TOTAL DOSE RADIATION TEST REPORT

ESA study: "Survey of Critical Components for 150 kRad Power Systems"

ESTEC Contract N° 22831/09/NL/AF refers

Contract extension up to 400 kRad as per CCN: ATGSP-CN-0004 IS. 3

Final Report

Part Type : IS9-2100ARH

Package : FP-16

Description : Rad Hard High Frequency Half Bridge Driver

Manufacturer : Intersil

Alter Technology Purchase Order N° ATGSP-TL-09-JC-CO-9 dated 11/27/2009

Alter Technology Project Manager: David NUNEZ

Hirex reference :	HRX/TID/1018	Issue : 01	Date :	January 20th, 2012
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CHANGE RECORD

ISSUE	DATE	PAGE	DESCRIPTION OF CHANGES
01	January 20th, 2012	All	Original Issue

TOTAL DOSE RADIATION TEST REPORT
on
Intersil
IS9-2100ARH
Rad Hard High Frequency Half Bridge Driver

TABLE OF CONTENTS

LIST OF FIGURES:

LIST OF TABLES:

1 Introduction

In the scope of the ESA study: “Survey of Critical Components for 150 kRad Power Systems”, a total dose characterization test of the Intersil IS9-2100ARH, Rad Hard High Frequency Half Bridge Driver has been performed with an accumulated dose of about 422 Krad(Si) at different dose rates of 36 & 100 & 300 rad(Si)/hour, in response to Alter Technology purchase order reference ATGSP-TL-09-JC-CO-9.

An Interim report, HRX/TID/0933 Issue 01, corresponding to the irradiation up to 159 Krad(Si) steps has been already provided.

The purpose of this test was to evaluate total dose withstanding of this component, to investigate its suitability for being used in space applications. This test was conducted on samples provided by Alter Technology.
Test has been performed in accordance with Hirex Engineering Radiation Test Plan HRX/SPE/0232 issue 2 dated 09/08/2010.

A complete set of electrical measurements together with graphical representation of measured parameters with respect to total dose received, are provided for all samples.

2 Applicable and Reference Documents

2.1 Applicable Documents

- Hirex Engineering Radiation Test Plan: HRX/SPE/0232 issue 2 dated 09/08/2010
- Alter Technology Proposal: ATGSP-OF-648/2009 Issue 1
- Minutes of Meeting: MM-SRP-ATG-0001 dated 29/10/2009
- Hirex internal specification: Total Ionizing dose test general procedure.
- SMD detail specification: 5962-99536

2.2 Reference Documents

- Intersil datasheet: FN9037.1, April 2003

3 Test Samples

13 samples of the IS9-2100ARH device were tested (6 ON + 6 OFF + 1 control sample).

12 samples (including the 6 samples already submitted to protons test: see report HRX/TID/0877) have been biased according to the flow diagram given in Figure 1.

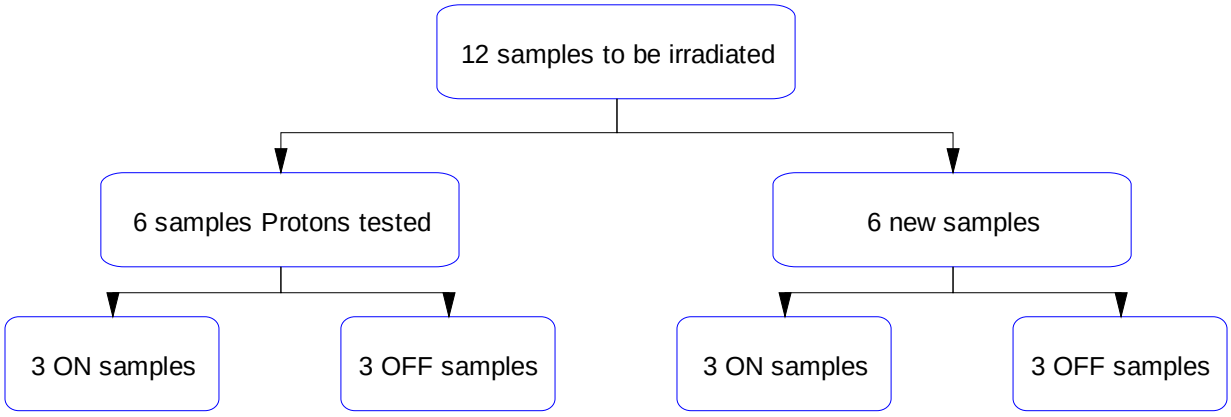


Figure 1 : Samples bias flow diagram

Samples were allocated into the bias conditions during exposures and annealing as provided in the following table. The different samples groups are also identified for an easier plots reading.

SN attributed by Hirex	Samples Allocation	Samples Group Naming
1	Control sample	REF
2	Biased ON	ON_PROTON
3	Biased ON	ON_PROTON
4	Biased ON	ON_PROTON
5	Biased OFF	OFF_PROTON
6	Biased OFF	OFF_PROTON
7	Biased OFF	OFF_PROTON
8	Biased OFF	OFF_TID
14	Biased OFF	OFF_TID
10	Biased OFF	OFF_TID
11	Biased ON	ON_TID
12	Biased ON	ON_TID
13	Biased ON	ON_TID

Identification of the IS9-2100ARH is given below:

Part Number: IS9-2100ARH

Top Marking: logo IS9-2100ARH delta /PROTO

Bottom Marking: -

Date Code: -

4 Experimental Conditions

4.1 Radiation Source Dose Rate and Annealing

The dose exposures were performed at UCL in Louvain (Belgium). In this irradiation facility, a Cobalt 60 source is used with the possibility to vary the dose rate by simply adjusting the distance to the source. During the dose exposures, devices under test have been irradiated in an ambient temperature of 24°C ±6°C.

The dose received by the devices has been controlled by the measurement of one Alanine pellet dosimeter placed onto the bias board.

Resulting test conditions are provided below.

Irradiation Steps requested	Pellet dosimetry data	Dose rate	Annealing steps	Temperature
kRad	kRad	Rad/h	Hours	°C
0	0			
10	11.7	36		Room
20	22.5	36		Room
50	53.1	36		Room
100	104.4	36		Room
150	159.3	100 [1]		Room
200	212.4	300 [1]		Room
250	262.8	300 [1]		Room
300	310.5	300 [1]		Room
350	351	300 [1]		Room
400	422.1	300 [1]		Room
			24	Room
			168	100

Note [1]: Due to the maintenance period planned at UCL at the end of December and in order to perform subsequent requested exposures steps up to 400 Krad(Si), the dose rates of several steps have been changed, in agreement with ESA, from 36 rad(Si)/h to 100 rad(Si)/h and from 100 rad(Si)/h to 300 rad(Si)/h as indicated.

4.2 Bias during Dose Exposures and Measurements conditions

4.2.1 Bias conditions

During exposures test board allowed to bias 6 samples in accordance with the electrical circuit provided in Figure 2.
6 other samples were biased OFF with all pins connected to ground.

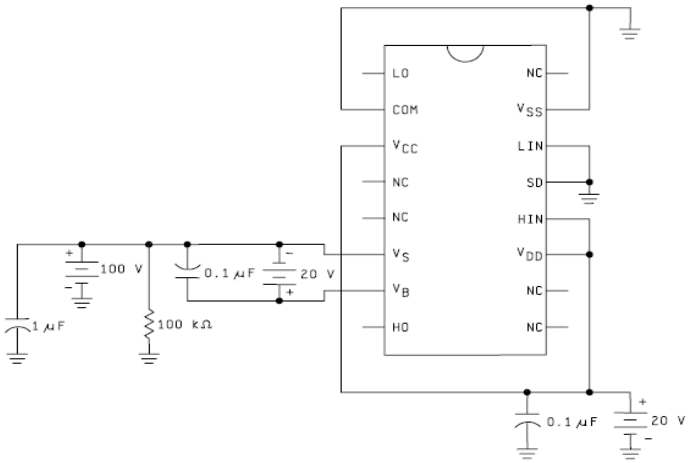


Figure 2 : Bias Conditions during Irradiation Exposures

4.2.2 Electrical Measurements

Electrical parameters test program principle for IS9-2100ARH is provided in Figure 3.

A HP4142 DC tester, a HP54831B Scope and a HP33120 waveform generator were used to perform required measurements

A dedicated test fixture was designed to ensure proper measurement conditions. In addition a faraday cage was used to ensure optimum conditions for low level measurements.

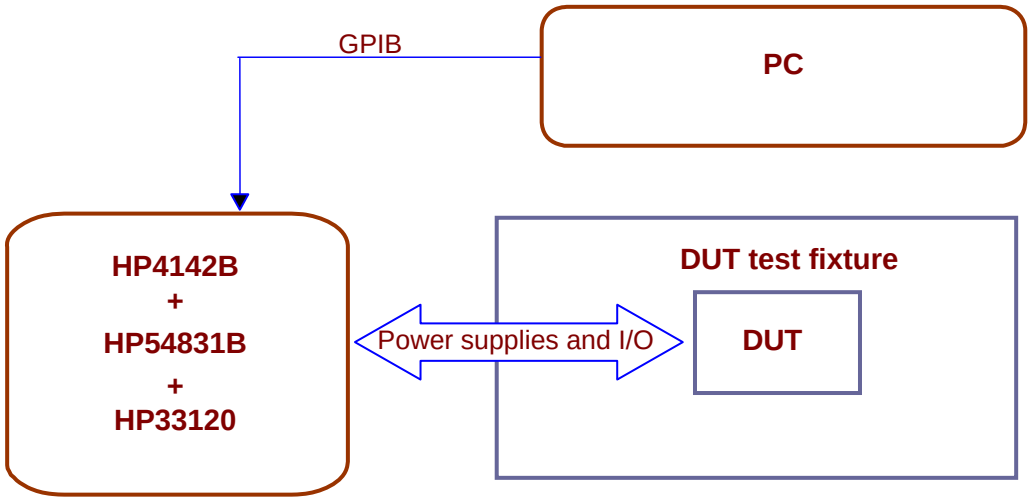


Figure 3 : IS9-2100ARH test program principle

Electrical parameters test conditions and limits used for performing this test are given in Table 1.

Parameter	Description	Conditions	Spec		Unit
			Min	Max	
VOH(HO)	High level output voltage	VIN = VIH VOH = VB - VHO	-	0.1	V
VOH(LO)	High level output voltage	VIN = VIH VOH = VCC - VLO	-	0.1	V
VOL(HO)	Low level output voltage	VIN = VIL	-	0.1	V
VOL(LO)	Low level output voltage	VIN = VIL	-	0.1	V
IQB_H	Quiescent VB supply current	VIN = 15V	-	500	µA
IQB_L	Quiescent VB supply current	VIN = 0V	-	500	µA
IQCC_H	Quiescent VCC supply current	VIN = 15V	-	50	µA
IQCC_L	Quiescent VCC supply current	VIN = 0V	-	50	µA
IQDD	Quiescent VDD supply current	VIN = 0V	-	2.9	mA
IIN+(HIN)	Logic “1” input bias current	VIN = 15V	-	75	µA
IIN+(SD)	Logic “1” input bias current	SD = 15V	-	75	µA
IIN+(LIN)	Logic “1” input bias current	VIN = 15V	-	75	µA
IIN–(HIN)	Logic “0” input bias current	VIN = 0V	-10	-	µA
IIN–(SD)	Logic “0” input bias current	SD = 0V	-10	-	µA
IIN–(LIN)	Logic “0” input bias current	VIN = 0V	-10	-	µA
VTHUV+	VDD / VSS under-voltage lockout threshold		8	12	V
VTHUV-	VDD / VSS under-voltage lockout threshold		8	12	V
VTHUVS	VDD / VSS under-voltage lockout threshold Hystersis	VTHUVS = (VTHUV+) - (VTHUV-)	0.25	2	V
TL_{OFF}	Low side turn-off propagation delay	CL = 1000pF	-	360	ns
TH_{OFF}	High side turn-off propagation delay	CL = 1000pF	-	360	ns
TL_{ON}	Low side turn-on propagation delay	CL = 1000pF	-	425	ns
TH_{ON}	High side turn-on propagation delay	CL = 1000pF	-	425	ns
TL_{SD}	Low side shutdown propagation delay	CL = 1000pF	-	400	ns
TH_{SD}	High side shutdown propagation delay	CL = 1000pF	-	400	ns
TR_{HO}	HO rise time	CL = 1000pF	-	40	ns
TR_{LO}	LO rise time	CL = 1000pF	-	40	ns
TF_{HO}	HO fall time	CL = 1000pF	-	40	ns
TF_{LO}	LO fall time	CL = 1000pF	-	40	ns
Mt_{ON}	Turn-on propagation delay matching	$TL_{ON} – TH_{ON}$	-20	60	ns
Mt_{OFF}	Turn-off propagation delay matching	$TL_{OFF} – TH_{OFF}$	-20	60	ns

Unless otherwise specified: VDD = VB = VCC = 15V; COM = VSS = VS = SD = 0V

Table 1 : Measured electrical parameters

5 Conclusion

A Total Ionizing Dose verification test was carried out by Hirex Engineering under Alter Technology contract on the Intersil IS9-2100ARH Rad Hard High Frequency Half Bridge Driver in FP-16 package.

12 samples plus one control sample were used during testing. They were exposed to radiation using different dose rates of 36, 100 & 300 rad(Si)/hour at room temperature.

Detail test results are presented in next section.

All parameters remained within specified limits all along testing.

6 Test Results

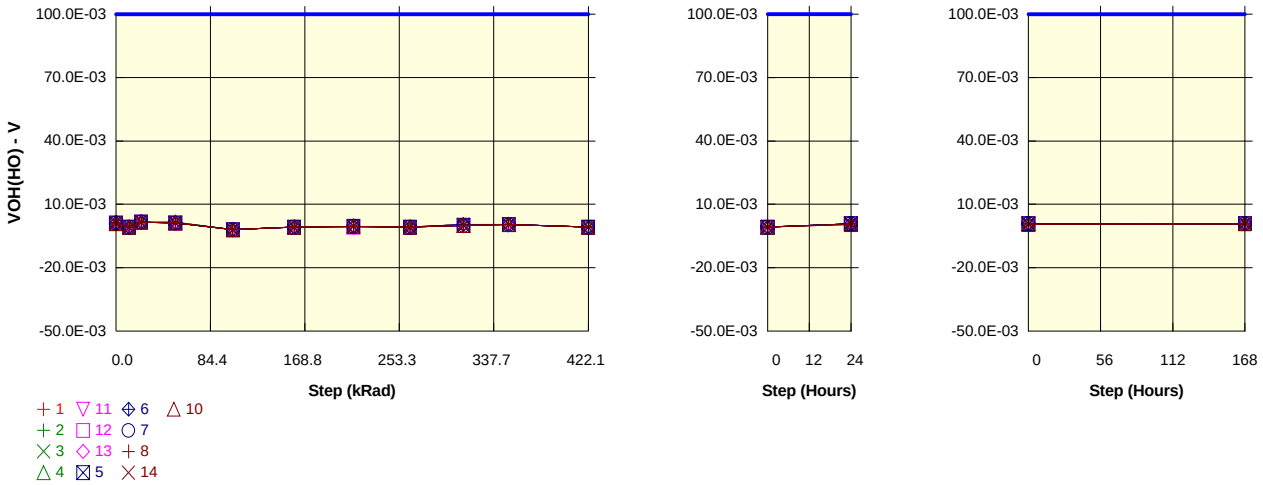
Test results including tables and graphics are provided in this section for each measured parameter.

Statistics are provided separately for biased ON & biased OFF samples of each group.

For each parameter, a drift calculation table is provided computing the drift between a given exposure step with respect to initial readings:

$$\Delta\text{(Parameter value)} = \text{(Parameter value}_{\text{POSTRAD}}\text{)} - \text{(Parameter value}_{\text{PRERAD}}\text{)}$$

Parameter : High Level Output Voltage : VOH(HO)
Test conditions : VIN=VIH. VOH=VB-VHO
Unit : V
Spec Limit Max : 100.0E-03
Spec limits are represented in bold lines on the graphic.



Measurements

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.2E-03	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
ON_PROTON samples													
2	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
3	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
4	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Statistics													
Min	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Max	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Average	800.1E-06	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-533.1E-06	-800.1E-06	266.4E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Sigma	15.7E-12	15.7E-12	0.0E+00	0.0E+00	0.0E+00	15.7E-12	188.8E-06	15.7E-12	188.4E-06	0.0E+00	15.7E-12	15.7E-12	15.7E-12

Drift Calculation

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-1.6E-03	800.1E-06	800.1E-06	-2.8E-03	-1.6E-03	-1.6E-03	-1.6E-03	-400.5E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
3	-	-1.6E-03	800.1E-06	800.1E-06	-2.8E-03	-1.6E-03	-1.2E-03	-1.6E-03	-400.5E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
4	-	-1.6E-03	800.1E-06	800.1E-06	-2.8E-03	-1.6E-03	-1.2E-03	-1.6E-03	-800.1E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
Average	-	-1.6E-03	800.1E-06	800.1E-06	-2.8E-03	-1.6E-03	-1.3E-03	-1.6E-03	-533.7E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
Sigma	-	31.4E-12	14.6E-12	14.6E-12	58.2E-12	31.4E-12	188.8E-06	31.4E-12	188.4E-06	4.2E-12	31.4E-12	0.0E+00	0.0E+00

Measurements

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.2E-03	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
ON_TID samples													
11	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
12	800.1E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
13	800.1E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Statistics													
Min	800.1E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Max	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Average	933.3E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-666.6E-06	-800.1E-06	133.2E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Sigma	188.4E-06	15.7E-12	0.0E+00	8.4E-12	0.0E+00	15.7E-12	188.8E-06	15.7E-12	188.4E-06	0.0E+00	15.7E-12	15.7E-12	15.7E-12

Drift Calculation

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-2.0E-03	-2.0E-03	-1.2E-03	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
12	-	-1.6E-03	800.1E-06	399.6E-06	-2.8E-03	-1.6E-03	-1.6E-03	-1.6E-03	-800.1E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
13	-	-1.6E-03	800.1E-06	399.6E-06	-2.8E-03	-1.6E-03	-1.2E-03	-1.6E-03	-400.5E-06	-400.5E-06	-1.6E-03	0.0E+00	0.0E+00
Average	-	-1.7E-03	666.9E-06	266.4E-06	-2.9E-03	-1.7E-03	-1.6E-03	-1.7E-03	-800.1E-06	-533.7E-06	-1.7E-03	-133.2E-06	-133.2E-06
Sigma	-	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	326.7E-06	188.4E-06	326.3E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06

Measurements

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.2E-03	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
OFF_PROTON samples													
5	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
6	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
7	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Statistics													
Min	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Max	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Average	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	133.2E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Sigma	8.4E-12	15.7E-12	0.0E+00	8.4E-12	0.0E+00	15.7E-12	0.0E+00	15.7E-12	188.4E-06	0.0E+00	15.7E-12	15.7E-12	15.7E-12

Drift Calculation

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-1.2E-03	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
6	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
7	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-1.2E-03	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
Average	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-1.1E-03	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
Sigma	-	0.0E+00	4.2E-12	0.0E+00	23.8E-12	0.0E+00	16.8E-12	0.0E+00	188.4E-06	11.9E-12	0.0E+00	3.0E-12	3.0E-12

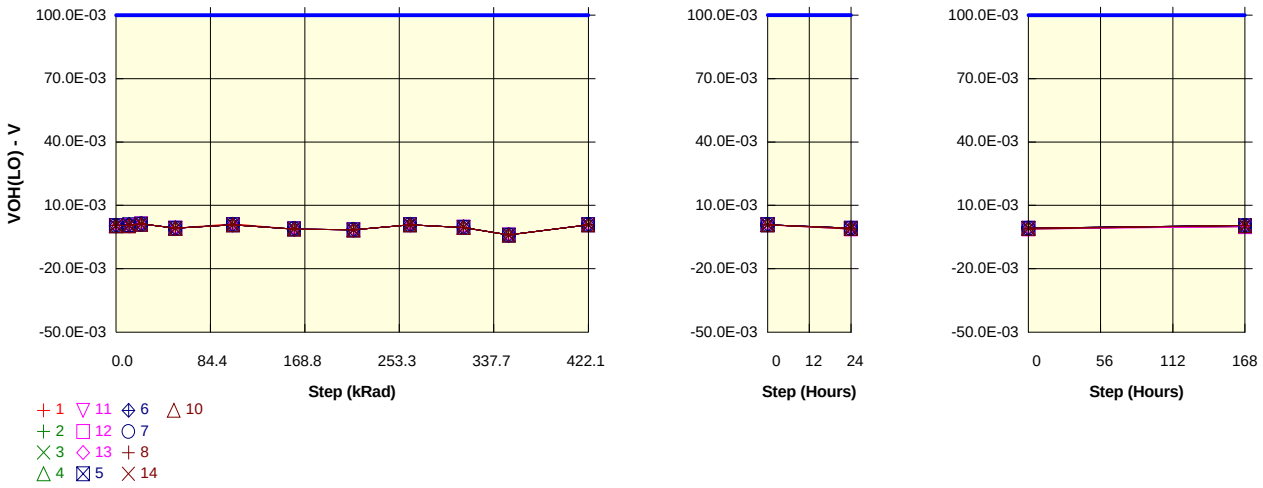
Measurements

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.2E-03	-800.1E-06	1.6E-03	1.6E-03	-2.0E-03	-800.1E-06	-800.1E-06	-800.1E-06	399.6E-06	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
OFF_TID samples													
8	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
14	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	399.6E-06	800.1E-06
10	800.1E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	399.6E-06	800.1E-06
Statistics													
Min	800.1E-06	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	399.6E-06	800.1E-06
Max	1.2E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	800.1E-06	800.1E-06
Average	1.1E-03	-800.1E-06	1.6E-03	1.2E-03	-2.0E-03	-800.1E-06	-399.6E-06	-800.1E-06	0.0E+00	399.6E-06	-800.1E-06	533.1E-06	800.1E-06
Sigma	188.4E-06	15.7E-12	0.0E+00	8.4E-12	0.0E+00	15.7E-12	0.0E+00	15.7E-12	0.0E+00	0.0E+00	15.7E-12	188.8E-06	15.7E-12

Drift Calculation

VOH(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-1.2E-03	-800.1E-06	-2.0E-03	-399.6E-06	-399.6E-06
14	-	-2.0E-03	400.5E-06	0.0E+00	-3.2E-03	-2.0E-03	-1.6E-03	-2.0E-03	-1.2E-03	-800.1E-06	-2.0E-03	-800.1E-06	-399.6E-06
10	-	-1.6E-03	800.1E-06	399.6E-06	-2.8E-03	-1.6E-03	-1.2E-03	-1.6E-03	-800.1E-06	-400.5E-06	-1.6E-03	-400.5E-06	0.0E+00
Average	-	-1.9E-03	533.7E-06	133.2E-06	-3.1E-03	-1.9E-03	-1.5E-03	-1.9E-03	-1.1E-03	-666.9E-06	-1.9E-03	-533.4E-06	-266.4E-06
Sigma	-	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.4E-06	188.6E-06	188.4E-06

Parameter : High Level Output Voltage : VOH(LO)
Test conditions : VIN=VIH. VOH=VCC-VLO
Unit : V
Spec Limit Max : 100.0E-03
Spec limits are represented in bold lines on the graphic.



Measurements

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	1.2E-03	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
ON_PROTON samples													
2	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
3	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
4	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Statistics													
Min	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
Max	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Average	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	266.4E-06
Sigma	0.0E+00	0.0E+00	8.4E-12	15.7E-12	15.7E-12	8.4E-12	0.0E+00	15.7E-12	0.0E+00	0.0E+00	15.7E-12	15.7E-12	188.4E-06

Drift Calculation

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
3	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	-399.6E-06
4	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
Average	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	-133.2E-06
Sigma	-	0.0E+00	11.9E-12	8.4E-12	4.2E-12	16.8E-12	0.0E+00	4.2E-12	0.0E+00	33.6E-12	4.2E-12	8.4E-12	188.4E-06

Measurements

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	1.2E-03	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
ON_TID samples													
11	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
12	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-1.2E-03	0.0E+00
13	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Statistics													
Min	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-1.2E-03	0.0E+00
Max	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Average	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-933.3E-06	133.2E-06
Sigma	0.0E+00	0.0E+00	8.4E-12	15.7E-12	15.7E-12	8.4E-12	0.0E+00	15.7E-12	0.0E+00	0.0E+00	15.7E-12	188.4E-06	188.4E-06

Drift Calculation

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	-399.6E-06
12	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.6E-03	-399.6E-06
13	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
Average	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.3E-03	-266.4E-06
Sigma	-	0.0E+00	11.9E-12	8.4E-12	4.2E-12	16.8E-12	0.0E+00	4.2E-12	0.0E+00	33.6E-12	4.2E-12	188.4E-06	188.4E-06

Measurements

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	1.2E-03	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
OFF_PROTON samples													
5	399.6E-06	800.1E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
6	399.6E-06	800.1E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
7	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Statistics													
Min	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Max	399.6E-06	800.1E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Average	399.6E-06	666.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Sigma	0.0E+00	188.8E-06	8.4E-12	15.7E-12	15.7E-12	8.4E-12	0.0E+00	15.7E-12	0.0E+00	0.0E+00	15.7E-12	15.7E-12	0.0E+00

Drift Calculation

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	400.5E-06	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
6	-	400.5E-06	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
7	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
Average	-	267.0E-06	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
Sigma	-	188.8E-06	11.9E-12	8.4E-12	4.2E-12	16.8E-12	0.0E+00	4.2E-12	0.0E+00	33.6E-12	4.2E-12	8.4E-12	0.0E+00

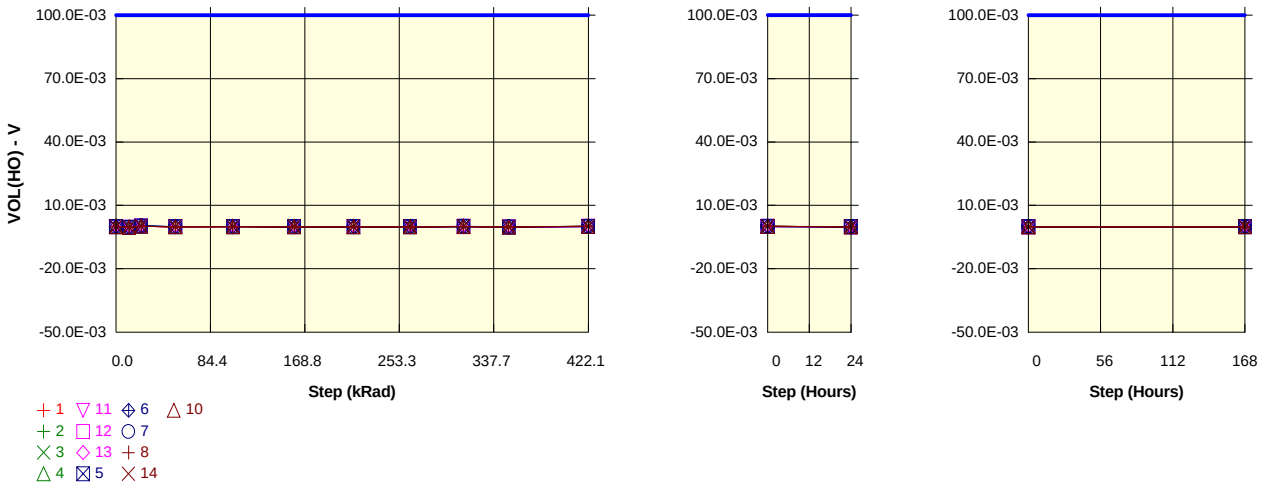
Measurements

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	1.2E-03	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	0.0E+00
OFF_TID samples													
8	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-1.2E-03	399.6E-06
14	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
10	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Statistics													
Min	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-1.2E-03	399.6E-06
Max	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-800.1E-06	399.6E-06
Average	399.6E-06	399.6E-06	1.2E-03	-800.1E-06	800.1E-06	-1.2E-03	-1.6E-03	800.1E-06	-399.6E-06	-4.0E-03	800.1E-06	-933.3E-06	399.6E-06
Sigma	0.0E+00	0.0E+00	8.4E-12	15.7E-12	15.7E-12	8.4E-12	0.0E+00	15.7E-12	0.0E+00	0.0E+00	15.7E-12	188.4E-06	0.0E+00

Drift Calculation

VOH(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.6E-03	0.0E+00
14	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
10	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.2E-03	0.0E+00
Average	-	0.0E+00	800.1E-06	-1.2E-03	400.5E-06	-1.6E-03	-2.0E-03	400.5E-06	-799.2E-06	-4.4E-03	400.5E-06	-1.3E-03	0.0E+00
Sigma	-	0.0E+00	11.9E-12	8.4E-12	4.2E-12	16.8E-12	0.0E+00	4.2E-12	0.0E+00	33.6E-12	4.2E-12	188.4E-06	0.0E+00

Parameter : Low level output voltage : VOL(HO)
Test conditions : VIN=VIL
Unit : V
Spec Limit Max : 100.0E-03
Spec limits are represented in bold lines on the graphic.



Measurements

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.0E+00	-400.0E-06	160.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
ON_PROTON samples													
2	-40.0E-06	-360.0E-06	200.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-240.0E-06	40.0E-06	-160.0E-06	-120.0E-06
3	-40.0E-06	-360.0E-06	200.0E-06	-40.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	80.0E-06	-160.0E-06	-120.0E-06
4	-40.0E-06	-400.0E-06	240.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	40.0E-06	-160.0E-06	-120.0E-06
Statistics													
Min	-40.0E-06	-400.0E-06	200.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-240.0E-06	40.0E-06	-160.0E-06	-120.0E-06
Max	-40.0E-06	-360.0E-06	240.0E-06	-40.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	80.0E-06	-160.0E-06	-120.0E-06
Average	-40.0E-06	-373.3E-06	213.3E-06	-66.7E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-213.3E-06	53.3E-06	-160.0E-06	-120.0E-06
Sigma	262.5E-15	18.9E-06	18.9E-06	18.9E-06	262.5E-15	525.1E-15	525.1E-15	1.1E-12	262.5E-15	18.9E-06	18.9E-06	1.1E-12	1.1E-12

Drift Calculation

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-320.0E-06	240.0E-06	-40.0E-06	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-80.0E-06
3	-	-320.0E-06	240.0E-06	0.0E+00	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-160.0E-06	120.0E-06	-120.0E-06	-80.0E-06
4	-	-360.0E-06	280.0E-06	-40.0E-06	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-160.0E-06	80.0E-06	-120.0E-06	-80.0E-06
Average	-	-333.3E-06	253.3E-06	-26.7E-06	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-173.3E-06	93.3E-06	-120.0E-06	-80.0E-06
Sigma	-	18.9E-06	18.9E-06	18.9E-06	0.0E+00	262.5E-15	262.5E-15	0.0E+00	525.1E-15	18.9E-06	18.9E-06	1.8E-12	0.0E+00

Measurements

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.0E+00	-400.0E-06	160.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
ON_TID samples													
11	-40.0E-06	-360.0E-06	200.0E-06	-80.0E-06	-40.0E-06	-120.0E-06	-80.0E-06	-120.0E-06	80.0E-06	-200.0E-06	40.0E-06	-160.0E-06	-160.0E-06
12	-40.0E-06	-400.0E-06	200.0E-06	-40.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	40.0E-06	-160.0E-06	-120.0E-06
13	-40.0E-06	-400.0E-06	200.0E-06	-80.0E-06	0.0E+00	-80.0E-06	-40.0E-06	-80.0E-06	40.0E-06	-240.0E-06	40.0E-06	-160.0E-06	-120.0E-06
Statistics													
Min	-40.0E-06	-400.0E-06	200.0E-06	-80.0E-06	-40.0E-06	-120.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	40.0E-06	-160.0E-06	-160.0E-06
Max	-40.0E-06	-360.0E-06	200.0E-06	-40.0E-06	0.0E+00	-80.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-200.0E-06	40.0E-06	-160.0E-06	-120.0E-06
Average	-40.0E-06	-386.7E-06	200.0E-06	-66.7E-06	-26.7E-06	-93.3E-06	-66.7E-06	-106.7E-06	40.0E-06	-226.7E-06	40.0E-06	-160.0E-06	-133.3E-06
Sigma	262.5E-15	18.9E-06	2.1E-12	18.9E-06	18.9E-06	18.9E-06	18.9E-06	18.9E-06	32.7E-06	18.9E-06	262.5E-15	1.1E-12	18.9E-06

Drift Calculation

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-320.0E-06	240.0E-06	-40.0E-06	0.0E+00	-80.0E-06	-40.0E-06	-80.0E-06	120.0E-06	-160.0E-06	80.0E-06	-120.0E-06	-120.0E-06
12	-	-360.0E-06	240.0E-06	0.0E+00	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	40.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-80.0E-06
13	-	-360.0E-06	240.0E-06	-40.0E-06	40.0E-06	-40.0E-06	0.0E+00	-40.0E-06	80.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-80.0E-06
Average	-	-346.7E-06	240.0E-06	-26.7E-06	13.3E-06	-53.3E-06	-26.7E-06	-66.7E-06	80.0E-06	-186.7E-06	80.0E-06	-120.0E-06	-93.3E-06
Sigma	-	18.9E-06	2.1E-12	18.9E-06	18.9E-06	18.9E-06	18.9E-06	18.9E-06	32.7E-06	18.9E-06	525.1E-15	1.8E-12	18.9E-06

Measurements

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.0E+00	-400.0E-06	160.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
OFF_PROTON samples													
5	-40.0E-06	-400.0E-06	240.0E-06	-40.0E-06	-40.0E-06	-120.0E-06	-40.0E-06	-80.0E-06	40.0E-06	-200.0E-06	40.0E-06	-120.0E-06	-120.0E-06
6	-40.0E-06	-400.0E-06	200.0E-06	-40.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-200.0E-06	80.0E-06	-160.0E-06	-80.0E-06
7	0.0E+00	-400.0E-06	200.0E-06	-40.0E-06	0.0E+00	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	40.0E-06	-120.0E-06	-120.0E-06
Statistics													
Min	-40.0E-06	-400.0E-06	200.0E-06	-40.0E-06	-40.0E-06	-120.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-200.0E-06	40.0E-06	-160.0E-06	-120.0E-06
Max	0.0E+00	-400.0E-06	240.0E-06	-40.0E-06	0.0E+00	-80.0E-06	-40.0E-06	-80.0E-06	40.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-80.0E-06
Average	-26.7E-06	-400.0E-06	213.3E-06	-40.0E-06	-26.7E-06	-93.3E-06	-66.7E-06	-106.7E-06	26.7E-06	-200.0E-06	53.3E-06	-133.3E-06	-106.7E-06
Sigma	18.9E-06	4.2E-12	18.9E-06	262.5E-15	18.9E-06	18.9E-06	18.9E-06	18.9E-06	18.9E-06	2.1E-12	18.9E-06	18.9E-06	18.9E-06

Drift Calculation

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-360.0E-06	280.0E-06	0.0E+00	0.0E+00	-80.0E-06	0.0E+00	-40.0E-06	80.0E-06	-160.0E-06	80.0E-06	-80.0E-06	-80.0E-06
6	-	-360.0E-06	240.0E-06	0.0E+00	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	40.0E-06	-160.0E-06	120.0E-06	-120.0E-06	-40.0E-06
7	-	-400.0E-06	200.0E-06	-40.0E-06	0.0E+00	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	40.0E-06	-120.0E-06	-120.0E-06
Average	-	-373.3E-06	240.0E-06	-13.3E-06	0.0E+00	-66.7E-06	-40.0E-06	-80.0E-06	53.3E-06	-173.3E-06	80.0E-06	-106.7E-06	-80.0E-06
Sigma	-	18.9E-06	32.7E-06	18.9E-06	0.0E+00	18.9E-06	32.7E-06	32.7E-06	18.9E-06	18.9E-06	32.7E-06	18.9E-06	32.7E-06

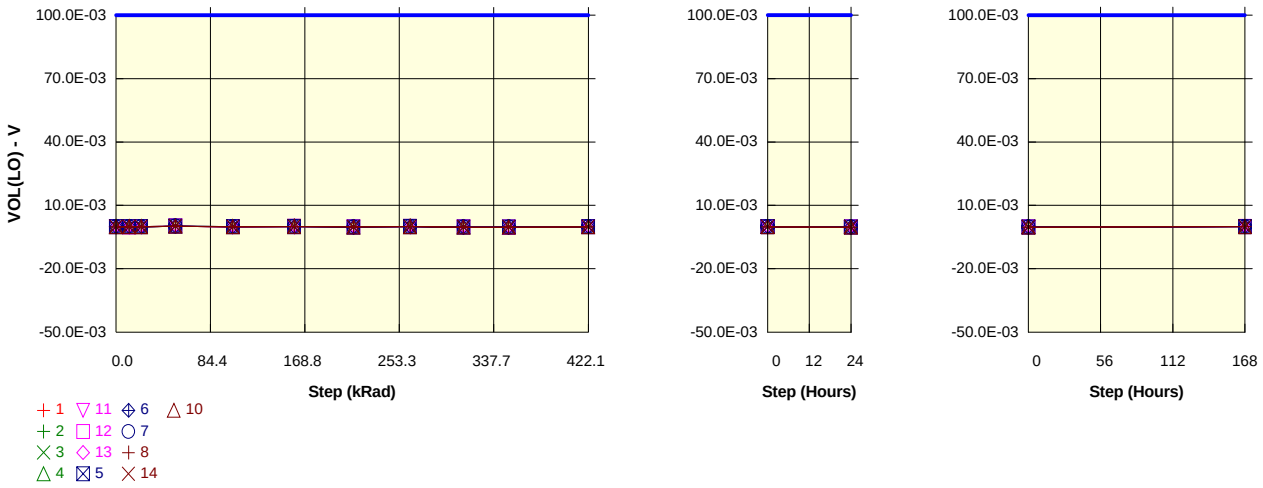
Measurements

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.0E+00	-400.0E-06	160.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
OFF_TID samples													
8	0.0E+00	-400.0E-06	200.0E-06	-80.0E-06	0.0E+00	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-200.0E-06	80.0E-06	-120.0E-06	-120.0E-06
14	-40.0E-06	-400.0E-06	200.0E-06	-120.0E-06	-80.0E-06	-80.0E-06	-40.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
10	-40.0E-06	-360.0E-06	200.0E-06	-80.0E-06	-40.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	40.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-120.0E-06
Statistics													
Min	-40.0E-06	-400.0E-06	200.0E-06	-120.0E-06	-80.0E-06	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-240.0E-06	80.0E-06	-160.0E-06	-120.0E-06
Max	0.0E+00	-360.0E-06	200.0E-06	-80.0E-06	0.0E+00	-80.0E-06	-40.0E-06	-120.0E-06	40.0E-06	-200.0E-06	80.0E-06	-120.0E-06	-120.0E-06
Average	-26.7E-06	-386.7E-06	200.0E-06	-93.3E-06	-40.0E-06	-80.0E-06	-66.7E-06	-120.0E-06	13.3E-06	-213.3E-06	80.0E-06	-133.3E-06	-120.0E-06
Sigma	18.9E-06	18.9E-06	2.1E-12	18.9E-06	32.7E-06	525.1E-15	18.9E-06	1.1E-12	18.9E-06	18.9E-06	525.1E-15	18.9E-06	1.1E-12

Drift Calculation

VOL(HO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-400.0E-06	200.0E-06	-80.0E-06	0.0E+00	-80.0E-06	-80.0E-06	-120.0E-06	0.0E+00	-200.0E-06	80.0E-06	-120.0E-06	-120.0E-06
14	-	-360.0E-06	240.0E-06	-80.0E-06	-40.0E-06	-40.0E-06	0.0E+00	-80.0E-06	40.0E-06	-200.0E-06	120.0E-06	-120.0E-06	-80.0E-06
10	-	-320.0E-06	240.0E-06	-40.0E-06	0.0E+00	-40.0E-06	-40.0E-06	-80.0E-06	80.0E-06	-160.0E-06	120.0E-06	-80.0E-06	-80.0E-06
Average	-	-360.0E-06	226.7E-06	-66.7E-06	-13.3E-06	-53.3E-06	-40.0E-06	-93.3E-06	40.0E-06	-186.7E-06	106.7E-06	-106.7E-06	-93.3E-06
Sigma	-	32.7E-06	18.9E-06	18.9E-06	18.9E-06	18.9E-06	32.7E-06	18.9E-06	32.7E-06	18.9E-06	18.9E-06	18.9E-06	18.9E-06

Parameter : Low level output voltage : VOL(LO)
Test conditions : VIN=VIL
Unit : V
Spec Limit Max : 100.0E-03
Spec limits are represented in bold lines on the graphic.



Measurements

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
ON_PROTON samples													
2	-80.0E-06	-120.0E-06	-80.0E-06	200.0E-06	-40.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
3	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
4	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Statistics													
Min	-80.0E-06	-120.0E-06	-80.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Max	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Average	-80.0E-06	-120.0E-06	-53.3E-06	200.0E-06	-53.3E-06	26.7E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Sigma	525.1E-15	1.1E-12	18.9E-06	2.1E-12	18.9E-06	18.9E-06	2.1E-12	0.0E+00	2.1E-12	2.1E-12	1.1E-12	2.1E-12	262.5E-15

Drift Calculation

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-40.0E-06	0.0E+00	280.0E-06	40.0E-06	120.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
3	-	-40.0E-06	40.0E-06	280.0E-06	40.0E-06	120.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
4	-	-40.0E-06	40.0E-06	280.0E-06	0.0E+00	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
Average	-	-40.0E-06	26.7E-06	280.0E-06	26.7E-06	106.7E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
Sigma	-	0.0E+00	18.9E-06	0.0E+00	18.9E-06	18.9E-06	1.1E-12	525.1E-15	0.0E+00	3.6E-12	0.0E+00	3.6E-12	262.5E-15

Measurements

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
ON_TID samples													
11	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	-40.0E-06	-240.0E-06	-280.0E-06	-160.0E-06	-280.0E-06	-40.0E-06
12	-80.0E-06	-160.0E-06	-40.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-320.0E-06	-120.0E-06	-280.0E-06	0.0E+00
13	-80.0E-06	-120.0E-06	-80.0E-06	160.0E-06	-40.0E-06	0.0E+00	-160.0E-06	0.0E+00	-240.0E-06	-320.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Statistics													
Min	-80.0E-06	-160.0E-06	-80.0E-06	160.0E-06	-80.0E-06	0.0E+00	-200.0E-06	-40.0E-06	-240.0E-06	-320.0E-06	-160.0E-06	-280.0E-06	-40.0E-06
Max	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	0.0E+00	-160.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	0.0E+00
Average	-80.0E-06	-133.3E-06	-53.3E-06	186.7E-06	-66.7E-06	0.0E+00	-186.7E-06	-13.3E-06	-240.0E-06	-306.7E-06	-133.3E-06	-280.0E-06	-26.7E-06
Sigma	525.1E-15	18.9E-06	18.9E-06	18.9E-06	18.9E-06	0.0E+00	18.9E-06	18.9E-06	2.1E-12	18.9E-06	18.9E-06	2.1E-12	18.9E-06

Drift Calculation

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-40.0E-06	40.0E-06	280.0E-06	0.0E+00	80.0E-06	-120.0E-06	40.0E-06	-160.0E-06	-200.0E-06	-80.0E-06	-200.0E-06	40.0E-06
12	-	-80.0E-06	40.0E-06	280.0E-06	0.0E+00	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-240.0E-06	-40.0E-06	-200.0E-06	80.0E-06
13	-	-40.0E-06	0.0E+00	240.0E-06	40.0E-06	80.0E-06	-80.0E-06	80.0E-06	-160.0E-06	-240.0E-06	-40.0E-06	-200.0E-06	40.0E-06
Average	-	-53.3E-06	26.7E-06	266.7E-06	13.3E-06	80.0E-06	-106.7E-06	66.7E-06	-160.0E-06	-226.7E-06	-53.3E-06	-200.0E-06	53.3E-06
Sigma	-	18.9E-06	18.9E-06	18.9E-06	18.9E-06	525.1E-15	18.9E-06	18.9E-06	0.0E+00	18.9E-06	18.9E-06	3.6E-12	18.9E-06

Measurements

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
OFF_PROTON samples													
5	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
6	-80.0E-06	-120.0E-06	-80.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	0.0E+00
7	-80.0E-06	-120.0E-06	-120.0E-06	200.0E-06	-40.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Statistics													
Min	-80.0E-06	-120.0E-06	-120.0E-06	200.0E-06	-80.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Max	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	0.0E+00
Average	-80.0E-06	-120.0E-06	-80.0E-06	200.0E-06	-53.3E-06	0.0E+00	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-26.7E-06
Sigma	525.1E-15	1.1E-12	32.7E-06	2.1E-12	18.9E-06	0.0E+00	2.1E-12	0.0E+00	2.1E-12	2.1E-12	1.1E-12	2.1E-12	18.9E-06

Drift Calculation

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-40.0E-06	40.0E-06	280.0E-06	40.0E-06	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
6	-	-40.0E-06	0.0E+00	280.0E-06	0.0E+00	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	80.0E-06
7	-	-40.0E-06	-40.0E-06	280.0E-06	40.0E-06	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
Average	-	-40.0E-06	-2.3E-21	280.0E-06	26.7E-06	80.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	53.3E-06
Sigma	-	0.0E+00	32.7E-06	0.0E+00	18.9E-06	525.1E-15	1.1E-12	525.1E-15	0.0E+00	3.6E-12	0.0E+00	3.6E-12	18.9E-06

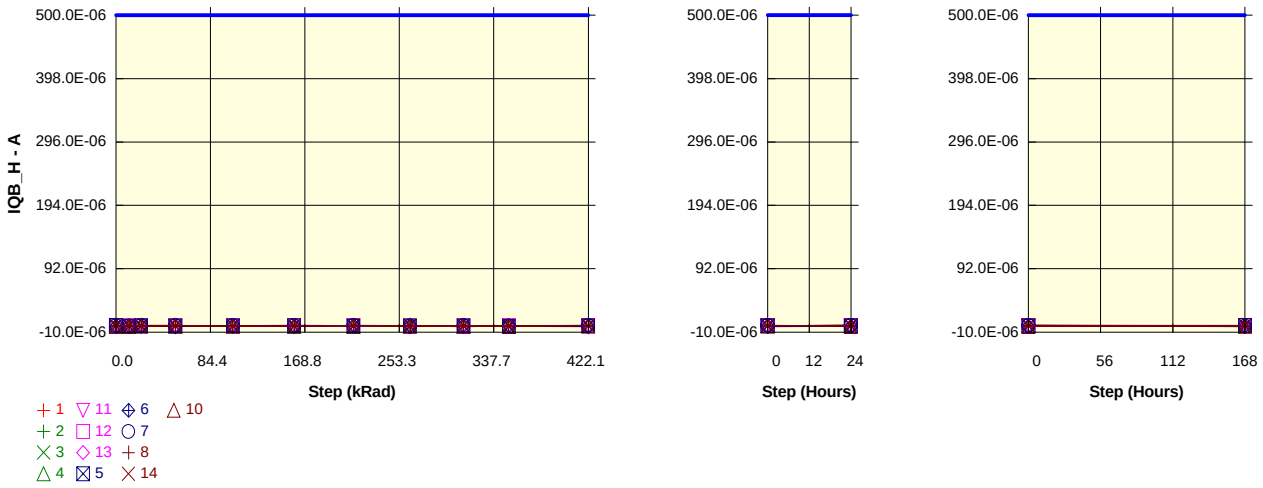
Measurements

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-80.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
OFF_TID samples													
8	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
14	-80.0E-06	-120.0E-06	-80.0E-06	160.0E-06	-80.0E-06	0.0E+00	-200.0E-06	-40.0E-06	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
10	-80.0E-06	-120.0E-06	-80.0E-06	200.0E-06	-80.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-80.0E-06	-280.0E-06	0.0E+00
Statistics													
Min	-80.0E-06	-120.0E-06	-80.0E-06	160.0E-06	-80.0E-06	0.0E+00	-200.0E-06	-40.0E-06	-240.0E-06	-280.0E-06	-120.0E-06	-280.0E-06	-40.0E-06
Max	-80.0E-06	-120.0E-06	-40.0E-06	200.0E-06	-40.0E-06	40.0E-06	-200.0E-06	0.0E+00	-240.0E-06	-280.0E-06	-80.0E-06	-280.0E-06	0.0E+00
Average	-80.0E-06	-120.0E-06	-66.7E-06	186.7E-06	-66.7E-06	26.7E-06	-200.0E-06	-13.3E-06	-240.0E-06	-280.0E-06	-106.7E-06	-280.0E-06	-26.7E-06
Sigma	525.1E-15	1.1E-12	18.9E-06	18.9E-06	18.9E-06	18.9E-06	2.1E-12	18.9E-06	2.1E-12	2.1E-12	18.9E-06	2.1E-12	18.9E-06

Drift Calculation

VOL(LO)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-40.0E-06	40.0E-06	280.0E-06	40.0E-06	120.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
14	-	-40.0E-06	0.0E+00	240.0E-06	0.0E+00	80.0E-06	-120.0E-06	40.0E-06	-160.0E-06	-200.0E-06	-40.0E-06	-200.0E-06	40.0E-06
10	-	-40.0E-06	0.0E+00	280.0E-06	0.0E+00	120.0E-06	-120.0E-06	80.0E-06	-160.0E-06	-200.0E-06	0.0E+00	-200.0E-06	80.0E-06
Average	-	-40.0E-06	13.3E-06	266.7E-06	13.3E-06	106.7E-06	-120.0E-06	66.7E-06	-160.0E-06	-200.0E-06	-26.7E-06	-200.0E-06	53.3E-06
Sigma	-	0.0E+00	18.9E-06	18.9E-06	18.9E-06	18.9E-06	1.1E-12	18.9E-06	0.0E+00	3.6E-12	18.9E-06	3.6E-12	18.9E-06

Parameter : Quiescent VB supply current : IQB_H
Test conditions : VIN=15V
Unit : A
Spec Limit Max : 500.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	372.0E-09	-244.0E-09	-734.0E-09	-300.0E-09	-212.0E-09	614.0E-09	-128.0E-09	-640.0E-09	238.0E-09	340.0E-09	240.0E-09	708.0E-09	300.0E-09
ON_PROTON samples													
2	-188.0E-09	88.0E-09	-800.0E-09	308.0E-09	-188.0E-09	-616.0E-09	374.0E-09	200.0E-09	226.0E-09	480.0E-09	632.0E-09	-786.0E-09	256.0E-09
3	-110.0E-09	-26.0E-09	514.0E-09	-260.0E-09	-734.0E-09	20.0E-09	590.0E-09	-500.0E-09	266.0E-09	180.0E-09	502.0E-09	750.0E-09	-938.0E-09
4	362.0E-09	-46.0E-09	-48.2E-09	-340.0E-09	-2.0E-09	-492.0E-09	-348.0E-09	400.0E-09	-960.0E-09	-376.0E-09	650.0E-09	87.8E-09	272.0E-09
Statistics													
Min	-188.0E-09	-46.0E-09	-800.0E-09	-340.0E-09	-734.0E-09	-616.0E-09	-348.0E-09	-500.0E-09	-960.0E-09	-376.0E-09	502.0E-09	-786.0E-09	-938.0E-09
Max	362.0E-09	88.0E-09	514.0E-09	308.0E-09	-2.0E-09	20.0E-09	590.0E-09	400.0E-09	266.0E-09	480.0E-09	650.0E-09	750.0E-09	272.0E-09
Average	21.3E-09	5.3E-09	-111.4E-09	-97.3E-09	-308.0E-09	-362.7E-09	205.3E-09	33.3E-09	-156.0E-09	94.7E-09	594.7E-09	17.3E-09	-136.7E-09
Sigma	243.0E-09	59.0E-09	538.3E-09	288.5E-09	310.7E-09	275.3E-09	401.1E-09	385.9E-09	568.7E-09	354.6E-09	65.9E-09	629.0E-09	566.7E-09

Drift Calculation

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	276.0E-09	-612.0E-09	496.0E-09	0.0E+00	-428.0E-09	562.0E-09	388.0E-09	414.0E-09	668.0E-09	820.0E-09	-598.0E-09	444.0E-09
3	-	84.0E-09	624.0E-09	-150.0E-09	-624.0E-09	130.0E-09	700.0E-09	-390.0E-09	376.0E-09	290.0E-09	612.0E-09	860.0E-09	-828.0E-09
4	-	-408.0E-09	-410.2E-09	-702.0E-09	-364.0E-09	-854.0E-09	-710.0E-09	38.0E-09	-1.3E-06	-738.0E-09	288.0E-09	-274.2E-09	-90.0E-09
Average	-	-16.0E-09	-132.7E-09	-118.7E-09	-329.3E-09	-384.0E-09	184.0E-09	12.0E-09	-177.3E-09	73.3E-09	573.3E-09	-4.1E-09	-158.0E-09
Sigma	-	288.1E-09	541.4E-09	489.6E-09	255.9E-09	402.9E-09	634.7E-09	318.1E-09	809.6E-09	594.1E-09	218.9E-09	625.1E-09	521.5E-09

Measurements

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	372.0E-09	-244.0E-09	-734.0E-09	-300.0E-09	-212.0E-09	614.0E-09	-128.0E-09	-640.0E-09	238.0E-09	340.0E-09	240.0E-09	708.0E-09	300.0E-09
ON_TID samples													
11	-426.0E-09	-166.0E-09	60.0E-09	-928.0E-09	286.0E-09	676.0E-09	342.0E-09	-440.0E-09	236.0E-09	-620.0E-09	-950.0E-09	-846.0E-09	140.0E-09
12	-316.0E-09	118.0E-09	234.0E-09	80.0E-09	128.0E-09	764.0E-09	588.0E-09	-380.0E-09	-852.0E-09	480.0E-09	422.0E-09	676.0E-09	718.0E-09
13	-194.0E-09	44.0E-09	220.0E-09	-100.0E-09	226.0E-09	-594.0E-09	-788.0E-09	-420.0E-09	406.0E-09	330.0E-09	520.0E-09	-532.0E-09	-642.0E-09
Statistics													
Min	-426.0E-09	-166.0E-09	60.0E-09	-928.0E-09	128.0E-09	-594.0E-09	-788.0E-09	-440.0E-09	-852.0E-09	-620.0E-09	-950.0E-09	-846.0E-09	-642.0E-09
Max	-194.0E-09	118.0E-09	234.0E-09	80.0E-09	286.0E-09	764.0E-09	588.0E-09	-380.0E-09	406.0E-09	480.0E-09	520.0E-09	676.0E-09	718.0E-09
Average	-312.0E-09	-1.3E-09	171.3E-09	-316.0E-09	213.3E-09	282.0E-09	47.3E-09	-413.3E-09	-70.0E-09	63.3E-09	-2.7E-09	-234.0E-09	72.0E-09
Sigma	94.8E-09	120.3E-09	78.9E-09	438.9E-09	65.1E-09	620.5E-09	599.1E-09	24.9E-09	557.3E-09	487.1E-09	671.1E-09	656.1E-09	557.3E-09

Drift Calculation

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	260.0E-09	486.0E-09	-502.0E-09	712.0E-09	1.1E-06	768.0E-09	-14.0E-09	662.0E-09	-194.0E-09	-524.0E-09	-420.0E-09	566.0E-09
12	-	434.0E-09	550.0E-09	396.0E-09	444.0E-09	1.1E-06	904.0E-09	-64.0E-09	-536.0E-09	796.0E-09	738.0E-09	992.0E-09	1.0E-06
13	-	238.0E-09	414.0E-09	94.0E-09	420.0E-09	-400.0E-09	-594.0E-09	-226.0E-09	600.0E-09	524.0E-09	714.0E-09	-338.0E-09	-448.0E-09
Average	-	310.7E-09	483.3E-09	-4.0E-09	525.3E-09	594.0E-09	359.3E-09	-101.3E-09	242.0E-09	375.3E-09	309.3E-09	78.0E-09	384.0E-09
Sigma	-	87.7E-09	55.6E-09	373.1E-09	132.4E-09	702.9E-09	676.4E-09	90.5E-09	550.7E-09	417.6E-09	589.3E-09	647.2E-09	618.6E-09

Measurements

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	372.0E-09	-244.0E-09	-734.0E-09	-300.0E-09	-212.0E-09	614.0E-09	-128.0E-09	-640.0E-09	238.0E-09	340.0E-09	240.0E-09	708.0E-09	300.0E-09
OFF_PROTON samples													
5	378.0E-09	-212.0E-09	140.0E-09	-40.0E-09	-40.0E-09	176.0E-09	-244.0E-09	298.0E-09	176.0E-09	-838.0E-09	200.0E-09	113.6E-09	428.0E-09
6	-460.0E-09	-228.0E-09	304.0E-09	-764.0E-09	-20.0E-09	-568.0E-09	698.0E-09	236.0E-09	306.0E-09	366.0E-09	-836.0E-09	-834.0E-09	-606.0E-09
7	30.0E-09	-200.0E-09	464.0E-09	-40.0E-09	-54.0E-09	272.0E-09	438.0E-09	-560.0E-09	328.0E-09	-236.0E-09	538.0E-09	798.0E-09	-170.0E-09
Statistics													
Min	-460.0E-09	-228.0E-09	140.0E-09	-764.0E-09	-54.0E-09	-568.0E-09	-244.0E-09	-560.0E-09	176.0E-09	-838.0E-09	-836.0E-09	-834.0E-09	-606.0E-09
Max	378.0E-09	-200.0E-09	464.0E-09	-40.0E-09	-20.0E-09	272.0E-09	698.0E-09	298.0E-09	328.0E-09	366.0E-09	538.0E-09	798.0E-09	428.0E-09
Average	-17.3E-09	-213.3E-09	302.7E-09	-281.3E-09	-38.0E-09	-40.0E-09	297.3E-09	-8.7E-09	270.0E-09	-236.0E-09	-32.7E-09	25.9E-09	-116.0E-09
Sigma	343.7E-09	11.5E-09	132.3E-09	341.3E-09	14.0E-09	375.4E-09	397.2E-09	390.7E-09	67.1E-09	491.5E-09	584.6E-09	669.1E-09	423.9E-09

Drift Calculation

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-590.0E-09	-238.0E-09	-418.0E-09	-418.0E-09	-202.0E-09	-622.0E-09	-80.0E-09	-202.0E-09	-1.2E-06	-178.0E-09	-264.4E-09	50.0E-09
6	-	232.0E-09	764.0E-09	-304.0E-09	440.0E-09	-108.0E-09	1.2E-06	696.0E-09	766.0E-09	826.0E-09	-376.0E-09	-374.0E-09	-146.0E-09
7	-	-230.0E-09	434.0E-09	-70.0E-09	-84.0E-09	242.0E-09	408.0E-09	-590.0E-09	298.0E-09	-266.0E-09	508.0E-09	768.0E-09	-200.0E-09
Average	-	-196.0E-09	320.0E-09	-264.0E-09	-20.7E-09	-22.7E-09	314.7E-09	8.7E-09	287.3E-09	-218.7E-09	-15.3E-09	43.2E-09	-98.7E-09
Sigma	-	336.4E-09	416.9E-09	144.9E-09	353.1E-09	191.0E-09	729.7E-09	528.7E-09	395.3E-09	834.3E-09	378.8E-09	514.5E-09	107.4E-09

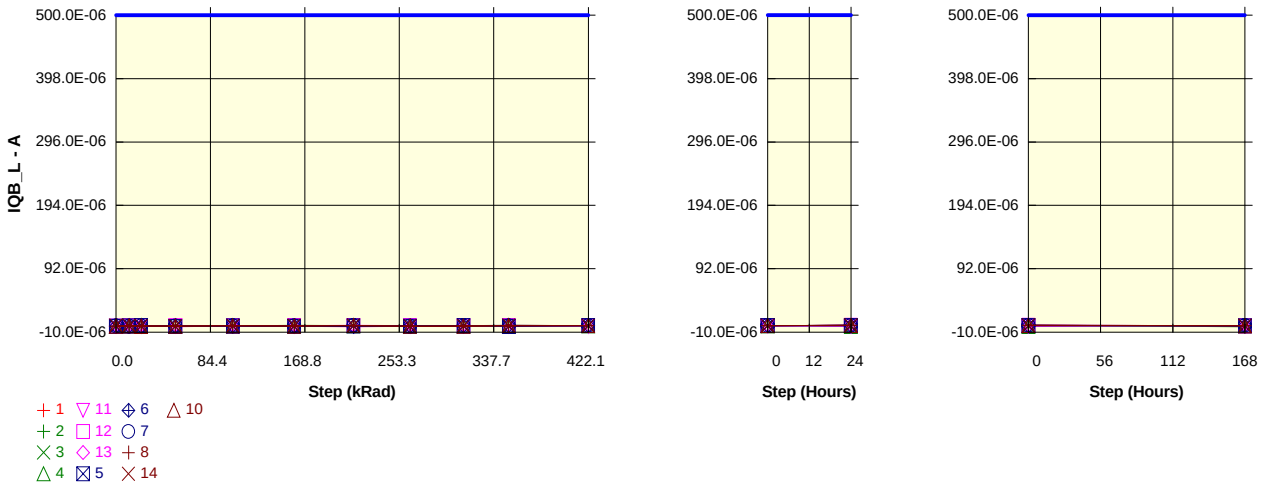
Measurements

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	372.0E-09	-244.0E-09	-734.0E-09	-300.0E-09	-212.0E-09	614.0E-09	-128.0E-09	-640.0E-09	238.0E-09	340.0E-09	240.0E-09	708.0E-09	300.0E-09
OFF_TID samples													
8	220.0E-09	-24.0E-09	-20.0E-09	-100.0E-09	-682.0E-09	366.0E-09	572.0E-09	28.0E-09	0.0E+00	-860.0E-09	568.0E-09	256.0E-09	514.0E-09
14	176.4E-09	252.0E-09	-850.0E-09	322.0E-09	-216.0E-09	-22.0E-09	516.0E-09	-320.0E-09	326.0E-09	440.0E-09	528.0E-09	798.0E-09	602.0E-09
10	-382.0E-09	-290.0E-09	652.0E-09	636.0E-09	-78.0E-09	38.0E-09	114.0E-09	80.0E-09	352.0E-09	-598.0E-09	356.0E-09	-850.0E-09	-424.0E-09
Statistics													
Min	-382.0E-09	-290.0E-09	-850.0E-09	-100.0E-09	-682.0E-09	-22.0E-09	114.0E-09	-320.0E-09	0.0E+00	-860.0E-09	356.0E-09	-850.0E-09	-424.0E-09
Max	220.0E-09	252.0E-09	652.0E-09	636.0E-09	-78.0E-09	366.0E-09	572.0E-09	80.0E-09	352.0E-09	440.0E-09	568.0E-09	798.0E-09	602.0E-09
Average	4.8E-09	-20.7E-09	-72.7E-09	286.0E-09	-325.3E-09	127.3E-09	400.7E-09	-70.7E-09	226.0E-09	-339.3E-09	484.0E-09	68.0E-09	230.7E-09
Sigma	274.1E-09	221.3E-09	614.3E-09	301.5E-09	258.4E-09	170.5E-09	204.0E-09	177.6E-09	160.2E-09	561.4E-09	92.0E-09	685.8E-09	464.3E-09

Drift Calculation

IQB_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-244.0E-09	-240.0E-09	-320.0E-09	-902.0E-09	146.0E-09	352.0E-09	-192.0E-09	-220.0E-09	-1.1E-06	348.0E-09	36.0E-09	294.0E-09
14	-	75.6E-09	-1.0E-06	145.6E-09	-392.4E-09	-198.4E-09	339.6E-09	-496.4E-09	149.6E-09	263.6E-09	351.6E-09	621.6E-09	425.6E-09
10	-	92.0E-09	1.0E-06	1.0E-06	304.0E-09	420.0E-09	496.0E-09	462.0E-09	734.0E-09	-216.0E-09	738.0E-09	-468.0E-09	-42.0E-09
Average	-	-25.5E-09	-77.5E-09	281.2E-09	-330.1E-09	122.5E-09	395.9E-09	-75.5E-09	221.2E-09	-344.1E-09	479.2E-09	63.2E-09	225.9E-09
Sigma	-	154.7E-09	849.0E-09	554.6E-09	494.3E-09	253.0E-09	71.0E-09	399.8E-09	392.7E-09	556.0E-09	183.0E-09	445.2E-09	196.9E-09

Parameter : Quiescent VB supply current : IQB_L
Test conditions : VIN=0V
Unit : A
Spec Limit Max : 500.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-352.0E-09	-180.0E-09	-640.0E-09	-400.0E-09	-220.0E-09	254.0E-09	602.0E-09	-440.0E-09	224.0E-09	564.0E-09	526.0E-09	754.0E-09	-398.0E-09
ON_PROTON samples													
2	-318.0E-09	-200.0E-09	80.0E-09	-400.0E-09	-30.0E-09	696.0E-09	484.0E-09	-440.0E-09	-260.0E-09	-538.0E-09	622.0E-09	844.0E-09	-930.0E-09
3	-362.0E-09	38.0E-09	-410.0E-09	-430.0E-09	64.0E-09	-480.0E-09	200.0E-09	-480.0E-09	188.0E-09	-320.0E-09	352.0E-09	-824.0E-09	248.0E-09
4	-386.0E-09	-354.0E-09	600.0E-09	-60.0E-09	-48.0E-09	-444.0E-09	274.0E-09	-380.0E-09	-560.0E-09	-840.0E-09	350.0E-09	-810.0E-09	420.0E-09
Statistics													
Min	-386.0E-09	-354.0E-09	-410.0E-09	-430.0E-09	-48.0E-09	-480.0E-09	200.0E-09	-480.0E-09	-560.0E-09	-840.0E-09	350.0E-09	-824.0E-09	-930.0E-09
Max	-318.0E-09	38.0E-09	600.0E-09	-60.0E-09	64.0E-09	696.0E-09	484.0E-09	-380.0E-09	188.0E-09	-320.0E-09	622.0E-09	844.0E-09	420.0E-09
Average	-355.3E-09	-172.0E-09	90.0E-09	-296.7E-09	-4.7E-09	-76.0E-09	319.3E-09	-433.3E-09	-210.7E-09	-566.0E-09	441.3E-09	-263.3E-09	-87.3E-09
Sigma	28.2E-09	161.3E-09	412.4E-09	167.8E-09	49.1E-09	546.1E-09	120.3E-09	41.1E-09	307.4E-09	213.2E-09	127.8E-09	783.0E-09	600.0E-09

Drift Calculation

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	118.0E-09	398.0E-09	-82.0E-09	288.0E-09	1.0E-06	802.0E-09	-122.0E-09	58.0E-09	-220.0E-09	940.0E-09	1.2E-06	-612.0E-09
3	-	400.0E-09	-48.0E-09	-68.0E-09	426.0E-09	-118.0E-09	562.0E-09	-118.0E-09	550.0E-09	42.0E-09	714.0E-09	-462.0E-09	610.0E-09
4	-	32.0E-09	986.0E-09	326.0E-09	338.0E-09	-58.0E-09	660.0E-09	6.0E-09	-174.0E-09	-454.0E-09	736.0E-09	-424.0E-09	806.0E-09
Average	-	183.3E-09	445.3E-09	58.7E-09	350.7E-09	279.3E-09	674.7E-09	-78.0E-09	144.7E-09	-210.7E-09	796.7E-09	92.0E-09	268.0E-09
Sigma	-	157.2E-09	423.5E-09	189.1E-09	57.0E-09	520.1E-09	98.5E-09	59.4E-09	301.9E-09	202.6E-09	101.7E-09	756.8E-09	627.4E-09

Measurements

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-352.0E-09	-180.0E-09	-640.0E-09	-400.0E-09	-220.0E-09	254.0E-09	602.0E-09	-440.0E-09	224.0E-09	564.0E-09	526.0E-09	754.0E-09	-398.0E-09
ON_TID samples													
11	-490.0E-09	78.0E-09	482.0E-09	-120.0E-09	-2.0E-09	-458.0E-09	220.0E-09	-520.0E-09	242.0E-09	-250.0E-09	-256.0E-09	-894.0E-09	324.0E-09
12	-404.0E-09	178.0E-09	254.0E-09	80.0E-09	74.0E-09	434.0E-09	700.0E-09	512.0E-09	240.0E-09	600.0E-09	530.0E-09	886.0E-09	310.0E-09
13	-260.0E-09	-240.0E-09	140.0E-09	-1.0E-06	-60.0E-09	-574.0E-09	-990.0E-09	-520.0E-09	300.0E-09	576.0E-09	330.0E-09	744.0E-09	402.0E-09
Statistics													
Min	-490.0E-09	-240.0E-09	140.0E-09	-1.0E-06	-60.0E-09	-574.0E-09	-990.0E-09	-520.0E-09	240.0E-09	-250.0E-09	-256.0E-09	-894.0E-09	310.0E-09
Max	-260.0E-09	178.0E-09	482.0E-09	80.0E-09	74.0E-09	434.0E-09	700.0E-09	512.0E-09	300.0E-09	600.0E-09	530.0E-09	886.0E-09	402.0E-09
Average	-384.7E-09	5.3E-09	292.0E-09	-347.3E-09	4.0E-09	-199.3E-09	-23.3E-09	-176.0E-09	260.7E-09	308.7E-09	201.3E-09	245.3E-09	345.3E-09
Sigma	94.9E-09	178.2E-09	142.2E-09	470.1E-09	54.9E-09	450.3E-09	711.1E-09	486.5E-09	27.8E-09	395.2E-09	333.5E-09	807.7E-09	40.5E-09

Drift Calculation

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	568.0E-09	972.0E-09	370.0E-09	488.0E-09	32.0E-09	710.0E-09	-30.0E-09	732.0E-09	240.0E-09	234.0E-09	-404.0E-09	814.0E-09
12	-	582.0E-09	658.0E-09	484.0E-09	478.0E-09	838.0E-09	1.1E-06	916.0E-09	644.0E-09	1.0E-06	934.0E-09	1.3E-06	714.0E-09
13	-	20.0E-09	400.0E-09	-742.0E-09	200.0E-09	-314.0E-09	-730.0E-09	-260.0E-09	560.0E-09	836.0E-09	590.0E-09	1.0E-06	662.0E-09
Average	-	390.0E-09	676.7E-09	37.3E-09	388.7E-09	185.3E-09	361.3E-09	208.7E-09	645.3E-09	693.3E-09	586.0E-09	630.0E-09	730.0E-09
Sigma	-	261.7E-09	233.9E-09	553.0E-09	133.5E-09	482.6E-09	788.3E-09	508.9E-09	70.2E-09	327.8E-09	285.8E-09	740.4E-09	63.1E-09

Measurements

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-352.0E-09	-180.0E-09	-640.0E-09	-400.0E-09	-220.0E-09	254.0E-09	602.0E-09	-440.0E-09	224.0E-09	564.0E-09	526.0E-09	754.0E-09	-398.0E-09
OFF_PROTON samples													
5	-484.0E-09	24.0E-09	600.0E-09	-886.0E-09	-140.0E-09	-390.0E-09	312.0E-09	-560.0E-09	356.0E-09	-662.0E-09	434.0E-09	798.0E-09	-86.0E-09
6	-464.0E-09	-182.0E-09	-884.0E-09	-200.0E-09	274.0E-09	-276.0E-09	-448.0E-09	-280.0E-09	206.0E-09	652.0E-09	500.0E-09	122.0E-09	282.0E-09
7	-84.0E-09	-440.0E-09	-60.0E-09	-120.0E-09	192.0E-09	-110.0E-09	422.0E-09	-400.0E-09	120.0E-09	240.0E-09	522.0E-09	816.0E-09	470.0E-09
Statistics													
Min	-484.0E-09	-440.0E-09	-884.0E-09	-886.0E-09	-140.0E-09	-390.0E-09	-448.0E-09	-560.0E-09	120.0E-09	-662.0E-09	434.0E-09	122.0E-09	-86.0E-09
Max	-84.0E-09	24.0E-09	600.0E-09	-120.0E-09	274.0E-09	-110.0E-09	422.0E-09	-280.0E-09	356.0E-09	652.0E-09	522.0E-09	816.0E-09	470.0E-09
Average	-344.0E-09	-199.3E-09	-114.7E-09	-402.0E-09	108.7E-09	-258.7E-09	95.3E-09	-413.3E-09	227.3E-09	76.7E-09	485.3E-09	578.7E-09	222.0E-09
Sigma	184.0E-09	189.8E-09	607.1E-09	343.8E-09	179.0E-09	115.0E-09	386.8E-09	114.7E-09	97.5E-09	548.7E-09	37.4E-09	323.0E-09	230.9E-09

Drift Calculation

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	508.0E-09	1.1E-06	-402.0E-09	344.0E-09	94.0E-09	796.0E-09	-76.0E-09	840.0E-09	-178.0E-09	918.0E-09	1.3E-06	398.0E-09
6	-	282.0E-09	-420.0E-09	264.0E-09	738.0E-09	188.0E-09	16.0E-09	184.0E-09	670.0E-09	1.1E-06	964.0E-09	586.0E-09	746.0E-09
7	-	-356.0E-09	24.0E-09	-36.0E-09	276.0E-09	-26.0E-09	506.0E-09	-316.0E-09	204.0E-09	324.0E-09	606.0E-09	900.0E-09	554.0E-09
Average	-	144.7E-09	229.3E-09	-58.0E-09	452.7E-09	85.3E-09	439.3E-09	-69.3E-09	571.3E-09	420.7E-09	829.3E-09	922.7E-09	566.0E-09
Sigma	-	365.9E-09	630.9E-09	272.3E-09	203.7E-09	87.6E-09	321.9E-09	204.2E-09	268.9E-09	532.7E-09	159.0E-09	284.6E-09	142.3E-09

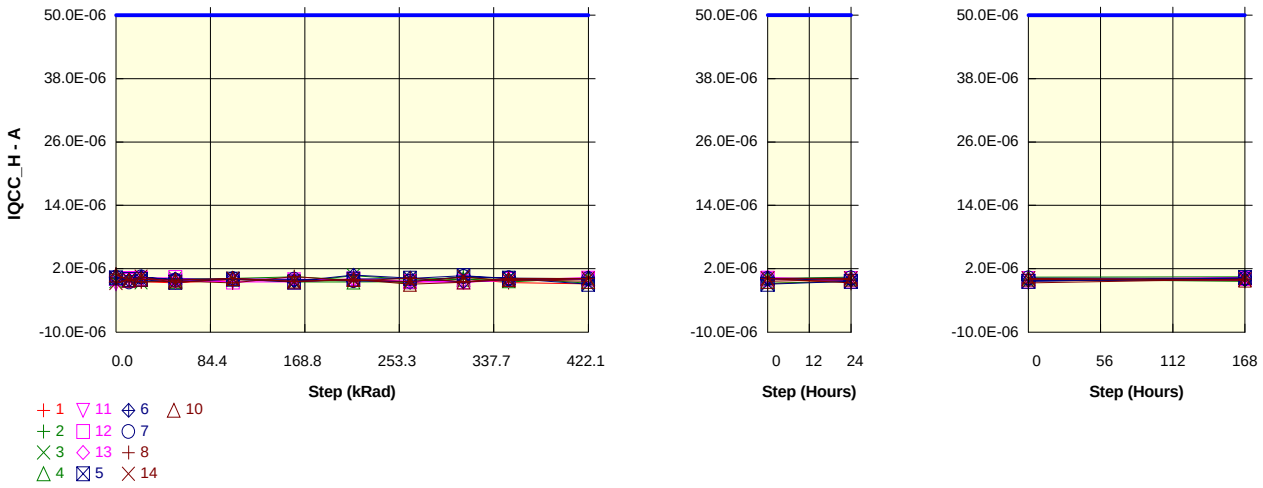
Measurements

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-352.0E-09	-180.0E-09	-640.0E-09	-400.0E-09	-220.0E-09	254.0E-09	602.0E-09	-440.0E-09	224.0E-09	564.0E-09	526.0E-09	754.0E-09	-398.0E-09
OFF_TID samples													
8	-510.0E-09	-42.0E-09	492.0E-09	-100.0E-09	-162.0E-09	254.0E-09	450.0E-09	-620.0E-09	156.0E-09	-216.0E-09	452.0E-09	768.0E-09	566.0E-09
14	448.0E-09	156.0E-09	-394.0E-09	-438.0E-09	298.0E-09	-80.0E-09	500.0E-09	-440.0E-09	-448.0E-09	360.0E-09	288.0E-09	674.0E-09	238.0E-09
10	-402.0E-09	-8.0E-09	-836.0E-09	-386.0E-09	314.0E-09	-504.0E-09	594.0E-09	-348.0E-09	-522.0E-09	752.0E-09	564.0E-09	794.0E-09	38.0E-09
Statistics													
Min	-510.0E-09	-42.0E-09	-836.0E-09	-438.0E-09	-162.0E-09	-504.0E-09	450.0E-09	-620.0E-09	-522.0E-09	-216.0E-09	288.0E-09	674.0E-09	38.0E-09
Max	448.0E-09	156.0E-09	492.0E-09	-100.0E-09	314.0E-09	254.0E-09	594.0E-09	-348.0E-09	156.0E-09	752.0E-09	564.0E-09	794.0E-09	566.0E-09
Average	-154.7E-09	35.3E-09	-246.0E-09	-308.0E-09	150.0E-09	-110.0E-09	514.7E-09	-469.3E-09	-271.3E-09	298.7E-09	434.7E-09	745.3E-09	280.7E-09
Sigma	428.4E-09	86.4E-09	552.2E-09	148.6E-09	220.7E-09	310.2E-09	59.7E-09	113.0E-09	303.7E-09	397.6E-09	113.3E-09	51.5E-09	217.7E-09

Drift Calculation

IQB_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	468.0E-09	1.0E-06	410.0E-09	348.0E-09	764.0E-09	960.0E-09	-110.0E-09	666.0E-09	294.0E-09	962.0E-09	1.3E-06	1.1E-06
14	-	-292.0E-09	-842.0E-09	-886.0E-09	-150.0E-09	-528.0E-09	52.0E-09	-888.0E-09	-896.0E-09	-88.0E-09	-160.0E-09	226.0E-09	-210.0E-09
10	-	394.0E-09	-434.0E-09	16.0E-09	716.0E-09	-102.0E-09	996.0E-09	54.0E-09	-120.0E-09	1.2E-06	966.0E-09	1.2E-06	440.0E-09
Average	-	190.0E-09	-91.3E-09	-153.3E-09	304.7E-09	44.7E-09	669.3E-09	-314.7E-09	-116.7E-09	453.3E-09	589.3E-09	900.0E-09	435.3E-09
Sigma	-	342.2E-09	790.8E-09	542.5E-09	354.9E-09	537.6E-09	436.8E-09	410.9E-09	637.7E-09	519.4E-09	529.9E-09	477.8E-09	525.0E-09

Parameter : Quiescent VCC supply current : IQCC_H
Test conditions : VIN = 15V
Unit : A
Spec Limit Max : 50.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-558.0E-09	-90.0E-09	-442.0E-09	-660.0E-09	-50.0E-09	-214.0E-09	66.0E-09	-680.0E-09	96.0E-09	-640.0E-09	-842.0E-09	-112.0E-09	-226.0E-09
ON_PROTON samples													
2	174.0E-09	250.0E-09	388.0E-09	-284.0E-09	178.0E-09	462.0E-09	-92.0E-09	-636.0E-09	566.0E-09	-502.0E-09	230.0E-09	28.0E-09	-336.0E-09
3	-304.0E-09	-210.0E-09	-550.0E-09	140.0E-09	24.0E-09	-504.0E-09	700.0E-09	8.0E-09	306.0E-09	292.0E-09	-720.0E-09	-350.0E-09	380.0E-09
4	252.0E-09	-160.0E-09	162.0E-09	-422.0E-09	86.0E-09	-518.0E-09	-504.0E-09	-434.0E-09	34.0E-09	-294.0E-09	204.0E-09	410.0E-09	470.0E-09
Statistics													
Min	-304.0E-09	-210.0E-09	-550.0E-09	-422.0E-09	24.0E-09	-518.0E-09	-504.0E-09	-636.0E-09	34.0E-09	-502.0E-09	-720.0E-09	-350.0E-09	-336.0E-09
Max	252.0E-09	250.0E-09	388.0E-09	140.0E-09	178.0E-09	462.0E-09	700.0E-09	8.0E-09	566.0E-09	292.0E-09	230.0E-09	410.0E-09	470.0E-09
Average	40.7E-09	-40.0E-09	4.7E-15	-188.7E-09	96.0E-09	-186.7E-09	34.7E-09	-354.0E-09	302.0E-09	-168.0E-09	-95.3E-09	29.3E-09	171.3E-09
Sigma	245.8E-09	206.1E-09	399.7E-09	239.1E-09	63.3E-09	458.7E-09	499.6E-09	268.9E-09	217.2E-09	336.2E-09	441.8E-09	310.3E-09	360.6E-09

Drift Calculation

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	76.0E-09	214.0E-09	-458.0E-09	4.0E-09	288.0E-09	-266.0E-09	-810.0E-09	392.0E-09	-676.0E-09	56.0E-09	-146.0E-09	-510.0E-09
3	-	94.0E-09	-246.0E-09	444.0E-09	328.0E-09	-200.0E-09	1.0E-06	312.0E-09	610.0E-09	596.0E-09	-416.0E-09	-46.0E-09	684.0E-09
4	-	-412.0E-09	-90.0E-09	-674.0E-09	-166.0E-09	-770.0E-09	-756.0E-09	-686.0E-09	-218.0E-09	-546.0E-09	-48.0E-09	158.0E-09	218.0E-09
Average	-	-80.7E-09	-40.7E-09	-229.3E-09	55.3E-09	-227.3E-09	-6.0E-09	-394.7E-09	261.3E-09	-208.7E-09	-136.0E-09	-11.3E-09	130.7E-09
Sigma	-	234.4E-09	191.0E-09	484.2E-09	204.9E-09	432.4E-09	741.7E-09	502.2E-09	350.4E-09	571.5E-09	202.5E-09	126.5E-09	491.3E-09

Measurements

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-558.0E-09	-90.0E-09	-442.0E-09	-660.0E-09	-50.0E-09	-214.0E-09	66.0E-09	-680.0E-09	96.0E-09	-640.0E-09	-842.0E-09	-112.0E-09	-226.0E-09
ON_TID samples													
11	-828.0E-09	130.0E-09	110.0E-09	-306.0E-09	-432.0E-09	-76.0E-09	-180.0E-09	-386.0E-09	-546.0E-09	-54.0E-09	200.0E-09	166.0E-09	-164.0E-09
12	156.0E-09	-194.0E-09	214.0E-09	314.0E-09	-508.0E-09	-518.0E-09	96.0E-09	-438.0E-09	-446.0E-09	-52.0E-09	6.0E-09	-320.0E-09	140.0E-09
13	262.0E-09	-182.0E-09	136.0E-09	-324.0E-09	74.0E-09	56.0E-09	-102.0E-09	-404.0E-09	-568.0E-09	-204.0E-09	378.0E-09	-86.0E-09	380.0E-09
Statistics													
Min	-828.0E-09	-194.0E-09	110.0E-09	-324.0E-09	-508.0E-09	-518.0E-09	-180.0E-09	-438.0E-09	-568.0E-09	-204.0E-09	6.0E-09	-320.0E-09	-164.0E-09
Max	262.0E-09	130.0E-09	214.0E-09	314.0E-09	74.0E-09	56.0E-09	96.0E-09	-386.0E-09	-446.0E-09	-52.0E-09	378.0E-09	166.0E-09	380.0E-09
Average	-136.7E-09	-82.0E-09	153.3E-09	-105.3E-09	-288.7E-09	-179.3E-09	-62.0E-09	-409.3E-09	-520.0E-09	-103.3E-09	194.7E-09	-80.0E-09	118.7E-09
Sigma	490.8E-09	150.0E-09	44.2E-09	296.6E-09	258.3E-09	245.5E-09	116.2E-09	21.6E-09	53.1E-09	71.2E-09	151.9E-09	198.5E-09	222.6E-09

Drift Calculation

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	958.0E-09	938.0E-09	522.0E-09	396.0E-09	752.0E-09	648.0E-09	442.0E-09	282.0E-09	774.0E-09	1.0E-06	994.0E-09	664.0E-09
12	-	-350.0E-09	58.0E-09	158.0E-09	-664.0E-09	-674.0E-09	-60.0E-09	-594.0E-09	-602.0E-09	-208.0E-09	-150.0E-09	-476.0E-09	-16.0E-09
13	-	-444.0E-09	-126.0E-09	-586.0E-09	-188.0E-09	-206.0E-09	-364.0E-09	-666.0E-09	-830.0E-09	-466.0E-09	116.0E-09	-348.0E-09	118.0E-09
Average	-	54.7E-09	290.0E-09	31.3E-09	-152.0E-09	-42.7E-09	74.7E-09	-272.7E-09	-383.3E-09	33.3E-09	331.3E-09	56.7E-09	255.3E-09
Sigma	-	639.9E-09	464.3E-09	461.1E-09	433.5E-09	593.5E-09	424.0E-09	506.2E-09	479.6E-09	534.2E-09	504.4E-09	664.9E-09	294.1E-09

Measurements

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-558.0E-09	-90.0E-09	-442.0E-09	-660.0E-09	-50.0E-09	-214.0E-09	66.0E-09	-680.0E-09	96.0E-09	-640.0E-09	-842.0E-09	-112.0E-09	-226.0E-09
OFF_PROTON samples													
5	278.0E-09	-36.0E-09	-34.0E-09	-548.0E-09	52.0E-09	-512.0E-09	52.0E-09	202.0E-09	688.0E-09	196.0E-09	-932.0E-09	-380.0E-09	320.0E-09
6	312.0E-09	-124.0E-09	392.0E-09	40.0E-09	96.0E-09	-358.0E-09	778.0E-09	238.0E-09	-464.0E-09	-70.0E-09	136.0E-09	-178.0E-09	-40.0E-09
7	338.0E-09	-492.0E-09	478.0E-09	-178.0E-09	88.0E-09	20.0E-09	-288.0E-09	-404.0E-09	492.0E-09	254.0E-09	132.0E-09	258.0E-09	160.0E-09
Statistics													
Min	278.0E-09	-492.0E-09	-34.0E-09	-548.0E-09	52.0E-09	-512.0E-09	-288.0E-09	-404.0E-09	-464.0E-09	-70.0E-09	-932.0E-09	-380.0E-09	-40.0E-09
Max	338.0E-09	-36.0E-09	478.0E-09	40.0E-09	96.0E-09	20.0E-09	778.0E-09	238.0E-09	688.0E-09	254.0E-09	136.0E-09	258.0E-09	320.0E-09
Average	309.3E-09	-217.3E-09	278.7E-09	-228.7E-09	78.7E-09	-283.3E-09	180.7E-09	12.0E-09	238.7E-09	126.7E-09	-221.3E-09	-100.0E-09	146.7E-09
Sigma	24.6E-09	197.5E-09	223.9E-09	242.7E-09	19.1E-09	223.5E-09	444.6E-09	294.5E-09	503.3E-09	141.1E-09	502.5E-09	266.2E-09	147.3E-09

Drift Calculation

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-314.0E-09	-312.0E-09	-826.0E-09	-226.0E-09	-790.0E-09	-226.0E-09	-76.0E-09	410.0E-09	-82.0E-09	-1.2E-06	-658.0E-09	42.0E-09
6	-	-436.0E-09	80.0E-09	-272.0E-09	-216.0E-09	-670.0E-09	466.0E-09	-74.0E-09	-776.0E-09	-382.0E-09	-176.0E-09	-490.0E-09	-352.0E-09
7	-	-830.0E-09	140.0E-09	-516.0E-09	-250.0E-09	-318.0E-09	-626.0E-09	-742.0E-09	154.0E-09	-84.0E-09	-206.0E-09	-80.0E-09	-178.0E-09
Average	-	-526.7E-09	-30.7E-09	-538.0E-09	-230.7E-09	-592.7E-09	-128.7E-09	-297.3E-09	-70.7E-09	-182.7E-09	-530.7E-09	-409.3E-09	-162.7E-09
Sigma	-	220.2E-09	200.4E-09	226.7E-09	14.3E-09	200.3E-09	451.1E-09	314.4E-09	509.6E-09	141.0E-09	480.5E-09	242.8E-09	161.2E-09

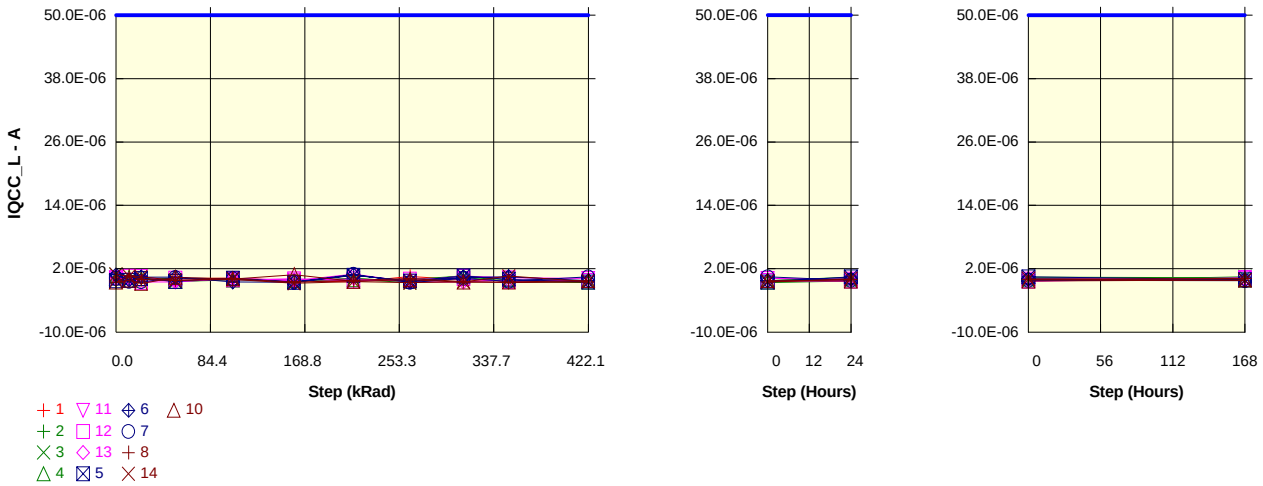
Measurements

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-558.0E-09	-90.0E-09	-442.0E-09	-660.0E-09	-50.0E-09	-214.0E-09	66.0E-09	-680.0E-09	96.0E-09	-640.0E-09	-842.0E-09	-112.0E-09	-226.0E-09
OFF_TID samples													
8	984.0E-09	-200.0E-09	-482.0E-09	-294.0E-09	-684.0E-09	536.0E-09	-310.0E-09	242.0E-09	-448.0E-09	190.0E-09	174.0E-09	-700.0E-09	54.0E-09
14	-670.0E-09	-148.0E-09	516.0E-09	-584.0E-09	172.0E-09	-404.0E-09	-78.0E-09	-408.0E-09	428.0E-09	-238.0E-09	136.0E-09	160.0E-09	-42.0E-09
10	800.0E-09	-164.0E-09	12.0E-09	-136.0E-09	156.0E-09	-354.0E-09	-24.0E-09	-940.0E-09	-520.0E-09	-20.0E-09	-376.0E-09	12.0E-09	-180.0E-09
Statistics													
Min	-670.0E-09	-200.0E-09	-482.0E-09	-584.0E-09	-684.0E-09	-404.0E-09	-310.0E-09	-940.0E-09	-520.0E-09	-238.0E-09	-376.0E-09	-700.0E-09	-180.0E-09
Max	984.0E-09	-148.0E-09	516.0E-09	-136.0E-09	172.0E-09	536.0E-09	-24.0E-09	242.0E-09	428.0E-09	190.0E-09	174.0E-09	160.0E-09	54.0E-09
Average	371.3E-09	-170.7E-09	15.3E-09	-338.0E-09	-118.7E-09	-74.0E-09	-137.3E-09	-368.7E-09	-180.0E-09	-22.7E-09	-22.0E-09	-176.0E-09	-56.0E-09
Sigma	740.2E-09	21.7E-09	407.4E-09	185.5E-09	399.8E-09	431.8E-09	124.1E-09	483.4E-09	430.9E-09	174.7E-09	250.8E-09	375.4E-09	96.0E-09

Drift Calculation

IQCC_H	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-1.2E-06	-1.5E-06	-1.3E-06	-1.7E-06	-448.0E-09	-1.3E-06	-742.0E-09	-1.4E-06	-794.0E-09	-810.0E-09	-1.7E-06	-930.0E-09
14	-	522.0E-09	1.2E-06	86.0E-09	842.0E-09	266.0E-09	592.0E-09	262.0E-09	1.1E-06	432.0E-09	806.0E-09	830.0E-09	628.0E-09
10	-	-964.0E-09	-788.0E-09	-936.0E-09	-644.0E-09	-1.2E-06	-824.0E-09	-1.7E-06	-1.3E-06	-820.0E-09	-1.2E-06	-788.0E-09	-980.0E-09
Average	-	-542.0E-09	-356.0E-09	-709.3E-09	-490.0E-09	-445.3E-09	-508.7E-09	-740.0E-09	-551.3E-09	-394.0E-09	-393.3E-09	-547.3E-09	-427.3E-09
Sigma	-	757.7E-09	1.1E-06	579.5E-09	1.0E-06	579.7E-09	801.6E-09	817.3E-09	1.2E-06	584.2E-09	861.1E-09	1.0E-06	746.5E-09

Parameter : Quiescent VCC supply current : IQCC_L
Test conditions : VIN = 0V
Unit : A
Spec Limit Max : 50.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	376.0E-09	-102.0E-09	-30.0E-09	192.0E-09	218.0E-09	-254.0E-09	-468.0E-09	550.0E-09	-48.0E-09	-268.0E-09	-222.0E-09	82.0E-09	186.0E-09
ON_PROTON samples													
2	-598.0E-09	-134.0E-09	180.0E-09	186.0E-09	194.0E-09	-358.0E-09	220.0E-09	-466.0E-09	720.0E-09	-560.0E-09	-270.0E-09	438.0E-09	292.0E-09
3	870.0E-09	-188.0E-09	176.0E-09	-432.0E-09	80.0E-09	-212.0E-09	54.0E-09	-664.0E-09	342.0E-09	-430.0E-09	-580.0E-09	-318.0E-09	460.0E-09
4	236.0E-09	354.0E-09	114.0E-09	-368.0E-09	-128.0E-09	-198.0E-09	-94.0E-09	-16.0E-09	632.0E-09	-130.0E-09	-502.0E-09	228.0E-09	-162.0E-09
Statistics													
Min	-598.0E-09	-188.0E-09	114.0E-09	-432.0E-09	-128.0E-09	-358.0E-09	-94.0E-09	-664.0E-09	342.0E-09	-560.0E-09	-580.0E-09	-318.0E-09	-162.0E-09
Max	870.0E-09	354.0E-09	180.0E-09	186.0E-09	194.0E-09	-198.0E-09	220.0E-09	-16.0E-09	720.0E-09	-130.0E-09	-270.0E-09	438.0E-09	460.0E-09
Average	169.3E-09	10.7E-09	156.7E-09	-204.7E-09	48.7E-09	-256.0E-09	60.0E-09	-382.0E-09	564.7E-09	-373.3E-09	-450.7E-09	116.0E-09	196.7E-09
Sigma	601.2E-09	243.8E-09	30.2E-09	277.5E-09	133.3E-09	72.4E-09	128.3E-09	271.1E-09	161.5E-09	180.1E-09	131.7E-09	318.6E-09	262.7E-09

Drift Calculation

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	464.0E-09	778.0E-09	784.0E-09	792.0E-09	240.0E-09	818.0E-09	132.0E-09	1.3E-06	38.0E-09	328.0E-09	1.0E-06	890.0E-09
3	-	-1.1E-06	-694.0E-09	-1.3E-06	-790.0E-09	-1.1E-06	-816.0E-09	-1.5E-06	-528.0E-09	-1.3E-06	-1.5E-06	-1.2E-06	-410.0E-09
4	-	118.0E-09	-122.0E-09	-604.0E-09	-364.0E-09	-434.0E-09	-330.0E-09	-252.0E-09	396.0E-09	-366.0E-09	-738.0E-09	-8.0E-09	-398.0E-09
Average	-	-158.7E-09	-12.7E-09	-374.0E-09	-120.7E-09	-425.3E-09	-109.3E-09	-551.3E-09	395.3E-09	-542.7E-09	-620.0E-09	-53.3E-09	27.3E-09
Sigma	-	651.4E-09	605.9E-09	867.0E-09	668.4E-09	539.7E-09	685.1E-09	712.3E-09	753.6E-09	560.3E-09	730.6E-09	908.5E-09	610.0E-09

Measurements

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	376.0E-09	-102.0E-09	-30.0E-09	192.0E-09	218.0E-09	-254.0E-09	-468.0E-09	550.0E-09	-48.0E-09	-268.0E-09	-222.0E-09	82.0E-09	186.0E-09
ON_TID samples													
11	260.0E-09	-166.0E-09	536.0E-09	-350.0E-09	134.0E-09	-136.0E-09	64.0E-09	-390.0E-09	598.0E-09	294.0E-09	170.0E-09	58.0E-09	200.0E-09
12	298.0E-09	564.0E-09	-572.0E-09	182.0E-09	-94.0E-09	104.0E-09	-316.0E-09	52.0E-09	128.0E-09	-370.0E-09	-226.0E-09	-344.0E-09	320.0E-09
13	420.0E-09	-146.0E-09	-466.0E-09	-512.0E-09	204.0E-09	-256.0E-09	960.0E-09	-496.0E-09	-492.0E-09	-134.0E-09	-294.0E-09	-160.0E-09	-166.0E-09
Statistics													
Min	260.0E-09	-166.0E-09	-572.0E-09	-512.0E-09	-94.0E-09	-256.0E-09	-316.0E-09	-496.0E-09	-492.0E-09	-370.0E-09	-294.0E-09	-344.0E-09	-166.0E-09
Max	420.0E-09	564.0E-09	536.0E-09	182.0E-09	204.0E-09	104.0E-09	960.0E-09	52.0E-09	598.0E-09	294.0E-09	170.0E-09	58.0E-09	320.0E-09
Average	326.0E-09	84.0E-09	-167.3E-09	-226.7E-09	81.3E-09	-96.0E-09	236.0E-09	-278.0E-09	78.0E-09	-70.0E-09	-116.7E-09	-148.7E-09	118.0E-09
Sigma	68.3E-09	339.5E-09	499.2E-09	296.4E-09	127.2E-09	149.7E-09	534.9E-09	237.3E-09	446.4E-09	274.8E-09	204.6E-09	164.3E-09	206.7E-09

Drift Calculation

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-426.0E-09	276.0E-09	-610.0E-09	-126.0E-09	-396.0E-09	-196.0E-09	-650.0E-09	338.0E-09	34.0E-09	-90.0E-09	-202.0E-09	-60.0E-09
12	-	266.0E-09	-870.0E-09	-116.0E-09	-392.0E-09	-194.0E-09	-614.0E-09	-246.0E-09	-170.0E-09	-668.0E-09	-524.0E-09	-642.0E-09	22.0E-09
13	-	-566.0E-09	-886.0E-09	-932.0E-09	-216.0E-09	-676.0E-09	540.0E-09	-916.0E-09	-912.0E-09	-554.0E-09	-714.0E-09	-580.0E-09	-586.0E-09
Average	-	-242.0E-09	-493.3E-09	-552.7E-09	-244.7E-09	-422.0E-09	-90.0E-09	-604.0E-09	-248.0E-09	-396.0E-09	-442.7E-09	-474.7E-09	-208.0E-09
Sigma	-	363.7E-09	544.0E-09	335.6E-09	110.5E-09	197.6E-09	477.0E-09	275.5E-09	513.3E-09	307.6E-09	261.2E-09	194.5E-09	269.4E-09

Measurements

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	376.0E-09	-102.0E-09	-30.0E-09	192.0E-09	218.0E-09	-254.0E-09	-468.0E-09	550.0E-09	-48.0E-09	-268.0E-09	-222.0E-09	82.0E-09	186.0E-09
OFF_PROTON samples													
5	-284.0E-09	-230.0E-09	154.0E-09	-388.0E-09	214.0E-09	-564.0E-09	760.0E-09	-326.0E-09	638.0E-09	18.0E-09	-518.0E-09	480.0E-09	-66.0E-09
6	842.0E-09	-128.0E-09	426.0E-09	424.0E-09	-504.0E-09	-526.0E-09	804.0E-09	-382.0E-09	372.0E-09	496.0E-09	-258.0E-09	42.0E-09	-196.0E-09
7	182.0E-09	-424.0E-09	-466.0E-09	312.0E-09	86.0E-09	-502.0E-09	940.0E-09	-606.0E-09	206.0E-09	-384.0E-09	464.0E-09	-194.0E-09	-260.0E-09
Statistics													
Min	-284.0E-09	-424.0E-09	-466.0E-09	-388.0E-09	-504.0E-09	-564.0E-09	760.0E-09	-606.0E-09	206.0E-09	-384.0E-09	-518.0E-09	-194.0E-09	-260.0E-09
Max	842.0E-09	-128.0E-09	426.0E-09	424.0E-09	214.0E-09	-502.0E-09	940.0E-09	-326.0E-09	638.0E-09	496.0E-09	464.0E-09	480.0E-09	-66.0E-09
Average	246.7E-09	-260.7E-09	38.0E-09	116.0E-09	-68.0E-09	-530.7E-09	834.7E-09	-438.0E-09	405.3E-09	43.3E-09	-104.0E-09	109.3E-09	-174.0E-09
Sigma	462.0E-09	122.8E-09	373.3E-09	359.3E-09	312.7E-09	25.5E-09	76.6E-09	121.0E-09	177.9E-09	359.7E-09	415.4E-09	279.2E-09	80.7E-09

Drift Calculation

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	54.0E-09	438.0E-09	-104.0E-09	498.0E-09	-280.0E-09	1.0E-06	-42.0E-09	922.0E-09	302.0E-09	-234.0E-09	764.0E-09	218.0E-09
6	-	-970.0E-09	-416.0E-09	-418.0E-09	-1.3E-06	-1.4E-06	-38.0E-09	-1.2E-06	-470.0E-09	-346.0E-09	-1.1E-06	-800.0E-09	-1.0E-06
7	-	-606.0E-09	-648.0E-09	130.0E-09	-96.0E-09	-684.0E-09	758.0E-09	-788.0E-09	24.0E-09	-566.0E-09	282.0E-09	-376.0E-09	-442.0E-09
Average	-	-507.3E-09	-208.7E-09	-130.7E-09	-314.7E-09	-777.3E-09	588.0E-09	-684.7E-09	158.7E-09	-203.3E-09	-350.7E-09	-137.3E-09	-420.7E-09
Sigma	-	423.8E-09	467.0E-09	224.5E-09	768.5E-09	449.1E-09	457.8E-09	488.1E-09	576.2E-09	368.4E-09	570.2E-09	660.4E-09	513.0E-09

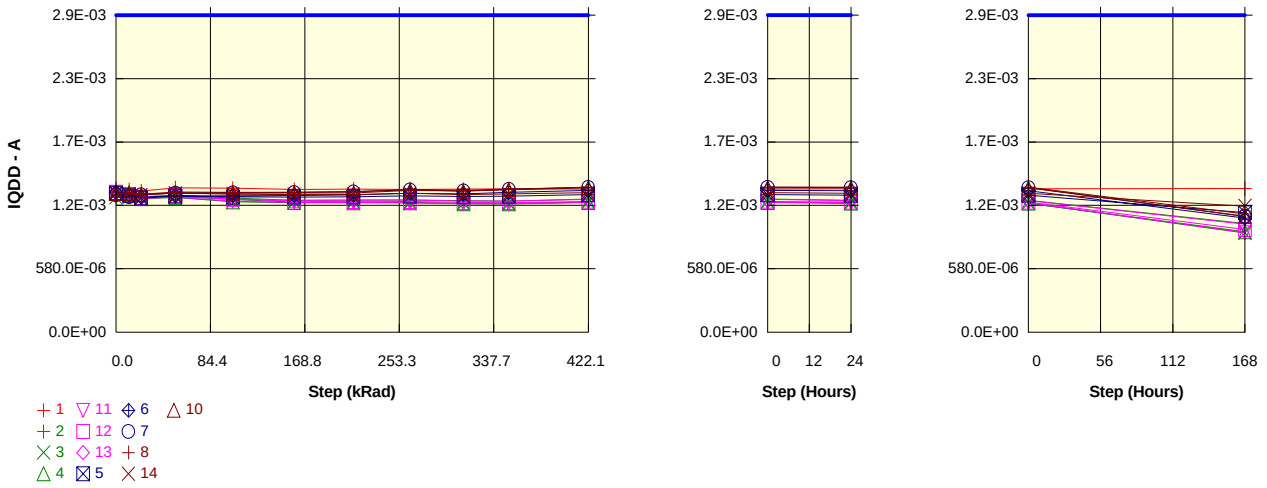
Measurements

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	376.0E-09	-102.0E-09	-30.0E-09	192.0E-09	218.0E-09	-254.0E-09	-468.0E-09	550.0E-09	-48.0E-09	-268.0E-09	-222.0E-09	82.0E-09	186.0E-09
OFF_TID samples													
8	-532.0E-09	654.0E-09	6.0E-09	-180.0E-09	92.0E-09	-542.0E-09	-172.0E-09	178.0E-09	-420.0E-09	-580.0E-09	-460.0E-09	-28.0E-09	180.0E-09
14	952.0E-09	562.0E-09	472.0E-09	-198.0E-09	18.0E-09	-748.0E-09	-418.0E-09	-620.0E-09	-492.0E-09	582.0E-09	-420.0E-09	60.0E-09	-212.0E-09
10	-530.0E-09	-178.0E-09	-780.0E-09	380.0E-09	76.0E-09	880.0E-09	-396.0E-09	-78.0E-09	-524.0E-09	-492.0E-09	-240.0E-09	-316.0E-09	-104.0E-09
Statistics													
Min	-532.0E-09	-178.0E-09	-780.0E-09	-198.0E-09	18.0E-09	-748.0E-09	-418.0E-09	-620.0E-09	-524.0E-09	-580.0E-09	-460.0E-09	-316.0E-09	-212.0E-09
Max	952.0E-09	654.0E-09	472.0E-09	380.0E-09	92.0E-09	880.0E-09	-172.0E-09	178.0E-09	-420.0E-09	582.0E-09	-240.0E-09	60.0E-09	180.0E-09
Average	-36.7E-09	346.0E-09	-100.7E-09	666.7E-12	62.0E-09	-136.7E-09	-328.7E-09	-173.3E-09	-478.7E-09	-163.3E-09	-373.3E-09	-94.7E-09	-45.3E-09
Sigma	699.1E-09	372.4E-09	516.7E-09	268.3E-09	31.8E-09	723.8E-09	111.1E-09	332.7E-09	43.5E-09	528.3E-09	95.7E-09	160.6E-09	165.3E-09

Drift Calculation

IQCC_L	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	1.2E-06	538.0E-09	352.0E-09	624.0E-09	-10.0E-09	360.0E-09	710.0E-09	112.0E-09	-48.0E-09	72.0E-09	504.0E-09	712.0E-09
14	-	-390.0E-09	-480.0E-09	-1.1E-06	-934.0E-09	-1.7E-06	-1.4E-06	-1.6E-06	-1.4E-06	-370.0E-09	-1.4E-06	-892.0E-09	-1.2E-06
10	-	352.0E-09	-250.0E-09	910.0E-09	606.0E-09	1.4E-06	134.0E-09	452.0E-09	6.0E-09	38.0E-09	290.0E-09	214.0E-09	426.0E-09
Average	-	382.7E-09	-64.0E-09	37.3E-09	98.7E-09	-100.0E-09	-292.0E-09	-136.7E-09	-442.0E-09	-126.7E-09	-336.7E-09	-58.0E-09	-8.7E-09
Sigma	-	643.8E-09	435.9E-09	869.9E-09	730.2E-09	1.3E-06	767.8E-09	1.0E-06	709.8E-09	175.6E-09	737.5E-09	601.5E-09	825.2E-09

Parameter : Quiescent VDD supply current : IQDD
Test conditions : VIN = 0V
Unit : A
Spec Limit Max : 2.9E-03
Spec limits are represented in bold lines on the graphic.



Measurements

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03
ON_PROTON samples													
2	1.2E-03	1.2E-03	1.2E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	994.2E-06
3	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	907.8E-06
4	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	918.9E-06
Statistics													
Min	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	907.8E-06
Max	1.3E-03	1.3E-03	1.2E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	994.2E-06
Average	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	940.3E-06
Sigma	18.0E-06	15.1E-06	7.1E-06	8.7E-06	13.5E-06	8.6E-06	9.9E-06	10.8E-06	12.1E-06	10.8E-06	13.9E-06	10.9E-06	38.4E-06

Drift Calculation

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	1.4E-06	4.2E-06	20.6E-06	-7.0E-06	-27.2E-06	-24.6E-06	-25.4E-06	-30.2E-06	-33.6E-06	-14.2E-06	-28.2E-06	-238.4E-06
3	-	6.4E-06	600.0E-09	7.2E-06	-20.4E-06	-43.2E-06	-43.0E-06	-49.2E-06	-54.2E-06	-54.8E-06	-41.4E-06	-50.0E-06	-325.4E-06
4	-	-2.6E-06	-50.6E-06	-39.0E-06	-78.2E-06	-85.8E-06	-86.2E-06	-86.4E-06	-96.0E-06	-96.6E-06	-84.4E-06	-91.2E-06	-352.1E-06
Average	-	1.7E-06	-15.3E-06	-3.7E-06	-35.2E-06	-52.1E-06	-51.3E-06	-53.7E-06	-60.1E-06	-61.7E-06	-46.7E-06	-56.5E-06	-305.3E-06
Sigma	-	3.7E-06	25.0E-06	25.5E-06	30.9E-06	24.7E-06	25.8E-06	25.1E-06	27.2E-06	26.2E-06	28.9E-06	26.1E-06	48.5E-06

Measurements

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03
ON_TID samples													
11	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	909.4E-06
12	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	939.6E-06
13	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	988.2E-06
Statistics													
Min	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	909.4E-06
Max	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	988.2E-06
Average	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	945.7E-06
Sigma	5.4E-06	4.3E-06	5.5E-06	5.8E-06	8.0E-06	7.2E-06	6.5E-06	10.0E-06	9.3E-06	9.9E-06	9.9E-06	7.2E-06	32.5E-06

Drift Calculation

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-34.6E-06	-58.4E-06	-46.4E-06	-82.6E-06	-93.0E-06	-93.0E-06	-98.4E-06	-105.8E-06	-106.4E-06	-92.8E-06	-97.8E-06	-372.4E-06
12	-	-11.6E-06	-34.6E-06	-21.8E-06	-54.6E-06	-69.0E-06	-74.8E-06	-72.8E-06	-82.4E-06	-84.4E-06	-72.4E-06	-79.2E-06	-329.8E-06
13	-	-18.4E-06	-36.4E-06	-24.2E-06	-54.4E-06	-65.8E-06	-67.2E-06	-64.0E-06	-73.0E-06	-72.2E-06	-59.0E-06	-70.4E-06	-283.6E-06
Average	-	-21.5E-06	-43.1E-06	-30.8E-06	-63.9E-06	-75.9E-06	-78.3E-06	-78.4E-06	-87.1E-06	-87.7E-06	-74.7E-06	-82.5E-06	-328.6E-06
Sigma	-	9.6E-06	10.8E-06	11.1E-06	13.2E-06	12.1E-06	10.8E-06	14.6E-06	13.8E-06	14.2E-06	13.9E-06	11.4E-06	36.3E-06

Measurements

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03
OFF_PROTON samples													
5	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.3E-03	1.3E-03	1.1E-03
6	1.3E-03	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.0E-03
7	1.3E-03	1.2E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Statistics													
Min	1.3E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.2E-03	1.3E-03	1.3E-03	1.0E-03
Max	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Average	1.3E-03	1.2E-03	1.2E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Sigma	10.7E-06	7.5E-06	12.9E-06	12.5E-06	16.5E-06	17.9E-06	19.9E-06	22.8E-06	21.2E-06	25.2E-06	27.7E-06	28.6E-06	20.8E-06

Drift Calculation

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-18.4E-06	-43.8E-06	-28.4E-06	-36.2E-06	-37.4E-06	-36.2E-06	-27.0E-06	-32.4E-06	-27.6E-06	-15.4E-06	-19.8E-06	-180.2E-06
6	-	-25.8E-06	-49.2E-06	-33.6E-06	-34.2E-06	-30.6E-06	-26.0E-06	-10.6E-06	-17.4E-06	-3.8E-06	14.8E-06	12.2E-06	-238.8E-06
7	-	-16.6E-06	2.0E-06	16.8E-06	20.0E-06	23.0E-06	29.2E-06	45.8E-06	36.4E-06	51.2E-06	69.2E-06	66.8E-06	-197.6E-06
Average	-	-20.3E-06	-30.3E-06	-15.1E-06	-16.8E-06	-15.0E-06	-11.0E-06	2.7E-06	-4.5E-06	6.6E-06	22.9E-06	19.7E-06	-205.5E-06
Sigma	-	4.0E-06	23.0E-06	22.6E-06	26.0E-06	27.0E-06	28.7E-06	31.2E-06	29.5E-06	33.0E-06	35.0E-06	35.8E-06	24.6E-06

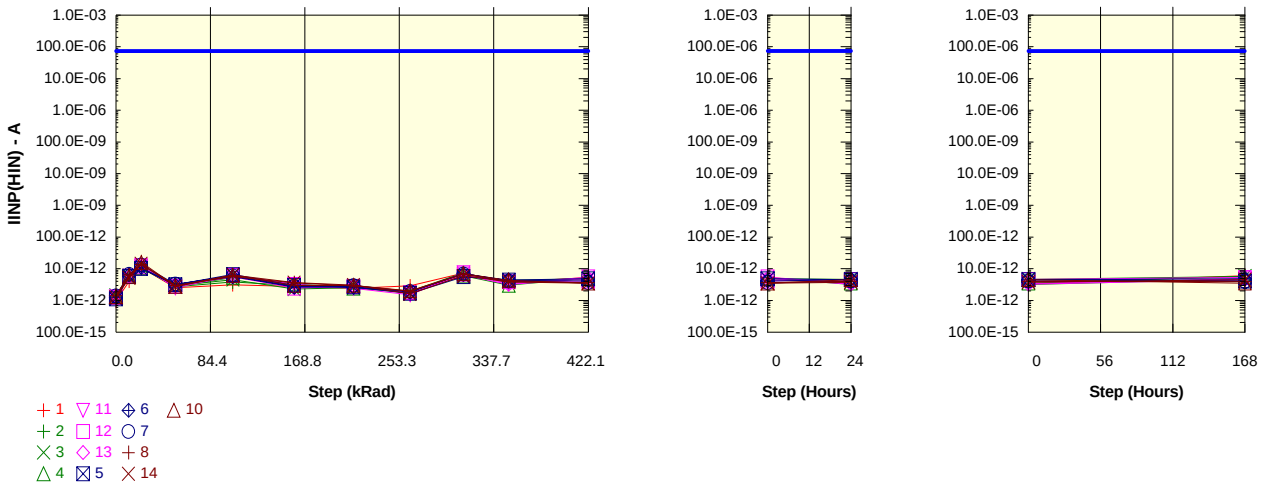
Measurements

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03
OFF_TID samples													
8	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
14	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.2E-03
10	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Statistics													
Min	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Max	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.2E-03
Average	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.3E-03	1.1E-03
Sigma	9.4E-06	7.2E-06	2.8E-06	5.6E-06	6.9E-06	8.4E-06	10.6E-06	14.9E-06	16.1E-06	20.0E-06	22.3E-06	25.2E-06	39.6E-06

Drift Calculation

IQDD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	26.2E-06	9.0E-06	30.4E-06	26.6E-06	26.8E-06	31.2E-06	51.2E-06	44.0E-06	55.8E-06	74.6E-06	72.8E-06	-170.2E-06
14	-	-13.2E-06	-20.2E-06	-2.6E-06	-13.0E-06	-15.8E-06	-17.2E-06	-6.0E-06	-15.8E-06	-11.4E-06	1.6E-06	-6.2E-06	-121.8E-06
10	-	-2.2E-06	-11.2E-06	2.2E-06	3.4E-06	6.2E-06	4.4E-06	28.8E-06	21.8E-06	35.6E-06	52.2E-06	51.2E-06	-207.2E-06
Average	-	3.6E-06	-7.5E-06	10.0E-06	5.7E-06	5.7E-06	6.1E-06	24.7E-06	16.7E-06	26.7E-06	42.8E-06	39.3E-06	-166.4E-06
Sigma	-	16.6E-06	12.2E-06	14.6E-06	16.2E-06	17.4E-06	19.8E-06	23.5E-06	24.7E-06	28.2E-06	30.5E-06	33.3E-06	35.0E-06

Parameter : Logic "1" input bias current : IINP(HIN)
Test conditions : VIN = 15V
Unit : A
Spec Limit Max : 75.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	960.0E-15	4.0E-12	10.8E-12	2.5E-12	3.1E-12	2.8E-12	2.4E-12	2.9E-12	7.2E-12	3.7E-12	5.3E-12	3.4E-12	6.0E-12
ON_PROTON samples													
2	1.3E-12	5.9E-12	10.8E-12	2.7E-12	3.8E-12	3.0E-12	2.5E-12	2.0E-12	7.4E-12	3.6E-12	5.2E-12	3.2E-12	4.8E-12
3	1.4E-12	6.3E-12	12.0E-12	2.9E-12	4.6E-12	2.3E-12	2.5E-12	1.8E-12	6.0E-12	4.3E-12	4.8E-12	4.7E-12	5.7E-12
4	1.2E-12	6.4E-12	10.9E-12	2.7E-12	5.4E-12	3.3E-12	2.4E-12	1.8E-12	5.9E-12	3.0E-12	5.1E-12	3.5E-12	5.7E-12
Statistics													
Min	1.2E-12	5.9E-12	10.8E-12	2.7E-12	3.8E-12	2.3E-12	2.4E-12	1.8E-12	5.9E-12	3.0E-12	4.8E-12	3.2E-12	4.8E-12
Max	1.4E-12	6.4E-12	12.0E-12	2.9E-12	5.4E-12	3.3E-12	2.5E-12	2.0E-12	7.4E-12	4.3E-12	5.2E-12	4.7E-12	5.7E-12
Average	1.3E-12	6.2E-12	11.2E-12	2.8E-12	4.6E-12	2.9E-12	2.5E-12	1.8E-12	6.5E-12	3.6E-12	5.0E-12	3.8E-12	5.4E-12
Sigma	83.8E-15	201.5E-15	524.8E-15	84.9E-15	620.8E-15	431.2E-15	25.5E-15	83.8E-15	684.0E-15	508.4E-15	142.4E-15	617.4E-15	462.0E-15

Drift Calculation

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	4.6E-12	9.5E-12	1.4E-12	2.5E-12	1.7E-12	1.2E-12	660.0E-15	6.1E-12	2.3E-12	3.9E-12	1.9E-12	3.5E-12
3	-	4.8E-12	10.5E-12	1.5E-12	3.1E-12	840.0E-15	1.1E-12	380.0E-15	4.6E-12	2.8E-12	3.4E-12	3.2E-12	4.3E-12
4	-	5.2E-12	9.7E-12	1.5E-12	4.1E-12	2.1E-12	1.2E-12	520.0E-15	4.7E-12	1.8E-12	3.9E-12	2.3E-12	4.5E-12
Average	-	4.9E-12	9.9E-12	1.5E-12	3.3E-12	1.5E-12	1.2E-12	520.0E-15	5.1E-12	2.3E-12	3.7E-12	2.5E-12	4.1E-12
Sigma	-	222.9E-15	447.9E-15	24.9E-15	652.6E-15	514.9E-15	67.5E-15	114.3E-15	704.7E-15	425.5E-15	221.7E-15	545.8E-15	450.6E-15

Measurements

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	960.0E-15	4.0E-12	10.8E-12	2.5E-12	3.1E-12	2.8E-12	2.4E-12	2.9E-12	7.2E-12	3.7E-12	5.3E-12	3.4E-12	6.0E-12
ON_TID samples													
11	1.3E-12	5.8E-12	12.5E-12	2.5E-12	6.2E-12	3.3E-12	2.4E-12	1.5E-12	7.5E-12	3.4E-12	5.5E-12	3.5E-12	4.8E-12
12	1.3E-12	5.8E-12	11.4E-12	2.8E-12	6.3E-12	2.4E-12	2.8E-12	1.8E-12	6.9E-12	3.9E-12	4.1E-12	4.6E-12	5.3E-12
13	1.4E-12	5.7E-12	11.3E-12	2.9E-12	5.6E-12	2.5E-12	2.9E-12	1.6E-12	6.5E-12	3.2E-12	5.0E-12	3.3E-12	4.5E-12
Statistics													
Min	1.3E-12	5.7E-12	11.3E-12	2.5E-12	5.6E-12	2.4E-12	2.4E-12	1.5E-12	6.5E-12	3.2E-12	4.1E-12	3.3E-12	4.5E-12
Max	1.4E-12	5.8E-12	12.5E-12	2.9E-12	6.3E-12	3.3E-12	2.9E-12	1.8E-12	7.5E-12	3.9E-12	5.5E-12	4.6E-12	5.3E-12
Average	1.3E-12	5.7E-12	11.7E-12	2.7E-12	6.0E-12	2.7E-12	2.7E-12	1.6E-12	6.9E-12	3.5E-12	4.9E-12	3.8E-12	4.9E-12
Sigma	52.5E-15	18.9E-15	557.2E-15	157.5E-15	294.1E-15	373.2E-15	193.9E-15	98.0E-15	404.7E-15	290.3E-15	579.3E-15	593.8E-15	305.1E-15

Drift Calculation

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	4.5E-12	11.2E-12	1.2E-12	4.9E-12	2.0E-12	1.1E-12	220.0E-15	6.2E-12	2.1E-12	4.2E-12	2.2E-12	3.5E-12
12	-	4.5E-12	10.1E-12	1.5E-12	5.0E-12	1.2E-12	1.5E-12	480.0E-15	5.6E-12	2.6E-12	2.8E-12	3.3E-12	4.0E-12
13	-	4.3E-12	9.9E-12	1.5E-12	4.2E-12	1.1E-12	1.5E-12	240.0E-15	5.1E-12	1.8E-12	3.6E-12	1.9E-12	3.1E-12
Average	-	4.4E-12	10.4E-12	1.4E-12	4.7E-12	1.4E-12	1.4E-12	313.3E-15	5.6E-12	2.2E-12	3.5E-12	2.5E-12	3.6E-12
Sigma	-	71.2E-15	580.9E-15	138.9E-15	346.5E-15	392.0E-15	170.8E-15	118.1E-15	441.8E-15	333.2E-15	565.0E-15	632.7E-15	351.9E-15

Measurements

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	960.0E-15	4.0E-12	10.8E-12	2.5E-12	3.1E-12	2.8E-12	2.4E-12	2.9E-12	7.2E-12	3.7E-12	5.3E-12	3.4E-12	6.0E-12
OFF_PROTON samples													
5	1.1E-12	5.6E-12	10.1E-12	3.1E-12	6.6E-12	3.0E-12	2.7E-12	1.7E-12	5.6E-12	4.4E-12	4.9E-12	4.5E-12	4.1E-12
6	1.3E-12	6.5E-12	10.9E-12	3.1E-12	5.7E-12	2.6E-12	2.6E-12	1.9E-12	6.8E-12	4.3E-12	4.1E-12	4.6E-12	4.8E-12
7	1.4E-12	6.7E-12	13.2E-12	3.3E-12	5.9E-12	2.8E-12	3.0E-12	1.9E-12	6.9E-12	4.1E-12	3.6E-12	4.0E-12	4.0E-12
Statistics													
Min	1.1E-12	5.6E-12	10.1E-12	3.1E-12	5.7E-12	2.6E-12	2.6E-12	1.7E-12	5.6E-12	4.1E-12	3.6E-12	4.0E-12	4.0E-12
Max	1.4E-12	6.7E-12	13.2E-12	3.3E-12	6.6E-12	3.0E-12	3.0E-12	1.9E-12	6.9E-12	4.4E-12	4.9E-12	4.6E-12	4.8E-12
Average	1.3E-12	6.3E-12	11.4E-12	3.2E-12	6.1E-12	2.8E-12	2.7E-12	1.8E-12	6.4E-12	4.3E-12	4.2E-12	4.4E-12	4.3E-12
Sigma	106.2E-15	478.4E-15	1.3E-12	90.9E-15	379.6E-15	138.9E-15	156.8E-15	111.2E-15	579.9E-15	114.3E-15	516.1E-15	241.7E-15	370.9E-15

Drift Calculation

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	4.5E-12	9.0E-12	2.0E-12	5.5E-12	1.9E-12	1.5E-12	540.0E-15	4.5E-12	3.3E-12	3.7E-12	3.4E-12	3.0E-12
6	-	5.3E-12	9.6E-12	1.8E-12	4.4E-12	1.4E-12	1.4E-12	600.0E-15	5.6E-12	3.1E-12	2.9E-12	3.3E-12	3.6E-12
7	-	5.3E-12	11.8E-12	1.9E-12	4.5E-12	1.4E-12	1.6E-12	540.0E-15	5.5E-12	2.7E-12	2.2E-12	2.7E-12	2.6E-12
Average	-	5.0E-12	10.1E-12	1.9E-12	4.8E-12	1.6E-12	1.5E-12	560.0E-15	5.2E-12	3.0E-12	2.9E-12	3.1E-12	3.1E-12
Sigma	-	378.5E-15	1.2E-12	89.9E-15	467.3E-15	217.5E-15	98.5E-15	28.3E-15	487.3E-15	215.6E-15	622.3E-15	331.6E-15	394.7E-15

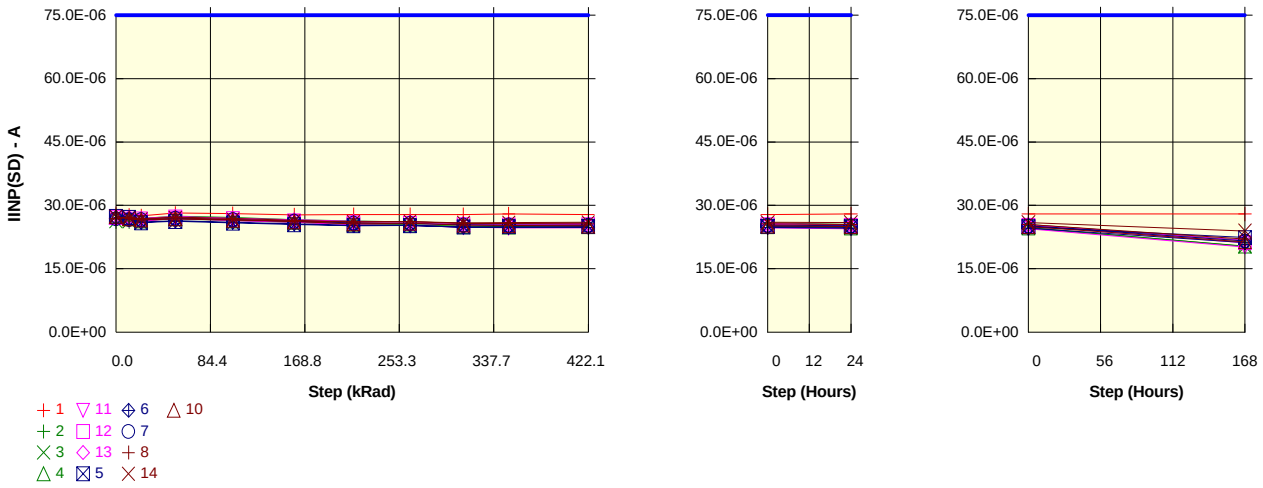
Measurements

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	960.0E-15	4.0E-12	10.8E-12	2.5E-12	3.1E-12	2.8E-12	2.4E-12	2.9E-12	7.2E-12	3.7E-12	5.3E-12	3.4E-12	6.0E-12
OFF_TID samples													
8	1.4E-12	6.3E-12	13.8E-12	3.0E-12	5.8E-12	3.6E-12	2.9E-12	2.0E-12	6.7E-12	4.0E-12	3.7E-12	4.0E-12	4.0E-12
14	1.3E-12	5.1E-12	14.3E-12	2.7E-12	6.3E-12	3.7E-12	3.1E-12	1.6E-12	6.0E-12	3.9E-12	3.5E-12	3.8E-12	4.5E-12
10	1.3E-12	5.8E-12	16.0E-12	2.8E-12	6.3E-12	3.0E-12	3.0E-12	2.0E-12	7.0E-12	4.3E-12	3.5E-12	4.5E-12	3.5E-12
Statistics													
Min	1.3E-12	5.1E-12	13.8E-12	2.7E-12	5.8E-12	3.0E-12	2.9E-12	1.6E-12	6.0E-12	3.9E-12	3.5E-12	3.8E-12	3.5E-12
Max	1.4E-12	6.3E-12	16.0E-12	3.0E-12	6.3E-12	3.7E-12	3.1E-12	2.0E-12	7.0E-12	4.3E-12	3.7E-12	4.5E-12	4.5E-12
Average	1.3E-12	5.8E-12	14.7E-12	2.8E-12	6.1E-12	3.4E-12	3.0E-12	1.9E-12	6.5E-12	4.1E-12	3.6E-12	4.1E-12	4.0E-12
Sigma	57.3E-15	476.9E-15	931.0E-15	106.2E-15	251.0E-15	302.1E-15	54.9E-15	176.1E-15	423.6E-15	200.7E-15	77.2E-15	308.3E-15	401.4E-15

Drift Calculation

IINP(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	4.9E-12	12.4E-12	1.6E-12	4.4E-12	2.2E-12	1.5E-12	560.0E-15	5.3E-12	2.6E-12	2.3E-12	2.6E-12	2.6E-12
14	-	3.9E-12	13.1E-12	1.4E-12	5.1E-12	2.4E-12	1.8E-12	360.0E-15	4.7E-12	2.6E-12	2.2E-12	2.5E-12	3.3E-12
10	-	4.5E-12	14.6E-12	1.5E-12	4.9E-12	1.7E-12	1.7E-12	680.0E-15	5.6E-12	3.0E-12	2.2E-12	3.2E-12	2.2E-12
Average	-	4.4E-12	13.4E-12	1.5E-12	4.8E-12	2.1E-12	1.7E-12	533.3E-15	5.2E-12	2.7E-12	2.2E-12	2.8E-12	2.7E-12
Sigma	-	419.6E-15	942.7E-15	49.0E-15	302.4E-15	315.1E-15	111.9E-15	132.0E-15	381.3E-15	194.8E-15	32.7E-15	290.4E-15	440.1E-15

Parameter : Logic "1" input bias current : IINP(SD)
Test conditions : SD = 15V
Unit : A
Spec Limit Max : 75.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	28.1E-06	27.7E-06	27.5E-06	28.2E-06	28.1E-06	27.8E-06	27.8E-06	27.9E-06	27.8E-06	28.0E-06	27.8E-06	28.0E-06	28.0E-06
ON_PROTON samples													
2	26.1E-06	26.1E-06	26.9E-06	27.5E-06	27.1E-06	26.6E-06	26.3E-06	26.1E-06	25.7E-06	25.6E-06	25.8E-06	25.5E-06	21.8E-06
3	26.3E-06	26.3E-06	26.4E-06	26.9E-06	26.6E-06	26.0E-06	25.5E-06	25.3E-06	25.1E-06	25.0E-06	25.2E-06	24.8E-06	20.3E-06
4	27.1E-06	26.9E-06	26.3E-06	26.9E-06	26.4E-06	26.0E-06	25.6E-06	25.4E-06	25.0E-06	24.9E-06	25.0E-06	24.6E-06	20.4E-06
Statistics													
Min	26.1E-06	26.1E-06	26.3E-06	26.9E-06	26.4E-06	26.0E-06	25.5E-06	25.3E-06	25.0E-06	24.9E-06	25.0E-06	24.6E-06	20.3E-06
Max	27.1E-06	26.9E-06	26.9E-06	27.5E-06	27.1E-06	26.6E-06	26.3E-06	26.1E-06	25.7E-06	25.6E-06	25.8E-06	25.5E-06	21.8E-06
Average	26.5E-06	26.4E-06	26.5E-06	27.1E-06	26.7E-06	26.2E-06	25.8E-06	25.6E-06	25.3E-06	25.2E-06	25.3E-06	25.0E-06	20.8E-06
Sigma	416.9E-09	333.6E-09	262.5E-09	276.7E-09	324.3E-09	293.7E-09	341.3E-09	347.5E-09	338.3E-09	317.3E-09	364.1E-09	362.9E-09	668.2E-09

Drift Calculation

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-18.0E-09	816.0E-09	1.4E-06	1.0E-06	514.0E-09	170.0E-09	-24.0E-09	-354.0E-09	-504.0E-09	-296.0E-09	-636.0E-09	-4.3E-06
3	-	-28.0E-09	110.0E-09	610.0E-09	278.0E-09	-308.0E-09	-794.0E-09	-994.0E-09	-1.2E-06	-1.3E-06	-1.1E-06	-1.5E-06	-6.0E-06
4	-	-202.0E-09	-744.0E-09	-200.0E-09	-716.0E-09	-1.1E-06	-1.5E-06	-1.7E-06	-2.1E-06	-2.2E-06	-2.1E-06	-2.4E-06	-6.7E-06
Average	-	-82.7E-09	60.7E-09	594.0E-09	194.7E-09	-288.7E-09	-696.7E-09	-900.7E-09	-1.2E-06	-1.3E-06	-1.2E-06	-1.5E-06	-5.7E-06
Sigma	-	84.5E-09	637.8E-09	641.9E-09	712.0E-09	647.6E-09	671.4E-09	680.9E-09	700.6E-09	692.0E-09	742.7E-09	737.5E-09	983.1E-09

Measurements

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	28.1E-06	27.7E-06	27.5E-06	28.2E-06	28.1E-06	27.8E-06	27.8E-06	27.9E-06	27.8E-06	28.0E-06	27.8E-06	28.0E-06	28.0E-06
ON_TID samples													
11	27.3E-06	26.6E-06	26.2E-06	26.9E-06	26.4E-06	26.0E-06	25.4E-06	25.2E-06	24.8E-06	24.7E-06	24.7E-06	24.5E-06	20.1E-06
12	27.1E-06	27.1E-06	26.8E-06	27.3E-06	26.8E-06	26.4E-06	25.8E-06	25.7E-06	25.4E-06	25.4E-06	25.5E-06	25.2E-06	21.1E-06
13	27.0E-06	27.2E-06	26.9E-06	27.4E-06	26.9E-06	26.6E-06	26.2E-06	26.1E-06	25.7E-06	25.6E-06	25.7E-06	25.4E-06	21.7E-06
Statistics													
Min	27.0E-06	26.6E-06	26.2E-06	26.9E-06	26.4E-06	26.0E-06	25.4E-06	25.2E-06	24.8E-06	24.7E-06	24.7E-06	24.5E-06	20.1E-06
Max	27.3E-06	27.2E-06	26.9E-06	27.4E-06	26.9E-06	26.6E-06	26.2E-06	26.1E-06	25.7E-06	25.6E-06	25.7E-06	25.4E-06	21.7E-06
Average	27.1E-06	26.9E-06	26.6E-06	27.2E-06	26.7E-06	26.3E-06	25.8E-06	25.7E-06	25.3E-06	25.2E-06	25.3E-06	25.0E-06	21.0E-06
Sigma	140.6E-09	255.5E-09	285.8E-09	204.7E-09	250.9E-09	244.8E-09	318.4E-09	365.0E-09	358.6E-09	391.6E-09	401.9E-09	403.3E-09	662.4E-09

Drift Calculation

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-740.0E-09	-1.1E-06	-446.0E-09	-968.0E-09	-1.3E-06	-1.9E-06	-2.1E-06	-2.5E-06	-2.6E-06	-2.6E-06	-2.8E-06	-7.2E-06
12	-	-34.0E-09	-354.0E-09	130.0E-09	-292.0E-09	-754.0E-09	-1.3E-06	-1.4E-06	-1.7E-06	-1.8E-06	-1.7E-06	-1.9E-06	-6.0E-06
13	-	178.0E-09	-84.0E-09	374.0E-09	-48.0E-09	-404.0E-09	-796.0E-09	-898.0E-09	-1.3E-06	-1.4E-06	-1.3E-06	-1.6E-06	-5.3E-06
Average	-	-198.7E-09	-508.7E-09	19.3E-09	-436.0E-09	-832.0E-09	-1.3E-06	-1.5E-06	-1.8E-06	-1.9E-06	-1.9E-06	-2.1E-06	-6.1E-06
Sigma	-	392.4E-09	424.2E-09	343.8E-09	389.1E-09	385.3E-09	458.9E-09	505.5E-09	498.0E-09	530.8E-09	540.6E-09	541.5E-09	802.9E-09

Measurements

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	28.1E-06	27.7E-06	27.5E-06	28.2E-06	28.1E-06	27.8E-06	27.8E-06	27.9E-06	27.8E-06	28.0E-06	27.8E-06	28.0E-06	28.0E-06
OFF_PROTON samples													
5	27.4E-06	27.2E-06	25.9E-06	26.2E-06	25.8E-06	25.5E-06	25.2E-06	25.2E-06	24.9E-06	24.9E-06	25.0E-06	24.9E-06	22.4E-06
6	27.0E-06	26.7E-06	26.0E-06	26.4E-06	26.0E-06	25.6E-06	25.2E-06	25.3E-06	24.9E-06	24.8E-06	24.8E-06	24.6E-06	21.2E-06
7	26.8E-06	26.6E-06	26.6E-06	26.9E-06	26.6E-06	26.2E-06	25.8E-06	25.7E-06	25.3E-06	25.3E-06	25.3E-06	25.1E-06	21.5E-06
Statistics													
Min	26.8E-06	26.6E-06	25.9E-06	26.2E-06	25.8E-06	25.5E-06	25.2E-06	25.2E-06	24.9E-06	24.8E-06	24.8E-06	24.6E-06	21.2E-06
Max	27.4E-06	27.2E-06	26.6E-06	26.9E-06	26.6E-06	26.2E-06	25.8E-06	25.7E-06	25.3E-06	25.3E-06	25.3E-06	25.1E-06	22.4E-06
Average	27.1E-06	26.9E-06	26.2E-06	26.5E-06	26.2E-06	25.8E-06	25.4E-06	25.4E-06	25.0E-06	25.0E-06	25.0E-06	24.9E-06	21.7E-06
Sigma	261.7E-09	226.2E-09	311.2E-09	304.6E-09	335.2E-09	328.2E-09	288.2E-09	222.6E-09	223.7E-09	216.1E-09	199.8E-09	216.7E-09	511.2E-09

Drift Calculation

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-266.0E-09	-1.5E-06	-1.2E-06	-1.6E-06	-2.0E-06	-2.2E-06	-2.2E-06	-2.5E-06	-2.5E-06	-2.4E-06	-2.5E-06	-5.0E-06
6	-	-266.0E-09	-1.0E-06	-658.0E-09	-996.0E-09	-1.4E-06	-1.8E-06	-1.8E-06	-2.2E-06	-2.2E-06	-2.2E-06	-2.4E-06	-5.8E-06
7	-	-160.0E-09	-186.0E-09	112.0E-09	-190.0E-09	-584.0E-09	-978.0E-09	-1.1E-06	-1.5E-06	-1.5E-06	-1.5E-06	-1.7E-06	-5.3E-06
Average	-	-230.7E-09	-902.7E-09	-590.7E-09	-931.3E-09	-1.3E-06	-1.7E-06	-1.7E-06	-2.1E-06	-2.1E-06	-2.0E-06	-2.2E-06	-5.4E-06
Sigma	-	50.0E-09	549.7E-09	548.3E-09	580.7E-09	572.8E-09	523.6E-09	459.9E-09	450.9E-09	424.2E-09	387.8E-09	376.3E-09	337.9E-09

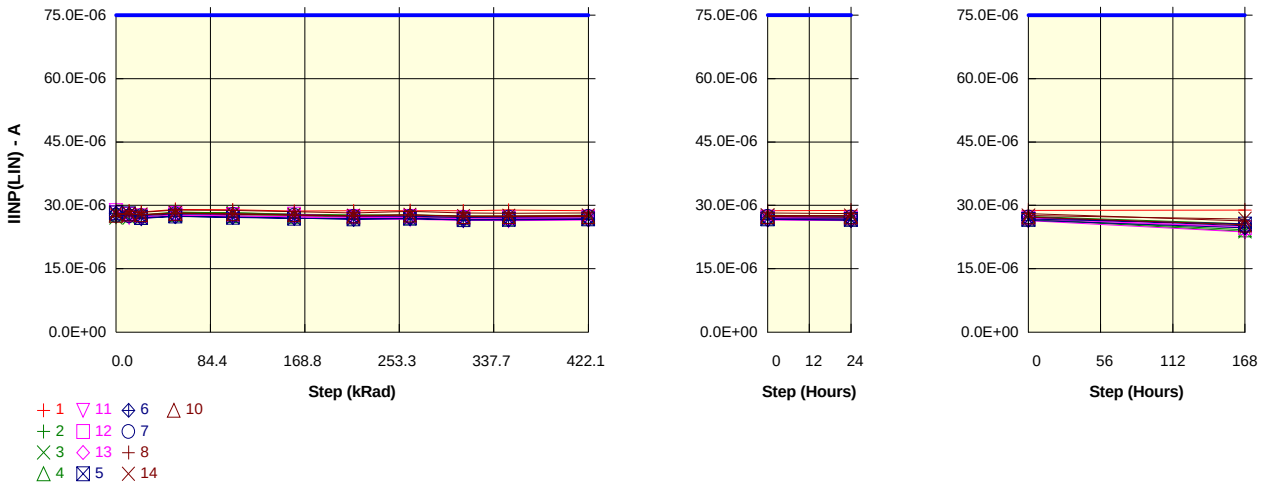
Measurements

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	28.1E-06	27.7E-06	27.5E-06	28.2E-06	28.1E-06	27.8E-06	27.8E-06	27.9E-06	27.8E-06	28.0E-06	27.8E-06	28.0E-06	28.0E-06
OFF_TID samples													
8	26.8E-06	27.2E-06	26.9E-06	27.2E-06	26.9E-06	26.5E-06	26.1E-06	26.1E-06	25.7E-06	25.7E-06	25.6E-06	25.5E-06	22.1E-06
14	27.3E-06	26.9E-06	26.7E-06	27.0E-06	26.6E-06	26.3E-06	26.1E-06	26.2E-06	25.8E-06	25.9E-06	26.0E-06	25.9E-06	24.0E-06
10	27.4E-06	26.8E-06	26.5E-06	26.8E-06	26.5E-06	26.1E-06	25.6E-06	25.8E-06	25.3E-06	25.2E-06	25.1E-06	25.0E-06	21.4E-06
Statistics													
Min	26.8E-06	26.8E-06	26.5E-06	26.8E-06	26.5E-06	26.1E-06	25.6E-06	25.8E-06	25.3E-06	25.2E-06	25.1E-06	25.0E-06	21.4E-06
Max	27.4E-06	27.2E-06	26.9E-06	27.2E-06	26.9E-06	26.5E-06	26.1E-06	26.2E-06	25.8E-06	25.9E-06	26.0E-06	25.9E-06	24.0E-06
Average	27.2E-06	27.0E-06	26.7E-06	27.0E-06	26.7E-06	26.3E-06	25.9E-06	26.0E-06	25.6E-06	25.6E-06	25.6E-06	25.5E-06	22.5E-06
Sigma	248.3E-09	167.7E-09	134.2E-09	193.0E-09	157.7E-09	146.4E-09	199.0E-09	177.6E-09	225.6E-09	276.0E-09	331.7E-09	379.0E-09	1.1E-06

Drift Calculation

IINP(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	350.0E-09	40.0E-09	414.0E-09	70.0E-09	-356.0E-09	-754.0E-09	-698.0E-09	-1.1E-06	-1.2E-06	-1.2E-06	-1.3E-06	-4.8E-06
14	-	-396.0E-09	-604.0E-09	-300.0E-09	-706.0E-09	-1.1E-06	-1.3E-06	-1.2E-06	-1.5E-06	-1.4E-06	-1.4E-06	-1.4E-06	-3.4E-06
10	-	-608.0E-09	-838.0E-09	-608.0E-09	-852.0E-09	-1.3E-06	-1.7E-06	-1.6E-06	-2.1E-06	-2.1E-06	-2.2E-06	-2.4E-06	-6.0E-06
Average	-	-218.0E-09	-467.3E-09	-164.7E-09	-496.0E-09	-890.7E-09	-1.2E-06	-1.2E-06	-1.6E-06	-1.6E-06	-1.6E-06	-1.7E-06	-4.7E-06
Sigma	-	410.9E-09	371.2E-09	428.1E-09	404.6E-09	387.8E-09	398.6E-09	369.1E-09	387.5E-09	412.3E-09	453.8E-09	475.3E-09	1.1E-06

Parameter : Logic "1" input bias current : IINP(LIN)
Test conditions : VIN = 15V
Unit : A
Spec Limit Max : 75.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	29.0E-06	28.6E-06	28.4E-06	29.1E-06	28.9E-06	28.6E-06	28.7E-06	28.8E-06	28.7E-06	28.9E-06	28.7E-06	28.8E-06	28.9E-06
ON_PROTON samples													
2	27.2E-06	27.2E-06	27.8E-06	28.4E-06	28.2E-06	27.9E-06	27.8E-06	27.8E-06	27.5E-06	27.4E-06	27.7E-06	27.4E-06	25.6E-06
3	27.1E-06	27.1E-06	27.6E-06	28.3E-06	28.2E-06	27.9E-06	27.4E-06	27.3E-06	27.1E-06	27.1E-06	27.3E-06	26.7E-06	23.9E-06
4	27.9E-06	27.8E-06	27.2E-06	27.9E-06	27.5E-06	27.4E-06	27.3E-06	27.2E-06	27.0E-06	26.9E-06	27.0E-06	26.8E-06	24.2E-06
Statistics													
Min	27.1E-06	27.1E-06	27.2E-06	27.9E-06	27.5E-06	27.4E-06	27.3E-06	27.2E-06	27.0E-06	26.9E-06	27.0E-06	26.7E-06	23.9E-06
Max	27.9E-06	27.8E-06	27.8E-06	28.4E-06	28.2E-06	27.9E-06	27.8E-06	27.8E-06	27.5E-06	27.4E-06	27.7E-06	27.4E-06	25.6E-06
Average	27.4E-06	27.4E-06	27.5E-06	28.2E-06	28.0E-06	27.7E-06	27.5E-06	27.4E-06	27.2E-06	27.2E-06	27.4E-06	27.0E-06	24.6E-06
Sigma	380.8E-09	304.1E-09	240.2E-09	236.9E-09	329.8E-09	215.9E-09	195.7E-09	257.4E-09	216.0E-09	203.5E-09	265.8E-09	309.5E-09	753.0E-09

Drift Calculation

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	2.0E-09	578.0E-09	1.2E-06	998.0E-09	714.0E-09	562.0E-09	574.0E-09	336.0E-09	234.0E-09	502.0E-09	206.0E-09	-1.6E-06
3	-	2.0E-09	496.0E-09	1.2E-06	1.2E-06	782.0E-09	356.0E-09	222.0E-09	8.0E-09	32.0E-09	248.0E-09	-380.0E-09	-3.2E-06
4	-	-162.0E-09	-750.0E-09	-88.0E-09	-424.0E-09	-512.0E-09	-662.0E-09	-784.0E-09	-898.0E-09	-1.0E-06	-900.0E-09	-1.2E-06	-3.7E-06
Average	-	-52.7E-09	108.0E-09	770.0E-09	576.7E-09	328.0E-09	85.3E-09	4.0E-09	-184.7E-09	-248.7E-09	-50.0E-09	-446.7E-09	-2.8E-06
Sigma	-	77.3E-09	607.6E-09	607.1E-09	710.5E-09	594.6E-09	535.1E-09	575.4E-09	521.9E-09	546.0E-09	609.9E-09	562.1E-09	916.6E-09

Measurements

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	29.0E-06	28.6E-06	28.4E-06	29.1E-06	28.9E-06	28.6E-06	28.7E-06	28.8E-06	28.7E-06	28.9E-06	28.7E-06	28.8E-06	28.9E-06
ON_TID samples													
11	28.8E-06	27.2E-06	26.9E-06	27.6E-06	27.3E-06	27.3E-06	26.8E-06	26.7E-06	26.4E-06	26.4E-06	26.5E-06	26.4E-06	23.7E-06
12	28.2E-06	27.8E-06	27.5E-06	28.1E-06	27.8E-06	27.9E-06	27.4E-06	27.4E-06	27.2E-06	27.1E-06	27.2E-06	27.0E-06	24.7E-06
13	28.2E-06	27.4E-06	27.2E-06	27.7E-06	27.5E-06	27.3E-06	27.2E-06	27.2E-06	26.8E-06	26.8E-06	26.9E-06	26.8E-06	25.0E-06
Statistics													
Min	28.2E-06	27.2E-06	26.9E-06	27.6E-06	27.3E-06	27.3E-06	26.8E-06	26.7E-06	26.4E-06	26.4E-06	26.5E-06	26.4E-06	23.7E-06
Max	28.8E-06	27.8E-06	27.5E-06	28.1E-06	27.8E-06	27.9E-06	27.4E-06	27.4E-06	27.2E-06	27.1E-06	27.2E-06	27.0E-06	25.0E-06
Average	28.4E-06	27.5E-06	27.2E-06	27.8E-06	27.6E-06	27.5E-06	27.1E-06	27.1E-06	26.8E-06	26.8E-06	26.9E-06	26.7E-06	24.5E-06
Sigma	276.0E-09	276.8E-09	273.6E-09	208.6E-09	221.8E-09	296.0E-09	226.1E-09	285.3E-09	294.0E-09	298.6E-09	291.5E-09	278.0E-09	558.6E-09

Drift Calculation

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-1.6E-06	-1.9E-06	-1.2E-06	-1.5E-06	-1.5E-06	-2.0E-06	-2.1E-06	-2.4E-06	-2.4E-06	-2.3E-06	-2.4E-06	-5.1E-06
12	-	-394.0E-09	-704.0E-09	-120.0E-09	-394.0E-09	-316.0E-09	-842.0E-09	-836.0E-09	-1.1E-06	-1.1E-06	-1.0E-06	-1.2E-06	-3.5E-06
13	-	-746.0E-09	-1000.0E-09	-460.0E-09	-668.0E-09	-876.0E-09	-1.0E-06	-1.0E-06	-1.4E-06	-1.4E-06	-1.3E-06	-1.4E-06	-3.2E-06
Average	-	-922.7E-09	-1.2E-06	-580.7E-09	-852.0E-09	-904.7E-09	-1.3E-06	-1.3E-06	-1.6E-06	-1.6E-06	-1.5E-06	-1.7E-06	-3.9E-06
Sigma	-	519.0E-09	524.2E-09	433.9E-09	467.5E-09	492.8E-09	485.7E-09	549.0E-09	546.6E-09	558.6E-09	550.6E-09	536.7E-09	833.0E-09

Measurements

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	29.0E-06	28.6E-06	28.4E-06	29.1E-06	28.9E-06	28.6E-06	28.7E-06	28.8E-06	28.7E-06	28.9E-06	28.7E-06	28.8E-06	28.9E-06
OFF_PROTON samples													
5	28.2E-06	28.0E-06	27.1E-06	27.5E-06	27.2E-06	26.9E-06	26.8E-06	26.9E-06	26.6E-06	26.7E-06	26.8E-06	26.7E-06	25.6E-06
6	28.1E-06	27.9E-06	26.9E-06	27.4E-06	27.2E-06	27.0E-06	26.7E-06	26.9E-06	26.5E-06	26.5E-06	26.6E-06	26.5E-06	24.7E-06
7	27.6E-06	27.5E-06	27.6E-06	28.0E-06	27.9E-06	27.7E-06	27.4E-06	27.4E-06	27.1E-06	27.2E-06	27.4E-06	27.2E-06	25.1E-06
Statistics													
Min	27.6E-06	27.5E-06	26.9E-06	27.4E-06	27.2E-06	26.9E-06	26.7E-06	26.9E-06	26.5E-06	26.5E-06	26.6E-06	26.5E-06	24.7E-06
Max	28.2E-06	28.0E-06	27.6E-06	28.0E-06	27.9E-06	27.7E-06	27.4E-06	27.4E-06	27.1E-06	27.2E-06	27.4E-06	27.2E-06	25.6E-06
Average	28.0E-06	27.8E-06	27.2E-06	27.6E-06	27.4E-06	27.2E-06	27.0E-06	27.1E-06	26.7E-06	26.8E-06	26.9E-06	26.8E-06	25.1E-06
Sigma	270.5E-09	221.0E-09	295.9E-09	285.3E-09	318.8E-09	361.9E-09	325.4E-09	241.1E-09	254.4E-09	285.2E-09	305.7E-09	315.2E-09	370.0E-09

Drift Calculation

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-218.0E-09	-1.2E-06	-774.0E-09	-1.1E-06	-1.3E-06	-1.4E-06	-1.3E-06	-1.6E-06	-1.5E-06	-1.4E-06	-1.5E-06	-2.6E-06
6	-	-172.0E-09	-1.2E-06	-738.0E-09	-892.0E-09	-1.1E-06	-1.4E-06	-1.2E-06	-1.6E-06	-1.5E-06	-1.4E-06	-1.6E-06	-3.4E-06
7	-	-96.0E-09	-20.0E-09	402.0E-09	260.0E-09	116.0E-09	-168.0E-09	-196.0E-09	-498.0E-09	-382.0E-09	-236.0E-09	-358.0E-09	-2.5E-06
Average	-	-162.0E-09	-798.7E-09	-370.0E-09	-564.0E-09	-768.7E-09	-998.0E-09	-908.7E-09	-1.2E-06	-1.1E-06	-1.0E-06	-1.2E-06	-2.8E-06
Sigma	-	50.3E-09	550.8E-09	546.1E-09	586.7E-09	630.0E-09	587.2E-09	505.2E-09	515.6E-09	541.2E-09	560.7E-09	563.6E-09	402.9E-09

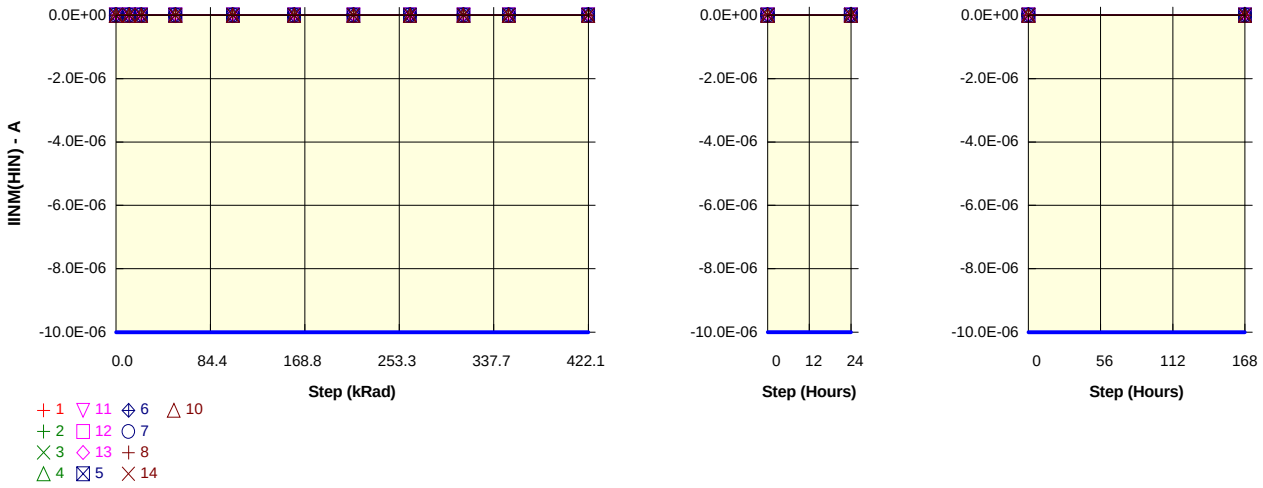
Measurements

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	29.0E-06	28.6E-06	28.4E-06	29.1E-06	28.9E-06	28.6E-06	28.7E-06	28.8E-06	28.7E-06	28.9E-06	28.7E-06	28.8E-06	28.9E-06
OFF_TID samples													
8	27.4E-06	28.6E-06	28.4E-06	28.9E-06	28.8E-06	28.5E-06	28.2E-06	28.6E-06	28.2E-06	28.2E-06	28.2E-06	28.1E-06	26.3E-06
14	28.0E-06	28.0E-06	27.8E-06	28.2E-06	27.9E-06	27.7E-06	27.6E-06	27.8E-06	27.5E-06	27.5E-06	27.6E-06	27.6E-06	26.8E-06
10	27.6E-06	28.0E-06	27.8E-06	28.1E-06	28.0E-06	27.8E-06	27.5E-06	27.7E-06	27.3E-06	27.4E-06	27.4E-06	27.2E-06	25.4E-06
Statistics													
Min	27.4E-06	28.0E-06	27.8E-06	28.1E-06	27.9E-06	27.7E-06	27.5E-06	27.7E-06	27.3E-06	27.4E-06	27.4E-06	27.2E-06	25.4E-06
Max	28.0E-06	28.6E-06	28.4E-06	28.9E-06	28.8E-06	28.5E-06	28.2E-06	28.6E-06	28.2E-06	28.2E-06	28.2E-06	28.1E-06	26.8E-06
Average	27.7E-06	28.2E-06	28.0E-06	28.4E-06	28.2E-06	28.0E-06	27.7E-06	28.0E-06	27.7E-06	27.7E-06	27.7E-06	27.6E-06	26.1E-06
Sigma	269.1E-09	306.2E-09	263.0E-09	329.7E-09	386.7E-09	359.1E-09	324.6E-09	393.1E-09	375.1E-09	343.5E-09	350.1E-09	334.0E-09	582.5E-09

Drift Calculation

IINP(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	1.3E-06	964.0E-09	1.5E-06	1.4E-06	1.1E-06	802.0E-09	1.2E-06	786.0E-09	764.0E-09	790.0E-09	658.0E-09	-1.1E-06
14	-	-14.0E-09	-210.0E-09	162.0E-09	-142.0E-09	-366.0E-09	-472.0E-09	-286.0E-09	-590.0E-09	-514.0E-09	-452.0E-09	-486.0E-09	-1.3E-06
10	-	330.0E-09	134.0E-09	482.0E-09	394.0E-09	142.0E-09	-180.0E-09	78.0E-09	-308.0E-09	-278.0E-09	-286.0E-09	-396.0E-09	-2.3E-06
Average	-	522.7E-09	296.0E-09	702.7E-09	546.0E-09	289.3E-09	50.0E-09	322.7E-09	-37.3E-09	-9.3E-09	17.3E-09	-74.7E-09	-1.6E-06
Sigma	-	534.5E-09	492.8E-09	554.0E-09	633.0E-09	604.3E-09	544.9E-09	621.4E-09	593.5E-09	555.3E-09	550.5E-09	519.4E-09	508.9E-09

Parameter : Logic "0" input bias current : IINM(HIN)
Test conditions : VIN = 0V
Unit : A
Spec Limit Min : -10.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-3.0E-12	-11.8E-12	-4.0E-12	-2.7E-12	-3.7E-12	-3.2E-12	-14.9E-12	-1.3E-12	-7.1E-12	-1.0E-12	-5.9E-12	-4.7E-12	-4.4E-12
ON_PROTON samples													
2	-2.6E-12	-7.5E-12	-3.9E-12	-3.0E-12	-4.4E-12	-3.4E-12	-14.2E-12	-2.2E-12	-7.0E-12	-1.1E-12	-5.6E-12	-4.8E-12	-3.5E-12
3	-2.7E-12	-6.8E-12	-4.4E-12	-3.1E-12	-4.7E-12	-3.3E-12	-14.7E-12	-2.2E-12	-5.7E-12	-1.8E-12	-4.7E-12	-6.0E-12	-4.5E-12
4	-2.5E-12	-6.3E-12	-4.4E-12	-3.0E-12	-5.4E-12	-3.9E-12	-14.4E-12	-2.3E-12	-5.9E-12	-880.0E-15	-5.5E-12	-5.2E-12	-4.6E-12
Statistics													
Min	-2.7E-12	-7.5E-12	-4.4E-12	-3.1E-12	-5.4E-12	-3.9E-12	-14.7E-12	-2.3E-12	-7.0E-12	-1.8E-12	-5.6E-12	-6.0E-12	-4.6E-12
Max	-2.5E-12	-6.3E-12	-3.9E-12	-3.0E-12	-4.4E-12	-3.3E-12	-14.2E-12	-2.2E-12	-5.7E-12	-880.0E-15	-4.7E-12	-4.8E-12	-3.5E-12
Average	-2.6E-12	-6.9E-12	-4.2E-12	-3.0E-12	-4.8E-12	-3.5E-12	-14.4E-12	-2.2E-12	-6.2E-12	-1.3E-12	-5.3E-12	-5.3E-12	-4.2E-12
Sigma	80.6E-15	462.0E-15	226.9E-15	24.9E-15	392.3E-15	281.1E-15	224.5E-15	16.3E-15	593.8E-15	380.5E-15	393.4E-15	509.7E-15	515.5E-15

Drift Calculation

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-4.9E-12	-1.4E-12	-440.0E-15	-1.9E-12	-860.0E-15	-11.6E-12	320.0E-15	-4.5E-12	1.4E-12	-3.0E-12	-2.2E-12	-900.0E-15
3	-	-4.0E-12	-1.7E-12	-340.0E-15	-1.9E-12	-540.0E-15	-12.0E-12	500.0E-15	-3.0E-12	940.0E-15	-2.0E-12	-3.3E-12	-1.8E-12
4	-	-3.8E-12	-1.9E-12	-480.0E-15	-2.8E-12	-1.4E-12	-11.8E-12	280.0E-15	-3.3E-12	1.7E-12	-3.0E-12	-2.6E-12	-2.1E-12
Average	-	-4.2E-12	-1.6E-12	-420.0E-15	-2.2E-12	-926.7E-15	-11.8E-12	366.7E-15	-3.6E-12	1.3E-12	-2.7E-12	-2.7E-12	-1.6E-12
Sigma	-	472.3E-15	213.1E-15	58.9E-15	429.7E-15	346.2E-15	155.2E-15	95.7E-15	639.4E-15	301.3E-15	472.5E-15	437.1E-15	494.2E-15

Measurements

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-3.0E-12	-11.8E-12	-4.0E-12	-2.7E-12	-3.7E-12	-3.2E-12	-14.9E-12	-1.3E-12	-7.1E-12	-1.0E-12	-5.9E-12	-4.7E-12	-4.4E-12
ON_TID samples													
11	-2.5E-12	-5.5E-12	-3.8E-12	-2.7E-12	-5.9E-12	-3.9E-12	-14.0E-12	-2.2E-12	-7.0E-12	-960.0E-15	-6.0E-12	-5.2E-12	-4.1E-12
12	-2.6E-12	-5.7E-12	-4.1E-12	-3.2E-12	-6.5E-12	-3.1E-12	-20.5E-12	-2.4E-12	-6.5E-12	-1.9E-12	-5.0E-12	-5.7E-12	-4.5E-12
13	-2.7E-12	-5.5E-12	-4.7E-12	-3.2E-12	-6.3E-12	-3.3E-12	-23.5E-12	-2.4E-12	-6.8E-12	-1.3E-12	-5.5E-12	-4.6E-12	-3.5E-12
Statistics													
Min	-2.7E-12	-5.7E-12	-4.7E-12	-3.2E-12	-6.5E-12	-3.9E-12	-23.5E-12	-2.4E-12	-7.0E-12	-1.9E-12	-6.0E-12	-5.7E-12	-4.5E-12
Max	-2.5E-12	-5.5E-12	-3.8E-12	-2.7E-12	-5.9E-12	-3.1E-12	-14.0E-12	-2.2E-12	-6.5E-12	-960.0E-15	-5.0E-12	-4.6E-12	-3.5E-12
Average	-2.6E-12	-5.6E-12	-4.2E-12	-3.0E-12	-6.2E-12	-3.4E-12	-19.3E-12	-2.3E-12	-6.8E-12	-1.4E-12	-5.5E-12	-5.1E-12	-4.1E-12
Sigma	52.5E-15	80.6E-15	390.2E-15	217.5E-15	262.8E-15	312.6E-15	4.0E-12	86.4E-15	190.7E-15	403.4E-15	400.3E-15	433.0E-15	396.0E-15

Drift Calculation

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-3.0E-12	-1.2E-12	-180.0E-15	-3.3E-12	-1.3E-12	-11.5E-12	320.0E-15	-4.4E-12	1.6E-12	-3.5E-12	-2.6E-12	-1.6E-12
12	-	-3.1E-12	-1.5E-12	-640.0E-15	-3.9E-12	-560.0E-15	-18.0E-12	180.0E-15	-3.9E-12	620.0E-15	-2.5E-12	-3.1E-12	-1.9E-12
13	-	-2.8E-12	-2.0E-12	-500.0E-15	-3.7E-12	-660.0E-15	-20.8E-12	240.0E-15	-4.1E-12	1.3E-12	-2.8E-12	-1.9E-12	-880.0E-15
Average	-	-3.0E-12	-1.6E-12	-440.0E-15	-3.7E-12	-846.7E-15	-16.8E-12	246.7E-15	-4.2E-12	1.2E-12	-2.9E-12	-2.6E-12	-1.5E-12
Sigma	-	114.3E-15	338.8E-15	192.5E-15	245.7E-15	337.2E-15	3.9E-12	57.3E-15	196.9E-15	405.4E-15	413.5E-15	475.9E-15	441.9E-15

Measurements

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-3.0E-12	-11.8E-12	-4.0E-12	-2.7E-12	-3.7E-12	-3.2E-12	-14.9E-12	-1.3E-12	-7.1E-12	-1.0E-12	-5.9E-12	-4.7E-12	-4.4E-12
OFF_PROTON samples													
5	-2.4E-12	-10.4E-12	-4.7E-12	-3.2E-12	-6.8E-12	-3.6E-12	-20.8E-12	-2.5E-12	-5.7E-12	-2.2E-12	-5.6E-12	-5.8E-12	-3.3E-12
6	-2.5E-12	-8.0E-12	-5.7E-12	-3.3E-12	-6.2E-12	-3.1E-12	-19.3E-12	-2.5E-12	-6.5E-12	-2.2E-12	-5.2E-12	-5.8E-12	-3.7E-12
7	-2.7E-12	-7.3E-12	-9.4E-12	-3.3E-12	-6.9E-12	-3.3E-12	-27.2E-12	-2.5E-12	-7.1E-12	-2.3E-12	-4.8E-12	-4.8E-12	-3.4E-12
Statistics													
Min	-2.7E-12	-10.4E-12	-9.4E-12	-3.3E-12	-6.9E-12	-3.6E-12	-27.2E-12	-2.5E-12	-7.1E-12	-2.3E-12	-5.6E-12	-5.8E-12	-3.7E-12
Max	-2.4E-12	-7.3E-12	-4.7E-12	-3.2E-12	-6.2E-12	-3.1E-12	-19.3E-12	-2.5E-12	-5.7E-12	-2.2E-12	-4.8E-12	-4.8E-12	-3.3E-12
Average	-2.5E-12	-8.6E-12	-6.6E-12	-3.3E-12	-6.6E-12	-3.4E-12	-22.4E-12	-2.5E-12	-6.4E-12	-2.3E-12	-5.2E-12	-5.5E-12	-3.5E-12
Sigma	102.0E-15	1.3E-12	2.0E-12	58.9E-15	311.7E-15	228.8E-15	3.4E-12	18.9E-15	597.6E-15	34.0E-15	335.6E-15	462.3E-15	183.5E-15

Drift Calculation

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-8.0E-12	-2.3E-12	-760.0E-15	-4.3E-12	-1.2E-12	-18.3E-12	-40.0E-15	-3.3E-12	200.0E-15	-3.2E-12	-3.3E-12	-860.0E-15
6	-	-5.5E-12	-3.2E-12	-800.0E-15	-3.7E-12	-600.0E-15	-16.8E-12	20.0E-15	-4.0E-12	240.0E-15	-2.7E-12	-3.3E-12	-1.2E-12
7	-	-4.7E-12	-6.7E-12	-660.0E-15	-4.2E-12	-680.0E-15	-24.5E-12	160.0E-15	-4.5E-12	360.0E-15	-2.1E-12	-2.1E-12	-760.0E-15
Average	-	-6.1E-12	-4.1E-12	-740.0E-15	-4.1E-12	-833.3E-15	-19.9E-12	46.7E-15	-3.9E-12	266.7E-15	-2.7E-12	-2.9E-12	-953.3E-15
Sigma	-	1.4E-12	1.9E-12	58.9E-15	281.1E-15	275.4E-15	3.3E-12	83.8E-15	503.1E-15	68.0E-15	435.8E-15	561.0E-15	206.8E-15

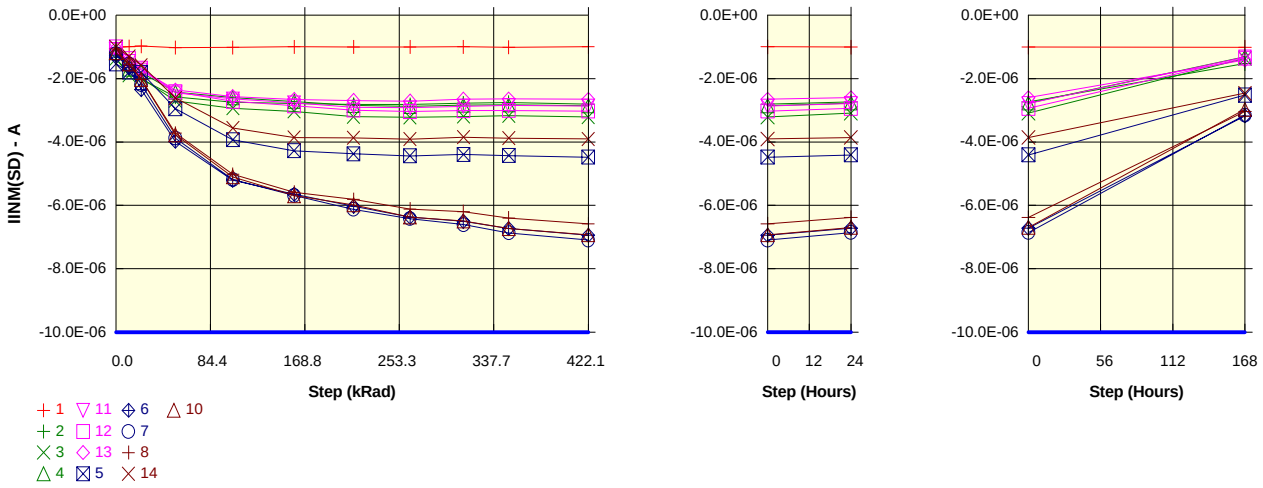
Measurements

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-3.0E-12	-11.8E-12	-4.0E-12	-2.7E-12	-3.7E-12	-3.2E-12	-14.9E-12	-1.3E-12	-7.1E-12	-1.0E-12	-5.9E-12	-4.7E-12	-4.4E-12
OFF_TID samples													
8	-2.6E-12	-6.0E-12	-15.2E-12	-3.1E-12	-6.8E-12	-3.8E-12	-24.8E-12	-2.6E-12	-6.8E-12	-1.6E-12	-4.6E-12	-5.4E-12	-3.3E-12
14	-2.6E-12	-5.3E-12	-12.9E-12	-3.1E-12	-7.4E-12	-3.6E-12	-27.4E-12	-2.5E-12	-6.0E-12	-1.5E-12	-4.6E-12	-5.4E-12	-4.1E-12
10	-2.6E-12	-5.7E-12	-19.2E-12	-3.0E-12	-6.7E-12	-3.4E-12	-31.0E-12	-2.6E-12	-7.3E-12	-2.2E-12	-4.5E-12	-5.5E-12	-3.0E-12
Statistics													
Min	-2.6E-12	-6.0E-12	-19.2E-12	-3.1E-12	-7.4E-12	-3.8E-12	-31.0E-12	-2.6E-12	-7.3E-12	-2.2E-12	-4.6E-12	-5.5E-12	-4.1E-12
Max	-2.6E-12	-5.3E-12	-12.9E-12	-3.0E-12	-6.7E-12	-3.4E-12	-24.8E-12	-2.5E-12	-6.0E-12	-1.5E-12	-4.5E-12	-5.4E-12	-3.0E-12
Average	-2.6E-12	-5.7E-12	-15.8E-12	-3.1E-12	-6.9E-12	-3.6E-12	-27.8E-12	-2.6E-12	-6.7E-12	-1.8E-12	-4.6E-12	-5.4E-12	-3.5E-12
Sigma	24.9E-15	285.8E-15	2.6E-12	43.2E-15	315.0E-15	164.4E-15	2.5E-12	75.4E-15	542.9E-15	321.0E-15	66.0E-15	56.6E-15	449.0E-15

Drift Calculation

IINM(HIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-3.4E-12	-12.6E-12	-480.0E-15	-4.1E-12	-1.2E-12	-22.2E-12	0.0E+00	-4.2E-12	1.1E-12	-2.0E-12	-2.7E-12	-700.0E-15
14	-	-2.7E-12	-10.3E-12	-560.0E-15	-4.8E-12	-1000.0E-15	-24.8E-12	100.0E-15	-3.4E-12	1.0E-12	-2.0E-12	-2.8E-12	-1.5E-12
10	-	-3.0E-12	-16.6E-12	-420.0E-15	-4.0E-12	-800.0E-15	-28.4E-12	-20.0E-15	-4.7E-12	380.0E-15	-1.9E-12	-2.9E-12	-360.0E-15
Average	-	-3.0E-12	-13.2E-12	-486.7E-15	-4.3E-12	-993.3E-15	-25.1E-12	26.7E-15	-4.1E-12	826.7E-15	-2.0E-12	-2.8E-12	-846.7E-15
Sigma	-	261.3E-15	2.6E-12	57.3E-15	337.2E-15	155.2E-15	2.6E-12	52.5E-15	524.7E-15	315.9E-15	66.0E-15	57.3E-15	468.9E-15

Parameter : Logic “0” input bias current : IINM(SD)
Test conditions : SD = 0V
Unit : A
Spec Limit Min : -10.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-1.0E-06	-994.7E-09	-979.6E-09	-1.0E-06	-1.0E-06	-996.9E-09	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06
ON_PROTON samples													
2	-1.1E-06	-1.5E-06	-2.0E-06	-2.6E-06	-2.7E-06	-2.8E-06	-2.8E-06	-2.8E-06	-2.8E-06	-2.7E-06	-2.8E-06	-2.7E-06	-1.5E-06
3	-1.4E-06	-1.9E-06	-2.0E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.1E-06	-1.4E-06
4	-1.2E-06	-1.7E-06	-1.8E-06	-2.4E-06	-2.6E-06	-2.7E-06	-2.8E-06	-2.9E-06	-2.8E-06	-2.8E-06	-2.9E-06	-2.8E-06	-1.3E-06
Statistics													
Min	-1.4E-06	-1.9E-06	-2.0E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.1E-06	-1.5E-06
Max	-1.1E-06	-1.5E-06	-1.8E-06	-2.4E-06	-2.6E-06	-2.7E-06	-2.8E-06	-2.8E-06	-2.8E-06	-2.7E-06	-2.8E-06	-2.7E-06	-1.3E-06
Average	-1.2E-06	-1.7E-06	-1.9E-06	-2.6E-06	-2.8E-06	-2.8E-06	-3.0E-06	-3.0E-06	-2.9E-06	-2.9E-06	-3.0E-06	-2.9E-06	-1.4E-06
Sigma	104.3E-09	168.7E-09	88.2E-09	110.2E-09	135.3E-09	135.0E-09	174.9E-09	179.2E-09	187.1E-09	185.5E-09	184.4E-09	161.6E-09	91.4E-09

Drift Calculation

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-354.0E-09	-878.4E-09	-1.5E-06	-1.6E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.6E-06	-1.6E-06	-1.7E-06	-1.6E-06	-394.8E-09
3	-	-525.0E-09	-605.8E-09	-1.3E-06	-1.6E-06	-1.7E-06	-1.8E-06	-1.9E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.7E-06	7.4E-09
4	-	-518.6E-09	-627.6E-09	-1.3E-06	-1.4E-06	-1.5E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.6E-06	-1.7E-06	-1.6E-06	-128.8E-09
Average	-	-465.9E-09	-703.9E-09	-1.3E-06	-1.5E-06	-1.6E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.6E-06	-172.1E-09
Sigma	-	79.1E-09	123.7E-09	83.6E-09	79.2E-09	56.3E-09	72.6E-09	75.3E-09	83.1E-09	81.3E-09	80.8E-09	58.4E-09	167.0E-09

Measurements

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-1.0E-06	-994.7E-09	-979.6E-09	-1.0E-06	-1.0E-06	-996.9E-09	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06
ON_TID samples													
11	-1.1E-06	-1.5E-06	-1.7E-06	-2.4E-06	-2.6E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.8E-06	-2.9E-06	-2.8E-06	-1.3E-06
12	-1.0E-06	-1.4E-06	-1.7E-06	-2.4E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-2.9E-06	-1.4E-06
13	-1.1E-06	-1.5E-06	-1.7E-06	-2.4E-06	-2.6E-06	-2.7E-06	-2.7E-06	-2.7E-06	-2.6E-06	-2.6E-06	-2.7E-06	-2.6E-06	-1.4E-06
Statistics													
Min	-1.1E-06	-1.5E-06	-1.7E-06	-2.4E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-2.9E-06	-1.4E-06
Max	-1.0E-06	-1.4E-06	-1.7E-06	-2.4E-06	-2.6E-06	-2.7E-06	-2.7E-06	-2.7E-06	-2.6E-06	-2.6E-06	-2.7E-06	-2.6E-06	-1.3E-06
Average	-1.0E-06	-1.4E-06	-1.7E-06	-2.4E-06	-2.6E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.8E-06	-2.8E-06	-2.8E-06	-2.8E-06	-1.4E-06
Sigma	33.2E-09	49.9E-09	27.1E-09	36.4E-09	59.5E-09	81.2E-09	127.0E-09	135.3E-09	149.6E-09	147.8E-09	151.7E-09	137.1E-09	40.5E-09

Drift Calculation

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-374.0E-09	-646.2E-09	-1.4E-06	-1.6E-06	-1.7E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.7E-06	-232.2E-09
12	-	-358.0E-09	-669.6E-09	-1.4E-06	-1.7E-06	-1.9E-06	-2.0E-06	-2.0E-06	-2.0E-06	-2.0E-06	-2.0E-06	-1.9E-06	-352.0E-09
13	-	-418.0E-09	-674.4E-09	-1.3E-06	-1.5E-06	-1.6E-06	-1.6E-06	-1.7E-06	-1.6E-06	-1.6E-06	-1.6E-06	-1.5E-06	-357.0E-09
Average	-	-383.3E-09	-663.4E-09	-1.4E-06	-1.6E-06	-1.7E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.8E-06	-1.7E-06	-313.7E-09
Sigma	-	25.4E-09	12.3E-09	45.2E-09	84.2E-09	105.1E-09	145.6E-09	155.4E-09	170.3E-09	169.8E-09	173.2E-09	159.9E-09	57.7E-09

Measurements

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-1.0E-06	-994.7E-09	-979.6E-09	-1.0E-06	-1.0E-06	-996.9E-09	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06
OFF_PROTON samples													
5	-1.5E-06	-1.8E-06	-1.8E-06	-3.0E-06	-3.9E-06	-4.3E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.5E-06	-4.4E-06	-2.5E-06
6	-1.3E-06	-1.7E-06	-2.4E-06	-4.0E-06	-5.2E-06	-5.6E-06	-6.0E-06	-6.4E-06	-6.5E-06	-6.7E-06	-6.9E-06	-6.7E-06	-3.2E-06
7	-1.2E-06	-1.5E-06	-2.2E-06	-3.9E-06	-5.2E-06	-5.7E-06	-6.1E-06	-6.4E-06	-6.6E-06	-6.9E-06	-7.1E-06	-6.9E-06	-3.2E-06
Statistics													
Min	-1.5E-06	-1.8E-06	-2.4E-06	-4.0E-06	-5.2E-06	-5.7E-06	-6.1E-06	-6.4E-06	-6.6E-06	-6.9E-06	-7.1E-06	-6.9E-06	-3.2E-06
Max	-1.2E-06	-1.5E-06	-1.8E-06	-3.0E-06	-3.9E-06	-4.3E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.5E-06	-4.4E-06	-2.5E-06
Average	-1.3E-06	-1.7E-06	-2.1E-06	-3.6E-06	-4.8E-06	-5.2E-06	-5.5E-06	-5.7E-06	-5.8E-06	-6.0E-06	-6.2E-06	-6.0E-06	-3.0E-06
Sigma	142.4E-09	104.3E-09	227.2E-09	463.5E-09	595.3E-09	655.9E-09	805.3E-09	923.3E-09	1.0E-06	1.1E-06	1.2E-06	1.1E-06	304.4E-09

Drift Calculation

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-260.8E-09	-272.4E-09	-1.4E-06	-2.4E-06	-2.7E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.9E-06	-984.0E-09
6	-	-397.2E-09	-1.1E-06	-2.7E-06	-3.9E-06	-4.4E-06	-4.8E-06	-5.1E-06	-5.2E-06	-5.5E-06	-5.7E-06	-5.5E-06	-1.9E-06
7	-	-329.8E-09	-974.8E-09	-2.7E-06	-4.0E-06	-4.5E-06	-4.9E-06	-5.2E-06	-5.4E-06	-5.7E-06	-5.9E-06	-5.6E-06	-1.9E-06
Average	-	-329.3E-09	-778.6E-09	-2.3E-06	-3.4E-06	-3.9E-06	-4.2E-06	-4.4E-06	-4.5E-06	-4.7E-06	-4.8E-06	-4.7E-06	-1.6E-06
Sigma	-	55.7E-09	360.9E-09	602.8E-09	736.3E-09	797.4E-09	947.2E-09	1.1E-06	1.2E-06	1.3E-06	1.3E-06	1.3E-06	445.2E-09

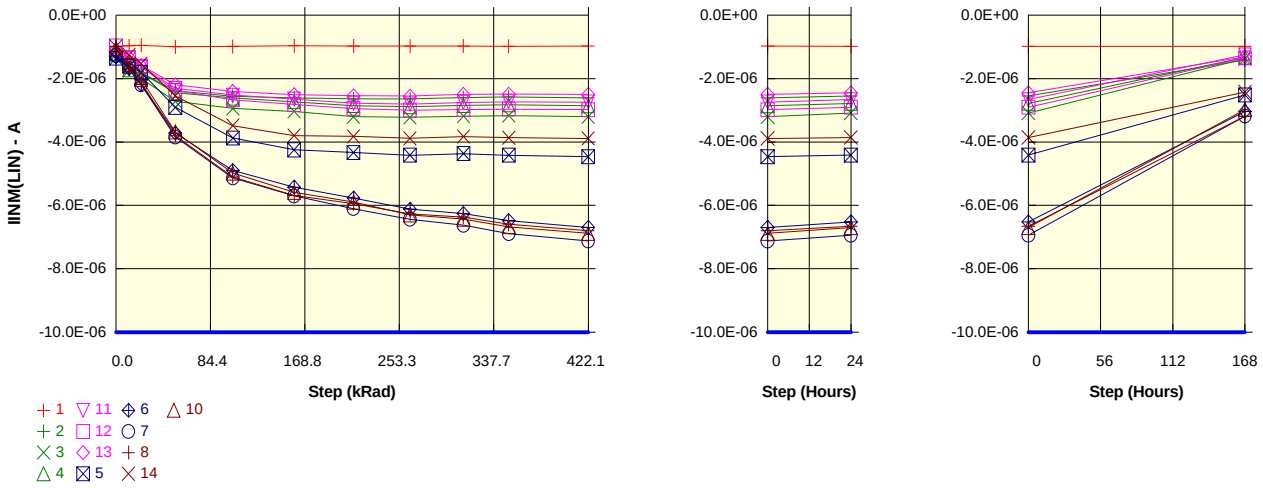
Measurements

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-1.0E-06	-994.7E-09	-979.6E-09	-1.0E-06	-1.0E-06	-996.9E-09	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06	-1.0E-06
OFF_TID samples													
8	-1.1E-06	-1.6E-06	-2.0E-06	-3.7E-06	-5.0E-06	-5.6E-06	-5.8E-06	-6.1E-06	-6.2E-06	-6.4E-06	-6.6E-06	-6.4E-06	-3.0E-06
14	-1.0E-06	-1.3E-06	-1.6E-06	-2.6E-06	-3.6E-06	-3.9E-06	-3.9E-06	-3.9E-06	-3.8E-06	-3.9E-06	-3.9E-06	-3.9E-06	-2.5E-06
10	-1.2E-06	-1.5E-06	-2.0E-06	-3.8E-06	-5.1E-06	-5.7E-06	-6.0E-06	-6.4E-06	-6.5E-06	-6.7E-06	-6.9E-06	-6.7E-06	-3.0E-06
Statistics													
Min	-1.2E-06	-1.6E-06	-2.0E-06	-3.8E-06	-5.1E-06	-5.7E-06	-6.0E-06	-6.4E-06	-6.5E-06	-6.7E-06	-6.9E-06	-6.7E-06	-3.0E-06
Max	-1.0E-06	-1.3E-06	-1.6E-06	-2.6E-06	-3.6E-06	-3.9E-06	-3.9E-06	-3.9E-06	-3.8E-06	-3.9E-06	-3.9E-06	-3.9E-06	-2.5E-06
Average	-1.1E-06	-1.5E-06	-1.9E-06	-3.4E-06	-4.6E-06	-5.0E-06	-5.2E-06	-5.5E-06	-5.5E-06	-5.7E-06	-5.8E-06	-5.6E-06	-2.8E-06
Sigma	73.7E-09	117.5E-09	209.9E-09	534.4E-09	709.4E-09	841.4E-09	959.1E-09	1.1E-06	1.2E-06	1.3E-06	1.4E-06	1.3E-06	257.5E-09

Drift Calculation

IINM(SD)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-505.2E-09	-959.2E-09	-2.7E-06	-4.0E-06	-4.5E-06	-4.8E-06	-5.1E-06	-5.1E-06	-5.3E-06	-5.5E-06	-5.3E-06	-2.0E-06
14	-	-298.8E-09	-573.0E-09	-1.6E-06	-2.6E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.9E-06	-1.5E-06
10	-	-353.0E-09	-842.4E-09	-2.6E-06	-3.9E-06	-4.5E-06	-4.8E-06	-5.2E-06	-5.3E-06	-5.5E-06	-5.7E-06	-5.5E-06	-1.8E-06
Average	-	-385.7E-09	-791.5E-09	-2.3E-06	-3.5E-06	-4.0E-06	-4.1E-06	-4.4E-06	-4.4E-06	-4.6E-06	-4.7E-06	-4.6E-06	-1.7E-06
Sigma	-	87.4E-09	161.7E-09	479.5E-09	653.6E-09	784.9E-09	901.6E-09	1.0E-06	1.1E-06	1.2E-06	1.3E-06	1.2E-06	214.4E-09

Parameter : Logic “0” input bias current : IINM(LIN)
Test conditions : VIN = 0V
Unit : A
Spec Limit Min : -10.0E-06
Spec limits are represented in bold lines on the graphic.



Measurements

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-993.9E-09	-966.9E-09	-952.5E-09	-997.0E-09	-989.4E-09	-969.1E-09	-973.7E-09	-977.0E-09	-973.1E-09	-985.1E-09	-973.1E-09	-981.4E-09	-983.7E-09
ON_PROTON samples													
2	-1.1E-06	-1.5E-06	-1.8E-06	-2.4E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-1.4E-06
3	-1.2E-06	-1.7E-06	-2.0E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.1E-06	-1.4E-06
4	-1.2E-06	-1.7E-06	-1.8E-06	-2.4E-06	-2.6E-06	-2.7E-06	-2.9E-06	-2.9E-06	-2.8E-06	-2.8E-06	-2.9E-06	-2.8E-06	-1.3E-06
Statistics													
Min	-1.2E-06	-1.7E-06	-2.0E-06	-2.7E-06	-2.9E-06	-3.0E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.2E-06	-3.1E-06	-1.4E-06
Max	-1.1E-06	-1.5E-06	-1.8E-06	-2.4E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-2.6E-06	-1.3E-06
Average	-1.2E-06	-1.7E-06	-1.9E-06	-2.5E-06	-2.7E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.9E-06	-2.8E-06	-1.4E-06
Sigma	43.3E-09	114.4E-09	81.4E-09	141.8E-09	167.4E-09	177.2E-09	232.5E-09	237.1E-09	241.6E-09	240.4E-09	241.6E-09	218.7E-09	33.8E-09

Drift Calculation

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-346.2E-09	-672.2E-09	-1.2E-06	-1.4E-06	-1.5E-06	-1.5E-06	-1.5E-06	-1.5E-06	-1.4E-06	-1.5E-06	-1.4E-06	-263.8E-09
3	-	-496.4E-09	-748.0E-09	-1.5E-06	-1.7E-06	-1.8E-06	-2.0E-06	-2.0E-06	-1.9E-06	-1.9E-06	-2.0E-06	-1.8E-06	-119.0E-09
4	-	-502.8E-09	-611.4E-09	-1.2E-06	-1.4E-06	-1.5E-06	-1.6E-06	-1.7E-06	-1.6E-06	-1.6E-06	-1.6E-06	-1.6E-06	-107.2E-09
Average	-	-448.5E-09	-677.2E-09	-1.3E-06	-1.5E-06	-1.6E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.6E-06	-163.3E-09
Sigma	-	72.4E-09	55.9E-09	108.5E-09	134.6E-09	140.4E-09	193.0E-09	196.6E-09	201.3E-09	200.0E-09	201.3E-09	178.4E-09	71.2E-09

Measurements

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-993.9E-09	-966.9E-09	-952.5E-09	-997.0E-09	-989.4E-09	-969.1E-09	-973.7E-09	-977.0E-09	-973.1E-09	-985.1E-09	-973.1E-09	-981.4E-09	-983.7E-09
ON_TID samples													
11	-1.2E-06	-1.3E-06	-1.6E-06	-2.3E-06	-2.5E-06	-2.7E-06	-2.8E-06	-2.8E-06	-2.8E-06	-2.7E-06	-2.7E-06	-2.7E-06	-1.3E-06
12	-970.3E-09	-1.3E-06	-1.6E-06	-2.4E-06	-2.7E-06	-2.8E-06	-2.9E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-2.9E-06	-1.3E-06
13	-1.1E-06	-1.3E-06	-1.6E-06	-2.2E-06	-2.4E-06	-2.5E-06	-2.5E-06	-2.6E-06	-2.5E-06	-2.5E-06	-2.5E-06	-2.5E-06	-1.3E-06
Statistics													
Min	-1.2E-06	-1.3E-06	-1.6E-06	-2.4E-06	-2.7E-06	-2.8E-06	-2.9E-06	-3.0E-06	-3.0E-06	-3.0E-06	-3.0E-06	-2.9E-06	-1.3E-06
Max	-970.3E-09	-1.3E-06	-1.6E-06	-2.2E-06	-2.4E-06	-2.5E-06	-2.5E-06	-2.6E-06	-2.5E-06	-2.5E-06	-2.5E-06	-2.5E-06	-1.3E-06
Average	-1.1E-06	-1.3E-06	-1.6E-06	-2.3E-06	-2.5E-06	-2.7E-06	-2.8E-06	-2.8E-06	-2.7E-06	-2.7E-06	-2.7E-06	-2.7E-06	-1.3E-06
Sigma	96.9E-09	5.8E-09	24.1E-09	75.0E-09	108.1E-09	128.2E-09	164.8E-09	181.3E-09	193.9E-09	192.5E-09	197.8E-09	184.4E-09	37.6E-09

Drift Calculation

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-142.0E-09	-407.8E-09	-1.1E-06	-1.3E-06	-1.4E-06	-1.6E-06	-1.6E-06	-1.5E-06	-1.5E-06	-1.5E-06	-1.5E-06	-44.8E-09
12	-	-370.5E-09	-675.7E-09	-1.4E-06	-1.7E-06	-1.8E-06	-2.0E-06	-2.0E-06	-2.0E-06	-2.0E-06	-2.0E-06	-1.9E-06	-373.3E-09
13	-	-245.2E-09	-496.4E-09	-1.1E-06	-1.3E-06	-1.4E-06	-1.5E-06	-1.5E-06	-1.4E-06	-1.4E-06	-1.4E-06	-1.4E-06	-220.4E-09
Average	-	-252.6E-09	-526.6E-09	-1.2E-06	-1.4E-06	-1.6E-06	-1.7E-06	-1.7E-06	-1.7E-06	-1.6E-06	-1.7E-06	-1.6E-06	-212.8E-09
Sigma	-	93.4E-09	111.4E-09	142.0E-09	181.1E-09	198.3E-09	223.3E-09	240.2E-09	254.6E-09	255.2E-09	260.3E-09	250.2E-09	134.2E-09

Measurements

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-993.9E-09	-966.9E-09	-952.5E-09	-997.0E-09	-989.4E-09	-969.1E-09	-973.7E-09	-977.0E-09	-973.1E-09	-985.1E-09	-973.1E-09	-981.4E-09	-983.7E-09
OFF_PROTON samples													
5	-1.4E-06	-1.6E-06	-1.8E-06	-2.9E-06	-3.9E-06	-4.2E-06	-4.3E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.5E-06	-4.4E-06	-2.5E-06
6	-1.3E-06	-1.7E-06	-2.2E-06	-3.7E-06	-4.9E-06	-5.4E-06	-5.8E-06	-6.1E-06	-6.3E-06	-6.5E-06	-6.7E-06	-6.5E-06	-3.0E-06
7	-1.3E-06	-1.6E-06	-2.2E-06	-3.8E-06	-5.1E-06	-5.7E-06	-6.1E-06	-6.4E-06	-6.6E-06	-6.9E-06	-7.1E-06	-6.9E-06	-3.2E-06
Statistics													
Min	-1.4E-06	-1.7E-06	-2.2E-06	-3.8E-06	-5.1E-06	-5.7E-06	-6.1E-06	-6.4E-06	-6.6E-06	-6.9E-06	-7.1E-06	-6.9E-06	-3.2E-06
Max	-1.3E-06	-1.6E-06	-1.8E-06	-2.9E-06	-3.9E-06	-4.2E-06	-4.3E-06	-4.4E-06	-4.4E-06	-4.4E-06	-4.5E-06	-4.4E-06	-2.5E-06
Average	-1.3E-06	-1.6E-06	-2.1E-06	-3.5E-06	-4.6E-06	-5.1E-06	-5.4E-06	-5.7E-06	-5.8E-06	-5.9E-06	-6.1E-06	-6.0E-06	-2.9E-06
Sigma	33.4E-09	46.1E-09	182.0E-09	413.1E-09	546.4E-09	630.9E-09	769.6E-09	887.9E-09	989.4E-09	1.1E-06	1.2E-06	1.1E-06	286.2E-09

Drift Calculation

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-251.4E-09	-445.8E-09	-1.6E-06	-2.5E-06	-2.9E-06	-3.0E-06	-3.1E-06	-3.0E-06	-3.1E-06	-3.1E-06	-3.1E-06	-1.2E-06
6	-	-374.4E-09	-873.2E-09	-2.4E-06	-3.6E-06	-4.1E-06	-4.5E-06	-4.8E-06	-4.9E-06	-5.2E-06	-5.4E-06	-5.2E-06	-1.7E-06
7	-	-295.2E-09	-920.8E-09	-2.6E-06	-3.9E-06	-4.4E-06	-4.8E-06	-5.2E-06	-5.3E-06	-5.6E-06	-5.8E-06	-5.7E-06	-1.9E-06
Average	-	-307.0E-09	-746.6E-09	-2.2E-06	-3.3E-06	-3.8E-06	-4.1E-06	-4.3E-06	-4.4E-06	-4.6E-06	-4.8E-06	-4.6E-06	-1.6E-06
Sigma	-	50.9E-09	213.6E-09	445.3E-09	579.0E-09	663.6E-09	802.3E-09	920.3E-09	1.0E-06	1.1E-06	1.2E-06	1.1E-06	319.2E-09

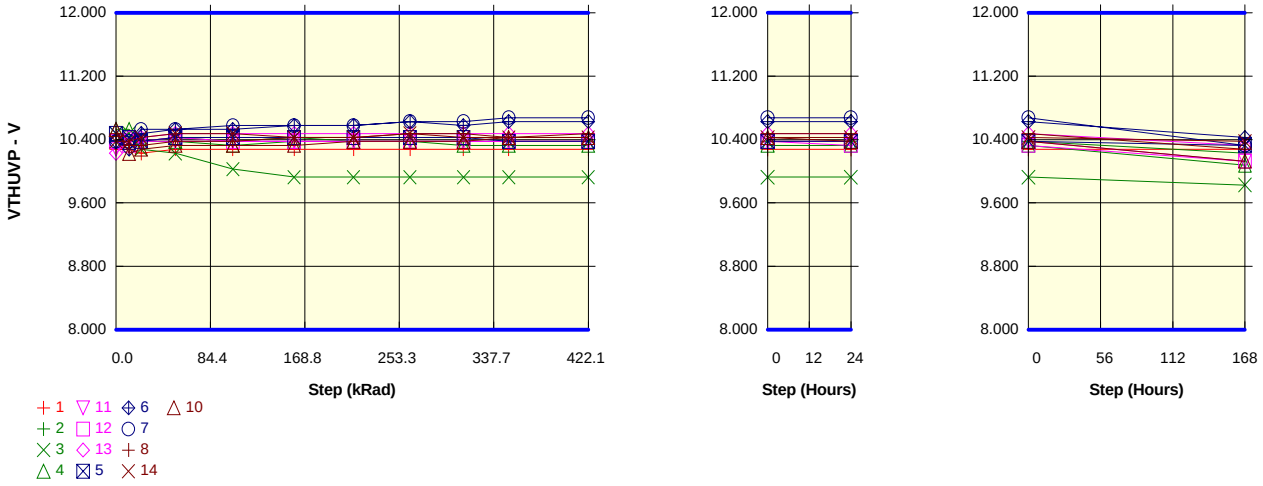
Measurements

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	-993.9E-09	-966.9E-09	-952.5E-09	-997.0E-09	-989.4E-09	-969.1E-09	-973.7E-09	-977.0E-09	-973.1E-09	-985.1E-09	-973.1E-09	-981.4E-09	-983.7E-09
OFF_TID samples													
8	-985.2E-09	-1.7E-06	-2.1E-06	-3.8E-06	-5.1E-06	-5.7E-06	-5.9E-06	-6.3E-06	-6.4E-06	-6.6E-06	-6.8E-06	-6.7E-06	-3.2E-06
14	-984.6E-09	-1.3E-06	-1.5E-06	-2.5E-06	-3.5E-06	-3.8E-06	-3.8E-06	-3.9E-06	-3.8E-06	-3.9E-06	-3.9E-06	-3.9E-06	-2.4E-06
10	-1.1E-06	-1.5E-06	-2.0E-06	-3.7E-06	-5.0E-06	-5.6E-06	-5.9E-06	-6.3E-06	-6.4E-06	-6.7E-06	-6.9E-06	-6.7E-06	-3.0E-06
Statistics													
Min	-1.1E-06	-1.7E-06	-2.1E-06	-3.8E-06	-5.1E-06	-5.7E-06	-5.9E-06	-6.3E-06	-6.4E-06	-6.7E-06	-6.9E-06	-6.7E-06	-3.2E-06
Max	-984.6E-09	-1.3E-06	-1.5E-06	-2.5E-06	-3.5E-06	-3.8E-06	-3.8E-06	-3.9E-06	-3.8E-06	-3.9E-06	-3.9E-06	-3.9E-06	-2.4E-06
Average	-1.0E-06	-1.5E-06	-1.9E-06	-3.3E-06	-4.5E-06	-5.0E-06	-5.2E-06	-5.5E-06	-5.5E-06	-5.7E-06	-5.9E-06	-5.7E-06	-2.9E-06
Sigma	33.4E-09	176.8E-09	260.0E-09	564.7E-09	735.2E-09	869.9E-09	989.0E-09	1.1E-06	1.2E-06	1.3E-06	1.4E-06	1.3E-06	321.4E-09

Drift Calculation

IINM(LIN)	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-695.2E-09	-1.1E-06	-2.8E-06	-4.1E-06	-4.7E-06	-5.0E-06	-5.3E-06	-5.4E-06	-5.6E-06	-5.8E-06	-5.7E-06	-2.2E-06
14	-	-272.4E-09	-547.4E-09	-1.6E-06	-2.5E-06	-2.8E-06	-2.8E-06	-2.9E-06	-2.8E-06	-2.9E-06	-2.9E-06	-2.9E-06	-1.4E-06
10	-	-491.6E-09	-966.4E-09	-2.6E-06	-3.9E-06	-4.5E-06	-4.8E-06	-5.2E-06	-5.4E-06	-5.6E-06	-5.8E-06	-5.6E-06	-1.9E-06
Average	-	-486.4E-09	-885.9E-09	-2.3E-06	-3.5E-06	-4.0E-06	-4.2E-06	-4.5E-06	-4.5E-06	-4.7E-06	-4.8E-06	-4.7E-06	-1.9E-06
Sigma	-	172.7E-09	250.1E-09	551.0E-09	720.7E-09	855.0E-09	973.2E-09	1.1E-06	1.2E-06	1.3E-06	1.4E-06	1.3E-06	314.7E-09

Parameter : VDD / VSS under-voltage lockout threshold : VTHUVP
Test conditions :
Unit : V
Spec Limit Min : 8.000
Spec Limit Max : 12.000
Spec limits are represented in bold lines on the graphic.



Measurements

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	10.277	10.277	10.227	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277
ON_PROTON samples													
2	10.377	10.377	10.377	10.427	10.377	10.427	10.377	10.377	10.377	10.377	10.377	10.377	10.227
3	10.477	10.477	10.277	10.227	10.027	9.927	9.927	9.927	9.927	9.927	9.927	9.927	9.827
4	10.527	10.527	10.377	10.377	10.327	10.377	10.377	10.377	10.327	10.327	10.327	10.327	10.077
Statistics													
Min	10.377	10.377	10.277	10.227	10.027	9.927	9.927	9.927	9.927	9.927	9.927	9.927	9.827
Max	10.527	10.527	10.377	10.427	10.377	10.427	10.377	10.377	10.377	10.377	10.377	10.377	10.227
Average	10.460	10.460	10.343	10.343	10.243	10.243	10.227	10.227	10.210	10.210	10.210	10.210	10.043
Sigma	0.062	0.062	0.047	0.085	0.155	0.225	0.212	0.212	0.201	0.201	0.201	0.201	0.165

Drift Calculation

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	953.7E-09	2.9E-06	50.0E-03	1.9E-06	50.0E-03	-2.9E-06	0.0E+00	-1.9E-06	-7.6E-06	953.7E-09	-1.9E-06	-150.0E-03
3	-	0.0E+00	-200.0E-03	-250.0E-03	-450.0E-03	-550.0E-03	-550.0E-03	-550.0E-03	-550.0E-03	-550.0E-03	-550.0E-03	-550.0E-03	-650.0E-03
4	-	0.0E+00	-150.0E-03	-150.0E-03	-200.0E-03	-150.0E-03	-150.0E-03	-150.0E-03	-200.0E-03	-200.0E-03	-200.0E-03	-200.0E-03	-450.0E-03
Average	-	317.9E-09	-116.7E-03	-116.7E-03	-216.7E-03	-216.7E-03	-233.3E-03	-233.3E-03	-250.0E-03	-250.0E-03	-250.0E-03	-250.0E-03	-416.7E-03
Sigma	-	449.6E-09	85.0E-03	124.7E-03	184.1E-03	249.4E-03	232.1E-03	232.1E-03	227.3E-03	227.3E-03	227.3E-03	227.3E-03	205.5E-03

Measurements

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	10.277	10.277	10.227	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277
ON_TID samples													
11	10.277	10.427	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.127
12	10.377	10.327	10.377	10.427	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.327	10.127
13	10.227	10.427	10.427	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.327
Statistics													
Min	10.227	10.327	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.377	10.327	10.127
Max	10.377	10.427	10.427	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.477	10.327
Average	10.293	10.393	10.393	10.427	10.410	10.410	10.410	10.410	10.410	10.410	10.410	10.393	10.193
Sigma	0.062	0.047	0.024	0.041	0.047	0.047	0.047	0.047	0.047	0.047	0.047	0.062	0.094

Drift Calculation

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	150.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	-150.0E-03
12	-	-50.0E-03	1.9E-06	50.0E-03	953.7E-09	-3.8E-06	-3.8E-06	0.0E+00	-1.9E-06	-8.6E-06	0.0E+00	-50.0E-03	-250.0E-03
13	-	200.0E-03	200.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	250.0E-03	100.0E-03
Average	-	100.0E-03	100.0E-03	133.3E-03	116.7E-03	116.7E-03	116.7E-03	116.7E-03	116.7E-03	116.7E-03	116.7E-03	100.0E-03	-100.0E-03
Sigma	-	108.0E-03	81.6E-03	85.0E-03	102.7E-03	102.7E-03	102.7E-03	102.7E-03	102.7E-03	102.7E-03	102.7E-03	122.5E-03	147.2E-03

Measurements

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	10.277	10.277	10.227	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277
OFF_PROTON samples													
5	10.477	10.427	10.377	10.427	10.427	10.427	10.427	10.427	10.427	10.377	10.377	10.377	10.327
6	10.377	10.277	10.477	10.527	10.527	10.577	10.577	10.627	10.577	10.627	10.627	10.627	10.427
7	10.377	10.377	10.527	10.527	10.577	10.577	10.577	10.627	10.627	10.677	10.677	10.677	10.327
Statistics													
Min	10.377	10.277	10.377	10.427	10.427	10.427	10.427	10.427	10.427	10.377	10.377	10.377	10.327
Max	10.477	10.427	10.527	10.527	10.577	10.577	10.577	10.627	10.627	10.677	10.677	10.677	10.427
Average	10.410	10.360	10.460	10.493	10.510	10.527	10.527	10.560	10.543	10.560	10.560	10.560	10.360
Sigma	0.047	0.062	0.062	0.047	0.062	0.071	0.071	0.094	0.085	0.131	0.131	0.131	0.047

Drift Calculation

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-150.0E-03
6	-	-100.0E-03	100.0E-03	150.0E-03	150.0E-03	200.0E-03	200.0E-03	250.0E-03	200.0E-03	250.0E-03	250.0E-03	250.0E-03	50.0E-03
7	-	953.7E-09	150.0E-03	150.0E-03	200.0E-03	200.0E-03	200.0E-03	250.0E-03	250.0E-03	300.0E-03	300.0E-03	300.0E-03	-50.0E-03
Average	-	-50.0E-03	50.0E-03	83.3E-03	100.0E-03	116.7E-03	116.7E-03	150.0E-03	133.3E-03	150.0E-03	150.0E-03	150.0E-03	-50.0E-03
Sigma	-	40.8E-03	108.0E-03	94.3E-03	108.0E-03	117.9E-03	117.9E-03	141.4E-03	131.2E-03	178.0E-03	178.0E-03	178.0E-03	81.6E-03

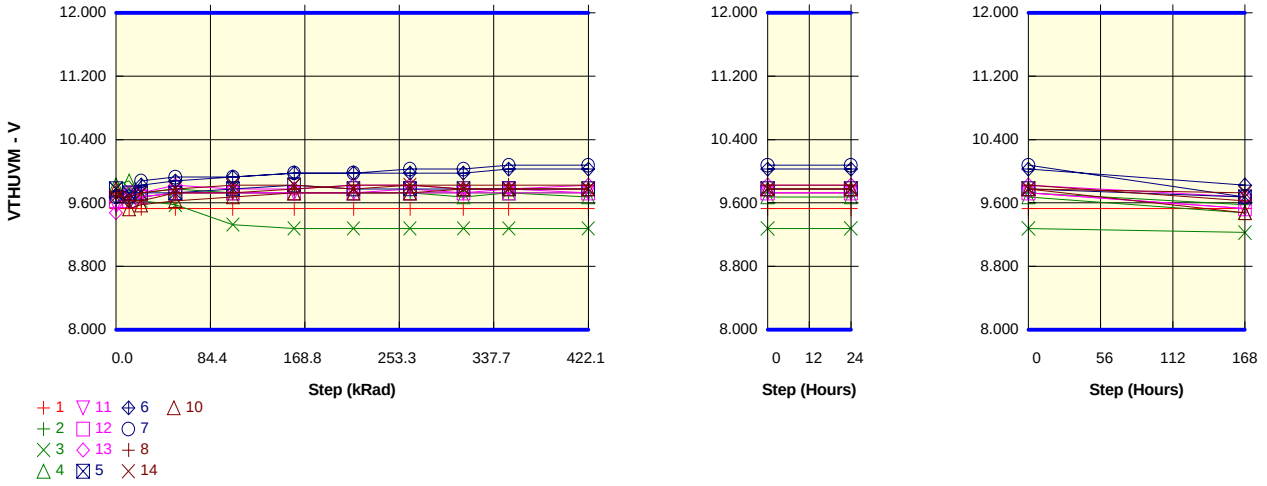
Measurements

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	10.277	10.277	10.227	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277	10.277
OFF_TID samples													
8	10.477	10.327	10.327	10.377	10.377	10.427	10.427	10.477	10.477	10.427	10.477	10.477	10.277
14	10.377	10.377	10.427	10.477	10.477	10.427	10.427	10.477	10.427	10.427	10.427	10.427	10.377
10	10.527	10.227	10.277	10.327	10.327	10.327	10.377	10.377	10.377	10.427	10.427	10.377	10.127
Statistics													
Min	10.377	10.227	10.277	10.327	10.327	10.327	10.377	10.377	10.377	10.427	10.427	10.377	10.127
Max	10.527	10.377	10.427	10.477	10.477	10.427	10.427	10.477	10.477	10.427	10.477	10.477	10.377
Average	10.460	10.310	10.343	10.393	10.393	10.393	10.410	10.443	10.427	10.427	10.443	10.427	10.260
Sigma	0.062	0.062	0.062	0.062	0.062	0.047	0.024	0.047	0.041	0.000	0.024	0.041	0.103

Drift Calculation

VTHUVP	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-150.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-2.9E-06	-4.8E-06	-50.0E-03	-2.9E-06	-5.7E-06	-200.0E-03
14	-	-953.7E-09	50.0E-03	100.0E-03	100.0E-03	50.0E-03	50.0E-03	100.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	-2.9E-06
10	-	-300.0E-03	-250.0E-03	-200.0E-03	-200.0E-03	-200.0E-03	-150.0E-03	-150.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-400.0E-03
Average	-	-150.0E-03	-116.7E-03	-66.7E-03	-66.7E-03	-66.7E-03	-50.0E-03	-16.7E-03	-33.3E-03	-33.3E-03	-16.7E-03	-33.3E-03	-200.0E-03
Sigma	-	122.5E-03	124.7E-03	124.7E-03	124.7E-03	102.7E-03	81.6E-03	102.7E-03	85.0E-03	62.4E-03	62.4E-03	85.0E-03	163.3E-03

Parameter : VDD / VSS under-voltage lockout threshold : VTHUVM
Test conditions :
Unit : V
Spec Limit Min : 8.000
Spec Limit Max : 12.000
Spec limits are represented in bold lines on the graphic.



Measurements

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527
ON_PROTON samples													
2	9.677	9.727	9.727	9.777	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.577
3	9.777	9.777	9.627	9.577	9.327	9.277	9.277	9.277	9.277	9.277	9.277	9.277	9.227
4	9.827	9.877	9.677	9.727	9.727	9.727	9.727	9.727	9.677	9.727	9.677	9.677	9.477
Statistics													
Min	9.677	9.727	9.627	9.577	9.327	9.277	9.277	9.277	9.277	9.277	9.277	9.277	9.227
Max	9.827	9.877	9.727	9.777	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.577
Average	9.760	9.793	9.677	9.693	9.593	9.577	9.577	9.577	9.560	9.577	9.560	9.560	9.427
Sigma	0.062	0.062	0.041	0.085	0.189	0.212	0.212	0.212	0.201	0.212	0.201	0.201	0.147

Drift Calculation

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	50.0E-03	50.0E-03	100.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	50.0E-03	-100.0E-03
3	-	0.0E+00	-150.0E-03	-200.0E-03	-450.0E-03	-500.0E-03	-500.0E-03	-500.0E-03	-500.0E-03	-500.0E-03	-500.0E-03	-500.0E-03	-550.0E-03
4	-	50.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-100.0E-03	-150.0E-03	-150.0E-03	-350.0E-03
Average	-	33.3E-03	-83.3E-03	-66.7E-03	-166.7E-03	-183.3E-03	-183.3E-03	-183.3E-03	-200.0E-03	-183.3E-03	-200.0E-03	-200.0E-03	-333.3E-03
Sigma	-	23.6E-03	94.3E-03	124.7E-03	209.5E-03	232.1E-03	232.1E-03	232.1E-03	227.3E-03	232.1E-03	227.3E-03	227.3E-03	184.1E-03

Measurements

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527
ON_TID samples													
11	9.577	9.727	9.677	9.727	9.727	9.727	9.727	9.777	9.727	9.777	9.727	9.727	9.527
12	9.627	9.627	9.677	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.527
13	9.477	9.727	9.727	9.827	9.777	9.777	9.827	9.827	9.777	9.777	9.827	9.827	9.677
Statistics													
Min	9.477	9.627	9.677	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.727	9.527
Max	9.627	9.727	9.727	9.827	9.777	9.777	9.827	9.827	9.777	9.777	9.827	9.827	9.677
Average	9.560	9.693	9.693	9.760	9.743	9.743	9.760	9.777	9.743	9.760	9.760	9.760	9.577
Sigma	0.062	0.047	0.024	0.047	0.024	0.024	0.047	0.041	0.024	0.024	0.047	0.047	0.071

Drift Calculation

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	150.0E-03	100.0E-03	150.0E-03	150.0E-03	150.0E-03	150.0E-03	200.0E-03	150.0E-03	200.0E-03	150.0E-03	150.0E-03	-50.0E-03
12	-	0.0E+00	50.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	-100.0E-03
13	-	250.0E-03	250.0E-03	350.0E-03	300.0E-03	300.0E-03	350.0E-03	350.0E-03	300.0E-03	300.0E-03	350.0E-03	350.0E-03	200.0E-03
Average	-	133.3E-03	133.3E-03	200.0E-03	183.3E-03	183.3E-03	200.0E-03	216.7E-03	183.3E-03	200.0E-03	200.0E-03	200.0E-03	16.7E-03
Sigma	-	102.7E-03	85.0E-03	108.0E-03	85.0E-03	85.0E-03	108.0E-03	102.7E-03	85.0E-03	81.6E-03	108.0E-03	108.0E-03	131.2E-03

Measurements

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527
OFF_PROTON samples													
5	9.777	9.727	9.727	9.727	9.777	9.827	9.777	9.777	9.777	9.777	9.777	9.777	9.677
6	9.677	9.627	9.827	9.877	9.927	9.977	9.977	9.977	9.977	10.027	10.027	10.027	9.827
7	9.677	9.677	9.877	9.927	9.927	9.977	9.977	10.027	10.027	10.077	10.077	10.077	9.677
Statistics													
Min	9.677	9.627	9.727	9.727	9.777	9.827	9.777	9.777	9.777	9.777	9.777	9.777	9.677
Max	9.777	9.727	9.877	9.927	9.927	9.977	9.977	10.027	10.027	10.077	10.077	10.077	9.827
Average	9.710	9.677	9.810	9.843	9.877	9.927	9.910	9.927	9.927	9.960	9.960	9.960	9.727
Sigma	0.047	0.041	0.062	0.085	0.071	0.071	0.094	0.108	0.108	0.131	0.131	0.131	0.071

Drift Calculation

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-50.0E-03	-50.0E-03	-50.0E-03	0.0E+00	50.0E-03	-4.8E-06	-1.9E-06	-2.9E-06	-9.5E-06	-953.7E-09	-4.8E-06	-100.0E-03
6	-	-50.0E-03	150.0E-03	200.0E-03	250.0E-03	300.0E-03	300.0E-03	300.0E-03	300.0E-03	350.0E-03	350.0E-03	350.0E-03	150.0E-03
7	-	0.0E+00	200.0E-03	250.0E-03	250.0E-03	300.0E-03	300.0E-03	350.0E-03	350.0E-03	400.0E-03	400.0E-03	400.0E-03	-2.9E-06
Average	-	-33.3E-03	100.0E-03	133.3E-03	166.7E-03	216.7E-03	200.0E-03	216.7E-03	216.7E-03	250.0E-03	250.0E-03	250.0E-03	16.7E-03
Sigma	-	23.6E-03	108.0E-03	131.2E-03	117.9E-03	117.9E-03	141.4E-03	154.6E-03	154.6E-03	178.0E-03	178.0E-03	178.0E-03	102.7E-03

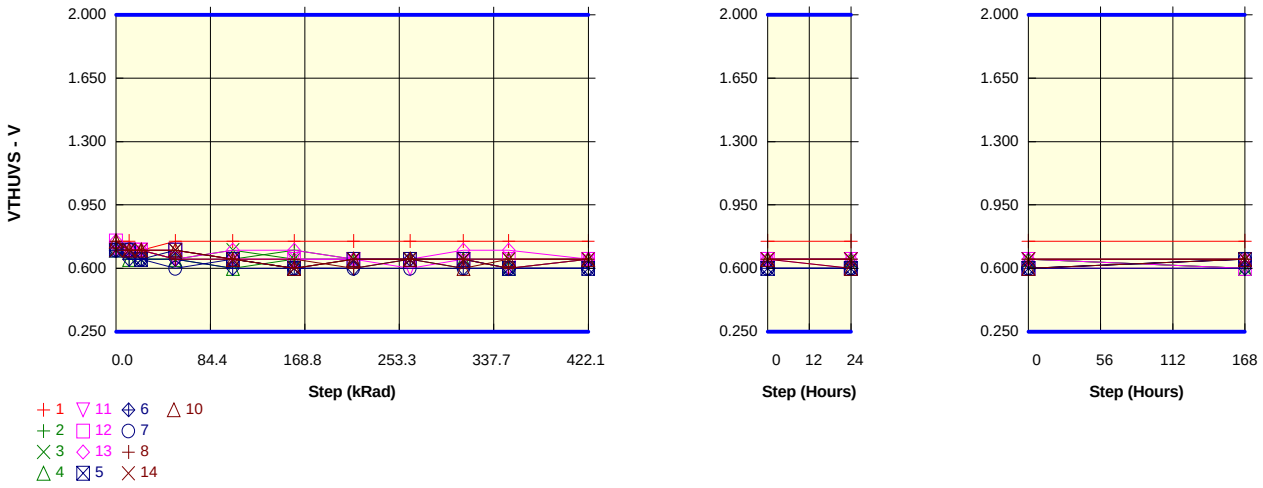
Measurements

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527	9.527
OFF_TID samples													
8	9.727	9.627	9.627	9.727	9.727	9.777	9.827	9.827	9.827	9.827	9.827	9.827	9.627
14	9.677	9.677	9.727	9.777	9.827	9.827	9.777	9.827	9.777	9.777	9.777	9.777	9.727
10	9.777	9.527	9.577	9.627	9.677	9.727	9.727	9.727	9.777	9.777	9.777	9.777	9.477
Statistics													
Min	9.677	9.527	9.577	9.627	9.677	9.727	9.727	9.727	9.777	9.777	9.777	9.777	9.477
Max	9.777	9.677	9.727	9.777	9.827	9.827	9.827	9.827	9.827	9.827	9.827	9.827	9.727
Average	9.727	9.610	9.643	9.710	9.743	9.777	9.777	9.793	9.793	9.793	9.793	9.793	9.610
Sigma	0.041	0.062	0.062	0.062	0.062	0.041	0.041	0.047	0.024	0.024	0.024	0.024	0.103

Drift Calculation

VTHUVM	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-100.0E-03	-100.0E-03	-3.8E-06	-953.7E-09	50.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	-100.0E-03
14	-	-953.7E-09	50.0E-03	100.0E-03	150.0E-03	150.0E-03	100.0E-03	150.0E-03	100.0E-03	100.0E-03	100.0E-03	100.0E-03	50.0E-03
10	-	-250.0E-03	-200.0E-03	-150.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-4.8E-06	-11.4E-06	-2.9E-06	-5.7E-06	-300.0E-03
Average	-	-116.7E-03	-83.3E-03	-16.7E-03	16.7E-03	50.0E-03	50.0E-03	66.7E-03	66.7E-03	66.7E-03	66.7E-03	66.7E-03	-116.7E-03
Sigma	-	102.7E-03	102.7E-03	102.7E-03	102.7E-03	81.6E-03	70.7E-03	85.0E-03	47.1E-03	47.1E-03	47.1E-03	47.1E-03	143.4E-03

Parameter : VDD / VSS under-voltage lockout threshold : VTHUVS
Test conditions : VTHUVS = (VTHUV+) - (VTHUV-)
Unit : V
Spec Limit Min : 0.250
Spec Limit Max : 2.000
Spec limits are represented in bold lines on the graphic.



Measurements

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.750	0.750	0.700	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
ON_PROTON samples													
2	0.700	0.650	0.650	0.650	0.650	0.700	0.650	0.650	0.650	0.650	0.650	0.650	0.650
3	0.700	0.700	0.650	0.650	0.700	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.600
4	0.700	0.650	0.700	0.650	0.600	0.650	0.650	0.650	0.650	0.600	0.650	0.650	0.600
Statistics													
Min	0.700	0.650	0.650	0.650	0.600	0.650	0.650	0.650	0.650	0.600	0.650	0.650	0.600
Max	0.700	0.700	0.700	0.650	0.700	0.700	0.650	0.650	0.650	0.650	0.650	0.650	0.650
Average	0.700	0.667	0.667	0.650	0.650	0.667	0.650	0.650	0.650	0.633	0.650	0.650	0.617
Sigma	0.000	0.024	0.024	0.000	0.041	0.024	0.000	0.000	0.000	0.024	0.000	0.000	0.024

Drift Calculation

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	953.7E-09	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03
3	-	0.0E+00	-50.0E-03	-50.0E-03	0.0E+00	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03
4	-	-50.0E-03	-953.7E-09	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-100.0E-03
Average	-	-33.3E-03	-33.3E-03	-50.0E-03	-50.0E-03	-33.3E-03	-50.0E-03	-50.0E-03	-50.0E-03	-66.7E-03	-50.0E-03	-50.0E-03	-83.3E-03
Sigma	-	23.6E-03	23.6E-03	1.2E-06	40.8E-03	23.6E-03	449.6E-09	449.6E-09	449.6E-09	23.6E-03	1.2E-06	1.2E-06	23.6E-03

Measurements

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.750	0.750	0.700	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
ON_TID samples													
11	0.700	0.700	0.700	0.650	0.650	0.650	0.650	0.600	0.650	0.600	0.650	0.650	0.600
12	0.750	0.700	0.700	0.700	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.600	0.600
13	0.750	0.700	0.700	0.650	0.700	0.700	0.650	0.650	0.700	0.700	0.650	0.650	0.650
Statistics													
Min	0.700	0.700	0.700	0.650	0.650	0.650	0.650	0.600	0.650	0.600	0.650	0.600	0.600
Max	0.750	0.700	0.700	0.700	0.700	0.700	0.650	0.650	0.700	0.700	0.650	0.650	0.650
Average	0.733	0.700	0.700	0.667	0.667	0.667	0.650	0.633	0.667	0.650	0.650	0.633	0.617
Sigma	0.024	0.000	0.000	0.024	0.024	0.024	0.000	0.024	0.024	0.041	0.000	0.024	0.024

Drift Calculation

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	0.0E+00	0.0E+00	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-100.0E-03
12	-	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-150.0E-03
13	-	-50.0E-03	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03
Average	-	-33.3E-03	-33.3E-03	-66.7E-03	-66.7E-03	-66.7E-03	-83.3E-03	-100.0E-03	-66.7E-03	-83.3E-03	-83.3E-03	-100.0E-03	-116.7E-03
Sigma	-	23.6E-03	23.6E-03	23.6E-03	23.6E-03	23.6E-03	23.6E-03	449.6E-09	23.6E-03	23.6E-03	23.6E-03	40.8E-03	23.6E-03

Measurements

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.750	0.750	0.700	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
OFF_PROTON samples													
5	0.700	0.700	0.650	0.700	0.650	0.600	0.650	0.650	0.650	0.600	0.600	0.600	0.650
6	0.700	0.650	0.650	0.650	0.600	0.600	0.600	0.650	0.600	0.600	0.600	0.600	0.600
7	0.700	0.700	0.650	0.600	0.650	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.650
Statistics													
Min	0.700	0.650	0.650	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600	0.600
Max	0.700	0.700	0.650	0.700	0.650	0.600	0.650	0.650	0.650	0.600	0.600	0.600	0.650
Average	0.700	0.683	0.650	0.650	0.633	0.600	0.617	0.633	0.617	0.600	0.600	0.600	0.633
Sigma	0.000	0.024	0.000	0.041	0.024	0.000	0.024	0.024	0.024	0.000	0.000	0.000	0.024

Drift Calculation

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	0.0E+00	-50.0E-03	0.0E+00	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-50.0E-03
6	-	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03
7	-	953.7E-09	-50.0E-03	-100.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-50.0E-03
Average	-	-16.7E-03	-50.0E-03	-50.0E-03	-66.7E-03	-100.0E-03	-83.3E-03	-66.7E-03	-83.3E-03	-100.0E-03	-100.0E-03	-100.0E-03	-66.7E-03
Sigma	-	23.6E-03	899.1E-09	40.8E-03	23.6E-03	449.6E-09	23.6E-03	23.6E-03	23.6E-03	449.6E-09	778.7E-09	778.7E-09	23.6E-03

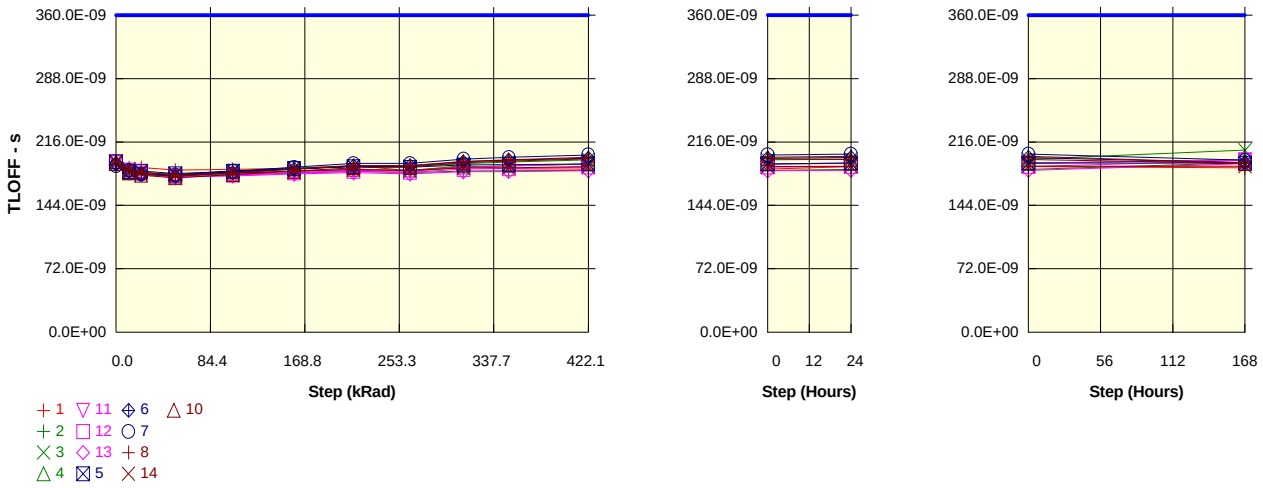
Measurements

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	0.750	0.750	0.700	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750
OFF_TID samples													
8	0.750	0.700	0.700	0.650	0.650	0.650	0.600	0.650	0.650	0.600	0.650	0.650	0.650
14	0.700	0.700	0.700	0.700	0.650	0.600	0.650	0.650	0.650	0.650	0.650	0.650	0.650
10	0.750	0.700	0.700	0.700	0.650	0.600	0.650	0.650	0.600	0.650	0.650	0.600	0.650
Statistics													
Min	0.700	0.700	0.700	0.650	0.650	0.600	0.600	0.650	0.600	0.600	0.650	0.600	0.650
Max	0.750	0.700	0.700	0.700	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650	0.650
Average	0.733	0.700	0.700	0.683	0.650	0.617	0.633	0.650	0.633	0.633	0.650	0.633	0.650
Sigma	0.024	0.000	0.000	0.024	0.000	0.024	0.024	0.000	0.024	0.024	0.000	0.024	0.000

Drift Calculation

VTHUVS	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-50.0E-03	-50.0E-03	-100.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-100.0E-03
14	-	0.0E+00	953.7E-09	0.0E+00	-50.0E-03	-100.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03	-50.0E-03
10	-	-50.0E-03	-50.0E-03	-50.0E-03	-100.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-100.0E-03	-100.0E-03	-150.0E-03	-100.0E-03
Average	-	-33.3E-03	-33.3E-03	-50.0E-03	-83.3E-03	-116.7E-03	-100.0E-03	-83.3E-03	-100.0E-03	-100.0E-03	-83.3E-03	-100.0E-03	-83.3E-03
Sigma	-	23.6E-03	23.6E-03	40.8E-03	23.6E-03	23.6E-03	40.8E-03	23.6E-03	40.8E-03	40.8E-03	23.6E-03	40.8E-03	23.6E-03

Parameter : Low side turn-off propagation delay : TLOFF
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 360.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	190.9E-09	186.8E-09	186.8E-09	184.0E-09	184.8E-09	186.2E-09	189.3E-09	183.4E-09	189.2E-09	185.3E-09	185.2E-09	188.2E-09	186.7E-09
ON_PROTON samples													
2	188.8E-09	184.8E-09	181.1E-09	177.4E-09	179.3E-09	180.9E-09	182.4E-09	181.1E-09	183.0E-09	183.2E-09	183.6E-09	184.8E-09	192.3E-09
3	191.3E-09	181.5E-09	181.1E-09	179.2E-09	183.0E-09	186.1E-09	188.5E-09	188.1E-09	191.4E-09	193.2E-09	195.7E-09	196.4E-09	206.6E-09
4	193.8E-09	181.2E-09	181.1E-09	177.9E-09	180.7E-09	182.9E-09	184.9E-09	184.2E-09	187.6E-09	188.9E-09	191.1E-09	191.7E-09	196.1E-09
Statistics													
Min	188.8E-09	181.2E-09	181.1E-09	177.4E-09	179.3E-09	180.9E-09	182.4E-09	181.1E-09	183.0E-09	183.2E-09	183.6E-09	184.8E-09	192.3E-09
Max	193.8E-09	184.8E-09	181.1E-09	179.2E-09	183.0E-09	186.1E-09	188.5E-09	188.1E-09	191.4E-09	193.2E-09	195.7E-09	196.4E-09	206.6E-09
Average	191.3E-09	182.5E-09	181.1E-09	178.2E-09	181.0E-09	183.3E-09	185.3E-09	184.5E-09	187.3E-09	188.4E-09	190.1E-09	191.0E-09	198.3E-09
Sigma	2.1E-09	1.6E-09	14.0E-12	772.2E-12	1.5E-09	2.1E-09	2.5E-09	2.8E-09	3.4E-09	4.1E-09	5.0E-09	4.8E-09	6.0E-09

Drift Calculation

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-4.0E-09	-7.6E-09	-11.4E-09	-9.4E-09	-7.9E-09	-6.3E-09	-7.6E-09	-5.7E-09	-5.5E-09	-5.2E-09	-4.0E-09	3.6E-09
3	-	-9.8E-09	-10.2E-09	-12.1E-09	-8.3E-09	-5.2E-09	-2.8E-09	-3.2E-09	107.8E-12	1.9E-09	4.5E-09	5.1E-09	15.3E-09
4	-	-12.6E-09	-12.7E-09	-15.9E-09	-13.2E-09	-11.0E-09	-9.0E-09	-9.7E-09	-6.2E-09	-5.0E-09	-2.8E-09	-2.1E-09	2.2E-09
Average	-	-8.8E-09	-10.2E-09	-13.1E-09	-10.3E-09	-8.0E-09	-6.0E-09	-6.8E-09	-4.0E-09	-2.9E-09	-1.2E-09	-326.5E-12	7.0E-09
Sigma	-	3.6E-09	2.1E-09	2.0E-09	2.1E-09	2.3E-09	2.5E-09	2.7E-09	2.9E-09	3.4E-09	4.1E-09	3.9E-09	5.9E-09

Measurements

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	190.9E-09	186.8E-09	186.8E-09	184.0E-09	184.8E-09	186.2E-09	189.3E-09	183.4E-09	189.2E-09	185.3E-09	185.2E-09	188.2E-09	186.7E-09
ON_TID samples													
11	192.3E-09	181.0E-09	179.4E-09	176.1E-09	178.6E-09	180.9E-09	183.5E-09	182.8E-09	186.8E-09	188.6E-09	191.0E-09	192.0E-09	195.9E-09
12	193.9E-09	184.1E-09	180.9E-09	176.9E-09	178.2E-09	180.8E-09	182.7E-09	181.6E-09	185.0E-09	185.8E-09	187.3E-09	188.2E-09	195.0E-09
13	190.5E-09	182.6E-09	180.2E-09	176.4E-09	177.4E-09	179.5E-09	181.0E-09	179.6E-09	182.2E-09	182.3E-09	183.3E-09	183.8E-09	191.3E-09
Statistics													
Min	190.5E-09	181.0E-09	179.4E-09	176.1E-09	177.4E-09	179.5E-09	181.0E-09	179.6E-09	182.2E-09	182.3E-09	183.3E-09	183.8E-09	191.3E-09
Max	193.9E-09	184.1E-09	180.9E-09	176.9E-09	178.6E-09	180.9E-09	183.5E-09	182.8E-09	186.8E-09	188.6E-09	191.0E-09	192.0E-09	195.9E-09
Average	192.2E-09	182.6E-09	180.2E-09	176.5E-09	178.1E-09	180.4E-09	182.4E-09	181.3E-09	184.7E-09	185.6E-09	187.2E-09	188.0E-09	194.1E-09
Sigma	1.4E-09	1.2E-09	603.5E-12	309.8E-12	494.9E-12	643.2E-12	1.0E-09	1.3E-09	1.9E-09	2.6E-09	3.2E-09	3.3E-09	2.0E-09

Drift Calculation

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-11.2E-09	-12.8E-09	-16.2E-09	-13.7E-09	-11.3E-09	-8.8E-09	-9.4E-09	-5.5E-09	-3.6E-09	-1.2E-09	-281.7E-12	3.6E-09
12	-	-9.8E-09	-13.0E-09	-17.0E-09	-15.6E-09	-13.1E-09	-11.2E-09	-12.3E-09	-8.9E-09	-8.1E-09	-6.5E-09	-5.7E-09	1.2E-09
13	-	-7.9E-09	-10.3E-09	-14.1E-09	-13.1E-09	-11.0E-09	-9.6E-09	-11.0E-09	-8.3E-09	-8.2E-09	-7.3E-09	-6.7E-09	793.8E-12
Average	-	-9.6E-09	-12.0E-09	-15.8E-09	-14.2E-09	-11.8E-09	-9.9E-09	-10.9E-09	-7.6E-09	-6.6E-09	-5.0E-09	-4.2E-09	1.9E-09
Sigma	-	1.3E-09	1.2E-09	1.2E-09	1.1E-09	900.5E-12	1.0E-09	1.2E-09	1.5E-09	2.1E-09	2.7E-09	2.8E-09	1.3E-09

Measurements

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	190.9E-09	186.8E-09	186.8E-09	184.0E-09	184.8E-09	186.2E-09	189.3E-09	183.4E-09	189.2E-09	185.3E-09	185.2E-09	188.2E-09	186.7E-09
OFF_PROTON samples													
5	193.4E-09	182.5E-09	182.8E-09	180.0E-09	182.6E-09	185.6E-09	188.0E-09	187.2E-09	189.7E-09	190.3E-09	191.1E-09	192.0E-09	191.9E-09
6	191.0E-09	183.3E-09	179.4E-09	177.3E-09	181.2E-09	185.0E-09	188.5E-09	188.9E-09	193.4E-09	195.4E-09	197.6E-09	198.4E-09	192.4E-09
7	189.1E-09	183.8E-09	179.5E-09	178.2E-09	182.7E-09	187.2E-09	191.6E-09	191.5E-09	196.5E-09	198.6E-09	201.3E-09	202.2E-09	195.3E-09
Statistics													
Min	189.1E-09	182.5E-09	179.4E-09	177.3E-09	181.2E-09	185.0E-09	188.0E-09	187.2E-09	189.7E-09	190.3E-09	191.1E-09	192.0E-09	191.9E-09
Max	193.4E-09	183.8E-09	182.8E-09	180.0E-09	182.7E-09	187.2E-09	191.6E-09	191.5E-09	196.5E-09	198.6E-09	201.3E-09	202.2E-09	195.3E-09
Average	191.2E-09	183.2E-09	180.6E-09	178.5E-09	182.2E-09	185.9E-09	189.4E-09	189.2E-09	193.2E-09	194.8E-09	196.7E-09	197.5E-09	193.2E-09
Sigma	1.8E-09	527.2E-12	1.6E-09	1.1E-09	689.0E-12	923.8E-12	1.6E-09	1.8E-09	2.8E-09	3.4E-09	4.2E-09	4.2E-09	1.5E-09

Drift Calculation

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-11.0E-09	-10.6E-09	-13.4E-09	-10.8E-09	-7.8E-09	-5.4E-09	-6.2E-09	-3.7E-09	-3.1E-09	-2.3E-09	-1.5E-09	-1.5E-09
6	-	-7.7E-09	-11.7E-09	-13.8E-09	-9.8E-09	-6.1E-09	-2.6E-09	-2.1E-09	2.4E-09	4.4E-09	6.6E-09	7.4E-09	1.3E-09
7	-	-5.3E-09	-9.6E-09	-10.8E-09	-6.3E-09	-1.9E-09	2.6E-09	2.5E-09	7.5E-09	9.6E-09	12.2E-09	13.2E-09	6.2E-09
Average	-	-8.0E-09	-10.6E-09	-12.7E-09	-9.0E-09	-5.3E-09	-1.8E-09	-2.0E-09	2.1E-09	3.6E-09	5.5E-09	6.4E-09	2.0E-09
Sigma	-	2.3E-09	856.4E-12	1.3E-09	1.9E-09	2.5E-09	3.3E-09	3.6E-09	4.6E-09	5.2E-09	6.0E-09	6.0E-09	3.2E-09

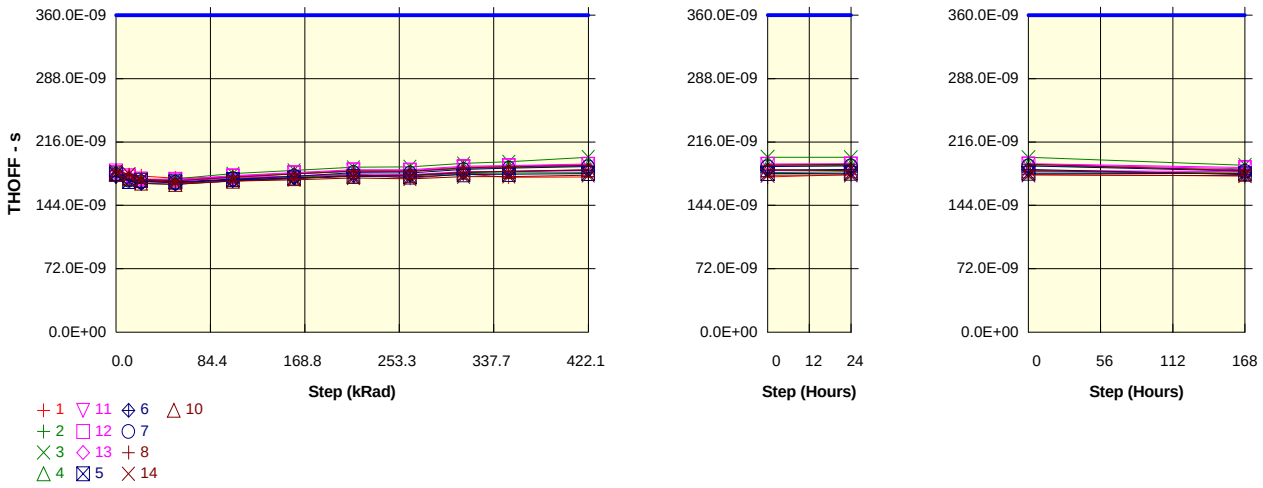
Measurements

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	190.9E-09	186.8E-09	186.8E-09	184.0E-09	184.8E-09	186.2E-09	189.3E-09	183.4E-09	189.2E-09	185.3E-09	185.2E-09	188.2E-09	186.7E-09
OFF_TID samples													
8	193.1E-09	182.3E-09	179.9E-09	177.1E-09	181.1E-09	185.2E-09	189.2E-09	189.0E-09	193.9E-09	195.8E-09	198.6E-09	199.6E-09	192.0E-09
14	193.7E-09	185.4E-09	182.0E-09	178.4E-09	180.4E-09	182.7E-09	184.9E-09	183.4E-09	186.5E-09	186.7E-09	187.9E-09	188.5E-09	188.4E-09
10	191.5E-09	180.8E-09	178.3E-09	175.3E-09	179.0E-09	182.8E-09	186.6E-09	187.5E-09	192.4E-09	194.3E-09	196.9E-09	196.0E-09	191.7E-09
Statistics													
Min	191.5E-09	180.8E-09	178.3E-09	175.3E-09	179.0E-09	182.7E-09	184.9E-09	183.4E-09	186.5E-09	186.7E-09	187.9E-09	188.5E-09	188.4E-09
Max	193.7E-09	185.4E-09	182.0E-09	178.4E-09	181.1E-09	185.2E-09	189.2E-09	189.0E-09	193.9E-09	195.8E-09	198.6E-09	199.6E-09	192.0E-09
Average	192.8E-09	182.9E-09	180.1E-09	176.9E-09	180.1E-09	183.6E-09	186.9E-09	186.6E-09	191.0E-09	192.3E-09	194.4E-09	194.7E-09	190.7E-09
Sigma	942.5E-12	1.9E-09	1.5E-09	1.3E-09	874.4E-12	1.2E-09	1.8E-09	2.4E-09	3.2E-09	4.0E-09	4.7E-09	4.6E-09	1.6E-09

Drift Calculation

TLOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-10.8E-09	-13.2E-09	-16.0E-09	-12.0E-09	-7.9E-09	-3.9E-09	-4.1E-09	805.4E-12	2.7E-09	5.5E-09	6.5E-09	-1.1E-09
14	-	-8.3E-09	-11.7E-09	-15.3E-09	-13.3E-09	-11.0E-09	-8.8E-09	-10.3E-09	-7.2E-09	-7.0E-09	-5.8E-09	-5.2E-09	-5.3E-09
10	-	-10.6E-09	-13.2E-09	-16.2E-09	-12.5E-09	-8.7E-09	-4.9E-09	-4.0E-09	961.9E-12	2.8E-09	5.4E-09	4.6E-09	198.9E-12
Average	-	-9.9E-09	-12.7E-09	-15.8E-09	-12.6E-09	-9.2E-09	-5.8E-09	-6.1E-09	-1.8E-09	-499.1E-12	1.7E-09	2.0E-09	-2.1E-09
Sigma	-	1.1E-09	694.8E-12	364.4E-12	526.8E-12	1.3E-09	2.1E-09	3.0E-09	3.8E-09	4.6E-09	5.3E-09	5.1E-09	2.3E-09

Parameter : High side turn-off propagation delay : THOFF
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 360.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	179.9E-09	177.3E-09	177.5E-09	175.0E-09	175.8E-09	176.8E-09	179.5E-09	174.7E-09	179.6E-09	176.1E-09	176.2E-09	179.0E-09	177.3E-09
ON_PROTON samples													
2	177.0E-09	173.7E-09	171.4E-09	170.3E-09	173.8E-09	176.1E-09	178.6E-09	177.7E-09	180.2E-09	180.6E-09	181.2E-09	182.2E-09	180.6E-09
3	179.2E-09	173.4E-09	173.0E-09	174.0E-09	179.8E-09	183.7E-09	187.2E-09	187.9E-09	191.6E-09	193.5E-09	198.8E-09	198.6E-09	189.7E-09
4	180.9E-09	175.2E-09	172.2E-09	171.9E-09	176.4E-09	179.7E-09	182.5E-09	182.5E-09	186.0E-09	187.0E-09	188.8E-09	189.2E-09	184.6E-09
Statistics													
Min	177.0E-09	173.4E-09	171.4E-09	170.3E-09	173.8E-09	176.1E-09	178.6E-09	177.7E-09	180.2E-09	180.6E-09	181.2E-09	182.2E-09	180.6E-09
Max	180.9E-09	175.2E-09	173.0E-09	174.0E-09	179.8E-09	183.7E-09	187.2E-09	187.9E-09	191.6E-09	193.5E-09	198.8E-09	198.6E-09	189.7E-09
Average	179.0E-09	174.1E-09	172.2E-09	172.1E-09	176.7E-09	179.8E-09	182.8E-09	182.7E-09	185.9E-09	187.0E-09	189.6E-09	190.0E-09	185.0E-09
Sigma	1.6E-09	771.4E-12	649.0E-12	1.5E-09	2.5E-09	3.1E-09	3.5E-09	4.2E-09	4.7E-09	5.3E-09	7.2E-09	6.7E-09	3.7E-09

Drift Calculation

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-3.3E-09	-5.6E-09	-6.6E-09	-3.2E-09	-839.2E-12	1.6E-09	709.0E-12	3.2E-09	3.6E-09	4.3E-09	5.2E-09	3.6E-09
3	-	-5.8E-09	-6.2E-09	-5.3E-09	586.6E-12	4.5E-09	7.9E-09	8.6E-09	12.3E-09	14.2E-09	19.5E-09	19.3E-09	10.4E-09
4	-	-5.7E-09	-8.7E-09	-9.0E-09	-4.5E-09	-1.2E-09	1.6E-09	1.6E-09	5.1E-09	6.1E-09	7.9E-09	8.3E-09	3.7E-09
Average	-	-5.0E-09	-6.8E-09	-7.0E-09	-2.3E-09	803.2E-12	3.7E-09	3.6E-09	6.9E-09	8.0E-09	10.6E-09	10.9E-09	5.9E-09
Sigma	-	1.2E-09	1.4E-09	1.6E-09	2.1E-09	2.6E-09	3.0E-09	3.5E-09	3.9E-09	4.5E-09	6.5E-09	6.1E-09	3.2E-09

Measurements

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	179.9E-09	177.3E-09	177.5E-09	175.0E-09	175.8E-09	176.8E-09	179.5E-09	174.7E-09	179.6E-09	176.1E-09	176.2E-09	179.0E-09	177.3E-09
ON_TID samples													
11	181.1E-09	176.3E-09	172.7E-09	172.5E-09	177.0E-09	180.3E-09	183.4E-09	183.6E-09	187.2E-09	188.6E-09	190.3E-09	190.8E-09	185.5E-09
12	183.0E-09	177.6E-09	174.1E-09	173.5E-09	177.7E-09	181.2E-09	184.5E-09	184.3E-09	188.3E-09	189.2E-09	190.9E-09	191.3E-09	187.0E-09
13	180.5E-09	176.1E-09	172.5E-09	171.6E-09	174.8E-09	177.4E-09	179.5E-09	178.9E-09	182.0E-09	182.2E-09	183.4E-09	183.6E-09	182.3E-09
Statistics													
Min	180.5E-09	176.1E-09	172.5E-09	171.6E-09	174.8E-09	177.4E-09	179.5E-09	178.9E-09	182.0E-09	182.2E-09	183.4E-09	183.6E-09	182.3E-09
Max	183.0E-09	177.6E-09	174.1E-09	173.5E-09	177.7E-09	181.2E-09	184.5E-09	184.3E-09	188.3E-09	189.2E-09	190.9E-09	191.3E-09	187.0E-09
Average	181.5E-09	176.7E-09	173.1E-09	172.5E-09	176.5E-09	179.6E-09	182.5E-09	182.3E-09	185.8E-09	186.7E-09	188.2E-09	188.6E-09	184.9E-09
Sigma	1.1E-09	691.0E-12	685.0E-12	775.4E-12	1.2E-09	1.6E-09	2.1E-09	2.4E-09	2.7E-09	3.1E-09	3.4E-09	3.5E-09	1.9E-09

Drift Calculation

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-4.9E-09	-8.4E-09	-8.7E-09	-4.1E-09	-839.0E-12	2.3E-09	2.5E-09	6.1E-09	7.5E-09	9.2E-09	9.7E-09	4.4E-09
12	-	-5.3E-09	-8.9E-09	-9.5E-09	-5.2E-09	-1.7E-09	1.5E-09	1.4E-09	5.4E-09	6.2E-09	7.9E-09	8.4E-09	4.0E-09
13	-	-4.4E-09	-8.0E-09	-8.9E-09	-5.6E-09	-3.1E-09	-983.7E-12	-1.5E-09	1.5E-09	1.8E-09	3.0E-09	3.1E-09	1.8E-09
Average	-	-4.9E-09	-8.4E-09	-9.0E-09	-5.0E-09	-1.9E-09	940.3E-12	773.6E-12	4.3E-09	5.2E-09	6.7E-09	7.0E-09	3.4E-09
Sigma	-	384.0E-12	385.2E-12	342.3E-12	649.1E-12	914.8E-12	1.4E-09	1.7E-09	2.0E-09	2.4E-09	2.7E-09	2.8E-09	1.1E-09

Measurements

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	179.9E-09	177.3E-09	177.5E-09	175.0E-09	175.8E-09	176.8E-09	179.5E-09	174.7E-09	179.6E-09	176.1E-09	176.2E-09	179.0E-09	177.3E-09
OFF_PROTON samples													
5	179.9E-09	171.2E-09	172.4E-09	170.5E-09	173.1E-09	174.9E-09	177.1E-09	176.3E-09	178.7E-09	179.1E-09	180.1E-09	180.5E-09	179.8E-09
6	176.8E-09	172.9E-09	168.9E-09	168.0E-09	172.1E-09	175.0E-09	177.8E-09	178.0E-09	181.3E-09	182.6E-09	184.2E-09	184.7E-09	179.0E-09
7	178.8E-09	172.5E-09	170.7E-09	169.9E-09	173.9E-09	177.2E-09	181.2E-09	180.7E-09	184.6E-09	186.2E-09	188.0E-09	188.9E-09	182.9E-09
Statistics													
Min	176.8E-09	171.2E-09	168.9E-09	168.0E-09	172.1E-09	174.9E-09	177.1E-09	176.3E-09	178.7E-09	179.1E-09	180.1E-09	180.5E-09	179.0E-09
Max	179.9E-09	172.9E-09	172.4E-09	170.5E-09	173.9E-09	177.2E-09	181.2E-09	180.7E-09	184.6E-09	186.2E-09	188.0E-09	188.9E-09	182.9E-09
Average	178.5E-09	172.2E-09	170.7E-09	169.5E-09	173.0E-09	175.7E-09	178.7E-09	178.3E-09	181.6E-09	182.7E-09	184.1E-09	184.7E-09	180.6E-09
Sigma	1.3E-09	743.4E-12	1.4E-09	1.1E-09	743.0E-12	1.1E-09	1.8E-09	1.8E-09	2.4E-09	2.9E-09	3.2E-09	3.5E-09	1.7E-09

Drift Calculation

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-8.7E-09	-7.5E-09	-9.4E-09	-6.8E-09	-5.0E-09	-2.8E-09	-3.6E-09	-1.1E-09	-752.7E-12	210.2E-12	616.1E-12	-42.4E-12
6	-	-3.9E-09	-7.9E-09	-8.8E-09	-4.8E-09	-1.8E-09	962.4E-12	1.2E-09	4.5E-09	5.8E-09	7.4E-09	7.9E-09	2.2E-09
7	-	-6.3E-09	-8.1E-09	-8.9E-09	-5.0E-09	-1.6E-09	2.3E-09	1.9E-09	5.8E-09	7.4E-09	9.1E-09	10.1E-09	4.1E-09
Average	-	-6.3E-09	-7.8E-09	-9.0E-09	-5.5E-09	-2.8E-09	163.1E-12	-170.6E-12	3.0E-09	4.1E-09	5.6E-09	6.2E-09	2.1E-09
Sigma	-	2.0E-09	263.3E-12	255.6E-12	923.3E-12	1.5E-09	2.2E-09	2.4E-09	3.0E-09	3.5E-09	3.9E-09	4.0E-09	1.7E-09

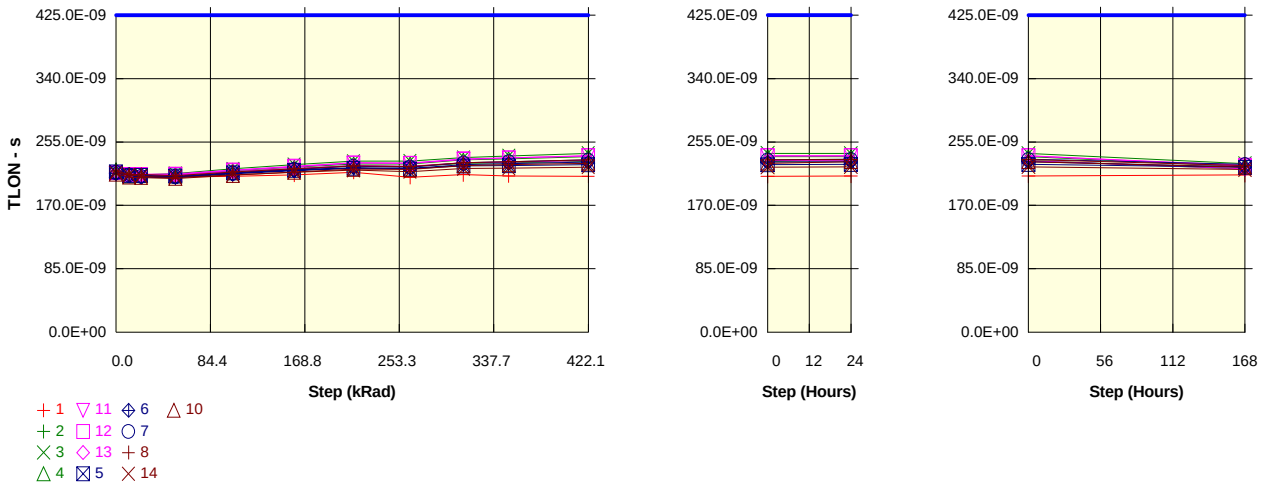
Measurements

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	179.9E-09	177.3E-09	177.5E-09	175.0E-09	175.8E-09	176.8E-09	179.5E-09	174.7E-09	179.6E-09	176.1E-09	176.2E-09	179.0E-09	177.3E-09
OFF_TID samples													
8	183.6E-09	178.6E-09	173.5E-09	171.8E-09	176.2E-09	179.5E-09	182.8E-09	182.7E-09	186.5E-09	187.6E-09	189.5E-09	190.5E-09	183.2E-09
14	182.5E-09	179.5E-09	173.3E-09	169.5E-09	171.7E-09	173.2E-09	175.1E-09	174.1E-09	176.6E-09	176.8E-09	178.1E-09	178.5E-09	177.8E-09
10	179.0E-09	174.5E-09	169.2E-09	167.8E-09	171.5E-09	174.4E-09	177.4E-09	178.0E-09	181.5E-09	182.5E-09	184.4E-09	183.3E-09	179.6E-09
Statistics													
Min	179.0E-09	174.5E-09	169.2E-09	167.8E-09	171.5E-09	173.2E-09	175.1E-09	174.1E-09	176.6E-09	176.8E-09	178.1E-09	178.5E-09	177.8E-09
Max	183.6E-09	179.5E-09	173.5E-09	171.8E-09	176.2E-09	179.5E-09	182.8E-09	182.7E-09	186.5E-09	187.6E-09	189.5E-09	190.5E-09	183.2E-09
Average	181.7E-09	177.5E-09	172.0E-09	169.7E-09	173.1E-09	175.7E-09	178.4E-09	178.3E-09	181.5E-09	182.3E-09	184.0E-09	184.1E-09	180.2E-09
Sigma	1.9E-09	2.2E-09	2.0E-09	1.7E-09	2.2E-09	2.7E-09	3.2E-09	3.5E-09	4.1E-09	4.4E-09	4.7E-09	4.9E-09	2.2E-09

Drift Calculation

THOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-5.0E-09	-10.1E-09	-11.7E-09	-7.4E-09	-4.1E-09	-743.8E-12	-822.4E-12	3.0E-09	4.1E-09	6.0E-09	6.9E-09	-340.2E-12
14	-	-3.0E-09	-9.2E-09	-13.0E-09	-10.8E-09	-9.4E-09	-7.4E-09	-8.4E-09	-5.9E-09	-5.7E-09	-4.4E-09	-4.1E-09	-4.7E-09
10	-	-4.5E-09	-9.8E-09	-11.2E-09	-7.6E-09	-4.7E-09	-1.6E-09	-1.1E-09	2.4E-09	3.4E-09	5.4E-09	4.2E-09	600.5E-12
Average	-	-4.2E-09	-9.7E-09	-12.0E-09	-8.6E-09	-6.0E-09	-3.3E-09	-3.4E-09	-169.7E-12	619.1E-12	2.3E-09	2.4E-09	-1.5E-09
Sigma	-	850.5E-12	358.9E-12	730.1E-12	1.6E-09	2.4E-09	3.0E-09	3.5E-09	4.1E-09	4.5E-09	4.7E-09	4.7E-09	2.3E-09

Parameter : Low side turn-on propagation delay : TLON
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 425.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	214.4E-09	210.7E-09	210.9E-09	208.0E-09	209.3E-09	210.6E-09	214.3E-09	207.6E-09	211.1E-09	209.6E-09	209.2E-09	209.7E-09	210.7E-09
ON_PROTON samples													
2	212.9E-09	210.4E-09	210.4E-09	210.3E-09	215.0E-09	219.1E-09	223.1E-09	222.1E-09	226.5E-09	227.3E-09	229.0E-09	230.2E-09	218.7E-09
3	213.1E-09	209.0E-09	210.7E-09	212.6E-09	218.9E-09	224.6E-09	229.3E-09	229.4E-09	234.2E-09	236.4E-09	239.8E-09	239.6E-09	226.0E-09
4	217.4E-09	209.8E-09	210.6E-09	210.8E-09	216.5E-09	221.3E-09	225.4E-09	225.5E-09	230.9E-09	232.5E-09	235.6E-09	235.3E-09	222.1E-09
Statistics													
Min	212.9E-09	209.0E-09	210.4E-09	210.3E-09	215.0E-09	219.1E-09	223.1E-09	222.1E-09	226.5E-09	227.3E-09	229.0E-09	230.2E-09	218.7E-09
Max	217.4E-09	210.4E-09	210.7E-09	212.6E-09	218.9E-09	224.6E-09	229.3E-09	229.4E-09	234.2E-09	236.4E-09	239.8E-09	239.6E-09	226.0E-09
Average	214.4E-09	209.7E-09	210.6E-09	211.2E-09	216.8E-09	221.7E-09	226.0E-09	225.7E-09	230.6E-09	232.1E-09	234.8E-09	235.0E-09	222.2E-09
Sigma	2.1E-09	596.5E-12	134.7E-12	1.0E-09	1.6E-09	2.3E-09	2.6E-09	3.0E-09	3.2E-09	3.7E-09	4.4E-09	3.9E-09	3.0E-09

Drift Calculation

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-2.5E-09	-2.5E-09	-2.6E-09	2.2E-09	6.3E-09	10.2E-09	9.2E-09	13.6E-09	14.5E-09	16.2E-09	17.3E-09	5.8E-09
3	-	-4.1E-09	-2.4E-09	-466.7E-12	5.8E-09	11.5E-09	16.2E-09	16.3E-09	21.2E-09	23.4E-09	26.7E-09	26.5E-09	12.9E-09
4	-	-7.6E-09	-6.8E-09	-6.6E-09	-863.0E-12	4.0E-09	8.1E-09	8.1E-09	13.6E-09	15.2E-09	18.2E-09	17.9E-09	4.7E-09
Average	-	-4.7E-09	-3.9E-09	-3.2E-09	2.4E-09	7.2E-09	11.5E-09	11.2E-09	16.1E-09	17.7E-09	20.3E-09	20.6E-09	7.8E-09
Sigma	-	2.1E-09	2.1E-09	2.5E-09	2.7E-09	3.2E-09	3.5E-09	3.6E-09	3.6E-09	4.0E-09	4.6E-09	4.2E-09	3.6E-09

Measurements

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	214.4E-09	210.7E-09	210.9E-09	208.0E-09	209.3E-09	210.6E-09	214.3E-09	207.6E-09	211.1E-09	209.6E-09	209.2E-09	209.7E-09	210.7E-09
ON_TID samples													
11	212.8E-09	209.6E-09	210.3E-09	211.2E-09	216.7E-09	221.8E-09	226.7E-09	226.2E-09	231.7E-09	233.5E-09	236.4E-09	236.5E-09	222.5E-09
12	214.1E-09	211.5E-09	211.6E-09	212.1E-09	217.4E-09	222.5E-09	227.1E-09	226.7E-09	232.5E-09	233.8E-09	236.5E-09	236.4E-09	223.9E-09
13	212.3E-09	209.5E-09	209.9E-09	210.3E-09	215.0E-09	219.4E-09	223.2E-09	222.2E-09	227.3E-09	228.0E-09	230.1E-09	230.0E-09	219.0E-09
Statistics													
Min	212.3E-09	209.5E-09	209.9E-09	210.3E-09	215.0E-09	219.4E-09	223.2E-09	222.2E-09	227.3E-09	228.0E-09	230.1E-09	230.0E-09	219.0E-09
Max	214.1E-09	211.5E-09	211.6E-09	212.1E-09	217.4E-09	222.5E-09	227.1E-09	226.7E-09	232.5E-09	233.8E-09	236.5E-09	236.5E-09	223.9E-09
Average	213.1E-09	210.2E-09	210.6E-09	211.2E-09	216.3E-09	221.2E-09	225.7E-09	225.0E-09	230.5E-09	231.8E-09	234.3E-09	234.3E-09	221.8E-09
Sigma	754.2E-12	896.7E-12	704.8E-12	699.5E-12	1.0E-09	1.3E-09	1.8E-09	2.0E-09	2.3E-09	2.7E-09	3.0E-09	3.1E-09	2.1E-09

Drift Calculation

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-3.2E-09	-2.6E-09	-1.6E-09	3.9E-09	9.0E-09	13.9E-09	13.3E-09	18.9E-09	20.7E-09	23.6E-09	23.7E-09	9.7E-09
12	-	-2.6E-09	-2.5E-09	-2.1E-09	3.3E-09	8.4E-09	13.0E-09	12.6E-09	18.4E-09	19.7E-09	22.4E-09	22.3E-09	9.8E-09
13	-	-2.8E-09	-2.4E-09	-2.0E-09	2.7E-09	7.0E-09	10.9E-09	9.9E-09	15.0E-09	15.7E-09	17.8E-09	17.6E-09	6.7E-09
Average	-	-2.9E-09	-2.5E-09	-1.9E-09	3.3E-09	8.1E-09	12.6E-09	11.9E-09	17.4E-09	18.7E-09	21.3E-09	21.2E-09	8.7E-09
Sigma	-	238.3E-12	82.2E-12	184.1E-12	507.3E-12	799.3E-12	1.3E-09	1.5E-09	1.7E-09	2.1E-09	2.5E-09	2.6E-09	1.4E-09

Measurements

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	214.4E-09	210.7E-09	210.9E-09	208.0E-09	209.3E-09	210.6E-09	214.3E-09	207.6E-09	211.1E-09	209.6E-09	209.2E-09	209.7E-09	210.7E-09
OFF_PROTON samples													
5	214.9E-09	209.8E-09	210.1E-09	209.1E-09	213.4E-09	217.2E-09	219.7E-09	218.8E-09	222.7E-09	223.2E-09	224.4E-09	225.0E-09	220.9E-09
6	213.1E-09	210.8E-09	208.1E-09	207.5E-09	211.9E-09	216.4E-09	220.4E-09	219.5E-09	224.7E-09	225.9E-09	228.0E-09	228.4E-09	221.4E-09
7	213.9E-09	210.7E-09	208.8E-09	208.4E-09	213.4E-09	218.2E-09	222.5E-09	221.3E-09	227.1E-09	228.5E-09	230.9E-09	231.9E-09	225.0E-09
Statistics													
Min	213.1E-09	209.8E-09	208.1E-09	207.5E-09	211.9E-09	216.4E-09	219.7E-09	218.8E-09	222.7E-09	223.2E-09	224.4E-09	225.0E-09	220.9E-09
Max	214.9E-09	210.8E-09	210.1E-09	209.1E-09	213.4E-09	218.2E-09	222.5E-09	221.3E-09	227.1E-09	228.5E-09	230.9E-09	231.9E-09	225.0E-09
Average	213.9E-09	210.4E-09	209.0E-09	208.3E-09	212.9E-09	217.3E-09	220.9E-09	219.9E-09	224.8E-09	225.9E-09	227.8E-09	228.4E-09	222.4E-09
Sigma	720.4E-12	467.2E-12	851.5E-12	663.6E-12	689.4E-12	731.5E-12	1.2E-09	1.1E-09	1.8E-09	2.2E-09	2.6E-09	2.8E-09	1.8E-09

Drift Calculation

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-5.1E-09	-4.7E-09	-5.7E-09	-1.5E-09	2.4E-09	4.9E-09	4.0E-09	7.9E-09	8.4E-09	9.6E-09	10.1E-09	6.1E-09
6	-	-2.3E-09	-5.0E-09	-5.6E-09	-1.2E-09	3.3E-09	7.3E-09	6.4E-09	11.6E-09	12.8E-09	14.9E-09	15.3E-09	8.3E-09
7	-	-3.2E-09	-5.1E-09	-5.5E-09	-532.0E-12	4.3E-09	8.7E-09	7.5E-09	13.2E-09	14.6E-09	17.0E-09	18.0E-09	11.1E-09
Average	-	-3.5E-09	-4.9E-09	-5.6E-09	-1.1E-09	3.3E-09	6.9E-09	5.9E-09	10.9E-09	11.9E-09	13.8E-09	14.5E-09	8.5E-09
Sigma	-	1.2E-09	155.7E-12	86.6E-12	393.4E-12	798.2E-12	1.6E-09	1.5E-09	2.2E-09	2.6E-09	3.1E-09	3.3E-09	2.1E-09

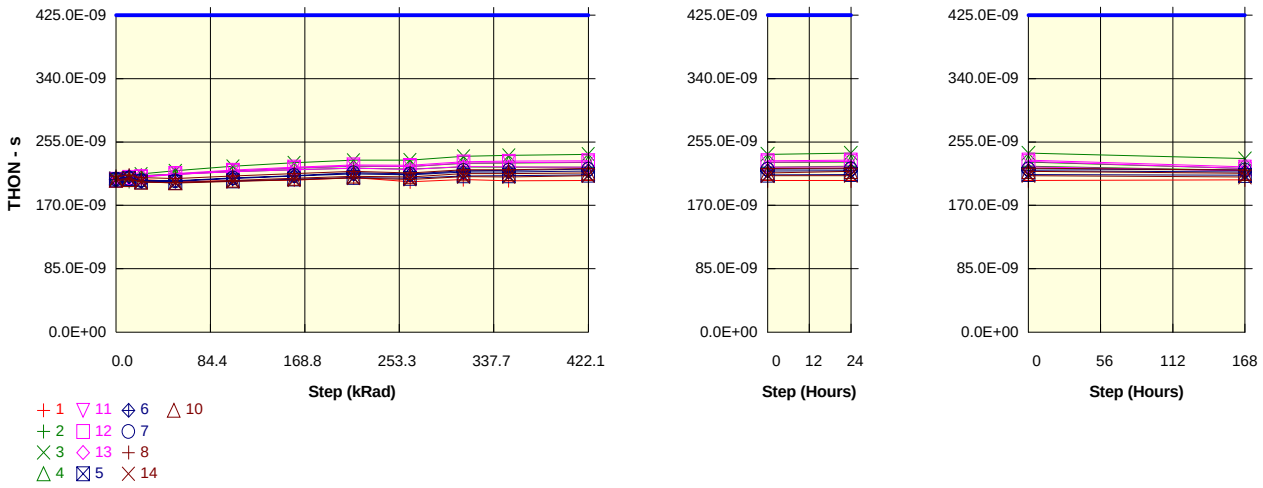
Measurements

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	214.4E-09	210.7E-09	210.9E-09	208.0E-09	209.3E-09	210.6E-09	214.3E-09	207.6E-09	211.1E-09	209.6E-09	209.2E-09	209.7E-09	210.7E-09
OFF_TID samples													
8	215.9E-09	211.6E-09	211.2E-09	209.8E-09	214.7E-09	218.9E-09	223.0E-09	221.9E-09	227.2E-09	228.4E-09	230.9E-09	231.7E-09	223.2E-09
14	213.4E-09	210.8E-09	209.0E-09	207.4E-09	210.9E-09	214.3E-09	217.1E-09	215.3E-09	219.4E-09	219.7E-09	221.3E-09	221.8E-09	218.0E-09
10	212.0E-09	207.9E-09	207.5E-09	206.2E-09	210.3E-09	214.5E-09	218.4E-09	218.1E-09	223.4E-09	224.5E-09	226.5E-09	228.6E-09	221.2E-09
Statistics													
Min	212.0E-09	207.9E-09	207.5E-09	206.2E-09	210.3E-09	214.3E-09	217.1E-09	215.3E-09	219.4E-09	219.7E-09	221.3E-09	221.8E-09	218.0E-09
Max	215.9E-09	211.6E-09	211.2E-09	209.8E-09	214.7E-09	218.9E-09	223.0E-09	221.9E-09	227.2E-09	228.4E-09	230.9E-09	231.7E-09	223.2E-09
Average	213.8E-09	210.1E-09	209.2E-09	207.8E-09	212.0E-09	215.9E-09	219.5E-09	218.4E-09	223.3E-09	224.2E-09	226.2E-09	227.4E-09	220.8E-09
Sigma	1.6E-09	1.6E-09	1.5E-09	1.5E-09	2.0E-09	2.1E-09	2.5E-09	2.7E-09	3.2E-09	3.6E-09	3.9E-09	4.2E-09	2.1E-09

Drift Calculation

TLON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-4.3E-09	-4.6E-09	-6.0E-09	-1.1E-09	3.0E-09	7.1E-09	6.0E-09	11.4E-09	12.5E-09	15.0E-09	15.8E-09	7.3E-09
14	-	-2.6E-09	-4.4E-09	-6.0E-09	-2.5E-09	931.3E-12	3.7E-09	1.9E-09	6.0E-09	6.3E-09	7.9E-09	8.3E-09	4.6E-09
10	-	-4.1E-09	-4.5E-09	-5.8E-09	-1.7E-09	2.5E-09	6.4E-09	6.1E-09	11.4E-09	12.5E-09	14.5E-09	16.6E-09	9.2E-09
Average	-	-3.7E-09	-4.5E-09	-6.0E-09	-1.8E-09	2.1E-09	5.8E-09	4.7E-09	9.6E-09	10.4E-09	12.5E-09	13.6E-09	7.1E-09
Sigma	-	754.7E-12	91.9E-12	119.1E-12	564.7E-12	886.9E-12	1.5E-09	2.0E-09	2.5E-09	2.9E-09	3.2E-09	3.7E-09	1.9E-09

Parameter : High side turn-on propagation delay : THON
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 425.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	206.1E-09	204.2E-09	204.5E-09	202.1E-09	203.0E-09	204.0E-09	207.2E-09	201.6E-09	204.7E-09	203.2E-09	203.3E-09	203.4E-09	204.4E-09
ON_PROTON samples													
2	204.7E-09	202.1E-09	210.1E-09	211.6E-09	215.3E-09	217.9E-09	220.0E-09	218.4E-09	221.6E-09	221.1E-09	221.0E-09	222.3E-09	216.8E-09
3	206.4E-09	206.4E-09	211.9E-09	216.2E-09	222.3E-09	227.0E-09	230.6E-09	230.8E-09	235.7E-09	237.0E-09	238.4E-09	240.1E-09	232.8E-09
4	207.3E-09	206.5E-09	209.1E-09	212.0E-09	216.0E-09	219.8E-09	222.3E-09	221.8E-09	226.4E-09	226.8E-09	227.8E-09	228.2E-09	219.3E-09
Statistics													
Min	204.7E-09	202.1E-09	209.1E-09	211.6E-09	215.3E-09	217.9E-09	220.0E-09	218.4E-09	221.6E-09	221.1E-09	221.0E-09	222.3E-09	216.8E-09
Max	207.3E-09	206.5E-09	211.9E-09	216.2E-09	222.3E-09	227.0E-09	230.6E-09	230.8E-09	235.7E-09	237.0E-09	238.4E-09	240.1E-09	232.8E-09
Average	206.1E-09	205.0E-09	210.4E-09	213.3E-09	217.9E-09	221.5E-09	224.3E-09	223.7E-09	227.9E-09	228.3E-09	229.1E-09	230.2E-09	222.9E-09
Sigma	1.1E-09	2.1E-09	1.2E-09	2.1E-09	3.2E-09	3.9E-09	4.6E-09	5.3E-09	5.9E-09	6.6E-09	7.2E-09	7.4E-09	7.0E-09

Drift Calculation

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-2.6E-09	5.4E-09	6.9E-09	10.6E-09	13.2E-09	15.3E-09	13.7E-09	16.9E-09	16.4E-09	16.3E-09	17.6E-09	12.1E-09
3	-	-61.4E-12	5.5E-09	9.8E-09	15.9E-09	20.6E-09	24.2E-09	24.4E-09	29.3E-09	30.5E-09	32.0E-09	33.7E-09	26.4E-09
4	-	-763.5E-12	1.8E-09	4.7E-09	8.7E-09	12.5E-09	15.0E-09	14.5E-09	19.1E-09	19.5E-09	20.5E-09	20.9E-09	12.0E-09
Average	-	-1.1E-09	4.2E-09	7.1E-09	11.7E-09	15.4E-09	18.2E-09	17.5E-09	21.8E-09	22.2E-09	22.9E-09	24.1E-09	16.8E-09
Sigma	-	1.1E-09	1.8E-09	2.1E-09	3.0E-09	3.7E-09	4.3E-09	4.9E-09	5.4E-09	6.1E-09	6.6E-09	6.9E-09	6.7E-09

Measurements

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	206.1E-09	204.2E-09	204.5E-09	202.1E-09	203.0E-09	204.0E-09	207.2E-09	201.6E-09	204.7E-09	203.2E-09	203.3E-09	203.4E-09	204.4E-09
ON_TID samples													
11	204.7E-09	204.4E-09	207.7E-09	212.7E-09	217.2E-09	221.2E-09	224.4E-09	223.6E-09	228.3E-09	229.3E-09	230.0E-09	230.8E-09	221.4E-09
12	204.1E-09	207.6E-09	208.3E-09	211.1E-09	215.7E-09	219.8E-09	222.7E-09	222.0E-09	226.9E-09	227.4E-09	228.1E-09	228.7E-09	219.3E-09
13	204.5E-09	208.0E-09	209.3E-09	211.7E-09	214.9E-09	217.8E-09	219.8E-09	218.2E-09	221.9E-09	221.5E-09	221.3E-09	221.6E-09	216.2E-09
Statistics													
Min	204.1E-09	204.4E-09	207.7E-09	211.1E-09	214.9E-09	217.8E-09	219.8E-09	218.2E-09	221.9E-09	221.5E-09	221.3E-09	221.6E-09	216.2E-09
Max	204.7E-09	208.0E-09	209.3E-09	212.7E-09	217.2E-09	221.2E-09	224.4E-09	223.6E-09	228.3E-09	229.3E-09	230.0E-09	230.8E-09	221.4E-09
Average	204.4E-09	206.7E-09	208.4E-09	211.8E-09	215.9E-09	219.6E-09	222.3E-09	221.3E-09	225.7E-09	226.0E-09	226.5E-09	227.0E-09	219.0E-09
Sigma	251.6E-12	1.6E-09	673.3E-12	652.3E-12	940.4E-12	1.4E-09	1.9E-09	2.3E-09	2.8E-09	3.3E-09	3.7E-09	3.9E-09	2.1E-09

Drift Calculation

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-346.8E-12	3.0E-09	7.9E-09	12.4E-09	16.5E-09	19.7E-09	18.9E-09	23.6E-09	24.6E-09	25.2E-09	26.1E-09	16.7E-09
12	-	3.5E-09	4.2E-09	7.0E-09	11.5E-09	15.7E-09	18.6E-09	17.9E-09	22.8E-09	23.3E-09	24.0E-09	24.6E-09	15.2E-09
13	-	3.6E-09	4.8E-09	7.2E-09	10.4E-09	13.3E-09	15.3E-09	13.7E-09	17.4E-09	17.0E-09	16.8E-09	17.1E-09	11.7E-09
Average	-	2.2E-09	4.0E-09	7.4E-09	11.5E-09	15.2E-09	17.9E-09	16.8E-09	21.3E-09	21.6E-09	22.0E-09	22.6E-09	14.6E-09
Sigma	-	1.8E-09	774.8E-12	415.3E-12	831.6E-12	1.3E-09	1.9E-09	2.3E-09	2.8E-09	3.3E-09	3.7E-09	3.9E-09	2.1E-09

Measurements

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	206.1E-09	204.2E-09	204.5E-09	202.1E-09	203.0E-09	204.0E-09	207.2E-09	201.6E-09	204.7E-09	203.2E-09	203.3E-09	203.4E-09	204.4E-09
OFF_PROTON samples													
5	204.2E-09	205.9E-09	201.5E-09	200.7E-09	202.6E-09	205.3E-09	207.5E-09	206.2E-09	209.7E-09	209.7E-09	210.6E-09	211.3E-09	210.3E-09
6	204.9E-09	208.2E-09	202.6E-09	202.6E-09	206.1E-09	209.3E-09	212.0E-09	210.9E-09	214.5E-09	214.8E-09	216.1E-09	216.3E-09	214.5E-09
7	205.1E-09	205.6E-09	203.2E-09	202.9E-09	206.7E-09	210.1E-09	213.6E-09	211.9E-09	216.4E-09	216.8E-09	218.4E-09	218.9E-09	217.2E-09
Statistics													
Min	204.2E-09	205.6E-09	201.5E-09	200.7E-09	202.6E-09	205.3E-09	207.5E-09	206.2E-09	209.7E-09	209.7E-09	210.6E-09	211.3E-09	210.3E-09
Max	205.1E-09	208.2E-09	203.2E-09	202.9E-09	206.7E-09	210.1E-09	213.6E-09	211.9E-09	216.4E-09	216.8E-09	218.4E-09	218.9E-09	217.2E-09
Average	204.7E-09	206.6E-09	202.5E-09	202.1E-09	205.1E-09	208.2E-09	211.0E-09	209.6E-09	213.5E-09	213.8E-09	215.0E-09	215.5E-09	214.0E-09
Sigma	375.5E-12	1.2E-09	704.5E-12	981.3E-12	1.8E-09	2.1E-09	2.6E-09	2.4E-09	2.8E-09	3.0E-09	3.3E-09	3.2E-09	2.9E-09

Drift Calculation

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	1.7E-09	-2.7E-09	-3.5E-09	-1.6E-09	1.1E-09	3.2E-09	2.0E-09	5.4E-09	5.5E-09	6.4E-09	7.0E-09	6.0E-09
6	-	3.3E-09	-2.3E-09	-2.3E-09	1.2E-09	4.4E-09	7.1E-09	6.0E-09	9.6E-09	9.9E-09	11.2E-09	11.4E-09	9.6E-09
7	-	530.5E-12	-1.9E-09	-2.2E-09	1.6E-09	5.0E-09	8.5E-09	6.8E-09	11.3E-09	11.8E-09	13.3E-09	13.8E-09	12.2E-09
Average	-	1.9E-09	-2.3E-09	-2.7E-09	397.2E-12	3.5E-09	6.3E-09	4.9E-09	8.8E-09	9.0E-09	10.3E-09	10.7E-09	9.3E-09
Sigma	-	1.1E-09	337.3E-12	608.7E-12	1.4E-09	1.7E-09	2.2E-09	2.1E-09	2.4E-09	2.6E-09	2.9E-09	2.8E-09	2.5E-09

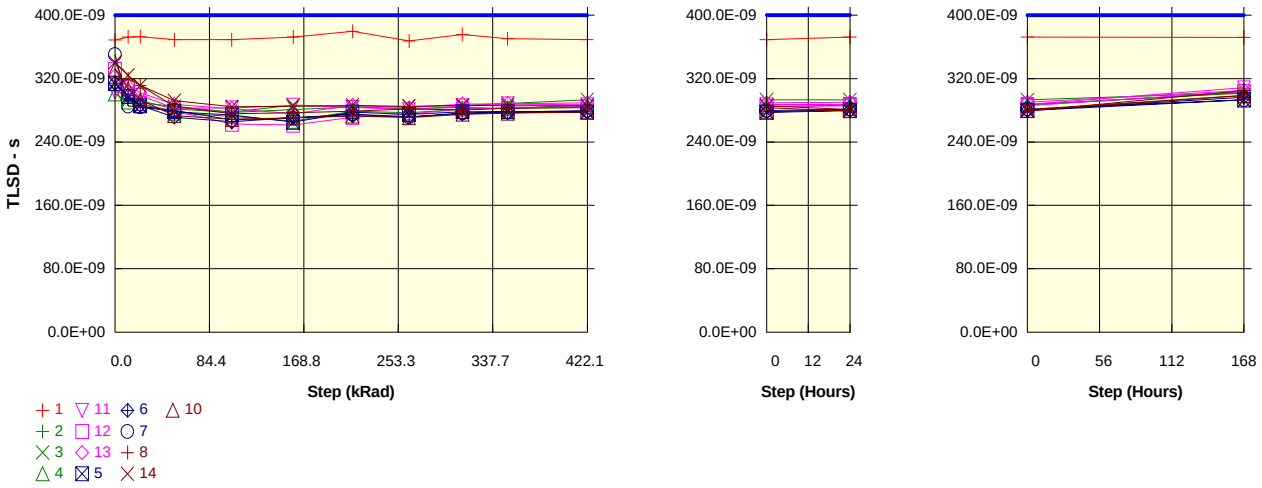
Measurements

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	206.1E-09	204.2E-09	204.5E-09	202.1E-09	203.0E-09	204.0E-09	207.2E-09	201.6E-09	204.7E-09	203.2E-09	203.3E-09	203.4E-09	204.4E-09
OFF_TID samples													
8	208.9E-09	210.4E-09	207.2E-09	206.2E-09	209.4E-09	212.6E-09	215.3E-09	213.4E-09	217.5E-09	217.7E-09	219.3E-09	219.8E-09	217.3E-09
14	204.5E-09	206.6E-09	201.7E-09	200.1E-09	202.0E-09	204.2E-09	206.7E-09	204.7E-09	208.6E-09	208.2E-09	209.7E-09	210.0E-09	208.2E-09
10	203.5E-09	204.5E-09	201.2E-09	200.3E-09	203.5E-09	206.3E-09	209.2E-09	208.3E-09	212.5E-09	212.5E-09	213.5E-09	215.4E-09	212.9E-09
Statistics													
Min	203.5E-09	204.5E-09	201.2E-09	200.1E-09	202.0E-09	204.2E-09	206.7E-09	204.7E-09	208.6E-09	208.2E-09	209.7E-09	210.0E-09	208.2E-09
Max	208.9E-09	210.4E-09	207.2E-09	206.2E-09	209.4E-09	212.6E-09	215.3E-09	213.4E-09	217.5E-09	217.7E-09	219.3E-09	219.8E-09	217.3E-09
Average	205.6E-09	207.2E-09	203.3E-09	202.2E-09	205.0E-09	207.7E-09	210.4E-09	208.8E-09	212.9E-09	212.8E-09	214.2E-09	215.1E-09	212.8E-09
Sigma	2.4E-09	2.4E-09	2.7E-09	2.8E-09	3.2E-09	3.5E-09	3.6E-09	3.6E-09	3.7E-09	3.9E-09	3.9E-09	4.0E-09	3.7E-09

Drift Calculation

THON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	1.5E-09	-1.8E-09	-2.8E-09	454.2E-12	3.6E-09	6.4E-09	4.5E-09	8.6E-09	8.8E-09	10.3E-09	10.9E-09	8.4E-09
14	-	2.1E-09	-2.9E-09	-4.5E-09	-2.5E-09	-264.1E-12	2.2E-09	230.8E-12	4.0E-09	3.7E-09	5.2E-09	5.5E-09	3.7E-09
10	-	1.1E-09	-2.2E-09	-3.1E-09	93.7E-12	2.9E-09	5.8E-09	4.8E-09	9.0E-09	9.1E-09	10.1E-09	11.9E-09	9.4E-09
Average	-	1.5E-09	-2.3E-09	-3.5E-09	-654.0E-12	2.1E-09	4.8E-09	3.2E-09	7.2E-09	7.2E-09	8.5E-09	9.4E-09	7.2E-09
Sigma	-	423.0E-12	440.0E-12	725.7E-12	1.3E-09	1.7E-09	1.8E-09	2.1E-09	2.3E-09	2.5E-09	2.4E-09	2.8E-09	2.5E-09

Parameter : Low side shutdown propagation delay : TLSD
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 400.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	368.9E-09	372.5E-09	372.8E-09	369.1E-09	369.0E-09	372.5E-09	379.6E-09	367.3E-09	375.7E-09	370.2E-09	369.2E-09	372.2E-09	371.9E-09
ON_PROTON samples													
2	307.7E-09	293.7E-09	292.4E-09	281.8E-09	277.0E-09	280.8E-09	284.3E-09	281.6E-09	283.6E-09	282.1E-09	287.1E-09	287.5E-09	301.6E-09
3	315.3E-09	294.9E-09	289.6E-09	284.9E-09	277.6E-09	286.4E-09	284.0E-09	284.6E-09	286.0E-09	288.6E-09	293.1E-09	293.1E-09	302.1E-09
4	300.8E-09	290.5E-09	288.4E-09	276.4E-09	272.2E-09	266.2E-09	278.7E-09	276.7E-09	281.5E-09	282.9E-09	284.7E-09	286.8E-09	302.4E-09
Statistics													
Min	300.8E-09	290.5E-09	288.4E-09	276.4E-09	272.2E-09	266.2E-09	278.7E-09	276.7E-09	281.5E-09	282.1E-09	284.7E-09	286.8E-09	301.6E-09
Max	315.3E-09	294.9E-09	292.4E-09	284.9E-09	277.6E-09	286.4E-09	284.3E-09	284.6E-09	286.0E-09	288.6E-09	293.1E-09	293.1E-09	302.4E-09
Average	308.0E-09	293.0E-09	290.1E-09	281.0E-09	275.6E-09	277.8E-09	282.3E-09	281.0E-09	283.7E-09	284.5E-09	288.3E-09	289.1E-09	302.1E-09
Sigma	5.9E-09	1.9E-09	1.7E-09	3.5E-09	2.4E-09	8.5E-09	2.6E-09	3.3E-09	1.9E-09	2.9E-09	3.5E-09	2.8E-09	344.8E-12

Drift Calculation

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-14.0E-09	-15.4E-09	-26.0E-09	-30.7E-09	-26.9E-09	-23.4E-09	-26.1E-09	-24.1E-09	-25.6E-09	-20.7E-09	-20.3E-09	-6.1E-09
3	-	-20.5E-09	-25.8E-09	-30.4E-09	-37.8E-09	-28.9E-09	-31.3E-09	-30.7E-09	-29.3E-09	-26.7E-09	-22.3E-09	-22.3E-09	-13.2E-09
4	-	-10.3E-09	-12.4E-09	-24.4E-09	-28.6E-09	-34.6E-09	-22.1E-09	-24.1E-09	-19.3E-09	-17.9E-09	-16.1E-09	-14.0E-09	1.6E-09
Average	-	-14.9E-09	-17.9E-09	-26.9E-09	-32.4E-09	-30.1E-09	-25.6E-09	-27.0E-09	-24.2E-09	-23.4E-09	-19.7E-09	-18.9E-09	-5.9E-09
Sigma	-	4.2E-09	5.7E-09	2.6E-09	3.9E-09	3.2E-09	4.1E-09	2.8E-09	4.1E-09	3.9E-09	2.6E-09	3.5E-09	6.1E-09

Measurements

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	368.9E-09	372.5E-09	372.8E-09	369.1E-09	369.0E-09	372.5E-09	379.6E-09	367.3E-09	375.7E-09	370.2E-09	369.2E-09	372.2E-09	371.9E-09
ON_TID samples													
11	303.0E-09	300.5E-09	299.0E-09	282.7E-09	283.1E-09	286.2E-09	283.7E-09	280.8E-09	285.6E-09	287.8E-09	286.8E-09	287.3E-09	308.4E-09
12	331.3E-09	309.4E-09	288.4E-09	279.2E-09	262.4E-09	261.2E-09	271.0E-09	275.2E-09	281.8E-09	282.5E-09	284.4E-09	285.8E-09	303.8E-09
13	323.7E-09	311.1E-09	302.2E-09	287.4E-09	282.2E-09	275.7E-09	286.2E-09	283.2E-09	287.8E-09	288.2E-09	289.4E-09	290.1E-09	304.9E-09
Statistics													
Min	303.0E-09	300.5E-09	288.4E-09	279.2E-09	262.4E-09	261.2E-09	271.0E-09	275.2E-09	281.8E-09	282.5E-09	284.4E-09	285.8E-09	303.8E-09
Max	331.3E-09	311.1E-09	302.2E-09	287.4E-09	283.1E-09	286.2E-09	286.2E-09	283.2E-09	287.8E-09	288.2E-09	289.4E-09	290.1E-09	308.4E-09
Average	319.3E-09	307.0E-09	296.5E-09	283.1E-09	275.9E-09	274.4E-09	280.3E-09	279.7E-09	285.0E-09	286.2E-09	286.9E-09	287.7E-09	305.7E-09
Sigma	12.0E-09	4.6E-09	5.9E-09	3.4E-09	9.5E-09	10.2E-09	6.6E-09	3.3E-09	2.5E-09	2.6E-09	2.1E-09	1.8E-09	2.0E-09

Drift Calculation

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-2.5E-09	-4.0E-09	-20.3E-09	-19.9E-09	-16.8E-09	-19.3E-09	-22.1E-09	-17.4E-09	-15.1E-09	-16.2E-09	-15.7E-09	5.4E-09
12	-	-22.0E-09	-42.9E-09	-52.1E-09	-68.9E-09	-70.1E-09	-60.3E-09	-56.1E-09	-49.6E-09	-48.9E-09	-46.9E-09	-45.5E-09	-27.6E-09
13	-	-12.6E-09	-21.5E-09	-36.3E-09	-41.5E-09	-48.0E-09	-37.5E-09	-40.5E-09	-35.9E-09	-35.5E-09	-34.3E-09	-33.6E-09	-18.8E-09
Average	-	-12.3E-09	-22.8E-09	-36.2E-09	-43.4E-09	-44.9E-09	-39.0E-09	-39.6E-09	-34.3E-09	-33.2E-09	-32.5E-09	-31.6E-09	-13.7E-09
Sigma	-	8.0E-09	15.9E-09	13.0E-09	20.0E-09	21.9E-09	16.8E-09	13.9E-09	13.2E-09	13.9E-09	12.6E-09	12.2E-09	13.9E-09

Measurements

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	368.9E-09	372.5E-09	372.8E-09	369.1E-09	369.0E-09	372.5E-09	379.6E-09	367.3E-09	375.7E-09	370.2E-09	369.2E-09	372.2E-09	371.9E-09
OFF_PROTON samples													
5	313.7E-09	297.2E-09	285.5E-09	278.2E-09	274.1E-09	264.9E-09	277.7E-09	274.8E-09	278.2E-09	278.4E-09	277.3E-09	279.6E-09	293.1E-09
6	314.4E-09	298.5E-09	286.3E-09	271.3E-09	265.3E-09	270.8E-09	273.1E-09	271.5E-09	275.4E-09	276.9E-09	278.2E-09	279.9E-09	296.4E-09
7	350.3E-09	285.2E-09	284.3E-09	279.7E-09	267.9E-09	270.2E-09	275.1E-09	271.5E-09	276.6E-09	277.8E-09	279.6E-09	281.4E-09	293.1E-09
Statistics													
Min	313.7E-09	285.2E-09	284.3E-09	271.3E-09	265.3E-09	264.9E-09	273.1E-09	271.5E-09	275.4E-09	276.9E-09	277.3E-09	279.6E-09	293.1E-09
Max	350.3E-09	298.5E-09	286.3E-09	279.7E-09	274.1E-09	270.8E-09	277.7E-09	274.8E-09	278.2E-09	278.4E-09	279.6E-09	281.4E-09	296.4E-09
Average	326.1E-09	293.6E-09	285.4E-09	276.4E-09	269.1E-09	268.7E-09	275.3E-09	272.6E-09	276.7E-09	277.7E-09	278.3E-09	280.3E-09	294.2E-09
Sigma	17.1E-09	6.0E-09	801.4E-12	3.6E-09	3.7E-09	2.7E-09	1.9E-09	1.5E-09	1.1E-09	595.8E-12	961.3E-12	779.2E-12	1.5E-09

Drift Calculation

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-16.5E-09	-28.2E-09	-35.5E-09	-39.6E-09	-48.8E-09	-35.9E-09	-38.9E-09	-35.5E-09	-35.3E-09	-36.4E-09	-34.1E-09	-20.6E-09
6	-	-15.9E-09	-28.1E-09	-43.1E-09	-49.1E-09	-43.6E-09	-41.3E-09	-42.9E-09	-39.0E-09	-37.5E-09	-36.2E-09	-34.5E-09	-18.0E-09
7	-	-65.1E-09	-66.0E-09	-70.6E-09	-82.4E-09	-80.1E-09	-75.2E-09	-78.8E-09	-73.7E-09	-72.5E-09	-70.7E-09	-68.9E-09	-57.2E-09
Average	-	-32.5E-09	-40.8E-09	-49.7E-09	-57.1E-09	-57.5E-09	-50.8E-09	-53.5E-09	-49.4E-09	-48.4E-09	-47.8E-09	-45.8E-09	-31.9E-09
Sigma	-	23.0E-09	17.8E-09	15.1E-09	18.4E-09	16.1E-09	17.4E-09	17.9E-09	17.3E-09	17.0E-09	16.2E-09	16.3E-09	17.9E-09

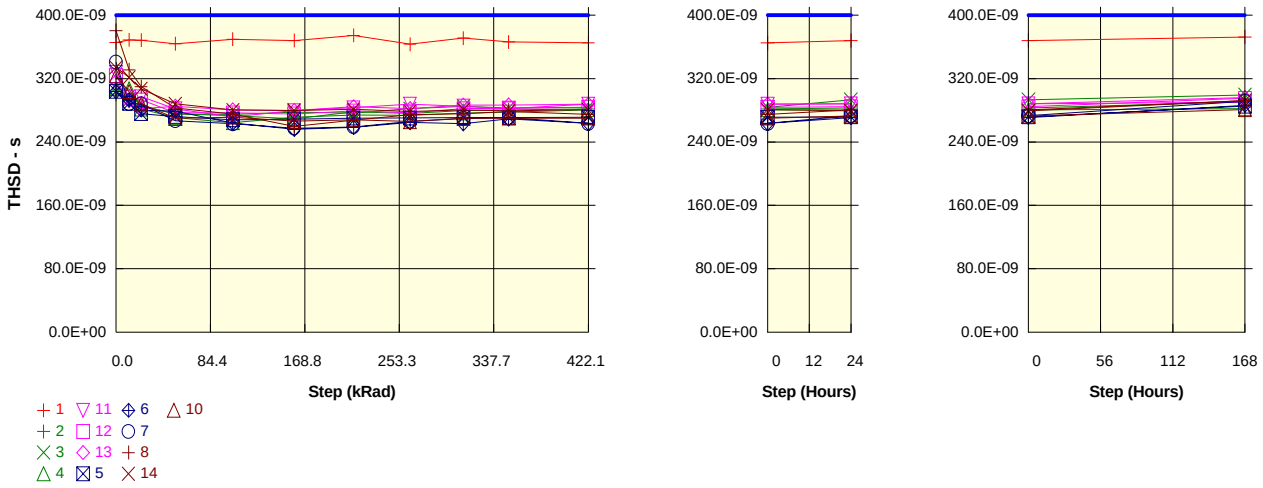
Measurements

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	368.9E-09	372.5E-09	372.8E-09	369.1E-09	369.0E-09	372.5E-09	379.6E-09	367.3E-09	375.7E-09	370.2E-09	369.2E-09	372.2E-09	371.9E-09
OFF_TID samples													
8	311.5E-09	319.4E-09	311.6E-09	284.8E-09	275.6E-09	276.7E-09	278.9E-09	281.7E-09	280.5E-09	282.6E-09	283.2E-09	278.7E-09	304.9E-09
14	340.6E-09	324.0E-09	311.4E-09	292.2E-09	284.5E-09	284.9E-09	286.4E-09	285.0E-09	286.1E-09	285.7E-09	285.7E-09	281.0E-09	298.8E-09
10	332.1E-09	307.0E-09	292.9E-09	273.3E-09	268.7E-09	270.2E-09	272.6E-09	270.5E-09	274.9E-09	276.4E-09	277.7E-09	279.9E-09	298.4E-09
Statistics													
Min	311.5E-09	307.0E-09	292.9E-09	273.3E-09	268.7E-09	270.2E-09	272.6E-09	270.5E-09	274.9E-09	276.4E-09	277.7E-09	278.7E-09	298.4E-09
Max	340.6E-09	324.0E-09	311.6E-09	292.2E-09	284.5E-09	284.9E-09	286.4E-09	285.0E-09	286.1E-09	285.7E-09	285.7E-09	281.0E-09	304.9E-09
Average	328.1E-09	316.8E-09	305.3E-09	283.5E-09	276.2E-09	277.3E-09	279.3E-09	279.1E-09	280.5E-09	281.6E-09	282.2E-09	279.9E-09	300.7E-09
Sigma	12.2E-09	7.2E-09	8.7E-09	7.8E-09	6.5E-09	6.0E-09	5.6E-09	6.2E-09	4.6E-09	3.9E-09	3.3E-09	950.3E-12	2.9E-09

Drift Calculation

TLSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	8.0E-09	65.0E-12	-26.7E-09	-35.9E-09	-34.8E-09	-32.6E-09	-29.8E-09	-30.9E-09	-28.9E-09	-28.3E-09	-32.8E-09	-6.6E-09
14	-	-16.6E-09	-29.2E-09	-48.4E-09	-56.1E-09	-55.7E-09	-54.2E-09	-55.6E-09	-54.5E-09	-54.9E-09	-54.9E-09	-59.6E-09	-41.8E-09
10	-	-25.1E-09	-39.2E-09	-58.8E-09	-63.4E-09	-61.9E-09	-59.5E-09	-61.5E-09	-57.2E-09	-55.7E-09	-54.4E-09	-52.2E-09	-33.7E-09
Average	-	-11.2E-09	-22.8E-09	-44.6E-09	-51.8E-09	-50.8E-09	-48.8E-09	-49.0E-09	-47.5E-09	-46.5E-09	-45.8E-09	-48.2E-09	-27.4E-09
Sigma	-	14.0E-09	16.7E-09	13.4E-09	11.6E-09	11.6E-09	11.6E-09	13.8E-09	11.8E-09	12.4E-09	12.4E-09	11.3E-09	15.0E-09

Parameter : High side shutdown propagation delay : THSD
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 400.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	365.2E-09	368.8E-09	368.4E-09	363.9E-09	369.6E-09	368.0E-09	374.5E-09	363.3E-09	371.0E-09	366.2E-09	364.9E-09	368.1E-09	372.5E-09
ON_PROTON samples													
2	300.4E-09	292.4E-09	285.3E-09	275.5E-09	273.3E-09	269.1E-09	278.0E-09	276.1E-09	279.7E-09	280.6E-09	281.5E-09	283.1E-09	290.6E-09
3	308.4E-09	292.9E-09	285.8E-09	275.1E-09	274.8E-09	277.8E-09	276.3E-09	282.0E-09	285.0E-09	283.0E-09	283.8E-09	293.2E-09	299.4E-09
4	307.1E-09	307.1E-09	281.6E-09	270.8E-09	264.3E-09	271.3E-09	274.0E-09	273.6E-09	276.6E-09	277.4E-09	280.6E-09	280.3E-09	282.0E-09
Statistics													
Min	300.4E-09	292.4E-09	281.6E-09	270.8E-09	264.3E-09	269.1E-09	274.0E-09	273.6E-09	276.6E-09	277.4E-09	280.6E-09	280.3E-09	282.0E-09
Max	308.4E-09	307.1E-09	285.8E-09	275.5E-09	274.8E-09	277.8E-09	278.0E-09	282.0E-09	285.0E-09	283.0E-09	283.8E-09	293.2E-09	299.4E-09
Average	305.3E-09	297.4E-09	284.2E-09	273.8E-09	270.8E-09	272.7E-09	276.1E-09	277.2E-09	280.4E-09	280.3E-09	281.9E-09	285.5E-09	290.7E-09
Sigma	3.5E-09	6.8E-09	1.9E-09	2.1E-09	4.7E-09	3.7E-09	1.6E-09	3.5E-09	3.5E-09	2.3E-09	1.3E-09	5.5E-09	7.1E-09

Drift Calculation

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-8.0E-09	-15.1E-09	-24.8E-09	-27.1E-09	-31.3E-09	-22.4E-09	-24.2E-09	-20.7E-09	-19.8E-09	-18.9E-09	-17.3E-09	-9.8E-09
3	-	-15.5E-09	-22.6E-09	-33.3E-09	-33.6E-09	-30.6E-09	-32.0E-09	-26.4E-09	-23.4E-09	-25.4E-09	-24.6E-09	-15.2E-09	-9.0E-09
4	-	-34.0E-12	-25.5E-09	-36.3E-09	-42.9E-09	-35.8E-09	-33.1E-09	-33.5E-09	-30.5E-09	-29.7E-09	-26.5E-09	-26.8E-09	-25.1E-09
Average	-	-7.8E-09	-21.1E-09	-31.5E-09	-34.5E-09	-32.6E-09	-29.2E-09	-28.1E-09	-24.9E-09	-25.0E-09	-23.4E-09	-19.8E-09	-14.6E-09
Sigma	-	6.3E-09	4.4E-09	4.8E-09	6.5E-09	2.3E-09	4.8E-09	4.0E-09	4.1E-09	4.0E-09	3.3E-09	5.0E-09	7.4E-09

Measurements

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	365.2E-09	368.8E-09	368.4E-09	363.9E-09	369.6E-09	368.0E-09	374.5E-09	363.3E-09	371.0E-09	366.2E-09	364.9E-09	368.1E-09	372.5E-09
ON_TID samples													
11	327.8E-09	292.4E-09	297.1E-09	281.8E-09	271.7E-09	279.5E-09	283.3E-09	287.7E-09	285.1E-09	282.0E-09	287.7E-09	288.1E-09	290.2E-09
12	323.7E-09	296.4E-09	292.9E-09	276.8E-09	276.7E-09	275.3E-09	279.2E-09	277.0E-09	281.9E-09	282.6E-09	283.8E-09	284.5E-09	295.0E-09
13	316.4E-09	292.2E-09	282.0E-09	285.2E-09	280.7E-09	279.7E-09	284.4E-09	282.3E-09	286.6E-09	286.8E-09	287.6E-09	288.0E-09	296.0E-09
Statistics													
Min	316.4E-09	292.2E-09	282.0E-09	276.8E-09	271.7E-09	275.3E-09	279.2E-09	277.0E-09	281.9E-09	282.0E-09	283.8E-09	284.5E-09	290.2E-09
Max	327.8E-09	296.4E-09	297.1E-09	285.2E-09	280.7E-09	279.7E-09	284.4E-09	287.7E-09	286.6E-09	286.8E-09	287.7E-09	288.1E-09	296.0E-09
Average	322.7E-09	293.6E-09	290.6E-09	281.2E-09	276.3E-09	278.2E-09	282.3E-09	282.3E-09	284.5E-09	283.8E-09	286.4E-09	286.9E-09	293.7E-09
Sigma	4.7E-09	1.9E-09	6.4E-09	3.4E-09	3.7E-09	2.0E-09	2.2E-09	4.4E-09	1.9E-09	2.1E-09	1.8E-09	1.7E-09	2.5E-09

Drift Calculation

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-35.4E-09	-30.7E-09	-46.0E-09	-56.1E-09	-48.3E-09	-44.5E-09	-40.1E-09	-42.7E-09	-45.8E-09	-40.1E-09	-39.7E-09	-37.6E-09
12	-	-27.4E-09	-30.8E-09	-46.9E-09	-47.0E-09	-48.4E-09	-44.5E-09	-46.7E-09	-41.8E-09	-41.1E-09	-40.0E-09	-39.2E-09	-28.7E-09
13	-	-24.3E-09	-34.5E-09	-31.3E-09	-35.8E-09	-36.8E-09	-32.1E-09	-34.2E-09	-29.9E-09	-29.7E-09	-28.8E-09	-28.4E-09	-20.5E-09
Average	-	-29.0E-09	-32.0E-09	-41.4E-09	-46.3E-09	-44.5E-09	-40.4E-09	-40.3E-09	-38.1E-09	-38.9E-09	-36.3E-09	-35.8E-09	-28.9E-09
Sigma	-	4.7E-09	1.7E-09	7.2E-09	8.3E-09	5.5E-09	5.9E-09	5.1E-09	5.8E-09	6.8E-09	5.3E-09	5.2E-09	7.0E-09

Measurements

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	365.2E-09	368.8E-09	368.4E-09	363.9E-09	369.6E-09	368.0E-09	374.5E-09	363.3E-09	371.0E-09	366.2E-09	364.9E-09	368.1E-09	372.5E-09
OFF_PROTON samples													
5	303.7E-09	288.9E-09	275.7E-09	272.0E-09	268.0E-09	268.7E-09	270.1E-09	270.3E-09	270.7E-09	270.7E-09	271.0E-09	271.6E-09	285.2E-09
6	303.5E-09	293.3E-09	280.2E-09	278.8E-09	263.8E-09	256.1E-09	258.5E-09	264.5E-09	262.9E-09	269.0E-09	263.3E-09	270.9E-09	286.3E-09
7	340.8E-09	288.6E-09	288.0E-09	266.8E-09	262.9E-09	257.4E-09	259.0E-09	265.8E-09	269.6E-09	270.6E-09	263.4E-09	273.0E-09	291.6E-09
Statistics													
Min	303.5E-09	288.6E-09	275.7E-09	266.8E-09	262.9E-09	256.1E-09	258.5E-09	264.5E-09	262.9E-09	269.0E-09	263.3E-09	270.9E-09	285.2E-09
Max	340.8E-09	293.3E-09	288.0E-09	278.8E-09	268.0E-09	268.7E-09	270.1E-09	270.3E-09	270.7E-09	270.7E-09	271.0E-09	273.0E-09	291.6E-09
Average	316.0E-09	290.3E-09	281.3E-09	272.5E-09	264.9E-09	260.7E-09	262.5E-09	266.9E-09	267.8E-09	270.1E-09	265.9E-09	271.8E-09	287.7E-09
Sigma	17.5E-09	2.1E-09	5.1E-09	4.9E-09	2.2E-09	5.7E-09	5.4E-09	2.5E-09	3.4E-09	795.3E-12	3.6E-09	883.9E-12	2.8E-09

Drift Calculation

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-14.8E-09	-28.0E-09	-31.7E-09	-35.7E-09	-35.0E-09	-33.6E-09	-33.5E-09	-33.0E-09	-33.0E-09	-32.7E-09	-32.1E-09	-18.5E-09
6	-	-10.2E-09	-23.3E-09	-24.7E-09	-39.7E-09	-47.4E-09	-45.0E-09	-39.0E-09	-40.5E-09	-34.5E-09	-40.2E-09	-32.6E-09	-17.2E-09
7	-	-52.1E-09	-52.8E-09	-73.9E-09	-77.8E-09	-83.3E-09	-81.8E-09	-75.0E-09	-71.2E-09	-70.1E-09	-77.4E-09	-67.8E-09	-49.2E-09
Average	-	-25.7E-09	-34.7E-09	-43.4E-09	-51.1E-09	-55.2E-09	-53.5E-09	-49.1E-09	-48.2E-09	-45.9E-09	-50.1E-09	-44.2E-09	-28.3E-09
Sigma	-	18.8E-09	12.9E-09	21.8E-09	19.0E-09	20.5E-09	20.5E-09	18.4E-09	16.5E-09	17.2E-09	19.5E-09	16.7E-09	14.8E-09

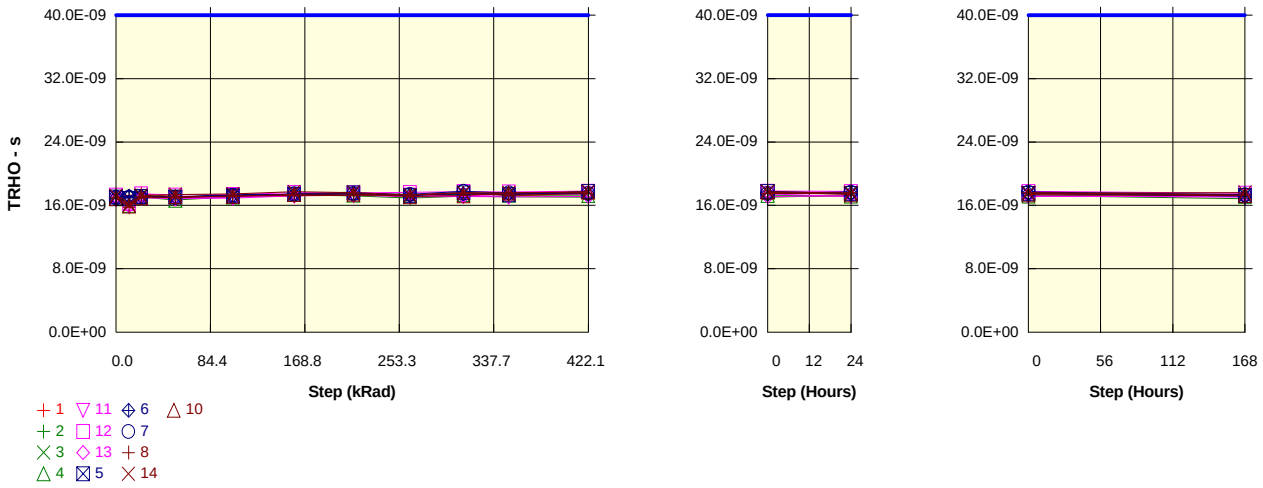
Measurements

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	365.2E-09	368.8E-09	368.4E-09	363.9E-09	369.6E-09	368.0E-09	374.5E-09	363.3E-09	371.0E-09	366.2E-09	364.9E-09	368.1E-09	372.5E-09
OFF_TID samples													
8	380.7E-09	330.9E-09	309.9E-09	283.1E-09	275.0E-09	259.9E-09	267.6E-09	274.3E-09	275.5E-09	278.3E-09	274.8E-09	280.6E-09	292.1E-09
14	334.0E-09	321.4E-09	307.1E-09	288.1E-09	280.4E-09	279.7E-09	281.1E-09	278.4E-09	280.6E-09	279.3E-09	280.7E-09	279.1E-09	292.2E-09
10	323.5E-09	303.4E-09	288.1E-09	269.8E-09	271.2E-09	266.1E-09	268.0E-09	265.8E-09	269.7E-09	269.9E-09	270.0E-09	272.7E-09	280.7E-09
Statistics													
Min	323.5E-09	303.4E-09	288.1E-09	269.8E-09	271.2E-09	259.9E-09	267.6E-09	265.8E-09	269.7E-09	269.9E-09	270.0E-09	272.7E-09	280.7E-09
Max	380.7E-09	330.9E-09	309.9E-09	288.1E-09	280.4E-09	279.7E-09	281.1E-09	278.4E-09	280.6E-09	279.3E-09	280.7E-09	280.6E-09	292.2E-09
Average	346.0E-09	318.6E-09	301.7E-09	280.3E-09	275.5E-09	268.6E-09	272.3E-09	272.8E-09	275.3E-09	275.8E-09	275.2E-09	277.5E-09	288.4E-09
Sigma	24.9E-09	11.4E-09	9.7E-09	7.7E-09	3.8E-09	8.3E-09	6.3E-09	5.2E-09	4.4E-09	4.2E-09	4.4E-09	3.4E-09	5.4E-09

Drift Calculation

THSD	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-49.7E-09	-70.8E-09	-97.6E-09	-105.7E-09	-120.8E-09	-113.1E-09	-106.4E-09	-105.2E-09	-102.4E-09	-105.8E-09	-100.1E-09	-88.5E-09
14	-	-12.6E-09	-26.9E-09	-45.9E-09	-53.6E-09	-54.3E-09	-52.9E-09	-55.6E-09	-53.4E-09	-54.7E-09	-53.2E-09	-54.9E-09	-41.7E-09
10	-	-20.1E-09	-35.4E-09	-53.7E-09	-52.3E-09	-57.3E-09	-55.4E-09	-57.7E-09	-53.7E-09	-53.5E-09	-53.4E-09	-50.8E-09	-42.7E-09
Average	-	-27.5E-09	-44.3E-09	-65.7E-09	-70.5E-09	-77.5E-09	-73.8E-09	-73.2E-09	-70.8E-09	-70.2E-09	-70.8E-09	-68.6E-09	-57.7E-09
Sigma	-	16.0E-09	19.0E-09	22.8E-09	24.9E-09	30.7E-09	27.8E-09	23.5E-09	24.3E-09	22.8E-09	24.8E-09	22.3E-09	21.8E-09

Parameter : HO rise time : TRHO
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 40.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	17.3E-09	17.2E-09	17.5E-09	17.1E-09	17.1E-09	17.2E-09	17.6E-09	17.0E-09	17.6E-09	17.3E-09	17.1E-09	17.2E-09	17.3E-09
ON_PROTON samples													
2	16.9E-09	17.0E-09	17.1E-09	16.8E-09	17.0E-09	17.3E-09	17.2E-09	16.9E-09	17.1E-09	17.1E-09	17.0E-09	17.3E-09	16.8E-09
3	17.1E-09	16.1E-09	17.3E-09	17.1E-09	17.3E-09	17.4E-09	17.7E-09	17.2E-09	17.5E-09	17.6E-09	17.7E-09	17.6E-09	17.3E-09
4	16.9E-09	16.0E-09	17.0E-09	16.7E-09	17.1E-09	17.4E-09	17.3E-09	17.3E-09	17.4E-09	17.3E-09	17.3E-09	17.2E-09	17.1E-09
Statistics													
Min	16.9E-09	16.0E-09	17.0E-09	16.7E-09	17.0E-09	17.3E-09	17.2E-09	16.9E-09	17.1E-09	17.1E-09	17.0E-09	17.2E-09	16.8E-09
Max	17.1E-09	17.0E-09	17.3E-09	17.1E-09	17.3E-09	17.4E-09	17.7E-09	17.3E-09	17.5E-09	17.6E-09	17.7E-09	17.6E-09	17.3E-09
Average	16.9E-09	16.4E-09	17.2E-09	16.9E-09	17.1E-09	17.4E-09	17.4E-09	17.1E-09	17.3E-09	17.3E-09	17.3E-09	17.4E-09	17.1E-09
Sigma	122.8E-12	466.4E-12	97.9E-12	168.2E-12	120.2E-12	52.7E-12	219.0E-12	170.4E-12	136.4E-12	191.7E-12	278.1E-12	196.2E-12	203.3E-12

Drift Calculation

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	163.0E-12	263.0E-12	-29.0E-12	167.0E-12	441.0E-12	326.0E-12	53.0E-12	278.0E-12	234.0E-12	172.0E-12	397.0E-12	-22.0E-12
3	-	-1.0E-09	165.0E-12	-42.0E-12	180.0E-12	274.0E-12	576.0E-12	117.0E-12	334.0E-12	443.0E-12	584.0E-12	510.0E-12	212.0E-12
4	-	-863.0E-12	192.0E-12	-190.0E-12	209.0E-12	566.0E-12	438.0E-12	444.0E-12	531.0E-12	448.0E-12	412.0E-12	322.0E-12	280.0E-12
Average	-	-581.3E-12	206.7E-12	-87.0E-12	185.3E-12	427.0E-12	446.7E-12	204.7E-12	381.0E-12	375.0E-12	389.3E-12	409.7E-12	156.7E-12
Sigma	-	531.5E-12	41.3E-12	73.0E-12	17.6E-12	119.6E-12	102.2E-12	171.2E-12	108.5E-12	99.7E-12	169.0E-12	77.3E-12	129.4E-12

Measurements

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	17.3E-09	17.2E-09	17.5E-09	17.1E-09	17.1E-09	17.2E-09	17.6E-09	17.0E-09	17.6E-09	17.3E-09	17.1E-09	17.2E-09	17.3E-09
ON_TID samples													
11	16.9E-09	16.1E-09	17.1E-09	16.9E-09	17.0E-09	17.3E-09	17.3E-09	17.3E-09	17.2E-09	17.3E-09	17.5E-09	17.1E-09	17.2E-09
12	17.3E-09	16.2E-09	17.5E-09	17.3E-09	17.4E-09	17.6E-09	17.6E-09	17.6E-09	17.7E-09	17.7E-09	17.8E-09	17.8E-09	17.5E-09
13	16.8E-09	16.0E-09	16.9E-09	16.8E-09	16.9E-09	17.2E-09	17.3E-09	17.1E-09	17.1E-09	17.1E-09	17.1E-09	17.2E-09	17.0E-09
Statistics													
Min	16.8E-09	16.0E-09	16.9E-09	16.8E-09	16.9E-09	17.2E-09	17.3E-09	17.1E-09	17.1E-09	17.1E-09	17.1E-09	17.1E-09	17.0E-09
Max	17.3E-09	16.2E-09	17.5E-09	17.3E-09	17.4E-09	17.6E-09	17.6E-09	17.6E-09	17.7E-09	17.7E-09	17.8E-09	17.8E-09	17.5E-09
Average	17.0E-09	16.1E-09	17.2E-09	17.0E-09	17.1E-09	17.4E-09	17.4E-09	17.3E-09	17.4E-09	17.4E-09	17.5E-09	17.4E-09	17.2E-09
Sigma	226.6E-12	112.6E-12	215.4E-12	203.5E-12	186.8E-12	180.6E-12	135.8E-12	223.2E-12	266.4E-12	250.1E-12	267.8E-12	283.9E-12	208.9E-12

Drift Calculation

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-755.0E-12	245.0E-12	53.0E-12	145.0E-12	408.0E-12	385.0E-12	417.0E-12	328.0E-12	454.0E-12	572.0E-12	232.0E-12	267.0E-12
12	-	-1.1E-09	153.4E-12	-2.6E-12	56.4E-12	304.4E-12	263.4E-12	324.4E-12	427.4E-12	378.4E-12	485.4E-12	456.4E-12	217.4E-12
13	-	-815.0E-12	156.0E-12	45.0E-12	142.0E-12	403.0E-12	511.0E-12	306.0E-12	350.0E-12	292.0E-12	354.0E-12	432.0E-12	251.0E-12
Average	-	-878.5E-12	184.8E-12	31.8E-12	114.5E-12	371.8E-12	386.5E-12	349.1E-12	368.5E-12	374.8E-12	470.5E-12	373.5E-12	245.1E-12
Sigma	-	134.5E-12	42.6E-12	24.5E-12	41.1E-12	47.7E-12	101.1E-12	48.6E-12	42.6E-12	66.2E-12	89.6E-12	100.5E-12	20.7E-12

Measurements

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	17.3E-09	17.2E-09	17.5E-09	17.1E-09	17.1E-09	17.2E-09	17.6E-09	17.0E-09	17.6E-09	17.3E-09	17.1E-09	17.2E-09	17.3E-09
OFF_PROTON samples													
5	17.1E-09	16.9E-09	17.1E-09	17.1E-09	17.2E-09	17.4E-09	17.6E-09	17.2E-09	17.6E-09	17.3E-09	17.7E-09	17.5E-09	17.3E-09
6	17.0E-09	17.2E-09	17.1E-09	17.0E-09	17.3E-09	17.4E-09	17.5E-09	17.3E-09	17.5E-09	17.5E-09	17.5E-09	17.5E-09	17.1E-09
7	17.0E-09	17.1E-09	17.0E-09	17.0E-09	17.2E-09	17.4E-09	17.5E-09	17.4E-09	17.8E-09	17.6E-09	17.5E-09	17.7E-09	17.4E-09
Statistics													
Min	17.0E-09	16.9E-09	17.0E-09	17.0E-09	17.2E-09	17.4E-09	17.5E-09	17.2E-09	17.5E-09	17.3E-09	17.5E-09	17.5E-09	17.1E-09
Max	17.1E-09	17.2E-09	17.1E-09	17.1E-09	17.3E-09	17.4E-09	17.6E-09	17.4E-09	17.8E-09	17.6E-09	17.7E-09	17.7E-09	17.4E-09
Average	17.0E-09	17.0E-09	17.1E-09	17.0E-09	17.2E-09	17.4E-09	17.5E-09	17.3E-09	17.6E-09	17.5E-09	17.6E-09	17.6E-09	17.2E-09
Sigma	38.6E-12	120.9E-12	49.3E-12	13.7E-12	18.4E-12	4.8E-12	51.5E-12	68.6E-12	130.1E-12	98.0E-12	119.6E-12	86.5E-12	88.8E-12

Drift Calculation

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-196.0E-12	90.0E-12	6.0E-12	163.0E-12	351.0E-12	516.0E-12	165.0E-12	526.0E-12	281.0E-12	691.0E-12	434.0E-12	199.0E-12
6	-	185.0E-12	138.0E-12	71.0E-12	298.0E-12	443.0E-12	493.0E-12	337.0E-12	485.0E-12	497.0E-12	509.0E-12	540.0E-12	169.0E-12
7	-	67.0E-12	41.0E-12	44.0E-12	257.0E-12	432.0E-12	481.0E-12	403.0E-12	782.0E-12	591.0E-12	531.0E-12	695.0E-12	366.0E-12
Average	-	18.7E-12	89.7E-12	40.3E-12	239.3E-12	408.7E-12	496.7E-12	301.7E-12	597.7E-12	456.3E-12	577.0E-12	556.3E-12	244.7E-12
Sigma	-	159.3E-12	39.6E-12	26.7E-12	56.5E-12	41.0E-12	14.5E-12	100.3E-12	131.4E-12	129.8E-12	81.1E-12	107.2E-12	86.7E-12

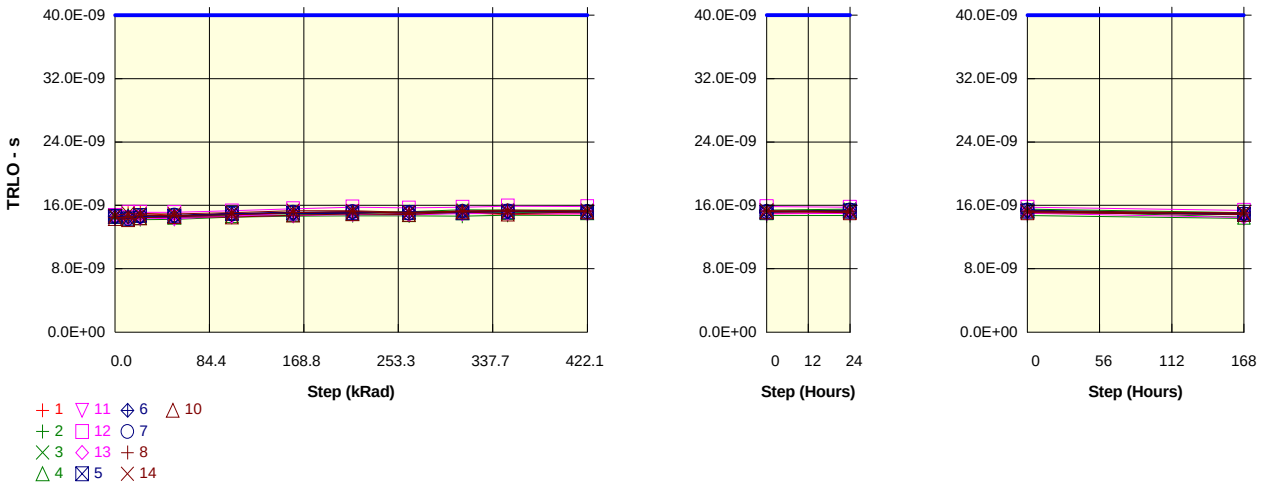
Measurements

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	17.3E-09	17.2E-09	17.5E-09	17.1E-09	17.1E-09	17.2E-09	17.6E-09	17.0E-09	17.6E-09	17.3E-09	17.1E-09	17.2E-09	17.3E-09
OFF_TID samples													
8	17.0E-09	15.8E-09	17.1E-09	16.9E-09	17.2E-09	17.2E-09	17.3E-09	17.3E-09	17.5E-09	17.3E-09	17.5E-09	17.6E-09	17.3E-09
14	17.2E-09	16.1E-09	17.2E-09	17.4E-09	17.4E-09	17.7E-09	17.6E-09	17.3E-09	17.6E-09	17.5E-09	17.7E-09	17.5E-09	17.6E-09
10	16.8E-09	15.9E-09	17.0E-09	17.1E-09	17.1E-09	17.4E-09	17.4E-09	17.1E-09	17.2E-09	17.5E-09	17.7E-09	17.3E-09	17.2E-09
Statistics													
Min	16.8E-09	15.8E-09	17.0E-09	16.9E-09	17.1E-09	17.2E-09	17.3E-09	17.1E-09	17.2E-09	17.3E-09	17.5E-09	17.3E-09	17.2E-09
Max	17.2E-09	16.1E-09	17.2E-09	17.4E-09	17.4E-09	17.7E-09	17.6E-09	17.3E-09	17.6E-09	17.5E-09	17.7E-09	17.6E-09	17.6E-09
Average	17.0E-09	15.9E-09	17.1E-09	17.1E-09	17.2E-09	17.4E-09	17.4E-09	17.2E-09	17.5E-09	17.5E-09	17.6E-09	17.5E-09	17.4E-09
Sigma	160.0E-12	120.3E-12	109.0E-12	174.2E-12	137.3E-12	201.7E-12	143.3E-12	106.0E-12	158.9E-12	117.6E-12	109.4E-12	100.9E-12	161.3E-12

Drift Calculation

TRHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-1.2E-09	162.0E-12	-27.0E-12	211.0E-12	254.0E-12	290.0E-12	362.0E-12	573.0E-12	329.0E-12	498.0E-12	620.0E-12	317.0E-12
14	-	-1.2E-09	0.0E+00	133.0E-12	209.0E-12	481.0E-12	381.0E-12	89.0E-12	365.0E-12	319.0E-12	496.0E-12	299.0E-12	375.0E-12
10	-	-920.0E-12	120.0E-12	242.0E-12	277.0E-12	549.0E-12	583.0E-12	255.0E-12	389.0E-12	702.0E-12	814.0E-12	506.0E-12	397.0E-12
Average	-	-1.1E-09	94.0E-12	116.0E-12	232.3E-12	428.0E-12	418.0E-12	235.3E-12	442.3E-12	450.0E-12	602.7E-12	475.0E-12	363.0E-12
Sigma	-	128.0E-12	68.6E-12	110.5E-12	31.6E-12	126.1E-12	122.4E-12	112.3E-12	92.9E-12	178.2E-12	149.4E-12	132.9E-12	33.7E-12

Parameter : LO rise time : TRLO
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 40.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	14.7E-09	15.0E-09	15.1E-09	14.7E-09	14.9E-09	15.0E-09	15.2E-09	14.9E-09	15.1E-09	14.8E-09	15.0E-09	15.0E-09	15.0E-09
ON_PROTON samples													
2	14.3E-09	14.7E-09	14.2E-09	14.2E-09	14.5E-09	14.6E-09	14.7E-09	14.7E-09	14.6E-09	14.7E-09	14.7E-09	14.7E-09	14.4E-09
3	14.5E-09	14.6E-09	14.5E-09	14.5E-09	14.9E-09	15.0E-09	15.1E-09	15.2E-09	15.4E-09	15.4E-09	15.4E-09	15.5E-09	15.1E-09
4	14.6E-09	14.6E-09	14.4E-09	14.5E-09	14.7E-09	14.8E-09	15.0E-09	14.8E-09	15.0E-09	15.1E-09	15.1E-09	15.3E-09	14.5E-09
Statistics													
Min	14.3E-09	14.6E-09	14.2E-09	14.2E-09	14.5E-09	14.6E-09	14.7E-09	14.7E-09	14.6E-09	14.7E-09	14.7E-09	14.7E-09	14.4E-09
Max	14.6E-09	14.7E-09	14.5E-09	14.5E-09	14.9E-09	15.0E-09	15.1E-09	15.2E-09	15.4E-09	15.4E-09	15.4E-09	15.5E-09	15.1E-09
Average	14.5E-09	14.7E-09	14.4E-09	14.4E-09	14.7E-09	14.8E-09	14.9E-09	14.9E-09	15.0E-09	15.1E-09	15.1E-09	15.2E-09	14.6E-09
Sigma	146.9E-12	50.3E-12	136.9E-12	134.1E-12	141.1E-12	167.1E-12	163.1E-12	217.0E-12	334.4E-12	278.9E-12	283.4E-12	346.9E-12	312.0E-12

Drift Calculation

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	459.0E-12	-85.0E-12	-44.0E-12	231.0E-12	346.0E-12	416.0E-12	390.0E-12	345.0E-12	465.0E-12	434.0E-12	445.0E-12	78.0E-12
3	-	91.0E-12	-36.0E-12	3.0E-12	310.0E-12	489.0E-12	539.0E-12	642.0E-12	898.0E-12	882.0E-12	862.0E-12	1000.0E-12	537.0E-12
4	-	5.0E-12	-171.0E-12	-144.0E-12	77.0E-12	192.0E-12	346.0E-12	203.0E-12	428.0E-12	475.0E-12	449.0E-12	702.0E-12	-112.0E-12
Average	-	185.0E-12	-97.3E-12	-61.7E-12	206.0E-12	342.3E-12	433.7E-12	411.7E-12	557.0E-12	607.3E-12	581.7E-12	715.7E-12	167.7E-12
Sigma	-	196.9E-12	55.8E-12	61.3E-12	96.8E-12	121.3E-12	79.8E-12	179.9E-12	243.5E-12	194.3E-12	198.3E-12	226.8E-12	272.4E-12

Measurements

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	14.7E-09	15.0E-09	15.1E-09	14.7E-09	14.9E-09	15.0E-09	15.2E-09	14.9E-09	15.1E-09	14.8E-09	15.0E-09	15.0E-09	15.0E-09
ON_TID samples													
11	14.4E-09	14.4E-09	14.5E-09	14.5E-09	14.6E-09	15.0E-09	15.2E-09	15.0E-09	15.1E-09	15.3E-09	15.1E-09	15.2E-09	14.8E-09
12	14.7E-09	15.1E-09	15.1E-09	15.1E-09	15.3E-09	15.6E-09	15.8E-09	15.7E-09	15.8E-09	15.9E-09	15.8E-09	15.8E-09	15.4E-09
13	14.5E-09	14.3E-09	14.4E-09	14.3E-09	14.7E-09	14.7E-09	14.8E-09	14.8E-09	14.9E-09	15.0E-09	14.9E-09	15.0E-09	14.5E-09
Statistics													
Min	14.4E-09	14.3E-09	14.4E-09	14.3E-09	14.6E-09	14.7E-09	14.8E-09	14.8E-09	14.9E-09	15.0E-09	14.9E-09	15.0E-09	14.5E-09
Max	14.7E-09	15.1E-09	15.1E-09	15.1E-09	15.3E-09	15.6E-09	15.8E-09	15.7E-09	15.8E-09	15.9E-09	15.8E-09	15.8E-09	15.4E-09
Average	14.6E-09	14.6E-09	14.7E-09	14.6E-09	14.9E-09	15.1E-09	15.3E-09	15.2E-09	15.3E-09	15.4E-09	15.3E-09	15.3E-09	14.9E-09
Sigma	128.2E-12	370.2E-12	339.7E-12	341.0E-12	317.5E-12	363.1E-12	389.0E-12	370.2E-12	361.0E-12	390.7E-12	387.5E-12	327.7E-12	366.9E-12

Drift Calculation

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-11.0E-12	13.0E-12	45.0E-12	190.0E-12	603.0E-12	731.0E-12	581.0E-12	647.0E-12	836.0E-12	702.0E-12	741.0E-12	353.0E-12
12	-	414.0E-12	407.0E-12	382.0E-12	582.0E-12	848.0E-12	1.0E-09	938.0E-12	1.0E-09	1.2E-09	1.1E-09	1.0E-09	637.0E-12
13	-	-176.0E-12	-95.0E-12	-159.0E-12	167.0E-12	216.0E-12	358.0E-12	315.0E-12	458.0E-12	493.0E-12	446.0E-12	518.0E-12	2.0E-12
Average	-	75.7E-12	108.3E-12	89.3E-12	313.0E-12	555.7E-12	712.0E-12	611.3E-12	714.0E-12	836.3E-12	750.7E-12	765.0E-12	330.7E-12
Sigma	-	248.5E-12	215.7E-12	223.1E-12	190.4E-12	260.2E-12	281.6E-12	255.2E-12	241.1E-12	280.5E-12	270.8E-12	212.2E-12	259.7E-12

Measurements

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	14.7E-09	15.0E-09	15.1E-09	14.7E-09	14.9E-09	15.0E-09	15.2E-09	14.9E-09	15.1E-09	14.8E-09	15.0E-09	15.0E-09	15.0E-09
OFF_PROTON samples													
5	14.6E-09	14.3E-09	14.7E-09	14.7E-09	15.0E-09	15.0E-09	15.1E-09	15.1E-09	15.1E-09	15.2E-09	15.1E-09	15.3E-09	14.9E-09
6	14.6E-09	14.6E-09	14.5E-09	14.6E-09	14.9E-09	15.0E-09	15.1E-09	15.2E-09	15.3E-09	15.2E-09	15.3E-09	15.3E-09	14.9E-09
7	14.6E-09	14.3E-09	14.7E-09	14.8E-09	14.9E-09	15.1E-09	15.2E-09	15.0E-09	15.3E-09	15.3E-09	15.2E-09	15.4E-09	14.9E-09
Statistics													
Min	14.6E-09	14.3E-09	14.5E-09	14.6E-09	14.9E-09	15.0E-09	15.1E-09	15.0E-09	15.1E-09	15.2E-09	15.1E-09	15.3E-09	14.9E-09
Max	14.6E-09	14.6E-09	14.7E-09	14.8E-09	15.0E-09	15.1E-09	15.2E-09	15.2E-09	15.3E-09	15.3E-09	15.3E-09	15.4E-09	14.9E-09
Average	14.6E-09	14.4E-09	14.6E-09	14.7E-09	14.9E-09	15.0E-09	15.1E-09	15.1E-09	15.2E-09	15.2E-09	15.2E-09	15.3E-09	14.9E-09
Sigma	32.7E-12	117.3E-12	89.4E-12	86.3E-12	46.9E-12	60.0E-12	73.8E-12	56.8E-12	87.2E-12	45.0E-12	58.8E-12	67.7E-12	31.1E-12

Drift Calculation

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-342.0E-12	112.0E-12	23.0E-12	352.0E-12	408.0E-12	421.0E-12	489.0E-12	443.0E-12	559.0E-12	518.0E-12	654.0E-12	225.0E-12
6	-	-557.2E-18	-28.0E-12	8.0E-12	316.0E-12	427.0E-12	502.0E-12	598.0E-12	705.0E-12	678.0E-12	740.0E-12	703.0E-12	324.0E-12
7	-	-285.0E-12	43.0E-12	164.0E-12	330.0E-12	518.0E-12	602.0E-12	410.0E-12	652.0E-12	691.0E-12	610.0E-12	804.0E-12	322.0E-12
Average	-	-209.0E-12	42.3E-12	65.0E-12	332.7E-12	451.0E-12	508.3E-12	499.0E-12	600.0E-12	642.7E-12	622.7E-12	720.3E-12	290.3E-12
Sigma	-	149.6E-12	57.2E-12	70.3E-12	14.8E-12	48.0E-12	74.0E-12	77.1E-12	113.1E-12	59.4E-12	91.1E-12	62.5E-12	46.2E-12

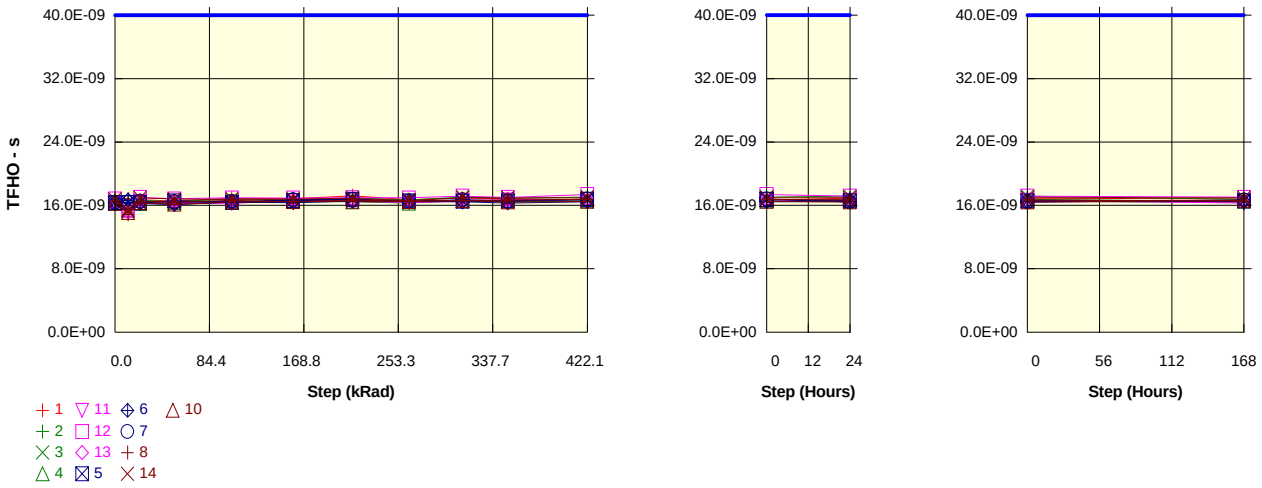
Measurements

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	14.7E-09	15.0E-09	15.1E-09	14.7E-09	14.9E-09	15.0E-09	15.2E-09	14.9E-09	15.1E-09	14.8E-09	15.0E-09	15.0E-09	15.0E-09
OFF_TID samples													
8	14.5E-09	14.5E-09	14.8E-09	14.7E-09	14.8E-09	15.1E-09	15.2E-09	15.0E-09	15.3E-09	15.4E-09	15.3E-09	15.3E-09	15.1E-09
14	14.7E-09	15.0E-09	14.9E-09	14.9E-09	15.1E-09	15.3E-09	15.3E-09	15.1E-09	15.3E-09	15.3E-09	15.3E-09	15.2E-09	15.0E-09
10	14.3E-09	14.2E-09	14.4E-09	14.6E-09	14.5E-09	14.8E-09	14.9E-09	14.8E-09	15.2E-09	14.9E-09	15.2E-09	15.1E-09	14.8E-09
Statistics													
Min	14.3E-09	14.2E-09	14.4E-09	14.6E-09	14.5E-09	14.8E-09	14.9E-09	14.8E-09	15.2E-09	14.9E-09	15.2E-09	15.1E-09	14.8E-09
Max	14.7E-09	15.0E-09	14.9E-09	14.9E-09	15.1E-09	15.3E-09	15.3E-09	15.1E-09	15.3E-09	15.4E-09	15.3E-09	15.3E-09	15.1E-09
Average	14.5E-09	14.6E-09	14.7E-09	14.7E-09	14.8E-09	15.1E-09	15.1E-09	15.0E-09	15.3E-09	15.2E-09	15.3E-09	15.2E-09	15.0E-09
Sigma	150.6E-12	313.7E-12	204.6E-12	144.1E-12	226.6E-12	237.1E-12	157.5E-12	122.3E-12	34.7E-12	205.7E-12	50.5E-12	80.1E-12	97.2E-12

Drift Calculation

TRLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	8.0E-12	279.0E-12	220.0E-12	314.0E-12	599.0E-12	704.0E-12	532.0E-12	785.0E-12	911.0E-12	800.0E-12	779.0E-12	563.0E-12
14	-	266.0E-12	201.0E-12	212.0E-12	375.0E-12	633.0E-12	602.0E-12	431.0E-12	569.0E-12	557.0E-12	612.0E-12	459.0E-12	336.0E-12
10	-	-128.0E-12	82.0E-12	228.0E-12	187.0E-12	421.0E-12	593.0E-12	501.0E-12	863.0E-12	574.0E-12	861.0E-12	735.0E-12	503.0E-12
Average	-	48.7E-12	187.3E-12	220.0E-12	292.0E-12	551.0E-12	633.0E-12	488.0E-12	739.0E-12	680.7E-12	757.7E-12	657.7E-12	467.3E-12
Sigma	-	163.4E-12	81.0E-12	6.5E-12	78.3E-12	93.0E-12	50.3E-12	42.2E-12	124.4E-12	163.0E-12	106.0E-12	141.6E-12	96.0E-12

Parameter : HO fall time : TFHO
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 40.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	16.7E-09	16.8E-09	16.7E-09	16.5E-09	16.9E-09	16.8E-09	17.2E-09	16.7E-09	16.9E-09	16.8E-09	16.6E-09	16.9E-09	16.8E-09
ON_PROTON samples													
2	16.3E-09	16.4E-09	16.4E-09	16.1E-09	16.5E-09	16.5E-09	16.5E-09	16.4E-09	16.5E-09	16.5E-09	16.5E-09	16.5E-09	16.4E-09
3	16.5E-09	15.3E-09	16.6E-09	16.5E-09	16.8E-09	16.7E-09	17.0E-09	16.7E-09	17.0E-09	16.9E-09	17.0E-09	17.1E-09	16.7E-09
4	16.6E-09	15.4E-09	16.3E-09	16.4E-09	16.4E-09	16.5E-09	16.5E-09	16.3E-09	16.6E-09	16.6E-09	16.6E-09	16.7E-09	16.5E-09
Statistics													
Min	16.3E-09	15.3E-09	16.3E-09	16.1E-09	16.4E-09	16.5E-09	16.5E-09	16.3E-09	16.5E-09	16.5E-09	16.5E-09	16.5E-09	16.4E-09
Max	16.6E-09	16.4E-09	16.6E-09	16.5E-09	16.8E-09	16.7E-09	17.0E-09	16.7E-09	17.0E-09	16.9E-09	17.0E-09	17.1E-09	16.7E-09
Average	16.5E-09	15.7E-09	16.4E-09	16.3E-09	16.6E-09	16.5E-09	16.6E-09	16.4E-09	16.7E-09	16.7E-09	16.7E-09	16.8E-09	16.5E-09
Sigma	139.9E-12	503.8E-12	158.1E-12	146.7E-12	189.9E-12	92.0E-12	219.8E-12	163.5E-12	217.6E-12	174.5E-12	231.7E-12	256.6E-12	151.5E-12

Drift Calculation

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	151.0E-12	177.0E-12	-136.0E-12	217.0E-12	200.0E-12	260.0E-12	122.0E-12	274.0E-12	250.0E-12	278.0E-12	262.0E-12	114.0E-12
3	-	-1.3E-09	117.0E-12	-58.0E-12	289.0E-12	149.0E-12	430.0E-12	149.0E-12	511.0E-12	391.0E-12	522.0E-12	613.0E-12	214.0E-12
4	-	-1.1E-09	-321.0E-12	-198.0E-12	-207.0E-12	-63.0E-12	-111.0E-12	-284.0E-12	60.0E-12	28.0E-12	3.0E-12	158.0E-12	-62.0E-12
Average	-	-751.0E-12	-9.0E-12	-130.7E-12	99.7E-12	95.3E-12	193.0E-12	-4.3E-12	281.7E-12	223.0E-12	267.7E-12	344.3E-12	88.7E-12
Sigma	-	639.4E-12	222.0E-12	57.3E-12	218.8E-12	113.9E-12	225.9E-12	198.1E-12	184.2E-12	149.4E-12	212.0E-12	194.7E-12	114.1E-12

Measurements

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	16.7E-09	16.8E-09	16.7E-09	16.5E-09	16.9E-09	16.8E-09	17.2E-09	16.7E-09	16.9E-09	16.8E-09	16.6E-09	16.9E-09	16.8E-09
ON_TID samples													
11	16.2E-09	15.3E-09	16.5E-09	16.3E-09	16.4E-09	16.6E-09	16.7E-09	16.4E-09	16.6E-09	16.7E-09	16.7E-09	16.6E-09	16.3E-09
12	16.8E-09	15.4E-09	17.0E-09	16.8E-09	17.0E-09	16.9E-09	17.0E-09	16.9E-09	17.2E-09	17.0E-09	17.4E-09	17.2E-09	17.0E-09
13	16.2E-09	15.2E-09	16.6E-09	16.3E-09	16.3E-09	16.6E-09	16.5E-09	16.4E-09	16.5E-09	16.6E-09	16.7E-09	16.5E-09	16.5E-09
Statistics													
Min	16.2E-09	15.2E-09	16.5E-09	16.3E-09	16.3E-09	16.6E-09	16.5E-09	16.4E-09	16.5E-09	16.6E-09	16.7E-09	16.5E-09	16.3E-09
Max	16.8E-09	15.4E-09	17.0E-09	16.8E-09	17.0E-09	16.9E-09	17.0E-09	16.9E-09	17.2E-09	17.0E-09	17.4E-09	17.2E-09	17.0E-09
Average	16.4E-09	15.3E-09	16.7E-09	16.5E-09	16.5E-09	16.7E-09	16.7E-09	16.6E-09	16.8E-09	16.8E-09	16.9E-09	16.8E-09	16.6E-09
Sigma	279.9E-12	88.8E-12	224.6E-12	240.0E-12	302.5E-12	165.5E-12	184.8E-12	249.3E-12	285.4E-12	168.2E-12	300.9E-12	299.8E-12	304.9E-12

Drift Calculation

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-907.0E-12	254.0E-12	68.0E-12	116.0E-12	315.0E-12	449.0E-12	186.0E-12	371.0E-12	448.0E-12	493.0E-12	399.0E-12	35.0E-12
12	-	-1.4E-09	189.1E-12	-2.9E-12	138.1E-12	107.1E-12	152.1E-12	122.1E-12	343.1E-12	195.1E-12	547.1E-12	357.1E-12	201.1E-12
13	-	-1.0E-09	359.0E-12	93.0E-12	72.0E-12	381.0E-12	321.0E-12	188.0E-12	306.0E-12	425.0E-12	510.0E-12	268.0E-12	322.0E-12
Average	-	-1.1E-09	267.4E-12	52.7E-12	108.7E-12	267.7E-12	307.4E-12	165.4E-12	340.0E-12	356.0E-12	516.7E-12	341.4E-12	186.0E-12
Sigma	-	221.5E-12	70.0E-12	40.6E-12	27.5E-12	116.7E-12	121.6E-12	30.6E-12	26.6E-12	114.2E-12	22.6E-12	54.6E-12	117.7E-12

Measurements

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	16.7E-09	16.8E-09	16.7E-09	16.5E-09	16.9E-09	16.8E-09	17.2E-09	16.7E-09	16.9E-09	16.8E-09	16.6E-09	16.9E-09	16.8E-09
OFF_PROTON samples													
5	16.4E-09	16.4E-09	16.3E-09	16.6E-09	16.4E-09	16.6E-09	16.8E-09	16.6E-09	16.5E-09	16.6E-09	16.7E-09	16.6E-09	16.6E-09
6	16.4E-09	16.7E-09	16.2E-09	16.1E-09	16.4E-09	16.4E-09	16.5E-09	16.5E-09	16.5E-09	16.3E-09	16.5E-09	16.5E-09	16.5E-09
7	16.4E-09	16.4E-09	16.5E-09	16.4E-09	16.5E-09	16.7E-09	16.7E-09	16.5E-09	16.7E-09	16.5E-09	16.8E-09	16.4E-09	16.7E-09
Statistics													
Min	16.4E-09	16.4E-09	16.2E-09	16.1E-09	16.4E-09	16.4E-09	16.5E-09	16.5E-09	16.5E-09	16.3E-09	16.5E-09	16.4E-09	16.5E-09
Max	16.4E-09	16.7E-09	16.5E-09	16.6E-09	16.5E-09	16.7E-09	16.8E-09	16.6E-09	16.7E-09	16.6E-09	16.8E-09	16.6E-09	16.7E-09
Average	16.4E-09	16.5E-09	16.4E-09	16.4E-09	16.4E-09	16.6E-09	16.7E-09	16.5E-09	16.6E-09	16.5E-09	16.7E-09	16.5E-09	16.6E-09
Sigma	13.4E-12	146.4E-12	112.4E-12	193.9E-12	33.1E-12	147.4E-12	90.1E-12	18.5E-12	110.6E-12	110.0E-12	136.3E-12	52.7E-12	69.7E-12

Drift Calculation

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-10.0E-12	-66.0E-12	208.0E-12	15.0E-12	218.0E-12	382.0E-12	188.0E-12	156.0E-12	193.0E-12	376.0E-12	198.0E-12	207.7E-12
6	-	265.0E-12	-156.0E-12	-287.0E-12	21.0E-12	-49.0E-12	140.0E-12	120.0E-12	60.0E-12	-86.0E-12	80.0E-12	106.0E-12	105.0E-12
7	-	-27.0E-12	128.0E-12	58.0E-12	86.0E-12	328.0E-12	326.0E-12	136.0E-12	342.0E-12	153.0E-12	411.0E-12	59.0E-12	297.0E-12
Average	-	76.0E-12	-31.3E-12	-7.0E-12	40.7E-12	165.7E-12	282.7E-12	148.0E-12	186.0E-12	86.7E-12	289.0E-12	121.0E-12	203.2E-12
Sigma	-	133.8E-12	118.5E-12	207.2E-12	32.1E-12	158.3E-12	103.4E-12	29.0E-12	117.1E-12	123.2E-12	148.5E-12	57.7E-12	78.4E-12

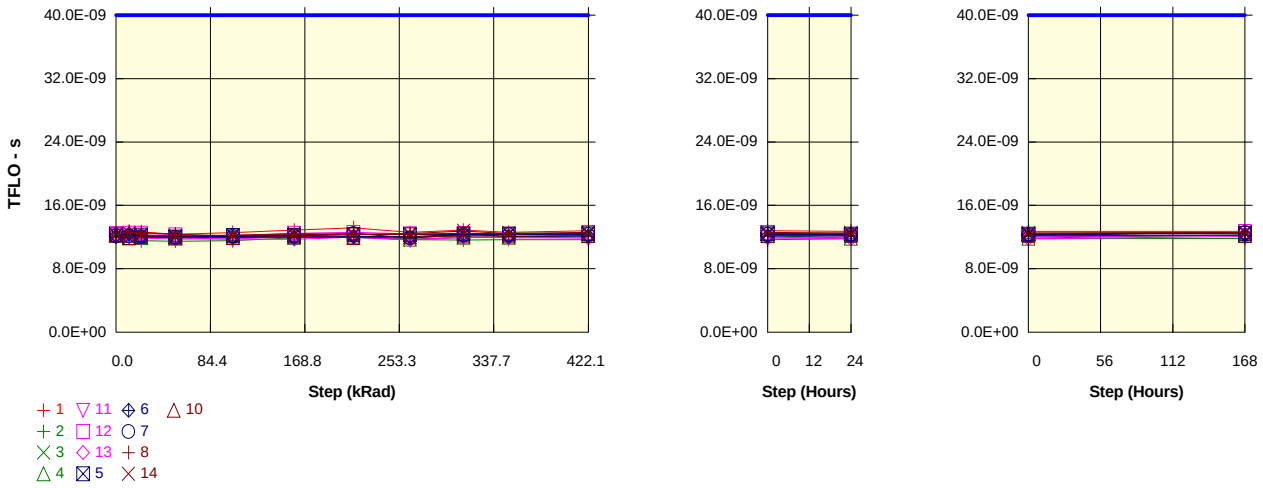
Measurements

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	16.7E-09	16.8E-09	16.7E-09	16.5E-09	16.9E-09	16.8E-09	17.2E-09	16.7E-09	16.9E-09	16.8E-09	16.6E-09	16.9E-09	16.8E-09
OFF_TID samples													
8	16.6E-09	14.8E-09	16.5E-09	16.4E-09	16.6E-09	16.5E-09	16.7E-09	16.5E-09	16.6E-09	16.7E-09	16.7E-09	16.7E-09	16.5E-09
14	16.8E-09	15.4E-09	16.9E-09	16.8E-09	16.7E-09	16.8E-09	16.9E-09	16.6E-09	17.0E-09	16.9E-09	17.0E-09	16.9E-09	16.9E-09
10	16.3E-09	15.1E-09	16.4E-09	16.1E-09	16.4E-09	16.5E-09	16.5E-09	16.5E-09	16.6E-09	16.4E-09	16.5E-09	16.4E-09	16.6E-09
Statistics													
Min	16.3E-09	14.8E-09	16.4E-09	16.1E-09	16.4E-09	16.5E-09	16.5E-09	16.5E-09	16.6E-09	16.4E-09	16.5E-09	16.4E-09	16.5E-09
Max	16.8E-09	15.4E-09	16.9E-09	16.8E-09	16.7E-09	16.8E-09	16.9E-09	16.6E-09	17.0E-09	16.9E-09	17.0E-09	16.9E-09	16.9E-09
Average	16.5E-09	15.1E-09	16.6E-09	16.4E-09	16.6E-09	16.6E-09	16.7E-09	16.5E-09	16.7E-09	16.7E-09	16.7E-09	16.7E-09	16.7E-09
Sigma	215.1E-12	224.6E-12	253.5E-12	258.0E-12	126.0E-12	136.3E-12	133.0E-12	43.2E-12	171.1E-12	193.6E-12	182.5E-12	207.8E-12	165.5E-12

Drift Calculation

TFHO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-1.7E-09	-78.0E-12	-168.0E-12	51.0E-12	-97.0E-12	90.0E-12	-71.0E-12	13.0E-12	114.0E-12	163.0E-12	79.0E-12	-25.0E-12
14	-	-1.4E-09	170.0E-12	-7.0E-12	-37.0E-12	-8.0E-12	83.0E-12	-184.0E-12	185.0E-12	136.0E-12	188.0E-12	156.0E-12	155.0E-12
10	-	-1.1E-09	99.0E-12	-113.0E-12	180.0E-12	232.0E-12	283.0E-12	249.0E-12	362.0E-12	185.0E-12	264.0E-12	171.0E-12	378.0E-12
Average	-	-1.4E-09	63.7E-12	-96.0E-12	64.7E-12	42.3E-12	152.0E-12	-2.0E-12	186.7E-12	145.0E-12	205.0E-12	135.3E-12	169.3E-12
Sigma	-	240.1E-12	104.3E-12	66.8E-12	89.1E-12	139.0E-12	92.7E-12	183.4E-12	142.5E-12	29.7E-12	43.0E-12	40.3E-12	164.8E-12

Parameter : LO fall time : TFLO
Test conditions : CL = 1000pF
Unit : s
Spec Limit Max : 40.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	12.4E-09	12.7E-09	12.6E-09	12.4E-09	12.6E-09	12.9E-09	13.2E-09	12.6E-09	12.9E-09	12.6E-09	12.8E-09	12.7E-09	12.7E-09
ON_PROTON samples													
2	12.0E-09	12.2E-09	11.5E-09	11.5E-09	11.5E-09	11.9E-09	12.0E-09	11.7E-09	11.6E-09	11.7E-09	11.7E-09	11.8E-09	11.8E-09
3	12.3E-09	12.2E-09	12.0E-09	12.1E-09	12.1E-09	12.3E-09	12.1E-09	12.0E-09	12.2E-09	12.5E-09	12.4E-09	12.4E-09	12.6E-09
4	12.2E-09	12.3E-09	11.9E-09	11.9E-09	11.9E-09	12.0E-09	12.1E-09	11.7E-09	12.0E-09	12.0E-09	12.2E-09	11.9E-09	12.3E-09
Statistics													
Min	12.0E-09	12.2E-09	11.5E-09	11.5E-09	11.5E-09	11.9E-09	12.0E-09	11.7E-09	11.6E-09	11.7E-09	11.7E-09	11.8E-09	11.8E-09
Max	12.3E-09	12.3E-09	12.0E-09	12.1E-09	12.1E-09	12.3E-09	12.1E-09	12.0E-09	12.2E-09	12.5E-09	12.4E-09	12.4E-09	12.6E-09
Average	12.2E-09	12.2E-09	11.8E-09	11.8E-09	11.9E-09	12.1E-09	12.1E-09	11.8E-09	11.9E-09	12.1E-09	12.1E-09	12.0E-09	12.2E-09
Sigma	135.3E-12	22.1E-12	210.0E-12	256.6E-12	237.1E-12	162.1E-12	72.3E-12	140.0E-12	222.2E-12	342.2E-12	324.1E-12	270.7E-12	330.2E-12

Drift Calculation

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	230.0E-12	-421.0E-12	-495.0E-12	-427.0E-12	-72.0E-12	-2.0E-12	-288.0E-12	-346.0E-12	-283.0E-12	-312.0E-12	-182.0E-12	-134.0E-12
3	-	-47.0E-12	-237.0E-12	-173.0E-12	-158.0E-12	10.0E-12	-133.0E-12	-267.0E-12	-108.0E-12	246.0E-12	157.0E-12	130.0E-12	374.0E-12
4	-	12.0E-12	-300.0E-12	-378.0E-12	-314.0E-12	-247.0E-12	-144.0E-12	-504.0E-12	-277.0E-12	-248.0E-12	-29.0E-12	-369.0E-12	28.0E-12
Average	-	65.0E-12	-319.3E-12	-348.7E-12	-299.7E-12	-103.0E-12	-93.0E-12	-353.0E-12	-243.7E-12	-95.0E-12	-61.3E-12	-140.3E-12	89.3E-12
Sigma	-	119.1E-12	76.4E-12	133.1E-12	110.3E-12	107.2E-12	64.5E-12	107.1E-12	100.0E-12	241.5E-12	192.8E-12	205.8E-12	211.9E-12

Measurements

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	12.4E-09	12.7E-09	12.6E-09	12.4E-09	12.6E-09	12.9E-09	13.2E-09	12.6E-09	12.9E-09	12.6E-09	12.8E-09	12.7E-09	12.7E-09
ON_TID samples													
11	12.1E-09	12.2E-09	12.1E-09	11.9E-09	11.8E-09	12.1E-09	12.0E-09	11.6E-09	11.9E-09	12.0E-09	11.9E-09	12.0E-09	12.2E-09
12	12.4E-09	12.5E-09	12.5E-09	12.3E-09	12.1E-09	12.5E-09	12.6E-09	12.4E-09	12.5E-09	12.4E-09	12.6E-09	12.2E-09	12.7E-09
13	12.1E-09	12.0E-09	11.9E-09	11.8E-09	11.7E-09	11.7E-09	12.0E-09	11.7E-09	12.1E-09	11.9E-09	11.9E-09	11.8E-09	12.1E-09
Statistics													
Min	12.1E-09	12.0E-09	11.9E-09	11.8E-09	11.7E-09	11.7E-09	12.0E-09	11.6E-09	11.9E-09	11.9E-09	11.9E-09	11.8E-09	12.1E-09
Max	12.4E-09	12.5E-09	12.5E-09	12.3E-09	12.1E-09	12.5E-09	12.6E-09	12.4E-09	12.5E-09	12.4E-09	12.6E-09	12.2E-09	12.7E-09
Average	12.2E-09	12.3E-09	12.2E-09	12.0E-09	11.9E-09	12.1E-09	12.2E-09	11.9E-09	12.2E-09	12.1E-09	12.1E-09	12.0E-09	12.3E-09
Sigma	151.2E-12	195.2E-12	265.3E-12	226.8E-12	178.0E-12	308.3E-12	284.5E-12	358.6E-12	230.8E-12	214.7E-12	320.3E-12	195.2E-12	279.0E-12

Drift Calculation

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	116.0E-12	11.0E-12	-237.0E-12	-372.0E-12	-39.0E-12	-143.0E-12	-513.0E-12	-192.0E-12	-141.0E-12	-218.0E-12	-96.0E-12	62.0E-12
12	-	68.0E-12	63.0E-12	-155.0E-12	-327.0E-12	33.0E-12	144.0E-12	-48.0E-12	28.0E-12	-51.0E-12	131.0E-12	-201.0E-12	259.0E-12
13	-	-83.0E-12	-259.0E-12	-364.0E-12	-394.0E-12	-396.0E-12	-135.0E-12	-462.0E-12	-72.0E-12	-218.0E-12	-237.0E-12	-352.0E-12	-63.0E-12
Average	-	33.7E-12	-61.7E-12	-252.0E-12	-364.3E-12	-134.0E-12	-44.7E-12	-341.0E-12	-78.7E-12	-136.7E-12	-108.0E-12	-216.3E-12	86.0E-12
Sigma	-	84.8E-12	141.1E-12	86.0E-12	27.9E-12	187.6E-12	133.4E-12	208.2E-12	89.9E-12	68.2E-12	169.2E-12	105.1E-12	132.5E-12

Measurements

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	12.4E-09	12.7E-09	12.6E-09	12.4E-09	12.6E-09	12.9E-09	13.2E-09	12.6E-09	12.9E-09	12.6E-09	12.8E-09	12.7E-09	12.7E-09
OFF_PROTON samples													
5	12.3E-09	11.9E-09	12.2E-09	12.0E-09	12.2E-09	12.2E-09	12.4E-09	12.3E-09	12.4E-09	12.4E-09	12.4E-09	12.4E-09	12.4E-09
6	12.2E-09	12.4E-09	12.1E-09	12.0E-09	12.0E-09	12.0E-09	12.1E-09	12.0E-09	12.4E-09	12.1E-09	12.1E-09	12.2E-09	12.3E-09
7	12.2E-09	12.1E-09	12.1E-09	12.0E-09	12.1E-09	12.2E-09	12.5E-09	11.9E-09	12.3E-09	12.3E-09	12.3E-09	12.3E-09	12.6E-09
Statistics													
Min	12.2E-09	11.9E-09	12.1E-09	12.0E-09	12.0E-09	12.0E-09	12.1E-09	11.9E-09	12.3E-09	12.1E-09	12.1E-09	12.2E-09	12.3E-09
Max	12.3E-09	12.4E-09	12.2E-09	12.0E-09	12.2E-09	12.2E-09	12.5E-09	12.3E-09	12.4E-09	12.4E-09	12.4E-09	12.4E-09	12.6E-09
Average	12.2E-09	12.1E-09	12.1E-09	12.0E-09	12.1E-09	12.1E-09	12.3E-09	12.1E-09	12.4E-09	12.3E-09	12.3E-09	12.3E-09	12.4E-09
Sigma	53.6E-12	212.7E-12	84.2E-12	19.3E-12	81.6E-12	97.4E-12	166.5E-12	175.0E-12	55.0E-12	121.9E-12	127.9E-12	85.9E-12	141.2E-12

Drift Calculation

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-396.0E-12	-30.0E-12	-275.0E-12	-45.0E-12	-71.0E-12	76.0E-12	28.0E-12	96.0E-12	92.0E-12	162.0E-12	93.0E-12	168.0E-12
6	-	228.0E-12	-110.0E-12	-219.0E-12	-134.0E-12	-183.0E-12	-100.0E-12	-157.0E-12	233.0E-12	-86.0E-12	-44.0E-12	-14.0E-12	77.0E-12
7	-	-19.0E-12	-82.0E-12	-172.0E-12	-67.0E-12	33.0E-12	316.0E-12	-269.0E-12	122.0E-12	161.0E-12	174.0E-12	120.0E-12	441.0E-12
Average	-	-62.3E-12	-74.0E-12	-222.0E-12	-82.0E-12	-73.7E-12	97.3E-12	-132.7E-12	150.3E-12	55.7E-12	97.3E-12	66.3E-12	228.7E-12
Sigma	-	256.6E-12	33.1E-12	42.1E-12	37.9E-12	88.2E-12	170.5E-12	122.5E-12	59.4E-12	104.1E-12	100.1E-12	57.9E-12	154.7E-12

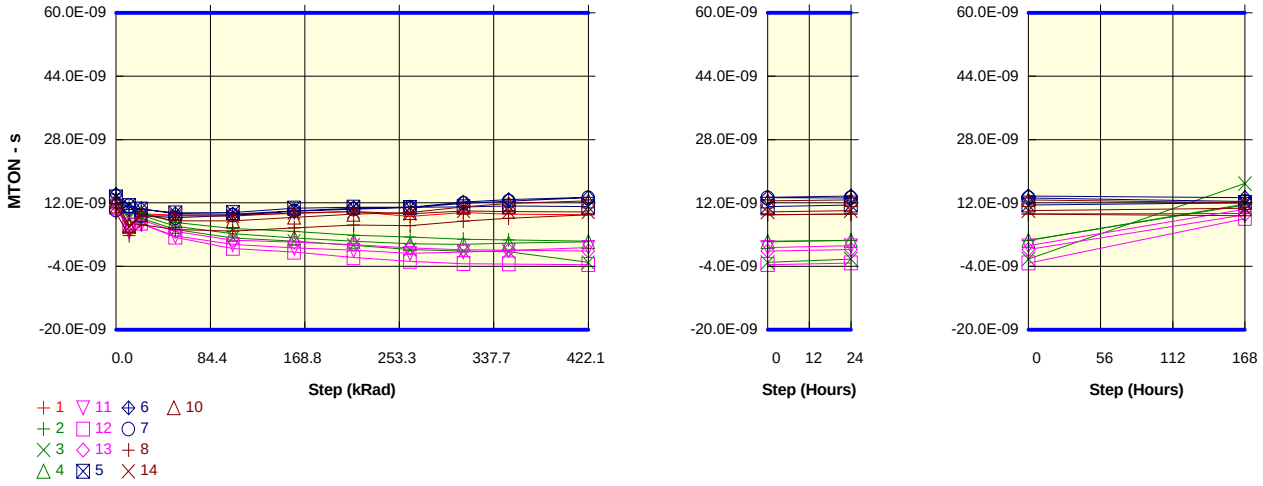
Measurements

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	12.4E-09	12.7E-09	12.6E-09	12.4E-09	12.6E-09	12.9E-09	13.2E-09	12.6E-09	12.9E-09	12.6E-09	12.8E-09	12.7E-09	12.7E-09
OFF_TID samples													
8	12.4E-09	12.6E-09	12.6E-09	12.4E-09	12.2E-09	12.3E-09	12.3E-09	12.3E-09	12.5E-09	12.4E-09	12.5E-09	12.5E-09	12.6E-09
14	12.3E-09	12.5E-09	12.3E-09	12.2E-09	12.2E-09	12.4E-09	12.4E-09	12.4E-09	12.8E-09	12.4E-09	12.6E-09	12.5E-09	12.5E-09
10	12.3E-09	11.9E-09	12.1E-09	12.0E-09	11.9E-09	12.0E-09	11.9E-09	12.0E-09	12.1E-09	12.1E-09	12.2E-09	12.2E-09	12.2E-09
Statistics													
Min	12.3E-09	11.9E-09	12.1E-09	12.0E-09	11.9E-09	12.0E-09	11.9E-09	12.0E-09	12.1E-09	12.1E-09	12.2E-09	12.2E-09	12.2E-09
Max	12.4E-09	12.6E-09	12.6E-09	12.4E-09	12.2E-09	12.4E-09	12.4E-09	12.4E-09	12.8E-09	12.4E-09	12.6E-09	12.5E-09	12.6E-09
Average	12.3E-09	12.3E-09	12.3E-09	12.2E-09	12.1E-09	12.3E-09	12.2E-09	12.3E-09	12.5E-09	12.3E-09	12.4E-09	12.4E-09	12.4E-09
Sigma	63.0E-12	297.2E-12	200.2E-12	164.9E-12	131.8E-12	178.8E-12	191.1E-12	178.5E-12	260.9E-12	140.6E-12	171.8E-12	133.6E-12	177.1E-12

Drift Calculation

TFLO	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	193.0E-12	141.0E-12	-42.0E-12	-254.0E-12	-108.0E-12	-82.0E-12	-81.0E-12	79.0E-12	-31.0E-12	60.0E-12	104.0E-12	150.0E-12
14	-	188.0E-12	-21.0E-12	-145.0E-12	-67.0E-12	129.0E-12	57.0E-12	116.0E-12	465.0E-12	126.0E-12	286.0E-12	178.0E-12	232.0E-12
10	-	-331.0E-12	-197.0E-12	-294.0E-12	-327.0E-12	-247.0E-12	-314.0E-12	-249.0E-12	-120.0E-12	-144.0E-12	-72.0E-12	-39.0E-12	-82.0E-12
Average	-	16.7E-12	-25.7E-12	-160.3E-12	-216.0E-12	-75.3E-12	-113.0E-12	-71.3E-12	141.3E-12	-16.3E-12	91.3E-12	81.0E-12	100.0E-12
Sigma	-	245.8E-12	138.0E-12	103.4E-12	109.5E-12	155.2E-12	153.0E-12	149.2E-12	242.9E-12	110.7E-12	147.8E-12	90.1E-12	133.0E-12

Parameter : Turn-on propagation delay matching : MTON
Test conditions : TLON – THON
Unit : s
Spec Limit Min : -20.0E-09
Spec Limit Max : 60.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	11.0E-09	9.4E-09	9.3E-09	9.0E-09	8.9E-09	9.4E-09	9.8E-09	8.7E-09	9.6E-09	9.2E-09	9.0E-09	9.2E-09	9.4E-09
ON_PROTON samples													
2	11.8E-09	11.1E-09	9.7E-09	7.0E-09	5.5E-09	4.8E-09	3.8E-09	3.4E-09	2.9E-09	2.7E-09	2.3E-09	2.6E-09	11.7E-09
3	12.1E-09	8.1E-09	8.1E-09	5.2E-09	3.2E-09	2.4E-09	1.3E-09	215.1E-12	-167.2E-12	-292.3E-12	-3.0E-09	-2.2E-09	16.9E-09
4	12.9E-09	6.0E-09	9.0E-09	6.1E-09	4.2E-09	3.2E-09	2.4E-09	1.7E-09	1.6E-09	1.8E-09	2.2E-09	2.6E-09	11.5E-09
Statistics													
Min	11.8E-09	6.0E-09	8.1E-09	5.2E-09	3.2E-09	2.4E-09	1.3E-09	215.1E-12	-167.2E-12	-292.3E-12	-3.0E-09	-2.2E-09	11.5E-09
Max	12.9E-09	11.1E-09	9.7E-09	7.0E-09	5.5E-09	4.8E-09	3.8E-09	3.4E-09	2.9E-09	2.7E-09	2.3E-09	2.6E-09	16.9E-09
Average	12.3E-09	8.4E-09	8.9E-09	6.1E-09	4.3E-09	3.4E-09	2.5E-09	1.8E-09	1.4E-09	1.4E-09	505.2E-12	986.1E-12	13.4E-09
Sigma	491.3E-12	2.1E-09	644.8E-12	729.8E-12	945.7E-12	1000.0E-12	1.0E-09	1.3E-09	1.2E-09	1.2E-09	2.5E-09	2.2E-09	2.5E-09

Drift Calculation

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	-663.0E-12	-2.1E-09	-4.7E-09	-6.3E-09	-7.0E-09	-7.9E-09	-8.3E-09	-8.9E-09	-9.1E-09	-9.5E-09	-9.2E-09	-75.8E-12
3	-	-4.0E-09	-3.9E-09	-6.8E-09	-8.9E-09	-9.7E-09	-10.7E-09	-11.8E-09	-12.2E-09	-12.3E-09	-15.1E-09	-14.2E-09	4.8E-09
4	-	-6.9E-09	-4.0E-09	-6.8E-09	-8.7E-09	-9.7E-09	-10.6E-09	-11.2E-09	-11.3E-09	-11.1E-09	-10.7E-09	-10.3E-09	-1.4E-09
Average	-	-3.8E-09	-3.3E-09	-6.1E-09	-7.9E-09	-8.8E-09	-9.8E-09	-10.5E-09	-10.8E-09	-10.8E-09	-11.7E-09	-11.3E-09	1.1E-09
Sigma	-	2.5E-09	878.9E-12	981.9E-12	1.2E-09	1.3E-09	1.3E-09	1.5E-09	1.4E-09	1.3E-09	2.4E-09	2.2E-09	2.7E-09

Measurements

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	11.0E-09	9.4E-09	9.3E-09	9.0E-09	8.9E-09	9.4E-09	9.8E-09	8.7E-09	9.6E-09	9.2E-09	9.0E-09	9.2E-09	9.4E-09
ON_TID samples													
11	11.1E-09	4.8E-09	6.7E-09	3.6E-09	1.5E-09	646.4E-12	69.6E-12	-771.2E-12	-396.4E-12	31.4E-12	739.2E-12	1.2E-09	10.4E-09
12	10.9E-09	6.5E-09	6.8E-09	3.3E-09	500.0E-12	-432.7E-12	-1.8E-09	-2.8E-09	-3.3E-09	-3.4E-09	-3.5E-09	-3.1E-09	8.1E-09
13	10.1E-09	6.5E-09	7.7E-09	4.8E-09	2.6E-09	2.1E-09	1.5E-09	640.3E-12	185.3E-12	48.9E-12	-155.5E-12	249.3E-12	9.0E-09
Statistics													
Min	10.1E-09	4.8E-09	6.7E-09	3.3E-09	500.0E-12	-432.7E-12	-1.8E-09	-2.8E-09	-3.3E-09	-3.4E-09	-3.5E-09	-3.1E-09	8.1E-09
Max	11.1E-09	6.5E-09	7.7E-09	4.8E-09	2.6E-09	2.1E-09	1.5E-09	640.3E-12	185.3E-12	48.9E-12	739.2E-12	1.2E-09	10.4E-09
Average	10.7E-09	5.9E-09	7.1E-09	3.9E-09	1.5E-09	772.7E-12	-86.9E-12	-962.2E-12	-1.2E-09	-1.1E-09	-986.6E-12	-562.8E-12	9.2E-09
Sigma	458.4E-12	811.5E-12	446.4E-12	633.3E-12	841.9E-12	1.0E-09	1.4E-09	1.4E-09	1.5E-09	1.6E-09	1.8E-09	1.9E-09	954.4E-12

Drift Calculation

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-6.4E-09	-4.5E-09	-7.5E-09	-9.6E-09	-10.5E-09	-11.1E-09	-11.9E-09	-11.5E-09	-11.1E-09	-10.4E-09	-9.9E-09	-748.2E-12
12	-	-4.4E-09	-4.1E-09	-7.6E-09	-10.4E-09	-11.3E-09	-12.7E-09	-13.7E-09	-14.2E-09	-14.3E-09	-14.5E-09	-14.0E-09	-2.8E-09
13	-	-3.6E-09	-2.4E-09	-5.3E-09	-7.5E-09	-8.0E-09	-8.6E-09	-9.4E-09	-9.9E-09	-10.0E-09	-10.2E-09	-9.8E-09	-1.0E-09
Average	-	-4.8E-09	-3.6E-09	-6.8E-09	-9.2E-09	-9.9E-09	-10.8E-09	-11.7E-09	-11.9E-09	-11.8E-09	-11.7E-09	-11.3E-09	-1.5E-09
Sigma	-	1.2E-09	904.3E-12	1.1E-09	1.2E-09	1.4E-09	1.7E-09	1.7E-09	1.8E-09	1.8E-09	2.0E-09	2.0E-09	927.3E-12

Measurements

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	11.0E-09	9.4E-09	9.3E-09	9.0E-09	8.9E-09	9.4E-09	9.8E-09	8.7E-09	9.6E-09	9.2E-09	9.0E-09	9.2E-09	9.4E-09
OFF_PROTON samples													
5	13.6E-09	11.3E-09	10.4E-09	9.5E-09	9.6E-09	10.7E-09	10.9E-09	10.9E-09	11.0E-09	11.2E-09	11.1E-09	11.5E-09	12.1E-09
6	14.2E-09	10.4E-09	10.5E-09	9.3E-09	9.2E-09	10.0E-09	10.7E-09	10.9E-09	12.2E-09	12.8E-09	13.4E-09	13.8E-09	13.4E-09
7	10.2E-09	11.3E-09	8.8E-09	8.3E-09	8.9E-09	9.9E-09	10.4E-09	10.8E-09	11.9E-09	12.4E-09	13.3E-09	13.3E-09	12.4E-09
Statistics													
Min	10.2E-09	10.4E-09	8.8E-09	8.3E-09	8.9E-09	9.9E-09	10.4E-09	10.8E-09	11.0E-09	11.2E-09	11.1E-09	11.5E-09	12.1E-09
Max	14.2E-09	11.3E-09	10.5E-09	9.5E-09	9.6E-09	10.7E-09	10.9E-09	10.9E-09	12.2E-09	12.8E-09	13.4E-09	13.8E-09	13.4E-09
Average	12.7E-09	11.0E-09	9.9E-09	9.0E-09	9.2E-09	10.2E-09	10.7E-09	10.9E-09	11.7E-09	12.1E-09	12.6E-09	12.8E-09	12.6E-09
Sigma	1.7E-09	439.8E-12	805.2E-12	528.0E-12	285.2E-12	337.3E-12	204.0E-12	35.5E-12	504.2E-12	693.4E-12	1.1E-09	981.1E-12	558.0E-12

Drift Calculation

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-2.2E-09	-3.1E-09	-4.1E-09	-4.0E-09	-2.9E-09	-2.6E-09	-2.7E-09	-2.6E-09	-2.4E-09	-2.5E-09	-2.1E-09	-1.5E-09
6	-	-3.8E-09	-3.7E-09	-5.0E-09	-5.0E-09	-4.2E-09	-3.5E-09	-3.3E-09	-2.0E-09	-1.4E-09	-797.0E-12	-448.3E-12	-841.1E-12
7	-	1.1E-09	-1.5E-09	-1.9E-09	-1.4E-09	-265.2E-12	213.3E-12	614.2E-12	1.7E-09	2.2E-09	3.1E-09	3.0E-09	2.2E-09
Average	-	-1.7E-09	-2.8E-09	-3.7E-09	-3.5E-09	-2.5E-09	-2.0E-09	-1.8E-09	-972.0E-12	-511.9E-12	-63.8E-12	170.9E-12	-62.6E-12
Sigma	-	2.0E-09	955.0E-12	1.3E-09	1.6E-09	1.7E-09	1.6E-09	1.7E-09	1.9E-09	2.0E-09	2.3E-09	2.1E-09	1.6E-09

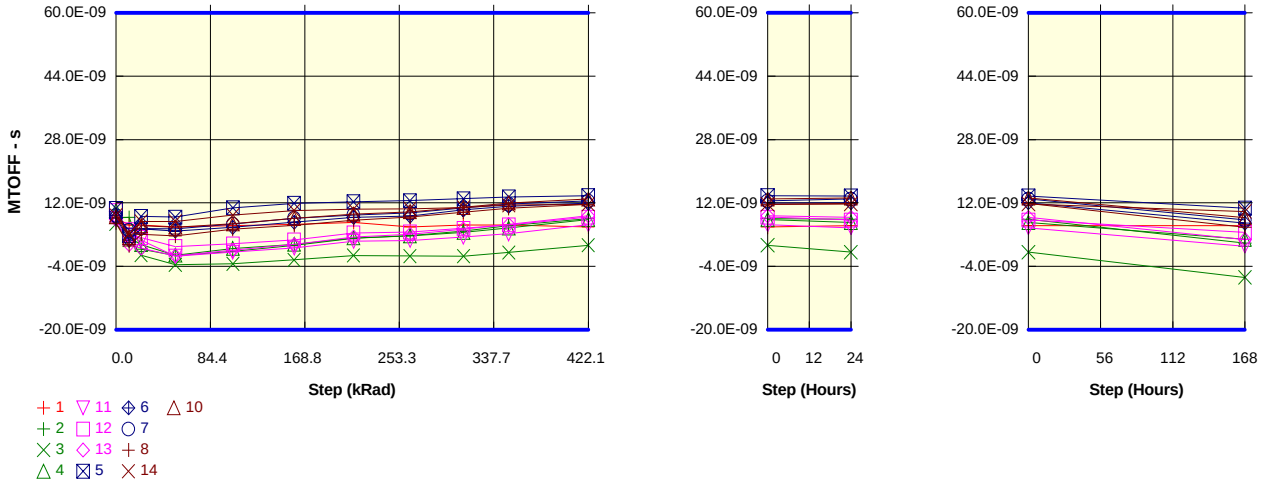
Measurements

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	11.0E-09	9.4E-09	9.3E-09	9.0E-09	8.9E-09	9.4E-09	9.8E-09	8.7E-09	9.6E-09	9.2E-09	9.0E-09	9.2E-09	9.4E-09
OFF_TID samples													
8	9.5E-09	3.7E-09	6.5E-09	5.3E-09	4.9E-09	5.7E-09	6.4E-09	6.3E-09	7.4E-09	8.2E-09	9.1E-09	9.2E-09	8.8E-09
14	11.2E-09	5.9E-09	8.7E-09	8.8E-09	8.7E-09	9.5E-09	9.8E-09	9.3E-09	10.0E-09	9.8E-09	9.7E-09	10.0E-09	10.6E-09
10	12.5E-09	6.3E-09	9.1E-09	7.5E-09	7.5E-09	8.4E-09	9.2E-09	9.6E-09	11.0E-09	11.8E-09	12.5E-09	12.8E-09	12.0E-09
Statistics													
Min	9.5E-09	3.7E-09	6.5E-09	5.3E-09	4.9E-09	5.7E-09	6.4E-09	6.3E-09	7.4E-09	8.2E-09	9.1E-09	9.2E-09	8.8E-09
Max	12.5E-09	6.3E-09	9.1E-09	8.8E-09	8.7E-09	9.5E-09	9.8E-09	9.6E-09	11.0E-09	11.8E-09	12.5E-09	12.8E-09	12.0E-09
Average	11.1E-09	5.3E-09	8.1E-09	7.2E-09	7.0E-09	7.9E-09	8.5E-09	8.4E-09	9.4E-09	9.9E-09	10.4E-09	10.7E-09	10.5E-09
Sigma	1.2E-09	1.1E-09	1.2E-09	1.5E-09	1.6E-09	1.6E-09	1.5E-09	1.5E-09	1.5E-09	1.5E-09	1.5E-09	1.5E-09	1.3E-09

Drift Calculation

MTON	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-5.8E-09	-3.1E-09	-4.3E-09	-4.6E-09	-3.9E-09	-3.1E-09	-3.3E-09	-2.2E-09	-1.4E-09	-492.1E-12	-354.1E-12	-758.8E-12
14	-	-5.3E-09	-2.5E-09	-2.4E-09	-2.5E-09	-1.7E-09	-1.4E-09	-1.9E-09	-1.2E-09	-1.4E-09	-1.5E-09	-1.1E-09	-563.4E-12
10	-	-6.1E-09	-3.4E-09	-5.0E-09	-4.9E-09	-4.0E-09	-3.3E-09	-2.9E-09	-1.5E-09	-609.3E-12	32.1E-12	324.3E-12	-401.6E-12
Average	-	-5.7E-09	-3.0E-09	-3.9E-09	-4.0E-09	-3.2E-09	-2.6E-09	-2.7E-09	-1.6E-09	-1.1E-09	-641.3E-12	-392.9E-12	-574.6E-12
Sigma	-	325.4E-12	372.5E-12	1.1E-09	1.1E-09	1.1E-09	865.9E-12	575.2E-12	401.7E-12	360.1E-12	619.7E-12	602.1E-12	146.0E-12

Parameter : Turn-off propagation delay matching : MTOFF
Test conditions : TLOFF – THOFF
Unit : s
Spec Limit Min : -20.0E-09
Spec Limit Max : 60.0E-09
Spec limits are represented in bold lines on the graphic.



Measurements

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	8.2E-09	6.4E-09	6.4E-09	5.9E-09	6.2E-09	6.6E-09	7.1E-09	5.9E-09	6.4E-09	6.4E-09	5.9E-09	6.3E-09	6.3E-09
ON_PROTON samples													
2	8.2E-09	8.3E-09	304.9E-12	-1.3E-09	-216.2E-12	1.3E-09	3.1E-09	3.7E-09	4.9E-09	6.3E-09	8.0E-09	7.9E-09	1.8E-09
3	6.7E-09	2.6E-09	-1.2E-09	-3.6E-09	-3.4E-09	-2.4E-09	-1.3E-09	-1.4E-09	-1.4E-09	-508.2E-12	1.3E-09	-429.3E-12	-6.8E-09
4	10.1E-09	3.2E-09	1.5E-09	-1.2E-09	494.7E-12	1.6E-09	3.2E-09	3.7E-09	4.6E-09	5.7E-09	7.8E-09	7.1E-09	2.8E-09
Statistics													
Min	6.7E-09	2.6E-09	-1.2E-09	-3.6E-09	-3.4E-09	-2.4E-09	-1.3E-09	-1.4E-09	-1.4E-09	-508.2E-12	1.3E-09	-429.3E-12	-6.8E-09
Max	10.1E-09	8.3E-09	1.5E-09	-1.2E-09	494.7E-12	1.6E-09	3.2E-09	3.7E-09	4.9E-09	6.3E-09	8.0E-09	7.9E-09	2.8E-09
Average	8.3E-09	4.7E-09	198.8E-12	-2.0E-09	-1.0E-09	150.1E-12	1.7E-09	2.0E-09	2.7E-09	3.8E-09	5.7E-09	4.8E-09	-706.2E-12
Sigma	1.4E-09	2.6E-09	1.1E-09	1.1E-09	1.7E-09	1.8E-09	2.1E-09	2.4E-09	2.9E-09	3.1E-09	3.1E-09	3.7E-09	4.3E-09

Drift Calculation

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_PROTON samples													
2	-	137.5E-12	-7.9E-09	-9.5E-09	-8.4E-09	-6.9E-09	-5.1E-09	-4.5E-09	-3.3E-09	-2.0E-09	-194.3E-12	-317.5E-12	-6.4E-09
3	-	-4.1E-09	-7.9E-09	-10.3E-09	-10.1E-09	-9.1E-09	-8.0E-09	-8.1E-09	-8.1E-09	-7.2E-09	-5.4E-09	-7.1E-09	-13.5E-09
4	-	-6.8E-09	-8.6E-09	-11.3E-09	-9.6E-09	-8.5E-09	-6.9E-09	-6.4E-09	-5.5E-09	-4.4E-09	-2.3E-09	-3.0E-09	-7.2E-09
Average	-	-3.6E-09	-8.1E-09	-10.4E-09	-9.4E-09	-8.2E-09	-6.6E-09	-6.3E-09	-5.6E-09	-4.5E-09	-2.6E-09	-3.5E-09	-9.0E-09
Sigma	-	2.9E-09	319.1E-12	710.1E-12	681.6E-12	905.2E-12	1.2E-09	1.5E-09	2.0E-09	2.1E-09	2.1E-09	2.8E-09	3.2E-09

Measurements

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	8.2E-09	6.4E-09	6.4E-09	5.9E-09	6.2E-09	6.6E-09	7.1E-09	5.9E-09	6.4E-09	6.4E-09	5.9E-09	6.3E-09	6.3E-09
ON_TID samples													
11	8.1E-09	5.3E-09	2.6E-09	-1.5E-09	-432.2E-12	613.7E-12	2.4E-09	2.5E-09	3.4E-09	4.2E-09	6.5E-09	5.7E-09	1.1E-09
12	10.0E-09	3.9E-09	3.3E-09	975.5E-12	1.7E-09	2.7E-09	4.4E-09	4.7E-09	5.6E-09	6.4E-09	8.4E-09	7.7E-09	4.6E-09
13	7.8E-09	1.5E-09	606.3E-12	-1.3E-09	72.8E-12	1.5E-09	3.4E-09	4.1E-09	5.4E-09	6.5E-09	8.8E-09	8.3E-09	2.8E-09
Statistics													
Min	7.8E-09	1.5E-09	606.3E-12	-1.5E-09	-432.2E-12	613.7E-12	2.4E-09	2.5E-09	3.4E-09	4.2E-09	6.5E-09	5.7E-09	1.1E-09
Max	10.0E-09	5.3E-09	3.3E-09	975.5E-12	1.7E-09	2.7E-09	4.4E-09	4.7E-09	5.6E-09	6.5E-09	8.8E-09	8.3E-09	4.6E-09
Average	8.6E-09	3.5E-09	2.1E-09	-609.8E-12	448.3E-12	1.6E-09	3.4E-09	3.7E-09	4.8E-09	5.7E-09	7.9E-09	7.3E-09	2.8E-09
Sigma	964.0E-12	1.6E-09	1.1E-09	1.1E-09	911.8E-12	844.1E-12	837.4E-12	889.5E-12	998.6E-12	1.1E-09	1.0E-09	1.1E-09	1.4E-09

Drift Calculation

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
ON_TID samples													
11	-	-2.8E-09	-5.5E-09	-9.6E-09	-8.5E-09	-7.5E-09	-5.8E-09	-5.6E-09	-4.7E-09	-3.9E-09	-1.6E-09	-2.4E-09	-7.0E-09
12	-	-6.1E-09	-6.7E-09	-9.0E-09	-8.3E-09	-7.3E-09	-5.6E-09	-5.3E-09	-4.4E-09	-3.6E-09	-1.6E-09	-2.3E-09	-5.4E-09
13	-	-6.3E-09	-7.2E-09	-9.2E-09	-7.8E-09	-6.3E-09	-4.4E-09	-3.8E-09	-2.4E-09	-1.3E-09	929.1E-12	522.0E-12	-5.1E-09
Average	-	-5.1E-09	-6.5E-09	-9.3E-09	-8.2E-09	-7.0E-09	-5.3E-09	-4.9E-09	-3.9E-09	-2.9E-09	-752.5E-12	-1.4E-09	-5.8E-09
Sigma	-	1.6E-09	707.8E-12	231.6E-12	329.5E-12	526.0E-12	592.4E-12	800.0E-12	1.0E-09	1.2E-09	1.2E-09	1.4E-09	863.0E-12

Measurements

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	8.2E-09	6.4E-09	6.4E-09	5.9E-09	6.2E-09	6.6E-09	7.1E-09	5.9E-09	6.4E-09	6.4E-09	5.9E-09	6.3E-09	6.3E-09
OFF_PROTON samples													
5	10.6E-09	3.8E-09	8.6E-09	8.4E-09	10.7E-09	11.9E-09	12.3E-09	12.6E-09	13.1E-09	13.5E-09	13.8E-09	13.7E-09	10.7E-09
6	8.2E-09	2.6E-09	5.5E-09	4.9E-09	5.8E-09	7.1E-09	8.4E-09	8.7E-09	10.2E-09	11.1E-09	11.9E-09	12.1E-09	6.9E-09
7	8.8E-09	5.1E-09	5.6E-09	5.5E-09	6.7E-09	8.1E-09	8.9E-09	9.5E-09	10.7E-09	11.7E-09	12.5E-09	13.0E-09	7.7E-09
Statistics													
Min	8.2E-09	2.6E-09	5.5E-09	4.9E-09	5.8E-09	7.1E-09	8.4E-09	8.7E-09	10.2E-09	11.1E-09	11.9E-09	12.1E-09	6.9E-09
Max	10.6E-09	5.1E-09	8.6E-09	8.4E-09	10.7E-09	11.9E-09	12.3E-09	12.6E-09	13.1E-09	13.5E-09	13.8E-09	13.7E-09	10.7E-09
Average	9.2E-09	3.8E-09	6.5E-09	6.3E-09	7.8E-09	9.1E-09	9.9E-09	10.3E-09	11.3E-09	12.1E-09	12.7E-09	12.9E-09	8.4E-09
Sigma	1.0E-09	1.0E-09	1.5E-09	1.6E-09	2.1E-09	2.1E-09	1.7E-09	1.7E-09	1.2E-09	1.0E-09	803.6E-12	683.0E-12	1.6E-09

Drift Calculation

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_PROTON samples													
5	-	-6.8E-09	-2.0E-09	-2.2E-09	104.4E-12	1.3E-09	1.6E-09	1.9E-09	2.4E-09	2.9E-09	3.2E-09	3.1E-09	14.5E-12
6	-	-5.6E-09	-2.7E-09	-3.3E-09	-2.4E-09	-1.1E-09	152.6E-12	465.6E-12	2.0E-09	2.9E-09	3.7E-09	3.9E-09	-1.3E-09
7	-	-3.7E-09	-3.2E-09	-3.3E-09	-2.1E-09	-652.6E-12	160.8E-12	703.3E-12	1.9E-09	2.9E-09	3.7E-09	4.2E-09	-1.1E-09
Average	-	-5.4E-09	-2.7E-09	-2.9E-09	-1.5E-09	-152.5E-12	648.5E-12	1.0E-09	2.1E-09	2.9E-09	3.5E-09	3.7E-09	-780.5E-12
Sigma	-	1.3E-09	486.1E-12	526.2E-12	1.1E-09	1.0E-09	695.5E-12	649.3E-12	214.6E-12	33.8E-12	243.3E-12	456.8E-12	570.8E-12

Measurements

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
1_REF	8.2E-09	6.4E-09	6.4E-09	5.9E-09	6.2E-09	6.6E-09	7.1E-09	5.9E-09	6.4E-09	6.4E-09	5.9E-09	6.3E-09	6.3E-09
OFF_TID samples													
8	6.9E-09	1.2E-09	4.1E-09	3.6E-09	5.3E-09	6.3E-09	7.7E-09	8.5E-09	9.7E-09	10.6E-09	11.6E-09	11.9E-09	5.9E-09
14	8.9E-09	4.2E-09	7.3E-09	7.3E-09	8.9E-09	10.1E-09	10.4E-09	10.5E-09	10.8E-09	11.4E-09	11.6E-09	11.7E-09	9.8E-09
10	8.5E-09	3.3E-09	6.3E-09	5.9E-09	6.7E-09	8.1E-09	9.2E-09	9.8E-09	10.9E-09	12.0E-09	13.0E-09	13.2E-09	8.3E-09
Statistics													
Min	6.9E-09	1.2E-09	4.1E-09	3.6E-09	5.3E-09	6.3E-09	7.7E-09	8.5E-09	9.7E-09	10.6E-09	11.6E-09	11.7E-09	5.9E-09
Max	8.9E-09	4.2E-09	7.3E-09	7.3E-09	8.9E-09	10.1E-09	10.4E-09	10.5E-09	10.9E-09	12.0E-09	13.0E-09	13.2E-09	9.8E-09
Average	8.1E-09	2.9E-09	5.9E-09	5.6E-09	7.0E-09	8.2E-09	9.1E-09	9.6E-09	10.5E-09	11.3E-09	12.1E-09	12.3E-09	8.0E-09
Sigma	857.4E-12	1.3E-09	1.4E-09	1.5E-09	1.5E-09	1.5E-09	1.1E-09	856.1E-12	556.1E-12	544.3E-12	636.8E-12	684.7E-12	1.6E-09

Drift Calculation

MTOFF	0 kRad	11.7 kRad	22.5 kRad	53.1 kRad	104.4 kRad	159.3 kRad	212.4 kRad	262.8 kRad	310.5 kRad	351 kRad	422.1 kRad	24 Hours	168 Hours
OFF_TID samples													
8	-	-5.8E-09	-2.9E-09	-3.3E-09	-1.6E-09	-593.7E-12	730.7E-12	1.5E-09	2.8E-09	3.7E-09	4.7E-09	5.0E-09	-1.0E-09
14	-	-4.7E-09	-1.6E-09	-1.6E-09	3.4E-12	1.2E-09	1.5E-09	1.6E-09	1.9E-09	2.5E-09	2.7E-09	2.8E-09	945.6E-12
10	-	-5.2E-09	-2.3E-09	-2.6E-09	-1.8E-09	-426.7E-12	650.2E-12	1.2E-09	2.3E-09	3.4E-09	4.4E-09	4.7E-09	-242.4E-12
Average	-	-5.2E-09	-2.2E-09	-2.5E-09	-1.1E-09	58.3E-12	974.4E-12	1.5E-09	2.3E-09	3.2E-09	4.0E-09	4.2E-09	-109.6E-12
Sigma	-	420.5E-12	531.2E-12	699.7E-12	800.7E-12	806.9E-12	402.9E-12	159.6E-12	333.8E-12	496.2E-12	863.9E-12	955.5E-12	812.8E-12