

TOTAL IONIZING DOSE RADIATION TEST REPORT

PART TYPE: S29GL01GS10FHI010



DATE CODE: 1512

DESCRIPTION: 1Gb x8/x16 90 nm NOR Flash Memory

MANUFACTURER: SPANSION INC.




RadLab

Alter reference:	ATN-RR-468	Issue:	2	Date:	2018/10/10
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DOCUMENT CHANGE CONTROL

ISSUE	DATE	Affected Edition / Revision	Affected Paragraph / Modification
1	2017/11/10	--	First edition of this document
2	2018/10/10	1	Pag 9/458: The name of the bias configuration has been corrected. Section 8: Name of bias configuration and statistics have been corrected. Pag 336/454: Appendix 1 has been included.

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1 INTRODUCTION

This report describes the Total Ionizing Dose (TID) test performed on device **S29GL01GS10FHI010 1Gb x8/x16 90 nm NOR Flash Memory** manufactured by **SPANSION INC.** with **D/C 1512**. The purpose of this test is to evaluate its suitability for being used in space applications under TID radiation conditions.

TID testing has been performed in accordance with the approved test plan **ATN-RP-212 Draft F** (see ANNEX I: TEST PLAN). Testing plan accomplishes with the “**ESCC 22900. Total Dose Steady State Irradiation**” test method and follows the “**MFR Datasheet performance specification**” for device performance evaluation.

TID testing, started on **2017/09/11** and finished on **2017/10/11**, was performed using a Cobalt-60 gamma ray source as it is described in paragraph “**4.2. Irradiation facility**” (see ANNEX II: DOSIMETRY).

A total of **30** samples with 2 different bias configurations were tested (**10 ON Bias LDC + 10 ON Bias HDC + 10 OFF bias**). Dose rate was **306.7 rad(Si)/h, 306.6 rad(Si)/h and 303.6 rad(Si)/h respectively**, for a total cumulative dose of **54.1 krad(Si), 53.7 krad(Si) and 152.6 krad(Si) respectively**. Irradiation steps were followed by two annealing steps: **24 hours at 25 °C** and **168h at 100°C**. TID testing sequence has been described in paragraph “**5.1.Radiation source dose rate and annealing**”.

A graphical summary of TID testing results is displayed in **TABLE X: Summary of Irradiation Testing Results**. A complete set of electrical measurements, together with graphical representation of measured parameters versus total absorbed dose are provided for all samples in paragraph “**8. TID RESULTS WITH GRAPHS AND TABLES**”.

2 APPLICABLE AND REFERENCE DOCUMENTS

2.1 Applicable documents


- TEST PLAN ATN-RP-212 Draft F

2.2 Reference documents

- ESCC 22900 Issue 5
- MFR Datasheet

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	S29GL01GS10FHI010 D/C 1512	SPANSION INC	RL:	2017901236
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3 PART INFORMATION

3.1 Parts traceability data

TABLE I: Parts Traceability Data

COMPONENT DESCRIPTION	1Gb x8/x16 90 nm NOR Flash Memory	PART TYPE	S29GL01GS10FHI010
COMPONENT NUMBER	S29GL01GS10FHI010	PACKAGE	BGA
DATE CODE	1512	MANUFACTURER	SPANSION INC.
GENERIC SPECIFICATION	MFR Datasheet	WAFER LOT:	N/Av
DETAIL SPECIFICATION	MFR Datasheet	AMENDMENT	--

3.2 Sample Pictures

3.2.1 External view

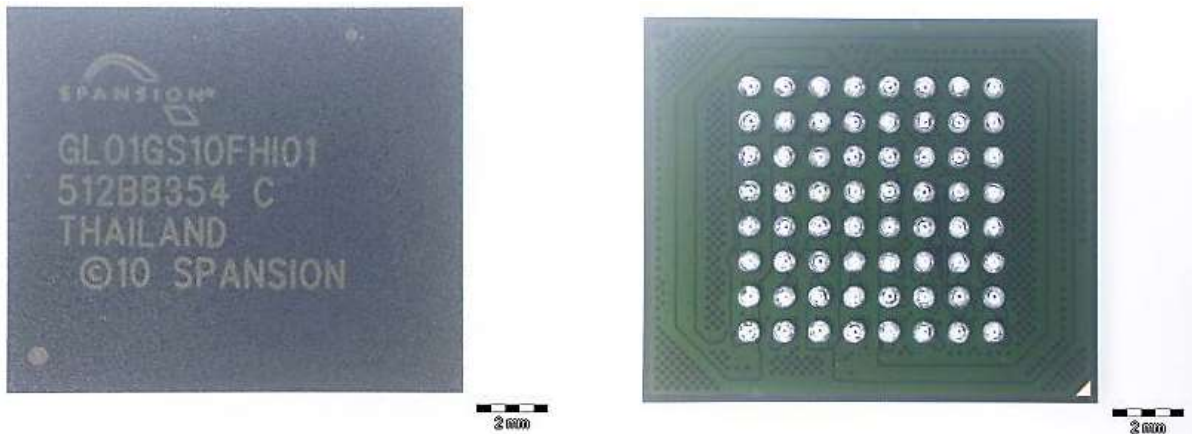



FIGURE 1: External General View

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3.2.2 Internal view

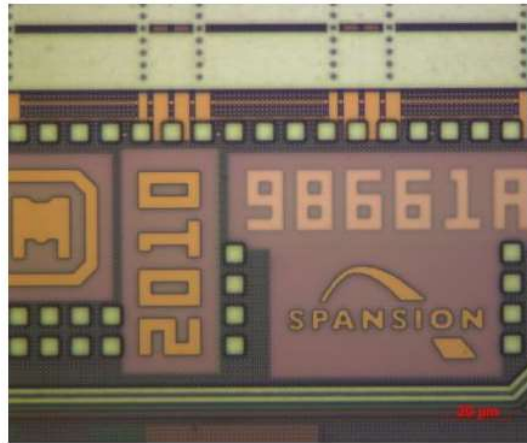


FIGURE 2: Internal Overall View

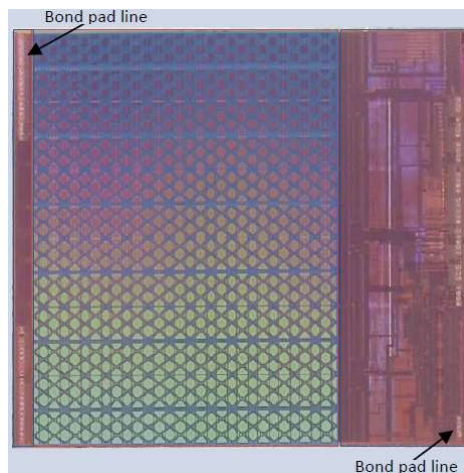


FIGURE 3: Die Mask Internal View

4 DOSIMETRY AND IRRADIATION FACILITY

4.1 Competences and irradiation facility


ALTER TECHNOLOGY laboratory has been audited by DSCC and ALTER TECHNOLOGY has been awarded **DLA Laboratory Suitability** for **MIL-STD-883 TM 1019** and **MIL-STD-750 TM 1019** TID tests performance in accordance with VQE-15-0222801.

ALTER TECHNOLOGY laboratory is **ENAC accredited ISO 17025** for **ESCC 22900**, **MIL-STD-883 TM 1019**, **MIL-STD-750 TM 1019** TID tests performance and dosimetry calculation and performance in accordance with Technical Annex 345/LE2116.

See **ANNEX II:** .

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4.2 Irradiation facility

4.2.1 Radlab facility

The **RADLAB** gamma radiation laboratory is based on a Cobalt-60 source placed into a **Gammabeam® X200 irradiator**. This Cobalt-60 source has photons of 1.17 and 1.33 MeV energies and 403TBq (10893Ci) certified on January 28th 2013.

The gamma radiation of around 1 MeV is a penetrating radiation, so the samples are irradiated completely.

The facility features meet the requirements for total dose irradiation tests currently demanded by the industry, and applicable standards such as ESCC, MIL-STD or ASTM. The dose rate can be adjusted to the level requested by the customer needs within a wide range, including standard and low window rates specified in ESCC 22900.

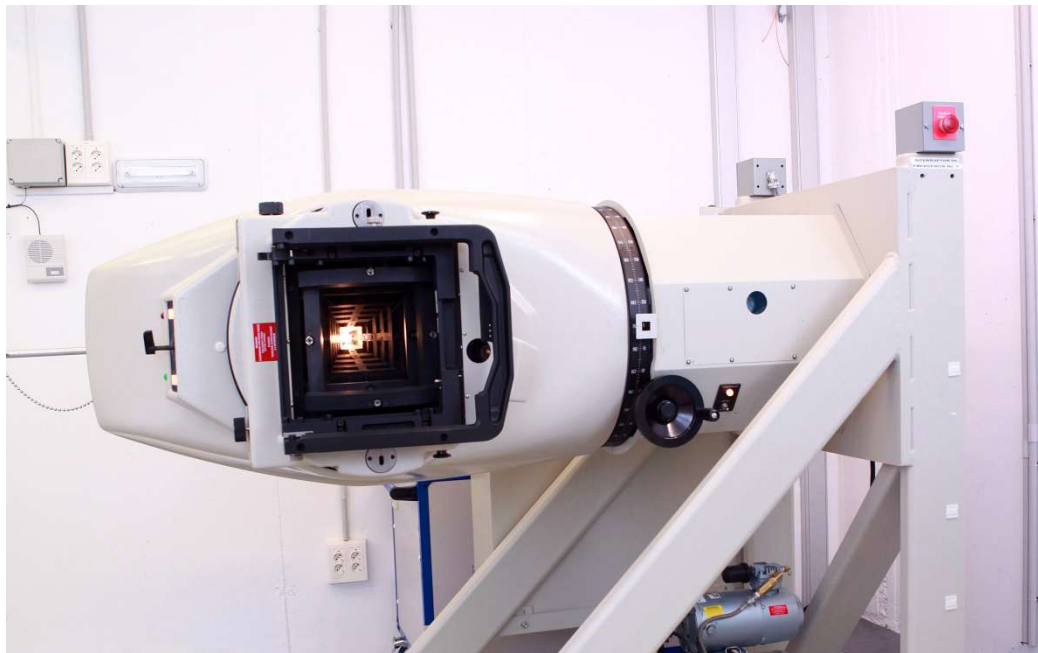


FIGURE 4: Gamma Irradiation Facility (RadLab®)

Test specimens are enclosed in a **Pb/Al container** to minimize dose enhancement effects caused by low-energy, scattered radiation.


4.2.2 Dose measurement

Dose rate measurement is performed through the **RMS (Radiation Monitoring System)**, a dosimetry system developed by ALTER TECHNOLOGY with less than 5% accuracy, which allows real time dose measurement thanks to a set of dedicated ionization chambers and electrometers.

The dosimetry is done regularly with calibrated dosimeters and ionization chambers manufactured by PTW Freiburg, Germany.

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	D/C 1512		Issue:	2
	SPANSION INC		Date:	2018/10/10
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The uniformity of each irradiation area is guaranteed through measurements of relative dose rate in precise profiles. The uniformity of the radiation field is included in the Dosimetry Report (see ANNEX II. DOSIMETRY).

The specific dosimetry equipment used to this radiation test is specified below:

TABLE II: Dosimetry Equipment List

REFERENCE	DESCRIPTION	CAL. DUE	USAGE
LE1007.007, LE1007.005 & LE1008.015	Ionization chamber	2018/05/09, 2018/07/20 & 2018/11/22	20, 30, 50 krad (Si), 20, 30, 50 krad (Si) & 20, 30, 50, 70, 100, 150 krad (Si)
LE1007.000	Electrometer	2018/03/05	20, 30, 50, 70, 100, 150 krad (Si)
LE1008.014, LE1007.009 & LE1008.011	Extension cable	N/A	20, 30, 50 krad (Si), 20, 30, 50 krad (Si) & 20, 30, 50, 70, 100, 150 krad (Si)
LE1009.054, LE1009.055 & LE1009.056	TID Box	N/A	20, 30, 50 krad (Si), 20, 30, 50 krad (Si) & 20, 30, 50, 70, 100, 150 krad (Si)

4.2.3 Environmental conditions

Environmental conditions (temperature, pressure and relative humidity) are controlled during the radiation exposures. All this equipment is periodically calibrated by ISO 17025 accredited companies.

Dose measurements are compensated against environmental temperature and pressure fluctuations in irradiation room.

4.2.4 Monitoring

A dedicated data acquisition system is available to record and to monitor online environment, absorbed dose and basing conditions in real-time. The radiation engineer has a complete test overview, with access to all test records during the whole test sequence (Table III. RVT steps).

5 EXPERIMENTAL CONDITIONS

5.1 Radiation source dose rate and annealing

The dose exposures were performed at **RadLab (CNA, Spain)**. A **Cobalt 60 source** is used to produce the ionizing radiation with the possibility of fixing the dose rate which arrives on samples by adjusting the samples distance to the source.

The total dose steady-state irradiation test was performed using a dose rate of **306.7 rad(Si)/h, 306.6 rad(Si)/h and 303.6 rad(Si)/h respectively** with 4.7 % of relative error (k=2) until a total accumulated dose of **54.1 krad(Si), 53.7 krad(Si) and 152.6 krad(Si) respectively**. Radiation uniformity on samples is equal to 93.4 %, 93.4% and 93.8% respectively (see ANNEX II: DOSIMETRY).

Absorbed dose has been controlled by a dedicated ionization chamber placed next to the samples. After radiation steps, annealing steps have been added to the TID.

See Table III to have a quick overview on performed steps and achieved dates.

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TABLE III: Radiation Monitoring System and TID Follow-Up Tool

Step	Required Acc. Dose	Total Step Dose	Real Acc. Dose	Deviation	Dose rate	Exposure time	Date
LDC	rad (Si)	rad(Si)	rad(Si)	%	rad(Si)/h	(h)	-
1	0	0	0	0	0	--	11/09/2017
2	20000	20277	20277.0	1.4	306.7	66.11	14/09/2017
3	30000	6304	26580.7	11.4	306.7	20.55	15/09/2017
4	50000	21939	48519.9	3.0	306.7	71.53	18/09/2017
5	70000	5556	54076.3	22.7	306.7	18.12	19/09/2017
Annealing							
6	Ann24h@25°C	24	--	--	--	--	20/09/2017
7	Ann168h@100°C	168	--	--	--	--	27/09/2017

Step	Required Acc. Dose	Total Step Dose	Real Acc. Dose	Deviation	Dose rate	Exposure time	Date
HDC	rad (Si)	rad(Si)	rad(Si)	%	rad(Si)/h	(h)	-
1	0	0	0	0	0	--	11/09/2017
2	20000	20349	20349.0	1.7	306.6	66.37	14/09/2017
3	30000	6250	26598.6	11.3	306.6	20.38	15/09/2017
4	50000	22111	48709.5	2.6	306.6	72.12	18/09/2017
5	70000	4973	53682.6	23.3	306.6	16.22	19/09/2017
Annealing							
6	Ann24h@25°C	24	--	--	--	--	20/09/2017
7	Ann168h@100°C	168	--	--	--	--	27/09/2017

Step	Required Acc. Dose	Total Step Dose	Real Acc. Dose	Deviation	Dose rate	Exposure time	Date
OFF	rad (Si)	rad(Si)	rad(Si)	%	rad(Si)/h	(h)	-
1	0	0	0	0	0	--	11/09/2017
2	20000	20190	20190.4	1.0	303.6	66.50	14/09/2017
3	30000	6321	26511.4	11.6	303.6	20.82	15/09/2017
4	50000	21886	48396.9	3.2	303.6	72.09	18/09/2017
5	70000	25665	74062.2	5.8	303.6	84.54	22/09/2017
6	100000	22533	96595.4	3.4	303.6	74.22	25/09/2017
7	150000	55999	152594.4	1.7	303.6	184.45	03/10/2017
Annealing							
8	Ann24h@25°C	24	--	--	--	--	04/10/2017
9	Ann168h@100°C	168	--	--	--	--	11/10/2017

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5.2 Bias setup

5.2.1 Parts distribution

In order to evaluate TID samples sensitivity between ON and OFF bias configuration, the irradiated parts were serialized as follows:

TABLE IV: Parts Distribution

LDC (Low Duty Cycle) samples

HDC (High Duty Cycle) samples

ALTER S/N	MANUFACTURER S/N	BIAS CONDITION
R1 (SN1)	N/A	Control Sample
R2 (SN2)	N/A	ON
R3 (SN3)	N/A	
R4 (SN4)	N/A	
R5 (SN5)	N/A	
R6 (SN6)	N/A	
R7 (SN7)	N/A	
R8 (SN8)	N/A	
R9 (SN9)	N/A	
R10 (SN10)	N/A	
R11 (SN11)	N/A	

ALTER S/N	MANUFACTURER S/N	BIAS CONDITION
R1 (SN1)	N/A	Control Sample
R2 (SN12)	N/A	ON
R3 (SN13)	N/A	
R4 (SN14)	N/A	
R5 (SN15)	N/A	
R6 (SN16)	N/A	
R7 (SN17)	N/A	
R8 (SN18)	N/A	
R9 (SN19)	N/A	
R10 (SN20)	N/A	
R11 (SN21)	N/A	

OFF samples

ALTER S/N	MANUFACTURER S/N	BIAS CONDITION
R1 (SN1)	N/A	Control Sample
R2 (SN22)	N/A	OFF
R3 (SN23)	N/A	
R4 (SN24)	N/A	
R5 (SN25)	N/A	
R6 (SN26)	N/A	
R7 (SN27)	N/A	
R8 (SN28)	N/A	
R9 (SN29)	N/A	
R10 (SN30)	N/A	
R11 (SN31)	N/A	

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5.2.2 Bias conditions

Test board allowed **20 ON** bias samples during exposures, in accordance with the electrical circuit provided in Figure 5, and **10 OFF** bias sample with all pins connected to ground.

During annealing steps same stress conditions were applied at 25° C and 100°C temperatures.

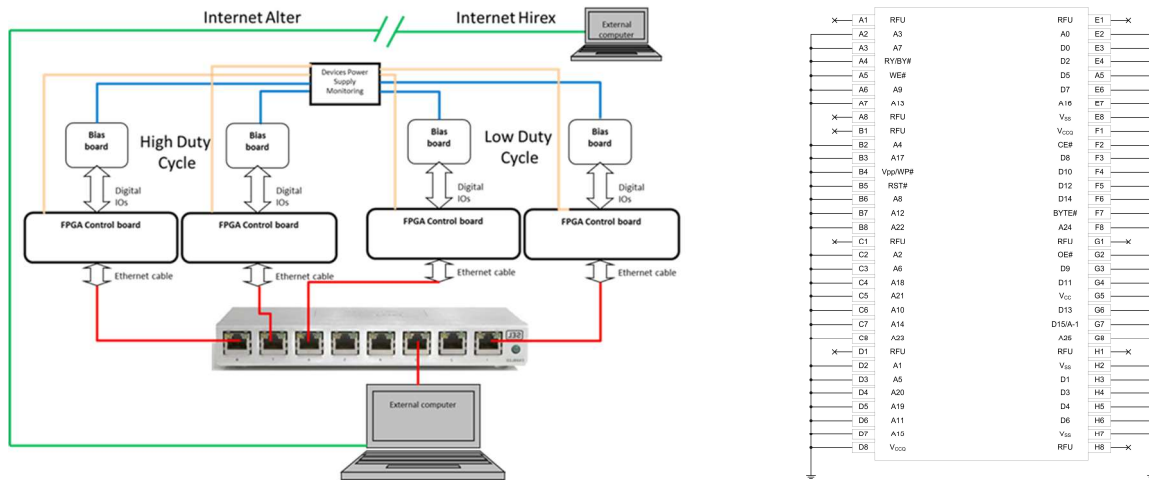


FIGURE 5: Radiation Bias Circuits, Biased and Unbiased respectively


5.2.3 Bias equipment identification

TABLE V: Bias Equipment List

REF. INVENT	DESCRIPTION	CAL. DUE	USAGE
LE0990.001	Power supply	N/A	20, 30, 50 krad (Si)
LE0990.002	Power supply	N/A	20, 30, 50 krad (Si)
LE0990.003	Power supply	N/A	20, 30, 50 krad (Si)
LE1005.006	Power supply	N/A	20, 30, 50 krad (Si)
LE1005.007	Power supply	N/A	20, 30, 50 krad (Si)
LE1011.002	Power supply	N/A	20, 30, 50 krad (Si)
LE1011.003	Power supply	N/A	20, 30, 50 krad (Si)
LE1011.004	Power supply	N/A	20, 30, 50 krad (Si)

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LE1046.002	Power supply	N/A	20, 30, 50 krad (Si)
LE1046.003	Power supply	N/A	20, 30, 50 krad (Si)
LE1046.004	Power supply	N/A	20, 30, 50 krad (Si)
LE1046.005	Power supply	N/A	20, 30, 50 krad (Si)
LE1046.007	Power supply	N/A	20, 30, 50 krad (Si)
Hirex PCB	Bias PCB	N/A	20, 30, 50, 70, 100, 150 krad (Si)

5.3 Test parameters and measuring conditions

5.3.1 Test parameters and measuring conditions


Both electrical parameters test conditions and limits used for performing parameter measurements were provided in the test plan **ATN-RP-212 Draft F**. They are also reported in table VI for information purpose.

TABLE VI: Test Parameters and Conditions

Nº	SYMBOL	TEST	CONDITIONS (Note 1) ($T_{AMB}=22\pm3^{\circ}C$)	LIMITS		UNIT
				MIN.	MAX.	
DC						
1	Cont	Continuity Test	--	--	--	V
2	I_{LI}	Input Load Current	$V_{IN} = V_{SS} \text{ to } V_{CC}$, $V_{CC} = V_{CC} \text{ max}$	--	± 1.0 (Note 2)	μA
3	I_{LO}	Output leakage Current	$V_{OUT} = V_{SS} \text{ to } V_{CC}$, $V_{CC} = V_{CC} \text{ max}$	--	± 1.0 (Note 3)	μA
4	V_{OL}	Output LOW Voltage	$I_{oL} = 100 \mu A$	--	$0.15 \times V_{IO}$ (Note 3)	V
5	V_{OH}	Output HIGH Voltage	$I_{oH} = 100 \mu A$	$0.85 \times V_{IO}$ (Note 3)	--	V
6	V_{IL}	Input LOW Voltage	--	-0.5 (Note 3)	$0.3 \times V_{IO}$ (Note 3)	V
7	V_{IH}	Input HIGH Voltage	--	$0.7 \times V_{IO}$ (Note 3)	$V_{IO} + 0.4$ (Note 3)	V
POWER SUPPLY						
8	ICC1	V_{CC} Active Read Current	CE# = VIL, OE# = VIH, Address switching@ 5 MHz, $V_{CC} = V_{CC} \text{ max}$	--	60	mA

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Nº	SYMBOL	TEST	CONDITIONS (Note 1) (T _{AMB} =22±3°C)	LIMITS		UNIT
				MIN.	MAX.	
9	ICC2	V _{cc} Intra-Page Read Current	CE# = VIL, OE# = VIH, Address switching@ 33 MHz, V _{cc} = V _{cc} max	--	25	mA
10	ICC3.1	V _{cc} Active Program Current	CE# = VIL, OE# = VIH, V _{cc} = V _{cc} max	--	100(Note 5)	mA
11	ICC3.2	V _{cc} Active Erase Current	CE# = VIL, OE# = VIH, V _{cc} = V _{cc} max	--	100(Note 5)	mA
AC						
12	tCS	CE# Setup Time	--	0 (Note 4)	--	ns
13	tCH	CE# Hold Time	--	0 (Note 4)	--	ns
14	tDS	Data Setup Time	--	30 (Note 4)	--	ns
15	tDH	Data Hold Time	--	0 (Note 4)	--	ns
16	tWP	WE# Pulse Width	--	25 (Note 4)	--	ns
17	tWPH	WE# Pulse Width High	--	20 (Note 4)	--	ns
FUNCTIONAL BLOCK						
18	Func_CHK	Pattern FCT Checkerboard.	Erase, write and read with pattern Checkerboard in block 0	(Note 6)	(Note 6)	--
19	Func_/CHK	Pattern FCT /Checkerboard	Erase, write and read with pattern Checkerboard Inverted in block 0	(Note 6)	(Note 6)	--
20	Data Retention	Read CC33h pattern	Write in 0kRad and read pattern CC33h in block 1 in following steps	(Note 6)(Note 7)	(Note 6)(Note 7)	--
21	Read Pattern	Read AAAAh pattern	Read only pattern AAAAh in block 512 only for ON parts	(Note 8)	(Note 8)	--

Notes:

1. The electrical testing to be performed with V_{cc}=V_{io}=3.3V unless otherwise noted in Table I.
2. Performed in A25-A0.
3. Performed in DQ15-DQ0.
4. These electrical tests are GO/NO GO. This means that the test will be performed only for the minimum limits specified in Table I and the reported results will be GO/NO GO.
5. This limit is informative as the datasheet of the DUT indicate that it has not been 100% tested. Therefore, this does not constitute Pass/Fail information.
6. This test has a GO/NO GO result. If any of the written data is read incorrectly, the test is considered to be NO GO.
7. The pattern is written at 0kRad, and read only in the rest of steps.
8. Block 512 will be written by ON radiation circuit. At the first execution (0 krad) the memory has not been written yet, and consequently the result should be a NO GO.

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9. The limits above are included herein for reference purposes only. The degradation of any of these parameters above the limits must not be considered a reason for supplier lot rejection, due to the fact that the aim of this test is to characterize the electrical behaviour of this lot when is submitted to radiation.

5.3.2 Parameter measurement circuits

Test circuits used are the ones specified into the applicable documents.

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5.3.3 Test equipment identification

TABLE VII: Electrical Measurement Equipment List

REFERENCE	DESCRIPTION	CAL. DUE	USAGE
ATN-EM-SW-1426	Test software	N/A	0, 20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.
TLC-PCB-EM-338	Test Fixture	N/A	0, 20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.
LE0826.000	ULTRAFLEX	2018/03/08	0, 20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.
LE0826.004	ULTRAFLEX ALTER GENERIC DIB	N/A	0, 20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.

TABLE VIII: Annealing Equipment List

REFERENCE	DESCRIPTION	CAL. DUE	USAGE
LE0831.000	Oven	2018/03/28	Ann.24h, Ann.168h
LE0990.001	Power supply	N/A	Ann.24h, Ann.168h
LE0990.002	Power supply	N/A	Ann.24h, Ann.168h
LE0990.003	Power supply	N/A	Ann.24h, Ann.168h
LE1005.006	Power supply	N/A	Ann.24h, Ann.168h
LE1005.007	Power supply	N/A	Ann.24h, Ann.168h
LE1046.002	Power supply	N/A	Ann.24h, Ann.168h
LE1046.007	Power supply	N/A	Ann.24h, Ann.168h
LE1046.008	Power supply	N/A	Ann.24h, Ann.168h

TABLE IX: Other Equipment List

REFERENCE	DESCRIPTION	CAL. DUE	USAGE
LE0273.000	Digital Thermometer	2017/12/29	20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.
LE0273.002	Ball Probe	2017/12/29	20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.
LE1253.000	Multimeter	2018/04/24	0, 20, 30, 50, 70, 100, 150 krad (Si), Ann. 24h, Ann. 168h.

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6 TID TESTING RESULTS

6.1 Parameters drift

Next table show the irradiation step, using a colour legend, for which one sample (at least) is near, out of specification, or even, not measurable for each measured parameter.

The table legend of parameters drift is described as below:

- Normal operation
- Out of limits: out-of-tolerance defined in the test plan
- Catastrophic failure: sudden and total failure from which recovery is impossible.

TABLE X: Summary of Irradiation Testing Results

N.	Symbol	DOSE RATE: 306.7, 306.6 & 303.6 rad (Si)/h for LDC, HDC & OFF respectively							ANNEALING		
		0 krad	20 krad	30 krad	50 krad	70 krad	100 krad	150 krad	ANN. 24h	ANN. 168h	
1	ILI LowPin a25	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
2	ILI LowPin a24	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
3	ILI LowPin a23	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
4	ILI LowPin a22	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
5	ILI LowPin a21	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
6	ILI LowPin a20	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
7	ILI LowPin a19	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
8	ILI LowPin a18	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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S29GL01GS10FHI010		SPANSION INC		Total Ionizing Dose Radiation Test			

ALTER TECHNOLOGY	
RL:	2017901236
Ref.:	ATN-RR-468
Issue:	2
Date:	2018/10/10
Page:	22 / 458

		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
9	ILI LowPin a17	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
10	ILI LowPin a16	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
11	ILI LowPin a15	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
12	ILI LowPin a14	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
13	ILI LowPin a13	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
14	ILI LowPin a12	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
15	ILI LowPin a11	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
16	ILI LowPin a10	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
17	ILI LowPin a9	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
18	ILI LowPin a8	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
19	ILI LowPin a7	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
20	ILI LowPin a6	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
21	ILI LowPin a5	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
22	ILI LowPin a4	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
23	ILI LowPin a3	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
24	ILI LowPin a2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
25	ILI LowPin a1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
26	ILI LowPin a0	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
27	ILI HighPin a25	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
28	ILI HighPin a24	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
29	ILI HighPin a23	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
30	ILI HighPin a22	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
31	ILI HighPin a21	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
32	ILI HighPin a20	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
33	ILI HighPin a19	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
34	ILI HighPin a18	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
35	ILI HighPin a17	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
36	ILI HighPin a16	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
37	ILI HighPin a15	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
38	ILI HighPin a14	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
39	ILI HighPin a13	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
40	ILI HighPin a12	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
41	ILI HighPin a11	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
42	ILI HighPin a10	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
43	ILI HighPin a9	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
44	ILI HighPin a8	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
45	ILI HighPin a7	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
46	ILI HighPin a6	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
47	ILI HighPin a5	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
48	ILI HighPin a4	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
49	ILI HighPin a3	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
50	ILI HighPin a2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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Total Ionizing Dose Radiation Test			
S29GL01GS10FHI010		SPANSION INC	
D/C 1512			

ALTER TECHNOLOGY	
RL:	2017901236
Ref.:	ATN-RR-468
Issue:	2
Date:	2018/10/10
Page:	25 / 458

		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
51	ILI HighPin a1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
52	ILI HighPin a0	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
53	ILO LowPin d15	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
54	ILO LowPin d14	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
55	ILO LowPin d13	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
56	ILO LowPin d12	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
57	ILO LowPin d11	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
58	ILO LowPin d10	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
59	ILO LowPin d9	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
60	ILO LowPin d8	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
61	ILO LowPin d7	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
62	ILO LowPin d6	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
63	ILO LowPin d5	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
64	ILO LowPin d4	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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S29GL01GS10FHI010	SPANSION INC		
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		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
65	ILO LowPin d3	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
66	ILO LowPin d2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
67	ILO LowPin d1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
68	ILO LowPin d0	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
69	ILO HighPin d15	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
70	ILO HighPin d14	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
71	ILO HighPin d13	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
72	ILO HighPin d12	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
73	ILO HighPin d11	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
74	ILO HighPin d10	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
75	ILO HighPin d9	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
76	ILO HighPin d8	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
77	ILO HighPin d7	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
78	ILO HighPin d6	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
79	ILO HighPin d5	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
80	ILO HighPin d4	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
81	ILO HighPin d3	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
82	ILO HighPin d2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
83	ILO HighPin d1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
84	ILO HighPin d0	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
85	VOL_MAX	LDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
86	VOH_MIN	LDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
87	VIL max fails	LDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
88	VIH min fails	LDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
89	ICC1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
90	ICC2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
91	ICC3.1	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
92	ICC3.2	LDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓
		HDC	✓	✓	✓	✓	NOTE 1	NOTE 1	NOTE 1	✓	✓

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		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
93	tCS fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
94	tCH fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
95	tDS fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
96	tDH fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
97	tWP fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
98	tWPH fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
99	Checkerboard fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
100	Checkerboard not fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
101	Retention fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	✓	✓	✓	✓	✓	✓	✓	✓	NOTE 2
102	Read Pattern fails	LDC	✓	✓	✓		NOTE 1	NOTE 1	NOTE 1		
		HDC	✓	✓			NOTE 1	NOTE 1	NOTE 1		
		OFF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NOTE 1: LDC and HDC samples finalized their irradiation test once the 50krad(Si) step was finalized and the data were analysed, by customer request.

NOTE 2: OFF based samples R5 and R7 (S/N: 25 & 27 respectively) failed in continuity test and it was not possible to perform measurement in post-annealing 168h.

	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY	
			RL:	2017901236
	S29GL01GS10FHI010	SPANSION INC	Ref.:	ATN-RR-468
			Issue:	2
			Date:	2018/10/10
			Page:	29 / 458
D/C 1512				

7 CONCLUSIONS

TID verification test was carried out by ALTER TECHNOLOGY on **S29GL01GS10FHI010, 1Gb x8/x16 90 nm NOR Flash Memory** in **BGA** package, in accordance with TEST PLAN **ATN-RP-212 Draft F** (see ANNEX I: TEST PLAN) with a dose rate of **306.7 rad(Si)/h, 306.6 rad(Si)/h and 303.6 rad(Si)/h respectively** and a total cumulative dose of **54.1 krad(Si), 53.7 krad(Si) and 152.6 krad(Si) respectively**. Test was performed on **30 samples** (10 ON biased + 10 ON biased + 10 OFF biased).

For each parameter:


- ✓ Performed measurements are registered in a table for each irradiation or annealing step.
- ✓ Graphs for the total cumulative dose vs parameter values have been plotted for each irradiation or annealing step.

A short summary of testing results is provided in the following paragraphs:

- ✓ Some parameters show sensitivity to total cumulative TID and its variation is enough to surpass the limits defined in the testing plan.
- ✓ Within this TID sensitivity, the most affected parameters are VOL_Max, VOH_Min, VIL_max (fails), ICC1, ICC2, ICC3.1 & ICC3.2, AC Characteristics and Functional tests.
- ✓ The most affected parameters were:
 - **VOL_Max:** LDC and HDC samples start to be out of limits between 20 and 30 krad(Si). In the case of LDC samples do not recover their initial values after the annealing processes. In the case of HDC samples only the R9 sample tends to recover its initial value after the annealing processes. There are not remarkable variations for OFF samples except for the aforementioned fact of R5 and R7 after annealing at 100°C step.
 - **VOH_Min:** LDC and HDC samples start to be out of limits between 20 and 30 krad(Si). Neither LDC or HDC samples tend to recover their initial values after the annealing processes. There are not remarkable variations for OFF samples except for the aforementioned fact of R5 and R7 after annealing at 100°C step.
 - **VIL max (fails) & VIH min (fails):** LDC and HDC samples start to be out of limits between 20 and 30 krad(Si). Neither LDC or HDC samples tend to recover their initial values after the annealing processes. OFF samples do not show any FAIL during the whole irradiation test except R5 and R7.
 - **ICC1, ICC2, ICC3.1 & ICC3.2:** LDC and HDC samples show a decreasing trend between 30 and 50krad(Si) (between 20 and 30krad(Si) for ICC3.2 parameter); beyond 50 krad(Si) the samples show a variable behaviour within limits and tend to recover their initial values after annealing 168h process only in some cases. There are not remarkable variations for OFF samples except for the aforementioned fact of R5 and R7 after annealing at 100°C step.
 - **AC Characteristics:** HDC samples start to be out of the limits between 30 and 50krad(Si) while LDC samples start to be out of limits between 20 and 30krad(Si). Only R4 in LDC samples tends to remain within limits after the annealing processes. OFF samples do not show any FAIL during the whole irradiation test except R5 and R7.

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	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY	
			RL:	2017901236
	S29GL01GS10FHI010		Ref.:	ATN-RR-468
	D/C 1512		Issue:	2
	SPANSION INC		Date:	2018/10/10
		Page:	30 / 458	

- **Checkerboard fails and Inverted Checkboard fails:** samples start to show functional failure between 20 and 30krad(Si) in some HDC samples. In the case of LDC samples show functional failure between 30 and 50krad(Si). Only some parts tend to recover their initial values after the annealing processes. OFF samples show any failures during the whole irradiation except for the aforementioned fact of R5 and R7 after annealing at 100°C step.

- **Retention fails and read pattern fails:** LDC and HDC samples start to show functional failure between 30 and 50krad(Si) except R7 in HDC samples, which starts to show functional failure between 20 and 30krad(Si). In both cases, not all samples tend to recover their initial values after the annealing processes.

- ✓ **Note:** Measurement of the Read Pattern fails parameter on part R2 (LDC samples) could not be performed due to hardware problem in the bias board. In the case of OFF samples this parameter must also not consider.

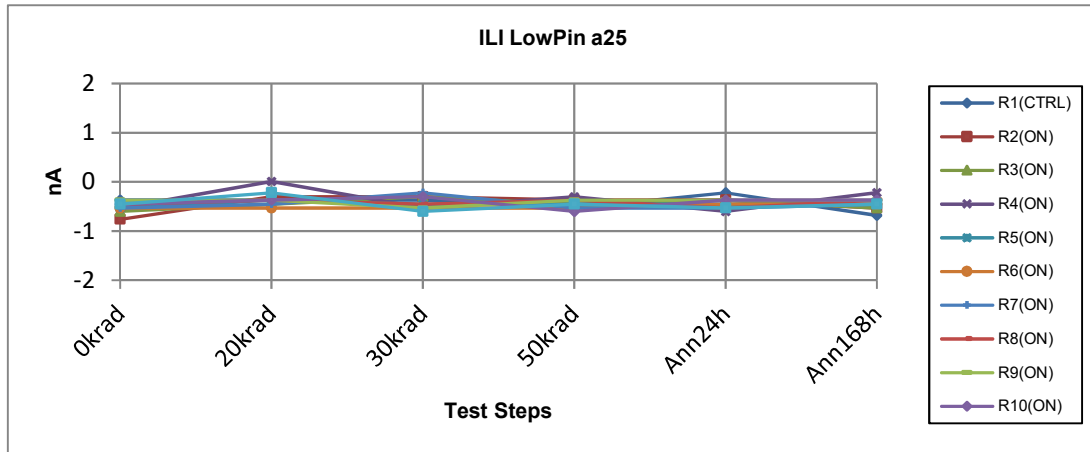
- ✓ **Note:** OFF biased samples R5 and R7 (S/N: 25 & 27 respectively) failed in continuity test and it was not possible to perform measurement in post-annealing 168h step.

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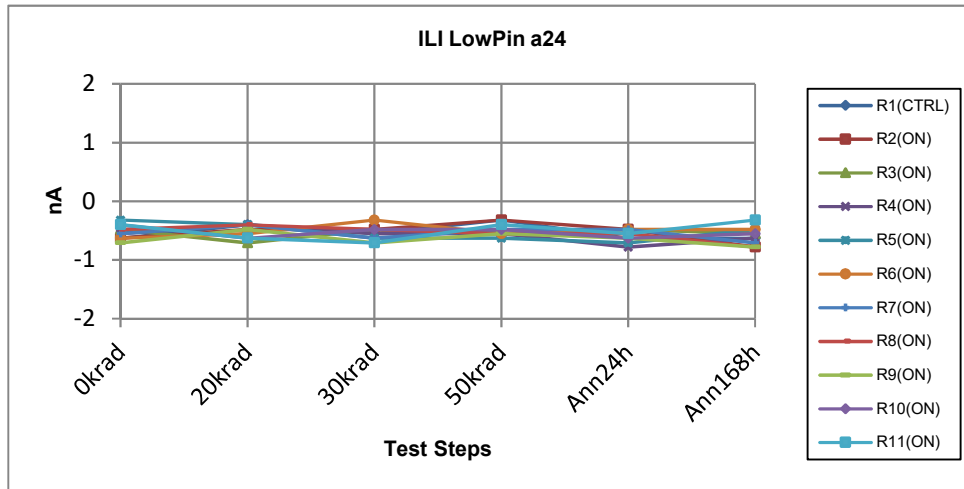
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8 TID RESULTS WITH GRAPHS AND TABLES.

R1 + LDC (Low Duty Cycle) samples (SN 2 to 11)



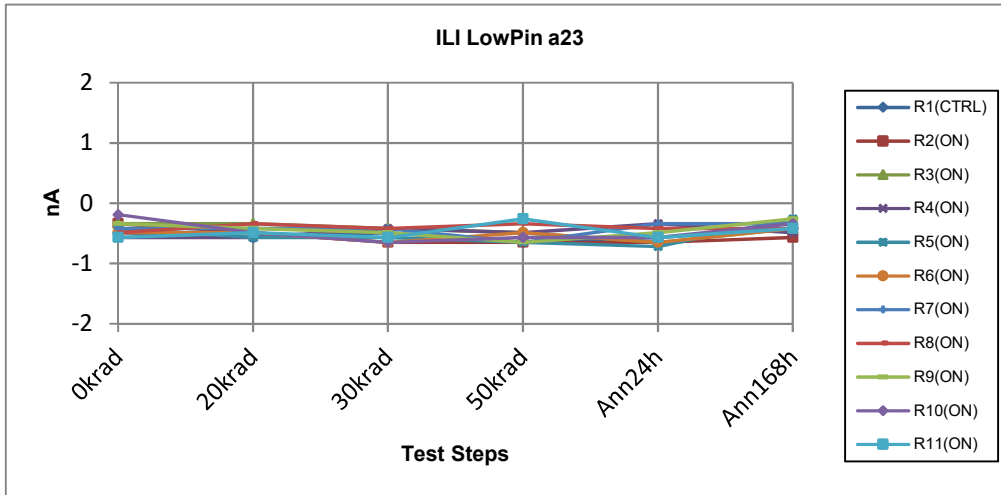
ILI LowPin a25	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.37	-0.37	-0.53	-0.22	-0.68
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.76	-0.30	-0.30	-0.37	-0.37	-0.53
R3(ON BIAS LDC)	-0.60	-0.45	-0.30	-0.45	-0.37	-0.53
R4(ON BIAS LDC)	-0.53	0.01	-0.53	-0.30	-0.60	-0.22
R5(ON BIAS LDC)	-0.53	-0.37	-0.45	-0.45	-0.45	-0.45
R6(ON BIAS LDC)	-0.53	-0.53	-0.53	-0.53	-0.45	-0.45
R7(ON BIAS LDC)	-0.53	-0.45	-0.22	-0.53	-0.53	-0.45
R8(ON BIAS LDC)	-0.45	-0.37	-0.45	-0.37	-0.53	-0.37
R9(ON BIAS LDC)	-0.37	-0.37	-0.53	-0.37	-0.37	-0.37
R10(ON BIAS LDC)	-0.45	-0.37	-0.30	-0.60	-0.37	-0.37
R11(ON BIAS LDC)	-0.45	-0.22	-0.60	-0.45	-0.53	-0.45
Irradiated, ON biased LDC parts statistics						
Min Value	-0.76	-0.53	-0.60	-0.60	-0.60	-0.53
Max Value	-0.37	0.01	-0.22	-0.30	-0.37	-0.22
Average	-0.52	-0.34	-0.42	-0.44	-0.46	-0.42
Sigma	0.11	0.15	0.13	0.09	0.09	0.09



ILI LowPin a24	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.63	-0.40	-0.55	-0.32	-0.63	-0.63
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.63	-0.48	-0.48	-0.32	-0.48	-0.78
R3(ON BIAS LDC)	-0.48	-0.71	-0.48	-0.55	-0.48	-0.55
R4(ON BIAS LDC)	-0.55	-0.40	-0.55	-0.55	-0.78	-0.63
R5(ON BIAS LDC)	-0.32	-0.40	-0.63	-0.63	-0.71	-0.48
R6(ON BIAS LDC)	-0.63	-0.55	-0.32	-0.55	-0.48	-0.48
R7(ON BIAS LDC)	-0.55	-0.40	-0.63	-0.48	-0.48	-0.71
R8(ON BIAS LDC)	-0.48	-0.40	-0.48	-0.55	-0.55	-0.78
R9(ON BIAS LDC)	-0.71	-0.48	-0.71	-0.55	-0.63	-0.78
R10(ON BIAS LDC)	-0.40	-0.63	-0.48	-0.48	-0.63	-0.55
R11(ON BIAS LDC)	-0.40	-0.63	-0.71	-0.40	-0.55	-0.32
Irradiated, ON biased LDC parts statistics						
Min Value	-0.71	-0.71	-0.71	-0.63	-0.78	-0.78
Max Value	-0.32	-0.40	-0.32	-0.32	-0.48	-0.32
Average	-0.52	-0.51	-0.55	-0.51	-0.58	-0.61
Sigma	0.12	0.12	0.12	0.09	0.11	0.16

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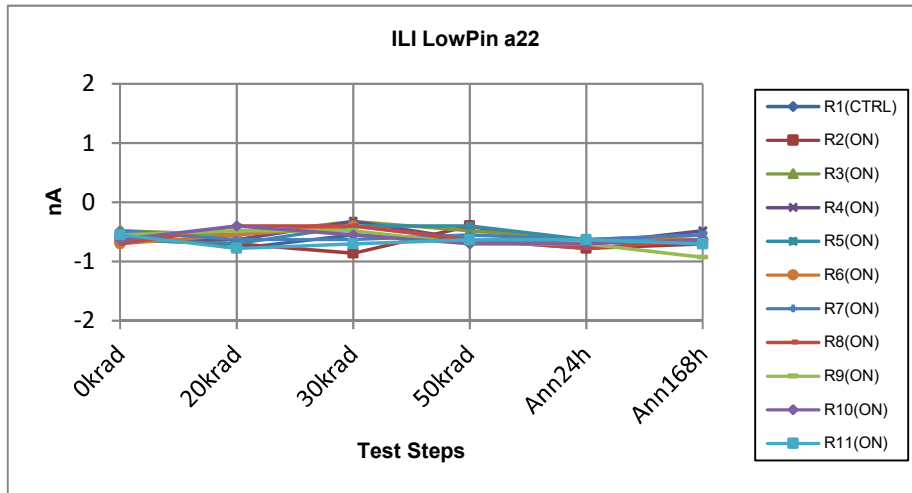
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ILI LowPin a23	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.49	-0.57	-0.49	-0.65	-0.57	-0.42
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.34	-0.49	-0.65	-0.65	-0.65	-0.57
R3(ON BIAS LDC)	-0.34	-0.34	-0.42	-0.49	-0.65	-0.42
R4(ON BIAS LDC)	-0.57	-0.57	-0.42	-0.49	-0.34	-0.49
R5(ON BIAS LDC)	-0.42	-0.57	-0.57	-0.65	-0.72	-0.26
R6(ON BIAS LDC)	-0.49	-0.49	-0.65	-0.49	-0.65	-0.42
R7(ON BIAS LDC)	-0.42	-0.42	-0.42	-0.65	-0.34	-0.34
R8(ON BIAS LDC)	-0.49	-0.34	-0.42	-0.34	-0.42	-0.42
R9(ON BIAS LDC)	-0.34	-0.42	-0.49	-0.65	-0.49	-0.26
R10(ON BIAS LDC)	-0.19	-0.49	-0.65	-0.57	-0.57	-0.34
R11(ON BIAS LDC)	-0.57	-0.49	-0.57	-0.26	-0.57	-0.42
Irradiated, ON biased LDC parts statistics						
Min Value	-0.57	-0.57	-0.65	-0.65	-0.72	-0.57
Max Value	-0.19	-0.34	-0.42	-0.26	-0.34	-0.26
Average	-0.42	-0.46	-0.53	-0.52	-0.54	-0.39
Sigma	0.12	0.08	0.10	0.14	0.14	0.10

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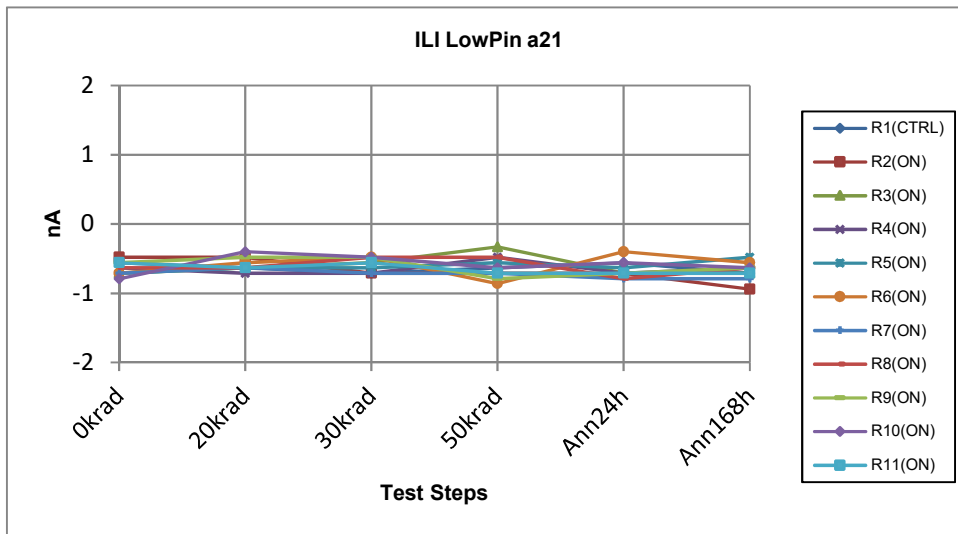
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ILI LowPin a22	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.48	-0.78	-0.55	-0.63	-0.78	-0.63
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.63	-0.70	-0.86	-0.40	-0.78	-0.70
R3(ON BIAS LDC)	-0.48	-0.55	-0.32	-0.48	-0.63	-0.63
R4(ON BIAS LDC)	-0.63	-0.63	-0.32	-0.63	-0.70	-0.48
R5(ON BIAS LDC)	-0.63	-0.70	-0.40	-0.40	-0.63	-0.55
R6(ON BIAS LDC)	-0.70	-0.55	-0.40	-0.63	-0.63	-0.63
R7(ON BIAS LDC)	-0.48	-0.63	-0.63	-0.55	-0.63	-0.55
R8(ON BIAS LDC)	-0.70	-0.40	-0.40	-0.63	-0.78	-0.63
R9(ON BIAS LDC)	-0.55	-0.48	-0.48	-0.70	-0.70	-0.93
R10(ON BIAS LDC)	-0.63	-0.40	-0.55	-0.70	-0.70	-0.63
R11(ON BIAS LDC)	-0.55	-0.78	-0.70	-0.63	-0.63	-0.70
Irradiated, ON biased LDC parts statistics						
Min Value	-0.70	-0.78	-0.86	-0.70	-0.78	-0.93
Max Value	-0.48	-0.40	-0.32	-0.40	-0.63	-0.48
Average	-0.60	-0.58	-0.51	-0.58	-0.68	-0.64
Sigma	0.08	0.13	0.18	0.11	0.06	0.12

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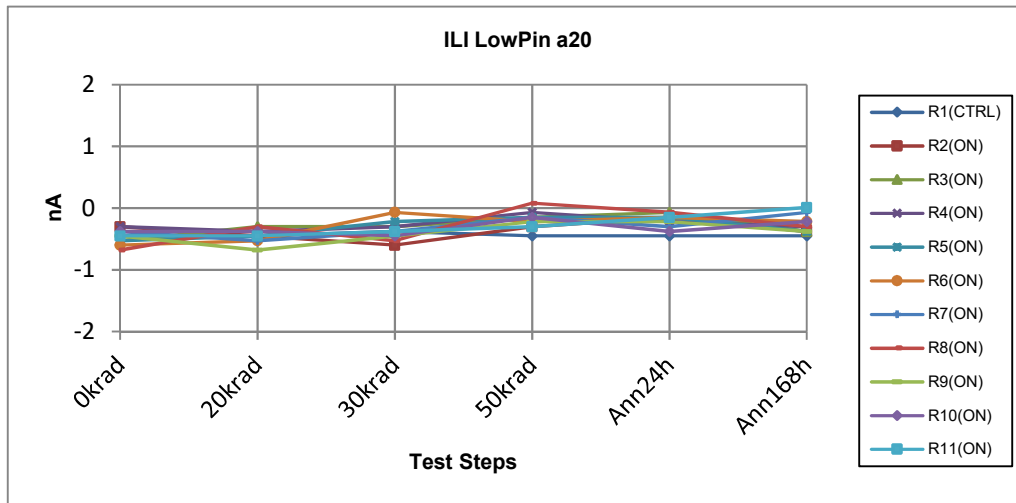
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ILI LowPin a21	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.63	-0.71	-0.63	-0.56	-0.71
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.48	-0.48	-0.71	-0.71	-0.71	-0.94
R3(ON BIAS LDC)	-0.71	-0.63	-0.56	-0.33	-0.71	-0.71
R4(ON BIAS LDC)	-0.63	-0.71	-0.71	-0.48	-0.71	-0.63
R5(ON BIAS LDC)	-0.71	-0.63	-0.63	-0.56	-0.63	-0.48
R6(ON BIAS LDC)	-0.71	-0.56	-0.48	-0.86	-0.40	-0.56
R7(ON BIAS LDC)	-0.71	-0.63	-0.71	-0.71	-0.79	-0.79
R8(ON BIAS LDC)	-0.63	-0.63	-0.48	-0.48	-0.79	-0.63
R9(ON BIAS LDC)	-0.56	-0.48	-0.48	-0.79	-0.71	-0.63
R10(ON BIAS LDC)	-0.79	-0.40	-0.48	-0.63	-0.56	-0.63
R11(ON BIAS LDC)	-0.56	-0.63	-0.56	-0.71	-0.71	-0.71
Irradiated, ON biased LDC parts statistics						
Min Value	-0.79	-0.71	-0.71	-0.86	-0.79	-0.94
Max Value	-0.48	-0.40	-0.48	-0.33	-0.40	-0.48
Average	-0.65	-0.58	-0.58	-0.63	-0.67	-0.67
Sigma	0.09	0.10	0.10	0.16	0.12	0.13

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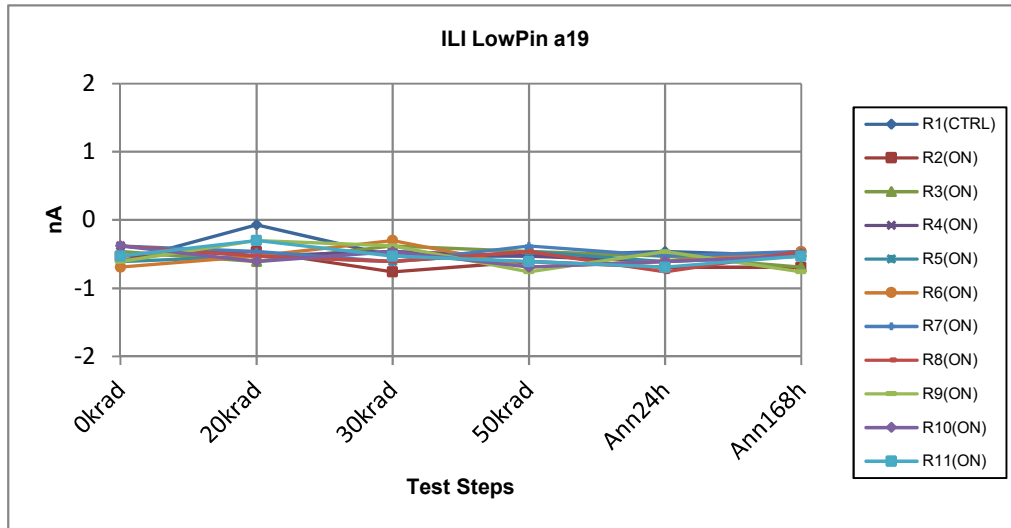
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ILI LowPin a20	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.45	-0.45	-0.38	-0.45	-0.45	-0.45
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.30	-0.45	-0.60	-0.30	-0.15	-0.38
R3(ON BIAS LDC)	-0.53	-0.30	-0.30	-0.15	-0.07	-0.38
R4(ON BIAS LDC)	-0.30	-0.38	-0.30	-0.07	-0.22	-0.30
R5(ON BIAS LDC)	-0.53	-0.45	-0.22	-0.15	-0.15	-0.38
R6(ON BIAS LDC)	-0.60	-0.53	-0.07	-0.22	-0.15	-0.22
R7(ON BIAS LDC)	-0.38	-0.53	-0.38	-0.15	-0.30	-0.07
R8(ON BIAS LDC)	-0.68	-0.30	-0.53	0.08	-0.07	-0.30
R9(ON BIAS LDC)	-0.45	-0.68	-0.45	-0.22	-0.22	-0.38
R10(ON BIAS LDC)	-0.38	-0.38	-0.45	-0.15	-0.38	-0.22
R11(ON BIAS LDC)	-0.45	-0.45	-0.38	-0.30	-0.15	0.01
Irradiated, ON biased LDC parts statistics						
Min Value	-0.68	-0.68	-0.60	-0.30	-0.38	-0.38
Max Value	-0.30	-0.30	-0.07	0.08	-0.07	0.01
Average	-0.46	-0.45	-0.37	-0.16	-0.19	-0.26
Sigma	0.13	0.12	0.15	0.11	0.10	0.14

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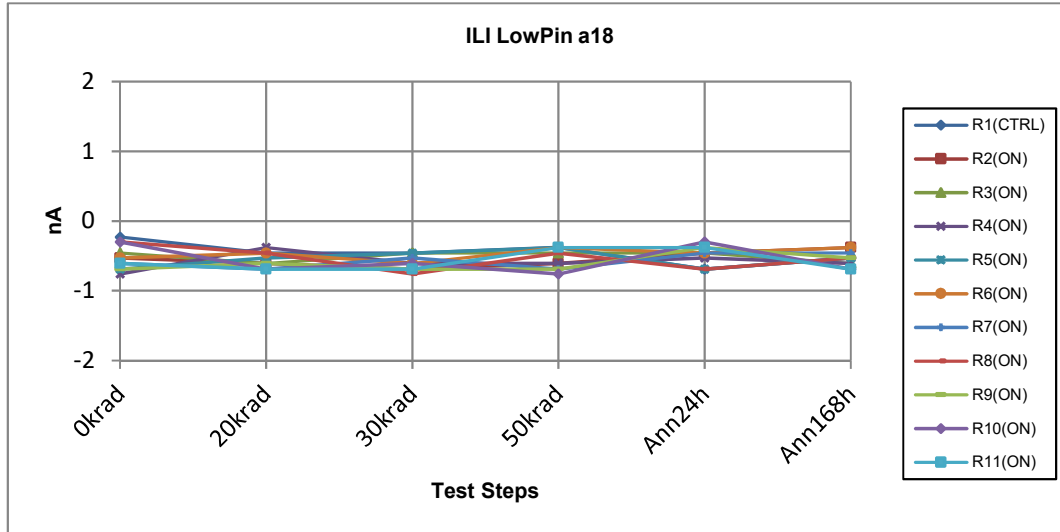
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ILI LowPin a19	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.61	-0.07	-0.53	-0.53	-0.46	-0.53
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.53	-0.46	-0.76	-0.61	-0.69	-0.69
R3(ON BIAS LDC)	-0.46	-0.61	-0.38	-0.46	-0.53	-0.69
R4(ON BIAS LDC)	-0.38	-0.53	-0.46	-0.53	-0.61	-0.46
R5(ON BIAS LDC)	-0.61	-0.53	-0.61	-0.46	-0.61	-0.53
R6(ON BIAS LDC)	-0.69	-0.53	-0.30	-0.69	-0.61	-0.46
R7(ON BIAS LDC)	-0.38	-0.46	-0.61	-0.38	-0.53	-0.46
R8(ON BIAS LDC)	-0.38	-0.53	-0.61	-0.46	-0.76	-0.46
R9(ON BIAS LDC)	-0.61	-0.30	-0.38	-0.76	-0.46	-0.76
R10(ON BIAS LDC)	-0.38	-0.61	-0.46	-0.69	-0.61	-0.53
R11(ON BIAS LDC)	-0.53	-0.30	-0.53	-0.61	-0.69	-0.53
Irradiated, ON biased LDC parts statistics						
Min Value	-0.69	-0.61	-0.76	-0.76	-0.76	-0.76
Max Value	-0.38	-0.30	-0.30	-0.38	-0.46	-0.46
Average	-0.50	-0.49	-0.51	-0.57	-0.61	-0.56
Sigma	0.12	0.11	0.14	0.13	0.09	0.11

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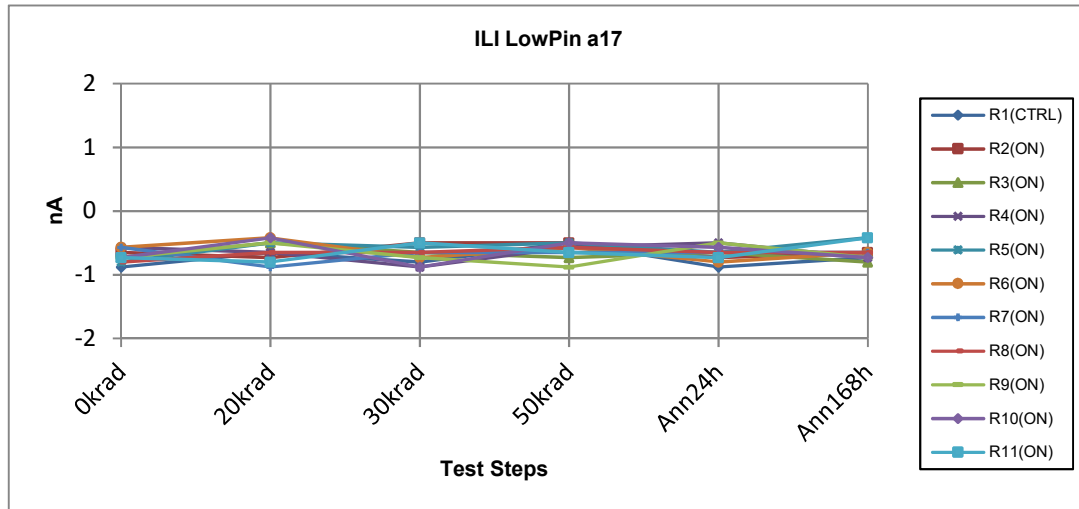
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ILI LowPin a18	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.46	-0.46	-0.38	-0.69	-0.53
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.53	-0.61	-0.69	-0.61	-0.46	-0.38
R3(ON BIAS LDC)	-0.46	-0.61	-0.46	-0.46	-0.46	-0.61
R4(ON BIAS LDC)	-0.76	-0.38	-0.61	-0.61	-0.53	-0.61
R5(ON BIAS LDC)	-0.69	-0.53	-0.46	-0.38	-0.69	-0.53
R6(ON BIAS LDC)	-0.53	-0.46	-0.61	-0.38	-0.46	-0.38
R7(ON BIAS LDC)	-0.61	-0.69	-0.53	-0.69	-0.46	-0.46
R8(ON BIAS LDC)	-0.30	-0.46	-0.76	-0.46	-0.69	-0.53
R9(ON BIAS LDC)	-0.69	-0.61	-0.69	-0.69	-0.38	-0.53
R10(ON BIAS LDC)	-0.30	-0.69	-0.61	-0.76	-0.30	-0.69
R11(ON BIAS LDC)	-0.61	-0.69	-0.69	-0.38	-0.38	-0.69
Irradiated, ON biased LDC parts statistics						
Min Value	-0.76	-0.69	-0.76	-0.76	-0.69	-0.69
Max Value	-0.30	-0.38	-0.46	-0.38	-0.30	-0.38
Average	-0.55	-0.57	-0.61	-0.54	-0.48	-0.54
Sigma	0.16	0.11	0.10	0.15	0.13	0.11

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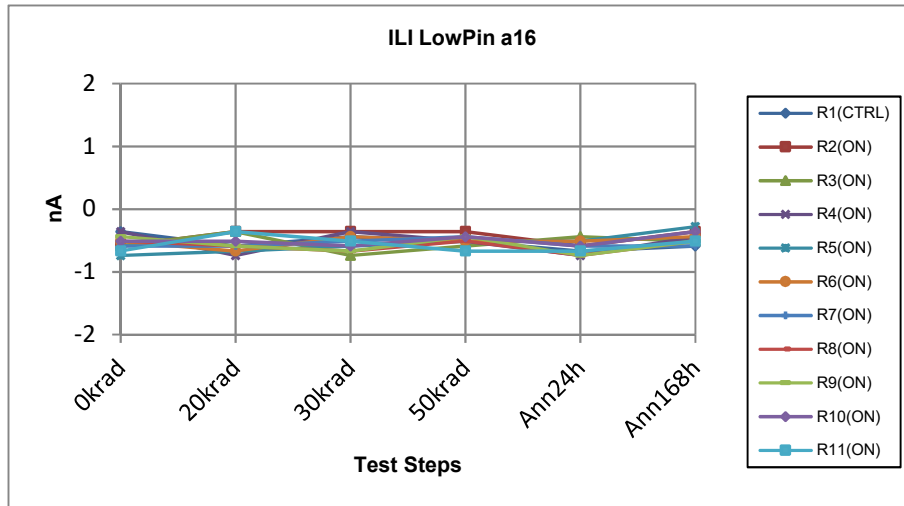
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ILI LowPin a17	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.88	-0.65	-0.80	-0.50	-0.88	-0.73
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.65	-0.73	-0.50	-0.50	-0.73	-0.65
R3(ON BIAS LDC)	-0.73	-0.50	-0.65	-0.73	-0.65	-0.80
R4(ON BIAS LDC)	-0.57	-0.65	-0.88	-0.57	-0.50	-0.73
R5(ON BIAS LDC)	-0.80	-0.50	-0.57	-0.50	-0.65	-0.42
R6(ON BIAS LDC)	-0.57	-0.42	-0.73	-0.57	-0.80	-0.65
R7(ON BIAS LDC)	-0.57	-0.88	-0.65	-0.65	-0.65	-0.65
R8(ON BIAS LDC)	-0.80	-0.65	-0.65	-0.57	-0.65	-0.65
R9(ON BIAS LDC)	-0.73	-0.50	-0.73	-0.88	-0.50	-0.73
R10(ON BIAS LDC)	-0.73	-0.42	-0.88	-0.50	-0.57	-0.73
R11(ON BIAS LDC)	-0.73	-0.80	-0.50	-0.65	-0.73	-0.42
Irradiated, ON biased LDC parts statistics						
Min Value	-0.80	-0.88	-0.88	-0.88	-0.80	-0.80
Max Value	-0.57	-0.42	-0.50	-0.50	-0.50	-0.42
Average	-0.69	-0.61	-0.67	-0.61	-0.64	-0.64
Sigma	0.09	0.16	0.14	0.12	0.10	0.13

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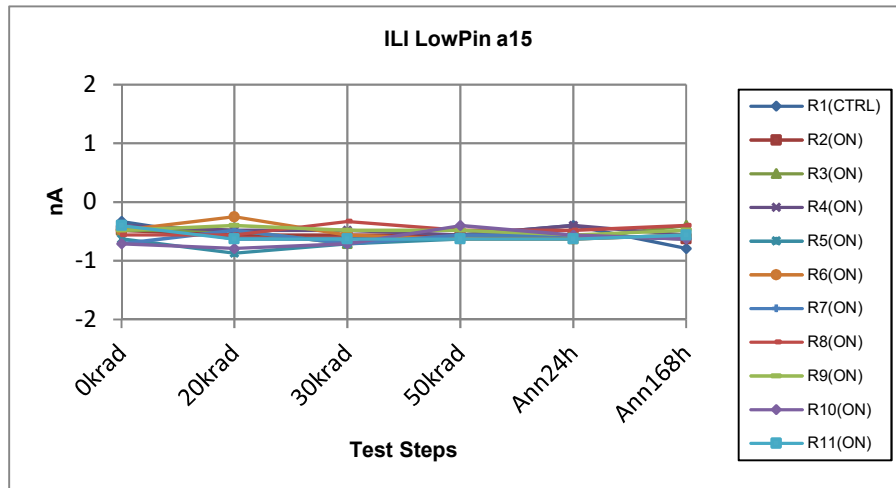
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ILI LowPin a16	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.36	-0.59	-0.44	-0.51	-0.67	-0.59
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.59	-0.36	-0.36	-0.36	-0.59	-0.36
R3(ON BIAS LDC)	-0.59	-0.36	-0.74	-0.59	-0.44	-0.51
R4(ON BIAS LDC)	-0.36	-0.74	-0.36	-0.51	-0.74	-0.44
R5(ON BIAS LDC)	-0.74	-0.67	-0.59	-0.51	-0.51	-0.28
R6(ON BIAS LDC)	-0.51	-0.67	-0.44	-0.51	-0.51	-0.44
R7(ON BIAS LDC)	-0.59	-0.59	-0.51	-0.44	-0.59	-0.59
R8(ON BIAS LDC)	-0.51	-0.59	-0.67	-0.51	-0.74	-0.51
R9(ON BIAS LDC)	-0.44	-0.59	-0.67	-0.44	-0.74	-0.51
R10(ON BIAS LDC)	-0.51	-0.51	-0.59	-0.44	-0.59	-0.36
R11(ON BIAS LDC)	-0.67	-0.36	-0.51	-0.67	-0.67	-0.51
Irradiated, ON biased LDC parts statistics						
Min Value	-0.74	-0.74	-0.74	-0.67	-0.74	-0.59
Max Value	-0.36	-0.36	-0.36	-0.36	-0.44	-0.28
Average	-0.55	-0.54	-0.54	-0.50	-0.61	-0.45
Sigma	0.11	0.14	0.13	0.09	0.11	0.09

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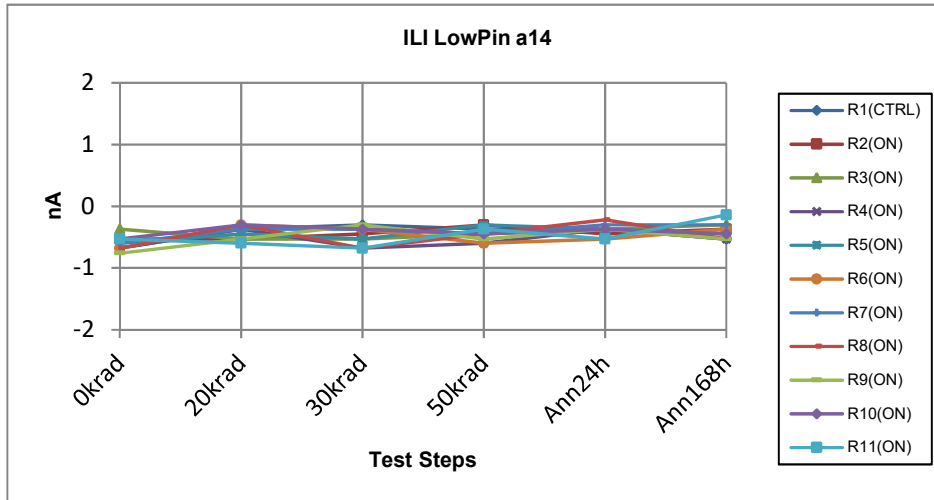
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ILI LowPin a15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.33	-0.63	-0.63	-0.56	-0.40	-0.79
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.48	-0.56	-0.56	-0.56	-0.56	-0.63
R3(ON BIAS LDC)	-0.48	-0.48	-0.71	-0.56	-0.63	-0.40
R4(ON BIAS LDC)	-0.40	-0.48	-0.48	-0.56	-0.40	-0.56
R5(ON BIAS LDC)	-0.63	-0.87	-0.71	-0.63	-0.63	-0.56
R6(ON BIAS LDC)	-0.48	-0.25	-0.56	-0.63	-0.63	-0.56
R7(ON BIAS LDC)	-0.71	-0.48	-0.71	-0.56	-0.56	-0.63
R8(ON BIAS LDC)	-0.56	-0.56	-0.33	-0.48	-0.48	-0.40
R9(ON BIAS LDC)	-0.48	-0.40	-0.48	-0.48	-0.56	-0.48
R10(ON BIAS LDC)	-0.71	-0.79	-0.71	-0.40	-0.56	-0.63
R11(ON BIAS LDC)	-0.40	-0.63	-0.63	-0.63	-0.63	-0.56
Irradiated, ON biased LDC parts statistics						
Min Value	-0.71	-0.87	-0.71	-0.63	-0.63	-0.63
Max Value	-0.40	-0.25	-0.33	-0.40	-0.40	-0.40
Average	-0.53	-0.55	-0.59	-0.55	-0.56	-0.54
Sigma	0.12	0.18	0.13	0.08	0.08	0.09

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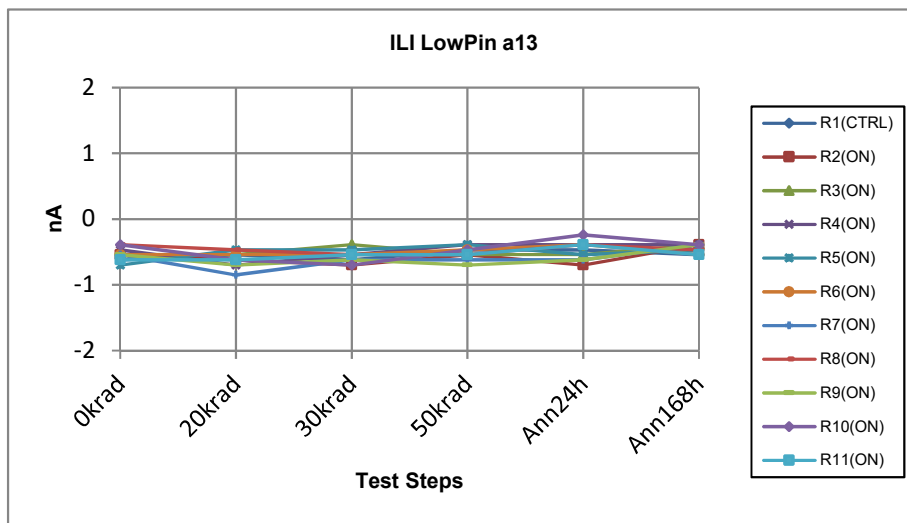
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ILI LowPin a14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.68	-0.37	-0.30	-0.37	-0.37	-0.53
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.53	-0.53	-0.45	-0.30	-0.45	-0.37
R3(ON BIAS LDC)	-0.37	-0.53	-0.53	-0.45	-0.37	-0.30
R4(ON BIAS LDC)	-0.68	-0.37	-0.68	-0.60	-0.37	-0.53
R5(ON BIAS LDC)	-0.60	-0.45	-0.53	-0.30	-0.37	-0.45
R6(ON BIAS LDC)	-0.68	-0.30	-0.37	-0.60	-0.53	-0.37
R7(ON BIAS LDC)	-0.60	-0.37	-0.37	-0.45	-0.30	-0.30
R8(ON BIAS LDC)	-0.68	-0.30	-0.68	-0.45	-0.22	-0.53
R9(ON BIAS LDC)	-0.76	-0.53	-0.30	-0.53	-0.37	-0.53
R10(ON BIAS LDC)	-0.53	-0.30	-0.37	-0.45	-0.37	-0.45
R11(ON BIAS LDC)	-0.53	-0.60	-0.68	-0.37	-0.53	-0.14
Irradiated, ON biased LDC parts statistics						
Min Value	-0.76	-0.60	-0.68	-0.60	-0.53	-0.53
Max Value	-0.37	-0.30	-0.30	-0.30	-0.22	-0.14
Average	-0.60	-0.43	-0.50	-0.45	-0.39	-0.40
Sigma	0.11	0.11	0.15	0.11	0.10	0.13

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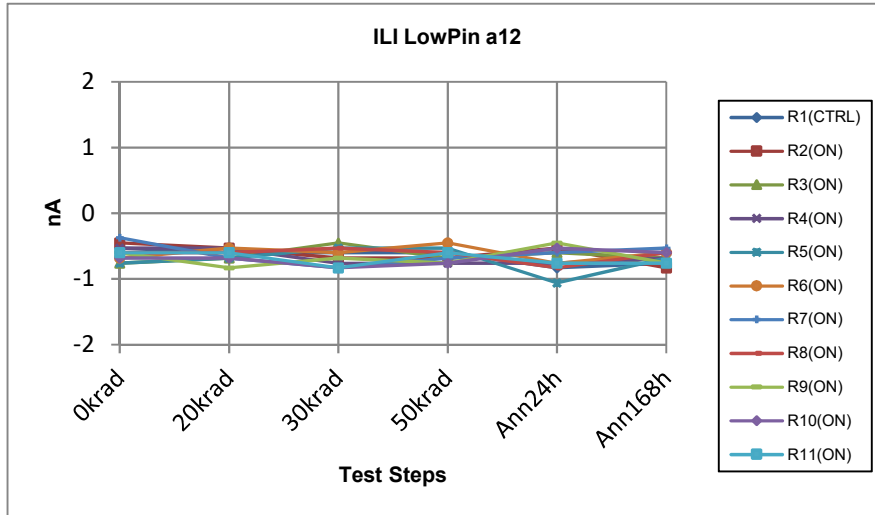
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ILI LowPin a13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.54	-0.62	-0.47	-0.47	-0.54
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.54	-0.62	-0.70	-0.54	-0.70	-0.39
R3(ON BIAS LDC)	-0.54	-0.54	-0.39	-0.54	-0.54	-0.39
R4(ON BIAS LDC)	-0.47	-0.70	-0.54	-0.39	-0.39	-0.39
R5(ON BIAS LDC)	-0.70	-0.47	-0.47	-0.39	-0.54	-0.47
R6(ON BIAS LDC)	-0.54	-0.54	-0.54	-0.47	-0.39	-0.54
R7(ON BIAS LDC)	-0.54	-0.85	-0.62	-0.62	-0.62	-0.39
R8(ON BIAS LDC)	-0.39	-0.47	-0.54	-0.54	-0.39	-0.47
R9(ON BIAS LDC)	-0.54	-0.70	-0.62	-0.70	-0.62	-0.39
R10(ON BIAS LDC)	-0.39	-0.62	-0.70	-0.47	-0.24	-0.39
R11(ON BIAS LDC)	-0.62	-0.62	-0.54	-0.54	-0.39	-0.54
Irradiated, ON biased LDC parts statistics						
Min Value	-0.70	-0.85	-0.70	-0.70	-0.70	-0.54
Max Value	-0.39	-0.47	-0.39	-0.39	-0.24	-0.39
Average	-0.53	-0.61	-0.57	-0.52	-0.48	-0.44
Sigma	0.09	0.12	0.10	0.10	0.14	0.06

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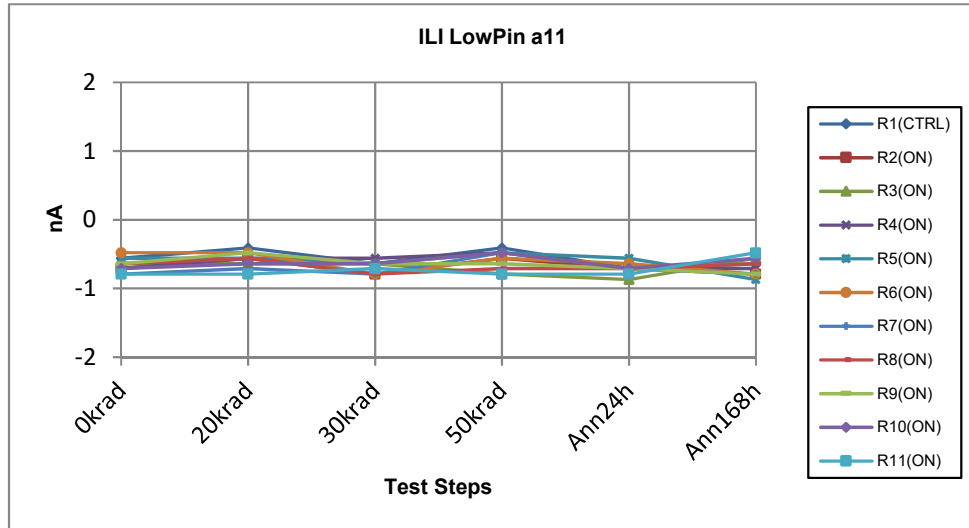
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ILI LowPin a12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.53	-0.60	-0.60	-0.60	-0.83	-0.76
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.45	-0.53	-0.68	-0.68	-0.53	-0.83
R3(ON BIAS LDC)	-0.76	-0.68	-0.45	-0.68	-0.60	-0.68
R4(ON BIAS LDC)	-0.53	-0.53	-0.76	-0.76	-0.76	-0.68
R5(ON BIAS LDC)	-0.76	-0.68	-0.53	-0.53	-1.06	-0.68
R6(ON BIAS LDC)	-0.68	-0.53	-0.60	-0.45	-0.76	-0.60
R7(ON BIAS LDC)	-0.37	-0.68	-0.83	-0.68	-0.60	-0.53
R8(ON BIAS LDC)	-0.60	-0.60	-0.53	-0.60	-0.83	-0.60
R9(ON BIAS LDC)	-0.60	-0.83	-0.68	-0.76	-0.45	-0.76
R10(ON BIAS LDC)	-0.68	-0.68	-0.83	-0.76	-0.53	-0.60
R11(ON BIAS LDC)	-0.60	-0.60	-0.83	-0.60	-0.76	-0.76
Irradiated, ON biased LDC parts statistics						
Min Value	-0.76	-0.83	-0.83	-0.76	-1.06	-0.83
Max Value	-0.37	-0.53	-0.45	-0.45	-0.45	-0.53
Average	-0.60	-0.63	-0.67	-0.65	-0.69	-0.67
Sigma	0.13	0.10	0.14	0.10	0.18	0.09

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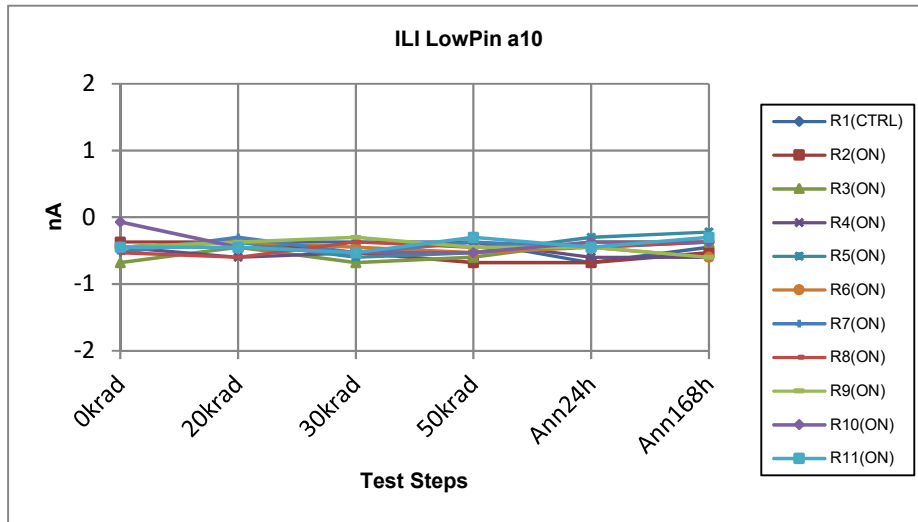
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ILI LowPin a11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.41	-0.64	-0.41	-0.71	-0.64
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.71	-0.56	-0.79	-0.56	-0.71	-0.79
R3(ON BIAS LDC)	-0.64	-0.64	-0.64	-0.79	-0.87	-0.56
R4(ON BIAS LDC)	-0.71	-0.56	-0.56	-0.48	-0.71	-0.71
R5(ON BIAS LDC)	-0.56	-0.56	-0.64	-0.48	-0.56	-0.87
R6(ON BIAS LDC)	-0.48	-0.48	-0.79	-0.56	-0.64	-0.79
R7(ON BIAS LDC)	-0.79	-0.71	-0.79	-0.48	-0.71	-0.79
R8(ON BIAS LDC)	-0.64	-0.56	-0.79	-0.71	-0.71	-0.64
R9(ON BIAS LDC)	-0.64	-0.48	-0.64	-0.64	-0.71	-0.79
R10(ON BIAS LDC)	-0.71	-0.64	-0.64	-0.48	-0.71	-0.56
R11(ON BIAS LDC)	-0.79	-0.79	-0.71	-0.79	-0.79	-0.48
Irradiated, ON biased LDC parts statistics						
Min Value	-0.79	-0.79	-0.79	-0.79	-0.87	-0.87
Max Value	-0.48	-0.48	-0.56	-0.48	-0.56	-0.48
Average	-0.67	-0.60	-0.70	-0.60	-0.71	-0.70
Sigma	0.10	0.10	0.09	0.13	0.08	0.13

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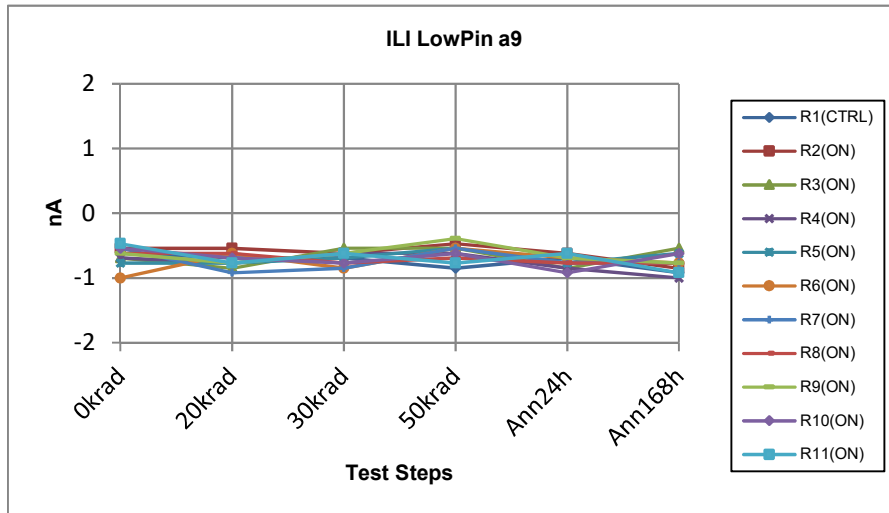
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ILI LowPin a10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.45	-0.37	-0.37	-0.37	-0.68	-0.45
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.37	-0.37	-0.53	-0.68	-0.68	-0.53
R3(ON BIAS LDC)	-0.68	-0.45	-0.68	-0.60	-0.37	-0.37
R4(ON BIAS LDC)	-0.45	-0.60	-0.53	-0.37	-0.60	-0.60
R5(ON BIAS LDC)	-0.45	-0.37	-0.60	-0.53	-0.30	-0.22
R6(ON BIAS LDC)	-0.45	-0.37	-0.45	-0.53	-0.45	-0.60
R7(ON BIAS LDC)	-0.53	-0.30	-0.53	-0.37	-0.45	-0.37
R8(ON BIAS LDC)	-0.53	-0.60	-0.37	-0.45	-0.45	-0.37
R9(ON BIAS LDC)	-0.45	-0.37	-0.30	-0.45	-0.45	-0.60
R10(ON BIAS LDC)	-0.07	-0.45	-0.53	-0.53	-0.37	-0.37
R11(ON BIAS LDC)	-0.45	-0.45	-0.53	-0.30	-0.45	-0.30
Irradiated, ON biased LDC parts statistics						
Min Value	-0.68	-0.60	-0.68	-0.68	-0.68	-0.60
Max Value	-0.07	-0.30	-0.30	-0.30	-0.30	-0.22
Average	-0.44	-0.43	-0.51	-0.48	-0.46	-0.43
Sigma	0.15	0.10	0.11	0.12	0.11	0.14

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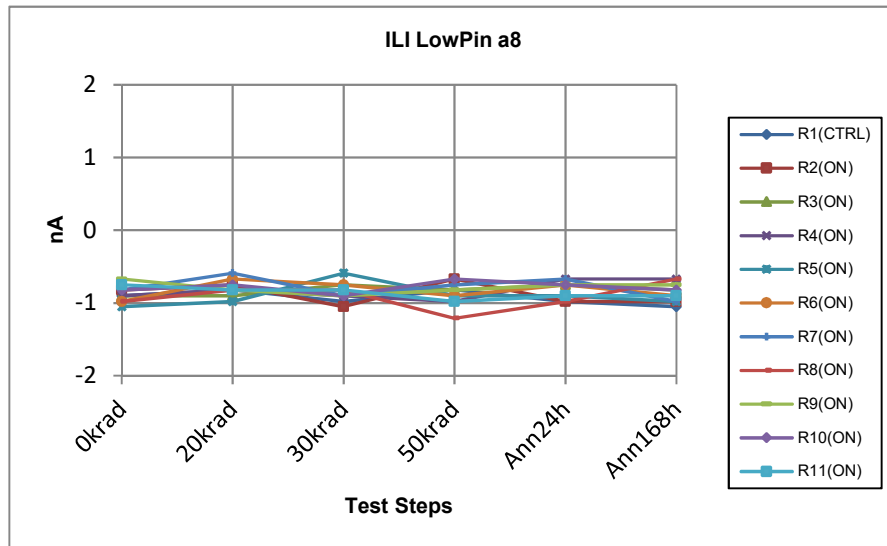
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ILI LowPin a9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.69	-0.69	-0.85	-0.69	-0.92
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.54	-0.54	-0.62	-0.47	-0.62	-0.85
R3(ON BIAS LDC)	-0.69	-0.85	-0.54	-0.54	-0.85	-0.54
R4(ON BIAS LDC)	-0.69	-0.77	-0.62	-0.62	-0.85	-1.00
R5(ON BIAS LDC)	-0.77	-0.77	-0.69	-0.54	-0.77	-0.62
R6(ON BIAS LDC)	-1.00	-0.62	-0.85	-0.54	-0.69	-0.77
R7(ON BIAS LDC)	-0.54	-0.92	-0.85	-0.54	-0.77	-0.77
R8(ON BIAS LDC)	-0.62	-0.62	-0.77	-0.69	-0.77	-0.77
R9(ON BIAS LDC)	-0.62	-0.77	-0.62	-0.39	-0.69	-0.77
R10(ON BIAS LDC)	-0.54	-0.69	-0.77	-0.62	-0.92	-0.62
R11(ON BIAS LDC)	-0.47	-0.77	-0.62	-0.77	-0.62	-0.92
Irradiated, ON biased LDC parts statistics						
Min Value	-1.00	-0.92	-0.85	-0.77	-0.92	-1.00
Max Value	-0.47	-0.54	-0.54	-0.39	-0.62	-0.54
Average	-0.65	-0.73	-0.70	-0.57	-0.76	-0.76
Sigma	0.15	0.11	0.11	0.11	0.10	0.14

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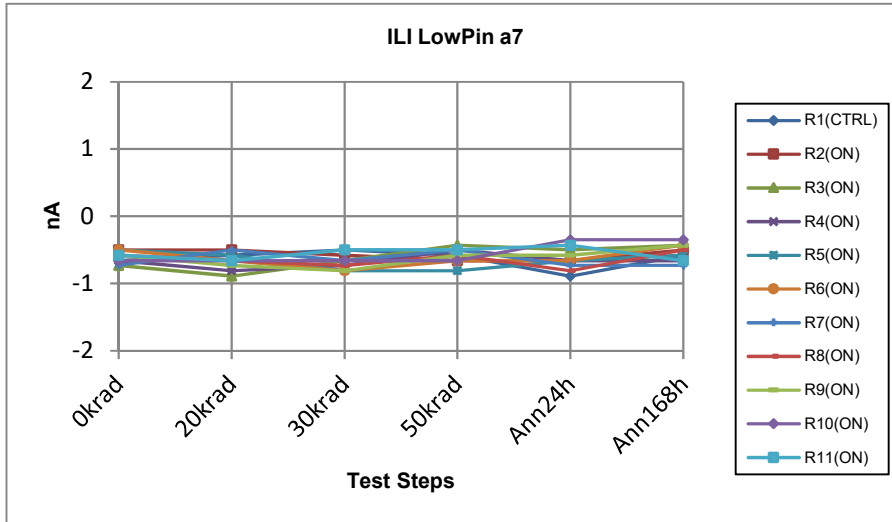
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ILI LowPin a8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.90	-0.82	-0.98	-0.82	-0.98	-1.05
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.82	-0.75	-1.05	-0.67	-0.98	-0.98
R3(ON BIAS LDC)	-0.90	-0.90	-0.75	-0.82	-0.75	-0.82
R4(ON BIAS LDC)	-0.90	-0.82	-0.90	-0.98	-0.67	-0.67
R5(ON BIAS LDC)	-1.05	-0.98	-0.59	-0.90	-0.90	-0.98
R6(ON BIAS LDC)	-0.98	-0.67	-0.75	-0.90	-0.75	-0.90
R7(ON BIAS LDC)	-0.82	-0.59	-0.90	-0.75	-0.67	-0.98
R8(ON BIAS LDC)	-0.98	-0.82	-0.82	-1.21	-0.98	-0.67
R9(ON BIAS LDC)	-0.67	-0.82	-0.90	-0.82	-0.75	-0.75
R10(ON BIAS LDC)	-0.82	-0.75	-0.90	-0.67	-0.75	-0.82
R11(ON BIAS LDC)	-0.75	-0.82	-0.82	-0.98	-0.90	-0.90
Irradiated, ON biased LDC parts statistics						
Min Value	-1.05	-0.98	-1.05	-1.21	-0.98	-0.98
Max Value	-0.67	-0.59	-0.59	-0.67	-0.67	-0.67
Average	-0.87	-0.79	-0.84	-0.87	-0.81	-0.85
Sigma	0.12	0.11	0.12	0.16	0.12	0.12

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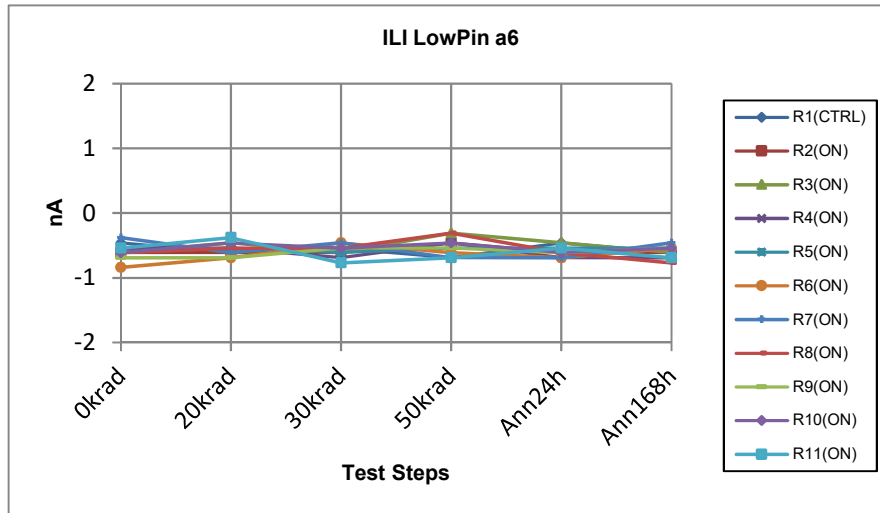
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ILI LowPin a7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.66	-0.58	-0.50	-0.58	-0.89	-0.58
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.50	-0.50	-0.58	-0.66	-0.66	-0.50
R3(ON BIAS LDC)	-0.73	-0.89	-0.66	-0.43	-0.50	-0.43
R4(ON BIAS LDC)	-0.66	-0.81	-0.73	-0.50	-0.66	-0.66
R5(ON BIAS LDC)	-0.50	-0.58	-0.81	-0.81	-0.66	-0.58
R6(ON BIAS LDC)	-0.50	-0.66	-0.81	-0.66	-0.66	-0.43
R7(ON BIAS LDC)	-0.73	-0.50	-0.66	-0.50	-0.73	-0.73
R8(ON BIAS LDC)	-0.58	-0.66	-0.73	-0.58	-0.81	-0.50
R9(ON BIAS LDC)	-0.58	-0.73	-0.81	-0.58	-0.58	-0.43
R10(ON BIAS LDC)	-0.66	-0.66	-0.66	-0.66	-0.35	-0.35
R11(ON BIAS LDC)	-0.58	-0.66	-0.50	-0.50	-0.43	-0.66
Irradiated, ON biased LDC parts statistics						
Min Value	-0.73	-0.89	-0.81	-0.81	-0.81	-0.73
Max Value	-0.50	-0.50	-0.50	-0.43	-0.35	-0.35
Average	-0.60	-0.67	-0.70	-0.59	-0.60	-0.53
Sigma	0.09	0.12	0.10	0.11	0.14	0.12

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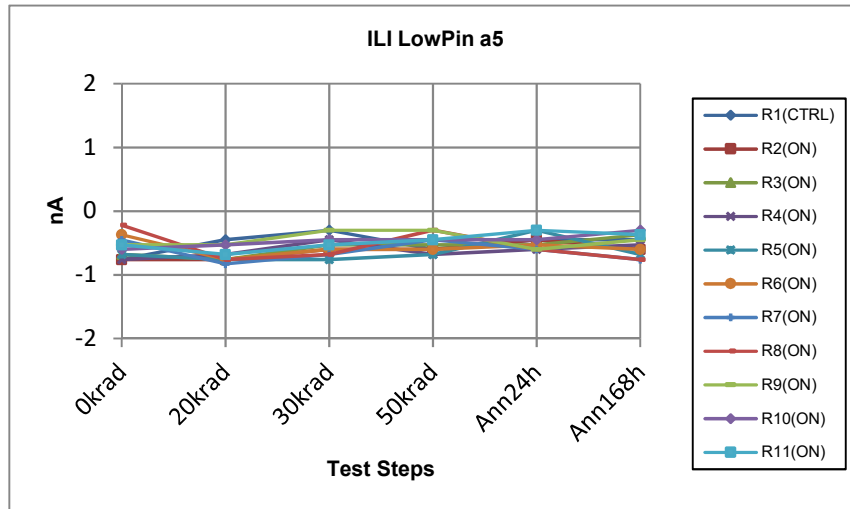
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ILI LowPin a6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.46	-0.61	-0.54	-0.69	-0.46	-0.61
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.61	-0.61	-0.61	-0.46	-0.61	-0.61
R3(ON BIAS LDC)	-0.61	-0.46	-0.61	-0.31	-0.46	-0.61
R4(ON BIAS LDC)	-0.54	-0.54	-0.69	-0.46	-0.69	-0.69
R5(ON BIAS LDC)	-0.61	-0.54	-0.61	-0.54	-0.54	-0.54
R6(ON BIAS LDC)	-0.84	-0.69	-0.46	-0.61	-0.69	-0.54
R7(ON BIAS LDC)	-0.38	-0.61	-0.46	-0.69	-0.69	-0.46
R8(ON BIAS LDC)	-0.61	-0.54	-0.54	-0.31	-0.61	-0.77
R9(ON BIAS LDC)	-0.69	-0.69	-0.54	-0.54	-0.61	-0.54
R10(ON BIAS LDC)	-0.61	-0.46	-0.54	-0.46	-0.61	-0.54
R11(ON BIAS LDC)	-0.54	-0.38	-0.77	-0.69	-0.54	-0.69
Irradiated, ON biased LDC parts statistics						
Min Value	-0.84	-0.69	-0.77	-0.69	-0.69	-0.77
Max Value	-0.38	-0.38	-0.46	-0.31	-0.46	-0.46
Average	-0.60	-0.55	-0.58	-0.51	-0.61	-0.60
Sigma	0.12	0.10	0.10	0.13	0.08	0.09

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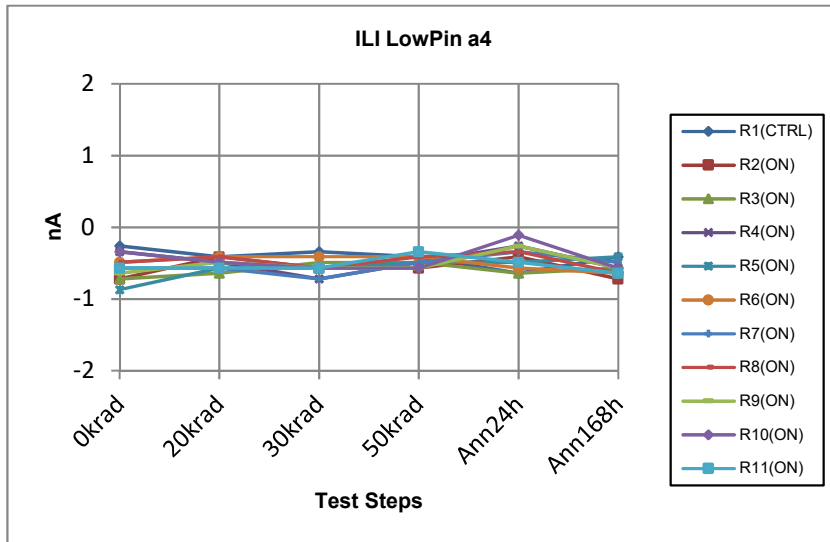
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ILI LowPin a5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.76	-0.45	-0.30	-0.60	-0.45	-0.45
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.76	-0.76	-0.60	-0.60	-0.45	-0.60
R3(ON BIAS LDC)	-0.68	-0.76	-0.53	-0.53	-0.53	-0.37
R4(ON BIAS LDC)	-0.76	-0.68	-0.45	-0.68	-0.60	-0.53
R5(ON BIAS LDC)	-0.68	-0.76	-0.76	-0.68	-0.30	-0.68
R6(ON BIAS LDC)	-0.37	-0.76	-0.60	-0.60	-0.53	-0.60
R7(ON BIAS LDC)	-0.45	-0.83	-0.68	-0.45	-0.60	-0.76
R8(ON BIAS LDC)	-0.22	-0.76	-0.68	-0.30	-0.60	-0.76
R9(ON BIAS LDC)	-0.53	-0.53	-0.30	-0.30	-0.60	-0.45
R10(ON BIAS LDC)	-0.60	-0.53	-0.45	-0.45	-0.45	-0.30
R11(ON BIAS LDC)	-0.53	-0.68	-0.53	-0.45	-0.30	-0.37
Irradiated, ON biased LDC parts statistics						
Min Value	-0.76	-0.83	-0.76	-0.68	-0.60	-0.76
Max Value	-0.22	-0.53	-0.30	-0.30	-0.30	-0.30
Average	-0.56	-0.71	-0.56	-0.50	-0.50	-0.54
Sigma	0.18	0.10	0.14	0.14	0.12	0.17

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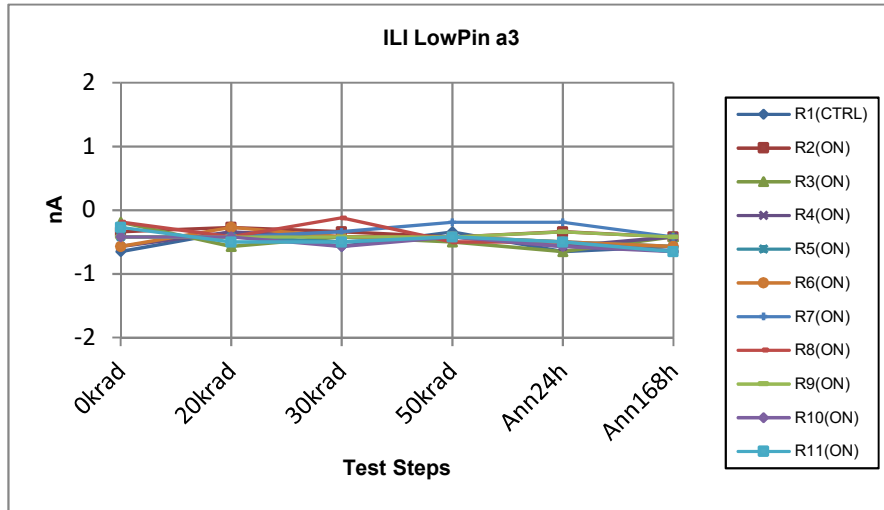
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ILI LowPin a4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.26	-0.41	-0.34	-0.41	-0.64	-0.41
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.72	-0.41	-0.57	-0.57	-0.41	-0.72
R3(ON BIAS LDC)	-0.72	-0.64	-0.49	-0.49	-0.64	-0.57
R4(ON BIAS LDC)	-0.34	-0.49	-0.72	-0.49	-0.26	-0.57
R5(ON BIAS LDC)	-0.87	-0.57	-0.57	-0.49	-0.49	-0.41
R6(ON BIAS LDC)	-0.49	-0.41	-0.41	-0.41	-0.57	-0.64
R7(ON BIAS LDC)	-0.57	-0.57	-0.72	-0.49	-0.34	-0.49
R8(ON BIAS LDC)	-0.49	-0.41	-0.57	-0.41	-0.34	-0.64
R9(ON BIAS LDC)	-0.64	-0.49	-0.57	-0.57	-0.26	-0.57
R10(ON BIAS LDC)	-0.34	-0.49	-0.57	-0.57	-0.11	-0.57
R11(ON BIAS LDC)	-0.57	-0.57	-0.57	-0.34	-0.49	-0.64
Irradiated, ON biased LDC parts statistics						
Min Value	-0.87	-0.64	-0.72	-0.57	-0.64	-0.72
Max Value	-0.34	-0.41	-0.41	-0.34	-0.11	-0.41
Average	-0.58	-0.51	-0.58	-0.48	-0.39	-0.58
Sigma	0.17	0.08	0.09	0.08	0.16	0.09

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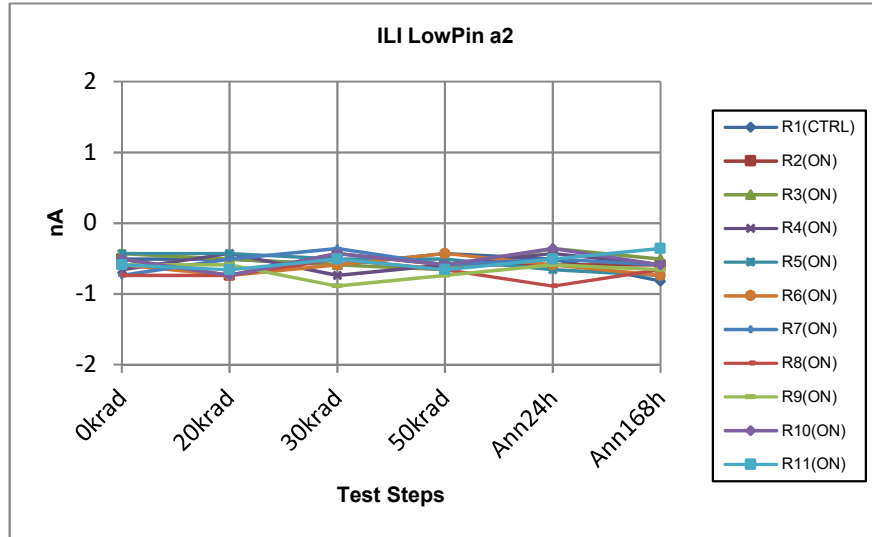
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ILI LowPin a3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.65	-0.34	-0.57	-0.34	-0.65	-0.57
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.34	-0.27	-0.34	-0.42	-0.34	-0.42
R3(ON BIAS LDC)	-0.19	-0.57	-0.42	-0.50	-0.65	-0.42
R4(ON BIAS LDC)	-0.57	-0.34	-0.42	-0.42	-0.57	-0.42
R5(ON BIAS LDC)	-0.42	-0.42	-0.50	-0.42	-0.50	-0.57
R6(ON BIAS LDC)	-0.57	-0.27	-0.42	-0.42	-0.50	-0.57
R7(ON BIAS LDC)	-0.42	-0.42	-0.34	-0.19	-0.19	-0.42
R8(ON BIAS LDC)	-0.19	-0.42	-0.12	-0.50	-0.50	-0.65
R9(ON BIAS LDC)	-0.42	-0.42	-0.42	-0.42	-0.34	-0.42
R10(ON BIAS LDC)	-0.42	-0.42	-0.57	-0.42	-0.57	-0.65
R11(ON BIAS LDC)	-0.27	-0.50	-0.50	-0.42	-0.50	-0.65
Irradiated, ON biased LDC parts statistics						
Min Value	-0.57	-0.57	-0.57	-0.50	-0.65	-0.65
Max Value	-0.19	-0.27	-0.12	-0.19	-0.19	-0.42
Average	-0.38	-0.41	-0.41	-0.41	-0.47	-0.52
Sigma	0.14	0.09	0.12	0.09	0.14	0.11

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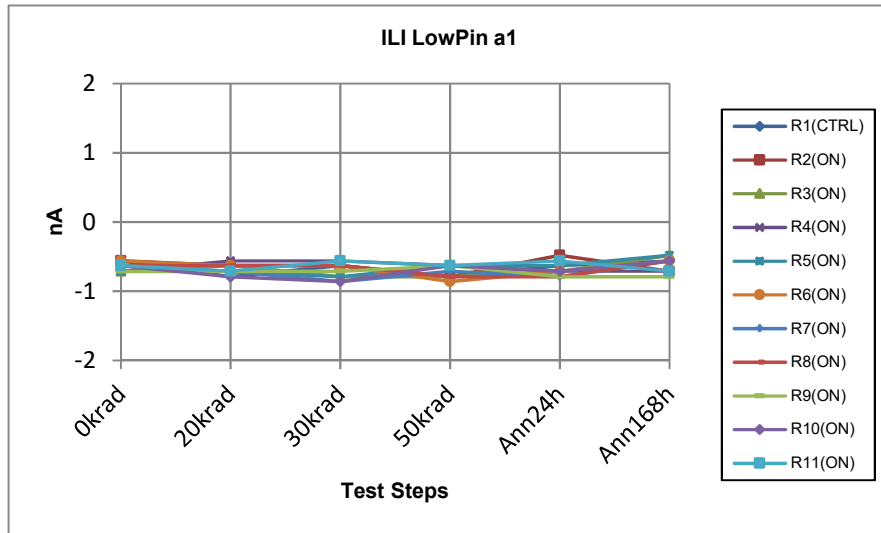
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ILI LowPin a2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.51	-0.51	-0.59	-0.43	-0.51	-0.82
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.51	-0.74	-0.43	-0.59	-0.59	-0.59
R3(ON BIAS LDC)	-0.43	-0.51	-0.59	-0.66	-0.36	-0.51
R4(ON BIAS LDC)	-0.66	-0.43	-0.74	-0.59	-0.43	-0.59
R5(ON BIAS LDC)	-0.43	-0.43	-0.51	-0.51	-0.66	-0.74
R6(ON BIAS LDC)	-0.59	-0.74	-0.59	-0.43	-0.59	-0.74
R7(ON BIAS LDC)	-0.74	-0.51	-0.36	-0.59	-0.51	-0.59
R8(ON BIAS LDC)	-0.74	-0.74	-0.51	-0.66	-0.89	-0.66
R9(ON BIAS LDC)	-0.59	-0.59	-0.89	-0.74	-0.59	-0.66
R10(ON BIAS LDC)	-0.51	-0.74	-0.43	-0.59	-0.36	-0.59
R11(ON BIAS LDC)	-0.59	-0.66	-0.51	-0.66	-0.51	-0.36
Irradiated, ON biased LDC parts statistics						
Min Value	-0.74	-0.74	-0.89	-0.74	-0.89	-0.74
Max Value	-0.43	-0.43	-0.36	-0.43	-0.36	-0.36
Average	-0.58	-0.61	-0.56	-0.60	-0.55	-0.60
Sigma	0.11	0.13	0.16	0.09	0.16	0.11

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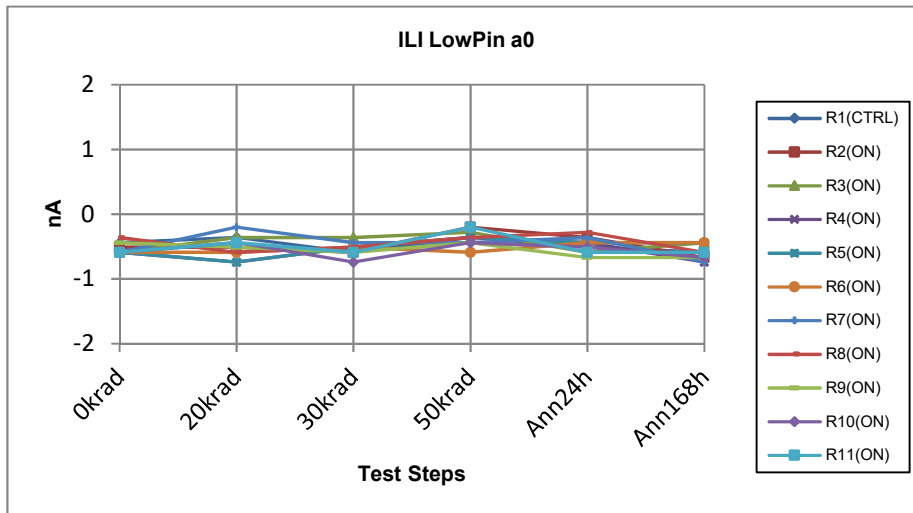
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ILI LowPin a1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.79	-0.63	-0.79	-0.63	-0.56
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.56	-0.63	-0.63	-0.79	-0.48	-0.71
R3(ON BIAS LDC)	-0.71	-0.63	-0.79	-0.79	-0.71	-0.48
R4(ON BIAS LDC)	-0.71	-0.56	-0.56	-0.63	-0.71	-0.71
R5(ON BIAS LDC)	-0.71	-0.71	-0.79	-0.63	-0.63	-0.48
R6(ON BIAS LDC)	-0.56	-0.63	-0.63	-0.86	-0.71	-0.56
R7(ON BIAS LDC)	-0.63	-0.71	-0.86	-0.71	-0.79	-0.56
R8(ON BIAS LDC)	-0.63	-0.63	-0.63	-0.79	-0.79	-0.56
R9(ON BIAS LDC)	-0.71	-0.71	-0.71	-0.63	-0.79	-0.79
R10(ON BIAS LDC)	-0.63	-0.79	-0.86	-0.63	-0.71	-0.56
R11(ON BIAS LDC)	-0.63	-0.71	-0.56	-0.63	-0.56	-0.71
Irradiated, ON biased LDC parts statistics						
Min Value	-0.71	-0.79	-0.86	-0.86	-0.79	-0.79
Max Value	-0.56	-0.56	-0.56	-0.63	-0.48	-0.48
Average	-0.65	-0.67	-0.70	-0.71	-0.69	-0.61
Sigma	0.06	0.07	0.12	0.09	0.10	0.11

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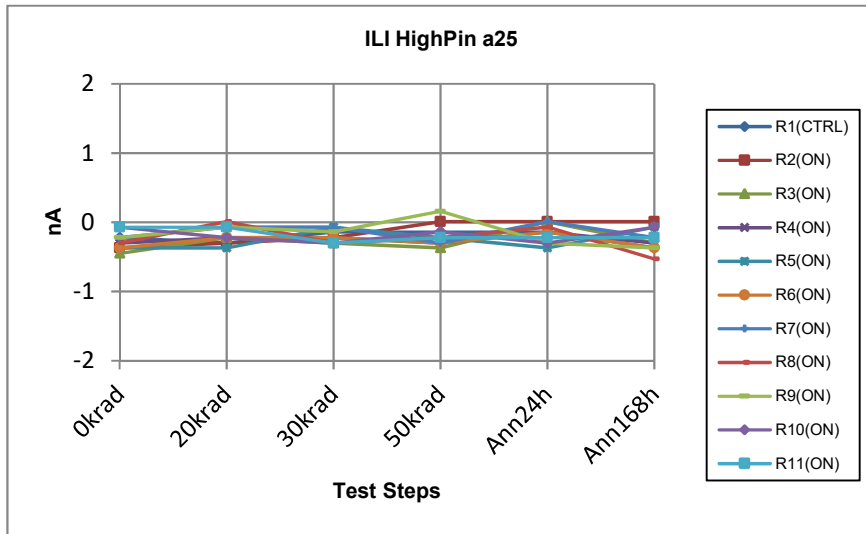
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ILI LowPin a0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.44	-0.36	-0.59	-0.36	-0.51	-0.59
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.51	-0.51	-0.59	-0.20	-0.36	-0.67
R3(ON BIAS LDC)	-0.59	-0.36	-0.36	-0.28	-0.59	-0.44
R4(ON BIAS LDC)	-0.59	-0.74	-0.51	-0.36	-0.44	-0.74
R5(ON BIAS LDC)	-0.59	-0.74	-0.51	-0.36	-0.44	-0.44
R6(ON BIAS LDC)	-0.59	-0.59	-0.51	-0.59	-0.44	-0.44
R7(ON BIAS LDC)	-0.59	-0.20	-0.44	-0.44	-0.36	-0.74
R8(ON BIAS LDC)	-0.36	-0.59	-0.51	-0.36	-0.28	-0.59
R9(ON BIAS LDC)	-0.44	-0.51	-0.59	-0.44	-0.67	-0.67
R10(ON BIAS LDC)	-0.59	-0.44	-0.74	-0.44	-0.51	-0.67
R11(ON BIAS LDC)	-0.59	-0.44	-0.59	-0.20	-0.59	-0.59
Irradiated, ON biased LDC parts statistics						
Min Value	-0.59	-0.74	-0.74	-0.59	-0.67	-0.74
Max Value	-0.36	-0.20	-0.36	-0.20	-0.28	-0.44
Average	-0.54	-0.51	-0.54	-0.37	-0.47	-0.60
Sigma	0.08	0.17	0.10	0.12	0.12	0.12

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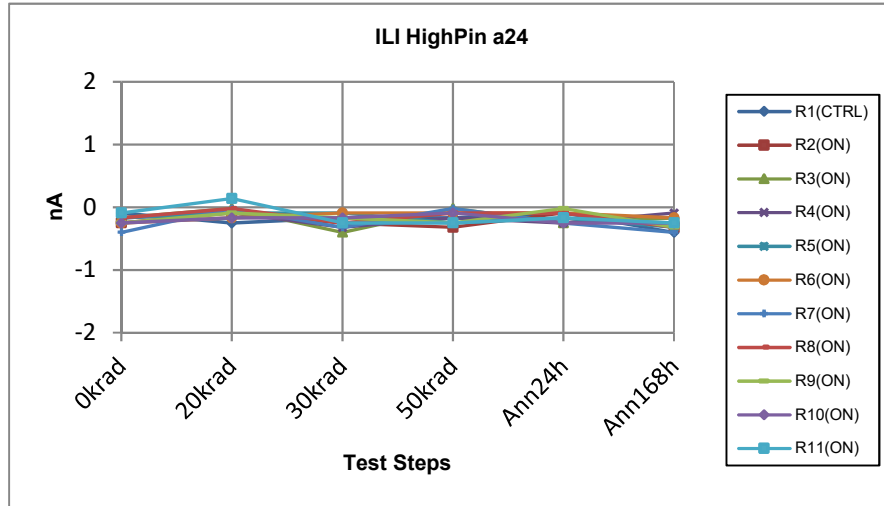
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ILI HighPin a25	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.22	-0.30	-0.14	-0.14	-0.14	-0.37
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.37	-0.30	-0.22	0.01	0.01	0.01
R3(ON BIAS LDC)	-0.45	-0.22	-0.30	-0.37	0.01	-0.30
R4(ON BIAS LDC)	-0.30	-0.22	-0.22	-0.30	-0.14	-0.30
R5(ON BIAS LDC)	-0.37	-0.37	-0.07	-0.22	-0.37	-0.07
R6(ON BIAS LDC)	-0.37	-0.22	-0.22	-0.30	-0.14	-0.37
R7(ON BIAS LDC)	-0.22	-0.07	-0.07	-0.30	0.01	-0.22
R8(ON BIAS LDC)	-0.30	0.01	-0.30	-0.22	-0.07	-0.53
R9(ON BIAS LDC)	-0.22	-0.07	-0.14	0.16	-0.30	-0.37
R10(ON BIAS LDC)	-0.07	-0.22	-0.30	-0.14	-0.30	-0.07
R11(ON BIAS LDC)	-0.07	-0.07	-0.30	-0.22	-0.22	-0.22
Irradiated, ON biased LDC parts statistics						
Min Value	-0.45	-0.37	-0.30	-0.37	-0.37	-0.53
Max Value	-0.07	0.01	-0.07	0.16	0.01	0.01
Average	-0.27	-0.18	-0.21	-0.19	-0.15	-0.24
Sigma	0.13	0.12	0.09	0.16	0.14	0.17

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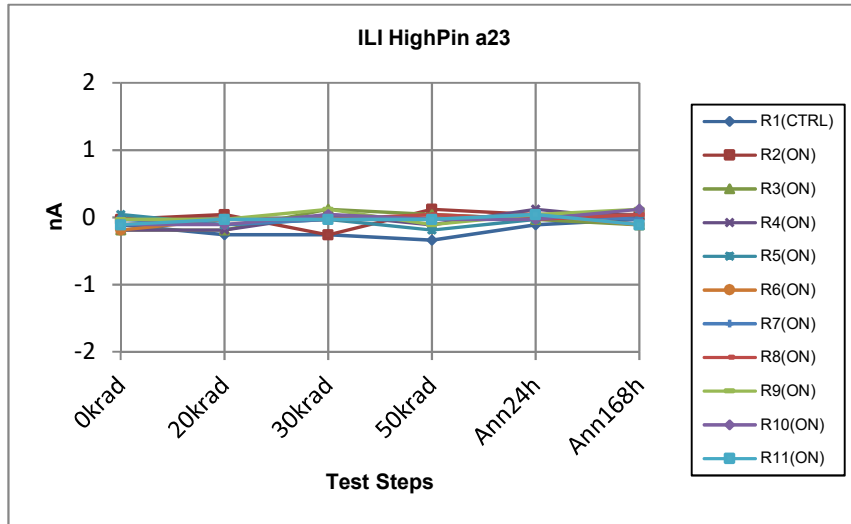
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ILI HighPin a24	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.09	-0.25	-0.17	-0.17	-0.09	-0.40
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.25	-0.09	-0.25	-0.32	-0.09	-0.32
R3(ON BIAS LDC)	-0.17	-0.02	-0.40	-0.02	-0.25	-0.17
R4(ON BIAS LDC)	-0.17	-0.09	-0.32	-0.17	-0.25	-0.09
R5(ON BIAS LDC)	-0.17	-0.09	-0.09	-0.25	-0.17	-0.32
R6(ON BIAS LDC)	-0.25	-0.17	-0.09	-0.09	-0.09	-0.17
R7(ON BIAS LDC)	-0.40	-0.02	-0.32	-0.02	-0.25	-0.40
R8(ON BIAS LDC)	-0.17	-0.02	-0.25	-0.09	-0.09	-0.32
R9(ON BIAS LDC)	-0.25	-0.09	-0.17	-0.25	-0.02	-0.32
R10(ON BIAS LDC)	-0.25	-0.17	-0.17	-0.09	-0.25	-0.25
R11(ON BIAS LDC)	-0.09	0.14	-0.25	-0.25	-0.17	-0.25
Irradiated, ON biased LDC parts statistics						
Min Value	-0.40	-0.17	-0.40	-0.32	-0.25	-0.40
Max Value	-0.09	0.14	-0.09	-0.02	-0.02	-0.09
Average	-0.22	-0.06	-0.23	-0.16	-0.16	-0.26
Sigma	0.08	0.09	0.10	0.11	0.09	0.09

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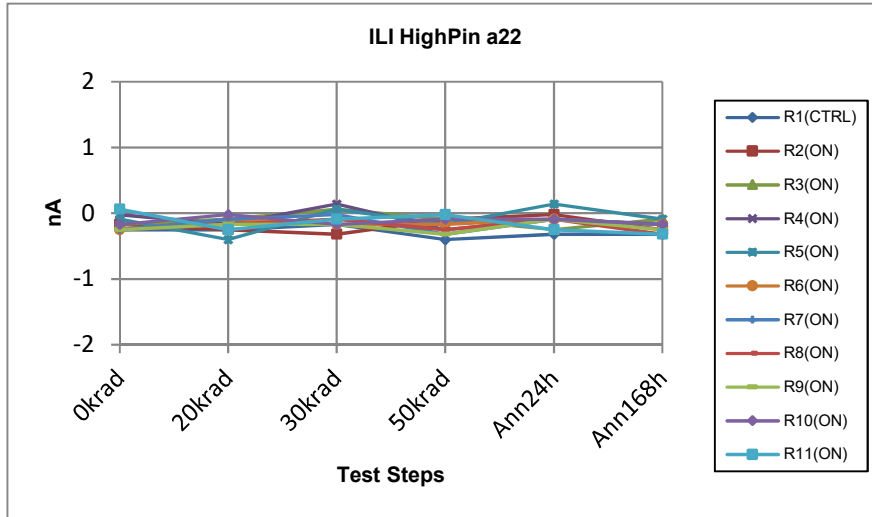
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ILI HighPin a23	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.11	-0.26	-0.26	-0.34	-0.11	-0.03
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.03	0.04	-0.26	0.12	0.04	0.04
R3(ON BIAS LDC)	-0.19	-0.19	0.12	0.04	-0.03	-0.11
R4(ON BIAS LDC)	-0.19	-0.19	0.04	-0.11	0.12	-0.03
R5(ON BIAS LDC)	0.04	-0.11	-0.03	-0.19	-0.03	0.04
R6(ON BIAS LDC)	-0.19	-0.03	-0.03	-0.03	0.04	-0.11
R7(ON BIAS LDC)	-0.03	-0.11	-0.03	-0.03	0.04	-0.03
R8(ON BIAS LDC)	-0.11	-0.03	-0.03	0.04	-0.03	0.04
R9(ON BIAS LDC)	-0.03	-0.03	0.12	-0.11	0.04	0.12
R10(ON BIAS LDC)	-0.11	-0.11	0.04	-0.03	-0.03	0.12
R11(ON BIAS LDC)	-0.11	-0.03	-0.03	-0.03	0.04	-0.11
Irradiated, ON biased LDC parts statistics						
Min Value	-0.19	-0.19	-0.26	-0.19	-0.03	-0.11
Max Value	0.04	0.04	0.12	0.12	0.12	0.12
Average	-0.10	-0.08	-0.01	-0.03	0.02	0.00
Sigma	0.08	0.08	0.11	0.09	0.05	0.09

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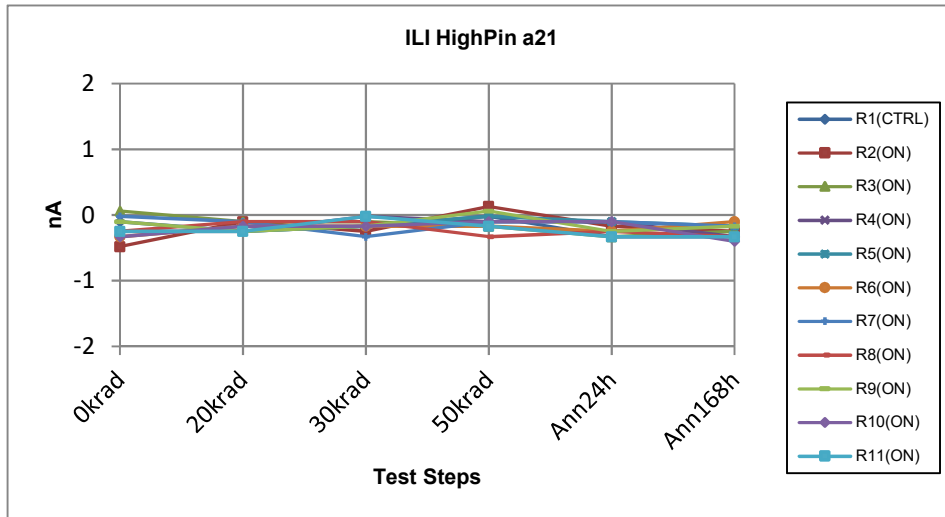
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ILI HighPin a22	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.25	-0.25	-0.17	-0.40	-0.32	-0.32
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.17	-0.25	-0.32	-0.09	-0.02	-0.25
R3(ON BIAS LDC)	-0.17	-0.09	0.06	-0.09	-0.25	-0.09
R4(ON BIAS LDC)	-0.02	-0.17	0.14	-0.25	-0.09	-0.17
R5(ON BIAS LDC)	-0.09	-0.40	0.06	-0.17	0.14	-0.09
R6(ON BIAS LDC)	-0.25	-0.09	-0.17	-0.17	-0.09	-0.17
R7(ON BIAS LDC)	-0.25	-0.09	-0.02	-0.32	-0.09	-0.17
R8(ON BIAS LDC)	-0.25	-0.17	-0.09	-0.25	-0.09	-0.32
R9(ON BIAS LDC)	-0.25	-0.17	-0.17	-0.32	-0.09	-0.25
R10(ON BIAS LDC)	-0.17	-0.02	-0.17	-0.09	-0.09	-0.17
R11(ON BIAS LDC)	0.06	-0.25	-0.09	-0.02	-0.25	-0.32
Irradiated, ON biased LDC parts statistics						
Min Value	-0.25	-0.40	-0.32	-0.32	-0.25	-0.32
Max Value	0.06	-0.02	0.14	-0.02	0.14	-0.09
Average	-0.16	-0.17	-0.08	-0.18	-0.09	-0.20
Sigma	0.11	0.11	0.14	0.10	0.11	0.08

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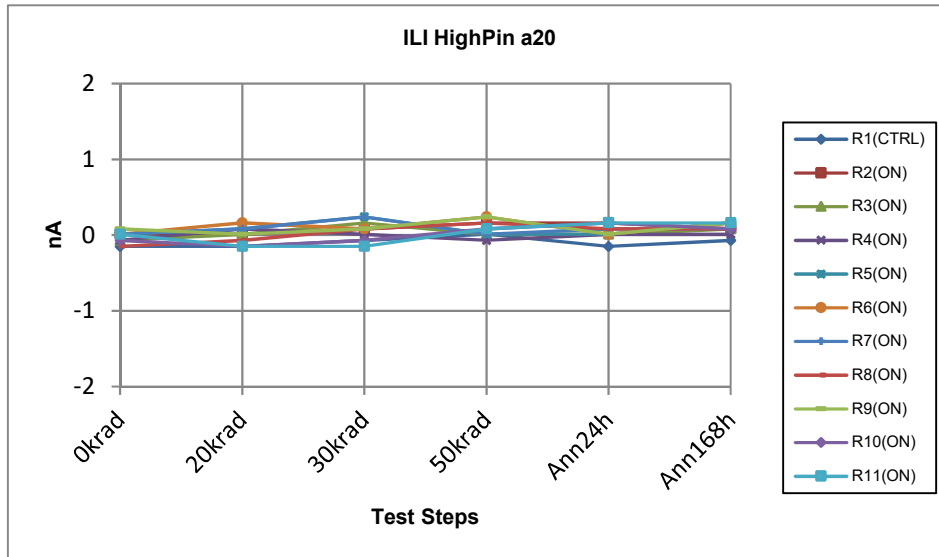
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ILI HighPin a21	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.10	-0.25	-0.17	-0.02	-0.33	-0.33
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.48	-0.10	-0.25	0.13	-0.17	-0.25
R3(ON BIAS LDC)	0.06	-0.10	-0.10	-0.17	-0.33	-0.25
R4(ON BIAS LDC)	-0.25	-0.25	-0.02	-0.10	-0.10	-0.33
R5(ON BIAS LDC)	-0.25	-0.25	-0.17	-0.02	-0.10	-0.17
R6(ON BIAS LDC)	-0.33	-0.17	-0.17	-0.17	-0.25	-0.10
R7(ON BIAS LDC)	-0.02	-0.10	-0.33	-0.10	-0.10	-0.17
R8(ON BIAS LDC)	-0.25	-0.10	-0.10	-0.33	-0.25	-0.33
R9(ON BIAS LDC)	-0.10	-0.25	-0.17	0.06	-0.25	-0.17
R10(ON BIAS LDC)	-0.33	-0.17	-0.17	-0.10	-0.10	-0.40
R11(ON BIAS LDC)	-0.25	-0.25	-0.02	-0.17	-0.33	-0.33
Irradiated, ON biased LDC parts statistics						
Min Value	-0.48	-0.25	-0.33	-0.33	-0.33	-0.40
Max Value	0.06	-0.10	-0.02	0.13	-0.10	-0.10
Average	-0.22	-0.17	-0.15	-0.10	-0.20	-0.25
Sigma	0.16	0.07	0.10	0.13	0.10	0.10

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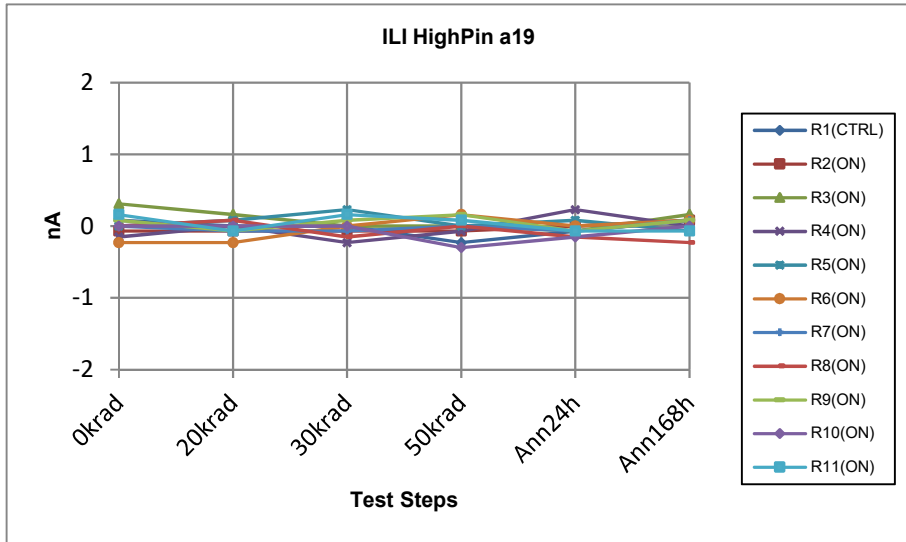
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ILI HighPin a20	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.15	-0.15	-0.07	0.01	-0.15	-0.07
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0.01	0.01	0.08	0.16	0.16	0.08
R3(ON BIAS LDC)	-0.07	0.01	0.16	0.01	0.01	0.08
R4(ON BIAS LDC)	-0.07	0.08	0.01	-0.07	0.01	0.01
R5(ON BIAS LDC)	0.01	0.08	0.24	0.01	0.01	0.16
R6(ON BIAS LDC)	0.01	0.16	0.08	0.24	0.01	0.16
R7(ON BIAS LDC)	0.01	0.08	0.24	0.01	0.08	0.08
R8(ON BIAS LDC)	-0.15	-0.07	0.08	0.16	0.08	0.08
R9(ON BIAS LDC)	0.08	0.01	0.08	0.24	0.01	0.16
R10(ON BIAS LDC)	-0.07	-0.15	-0.07	0.08	0.16	0.08
R11(ON BIAS LDC)	0.01	-0.15	-0.15	0.08	0.16	0.16
Irradiated, ON biased LDC parts statistics						
Min Value	-0.15	-0.15	-0.15	-0.07	0.01	0.01
Max Value	0.08	0.16	0.24	0.24	0.16	0.16
Average	-0.02	0.01	0.08	0.09	0.07	0.11
Sigma	0.07	0.10	0.12	0.11	0.07	0.05

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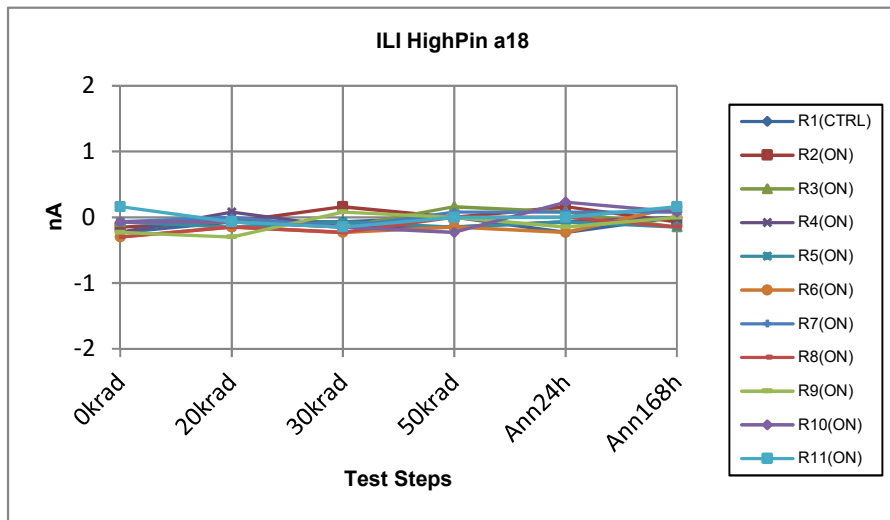
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ILI HighPin a19	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.08	0.00	0.00	-0.23	-0.07	0.08
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.07	-0.07	-0.07	-0.07	0.00	0.08
R3(ON BIAS LDC)	0.31	0.16	0.00	0.00	-0.07	0.16
R4(ON BIAS LDC)	-0.15	0.00	-0.23	-0.07	0.23	0.00
R5(ON BIAS LDC)	0.00	0.08	0.23	0.00	0.08	-0.07
R6(ON BIAS LDC)	-0.23	-0.23	0.00	0.16	0.00	0.08
R7(ON BIAS LDC)	0.00	-0.07	-0.07	0.00	-0.07	0.08
R8(ON BIAS LDC)	0.00	0.08	-0.15	0.00	-0.15	-0.23
R9(ON BIAS LDC)	0.08	-0.07	0.08	0.16	-0.07	0.08
R10(ON BIAS LDC)	0.00	0.00	0.00	-0.30	-0.15	0.00
R11(ON BIAS LDC)	0.16	-0.07	0.16	0.08	-0.07	-0.07
Irradiated, ON biased LDC parts statistics						
Min Value	-0.23	-0.23	-0.23	-0.30	-0.15	-0.23
Max Value	0.31	0.16	0.23	0.16	0.23	0.16
Average	0.01	-0.02	-0.01	0.00	-0.03	0.01
Sigma	0.15	0.11	0.14	0.13	0.11	0.11

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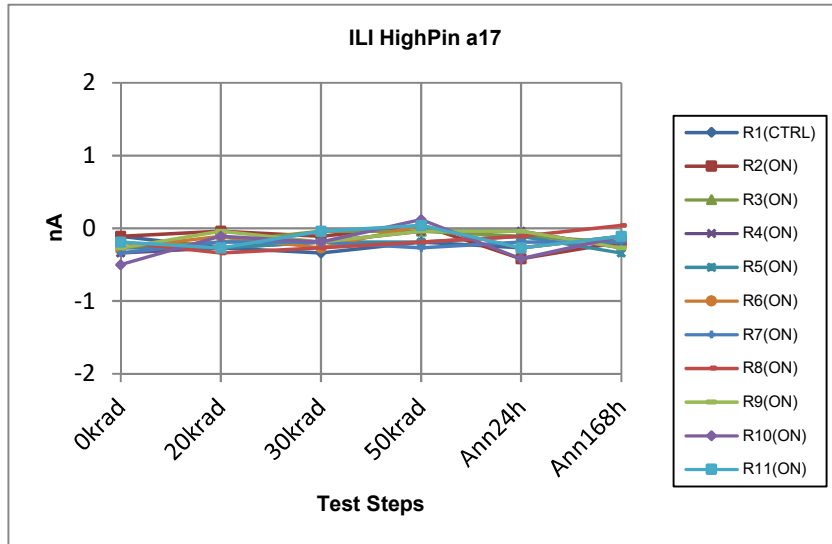
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ILI HighPin a18	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.07	-0.07	0.00	-0.23	0.00
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.15	-0.07	0.16	0.00	0.16	-0.07
R3(ON BIAS LDC)	-0.07	-0.07	-0.15	0.16	0.08	-0.15
R4(ON BIAS LDC)	-0.23	0.08	-0.15	-0.15	-0.07	0.00
R5(ON BIAS LDC)	-0.07	-0.15	-0.07	-0.15	-0.07	-0.15
R6(ON BIAS LDC)	-0.30	-0.15	-0.23	-0.15	-0.23	0.16
R7(ON BIAS LDC)	-0.07	0.00	-0.15	0.08	0.08	0.08
R8(ON BIAS LDC)	-0.30	-0.15	-0.23	0.00	0.00	-0.15
R9(ON BIAS LDC)	-0.23	-0.30	0.08	0.00	-0.15	0.00
R10(ON BIAS LDC)	-0.07	-0.07	-0.15	-0.23	0.23	0.08
R11(ON BIAS LDC)	0.16	-0.07	-0.15	0.00	0.00	0.16
Irradiated, ON biased LDC parts statistics						
Min Value	-0.30	-0.30	-0.23	-0.23	-0.23	-0.15
Max Value	0.16	0.08	0.16	0.16	0.23	0.16
Average	-0.13	-0.10	-0.10	-0.04	0.00	0.00
Sigma	0.14	0.10	0.13	0.12	0.14	0.12

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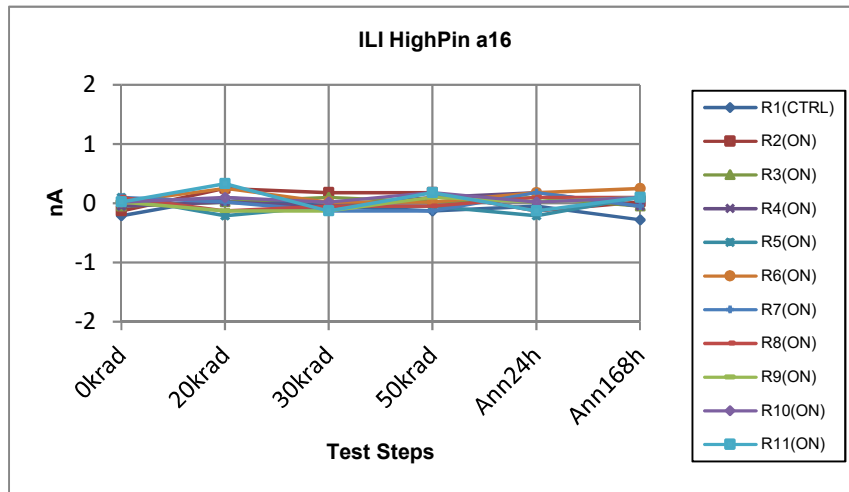
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ILI HighPin a17	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.11	-0.27	-0.34	-0.19	-0.27	-0.11
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.11	-0.04	-0.11	0.04	-0.42	-0.19
R3(ON BIAS LDC)	-0.27	-0.19	-0.04	-0.04	-0.11	-0.19
R4(ON BIAS LDC)	-0.34	-0.27	-0.19	-0.04	-0.04	-0.27
R5(ON BIAS LDC)	-0.27	-0.27	-0.19	-0.19	-0.11	-0.34
R6(ON BIAS LDC)	-0.27	-0.11	-0.27	0.04	-0.27	-0.11
R7(ON BIAS LDC)	-0.34	-0.19	-0.19	-0.27	-0.19	-0.19
R8(ON BIAS LDC)	-0.19	-0.34	-0.27	-0.19	-0.11	0.04
R9(ON BIAS LDC)	-0.27	-0.04	-0.19	-0.04	-0.04	-0.27
R10(ON BIAS LDC)	-0.50	-0.11	-0.19	0.12	-0.42	-0.11
R11(ON BIAS LDC)	-0.19	-0.27	-0.04	0.04	-0.27	-0.11
Irradiated, ON biased LDC parts statistics						
Min Value	-0.50	-0.34	-0.27	-0.27	-0.42	-0.34
Max Value	-0.11	-0.04	-0.04	0.12	-0.04	0.04
Average	-0.28	-0.18	-0.17	-0.05	-0.20	-0.17
Sigma	0.11	0.10	0.08	0.13	0.14	0.11

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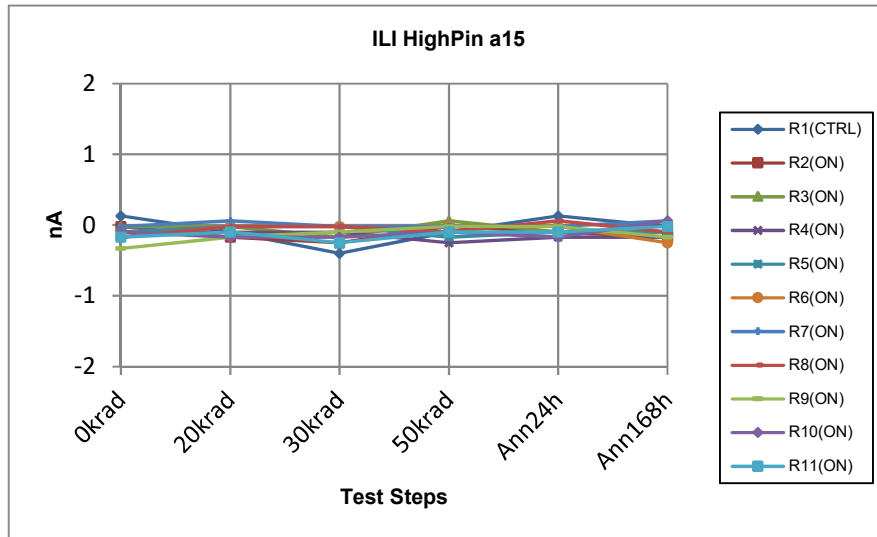
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ILI HighPin a16	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.21	0.10	-0.05	-0.13	-0.05	-0.28
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.13	0.25	0.18	0.18	-0.13	0.02
R3(ON BIAS LDC)	-0.05	0.02	0.10	0.02	0.10	-0.05
R4(ON BIAS LDC)	-0.05	0.02	-0.05	0.10	0.18	-0.05
R5(ON BIAS LDC)	0.10	-0.21	-0.05	-0.05	-0.21	0.10
R6(ON BIAS LDC)	0.02	0.25	0.02	0.02	0.18	0.25
R7(ON BIAS LDC)	0.10	0.02	-0.13	-0.13	0.18	-0.05
R8(ON BIAS LDC)	0.10	-0.13	-0.05	-0.05	0.10	0.10
R9(ON BIAS LDC)	0.02	-0.13	-0.13	0.10	0.02	0.10
R10(ON BIAS LDC)	0.02	0.10	0.02	0.18	0.02	0.10
R11(ON BIAS LDC)	0.02	0.33	-0.13	0.18	-0.13	0.10
Irradiated, ON biased LDC parts statistics						
Min Value	-0.13	-0.21	-0.13	-0.13	-0.21	-0.05
Max Value	0.10	0.33	0.18	0.18	0.18	0.25
Average	0.02	0.05	-0.02	0.06	0.03	0.06
Sigma	0.08	0.18	0.10	0.11	0.14	0.10

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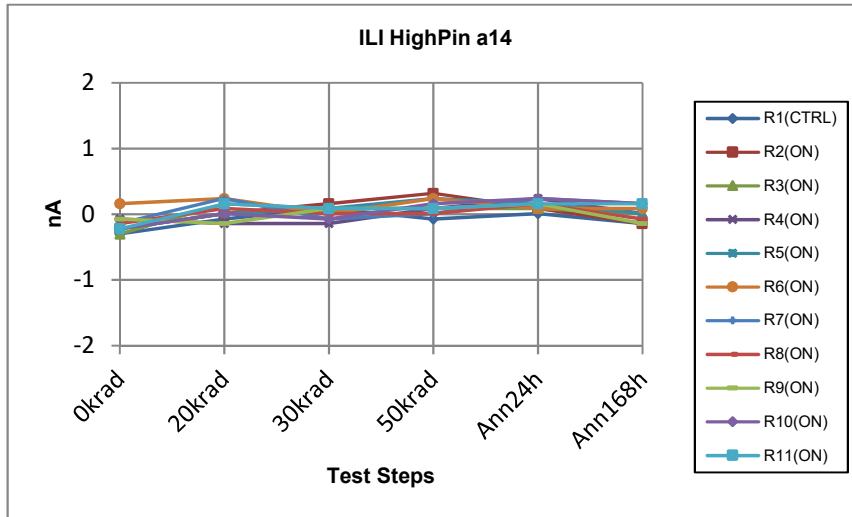
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ILI HighPin a15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.13	-0.10	-0.40	-0.10	0.13	-0.02
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.02	-0.17	-0.25	-0.02	-0.10	-0.17
R3(ON BIAS LDC)	-0.02	-0.02	-0.17	0.06	-0.10	-0.10
R4(ON BIAS LDC)	-0.10	-0.10	-0.10	-0.25	-0.17	-0.17
R5(ON BIAS LDC)	-0.10	-0.02	-0.02	-0.17	-0.10	-0.10
R6(ON BIAS LDC)	-0.17	-0.02	-0.02	-0.02	-0.02	-0.25
R7(ON BIAS LDC)	-0.02	0.06	-0.02	-0.02	-0.02	0.06
R8(ON BIAS LDC)	-0.17	-0.02	-0.02	-0.10	0.06	-0.10
R9(ON BIAS LDC)	-0.33	-0.17	-0.10	-0.02	-0.02	-0.17
R10(ON BIAS LDC)	-0.10	-0.17	-0.17	-0.10	-0.17	0.06
R11(ON BIAS LDC)	-0.17	-0.10	-0.25	-0.10	-0.10	-0.02
Irradiated, ON biased LDC parts statistics						
Min Value	-0.33	-0.17	-0.25	-0.25	-0.17	-0.25
Max Value	-0.02	0.06	-0.02	0.06	0.06	0.06
Average	-0.12	-0.07	-0.11	-0.07	-0.07	-0.10
Sigma	0.10	0.08	0.09	0.09	0.07	0.10

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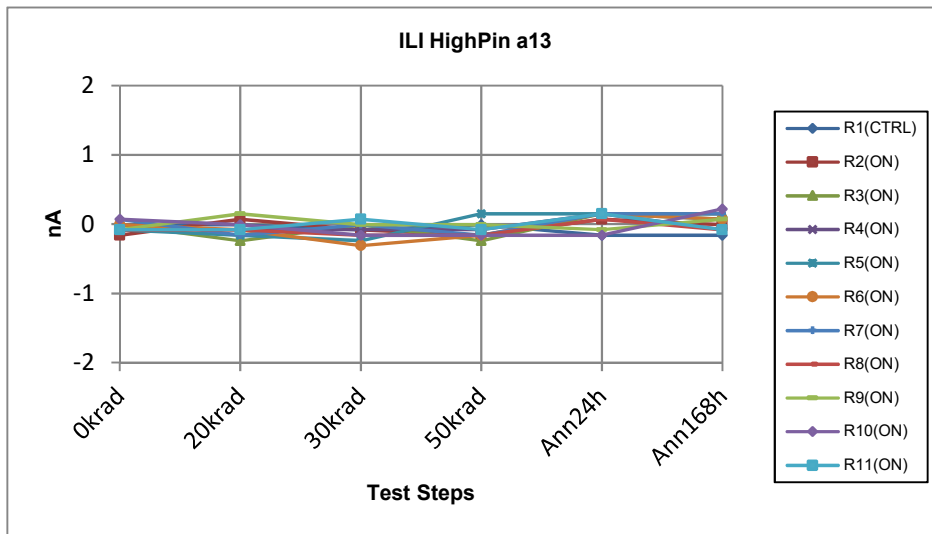
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ILI HighPin a14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.07	0.09	-0.07	0.01	-0.14
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.22	0.01	0.16	0.32	0.09	-0.14
R3(ON BIAS LDC)	-0.30	0.16	0.09	0.09	0.09	0.01
R4(ON BIAS LDC)	-0.07	-0.14	-0.14	0.09	0.24	0.01
R5(ON BIAS LDC)	-0.22	0.01	0.09	0.24	0.16	0.01
R6(ON BIAS LDC)	0.16	0.24	0.01	0.24	0.09	0.09
R7(ON BIAS LDC)	-0.14	0.24	-0.07	0.01	0.24	0.16
R8(ON BIAS LDC)	-0.14	0.09	0.01	0.01	0.16	-0.07
R9(ON BIAS LDC)	-0.07	-0.14	0.09	0.09	0.16	-0.14
R10(ON BIAS LDC)	-0.22	0.01	-0.07	0.16	0.24	0.16
R11(ON BIAS LDC)	-0.22	0.16	0.09	0.09	0.16	0.16
Irradiated, ON biased LDC parts statistics						
Min Value	-0.30	-0.14	-0.14	0.01	0.09	-0.14
Max Value	0.16	0.24	0.16	0.32	0.24	0.16
Average	-0.14	0.06	0.03	0.13	0.16	0.03
Sigma	0.13	0.14	0.09	0.10	0.06	0.12

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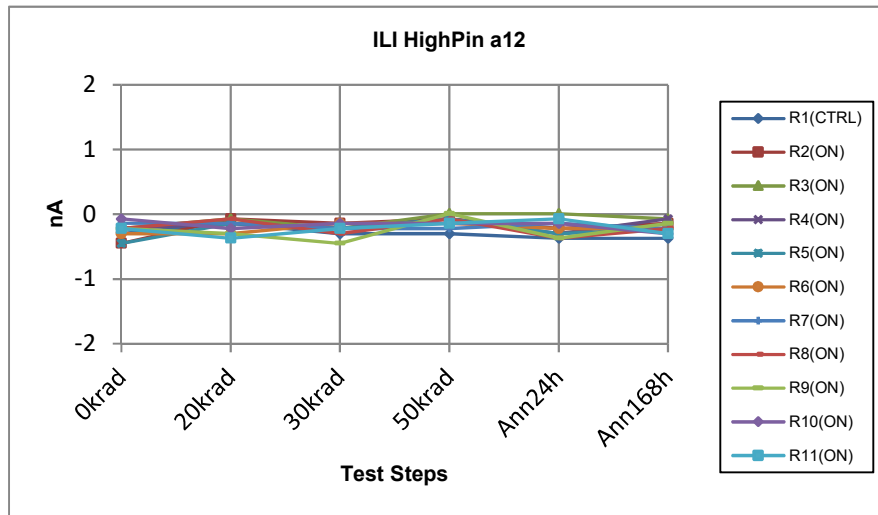
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ILI HighPin a13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.01	-0.01	-0.08	-0.01	-0.16	-0.16
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.16	0.07	-0.08	-0.16	0.07	-0.01
R3(ON BIAS LDC)	-0.01	-0.24	-0.01	-0.24	0.15	0.15
R4(ON BIAS LDC)	-0.08	-0.08	-0.08	-0.08	0.15	-0.08
R5(ON BIAS LDC)	-0.08	-0.16	-0.24	0.15	0.15	0.07
R6(ON BIAS LDC)	-0.01	-0.08	-0.31	-0.16	0.15	0.07
R7(ON BIAS LDC)	0.07	-0.16	-0.01	-0.16	0.15	0.15
R8(ON BIAS LDC)	-0.08	-0.08	-0.16	-0.16	0.07	-0.08
R9(ON BIAS LDC)	-0.08	0.15	-0.01	-0.01	-0.08	0.07
R10(ON BIAS LDC)	0.07	-0.01	-0.16	-0.16	-0.16	0.22
R11(ON BIAS LDC)	-0.08	-0.08	0.07	-0.08	0.15	-0.08
Irradiated, ON biased LDC parts statistics						
Min Value	-0.16	-0.24	-0.31	-0.24	-0.16	-0.08
Max Value	0.07	0.15	0.07	0.15	0.15	0.22
Average	-0.04	-0.07	-0.10	-0.11	0.08	0.05
Sigma	0.07	0.11	0.12	0.11	0.11	0.11

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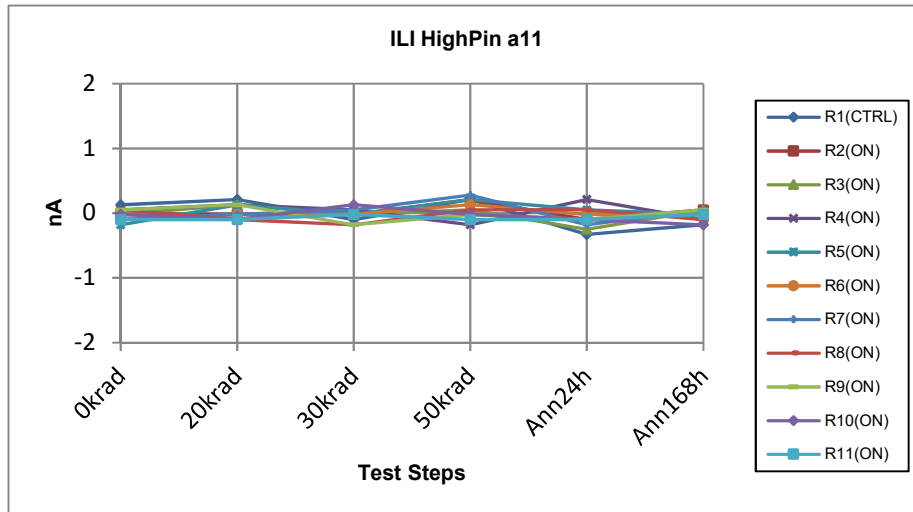
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ILI HighPin a12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.14	-0.30	-0.30	-0.37	-0.37
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.45	-0.07	-0.14	-0.07	-0.22	-0.14
R3(ON BIAS LDC)	-0.22	-0.07	-0.22	0.01	0.01	-0.07
R4(ON BIAS LDC)	-0.22	-0.14	-0.22	-0.07	-0.30	-0.07
R5(ON BIAS LDC)	-0.45	-0.14	-0.22	-0.07	-0.30	-0.22
R6(ON BIAS LDC)	-0.30	-0.30	-0.14	-0.14	-0.22	-0.22
R7(ON BIAS LDC)	-0.14	-0.14	-0.22	-0.22	-0.14	-0.22
R8(ON BIAS LDC)	-0.22	-0.07	-0.30	-0.07	-0.37	-0.22
R9(ON BIAS LDC)	-0.22	-0.30	-0.45	0.01	-0.37	-0.14
R10(ON BIAS LDC)	-0.07	-0.22	-0.14	-0.14	-0.14	-0.30
R11(ON BIAS LDC)	-0.22	-0.37	-0.22	-0.14	-0.07	-0.30
Irradiated, ON biased LDC parts statistics						
Min Value	-0.45	-0.37	-0.45	-0.22	-0.37	-0.30
Max Value	-0.07	-0.07	-0.14	0.01	0.01	-0.07
Average	-0.25	-0.18	-0.23	-0.09	-0.21	-0.19
Sigma	0.12	0.11	0.09	0.07	0.13	0.08

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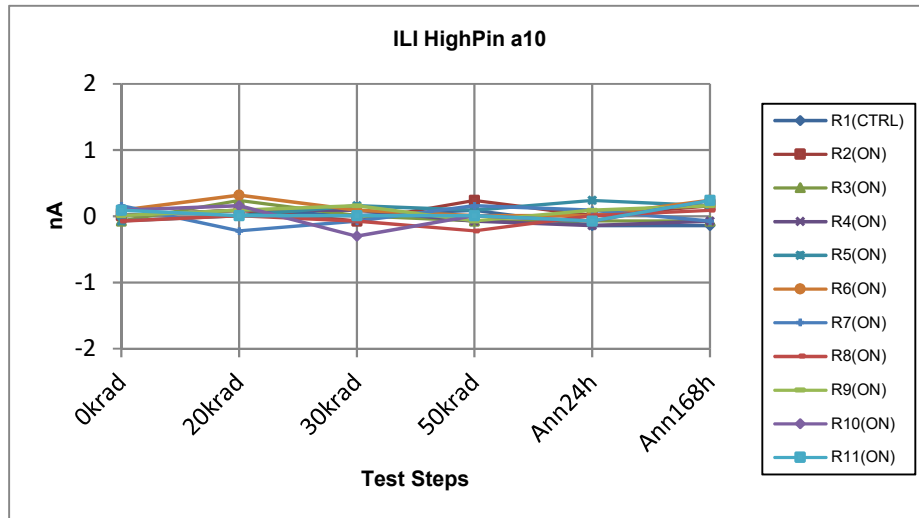
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ILI HighPin a11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.13	0.21	-0.10	0.21	-0.33	-0.18
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.02	-0.02	-0.02	0.21	-0.10	0.05
R3(ON BIAS LDC)	-0.02	0.13	-0.02	0.05	-0.25	0.05
R4(ON BIAS LDC)	0.05	0.13	0.05	-0.18	0.21	-0.10
R5(ON BIAS LDC)	-0.18	0.13	-0.02	0.21	0.05	-0.02
R6(ON BIAS LDC)	-0.10	-0.02	-0.02	0.13	-0.02	-0.02
R7(ON BIAS LDC)	-0.10	-0.02	0.05	0.28	-0.18	0.05
R8(ON BIAS LDC)	0.05	-0.10	-0.18	0.05	0.05	-0.10
R9(ON BIAS LDC)	0.05	0.13	-0.18	-0.02	-0.10	0.05
R10(ON BIAS LDC)	-0.02	-0.10	0.13	-0.02	-0.10	-0.18
R11(ON BIAS LDC)	-0.10	-0.10	-0.02	-0.10	-0.10	-0.02
Irradiated, ON biased LDC parts statistics						
Min Value	-0.18	-0.10	-0.18	-0.18	-0.25	-0.18
Max Value	0.05	0.13	0.13	0.28	0.21	0.05
Average	-0.04	0.02	-0.02	0.06	-0.05	-0.02
Sigma	0.08	0.10	0.10	0.15	0.13	0.08

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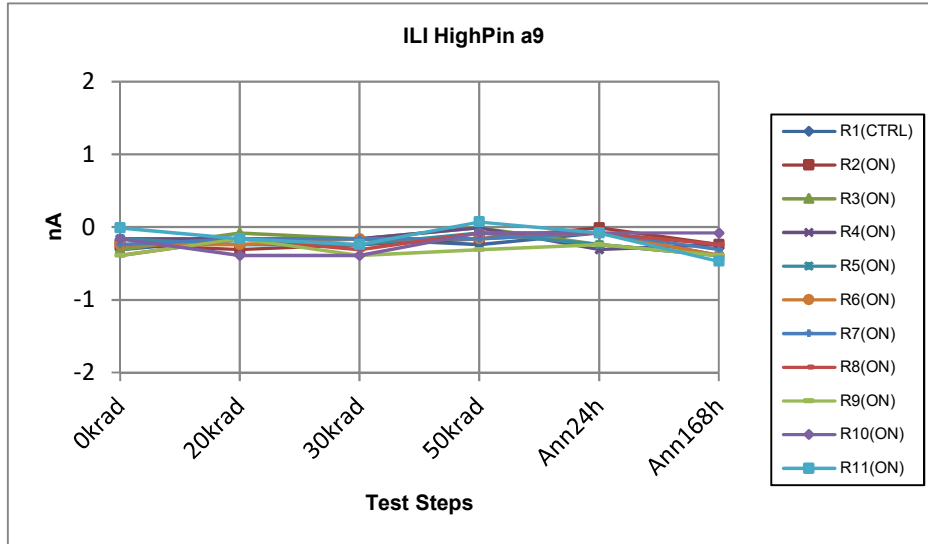
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ILI HighPin a10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.01	0.09	0.01	0.09	-0.14	-0.14
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0.01	0.09	-0.07	0.24	0.01	0.16
R3(ON BIAS LDC)	-0.07	0.24	0.01	-0.07	-0.07	-0.07
R4(ON BIAS LDC)	0.01	0.09	0.09	-0.07	-0.14	-0.07
R5(ON BIAS LDC)	-0.07	0.01	0.16	0.09	0.24	0.16
R6(ON BIAS LDC)	0.09	0.32	0.09	0.01	0.01	0.24
R7(ON BIAS LDC)	0.16	-0.22	-0.07	0.16	0.09	-0.07
R8(ON BIAS LDC)	-0.07	0.01	-0.07	-0.22	0.01	0.09
R9(ON BIAS LDC)	0.01	0.09	0.16	-0.07	0.09	0.16
R10(ON BIAS LDC)	0.09	0.16	-0.30	0.01	-0.07	0.24
R11(ON BIAS LDC)	0.09	0.01	0.01	0.01	-0.07	0.24
Irradiated, ON biased LDC parts statistics						
Min Value	-0.07	-0.22	-0.30	-0.22	-0.14	-0.07
Max Value	0.16	0.32	0.16	0.24	0.24	0.24
Average	0.03	0.08	0.00	0.01	0.01	0.11
Sigma	0.08	0.15	0.14	0.13	0.11	0.13

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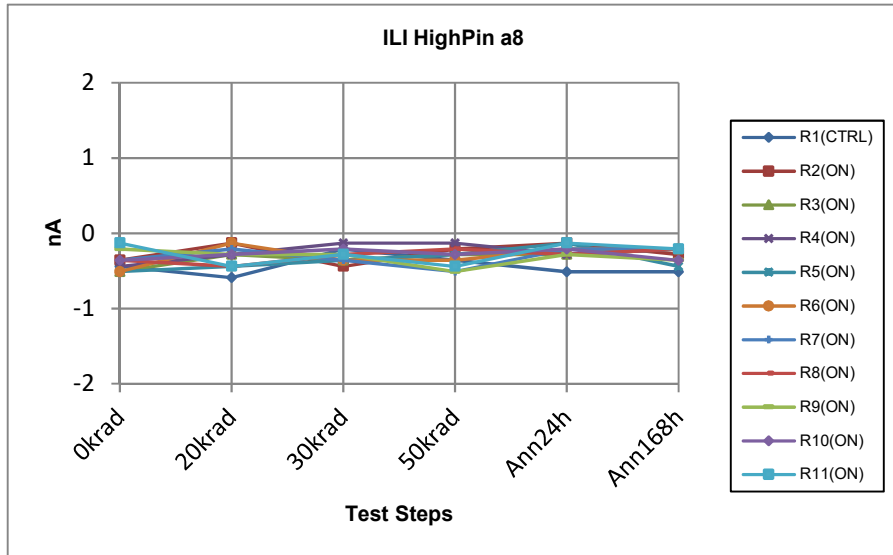
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ILI HighPin a9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.31	-0.16	-0.16	-0.24	-0.08	-0.39
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.24	-0.31	-0.24	-0.16	-0.01	-0.24
R3(ON BIAS LDC)	-0.31	-0.08	-0.16	-0.01	-0.24	-0.39
R4(ON BIAS LDC)	-0.16	-0.16	-0.16	-0.01	-0.31	-0.24
R5(ON BIAS LDC)	-0.16	-0.24	-0.24	-0.08	-0.24	-0.39
R6(ON BIAS LDC)	-0.24	-0.24	-0.16	-0.16	-0.08	-0.39
R7(ON BIAS LDC)	-0.24	-0.16	-0.16	-0.16	-0.08	-0.31
R8(ON BIAS LDC)	-0.39	-0.16	-0.31	-0.08	-0.08	-0.24
R9(ON BIAS LDC)	-0.39	-0.16	-0.39	-0.31	-0.24	-0.39
R10(ON BIAS LDC)	-0.16	-0.39	-0.39	-0.08	-0.08	-0.08
R11(ON BIAS LDC)	-0.01	-0.16	-0.24	0.07	-0.08	-0.47
Irradiated, ON biased LDC parts statistics						
Min Value	-0.39	-0.39	-0.39	-0.31	-0.31	-0.47
Max Value	-0.01	-0.08	-0.16	0.07	-0.01	-0.08
Average	-0.23	-0.21	-0.25	-0.10	-0.14	-0.31
Sigma	0.12	0.09	0.09	0.11	0.10	0.11

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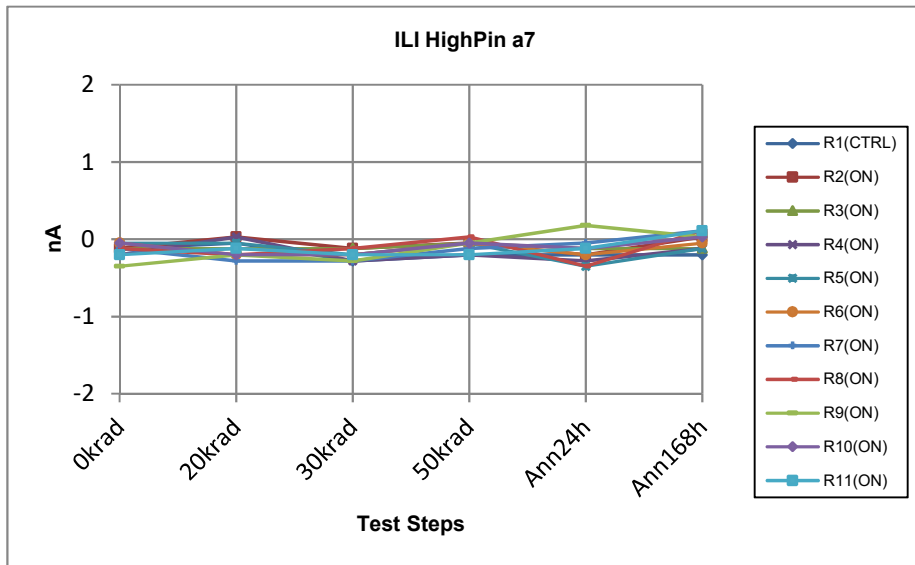
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ILI HighPin a8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.44	-0.59	-0.21	-0.36	-0.51	-0.51
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.36	-0.13	-0.44	-0.21	-0.13	-0.28
R3(ON BIAS LDC)	-0.51	-0.28	-0.36	-0.28	-0.28	-0.21
R4(ON BIAS LDC)	-0.44	-0.28	-0.13	-0.13	-0.28	-0.21
R5(ON BIAS LDC)	-0.51	-0.44	-0.36	-0.28	-0.13	-0.44
R6(ON BIAS LDC)	-0.51	-0.13	-0.36	-0.36	-0.21	-0.21
R7(ON BIAS LDC)	-0.36	-0.21	-0.36	-0.51	-0.21	-0.21
R8(ON BIAS LDC)	-0.36	-0.44	-0.28	-0.21	-0.28	-0.21
R9(ON BIAS LDC)	-0.21	-0.28	-0.28	-0.51	-0.28	-0.36
R10(ON BIAS LDC)	-0.36	-0.28	-0.21	-0.28	-0.21	-0.36
R11(ON BIAS LDC)	-0.13	-0.44	-0.28	-0.44	-0.13	-0.21
Irradiated, ON biased LDC parts statistics						
Min Value	-0.51	-0.44	-0.44	-0.51	-0.28	-0.44
Max Value	-0.13	-0.13	-0.13	-0.13	-0.13	-0.21
Average	-0.38	-0.29	-0.31	-0.32	-0.21	-0.27
Sigma	0.13	0.12	0.09	0.13	0.07	0.09

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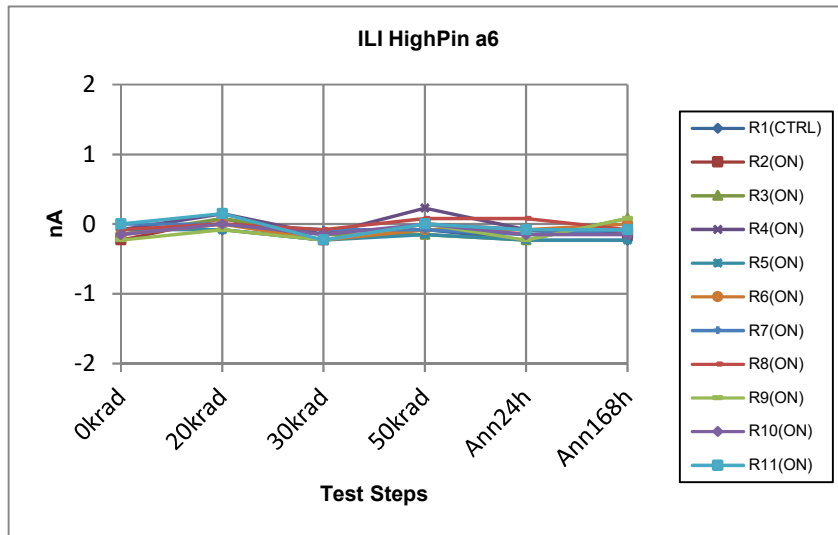
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ILI HighPin a7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.12	-0.05	-0.28	-0.20	-0.20	-0.20
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.12	0.03	-0.12	-0.05	-0.20	0.03
R3(ON BIAS LDC)	-0.12	-0.12	-0.12	-0.05	-0.12	-0.12
R4(ON BIAS LDC)	-0.20	0.03	-0.28	-0.20	-0.28	-0.12
R5(ON BIAS LDC)	-0.05	-0.05	-0.20	-0.05	-0.35	-0.12
R6(ON BIAS LDC)	-0.05	-0.20	-0.20	-0.05	-0.20	-0.05
R7(ON BIAS LDC)	-0.12	-0.28	-0.28	-0.12	-0.05	0.11
R8(ON BIAS LDC)	-0.12	-0.20	-0.12	0.03	-0.35	0.11
R9(ON BIAS LDC)	-0.35	-0.20	-0.28	-0.05	0.18	0.03
R10(ON BIAS LDC)	-0.05	-0.20	-0.20	-0.05	-0.12	0.03
R11(ON BIAS LDC)	-0.20	-0.12	-0.20	-0.20	-0.12	0.11
Irradiated, ON biased LDC parts statistics						
Min Value	-0.35	-0.28	-0.28	-0.20	-0.35	-0.12
Max Value	-0.05	0.03	-0.12	0.03	0.18	0.11
Average	-0.14	-0.13	-0.20	-0.08	-0.16	0.00
Sigma	0.09	0.11	0.07	0.07	0.16	0.10

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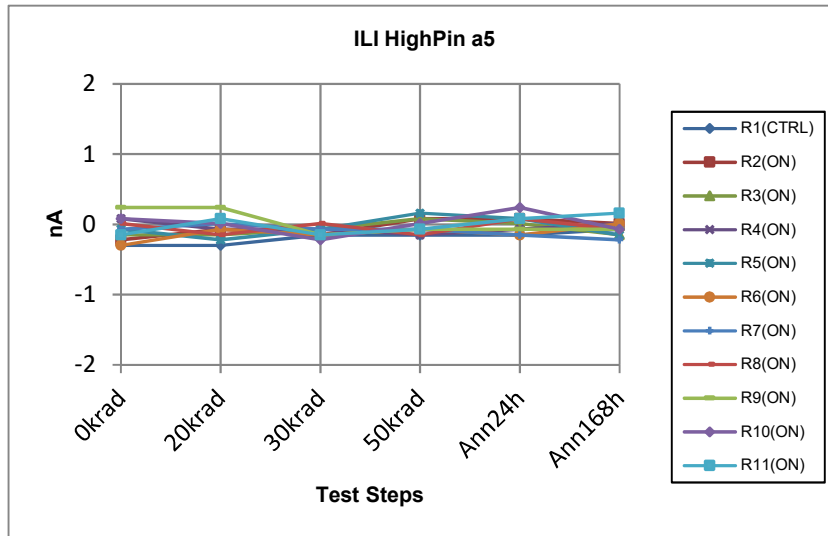
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ILI HighPin a6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.08	-0.08	-0.23	-0.08	-0.23	-0.23
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.23	0.08	-0.23	0.00	-0.08	-0.15
R3(ON BIAS LDC)	-0.15	0.08	-0.15	-0.15	-0.23	0.08
R4(ON BIAS LDC)	-0.08	0.15	-0.15	0.23	-0.08	-0.15
R5(ON BIAS LDC)	-0.08	-0.08	-0.23	-0.15	-0.23	-0.23
R6(ON BIAS LDC)	-0.15	0.00	-0.23	-0.08	-0.08	0.00
R7(ON BIAS LDC)	0.00	0.00	-0.08	-0.08	-0.15	-0.08
R8(ON BIAS LDC)	-0.08	0.00	-0.08	0.08	0.08	-0.08
R9(ON BIAS LDC)	-0.23	-0.08	-0.23	0.00	-0.23	0.08
R10(ON BIAS LDC)	-0.15	0.00	-0.15	0.00	-0.15	-0.15
R11(ON BIAS LDC)	0.00	0.15	-0.23	0.00	-0.08	-0.08
Irradiated, ON biased LDC parts statistics						
Min Value	-0.23	-0.08	-0.23	-0.15	-0.23	-0.23
Max Value	0.00	0.15	-0.08	0.23	0.08	0.08
Average	-0.12	0.03	-0.18	-0.02	-0.12	-0.08
Sigma	0.08	0.08	0.06	0.11	0.10	0.10

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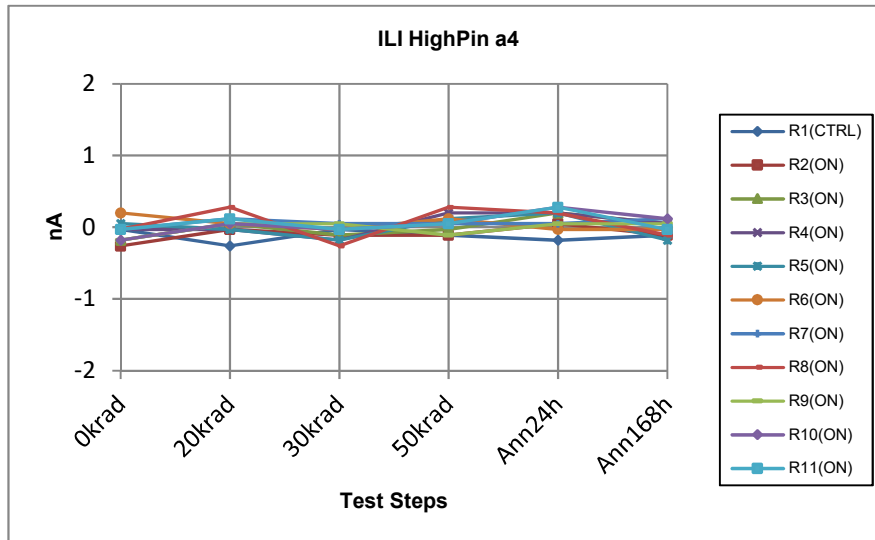
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ILI HighPin a5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.30	-0.15	-0.15	-0.15	-0.07
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.22	-0.07	-0.15	0.08	0.08	0.01
R3(ON BIAS LDC)	-0.15	-0.15	-0.07	0.08	0.01	-0.15
R4(ON BIAS LDC)	0.08	-0.07	-0.07	-0.15	-0.07	0.01
R5(ON BIAS LDC)	-0.07	-0.22	-0.07	0.16	0.08	-0.15
R6(ON BIAS LDC)	-0.30	-0.07	-0.15	-0.07	-0.15	0.01
R7(ON BIAS LDC)	-0.07	0.01	-0.07	-0.07	-0.15	-0.22
R8(ON BIAS LDC)	0.01	-0.15	0.01	-0.15	0.08	-0.07
R9(ON BIAS LDC)	0.24	0.24	-0.15	-0.07	-0.07	-0.07
R10(ON BIAS LDC)	0.08	0.01	-0.22	0.01	0.24	-0.07
R11(ON BIAS LDC)	-0.15	0.08	-0.15	-0.07	0.08	0.16
Irradiated, ON biased LDC parts statistics						
Min Value	-0.30	-0.22	-0.22	-0.15	-0.15	-0.22
Max Value	0.24	0.24	0.01	0.16	0.24	0.16
Average	-0.06	-0.04	-0.11	-0.03	0.01	-0.05
Sigma	0.16	0.13	0.07	0.10	0.12	0.11

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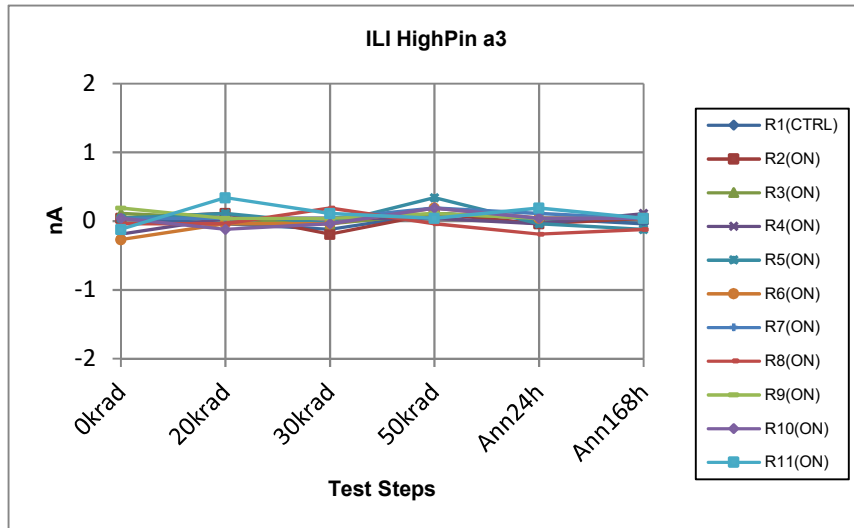
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ILI HighPin a4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.03	-0.26	-0.03	-0.11	-0.18	-0.11
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.26	-0.03	-0.11	-0.11	0.05	-0.11
R3(ON BIAS LDC)	-0.18	0.05	-0.11	-0.03	0.20	0.05
R4(ON BIAS LDC)	-0.03	-0.03	-0.18	0.20	0.20	0.05
R5(ON BIAS LDC)	0.05	-0.03	-0.18	0.12	0.20	-0.18
R6(ON BIAS LDC)	0.20	0.05	-0.03	0.12	-0.03	-0.03
R7(ON BIAS LDC)	-0.03	0.12	0.05	0.05	0.05	0.12
R8(ON BIAS LDC)	-0.03	0.28	-0.26	0.28	0.20	-0.11
R9(ON BIAS LDC)	-0.18	0.05	0.05	-0.11	0.05	0.05
R10(ON BIAS LDC)	-0.18	0.05	-0.03	0.05	0.28	0.12
R11(ON BIAS LDC)	-0.03	0.12	-0.03	0.05	0.28	-0.03
Irradiated, ON biased LDC parts statistics						
Min Value	-0.26	-0.03	-0.26	-0.11	-0.03	-0.18
Max Value	0.20	0.28	0.05	0.28	0.28	0.12
Average	-0.07	0.06	-0.08	0.06	0.15	-0.01
Sigma	0.14	0.09	0.10	0.13	0.11	0.10

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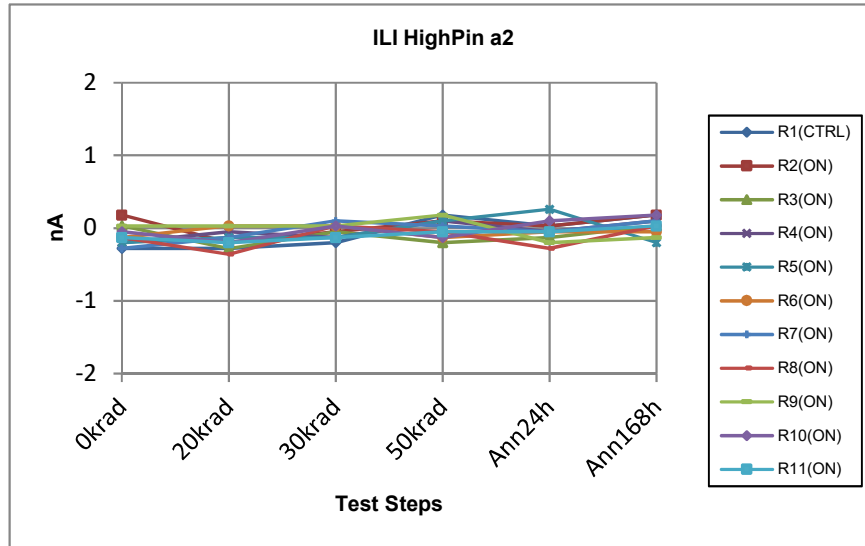
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ILI HighPin a3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.04	-0.04	-0.12	0.11	0.04	-0.04
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0.04	0.11	-0.19	0.11	-0.04	0.04
R3(ON BIAS LDC)	0.11	0.04	-0.04	0.11	0.04	0.04
R4(ON BIAS LDC)	-0.19	0.04	0.04	0.04	-0.04	0.11
R5(ON BIAS LDC)	0.04	0.11	-0.04	0.34	-0.04	-0.12
R6(ON BIAS LDC)	-0.27	-0.04	-0.04	0.19	0.04	0.04
R7(ON BIAS LDC)	0.04	0.04	0.04	0.19	0.11	0.04
R8(ON BIAS LDC)	-0.04	-0.04	0.19	-0.04	-0.19	-0.12
R9(ON BIAS LDC)	0.19	0.04	0.04	0.11	0.04	0.04
R10(ON BIAS LDC)	0.04	-0.12	-0.04	0.19	0.04	0.04
R11(ON BIAS LDC)	-0.12	0.34	0.11	0.04	0.19	0.04
Irradiated, ON biased LDC parts statistics						
Min Value	-0.27	-0.12	-0.19	-0.04	-0.19	-0.12
Max Value	0.19	0.34	0.19	0.34	0.19	0.11
Average	-0.02	0.05	0.01	0.13	0.02	0.02
Sigma	0.14	0.12	0.10	0.11	0.10	0.07

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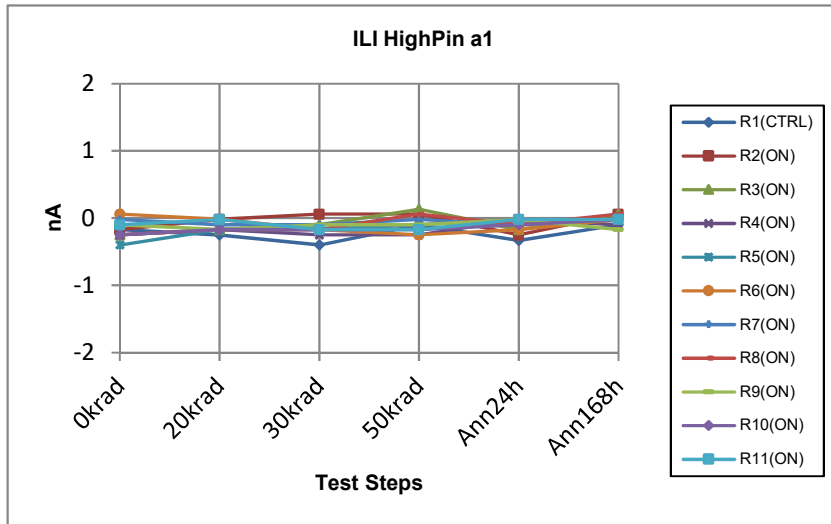
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ILI HighPin a2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.28	-0.28	-0.20	0.18	0.03	0.18
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0.18	-0.20	-0.05	0.10	0.03	0.18
R3(ON BIAS LDC)	0.03	-0.28	-0.05	-0.20	-0.13	0.03
R4(ON BIAS LDC)	-0.20	-0.05	-0.13	0.10	-0.05	0.10
R5(ON BIAS LDC)	-0.20	-0.13	-0.13	0.10	0.26	-0.20
R6(ON BIAS LDC)	-0.13	0.03	0.03	-0.13	-0.05	-0.05
R7(ON BIAS LDC)	-0.28	-0.13	0.10	0.03	-0.05	0.10
R8(ON BIAS LDC)	-0.13	-0.36	0.03	-0.05	-0.28	0.03
R9(ON BIAS LDC)	0.03	0.03	0.03	0.18	-0.20	-0.13
R10(ON BIAS LDC)	-0.05	-0.20	0.03	-0.13	0.10	0.18
R11(ON BIAS LDC)	-0.13	-0.20	-0.13	-0.05	-0.05	0.03
Irradiated, ON biased LDC parts statistics						
Min Value	-0.28	-0.36	-0.13	-0.20	-0.28	-0.20
Max Value	0.18	0.03	0.10	0.18	0.26	0.18
Average	-0.09	-0.15	-0.03	-0.01	-0.04	0.03
Sigma	0.14	0.13	0.08	0.13	0.15	0.12

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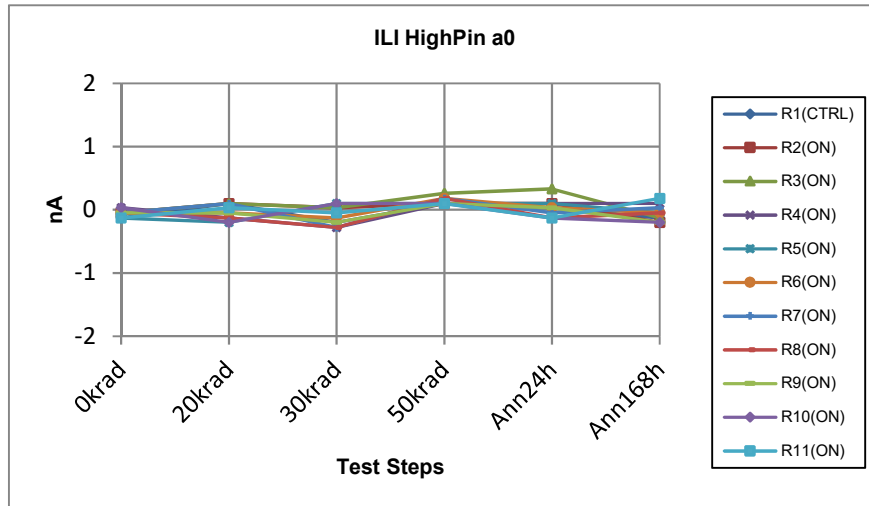
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ILI HighPin a1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.17	-0.25	-0.40	-0.10	-0.33	-0.10
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.17	-0.02	0.06	0.06	-0.25	0.06
R3(ON BIAS LDC)	-0.25	-0.17	-0.10	0.13	-0.17	0.06
R4(ON BIAS LDC)	-0.25	-0.17	-0.25	-0.25	-0.02	-0.10
R5(ON BIAS LDC)	-0.40	-0.17	-0.17	-0.10	-0.02	-0.02
R6(ON BIAS LDC)	0.06	-0.02	-0.17	-0.25	-0.17	-0.02
R7(ON BIAS LDC)	-0.02	-0.10	-0.10	-0.02	-0.10	-0.02
R8(ON BIAS LDC)	-0.25	-0.17	-0.17	0.06	-0.10	0.06
R9(ON BIAS LDC)	-0.10	-0.17	-0.10	-0.10	-0.02	-0.17
R10(ON BIAS LDC)	-0.25	-0.17	-0.17	-0.17	-0.10	-0.02
R11(ON BIAS LDC)	-0.10	-0.02	-0.17	-0.17	-0.02	-0.02
Irradiated, ON biased LDC parts statistics						
Min Value	-0.40	-0.17	-0.25	-0.25	-0.25	-0.17
Max Value	0.06	-0.02	0.06	0.13	-0.02	0.06
Average	-0.17	-0.12	-0.13	-0.08	-0.10	-0.02
Sigma	0.13	0.07	0.08	0.13	0.08	0.07

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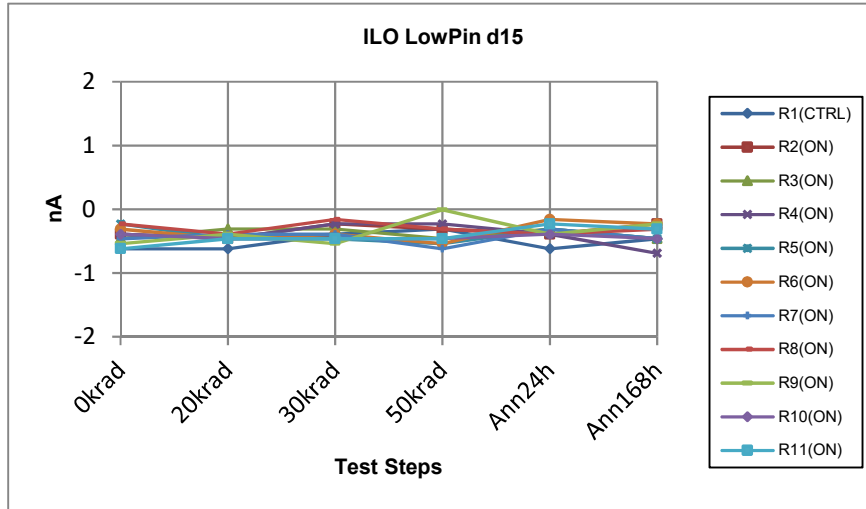
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ILI HighPin a0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.13	0.10	-0.20	0.10	0.03	-0.13
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.05	0.10	0.03	0.10	0.10	-0.20
R3(ON BIAS LDC)	-0.05	0.10	0.03	0.26	0.33	-0.13
R4(ON BIAS LDC)	0.03	-0.13	-0.28	0.10	0.10	0.10
R5(ON BIAS LDC)	-0.13	-0.20	0.10	0.10	0.10	-0.05
R6(ON BIAS LDC)	-0.05	-0.05	-0.13	0.18	0.03	-0.05
R7(ON BIAS LDC)	-0.05	0.10	-0.28	0.18	-0.05	0.03
R8(ON BIAS LDC)	-0.05	-0.13	-0.28	0.18	-0.13	-0.05
R9(ON BIAS LDC)	-0.05	-0.05	-0.20	0.10	0.03	-0.20
R10(ON BIAS LDC)	0.03	-0.20	0.10	0.10	-0.13	-0.20
R11(ON BIAS LDC)	-0.13	0.03	-0.05	0.10	-0.13	0.18
Irradiated, ON biased LDC parts statistics						
Min Value	-0.13	-0.20	-0.28	0.10	-0.13	-0.20
Max Value	0.03	0.10	0.10	0.26	0.33	0.18
Average	-0.05	-0.04	-0.10	0.14	0.03	-0.06
Sigma	0.05	0.12	0.16	0.06	0.14	0.13

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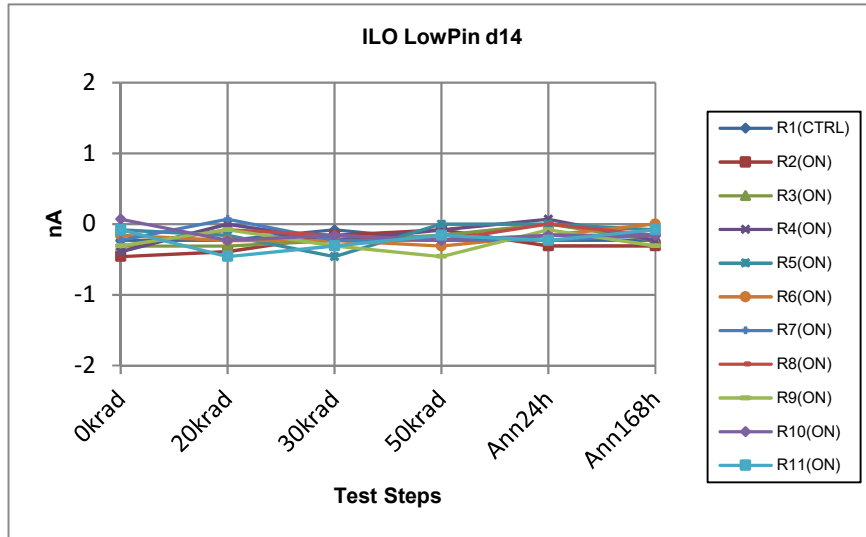
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ILO LowPin d15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.62	-0.39	-0.31	-0.62	-0.46
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.39	-0.46	-0.23	-0.31	-0.39	-0.23
R3(ON BIAS LDC)	-0.46	-0.31	-0.31	-0.46	-0.31	-0.46
R4(ON BIAS LDC)	-0.39	-0.46	-0.23	-0.23	-0.39	-0.69
R5(ON BIAS LDC)	-0.23	-0.46	-0.46	-0.54	-0.31	-0.46
R6(ON BIAS LDC)	-0.31	-0.46	-0.39	-0.54	-0.16	-0.23
R7(ON BIAS LDC)	-0.46	-0.39	-0.39	-0.62	-0.31	-0.46
R8(ON BIAS LDC)	-0.23	-0.39	-0.16	-0.31	-0.39	-0.31
R9(ON BIAS LDC)	-0.54	-0.39	-0.54	-0.01	-0.39	-0.23
R10(ON BIAS LDC)	-0.39	-0.46	-0.46	-0.46	-0.39	-0.46
R11(ON BIAS LDC)	-0.62	-0.46	-0.46	-0.46	-0.23	-0.31
Irradiated, ON biased LDC parts statistics						
Min Value	-0.62	-0.46	-0.54	-0.62	-0.39	-0.69
Max Value	-0.23	-0.31	-0.16	-0.01	-0.16	-0.23
Average	-0.40	-0.42	-0.36	-0.39	-0.33	-0.38
Sigma	0.13	0.05	0.12	0.18	0.08	0.15

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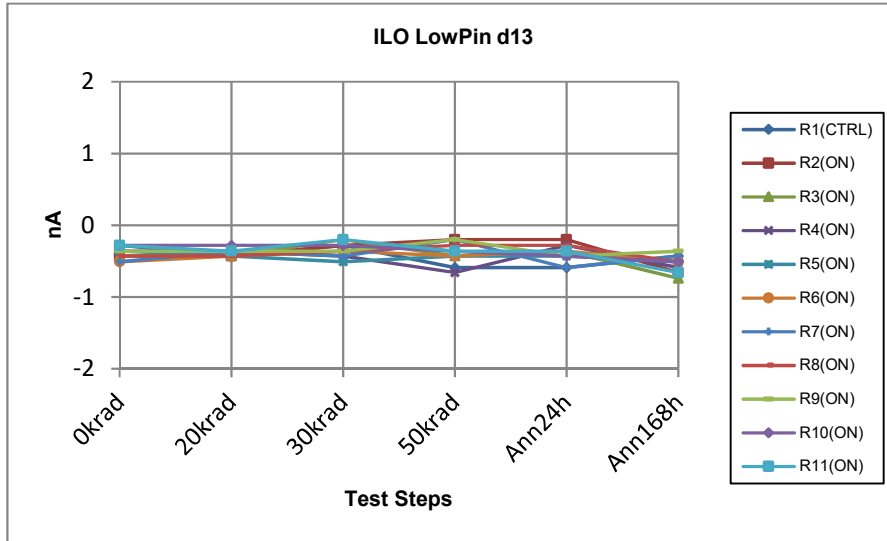
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ILO LowPin d14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.23	-0.08	-0.23	-0.23	-0.23
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.46	-0.39	-0.16	-0.08	-0.31	-0.31
R3(ON BIAS LDC)	-0.31	-0.31	-0.23	-0.16	0.00	-0.23
R4(ON BIAS LDC)	-0.39	0.00	-0.23	-0.08	0.07	-0.23
R5(ON BIAS LDC)	-0.08	-0.16	-0.46	0.00	0.00	-0.08
R6(ON BIAS LDC)	-0.16	-0.23	-0.23	-0.31	-0.16	0.00
R7(ON BIAS LDC)	-0.23	0.07	-0.23	-0.23	-0.23	-0.16
R8(ON BIAS LDC)	-0.31	-0.08	-0.16	-0.23	0.00	-0.16
R9(ON BIAS LDC)	-0.31	-0.08	-0.31	-0.46	-0.08	-0.31
R10(ON BIAS LDC)	0.07	-0.23	-0.16	-0.23	-0.16	-0.16
R11(ON BIAS LDC)	-0.08	-0.46	-0.31	-0.16	-0.23	-0.08
Irradiated, ON biased LDC parts statistics						
Min Value	-0.46	-0.46	-0.46	-0.46	-0.31	-0.31
Max Value	0.07	0.07	-0.16	0.00	0.07	0.00
Average	-0.23	-0.19	-0.25	-0.19	-0.11	-0.17
Sigma	0.16	0.17	0.09	0.13	0.13	0.10

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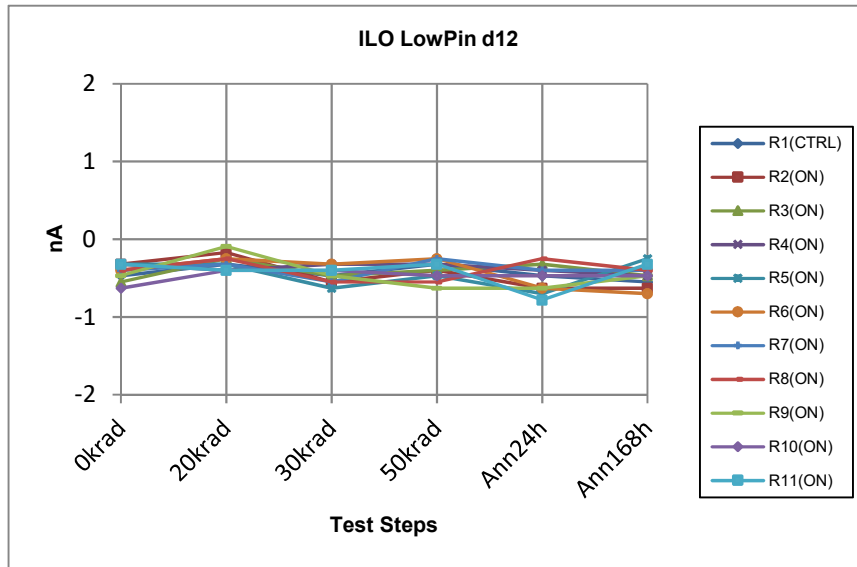
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ILO LowPin d13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.28	-0.43	-0.28	-0.59	-0.59	-0.43
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.43	-0.43	-0.28	-0.20	-0.20	-0.66
R3(ON BIAS LDC)	-0.43	-0.43	-0.20	-0.43	-0.36	-0.74
R4(ON BIAS LDC)	-0.36	-0.36	-0.43	-0.66	-0.28	-0.59
R5(ON BIAS LDC)	-0.36	-0.43	-0.51	-0.43	-0.43	-0.51
R6(ON BIAS LDC)	-0.51	-0.43	-0.36	-0.43	-0.36	-0.51
R7(ON BIAS LDC)	-0.51	-0.36	-0.43	-0.20	-0.59	-0.43
R8(ON BIAS LDC)	-0.43	-0.43	-0.36	-0.28	-0.28	-0.51
R9(ON BIAS LDC)	-0.36	-0.36	-0.36	-0.20	-0.43	-0.36
R10(ON BIAS LDC)	-0.28	-0.28	-0.28	-0.36	-0.43	-0.51
R11(ON BIAS LDC)	-0.28	-0.36	-0.20	-0.36	-0.36	-0.66
Irradiated, ON biased LDC parts statistics						
Min Value	-0.51	-0.43	-0.51	-0.66	-0.59	-0.74
Max Value	-0.28	-0.28	-0.20	-0.20	-0.20	-0.36
Average	-0.40	-0.39	-0.34	-0.36	-0.37	-0.55
Sigma	0.08	0.05	0.10	0.14	0.11	0.11

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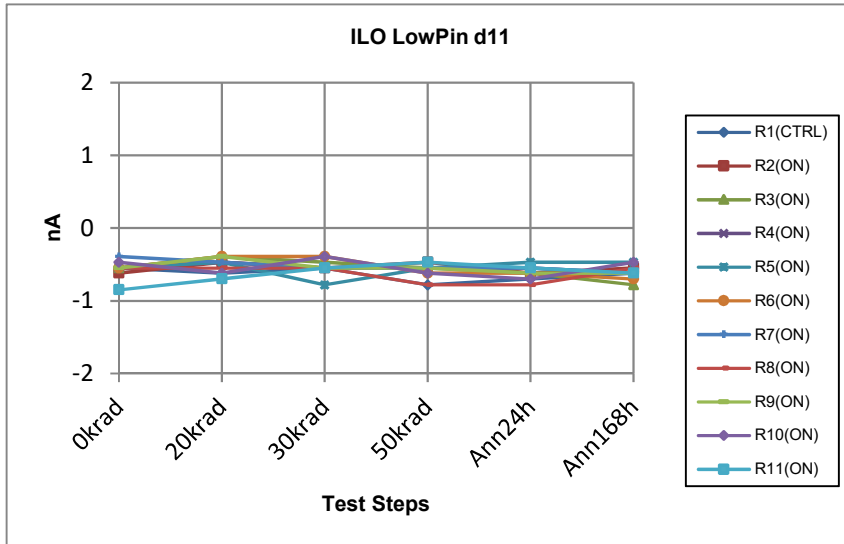
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ILO LowPin d12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.47	-0.32	-0.47	-0.32	-0.47	-0.55
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.32	-0.17	-0.55	-0.40	-0.63	-0.63
R3(ON BIAS LDC)	-0.55	-0.25	-0.47	-0.40	-0.32	-0.47
R4(ON BIAS LDC)	-0.32	-0.40	-0.32	-0.32	-0.40	-0.47
R5(ON BIAS LDC)	-0.32	-0.32	-0.63	-0.47	-0.70	-0.25
R6(ON BIAS LDC)	-0.40	-0.25	-0.32	-0.25	-0.63	-0.70
R7(ON BIAS LDC)	-0.40	-0.32	-0.55	-0.25	-0.40	-0.40
R8(ON BIAS LDC)	-0.40	-0.25	-0.55	-0.55	-0.25	-0.40
R9(ON BIAS LDC)	-0.47	-0.09	-0.47	-0.63	-0.63	-0.47
R10(ON BIAS LDC)	-0.63	-0.40	-0.40	-0.47	-0.47	-0.47
R11(ON BIAS LDC)	-0.32	-0.40	-0.40	-0.32	-0.78	-0.32
Irradiated, ON biased LDC parts statistics						
Min Value	-0.63	-0.40	-0.63	-0.63	-0.78	-0.70
Max Value	-0.32	-0.09	-0.32	-0.25	-0.25	-0.25
Average	-0.41	-0.29	-0.47	-0.41	-0.52	-0.46
Sigma	0.11	0.10	0.11	0.13	0.18	0.13

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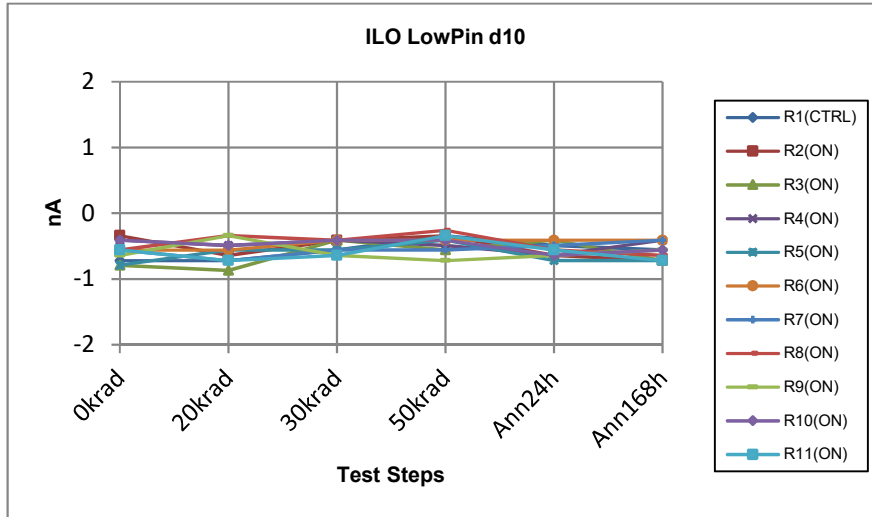
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ILO LowPin d11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.55	-0.62	-0.55	-0.78	-0.70	-0.62
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.62	-0.47	-0.55	-0.47	-0.62	-0.55
R3(ON BIAS LDC)	-0.55	-0.39	-0.47	-0.55	-0.62	-0.78
R4(ON BIAS LDC)	-0.55	-0.47	-0.55	-0.55	-0.55	-0.62
R5(ON BIAS LDC)	-0.55	-0.47	-0.78	-0.55	-0.47	-0.47
R6(ON BIAS LDC)	-0.55	-0.39	-0.39	-0.62	-0.62	-0.70
R7(ON BIAS LDC)	-0.39	-0.47	-0.55	-0.55	-0.55	-0.62
R8(ON BIAS LDC)	-0.55	-0.55	-0.55	-0.78	-0.78	-0.55
R9(ON BIAS LDC)	-0.55	-0.39	-0.55	-0.55	-0.62	-0.62
R10(ON BIAS LDC)	-0.47	-0.62	-0.39	-0.62	-0.70	-0.47
R11(ON BIAS LDC)	-0.85	-0.70	-0.55	-0.47	-0.55	-0.62
Irradiated, ON biased LDC parts statistics						
Min Value	-0.85	-0.70	-0.78	-0.78	-0.78	-0.78
Max Value	-0.39	-0.39	-0.39	-0.47	-0.47	-0.47
Average	-0.56	-0.49	-0.53	-0.57	-0.61	-0.60
Sigma	0.12	0.10	0.11	0.09	0.09	0.10

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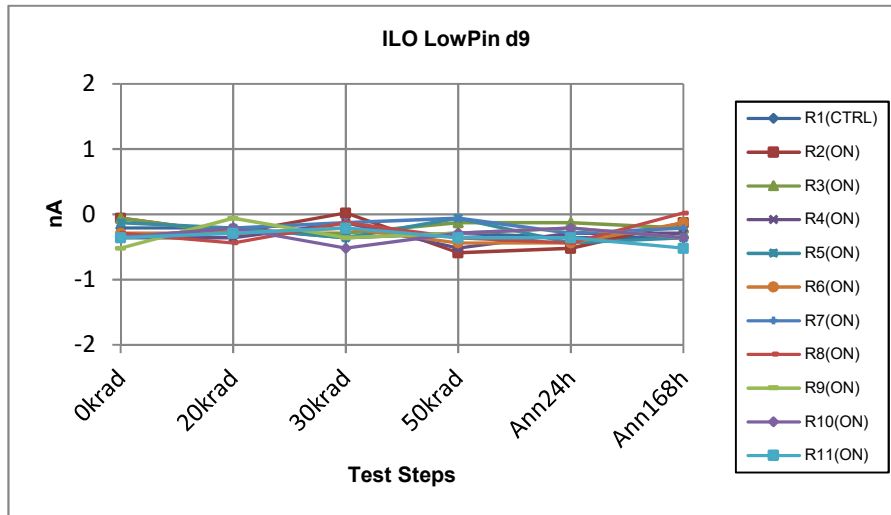
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ILO LowPin d10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.72	-0.72	-0.56	-0.34	-0.49	-0.56
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.34	-0.64	-0.41	-0.34	-0.64	-0.72
R3(ON BIAS LDC)	-0.79	-0.87	-0.41	-0.56	-0.41	-0.72
R4(ON BIAS LDC)	-0.41	-0.49	-0.41	-0.49	-0.64	-0.41
R5(ON BIAS LDC)	-0.79	-0.56	-0.56	-0.41	-0.72	-0.72
R6(ON BIAS LDC)	-0.56	-0.56	-0.41	-0.41	-0.41	-0.41
R7(ON BIAS LDC)	-0.56	-0.72	-0.56	-0.56	-0.49	-0.41
R8(ON BIAS LDC)	-0.56	-0.34	-0.41	-0.26	-0.56	-0.64
R9(ON BIAS LDC)	-0.64	-0.34	-0.64	-0.72	-0.64	-0.56
R10(ON BIAS LDC)	-0.41	-0.49	-0.41	-0.41	-0.64	-0.56
R11(ON BIAS LDC)	-0.56	-0.72	-0.64	-0.34	-0.56	-0.72
Irradiated, ON biased LDC parts statistics						
Min Value	-0.79	-0.87	-0.64	-0.72	-0.72	-0.72
Max Value	-0.34	-0.34	-0.41	-0.26	-0.41	-0.41
Average	-0.56	-0.57	-0.49	-0.45	-0.57	-0.59
Sigma	0.15	0.17	0.10	0.13	0.11	0.14

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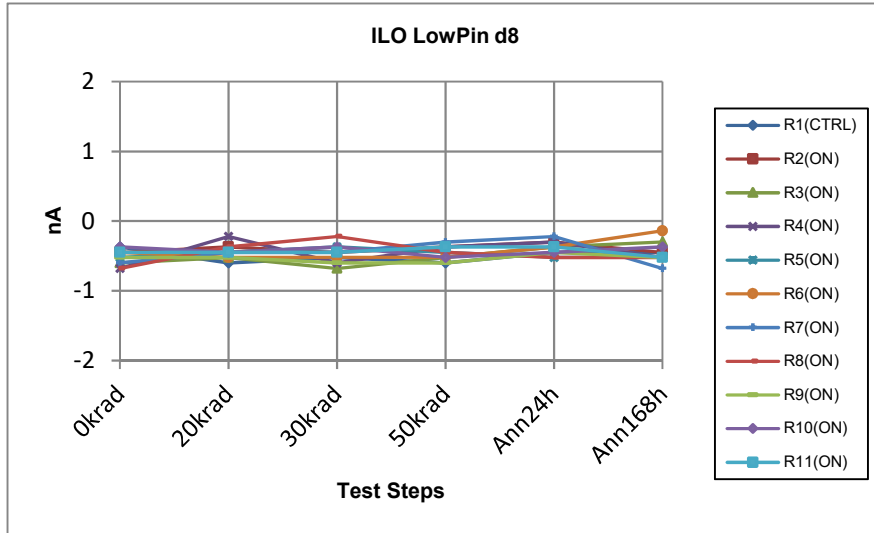
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ILO LowPin d9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.21	-0.21	-0.36	-0.29	-0.36	-0.36
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.06	-0.29	0.02	-0.59	-0.52	-0.13
R3(ON BIAS LDC)	-0.06	-0.29	-0.29	-0.13	-0.13	-0.21
R4(ON BIAS LDC)	-0.36	-0.36	-0.13	-0.52	-0.29	-0.29
R5(ON BIAS LDC)	-0.13	-0.21	-0.36	-0.06	-0.44	-0.36
R6(ON BIAS LDC)	-0.29	-0.29	-0.21	-0.44	-0.44	-0.13
R7(ON BIAS LDC)	-0.36	-0.21	-0.13	-0.06	-0.29	-0.21
R8(ON BIAS LDC)	-0.29	-0.44	-0.13	-0.36	-0.44	0.02
R9(ON BIAS LDC)	-0.52	-0.06	-0.36	-0.29	-0.21	-0.36
R10(ON BIAS LDC)	-0.36	-0.21	-0.52	-0.29	-0.21	-0.36
R11(ON BIAS LDC)	-0.36	-0.29	-0.21	-0.36	-0.36	-0.52
Irradiated, ON biased LDC parts statistics						
Min Value	-0.52	-0.44	-0.52	-0.59	-0.52	-0.52
Max Value	-0.06	-0.06	0.02	-0.06	-0.13	0.02
Average	-0.28	-0.27	-0.23	-0.31	-0.33	-0.26
Sigma	0.15	0.10	0.15	0.18	0.13	0.15

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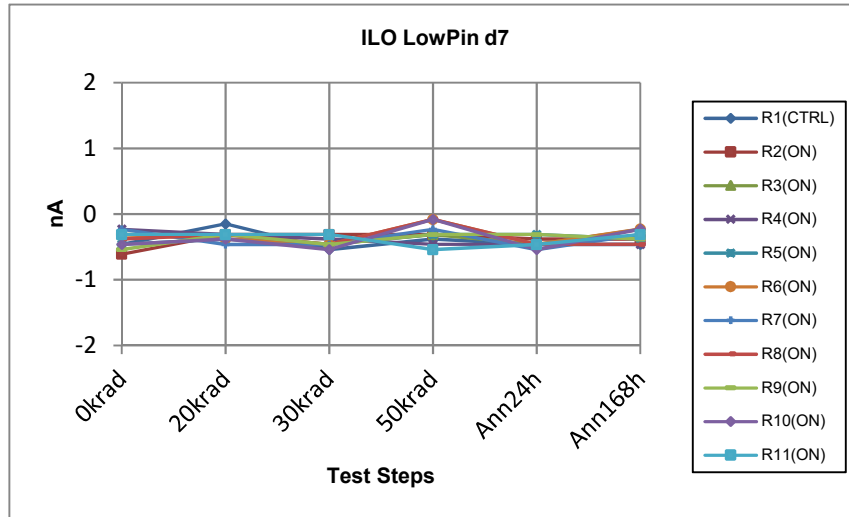
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ILO LowPin d8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.60	-0.52	-0.60	-0.45	-0.45
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.45	-0.37	-0.45	-0.37	-0.30	-0.45
R3(ON BIAS LDC)	-0.60	-0.52	-0.68	-0.52	-0.37	-0.30
R4(ON BIAS LDC)	-0.68	-0.22	-0.60	-0.37	-0.30	-0.52
R5(ON BIAS LDC)	-0.52	-0.45	-0.37	-0.45	-0.52	-0.52
R6(ON BIAS LDC)	-0.45	-0.52	-0.52	-0.52	-0.37	-0.14
R7(ON BIAS LDC)	-0.60	-0.45	-0.45	-0.30	-0.22	-0.68
R8(ON BIAS LDC)	-0.68	-0.37	-0.22	-0.45	-0.52	-0.52
R9(ON BIAS LDC)	-0.52	-0.52	-0.60	-0.60	-0.45	-0.52
R10(ON BIAS LDC)	-0.37	-0.45	-0.37	-0.52	-0.45	-0.37
R11(ON BIAS LDC)	-0.45	-0.45	-0.45	-0.37	-0.37	-0.52
Irradiated, ON biased LDC parts statistics						
Min Value	-0.68	-0.52	-0.68	-0.60	-0.52	-0.68
Max Value	-0.37	-0.22	-0.22	-0.30	-0.22	-0.14
Average	-0.53	-0.43	-0.47	-0.45	-0.39	-0.45
Sigma	0.11	0.09	0.14	0.09	0.10	0.15

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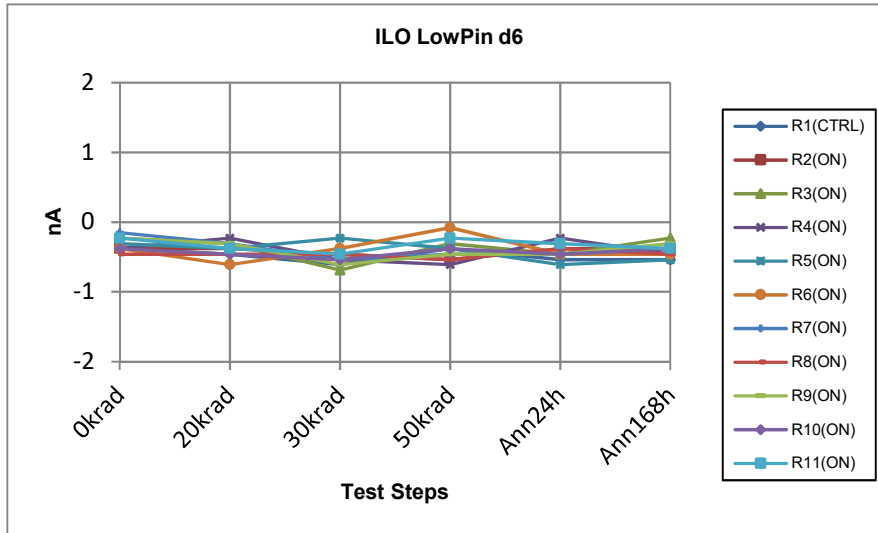
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ILO LowPin d7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.46	-0.15	-0.54	-0.38	-0.46	-0.46
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.61	-0.31	-0.31	-0.31	-0.38	-0.38
R3(ON BIAS LDC)	-0.31	-0.31	-0.46	-0.31	-0.46	-0.23
R4(ON BIAS LDC)	-0.23	-0.31	-0.38	-0.46	-0.46	-0.46
R5(ON BIAS LDC)	-0.46	-0.38	-0.46	-0.31	-0.31	-0.38
R6(ON BIAS LDC)	-0.31	-0.38	-0.46	-0.08	-0.46	-0.23
R7(ON BIAS LDC)	-0.23	-0.46	-0.46	-0.23	-0.54	-0.31
R8(ON BIAS LDC)	-0.38	-0.31	-0.46	-0.08	-0.46	-0.46
R9(ON BIAS LDC)	-0.54	-0.31	-0.46	-0.31	-0.31	-0.38
R10(ON BIAS LDC)	-0.46	-0.38	-0.54	-0.08	-0.54	-0.23
R11(ON BIAS LDC)	-0.31	-0.31	-0.31	-0.54	-0.46	-0.31
Irradiated, ON biased LDC parts statistics						
Min Value	-0.61	-0.46	-0.54	-0.54	-0.54	-0.46
Max Value	-0.23	-0.31	-0.31	-0.08	-0.31	-0.23
Average	-0.38	-0.35	-0.43	-0.27	-0.44	-0.34
Sigma	0.13	0.05	0.07	0.16	0.08	0.09

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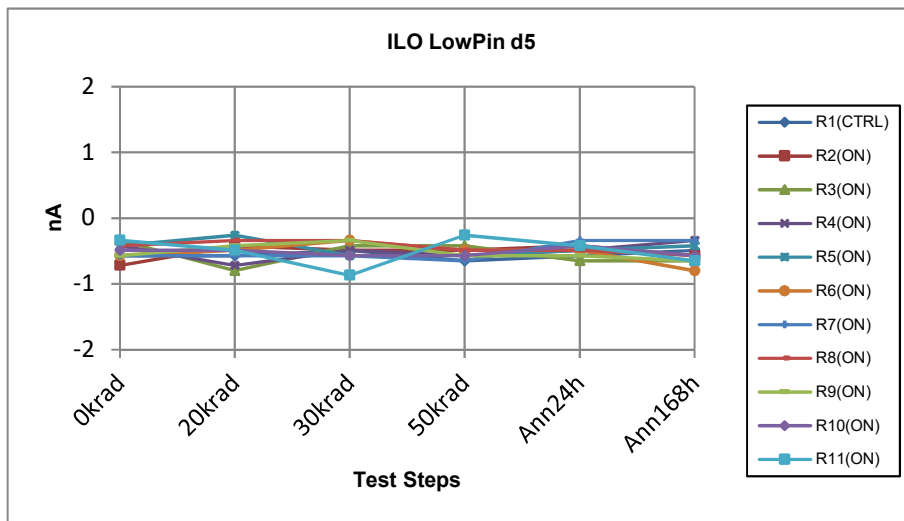
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ILO LowPin d6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.38	-0.46	-0.61	-0.38	-0.54	-0.54
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.38	-0.38	-0.46	-0.54	-0.38	-0.38
R3(ON BIAS LDC)	-0.23	-0.31	-0.69	-0.31	-0.46	-0.23
R4(ON BIAS LDC)	-0.38	-0.23	-0.54	-0.61	-0.23	-0.46
R5(ON BIAS LDC)	-0.31	-0.38	-0.23	-0.38	-0.61	-0.54
R6(ON BIAS LDC)	-0.38	-0.61	-0.38	-0.08	-0.46	-0.46
R7(ON BIAS LDC)	-0.15	-0.31	-0.54	-0.46	-0.46	-0.38
R8(ON BIAS LDC)	-0.46	-0.46	-0.46	-0.54	-0.38	-0.46
R9(ON BIAS LDC)	-0.23	-0.31	-0.61	-0.46	-0.46	-0.31
R10(ON BIAS LDC)	-0.38	-0.46	-0.54	-0.38	-0.46	-0.38
R11(ON BIAS LDC)	-0.23	-0.38	-0.46	-0.23	-0.31	-0.38
Irradiated, ON biased LDC parts statistics						
Min Value	-0.46	-0.61	-0.69	-0.61	-0.61	-0.54
Max Value	-0.15	-0.23	-0.23	-0.08	-0.23	-0.23
Average	-0.31	-0.38	-0.49	-0.40	-0.42	-0.40
Sigma	0.10	0.11	0.13	0.16	0.10	0.09

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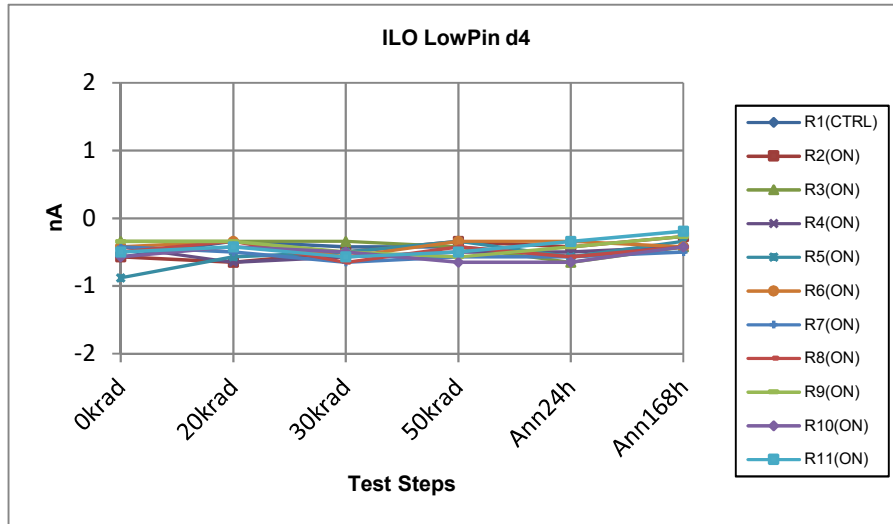
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ILO LowPin d5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.57	-0.49	-0.65	-0.57	-0.49
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.72	-0.42	-0.49	-0.49	-0.42	-0.57
R3(ON BIAS LDC)	-0.34	-0.80	-0.42	-0.42	-0.65	-0.65
R4(ON BIAS LDC)	-0.42	-0.72	-0.49	-0.57	-0.49	-0.34
R5(ON BIAS LDC)	-0.42	-0.26	-0.57	-0.57	-0.49	-0.42
R6(ON BIAS LDC)	-0.57	-0.49	-0.34	-0.49	-0.49	-0.80
R7(ON BIAS LDC)	-0.57	-0.57	-0.57	-0.65	-0.34	-0.34
R8(ON BIAS LDC)	-0.42	-0.34	-0.34	-0.49	-0.49	-0.57
R9(ON BIAS LDC)	-0.57	-0.42	-0.34	-0.57	-0.57	-0.65
R10(ON BIAS LDC)	-0.49	-0.49	-0.57	-0.57	-0.42	-0.57
R11(ON BIAS LDC)	-0.34	-0.49	-0.87	-0.26	-0.42	-0.65
Irradiated, ON biased LDC parts statistics						
Min Value	-0.72	-0.80	-0.87	-0.65	-0.65	-0.80
Max Value	-0.34	-0.26	-0.34	-0.26	-0.34	-0.34
Average	-0.49	-0.50	-0.50	-0.51	-0.48	-0.56
Sigma	0.12	0.16	0.16	0.11	0.09	0.15

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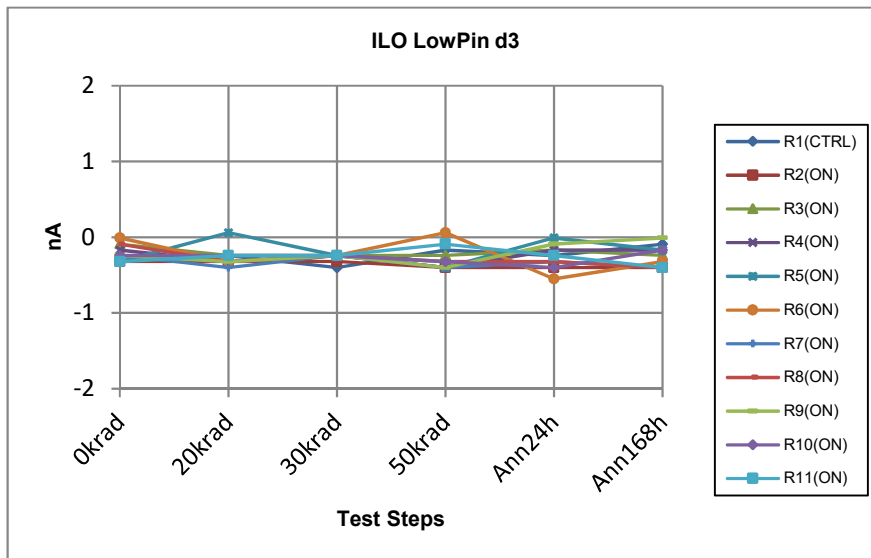
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ILO LowPin d4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.34	-0.42	-0.42	-0.57	-0.42
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.57	-0.65	-0.50	-0.34	-0.42	-0.27
R3(ON BIAS LDC)	-0.34	-0.34	-0.34	-0.42	-0.65	-0.42
R4(ON BIAS LDC)	-0.42	-0.65	-0.57	-0.50	-0.50	-0.42
R5(ON BIAS LDC)	-0.88	-0.57	-0.50	-0.34	-0.57	-0.34
R6(ON BIAS LDC)	-0.42	-0.34	-0.57	-0.34	-0.34	-0.42
R7(ON BIAS LDC)	-0.42	-0.50	-0.65	-0.57	-0.57	-0.50
R8(ON BIAS LDC)	-0.50	-0.34	-0.65	-0.42	-0.57	-0.42
R9(ON BIAS LDC)	-0.34	-0.34	-0.50	-0.57	-0.42	-0.27
R10(ON BIAS LDC)	-0.57	-0.42	-0.50	-0.65	-0.65	-0.42
R11(ON BIAS LDC)	-0.50	-0.42	-0.57	-0.50	-0.34	-0.19
Irradiated, ON biased LDC parts statistics						
Min Value	-0.88	-0.65	-0.65	-0.65	-0.65	-0.50
Max Value	-0.34	-0.34	-0.34	-0.34	-0.34	-0.19
Average	-0.50	-0.46	-0.54	-0.47	-0.50	-0.37
Sigma	0.16	0.13	0.09	0.11	0.12	0.10

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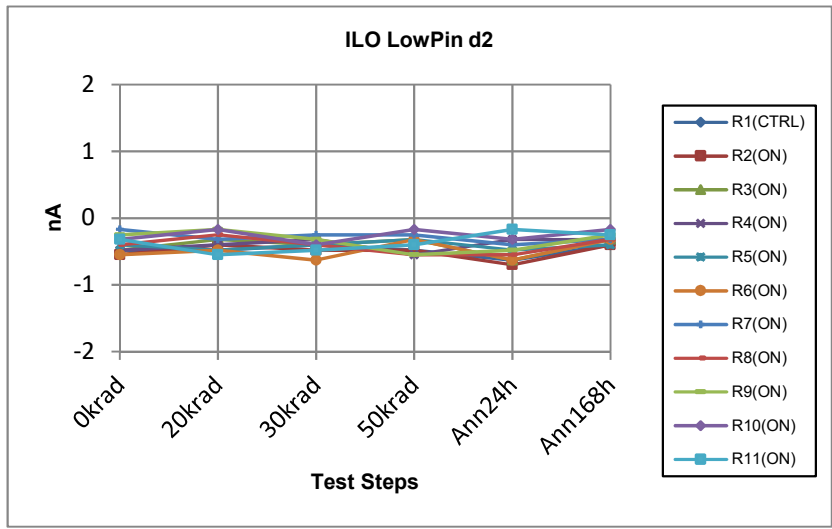
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ILO LowPin d3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.32	-0.24	-0.40	-0.17	-0.24	-0.09
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.32	-0.32	-0.32	-0.40	-0.40	-0.40
R3(ON BIAS LDC)	-0.09	-0.24	-0.24	-0.24	-0.17	-0.24
R4(ON BIAS LDC)	-0.17	-0.32	-0.24	-0.40	-0.17	-0.17
R5(ON BIAS LDC)	-0.32	0.06	-0.24	-0.40	-0.01	-0.17
R6(ON BIAS LDC)	-0.01	-0.32	-0.24	0.06	-0.55	-0.32
R7(ON BIAS LDC)	-0.24	-0.40	-0.24	-0.40	-0.32	-0.40
R8(ON BIAS LDC)	-0.09	-0.32	-0.24	-0.32	-0.32	-0.40
R9(ON BIAS LDC)	-0.24	-0.32	-0.24	-0.40	-0.09	-0.01
R10(ON BIAS LDC)	-0.24	-0.24	-0.24	-0.32	-0.40	-0.17
R11(ON BIAS LDC)	-0.32	-0.24	-0.24	-0.09	-0.24	-0.40
Irradiated, ON biased LDC parts statistics						
Min Value	-0.32	-0.40	-0.32	-0.40	-0.55	-0.40
Max Value	-0.01	0.06	-0.24	0.06	-0.01	-0.01
Average	-0.20	-0.27	-0.25	-0.29	-0.27	-0.27
Sigma	0.11	0.13	0.03	0.16	0.16	0.14

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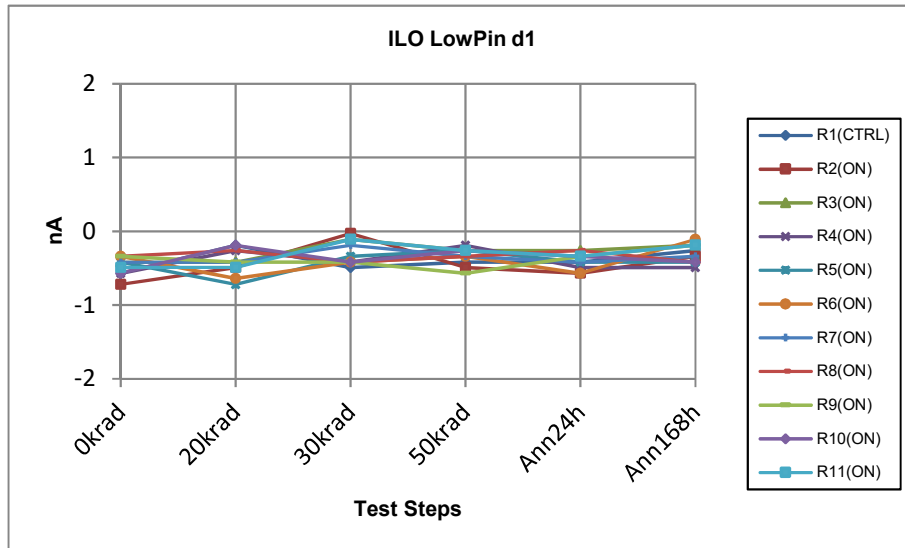
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ILO LowPin d2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.48	-0.48	-0.40	-0.48	-0.63	-0.40
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.55	-0.40	-0.48	-0.48	-0.70	-0.40
R3(ON BIAS LDC)	-0.48	-0.32	-0.40	-0.32	-0.63	-0.32
R4(ON BIAS LDC)	-0.48	-0.40	-0.32	-0.55	-0.32	-0.32
R5(ON BIAS LDC)	-0.40	-0.48	-0.40	-0.32	-0.48	-0.40
R6(ON BIAS LDC)	-0.55	-0.48	-0.63	-0.32	-0.63	-0.32
R7(ON BIAS LDC)	-0.17	-0.32	-0.25	-0.25	-0.40	-0.32
R8(ON BIAS LDC)	-0.40	-0.25	-0.40	-0.55	-0.55	-0.32
R9(ON BIAS LDC)	-0.25	-0.17	-0.32	-0.55	-0.48	-0.25
R10(ON BIAS LDC)	-0.32	-0.17	-0.40	-0.17	-0.32	-0.17
R11(ON BIAS LDC)	-0.32	-0.55	-0.48	-0.40	-0.17	-0.25
Irradiated, ON biased LDC parts statistics						
Min Value	-0.55	-0.55	-0.63	-0.55	-0.70	-0.40
Max Value	-0.17	-0.17	-0.25	-0.17	-0.17	-0.17
Average	-0.39	-0.35	-0.41	-0.39	-0.47	-0.31
Sigma	0.13	0.13	0.11	0.14	0.17	0.07

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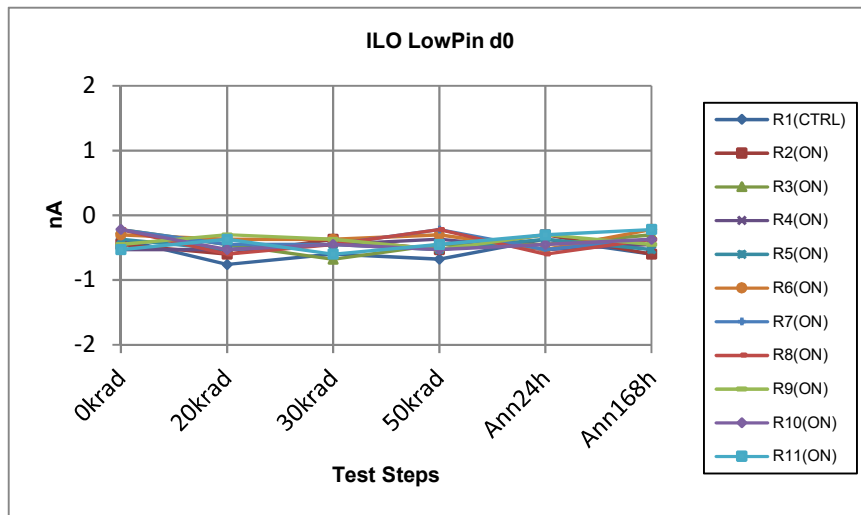
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ILO LowPin d1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.19	-0.49	-0.42	-0.42	-0.26
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.72	-0.49	-0.03	-0.49	-0.57	-0.34
R3(ON BIAS LDC)	-0.42	-0.42	-0.11	-0.26	-0.26	-0.19
R4(ON BIAS LDC)	-0.57	-0.26	-0.42	-0.19	-0.49	-0.49
R5(ON BIAS LDC)	-0.42	-0.72	-0.34	-0.26	-0.42	-0.42
R6(ON BIAS LDC)	-0.34	-0.64	-0.42	-0.34	-0.57	-0.11
R7(ON BIAS LDC)	-0.42	-0.42	-0.19	-0.34	-0.42	-0.34
R8(ON BIAS LDC)	-0.34	-0.26	-0.42	-0.34	-0.26	-0.42
R9(ON BIAS LDC)	-0.34	-0.42	-0.42	-0.57	-0.34	-0.19
R10(ON BIAS LDC)	-0.57	-0.19	-0.42	-0.26	-0.34	-0.42
R11(ON BIAS LDC)	-0.49	-0.49	-0.11	-0.26	-0.34	-0.19
Irradiated, ON biased LDC parts statistics						
Min Value	-0.72	-0.72	-0.42	-0.57	-0.57	-0.49
Max Value	-0.34	-0.19	-0.03	-0.19	-0.26	-0.11
Average	-0.46	-0.43	-0.29	-0.33	-0.40	-0.31
Sigma	0.12	0.17	0.16	0.12	0.11	0.13

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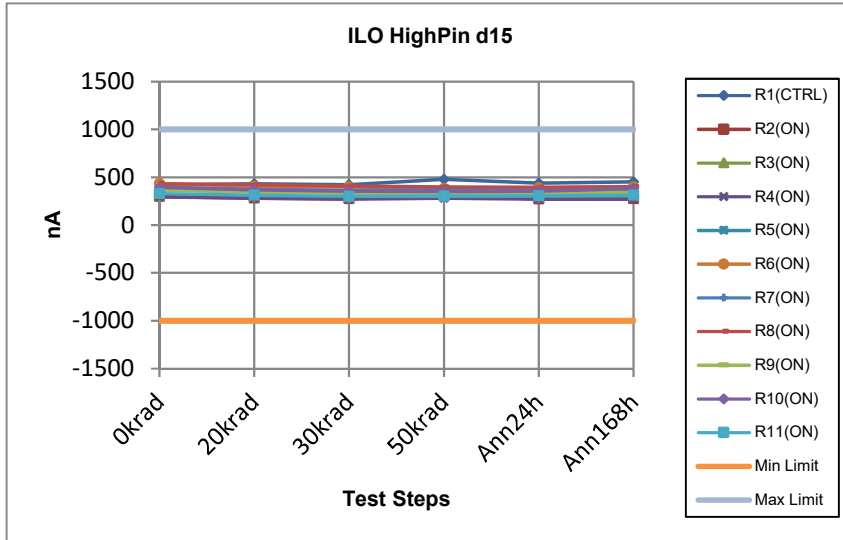
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ILO LowPin d0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.76	-0.60	-0.68	-0.37	-0.60
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	-0.45	-0.60	-0.37	-0.53	-0.30	-0.60
R3(ON BIAS LDC)	-0.22	-0.45	-0.68	-0.45	-0.45	-0.30
R4(ON BIAS LDC)	-0.53	-0.53	-0.45	-0.37	-0.53	-0.45
R5(ON BIAS LDC)	-0.37	-0.53	-0.45	-0.53	-0.37	-0.53
R6(ON BIAS LDC)	-0.30	-0.37	-0.37	-0.30	-0.53	-0.22
R7(ON BIAS LDC)	-0.22	-0.45	-0.45	-0.22	-0.53	-0.37
R8(ON BIAS LDC)	-0.22	-0.60	-0.45	-0.22	-0.60	-0.37
R9(ON BIAS LDC)	-0.45	-0.30	-0.37	-0.53	-0.30	-0.45
R10(ON BIAS LDC)	-0.22	-0.53	-0.45	-0.53	-0.45	-0.37
R11(ON BIAS LDC)	-0.53	-0.37	-0.60	-0.45	-0.30	-0.22
Irradiated, ON biased LDC parts statistics						
Min Value	-0.53	-0.60	-0.68	-0.53	-0.60	-0.60
Max Value	-0.22	-0.30	-0.37	-0.22	-0.30	-0.22
Average	-0.35	-0.47	-0.46	-0.41	-0.44	-0.39
Sigma	0.13	0.10	0.10	0.13	0.11	0.12

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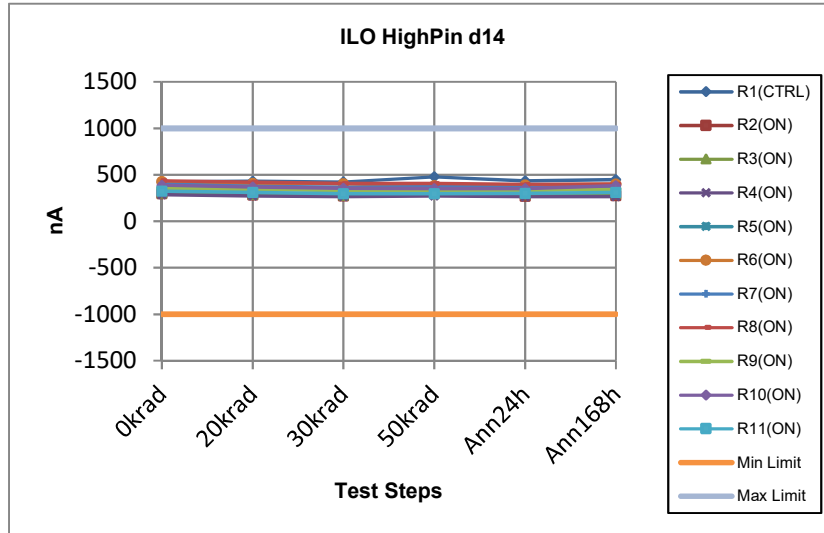
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ILO HighPin d15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	418.9	430.8	420.6	478.7	440.1	452.7
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	297.6	281.0	273.3	327.5	271.3	275.8
R3(ON BIAS LDC)	303.0	295.3	286.2	307.4	287.8	297.9
R4(ON BIAS LDC)	294.9	281.3	272.8	279.9	271.8	271.7
R5(ON BIAS LDC)	388.8	370.6	358.8	354.7	349.6	363.4
R6(ON BIAS LDC)	434.1	405.8	399.6	380.8	387.2	399.4
R7(ON BIAS LDC)	397.2	371.6	361.1	369.8	364.4	370.3
R8(ON BIAS LDC)	434.2	423.4	410.2	400.2	396.7	402.2
R9(ON BIAS LDC)	363.7	346.5	332.1	333.4	332.4	346.0
R10(ON BIAS LDC)	393.4	368.0	354.9	352.0	356.3	383.3
R11(ON BIAS LDC)	329.3	311.8	299.1	301.2	303.8	312.9
Irradiated, ON biased LDC parts statistics						
Min Value	294.9	281.0	272.8	279.9	271.3	271.7
Max Value	434.2	423.4	410.2	400.2	396.7	402.2
Average	363.6	345.5	334.8	340.7	332.1	342.3
Sigma	54.3	51.0	50.4	37.9	46.2	49.5

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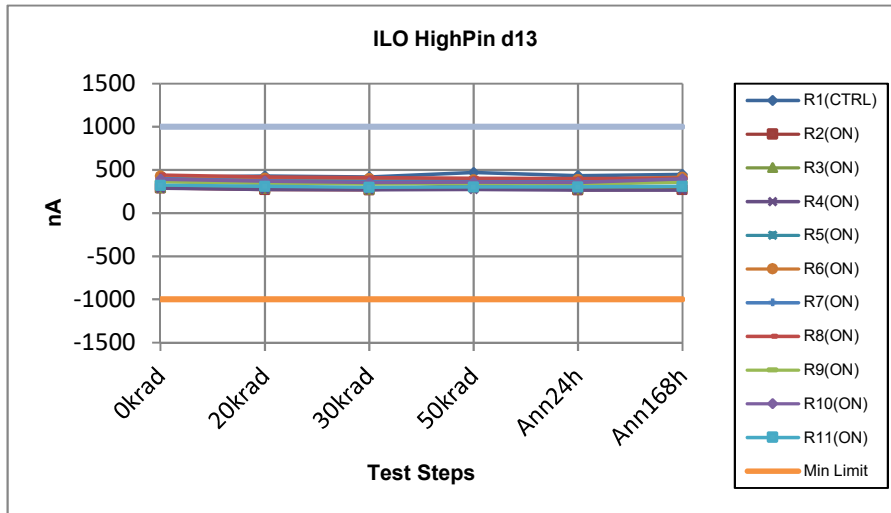
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ILO HighPin d14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	424.9	431.8	422.7	478.4	435.6	448.2
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	297.5	282.5	271.7	330.4	270.2	275.7
R3(ON BIAS LDC)	302.4	290.6	280.7	300.3	285.2	295.6
R4(ON BIAS LDC)	286.2	271.3	266.2	273.9	263.7	265.3
R5(ON BIAS LDC)	381.8	369.9	354.2	350.1	344.6	354.7
R6(ON BIAS LDC)	427.6	406.0	403.7	383.5	388.8	401.1
R7(ON BIAS LDC)	400.0	374.6	365.9	372.0	365.9	366.9
R8(ON BIAS LDC)	436.7	420.4	407.8	405.5	398.0	400.2
R9(ON BIAS LDC)	355.8	342.2	330.4	333.2	333.0	346.7
R10(ON BIAS LDC)	387.4	369.6	354.2	353.1	352.3	382.8
R11(ON BIAS LDC)	324.7	310.5	296.4	297.7	299.0	309.1
Irradiated, ON biased LDC parts statistics						
Min Value	286.2	271.3	266.2	273.9	263.7	265.3
Max Value	436.7	420.4	407.8	405.5	398.0	401.1
Average	360.0	343.8	333.1	340.0	330.1	339.8
Sigma	55.0	52.7	52.6	41.3	48.3	50.3

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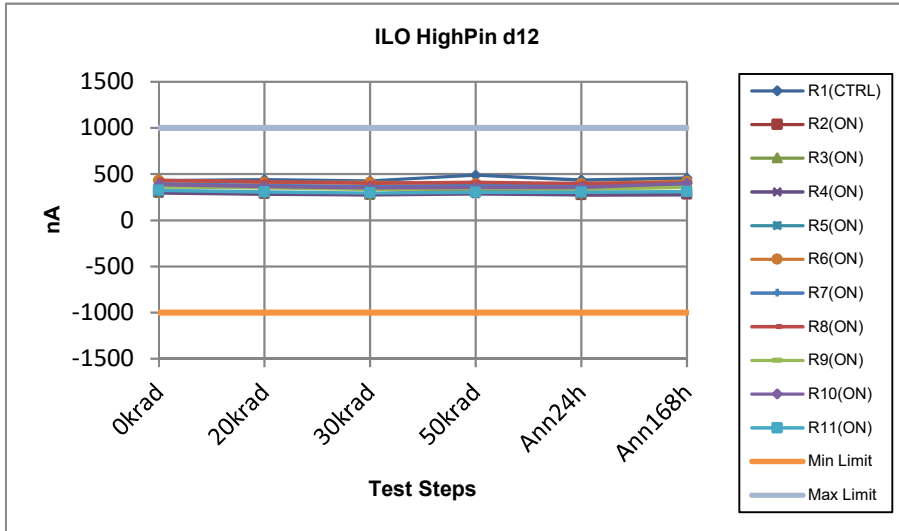
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ILO HighPin d13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	414.3	430.6	419.5	469.7	434.1	446.7
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	292.5	275.8	269.6	323.1	269.3	272.3
R3(ON BIAS LDC)	297.5	290.3	277.2	304.7	282.7	304.7
R4(ON BIAS LDC)	286.7	273.4	268.5	274.0	266.0	265.7
R5(ON BIAS LDC)	391.9	372.1	365.1	361.2	355.8	370.8
R6(ON BIAS LDC)	428.2	405.1	401.6	385.7	389.3	415.5
R7(ON BIAS LDC)	400.3	374.2	366.0	373.9	364.0	370.0
R8(ON BIAS LDC)	443.6	420.1	409.7	405.4	400.8	402.8
R9(ON BIAS LDC)	362.8	345.7	334.2	340.1	334.9	358.0
R10(ON BIAS LDC)	391.7	370.6	353.5	357.5	357.0	396.9
R11(ON BIAS LDC)	323.6	309.5	298.2	303.9	301.8	310.6
Irradiated, ON biased LDC parts statistics						
Min Value	286.7	273.4	268.5	274.0	266.0	265.7
Max Value	443.6	420.1	409.7	405.4	400.8	415.5
Average	361.9	343.7	334.4	342.9	332.2	346.7
Sigma	58.2	53.4	53.3	41.3	49.3	54.6

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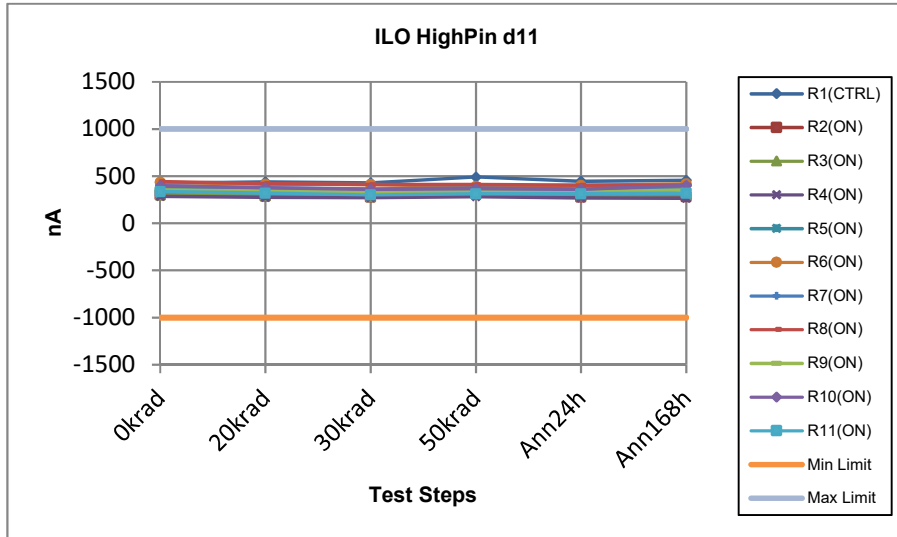
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ILO HighPin d12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	428.2	438.6	426.7	488.3	436.7	455.0
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	303.5	288.9	280.1	335.1	275.7	282.1
R3(ON BIAS LDC)	304.3	293.5	278.2	307.0	285.3	306.1
R4(ON BIAS LDC)	294.6	283.7	274.3	286.0	274.4	275.0
R5(ON BIAS LDC)	388.9	371.6	361.8	358.8	351.1	371.0
R6(ON BIAS LDC)	432.1	410.9	410.8	394.7	398.8	421.0
R7(ON BIAS LDC)	394.0	375.8	362.3	375.0	367.2	372.0
R8(ON BIAS LDC)	432.3	419.4	401.7	409.6	399.9	404.4
R9(ON BIAS LDC)	363.1	353.2	335.5	343.6	334.7	360.3
R10(ON BIAS LDC)	386.1	367.0	349.6	354.2	356.7	400.9
R11(ON BIAS LDC)	323.9	308.4	295.7	303.2	305.4	310.4
Irradiated, ON biased LDC parts statistics						
Min Value	294.6	283.7	274.3	286.0	274.4	275.0
Max Value	432.3	419.4	410.8	409.6	399.9	421.0
Average	362.3	347.2	335.0	346.7	334.9	350.3
Sigma	52.6	50.5	50.9	40.2	47.8	53.1

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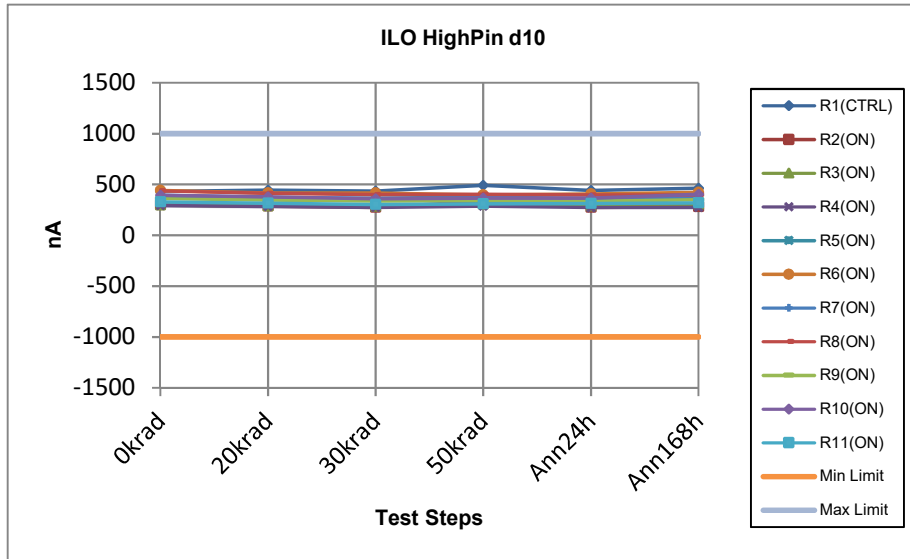
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ILO HighPin d11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	426.1	439.5	430.1	490.3	445.3	455.3
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	301.8	288.3	279.9	337.2	279.1	282.4
R3(ON BIAS LDC)	298.9	293.5	281.7	309.1	288.7	303.3
R4(ON BIAS LDC)	286.3	276.8	270.6	283.7	267.8	266.1
R5(ON BIAS LDC)	383.7	367.2	353.2	358.3	349.4	362.5
R6(ON BIAS LDC)	435.1	415.7	412.7	391.0	402.0	419.5
R7(ON BIAS LDC)	395.2	372.8	364.2	372.5	364.6	366.6
R8(ON BIAS LDC)	441.9	421.2	412.6	411.9	404.9	405.3
R9(ON BIAS LDC)	354.8	342.5	331.6	336.9	330.5	352.4
R10(ON BIAS LDC)	396.6	377.5	358.9	366.9	361.9	402.5
R11(ON BIAS LDC)	337.1	321.4	301.8	314.4	311.8	320.9
Irradiated, ON biased LDC parts statistics						
Min Value	286.3	276.8	270.6	283.7	267.8	266.1
Max Value	441.9	421.2	412.7	411.9	404.9	419.5
Average	363.1	347.7	336.7	348.2	336.1	348.1
Sigma	56.3	51.8	52.6	39.5	48.9	53.4

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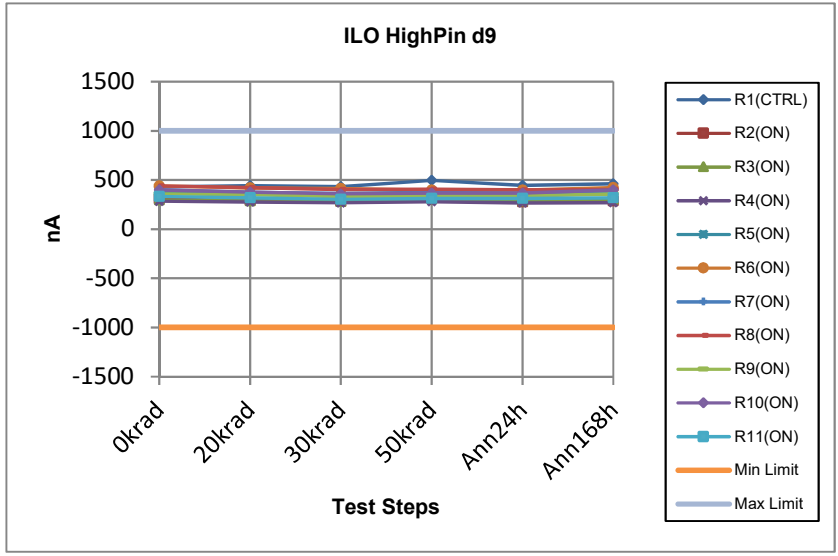
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ILO HighPin d10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	432.9	443.4	433.9	491.3	442.4	462.1
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	298.7	286.7	274.6	336.0	273.0	280.5
R3(ON BIAS LDC)	297.5	285.8	283.0	306.2	286.9	302.4
R4(ON BIAS LDC)	292.6	282.9	273.5	286.9	272.6	272.9
R5(ON BIAS LDC)	382.6	367.1	354.0	355.7	343.4	363.0
R6(ON BIAS LDC)	440.5	416.1	415.2	397.4	406.2	422.6
R7(ON BIAS LDC)	394.3	372.6	365.9	376.3	362.1	369.0
R8(ON BIAS LDC)	437.2	413.7	401.5	403.1	398.3	397.7
R9(ON BIAS LDC)	360.1	346.3	334.8	341.3	335.6	350.5
R10(ON BIAS LDC)	393.4	378.7	358.3	365.0	364.9	403.0
R11(ON BIAS LDC)	328.2	316.5	303.1	307.7	311.0	317.2
Irradiated, ON biased LDC parts statistics						
Min Value	292.6	282.9	273.5	286.9	272.6	272.9
Max Value	440.5	416.1	415.2	403.1	406.2	422.6
Average	362.5	346.6	336.4	347.6	335.4	347.9
Sigma	56.2	51.3	51.5	39.3	48.7	52.7

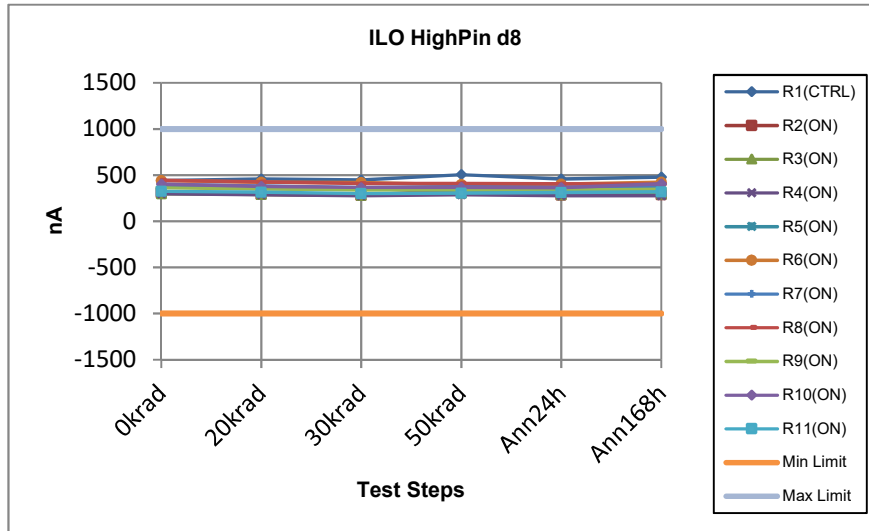
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ILO HighPin d9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	430.1	443.2	433.0	495.5	444.7	461.9
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	304.4	287.7	278.1	338.4	276.3	283.8
R3(ON BIAS LDC)	295.9	286.5	278.4	305.8	285.2	300.7
R4(ON BIAS LDC)	283.4	276.9	266.4	279.0	266.7	268.5
R5(ON BIAS LDC)	381.5	363.8	355.4	352.9	344.8	360.4
R6(ON BIAS LDC)	439.0	417.7	410.9	396.7	395.4	420.7
R7(ON BIAS LDC)	399.2	371.8	363.4	374.3	364.9	375.1
R8(ON BIAS LDC)	439.6	420.7	403.2	406.3	400.5	402.6
R9(ON BIAS LDC)	358.9	349.4	331.4	338.4	337.0	355.6
R10(ON BIAS LDC)	397.9	375.6	358.0	365.6	366.8	399.6
R11(ON BIAS LDC)	332.4	316.7	302.5	310.1	310.6	316.7
Irradiated, ON biased LDC parts statistics						
Min Value	283.4	276.9	266.4	279.0	266.7	268.5
Max Value	439.6	420.7	410.9	406.3	400.5	420.7
Average	363.2	346.7	334.8	346.8	334.8	348.4
Sigma	57.5	52.9	52.0	40.8	48.5	53.2

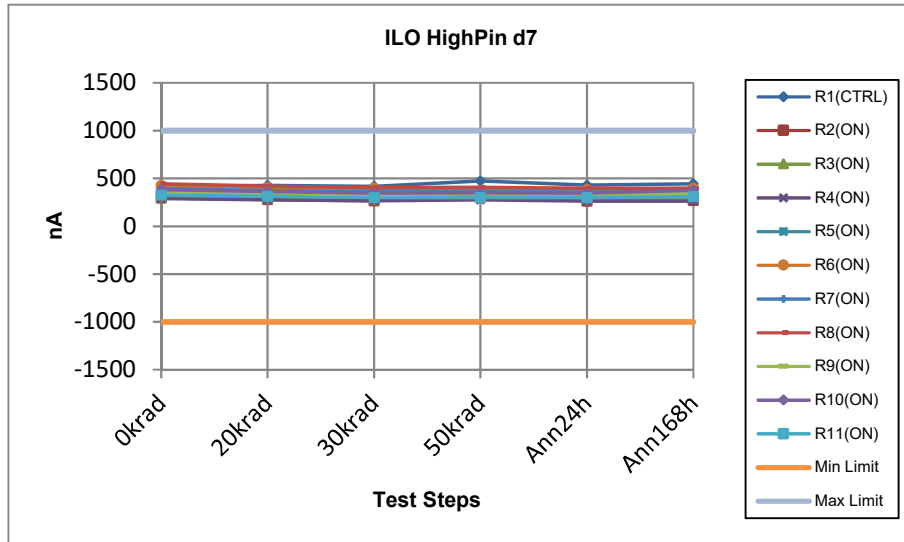
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ILO HighPin d8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	442.8	458.9	447.3	505.1	457.8	478.2
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	307.3	292.7	281.1	342.4	283.0	288.8
R3(ON BIAS LDC)	297.6	291.7	282.8	305.3	289.0	296.1
R4(ON BIAS LDC)	297.6	286.5	279.0	288.8	277.4	278.7
R5(ON BIAS LDC)	392.3	369.7	361.4	352.9	347.1	365.6
R6(ON BIAS LDC)	441.8	422.0	420.9	397.7	403.2	422.6
R7(ON BIAS LDC)	401.6	382.7	366.7	373.8	369.5	374.2
R8(ON BIAS LDC)	444.3	425.9	409.5	410.3	405.4	404.5
R9(ON BIAS LDC)	362.0	352.3	339.3	340.8	338.4	348.1
R10(ON BIAS LDC)	402.2	379.0	365.4	367.6	365.6	405.3
R11(ON BIAS LDC)	325.2	316.5	300.7	304.4	311.9	320.3
Irradiated, ON biased LDC parts statistics						
Min Value	297.6	286.5	279.0	288.8	277.4	278.7
Max Value	444.3	425.9	420.9	410.3	405.4	422.6
Average	367.2	351.9	340.7	348.4	339.1	350.4
Sigma	57.4	52.8	52.9	40.5	47.6	52.4

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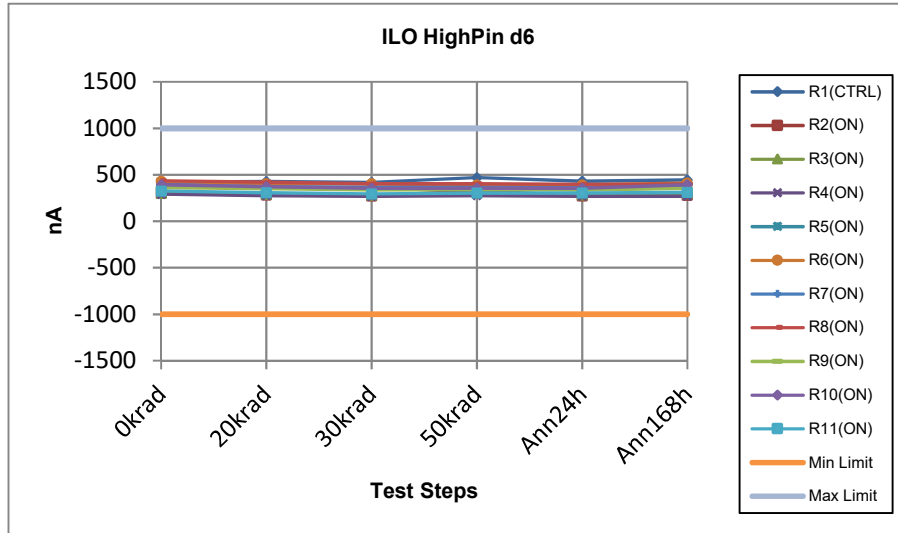
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ILO HighPin d7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	415.1	427.3	418.8	474.0	429.5	444.5
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	295.8	278.6	268.5	325.7	265.1	271.8
R3(ON BIAS LDC)	304.0	290.8	281.9	302.2	284.6	293.8
R4(ON BIAS LDC)	288.5	275.8	266.6	276.4	263.2	265.1
R5(ON BIAS LDC)	379.4	364.1	348.9	346.0	342.1	353.2
R6(ON BIAS LDC)	427.6	402.7	396.8	377.5	383.7	399.0
R7(ON BIAS LDC)	395.0	373.8	363.5	367.3	359.4	364.3
R8(ON BIAS LDC)	443.6	422.3	405.4	407.8	397.5	398.4
R9(ON BIAS LDC)	359.1	345.1	331.8	338.7	332.0	343.7
R10(ON BIAS LDC)	383.4	364.4	344.7	348.9	348.7	377.2
R11(ON BIAS LDC)	326.6	313.2	299.2	299.5	301.5	311.7
Irradiated, ON biased LDC parts statistics						
Min Value	288.5	275.8	266.6	276.4	263.2	265.1
Max Value	443.6	422.3	405.4	407.8	397.5	399.0
Average	360.3	343.1	330.7	339.0	327.8	337.8
Sigma	55.0	51.6	50.5	39.7	47.5	49.7

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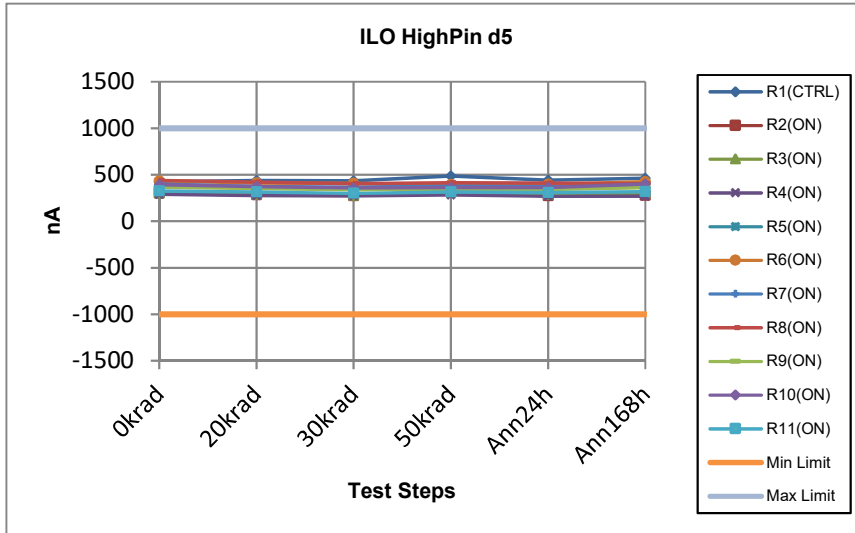
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ILO HighPin d6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	420.5	428.7	418.6	470.3	429.9	444.4
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	300.6	282.8	273.9	330.5	274.0	279.7
R3(ON BIAS LDC)	299.4	289.5	279.4	304.3	281.9	297.3
R4(ON BIAS LDC)	291.3	275.6	266.6	276.0	268.4	270.9
R5(ON BIAS LDC)	381.4	364.7	351.1	353.9	339.5	363.5
R6(ON BIAS LDC)	430.1	404.0	405.1	388.7	391.4	409.9
R7(ON BIAS LDC)	395.1	369.2	364.4	365.8	360.2	370.7
R8(ON BIAS LDC)	436.8	422.0	403.6	404.8	397.5	399.7
R9(ON BIAS LDC)	362.3	352.9	336.4	340.8	338.9	354.5
R10(ON BIAS LDC)	392.4	372.7	354.4	356.6	355.6	393.1
R11(ON BIAS LDC)	325.8	308.6	294.6	303.9	302.1	311.8
Irradiated, ON biased LDC parts statistics						
Min Value	291.3	275.6	266.6	276.0	268.4	270.9
Max Value	436.8	422.0	405.1	404.8	397.5	409.9
Average	361.5	344.2	332.9	342.5	330.9	345.1
Sigma	54.4	52.0	51.9	40.0	47.2	51.3

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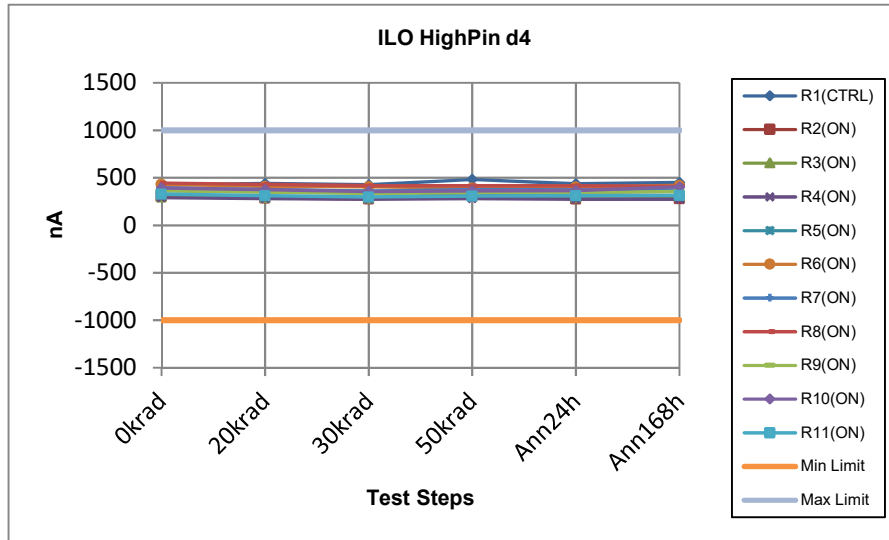
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ILO HighPin d5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	425.5	439.5	435.8	486.8	442.4	462.1
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	302.5	282.8	274.5	336.0	275.1	275.5
R3(ON BIAS LDC)	299.7	288.7	277.9	311.2	288.9	303.3
R4(ON BIAS LDC)	290.9	276.6	272.4	284.2	268.7	270.6
R5(ON BIAS LDC)	385.9	369.2	354.7	360.1	355.7	367.0
R6(ON BIAS LDC)	433.7	410.4	408.1	395.3	396.3	424.7
R7(ON BIAS LDC)	400.9	373.7	366.3	379.1	373.6	370.7
R8(ON BIAS LDC)	440.0	423.2	405.9	414.0	409.9	405.7
R9(ON BIAS LDC)	367.0	352.4	336.3	346.6	344.2	364.6
R10(ON BIAS LDC)	394.2	373.2	356.9	363.4	363.2	401.4
R11(ON BIAS LDC)	324.8	314.3	300.1	313.6	309.6	317.0
Irradiated, ON biased LDC parts statistics						
Min Value	290.9	276.6	272.4	284.2	268.7	270.6
Max Value	440.0	423.2	408.1	414.0	409.9	424.7
Average	364.0	346.4	335.3	350.3	338.5	350.0
Sigma	56.0	53.0	51.9	40.3	50.3	55.2

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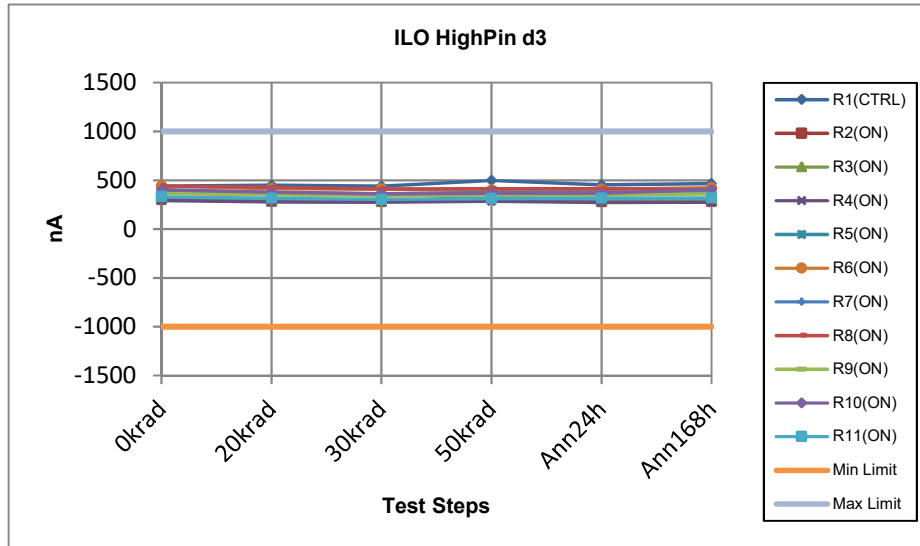
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ILO HighPin d4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	423.5	438.7	428.1	483.1	437.3	449.9
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	304.5	287.5	277.0	342.7	278.7	280.3
R3(ON BIAS LDC)	299.0	290.3	284.0	307.4	291.1	305.9
R4(ON BIAS LDC)	290.6	281.6	273.8	283.2	275.4	276.2
R5(ON BIAS LDC)	388.6	369.2	360.0	361.6	356.0	370.9
R6(ON BIAS LDC)	432.5	408.5	406.0	392.7	402.8	419.5
R7(ON BIAS LDC)	391.8	374.6	360.2	375.3	374.0	369.5
R8(ON BIAS LDC)	445.1	430.0	415.7	416.5	416.8	411.6
R9(ON BIAS LDC)	362.0	349.0	333.5	342.1	343.3	355.3
R10(ON BIAS LDC)	392.9	376.9	355.1	363.6	367.4	404.7
R11(ON BIAS LDC)	328.2	313.4	299.1	310.0	313.5	315.7
Irradiated, ON biased LDC parts statistics						
Min Value	290.6	281.6	273.8	283.2	275.4	276.2
Max Value	445.1	430.0	415.7	416.5	416.8	419.5
Average	363.5	348.1	336.4	349.5	341.9	351.0
Sigma	55.7	52.7	51.8	41.1	50.5	53.6

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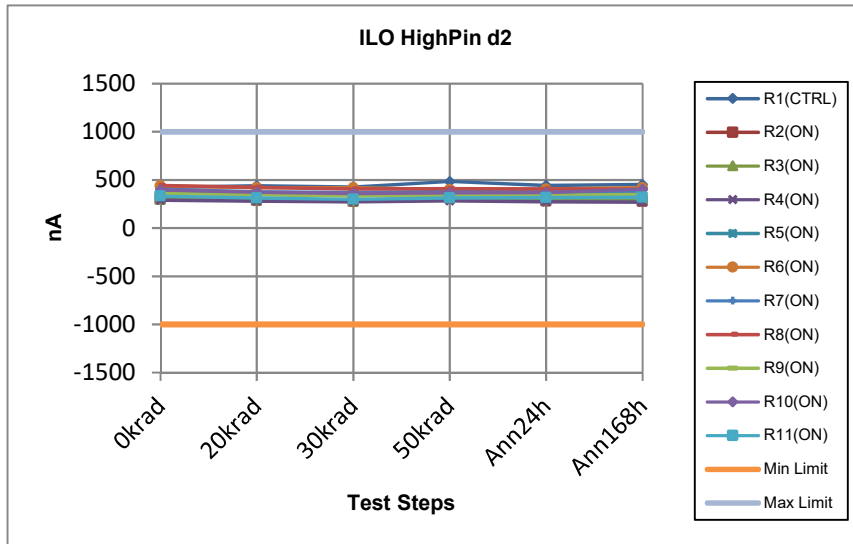
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ILO HighPin d3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	439.7	449.3	439.7	498.1	454.5	466.3
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	303.5	283.4	278.6	338.9	280.4	281.6
R3(ON BIAS LDC)	304.1	291.8	282.9	312.9	290.9	303.2
R4(ON BIAS LDC)	292.2	280.5	275.5	286.1	274.4	274.2
R5(ON BIAS LDC)	387.9	373.5	357.4	366.0	360.4	374.0
R6(ON BIAS LDC)	441.4	413.7	410.3	396.8	408.1	422.2
R7(ON BIAS LDC)	395.8	370.3	361.5	374.3	374.3	369.7
R8(ON BIAS LDC)	441.9	426.5	409.5	413.5	415.5	406.5
R9(ON BIAS LDC)	364.6	350.9	337.2	348.1	347.9	360.1
R10(ON BIAS LDC)	403.7	378.6	361.2	368.1	369.2	404.9
R11(ON BIAS LDC)	330.6	315.0	303.7	313.2	316.5	320.1
Irradiated, ON biased LDC parts statistics						
Min Value	292.2	280.5	275.5	286.1	274.4	274.2
Max Value	441.9	426.5	410.3	413.5	415.5	422.2
Average	366.6	348.4	337.8	351.8	343.8	351.6
Sigma	56.4	53.3	51.0	39.9	51.1	53.7

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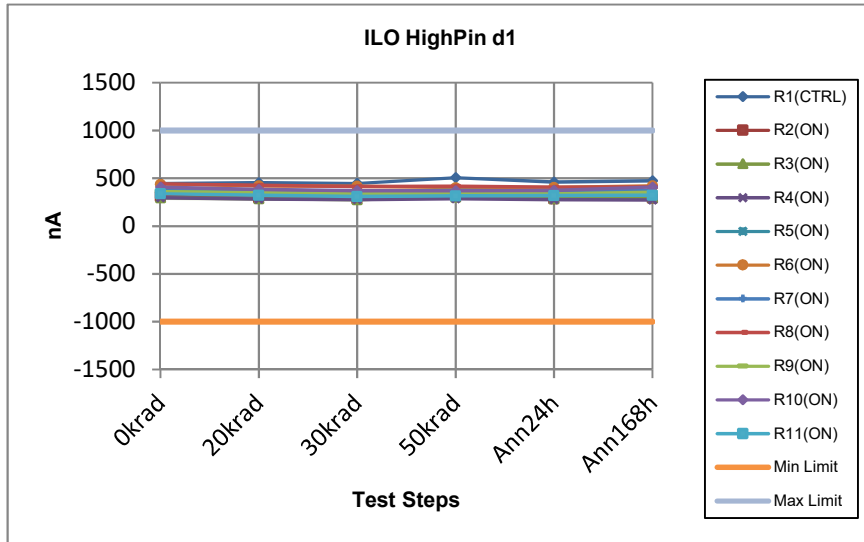
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ILO HighPin d2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	423.0	439.7	426.8	483.4	442.4	453.5
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	301.1	285.1	277.8	338.0	279.7	276.6
R3(ON BIAS LDC)	296.4	290.9	280.7	307.9	290.4	301.0
R4(ON BIAS LDC)	289.3	279.8	272.1	284.1	272.2	269.3
R5(ON BIAS LDC)	379.6	363.3	358.5	356.2	349.1	364.6
R6(ON BIAS LDC)	440.0	418.2	419.6	400.5	405.9	421.1
R7(ON BIAS LDC)	405.0	377.6	371.1	379.3	374.0	375.6
R8(ON BIAS LDC)	442.1	422.6	407.1	408.4	406.3	404.0
R9(ON BIAS LDC)	359.8	346.3	330.7	340.0	340.0	348.2
R10(ON BIAS LDC)	396.2	371.8	360.3	366.8	368.6	404.5
R11(ON BIAS LDC)	331.6	312.1	298.9	314.9	315.8	319.9
Irradiated, ON biased LDC parts statistics						
Min Value	289.3	279.8	272.1	284.1	272.2	269.3
Max Value	442.1	422.6	419.6	408.4	406.3	421.1
Average	364.1	346.8	337.7	349.6	340.2	348.5
Sigma	57.8	53.0	54.0	40.5	49.5	54.8

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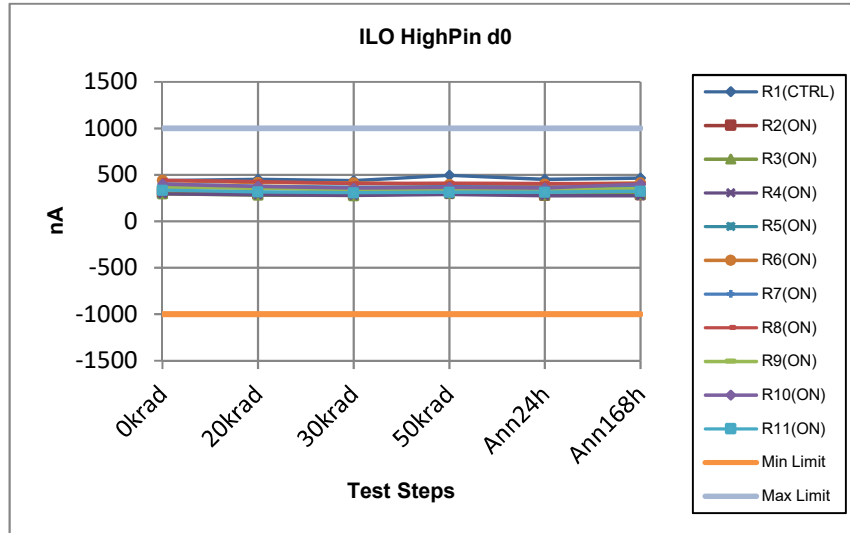
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ILO HighPin d1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	446.0	455.5	446.0	505.9	460.5	474.7
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	310.9	295.9	285.4	346.0	287.8	292.1
R3(ON BIAS LDC)	297.0	286.6	275.6	304.1	286.9	295.5
R4(ON BIAS LDC)	296.1	282.4	275.6	286.4	275.0	273.3
R5(ON BIAS LDC)	379.4	367.6	357.4	355.4	350.8	362.2
R6(ON BIAS LDC)	438.7	422.0	418.7	401.1	405.3	420.3
R7(ON BIAS LDC)	397.6	376.7	364.1	373.4	366.1	370.6
R8(ON BIAS LDC)	441.7	428.1	413.6	418.3	407.9	409.6
R9(ON BIAS LDC)	362.6	351.2	337.6	343.1	338.3	352.8
R10(ON BIAS LDC)	406.9	384.7	370.5	369.0	373.8	408.0
R11(ON BIAS LDC)	339.2	321.7	310.3	318.1	320.6	323.6
Irradiated, ON biased LDC parts statistics						
Min Value	296.1	282.4	275.6	286.4	275.0	273.3
Max Value	441.7	428.1	418.7	418.3	407.9	420.3
Average	367.0	351.7	340.9	351.5	341.2	350.8
Sigma	55.0	53.5	53.3	41.4	48.3	53.1

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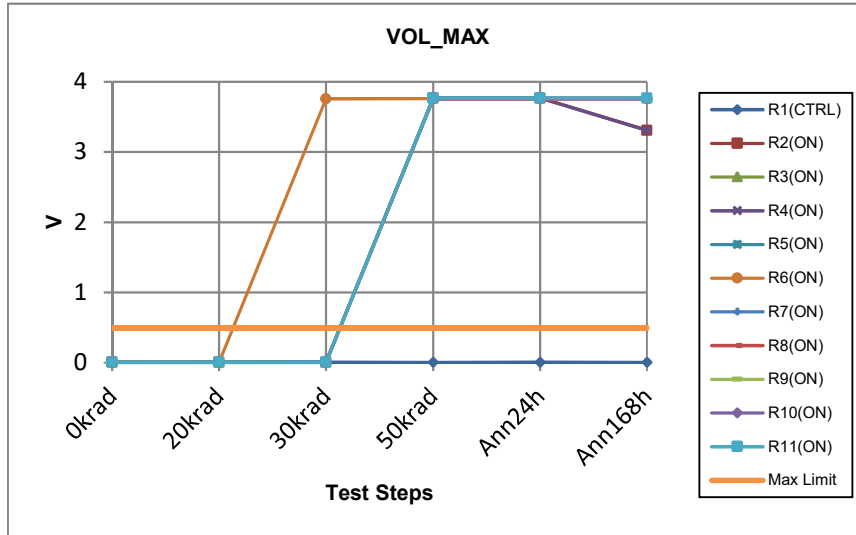
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ILO HighPin d0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	437.5	450.5	438.5	494.9	450.7	465.8
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	302.6	293.2	282.6	337.8	277.8	286.1
R3(ON BIAS LDC)	295.5	281.3	276.9	300.2	282.1	290.2
R4(ON BIAS LDC)	295.0	285.1	278.7	288.1	275.0	274.6
R5(ON BIAS LDC)	390.4	373.1	363.5	361.8	352.3	367.8
R6(ON BIAS LDC)	439.8	415.2	414.5	395.2	400.6	413.2
R7(ON BIAS LDC)	399.0	375.3	363.2	370.1	364.4	370.8
R8(ON BIAS LDC)	440.8	425.8	407.0	409.9	405.5	404.9
R9(ON BIAS LDC)	364.9	353.4	334.7	342.2	338.9	349.8
R10(ON BIAS LDC)	397.7	374.7	355.6	365.5	359.6	400.0
R11(ON BIAS LDC)	335.1	316.1	307.0	313.5	313.9	322.1
Irradiated, ON biased LDC parts statistics						
Min Value	295.0	281.3	276.9	288.1	275.0	274.6
Max Value	440.8	425.8	414.5	409.9	405.5	413.2
Average	366.1	349.3	338.4	348.4	337.0	347.9
Sigma	56.5	52.8	51.1	39.8	48.4	52.0

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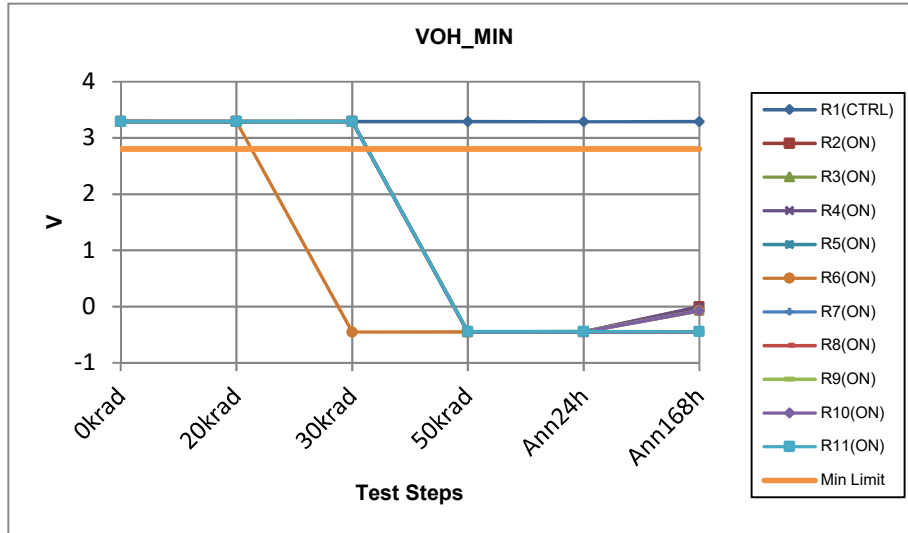
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VOL_MAX	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	0.495	0.495	0.495	0.495	0.495	0.495
Unit	V	V	V	V	V	V
Control results						
R1(CTRL)	0.0060	0.0060	0.0060	0.0058	0.0061	0.0058
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0.0063	0.0063	0.0063	3.7671	3.7702	3.3066
R3(ON BIAS LDC)	0.0061	0.0060	0.0060	3.7687	3.7682	3.7684
R4(ON BIAS LDC)	0.0067	0.0066	0.0066	3.7706	3.7709	3.3074
R5(ON BIAS LDC)	0.0057	0.0056	0.0058	3.7641	3.7640	3.7634
R6(ON BIAS LDC)	0.0057	0.0057	3.7599	3.7609	3.7604	3.7596
R7(ON BIAS LDC)	0.0057	0.0057	0.0057	3.7622	3.7622	3.7620
R8(ON BIAS LDC)	0.0057	0.0057	0.0055	3.7594	3.7598	3.7600
R9(ON BIAS LDC)	0.0059	0.0059	0.0058	3.7649	3.7644	3.7643
R10(ON BIAS LDC)	0.0058	0.0059	0.0060	3.7631	3.7630	3.7608
R11(ON BIAS LDC)	0.0060	0.0059	0.0059	3.7677	3.7671	3.7671
Irradiated, ON biased LDC parts statistics						
Min Value	0.0057	0.0056	0.0055	3.7594	3.7598	3.3066
Max Value	0.0067	0.0066	3.7599	3.7706	3.7709	3.7684
Average	0.0059	0.0059	0.3813	3.7649	3.7650	3.6720
Sigma	0.0003	0.0003	1.1871	0.0036	0.0039	0.1924

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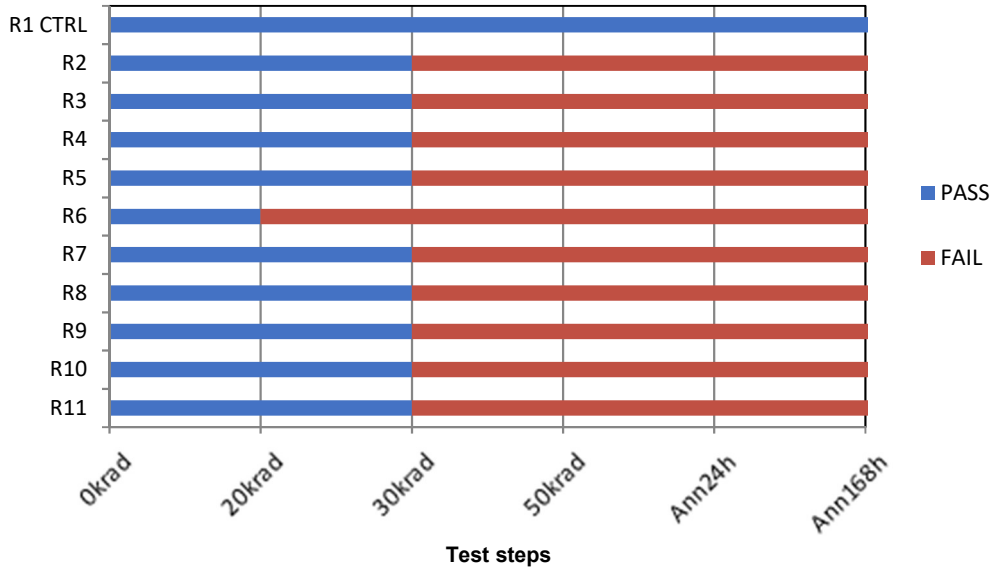
VOH_MIN	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	2.805	2.805	2.805	2.805	2.805	2.805
Max Limit	--	--	--	--	--	--
Unit	V	V	V	V	V	V
Control results						
R1(CTRL)	3.2917	3.2918	3.2916	3.2915	3.2911	3.2918
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	3.2908	3.2912	3.2910	-0.4490	-0.4515	-0.0065
R3(ON BIAS LDC)	3.2910	3.2915	3.2908	-0.4488	-0.4480	-0.0708
R4(ON BIAS LDC)	3.2904	3.2907	3.2905	-0.4492	-0.4489	-0.0068
R5(ON BIAS LDC)	3.2911	3.2912	3.2915	-0.4519	-0.4513	-0.4514
R6(ON BIAS LDC)	3.2913	3.2916	-0.4544	-0.4514	-0.4501	-0.0781
R7(ON BIAS LDC)	3.2918	3.2916	3.2918	-0.4507	-0.4501	-0.4509
R8(ON BIAS LDC)	3.2922	3.2917	3.2919	-0.4518	-0.4511	-0.4521
R9(ON BIAS LDC)	3.2915	3.2913	3.2915	-0.4487	-0.4479	-0.0757
R10(ON BIAS LDC)	3.2915	3.2916	3.2918	-0.4506	-0.4492	-0.0774
R11(ON BIAS LDC)	3.2914	3.2913	3.2907	-0.4474	-0.4458	-0.4476
Irradiated, ON biased LDC parts statistics						
Min Value	3.2904	3.2907	-0.4544	-0.4519	-0.4515	-0.4521
Max Value	3.2922	3.2917	3.2919	-0.4474	-0.4458	-0.0065
Average	3.2913	3.2913	2.9167	-0.4499	-0.4494	-0.2117
Sigma	0.0005	0.0003	1.1845	0.0015	0.0018	0.2072

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VILmax fails



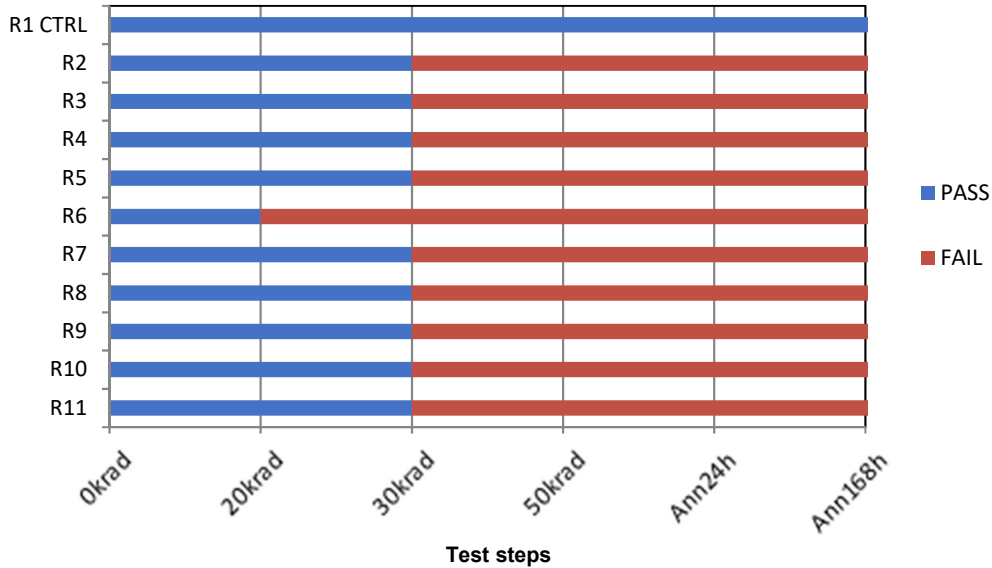
VILmax fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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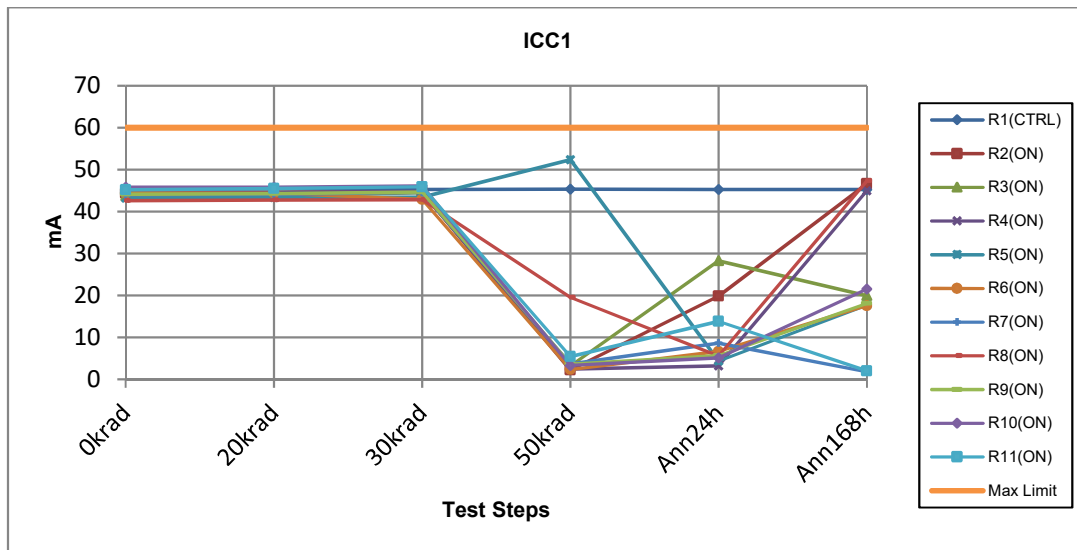
VIHmin fails



VIHmin fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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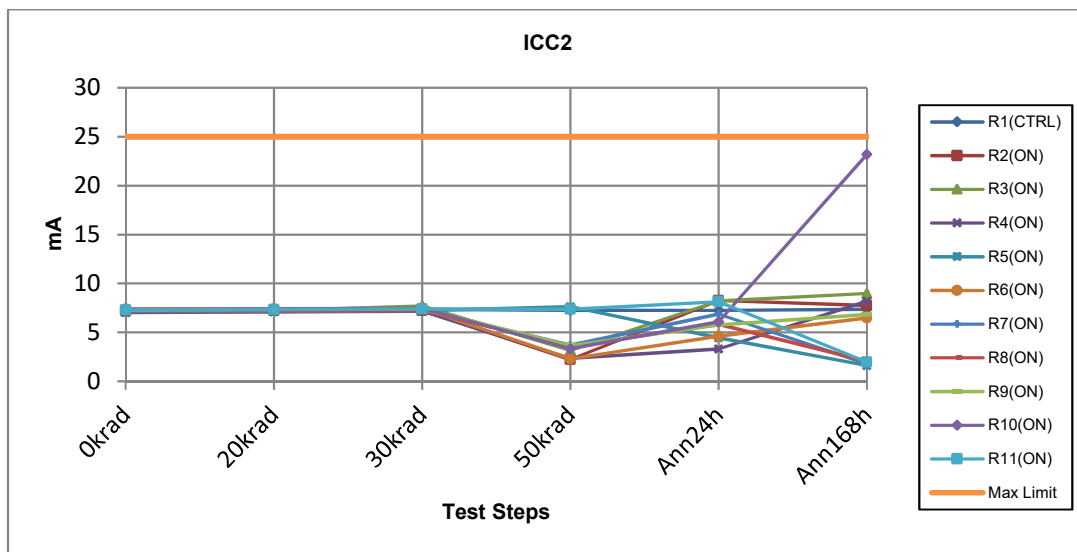
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ICC1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	60	60	60	60	60	60
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	45.21	45.43	45.26	45.34	45.28	45.29
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	44.37	44.58	44.65	2.23	19.87	46.63
R3(ON BIAS LDC)	43.72	43.85	44.51	3.16	28.23	19.94
R4(ON BIAS LDC)	44.70	44.48	44.82	2.43	3.24	45.00
R5(ON BIAS LDC)	43.19	43.36	43.47	52.37	4.35	17.71
R6(ON BIAS LDC)	44.40	44.41	42.90	2.34	6.63	17.57
R7(ON BIAS LDC)	44.01	44.15	44.53	3.68	8.63	1.77
R8(ON BIAS LDC)	42.61	42.73	42.81	19.53	5.53	47.31
R9(ON BIAS LDC)	44.10	44.25	44.65	3.64	5.62	18.11
R10(ON BIAS LDC)	45.78	45.84	46.10	3.32	5.08	21.56
R11(ON BIAS LDC)	45.22	45.52	45.90	5.43	13.80	2.01
Irradiated, ON biased LDC parts statistics						
Min Value	42.61	42.73	42.81	2.23	3.24	1.77
Max Value	45.78	45.84	46.10	52.37	28.23	47.31
Average	44.21	44.32	44.43	9.81	10.10	23.76
Sigma	0.92	0.92	1.11	15.83	8.15	17.04

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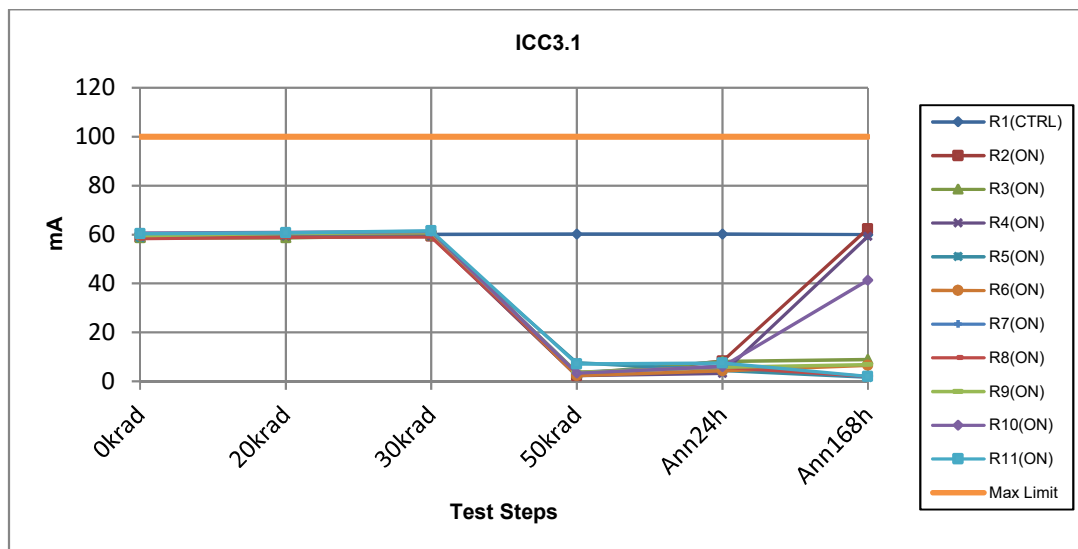
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ICC2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	25	25	25	25	25	25
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	7.31	7.28	7.36	7.27	7.25	7.36
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	7.18	7.22	7.22	2.22	8.26	7.76
R3(ON BIAS LDC)	7.20	7.24	7.69	3.15	8.23	8.98
R4(ON BIAS LDC)	7.02	7.12	7.18	2.35	3.31	8.19
R5(ON BIAS LDC)	7.14	7.15	7.22	7.63	4.45	1.62
R6(ON BIAS LDC)	7.39	7.41	7.43	2.30	4.62	6.47
R7(ON BIAS LDC)	7.17	7.14	7.27	3.71	6.89	1.80
R8(ON BIAS LDC)	7.21	7.20	7.24	3.55	5.82	2.06
R9(ON BIAS LDC)	7.25	7.36	7.39	3.66	5.74	6.84
R10(ON BIAS LDC)	7.37	7.41	7.43	3.34	6.10	23.20
R11(ON BIAS LDC)	7.29	7.32	7.39	7.36	8.14	1.97
Irradiated, ON biased LDC parts statistics						
Min Value	7.02	7.12	7.18	2.22	3.31	1.62
Max Value	7.39	7.41	7.69	7.63	8.26	23.20
Average	7.22	7.26	7.35	3.93	6.15	6.89
Sigma	0.11	0.11	0.15	1.97	1.73	6.45

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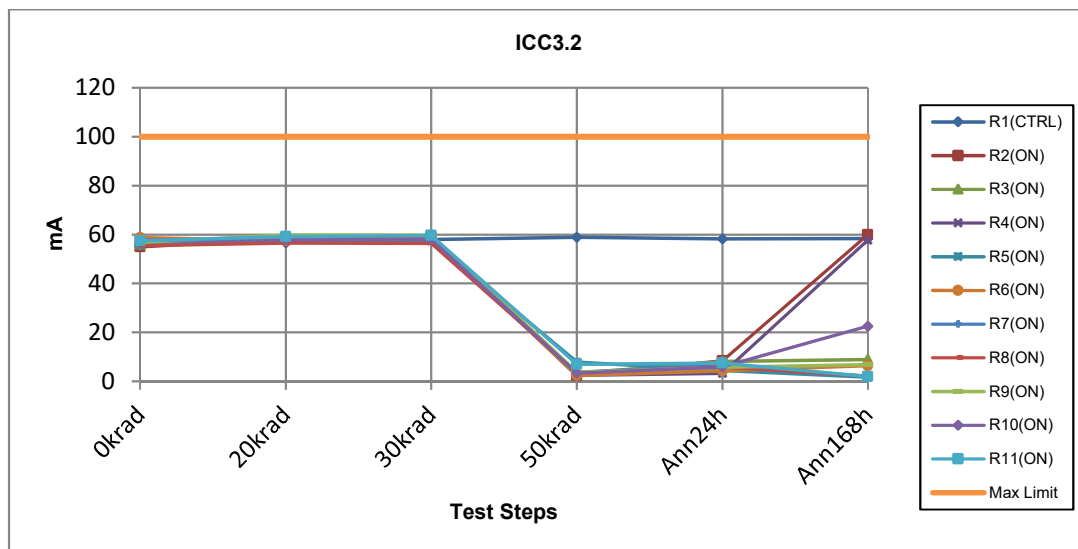
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ICC3.1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	60.24	60.27	60.09	60.25	60.22	60.00
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	58.82	59.54	59.29	2.22	8.29	62.32
R3(ON BIAS LDC)	58.57	58.64	59.70	3.19	8.10	8.95
R4(ON BIAS LDC)	58.96	59.44	59.38	2.37	3.29	59.31
R5(ON BIAS LDC)	58.70	59.84	60.23	7.63	4.43	1.63
R6(ON BIAS LDC)	59.73	60.45	60.71	2.30	4.34	6.49
R7(ON BIAS LDC)	59.70	60.43	61.00	3.70	6.15	1.85
R8(ON BIAS LDC)	58.40	58.85	58.99	3.52	5.80	2.06
R9(ON BIAS LDC)	59.59	60.46	60.87	3.68	5.77	6.86
R10(ON BIAS LDC)	60.62	60.85	61.25	3.36	6.00	41.40
R11(ON BIAS LDC)	60.39	60.71	61.51	7.02	7.52	1.99
Irradiated, ON biased LDC parts statistics						
Min Value	58.40	58.64	58.99	2.22	3.29	1.63
Max Value	60.62	60.85	61.51	7.63	8.29	62.32
Average	59.35	59.92	60.29	3.90	5.97	19.29
Sigma	0.77	0.78	0.90	1.90	1.65	24.90

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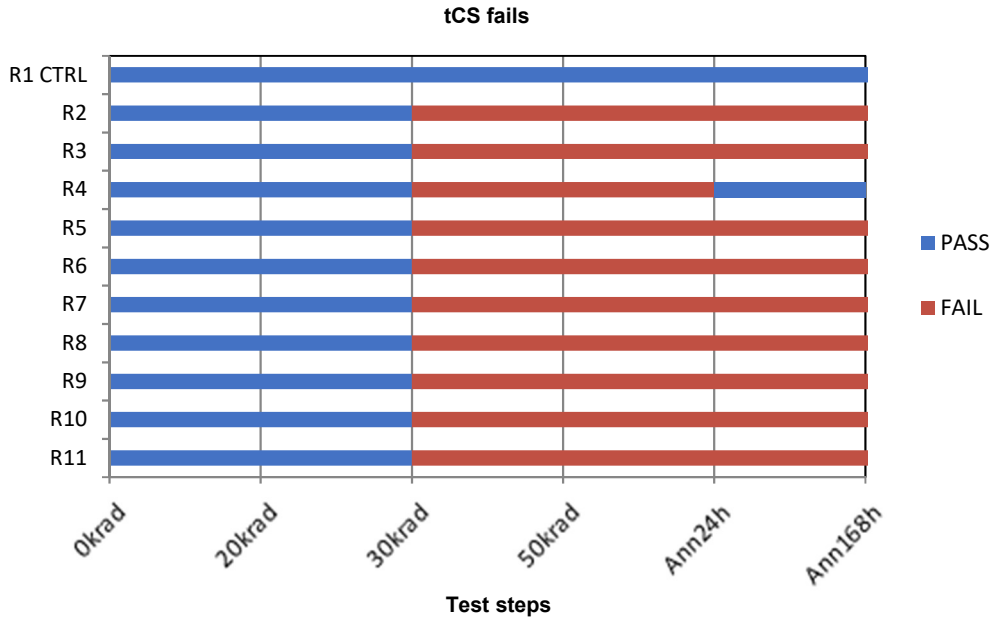
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ICC3.2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	58.19	56.70	58.04	58.88	58.21	58.43
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	54.94	58.34	59.17	2.23	8.36	59.98
R3(ON BIAS LDC)	55.94	58.66	57.86	3.19	8.14	8.94
R4(ON BIAS LDC)	55.74	58.80	59.20	2.39	3.30	57.67
R5(ON BIAS LDC)	55.82	58.09	57.43	7.80	4.43	1.62
R6(ON BIAS LDC)	58.80	57.41	58.55	2.35	4.34	6.48
R7(ON BIAS LDC)	56.00	57.49	57.62	3.71	6.62	1.85
R8(ON BIAS LDC)	55.46	56.55	56.46	3.53	5.85	2.08
R9(ON BIAS LDC)	56.76	59.81	59.71	3.71	5.74	6.87
R10(ON BIAS LDC)	57.75	58.03	58.20	3.35	5.95	22.57
R11(ON BIAS LDC)	57.49	59.15	59.64	6.93	7.50	1.97
Irradiated, ON biased LDC parts statistics						
Min Value	54.94	56.55	56.46	2.23	3.30	1.62
Max Value	58.80	59.81	59.71	7.80	8.36	59.98
Average	56.47	58.23	58.38	3.92	6.02	17.00
Sigma	1.20	0.94	1.06	1.91	1.68	22.91

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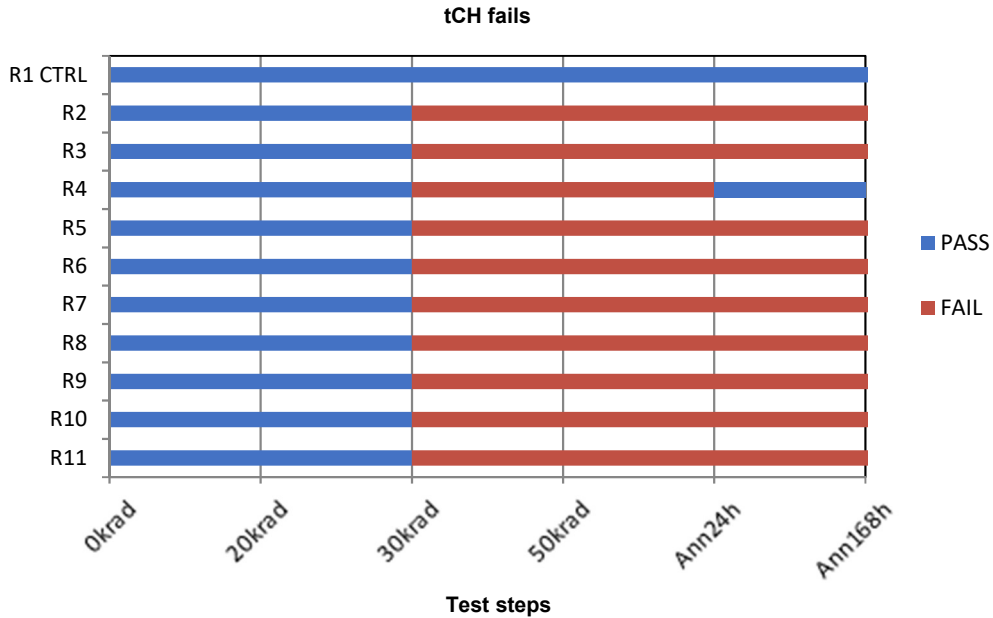
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tCS fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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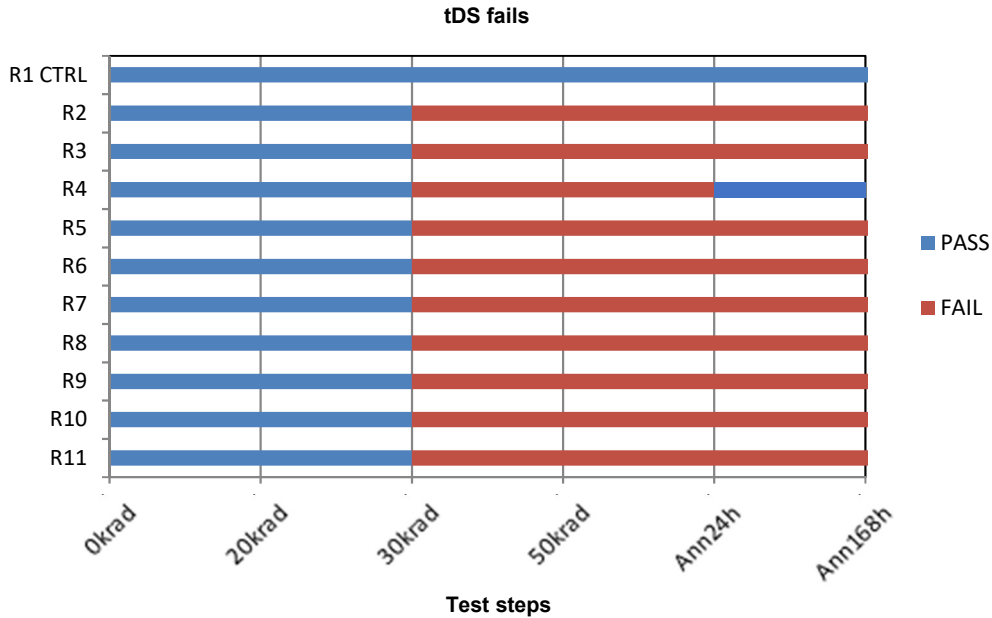
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tCH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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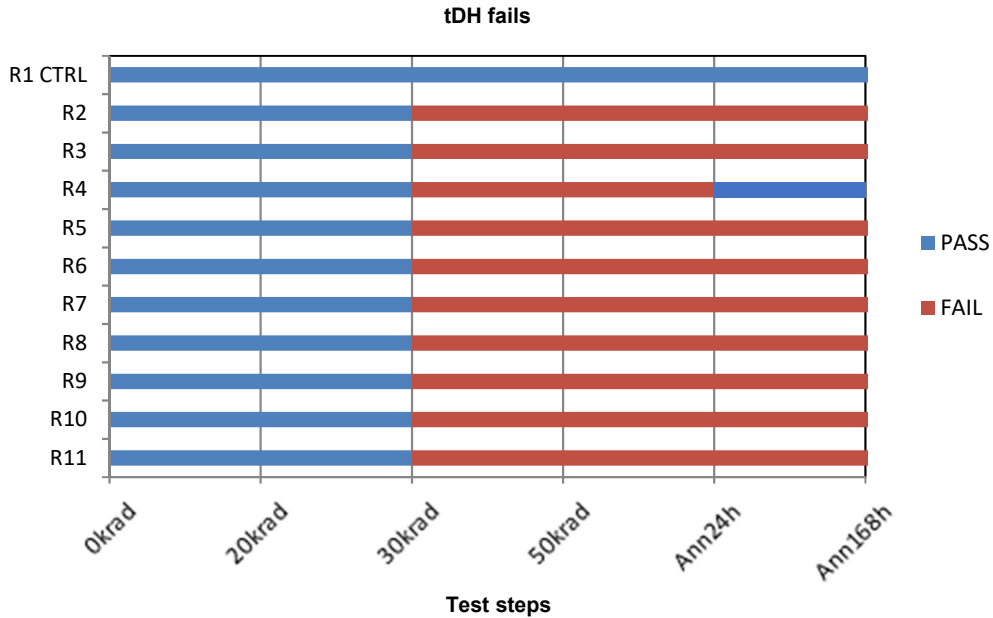
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tDS fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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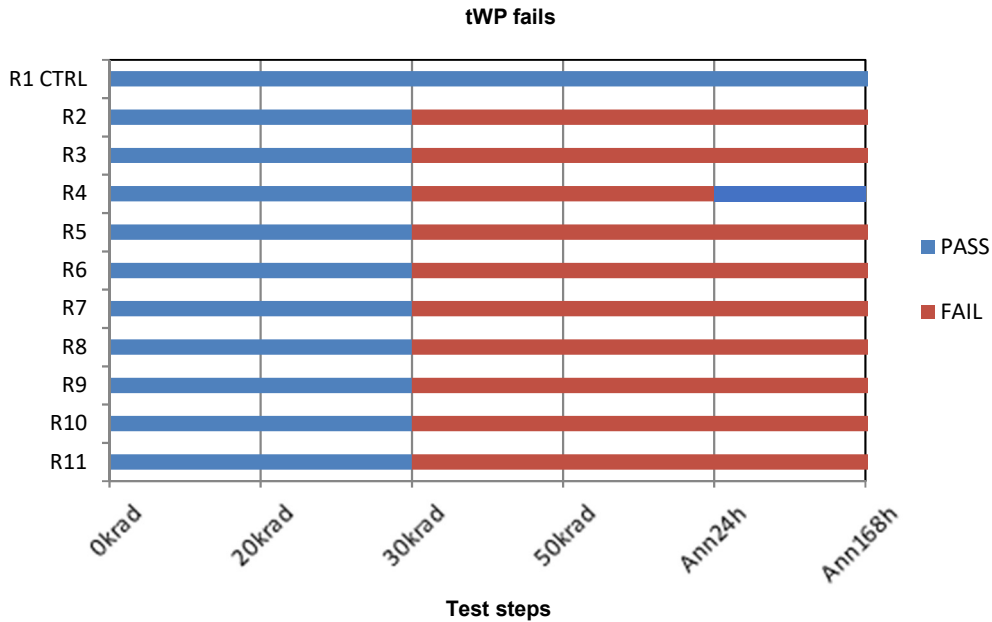
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tDH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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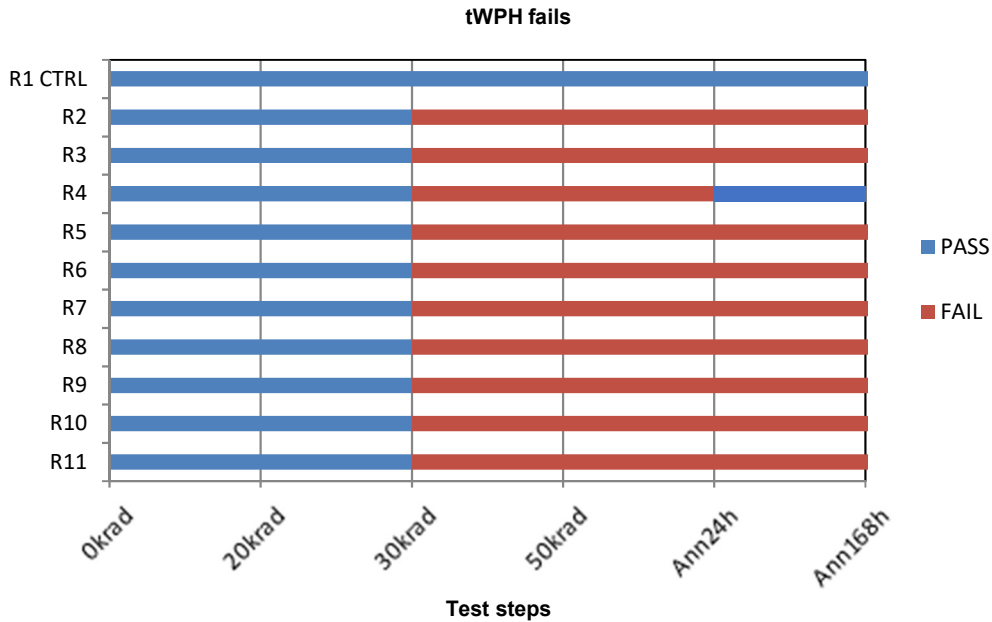
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tWP fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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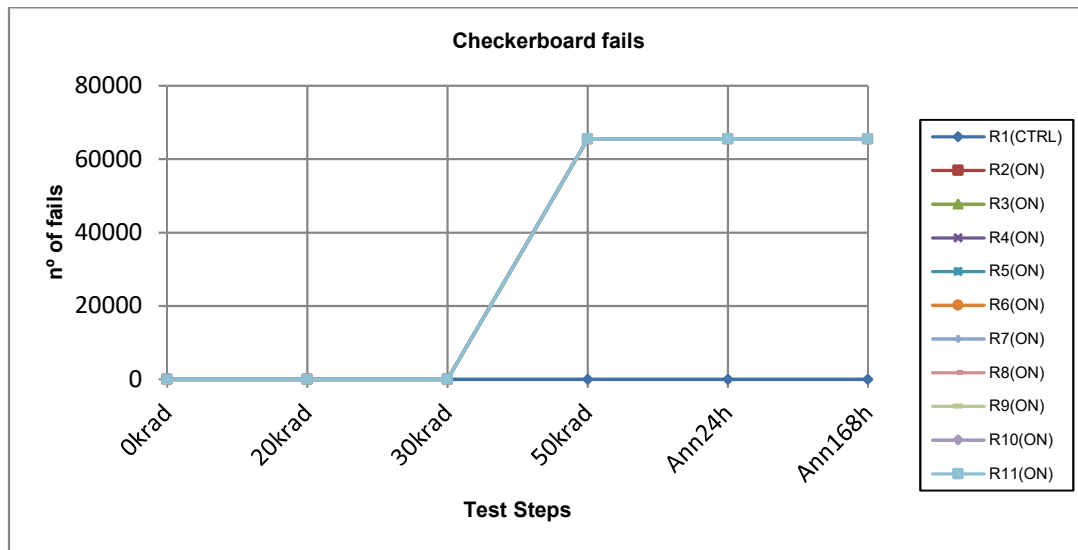
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tWPH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R5(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R8(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS LDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased LDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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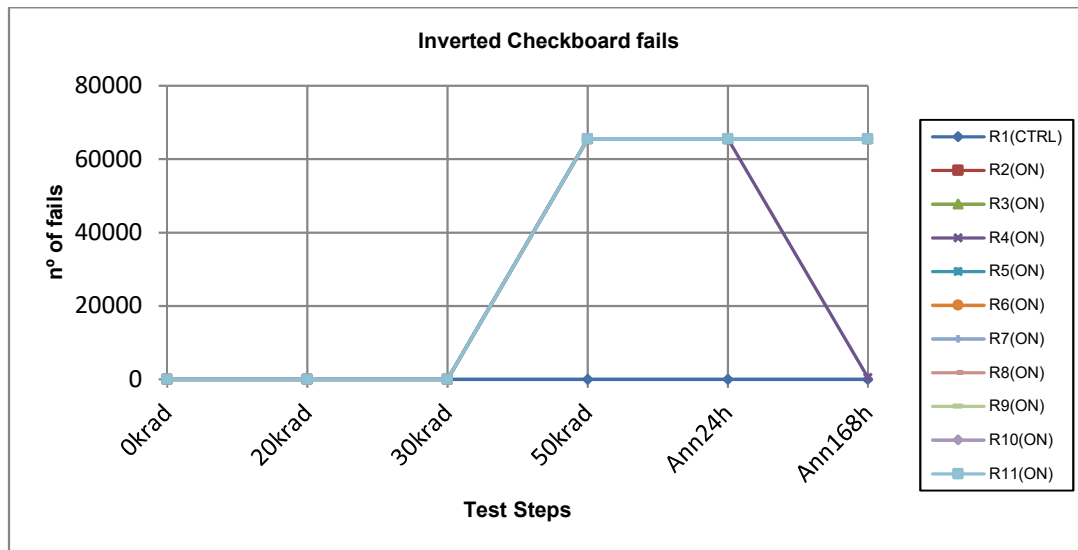
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Checkerboard fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0	0	0	65536	65536	65536
R3(ON BIAS LDC)	0	0	0	65536	65536	65536
R4(ON BIAS LDC)	0	0	0	65536	65536	65536
R5(ON BIAS LDC)	0	0	0	65536	65536	65536
R6(ON BIAS LDC)	0	0	0	65536	65536	65536
R7(ON BIAS LDC)	0	0	0	65536	65536	65536
R8(ON BIAS LDC)	0	0	0	65536	65536	65536
R9(ON BIAS LDC)	0	0	0	65536	65536	65536
R10(ON BIAS LDC)	0	0	0	65536	65536	65536
R11(ON BIAS LDC)	0	0	0	65536	65536	65536
Irradiated, ON biased LDC parts statistics						
Min Value	0	0	0	65536	65536	65536
Max Value	0	0	0	65536	65536	65536
Average	0	0	0	65536	65536	65536
Sigma	0	0	0	0	0	0

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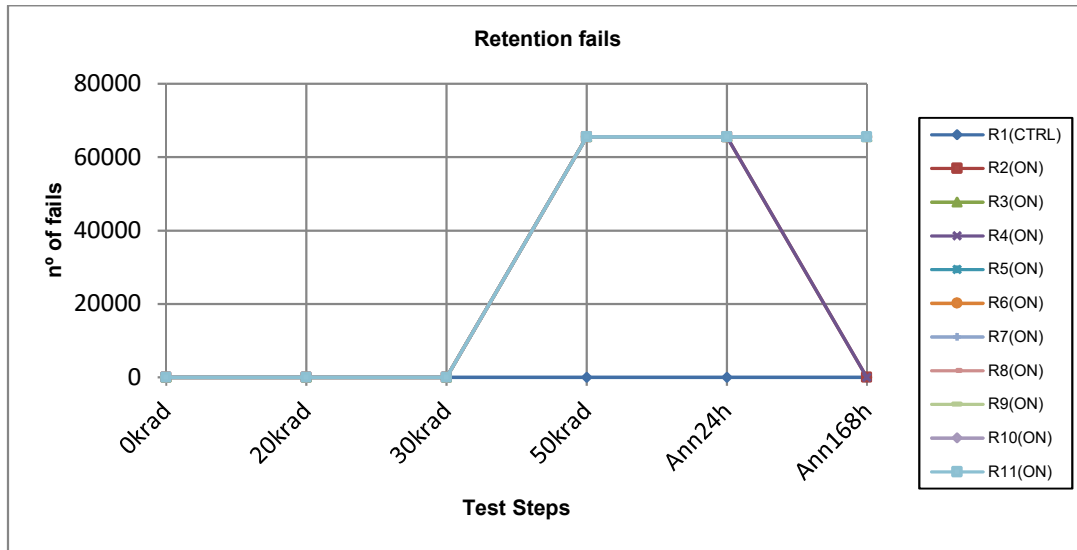
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Inverted Checkboard fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0	0	0	65536	65536	65535
R3(ON BIAS LDC)	0	0	0	65536	65536	65536
R4(ON BIAS LDC)	0	0	0	65536	65536	521
R5(ON BIAS LDC)	0	0	0	65536	65536	65536
R6(ON BIAS LDC)	0	0	0	65536	65536	65536
R7(ON BIAS LDC)	0	0	0	65536	65536	65536
R8(ON BIAS LDC)	0	0	0	65536	65536	65536
R9(ON BIAS LDC)	0	0	0	65536	65536	65536
R10(ON BIAS LDC)	0	0	0	65536	65536	65536
R11(ON BIAS LDC)	0	0	0	65536	65536	65536
Irradiated, ON biased LDC parts statistics						
Min Value	0	0	0	65536	65536	521
Max Value	0	0	0	65536	65536	65536
Average	0	0	0	65536	65536	59034
Sigma	0	0	0	0	0	20560

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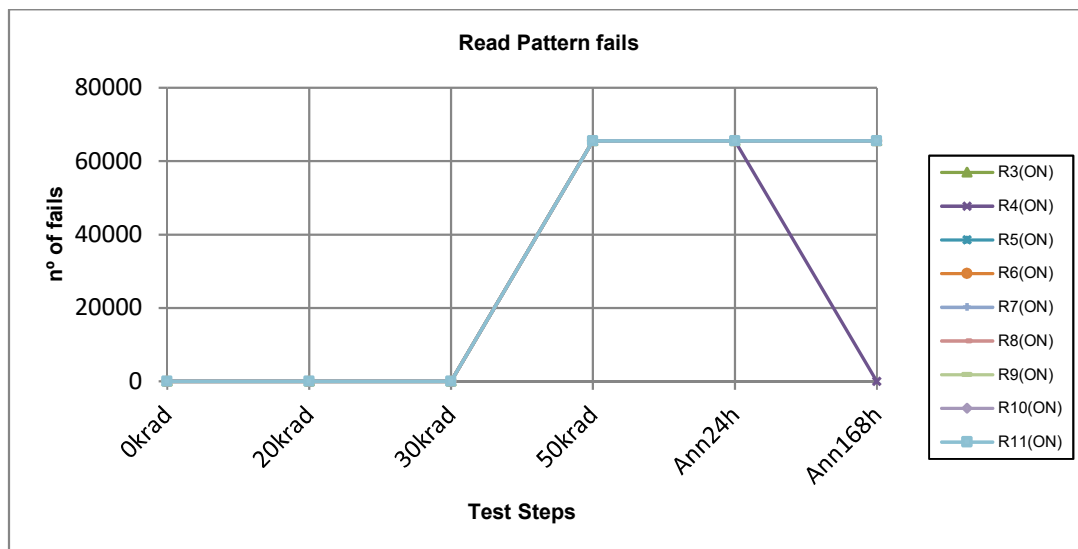
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Retention fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	0	0	0	65536	65536	0
R3(ON BIAS LDC)	0	0	0	65536	65536	65536
R4(ON BIAS LDC)	0	0	0	65536	65536	0
R5(ON BIAS LDC)	0	0	0	65536	65536	65536
R6(ON BIAS LDC)	0	0	0	65536	65536	65536
R7(ON BIAS LDC)	0	0	0	65536	65536	65536
R8(ON BIAS LDC)	0	0	0	65536	65536	65536
R9(ON BIAS LDC)	0	0	0	65536	65536	65536
R10(ON BIAS LDC)	0	0	0	65536	65536	65536
R11(ON BIAS LDC)	0	0	0	65536	65536	65536
Irradiated, ON biased LDC parts statistics						
Min Value	0	0	0	65536	65536	0
Max Value	0	0	0	65536	65536	65536
Average	0	0	0	65536	65536	52429
Sigma	0	0	0	0	0	27632

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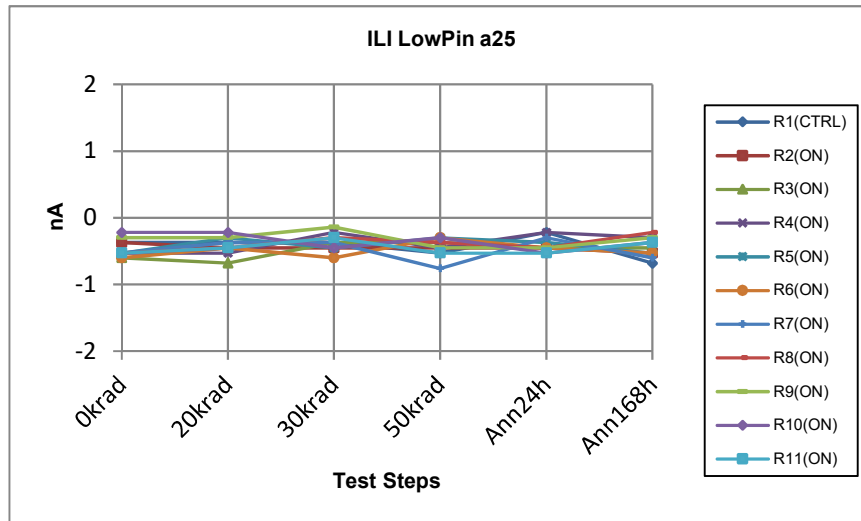
Read Pattern fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	N/A	N/A	N/A	N/A	N/A	N/A
Irradiated, ON biased LDC parts results						
R2(ON BIAS LDC)	N/A	N/A	N/A	N/A	N/A	N/A
R3(ON BIAS LDC)	0	0	0	65536	65536	65536
R4(ON BIAS LDC)	0	0	0	65536	65536	0
R5(ON BIAS LDC)	0	0	0	65536	65536	65536
R6(ON BIAS LDC)	0	0	0	65536	65536	65536
R7(ON BIAS LDC)	0	0	0	65536	65536	65536
R8(ON BIAS LDC)	0	0	0	65536	65536	65536
R9(ON BIAS LDC)	0	0	0	65536	65536	65536
R10(ON BIAS LDC)	0	0	0	65536	65536	65536
R11(ON BIAS LDC)	0	0	0	65536	65536	65536
Irradiated, ON biased LDC parts statistics						
Min Value	0	0	0	65536	65536	0
Max Value	0	0	0	65536	65536	65536
Average	0	0	0	65536	65536	58254
Sigma	0	0	0	0	0	21845

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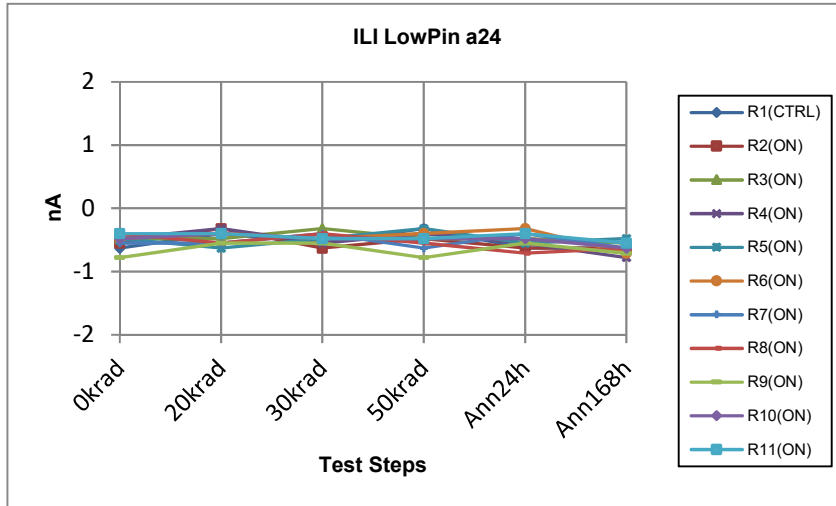
R1 + HDC (High Duty Cycle) samples (SN 12 to 21)



ILI LowPin a25	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.37	-0.37	-0.53	-0.22	-0.68
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.37	-0.45	-0.45	-0.45	-0.45	-0.53
R3(ON BIAS HDC)	-0.60	-0.68	-0.37	-0.37	-0.45	-0.45
R4(ON BIAS HDC)	-0.53	-0.53	-0.22	-0.45	-0.22	-0.30
R5(ON BIAS HDC)	-0.53	-0.30	-0.45	-0.30	-0.37	-0.53
R6(ON BIAS HDC)	-0.60	-0.45	-0.60	-0.30	-0.45	-0.53
R7(ON BIAS HDC)	-0.53	-0.37	-0.37	-0.76	-0.30	-0.60
R8(ON BIAS HDC)	-0.53	-0.45	-0.30	-0.37	-0.45	-0.22
R9(ON BIAS HDC)	-0.30	-0.30	-0.14	-0.45	-0.45	-0.30
R10(ON BIAS HDC)	-0.22	-0.22	-0.45	-0.30	-0.53	-0.37
R11(ON BIAS HDC)	-0.53	-0.45	-0.30	-0.53	-0.53	-0.37
Irradiated, ON biased HDC parts statistics						
Min Value	-0.60	-0.68	-0.60	-0.76	-0.53	-0.60
Max Value	-0.22	-0.22	-0.14	-0.30	-0.22	-0.22
Average	-0.47	-0.42	-0.37	-0.43	-0.42	-0.42
Sigma	0.13	0.13	0.13	0.14	0.10	0.13

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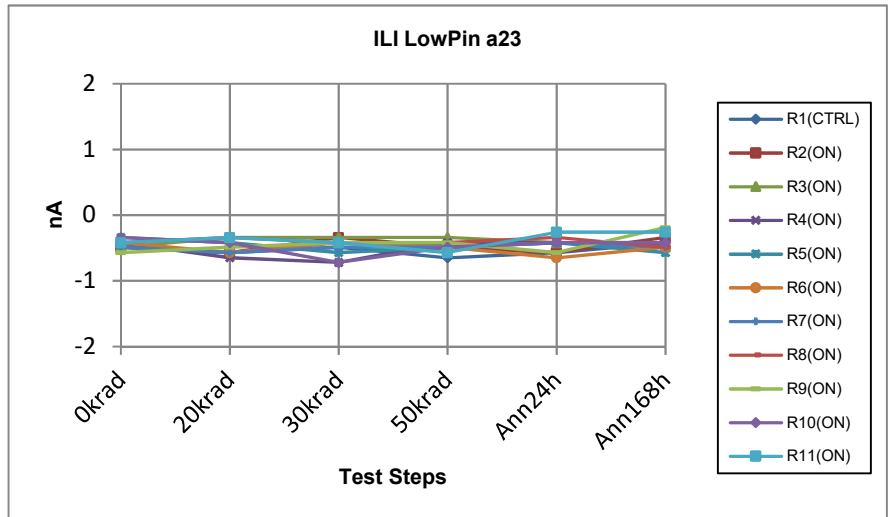
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ILI LowPin a24	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.63	-0.40	-0.55	-0.32	-0.63	-0.63
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.55	-0.32	-0.63	-0.48	-0.63	-0.63
R3(ON BIAS HDC)	-0.48	-0.48	-0.32	-0.48	-0.48	-0.55
R4(ON BIAS HDC)	-0.48	-0.32	-0.55	-0.40	-0.55	-0.78
R5(ON BIAS HDC)	-0.48	-0.63	-0.48	-0.32	-0.55	-0.48
R6(ON BIAS HDC)	-0.48	-0.40	-0.48	-0.40	-0.32	-0.71
R7(ON BIAS HDC)	-0.55	-0.55	-0.40	-0.63	-0.40	-0.63
R8(ON BIAS HDC)	-0.40	-0.55	-0.40	-0.55	-0.71	-0.63
R9(ON BIAS HDC)	-0.78	-0.55	-0.55	-0.78	-0.55	-0.71
R10(ON BIAS HDC)	-0.48	-0.40	-0.48	-0.48	-0.48	-0.63
R11(ON BIAS HDC)	-0.40	-0.40	-0.48	-0.48	-0.40	-0.55
Irradiated, ON biased HDC parts statistics						
Min Value	-0.78	-0.63	-0.63	-0.78	-0.71	-0.78
Max Value	-0.40	-0.32	-0.32	-0.32	-0.32	-0.48
Average	-0.51	-0.46	-0.48	-0.50	-0.51	-0.63
Sigma	0.11	0.11	0.09	0.13	0.12	0.09

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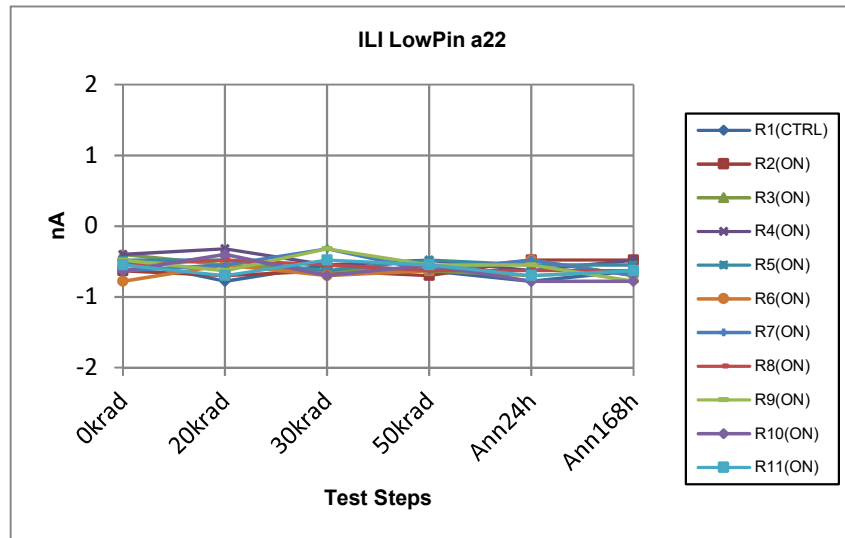
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ILI LowPin a23	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.49	-0.57	-0.49	-0.65	-0.57	-0.42
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.49	-0.57	-0.34	-0.49	-0.57	-0.34
R3(ON BIAS HDC)	-0.49	-0.34	-0.34	-0.34	-0.42	-0.49
R4(ON BIAS HDC)	-0.42	-0.65	-0.72	-0.42	-0.42	-0.42
R5(ON BIAS HDC)	-0.34	-0.42	-0.57	-0.49	-0.42	-0.57
R6(ON BIAS HDC)	-0.42	-0.57	-0.42	-0.49	-0.65	-0.49
R7(ON BIAS HDC)	-0.49	-0.57	-0.49	-0.49	-0.42	-0.49
R8(ON BIAS HDC)	-0.42	-0.34	-0.42	-0.42	-0.34	-0.49
R9(ON BIAS HDC)	-0.57	-0.49	-0.42	-0.42	-0.57	-0.19
R10(ON BIAS HDC)	-0.34	-0.42	-0.72	-0.49	-0.42	-0.42
R11(ON BIAS HDC)	-0.42	-0.34	-0.42	-0.57	-0.26	-0.26
Irradiated, ON biased HDC parts statistics						
Min Value	-0.57	-0.65	-0.72	-0.57	-0.65	-0.57
Max Value	-0.34	-0.34	-0.34	-0.34	-0.26	-0.19
Average	-0.44	-0.47	-0.49	-0.46	-0.45	-0.42
Sigma	0.07	0.11	0.14	0.06	0.12	0.12

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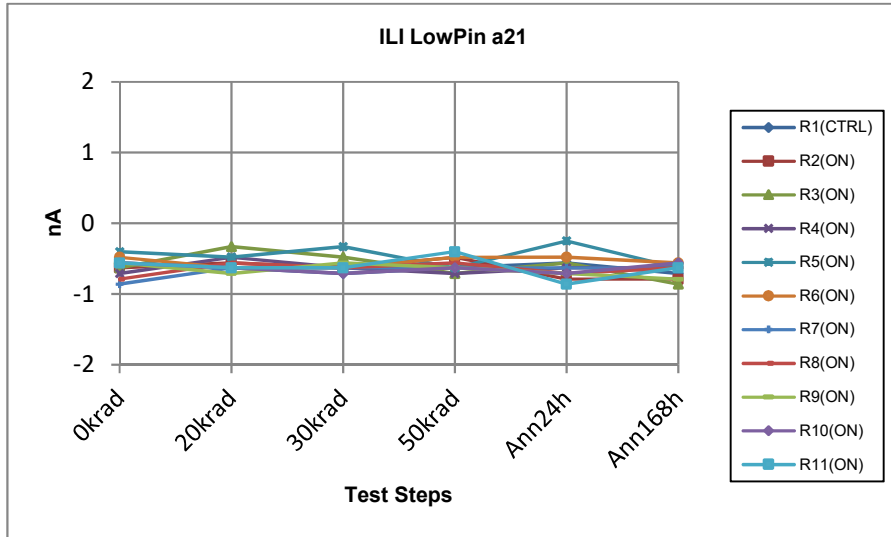
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ILI LowPin a22	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.48	-0.78	-0.55	-0.63	-0.78	-0.63
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.63	-0.70	-0.63	-0.70	-0.48	-0.48
R3(ON BIAS HDC)	-0.40	-0.55	-0.63	-0.63	-0.70	-0.63
R4(ON BIAS HDC)	-0.40	-0.32	-0.55	-0.48	-0.63	-0.48
R5(ON BIAS HDC)	-0.48	-0.48	-0.63	-0.48	-0.55	-0.55
R6(ON BIAS HDC)	-0.78	-0.55	-0.70	-0.63	-0.48	-0.70
R7(ON BIAS HDC)	-0.63	-0.55	-0.32	-0.63	-0.48	-0.70
R8(ON BIAS HDC)	-0.55	-0.48	-0.55	-0.63	-0.63	-0.63
R9(ON BIAS HDC)	-0.48	-0.63	-0.32	-0.55	-0.55	-0.78
R10(ON BIAS HDC)	-0.63	-0.40	-0.70	-0.55	-0.78	-0.78
R11(ON BIAS HDC)	-0.55	-0.70	-0.48	-0.55	-0.70	-0.63
Irradiated, ON biased HDC parts statistics						
Min Value	-0.78	-0.70	-0.70	-0.70	-0.78	-0.78
Max Value	-0.40	-0.32	-0.32	-0.48	-0.48	-0.48
Average	-0.55	-0.54	-0.55	-0.58	-0.60	-0.64
Sigma	0.12	0.12	0.14	0.07	0.11	0.11

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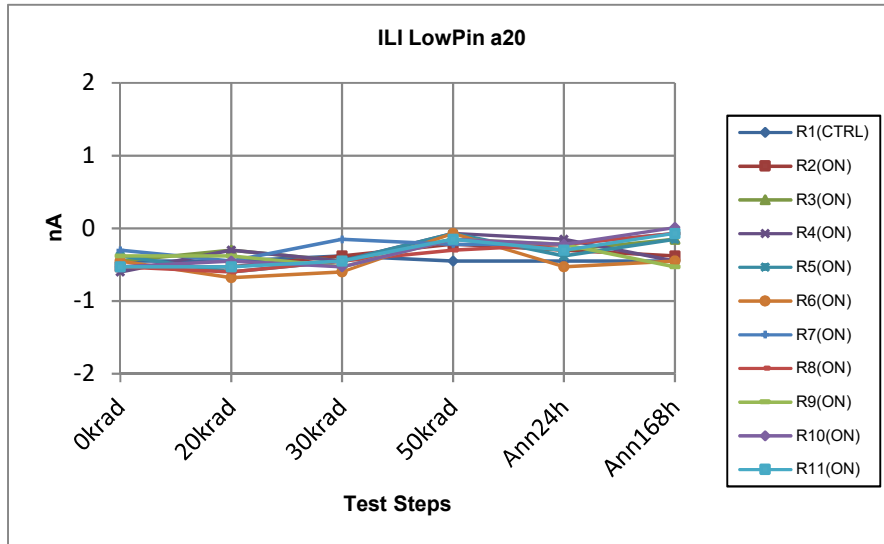
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ILI LowPin a21	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.63	-0.71	-0.63	-0.56	-0.71
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.63	-0.56	-0.63	-0.48	-0.79	-0.79
R3(ON BIAS HDC)	-0.63	-0.33	-0.48	-0.71	-0.56	-0.86
R4(ON BIAS HDC)	-0.71	-0.48	-0.63	-0.71	-0.63	-0.63
R5(ON BIAS HDC)	-0.40	-0.48	-0.33	-0.63	-0.25	-0.63
R6(ON BIAS HDC)	-0.48	-0.63	-0.63	-0.48	-0.48	-0.56
R7(ON BIAS HDC)	-0.86	-0.63	-0.63	-0.63	-0.63	-0.63
R8(ON BIAS HDC)	-0.79	-0.56	-0.63	-0.56	-0.71	-0.63
R9(ON BIAS HDC)	-0.56	-0.71	-0.56	-0.63	-0.71	-0.79
R10(ON BIAS HDC)	-0.56	-0.63	-0.71	-0.63	-0.71	-0.56
R11(ON BIAS HDC)	-0.56	-0.63	-0.63	-0.40	-0.86	-0.63
Irradiated, ON biased HDC parts statistics						
Min Value	-0.86	-0.71	-0.71	-0.71	-0.86	-0.86
Max Value	-0.40	-0.33	-0.33	-0.40	-0.25	-0.56
Average	-0.62	-0.56	-0.59	-0.59	-0.63	-0.67
Sigma	0.14	0.11	0.11	0.10	0.17	0.10

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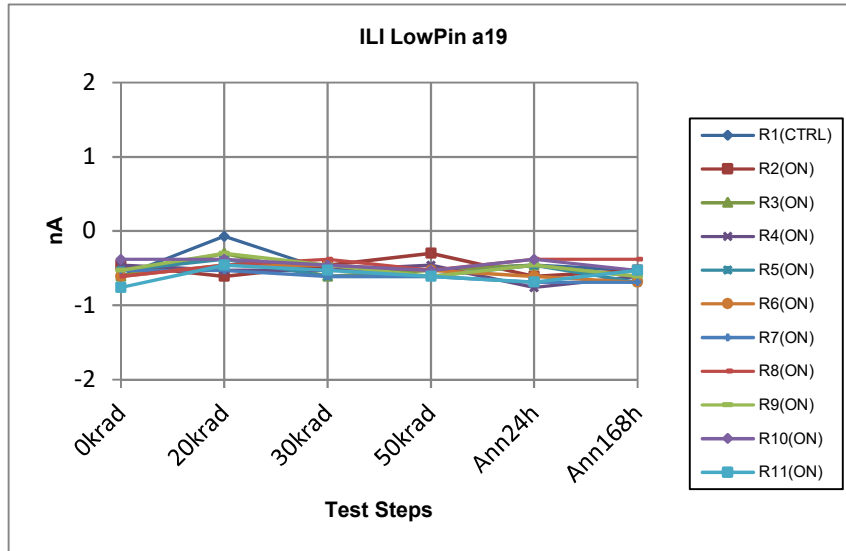
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ILI LowPin a20	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.45	-0.45	-0.38	-0.45	-0.45	-0.45
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.53	-0.53	-0.38	-0.22	-0.30	-0.38
R3(ON BIAS HDC)	-0.45	-0.30	-0.45	-0.15	-0.30	-0.15
R4(ON BIAS HDC)	-0.60	-0.30	-0.45	-0.07	-0.15	-0.45
R5(ON BIAS HDC)	-0.38	-0.60	-0.45	-0.07	-0.38	-0.15
R6(ON BIAS HDC)	-0.45	-0.68	-0.60	-0.07	-0.53	-0.45
R7(ON BIAS HDC)	-0.30	-0.45	-0.15	-0.22	-0.22	-0.07
R8(ON BIAS HDC)	-0.53	-0.60	-0.45	-0.30	-0.22	-0.07
R9(ON BIAS HDC)	-0.38	-0.38	-0.53	-0.15	-0.22	-0.53
R10(ON BIAS HDC)	-0.53	-0.45	-0.53	-0.15	-0.22	0.01
R11(ON BIAS HDC)	-0.53	-0.53	-0.45	-0.15	-0.30	-0.07
Irradiated, ON biased HDC parts statistics						
Min Value	-0.60	-0.68	-0.60	-0.30	-0.53	-0.53
Max Value	-0.30	-0.30	-0.15	-0.07	-0.15	0.01
Average	-0.47	-0.48	-0.44	-0.16	-0.28	-0.23
Sigma	0.09	0.13	0.12	0.08	0.11	0.20

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ILI LowPin a19	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.61	-0.07	-0.53	-0.53	-0.46	-0.53
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.46	-0.61	-0.46	-0.30	-0.61	-0.53
R3(ON BIAS HDC)	-0.61	-0.30	-0.61	-0.53	-0.46	-0.61
R4(ON BIAS HDC)	-0.46	-0.53	-0.53	-0.46	-0.76	-0.61
R5(ON BIAS HDC)	-0.53	-0.38	-0.61	-0.61	-0.46	-0.69
R6(ON BIAS HDC)	-0.61	-0.46	-0.46	-0.53	-0.61	-0.69
R7(ON BIAS HDC)	-0.53	-0.53	-0.61	-0.61	-0.69	-0.69
R8(ON BIAS HDC)	-0.61	-0.46	-0.38	-0.53	-0.38	-0.38
R9(ON BIAS HDC)	-0.53	-0.30	-0.46	-0.61	-0.46	-0.61
R10(ON BIAS HDC)	-0.38	-0.38	-0.46	-0.53	-0.38	-0.53
R11(ON BIAS HDC)	-0.76	-0.46	-0.53	-0.61	-0.69	-0.53
Irradiated, ON biased HDC parts statistics						
Min Value	-0.76	-0.61	-0.61	-0.61	-0.76	-0.69
Max Value	-0.38	-0.30	-0.38	-0.30	-0.38	-0.38
Average	-0.55	-0.44	-0.51	-0.53	-0.55	-0.59
Sigma	0.11	0.10	0.08	0.10	0.14	0.10

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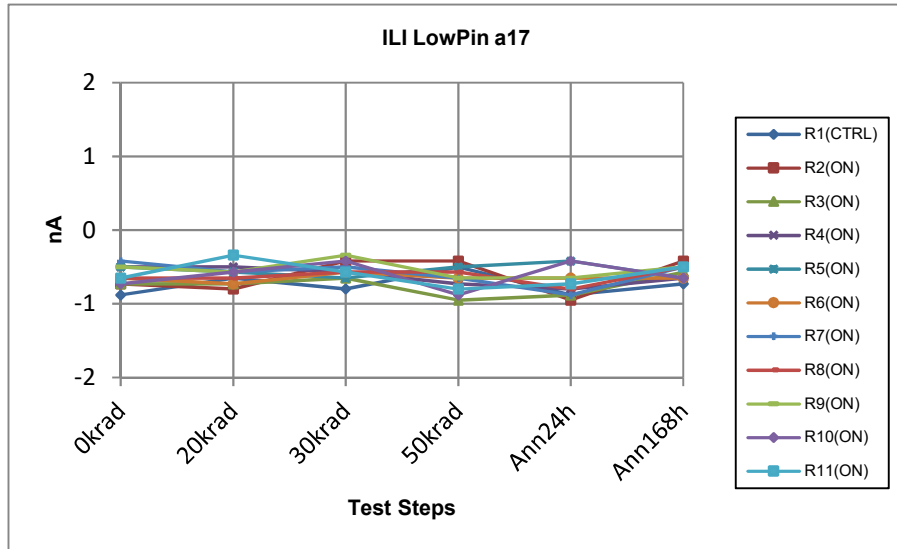
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ILI LowPin a18	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.46	-0.46	-0.38	-0.69	-0.53
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.69	-0.76	-0.53	-0.53	-0.46	-0.38
R3(ON BIAS HDC)	-0.69	-0.61	-0.38	-0.84	-0.46	-0.53
R4(ON BIAS HDC)	-0.38	-0.30	-0.61	-0.53	-0.61	-0.61
R5(ON BIAS HDC)	-0.69	-0.53	-0.53	-0.46	-0.69	-0.46
R6(ON BIAS HDC)	-0.99	-0.53	-0.46	-0.15	-0.53	-0.61
R7(ON BIAS HDC)	-0.69	-0.69	-0.30	-0.53	-0.46	-0.53
R8(ON BIAS HDC)	-0.53	-0.46	-0.61	-0.61	-0.38	-0.53
R9(ON BIAS HDC)	-0.46	-0.69	-0.38	-0.53	-0.69	-0.38
R10(ON BIAS HDC)	-0.46	-0.30	-0.61	-0.53	-0.30	-0.61
R11(ON BIAS HDC)	-0.61	-0.53	-0.61	-0.46	-0.38	-0.61
Irradiated, ON biased HDC parts statistics						
Min Value	-0.99	-0.76	-0.61	-0.84	-0.69	-0.61
Max Value	-0.38	-0.30	-0.30	-0.15	-0.30	-0.38
Average	-0.62	-0.54	-0.50	-0.52	-0.50	-0.53
Sigma	0.17	0.16	0.12	0.17	0.13	0.09

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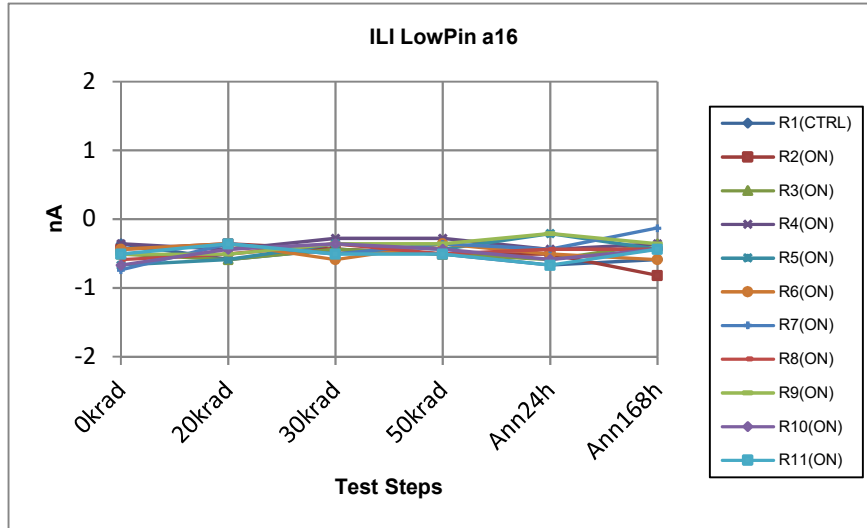
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ILI LowPin a17	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.88	-0.65	-0.80	-0.50	-0.88	-0.73
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.73	-0.80	-0.42	-0.42	-0.95	-0.42
R3(ON BIAS HDC)	-0.73	-0.73	-0.65	-0.95	-0.88	-0.57
R4(ON BIAS HDC)	-0.50	-0.50	-0.57	-0.73	-0.80	-0.65
R5(ON BIAS HDC)	-0.50	-0.57	-0.65	-0.50	-0.42	-0.65
R6(ON BIAS HDC)	-0.65	-0.73	-0.57	-0.65	-0.65	-0.65
R7(ON BIAS HDC)	-0.42	-0.57	-0.50	-0.65	-0.88	-0.50
R8(ON BIAS HDC)	-0.65	-0.65	-0.57	-0.57	-0.80	-0.50
R9(ON BIAS HDC)	-0.50	-0.57	-0.34	-0.65	-0.65	-0.50
R10(ON BIAS HDC)	-0.73	-0.57	-0.42	-0.88	-0.42	-0.65
R11(ON BIAS HDC)	-0.65	-0.34	-0.57	-0.80	-0.73	-0.50
Irradiated, ON biased HDC parts statistics						
Min Value	-0.73	-0.80	-0.65	-0.95	-0.95	-0.65
Max Value	-0.42	-0.34	-0.34	-0.42	-0.42	-0.42
Average	-0.61	-0.60	-0.53	-0.68	-0.72	-0.56
Sigma	0.12	0.13	0.10	0.16	0.18	0.09

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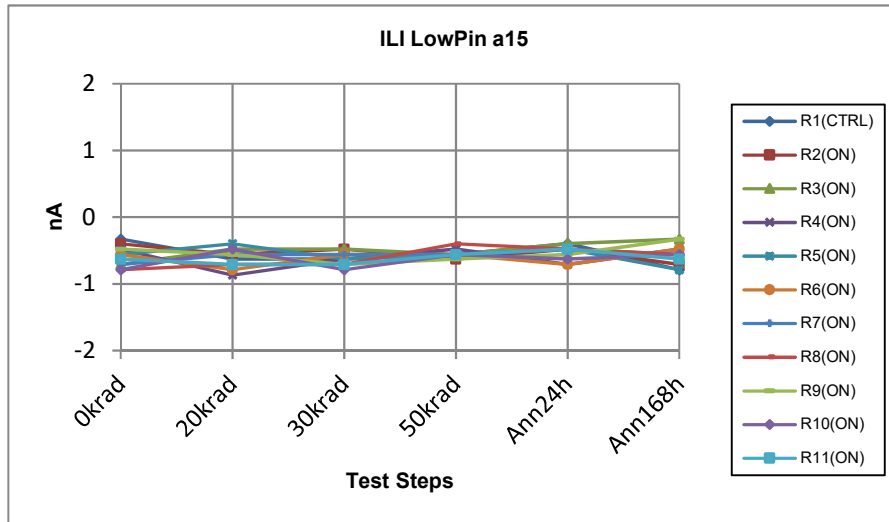
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ILI LowPin a16	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.36	-0.59	-0.44	-0.51	-0.67	-0.59
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.44	-0.36	-0.44	-0.51	-0.51	-0.82
R3(ON BIAS HDC)	-0.51	-0.59	-0.44	-0.51	-0.59	-0.36
R4(ON BIAS HDC)	-0.36	-0.44	-0.28	-0.28	-0.44	-0.36
R5(ON BIAS HDC)	-0.67	-0.59	-0.36	-0.44	-0.21	-0.44
R6(ON BIAS HDC)	-0.44	-0.36	-0.59	-0.36	-0.51	-0.59
R7(ON BIAS HDC)	-0.74	-0.36	-0.51	-0.36	-0.44	-0.13
R8(ON BIAS HDC)	-0.59	-0.51	-0.36	-0.51	-0.44	-0.44
R9(ON BIAS HDC)	-0.51	-0.51	-0.36	-0.36	-0.21	-0.36
R10(ON BIAS HDC)	-0.67	-0.44	-0.36	-0.44	-0.59	-0.44
R11(ON BIAS HDC)	-0.51	-0.36	-0.51	-0.51	-0.67	-0.44
Irradiated, ON biased HDC parts statistics						
Min Value	-0.74	-0.59	-0.59	-0.51	-0.67	-0.82
Max Value	-0.36	-0.36	-0.28	-0.28	-0.21	-0.13
Average	-0.54	-0.45	-0.42	-0.43	-0.46	-0.44
Sigma	0.12	0.09	0.09	0.08	0.15	0.18

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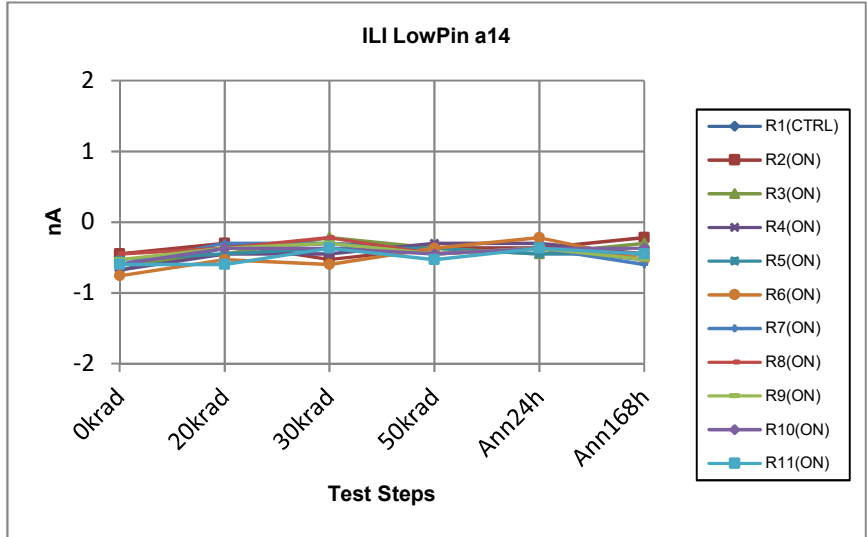
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ILI LowPin a15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.33	-0.63	-0.63	-0.56	-0.40	-0.79
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.40	-0.56	-0.48	-0.63	-0.48	-0.71
R3(ON BIAS HDC)	-0.71	-0.48	-0.48	-0.56	-0.40	-0.33
R4(ON BIAS HDC)	-0.48	-0.87	-0.63	-0.48	-0.71	-0.48
R5(ON BIAS HDC)	-0.56	-0.40	-0.63	-0.56	-0.48	-0.79
R6(ON BIAS HDC)	-0.56	-0.79	-0.56	-0.56	-0.71	-0.48
R7(ON BIAS HDC)	-0.71	-0.56	-0.56	-0.56	-0.48	-0.56
R8(ON BIAS HDC)	-0.79	-0.71	-0.71	-0.40	-0.48	-0.56
R9(ON BIAS HDC)	-0.48	-0.56	-0.71	-0.63	-0.56	-0.33
R10(ON BIAS HDC)	-0.79	-0.48	-0.79	-0.56	-0.63	-0.56
R11(ON BIAS HDC)	-0.63	-0.71	-0.71	-0.56	-0.48	-0.63
Irradiated, ON biased HDC parts statistics						
Min Value	-0.79	-0.87	-0.79	-0.63	-0.71	-0.79
Max Value	-0.40	-0.40	-0.48	-0.40	-0.40	-0.33
Average	-0.61	-0.61	-0.63	-0.55	-0.54	-0.54
Sigma	0.14	0.15	0.11	0.07	0.11	0.15

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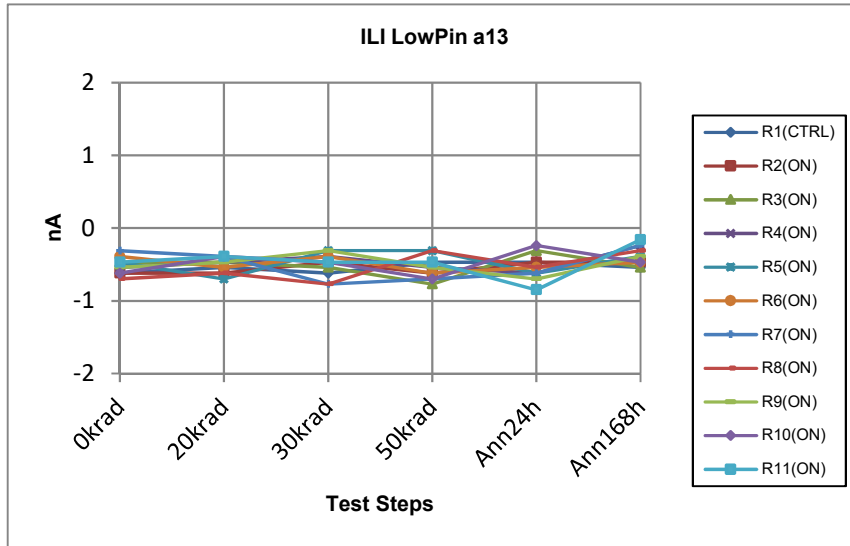
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ILI LowPin a14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.68	-0.37	-0.30	-0.37	-0.37	-0.53
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.45	-0.30	-0.53	-0.37	-0.37	-0.22
R3(ON BIAS HDC)	-0.60	-0.45	-0.22	-0.37	-0.45	-0.30
R4(ON BIAS HDC)	-0.68	-0.45	-0.45	-0.30	-0.30	-0.45
R5(ON BIAS HDC)	-0.53	-0.45	-0.37	-0.37	-0.45	-0.45
R6(ON BIAS HDC)	-0.76	-0.53	-0.60	-0.37	-0.22	-0.53
R7(ON BIAS HDC)	-0.60	-0.30	-0.30	-0.45	-0.37	-0.60
R8(ON BIAS HDC)	-0.45	-0.37	-0.22	-0.45	-0.37	-0.45
R9(ON BIAS HDC)	-0.53	-0.37	-0.30	-0.45	-0.37	-0.53
R10(ON BIAS HDC)	-0.60	-0.37	-0.37	-0.45	-0.37	-0.37
R11(ON BIAS HDC)	-0.60	-0.60	-0.37	-0.53	-0.37	-0.45
Irradiated, ON biased HDC parts statistics						
Min Value	-0.76	-0.60	-0.60	-0.53	-0.45	-0.60
Max Value	-0.45	-0.30	-0.22	-0.30	-0.22	-0.22
Average	-0.58	-0.42	-0.37	-0.41	-0.36	-0.44
Sigma	0.10	0.10	0.12	0.07	0.07	0.11

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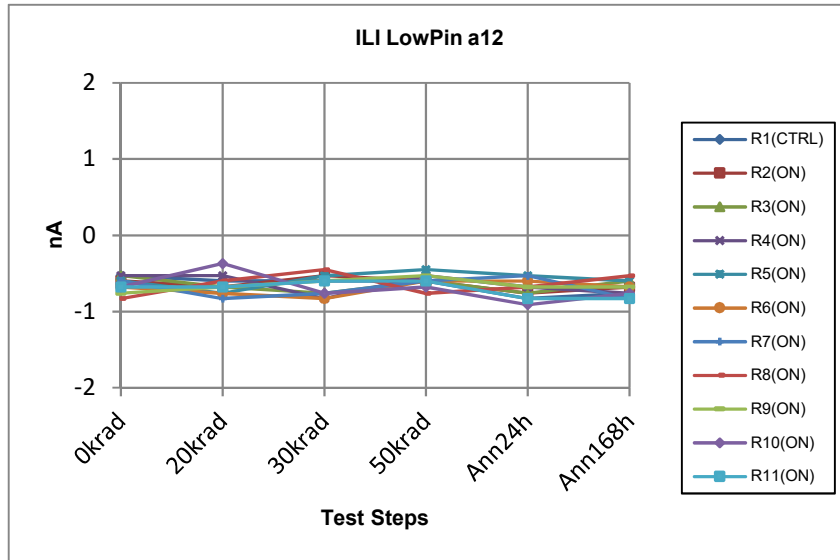
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ILI LowPin a13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.54	-0.62	-0.47	-0.47	-0.54
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.62	-0.62	-0.47	-0.62	-0.47	-0.47
R3(ON BIAS HDC)	-0.47	-0.47	-0.54	-0.77	-0.31	-0.54
R4(ON BIAS HDC)	-0.54	-0.47	-0.39	-0.54	-0.62	-0.24
R5(ON BIAS HDC)	-0.47	-0.70	-0.31	-0.31	-0.62	-0.39
R6(ON BIAS HDC)	-0.39	-0.54	-0.39	-0.62	-0.54	-0.47
R7(ON BIAS HDC)	-0.31	-0.39	-0.77	-0.70	-0.62	-0.24
R8(ON BIAS HDC)	-0.70	-0.62	-0.77	-0.31	-0.54	-0.31
R9(ON BIAS HDC)	-0.54	-0.47	-0.31	-0.54	-0.70	-0.39
R10(ON BIAS HDC)	-0.62	-0.39	-0.47	-0.70	-0.24	-0.47
R11(ON BIAS HDC)	-0.47	-0.39	-0.47	-0.47	-0.85	-0.16
Irradiated, ON biased HDC parts statistics						
Min Value	-0.70	-0.70	-0.77	-0.77	-0.85	-0.54
Max Value	-0.31	-0.39	-0.31	-0.31	-0.24	-0.16
Average	-0.51	-0.51	-0.49	-0.56	-0.55	-0.37
Sigma	0.12	0.11	0.17	0.16	0.18	0.13

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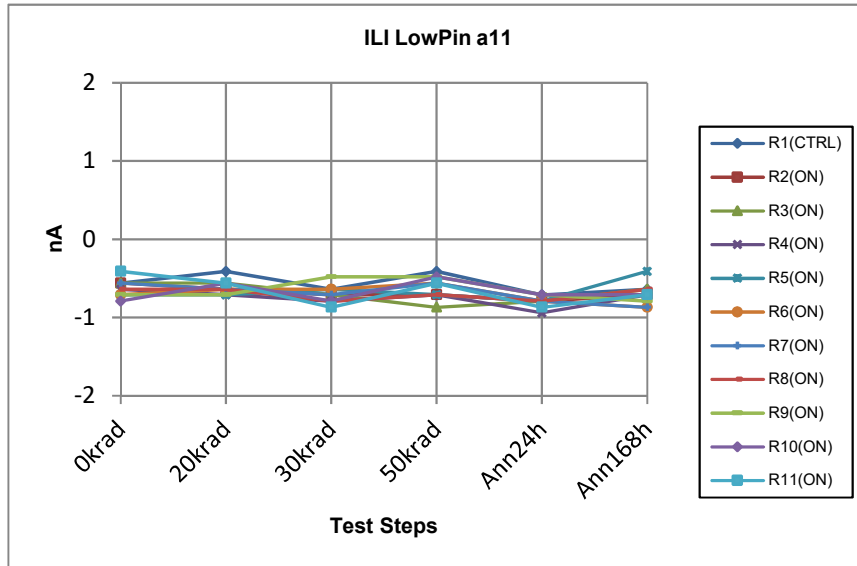
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ILI LowPin a12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.53	-0.60	-0.60	-0.60	-0.83	-0.76
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.60	-0.68	-0.53	-0.60	-0.76	-0.68
R3(ON BIAS HDC)	-0.53	-0.68	-0.76	-0.60	-0.76	-0.60
R4(ON BIAS HDC)	-0.53	-0.53	-0.83	-0.53	-0.68	-0.76
R5(ON BIAS HDC)	-0.60	-0.76	-0.53	-0.45	-0.53	-0.60
R6(ON BIAS HDC)	-0.68	-0.76	-0.83	-0.60	-0.60	-0.68
R7(ON BIAS HDC)	-0.60	-0.83	-0.76	-0.60	-0.53	-0.83
R8(ON BIAS HDC)	-0.83	-0.60	-0.45	-0.76	-0.68	-0.53
R9(ON BIAS HDC)	-0.76	-0.68	-0.60	-0.53	-0.68	-0.68
R10(ON BIAS HDC)	-0.68	-0.37	-0.76	-0.68	-0.91	-0.76
R11(ON BIAS HDC)	-0.68	-0.68	-0.60	-0.60	-0.83	-0.83
Irradiated, ON biased HDC parts statistics						
Min Value	-0.83	-0.83	-0.83	-0.76	-0.91	-0.83
Max Value	-0.53	-0.37	-0.45	-0.45	-0.53	-0.53
Average	-0.65	-0.66	-0.67	-0.60	-0.70	-0.70
Sigma	0.10	0.13	0.14	0.08	0.12	0.10

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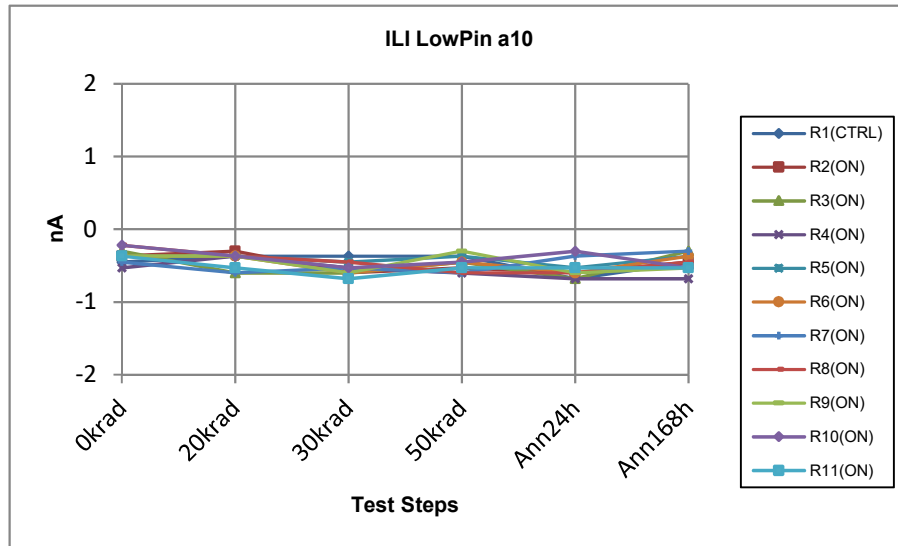
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ILI LowPin a11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.41	-0.64	-0.41	-0.71	-0.64
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.56	-0.64	-0.71	-0.71	-0.79	-0.71
R3(ON BIAS HDC)	-0.56	-0.56	-0.71	-0.87	-0.79	-0.64
R4(ON BIAS HDC)	-0.64	-0.71	-0.79	-0.71	-0.94	-0.71
R5(ON BIAS HDC)	-0.71	-0.71	-0.64	-0.71	-0.79	-0.41
R6(ON BIAS HDC)	-0.71	-0.64	-0.64	-0.56	-0.79	-0.87
R7(ON BIAS HDC)	-0.56	-0.64	-0.71	-0.56	-0.79	-0.87
R8(ON BIAS HDC)	-0.64	-0.64	-0.79	-0.71	-0.79	-0.64
R9(ON BIAS HDC)	-0.71	-0.71	-0.48	-0.48	-0.71	-0.79
R10(ON BIAS HDC)	-0.79	-0.56	-0.79	-0.48	-0.71	-0.71
R11(ON BIAS HDC)	-0.41	-0.56	-0.87	-0.56	-0.87	-0.71
Irradiated, ON biased HDC parts statistics						
Min Value	-0.79	-0.71	-0.87	-0.87	-0.94	-0.87
Max Value	-0.41	-0.56	-0.48	-0.48	-0.71	-0.41
Average	-0.63	-0.64	-0.71	-0.64	-0.80	-0.71
Sigma	0.11	0.06	0.11	0.13	0.07	0.13

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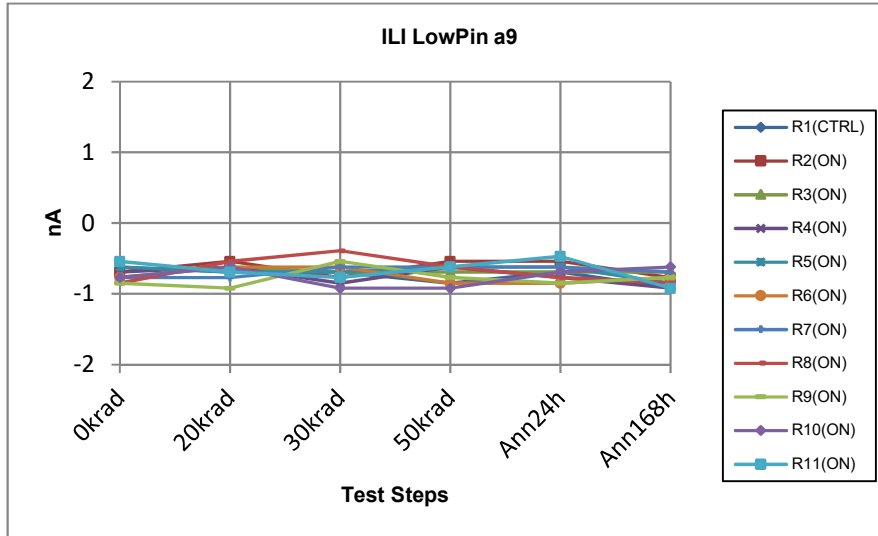
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ILI LowPin a10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.45	-0.37	-0.37	-0.37	-0.68	-0.45
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.37	-0.30	-0.60	-0.53	-0.60	-0.45
R3(ON BIAS HDC)	-0.30	-0.60	-0.60	-0.45	-0.68	-0.30
R4(ON BIAS HDC)	-0.53	-0.37	-0.53	-0.60	-0.68	-0.68
R5(ON BIAS HDC)	-0.37	-0.37	-0.45	-0.37	-0.53	-0.37
R6(ON BIAS HDC)	-0.37	-0.37	-0.60	-0.45	-0.60	-0.37
R7(ON BIAS HDC)	-0.45	-0.60	-0.53	-0.60	-0.37	-0.30
R8(ON BIAS HDC)	-0.22	-0.37	-0.45	-0.60	-0.60	-0.45
R9(ON BIAS HDC)	-0.37	-0.37	-0.60	-0.30	-0.60	-0.53
R10(ON BIAS HDC)	-0.22	-0.37	-0.53	-0.45	-0.30	-0.53
R11(ON BIAS HDC)	-0.37	-0.53	-0.68	-0.53	-0.53	-0.53
Irradiated, ON biased HDC parts statistics						
Min Value	-0.53	-0.60	-0.68	-0.60	-0.68	-0.68
Max Value	-0.22	-0.30	-0.45	-0.30	-0.30	-0.30
Average	-0.36	-0.43	-0.56	-0.49	-0.55	-0.45
Sigma	0.09	0.11	0.07	0.10	0.12	0.12

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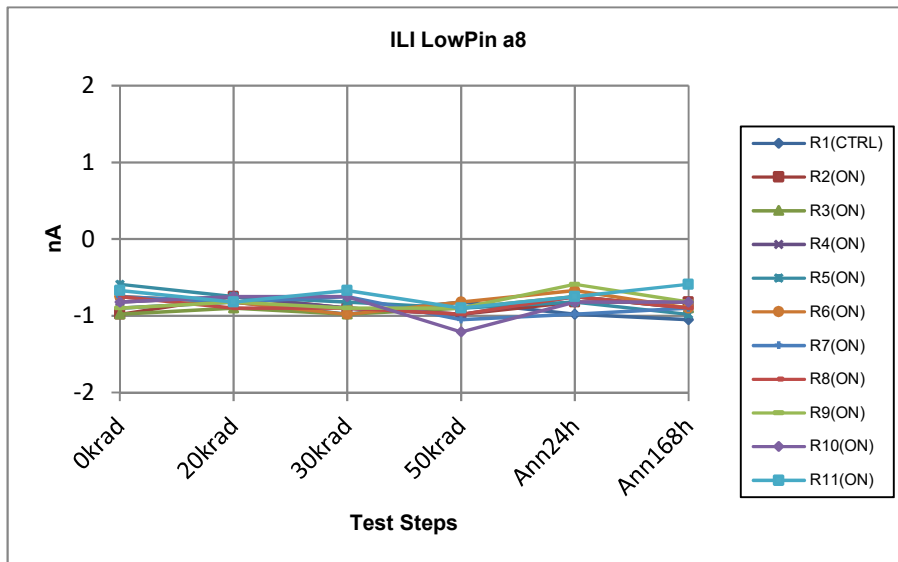
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ILI LowPin a9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.69	-0.69	-0.85	-0.69	-0.92
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.69	-0.54	-0.77	-0.54	-0.54	-0.77
R3(ON BIAS HDC)	-0.77	-0.62	-0.69	-0.69	-0.69	-0.69
R4(ON BIAS HDC)	-0.69	-0.62	-0.85	-0.62	-0.77	-0.92
R5(ON BIAS HDC)	-0.62	-0.69	-0.69	-0.62	-0.62	-0.85
R6(ON BIAS HDC)	-0.77	-0.62	-0.62	-0.85	-0.85	-0.77
R7(ON BIAS HDC)	-0.77	-0.77	-0.62	-0.62	-0.62	-0.69
R8(ON BIAS HDC)	-0.85	-0.54	-0.39	-0.62	-0.77	-0.85
R9(ON BIAS HDC)	-0.85	-0.92	-0.54	-0.77	-0.85	-0.77
R10(ON BIAS HDC)	-0.77	-0.62	-0.92	-0.92	-0.69	-0.62
R11(ON BIAS HDC)	-0.54	-0.69	-0.77	-0.62	-0.47	-0.92
Irradiated, ON biased HDC parts statistics						
Min Value	-0.85	-0.92	-0.92	-0.92	-0.85	-0.92
Max Value	-0.54	-0.54	-0.39	-0.54	-0.47	-0.62
Average	-0.73	-0.66	-0.69	-0.69	-0.69	-0.79
Sigma	0.10	0.11	0.15	0.12	0.13	0.10

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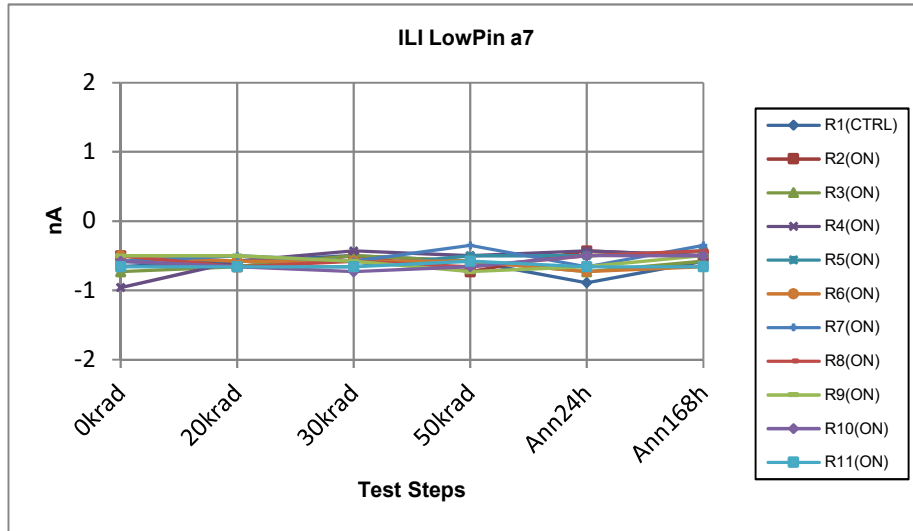
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ILI LowPin a8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.90	-0.82	-0.98	-0.82	-0.98	-1.05
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.98	-0.75	-0.90	-0.98	-0.82	-0.82
R3(ON BIAS HDC)	-0.98	-0.90	-0.98	-0.90	-0.75	-0.90
R4(ON BIAS HDC)	-0.82	-0.75	-0.90	-0.98	-0.75	-0.90
R5(ON BIAS HDC)	-0.59	-0.75	-0.82	-0.90	-0.82	-0.98
R6(ON BIAS HDC)	-0.75	-0.82	-0.98	-0.82	-0.67	-0.90
R7(ON BIAS HDC)	-0.75	-0.82	-0.75	-1.05	-0.98	-0.90
R8(ON BIAS HDC)	-0.75	-0.90	-0.90	-0.98	-0.75	-0.90
R9(ON BIAS HDC)	-0.90	-0.82	-0.90	-0.90	-0.59	-0.82
R10(ON BIAS HDC)	-0.82	-0.75	-0.75	-1.21	-0.82	-0.82
R11(ON BIAS HDC)	-0.67	-0.82	-0.67	-0.90	-0.75	-0.59
Irradiated, ON biased HDC parts statistics						
Min Value	-0.98	-0.90	-0.98	-1.21	-0.98	-0.98
Max Value	-0.59	-0.75	-0.67	-0.82	-0.59	-0.59
Average	-0.80	-0.81	-0.86	-0.96	-0.77	-0.85
Sigma	0.13	0.06	0.10	0.11	0.10	0.11

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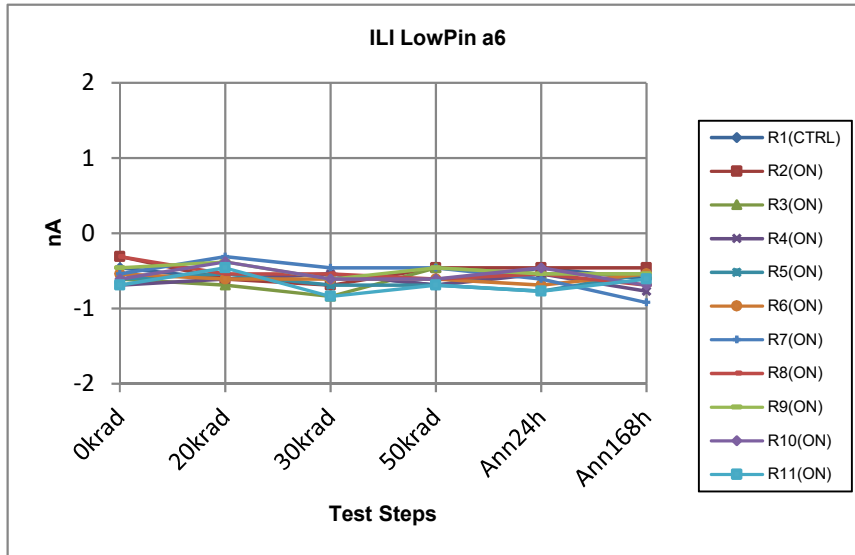
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ILI LowPin a7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.66	-0.58	-0.50	-0.58	-0.89	-0.58
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.50	-0.66	-0.50	-0.73	-0.43	-0.50
R3(ON BIAS HDC)	-0.73	-0.66	-0.50	-0.58	-0.73	-0.58
R4(ON BIAS HDC)	-0.96	-0.58	-0.43	-0.50	-0.43	-0.50
R5(ON BIAS HDC)	-0.58	-0.66	-0.66	-0.50	-0.50	-0.43
R6(ON BIAS HDC)	-0.50	-0.58	-0.58	-0.58	-0.73	-0.66
R7(ON BIAS HDC)	-0.58	-0.50	-0.58	-0.35	-0.66	-0.35
R8(ON BIAS HDC)	-0.50	-0.66	-0.58	-0.66	-0.50	-0.43
R9(ON BIAS HDC)	-0.50	-0.50	-0.58	-0.73	-0.66	-0.50
R10(ON BIAS HDC)	-0.58	-0.66	-0.73	-0.66	-0.50	-0.50
R11(ON BIAS HDC)	-0.66	-0.66	-0.66	-0.58	-0.66	-0.66
Irradiated, ON biased HDC parts statistics						
Min Value	-0.96	-0.66	-0.73	-0.73	-0.73	-0.66
Max Value	-0.50	-0.50	-0.43	-0.35	-0.43	-0.35
Average	-0.61	-0.61	-0.58	-0.59	-0.58	-0.51
Sigma	0.15	0.07	0.09	0.12	0.12	0.10

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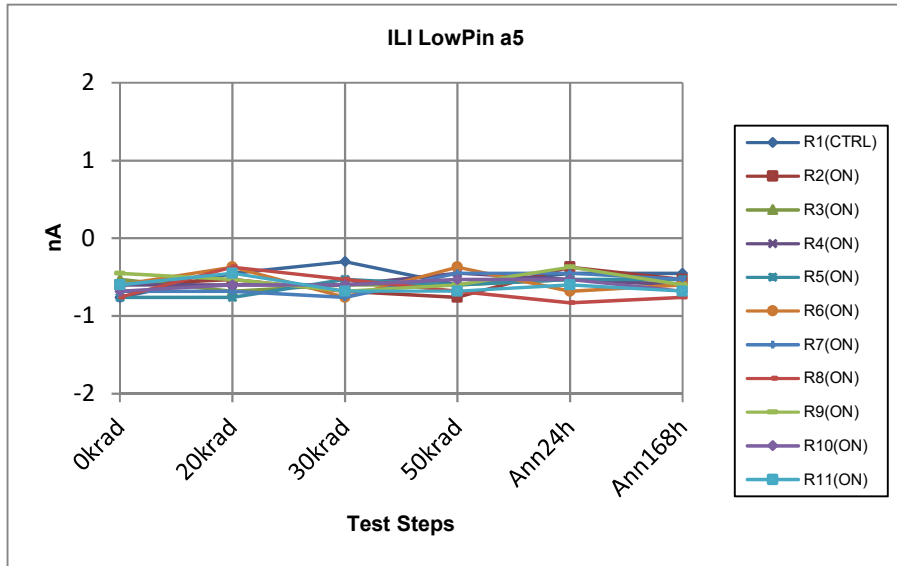
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ILI LowPin a6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.46	-0.61	-0.54	-0.69	-0.46	-0.61
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.31	-0.61	-0.69	-0.46	-0.46	-0.46
R3(ON BIAS HDC)	-0.61	-0.69	-0.84	-0.46	-0.54	-0.54
R4(ON BIAS HDC)	-0.69	-0.61	-0.54	-0.69	-0.54	-0.77
R5(ON BIAS HDC)	-0.61	-0.54	-0.69	-0.69	-0.77	-0.54
R6(ON BIAS HDC)	-0.54	-0.61	-0.61	-0.61	-0.69	-0.54
R7(ON BIAS HDC)	-0.54	-0.31	-0.46	-0.46	-0.61	-0.92
R8(ON BIAS HDC)	-0.31	-0.54	-0.54	-0.61	-0.54	-0.69
R9(ON BIAS HDC)	-0.46	-0.38	-0.61	-0.46	-0.54	-0.54
R10(ON BIAS HDC)	-0.61	-0.38	-0.61	-0.61	-0.46	-0.69
R11(ON BIAS HDC)	-0.69	-0.46	-0.84	-0.69	-0.77	-0.61
Irradiated, ON biased HDC parts statistics						
Min Value	-0.69	-0.69	-0.84	-0.69	-0.77	-0.92
Max Value	-0.31	-0.31	-0.46	-0.46	-0.46	-0.46
Average	-0.54	-0.51	-0.64	-0.57	-0.59	-0.63
Sigma	0.14	0.12	0.12	0.10	0.11	0.14

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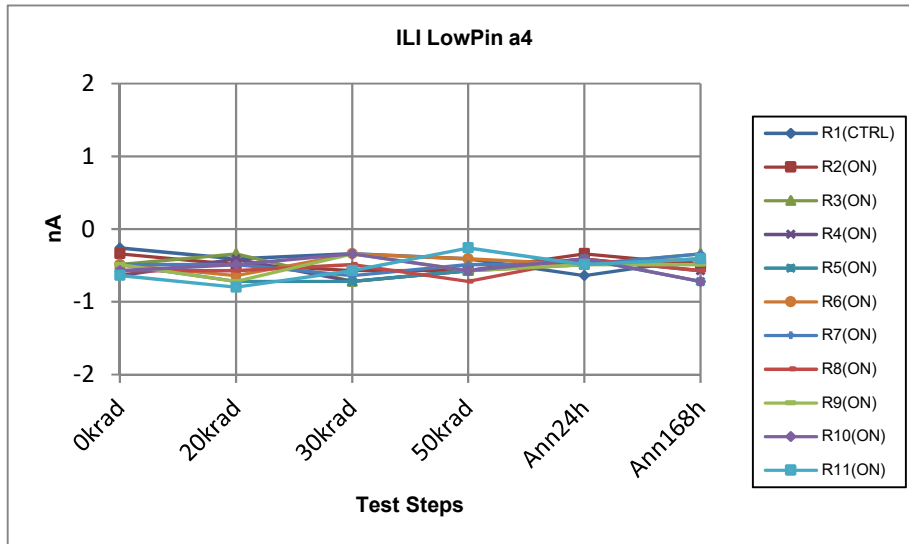
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ILI LowPin a5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.76	-0.45	-0.30	-0.60	-0.45	-0.45
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.60	-0.53	-0.68	-0.76	-0.37	-0.53
R3(ON BIAS HDC)	-0.53	-0.68	-0.60	-0.60	-0.53	-0.60
R4(ON BIAS HDC)	-0.60	-0.60	-0.60	-0.45	-0.53	-0.60
R5(ON BIAS HDC)	-0.76	-0.76	-0.53	-0.60	-0.53	-0.53
R6(ON BIAS HDC)	-0.60	-0.37	-0.76	-0.37	-0.68	-0.60
R7(ON BIAS HDC)	-0.68	-0.68	-0.76	-0.45	-0.45	-0.53
R8(ON BIAS HDC)	-0.76	-0.37	-0.53	-0.68	-0.83	-0.76
R9(ON BIAS HDC)	-0.45	-0.53	-0.68	-0.60	-0.37	-0.60
R10(ON BIAS HDC)	-0.68	-0.60	-0.60	-0.53	-0.53	-0.68
R11(ON BIAS HDC)	-0.60	-0.45	-0.68	-0.68	-0.60	-0.68
Irradiated, ON biased HDC parts statistics						
Min Value	-0.76	-0.76	-0.76	-0.76	-0.83	-0.76
Max Value	-0.45	-0.37	-0.53	-0.37	-0.37	-0.53
Average	-0.63	-0.56	-0.64	-0.57	-0.54	-0.61
Sigma	0.10	0.13	0.08	0.12	0.14	0.08

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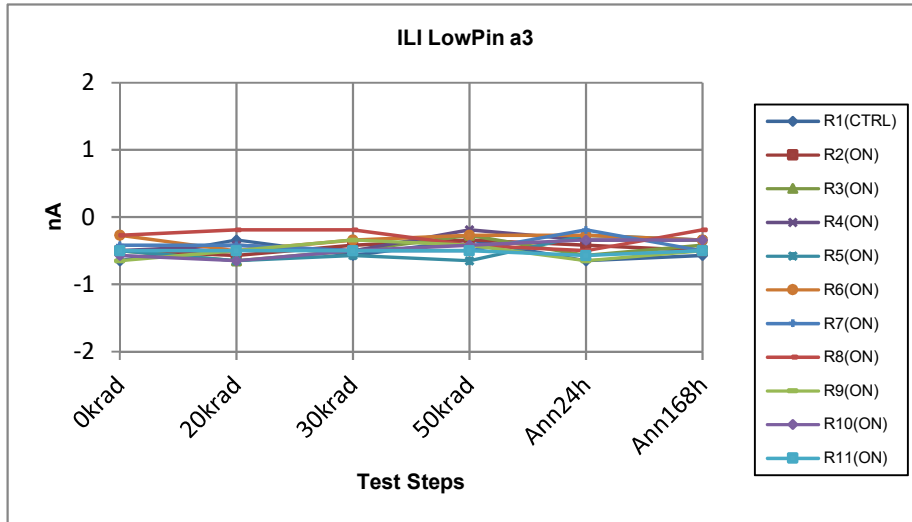
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ILI LowPin a4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.26	-0.41	-0.34	-0.41	-0.64	-0.41
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.34	-0.49	-0.57	-0.57	-0.34	-0.49
R3(ON BIAS HDC)	-0.49	-0.34	-0.72	-0.57	-0.49	-0.34
R4(ON BIAS HDC)	-0.64	-0.41	-0.72	-0.57	-0.41	-0.57
R5(ON BIAS HDC)	-0.49	-0.72	-0.72	-0.57	-0.41	-0.72
R6(ON BIAS HDC)	-0.49	-0.64	-0.34	-0.41	-0.49	-0.41
R7(ON BIAS HDC)	-0.49	-0.49	-0.64	-0.49	-0.49	-0.34
R8(ON BIAS HDC)	-0.57	-0.57	-0.49	-0.72	-0.41	-0.57
R9(ON BIAS HDC)	-0.49	-0.72	-0.34	-0.57	-0.49	-0.49
R10(ON BIAS HDC)	-0.57	-0.49	-0.34	-0.57	-0.41	-0.72
R11(ON BIAS HDC)	-0.64	-0.80	-0.57	-0.26	-0.49	-0.41
Irradiated, ON biased HDC parts statistics						
Min Value	-0.64	-0.80	-0.72	-0.72	-0.49	-0.72
Max Value	-0.34	-0.34	-0.34	-0.26	-0.34	-0.34
Average	-0.52	-0.57	-0.55	-0.53	-0.44	-0.51
Sigma	0.09	0.15	0.16	0.12	0.05	0.14

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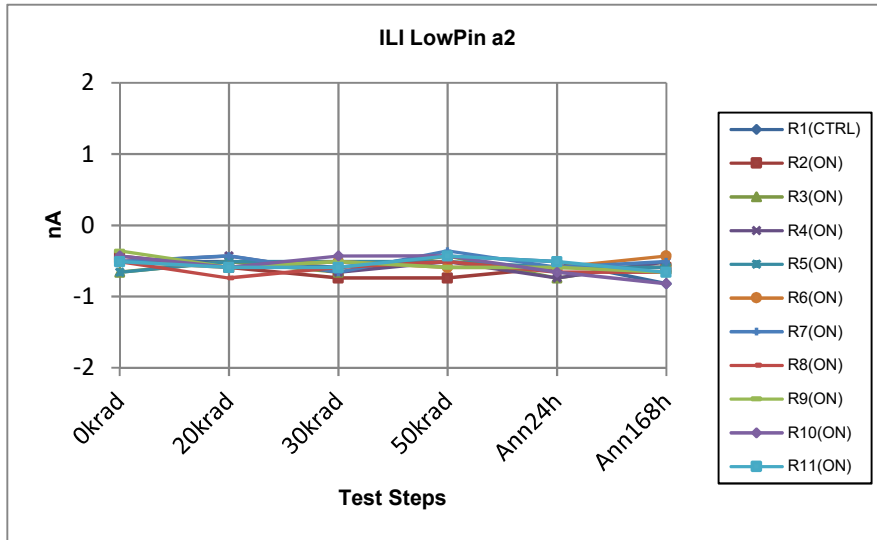
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ILI LowPin a3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.65	-0.34	-0.57	-0.34	-0.65	-0.57
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.50	-0.57	-0.42	-0.34	-0.42	-0.50
R3(ON BIAS HDC)	-0.50	-0.65	-0.50	-0.27	-0.57	-0.42
R4(ON BIAS HDC)	-0.50	-0.42	-0.50	-0.19	-0.34	-0.34
R5(ON BIAS HDC)	-0.50	-0.65	-0.57	-0.65	-0.27	-0.34
R6(ON BIAS HDC)	-0.27	-0.50	-0.34	-0.27	-0.27	-0.34
R7(ON BIAS HDC)	-0.42	-0.42	-0.50	-0.50	-0.19	-0.50
R8(ON BIAS HDC)	-0.27	-0.19	-0.19	-0.42	-0.50	-0.19
R9(ON BIAS HDC)	-0.65	-0.50	-0.34	-0.42	-0.65	-0.50
R10(ON BIAS HDC)	-0.57	-0.65	-0.50	-0.42	-0.34	-0.34
R11(ON BIAS HDC)	-0.50	-0.50	-0.50	-0.50	-0.57	-0.50
Irradiated, ON biased HDC parts statistics						
Min Value	-0.65	-0.65	-0.57	-0.65	-0.65	-0.50
Max Value	-0.27	-0.19	-0.19	-0.19	-0.19	-0.19
Average	-0.47	-0.51	-0.44	-0.40	-0.41	-0.40
Sigma	0.12	0.14	0.11	0.14	0.15	0.10

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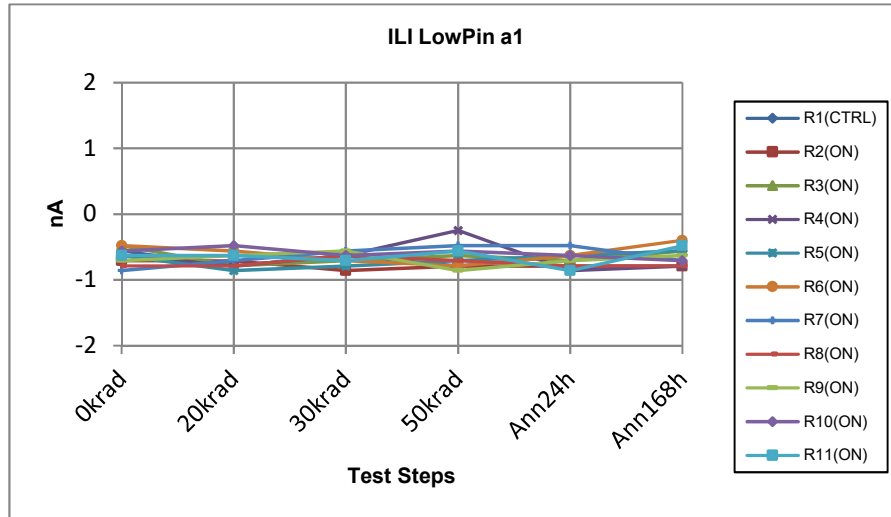
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ILI LowPin a2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.51	-0.51	-0.59	-0.43	-0.51	-0.82
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.43	-0.59	-0.74	-0.74	-0.59	-0.59
R3(ON BIAS HDC)	-0.66	-0.51	-0.66	-0.43	-0.74	-0.51
R4(ON BIAS HDC)	-0.51	-0.43	-0.66	-0.51	-0.74	-0.51
R5(ON BIAS HDC)	-0.66	-0.51	-0.51	-0.51	-0.59	-0.59
R6(ON BIAS HDC)	-0.51	-0.59	-0.51	-0.59	-0.59	-0.43
R7(ON BIAS HDC)	-0.51	-0.43	-0.66	-0.36	-0.59	-0.51
R8(ON BIAS HDC)	-0.51	-0.74	-0.59	-0.51	-0.66	-0.66
R9(ON BIAS HDC)	-0.36	-0.59	-0.51	-0.59	-0.59	-0.66
R10(ON BIAS HDC)	-0.43	-0.59	-0.43	-0.43	-0.66	-0.82
R11(ON BIAS HDC)	-0.51	-0.59	-0.59	-0.43	-0.51	-0.66
Irradiated, ON biased HDC parts statistics						
Min Value	-0.66	-0.74	-0.74	-0.74	-0.74	-0.82
Max Value	-0.36	-0.43	-0.43	-0.36	-0.51	-0.43
Average	-0.51	-0.56	-0.59	-0.51	-0.63	-0.59
Sigma	0.09	0.09	0.10	0.11	0.07	0.11

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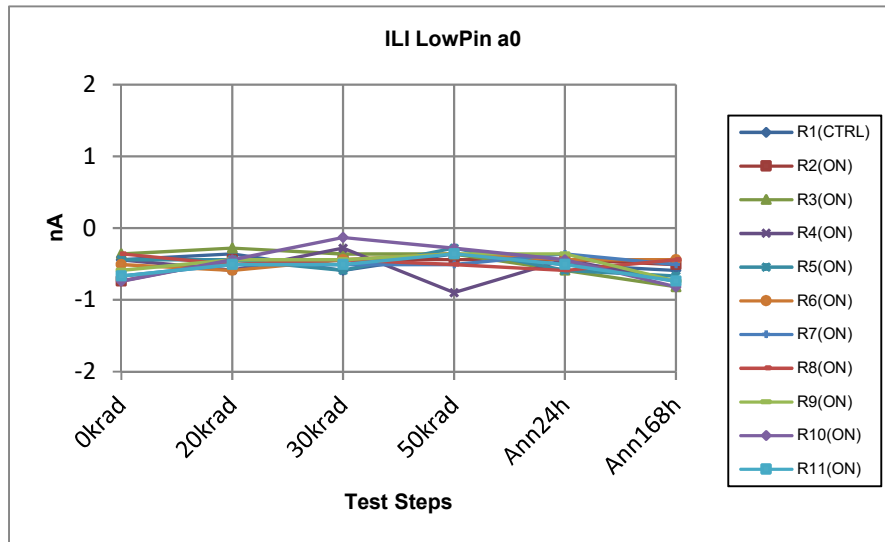
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ILI LowPin a1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.56	-0.79	-0.63	-0.79	-0.63	-0.56
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.71	-0.71	-0.86	-0.79	-0.79	-0.79
R3(ON BIAS HDC)	-0.48	-0.79	-0.71	-0.63	-0.71	-0.56
R4(ON BIAS HDC)	-0.63	-0.79	-0.63	-0.25	-0.86	-0.79
R5(ON BIAS HDC)	-0.63	-0.86	-0.79	-0.71	-0.63	-0.56
R6(ON BIAS HDC)	-0.48	-0.56	-0.71	-0.79	-0.63	-0.40
R7(ON BIAS HDC)	-0.86	-0.71	-0.56	-0.48	-0.48	-0.71
R8(ON BIAS HDC)	-0.79	-0.79	-0.63	-0.71	-0.79	-0.79
R9(ON BIAS HDC)	-0.71	-0.63	-0.56	-0.86	-0.71	-0.63
R10(ON BIAS HDC)	-0.56	-0.48	-0.63	-0.56	-0.63	-0.71
R11(ON BIAS HDC)	-0.63	-0.63	-0.71	-0.56	-0.86	-0.48
Irradiated, ON biased HDC parts statistics						
Min Value	-0.86	-0.86	-0.86	-0.86	-0.86	-0.79
Max Value	-0.48	-0.48	-0.56	-0.25	-0.48	-0.40
Average	-0.65	-0.70	-0.68	-0.63	-0.71	-0.64
Sigma	0.12	0.12	0.10	0.18	0.12	0.14

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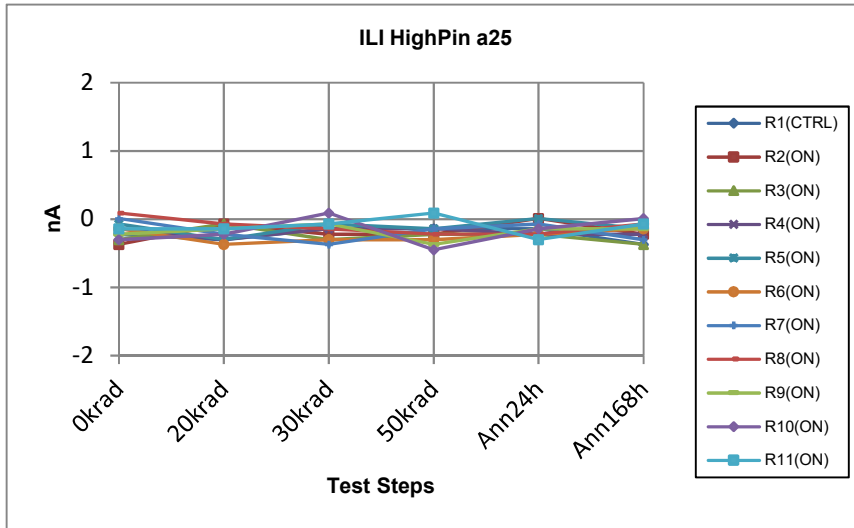
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ILI LowPin a0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.44	-0.36	-0.59	-0.36	-0.51	-0.59
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.74	-0.44	-0.44	-0.44	-0.44	-0.51
R3(ON BIAS HDC)	-0.36	-0.28	-0.36	-0.36	-0.59	-0.82
R4(ON BIAS HDC)	-0.44	-0.59	-0.28	-0.90	-0.44	-0.74
R5(ON BIAS HDC)	-0.44	-0.44	-0.59	-0.28	-0.59	-0.67
R6(ON BIAS HDC)	-0.51	-0.59	-0.44	-0.36	-0.44	-0.44
R7(ON BIAS HDC)	-0.67	-0.51	-0.51	-0.51	-0.36	-0.51
R8(ON BIAS HDC)	-0.36	-0.51	-0.44	-0.51	-0.59	-0.44
R9(ON BIAS HDC)	-0.59	-0.44	-0.44	-0.36	-0.36	-0.74
R10(ON BIAS HDC)	-0.74	-0.44	-0.13	-0.28	-0.44	-0.82
R11(ON BIAS HDC)	-0.67	-0.51	-0.51	-0.36	-0.51	-0.74
Irradiated, ON biased HDC parts statistics						
Min Value	-0.74	-0.59	-0.59	-0.90	-0.59	-0.82
Max Value	-0.36	-0.28	-0.13	-0.28	-0.36	-0.44
Average	-0.55	-0.48	-0.41	-0.44	-0.48	-0.64
Sigma	0.15	0.09	0.13	0.18	0.09	0.15

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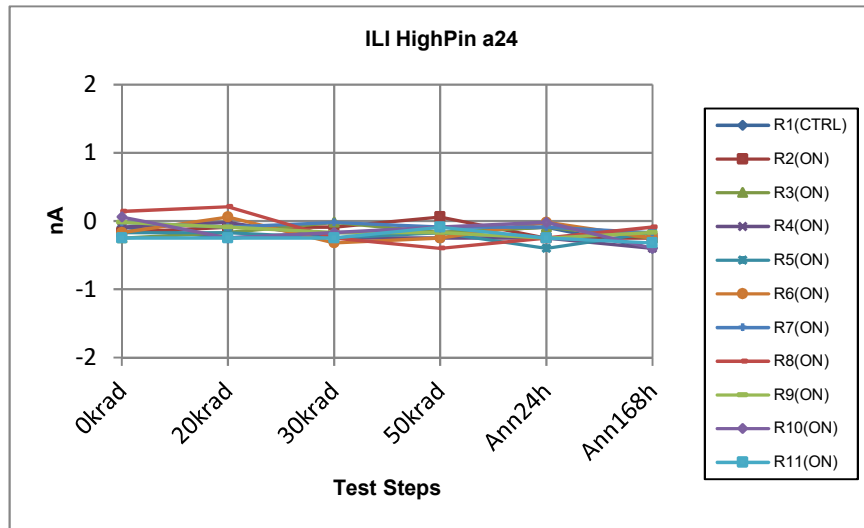
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ILI HighPin a25	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.22	-0.30	-0.14	-0.14	-0.14	-0.37
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.37	-0.07	-0.22	-0.22	0.01	-0.22
R3(ON BIAS HDC)	-0.30	-0.07	-0.30	-0.22	-0.22	-0.37
R4(ON BIAS HDC)	-0.14	-0.30	-0.14	-0.14	-0.22	-0.22
R5(ON BIAS HDC)	-0.07	-0.30	-0.07	-0.14	0.01	-0.14
R6(ON BIAS HDC)	-0.14	-0.37	-0.30	-0.30	-0.22	-0.14
R7(ON BIAS HDC)	0.01	-0.22	-0.37	-0.14	-0.07	-0.30
R8(ON BIAS HDC)	0.09	-0.07	-0.14	-0.22	-0.22	-0.07
R9(ON BIAS HDC)	-0.22	-0.14	-0.07	-0.37	-0.14	-0.14
R10(ON BIAS HDC)	-0.30	-0.22	0.09	-0.45	-0.14	0.01
R11(ON BIAS HDC)	-0.14	-0.14	-0.07	0.09	-0.30	-0.07
Irradiated, ON biased HDC parts statistics						
Min Value	-0.37	-0.37	-0.37	-0.45	-0.30	-0.37
Max Value	0.09	-0.07	0.09	0.09	0.01	0.01
Average	-0.16	-0.19	-0.16	-0.21	-0.15	-0.17
Sigma	0.14	0.11	0.14	0.15	0.11	0.11

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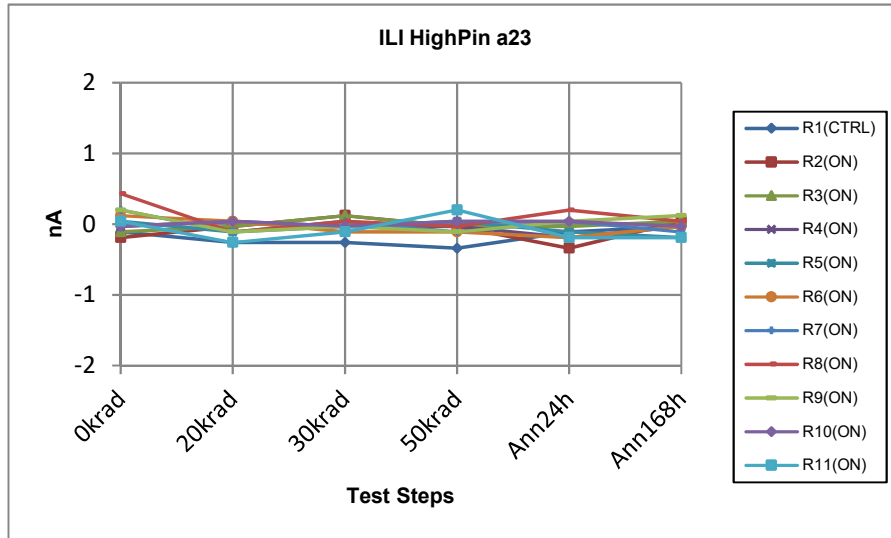
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ILI HighPin a24	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.09	-0.25	-0.17	-0.17	-0.09	-0.40
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.17	-0.09	-0.09	0.06	-0.25	-0.25
R3(ON BIAS HDC)	-0.25	-0.17	-0.02	-0.17	-0.09	-0.25
R4(ON BIAS HDC)	-0.09	-0.02	-0.25	-0.25	-0.25	-0.40
R5(ON BIAS HDC)	-0.17	-0.17	-0.25	-0.17	-0.40	-0.17
R6(ON BIAS HDC)	-0.17	0.06	-0.32	-0.25	-0.02	-0.25
R7(ON BIAS HDC)	-0.02	-0.09	-0.02	-0.09	-0.09	-0.17
R8(ON BIAS HDC)	0.14	0.21	-0.25	-0.40	-0.25	-0.09
R9(ON BIAS HDC)	-0.02	-0.09	-0.17	-0.17	-0.25	-0.17
R10(ON BIAS HDC)	0.06	-0.25	-0.17	-0.09	-0.02	-0.40
R11(ON BIAS HDC)	-0.25	-0.25	-0.25	-0.09	-0.25	-0.32
Irradiated, ON biased HDC parts statistics						
Min Value	-0.25	-0.25	-0.32	-0.40	-0.40	-0.40
Max Value	0.14	0.21	-0.02	0.06	-0.02	-0.09
Average	-0.09	-0.09	-0.18	-0.16	-0.19	-0.25
Sigma	0.13	0.14	0.10	0.12	0.12	0.10

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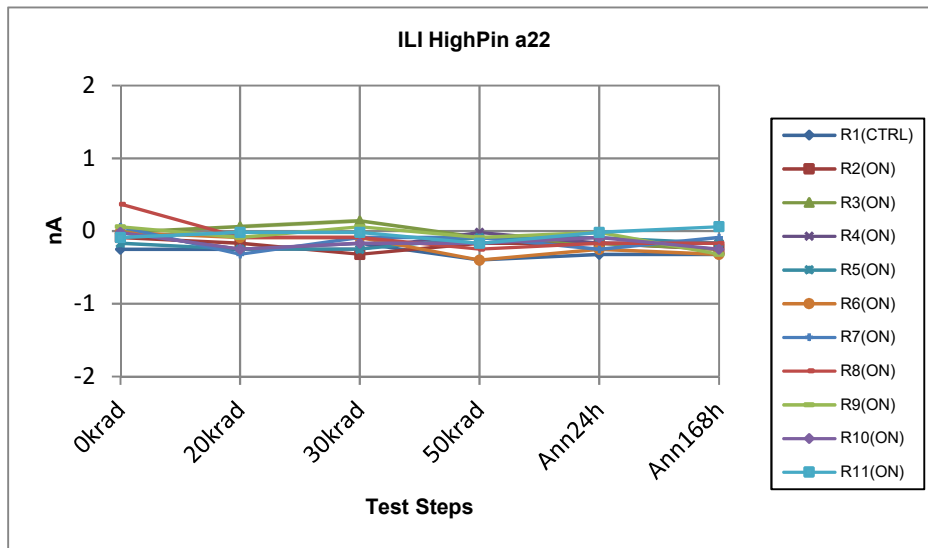
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ILI HighPin a23	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.11	-0.26	-0.26	-0.34	-0.11	-0.03
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.19	-0.03	0.12	-0.03	-0.34	0.04
R3(ON BIAS HDC)	-0.11	-0.03	0.12	-0.03	-0.03	0.04
R4(ON BIAS HDC)	-0.03	0.04	-0.03	-0.03	-0.19	-0.03
R5(ON BIAS HDC)	0.04	-0.11	-0.03	0.04	-0.11	-0.19
R6(ON BIAS HDC)	0.12	0.04	-0.11	-0.11	-0.19	-0.03
R7(ON BIAS HDC)	0.20	-0.11	0.04	-0.11	0.04	-0.11
R8(ON BIAS HDC)	0.43	-0.11	0.04	-0.03	0.20	0.04
R9(ON BIAS HDC)	0.20	-0.11	-0.03	-0.11	0.04	0.12
R10(ON BIAS HDC)	-0.03	0.04	-0.03	0.04	0.04	-0.03
R11(ON BIAS HDC)	0.04	-0.26	-0.11	0.20	-0.19	-0.19
Irradiated, ON biased HDC parts statistics						
Min Value	-0.19	-0.26	-0.11	-0.11	-0.34	-0.19
Max Value	0.43	0.04	0.12	0.20	0.20	0.12
Average	0.07	-0.06	0.00	-0.02	-0.07	-0.03
Sigma	0.18	0.10	0.08	0.09	0.16	0.10

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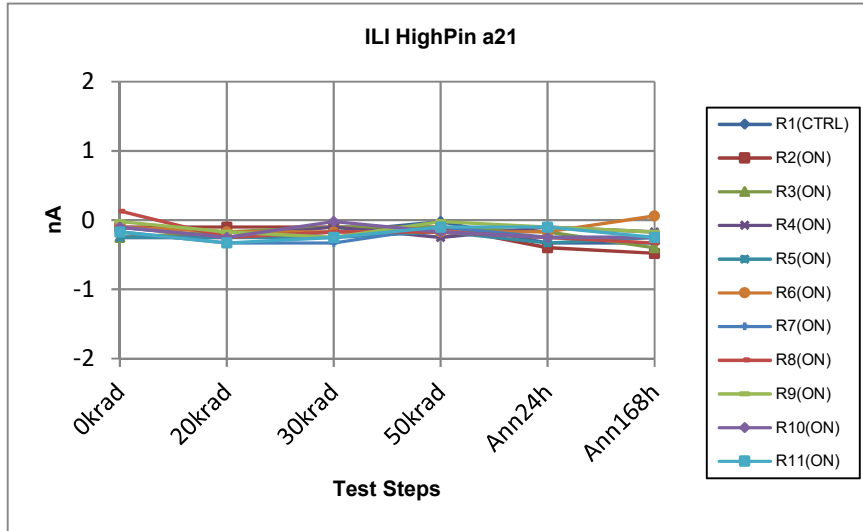
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ILI HighPin a22	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.25	-0.25	-0.17	-0.40	-0.32	-0.32
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.09	-0.17	-0.32	-0.17	-0.17	-0.25
R3(ON BIAS HDC)	-0.02	0.06	0.14	-0.09	-0.17	-0.25
R4(ON BIAS HDC)	-0.02	-0.25	-0.25	-0.02	-0.17	-0.17
R5(ON BIAS HDC)	-0.17	-0.25	-0.25	-0.09	-0.09	-0.17
R6(ON BIAS HDC)	-0.02	-0.09	-0.09	-0.40	-0.25	-0.32
R7(ON BIAS HDC)	0.06	-0.32	-0.09	-0.09	-0.25	-0.09
R8(ON BIAS HDC)	0.37	-0.09	-0.09	-0.25	-0.17	-0.17
R9(ON BIAS HDC)	0.06	-0.09	0.06	-0.09	-0.02	-0.32
R10(ON BIAS HDC)	-0.02	-0.25	-0.17	-0.17	-0.09	-0.25
R11(ON BIAS HDC)	-0.09	-0.02	-0.02	-0.17	-0.02	0.06
Irradiated, ON biased HDC parts statistics						
Min Value	-0.17	-0.32	-0.32	-0.40	-0.25	-0.32
Max Value	0.37	0.06	0.14	-0.02	-0.02	0.06
Average	0.01	-0.15	-0.11	-0.15	-0.14	-0.19
Sigma	0.15	0.12	0.14	0.11	0.08	0.11

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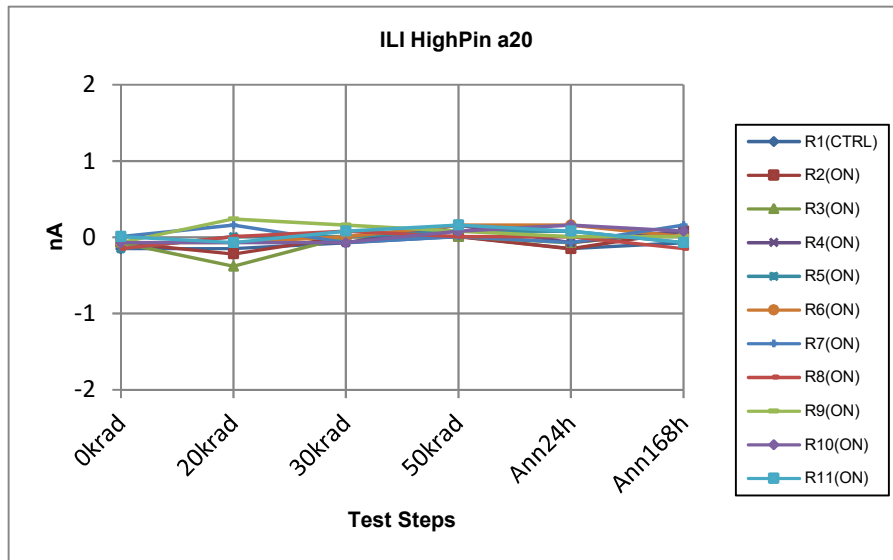
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ILI HighPin a21	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.10	-0.25	-0.17	-0.02	-0.33	-0.33
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.10	-0.10	-0.10	-0.10	-0.40	-0.48
R3(ON BIAS HDC)	-0.25	-0.17	-0.10	-0.10	-0.17	-0.40
R4(ON BIAS HDC)	-0.25	-0.25	-0.10	-0.25	-0.10	-0.17
R5(ON BIAS HDC)	-0.25	-0.25	-0.25	-0.17	-0.33	-0.25
R6(ON BIAS HDC)	-0.10	-0.17	-0.17	-0.17	-0.17	0.06
R7(ON BIAS HDC)	-0.17	-0.33	-0.33	-0.10	-0.25	-0.25
R8(ON BIAS HDC)	0.13	-0.25	-0.17	-0.17	-0.25	-0.33
R9(ON BIAS HDC)	-0.02	-0.17	-0.25	-0.02	-0.10	-0.17
R10(ON BIAS HDC)	-0.10	-0.25	-0.02	-0.17	-0.25	-0.25
R11(ON BIAS HDC)	-0.17	-0.33	-0.25	-0.10	-0.10	-0.25
Irradiated, ON biased HDC parts statistics						
Min Value	-0.25	-0.33	-0.33	-0.25	-0.40	-0.48
Max Value	0.13	-0.10	-0.02	-0.02	-0.10	0.06
Average	-0.13	-0.23	-0.17	-0.14	-0.21	-0.25
Sigma	0.12	0.07	0.10	0.06	0.10	0.15

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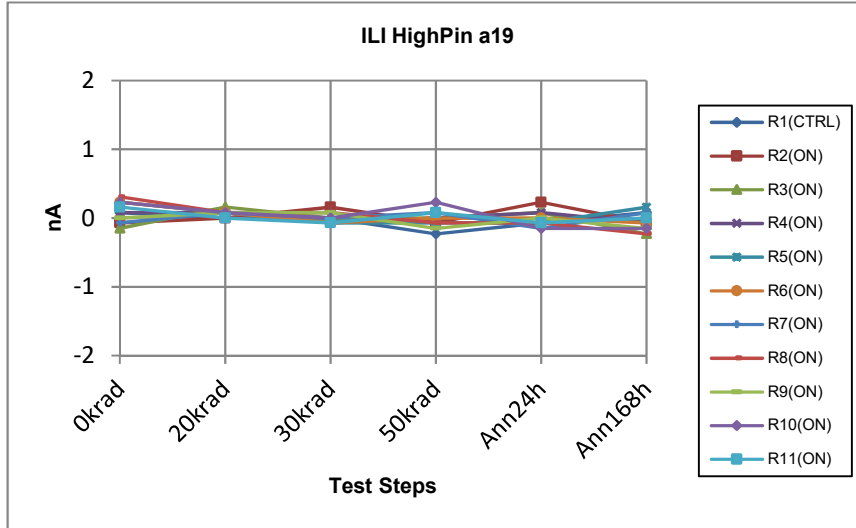
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ILI HighPin a20	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.15	-0.15	-0.07	0.01	-0.15	-0.07
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.07	-0.22	0.01	0.01	-0.15	0.08
R3(ON BIAS HDC)	-0.07	-0.38	0.01	0.01	-0.07	0.08
R4(ON BIAS HDC)	-0.07	-0.07	-0.07	0.16	-0.07	0.08
R5(ON BIAS HDC)	-0.15	0.01	0.01	0.08	0.08	-0.07
R6(ON BIAS HDC)	-0.07	-0.07	0.01	0.16	0.16	0.01
R7(ON BIAS HDC)	0.01	0.16	-0.07	0.01	-0.07	0.16
R8(ON BIAS HDC)	-0.15	0.01	0.08	0.01	0.01	-0.15
R9(ON BIAS HDC)	-0.07	0.24	0.16	0.08	0.01	0.01
R10(ON BIAS HDC)	-0.07	-0.07	-0.07	0.08	0.16	0.08
R11(ON BIAS HDC)	0.01	-0.07	0.08	0.16	0.08	-0.07
Irradiated, ON biased HDC parts statistics						
Min Value	-0.15	-0.38	-0.07	0.01	-0.15	-0.15
Max Value	0.01	0.24	0.16	0.16	0.16	0.16
Average	-0.07	-0.05	0.02	0.08	0.01	0.02
Sigma	0.05	0.17	0.08	0.07	0.11	0.09

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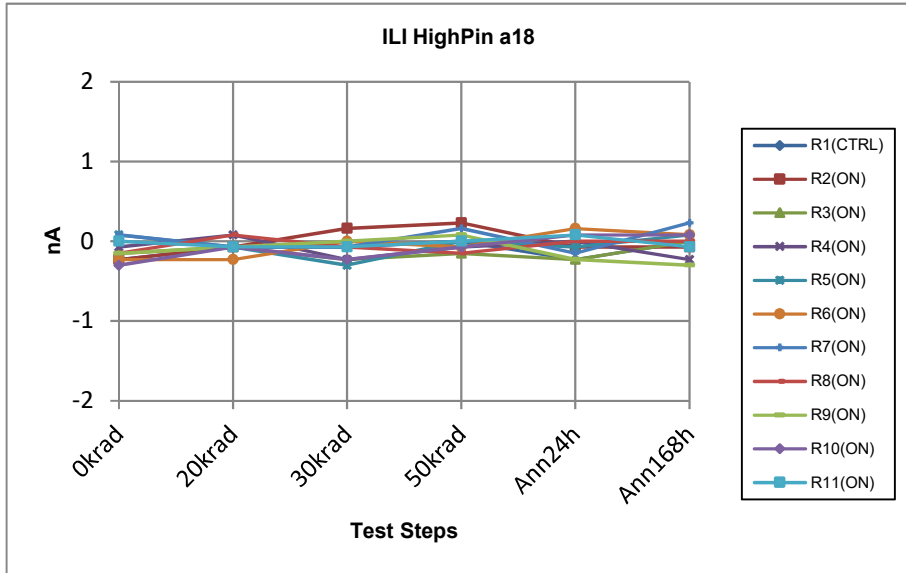
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ILI HighPin a19	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.08	0.00	0.00	-0.23	-0.07	0.08
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.07	0.00	0.16	-0.07	0.23	-0.07
R3(ON BIAS HDC)	-0.15	0.16	0.00	0.00	0.08	-0.23
R4(ON BIAS HDC)	0.08	0.08	-0.07	0.00	0.08	-0.07
R5(ON BIAS HDC)	0.23	0.08	-0.07	-0.07	-0.07	0.16
R6(ON BIAS HDC)	0.23	0.08	-0.07	0.00	0.00	-0.07
R7(ON BIAS HDC)	-0.07	0.08	0.00	0.08	-0.15	0.08
R8(ON BIAS HDC)	0.31	0.08	0.08	-0.07	-0.07	-0.23
R9(ON BIAS HDC)	0.00	0.08	0.08	-0.15	0.00	-0.15
R10(ON BIAS HDC)	0.23	0.08	0.00	0.23	-0.15	-0.15
R11(ON BIAS HDC)	0.16	0.00	-0.07	0.08	-0.07	0.00
Irradiated, ON biased HDC parts statistics						
Min Value	-0.15	0.00	-0.07	-0.15	-0.15	-0.23
Max Value	0.31	0.16	0.16	0.23	0.23	0.16
Average	0.10	0.07	0.00	0.00	-0.01	-0.07
Sigma	0.16	0.05	0.08	0.11	0.12	0.13

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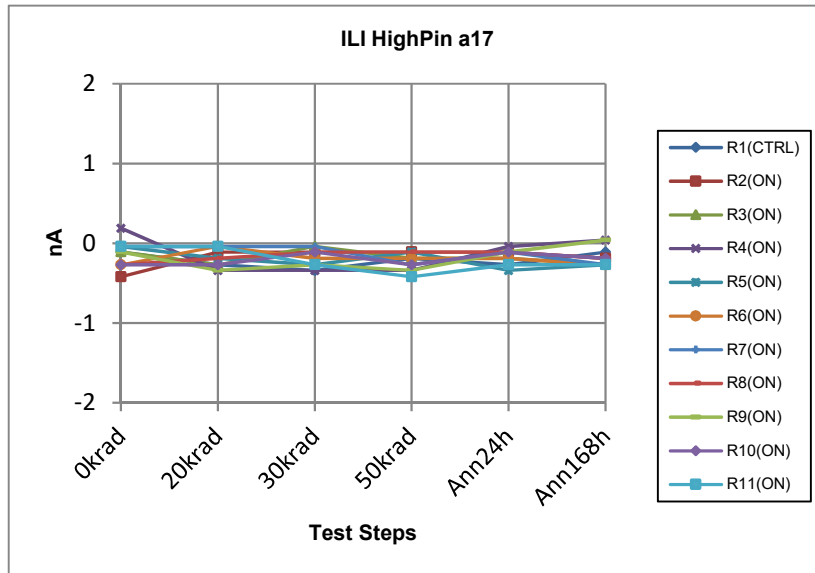
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ILI HighPin a18	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.07	-0.07	0.00	-0.23	0.00
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.23	-0.07	0.16	0.23	-0.07	-0.07
R3(ON BIAS HDC)	-0.15	-0.07	-0.23	-0.15	-0.23	0.00
R4(ON BIAS HDC)	-0.07	0.08	-0.23	-0.07	0.00	-0.23
R5(ON BIAS HDC)	0.08	-0.07	-0.30	0.00	-0.07	0.08
R6(ON BIAS HDC)	-0.23	-0.23	0.00	-0.07	0.16	0.08
R7(ON BIAS HDC)	0.08	-0.07	-0.07	0.16	-0.15	0.23
R8(ON BIAS HDC)	-0.15	0.08	-0.07	-0.15	0.00	0.00
R9(ON BIAS HDC)	-0.15	-0.07	0.00	0.08	-0.23	-0.30
R10(ON BIAS HDC)	-0.30	-0.07	-0.23	-0.07	0.08	0.08
R11(ON BIAS HDC)	0.00	-0.07	-0.07	0.00	0.08	-0.07
Irradiated, ON biased HDC parts statistics						
Min Value	-0.30	-0.23	-0.30	-0.15	-0.23	-0.30
Max Value	0.08	0.08	0.16	0.23	0.16	0.23
Average	-0.11	-0.06	-0.10	0.00	-0.04	-0.02
Sigma	0.13	0.09	0.14	0.13	0.13	0.16

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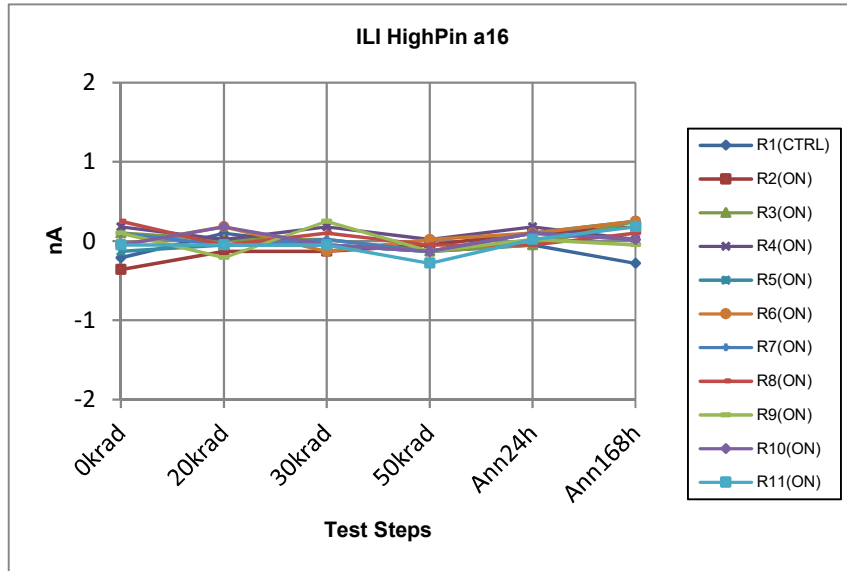
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ILI HighPin a17	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.11	-0.27	-0.34	-0.19	-0.27	-0.11
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.42	-0.11	-0.11	-0.11	-0.11	-0.19
R3(ON BIAS HDC)	-0.11	-0.27	-0.04	-0.19	-0.19	-0.27
R4(ON BIAS HDC)	0.19	-0.34	-0.34	-0.34	-0.04	0.04
R5(ON BIAS HDC)	-0.04	-0.19	-0.27	-0.11	-0.34	-0.27
R6(ON BIAS HDC)	-0.27	-0.04	-0.19	-0.19	-0.19	-0.27
R7(ON BIAS HDC)	-0.04	-0.04	-0.04	-0.27	-0.11	-0.27
R8(ON BIAS HDC)	-0.27	-0.19	-0.11	-0.11	-0.11	-0.19
R9(ON BIAS HDC)	-0.11	-0.34	-0.27	-0.34	-0.11	0.04
R10(ON BIAS HDC)	-0.27	-0.27	-0.11	-0.27	-0.11	-0.19
R11(ON BIAS HDC)	-0.04	-0.04	-0.27	-0.42	-0.27	-0.27
Irradiated, ON biased HDC parts statistics						
Min Value	-0.42	-0.34	-0.34	-0.42	-0.34	-0.27
Max Value	0.19	-0.04	-0.04	-0.11	-0.04	0.04
Average	-0.14	-0.18	-0.18	-0.24	-0.16	-0.18
Sigma	0.17	0.12	0.11	0.11	0.09	0.12

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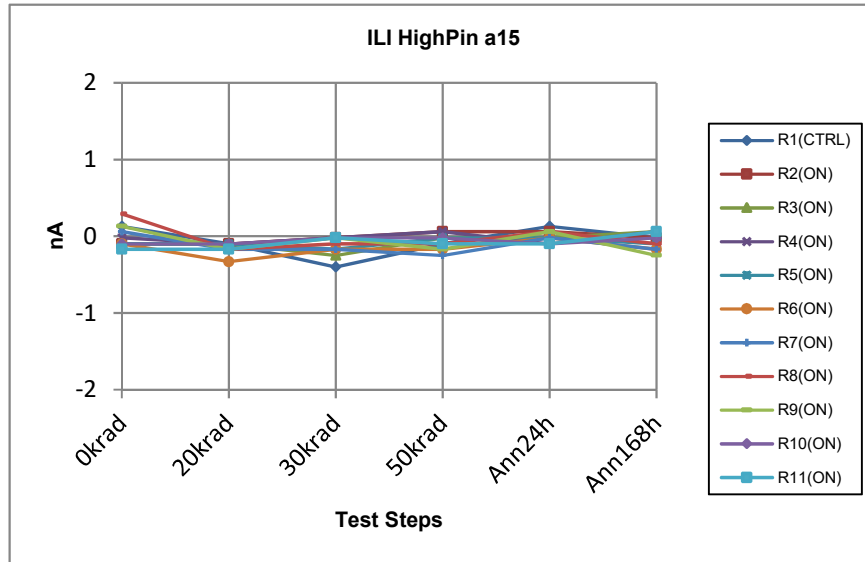
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ILI HighPin a16	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.21	0.10	-0.05	-0.13	-0.05	-0.28
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.36	-0.13	-0.13	-0.05	0.10	0.18
R3(ON BIAS HDC)	0.10	0.02	0.02	-0.13	-0.05	0.25
R4(ON BIAS HDC)	0.18	0.02	0.18	0.02	0.18	0.02
R5(ON BIAS HDC)	-0.13	-0.05	-0.05	-0.13	0.10	0.25
R6(ON BIAS HDC)	-0.05	0.18	-0.13	0.02	0.10	0.25
R7(ON BIAS HDC)	0.10	-0.05	0.02	-0.13	0.10	0.02
R8(ON BIAS HDC)	0.25	-0.05	0.10	-0.05	-0.05	0.10
R9(ON BIAS HDC)	0.10	-0.21	0.25	-0.13	0.02	-0.05
R10(ON BIAS HDC)	-0.05	0.18	-0.05	-0.13	0.10	0.02
R11(ON BIAS HDC)	-0.05	-0.05	-0.05	-0.28	0.02	0.18
Irradiated, ON biased HDC parts statistics						
Min Value	-0.36	-0.21	-0.13	-0.28	-0.05	-0.05
Max Value	0.25	0.18	0.25	0.02	0.18	0.25
Average	0.01	-0.01	0.02	-0.10	0.06	0.12
Sigma	0.18	0.12	0.13	0.09	0.07	0.11

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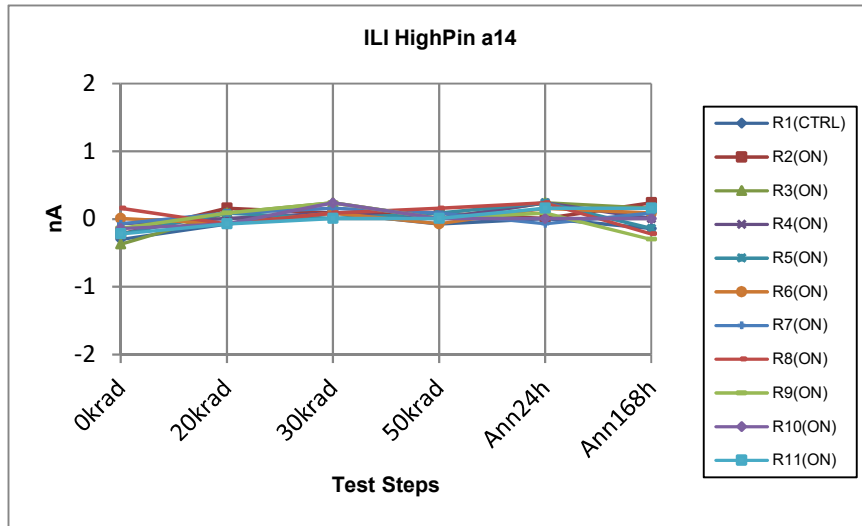
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ILI HighPin a15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.13	-0.10	-0.40	-0.10	0.13	-0.02
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.10	-0.10	-0.02	0.06	0.06	-0.02
R3(ON BIAS HDC)	-0.10	-0.10	-0.25	-0.02	-0.02	0.06
R4(ON BIAS HDC)	-0.02	-0.10	-0.02	0.06	-0.10	0.06
R5(ON BIAS HDC)	-0.10	-0.10	-0.17	-0.02	-0.02	-0.10
R6(ON BIAS HDC)	-0.10	-0.33	-0.17	-0.17	-0.02	-0.17
R7(ON BIAS HDC)	0.06	-0.17	-0.17	-0.25	-0.02	-0.17
R8(ON BIAS HDC)	0.29	-0.17	-0.10	-0.10	0.06	-0.10
R9(ON BIAS HDC)	0.13	-0.17	-0.02	-0.17	0.06	-0.25
R10(ON BIAS HDC)	-0.10	-0.10	-0.02	-0.02	-0.10	-0.02
R11(ON BIAS HDC)	-0.17	-0.17	-0.02	-0.10	-0.10	0.06
Irradiated, ON biased HDC parts statistics						
Min Value	-0.17	-0.33	-0.25	-0.25	-0.10	-0.25
Max Value	0.29	-0.10	-0.02	0.06	0.06	0.06
Average	-0.02	-0.15	-0.10	-0.07	-0.02	-0.07
Sigma	0.14	0.07	0.09	0.10	0.07	0.11

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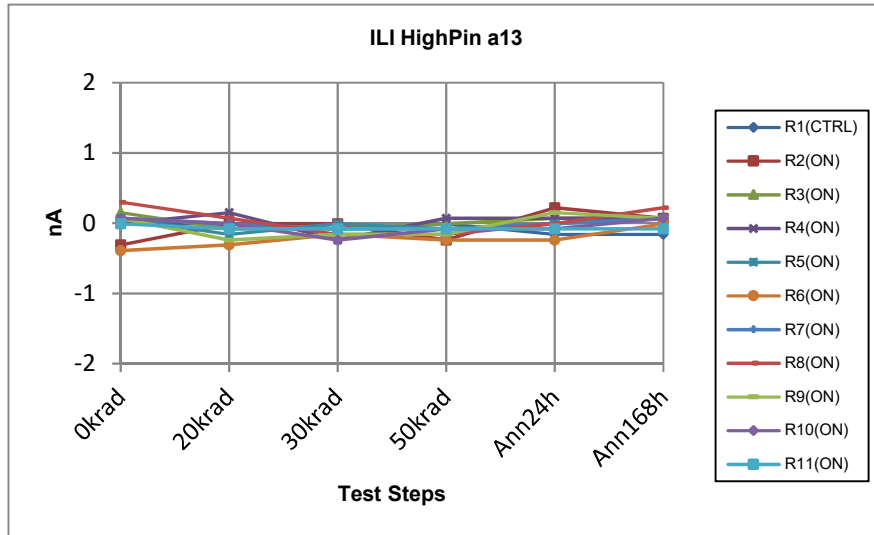
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ILI HighPin a14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.07	0.09	-0.07	0.01	-0.14
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.22	0.16	0.09	0.09	0.01	0.24
R3(ON BIAS HDC)	-0.37	0.09	0.24	0.01	0.24	0.16
R4(ON BIAS HDC)	-0.07	0.01	0.09	0.01	0.24	0.01
R5(ON BIAS HDC)	-0.22	0.09	0.01	0.09	0.24	-0.14
R6(ON BIAS HDC)	0.01	-0.07	0.09	-0.07	0.16	0.09
R7(ON BIAS HDC)	-0.07	0.09	0.16	0.09	-0.07	0.09
R8(ON BIAS HDC)	0.16	-0.07	0.09	0.16	0.24	-0.22
R9(ON BIAS HDC)	-0.14	0.09	0.24	0.01	0.09	-0.30
R10(ON BIAS HDC)	-0.14	-0.07	0.24	0.01	0.01	0.01
R11(ON BIAS HDC)	-0.22	-0.07	0.01	0.01	0.16	0.16
Irradiated, ON biased HDC parts statistics						
Min Value	-0.37	-0.07	0.01	-0.07	-0.07	-0.30
Max Value	0.16	0.16	0.24	0.16	0.24	0.24
Average	-0.13	0.03	0.13	0.04	0.13	0.01
Sigma	0.15	0.09	0.09	0.07	0.12	0.18

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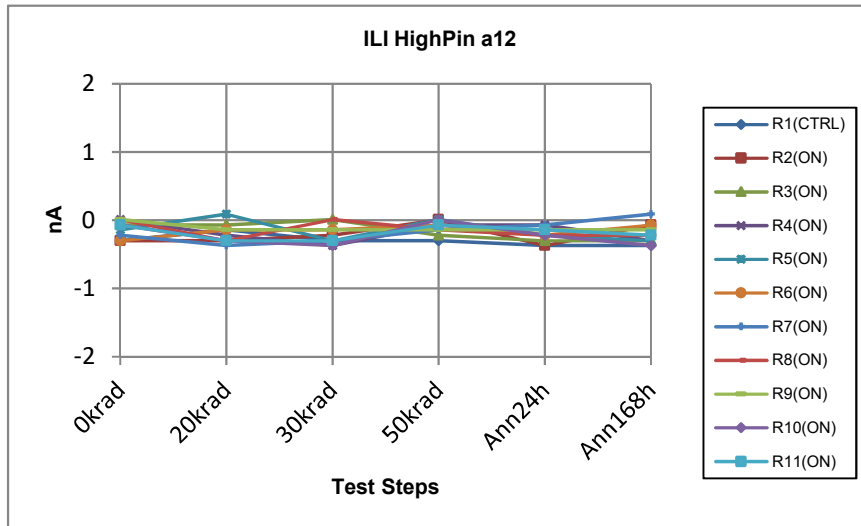
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ILI HighPin a13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.01	-0.01	-0.08	-0.01	-0.16	-0.16
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.31	-0.01	-0.01	-0.24	0.22	0.07
R3(ON BIAS HDC)	0.15	-0.08	-0.08	-0.01	0.07	0.07
R4(ON BIAS HDC)	-0.01	0.15	-0.24	0.07	0.07	0.07
R5(ON BIAS HDC)	0.07	-0.16	-0.01	-0.08	-0.01	0.07
R6(ON BIAS HDC)	-0.39	-0.31	-0.16	-0.24	-0.24	-0.01
R7(ON BIAS HDC)	0.07	-0.01	-0.08	-0.08	-0.01	0.07
R8(ON BIAS HDC)	0.30	0.07	-0.16	-0.16	-0.01	0.22
R9(ON BIAS HDC)	0.07	-0.24	-0.16	-0.16	0.15	0.07
R10(ON BIAS HDC)	0.07	-0.01	-0.24	-0.08	-0.08	0.07
R11(ON BIAS HDC)	-0.01	-0.08	-0.08	-0.08	-0.08	-0.08
Irradiated, ON biased HDC parts statistics						
Min Value	-0.39	-0.31	-0.24	-0.24	-0.24	-0.08
Max Value	0.30	0.15	-0.01	0.07	0.22	0.22
Average	0.00	-0.07	-0.12	-0.11	0.01	0.06
Sigma	0.21	0.14	0.08	0.10	0.13	0.08

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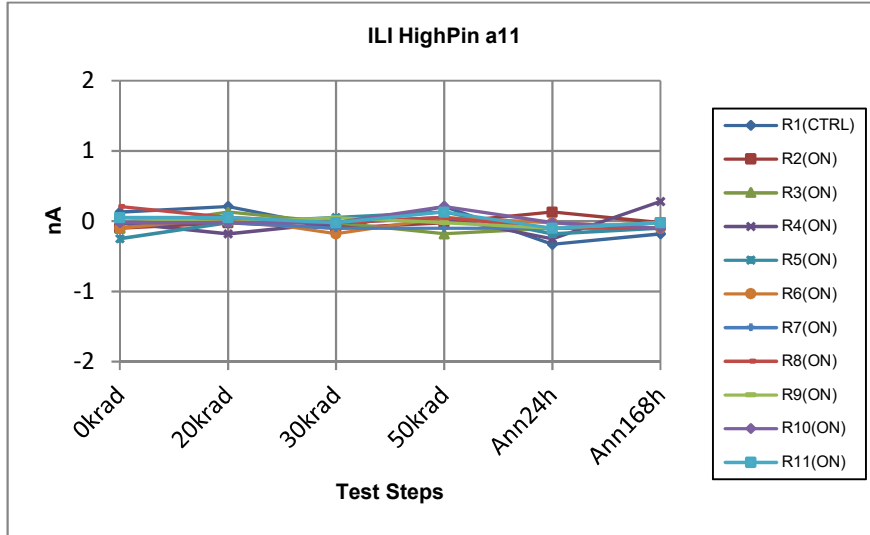
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ILI HighPin a12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.14	-0.30	-0.30	-0.37	-0.37
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.30	-0.30	-0.22	0.01	-0.37	-0.07
R3(ON BIAS HDC)	-0.07	-0.07	0.01	-0.22	-0.30	-0.30
R4(ON BIAS HDC)	0.01	-0.22	-0.37	-0.07	-0.07	-0.30
R5(ON BIAS HDC)	-0.14	0.09	-0.30	0.01	-0.22	-0.30
R6(ON BIAS HDC)	-0.30	-0.14	-0.14	-0.07	-0.22	-0.07
R7(ON BIAS HDC)	-0.22	-0.37	-0.30	-0.14	-0.07	0.09
R8(ON BIAS HDC)	0.01	-0.30	0.01	-0.14	-0.22	-0.22
R9(ON BIAS HDC)	0.01	-0.14	-0.14	-0.14	-0.14	-0.14
R10(ON BIAS HDC)	-0.07	-0.30	-0.37	0.01	-0.22	-0.37
R11(ON BIAS HDC)	-0.07	-0.30	-0.30	-0.07	-0.14	-0.22
Irradiated, ON biased HDC parts statistics						
Min Value	-0.30	-0.37	-0.37	-0.22	-0.37	-0.37
Max Value	0.01	0.09	0.01	0.01	-0.07	0.09
Average	-0.11	-0.21	-0.21	-0.08	-0.20	-0.19
Sigma	0.12	0.14	0.14	0.08	0.10	0.14

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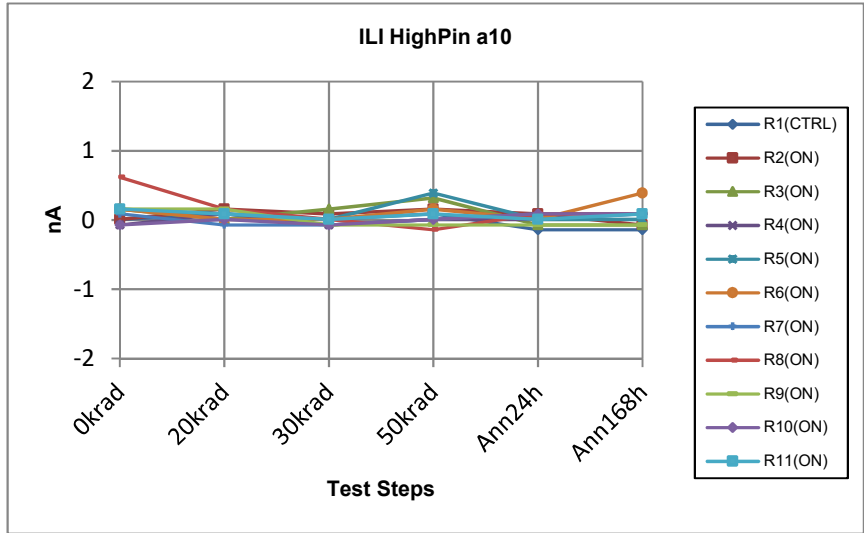
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ILI HighPin a11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.13	0.21	-0.10	0.21	-0.33	-0.18
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.10	-0.02	-0.10	-0.02	0.13	-0.02
R3(ON BIAS HDC)	-0.10	0.13	-0.02	-0.18	-0.10	-0.02
R4(ON BIAS HDC)	-0.02	-0.18	-0.02	0.05	-0.25	0.28
R5(ON BIAS HDC)	-0.25	-0.02	0.05	0.13	-0.18	-0.10
R6(ON BIAS HDC)	-0.10	0.05	-0.18	0.05	-0.02	-0.10
R7(ON BIAS HDC)	-0.02	-0.02	-0.10	-0.10	-0.10	-0.02
R8(ON BIAS HDC)	0.21	0.05	-0.02	0.05	-0.10	-0.10
R9(ON BIAS HDC)	0.05	-0.02	0.05	-0.02	-0.10	-0.02
R10(ON BIAS HDC)	-0.02	-0.02	-0.02	0.21	-0.02	-0.10
R11(ON BIAS HDC)	0.05	0.05	-0.02	0.13	-0.10	-0.02
Irradiated, ON biased HDC parts statistics						
Min Value	-0.25	-0.18	-0.18	-0.18	-0.25	-0.10
Max Value	0.21	0.13	0.05	0.21	0.13	0.28
Average	-0.03	0.00	-0.04	0.03	-0.08	-0.02
Sigma	0.12	0.08	0.07	0.12	0.10	0.11

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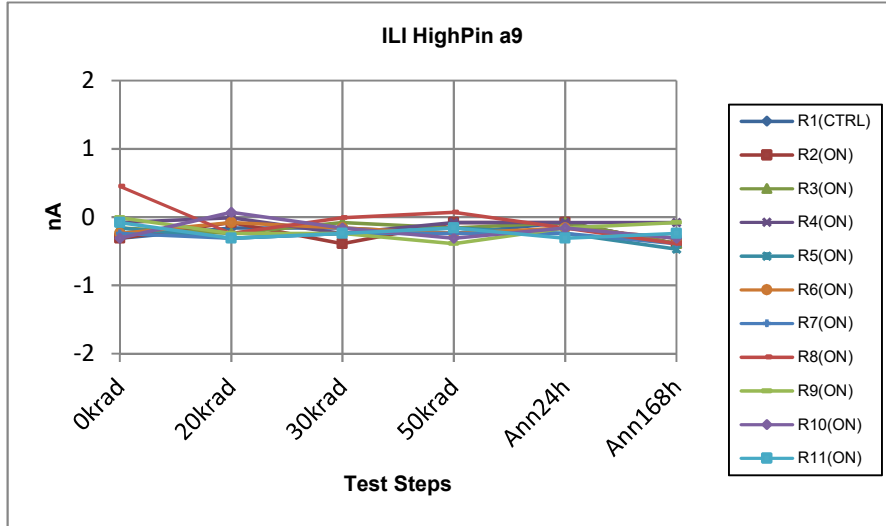
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ILI HighPin a10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.01	0.09	0.01	0.09	-0.14	-0.14
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0.01	0.16	0.09	0.16	0.09	-0.07
R3(ON BIAS HDC)	0.16	0.01	0.16	0.32	-0.07	-0.07
R4(ON BIAS HDC)	-0.07	0.09	-0.07	0.01	0.01	0.09
R5(ON BIAS HDC)	0.16	0.09	0.01	0.39	0.01	0.01
R6(ON BIAS HDC)	0.16	0.01	0.01	0.16	0.01	0.39
R7(ON BIAS HDC)	0.09	-0.07	-0.07	0.01	0.09	0.09
R8(ON BIAS HDC)	0.62	0.16	0.01	-0.14	0.09	0.09
R9(ON BIAS HDC)	0.16	0.16	-0.07	-0.07	-0.07	-0.07
R10(ON BIAS HDC)	-0.07	0.01	-0.07	0.01	0.09	0.09
R11(ON BIAS HDC)	0.16	0.09	0.01	0.09	0.01	0.09
Irradiated, ON biased HDC parts statistics						
Min Value	-0.07	-0.07	-0.07	-0.14	-0.07	-0.07
Max Value	0.62	0.16	0.16	0.39	0.09	0.39
Average	0.14	0.07	0.00	0.09	0.03	0.06
Sigma	0.19	0.08	0.08	0.17	0.06	0.14

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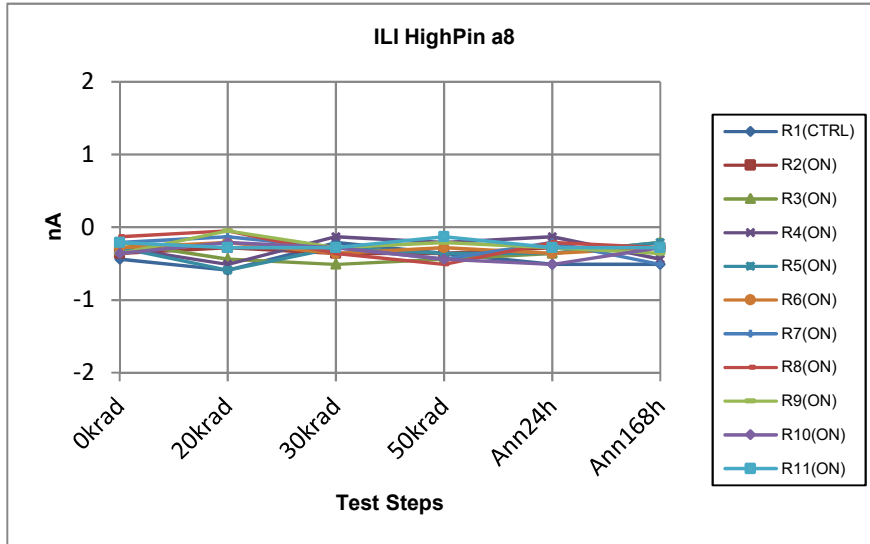
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ILI HighPin a9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.31	-0.16	-0.16	-0.24	-0.08	-0.39
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.31	-0.08	-0.39	-0.08	-0.08	-0.39
R3(ON BIAS HDC)	-0.16	-0.24	-0.08	-0.16	-0.08	-0.39
R4(ON BIAS HDC)	-0.08	-0.01	-0.24	-0.08	-0.08	-0.08
R5(ON BIAS HDC)	-0.16	-0.31	-0.24	-0.16	-0.24	-0.47
R6(ON BIAS HDC)	-0.24	-0.08	-0.16	-0.24	-0.16	-0.31
R7(ON BIAS HDC)	-0.24	-0.31	-0.24	-0.24	-0.24	-0.39
R8(ON BIAS HDC)	0.45	-0.24	-0.01	0.07	-0.16	-0.39
R9(ON BIAS HDC)	-0.01	-0.24	-0.24	-0.39	-0.16	-0.08
R10(ON BIAS HDC)	-0.31	0.07	-0.16	-0.31	-0.16	-0.31
R11(ON BIAS HDC)	-0.08	-0.31	-0.24	-0.16	-0.31	-0.24
Irradiated, ON biased HDC parts statistics						
Min Value	-0.31	-0.31	-0.39	-0.39	-0.31	-0.47
Max Value	0.45	0.07	-0.01	0.07	-0.08	-0.08
Average	-0.11	-0.18	-0.20	-0.18	-0.17	-0.31
Sigma	0.22	0.14	0.10	0.13	0.08	0.13

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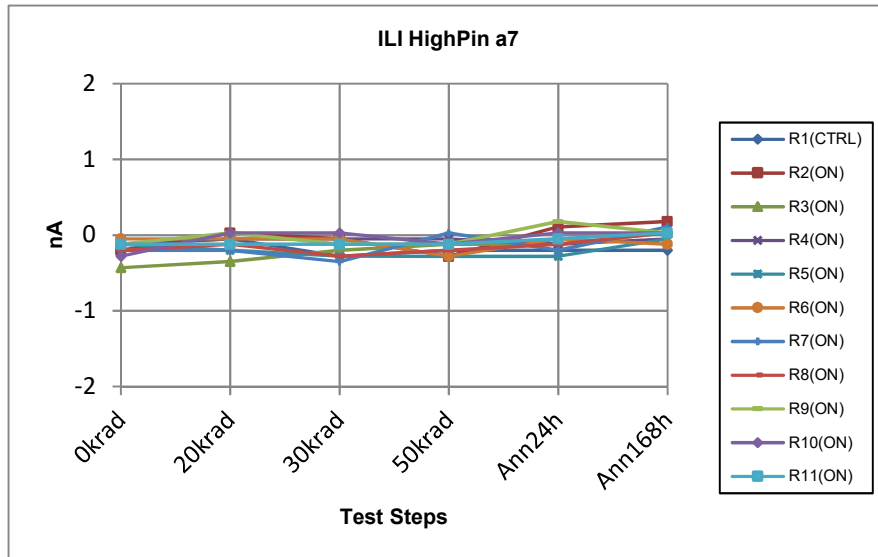
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ILI HighPin a8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.44	-0.59	-0.21	-0.36	-0.51	-0.51
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.36	-0.28	-0.36	-0.36	-0.28	-0.28
R3(ON BIAS HDC)	-0.21	-0.44	-0.51	-0.44	-0.36	-0.21
R4(ON BIAS HDC)	-0.28	-0.51	-0.13	-0.21	-0.13	-0.44
R5(ON BIAS HDC)	-0.28	-0.59	-0.28	-0.36	-0.36	-0.21
R6(ON BIAS HDC)	-0.28	-0.21	-0.36	-0.28	-0.36	-0.28
R7(ON BIAS HDC)	-0.21	-0.13	-0.28	-0.44	-0.21	-0.51
R8(ON BIAS HDC)	-0.13	-0.05	-0.36	-0.51	-0.21	-0.28
R9(ON BIAS HDC)	-0.36	-0.05	-0.28	-0.21	-0.28	-0.36
R10(ON BIAS HDC)	-0.36	-0.21	-0.28	-0.44	-0.51	-0.28
R11(ON BIAS HDC)	-0.21	-0.28	-0.28	-0.13	-0.28	-0.28
Irradiated, ON biased HDC parts statistics						
Min Value	-0.36	-0.59	-0.51	-0.51	-0.51	-0.51
Max Value	-0.13	-0.05	-0.13	-0.13	-0.13	-0.21
Average	-0.27	-0.28	-0.31	-0.34	-0.30	-0.31
Sigma	0.08	0.19	0.10	0.13	0.11	0.10

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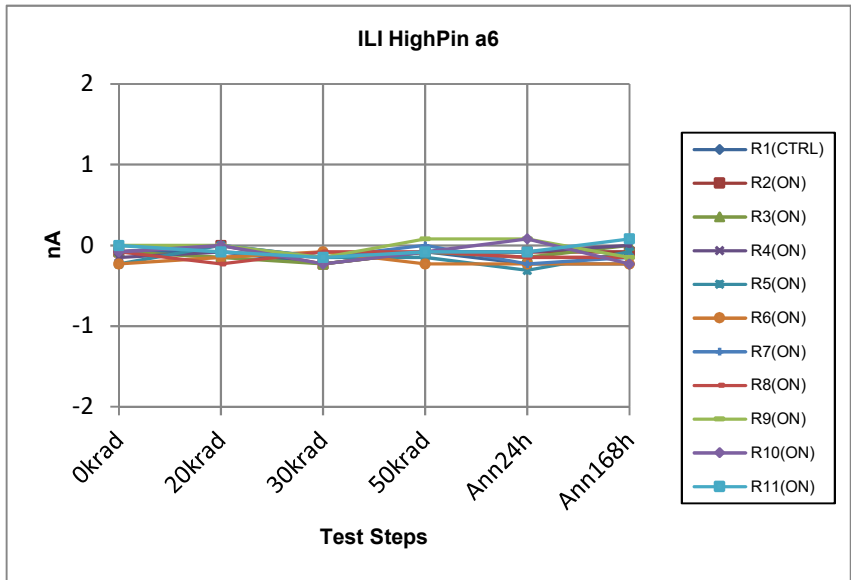
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ILI HighPin a7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.12	-0.05	-0.28	-0.20	-0.20	-0.20
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.20	0.03	-0.05	-0.28	0.11	0.18
R3(ON BIAS HDC)	-0.43	-0.35	-0.20	-0.12	-0.12	0.03
R4(ON BIAS HDC)	-0.12	-0.05	-0.05	-0.05	-0.12	-0.05
R5(ON BIAS HDC)	-0.12	-0.20	-0.28	-0.28	-0.28	-0.05
R6(ON BIAS HDC)	-0.05	-0.05	-0.05	-0.28	-0.05	-0.12
R7(ON BIAS HDC)	-0.20	-0.20	-0.35	0.03	-0.20	0.11
R8(ON BIAS HDC)	-0.20	-0.12	-0.28	-0.20	-0.12	0.03
R9(ON BIAS HDC)	-0.12	0.03	-0.12	-0.12	0.18	0.03
R10(ON BIAS HDC)	-0.28	0.03	0.03	-0.12	0.03	0.03
R11(ON BIAS HDC)	-0.12	-0.12	-0.12	-0.12	-0.05	0.03
Irradiated, ON biased HDC parts statistics						
Min Value	-0.43	-0.35	-0.35	-0.28	-0.28	-0.12
Max Value	-0.05	0.03	0.03	0.03	0.18	0.18
Average	-0.18	-0.10	-0.15	-0.15	-0.06	0.02
Sigma	0.11	0.12	0.12	0.10	0.14	0.08

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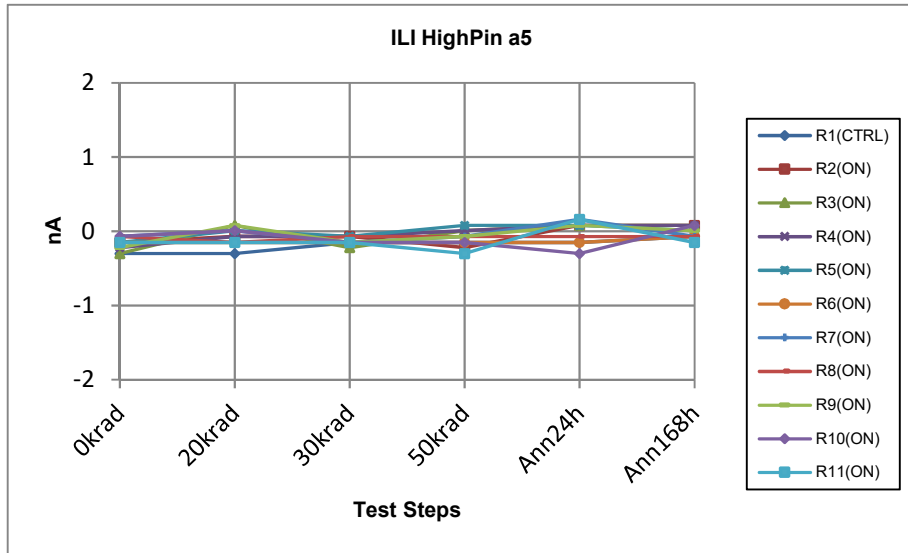
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ILI HighPin a6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.08	-0.08	-0.23	-0.08	-0.23	-0.23
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.08	0.00	-0.23	-0.08	-0.08	-0.08
R3(ON BIAS HDC)	-0.08	-0.15	-0.23	-0.08	-0.15	0.00
R4(ON BIAS HDC)	-0.15	-0.08	-0.15	-0.08	-0.08	0.00
R5(ON BIAS HDC)	-0.23	0.00	-0.15	-0.15	-0.31	-0.08
R6(ON BIAS HDC)	-0.23	-0.15	-0.08	-0.23	-0.23	-0.23
R7(ON BIAS HDC)	-0.08	0.00	-0.15	0.00	-0.23	-0.15
R8(ON BIAS HDC)	-0.08	-0.23	-0.08	-0.08	-0.15	-0.15
R9(ON BIAS HDC)	0.00	0.00	-0.15	0.08	0.08	-0.15
R10(ON BIAS HDC)	-0.08	0.00	-0.23	-0.08	0.08	-0.23
R11(ON BIAS HDC)	0.00	-0.08	-0.15	-0.08	-0.08	0.08
Irradiated, ON biased HDC parts statistics						
Min Value	-0.23	-0.23	-0.23	-0.23	-0.31	-0.23
Max Value	0.00	0.00	-0.08	0.08	0.08	0.08
Average	-0.10	-0.07	-0.16	-0.08	-0.12	-0.10
Sigma	0.08	0.08	0.06	0.08	0.13	0.10

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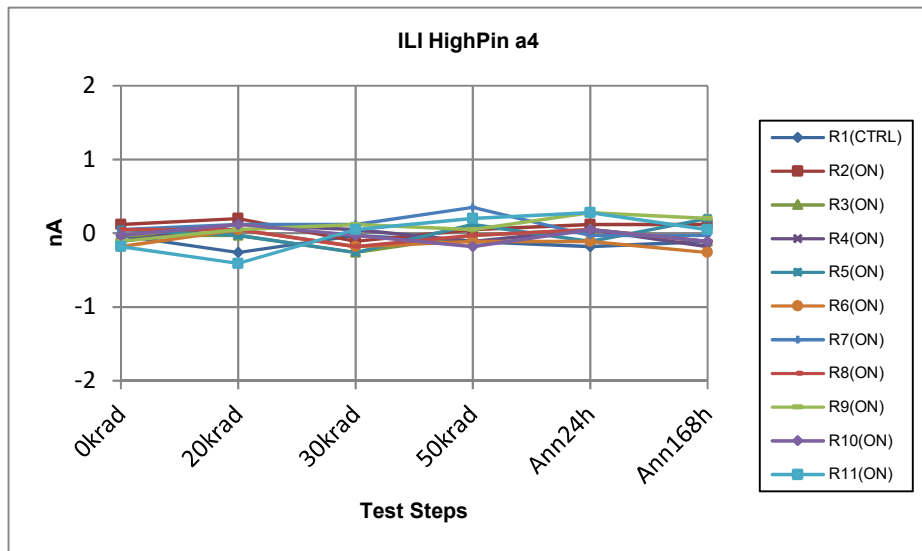
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ILI HighPin a5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.30	-0.30	-0.15	-0.15	-0.15	-0.07
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.15	-0.07	-0.07	-0.22	0.08	0.08
R3(ON BIAS HDC)	-0.30	0.08	-0.22	0.01	0.08	0.08
R4(ON BIAS HDC)	-0.22	-0.07	-0.07	0.01	0.08	0.08
R5(ON BIAS HDC)	-0.15	0.01	-0.07	0.08	0.08	0.01
R6(ON BIAS HDC)	-0.15	-0.15	-0.15	-0.15	-0.15	-0.07
R7(ON BIAS HDC)	-0.07	0.01	-0.15	-0.07	0.16	-0.07
R8(ON BIAS HDC)	-0.07	-0.15	-0.07	-0.07	-0.07	-0.07
R9(ON BIAS HDC)	-0.22	0.08	-0.15	-0.07	0.08	0.01
R10(ON BIAS HDC)	-0.07	0.01	-0.15	-0.15	-0.30	0.08
R11(ON BIAS HDC)	-0.15	-0.15	-0.15	-0.30	0.16	-0.15
Irradiated, ON biased HDC parts statistics						
Min Value	-0.30	-0.15	-0.22	-0.30	-0.30	-0.15
Max Value	-0.07	0.08	-0.07	0.08	0.16	0.08
Average	-0.16	-0.04	-0.13	-0.09	0.02	0.00
Sigma	0.08	0.09	0.05	0.11	0.15	0.08

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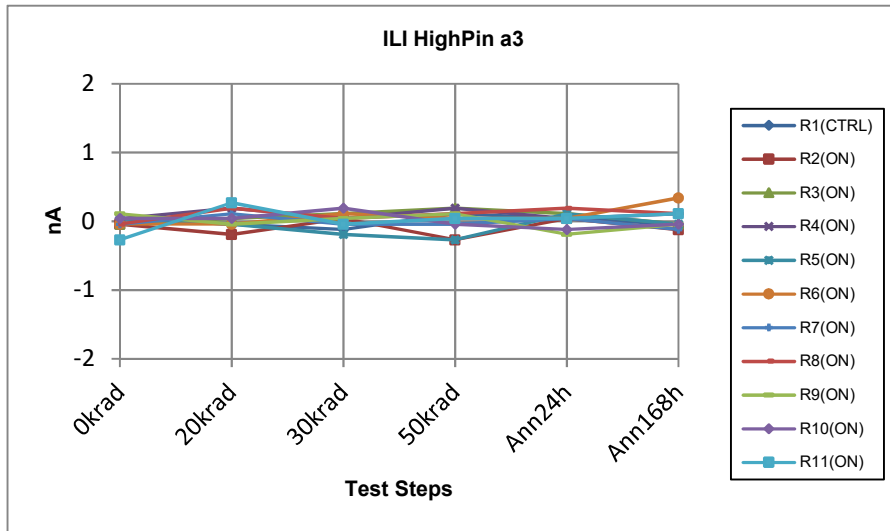
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ILI HighPin a4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.03	-0.26	-0.03	-0.11	-0.18	-0.11
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0.12	0.20	-0.11	0.05	0.12	0.12
R3(ON BIAS HDC)	-0.03	-0.03	-0.26	-0.03	0.05	-0.11
R4(ON BIAS HDC)	-0.11	0.12	0.05	-0.11	0.05	-0.18
R5(ON BIAS HDC)	0.05	-0.03	-0.26	0.12	-0.11	0.20
R6(ON BIAS HDC)	-0.18	0.05	-0.18	-0.11	-0.11	-0.26
R7(ON BIAS HDC)	0.05	0.12	0.12	0.35	-0.03	-0.03
R8(ON BIAS HDC)	0.05	0.05	-0.18	-0.03	0.05	-0.11
R9(ON BIAS HDC)	-0.11	0.05	0.12	0.05	0.28	0.20
R10(ON BIAS HDC)	-0.03	0.12	-0.03	-0.18	0.05	-0.11
R11(ON BIAS HDC)	-0.18	-0.41	0.05	0.20	0.28	0.05
Irradiated, ON biased HDC parts statistics						
Min Value	-0.18	-0.41	-0.26	-0.18	-0.11	-0.26
Max Value	0.12	0.20	0.12	0.35	0.28	0.20
Average	-0.04	0.02	-0.07	0.03	0.06	-0.02
Sigma	0.10	0.17	0.15	0.16	0.14	0.16

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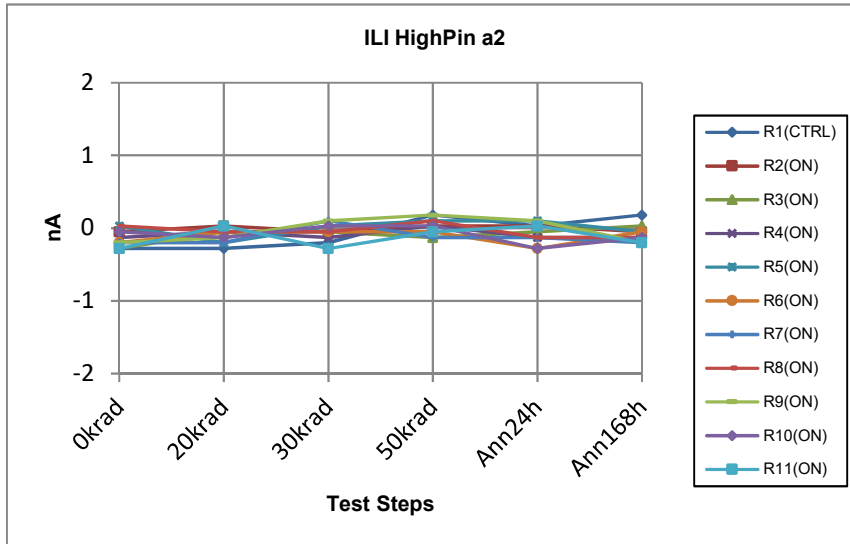
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ILI HighPin a3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	0.04	-0.04	-0.12	0.11	0.04	-0.04
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.04	-0.19	0.04	-0.27	0.04	-0.12
R3(ON BIAS HDC)	-0.04	0.04	0.11	0.19	0.11	-0.04
R4(ON BIAS HDC)	0.04	0.19	0.04	0.19	0.04	0.11
R5(ON BIAS HDC)	0.04	-0.04	-0.19	-0.27	0.11	-0.04
R6(ON BIAS HDC)	-0.04	-0.04	0.11	0.04	0.04	0.34
R7(ON BIAS HDC)	-0.04	0.11	-0.04	-0.04	0.04	-0.12
R8(ON BIAS HDC)	-0.04	0.19	0.04	0.11	0.19	0.11
R9(ON BIAS HDC)	0.11	-0.04	0.04	0.11	-0.19	-0.04
R10(ON BIAS HDC)	0.04	0.04	0.19	-0.04	-0.12	-0.04
R11(ON BIAS HDC)	-0.27	0.27	-0.04	0.04	0.04	0.11
Irradiated, ON biased HDC parts statistics						
Min Value	-0.27	-0.19	-0.19	-0.27	-0.19	-0.12
Max Value	0.11	0.27	0.19	0.19	0.19	0.34
Average	-0.02	0.05	0.03	0.01	0.03	0.03
Sigma	0.10	0.14	0.10	0.17	0.11	0.14

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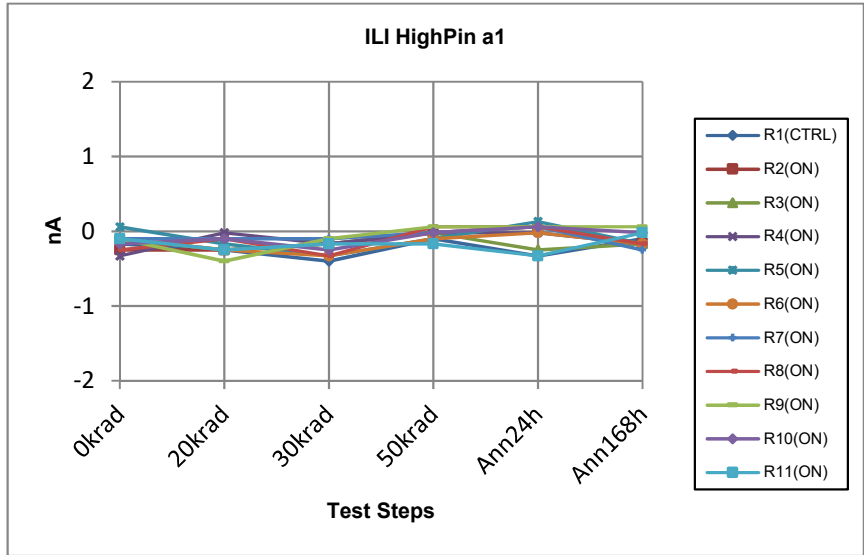
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ILI HighPin a2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.28	-0.28	-0.20	0.18	0.03	0.18
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.05	0.03	-0.05	0.03	0.03	-0.05
R3(ON BIAS HDC)	-0.28	-0.05	-0.05	-0.13	-0.05	0.03
R4(ON BIAS HDC)	-0.13	-0.05	-0.13	0.03	-0.13	-0.13
R5(ON BIAS HDC)	0.03	-0.20	0.03	0.10	0.10	-0.05
R6(ON BIAS HDC)	-0.20	-0.05	-0.05	-0.05	-0.28	-0.05
R7(ON BIAS HDC)	-0.20	-0.20	0.10	-0.13	-0.13	-0.20
R8(ON BIAS HDC)	0.03	-0.05	-0.05	0.10	-0.13	-0.13
R9(ON BIAS HDC)	-0.20	-0.13	0.10	0.18	0.10	-0.20
R10(ON BIAS HDC)	-0.05	-0.13	0.03	0.03	-0.28	-0.13
R11(ON BIAS HDC)	-0.28	0.03	-0.28	-0.05	0.03	-0.20
Irradiated, ON biased HDC parts statistics						
Min Value	-0.28	-0.20	-0.28	-0.13	-0.28	-0.20
Max Value	0.03	0.03	0.10	0.18	0.10	0.03
Average	-0.13	-0.08	-0.04	0.01	-0.07	-0.11
Sigma	0.12	0.08	0.11	0.10	0.14	0.08

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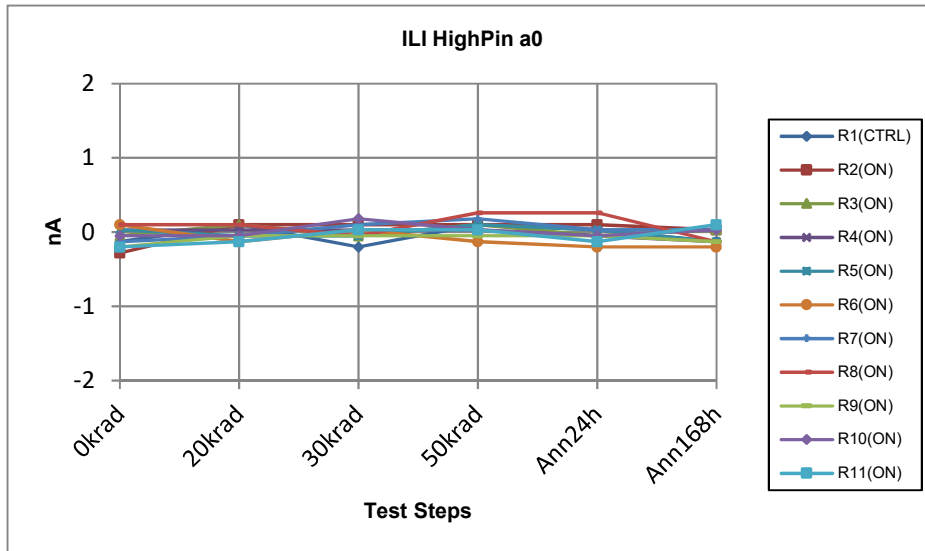
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ILI HighPin a1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.17	-0.25	-0.40	-0.10	-0.33	-0.10
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.25	-0.25	-0.17	-0.02	0.06	-0.17
R3(ON BIAS HDC)	-0.10	-0.25	-0.17	-0.02	-0.25	-0.17
R4(ON BIAS HDC)	-0.33	-0.02	-0.17	-0.02	-0.02	-0.17
R5(ON BIAS HDC)	0.06	-0.17	-0.33	-0.10	0.13	-0.17
R6(ON BIAS HDC)	-0.10	-0.25	-0.33	-0.10	-0.02	-0.17
R7(ON BIAS HDC)	-0.10	-0.10	-0.10	-0.02	0.06	-0.25
R8(ON BIAS HDC)	-0.25	-0.10	-0.33	0.06	0.06	-0.17
R9(ON BIAS HDC)	-0.10	-0.40	-0.10	0.06	0.06	0.06
R10(ON BIAS HDC)	-0.17	-0.10	-0.25	-0.02	0.06	-0.02
R11(ON BIAS HDC)	-0.10	-0.25	-0.17	-0.17	-0.33	-0.02
Irradiated, ON biased HDC parts statistics						
Min Value	-0.33	-0.40	-0.33	-0.17	-0.33	-0.25
Max Value	0.06	-0.02	-0.10	0.06	0.13	0.06
Average	-0.14	-0.19	-0.21	-0.04	-0.02	-0.13
Sigma	0.11	0.11	0.09	0.07	0.15	0.10

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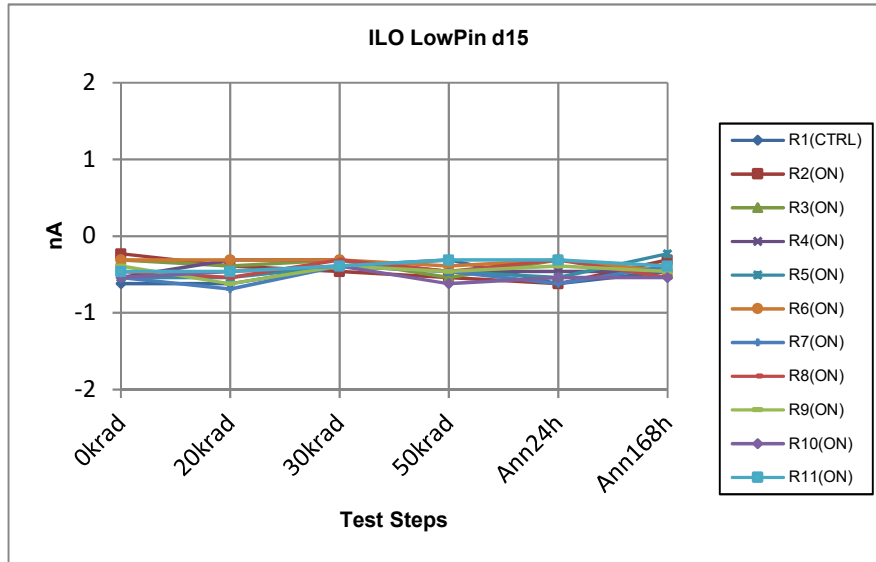
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ILI HighPin a0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.13	0.10	-0.20	0.10	0.03	-0.13
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.28	0.10	0.10	0.10	0.10	0.03
R3(ON BIAS HDC)	-0.05	0.10	-0.05	0.10	-0.05	0.03
R4(ON BIAS HDC)	0.03	0.03	0.03	0.03	-0.05	-0.13
R5(ON BIAS HDC)	0.03	-0.05	-0.05	0.10	0.03	-0.13
R6(ON BIAS HDC)	0.10	-0.13	0.03	-0.13	-0.20	-0.20
R7(ON BIAS HDC)	-0.13	-0.05	0.10	0.18	0.03	0.03
R8(ON BIAS HDC)	0.10	0.10	-0.05	0.26	0.26	-0.13
R9(ON BIAS HDC)	-0.20	-0.05	-0.05	-0.05	-0.05	-0.13
R10(ON BIAS HDC)	-0.05	-0.05	0.18	0.03	-0.05	0.03
R11(ON BIAS HDC)	-0.20	-0.13	0.03	0.03	-0.13	0.10
Irradiated, ON biased HDC parts statistics						
Min Value	-0.28	-0.13	-0.05	-0.13	-0.20	-0.20
Max Value	0.10	0.10	0.18	0.26	0.26	0.10
Average	-0.07	-0.01	0.03	0.07	-0.01	-0.05
Sigma	0.13	0.09	0.08	0.11	0.13	0.10

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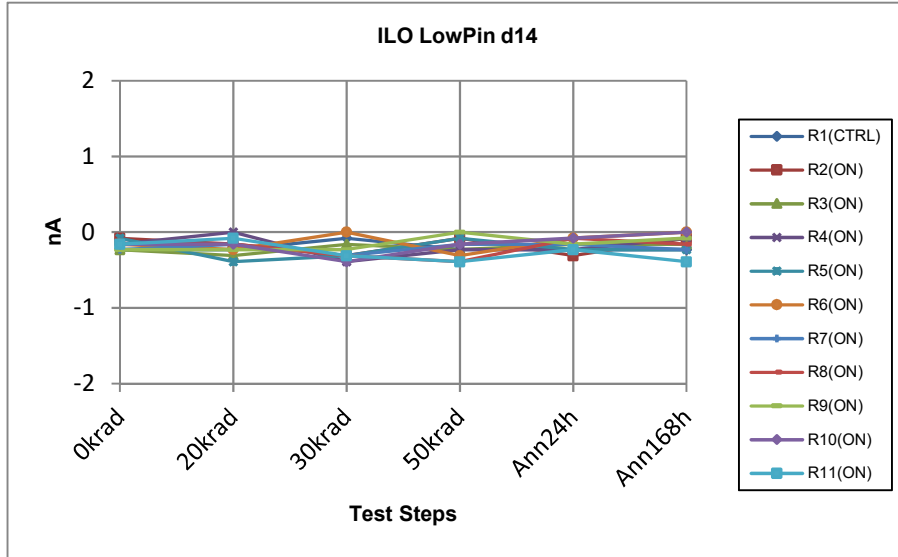
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ILO LowPin d15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.62	-0.62	-0.39	-0.31	-0.62	-0.46
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.23	-0.39	-0.46	-0.54	-0.62	-0.31
R3(ON BIAS HDC)	-0.31	-0.39	-0.31	-0.54	-0.31	-0.46
R4(ON BIAS HDC)	-0.54	-0.31	-0.31	-0.46	-0.46	-0.46
R5(ON BIAS HDC)	-0.54	-0.54	-0.39	-0.46	-0.54	-0.23
R6(ON BIAS HDC)	-0.31	-0.31	-0.31	-0.39	-0.31	-0.46
R7(ON BIAS HDC)	-0.54	-0.69	-0.39	-0.46	-0.62	-0.39
R8(ON BIAS HDC)	-0.46	-0.54	-0.31	-0.46	-0.31	-0.54
R9(ON BIAS HDC)	-0.39	-0.62	-0.39	-0.46	-0.39	-0.46
R10(ON BIAS HDC)	-0.54	-0.46	-0.39	-0.62	-0.54	-0.54
R11(ON BIAS HDC)	-0.46	-0.46	-0.39	-0.31	-0.31	-0.39
Irradiated, ON biased HDC parts statistics						
Min Value	-0.54	-0.69	-0.46	-0.62	-0.62	-0.54
Max Value	-0.23	-0.31	-0.31	-0.31	-0.31	-0.23
Average	-0.43	-0.47	-0.37	-0.47	-0.44	-0.42
Sigma	0.12	0.13	0.05	0.08	0.13	0.10

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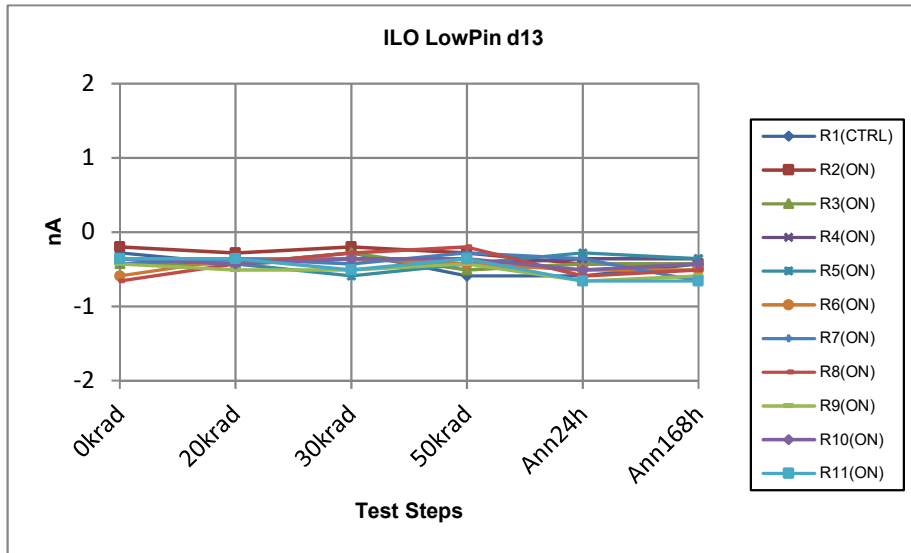
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ILO LowPin d14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.23	-0.23	-0.08	-0.23	-0.23	-0.23
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.08	-0.16	-0.31	-0.08	-0.31	-0.08
R3(ON BIAS HDC)	-0.23	-0.31	-0.16	-0.23	-0.16	-0.16
R4(ON BIAS HDC)	-0.16	0.00	-0.39	-0.23	-0.23	-0.08
R5(ON BIAS HDC)	-0.08	-0.39	-0.31	-0.08	-0.23	-0.23
R6(ON BIAS HDC)	-0.16	-0.23	0.00	-0.31	-0.08	0.00
R7(ON BIAS HDC)	-0.23	-0.16	-0.31	-0.16	-0.16	-0.23
R8(ON BIAS HDC)	-0.16	-0.16	-0.31	-0.39	-0.08	-0.16
R9(ON BIAS HDC)	-0.23	-0.23	-0.23	0.00	-0.16	-0.08
R10(ON BIAS HDC)	-0.16	-0.16	-0.39	-0.16	-0.08	0.00
R11(ON BIAS HDC)	-0.16	-0.08	-0.31	-0.39	-0.23	-0.39
Irradiated, ON biased HDC parts statistics						
Min Value	-0.23	-0.39	-0.39	-0.39	-0.31	-0.39
Max Value	-0.08	0.00	0.00	0.00	-0.08	0.00
Average	-0.17	-0.19	-0.27	-0.20	-0.17	-0.14
Sigma	0.06	0.11	0.12	0.13	0.08	0.12

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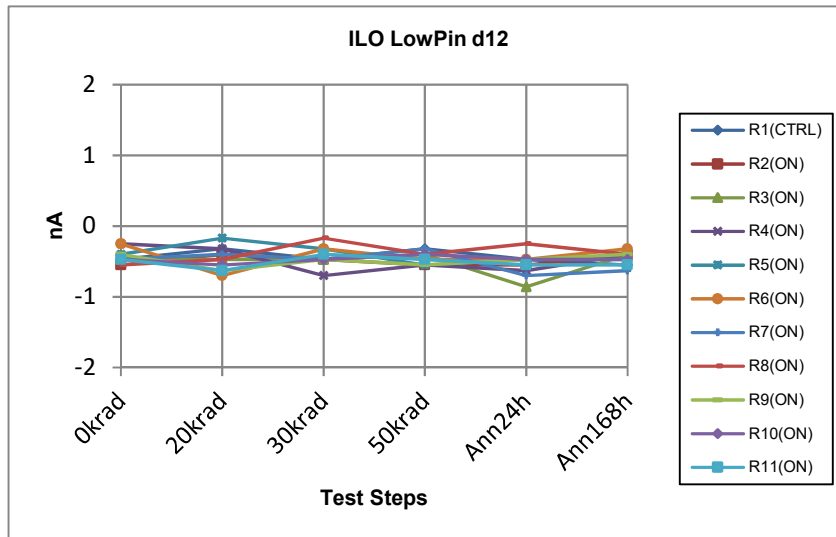
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ILO LowPin d13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.28	-0.43	-0.28	-0.59	-0.59	-0.43
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.20	-0.28	-0.20	-0.28	-0.43	-0.43
R3(ON BIAS HDC)	-0.43	-0.43	-0.28	-0.51	-0.43	-0.43
R4(ON BIAS HDC)	-0.36	-0.43	-0.36	-0.43	-0.36	-0.36
R5(ON BIAS HDC)	-0.36	-0.43	-0.59	-0.43	-0.28	-0.36
R6(ON BIAS HDC)	-0.59	-0.36	-0.36	-0.43	-0.51	-0.51
R7(ON BIAS HDC)	-0.43	-0.36	-0.43	-0.28	-0.36	-0.66
R8(ON BIAS HDC)	-0.66	-0.43	-0.28	-0.20	-0.59	-0.51
R9(ON BIAS HDC)	-0.43	-0.51	-0.51	-0.43	-0.66	-0.59
R10(ON BIAS HDC)	-0.36	-0.43	-0.36	-0.36	-0.51	-0.43
R11(ON BIAS HDC)	-0.36	-0.36	-0.51	-0.36	-0.66	-0.66
Irradiated, ON biased HDC parts statistics						
Min Value	-0.66	-0.51	-0.59	-0.51	-0.66	-0.66
Max Value	-0.20	-0.28	-0.20	-0.20	-0.28	-0.36
Average	-0.42	-0.40	-0.39	-0.37	-0.48	-0.49
Sigma	0.13	0.06	0.12	0.09	0.13	0.11

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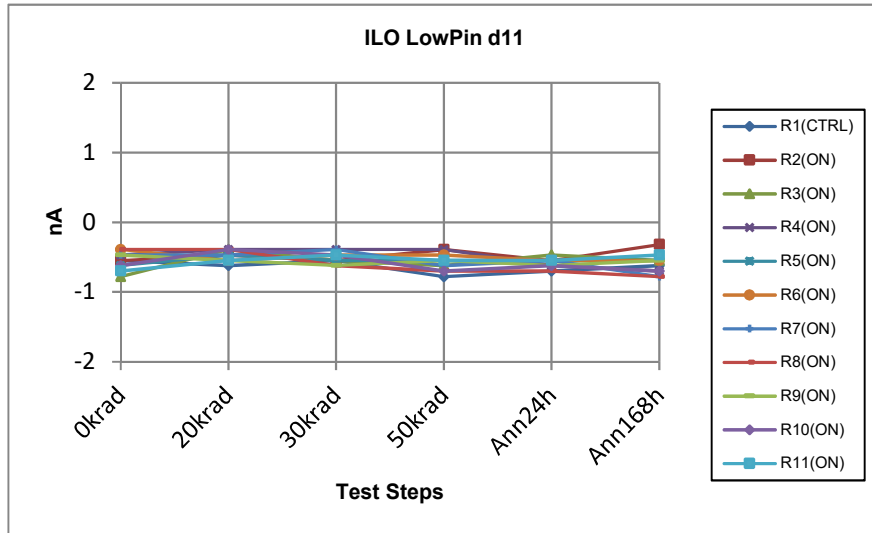
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ILO LowPin d12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.47	-0.32	-0.47	-0.32	-0.47	-0.55
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.55	-0.40	-0.47	-0.55	-0.55	-0.40
R3(ON BIAS HDC)	-0.47	-0.47	-0.47	-0.40	-0.86	-0.40
R4(ON BIAS HDC)	-0.25	-0.32	-0.70	-0.55	-0.63	-0.40
R5(ON BIAS HDC)	-0.40	-0.17	-0.32	-0.55	-0.47	-0.47
R6(ON BIAS HDC)	-0.25	-0.70	-0.32	-0.47	-0.47	-0.32
R7(ON BIAS HDC)	-0.47	-0.40	-0.47	-0.32	-0.70	-0.63
R8(ON BIAS HDC)	-0.55	-0.47	-0.17	-0.40	-0.25	-0.40
R9(ON BIAS HDC)	-0.40	-0.63	-0.47	-0.55	-0.47	-0.40
R10(ON BIAS HDC)	-0.47	-0.55	-0.47	-0.40	-0.47	-0.47
R11(ON BIAS HDC)	-0.47	-0.63	-0.40	-0.47	-0.55	-0.55
Irradiated, ON biased HDC parts statistics						
Min Value	-0.55	-0.70	-0.70	-0.55	-0.86	-0.63
Max Value	-0.25	-0.17	-0.17	-0.32	-0.25	-0.32
Average	-0.43	-0.47	-0.43	-0.47	-0.54	-0.44
Sigma	0.11	0.16	0.14	0.08	0.16	0.09

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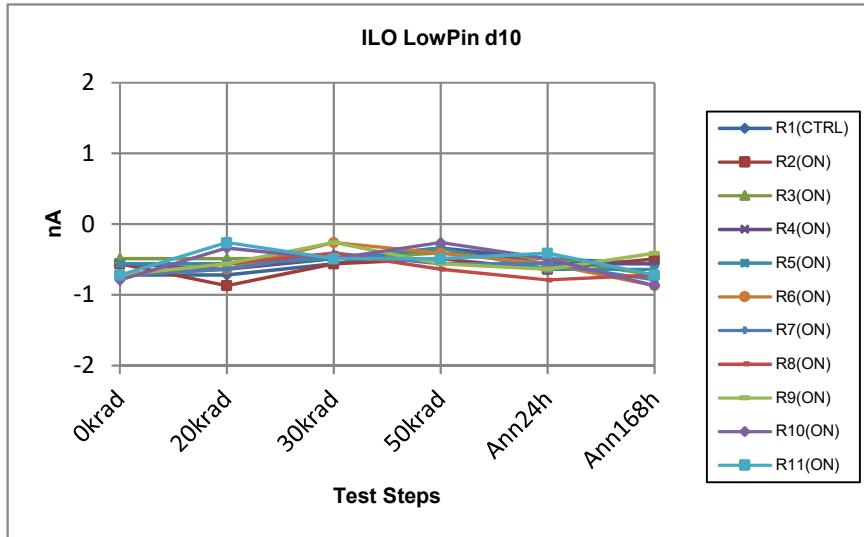
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ILO LowPin d11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.55	-0.62	-0.55	-0.78	-0.70	-0.62
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.55	-0.47	-0.55	-0.39	-0.55	-0.32
R3(ON BIAS HDC)	-0.78	-0.39	-0.55	-0.62	-0.47	-0.55
R4(ON BIAS HDC)	-0.47	-0.39	-0.39	-0.39	-0.62	-0.70
R5(ON BIAS HDC)	-0.62	-0.47	-0.55	-0.55	-0.55	-0.55
R6(ON BIAS HDC)	-0.39	-0.55	-0.47	-0.47	-0.55	-0.55
R7(ON BIAS HDC)	-0.47	-0.47	-0.39	-0.62	-0.55	-0.78
R8(ON BIAS HDC)	-0.39	-0.39	-0.62	-0.70	-0.70	-0.78
R9(ON BIAS HDC)	-0.47	-0.55	-0.62	-0.55	-0.62	-0.55
R10(ON BIAS HDC)	-0.62	-0.39	-0.47	-0.70	-0.62	-0.70
R11(ON BIAS HDC)	-0.70	-0.55	-0.47	-0.55	-0.55	-0.47
Irradiated, ON biased HDC parts statistics						
Min Value	-0.78	-0.55	-0.62	-0.70	-0.70	-0.78
Max Value	-0.39	-0.39	-0.39	-0.39	-0.47	-0.32
Average	-0.55	-0.46	-0.51	-0.55	-0.58	-0.60
Sigma	0.13	0.07	0.08	0.11	0.06	0.15

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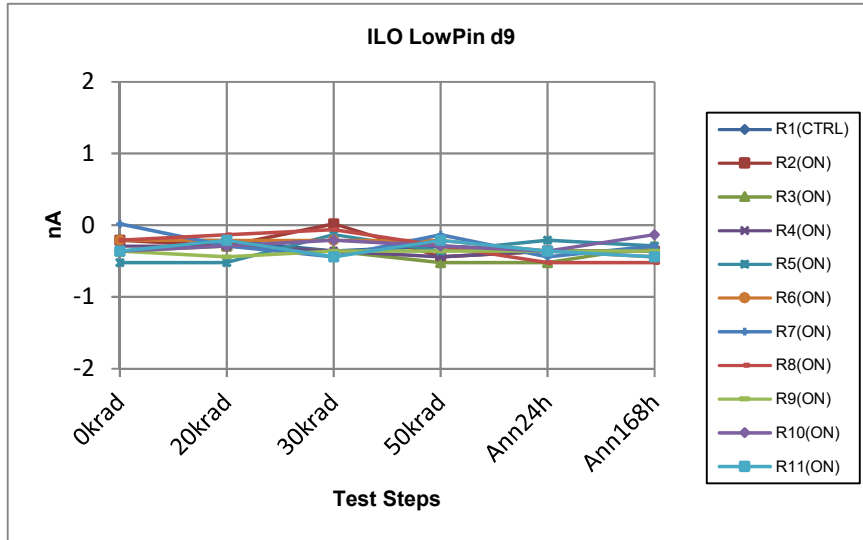
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ILO LowPin d10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.72	-0.72	-0.56	-0.34	-0.49	-0.56
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.56	-0.87	-0.56	-0.49	-0.64	-0.49
R3(ON BIAS HDC)	-0.49	-0.49	-0.49	-0.41	-0.49	-0.72
R4(ON BIAS HDC)	-0.56	-0.64	-0.49	-0.34	-0.56	-0.56
R5(ON BIAS HDC)	-0.56	-0.56	-0.49	-0.34	-0.64	-0.64
R6(ON BIAS HDC)	-0.72	-0.64	-0.26	-0.41	-0.56	-0.87
R7(ON BIAS HDC)	-0.72	-0.64	-0.41	-0.56	-0.56	-0.79
R8(ON BIAS HDC)	-0.72	-0.56	-0.41	-0.64	-0.79	-0.72
R9(ON BIAS HDC)	-0.72	-0.56	-0.26	-0.56	-0.64	-0.41
R10(ON BIAS HDC)	-0.79	-0.34	-0.49	-0.26	-0.49	-0.87
R11(ON BIAS HDC)	-0.72	-0.26	-0.49	-0.49	-0.41	-0.72
Irradiated, ON biased HDC parts statistics						
Min Value	-0.79	-0.87	-0.56	-0.64	-0.79	-0.87
Max Value	-0.49	-0.26	-0.26	-0.26	-0.41	-0.41
Average	-0.66	-0.56	-0.44	-0.45	-0.58	-0.68
Sigma	0.10	0.17	0.10	0.12	0.11	0.15

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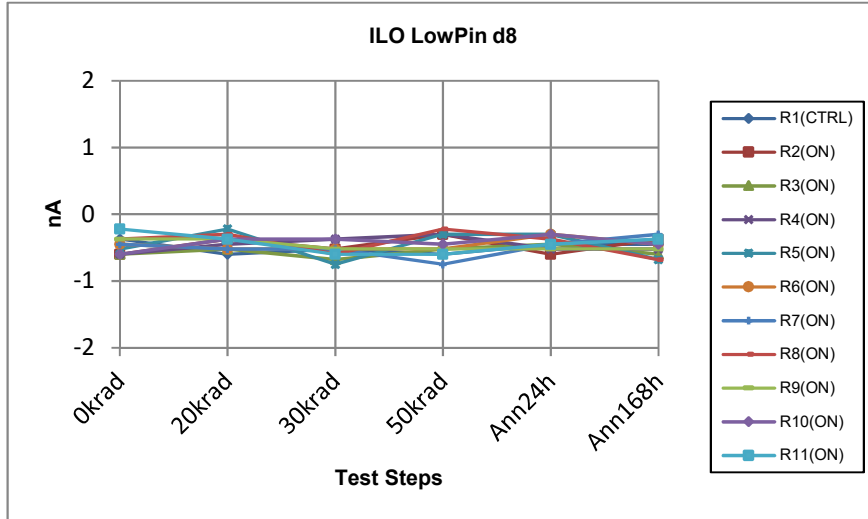
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ILO LowPin d9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.21	-0.21	-0.36	-0.29	-0.36	-0.36
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.21	-0.29	0.02	-0.44	-0.36	-0.36
R3(ON BIAS HDC)	-0.36	-0.29	-0.36	-0.52	-0.52	-0.29
R4(ON BIAS HDC)	-0.29	-0.29	-0.36	-0.44	-0.36	-0.36
R5(ON BIAS HDC)	-0.52	-0.52	-0.13	-0.36	-0.21	-0.29
R6(ON BIAS HDC)	-0.21	-0.21	-0.21	-0.21	-0.36	-0.44
R7(ON BIAS HDC)	0.02	-0.29	-0.44	-0.13	-0.44	-0.29
R8(ON BIAS HDC)	-0.21	-0.13	-0.06	-0.29	-0.52	-0.52
R9(ON BIAS HDC)	-0.36	-0.44	-0.36	-0.36	-0.36	-0.36
R10(ON BIAS HDC)	-0.36	-0.29	-0.21	-0.29	-0.36	-0.13
R11(ON BIAS HDC)	-0.36	-0.21	-0.44	-0.21	-0.36	-0.44
Irradiated, ON biased HDC parts statistics						
Min Value	-0.52	-0.52	-0.44	-0.52	-0.52	-0.52
Max Value	0.02	-0.13	0.02	-0.13	-0.21	-0.13
Average	-0.29	-0.30	-0.26	-0.33	-0.39	-0.35
Sigma	0.14	0.11	0.16	0.12	0.09	0.11

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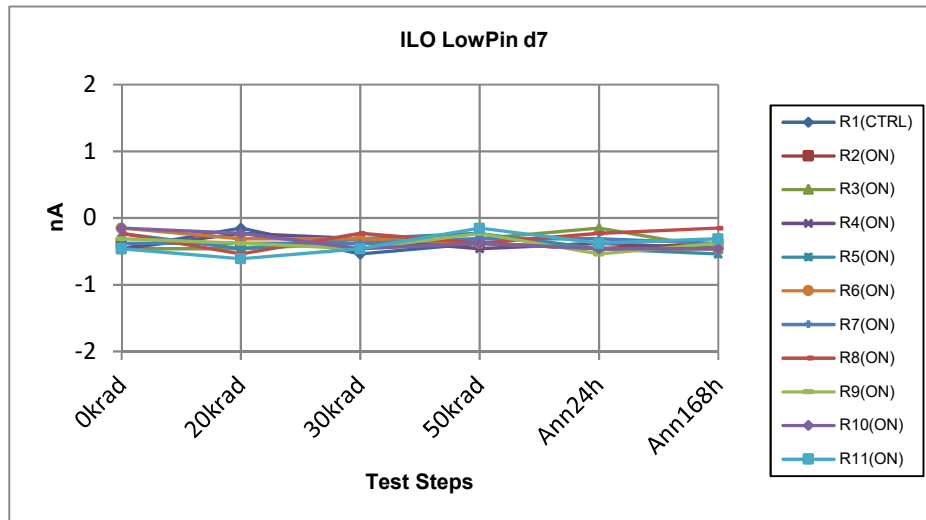
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ILO LowPin d8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.60	-0.52	-0.60	-0.45	-0.45
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.60	-0.37	-0.52	-0.30	-0.60	-0.37
R3(ON BIAS HDC)	-0.60	-0.52	-0.68	-0.52	-0.45	-0.60
R4(ON BIAS HDC)	-0.60	-0.45	-0.37	-0.30	-0.52	-0.52
R5(ON BIAS HDC)	-0.52	-0.22	-0.75	-0.30	-0.30	-0.68
R6(ON BIAS HDC)	-0.45	-0.52	-0.52	-0.52	-0.30	-0.45
R7(ON BIAS HDC)	-0.45	-0.52	-0.52	-0.75	-0.45	-0.30
R8(ON BIAS HDC)	-0.37	-0.30	-0.60	-0.22	-0.37	-0.68
R9(ON BIAS HDC)	-0.37	-0.37	-0.52	-0.52	-0.52	-0.52
R10(ON BIAS HDC)	-0.60	-0.37	-0.37	-0.45	-0.30	-0.45
R11(ON BIAS HDC)	-0.22	-0.37	-0.60	-0.60	-0.45	-0.37
Irradiated, ON biased HDC parts statistics						
Min Value	-0.60	-0.52	-0.75	-0.75	-0.60	-0.68
Max Value	-0.22	-0.22	-0.37	-0.22	-0.30	-0.30
Average	-0.48	-0.40	-0.55	-0.45	-0.43	-0.49
Sigma	0.13	0.10	0.12	0.17	0.11	0.13

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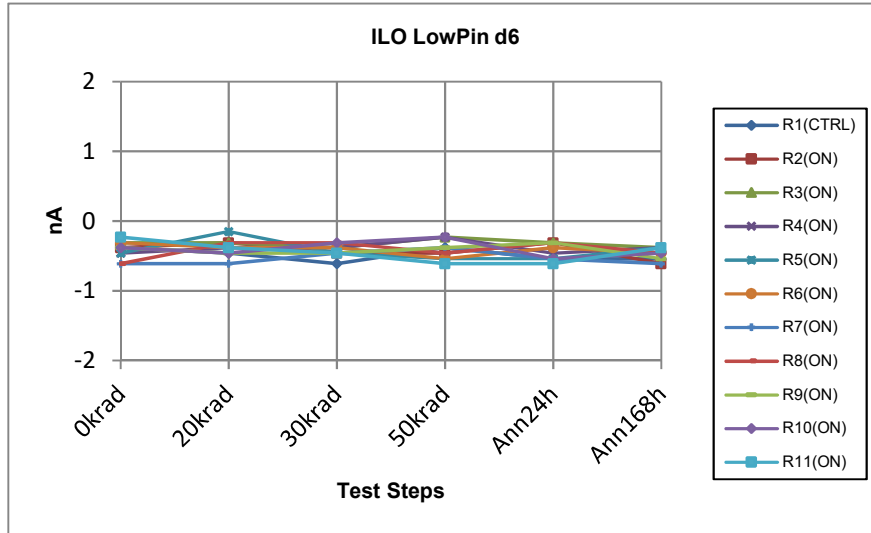
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ILO LowPin d7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.46	-0.15	-0.54	-0.38	-0.46	-0.46
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.38	-0.38	-0.38	-0.38	-0.46	-0.38
R3(ON BIAS HDC)	-0.46	-0.46	-0.38	-0.31	-0.15	-0.46
R4(ON BIAS HDC)	-0.46	-0.23	-0.31	-0.46	-0.38	-0.46
R5(ON BIAS HDC)	-0.23	-0.46	-0.31	-0.23	-0.46	-0.54
R6(ON BIAS HDC)	-0.15	-0.31	-0.31	-0.38	-0.46	-0.46
R7(ON BIAS HDC)	-0.38	-0.38	-0.38	-0.31	-0.31	-0.38
R8(ON BIAS HDC)	-0.23	-0.54	-0.23	-0.38	-0.23	-0.15
R9(ON BIAS HDC)	-0.31	-0.38	-0.46	-0.23	-0.54	-0.38
R10(ON BIAS HDC)	-0.15	-0.23	-0.46	-0.38	-0.46	-0.46
R11(ON BIAS HDC)	-0.46	-0.61	-0.46	-0.15	-0.38	-0.31
Irradiated, ON biased HDC parts statistics						
Min Value	-0.46	-0.61	-0.46	-0.46	-0.54	-0.54
Max Value	-0.15	-0.23	-0.23	-0.15	-0.15	-0.15
Average	-0.32	-0.40	-0.37	-0.32	-0.38	-0.40
Sigma	0.12	0.12	0.08	0.09	0.12	0.11

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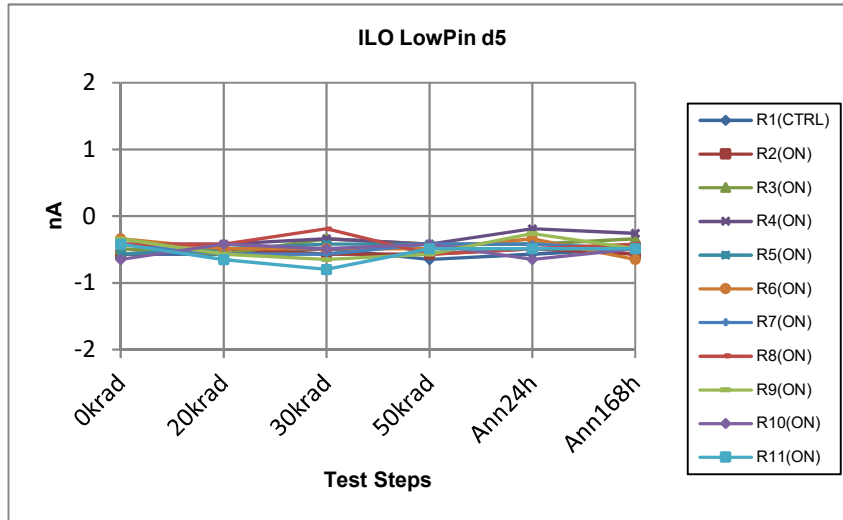
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ILO LowPin d6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.38	-0.46	-0.61	-0.38	-0.54	-0.54
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.38	-0.31	-0.46	-0.46	-0.31	-0.61
R3(ON BIAS HDC)	-0.31	-0.31	-0.38	-0.23	-0.31	-0.38
R4(ON BIAS HDC)	-0.46	-0.38	-0.38	-0.23	-0.46	-0.38
R5(ON BIAS HDC)	-0.46	-0.15	-0.46	-0.54	-0.54	-0.38
R6(ON BIAS HDC)	-0.31	-0.38	-0.38	-0.54	-0.38	-0.46
R7(ON BIAS HDC)	-0.61	-0.61	-0.46	-0.38	-0.54	-0.61
R8(ON BIAS HDC)	-0.61	-0.31	-0.31	-0.46	-0.31	-0.46
R9(ON BIAS HDC)	-0.38	-0.46	-0.46	-0.38	-0.31	-0.54
R10(ON BIAS HDC)	-0.38	-0.46	-0.31	-0.23	-0.54	-0.46
R11(ON BIAS HDC)	-0.23	-0.38	-0.46	-0.61	-0.61	-0.38
Irradiated, ON biased HDC parts statistics						
Min Value	-0.61	-0.61	-0.46	-0.61	-0.61	-0.61
Max Value	-0.23	-0.15	-0.31	-0.23	-0.31	-0.38
Average	-0.41	-0.38	-0.41	-0.41	-0.43	-0.47
Sigma	0.12	0.12	0.06	0.14	0.12	0.09

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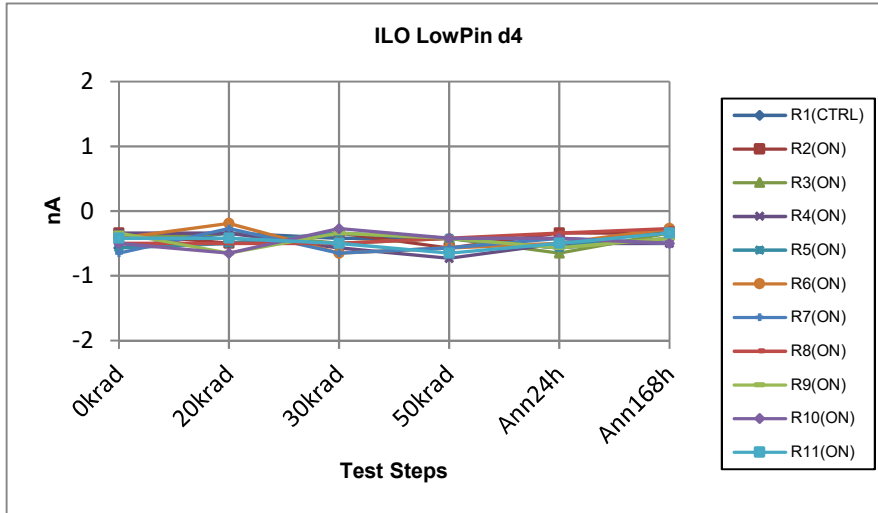
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ILO LowPin d5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.57	-0.49	-0.65	-0.57	-0.49
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.57	-0.49	-0.57	-0.57	-0.49	-0.57
R3(ON BIAS HDC)	-0.49	-0.57	-0.34	-0.42	-0.42	-0.34
R4(ON BIAS HDC)	-0.42	-0.42	-0.34	-0.42	-0.19	-0.26
R5(ON BIAS HDC)	-0.57	-0.49	-0.42	-0.42	-0.42	-0.49
R6(ON BIAS HDC)	-0.34	-0.49	-0.49	-0.49	-0.34	-0.65
R7(ON BIAS HDC)	-0.42	-0.57	-0.57	-0.42	-0.42	-0.49
R8(ON BIAS HDC)	-0.42	-0.42	-0.19	-0.57	-0.49	-0.42
R9(ON BIAS HDC)	-0.34	-0.57	-0.65	-0.57	-0.26	-0.49
R10(ON BIAS HDC)	-0.65	-0.42	-0.49	-0.42	-0.65	-0.49
R11(ON BIAS HDC)	-0.42	-0.65	-0.80	-0.49	-0.49	-0.49
Irradiated, ON biased HDC parts statistics						
Min Value	-0.65	-0.65	-0.80	-0.57	-0.65	-0.65
Max Value	-0.34	-0.42	-0.19	-0.42	-0.19	-0.26
Average	-0.46	-0.51	-0.49	-0.48	-0.42	-0.47
Sigma	0.10	0.08	0.17	0.07	0.13	0.11

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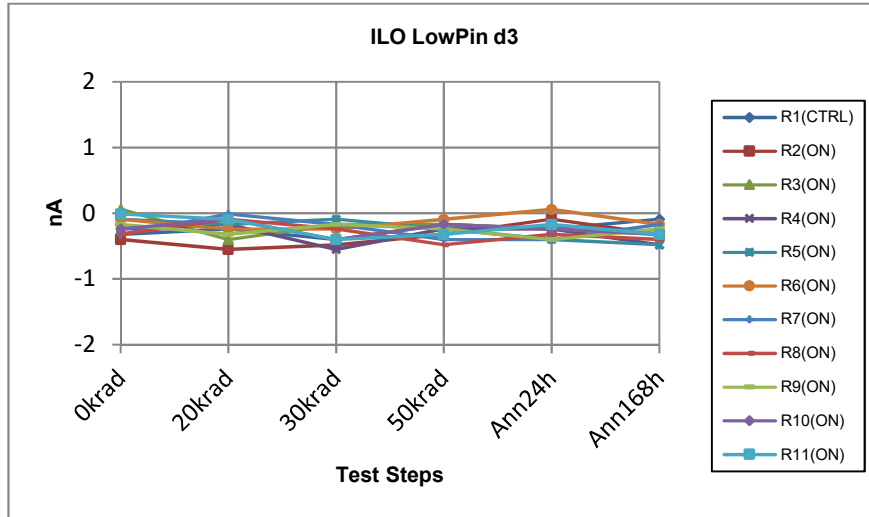
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ILO LowPin d4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.34	-0.42	-0.42	-0.57	-0.42
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.34	-0.50	-0.34	-0.57	-0.34	-0.34
R3(ON BIAS HDC)	-0.42	-0.34	-0.50	-0.42	-0.65	-0.34
R4(ON BIAS HDC)	-0.34	-0.34	-0.57	-0.73	-0.50	-0.50
R5(ON BIAS HDC)	-0.57	-0.50	-0.34	-0.42	-0.57	-0.27
R6(ON BIAS HDC)	-0.42	-0.19	-0.65	-0.57	-0.50	-0.27
R7(ON BIAS HDC)	-0.65	-0.27	-0.65	-0.57	-0.42	-0.50
R8(ON BIAS HDC)	-0.50	-0.50	-0.50	-0.42	-0.34	-0.27
R9(ON BIAS HDC)	-0.34	-0.65	-0.34	-0.42	-0.57	-0.42
R10(ON BIAS HDC)	-0.50	-0.65	-0.27	-0.42	-0.42	-0.50
R11(ON BIAS HDC)	-0.42	-0.42	-0.50	-0.65	-0.50	-0.34
Irradiated, ON biased HDC parts statistics						
Min Value	-0.65	-0.65	-0.65	-0.73	-0.65	-0.50
Max Value	-0.34	-0.19	-0.27	-0.42	-0.34	-0.27
Average	-0.45	-0.44	-0.47	-0.52	-0.48	-0.38
Sigma	0.10	0.15	0.14	0.11	0.10	0.10

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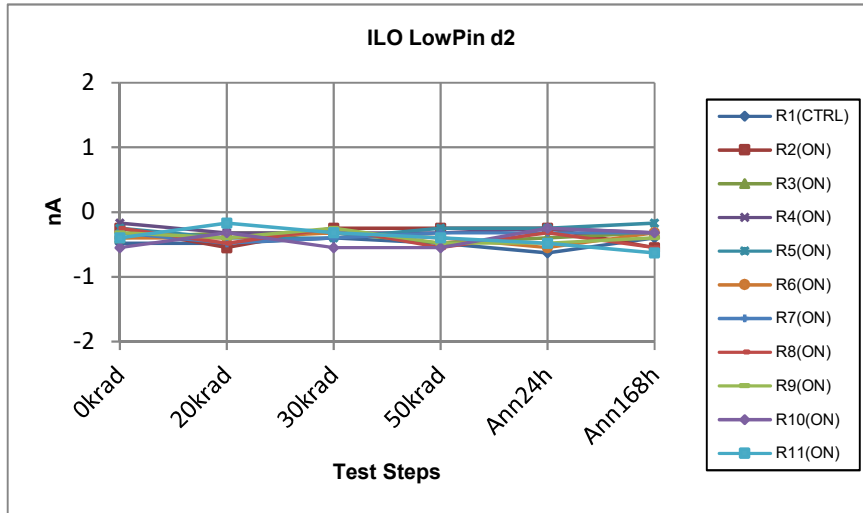
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ILO LowPin d3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.32	-0.24	-0.40	-0.17	-0.24	-0.09
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.40	-0.55	-0.48	-0.32	-0.09	-0.32
R3(ON BIAS HDC)	0.06	-0.40	-0.17	-0.17	-0.24	-0.32
R4(ON BIAS HDC)	-0.24	-0.17	-0.55	-0.24	-0.24	-0.48
R5(ON BIAS HDC)	-0.09	-0.17	-0.09	-0.24	-0.40	-0.48
R6(ON BIAS HDC)	-0.09	-0.24	-0.24	-0.09	0.06	-0.17
R7(ON BIAS HDC)	-0.32	-0.01	-0.17	-0.40	-0.40	-0.17
R8(ON BIAS HDC)	-0.32	-0.09	-0.24	-0.48	-0.32	-0.40
R9(ON BIAS HDC)	-0.17	-0.32	-0.17	-0.24	-0.40	-0.24
R10(ON BIAS HDC)	-0.24	-0.09	-0.40	-0.17	-0.24	-0.32
R11(ON BIAS HDC)	-0.01	-0.09	-0.40	-0.32	-0.17	-0.32
Irradiated, ON biased HDC parts statistics						
Min Value	-0.40	-0.55	-0.55	-0.48	-0.40	-0.48
Max Value	0.06	-0.01	-0.09	-0.09	0.06	-0.17
Average	-0.18	-0.21	-0.29	-0.27	-0.24	-0.32
Sigma	0.15	0.17	0.15	0.12	0.15	0.11

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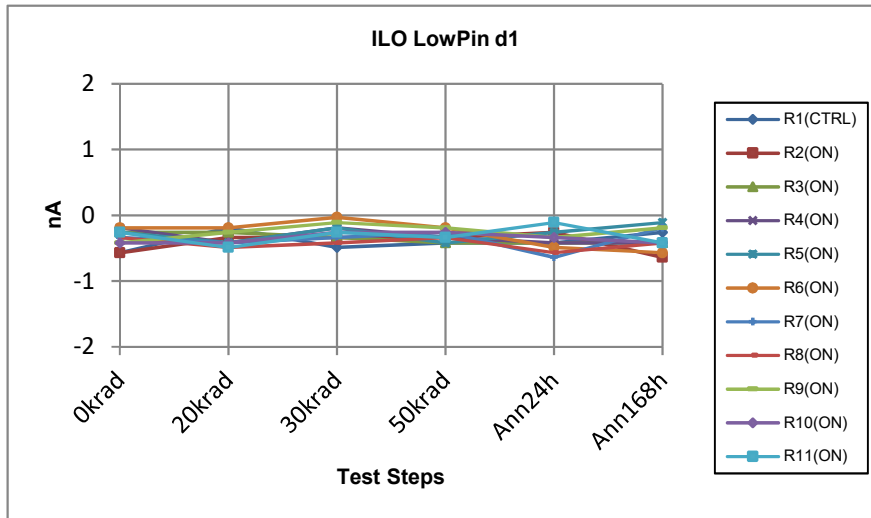
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ILO LowPin d2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.48	-0.48	-0.40	-0.48	-0.63	-0.40
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.25	-0.55	-0.25	-0.25	-0.25	-0.55
R3(ON BIAS HDC)	-0.40	-0.32	-0.32	-0.48	-0.40	-0.32
R4(ON BIAS HDC)	-0.17	-0.32	-0.32	-0.32	-0.25	-0.32
R5(ON BIAS HDC)	-0.25	-0.40	-0.40	-0.25	-0.25	-0.17
R6(ON BIAS HDC)	-0.40	-0.40	-0.32	-0.40	-0.55	-0.32
R7(ON BIAS HDC)	-0.32	-0.48	-0.40	-0.32	-0.32	-0.32
R8(ON BIAS HDC)	-0.25	-0.48	-0.25	-0.55	-0.32	-0.55
R9(ON BIAS HDC)	-0.32	-0.40	-0.25	-0.48	-0.48	-0.40
R10(ON BIAS HDC)	-0.55	-0.32	-0.55	-0.55	-0.25	-0.32
R11(ON BIAS HDC)	-0.40	-0.17	-0.32	-0.40	-0.48	-0.63
Irradiated, ON biased HDC parts statistics						
Min Value	-0.55	-0.55	-0.55	-0.55	-0.55	-0.63
Max Value	-0.17	-0.17	-0.25	-0.25	-0.25	-0.17
Average	-0.33	-0.38	-0.34	-0.40	-0.36	-0.39
Sigma	0.11	0.11	0.09	0.11	0.11	0.14

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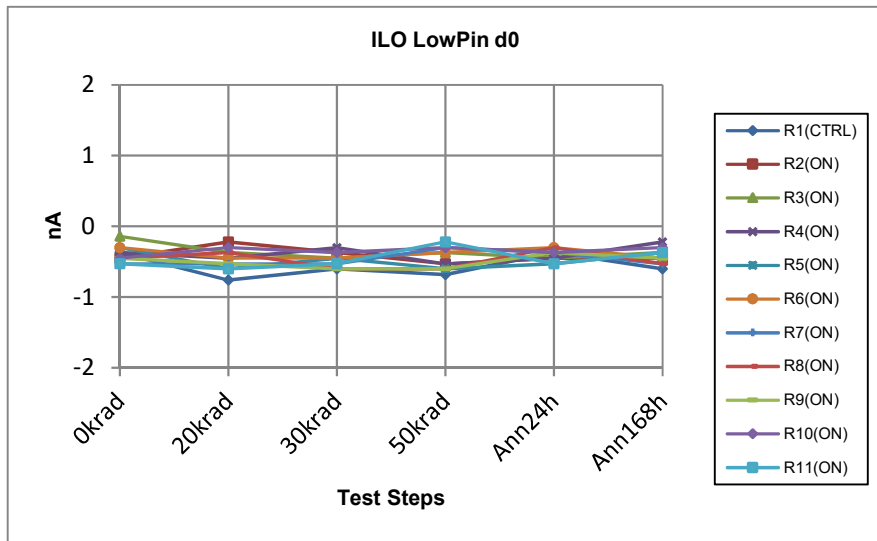
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ILO LowPin d1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.57	-0.19	-0.49	-0.42	-0.42	-0.26
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.57	-0.34	-0.34	-0.34	-0.26	-0.64
R3(ON BIAS HDC)	-0.26	-0.26	-0.34	-0.42	-0.42	-0.42
R4(ON BIAS HDC)	-0.19	-0.42	-0.19	-0.34	-0.42	-0.42
R5(ON BIAS HDC)	-0.26	-0.42	-0.19	-0.42	-0.26	-0.11
R6(ON BIAS HDC)	-0.19	-0.19	-0.03	-0.19	-0.49	-0.57
R7(ON BIAS HDC)	-0.34	-0.42	-0.34	-0.26	-0.64	-0.19
R8(ON BIAS HDC)	-0.34	-0.49	-0.42	-0.34	-0.57	-0.42
R9(ON BIAS HDC)	-0.42	-0.26	-0.11	-0.19	-0.34	-0.19
R10(ON BIAS HDC)	-0.42	-0.42	-0.26	-0.26	-0.34	-0.42
R11(ON BIAS HDC)	-0.26	-0.49	-0.26	-0.34	-0.11	-0.42
Irradiated, ON biased HDC parts statistics						
Min Value	-0.57	-0.49	-0.42	-0.42	-0.64	-0.64
Max Value	-0.19	-0.19	-0.03	-0.19	-0.11	-0.11
Average	-0.33	-0.37	-0.25	-0.31	-0.39	-0.38
Sigma	0.12	0.10	0.12	0.08	0.16	0.17

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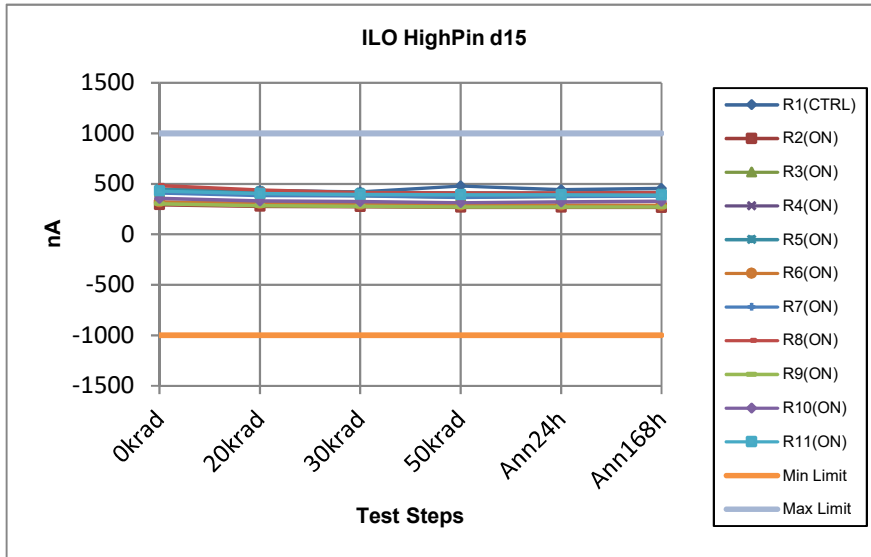
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ILO LowPin d0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	-0.37	-0.76	-0.60	-0.68	-0.37	-0.60
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	-0.45	-0.22	-0.37	-0.53	-0.45	-0.45
R3(ON BIAS HDC)	-0.14	-0.37	-0.45	-0.37	-0.45	-0.37
R4(ON BIAS HDC)	-0.37	-0.45	-0.30	-0.53	-0.45	-0.22
R5(ON BIAS HDC)	-0.30	-0.60	-0.45	-0.60	-0.53	-0.37
R6(ON BIAS HDC)	-0.30	-0.45	-0.45	-0.37	-0.30	-0.45
R7(ON BIAS HDC)	-0.53	-0.53	-0.53	-0.30	-0.37	-0.53
R8(ON BIAS HDC)	-0.45	-0.37	-0.60	-0.60	-0.30	-0.53
R9(ON BIAS HDC)	-0.45	-0.53	-0.60	-0.60	-0.37	-0.45
R10(ON BIAS HDC)	-0.45	-0.30	-0.37	-0.30	-0.37	-0.30
R11(ON BIAS HDC)	-0.53	-0.60	-0.53	-0.22	-0.53	-0.37
Irradiated, ON biased HDC parts statistics						
Min Value	-0.53	-0.60	-0.60	-0.60	-0.53	-0.53
Max Value	-0.14	-0.22	-0.30	-0.22	-0.30	-0.22
Average	-0.40	-0.44	-0.47	-0.44	-0.41	-0.40
Sigma	0.12	0.13	0.10	0.15	0.08	0.10

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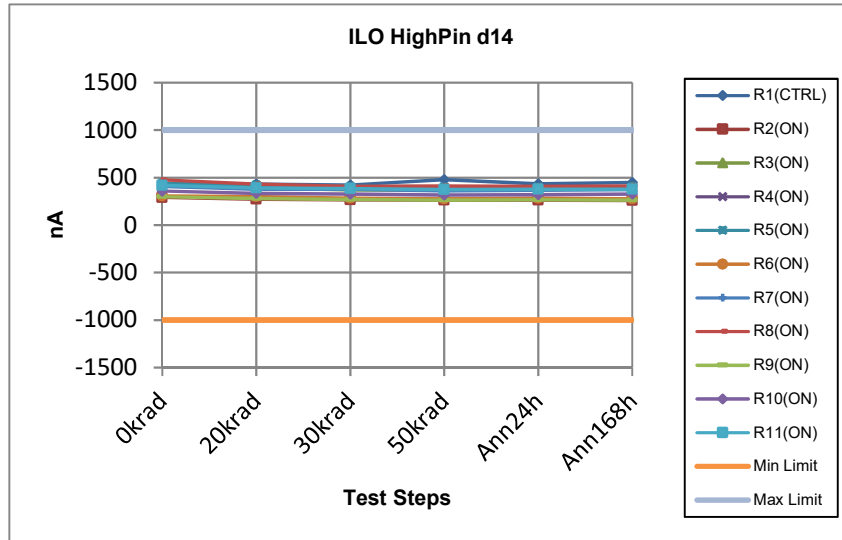
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ILO HighPin d15	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	418.9	430.8	420.6	478.7	440.1	452.7
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	292.1	277.7	272.4	267.2	267.9	264.7
R3(ON BIAS HDC)	414.0	397.9	383.0	368.6	374.8	397.3
R4(ON BIAS HDC)	431.8	412.9	398.6	386.9	391.5	401.5
R5(ON BIAS HDC)	449.5	430.9	416.2	408.1	407.5	412.3
R6(ON BIAS HDC)	321.3	305.4	295.1	289.1	290.1	287.3
R7(ON BIAS HDC)	410.0	383.3	382.1	363.5	374.7	378.7
R8(ON BIAS HDC)	483.0	438.0	414.0	409.1	409.4	411.8
R9(ON BIAS HDC)	301.6	282.7	277.4	269.9	270.6	269.8
R10(ON BIAS HDC)	355.8	330.1	323.7	313.0	319.6	326.4
R11(ON BIAS HDC)	427.7	404.7	394.4	389.2	389.6	387.9
Irradiated, ON biased HDC parts statistics						
Min Value	292.1	277.7	272.4	267.2	267.9	264.7
Max Value	483.0	438.0	416.2	409.1	409.4	412.3
Average	388.7	366.4	355.7	346.5	349.6	353.8
Sigma	66.3	61.6	57.3	56.3	56.7	60.5

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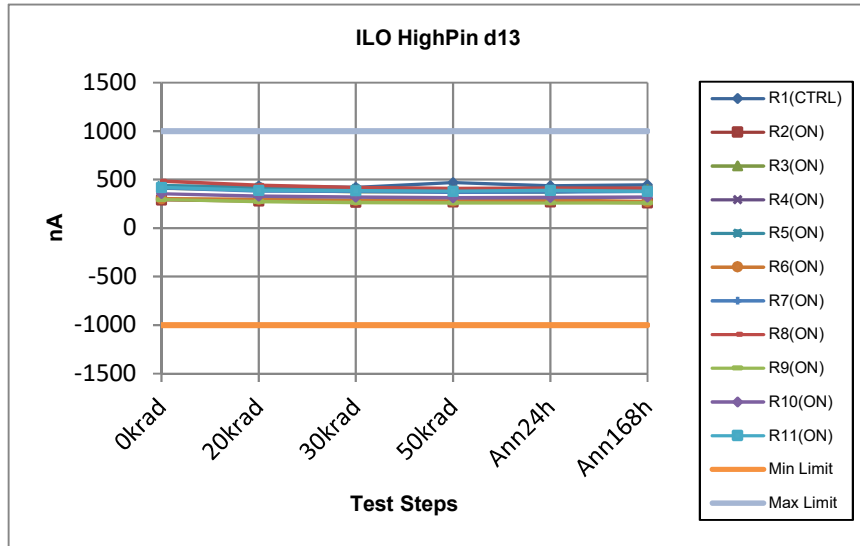
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ILO HighPin d14	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	424.9	431.8	422.7	478.4	435.6	448.2
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	291.1	273.3	265.2	263.3	262.7	259.0
R3(ON BIAS HDC)	410.0	393.4	371.5	366.1	370.1	394.5
R4(ON BIAS HDC)	426.6	405.3	393.2	390.1	386.1	397.0
R5(ON BIAS HDC)	442.5	426.2	407.1	404.7	399.6	403.7
R6(ON BIAS HDC)	306.5	299.3	284.1	277.2	282.8	277.5
R7(ON BIAS HDC)	406.1	378.4	378.0	360.3	365.9	372.5
R8(ON BIAS HDC)	476.8	431.2	409.5	410.6	408.1	411.3
R9(ON BIAS HDC)	298.5	278.5	268.9	263.7	264.8	262.3
R10(ON BIAS HDC)	357.9	332.9	325.3	317.1	318.7	325.7
R11(ON BIAS HDC)	417.2	391.4	383.4	374.5	378.1	376.6
Irradiated, ON biased HDC parts statistics						
Min Value	291.1	273.3	265.2	263.3	262.7	259.0
Max Value	476.8	431.2	409.5	410.6	408.1	411.3
Average	383.3	361.0	348.6	342.8	343.7	348.0
Sigma	65.6	60.1	57.5	57.8	56.3	61.3

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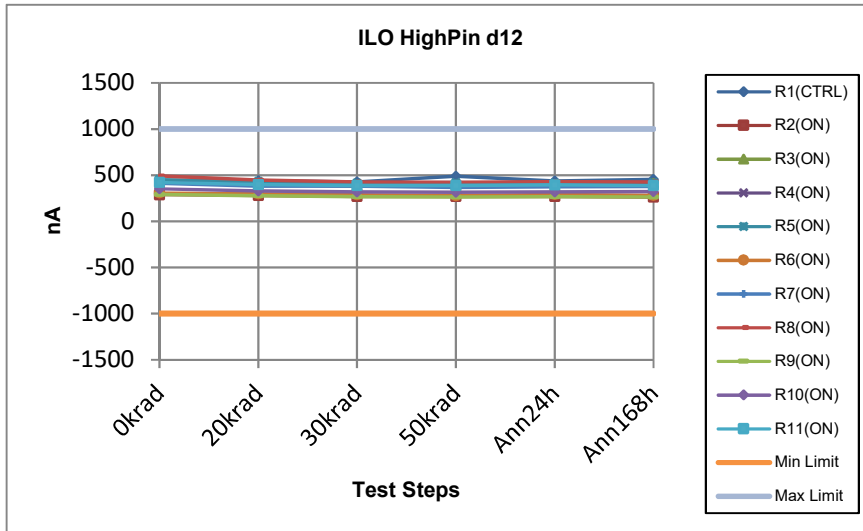
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ILO HighPin d13	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	414.3	430.6	419.5	469.7	434.1	446.7
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	291.1	278.8	265.8	270.9	270.5	261.5
R3(ON BIAS HDC)	410.8	396.6	376.3	376.8	370.8	399.6
R4(ON BIAS HDC)	425.9	407.4	392.6	390.3	387.6	396.9
R5(ON BIAS HDC)	438.3	422.0	409.7	398.2	397.5	402.2
R6(ON BIAS HDC)	304.9	296.2	285.7	279.8	289.4	273.9
R7(ON BIAS HDC)	413.6	382.2	379.9	367.0	373.2	378.6
R8(ON BIAS HDC)	484.5	440.6	419.5	411.1	413.2	412.2
R9(ON BIAS HDC)	294.0	272.3	263.9	260.7	259.4	260.0
R10(ON BIAS HDC)	354.6	329.0	320.1	313.0	315.4	319.5
R11(ON BIAS HDC)	420.4	389.2	384.8	380.4	387.7	380.7
Irradiated, ON biased HDC parts statistics						
Min Value	291.1	272.3	263.9	260.7	259.4	260.0
Max Value	484.5	440.6	419.5	411.1	413.2	412.2
Average	383.8	361.4	349.8	344.8	346.5	348.5
Sigma	68.0	62.0	60.1	57.6	57.1	62.9

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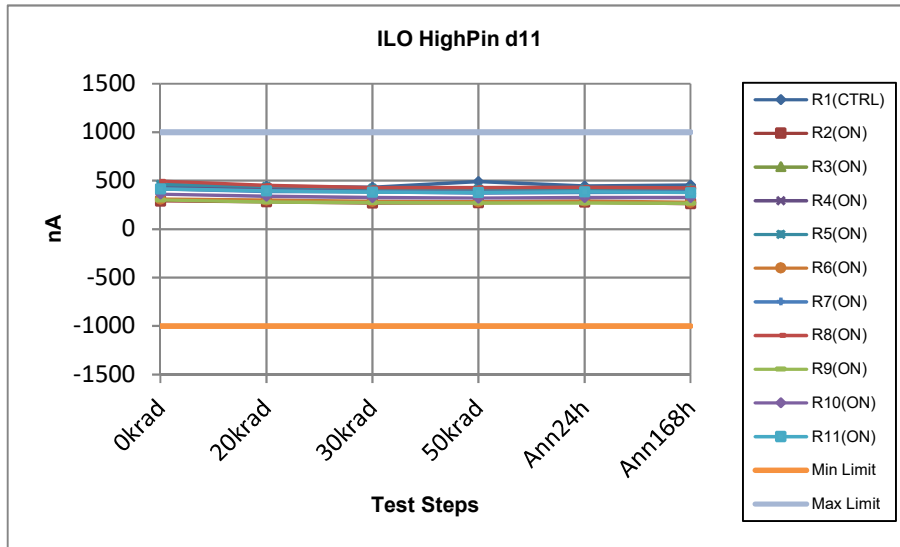
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ILO HighPin d12	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	428.2	438.6	426.7	488.3	436.7	455.0
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	288.6	280.5	270.4	270.6	271.4	263.1
R3(ON BIAS HDC)	416.7	402.5	381.9	380.6	381.5	411.2
R4(ON BIAS HDC)	429.5	410.9	398.0	397.3	396.9	407.7
R5(ON BIAS HDC)	452.7	433.5	414.8	418.1	414.6	417.8
R6(ON BIAS HDC)	306.9	297.9	287.6	278.4	289.2	280.8
R7(ON BIAS HDC)	409.5	382.1	382.2	364.8	373.1	378.0
R8(ON BIAS HDC)	491.9	448.4	426.1	423.9	431.2	424.8
R9(ON BIAS HDC)	290.5	278.3	268.0	262.4	266.2	262.9
R10(ON BIAS HDC)	352.2	328.4	319.3	314.8	318.2	323.0
R11(ON BIAS HDC)	420.9	398.5	389.5	388.6	393.3	387.0
Irradiated, ON biased HDC parts statistics						
Min Value	288.6	278.3	268.0	262.4	266.2	262.9
Max Value	491.9	448.4	426.1	423.9	431.2	424.8
Average	385.9	366.1	353.8	350.0	353.6	355.6
Sigma	71.7	64.2	61.1	62.6	61.6	66.5

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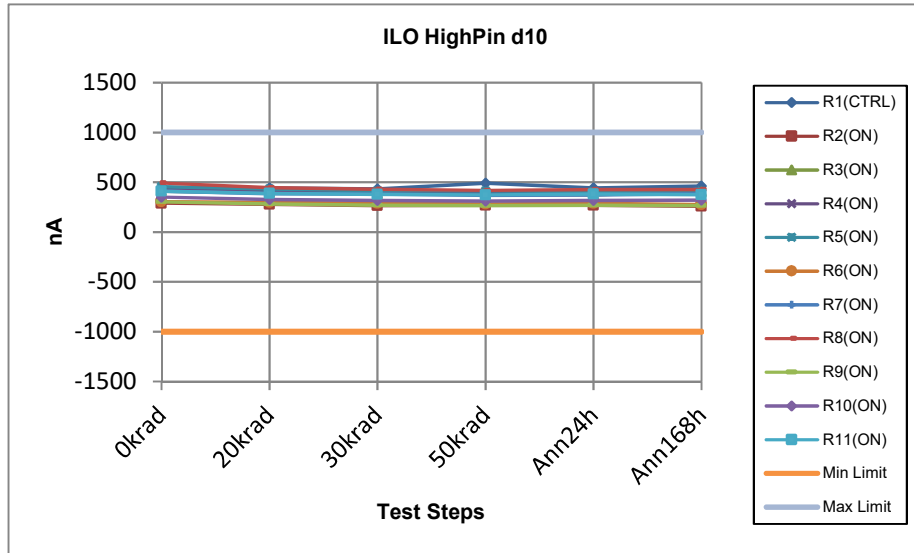
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ILO HighPin d11	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	426.1	439.5	430.1	490.3	445.3	455.3
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	290.3	281.5	269.2	273.3	277.8	262.5
R3(ON BIAS HDC)	414.6	401.7	383.7	381.1	384.8	408.3
R4(ON BIAS HDC)	430.6	414.8	401.1	401.9	395.6	405.2
R5(ON BIAS HDC)	460.2	442.7	419.7	418.4	418.0	415.0
R6(ON BIAS HDC)	308.5	299.6	285.6	281.4	289.0	275.7
R7(ON BIAS HDC)	412.5	389.7	383.7	369.5	377.0	382.1
R8(ON BIAS HDC)	495.0	450.4	428.1	427.2	432.2	424.0
R9(ON BIAS HDC)	300.1	280.0	271.1	268.7	270.3	266.6
R10(ON BIAS HDC)	360.6	339.8	326.9	320.0	325.3	326.3
R11(ON BIAS HDC)	414.6	394.8	382.0	377.4	386.3	376.4
Irradiated, ON biased HDC parts statistics						
Min Value	290.3	280.0	269.2	268.7	270.3	262.5
Max Value	495.0	450.4	428.1	427.2	432.2	424.0
Average	388.7	369.5	355.1	351.9	355.6	354.2
Sigma	70.6	64.6	61.5	61.0	59.9	65.3

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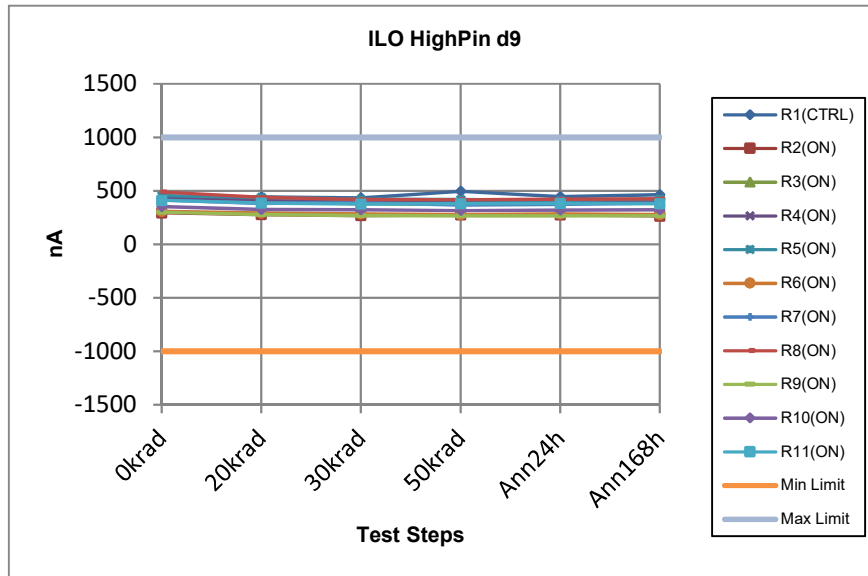
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ILO HighPin d10	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	432.9	443.4	433.9	491.3	442.4	462.1
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	290.1	277.5	266.1	270.6	270.5	259.1
R3(ON BIAS HDC)	411.0	397.0	381.4	377.9	373.4	400.4
R4(ON BIAS HDC)	434.6	414.9	403.6	398.6	399.7	408.6
R5(ON BIAS HDC)	456.3	433.7	415.6	414.7	407.0	409.6
R6(ON BIAS HDC)	305.4	298.4	289.0	280.9	288.8	276.1
R7(ON BIAS HDC)	410.1	384.7	383.0	368.2	372.9	384.2
R8(ON BIAS HDC)	493.6	447.5	428.8	417.9	425.6	425.6
R9(ON BIAS HDC)	303.3	281.9	270.6	267.0	270.2	265.7
R10(ON BIAS HDC)	350.8	327.3	317.7	310.7	317.5	320.5
R11(ON BIAS HDC)	410.5	389.0	377.4	373.8	383.0	374.8
Irradiated, ON biased HDC parts statistics						
Min Value	290.1	277.5	266.1	267.0	270.2	259.1
Max Value	493.6	447.5	428.8	417.9	425.6	425.6
Average	386.6	365.2	353.3	348.0	350.8	352.5
Sigma	70.3	63.6	61.7	59.9	58.8	65.5

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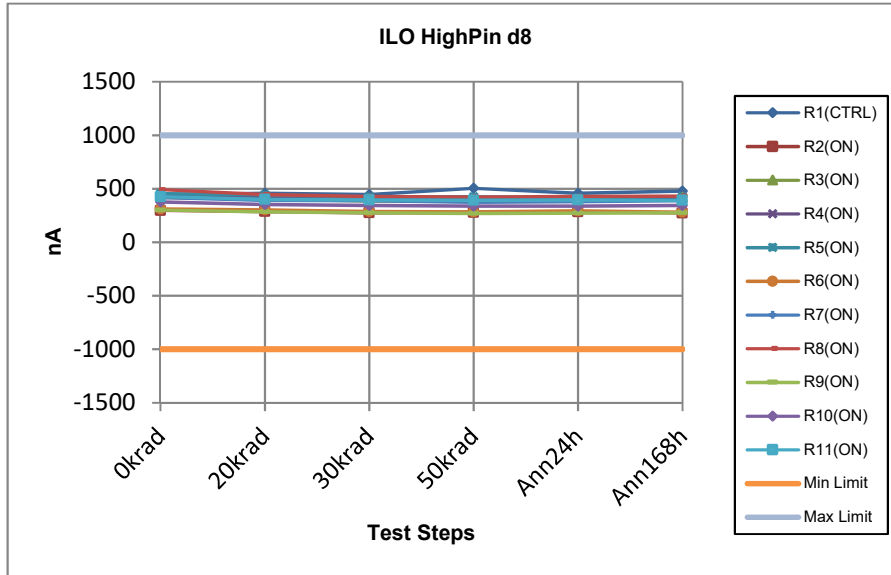
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ILO HighPin d9	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	430.1	443.2	433.0	495.5	444.7	461.9
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	293.6	278.5	268.3	274.1	274.1	264.2
R3(ON BIAS HDC)	418.1	400.0	380.5	373.7	380.9	409.1
R4(ON BIAS HDC)	428.9	409.8	392.4	394.9	396.7	405.6
R5(ON BIAS HDC)	455.1	439.2	420.9	417.7	411.0	424.2
R6(ON BIAS HDC)	307.5	294.0	283.4	278.2	285.1	278.8
R7(ON BIAS HDC)	414.3	383.1	387.5	367.8	374.7	386.4
R8(ON BIAS HDC)	489.4	440.5	419.4	417.2	422.1	423.9
R9(ON BIAS HDC)	299.7	278.3	268.7	266.6	266.8	266.4
R10(ON BIAS HDC)	352.2	327.2	322.1	315.9	318.2	323.0
R11(ON BIAS HDC)	410.6	384.4	376.3	378.4	382.8	380.5
Irradiated, ON biased HDC parts statistics						
Min Value	293.6	278.3	268.3	266.6	266.8	264.2
Max Value	489.4	440.5	420.9	417.7	422.1	424.2
Average	386.9	363.5	351.9	348.4	351.2	356.2
Sigma	69.1	63.8	60.7	59.5	59.3	66.3

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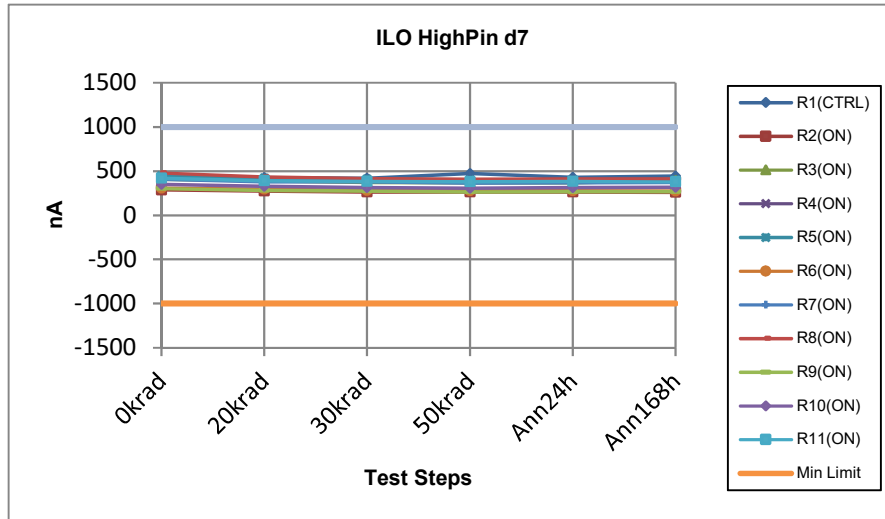
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ILO HighPin d8	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	442.8	458.9	447.3	505.1	457.8	478.2
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	297.9	287.5	275.9	279.1	284.8	273.8
R3(ON BIAS HDC)	419.0	405.2	385.6	382.8	386.8	418.2
R4(ON BIAS HDC)	441.3	426.1	408.2	410.9	405.9	421.4
R5(ON BIAS HDC)	455.5	442.2	425.8	424.6	417.7	425.0
R6(ON BIAS HDC)	310.8	301.1	288.9	284.3	292.4	281.4
R7(ON BIAS HDC)	418.7	393.5	389.3	373.6	381.4	389.5
R8(ON BIAS HDC)	492.5	446.7	429.2	424.0	426.9	432.0
R9(ON BIAS HDC)	300.9	284.9	276.1	270.0	271.5	274.7
R10(ON BIAS HDC)	377.3	353.0	344.9	337.9	339.1	344.4
R11(ON BIAS HDC)	426.2	400.5	394.6	391.3	395.2	391.0
Irradiated, ON biased HDC parts statistics						
Min Value	297.9	284.9	275.9	270.0	271.5	273.8
Max Value	492.5	446.7	429.2	424.6	426.9	432.0
Average	394.0	374.1	361.8	357.8	360.2	365.1
Sigma	69.2	63.1	61.0	60.9	58.5	66.1

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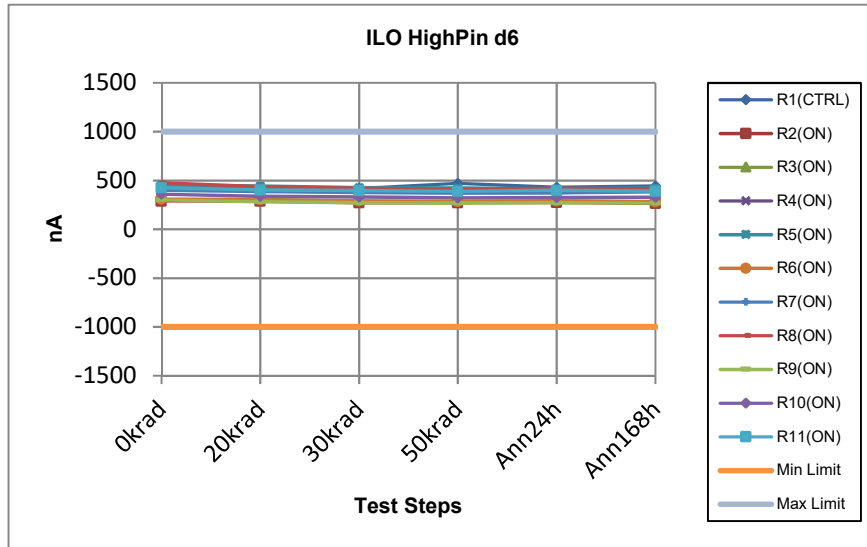
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ILO HighPin d7	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	415.1	427.3	418.8	474.0	429.5	444.5
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	286.6	274.2	264.3	263.9	264.6	258.3
R3(ON BIAS HDC)	406.3	389.0	370.5	367.6	365.6	394.0
R4(ON BIAS HDC)	422.7	401.2	388.5	388.7	379.1	393.2
R5(ON BIAS HDC)	448.3	422.1	411.3	401.7	398.5	402.4
R6(ON BIAS HDC)	306.9	294.3	282.3	278.1	277.1	275.5
R7(ON BIAS HDC)	407.9	378.1	378.4	363.8	366.7	373.4
R8(ON BIAS HDC)	479.2	435.2	414.2	409.1	411.4	413.0
R9(ON BIAS HDC)	301.3	282.1	273.2	263.2	266.4	265.9
R10(ON BIAS HDC)	349.3	326.8	315.2	306.1	312.5	316.3
R11(ON BIAS HDC)	418.9	390.8	382.1	378.4	383.9	378.0
Irradiated, ON biased HDC parts statistics						
Min Value	286.6	274.2	264.3	263.2	264.6	258.3
Max Value	479.2	435.2	414.2	409.1	411.4	413.0
Average	382.7	359.4	348.0	342.1	342.6	347.0
Sigma	67.0	59.8	58.3	58.1	56.9	61.4

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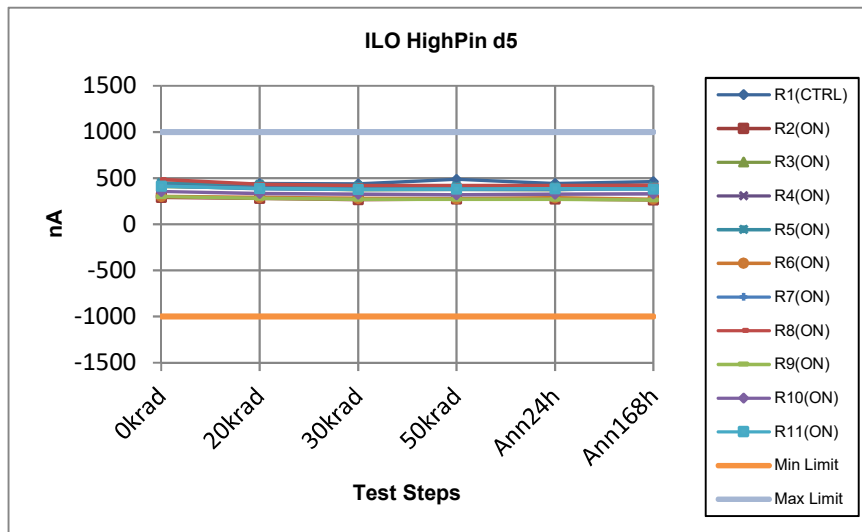
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ILO HighPin d6	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	420.5	428.7	418.6	470.3	429.9	444.4
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	290.0	287.8	271.7	273.5	276.9	266.2
R3(ON BIAS HDC)	408.2	396.7	382.2	375.4	375.6	406.0
R4(ON BIAS HDC)	424.7	416.7	402.0	396.4	393.7	408.4
R5(ON BIAS HDC)	454.1	442.8	427.0	423.1	414.5	422.1
R6(ON BIAS HDC)	309.5	303.9	292.4	285.6	293.0	282.8
R7(ON BIAS HDC)	400.6	387.7	376.3	369.6	375.0	382.9
R8(ON BIAS HDC)	475.6	436.2	419.4	410.4	419.3	414.8
R9(ON BIAS HDC)	300.5	280.6	273.3	269.1	272.1	267.6
R10(ON BIAS HDC)	359.8	338.1	331.0	321.7	324.6	328.6
R11(ON BIAS HDC)	426.6	404.0	397.0	389.2	399.0	389.4
Irradiated, ON biased HDC parts statistics						
Min Value	290.0	280.6	271.7	269.1	272.1	266.2
Max Value	475.6	442.8	427.0	423.1	419.3	422.1
Average	385.0	369.5	357.2	351.4	354.4	356.9
Sigma	66.3	61.6	60.2	58.7	57.4	64.0

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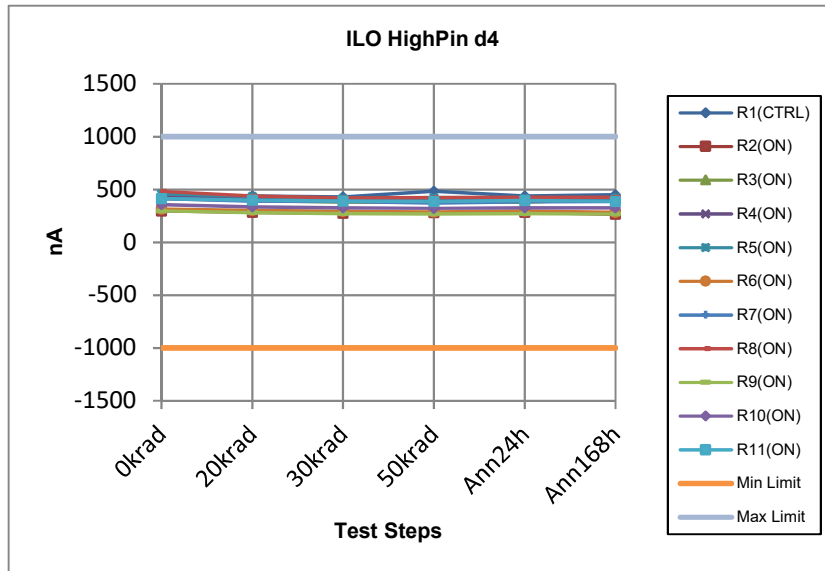
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ILO HighPin d5	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	425.5	439.5	435.8	486.8	442.4	462.1
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	292.0	282.5	267.9	274.8	273.5	262.3
R3(ON BIAS HDC)	407.7	391.8	375.0	379.2	373.2	399.9
R4(ON BIAS HDC)	437.8	409.6	395.4	402.4	398.8	407.2
R5(ON BIAS HDC)	449.9	434.8	416.8	415.7	411.9	418.0
R6(ON BIAS HDC)	302.5	292.3	282.5	278.1	289.0	273.2
R7(ON BIAS HDC)	414.7	386.0	379.9	376.6	377.3	385.6
R8(ON BIAS HDC)	485.4	432.6	421.4	419.6	421.3	421.9
R9(ON BIAS HDC)	300.0	279.7	272.3	270.4	270.9	263.5
R10(ON BIAS HDC)	355.3	333.2	325.5	319.9	326.4	329.3
R11(ON BIAS HDC)	412.3	387.4	378.6	383.0	384.5	381.8
Irradiated, ON biased HDC parts statistics						
Min Value	292.0	279.7	267.9	270.4	270.9	262.3
Max Value	485.4	434.8	421.4	419.6	421.3	421.9
Average	385.8	363.0	351.5	352.0	352.7	354.3
Sigma	68.9	60.9	59.5	60.2	57.8	65.9

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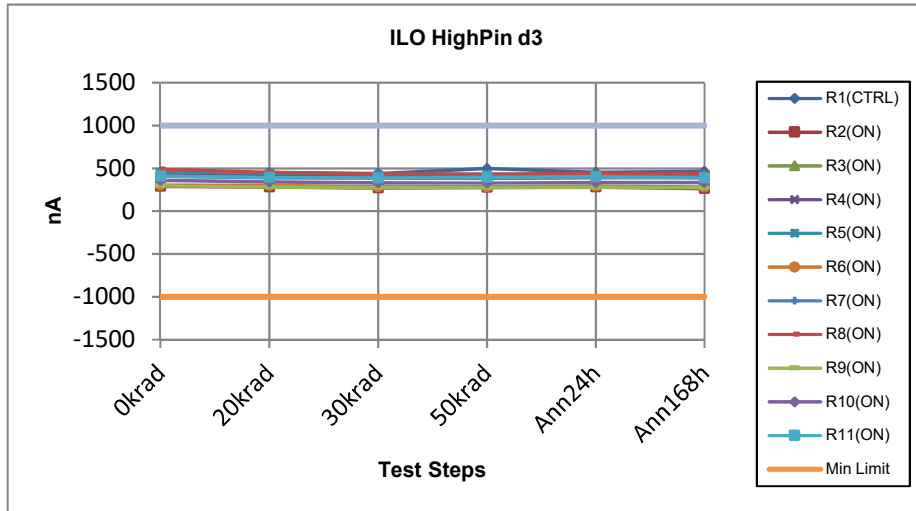
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ILO HighPin d4	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	423.5	438.7	428.1	483.1	437.3	449.9
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	296.8	284.0	274.1	279.3	282.6	265.9
R3(ON BIAS HDC)	411.5	397.0	379.1	380.0	379.5	409.4
R4(ON BIAS HDC)	433.2	414.5	398.2	403.5	400.1	410.9
R5(ON BIAS HDC)	458.1	435.7	416.5	421.8	418.8	418.7
R6(ON BIAS HDC)	313.2	303.1	292.6	287.8	295.7	283.2
R7(ON BIAS HDC)	413.5	388.2	387.3	370.1	382.8	387.3
R8(ON BIAS HDC)	482.1	439.6	420.4	421.7	426.6	425.3
R9(ON BIAS HDC)	297.0	279.6	270.3	268.8	272.8	266.9
R10(ON BIAS HDC)	355.8	333.8	326.7	320.8	326.1	325.1
R11(ON BIAS HDC)	414.0	398.7	389.3	387.7	396.2	387.3
Irradiated, ON biased HDC parts statistics						
Min Value	296.8	279.6	270.3	268.8	272.8	265.9
Max Value	482.1	439.6	420.4	421.8	426.6	425.3
Average	387.5	367.4	355.4	354.1	358.1	358.0
Sigma	67.4	61.7	58.8	59.7	58.3	65.7

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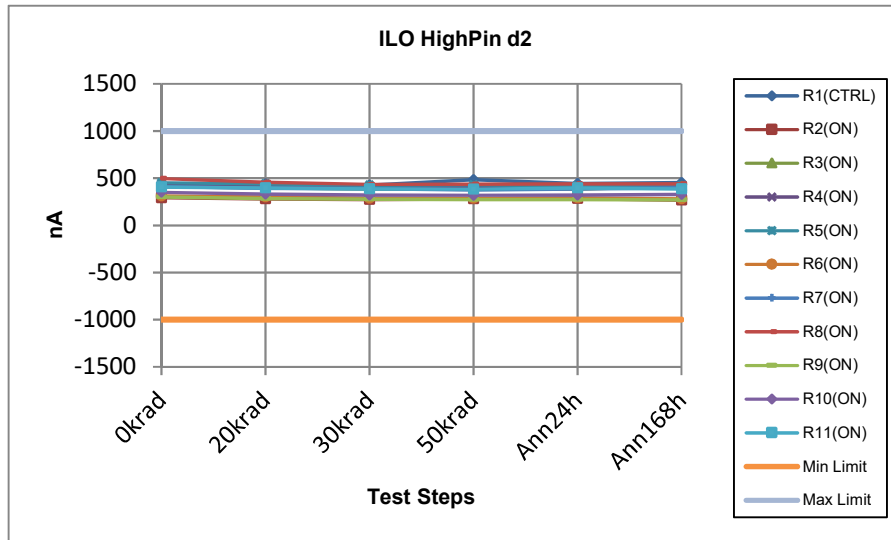
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ILO HighPin d3	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	439.7	449.3	439.7	498.1	454.5	466.3
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	289.4	282.3	271.3	278.2	282.8	263.4
R3(ON BIAS HDC)	418.1	404.9	385.8	388.4	397.0	414.4
R4(ON BIAS HDC)	437.7	426.2	404.8	411.8	413.1	419.0
R5(ON BIAS HDC)	455.2	446.2	429.6	429.6	427.5	422.4
R6(ON BIAS HDC)	305.3	298.8	286.8	284.9	293.0	281.3
R7(ON BIAS HDC)	407.9	388.8	387.1	382.3	389.2	392.1
R8(ON BIAS HDC)	489.5	452.1	433.7	432.5	442.0	443.3
R9(ON BIAS HDC)	295.4	283.4	272.9	273.8	276.1	271.9
R10(ON BIAS HDC)	360.2	340.1	331.7	328.7	334.2	335.4
R11(ON BIAS HDC)	408.9	392.2	387.2	393.8	400.3	385.5
Irradiated, ON biased HDC parts statistics						
Min Value	289.4	282.3	271.3	273.8	276.1	263.4
Max Value	489.5	452.1	433.7	432.5	442.0	443.3
Average	386.7	371.5	359.1	360.4	365.5	362.9
Sigma	70.7	65.7	63.3	63.2	63.1	68.9

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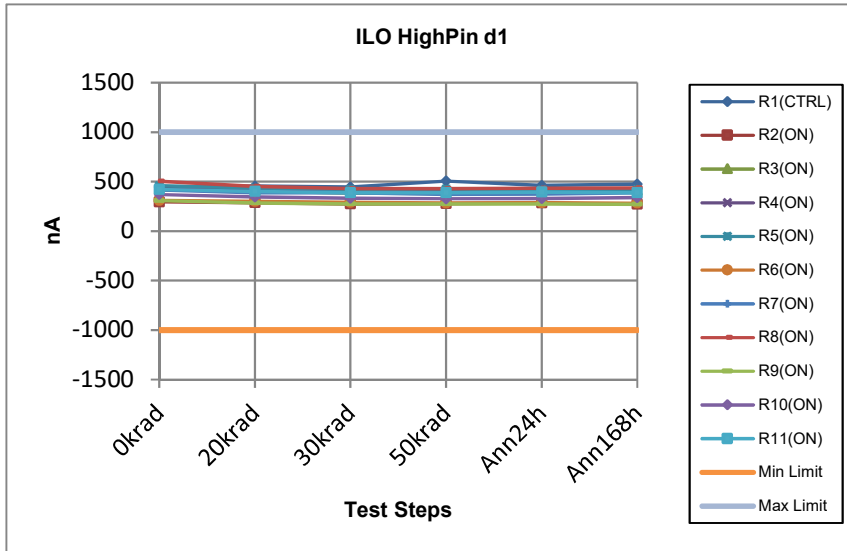
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ILO HighPin d2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	423.0	439.7	426.8	483.4	442.4	453.5
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	291.5	281.9	272.6	279.0	282.2	267.2
R3(ON BIAS HDC)	410.5	398.7	384.7	381.9	385.2	411.5
R4(ON BIAS HDC)	432.6	413.7	402.5	403.8	403.9	412.0
R5(ON BIAS HDC)	451.5	441.0	424.9	428.2	419.6	418.8
R6(ON BIAS HDC)	310.5	299.1	288.6	285.3	291.6	280.4
R7(ON BIAS HDC)	410.5	390.6	388.0	375.5	384.7	398.1
R8(ON BIAS HDC)	495.9	457.2	434.5	436.8	440.6	438.7
R9(ON BIAS HDC)	300.7	285.2	276.2	272.0	275.1	269.7
R10(ON BIAS HDC)	350.2	332.5	322.2	318.8	321.9	326.5
R11(ON BIAS HDC)	406.4	394.9	384.1	383.5	394.1	384.1
Irradiated, ON biased HDC parts statistics						
Min Value	291.5	281.9	272.6	272.0	275.1	267.2
Max Value	495.9	457.2	434.5	436.8	440.6	438.7
Average	386.0	369.5	357.8	356.5	359.9	360.7
Sigma	69.4	64.8	62.1	62.5	61.3	67.7

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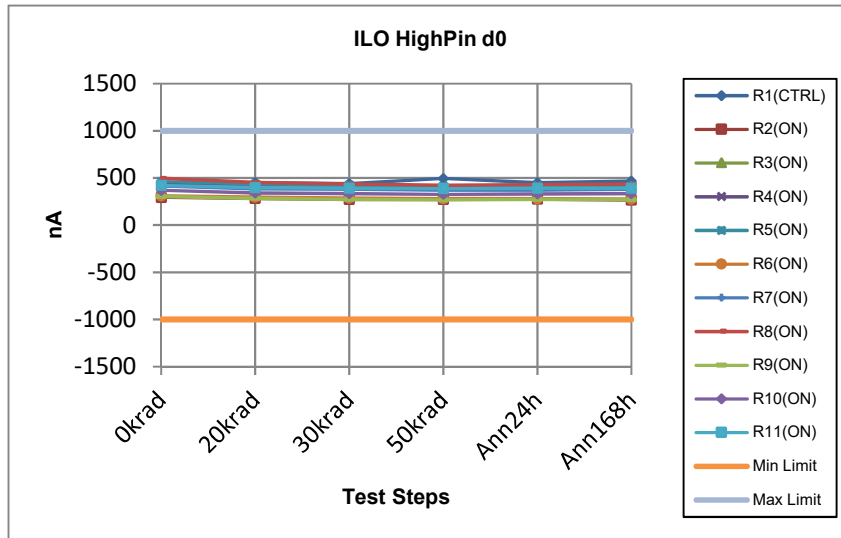
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ILO HighPin d1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	446.0	455.5	446.0	505.9	460.5	474.7
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	294.5	286.7	274.4	278.2	282.4	269.6
R3(ON BIAS HDC)	416.1	406.6	383.9	380.0	381.5	410.3
R4(ON BIAS HDC)	436.6	419.8	396.2	401.5	403.1	410.4
R5(ON BIAS HDC)	457.8	435.5	421.6	426.4	415.8	419.5
R6(ON BIAS HDC)	310.4	301.2	288.8	283.0	288.1	282.4
R7(ON BIAS HDC)	413.8	387.2	386.0	371.4	374.8	386.8
R8(ON BIAS HDC)	503.2	450.7	428.8	429.4	433.8	435.2
R9(ON BIAS HDC)	307.1	283.1	275.1	272.6	273.6	271.2
R10(ON BIAS HDC)	370.2	344.0	333.3	327.3	329.4	338.1
R11(ON BIAS HDC)	421.0	400.3	388.1	387.1	393.3	388.3
Irradiated, ON biased HDC parts statistics						
Min Value	294.5	283.1	274.4	272.6	273.6	269.6
Max Value	503.2	450.7	428.8	429.4	433.8	435.2
Average	393.1	371.5	357.6	355.7	357.6	361.2
Sigma	70.2	63.0	59.8	60.9	59.4	65.3

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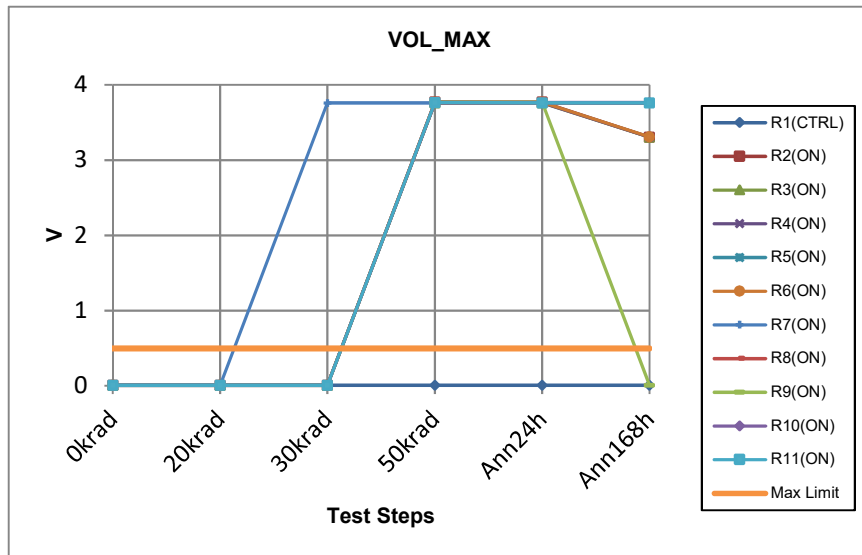
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ILO HighPin d0	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA
Control results						
R1(CTRL)	437.5	450.5	438.5	494.9	450.7	465.8
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	294.5	282.0	271.6	273.6	275.7	265.4
R3(ON BIAS HDC)	419.8	404.9	384.2	377.9	379.0	411.6
R4(ON BIAS HDC)	428.3	409.2	399.9	395.5	392.7	403.0
R5(ON BIAS HDC)	462.0	440.5	426.1	416.7	417.8	414.7
R6(ON BIAS HDC)	309.3	296.0	285.0	279.1	280.8	277.6
R7(ON BIAS HDC)	415.6	385.0	382.6	370.1	372.0	382.8
R8(ON BIAS HDC)	497.0	452.0	434.1	422.4	429.6	436.5
R9(ON BIAS HDC)	303.7	281.6	272.8	266.9	271.8	270.6
R10(ON BIAS HDC)	369.3	341.8	332.4	326.0	329.9	335.2
R11(ON BIAS HDC)	421.3	399.1	392.1	387.4	393.1	392.2
Irradiated, ON biased HDC parts statistics						
Min Value	294.5	281.6	271.6	266.9	271.8	265.4
Max Value	497.0	452.0	434.1	422.4	429.6	436.5
Average	392.1	369.2	358.1	351.6	354.3	359.0
Sigma	70.0	64.4	62.7	60.2	60.2	66.0

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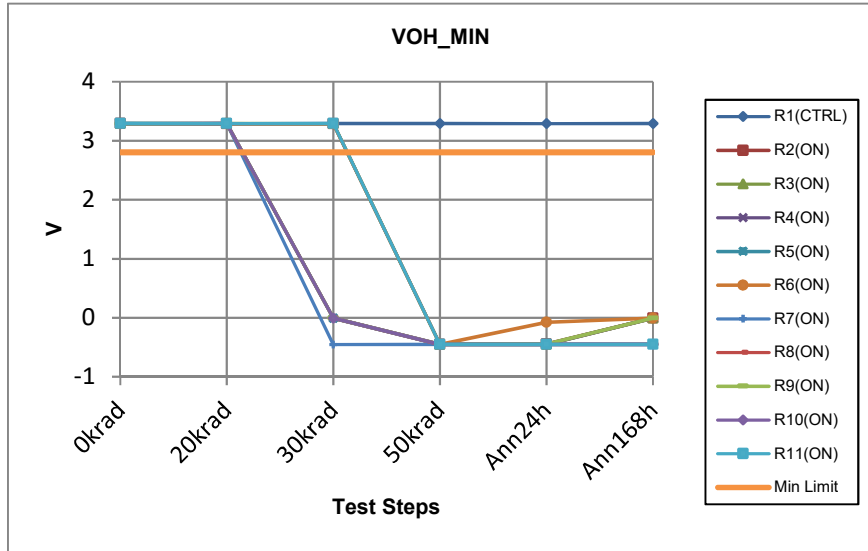
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VOL_MAX	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	0.495	0.495	0.495	0.495	0.495	0.495
Unit	V	V	V	V	V	V
Control results						
R1(CTRL)	0.0060	0.0060	0.0060	0.0058	0.0061	0.0058
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0.0063	0.0063	0.0061	3.7710	3.7715	3.3063
R3(ON BIAS HDC)	0.0054	0.0053	0.0054	3.7617	3.7616	3.3051
R4(ON BIAS HDC)	0.0057	0.0055	0.0057	3.7604	3.7609	3.3057
R5(ON BIAS HDC)	0.0057	0.0057	0.0057	3.7601	3.7602	3.7591
R6(ON BIAS HDC)	0.0064	0.0062	0.0064	3.7692	3.7690	3.3069
R7(ON BIAS HDC)	0.0055	0.0055	3.7611	3.7622	3.7619	3.7624
R8(ON BIAS HDC)	0.0055	0.0054	0.0055	3.7591	3.7593	3.7592
R9(ON BIAS HDC)	0.0064	0.0064	0.0064	3.7707	3.7710	0.0067
R10(ON BIAS HDC)	0.0060	0.0059	0.0061	3.7662	3.7662	3.7660
R11(ON BIAS HDC)	0.0057	0.0057	0.0057	3.7638	3.7606	3.7617
Irradiated, ON biased HDC parts statistics						
Min Value	0.0054	0.0053	0.0054	3.7591	3.7593	0.0067
Max Value	0.0064	0.0064	3.7611	3.7710	3.7715	3.7660
Average	0.0058	0.0058	0.3814	3.7644	3.7642	3.2039
Sigma	0.0004	0.0004	1.1875	0.0045	0.0047	1.1460

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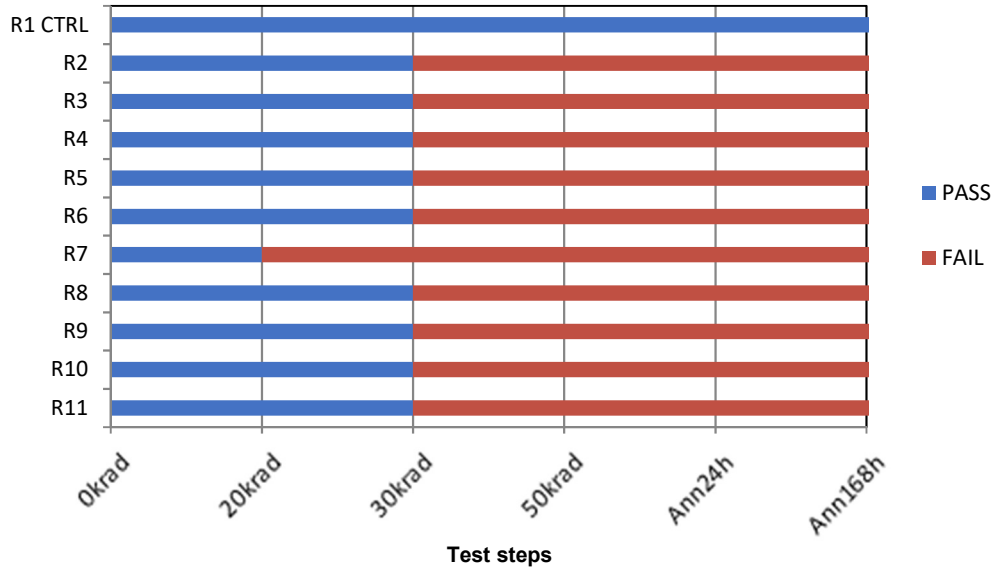
VOH_MIN	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	2.805	2.805	2.805	2.805	2.805	2.805
Max Limit	--	--	--	--	--	--
Unit	V	V	V	V	V	V
Control results						
R1(CTRL)	3.2917	3.2918	3.2916	3.2915	3.2911	3.2918
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	3.2911	3.2907	3.2908	-0.4502	-0.4482	-0.0066
R3(ON BIAS HDC)	3.2918	3.2921	3.2922	-0.4537	-0.4527	-0.0048
R4(ON BIAS HDC)	3.2921	3.2916	-0.0060	-0.4523	-0.4517	-0.0057
R5(ON BIAS HDC)	3.2918	3.2913	-0.0063	-0.4521	-0.4513	-0.4499
R6(ON BIAS HDC)	3.2908	3.2910	3.2905	-0.4513	-0.0794	-0.0067
R7(ON BIAS HDC)	3.2918	3.2921	-0.4560	-0.4540	-0.4533	-0.4528
R8(ON BIAS HDC)	3.2919	3.2919	-0.0060	-0.4512	-0.4520	-0.4506
R9(ON BIAS HDC)	3.2908	3.2911	-0.0070	-0.4493	-0.4482	-0.0066
R10(ON BIAS HDC)	3.2917	3.2911	-0.0065	-0.4519	-0.4508	-0.4507
R11(ON BIAS HDC)	3.2915	3.2918	3.2916	-0.4511	-0.4501	-0.4507
Irradiated, ON biased HDC parts statistics						
Min Value	3.2908	3.2907	-0.4560	-0.4540	-0.4533	-0.4528
Max Value	3.2921	3.2921	3.2922	-0.4493	-0.0794	-0.0048
Average	3.2915	3.2915	1.2677	-0.4517	-0.4138	-0.2285
Sigma	0.0004	0.0005	1.7470	0.0014	0.1175	0.2345

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VILmax fails



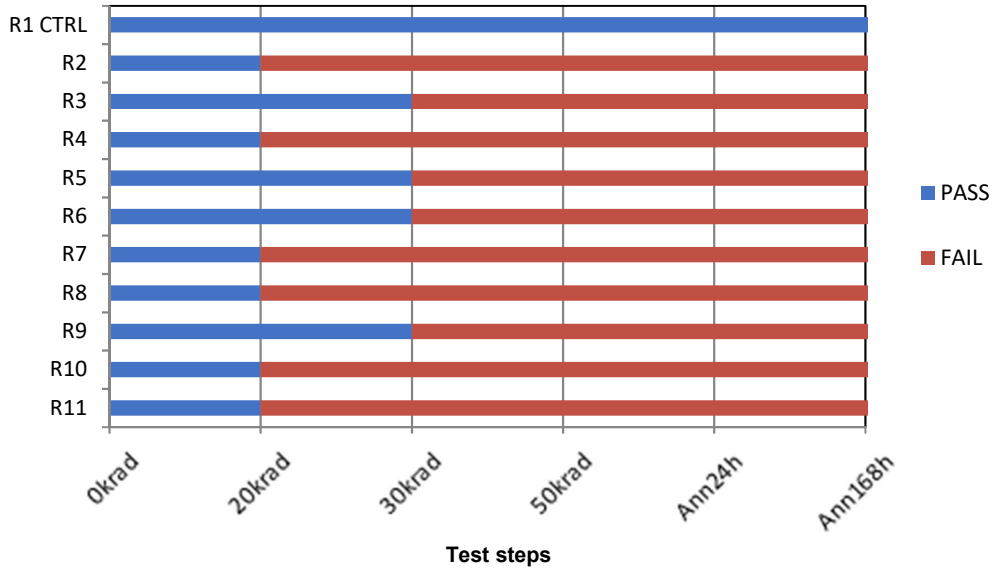
VILmax fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	PASS
R10(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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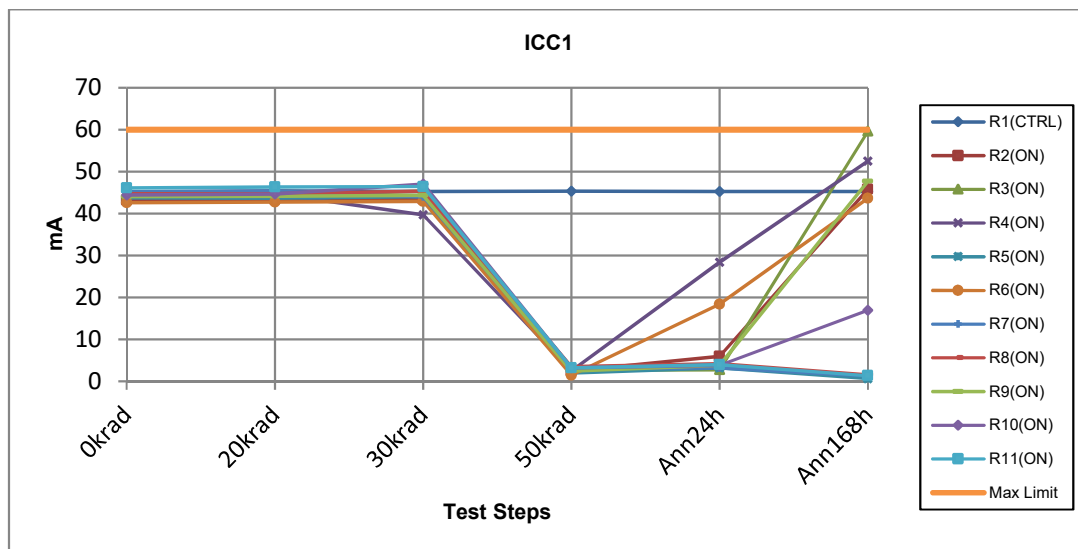
VIHmin fails



VIHmin fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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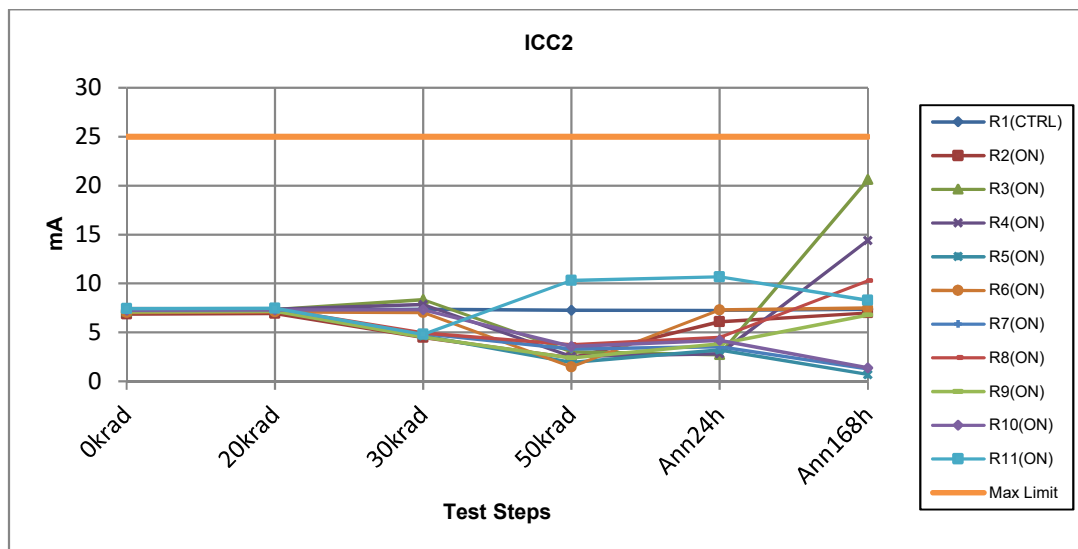
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ICC1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	60	60	60	60	60	60
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	45.21	45.43	45.26	45.34	45.28	45.29
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	43.21	43.34	43.43	2.43	5.92	45.83
R3(ON BIAS HDC)	44.25	44.43	45.36	2.67	2.77	59.61
R4(ON BIAS HDC)	44.80	44.75	39.72	2.47	28.37	52.52
R5(ON BIAS HDC)	43.73	43.69	43.99	1.97	3.17	0.63
R6(ON BIAS HDC)	42.58	42.72	42.93	1.45	18.39	43.66
R7(ON BIAS HDC)	45.19	45.40	43.94	3.04	3.22	1.24
R8(ON BIAS HDC)	44.70	44.72	45.35	3.48	4.21	1.57
R9(ON BIAS HDC)	44.08	44.12	44.37	2.45	3.79	47.71
R10(ON BIAS HDC)	44.41	44.65	47.02	3.21	3.85	16.96
R11(ON BIAS HDC)	46.08	46.34	46.44	3.18	3.98	1.35
Irradiated, ON biased HDC parts statistics						
Min Value	42.58	42.72	39.72	1.45	2.77	0.63
Max Value	46.08	46.34	47.02	3.48	28.37	59.61
Average	44.30	44.42	44.25	2.63	7.77	27.11
Sigma	0.99	1.03	2.06	0.62	8.60	24.81

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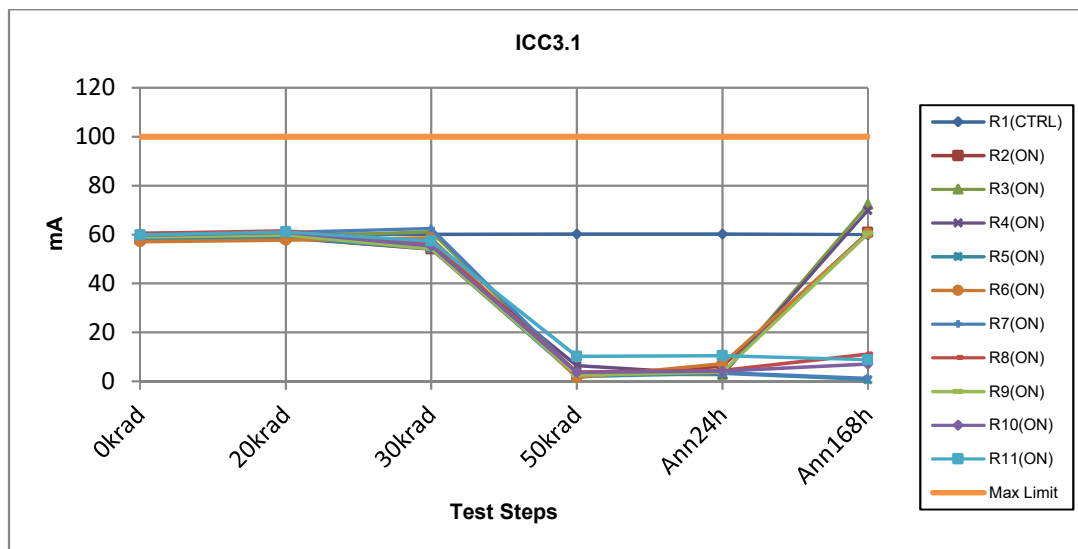
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ICC2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	25	25	25	25	25	25
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	7.31	7.28	7.36	7.27	7.25	7.36
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	6.89	6.94	4.49	2.41	6.10	6.99
R3(ON BIAS HDC)	7.13	7.33	8.35	3.01	2.72	20.61
R4(ON BIAS HDC)	7.29	7.36	7.84	2.54	2.80	14.41
R5(ON BIAS HDC)	7.25	7.27	4.65	1.93	3.19	0.69
R6(ON BIAS HDC)	7.03	7.10	7.04	1.47	7.30	7.50
R7(ON BIAS HDC)	7.20	7.29	4.87	3.32	3.52	1.27
R8(ON BIAS HDC)	7.43	7.39	4.94	3.74	4.47	10.28
R9(ON BIAS HDC)	7.11	7.15	4.51	2.39	3.82	6.78
R10(ON BIAS HDC)	7.28	7.29	7.32	3.57	4.18	1.37
R11(ON BIAS HDC)	7.43	7.46	4.80	10.30	10.68	8.27
Irradiated, ON biased HDC parts statistics						
Min Value	6.89	6.94	4.49	1.47	2.72	0.69
Max Value	7.43	7.46	8.35	10.30	10.68	20.61
Average	7.20	7.26	5.88	3.47	4.88	7.82
Sigma	0.17	0.15	1.55	2.51	2.50	6.24

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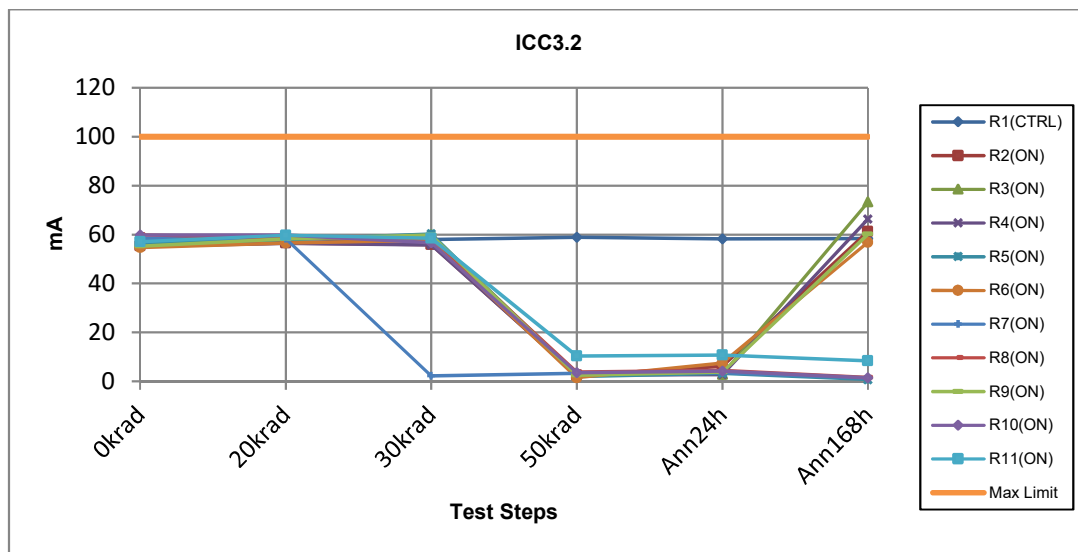
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ICC3.1	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	60.24	60.27	60.09	60.25	60.22	60.00
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	57.97	58.69	54.00	2.45	6.11	60.79
R3(ON BIAS HDC)	58.81	59.19	61.11	3.02	2.77	72.18
R4(ON BIAS HDC)	58.27	59.30	54.56	6.42	2.80	69.94
R5(ON BIAS HDC)	58.10	58.71	54.20	1.95	3.22	0.70
R6(ON BIAS HDC)	57.11	57.66	58.69	1.50	7.20	60.47
R7(ON BIAS HDC)	60.46	60.83	62.48	3.38	3.53	1.26
R8(ON BIAS HDC)	60.50	61.56	56.57	3.81	4.51	11.18
R9(ON BIAS HDC)	59.05	59.87	54.16	2.48	3.84	60.43
R10(ON BIAS HDC)	59.72	60.88	55.41	3.62	4.18	7.11
R11(ON BIAS HDC)	59.87	61.07	57.27	10.27	10.54	8.82
Irradiated, ON biased HDC parts statistics						
Min Value	57.11	57.66	54.00	1.50	2.77	0.70
Max Value	60.50	61.56	62.48	10.27	10.54	72.18
Average	58.99	59.78	56.84	3.89	4.87	35.29
Sigma	1.14	1.27	3.04	2.62	2.45	31.46

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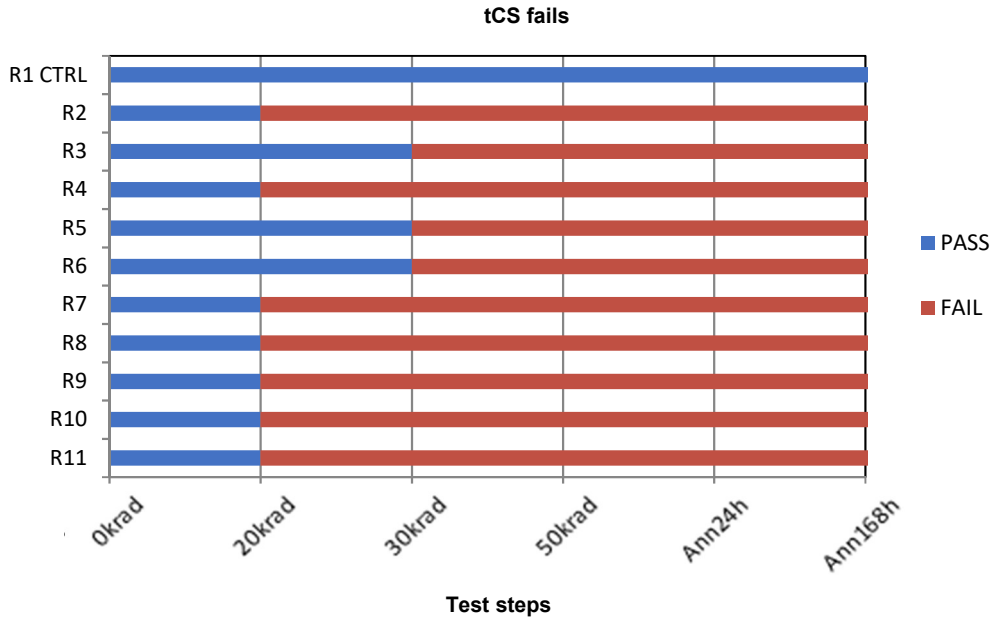
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ICC3.2	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA
Control results						
R1(CTRL)	58.19	56.70	58.04	58.88	58.21	58.43
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	55.42	56.53	55.92	2.44	6.12	61.22
R3(ON BIAS HDC)	56.13	57.98	59.96	3.01	2.79	73.22
R4(ON BIAS HDC)	55.23	56.42	55.74	2.53	2.78	66.35
R5(ON BIAS HDC)	56.19	57.96	60.28	1.97	3.21	0.71
R6(ON BIAS HDC)	54.76	56.59	57.69	1.50	7.43	56.81
R7(ON BIAS HDC)	58.37	58.24	2.18	3.34	3.54	1.26
R8(ON BIAS HDC)	59.90	58.59	58.78	3.82	4.46	1.61
R9(ON BIAS HDC)	55.25	58.29	59.76	2.47	3.84	60.17
R10(ON BIAS HDC)	59.81	59.80	56.67	3.60	4.18	1.43
R11(ON BIAS HDC)	57.03	59.74	58.55	10.31	10.75	8.37
Irradiated, ON biased HDC parts statistics						
Min Value	54.76	56.42	2.18	1.50	2.78	0.71
Max Value	59.90	59.80	60.28	10.31	10.75	73.22
Average	56.81	58.01	52.55	3.50	4.91	33.12
Sigma	1.91	1.22	17.78	2.50	2.53	32.44

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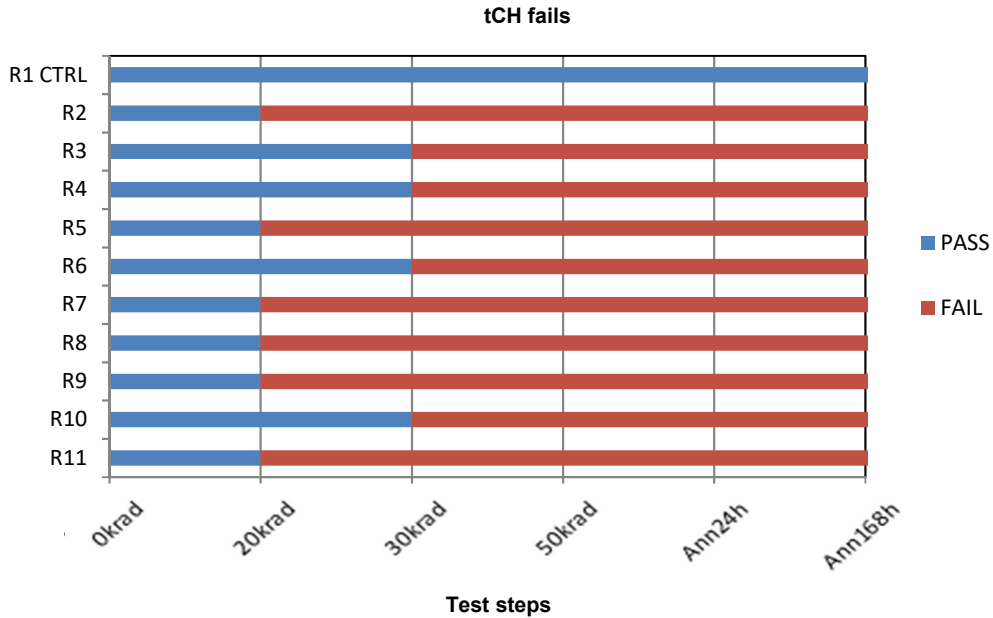
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tCS fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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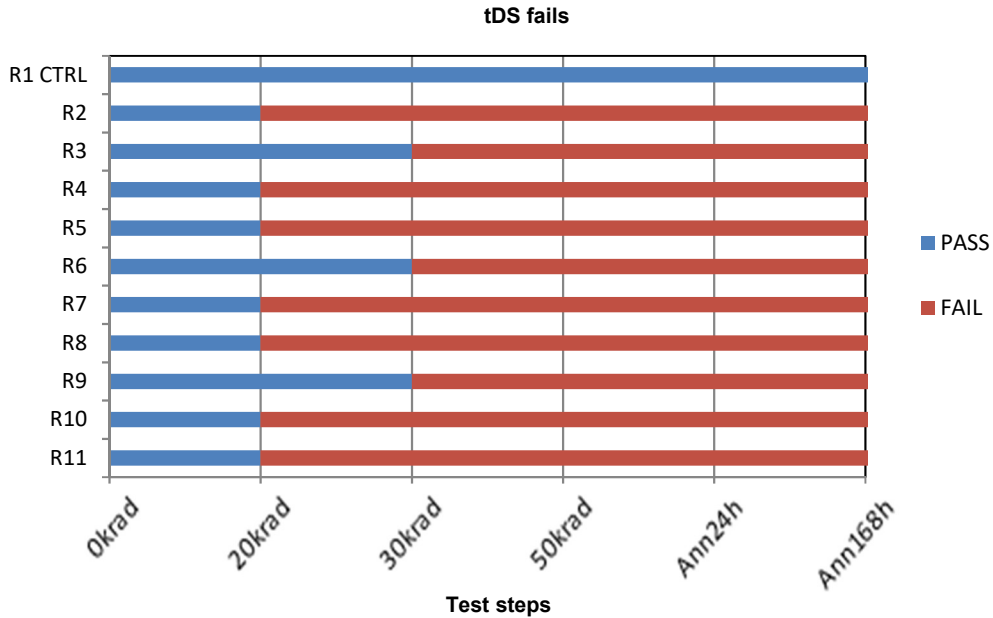
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tCH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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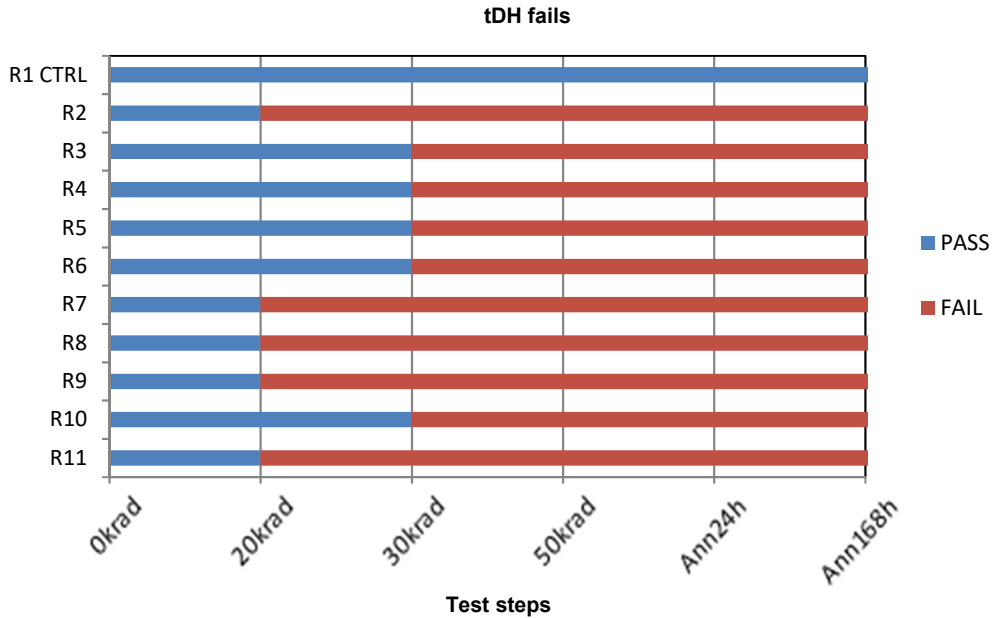
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tDS fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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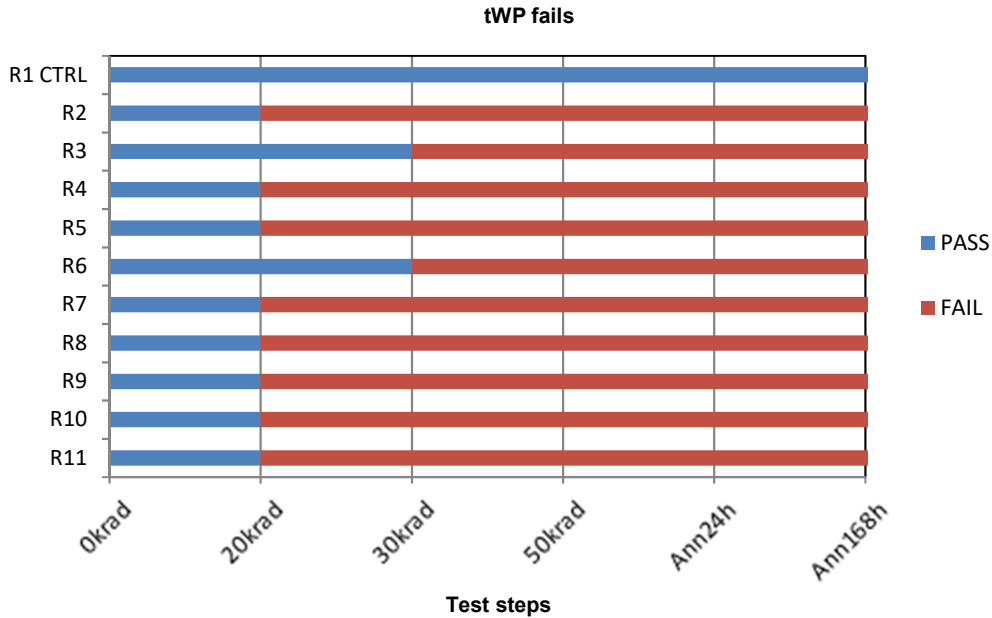
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tDH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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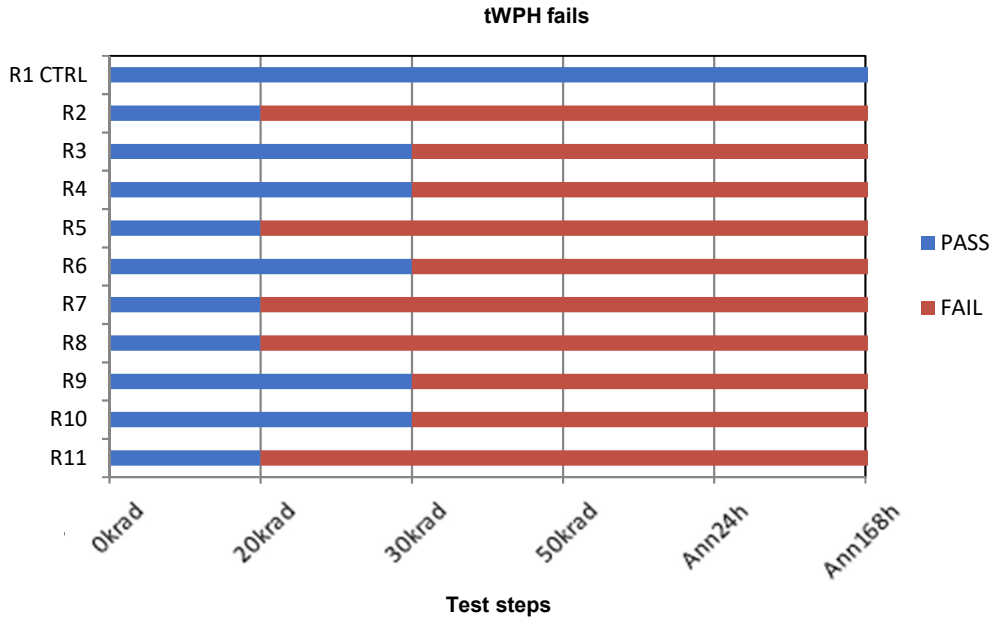
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tWP fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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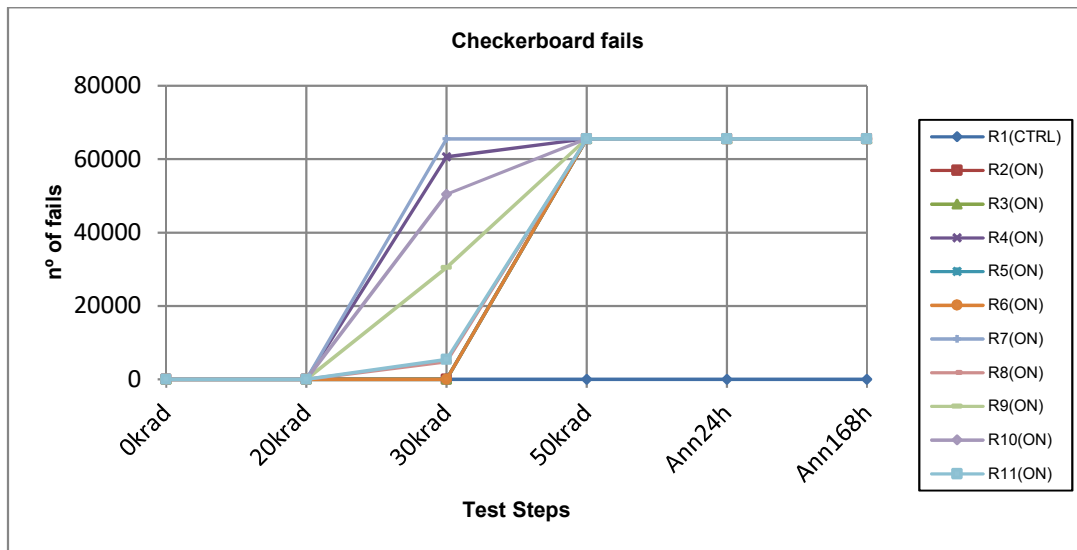
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tWPH fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F
Control results						
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R3(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R4(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R5(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R6(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R7(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R8(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
R9(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R10(ON BIAS HDC)	PASS	PASS	PASS	FAIL	FAIL	FAIL
R11(ON BIAS HDC)	PASS	PASS	FAIL	FAIL	FAIL	FAIL
Irradiated, ON biased HDC parts statistics						
Min Value	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A

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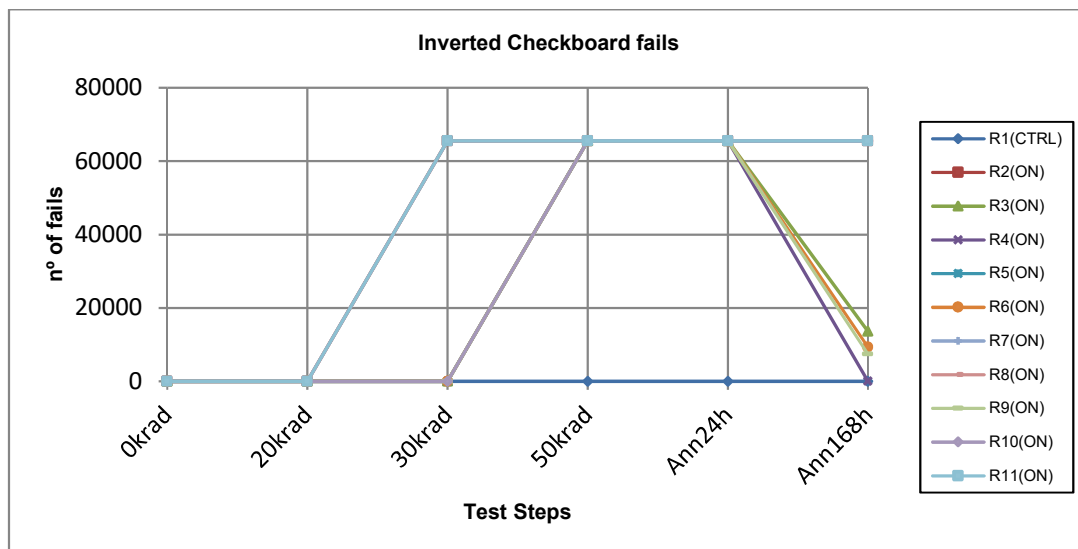
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Checkerboard fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0	0	0	65536	65536	65536
R3(ON BIAS HDC)	0	0	0	65536	65536	65536
R4(ON BIAS HDC)	0	0	60672	65536	65536	65536
R5(ON BIAS HDC)	0	0	0	65536	65536	65536
R6(ON BIAS HDC)	0	0	0	65536	65536	65536
R7(ON BIAS HDC)	0	0	65536	65536	65536	65536
R8(ON BIAS HDC)	0	0	4802	65536	65536	65536
R9(ON BIAS HDC)	0	0	30464	65536	65536	65536
R10(ON BIAS HDC)	0	0	50432	65536	65536	65536
R11(ON BIAS HDC)	0	0	5371	65536	65536	65536
Irradiated, ON biased HDC parts statistics						
Min Value	0	0	0	65536	65536	65536
Max Value	0	0	65536	65536	65536	65536
Average	0	0	21728	65536	65536	65536
Sigma	0	0	27444	0	0	0

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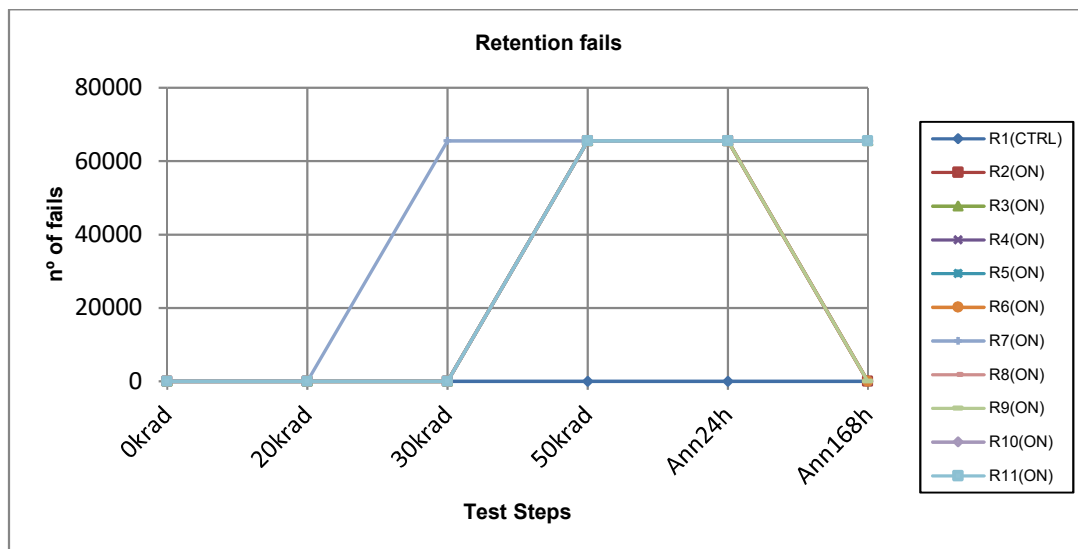
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Inverted Checkboard fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0	0	65536	65536	65536	65536
R3(ON BIAS HDC)	0	0	0	65536	65536	13634
R4(ON BIAS HDC)	0	0	0	65536	65536	116
R5(ON BIAS HDC)	0	0	0	65536	65536	65536
R6(ON BIAS HDC)	0	0	0	65536	65536	9361
R7(ON BIAS HDC)	0	0	65536	65536	65536	65536
R8(ON BIAS HDC)	0	0	65536	65536	65536	65536
R9(ON BIAS HDC)	0	0	0	65536	65536	7451
R10(ON BIAS HDC)	0	0	0	65536	65536	65536
R11(ON BIAS HDC)	0	0	65536	65536	65536	65536
Irradiated, ON biased HDC parts statistics						
Min Value	0	0	0	65536	65536	0
Max Value	0	0	65536	65536	65536	65536
Average	0	0	6554	65536	65536	39322
Sigma	0	0	20724	0	0	33843

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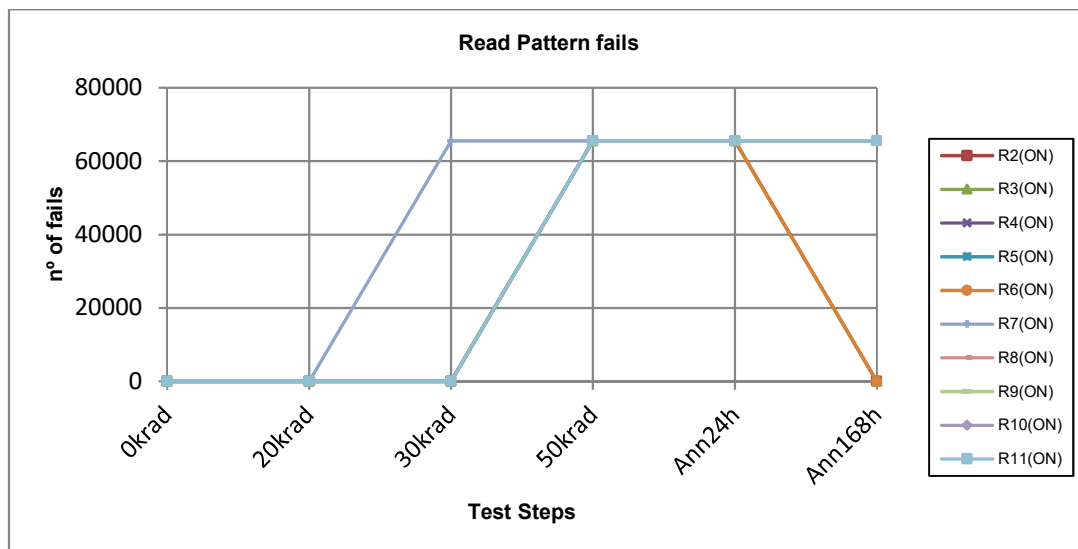
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Retention fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	0	0	0	0	0	0
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0	0	0	65536	65536	0
R3(ON BIAS HDC)	0	0	0	65536	65536	65536
R4(ON BIAS HDC)	0	0	0	65536	65536	0
R5(ON BIAS HDC)	0	0	0	65536	65536	65536
R6(ON BIAS HDC)	0	0	0	65536	65536	0
R7(ON BIAS HDC)	0	0	65536	65536	65536	65536
R8(ON BIAS HDC)	0	0	0	65536	65536	65536
R9(ON BIAS HDC)	0	0	0	65536	65536	0
R10(ON BIAS HDC)	0	0	0	65536	65536	65536
R11(ON BIAS HDC)	0	0	0	65536	65536	65536
Irradiated, ON biased HDC parts statistics						
Min Value	0	0	0	65536	65536	0
Max Value	0	0	65536	65536	65536	65536
Average	0	0	6554	65536	65536	39322
Sigma	0	0	20724	0	0	33843

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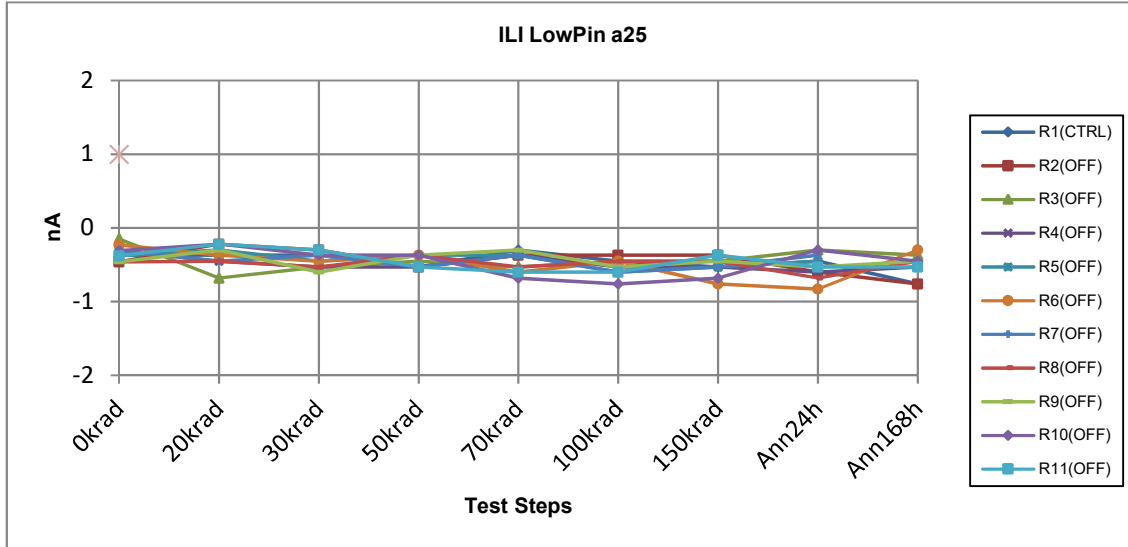
Read Pattern fails	0krad	20krad	30krad	50krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results						
R1(CTRL)	N/A	N/A	N/A	N/A	N/A	N/A
Irradiated, ON biased HDC parts results						
R2(ON BIAS HDC)	0	0	0	65536	65536	16
R3(ON BIAS HDC)	0	0	0	65536	65536	0
R4(ON BIAS HDC)	0	0	0	65536	65536	65536
R5(ON BIAS HDC)	0	0	0	65536	65536	65536
R6(ON BIAS HDC)	0	0	0	65536	65536	0
R7(ON BIAS HDC)	0	0	65536	65536	65536	65536
R8(ON BIAS HDC)	0	0	0	65536	65536	65536
R9(ON BIAS HDC)	0	0	0	65536	65536	65536
R10(ON BIAS HDC)	0	0	0	65536	65536	65536
R11(ON BIAS HDC)	0	0	0	65536	65536	65536
Irradiated, ON biased HDC parts statistics						
Min Value	0	0	0	65536	65536	0
Max Value	0	0	65536	65536	65536	65536
Average	0	0	6554	65536	65536	45877
Sigma	0	0	20724	0	0	31654

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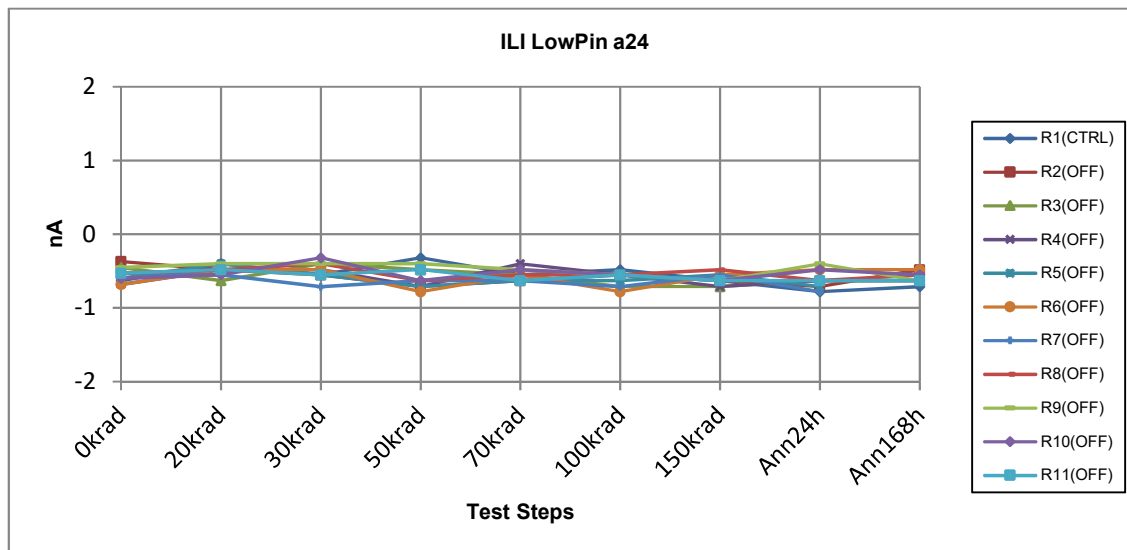
R1 + OFF samples (SN 22 to 31)



ILI LowPin a25	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.37	-0.37	-0.37	-0.53	-0.30	-0.45	-0.53	-0.45	-0.76
Irradiated, unbiased parts results									
R2(OFF)	-0.46	-0.22	-0.30	-0.53	-0.37	-0.37	-0.37	-0.60	-0.76
R3(OFF)	-0.15	-0.68	-0.53	-0.45	-0.53	-0.45	-0.45	-0.30	-0.37
R4(OFF)	-0.31	-0.45	-0.53	-0.53	-0.37	-0.53	-0.53	-0.60	-0.53
R5(OFF)	-0.38	-0.30	-0.45	-0.37	-0.37	-0.60	-0.53	-0.45	No meas.
R6(OFF)	-0.23	-0.37	-0.45	-0.37	-0.60	-0.45	-0.76	-0.83	-0.30
R7(OFF)	-0.31	-0.45	-0.37	-0.53	-0.37	-0.60	-0.53	-0.37	No meas.
R8(OFF)	-0.46	-0.45	-0.53	-0.37	-0.53	-0.45	-0.45	-0.68	-0.45
R9(OFF)	-0.46	-0.30	-0.60	-0.37	-0.30	-0.53	-0.45	-0.53	-0.45
R10(OFF)	-0.31	-0.22	-0.37	-0.37	-0.68	-0.76	-0.68	-0.30	-0.45
R11(OFF)	-0.38	-0.22	-0.30	-0.53	-0.60	-0.60	-0.37	-0.53	-0.53
Irradiated, unbiased parts statistics									
Min Value	-0.46	-0.45	-0.60	-0.53	-0.68	-0.76	-0.68	-0.68	-0.53
Max Value	-0.15	-0.22	-0.30	-0.37	-0.30	-0.45	-0.37	-0.30	-0.45
Average	-0.35	-0.33	-0.43	-0.43	-0.50	-0.59	-0.50	-0.48	-0.47
Sigma	0.10	0.12	0.13	0.09	0.16	0.11	0.12	0.15	0.04

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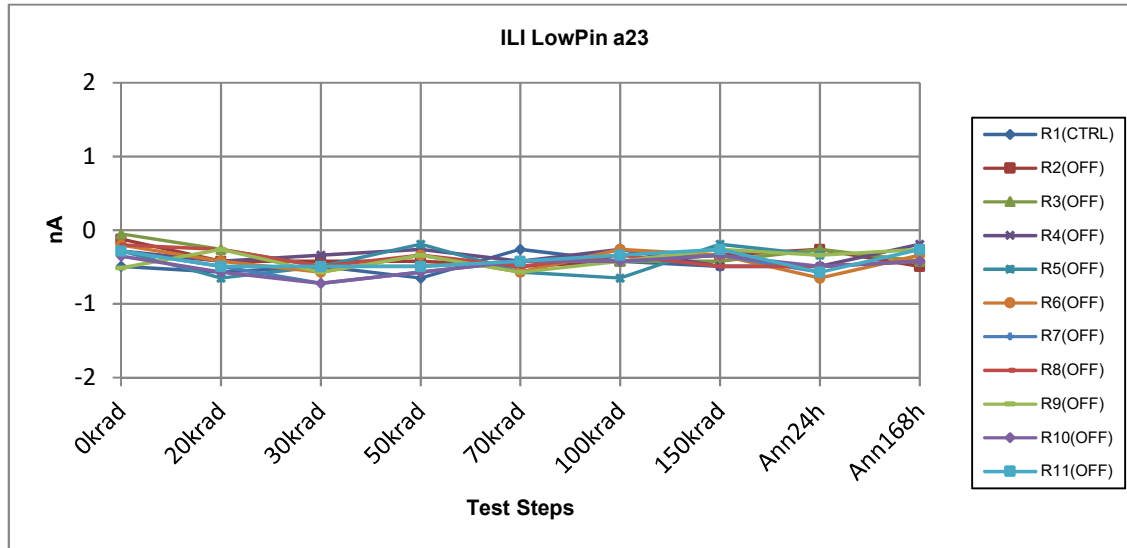
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ILI LowPin a24	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.63	-0.40	-0.55	-0.32	-0.55	-0.48	-0.63	-0.78	-0.71
Irradiated, unbiased parts results									
R2(OFF)	-0.37	-0.48	-0.55	-0.71	-0.63	-0.55	-0.63	-0.71	-0.48
R3(OFF)	-0.45	-0.63	-0.40	-0.48	-0.55	-0.71	-0.71	-0.63	-0.63
R4(OFF)	-0.68	-0.48	-0.48	-0.71	-0.40	-0.55	-0.71	-0.63	-0.63
R5(OFF)	-0.60	-0.40	-0.55	-0.71	-0.63	-0.63	-0.55	-0.71	No meas.
R6(OFF)	-0.68	-0.48	-0.48	-0.78	-0.55	-0.78	-0.55	-0.48	-0.48
R7(OFF)	-0.53	-0.55	-0.71	-0.63	-0.63	-0.71	-0.55	-0.78	No meas.
R8(OFF)	-0.53	-0.48	-0.40	-0.63	-0.55	-0.55	-0.48	-0.63	-0.55
R9(OFF)	-0.45	-0.40	-0.40	-0.40	-0.48	-0.55	-0.63	-0.40	-0.63
R10(OFF)	-0.60	-0.55	-0.32	-0.63	-0.48	-0.55	-0.63	-0.48	-0.55
R11(OFF)	-0.53	-0.48	-0.55	-0.48	-0.63	-0.55	-0.63	-0.63	-0.63
Irradiated, unbiased parts statistics									
Min Value	-0.68	-0.55	-0.71	-0.63	-0.63	-0.71	-0.63	-0.78	-0.63
Max Value	-0.37	-0.40	-0.32	-0.40	-0.48	-0.55	-0.48	-0.40	-0.55
Average	-0.54	-0.49	-0.48	-0.55	-0.55	-0.58	-0.58	-0.58	-0.59
Sigma	0.10	0.06	0.16	0.11	0.08	0.07	0.07	0.15	0.05

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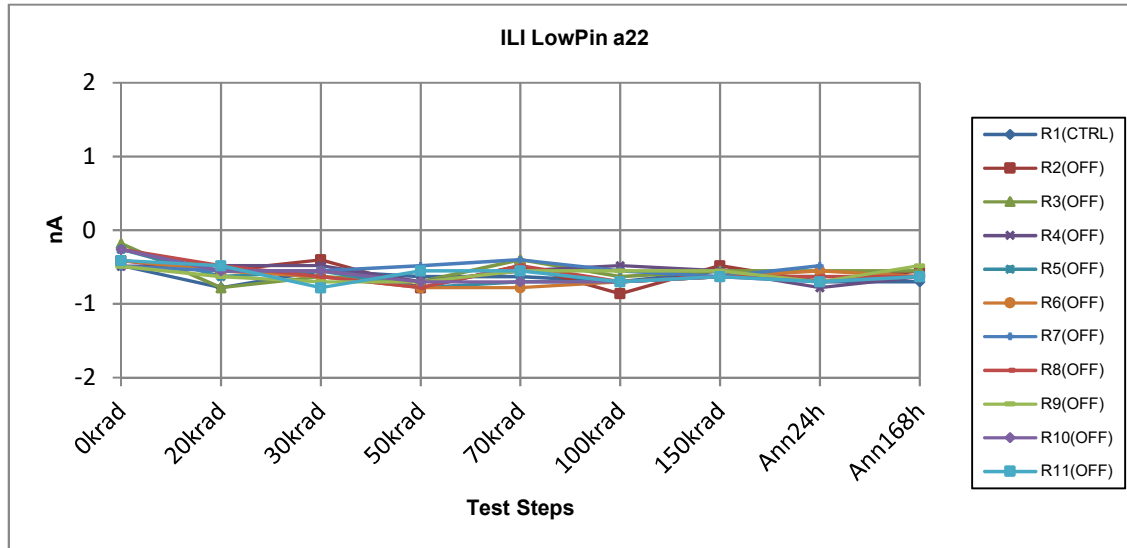
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ILI LowPin a23	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.49	-0.57	-0.49	-0.65	-0.26	-0.42	-0.49	-0.49	-0.42
Irradiated, unbiased parts results									
R2(OFF)	-0.12	-0.42	-0.42	-0.42	-0.49	-0.42	-0.34	-0.26	-0.49
R3(OFF)	-0.05	-0.26	-0.49	-0.49	-0.42	-0.42	-0.42	-0.26	-0.42
R4(OFF)	-0.28	-0.42	-0.34	-0.26	-0.42	-0.26	-0.49	-0.49	-0.19
R5(OFF)	-0.28	-0.65	-0.49	-0.19	-0.57	-0.65	-0.19	-0.34	No meas.
R6(OFF)	-0.20	-0.42	-0.57	-0.34	-0.57	-0.26	-0.34	-0.65	-0.34
R7(OFF)	-0.28	-0.49	-0.72	-0.57	-0.42	-0.42	-0.34	-0.57	No meas.
R8(OFF)	-0.20	-0.26	-0.49	-0.34	-0.49	-0.34	-0.49	-0.49	-0.42
R9(OFF)	-0.51	-0.26	-0.57	-0.34	-0.57	-0.42	-0.26	-0.34	-0.26
R10(OFF)	-0.35	-0.57	-0.72	-0.57	-0.42	-0.42	-0.34	-0.49	-0.42
R11(OFF)	-0.28	-0.49	-0.49	-0.49	-0.42	-0.34	-0.26	-0.57	-0.26
Irradiated, unbiased parts statistics									
Min Value	-0.51	-0.57	-0.72	-0.57	-0.57	-0.42	-0.49	-0.57	-0.42
Max Value	-0.05	-0.26	-0.49	-0.34	-0.42	-0.34	-0.26	-0.34	-0.26
Average	-0.26	-0.41	-0.60	-0.46	-0.46	-0.39	-0.34	-0.49	-0.34
Sigma	0.13	0.14	0.12	0.12	0.07	0.04	0.09	0.09	0.09

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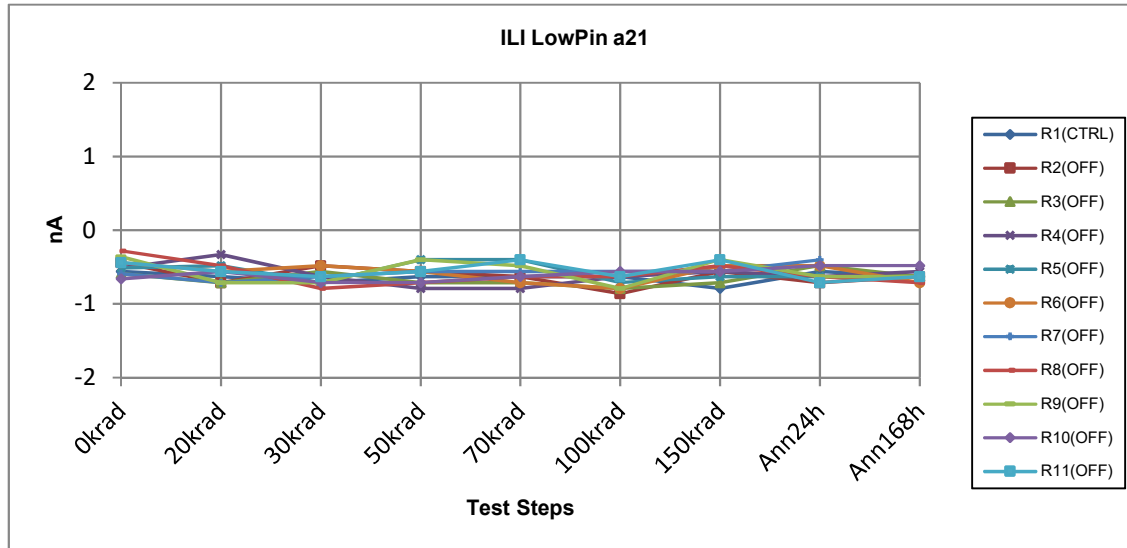
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ILI LowPin a22	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.48	-0.78	-0.55	-0.63	-0.63	-0.70	-0.55	-0.70	-0.70
Irradiated, unbiased parts results									
R2(OFF)	-0.41	-0.55	-0.40	-0.78	-0.48	-0.86	-0.48	-0.70	-0.55
R3(OFF)	-0.18	-0.78	-0.63	-0.70	-0.40	-0.63	-0.55	-0.55	-0.55
R4(OFF)	-0.49	-0.48	-0.48	-0.70	-0.55	-0.48	-0.55	-0.78	-0.63
R5(OFF)	-0.26	-0.63	-0.55	-0.78	-0.70	-0.70	-0.63	-0.63	No meas.
R6(OFF)	-0.41	-0.55	-0.63	-0.78	-0.78	-0.70	-0.63	-0.55	-0.63
R7(OFF)	-0.49	-0.55	-0.55	-0.48	-0.40	-0.55	-0.63	-0.48	No meas.
R8(OFF)	-0.26	-0.48	-0.63	-0.78	-0.48	-0.70	-0.63	-0.63	-0.63
R9(OFF)	-0.49	-0.63	-0.70	-0.70	-0.55	-0.55	-0.55	-0.70	-0.48
R10(OFF)	-0.26	-0.55	-0.55	-0.70	-0.70	-0.70	-0.63	-0.70	-0.63
R11(OFF)	-0.41	-0.48	-0.78	-0.55	-0.55	-0.70	-0.63	-0.70	-0.63
Irradiated, unbiased parts statistics									
Min Value	-0.49	-0.63	-0.78	-0.78	-0.70	-0.70	-0.63	-0.70	-0.63
Max Value	-0.18	-0.48	-0.55	-0.48	-0.40	-0.55	-0.55	-0.48	-0.48
Average	-0.37	-0.54	-0.64	-0.64	-0.54	-0.64	-0.61	-0.64	-0.59
Sigma	0.12	0.06	0.10	0.12	0.11	0.08	0.04	0.10	0.07

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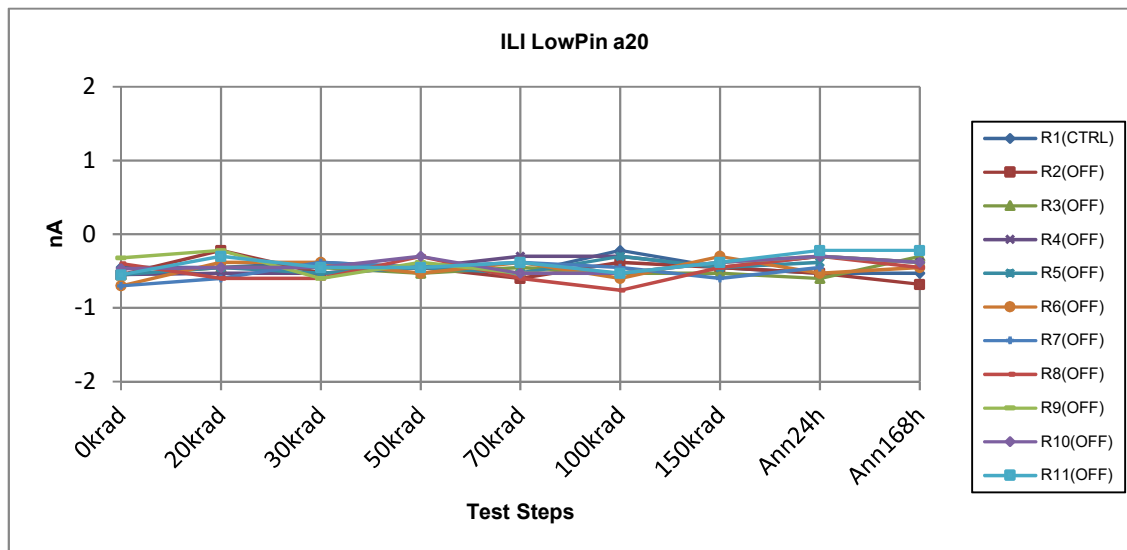
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ILI LowPin a21	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.56	-0.63	-0.71	-0.63	-0.63	-0.63	-0.79	-0.56	-0.63
Irradiated, unbiased parts results									
R2(OFF)	-0.44	-0.71	-0.48	-0.56	-0.63	-0.86	-0.56	-0.71	-0.63
R3(OFF)	-0.59	-0.71	-0.56	-0.71	-0.71	-0.79	-0.71	-0.48	-0.63
R4(OFF)	-0.51	-0.33	-0.63	-0.79	-0.79	-0.63	-0.56	-0.63	-0.56
R5(OFF)	-0.51	-0.48	-0.71	-0.40	-0.40	-0.71	-0.63	-0.63	No meas.
R6(OFF)	-0.44	-0.56	-0.48	-0.56	-0.71	-0.79	-0.48	-0.48	-0.71
R7(OFF)	-0.59	-0.71	-0.63	-0.56	-0.56	-0.56	-0.56	-0.40	No meas.
R8(OFF)	-0.28	-0.48	-0.79	-0.71	-0.63	-0.63	-0.48	-0.63	-0.71
R9(OFF)	-0.36	-0.71	-0.71	-0.40	-0.48	-0.79	-0.40	-0.63	-0.63
R10(OFF)	-0.66	-0.56	-0.71	-0.71	-0.63	-0.56	-0.56	-0.48	-0.48
R11(OFF)	-0.44	-0.56	-0.63	-0.56	-0.40	-0.63	-0.40	-0.71	-0.63
Irradiated, unbiased parts statistics									
Min Value	-0.66	-0.71	-0.79	-0.71	-0.63	-0.79	-0.56	-0.71	-0.71
Max Value	-0.28	-0.48	-0.63	-0.40	-0.40	-0.56	-0.40	-0.40	-0.48
Average	-0.48	-0.60	-0.69	-0.59	-0.54	-0.63	-0.48	-0.57	-0.61
Sigma	0.11	0.10	0.07	0.13	0.10	0.09	0.08	0.13	0.10

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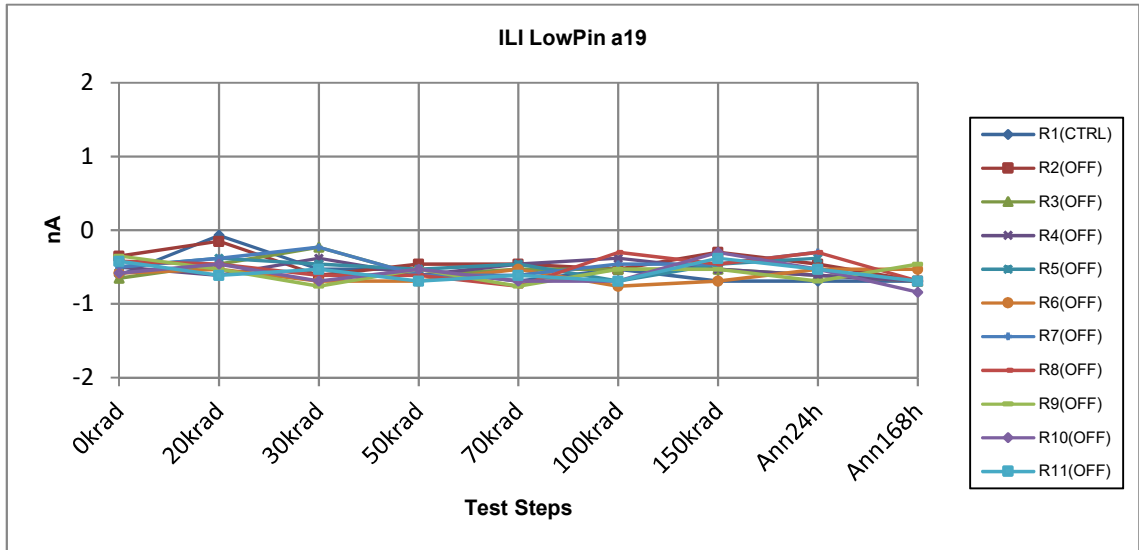
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ILI LowPin a20	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.45	-0.45	-0.38	-0.45	-0.53	-0.22	-0.45	-0.53	-0.53
Irradiated, unbiased parts results									
R2(OFF)	-0.55	-0.22	-0.53	-0.45	-0.60	-0.38	-0.45	-0.53	-0.68
R3(OFF)	-0.55	-0.45	-0.45	-0.53	-0.45	-0.53	-0.53	-0.60	-0.30
R4(OFF)	-0.55	-0.53	-0.53	-0.45	-0.30	-0.30	-0.45	-0.30	-0.38
R5(OFF)	-0.55	-0.45	-0.53	-0.45	-0.53	-0.30	-0.45	-0.38	No meas.
R6(OFF)	-0.70	-0.38	-0.38	-0.53	-0.38	-0.60	-0.30	-0.53	-0.45
R7(OFF)	-0.70	-0.60	-0.38	-0.45	-0.38	-0.45	-0.60	-0.45	No meas.
R8(OFF)	-0.40	-0.60	-0.60	-0.30	-0.60	-0.76	-0.45	-0.30	-0.45
R9(OFF)	-0.32	-0.22	-0.60	-0.38	-0.53	-0.53	-0.38	-0.30	-0.38
R10(OFF)	-0.47	-0.45	-0.45	-0.30	-0.53	-0.53	-0.38	-0.30	-0.38
R11(OFF)	-0.55	-0.30	-0.45	-0.45	-0.38	-0.53	-0.38	-0.22	-0.22
Irradiated, unbiased parts statistics									
Min Value	-0.70	-0.60	-0.60	-0.45	-0.60	-0.76	-0.60	-0.45	-0.45
Max Value	-0.32	-0.22	-0.38	-0.30	-0.38	-0.45	-0.38	-0.22	-0.22
Average	-0.53	-0.43	-0.50	-0.38	-0.48	-0.56	-0.44	-0.31	-0.36
Sigma	0.12	0.17	0.10	0.08	0.10	0.12	0.10	0.08	0.10

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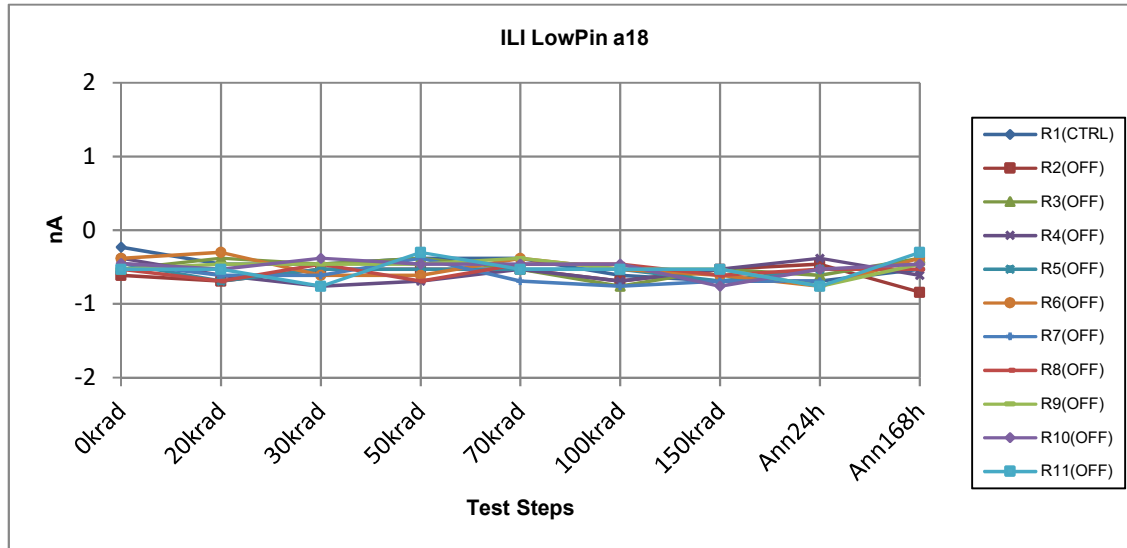
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ILI LowPin a19	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.61	-0.07	-0.53	-0.53	-0.69	-0.53	-0.69	-0.69	-0.69
Irradiated, unbiased parts results									
R2(OFF)	-0.35	-0.15	-0.61	-0.46	-0.46	-0.53	-0.30	-0.46	-0.69
R3(OFF)	-0.65	-0.46	-0.23	-0.61	-0.53	-0.53	-0.53	-0.61	-0.69
R4(OFF)	-0.50	-0.61	-0.38	-0.61	-0.46	-0.38	-0.53	-0.61	-0.69
R5(OFF)	-0.50	-0.38	-0.46	-0.53	-0.46	-0.69	-0.46	-0.38	No meas.
R6(OFF)	-0.58	-0.53	-0.69	-0.69	-0.53	-0.76	-0.69	-0.53	-0.53
R7(OFF)	-0.50	-0.38	-0.23	-0.61	-0.61	-0.46	-0.46	-0.30	No meas.
R8(OFF)	-0.42	-0.46	-0.61	-0.61	-0.76	-0.30	-0.46	-0.30	-0.69
R9(OFF)	-0.35	-0.53	-0.76	-0.53	-0.76	-0.53	-0.53	-0.69	-0.46
R10(OFF)	-0.58	-0.46	-0.69	-0.53	-0.69	-0.69	-0.30	-0.53	-0.84
R11(OFF)	-0.42	-0.61	-0.53	-0.69	-0.61	-0.69	-0.38	-0.53	-0.69
Irradiated, unbiased parts statistics									
Min Value	-0.65	-0.61	-0.76	-0.69	-0.76	-0.69	-0.53	-0.69	-0.84
Max Value	-0.35	-0.38	-0.23	-0.53	-0.61	-0.30	-0.30	-0.30	-0.46
Average	-0.49	-0.49	-0.56	-0.59	-0.69	-0.53	-0.43	-0.47	-0.67
Sigma	0.10	0.09	0.21	0.07	0.08	0.17	0.09	0.17	0.16

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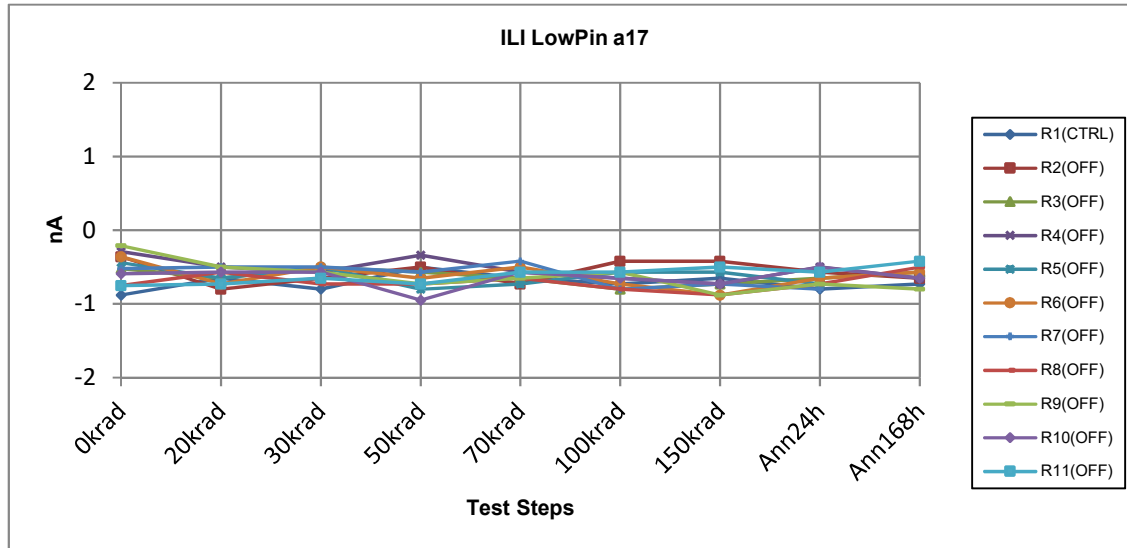
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ILI LowPin a18	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.23	-0.46	-0.46	-0.38	-0.38	-0.61	-0.69	-0.69	-0.53
Irradiated, unbiased parts results									
R2(OFF)	-0.61	-0.69	-0.53	-0.53	-0.53	-0.69	-0.53	-0.46	-0.84
R3(OFF)	-0.53	-0.38	-0.46	-0.38	-0.53	-0.76	-0.53	-0.61	-0.38
R4(OFF)	-0.38	-0.61	-0.76	-0.69	-0.53	-0.69	-0.53	-0.38	-0.61
R5(OFF)	-0.45	-0.69	-0.53	-0.53	-0.53	-0.53	-0.69	-0.53	No meas.
R6(OFF)	-0.38	-0.30	-0.61	-0.61	-0.38	-0.53	-0.61	-0.76	-0.38
R7(OFF)	-0.45	-0.61	-0.61	-0.38	-0.69	-0.76	-0.69	-0.69	No meas.
R8(OFF)	-0.53	-0.69	-0.46	-0.69	-0.46	-0.46	-0.61	-0.53	-0.53
R9(OFF)	-0.53	-0.46	-0.46	-0.46	-0.38	-0.53	-0.53	-0.76	-0.46
R10(OFF)	-0.45	-0.53	-0.38	-0.46	-0.46	-0.46	-0.76	-0.53	-0.46
R11(OFF)	-0.53	-0.53	-0.76	-0.30	-0.53	-0.53	-0.53	-0.76	-0.30
Irradiated, unbiased parts statistics									
Min Value	-0.61	-0.69	-0.76	-0.69	-0.69	-0.76	-0.76	-0.76	-0.53
Max Value	-0.38	-0.46	-0.38	-0.30	-0.38	-0.46	-0.53	-0.53	-0.30
Average	-0.48	-0.56	-0.53	-0.46	-0.50	-0.55	-0.62	-0.65	-0.44
Sigma	0.07	0.09	0.15	0.15	0.12	0.12	0.10	0.12	0.10

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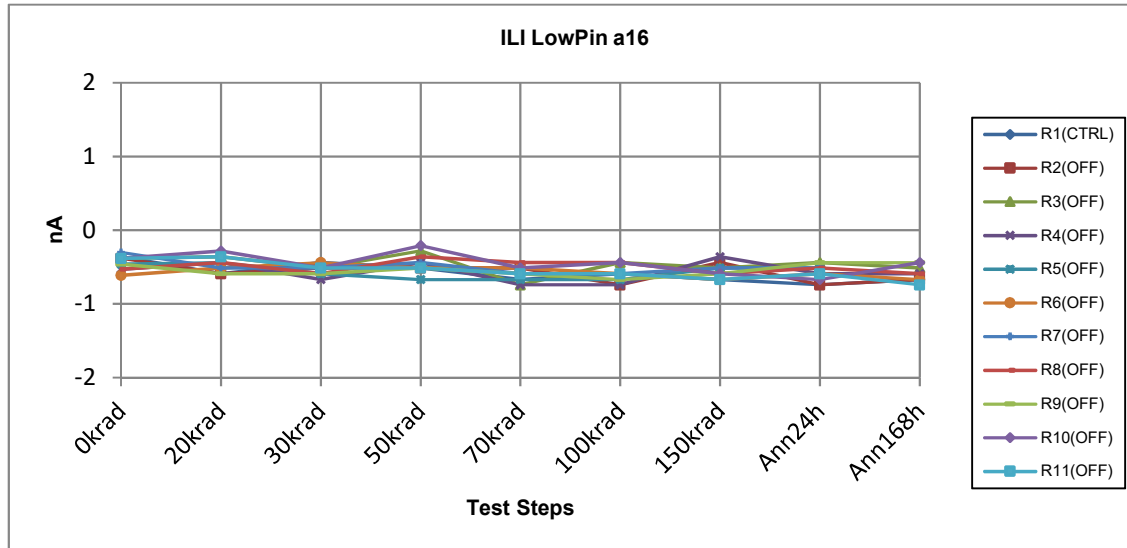
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ILI LowPin a17	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.88	-0.65	-0.80	-0.50	-0.65	-0.73	-0.65	-0.80	-0.73
Irradiated, unbiased parts results									
R2(OFF)	-0.36	-0.80	-0.65	-0.50	-0.73	-0.42	-0.42	-0.57	-0.65
R3(OFF)	-0.52	-0.65	-0.50	-0.57	-0.65	-0.80	-0.73	-0.65	-0.57
R4(OFF)	-0.29	-0.50	-0.57	-0.34	-0.57	-0.65	-0.73	-0.50	-0.65
R5(OFF)	-0.44	-0.65	-0.50	-0.80	-0.73	-0.57	-0.57	-0.73	No meas.
R6(OFF)	-0.36	-0.73	-0.50	-0.65	-0.50	-0.73	-0.88	-0.65	-0.57
R7(OFF)	-0.52	-0.50	-0.50	-0.57	-0.42	-0.80	-0.73	-0.80	No meas.
R8(OFF)	-0.75	-0.57	-0.73	-0.73	-0.65	-0.80	-0.88	-0.73	-0.50
R9(OFF)	-0.21	-0.50	-0.57	-0.73	-0.65	-0.57	-0.88	-0.73	-0.80
R10(OFF)	-0.59	-0.57	-0.57	-0.95	-0.57	-0.65	-0.73	-0.50	-0.65
R11(OFF)	-0.75	-0.73	-0.65	-0.73	-0.57	-0.57	-0.50	-0.57	-0.42
Irradiated, unbiased parts statistics									
Min Value	-0.75	-0.73	-0.73	-0.95	-0.65	-0.80	-0.88	-0.80	-0.80
Max Value	-0.21	-0.50	-0.50	-0.57	-0.42	-0.57	-0.50	-0.50	-0.42
Average	-0.48	-0.57	-0.60	-0.74	-0.57	-0.68	-0.74	-0.67	-0.59
Sigma	0.18	0.09	0.09	0.14	0.09	0.12	0.16	0.13	0.17

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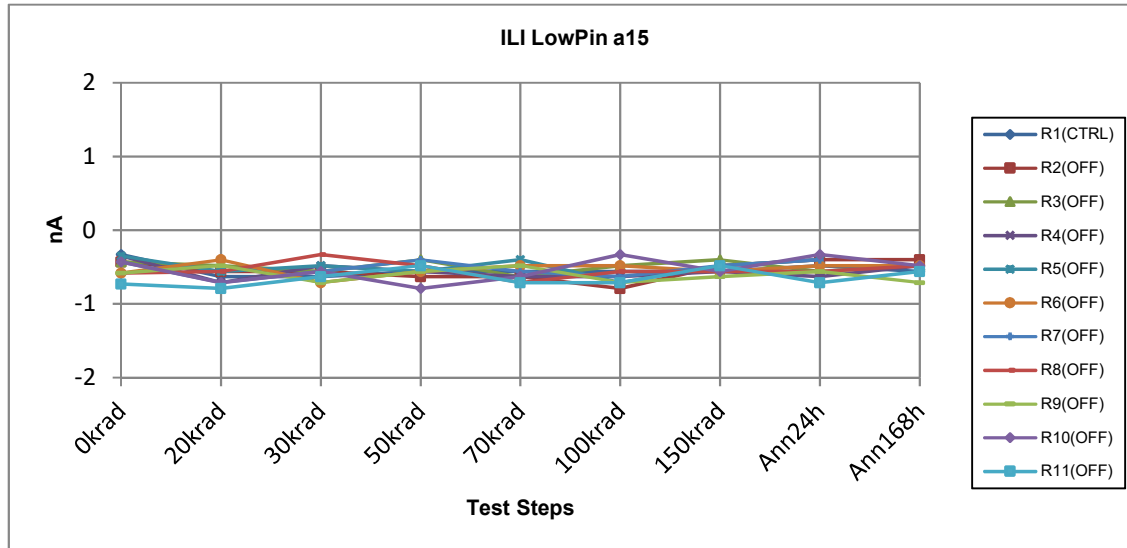
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ILI LowPin a16	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.36	-0.59	-0.44	-0.51	-0.67	-0.59	-0.67	-0.74	-0.67
Irradiated, unbiased parts results									
R2(OFF)	-0.38	-0.59	-0.51	-0.51	-0.51	-0.74	-0.44	-0.74	-0.67
R3(OFF)	-0.38	-0.36	-0.51	-0.28	-0.74	-0.44	-0.51	-0.44	-0.51
R4(OFF)	-0.53	-0.44	-0.67	-0.44	-0.74	-0.74	-0.36	-0.59	-0.59
R5(OFF)	-0.46	-0.44	-0.59	-0.67	-0.67	-0.67	-0.51	-0.51	No meas.
R6(OFF)	-0.61	-0.51	-0.44	-0.51	-0.51	-0.59	-0.67	-0.59	-0.67
R7(OFF)	-0.30	-0.51	-0.51	-0.44	-0.59	-0.59	-0.51	-0.51	No meas.
R8(OFF)	-0.53	-0.44	-0.59	-0.36	-0.44	-0.44	-0.59	-0.51	-0.59
R9(OFF)	-0.46	-0.59	-0.59	-0.51	-0.59	-0.67	-0.59	-0.44	-0.44
R10(OFF)	-0.38	-0.28	-0.51	-0.21	-0.51	-0.44	-0.59	-0.67	-0.44
R11(OFF)	-0.38	-0.36	-0.51	-0.51	-0.59	-0.59	-0.67	-0.59	-0.74
Irradiated, unbiased parts statistics									
Min Value	-0.61	-0.59	-0.59	-0.51	-0.59	-0.67	-0.67	-0.67	-0.74
Max Value	-0.30	-0.28	-0.51	-0.21	-0.44	-0.44	-0.51	-0.44	-0.44
Average	-0.44	-0.44	-0.54	-0.41	-0.54	-0.55	-0.59	-0.54	-0.55
Sigma	0.09	0.12	0.04	0.13	0.07	0.10	0.06	0.09	0.14

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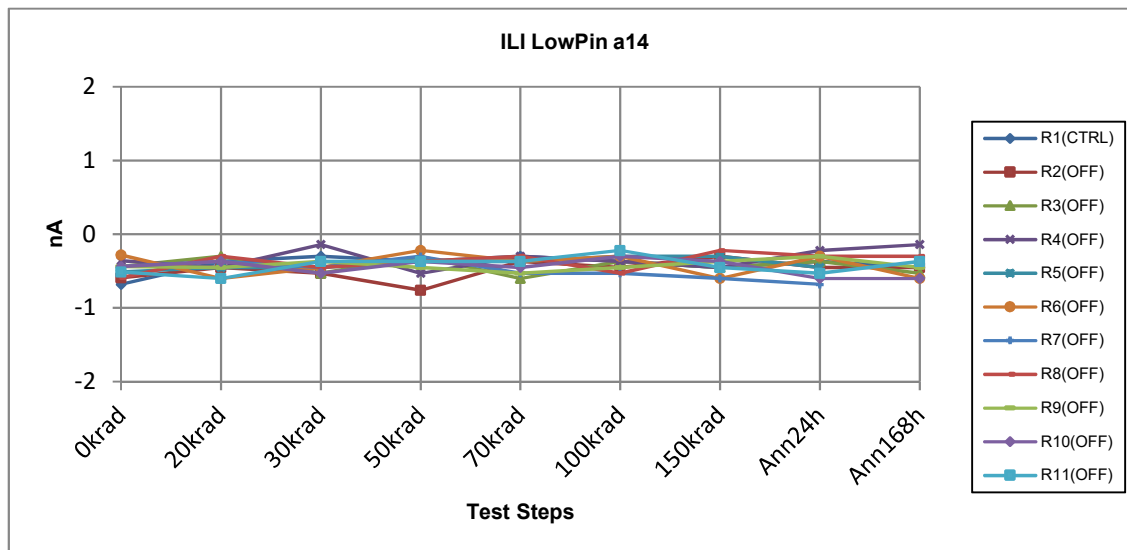
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ILI LowPin a15	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.33	-0.63	-0.63	-0.56	-0.56	-0.56	-0.56	-0.48	-0.56
Irradiated, unbiased parts results									
R2(OFF)	-0.43	-0.56	-0.56	-0.63	-0.63	-0.79	-0.48	-0.40	-0.40
R3(OFF)	-0.43	-0.48	-0.56	-0.40	-0.63	-0.48	-0.40	-0.56	-0.48
R4(OFF)	-0.35	-0.71	-0.48	-0.56	-0.63	-0.63	-0.56	-0.63	-0.48
R5(OFF)	-0.35	-0.56	-0.48	-0.56	-0.40	-0.71	-0.48	-0.40	No meas.
R6(OFF)	-0.58	-0.40	-0.71	-0.56	-0.48	-0.48	-0.56	-0.48	-0.48
R7(OFF)	-0.43	-0.71	-0.56	-0.40	-0.56	-0.63	-0.48	-0.40	No meas.
R8(OFF)	-0.58	-0.56	-0.33	-0.48	-0.71	-0.56	-0.56	-0.56	-0.48
R9(OFF)	-0.58	-0.48	-0.71	-0.56	-0.48	-0.71	-0.63	-0.56	-0.71
R10(OFF)	-0.43	-0.71	-0.56	-0.79	-0.63	-0.33	-0.56	-0.33	-0.48
R11(OFF)	-0.73	-0.79	-0.63	-0.48	-0.71	-0.71	-0.48	-0.71	-0.56
Irradiated, unbiased parts statistics									
Min Value	-0.73	-0.79	-0.71	-0.79	-0.71	-0.71	-0.63	-0.71	-0.71
Max Value	-0.35	-0.48	-0.33	-0.40	-0.48	-0.33	-0.48	-0.33	-0.48
Average	-0.49	-0.65	-0.56	-0.54	-0.62	-0.59	-0.54	-0.51	-0.56
Sigma	0.12	0.13	0.14	0.15	0.10	0.16	0.06	0.15	0.11

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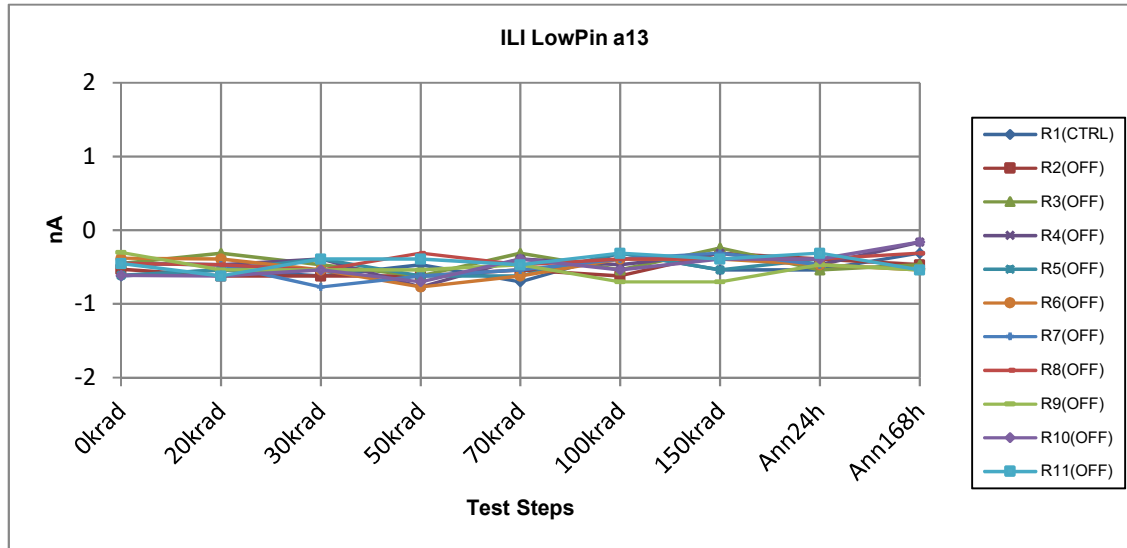
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ILI LowPin a14	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.68	-0.37	-0.30	-0.37	-0.30	-0.37	-0.45	-0.37	-0.45
Irradiated, unbiased parts results									
R2(OFF)	-0.59	-0.45	-0.53	-0.76	-0.37	-0.45	-0.30	-0.45	-0.45
R3(OFF)	-0.44	-0.30	-0.53	-0.30	-0.60	-0.37	-0.45	-0.37	-0.53
R4(OFF)	-0.36	-0.45	-0.14	-0.53	-0.30	-0.37	-0.45	-0.22	-0.14
R5(OFF)	-0.51	-0.45	-0.45	-0.37	-0.37	-0.30	-0.30	-0.45	No meas.
R6(OFF)	-0.28	-0.60	-0.45	-0.22	-0.37	-0.30	-0.60	-0.30	-0.60
R7(OFF)	-0.44	-0.37	-0.45	-0.30	-0.53	-0.53	-0.60	-0.68	No meas.
R8(OFF)	-0.59	-0.30	-0.45	-0.37	-0.30	-0.53	-0.22	-0.30	-0.30
R9(OFF)	-0.44	-0.45	-0.37	-0.45	-0.53	-0.45	-0.37	-0.30	-0.45
R10(OFF)	-0.44	-0.37	-0.53	-0.37	-0.45	-0.30	-0.37	-0.60	-0.60
R11(OFF)	-0.51	-0.60	-0.37	-0.37	-0.37	-0.22	-0.45	-0.53	-0.37
Irradiated, unbiased parts statistics									
Min Value	-0.59	-0.60	-0.53	-0.45	-0.53	-0.53	-0.60	-0.68	-0.60
Max Value	-0.28	-0.30	-0.37	-0.30	-0.30	-0.22	-0.22	-0.30	-0.30
Average	-0.46	-0.42	-0.43	-0.37	-0.44	-0.41	-0.40	-0.48	-0.43
Sigma	0.10	0.11	0.07	0.05	0.10	0.14	0.14	0.17	0.13

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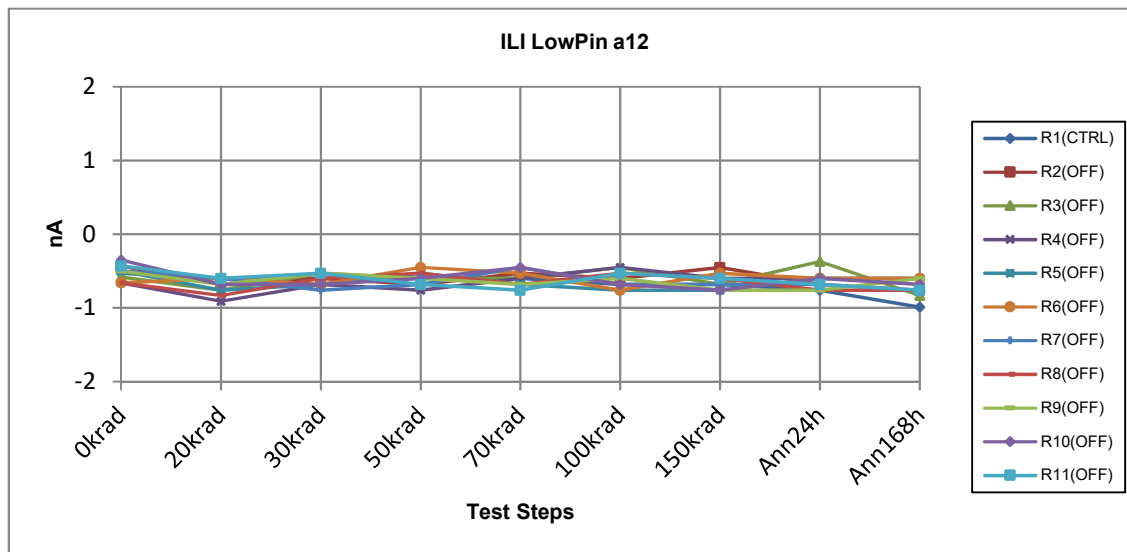
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ILI LowPin a13	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.62	-0.54	-0.62	-0.47	-0.70	-0.31	-0.54	-0.54	-0.31
Irradiated, unbiased parts results									
R2(OFF)	-0.53	-0.62	-0.62	-0.62	-0.54	-0.62	-0.31	-0.39	-0.47
R3(OFF)	-0.45	-0.31	-0.47	-0.62	-0.31	-0.54	-0.24	-0.54	-0.47
R4(OFF)	-0.45	-0.47	-0.39	-0.77	-0.39	-0.47	-0.31	-0.47	-0.16
R5(OFF)	-0.61	-0.54	-0.39	-0.62	-0.62	-0.31	-0.54	-0.39	No meas.
R6(OFF)	-0.38	-0.39	-0.54	-0.77	-0.62	-0.39	-0.39	-0.47	-0.54
R7(OFF)	-0.45	-0.47	-0.77	-0.62	-0.54	-0.39	-0.31	-0.47	No meas.
R8(OFF)	-0.45	-0.47	-0.54	-0.31	-0.47	-0.39	-0.39	-0.39	-0.31
R9(OFF)	-0.30	-0.54	-0.54	-0.54	-0.47	-0.70	-0.70	-0.47	-0.54
R10(OFF)	-0.61	-0.62	-0.54	-0.70	-0.39	-0.54	-0.39	-0.39	-0.16
R11(OFF)	-0.45	-0.62	-0.39	-0.39	-0.47	-0.31	-0.39	-0.31	-0.54
Irradiated, unbiased parts statistics									
Min Value	-0.61	-0.62	-0.77	-0.70	-0.54	-0.70	-0.70	-0.47	-0.54
Max Value	-0.30	-0.47	-0.39	-0.31	-0.39	-0.31	-0.31	-0.31	-0.16
Average	-0.47	-0.54	-0.56	-0.51	-0.47	-0.47	-0.44	-0.41	-0.39
Sigma	0.10	0.08	0.14	0.16	0.05	0.16	0.15	0.07	0.19

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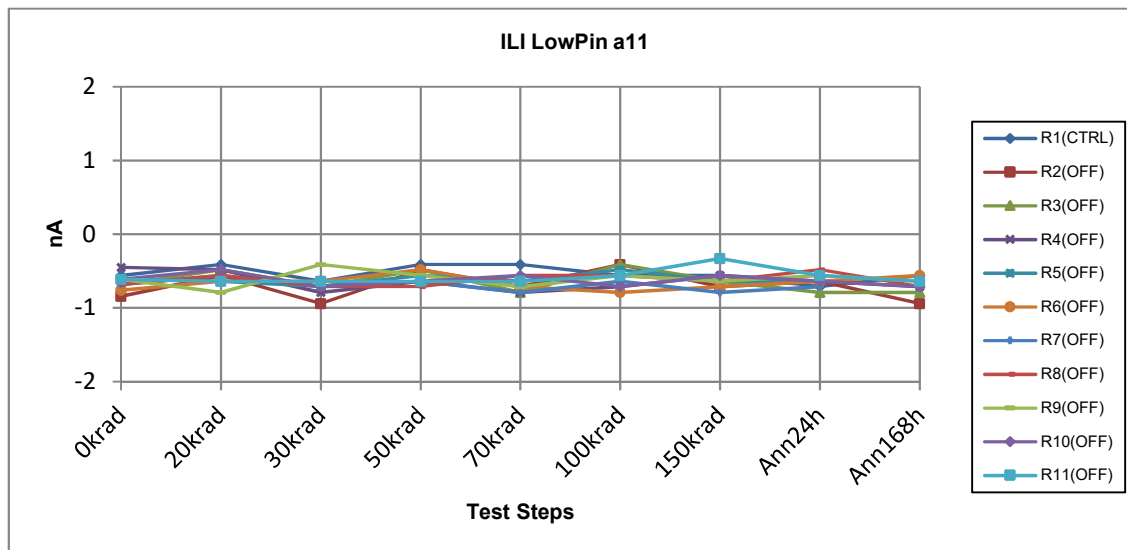
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ILI LowPin a12	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.53	-0.60	-0.60	-0.60	-0.60	-0.68	-0.68	-0.76	-0.99
Irradiated, unbiased parts results									
R2(OFF)	-0.43	-0.68	-0.60	-0.68	-0.53	-0.60	-0.45	-0.68	-0.76
R3(OFF)	-0.58	-0.76	-0.53	-0.60	-0.60	-0.45	-0.68	-0.37	-0.83
R4(OFF)	-0.66	-0.91	-0.68	-0.76	-0.60	-0.45	-0.60	-0.60	-0.60
R5(OFF)	-0.50	-0.76	-0.68	-0.53	-0.68	-0.76	-0.76	-0.60	No meas.
R6(OFF)	-0.66	-0.60	-0.68	-0.45	-0.53	-0.76	-0.53	-0.60	-0.60
R7(OFF)	-0.50	-0.60	-0.76	-0.68	-0.45	-0.68	-0.68	-0.68	No meas.
R8(OFF)	-0.66	-0.83	-0.60	-0.53	-0.68	-0.53	-0.60	-0.76	-0.76
R9(OFF)	-0.50	-0.68	-0.53	-0.60	-0.68	-0.60	-0.76	-0.76	-0.60
R10(OFF)	-0.35	-0.68	-0.68	-0.60	-0.45	-0.68	-0.76	-0.60	-0.68
R11(OFF)	-0.43	-0.60	-0.53	-0.68	-0.76	-0.53	-0.60	-0.68	-0.76
Irradiated, unbiased parts statistics									
Min Value	-0.66	-0.83	-0.76	-0.68	-0.76	-0.68	-0.76	-0.76	-0.76
Max Value	-0.35	-0.60	-0.53	-0.53	-0.45	-0.53	-0.60	-0.60	-0.60
Average	-0.53	-0.68	-0.62	-0.62	-0.60	-0.60	-0.68	-0.70	-0.70
Sigma	0.11	0.09	0.10	0.06	0.14	0.08	0.08	0.07	0.08

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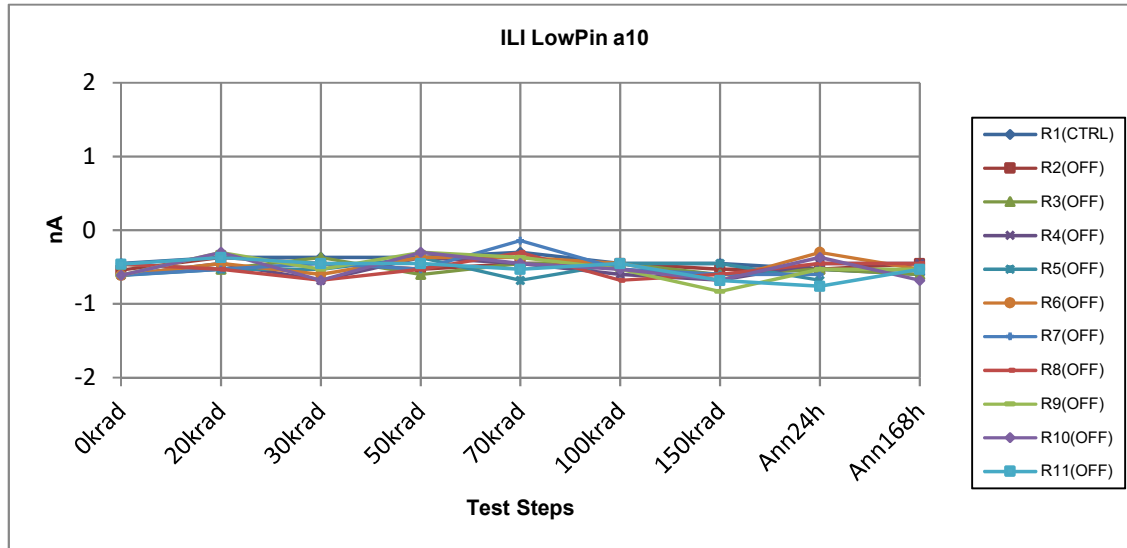
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ILI LowPin a11	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.56	-0.41	-0.64	-0.41	-0.41	-0.56	-0.56	-0.71	-0.56
Irradiated, unbiased parts results									
R2(OFF)	-0.84	-0.56	-0.94	-0.48	-0.71	-0.41	-0.71	-0.64	-0.94
R3(OFF)	-0.68	-0.48	-0.71	-0.48	-0.79	-0.41	-0.64	-0.79	-0.79
R4(OFF)	-0.45	-0.48	-0.79	-0.64	-0.79	-0.71	-0.56	-0.64	-0.71
R5(OFF)	-0.61	-0.64	-0.71	-0.56	-0.64	-0.48	-0.64	-0.64	No meas.
R6(OFF)	-0.76	-0.64	-0.64	-0.48	-0.71	-0.79	-0.71	-0.64	-0.56
R7(OFF)	-0.68	-0.56	-0.71	-0.64	-0.79	-0.64	-0.79	-0.71	No meas.
R8(OFF)	-0.68	-0.56	-0.71	-0.71	-0.56	-0.56	-0.64	-0.48	-0.71
R9(OFF)	-0.61	-0.79	-0.41	-0.56	-0.71	-0.56	-0.64	-0.56	-0.64
R10(OFF)	-0.61	-0.48	-0.71	-0.64	-0.56	-0.71	-0.56	-0.64	-0.71
R11(OFF)	-0.61	-0.64	-0.64	-0.64	-0.64	-0.56	-0.33	-0.56	-0.64
Irradiated, unbiased parts statistics									
Min Value	-0.84	-0.79	-0.71	-0.71	-0.79	-0.71	-0.79	-0.71	-0.71
Max Value	-0.45	-0.48	-0.41	-0.56	-0.56	-0.56	-0.33	-0.48	-0.64
Average	-0.65	-0.61	-0.64	-0.64	-0.65	-0.61	-0.59	-0.59	-0.68
Sigma	0.10	0.12	0.13	0.05	0.10	0.07	0.17	0.09	0.04

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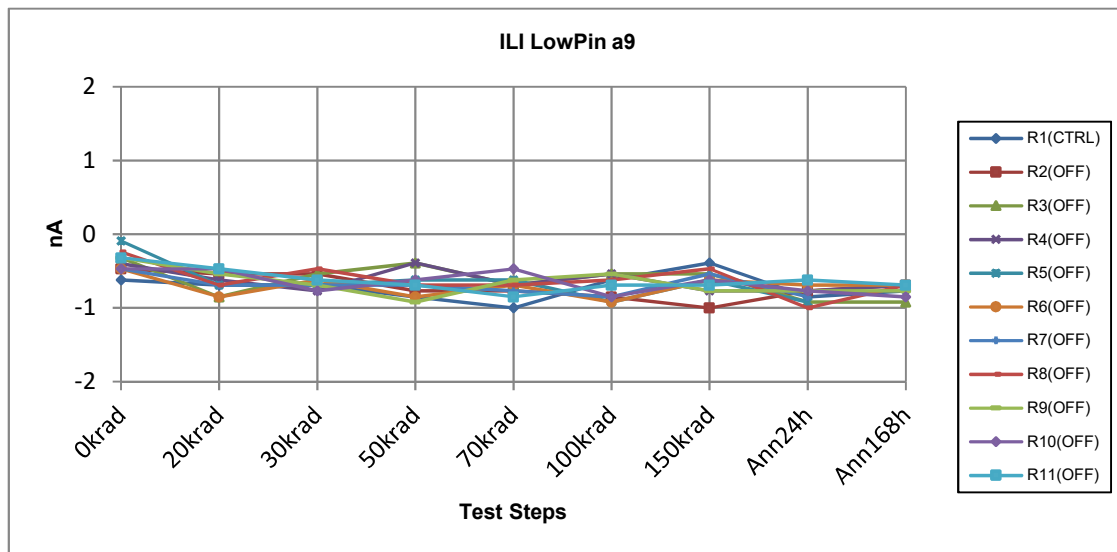
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ILI LowPin a10	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.45	-0.37	-0.37	-0.37	-0.30	-0.45	-0.45	-0.53	-0.60
Irradiated, unbiased parts results									
R2(OFF)	-0.54	-0.37	-0.45	-0.53	-0.45	-0.45	-0.53	-0.53	-0.45
R3(OFF)	-0.46	-0.53	-0.37	-0.60	-0.45	-0.45	-0.60	-0.53	-0.60
R4(OFF)	-0.61	-0.45	-0.68	-0.37	-0.45	-0.60	-0.68	-0.45	-0.45
R5(OFF)	-0.61	-0.53	-0.53	-0.37	-0.68	-0.45	-0.45	-0.68	No meas.
R6(OFF)	-0.61	-0.45	-0.60	-0.37	-0.37	-0.45	-0.68	-0.30	-0.53
R7(OFF)	-0.61	-0.53	-0.45	-0.53	-0.14	-0.53	-0.60	-0.60	No meas.
R8(OFF)	-0.46	-0.53	-0.68	-0.53	-0.30	-0.68	-0.60	-0.45	-0.45
R9(OFF)	-0.61	-0.30	-0.53	-0.30	-0.37	-0.53	-0.83	-0.53	-0.53
R10(OFF)	-0.61	-0.30	-0.68	-0.30	-0.45	-0.53	-0.68	-0.37	-0.68
R11(OFF)	-0.46	-0.37	-0.45	-0.45	-0.53	-0.45	-0.68	-0.76	-0.53
Irradiated, unbiased parts statistics									
Min Value	-0.61	-0.53	-0.68	-0.53	-0.53	-0.68	-0.83	-0.76	-0.68
Max Value	-0.46	-0.30	-0.45	-0.30	-0.14	-0.45	-0.60	-0.37	-0.45
Average	-0.56	-0.41	-0.56	-0.42	-0.36	-0.54	-0.68	-0.54	-0.55
Sigma	0.07	0.12	0.12	0.12	0.15	0.08	0.09	0.15	0.10

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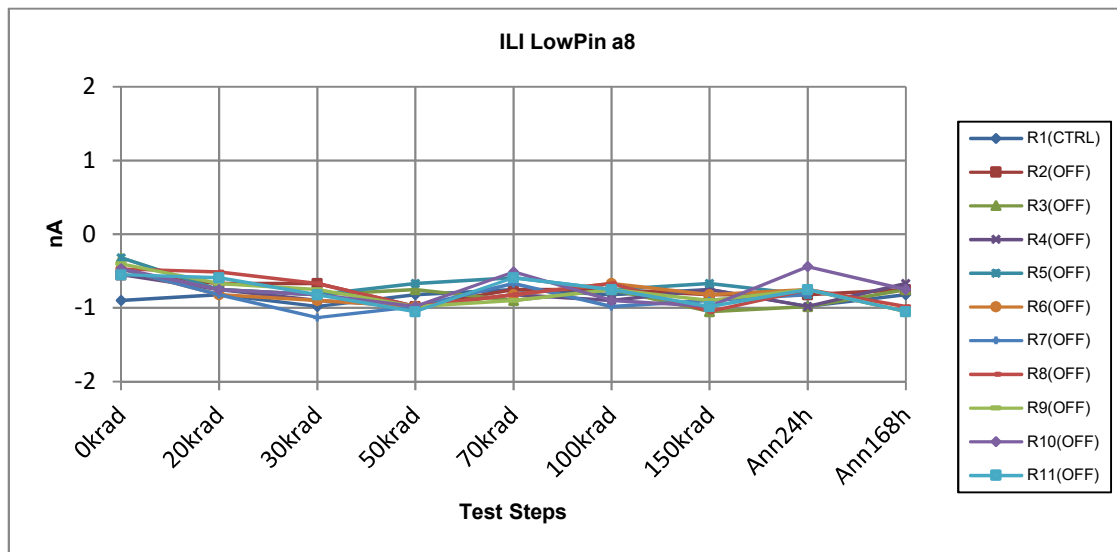
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ILI LowPin a9	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.62	-0.69	-0.69	-0.85	-1.00	-0.62	-0.39	-0.85	-0.77
Irradiated, unbiased parts results									
R2(OFF)	-0.47	-0.54	-0.54	-0.77	-0.77	-0.85	-1.00	-0.77	-0.69
R3(OFF)	-0.32	-0.85	-0.54	-0.39	-0.69	-0.54	-0.54	-0.92	-0.92
R4(OFF)	-0.40	-0.62	-0.77	-0.39	-0.69	-0.54	-0.77	-0.77	-0.69
R5(OFF)	-0.09	-0.69	-0.69	-0.62	-0.62	-0.92	-0.62	-0.92	No meas.
R6(OFF)	-0.47	-0.85	-0.62	-0.85	-0.69	-0.92	-0.62	-0.69	-0.69
R7(OFF)	-0.47	-0.69	-0.69	-0.69	-0.77	-0.85	-0.54	-0.85	No meas.
R8(OFF)	-0.24	-0.69	-0.47	-0.69	-0.69	-0.62	-0.47	-1.00	-0.69
R9(OFF)	-0.32	-0.54	-0.69	-0.92	-0.62	-0.54	-0.77	-0.77	-0.77
R10(OFF)	-0.47	-0.47	-0.77	-0.62	-0.47	-0.85	-0.62	-0.77	-0.85
R11(OFF)	-0.32	-0.47	-0.62	-0.69	-0.85	-0.69	-0.69	-0.62	-0.69
Irradiated, unbiased parts statistics									
Min Value	-0.47	-0.69	-0.77	-0.92	-0.85	-0.85	-0.77	-1.00	-0.85
Max Value	-0.09	-0.47	-0.47	-0.62	-0.47	-0.54	-0.47	-0.62	-0.69
Average	-0.36	-0.57	-0.65	-0.72	-0.68	-0.71	-0.62	-0.80	-0.75
Sigma	0.13	0.11	0.11	0.11	0.15	0.14	0.12	0.14	0.08

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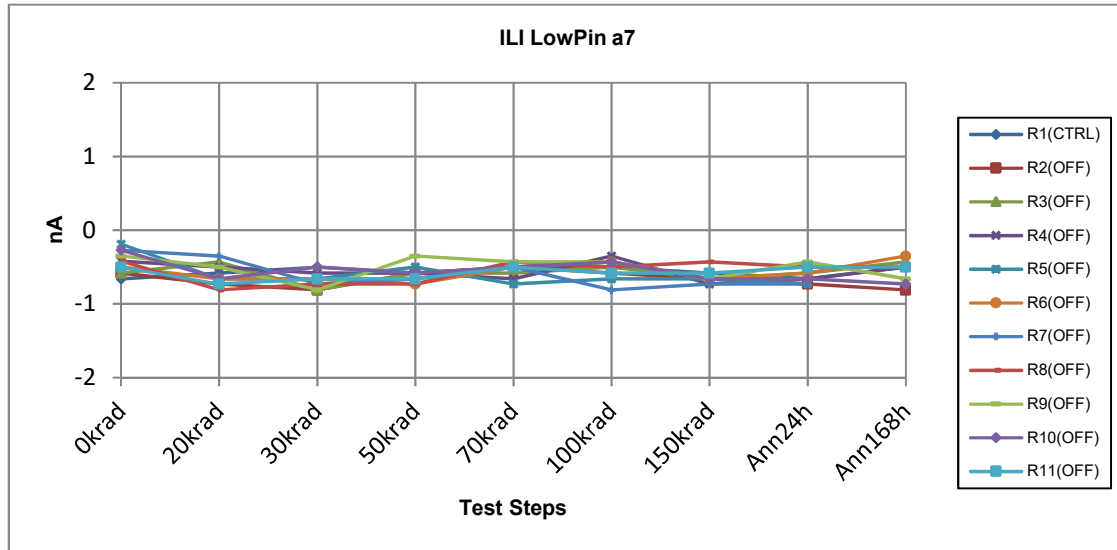
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ILI LowPin a8	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.90	-0.82	-0.98	-0.82	-0.75	-0.82	-0.75	-0.98	-0.82
Irradiated, unbiased parts results									
R2(OFF)	-0.55	-0.67	-0.67	-0.98	-0.75	-0.75	-0.82	-0.82	-0.75
R3(OFF)	-0.32	-0.75	-0.82	-0.75	-0.90	-0.75	-1.05	-0.98	-0.75
R4(OFF)	-0.55	-0.75	-0.90	-0.98	-0.82	-0.90	-0.75	-0.98	-0.67
R5(OFF)	-0.32	-0.75	-0.82	-0.67	-0.59	-0.75	-0.67	-0.82	No meas.
R6(OFF)	-0.47	-0.82	-0.90	-0.98	-0.82	-0.67	-0.82	-0.75	-1.05
R7(OFF)	-0.47	-0.82	-1.13	-0.98	-0.67	-0.98	-0.90	-0.82	No meas.
R8(OFF)	-0.47	-0.51	-0.67	-0.98	-0.82	-0.67	-1.05	-0.75	-0.98
R9(OFF)	-0.40	-0.67	-0.75	-0.98	-0.90	-0.75	-0.90	-0.75	-1.05
R10(OFF)	-0.47	-0.75	-0.82	-0.98	-0.51	-0.90	-0.98	-0.44	-0.75
R11(OFF)	-0.55	-0.59	-0.82	-1.05	-0.59	-0.75	-0.98	-0.75	-1.05
Irradiated, unbiased parts statistics									
Min Value	-0.55	-0.82	-1.13	-1.05	-0.90	-0.98	-1.05	-0.82	-1.05
Max Value	-0.32	-0.51	-0.67	-0.98	-0.51	-0.67	-0.90	-0.44	-0.75
Average	-0.46	-0.67	-0.84	-0.99	-0.70	-0.81	-0.96	-0.70	-0.96
Sigma	0.09	0.12	0.17	0.03	0.16	0.13	0.06	0.15	0.14

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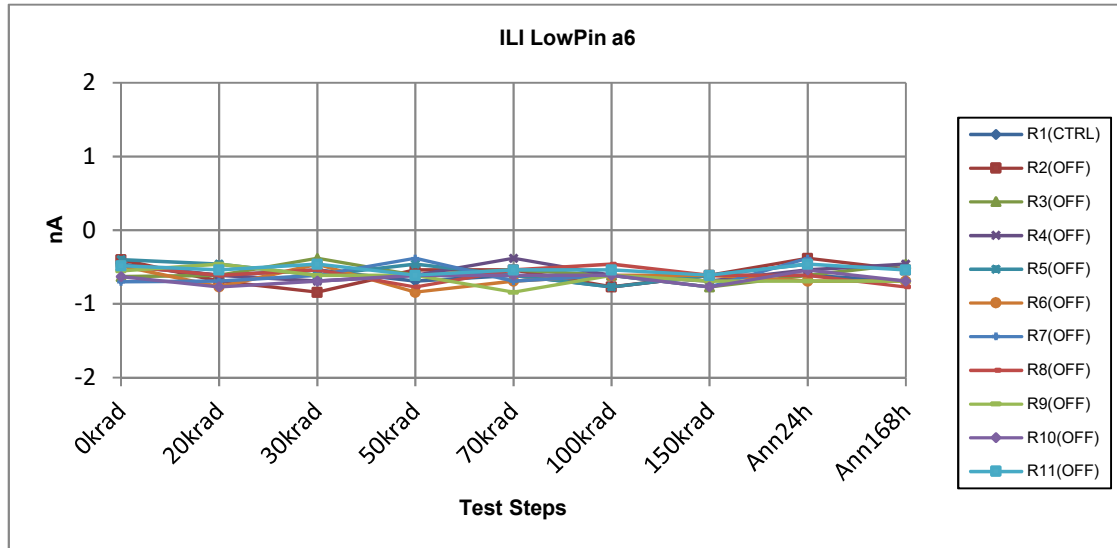
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ILI LowPin a7	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.66	-0.58	-0.50	-0.58	-0.50	-0.50	-0.58	-0.66	-0.50
Irradiated, unbiased parts results									
R2(OFF)	-0.58	-0.73	-0.81	-0.58	-0.50	-0.58	-0.66	-0.73	-0.81
R3(OFF)	-0.58	-0.43	-0.81	-0.58	-0.58	-0.50	-0.66	-0.58	-0.43
R4(OFF)	-0.42	-0.50	-0.58	-0.58	-0.66	-0.35	-0.73	-0.66	-0.50
R5(OFF)	-0.19	-0.66	-0.66	-0.50	-0.73	-0.66	-0.66	-0.73	No meas.
R6(OFF)	-0.50	-0.66	-0.66	-0.73	-0.50	-0.43	-0.66	-0.58	-0.35
R7(OFF)	-0.27	-0.35	-0.73	-0.66	-0.50	-0.81	-0.73	-0.73	No meas.
R8(OFF)	-0.42	-0.81	-0.73	-0.73	-0.43	-0.50	-0.43	-0.50	-0.50
R9(OFF)	-0.35	-0.50	-0.81	-0.35	-0.43	-0.43	-0.66	-0.43	-0.66
R10(OFF)	-0.27	-0.66	-0.50	-0.58	-0.50	-0.43	-0.66	-0.66	-0.73
R11(OFF)	-0.50	-0.73	-0.66	-0.66	-0.50	-0.58	-0.58	-0.50	-0.50
Irradiated, unbiased parts statistics									
Min Value	-0.58	-0.81	-0.81	-0.73	-0.50	-0.81	-0.73	-0.73	-0.73
Max Value	-0.19	-0.35	-0.50	-0.35	-0.43	-0.43	-0.43	-0.43	-0.50
Average	-0.41	-0.61	-0.69	-0.60	-0.47	-0.55	-0.61	-0.56	-0.60
Sigma	0.14	0.18	0.12	0.15	0.04	0.16	0.11	0.13	0.12

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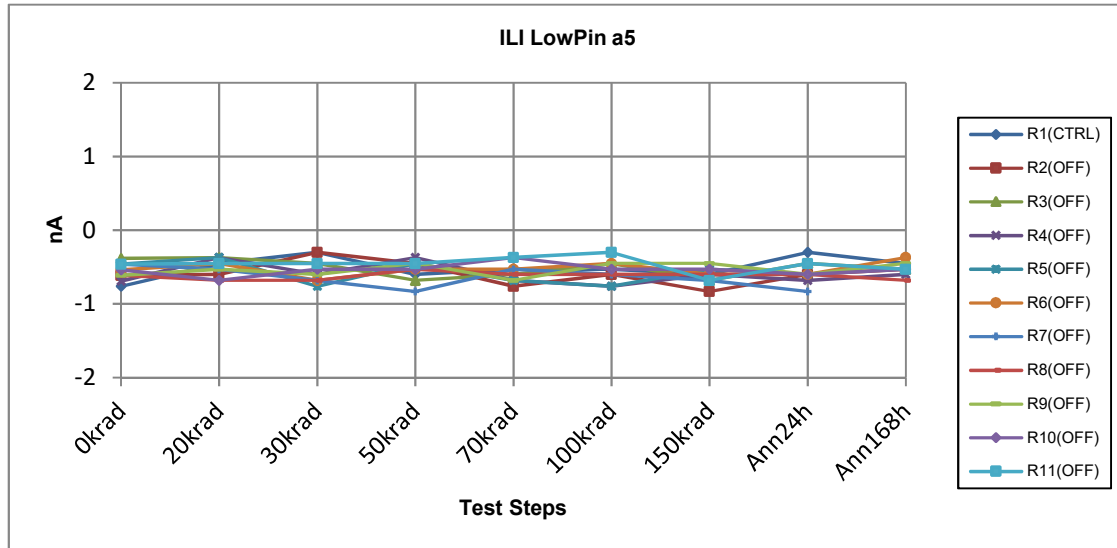
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ILI LowPin a6	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.46	-0.61	-0.54	-0.69	-0.61	-0.77	-0.61	-0.61	-0.69
Irradiated, unbiased parts results									
R2(OFF)	-0.40	-0.69	-0.84	-0.54	-0.54	-0.77	-0.61	-0.38	-0.54
R3(OFF)	-0.63	-0.61	-0.38	-0.61	-0.54	-0.61	-0.77	-0.61	-0.46
R4(OFF)	-0.48	-0.61	-0.69	-0.61	-0.38	-0.61	-0.69	-0.54	-0.46
R5(OFF)	-0.40	-0.46	-0.61	-0.46	-0.61	-0.77	-0.61	-0.46	No meas.
R6(OFF)	-0.48	-0.77	-0.46	-0.84	-0.69	-0.61	-0.61	-0.69	-0.69
R7(OFF)	-0.70	-0.69	-0.61	-0.38	-0.69	-0.61	-0.77	-0.38	No meas.
R8(OFF)	-0.48	-0.61	-0.54	-0.77	-0.54	-0.46	-0.61	-0.61	-0.77
R9(OFF)	-0.55	-0.46	-0.61	-0.61	-0.84	-0.61	-0.69	-0.69	-0.69
R10(OFF)	-0.63	-0.77	-0.69	-0.61	-0.61	-0.61	-0.77	-0.54	-0.69
R11(OFF)	-0.48	-0.54	-0.46	-0.61	-0.54	-0.54	-0.61	-0.46	-0.54
Irradiated, unbiased parts statistics									
Min Value	-0.70	-0.77	-0.69	-0.77	-0.84	-0.61	-0.77	-0.69	-0.77
Max Value	-0.40	-0.46	-0.46	-0.38	-0.54	-0.46	-0.61	-0.38	-0.54
Average	-0.52	-0.61	-0.58	-0.60	-0.64	-0.57	-0.69	-0.54	-0.67
Sigma	0.10	0.12	0.09	0.14	0.13	0.07	0.08	0.12	0.10

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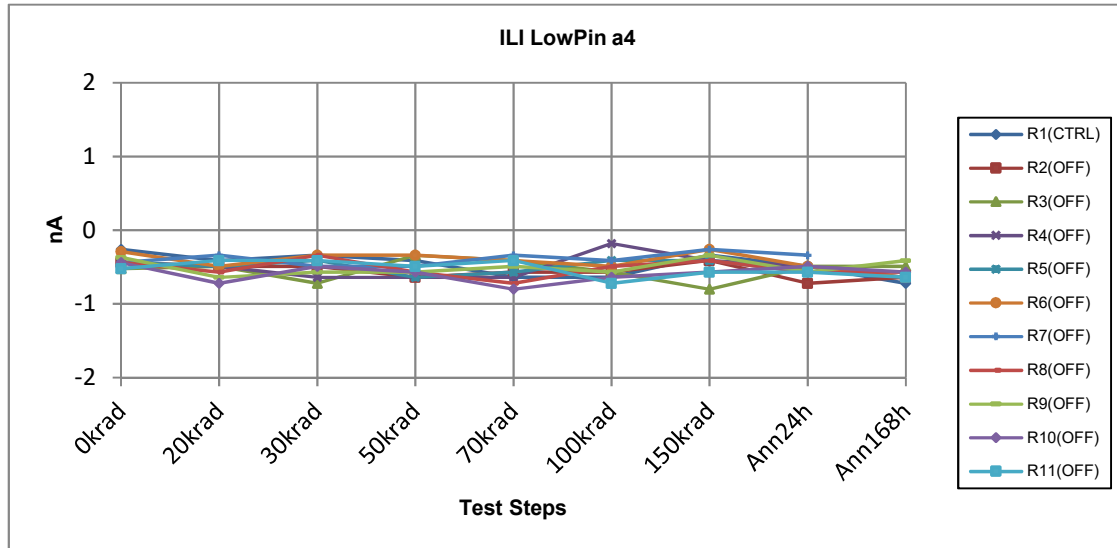
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ILI LowPin a5	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.76	-0.45	-0.30	-0.60	-0.53	-0.53	-0.60	-0.30	-0.45
Irradiated, unbiased parts results									
R2(OFF)	-0.61	-0.60	-0.30	-0.45	-0.76	-0.60	-0.83	-0.60	-0.53
R3(OFF)	-0.38	-0.37	-0.45	-0.68	-0.60	-0.45	-0.68	-0.45	-0.53
R4(OFF)	-0.69	-0.37	-0.60	-0.37	-0.68	-0.76	-0.60	-0.68	-0.60
R5(OFF)	-0.46	-0.37	-0.76	-0.45	-0.68	-0.76	-0.53	-0.60	No meas.
R6(OFF)	-0.54	-0.45	-0.68	-0.53	-0.53	-0.45	-0.60	-0.60	-0.37
R7(OFF)	-0.46	-0.53	-0.68	-0.83	-0.53	-0.60	-0.68	-0.83	No meas.
R8(OFF)	-0.61	-0.68	-0.68	-0.53	-0.60	-0.60	-0.60	-0.60	-0.68
R9(OFF)	-0.61	-0.53	-0.60	-0.45	-0.68	-0.45	-0.45	-0.60	-0.45
R10(OFF)	-0.54	-0.68	-0.53	-0.53	-0.37	-0.53	-0.53	-0.60	-0.53
R11(OFF)	-0.46	-0.45	-0.45	-0.45	-0.37	-0.30	-0.68	-0.45	-0.53
Irradiated, unbiased parts statistics									
Min Value	-0.69	-0.68	-0.76	-0.83	-0.76	-0.76	-0.83	-0.83	-0.68
Max Value	-0.38	-0.37	-0.30	-0.37	-0.37	-0.30	-0.45	-0.45	-0.37
Average	-0.54	-0.50	-0.57	-0.53	-0.58	-0.55	-0.62	-0.60	-0.53
Sigma	0.10	0.12	0.14	0.13	0.13	0.14	0.11	0.11	0.09

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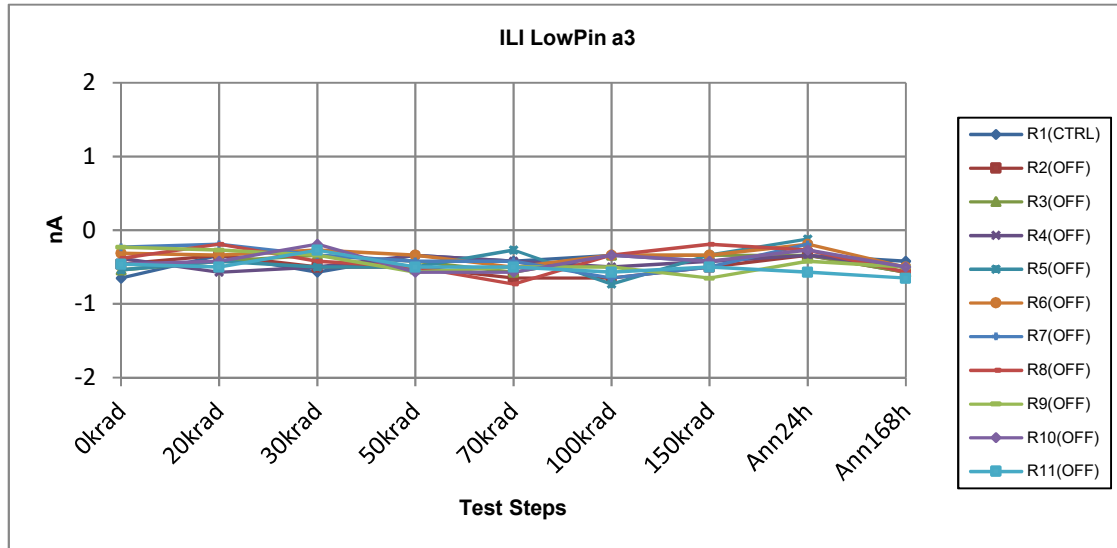
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ILI LowPin a4	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.26	-0.41	-0.34	-0.41	-0.64	-0.64	-0.34	-0.49	-0.72
Irradiated, unbiased parts results									
R2(OFF)	-0.44	-0.49	-0.49	-0.64	-0.57	-0.57	-0.41	-0.72	-0.64
R3(OFF)	-0.52	-0.49	-0.72	-0.34	-0.41	-0.57	-0.80	-0.49	-0.49
R4(OFF)	-0.44	-0.49	-0.64	-0.64	-0.64	-0.18	-0.41	-0.49	-0.64
R5(OFF)	-0.44	-0.49	-0.41	-0.64	-0.57	-0.41	-0.41	-0.57	No meas.
R6(OFF)	-0.29	-0.49	-0.34	-0.34	-0.41	-0.49	-0.26	-0.49	-0.64
R7(OFF)	-0.44	-0.34	-0.49	-0.49	-0.34	-0.41	-0.26	-0.34	No meas.
R8(OFF)	-0.44	-0.57	-0.34	-0.57	-0.72	-0.49	-0.41	-0.57	-0.57
R9(OFF)	-0.37	-0.64	-0.57	-0.57	-0.49	-0.57	-0.34	-0.57	-0.41
R10(OFF)	-0.44	-0.72	-0.49	-0.57	-0.80	-0.64	-0.57	-0.49	-0.57
R11(OFF)	-0.52	-0.41	-0.41	-0.49	-0.41	-0.72	-0.57	-0.57	-0.64
Irradiated, unbiased parts statistics									
Min Value	-0.52	-0.72	-0.72	-0.64	-0.80	-0.72	-0.80	-0.72	-0.64
Max Value	-0.29	-0.34	-0.34	-0.34	-0.34	-0.18	-0.26	-0.34	-0.41
Average	-0.43	-0.51	-0.49	-0.53	-0.54	-0.51	-0.44	-0.53	-0.58
Sigma	0.07	0.11	0.12	0.11	0.15	0.15	0.16	0.10	0.09

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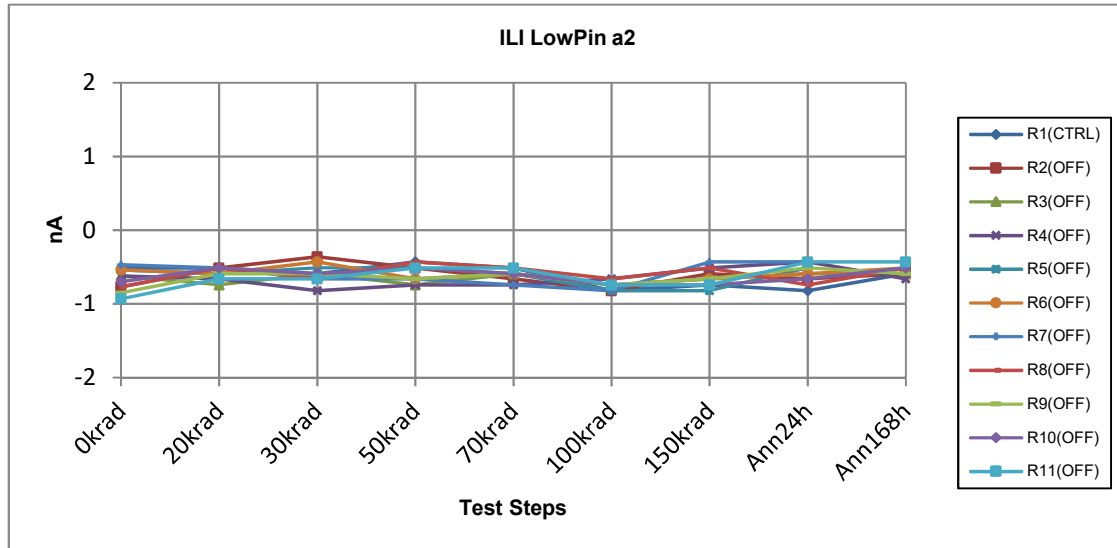
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ILI LowPin a3	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.65	-0.34	-0.57	-0.34	-0.42	-0.34	-0.42	-0.34	-0.42
Irradiated, unbiased parts results									
R2(OFF)	-0.46	-0.34	-0.50	-0.50	-0.65	-0.65	-0.50	-0.34	-0.57
R3(OFF)	-0.54	-0.42	-0.34	-0.42	-0.57	-0.34	-0.34	-0.34	-0.57
R4(OFF)	-0.38	-0.57	-0.50	-0.34	-0.42	-0.50	-0.42	-0.34	-0.50
R5(OFF)	-0.54	-0.42	-0.50	-0.50	-0.27	-0.73	-0.34	-0.12	No meas.
R6(OFF)	-0.31	-0.34	-0.27	-0.34	-0.50	-0.34	-0.34	-0.19	-0.50
R7(OFF)	-0.23	-0.19	-0.34	-0.42	-0.42	-0.65	-0.50	-0.19	No meas.
R8(OFF)	-0.38	-0.19	-0.42	-0.50	-0.73	-0.34	-0.19	-0.27	-0.57
R9(OFF)	-0.23	-0.27	-0.34	-0.57	-0.50	-0.50	-0.65	-0.42	-0.50
R10(OFF)	-0.46	-0.42	-0.19	-0.57	-0.57	-0.34	-0.42	-0.27	-0.50
R11(OFF)	-0.46	-0.50	-0.27	-0.50	-0.50	-0.57	-0.50	-0.57	-0.65
Irradiated, unbiased parts statistics									
Min Value	-0.54	-0.57	-0.50	-0.57	-0.73	-0.73	-0.65	-0.57	-0.65
Max Value	-0.23	-0.19	-0.19	-0.34	-0.27	-0.34	-0.19	-0.12	-0.50
Average	-0.40	-0.37	-0.37	-0.47	-0.51	-0.50	-0.42	-0.31	-0.55
Sigma	0.11	0.13	0.11	0.08	0.13	0.15	0.13	0.13	0.05

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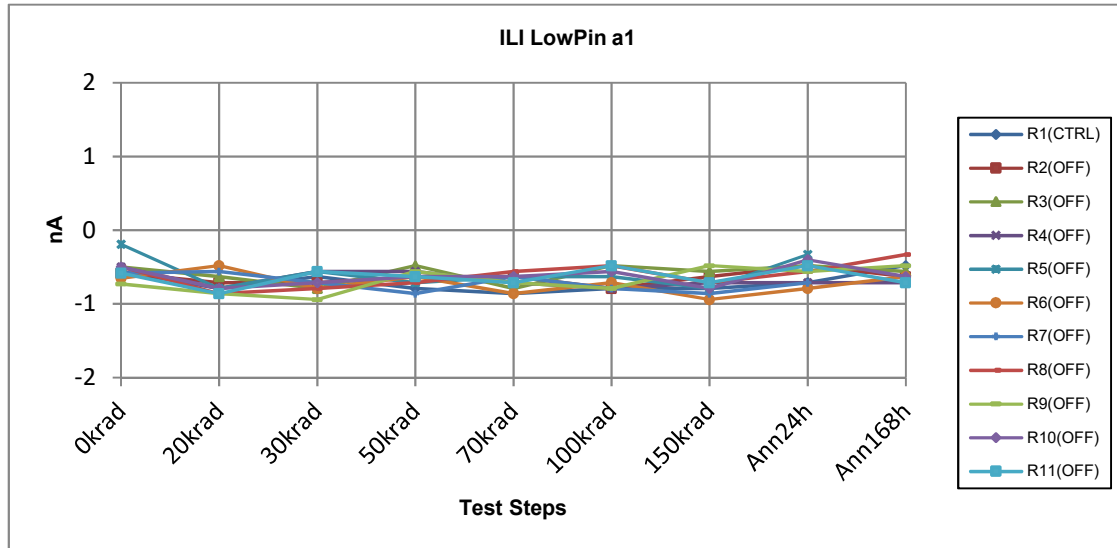
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ILI LowPin a2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.51	-0.51	-0.59	-0.43	-0.51	-0.82	-0.74	-0.82	-0.59
Irradiated, unbiased parts results									
R2(OFF)	-0.77	-0.51	-0.36	-0.51	-0.66	-0.82	-0.59	-0.66	-0.59
R3(OFF)	-0.62	-0.74	-0.59	-0.74	-0.59	-0.74	-0.66	-0.59	-0.59
R4(OFF)	-0.62	-0.66	-0.82	-0.74	-0.74	-0.66	-0.51	-0.43	-0.66
R5(OFF)	-0.54	-0.59	-0.51	-0.51	-0.59	-0.82	-0.82	-0.51	No meas.
R6(OFF)	-0.54	-0.59	-0.43	-0.66	-0.59	-0.74	-0.66	-0.59	-0.51
R7(OFF)	-0.47	-0.51	-0.66	-0.66	-0.74	-0.82	-0.43	-0.43	No meas.
R8(OFF)	-0.77	-0.51	-0.66	-0.43	-0.51	-0.66	-0.51	-0.74	-0.51
R9(OFF)	-0.85	-0.59	-0.59	-0.66	-0.59	-0.74	-0.66	-0.51	-0.59
R10(OFF)	-0.70	-0.51	-0.59	-0.51	-0.59	-0.74	-0.74	-0.66	-0.51
R11(OFF)	-0.93	-0.66	-0.66	-0.51	-0.51	-0.74	-0.74	-0.43	-0.43
Irradiated, unbiased parts statistics									
Min Value	-0.93	-0.74	-0.82	-0.74	-0.74	-0.82	-0.82	-0.74	-0.66
Max Value	-0.47	-0.51	-0.36	-0.43	-0.51	-0.66	-0.43	-0.43	-0.43
Average	-0.68	-0.59	-0.59	-0.59	-0.61	-0.75	-0.63	-0.56	-0.55
Sigma	0.15	0.08	0.13	0.11	0.08	0.06	0.12	0.11	0.07

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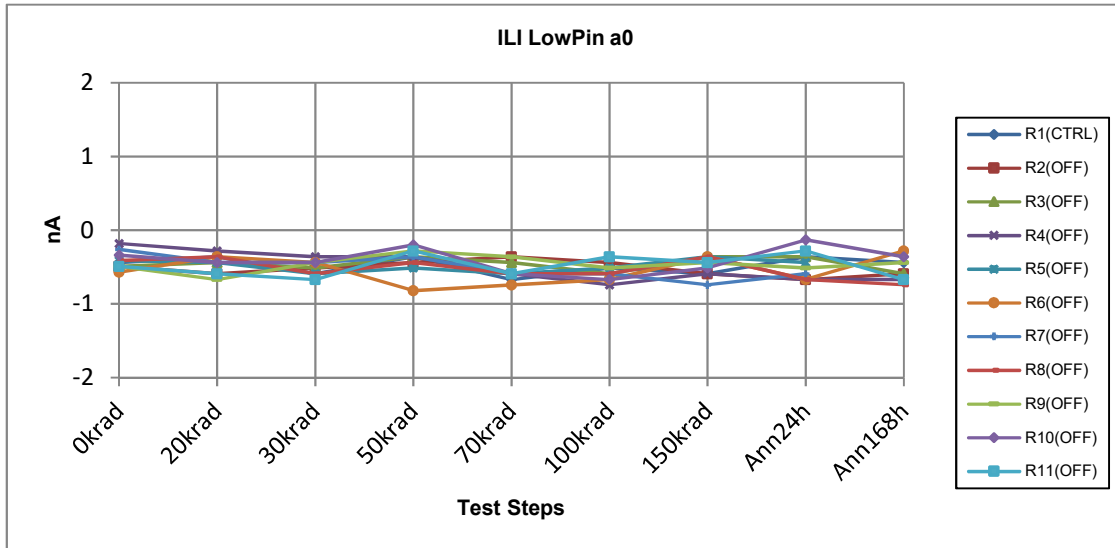
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ILI LowPin a1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.56	-0.79	-0.63	-0.79	-0.86	-0.79	-0.79	-0.71	-0.48
Irradiated, unbiased parts results									
R2(OFF)	-0.58	-0.71	-0.71	-0.63	-0.63	-0.79	-0.63	-0.48	-0.63
R3(OFF)	-0.50	-0.63	-0.79	-0.48	-0.79	-0.48	-0.56	-0.48	-0.56
R4(OFF)	-0.50	-0.79	-0.56	-0.56	-0.71	-0.79	-0.71	-0.71	-0.71
R5(OFF)	-0.19	-0.79	-0.56	-0.71	-0.63	-0.63	-0.79	-0.33	No meas.
R6(OFF)	-0.65	-0.48	-0.79	-0.63	-0.86	-0.71	-0.94	-0.79	-0.63
R7(OFF)	-0.58	-0.56	-0.71	-0.86	-0.63	-0.79	-0.86	-0.71	No meas.
R8(OFF)	-0.50	-0.86	-0.79	-0.71	-0.56	-0.48	-0.71	-0.56	-0.33
R9(OFF)	-0.73	-0.86	-0.94	-0.56	-0.71	-0.79	-0.48	-0.56	-0.48
R10(OFF)	-0.50	-0.79	-0.71	-0.63	-0.63	-0.56	-0.79	-0.40	-0.63
R11(OFF)	-0.58	-0.86	-0.56	-0.63	-0.71	-0.48	-0.71	-0.48	-0.71
Irradiated, unbiased parts statistics									
Min Value	-0.73	-0.86	-0.94	-0.86	-0.86	-0.79	-0.94	-0.79	-0.71
Max Value	-0.19	-0.48	-0.56	-0.48	-0.56	-0.48	-0.48	-0.33	-0.33
Average	-0.53	-0.73	-0.71	-0.64	-0.69	-0.65	-0.72	-0.55	-0.59
Sigma	0.14	0.13	0.12	0.10	0.09	0.14	0.14	0.15	0.13

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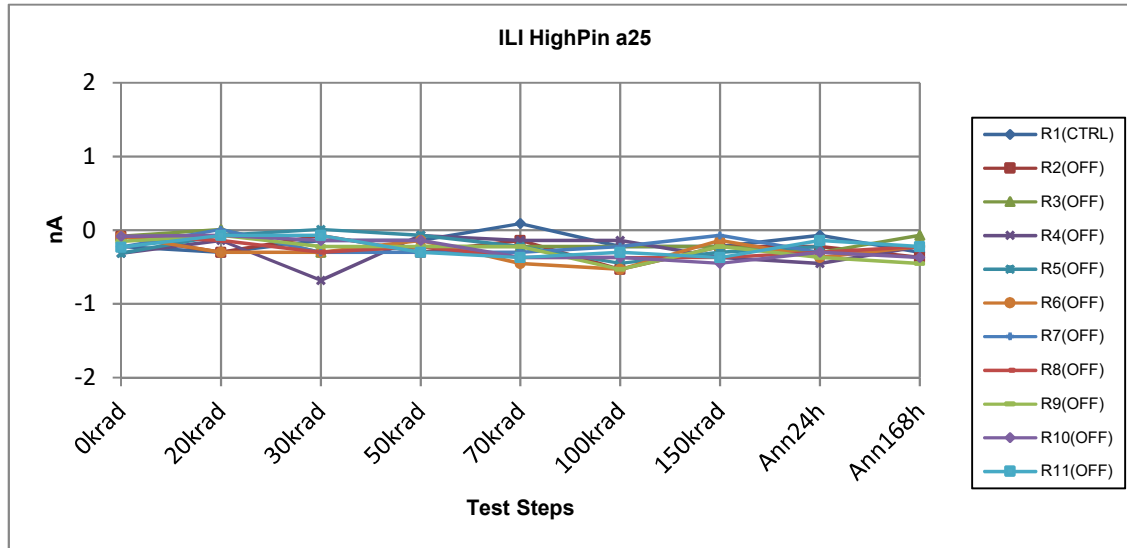
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ILI LowPin a0	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.44	-0.36	-0.59	-0.36	-0.67	-0.51	-0.59	-0.36	-0.44
Irradiated, unbiased parts results									
R2(OFF)	-0.49	-0.59	-0.51	-0.44	-0.36	-0.44	-0.59	-0.67	-0.59
R3(OFF)	-0.49	-0.44	-0.51	-0.36	-0.44	-0.59	-0.36	-0.36	-0.59
R4(OFF)	-0.18	-0.28	-0.36	-0.36	-0.59	-0.74	-0.59	-0.67	-0.67
R5(OFF)	-0.41	-0.44	-0.59	-0.51	-0.59	-0.51	-0.36	-0.44	No meas.
R6(OFF)	-0.57	-0.36	-0.44	-0.82	-0.74	-0.67	-0.36	-0.67	-0.28
R7(OFF)	-0.26	-0.44	-0.44	-0.36	-0.59	-0.59	-0.74	-0.59	No meas.
R8(OFF)	-0.41	-0.36	-0.59	-0.44	-0.59	-0.59	-0.36	-0.67	-0.74
R9(OFF)	-0.49	-0.67	-0.44	-0.28	-0.36	-0.51	-0.44	-0.51	-0.44
R10(OFF)	-0.34	-0.44	-0.44	-0.20	-0.59	-0.67	-0.51	-0.13	-0.36
R11(OFF)	-0.49	-0.59	-0.67	-0.28	-0.59	-0.36	-0.44	-0.28	-0.67
Irradiated, unbiased parts statistics									
Min Value	-0.57	-0.67	-0.67	-0.82	-0.74	-0.74	-0.74	-0.67	-0.74
Max Value	-0.18	-0.28	-0.36	-0.20	-0.36	-0.36	-0.36	-0.13	-0.28
Average	-0.41	-0.46	-0.50	-0.41	-0.54	-0.57	-0.48	-0.50	-0.54
Sigma	0.12	0.12	0.09	0.17	0.12	0.11	0.13	0.19	0.16

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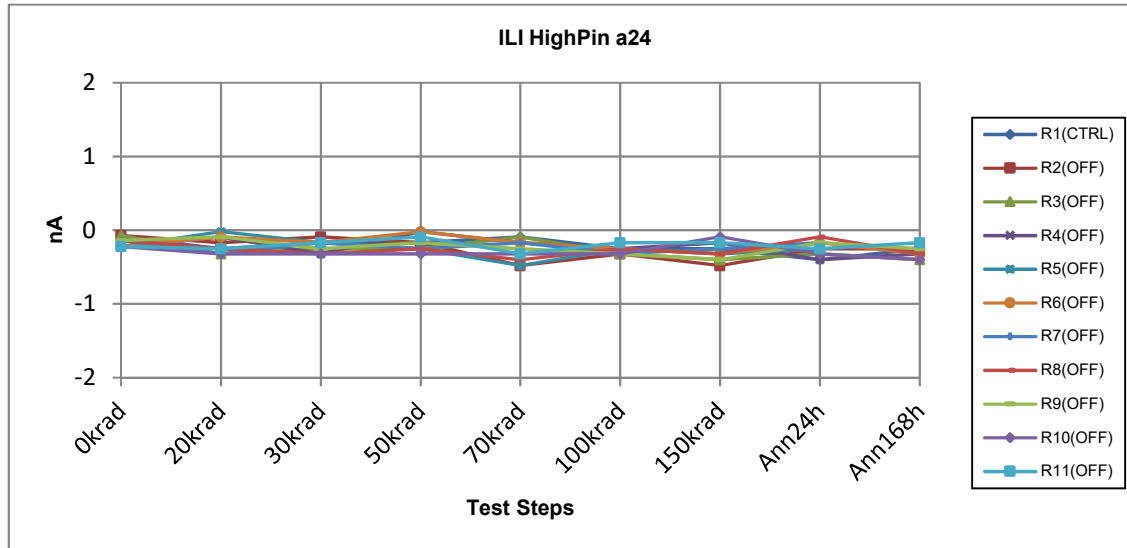
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ILI HighPin a25	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.22	-0.30	-0.14	-0.14	0.09	-0.22	-0.22	-0.07	-0.30
Irradiated, unbiased parts results									
R2(OFF)	-0.08	-0.30	-0.07	-0.30	-0.14	-0.53	-0.22	-0.22	-0.37
R3(OFF)	-0.08	0.01	-0.30	-0.22	-0.22	-0.22	-0.22	-0.30	-0.07
R4(OFF)	-0.31	-0.14	-0.68	-0.07	-0.14	-0.14	-0.37	-0.45	-0.22
R5(OFF)	-0.31	-0.07	0.01	-0.07	-0.22	-0.45	-0.30	-0.22	No meas.
R6(OFF)	-0.08	-0.30	-0.30	-0.14	-0.45	-0.53	-0.14	-0.37	-0.22
R7(OFF)	-0.23	0.01	-0.30	-0.30	-0.30	-0.22	-0.07	-0.30	No meas.
R8(OFF)	-0.08	-0.14	-0.30	-0.22	-0.37	-0.37	-0.37	-0.30	-0.22
R9(OFF)	-0.15	-0.07	-0.22	-0.22	-0.22	-0.53	-0.22	-0.37	-0.45
R10(OFF)	-0.08	-0.07	-0.14	-0.14	-0.37	-0.37	-0.45	-0.30	-0.37
R11(OFF)	-0.23	-0.07	-0.07	-0.30	-0.37	-0.30	-0.37	-0.14	-0.22
Irradiated, unbiased parts statistics									
Min Value	-0.31	-0.30	-0.68	-0.30	-0.45	-0.53	-0.45	-0.45	-0.45
Max Value	-0.08	0.01	0.01	-0.07	-0.14	-0.14	-0.07	-0.14	-0.07
Average	-0.16	-0.11	-0.24	-0.20	-0.28	-0.37	-0.27	-0.30	-0.27
Sigma	0.10	0.11	0.19	0.09	0.11	0.14	0.12	0.09	0.12

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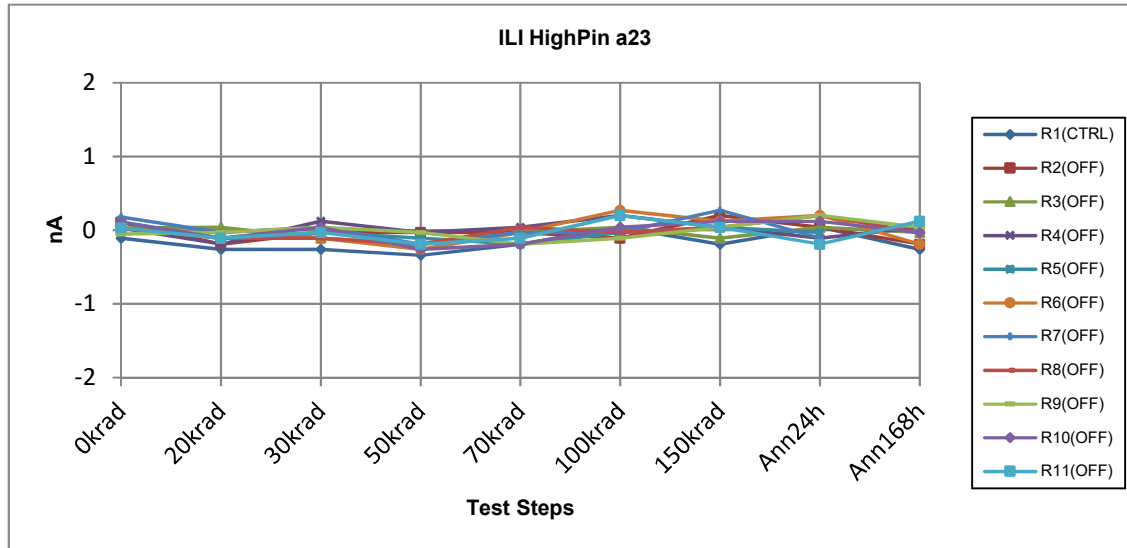
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ILI HighPin a24	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.09	-0.25	-0.17	-0.17	-0.09	-0.25	-0.25	-0.40	-0.25
Irradiated, unbiased parts results									
R2(OFF)	-0.07	-0.17	-0.09	-0.17	-0.48	-0.32	-0.48	-0.25	-0.25
R3(OFF)	-0.07	-0.32	-0.25	-0.25	-0.09	-0.32	-0.40	-0.32	-0.40
R4(OFF)	-0.22	-0.09	-0.32	-0.02	-0.17	-0.25	-0.17	-0.40	-0.32
R5(OFF)	-0.22	-0.02	-0.17	-0.25	-0.48	-0.25	-0.32	-0.25	No meas.
R6(OFF)	-0.22	-0.09	-0.17	-0.02	-0.17	-0.25	-0.32	-0.17	-0.32
R7(OFF)	-0.14	-0.32	-0.17	-0.25	-0.17	-0.32	-0.25	-0.17	No meas.
R8(OFF)	-0.14	-0.25	-0.32	-0.25	-0.40	-0.25	-0.32	-0.09	-0.32
R9(OFF)	-0.14	-0.09	-0.25	-0.17	-0.25	-0.32	-0.40	-0.17	-0.25
R10(OFF)	-0.22	-0.32	-0.32	-0.32	-0.32	-0.32	-0.09	-0.32	-0.40
R11(OFF)	-0.22	-0.25	-0.17	-0.09	-0.32	-0.17	-0.17	-0.25	-0.17
Irradiated, unbiased parts statistics									
Min Value	-0.22	-0.32	-0.32	-0.32	-0.48	-0.32	-0.48	-0.40	-0.40
Max Value	-0.07	-0.02	-0.09	-0.02	-0.09	-0.17	-0.09	-0.09	-0.17
Average	-0.17	-0.19	-0.22	-0.18	-0.29	-0.28	-0.29	-0.24	-0.30
Sigma	0.06	0.11	0.08	0.10	0.14	0.05	0.12	0.09	0.08

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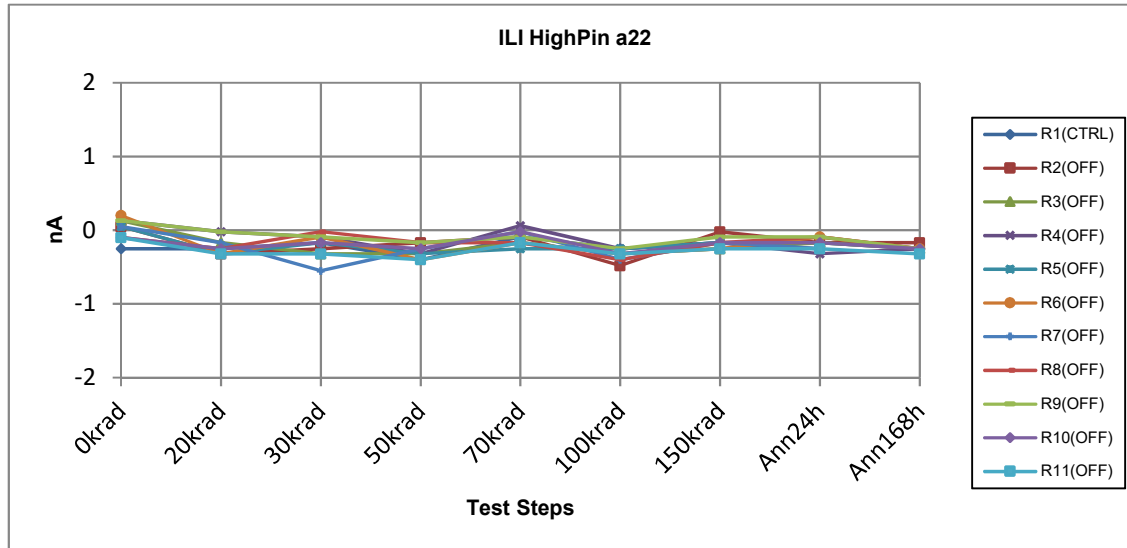
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ILI HighPin a23	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.11	-0.26	-0.26	-0.34	-0.19	0.04	-0.19	0.04	-0.26
Irradiated, unbiased parts results									
R2(OFF)	0.11	-0.19	-0.03	-0.03	-0.03	-0.11	0.20	0.04	-0.19
R3(OFF)	0.03	0.04	-0.11	-0.19	-0.03	0.04	-0.11	0.04	-0.03
R4(OFF)	0.03	-0.19	0.12	-0.03	0.04	0.20	0.04	-0.11	0.04
R5(OFF)	0.11	-0.11	-0.03	-0.11	-0.19	-0.03	0.04	-0.03	No meas.
R6(OFF)	0.03	-0.11	-0.11	-0.26	-0.03	0.27	0.12	0.20	-0.19
R7(OFF)	0.18	-0.03	0.04	-0.19	-0.03	-0.03	0.27	-0.11	No meas.
R8(OFF)	0.03	-0.11	-0.11	-0.19	0.04	-0.03	0.04	0.20	-0.03
R9(OFF)	-0.05	-0.03	0.04	-0.03	-0.19	-0.11	0.04	0.20	0.04
R10(OFF)	0.11	-0.11	0.04	-0.26	-0.19	0.04	0.12	0.12	-0.03
R11(OFF)	0.03	-0.11	-0.03	-0.19	-0.11	0.20	0.04	-0.19	0.12
Irradiated, unbiased parts statistics									
Min Value	-0.05	-0.19	-0.11	-0.26	-0.19	-0.11	-0.11	-0.19	-0.19
Max Value	0.18	0.04	0.12	-0.03	0.04	0.27	0.27	0.20	0.12
Average	0.06	-0.10	-0.02	-0.15	-0.07	0.04	0.08	0.04	-0.03
Sigma	0.07	0.07	0.08	0.09	0.09	0.13	0.10	0.14	0.11

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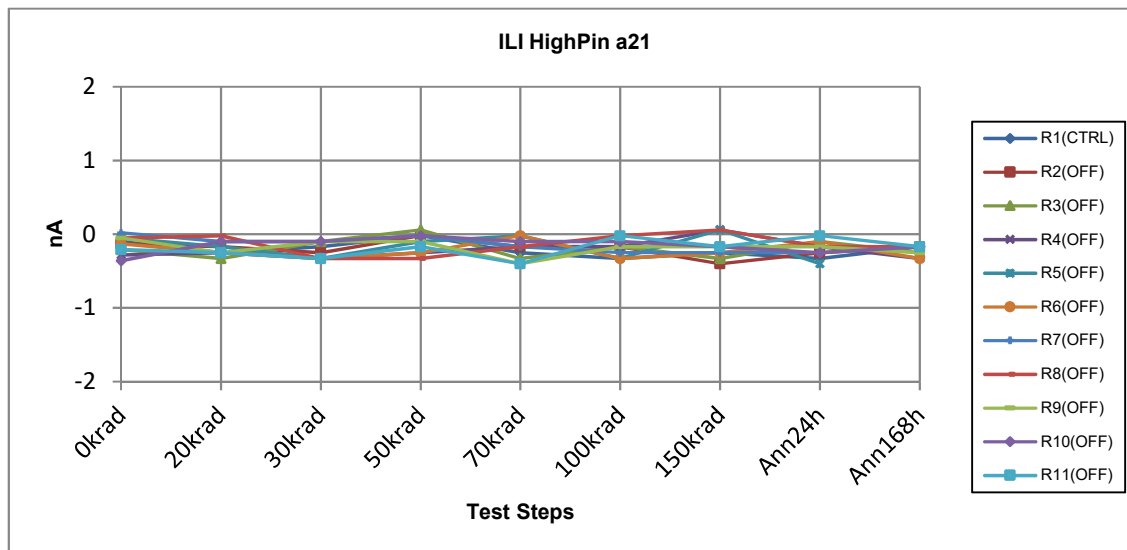
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ILI HighPin a22	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.25	-0.25	-0.17	-0.40	-0.09	-0.25	-0.17	-0.17	-0.25
Irradiated, unbiased parts results									
R2(OFF)	0.05	-0.32	-0.25	-0.17	-0.09	-0.48	-0.02	-0.17	-0.17
R3(OFF)	0.13	-0.17	-0.32	-0.32	-0.17	-0.32	-0.25	-0.17	-0.25
R4(OFF)	0.13	-0.02	-0.09	-0.32	0.06	-0.25	-0.17	-0.32	-0.25
R5(OFF)	0.05	-0.32	-0.17	-0.32	-0.25	-0.25	-0.17	-0.25	No meas.
R6(OFF)	0.20	-0.32	-0.09	-0.40	-0.17	-0.32	-0.25	-0.09	-0.25
R7(OFF)	0.05	-0.17	-0.55	-0.25	-0.02	-0.40	-0.17	-0.25	No meas.
R8(OFF)	-0.10	-0.25	-0.02	-0.17	-0.17	-0.40	-0.17	-0.09	-0.25
R9(OFF)	0.13	-0.02	-0.09	-0.17	-0.09	-0.25	-0.09	-0.09	-0.25
R10(OFF)	-0.10	-0.25	-0.17	-0.25	-0.02	-0.32	-0.17	-0.17	-0.25
R11(OFF)	-0.10	-0.32	-0.32	-0.40	-0.17	-0.32	-0.25	-0.25	-0.32
Irradiated, unbiased parts statistics									
Min Value	-0.10	-0.32	-0.55	-0.40	-0.25	-0.48	-0.25	-0.32	-0.32
Max Value	0.20	-0.02	-0.02	-0.17	0.06	-0.25	-0.02	-0.09	-0.17
Average	0.04	-0.22	-0.21	-0.28	-0.11	-0.33	-0.17	-0.19	-0.25
Sigma	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.0

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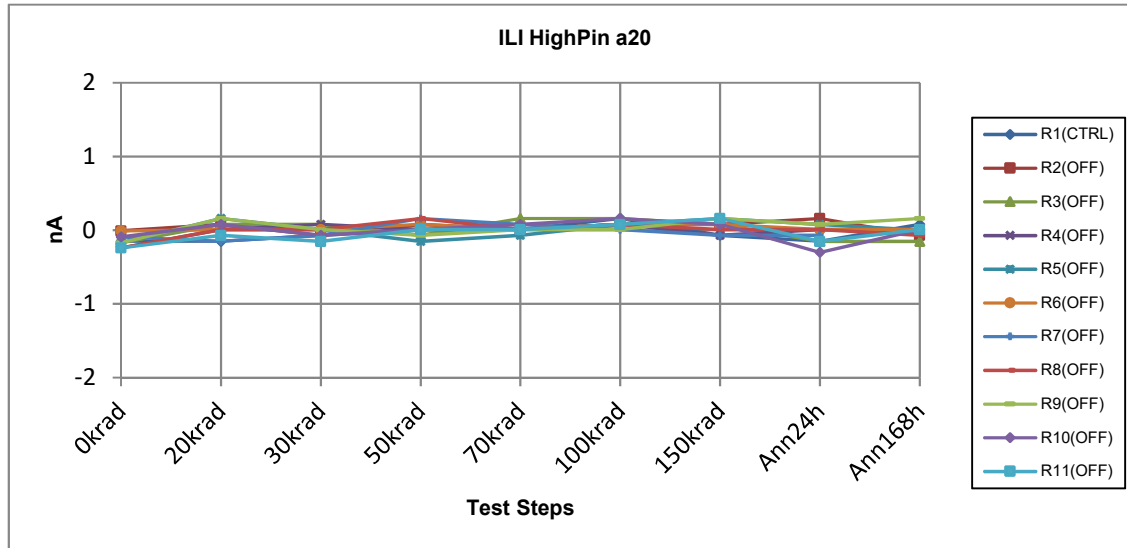
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ILI HighPin a21	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.10	-0.25	-0.17	-0.02	-0.25	-0.33	-0.25	-0.33	-0.17
Irradiated, unbiased parts results									
R2(OFF)	-0.13	-0.17	-0.25	-0.02	-0.17	-0.17	-0.40	-0.25	-0.17
R3(OFF)	-0.21	-0.33	-0.10	0.06	-0.33	-0.17	-0.33	-0.10	-0.25
R4(OFF)	-0.28	-0.25	-0.33	-0.25	-0.17	-0.17	0.06	-0.17	-0.33
R5(OFF)	-0.05	-0.17	-0.33	-0.10	-0.02	-0.33	0.06	-0.40	No meas.
R6(OFF)	-0.13	-0.25	-0.33	-0.25	-0.02	-0.33	-0.25	-0.10	-0.33
R7(OFF)	0.02	-0.10	-0.10	-0.02	-0.17	-0.25	-0.25	-0.25	No meas.
R8(OFF)	-0.05	-0.02	-0.33	-0.33	-0.17	-0.02	0.06	-0.17	-0.17
R9(OFF)	-0.05	-0.25	-0.10	-0.10	-0.40	-0.17	-0.17	-0.17	-0.25
R10(OFF)	-0.36	-0.10	-0.10	-0.02	-0.10	-0.10	-0.17	-0.25	-0.17
R11(OFF)	-0.21	-0.25	-0.33	-0.17	-0.40	-0.02	-0.17	-0.02	-0.17
Irradiated, unbiased parts statistics									
Min Value	-0.36	-0.33	-0.33	-0.33	-0.40	-0.33	-0.40	-0.40	-0.33
Max Value	0.02	-0.02	-0.10	0.06	-0.02	-0.02	0.06	-0.02	-0.17
Average	-0.15	-0.19	-0.23	-0.12	-0.20	-0.17	-0.16	-0.19	-0.23
Sigma	0.12	0.09	0.11	0.13	0.14	0.11	0.17	0.11	0.07

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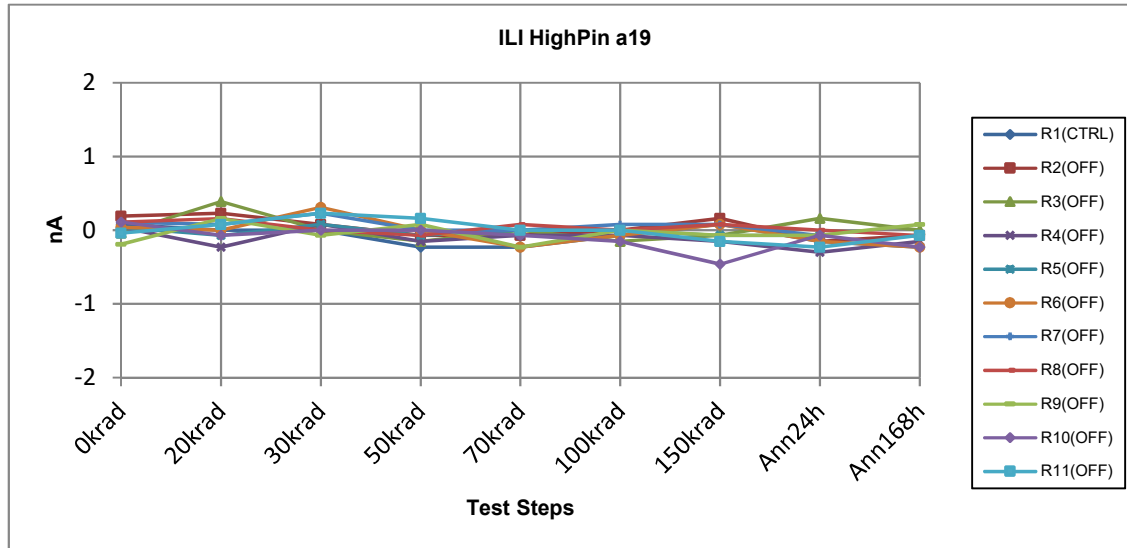
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ILI HighPin a20	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.15	-0.15	-0.07	0.01	0.01	0.16	-0.07	-0.15	0.08
Irradiated, unbiased parts results									
R2(OFF)	-0.01	0.08	-0.07	0.08	0.01	0.08	0.08	0.16	-0.07
R3(OFF)	-0.17	0.08	0.08	-0.07	0.16	0.16	0.08	-0.15	-0.15
R4(OFF)	-0.24	0.01	0.08	0.01	0.01	0.08	-0.07	0.01	0.01
R5(OFF)	-0.17	0.16	0.01	-0.15	-0.07	0.08	0.16	0.08	No meas.
R6(OFF)	-0.01	0.01	0.01	0.08	0.01	0.08	0.08	0.01	0.01
R7(OFF)	-0.09	-0.15	-0.07	0.16	0.08	0.01	-0.07	-0.07	No meas.
R8(OFF)	-0.24	0.01	0.01	0.16	0.01	0.08	0.01	0.01	-0.07
R9(OFF)	-0.17	0.16	0.01	-0.07	0.01	0.01	0.16	0.08	0.16
R10(OFF)	-0.09	0.08	-0.07	0.01	0.08	0.16	0.08	-0.30	0.01
R11(OFF)	-0.24	-0.07	-0.15	0.01	0.01	0.08	0.16	-0.15	0.01
Irradiated, unbiased parts statistics									
Min Value	-0.24	-0.15	-0.15	-0.15	-0.07	0.01	-0.07	-0.30	-0.15
Max Value	-0.01	0.16	0.08	0.16	0.16	0.16	0.16	0.16	0.16
Average	-0.14	0.04	-0.02	0.02	0.03	0.08	0.07	-0.03	-0.01
Sigma	0.09	0.10	0.07	0.10	0.06	0.05	0.09	0.14	0.09

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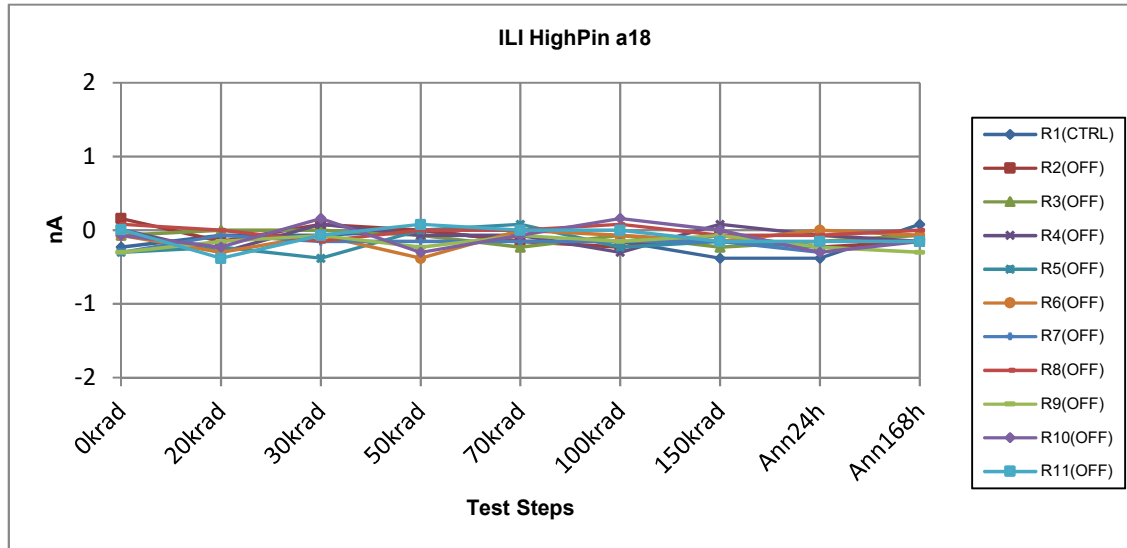
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ILI HighPin a19	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	0.08	0.00	0.00	-0.23	-0.23	-0.07	0.08	-0.15	-0.23
Irradiated, unbiased parts results									
R2(OFF)	0.19	0.23	0.08	-0.07	-0.07	0.00	0.16	-0.15	-0.07
R3(OFF)	-0.04	0.39	0.00	-0.15	0.00	-0.15	-0.07	0.16	0.00
R4(OFF)	0.04	-0.23	0.08	-0.15	-0.07	-0.07	-0.15	-0.30	-0.15
R5(OFF)	0.04	-0.07	0.08	-0.07	0.00	0.00	-0.07	-0.07	No meas.
R6(OFF)	0.04	0.00	0.31	0.00	-0.23	-0.07	0.08	-0.15	-0.23
R7(OFF)	0.11	0.08	0.23	0.00	0.00	0.08	0.08	-0.07	No meas.
R8(OFF)	0.11	0.16	0.00	-0.07	0.08	0.00	0.08	0.00	-0.07
R9(OFF)	-0.19	0.16	-0.07	0.08	-0.23	0.00	-0.07	-0.07	0.08
R10(OFF)	0.11	-0.07	0.00	0.00	-0.07	-0.15	-0.46	-0.07	-0.23
R11(OFF)	-0.04	0.08	0.23	0.16	0.00	0.00	-0.15	-0.23	-0.07
Irradiated, unbiased parts statistics									
Min Value	-0.19	-0.23	-0.07	-0.15	-0.23	-0.15	-0.46	-0.30	-0.23
Max Value	0.19	0.39	0.31	0.16	0.08	0.08	0.16	0.16	0.08
Average	0.04	0.07	0.09	-0.03	-0.06	-0.04	-0.06	-0.10	-0.09
Sigma	0.11	0.18	0.12	0.10	0.10	0.07	0.18	0.13	0.11

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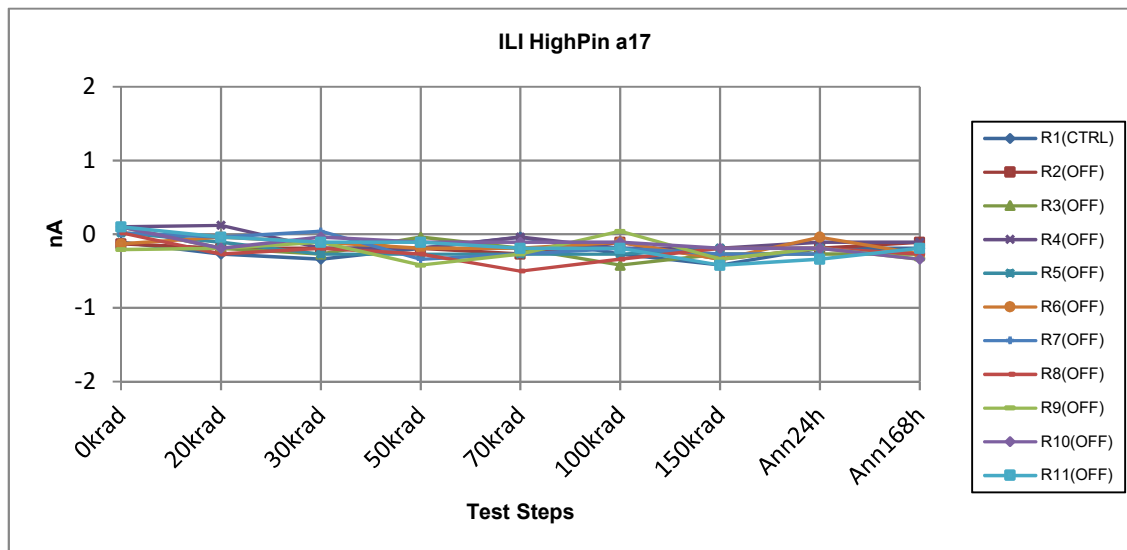
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ILI HighPin a18	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.23	-0.07	-0.07	0.00	-0.15	-0.15	-0.38	-0.38	0.08
Irradiated, unbiased parts results									
R2(OFF)	0.16	-0.15	0.08	0.00	-0.15	-0.23	-0.07	-0.23	-0.15
R3(OFF)	-0.07	0.00	0.00	-0.07	-0.23	-0.07	-0.23	-0.15	-0.07
R4(OFF)	0.01	-0.30	0.08	-0.07	-0.07	-0.30	0.08	-0.07	-0.15
R5(OFF)	-0.30	-0.23	-0.38	0.00	0.08	-0.23	-0.15	-0.23	No meas.
R6(OFF)	-0.07	-0.30	-0.07	-0.38	0.00	-0.07	-0.15	0.00	-0.07
R7(OFF)	-0.30	-0.07	-0.15	-0.15	-0.15	-0.15	-0.15	-0.30	No meas.
R8(OFF)	0.08	0.00	-0.15	0.00	0.00	0.08	-0.07	-0.07	0.00
R9(OFF)	-0.30	-0.15	-0.07	-0.23	-0.07	-0.15	-0.07	-0.23	-0.30
R10(OFF)	-0.07	-0.23	0.16	-0.30	-0.07	0.16	0.00	-0.30	-0.15
R11(OFF)	0.01	-0.38	-0.07	0.08	0.00	0.00	-0.15	-0.15	-0.15
Irradiated, unbiased parts statistics									
Min Value	-0.30	-0.38	-0.38	-0.38	-0.23	-0.30	-0.23	-0.30	-0.30
Max Value	0.16	0.00	0.16	0.08	0.08	0.16	0.08	0.00	0.00
Average	-0.09	-0.18	-0.06	-0.11	-0.07	-0.10	-0.10	-0.17	-0.13
Sigma	0.16	0.13	0.15	0.15	0.09	0.15	0.09	0.10	0.09

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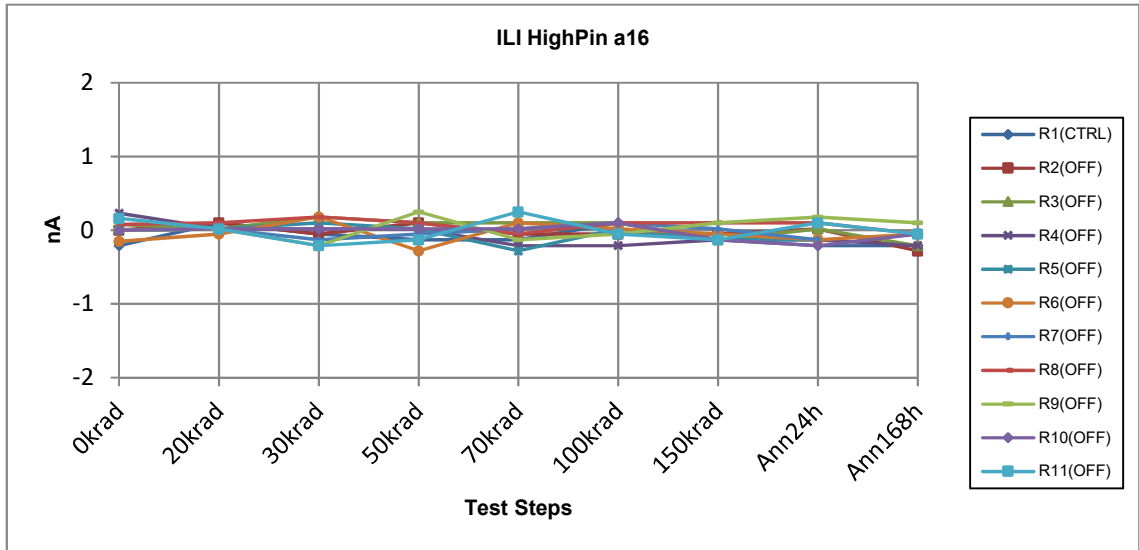
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ILI HighPin a17	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.11	-0.27	-0.34	-0.19	-0.04	-0.27	-0.42	-0.19	-0.19
Irradiated, unbiased parts results									
R2(OFF)	-0.13	-0.19	-0.19	-0.19	-0.27	-0.11	-0.34	-0.19	-0.11
R3(OFF)	0.10	-0.19	-0.27	-0.04	-0.19	-0.42	-0.27	-0.27	-0.27
R4(OFF)	0.10	0.12	-0.19	-0.19	-0.04	-0.19	-0.19	-0.11	-0.11
R5(OFF)	0.02	-0.11	-0.27	-0.27	-0.27	-0.27	-0.19	-0.19	No meas.
R6(OFF)	-0.13	-0.04	-0.11	-0.19	-0.19	-0.11	-0.34	-0.04	-0.27
R7(OFF)	0.02	-0.04	0.04	-0.34	-0.27	-0.19	-0.27	-0.27	No meas.
R8(OFF)	0.02	-0.27	-0.19	-0.27	-0.50	-0.34	-0.19	-0.19	-0.27
R9(OFF)	-0.21	-0.19	-0.11	-0.42	-0.27	0.04	-0.34	-0.19	-0.34
R10(OFF)	0.10	-0.19	-0.04	-0.11	-0.11	-0.11	-0.19	-0.19	-0.34
R11(OFF)	0.10	-0.04	-0.11	-0.11	-0.19	-0.19	-0.42	-0.34	-0.19
Irradiated, unbiased parts statistics									
Min Value	-0.21	-0.27	-0.27	-0.42	-0.50	-0.42	-0.42	-0.34	-0.34
Max Value	0.10	0.12	0.04	-0.04	-0.04	0.04	-0.19	-0.04	-0.11
Average	0.00	-0.11	-0.14	-0.21	-0.23	-0.19	-0.27	-0.20	-0.24
Sigma	0.12	0.11	0.10	0.11	0.12	0.13	0.08	0.08	0.09

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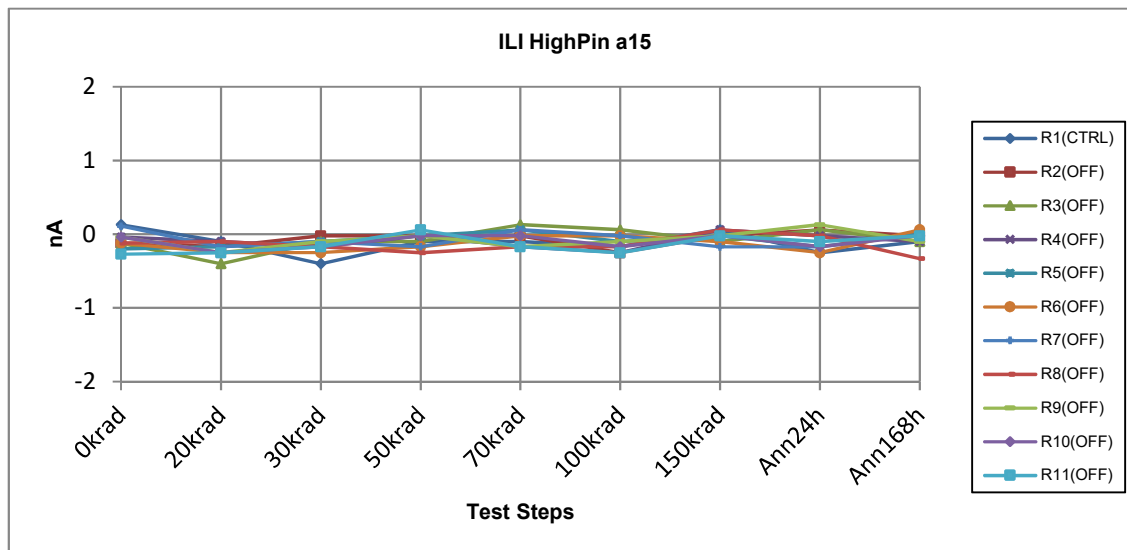
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ILI HighPin a16	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.21	0.10	-0.05	-0.13	-0.13	0.10	-0.13	-0.21	-0.21
Irradiated, unbiased parts results									
R2(OFF)	0.00	0.10	-0.05	0.10	-0.05	-0.05	-0.05	0.02	-0.28
R3(OFF)	0.08	0.02	0.18	0.10	0.10	0.10	-0.13	0.02	-0.21
R4(OFF)	0.23	0.02	0.02	0.02	-0.21	-0.21	-0.13	-0.13	-0.21
R5(OFF)	0.00	0.02	0.10	0.02	-0.28	0.02	-0.13	-0.13	No meas.
R6(OFF)	-0.15	-0.05	0.18	-0.28	0.10	0.02	-0.05	-0.13	-0.05
R7(OFF)	0.00	0.02	-0.13	-0.05	0.02	0.10	0.02	-0.13	No meas.
R8(OFF)	0.08	0.10	0.18	0.10	-0.05	0.10	0.10	0.10	-0.05
R9(OFF)	0.00	0.02	-0.21	0.25	-0.13	-0.05	0.10	0.18	0.10
R10(OFF)	0.00	0.02	0.02	0.02	0.02	0.10	-0.13	-0.21	-0.05
R11(OFF)	0.16	0.02	-0.21	-0.13	0.25	-0.05	-0.13	0.10	-0.05
Irradiated, unbiased parts statistics									
Min Value	-0.15	-0.05	-0.21	-0.28	-0.28	-0.21	-0.13	-0.21	-0.28
Max Value	0.23	0.10	0.18	0.25	0.25	0.10	0.10	0.18	0.10
Average	0.04	0.03	0.01	0.02	-0.02	0.01	-0.05	-0.03	-0.10
Sigma	0.10	0.04	0.15	0.15	0.16	0.10	0.10	0.13	0.12

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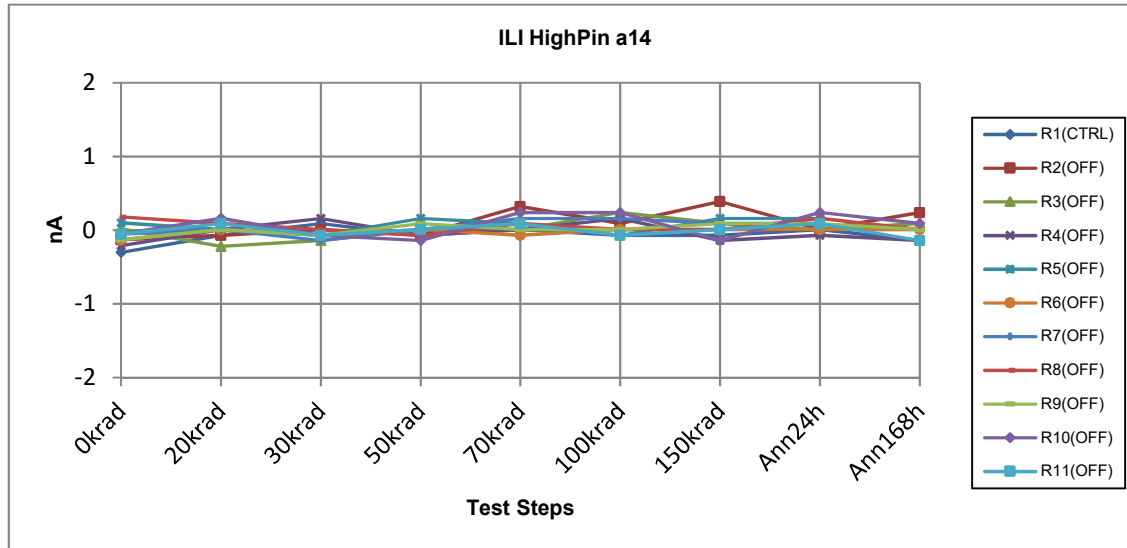
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ILI HighPin a15	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	0.13	-0.10	-0.40	-0.10	-0.10	-0.17	0.06	-0.25	-0.10
Irradiated, unbiased parts results									
R2(OFF)	-0.12	-0.17	-0.02	-0.02	-0.02	-0.25	-0.02	0.06	-0.02
R3(OFF)	-0.12	-0.40	-0.10	-0.10	0.13	0.06	-0.10	0.06	-0.10
R4(OFF)	-0.04	-0.10	-0.17	-0.02	-0.17	-0.25	0.06	-0.02	-0.10
R5(OFF)	-0.20	-0.17	-0.10	-0.02	0.06	-0.10	-0.02	-0.17	No meas.
R6(OFF)	-0.12	-0.25	-0.25	-0.17	-0.02	-0.02	-0.10	-0.25	0.06
R7(OFF)	0.11	-0.17	-0.10	-0.17	0.06	-0.02	-0.17	-0.17	No meas.
R8(OFF)	-0.12	-0.10	-0.17	-0.25	-0.17	-0.17	0.06	-0.02	-0.33
R9(OFF)	-0.04	-0.25	-0.10	-0.02	-0.17	-0.10	-0.02	0.13	-0.10
R10(OFF)	-0.04	-0.25	-0.17	-0.02	-0.02	-0.17	-0.02	-0.17	-0.02
R11(OFF)	-0.27	-0.25	-0.17	0.06	-0.17	-0.25	-0.02	-0.10	-0.02
Irradiated, unbiased parts statistics									
Min Value	-0.27	-0.40	-0.25	-0.25	-0.17	-0.25	-0.17	-0.25	-0.33
Max Value	0.11	-0.10	-0.02	0.06	0.13	0.06	0.06	0.13	0.06
Average	-0.10	-0.21	-0.14	-0.07	-0.05	-0.13	-0.04	-0.07	-0.08
Sigma	0.10	0.09	0.06	0.10	0.11	0.11	0.07	0.13	0.12

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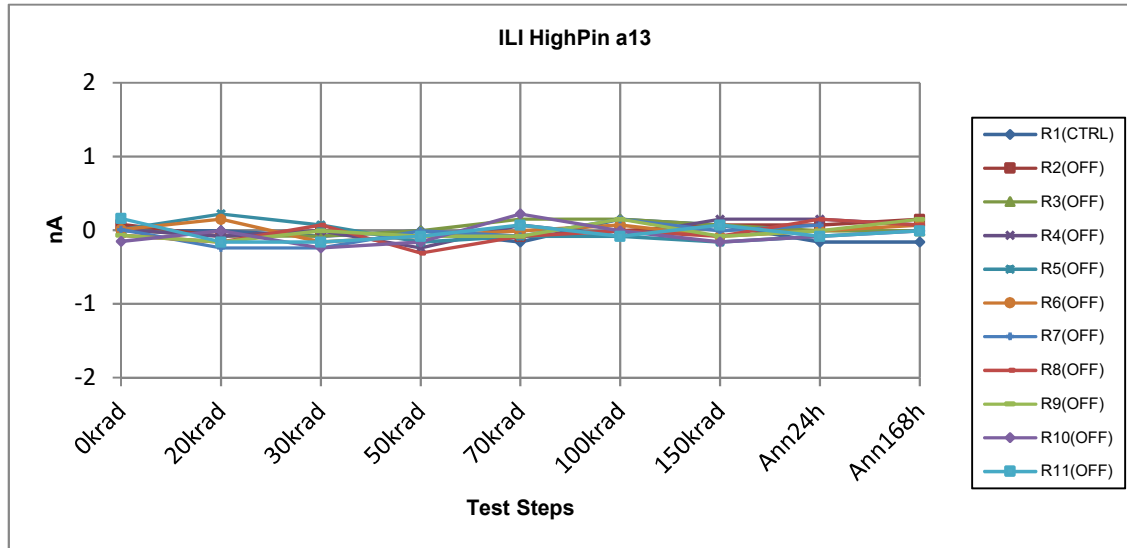
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ILI HighPin a14	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.30	-0.07	0.09	-0.07	0.01	-0.07	-0.07	0.01	-0.14
Irradiated, unbiased parts results									
R2(OFF)	-0.13	-0.07	0.01	-0.07	0.32	0.09	0.39	0.01	0.24
R3(OFF)	0.02	-0.22	-0.14	0.01	0.01	0.24	0.09	0.01	0.09
R4(OFF)	-0.21	0.01	0.16	-0.07	0.01	0.16	-0.14	-0.07	-0.14
R5(OFF)	0.10	0.01	-0.07	0.16	0.09	-0.07	0.16	0.16	No meas.
R6(OFF)	-0.13	0.01	-0.07	0.01	-0.07	0.01	0.01	0.01	0.01
R7(OFF)	-0.05	0.01	-0.14	0.01	0.16	0.16	0.09	0.09	No meas.
R8(OFF)	0.18	0.09	0.01	-0.07	0.09	0.01	0.01	0.16	0.01
R9(OFF)	-0.13	0.01	-0.07	0.09	0.01	0.01	0.09	0.09	0.01
R10(OFF)	-0.05	0.16	-0.07	-0.14	0.24	0.24	-0.14	0.24	0.09
R11(OFF)	-0.05	0.09	-0.07	0.01	0.09	-0.07	0.01	0.09	-0.14
Irradiated, unbiased parts statistics									
Min Value	-0.21	-0.22	-0.14	-0.14	-0.07	-0.07	-0.14	-0.07	-0.14
Max Value	0.18	0.16	0.16	0.16	0.32	0.24	0.39	0.24	0.24
Average	-0.05	0.01	-0.05	-0.01	0.10	0.08	0.06	0.08	0.02
Sigma	0.12	0.10	0.09	0.09	0.12	0.12	0.15	0.09	0.13

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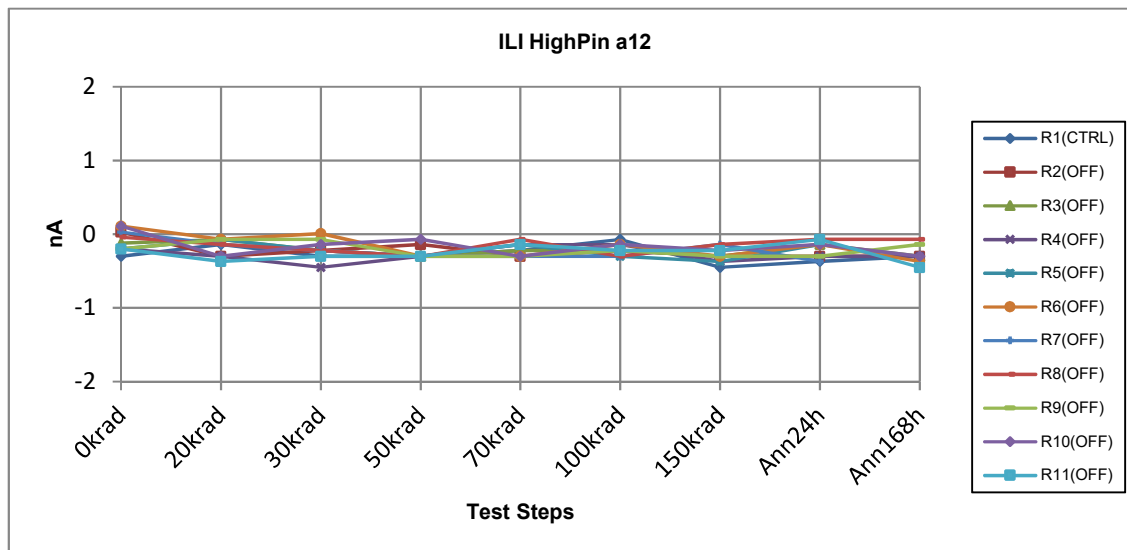
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ILI HighPin a13	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.01	-0.01	-0.08	-0.01	-0.16	0.15	0.07	-0.16	-0.16
Irradiated, unbiased parts results									
R2(OFF)	0.08	-0.08	-0.01	-0.08	-0.08	-0.01	0.07	0.07	0.15
R3(OFF)	0.01	-0.08	-0.08	-0.01	0.15	0.15	0.07	-0.01	-0.01
R4(OFF)	0.01	-0.08	-0.01	-0.24	0.07	-0.08	0.15	0.15	0.07
R5(OFF)	0.01	0.22	0.07	-0.16	-0.08	-0.08	-0.16	-0.08	No meas.
R6(OFF)	0.01	0.15	-0.16	-0.08	-0.01	0.07	-0.08	-0.01	0.07
R7(OFF)	0.01	-0.24	-0.24	-0.01	-0.08	0.15	-0.01	0.07	No meas.
R8(OFF)	-0.07	-0.16	0.07	-0.31	-0.08	-0.01	-0.08	0.15	0.07
R9(OFF)	-0.07	-0.16	-0.01	-0.08	-0.08	0.15	-0.08	-0.01	0.15
R10(OFF)	-0.15	-0.01	-0.24	-0.16	0.22	-0.01	-0.16	-0.08	-0.01
R11(OFF)	0.16	-0.16	-0.16	-0.08	0.07	-0.08	0.07	-0.08	-0.01
Irradiated, unbiased parts statistics									
Min Value	-0.15	-0.24	-0.24	-0.31	-0.08	-0.08	-0.16	-0.08	-0.01
Max Value	0.16	0.22	0.07	-0.01	0.22	0.15	0.15	0.15	0.15
Average	0.00	-0.06	-0.08	-0.12	0.01	0.03	-0.02	0.02	0.06
Sigma	0.08	0.14	0.12	0.10	0.11	0.10	0.11	0.09	0.07

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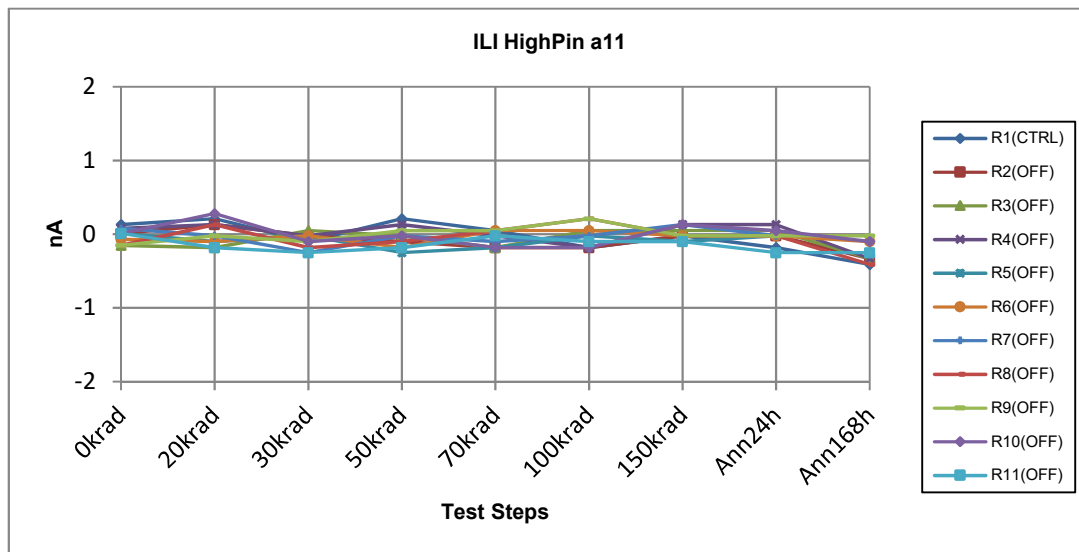
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ILI HighPin a12	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.30	-0.14	-0.30	-0.30	-0.22	-0.07	-0.45	-0.37	-0.30
Irradiated, unbiased parts results									
R2(OFF)	0.03	-0.30	-0.22	-0.14	-0.30	-0.22	-0.30	-0.30	-0.30
R3(OFF)	-0.12	-0.07	-0.22	-0.30	-0.22	-0.22	-0.30	-0.14	-0.30
R4(OFF)	-0.20	-0.30	-0.45	-0.30	-0.14	-0.14	-0.37	-0.30	-0.30
R5(OFF)	-0.20	-0.07	-0.22	-0.30	-0.14	-0.30	-0.37	-0.14	No meas.
R6(OFF)	0.11	-0.07	0.01	-0.30	-0.30	-0.14	-0.30	-0.14	-0.37
R7(OFF)	0.03	-0.14	-0.22	-0.30	-0.30	-0.30	-0.14	-0.37	No meas.
R8(OFF)	-0.04	-0.14	-0.22	-0.30	-0.07	-0.30	-0.14	-0.07	-0.07
R9(OFF)	-0.20	-0.07	-0.07	-0.30	-0.30	-0.22	-0.30	-0.30	-0.14
R10(OFF)	0.11	-0.30	-0.14	-0.07	-0.30	-0.14	-0.22	-0.14	-0.30
R11(OFF)	-0.20	-0.37	-0.30	-0.30	-0.14	-0.22	-0.22	-0.07	-0.45
Irradiated, unbiased parts statistics									
Min Value	-0.20	-0.37	-0.45	-0.30	-0.30	-0.30	-0.37	-0.37	-0.45
Max Value	0.11	-0.07	0.01	-0.07	-0.07	-0.14	-0.14	-0.07	-0.07
Average	-0.07	-0.18	-0.21	-0.26	-0.22	-0.22	-0.27	-0.20	-0.28
Sigma	0.13	0.12	0.12	0.08	0.09	0.07	0.08	0.11	0.12

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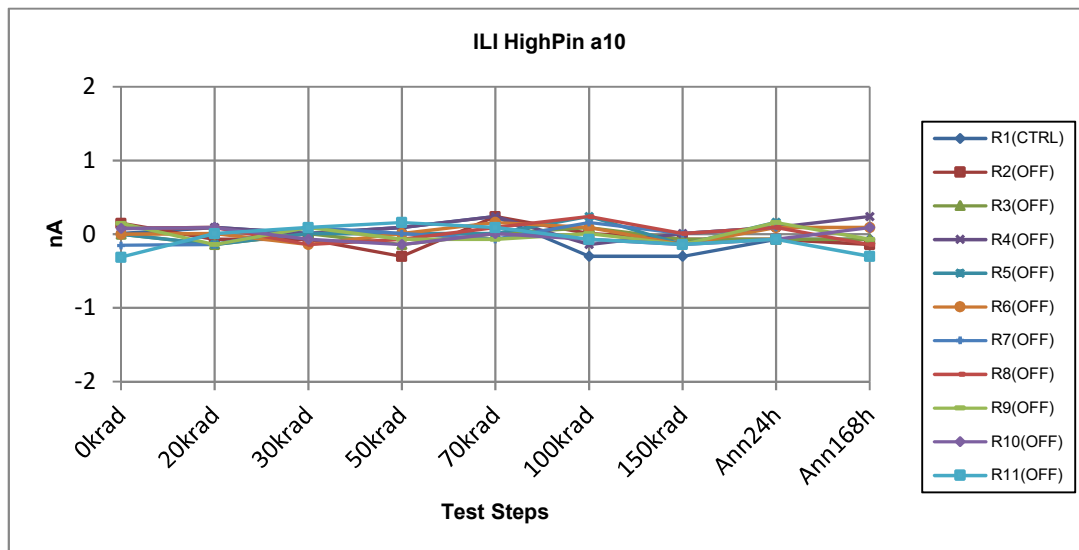
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ILI HighPin a11	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	0.13	0.21	-0.10	0.21	0.05	-0.18	-0.02	-0.18	-0.41
Irradiated, unbiased parts results									
R2(OFF)	0.01	0.13	-0.02	-0.10	-0.18	-0.18	-0.02	-0.02	-0.33
R3(OFF)	-0.15	-0.18	0.05	-0.02	-0.18	0.05	0.05	0.05	-0.33
R4(OFF)	0.08	0.13	-0.02	0.13	-0.02	-0.18	0.13	0.13	-0.33
R5(OFF)	0.01	-0.10	-0.02	-0.25	-0.18	-0.02	-0.10	-0.02	No meas.
R6(OFF)	-0.07	-0.10	-0.02	-0.18	0.05	0.05	-0.02	-0.02	-0.10
R7(OFF)	0.08	-0.02	-0.25	-0.02	-0.10	-0.02	0.13	-0.02	No meas.
R8(OFF)	-0.15	0.13	-0.18	-0.10	0.05	0.21	-0.02	-0.02	-0.41
R9(OFF)	-0.15	-0.02	-0.10	0.05	0.05	0.21	-0.02	-0.02	-0.02
R10(OFF)	0.01	0.28	-0.10	-0.02	-0.18	-0.18	0.13	0.05	-0.10
R11(OFF)	0.01	-0.18	-0.25	-0.18	-0.02	-0.10	-0.10	-0.25	-0.25
Irradiated, unbiased parts statistics									
Min Value	-0.15	-0.18	-0.25	-0.25	-0.18	-0.18	-0.10	-0.25	-0.41
Max Value	0.08	0.28	0.05	0.13	0.05	0.21	0.13	0.13	-0.02
Average	-0.03	0.01	-0.09	-0.07	-0.07	-0.02	0.02	-0.01	-0.23
Sigma	0.09	0.15	0.10	0.12	0.10	0.15	0.09	0.10	0.14

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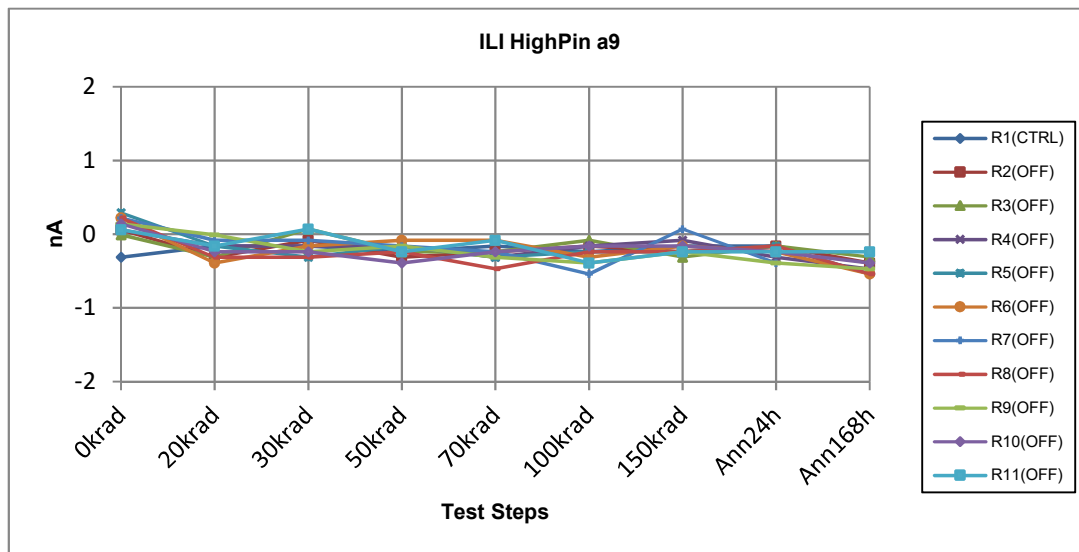
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ILI HighPin a10	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	0.01	0.09	0.01	0.09	0.24	-0.30	-0.30	-0.07	-0.07
Irradiated, unbiased parts results									
R2(OFF)	0.15	-0.07	-0.07	-0.30	0.24	0.01	-0.07	-0.07	-0.14
R3(OFF)	0.00	-0.14	0.01	-0.14	0.01	0.09	-0.07	-0.07	-0.07
R4(OFF)	0.08	0.09	0.01	0.09	0.24	-0.14	0.01	0.09	0.24
R5(OFF)	0.00	-0.14	0.01	0.01	0.01	0.24	-0.14	0.16	No meas.
R6(OFF)	0.00	0.01	-0.14	0.01	0.16	0.09	-0.14	0.09	0.09
R7(OFF)	-0.15	-0.14	0.09	0.01	-0.07	0.16	0.01	0.09	No meas.
R8(OFF)	0.08	0.09	-0.14	-0.07	0.09	0.24	0.01	0.09	-0.14
R9(OFF)	0.15	-0.14	0.09	-0.07	-0.07	0.01	-0.14	0.16	-0.07
R10(OFF)	0.08	0.09	-0.07	-0.14	0.01	-0.07	-0.14	-0.07	0.09
R11(OFF)	-0.31	0.01	0.09	0.16	0.09	-0.07	-0.14	-0.07	-0.30
Irradiated, unbiased parts statistics									
Min Value	-0.31	-0.14	-0.14	-0.30	-0.07	-0.14	-0.14	-0.07	-0.30
Max Value	0.15	0.09	0.09	0.16	0.24	0.24	0.01	0.16	0.24
Average	0.01	-0.03	-0.01	-0.04	0.07	0.06	-0.08	0.04	-0.04
Sigma	0.14	0.10	0.09	0.13	0.11	0.13	0.07	0.10	0.17

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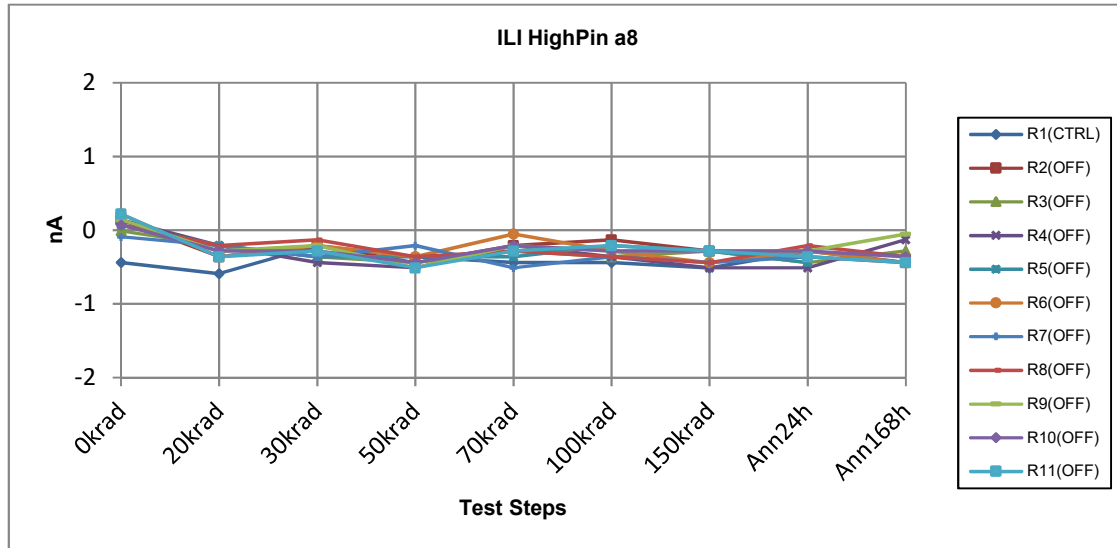
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ILI HighPin a9	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.31	-0.16	-0.16	-0.24	-0.16	-0.24	-0.16	-0.16	-0.54
Irradiated, unbiased parts results									
R2(OFF)	0.06	-0.31	-0.08	-0.31	-0.24	-0.16	-0.24	-0.16	-0.39
R3(OFF)	-0.01	-0.31	0.07	-0.24	-0.24	-0.08	-0.31	-0.16	-0.31
R4(OFF)	0.06	-0.16	-0.16	-0.16	-0.31	-0.16	-0.08	-0.31	-0.47
R5(OFF)	0.29	-0.16	-0.31	-0.16	-0.31	-0.24	-0.24	-0.16	No meas.
R6(OFF)	0.22	-0.39	-0.16	-0.08	-0.08	-0.31	-0.16	-0.24	-0.54
R7(OFF)	0.22	-0.08	-0.08	-0.16	-0.24	-0.54	0.07	-0.39	No meas.
R8(OFF)	0.22	-0.31	-0.31	-0.24	-0.47	-0.24	-0.24	-0.16	-0.54
R9(OFF)	0.14	-0.01	-0.24	-0.16	-0.31	-0.39	-0.24	-0.39	-0.47
R10(OFF)	0.14	-0.24	-0.24	-0.39	-0.24	-0.16	-0.16	-0.24	-0.39
R11(OFF)	0.06	-0.16	0.07	-0.24	-0.08	-0.39	-0.24	-0.24	-0.24
Irradiated, unbiased parts statistics									
Min Value	-0.01	-0.39	-0.31	-0.39	-0.47	-0.54	-0.31	-0.39	-0.54
Max Value	0.29	-0.01	0.07	-0.08	-0.08	-0.08	0.07	-0.16	-0.24
Average	0.14	-0.21	-0.14	-0.21	-0.25	-0.27	-0.18	-0.25	-0.42
Sigma	0.10	0.12	0.14	0.09	0.11	0.14	0.11	0.09	0.11

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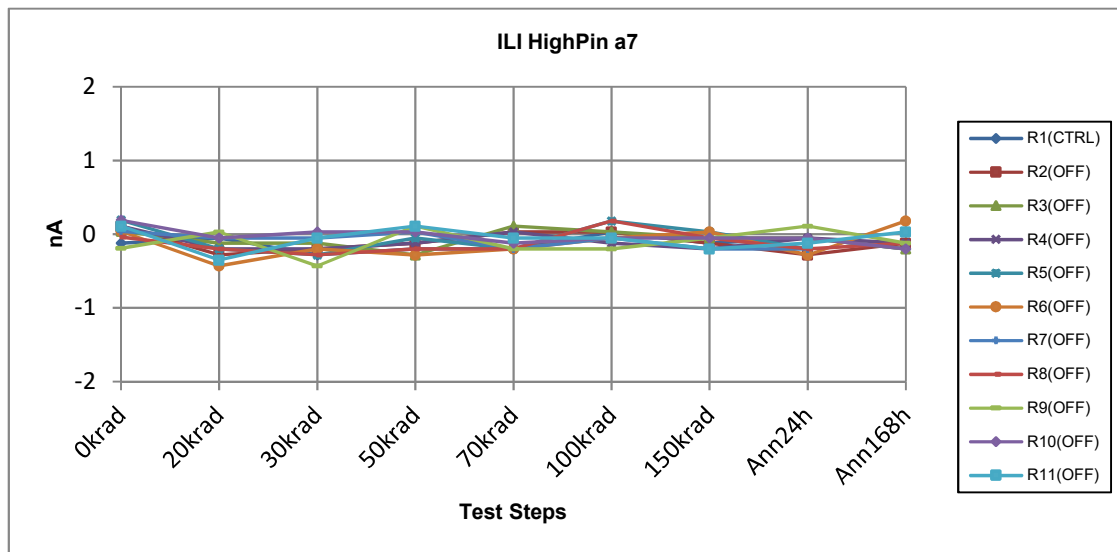
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ILI HighPin a8	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.44	-0.59	-0.21	-0.36	-0.44	-0.44	-0.51	-0.28	-0.44
Irradiated, unbiased parts results									
R2(OFF)	0.14	-0.36	-0.21	-0.44	-0.21	-0.13	-0.28	-0.36	-0.44
R3(OFF)	-0.01	-0.21	-0.36	-0.44	-0.28	-0.36	-0.28	-0.44	-0.28
R4(OFF)	0.14	-0.21	-0.44	-0.51	-0.21	-0.36	-0.51	-0.51	-0.13
R5(OFF)	0.07	-0.21	-0.36	-0.36	-0.36	-0.21	-0.28	-0.44	No meas.
R6(OFF)	0.22	-0.36	-0.21	-0.36	-0.05	-0.28	-0.44	-0.28	-0.44
R7(OFF)	-0.09	-0.21	-0.36	-0.21	-0.51	-0.36	-0.44	-0.36	No meas.
R8(OFF)	0.07	-0.21	-0.13	-0.36	-0.28	-0.36	-0.44	-0.21	-0.36
R9(OFF)	0.14	-0.28	-0.21	-0.51	-0.21	-0.28	-0.28	-0.28	-0.05
R10(OFF)	0.07	-0.28	-0.28	-0.44	-0.21	-0.28	-0.28	-0.28	-0.36
R11(OFF)	0.22	-0.36	-0.28	-0.51	-0.28	-0.21	-0.28	-0.36	-0.44
Irradiated, unbiased parts statistics									
Min Value	-0.09	-0.36	-0.44	-0.51	-0.51	-0.36	-0.51	-0.51	-0.44
Max Value	0.22	-0.21	-0.13	-0.21	-0.05	-0.13	-0.28	-0.21	-0.05
Average	0.10	-0.27	-0.28	-0.41	-0.26	-0.28	-0.35	-0.35	-0.31
Sigma	0.10	0.07	0.10	0.09	0.12	0.08	0.09	0.09	0.15

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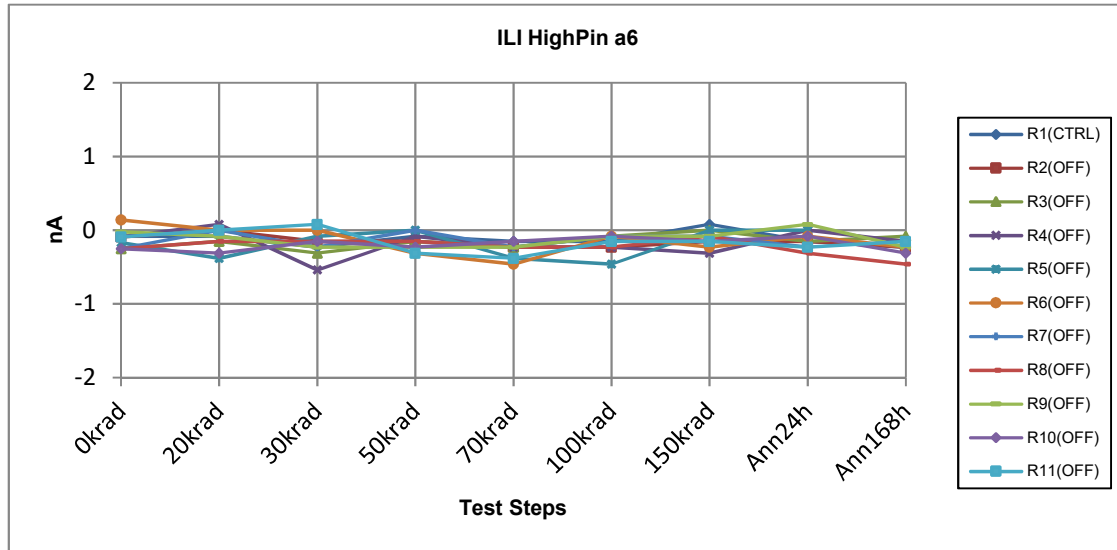
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ILI HighPin a7	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.12	-0.05	-0.28	-0.20	-0.20	0.03	-0.12	-0.05	-0.20
Irradiated, unbiased parts results									
R2(OFF)	0.11	-0.28	-0.20	-0.12	0.03	0.03	-0.12	-0.28	-0.12
R3(OFF)	0.04	-0.12	-0.12	-0.28	0.11	0.03	-0.05	-0.05	-0.20
R4(OFF)	0.11	-0.20	-0.20	-0.12	0.03	-0.12	-0.20	-0.05	-0.12
R5(OFF)	0.19	-0.20	-0.28	-0.05	-0.20	0.18	0.03	-0.20	No meas.
R6(OFF)	0.04	-0.43	-0.20	-0.28	-0.20	-0.05	0.03	-0.28	0.18
R7(OFF)	0.04	-0.05	-0.05	0.03	-0.20	-0.05	-0.20	-0.20	No meas.
R8(OFF)	-0.04	-0.20	-0.28	-0.20	-0.20	0.18	-0.05	-0.20	-0.12
R9(OFF)	-0.19	0.03	-0.43	0.11	-0.20	-0.20	-0.05	0.11	-0.12
R10(OFF)	0.19	-0.05	0.03	0.03	-0.12	-0.05	-0.05	-0.05	-0.20
R11(OFF)	0.11	-0.35	-0.05	0.11	-0.05	-0.05	-0.20	-0.12	0.03
Irradiated, unbiased parts statistics									
Min Value	-0.19	-0.43	-0.43	-0.28	-0.20	-0.20	-0.20	-0.28	-0.20
Max Value	0.19	0.03	0.03	0.11	0.11	0.18	0.03	0.11	0.18
Average	0.06	-0.19	-0.18	-0.08	-0.10	-0.01	-0.09	-0.13	-0.08
Sigma	0.11	0.14	0.14	0.15	0.12	0.12	0.09	0.12	0.13

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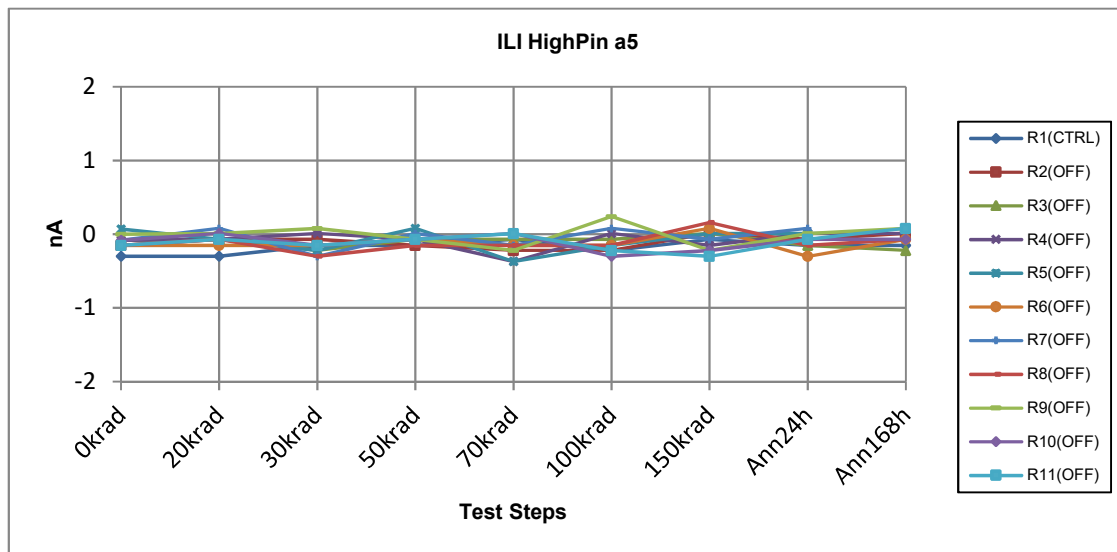
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ILI HighPin a6	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.08	-0.08	-0.23	-0.08	-0.15	-0.15	0.08	-0.15	-0.23
Irradiated, unbiased parts results									
R2(OFF)	-0.09	0.00	-0.15	-0.15	-0.23	-0.23	-0.15	-0.15	-0.23
R3(OFF)	-0.25	-0.15	-0.31	-0.15	-0.23	-0.08	0.00	-0.15	-0.08
R4(OFF)	-0.09	0.08	-0.54	-0.08	-0.23	-0.23	-0.31	0.00	-0.15
R5(OFF)	-0.17	-0.38	-0.08	0.00	-0.38	-0.46	0.00	0.00	No meas.
R6(OFF)	0.14	0.00	0.00	-0.31	-0.46	-0.08	-0.23	-0.08	-0.23
R7(OFF)	-0.25	0.00	-0.23	0.00	-0.23	-0.08	-0.08	-0.23	No meas.
R8(OFF)	-0.25	-0.15	-0.15	-0.15	-0.23	-0.23	-0.08	-0.31	-0.46
R9(OFF)	-0.02	-0.08	-0.23	-0.23	-0.23	-0.08	-0.08	0.08	-0.23
R10(OFF)	-0.25	-0.31	-0.15	-0.23	-0.15	-0.08	-0.15	-0.08	-0.31
R11(OFF)	-0.09	0.00	0.08	-0.31	-0.38	-0.15	-0.15	-0.23	-0.15
Irradiated, unbiased parts statistics									
Min Value	-0.25	-0.38	-0.54	-0.31	-0.46	-0.46	-0.31	-0.31	-0.46
Max Value	0.14	0.08	0.08	0.00	-0.15	-0.08	0.00	0.08	-0.08
Average	-0.13	-0.10	-0.18	-0.16	-0.28	-0.17	-0.12	-0.12	-0.23
Sigma	0.13	0.15	0.17	0.11	0.10	0.12	0.10	0.12	0.12

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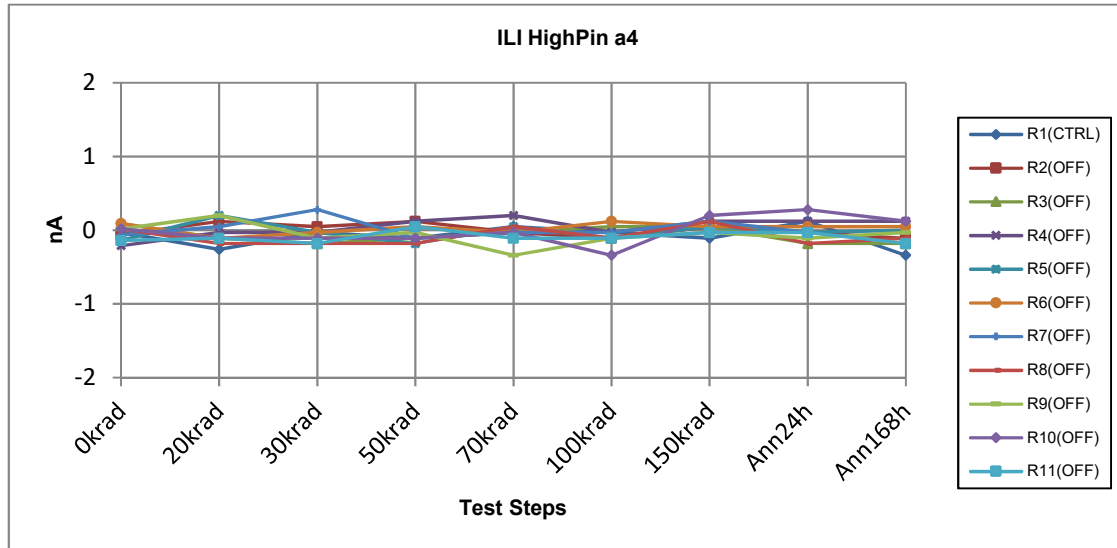
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ILI HighPin a5	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.30	-0.30	-0.15	-0.15	-0.07	-0.22	-0.07	-0.15	-0.15
Irradiated, unbiased parts results									
R2(OFF)	-0.15	-0.07	-0.07	-0.15	-0.22	-0.22	0.01	-0.07	0.01
R3(OFF)	-0.08	-0.07	-0.22	-0.07	-0.07	-0.07	0.01	-0.15	-0.22
R4(OFF)	-0.08	-0.07	0.01	-0.07	-0.37	0.01	-0.15	0.01	0.01
R5(OFF)	0.07	-0.07	-0.22	0.08	-0.37	-0.15	0.01	0.01	No meas.
R6(OFF)	-0.15	-0.15	-0.15	-0.07	-0.15	-0.15	0.08	-0.30	-0.07
R7(OFF)	-0.08	0.08	-0.30	0.01	-0.15	0.08	-0.07	0.08	No meas.
R8(OFF)	-0.15	-0.07	-0.30	-0.15	-0.15	-0.15	0.16	-0.15	-0.07
R9(OFF)	0.00	0.01	0.08	-0.07	-0.22	0.24	-0.22	0.01	0.08
R10(OFF)	-0.08	0.01	-0.15	-0.07	0.01	-0.30	-0.22	-0.07	-0.07
R11(OFF)	-0.15	-0.07	-0.15	-0.07	0.01	-0.22	-0.30	-0.07	0.08
Irradiated, unbiased parts statistics									
Min Value	-0.15	-0.15	-0.30	-0.15	-0.37	-0.30	-0.30	-0.30	-0.22
Max Value	0.07	0.08	0.08	0.08	0.01	0.24	0.16	0.08	0.08
Average	-0.09	-0.05	-0.15	-0.06	-0.17	-0.09	-0.07	-0.07	-0.03
Sigma	0.07	0.06	0.12	0.07	0.13	0.16	0.15	0.11	0.10

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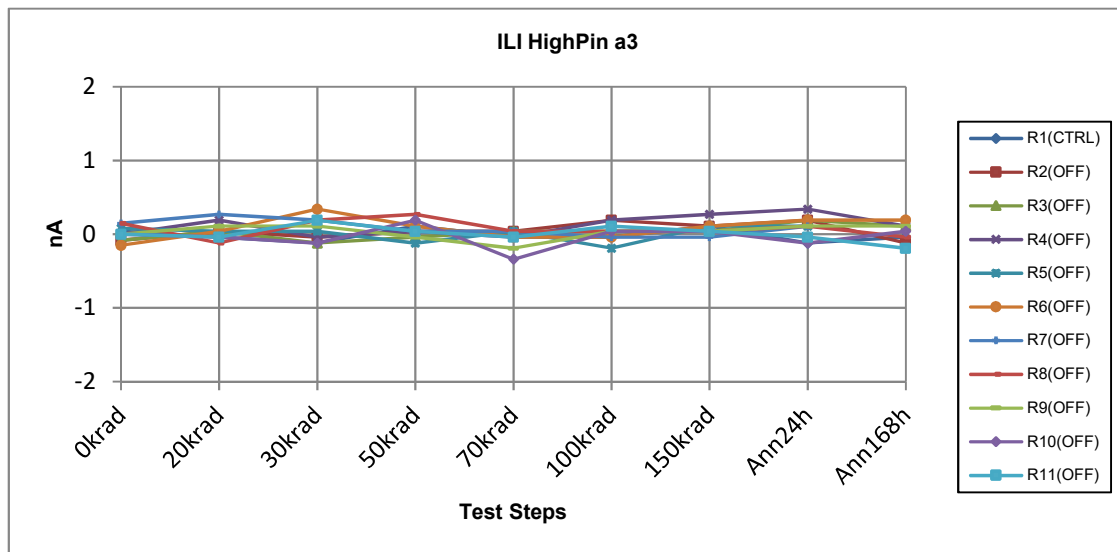
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ILI HighPin a4	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.03	-0.26	-0.03	-0.11	0.05	-0.03	-0.11	0.12	-0.34
Irradiated, unbiased parts results									
R2(OFF)	-0.06	0.12	0.05	0.12	-0.03	-0.11	0.05	-0.03	-0.11
R3(OFF)	0.09	-0.11	-0.18	-0.11	-0.03	0.05	0.05	-0.18	-0.18
R4(OFF)	-0.21	-0.03	-0.03	0.12	0.20	-0.03	0.12	0.12	0.12
R5(OFF)	-0.14	0.20	-0.03	-0.18	0.05	-0.11	0.05	-0.03	No meas.
R6(OFF)	0.09	-0.11	-0.03	0.05	-0.03	0.12	0.05	0.05	0.05
R7(OFF)	-0.06	0.05	0.28	-0.11	-0.03	-0.03	0.12	-0.03	No meas.
R8(OFF)	0.02	-0.18	-0.18	-0.18	0.05	-0.11	0.12	-0.18	-0.11
R9(OFF)	0.02	0.20	-0.11	-0.03	-0.34	-0.11	-0.03	-0.11	-0.03
R10(OFF)	0.02	-0.11	-0.11	-0.11	-0.03	-0.34	0.20	0.28	0.12
R11(OFF)	-0.14	-0.11	-0.18	0.05	-0.11	-0.11	-0.03	-0.03	-0.18
Irradiated, unbiased parts statistics									
Min Value	-0.21	-0.18	-0.18	-0.18	-0.34	-0.34	-0.03	-0.18	-0.18
Max Value	0.09	0.20	0.28	0.12	0.20	0.12	0.20	0.28	0.12
Average	-0.04	-0.01	-0.05	-0.04	-0.03	-0.08	0.07	-0.01	-0.04
Sigma	0.10	0.14	0.14	0.12	0.14	0.12	0.07	0.14	0.12

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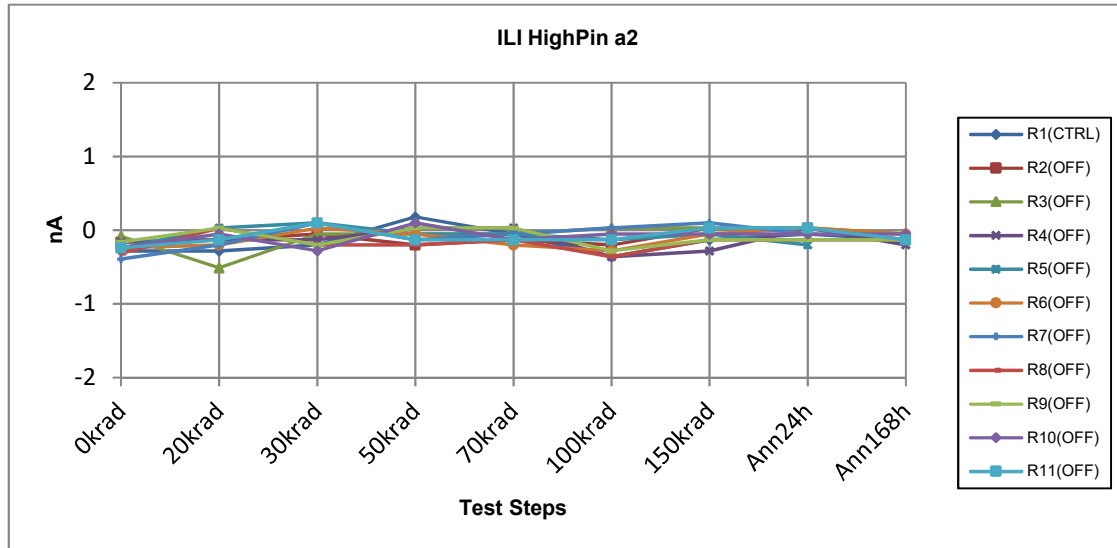
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ILI HighPin a3	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	0.04	-0.04	-0.12	0.11	-0.04	-0.04	0.11	-0.12	-0.04
Irradiated, unbiased parts results									
R2(OFF)	-0.08	0.04	-0.04	0.04	0.04	0.19	0.11	0.19	-0.12
R3(OFF)	-0.08	0.04	-0.12	-0.04	0.04	0.04	0.04	0.19	0.11
R4(OFF)	0.00	0.19	-0.04	0.04	-0.04	0.19	0.27	0.34	0.11
R5(OFF)	0.08	0.04	0.04	-0.12	0.04	-0.19	0.11	0.11	No meas.
R6(OFF)	-0.15	0.04	0.34	0.11	-0.04	-0.04	0.11	0.19	0.19
R7(OFF)	0.15	0.27	0.19	0.04	0.04	-0.04	-0.04	0.11	No meas.
R8(OFF)	0.15	-0.12	0.19	0.27	0.04	0.04	0.04	0.11	-0.04
R9(OFF)	0.00	0.11	0.11	-0.04	-0.19	0.04	0.04	0.11	0.11
R10(OFF)	0.00	-0.04	-0.12	0.19	-0.34	0.04	0.04	-0.12	0.04
R11(OFF)	0.00	-0.04	0.19	0.04	-0.04	0.11	0.04	-0.04	-0.19
Irradiated, unbiased parts statistics									
Min Value	-0.15	-0.12	-0.12	-0.12	-0.34	-0.19	-0.04	-0.12	-0.19
Max Value	0.15	0.27	0.34	0.27	0.04	0.19	0.27	0.34	0.19
Average	0.01	0.05	0.07	0.05	-0.05	0.04	0.08	0.12	0.03
Sigma	0.10	0.11	0.15	0.11	0.13	0.11	0.08	0.13	0.13

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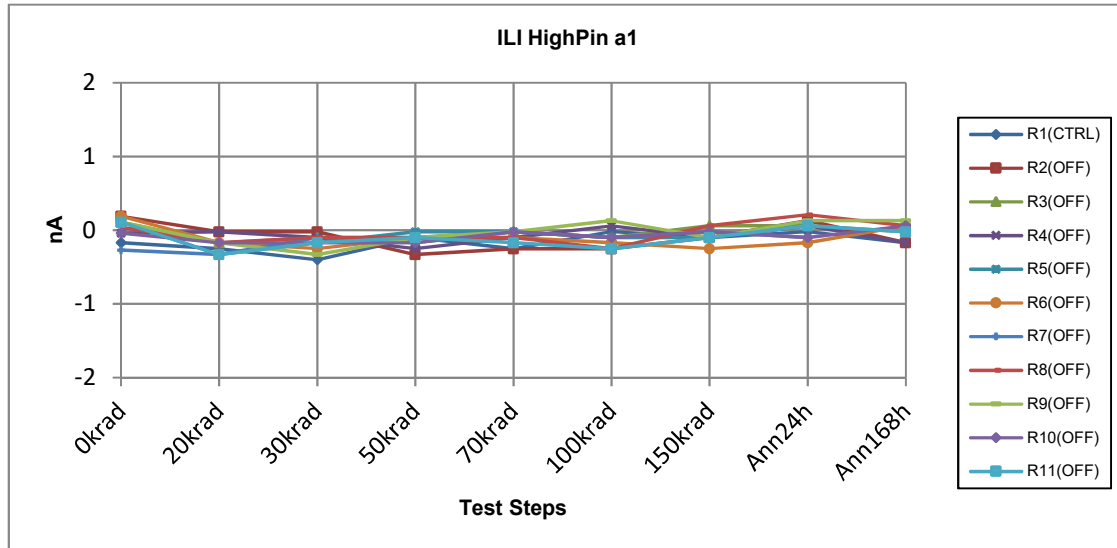
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ILI HighPin a2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.28	-0.28	-0.20	0.18	-0.05	-0.36	-0.13	-0.05	-0.13
Irradiated, unbiased parts results									
R2(OFF)	-0.16	-0.13	-0.05	-0.20	-0.13	-0.20	0.03	0.03	-0.13
R3(OFF)	-0.08	-0.51	-0.05	-0.05	-0.05	0.03	0.03	0.03	-0.05
R4(OFF)	-0.16	-0.13	-0.13	0.03	0.03	-0.36	-0.28	0.03	-0.20
R5(OFF)	-0.24	0.03	0.10	-0.05	-0.05	-0.13	-0.05	-0.20	No meas.
R6(OFF)	-0.24	-0.20	0.03	-0.05	-0.20	-0.28	-0.05	0.03	-0.05
R7(OFF)	-0.39	-0.20	0.10	-0.13	-0.05	0.03	0.10	-0.05	No meas.
R8(OFF)	-0.31	0.03	-0.20	-0.20	-0.13	-0.36	-0.13	-0.13	-0.13
R9(OFF)	-0.16	0.03	-0.20	0.03	0.03	-0.28	-0.13	-0.13	-0.13
R10(OFF)	-0.24	-0.05	-0.28	0.10	-0.13	-0.05	-0.05	-0.05	-0.05
R11(OFF)	-0.24	-0.13	0.10	-0.13	-0.13	-0.13	0.03	0.03	-0.13
Irradiated, unbiased parts statistics									
Min Value	-0.39	-0.51	-0.28	-0.20	-0.20	-0.36	-0.28	-0.20	-0.20
Max Value	-0.08	0.03	0.10	0.10	0.03	0.03	0.10	0.03	-0.05
Average	-0.22	-0.13	-0.06	-0.07	-0.08	-0.17	-0.05	-0.04	-0.11
Sigma	0.09	0.16	0.14	0.10	0.08	0.15	0.11	0.09	0.05

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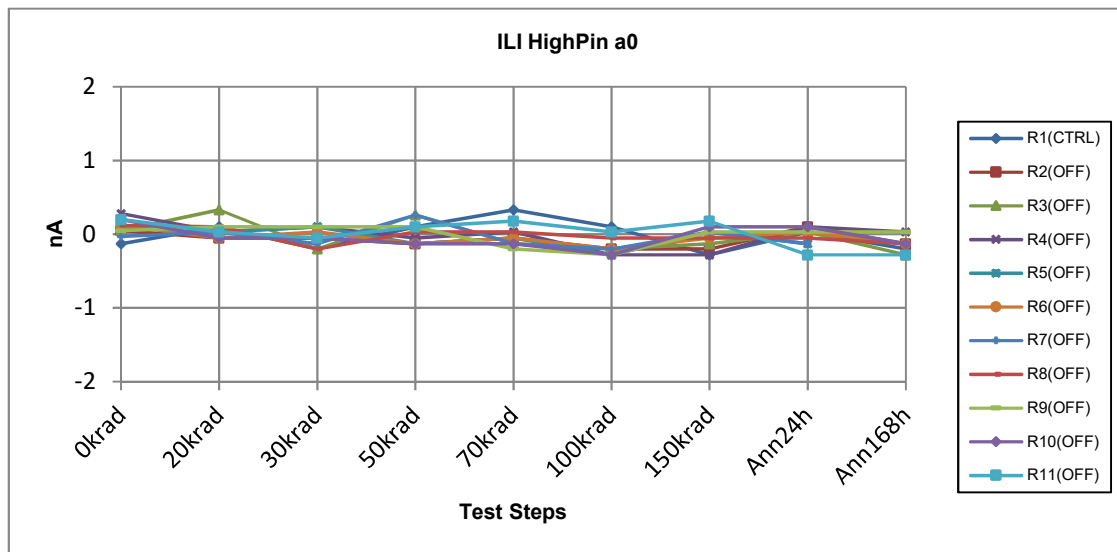
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ILI HighPin a1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.17	-0.25	-0.40	-0.10	-0.25	-0.02	-0.10	-0.02	-0.17
Irradiated, unbiased parts results									
R2(OFF)	0.19	-0.02	-0.02	-0.33	-0.25	-0.25	-0.10	0.13	-0.17
R3(OFF)	0.11	-0.17	-0.10	-0.17	-0.02	-0.10	0.06	0.06	-0.02
R4(OFF)	-0.04	-0.02	-0.10	-0.25	-0.10	0.06	-0.10	0.06	-0.17
R5(OFF)	0.11	-0.33	-0.17	-0.02	-0.02	-0.10	-0.10	0.06	No meas.
R6(OFF)	0.19	-0.17	-0.25	-0.10	-0.10	-0.17	-0.25	-0.17	0.06
R7(OFF)	-0.27	-0.33	-0.10	-0.10	-0.02	-0.10	-0.02	-0.10	No meas.
R8(OFF)	0.04	-0.17	-0.10	-0.10	-0.10	-0.25	0.06	0.21	0.06
R9(OFF)	0.11	-0.17	-0.33	-0.10	-0.02	0.13	-0.10	0.13	0.13
R10(OFF)	-0.04	-0.17	-0.17	-0.17	-0.02	-0.10	-0.02	-0.10	0.06
R11(OFF)	0.11	-0.33	-0.17	-0.10	-0.17	-0.25	-0.10	0.06	-0.02
Irradiated, unbiased parts statistics									
Min Value	-0.27	-0.33	-0.33	-0.33	-0.25	-0.25	-0.25	-0.17	-0.17
Max Value	0.19	-0.02	-0.02	-0.02	-0.02	0.13	0.06	0.21	0.13
Average	0.05	-0.19	-0.15	-0.14	-0.08	-0.11	-0.07	0.03	-0.01
Sigma	0.14	0.11	0.09	0.09	0.08	0.13	0.09	0.12	0.11

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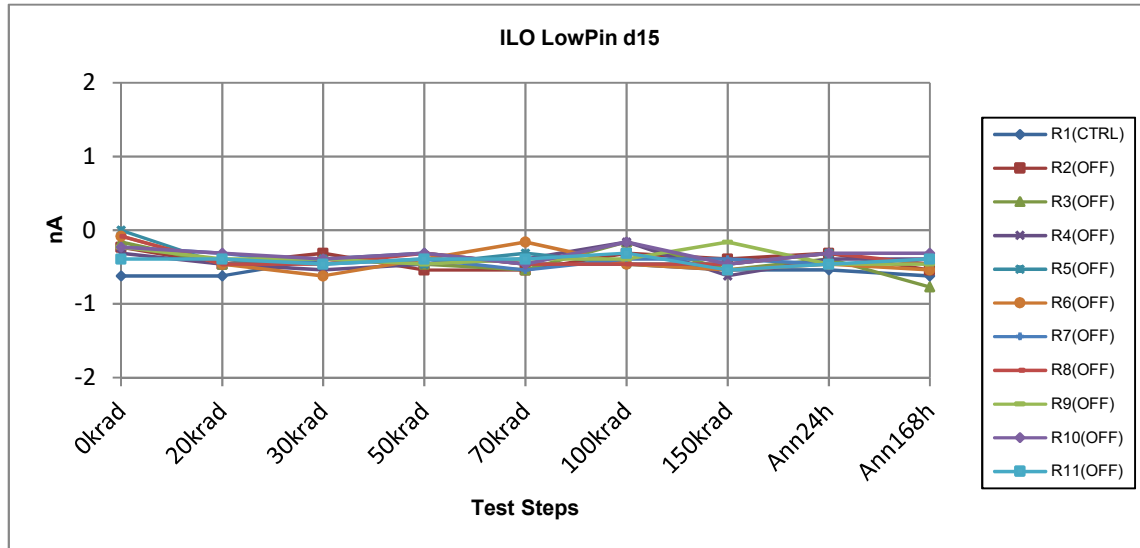
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ILI HighPin a0	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.13	0.10	-0.20	0.10	0.33	0.10	-0.28	0.03	-0.20
Irradiated, unbiased parts results									
R2(OFF)	0.05	-0.05	-0.05	-0.13	-0.05	-0.20	-0.20	0.10	-0.13
R3(OFF)	0.05	0.33	-0.20	0.26	-0.13	-0.20	-0.13	0.03	-0.28
R4(OFF)	0.28	0.03	0.10	-0.05	0.03	-0.28	-0.28	0.10	0.03
R5(OFF)	0.12	0.03	0.10	-0.13	-0.05	-0.28	0.03	-0.13	No meas.
R6(OFF)	0.12	-0.05	0.03	-0.13	-0.05	-0.20	-0.05	0.03	-0.13
R7(OFF)	-0.03	0.03	-0.13	0.26	-0.13	-0.20	0.03	-0.13	No meas.
R8(OFF)	0.12	0.10	-0.20	0.03	0.03	-0.05	-0.05	-0.05	-0.13
R9(OFF)	0.05	0.10	0.10	0.10	-0.20	-0.28	0.03	0.03	0.03
R10(OFF)	0.20	-0.05	-0.05	-0.13	-0.13	-0.28	0.10	0.10	-0.13
R11(OFF)	0.20	0.03	-0.05	0.10	0.18	0.03	0.18	-0.28	-0.28
Irradiated, unbiased parts statistics									
Min Value	-0.03	-0.05	-0.20	-0.13	-0.20	-0.28	-0.28	-0.28	-0.28
Max Value	0.28	0.33	0.10	0.26	0.18	0.03	0.18	0.10	0.03
Average	0.12	0.05	-0.04	0.02	-0.05	-0.19	-0.03	-0.02	-0.13
Sigma	0.09	0.11	0.12	0.16	0.11	0.11	0.14	0.13	0.12

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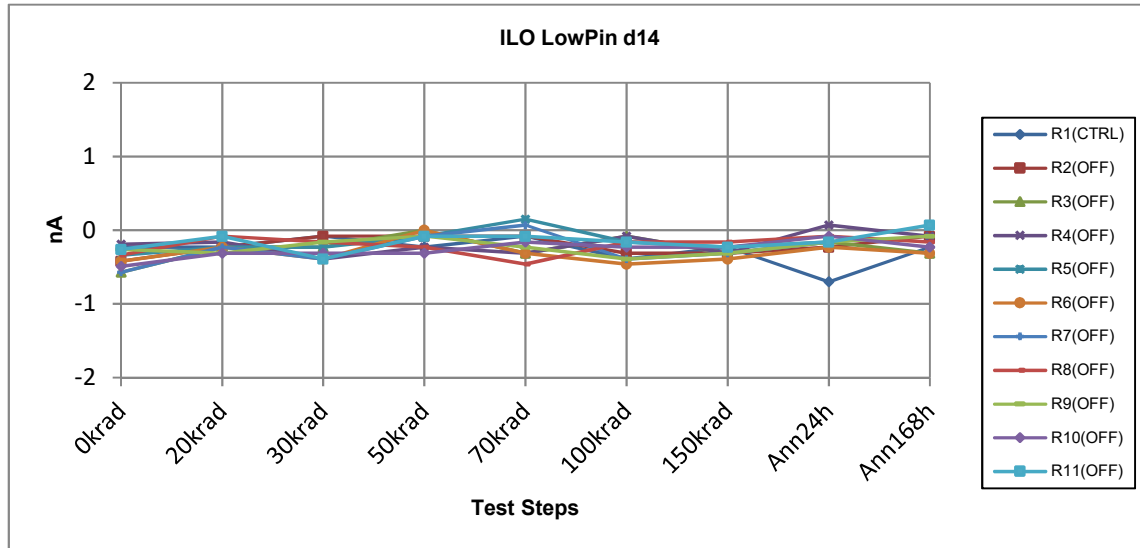
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ILO LowPin d15	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.62	-0.62	-0.39	-0.31	-0.46	-0.46	-0.54	-0.54	-0.62
Irradiated, unbiased parts results									
R2(OFF)	-0.23	-0.46	-0.31	-0.54	-0.54	-0.31	-0.39	-0.31	-0.54
R3(OFF)	-0.16	-0.46	-0.39	-0.46	-0.54	-0.16	-0.54	-0.39	-0.77
R4(OFF)	-0.31	-0.46	-0.54	-0.46	-0.39	-0.16	-0.62	-0.39	-0.39
R5(OFF)	0.00	-0.46	-0.39	-0.46	-0.31	-0.46	-0.46	-0.31	No meas.
R6(OFF)	-0.08	-0.46	-0.62	-0.39	-0.16	-0.46	-0.54	-0.46	-0.54
R7(OFF)	-0.23	-0.31	-0.46	-0.39	-0.54	-0.39	-0.39	-0.46	No meas.
R8(OFF)	-0.08	-0.46	-0.46	-0.31	-0.46	-0.46	-0.46	-0.31	-0.46
R9(OFF)	-0.23	-0.39	-0.39	-0.46	-0.39	-0.39	-0.16	-0.46	-0.46
R10(OFF)	-0.23	-0.31	-0.39	-0.31	-0.46	-0.16	-0.46	-0.31	-0.31
R11(OFF)	-0.39	-0.39	-0.46	-0.39	-0.39	-0.31	-0.54	-0.46	-0.39
Irradiated, unbiased parts statistics									
Min Value	-0.39	-0.46	-0.62	-0.54	-0.54	-0.46	-0.62	-0.46	-0.77
Max Value	0.00	-0.31	-0.31	-0.31	-0.16	-0.16	-0.16	-0.31	-0.31
Average	-0.19	-0.42	-0.44	-0.42	-0.42	-0.33	-0.46	-0.39	-0.48
Sigma	0.12	0.06	0.09	0.07	0.12	0.13	0.13	0.07	0.14

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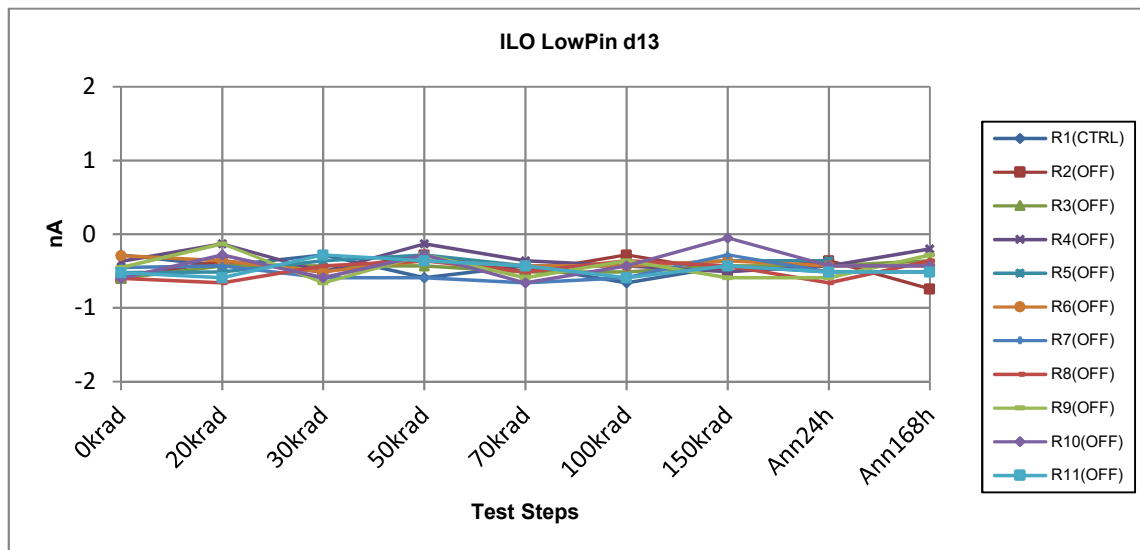
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ILO LowPin d14	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.23	-0.23	-0.08	-0.23	-0.08	-0.39	-0.23	-0.70	-0.23
Irradiated, unbiased parts results									
R2(OFF)	-0.42	-0.23	-0.08	-0.08	-0.08	-0.31	-0.31	-0.23	-0.08
R3(OFF)	-0.57	-0.23	-0.23	0.00	-0.31	-0.08	-0.31	-0.16	-0.31
R4(OFF)	-0.19	-0.16	-0.39	-0.23	-0.31	-0.08	-0.31	0.07	-0.08
R5(OFF)	-0.34	-0.23	-0.23	-0.08	0.15	-0.16	-0.23	-0.16	No meas.
R6(OFF)	-0.42	-0.23	-0.39	0.00	-0.31	-0.46	-0.39	-0.23	-0.31
R7(OFF)	-0.57	-0.23	-0.39	-0.08	0.07	-0.39	-0.31	-0.16	No meas.
R8(OFF)	-0.34	-0.08	-0.16	-0.23	-0.46	-0.16	-0.16	-0.08	-0.16
R9(OFF)	-0.26	-0.31	-0.16	-0.08	-0.23	-0.39	-0.31	-0.16	-0.08
R10(OFF)	-0.49	-0.31	-0.31	-0.31	-0.16	-0.23	-0.23	-0.08	-0.23
R11(OFF)	-0.26	-0.08	-0.39	-0.08	-0.08	-0.16	-0.23	-0.16	0.07
Irradiated, unbiased parts statistics									
Min Value	-0.57	-0.31	-0.39	-0.31	-0.46	-0.46	-0.39	-0.23	-0.31
Max Value	-0.19	-0.08	-0.08	0.00	0.15	-0.08	-0.16	0.07	0.07
Average	-0.39	-0.21	-0.27	-0.12	-0.17	-0.24	-0.28	-0.14	-0.15
Sigma	0.13	0.08	0.12	0.10	0.19	0.14	0.07	0.09	0.13

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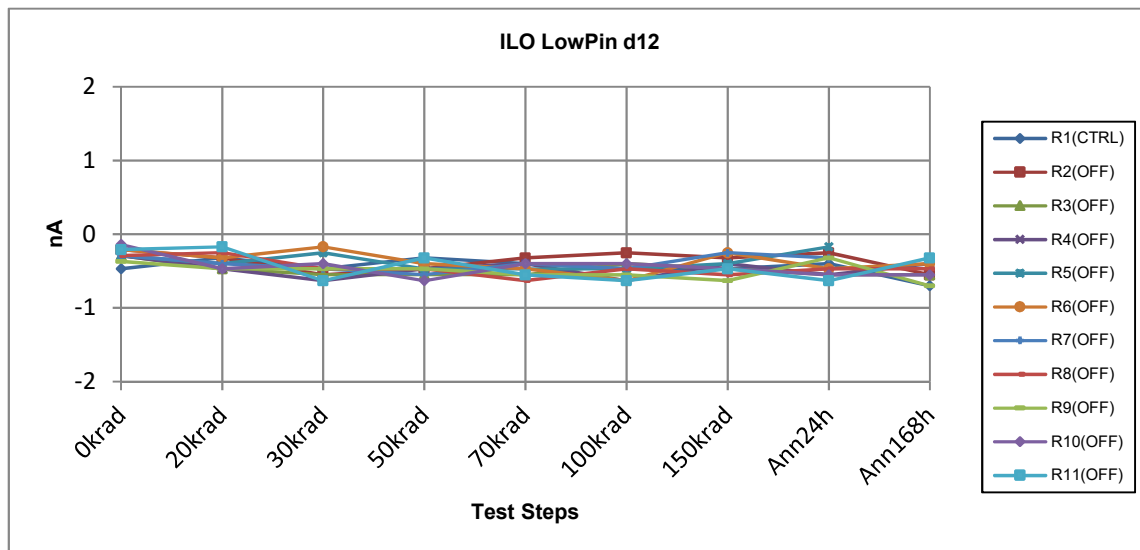
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ILO LowPin d13	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.28	-0.43	-0.28	-0.59	-0.43	-0.66	-0.43	-0.51	-0.51
Irradiated, unbiased parts results									
R2(OFF)	-0.60	-0.36	-0.51	-0.28	-0.51	-0.28	-0.51	-0.36	-0.74
R3(OFF)	-0.60	-0.43	-0.43	-0.43	-0.51	-0.51	-0.43	-0.43	-0.36
R4(OFF)	-0.37	-0.13	-0.51	-0.13	-0.36	-0.43	-0.51	-0.43	-0.20
R5(OFF)	-0.52	-0.51	-0.36	-0.28	-0.43	-0.43	-0.36	-0.36	No meas.
R6(OFF)	-0.29	-0.36	-0.51	-0.36	-0.43	-0.43	-0.36	-0.43	-0.43
R7(OFF)	-0.45	-0.43	-0.59	-0.59	-0.66	-0.59	-0.28	-0.51	No meas.
R8(OFF)	-0.60	-0.66	-0.43	-0.36	-0.51	-0.36	-0.43	-0.66	-0.36
R9(OFF)	-0.45	-0.13	-0.66	-0.28	-0.59	-0.36	-0.59	-0.59	-0.28
R10(OFF)	-0.60	-0.28	-0.59	-0.28	-0.66	-0.43	-0.05	-0.43	-0.43
R11(OFF)	-0.52	-0.59	-0.28	-0.36	-0.43	-0.59	-0.43	-0.51	-0.51
Irradiated, unbiased parts statistics									
Min Value	-0.60	-0.66	-0.66	-0.59	-0.66	-0.59	-0.59	-0.66	-0.74
Max Value	-0.29	-0.13	-0.28	-0.13	-0.36	-0.28	-0.05	-0.36	-0.20
Average	-0.50	-0.39	-0.49	-0.34	-0.51	-0.44	-0.40	-0.47	-0.41
Sigma	0.11	0.18	0.11	0.12	0.10	0.10	0.15	0.10	0.16

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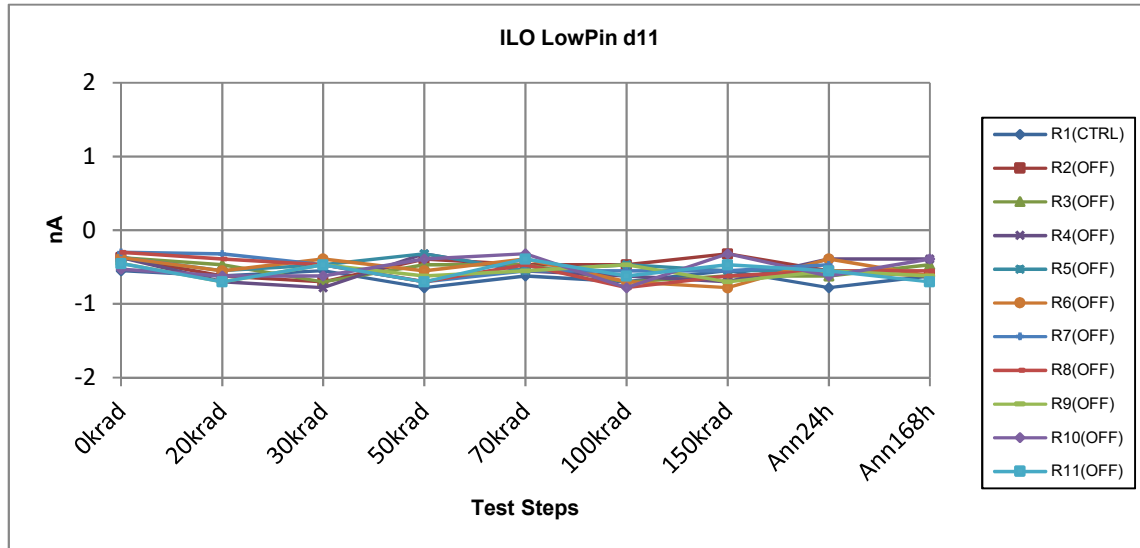
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ILO LowPin d12	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.47	-0.32	-0.47	-0.32	-0.40	-0.47	-0.47	-0.40	-0.70
Irradiated, unbiased parts results									
R2(OFF)	-0.21	-0.32	-0.55	-0.47	-0.32	-0.25	-0.32	-0.25	-0.55
R3(OFF)	-0.29	-0.47	-0.55	-0.55	-0.55	-0.40	-0.47	-0.55	-0.55
R4(OFF)	-0.29	-0.47	-0.63	-0.47	-0.40	-0.63	-0.40	-0.55	-0.40
R5(OFF)	-0.29	-0.40	-0.25	-0.47	-0.47	-0.47	-0.40	-0.17	No meas.
R6(OFF)	-0.21	-0.32	-0.17	-0.40	-0.47	-0.63	-0.25	-0.47	-0.40
R7(OFF)	-0.29	-0.40	-0.47	-0.55	-0.40	-0.47	-0.25	-0.32	No meas.
R8(OFF)	-0.29	-0.25	-0.47	-0.47	-0.63	-0.47	-0.55	-0.47	-0.47
R9(OFF)	-0.37	-0.47	-0.47	-0.47	-0.55	-0.55	-0.63	-0.32	-0.70
R10(OFF)	-0.14	-0.47	-0.40	-0.63	-0.40	-0.40	-0.47	-0.55	-0.55
R11(OFF)	-0.21	-0.17	-0.63	-0.32	-0.55	-0.63	-0.47	-0.63	-0.32
Irradiated, unbiased parts statistics									
Min Value	-0.37	-0.47	-0.63	-0.63	-0.63	-0.63	-0.63	-0.63	-0.70
Max Value	-0.14	-0.17	-0.17	-0.32	-0.32	-0.25	-0.25	-0.17	-0.32
Average	-0.26	-0.37	-0.46	-0.48	-0.47	-0.49	-0.42	-0.43	-0.49
Sigma	0.07	0.11	0.15	0.08	0.10	0.12	0.12	0.15	0.12

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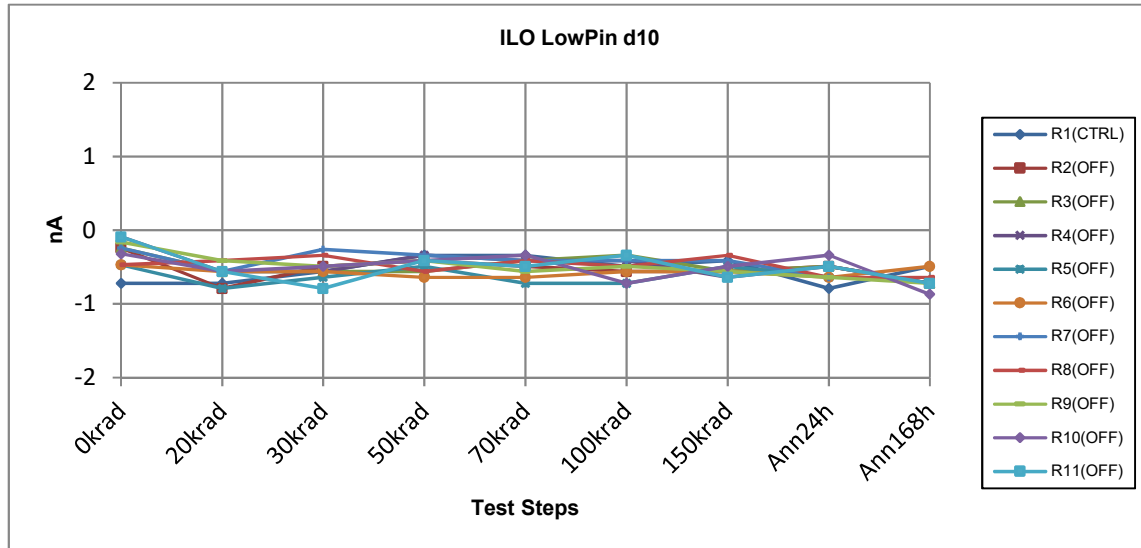
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ILO LowPin d11	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.55	-0.62	-0.55	-0.78	-0.62	-0.70	-0.55	-0.78	-0.62
Irradiated, unbiased parts results									
R2(OFF)	-0.37	-0.62	-0.70	-0.39	-0.47	-0.47	-0.32	-0.55	-0.62
R3(OFF)	-0.37	-0.47	-0.70	-0.47	-0.47	-0.70	-0.62	-0.62	-0.47
R4(OFF)	-0.37	-0.70	-0.78	-0.32	-0.55	-0.62	-0.70	-0.39	-0.39
R5(OFF)	-0.37	-0.55	-0.47	-0.32	-0.55	-0.47	-0.55	-0.55	No meas.
R6(OFF)	-0.37	-0.55	-0.39	-0.55	-0.39	-0.70	-0.78	-0.39	-0.62
R7(OFF)	-0.30	-0.32	-0.47	-0.70	-0.55	-0.55	-0.55	-0.47	No meas.
R8(OFF)	-0.30	-0.39	-0.47	-0.70	-0.47	-0.78	-0.62	-0.55	-0.55
R9(OFF)	-0.45	-0.70	-0.47	-0.62	-0.55	-0.47	-0.70	-0.55	-0.62
R10(OFF)	-0.53	-0.62	-0.62	-0.39	-0.32	-0.78	-0.32	-0.62	-0.39
R11(OFF)	-0.45	-0.70	-0.47	-0.70	-0.39	-0.62	-0.47	-0.55	-0.70
Irradiated, unbiased parts statistics									
Min Value	-0.53	-0.70	-0.78	-0.70	-0.55	-0.78	-0.78	-0.62	-0.70
Max Value	-0.30	-0.32	-0.39	-0.32	-0.32	-0.47	-0.32	-0.39	-0.39
Average	-0.39	-0.56	-0.55	-0.52	-0.47	-0.62	-0.56	-0.52	-0.55
Sigma	0.07	0.13	0.13	0.16	0.08	0.12	0.16	0.08	0.12

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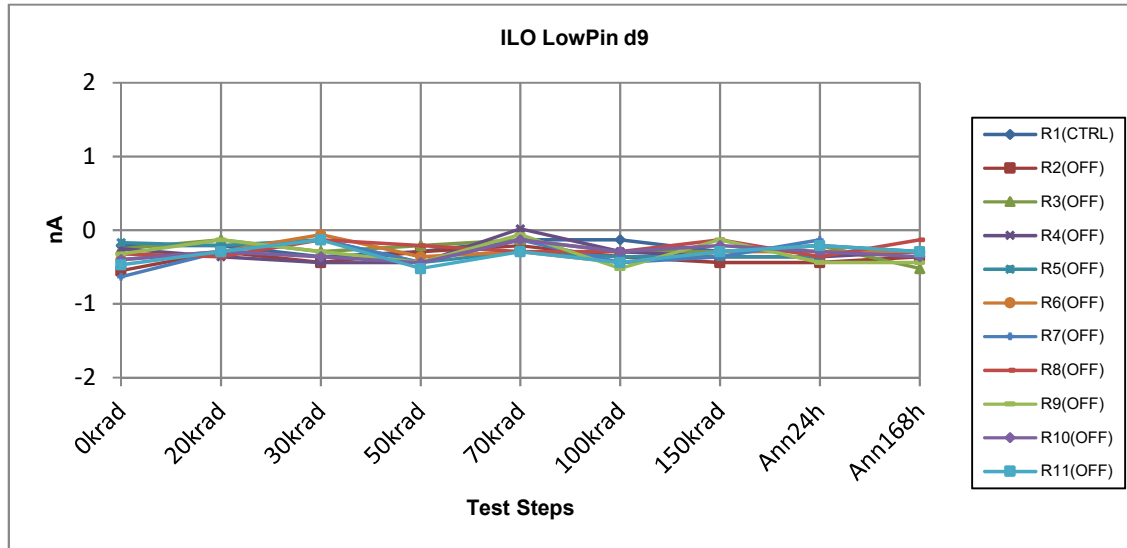
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ILO LowPin d10	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.72	-0.72	-0.56	-0.34	-0.34	-0.49	-0.41	-0.79	-0.49
Irradiated, unbiased parts results									
R2(OFF)	-0.24	-0.79	-0.49	-0.41	-0.49	-0.56	-0.56	-0.49	-0.72
R3(OFF)	-0.24	-0.56	-0.56	-0.56	-0.41	-0.34	-0.56	-0.49	-0.72
R4(OFF)	-0.09	-0.56	-0.56	-0.34	-0.41	-0.41	-0.64	-0.49	-0.72
R5(OFF)	-0.47	-0.79	-0.64	-0.49	-0.72	-0.72	-0.49	-0.64	No meas.
R6(OFF)	-0.47	-0.56	-0.56	-0.64	-0.64	-0.56	-0.56	-0.64	-0.49
R7(OFF)	-0.24	-0.56	-0.26	-0.34	-0.41	-0.41	-0.41	-0.64	No meas.
R8(OFF)	-0.47	-0.41	-0.34	-0.56	-0.41	-0.49	-0.34	-0.64	-0.64
R9(OFF)	-0.16	-0.41	-0.49	-0.41	-0.56	-0.49	-0.56	-0.64	-0.72
R10(OFF)	-0.32	-0.56	-0.49	-0.41	-0.34	-0.72	-0.49	-0.34	-0.87
R11(OFF)	-0.09	-0.56	-0.79	-0.41	-0.49	-0.34	-0.64	-0.49	-0.72
Irradiated, unbiased parts statistics									
Min Value	-0.47	-0.79	-0.79	-0.64	-0.72	-0.72	-0.64	-0.64	-0.87
Max Value	-0.09	-0.41	-0.26	-0.34	-0.34	-0.34	-0.34	-0.34	-0.49
Average	-0.28	-0.58	-0.52	-0.46	-0.49	-0.50	-0.53	-0.55	-0.70
Sigma	0.15	0.13	0.15	0.10	0.12	0.14	0.10	0.10	0.11

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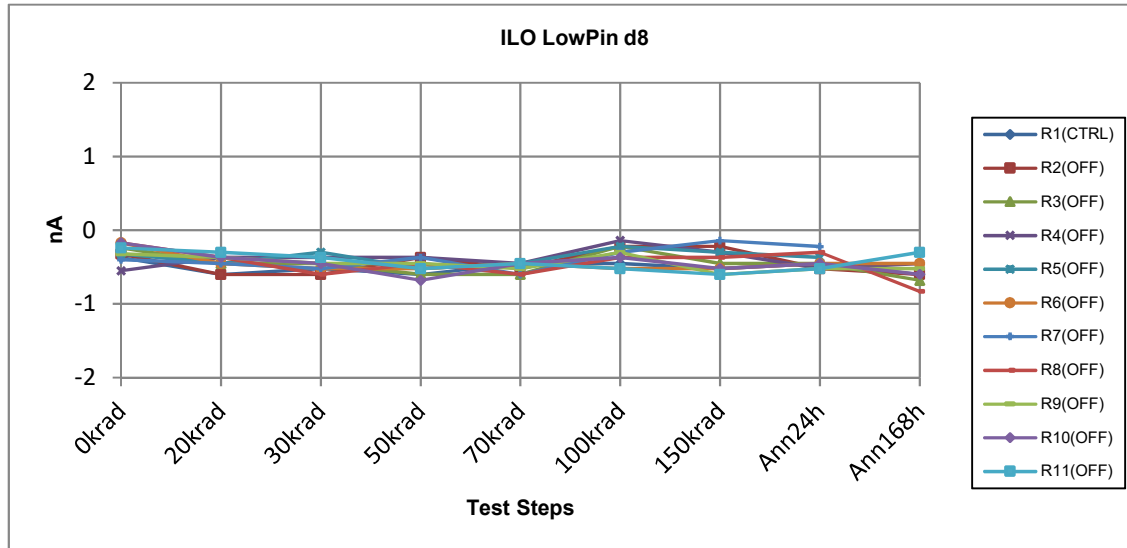
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ILO LowPin d9	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.21	-0.21	-0.36	-0.29	-0.13	-0.13	-0.29	-0.21	-0.29
Irradiated, unbiased parts results									
R2(OFF)	-0.55	-0.29	-0.44	-0.29	-0.21	-0.36	-0.44	-0.44	-0.36
R3(OFF)	-0.25	-0.13	-0.29	-0.21	-0.13	-0.29	-0.29	-0.21	-0.52
R4(OFF)	-0.25	-0.36	-0.44	-0.44	0.02	-0.29	-0.36	-0.36	-0.29
R5(OFF)	-0.17	-0.21	-0.13	-0.44	-0.29	-0.36	-0.36	-0.36	No meas.
R6(OFF)	-0.40	-0.29	-0.06	-0.36	-0.29	-0.44	-0.29	-0.29	-0.29
R7(OFF)	-0.63	-0.29	-0.13	-0.44	-0.13	-0.44	-0.36	-0.13	No meas.
R8(OFF)	-0.32	-0.36	-0.13	-0.21	-0.29	-0.29	-0.13	-0.36	-0.13
R9(OFF)	-0.32	-0.13	-0.29	-0.44	-0.06	-0.52	-0.13	-0.44	-0.44
R10(OFF)	-0.40	-0.29	-0.36	-0.44	-0.13	-0.29	-0.21	-0.29	-0.36
R11(OFF)	-0.47	-0.29	-0.13	-0.52	-0.29	-0.44	-0.29	-0.21	-0.29
Irradiated, unbiased parts statistics									
Min Value	-0.63	-0.36	-0.44	-0.52	-0.29	-0.52	-0.44	-0.44	-0.52
Max Value	-0.17	-0.13	-0.06	-0.21	0.02	-0.29	-0.13	-0.13	-0.13
Average	-0.38	-0.26	-0.24	-0.38	-0.18	-0.37	-0.29	-0.31	-0.34
Sigma	0.14	0.08	0.14	0.11	0.11	0.08	0.10	0.10	0.12

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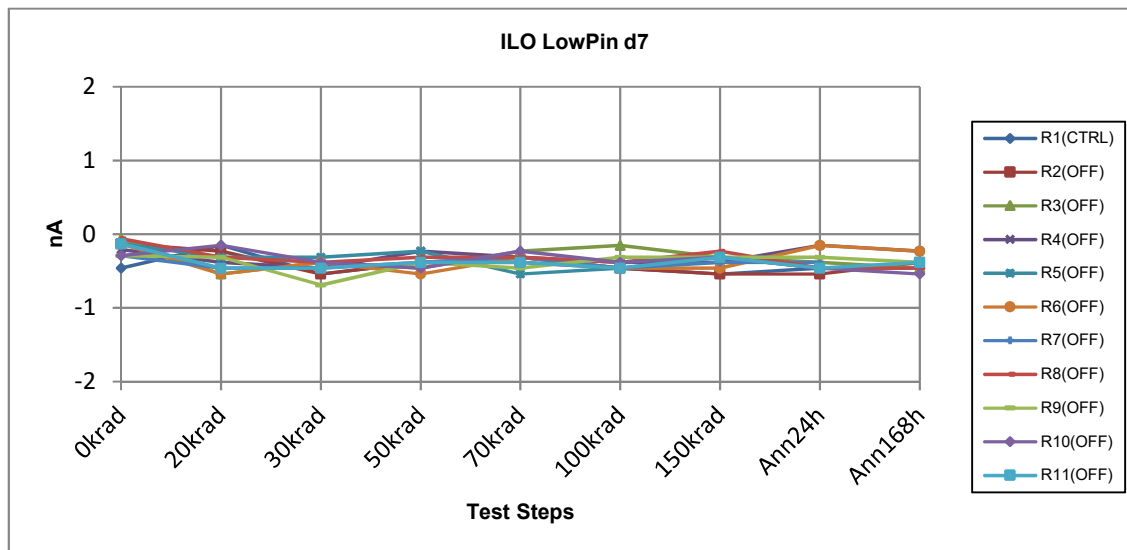
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ILO LowPin d8	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.37	-0.60	-0.52	-0.60	-0.45	-0.45	-0.52	-0.45	-0.60
Irradiated, unbiased parts results									
R2(OFF)	-0.32	-0.60	-0.60	-0.37	-0.52	-0.22	-0.22	-0.52	-0.60
R3(OFF)	-0.24	-0.45	-0.45	-0.60	-0.60	-0.22	-0.45	-0.45	-0.68
R4(OFF)	-0.55	-0.37	-0.37	-0.37	-0.45	-0.14	-0.30	-0.52	-0.45
R5(OFF)	-0.32	-0.45	-0.30	-0.52	-0.45	-0.22	-0.30	-0.37	No meas.
R6(OFF)	-0.17	-0.45	-0.52	-0.52	-0.45	-0.52	-0.52	-0.45	-0.45
R7(OFF)	-0.40	-0.45	-0.52	-0.37	-0.60	-0.30	-0.14	-0.22	No meas.
R8(OFF)	-0.17	-0.37	-0.60	-0.45	-0.60	-0.37	-0.37	-0.30	-0.83
R9(OFF)	-0.32	-0.37	-0.45	-0.45	-0.52	-0.30	-0.60	-0.52	-0.52
R10(OFF)	-0.17	-0.37	-0.45	-0.68	-0.45	-0.37	-0.52	-0.45	-0.60
R11(OFF)	-0.24	-0.30	-0.37	-0.52	-0.45	-0.52	-0.60	-0.52	-0.30
Irradiated, unbiased parts statistics									
Min Value	-0.55	-0.60	-0.60	-0.68	-0.60	-0.52	-0.60	-0.52	-0.83
Max Value	-0.17	-0.30	-0.30	-0.37	-0.45	-0.14	-0.14	-0.22	-0.30
Average	-0.29	-0.42	-0.46	-0.49	-0.51	-0.32	-0.40	-0.43	-0.55
Sigma	0.12	0.08	0.10	0.10	0.07	0.13	0.16	0.10	0.16

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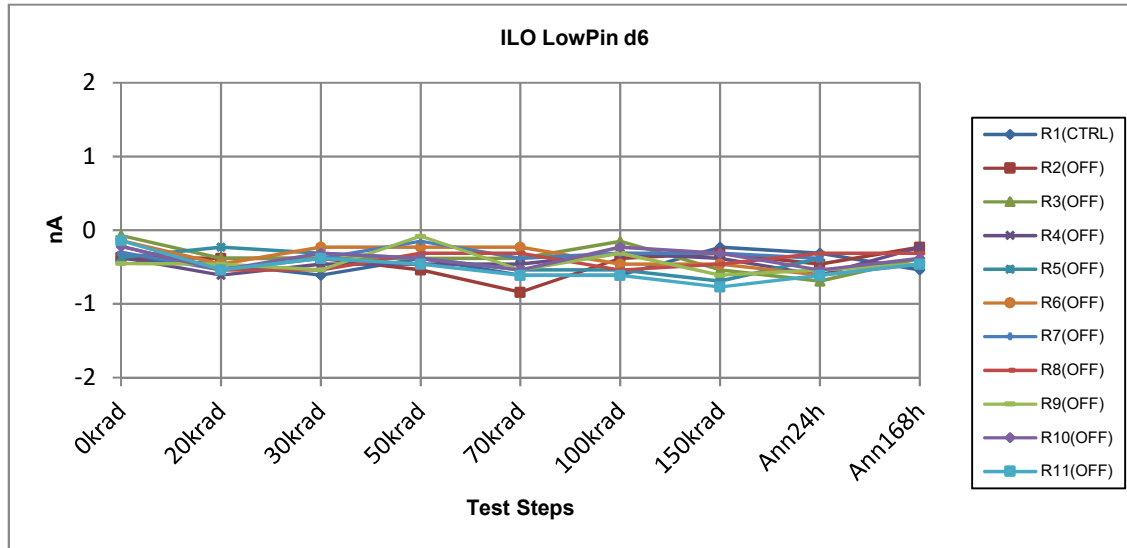
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ILO LowPin d7	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.46	-0.15	-0.54	-0.38	-0.31	-0.46	-0.54	-0.46	-0.46
Irradiated, unbiased parts results									
R2(OFF)	-0.13	-0.23	-0.54	-0.38	-0.38	-0.46	-0.54	-0.54	-0.38
R3(OFF)	-0.06	-0.54	-0.38	-0.46	-0.23	-0.15	-0.31	-0.38	-0.46
R4(OFF)	-0.21	-0.38	-0.46	-0.23	-0.31	-0.38	-0.38	-0.15	-0.23
R5(OFF)	-0.13	-0.31	-0.31	-0.23	-0.54	-0.46	-0.31	-0.46	No meas.
R6(OFF)	-0.13	-0.54	-0.38	-0.54	-0.31	-0.46	-0.46	-0.15	-0.23
R7(OFF)	-0.29	-0.46	-0.46	-0.38	-0.31	-0.46	-0.38	-0.38	No meas.
R8(OFF)	-0.06	-0.31	-0.38	-0.31	-0.31	-0.38	-0.23	-0.46	-0.46
R9(OFF)	-0.29	-0.31	-0.69	-0.38	-0.46	-0.31	-0.31	-0.31	-0.38
R10(OFF)	-0.29	-0.15	-0.38	-0.46	-0.23	-0.38	-0.31	-0.46	-0.54
R11(OFF)	-0.13	-0.46	-0.46	-0.38	-0.38	-0.46	-0.31	-0.46	-0.38
Irradiated, unbiased parts statistics									
Min Value	-0.29	-0.54	-0.69	-0.54	-0.54	-0.46	-0.54	-0.54	-0.54
Max Value	-0.06	-0.15	-0.31	-0.23	-0.23	-0.15	-0.23	-0.15	-0.23
Average	-0.17	-0.37	-0.44	-0.38	-0.35	-0.39	-0.35	-0.38	-0.38
Sigma	0.09	0.13	0.11	0.10	0.10	0.10	0.09	0.13	0.11

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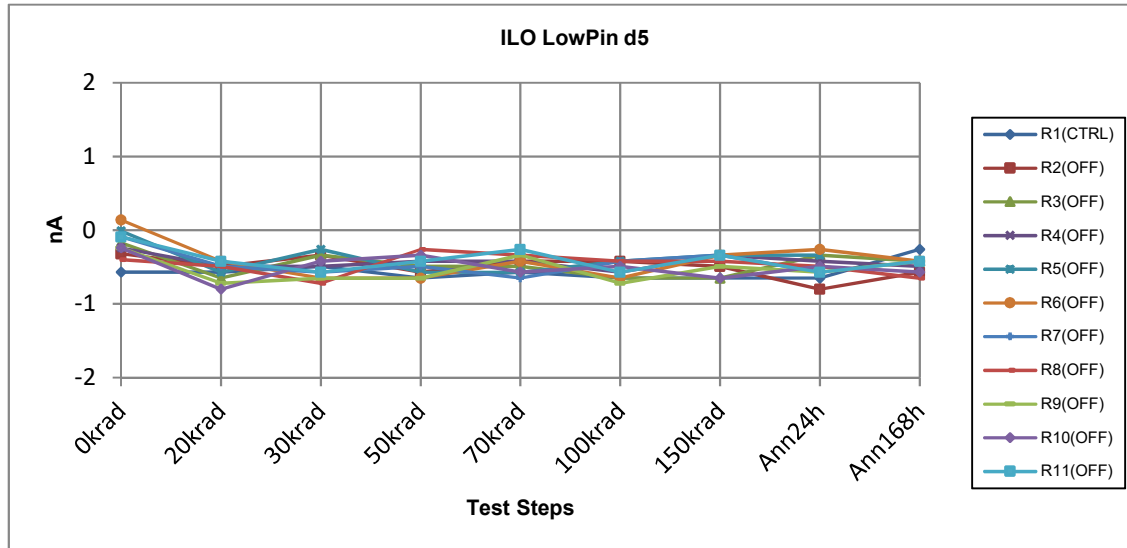
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ILO LowPin d6	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.38	-0.46	-0.61	-0.38	-0.61	-0.61	-0.23	-0.31	-0.54
Irradiated, unbiased parts results									
R2(OFF)	-0.37	-0.38	-0.38	-0.54	-0.84	-0.38	-0.31	-0.46	-0.23
R3(OFF)	-0.07	-0.38	-0.38	-0.38	-0.38	-0.15	-0.54	-0.69	-0.38
R4(OFF)	-0.37	-0.61	-0.46	-0.46	-0.46	-0.31	-0.38	-0.61	-0.23
R5(OFF)	-0.37	-0.23	-0.31	-0.38	-0.54	-0.54	-0.69	-0.38	No meas.
R6(OFF)	-0.14	-0.46	-0.23	-0.23	-0.23	-0.46	-0.46	-0.61	-0.46
R7(OFF)	-0.30	-0.54	-0.38	-0.15	-0.38	-0.31	-0.31	-0.38	No meas.
R8(OFF)	-0.22	-0.54	-0.54	-0.31	-0.31	-0.54	-0.46	-0.31	-0.31
R9(OFF)	-0.45	-0.46	-0.54	-0.08	-0.54	-0.31	-0.61	-0.54	-0.46
R10(OFF)	-0.22	-0.54	-0.31	-0.38	-0.54	-0.23	-0.31	-0.54	-0.38
R11(OFF)	-0.14	-0.54	-0.38	-0.46	-0.61	-0.61	-0.77	-0.61	-0.46
Irradiated, unbiased parts statistics									
Min Value	-0.45	-0.61	-0.54	-0.54	-0.84	-0.61	-0.77	-0.69	-0.46
Max Value	-0.07	-0.23	-0.23	-0.08	-0.23	-0.15	-0.31	-0.31	-0.23
Average	-0.27	-0.47	-0.39	-0.34	-0.48	-0.38	-0.48	-0.51	-0.36
Sigma	0.13	0.11	0.10	0.15	0.17	0.15	0.17	0.12	0.10

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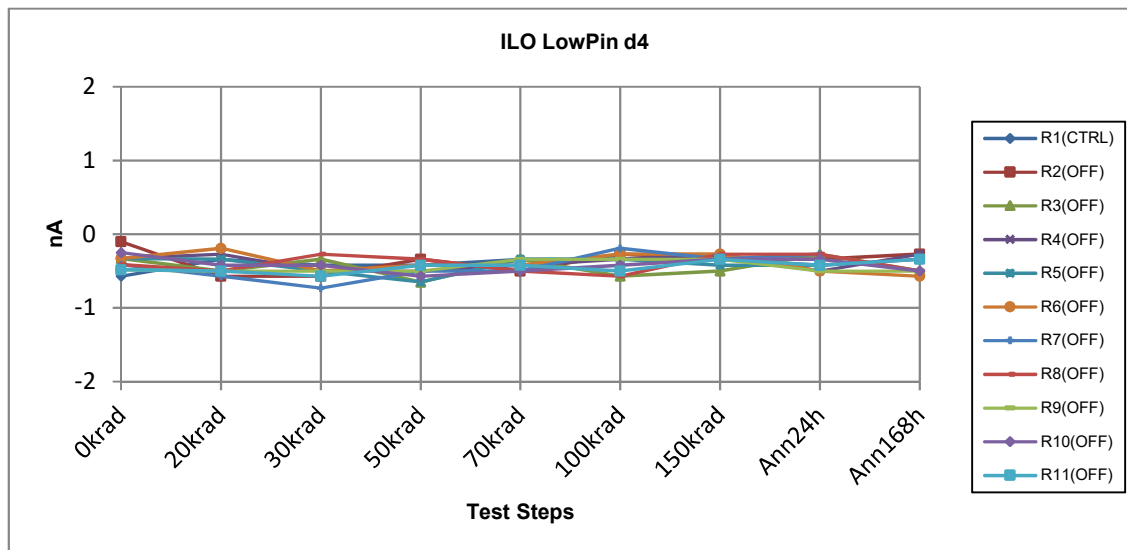
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ILO LowPin d5	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.57	-0.57	-0.49	-0.65	-0.57	-0.65	-0.65	-0.65	-0.26
Irradiated, unbiased parts results									
R2(OFF)	-0.32	-0.49	-0.34	-0.57	-0.42	-0.42	-0.49	-0.80	-0.57
R3(OFF)	-0.17	-0.65	-0.34	-0.49	-0.49	-0.65	-0.65	-0.34	-0.42
R4(OFF)	-0.24	-0.49	-0.49	-0.42	-0.42	-0.57	-0.34	-0.42	-0.49
R5(OFF)	-0.01	-0.57	-0.26	-0.57	-0.57	-0.42	-0.34	-0.34	No meas.
R6(OFF)	0.14	-0.42	-0.65	-0.65	-0.42	-0.65	-0.34	-0.26	-0.42
R7(OFF)	-0.09	-0.49	-0.57	-0.49	-0.65	-0.42	-0.34	-0.57	No meas.
R8(OFF)	-0.40	-0.49	-0.72	-0.26	-0.34	-0.42	-0.42	-0.49	-0.65
R9(OFF)	-0.24	-0.72	-0.65	-0.65	-0.34	-0.72	-0.49	-0.57	-0.42
R10(OFF)	-0.24	-0.80	-0.42	-0.34	-0.57	-0.49	-0.65	-0.49	-0.57
R11(OFF)	-0.09	-0.42	-0.57	-0.42	-0.26	-0.57	-0.34	-0.57	-0.42
Irradiated, unbiased parts statistics									
Min Value	-0.40	-0.80	-0.72	-0.65	-0.65	-0.72	-0.65	-0.80	-0.65
Max Value	0.14	-0.42	-0.26	-0.26	-0.26	-0.42	-0.34	-0.26	-0.42
Average	-0.17	-0.55	-0.50	-0.49	-0.45	-0.53	-0.44	-0.49	-0.50
Sigma	0.16	0.13	0.16	0.13	0.12	0.11	0.13	0.16	0.09

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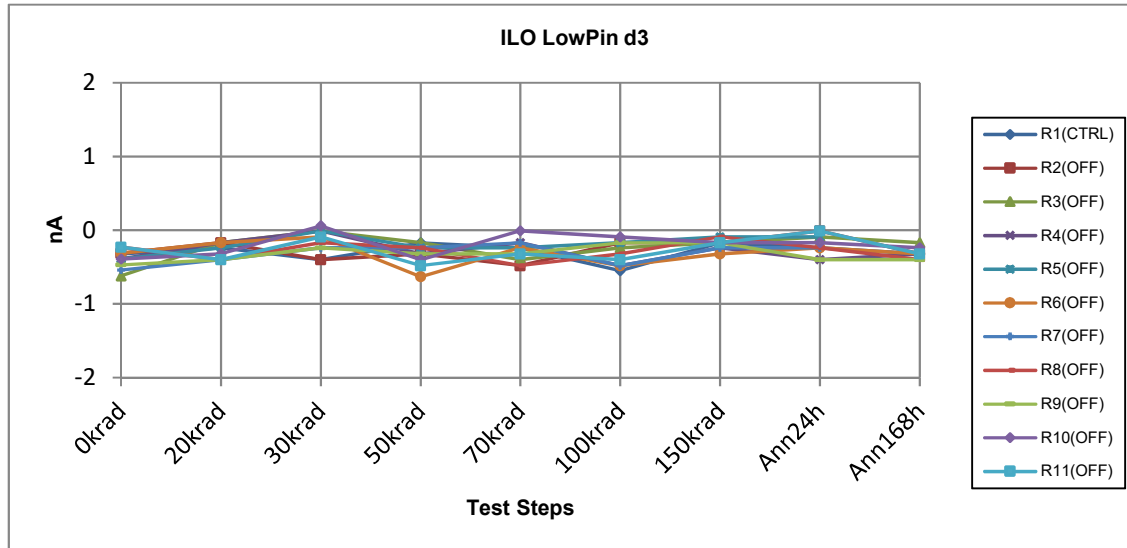
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ILO LowPin d4	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.57	-0.34	-0.42	-0.42	-0.34	-0.34	-0.34	-0.42	-0.34
Irradiated, unbiased parts results									
R2(OFF)	-0.10	-0.57	-0.57	-0.34	-0.50	-0.27	-0.34	-0.34	-0.27
R3(OFF)	-0.33	-0.50	-0.34	-0.65	-0.34	-0.57	-0.50	-0.27	-0.50
R4(OFF)	-0.33	-0.27	-0.50	-0.50	-0.42	-0.34	-0.27	-0.50	-0.27
R5(OFF)	-0.33	-0.34	-0.50	-0.65	-0.34	-0.34	-0.42	-0.42	No meas.
R6(OFF)	-0.33	-0.19	-0.50	-0.42	-0.42	-0.27	-0.27	-0.50	-0.57
R7(OFF)	-0.41	-0.57	-0.73	-0.50	-0.50	-0.19	-0.34	-0.27	No meas.
R8(OFF)	-0.41	-0.50	-0.27	-0.34	-0.50	-0.57	-0.27	-0.27	-0.50
R9(OFF)	-0.48	-0.50	-0.50	-0.50	-0.34	-0.34	-0.34	-0.50	-0.50
R10(OFF)	-0.25	-0.42	-0.42	-0.57	-0.50	-0.42	-0.34	-0.34	-0.50
R11(OFF)	-0.48	-0.50	-0.57	-0.42	-0.42	-0.50	-0.34	-0.42	-0.34
Irradiated, unbiased parts statistics									
Min Value	-0.48	-0.57	-0.73	-0.65	-0.50	-0.57	-0.50	-0.50	-0.57
Max Value	-0.10	-0.19	-0.27	-0.34	-0.34	-0.19	-0.27	-0.27	-0.27
Average	-0.35	-0.44	-0.49	-0.49	-0.43	-0.38	-0.34	-0.38	-0.43
Sigma	0.11	0.13	0.13	0.11	0.07	0.13	0.07	0.10	0.12

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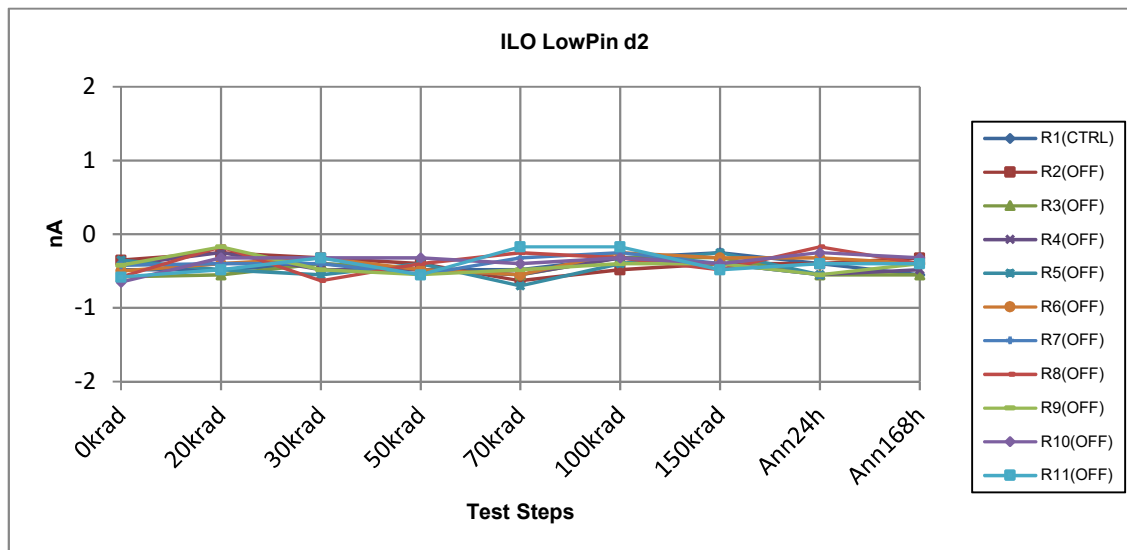
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ILO LowPin d3	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.32	-0.24	-0.40	-0.17	-0.24	-0.55	-0.17	-0.24	-0.32
Irradiated, unbiased parts results									
R2(OFF)	-0.31	-0.17	-0.40	-0.32	-0.48	-0.17	-0.17	-0.01	-0.32
R3(OFF)	-0.62	-0.17	-0.01	-0.17	-0.40	-0.24	-0.17	-0.09	-0.17
R4(OFF)	-0.39	-0.17	-0.01	-0.32	-0.17	-0.48	-0.24	-0.40	-0.32
R5(OFF)	-0.39	-0.24	-0.01	-0.24	-0.24	-0.17	-0.09	-0.09	No meas.
R6(OFF)	-0.31	-0.17	-0.09	-0.63	-0.24	-0.48	-0.32	-0.24	-0.32
R7(OFF)	-0.54	-0.40	-0.24	-0.24	-0.17	-0.48	-0.24	-0.24	No meas.
R8(OFF)	-0.23	-0.40	-0.17	-0.24	-0.48	-0.32	-0.09	-0.24	-0.40
R9(OFF)	-0.47	-0.40	-0.24	-0.32	-0.32	-0.17	-0.17	-0.40	-0.40
R10(OFF)	-0.39	-0.32	0.06	-0.40	-0.01	-0.09	-0.17	-0.17	-0.24
R11(OFF)	-0.23	-0.40	-0.09	-0.48	-0.32	-0.40	-0.17	-0.01	-0.32
Irradiated, unbiased parts statistics									
Min Value	-0.62	-0.40	-0.40	-0.63	-0.48	-0.48	-0.32	-0.40	-0.40
Max Value	-0.23	-0.17	0.06	-0.17	-0.01	-0.09	-0.09	-0.01	-0.17
Average	-0.39	-0.28	-0.12	-0.34	-0.28	-0.30	-0.18	-0.19	-0.31
Sigma	0.13	0.11	0.14	0.14	0.15	0.15	0.07	0.14	0.08

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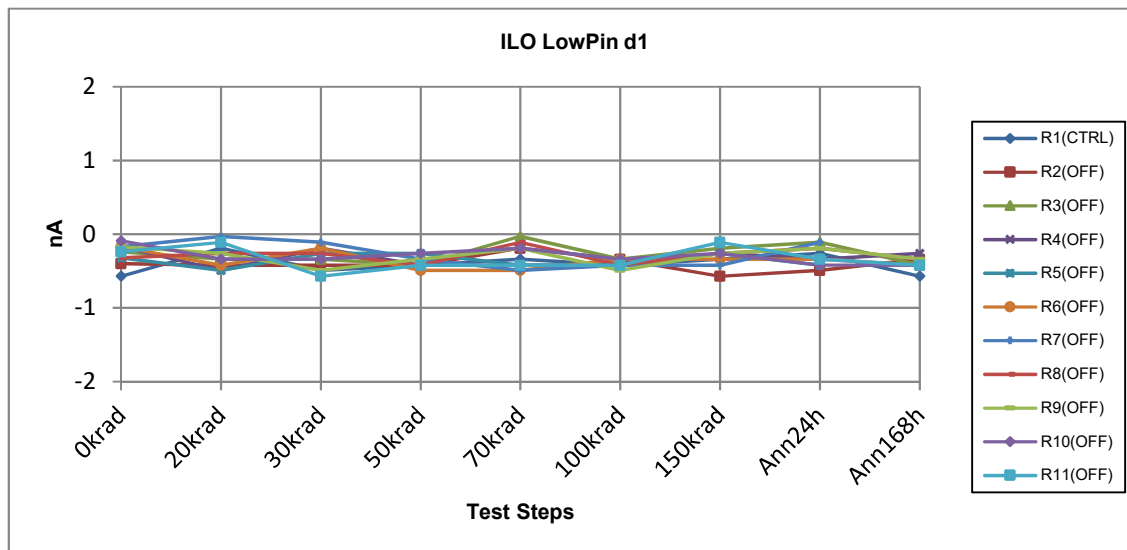
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ILO LowPin d2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.48	-0.48	-0.40	-0.48	-0.48	-0.32	-0.25	-0.40	-0.55
Irradiated, unbiased parts results									
R2(OFF)	-0.35	-0.25	-0.32	-0.40	-0.63	-0.48	-0.40	-0.40	-0.32
R3(OFF)	-0.58	-0.55	-0.40	-0.48	-0.55	-0.32	-0.32	-0.55	-0.55
R4(OFF)	-0.42	-0.25	-0.48	-0.48	-0.55	-0.32	-0.40	-0.55	-0.48
R5(OFF)	-0.35	-0.48	-0.55	-0.40	-0.70	-0.40	-0.25	-0.55	No meas.
R6(OFF)	-0.50	-0.40	-0.32	-0.48	-0.55	-0.25	-0.32	-0.32	-0.40
R7(OFF)	-0.42	-0.40	-0.40	-0.55	-0.32	-0.25	-0.40	-0.55	No meas.
R8(OFF)	-0.58	-0.17	-0.63	-0.40	-0.25	-0.32	-0.48	-0.17	-0.40
R9(OFF)	-0.42	-0.17	-0.48	-0.55	-0.48	-0.40	-0.40	-0.55	-0.40
R10(OFF)	-0.65	-0.32	-0.32	-0.32	-0.40	-0.32	-0.40	-0.25	-0.32
R11(OFF)	-0.58	-0.48	-0.32	-0.55	-0.17	-0.17	-0.48	-0.40	-0.40
Irradiated, unbiased parts statistics									
Min Value	-0.65	-0.55	-0.63	-0.55	-0.70	-0.48	-0.48	-0.55	-0.55
Max Value	-0.35	-0.17	-0.32	-0.32	-0.17	-0.17	-0.25	-0.17	-0.32
Average	-0.49	-0.35	-0.42	-0.46	-0.46	-0.32	-0.39	-0.43	-0.41
Sigma	0.11	0.14	0.11	0.08	0.17	0.09	0.07	0.14	0.08

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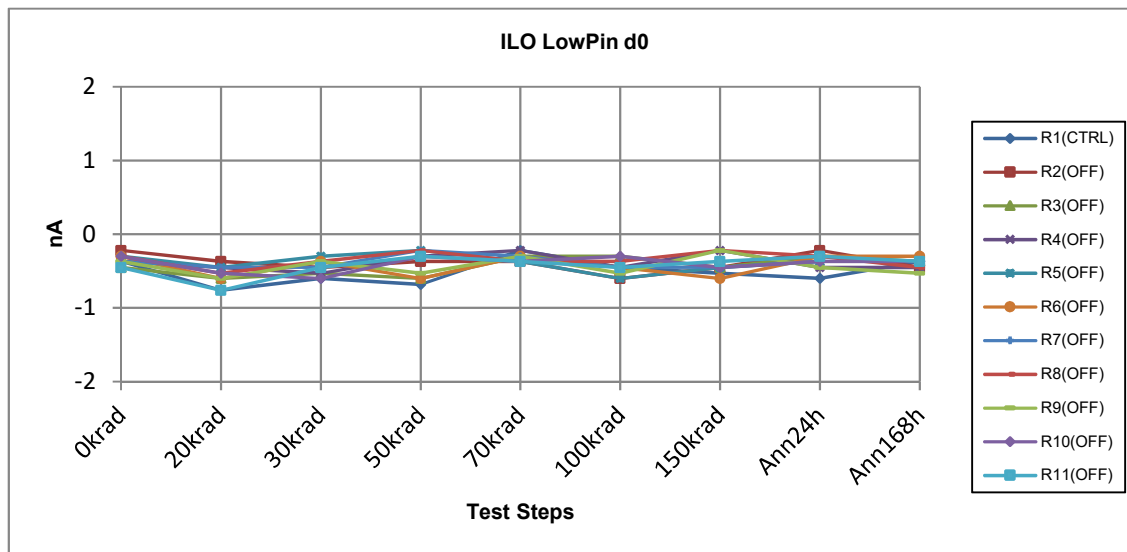
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ILO LowPin d1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.57	-0.19	-0.49	-0.42	-0.34	-0.42	-0.34	-0.26	-0.57
Irradiated, unbiased parts results									
R2(OFF)	-0.40	-0.42	-0.42	-0.42	-0.19	-0.34	-0.57	-0.49	-0.34
R3(OFF)	-0.24	-0.34	-0.34	-0.42	-0.03	-0.34	-0.19	-0.11	-0.42
R4(OFF)	-0.17	-0.49	-0.19	-0.42	-0.42	-0.42	-0.26	-0.34	-0.26
R5(OFF)	-0.32	-0.49	-0.26	-0.26	-0.42	-0.42	-0.26	-0.42	No meas.
R6(OFF)	-0.17	-0.42	-0.19	-0.49	-0.49	-0.34	-0.34	-0.34	-0.42
R7(OFF)	-0.17	-0.03	-0.11	-0.34	-0.49	-0.42	-0.42	-0.11	No meas.
R8(OFF)	-0.32	-0.26	-0.26	-0.42	-0.11	-0.42	-0.26	-0.19	-0.34
R9(OFF)	-0.17	-0.26	-0.49	-0.34	-0.19	-0.49	-0.26	-0.19	-0.34
R10(OFF)	-0.09	-0.34	-0.34	-0.26	-0.19	-0.34	-0.26	-0.42	-0.42
R11(OFF)	-0.24	-0.11	-0.57	-0.42	-0.42	-0.42	-0.11	-0.34	-0.42
Irradiated, unbiased parts statistics									
Min Value	-0.40	-0.49	-0.57	-0.49	-0.49	-0.49	-0.57	-0.49	-0.42
Max Value	-0.09	-0.03	-0.11	-0.26	-0.03	-0.34	-0.11	-0.11	-0.26
Average	-0.23	-0.32	-0.32	-0.38	-0.30	-0.40	-0.29	-0.30	-0.37
Sigma	0.09	0.15	0.14	0.08	0.17	0.05	0.13	0.14	0.06

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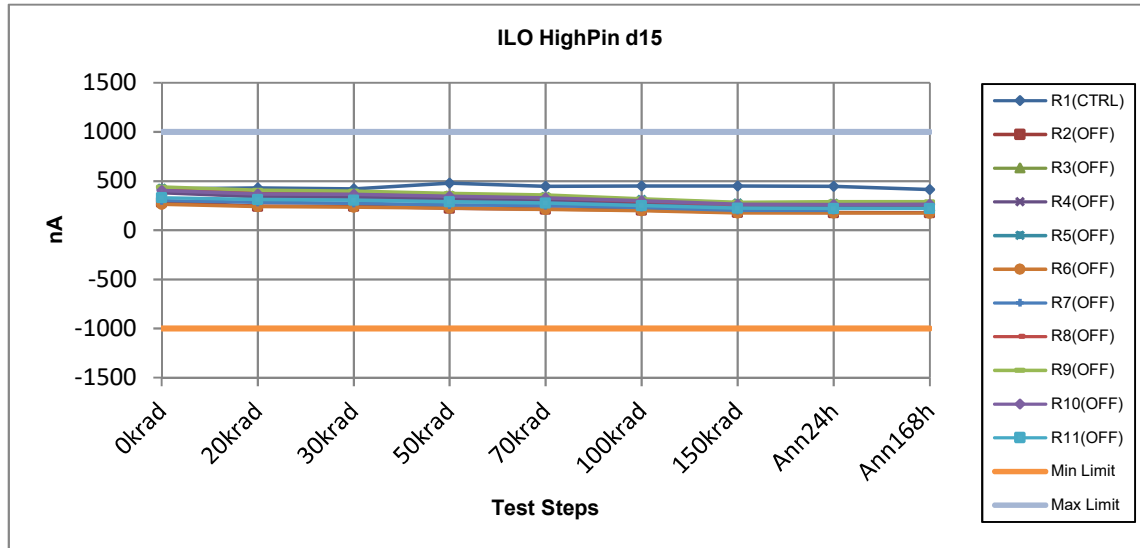
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ILO LowPin d0	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	-0.37	-0.76	-0.60	-0.68	-0.22	-0.45	-0.53	-0.60	-0.37
Irradiated, unbiased parts results									
R2(OFF)	-0.22	-0.37	-0.45	-0.37	-0.37	-0.60	-0.45	-0.22	-0.45
R3(OFF)	-0.45	-0.60	-0.53	-0.60	-0.30	-0.30	-0.45	-0.30	-0.37
R4(OFF)	-0.37	-0.45	-0.53	-0.30	-0.22	-0.45	-0.22	-0.45	-0.45
R5(OFF)	-0.30	-0.45	-0.30	-0.22	-0.37	-0.60	-0.45	-0.37	No meas.
R6(OFF)	-0.30	-0.60	-0.37	-0.60	-0.30	-0.45	-0.60	-0.30	-0.30
R7(OFF)	-0.37	-0.45	-0.45	-0.22	-0.30	-0.45	-0.45	-0.37	No meas.
R8(OFF)	-0.30	-0.53	-0.37	-0.22	-0.37	-0.37	-0.22	-0.30	-0.45
R9(OFF)	-0.37	-0.60	-0.37	-0.53	-0.30	-0.53	-0.22	-0.45	-0.53
R10(OFF)	-0.30	-0.53	-0.60	-0.30	-0.37	-0.30	-0.45	-0.37	-0.37
R11(OFF)	-0.45	-0.76	-0.45	-0.30	-0.37	-0.45	-0.37	-0.30	-0.37
Irradiated, unbiased parts statistics									
Min Value	-0.45	-0.76	-0.60	-0.60	-0.37	-0.60	-0.60	-0.45	-0.53
Max Value	-0.22	-0.37	-0.30	-0.22	-0.22	-0.30	-0.22	-0.22	-0.30
Average	-0.34	-0.53	-0.44	-0.37	-0.33	-0.45	-0.39	-0.34	-0.41
Sigma	0.07	0.11	0.09	0.15	0.05	0.11	0.13	0.07	0.07

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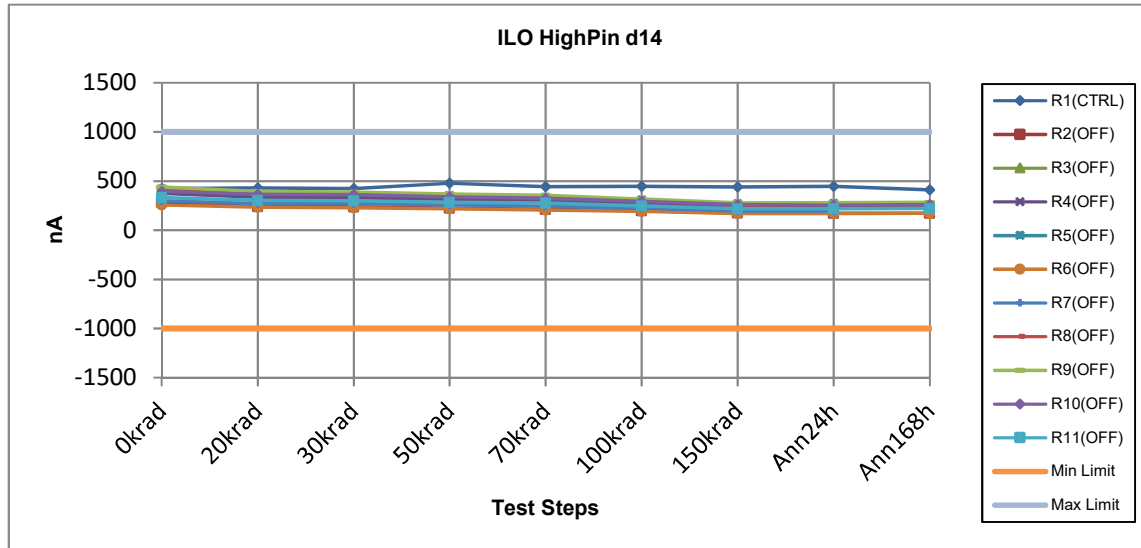
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ILO HighPin d15	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	418.9	430.8	420.6	478.7	448.0	450.7	448.6	446.8	413.7
Irradiated, unbiased parts results									
R2(OFF)	288.5	244.2	245.3	225.9	214.7	204.3	181.7	179.5	178.3
R3(OFF)	397.0	340.3	341.4	320.9	301.8	286.7	249.5	250.0	241.4
R4(OFF)	380.4	341.4	335.3	315.8	294.7	279.0	239.2	237.9	234.8
R5(OFF)	426.6	385.1	383.3	356.9	341.3	314.3	276.0	275.5	No meas.
R6(OFF)	263.7	242.8	233.4	223.9	212.7	198.3	174.9	174.9	174.4
R7(OFF)	301.3	282.9	274.7	258.4	249.9	230.8	201.0	202.0	No meas.
R8(OFF)	417.4	383.0	376.5	353.0	333.8	297.4	258.6	262.8	259.8
R9(OFF)	440.1	406.2	397.8	376.2	359.2	320.8	285.7	289.7	288.7
R10(OFF)	403.9	368.1	365.4	345.5	328.6	298.9	263.3	261.1	263.1
R11(OFF)	331.5	313.9	307.8	290.4	277.6	251.0	223.9	221.8	223.3
Irradiated, unbiased parts statistics									
Min Value	263.7	242.8	233.4	223.9	212.7	198.3	174.9	174.9	174.4
Max Value	440.1	406.2	397.8	376.2	359.2	320.8	285.7	289.7	288.7
Average	365.0	330.8	326.1	306.7	291.4	268.1	235.4	235.5	233.0
Sigma	63.5	58.5	58.6	55.1	52.1	44.5	38.8	39.8	40.2

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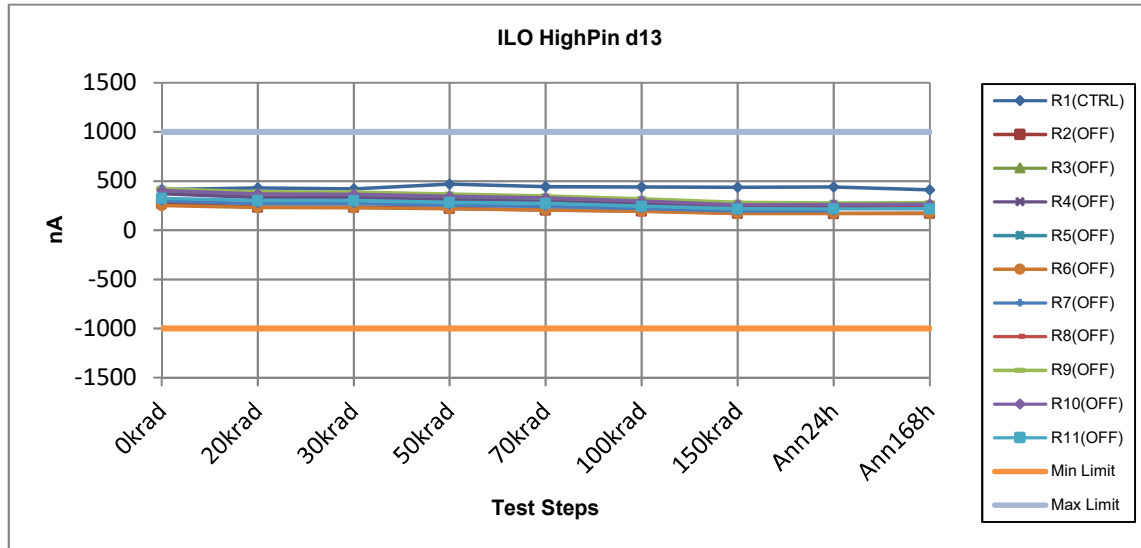
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ILO HighPin d14	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	424.9	431.8	422.7	478.4	443.0	447.7	440.9	447.8	410.4
Irradiated, unbiased parts results									
R2(OFF)	284.8	241.9	237.6	224.3	212.6	200.2	176.3	174.3	172.5
R3(OFF)	401.9	341.3	342.6	317.4	300.9	285.2	243.8	246.1	240.4
R4(OFF)	373.3	337.0	330.8	314.8	290.8	275.7	233.9	235.7	233.8
R5(OFF)	420.1	381.8	375.4	353.5	336.7	310.4	271.9	273.9	No meas.
R6(OFF)	256.4	236.4	229.3	219.8	206.8	192.3	170.6	171.4	170.5
R7(OFF)	300.3	272.1	270.7	256.6	243.7	223.5	196.8	196.0	No meas.
R8(OFF)	418.5	381.3	373.4	350.7	333.5	299.0	254.6	259.7	258.4
R9(OFF)	440.1	393.6	388.1	367.6	355.8	316.4	279.4	279.6	284.2
R10(OFF)	395.2	365.3	361.2	339.0	326.4	292.7	261.0	256.9	262.3
R11(OFF)	332.0	304.1	301.1	284.2	275.9	248.3	218.2	219.2	223.0
Irradiated, unbiased parts statistics									
Min Value	256.4	236.4	229.3	219.8	206.8	192.3	170.6	171.4	170.5
Max Value	440.1	393.6	388.1	367.6	355.8	316.4	279.4	279.6	284.2
Average	362.3	325.5	321.0	302.8	288.3	264.4	230.6	231.2	230.6
Sigma	64.4	58.8	58.4	54.0	52.8	45.5	38.9	39.6	41.0

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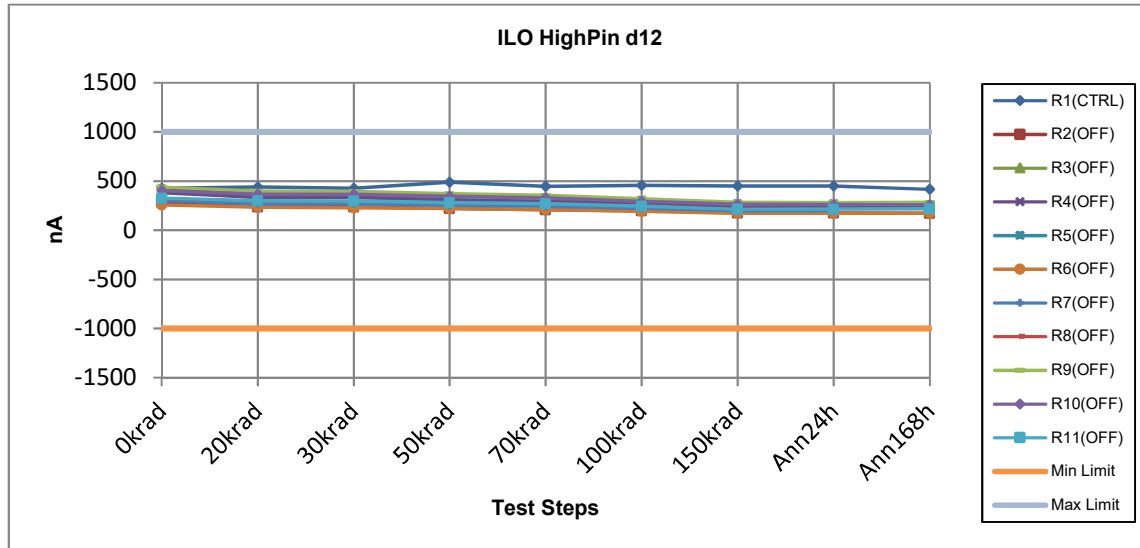
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ILO HighPin d13	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	414.3	430.6	419.5	469.7	443.2	440.8	437.2	439.6	410.3
Irradiated, unbiased parts results									
R2(OFF)	274.7	236.3	236.0	220.9	204.7	196.5	172.5	171.2	172.6
R3(OFF)	389.5	336.2	335.2	316.3	294.7	277.2	238.5	242.4	238.1
R4(OFF)	371.8	331.0	328.8	309.7	291.2	270.9	234.3	234.7	235.2
R5(OFF)	406.6	374.1	368.5	341.3	328.9	302.9	264.0	262.9	No meas.
R6(OFF)	251.4	232.0	227.3	219.1	207.0	191.0	170.9	169.2	169.2
R7(OFF)	296.4	269.4	269.8	254.5	242.1	222.1	197.1	196.6	No meas.
R8(OFF)	417.7	383.9	373.1	348.8	336.4	299.3	258.7	260.8	259.0
R9(OFF)	422.8	390.3	387.3	367.3	348.0	318.2	282.5	278.1	280.4
R10(OFF)	403.7	367.2	365.7	344.7	329.0	296.5	260.1	261.4	264.0
R11(OFF)	324.5	304.1	303.6	284.8	274.7	244.3	218.6	217.6	220.0
Irradiated, unbiased parts statistics									
Min Value	251.4	232.0	227.3	219.1	204.7	191.0	170.9	169.2	169.2
Max Value	422.8	390.3	387.3	367.3	348.0	318.2	282.5	278.1	280.4
Average	355.9	322.5	319.5	300.7	285.7	261.9	229.7	229.5	229.8
Sigma	63.7	59.7	58.3	53.8	52.8	45.9	39.1	39.3	40.9

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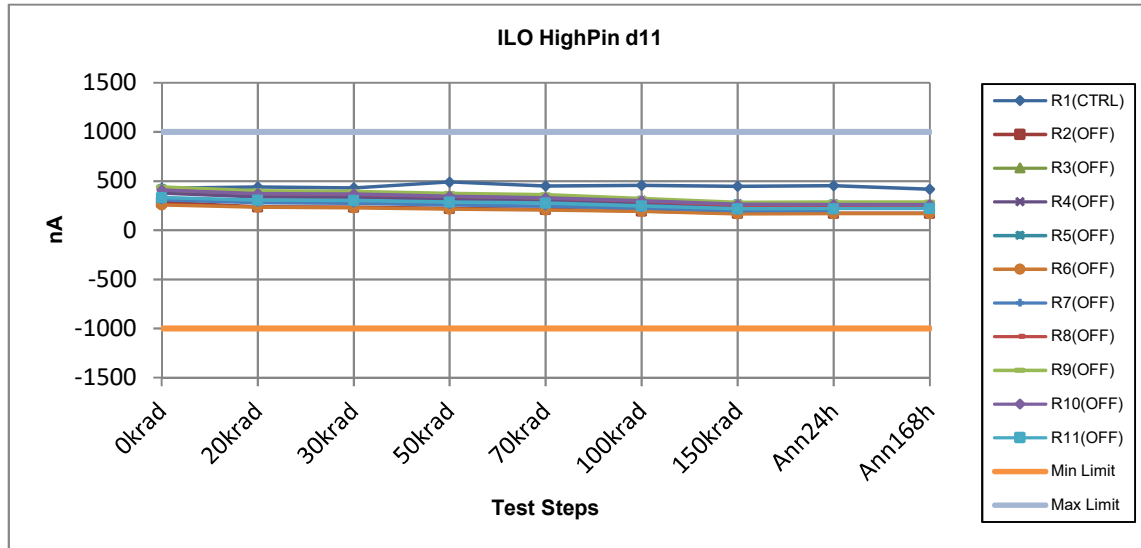
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ILO HighPin d12	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	428.2	438.6	426.7	488.3	448.2	455.9	451.0	450.6	415.8
Irradiated, unbiased parts results									
R2(OFF)	286.7	238.3	238.6	221.9	208.4	199.5	177.2	175.4	174.4
R3(OFF)	394.5	332.4	332.6	311.2	297.0	280.3	240.0	243.9	236.8
R4(OFF)	381.9	336.0	335.2	311.2	291.2	277.6	241.9	240.7	237.0
R5(OFF)	419.1	375.8	372.1	346.2	328.4	306.7	269.3	272.3	No meas.
R6(OFF)	257.7	234.5	229.3	222.0	208.3	193.5	171.5	171.8	171.4
R7(OFF)	301.9	271.7	270.4	253.8	246.1	224.4	199.6	197.9	No meas.
R8(OFF)	426.1	384.8	376.8	353.4	336.4	302.2	262.4	262.0	263.0
R9(OFF)	438.5	396.1	396.0	371.9	356.7	320.9	284.5	282.2	284.3
R10(OFF)	404.2	365.0	363.6	344.3	330.6	294.7	263.5	261.5	259.1
R11(OFF)	327.2	299.7	297.4	281.9	271.3	243.9	214.0	215.0	217.6
Irradiated, unbiased parts statistics									
Min Value	257.7	234.5	229.3	221.9	208.3	193.5	171.5	171.8	171.4
Max Value	438.5	396.1	396.0	371.9	356.7	320.9	284.5	282.2	284.3
Average	363.8	323.4	321.2	301.8	287.4	264.4	232.4	232.3	230.4
Sigma	64.8	59.8	59.4	54.7	53.0	46.0	39.8	40.0	40.8

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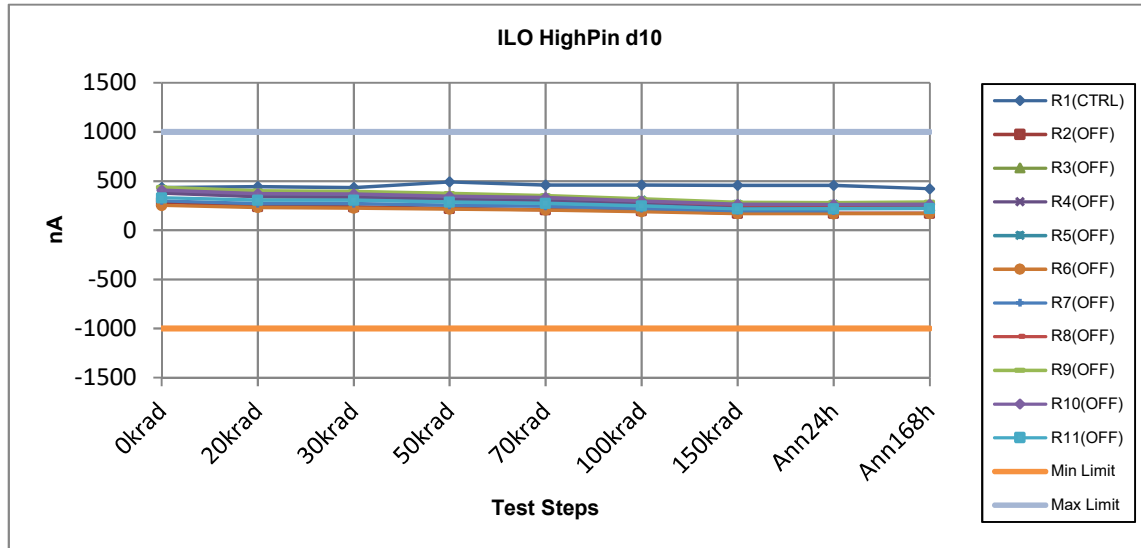
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ILO HighPin d11	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	426.1	439.5	430.1	490.3	450.7	456.4	447.7	453.1	416.7
Irradiated, unbiased parts results									
R2(OFF)	285.1	239.1	235.9	220.8	211.5	197.2	172.5	173.8	173.1
R3(OFF)	396.7	341.1	338.9	317.4	298.0	283.9	247.0	248.4	240.4
R4(OFF)	375.7	340.2	335.8	312.1	294.4	273.8	239.7	239.7	237.1
R5(OFF)	423.1	383.7	376.2	352.0	335.6	307.4	270.3	270.3	No meas.
R6(OFF)	257.1	235.6	228.9	216.5	206.1	194.1	166.9	171.2	169.5
R7(OFF)	307.1	279.4	272.6	256.6	245.3	225.6	199.2	201.3	No meas.
R8(OFF)	413.8	374.8	366.5	344.7	330.2	296.1	254.7	254.0	256.0
R9(OFF)	440.8	401.2	394.2	376.4	360.3	322.5	285.0	285.9	288.0
R10(OFF)	409.1	373.2	369.9	344.1	329.7	299.0	264.6	262.1	261.6
R11(OFF)	332.2	307.4	303.5	286.3	276.1	249.2	219.8	219.4	220.8
Irradiated, unbiased parts statistics									
Min Value	257.1	235.6	228.9	216.5	206.1	194.1	166.9	171.2	169.5
Max Value	440.8	401.2	394.2	376.4	360.3	322.5	285.0	285.9	288.0
Average	364.1	327.6	322.2	302.7	288.7	264.9	232.0	232.6	230.8
Sigma	64.1	59.8	59.4	56.0	53.4	46.0	41.0	39.8	41.7

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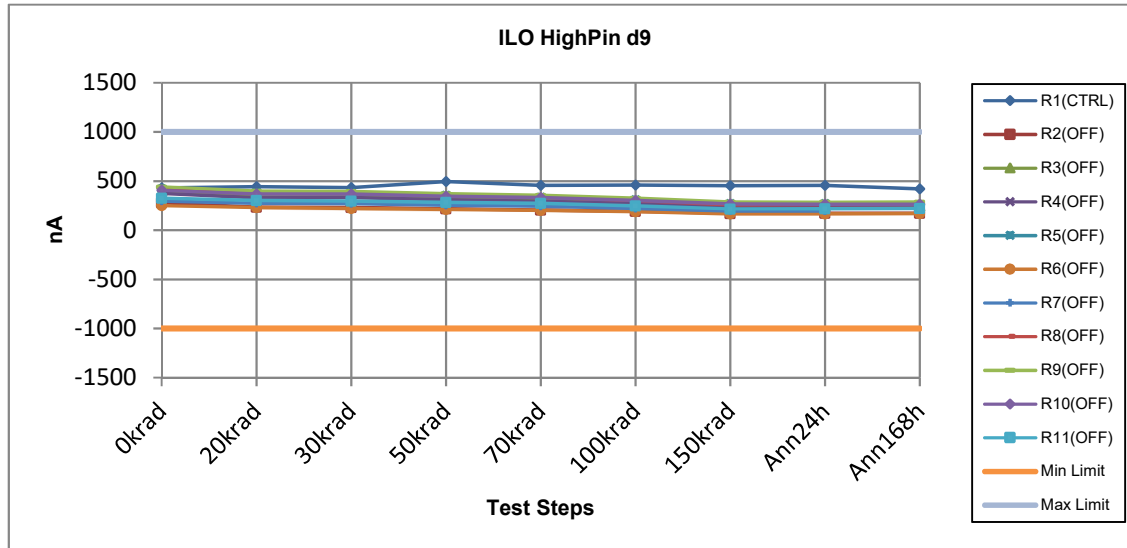
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ILO HighPin d10	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	432.9	443.4	433.9	491.3	458.9	458.4	456.4	455.1	421.1
Irradiated, unbiased parts results									
R2(OFF)	286.5	240.2	239.5	221.9	210.3	198.8	174.5	174.2	172.5
R3(OFF)	401.5	343.8	338.9	321.7	302.0	286.3	246.4	248.2	241.9
R4(OFF)	377.7	341.1	334.7	315.5	295.3	275.8	242.8	236.9	238.1
R5(OFF)	416.1	374.4	369.8	350.2	330.2	306.6	264.1	264.5	No meas.
R6(OFF)	252.3	232.4	224.9	216.0	204.9	190.4	168.3	168.0	169.9
R7(OFF)	298.9	272.2	270.6	255.1	243.7	221.3	197.8	197.2	No meas.
R8(OFF)	421.3	383.2	377.1	352.2	335.0	299.8	257.0	259.0	260.2
R9(OFF)	436.4	399.5	396.0	374.6	353.0	321.1	284.4	280.3	285.9
R10(OFF)	407.4	371.6	368.0	345.0	331.6	297.8	263.4	261.9	263.5
R11(OFF)	330.2	307.6	305.1	285.9	274.4	248.5	217.7	218.8	221.6
Irradiated, unbiased parts statistics									
Min Value	252.3	232.4	224.9	216.0	204.9	190.4	168.3	168.0	169.9
Max Value	436.4	399.5	396.0	374.6	353.0	321.1	284.4	280.3	285.9
Average	362.8	326.6	322.5	303.8	288.0	264.6	231.6	230.9	231.7
Sigma	65.5	60.6	60.1	56.6	53.2	47.0	40.1	39.6	42.0

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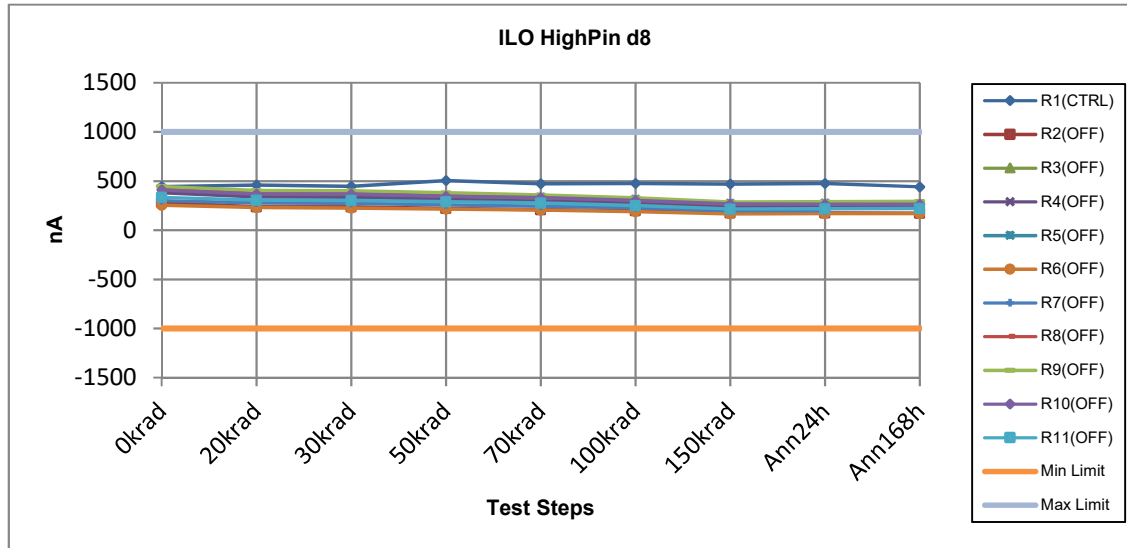
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ILO HighPin d9	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	430.1	443.2	433.0	495.5	456.4	459.5	453.2	456.3	420.7
Irradiated, unbiased parts results									
R2(OFF)	279.5	235.5	232.6	218.1	205.3	193.3	171.0	172.9	172.4
R3(OFF)	396.0	339.4	338.7	320.6	300.3	286.2	244.6	247.2	240.4
R4(OFF)	374.5	330.1	331.3	310.3	293.3	273.4	235.8	236.5	235.0
R5(OFF)	420.6	381.5	376.7	354.6	334.7	308.6	270.0	271.6	No meas.
R6(OFF)	249.9	230.3	222.0	213.6	203.2	189.6	167.1	166.9	168.9
R7(OFF)	296.3	275.1	270.2	253.5	244.1	222.8	195.0	195.4	No meas.
R8(OFF)	421.9	380.7	378.0	353.6	335.4	304.4	257.9	260.7	261.5
R9(OFF)	441.0	396.9	394.5	372.2	355.7	325.0	288.4	286.1	288.4
R10(OFF)	406.7	367.4	368.8	344.5	331.5	302.6	266.0	264.6	265.8
R11(OFF)	326.6	302.5	296.8	285.2	274.7	248.7	216.1	217.6	220.3
Irradiated, unbiased parts statistics									
Min Value	249.9	230.3	222.0	213.6	203.2	189.6	167.1	166.9	168.9
Max Value	441.0	396.9	394.5	372.2	355.7	325.0	288.4	286.1	288.4
Average	361.3	323.9	321.0	302.6	287.8	265.5	231.2	231.9	231.6
Sigma	67.9	61.0	62.6	57.8	55.0	49.3	42.4	42.0	43.0

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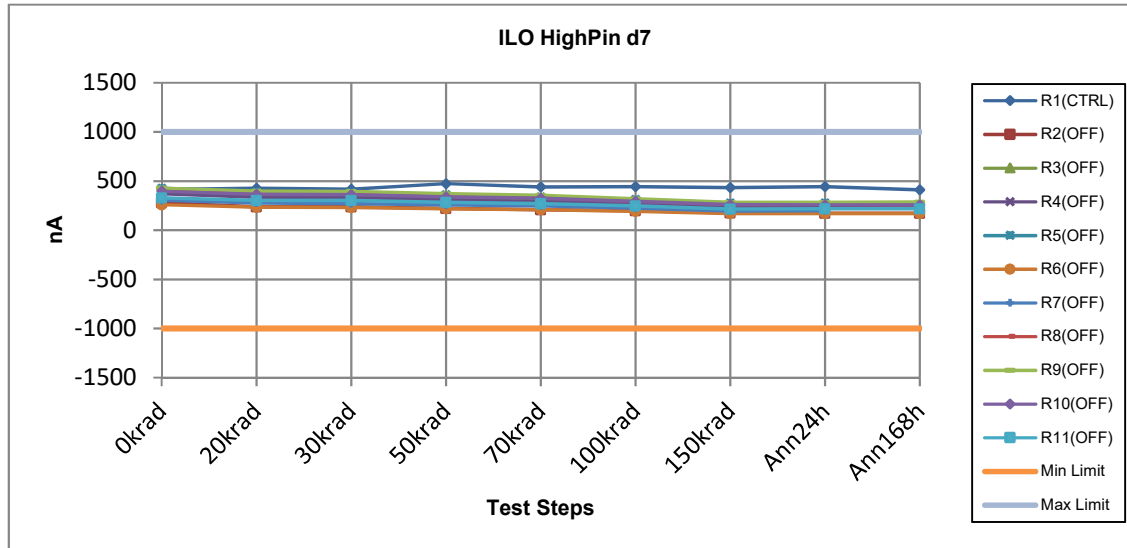
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ILO HighPin d8	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	442.8	458.9	447.3	505.1	471.7	477.2	468.5	474.6	440.8
Irradiated, unbiased parts results									
R2(OFF)	284.6	237.8	237.6	220.9	208.5	197.5	176.7	175.9	174.1
R3(OFF)	401.9	344.9	346.4	322.6	303.4	288.3	249.5	249.8	246.7
R4(OFF)	381.1	338.8	336.7	314.4	294.2	278.9	242.0	241.6	239.1
R5(OFF)	428.7	383.0	382.8	354.0	337.5	316.6	274.5	276.8	No meas.
R6(OFF)	254.6	231.7	225.5	215.7	205.7	190.1	166.6	168.8	169.5
R7(OFF)	302.4	275.9	274.6	257.5	246.2	226.7	200.3	199.4	No meas.
R8(OFF)	429.5	389.8	380.1	357.3	337.5	306.1	265.4	265.2	266.5
R9(OFF)	445.5	405.1	401.5	381.4	359.1	329.2	288.1	288.8	293.8
R10(OFF)	409.8	368.4	367.1	346.8	332.2	302.6	266.6	263.7	264.5
R11(OFF)	334.4	307.6	303.1	289.3	278.1	251.5	216.3	219.8	221.8
Irradiated, unbiased parts statistics									
Min Value	254.6	231.7	225.5	215.7	205.7	190.1	166.6	168.8	169.5
Max Value	445.5	405.1	401.5	381.4	359.1	329.2	288.1	288.8	293.8
Average	367.3	328.3	325.6	306.0	290.2	268.8	234.6	235.0	234.5
Sigma	68.1	62.7	62.5	58.4	54.8	49.8	42.4	42.2	44.1

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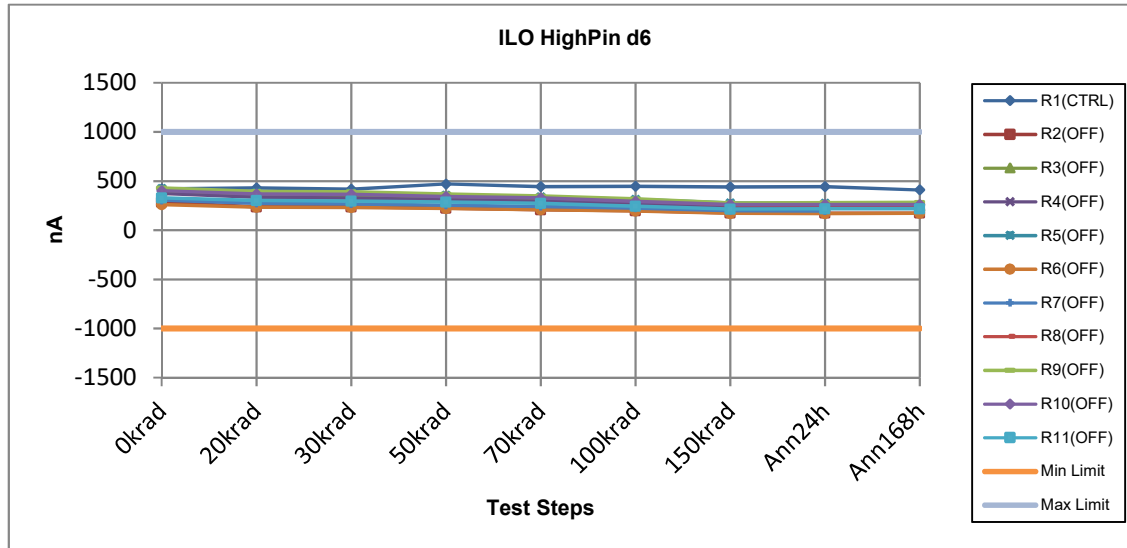
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ILO HighPin d7	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	415.1	427.3	418.8	474.0	440.5	443.2	432.3	443.3	410.1
Irradiated, unbiased parts results									
R2(OFF)	281.3	238.8	237.9	222.8	208.8	199.3	175.5	172.4	173.4
R3(OFF)	397.7	344.8	341.7	319.5	302.1	282.0	243.0	244.8	237.7
R4(OFF)	371.1	336.5	334.0	310.4	291.1	274.8	238.4	237.2	236.7
R5(OFF)	427.0	386.6	384.6	361.2	339.1	312.4	277.1	277.8	No meas.
R6(OFF)	259.0	233.7	231.1	219.0	208.5	193.0	169.5	170.3	170.8
R7(OFF)	304.0	276.4	271.2	258.4	248.1	226.2	196.4	199.1	No meas.
R8(OFF)	418.4	379.6	376.2	347.3	334.1	295.6	258.5	263.3	258.8
R9(OFF)	429.1	397.1	395.2	372.0	355.6	319.4	284.3	283.0	286.3
R10(OFF)	396.4	364.4	360.3	338.7	327.2	292.7	260.4	258.3	259.1
R11(OFF)	328.8	302.0	302.9	283.0	271.8	246.9	215.4	219.2	217.7
Irradiated, unbiased parts statistics									
Min Value	259.0	233.7	231.1	219.0	208.5	193.0	169.5	170.3	170.8
Max Value	429.1	397.1	395.2	372.0	355.6	319.4	284.3	283.0	286.3
Average	361.3	326.0	323.5	303.2	288.6	264.2	231.9	232.5	230.0
Sigma	63.3	60.3	60.1	55.4	53.2	45.5	40.9	41.0	41.1

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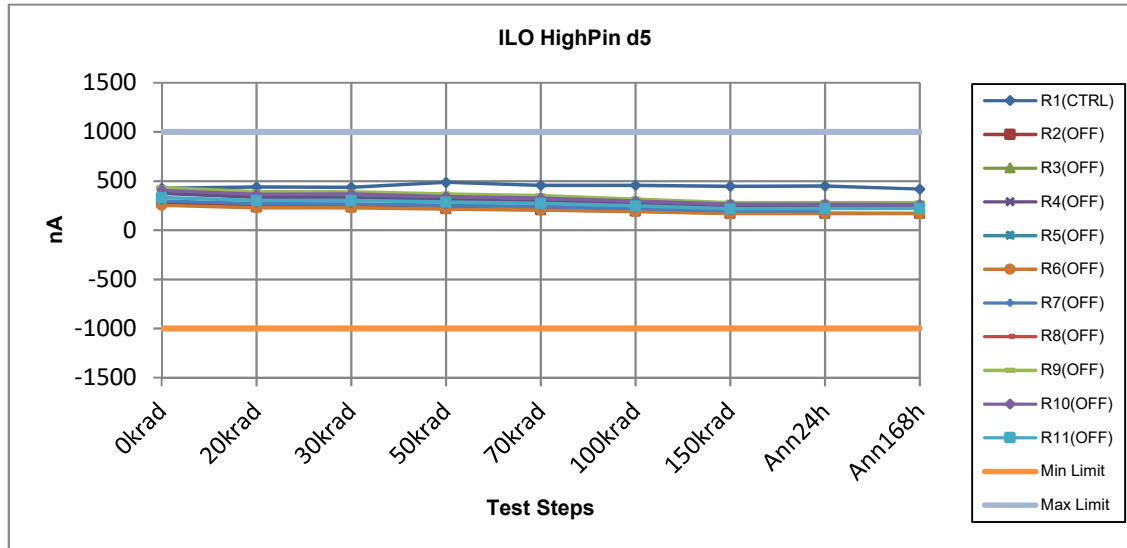
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ILO HighPin d6	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	420.5	428.7	418.6	470.3	442.8	446.5	441.0	442.3	409.5
Irradiated, unbiased parts results									
R2(OFF)	285.6	237.6	237.8	223.7	209.1	200.3	176.2	175.1	175.1
R3(OFF)	399.0	344.0	338.4	323.3	299.8	285.8	248.4	249.1	243.5
R4(OFF)	373.7	335.3	327.3	309.3	291.9	272.9	239.7	237.3	236.4
R5(OFF)	425.1	383.6	378.5	356.8	338.5	312.9	276.1	272.6	No meas.
R6(OFF)	260.4	236.4	230.1	221.5	209.8	194.3	170.9	171.0	171.5
R7(OFF)	304.7	275.5	267.1	254.7	242.5	225.1	198.6	195.9	No meas.
R8(OFF)	422.7	383.8	376.3	352.9	332.6	301.9	256.9	258.9	258.0
R9(OFF)	430.0	393.1	389.9	368.1	350.1	318.7	278.7	279.9	284.8
R10(OFF)	401.6	368.0	365.1	342.6	328.2	295.1	260.8	260.9	262.4
R11(OFF)	329.9	303.9	296.7	286.7	274.2	246.0	214.6	219.4	218.6
Irradiated, unbiased parts statistics									
Min Value	260.4	236.4	230.1	221.5	209.1	194.3	170.9	171.0	171.5
Max Value	430.0	393.1	389.9	368.1	350.1	318.7	278.7	279.9	284.8
Average	363.3	326.1	320.7	304.0	287.7	265.3	232.1	232.0	231.3
Sigma	63.1	59.8	59.7	54.9	52.5	46.0	39.7	39.8	40.7

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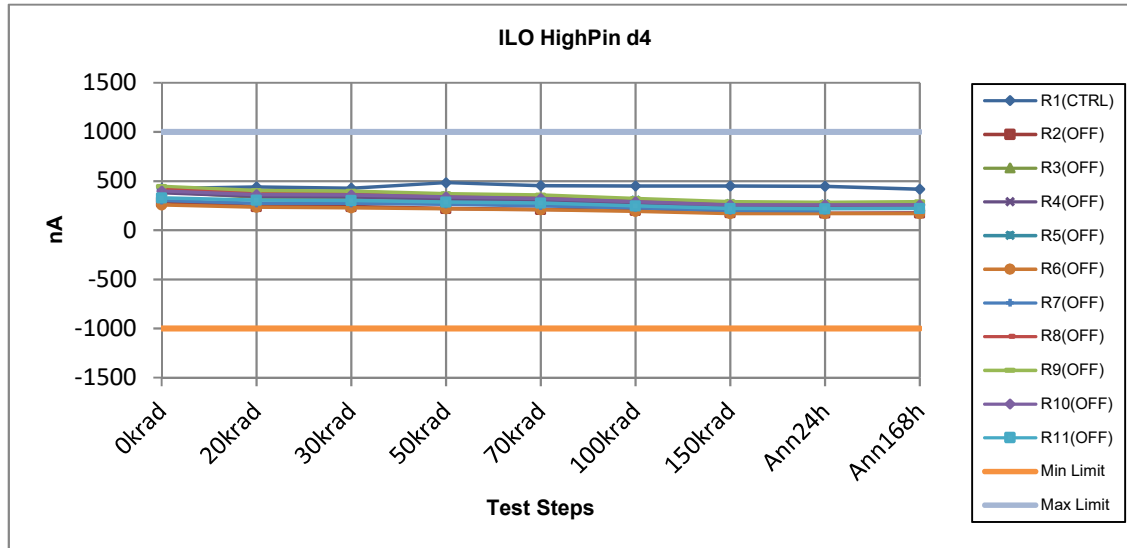
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ILO HighPin d5	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	425.5	439.5	435.8	486.8	455.6	455.2	446.8	451.3	418.8
Irradiated, unbiased parts results									
R2(OFF)	284.7	239.3	237.0	221.8	209.2	196.8	174.3	174.0	171.7
R3(OFF)	390.1	333.2	331.9	313.0	295.0	280.5	237.6	242.1	236.0
R4(OFF)	375.4	334.4	328.9	308.4	289.4	270.6	236.3	234.4	233.5
R5(OFF)	411.1	372.9	363.2	344.9	326.1	296.6	265.3	264.2	No meas.
R6(OFF)	253.3	229.0	227.3	215.8	205.6	188.8	167.6	168.5	168.4
R7(OFF)	299.2	269.6	267.7	253.4	241.5	221.2	197.3	195.9	No meas.
R8(OFF)	424.9	386.8	379.6	357.0	333.7	301.0	262.4	264.5	262.5
R9(OFF)	433.7	392.2	390.9	369.2	350.7	315.3	282.0	280.6	280.4
R10(OFF)	406.1	366.6	367.3	342.3	326.5	298.1	263.1	262.6	260.4
R11(OFF)	331.8	303.8	302.4	286.9	275.0	249.4	218.4	221.1	220.5
Irradiated, unbiased parts statistics									
Min Value	253.3	229.0	227.3	215.8	205.6	188.8	167.6	168.5	168.4
Max Value	433.7	392.2	390.9	369.2	350.7	315.3	282.0	280.6	280.4
Average	361.0	322.8	319.6	301.3	285.3	261.8	230.4	230.8	229.2
Sigma	64.2	60.1	59.1	55.4	51.9	45.6	40.0	39.9	41.2

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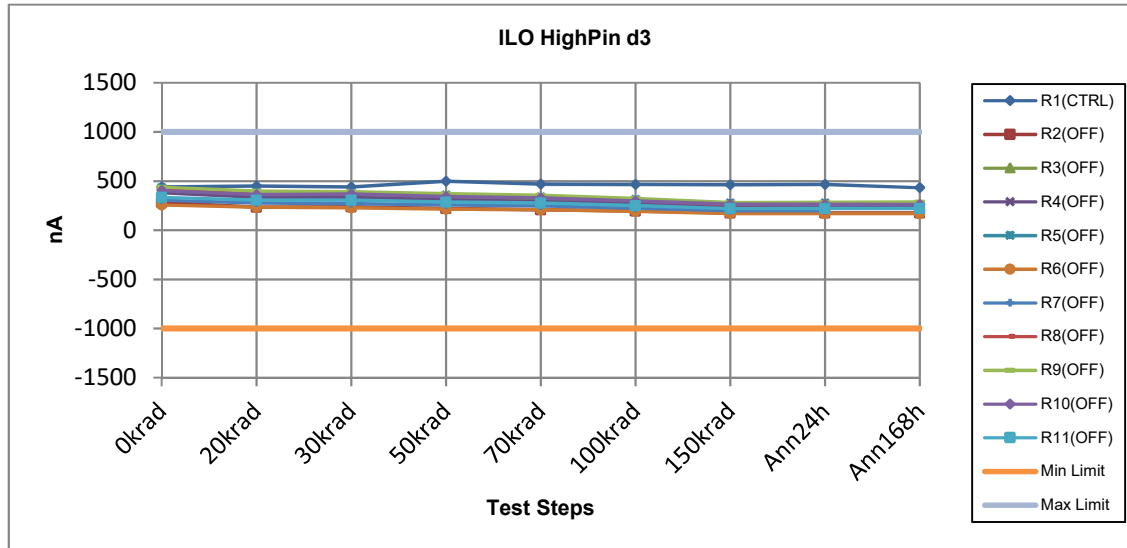
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ILO HighPin d4	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	423.5	438.7	428.1	483.1	454.7	449.0	449.1	446.0	416.8
Irradiated, unbiased parts results									
R2(OFF)	290.8	241.4	241.9	222.4	213.0	201.4	178.0	174.8	176.2
R3(OFF)	393.6	337.1	334.7	317.2	295.4	281.3	241.8	243.0	236.8
R4(OFF)	381.8	344.8	339.7	314.9	295.9	281.4	242.7	239.2	238.9
R5(OFF)	421.1	379.6	374.9	347.8	330.6	306.3	271.4	267.5	No meas.
R6(OFF)	256.9	233.7	229.0	218.1	208.9	191.8	168.8	171.1	168.6
R7(OFF)	302.2	275.4	274.1	263.0	247.7	229.7	199.7	200.5	No meas.
R8(OFF)	429.2	387.6	378.6	353.0	338.6	302.4	263.9	261.2	260.7
R9(OFF)	448.2	403.2	398.5	371.3	357.7	323.4	290.7	285.2	289.8
R10(OFF)	398.6	362.1	357.7	337.8	322.7	290.7	257.9	257.4	257.7
R11(OFF)	329.4	305.9	302.2	287.2	276.0	247.6	220.9	219.0	220.2
Irradiated, unbiased parts statistics									
Min Value	256.9	233.7	229.0	218.1	208.9	191.8	168.8	171.1	168.6
Max Value	448.2	403.2	398.5	371.3	357.7	323.4	290.7	285.2	289.8
Average	365.2	327.1	323.1	303.3	288.7	265.6	233.6	231.9	231.1
Sigma	65.7	60.6	59.0	54.0	51.9	45.5	40.7	39.3	41.7

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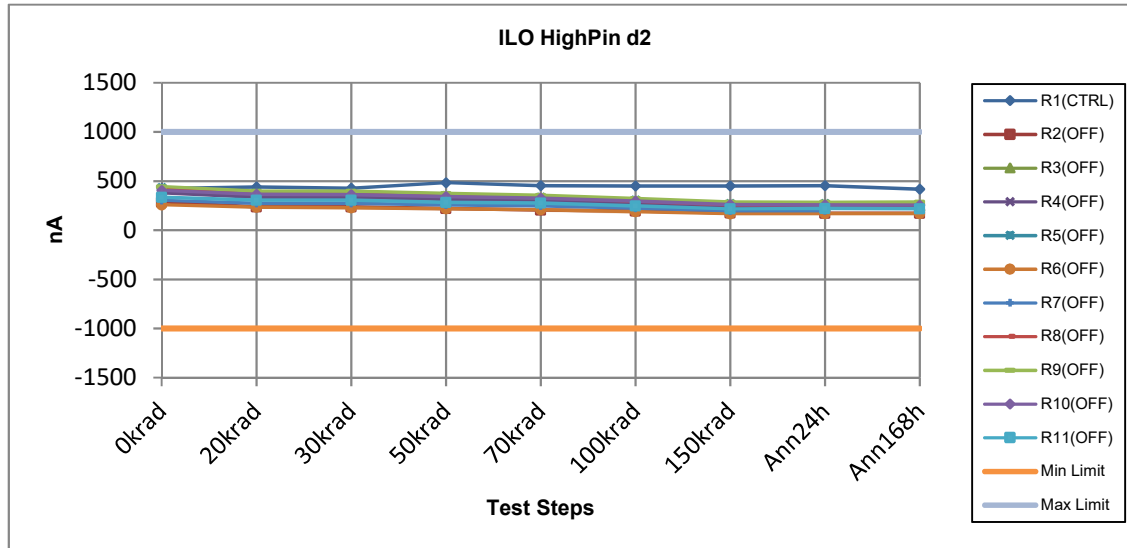
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ILO HighPin d3	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	439.7	449.3	439.7	498.1	469.0	465.1	463.8	467.1	432.0
Irradiated, unbiased parts results									
R2(OFF)	283.9	236.3	238.6	221.4	210.1	197.4	176.5	177.1	175.8
R3(OFF)	413.7	351.7	354.1	329.7	309.6	293.7	249.5	254.3	245.2
R4(OFF)	380.8	334.4	333.7	309.8	291.2	274.1	237.2	236.9	235.2
R5(OFF)	434.4	387.8	381.1	359.8	338.2	312.0	276.5	278.1	No meas.
R6(OFF)	256.8	233.7	227.0	216.9	209.0	191.6	168.2	169.9	170.0
R7(OFF)	305.1	275.7	271.6	256.8	246.6	225.5	199.1	199.2	No meas.
R8(OFF)	426.3	381.7	379.4	355.8	337.1	302.0	259.4	263.3	263.0
R9(OFF)	437.7	399.1	391.3	371.7	356.8	321.4	282.1	285.1	287.2
R10(OFF)	403.5	362.4	367.0	343.0	330.1	296.2	265.3	262.8	262.0
R11(OFF)	334.8	305.3	306.7	287.1	277.2	249.7	220.3	221.3	222.2
Irradiated, unbiased parts statistics									
Min Value	256.8	233.7	227.0	216.9	209.0	191.6	168.2	169.9	170.0
Max Value	437.7	399.1	391.3	371.7	356.8	321.4	282.1	285.1	287.2
Average	367.7	326.8	325.0	305.2	290.6	266.4	233.4	234.8	232.6
Sigma	67.2	61.3	61.0	57.3	53.7	47.6	40.9	41.3	41.7

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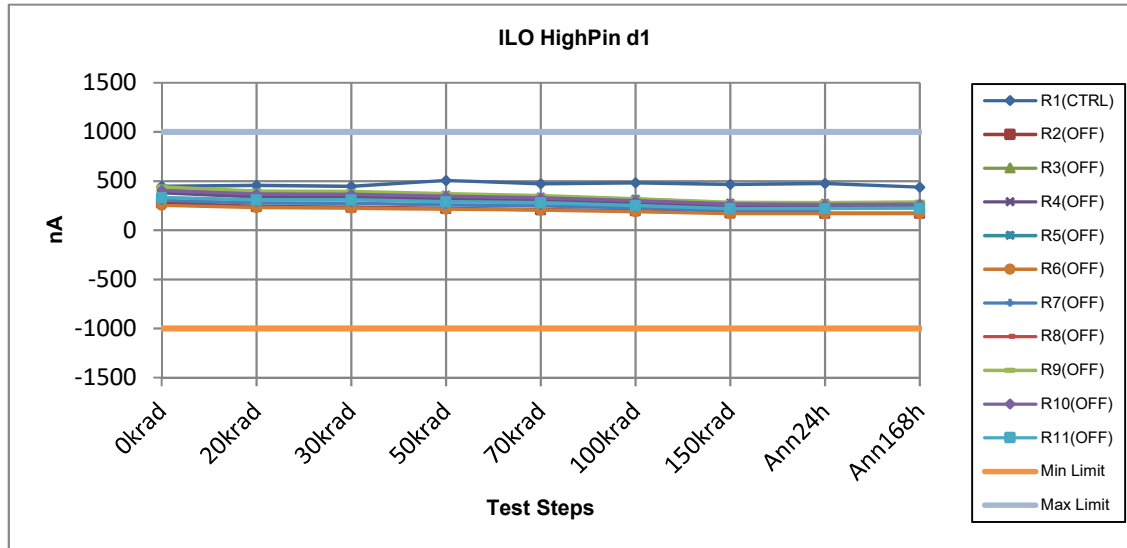
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ILO HighPin d2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	423.0	439.7	426.8	483.4	452.7	450.9	448.3	453.8	417.3
Irradiated, unbiased parts results									
R2(OFF)	287.7	238.8	237.5	223.2	207.0	197.1	174.6	174.2	173.6
R3(OFF)	407.0	344.0	340.6	322.1	303.2	286.7	245.0	249.0	243.4
R4(OFF)	381.1	336.1	334.3	312.8	294.2	278.6	239.1	239.9	239.3
R5(OFF)	433.5	376.6	377.7	353.6	334.4	305.0	269.1	271.5	No meas.
R6(OFF)	258.6	233.5	228.1	217.4	208.0	188.9	167.4	170.7	169.5
R7(OFF)	303.9	273.2	272.6	257.9	246.9	226.7	197.1	200.4	No meas.
R8(OFF)	426.8	375.7	379.8	354.2	335.8	296.5	256.2	262.0	261.0
R9(OFF)	444.1	397.3	397.8	374.5	356.7	322.3	287.5	286.1	288.4
R10(OFF)	405.8	366.6	362.5	340.9	326.8	295.9	259.6	257.9	256.0
R11(OFF)	335.8	307.2	305.9	284.7	277.1	248.6	217.7	222.0	218.6
Irradiated, unbiased parts statistics									
Min Value	258.6	233.5	228.1	217.4	207.0	188.9	167.4	170.7	169.5
Max Value	444.1	397.3	397.8	374.5	356.7	322.3	287.5	286.1	288.4
Average	368.4	324.9	323.7	304.1	289.0	264.6	231.3	233.4	231.2
Sigma	66.8	59.1	60.5	56.0	53.4	46.7	40.7	40.3	41.9

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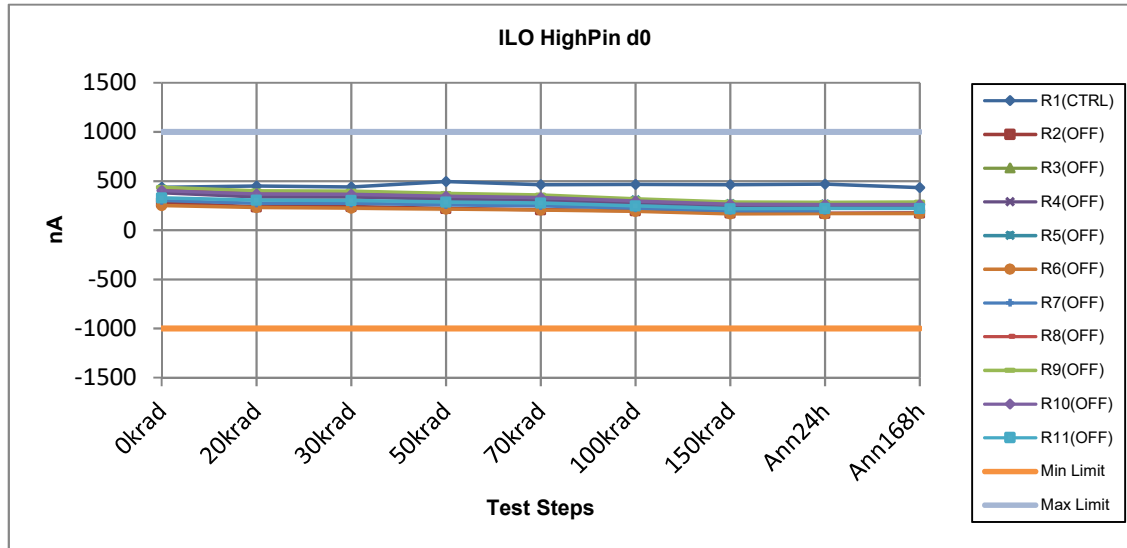
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ILO HighPin d1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	446.0	455.5	446.0	505.9	473.1	481.1	466.0	474.8	438.4
Irradiated, unbiased parts results									
R2(OFF)	281.8	240.6	236.5	222.7	210.4	198.2	176.2	174.4	173.2
R3(OFF)	403.6	343.9	344.2	322.1	307.7	291.8	250.7	250.5	243.9
R4(OFF)	380.6	338.3	336.2	315.0	297.9	279.0	243.7	239.5	239.6
R5(OFF)	430.0	389.5	379.3	358.7	340.0	314.8	276.8	275.2	No meas.
R6(OFF)	253.3	232.1	225.2	215.4	205.9	189.9	169.1	169.9	168.5
R7(OFF)	304.9	277.3	274.6	256.7	246.4	227.1	201.6	201.3	No meas.
R8(OFF)	431.7	390.6	386.1	358.7	338.4	305.9	263.3	267.8	266.5
R9(OFF)	439.7	397.4	393.5	372.6	351.8	320.4	285.2	282.5	285.7
R10(OFF)	403.4	367.4	365.8	346.4	328.8	298.7	266.1	261.7	264.6
R11(OFF)	332.3	310.9	310.3	289.3	279.2	250.7	220.6	222.9	223.9
Irradiated, unbiased parts statistics									
Min Value	253.3	232.1	225.2	215.4	205.9	189.9	169.1	169.9	168.5
Max Value	439.7	397.4	393.5	372.6	351.8	320.4	285.2	282.5	285.7
Average	366.1	328.8	325.2	305.8	290.6	267.6	235.3	234.6	233.2
Sigma	68.0	61.6	61.5	57.6	53.7	48.3	41.5	41.0	42.9

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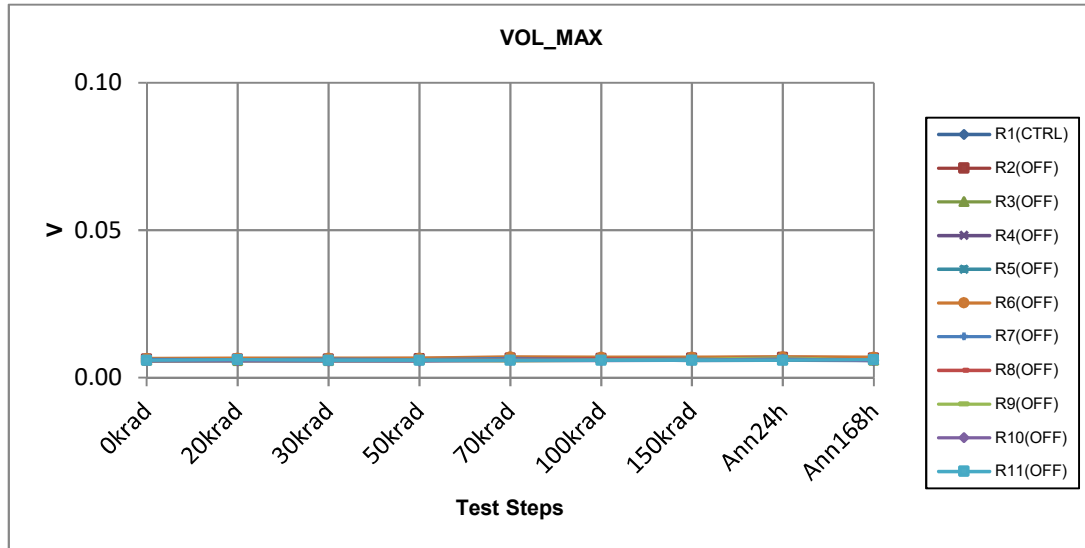
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ILO HighPin d0	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000
Max Limit	1000	1000	1000	1000	1000	1000	1000	1000	1000
Unit	nA	nA	nA	nA	nA	nA	nA	nA	nA
Control results									
R1(CTRL)	437.5	450.5	438.5	494.9	464.1	464.8	461.6	467.8	433.3
Irradiated, unbiased parts results									
R2(OFF)	282.4	237.5	241.6	222.6	209.4	198.6	176.6	174.4	176.4
R3(OFF)	398.8	342.9	341.0	318.5	299.8	283.1	243.2	246.1	239.6
R4(OFF)	379.5	338.9	339.3	316.5	296.8	277.4	242.3	239.5	238.9
R5(OFF)	422.1	381.3	381.0	350.7	332.2	309.1	269.2	267.6	No meas.
R6(OFF)	251.4	230.4	224.9	214.9	204.2	191.6	167.9	167.3	169.2
R7(OFF)	301.1	273.4	272.8	257.3	248.2	226.5	198.5	199.4	No meas.
R8(OFF)	430.1	390.0	386.2	357.8	340.5	303.4	266.2	267.8	267.2
R9(OFF)	436.8	400.2	397.1	374.6	358.1	318.9	287.1	283.2	288.5
R10(OFF)	403.0	369.4	363.9	344.8	333.5	295.4	264.2	262.0	261.3
R11(OFF)	329.9	306.9	304.3	286.3	277.7	248.6	219.0	220.5	220.9
Irradiated, unbiased parts statistics									
Min Value	251.4	230.4	224.9	214.9	204.2	191.6	167.9	167.3	169.2
Max Value	436.8	400.2	397.1	374.6	358.1	318.9	287.1	283.2	288.5
Average	363.5	327.1	325.2	304.4	290.1	265.3	233.4	232.8	232.7
Sigma	67.1	62.4	61.6	56.9	54.5	46.3	41.2	40.8	42.3

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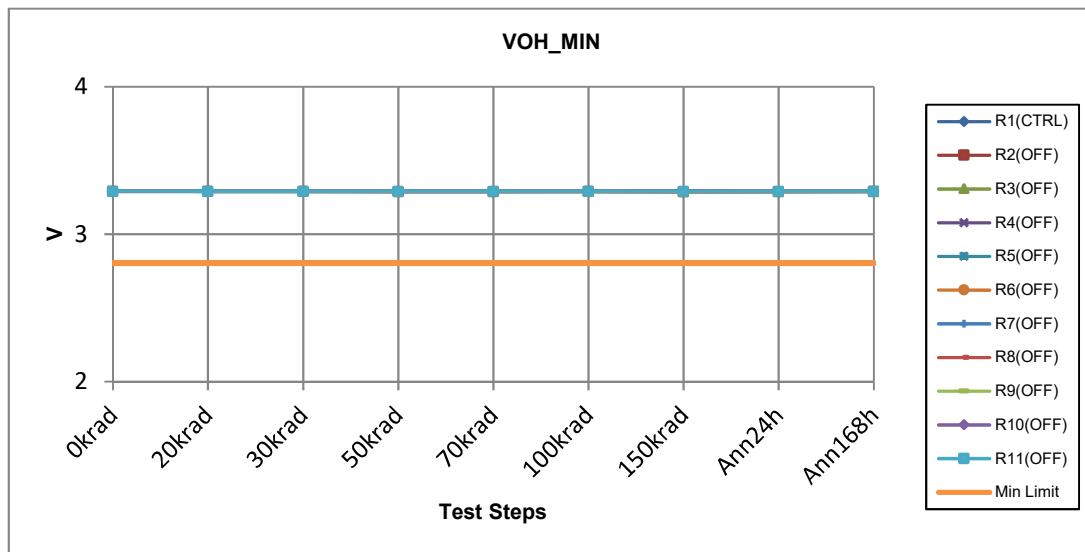
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VOL_MAX	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495	0.495
Unit	V	V	V	V	V	V	V	V	V
Control results									
R1(CTRL)	0.0060	0.0060	0.0060	0.0058	0.0060	0.0063	0.0058	0.0060	0.0058
Irradiated, unbiased parts results									
R2(OFF)	0.0063	0.0064	0.0064	0.0065	0.0068	0.0066	0.0067	0.0069	0.0067
R3(OFF)	0.0059	0.0059	0.0059	0.0061	0.0063	0.0064	0.0061	0.0061	0.0060
R4(OFF)	0.0058	0.0060	0.0060	0.0060	0.0060	0.0063	0.0060	0.0061	0.0060
R5(OFF)	0.0057	0.0060	0.0058	0.0058	0.0065	0.0063	0.0063	0.0064	No meas.
R6(OFF)	0.0065	0.0066	0.0066	0.0066	0.0070	0.0069	0.0069	0.0070	0.0069
R7(OFF)	0.0062	0.0061	0.0063	0.0061	0.0065	0.0062	0.0063	0.0064	No meas.
R8(OFF)	0.0058	0.0058	0.0058	0.0058	0.0061	0.0064	0.0061	0.0069	0.0058
R9(OFF)	0.0058	0.0057	0.0057	0.0058	0.0057	0.0060	0.0061	0.0067	0.0058
R10(OFF)	0.0058	0.0057	0.0057	0.0057	0.0058	0.0058	0.0060	0.0063	0.0058
R11(OFF)	0.0059	0.0061	0.0060	0.0060	0.0060	0.0060	0.0060	0.0060	0.0061
Irradiated, unbiased parts statistics									
Min Value	0.0057	0.0057	0.0057	0.0057	0.0057	0.0058	0.0060	0.0060	0.0058
Max Value	0.0065	0.0066	0.0066	0.0066	0.0070	0.0069	0.0069	0.0070	0.0069
Average	0.0060	0.0060	0.0060	0.0060	0.0062	0.0063	0.0062	0.0065	0.0061
Sigma	0.0003	0.0003	0.0003	0.0003	0.0004	0.0003	0.0003	0.0004	0.0004

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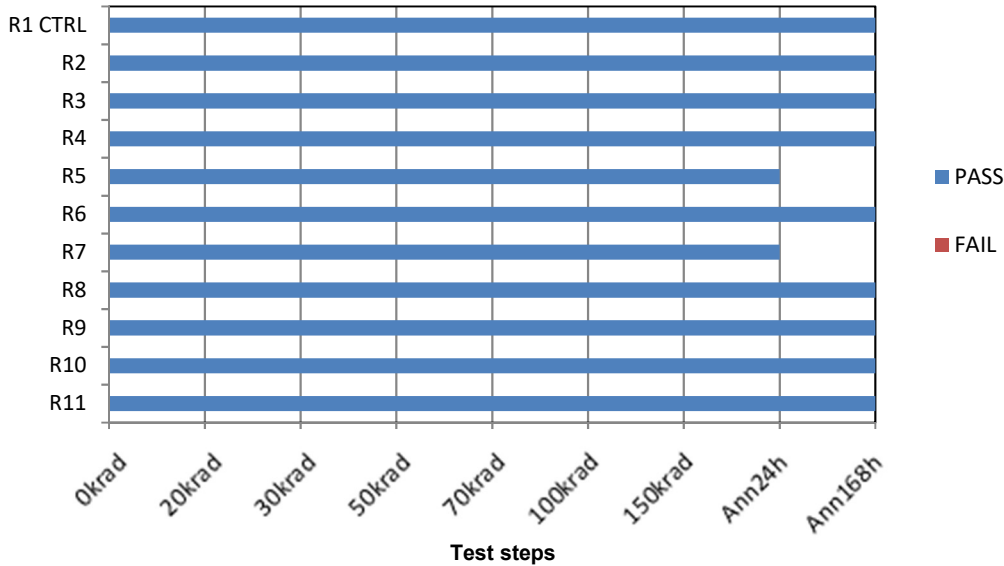
VOH_MIN	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	2.805	2.805	2.805	2.805	2.805	2.805	2.805	2.805	2.805
Max Limit	--	--	--	--	--	--	--	--	--
Unit	V	V	V	V	V	V	V	V	V
Control results									
R1(CTRL)	3.2917	3.2918	3.2916	3.2915	3.2910	3.2911	3.2913	3.2911	3.2912
Irradiated, unbiased parts results									
R2(OFF)	3.2907	3.2905	3.2903	3.2895	3.2897	3.2903	3.2889	3.2896	3.2904
R3(OFF)	3.2917	3.2912	3.2913	3.2910	3.2906	3.2904	3.2901	3.2904	3.2898
R4(OFF)	3.2914	3.2913	3.2912	3.2909	3.2911	3.2904	3.2905	3.2904	3.2898
R5(OFF)	3.2919	3.2911	3.2916	3.2911	3.2906	3.2902	3.2902	3.2908	No meas.
R6(OFF)	3.2911	3.2908	3.2907	3.2905	3.2905	3.2897	3.2894	3.2900	3.2900
R7(OFF)	3.2912	3.2909	3.2905	3.2903	3.2905	3.2904	3.2899	3.2906	No meas.
R8(OFF)	3.2920	3.2916	3.2918	3.2919	3.2914	3.2918	3.2915	3.2916	3.2918
R9(OFF)	3.2921	3.2921	3.2919	3.2913	3.2917	3.2914	3.2903	3.2912	3.2910
R10(OFF)	3.2921	3.2920	3.2915	3.2918	3.2913	3.2914	3.2909	3.2915	3.2915
R11(OFF)	3.2918	3.2915	3.2916	3.2913	3.2914	3.2908	3.2913	3.2913	3.2912
Irradiated, unbiased parts statistics									
Min Value	3.2907	3.2905	3.2903	3.2895	3.2897	3.2897	3.2889	3.2896	3.2898
Max Value	3.2921	3.2921	3.2919	3.2919	3.2917	3.2918	3.2915	3.2916	3.2918
Average	3.2916	3.2913	3.2912	3.2910	3.2909	3.2907	3.2903	3.2907	3.2907
Sigma	0.0005	0.0005	0.0006	0.0007	0.0006	0.0007	0.0008	0.0007	0.0008

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VILmax fails



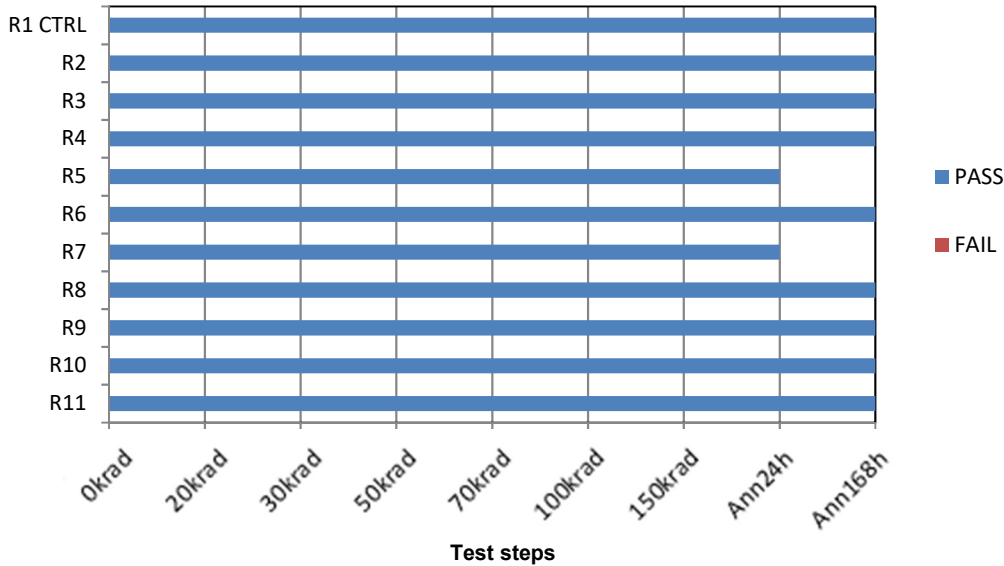
VILmax fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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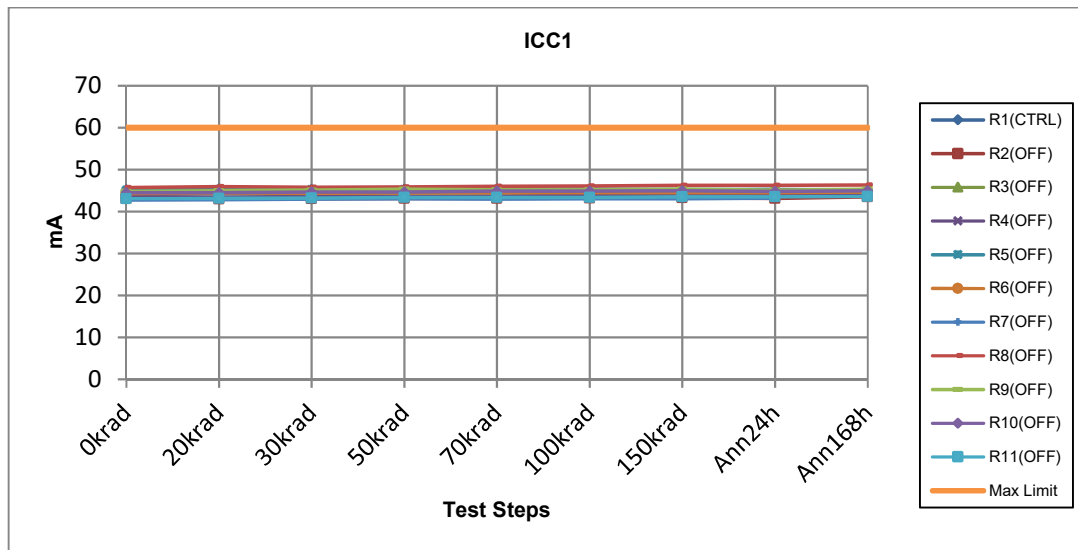
VIH min fails



VIHmin fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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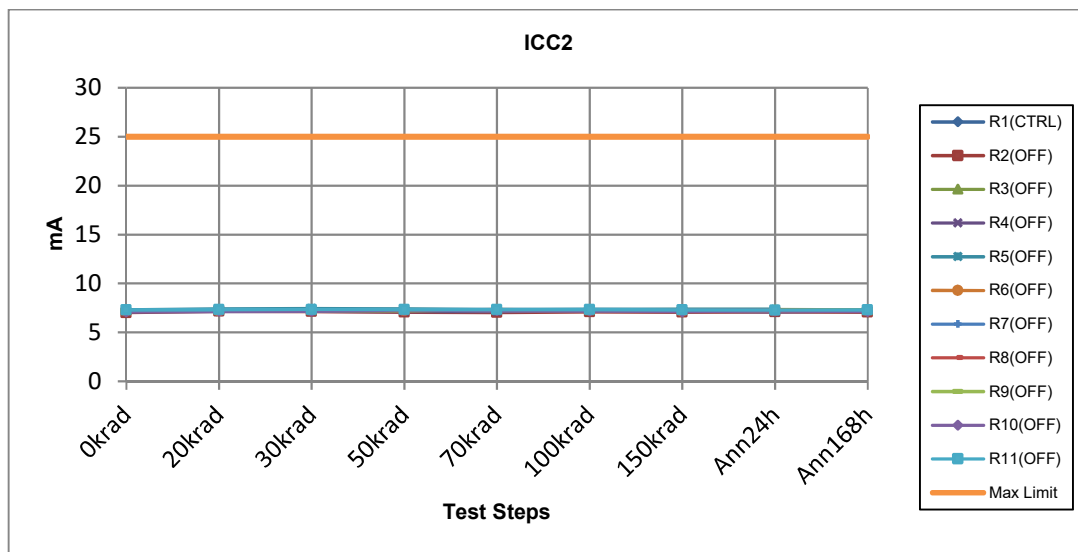
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ICC1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	60	60	60	60	60	60	60	60	60
Unit	mA	mA	mA	mA	mA	mA	mA	mA	mA
Control results									
R1(CTRL)	45.21	45.43	45.26	45.34	45.35	45.25	45.17	45.25	45.17
Irradiated, unbiased parts results									
R2(OFF)	43.09	42.96	43.09	43.14	43.17	43.24	43.30	43.12	43.49
R3(OFF)	44.22	44.24	44.28	44.45	44.46	44.40	44.43	44.41	44.50
R4(OFF)	43.60	43.47	43.63	43.57	43.64	43.88	43.87	43.82	43.80
R5(OFF)	45.12	45.29	45.27	45.24	45.30	45.37	45.31	45.29	No meas.
R6(OFF)	44.28	44.42	44.34	44.40	44.51	44.51	44.53	44.52	44.62
R7(OFF)	42.76	42.80	42.98	43.03	42.98	43.07	43.09	43.16	No meas.
R8(OFF)	45.74	45.95	45.83	45.86	46.02	46.08	46.23	46.27	46.34
R9(OFF)	44.82	44.95	45.15	45.36	45.19	45.17	45.33	45.11	45.36
R10(OFF)	44.53	44.52	44.66	44.65	44.92	44.87	44.96	44.81	44.95
R11(OFF)	43.09	43.10	43.20	43.34	43.38	43.38	43.52	43.49	43.61
Irradiated, unbiased parts statistics									
Min Value	42.76	42.80	42.98	43.03	42.98	43.07	43.09	43.12	43.49
Max Value	45.74	45.95	45.83	45.86	46.02	46.08	46.23	46.27	46.34
Average	44.13	44.17	44.24	44.30	44.36	44.40	44.46	44.40	44.58
Sigma	0.97	1.06	1.00	1.00	1.03	1.00	1.02	1.02	0.97

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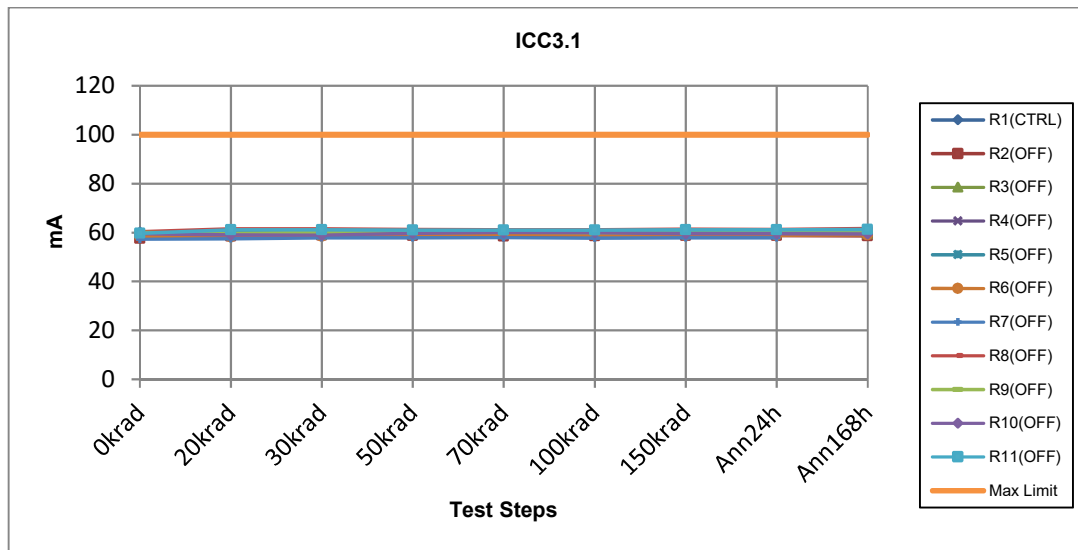
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ICC2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	25	25	25	25	25	25	25	25	25
Unit	mA	mA	mA	mA	mA	mA	mA	mA	mA
Control results									
R1(CTRL)	7.31	7.28	7.36	7.27	7.32	7.29	7.20	7.29	7.31
Irradiated, unbiased parts results									
R2(OFF)	7.01	7.17	7.13	7.06	7.05	7.09	7.08	7.10	7.06
R3(OFF)	7.26	7.30	7.29	7.33	7.29	7.29	7.34	7.34	7.29
R4(OFF)	7.15	7.13	7.17	7.14	7.13	7.18	7.19	7.10	7.18
R5(OFF)	7.30	7.39	7.44	7.41	7.33	7.35	7.36	7.38	No meas.
R6(OFF)	7.20	7.21	7.25	7.24	7.33	7.25	7.17	7.22	7.22
R7(OFF)	7.21	7.27	7.24	7.29	7.19	7.14	7.22	7.25	No meas.
R8(OFF)	7.17	7.27	7.27	7.27	7.22	7.21	7.25	7.24	7.20
R9(OFF)	7.19	7.32	7.22	7.22	7.31	7.27	7.18	7.24	7.28
R10(OFF)	7.11	7.17	7.18	7.27	7.24	7.19	7.11	7.20	7.14
R11(OFF)	7.29	7.32	7.34	7.33	7.34	7.32	7.31	7.28	7.29
Irradiated, unbiased parts statistics									
Min Value	7.01	7.13	7.13	7.06	7.05	7.09	7.08	7.10	7.06
Max Value	7.30	7.39	7.44	7.41	7.34	7.35	7.36	7.38	7.29
Average	7.19	7.26	7.26	7.26	7.24	7.23	7.22	7.24	7.21
Sigma	0.09	0.08	0.09	0.10	0.10	0.08	0.09	0.09	0.08

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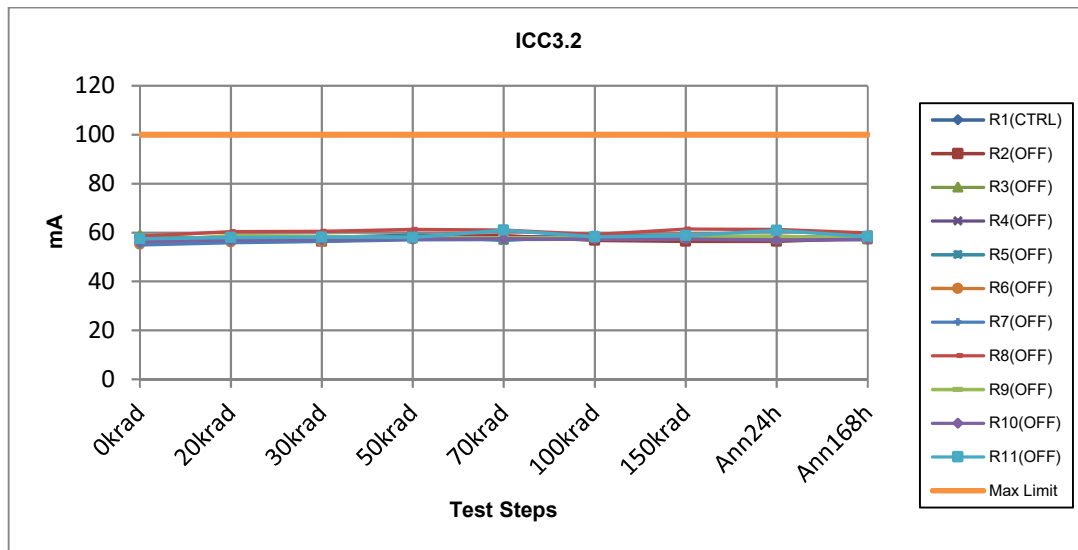
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ICC3.1	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA	mA	mA	mA
Control results									
R1(CTRL)	60.24	60.27	60.09	60.25	60.07	60.05	60.02	60.11	60.06
Irradiated, unbiased parts results									
R2(OFF)	57.61	58.55	58.89	58.76	58.48	58.62	58.77	58.74	58.62
R3(OFF)	59.45	59.17	59.15	59.78	59.83	59.87	59.86	59.74	59.39
R4(OFF)	59.73	59.57	59.11	59.03	59.37	59.38	59.17	59.31	59.21
R5(OFF)	59.21	59.84	60.01	60.10	59.89	60.10	59.78	59.98	No meas.
R6(OFF)	58.50	58.17	58.47	58.90	59.18	58.90	58.90	58.87	59.05
R7(OFF)	57.23	57.44	57.84	57.81	57.91	57.74	57.90	57.89	No meas.
R8(OFF)	60.36	61.54	61.45	61.24	61.11	61.08	61.36	61.31	61.69
R9(OFF)	60.08	59.72	60.01	60.00	60.10	60.00	59.79	60.00	60.01
R10(OFF)	59.56	59.07	58.94	59.65	59.98	59.89	59.54	59.56	59.39
R11(OFF)	59.68	61.12	61.13	60.96	60.95	60.93	61.07	61.14	61.24
Irradiated, unbiased parts statistics									
Min Value	57.23	57.44	57.84	57.81	57.91	57.74	57.90	57.89	58.62
Max Value	60.36	61.54	61.45	61.24	61.11	61.08	61.36	61.31	61.69
Average	59.14	59.42	59.50	59.62	59.68	59.65	59.61	59.65	59.83
Sigma	1.04	1.25	1.14	1.04	1.00	1.03	1.04	1.05	1.09

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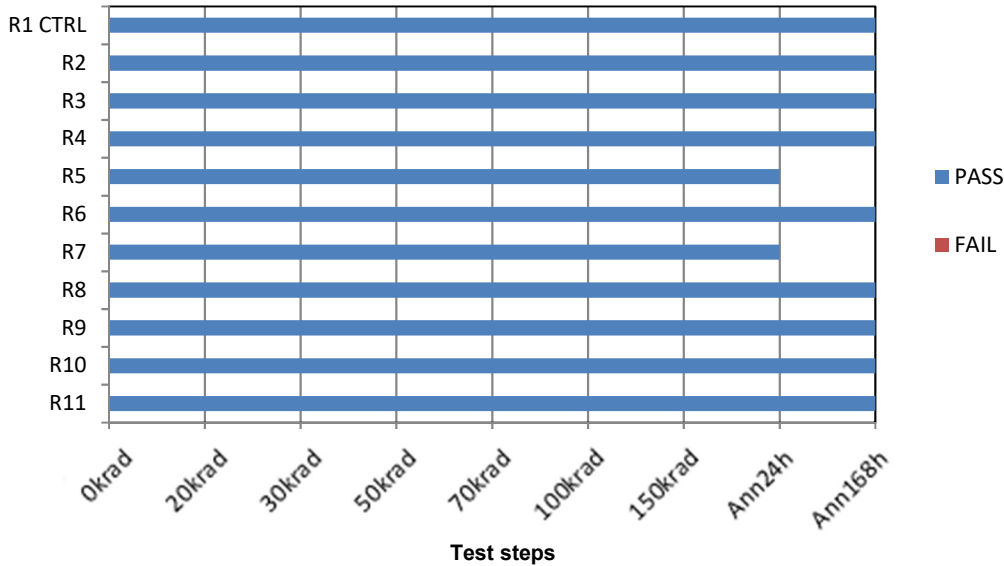
ICC3.2	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	100	100	100	100	100	100	100	100	100
Unit	mA	mA	mA	mA	mA	mA	mA	mA	mA
Control results									
R1(CTRL)	58.19	56.70	58.04	58.88	58.27	58.24	58.17	58.40	57.79
Irradiated, unbiased parts results									
R2(OFF)	57.16	57.74	56.37	58.22	58.79	56.81	56.35	56.38	57.74
R3(OFF)	58.89	57.23	56.94	57.70	57.20	58.09	57.85	57.61	57.26
R4(OFF)	56.68	57.28	57.26	57.40	57.34	57.28	57.33	56.90	57.13
R5(OFF)	56.52	57.91	56.74	58.82	56.85	58.88	58.77	57.03	No meas.
R6(OFF)	55.22	56.17	56.54	57.42	57.84	57.75	57.75	57.46	57.32
R7(OFF)	54.93	55.83	56.43	57.06	57.24	57.34	57.30	57.32	No meas.
R8(OFF)	58.59	60.36	60.50	61.30	60.96	59.15	61.42	61.27	59.84
R9(OFF)	56.48	58.76	58.50	57.86	57.89	57.84	58.48	58.47	57.65
R10(OFF)	56.41	56.94	57.17	57.26	57.46	57.35	57.26	56.99	57.17
R11(OFF)	57.45	58.00	58.07	57.98	60.97	58.25	58.81	60.86	58.34
Irradiated, unbiased parts statistics									
Min Value	54.93	55.83	56.37	57.06	56.85	56.81	56.35	56.38	57.13
Max Value	58.89	60.36	60.50	61.30	60.97	59.15	61.42	61.27	59.84
Average	56.83	57.62	57.45	58.10	58.25	57.87	58.13	58.03	57.81
Sigma	1.27	1.29	1.28	1.24	1.52	0.74	1.39	1.69	0.92

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tCS fails



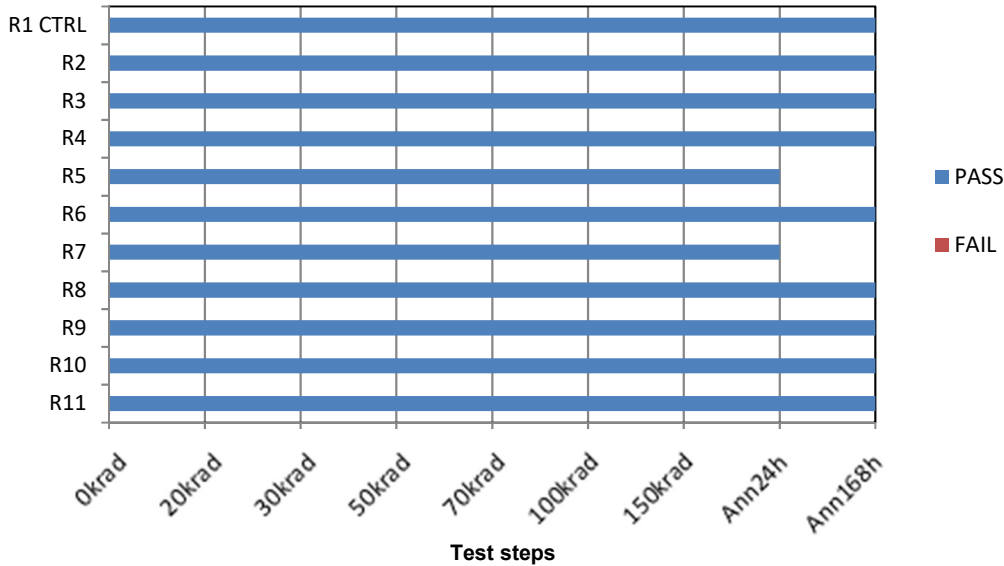
tCS fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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tCH fails



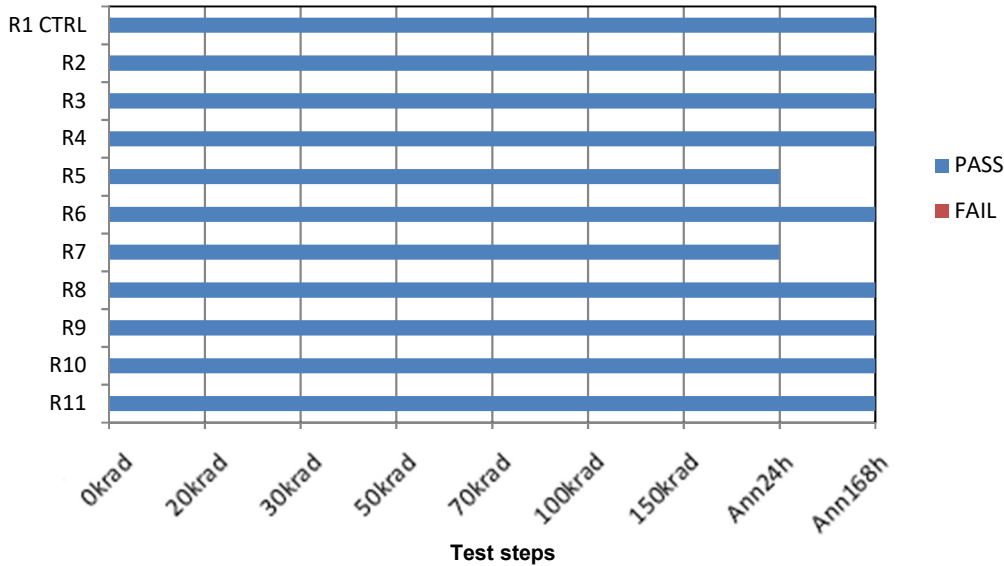
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Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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tDS fails



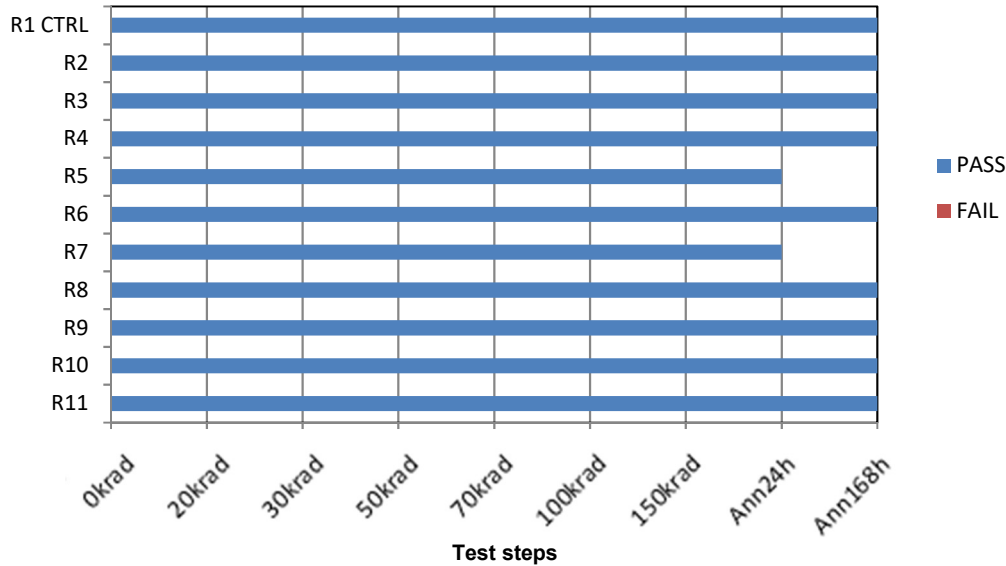
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Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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tDH fails



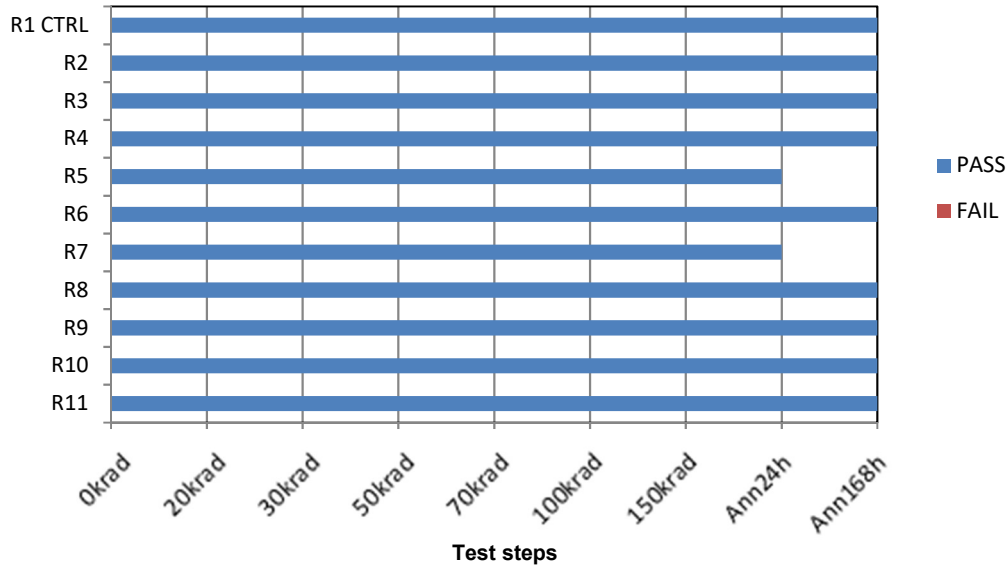
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Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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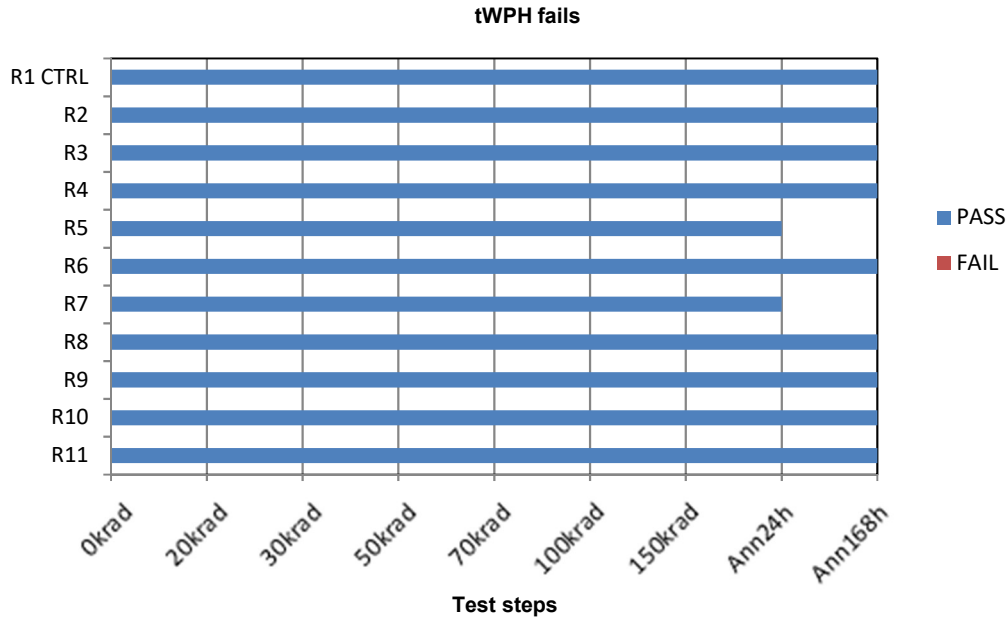
tWP fails



tWP fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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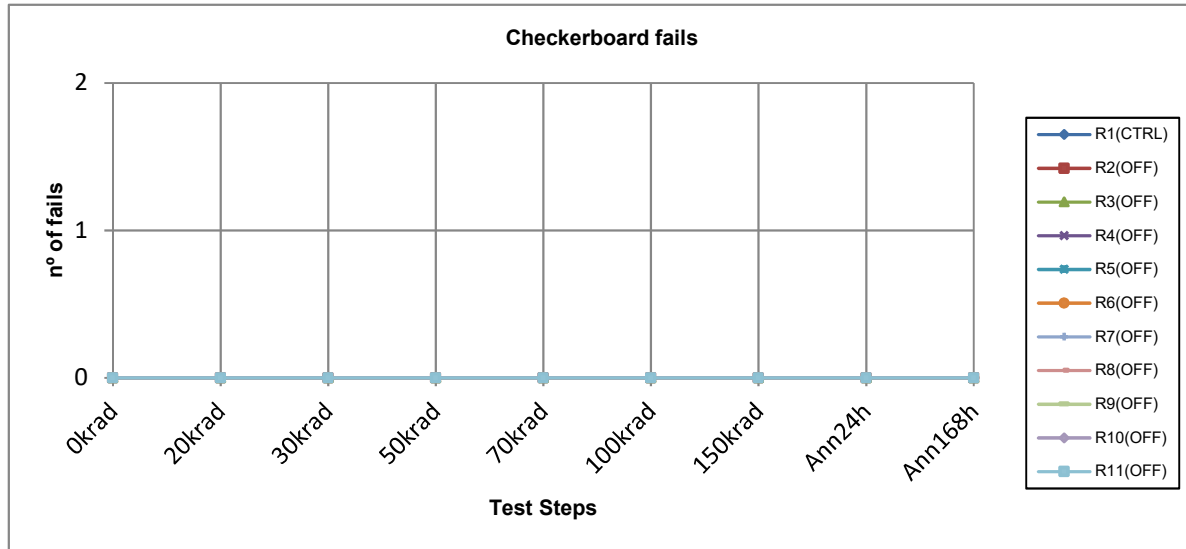
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tWPH fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F	P/F
Control results									
R1(CTRL)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts results									
R2(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R3(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R4(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R5(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R6(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R7(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	No meas.
R8(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R9(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R10(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
R11(OFF)	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS	PASS
Irradiated, unbiased parts statistics									
Min Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max Value	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Average	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sigma	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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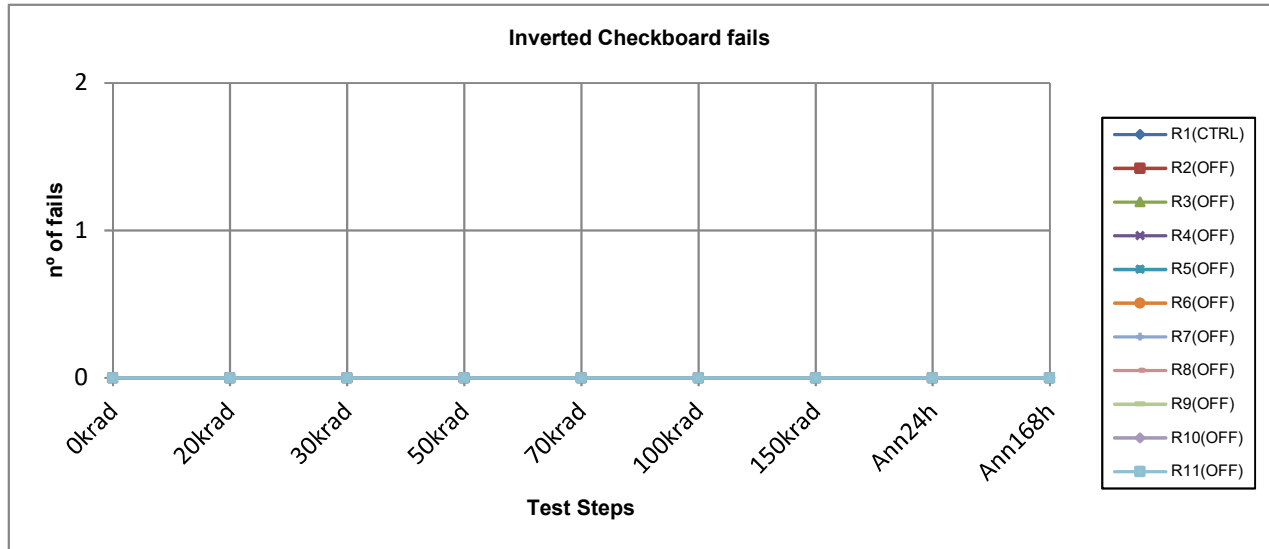
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Checkerboard fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results									
R1(CTRL)	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts results									
R2(OFF)	0	0	0	0	0	0	0	0	0
R3(OFF)	0	0	0	0	0	0	0	0	0
R4(OFF)	0	0	0	0	0	0	0	0	0
R5(OFF)	0	0	0	0	0	0	0	0	No meas.
R6(OFF)	0	0	0	0	0	0	0	0	0
R7(OFF)	0	0	0	0	0	0	0	0	No meas.
R8(OFF)	0	0	0	0	0	0	0	0	0
R9(OFF)	0	0	0	0	0	0	0	0	0
R10(OFF)	0	0	0	0	0	0	0	0	0
R11(OFF)	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts statistics									
Min Value	0	0	0	0	0	0	0	0	0
Max Value	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0
Sigma	0	0	0	0	0	0	0	0	0

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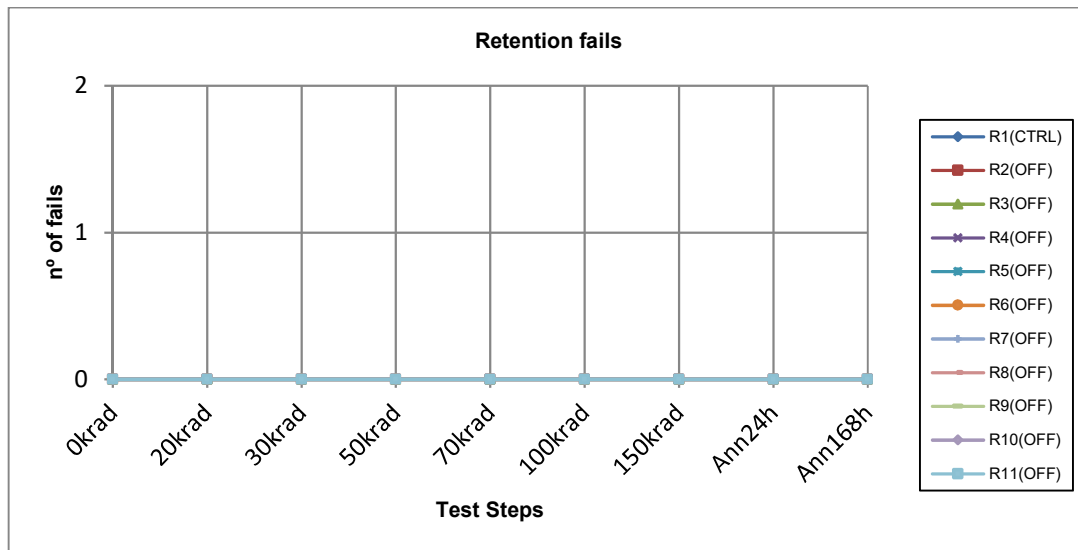
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Inverted Checkboard fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results									
R1(CTRL)	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts results									
R2(OFF)	0	0	0	0	0	0	0	0	0
R3(OFF)	0	0	0	0	0	0	0	0	0
R4(OFF)	0	0	0	0	0	0	0	0	0
R5(OFF)	0	0	0	0	0	0	0	0	No meas.
R6(OFF)	0	0	0	0	0	0	0	0	0
R7(OFF)	0	0	0	0	0	0	0	0	No meas.
R8(OFF)	0	0	0	0	0	0	0	0	0
R9(OFF)	0	0	0	0	0	0	0	0	0
R10(OFF)	0	0	0	0	0	0	0	0	0
R11(OFF)	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts statistics									
Min Value	0	0	0	0	0	0	0	0	0
Max Value	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0
Sigma	0	0	0	0	0	0	0	0	0

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Retention fails	0krad	20krad	30krad	50krad	70krad	100krad	150krad	Ann24h	Ann168h
Min Limit	--	--	--	--	--	--	--	--	--
Max Limit	--	--	--	--	--	--	--	--	--
Unit	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails	n° of fails
Control results									
R1(CTRL)	0	0	0	0	0	0	0	0	0
Irradiated, biased parts results									
R2(OFF)	0	0	0	0	0	0	0	0	0
R3(OFF)	0	0	0	0	0	0	0	0	0
R4(OFF)	0	0	0	0	0	0	0	0	0
R5(OFF)	0	0	0	0	0	0	0	0	No meas.
R6(OFF)	0	0	0	0	0	0	0	0	0
Irradiated, biased parts statistics									
Min Value	0	0	0	0	0	0	0	0	0
Max Value	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0
Sigma	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts results									
R7(OFF)	0	0	0	0	0	0	0	0	No meas.
R8(OFF)	0	0	0	0	0	0	0	0	0
R9(OFF)	0	0	0	0	0	0	0	0	0
R10(OFF)	0	0	0	0	0	0	0	0	0
R11(OFF)	0	0	0	0	0	0	0	0	0
Irradiated, unbiased parts statistics									
Min Value	0	0	0	0	0	0	0	0	0
Max Value	0	0	0	0	0	0	0	0	0
Average	0	0	0	0	0	0	0	0	0
Sigma	0	0	0	0	0	0	0	0	0

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APPENDIX 1: IN SITU TEST REPORT

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9 INTRODUCTION

This report presents the functional test results obtained on S29GL01GS10FHI010 NOR flash during beam exposure and annealing. A supervisor board (provided by HIREX, reference: STB025C) connected to a DUT (Devices Under Test) bias board (provided by HIREX, reference: PL266A) sends in parallel the test sequence commands to each DUT on the bias board and test data are transmitted via an Ethernet cable to the test monitoring laptop PC.

10 IN-SITU TEST SYSTEM DESCRIPTION

10.1 Overview

The following figure shows the test system overview for dynamic in-situ test.

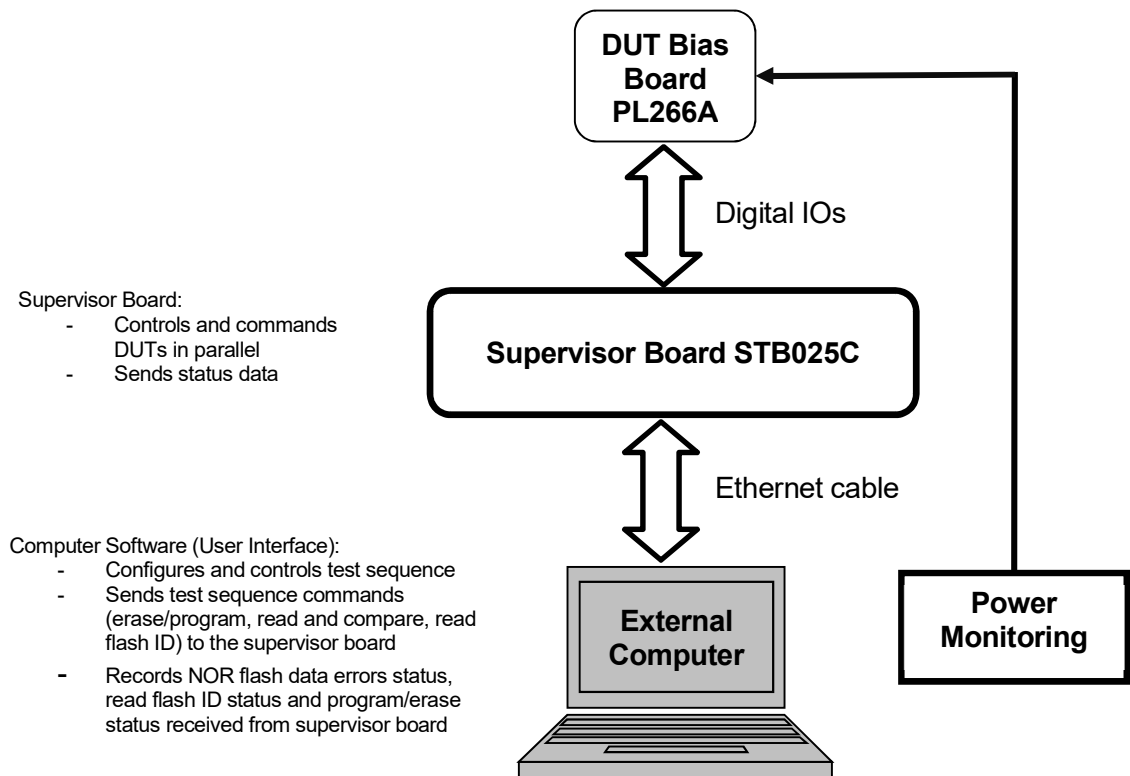



FIGURE 6: In-situ test system overview

User interface (UI) software developed by HIREX permits to configure the test flow, sends the test sequence commands to the supervisor board and records data errors status, read flash ID status and program/erase status of the NOR flash memories, received from the supervisor board.

Supervisor board receives test commands from the UI software and drives the DUTs by his In/Out digital signals. DUT Bias board can receive up to 5 devices. Supervisor board is connected to the computer with an Ethernet cable.

Power monitoring is managed by an external power supply.

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10.2 Supervisor board description

The supervisor board can drive up to 5 NOR flash memories at same time. Test data are sent to the computer by Ethernet at 100Mbps. This board has the following features:

Main devices:

- FPGA Xilinx Spartan 6
- CPU 32bits MX32 – 105 DMIPS

Interfaces:

- Ethernet
- Bus CAN 2.0B
- 2 x I2C, CPU input interrupt
- USB
- 300 IO with external driver (FPGA interface)
- 24 IO directly connected to the FPGA
- 8 IO directly connected to the CPU

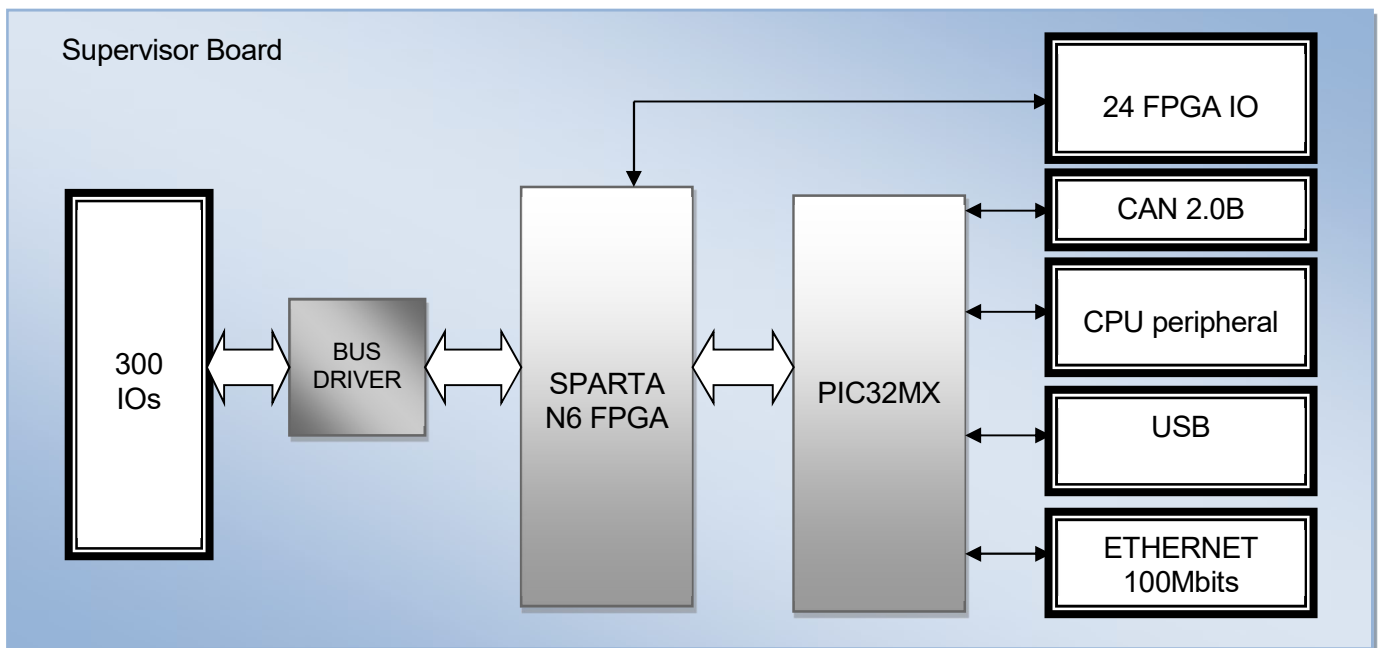


FIGURE 7: Supervisor board overview.

11 TEST CONDITIONS

11.1 Bias conditions

Bias boards allowed 20 ON bias samples during exposures, in accordance with the electrical circuit provided in **¡Error! No se encuentra el origen de la referencia.** 10 samples were biased in low duty cycle (LDC) and 10 other samples in high duty cycle (HDC). 2 bias boards with 2 supervisor boards were used for LDC bias (5 devices per bias board). Similarly for HDC bias.

During annealing steps same stress conditions were applied at 25° C and 100°C temperatures.

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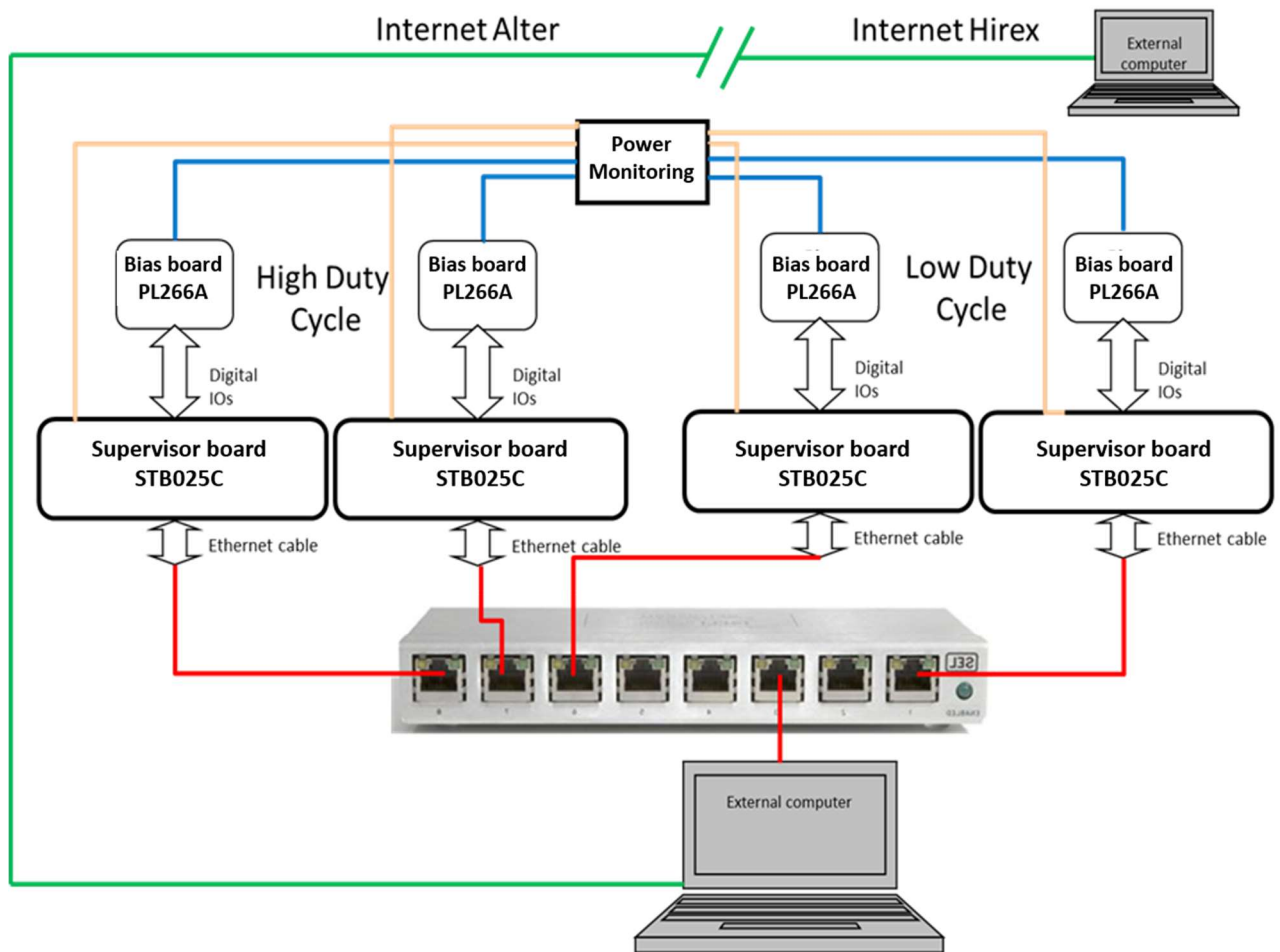



FIGURE 8:: Bias setup overview.

11.2 Parts distribution

The following table identifies the irradiated samples positions on DUT bias boards. In the following section, the DUT number on the bias board (DUT N°) is used with the bias board number to identify the sample, e.g. DUT0 Board1 for device on position 0 of Board1.

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LDC				HDC			
Supervisor Board STB025C serial number	Bias Board PL266A serial number	DUT N°on bias board	ALTER Sample serial number	Supervisor Board STB025C serial number	Bias Board serial number	DUT N°on bias board	ALTER Sample serial number
SN2.IP33	Board1	0	R2 (SN2)	SN5.IP41	Board3	0	R2 (SN12)
		1	R3 (SN3)			1	R3 (SN13)
		2	R4 (SN4)			2	R4 (SN14)
		3	R5 (SN5)			3	R5 (SN15)
		4	R6 (SN6)			4	R6 (SN16)
SN0.IP40	Board2	0	R7 (SN7)	SN10.IP45	Board4	0	R7 (SN17)
		1	R8 (SN8)			1	R8 (SN18)
		2	R9 (SN9)			2	R9 (SN19)
		3	R10 (SN10)			3	R10 (SN20)
		4	R11 (SN11)			4	R11 (SN21)

11.3 High duty cycle (HDC) bias

Campaign start date: 11/09/2017 15:50
 Campaign end date: 27/09/2017 16:00

Step	Required Acc. Dose	Total Step Dose	Real Acc. Dose	Deviation	Dose rate	Exposure time	Date
HDC	rad (Si)	rad(Si)	rad(Si)	%	rad(Si)/h	(h)	-
0	0	0	0	0	0	--	11/09/2017
1	20000	20349	20349.0	1.7	306.6	66.37	14/09/2017
2	30000	6250	26598.6	11.3	306.6	20.38	15/09/2017
3	50000	22111	48709.5	2.6	306.6	72.12	18/09/2017
4	70000	4973	53682.6	23.3	306.6	16.22	19/09/2017
Annealing							
5	Ann24h@25°C	24	--	--	--	--	20/09/2017
6	Ann168h@100°C	168	--	--	--	--	27/09/2017

Note 1: Exposure have been stopped after 70krad(Si) step, by customer request.

11.3.1 Test flow

On one hand, blocks 2 to 511 are erased/programmed and read permanently during exposure and annealing.

On the other hand, blocks 512 to 1023 are written with hexadecimal pattern AAAA at the beginning of each step. These blocks are then only read permanently during exposure and annealing.

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The following test sequence is applied during exposure and annealing:

1. Read NOR flash DUT ID code
2. Erase/Program blocks 512 to 1023 with hexadecimal pattern AAAA
3. Read NOR flash DUT ID code
4. Erase/Program blocks 2 to 511 with hexadecimal pattern 5555
5. Read blocks 2 to 511 and check for errors
6. Erase/Program blocks 2 to 511 with hexadecimal pattern AAAA
7. Read blocks 2 to 511 and check for errors
8. Read blocks 512 to 1023 and check for errors
9. Loop to step 3

¡Error! No se encuentra el origen de la referencia. represents the in-situ test iteration cycle, i.e. from step 3 to step 8. **¡Error! No se encuentra el origen de la referencia.** represents the entire HDC test flow including electrical measurements steps that were applied to the DUTs.

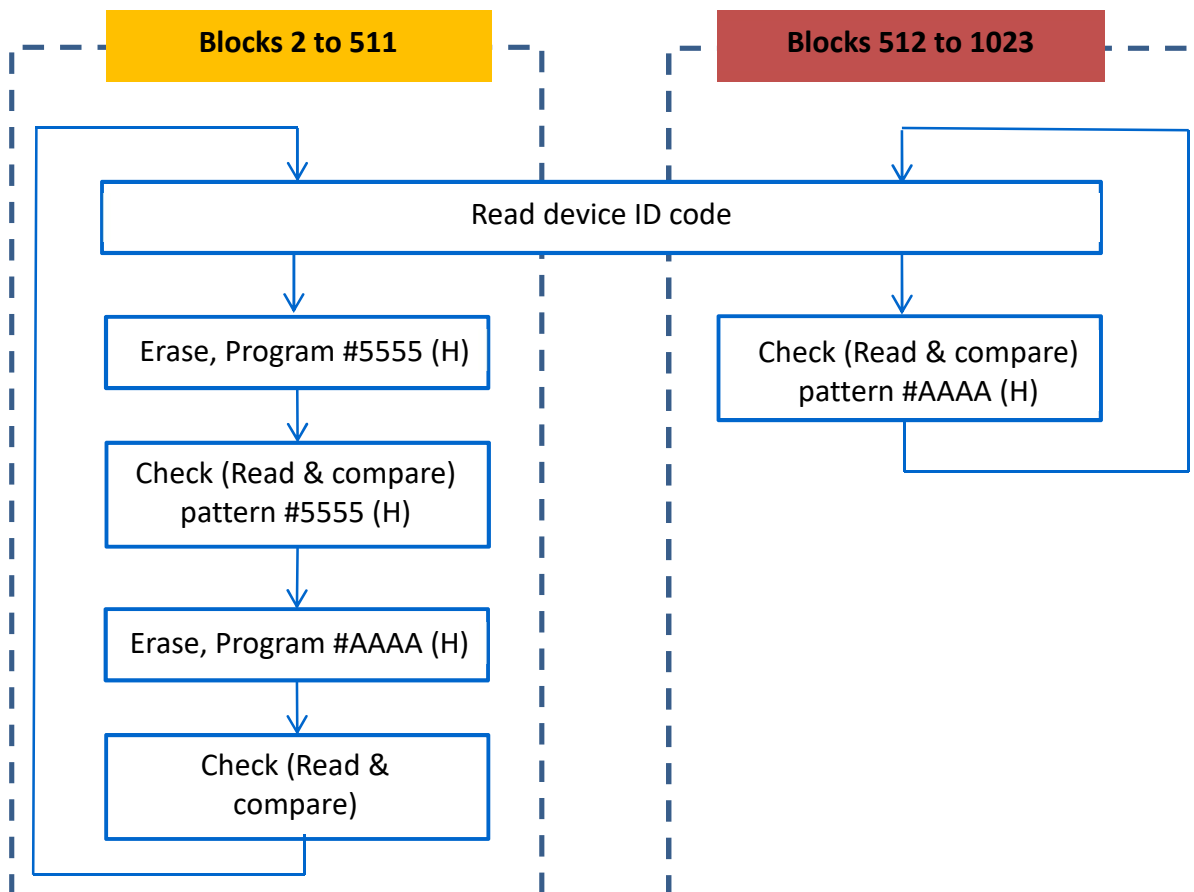


FIGURE 9: High duty cycle in-situ test iteration cycle flow chart.



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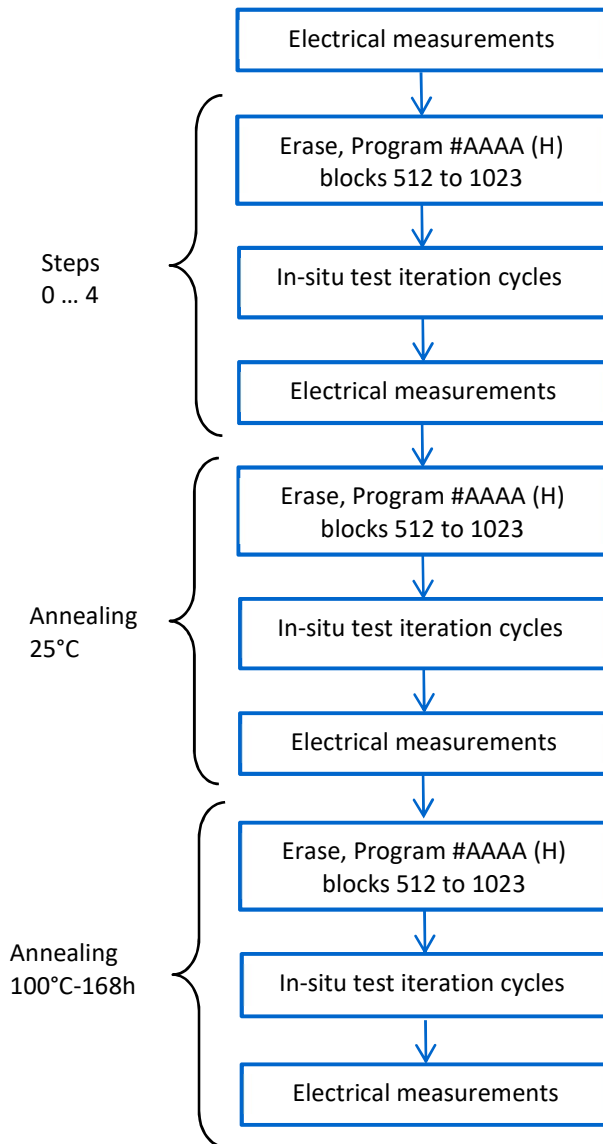



FIGURE 10: High duty cycle in-situ test flow chart.

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11.4 Low duty cycle (LDC) bias

Campaign start date: 11/09/2017 13:16

Campaign end date: 27/09/2017 14:00

Step	Required Acc. Dose	Total Step Dose	Real Acc. Dose	Deviation	Dose rate	Exposure time	Date
LDC	rad (Si)	rad(Si)	rad(Si)	%	rad(Si)/h	(h)	-
0	0	0	0	0	0	--	11/09/2017
1	20000	20277	20277.0	1.4	306.7	66.11	14/09/2017
2	30000	6304	26580.7	11.4	306.7	20.55	15/09/2017
3	50000	21939	48519.9	3.0	306.7	71.53	18/09/2017
4	70000	5556	54076.3	22.7	306.7	18.12	19/09/2017
Annealing							
5	Ann24h@25°C	24	--	--	--	--	20/09/2017
6	Ann168h@100°C	168	--	--	--	--	27/09/2017

Note 1: Exposure have been stopped after 70krad(Si) step, by customer request.

11.4.1 Test flow

Excepted block 0 and 1, all other blocks are written with hexadecimal pattern AAAA at the beginning of irradiation campaign.

Then, blocks 2 to 511 are written with hexadecimal pattern AAAA at the beginning of each step. These blocks are erased/programmed and read during exposure and annealing. Otherwise, blocks 512 to 1023 are only read during exposure and annealing.

The following test sequence is applied during exposure and annealing:

1. Read NOR flash DUT ID code
2. Erase/Program blocks 2 to 511 with hexadecimal pattern AAAA
3. Read NOR flash DUT ID code
4. Read blocks 512 to 1023 and check for errors
5. Read blocks 2 to 511 and check for errors
6. Erase/Program blocks 2 to 511 with hexadecimal pattern 5555
7. Read blocks 2 to 511 and check for errors
8. Erase/Program blocks 2 to 511 with hexadecimal pattern AAAA
9. Read blocks 2 to 511 and check for errors
10. Wait for an exposure time equivalent to about 1krad (Si)
11. Loop to step 3

¡Error! No se encuentra el origen de la referencia. represents the in-situ test iteration cycle, i.e. from step 3 to step 10. **¡Error! No se encuentra el origen de la referencia.** represents the entire LDC test flow including electrical measurements steps that were applied to the DUTs.

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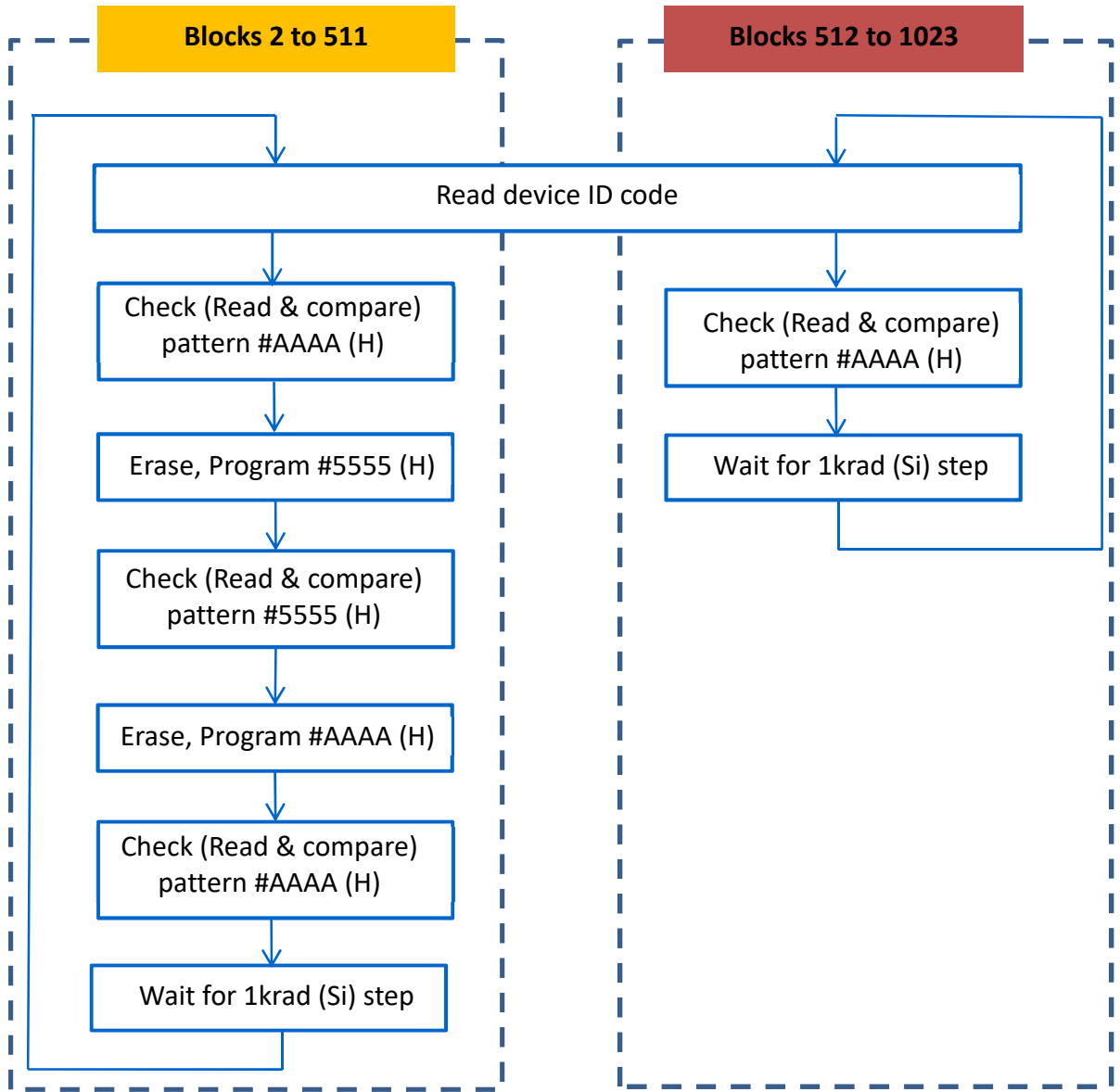


FIGURE 11: Low duty cycle in-situ test iteration cycle flow chart.



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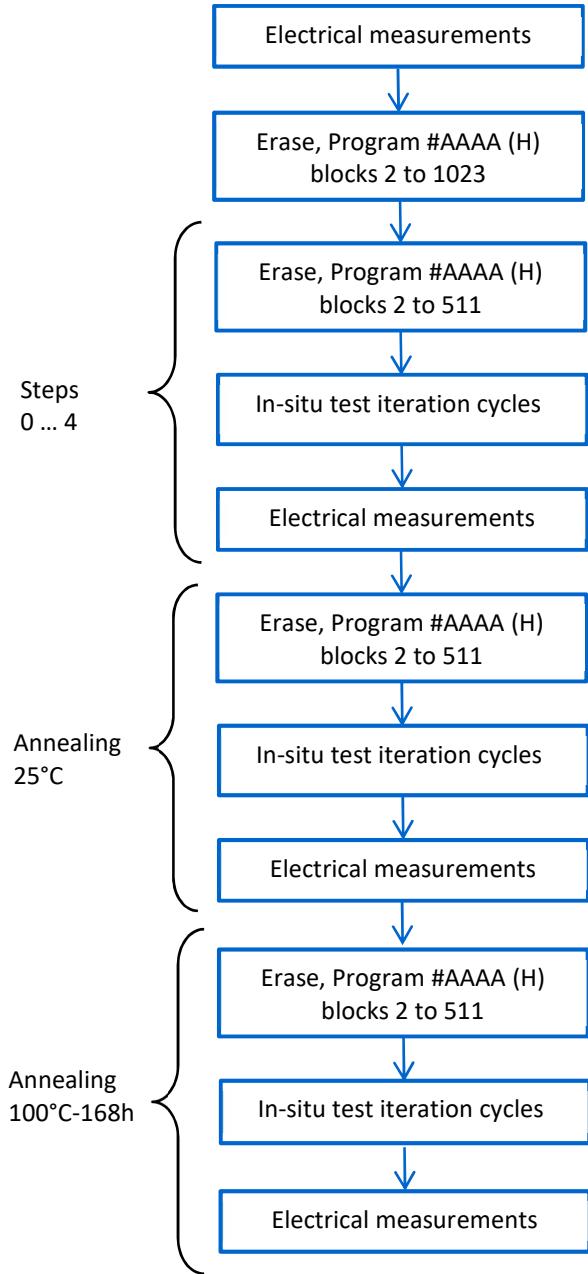



FIGURE 12: Low duty cycle in-situ test flow chart.

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12 TEST RESULTS

Results are transmitted via an Ethernet network from the supervisor boards to the laptop pc situated outside the exposure room.

The results consist in:

- Board level:
 - Program/Erase duration: presents the evolution of the time duration in seconds of erase/program operation.
- DUT level:
 - Erase/Program: contains the results of erase/program operations.
 - Failed erase blocks (E).
 - Failed program blocks (P).
 - Failed blocks (E+P).
 - Read: contains the results of read operations.
 - Blocks with minimum 1 word (16 bits) in error.
 - Blocks with 90% words in error.
 - Words in error: total number of words in error per device
 - DUT access status: contains the device identification (read device ID) operation results.
 - Identification ok.
 - Identification wrong.
 - Reset failed.

In the following figures representing test results, firstly in sections 4.1 to 4.8 the duration of Program/Erase operations of each board are presented for each step. This time duration is expressed by devices bias board (each devices bias board contains 5 devices). The rest of sections presents the results per DUT.


Secondly, the number of blocks with Erase / Program failure are represented for each step. As explained previously, an Erase / Program failure is registered, only after 2 unsuccessful tentative, if one of the following three cases occurs: 1) failed to reset the device, i.e. the DUT remains busy (R/B# low) after physical reset; 2) the device raises a fail status flag for the erase / program operation; 3) the erase / program operation time duration exceeds the maximum erase / program time specified in the device datasheet.

In addition, if the DUT raises a block erase failure (at the second tentative), the concerned block won't be programmed. Furthermore, the number of blocks (E+P) with either an erase or program failure is represented.

Thirdly, the number of blocks having at least 1 word in error and blocks having more than 90% of their bytes in error are represented respectively. Additionally, the total number of words in error in the read blocks are represented. Please note that when failing to access the device (device remains busy after reset), the number of blocks with 90% words in error and number of words in error will be left equal to 0 while the number of blocks with minimum 1 word in error will be set to all blocks.

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Finally, the DUT access status is showed. Identification ok means that the read device ID is conformed to the attended device ID like specified in the device datasheet. Identification wrong means that the read device ID is different from the attended device ID. Reset failed is indicated if there is a fail to reset the device, i.e. device remains busy (R/B# low) after physical reset. The latter state may be interpreted as the device is not responding anymore (broken).

Erase, program duration pattern 0x5555 (board):

In LDC bias, from the beginning of step 1 (0-20 krad) till the end of step 2 (20-30 krad), there is a slight irregular increment. At the beginning of step 3 (30-50 krad), there an abrupt raise¹ to a certain duration which is kept during the rest of the step. At the beginning of step 4 (50-70 krad), there is a quick reduction² in duration to a value lower than the one at the beginning of step 1 (0-20 krad). This value continues till the end of the processes.

In HDC bias, there is a smooth increment from the initiation of step 1 (0-20 krad) to the end of step 2 (20-30 krad). At the beginning of step 3, there is a sudden diminution³ to a value lower than the one at the beginning of step 1 (0-20 krad). This value continues till the end of the processes.

Erase, program duration pattern 0xAAAA (board):

In LDC bias, from the beginning of step 1 (0-20 krad) till the end of step 2 (20-30 krad), there is an irregular constant. At the beginning of step 3 (30-50 krad), there an abrupt raise¹ to a certain duration which is kept during the rest of the step. At the beginning of step 4 (50-70 krad), there is a quick reduction² in duration to a value lower than the one at the beginning of step 1 (0-20 krad). This value continues till the end of the processes.


In HDC bias, there is a smooth increment from the initiation of step 1 (0-20 krad) to the end of step 2 (20-30 krad). At the beginning of step 3, there is a sudden diminution³ to a value lower than the one at the beginning of step 1 (0-20 krad). This value continues till the end of the processes.

¹ This raise can be correlated with erase / program failures (all block failed) and DUT access status (identification wrong for most devices). This let suggest that erase failures after the jump in step 3 are detected by the mean of the 3rd case (see section 3.5), i.e. the max time of erase operation reached, because having device access status wrong exclude the 1st case and having erase / program duration time increasing a lot exclude the 2nd case.

² This important reduction can be explained by DUT access status, which is reset failed for all devices. Erase failures after this duration reduction are detected via the 1st case, i.e. failed to reset the device.

³ This sudden diminution in step 3 coincides with all blocks to go in fail erase, while the devices access status are ok. So, this diminution does not reflect a real decrease in erase / program duration. In addition, this let conclude that erase failures after the jump in step 3 are detected by the mean of the 2nd case (see section 3.5) i.e. the device raises a fail status flag, because having device access status ok exclude the 1st case and having erase / program duration time decreasing exclude the 3rd case. On step 4, we can observe that the devices access status change to reset failed. Then in this step, the erase failures are detected via the 1st case, i.e. failed to reset the device.

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Erase, program, pattern 0x5555 (DUT blocks 2 to 511):

In LDC bias, at the end of step 1 (0-20 krad), there is a sudden raise of failed erased blocks to half of the blocks and it continues through all step 2 (20-30 krad). At the beginning of step 3 (30-50 krad), there is another quick increment of failures¹ to all blocks failed to be erased which continues till the end of all processes.

In HDC bias, from the end of step 1 (0-20 krad) till the beginning of step 3 (30-50 krad), there is an increment from no error to all blocks failed to be erased. The increment has different shapes, from regular to an abrupt change³ at the beginning of step 3 (30-50). From this point, all blocks are failed to be erased.

Erase, program, pattern 0xAAAA (blocks 2 to 511):

In LDC bias, at the end of step 1 (0-20 krad), there is a sudden raise of failed erased blocks to half of the blocks and it continues through all step 2 (20-30 krad). At the beginning of step 3 (30-50 krad), there is another quick increment of failures¹ to all blocks failed to be erased which continues till the end of all processes.

In HDC bias, from the end of step 1 (0-20 krad) till the beginning of step 3 (30-50 krad), there is an increment from no error to all blocks failed to be erased. The increment has different shapes, from regular to an abrupt change³ at the beginning of step 3 (30-50). From this point, all blocks are failed to be erased.

Read pattern 0x5555 (blocks 2 to 511):

In LDC bias, at the end of step 1 (0-20 krad), there is a sudden raise of failures where half of the blocks have at least 90% words in error, and this behavior continues through all step 2 (20-30 krad). At the beginning of step 3 (30-50 krad), there is another quick increment of failures to all blocks with at least 90% words in error. During step 3 (30-50 krad), there is heterogenous behavior, some DUTs continues with all blocks including at least 90% words in error but other change to all blocks with minimum 1 word in error⁴. During the rest of the processes, all the DUTs continues with all blocks containing minimum 1 word in error.

In HDC bias, from the end of step 1 (0-20 krad) till the beginning of step 3 (30-50 krad), there is an increment from no error to all blocks with at least 90% words in error. The increment has different shapes⁵, from regular to an abrupt change at the beginning of step 3 (30-50). In general, during step 3 (30-50 krad), all the blocks have at least 90% words in error. From the beginning of step 4 (50-70 krad) till the end of all processes, all the blocks change from having at least 90% words in error to minimum 1 word in error⁴.


Read pattern 0xAAAA (blocks 2 to 511):

In LDC bias, at the end of step 1 (0-20 krad), there is a sudden raise of failures where half of the blocks have at least 90% words in error, and this behavior continues through

⁴ All blocks with minimum 1 word in error are concurrent with reset failed devices status, which is not representative of real behavior but absence of data.

⁵ The shape of the increment is similar to those in erase/program failures.

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all step 2 (20-30 krad). At the beginning of step 3 (30-50 krad), there is another quick increment of failures to all blocks with at least 90% words in error. During step 3 (30-50 krad), there is heterogenous behavior, some DUTs continues with all blocks including at least 90% words in error but other change to all blocks with minimum 1 word in error⁴. During the rest of the processes, all the DUTs continue with all blocks containing minimum 1 word in error.

In HDC bias, from the end of step 1 (0-20 krad) till the beginning of step 3 (30-50 krad), there is an increment from no error to all blocks with at least 90% words in error. The increment has different shapes⁵, from regular to an abrupt change at the beginning of step 3 (30-50). In general, during step 3 (30-50 krad), all the blocks have at least 90% words in error. From the beginning of step 4 (50-70 krad) till the end of all processes, all the blocks change from having at least 90% words in error to minimum 1 word in error.

Read only, pattern 0xAAAA (blocks 512 to 1023):

In LDC bias, errors start at the beginning of step 2 (20-30 krad) with an abrupt raise of blocks with minimum 1 word in error and words in error at the beginning of step 3 (30-50 krad). During step 3 (30-50 krad), there is heterogenous behavior, some DUTs continues with all blocks including at least 90% words in error but other change to all blocks with minimum 1 word in error⁴. During the rest of the processes, all the DUTs continues with all blocks containing minimum 1 word in error.

In HDC bias, from the beginning of step 2 (20-30 krad) to the end of step 3 (30-50 krad), there is a heterogenous raise of failures in the blocks⁶. There are both raise of blocks with minimum 1 word in error and at least 90% words in error while the changes are smooth or abrupt. From the start of step 4 (50-70 krad) till the end of the processes, all the blocks remain with minimum 1 word in error⁴.

DUT access status:


In LDC bias, during step 1 (0-20 krad) and step 2 (20-30 krad) the identification of the DUTs are ok. During step 3 (30-50 krad), the status change from identification ok to reset failed, sometimes passing through identification wrong. During the rest of the processes, all the DUTs are in reset failed status.

In HDC bias, in general from step 1 (0-20 krad) to step 3 (30-50 krad), the status of all the DUTs are identification ok. At the beginning of step 4 (50-70 krad), they change abruptly to reset failed and this behavior is kept until the end of the processes.

To conclude, above an irradiation dose threshold of about 20 krad, DUTs were widely affected by erase/program failures and data errors. There is no significant difference in results observed between HDC and LDC biases. The annealing at 100°C does not seem to totally recover all the DUTs neither in HDC nor LDC bias.

⁶ Note the jumps in errors at the beginning of these steps. They can be correlated to the operation erase/program blocks 512 to 1023 executed at the beginning of each step, like specified in the test flow chart in section 3.3.1. If during this operation some blocks failed to be erased/programmed, this will generate data errors.

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Notes:

- 1- DUT 0 in board 1 had connectivity problems. The data shown here are not representative of the actual behavior of the device.
- 2- The bias board power supply measurements were not functioning due to technical difficulties.

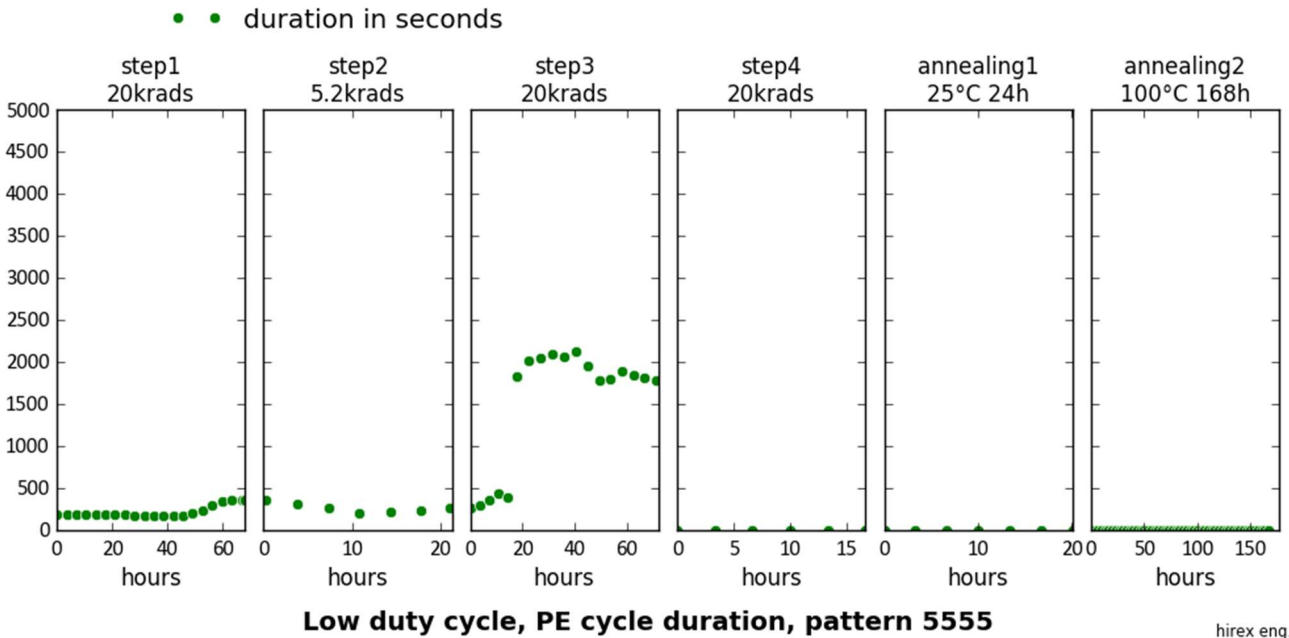
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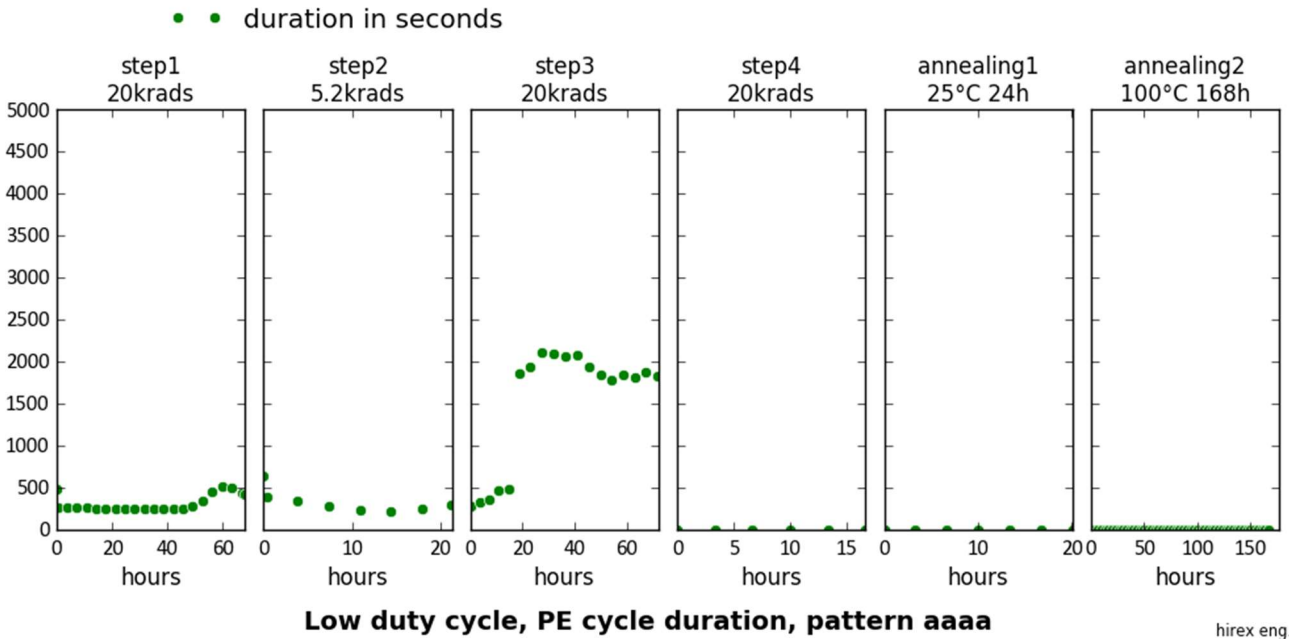


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12.1 Board1, Low Duty Cycle, Program/Erase Duration, Pattern 0x5555



12.2 Board1, Low Duty Cycle, Program/Erase Duration, Pattern 0xaaaa



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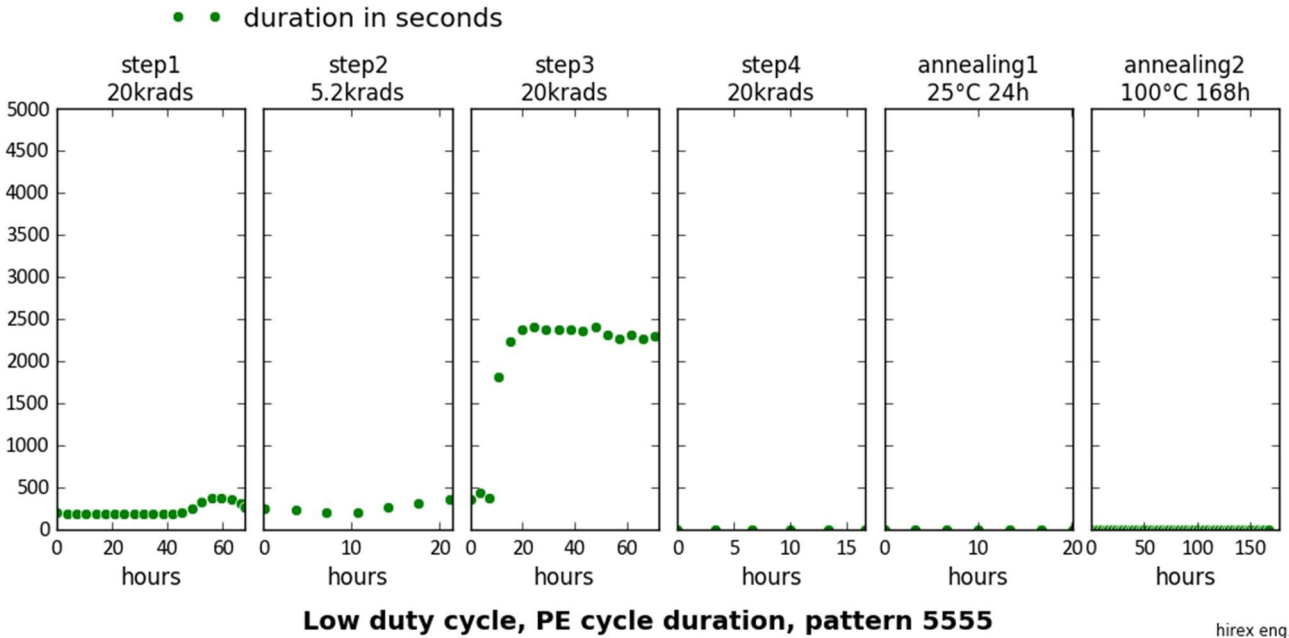
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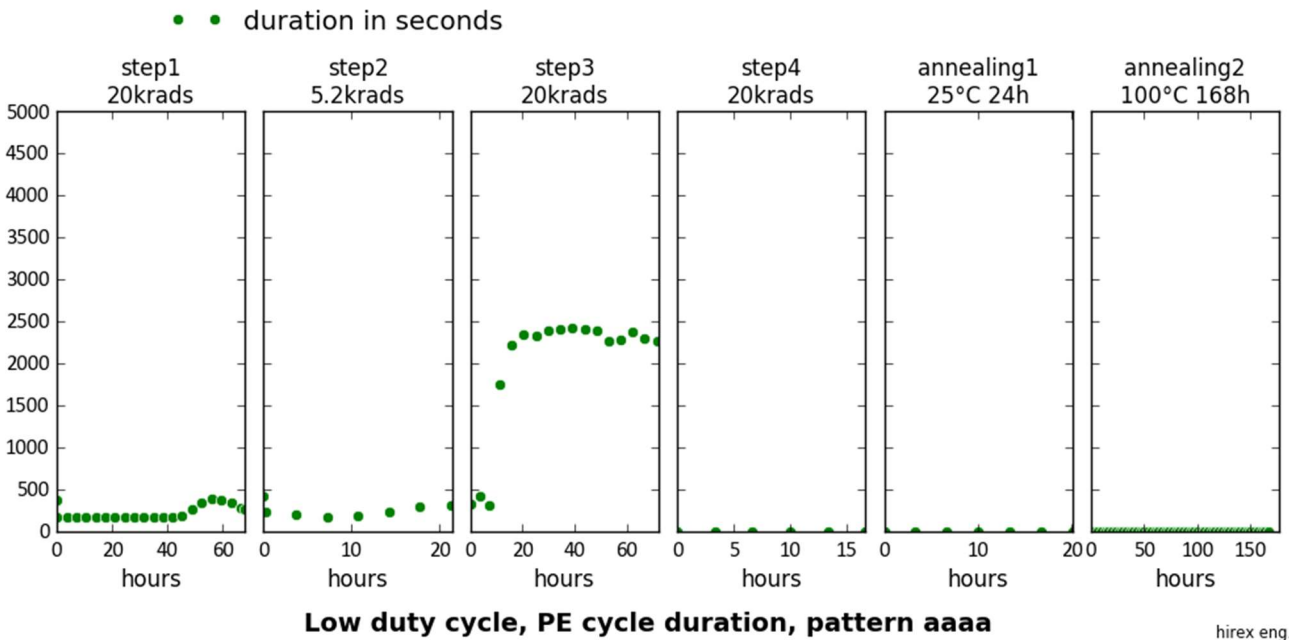
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12.3 Board2, Low Duty Cycle, Program/Erase Duration, Pattern 0x5555



12.4 Board2, Low Duty Cycle, Program/Erase Duration, Pattern 0xaaaa



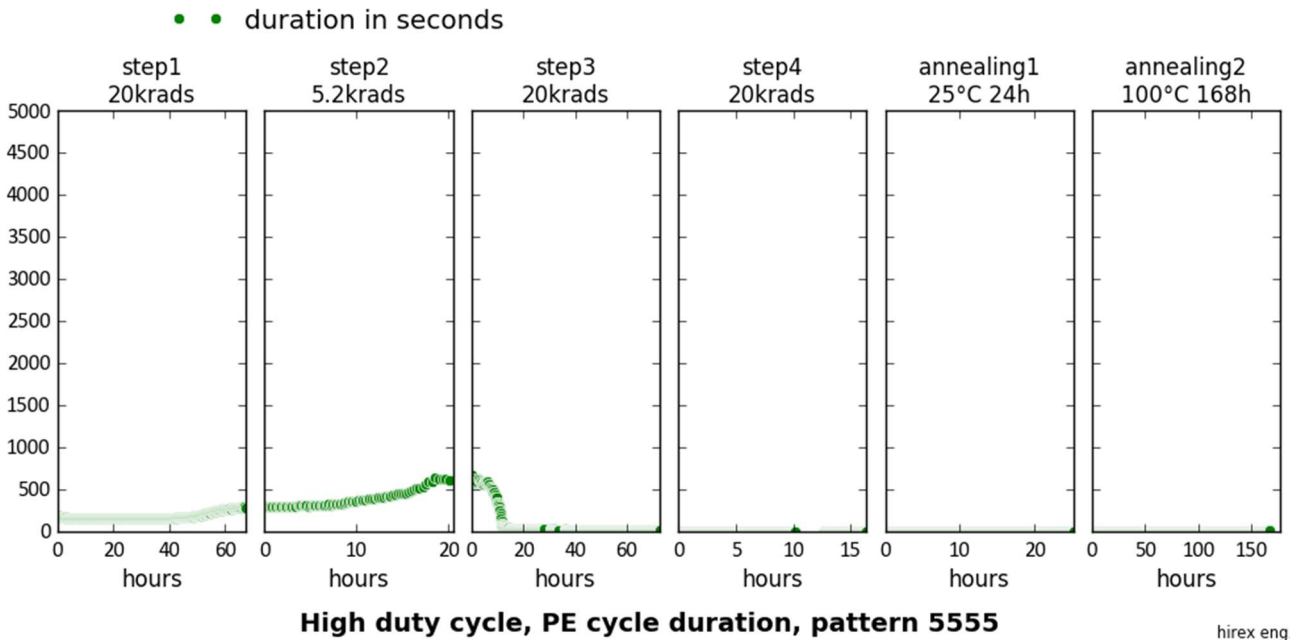
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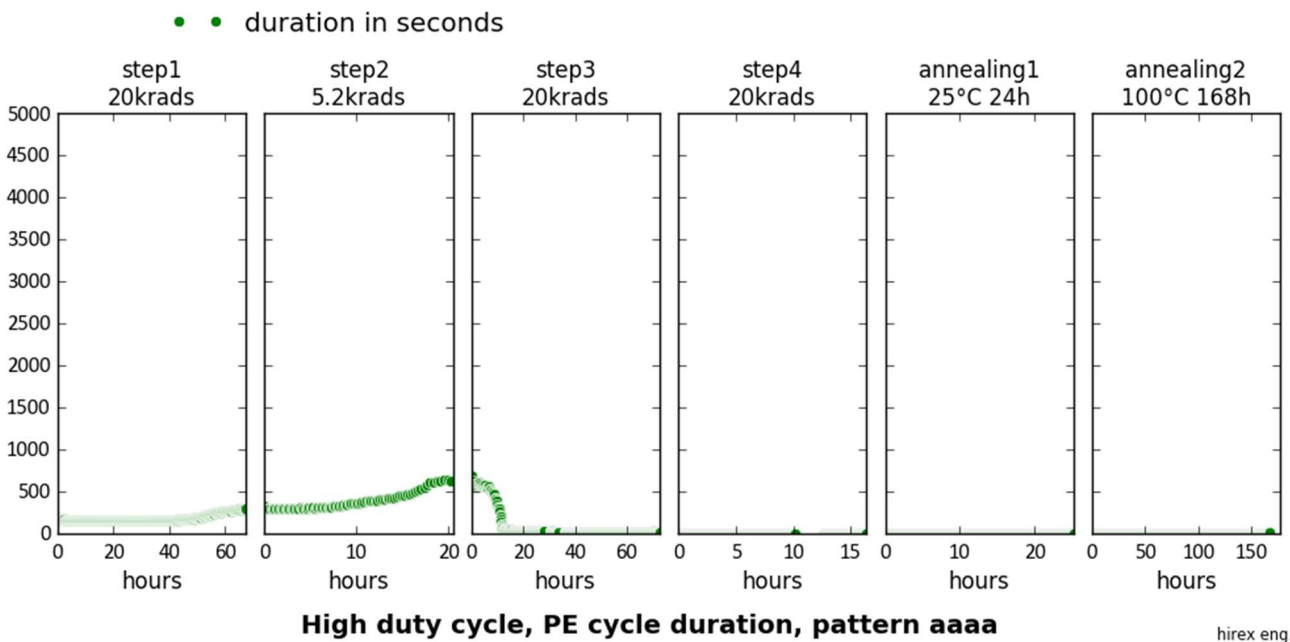


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12.5 Board3, High Duty Cycle, Program/Erase Duration, Pattern 0x5555



12.6 Board3, High Duty Cycle, Program/Erase Duration, Pattern 0xaaaa



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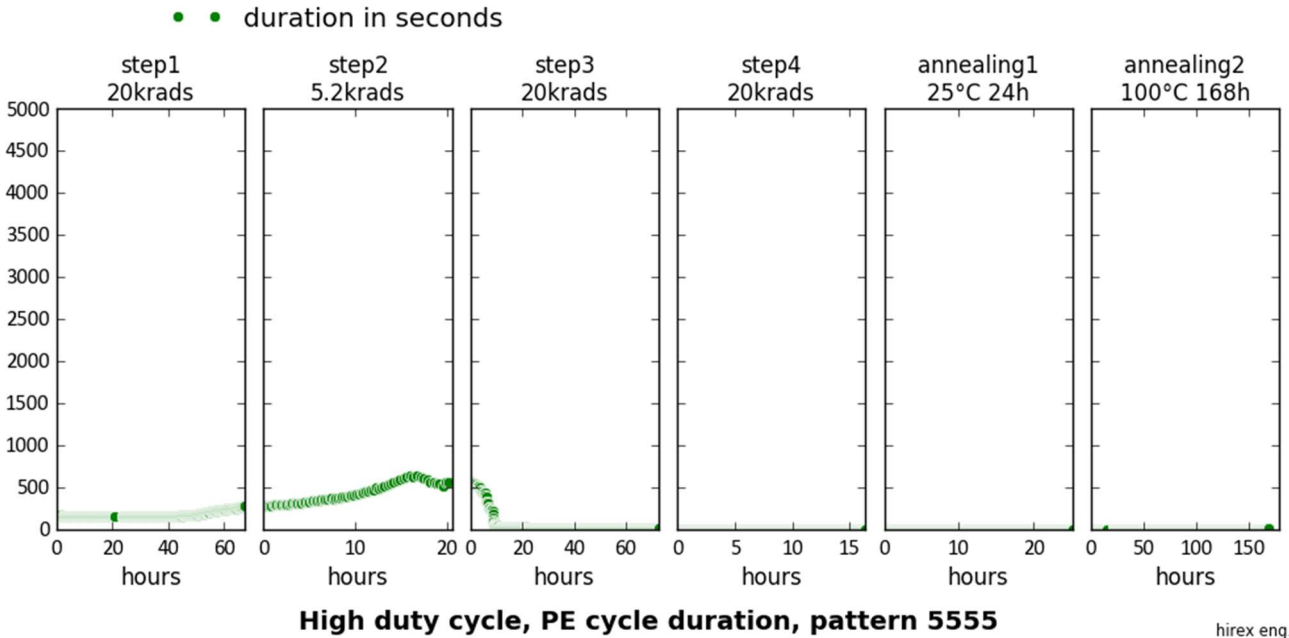
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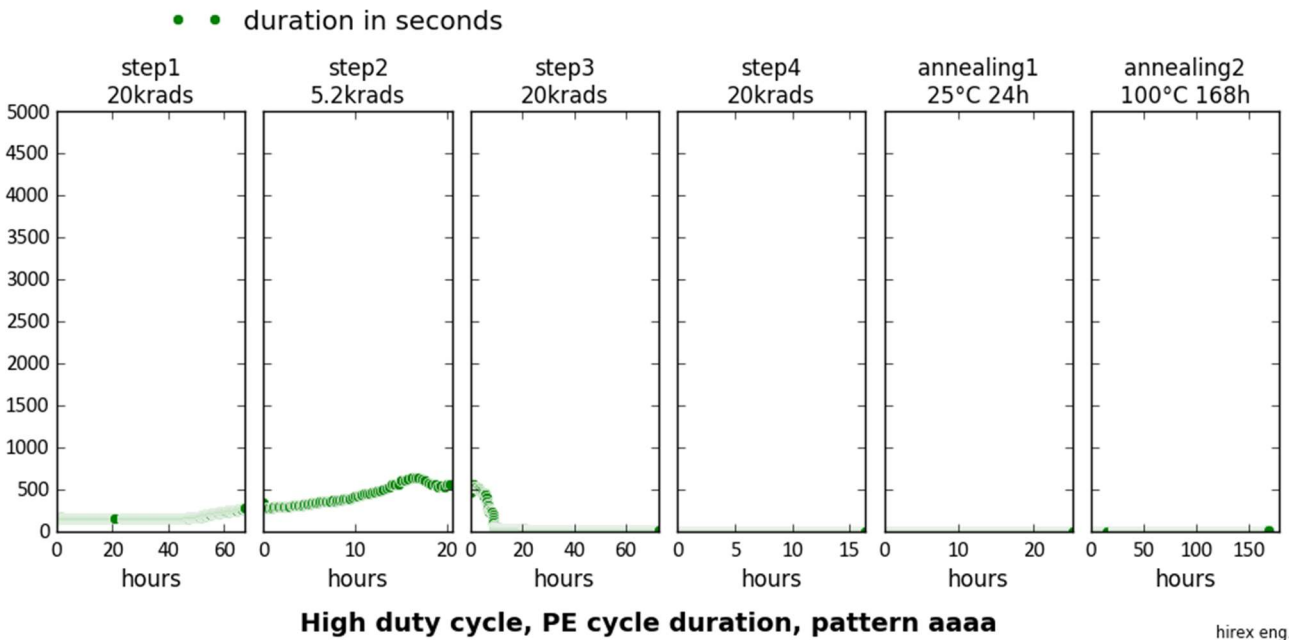
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12.7 Board4, High Duty Cycle, Program/Erase Duration, Pattern 0x5555




12.8 Board4, High Duty Cycle, Program/Erase Duration, Pattern 0xaaaa



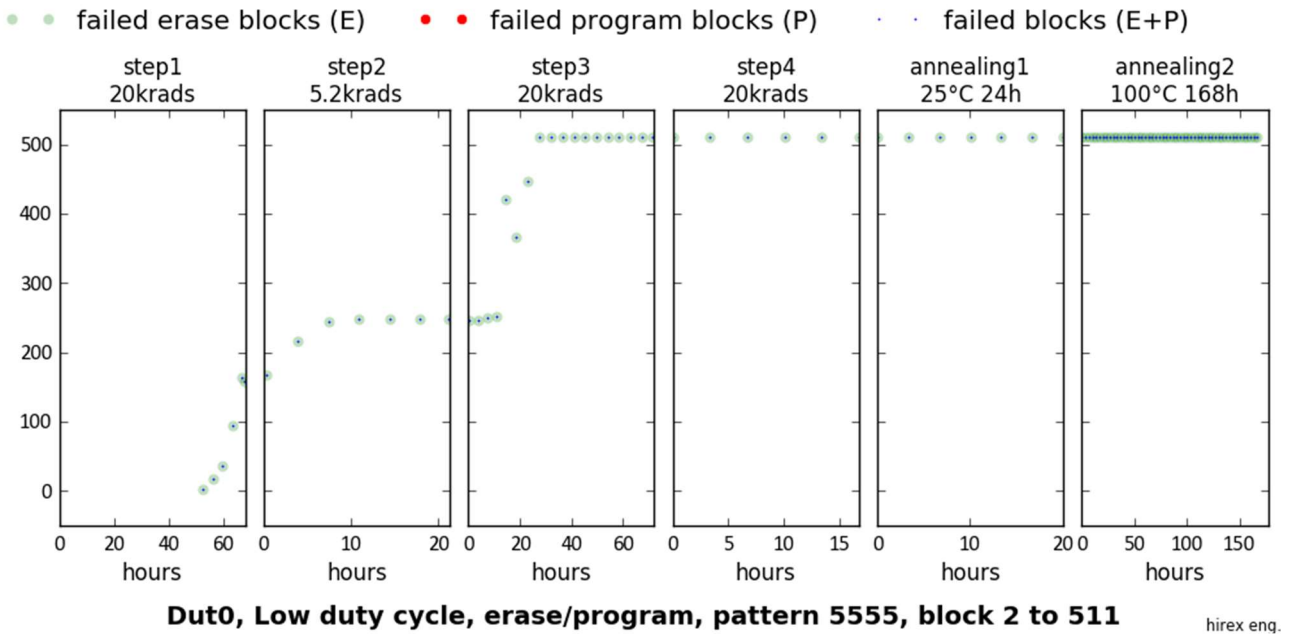
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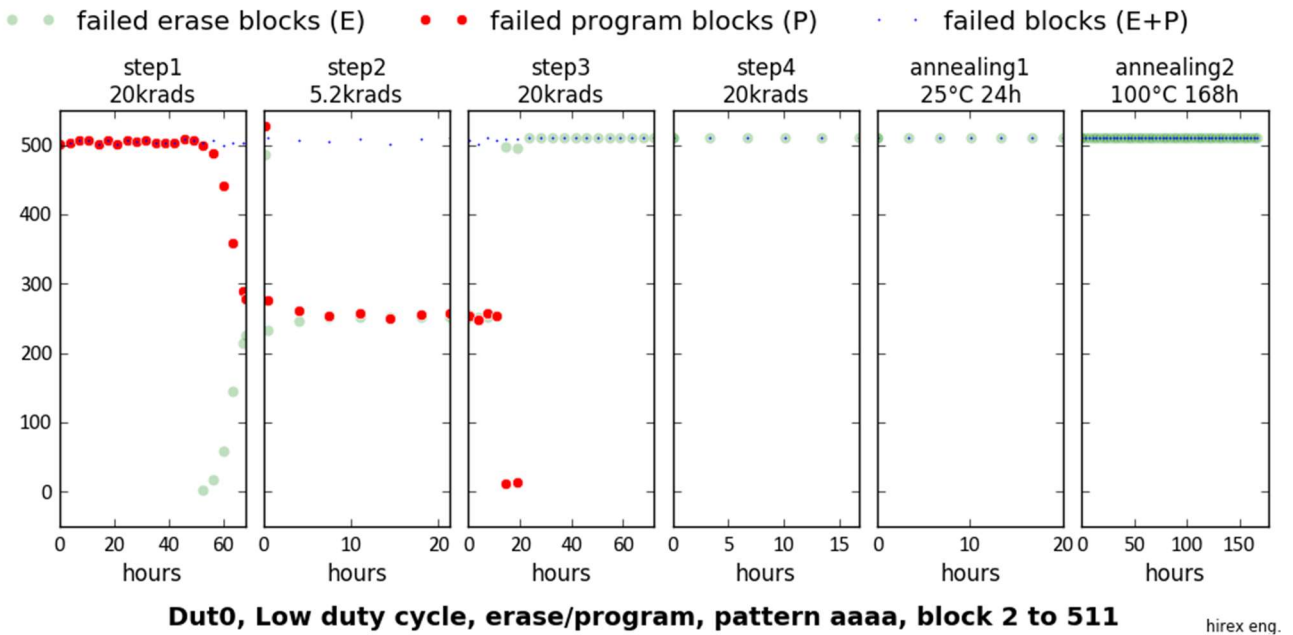
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12.9 DUT0 (Board 1), Low duty cycle

12.9.1 DUT0, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511




12.9.2 DUT0, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511



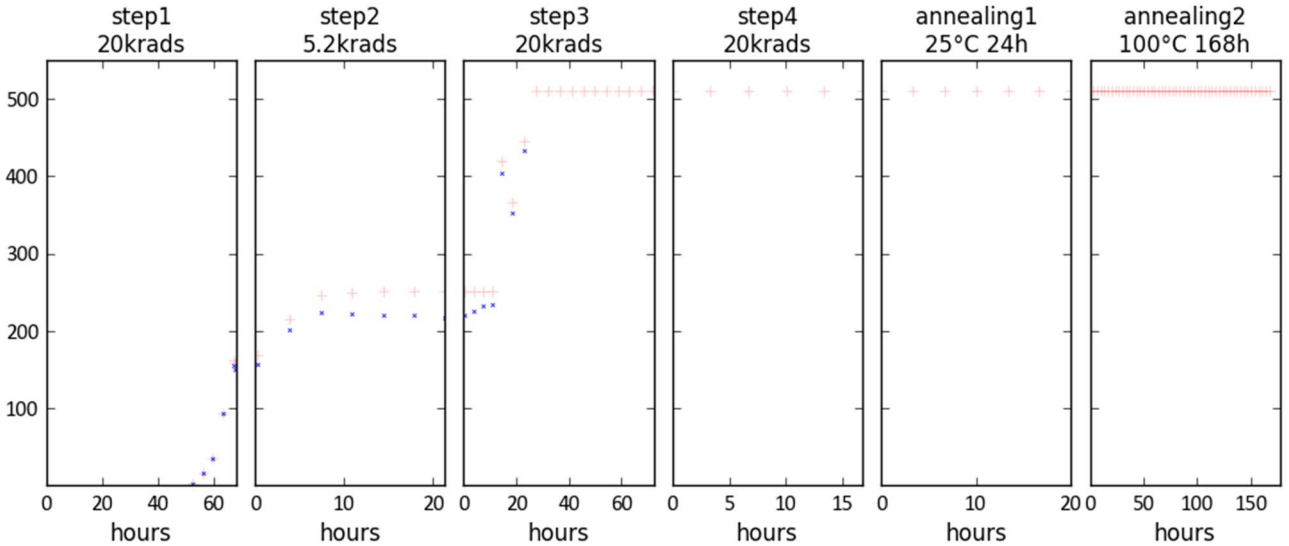
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12.9.3 DUT0, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

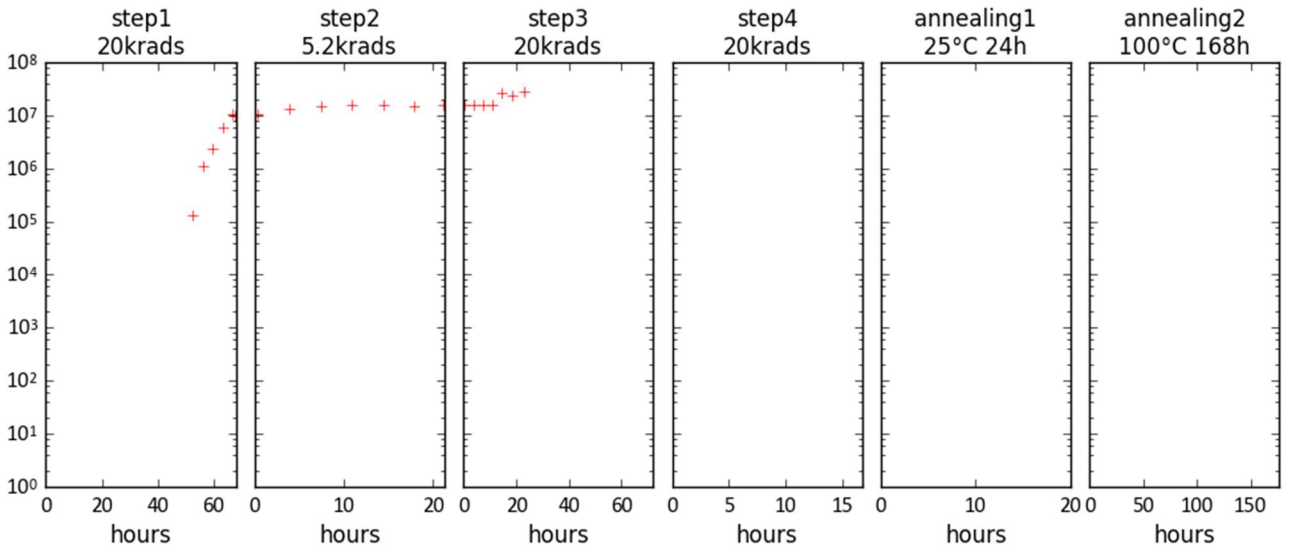
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



Dut0, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

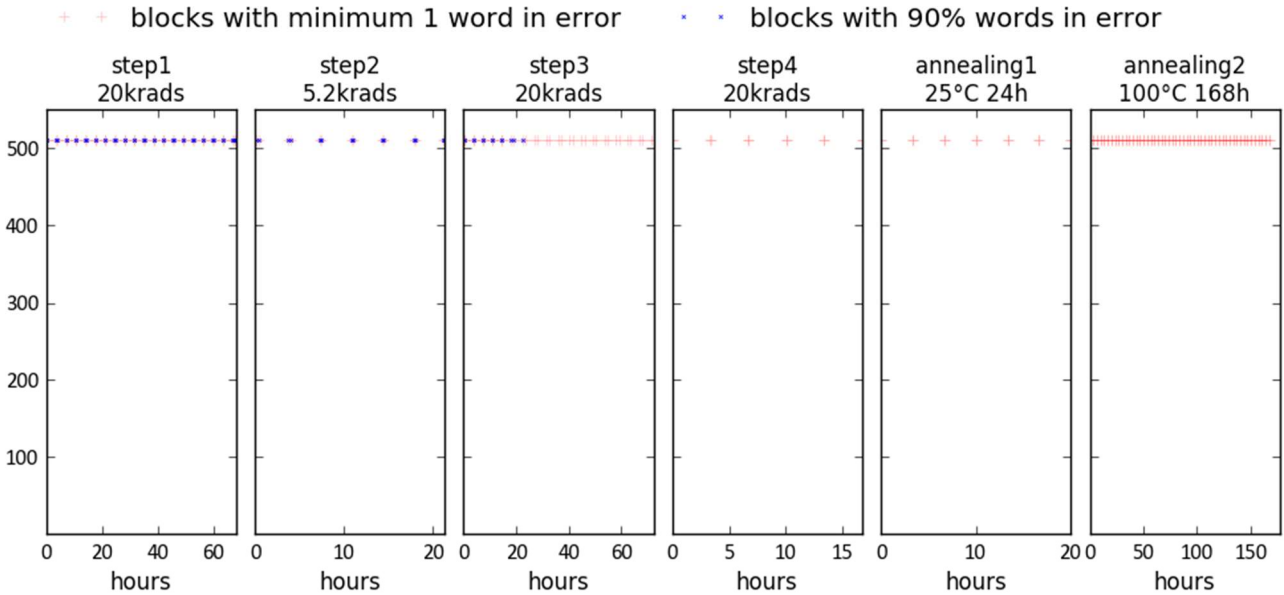
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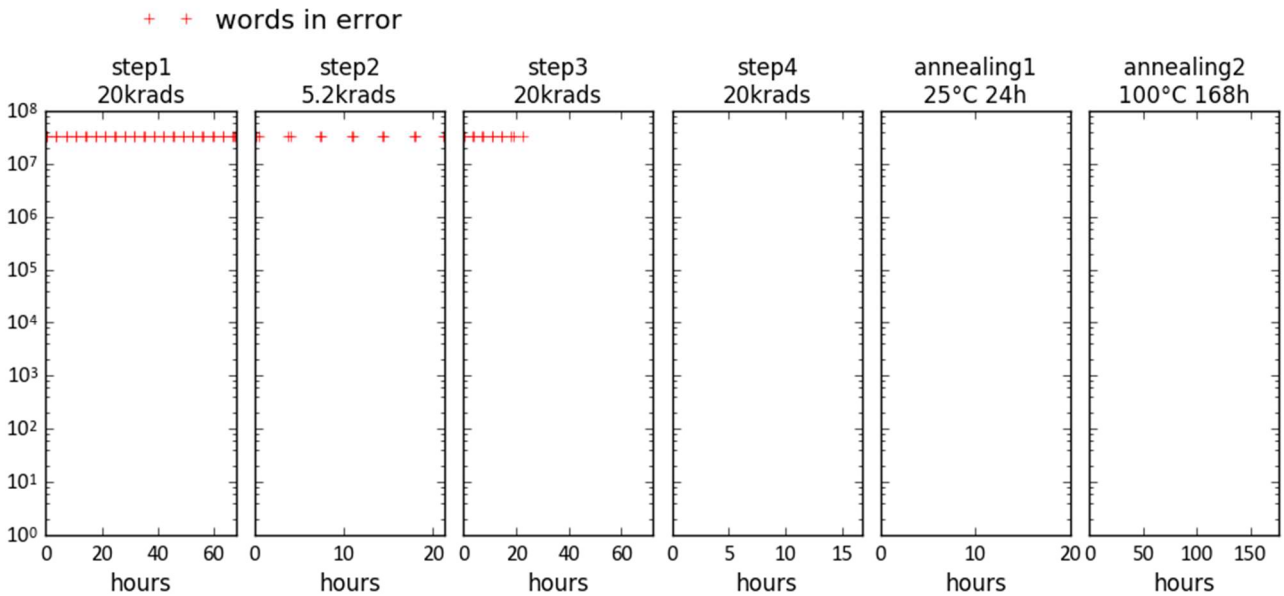
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12.9.4 DUT0, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut0, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut0, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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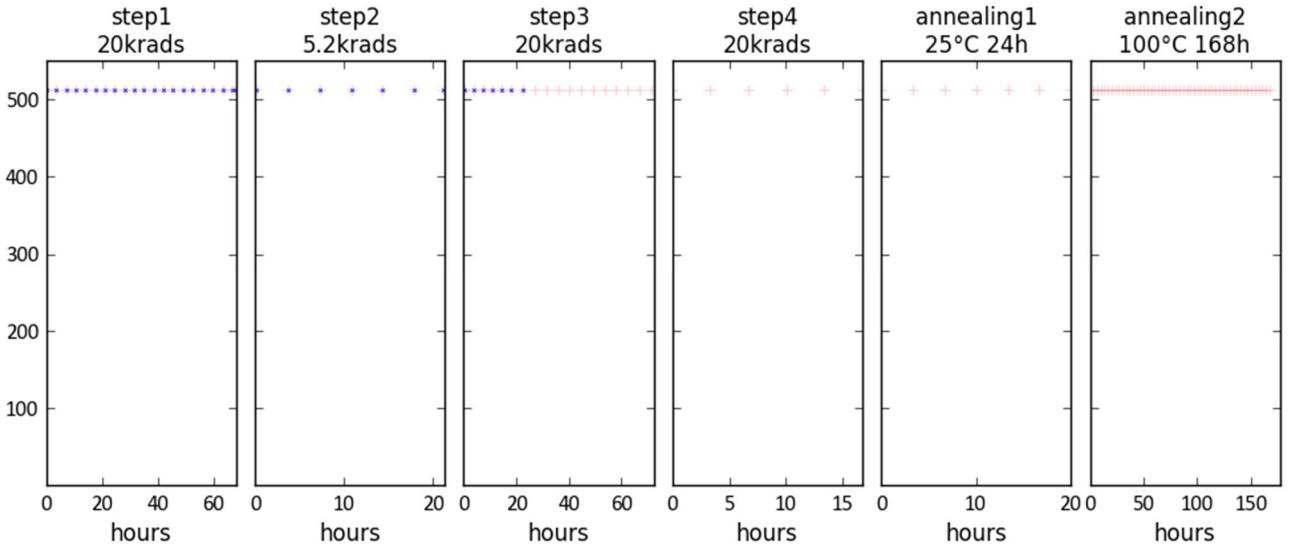
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12.9.5 DUT0, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

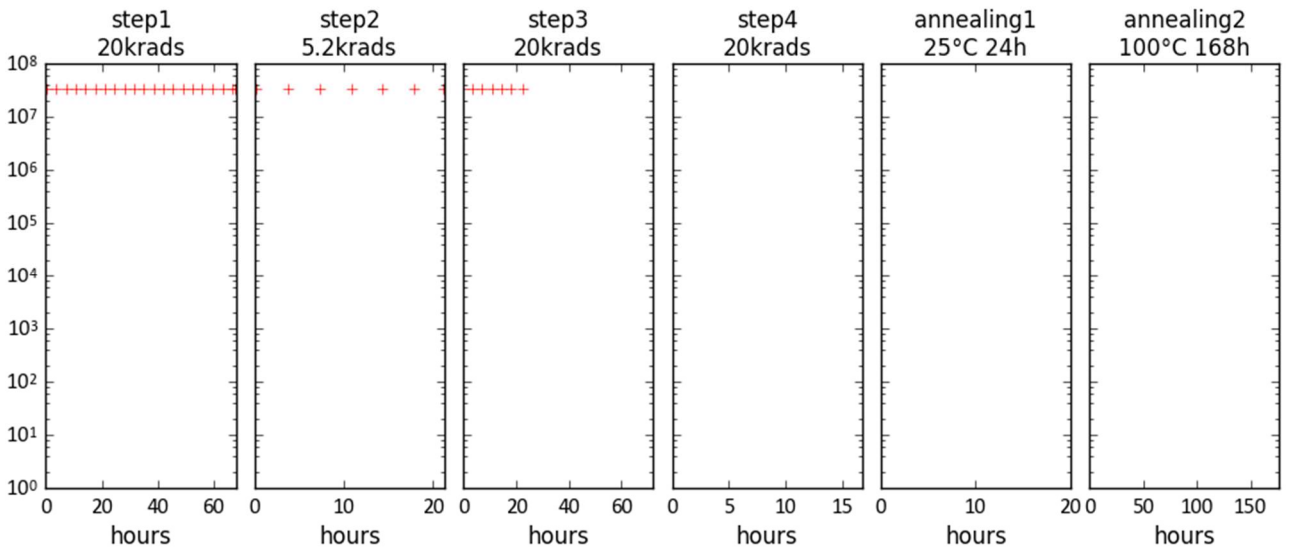
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut0, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

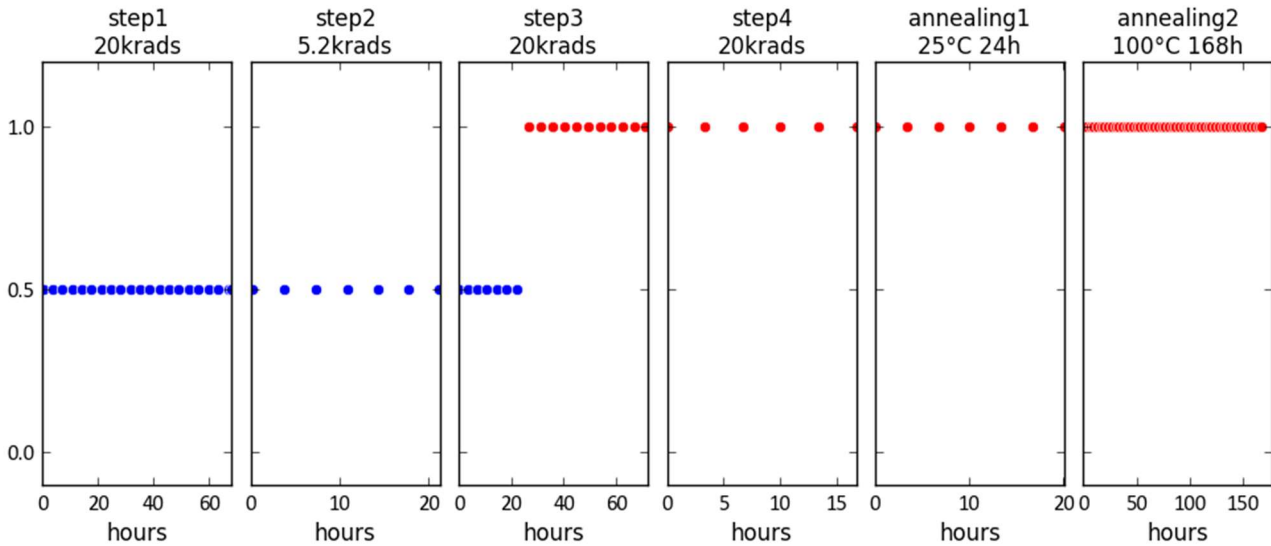
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12.9.6 DUT0, Low Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut0, Low duty cycle, DUT access status

hirex eng.

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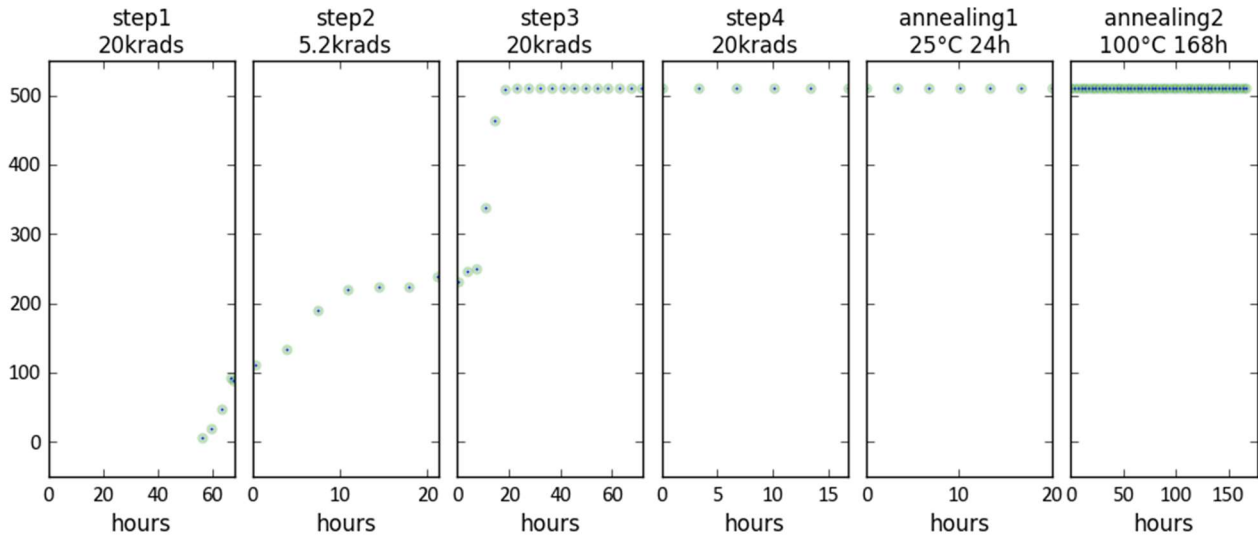
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12.10 DUT1 (Board 1), Low duty cycle

12.10.1 DUT1, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

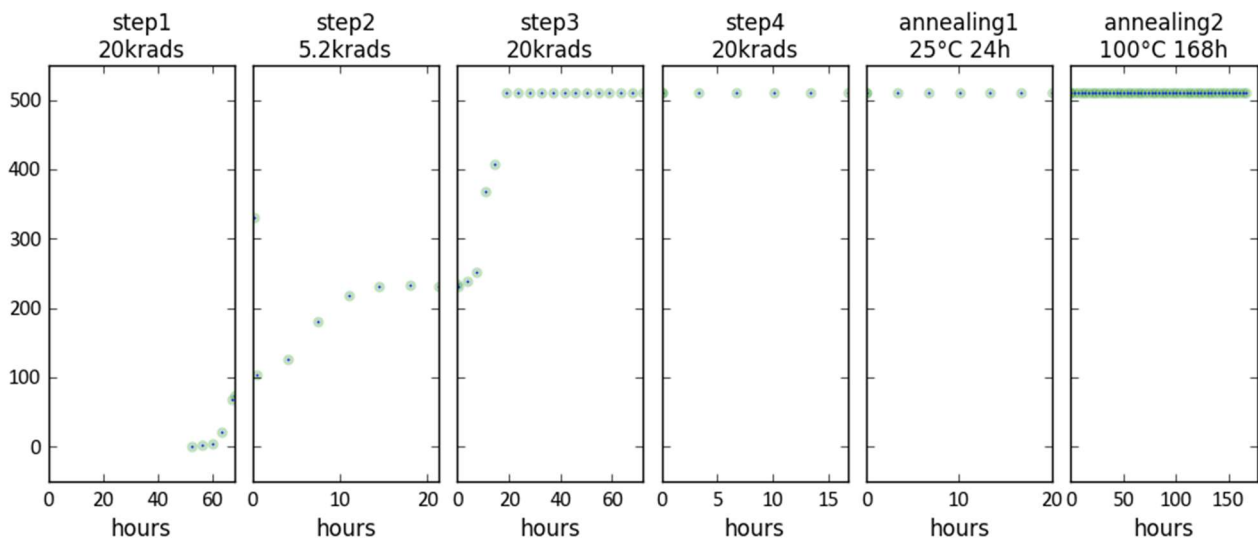


Dut1, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.10.2 DUT1, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut1, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

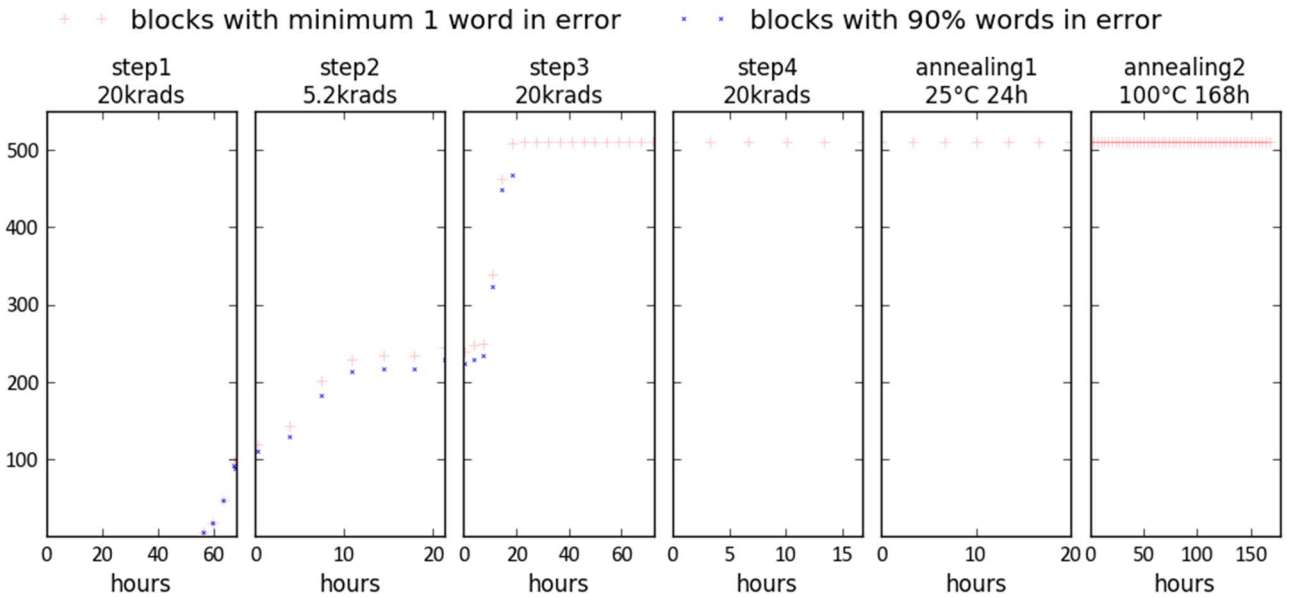
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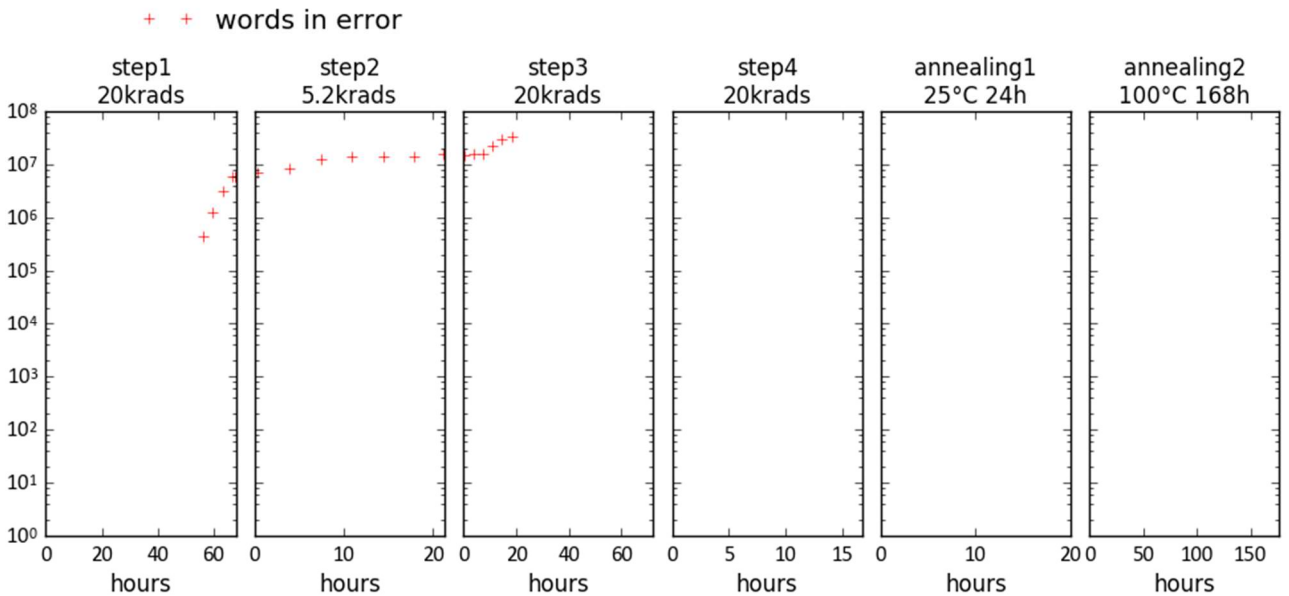
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12.10.3 DUT1, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511



Dut1, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.




Dut1, Low duty cycle, Read, pattern 5555, block 2 to 511

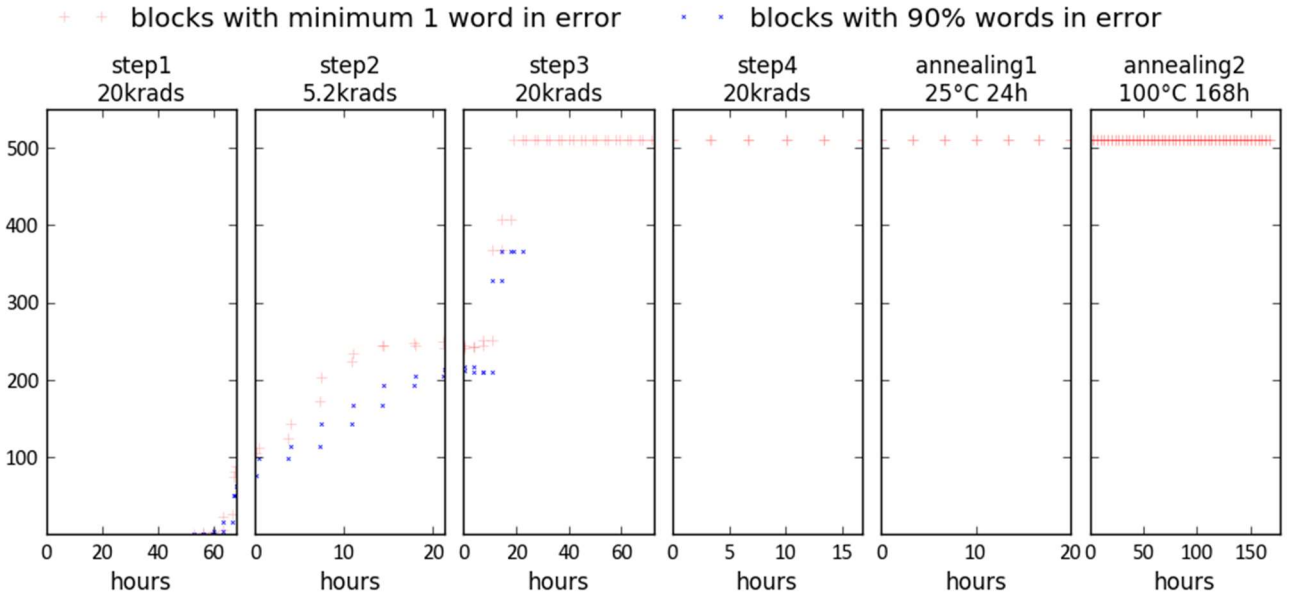
hirex eng.

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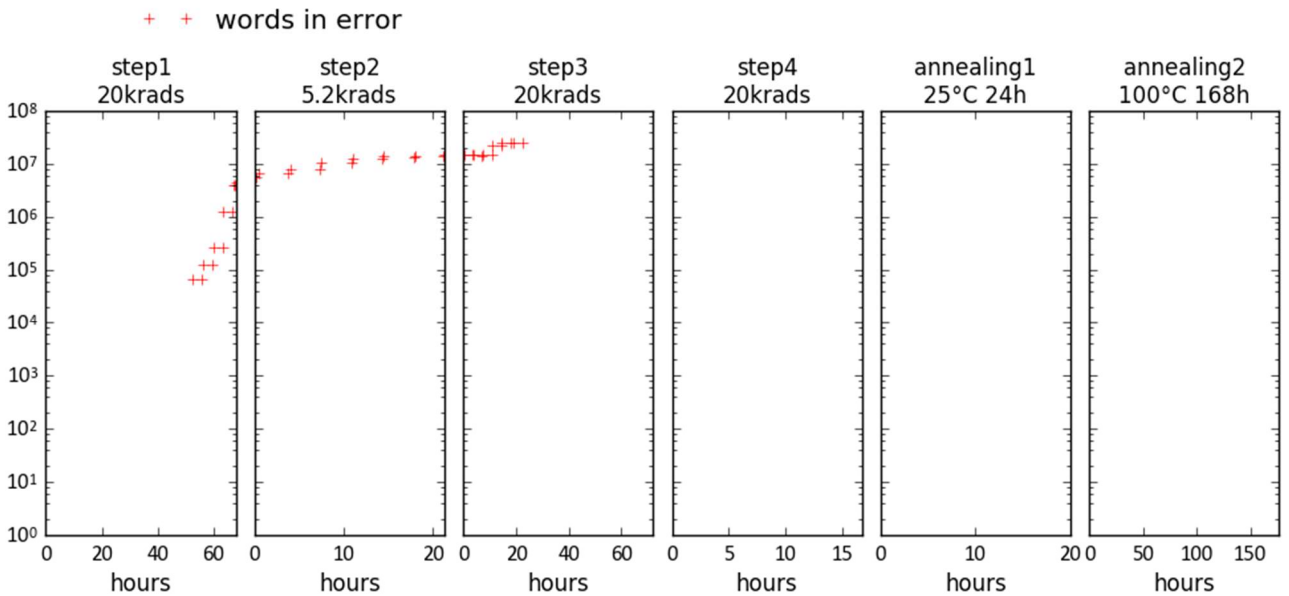
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	S29GL01GS10FHI010		SPANSION INC		RL: 2017901236
					Ref.: ATN-RR-468
	D/C 1512				Issue: 2
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12.10.4 DUT1, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut1, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut1, Low duty cycle, Read, pattern aaaa, block 2 to 511

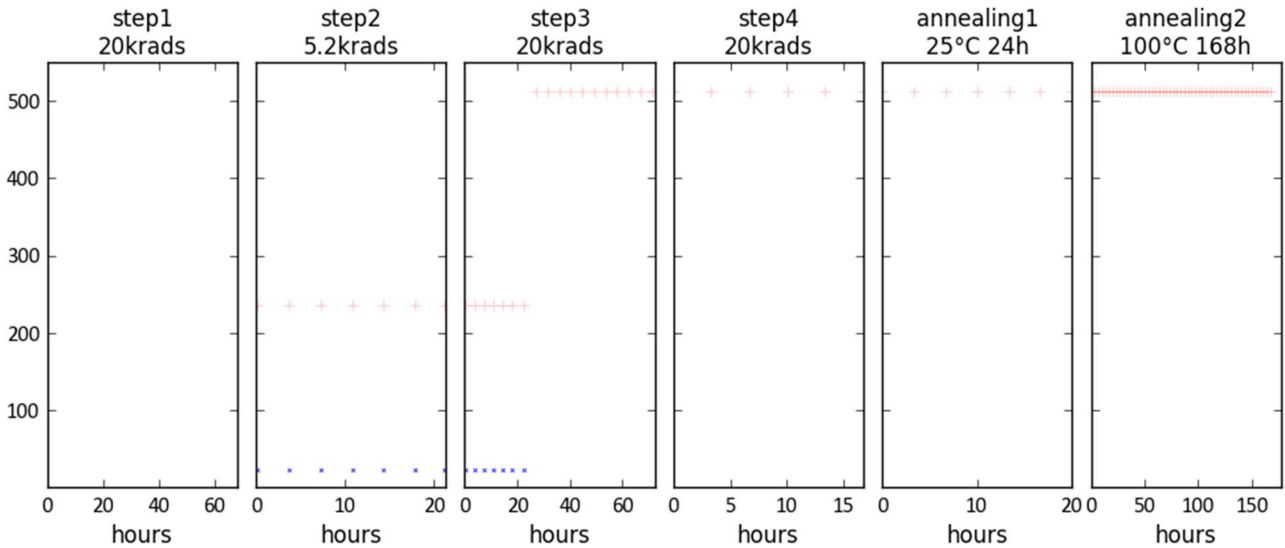
hirex eng.

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12.10.5 DUT1, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

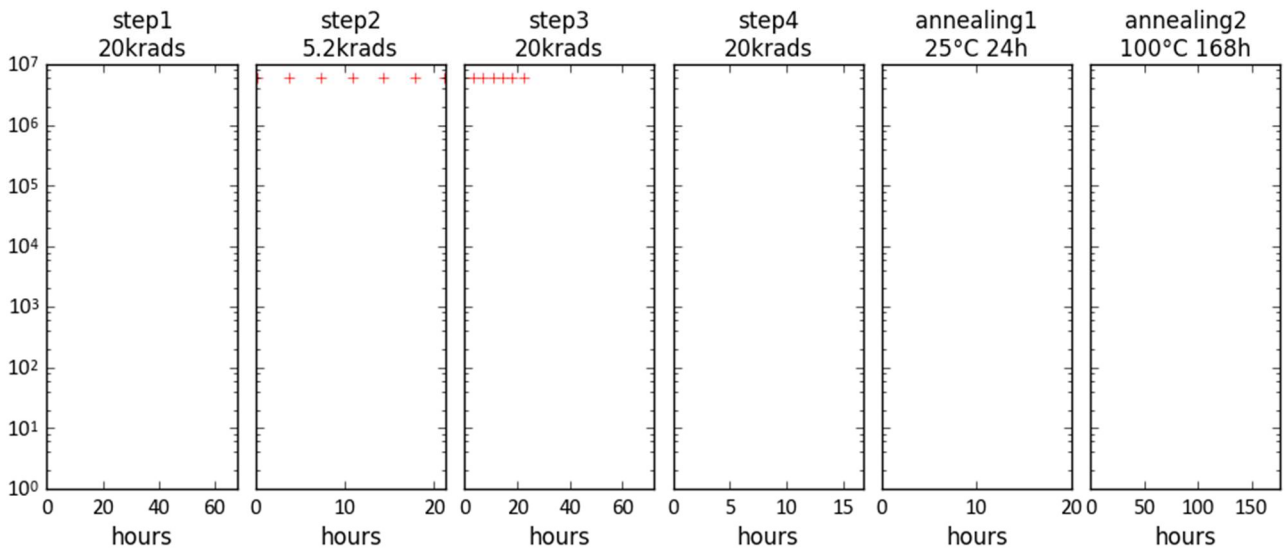
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut1, Low duty cycle, Read, pattern aaaa, block 512 to 1023

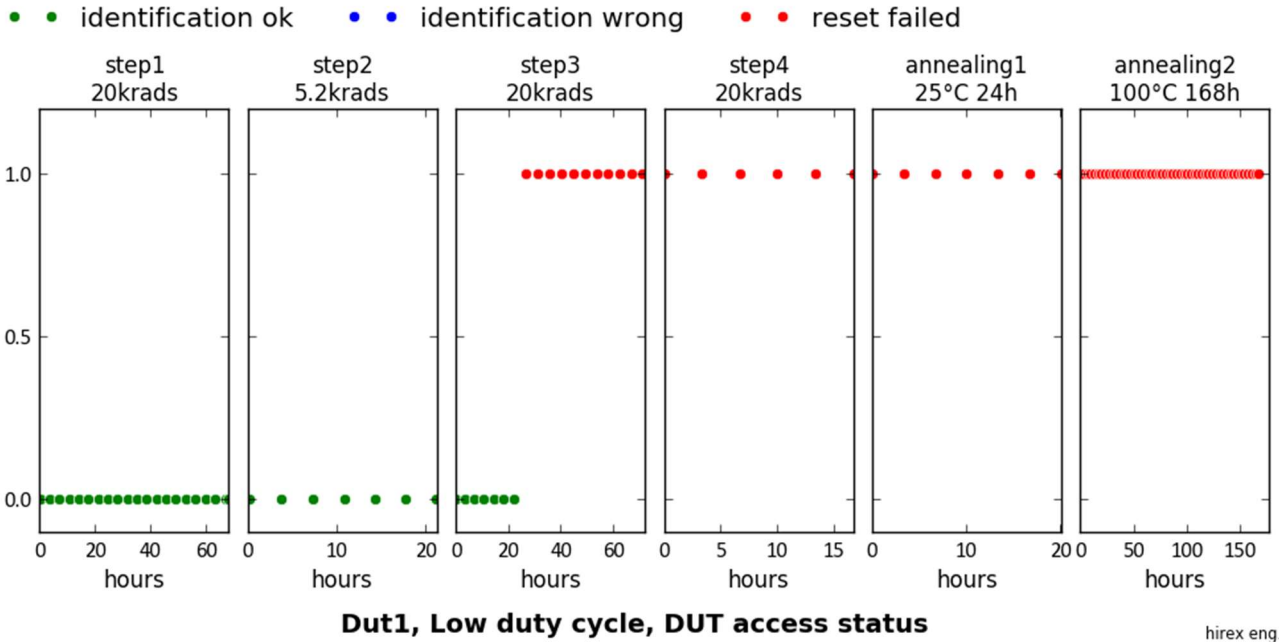
hirex eng.

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12.10.6 DUT1, Low Duty Cycle, DUT access status



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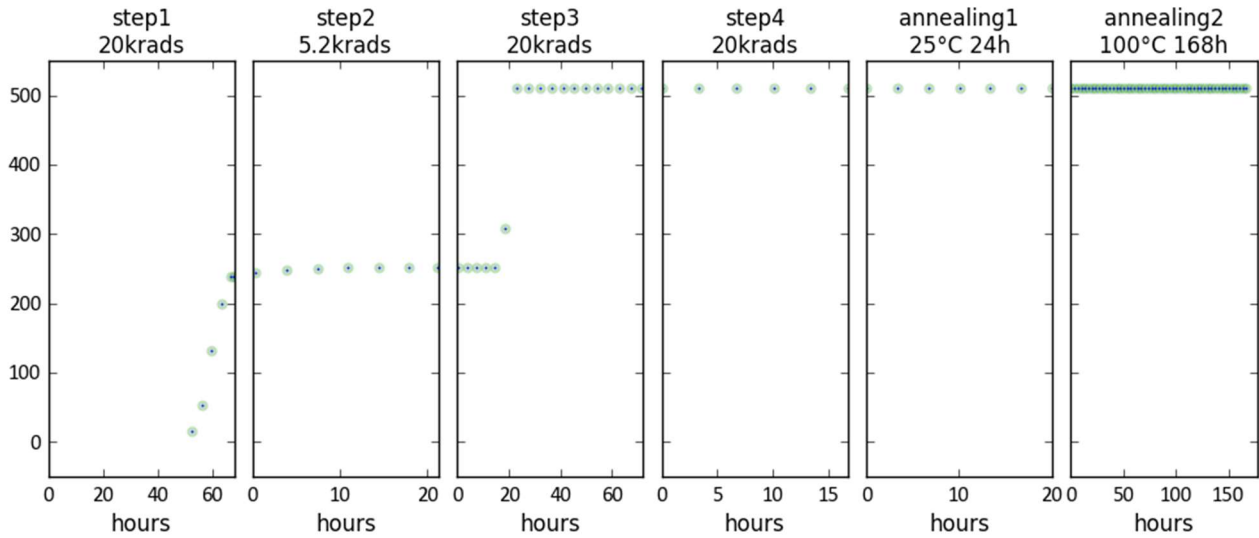
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12.11 DUT2 (Board 1), Low duty cycle

12.11.1 DUT2, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

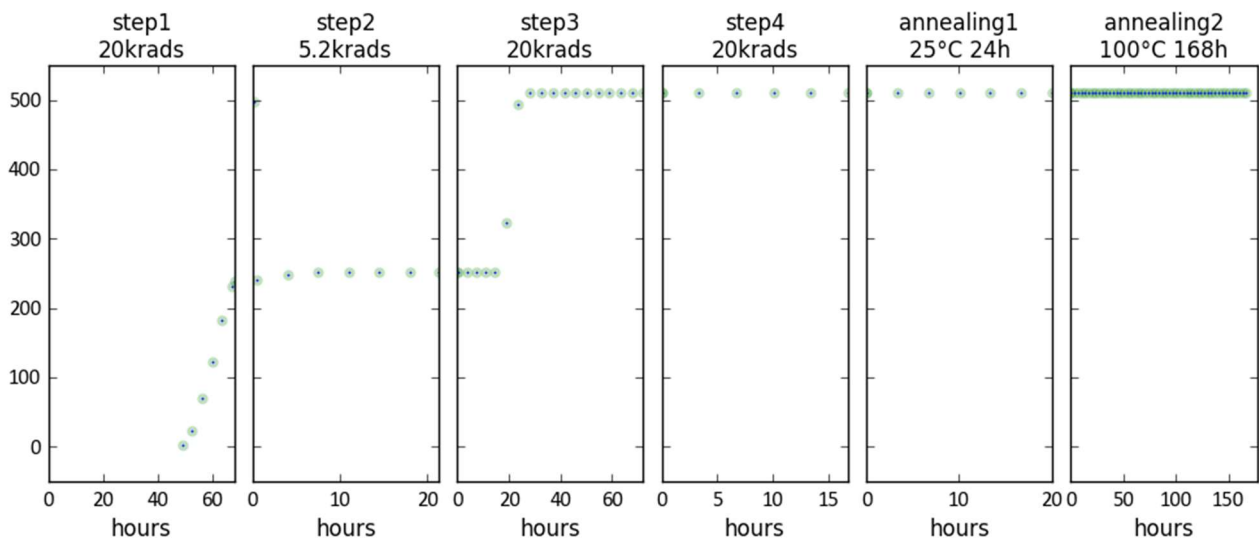


Dut2, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.11.2 DUT2, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut2, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

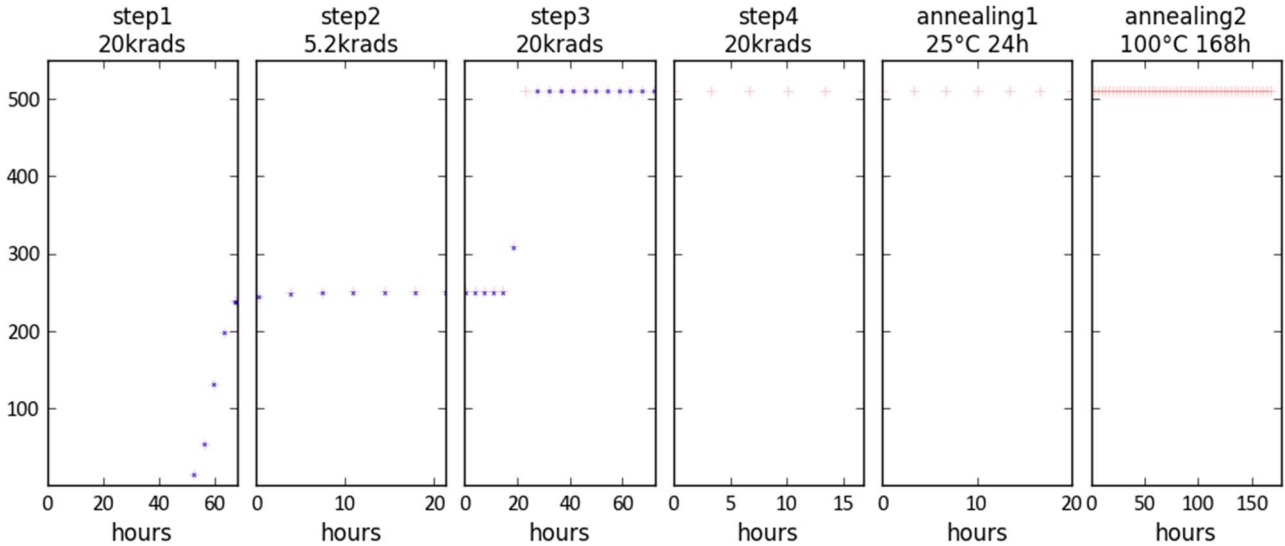
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12.11.3 DUT2, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

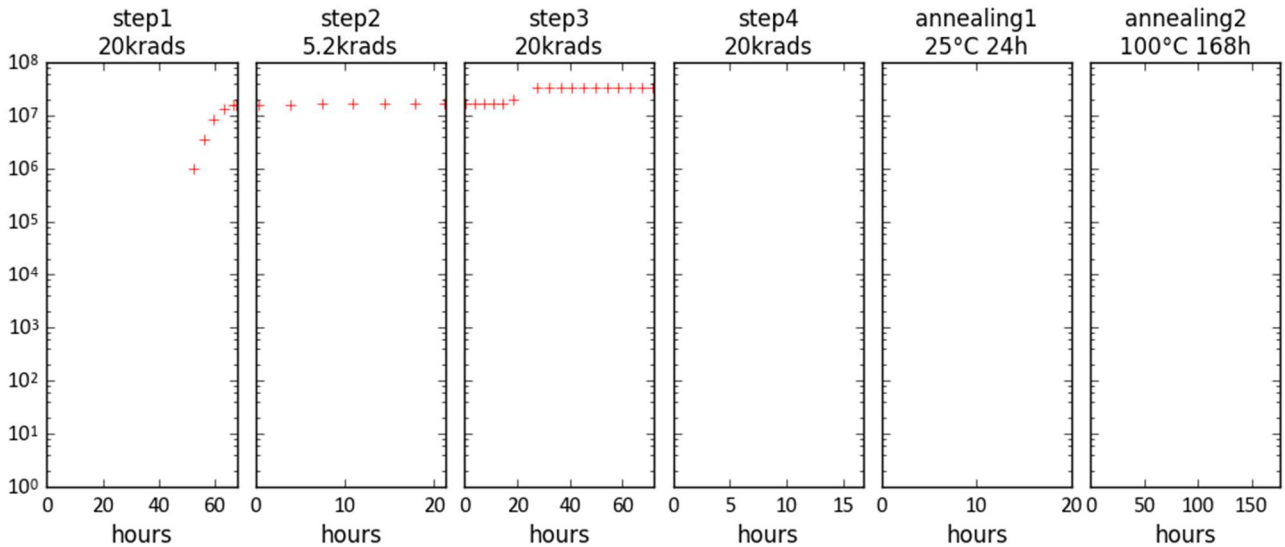
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut2, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



Dut2, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

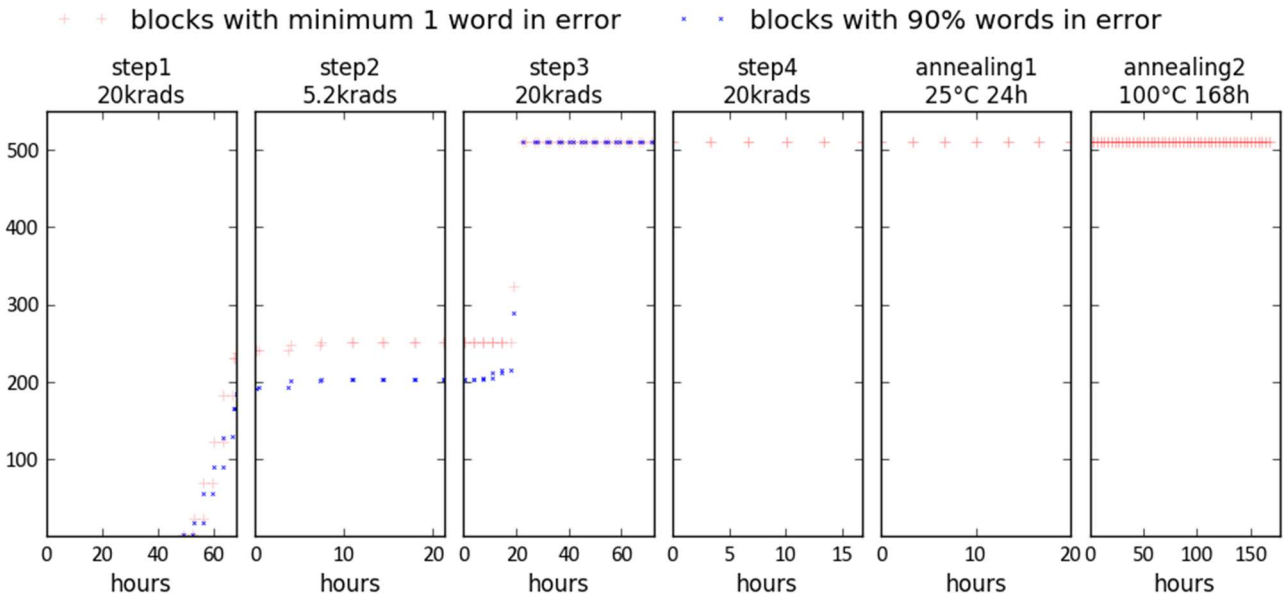
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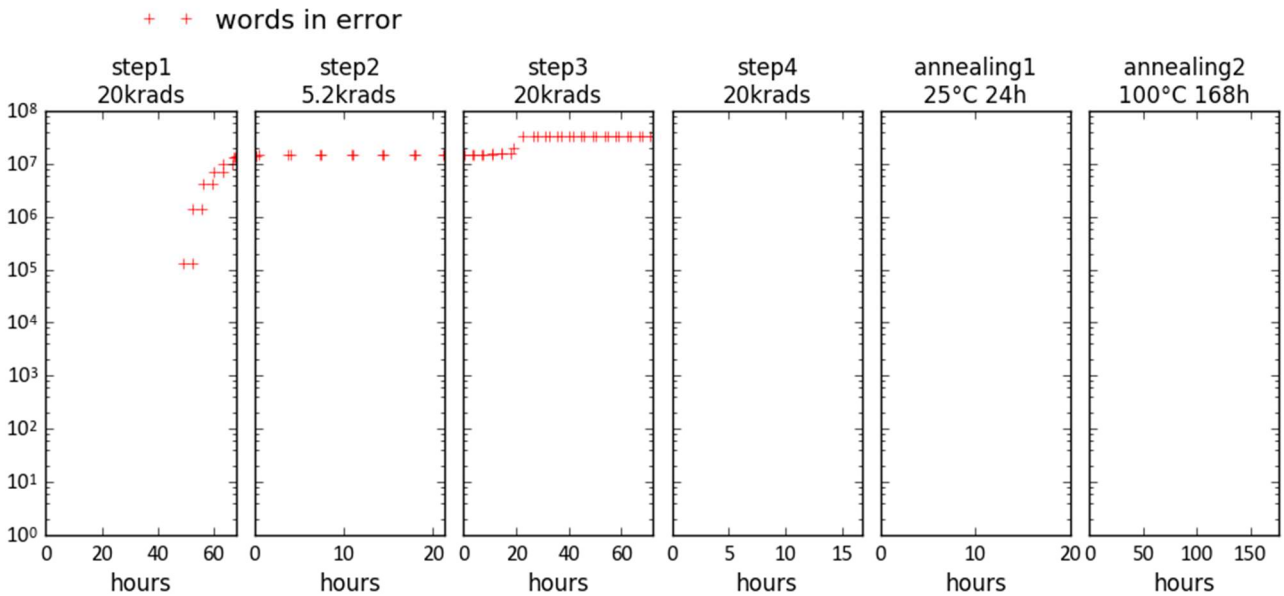
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S29GL01GS10FHI010	D/C 1512	SPANSION INC	
		Ref.:	ATN-RR-468
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12.11.4 DUT2, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut2, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut2, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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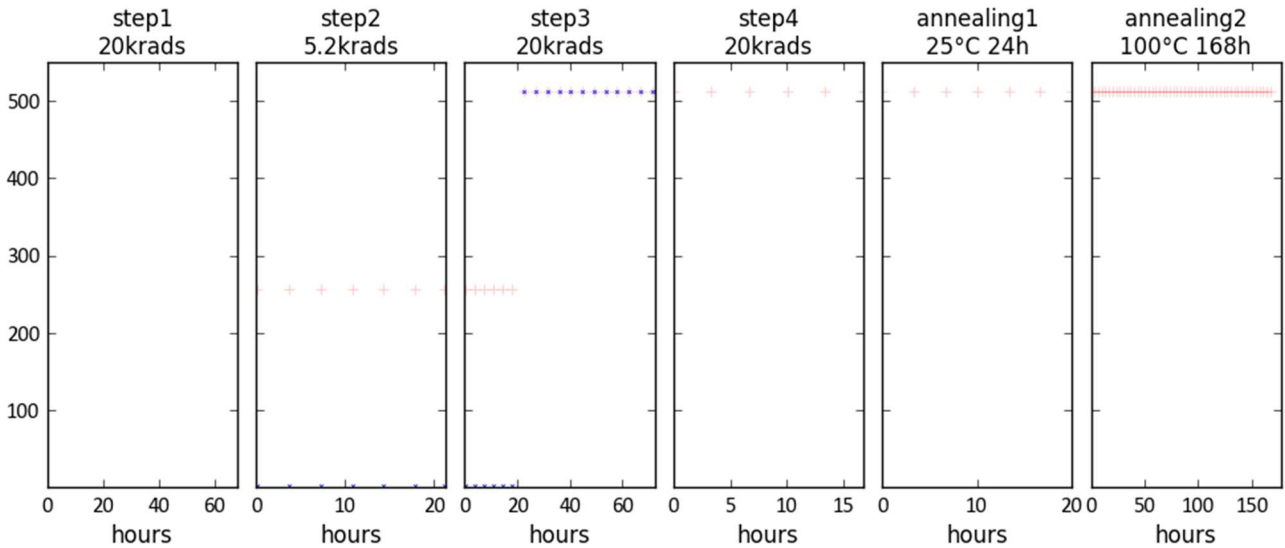
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12.11.5 DUT2, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

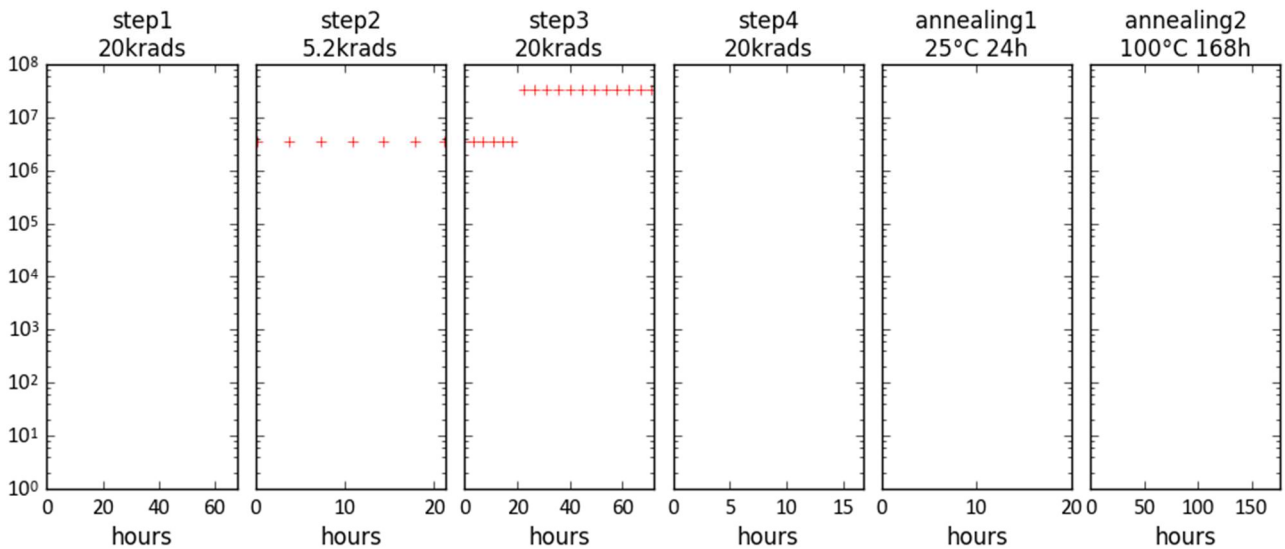
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut2, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error



Dut2, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

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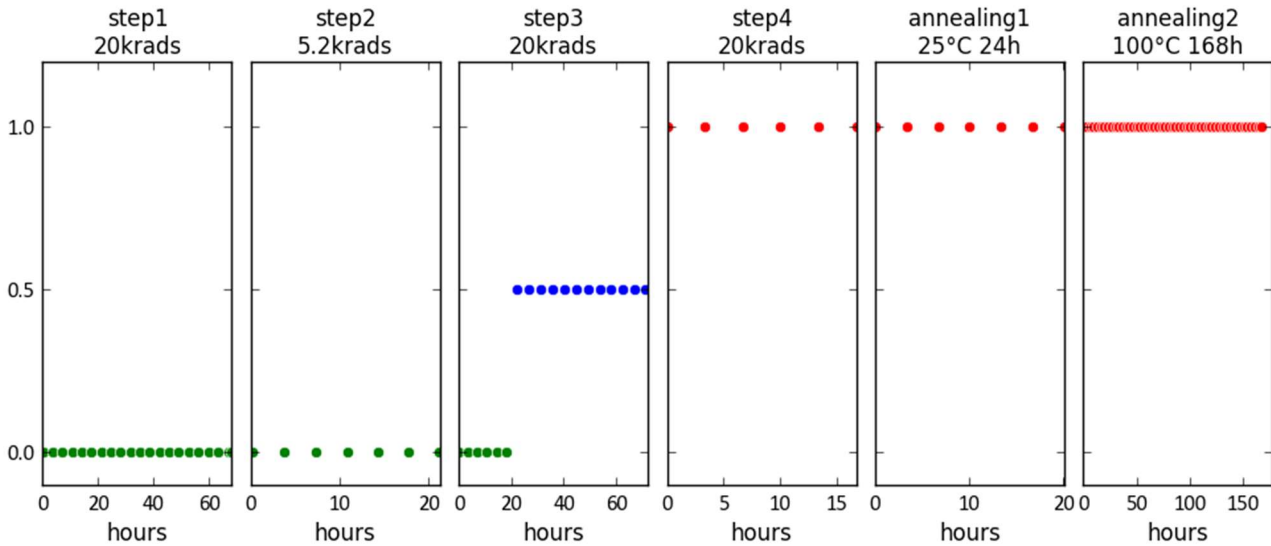
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12.11.6 DUT2, Low Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut2, Low duty cycle, DUT access status

hirex eng.

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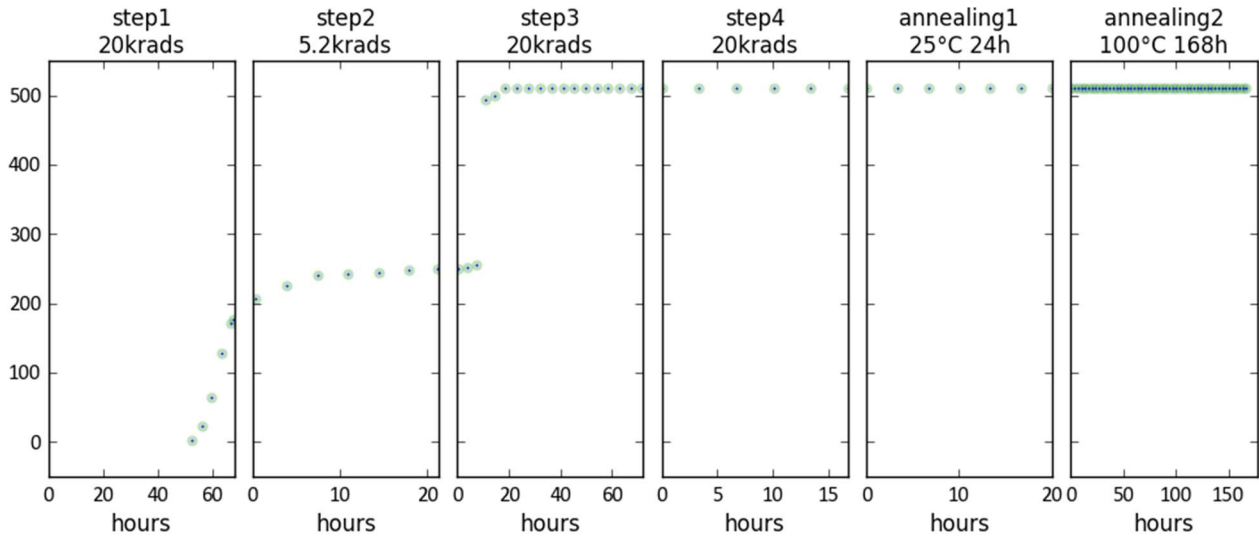
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12.12 DUT3 (Board 1), Low duty cycle

12.12.1 DUT3, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

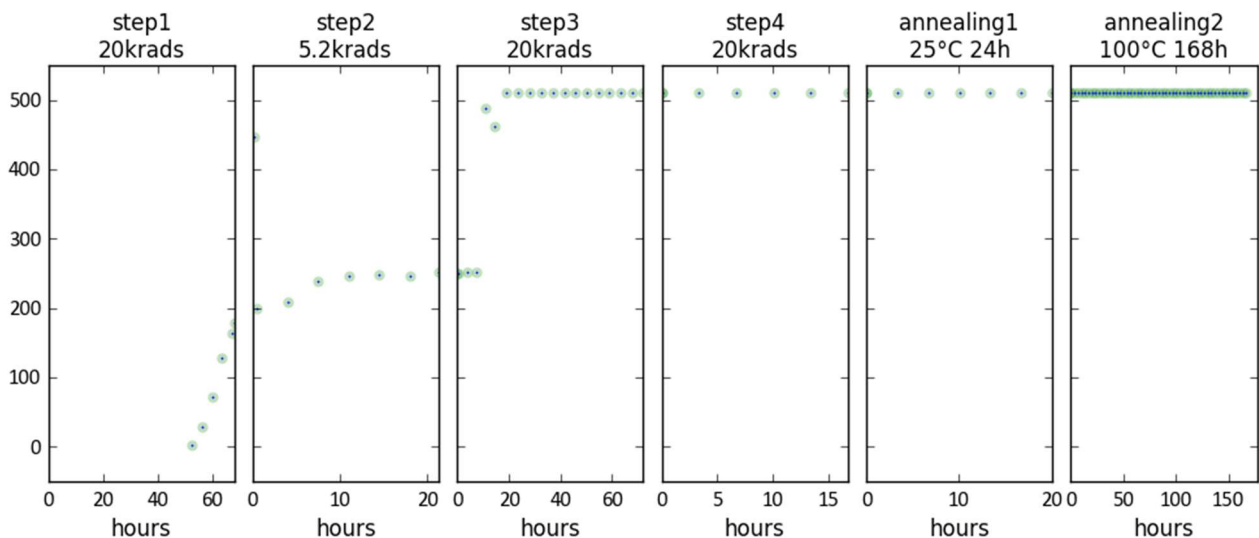


Dut3, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.12.2 DUT3, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



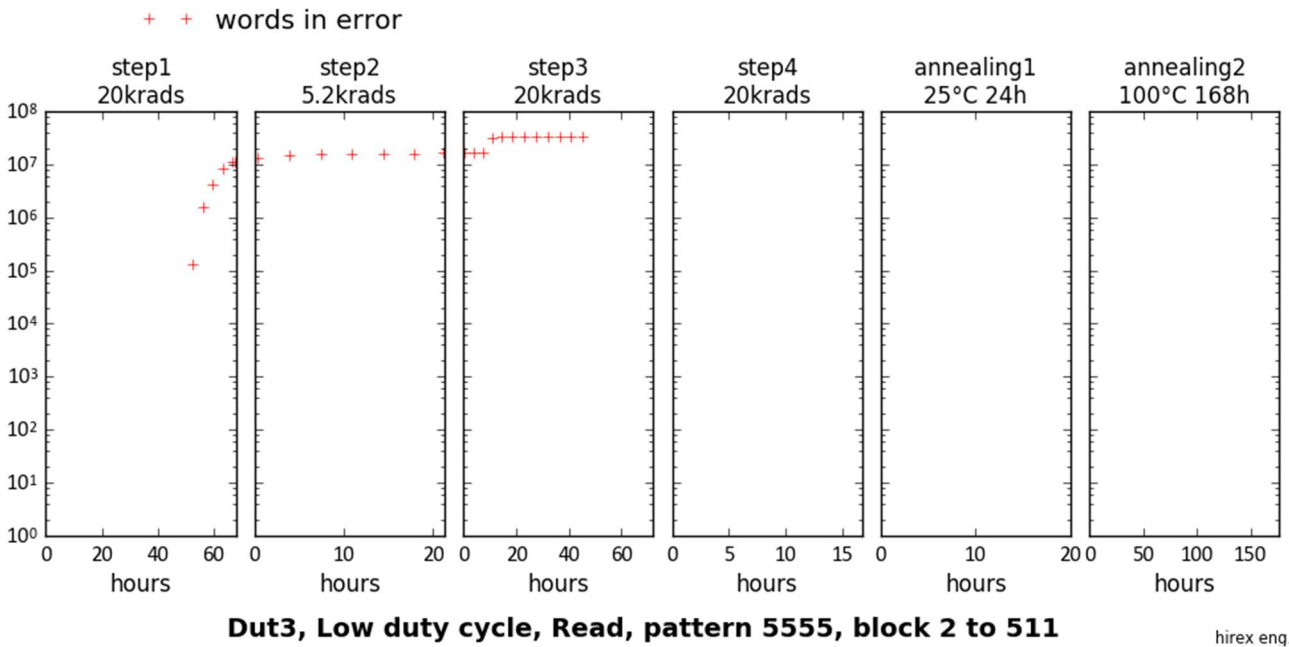
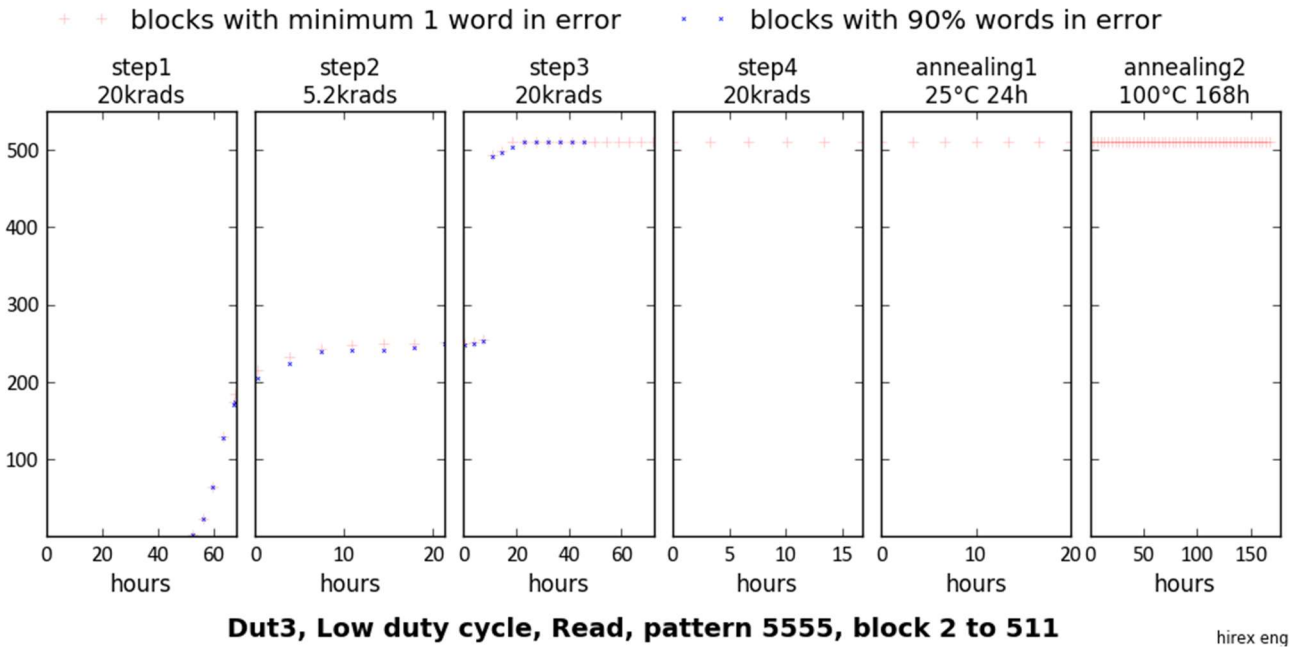
Dut3, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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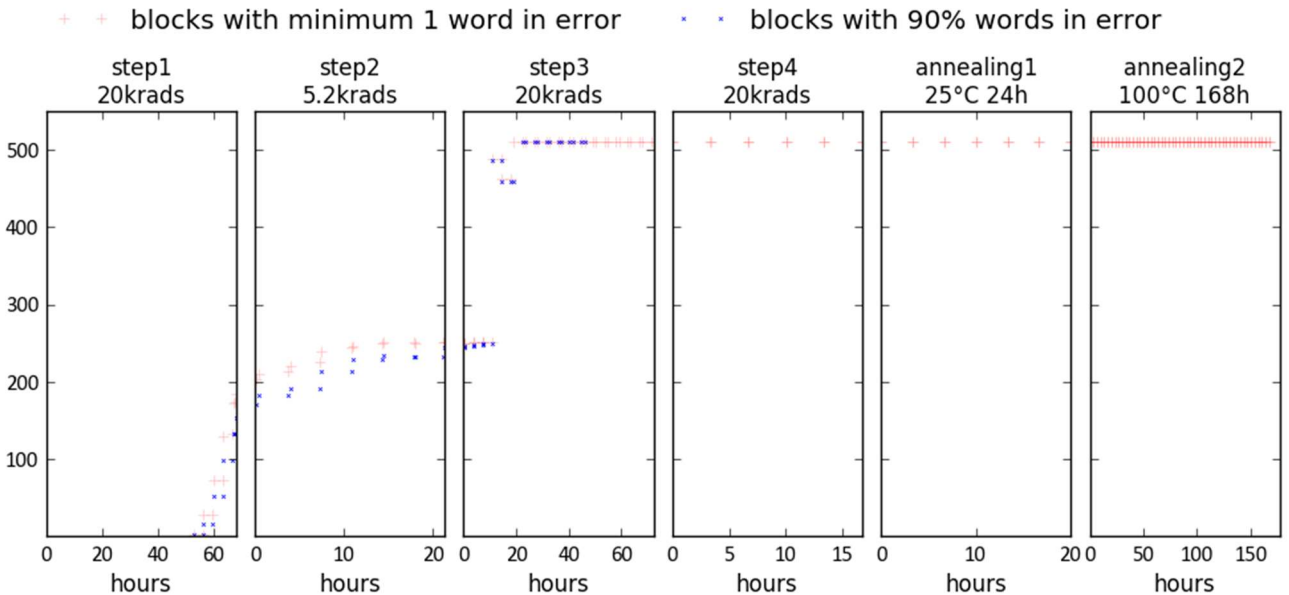
12.12.3 DUT3, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511



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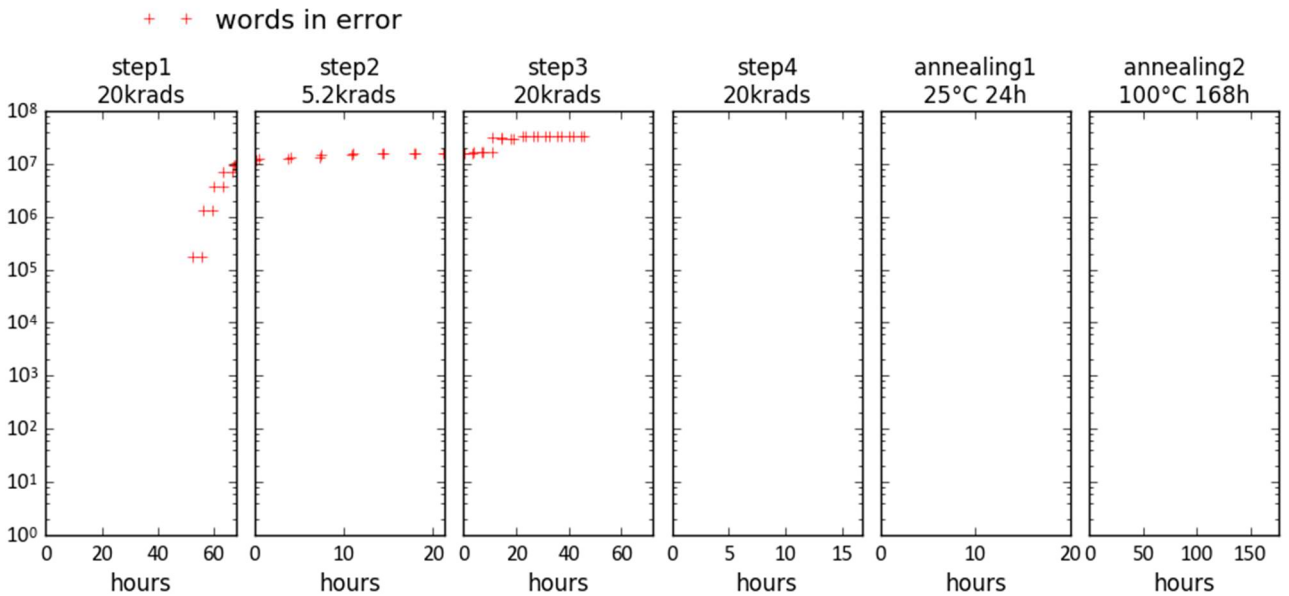
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12.12.4 DUT3, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut3, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut3, Low duty cycle, Read, pattern aaaa, block 2 to 511

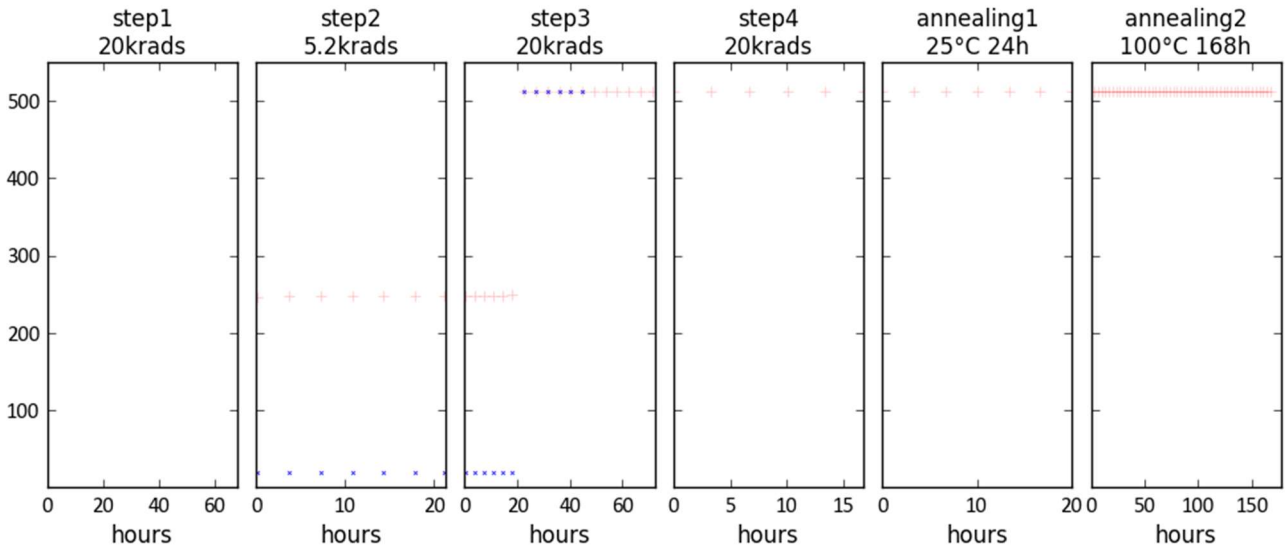
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12.12.5 DUT3, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

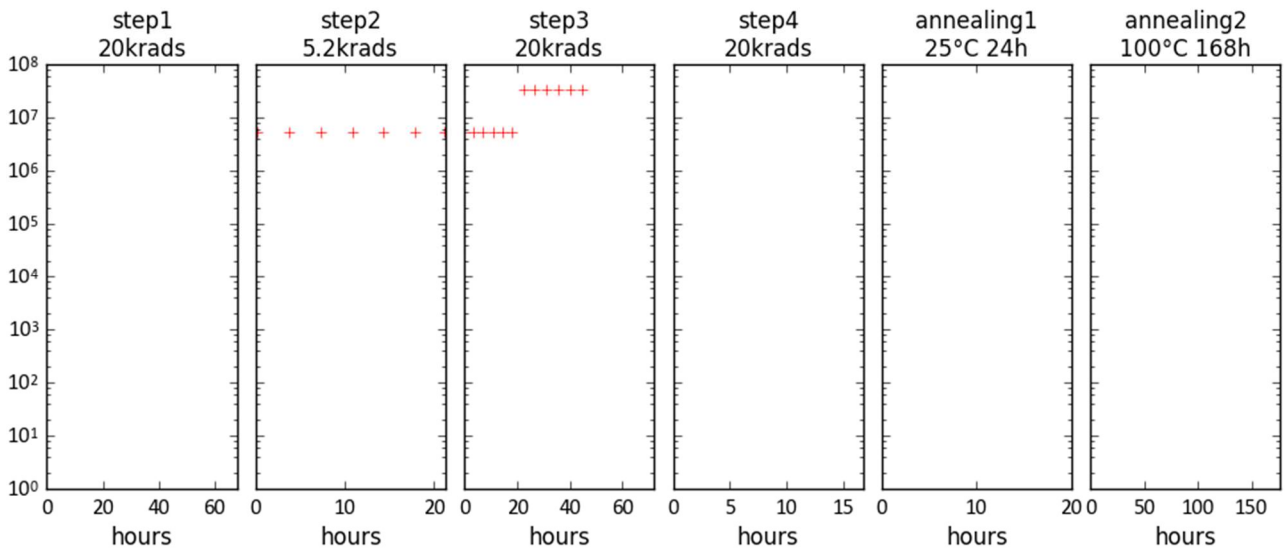
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut3, Low duty cycle, Read, pattern aaaa, block 512 to 1023


hirex eng.

+ + words in error



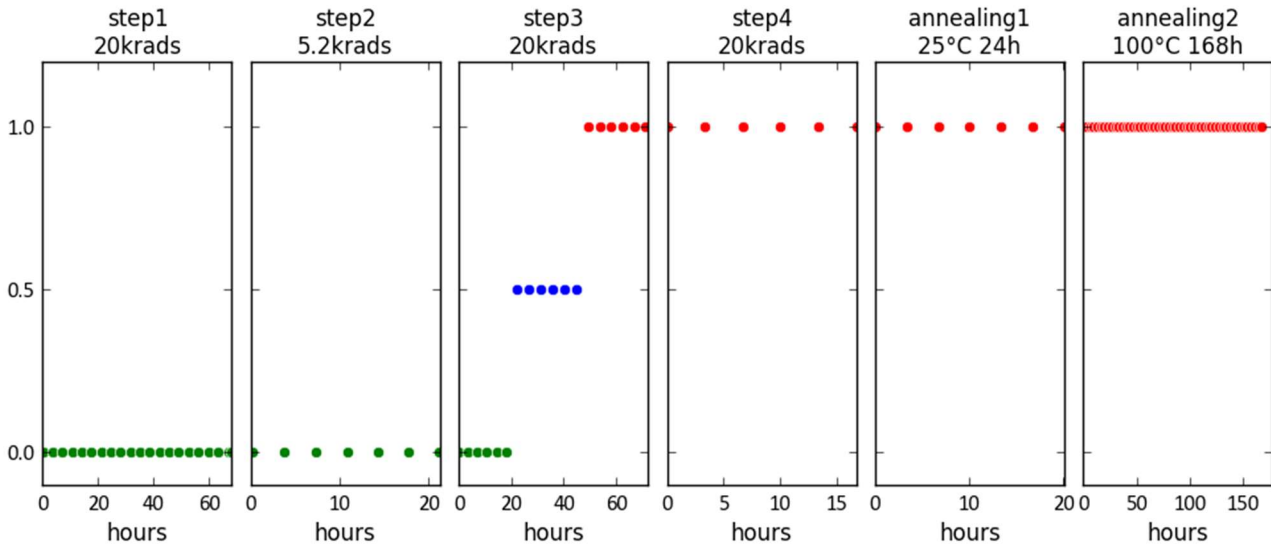
Dut3, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

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12.12.6 DUT3, Low Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut3, Low duty cycle, DUT access status

hirex eng.

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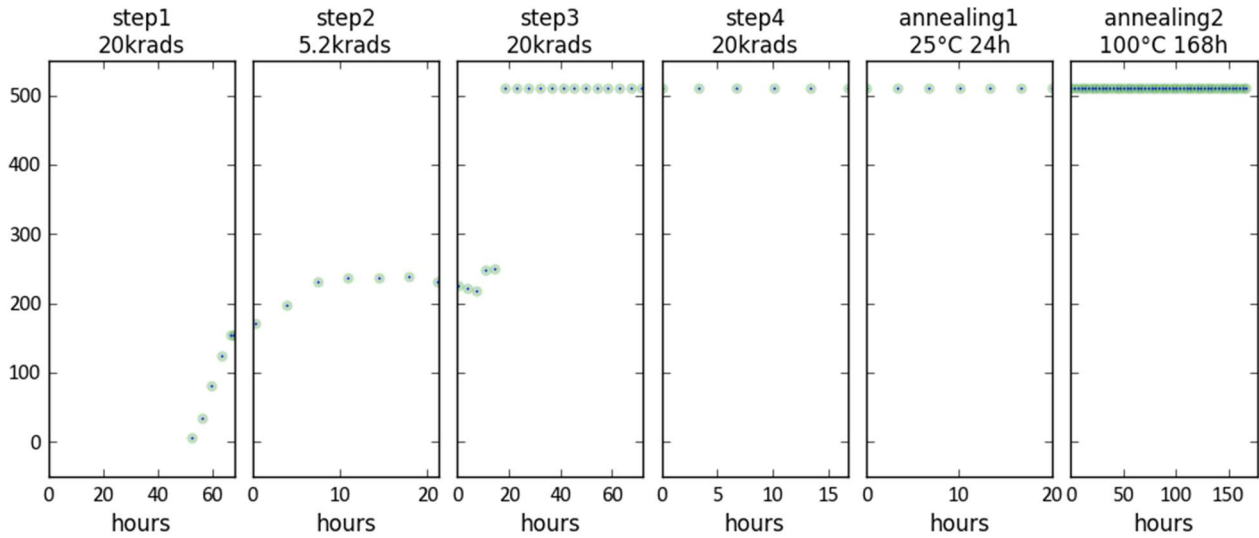
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12.13 DUT4 (Board 1), Low duty cycle

12.13.1 DUT4, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

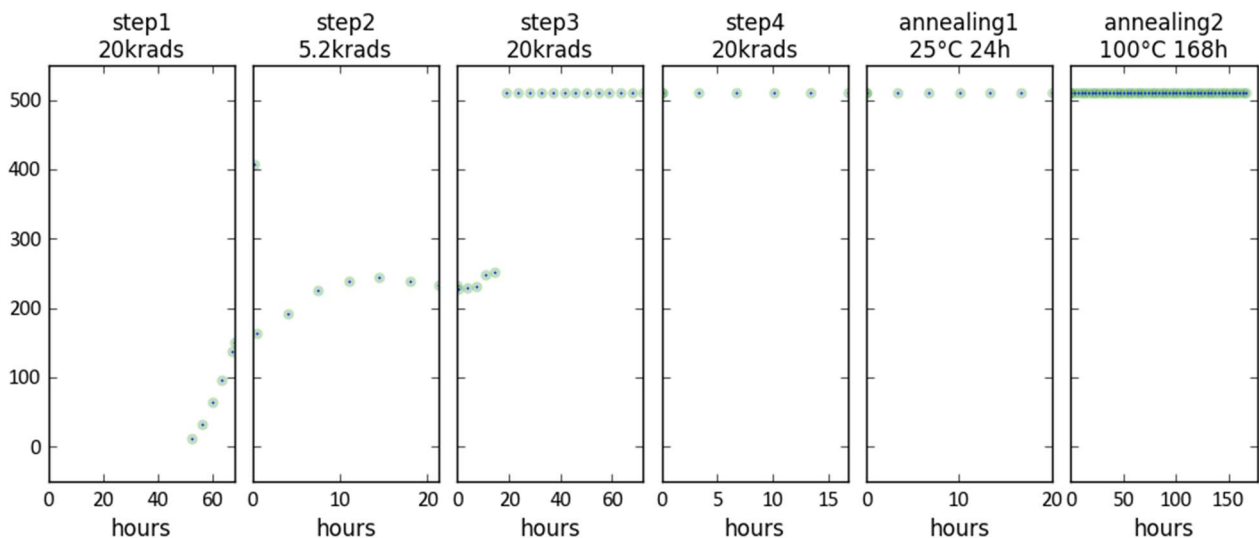


Dut4, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.13.2 DUT4, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



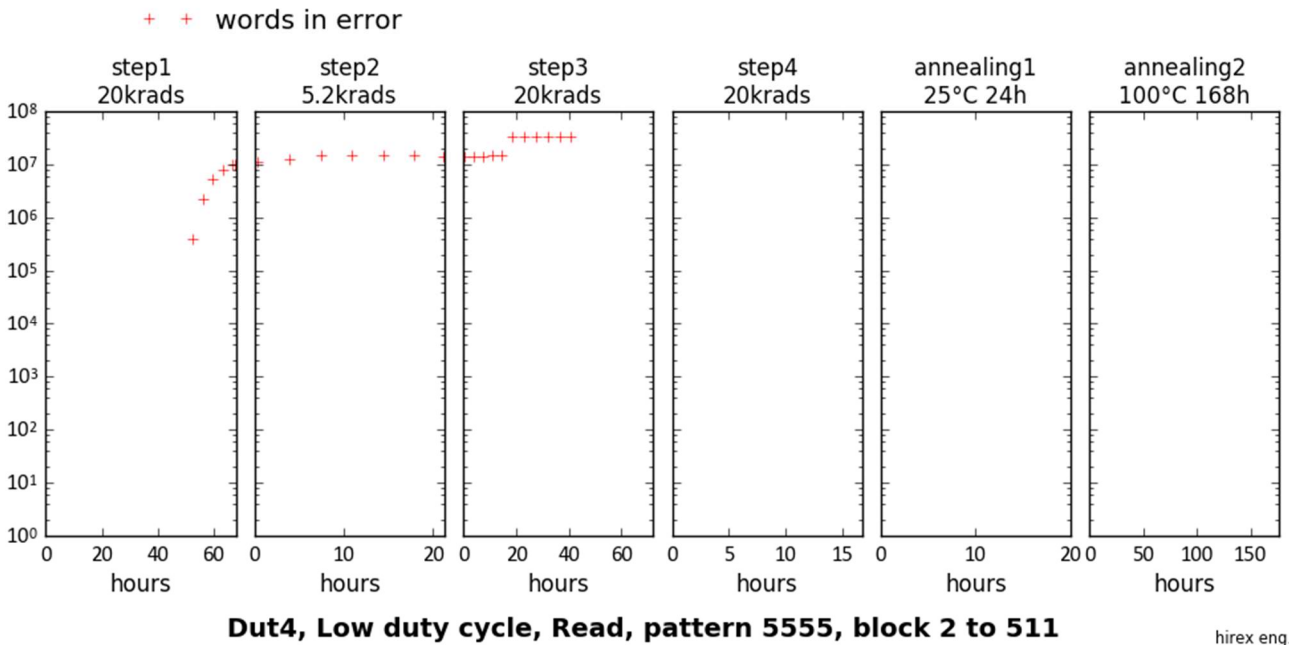
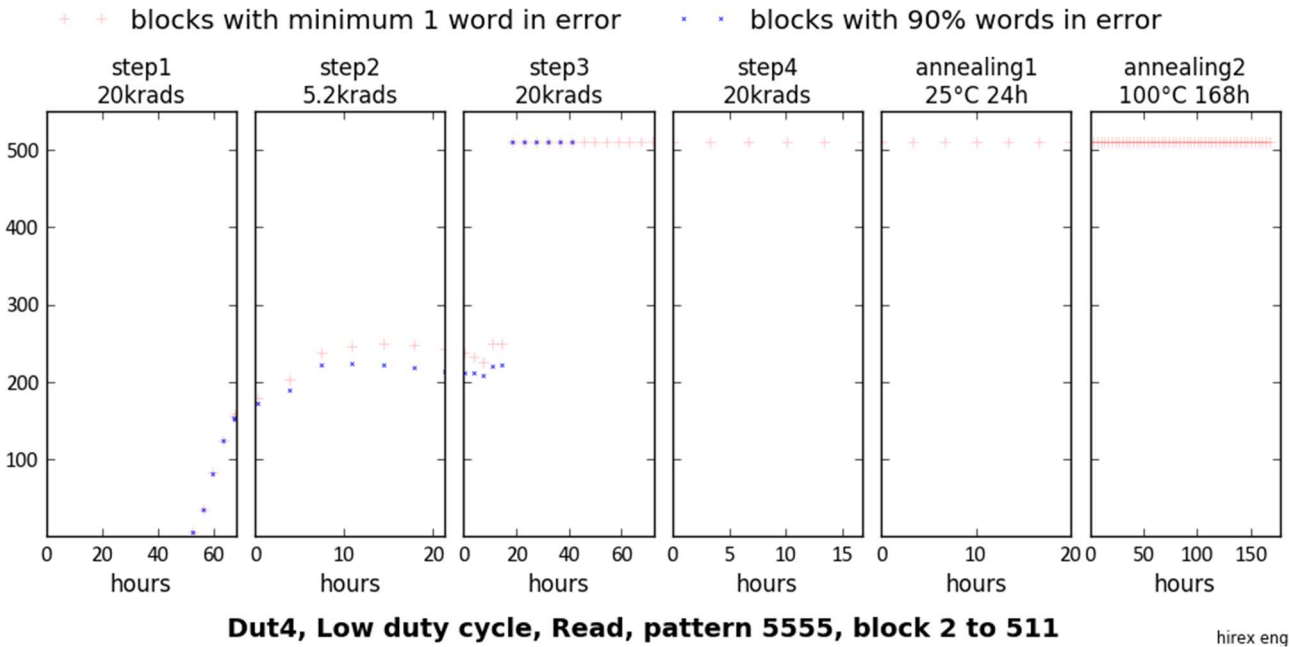
Dut4, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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12.13.3 DUT4, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511



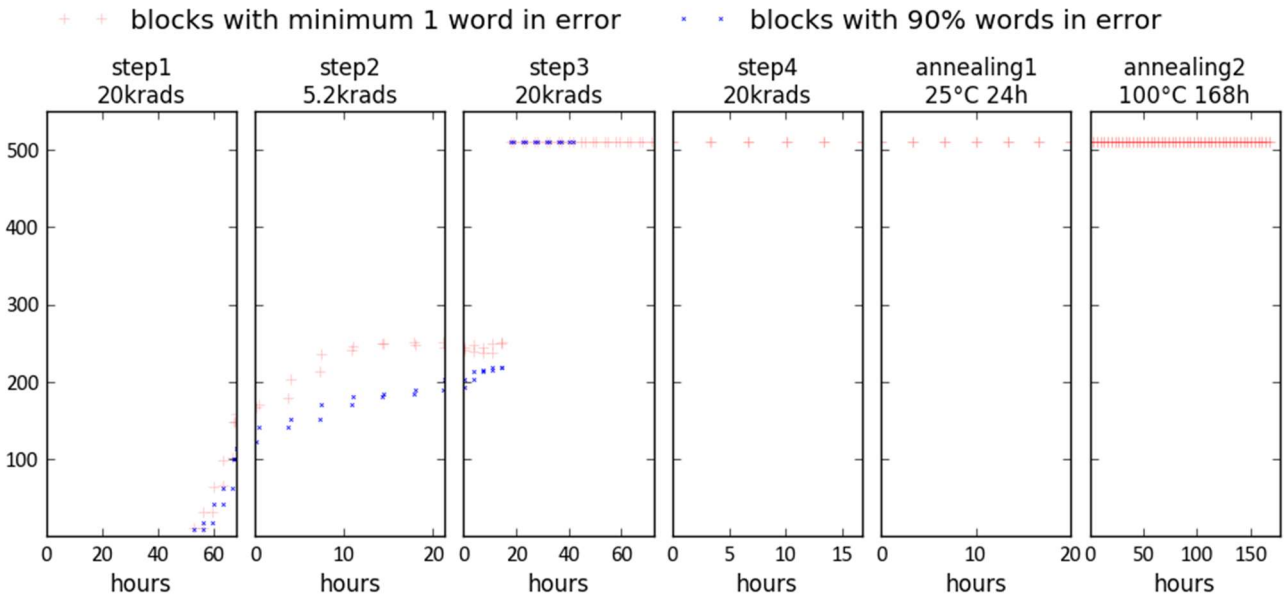
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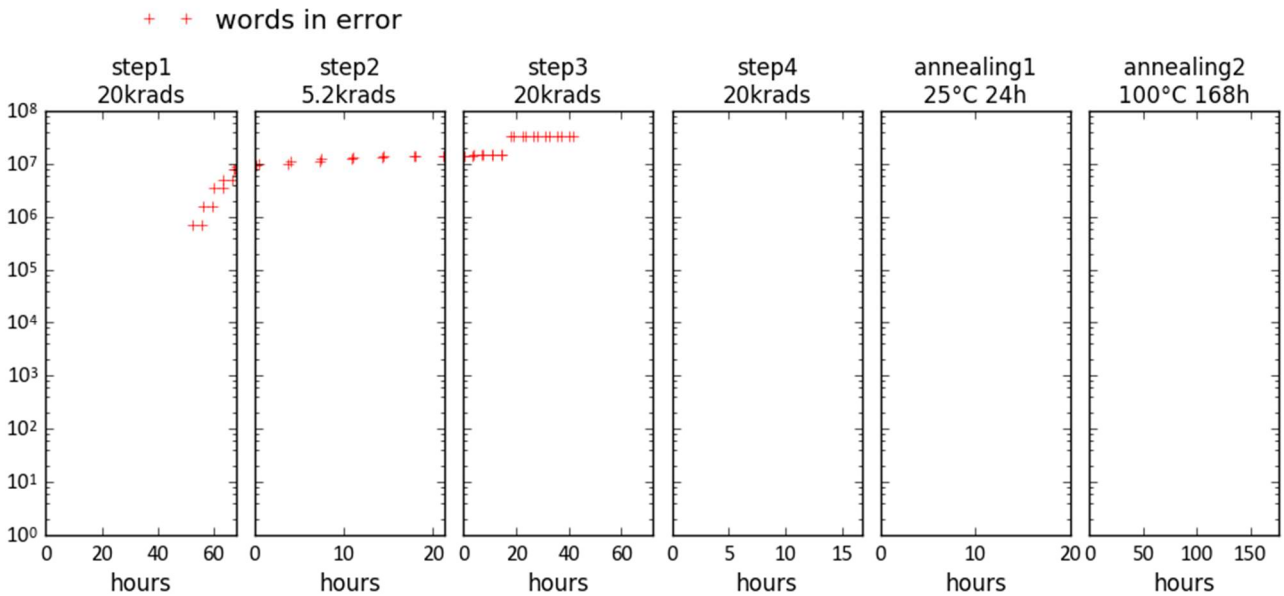
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12.13.4 DUT4, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut4, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut4, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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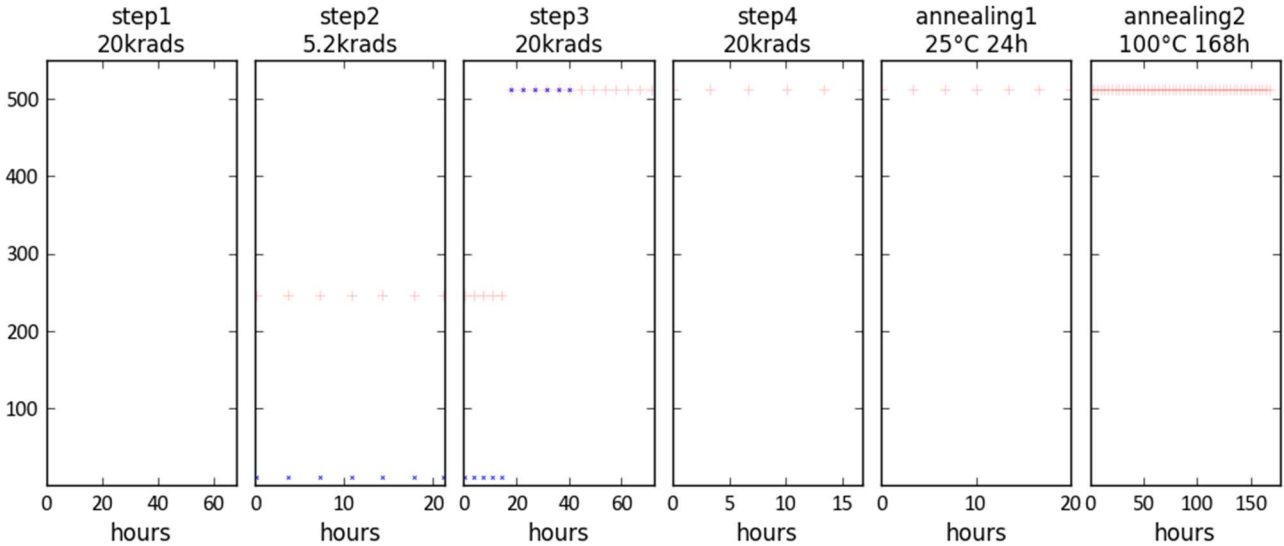
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12.13.5 DUT4, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

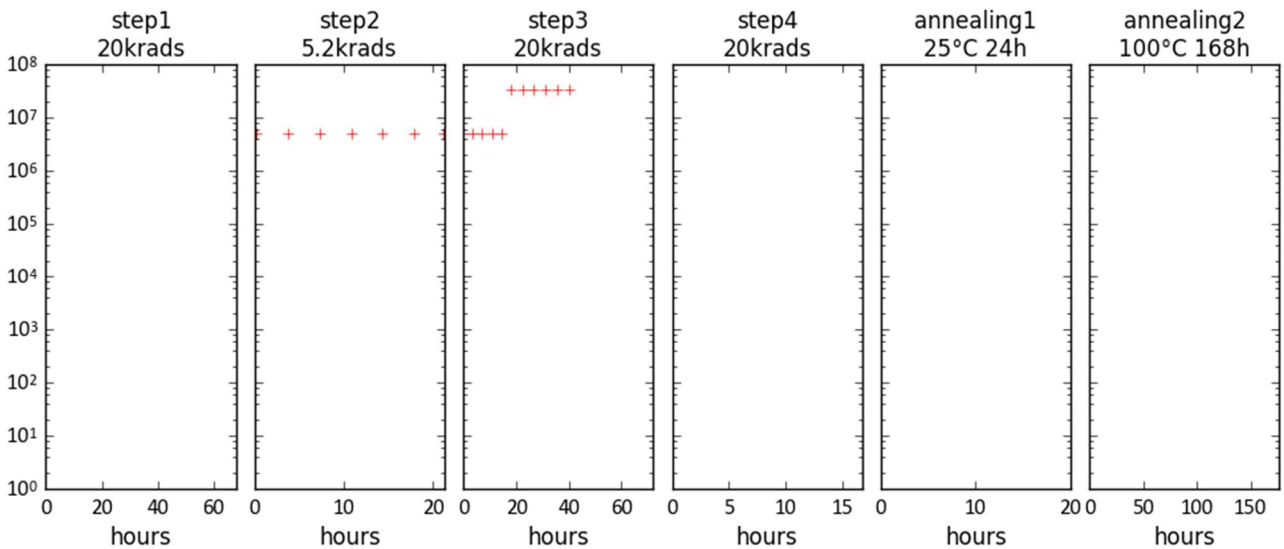
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Dut4, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut4, Low duty cycle, Read, pattern aaaa, block 512 to 1023

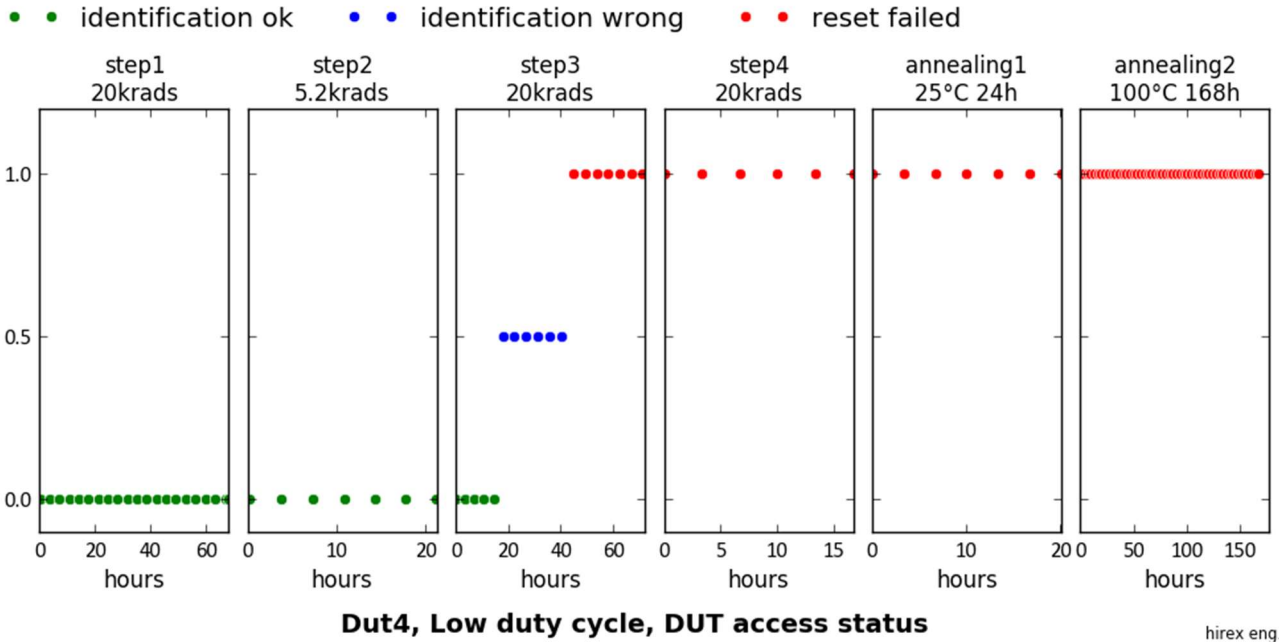
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12.13.6 DUT4, Low Duty Cycle, DUT access status



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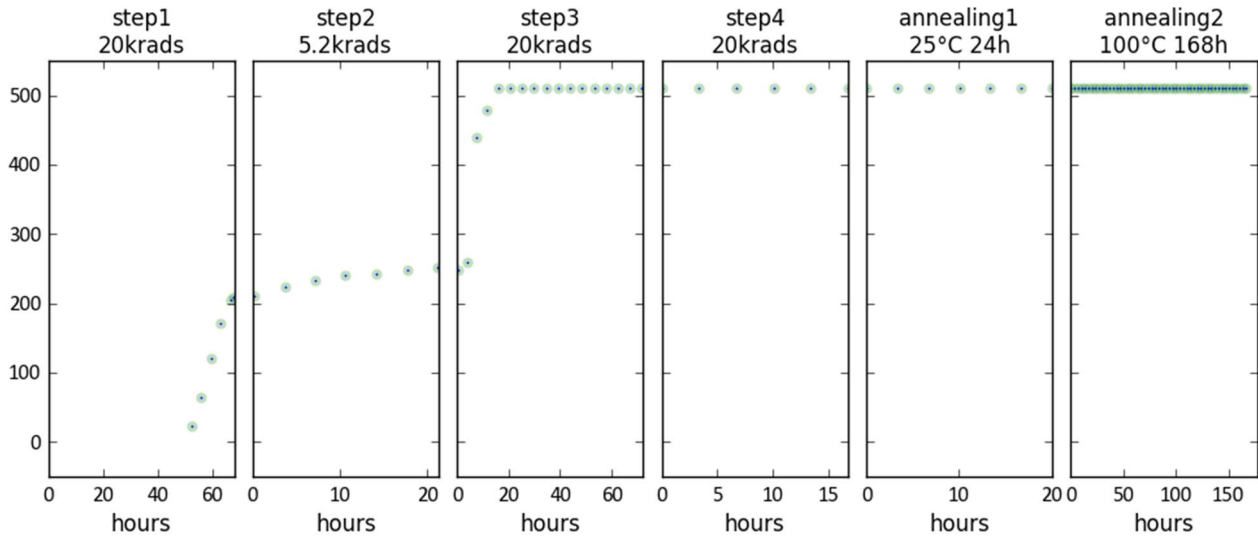
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12.14 DUT0 (Board 2), Low duty cycle

12.14.1 DUT0, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

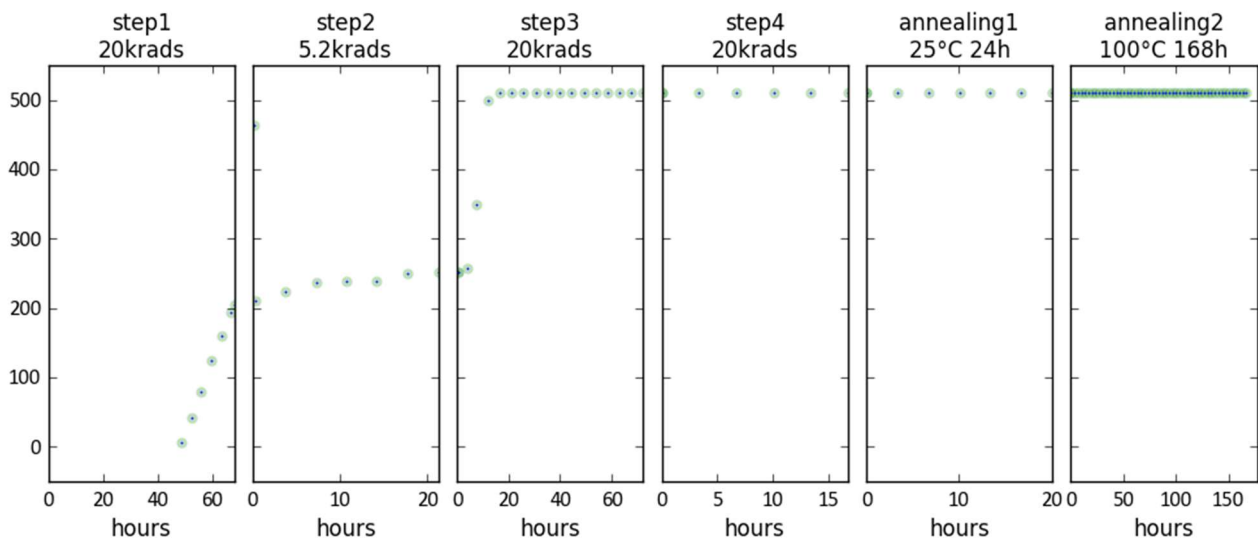


Dut0, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.14.2 DUT0, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut0, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

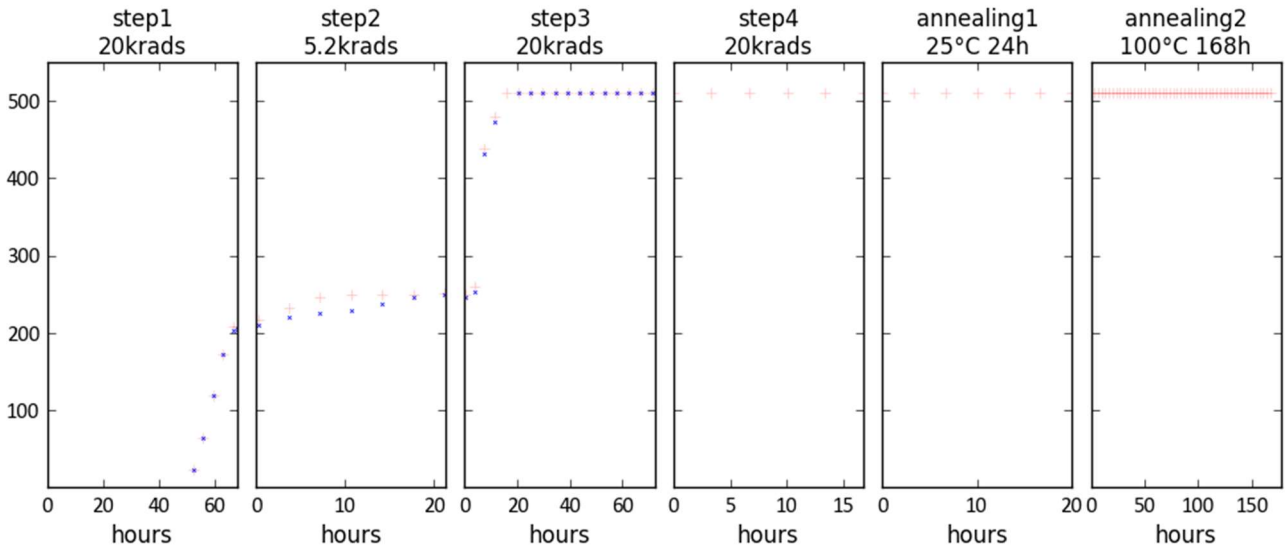
hirex eng.

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12.14.3 DUT0, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

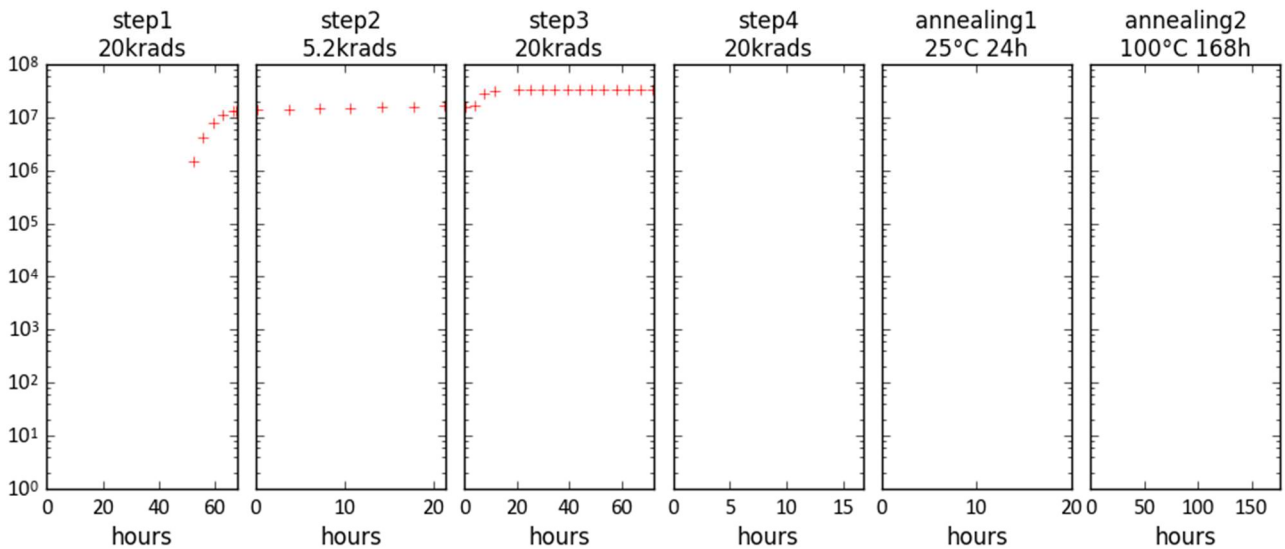
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Dut0, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



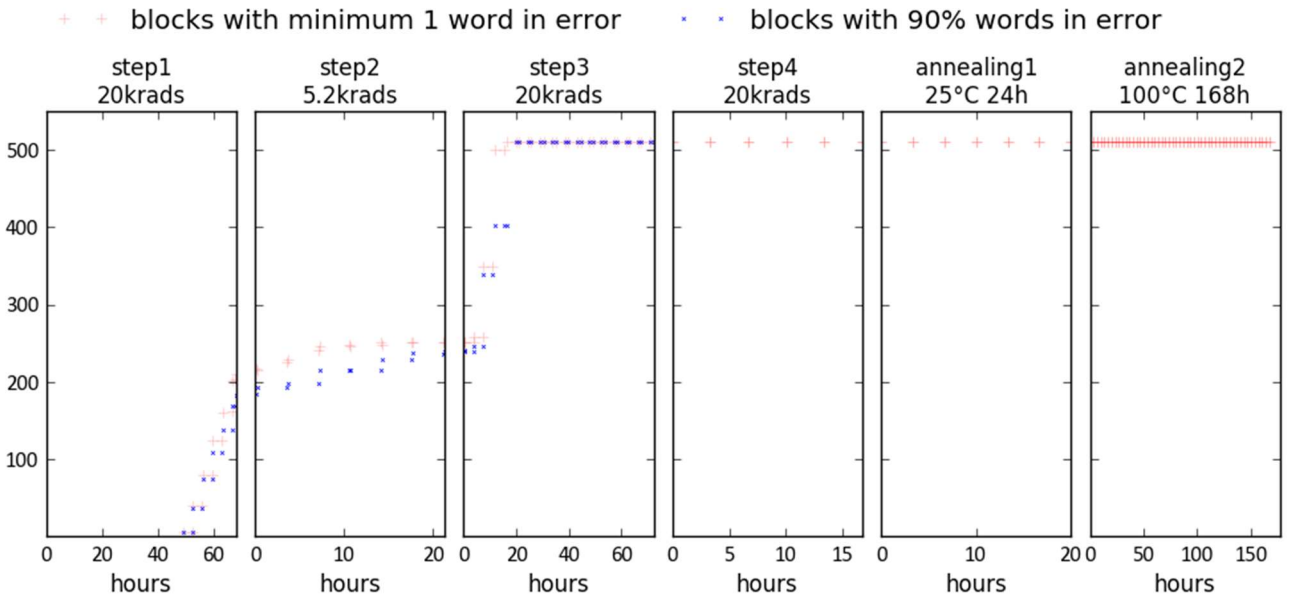
Dut0, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.



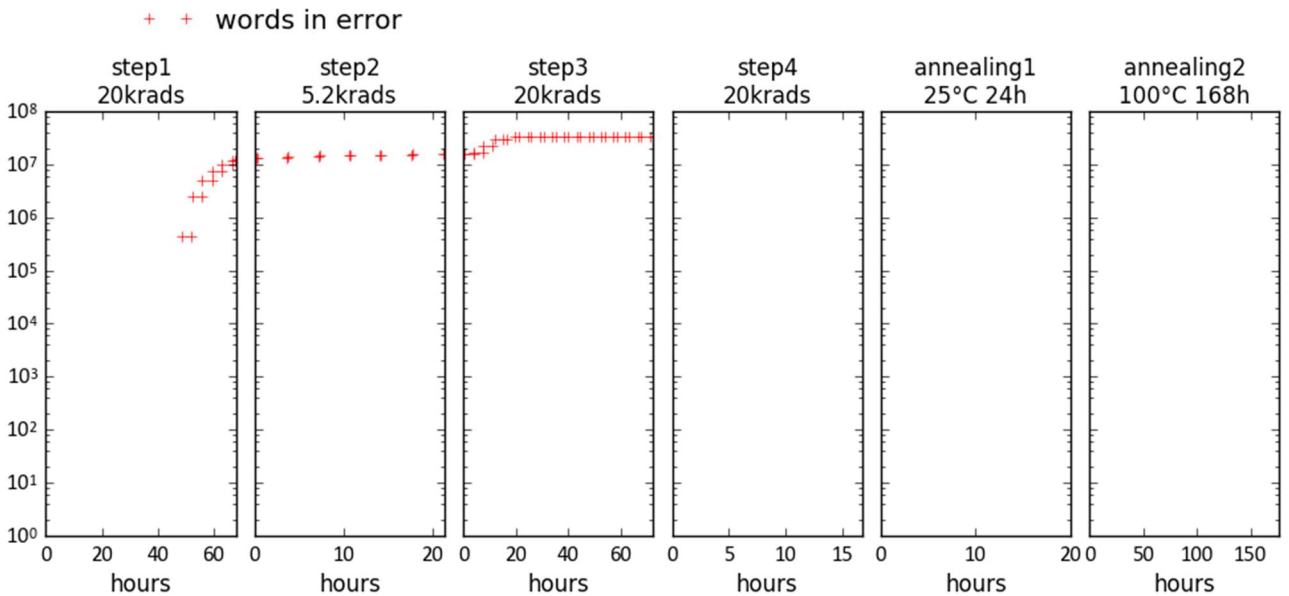
Total Ionizing Dose Radiation Test S29GL01GS10FHI010 D/C 1512		ALTER TECHNOLOGY	
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12.14.4 DUT0, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut0, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut0, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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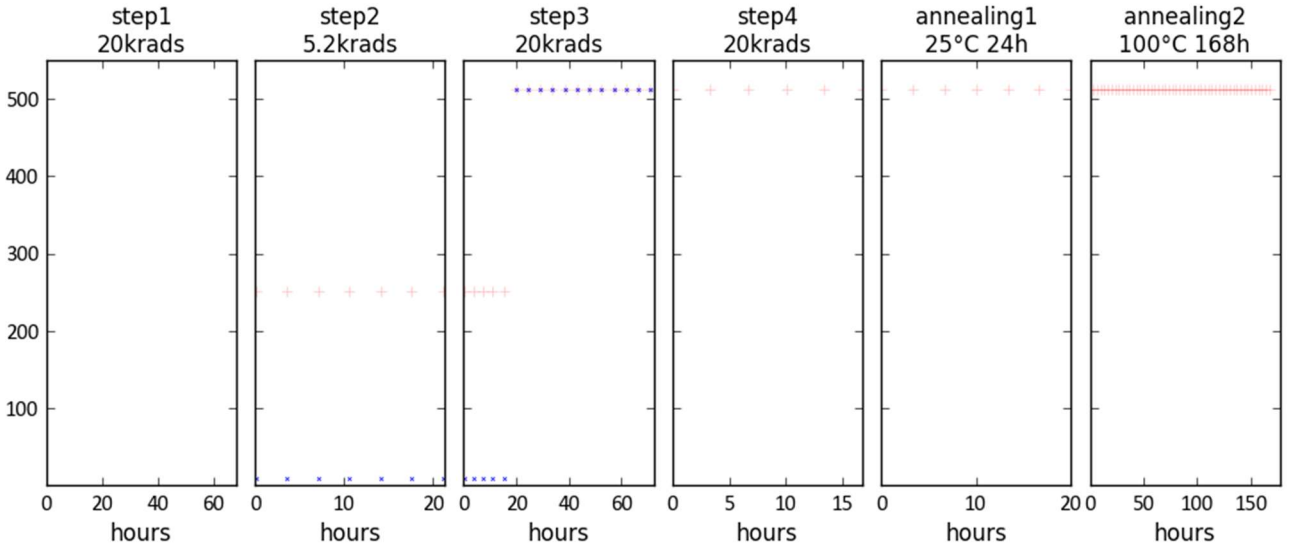
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12.14.5 DUT0, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

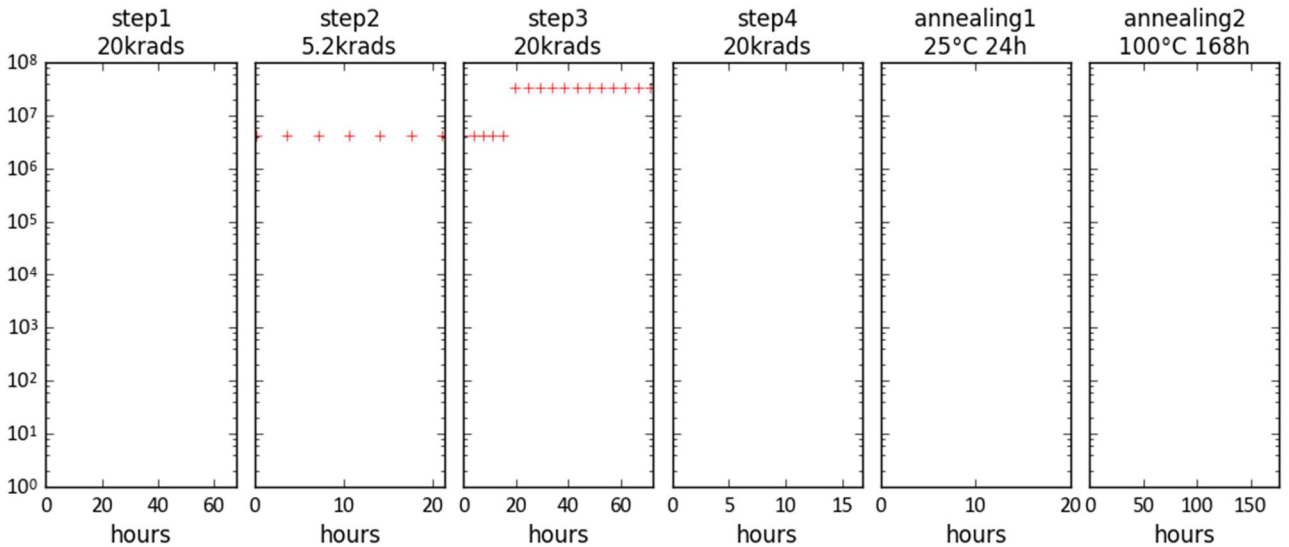
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut0, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

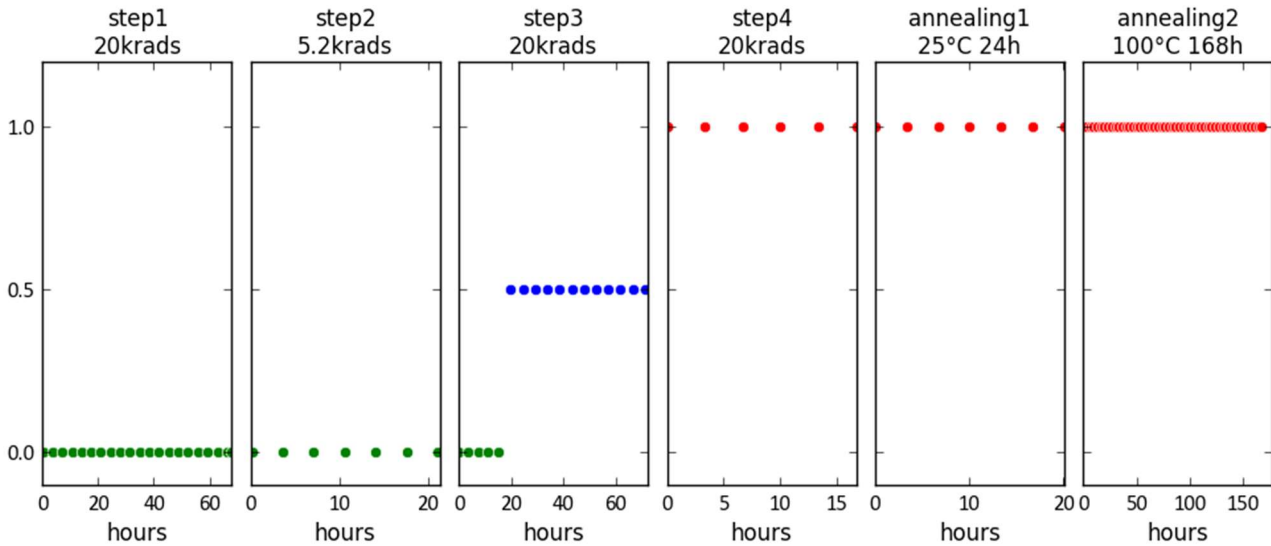
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12.14.6 DUT0, Low Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut0, Low duty cycle, DUT access status

hirex eng.

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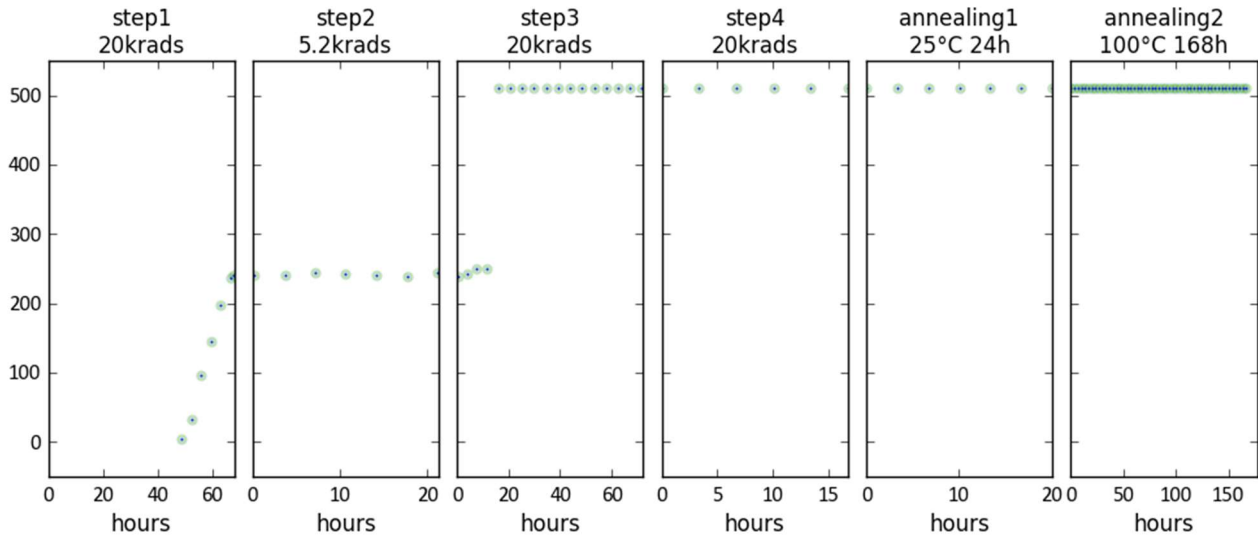
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12.15 DUT1 (Board 2), Low duty cycle

12.15.1 DUT1, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

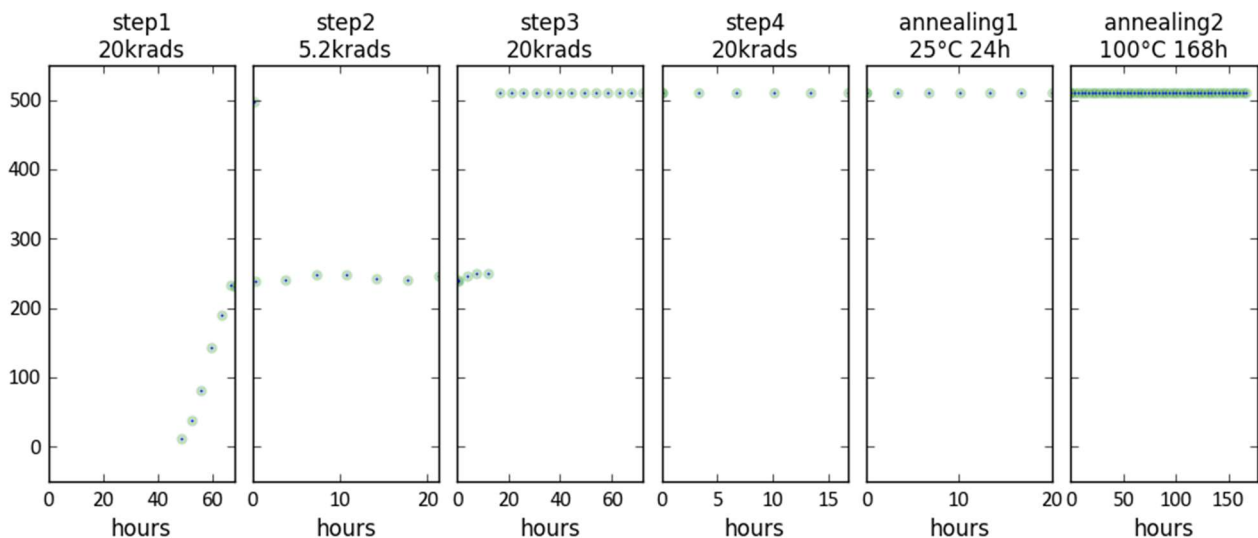


Dut1, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.15.2 DUT1, Low Duty Cycle, Erase/Program, pattern = 0xA AAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



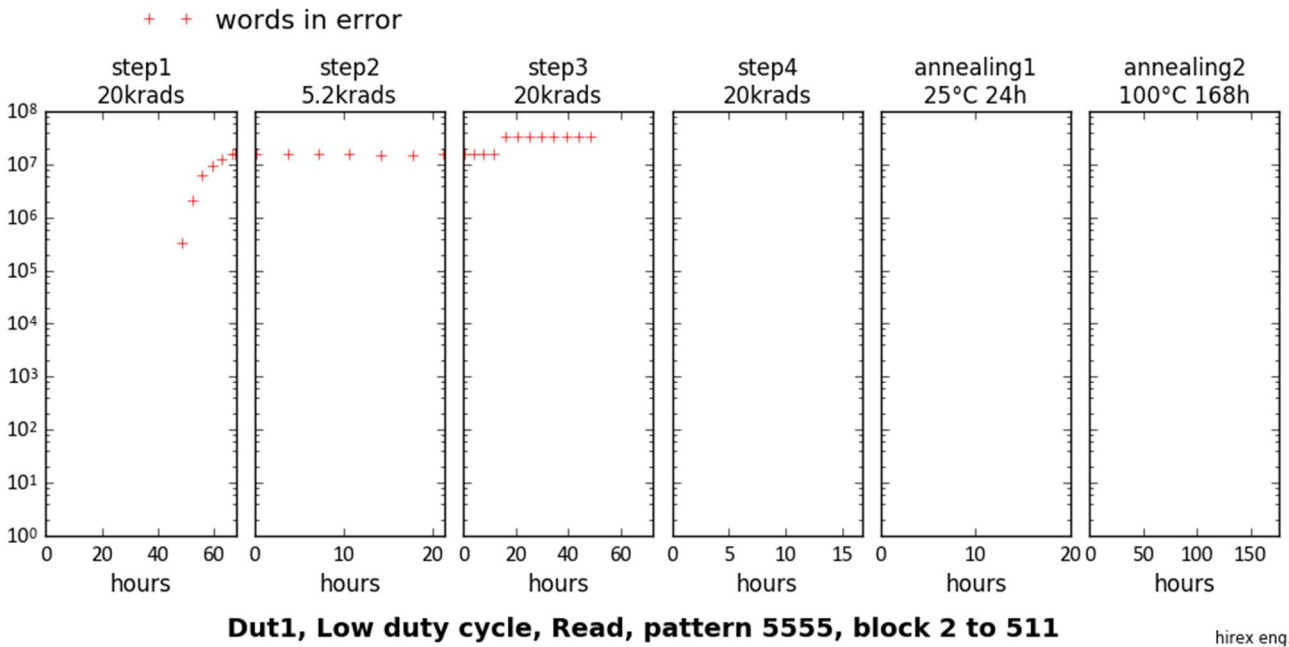
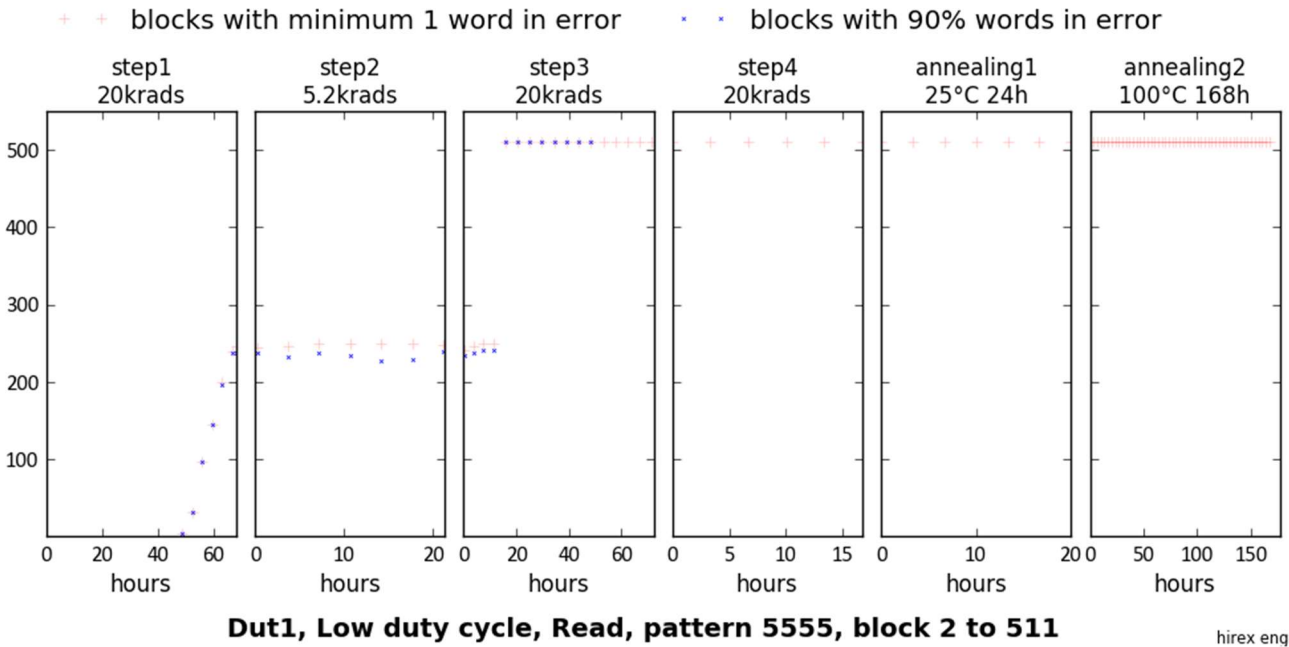
Dut1, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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12.15.3 DUT1, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

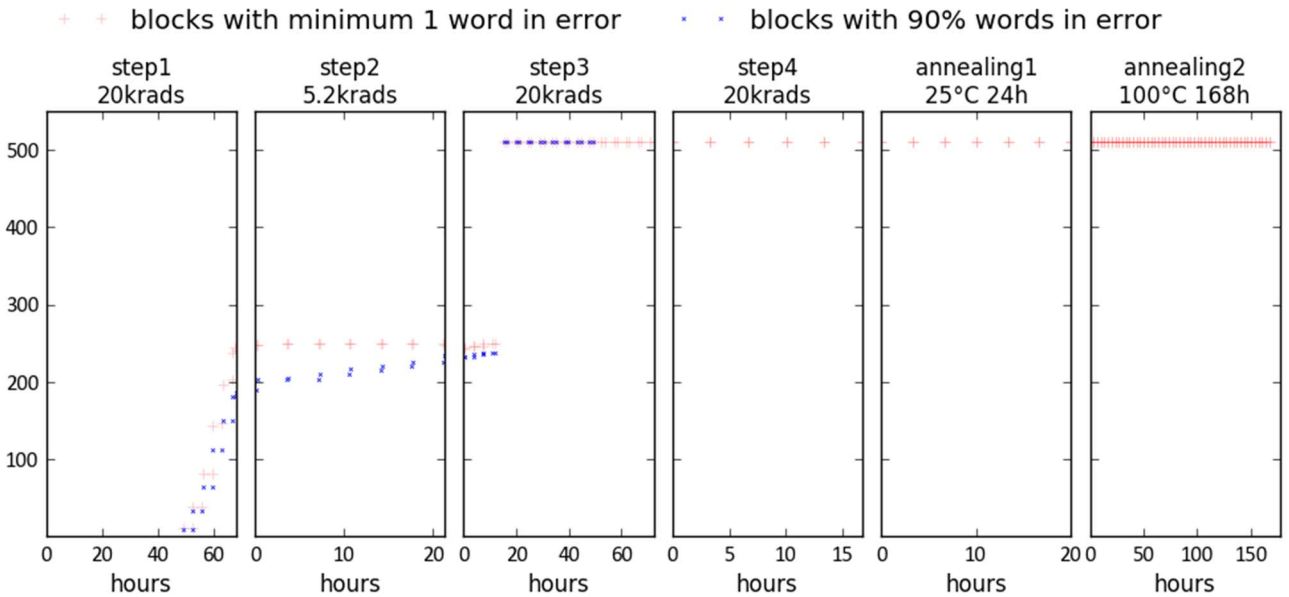


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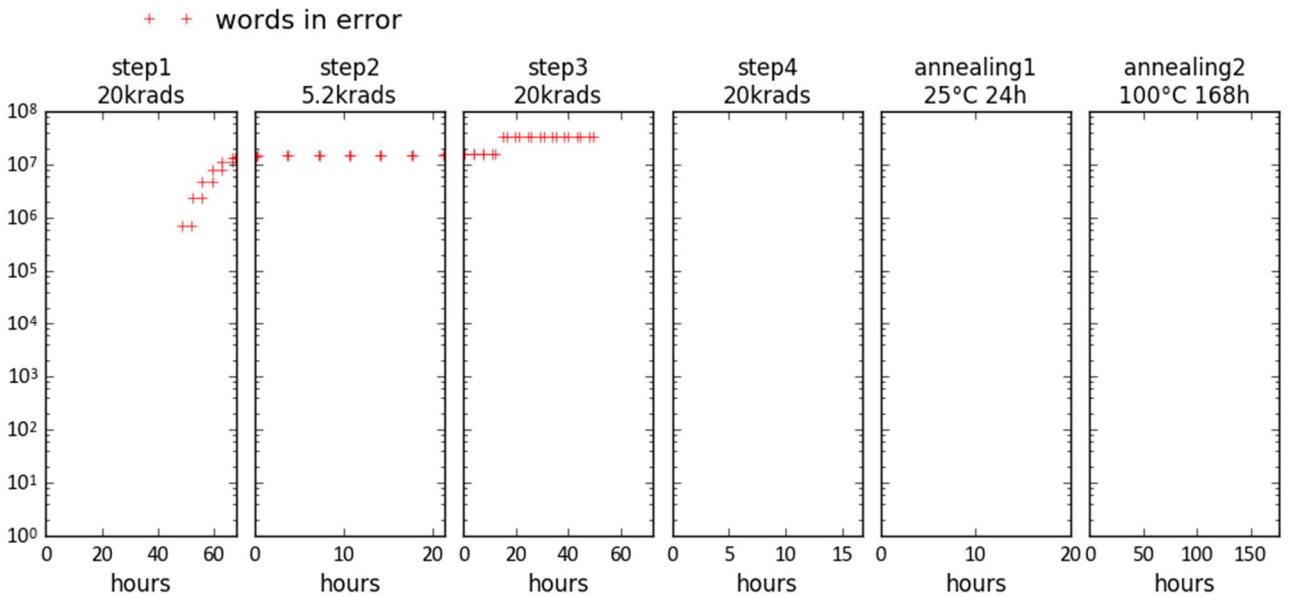


12.15.4 DUT1, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut1, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.



Dut1, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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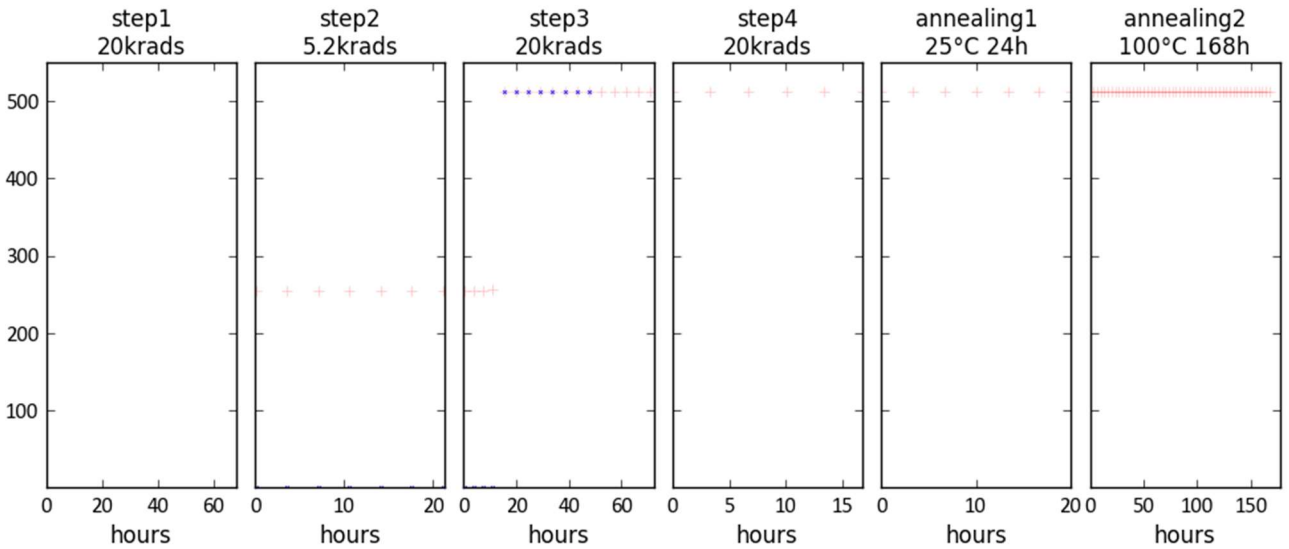
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12.15.5 DUT1, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

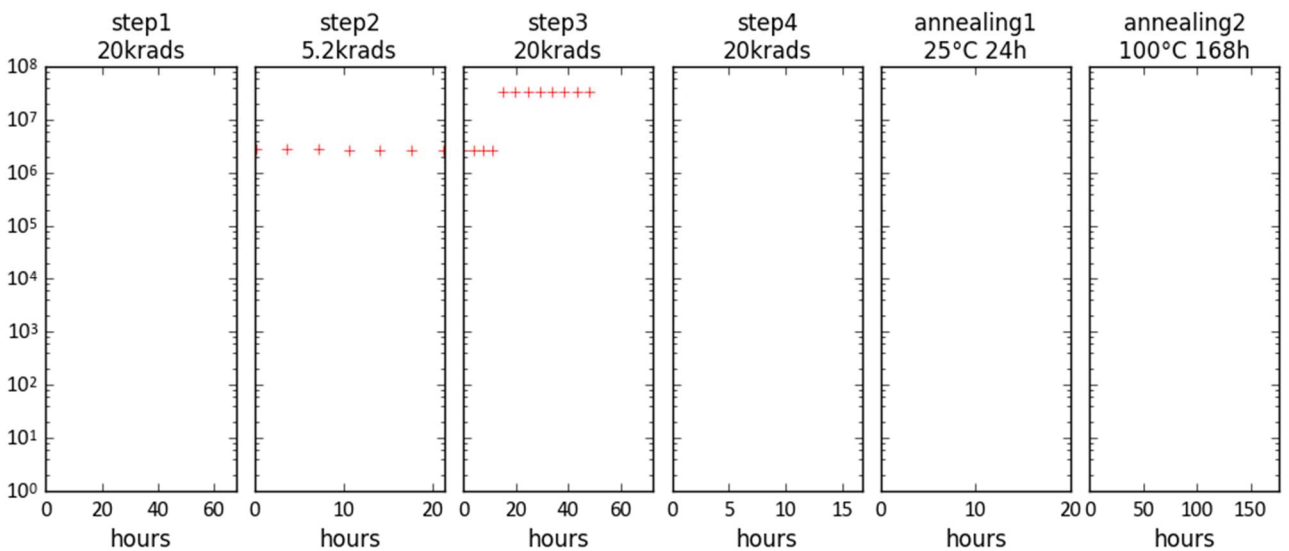
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut1, Low duty cycle, Read, pattern aaaa, block 512 to 1023

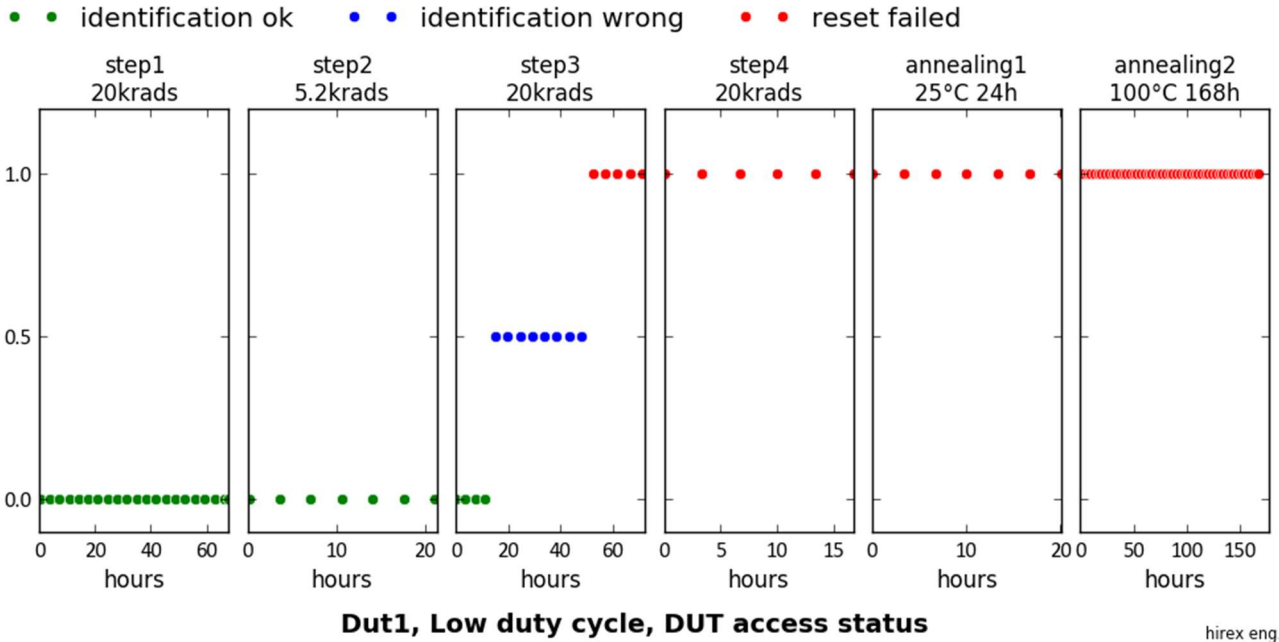
hirex eng.

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12.15.6 DUT1, Low Duty Cycle, DUT access status



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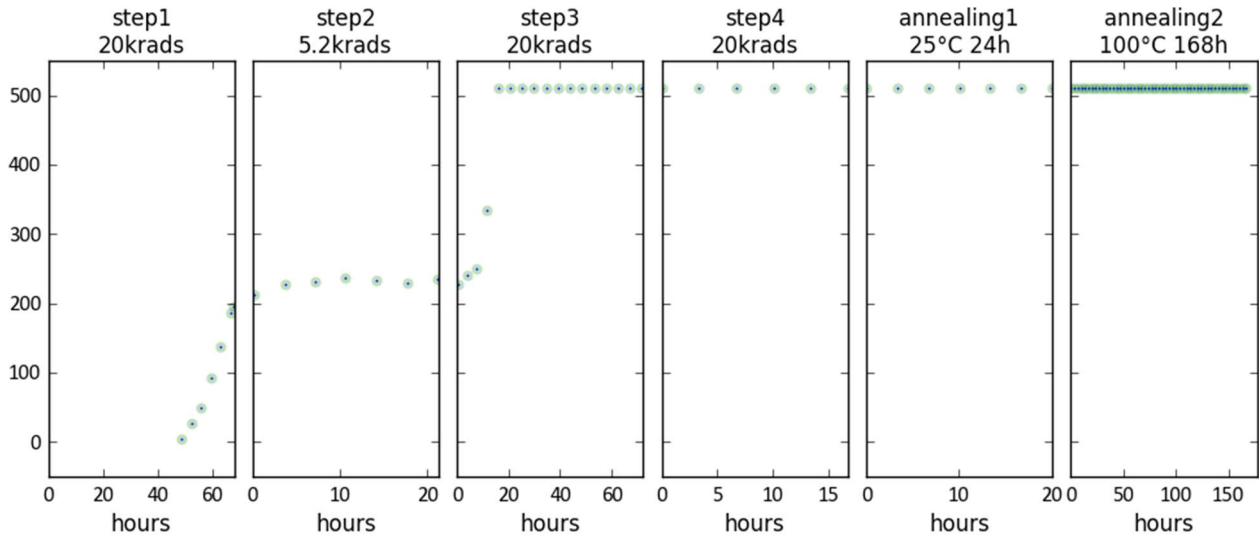
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12.16 DUT2 (Board 2), Low duty cycle

12.16.1 DUT2, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

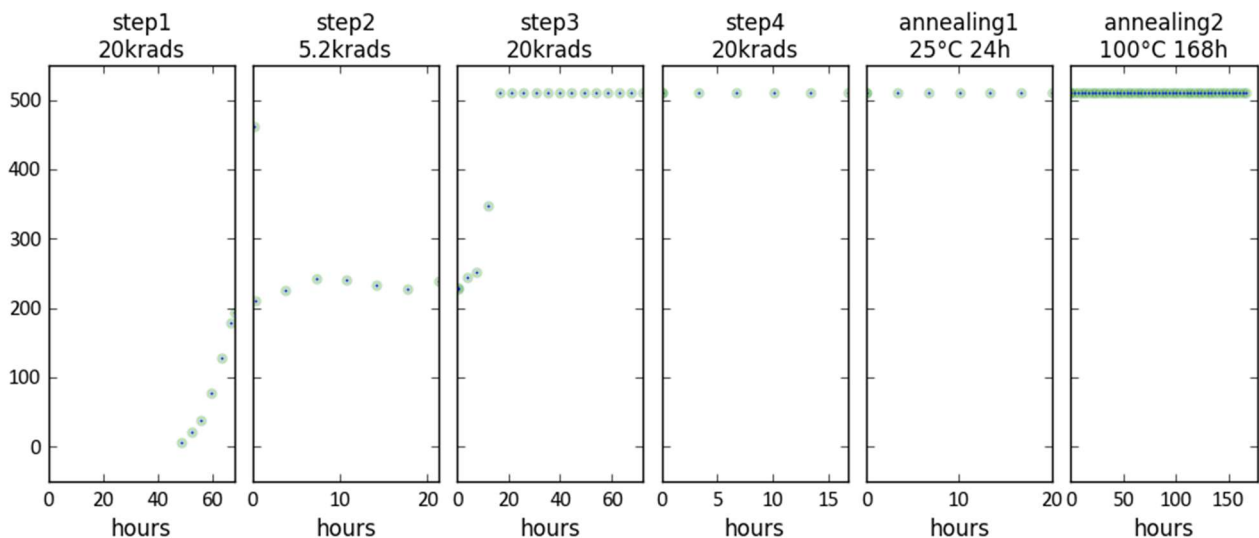


Dut2, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.16.2 DUT2, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut2, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

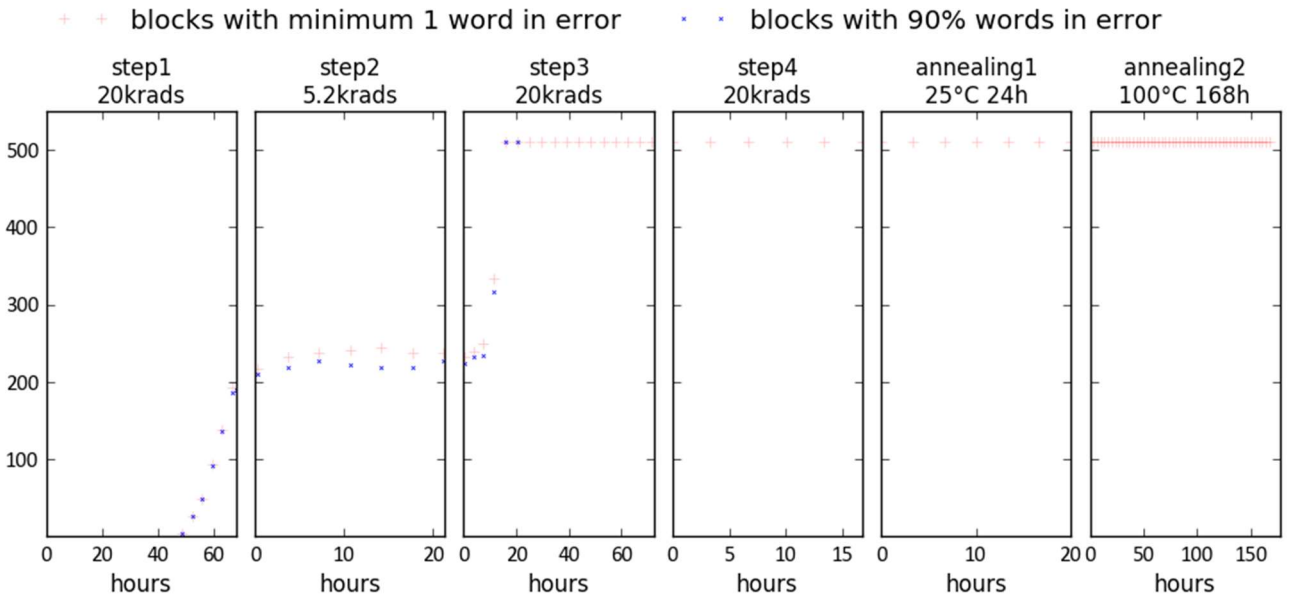
hirex eng.

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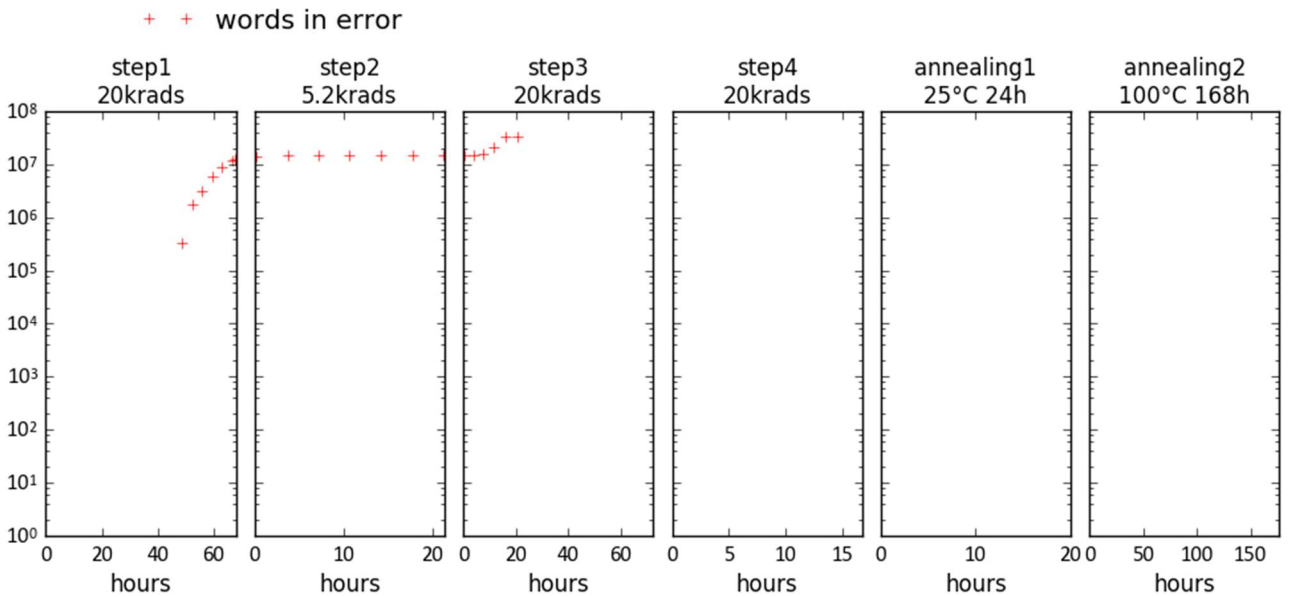
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12.16.3 DUT2, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511



Dut2, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.



Dut2, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

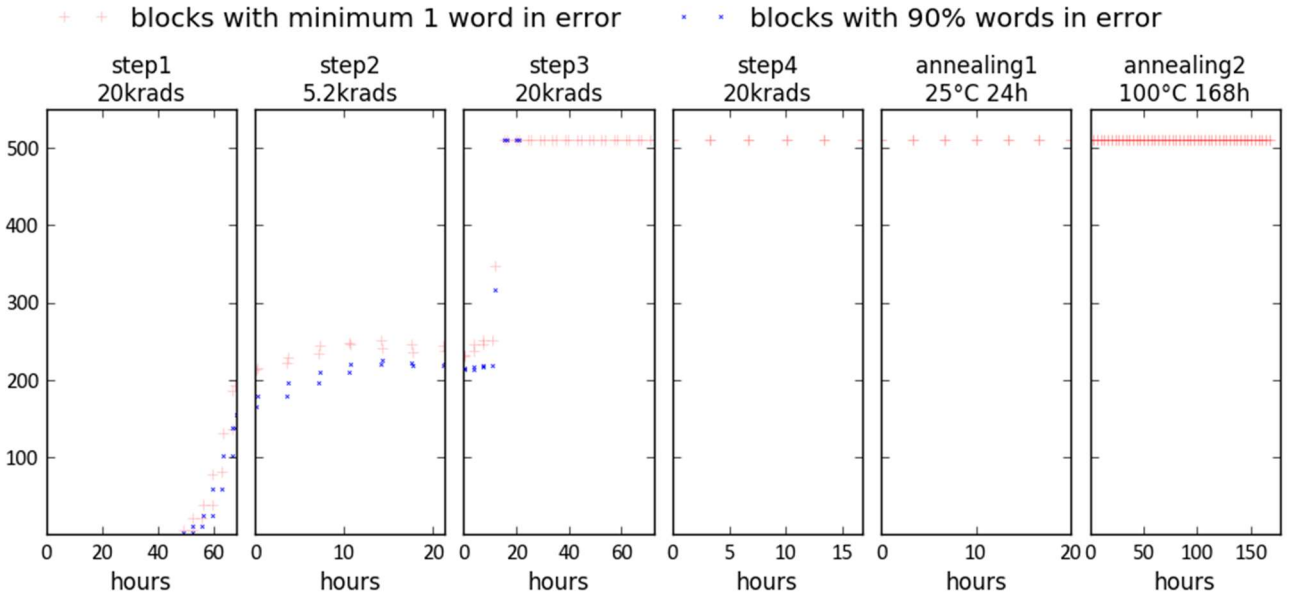
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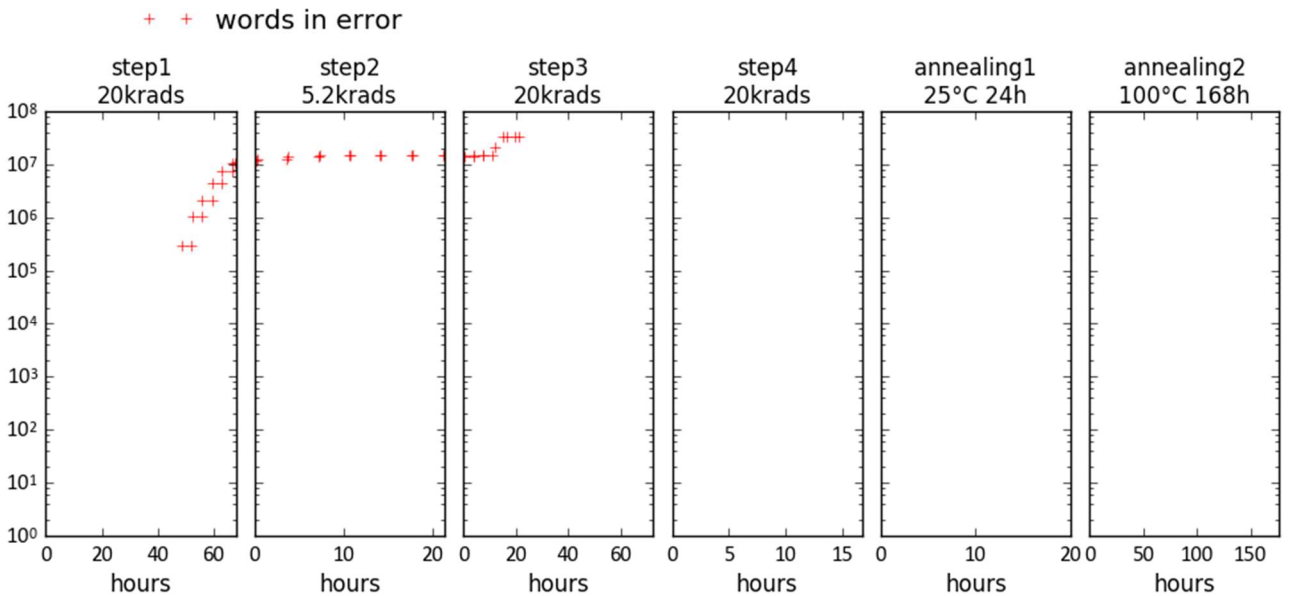
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12.16.4 DUT2, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



Dut2, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.




Dut2, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

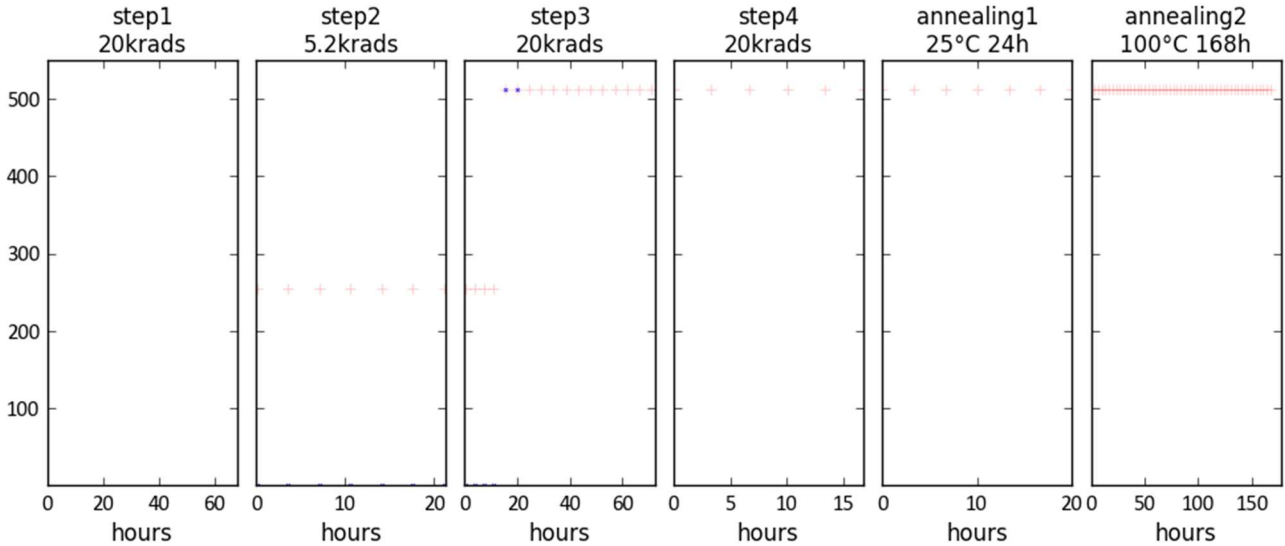
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12.16.5 DUT2, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

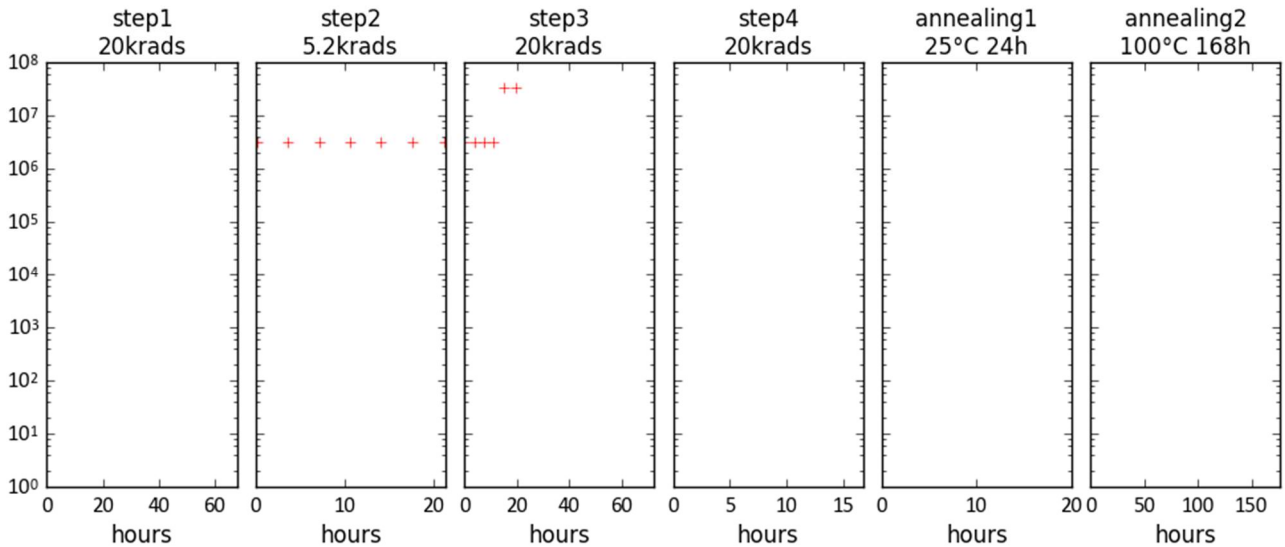
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Dut2, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut2, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

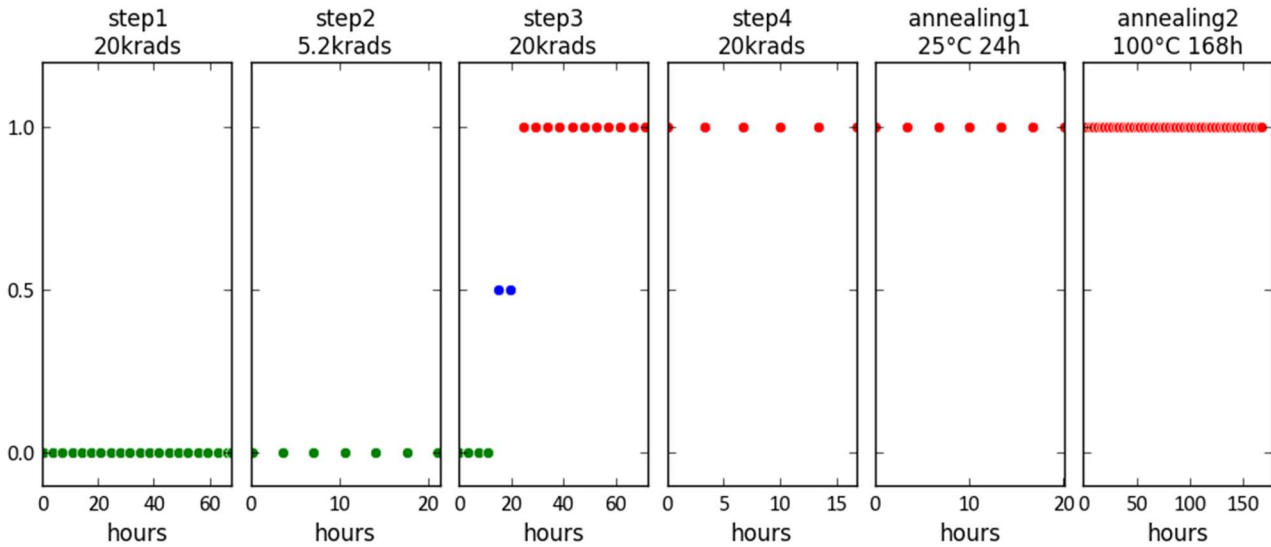
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12.16.6 DUT2, Low Duty Cycle, DUT access status

• • identification ok • • identification wrong • • reset failed




Dut2, Low duty cycle, DUT access status

hirex eng.

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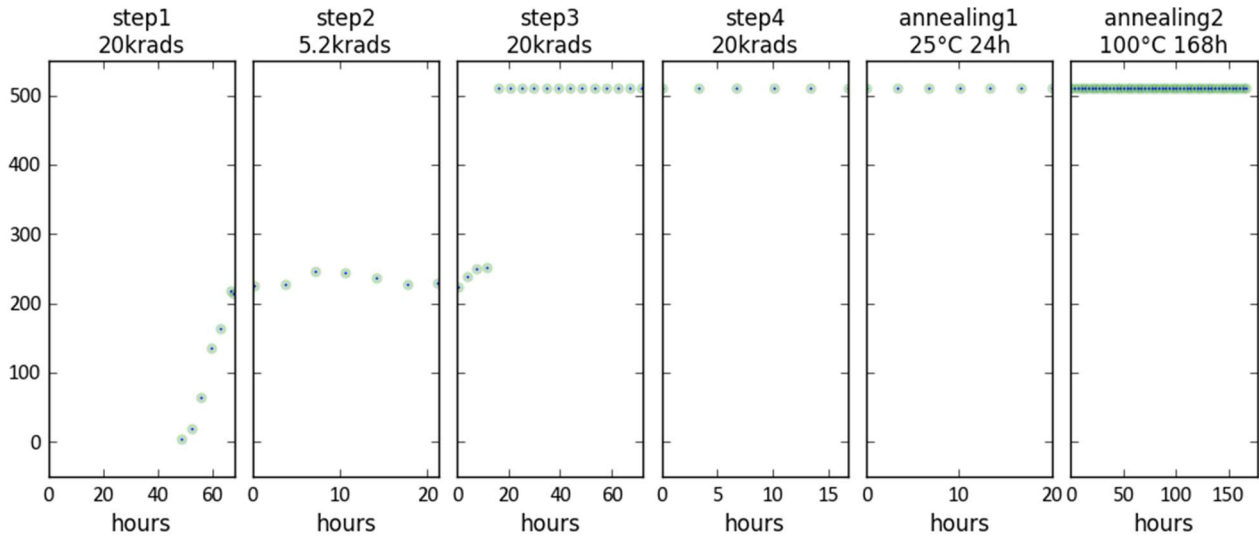
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12.17 DUT3 (Board 2), Low duty cycle

12.17.1 DUT3, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

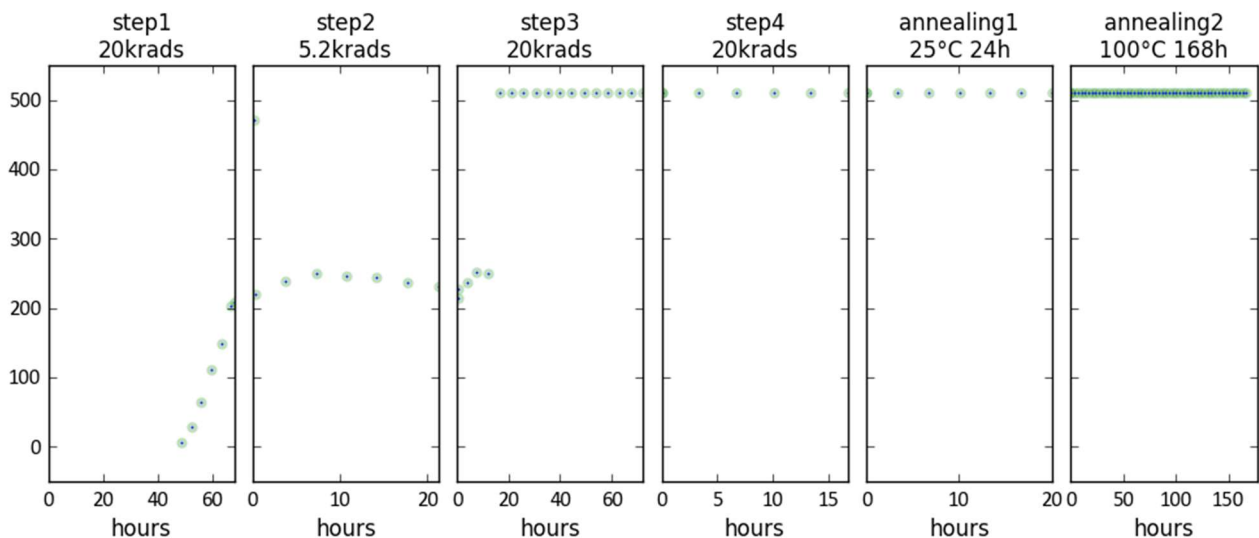


Dut3, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.17.2 DUT3, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut3, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

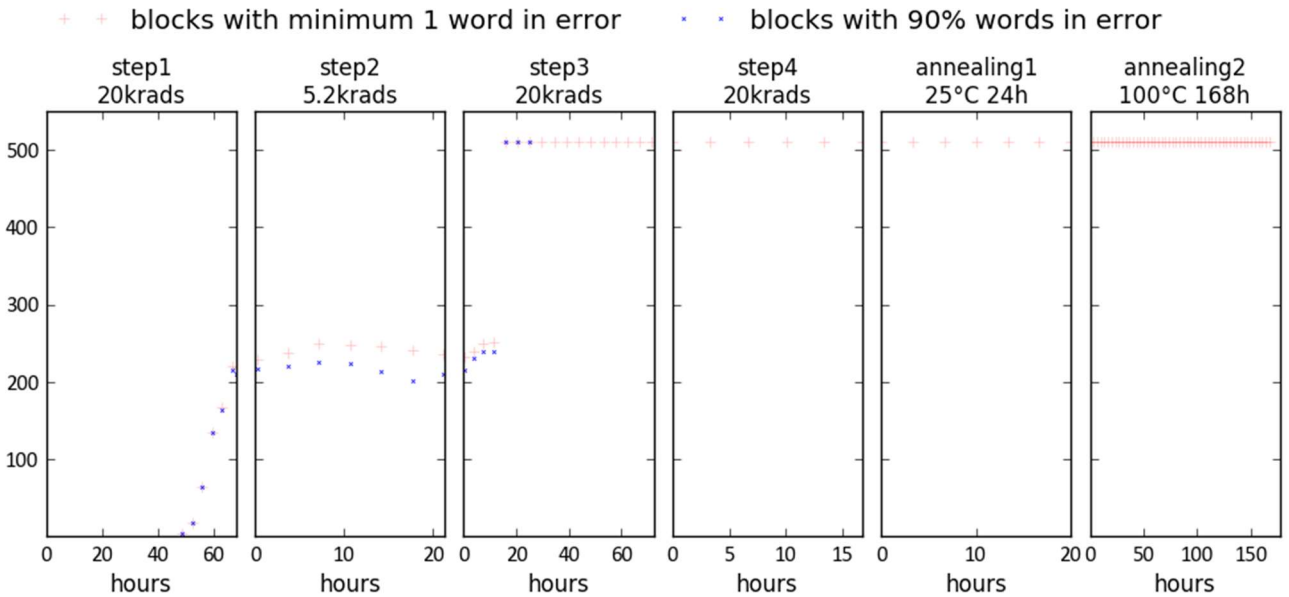
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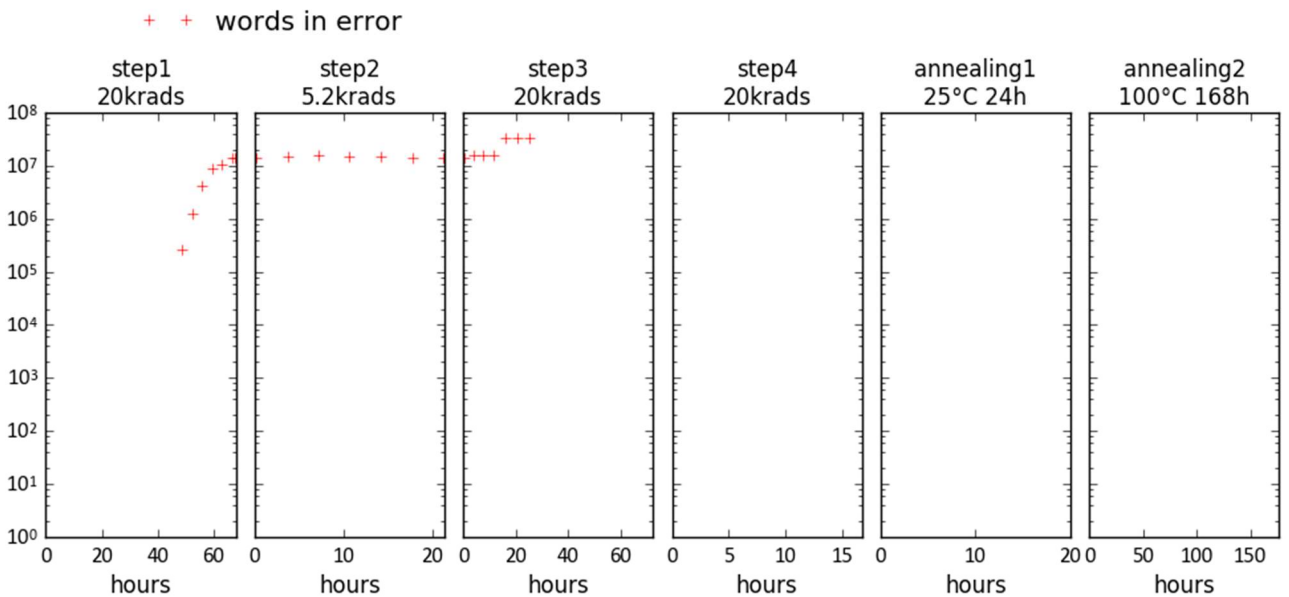
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12.17.3 DUT3, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511



Dut3, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.



Dut3, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

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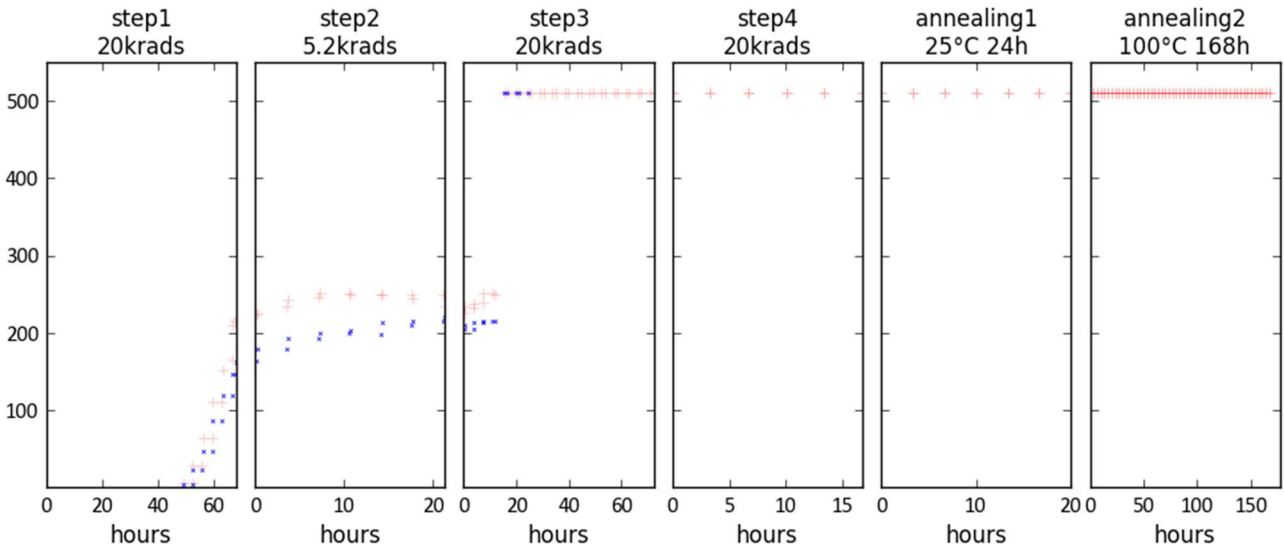


S29GL01GS10FHI010		Total Ionizing Dose Radiation Test	
		SPANSION INC	
D/C 1512		ALTER TECHNOLOGY	

RL:	2017901236
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12.17.4 DUT3, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

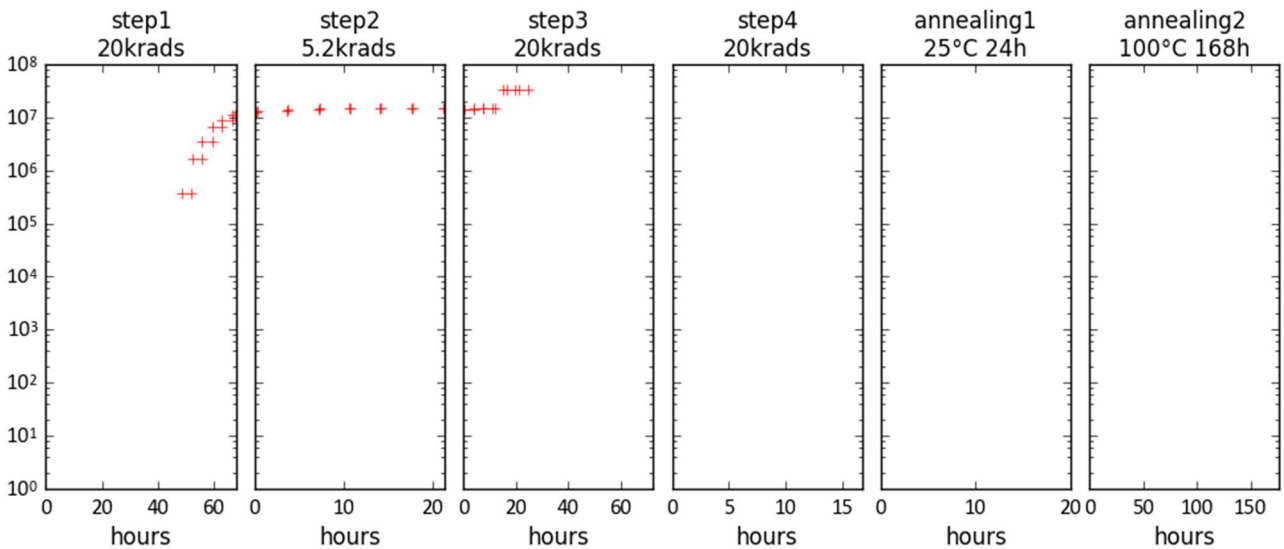
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut3, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut3, Low duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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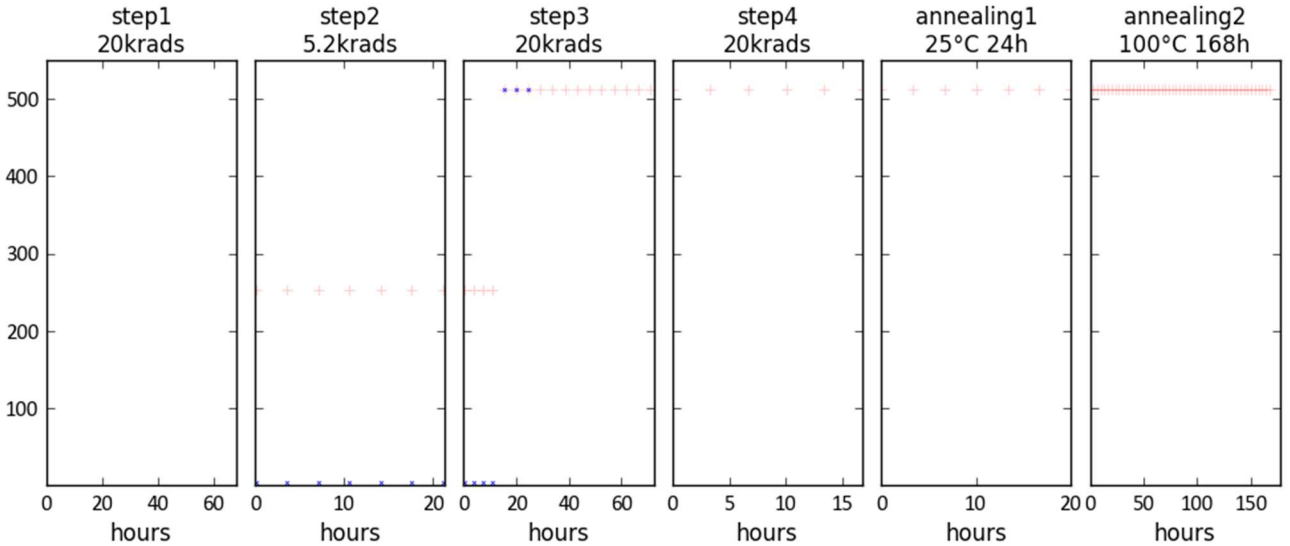
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		RL: 2017901236 Ref.: ATN-RR-468 Issue: 2 Date: 2018/10/10 Page: 398 / 458	SPANSION INC

12.17.5 DUT3, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

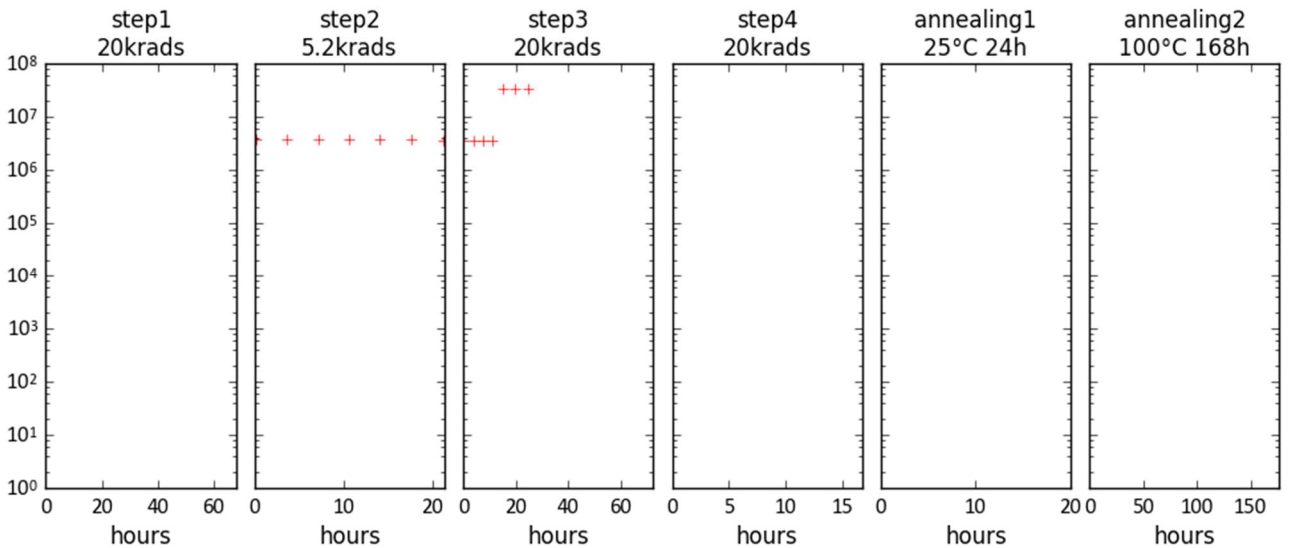
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut3, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut3, Low duty cycle, Read, pattern aaaa, block 512 to 1023

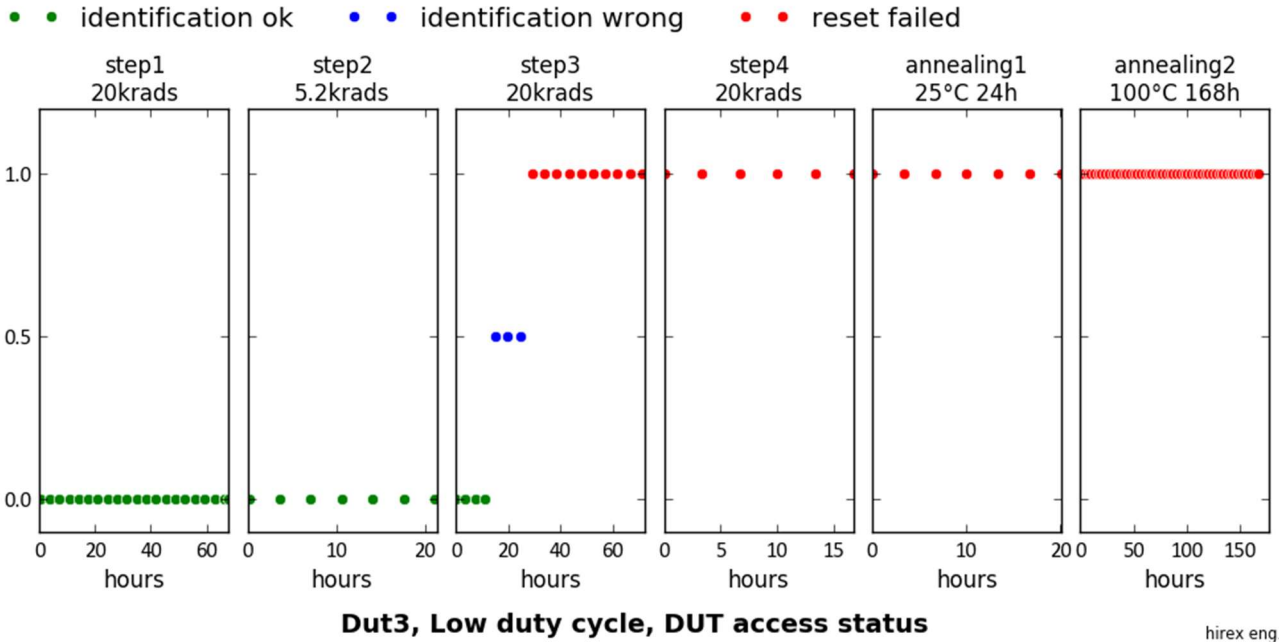
hirex eng.

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	S29GL01GS10FHI010 D/C 1512		SPANSION INC		RL: 2017901236
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12.17.6 DUT3, Low Duty Cycle, DUT access status



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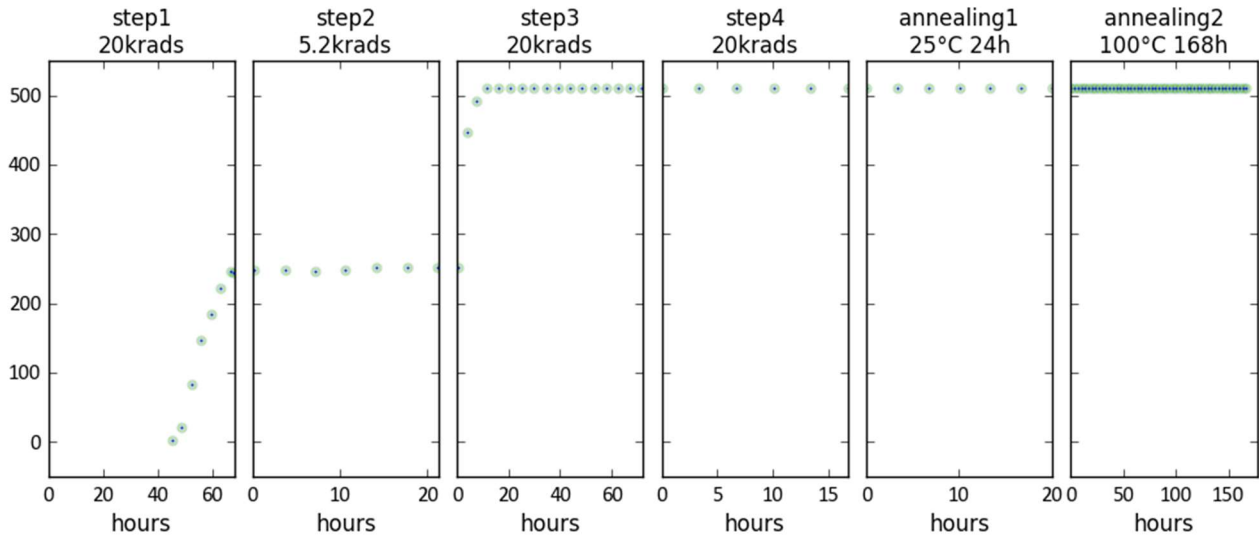
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12.18 DUT4 (Board 2), Low duty cycle

12.18.1 DUT4, Low Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

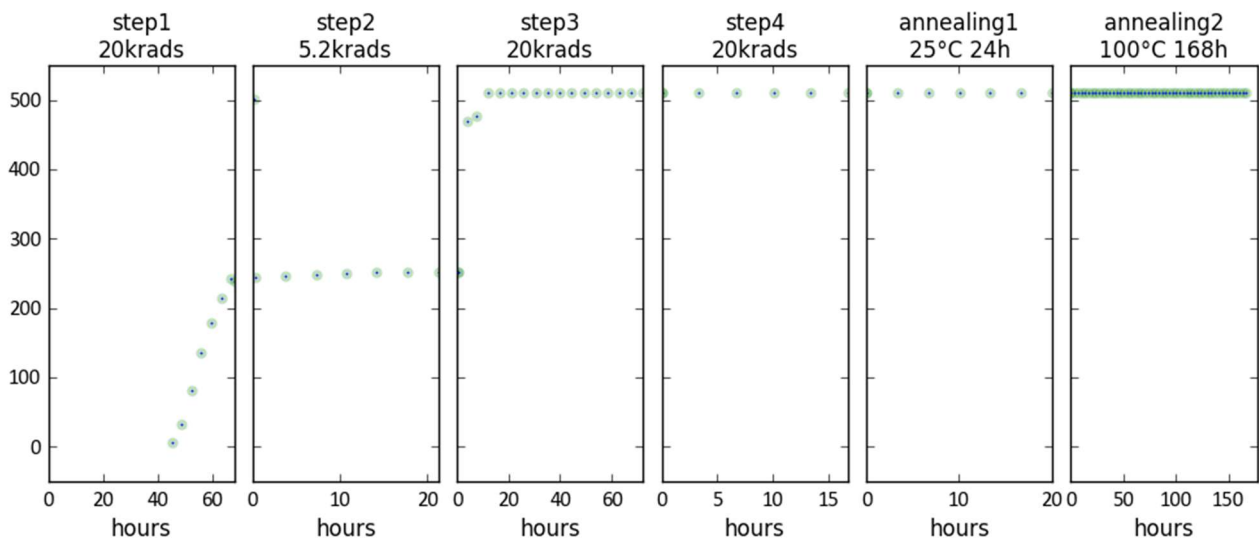


Dut4, Low duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.18.2 DUT4, Low Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut4, Low duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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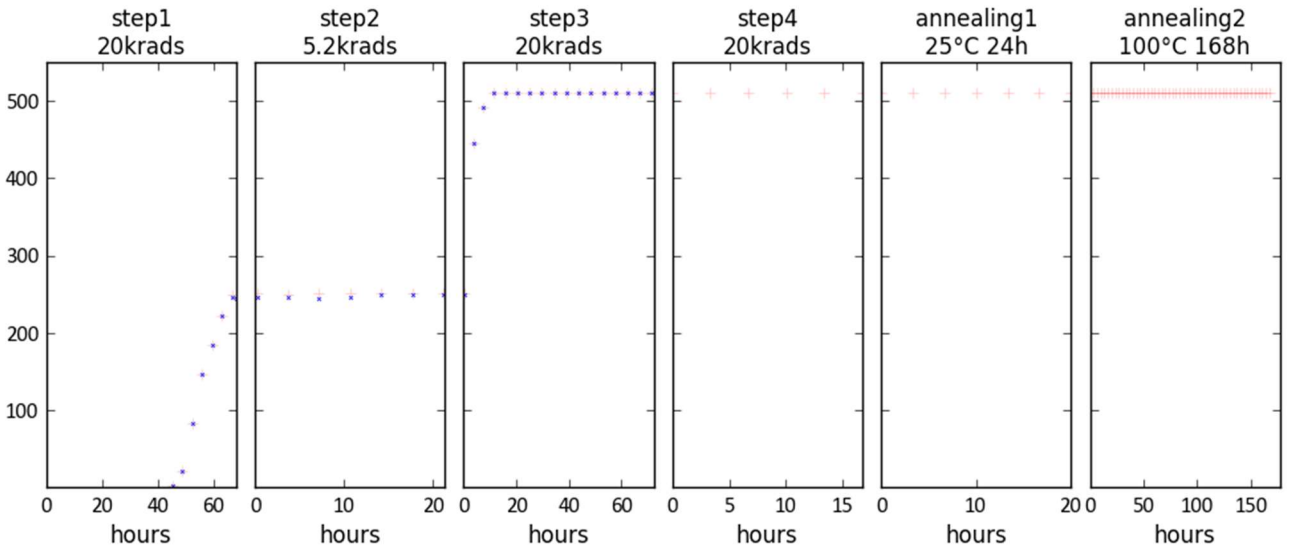
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12.18.3 DUT4, Low Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

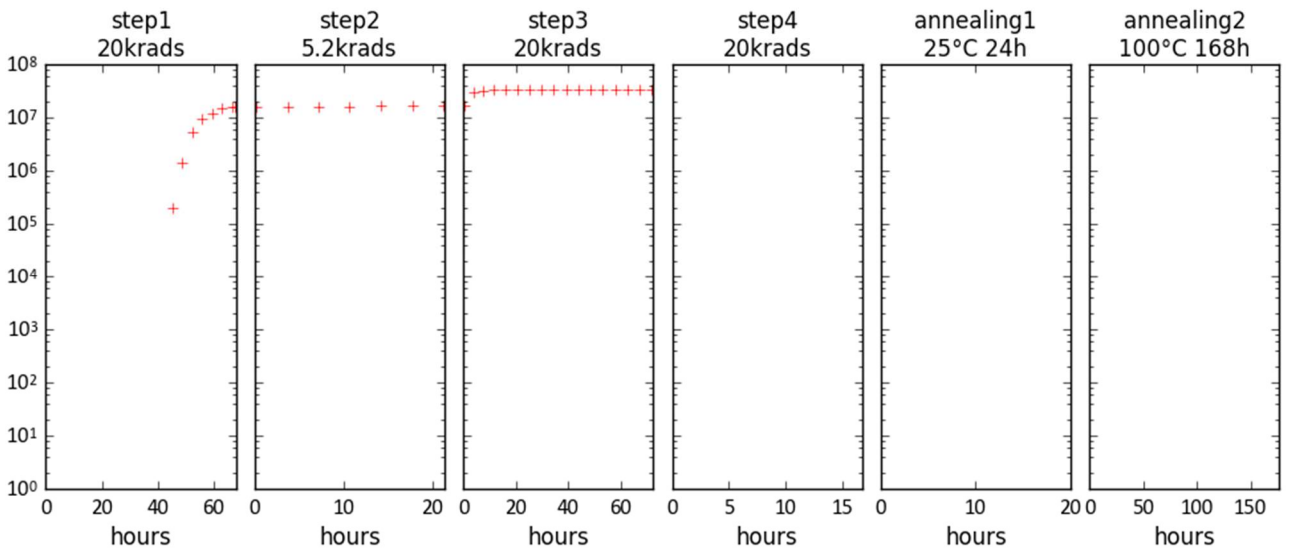
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Dut4, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



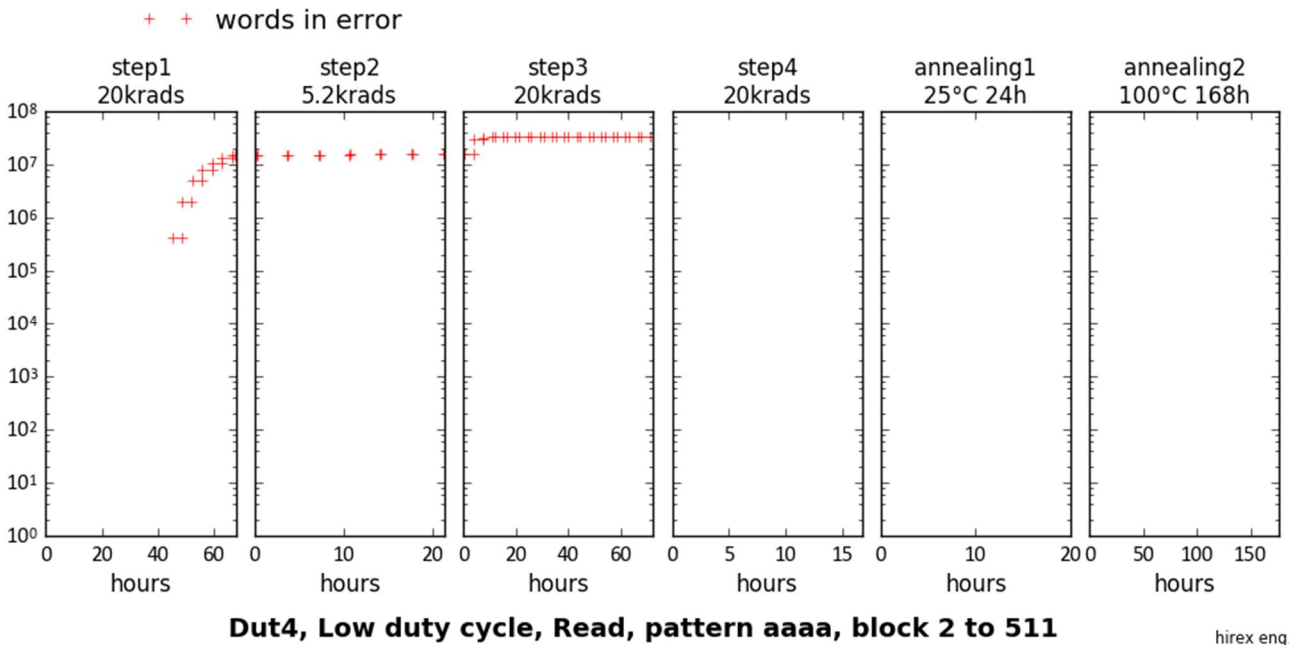
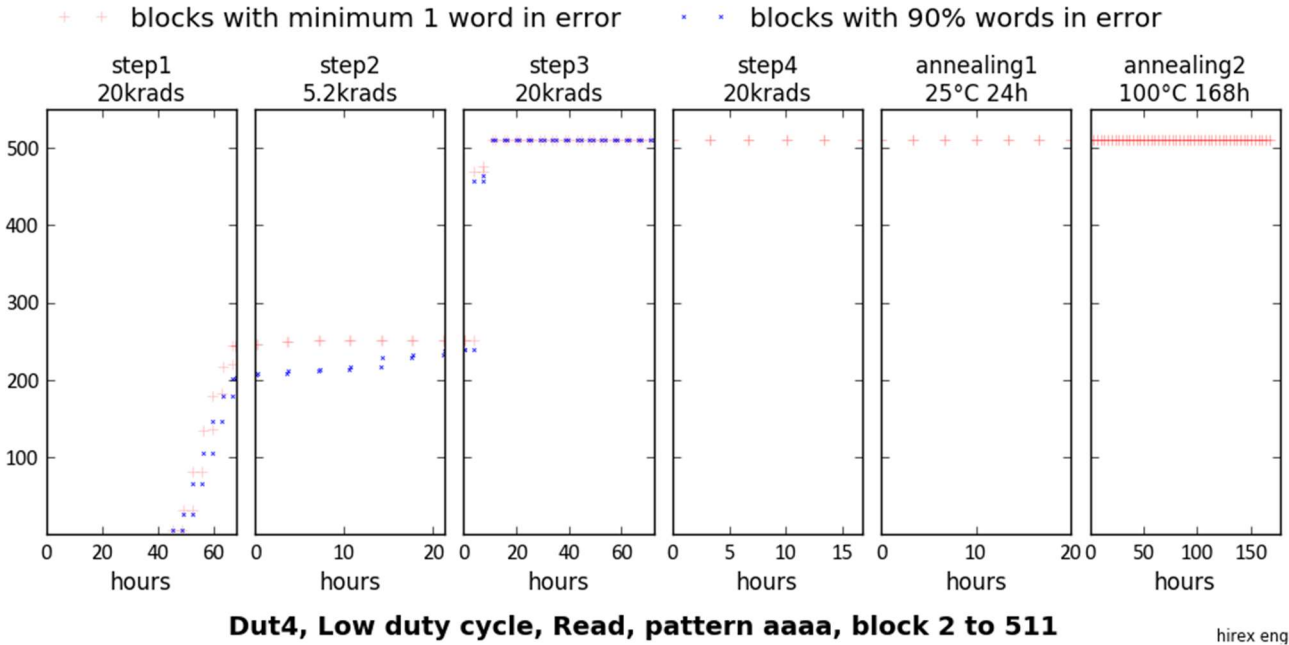
Dut4, Low duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

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12.18.4 DUT4, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511



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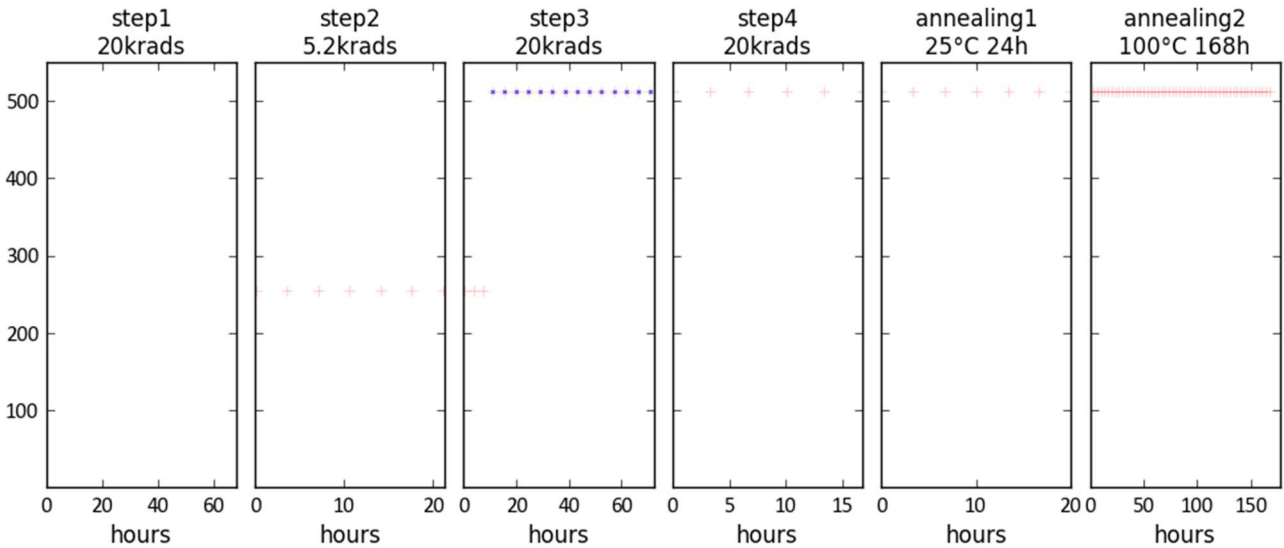
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12.18.5 DUT4, Low Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

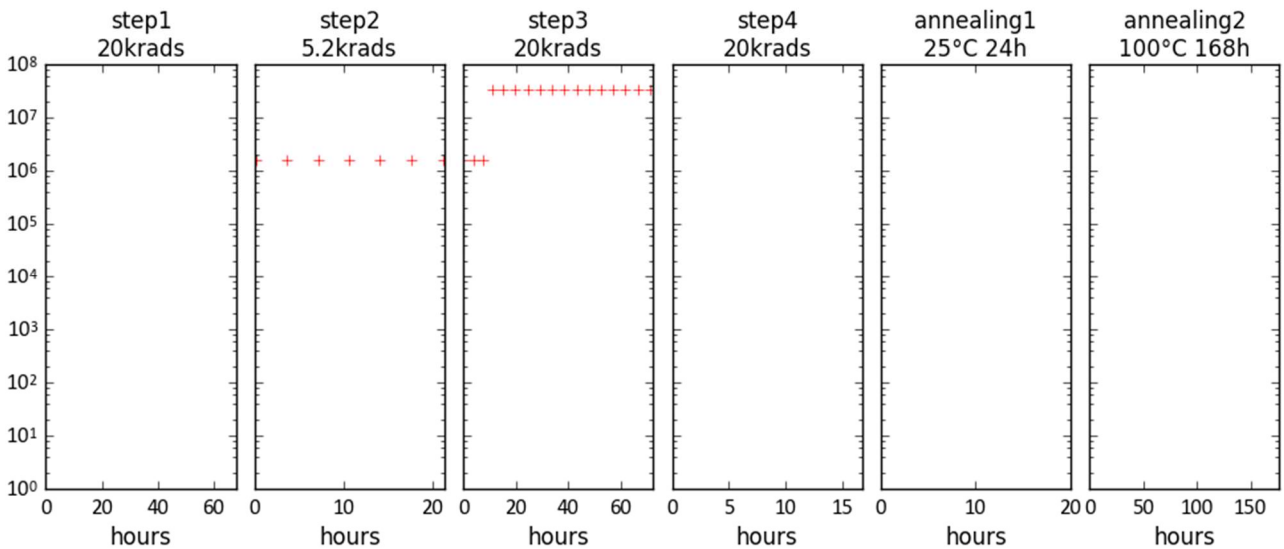
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut4, Low duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut4, Low duty cycle, Read, pattern aaaa, block 512 to 1023

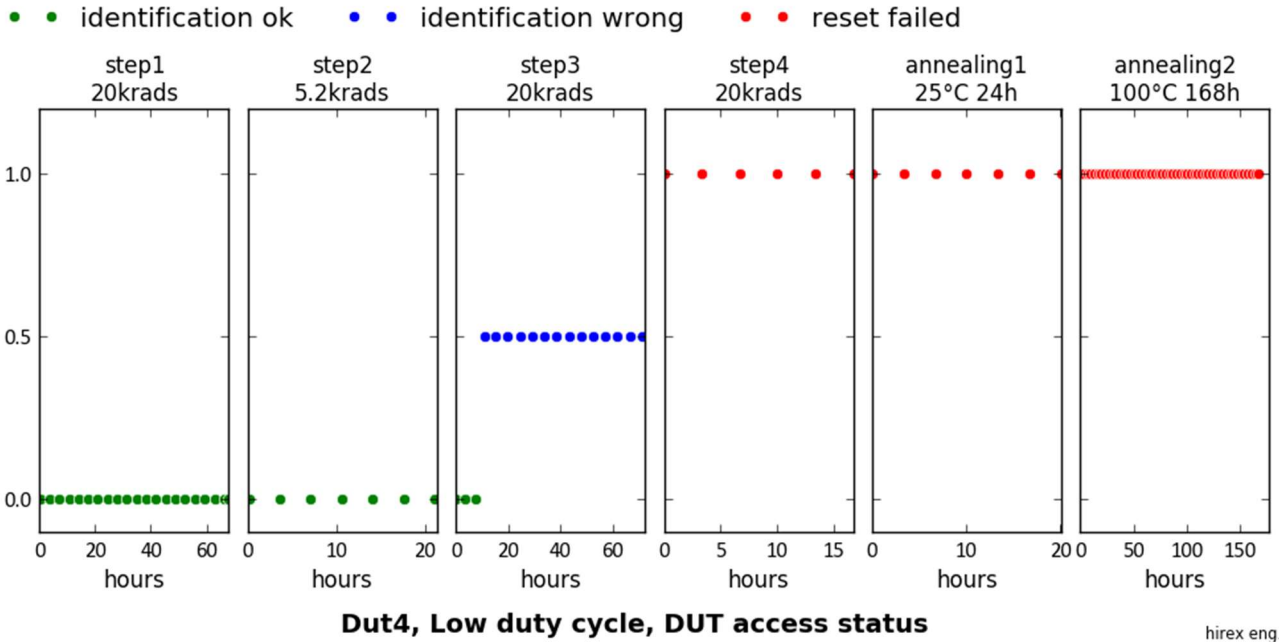
hirex eng.

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	S29GL01GS10FHI010 D/C 1512		SPANSION INC		RL: 2017901236
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12.18.6 DUT4, Low Duty Cycle, DUT access status



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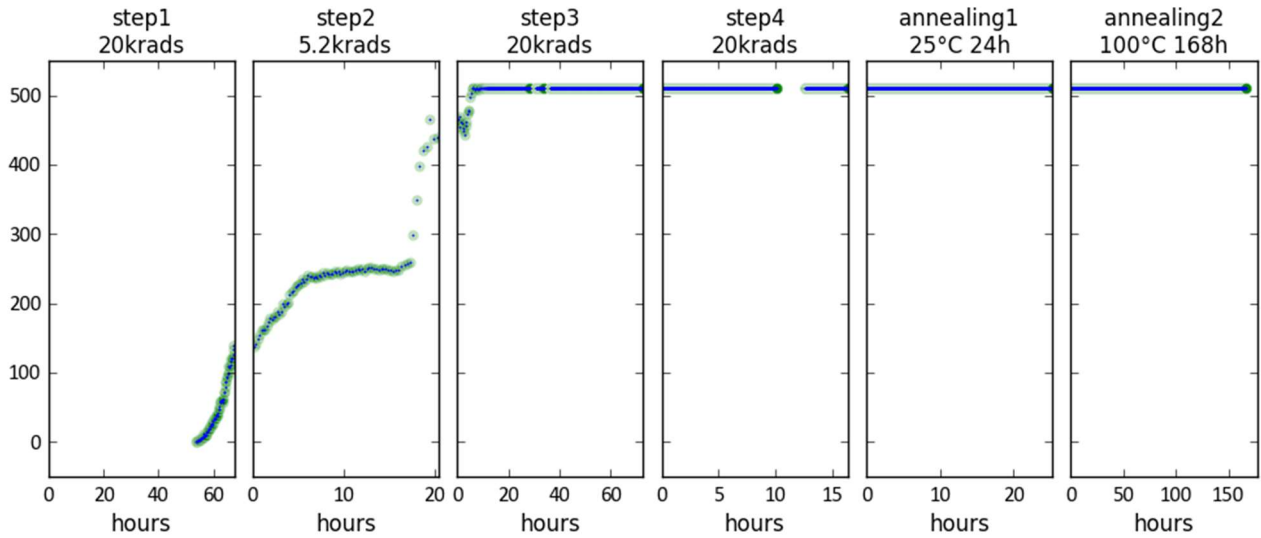
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	S29GL01GS10FHI010		SPANSION INC		RL: 2017901236
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12.19 DUT0 (Board 3), High duty cycle

12.19.1 DUT0, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

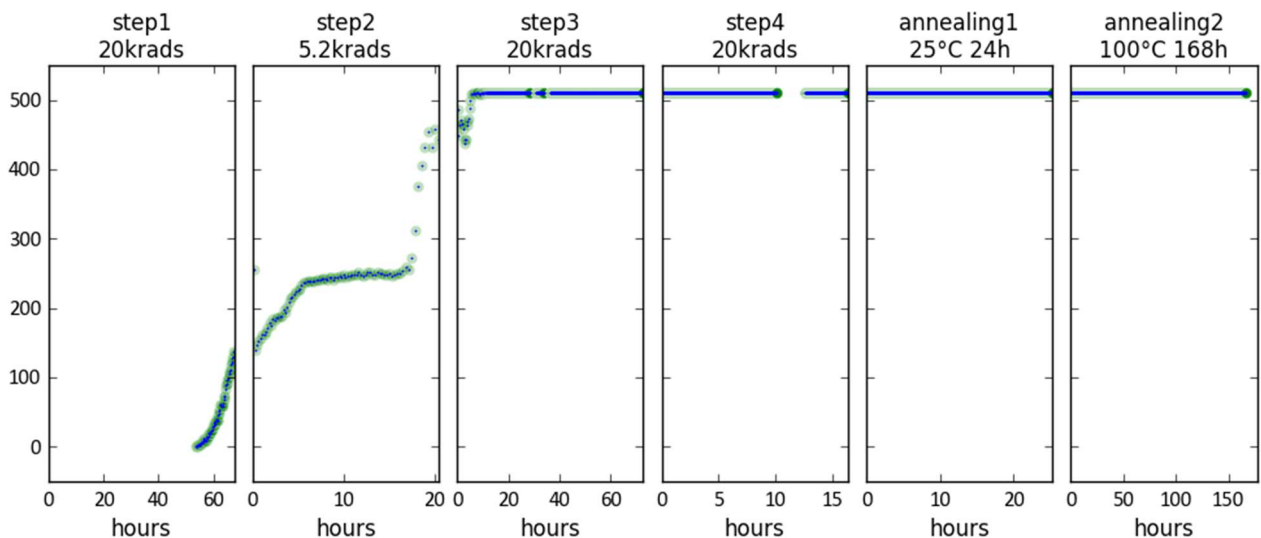


Dut0, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.19.2 DUT0, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut0, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

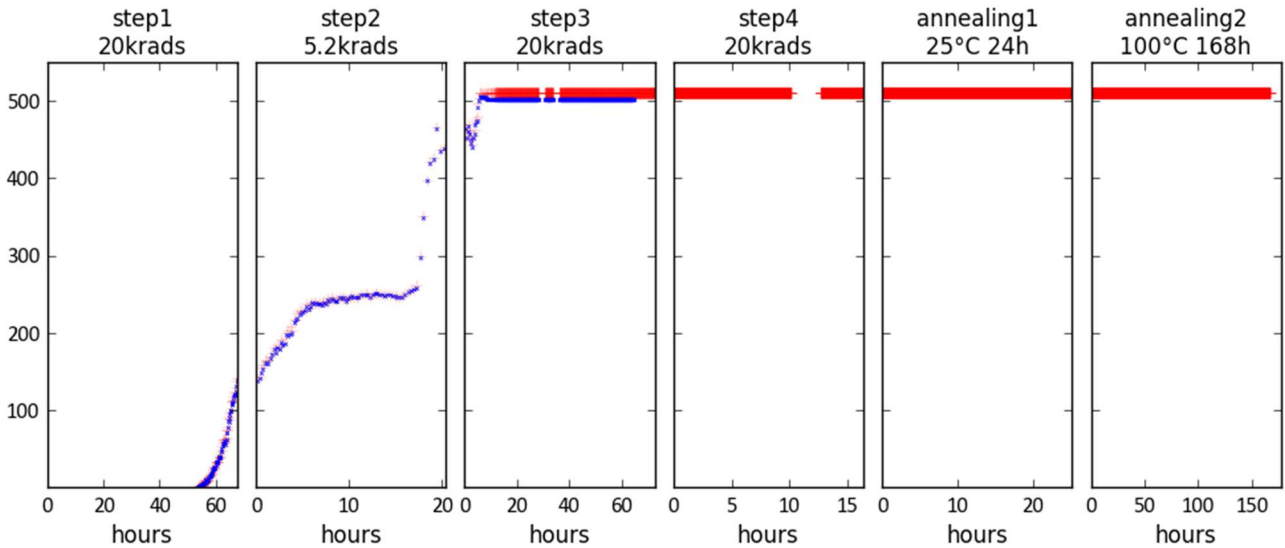
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info@altertechnology.com

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12.19.3 DUT0, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

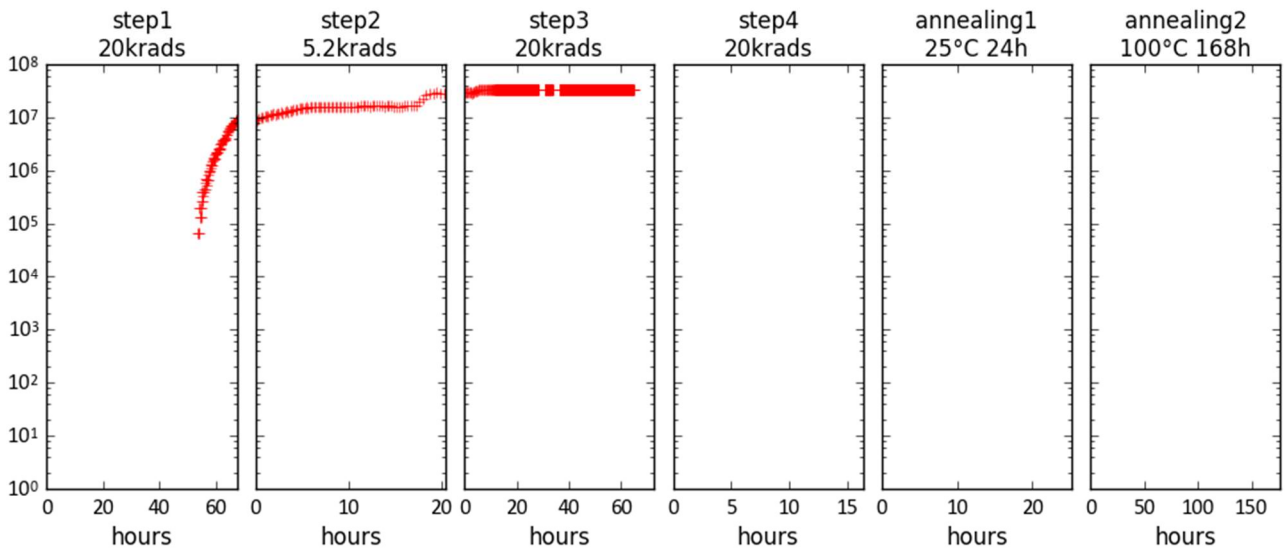
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut0, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

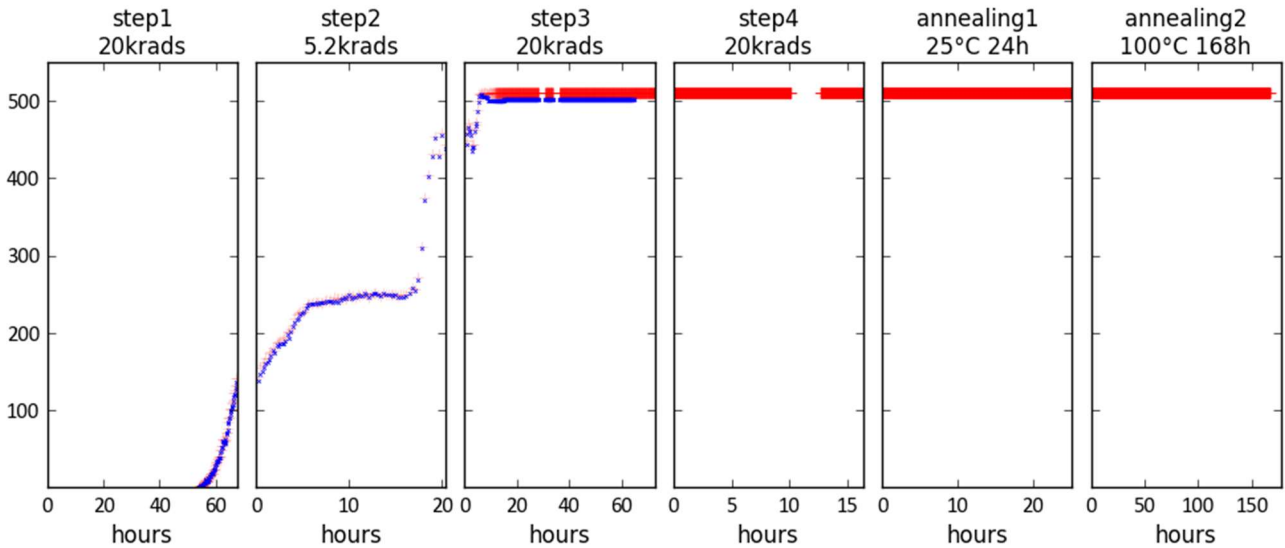
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	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY		
	S29GL01GS10FHI010		SPANSION INC		RL: 2017901236
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	D/C 1512				Issue: 2
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12.19.4 DUT0, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

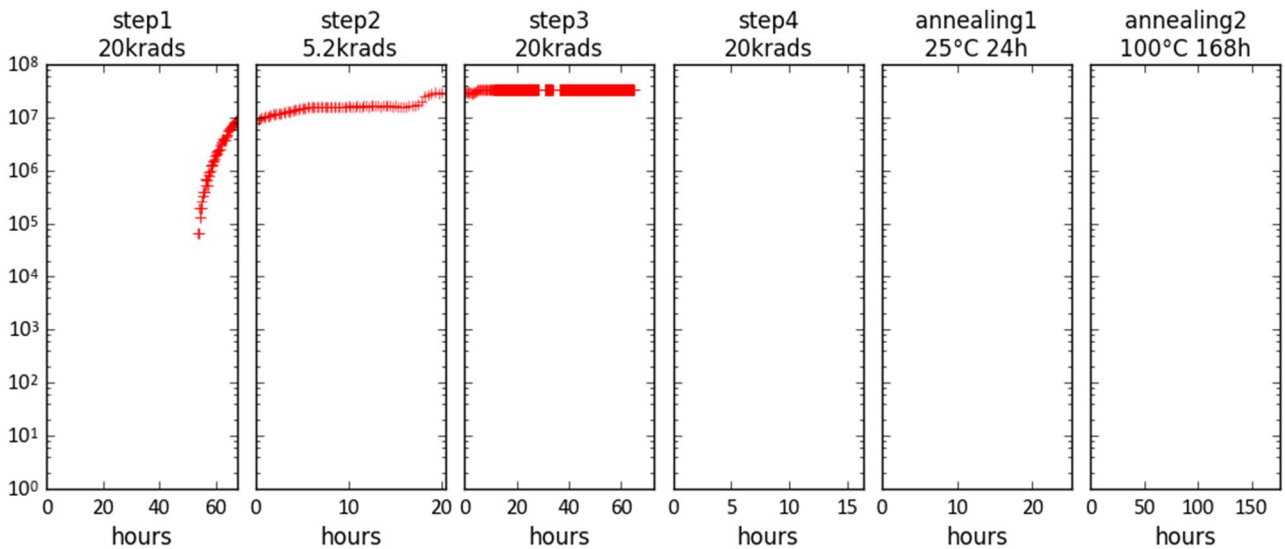
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut0, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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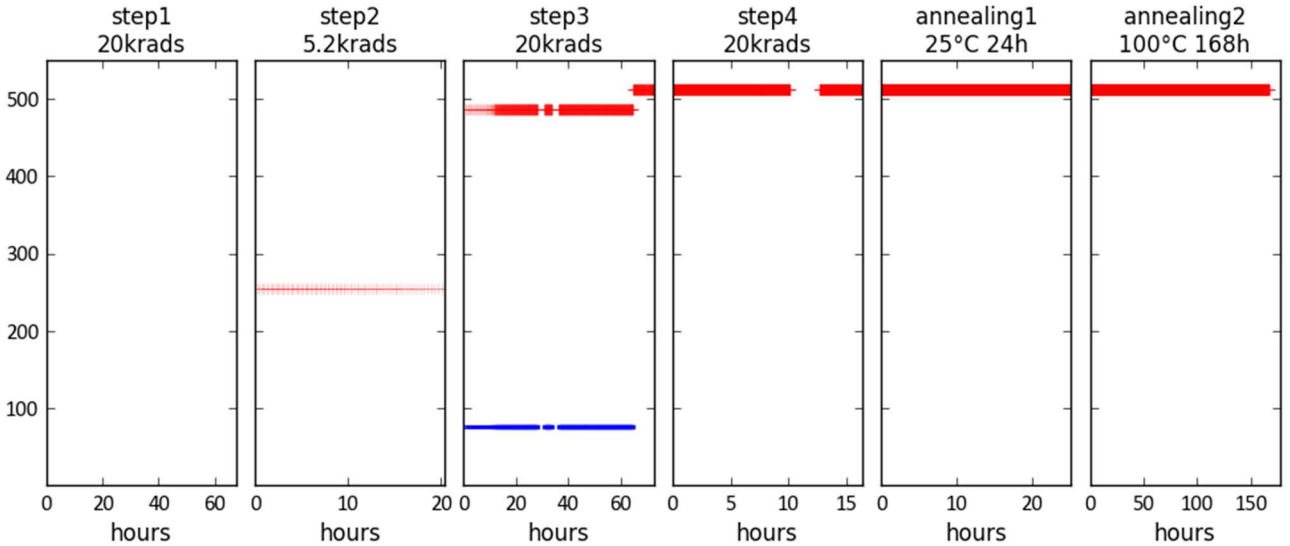
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12.19.5 DUT0, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

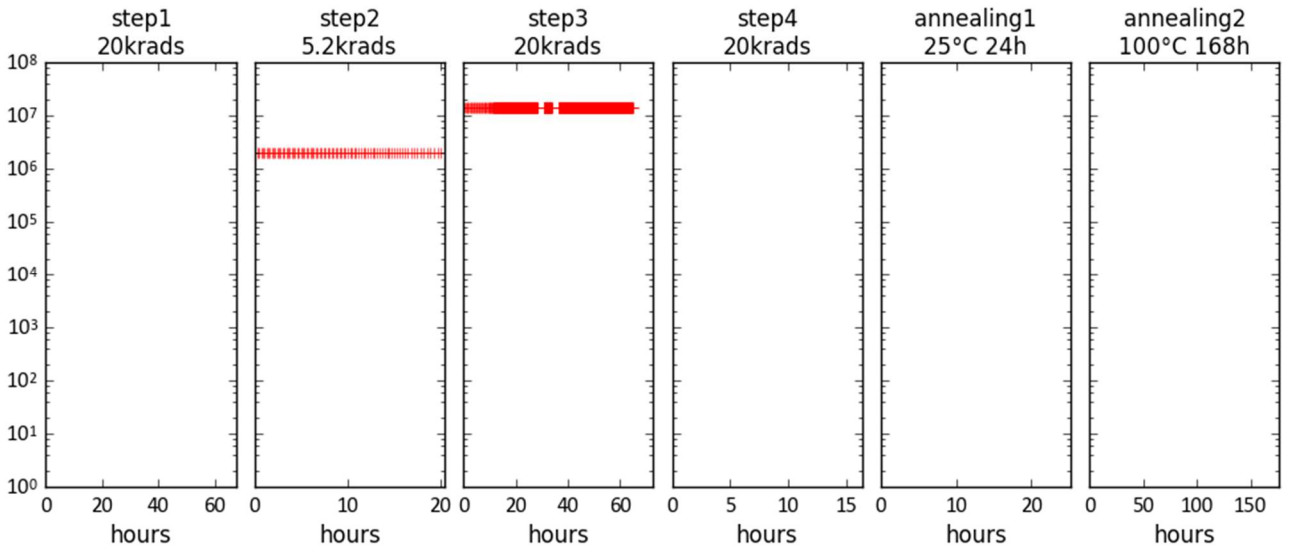
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

+ + words in error



Dut0, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

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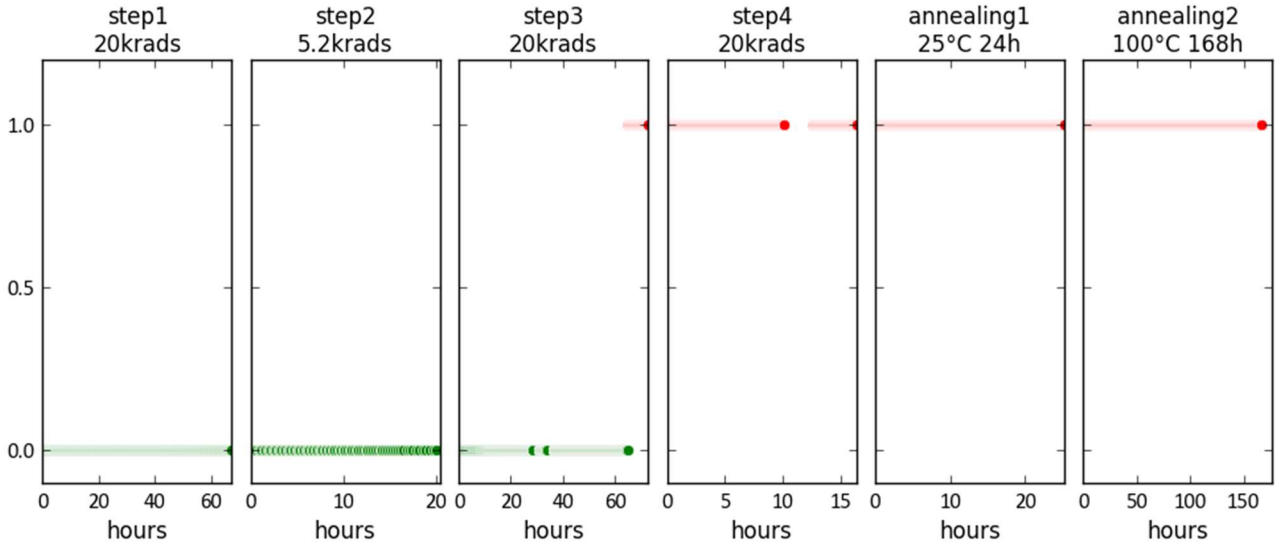
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12.19.6 DUT0, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut0, High duty cycle, DUT access status

hirex eng.

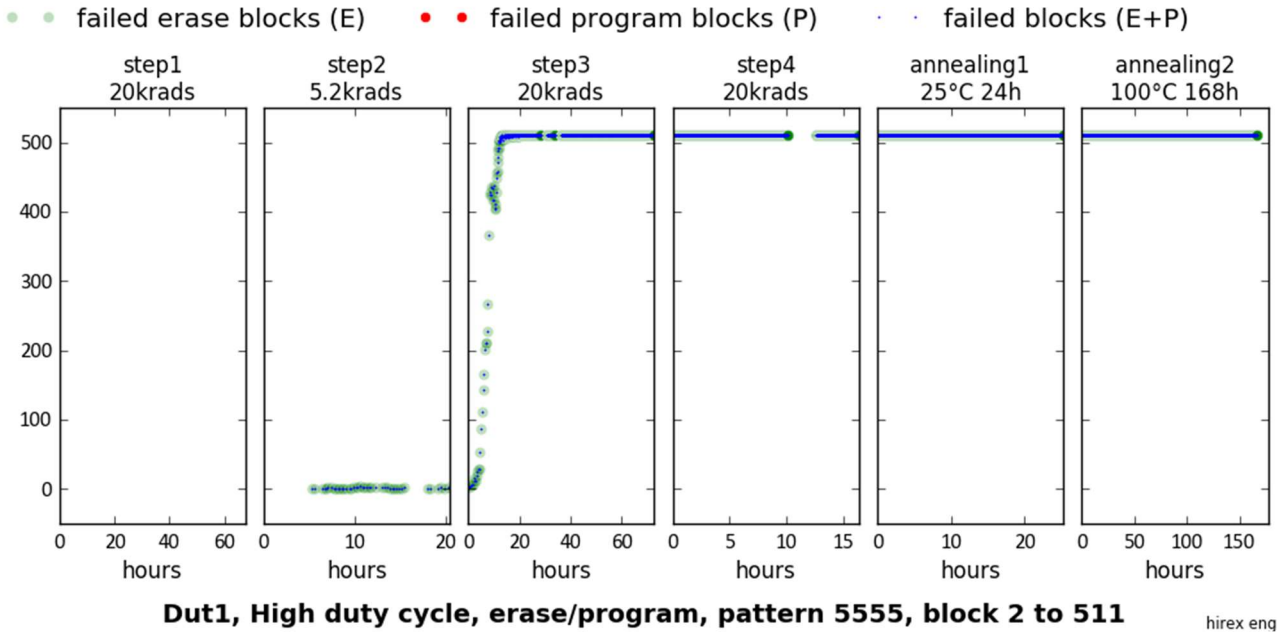
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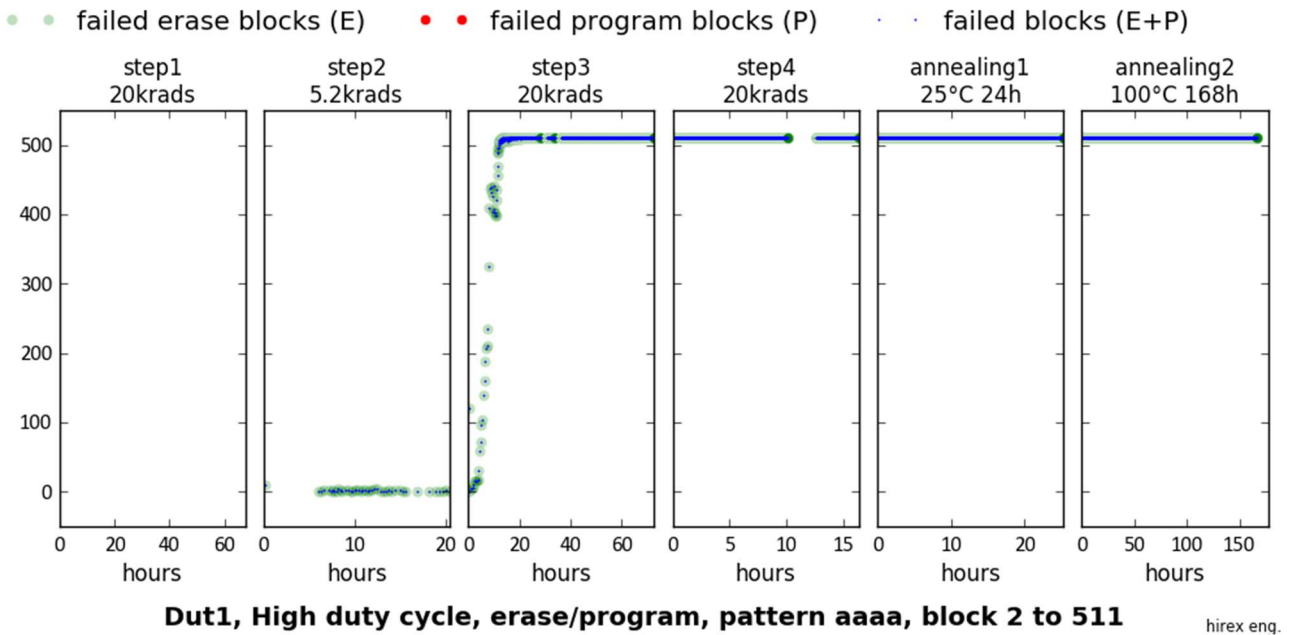
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	SPANSION INC D/C 1512		Issue:	2
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12.20 DUT1 (Board 3), High duty cycle

12.20.1 DUT1, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511



12.20.2 DUT1, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511



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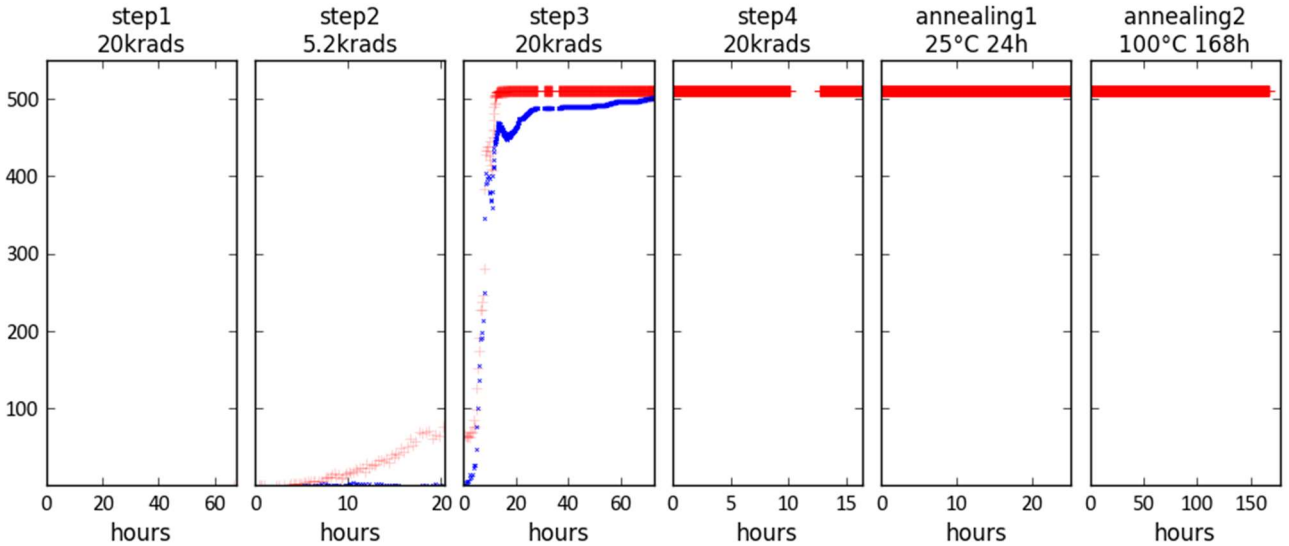
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D/C 1512		Date:	2018/10/10
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12.20.3 DUT1, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

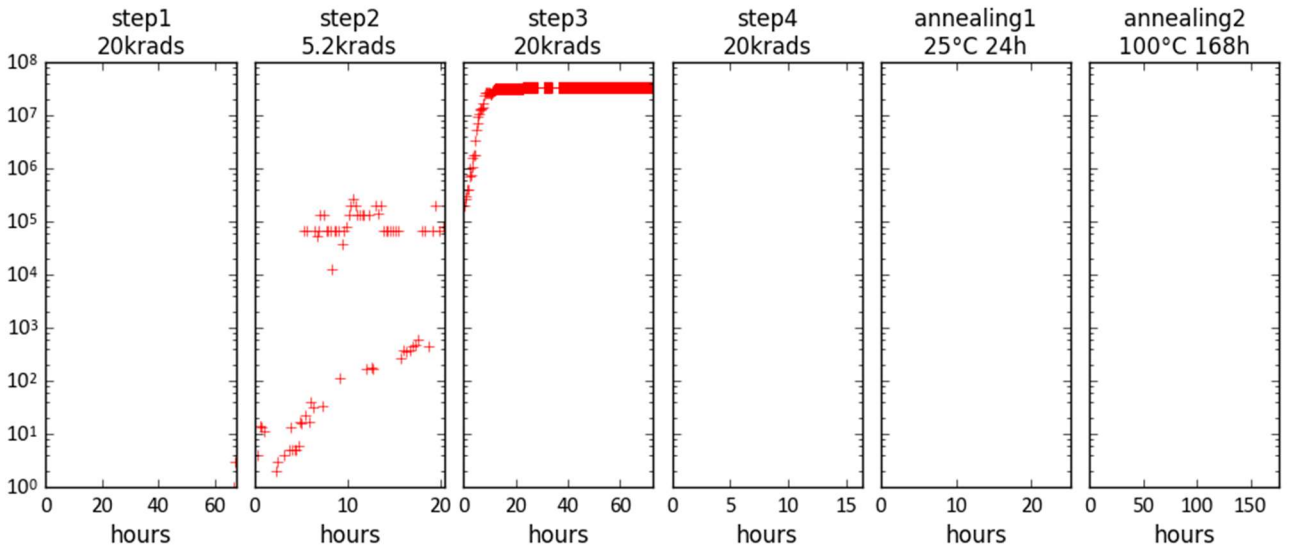
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut1, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

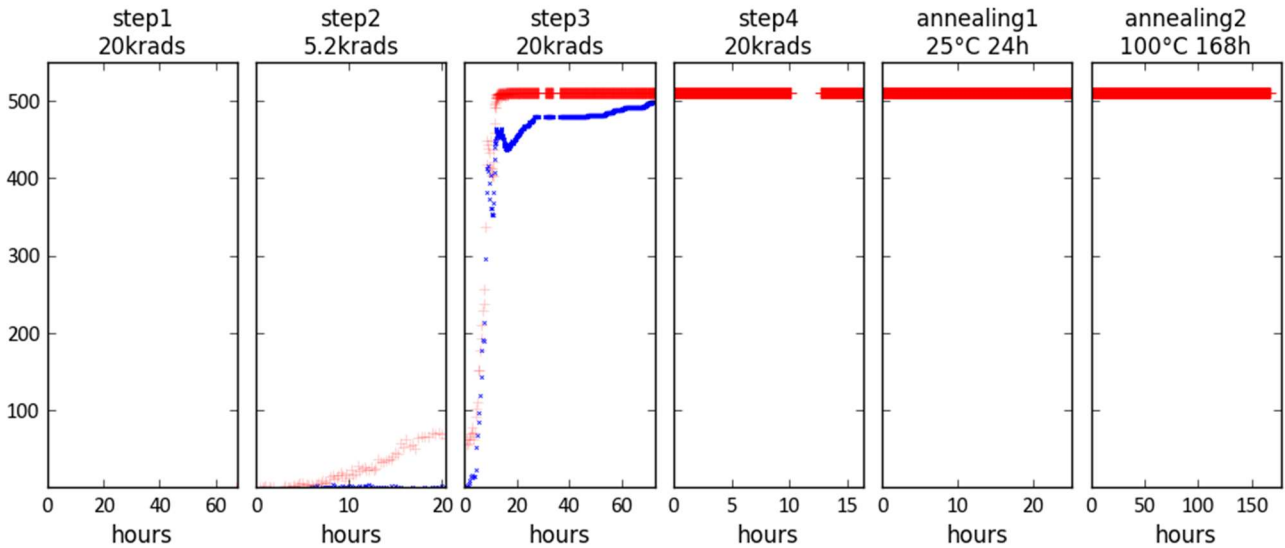
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12.20.4 DUT1, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

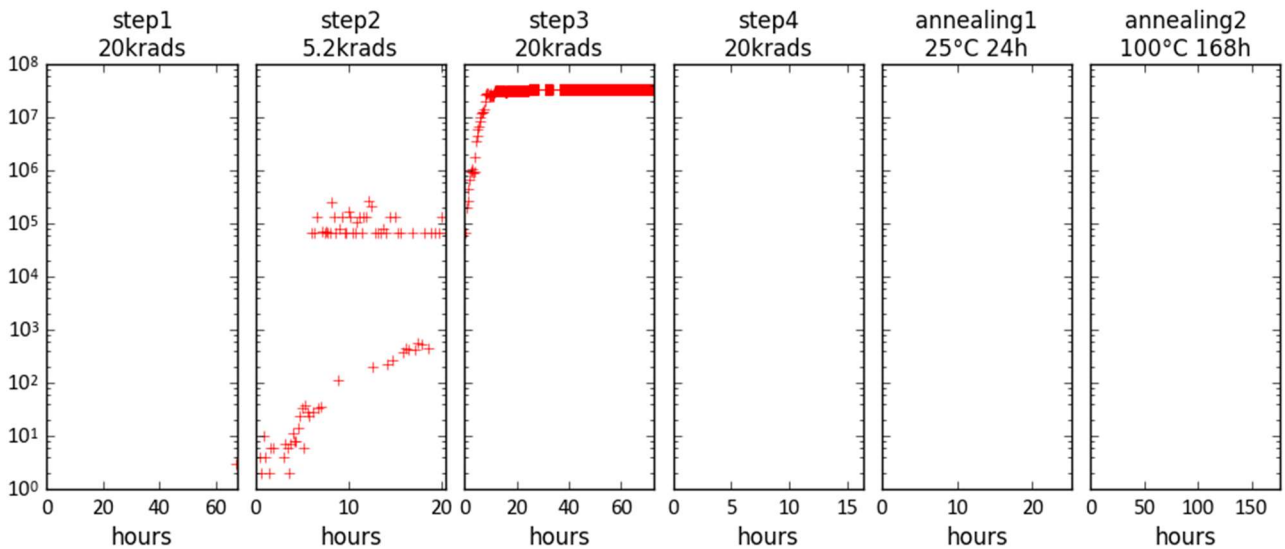
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Dut1, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut1, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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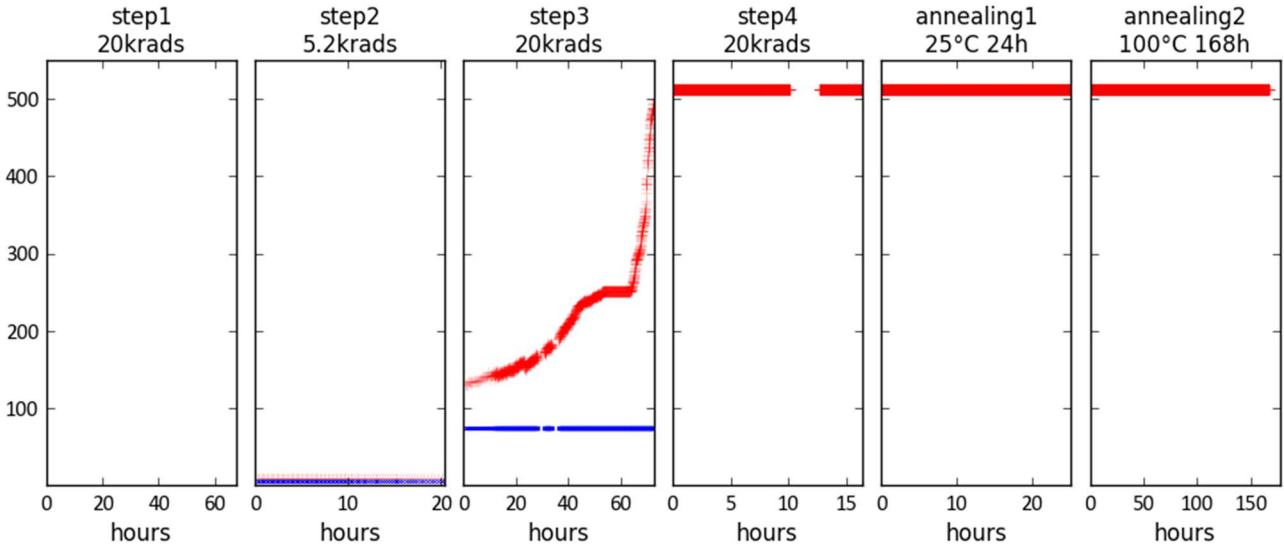
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12.20.5 DUT1, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

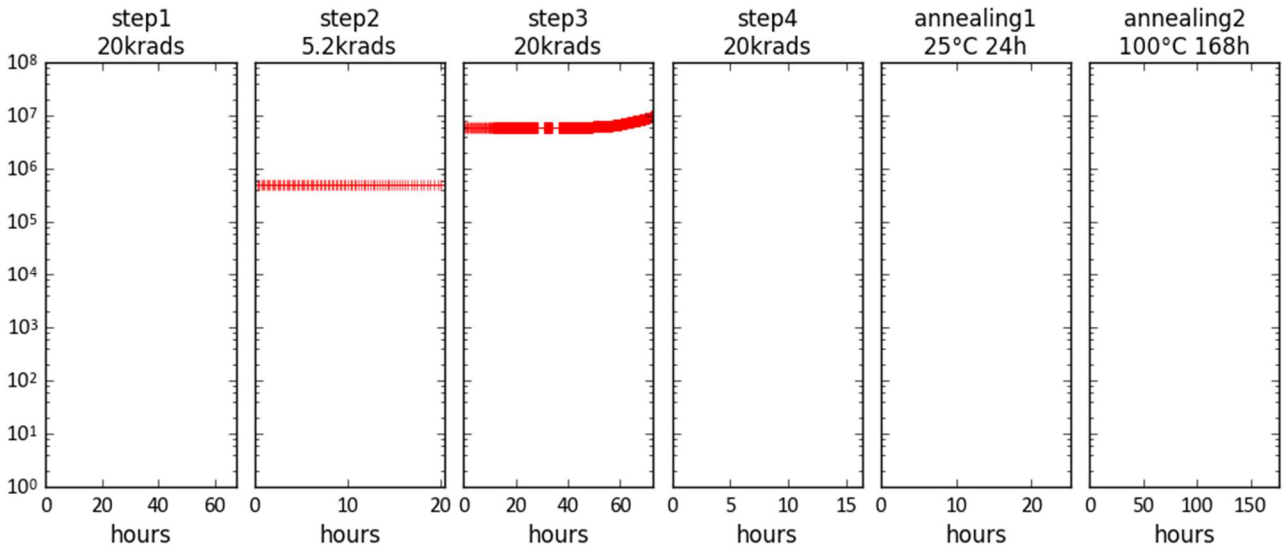
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

+ + words in error



Dut1, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

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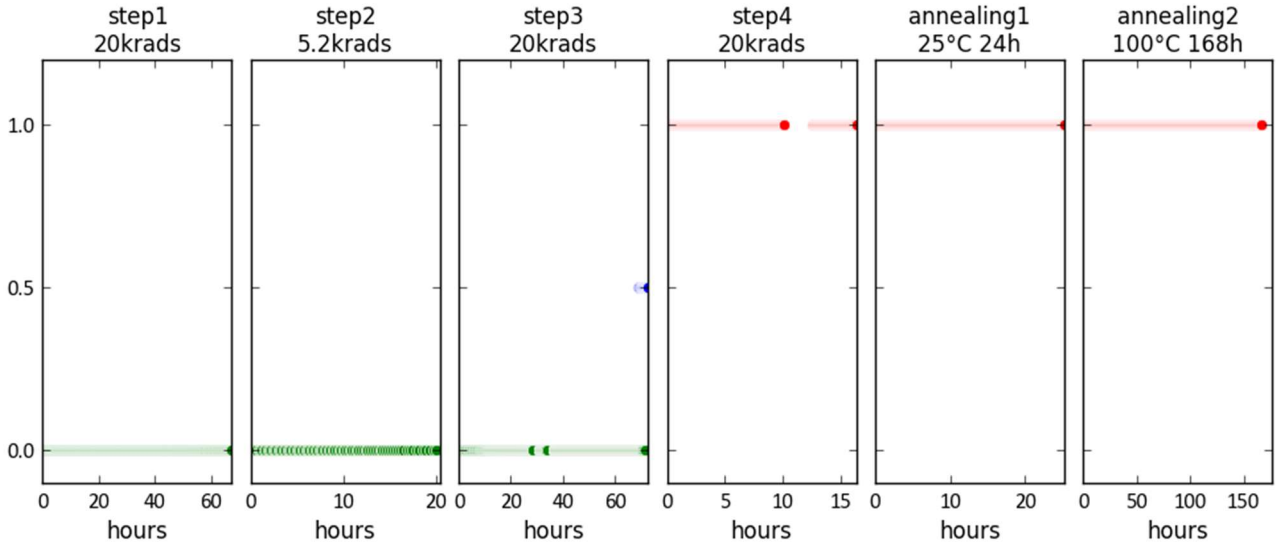
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12.20.6 DUT1, High Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut1, High duty cycle, DUT access status

hirex eng.

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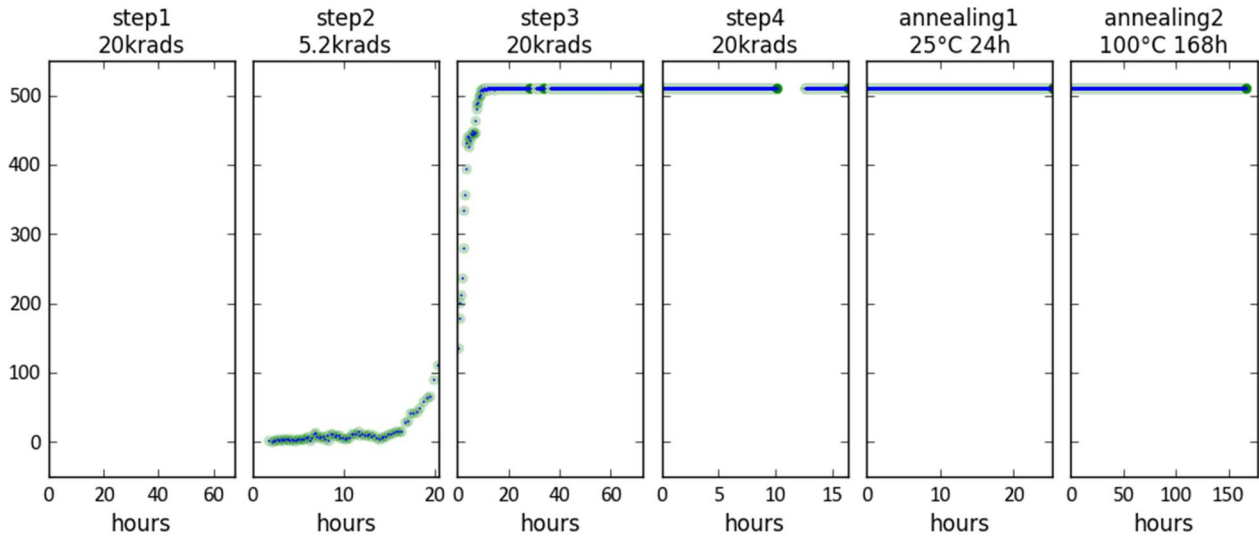
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12.21 DUT2 (Board 3), High duty cycle

12.21.1 DUT2, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

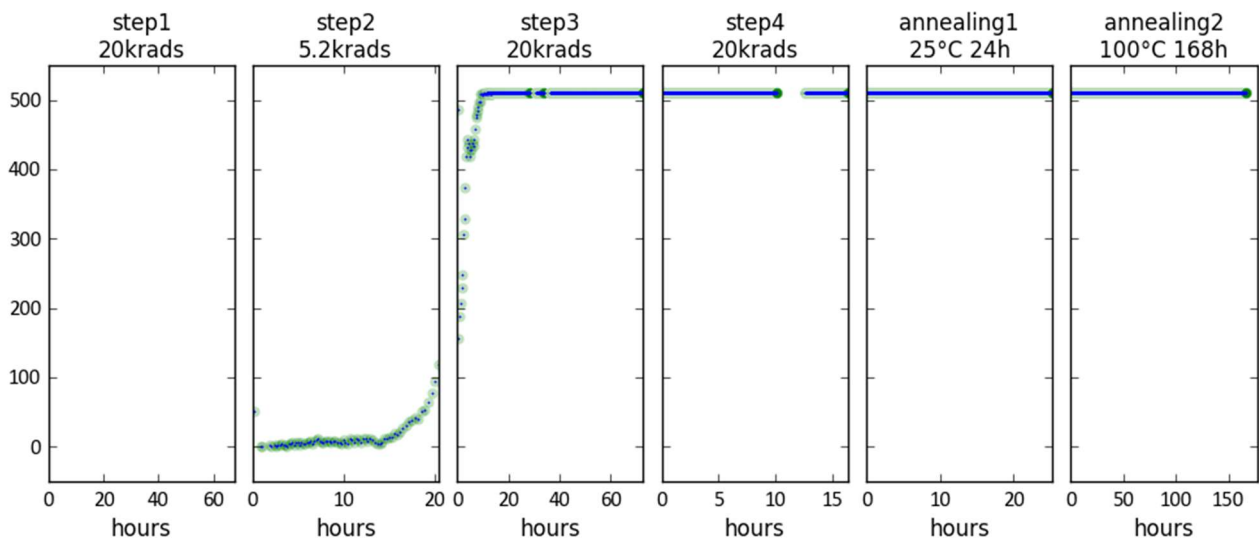


Dut2, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.21.2 DUT2, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut2, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

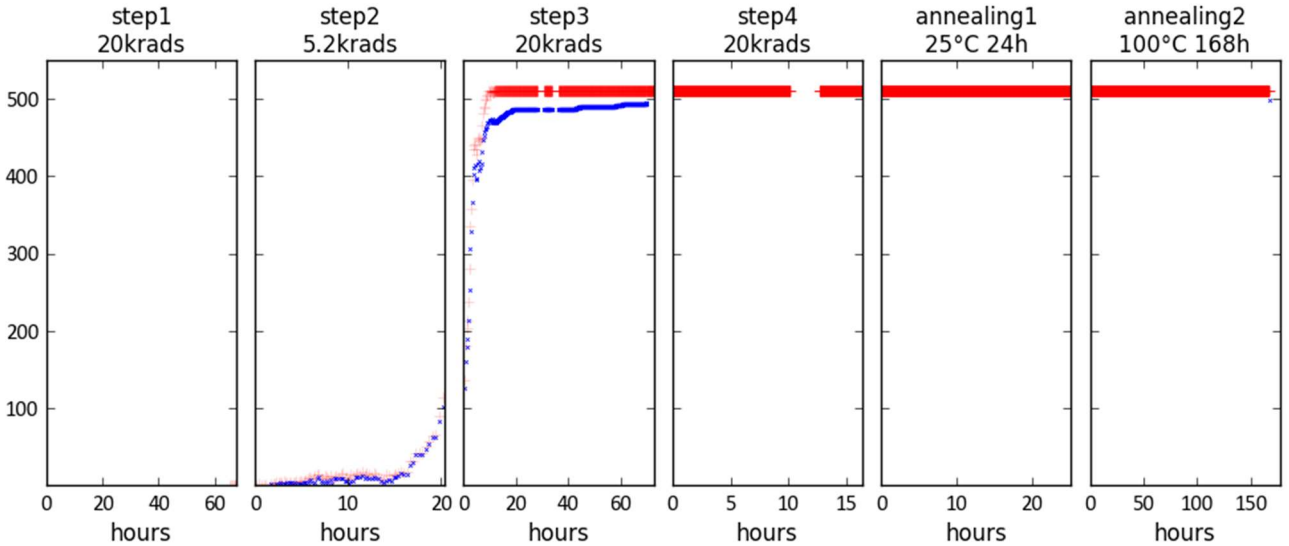
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12.21.3 DUT2, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

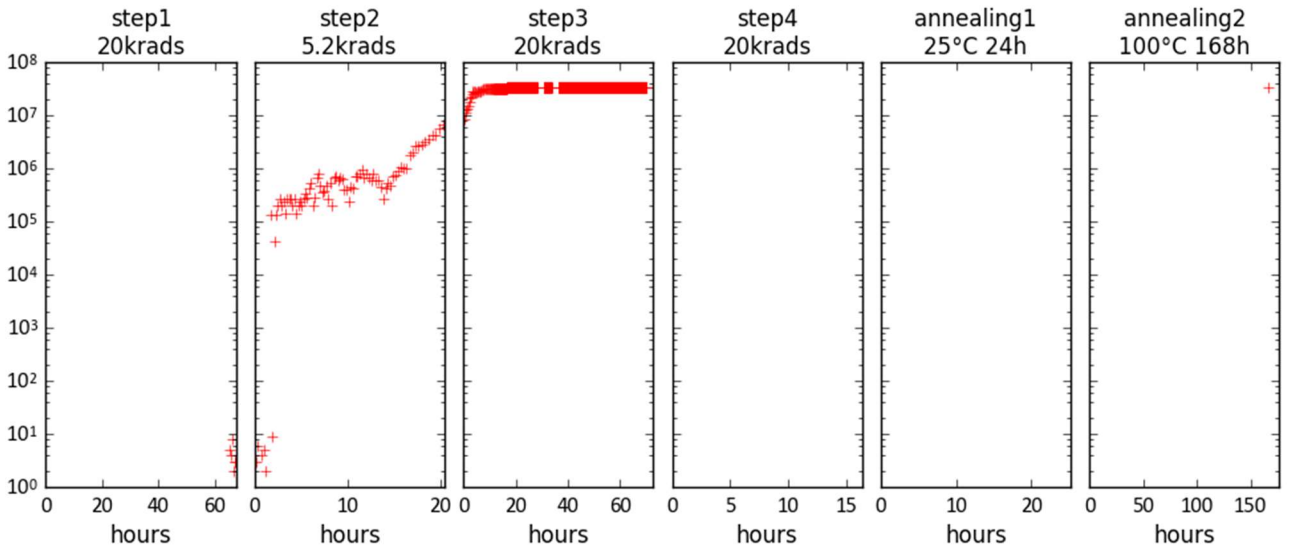
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Dut2, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



Dut2, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

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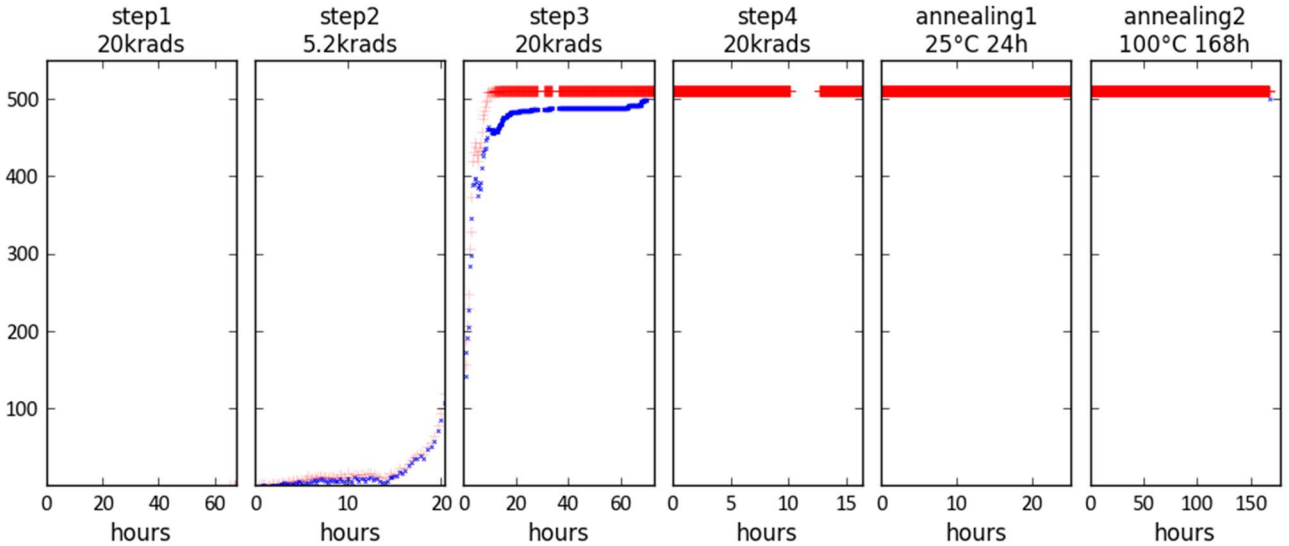
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12.21.4 DUT2, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

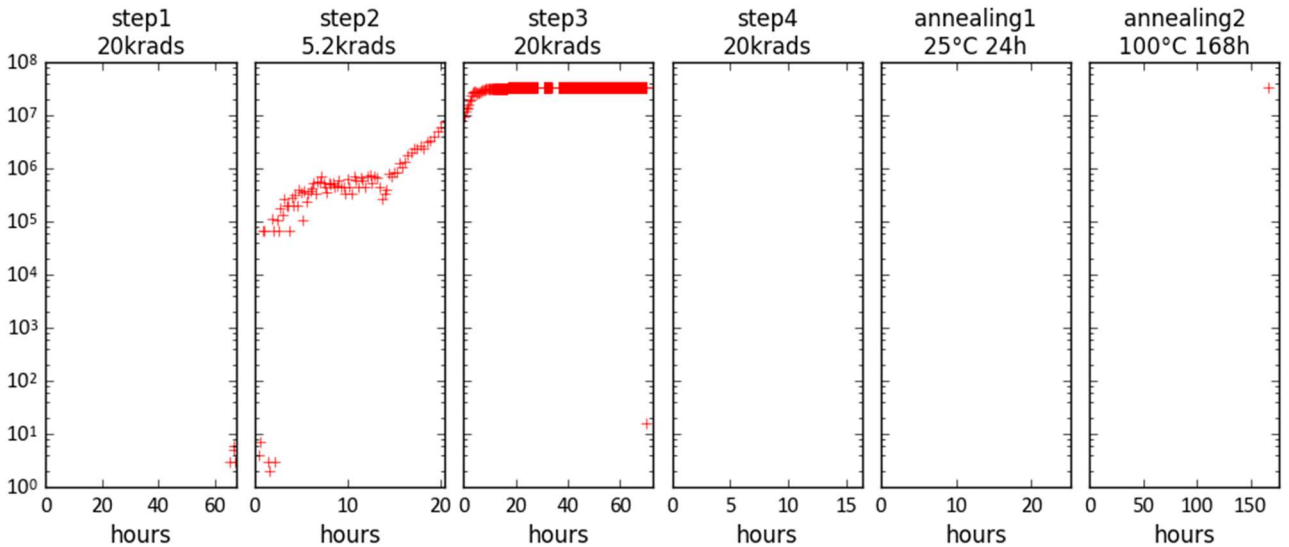
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Dut2, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error




Dut2, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

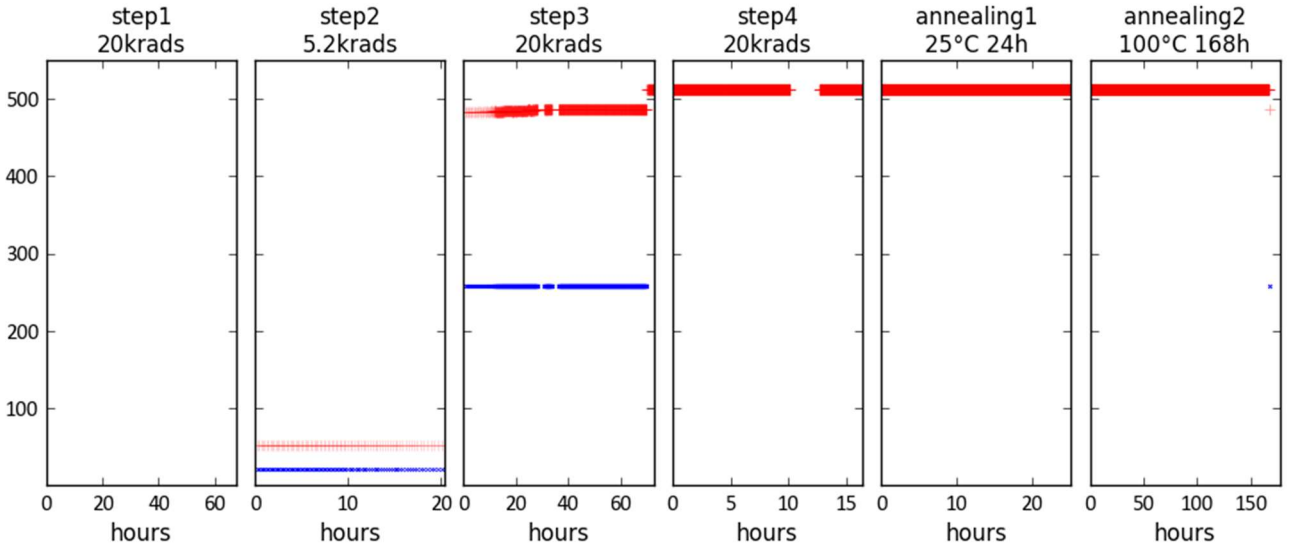
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12.21.5 DUT2, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

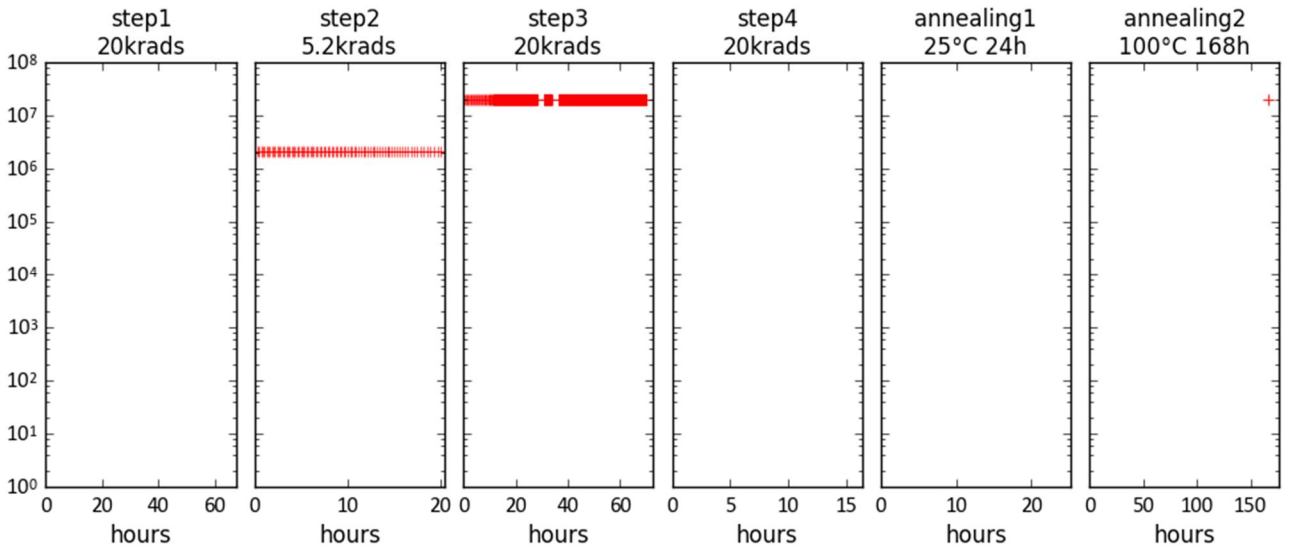
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Dut2, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

+ + words in error



Dut2, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

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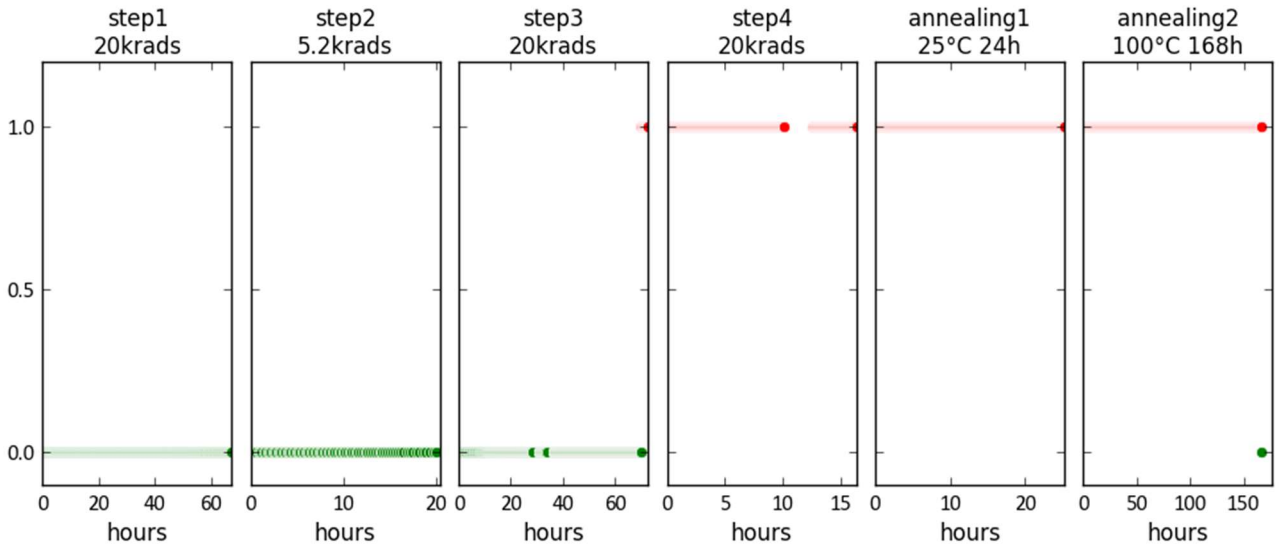
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12.21.6 DUT2, High Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut2, High duty cycle, DUT access status

hirex eng.

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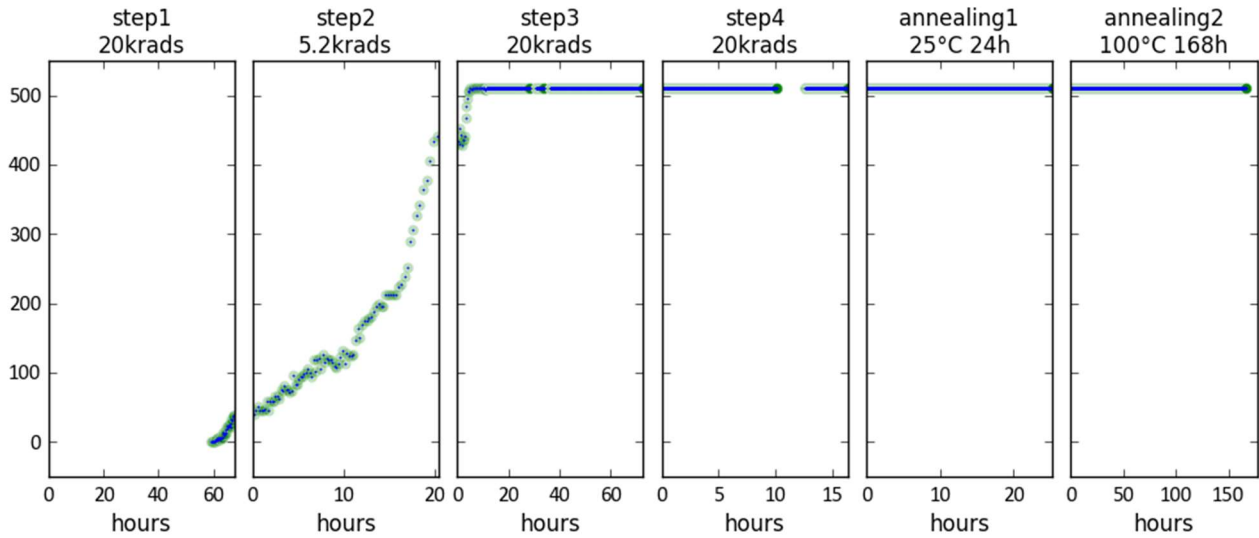
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12.22 DUT3 (Board 3), High duty cycle

12.22.1 DUT3, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

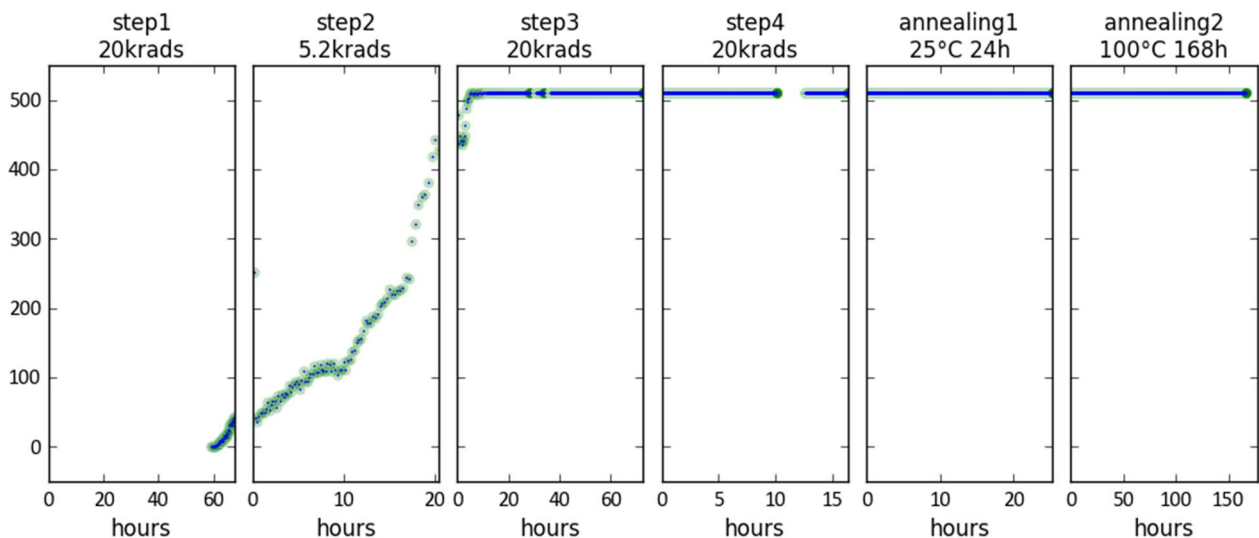


Dut3, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.22.2 DUT3, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut3, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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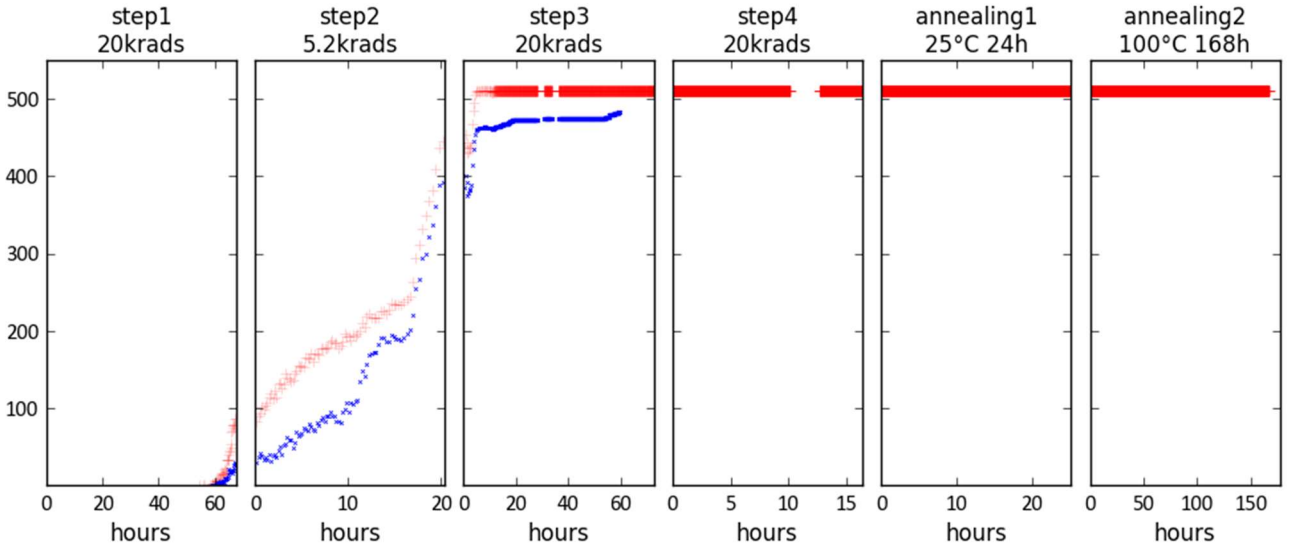
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12.22.3 DUT3, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

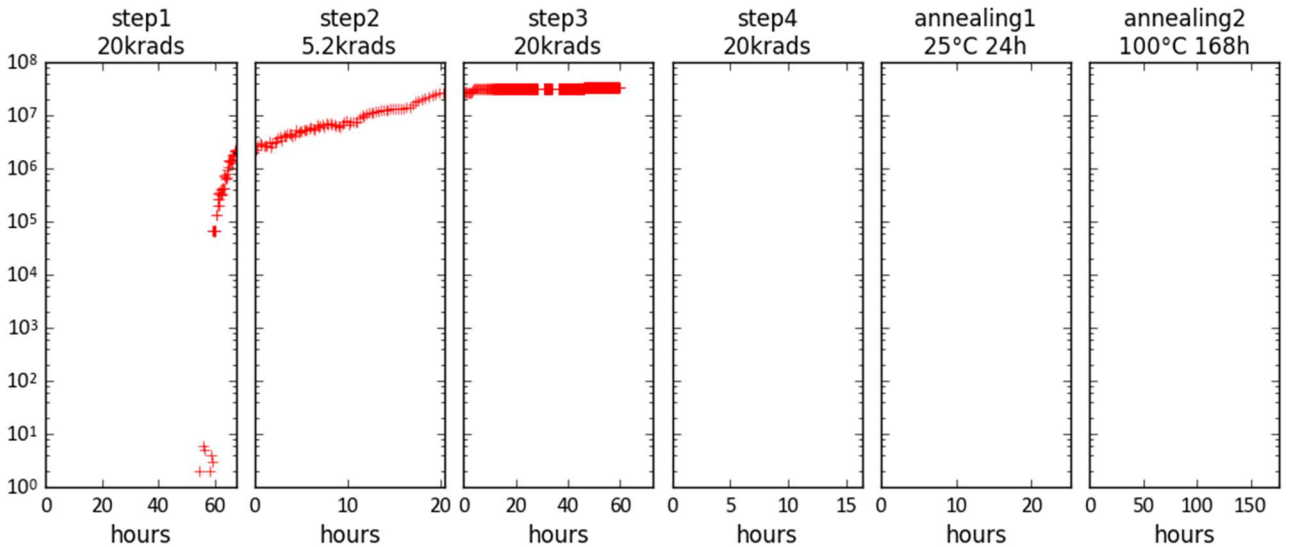
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Dut3, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut3, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

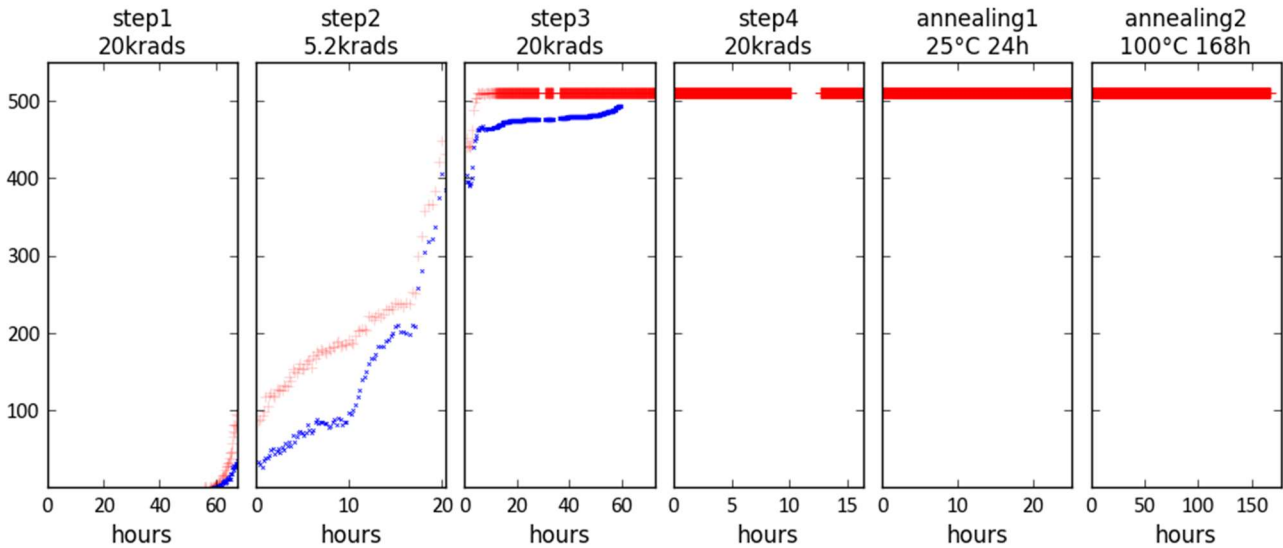
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12.22.4 DUT3, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

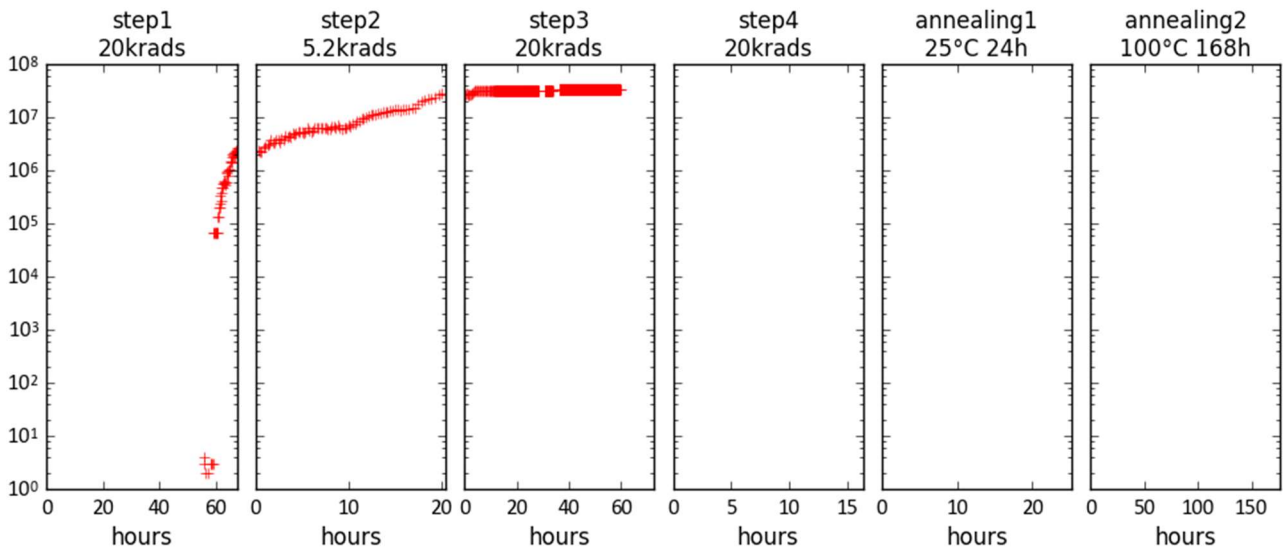
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Dut3, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut3, High duty cycle, Read, pattern aaaa, block 2 to 511

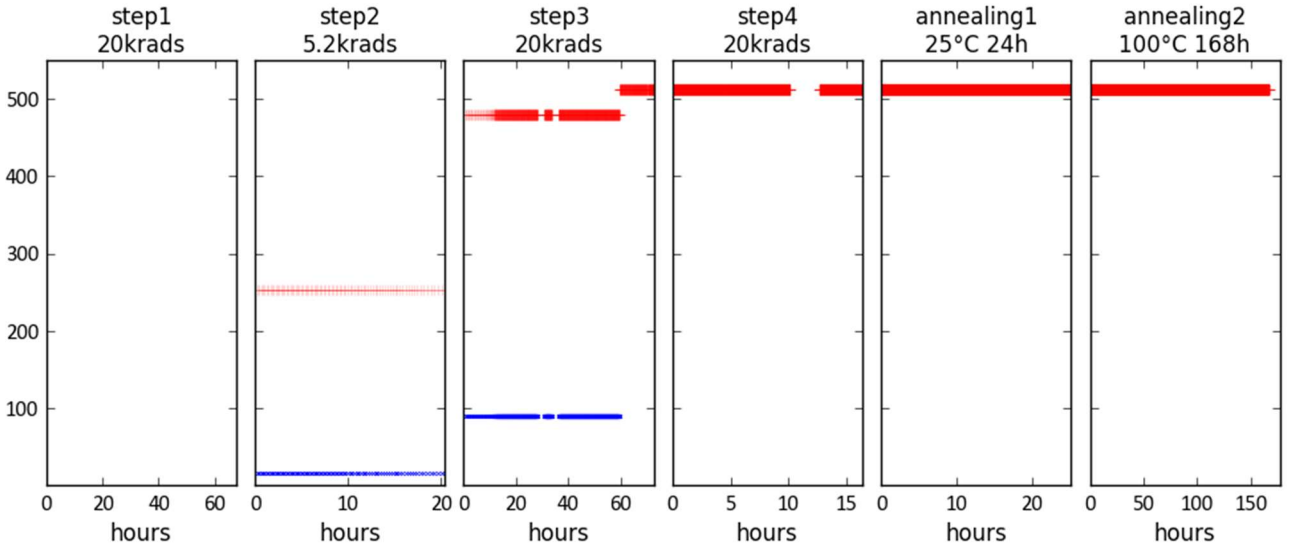
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12.22.5 DUT3, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

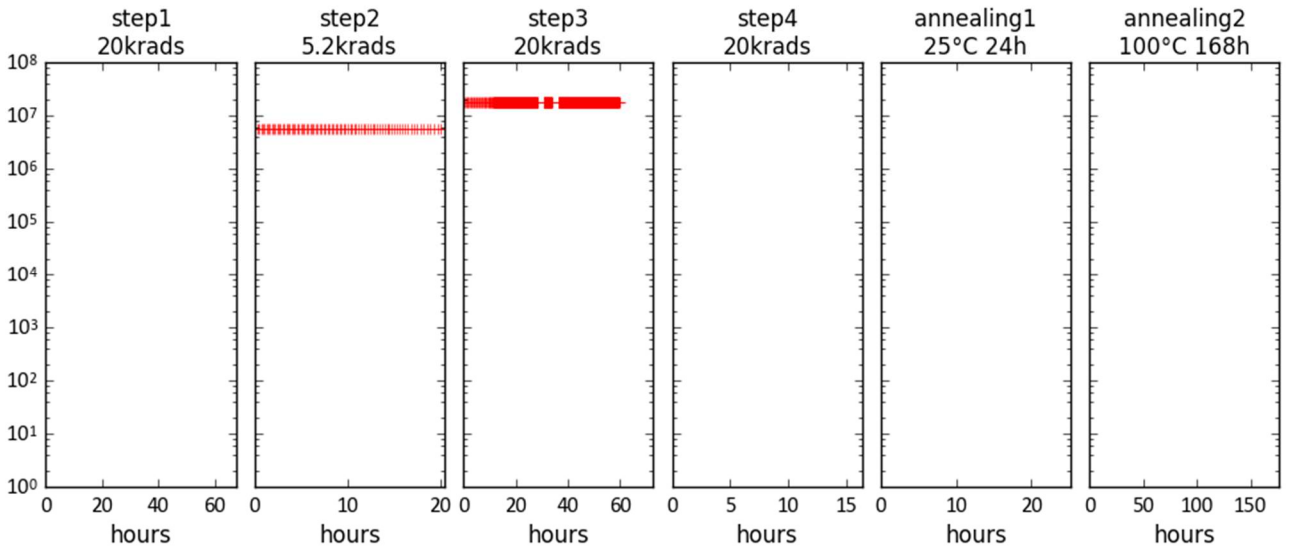
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut3, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error



Dut3, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

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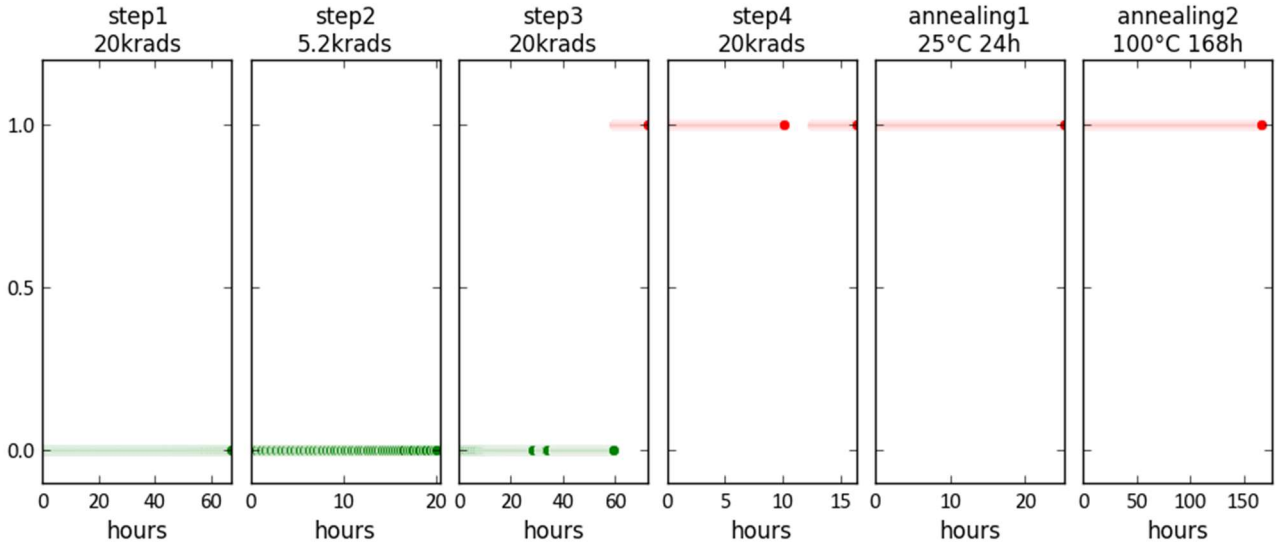


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12.22.6 DUT3, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut3, High duty cycle, DUT access status

hirex eng.

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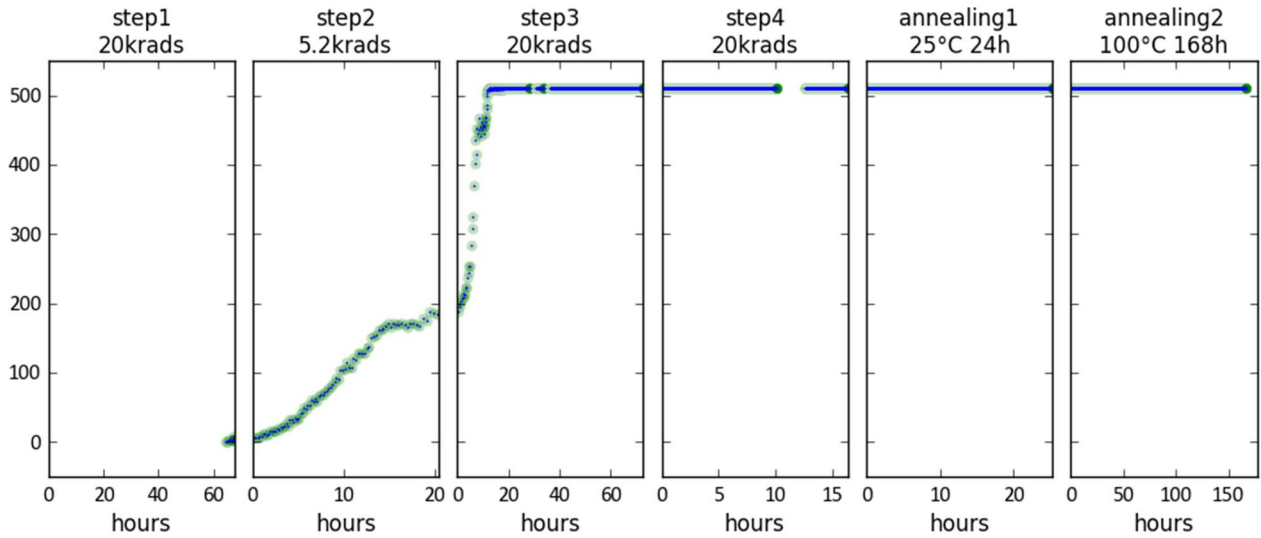
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12.23 DUT4 (Board 3), High duty cycle

12.23.1 DUT4, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

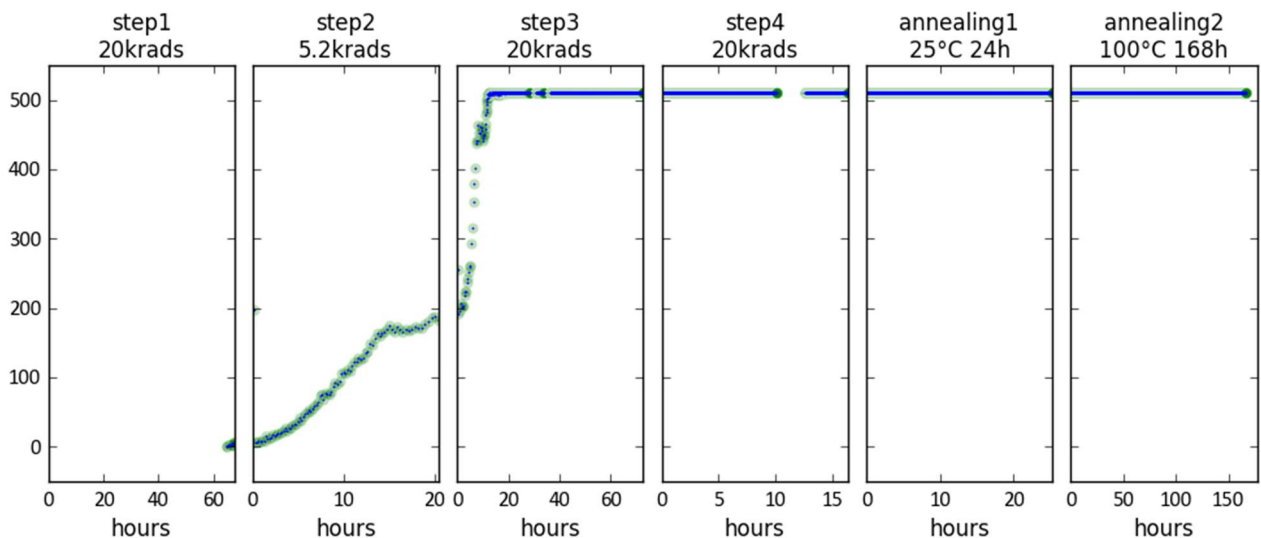


Dut4, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.23.2 DUT4, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut4, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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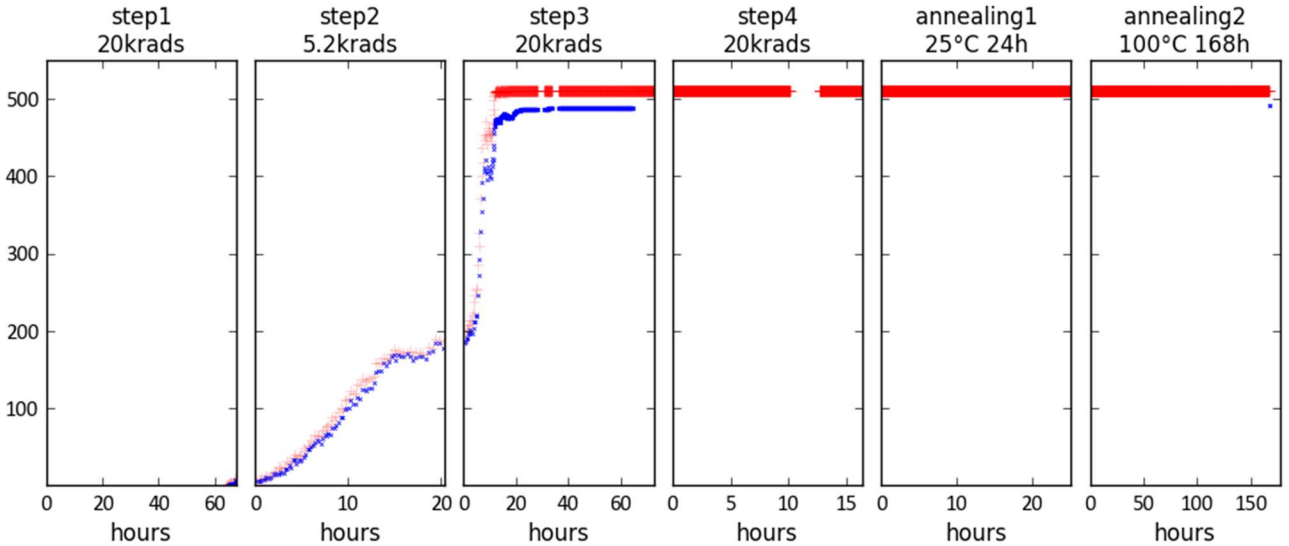
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12.23.3 DUT4, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

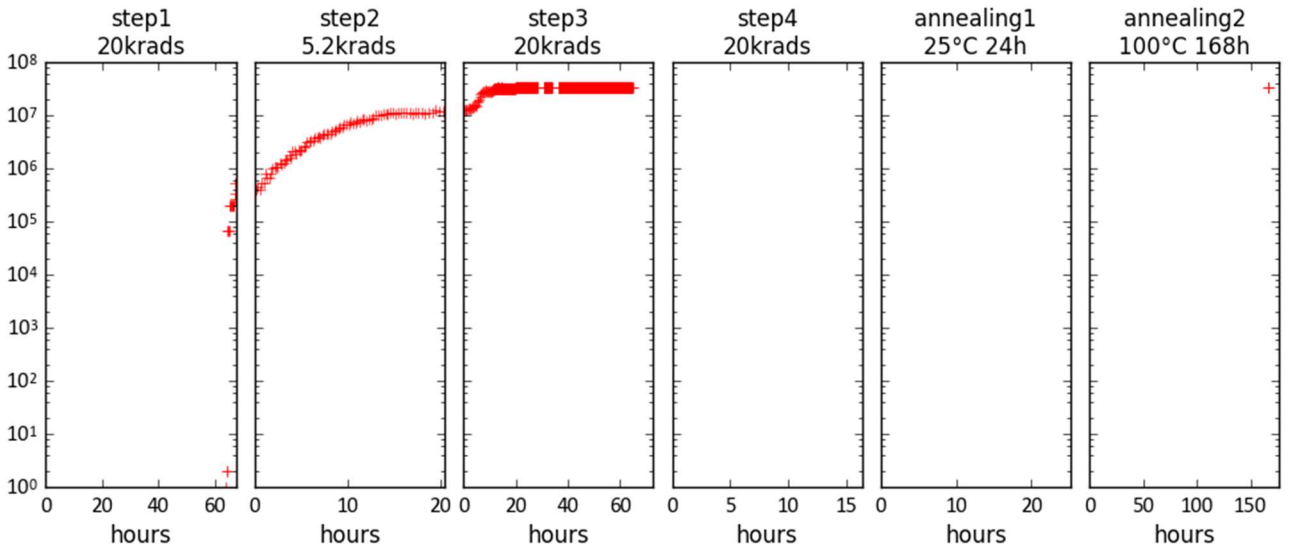
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Dut4, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut4, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

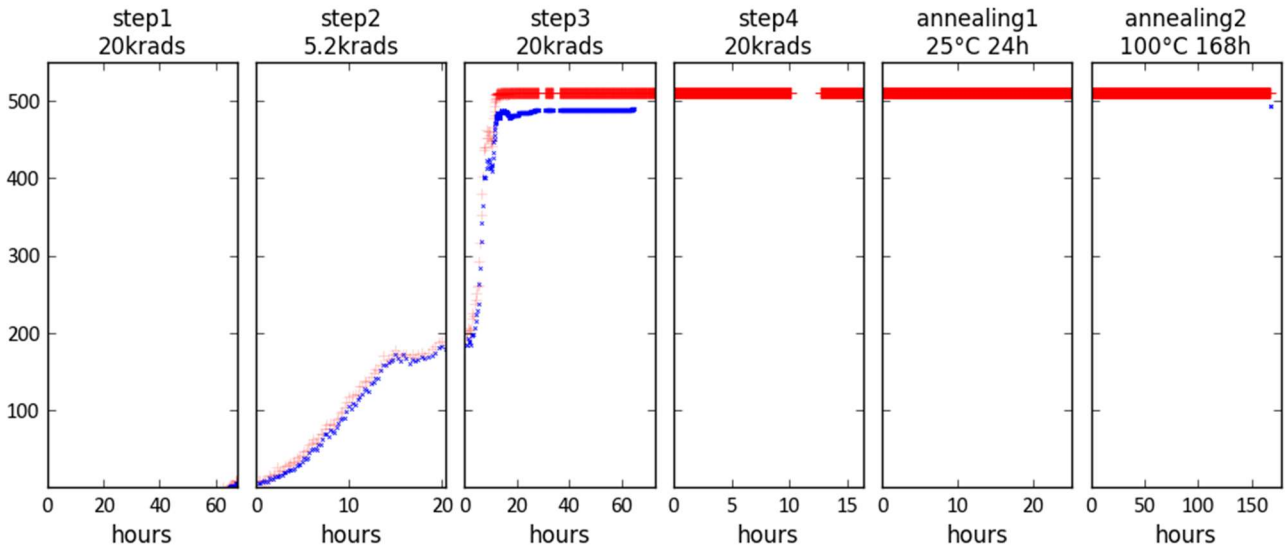
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12.23.4 DUT4, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

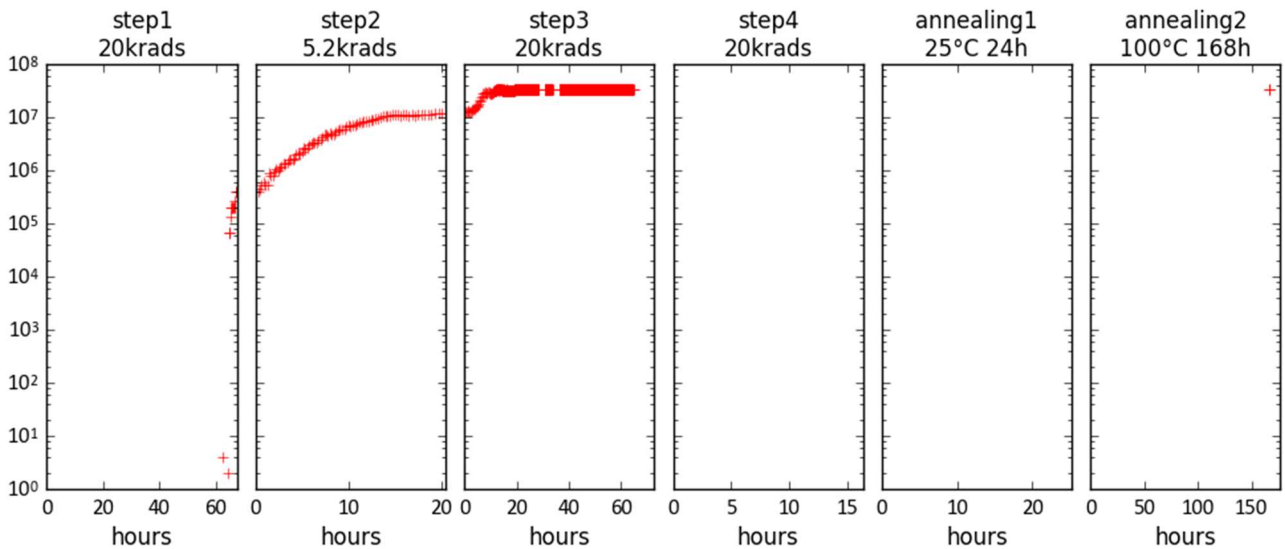
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Dut4, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut4, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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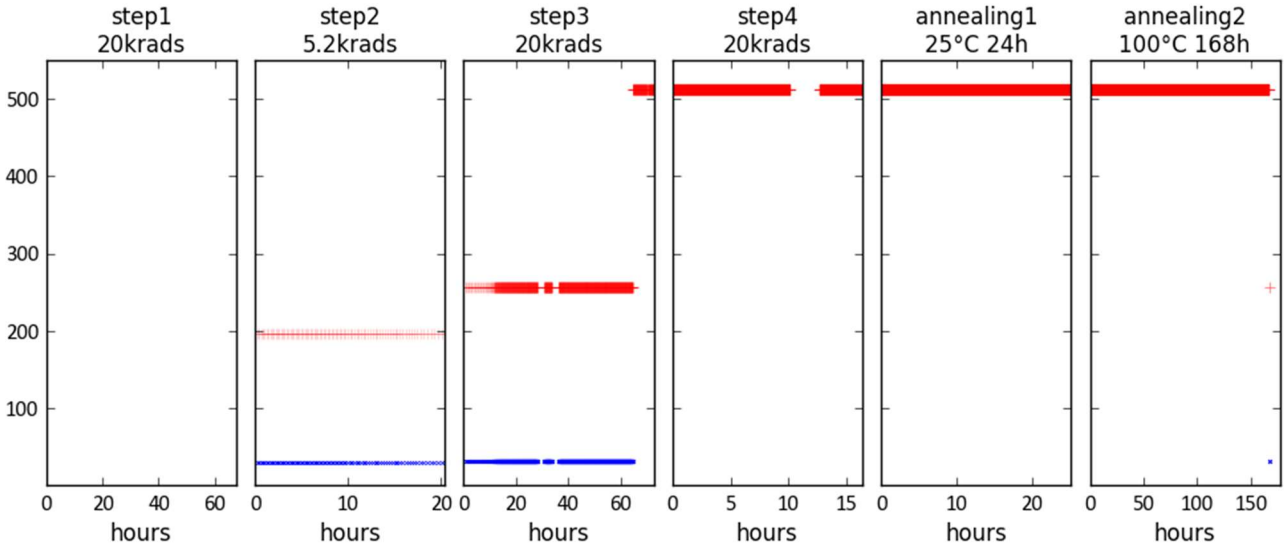
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12.23.5 DUT4, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

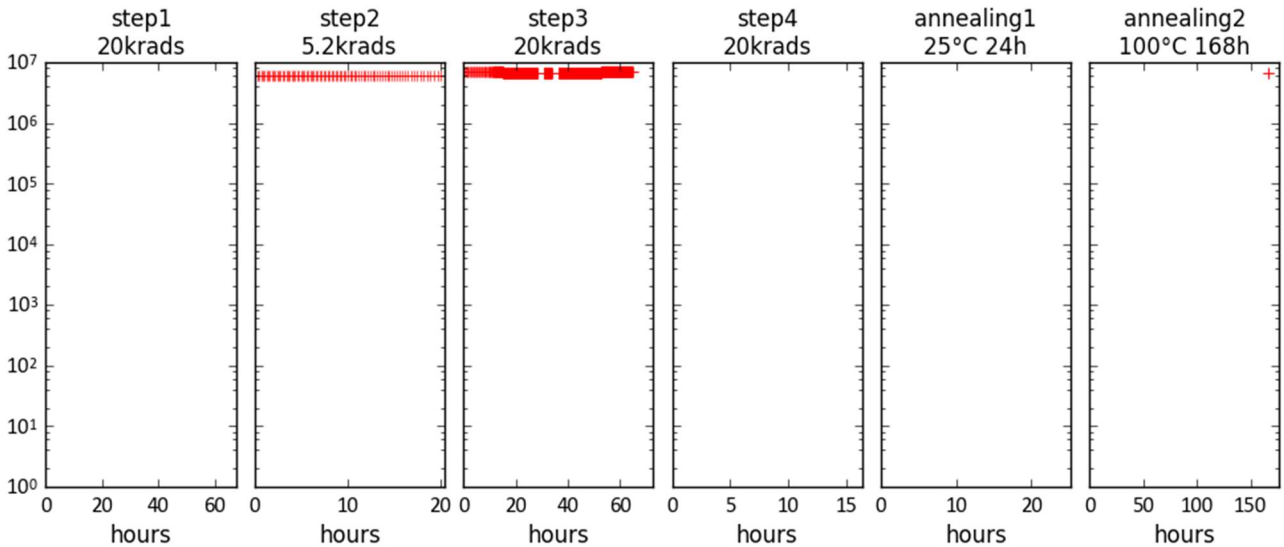
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Dut4, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

+ + words in error



Dut4, High duty cycle, Read, pattern aaa, block 512 to 1023

hirex eng.

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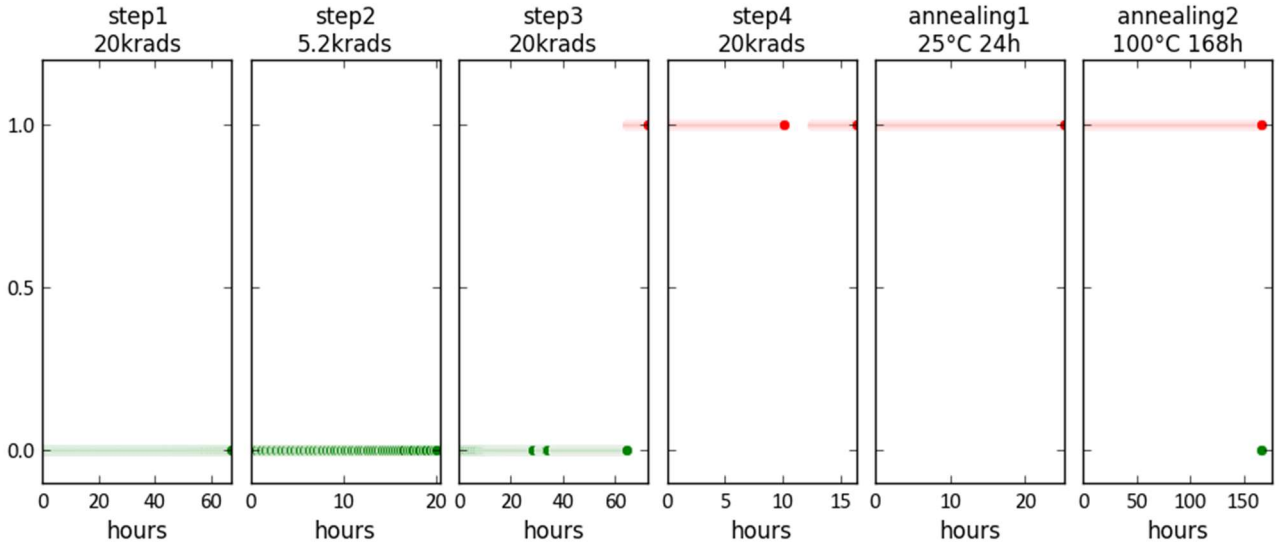
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12.23.6 DUT4, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut4, High duty cycle, DUT access status

hirex eng.

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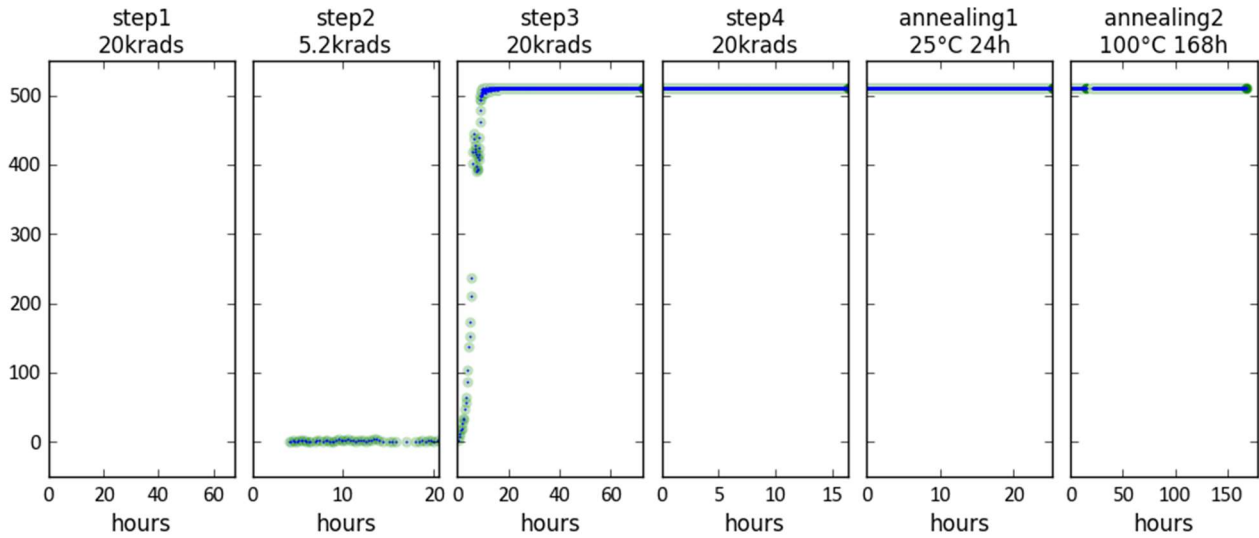
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	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY			
	S29GL01GS10FHI010		RL:	2017901236		
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12.24 DUT0 (Board 4), High duty cycle

12.24.1 DUT0, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

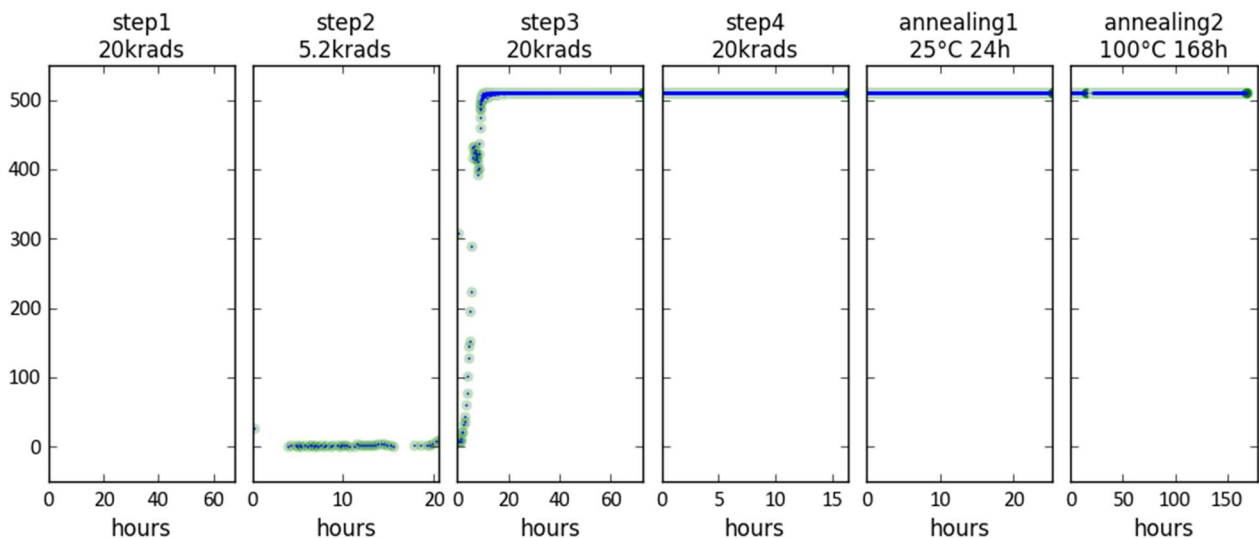


Dut0, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.24.2 DUT0, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut0, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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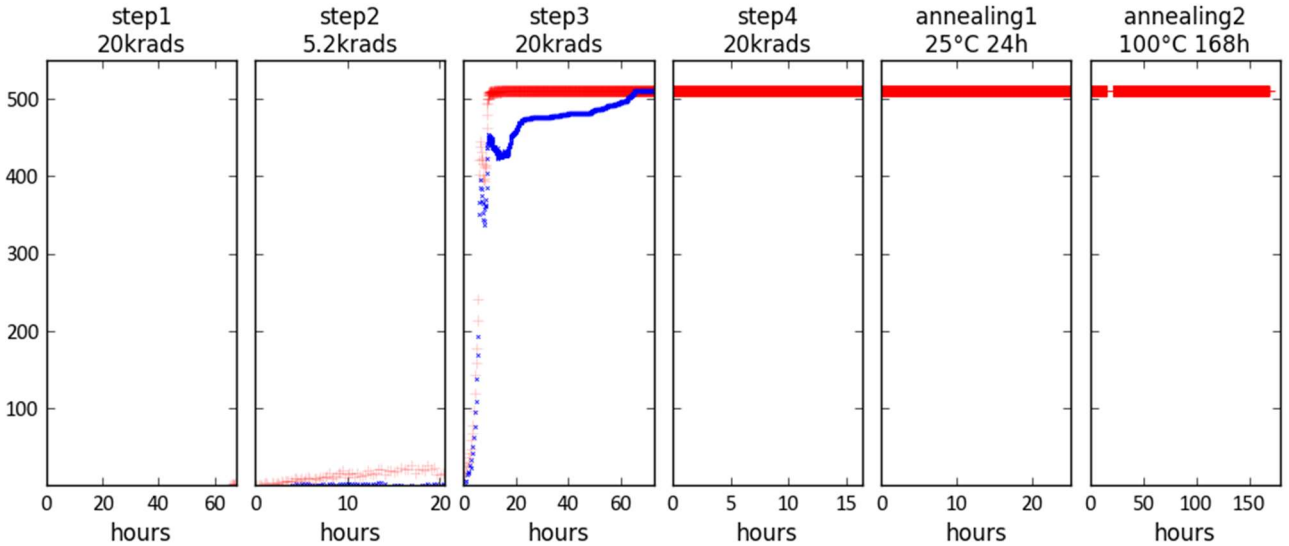
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12.24.3 DUT0, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

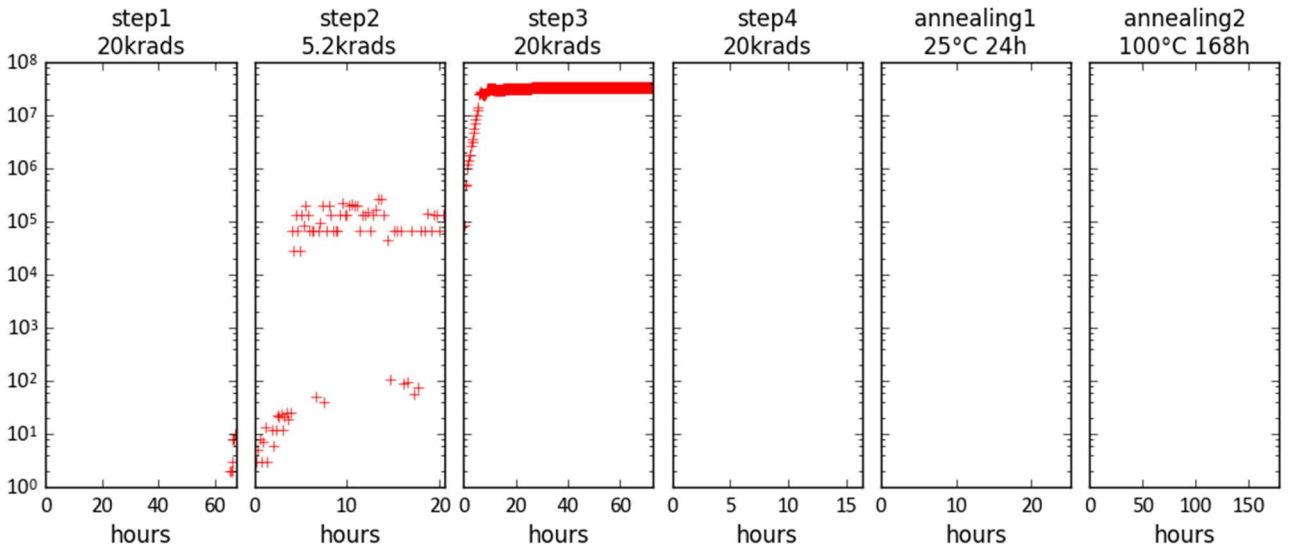
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut0, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

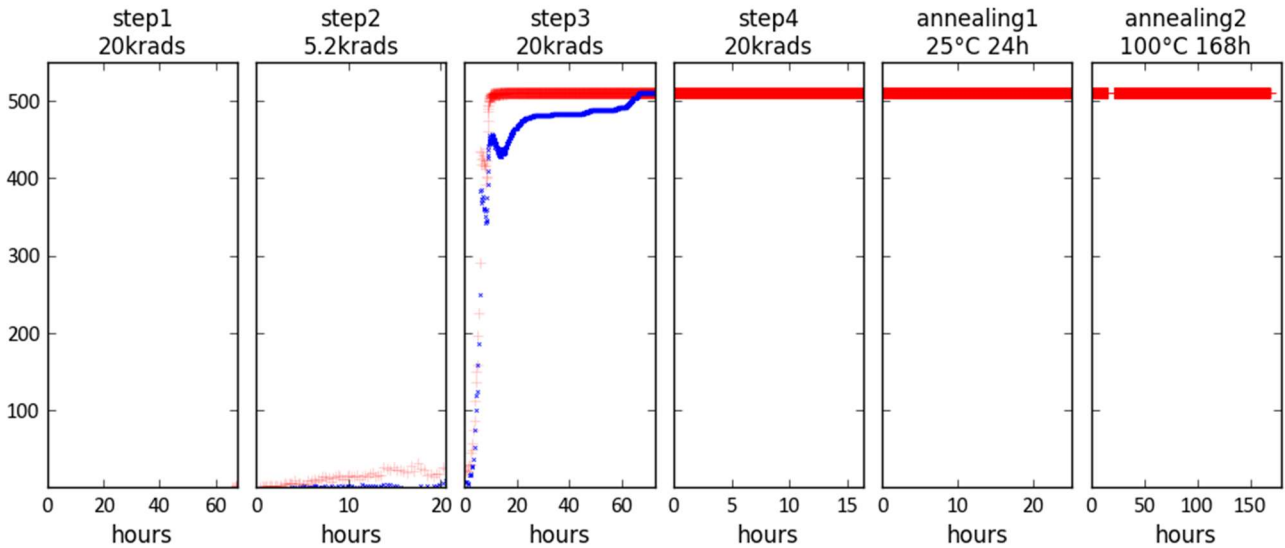
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12.24.4 DUT0, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

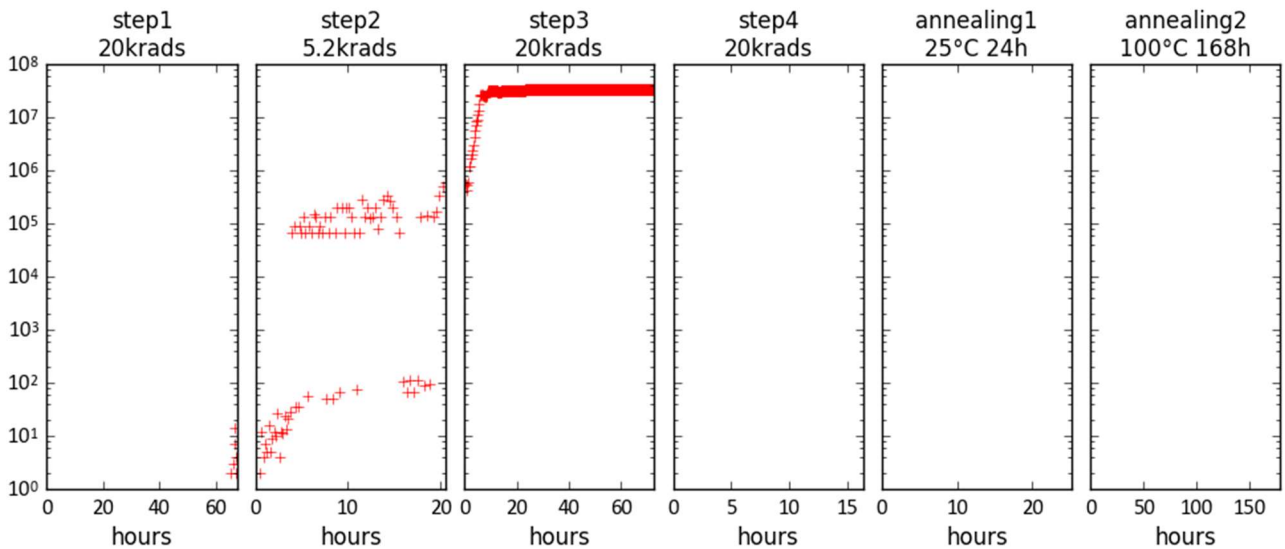
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error




Dut0, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

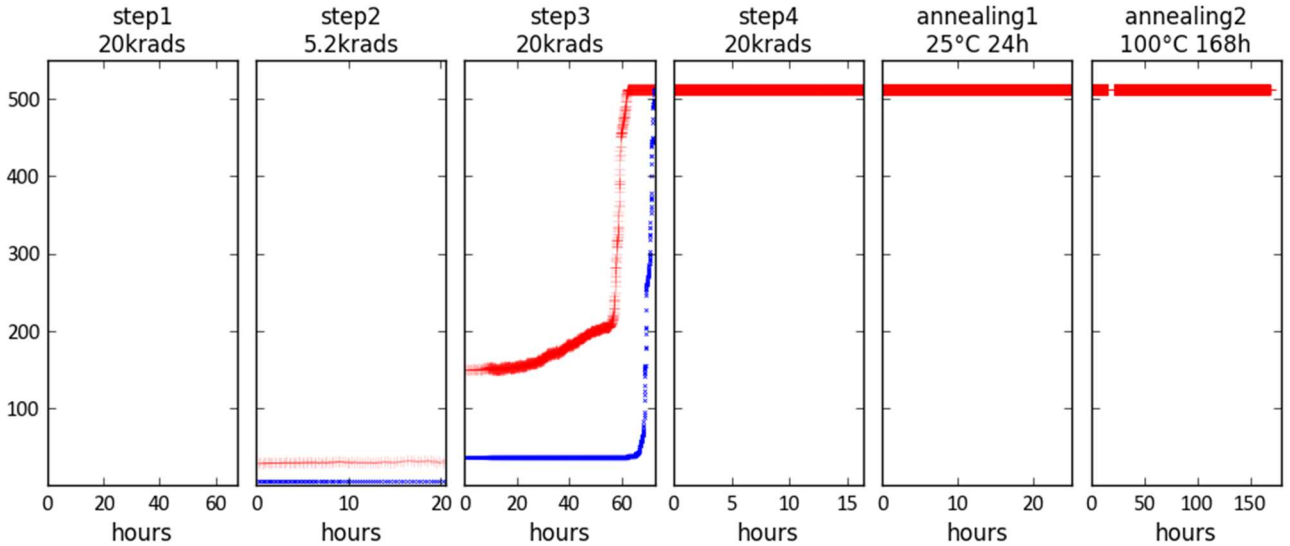
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12.24.5 DUT0, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

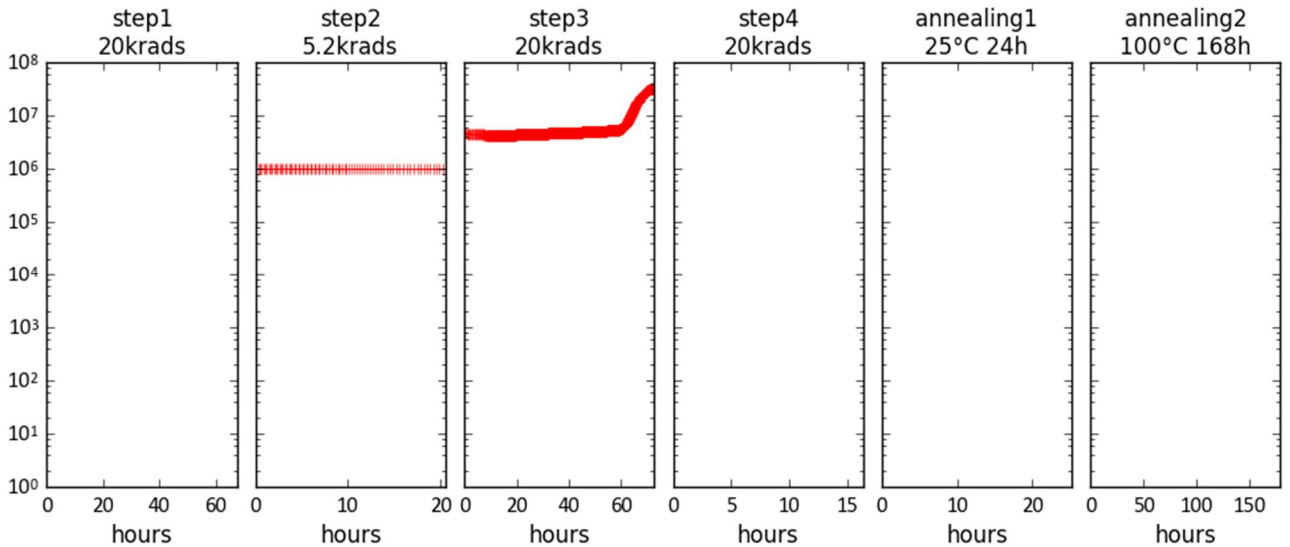
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut0, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut0, High duty cycle, Read, pattern aaaa, block 512 to 1023

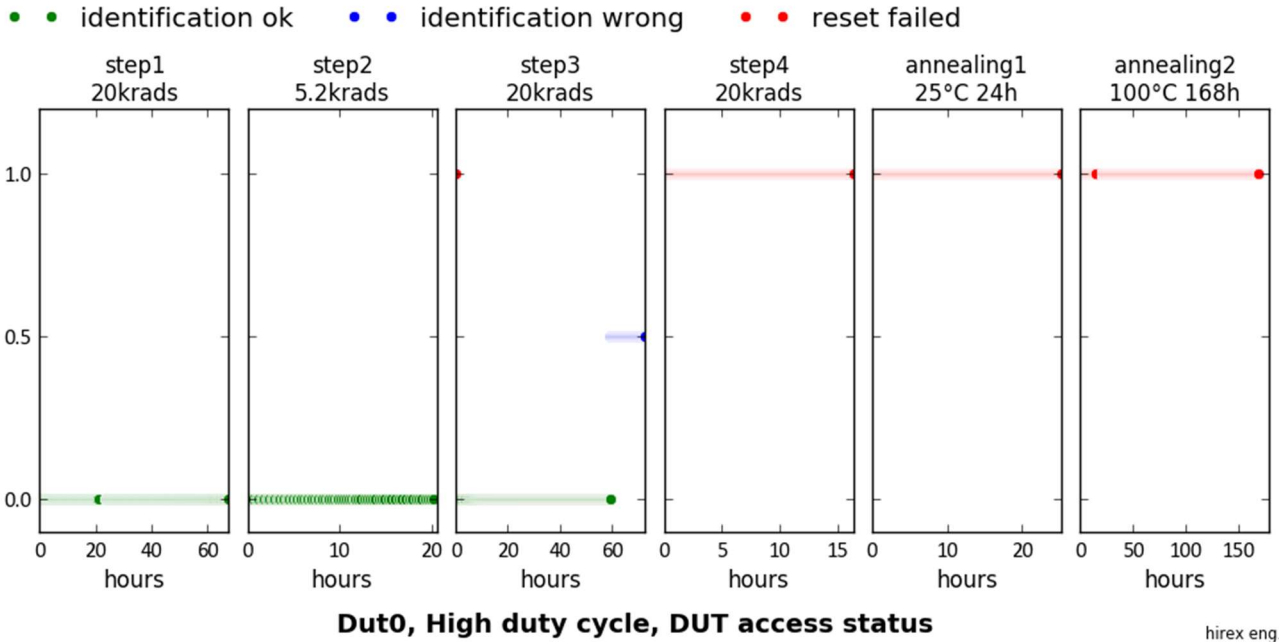
hirex eng.

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12.24.6 DUT0, High Duty Cycle, DUT access status



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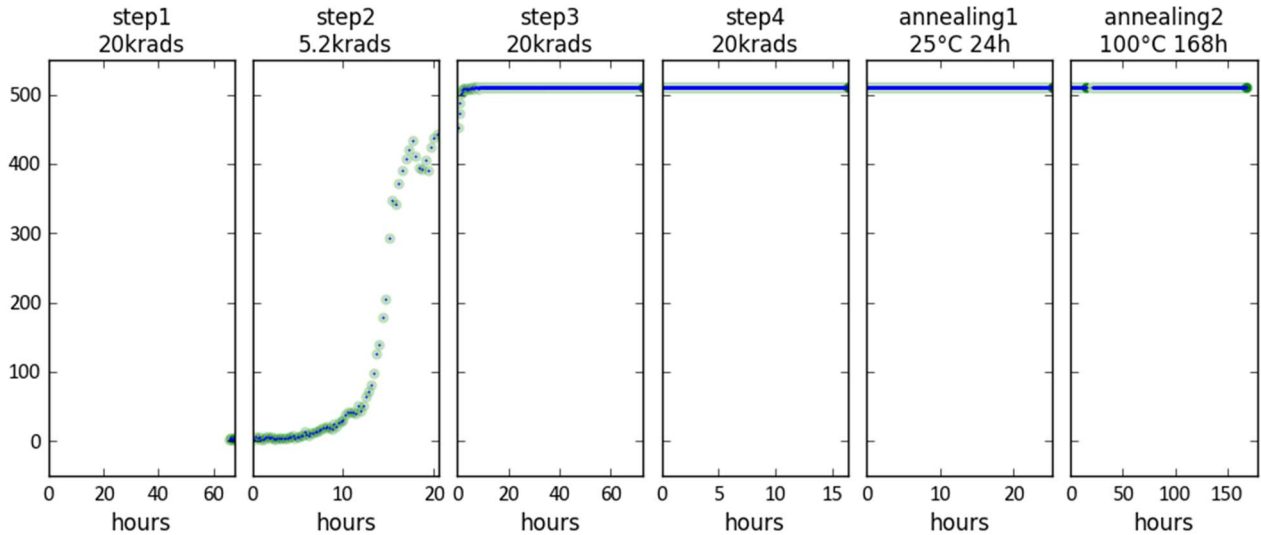
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12.25 DUT1 (Board 4), High duty cycle

12.25.1 DUT1, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

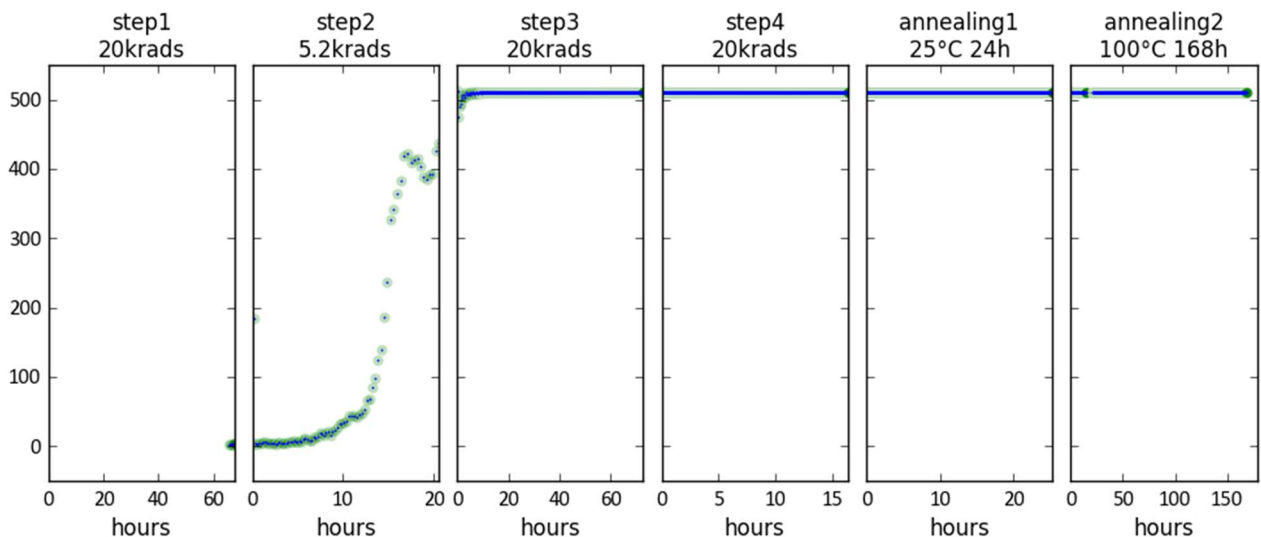


Dut1, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.25.2 DUT1, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)




Dut1, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

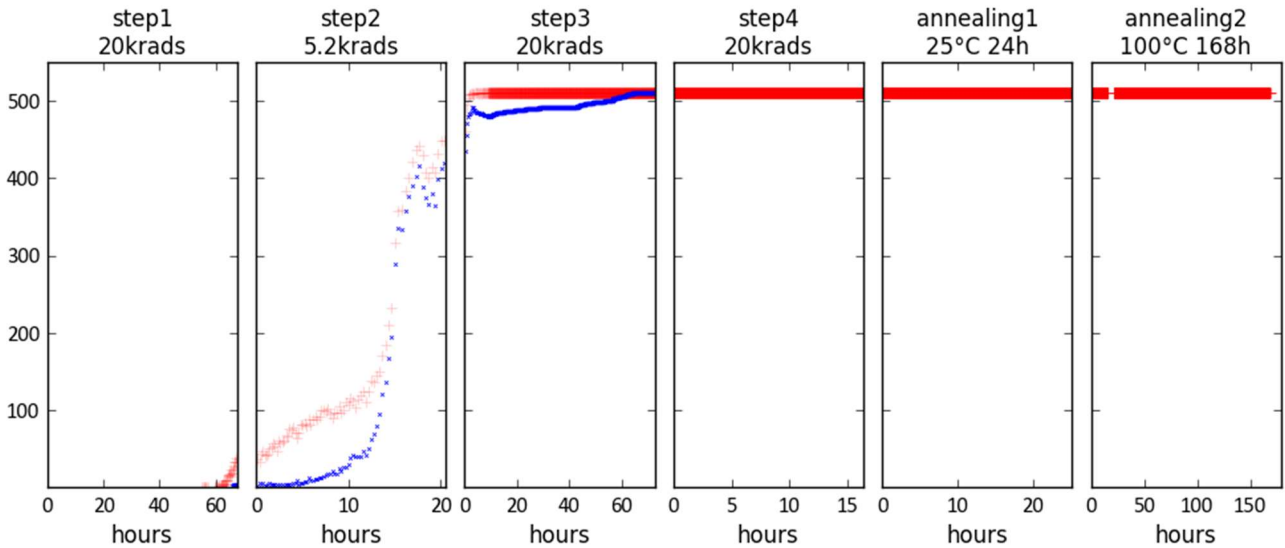
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12.25.3 DUT1, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

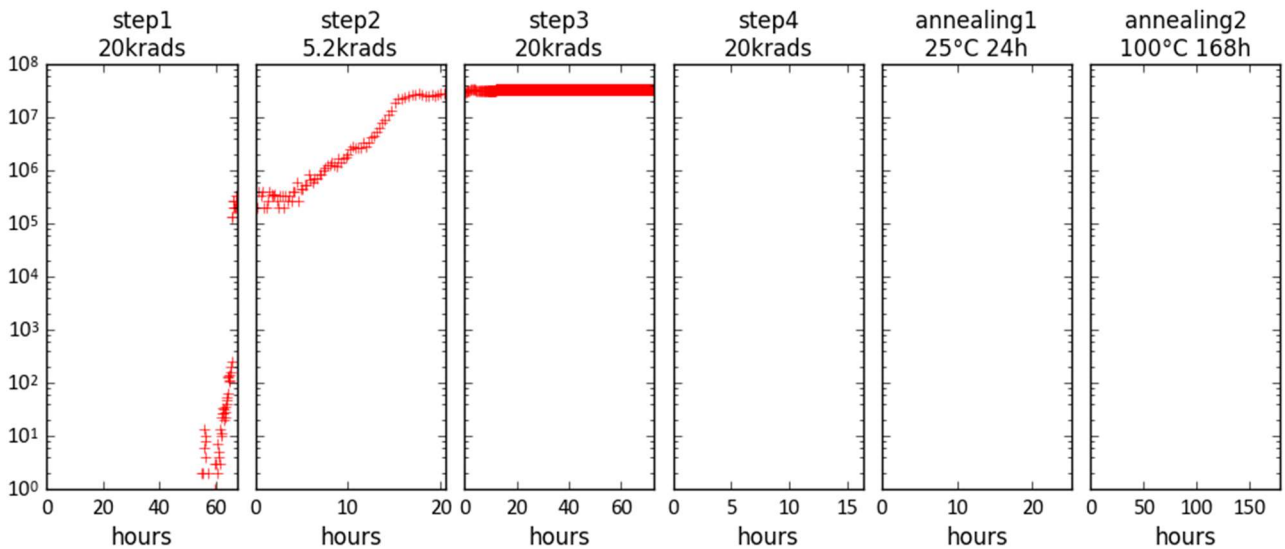
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut1, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

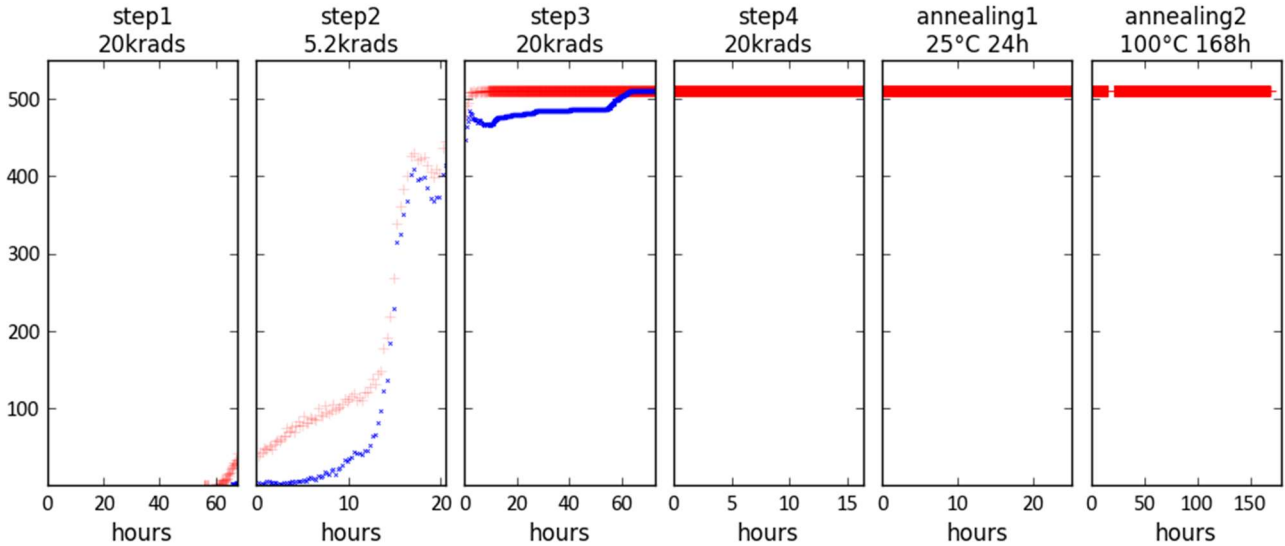
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12.25.4 DUT1, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

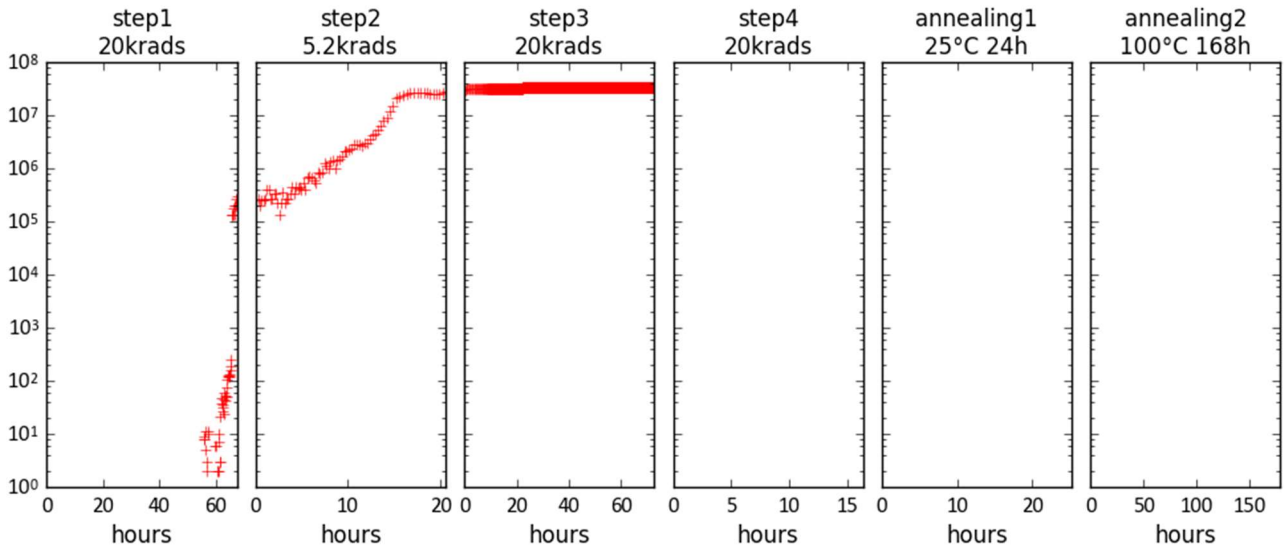
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error




Dut1, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

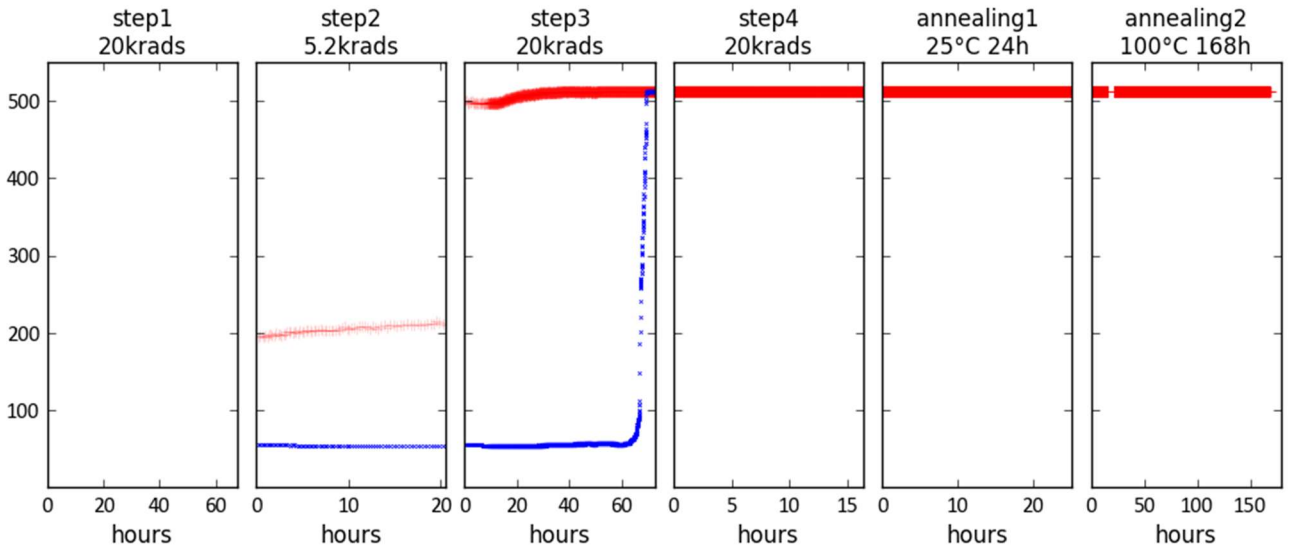
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12.25.5 DUT1, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

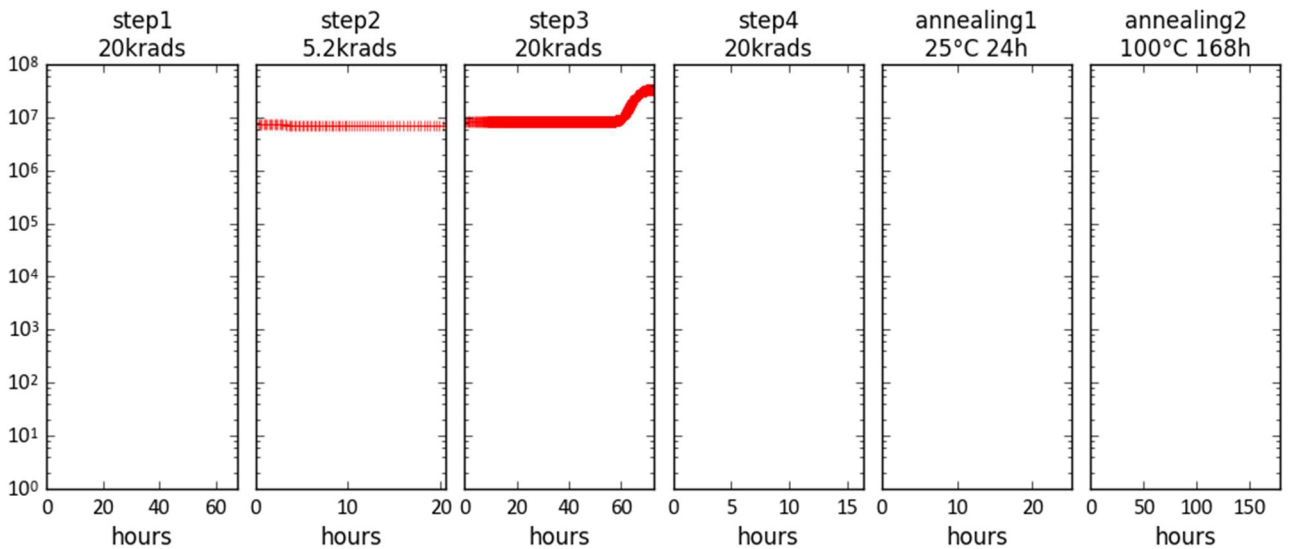
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut1, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut1, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

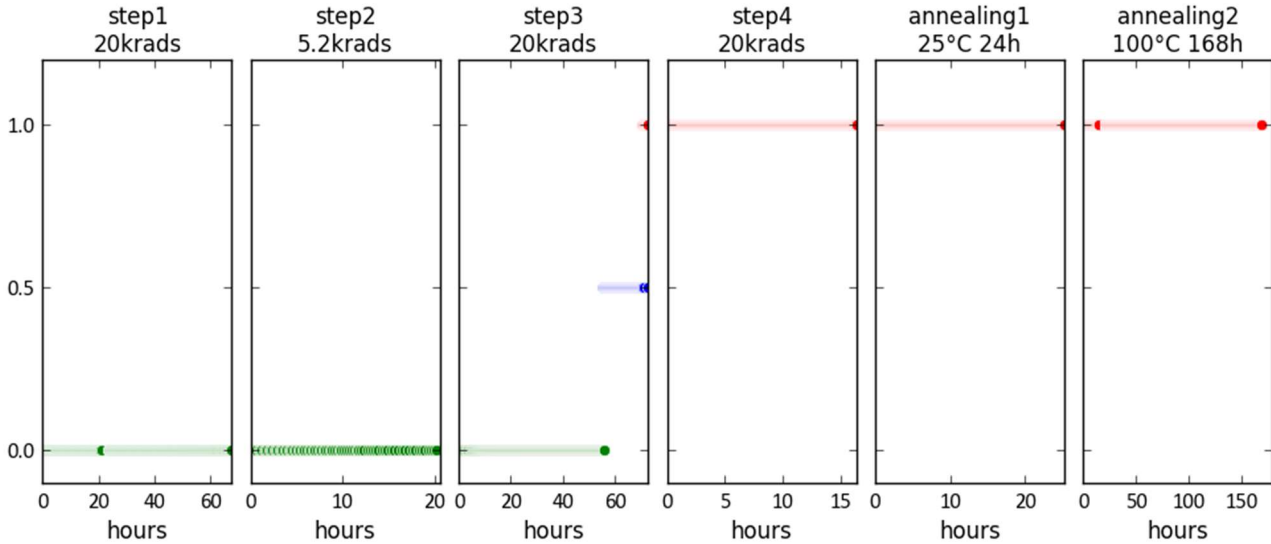
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	S29GL01GS10FHI010 D/C 1512		SPANSION INC		RL: 2017901236
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12.25.6 DUT1, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut1, High duty cycle, DUT access status

hirex eng.

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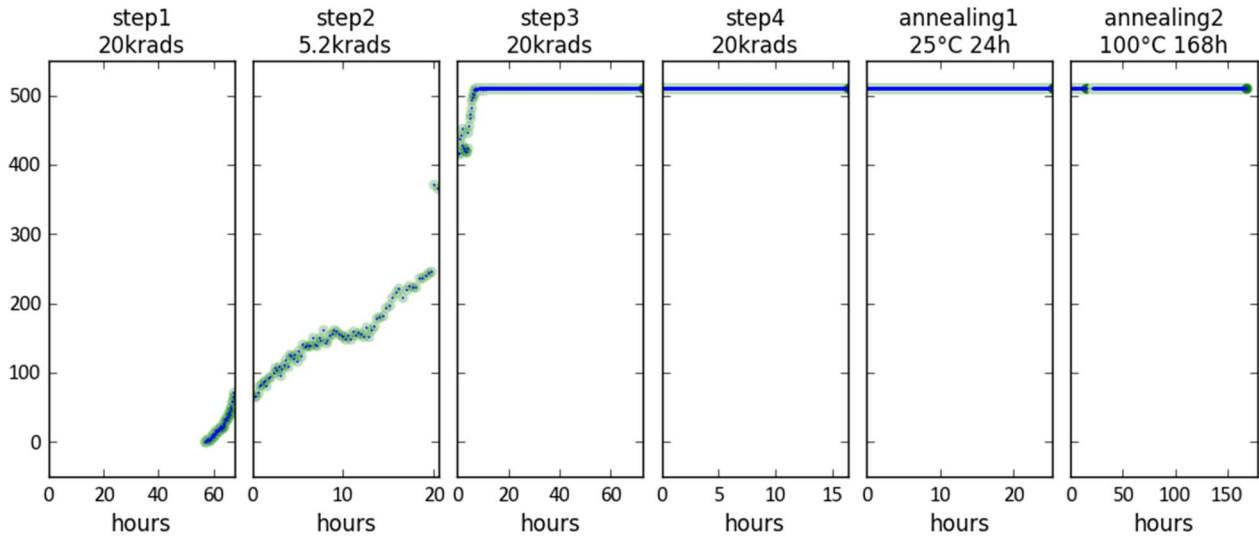
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12.26 DUT2 (Board 4), High duty cycle

12.26.1 DUT2, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

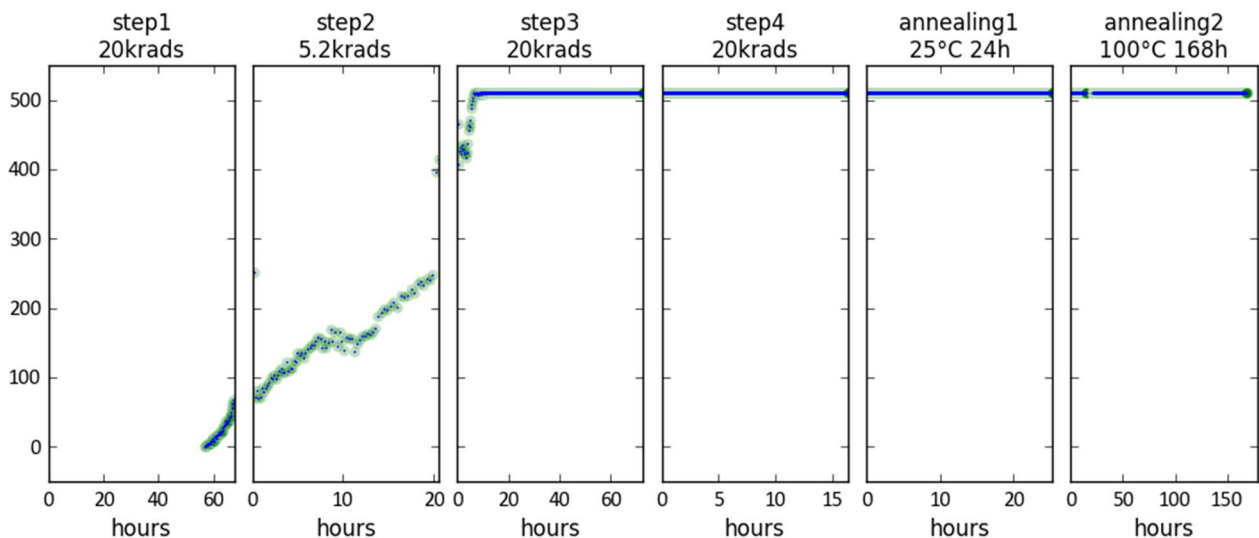


Dut2, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.26.2 DUT2, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut2, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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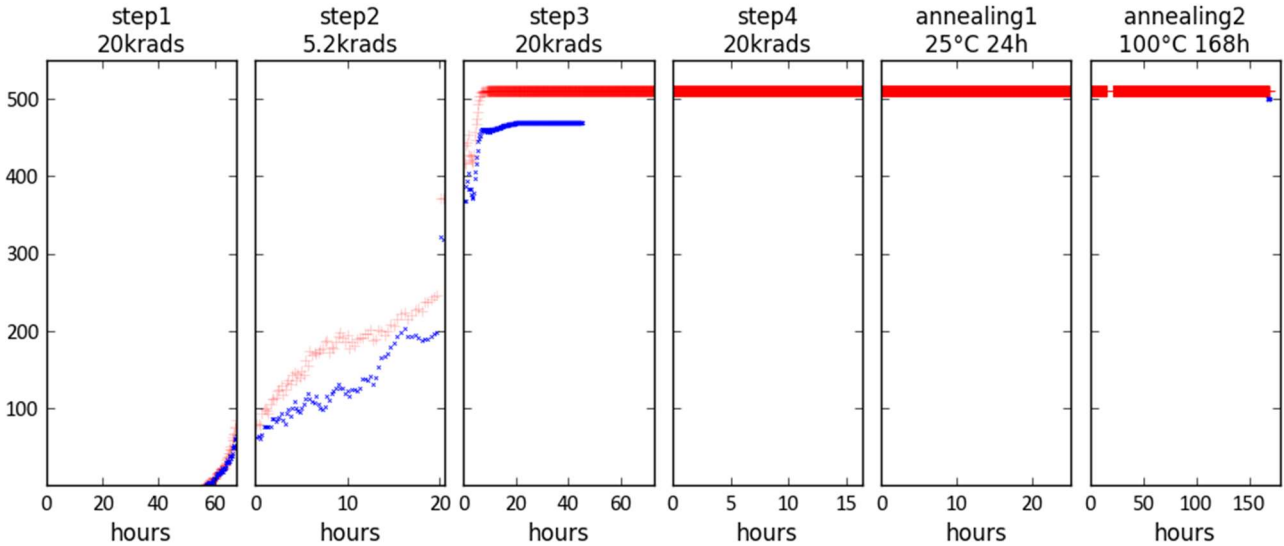
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12.26.3 DUT2, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

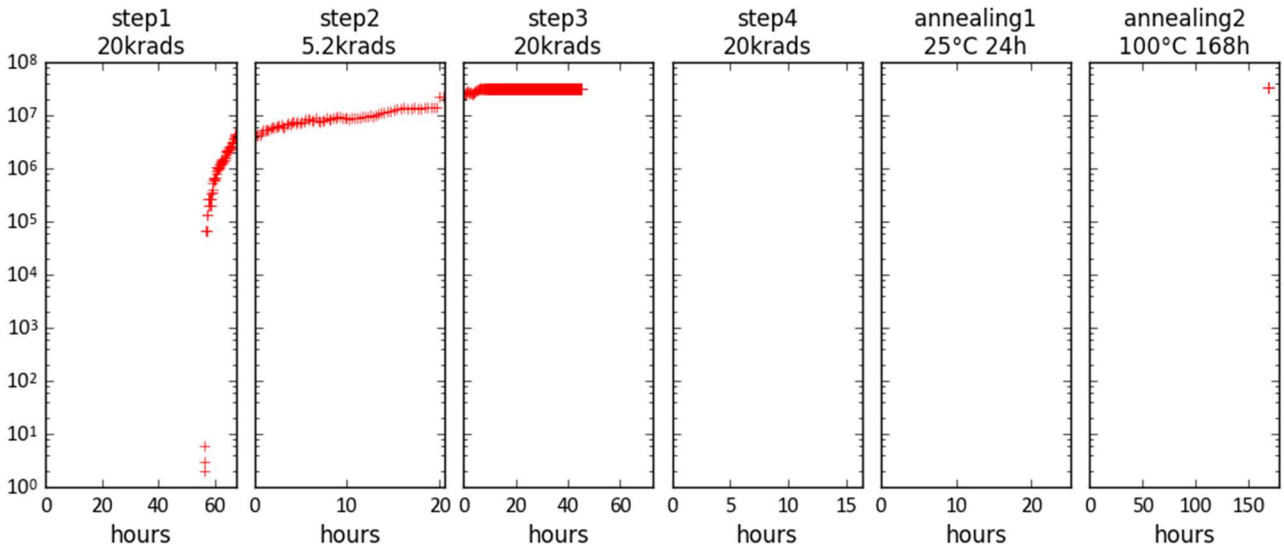
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut2, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error




Dut2, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

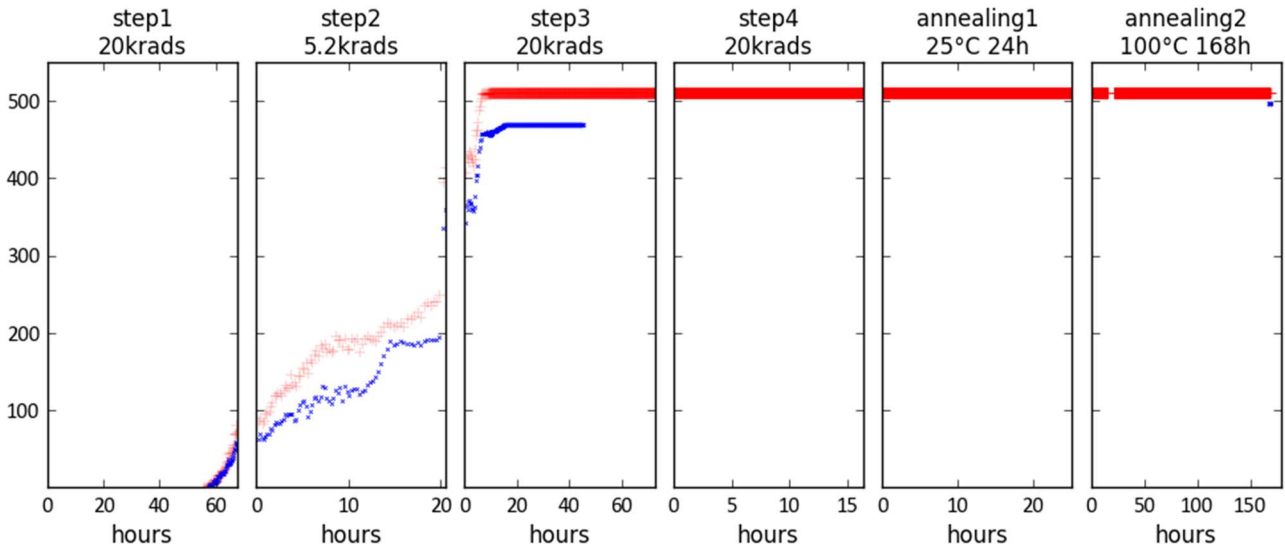
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12.26.4 DUT2, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

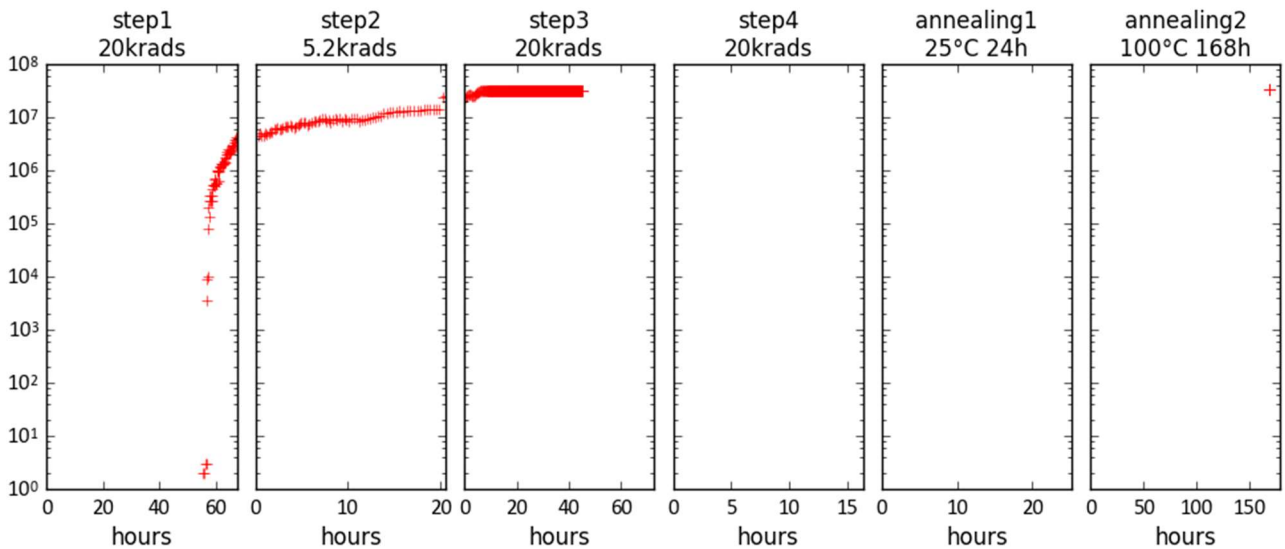
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut2, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut2, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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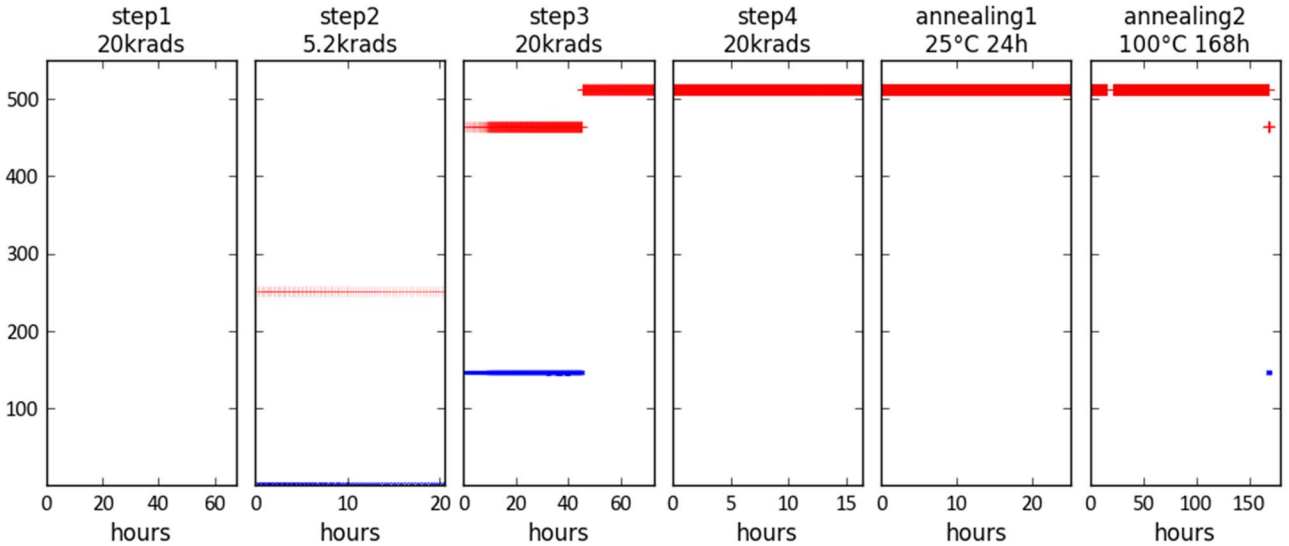
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12.26.5 DUT2, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

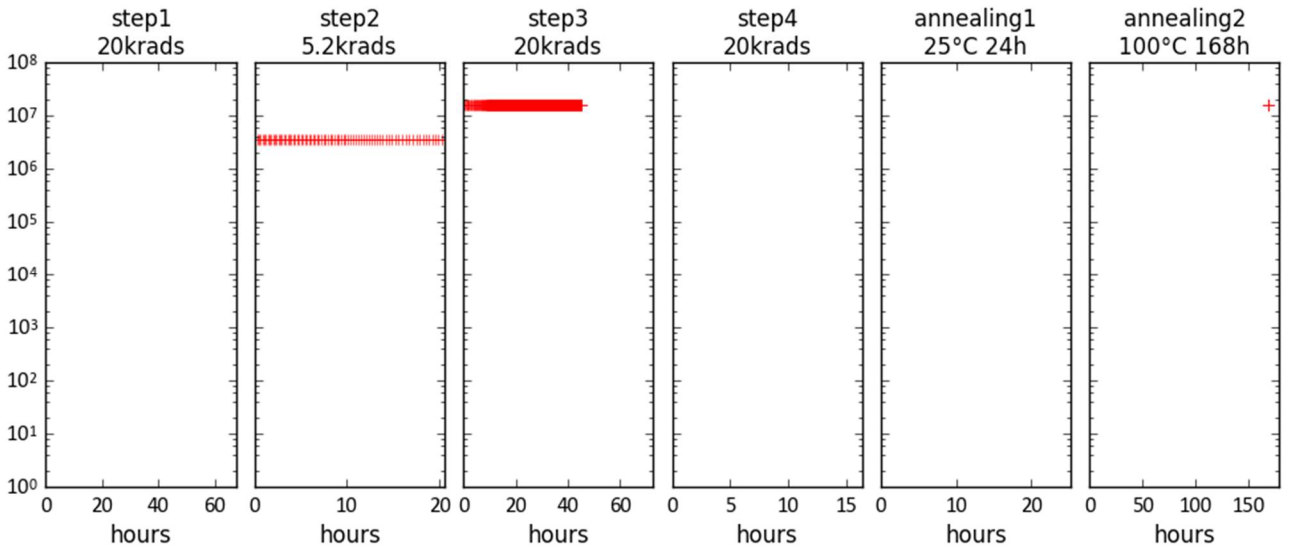
+ + blocks with minimum 1 word in error * * blocks with 90% words in error



Dut2, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error



Dut2, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

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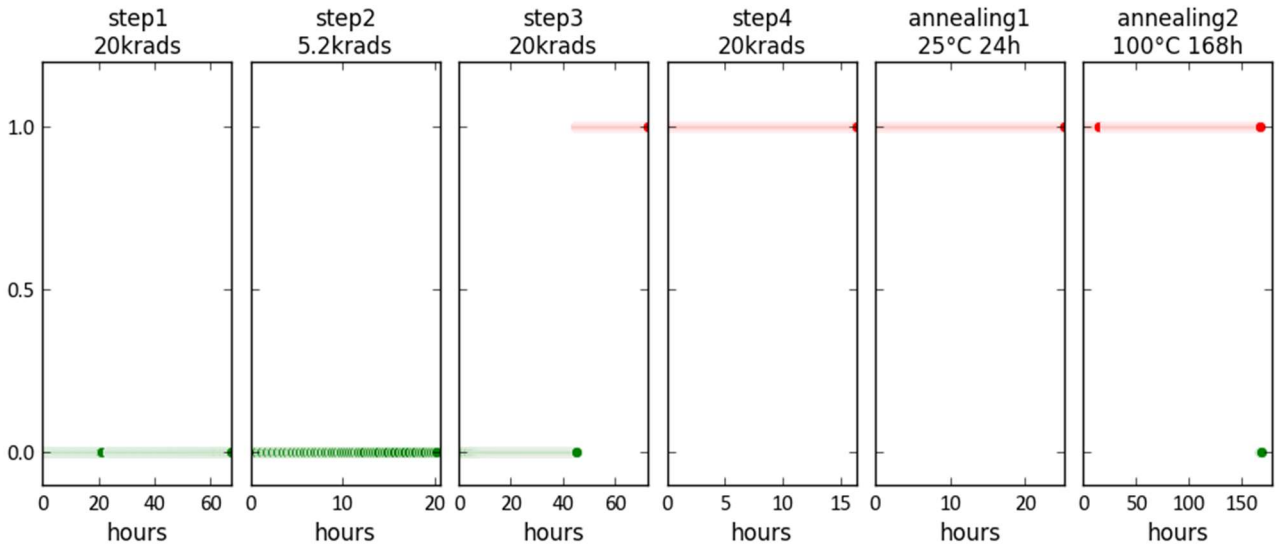
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12.26.6 DUT2, High Duty Cycle, DUT access status

● ● identification ok
 ● ● identification wrong
 ● ● reset failed




Dut2, High duty cycle, DUT access status

hirex eng.

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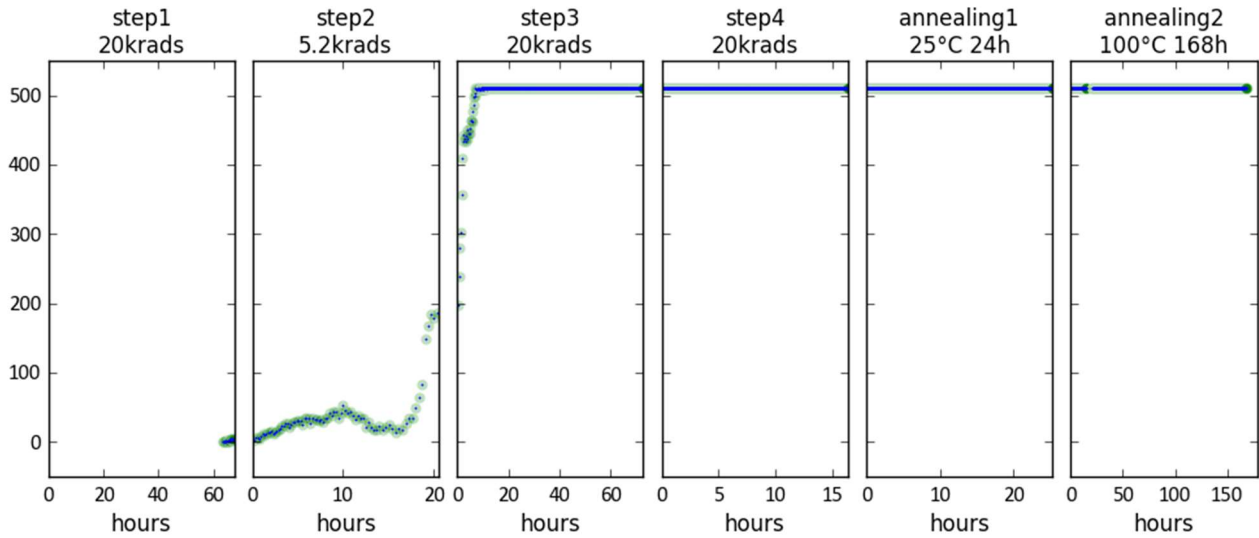
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12.27 DUT3 (Board 4), High duty cycle

12.27.1 DUT3, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

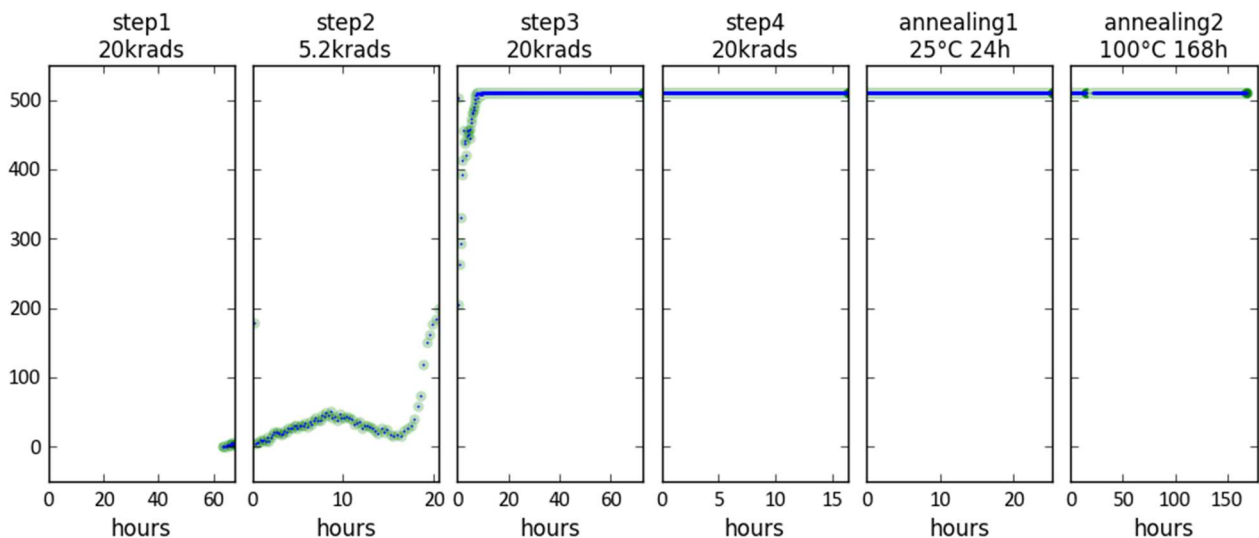


Dut3, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.27.2 DUT3, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut3, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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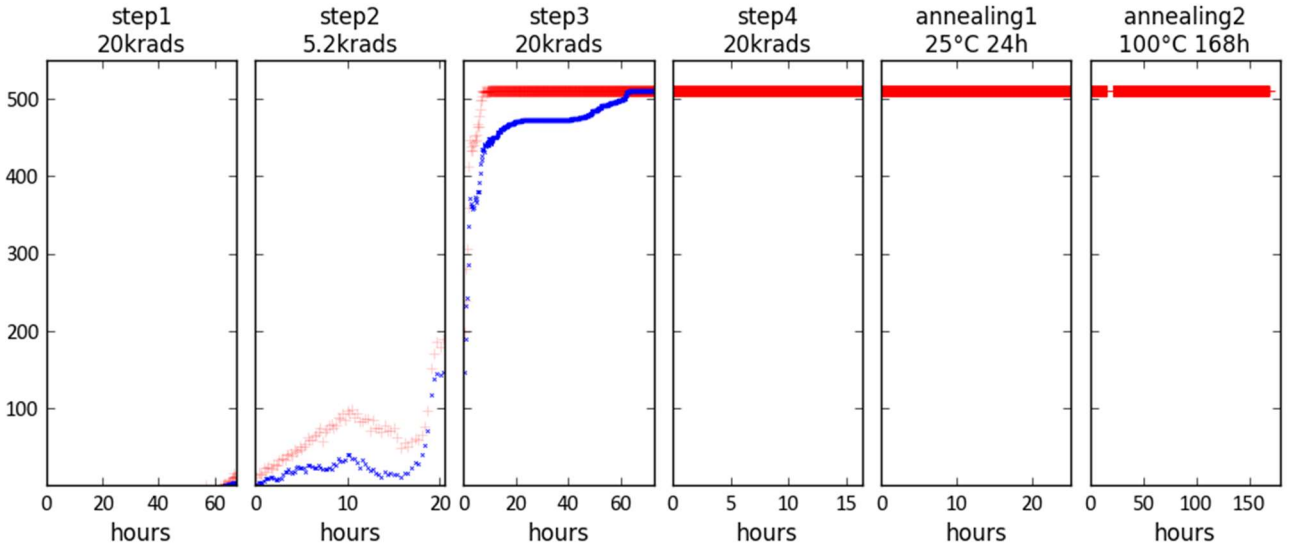
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S29GL01GS10FHI010	D/C 1512	Ref.:	ATN-RR-468
		Issue:	2
SPANSION INC		Date:	2018/10/10
		Page:	446 / 458

12.27.3 DUT3, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

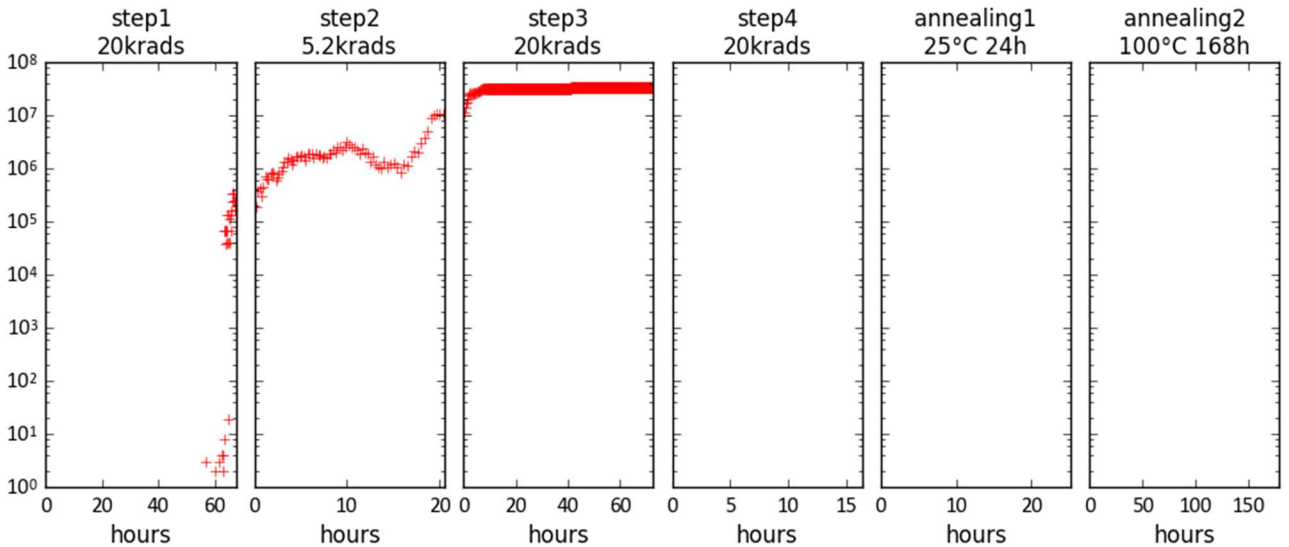
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Dut3, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



Dut3, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

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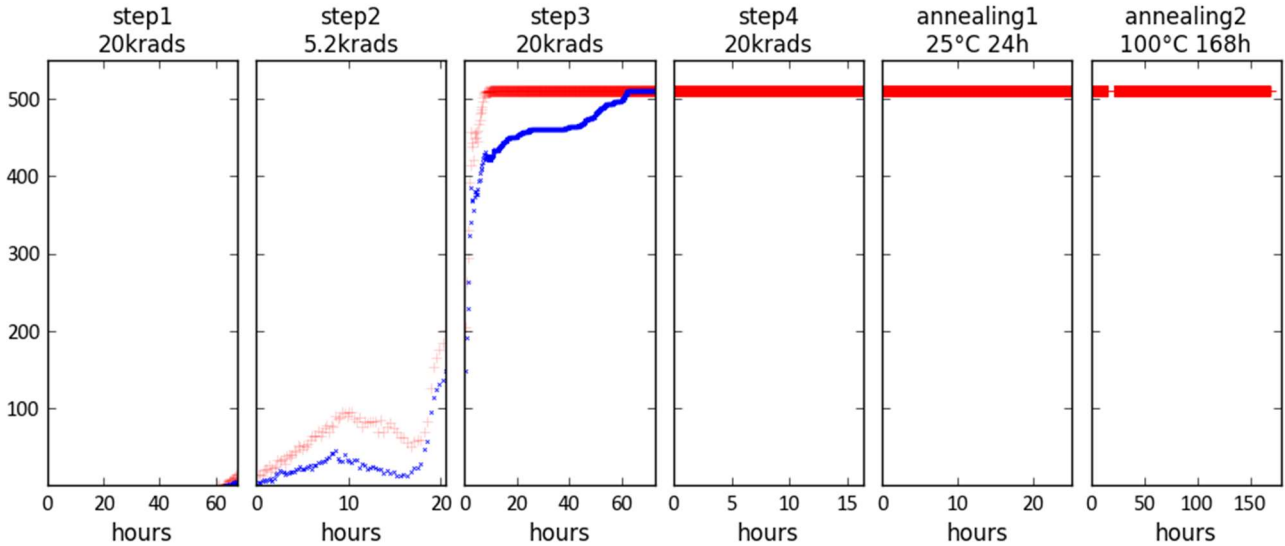
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12.27.4 DUT3, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

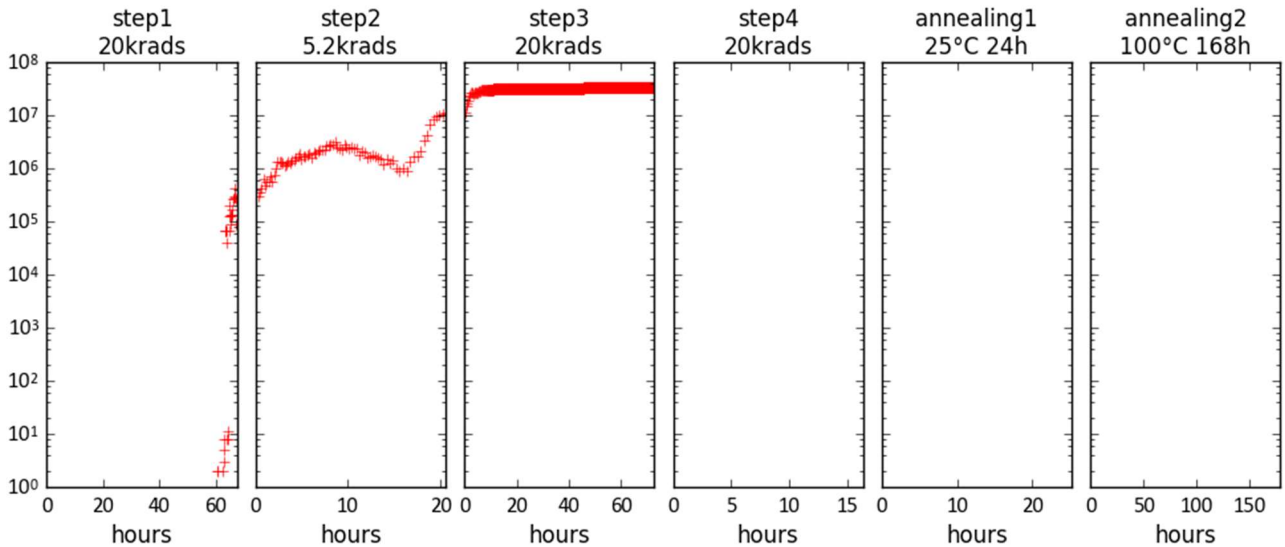
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Dut3, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error




Dut3, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

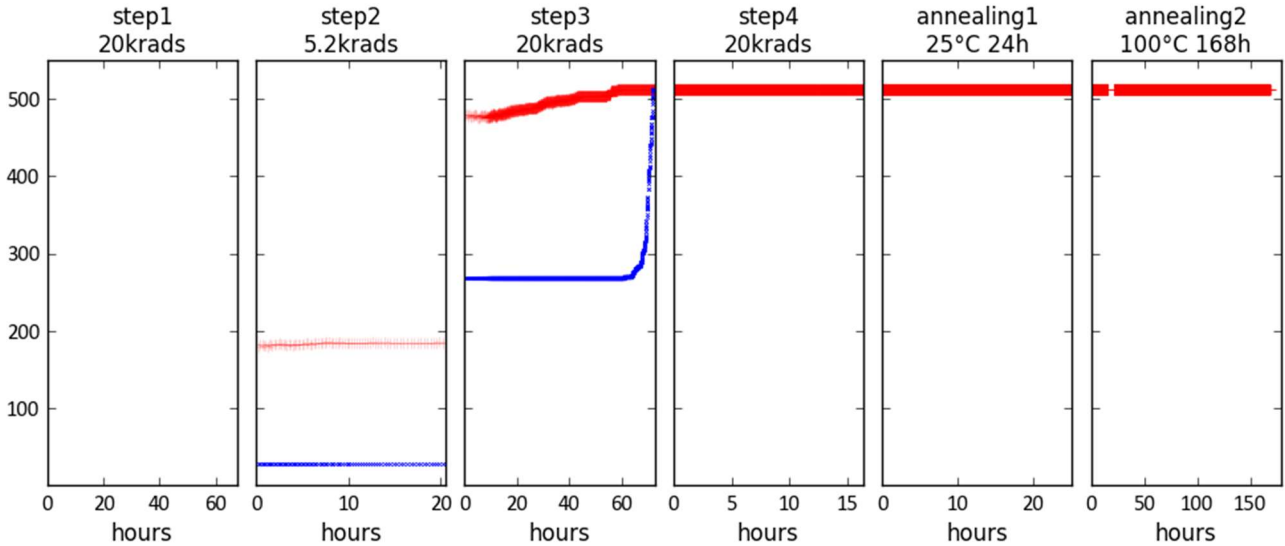
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12.27.5 DUT3, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

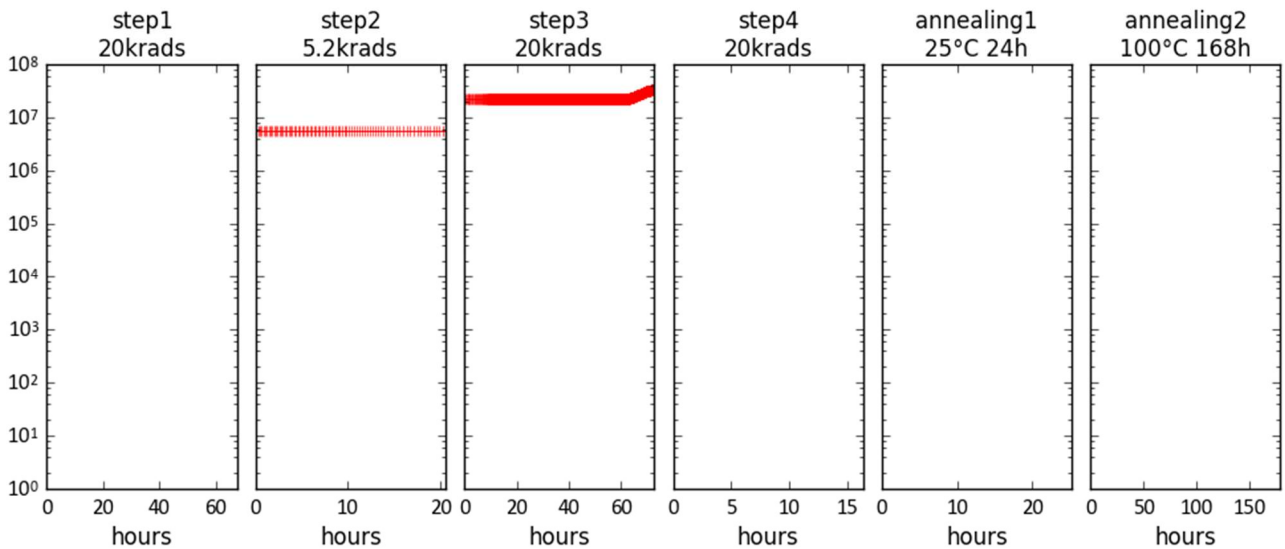
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Dut3, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error




Dut3, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

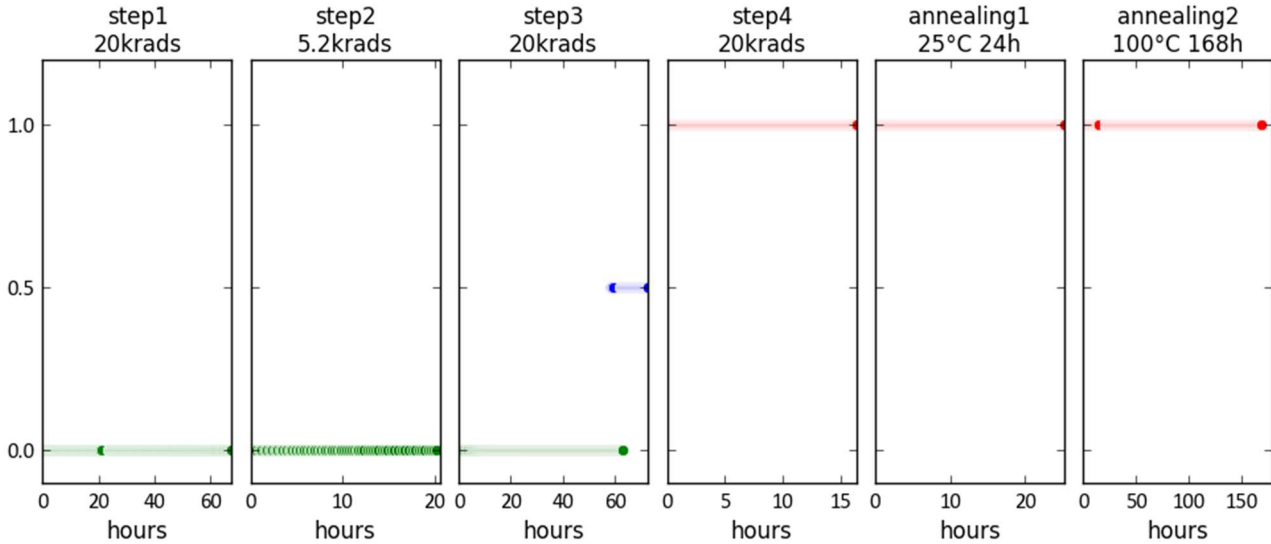
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12.27.6 DUT3, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut3, High duty cycle, DUT access status

hirex eng.

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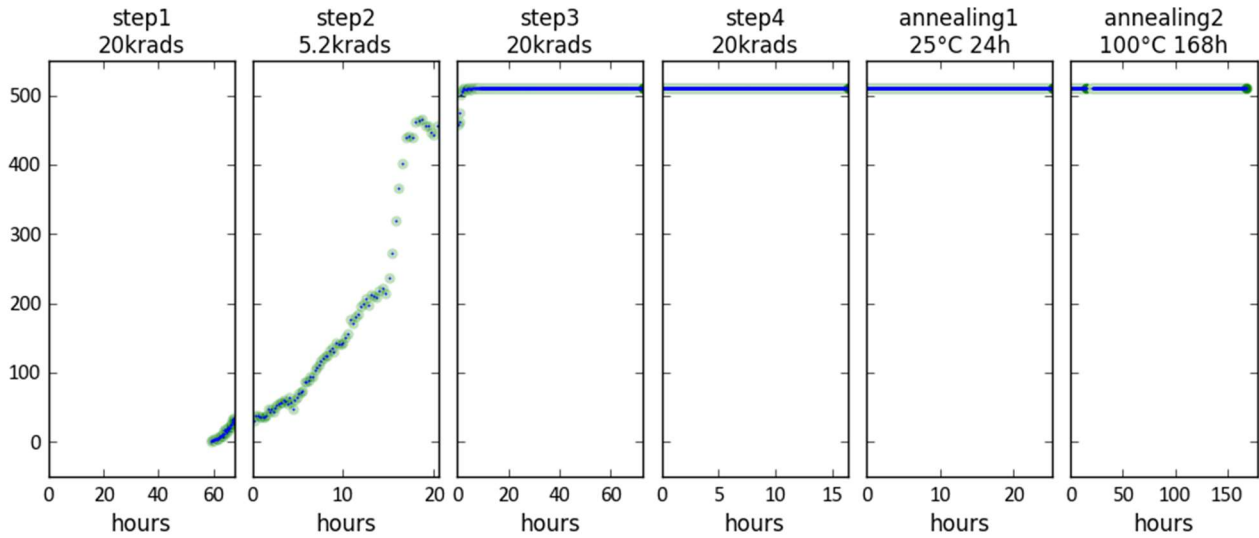
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12.28 DUT4 (Board 4), High duty cycle

12.28.1 DUT4, High Duty Cycle, Erase/Program, pattern =0x5555, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)

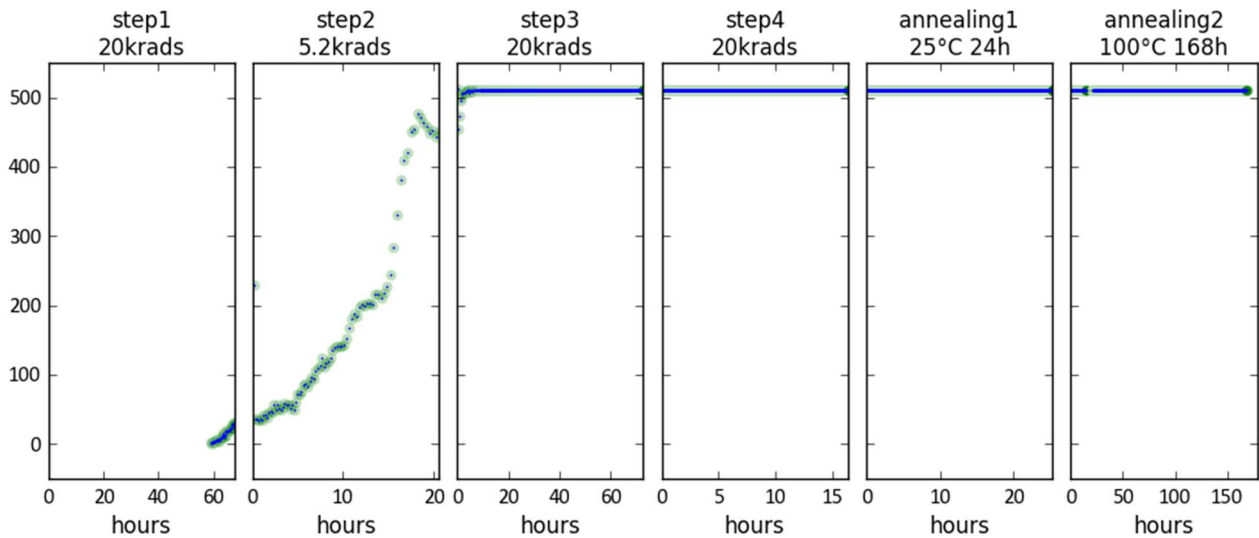


Dut4, High duty cycle, erase/program, pattern 5555, block 2 to 511

hirex eng.

12.28.2 DUT4, High Duty Cycle, Erase/Program, pattern = 0xAAAA, blocks 2 to 511

● failed erase blocks (E) ● failed program blocks (P) ● failed blocks (E+P)



Dut4, High duty cycle, erase/program, pattern aaaa, block 2 to 511

hirex eng.

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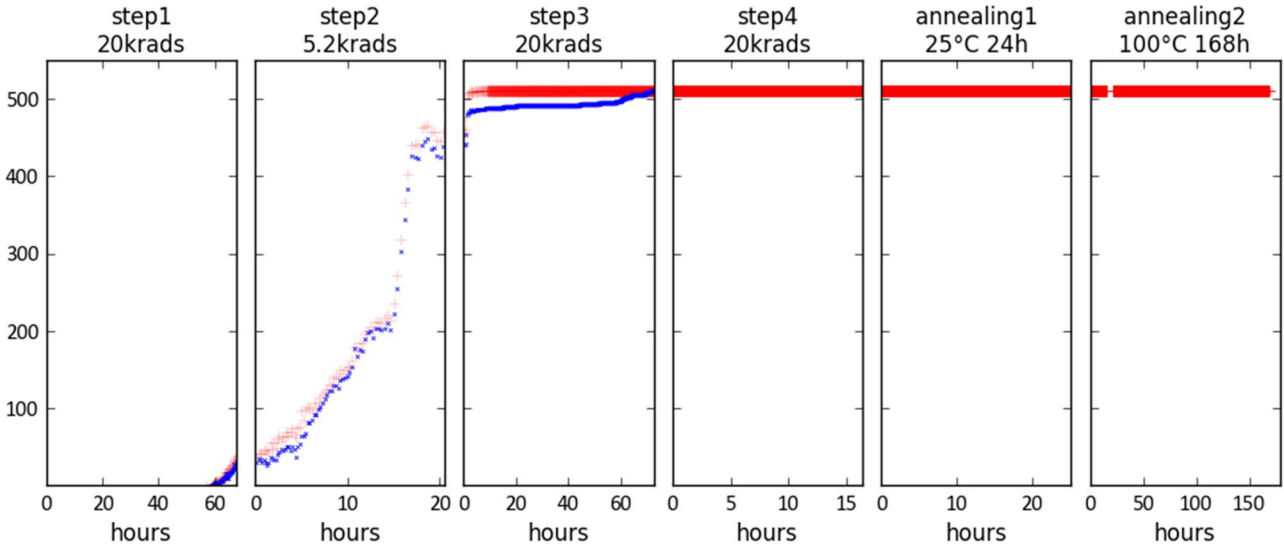
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12.28.3 DUT4, High Duty Cycle, Read, pattern = 0x5555, blocks 2 to 511

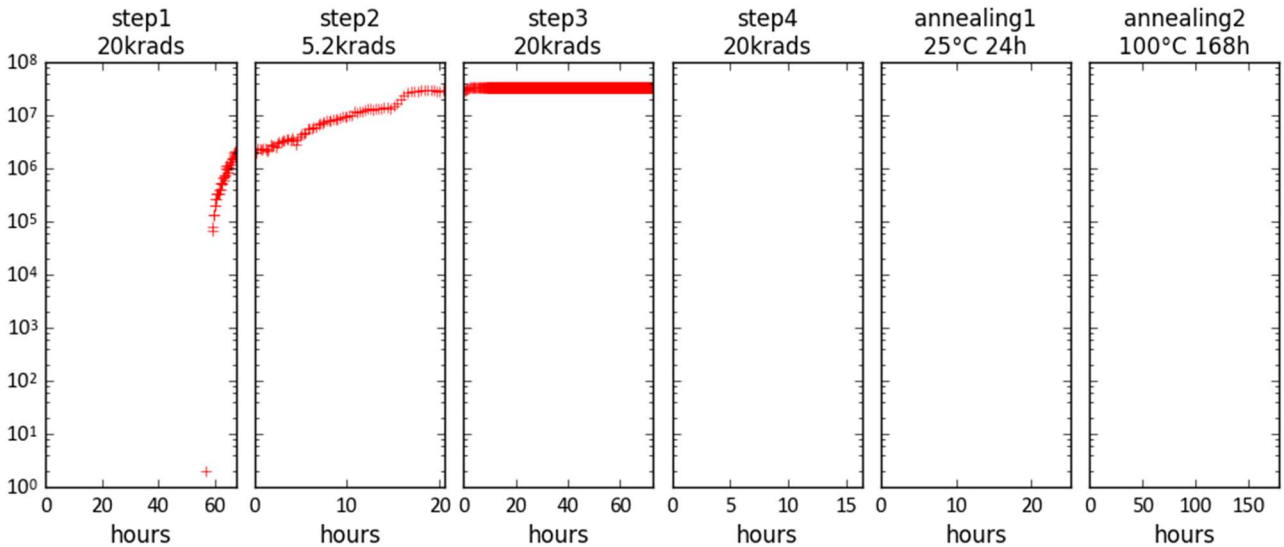
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Dut4, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

+ + words in error



Dut4, High duty cycle, Read, pattern 5555, block 2 to 511

hirex eng.

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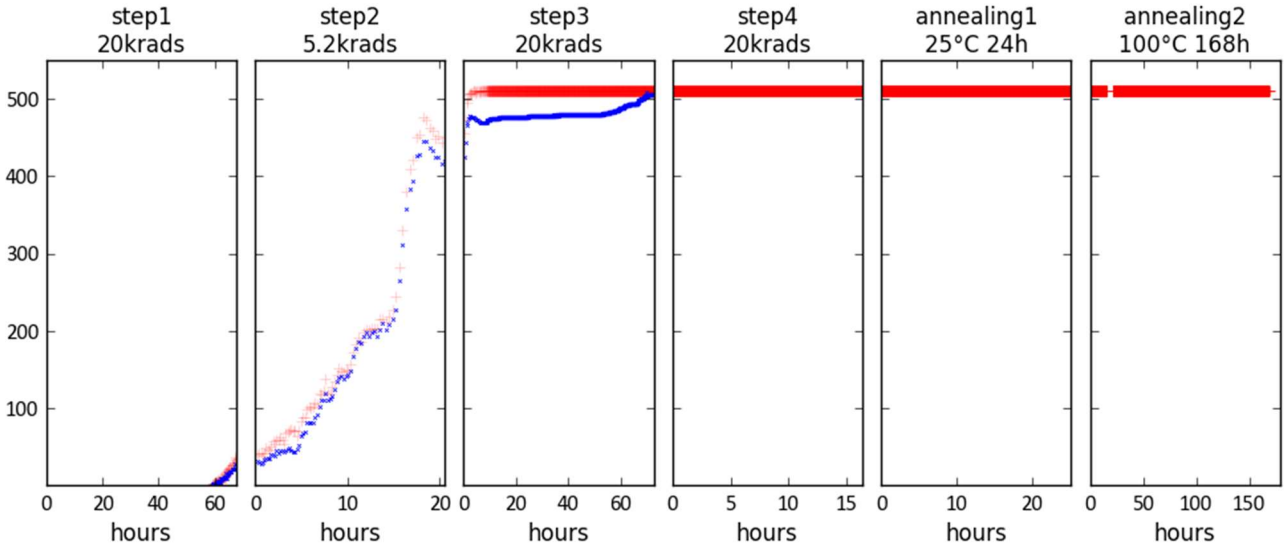
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12.28.4 DUT4, High Duty Cycle, Read, pattern = 0xAAAA, blocks 2 to 511

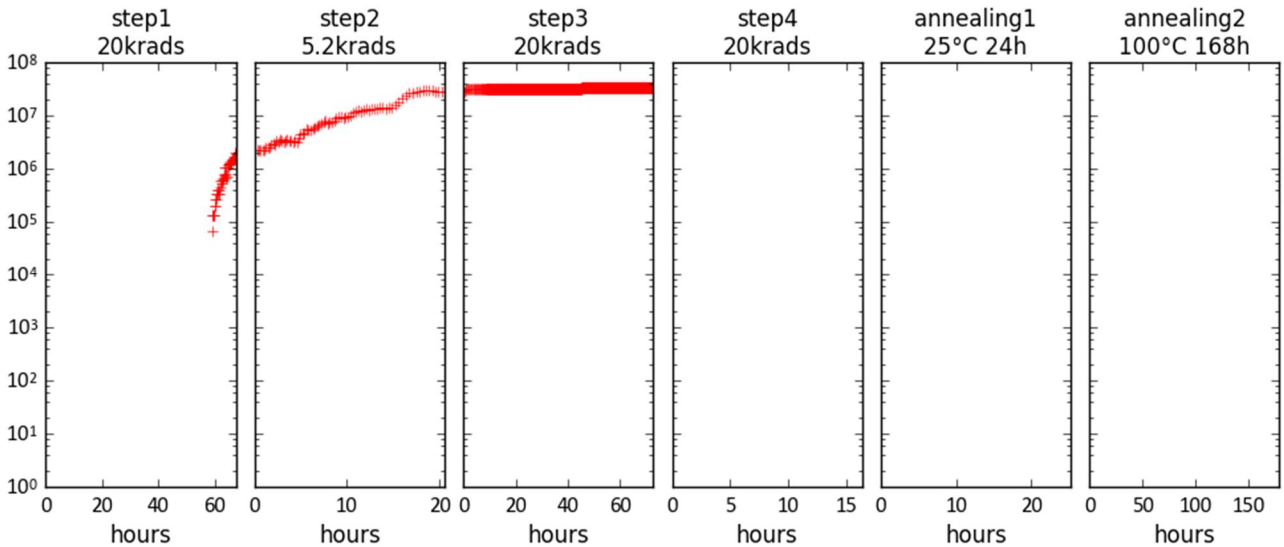
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Dut4, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

+ + words in error



Dut4, High duty cycle, Read, pattern aaaa, block 2 to 511

hirex eng.

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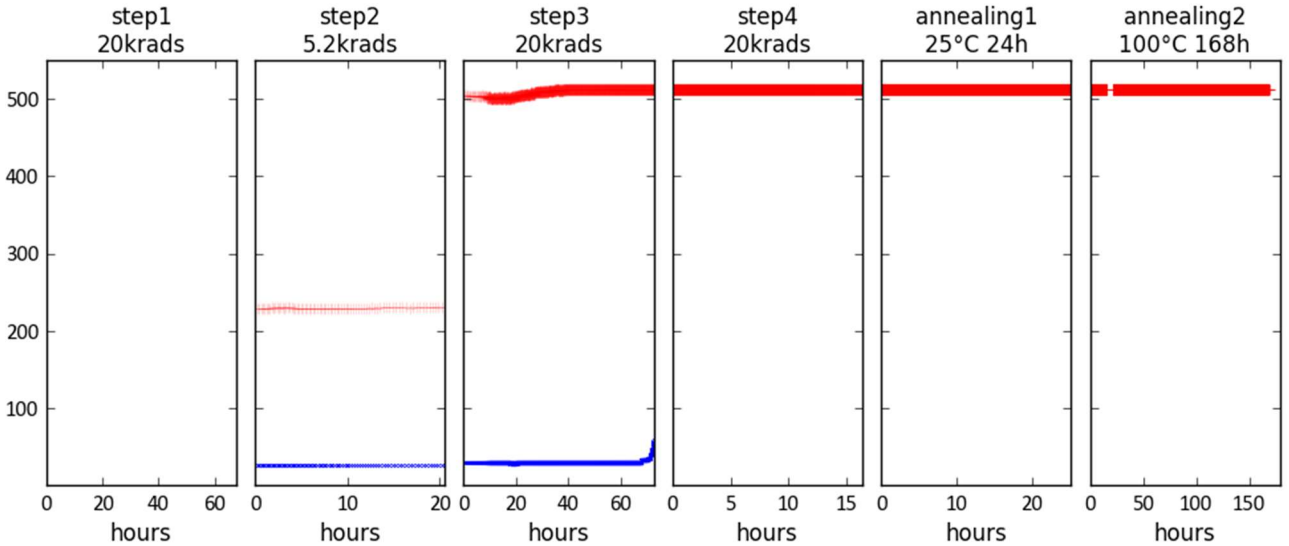
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		Issue:	2
D/C 1512		Date:	2018/10/10
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12.28.5 DUT4, High Duty Cycle, Read, pattern = 0xAAAA, blocks 512 to 1023

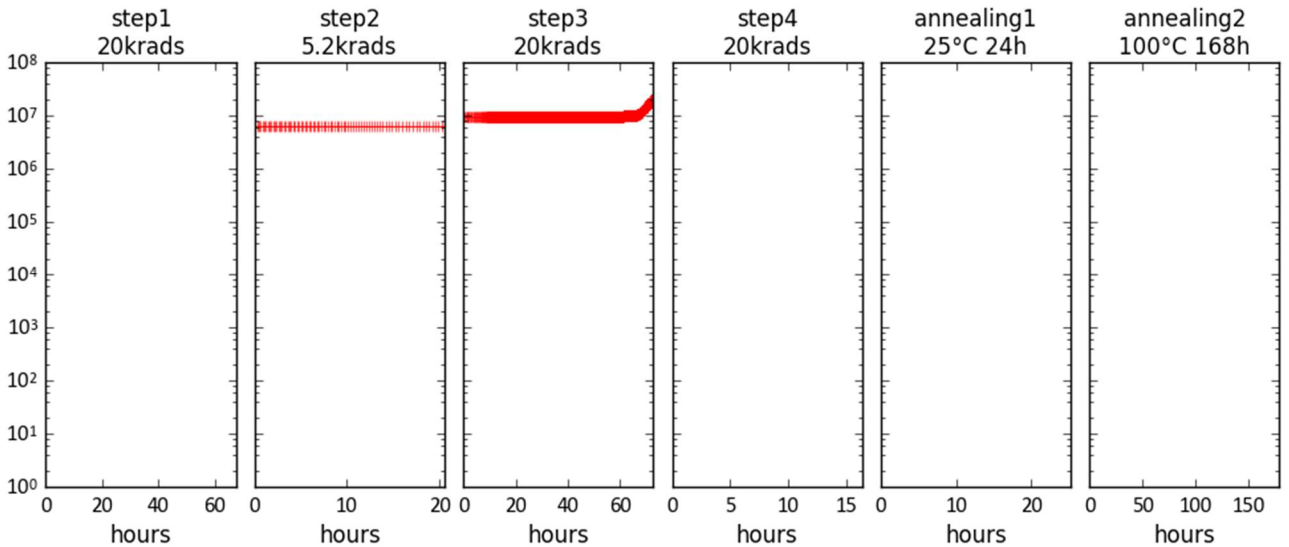
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Dut4, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

+ + words in error



Dut4, High duty cycle, Read, pattern aaaa, block 512 to 1023

hirex eng.

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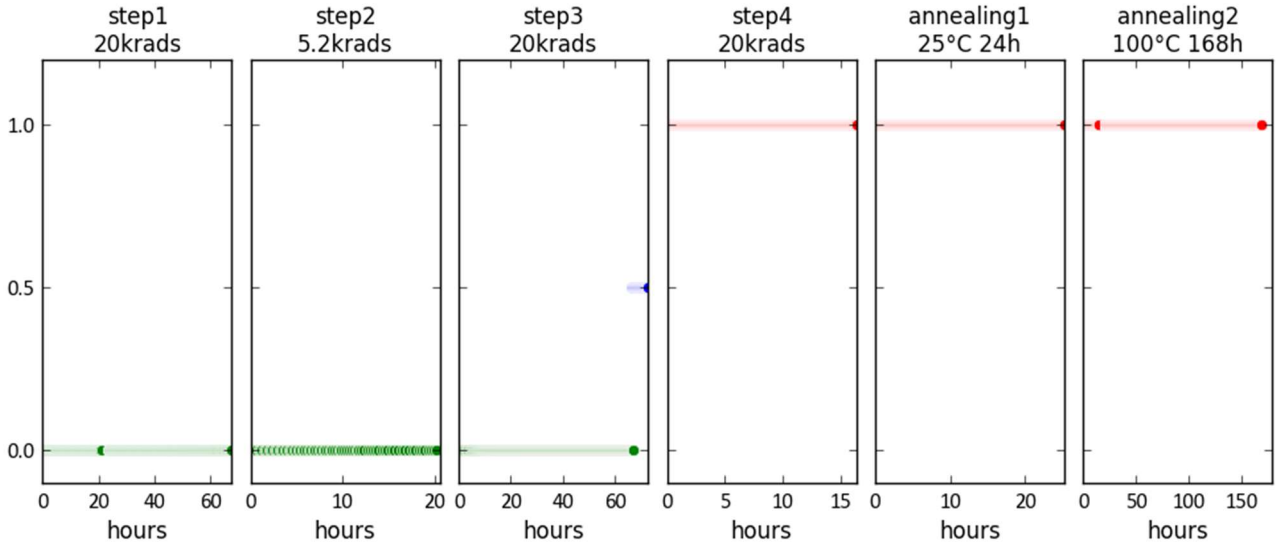
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		RL: 2017901236 Ref.: ATN-RR-468 Issue: 2 Date: 2018/10/10 Page: 454 / 458	SPANSION INC

12.28.6 DUT4, High Duty Cycle, DUT access status

● ● identification ok ● ● identification wrong ● ● reset failed




Dut4, High duty cycle, DUT access status

hirex eng.

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ANNEX I: TEST PLAN

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**TOTAL DOSE RADIATION
TEST PLAN
No. ATN-RP-212**

Issue: DRAFT F Rev.:

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Component No. S29GL01GS10FHI010		Component Designation: S29GL01GS10FHI010				Irradiation Spec. No.: ESCC 22900 Issue 5 (Note 6)			
Gen. Spec.: MFR DATA SHEET Det. Spec.: MFR DATA SHEET Amend.: N/A		Date Code: N/Av Lot Number: N/Av Wafer No.: N/Av				Project/Programme: JUICE			
Family/Group: 08/29	Technology: --	Functional Assignment: 1Gb x8/x16 90 nm NOR Flash Memory				Package: 64 BGA			
Manuf. Name: SPANSION Address: USA		Sample Size: 31				Level of Interest: N/Av krad(Si)			
		Irradiation Devices: 30				Maximum Test Level: 150 krad(Si)			
		Control Devices: 1				Radiation Source: ⁶⁰ Co			
EXPERIMENTAL STEPS		1	2	3	4	5	6	7	8
PROCESS		Irrad	Irrad	Irrad	Irrad	Irrad	Irrad	Ann	Ann
Dose [krad (Si)]		20	10	20	20	30	50	-	-
Cumulative Dose [krad (Si)]		20	30	50	70	100	150	-	-
Dose Rate [rad(Si)/h]		300	300	300	300	300	300	-	-
Exposure Time (h)		66.7	33.3	66.7	66.7	100	166.7	24	168
Temperature (°C)		25	25	25	25	25	25	25	100
Irradiation Conditions: Biased: 20 samples (Note 4) Unbiased: 10 samples (Note 5) Test Circuit: Figure 1 & 2		Irradiation Measurements Interval: Remote Test: X In situ Test: X				Annealing Conditions: Biased: 20 samples (Note 4) Unbiased: 10 samples (Note 5) Test Circuit: Figure 1 & 2			
Notes:									
1. The total dose step values recommended in the table above should be considered as indicative. If any step cannot reach a deviation ≤10%, it should be separated in two intermediate steps (before and after).									
2. The dose rate given must be considered as a guide. In any case, it must be maintained ≤ 360 rad(Si)/h.									
3. Samples submitted to this irradiation test were not submitted to screening sequence.									
4. Distribution of biased samples: 10 at high duty cycle and 10 at low duty cycle (Figure 1).									
5. See Figure 2.									
6. According to ESA approval According to ESA approval the time interval from the completion of an exposure to the start of the next exposure shall be a maximum of 3 hours.									
	Name		Signature			Date			
Prepared by	Sonia Vargas / Pablo Frutos (ATN)(TID Engineer)					2017/06/14			
Reviewed by	José J. González (ATN) (TID Supervisor)					2017/06/14			
Approved by									

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**TOTAL DOSE RADIATION
TEST PLAN
No. ATN-RP-212**

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DOCUMENT CONTROL CHANGE

Edition / Revision	Date	Affected Edition / Revision	Affected Paragraph / Modification
ATN-RP-212 Draft A	2015/01/16	--	Draft edition of this document.
ATN-RP-212 Draft B	2015/02/20	ATN-RP-212 Draft A	<ul style="list-style-type: none"> - Included Annex with PCB information. - Exposure time at step 6 (Annealing), modified to 24 hours instead 168 hours. - Project name changed from EPE to JUICE
ATN-RP-212 Draft C	2015/05/07	ATN-RP-212 Draft B	<ul style="list-style-type: none"> - Package option changed from TSOP 56 to BGA 64 - Electrical Measurements updated -Unbiased Radiation Circuit Schematic included -Socket of Unbiased Radiation Circuit included in Annex
ATN-RP-212 Draft D	2015/10/19	ATN-RP-212 Draft C	<ul style="list-style-type: none"> -I_{LI} test conditions updated -I_{LO} test conditions updated -V_{OL} test conditions updated -V_{OH} test conditions updated -V_{IL} test conditions updated -V_{IH} test conditions updated -Inclusion of data retention of read inverted checkerboard test
ATN-RP-212 Draft E	2015/05/24	ATN-RP-212 Draft D	<ul style="list-style-type: none"> -Removal of data retention of read inverted checkerboard test -Inclusion of data retention test of pattern CC33h -Inclusion of read of AAAAh pattern. -The dose rate and irradiation test step have been updated. -Note 6 in page 1 has been included.
ATN-RP-212 Draft F	2017/06/14	ATN-RP-212 Draft E	<ul style="list-style-type: none"> -Figure 1. The circuit for the high and low duty cycle radiation circuit has been included.

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FIGURE 1 – HIGH AND LOW DUTY CYCLE RADIATION CIRCUIT

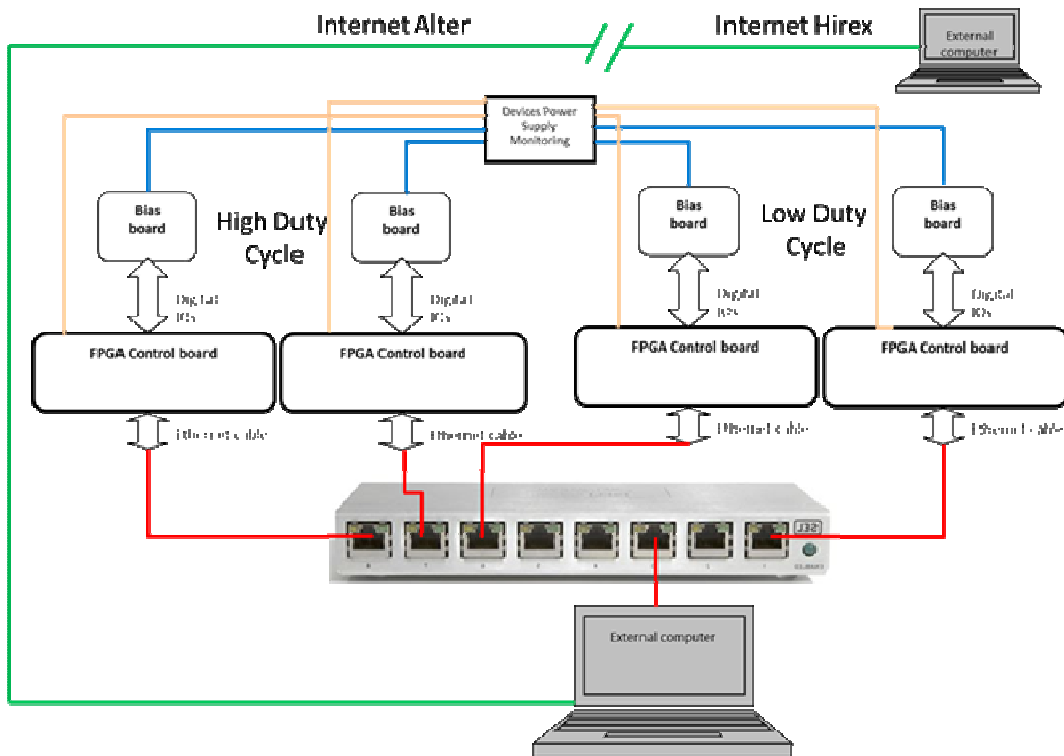
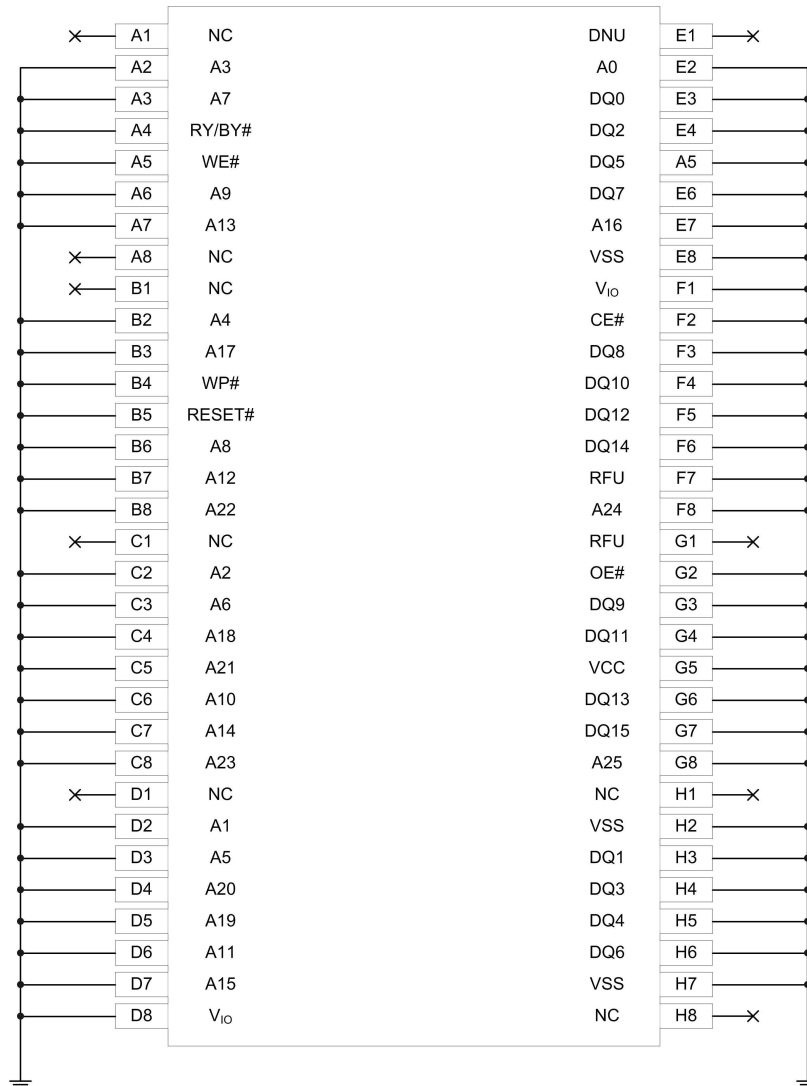


FIGURE 2 - UNBIASED RADIATION CIRCUIT



Notes:

Socket information of circuit is shown in fig.3



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TABLE I.- ELECTRICAL MEASUREMENTS SPANSION NOR FLASH

Nº	SYMBOL	TEST	CONDITIONS (Note 1) (T _{AMB} =22±3°C)	LIMITS		UNIT
				MIN.	MAX.	
DC						
1	Cont	Continuity Test	--	--	--	V
2	I _{LI}	Input Load Current	V _{IN} = V _{SS} to V _{CC} , V _{CC} = V _{CC} max	--	±1.0 (Note 2)	µA
3	I _{LO}	Output leakage Current	V _{OUT} = V _{SS} to V _{CC} , V _{CC} = V _{CC} max	--	±1.0 (Note 3)	µA
4	V _{OL}	Output LOW Voltage	I _{OL} = 100 µA	--	0.15 x V _{IO} (Note 3)	V
5	V _{OH}	Output HIGH Voltage	I _{OH} = 100 µA	0.85 x V _{IO} (Note 3)	--	V
6	V _{IL}	Input LOW Voltage	--	-0.5 (Note 3)	0.3 x V _{IO} (Note 3)	V
7	V _{IH}	Input HIGH Voltage	--	0.7 x V _{IO} (Note 3)	V _{IO} + 0.4 (Note 3)	V
POWER SUPPLY						
8	ICC1	V _{CC} Active Read Current	CE# = V _{IL} , OE# = V _{IH} , Address switching@ 5 MHz, V _{CC} = V _{CC} max	--	60	mA
9	ICC2	V _{CC} Intra-Page Read Current	CE# = V _{IL} , OE# = V _{IH} , Address switching@ 33 MHz, V _{CC} = V _{CC} max	--	25	mA
10	ICC3.1	V _{CC} Active Program Current	CE# = V _{IL} , OE# = V _{IH} , V _{CC} = V _{CC} max	--	100(Note 5)	mA
11	ICC3.2	V _{CC} Active Erase Current	CE# = V _{IL} , OE# = V _{IH} , V _{CC} = V _{CC} max	--	100(Note 5)	mA
AC						
12	t _{CS}	CE# Setup Time	--	0 (Note 4)	--	ns
13	t _{CH}	CE# Hold Time	--	0 (Note 4)	--	ns
14	t _{DS}	Data Setup Time	--	30 (Note 4)	--	ns
15	t _{DH}	Data Hold Time	--	0 (Note 4)	--	ns
16	t _{WP}	WE# Pulse Width	--	25 (Note 4)	--	ns
17	t _{WPH}	WE# Pulse Width High	--	20 (Note 4)	--	ns
FUNCTIONAL BLOCK						
18	Func_CHK	Pattern FCT Checkerboard.	Erase, write and read with pattern Checkerboard in block 0	(Note 6)	(Note 6)	--

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**TOTAL DOSE RADIATION
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Nº	SYMBOL	TEST	CONDITIONS (Note 1) (T _{AMB} =22±3°C)	LIMITS		UNIT
				MIN.	MAX.	
19	Func_/CHK	Pattern FCT /Checkerboard	Erase, write and read with pattern Checkerboard Inverted in block 0	(Note 6)	(Note 6)	--
20	Data Retention	Read CC33h pattern	Write in 0kRad and read pattern CC33h in block 1 in following steps	(Note 6)(Note 7)	(Note 6)(Note 7)	--
21	Read Pattern	Read AAAAh pattern	Read only pattern AAAAh in block 512 only for ON parts	(Note 8)	(Note 8)	--

Notes:

1. The electrical testing to be performed with V_{CC}=V_{IO}=3.3V unless otherwise noted in Table I.
2. Performed in A25-A0.
3. Performed in DQ15-DQ0.
4. These electrical tests are GO/NO GO. This means that the test will be performed only for the minimum limits specified in Table I and the reported results will be GO/NO GO.
5. This limit is informative as the datasheet of the DUT indicate that it has not been 100% tested. Therefore, this does not constitute Pass/Fail information.
6. This test has a GO/NO GO result. If any of the written data is read incorrectly, the test is considered to be NO GO.
7. The pattern is written at 0kRad, and read only in the rest of steps.
8. Block 512 will be written by ON radiation circuit. At the first execution (0 krad) the memory has not been written yet, and consequently the result should be a NO GO.
9. The limits above are included herein for reference purposes only. The degradation of any of these parameters above the limits must not be considered a reason for supplier lot rejection, due to the fact that the aim of this test is to characterize the electrical behaviour of this lot when is submitted to radiation.



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ANNEX I

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41092 Sevilla, ESPAÑA. T: 34-95-446 70 50, Fax: 34-95-446 73 39, E-Mail: info@altertechnology.com

ATNF140.E

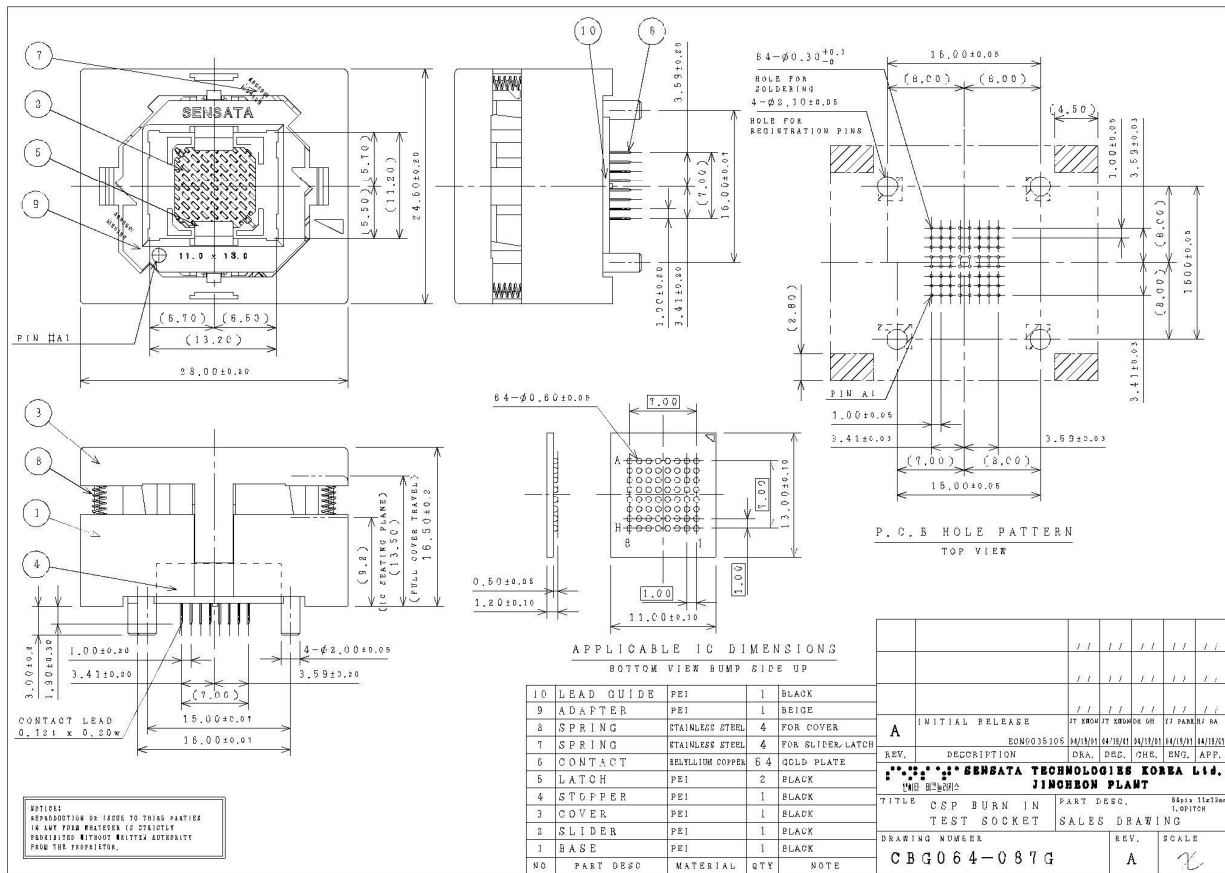



FIGURE 3. Radiation Circuit Socket

	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY	
			RL:	2017901236
	S29GL01GS10FHI010	SPANSION INC	Ref.:	ATN-RR-468
			Issue:	2
			Date:	2018/10/10
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D/C 1512				

ANNEX II: DOSIMETRY REPORT

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ALTER TECHNOLOGY TÜV NORD S.A.U., AN ISO 9001, EN 9100 ISO/IECE 17025:025 AND DLA SUITABILITY CERTIFIED COMPANY
 c/ Tomas Alba Edison, 4, Parque Científico y Tecnológico Cartuja - 41092 Seville, SPAIN. T: 34-95-446 70 50, Fax: 34-95-446 73 39, E-Mail:
info@altertechnology.com

CNA DATA

Reception date of the samples: N/A

Irradiation Test Report Number:
20170911_ GR10

TITLE

ALTER TECHNOLOGY TESTS

TEST REQUESTER

Company/Organism Alter Technology	Department Parts Laboratory	Name Eugenio	Surname Muñoz
Address C/ Tomás A. Edison 4	Phone 954467050	E-mail eugenio.munoz@altertechnology.com	

REQUESTED CONDITIONS


Total area (cm ²)	Lead Box
Dose rate [rad(Si)/h]	~ 300 rad (Si)/h
Accumulated dose [krad(Si)]	N/A
Others conditions	N/A

GENERAL IRRADIATION CONDITIONS

Test Date	11/09/2017
Source Activity on Test Date (TBq)	217.441
Detection System	Farmer Ionization Chamber and Electrometer MULTIDOS
SDD ⁽¹⁾ (cm)	260
Field Size	Maximum
Position	GR10

DOSIMETRY CHARACTERIZATION

Point	A	B	C	D
Dose Rate [rad(Si)/h]	314.65	297.62	317.60	295.58
Uncertainty ⁽²⁾ (%)	2.8	4.7	4.7	2.8
Average dose rate [rad(Si)/h]	306.7			
Uncertainty ⁽²⁾ (%)	4.7			
Uniformity (%)	93.4			

Supervisor	Date of Report Delivery
 Pedro Martín	07/11/2017

- (1) SDD: Source Detector Distance
- (2) Uncertainty determined considering the uncertainties of the experimental conditions and with a coverage factor $k=2$.

CNA DATA

Reception date of the samples: N/A

Irradiation Test Report Number:
20170911_ GRD12

TITLE

ALTER TECHNOLOGY TESTS

TEST REQUESTER

Company/Organism Alter Technology	Department Parts Laboratory	Name Eugenio	Surname Muñoz
Address C/ Tomás A. Edison 4	Phone 954467050	E-mail eugenio.munoz@altertechnology.com	

REQUESTED CONDITIONS


Total area (cm ²)	Lead Box
Dose rate [rad(Si)/h]	~ 300 rad (Si)/h
Accumulated dose [krad(Si)]	N/A
Others conditions	N/A

GENERAL IRRADIATION CONDITIONS

Test Date	11/09/2017
Source Activity on Test Date (TBq)	217.441
Detection System	Farmer Ionization Chamber and Electrometer MULTIDOS
SDD ⁽¹⁾ (cm)	260
Field Size	Maximum
Position	GRD12

DOSIMETRY CHARACTERIZATION

Point	A	B	C	D
Dose Rate [rad(Si)/h]	316.62	303.58	310.74	295.58
Uncertainty ⁽²⁾ (%)	2.8	4.7	4.7	2.8
Average dose rate [rad(Si)/h]	306.6			
Uncertainty ⁽²⁾ (%)	4.7			
Uniformity (%)	93.4			

Supervisor	Date of Report Delivery
 Pedro Martín	07/11/2017

- (1) SDD: Source Detector Distance
- (2) Uncertainty determined considering the uncertainties of the experimental conditions and with a coverage factor $k=2$.

CNA DATA

Reception date of the samples: N/A

Irradiation Test Report Number:
20170911_ GRU12

TITLE

ALTER TECHNOLOGY TESTS

TEST REQUESTER

Company/Organism Alter Technology	Department Parts Laboratory	Name Eugenio	Surname Muñoz
Address C/ Tomás A. Edison 4	Phone 954467050	E-mail eugenio.munoz@altertechnology.com	

REQUESTED CONDITIONS


Total area (cm ²)	Lead Box
Dose rate [rad(Si)/h]	~ 300 rad (Si)/h
Accumulated dose [krad(Si)]	N/A
Others conditions	N/A

GENERAL IRRADIATION CONDITIONS


Test Date	11/09/2017
Source Activity on Test Date (TBq)	217.441
Detection System	Farmer Ionization Chamber and Electrometer MULTIDOS
SDD ⁽¹⁾ (cm)	260
Field Size	Maximum
Position	GRU12

DOSIMETRY CHARACTERIZATION

Point	A	B	C	D
Dose Rate [rad(Si)/h]	305.06	295.08	314.61	299.82
Uncertainty ⁽²⁾ (%)	2.8	4.7	4.7	2.8
Average dose rate [rad(Si)/h]	303.6			
Uncertainty ⁽²⁾ (%)	4.7			
Uniformity (%)	93.8			

Supervisor	Date of Report Delivery
 Pedro Martín	07/11/2017

- (1) SDD: Source Detector Distance
- (2) Uncertainty determined considering the uncertainties of the experimental conditions and with a coverage factor $k=2$.

	Total Ionizing Dose Radiation Test		ALTER TECHNOLOGY	
			RL:	2017901236
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ANNEX III: COMPETENCES AND WARRANTIES

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c/ Tomas Alba Edison, 4, Parque Científico y Tecnológico Cartuja - 41092 Seville, SPAIN. T: 34-95-446 70 50, Fax: 34-95-446 73 39, E-Mail:
info@altertechnology.com



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
POST OFFICE BOX 3990
COLUMBUS, OH 43218-3990

April 25, 2018

Mr. Jose Andres Izquierdo
Alter Technology TUV Nord S.A.U.
C/ Tomas A. Edison 4
41092 Sevilla, Spain

Dear Mr. Izquierdo:

Re: Retention of Laboratory Suitability, January 1, 2017 through December 31, 2017, MIL-STD-750F and Mil-STD-883; FSC 5961 and FSC 5962, VQE-18-032559, Control Number: 061195

We have reviewed your January 1, 2017 through December 31, 2017 commercial laboratory suitability annual retention report for MIL-STD-750 & MIL-STD-883. The reports indicate conformance with the requirements of DLA Land and Maritime's Laboratory Suitability Information booklet. Therefore, the listing of your MIL-STD-750 & MIL-STD-883 capabilities as stated in your latest laboratory suitability letter, VQE-18-031782, will be continued on the List of Commercial Laboratories Suitable for Testing Military Devices.

This suitability prohibits your company from removing or altering the device marking. Any device that fails testing conditions shall be identified (isolated) as a reject and returned to the device manufacturer for verification of failure mode.

Electrostatic discharge sensitivity (ESDS) requirements as stated in MIL-PRF-19500 and MIL-STD-883 are enforced by this Center. Therefore, all semiconductor and microcircuit devices will be handled as marked, unless otherwise notified by device manufacturer.

Your next retention report of commercial laboratory suitability should cover calendar year 2018 and must be submitted no later than March 1, 2019. It should be formatted to contain the items of Section IV of the DLA Land and Maritime booklet mentioned above. If we do not receive the report by this date, your capabilities may be removed from the List of Commercial Laboratories Suitable for Testing Military Devices.

If you have any questions, please contact Mr. Carl DelloStritto at 614-692-0616.

Sincerely,

Digitally signed by
KOLONCHUK.RAYMOND.L.JR.1230207093
Date: 2018.04.26 13:41:03 -04'00'

RAYMOND L. KOLONCHUK
Chief
Electronic Devices Branch

ANEXO TÉCNICO
ACREDITACIÓN Nº 345/LE2116
SCHEDULE OF ACCREDITATION

Entidad/Entity: ALTER TECHNOLOGY TÜV NORD, S.A. (Unipersonal)

Dirección/Address: C/ Tomás Alba Edison, 4 Parque Científico y Tecnológico Cartuja; 41092 Sevilla

Norma de referencia/Reference Standard: UNE-EN ISO/IEC 17025: 2005

Ensayos en la siguiente área/Test in the following area:

Ensayos Eléctricos, Funcionales y Seguridad / Electrical, Functional And Safety Tests

Categoría 0 (Ensayos en el laboratorio permanente)
Category 0 (Test performed at permanent laboratory)


PRODUCTO/MATERIAL A ENSAYAR PRODUCTS/MATERIALS TESTED	ENSAYO TYPE OF TEST	NORMA/PROCEDIMIENTO DE ENSAYO STANDARD SPECIFICATIONS/ TEST PROCEDURE
Componentes eléctricos, electrónicos, electromecánicos y opto electrónicos para aplicaciones aeroespaciales y de defensa <i>Electrical, electronic, electromechanical and opto electronics components for aerospace and defence application</i>		
Dispositivos semiconductores, incluyendo dispositivos discretos y circuitos integrados <i>Semiconductor devices, including discrete devices and integrated circuits</i>	Radiación ionizante dosis total <i>Total dose steady-state irradiation (TID)</i>	ESCC 22900, iss. 4: 2010
Dispositivos microelectrónicos <i>Microelectronic devices</i>	Radiación ionizante dosis total <i>Ionizing radiation total dose (TID)</i>	MIL-STD-883H 26 February 2010 MIL-STD-883J 7 June 2013 Método 1019.8
Dispositivos semiconductores <i>Semiconductor devices</i>	Radiación ionizante dosis total <i>Steady - state total dose irradiation (TID)</i>	MIL-STD-750E 20 November 2006 MIL-STD-750F 3 January 2012 Método 1019.5
Dispositivos eléctricos, electrónicos y electromecánicos <i>Electrical, electronical and electromechanical devices</i>	Dosimetría para ensayos de dosis absorbida <i>Dosimetry for absorbed dose testing</i>	Procedimiento interno / <i>In-house procedure</i> ATN-Q-IO-21-73



The present technical annex is subject to possible modifications. The validity status of the accreditation can be confirmed in www.enac.es

Código Validación Electrónica: 4d164922M5NCz5n4X9

El presente anexo técnico está sujeto a posibles modificaciones. La vigencia de la acreditación y del presente anexo técnico puede confirmarse en <http://www.enac.es/web/enac/validacion-electronica> o haciendo clic **aquí**

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	S29GL01GS10FHI010 D/C 1512	SPANSION INC	Ref.:	ATN-RR-468
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END OF DOCUMENT

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