Radiation Report

TPS7H4010-SEP Neutron Displacement Damage Characterization

ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7H4010-SEP device. The results show that all devices were fully functional and within production test limits after having been irradiated up to 1 × 10^{13} n/cm^2 (1-MeV equivalent). A sample size of nine units was exposed to radiation testing per MIL-STD-883, Method 1017 for Neutron Irradiation, and an additional one device was used as a control unit and was not irradiated. All devices used in the experiment were from lot trace code 06P2KKJ and assembly lot 0114516. Electrical testing was performed at Texas Instruments before and after neutron irradiation using the production test program for TPS7H4010-SEP.

Table of Contents

1 Overview 2
2 Test Procedures 3
3 Facility 4
4 Results 5
4.1 TPS7H4010-SEP Specification Compliance Matrix 5
4.2 Timing Characteristics 7
4.3 Switching Characteristics 7
A Appendix A: Test Results 8

List of Figures

Figure 2-1. TPS7H4010-SEP Device 3

List of Tables

Table 1-1. Overview Information 2
Table 2-1. Neutron Irradiation Conditions 3
Table 4-1. Electrical Characteristics 5
Table 4-2. Timing Characteristics 7
Table 4-3. Switching Characteristics 7

Trademarks

1 Overview

The TPS7H4010-SEP is a 3.5-V to 32-V, 6-A, synchronous step-down voltage converter capable of driving up to 6 A of load current. The TPS7H4010-SEP provides exceptional efficiency and output accuracy in a very small solution size.

General device information and testing conditions are listed in the TPS7H4010-SEP data sheet.

Table 1-1. Overview Information

TI Part Number	TPS7H4010-SEP
VID Number	V62/19623-01XE
Device Name	TPS7H4010MRNPTSEP
Device Function	Synchronous Step-Down Voltage Converter
Die Name	LLM736067B0SEP
Technology	LBC8MV
Assembly Lot Number / Lot Trace Code	0114516 / 06P2KKJ
Unbiased Quantity Tested	9
Exposure Facility	VPT Rad
Neutron Fluence (1-MeV equivalent)	1.0×10^{12}, 5.0×10^{12}, 1.0×10^{13} n/cm^2
Irradiation Temperature	Room temp
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2 Test Procedures

The TPS7H4010-SEP was electrically pre-tested using the production automated test equipment program.

General test procedures adhered to MIL-STD-883, Method 1017 for Neutron Irradiation of TPS7H4010-SEP. Neutron irradiation conditions are listed in Table 2-1.

Table 2-1. Neutron Irradiation Conditions

Group	Sample Qty	Neutron Fluence (n/cm^2)	Bias
A	3	1.0×10^{12}	Unbiased
B	3	5.0×10^{12}	Unbiased
C	3	1.0×10^{13}	Unbiased

Figure 2-1. TPS7H4010-SEP Device

3 Facility

Neutron Dosimetry Test is done in Fast Neutron Irradiation (FNI) facility of The University of Massachusetts Lowell. It is designed to give a fast flux level = 10^{11} n/cm^2–s, with relatively low thermal fluence and gamma dose rates.

The neutron fluence for this irradiation was measured utilizing ASTM E-265 - Measuring Reaction Rates and Fast Neutron Fluence by Radio-activation of Sulfur-32, and correlated to the measured reactor power level. All irradiation conditions required under ASTM 722 were met and includes neutron fluence, distribution, and uncertainty. The average integrated neutron fluence (1-MeV Si equivalent) reported in this document reflects these factors.

Detailed information of the radiation facility is available at the following link:

https://www.uml.edu/docs/FNI%20Brochure_tcm18-90375.pdf

4 Results

There were no functional failures at any irradiation level. All parametric measurements remained well within all data sheet (SNVSBL0) limits for all exposure levels. The full parameter list and graphs are found in Appendix A.

4.1 TPS7H4010-SEP Specification Compliance Matrix

The TPS7H4010-SEP specification compliance matrix is comprised of electrical, timing, and switching characteristics lists as tabulated below.

Table 4-1. Electrical Characteristics

PARAMETER		TEST CONDITIONS	TPS7H4010-SEP Data Sheet				TEST#
			MIN	TYP	MAX	UNIT	
SUPPLY VOLTAGE (PVIN PINS)							
PVIN	Operating input voltage		3.5		32	V	
I_{SD}	Shutdown quiescent current; measured at PVIN pin(1)	V_{EN} = AGND, T_J = 25°C		0.8	10	µA	2.1, 2.2, 2.3, 2.4
I_{Q_NONSW}	Operating quiescent current from PVIN (non-switching)	V_{EN} = 2 V, V_{FB} = 1.5 V, V_{BIAS} = 3.3 V external		0.6	12	µA	25.5
ENABLE (EN PIN)							
$V_{EN\_VCC\_H}$	Enable input high-level for VCC output	V_{EN} rising			1.15	V	30.1
$V_{EN\_VCC\_L}$	Enable input low-level for VCC output	V_{EN} falling	0.3			V	30.2
$V_{EN\_VOUT\_H}$	Enable input high-level for VOUT	V_{EN} rising	1.14	1.196	1.25	V	30.4
$V_{EN\_VOUT\_HYS}$	Enable input hysteresis for VOUT	V_{EN} falling hysteresis		100		mV	30.6
I_{LKG_EN}	Enable input leakage current	V_{EN} = 2 V		1.4	200	nA	25.3
INTERNAL LDO (VCC PIN, BIAS PIN)							
VCC	Internal VCC voltage	PWM operation		3.27		V	12.6, 12.7, 12.8
		PFM operation		3.1		V	29.4, 29.5, 29.6
V_{CC_UVLO}	Internal VCC undervoltage lockout	VCC rising	2.96	3.14	3.27	V	29.2
		VCC falling hysteresis		605		mV	29.3
V_{BIAS_ON}	Input changeover	VBIAS rising		3.09	3.25	V	29.9
		VBIAS falling hysteresis		63		mV	29.10
I_{BIAS_NONSW}	Operating quiescent current from external VBIAS (non-switching)	VEN = 2 V, VFB = 1.5 V, VBIAS = 3.3 V external		21	50	µA	29.16
VOLTAGE REFERENCE (FB PIN)							
V_{FB}	Feedback voltage	PWM mode	0.987	1.006	1.017	V	28.1, 28.3, 28.5
I_{LKG_FB}	Input leakage current at FB pin	VFB = 1 V		0.2	60	nA	25.4
HIGH SIDE DRIVER (CBOOT PIN)							
V_{CBOOT_UVLO}	CBOOT - SW undervoltage lockout		1.6	2.2	2.7	V	38.2
CURRENT LIMITS AND HICCUP							
I_{HS_LIMIT}	Short-circuit, high-side current limit(2)		7.4	8.7	9.85	A	20.5

Table 4-1. Electrical Characteristics (continued)

PARAMETER		TEST CONDITIONS	TPS7H4010-SEP Data Sheet				TEST#
			MIN	TYP	MAX	UNIT	
I_{LS_LIMIT}	Low-side current limit(2)		5.8	6.6	7.25	A	22.5
I_{NEG_LIMIT}	Negative current limit			–6		A	22.7
V_{HICCUP}	Hiccup threshold on FB pin		0.36	0.4	0.44	V	37.17, 37.18
I_{L_ZC}	Zero cross-current limit			0.06		A	22.6
SOFT START (SS/TRK PIN)							
I_{SSC}	Soft-start charge current		1.8	2	2.2	µA	25.6, 32.4
R_{SSD}	Soft-start discharge resistance	UVLO, TSD, OCP, or EN = AGND		1		kΩ	32.3
POWER GOOD (PGOOD PIN) and OVERVOLTAGE PROTECTION							
V_{PGOOD_OV}	Power-good overvoltage threshold	% of FB voltage	106%	110%	113%		37.5,37.6
V_{PGOOD_UV}	Power-good undervoltage threshold	% of FB voltage	86%	90%	93%		37.8, 37.9
V_{PGOOD_HYS}	Power-good hysteresis	% of FB voltage		1.2%			37.7, 37.10
V_{PGOOD_VALID}	Minimum input voltage for proper PGOOD function	50-µA pullup to PGOOD pin, V_{EN} = AGND, T_J = 25°C		1.3	2	V	37.1
R_{PGOOD}	Power-good ON-resistance	VEN = 2.5 V		40	100	Ω	37.2, 37.4
		VEN = AGND		30	90		37.3
MOSFETS							
$R_{DS\_ON\_HS}$ (3)	High-side MOSFET ON-resistance	IOUT = 1 A, VBIAS = VOUT = 3.3 V		53	90	mΩ	18.1
$R_{DS\_ON\_LS}$ (3)	Low-side MOSFET ON-resistance	IOUT = 1 A, VBIAS = VOUT = 3.3 V		31	55	mΩ	18.2

(1) Shutdown current includes leakage current of the switching transistors.
(2) This current limit was measured as the internal comparator trip point. Due to inherent delays in the current limit comparator and drivers, the peak current limit measured in closed loop with faster slew rate will be larger, and valley current limit will be lower.
(3) Measured at pins.

4.2 Timing Characteristics

Table 4-2. Timing Characteristics

PARAMETER		TEST CONDITIONS	TPS7H4010-SEP Data Sheet				Test #
			MIN	TYP	MAX	UNIT	
CURRENT LIMITS AND HICCUP							
t_{OC}	Overcurrent hiccup retry delay time			46		ms	32.2
SOFT START (SS/TRK PIN)							
t_{SS}	Internal soft-start time	CSS = OPEN, from EN rising edge to PGOOD rising edge	3.5	6.3		ms	32.1, 32.5
POWER GOOD (PGOOD PIN) and OVERVOLTAGE PROTECTION							
t_{PGOOD_RISE}	PGOOD rising edge deglitch delay		80	140	200	µs	37.15
t_{PGOOD_FALL}	PGOOD falling edge deglitch delay		80	140	200	µs	37.16

4.3 Switching Characteristics

Table 4-3. Switching Characteristics

PARAMETER		TEST CONDITIONS	TPS7H4010-SEP Data Sheet				Test #
			MIN	TYP	MAX	UNIT	
PWM LIMITS (SW PINS)							
$t_{ON\text{-}MIN}$	Minimum switch on-time			60	82	ns	36.2
$t_{OFF\text{-}MIN}$	Minimum switch off-time			70	120	ns	36.5
$t_{ON\text{-}MAX}$	Maximum switch on-time	HS timeout in dropout	3	6	9	µs	36.7
OSCILLATOR (RT and SYNC PINS)							
f_{OSC}	Internal oscillator frequency	RT = Open	440	500	560	kHz	36.1
f_{ADJ}	Minimum adjustable frqeuency by RT or SYNC	RT = 115 kΩ, 0.1%	315	350	385	kHz	36.9
	Maximum adjustable frqeuency by RT or SYNC	RT = 17.4 kΩ, 0.1%	1980	2200	2420		36.3, 36.4
V_{SYNC_HIGH}	Sync input high-level threshold				2	V	34.1
V_{SYNC_LOW}	Sync input low-level threshold		0.4			V	34.2
V_{MODE_HIGH}	Mode input high-level threshold for FPWM			0.42		V	34.7
V_{MODE_LOW}	Mode input low-level threshold for AUTO mode			0.4		V	34.8
t_{SYNC_MIN}	Sync input minimum ON and OFF time			80		ns	34.5, 34.6

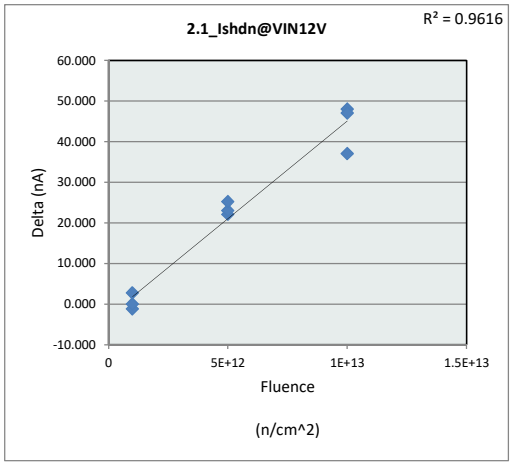
A Appendix A: Test Results

This appendix contains the detailed NDD test results.

NDD Report
TPS7H4010-SEP

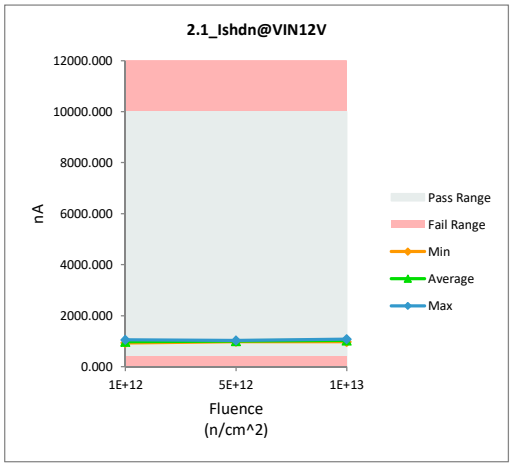
	2.1_Ishdn@VIN12V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	1445	10000
Min Limit	400	400

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1055.740	1054.540	-1.200
1E+12	121	965.820	965.850	0.030
1E+12	122	930.030	932.740	2.710
5E+12	123	988.510	1010.600	22.090
5E+12	124	960.310	983.310	23.000
5E+12	125	1008.620	1033.860	25.240
1E+13	126	924.960	972.990	48.030
1E+13	127	1044.120	1081.170	37.050
1E+13	128	983.130	1030.180	47.050
	Max	1055.740	1081.170	48.030
	Average	984.582	1007.249	22.667
	Min	924.960	932.740	-1.200
	Std Dev	45.656	47.379	19.145



	2.1_Ishdn@VIN12V	
Test Site		
Tester		
Test Number		
Max Limit	10000	nA
Min Limit	400	nA

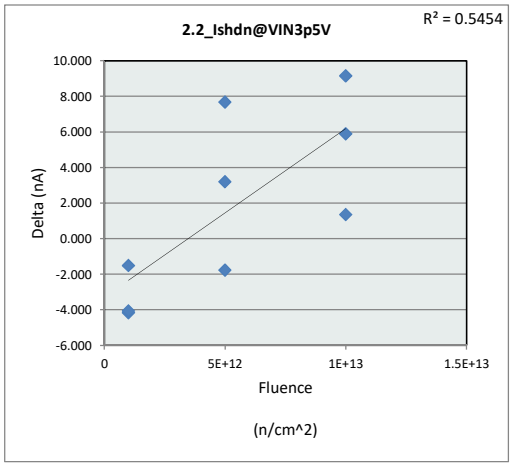
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	400.000	400.000	400.000
Min	932.740	983.310	972.990
Average	984.377	1009.257	1028.113
Max	1054.540	1033.860	1081.170
UL	10000.000	10000.000	10000.000



NDD Report
TPS7H4010-SEP

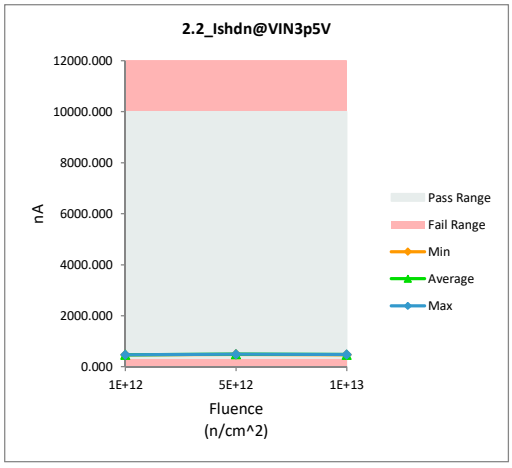
	2.2_Ishdn@VIN3p5V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	580	10000
Min Limit	295	295

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	480.310	476.150	-4.160
1E+12	121	469.730	468.220	-1.510
1E+12	122	479.770	475.710	-4.060
5E+12	123	490.540	488.770	-1.770
5E+12	124	481.060	488.740	7.680
5E+12	125	486.540	489.750	3.210
1E+13	126	470.420	476.310	5.890
1E+13	127	474.480	475.840	1.360
1E+13	128	470.640	479.800	9.160
	Max	490.540	489.750	9.160
	Average	478.166	479.921	1.756
	Min	469.730	468.220	-4.160
	Std Dev	7.418	7.511	5.015



	2.2_Ishdn@VIN3p5V	
Test Site		
Tester		
Test Number		
Max Limit	10000	nA
Min Limit	295	nA

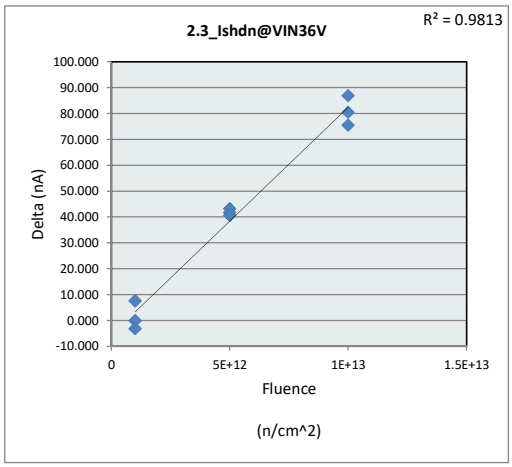
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	295.000	295.000	295.000
Min	468.220	488.740	475.840
Average	473.360	489.087	477.317
Max	476.150	489.750	479.800
UL	10000.000	10000.000	10000.000



NDD Report
TPS7H4010-SEP

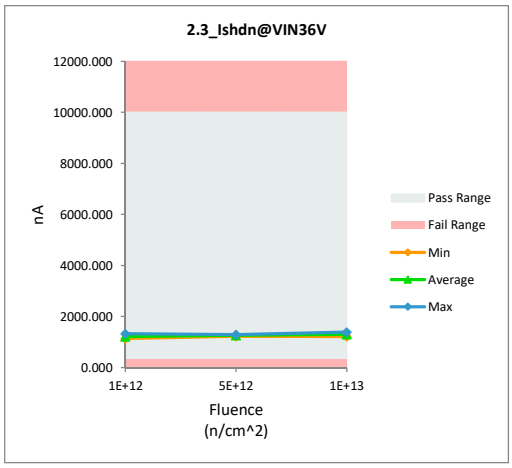
	2.3_Ishdn@VIN36V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	1940	10000
Min Limit	345	345

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1322.410	1322.320	-0.090
1E+12	121	1196.230	1193.050	-3.180
1E+12	122	1128.030	1135.550	7.520
5E+12	123	1226.350	1269.470	43.120
5E+12	124	1182.160	1223.900	41.740
5E+12	125	1248.640	1289.210	40.570
1E+13	126	1132.180	1219.080	86.900
1E+13	127	1308.940	1384.410	75.470
1E+13	128	1219.770	1300.250	80.480
	Max	1322.410	1384.410	86.900
	Average	1218.301	1259.693	41.392
	Min	1128.030	1135.550	-3.180
	Std Dev	68.374	74.893	34.675



	2.3_Ishdn@VIN36V	
Test Site		
Tester		
Test Number		
Max Limit	10000	nA
Min Limit	345	nA

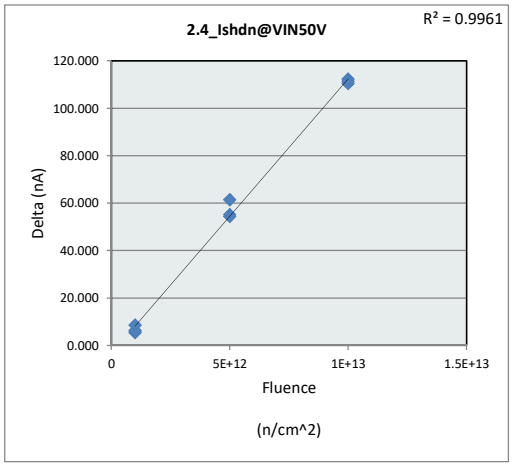
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	345.000	345.000	345.000
Min	1135.550	1223.900	1219.080
Average	1216.973	1260.860	1301.247
Max	1322.320	1289.210	1384.410
UL	10000.000	10000.000	10000.000



NDD Report
TPS7H4010-SEP

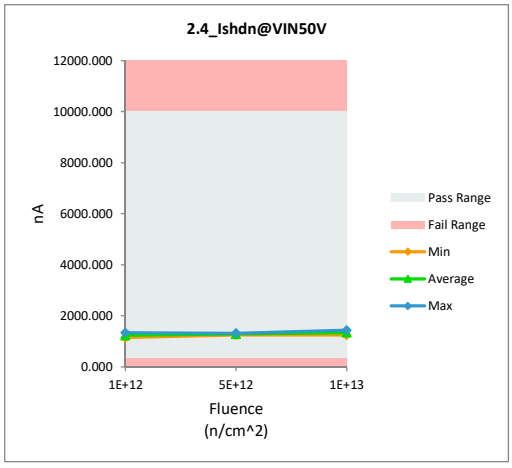
	2.4_Ishdn@VIN50V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	2500	10000
Min Limit	345	345

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1335.160	1340.580	5.420
1E+12	121	1214.070	1220.440	6.370
1E+12	122	1134.320	1142.970	8.650
5E+12	123	1239.510	1300.930	61.420
5E+12	124	1196.710	1251.870	55.160
5E+12	125	1263.250	1317.680	54.430
1E+13	126	1139.950	1250.420	110.470
1E+13	127	1323.770	1436.100	112.330
1E+13	128	1228.860	1340.270	111.410
	Max	1335.160	1436.100	112.330
	Average	1230.622	1289.029	58.407
	Min	1134.320	1142.970	5.420
	Std Dev	70.419	84.250	45.352



	2.4_Ishdn@VIN50V	
Test Site		
Tester		
Test Number		
Max Limit	10000	nA
Min Limit	345	nA

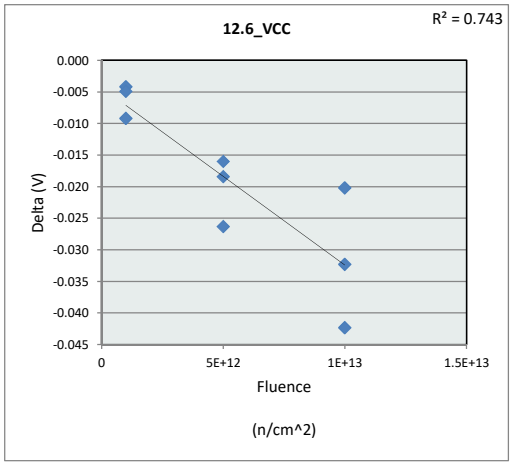
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	345.000	345.000	345.000
Min	1142.970	1251.870	1250.420
Average	1234.663	1290.160	1342.263
Max	1340.580	1317.680	1436.100
UL	10000.000	10000.000	10000.000



NDD Report
TPS7H4010-SEP

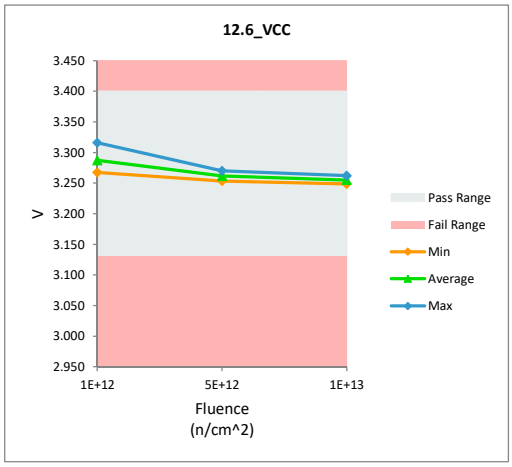
	12.6_VCC	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.4	3.4
Min Limit	3.13	3.13

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.282	3.278	-0.004
1E+12	121	3.321	3.316	-0.005
1E+12	122	3.277	3.267	-0.009
5E+12	123	3.280	3.261	-0.018
5E+12	124	3.286	3.270	-0.016
5E+12	125	3.280	3.253	-0.026
1E+13	126	3.282	3.262	-0.020
1E+13	127	3.281	3.249	-0.032
1E+13	128	3.297	3.254	-0.042
	Max	3.321	3.316	-0.004
	Average	3.287	3.268	-0.019
	Min	3.277	3.249	-0.042
	Std Dev	0.014	0.020	0.013



	12.6_VCC		
Test Site			
Tester			
Test Number			
Max Limit	3.4	V	
Min Limit	3.13	V	

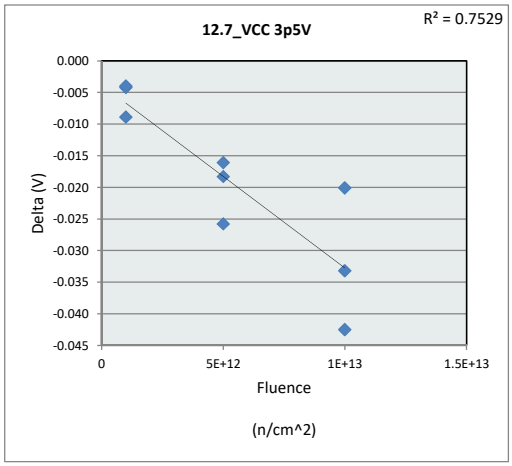
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.130	3.130	3.130
Min	3.268	3.253	3.249
Average	3.287	3.262	3.255
Max	3.316	3.270	3.262
UL	3.400	3.400	3.400



NDD Report
TPS7H4010-SEP

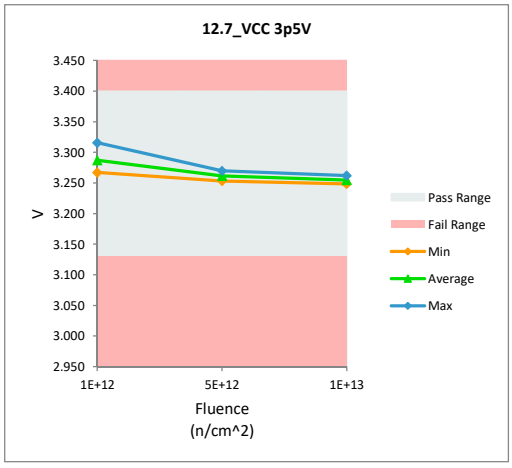
	12.7_VCC 3p5V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.4	3.4
Min Limit	3.13	3.13

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.282	3.277	-0.004
1E+12	121	3.320	3.316	-0.004
1E+12	122	3.276	3.267	-0.009
5E+12	123	3.279	3.261	-0.018
5E+12	124	3.286	3.270	-0.016
5E+12	125	3.279	3.253	-0.026
1E+13	126	3.282	3.262	-0.020
1E+13	127	3.282	3.249	-0.033
1E+13	128	3.296	3.254	-0.043
	Max	3.320	3.316	-0.004
	Average	3.287	3.268	-0.019
	Min	3.276	3.249	-0.043
	Std Dev	0.014	0.020	0.013



	12.7_VCC 3p5V		
Test Site			
Tester			
Test Number			
Max Limit	3.4	V	
Min Limit	3.13	V	

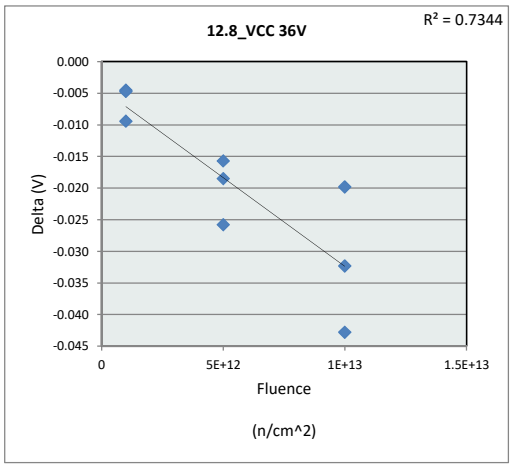
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.130	3.130	3.130
Min	3.267	3.253	3.249
Average	3.287	3.261	3.255
Max	3.316	3.270	3.262
UL	3.400	3.400	3.400



NDD Report
TPS7H4010-SEP

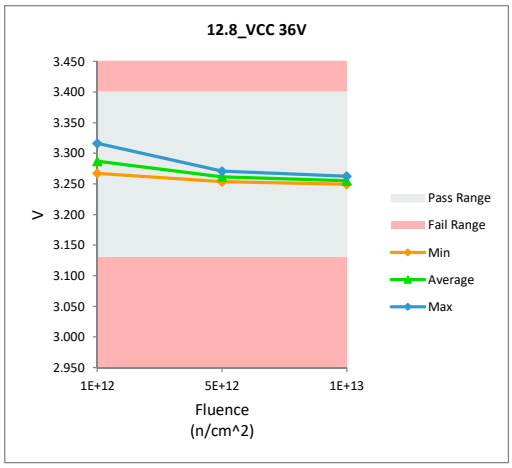
	12.8_VCC 36V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.4	3.4
Min Limit	3.13	3.13

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.282	3.278	-0.004
1E+12	121	3.321	3.316	-0.005
1E+12	122	3.277	3.267	-0.009
5E+12	123	3.280	3.261	-0.018
5E+12	124	3.286	3.271	-0.016
5E+12	125	3.279	3.253	-0.026
1E+13	126	3.282	3.263	-0.020
1E+13	127	3.282	3.249	-0.032
1E+13	128	3.297	3.254	-0.043
	Max	3.321	3.316	-0.004
	Average	3.287	3.268	-0.019
	Min	3.277	3.249	-0.043
	Std Dev	0.014	0.020	0.013



	12.8_VCC 36V		
Test Site			
Tester			
Test Number			
Max Limit	3.4	V	
Min Limit	3.13	V	

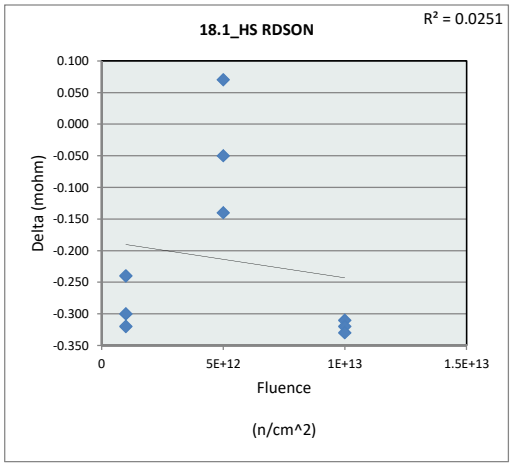
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.130	3.130	3.130
Min	3.267	3.253	3.249
Average	3.287	3.262	3.255
Max	3.316	3.271	3.263
UL	3.400	3.400	3.400



NDD Report
TPS7H4010-SEP

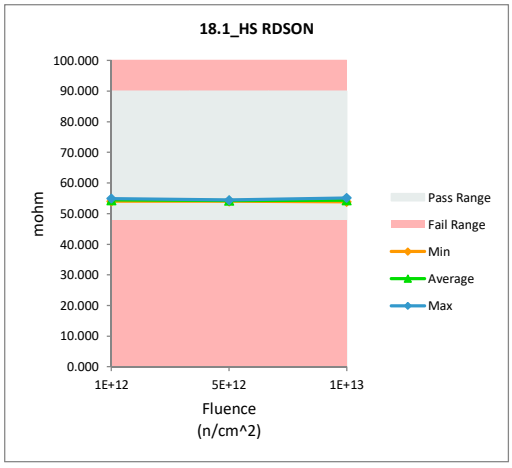
	18.1_HS RDSON	
Test Site		
Tester		
Test Number		
Unit	mohm	mohm
Max Limit	58	90
Min Limit	48	48

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	54.690	54.370	-0.320
1E+12	121	54.330	54.030	-0.300
1E+12	122	55.170	54.930	-0.240
5E+12	123	54.220	54.290	0.070
5E+12	124	54.480	54.430	-0.050
5E+12	125	54.180	54.040	-0.140
1E+13	126	55.450	55.140	-0.310
1E+13	127	54.190	53.870	-0.320
1E+13	128	54.550	54.220	-0.330
	Max	55.450	55.140	0.070
	Average	54.584	54.369	-0.216
	Min	54.180	53.870	-0.330
	Std Dev	0.452	0.420	0.144



	18.1_HS RDSON	
Test Site		
Tester		
Test Number		
Max Limit	90	mohm
Min Limit	48	mohm

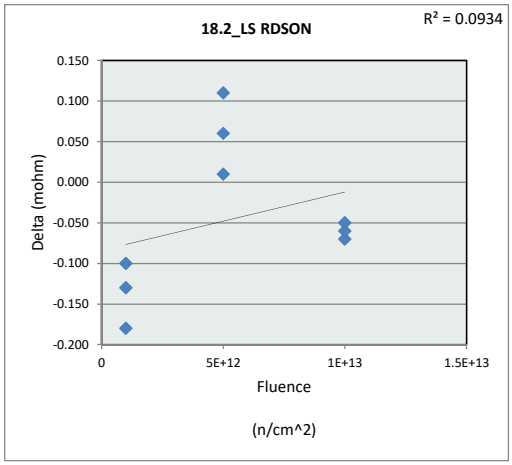
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	48.000	48.000	48.000
Min	54.030	54.040	53.870
Average	54.443	54.253	54.410
Max	54.930	54.430	55.140
UL	90.000	90.000	90.000



NDD Report
TPS7H4010-SEP

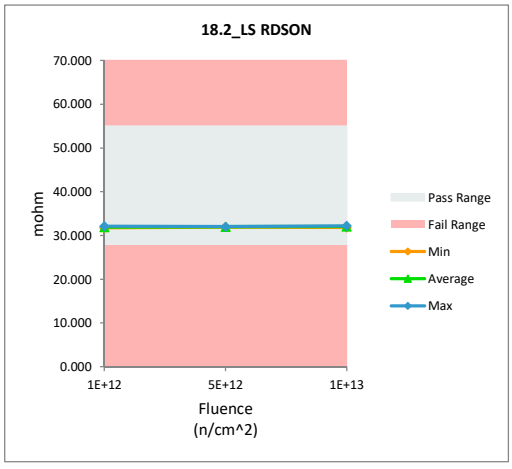
	18.2_LS RDSON	
Test Site		
Tester		
Test Number		
Unit	mohm	mohm
Max Limit	45	55
Min Limit	27.8	27.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	32.070	31.890	-0.180
1E+12	121	31.880	31.750	-0.130
1E+12	122	32.220	32.120	-0.100
5E+12	123	31.890	32.000	0.110
5E+12	124	31.960	32.020	0.060
5E+12	125	31.930	31.940	0.010
1E+13	126	32.270	32.220	-0.050
1E+13	127	31.890	31.820	-0.070
1E+13	128	32.080	32.020	-0.060
	Max	32.270	32.220	0.110
	Average	32.021	31.976	-0.046
	Min	31.880	31.750	-0.180
	Std Dev	0.147	0.145	0.092



	18.2_LS RDSON		
Test Site			
Tester			
Test Number			
Max Limit	55	mohm	
Min Limit	27.8	mohm	

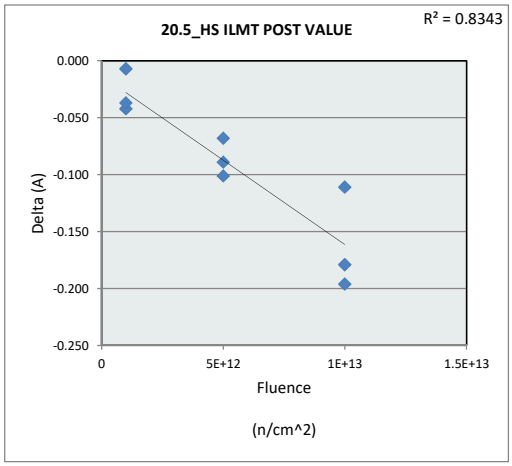
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	27.800	27.800	27.800
Min	31.750	31.940	31.820
Average	31.920	31.987	32.020
Max	32.120	32.020	32.220
UL	55.000	55.000	55.000



NDD Report
TPS7H4010-SEP

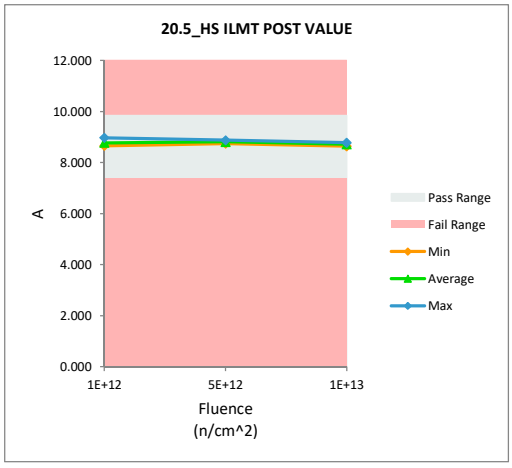
	20.5_HS ILMT POST VALUE	
Test Site		
Tester		
Test Number		
Unit	A	A
Max Limit	9.15	9.85
Min Limit	7.4	7.4

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	8.707	8.700	-0.007
1E+12	121	9.017	8.975	-0.042
1E+12	122	8.692	8.655	-0.037
5E+12	123	8.905	8.816	-0.089
5E+12	124	8.818	8.750	-0.068
5E+12	125	8.981	8.880	-0.101
1E+13	126	8.834	8.723	-0.111
1E+13	127	8.962	8.783	-0.179
1E+13	128	8.838	8.642	-0.196
	Max	9.017	8.975	-0.007
	Average	8.862	8.769	-0.092
	Min	8.692	8.642	-0.196
	Std Dev	0.115	0.108	0.063



	20.5_HS ILMT POST VALUE	
Test Site		
Tester		
Test Number		
Max Limit	9.85	A
Min Limit	7.4	A

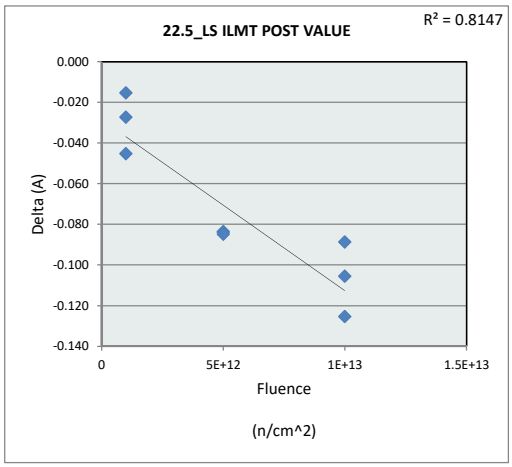
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	7.400	7.400	7.400
Min	8.655	8.750	8.642
Average	8.777	8.815	8.716
Max	8.975	8.880	8.783
UL	9.850	9.850	9.850



NDD Report
TPS7H4010-SEP

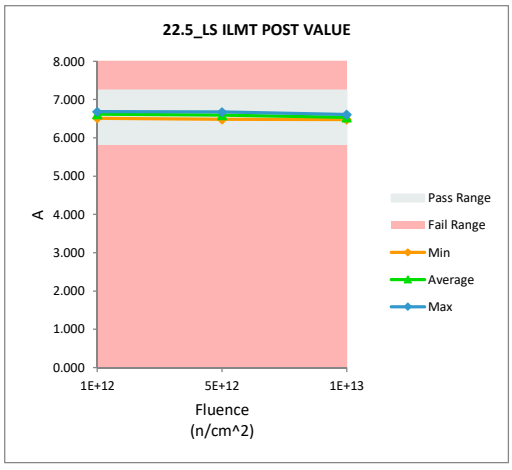
	22.5_LS ILMT POST VALUE	
Test Site		
Tester		
Test Number		
Unit	A	A
Max Limit	6.95	7.25
Min Limit	5.8	5.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	6.700	6.685	-0.015
1E+12	121	6.701	6.656	-0.045
1E+12	122	6.542	6.515	-0.027
5E+12	123	6.569	6.485	-0.083
5E+12	124	6.706	6.622	-0.084
5E+12	125	6.759	6.674	-0.085
1E+13	126	6.697	6.608	-0.089
1E+13	127	6.583	6.478	-0.105
1E+13	128	6.646	6.520	-0.125
	Max	6.759	6.685	-0.015
	Average	6.656	6.582	-0.073
	Min	6.542	6.478	-0.125
	Std Dev	0.075	0.083	0.036



	22.5_LS ILMT POST VALUE	
Test Site		
Tester		
Test Number		
Max Limit	7.25	A
Min Limit	5.8	A

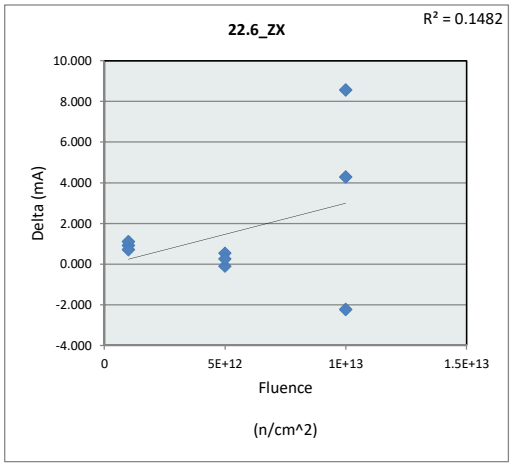
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	5.800	5.800	5.800
Min	6.515	6.485	6.478
Average	6.618	6.594	6.535
Max	6.685	6.674	6.608
UL	7.250	7.250	7.250



NDD Report
TPS7H4010-SEP

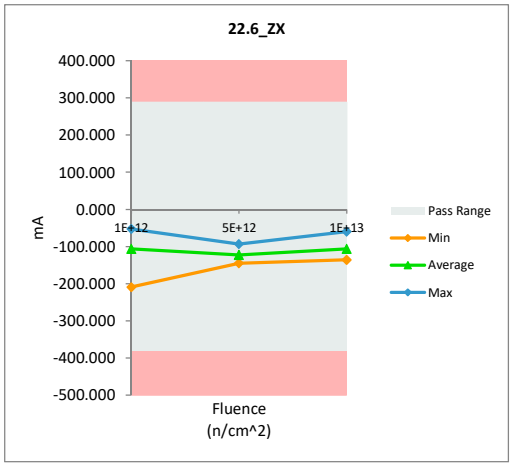
	22.6_ZX	
Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	288	288
Min Limit	-380	-380

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	-53.510	-52.590	0.920
1E+12	121	-58.630	-57.520	1.110
1E+12	122	-209.850	-209.140	0.710
5E+12	123	-93.990	-93.460	0.530
5E+12	124	-129.420	-129.520	-0.100
5E+12	125	-145.240	-144.980	0.260
1E+13	126	-132.420	-123.850	8.570
1E+13	127	-64.140	-59.850	4.290
1E+13	128	-133.670	-135.900	-2.230
	Max	-53.510	-52.590	8.570
	Average	-113.430	-111.868	1.562
	Min	-209.850	-209.140	-2.230
	Std Dev	50.911	51.361	3.118



	22.6_ZX	
Test Site		
Tester		
Test Number		
Max Limit	288	mA
Min Limit	-380	mA

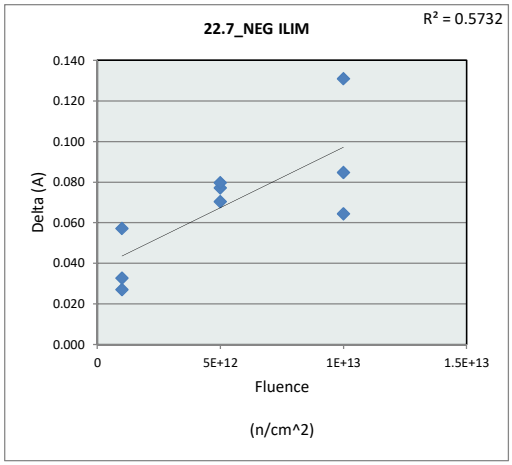
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-380.000	-380.000	-380.000
Min	-209.140	-144.980	-135.900
Average	-106.417	-122.653	-106.533
Max	-52.590	-93.460	-59.850
UL	288.000	288.000	288.000



NDD Report
TPS7H4010-SEP

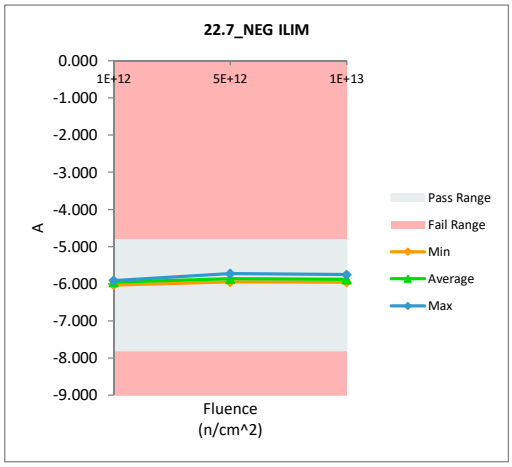
	22.7_NEG ILIM	
Test Site		
Tester		
Test Number		
Unit	A	A
Max Limit	-4.8	-4.8
Min Limit	-7.8	-7.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	-6.063	-6.036	0.027
1E+12	121	-5.965	-5.933	0.033
1E+12	122	-5.972	-5.915	0.057
5E+12	123	-5.799	-5.729	0.070
5E+12	124	-6.031	-5.954	0.077
5E+12	125	-6.005	-5.925	0.080
1E+13	126	-6.026	-5.962	0.064
1E+13	127	-5.842	-5.757	0.085
1E+13	128	-6.054	-5.923	0.131
	Max	-5.799	-5.729	0.131
	Average	-5.973	-5.904	0.069
	Min	-6.063	-6.036	0.027
	Std Dev	0.093	0.098	0.031



	22.7_NEG ILIM		
Test Site			
Tester			
Test Number			
Max Limit	-4.8	A	
Min Limit	-7.8	A	

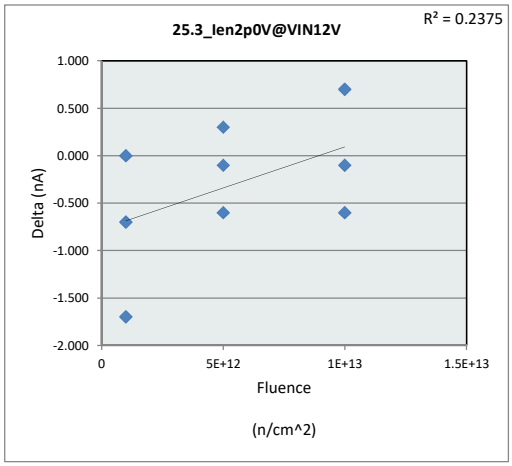
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-7.800	-7.800	-7.800
Min	-6.036	-5.954	-5.962
Average	-5.961	-5.869	-5.881
Max	-5.915	-5.729	-5.757
UL	-4.800	-4.800	-4.800



NDD Report
TPS7H4010-SEP

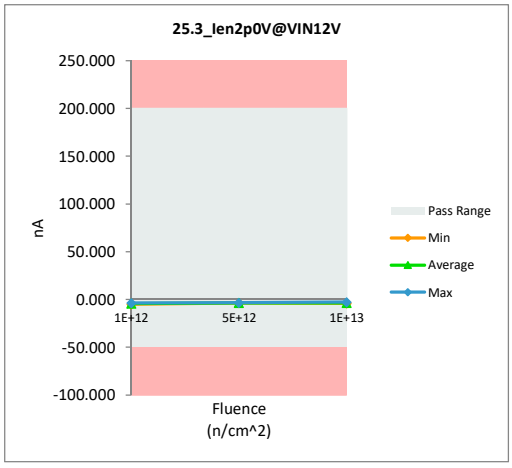
	25.3_Ien2p0V@VIN12V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	50	200
Min Limit	-50	-50

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	-3.600	-3.600	0.000
1E+12	121	-3.200	-3.900	-0.700
1E+12	122	-3.400	-5.100	-1.700
5E+12	123	-4.000	-3.700	0.300
5E+12	124	-3.300	-3.400	-0.100
5E+12	125	-2.800	-3.400	-0.600
1E+13	126	-3.500	-2.800	0.700
1E+13	127	-3.500	-4.100	-0.600
1E+13	128	-3.600	-3.700	-0.100
	Max	-2.800	-2.800	0.700
	Average	-3.433	-3.744	-0.311
	Min	-4.000	-5.100	-1.700
	Std Dev	0.328	0.627	0.692



	25.3_Ien2p0V@VIN12V	
Test Site		
Tester		
Test Number		
Max Limit	200	nA
Min Limit	-50	nA

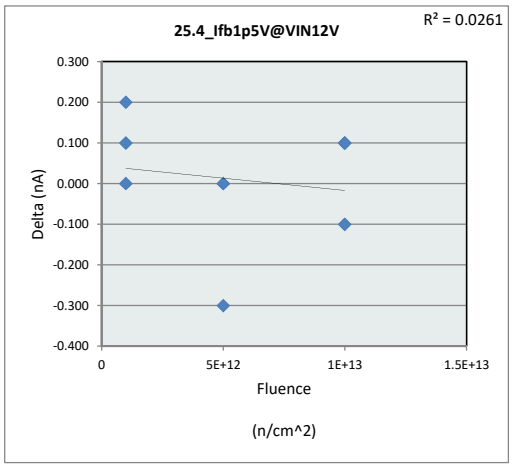
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-50.000	-50.000	-50.000
Min	-5.100	-3.700	-4.100
Average	-4.200	-3.500	-3.533
Max	-3.600	-3.400	-2.800
UL	200.000	200.000	200.000



NDD Report
TPS7H4010-SEP

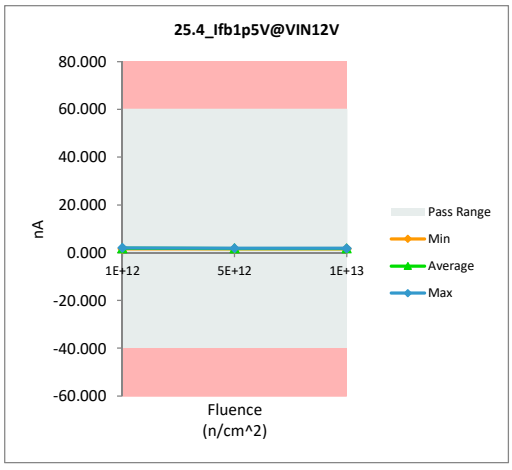
	25.4_Ifb1p5V@VIN12V	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	40	60
Min Limit	-40	-40

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.800	2.000	0.200
1E+12	121	1.900	2.000	0.100
1E+12	122	1.600	1.600	0.000
5E+12	123	1.900	1.900	0.000
5E+12	124	1.900	1.600	-0.300
5E+12	125	1.800	1.800	0.000
1E+13	126	1.700	1.800	0.100
1E+13	127	1.700	1.800	0.100
1E+13	128	1.700	1.600	-0.100
	Max	1.900	2.000	0.200
	Average	1.778	1.789	0.011
	Min	1.600	1.600	-0.300
	Std Dev	0.109	0.162	0.145



	25.4_Ifb1p5V@VIN12V	
Test Site		
Tester		
Test Number		
Max Limit	60	nA
Min Limit	-40	nA

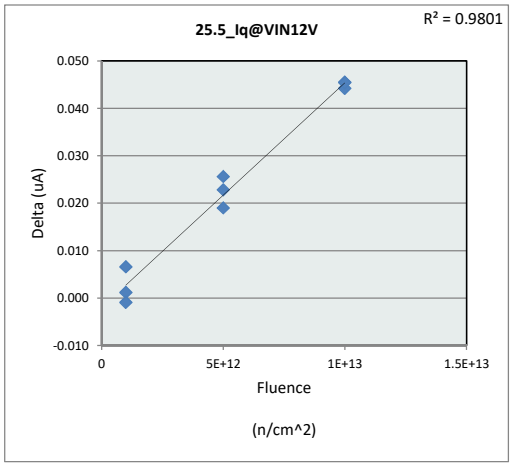
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-40.000	-40.000	-40.000
Min	1.600	1.600	1.600
Average	1.867	1.767	1.733
Max	2.000	1.900	1.800
UL	60.000	60.000	60.000



NDD Report
TPS7H4010-SEP

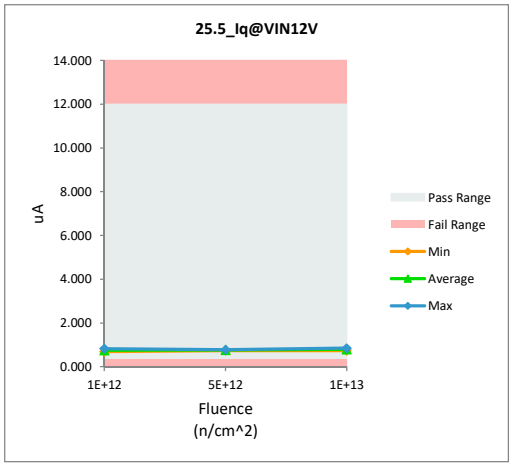
	25.5_Iq@VIN12V	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	1.1	12
Min Limit	0.33	0.33

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.823	0.824	0.001
1E+12	121	0.732	0.731	-0.001
1E+12	122	0.686	0.693	0.007
5E+12	123	0.741	0.767	0.026
5E+12	124	0.717	0.739	0.023
5E+12	125	0.766	0.785	0.019
1E+13	126	0.696	0.742	0.046
1E+13	127	0.804	0.848	0.044
1E+13	128	0.748	0.794	0.045
	Max	0.823	0.848	0.046
	Average	0.746	0.769	0.023
	Min	0.686	0.693	-0.001
	Std Dev	0.046	0.049	0.019



	25.5_Iq@VIN12V	
Test Site		
Tester		
Test Number		
Max Limit	12	uA
Min Limit	0.33	uA

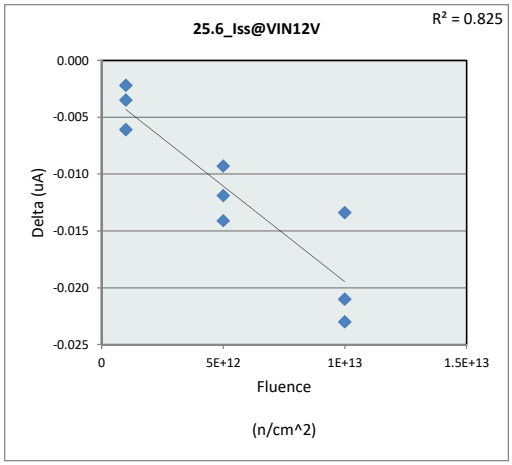
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.330	0.330	0.330
Min	0.693	0.739	0.742
Average	0.749	0.764	0.795
Max	0.824	0.785	0.848
UL	12.000	12.000	12.000



NDD Report
TPS7H4010-SEP

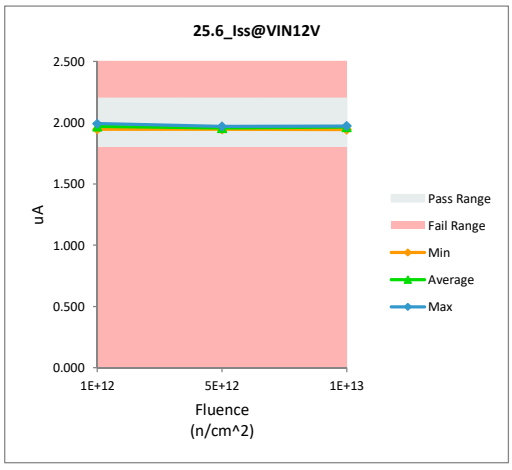
	25.6_Iss@VIN12V	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	2.199	2.2
Min Limit	1.8	1.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.996	1.993	-0.002
1E+12	121	1.973	1.970	-0.003
1E+12	122	1.954	1.947	-0.006
5E+12	123	1.960	1.948	-0.012
5E+12	124	1.962	1.953	-0.009
5E+12	125	1.986	1.972	-0.014
1E+13	126	1.959	1.946	-0.013
1E+13	127	1.995	1.974	-0.021
1E+13	128	1.996	1.973	-0.023
	Max	1.996	1.993	-0.002
	Average	1.976	1.964	-0.012
	Min	1.954	1.946	-0.023
	Std Dev	0.018	0.016	0.007



	25.6_Iss@VIN12V		
Test Site			
Tester			
Test Number			
Max Limit	2.2	uA	
Min Limit	1.8	uA	

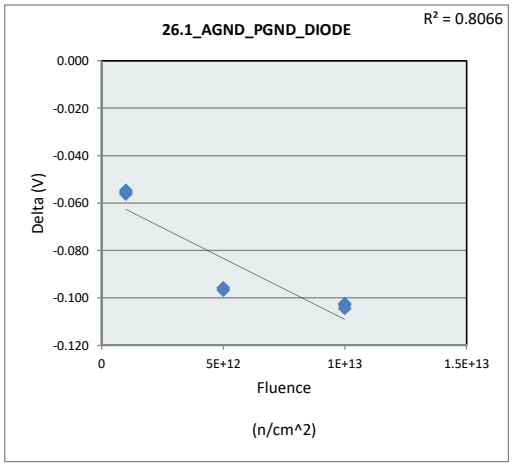
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.800	1.800	1.800
Min	1.948	1.948	1.946
Average	1.970	1.958	1.964
Max	1.993	1.972	1.974
UL	2.200	2.200	2.200



NDD Report
TPS7H4010-SEP

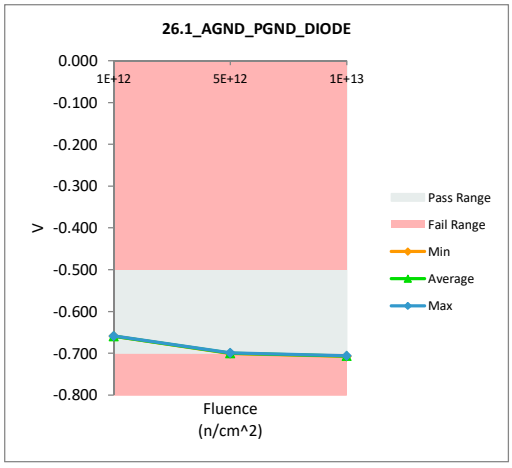
	26.1_AGND_PGND_DIODE	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	-0.5	-0.5
Min Limit	-0.7	-0.7

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	-0.603	-0.659	-0.056
1E+12	121	-0.603	-0.659	-0.055
1E+12	122	-0.604	-0.659	-0.055
5E+12	123	-0.603	-0.699	-0.096
5E+12	124	-0.604	-0.700	-0.097
5E+12	125	-0.604	-0.701	-0.097
1E+13	126	-0.603	-0.706	-0.102
1E+13	127	-0.603	-0.706	-0.103
1E+13	128	-0.603	-0.707	-0.104
	Max	-0.603	-0.659	-0.055
	Average	-0.603	-0.688	-0.085
	Min	-0.604	-0.707	-0.104
	Std Dev	0.000	0.022	0.022



	26.1_AGND_PGND_DIODE		
Test Site			
Tester			
Test Number			
Max Limit	-0.5	V	
Min Limit	-0.7	V	

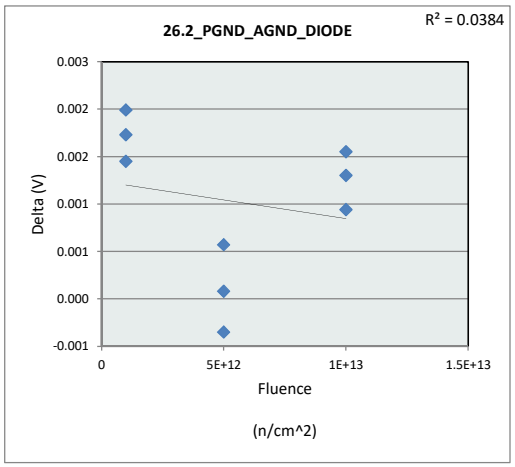
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-0.700	-0.700	-0.700
Min	-0.659	-0.701	-0.707
Average	-0.659	-0.700	-0.706
Max	-0.659	-0.699	-0.706
UL	-0.500	-0.500	-0.500



NDD Report
TPS7H4010-SEP

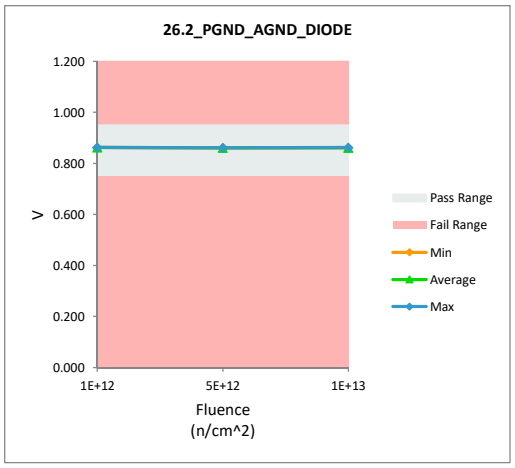
	26.2_PGND_AGND_DIODE	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.95	0.95
Min Limit	0.75	0.75

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.861	0.863	0.002
1E+12	121	0.861	0.863	0.002
1E+12	122	0.860	0.862	0.001
5E+12	123	0.861	0.860	0.000
5E+12	124	0.861	0.861	0.000
5E+12	125	0.861	0.861	0.001
1E+13	126	0.860	0.861	0.001
1E+13	127	0.861	0.862	0.001
1E+13	128	0.860	0.862	0.002
	Max	0.861	0.863	0.002
	Average	0.861	0.862	0.001
	Min	0.860	0.860	0.000
	Std Dev	0.000	0.001	0.001



	26.2_PGND_AGND_DIODE		
Test Site			
Tester			
Test Number			
Max Limit	0.95	V	
Min Limit	0.75	V	

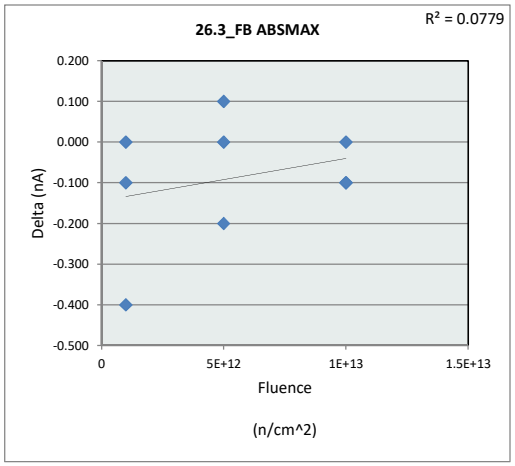
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.750	0.750	0.750
Min	0.862	0.860	0.861
Average	0.862	0.861	0.862
Max	0.863	0.861	0.862
UL	0.950	0.950	0.950



NDD Report
TPS7H4010-SEP

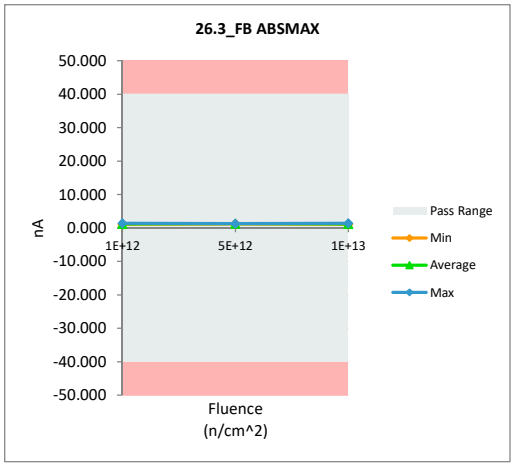
	26.3_FB ABSMAX	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	40	40
Min Limit	-40	-40

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.500	1.100	-0.400
1E+12	121	1.300	1.200	-0.100
1E+12	122	1.400	1.400	0.000
5E+12	123	1.100	1.200	0.100
5E+12	124	1.500	1.300	-0.200
5E+12	125	1.300	1.300	0.000
1E+13	126	1.500	1.400	-0.100
1E+13	127	1.100	1.100	0.000
1E+13	128	1.300	1.200	-0.100
	Max	1.500	1.400	0.100
	Average	1.333	1.244	-0.089
	Min	1.100	1.100	-0.400
	Std Dev	0.158	0.113	0.145



	26.3_FB ABSMAX	
Test Site		
Tester		
Test Number		
Max Limit	40	nA
Min Limit	-40	nA

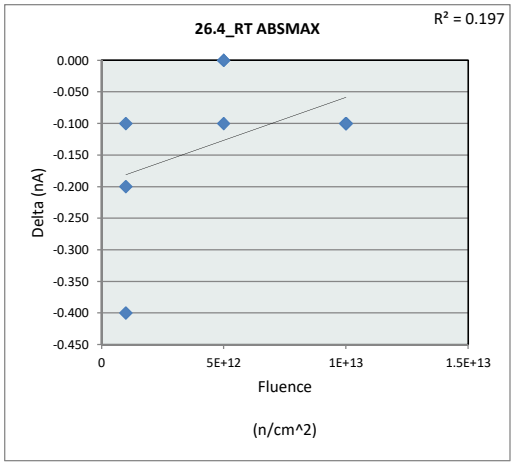
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-40.000	-40.000	-40.000
Min	1.100	1.200	1.100
Average	1.233	1.267	1.233
Max	1.400	1.300	1.400
UL	40.000	40.000	40.000



NDD Report
TPS7H4010-SEP

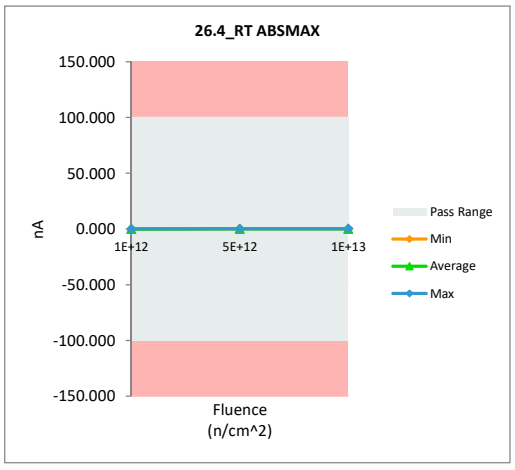
	26.4_RT ABSMAX	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	100	100
Min Limit	-100	-100

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.200	0.100	-0.100
1E+12	121	0.200	0.000	-0.200
1E+12	122	0.300	-0.100	-0.400
5E+12	123	0.100	0.100	0.000
5E+12	124	0.100	0.100	0.000
5E+12	125	0.200	0.100	-0.100
1E+13	126	0.300	0.200	-0.100
1E+13	127	0.300	0.200	-0.100
1E+13	128	0.300	0.200	-0.100
	Max	0.300	0.200	0.000
	Average	0.222	0.100	-0.122
	Min	0.100	-0.100	-0.400
	Std Dev	0.083	0.100	0.120



	26.4_RT ABSMAX		
Test Site			
Tester			
Test Number			
Max Limit	100	nA	
Min Limit	-100	nA	

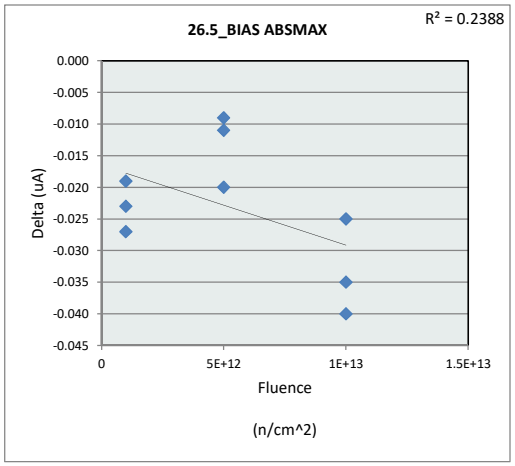
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-100.000	-100.000	-100.000
Min	-0.100	0.100	0.200
Average	0.000	0.100	0.200
Max	0.100	0.100	0.200
UL	100.000	100.000	100.000



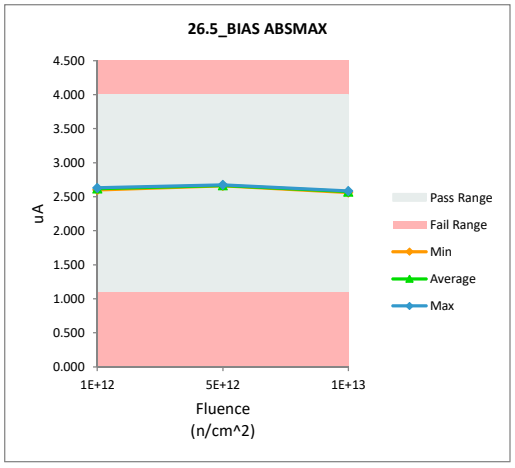
NDD Report
TPS7H4010-SEP

	26.5_BIAS ABSMAX	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	4	4
Min Limit	1.1	1.1

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	2.620	2.601	-0.019
1E+12	121	2.652	2.625	-0.027
1E+12	122	2.653	2.630	-0.023
5E+12	123	2.669	2.658	-0.011
5E+12	124	2.680	2.660	-0.020
5E+12	125	2.684	2.675	-0.009
1E+13	126	2.609	2.584	-0.025
1E+13	127	2.596	2.561	-0.035
1E+13	128	2.618	2.578	-0.040
	Max	2.684	2.675	-0.009
	Average	2.642	2.619	-0.023
	Min	2.596	2.561	-0.040
	Std Dev	0.032	0.040	0.010



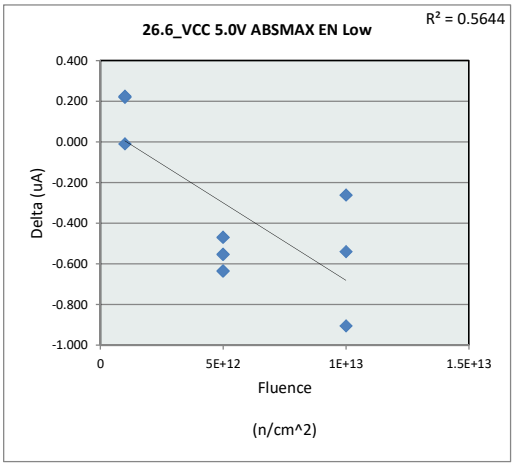
	26.5_BIAS ABSMAX		
Test Site			
Tester			
Test Number			
Max Limit	4	uA	
Min Limit	1.1	uA	
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.100	1.100	1.100
Min	2.601	2.658	2.561
Average	2.619	2.664	2.574
Max	2.630	2.675	2.584
UL	4.000	4.000	4.000



NDD Report
TPS7H4010-SEP

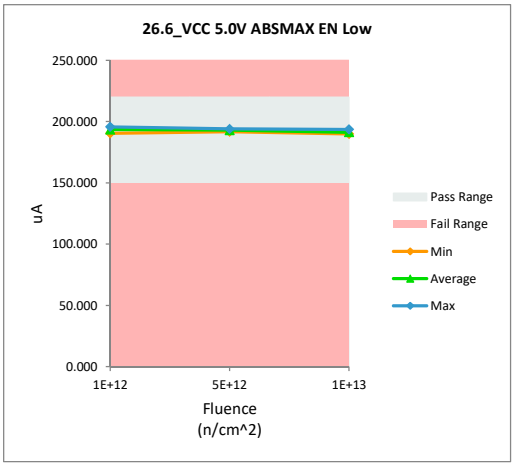
	26.6_VCC 5.0V ABSMAX EN Low	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	220	220
Min Limit	150	150

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	195.548	195.768	0.220
1E+12	121	194.195	194.420	0.225
1E+12	122	190.596	190.587	-0.009
5E+12	123	194.254	193.701	-0.553
5E+12	124	194.539	194.070	-0.469
5E+12	125	192.315	191.680	-0.635
1E+13	126	190.257	189.996	-0.261
1E+13	127	194.229	193.690	-0.539
1E+13	128	191.309	190.404	-0.905
	Max	195.548	195.768	0.225
	Average	193.027	192.702	-0.325
	Min	190.257	189.996	-0.905
	Std Dev	1.936	2.071	0.396



	26.6_VCC 5.0V ABSMAX EN Low		
Test Site			
Tester			
Test Number			
Max Limit	220	uA	
Min Limit	150	uA	

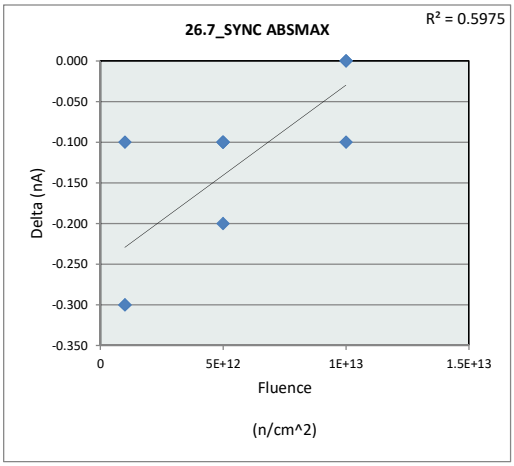
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	150.000	150.000	150.000
Min	190.587	191.680	189.996
Average	193.592	193.150	191.363
Max	195.768	194.070	193.690
UL	220.000	220.000	220.000



NDD Report
TPS7H4010-SEP

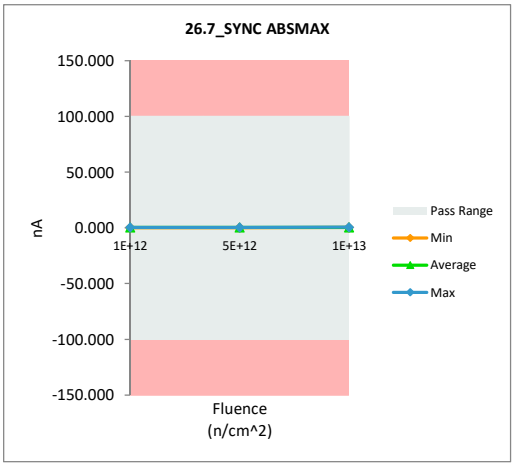
	26.7_SYNC ABSMAX	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	100	100
Min Limit	-100	-100

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.500	0.400	-0.100
1E+12	121	0.500	0.200	-0.300
1E+12	122	0.600	0.300	-0.300
5E+12	123	0.400	0.200	-0.200
5E+12	124	0.500	0.400	-0.100
5E+12	125	0.400	0.300	-0.100
1E+13	126	0.700	0.700	0.000
1E+13	127	0.400	0.400	0.000
1E+13	128	0.500	0.400	-0.100
	Max	0.700	0.700	0.000
	Average	0.500	0.367	-0.133
	Min	0.400	0.200	-0.300
	Std Dev	0.100	0.150	0.112



	26.7_SYNC ABSMAX	
Test Site		
Tester		
Test Number		
Max Limit	100	nA
Min Limit	-100	nA

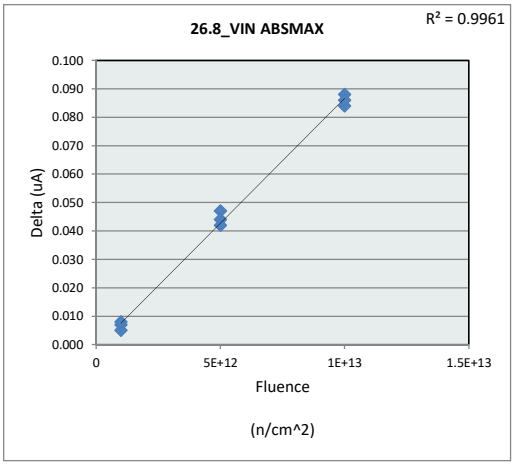
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-100.000	-100.000	-100.000
Min	0.200	0.200	0.400
Average	0.300	0.300	0.500
Max	0.400	0.400	0.700
UL	100.000	100.000	100.000



NDD Report
TPS7H4010-SEP

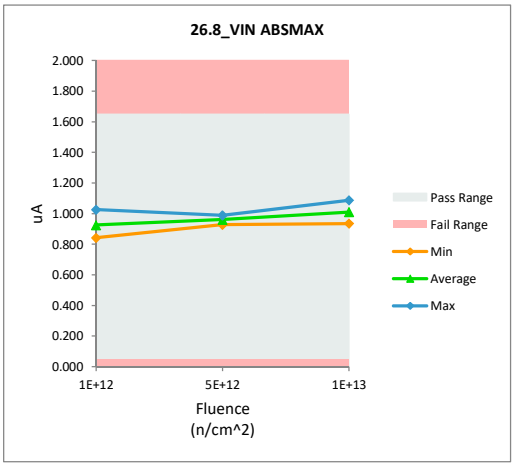
	26.8_VIN ABSMAX	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	1.65	1.65
Min Limit	0.05	0.05

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.021	1.026	0.005
1E+12	121	0.901	0.908	0.007
1E+12	122	0.834	0.842	0.008
5E+12	123	0.919	0.966	0.047
5E+12	124	0.884	0.928	0.044
5E+12	125	0.946	0.988	0.042
1E+13	126	0.847	0.935	0.088
1E+13	127	1.004	1.088	0.084
1E+13	128	0.923	1.009	0.086
	Max	1.021	1.088	0.088
	Average	0.920	0.966	0.046
	Min	0.834	0.842	0.005
	Std Dev	0.064	0.072	0.034



	26.8_VIN ABSMAX		
Test Site			
Tester			
Test Number			
Max Limit	1.65	uA	
Min Limit	0.05	uA	

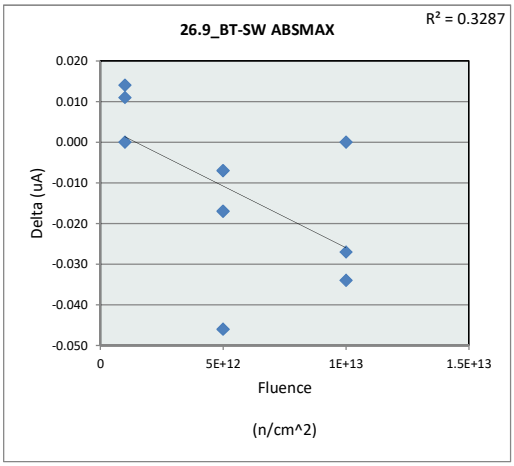
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.050	0.050	0.050
Min	0.842	0.928	0.935
Average	0.925	0.961	1.011
Max	1.026	0.988	1.088
UL	1.650	1.650	1.650



NDD Report
TPS7H4010-SEP

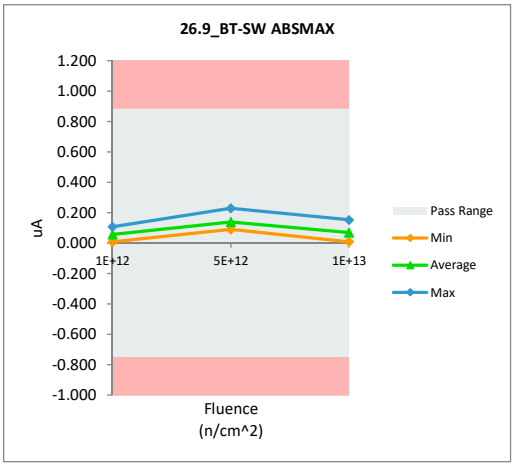
	26.9_BT-SW ABSMAX	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0.88	0.88
Min Limit	-0.75	-0.75

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.046	0.057	0.011
1E+12	121	0.093	0.107	0.014
1E+12	122	0.008	0.008	0.000
5E+12	123	0.276	0.230	-0.046
5E+12	124	0.107	0.090	-0.017
5E+12	125	0.103	0.096	-0.007
1E+13	126	0.009	0.009	0.000
1E+13	127	0.180	0.153	-0.027
1E+13	128	0.080	0.046	-0.034
	Max	0.276	0.230	0.014
	Average	0.100	0.088	-0.012
	Min	0.008	0.008	-0.046
	Std Dev	0.085	0.071	0.021



	26.9_BT-SW ABSMAX	
Test Site		
Tester		
Test Number		
Max Limit	0.88	uA
Min Limit	-0.75	uA

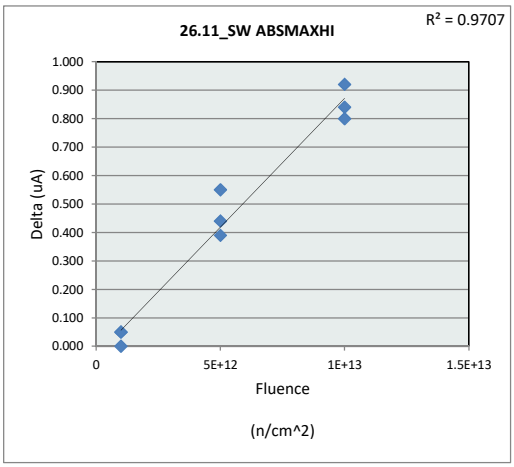
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-0.750	-0.750	-0.750
Min	0.008	0.090	0.009
Average	0.057	0.139	0.069
Max	0.107	0.230	0.153
UL	0.880	0.880	0.880



NDD Report
TPS7H4010-SEP

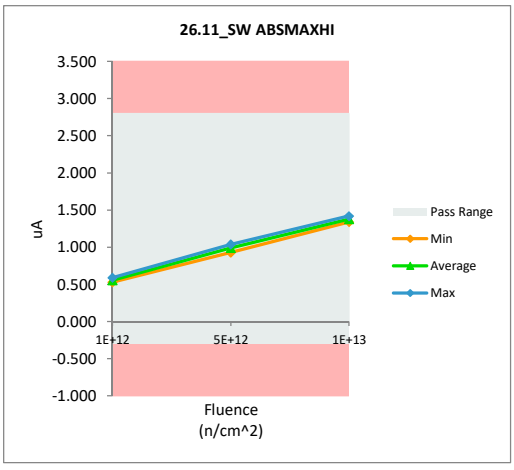
	26.11_SW ABSMAXHI	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	2.8	2.8
Min Limit	-0.3	-0.3

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.550	0.550	0.000
1E+12	121	0.480	0.530	0.050
1E+12	122	0.540	0.590	0.050
5E+12	123	0.450	1.000	0.550
5E+12	124	0.540	0.930	0.390
5E+12	125	0.600	1.040	0.440
1E+13	126	0.540	1.380	0.840
1E+13	127	0.500	1.420	0.920
1E+13	128	0.540	1.340	0.800
	Max	0.600	1.420	0.920
	Average	0.527	0.976	0.449
	Min	0.450	0.530	0.000
	Std Dev	0.044	0.359	0.359



	26.11_SW ABSMAXHI		
Test Site			
Tester			
Test Number			
Max Limit	2.8	uA	
Min Limit	-0.3	uA	

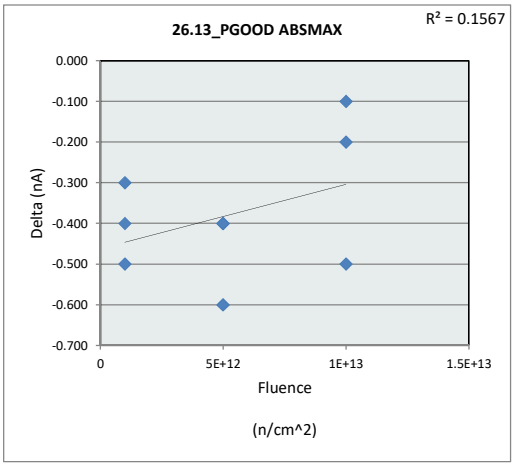
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-0.300	-0.300	-0.300
Min	0.530	0.930	1.340
Average	0.557	0.990	1.380
Max	0.590	1.040	1.420
UL	2.800	2.800	2.800



NDD Report
TPS7H4010-SEP

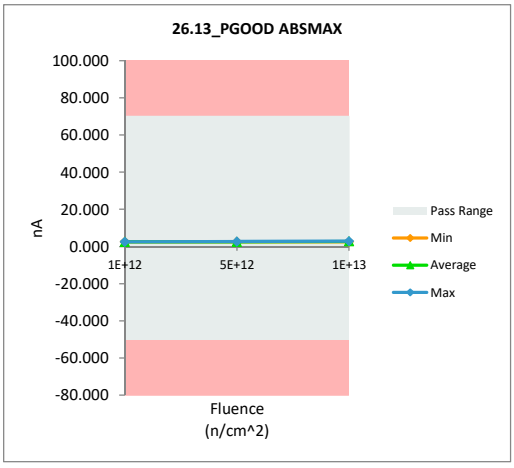
	26.13_PGOOD ABSMAX	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	70	70
Min Limit	-50	-50

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.000	2.600	-0.400
1E+12	121	2.800	2.500	-0.300
1E+12	122	3.000	2.500	-0.500
5E+12	123	3.100	2.700	-0.400
5E+12	124	2.900	2.500	-0.400
5E+12	125	3.100	2.500	-0.600
1E+13	126	3.100	2.900	-0.200
1E+13	127	3.000	2.900	-0.100
1E+13	128	3.000	2.500	-0.500
	Max	3.100	2.900	-0.100
	Average	3.000	2.622	-0.378
	Min	2.800	2.500	-0.600
	Std Dev	0.100	0.172	0.156



	26.13_PGOOD ABSMAX	
Test Site		
Tester		
Test Number		
Max Limit	70	nA
Min Limit	-50	nA

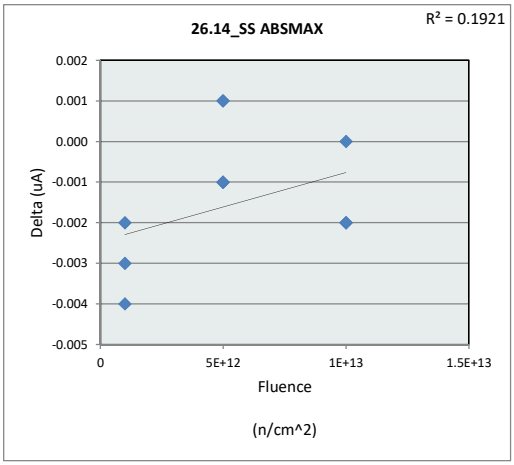
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-50.000	-50.000	-50.000
Min	2.500	2.500	2.500
Average	2.533	2.567	2.767
Max	2.600	2.700	2.900
UL	70.000	70.000	70.000



NDD Report
TPS7H4010-SEP

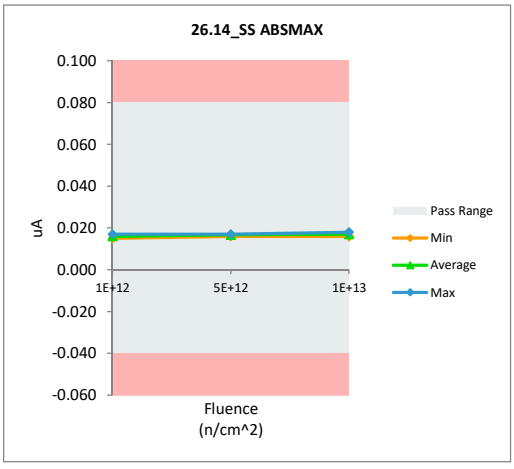
	26.14_SS ABSMAX	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	0.08	0.08
Min Limit	-0.04	-0.04

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.020	0.017	-0.003
1E+12	121	0.020	0.016	-0.004
1E+12	122	0.017	0.015	-0.002
5E+12	123	0.016	0.017	0.001
5E+12	124	0.017	0.016	-0.001
5E+12	125	0.018	0.017	-0.001
1E+13	126	0.018	0.016	-0.002
1E+13	127	0.019	0.017	-0.002
1E+13	128	0.018	0.018	0.000
	Max	0.020	0.018	0.001
	Average	0.018	0.017	-0.002
	Min	0.016	0.015	-0.004
	Std Dev	0.001	0.001	0.002



	26.14_SS ABSMAX		
Test Site			
Tester			
Test Number			
Max Limit	0.08	uA	
Min Limit	-0.04	uA	

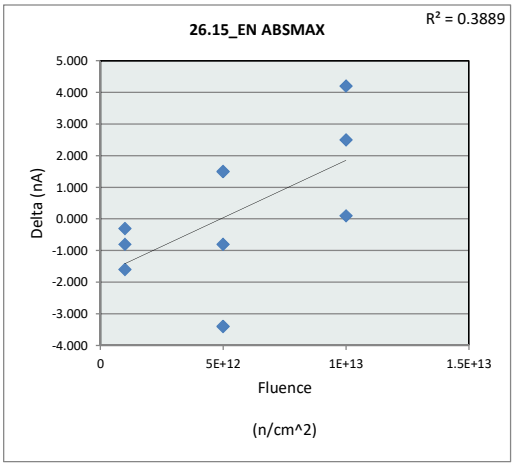
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-0.040	-0.040	-0.040
Min	0.015	0.016	0.016
Average	0.016	0.017	0.017
Max	0.017	0.017	0.018
UL	0.080	0.080	0.080



NDD Report
TPS7H4010-SEP

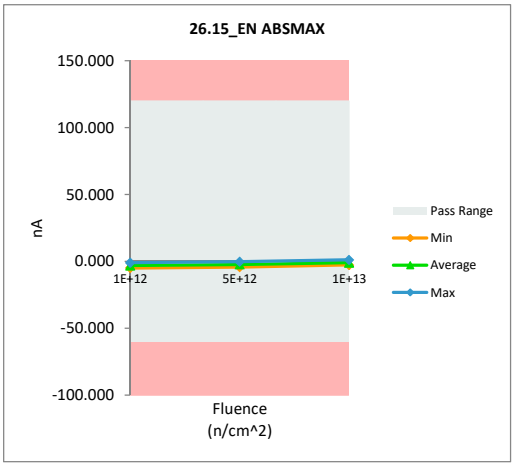
	26.15_EN ABSMAX	
Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	120	120
Min Limit	-60	-60

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	-3.400	-5.000	-1.600
1E+12	121	-0.700	-1.000	-0.300
1E+12	122	-2.500	-3.300	-0.800
5E+12	123	-1.500	-2.300	-0.800
5E+12	124	-1.800	-0.300	1.500
5E+12	125	-0.900	-4.300	-3.400
1E+13	126	-2.800	-2.700	0.100
1E+13	127	-3.000	1.200	4.200
1E+13	128	-4.000	-1.500	2.500
	Max	-0.700	1.200	4.200
	Average	-2.289	-2.133	0.156
	Min	-4.000	-5.000	-3.400
	Std Dev	1.134	1.962	2.275



	26.15_EN ABSMAX	
Test Site		
Tester		
Test Number		
Max Limit	120	nA
Min Limit	-60	nA

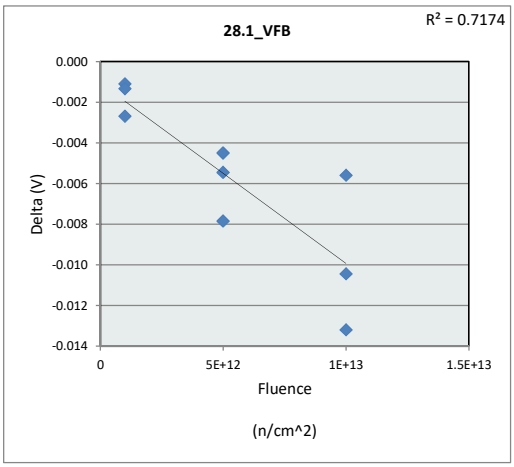
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	-60.000	-60.000	-60.000
Min	-5.000	-4.300	-2.700
Average	-3.100	-2.300	-1.000
Max	-1.000	-0.300	1.200
UL	120.000	120.000	120.000



NDD Report
TPS7H4010-SEP

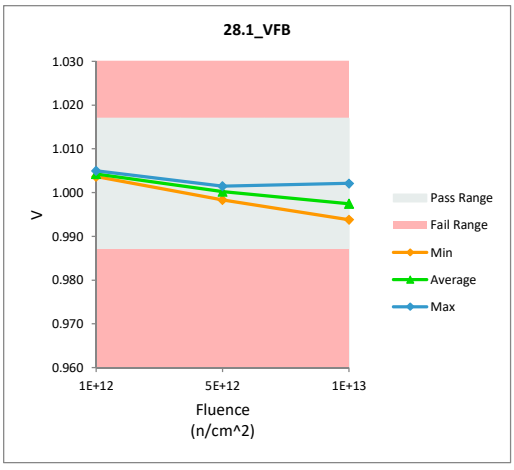
	28.1_VFB	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.0108	1.017
Min Limit	0.987	0.987

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.005	1.004	-0.001
1E+12	121	1.006	1.005	-0.001
1E+12	122	1.006	1.004	-0.003
5E+12	123	1.006	1.001	-0.005
5E+12	124	1.006	1.001	-0.004
5E+12	125	1.006	0.998	-0.008
1E+13	126	1.008	1.002	-0.006
1E+13	127	1.007	0.997	-0.010
1E+13	128	1.007	0.994	-0.013
	Max	1.008	1.005	-0.001
	Average	1.006	1.001	-0.006
	Min	1.005	0.994	-0.013
	Std Dev	0.001	0.004	0.004



	28.1_VFB	
Test Site		
Tester		
Test Number		
Max Limit	1.017	V
Min Limit	0.987	V

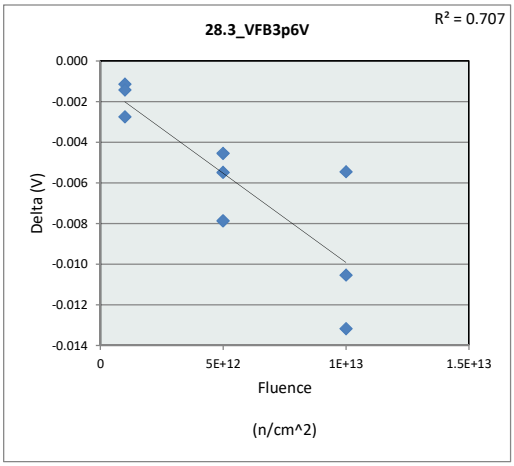
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.987	0.987	0.987
Min	1.004	0.998	0.994
Average	1.004	1.000	0.997
Max	1.005	1.001	1.002
UL	1.017	1.017	1.017



NDD Report
TPS7H4010-SEP

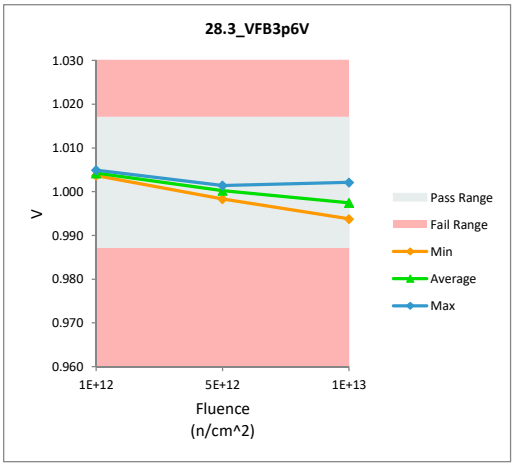
	28.3_VFB3p6V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.0085	1.017
Min Limit	0.987	0.987

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.005	1.004	-0.001
1E+12	121	1.006	1.005	-0.001
1E+12	122	1.006	1.004	-0.003
5E+12	123	1.006	1.001	-0.005
5E+12	124	1.006	1.001	-0.005
5E+12	125	1.006	0.998	-0.008
1E+13	126	1.008	1.002	-0.005
1E+13	127	1.007	0.997	-0.011
1E+13	128	1.007	0.994	-0.013
	Max	1.008	1.005	-0.001
	Average	1.006	1.001	-0.006
	Min	1.005	0.994	-0.013
	Std Dev	0.001	0.004	0.004



	28.3_VFB3p6V		
Test Site			
Tester			
Test Number			
Max Limit	1.017	V	
Min Limit	0.987	V	

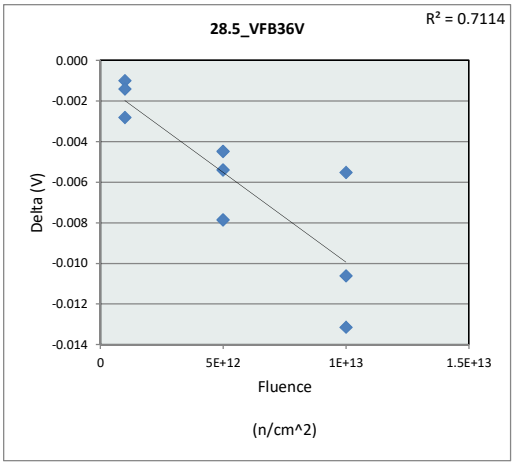
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.987	0.987	0.987
Min	1.004	0.998	0.994
Average	1.004	1.000	0.997
Max	1.005	1.001	1.002
UL	1.017	1.017	1.017



NDD Report
TPS7H4010-SEP

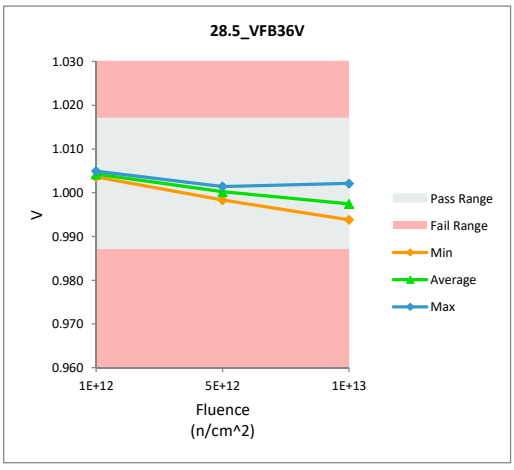
	28.5_VFB36V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.0085	1.017
Min Limit	0.987	0.987

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.005	1.004	-0.001
1E+12	121	1.006	1.005	-0.001
1E+12	122	1.006	1.004	-0.003
5E+12	123	1.006	1.001	-0.005
5E+12	124	1.006	1.001	-0.004
5E+12	125	1.006	0.998	-0.008
1E+13	126	1.008	1.002	-0.006
1E+13	127	1.007	0.996	-0.011
1E+13	128	1.007	0.994	-0.013
	Max	1.008	1.005	-0.001
	Average	1.006	1.001	-0.006
	Min	1.005	0.994	-0.013
	Std Dev	0.001	0.004	0.004



	28.5_VFB36V	
Test Site		
Tester		
Test Number		
Max Limit	1.017	V
Min Limit	0.987	V

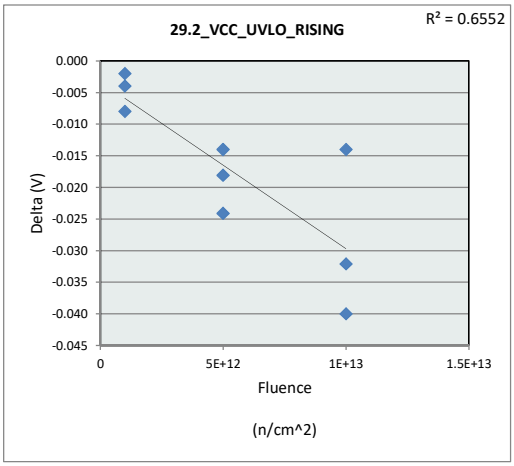
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.987	0.987	0.987
Min	1.004	0.998	0.994
Average	1.004	1.000	0.997
Max	1.005	1.001	1.002
UL	1.017	1.017	1.017



NDD Report
TPS7H4010-SEP

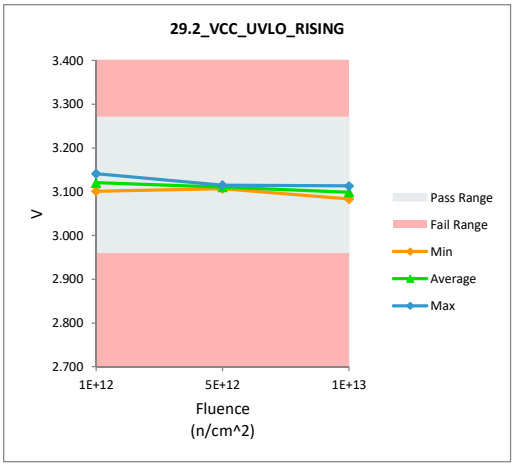
	29.2_VCC_UVLO_RISING	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.24	3.27
Min Limit	2.96	2.96

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.143	3.141	-0.002
1E+12	121	3.123	3.119	-0.004
1E+12	122	3.109	3.101	-0.008
5E+12	123	3.133	3.115	-0.018
5E+12	124	3.121	3.107	-0.014
5E+12	125	3.133	3.109	-0.024
1E+13	126	3.115	3.101	-0.014
1E+13	127	3.145	3.113	-0.032
1E+13	128	3.123	3.083	-0.040
	Max	3.145	3.141	-0.002
	Average	3.127	3.110	-0.017
	Min	3.109	3.083	-0.040
	Std Dev	0.012	0.016	0.013



	29.2_VCC_UVLO_RISING		
Test Site			
Tester			
Test Number			
Max Limit	3.27	V	
Min Limit	2.96	V	

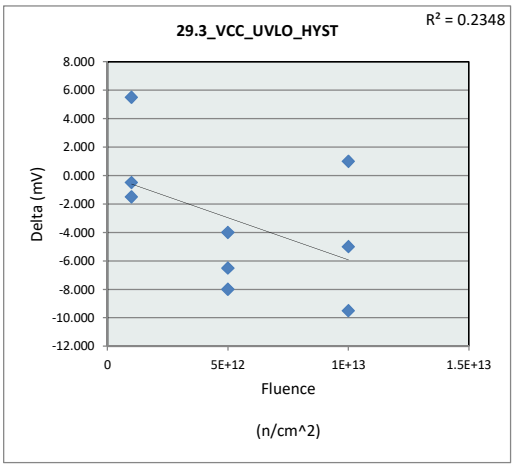
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	2.960	2.960	2.960
Min	3.101	3.107	3.083
Average	3.121	3.111	3.099
Max	3.141	3.115	3.113
UL	3.270	3.270	3.270



NDD Report
TPS7H4010-SEP

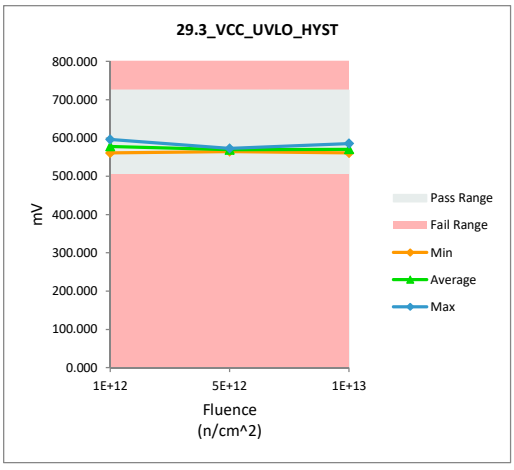
	29.3_VCC_UVLO_HYST	
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	725	725
Min Limit	505	505

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	590.700	596.200	5.500
1E+12	121	578.100	576.600	-1.500
1E+12	122	561.600	561.100	-0.500
5E+12	123	580.600	572.600	-8.000
5E+12	124	568.600	564.600	-4.000
5E+12	125	578.100	571.600	-6.500
1E+13	126	560.100	561.100	1.000
1E+13	127	595.200	585.700	-9.500
1E+13	128	570.600	565.600	-5.000
	Max	595.200	596.200	5.500
	Average	575.956	572.789	-3.167
	Min	560.100	561.100	-9.500
	Std Dev	12.035	11.847	4.757



	29.3_VCC_UVLO_HYST		
Test Site			
Tester			
Test Number			
Max Limit	725	mV	
Min Limit	505	mV	

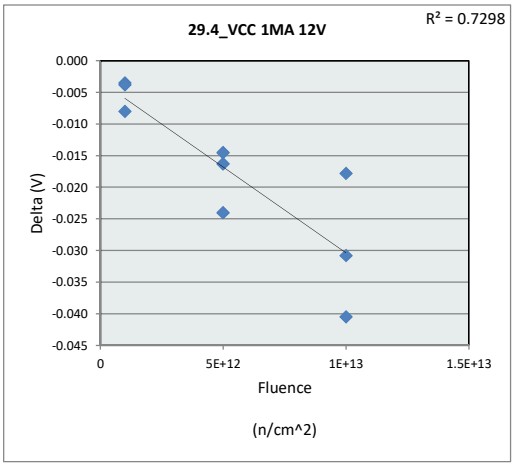
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	505.000	505.000	505.000
Min	561.100	564.600	561.100
Average	577.967	569.600	570.800
Max	596.200	572.600	585.700
UL	725.000	725.000	725.000



NDD Report
TPS7H4010-SEP

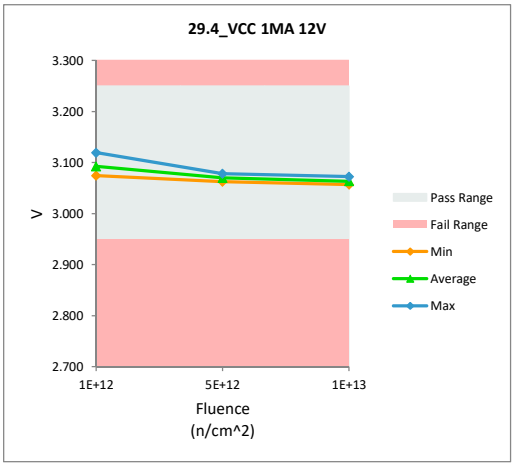
	29.4_VCC 1MA 12V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.25	3.25
Min Limit	2.95	2.95

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.087	3.084	-0.003
1E+12	121	3.123	3.120	-0.004
1E+12	122	3.083	3.075	-0.008
5E+12	123	3.086	3.069	-0.016
5E+12	124	3.093	3.078	-0.014
5E+12	125	3.087	3.063	-0.024
1E+13	126	3.090	3.072	-0.018
1E+13	127	3.088	3.057	-0.031
1E+13	128	3.102	3.061	-0.041
	Max	3.123	3.120	-0.003
	Average	3.093	3.075	-0.018
	Min	3.083	3.057	-0.041
	Std Dev	0.013	0.019	0.012



	29.4_VCC 1MA 12V		
Test Site			
Tester			
Test Number			
Max Limit	3.25	V	
Min Limit	2.95	V	

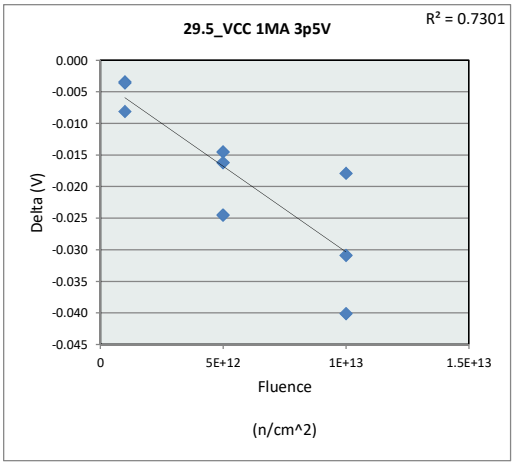
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	2.950	2.950	2.950
Min	3.075	3.063	3.057
Average	3.093	3.070	3.064
Max	3.120	3.078	3.072
UL	3.250	3.250	3.250



NDD Report
TPS7H4010-SEP

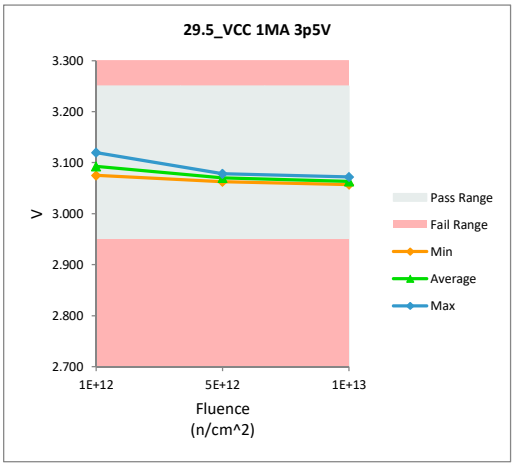
	29.5_VCC 1MA 3p5V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.25	3.25
Min Limit	2.95	2.95

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.087	3.083	-0.003
1E+12	121	3.123	3.120	-0.004
1E+12	122	3.083	3.075	-0.008
5E+12	123	3.086	3.069	-0.016
5E+12	124	3.093	3.078	-0.014
5E+12	125	3.087	3.063	-0.024
1E+13	126	3.090	3.072	-0.018
1E+13	127	3.088	3.057	-0.031
1E+13	128	3.101	3.061	-0.040
	Max	3.123	3.120	-0.003
	Average	3.093	3.075	-0.018
	Min	3.083	3.057	-0.040
	Std Dev	0.012	0.019	0.012



	29.5_VCC 1MA 3p5V		
Test Site			
Tester			
Test Number			
Max Limit	3.25	V	
Min Limit	2.95	V	

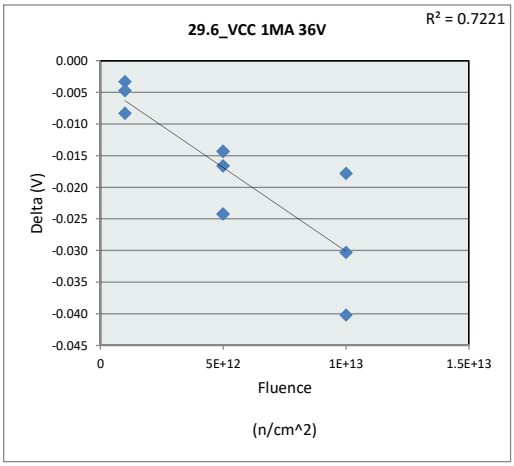
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	2.950	2.950	2.950
Min	3.075	3.063	3.057
Average	3.093	3.070	3.063
Max	3.120	3.078	3.072
UL	3.250	3.250	3.250



NDD Report
TPS7H4010-SEP

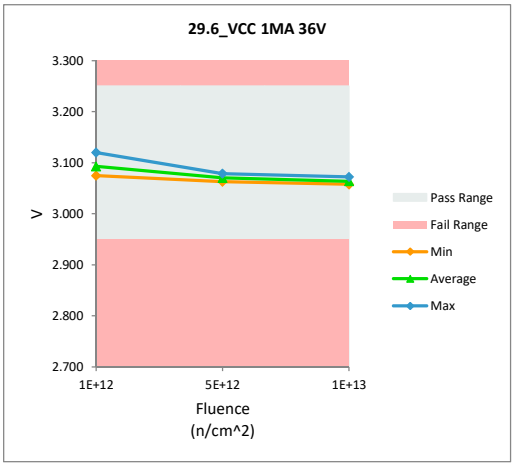
	29.6_VCC 1MA 36V	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.25	3.25
Min Limit	2.95	2.95

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.087	3.083	-0.003
1E+12	121	3.125	3.120	-0.005
1E+12	122	3.083	3.075	-0.008
5E+12	123	3.086	3.069	-0.017
5E+12	124	3.093	3.079	-0.014
5E+12	125	3.087	3.063	-0.024
1E+13	126	3.090	3.072	-0.018
1E+13	127	3.088	3.057	-0.030
1E+13	128	3.101	3.061	-0.040
	Max	3.125	3.120	-0.003
	Average	3.093	3.075	-0.018
	Min	3.083	3.057	-0.040
	Std Dev	0.013	0.019	0.012



	29.6_VCC 1MA 36V		
Test Site			
Tester			
Test Number			
Max Limit	3.25	V	
Min Limit	2.95	V	

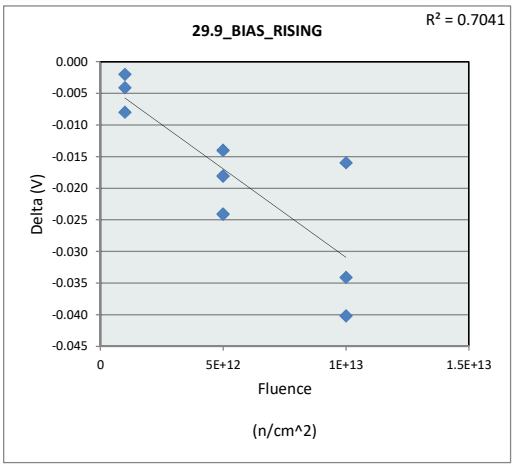
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	2.950	2.950	2.950
Min	3.075	3.063	3.058
Average	3.093	3.070	3.064
Max	3.120	3.079	3.072
UL	3.250	3.250	3.250



NDD Report
TPS7H4010-SEP

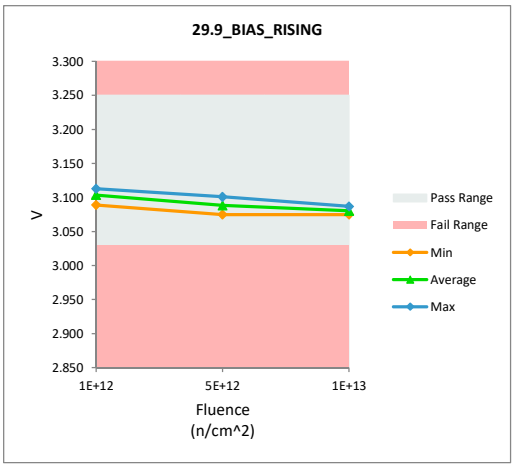
	29.9_BIAS_RISING	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.152	3.25
Min Limit	3.03	3.03

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	3.117	3.113	-0.004
1E+12	121	3.111	3.109	-0.002
1E+12	122	3.097	3.089	-0.008
5E+12	123	3.119	3.101	-0.018
5E+12	124	3.103	3.089	-0.014
5E+12	125	3.099	3.075	-0.024
1E+13	126	3.103	3.087	-0.016
1E+13	127	3.113	3.079	-0.034
1E+13	128	3.115	3.075	-0.040
	Max	3.119	3.113	-0.002
	Average	3.109	3.091	-0.018
	Min	3.097	3.075	-0.040
	Std Dev	0.008	0.014	0.013



	29.9_BIAS_RISING		
Test Site			
Tester			
Test Number			
Max Limit	3.25	V	
Min Limit	3.03	V	

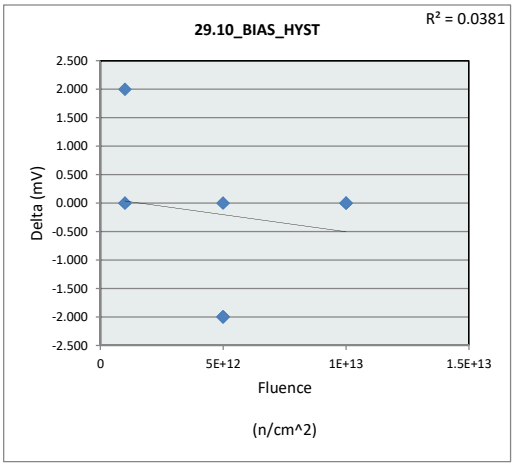
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.030	3.030	3.030
Min	3.089	3.075	3.075
Average	3.104	3.088	3.080
Max	3.113	3.101	3.087
UL	3.250	3.250	3.250



NDD Report
TPS7H4010-SEP

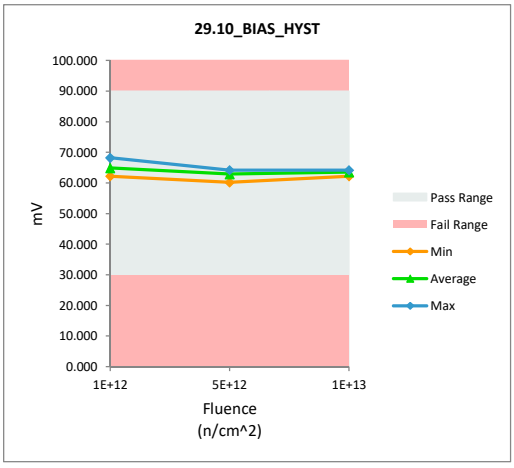
	29.10_BIAS_HYST	
Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	90	90
Min Limit	30	30

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	64.200	64.200	0.000
1E+12	121	66.200	68.200	2.000
1E+12	122	62.200	62.200	0.000
5E+12	123	66.200	64.200	-2.000
5E+12	124	62.200	60.200	-2.000
5E+12	125	64.200	64.200	0.000
1E+13	126	62.200	62.200	0.000
1E+13	127	64.200	64.200	0.000
1E+13	128	64.200	64.200	0.000
	Max	66.200	68.200	2.000
	Average	63.978	63.756	-0.222
	Min	62.200	60.200	-2.000
	Std Dev	1.563	2.186	1.202



	29.10_BIAS_HYST		
Test Site			
Tester			
Test Number			
Max Limit	90	mV	
Min Limit	30	mV	

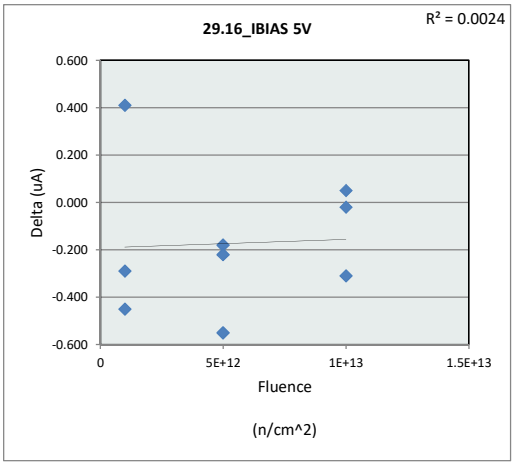
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	30.000	30.000	30.000
Min	62.200	60.200	62.200
Average	64.867	62.867	63.533
Max	68.200	64.200	64.200
UL	90.000	90.000	90.000



NDD Report
TPS7H4010-SEP

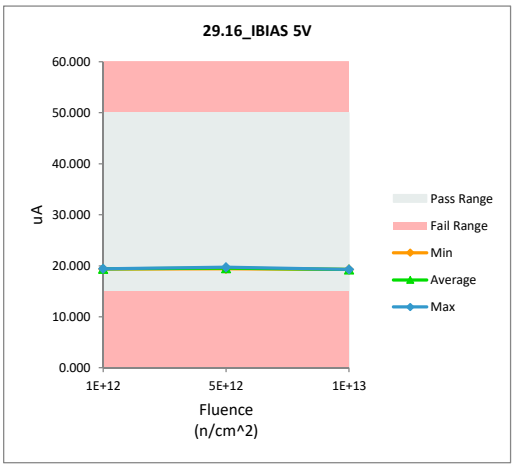
	29.16_IBIAS 5V	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	22	50
Min Limit	15	15

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	19.840	19.390	-0.450
1E+12	121	19.640	19.350	-0.290
1E+12	122	19.010	19.420	0.410
5E+12	123	19.620	19.440	-0.180
5E+12	124	19.930	19.710	-0.220
5E+12	125	19.930	19.380	-0.550
1E+13	126	19.210	19.260	0.050
1E+13	127	19.600	19.290	-0.310
1E+13	128	19.300	19.280	-0.020
	Max	19.930	19.710	0.410
	Average	19.564	19.391	-0.173
	Min	19.010	19.260	-0.550
	Std Dev	0.327	0.135	0.289



	29.16_IBIAS 5V		
Test Site			
Tester			
Test Number			
Max Limit	50	uA	
Min Limit	15	uA	

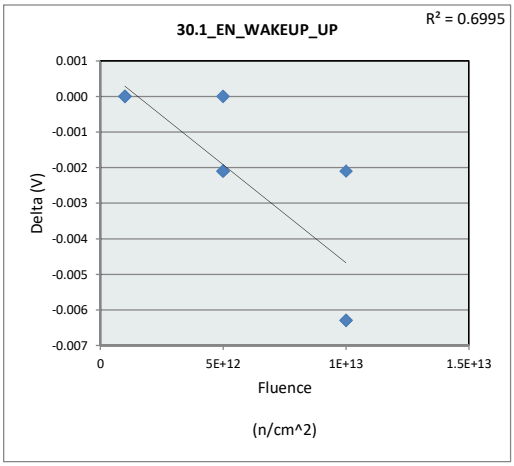
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	15.000	15.000	15.000
Min	19.350	19.380	19.260
Average	19.387	19.510	19.277
Max	19.420	19.710	19.290
UL	50.000	50.000	50.000



NDD Report
TPS7H4010-SEP

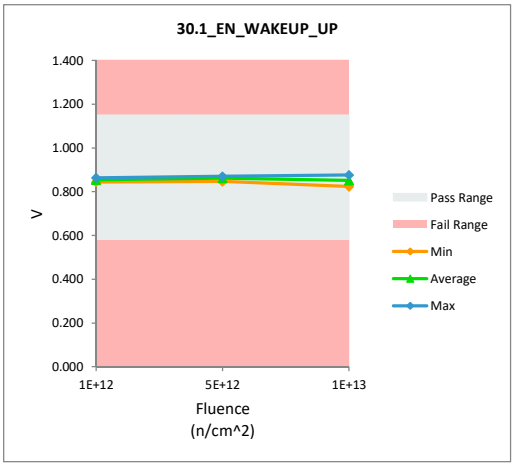
	30.1_EN_WAKEUP_UP	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.0099	1.15
Min Limit	0.58	0.58

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.845	0.845	0.000
1E+12	121	0.855	0.855	0.000
1E+12	122	0.864	0.864	0.000
5E+12	123	0.872	0.870	-0.002
5E+12	124	0.870	0.868	-0.002
5E+12	125	0.847	0.847	0.000
1E+13	126	0.826	0.824	-0.002
1E+13	127	0.883	0.877	-0.006
1E+13	128	0.862	0.855	-0.006
	Max	0.883	0.877	0.000
	Average	0.858	0.856	-0.002
	Min	0.826	0.824	-0.006
	Std Dev	0.017	0.016	0.003



	30.1_EN_WAKEUP_UP		
Test Site			
Tester			
Test Number			
Max Limit	1.15	V	
Min Limit	0.58	V	

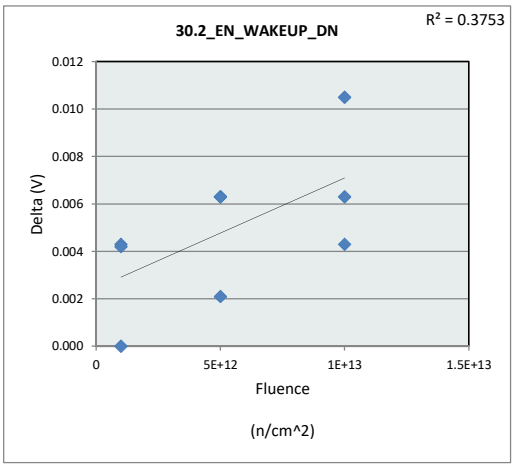
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.580	0.580	0.580
Min	0.845	0.847	0.824
Average	0.855	0.862	0.852
Max	0.864	0.870	0.877
UL	1.150	1.150	1.150



NDD Report
TPS7H4010-SEP

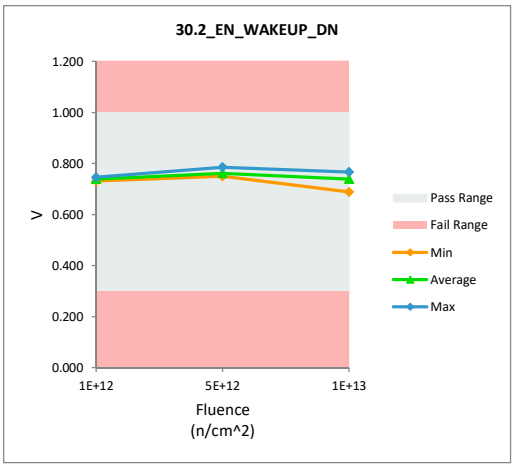
	30.2_EN_WAKEUP_DN	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1	1
Min Limit	0.3	0.3

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.742	0.742	0.000
1E+12	121	0.727	0.731	0.004
1E+12	122	0.742	0.746	0.004
5E+12	123	0.784	0.786	0.002
5E+12	124	0.744	0.750	0.006
5E+12	125	0.744	0.750	0.006
1E+13	126	0.685	0.689	0.004
1E+13	127	0.756	0.767	0.011
1E+13	128	0.756	0.763	0.006
	Max	0.784	0.786	0.011
	Average	0.742	0.747	0.005
	Min	0.685	0.689	0.000
	Std Dev	0.027	0.027	0.003



	30.2_EN_WAKEUP_DN		
Test Site			
Tester			
Test Number			
Max Limit	1	V	
Min Limit	0.3	V	

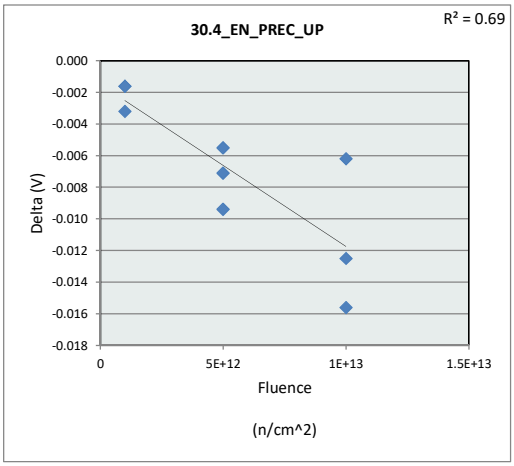
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.300	0.300	0.300
Min	0.731	0.750	0.689
Average	0.740	0.762	0.740
Max	0.746	0.786	0.767
UL	1.000	1.000	1.000



NDD Report
TPS7H4010-SEP

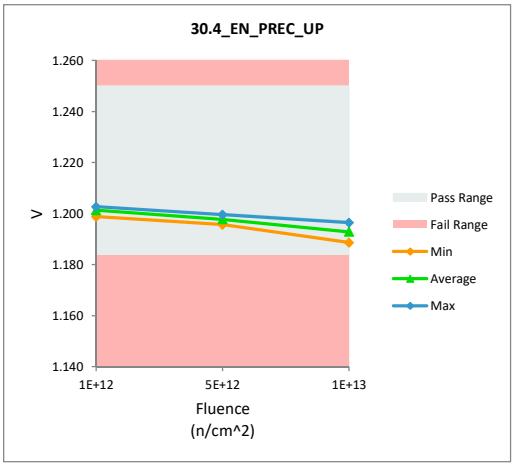
	30.4_EN_PREC_UP	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.215	1.25
Min Limit	1.184	1.184

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.204	1.203	-0.002
1E+12	121	1.204	1.203	-0.002
1E+12	122	1.202	1.199	-0.003
5E+12	123	1.205	1.198	-0.007
5E+12	124	1.205	1.200	-0.006
5E+12	125	1.205	1.196	-0.009
1E+13	126	1.203	1.196	-0.006
1E+13	127	1.206	1.193	-0.012
1E+13	128	1.204	1.189	-0.016
	Max	1.206	1.203	-0.002
	Average	1.204	1.197	-0.007
	Min	1.202	1.189	-0.016
	Std Dev	0.001	0.004	0.005



	30.4_EN_PREC_UP		
Test Site			
Tester			
Test Number			
Max Limit	1.25	V	
Min Limit	1.184	V	

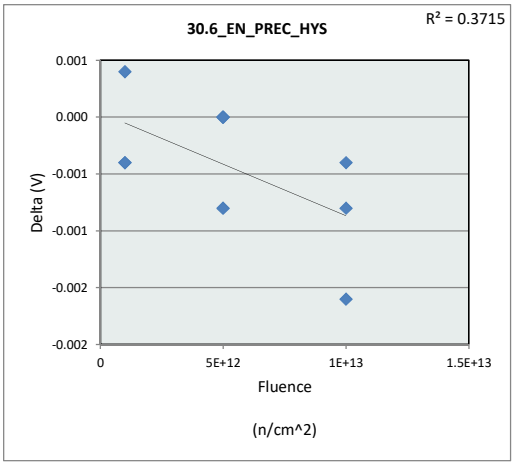
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.184	1.184	1.184
Min	1.199	1.196	1.189
Average	1.201	1.198	1.193
Max	1.203	1.200	1.197
UL	1.250	1.250	1.250



NDD Report
TPS7H4010-SEP

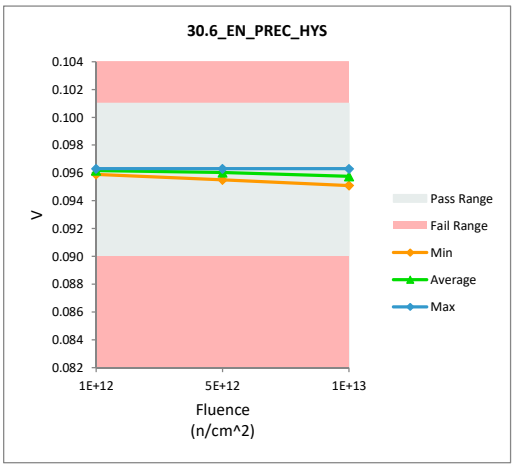
	30.6_EN_PREC_HYS	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.101	0.101
Min Limit	0.09	0.09

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.097	0.096	0.000
1E+12	121	0.097	0.096	0.000
1E+12	122	0.095	0.096	0.000
5E+12	123	0.096	0.096	0.000
5E+12	124	0.096	0.095	-0.001
5E+12	125	0.096	0.096	0.000
1E+13	126	0.096	0.096	0.000
1E+13	127	0.097	0.096	-0.001
1E+13	128	0.097	0.095	-0.002
	Max	0.097	0.096	0.000
	Average	0.096	0.096	0.000
	Min	0.095	0.095	-0.002
	Std Dev	0.000	0.000	0.001



	30.6_EN_PREC_HYS		
Test Site			
Tester			
Test Number			
Max Limit	0.101	V	
Min Limit	0.09	V	

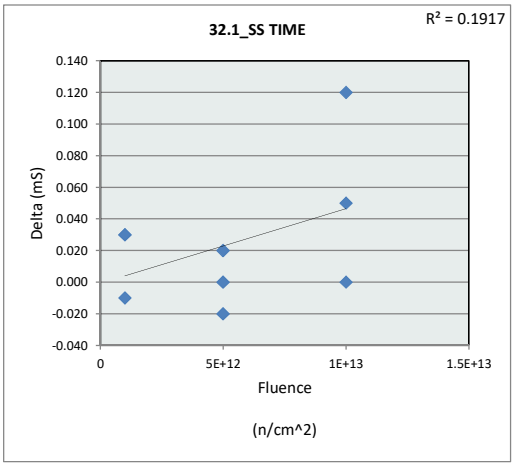
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.090	0.090	0.090
Min	0.096	0.096	0.095
Average	0.096	0.096	0.096
Max	0.096	0.096	0.096
UL	0.101	0.101	0.101



NDD Report
TPS7H4010-SEP

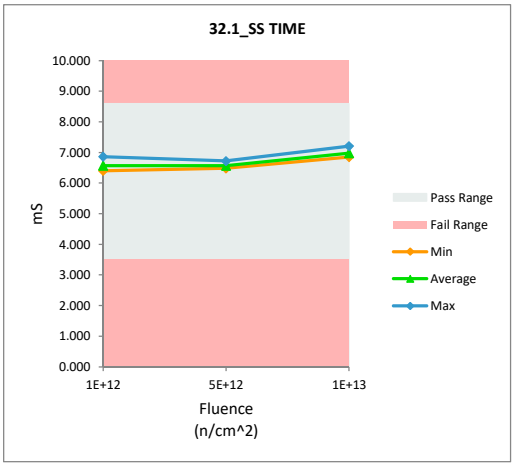
	32.1_SS TIME	
Test Site		
Tester		
Test Number		
Unit	mS	mS
Max Limit	8.45	8.6
Min Limit	3.5	3.5

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	6.410	6.440	0.030
1E+12	121	6.410	6.400	-0.010
1E+12	122	6.830	6.860	0.030
5E+12	123	6.740	6.720	-0.020
5E+12	124	6.480	6.480	0.000
5E+12	125	6.480	6.500	0.020
1E+13	126	6.800	6.850	0.050
1E+13	127	6.870	6.870	0.000
1E+13	128	7.090	7.210	0.120
	Max	7.090	7.210	0.120
	Average	6.679	6.703	0.024
	Min	6.410	6.400	-0.020
	Std Dev	0.243	0.270	0.042



	32.1_SS TIME		
Test Site			
Tester			
Test Number			
Max Limit	8.6	mS	
Min Limit	3.5	mS	

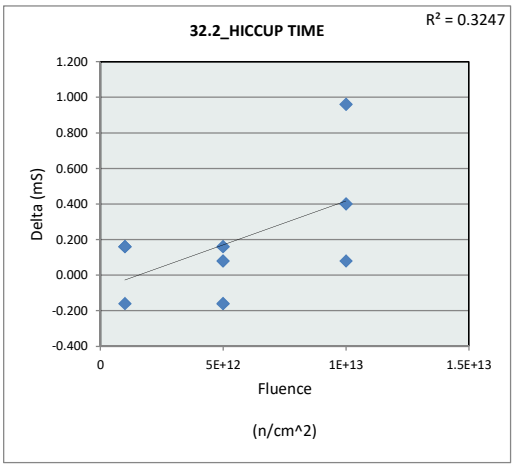
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.500	3.500	3.500
Min	6.400	6.480	6.850
Average	6.567	6.567	6.977
Max	6.860	6.720	7.210
UL	8.600	8.600	8.600



NDD Report
TPS7H4010-SEP

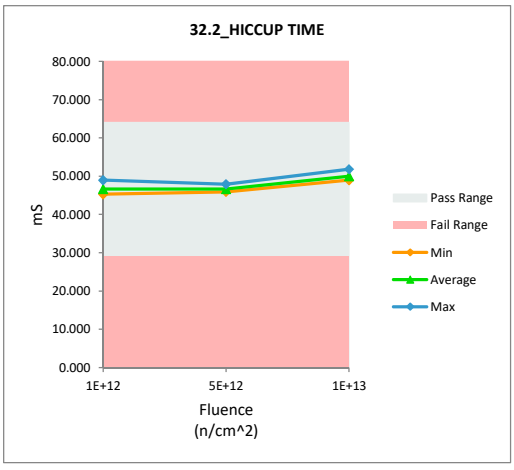
	32.2_HICCUP TIME	
Test Site		
Tester		
Test Number		
Unit	mS	mS
Max Limit	64	64
Min Limit	29	29

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	45.440	45.600	0.160
1E+12	121	45.440	45.280	-0.160
1E+12	122	48.800	48.960	0.160
5E+12	123	48.080	47.920	-0.160
5E+12	124	45.840	45.920	0.080
5E+12	125	45.920	46.080	0.160
1E+13	126	48.560	48.960	0.400
1E+13	127	49.040	49.120	0.080
1E+13	128	50.880	51.840	0.960
	Max	50.880	51.840	0.960
	Average	47.556	47.742	0.187
	Min	45.440	45.280	-0.160
	Std Dev	1.958	2.192	0.337



	32.2_HICCUP TIME		
Test Site			
Tester			
Test Number			
Max Limit	64	mS	
Min Limit	29	mS	

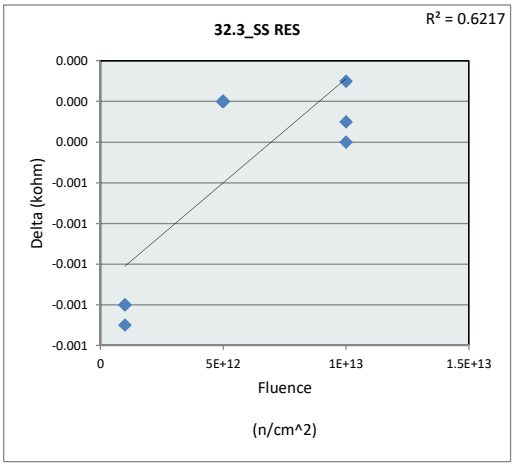
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	29.000	29.000	29.000
Min	45.280	45.920	48.960
Average	46.613	46.640	49.973
Max	48.960	47.920	51.840
UL	64.000	64.000	64.000



NDD Report
TPS7H4010-SEP

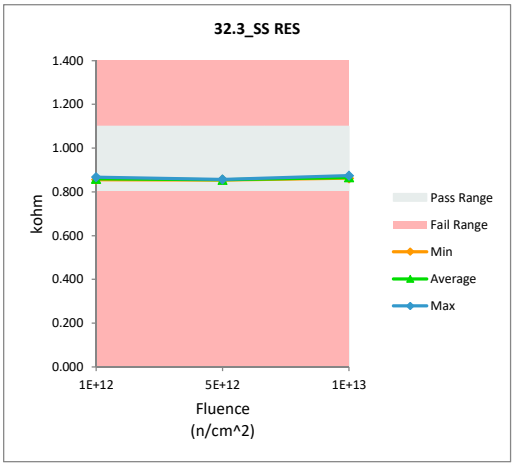
	32.3_SS RES	
Test Site		
Tester		
Test Number		
Unit	kohm	kohm
Max Limit	1.1	1.1
Min Limit	0.8	0.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.869	0.868	-0.001
1E+12	121	0.857	0.855	-0.001
1E+12	122	0.857	0.855	-0.001
5E+12	123	0.855	0.855	0.000
5E+12	124	0.857	0.857	0.000
5E+12	125	0.855	0.855	0.000
1E+13	126	0.863	0.863	0.000
1E+13	127	0.862	0.862	0.000
1E+13	128	0.875	0.874	0.000
	Max	0.875	0.874	0.000
	Average	0.861	0.860	-0.001
	Min	0.855	0.855	-0.001
	Std Dev	0.007	0.007	0.001



	32.3_SS RES		
Test Site			
Tester			
Test Number			
Max Limit	1.1	kohm	
Min Limit	0.8	kohm	

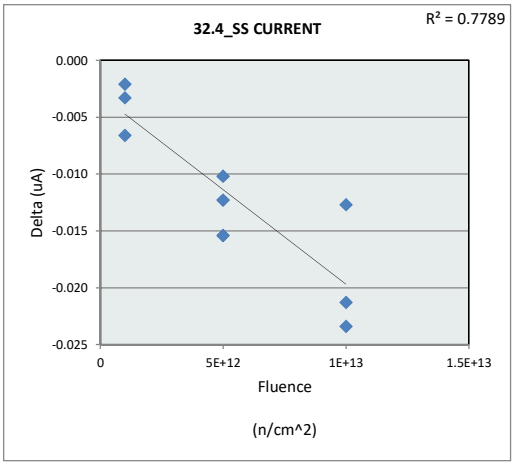
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.800	0.800	0.800
Min	0.856	0.855	0.862
Average	0.860	0.855	0.866
Max	0.868	0.857	0.874
UL	1.100	1.100	1.100



NDD Report
TPS7H4010-SEP

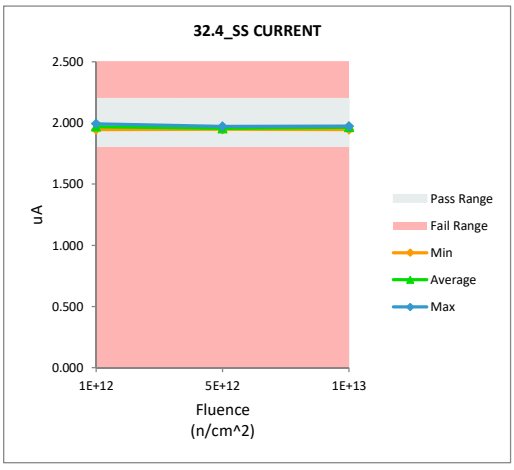
	32.4_SS CURRENT	
Test Site		
Tester		
Test Number		
Unit	uA	uA
Max Limit	2.15	2.2
Min Limit	1.8	1.8

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.996	1.993	-0.002
1E+12	121	1.973	1.969	-0.003
1E+12	122	1.953	1.947	-0.007
5E+12	123	1.959	1.947	-0.012
5E+12	124	1.963	1.953	-0.010
5E+12	125	1.986	1.971	-0.015
1E+13	126	1.958	1.946	-0.013
1E+13	127	1.995	1.973	-0.021
1E+13	128	1.996	1.973	-0.023
	Max	1.996	1.993	-0.002
	Average	1.975	1.964	-0.012
	Min	1.953	1.946	-0.023
	Std Dev	0.018	0.016	0.007



	32.4_SS CURRENT		
Test Site			
Tester			
Test Number			
Max Limit	2.2	uA	
Min Limit	1.8	uA	

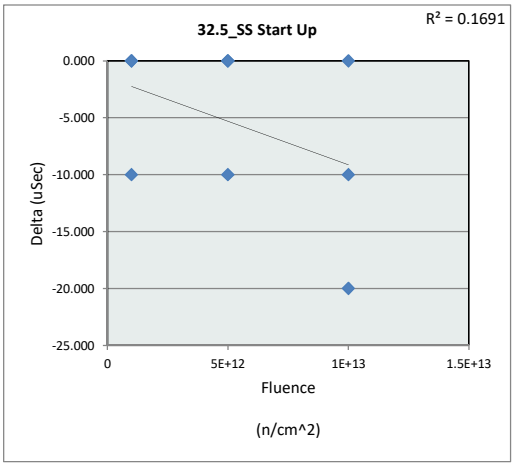
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.800	1.800	1.800
Min	1.947	1.947	1.946
Average	1.970	1.957	1.964
Max	1.994	1.971	1.973
UL	2.200	2.200	2.200



NDD Report
TPS7H4010-SEP

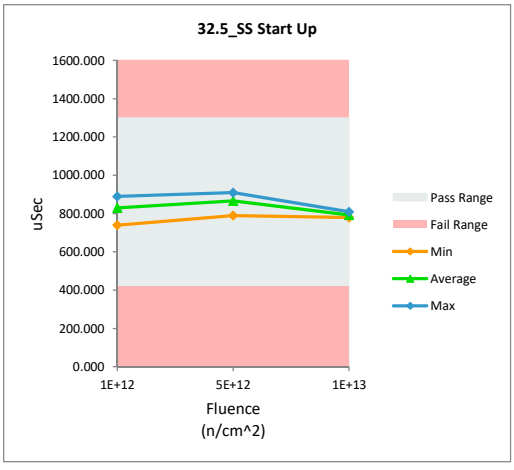
	32.5_SS Start Up	
Test Site		
Tester		
Test Number		
Unit	uSec	uSec
Max Limit	1300	1300
Min Limit	420	420

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	750.000	740.000	-10.000
1E+12	121	860.000	860.000	0.000
1E+12	122	890.000	890.000	0.000
5E+12	123	910.000	910.000	0.000
5E+12	124	900.000	900.000	0.000
5E+12	125	800.000	790.000	-10.000
1E+13	126	820.000	810.000	-10.000
1E+13	127	790.000	790.000	0.000
1E+13	128	800.000	780.000	-20.000
	Max	910.000	910.000	0.000
	Average	835.556	830.000	-5.556
	Min	750.000	740.000	-20.000
	Std Dev	56.372	61.237	7.265



	32.5_SS Start Up		
Test Site			
Tester			
Test Number			
Max Limit	1300	uSec	
Min Limit	420	uSec	

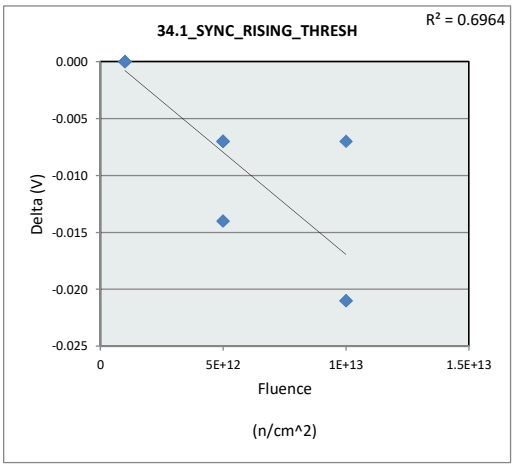
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	420.000	420.000	420.000
Min	740.000	790.000	780.000
Average	830.000	866.667	793.333
Max	890.000	910.000	810.000
UL	1300.000	1300.000	1300.000



NDD Report
TPS7H4010-SEP

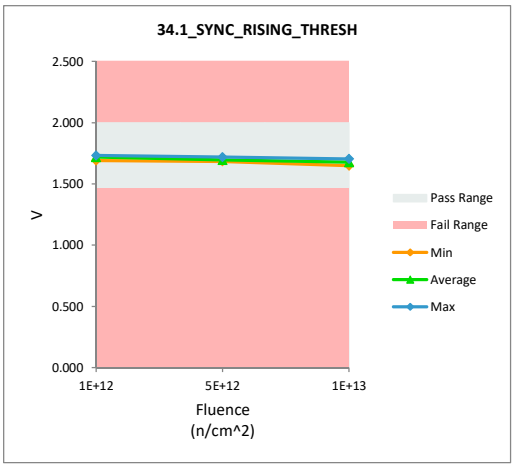
	34.1_SYNC_RISING_THRESH	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.9	2
Min Limit	1.47	1.47

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.733	1.733	0.000
1E+12	121	1.733	1.733	0.000
1E+12	122	1.691	1.691	0.000
5E+12	123	1.691	1.684	-0.007
5E+12	124	1.726	1.719	-0.007
5E+12	125	1.698	1.684	-0.014
1E+13	126	1.656	1.649	-0.007
1E+13	127	1.698	1.677	-0.021
1E+13	128	1.726	1.705	-0.021
	Max	1.733	1.733	0.000
	Average	1.706	1.697	-0.009
	Min	1.656	1.649	-0.021
	Std Dev	0.026	0.028	0.008



	34.1_SYNC_RISING_THRESH		
Test Site			
Tester			
Test Number			
Max Limit	2	V	
Min Limit	1.47	V	

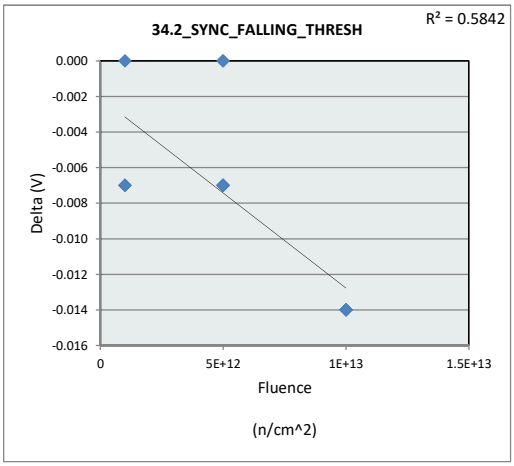
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.470	1.470	1.470
Min	1.691	1.684	1.649
Average	1.719	1.696	1.677
Max	1.733	1.719	1.705
UL	2.000	2.000	2.000



NDD Report
TPS7H4010-SEP

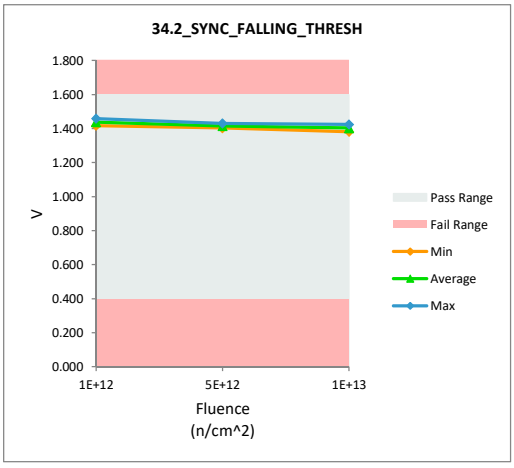
	34.2_SYNC_FALLING_THRESH	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.6	1.6
Min Limit	0.4	0.4

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.445	1.438	-0.007
1E+12	121	1.459	1.459	0.000
1E+12	122	1.424	1.417	-0.007
5E+12	123	1.410	1.403	-0.007
5E+12	124	1.431	1.431	0.000
5E+12	125	1.417	1.410	-0.007
1E+13	126	1.396	1.382	-0.014
1E+13	127	1.417	1.403	-0.014
1E+13	128	1.438	1.424	-0.014
	Max	1.459	1.459	0.000
	Average	1.426	1.419	-0.008
	Min	1.396	1.382	-0.014
	Std Dev	0.019	0.023	0.005



	34.2_SYNC_FALLING_THRESH		
Test Site			
Tester			
Test Number			
Max Limit	1.6	V	
Min Limit	0.4	V	

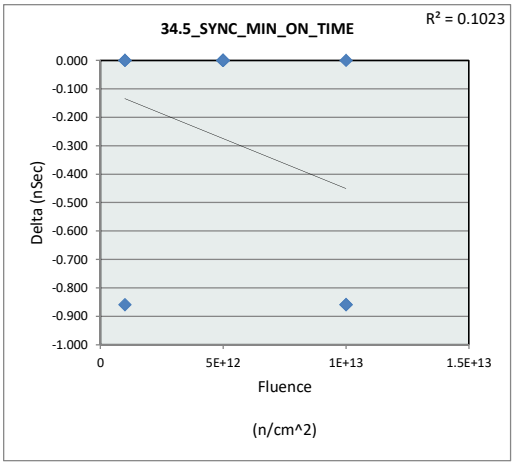
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.400	0.400	0.400
Min	1.417	1.403	1.382
Average	1.438	1.415	1.403
Max	1.459	1.431	1.424
UL	1.600	1.600	1.600



NDD Report
TPS7H4010-SEP

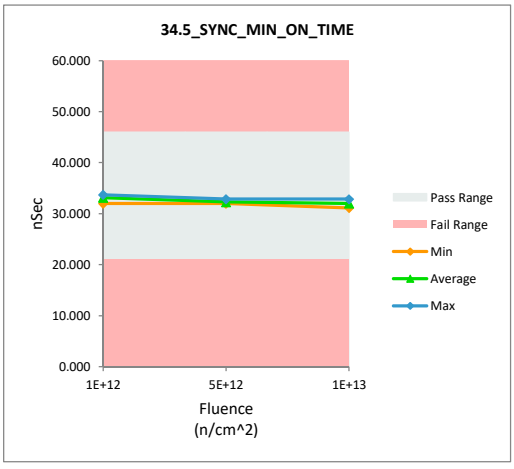
	34.5_SYNC_MIN_ON_TIME	
Test Site		
Tester		
Test Number		
Unit	nSec	nSec
Max Limit	46	46
Min Limit	21	21

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	33.711	33.711	0.000
1E+12	121	33.711	33.711	0.000
1E+12	122	32.852	31.992	-0.860
5E+12	123	31.992	31.992	0.000
5E+12	124	32.852	32.852	0.000
5E+12	125	31.992	31.992	0.000
1E+13	126	31.133	31.133	0.000
1E+13	127	32.852	31.992	-0.860
1E+13	128	33.711	32.852	-0.859
	Max	33.711	33.711	0.000
	Average	32.756	32.470	-0.287
	Min	31.133	31.133	-0.860
	Std Dev	0.906	0.871	0.430



	34.5_SYNC_MIN_ON_TIME		
Test Site			
Tester			
Test Number			
Max Limit	46	nSec	
Min Limit	21	nSec	

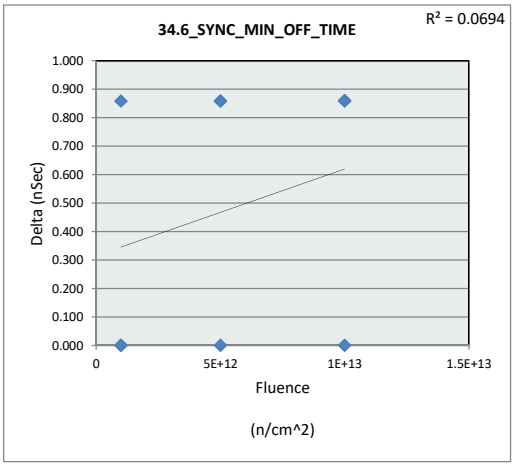
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	21.000	21.000	21.000
Min	31.992	31.992	31.133
Average	33.138	32.279	31.992
Max	33.711	32.852	32.852
UL	46.000	46.000	46.000



NDD Report
TPS7H4010-SEP

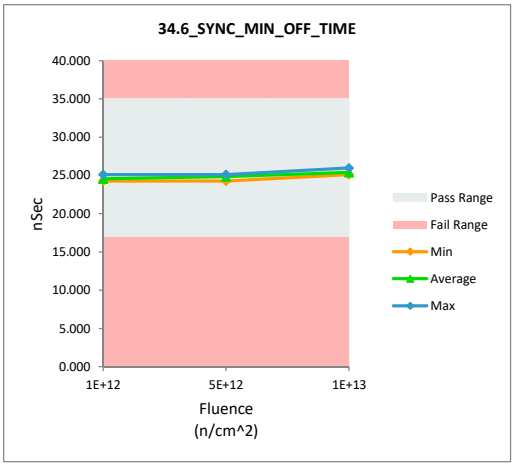
	34.6_SYNC_MIN_OFF_TIME	
Test Site		
Tester		
Test Number		
Unit	nSec	nSec
Max Limit	35	35
Min Limit	17	17

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	24.258	24.258	0.000
1E+12	121	24.258	24.258	0.000
1E+12	122	24.258	25.117	0.859
5E+12	123	24.258	25.117	0.859
5E+12	124	24.258	24.258	0.000
5E+12	125	24.258	25.117	0.859
1E+13	126	25.117	25.117	0.000
1E+13	127	25.117	25.977	0.860
1E+13	128	24.258	25.117	0.859
	Max	25.117	25.977	0.860
	Average	24.449	24.926	0.477
	Min	24.258	24.258	0.000
	Std Dev	0.379	0.573	0.453



	34.6_SYNC_MIN_OFF_TIME		
Test Site			
Tester			
Test Number			
Max Limit	35	nSec	
Min Limit	17	nSec	

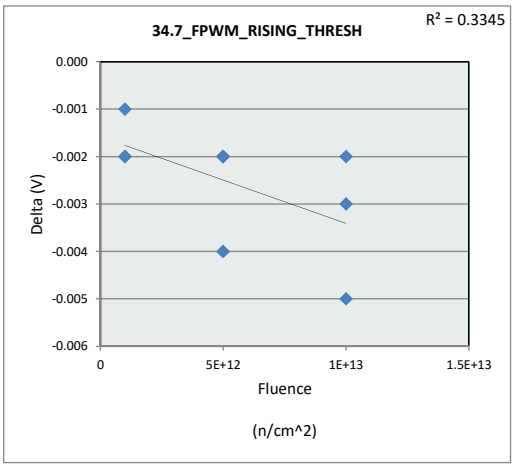
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	17.000	17.000	17.000
Min	24.258	24.258	25.117
Average	24.544	24.831	25.404
Max	25.117	25.117	25.977
UL	35.000	35.000	35.000



NDD Report
TPS7H4010-SEP

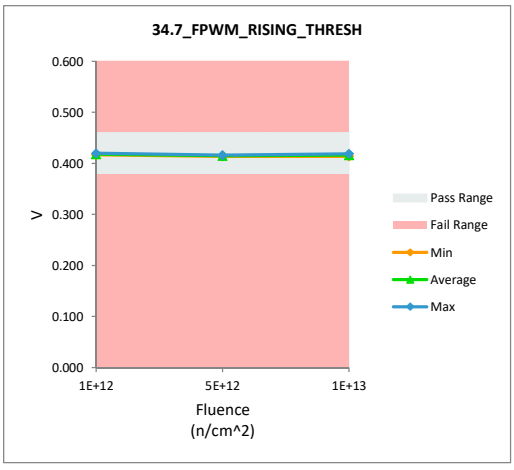
	34.7_FPWM_RISING_THRESH	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.46	0.46
Min Limit	0.38	0.38

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.419	0.417	-0.002
1E+12	121	0.421	0.420	-0.001
1E+12	122	0.419	0.417	-0.002
5E+12	123	0.417	0.415	-0.002
5E+12	124	0.416	0.414	-0.002
5E+12	125	0.420	0.416	-0.004
1E+13	126	0.421	0.419	-0.002
1E+13	127	0.417	0.414	-0.003
1E+13	128	0.420	0.415	-0.005
	Max	0.421	0.420	-0.001
	Average	0.419	0.416	-0.003
	Min	0.416	0.414	-0.005
	Std Dev	0.002	0.002	0.001



	34.7_FPWM_RISING_THRESH		
Test Site			
Tester			
Test Number			
Max Limit	0.46	V	
Min Limit	0.38	V	

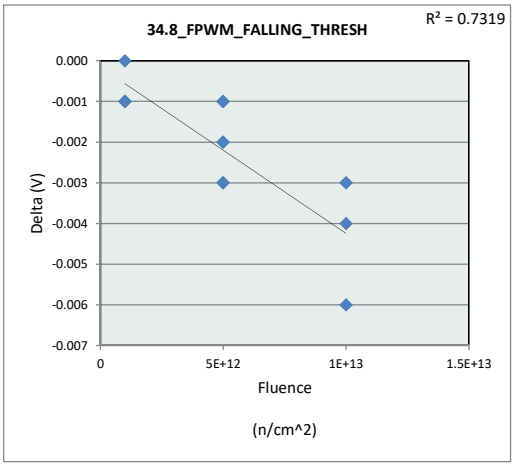
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.380	0.380	0.380
Min	0.417	0.414	0.414
Average	0.418	0.415	0.416
Max	0.420	0.416	0.419
UL	0.460	0.460	0.460



NDD Report
TPS7H4010-SEP

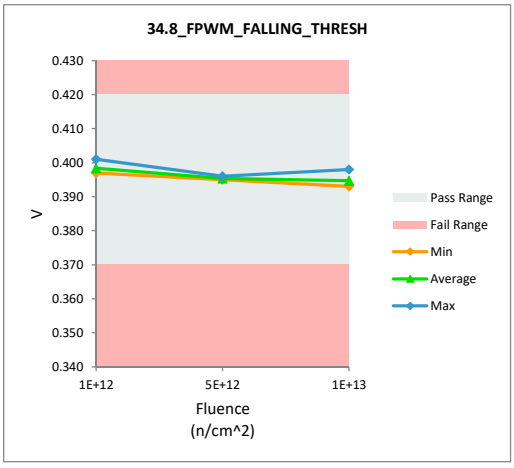
	34.8_FPWM_FALLING_THRESH	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.42	0.42
Min Limit	0.37	0.37

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.398	0.397	-0.001
1E+12	121	0.401	0.401	0.000
1E+12	122	0.398	0.397	-0.001
5E+12	123	0.397	0.395	-0.002
5E+12	124	0.396	0.395	-0.001
5E+12	125	0.399	0.396	-0.003
1E+13	126	0.401	0.398	-0.003
1E+13	127	0.397	0.393	-0.004
1E+13	128	0.399	0.393	-0.006
	Max	0.401	0.401	0.000
	Average	0.398	0.396	-0.002
	Min	0.396	0.393	-0.006
	Std Dev	0.002	0.003	0.002



	34.8_FPWM_FALLING_THRESH		
Test Site			
Tester			
Test Number			
Max Limit	0.42	V	
Min Limit	0.37	V	

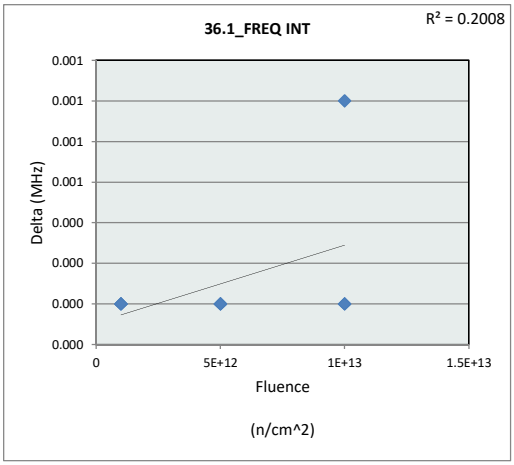
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.370	0.370	0.370
Min	0.397	0.395	0.393
Average	0.398	0.395	0.395
Max	0.401	0.396	0.398
UL	0.420	0.420	0.420



NDD Report
TPS7H4010-SEP

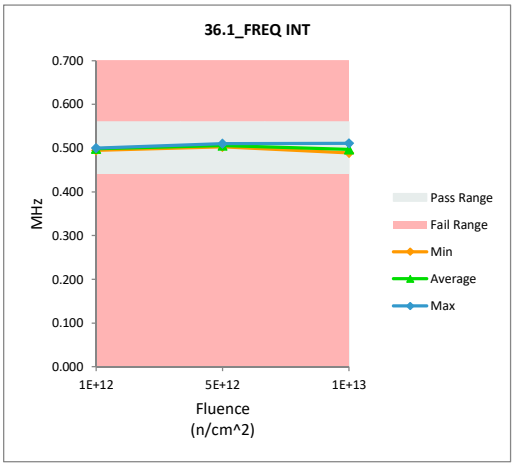
	36.1_FREQ INT	
Test Site		
Tester		
Test Number		
Unit	MHz	MHz
Max Limit	0.54	0.56
Min Limit	0.44	0.44

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.495	0.495	0.000
1E+12	121	0.500	0.500	0.000
1E+12	122	0.500	0.500	0.000
5E+12	123	0.503	0.503	0.000
5E+12	124	0.504	0.504	0.000
5E+12	125	0.510	0.510	0.000
1E+13	126	0.510	0.511	0.001
1E+13	127	0.491	0.491	0.000
1E+13	128	0.489	0.489	0.000
	Max	0.510	0.511	0.001
	Average	0.500	0.500	0.000
	Min	0.489	0.489	0.000
	Std Dev	0.008	0.008	0.000



	36.1_FREQ INT		
Test Site			
Tester			
Test Number			
Max Limit	0.56	MHz	
Min Limit	0.44	MHz	

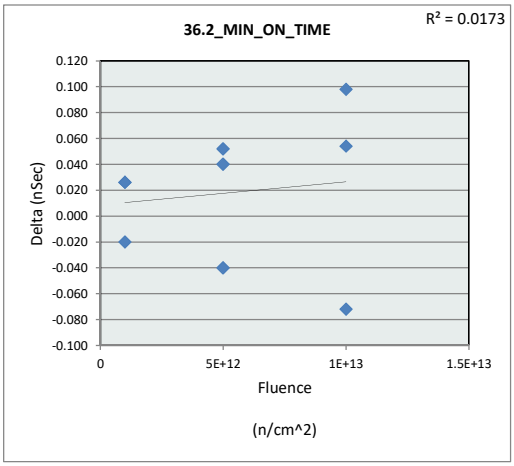
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.440	0.440	0.440
Min	0.495	0.503	0.489
Average	0.498	0.506	0.497
Max	0.500	0.510	0.511
UL	0.560	0.560	0.560



NDD Report
TPS7H4010-SEP

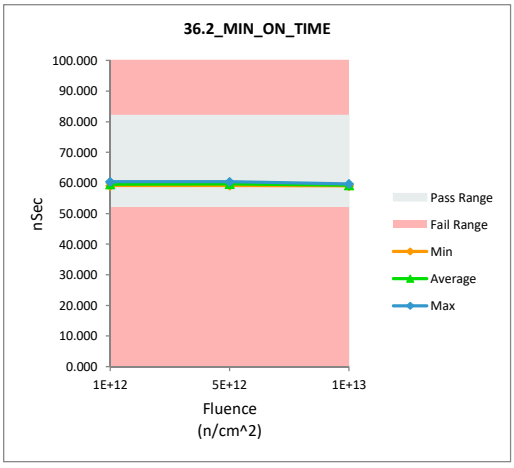
	36.2_MIN_ON_TIME	
Test Site		
Tester		
Test Number		
Unit	nSec	nSec
Max Limit	68	82
Min Limit	52	52

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	60.370	60.396	0.026
1E+12	121	59.137	59.117	-0.020
1E+12	122	59.223	59.249	0.026
5E+12	123	59.134	59.174	0.040
5E+12	124	60.409	60.369	-0.040
5E+12	125	59.461	59.513	0.052
1E+13	126	59.772	59.700	-0.072
1E+13	127	58.985	59.039	0.054
1E+13	128	59.008	59.106	0.098
	Max	60.409	60.396	0.098
	Average	59.500	59.518	0.018
	Min	58.985	59.039	-0.072
	Std Dev	0.560	0.534	0.053



	36.2_MIN_ON_TIME		
Test Site			
Tester			
Test Number			
Max Limit	82	nSec	
Min Limit	52	nSec	

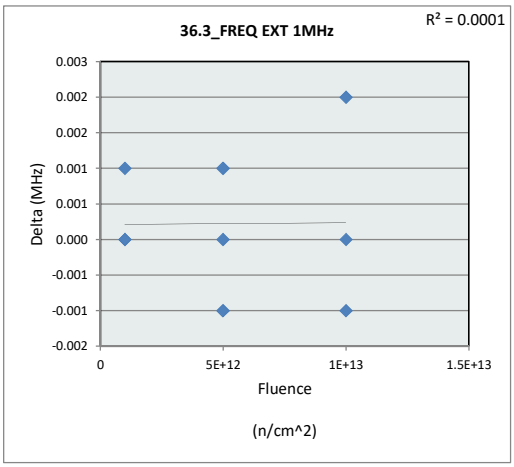
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	52.000	52.000	52.000
Min	59.117	59.174	59.039
Average	59.587	59.685	59.282
Max	60.396	60.369	59.700
UL	82.000	82.000	82.000



NDD Report
TPS7H4010-SEP

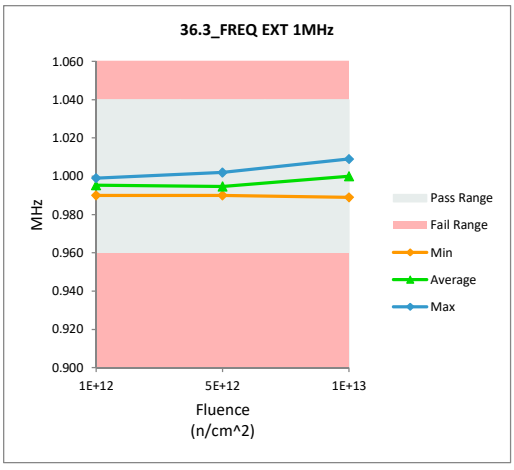
	36.3_FREQ EXT 1MHz	
Test Site		
Tester		
Test Number		
Unit	MHz	MHz
Max Limit	1.04	1.04
Min Limit	0.96	0.96

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.989	0.990	0.001
1E+12	121	0.997	0.997	0.000
1E+12	122	0.999	0.999	0.000
5E+12	123	0.989	0.990	0.001
5E+12	124	0.992	0.992	0.000
5E+12	125	1.003	1.002	-0.001
1E+13	126	1.007	1.009	0.002
1E+13	127	1.002	1.002	0.000
1E+13	128	0.990	0.989	-0.001
	Max	1.007	1.009	0.002
	Average	0.996	0.997	0.000
	Min	0.989	0.989	-0.001
	Std Dev	0.007	0.007	0.001



	36.3_FREQ EXT 1MHz		
Test Site			
Tester			
Test Number			
Max Limit	1.04	MHz	
Min Limit	0.96	MHz	

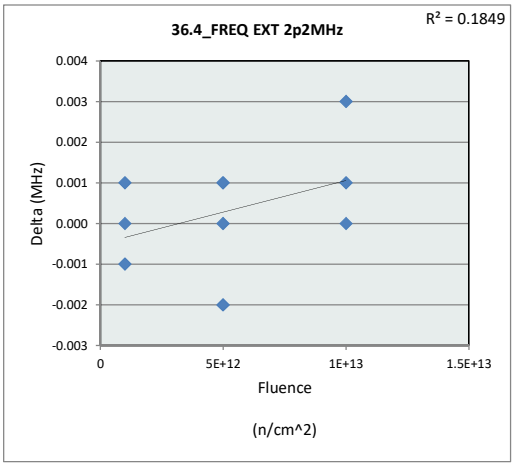
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.960	0.960	0.960
Min	0.990	0.990	0.989
Average	0.995	0.995	1.000
Max	0.999	1.002	1.009
UL	1.040	1.040	1.040



NDD Report
TPS7H4010-SEP

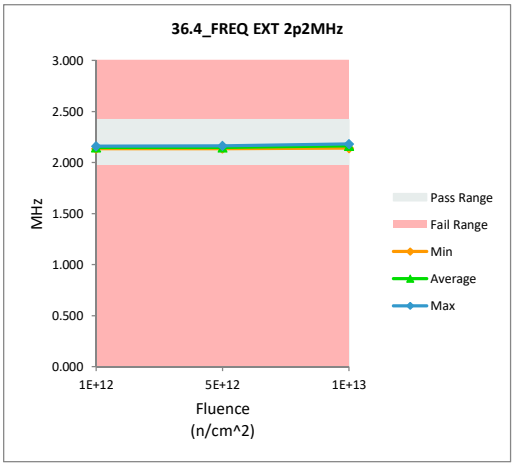
	36.4_FREQ EXT 2p2MHz	
Test Site		
Tester		
Test Number		
Unit	MHz	MHz
Max Limit	2.25	2.42
Min Limit	1.98	1.98

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	2.134	2.135	0.001
1E+12	121	2.152	2.152	0.000
1E+12	122	2.162	2.161	-0.001
5E+12	123	2.140	2.141	0.001
5E+12	124	2.137	2.137	0.000
5E+12	125	2.167	2.165	-0.002
1E+13	126	2.180	2.183	0.003
1E+13	127	2.168	2.169	0.001
1E+13	128	2.141	2.141	0.000
	Max	2.180	2.183	0.003
	Average	2.153	2.154	0.000
	Min	2.134	2.135	-0.002
	Std Dev	0.016	0.017	0.001



	36.4_FREQ EXT 2p2MHz	
Test Site		
Tester		
Test Number		
Max Limit	2.42	MHz
Min Limit	1.98	MHz

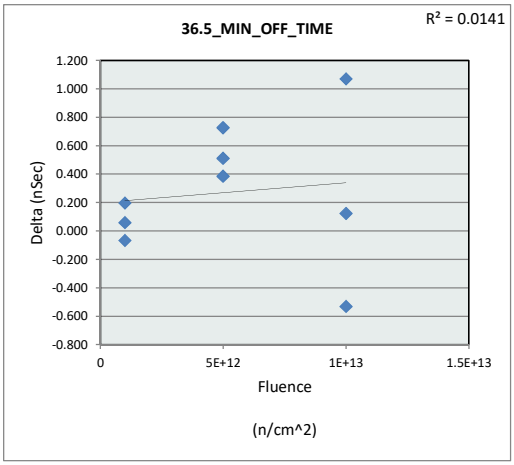
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980
Min	2.135	2.137	2.141
Average	2.149	2.148	2.164
Max	2.161	2.165	2.183
UL	2.420	2.420	2.420



NDD Report
TPS7H4010-SEP

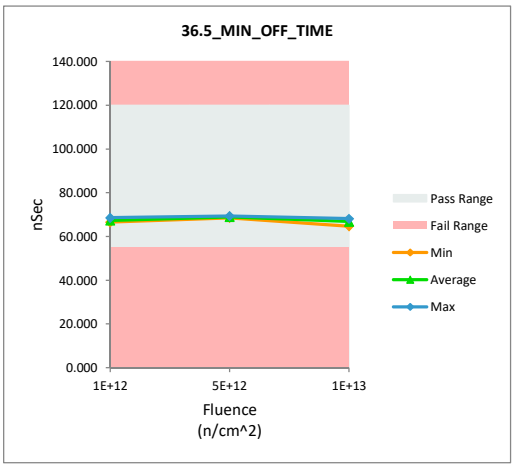
	36.5_MIN_OFF_TIME	
Test Site		
Tester		
Test Number		
Unit	nSec	nSec
Max Limit	78	120
Min Limit	55	55

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	68.518	68.576	0.058
1E+12	121	67.061	66.993	-0.068
1E+12	122	66.357	66.553	0.196
5E+12	123	68.510	69.020	0.510
5E+12	124	68.148	68.532	0.384
5E+12	125	68.646	69.371	0.725
1E+13	126	64.597	64.719	0.122
1E+13	127	68.193	67.662	-0.531
1E+13	128	67.128	68.197	1.069
	Max	68.646	69.371	1.069
	Average	67.462	67.736	0.274
	Min	64.597	64.719	-0.531
	Std Dev	1.338	1.455	0.467



	36.5_MIN_OFF_TIME		
Test Site			
Tester			
Test Number			
Max Limit	120	nSec	
Min Limit	55	nSec	

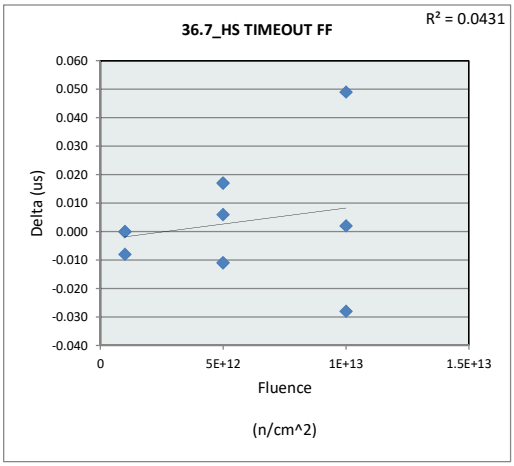
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	55.000	55.000	55.000
Min	66.553	68.532	64.719
Average	67.374	68.974	66.859
Max	68.576	69.371	68.197
UL	120.000	120.000	120.000



NDD Report
TPS7H4010-SEP

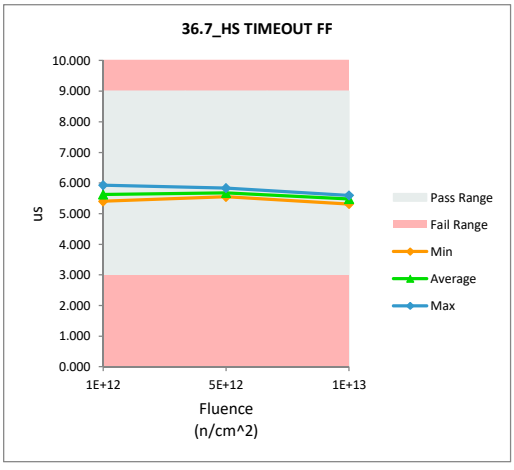
	36.7_HS TIMEOUT FF	
Test Site		
Tester		
Test Number		
Unit	us	us
Max Limit	8	9
Min Limit	3	3

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	5.941	5.933	-0.008
1E+12	121	5.404	5.404	0.000
1E+12	122	5.547	5.547	0.000
5E+12	123	5.533	5.550	0.017
5E+12	124	5.651	5.657	0.006
5E+12	125	5.846	5.835	-0.011
1E+13	126	5.315	5.317	0.002
1E+13	127	5.626	5.598	-0.028
1E+13	128	5.472	5.521	0.049
	Max	5.941	5.933	0.049
	Average	5.593	5.596	0.003
	Min	5.315	5.317	-0.028
	Std Dev	0.201	0.193	0.021



	36.7_HS TIMEOUT FF		
Test Site			
Tester			
Test Number			
Max Limit	9	us	
Min Limit	3	us	

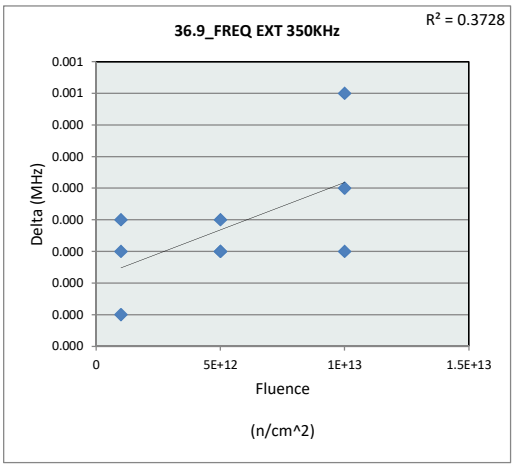
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	3.000	3.000	3.000
Min	5.404	5.550	5.317
Average	5.628	5.681	5.479
Max	5.933	5.835	5.598
UL	9.000	9.000	9.000



NDD Report
TPS7H4010-SEP

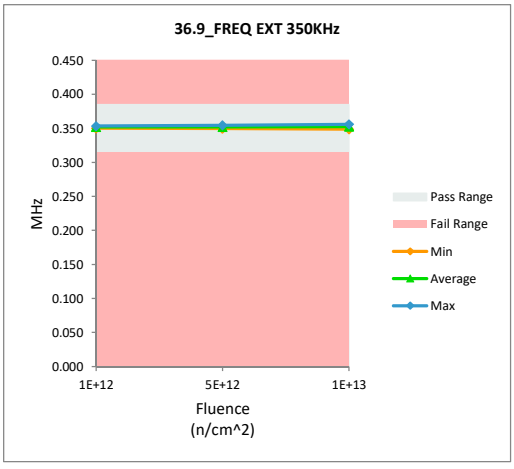
	36.9_FREQ EXT 350KHz	
Test Site		
Tester		
Test Number		
Unit	MHz	MHz
Max Limit	0.376	0.385
Min Limit	0.315	0.315

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.350	0.350	0.000
1E+12	121	0.354	0.354	0.000
1E+12	122	0.353	0.353	0.000
5E+12	123	0.350	0.350	0.000
5E+12	124	0.352	0.352	0.000
5E+12	125	0.355	0.355	0.000
1E+13	126	0.356	0.356	0.000
1E+13	127	0.353	0.353	0.000
1E+13	128	0.349	0.349	0.000
	Max	0.356	0.356	0.000
	Average	0.352	0.352	0.000
	Min	0.349	0.349	0.000
	Std Dev	0.002	0.002	0.000



	36.9_FREQ EXT 350KHz		
Test Site			
Tester			
Test Number			
Max Limit	0.385	MHz	
Min Limit	0.315	MHz	

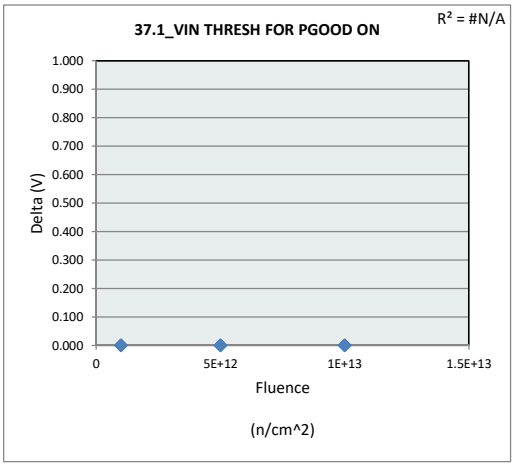
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.315	0.315	0.315
Min	0.350	0.350	0.349
Average	0.352	0.352	0.353
Max	0.354	0.355	0.356
UL	0.385	0.385	0.385



NDD Report
TPS7H4010-SEP

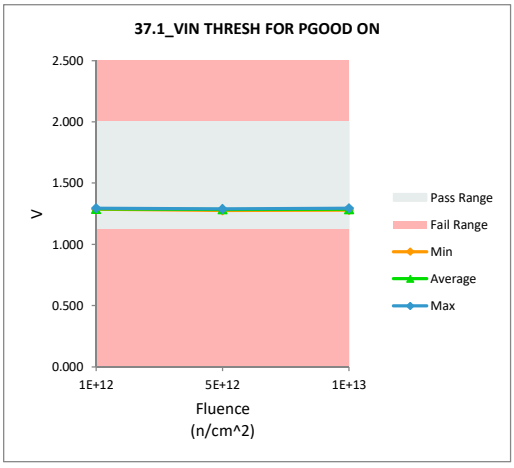
	37.1_VIN THRESH FOR PGOOD O	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.42	2
Min Limit	1.12	1.12

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.286	1.286	0.000
1E+12	121	1.295	1.295	0.000
1E+12	122	1.286	1.286	0.000
5E+12	123	1.289	1.289	0.000
5E+12	124	1.289	1.289	0.000
5E+12	125	1.277	1.277	0.000
1E+13	126	1.280	1.280	0.000
1E+13	127	1.295	1.295	0.000
1E+13	128	1.286	1.286	0.000
	Max	1.295	1.295	0.000
	Average	1.287	1.287	0.000
	Min	1.277	1.277	0.000
	Std Dev	0.006	0.006	0.000



	37.1_VIN THRESH FOR PGOOD		
Test Site			
Tester			
Test Number			
Max Limit	2	V	
Min Limit	1.12	V	

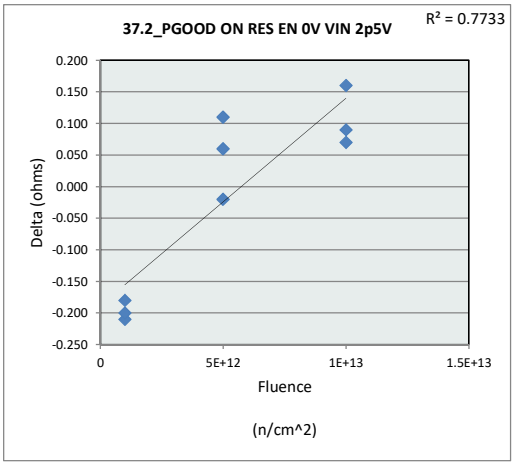
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.120	1.120	1.120
Min	1.286	1.277	1.280
Average	1.289	1.285	1.287
Max	1.295	1.289	1.295
UL	2.000	2.000	2.000



NDD Report
TPS7H4010-SEP

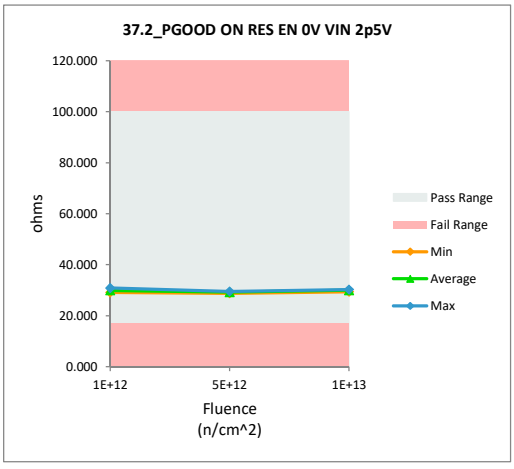
	37.2_PGOOD ON RES EN 0V VIN 2	
Test Site		
Tester		
Test Number		
Unit	ohms	ohms
Max Limit	60	100
Min Limit	17	17

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	29.340	29.130	-0.210
1E+12	121	31.030	30.850	-0.180
1E+12	122	29.990	29.790	-0.200
5E+12	123	28.710	28.820	0.110
5E+12	124	29.370	29.430	0.060
5E+12	125	29.540	29.520	-0.020
1E+13	126	30.020	30.180	0.160
1E+13	127	29.350	29.440	0.090
1E+13	128	30.220	30.290	0.070
	Max	31.030	30.850	0.160
	Average	29.730	29.717	-0.013
	Min	28.710	28.820	-0.210
	Std Dev	0.669	0.630	0.146



	37.2_PGOOD ON RES EN 0V VIN		
Test Site			
Tester			
Test Number			
Max Limit	100	ohms	
Min Limit	17	ohms	

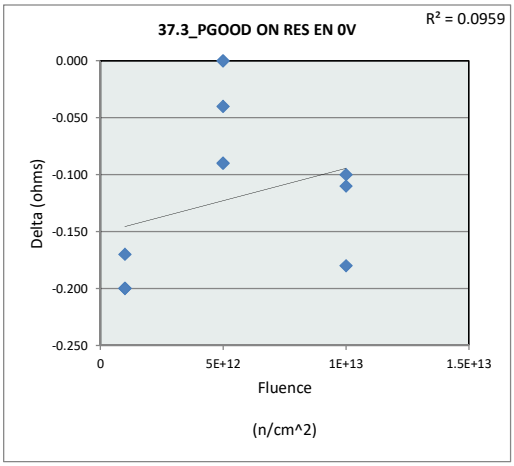
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	17.000	17.000	17.000
Min	29.130	28.820	29.440
Average	29.923	29.257	29.970
Max	30.850	29.520	30.290
UL	100.000	100.000	100.000



NDD Report
TPS7H4010-SEP

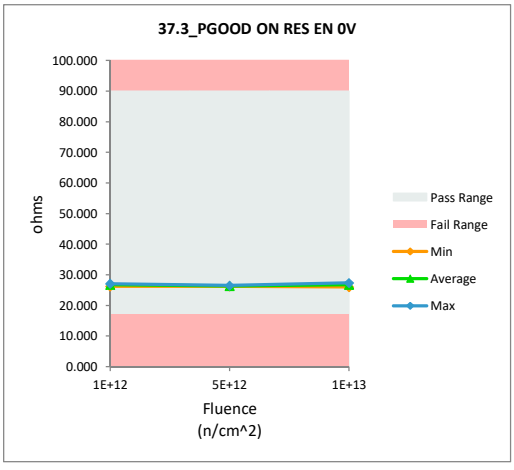
	37.3_PGOOD ON RES EN 0V	
Test Site		
Tester		
Test Number		
Unit	ohms	ohms
Max Limit	45	90
Min Limit	17	17

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	26.420	26.220	-0.200
1E+12	121	27.140	26.970	-0.170
1E+12	122	27.320	27.120	-0.200
5E+12	123	26.210	26.210	0.000
5E+12	124	26.570	26.530	-0.040
5E+12	125	26.480	26.390	-0.090
1E+13	126	27.510	27.410	-0.100
1E+13	127	26.160	26.050	-0.110
1E+13	128	27.110	26.930	-0.180
	Max	27.510	27.410	0.000
	Average	26.769	26.648	-0.121
	Min	26.160	26.050	-0.200
	Std Dev	0.504	0.474	0.072



	37.3_PGOOD ON RES EN 0V		
Test Site			
Tester			
Test Number			
Max Limit	90	ohms	
Min Limit	17	ohms	

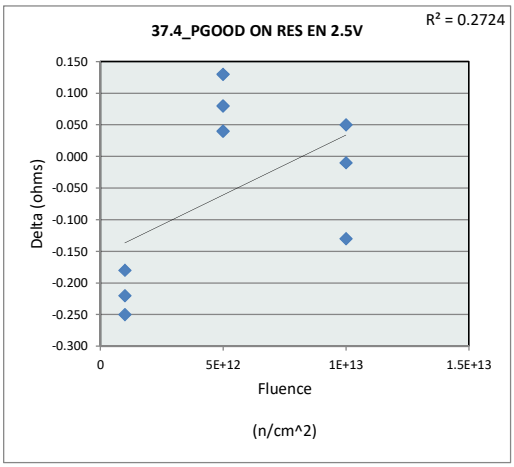
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	17.000	17.000	17.000
Min	26.220	26.210	26.050
Average	26.770	26.377	26.797
Max	27.120	26.530	27.410
UL	90.000	90.000	90.000



NDD Report
TPS7H4010-SEP

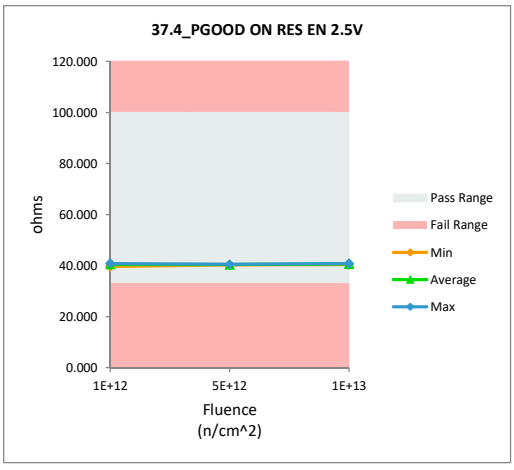
	37.4_PGOOD ON RES EN 2.5V	
Test Site		
Tester		
Test Number		
Unit	ohms	ohms
Max Limit	55	100
Min Limit	33	33

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	41.000	40.750	-0.250
1E+12	121	39.870	39.650	-0.220
1E+12	122	41.000	40.820	-0.180
5E+12	123	40.080	40.210	0.130
5E+12	124	40.420	40.460	0.040
5E+12	125	40.390	40.470	0.080
1E+13	126	40.940	40.810	-0.130
1E+13	127	40.370	40.360	-0.010
1E+13	128	40.760	40.810	0.050
	Max	41.000	40.820	0.130
	Average	40.537	40.482	-0.054
	Min	39.870	39.650	-0.250
	Std Dev	0.412	0.385	0.142



	37.4_PGOOD ON RES EN 2.5V		
Test Site			
Tester			
Test Number			
Max Limit	100	ohms	
Min Limit	33	ohms	

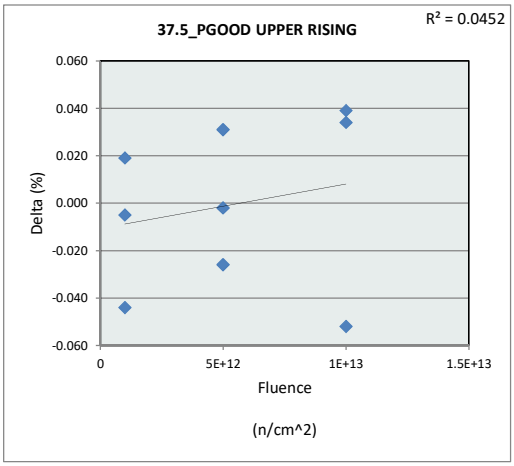
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	33.000	33.000	33.000
Min	39.650	40.210	40.360
Average	40.407	40.380	40.660
Max	40.820	40.470	40.810
UL	100.000	100.000	100.000



NDD Report
TPS7H4010-SEP

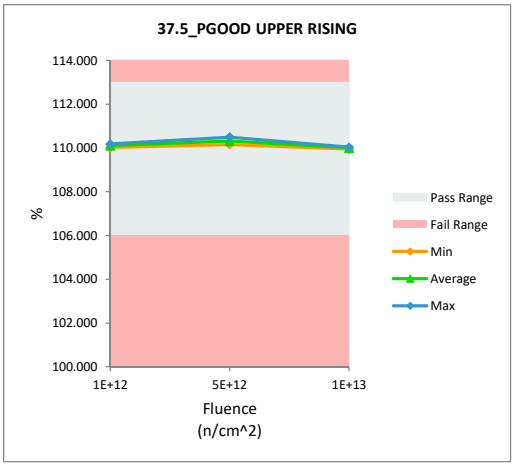
	37.5_PGOOD UPPER RISING	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	112.5	113
Min Limit	106	106

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	110.185	110.180	-0.005
1E+12	121	110.200	110.156	-0.044
1E+12	122	110.004	110.023	0.019
5E+12	123	110.132	110.163	0.031
5E+12	124	110.521	110.495	-0.026
5E+12	125	110.294	110.292	-0.002
1E+13	126	109.998	110.037	0.039
1E+13	127	109.993	110.027	0.034
1E+13	128	110.003	109.951	-0.052
	Max	110.521	110.495	0.039
	Average	110.148	110.147	-0.001
	Min	109.993	109.951	-0.052
	Std Dev	0.178	0.167	0.034



	37.5_PGOOD UPPER RISING	
Test Site		
Tester		
Test Number		
Max Limit	113	%
Min Limit	106	%

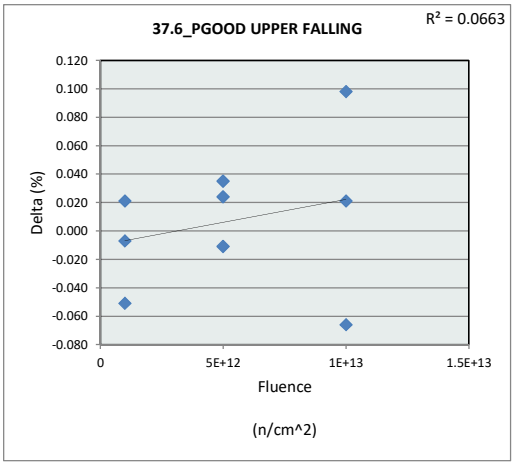
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	106.000	106.000	106.000
Min	110.023	110.163	109.951
Average	110.120	110.317	110.005
Max	110.180	110.495	110.037
UL	113.000	113.000	113.000



NDD Report
TPS7H4010-SEP

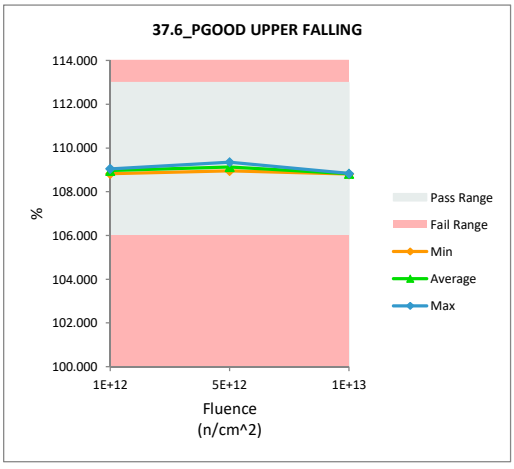
	37.6_PGOOD UPPER FALLING	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	111.5	113
Min Limit	106	106

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	109.054	109.047	-0.007
1E+12	121	109.004	109.025	0.021
1E+12	122	108.874	108.823	-0.051
5E+12	123	108.936	108.960	0.024
5E+12	124	109.324	109.359	0.035
5E+12	125	109.097	109.086	-0.011
1E+13	126	108.737	108.835	0.098
1E+13	127	108.798	108.819	0.021
1E+13	128	108.873	108.807	-0.066
	Max	109.324	109.359	0.098
	Average	108.966	108.973	0.007
	Min	108.737	108.807	-0.066
	Std Dev	0.178	0.181	0.049



	37.6_PGOOD UPPER FALLING		
Test Site			
Tester			
Test Number			
Max Limit	113	%	
Min Limit	106	%	

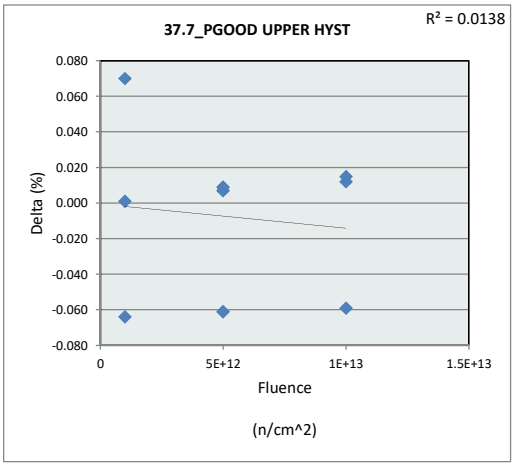
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	106.000	106.000	106.000
Min	108.823	108.960	108.807
Average	108.965	109.135	108.820
Max	109.047	109.359	108.835
UL	113.000	113.000	113.000



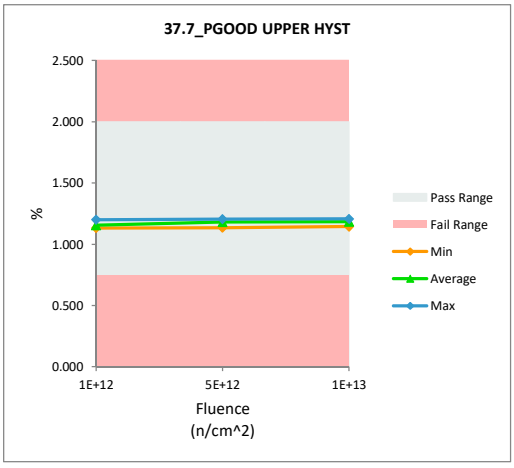
NDD Report
TPS7H4010-SEP

	37.7_PGOOD UPPER HYST	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	2	2
Min Limit	0.75	0.75

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.131	1.132	0.001
1E+12	121	1.196	1.132	-0.064
1E+12	122	1.130	1.200	0.070
5E+12	123	1.196	1.203	0.007
5E+12	124	1.197	1.136	-0.061
5E+12	125	1.197	1.206	0.009
1E+13	126	1.261	1.202	-0.059
1E+13	127	1.196	1.208	0.012
1E+13	128	1.129	1.144	0.015
	Max	1.261	1.208	0.070
	Average	1.181	1.174	-0.008
	Min	1.129	1.132	-0.064
	Std Dev	0.044	0.036	0.045



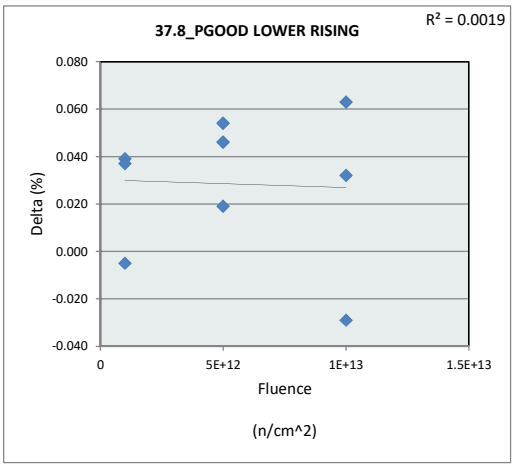
	37.7_PGOOD UPPER HYST		
Test Site			
Tester			
Test Number			
Max Limit	2	%	
Min Limit	0.75	%	
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.750	0.750	0.750
Min	1.132	1.136	1.144
Average	1.155	1.182	1.185
Max	1.200	1.206	1.208
UL	2.000	2.000	2.000



NDD Report
TPS7H4010-SEP

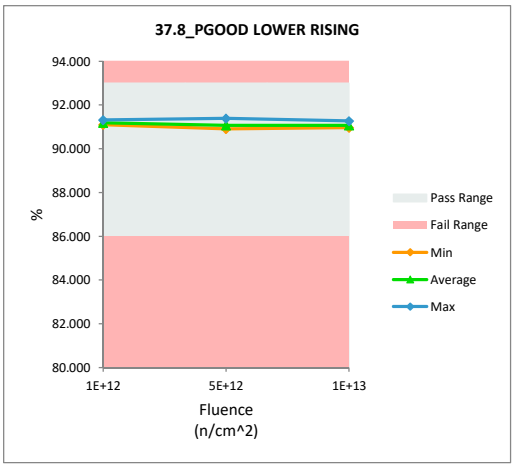
	37.8_PGOOD LOWER RISING	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	92	93
Min Limit	86	86

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	91.089	91.128	0.039
1E+12	121	91.324	91.319	-0.005
1E+12	122	91.060	91.097	0.037
5E+12	123	90.857	90.911	0.054
5E+12	124	91.369	91.388	0.019
5E+12	125	90.881	90.927	0.046
1E+13	126	91.211	91.274	0.063
1E+13	127	90.930	90.962	0.032
1E+13	128	91.004	90.975	-0.029
	Max	91.369	91.388	0.063
	Average	91.081	91.109	0.028
	Min	90.857	90.911	-0.029
	Std Dev	0.187	0.181	0.029



	37.8_PGOOD LOWER RISING		
Test Site			
Tester			
Test Number			
Max Limit	93	%	
Min Limit	86	%	

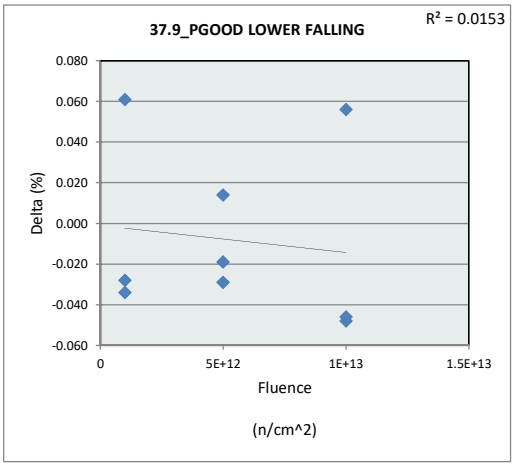
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	86.000	86.000	86.000
Min	91.097	90.911	90.962
Average	91.181	91.075	91.070
Max	91.319	91.388	91.274
UL	93.000	93.000	93.000



NDD Report
TPS7H4010-SEP

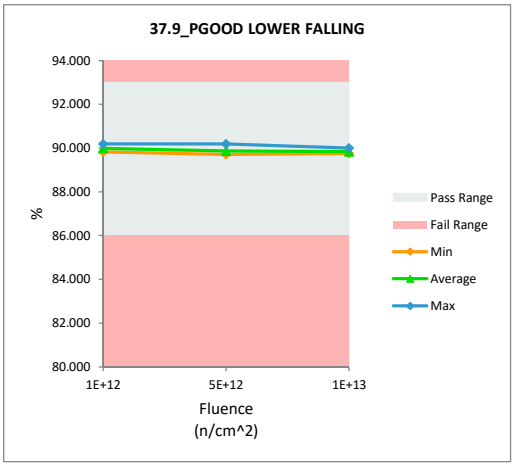
	37.9_PGOOD LOWER FALLING	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	90.84	93
Min Limit	86	86

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	89.957	89.929	-0.028
1E+12	121	90.127	90.188	0.061
1E+12	122	89.864	89.830	-0.034
5E+12	123	89.727	89.708	-0.019
5E+12	124	90.172	90.186	0.014
5E+12	125	89.750	89.721	-0.029
1E+13	126	89.950	90.006	0.056
1E+13	127	89.801	89.753	-0.048
1E+13	128	89.809	89.763	-0.046
	Max	90.172	90.188	0.061
	Average	89.906	89.898	-0.008
	Min	89.727	89.708	-0.048
	Std Dev	0.159	0.191	0.042



	37.9_PGOOD LOWER FALLING		
Test Site			
Tester			
Test Number			
Max Limit	93	%	
Min Limit	86	%	

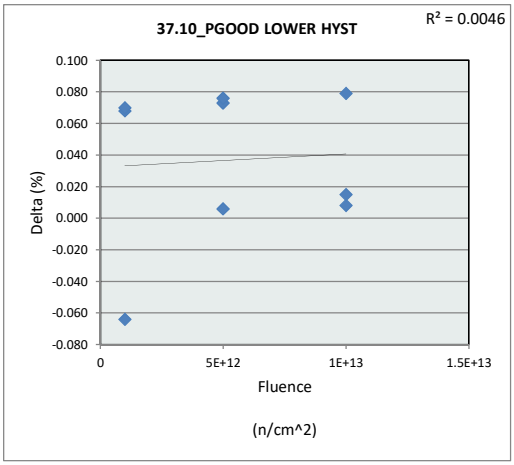
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	86.000	86.000	86.000
Min	89.830	89.708	89.753
Average	89.982	89.872	89.841
Max	90.188	90.186	90.006
UL	93.000	93.000	93.000



NDD Report
TPS7H4010-SEP

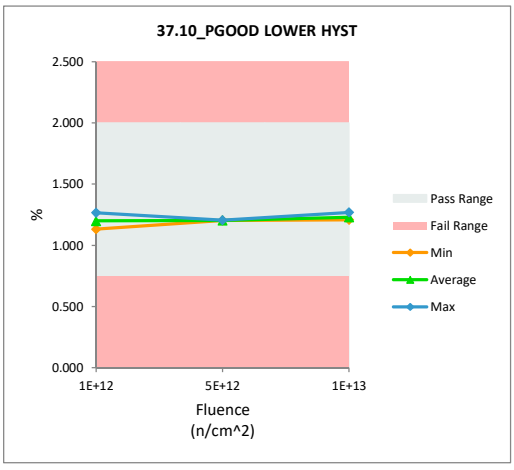
	37.10_PGOOD LOWER HYST	
Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	2	2
Min Limit	0.75	0.75

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	1.131	1.199	0.068
1E+12	121	1.196	1.132	-0.064
1E+12	122	1.196	1.266	0.070
5E+12	123	1.130	1.203	0.073
5E+12	124	1.197	1.203	0.006
5E+12	125	1.130	1.206	0.076
1E+13	126	1.261	1.269	0.008
1E+13	127	1.129	1.208	0.079
1E+13	128	1.196	1.211	0.015
	Max	1.261	1.269	0.079
	Average	1.174	1.211	0.037
	Min	1.129	1.132	-0.064
	Std Dev	0.046	0.040	0.049



	37.10_PGOOD LOWER HYST		
Test Site			
Tester			
Test Number			
Max Limit	2	%	
Min Limit	0.75	%	

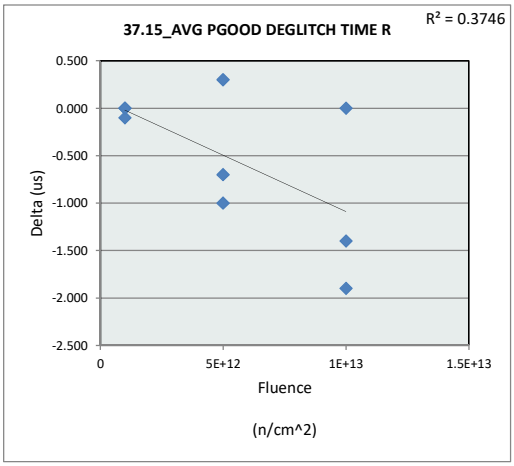
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.750	0.750	0.750
Min	1.132	1.203	1.208
Average	1.199	1.204	1.229
Max	1.266	1.206	1.269
UL	2.000	2.000	2.000



NDD Report
TPS7H4010-SEP

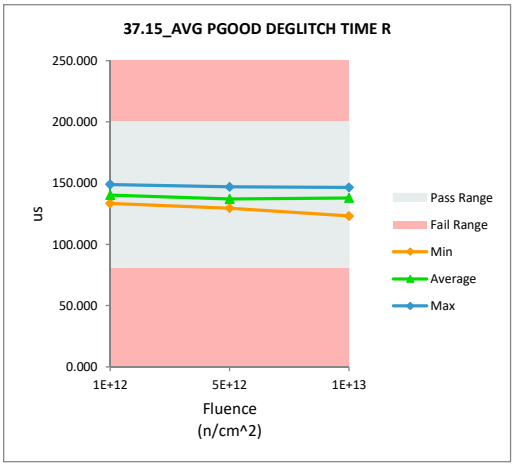
	37.15_AVG PGOOD DEGLITCH TI	
Test Site		
Tester		
Test Number		
Unit	us	us
Max Limit	188	200
Min Limit	80	80

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	138.400	138.400	0.000
1E+12	121	133.600	133.500	-0.100
1E+12	122	148.900	148.900	0.000
5E+12	123	146.600	146.900	0.300
5E+12	124	130.500	129.500	-1.000
5E+12	125	135.700	135.000	-0.700
1E+13	126	148.400	146.500	-1.900
1E+13	127	144.200	144.200	0.000
1E+13	128	124.500	123.100	-1.400
	Max	148.900	148.900	0.300
	Average	138.978	138.444	-0.533
	Min	124.500	123.100	-1.900
	Std Dev	8.617	8.878	0.758



	37.15_AVG PGOOD DEGLITCH T		
Test Site			
Tester			
Test Number			
Max Limit	200	us	
Min Limit	80	us	

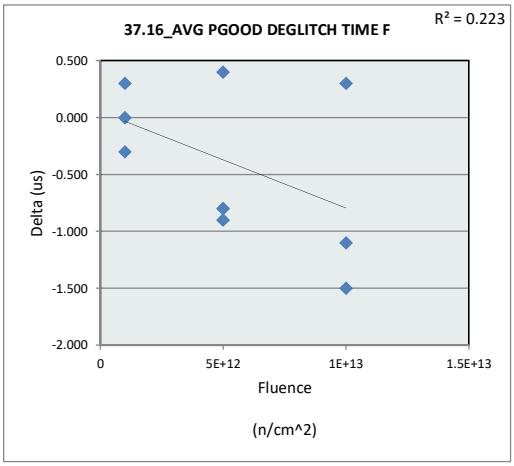
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	80.000	80.000	80.000
Min	133.500	129.500	123.100
Average	140.267	137.133	137.933
Max	148.900	146.900	146.500
UL	200.000	200.000	200.000



NDD Report
TPS7H4010-SEP

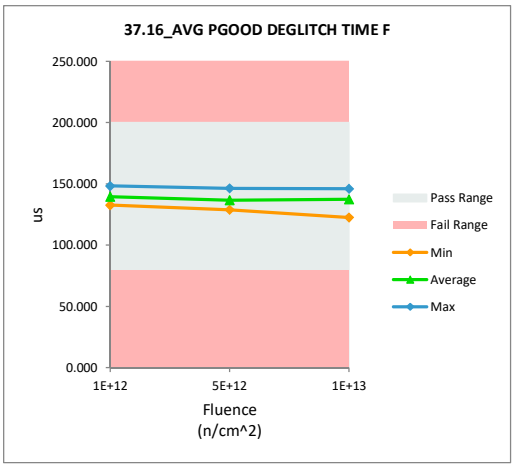
	37.16_AVG PGOOD DEGLITCH TI	
Test Site		
Tester		
Test Number		
Unit	us	us
Max Limit	188	200
Min Limit	80	80

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	137.700	137.700	0.000
1E+12	121	132.900	132.600	-0.300
1E+12	122	148.000	148.300	0.300
5E+12	123	146.000	146.400	0.400
5E+12	124	129.700	128.900	-0.800
5E+12	125	135.500	134.600	-0.900
1E+13	126	147.500	146.000	-1.500
1E+13	127	143.500	143.800	0.300
1E+13	128	123.700	122.600	-1.100
	Max	148.000	148.300	0.400
	Average	138.278	137.878	-0.400
	Min	123.700	122.600	-1.500
	Std Dev	8.584	8.909	0.698



	37.16_AVG PGOOD DEGLITCH T	
Test Site		
Tester		
Test Number		
Max Limit	200	us
Min Limit	80	us

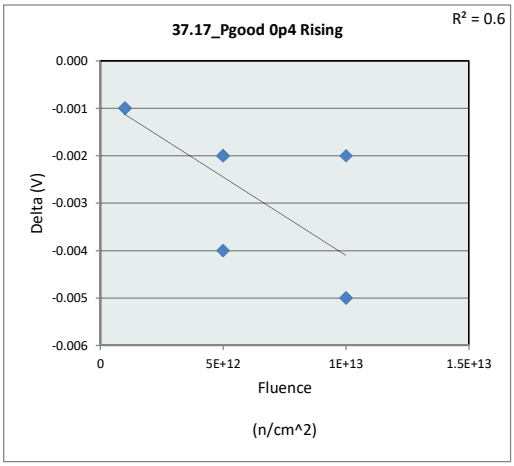
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	80.000	80.000	80.000
Min	132.600	128.900	122.600
Average	139.533	136.633	137.467
Max	148.300	146.400	146.000
UL	200.000	200.000	200.000



NDD Report
TPS7H4010-SEP

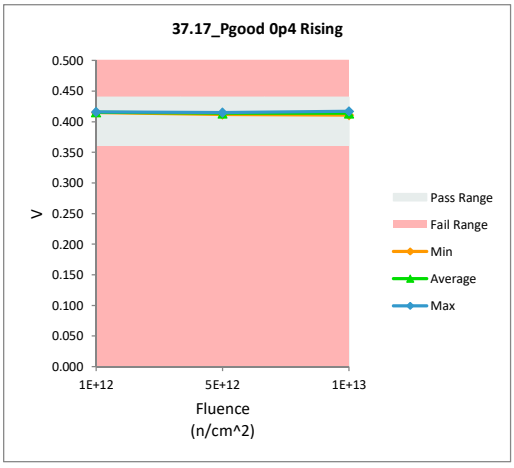
	37.17_Pgood 0p4 Rising	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.43	0.44
Min Limit	0.36	0.36

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.416	0.415	-0.001
1E+12	121	0.416	0.415	-0.001
1E+12	122	0.417	0.416	-0.001
5E+12	123	0.417	0.415	-0.002
5E+12	124	0.416	0.414	-0.002
5E+12	125	0.416	0.412	-0.004
1E+13	126	0.419	0.417	-0.002
1E+13	127	0.418	0.413	-0.005
1E+13	128	0.416	0.411	-0.005
	Max	0.419	0.417	-0.001
	Average	0.417	0.414	-0.003
	Min	0.416	0.411	-0.005
	Std Dev	0.001	0.002	0.002



	37.17_Pgood 0p4 Rising		
Test Site			
Tester			
Test Number			
Max Limit	0.44	V	
Min Limit	0.36	V	

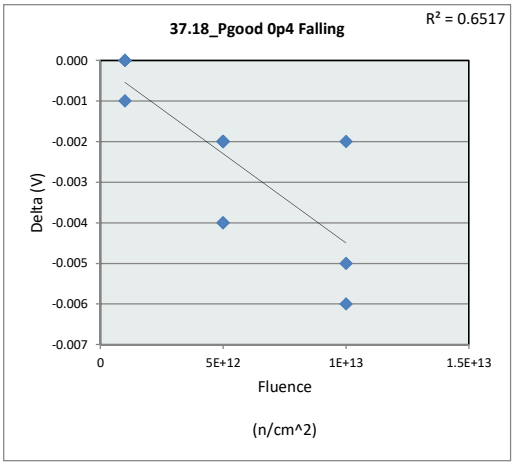
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.360	0.360	0.360
Min	0.415	0.412	0.411
Average	0.415	0.414	0.414
Max	0.416	0.415	0.417
UL	0.440	0.440	0.440



NDD Report
TPS7H4010-SEP

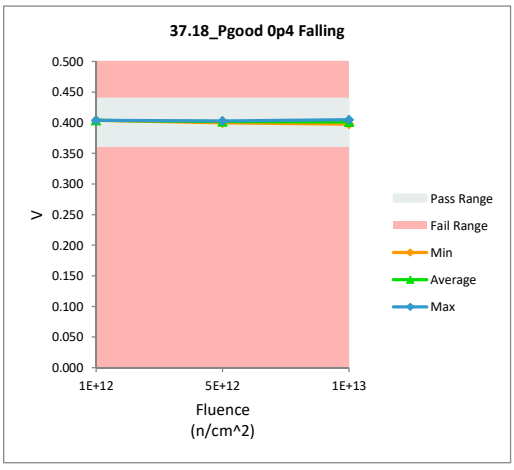
	37.18_Pgood 0p4 Falling	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.418	0.44
Min Limit	0.36	0.36

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	0.404	0.404	0.000
1E+12	121	0.404	0.404	0.000
1E+12	122	0.405	0.404	-0.001
5E+12	123	0.405	0.403	-0.002
5E+12	124	0.405	0.403	-0.002
5E+12	125	0.404	0.400	-0.004
1E+13	126	0.407	0.405	-0.002
1E+13	127	0.406	0.401	-0.005
1E+13	128	0.404	0.398	-0.006
	Max	0.407	0.405	0.000
	Average	0.405	0.402	-0.002
	Min	0.404	0.398	-0.006
	Std Dev	0.001	0.002	0.002



	37.18_Pgood 0p4 Falling		
Test Site			
Tester			
Test Number			
Max Limit	0.44	V	
Min Limit	0.36	V	

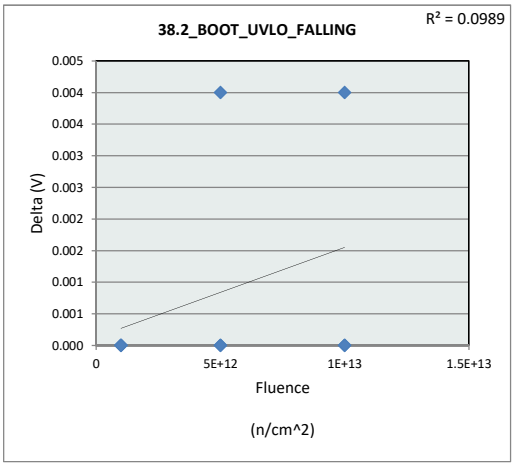
Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	0.360	0.360	0.360
Min	0.404	0.400	0.398
Average	0.404	0.402	0.401
Max	0.404	0.403	0.405
UL	0.440	0.440	0.440



NDD Report
TPS7H4010-SEP

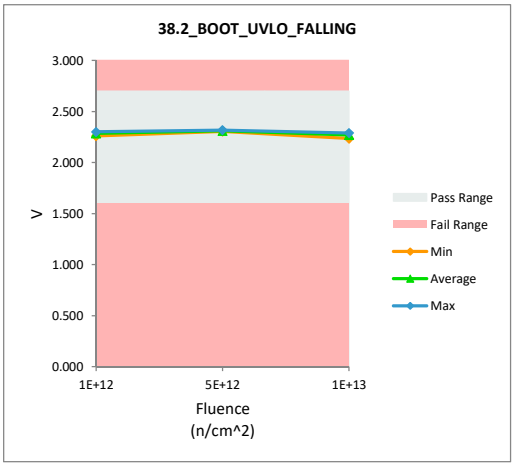
	38.2_BOOT_UVLO_FALLING	
Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	2.5	2.7
Min Limit	1.6	1.6

Fluence (n/cm^2)	Serial #	PRE_NDD	POST_NDD	Delta
1E+12	120	2.297	2.297	0.000
1E+12	121	2.301	2.301	0.000
1E+12	122	2.261	2.261	0.000
5E+12	123	2.304	2.304	0.000
5E+12	124	2.304	2.308	0.004
5E+12	125	2.319	2.319	0.000
1E+13	126	2.232	2.236	0.004
1E+13	127	2.290	2.290	0.000
1E+13	128	2.290	2.290	0.000
	Max	2.319	2.319	0.004
	Average	2.289	2.290	0.001
	Min	2.232	2.236	0.000
	Std Dev	0.026	0.026	0.002



	38.2_BOOT_UVLO_FALLING		
Test Site			
Tester			
Test Number			
Max Limit	2.7	V	
Min Limit	1.6	V	

Fluence (n/cm^2)	1E+12	5E+12	1E+13
LL	1.600	1.600	1.600
Min	2.261	2.304	2.236
Average	2.286	2.310	2.272
Max	2.301	2.319	2.290
UL	2.700	2.700	2.700



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