

TPS7H5004-SP Neutron Displacement Damage (NDD) Characterization



ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7H5004-SP, Texas Instruments 4-V to 14-V radiation-hardness-assured, current mode, dual output PWM controller optimized for DC-DC converters in space applications. The TPS7H5004-SP showed a strong degree of hardness to neutron irradiation up to fluence level 1×10^{13} n/cm².

The neutron irradiation test is a destructive test. Test procedure follows MIL-STD-883 method 1017 as guidance. The purpose of this test is to determine the device susceptibility to non-ionizing energy loss (NIEL) degradation. Objectives of the test are, to detect and measure the degradation of critical device parameters as a function of neutron fluence and to determine if these parameters are within specified limits after exposure to a specified level of neutron fluence.

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1 Device Information

1.1 Product Description

The TPS7H5004-SP is a dual output radiation-tolerant PWM controller suited for usage in non-synchronous push-pull and full-bridge topologies. The controller has configurable leading edge blank time. The maximum duty cycle for this device is 50% and is attained by connecting the DCL pin to AVSS. The device has high switching frequency capability, small footprint, and 0.613 +0.7%/-1% reference.

The TPS7H5004-SP can be driven using an external clock through the SYNC pin or run using its internal oscillator at a frequency programmed by the user. Other programmable features include the UVLO threshold, soft start, and slope compensation. The TPS7H5004-SP is packaged in a very small 22-pin ceramic dual flat package,

1.2 Device Details

[Table 1-1](#) lists the device information and test conditions used in the NDD characterization.

Table 1-1. Device and Exposure Details

NDD Exposure Details	
TI Device	TPS7H5004-SP
TI Part Name	5962R1822204VXC
Device Function	PWM controller
Package	22-pin CFP (HFT)
Technology	LBC7
Lot Number / Date Code	2003537 / 2212A
Sample Quantity	9 + 1 control unit
Exposure Facility	Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor (UMLRR)
Neutron Fluence (1-MeV equivalent) Level	1×10^{12} , 5×10^{12} , 1×10^{13} n/cm ²
Irradiation Temperature	25°C

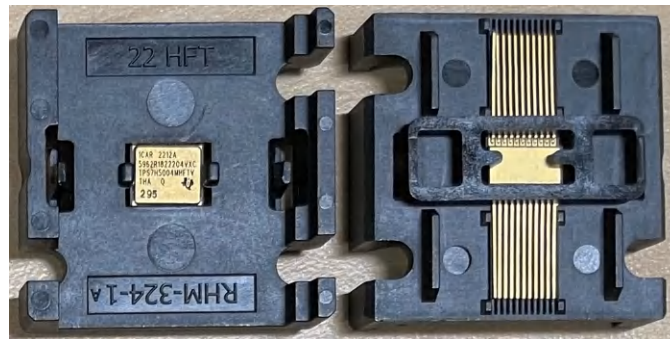


Figure 1-1. TPS7H5004-SP Device

2 Total Dose Test Setup

2.1 Test Overview

General test procedures adhere to MIL-STD-883, Method 1017 as a guide for neutron irradiation. The TPS7H5004-SP was electrically tested using the production automated test equipment (ATE) program at an ambient room temperature of 25°C before and after neutron irradiation.

2.2 Test Facility

The utilized test facility is the Fast Neutron Irradiation (FNI) Facility of University of Massachusetts Lowell Research Reactor. The neutron fluence for this irradiation was measured utilizing ASTM E-265 “Measuring Reaction Rates and Fast Neutron Fluence by Radioactivation of Sulfur-32” and correlated to the measured reactor power level. All irradiation conditions required under ASTM 722 were met, this includes: neutron fluence, distribution and uncertainty. The Average Integrated Neutron Fluence, 1-MeV(Si) equivalent, 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

2.3 Test Setup Details

Devices were irradiated at three fluence levels in unbiased conditions: 1.0×10^{12} n/cm², 5.0×10^{12} n/cm² and 1.0×10^{13} n/cm².

Table 2-1. Neutron Irradiation Conditions

GROUP	SAMPLE QTY	NEUTRON FLUENCE (n/cm ²)	BIAS
A	3	1.0×10^{12}	Unbias
B	3	5.0×10^{12}	Unbias
C	3	1.0×10^{13}	Unbias
Control Unit	1	N/A	N/A

3 Test Results

3.1 NDD Characterization Summary

The results show that all devices were fully functional and within specification limits. A sample size of nine units was exposed for neutron irradiation and an additional unirradiated control unit was used as correlation.

Overall, the TPS7H5004-SP showed a strong degree of hardness to Neutron irradiation up to fluence level 1×10^{13} n/cm². The measurements taken post-irradiation for each sample set showed a marginal shift for most parameters at each fluence level. The parameters that showed a greater degree of change between pre- and post- irradiation were still within the Electrical Performance Characteristics specified in the Data Sheet Electrical Parameters table. See [Table 3-1](#) for the Data Sheet Electrical Parameters and Associated Tests.

Electrical testing is done for pre- and post- neutron irradiation by ATE. ATE electrical test is done at an ambient room temperature of 25°C. Parameters not listed in the [Table 3-1](#) are omitted either because there is no parametric data or because verification was done through bench testing.

See [Appendix A](#) for NDD report up to 1.0×10^{13} n/cm².

3.2 Data Sheet Electrical Parameters and Associated Tests

Table 3-1. TPS7H5004-SP Electrical Parameters Table

PARAMETER	TEST CONDITION	TPS7H5004-SP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
SUPPLY VOLTAGES AND CURRENTS						
IDD Operating supply current	f _{SW} = 500 kHz, No load for OUTA and OUTB		6.25	8	mA	5.24 __IDD_ACT_500K_NOLOAD_4V, 5.25 __IDD_ACT_500K_NOLOAD_5V, 5.26 __IDD_ACT_500K_NOLOAD_12V, 5.27 __IDD_ACT_500K_NOLOAD_14V
	f _{SW} = 1 MHz, No load for OUTA and OUTB		6.75	9.5	mA	5.28 __IDD_ACT_1M_NOLOAD_4V, 5.29 __IDD_ACT_1M_NOLOAD_5V, 5.30 __IDD_ACT_1M_NOLOAD_12V, 5.31 __IDD_ACT_1M_NOLOAD_14V
	f _{SW} = 2 MHz, No load for OUTA and OUTB		8.5	13.5	mA	5.36 __IDD_ACT_2M_NOLOAD_4V, 5.37 __IDD_ACT_2M_NOLOAD_5V, 5.38 __IDD_ACT_2M_NOLOAD_12V, 5.39 __IDD_ACT_2M_NOLOAD_14V
	f _{SW} = 500 kHz, C _{LOAD} = 100pF for OUTA and OUTB		7.5	9.5	mA	5.48 __IDD_ACT_500K_4V, 5.49 __IDD_ACT_500K_5V, 5.50 __IDD_ACT_500K_12V, 5.51 __IDD_ACT_500K_14V
	f _{SW} = 1 MHz, C _{LOAD} = 100pF for OUTA and OUTB		9	12	mA	5.52 __IDD_ACT_1M_4V, 5.53 __IDD_ACT_1M_5V, 5.54 __IDD_ACT_1M_12V, 5.55 __IDD_ACT_1M_14V
	f _{SW} = 2 MHz, C _{LOAD} = 100pF for OUTA and OUTB		14	19.5	mA	5.60 __IDD_ACT_2M_4V, 5.61 __IDD_ACT_2M_5V, 5.62 __IDD_ACT_2M_12V, 5.63 __IDD_ACT_2M_14V
I _{DD(dis)} Standby current	EN = 0 V			3	mA	5.1 __IDD_DIS_4V, 5.2 __IDD_DIS_5V, 5.3 __IDD_DIS_12V 5.4 __IDD_DIS_14V
VLDO Internal linear regulator output voltage	5 V ≤ VIN ≤ 14 V, f _{sw} ≤ 1 MHz	4.75	5	5.2	V	5.65 __V_LDO_100K_5V, 5.66 __V_LDO_100K_12V, 5.67 __V_LDO_100K_14V, 5.69 __V_LDO_200K_5V, 5.70 __V_LDO_200K_12V, 5.71 __V_LDO_200K_14V, 5.73 __V_LDO_500K_5V, 5.74 __V_LDO_500K_12V, 5.75 __V_LDO_500K_14V, 5.77 __V_LDO_1M_5V, 5.78 __V_LDO_1M_12V, 5.79 __V_LDO_1M_14V
	5 V ≤ VIN ≤ 14 V, f _{sw} = 2 MHz	4.65	5	5.2	V	5.85 __V_LDO_2M_5V, 5.86 __V_LDO_2M_12V, 5.87 __V_LDO_2M_14V
ENABLE AND UNDERVOLTAGE LOCKOUT						
V _{ENR} EN threshold rising		0.57	0.6	0.65	V	6.5 __V_EN_RISE_4V, 6.8 __V_EN_RISE_5V, 6.11 __V_EN_RISE_12V, 6.14 __V_EN_RISE_14V
V _{ENF} EN threshold falling		0.47	0.5	0.55	V	6.6 __V_EN_FALL_4V, 6.9 __V_EN_FALL_5V, 6.12 __V_EN_FALL_12V, 6.15 __V_EN_FALL_14V
V _{ENH} EN hysteresis voltage		85	95	105	mV	6.7 __V_EN_HYS_4V, 6.10 __V_EN_HYS_5V, 6.13 __V_EN_HYS_12V, 6.16 __V_EN_HYS_14V
I _{EN} EN pin input leakage current	VIN = 14 V, EN = 5V		5	50	nA	6.1 __I_EN_LEAK_4V, 6.2 __I_EN_LEAK_5V, 6.3 __I_EN_LEAK_12V, 6.4 __I_EN_LEAK_14V

Table 3-1. TPS7H5004-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5004-SP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
VLDO _{UVLOR} VLDO UVLO rising		3.44	3.55	3.66	V	6.34 __UVLO_VLDO_RISE_1MHz, 6.37 __UVLO_VLDO_RISE_100kHz, 6.40 __UVLO_VLDO_RISE_200kHz, 6.43 __UVLO_VLDO_RISE_500kHz, 6.46 __UVLO_VLDO_RISE_2MHz
VLDO _{UVLOF} VLDO UVLO falling		3.29	3.4	3.51	V	6.35 __UVLO_VLDO_FALL_1MHz, 6.38 __UVLO_VLDO_FALL_100kHz, 6.41 __UVLO_VLDO_FALL_200kHz, 6.44 __UVLO_VLDO_FALL_500kHz, 6.47 __UVLO_VLDO_FALL_2MHz
VLDO _{UVLOH} VLDO UVLO hysteresis		115	135	160	mV	6.36 __UVLO_VLDO_HYS_1MHz, 6.39 __UVLO_VLDO_HYS_100kHz, 6.42 __UVLO_VLDO_HYS_200kHz, 6.45 __UVLO_VLDO_HYS_500kHz, 6.48 __UVLO_VLDO_HYS_2MHz
SOFT START						
I _{SS} Soft-start current	SS = 0.3 V	1.98	2.7	3.32	μA	7.1 __I_SS_4V, 7.3 __I_SS_5V, 7.5 __I_SS_12V, 7.7 __I_SS_14V
ERROR AMPLIFIER						
E _{A_{gm}} Transconductance	-2 μA < I _{COMP} < 2 μA, V _(COMP) = 1 V	1150	1800	2500	μA/V	8.9 __EA_GM_4V, 8.10 __EA_GM_5V, 8.11 __EA_GM_12V, 8.12 __EA_GM_14V
E _{A_{ISRC}} Error amplifier source current	V _(COMP) = 1 V, 100-mV input overdrive	100		190	μA	8.13 __EA_I_SOURCE_4V, 8.14 __EA_I_SOURCE_5V, 8.15 __EA_I_SOURCE_12V, 8.16 __EA_I_SOURCE_14V
E _{A_{ISNK}} Error amplifier sink current	V _(COMP) = 1 V, 100-mV input overdrive	100		190	μA	8.17 __EA_I_SINK_4V, 8.18 __EA_I_SINK_5V, 8.19 __EA_I_SINK_12V, 8.20 __EA_I_SINK_14V
E _{A_{OS}} Error amplifier offset voltage		-2		2	mV	8.5 __EA_OS_4V, 8.6 __EA_OS_5V, 8.7 __EA_OS_12V, 8.8 __EA_OS_14V
OSCILLATOR						
SYNC _{RT} SYNC out low-to-high rise time (10%/90%)	C _{LOAD} = 25 pF		6	15	ns	9.1 __T_SYNC_RISE_100kHz_4V, 9.5 __T_SYNC_RISE_200kHz_4V, 9.9 __T_SYNC_RISE_500kHz_4V, 9.13 __T_SYNC_RISE_1MHz_4V, 9.17 __T_SYNC_RISE_1p5MHz_4V, 9.21 __T_SYNC_RISE_2MHz_4V, 9.25 __T_SYNC_RISE_100kHz_5V, 9.29 __T_SYNC_RISE_200kHz_5V, 9.33 __T_SYNC_RISE_500kHz_5V, 9.37 __T_SYNC_RISE_1MHz_5V, 9.41 __T_SYNC_RISE_1p5MHz_5V, 9.45 __T_SYNC_RISE_2MHz_5V, 9.49 __T_SYNC_RISE_100kHz_12V, 9.53 __T_SYNC_RISE_200kHz_12V, 9.57 __T_SYNC_RISE_500kHz_12V, 9.61 __T_SYNC_RISE_1MHz_12V, 9.65 __T_SYNC_RISE_1p5MHz_12V, 9.69 __T_SYNC_RISE_2MHz_12V, 9.73 __T_SYNC_RISE_100kHz_14V, 9.77 __T_SYNC_RISE_200kHz_14V, 9.81 __T_SYNC_RISE_500kHz_14V, 9.85 __T_SYNC_RISE_1MHz_14V, 9.89 __T_SYNC_RISE_1p5MHz_14V, 9.93 __T_SYNC_RISE_2MHz_14V
SYNC _{FT} SYNC out high-to-low fall time (10%/90%)	C _{LOAD} = 25 pF		6	17	ns	9.2 __T_SYNC_FALL_100kHz_4V, 9.6 __T_SYNC_FALL_200kHz_4V, 9.10 __T_SYNC_FALL_500kHz_4V, 9.14 __T_SYNC_FALL_1MHz_4V, 9.18 __T_SYNC_FALL_1p5MHz_4V, 9.22 __T_SYNC_FALL_2MHz_4V, 9.26 __T_SYNC_FALL_100kHz_5V, 9.30 __T_SYNC_FALL_200kHz_5V, 9.34 __T_SYNC_FALL_500kHz_5V, 9.38 __T_SYNC_FALL_1MHz_5V, 9.42 __T_SYNC_FALL_1p5MHz_5V, 9.46 __T_SYNC_FALL_2MHz_5V, 9.50 __T_SYNC_FALL_100kHz_12V, 9.54 __T_SYNC_FALL_200kHz_12V, 9.58 __T_SYNC_FALL_500kHz_12V, 9.62 __T_SYNC_FALL_1MHz_12V, 9.66 __T_SYNC_FALL_1p5MHz_12V, 9.70 __T_SYNC_FALL_2MHz_12V, 9.74 __T_SYNC_FALL_100kHz_14V, 9.78 __T_SYNC_FALL_200kHz_14V, 9.82 __T_SYNC_FALL_500kHz_14V, 9.86 __T_SYNC_FALL_1MHz_14V, 9.90 __T_SYNC_FALL_1p5MHz_14V, 9.94 __T_SYNC_FALL_2MHz_14V
SYNC _{OL} SYNC out low level	I _{OL} = 10 mA			500	mV	9.186 __SYNC_VOL_4V, 9.187 __SYNC_VOL_5V, 9.188 __SYNC_VOL_12V, 9.189 __SYNC_VOL_14V
EXT _{DT} Externally set frequency detection time	RT = Open, f = 200 kHz			20	μs	9.185 __T_SYNC_DETECT

Table 3-1. TPS7H5004-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5004-SP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
FSW _{EXT} Externally set frequency	RT = 1.07 MΩ	95	105	115	kHz	9.4 __FSW_EXT_RT_100kHz_4V, 9.28 __FSW_EXT_RT_100kHz_5V, 9.52 __FSW_EXT_RT_100kHz_12V, 9.76 __FSW_EXT_RT_100kHz_14V
	RT = 511 kΩ	190	210	230	kHz	9.8 __FSW_EXT_RT_200kHz_4V, 9.32 __FSW_EXT_RT_200kHz_5V, 9.56 __FSW_EXT_RT_200kHz_12V, 9.80 __FSW_EXT_RT_200kHz_14V
	RT = 90.9 kΩ	900	1000	1100	kHz	9.16 __FSW_EXT_RT_1MHz_4V, 9.40 __FSW_EXT_RT_1MHz_5V, 9.64 __FSW_EXT_RT_1MHz_12V, 9.88 __FSW_EXT_RT_1MHz_14V
	RT = 34.8 kΩ	1700	2000	2300	kHz	9.24 __FSW_EXT_RT_2MHz_4V, 9.48 __FSW_EXT_RT_2MHz_5V, 9.72 __FSW_EXT_RT_2MHz_12V, 9.96 __FSW_EXT_RT_2MHz_14V
VOLTAGE REFERENCE						
VREF Internal voltage reference initial tolerance	Measured at COMP, 25°C	0.609	0.613	0.615	V	8.1 __VREF_4V, 8.2 __VREF_5V, 8.3 __VREF_12V, 8.4 __VREF_14V
REFCAP voltage	REFCAP = 470 nF	1.213	1.225	1.237	V	5.88 __V_REFCAP_100K_4V, 5.89 __V_REFCAP_100K_5V, 5.90 __V_REFCAP_100K_12V, 5.91 __V_REFCAP_100K_14V, 5.92 __V_REFCAP_200K_4V, 5.93 __V_REFCAP_200K_5V, 5.94 __V_REFCAP_200K_12V, 5.95 __V_REFCAP_200K_14V, 5.96 __V_REFCAP_500K_4V, 5.97 __V_REFCAP_500K_5V, 5.98 __V_REFCAP_500K_12V, 5.99 __V_REFCAP_500K_14V, 5.100 __V_REFCAP_1M_4V, 5.101 __V_REFCAP_1M_5V, 5.102 __V_REFCAP_1M_12V, 5.103 __V_REFCAP_1M_14V, 5.104 __V_REFCAP_1P5M_4V, 5.105 __V_REFCAP_1P5M_5V, 5.106 __V_REFCAP_1P5M_12V, 5.107 __V_REFCAP_1P5M_14V, 5.108 __V_REFCAP_2M_4V, 5.109 __V_REFCAP_2M_5V, 5.110 __V_REFCAP_2M_12V, 5.111 __V_REFCAP_2M_14V
CURRENT SENSE, CURRENT LIMIT AND HICCUP						
CCSR	COMP to CS_ILIM ratio	2.00	2.06	2.12		10.49 __CCSR_Ratio
V _{CS_ILIM} Current limit (over-current) threshold			1.05	1.09	V	10.1 __V_CS_ILIM_OC_Rise_4V, 10.2 __V_CS_ILIM_OC_Fall_4V, 10.3 __V_CS_ILIM_OC_Rise_5V, 10.4 __V_CS_ILIM_OC_Fall_5V, 10.5 __V_CS_ILIM_OC_Rise_12V, 10.6 __V_CS_ILIM_OC_Fall_12V, 10.7 __V_CS_ILIM_OC_Rise_14V, 10.8 __V_CS_ILIM_OC_Fall_14V
FAULT						
V _{FLTR} FLT threshold rising		0.57	0.6	0.65	V	12.1 __V_FAULT_RISE_4V, 12.4 __V_FAULT_RISE_5V, 12.7 __V_FAULT_RISE_12V, 12.10 __V_FAULT_RISE_14V
V _{FLTF} FLT threshold falling		0.47	0.5	0.55	V	12.2 __V_FAULT_FALL_4V, 12.5 __V_FAULT_FALL_5V, 12.8 __V_FAULT_FALL_12V, 12.11 __V_FAULT_FALL_14V
V _{FLTH} FLT hysteresis voltage		90	100	110	mV	12.3 __V_FAULT_HYS_4V, 12.6 __V_FAULT_HYS_5V, 12.9 __V_FAULT_HYS_12V, 12.12 __V_FAULT_HYS_14V
T _{FLT} FLT minimum pulse width	V _{FLT} = 1 V	0.4		1.4	μs	12.14 __T_FAULT_MIN
t _{DFLT} FLT delay duration	f _{sw} = 100 kHz	140	152	169	μs	12.15 __T_FAULT_DELAY_100kHz
	f _{sw} = 200 kHz	66	78	86	μs	12.17 __T_FAULT_DELAY_200kHz
	f _{sw} = 1 MHz	14	17	21	μs	12.21 __T_FAULT_DELAY_1MHz
	f _{sw} = 2 MHz	7	11	14	μs	12.23 __T_FAULT_DELAY_2MHz
PRIMARY AND SYNCHRONOUS RECTIFIER OUTPUTS						

Table 3-1. TPS7H5004-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5004-SP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
Rise/fall time	$R_{LOAD} = 50\text{ k}\Omega$, $C_{LOAD} = 100\text{ pF}$, 10% to 90%		10	17	ns	13.1 __OUTA_RISE_1MHz_4V, 13.9 __OUTA_RISE_1MHz_5V, 13.17 __OUTA_RISE_1MHz_12V, 13.25 __OUTA_RISE_1MHz_14V, 13.3 __OUTA_FALL_1MHz_4V, 13.11 __OUTA_FALL_1MHz_5V, 13.19 __OUTA_FALL_1MHz_12V, 13.27 __OUTA_FALL_1MHz_14V, 13.2 __OUTB_RISE_1MHz_4V, 13.10 __OUTB_RISE_1MHz_5V, 13.18 __OUTB_RISE_1MHz_12V, 13.26 __OUTB_RISE_1MHz_14V, 13.4 __OUTB_FALL_1MHz_4V, 13.12 __OUTB_FALL_1MHz_5V, 13.20 __OUTB_FALL_1MHz_12V, 13.28 __OUTB_FALL_1MHz_14V
MINIMUM ON-TIME AND DEAD TIME						
t_{MIN} Minimum on-time	LEB = 10 k Ω , 5 V \leq VIN \leq 14 V			85	ns	13.145 __OUT_T_ON_MIN
LEADING EDGE BLANK TIME AND DUTY CYCLE						
T_{LEB} , Leading edge blank time	LEB = 10 k Ω , 5 V \leq VIN \leq 14 V	12	15	19	ns	13.147 __T_LEB_10ns_5V, 13.148 __T_LEB_10ns_12V, 13.149 __T_LEB_10ns_14V
	LEB = 49.9k Ω , 5 V \leq VIN \leq 14 V	45	50	55	ns	13.151 __T_LEB_50ns_5V, 13.152 __T_LEB_50ns_12V, 13.153 __T_LEB_50ns_14V
	LEB = 110 k Ω , 5 V \leq VIN \leq 14 V	85	100	110	ns	13.155 __T_LEB_100ns_5V, 13.156 __T_LEB_100ns_12V, 13.157 __T_LEB_100ns_14V
D_{MAX} Maximum duty cycle	DCL = AVSS	45	48	50	%	13.160 __MAX_DC_DCL_AVSS

4 Applicable and Reference Documents

4.1 Applicable Documents

- Texas Instruments, [TPS7H500x-SP Radiation-Hardness-Assured 2-MHz Current-Mode PWM Controllers](#) , Data Sheet
- Texas Instruments, [TPS7H5004-SP Total Ionizing Dose \(TID\)](#), Radiation Report
- Texas Instruments, [TPS7H500xEVM-CVAL](#), User's Guide
- Texas Instruments, [TPS7H500x-SP Single-Event Effects \(SEE\)](#), Radiation Report

4.2 Reference Documents

Texas Instruments neutron irradiation test follow the guideline from MIL-STD-883 TM 1017. The document is available in Defense Logistic Agency's website.

A Appendix: NDD Report Data

This appendix contains the NDD report data.

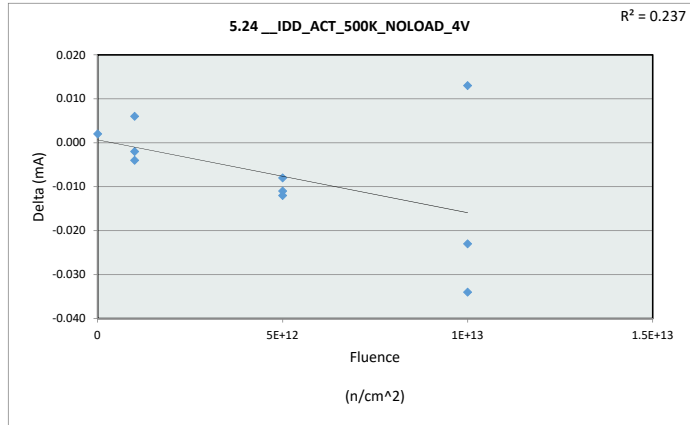
Neutron Displacement Damage (NDD) Report
TPS7H5004-SP

Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.24 IDD_ACT_500K_NOLOAD_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	8	8
Min Limit		

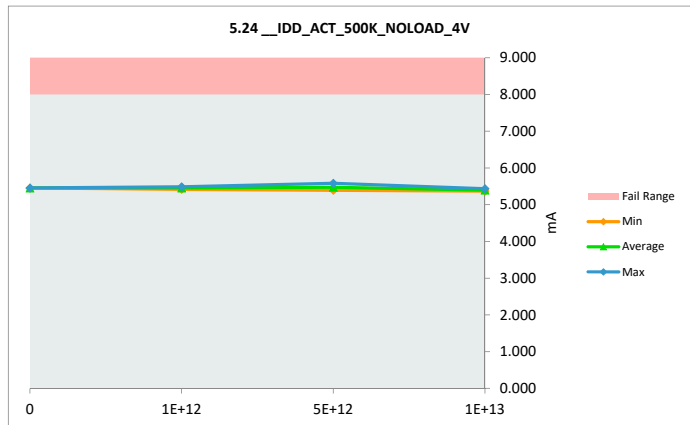
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.453	5.455	0.002
1E+12	243	5.489	5.487	-0.002
1E+12	244	5.464	5.460	-0.004
1E+12	247	5.411	5.417	0.006
5E+12	251	5.399	5.391	-0.008
5E+12	252	5.597	5.585	-0.012
5E+12	259	5.457	5.446	-0.011
1E+13	261	5.405	5.371	-0.034
1E+13	263	5.372	5.385	0.013
1E+13	264	5.460	5.437	-0.023
Max		5.597	5.585	0.013
Average		5.451	5.443	-0.007
Min		5.372	5.371	-0.034
Std Dev		0.063	0.062	0.014



5.24 IDD_ACT_500K_NOLOAD_4V

Test Site		
Tester		
Test Number		
Max Limit	8	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	5.455	5.417	5.391	5.371
Average	5.455	5.455	5.474	5.398
Max	5.455	5.487	5.585	5.437
UL	8.000	8.000	8.000	8.000

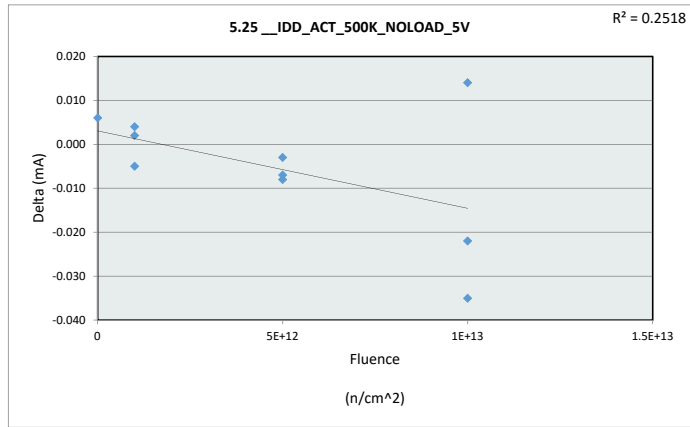


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.25 __IDD_ACT_500K_NOLOAD_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	8	8
Min Limit		

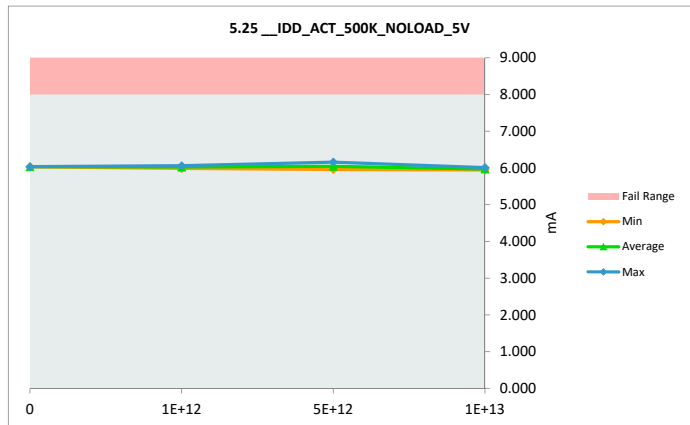
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.028	6.034	0.006
1E+12	243	6.057	6.059	-0.002
1E+12	244	6.035	6.030	-0.005
1E+12	247	5.982	5.986	0.004
5E+12	251	5.965	5.958	-0.007
5E+12	252	6.162	6.159	-0.003
5E+12	259	6.031	6.023	-0.008
1E+13	261	5.980	5.945	-0.035
1E+13	263	5.942	5.956	0.014
1E+13	264	6.033	6.011	-0.022
Max		6.162	6.159	0.014
Average		6.022	6.016	-0.005
Min		5.942	5.945	-0.035
Std Dev		0.062	0.063	0.014



5.25 __IDD_ACT_500K_NOLOAD_5V

Test Site		
Tester		
Test Number		
Max Limit	8	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.034	5.986	5.958	5.945
Average	6.034	6.025	6.047	5.971
Max	6.034	6.059	6.159	6.011
UL	8.000	8.000	8.000	8.000

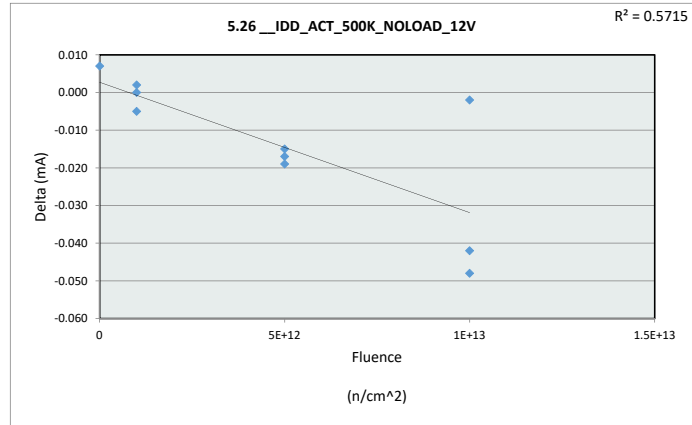


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.26 IDD_ACT_500K_NOLOAD_12V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	8	8
Min Limit		

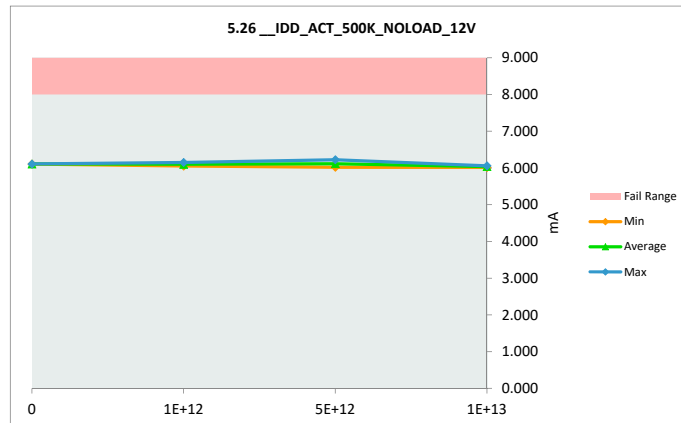
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.100	6.107	0.007
1E+12	243	6.148	6.148	0.000
1E+12	244	6.102	6.097	-0.005
1E+12	247	6.048	6.050	0.002
5E+12	251	6.034	6.019	-0.015
5E+12	252	6.244	6.225	-0.019
5E+12	259	6.112	6.095	-0.017
1E+13	261	6.064	6.016	-0.048
1E+13	263	6.032	6.030	-0.002
1E+13	264	6.100	6.058	-0.042
Max		6.244	6.225	0.007
Average		6.098	6.084	-0.014
Min		6.032	6.016	-0.048
Std Dev		0.063	0.065	0.019



5.26 IDD_ACT_500K_NOLOAD

Test Site		
Tester		
Test Number		
Max Limit	8	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.107	6.050	6.019	6.016
Average	6.107	6.098	6.113	6.035
Max	6.107	6.148	6.225	6.058
UL	8.000	8.000	8.000	8.000

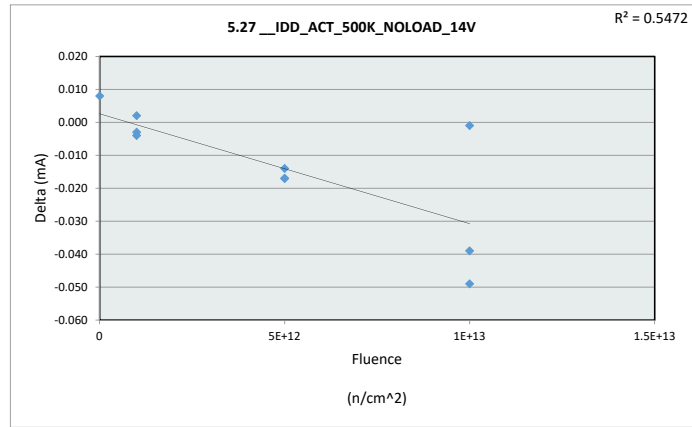


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.27 IDD_ACT_500K_NOLOAD_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	8	8
Min Limit		

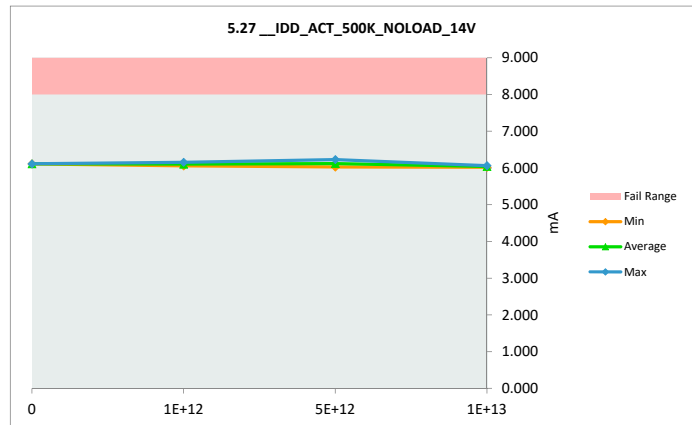
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.104	6.112	0.008
1E+12	243	6.155	6.152	-0.003
1E+12	244	6.106	6.102	-0.004
1E+12	247	6.053	6.055	0.002
5E+12	251	6.038	6.024	-0.014
5E+12	252	6.247	6.230	-0.017
5E+12	259	6.116	6.099	-0.017
1E+13	261	6.070	6.021	-0.049
1E+13	263	6.035	6.034	-0.001
1E+13	264	6.102	6.063	-0.039
Max		6.247	6.230	0.008
Average		6.103	6.089	-0.013
Min		6.035	6.021	-0.049
Std Dev		0.063	0.065	0.018



5.27 IDD_ACT_500K_NOLOAD_14V

Test Site		
Tester		
Test Number		
Max Limit	8	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.112	6.055	6.024	6.021
Average	6.112	6.103	6.118	6.039
Max	6.112	6.152	6.230	6.063
UL	8.000	8.000	8.000	8.000

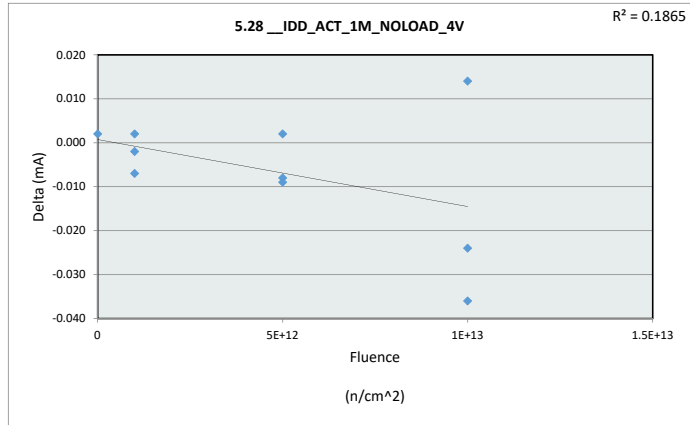


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.28 IDD_ACT_1M_NOLOAD_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

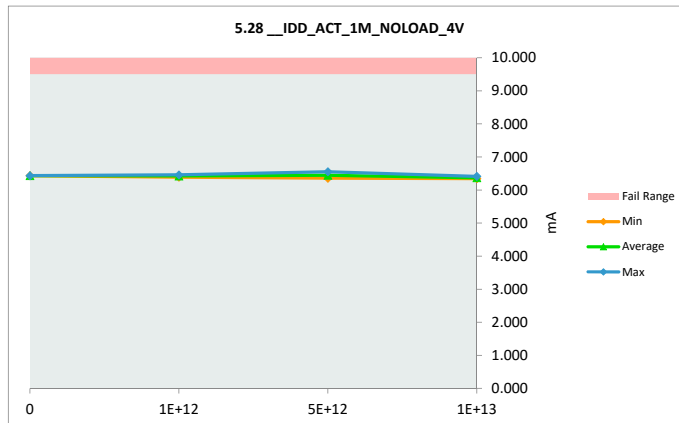
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.431	6.433	0.002
1E+12	243	6.458	6.456	-0.002
1E+12	244	6.437	6.430	-0.007
1E+12	247	6.384	6.386	0.002
5E+12	251	6.364	6.356	-0.008
5E+12	252	6.549	6.551	0.002
5E+12	259	6.436	6.427	-0.009
1E+13	261	6.381	6.345	-0.036
1E+13	263	6.341	6.355	0.014
1E+13	264	6.436	6.412	-0.024
Max		6.549	6.551	0.014
Average		6.422	6.415	-0.007
Min		6.341	6.345	-0.036
Std Dev		0.059	0.061	0.014



5.28 IDD_ACT_1M_NOLOAD

Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.433	6.386	6.356	6.345
Average	6.433	6.424	6.445	6.371
Max	6.433	6.456	6.551	6.412
UL	9.500	9.500	9.500	9.500

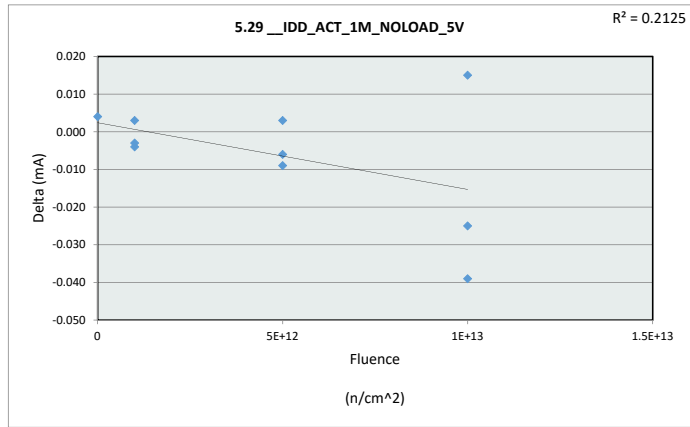


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.29 IDD_ACT_1M_NOLOAD_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

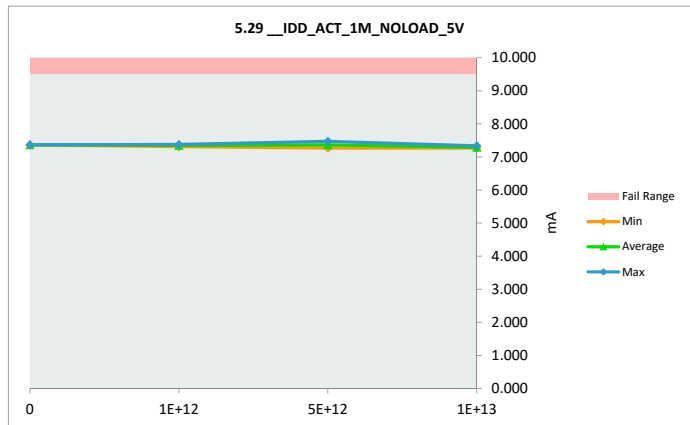
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.361	7.365	0.004
1E+12	243	7.380	7.376	-0.004
1E+12	244	7.357	7.354	-0.003
1E+12	247	7.306	7.309	0.003
5E+12	251	7.277	7.268	-0.009
5E+12	252	7.471	7.474	0.003
5E+12	259	7.364	7.358	-0.006
1E+13	261	7.307	7.268	-0.039
1E+13	263	7.259	7.274	0.015
1E+13	264	7.361	7.336	-0.025
Max		7.471	7.474	0.015
Average		7.344	7.338	-0.006
Min		7.259	7.268	-0.039
Std Dev		0.061	0.063	0.016



5.29 IDD_ACT_1M_NOLOAD

Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.365	7.309	7.268	7.268
Average	7.365	7.346	7.367	7.293
Max	7.365	7.376	7.474	7.336
UL	9.500	9.500	9.500	9.500

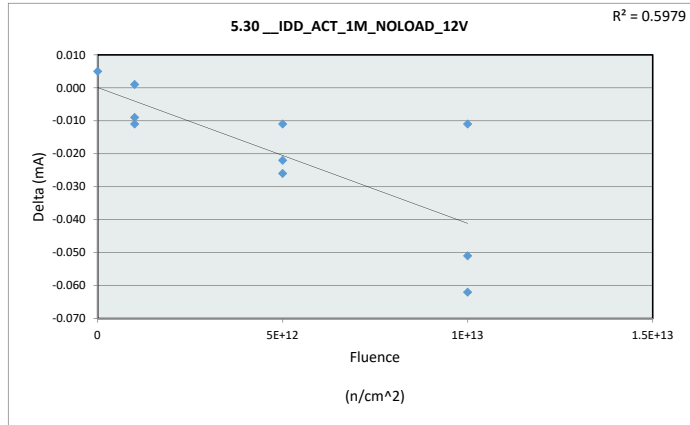


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.30 IDD_ACT_1M_NOLOAD_12V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

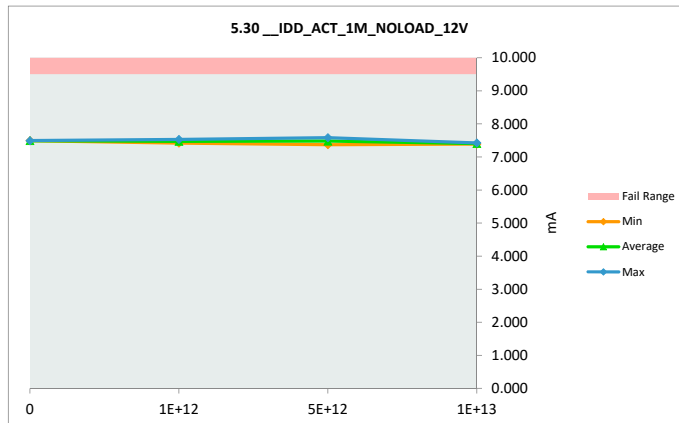
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.487	7.492	0.005
1E+12	243	7.538	7.529	-0.009
1E+12	244	7.476	7.465	-0.011
1E+12	247	7.416	7.417	0.001
5E+12	251	7.396	7.370	-0.026
5E+12	252	7.596	7.585	-0.011
5E+12	259	7.504	7.482	-0.022
1E+13	261	7.451	7.389	-0.062
1E+13	263	7.410	7.399	-0.011
1E+13	264	7.473	7.422	-0.051
Max		7.596	7.585	0.005
Average		7.475	7.455	-0.020
Min		7.396	7.370	-0.062
Std Dev		0.062	0.068	0.022



5.30 IDD_ACT_1M_NOLOAD

Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.492	7.417	7.370	7.389
Average	7.492	7.470	7.479	7.403
Max	7.492	7.529	7.585	7.422
UL	9.500	9.500	9.500	9.500

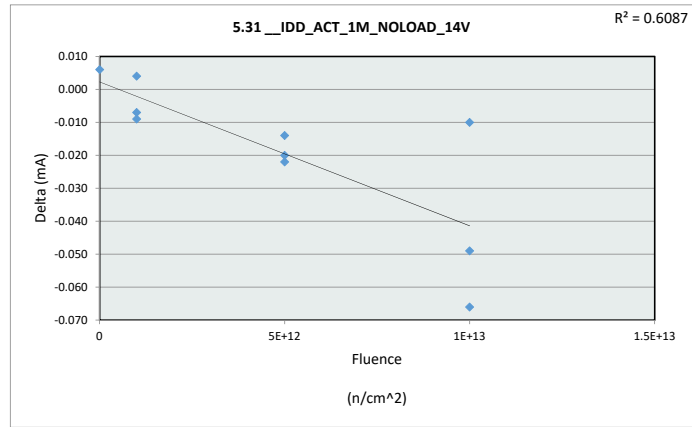


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.31 IDD_ACT_1M_NOLOAD_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

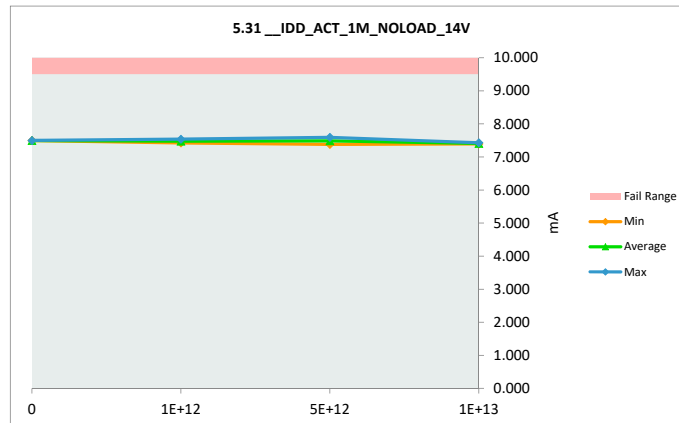
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.491	7.497	0.006
1E+12	243	7.542	7.535	-0.007
1E+12	244	7.478	7.469	-0.009
1E+12	247	7.418	7.422	0.004
5E+12	251	7.400	7.378	-0.022
5E+12	252	7.605	7.591	-0.014
5E+12	259	7.507	7.487	-0.020
1E+13	261	7.460	7.394	-0.066
1E+13	263	7.412	7.402	-0.010
1E+13	264	7.476	7.427	-0.049
Max		7.605	7.591	0.006
Average		7.479	7.460	-0.019
Min		7.400	7.378	-0.066
Std Dev		0.063	0.068	0.023



5.31 IDD_ACT_1M_NOLOAD

Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.497	7.422	7.378	7.394
Average	7.497	7.475	7.485	7.408
Max	7.497	7.535	7.591	7.427
UL	9.500	9.500	9.500	9.500

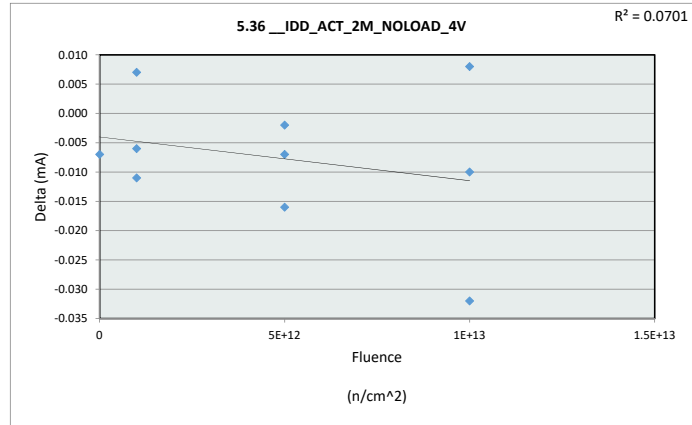


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.36 IDD_ACT_2M_NOLOAD_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	13.5	13.5
Min Limit		

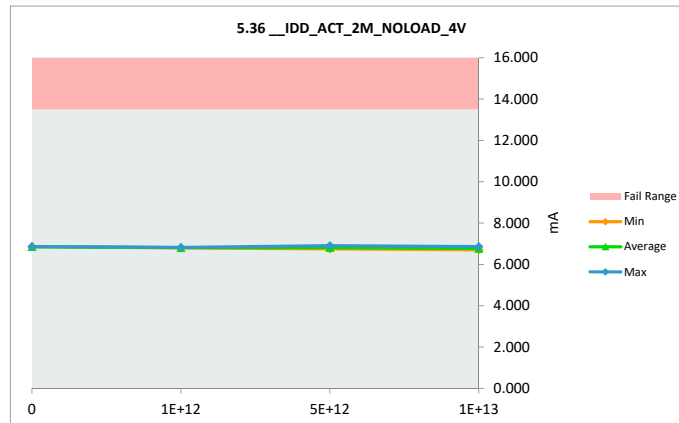
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.866	6.859	-0.007
1E+12	243	6.830	6.824	-0.006
1E+12	244	6.814	6.803	-0.011
1E+12	247	6.784	6.791	0.007
5E+12	251	6.767	6.751	-0.016
5E+12	252	6.909	6.907	-0.002
5E+12	259	6.779	6.772	-0.007
1E+13	261	6.738	6.706	-0.032
1E+13	263	6.741	6.749	0.008
1E+13	264	6.869	6.859	-0.010
Max		6.909	6.907	0.008
Average		6.810	6.802	-0.008
Min		6.738	6.706	-0.032
Std Dev		0.058	0.061	0.011



5.36 IDD_ACT_2M_NOLOAD

Test Site	
Tester	
Test Number	
Max Limit	13.5 mA
Min Limit	mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.859	6.791	6.751	6.706
Average	6.859	6.806	6.810	6.771
Max	6.859	6.824	6.907	6.859
UL	13.500	13.500	13.500	13.500

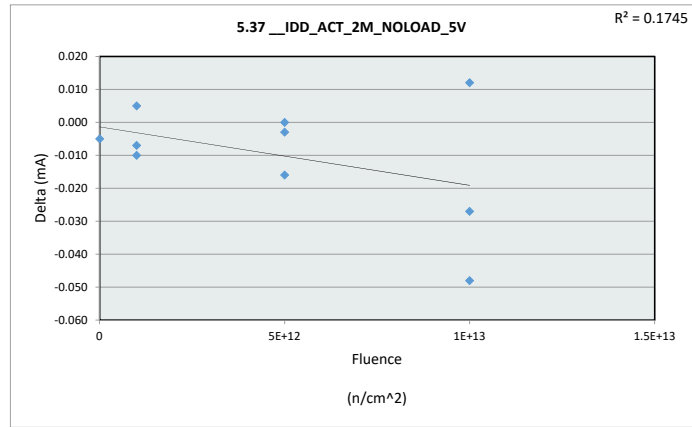


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.37 IDD_ACT_2M_NOLOAD_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	13.5	13.5
Min Limit		

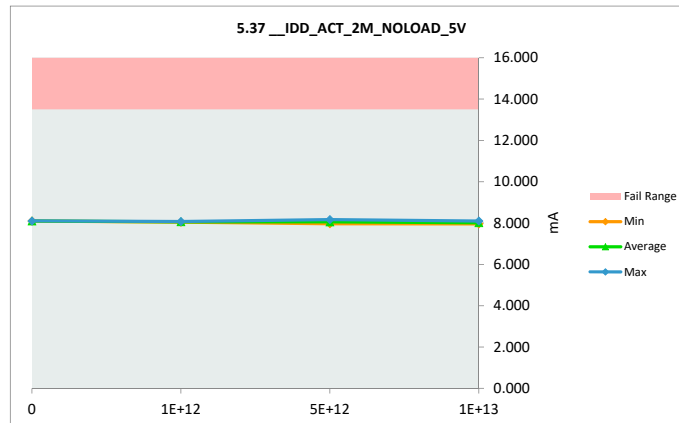
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.104	8.099	-0.005
1E+12	243	8.085	8.078	-0.007
1E+12	244	8.070	8.060	-0.010
1E+12	247	8.033	8.038	0.005
5E+12	251	7.980	7.964	-0.016
5E+12	252	8.172	8.169	-0.003
5E+12	259	8.036	8.036	0.000
1E+13	261	8.019	7.971	-0.048
1E+13	263	7.950	7.962	0.012
1E+13	264	8.125	8.098	-0.027
Max		8.172	8.169	0.012
Average		8.057	8.048	-0.010
Min		7.950	7.962	-0.048
Std Dev		0.067	0.068	0.017



5.37 IDD_ACT_2M_NOLOAD

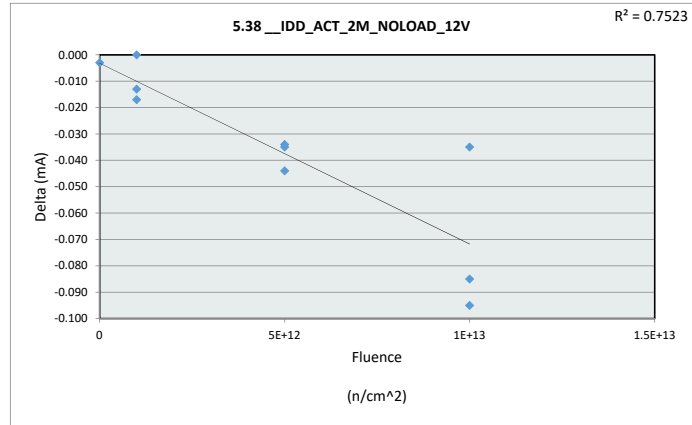
Test Site		
Tester		
Test Number		
Max Limit	13.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.099	8.038	7.964	7.962
Average	8.099	8.059	8.056	8.010
Max	8.099	8.078	8.169	8.098
UL	13.500	13.500	13.500	13.500

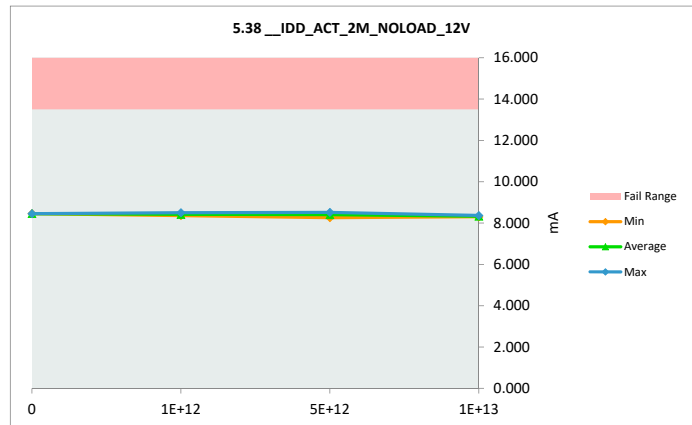


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.38 IDD_ACT_2M_NOLOAD_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		13.5	13.5	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.457	8.454	-0.003
1E+12	243	8.511	8.498	-0.013
1E+12	244	8.408	8.391	-0.017
1E+12	247	8.361	8.361	0.000
5E+12	251	8.307	8.263	-0.044
5E+12	252	8.550	8.515	-0.035
5E+12	259	8.466	8.432	-0.034
1E+13	261	8.410	8.315	-0.095
1E+13	263	8.337	8.302	-0.035
1E+13	264	8.451	8.366	-0.085
Max		8.550	8.515	0.000
Average		8.426	8.390	-0.036
Min		8.307	8.263	-0.095
Std Dev		0.077	0.084	0.032



5.38 IDD_ACT_2M_NOLOAD				
Test Site				
Tester				
Test Number				
Max Limit		13.5	mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.454	8.361	8.263	8.302
Average	8.454	8.417	8.403	8.328
Max	8.454	8.498	8.515	8.366
UL	13.500	13.500	13.500	13.500

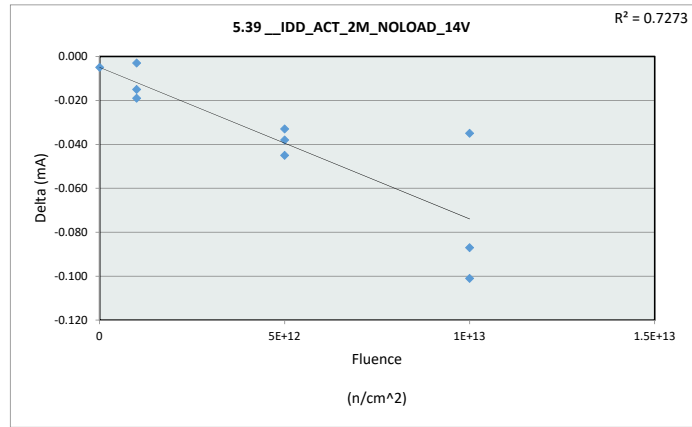


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.39 IDD_ACT_2M_NOLOAD_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	13.5	13.5
Min Limit		

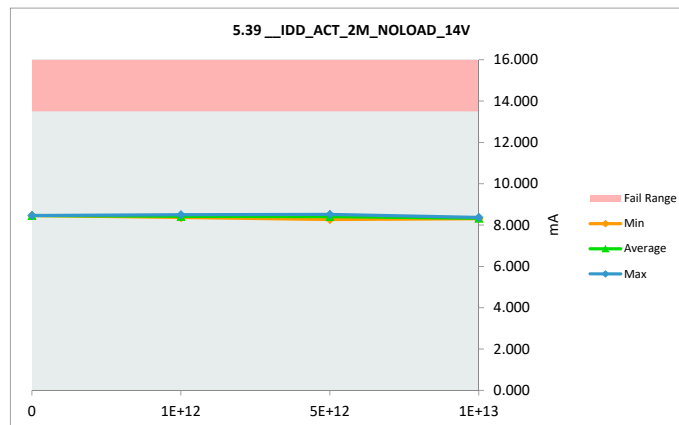
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.464	8.459	-0.005
1E+12	243	8.516	8.501	-0.015
1E+12	244	8.412	8.393	-0.019
1E+12	247	8.366	8.363	-0.003
5E+12	251	8.311	8.266	-0.045
5E+12	252	8.555	8.517	-0.038
5E+12	259	8.468	8.435	-0.033
1E+13	261	8.417	8.316	-0.101
1E+13	263	8.341	8.306	-0.035
1E+13	264	8.456	8.369	-0.087
Max		8.555	8.517	-0.003
Average		8.431	8.393	-0.038
Min		8.311	8.266	-0.101
Std Dev		0.077	0.084	0.033



5.39 IDD_ACT_2M_NOLOAD

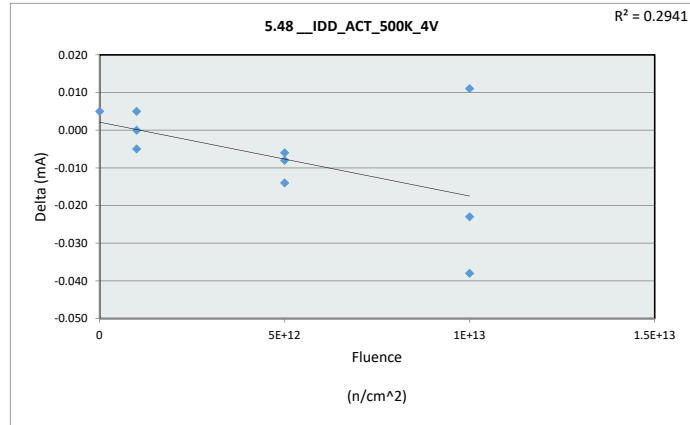
Test Site		
Tester		
Test Number		
Max Limit	13.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.459	8.363	8.266	8.306
Average	8.459	8.419	8.406	8.330
Max	8.459	8.501	8.517	8.369
UL	13.500	13.500	13.500	13.500

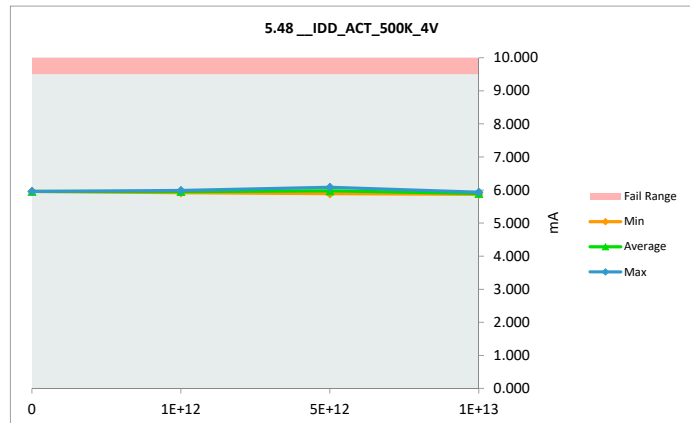


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.48 IDD_ACT_500K_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.952	5.957	0.005
1E+12	243	5.985	5.985	0.000
1E+12	244	5.960	5.955	-0.005
1E+12	247	5.910	5.915	0.005
5E+12	251	5.892	5.886	-0.006
5E+12	252	6.098	6.084	-0.014
5E+12	259	5.960	5.952	-0.008
1E+13	261	5.906	5.868	-0.038
1E+13	263	5.869	5.880	0.011
1E+13	264	5.957	5.934	-0.023
Max		6.098	6.084	0.011
Average		5.949	5.942	-0.007
Min		5.869	5.868	-0.038
Std Dev		0.064	0.063	0.015



5.48 IDD_ACT_500K_4V				
Test Site				
Tester				
Test Number				
Max Limit	9.5		mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	5.957	5.915	5.886	5.868
Average	5.957	5.952	5.974	5.894
Max	5.957	5.985	6.084	5.934
UL	9.500	9.500	9.500	9.500

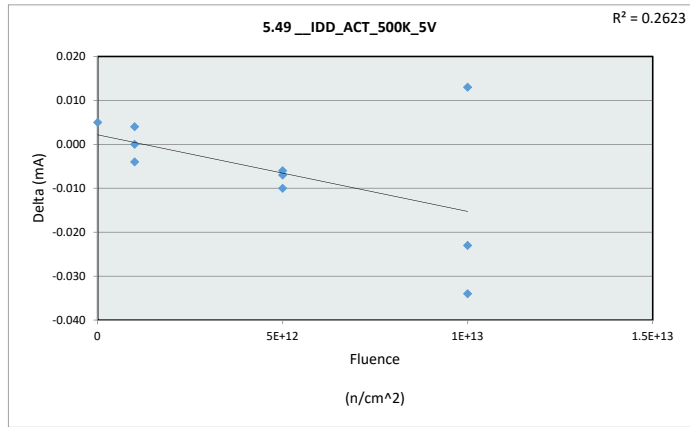


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.49 IDD_ACT_500K_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

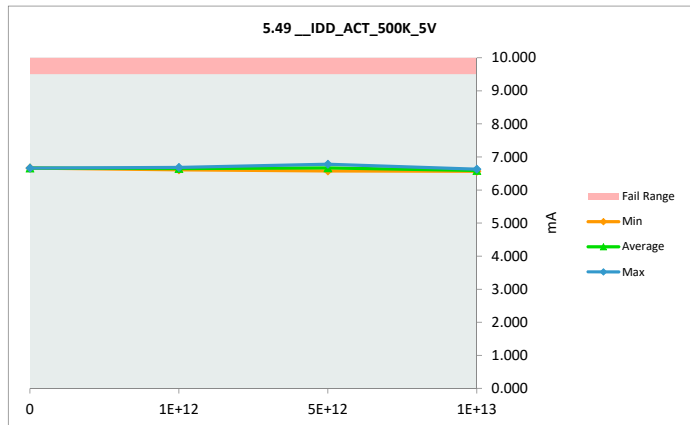
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.658	6.663	0.005
1E+12	243	6.683	6.683	0.000
1E+12	244	6.656	6.652	-0.004
1E+12	247	6.606	6.610	0.004
5E+12	251	6.582	6.576	-0.006
5E+12	252	6.786	6.779	-0.007
5E+12	259	6.661	6.651	-0.010
1E+13	261	6.600	6.566	-0.034
1E+13	263	6.566	6.579	0.013
1E+13	264	6.651	6.628	-0.023
Max		6.786	6.779	0.013
Average		6.645	6.639	-0.006
Min		6.566	6.566	-0.034
Std Dev		0.063	0.063	0.014



5.49 IDD_ACT_500K_5V

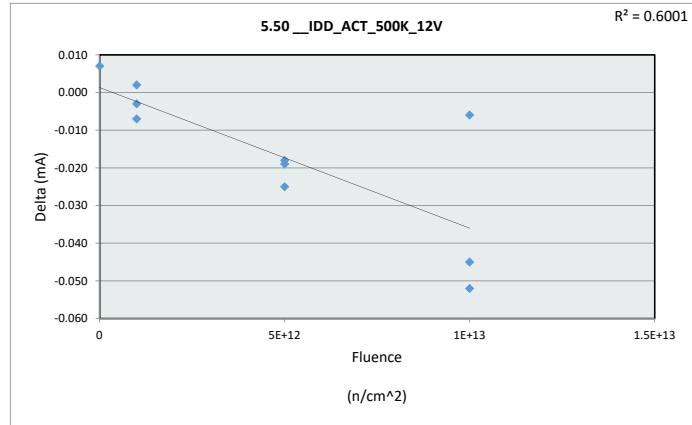
Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.663	6.610	6.576	6.566
Average	6.663	6.648	6.669	6.591
Max	6.663	6.683	6.779	6.628
UL	9.500	9.500	9.500	9.500

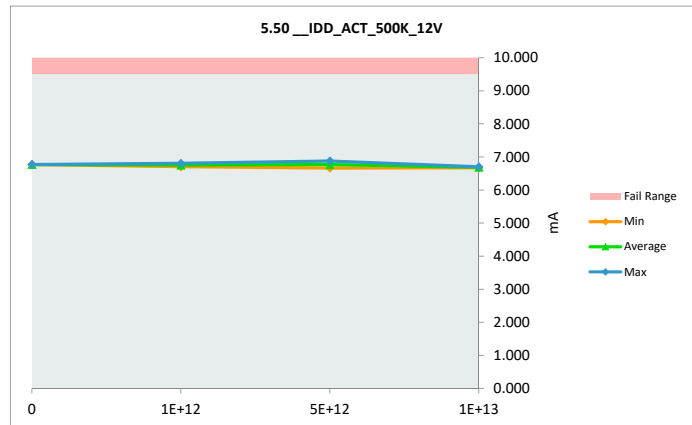


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.50 IDD_ACT_500K_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		9.5	9.5	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.763	6.770	0.007
1E+12	243	6.809	6.806	-0.003
1E+12	244	6.754	6.747	-0.007
1E+12	247	6.701	6.703	0.002
5E+12	251	6.683	6.664	-0.019
5E+12	252	6.902	6.877	-0.025
5E+12	259	6.774	6.756	-0.018
1E+13	261	6.722	6.670	-0.052
1E+13	263	6.690	6.684	-0.006
1E+13	264	6.748	6.703	-0.045
Max		6.902	6.877	0.007
Average		6.755	6.738	-0.017
Min		6.683	6.664	-0.052
Std Dev		0.065	0.067	0.020



5.50 IDD_ACT_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit	9.5	mA		
Min Limit		mA		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.770	6.703	6.664	6.670
Average	6.770	6.752	6.766	6.686
Max	6.770	6.806	6.877	6.703
UL	9.500	9.500	9.500	9.500

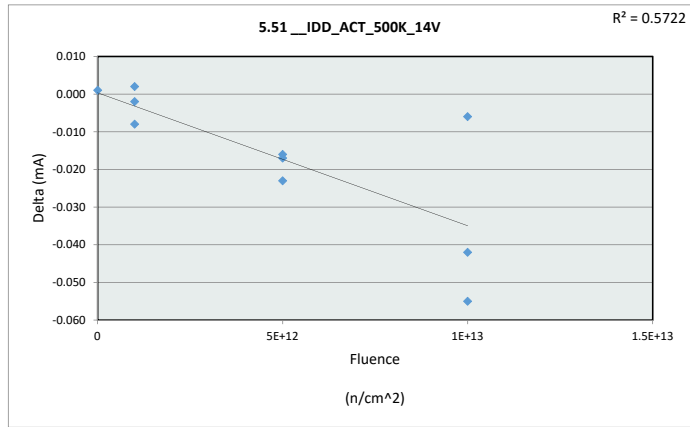


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.51 IDD_ACT_500K_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	9.5	9.5
Min Limit		

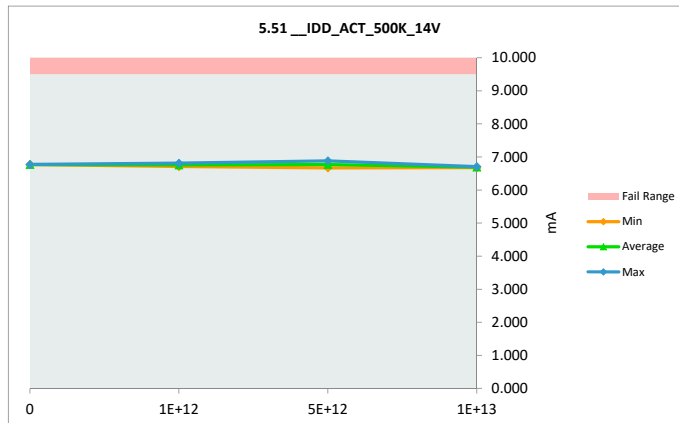
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.770	6.771	0.001
1E+12	243	6.813	6.811	-0.002
1E+12	244	6.761	6.753	-0.008
1E+12	247	6.707	6.709	0.002
5E+12	251	6.685	6.668	-0.017
5E+12	252	6.904	6.881	-0.023
5E+12	259	6.777	6.761	-0.016
1E+13	261	6.730	6.675	-0.055
1E+13	263	6.693	6.687	-0.006
1E+13	264	6.751	6.709	-0.042
Max		6.904	6.881	0.002
Average		6.759	6.743	-0.017
Min		6.685	6.668	-0.055
Std Dev		0.065	0.067	0.019



5.51 IDD_ACT_500K_14V

Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.771	6.709	6.668	6.675
Average	6.771	6.758	6.770	6.690
Max	6.771	6.811	6.881	6.709
UL	9.500	9.500	9.500	9.500

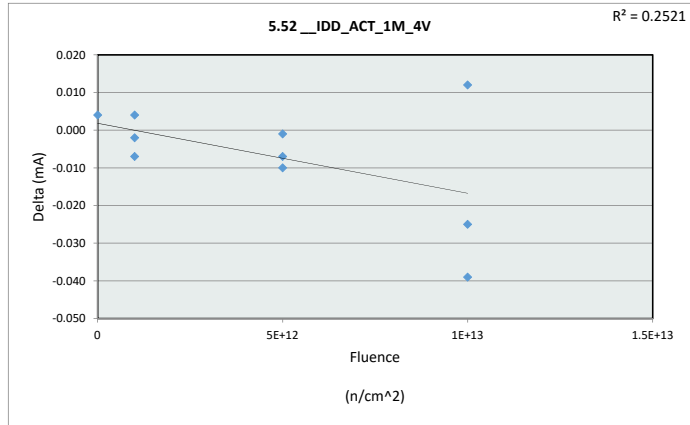


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.52 IDD_ACT_1M_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	12	12
Min Limit		

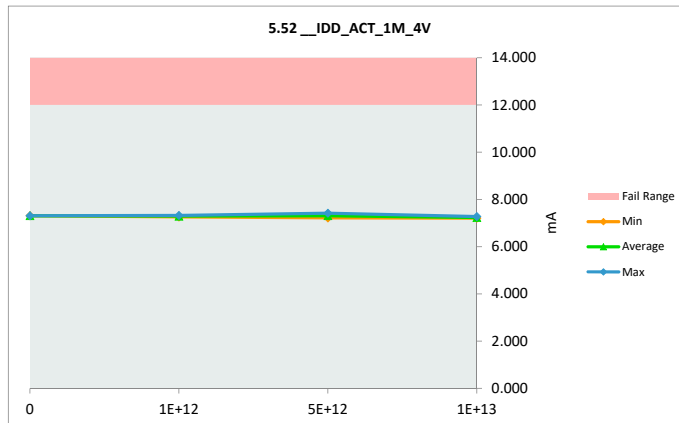
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.304	7.308	0.004
1E+12	243	7.324	7.322	-0.002
1E+12	244	7.304	7.297	-0.007
1E+12	247	7.252	7.256	0.004
5E+12	251	7.223	7.216	-0.007
5E+12	252	7.417	7.416	-0.001
5E+12	259	7.313	7.303	-0.010
1E+13	261	7.250	7.211	-0.039
1E+13	263	7.203	7.215	0.012
1E+13	264	7.303	7.278	-0.025
Max		7.417	7.416	0.012
Average		7.289	7.282	-0.007
Min		7.203	7.211	-0.039
Std Dev		0.061	0.063	0.015



5.52 IDD_ACT_1M_4V

Test Site		
Tester		
Test Number		
Max Limit	12	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.308	7.256	7.216	7.211
Average	7.308	7.292	7.312	7.235
Max	7.308	7.322	7.416	7.278
UL	12.000	12.000	12.000	12.000

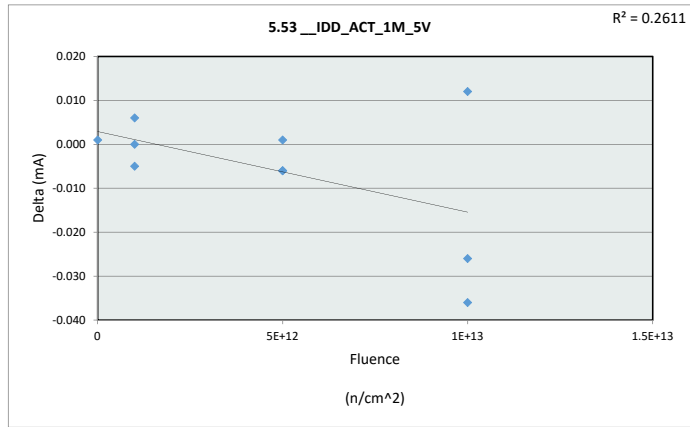


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.53 IDD_ACT_1M_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	12	12
Min Limit		

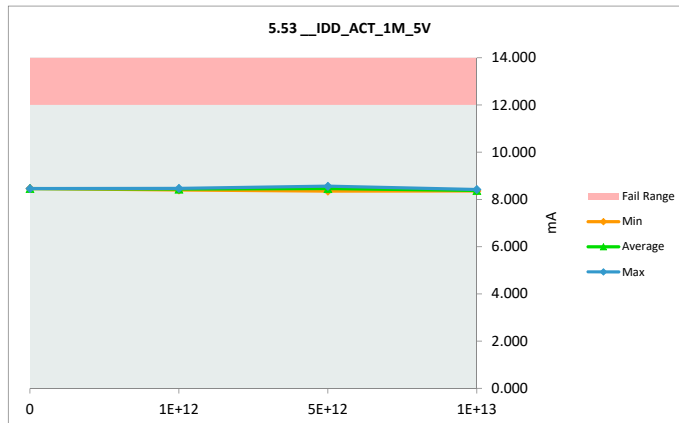
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.459	8.460	0.001
1E+12	243	8.468	8.468	0.000
1E+12	244	8.446	8.441	-0.005
1E+12	247	8.392	8.398	0.006
5E+12	251	8.357	8.351	-0.006
5E+12	252	8.559	8.560	0.001
5E+12	259	8.464	8.458	-0.006
1E+13	261	8.397	8.361	-0.036
1E+13	263	8.345	8.357	0.012
1E+13	264	8.449	8.423	-0.026
Max		8.559	8.560	0.012
Average		8.434	8.428	-0.006
Min		8.345	8.351	-0.036
Std Dev		0.063	0.065	0.015



5.53 IDD_ACT_1M_5V

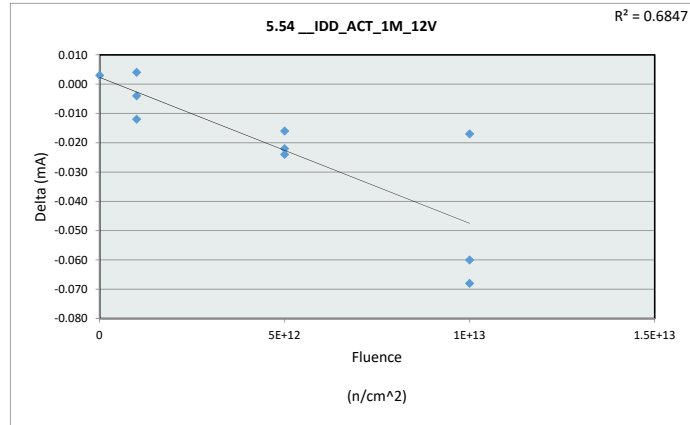
Test Site		
Tester		
Test Number		
Max Limit	12	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.460	8.398	8.351	8.357
Average	8.460	8.436	8.456	8.380
Max	8.460	8.468	8.560	8.423
UL	12.000	12.000	12.000	12.000

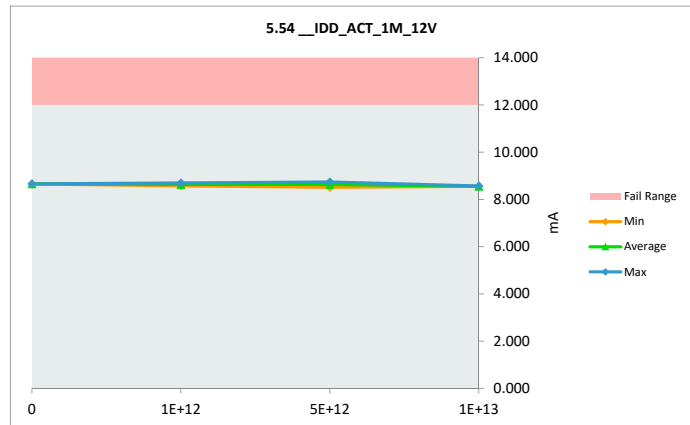


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.54 IDD_ACT_1M_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.655	8.658	0.003
1E+12	243	8.700	8.696	-0.004
1E+12	244	8.635	8.623	-0.012
1E+12	247	8.571	8.575	0.004
5E+12	251	8.541	8.517	-0.024
5E+12	252	8.756	8.740	-0.016
5E+12	259	8.677	8.655	-0.022
1E+13	261	8.622	8.554	-0.068
1E+13	263	8.572	8.555	-0.017
1E+13	264	8.627	8.567	-0.060
Max		8.756	8.740	0.004
Average		8.636	8.614	-0.022
Min		8.541	8.517	-0.068
Std Dev		0.065	0.072	0.024

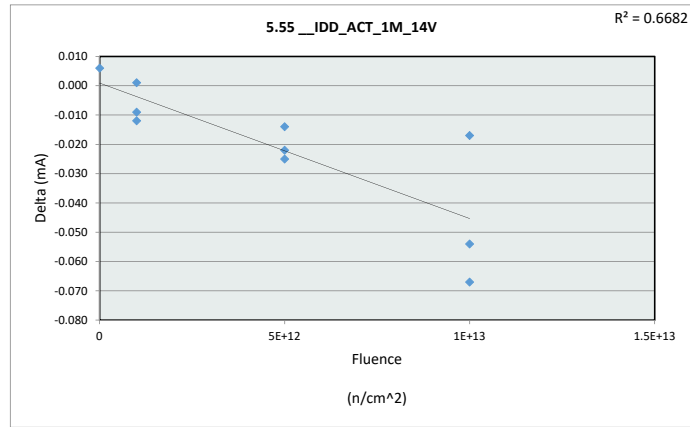


5.54 IDD_ACT_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	12	mA		
Min Limit		mA		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.658	8.575	8.517	8.554
Average	8.658	8.631	8.637	8.559
Max	8.658	8.696	8.740	8.567
UL	12.000	12.000	12.000	12.000

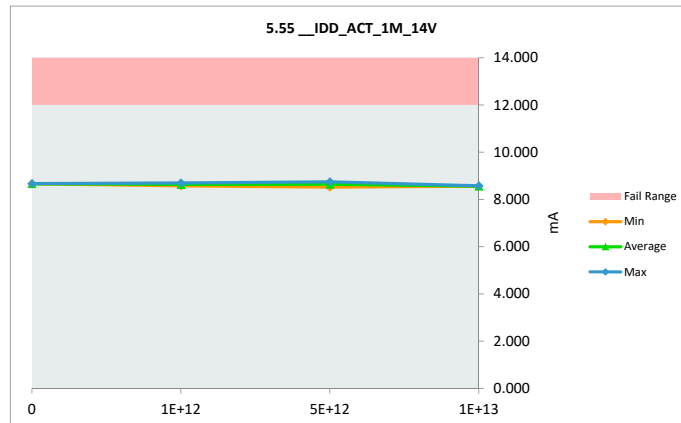


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.55 IDD_ACT_1M_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		12	12	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.660	8.666	0.006
1E+12	243	8.707	8.698	-0.009
1E+12	244	8.639	8.627	-0.012
1E+12	247	8.576	8.577	0.001
5E+12	251	8.549	8.524	-0.025
5E+12	252	8.758	8.744	-0.014
5E+12	259	8.681	8.659	-0.022
1E+13	261	8.627	8.560	-0.067
1E+13	263	8.575	8.558	-0.017
1E+13	264	8.629	8.575	-0.054
Max		8.758	8.744	0.006
Average		8.640	8.619	-0.021
Min		8.549	8.524	-0.067
Std Dev		0.064	0.071	0.023



5.55 IDD_ACT_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	12	mA		
Min Limit		mA		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.666	8.577	8.524	8.558
Average	8.666	8.634	8.642	8.564
Max	8.666	8.698	8.744	8.575
UL	12.000	12.000	12.000	12.000

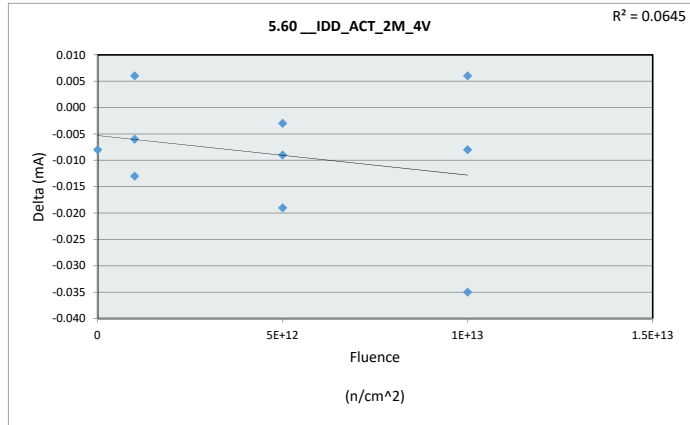


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.60 IDD_ACT_2M_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	19.5	19.5
Min Limit		

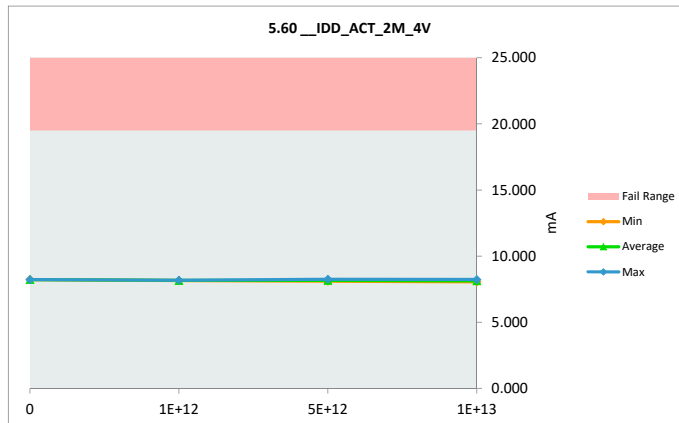
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.233	8.225	-0.008
1E+12	243	8.179	8.173	-0.006
1E+12	244	8.161	8.148	-0.013
1E+12	247	8.147	8.153	0.006
5E+12	251	8.122	8.103	-0.019
5E+12	252	8.257	8.254	-0.003
5E+12	259	8.135	8.126	-0.009
1E+13	261	8.088	8.053	-0.035
1E+13	263	8.091	8.097	0.006
1E+13	264	8.237	8.229	-0.008
Max		8.257	8.254	0.006
Average		8.165	8.156	-0.009
Min		8.088	8.053	-0.035
Std Dev		0.061	0.065	0.012



5.60 IDD_ACT_2M_4V

Test Site		
Tester		
Test Number		
Max Limit	19.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.225	8.148	8.103	8.053
Average	8.225	8.158	8.161	8.126
Max	8.225	8.173	8.254	8.229
UL	19.500	19.500	19.500	19.500

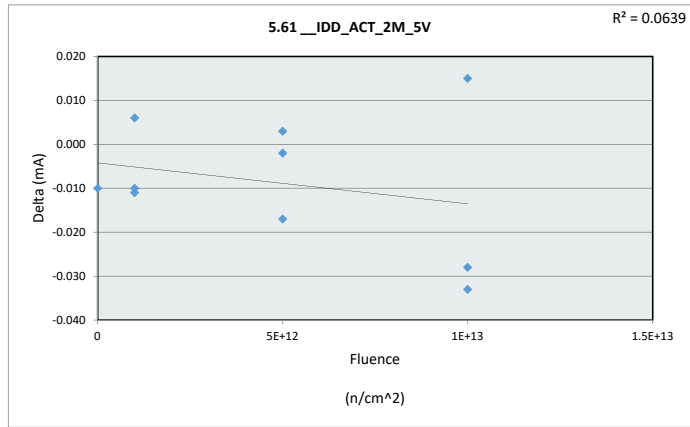


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.61 IDD_ACT_2M_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	19.5	19.5
Min Limit		

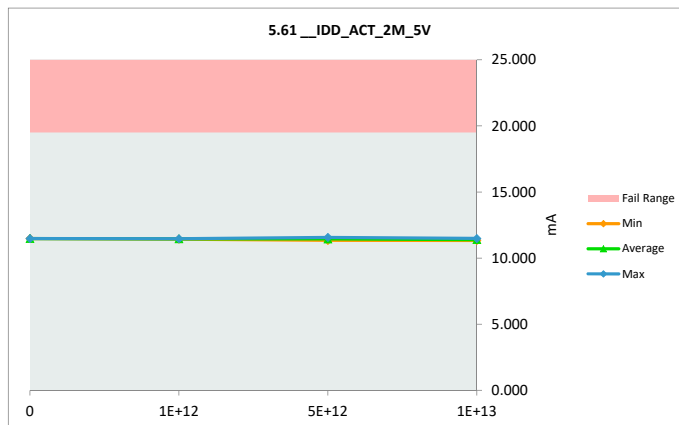
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	11.490	11.480	-0.010
1E+12	243	11.481	11.470	-0.011
1E+12	244	11.472	11.462	-0.010
1E+12	247	11.423	11.429	0.006
5E+12	251	11.357	11.340	-0.017
5E+12	252	11.573	11.571	-0.002
5E+12	259	11.421	11.424	0.003
1E+13	261	11.401	11.373	-0.028
1E+13	263	11.315	11.330	0.015
1E+13	264	11.517	11.484	-0.033
Max		11.573	11.571	0.015
Average		11.445	11.436	-0.009
Min		11.315	11.330	-0.033
Std Dev		0.077	0.074	0.015



5.61 IDD_ACT_2M_5V

Test Site		
Tester		
Test Number		
Max Limit	19.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	11.480	11.429	11.340	11.330
Average	11.480	11.454	11.445	11.396
Max	11.480	11.470	11.571	11.484
UL	19.500	19.500	19.500	19.500

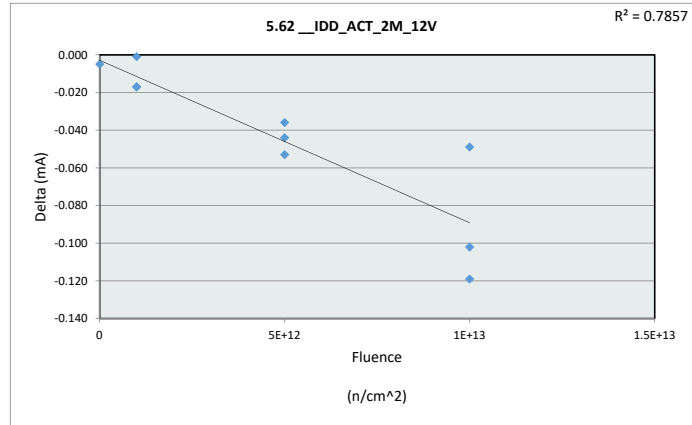


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.62 IDD_ACT_2M_12V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	19.5	19.5
Min Limit		

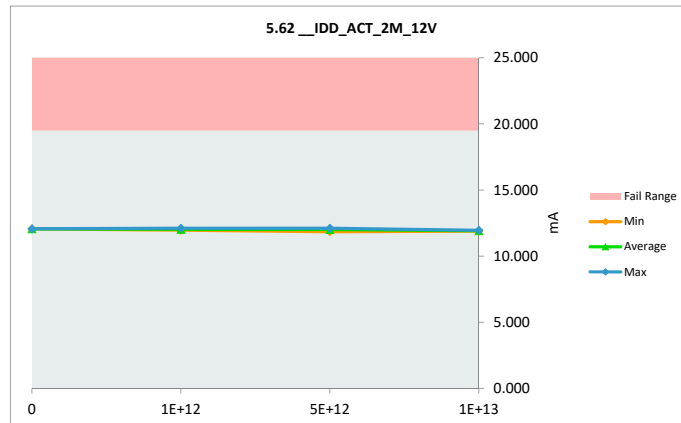
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	12.068	12.063	-0.005
1E+12	243	12.132	12.115	-0.017
1E+12	244	12.014	11.997	-0.017
1E+12	247	11.958	11.957	-0.001
5E+12	251	11.900	11.847	-0.053
5E+12	252	12.144	12.108	-0.036
5E+12	259	12.125	12.081	-0.044
1E+13	261	12.042	11.923	-0.119
1E+13	263	11.936	11.887	-0.049
1E+13	264	12.052	11.950	-0.102
Max		12.144	12.115	-0.001
Average		12.037	11.993	-0.044
Min		11.900	11.847	-0.119
Std Dev		0.085	0.095	0.039



5.62 IDD_ACT_2M_12V

Test Site		
Tester		
Test Number		
Max Limit	19.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	12.063	11.957	11.847	11.887
Average	12.063	12.023	12.012	11.920
Max	12.063	12.115	12.108	11.950
UL	19.500	19.500	19.500	19.500

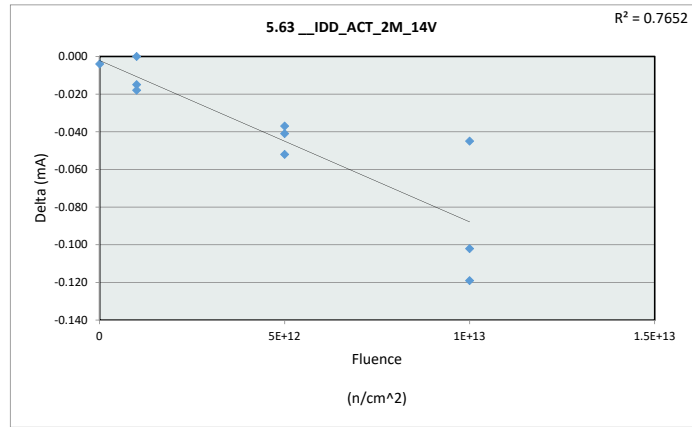


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.63 IDD_ACT_2M_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	19.5	19.5
Min Limit		

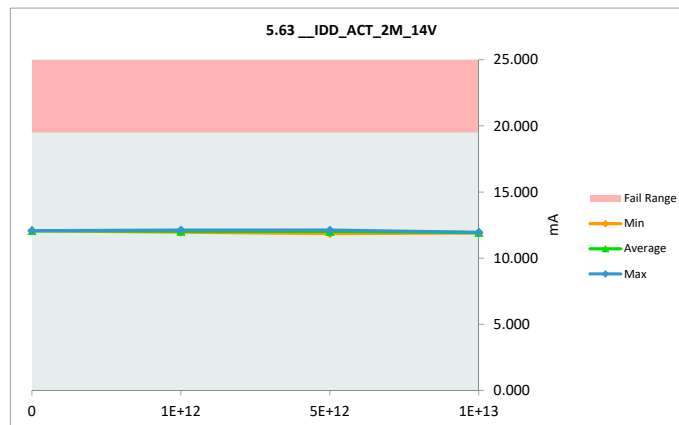
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	12.072	12.068	-0.004
1E+12	243	12.136	12.121	-0.015
1E+12	244	12.018	12.000	-0.018
1E+12	247	11.963	11.963	0.000
5E+12	251	11.905	11.853	-0.052
5E+12	252	12.149	12.112	-0.037
5E+12	259	12.126	12.085	-0.041
1E+13	261	12.048	11.929	-0.119
1E+13	263	11.940	11.895	-0.045
1E+13	264	12.058	11.956	-0.102
Max		12.149	12.121	0.000
Average		12.041	11.998	-0.043
Min		11.905	11.853	-0.119
Std Dev		0.085	0.094	0.040



5.63 IDD_ACT_2M_14V

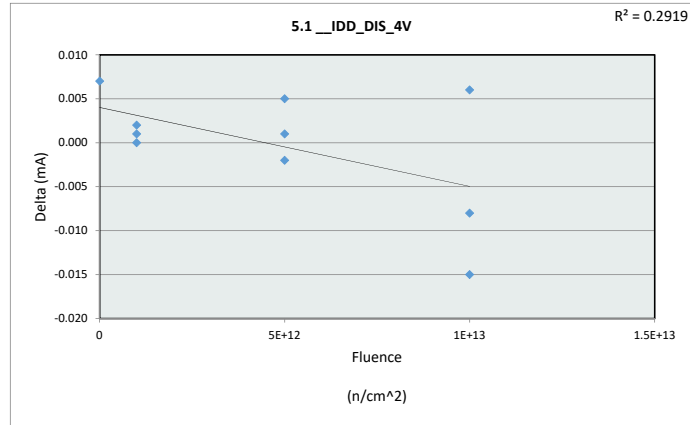
Test Site		
Tester		
Test Number		
Max Limit	19.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	12.068	11.963	11.853	11.895
Average	12.068	12.028	12.017	11.927
Max	12.068	12.121	12.112	11.956
UL	19.500	19.500	19.500	19.500

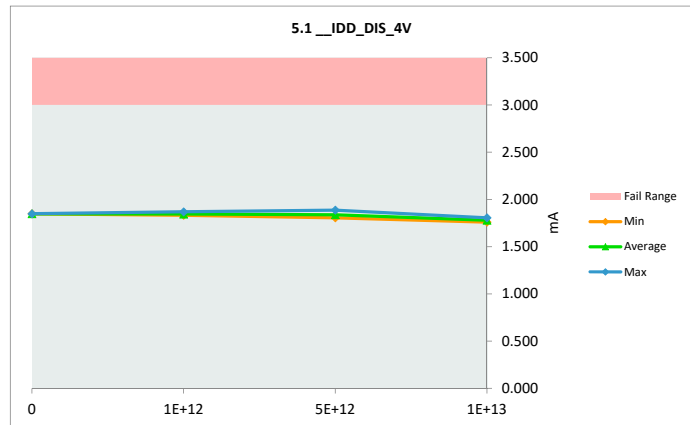


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.1_IDD_DIS_4V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.841	1.848	0.007
1E+12	243	1.867	1.869	0.002
1E+12	244	1.832	1.832	0.000
1E+12	247	1.833	1.834	0.001
5E+12	251	1.814	1.819	0.005
5E+12	252	1.886	1.887	0.001
5E+12	259	1.807	1.805	-0.002
1E+13	261	1.790	1.775	-0.015
1E+13	263	1.800	1.806	0.006
1E+13	264	1.767	1.759	-0.008
	Max	1.886	1.887	0.007
	Average	1.824	1.823	0.000
	Min	1.767	1.759	-0.015
	Std Dev	0.036	0.040	0.007

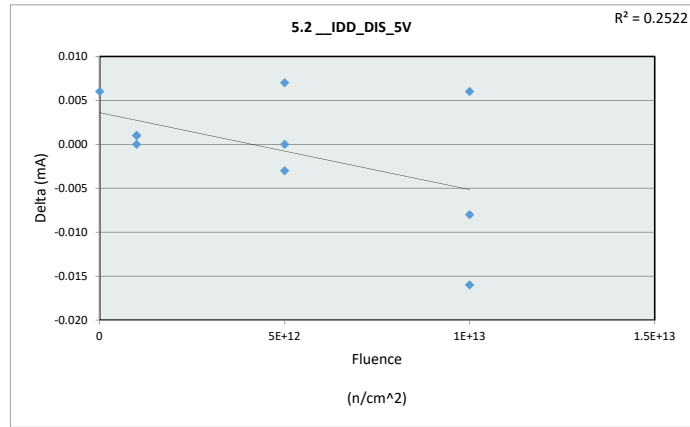


5.1_IDD_DIS_4V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.848	1.832	1.805	1.759
Average	1.848	1.845	1.837	1.780
Max	1.848	1.869	1.887	1.806
UL	3.000	3.000	3.000	3.000

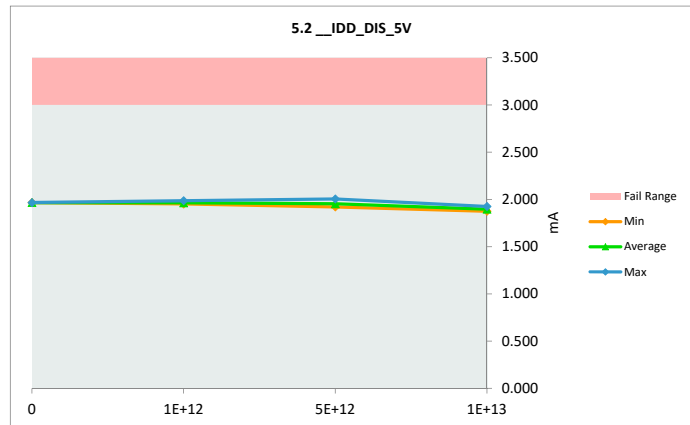


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.2_IDD_DIS_5V				
Fluence		PRE	POST	Delta
0	266	1.961	1.967	0.006
1E+12	243	1.985	1.986	0.001
1E+12	244	1.952	1.952	0.000
1E+12	247	1.951	1.952	0.001
5E+12	251	1.929	1.936	0.007
5E+12	252	2.005	2.005	0.000
5E+12	259	1.923	1.920	-0.003
1E+13	261	1.909	1.893	-0.016
1E+13	263	1.919	1.925	0.006
1E+13	264	1.883	1.875	-0.008
	Max	2.005	2.005	0.007
	Average	1.942	1.941	-0.001
	Min	1.883	1.875	-0.016
	Std Dev	0.036	0.040	0.007

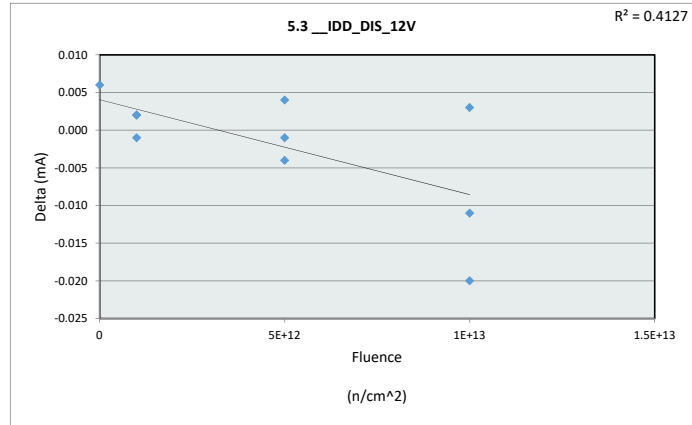


5.2_IDD_DIS_5V				
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.967	1.952	1.920	1.875
Average	1.967	1.963	1.954	1.898
Max	1.967	1.986	2.005	1.925
UL	3.000	3.000	3.000	3.000

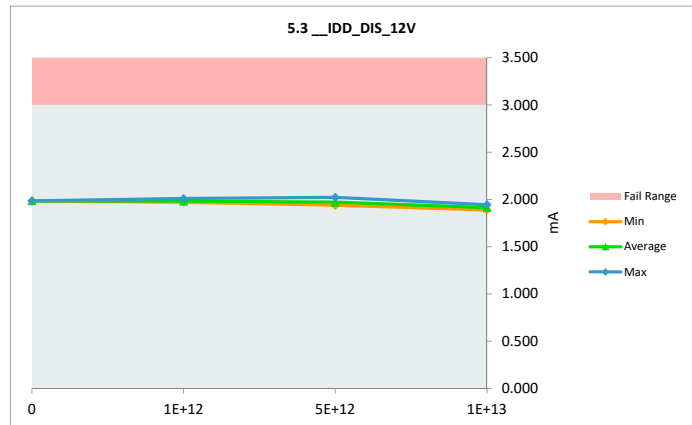


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.3 __IDD_DIS_12V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.979	1.985	0.006
1E+12	243	2.007	2.009	0.002
1E+12	244	1.970	1.969	-0.001
1E+12	247	1.967	1.969	0.002
5E+12	251	1.947	1.951	0.004
5E+12	252	2.023	2.022	-0.001
5E+12	259	1.942	1.938	-0.004
1E+13	261	1.931	1.911	-0.020
1E+13	263	1.941	1.944	0.003
1E+13	264	1.900	1.889	-0.011
	Max	2.023	2.022	0.006
	Average	1.961	1.959	-0.002
	Min	1.900	1.889	-0.020
	Std Dev	0.036	0.041	0.008

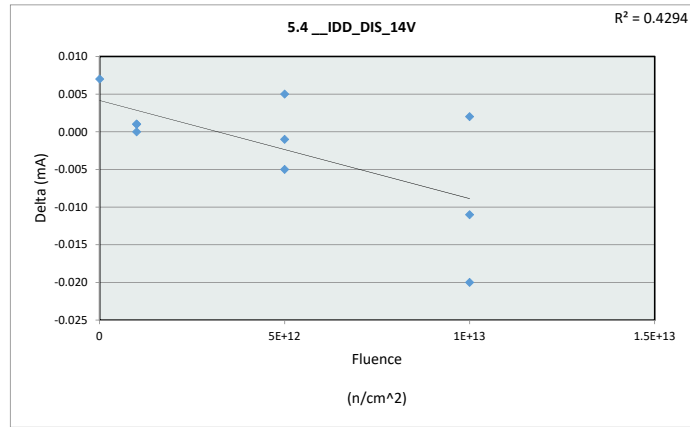


5.3 __IDD_DIS_12V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.985	1.969	1.938	1.889
Average	1.985	1.982	1.970	1.915
Max	1.985	2.009	2.022	1.944
UL	3.000	3.000	3.000	3.000

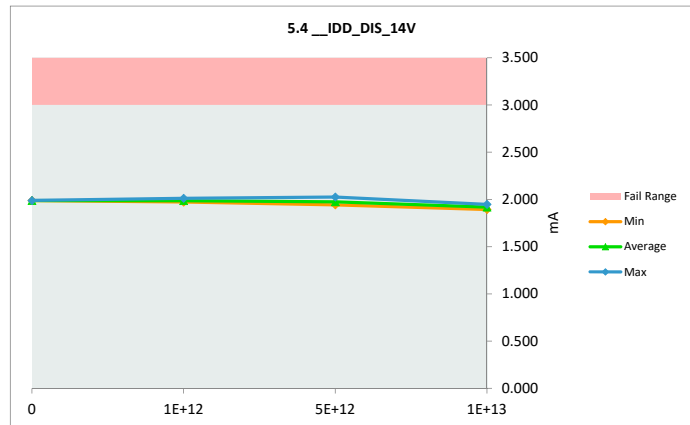


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.4 __IDD_DIS_14V				
Test Site				
Tester				
Test Number				
Unit		mA	mA	
Max Limit		3	3	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.982	1.989	0.007
1E+12	243	2.011	2.012	0.001
1E+12	244	1.974	1.974	0.000
1E+12	247	1.971	1.972	0.001
5E+12	251	1.950	1.955	0.005
5E+12	252	2.027	2.026	-0.001
5E+12	259	1.947	1.942	-0.005
1E+13	261	1.935	1.915	-0.020
1E+13	263	1.946	1.948	0.002
1E+13	264	1.904	1.893	-0.011
	Max	2.027	2.026	0.007
	Average	1.965	1.963	-0.002
	Min	1.904	1.893	-0.020
	Std Dev	0.036	0.041	0.008

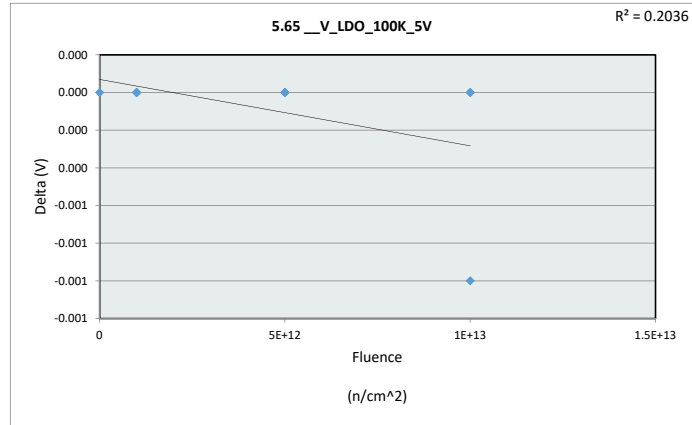


5.4 __IDD_DIS_14V				
Test Site				
Tester				
Test Number				
Max Limit		3	mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.989	1.972	1.942	1.893
Average	1.989	1.986	1.974	1.919
Max	1.989	2.012	2.026	1.948
UL	3.000	3.000	3.000	3.000

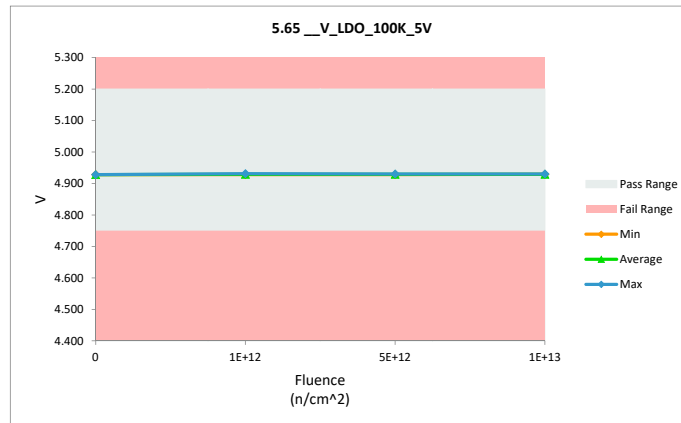


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.65 __V_LDO_100K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	4.928	4.928	0.000
1E+12	243	4.928	4.928	0.000
1E+12	244	4.928	4.928	0.000
1E+12	247	4.931	4.931	0.000
5E+12	251	4.930	4.930	0.000
5E+12	252	4.928	4.928	0.000
5E+12	259	4.929	4.929	0.000
1E+13	261	4.929	4.929	0.000
1E+13	263	4.930	4.929	-0.001
1E+13	264	4.930	4.930	0.000
Max		4.931	4.931	0.000
Average		4.929	4.929	0.000
Min		4.928	4.928	-0.001
Std Dev		0.001	0.001	0.000



5.65 __V_LDO_100K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.928	4.928	4.928	4.929
Average	4.928	4.929	4.929	4.929
Max	4.928	4.931	4.930	4.930
UL	5.200	5.200	5.200	5.200

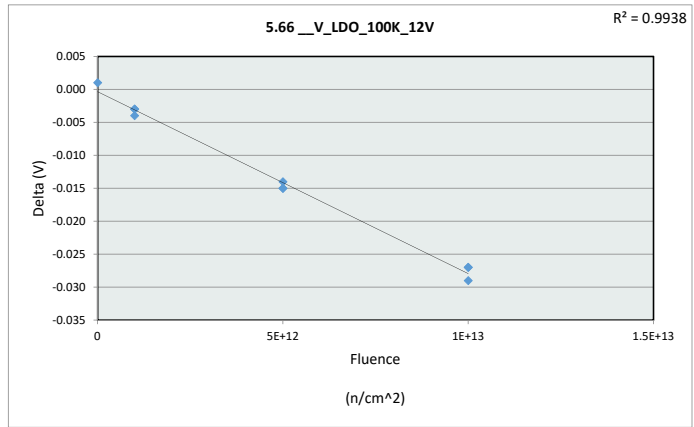


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.66_V_LDO_100K_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.75	4.75

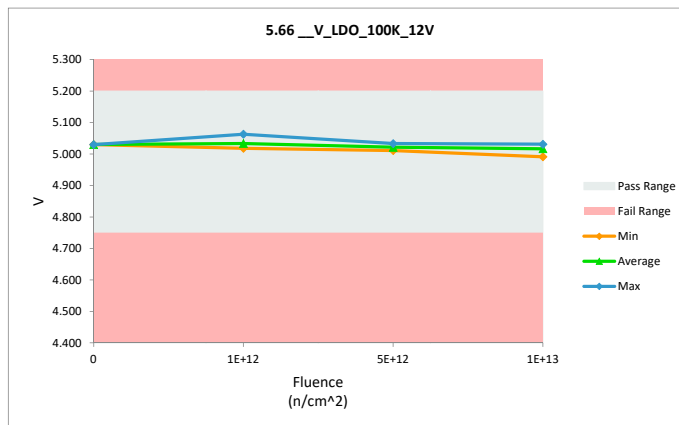
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.030	0.001
1E+12	243	5.067	5.063	-0.004
1E+12	244	5.021	5.018	-0.003
1E+12	247	5.022	5.019	-0.003
5E+12	251	5.026	5.011	-0.015
5E+12	252	5.035	5.020	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.055	5.028	-0.027
1E+13	263	5.058	5.031	-0.027
1E+13	264	5.020	4.991	-0.029
Max		5.067	5.063	0.001
Average		5.038	5.024	-0.014
Min		5.020	4.991	-0.029
Std Dev		0.017	0.018	0.011



5.66_V_LDO_100K_12V

Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.030	5.018	5.011	4.991
Average	5.030	5.033	5.021	5.017
Max	5.030	5.063	5.033	5.031
UL	5.200	5.200	5.200	5.200

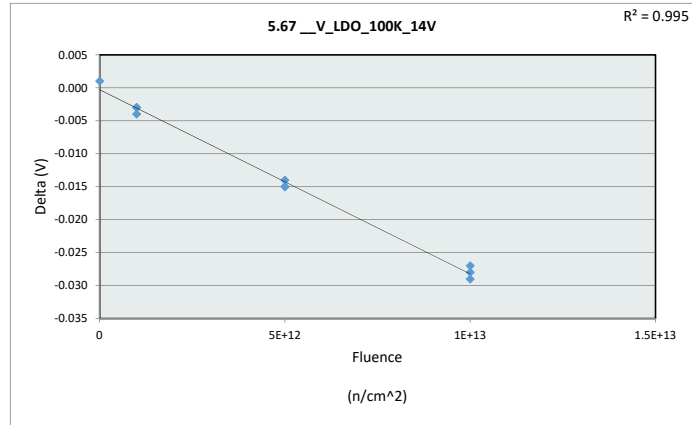


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.67_V_LDO_100K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.75	4.75

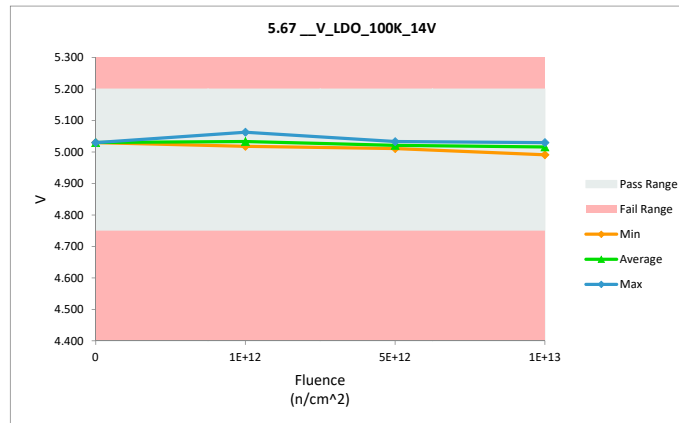
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.030	0.001
1E+12	243	5.067	5.063	-0.004
1E+12	244	5.021	5.018	-0.003
1E+12	247	5.022	5.019	-0.003
5E+12	251	5.026	5.011	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.055	5.028	-0.027
1E+13	263	5.058	5.030	-0.028
1E+13	264	5.020	4.991	-0.029
Max		5.067	5.063	0.001
Average		5.038	5.024	-0.014
Min		5.020	4.991	-0.029
Std Dev		0.017	0.018	0.011



5.67_V_LDO_100K_14V

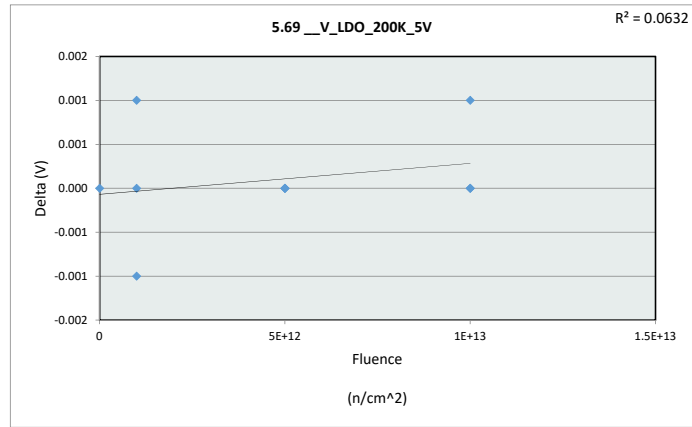
Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.030	5.018	5.011	4.991
Average	5.030	5.033	5.021	5.016
Max	5.030	5.063	5.033	5.030
UL	5.200	5.200	5.200	5.200

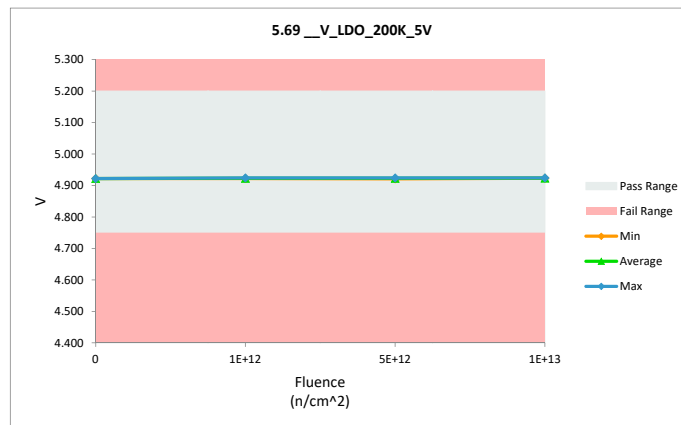


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.69 __V_LDO_200K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	4.922	4.922	0.000
1E+12	243	4.922	4.922	0.000
1E+12	244	4.921	4.922	0.001
1E+12	247	4.925	4.924	-0.001
5E+12	251	4.924	4.924	0.000
5E+12	252	4.921	4.921	0.000
5E+12	259	4.923	4.923	0.000
1E+13	261	4.923	4.923	0.000
1E+13	263	4.923	4.923	0.000
1E+13	264	4.923	4.924	0.001
Max		4.925	4.924	0.001
Average		4.923	4.923	0.000
Min		4.921	4.921	-0.001
Std Dev		0.001	0.001	0.001



5.69 __V_LDO_200K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.922	4.922	4.921	4.923
Average	4.922	4.923	4.923	4.923
Max	4.922	4.924	4.924	4.924
UL	5.200	5.200	5.200	5.200

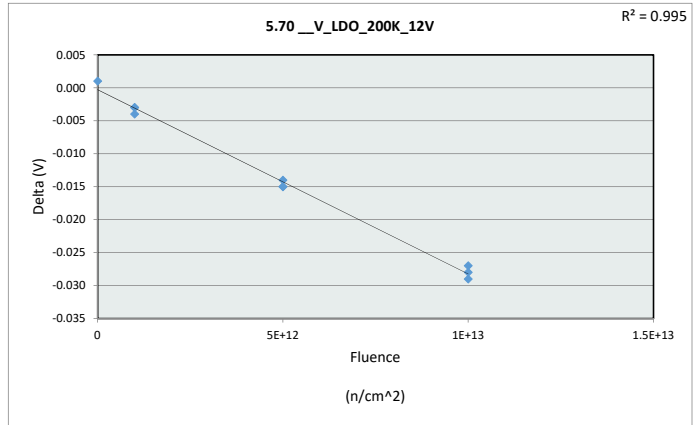


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.70_V_LDO_200K_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.75	4.75

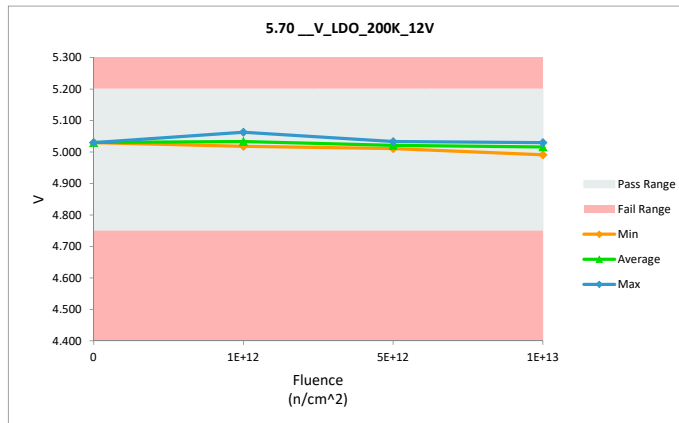
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.030	0.001
1E+12	243	5.067	5.063	-0.004
1E+12	244	5.021	5.018	-0.003
1E+12	247	5.022	5.019	-0.003
5E+12	251	5.026	5.011	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.055	5.028	-0.027
1E+13	263	5.058	5.030	-0.028
1E+13	264	5.020	4.991	-0.029
Max		5.067	5.063	0.001
Average		5.038	5.024	-0.014
Min		5.020	4.991	-0.029
Std Dev		0.017	0.018	0.011



5.70_V_LDO_200K_12V

Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.030	5.018	5.011	4.991
Average	5.030	5.033	5.021	5.016
Max	5.030	5.063	5.033	5.030
UL	5.200	5.200	5.200	5.200

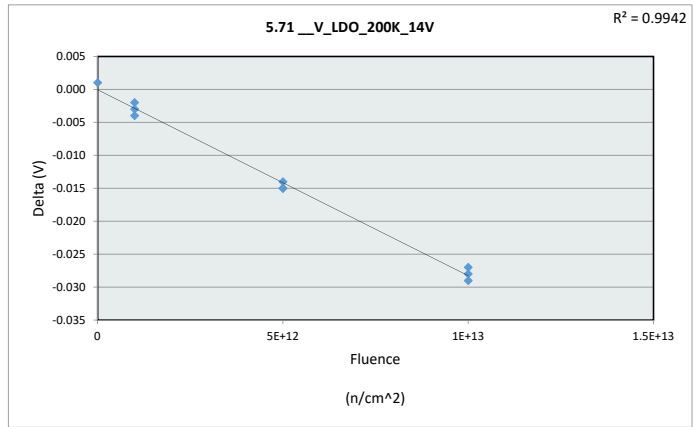


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.71_V_LDO_200K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.75	4.75

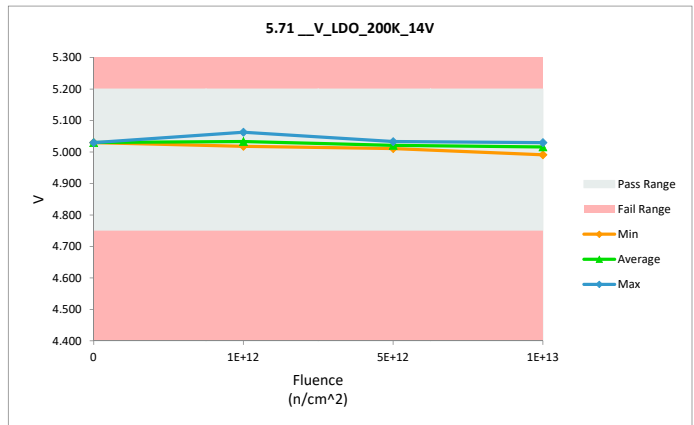
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.030	0.001
1E+12	243	5.067	5.063	-0.004
1E+12	244	5.020	5.018	-0.002
1E+12	247	5.022	5.019	-0.003
5E+12	251	5.026	5.011	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.055	5.028	-0.027
1E+13	263	5.058	5.030	-0.028
1E+13	264	5.020	4.991	-0.029
Max		5.067	5.063	0.001
Average		5.038	5.024	-0.014
Min		5.020	4.991	-0.029
Std Dev		0.017	0.018	0.011



5.71_V_LDO_200K_14V

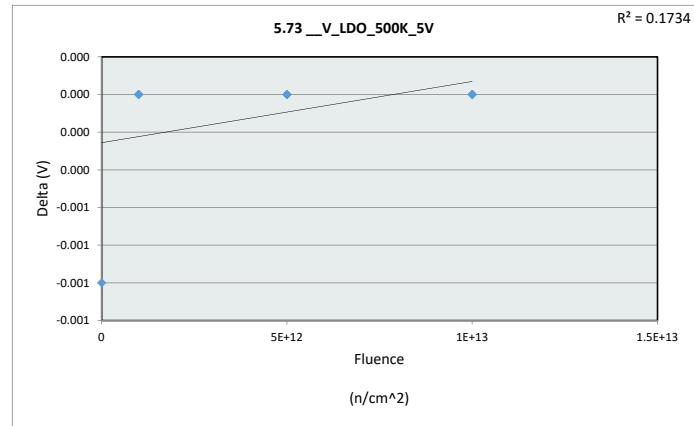
Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.030	5.018	5.011	4.991
Average	5.030	5.033	5.021	5.016
Max	5.030	5.063	5.033	5.030
UL	5.200	5.200	5.200	5.200

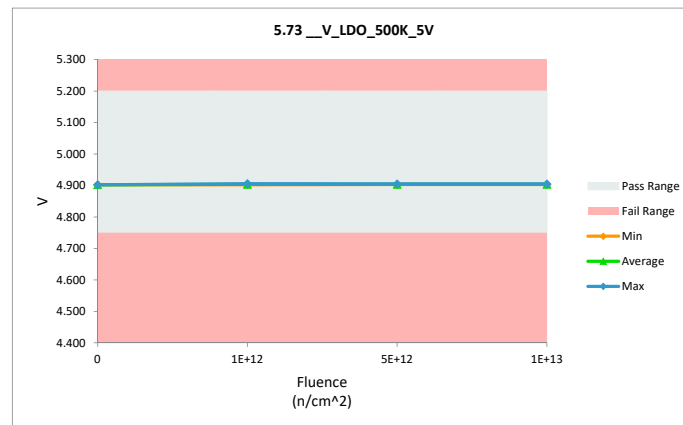


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.73 __V_LDO_500K_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	4.903	4.902	-0.001
1E+12	243	4.903	4.903	0.000
1E+12	244	4.902	4.902	0.000
1E+12	247	4.906	4.906	0.000
5E+12	251	4.905	4.905	0.000
5E+12	252	4.903	4.903	0.000
5E+12	259	4.904	4.904	0.000
1E+13	261	4.903	4.903	0.000
1E+13	263	4.904	4.904	0.000
1E+13	264	4.905	4.905	0.000
Max		4.906	4.906	0.000
Average		4.904	4.904	0.000
Min		4.902	4.902	-0.001
Std Dev		0.001	0.001	0.000

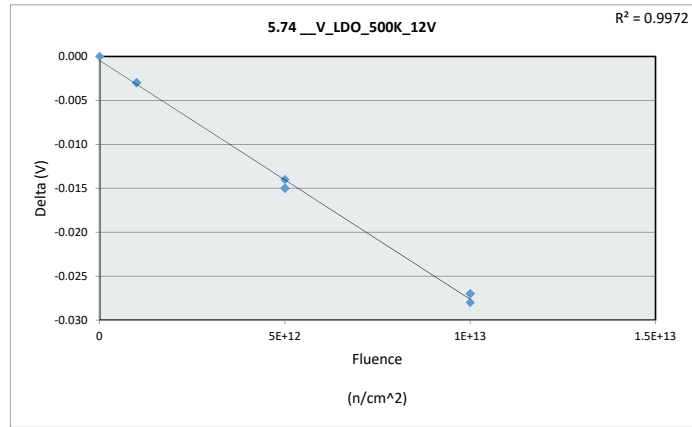


5.73 __V_LDO_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.902	4.902	4.903	4.903
Average	4.902	4.904	4.904	4.904
Max	4.902	4.906	4.905	4.905
UL	5.200	5.200	5.200	5.200

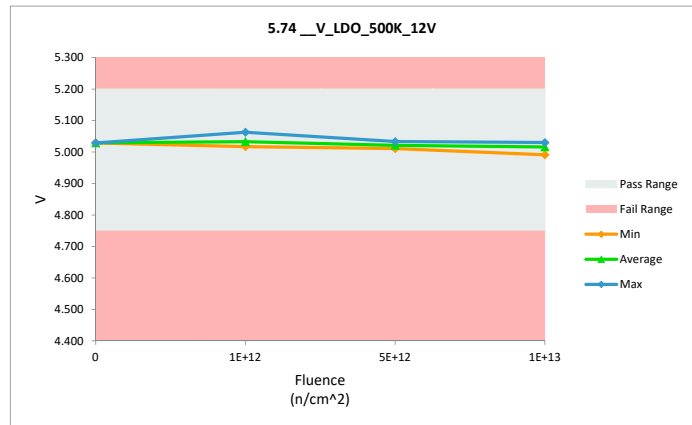


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.74_V_LDO_500K_12V				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		5.2	5.2	
Min Limit		4.75	4.75	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.029	0.000
1E+12	243	5.066	5.063	-0.003
1E+12	244	5.020	5.017	-0.003
1E+12	247	5.022	5.019	-0.003
5E+12	251	5.026	5.011	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.054	5.027	-0.027
1E+13	263	5.057	5.030	-0.027
1E+13	264	5.019	4.991	-0.028
Max		5.066	5.063	0.000
Average		5.037	5.024	-0.013
Min		5.019	4.991	-0.028
Std Dev		0.017	0.018	0.011



5.74_V_LDO_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit		5.2	V	
Min Limit		4.75	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.029	5.017	5.011	4.991
Average	5.029	5.033	5.021	5.016
Max	5.029	5.063	5.033	5.030
UL	5.200	5.200	5.200	5.200

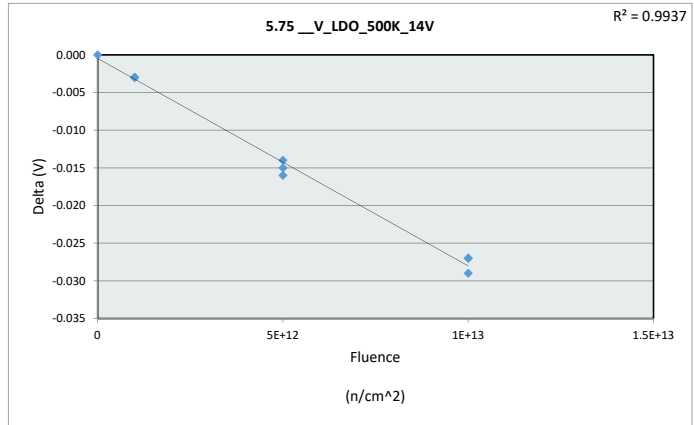


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.75_V_LDO_500K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.75	4.75

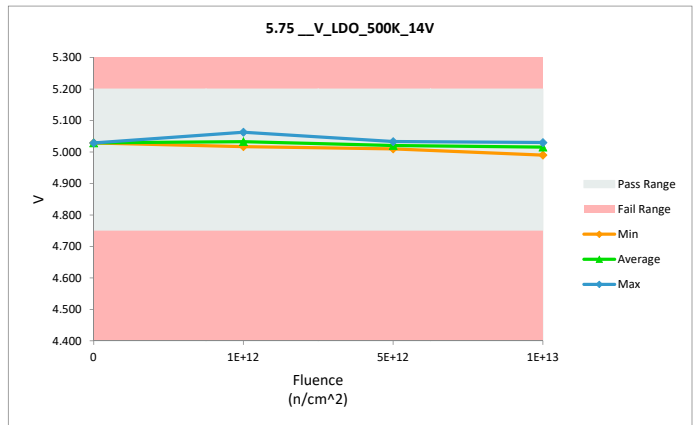
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.029	0.000
1E+12	243	5.066	5.063	-0.003
1E+12	244	5.020	5.017	-0.003
1E+12	247	5.021	5.018	-0.003
5E+12	251	5.026	5.010	-0.016
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.033	-0.014
1E+13	261	5.054	5.027	-0.027
1E+13	263	5.057	5.030	-0.027
1E+13	264	5.019	4.990	-0.029
Max		5.066	5.063	0.000
Average		5.037	5.024	-0.014
Min		5.019	4.990	-0.029
Std Dev		0.017	0.019	0.011



5.75_V_LDO_500K_14V

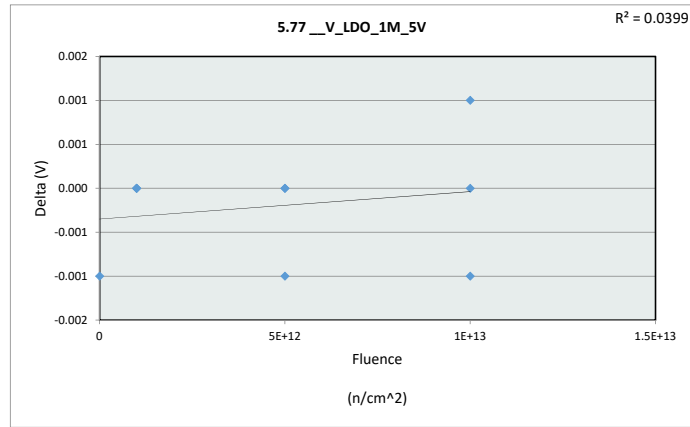
Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.029	5.017	5.010	4.990
Average	5.029	5.033	5.021	5.016
Max	5.029	5.063	5.033	5.030
UL	5.200	5.200	5.200	5.200

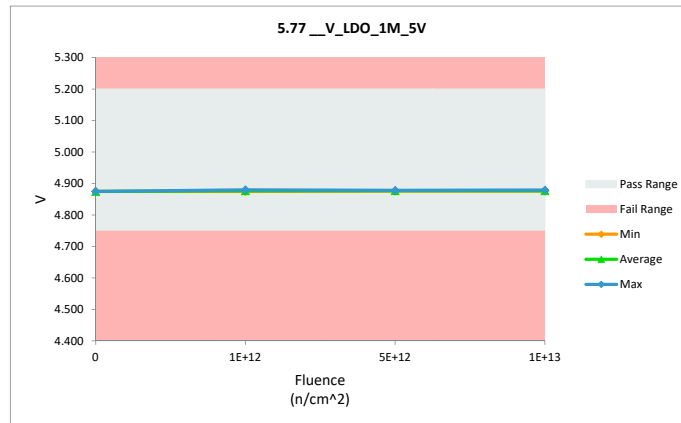


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.77 __V_LDO_1M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	4.876	4.875	-0.001
1E+12	243	4.876	4.876	0.000
1E+12	244	4.875	4.875	0.000
1E+12	247	4.880	4.880	0.000
5E+12	251	4.878	4.878	0.000
5E+12	252	4.877	4.876	-0.001
5E+12	259	4.877	4.877	0.000
1E+13	261	4.876	4.876	0.000
1E+13	263	4.877	4.876	-0.001
1E+13	264	4.878	4.879	0.001
Max		4.880	4.880	0.001
Average		4.877	4.877	0.000
Min		4.875	4.875	-0.001
Std Dev		0.001	0.002	0.001

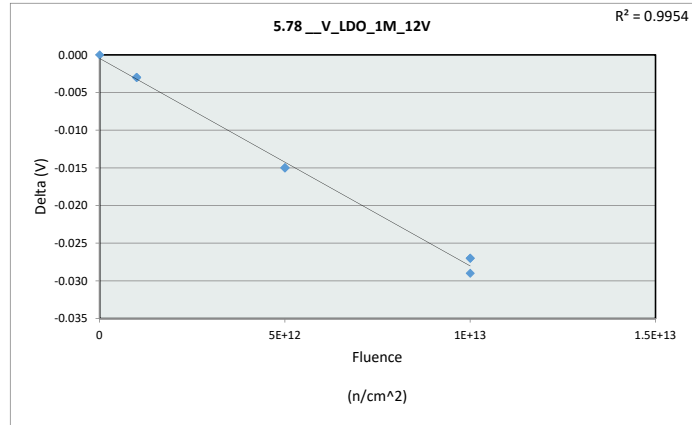


5.77 __V_LDO_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.875	4.875	4.876	4.876
Average	4.875	4.877	4.877	4.877
Max	4.875	4.880	4.878	4.879
UL	5.200	5.200	5.200	5.200

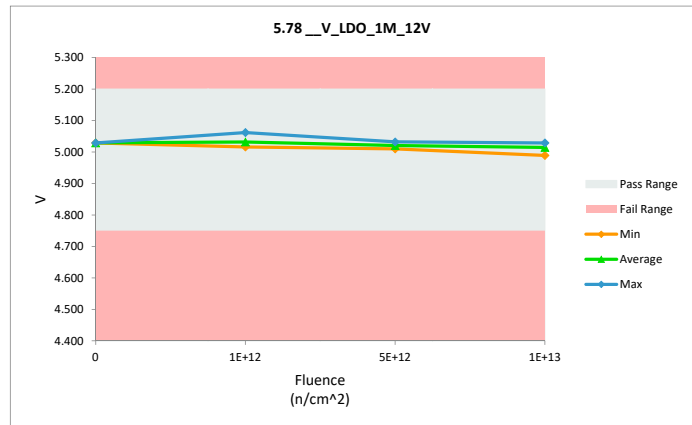


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.78 __V_LDO_1M_12V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.029	0.000
1E+12	243	5.065	5.062	-0.003
1E+12	244	5.019	5.016	-0.003
1E+12	247	5.021	5.018	-0.003
5E+12	251	5.025	5.010	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.047	5.032	-0.015
1E+13	261	5.053	5.026	-0.027
1E+13	263	5.056	5.029	-0.027
1E+13	264	5.018	4.989	-0.029
Max		5.065	5.062	0.000
Average		5.037	5.023	-0.014
Min		5.018	4.989	-0.029
Std Dev		0.017	0.019	0.011

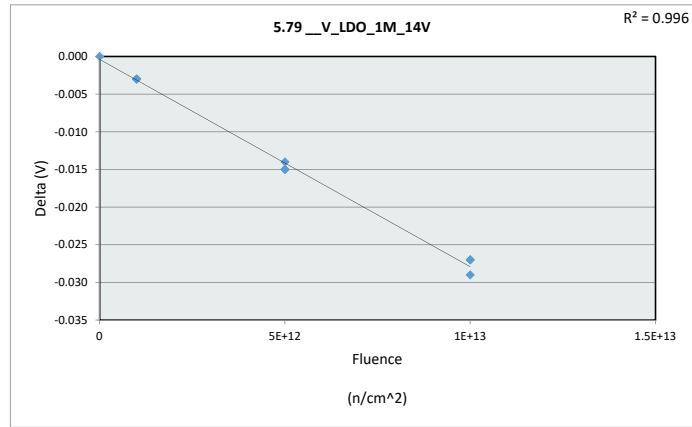


5.78 __V_LDO_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.029	5.016	5.010	4.989
Average	5.029	5.032	5.020	5.015
Max	5.029	5.062	5.032	5.029
UL	5.200	5.200	5.200	5.200

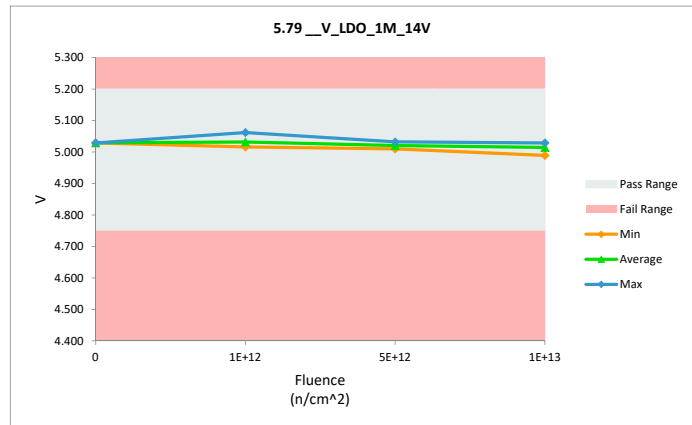


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.79 __V_LDO_1M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	5.2	5.2		
Min Limit	4.75	4.75		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.029	5.029	0.000
1E+12	243	5.065	5.062	-0.003
1E+12	244	5.019	5.016	-0.003
1E+12	247	5.021	5.018	-0.003
5E+12	251	5.025	5.010	-0.015
5E+12	252	5.034	5.019	-0.015
5E+12	259	5.046	5.032	-0.014
1E+13	261	5.053	5.026	-0.027
1E+13	263	5.056	5.029	-0.027
1E+13	264	5.018	4.989	-0.029
Max		5.065	5.062	0.000
Average		5.037	5.023	-0.014
Min		5.018	4.989	-0.029
Std Dev		0.017	0.019	0.011

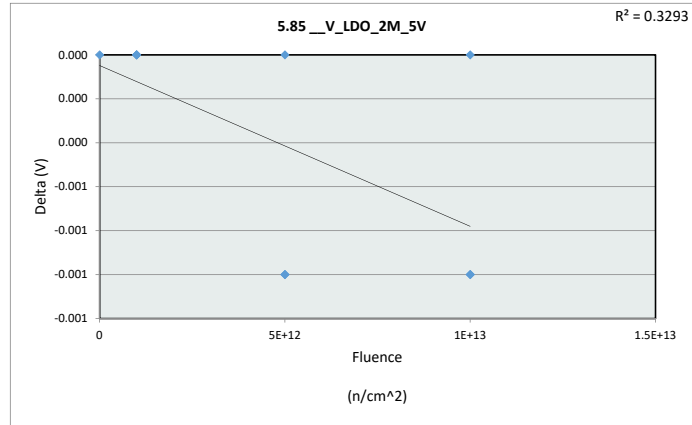


5.79 __V_LDO_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.029	5.016	5.010	4.989
Average	5.029	5.032	5.020	5.015
Max	5.029	5.062	5.032	5.029
UL	5.200	5.200	5.200	5.200

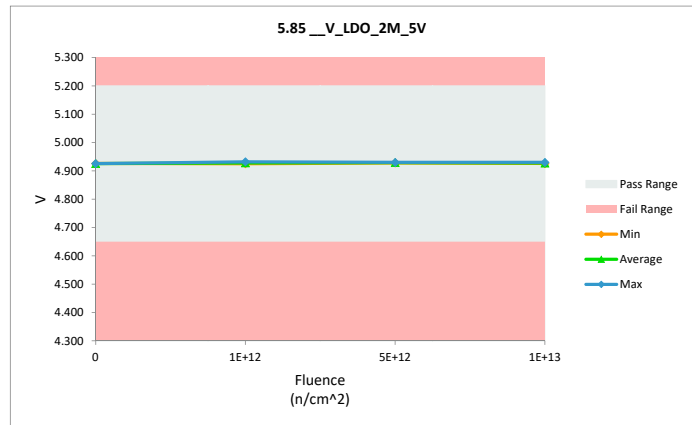


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.85 __V_LDO_2M_5V				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		5.2	5.2	
Min Limit		4.65	4.65	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	4.926	4.926	0.000
1E+12	243	4.927	4.927	0.000
1E+12	244	4.925	4.925	0.000
1E+12	247	4.932	4.932	0.000
5E+12	251	4.930	4.930	0.000
5E+12	252	4.929	4.928	-0.001
5E+12	259	4.930	4.929	-0.001
1E+13	261	4.927	4.926	-0.001
1E+13	263	4.928	4.927	-0.001
1E+13	264	4.930	4.930	0.000
Max		4.932	4.932	0.000
Average		4.928	4.928	0.000
Min		4.925	4.925	-0.001
Std Dev		0.002	0.002	0.001



5.85 __V_LDO_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit		5.2	V	
Min Limit		4.65	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	4.926	4.925	4.928	4.926
Average	4.926	4.928	4.929	4.928
Max	4.926	4.932	4.930	4.930
UL	5.200	5.200	5.200	5.200

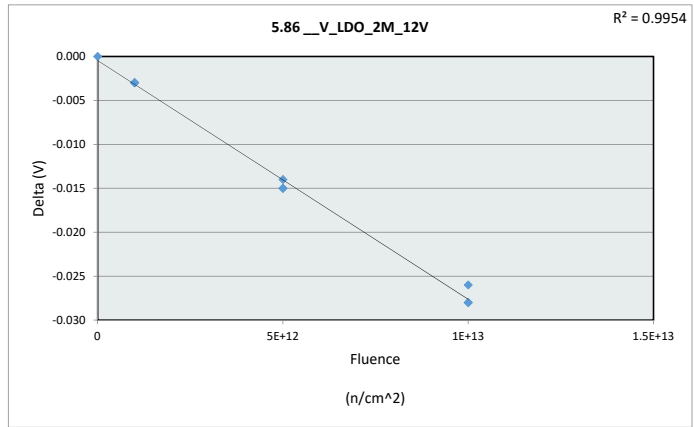


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.86 __V_LDO_2M_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.65	4.65

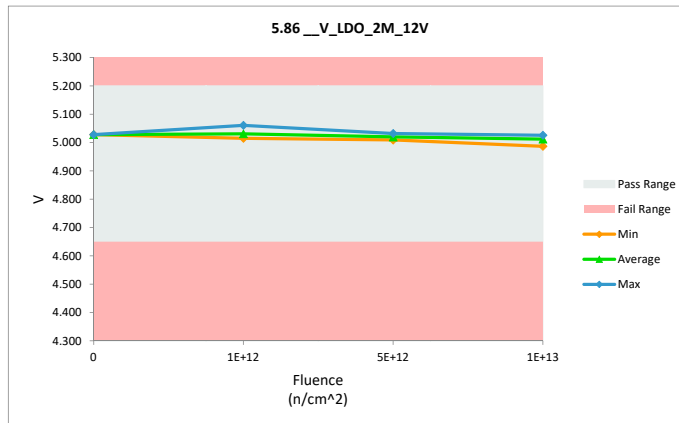
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.028	5.028	0.000
1E+12	243	5.064	5.061	-0.003
1E+12	244	5.018	5.015	-0.003
1E+12	247	5.019	5.016	-0.003
5E+12	251	5.024	5.009	-0.015
5E+12	252	5.033	5.018	-0.015
5E+12	259	5.046	5.032	-0.014
1E+13	261	5.050	5.024	-0.026
1E+13	263	5.054	5.026	-0.028
1E+13	264	5.015	4.987	-0.028
Max		5.064	5.061	0.000
Average		5.035	5.022	-0.014
Min		5.015	4.987	-0.028
Std Dev		0.017	0.019	0.011



5.86 __V_LDO_2M_12V

Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.65	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	5.028	5.015	5.009	4.987
Average	5.028	5.031	5.020	5.012
Max	5.028	5.061	5.032	5.026
UL	5.200	5.200	5.200	5.200

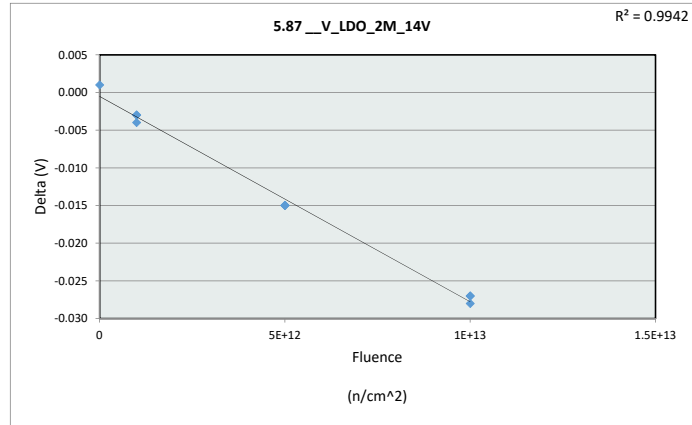


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.87 __V_LDO_2M_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	5.2	5.2
Min Limit	4.65	4.65

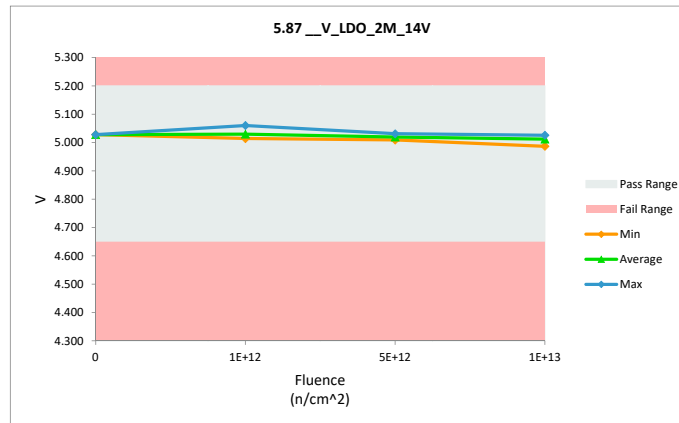
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	5.027	5.028	0.001
1E+12	243	5.063	5.060	-0.003
1E+12	244	5.018	5.014	-0.004
1E+12	247	5.019	5.016	-0.003
5E+12	251	5.024	5.009	-0.015
5E+12	252	5.033	5.018	-0.015
5E+12	259	5.046	5.031	-0.015
1E+13	261	5.050	5.023	-0.027
1E+13	263	5.053	5.026	-0.027
1E+13	264	5.015	4.987	-0.028
Max		5.063	5.060	0.001
Average		5.035	5.021	-0.014
Min		5.015	4.987	-0.028
Std Dev		0.017	0.019	0.011



5.87 __V_LDO_2M_14V

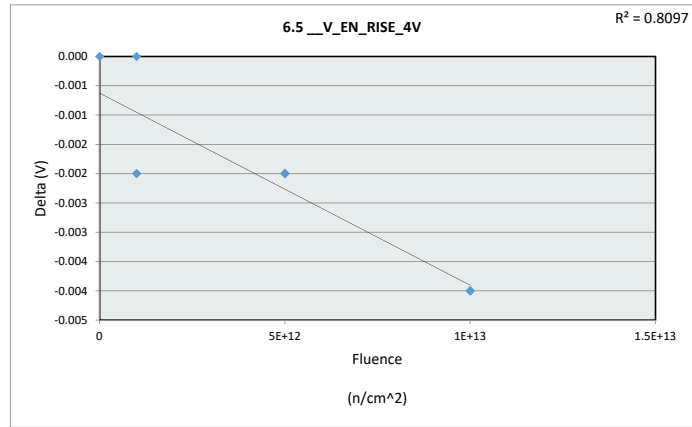
Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.65	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	5.028	5.014	5.009	4.987
Average	5.028	5.030	5.019	5.012
Max	5.028	5.060	5.031	5.026
UL	5.200	5.200	5.200	5.200

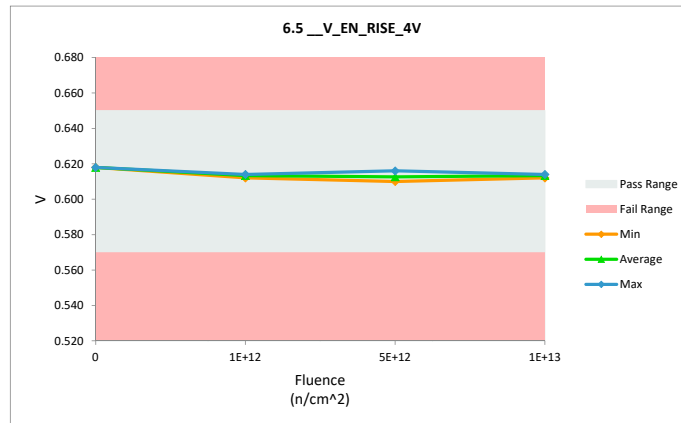


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.5 __V_EN_RISE_4V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.65	0.65		
Min Limit	0.57	0.57		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.618	0.618	0.000
1E+12	243	0.614	0.612	-0.002
1E+12	244	0.616	0.614	-0.002
1E+12	247	0.614	0.614	0.000
5E+12	251	0.612	0.610	-0.002
5E+12	252	0.614	0.612	-0.002
5E+12	259	0.618	0.616	-0.002
1E+13	261	0.616	0.612	-0.004
1E+13	263	0.618	0.614	-0.004
1E+13	264	0.618	0.614	-0.004
Max		0.618	0.618	0.000
Average		0.616	0.614	-0.002
Min		0.612	0.610	-0.004
Std Dev		0.002	0.002	0.001



6.5 __V_EN_RISE_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.618	0.612	0.610	0.612
Average	0.618	0.613	0.613	0.613
Max	0.618	0.614	0.616	0.614
UL	0.650	0.650	0.650	0.650

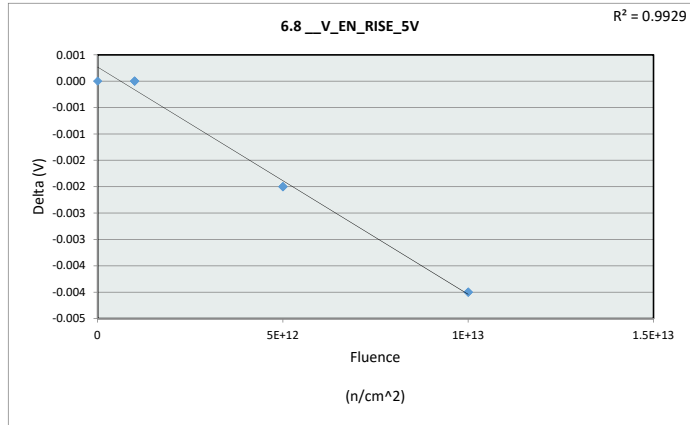


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.8 __V_EN_RISE_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.65	0.65
Min Limit	0.57	0.57

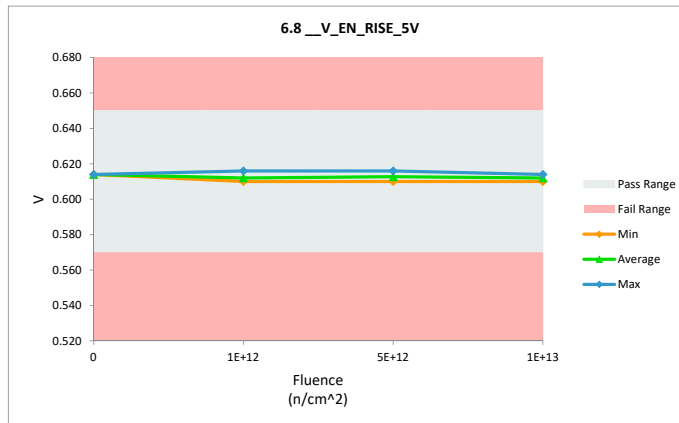
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.614	0.614	0.000
1E+12	243	0.610	0.610	0.000
1E+12	244	0.616	0.616	0.000
1E+12	247	0.610	0.610	0.000
5E+12	251	0.612	0.610	-0.002
5E+12	252	0.614	0.612	-0.002
5E+12	259	0.618	0.616	-0.002
1E+13	261	0.616	0.612	-0.004
1E+13	263	0.618	0.614	-0.004
1E+13	264	0.614	0.610	-0.004
Max		0.618	0.616	0.000
Average		0.614	0.612	-0.002
Min		0.610	0.610	-0.004
Std Dev		0.003	0.002	0.002



6.8 __V_EN_RISE_5V

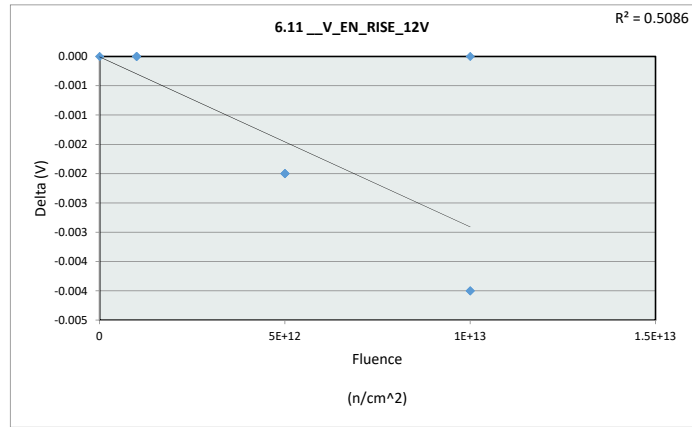
Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.614	0.610	0.610	0.610
Average	0.614	0.612	0.613	0.612
Max	0.614	0.616	0.616	0.614
UL	0.650	0.650	0.650	0.650

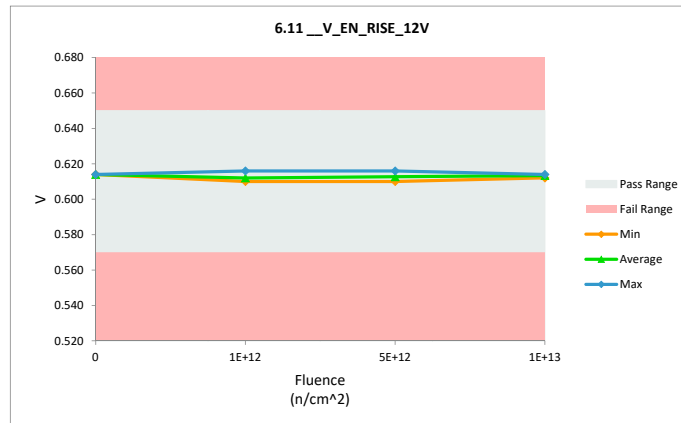


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.11 __V_EN_RISE_12V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.65	0.65		
Min Limit	0.57	0.57		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.614	0.614	0.000
1E+12	243	0.610	0.610	0.000
1E+12	244	0.616	0.616	0.000
1E+12	247	0.610	0.610	0.000
5E+12	251	0.612	0.610	-0.002
5E+12	252	0.614	0.612	-0.002
5E+12	259	0.618	0.616	-0.002
1E+13	261	0.616	0.612	-0.004
1E+13	263	0.618	0.614	-0.004
1E+13	264	0.614	0.614	0.000
Max		0.618	0.616	0.000
Average		0.614	0.613	-0.001
Min		0.610	0.610	-0.004
Std Dev		0.003	0.002	0.002

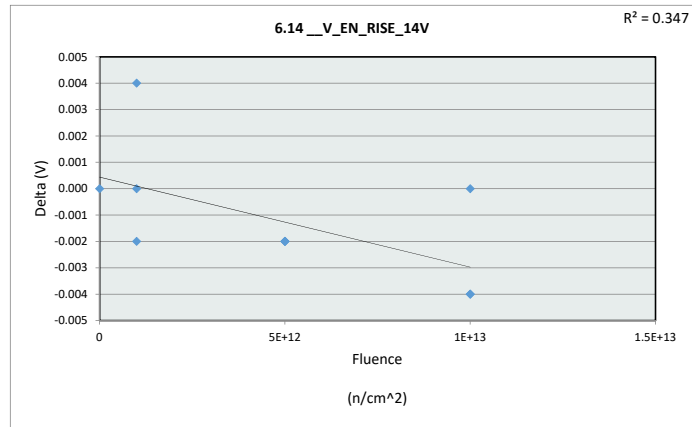


6.11 __V_EN_RISE_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.614	0.610	0.610	0.612
Average	0.614	0.612	0.613	0.613
Max	0.614	0.616	0.616	0.614
UL	0.650	0.650	0.650	0.650

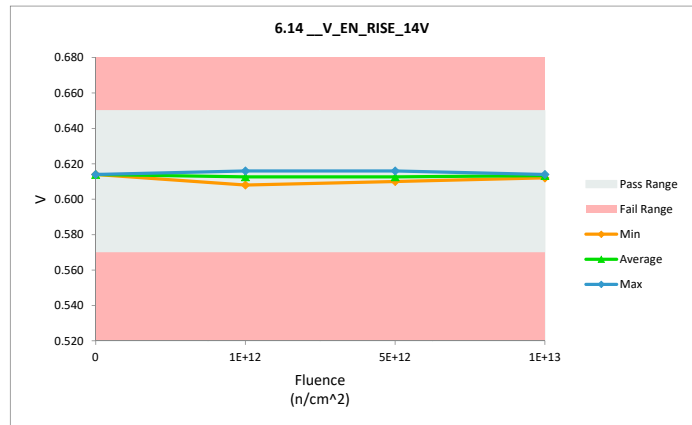


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.14 __V_EN_RISE_14V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.65	0.65		
Min Limit	0.57	0.57		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.614	0.614	0.000
1E+12	243	0.610	0.608	-0.002
1E+12	244	0.616	0.616	0.000
1E+12	247	0.610	0.614	0.004
5E+12	251	0.612	0.610	-0.002
5E+12	252	0.614	0.612	-0.002
5E+12	259	0.618	0.616	-0.002
1E+13	261	0.616	0.612	-0.004
1E+13	263	0.618	0.614	-0.004
1E+13	264	0.614	0.614	0.000
Max		0.618	0.616	0.004
Average		0.614	0.613	-0.001
Min		0.610	0.608	-0.004
Std Dev		0.003	0.003	0.002

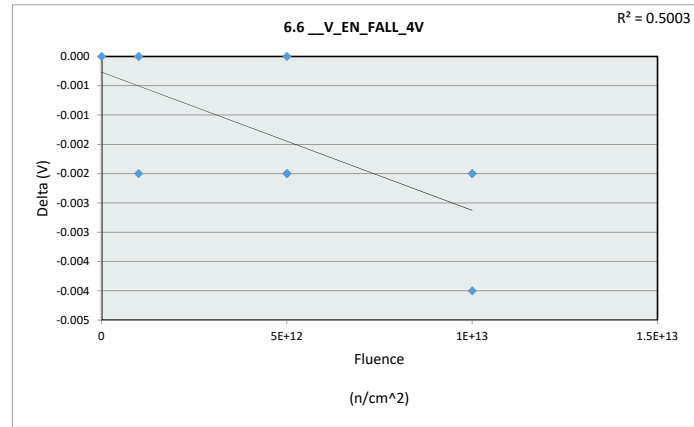


6.14 __V_EN_RISE_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.614	0.608	0.610	0.612
Average	0.614	0.613	0.613	0.613
Max	0.614	0.616	0.616	0.614
UL	0.650	0.650	0.650	0.650

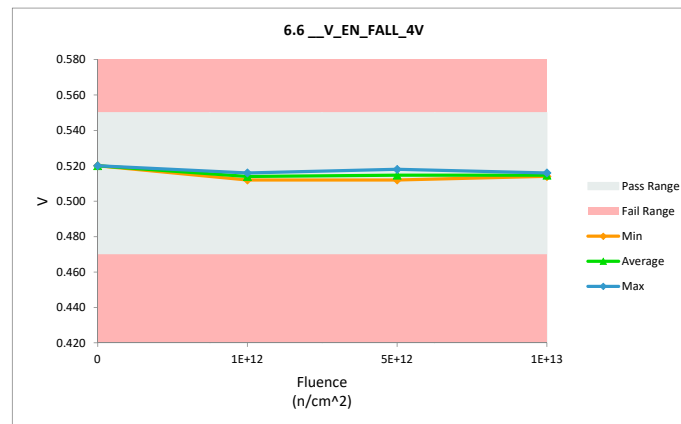


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.6 __V_EN_FALL_4V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.55	0.55		
Min Limit	0.47	0.47		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.520	0.520	0.000
1E+12	243	0.514	0.512	-0.002
1E+12	244	0.516	0.516	0.000
1E+12	247	0.514	0.514	0.000
5E+12	251	0.516	0.514	-0.002
5E+12	252	0.514	0.512	-0.002
5E+12	259	0.518	0.518	0.000
1E+13	261	0.516	0.514	-0.002
1E+13	263	0.518	0.514	-0.004
1E+13	264	0.518	0.516	-0.002
Max		0.520	0.520	0.000
Average		0.516	0.515	-0.001
Min		0.514	0.512	-0.004
Std Dev		0.002	0.003	0.001

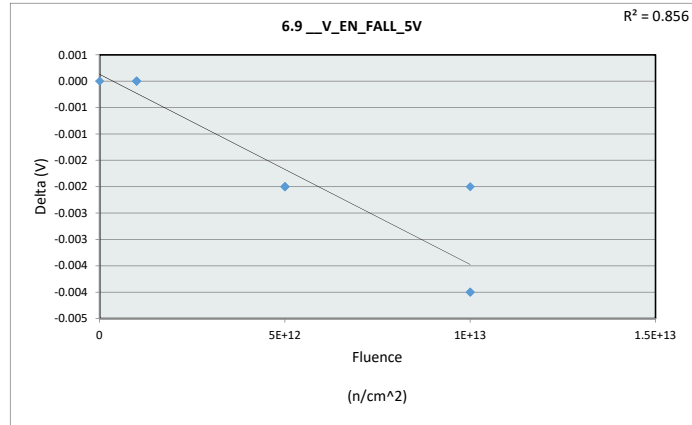


6.6 __V_EN_FALL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.520	0.512	0.512	0.514
Average	0.520	0.514	0.515	0.515
Max	0.520	0.516	0.518	0.516
UL	0.550	0.550	0.550	0.550

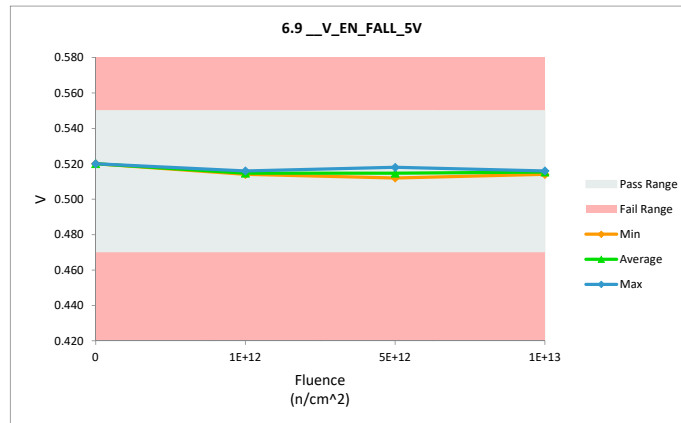


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.9 __V_EN_FALL_5V				
Test Site				
Tester				
Test Number				
Unit		V	V	
Max Limit		0.55	0.55	
Min Limit		0.47	0.47	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.520	0.520	0.000
1E+12	243	0.514	0.514	0.000
1E+12	244	0.516	0.516	0.000
1E+12	247	0.514	0.514	0.000
5E+12	251	0.516	0.514	-0.002
5E+12	252	0.514	0.512	-0.002
5E+12	259	0.520	0.518	-0.002
1E+13	261	0.518	0.514	-0.004
1E+13	263	0.518	0.516	-0.002
1E+13	264	0.520	0.516	-0.004
Max		0.520	0.520	0.000
Average		0.517	0.515	-0.002
Min		0.514	0.512	-0.004
Std Dev		0.003	0.002	0.002

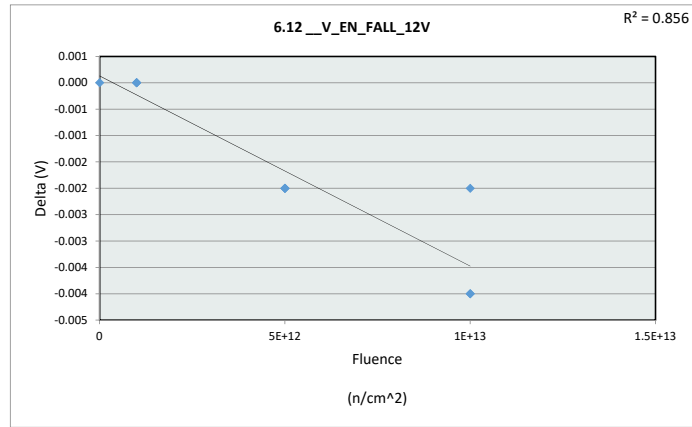


6.9 __V_EN_FALL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.520	0.514	0.512	0.514
Average	0.520	0.515	0.515	0.515
Max	0.520	0.516	0.518	0.516
UL	0.550	0.550	0.550	0.550

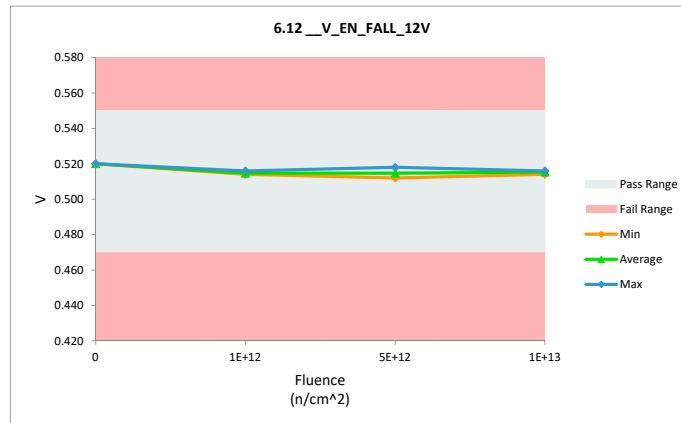


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.12 __V_EN_FALL_12V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.55	0.55		
Min Limit	0.47	0.47		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.520	0.520	0.000
1E+12	243	0.514	0.514	0.000
1E+12	244	0.516	0.516	0.000
1E+12	247	0.514	0.514	0.000
5E+12	251	0.516	0.514	-0.002
5E+12	252	0.514	0.512	-0.002
5E+12	259	0.520	0.518	-0.002
1E+13	261	0.518	0.514	-0.004
1E+13	263	0.518	0.516	-0.002
1E+13	264	0.520	0.516	-0.004
Max		0.520	0.520	0.000
Average		0.517	0.515	-0.002
Min		0.514	0.512	-0.004
Std Dev		0.003	0.002	0.002

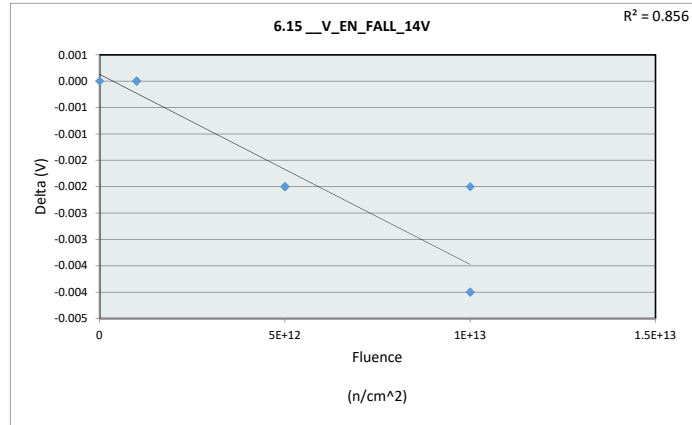


6.12 __V_EN_FALL_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.520	0.514	0.512	0.514
Average	0.520	0.515	0.515	0.515
Max	0.520	0.516	0.518	0.516
UL	0.550	0.550	0.550	0.550

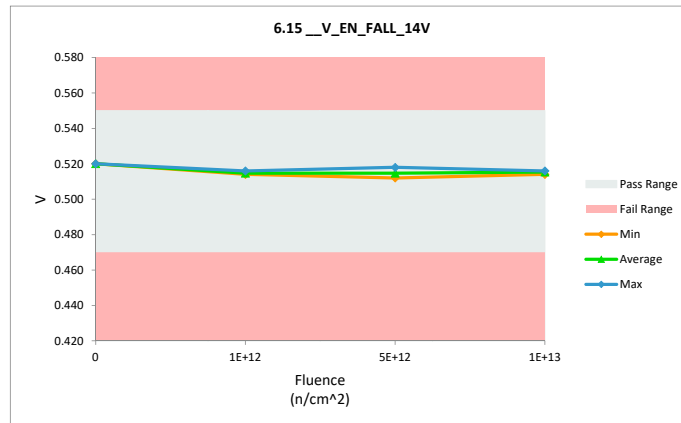


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.15 __V_EN_FALL_14V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.55	0.55		
Min Limit	0.47	0.47		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.520	0.520	0.000
1E+12	243	0.514	0.514	0.000
1E+12	244	0.516	0.516	0.000
1E+12	247	0.514	0.514	0.000
5E+12	251	0.516	0.514	-0.002
5E+12	252	0.514	0.512	-0.002
5E+12	259	0.520	0.518	-0.002
1E+13	261	0.518	0.514	-0.004
1E+13	263	0.518	0.516	-0.002
1E+13	264	0.520	0.516	-0.004
Max		0.520	0.520	0.000
Average		0.517	0.515	-0.002
Min		0.514	0.512	-0.004
Std Dev		0.003	0.002	0.002

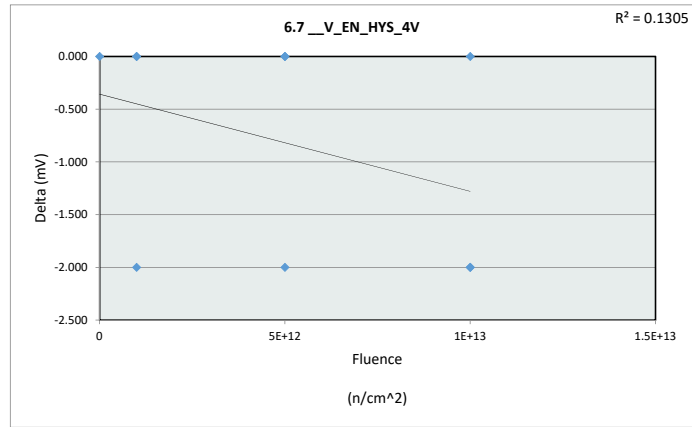


6.15 __V_EN_FALL_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.520	0.514	0.512	0.514
Average	0.520	0.515	0.515	0.515
Max	0.520	0.516	0.518	0.516
UL	0.550	0.550	0.550	0.550

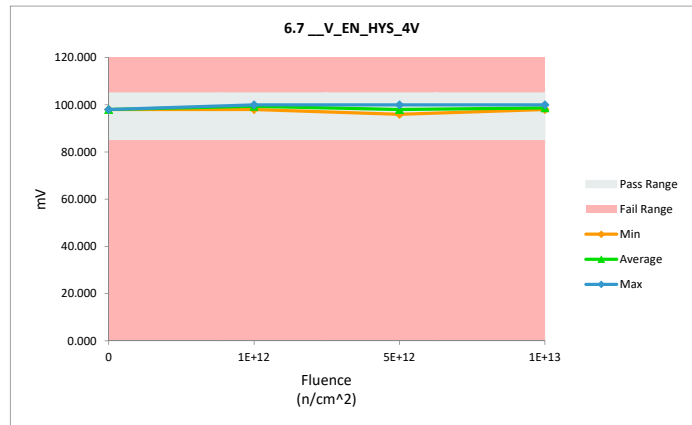


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.7 __V_EN_HYS_4V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		105	105	
Min Limit		85	85	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	98.000	98.000	0.000
1E+12	243	100.000	100.000	0.000
1E+12	244	100.000	98.000	-2.000
1E+12	247	100.000	100.000	0.000
5E+12	251	96.000	96.000	0.000
5E+12	252	100.000	100.000	0.000
5E+12	259	100.000	98.000	-2.000
1E+13	261	100.000	98.000	-2.000
1E+13	263	100.000	100.000	0.000
1E+13	264	100.000	98.000	-2.000
Max		100.000	100.000	0.000
Average		99.400	98.600	-0.800
Min		96.000	96.000	-2.000
Std Dev		1.350	1.350	1.033

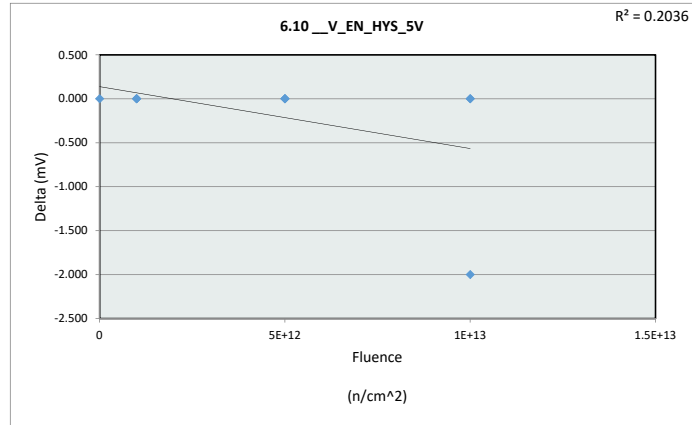


6.7 __V_EN_HYS_4V				
Test Site				
Tester				
Test Number				
Max Limit		105	mV	
Min Limit		85	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	98.000	98.000	96.000	98.000
Average	98.000	99.333	98.000	98.667
Max	98.000	100.000	100.000	100.000
UL	105.000	105.000	105.000	105.000

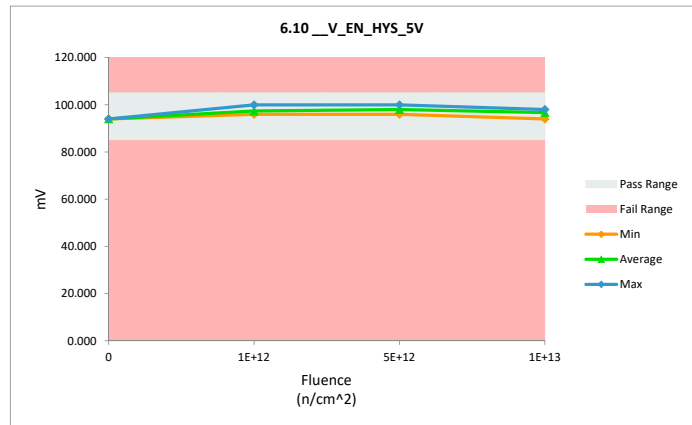


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.10 __V_EN_HYS_5V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		105	105	
Min Limit		85	85	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	94.000	94.000	0.000
1E+12	243	96.000	96.000	0.000
1E+12	244	100.000	100.000	0.000
1E+12	247	96.000	96.000	0.000
5E+12	251	96.000	96.000	0.000
5E+12	252	100.000	100.000	0.000
5E+12	259	98.000	98.000	0.000
1E+13	261	98.000	98.000	0.000
1E+13	263	100.000	98.000	-2.000
1E+13	264	94.000	94.000	0.000
Max		100.000	100.000	0.000
Average		97.200	97.000	-0.200
Min		94.000	94.000	-2.000
Std Dev		2.348	2.160	0.632

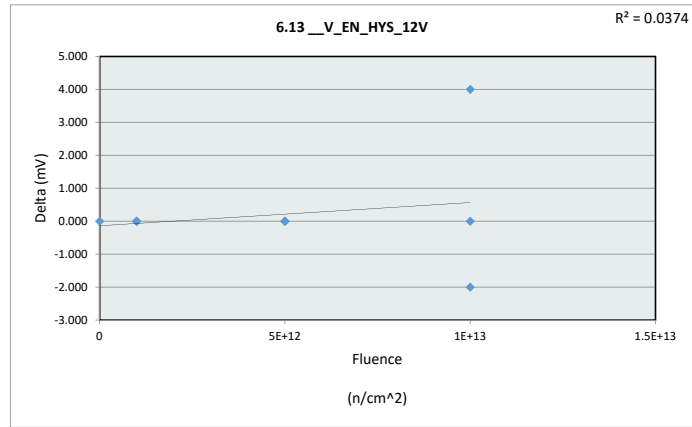


6.10 __V_EN_HYS_5V				
Test Site				
Tester				
Test Number				
Max Limit		105	mV	
Min Limit		85	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	94.000	96.000	96.000	94.000
Average	94.000	97.333	98.000	96.667
Max	94.000	100.000	100.000	98.000
UL	105.000	105.000	105.000	105.000

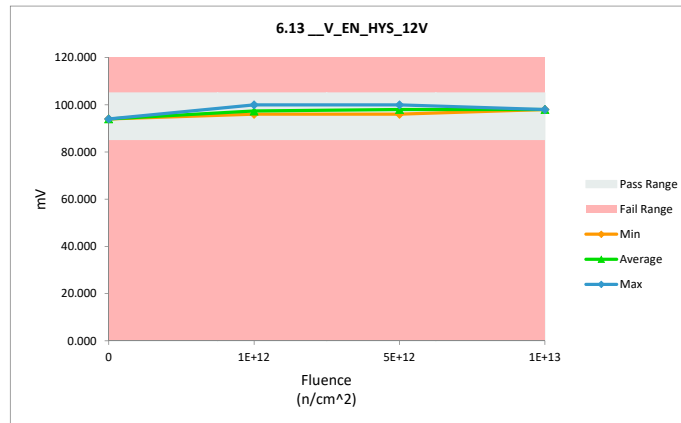


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.13 __V_EN_HYS_12V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		105	105	
Min Limit		85	85	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	94.000	94.000	0.000
1E+12	243	96.000	96.000	0.000
1E+12	244	100.000	100.000	0.000
1E+12	247	96.000	96.000	0.000
5E+12	251	96.000	96.000	0.000
5E+12	252	100.000	100.000	0.000
5E+12	259	98.000	98.000	0.000
1E+13	261	98.000	98.000	0.000
1E+13	263	100.000	98.000	-2.000
1E+13	264	94.000	98.000	4.000
Max		100.000	100.000	4.000
Average		97.200	97.400	0.200
Min		94.000	94.000	-2.000
Std Dev		2.348	1.897	1.476



6.13 __V_EN_HYS_12V				
Test Site				
Tester				
Test Number				
Max Limit		105	mV	
Min Limit		85	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	94.000	96.000	96.000	98.000
Average	94.000	97.333	98.000	98.000
Max	94.000	100.000	100.000	98.000
UL	105.000	105.000	105.000	105.000

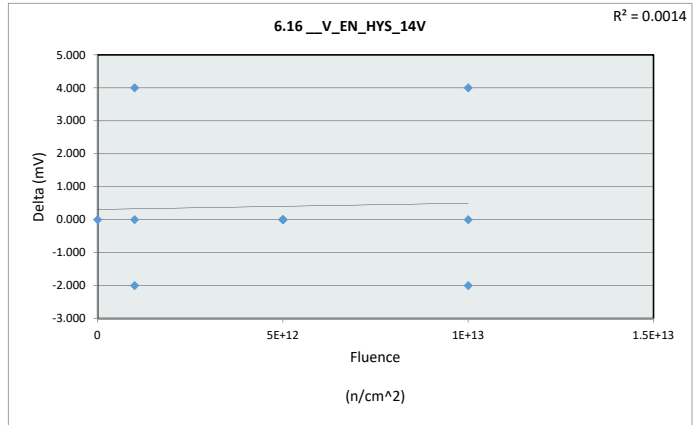


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.16 __V_EN_HYS_14V

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	105	105
Min Limit	85	85

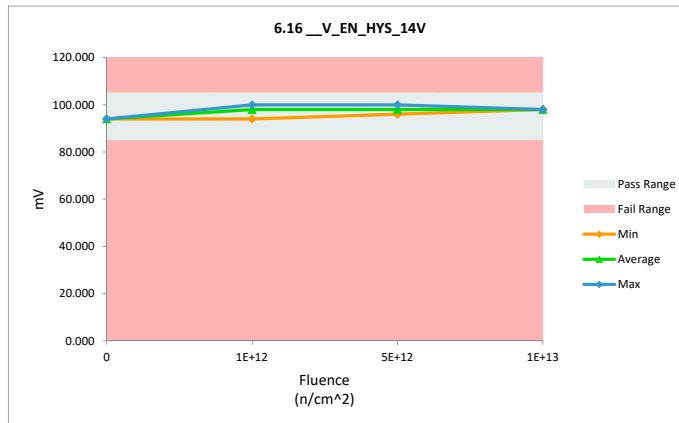
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	94.000	94.000	0.000
1E+12	243	96.000	94.000	-2.000
1E+12	244	100.000	100.000	0.000
1E+12	247	96.000	100.000	4.000
5E+12	251	96.000	96.000	0.000
5E+12	252	100.000	100.000	0.000
5E+12	259	98.000	98.000	0.000
1E+13	261	98.000	98.000	0.000
1E+13	263	100.000	98.000	-2.000
1E+13	264	94.000	98.000	4.000
Max		100.000	100.000	4.000
Average		97.200	97.600	0.400
Min		94.000	94.000	-2.000
Std Dev		2.348	2.271	2.066



6.16 __V_EN_HYS_14V

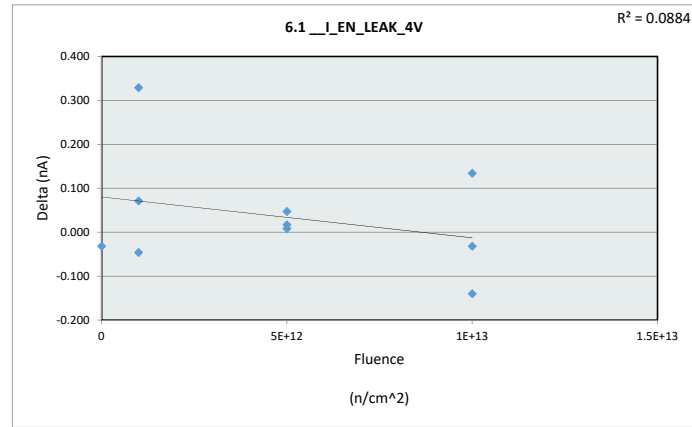
Test Site		
Tester		
Test Number		
Max Limit	105	mV
Min Limit	85	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	94.000	94.000	96.000	98.000
Average	94.000	98.000	98.000	98.000
Max	94.000	100.000	100.000	98.000
UL	105.000	105.000	105.000	105.000

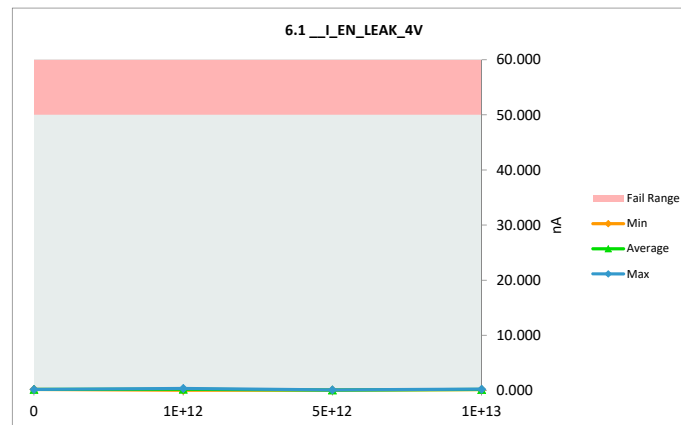


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.1 __I_EN_LEAK_4V				
Test Site				
Tester				
Test Number				
Unit		nA	nA	
Max Limit		50	50	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.195	0.163	-0.032
1E+12	243	0.068	0.022	-0.046
1E+12	244	0.020	0.349	0.329
1E+12	247	0.127	0.198	0.071
5E+12	251	0.068	0.085	0.017
5E+12	252	0.029	0.037	0.008
5E+12	259	0.029	0.076	0.047
1E+13	261	0.156	0.124	-0.032
1E+13	263	0.264	0.124	-0.140
1E+13	264	0.078	0.212	0.134
Max		0.264	0.349	0.329
Average		0.103	0.139	0.036
Min		0.020	0.022	-0.140
Std Dev		0.081	0.097	0.127

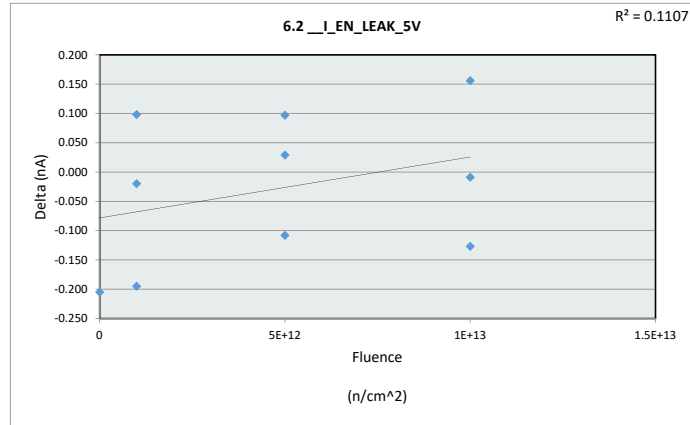


6.1 __I_EN_LEAK_4V				
Test Site				
Tester				
Test Number				
Max Limit		50	nA	
Min Limit			nA	
Fluence (n/cm ²)	LL	Min	Average	Max
0	0.163	0.022	0.037	0.124
1E+12	0.163	0.190	0.066	0.153
5E+12	0.163	0.349	0.085	0.212
1E+13	50.000	50.000	50.000	50.000

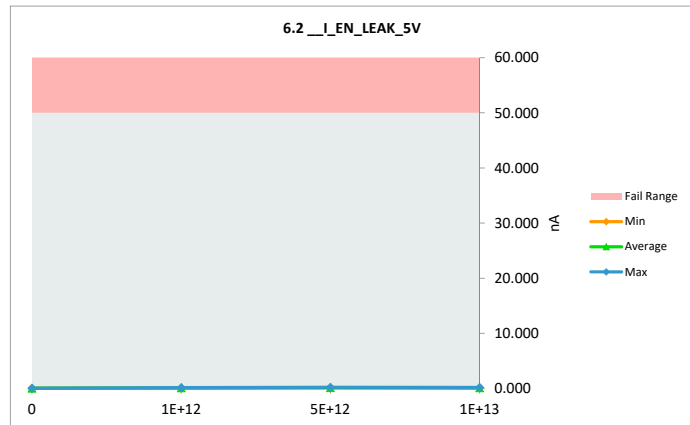


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.2 __I_EN_LEAK_5V				
Test Site				
Tester				
Test Number				
Unit		nA	nA	
Max Limit		50	50	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.220	0.015	-0.205
1E+12	243	0.044	0.142	0.098
1E+12	244	0.249	0.054	-0.195
1E+12	247	0.044	0.024	-0.020
5E+12	251	0.044	0.073	0.029
5E+12	252	0.093	0.190	0.097
5E+12	259	0.210	0.102	-0.108
1E+13	261	0.005	0.161	0.156
1E+13	263	0.190	0.063	-0.127
1E+13	264	0.063	0.054	-0.009
Max		0.249	0.190	0.156
Average		0.116	0.088	-0.028
Min		0.005	0.015	-0.205
Std Dev		0.091	0.059	0.127



6.2 __I_EN_LEAK_5V				
Test Site				
Tester				
Test Number				
Max Limit		50	nA	
Min Limit			nA	
Fluence (n/cm ²)	LL	Min	Average	Max
0	0.015	0.015	0.015	0.015
1E+12	0.024	0.073	0.142	0.190
5E+12	0.073	0.122	0.190	0.161
1E+13	0.054	0.093	0.161	0.161
UL	50.000	50.000	50.000	50.000

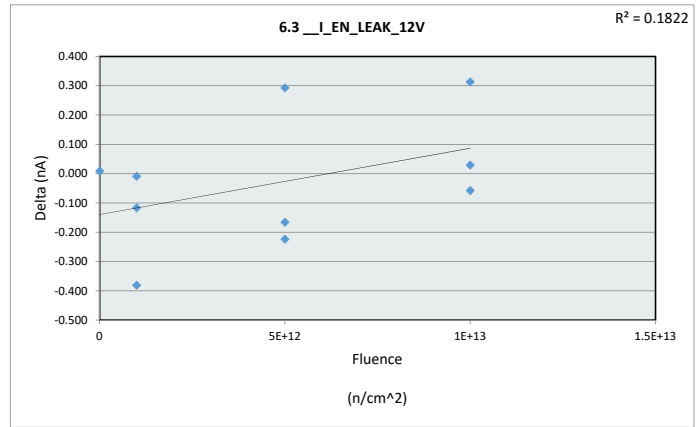


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.3_I_EN_LEAK_12V

Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	50	50
Min Limit		

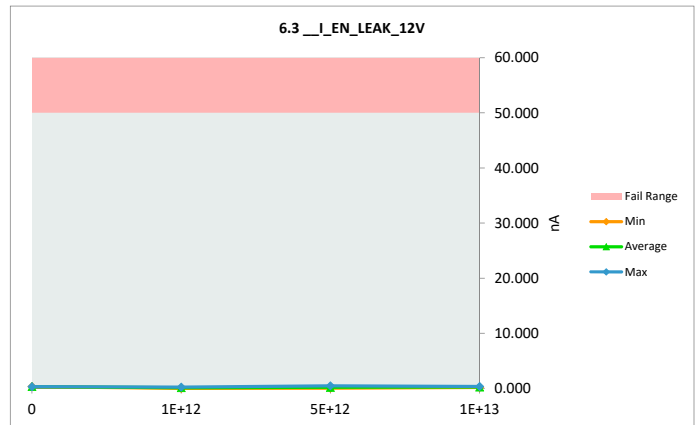
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.298	0.307	0.009
1E+12	243	0.386	0.005	-0.381
1E+12	244	0.229	0.220	-0.009
1E+12	247	0.259	0.142	-0.117
5E+12	251	0.239	0.015	-0.224
5E+12	252	0.210	0.044	-0.166
5E+12	259	0.171	0.464	0.293
1E+13	261	0.229	0.171	-0.058
1E+13	263	0.171	0.200	0.029
1E+13	264	0.034	0.347	0.313
Max		0.386	0.464	0.313
Average		0.223	0.192	-0.031
Min		0.034	0.005	-0.381
Std Dev		0.091	0.150	0.215



6.3_I_EN_LEAK_12V

Test Site		
Tester		
Test Number		
Max Limit	50	nA
Min Limit		nA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	0.307	0.005	0.015	0.171
Average	0.307	0.122	0.174	0.239
Max	0.307	0.220	0.464	0.347
UL	50.000	50.000	50.000	50.000

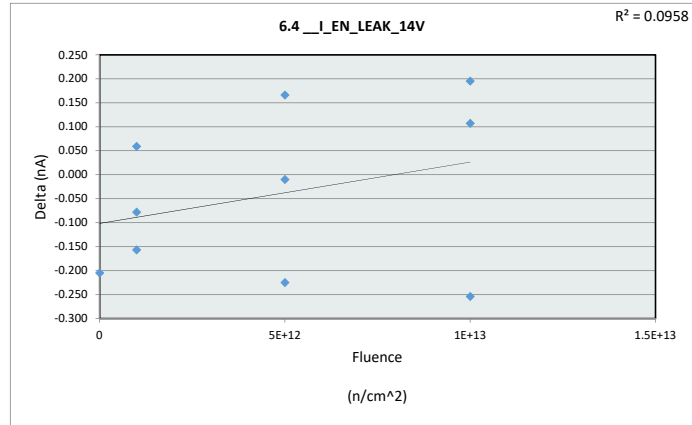


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.4_I_EN_LEAK_14V

Test Site		
Tester		
Test Number		
Unit	nA	nA
Max Limit	50	50
Min Limit		

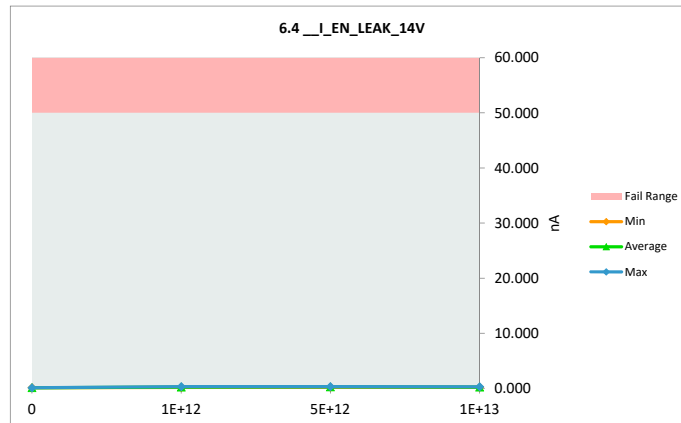
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.307	0.102	-0.205
1E+12	243	0.278	0.200	-0.078
1E+12	244	0.112	0.171	0.059
1E+12	247	0.464	0.307	-0.157
5E+12	251	0.327	0.317	-0.010
5E+12	252	0.151	0.317	0.166
5E+12	259	0.415	0.190	-0.225
1E+13	261	0.532	0.278	-0.254
1E+13	263	0.015	0.210	0.195
1E+13	264	0.093	0.200	0.107
Max		0.532	0.317	0.195
Average		0.269	0.229	-0.040
Min		0.015	0.102	-0.254
Std Dev		0.172	0.072	0.167



6.4_I_EN_LEAK_14V

Test Site		
Tester		
Test Number		
Max Limit	50	nA
Min Limit		nA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	0.102	0.171	0.190	0.200
Average	0.102	0.226	0.275	0.229
Max	0.102	0.307	0.317	0.278
UL	50.000	50.000	50.000	50.000

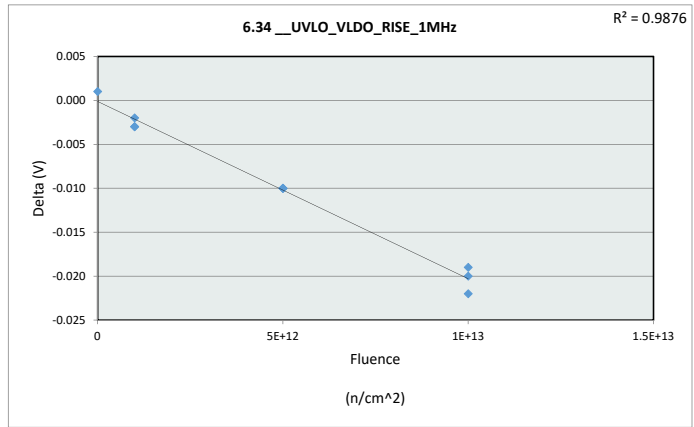


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.34 UVLO_VLDO_RISE_1MHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.66	3.66
Min Limit	3.44	3.44

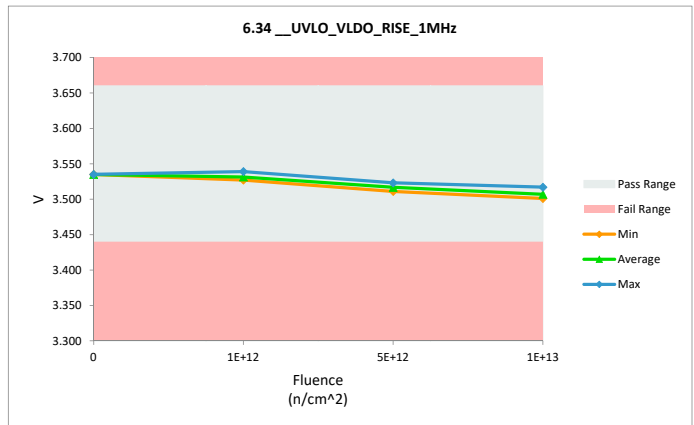
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.534	3.535	0.001
1E+12	243	3.530	3.527	-0.003
1E+12	244	3.541	3.539	-0.002
1E+12	247	3.531	3.528	-0.003
5E+12	251	3.521	3.511	-0.010
5E+12	252	3.526	3.516	-0.010
5E+12	259	3.533	3.523	-0.010
1E+13	261	3.536	3.517	-0.019
1E+13	263	3.523	3.503	-0.020
1E+13	264	3.523	3.501	-0.022
Max		3.541	3.539	0.001
Average		3.530	3.520	-0.010
Min		3.521	3.501	-0.022
Std Dev		0.006	0.013	0.008



6.34 UVLO_VLDO_RISE_1MHz

Test Site		
Tester		
Test Number		
Max Limit	3.66	V
Min Limit	3.44	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.535	3.527	3.511	3.501
Average	3.535	3.531	3.517	3.507
Max	3.535	3.539	3.523	3.517
UL	3.660	3.660	3.660	3.660

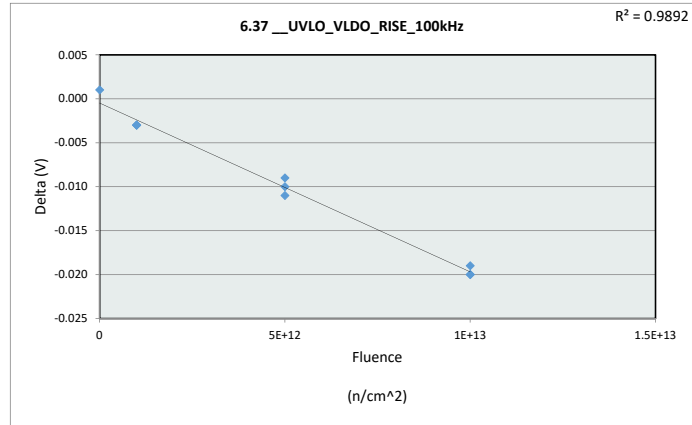


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.37 __UVLO_VLDO_RISE_100kHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.66	3.66
Min Limit	3.44	3.44

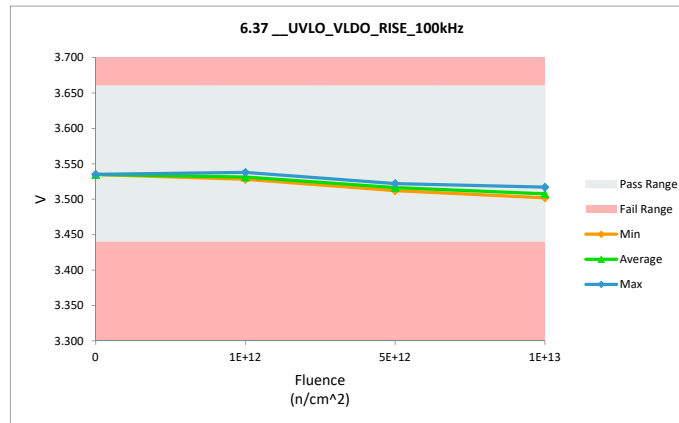
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.534	3.535	0.001
1E+12	243	3.531	3.528	-0.003
1E+12	244	3.541	3.538	-0.003
1E+12	247	3.531	3.528	-0.003
5E+12	251	3.522	3.512	-0.010
5E+12	252	3.526	3.515	-0.011
5E+12	259	3.531	3.522	-0.009
1E+13	261	3.537	3.517	-0.020
1E+13	263	3.523	3.504	-0.019
1E+13	264	3.522	3.502	-0.020
Max		3.541	3.538	0.001
Average		3.530	3.520	-0.010
Min		3.522	3.502	-0.020
Std Dev		0.007	0.012	0.008



6.37 __UVLO_VLDO_RISE_100

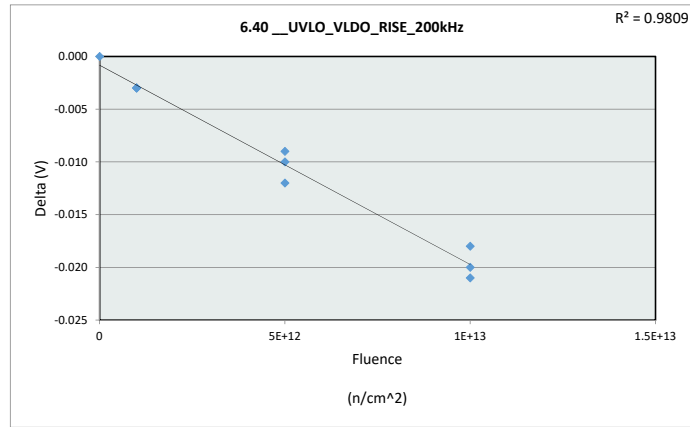
Test Site		
Tester		
Test Number		
Max Limit	3.66	V
Min Limit	3.44	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.535	3.528	3.512	3.502
Average	3.535	3.531	3.516	3.508
Max	3.535	3.538	3.522	3.517
UL	3.660	3.660	3.660	3.660

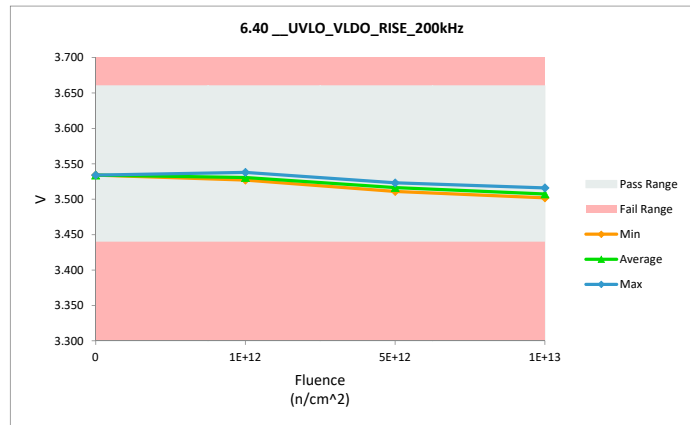


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.40 UVLO_VLDO_RISE_200kHz				
Fluence				
(n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.534	3.534	0.000
1E+12	243	3.530	3.527	-0.003
1E+12	244	3.541	3.538	-0.003
1E+12	247	3.530	3.527	-0.003
5E+12	251	3.521	3.511	-0.010
5E+12	252	3.527	3.515	-0.012
5E+12	259	3.532	3.523	-0.009
1E+13	261	3.536	3.516	-0.020
1E+13	263	3.522	3.504	-0.018
1E+13	264	3.523	3.502	-0.021
	Max	3.541	3.538	0.000
	Average	3.530	3.520	-0.010
	Min	3.521	3.502	-0.021
	Std Dev	0.006	0.012	0.008



6.40 UVLO_VLDO_RISE_200				
Test Site				
Tester				
Test Number				
Max Limit	3.66	V		
Min Limit	3.44	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.534	3.527	3.511	3.502
Average	3.534	3.531	3.516	3.507
Max	3.534	3.538	3.523	3.516
UL	3.660	3.660	3.660	3.660

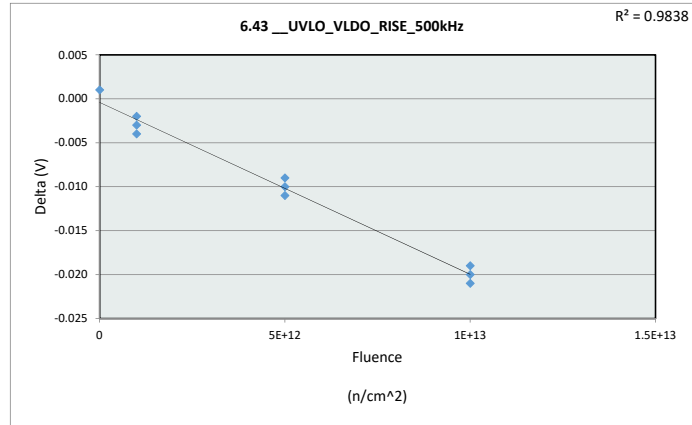


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.43 UVLO_VLDO_RISE_500kHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.66	3.66
Min Limit	3.44	3.44

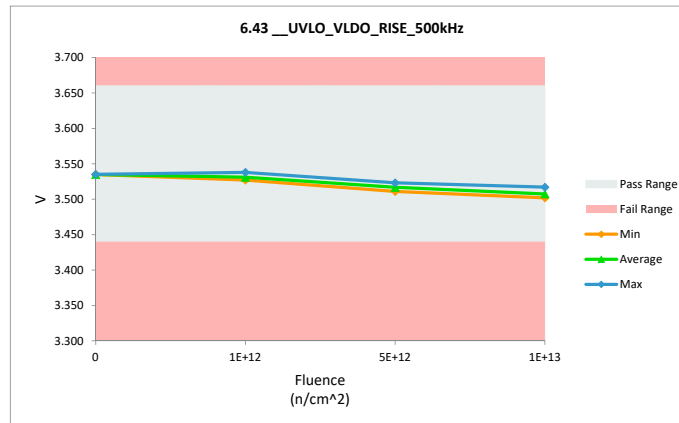
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.534	3.535	0.001
1E+12	243	3.530	3.528	-0.002
1E+12	244	3.541	3.538	-0.003
1E+12	247	3.531	3.527	-0.004
5E+12	251	3.521	3.511	-0.010
5E+12	252	3.527	3.516	-0.011
5E+12	259	3.532	3.523	-0.009
1E+13	261	3.536	3.517	-0.019
1E+13	263	3.523	3.503	-0.020
1E+13	264	3.523	3.502	-0.021
Max		3.541	3.538	0.001
Average		3.530	3.520	-0.010
Min		3.521	3.502	-0.021
Std Dev		0.006	0.012	0.008



6.43 UVLO_VLDO_RISE_500

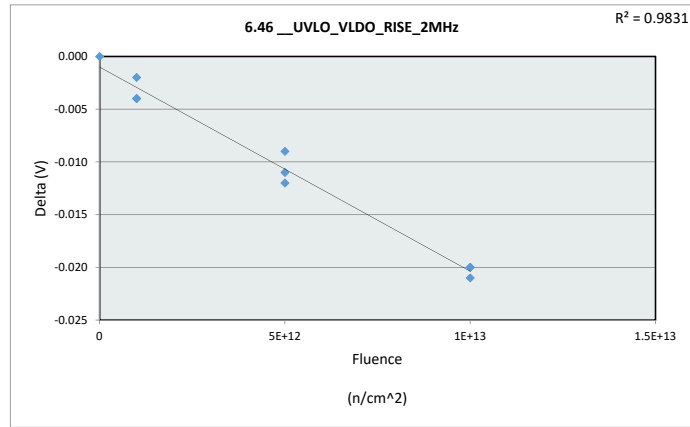
Test Site		
Tester		
Test Number		
Max Limit	3.66	V
Min Limit	3.44	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.535	3.527	3.511	3.502
Average	3.535	3.531	3.517	3.507
Max	3.535	3.538	3.523	3.517
UL	3.660	3.660	3.660	3.660

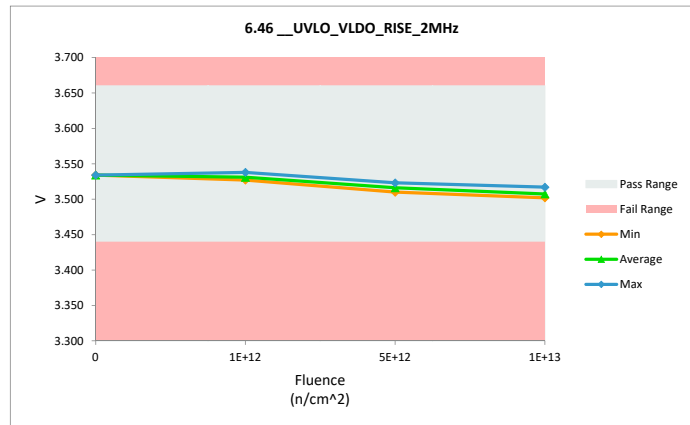


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.46 UVLO_VLDO_RISE_2MHz				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	3.66	3.66		
Min Limit	3.44	3.44		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.534	3.534	0.000
1E+12	243	3.531	3.527	-0.004
1E+12	244	3.542	3.538	-0.004
1E+12	247	3.530	3.528	-0.002
5E+12	251	3.521	3.510	-0.011
5E+12	252	3.527	3.515	-0.012
5E+12	259	3.532	3.523	-0.009
1E+13	261	3.537	3.517	-0.020
1E+13	263	3.523	3.503	-0.020
1E+13	264	3.523	3.502	-0.021
Max		3.542	3.538	0.000
Average		3.530	3.520	-0.010
Min		3.521	3.502	-0.021
Std Dev		0.007	0.012	0.008



6.46 UVLO_VLDO_RISE_2MHz				
Test Site				
Tester				
Test Number				
Max Limit	3.66	V		
Min Limit	3.44	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.534	3.527	3.510	3.502
Average	3.534	3.531	3.516	3.507
Max	3.534	3.538	3.523	3.517
UL	3.660	3.660	3.660	3.660

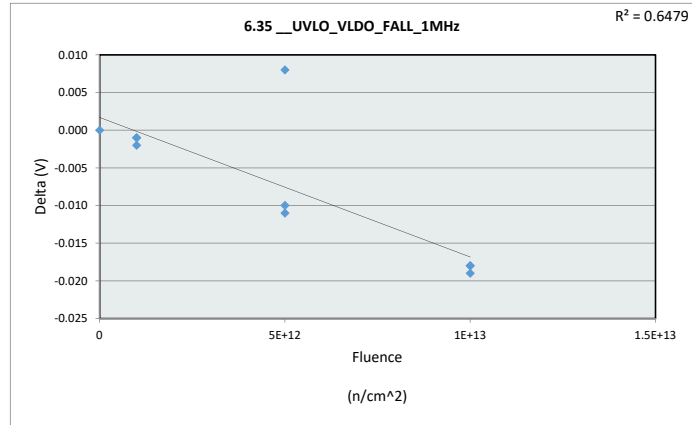


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.35 UVLO_VLDO_FALL_1MHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.51	3.51
Min Limit	3.29	3.29

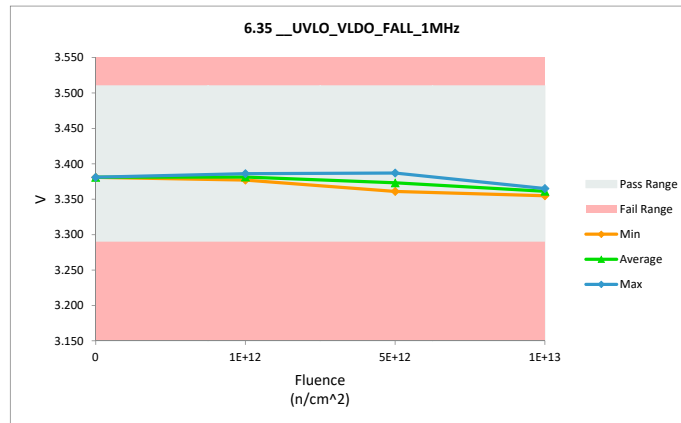
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.381	3.381	0.000
1E+12	243	3.378	3.377	-0.001
1E+12	244	3.387	3.386	-0.001
1E+12	247	3.383	3.381	-0.002
5E+12	251	3.371	3.361	-0.010
5E+12	252	3.382	3.371	-0.011
5E+12	259	3.379	3.387	0.008
1E+13	261	3.384	3.365	-0.019
1E+13	263	3.382	3.364	-0.018
1E+13	264	3.373	3.355	-0.018
Max		3.387	3.387	0.008
Average		3.380	3.373	-0.007
Min		3.371	3.355	-0.019
Std Dev		0.005	0.011	0.009



6.35 UVLO_VLDO_FALL_1MHz

Test Site		
Tester		
Test Number		
Max Limit	3.51	V
Min Limit	3.29	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.381	3.377	3.361	3.355
Average	3.381	3.381	3.373	3.361
Max	3.381	3.386	3.387	3.365
UL	3.510	3.510	3.510	3.510

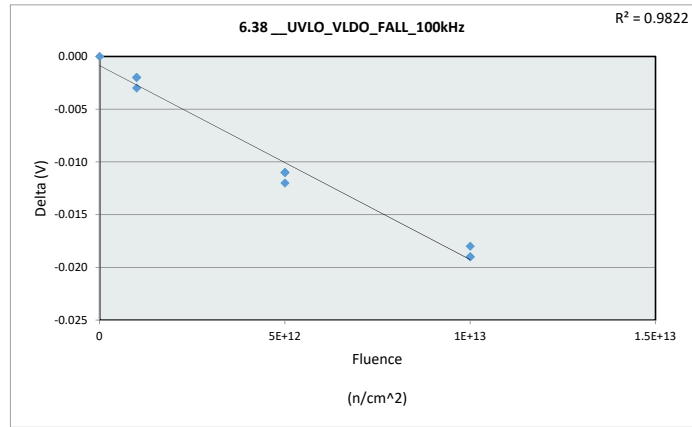


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.38 UVLO_VLDO_FALL_100kHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.51	3.51
Min Limit	3.29	3.29

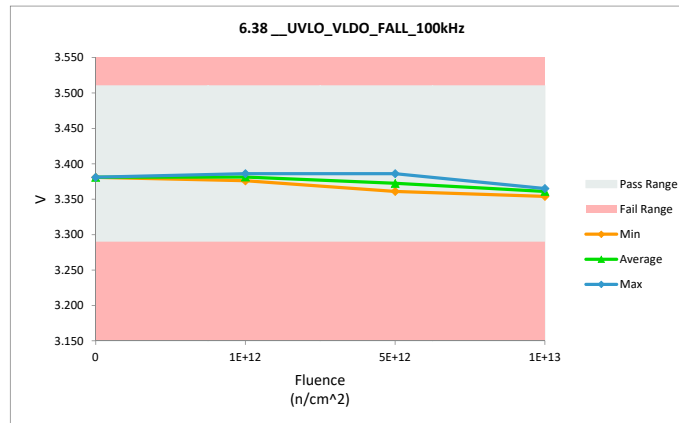
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.381	3.381	0.000
1E+12	243	3.378	3.376	-0.002
1E+12	244	3.389	3.386	-0.003
1E+12	247	3.384	3.382	-0.002
5E+12	251	3.372	3.361	-0.011
5E+12	252	3.382	3.370	-0.012
5E+12	259	3.397	3.386	-0.011
1E+13	261	3.384	3.365	-0.019
1E+13	263	3.382	3.364	-0.018
1E+13	264	3.373	3.354	-0.019
Max		3.397	3.386	0.000
Average		3.382	3.372	-0.010
Min		3.372	3.354	-0.019
Std Dev		0.007	0.011	0.008



6.38 UVLO_VLDO_FALL_100

Test Site		
Tester		
Test Number		
Max Limit	3.51	V
Min Limit	3.29	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.381	3.376	3.361	3.354
Average	3.381	3.381	3.372	3.361
Max	3.381	3.386	3.386	3.365
UL	3.510	3.510	3.510	3.510

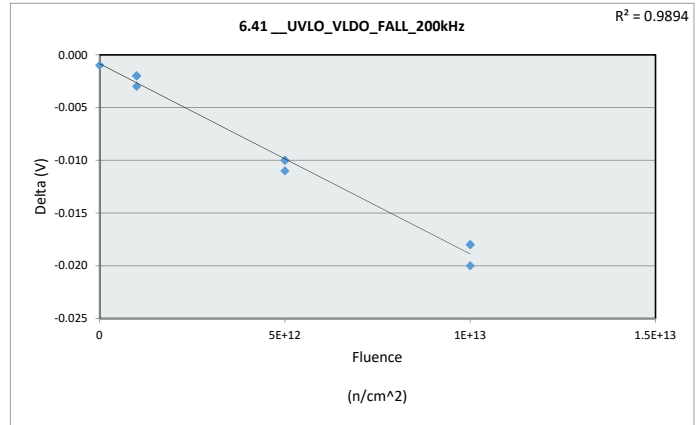


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.41 UVLO_VLDO_FALL_200kHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.51	3.51
Min Limit	3.29	3.29

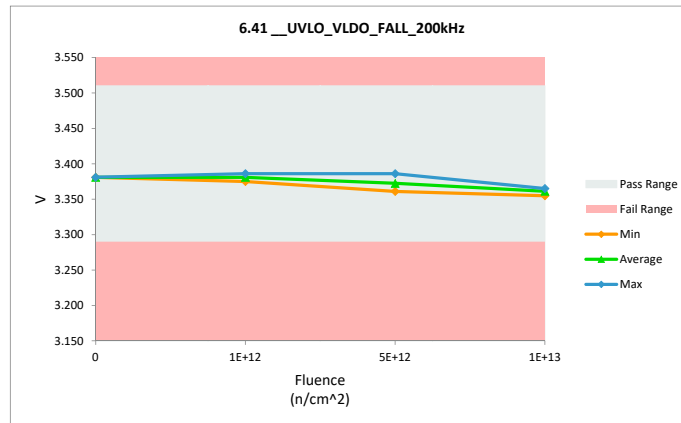
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.382	3.381	-0.001
1E+12	243	3.378	3.375	-0.003
1E+12	244	3.388	3.386	-0.002
1E+12	247	3.384	3.382	-0.002
5E+12	251	3.371	3.361	-0.010
5E+12	252	3.381	3.370	-0.011
5E+12	259	3.396	3.386	-0.010
1E+13	261	3.384	3.364	-0.020
1E+13	263	3.383	3.365	-0.018
1E+13	264	3.373	3.355	-0.018
Max		3.396	3.386	-0.001
Average		3.382	3.372	-0.010
Min		3.371	3.355	-0.020
Std Dev		0.007	0.011	0.007



6.41 UVLO_VLDO_FALL_200

Test Site		
Tester		
Test Number		
Max Limit	3.51	V
Min Limit	3.29	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.381	3.375	3.361	3.355
Average	3.381	3.381	3.372	3.361
Max	3.381	3.386	3.386	3.365
UL	3.510	3.510	3.510	3.510

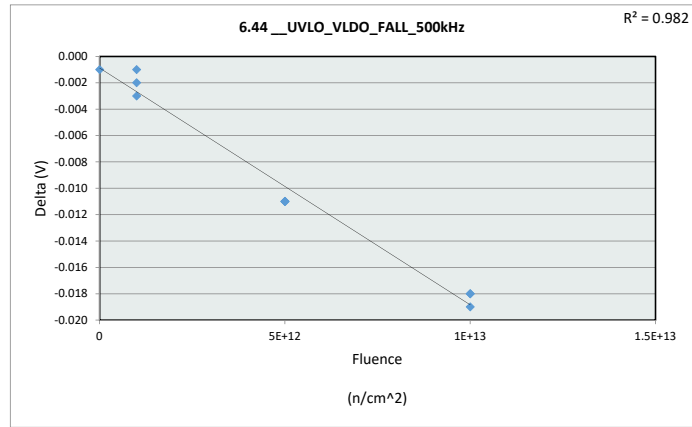


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.44 UVLO_VLDO_FALL_500kHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.51	3.51
Min Limit	3.29	3.29

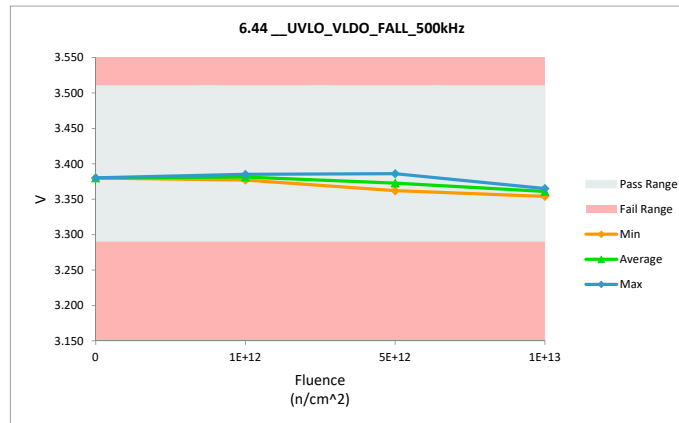
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.381	3.380	-0.001
1E+12	243	3.378	3.377	-0.001
1E+12	244	3.388	3.385	-0.003
1E+12	247	3.384	3.382	-0.002
5E+12	251	3.373	3.362	-0.011
5E+12	252	3.381	3.370	-0.011
5E+12	259	3.397	3.386	-0.011
1E+13	261	3.383	3.365	-0.018
1E+13	263	3.382	3.364	-0.018
1E+13	264	3.373	3.354	-0.019
Max		3.397	3.386	-0.001
Average		3.382	3.373	-0.009
Min		3.373	3.354	-0.019
Std Dev		0.007	0.011	0.007



6.44 UVLO_VLDO_FALL_500

Test Site		
Tester		
Test Number		
Max Limit	3.51	V
Min Limit	3.29	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.380	3.377	3.362	3.354
Average	3.380	3.381	3.373	3.361
Max	3.380	3.385	3.386	3.365
UL	3.510	3.510	3.510	3.510

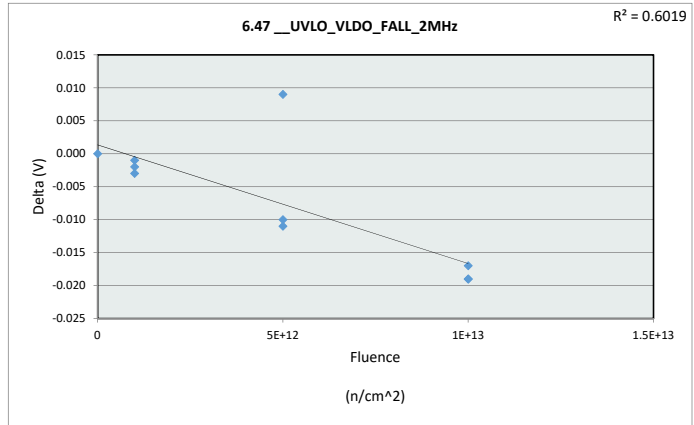


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.47 __UVLO_VLDO_FALL_2MHz

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	3.51	3.51
Min Limit	3.29	3.29

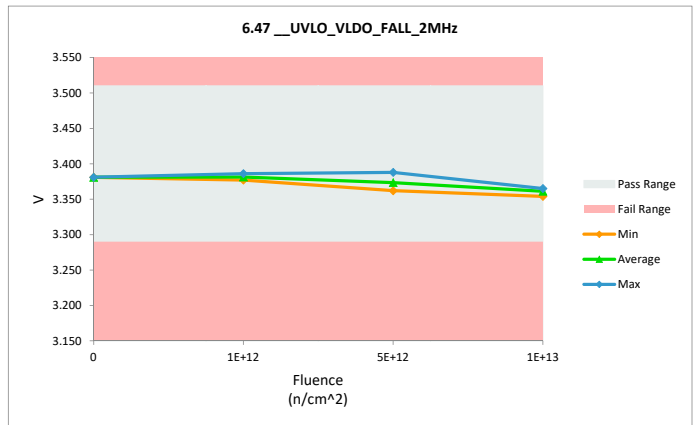
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	3.381	3.381	0.000
1E+12	243	3.378	3.377	-0.001
1E+12	244	3.388	3.386	-0.002
1E+12	247	3.384	3.381	-0.003
5E+12	251	3.372	3.362	-0.010
5E+12	252	3.381	3.370	-0.011
5E+12	259	3.379	3.388	0.009
1E+13	261	3.384	3.365	-0.019
1E+13	263	3.382	3.365	-0.017
1E+13	264	3.373	3.354	-0.019
Max		3.388	3.388	0.009
Average		3.380	3.373	-0.007
Min		3.372	3.354	-0.019
Std Dev		0.005	0.011	0.009



6.47 __UVLO_VLDO_FALL_2MHz

Test Site		
Tester		
Test Number		
Max Limit	3.51	V
Min Limit	3.29	V

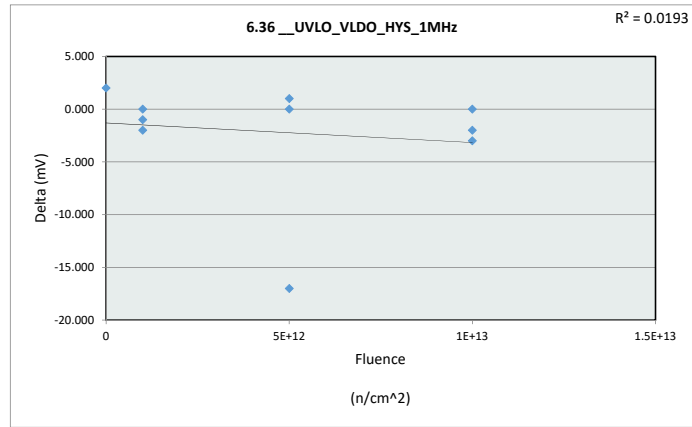
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.381	3.377	3.362	3.354
Average	3.381	3.381	3.373	3.361
Max	3.381	3.386	3.388	3.365
UL	3.510	3.510	3.510	3.510



Neutron Displacement Damage (NDD) Report TPS7H5004-SP

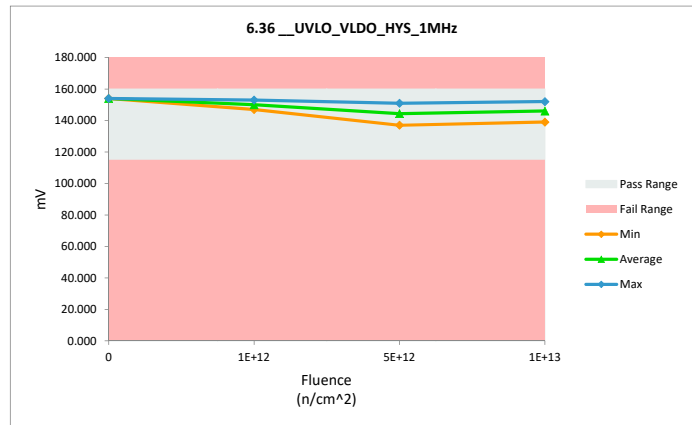
6.36 UVLO_VLDO_HYS_1MHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	152.000	154.000	2.000
1E+12	243	152.000	150.000	-2.000
1E+12	244	153.000	153.000	0.000
1E+12	247	148.000	147.000	-1.000
5E+12	251	150.000	151.000	1.000
5E+12	252	145.000	145.000	0.000
5E+12	259	154.000	137.000	-17.000
1E+13	261	152.000	152.000	0.000
1E+13	263	141.000	139.000	-2.000
1E+13	264	150.000	147.000	-3.000
Max		154.000	154.000	2.000
Average		149.700	147.500	-2.200
Min		141.000	137.000	-17.000
Std Dev		4.029	5.778	5.412



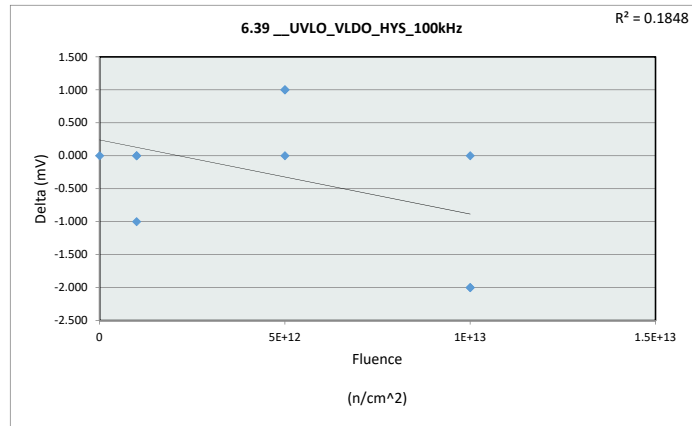
6.36 UVLO_VLDO_HYS_1MH

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	154.000	147.000	137.000	139.000
Average	154.000	150.000	144.333	146.000
Max	154.000	153.000	151.000	152.000
UL	160.000	160.000	160.000	160.000

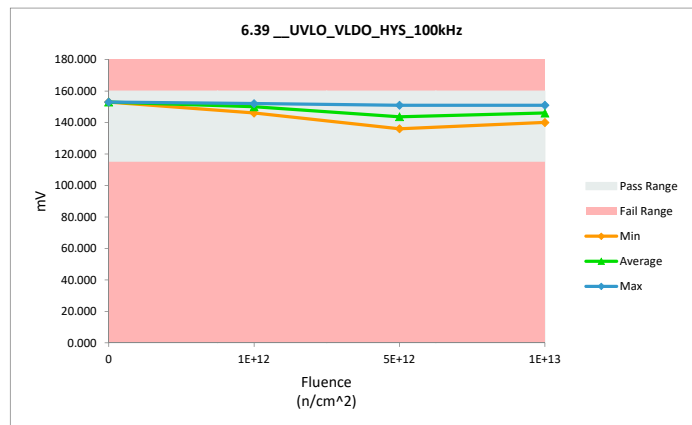


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.39 UVLO_VLDO_HYS_100kHz				
Test Site				
Tester				
Test Number				
Unit				
Max Limit				
Min Limit				
Fluence	Serial #	PRE	POST	Delta
0	266	153.000	153.000	0.000
1E+12	243	152.000	152.000	0.000
1E+12	244	152.000	152.000	0.000
1E+12	247	147.000	146.000	-1.000
5E+12	251	150.000	151.000	1.000
5E+12	252	144.000	144.000	0.000
5E+12	259	135.000	136.000	1.000
1E+13	261	153.000	151.000	-2.000
1E+13	263	140.000	140.000	0.000
1E+13	264	149.000	147.000	-2.000
Max		153.000	153.000	1.000
Average		147.500	147.200	-0.300
Min		135.000	136.000	-2.000
Std Dev		6.096	5.750	1.059



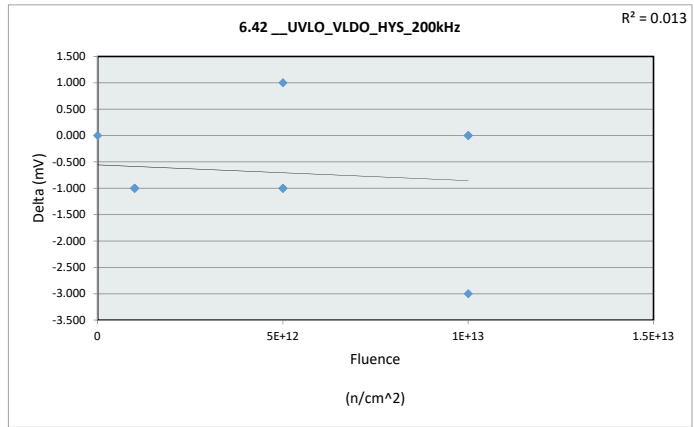
6.39 UVLO_VLDO_HYS_100kHz				
Test Site				
Tester				
Test Number				
Max Limit				
Min Limit				
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	153.000	146.000	136.000	140.000
Average	153.000	150.000	143.667	146.000
Max	153.000	152.000	151.000	151.000
UL	160.000	160.000	160.000	160.000



Neutron Displacement Damage (NDD) Report TPS7H5004-SP

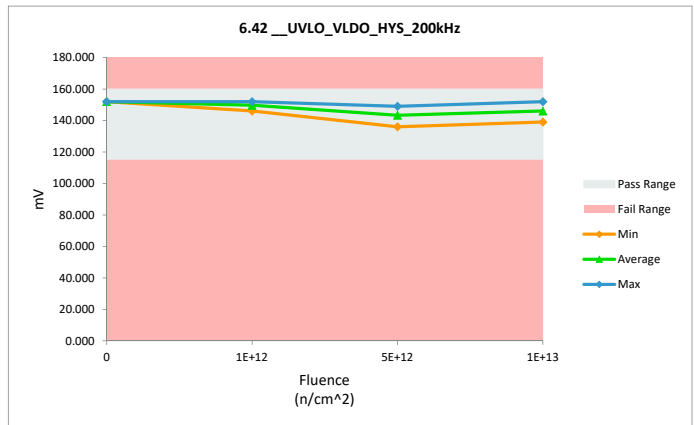
6.42 UVLO_VLDO_HYS_200kHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	152.000	152.000	0.000
1E+12	243	152.000	151.000	-1.000
1E+12	244	153.000	152.000	-1.000
1E+12	247	147.000	146.000	-1.000
5E+12	251	150.000	149.000	-1.000
5E+12	252	146.000	145.000	-1.000
5E+12	259	135.000	136.000	1.000
1E+13	261	152.000	152.000	0.000
1E+13	263	139.000	139.000	0.000
1E+13	264	150.000	147.000	-3.000
Max		153.000	152.000	1.000
Average		147.600	146.900	-0.700
Min		135.000	136.000	-3.000
Std Dev		6.096	5.626	1.059



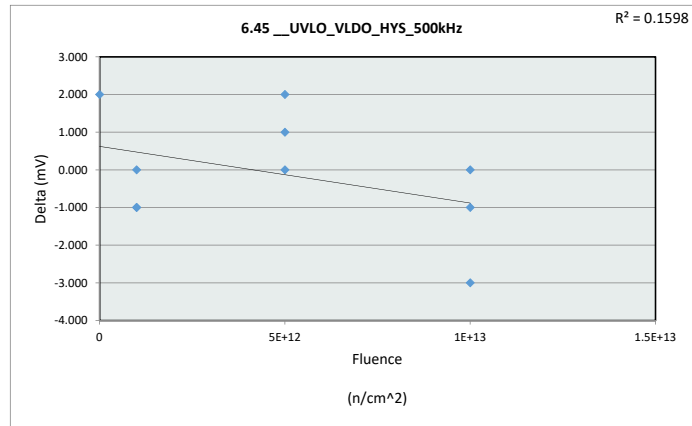
6.42 UVLO_VLDO_HYS_200kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	152.000	146.000	136.000	139.000
Average	152.000	149.667	143.333	146.000
Max	152.000	152.000	149.000	152.000
UL	160.000	160.000	160.000	160.000

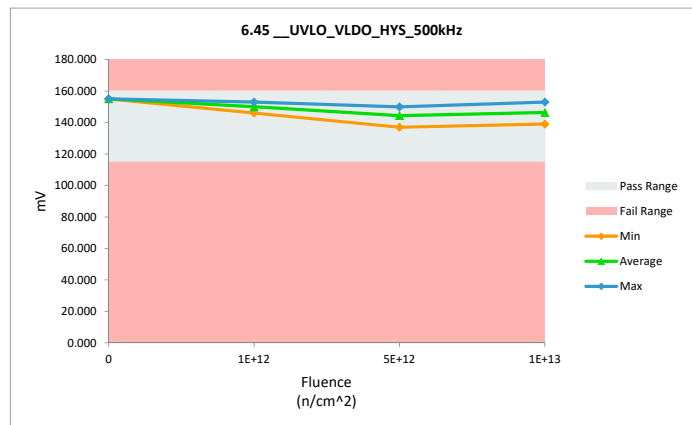


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

6.45 UVLO_VLDO_HYS_500kHz				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		160	160	
Min Limit		115	115	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	153.000	155.000	2.000
1E+12	243	152.000	151.000	-1.000
1E+12	244	153.000	153.000	0.000
1E+12	247	147.000	146.000	-1.000
5E+12	251	149.000	150.000	1.000
5E+12	252	146.000	146.000	0.000
5E+12	259	135.000	137.000	2.000
1E+13	261	153.000	153.000	0.000
1E+13	263	140.000	139.000	-1.000
1E+13	264	150.000	147.000	-3.000
Max		153.000	155.000	2.000
Average		147.800	147.700	-0.100
Min		135.000	137.000	-3.000
Std Dev		6.088	5.982	1.524



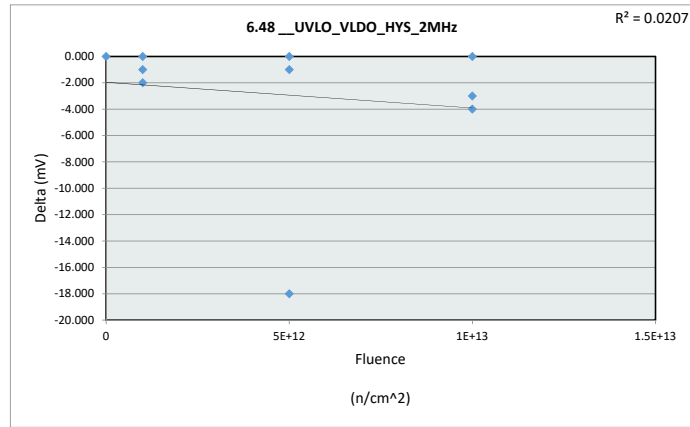
6.45 UVLO_VLDO_HYS_500kHz				
Test Site				
Tester				
Test Number				
Max Limit	160	mV		
Min Limit	115	mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	155.000	146.000	137.000	139.000
Average	155.000	150.000	144.333	146.333
Max	155.000	153.000	150.000	153.000
UL	160.000	160.000	160.000	160.000



Neutron Displacement Damage (NDD) Report TPS7H5004-SP

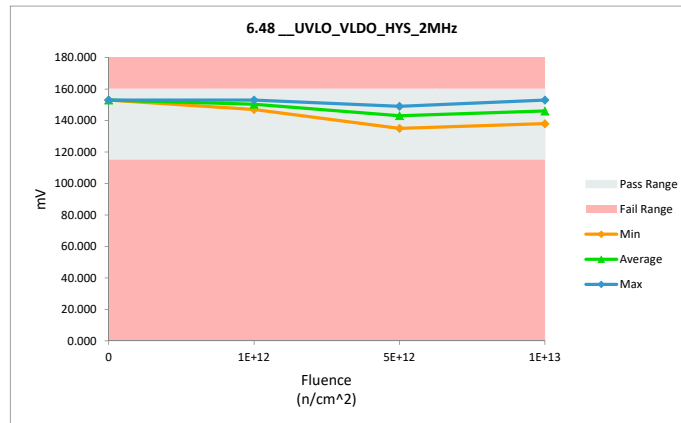
6.48 UVLO_VLDO_HYS_2MHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	153.000	153.000	0.000
1E+12	243	153.000	151.000	-2.000
1E+12	244	154.000	153.000	-1.000
1E+12	247	147.000	147.000	0.000
5E+12	251	149.000	149.000	0.000
5E+12	252	146.000	145.000	-1.000
5E+12	259	153.000	135.000	-18.000
1E+13	261	153.000	153.000	0.000
1E+13	263	141.000	138.000	-3.000
1E+13	264	151.000	147.000	-4.000
Max		154.000	153.000	0.000
Average		150.000	147.100	-2.900
Min		141.000	135.000	-18.000
Std Dev		4.216	6.297	5.486



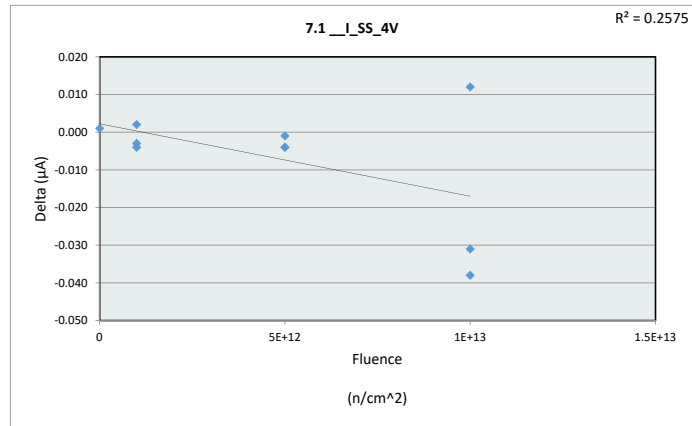
6.48 UVLO_VLDO_HYS_2MH

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	153.000	147.000	135.000	138.000
Average	153.000	150.333	143.000	146.000
Max	153.000	153.000	149.000	153.000
UL	160.000	160.000	160.000	160.000

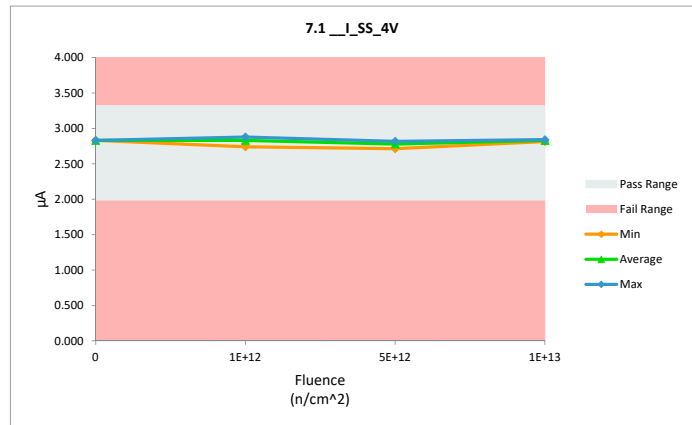


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

7.1_I_SS_4V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2.829	2.830	0.001
1E+12	243	2.879	2.876	-0.003
1E+12	244	2.882	2.878	-0.004
1E+12	247	2.738	2.740	0.002
5E+12	251	2.718	2.714	-0.004
5E+12	252	2.818	2.817	-0.001
5E+12	259	2.808	2.804	-0.004
1E+13	261	2.878	2.840	-0.038
1E+13	263	2.802	2.814	0.012
1E+13	264	2.866	2.835	-0.031
Max		2.882	2.878	0.012
Average		2.822	2.815	-0.007
Min		2.718	2.714	-0.038
Std Dev		0.058	0.053	0.015

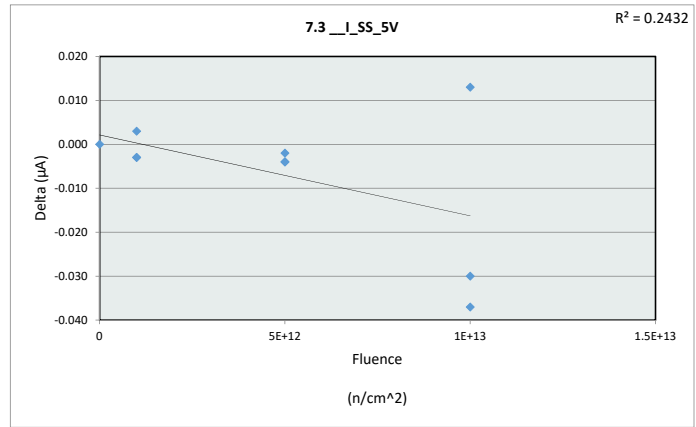


7.1_I_SS_4V					
Test Site					
Tester					
Test Number					
Max Limit		3.32	µA		
Min Limit		1.98	µA		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		1.980	1.980	1.980	1.980
Min		2.830	2.740	2.714	2.814
Average		2.830	2.831	2.778	2.830
Max		2.830	2.878	2.817	2.840
UL		3.320	3.320	3.320	3.320

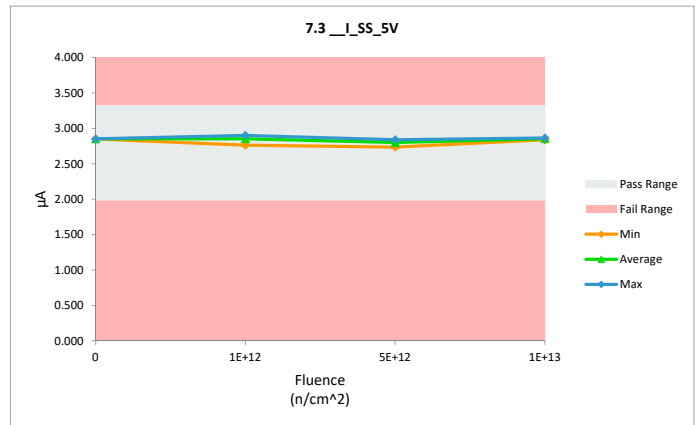


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

7.3_I_SS_5V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2.852	2.852	0.000
1E+12	243	2.901	2.898	-0.003
1E+12	244	2.904	2.901	-0.003
1E+12	247	2.760	2.763	0.003
5E+12	251	2.740	2.736	-0.004
5E+12	252	2.842	2.840	-0.002
5E+12	259	2.830	2.826	-0.004
1E+13	261	2.901	2.864	-0.037
1E+13	263	2.825	2.838	0.013
1E+13	264	2.887	2.857	-0.030
Max		2.904	2.901	0.013
Average		2.844	2.838	-0.007
Min		2.740	2.736	-0.037
Std Dev		0.058	0.053	0.015

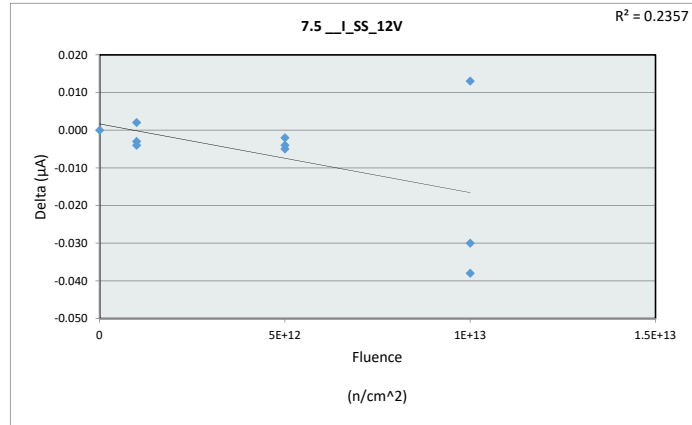


7.3_I_SS_5V					
Test Site					
Tester					
Test Number					
Max Limit		3.32	µA		
Min Limit		1.98	µA		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		1.980	1.980	1.980	1.980
Min		2.852	2.763	2.736	2.838
Average		2.852	2.854	2.801	2.853
Max		2.852	2.901	2.840	2.864
UL		3.320	3.320	3.320	3.320

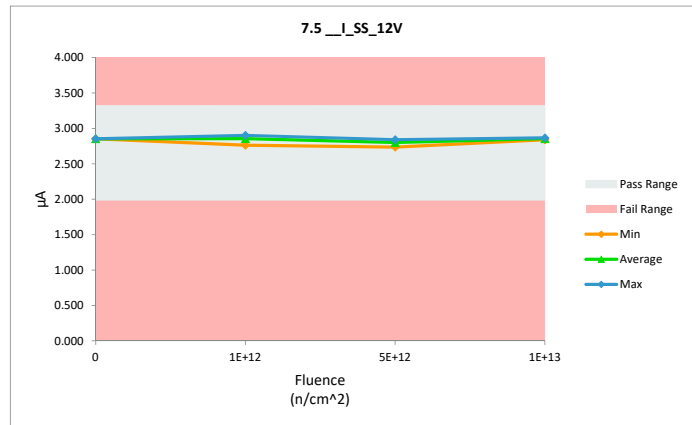


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

7.5 __I_SS_12V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2.853	2.853	0.000
1E+12	243	2.903	2.899	-0.004
1E+12	244	2.905	2.902	-0.003
1E+12	247	2.761	2.763	0.002
5E+12	251	2.741	2.737	-0.004
5E+12	252	2.843	2.841	-0.002
5E+12	259	2.832	2.827	-0.005
1E+13	261	2.903	2.865	-0.038
1E+13	263	2.826	2.839	0.013
1E+13	264	2.887	2.857	-0.030
Max		2.905	2.902	0.013
Average		2.845	2.838	-0.007
Min		2.741	2.737	-0.038
Std Dev		0.058	0.053	0.015

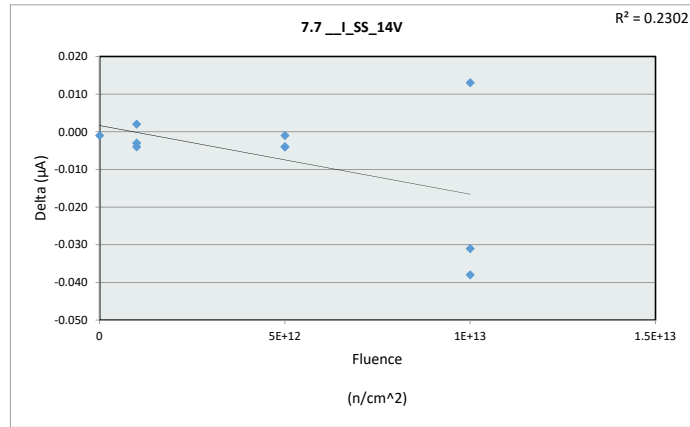


7.5 __I_SS_12V				
Test Site				
Tester				
Test Number				
Max Limit		3.32	µA	
Min Limit		1.98	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.853	2.763	2.737	2.839
Average	2.853	2.855	2.802	2.854
Max	2.853	2.902	2.841	2.865
UL	3.320	3.320	3.320	3.320

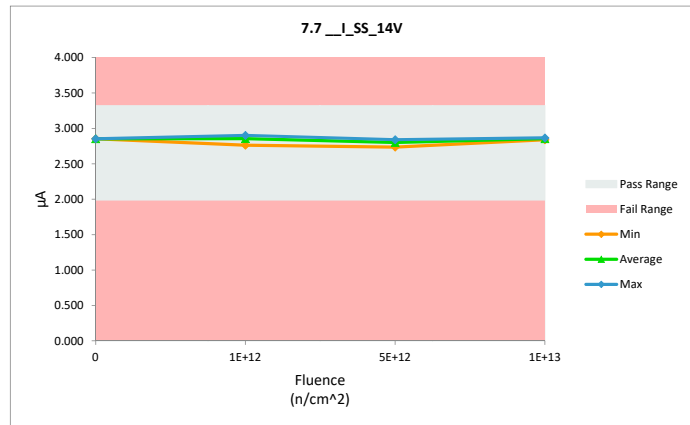


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

7.7_I_SS_14V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		3.32	3.32	
Min Limit		1.98	1.98	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2.854	2.853	-0.001
1E+12	243	2.904	2.900	-0.004
1E+12	244	2.905	2.902	-0.003
1E+12	247	2.761	2.763	0.002
5E+12	251	2.741	2.737	-0.004
5E+12	252	2.842	2.841	-0.001
5E+12	259	2.831	2.827	-0.004
1E+13	261	2.903	2.865	-0.038
1E+13	263	2.826	2.839	0.013
1E+13	264	2.888	2.857	-0.031
Max		2.905	2.902	0.013
Average		2.846	2.838	-0.007
Min		2.741	2.737	-0.038
Std Dev		0.059	0.053	0.015

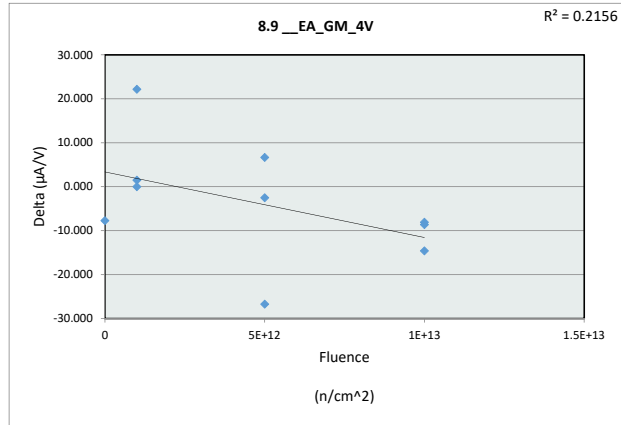


7.7_I_SS_14V					
Test Site					
Tester					
Test Number					
Max Limit		3.32	µA		
Min Limit		1.98	µA		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		1.980	1.980	1.980	1.980
Min		2.853	2.763	2.737	2.839
Average		2.853	2.855	2.802	2.854
Max		2.853	2.902	2.841	2.865
UL		3.320	3.320	3.320	3.320

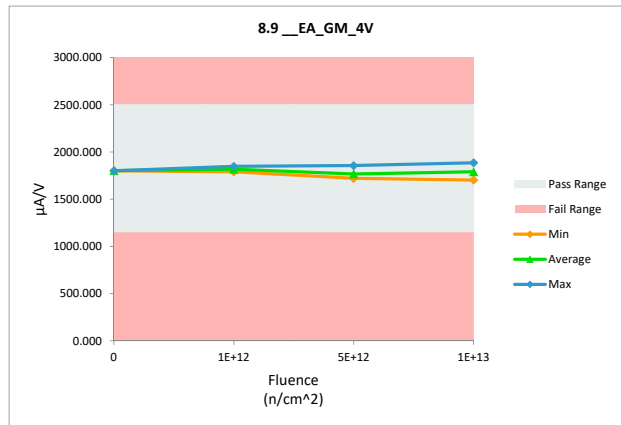


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.9_EA_GM_4V				
Test Site				
Tester				
Test Number				
Unit		µA/V	µA/V	
Max Limit		2500	2500	
Min Limit		1150	1150	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1809.050	1801.329	-7.721
1E+12	243	1790.381	1790.381	0.000
1E+12	244	1846.186	1847.660	1.474
1E+12	247	1795.843	1818.018	22.175
5E+12	251	1747.026	1720.317	-26.709
5E+12	252	1849.565	1856.205	6.640
5E+12	259	1729.913	1727.375	-2.538
1E+13	261	1895.238	1886.585	-8.653
1E+13	263	1710.512	1702.415	-8.097
1E+13	264	1794.940	1780.331	-14.609
	Max	1895.238	1886.585	22.175
	Average	1796.865	1793.062	-3.804
	Min	1710.512	1702.415	-8.097
	Std Dev	57.257	61.823	13.024



8.9_EA_GM_4V				
Test Site				
Tester				
Test Number				
Max Limit		2500	µA/V	
Min Limit		1150	µA/V	
Fluence (n/cm ²)	LL	Min	Average	Max
0	1150.000	1801.329	1809.050	1809.050
1E+12	1150.000	1790.381	1790.381	1790.381
5E+12	1150.000	1720.317	1767.966	1767.966
1E+13	1150.000	1702.415	1789.777	1789.777
	UL	2500.000	2500.000	2500.000

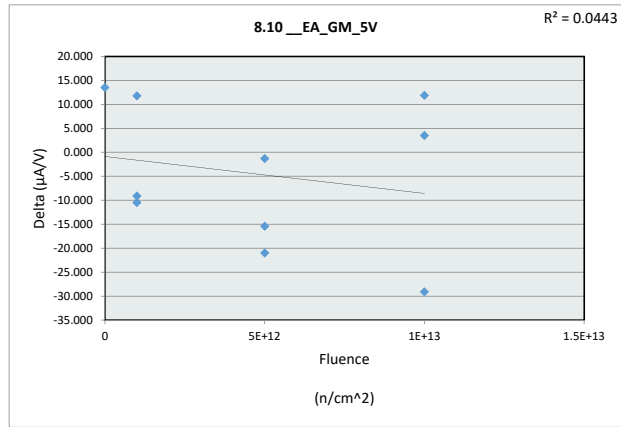


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.10_EA_GM_5V

Test Site		
Tester		
Test Number		
Unit	µA/V	µA/V
Max Limit	2500	2500
Min Limit	1150	1150

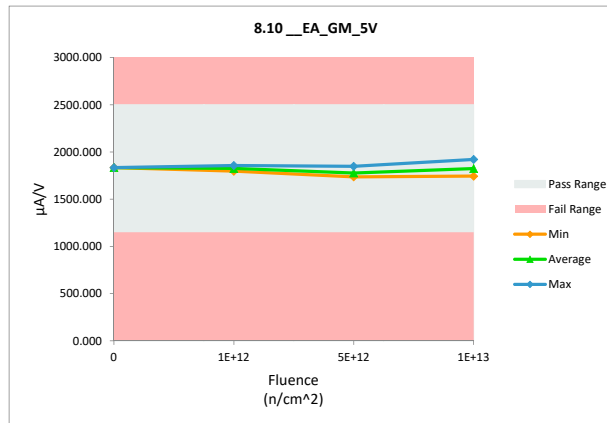
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1821.462	1834.989	13.527
1E+12	243	1806.858	1796.382	-10.476
1E+12	244	1865.690	1856.564	-9.126
1E+12	247	1812.421	1824.205	11.784
5E+12	251	1768.881	1747.882	-20.999
5E+12	252	1863.659	1848.250	-15.409
5E+12	259	1738.860	1737.563	-1.297
1E+13	261	1950.454	1921.371	-29.083
1E+13	263	1732.369	1744.238	11.869
1E+13	264	1803.342	1806.858	3.516
Max		1950.454	1921.371	13.527
Average		1816.400	1811.830	-4.569
Min		1732.369	1737.563	-29.083
Std Dev		65.207	58.170	14.852



8.10_EA_GM_5V

Test Site		
Tester		
Test Number		
Max Limit	2500	µA/V
Min Limit	1150	µA/V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1834.989	1796.382	1737.563	1744.238
Average	1834.989	1825.717	1777.898	1824.156
Max	1834.989	1856.564	1848.250	1921.371
UL	2500.000	2500.000	2500.000	2500.000

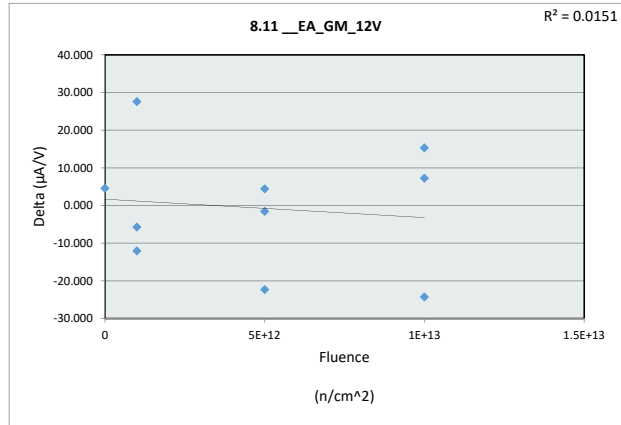


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.11_EA_GM_12V

Test Site		
Tester		
Test Number		
Unit	µA/V	µA/V
Max Limit	2500	2500
Min Limit	1150	1150

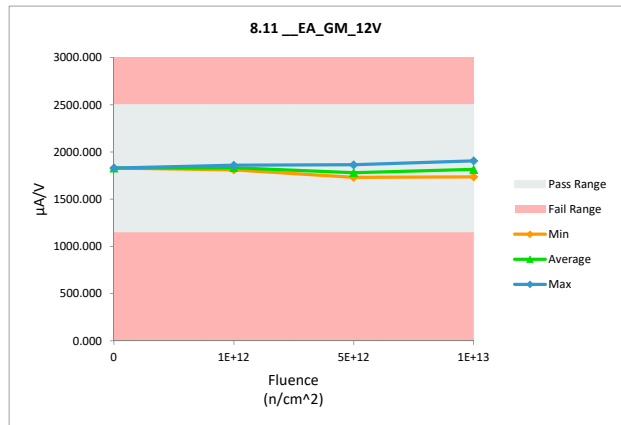
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1824.731	1829.307	4.576
1E+12	243	1783.615	1811.178	27.563
1E+12	244	1871.642	1859.620	-12.022
1E+12	247	1835.009	1829.307	-5.702
5E+12	251	1768.881	1746.581	-22.300
5E+12	252	1859.620	1864.042	4.422
5E+12	259	1733.999	1732.450	-1.549
1E+13	261	1931.268	1907.000	-24.268
1E+13	263	1721.226	1736.538	15.312
1E+13	264	1795.853	1803.081	7.228
Max		1931.268	1907.000	27.563
Average		1812.584	1811.910	-0.674
Min		1721.226	1732.450	-24.268
Std Dev		64.968	58.673	16.152



8.11_EA_GM_12V

Test Site		
Tester		
Test Number		
Max Limit	2500	µA/V
Min Limit	1150	µA/V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1829.307	1811.178	1732.450	1736.538
Average	1829.307	1833.368	1781.024	1815.540
Max	1829.307	1859.620	1864.042	1907.000
UL	2500.000	2500.000	2500.000	2500.000

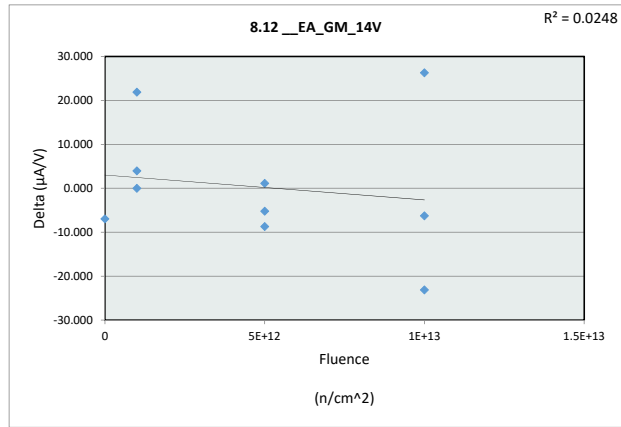


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.12_EA_GM_14V

Test Site		
Tester		
Test Number		
Unit	µA/V	µA/V
Max Limit	2500	2500
Min Limit	1150	1150

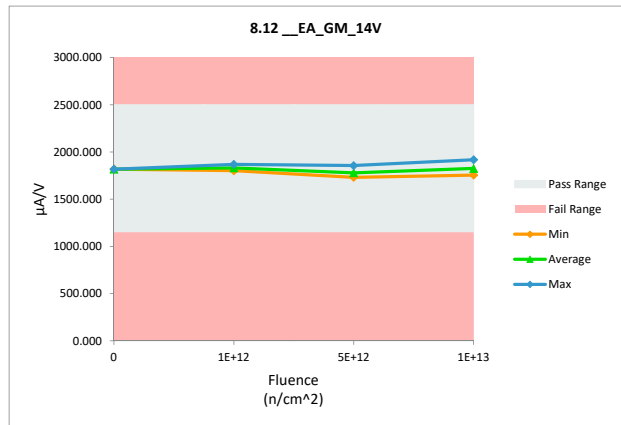
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1824.344	1817.388	-6.956
1E+12	243	1801.338	1801.329	-0.009
1E+12	244	1864.301	1868.256	3.955
1E+12	247	1802.451	1824.304	21.853
5E+12	251	1753.087	1747.882	-5.205
5E+12	252	1854.707	1855.825	1.118
5E+12	259	1741.179	1732.459	-8.720
1E+13	261	1924.964	1918.690	-6.274
1E+13	263	1729.066	1755.324	26.258
1E+13	264	1825.654	1802.538	-23.116
Max		1924.964	1918.690	26.258
Average		1812.109	1812.399	0.290
Min		1729.066	1732.459	-23.116
Std Dev		60.762	58.215	14.561



8.12_EA_GM_14V

Test Site		
Tester		
Test Number		
Max Limit	2500	µA/V
Min Limit	1150	µA/V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1817.388	1801.329	1732.459	1755.324
Average	1817.388	1831.296	1778.722	1825.517
Max	1817.388	1868.256	1855.825	1918.690
UL	2500.000	2500.000	2500.000	2500.000

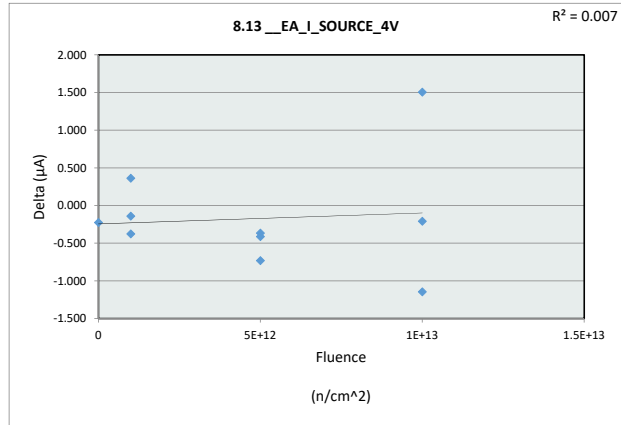


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.13 EA_I_SOURCE_4V

Test Site		
Tester		
Test Number		
Unit	µA	µA
Max Limit	190	190
Min Limit	100	100

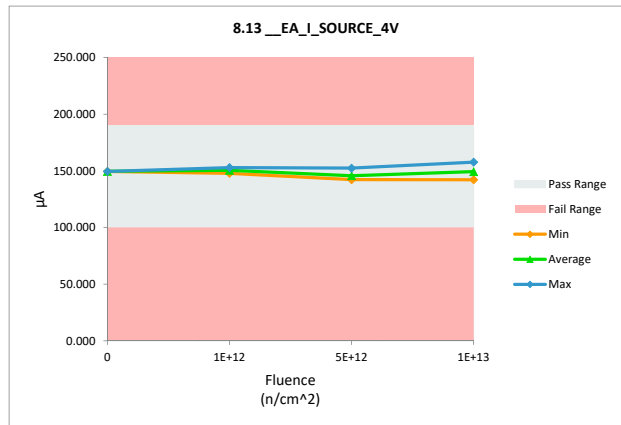
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	149.780	149.553	-0.227
1E+12	243	147.969	147.827	-0.142
1E+12	244	153.297	152.921	-0.376
1E+12	247	150.630	150.993	0.363
5E+12	251	143.301	142.569	-0.732
5E+12	252	152.732	152.366	-0.366
5E+12	259	142.609	142.196	-0.413
1E+13	261	158.820	157.675	-1.145
1E+13	263	140.642	142.147	1.505
1E+13	264	148.316	148.106	-0.210
Max		158.820	157.675	1.505
Average		148.810	148.635	-0.174
Min		140.642	142.147	-1.145
Std Dev		5.542	5.182	0.707



8.13 EA_I_SOURCE_4V

Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	149.553	147.827	142.196	142.147
Average	149.553	150.580	145.710	149.309
Max	149.553	152.921	152.366	157.675
UL	190.000	190.000	190.000	190.000

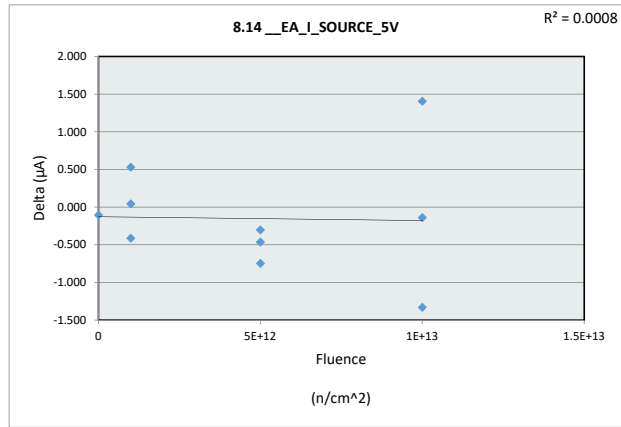


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.14_EA_I_SOURCE_5V

Test Site		
Tester		
Test Number		
Unit	µA	µA
Max Limit	190	190
Min Limit	100	100

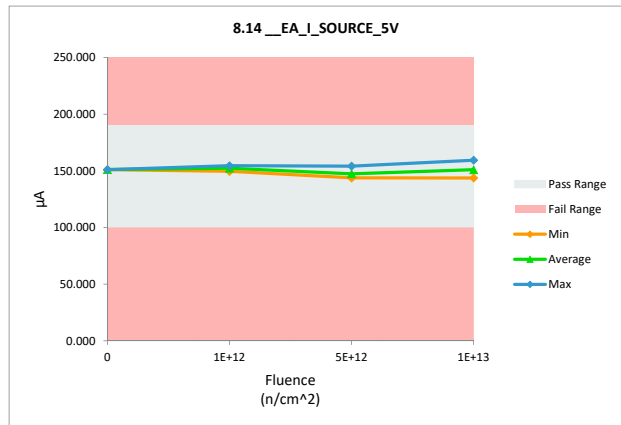
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.237	151.131	-0.106
1E+12	243	149.507	149.551	0.044
1E+12	244	154.956	154.543	-0.413
1E+12	247	152.328	152.858	0.530
5E+12	251	144.981	144.235	-0.746
5E+12	252	154.445	154.143	-0.302
5E+12	259	144.228	143.765	-0.463
1E+13	261	160.808	159.478	-1.330
1E+13	263	142.329	143.734	1.405
1E+13	264	149.866	149.727	-0.139
Max		160.808	159.478	1.405
Average		150.468	150.316	-0.152
Min		142.329	143.734	-1.330
Std Dev		5.612	5.246	0.735



8.14_EA_I_SOURCE_5V

Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.131	149.551	143.765	143.734
Average	151.131	152.317	147.381	150.980
Max	151.131	154.543	154.143	159.478
UL	190.000	190.000	190.000	190.000

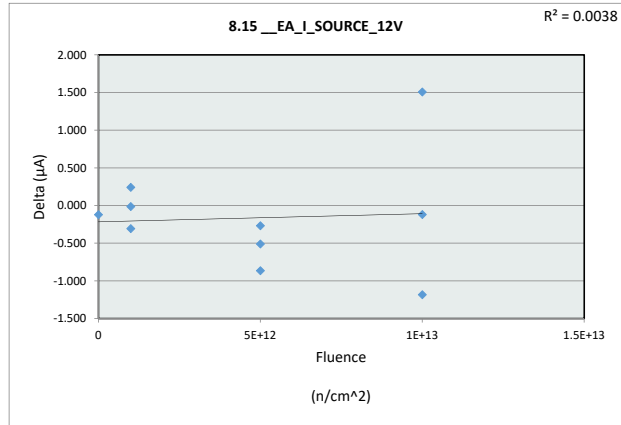


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.15 __EA_I_SOURCE_12V

Test Site		
Tester		
Test Number		
Unit	µA	µA
Max Limit	190	190
Min Limit	100	100

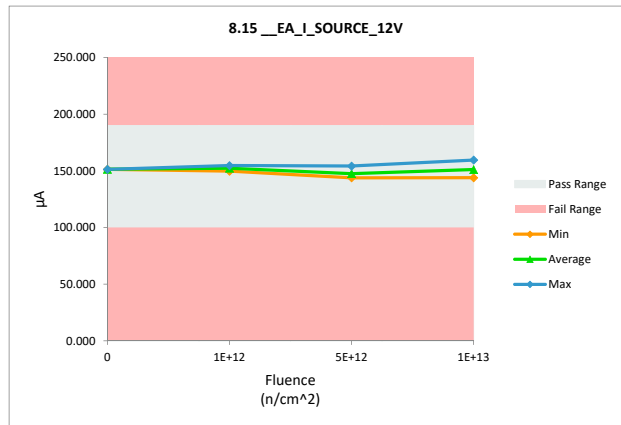
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.496	151.374	-0.122
1E+12	243	149.716	149.702	-0.014
1E+12	244	154.993	154.686	-0.307
1E+12	247	152.488	152.728	0.240
5E+12	251	145.177	144.312	-0.865
5E+12	252	154.518	154.249	-0.269
5E+12	259	144.437	143.927	-0.510
1E+13	261	160.744	159.560	-1.184
1E+13	263	142.436	143.942	1.506
1E+13	264	149.938	149.817	-0.121
Max		160.744	159.560	1.506
Average		150.594	150.430	-0.165
Min		142.436	143.927	-1.184
Std Dev		5.550	5.217	0.720



8.15 __EA_I_SOURCE_12V

Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.374	149.702	143.927	143.942
Average	151.374	152.372	147.496	151.106
Max	151.374	154.686	154.249	159.560
UL	190.000	190.000	190.000	190.000

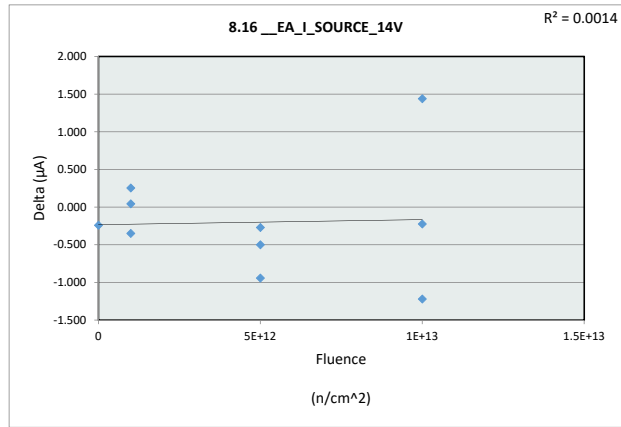


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.16 __EA_I_SOURCE_14V

Test Site		
Tester		
Test Number		
Unit	µA	µA
Max Limit	190	190
Min Limit	100	100

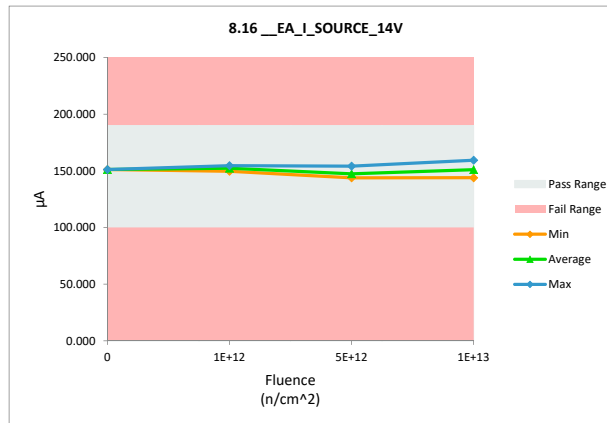
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.433	151.191	-0.242
1E+12	243	149.629	149.672	0.043
1E+12	244	154.964	154.615	-0.349
1E+12	247	152.492	152.746	0.254
5E+12	251	145.134	144.193	-0.941
5E+12	252	154.448	154.178	-0.270
5E+12	259	144.358	143.857	-0.501
1E+13	261	160.690	159.471	-1.219
1E+13	263	142.460	143.899	1.439
1E+13	264	149.938	149.713	-0.225
Max		160.690	159.471	1.439
Average		150.555	150.353	-0.201
Min		142.460	143.857	-1.219
Std Dev		5.542	5.218	0.719



8.16 __EA_I_SOURCE_14V

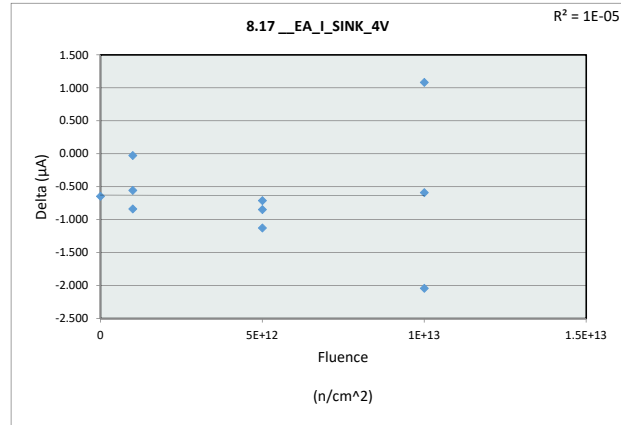
Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.191	149.672	143.857	143.899
Average	151.191	152.344	147.409	151.028
Max	151.191	154.615	154.178	159.471
UL	190.000	190.000	190.000	190.000

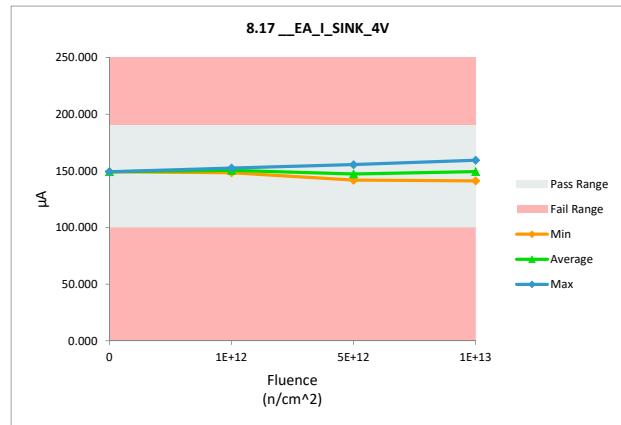


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.17_EA_I_SINK_4V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		190	190	
Min Limit		100	100	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	149.881	149.235	-0.646
1E+12	243	148.961	148.404	-0.557
1E+12	244	153.333	152.496	-0.837
1E+12	247	150.889	150.862	-0.027
5E+12	251	145.627	144.501	-1.126
5E+12	252	156.236	155.524	-0.712
5E+12	259	142.676	141.828	-0.848
1E+13	261	161.465	159.423	-2.042
1E+13	263	140.121	141.202	1.081
1E+13	264	148.152	147.562	-0.590
	Max	161.465	159.423	1.081
	Average	149.734	149.104	-0.630
	Min	140.121	141.202	-2.042
	Std Dev	6.293	5.790	0.791

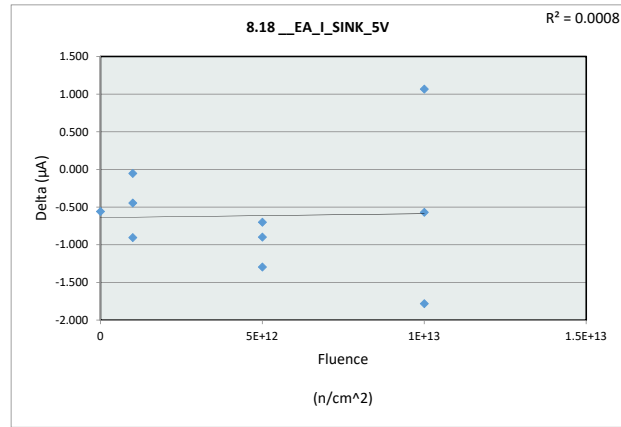


8.17_EA_I_SINK_4V				
Test Site				
Tester				
Test Number				
Max Limit		190	µA	
Min Limit		100	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	149.235	148.404	141.828	141.202
Average	149.235	150.587	147.284	149.396
Max	149.235	152.496	155.524	159.423
UL	190.000	190.000	190.000	190.000

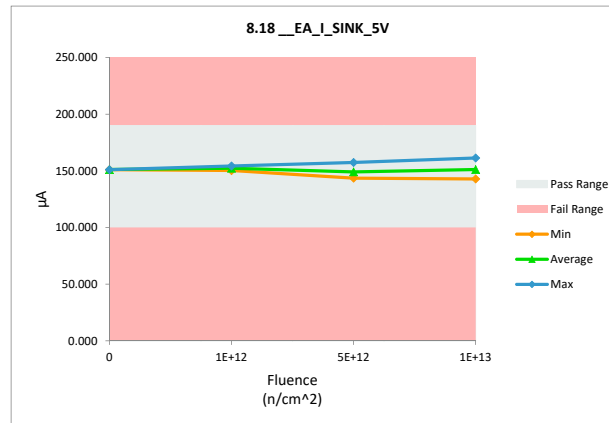


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.18_EA_I_SINK_5V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		190	190	
Min Limit		100	100	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.673	151.115	-0.558
1E+12	243	150.733	150.288	-0.445
1E+12	244	155.186	154.281	-0.905
1E+12	247	152.732	152.678	-0.054
5E+12	251	147.561	146.265	-1.296
5E+12	252	158.133	157.432	-0.701
5E+12	259	144.483	143.585	-0.898
1E+13	261	163.231	161.449	-1.782
1E+13	263	141.872	142.938	1.066
1E+13	264	149.849	149.281	-0.568
Max		163.231	161.449	1.066
Average		151.545	150.931	-0.614
Min		141.872	142.938	-1.782
Std Dev		6.302	5.869	0.758

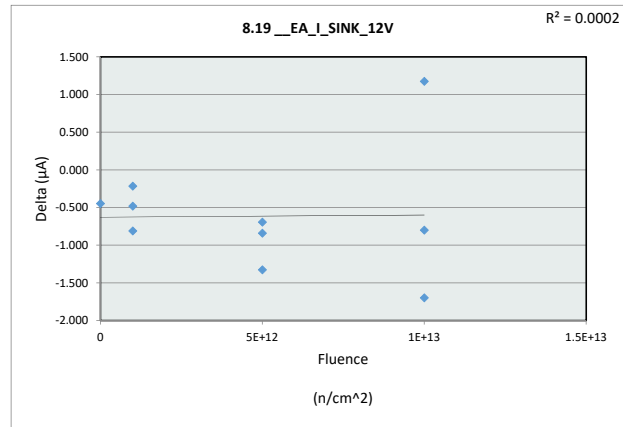


8.18_EA_I_SINK_5V				
Test Site				
Tester				
Test Number				
Max Limit		190	µA	
Min Limit		100	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.115	150.288	143.585	142.938
Average	151.115	152.416	149.094	151.223
Max	151.115	154.281	157.432	161.449
UL	190.000	190.000	190.000	190.000

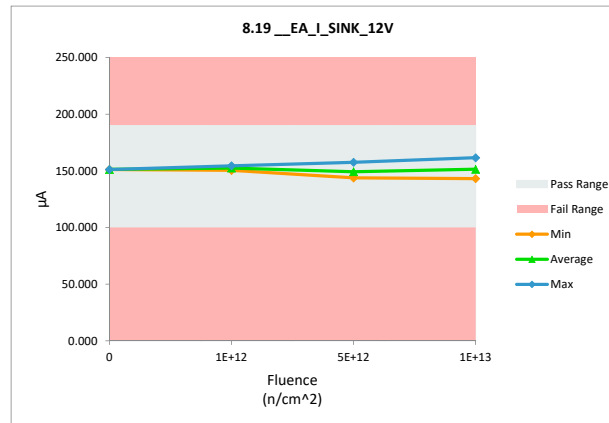


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.19_EA_I_SINK_12V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		190	190	
Min Limit		100	100	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.690	151.243	-0.447
1E+12	243	150.935	150.452	-0.483
1E+12	244	155.233	154.422	-0.811
1E+12	247	152.951	152.734	-0.217
5E+12	251	147.671	146.343	-1.328
5E+12	252	158.275	157.581	-0.694
5E+12	259	144.603	143.762	-0.841
1E+13	261	163.306	161.608	-1.698
1E+13	263	141.953	143.127	1.174
1E+13	264	150.192	149.391	-0.801
Max		163.306	161.608	1.174
Average		151.681	151.066	-0.615
Min		141.953	143.127	-1.698
Std Dev		6.293	5.864	0.761

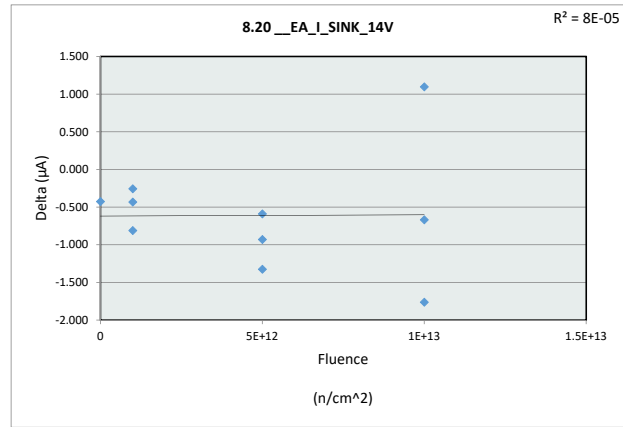


8.19_EA_I_SINK_12V				
Test Site				
Tester				
Test Number				
Max Limit		190	µA	
Min Limit		100	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.243	150.452	143.762	143.127
Average	151.243	152.536	149.229	151.375
Max	151.243	154.422	157.581	161.608
UL	190.000	190.000	190.000	190.000

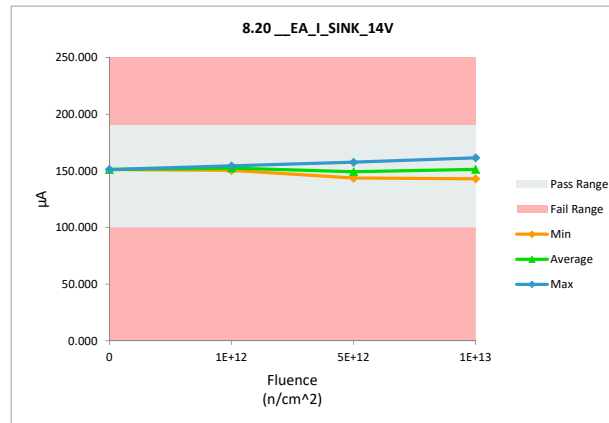


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.20_EA_I_SINK_14V				
Test Site				
Tester				
Test Number				
Unit		µA	µA	
Max Limit		190	190	
Min Limit		100	100	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	151.638	151.211	-0.427
1E+12	243	150.864	150.430	-0.434
1E+12	244	155.178	154.367	-0.811
1E+12	247	152.916	152.660	-0.256
5E+12	251	147.679	146.354	-1.325
5E+12	252	158.194	157.604	-0.590
5E+12	259	144.538	143.609	-0.929
1E+13	261	163.298	161.536	-1.762
1E+13	263	141.992	143.087	1.095
1E+13	264	150.034	149.365	-0.669
Max		163.298	161.536	1.095
Average		151.633	151.022	-0.611
Min		141.992	143.087	-1.762
Std Dev		6.284	5.874	0.751

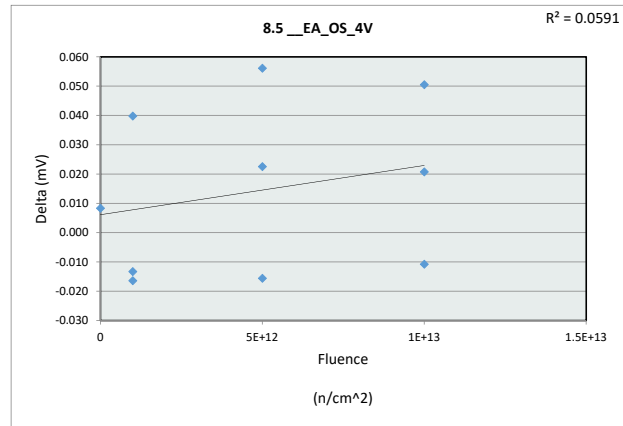


8.20_EA_I_SINK_14V				
Test Site				
Tester				
Test Number				
Max Limit		190	µA	
Min Limit		100	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	151.211	150.430	143.609	143.087
Average	151.211	152.486	149.189	151.329
Max	151.211	154.367	157.604	161.536
UL	190.000	190.000	190.000	190.000

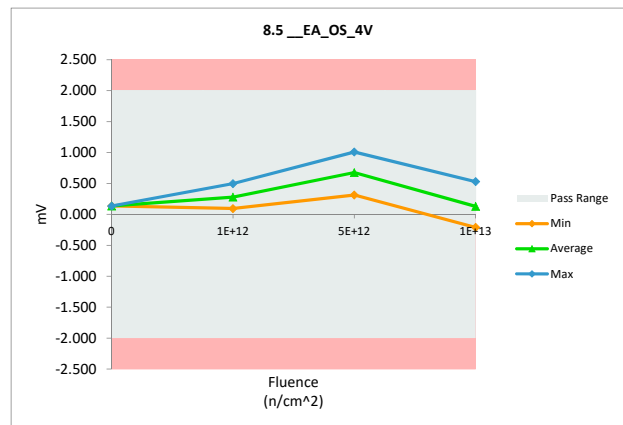


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.5_EA_OS_4V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.127	0.135	0.008
1E+12	243	0.458	0.498	0.040
1E+12	244	0.109	0.093	-0.016
1E+12	247	0.259	0.245	-0.013
5E+12	251	0.649	0.705	0.056
5E+12	252	1.025	1.009	-0.016
5E+12	259	0.292	0.314	0.023
1E+13	261	0.479	0.530	0.051
1E+13	263	-0.231	-0.210	0.021
1E+13	264	0.079	0.068	-0.011
Max		1.025	1.009	0.056
Average		0.324	0.339	0.014
Min		-0.231	-0.210	-0.016
Std Dev		0.349	0.354	0.028

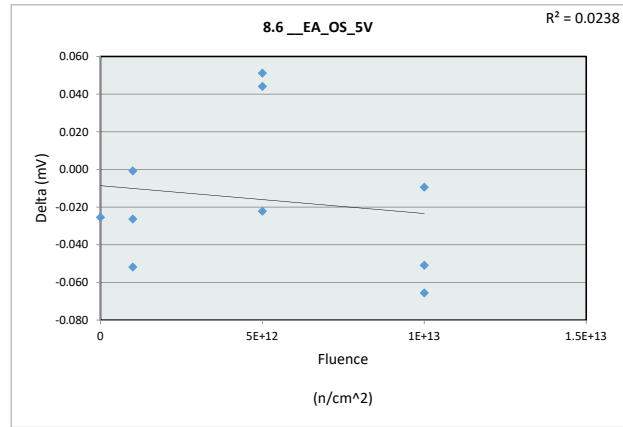


8.5_EA_OS_4V				
Test Site				
Tester				
Test Number				
Max Limit	2		mV	
Min Limit	-2		mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.135	0.093	0.314	-0.210
Average	0.135	0.279	0.676	0.129
Max	0.135	0.498	1.009	0.530
UL	2.000	2.000	2.000	2.000

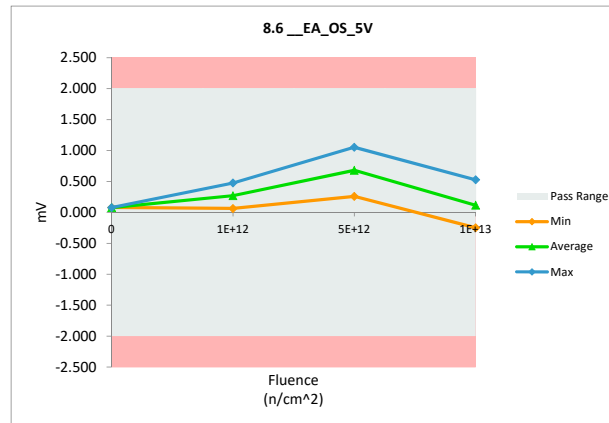


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.6 __EA_OS_5V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.104	0.079	-0.025
1E+12	243	0.502	0.476	-0.026
1E+12	244	0.115	0.063	-0.052
1E+12	247	0.271	0.270	-0.001
5E+12	251	0.686	0.730	0.044
5E+12	252	1.002	1.053	0.051
5E+12	259	0.282	0.259	-0.022
1E+13	261	0.578	0.527	-0.051
1E+13	263	-0.183	-0.249	-0.066
1E+13	264	0.078	0.068	-0.009
Max		1.002	1.053	0.051
Average		0.343	0.328	-0.016
Min		-0.183	-0.249	-0.066
Std Dev		0.349	0.378	0.039

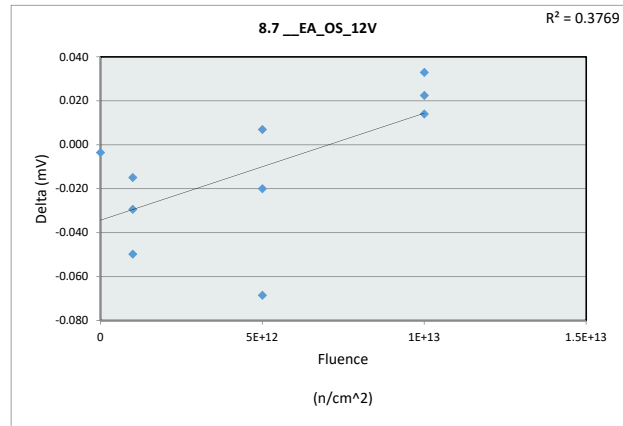


8.6 __EA_OS_5V				
Test Site				
Tester				
Test Number				
Max Limit		2	mV	
Min Limit		-2	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.079	0.063	0.260	-0.249
Average	0.079	0.270	0.681	0.116
Max	0.079	0.476	1.053	0.527
UL	2.000	2.000	2.000	2.000

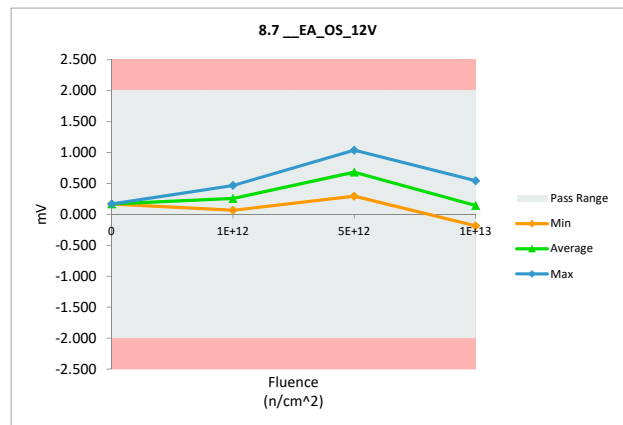


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.7 __EA_OS_12V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		2	2	
Min Limit		-2	-2	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.171	0.168	-0.004
1E+12	243	0.483	0.468	-0.015
1E+12	244	0.095	0.066	-0.029
1E+12	247	0.287	0.237	-0.050
5E+12	251	0.734	0.714	-0.020
5E+12	252	1.031	1.038	0.007
5E+12	259	0.363	0.295	-0.069
1E+13	261	0.511	0.544	0.033
1E+13	263	-0.199	-0.185	0.014
1E+13	264	0.048	0.071	0.022
Max		1.031	1.038	0.033
Average		0.352	0.341	-0.011
Min		-0.199	-0.185	-0.069
Std Dev		0.357	0.357	0.032



8.7 __EA_OS_12V				
Test Site				
Tester				
Test Number				
Max Limit	2		mV	
Min Limit	-2		mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.168	0.066	0.295	-0.185
Average	0.168	0.257	0.682	0.143
Max	0.168	0.468	1.038	0.544
UL	2.000	2.000	2.000	2.000

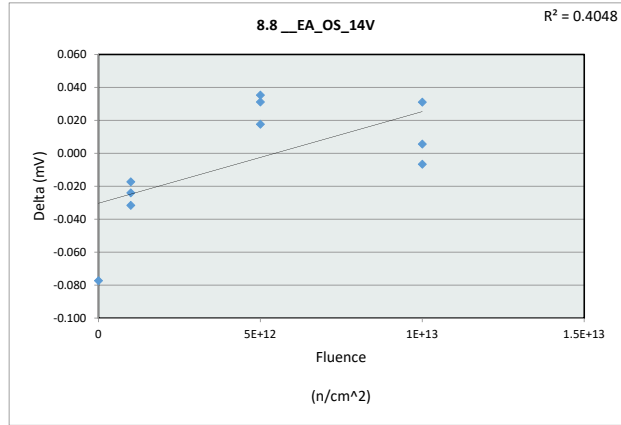


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.8_EA_OS_14V

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	2	2
Min Limit	-2	-2

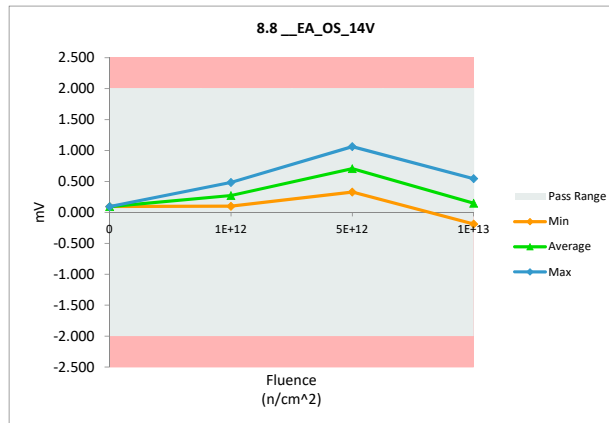
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.171	0.094	-0.077
1E+12	243	0.508	0.484	-0.024
1E+12	244	0.116	0.099	-0.017
1E+12	247	0.266	0.235	-0.032
5E+12	251	0.698	0.730	0.031
5E+12	252	1.028	1.063	0.035
5E+12	259	0.311	0.329	0.018
1E+13	261	0.540	0.545	0.006
1E+13	263	-0.182	-0.188	-0.007
1E+13	264	0.058	0.089	0.031
Max		1.028	1.063	0.035
Average		0.352	0.348	-0.004
Min		-0.182	-0.188	-0.077
Std Dev		0.350	0.367	0.035



8.8_EA_OS_14V

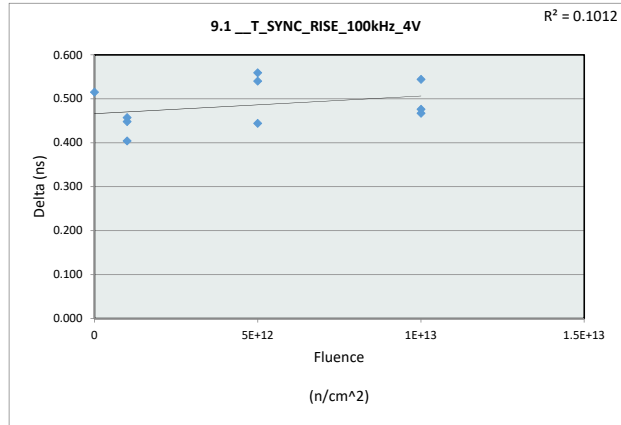
Test Site		
Tester		
Test Number		
Max Limit	2	mV
Min Limit	-2	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.094	0.099	0.329	-0.188
Average	0.094	0.272	0.707	0.149
Max	0.094	0.484	1.063	0.545
UL	2.000	2.000	2.000	2.000

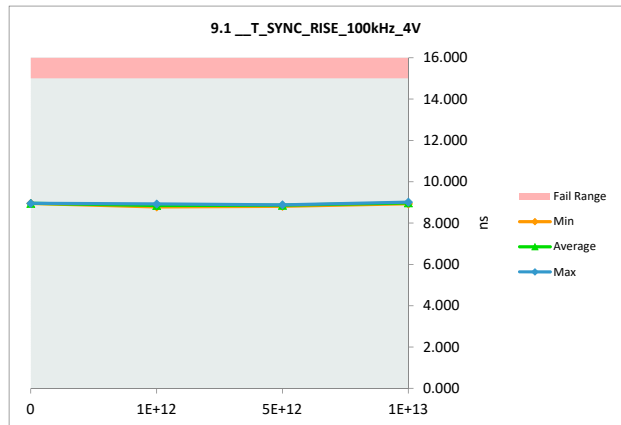


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.1 __T_SYNC_RISE_100kHz_4V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.437	8.952	0.515
1E+12	243	8.399	8.856	0.457
1E+12	244	8.518	8.922	0.404
1E+12	247	8.329	8.777	0.448
5E+12	251	8.324	8.883	0.559
5E+12	252	8.367	8.811	0.444
5E+12	259	8.344	8.884	0.540
1E+13	261	8.533	9.009	0.476
1E+13	263	8.463	8.930	0.467
1E+13	264	8.430	8.974	0.544
Max		8.533	9.009	0.559
Average		8.414	8.900	0.485
Min		8.324	8.777	0.404
Std Dev		0.075	0.072	0.051

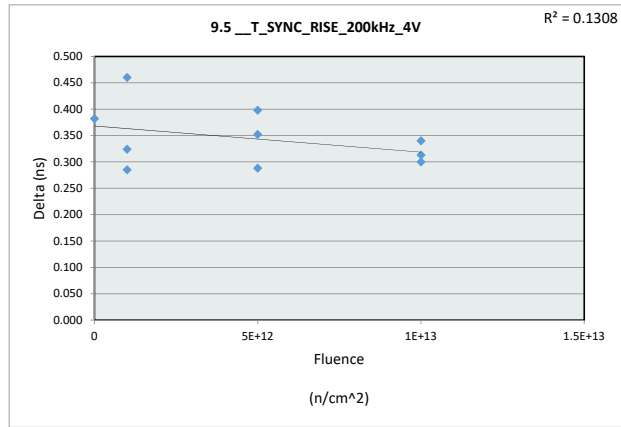


9.1 __T_SYNC_RISE_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.952	8.777	8.811	8.930
Average	8.952	8.852	8.859	8.971
Max	8.952	8.922	8.884	9.009
UL	15.000	15.000	15.000	15.000

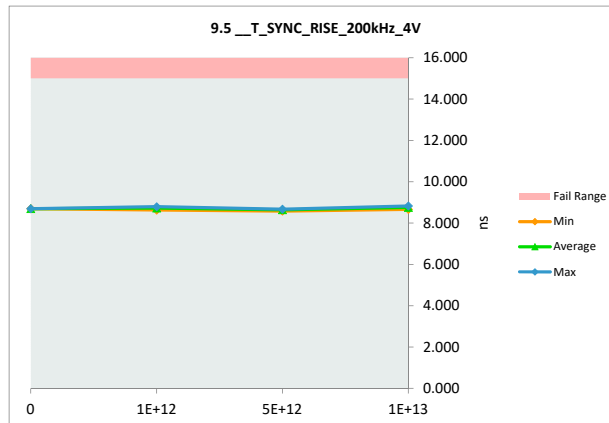


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.5 __T_SYNC_RISE_200kHz_4V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.311	8.693	0.382
1E+12	243	8.343	8.628	0.285
1E+12	244	8.432	8.756	0.324
1E+12	247	8.329	8.789	0.460
5E+12	251	8.320	8.672	0.352
5E+12	252	8.266	8.664	0.398
5E+12	259	8.292	8.580	0.288
1E+13	261	8.450	8.790	0.340
1E+13	263	8.513	8.826	0.313
1E+13	264	8.357	8.657	0.300
Max		8.513	8.826	0.460
Average		8.361	8.705	0.344
Min		8.266	8.580	0.285
Std Dev		0.078	0.080	0.056

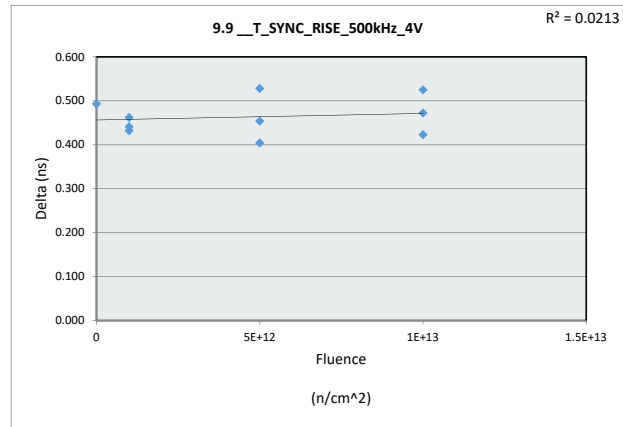


9.5 __T_SYNC_RISE_200kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.693	8.628	8.580	8.657
Average	8.693	8.724	8.639	8.758
Max	8.693	8.789	8.672	8.826
UL	15.000	15.000	15.000	15.000

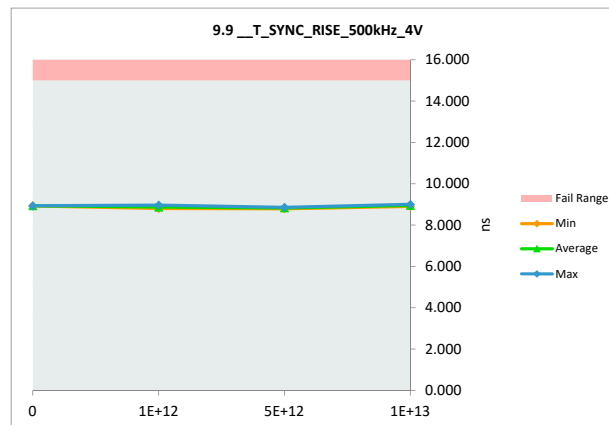


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.9 __T_SYNC_RISE_500kHz_4V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.438	8.931	0.493
1E+12	243	8.401	8.842	0.441
1E+12	244	8.534	8.966	0.432
1E+12	247	8.338	8.800	0.462
5E+12	251	8.385	8.839	0.454
5E+12	252	8.332	8.860	0.528
5E+12	259	8.385	8.789	0.404
1E+13	261	8.476	9.001	0.525
1E+13	263	8.484	8.956	0.472
1E+13	264	8.481	8.904	0.423
Max		8.534	9.001	0.528
Average		8.425	8.889	0.463
Min		8.332	8.789	0.404
Std Dev		0.068	0.073	0.042



9.9 __T_SYNC_RISE_500kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.931	8.800	8.789	8.904
Average	8.931	8.869	8.829	8.954
Max	8.931	8.966	8.860	9.001
UL	15.000	15.000	15.000	15.000

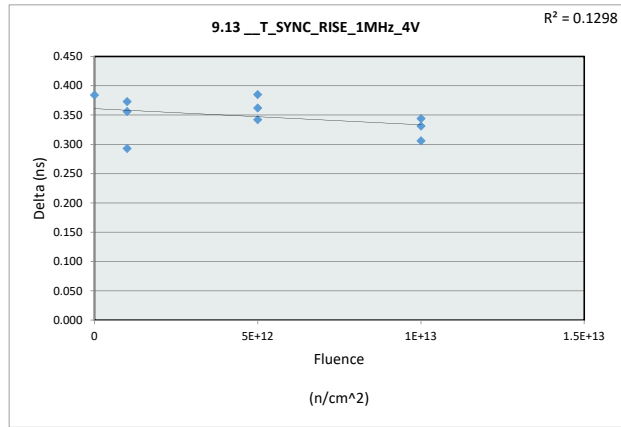


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.13 __T_SYNC_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

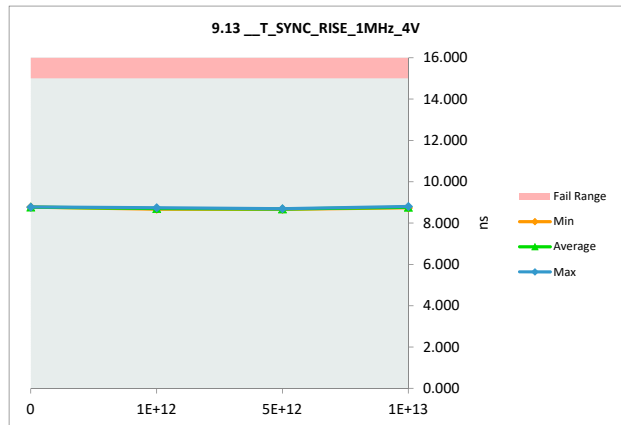
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.392	8.776	0.384
1E+12	243	8.341	8.697	0.356
1E+12	244	8.448	8.741	0.293
1E+12	247	8.296	8.669	0.373
5E+12	251	8.330	8.672	0.342
5E+12	252	8.310	8.695	0.385
5E+12	259	8.305	8.667	0.362
1E+13	261	8.470	8.801	0.331
1E+13	263	8.450	8.756	0.306
1E+13	264	8.391	8.735	0.344
Max		8.470	8.801	0.385
Average		8.373	8.721	0.348
Min		8.296	8.667	0.293
Std Dev		0.066	0.048	0.031



9.13 __T_SYNC_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.776	8.669	8.667	8.735
Average	8.776	8.702	8.678	8.764
Max	8.776	8.741	8.695	8.801
UL	15.000	15.000	15.000	15.000

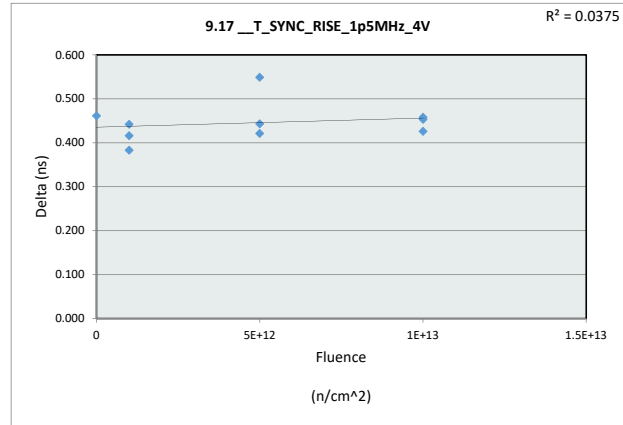


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.17 __T_SYNC_RISE_1p5MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

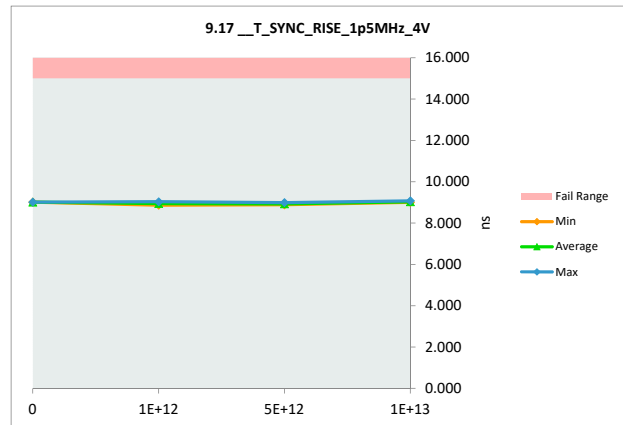
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.550	9.011	0.461
1E+12	243	8.548	8.931	0.383
1E+12	244	8.587	9.029	0.442
1E+12	247	8.450	8.866	0.416
5E+12	251	8.438	8.987	0.549
5E+12	252	8.460	8.881	0.421
5E+12	259	8.476	8.919	0.443
1E+13	261	8.618	9.071	0.453
1E+13	263	8.586	9.012	0.426
1E+13	264	8.545	9.003	0.458
Max		8.618	9.071	0.549
Average		8.526	8.971	0.445
Min		8.438	8.866	0.383
Std Dev		0.065	0.068	0.043



9.17 __T_SYNC_RISE_1p5MHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.011	8.866	8.881	9.003
Average	9.011	8.942	8.929	9.029
Max	9.011	9.029	8.987	9.071
UL	15.000	15.000	15.000	15.000

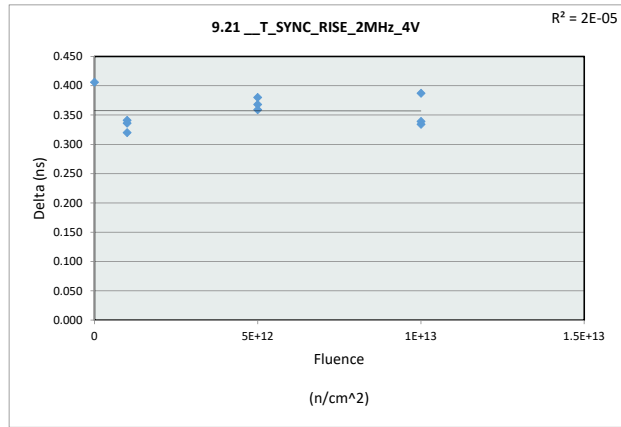


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.21 __T_SYNC_RISE_2MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

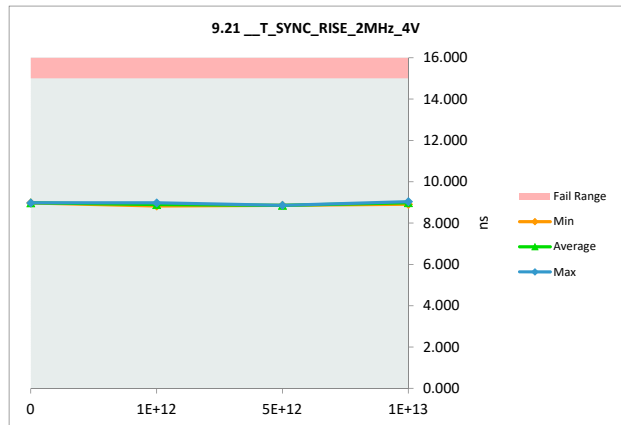
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.569	8.975	0.406
1E+12	243	8.534	8.870	0.336
1E+12	244	8.633	8.974	0.341
1E+12	247	8.507	8.827	0.320
5E+12	251	8.497	8.856	0.359
5E+12	252	8.489	8.857	0.368
5E+12	259	8.473	8.853	0.380
1E+13	261	8.669	9.008	0.339
1E+13	263	8.650	9.037	0.387
1E+13	264	8.573	8.907	0.334
Max		8.669	9.037	0.406
Average		8.559	8.916	0.357
Min		8.473	8.827	0.320
Std Dev		0.071	0.075	0.028



9.21 __T_SYNC_RISE_2MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.975	8.827	8.853	8.907
Average	8.975	8.890	8.855	8.984
Max	8.975	8.974	8.857	9.037
UL	15.000	15.000	15.000	15.000

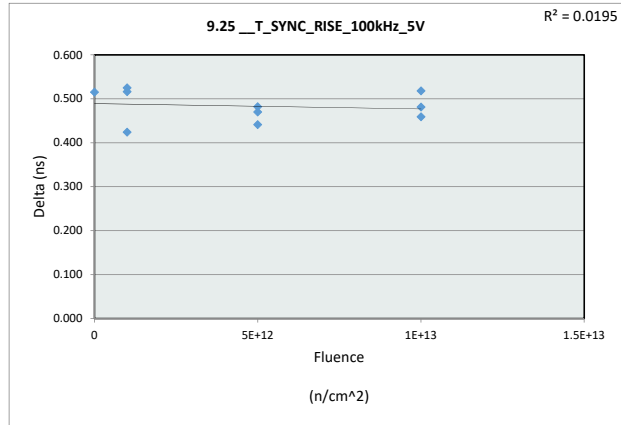


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.25 __T_SYNC_RISE_100kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

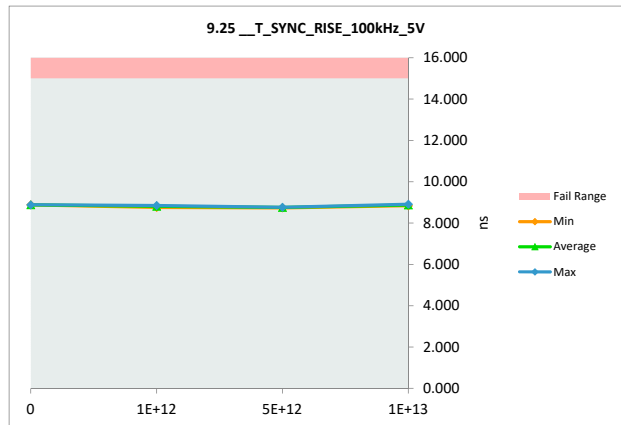
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.366	8.881	0.515
1E+12	243	8.305	8.821	0.516
1E+12	244	8.424	8.848	0.424
1E+12	247	8.229	8.754	0.525
5E+12	251	8.291	8.761	0.470
5E+12	252	8.286	8.768	0.482
5E+12	259	8.293	8.734	0.441
1E+13	261	8.450	8.909	0.459
1E+13	263	8.351	8.869	0.518
1E+13	264	8.355	8.836	0.481
Max		8.450	8.909	0.525
Average		8.335	8.818	0.483
Min		8.229	8.734	0.424
Std Dev		0.067	0.061	0.035



9.25 __T_SYNC_RISE_100kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.881	8.754	8.734	8.836
Average	8.881	8.808	8.754	8.871
Max	8.881	8.848	8.768	8.909
UL	15.000	15.000	15.000	15.000

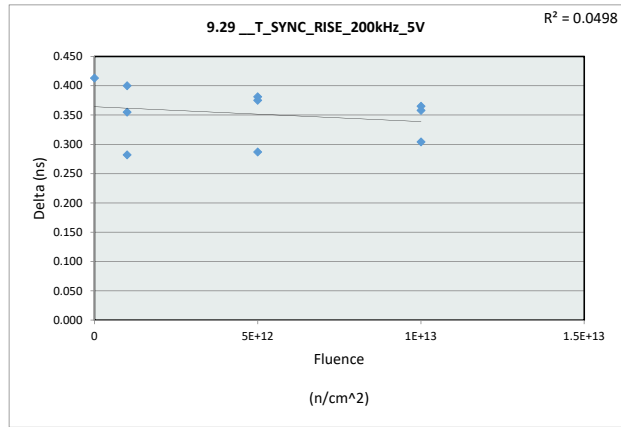


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.29 __T_SYNC_RISE_200kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

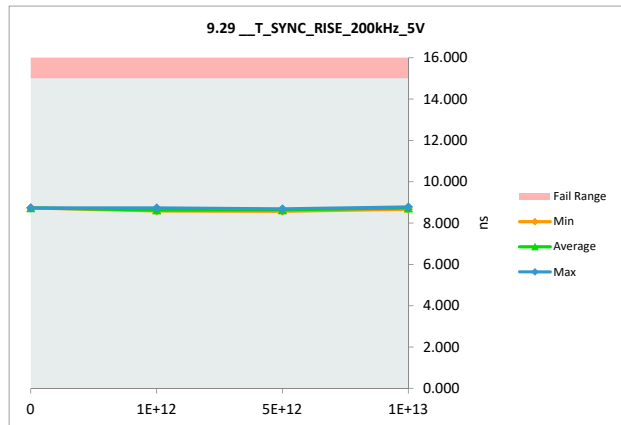
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.319	8.732	0.413
1E+12	243	8.304	8.586	0.282
1E+12	244	8.331	8.731	0.400
1E+12	247	8.236	8.591	0.355
5E+12	251	8.305	8.686	0.381
5E+12	252	8.284	8.571	0.287
5E+12	259	8.278	8.653	0.375
1E+13	261	8.415	8.780	0.365
1E+13	263	8.380	8.738	0.358
1E+13	264	8.367	8.671	0.304
Max		8.415	8.780	0.413
Average		8.322	8.674	0.352
Min		8.236	8.571	0.282
Std Dev		0.053	0.073	0.046



9.29 __T_SYNC_RISE_200kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.732	8.586	8.571	8.671
Average	8.732	8.636	8.637	8.730
Max	8.732	8.731	8.686	8.780
UL	15.000	15.000	15.000	15.000

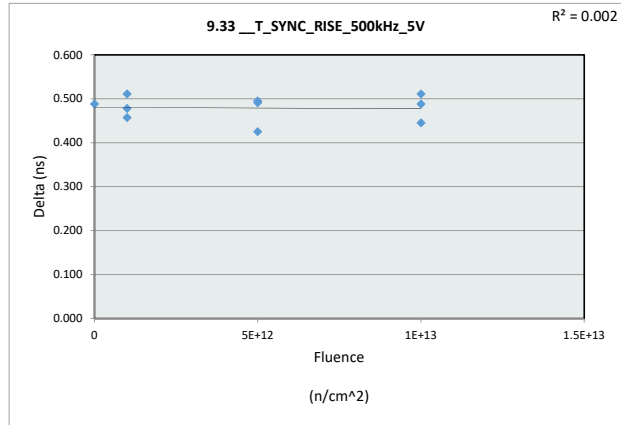


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.33 __T_SYNC_RISE_500kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

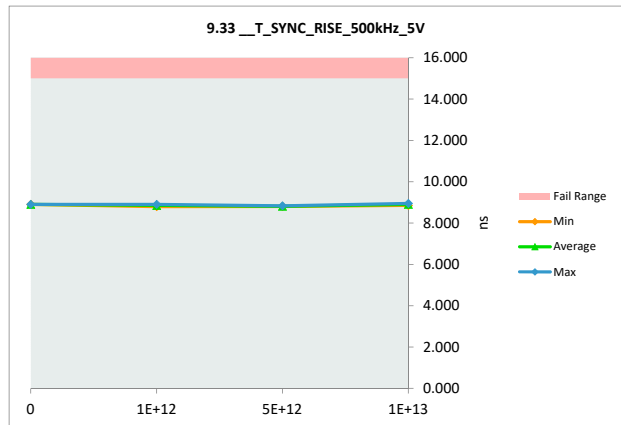
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.415	8.903	0.488
1E+12	243	8.379	8.857	0.478
1E+12	244	8.392	8.903	0.511
1E+12	247	8.335	8.792	0.457
5E+12	251	8.336	8.831	0.495
5E+12	252	8.309	8.800	0.491
5E+12	259	8.381	8.806	0.425
1E+13	261	8.462	8.950	0.488
1E+13	263	8.407	8.918	0.511
1E+13	264	8.408	8.853	0.445
Max		8.462	8.950	0.511
Average		8.382	8.861	0.479
Min		8.309	8.792	0.425
Std Dev		0.045	0.055	0.028



9.33 __T_SYNC_RISE_500kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.903	8.792	8.800	8.853
Average	8.903	8.851	8.812	8.907
Max	8.903	8.903	8.831	8.950
UL	15.000	15.000	15.000	15.000

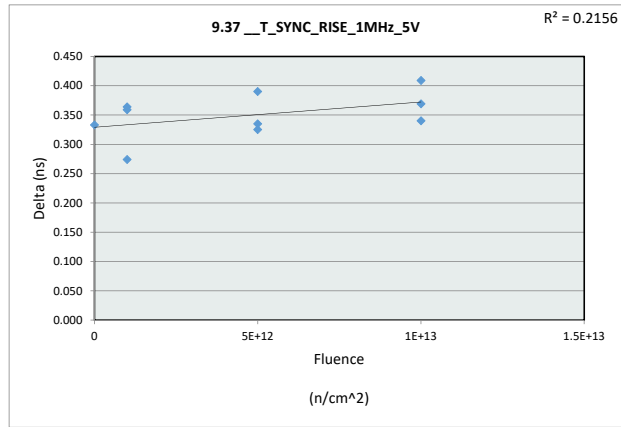


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.37 __T_SYNC_RISE_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

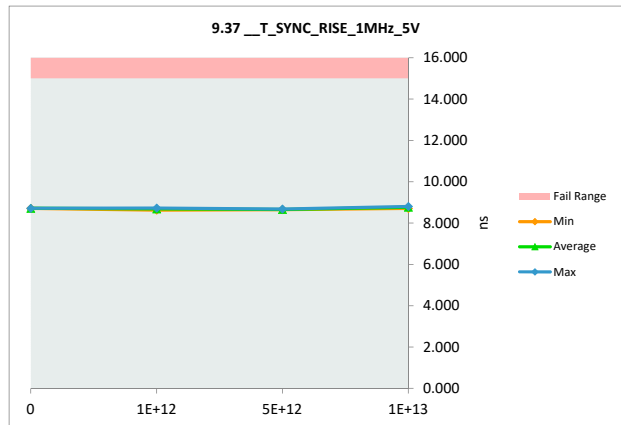
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.380	8.713	0.333
1E+12	243	8.330	8.694	0.364
1E+12	244	8.449	8.723	0.274
1E+12	247	8.267	8.626	0.359
5E+12	251	8.312	8.647	0.335
5E+12	252	8.290	8.680	0.390
5E+12	259	8.323	8.648	0.325
1E+13	261	8.461	8.801	0.340
1E+13	263	8.376	8.785	0.409
1E+13	264	8.334	8.703	0.369
Max		8.461	8.801	0.409
Average		8.352	8.702	0.350
Min		8.267	8.626	0.274
Std Dev		0.064	0.057	0.038



9.37 __T_SYNC_RISE_1MHz_5

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.713	8.626	8.647	8.703
Average	8.713	8.681	8.658	8.763
Max	8.713	8.723	8.680	8.801
UL	15.000	15.000	15.000	15.000

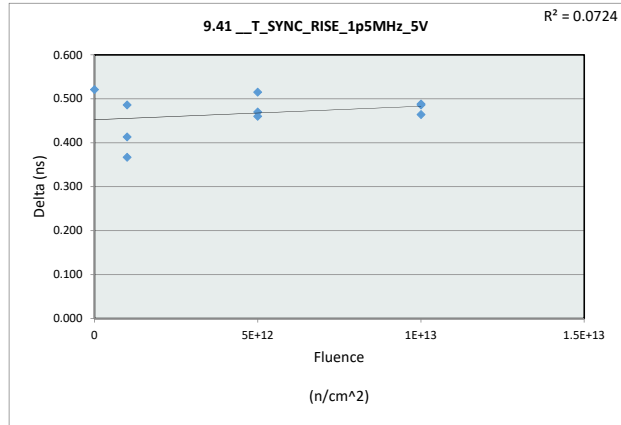


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.41 __T_SYNC_RISE_1p5MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

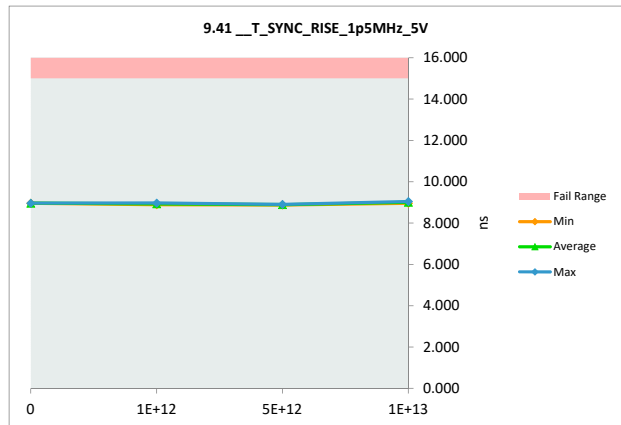
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.439	8.960	0.521
1E+12	243	8.555	8.922	0.367
1E+12	244	8.554	8.967	0.413
1E+12	247	8.402	8.888	0.486
5E+12	251	8.417	8.877	0.460
5E+12	252	8.387	8.902	0.515
5E+12	259	8.406	8.876	0.470
1E+13	261	8.554	9.042	0.488
1E+13	263	8.528	9.014	0.486
1E+13	264	8.491	8.955	0.464
Max		8.555	9.042	0.521
Average		8.473	8.940	0.467
Min		8.387	8.876	0.367
Std Dev		0.070	0.058	0.046



9.41 __T_SYNC_RISE_1p5MHz

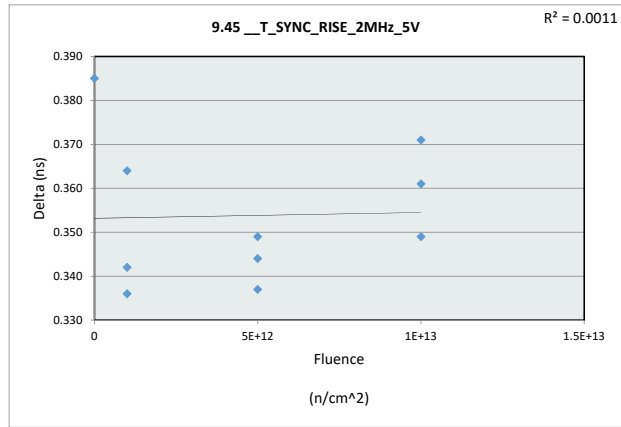
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.960	8.888	8.876	8.955
Average	8.960	8.926	8.885	9.004
Max	8.960	8.967	8.902	9.042
UL	15.000	15.000	15.000	15.000

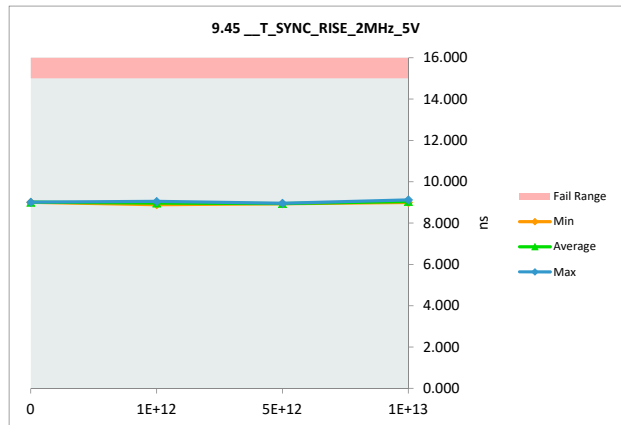


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.45 __T_SYNC_RISE_2MHz_5V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.623	9.008	0.385
1E+12	243	8.626	8.962	0.336
1E+12	244	8.680	9.044	0.364
1E+12	247	8.546	8.888	0.342
5E+12	251	8.598	8.935	0.337
5E+12	252	8.597	8.941	0.344
5E+12	259	8.606	8.955	0.349
1E+13	261	8.747	9.118	0.371
1E+13	263	8.650	9.011	0.361
1E+13	264	8.645	8.994	0.349
Max		8.747	9.118	0.385
Average		8.632	8.986	0.354
Min		8.546	8.888	0.336
Std Dev		0.054	0.065	0.016



9.45 __T_SYNC_RISE_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.008	8.888	8.935	8.994
Average	9.008	8.965	8.944	9.041
Max	9.008	9.044	8.955	9.118
UL	15.000	15.000	15.000	15.000

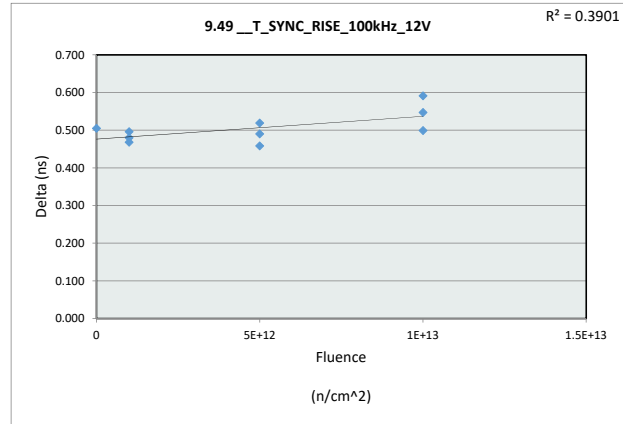


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.49 __T_SYNC_RISE_100kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

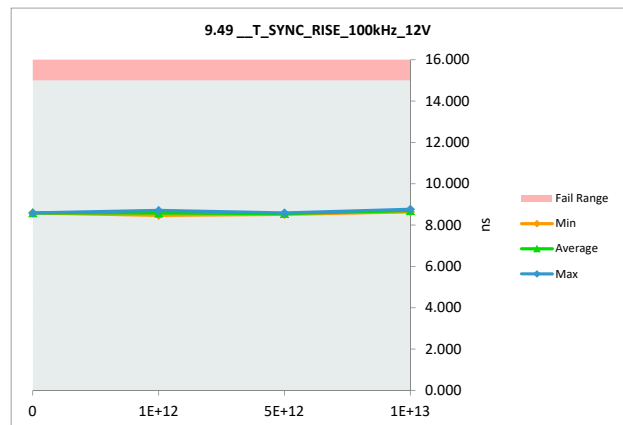
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.081	8.586	0.505
1E+12	243	7.988	8.468	0.480
1E+12	244	8.209	8.705	0.496
1E+12	247	8.107	8.575	0.468
5E+12	251	8.127	8.585	0.458
5E+12	252	8.057	8.576	0.519
5E+12	259	8.024	8.514	0.490
1E+13	261	8.157	8.704	0.547
1E+13	263	8.139	8.638	0.499
1E+13	264	8.174	8.765	0.591
Max		8.209	8.765	0.591
Average		8.106	8.612	0.505
Min		7.988	8.468	0.458
Std Dev		0.069	0.092	0.039



9.49 __T_SYNC_RISE_100kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.586	8.468	8.514	8.638
Average	8.586	8.583	8.558	8.702
Max	8.586	8.705	8.585	8.765
UL	15.000	15.000	15.000	15.000

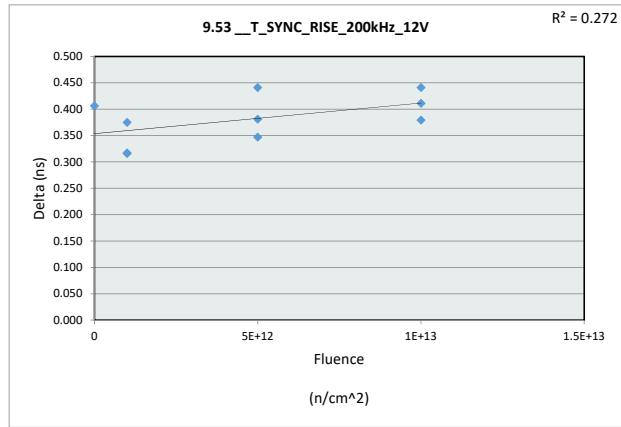


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.53 __T_SYNC_RISE_200kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

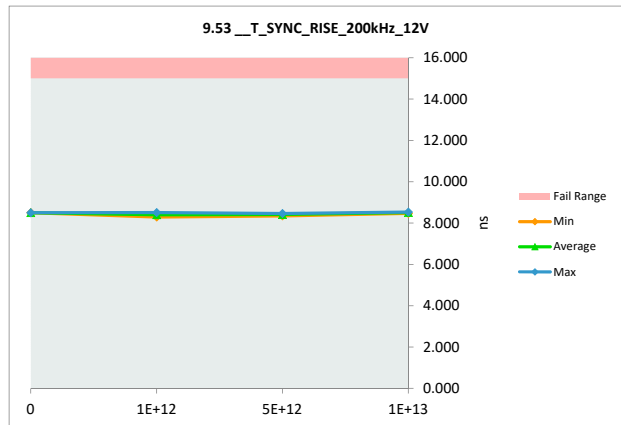
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.092	8.498	0.406
1E+12	243	7.972	8.289	0.317
1E+12	244	8.190	8.506	0.316
1E+12	247	8.032	8.407	0.375
5E+12	251	8.023	8.464	0.441
5E+12	252	8.042	8.423	0.381
5E+12	259	7.998	8.345	0.347
1E+13	261	8.093	8.534	0.441
1E+13	263	8.085	8.464	0.379
1E+13	264	8.112	8.523	0.411
Max		8.190	8.534	0.441
Average		8.064	8.445	0.381
Min		7.972	8.289	0.316
Std Dev		0.063	0.080	0.045



9.53 __T_SYNC_RISE_200kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.498	8.289	8.345	8.464
Average	8.498	8.401	8.411	8.507
Max	8.498	8.506	8.464	8.534
UL	15.000	15.000	15.000	15.000

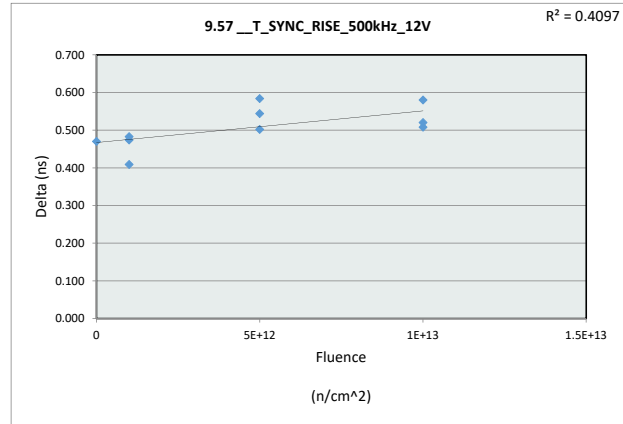


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.57 __T_SYNC_RISE_500kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

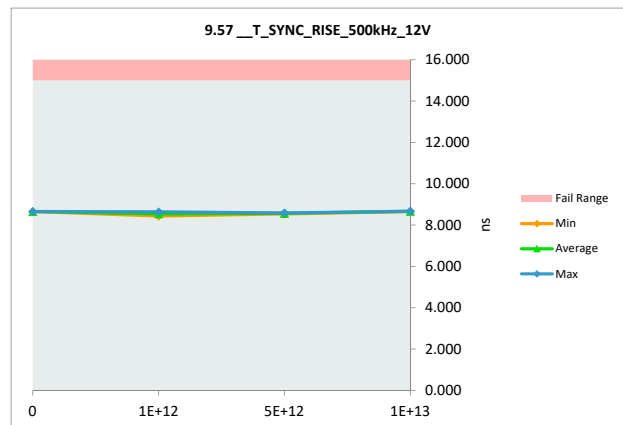
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.180	8.650	0.470
1E+12	243	8.031	8.440	0.409
1E+12	244	8.154	8.637	0.483
1E+12	247	8.070	8.544	0.474
5E+12	251	8.087	8.589	0.502
5E+12	252	7.993	8.577	0.584
5E+12	259	7.989	8.533	0.544
1E+13	261	8.140	8.660	0.520
1E+13	263	8.081	8.661	0.580
1E+13	264	8.167	8.675	0.508
Max		8.180	8.675	0.584
Average		8.089	8.597	0.507
Min		7.989	8.440	0.409
Std Dev		0.070	0.075	0.053



9.57 __T_SYNC_RISE_500kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.650	8.440	8.533	8.660
Average	8.650	8.540	8.566	8.665
Max	8.650	8.637	8.589	8.675
UL	15.000	15.000	15.000	15.000

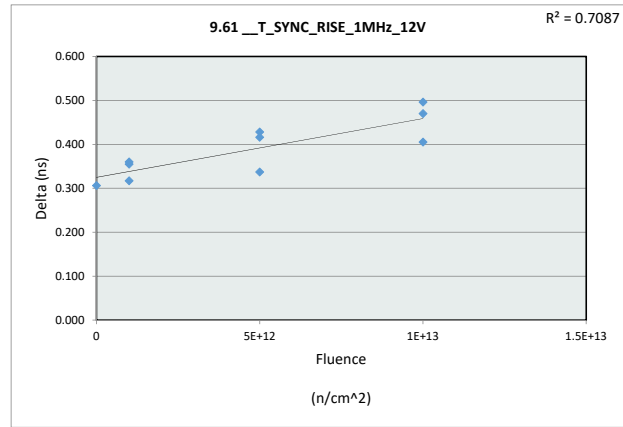


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.61 __T_SYNC_RISE_1MHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

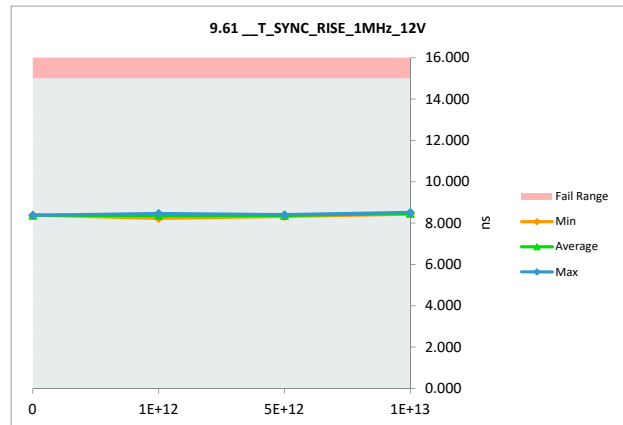
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.073	8.379	0.306
1E+12	243	7.915	8.232	0.317
1E+12	244	8.106	8.461	0.355
1E+12	247	8.033	8.393	0.360
5E+12	251	7.985	8.401	0.416
5E+12	252	7.962	8.390	0.428
5E+12	259	7.981	8.318	0.337
1E+13	261	7.961	8.457	0.496
1E+13	263	8.027	8.432	0.405
1E+13	264	8.046	8.516	0.470
Max		8.106	8.516	0.496
Average		8.009	8.398	0.389
Min		7.915	8.232	0.306
Std Dev		0.058	0.080	0.064



9.61 __T_SYNC_RISE_1MHz_1

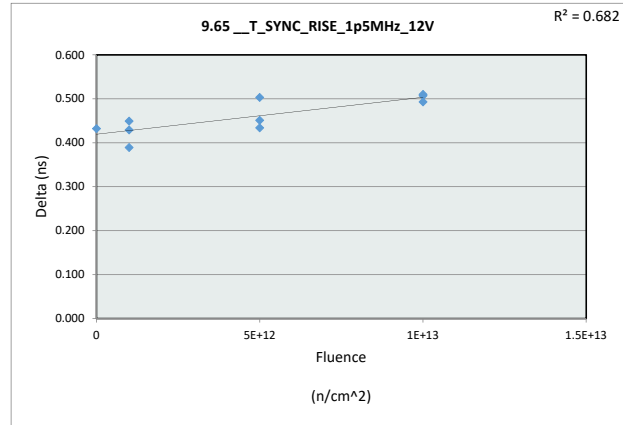
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.379	8.232	8.318	8.432
Average	8.379	8.362	8.370	8.468
Max	8.379	8.461	8.401	8.516
UL	15.000	15.000	15.000	15.000

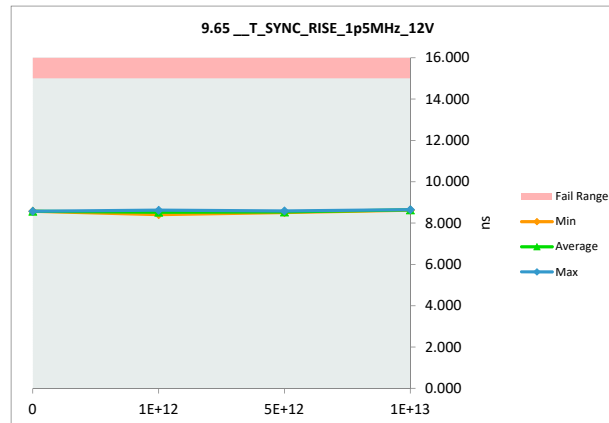


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.65 __T_SYNC_RISE_1p5MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	15	15		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.138	8.570	0.432
1E+12	243	8.020	8.409	0.389
1E+12	244	8.192	8.621	0.429
1E+12	247	8.084	8.533	0.449
5E+12	251	8.135	8.586	0.451
5E+12	252	8.076	8.510	0.434
5E+12	259	8.006	8.509	0.503
1E+13	261	8.121	8.628	0.507
1E+13	263	8.121	8.631	0.510
1E+13	264	8.159	8.652	0.493
Max		8.192	8.652	0.510
Average		8.105	8.565	0.460
Min		8.006	8.409	0.389
Std Dev		0.059	0.075	0.041



9.65 __T_SYNC_RISE_1p5MHz				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.570	8.409	8.509	8.628
Average	8.570	8.521	8.535	8.637
Max	8.570	8.621	8.586	8.652
UL	15.000	15.000	15.000	15.000

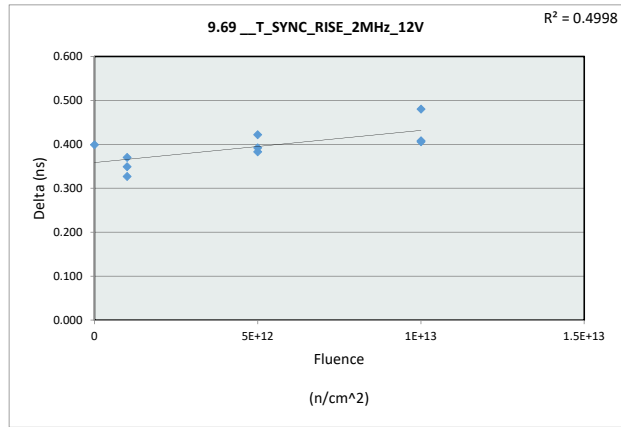


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.69 __T_SYNC_RISE_2MHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

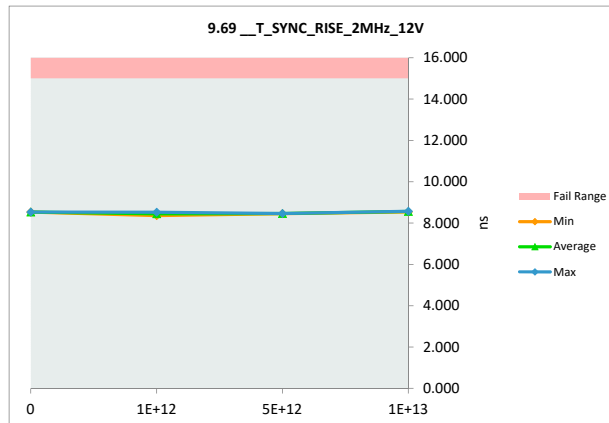
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.133	8.532	0.399
1E+12	243	8.038	8.365	0.327
1E+12	244	8.174	8.523	0.349
1E+12	247	8.077	8.447	0.370
5E+12	251	8.079	8.462	0.383
5E+12	252	8.069	8.461	0.392
5E+12	259	8.032	8.454	0.422
1E+13	261	8.156	8.564	0.408
1E+13	263	8.061	8.541	0.480
1E+13	264	8.168	8.574	0.406
Max		8.174	8.574	0.480
Average		8.099	8.492	0.394
Min		8.032	8.365	0.327
Std Dev		0.054	0.065	0.042



9.69 __T_SYNC_RISE_2MHz_1

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.532	8.365	8.454	8.541
Average	8.532	8.445	8.459	8.560
Max	8.532	8.523	8.462	8.574
UL	15.000	15.000	15.000	15.000

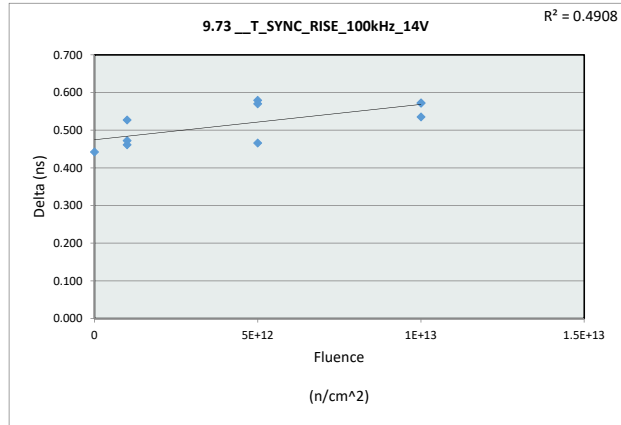


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.73 __T_SYNC_RISE_100kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

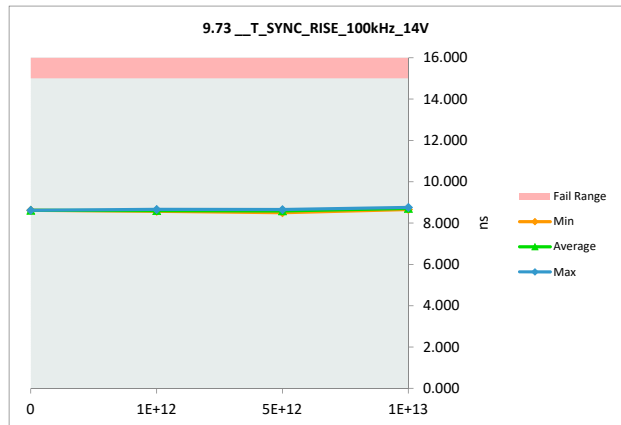
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.173	8.615	0.442
1E+12	243	8.047	8.574	0.527
1E+12	244	8.197	8.658	0.461
1E+12	247	8.096	8.568	0.472
5E+12	251	8.082	8.652	0.570
5E+12	252	8.039	8.618	0.579
5E+12	259	8.032	8.498	0.466
1E+13	261	8.149	8.721	0.572
1E+13	263	8.083	8.655	0.572
1E+13	264	8.222	8.757	0.535
Max		8.222	8.757	0.579
Average		8.112	8.632	0.520
Min		8.032	8.498	0.442
Std Dev		0.069	0.075	0.054



9.73 __T_SYNC_RISE_100kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.615	8.568	8.498	8.655
Average	8.615	8.600	8.589	8.711
Max	8.615	8.658	8.652	8.757
UL	15.000	15.000	15.000	15.000

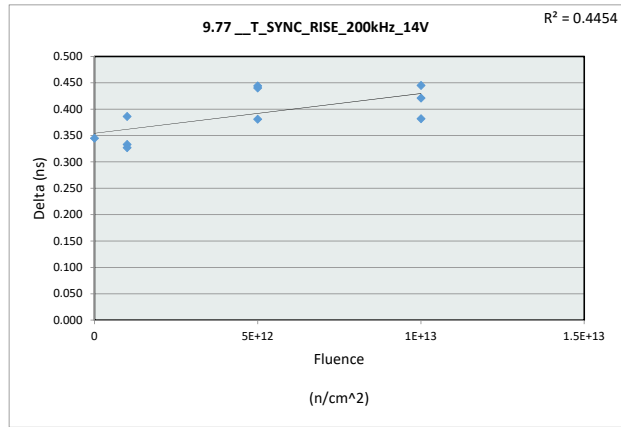


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.77 __T_SYNC_RISE_200kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

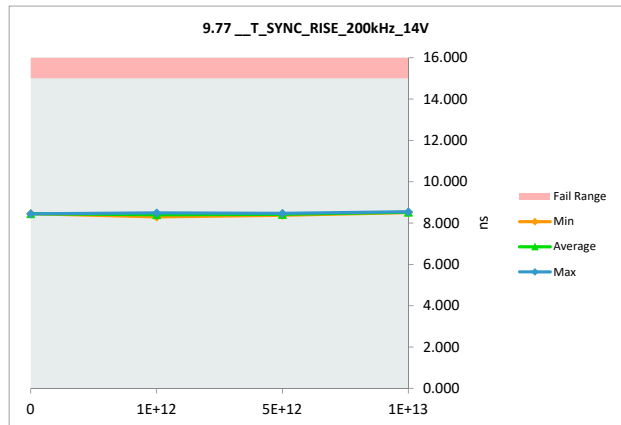
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.104	8.449	0.345
1E+12	243	7.965	8.298	0.333
1E+12	244	8.161	8.488	0.327
1E+12	247	8.031	8.417	0.386
5E+12	251	8.020	8.464	0.444
5E+12	252	8.038	8.419	0.381
5E+12	259	7.936	8.376	0.440
1E+13	261	8.123	8.544	0.421
1E+13	263	8.065	8.510	0.445
1E+13	264	8.140	8.522	0.382
Max		8.161	8.544	0.445
Average		8.058	8.449	0.390
Min		7.936	8.298	0.327
Std Dev		0.074	0.074	0.046



9.77 __T_SYNC_RISE_200kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.449	8.298	8.376	8.510
Average	8.449	8.401	8.420	8.525
Max	8.449	8.488	8.464	8.544
UL	15.000	15.000	15.000	15.000

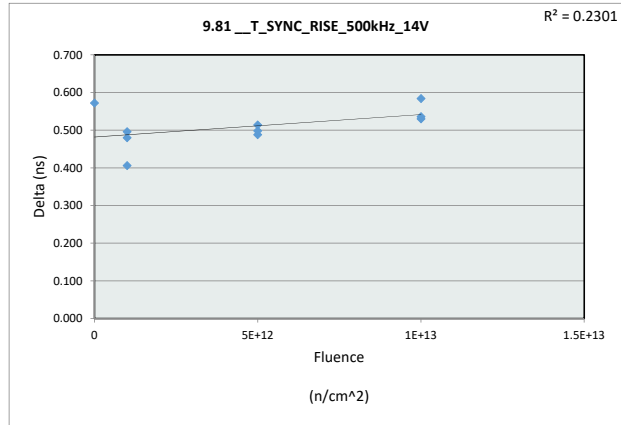


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.81 __T_SYNC_RISE_500kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

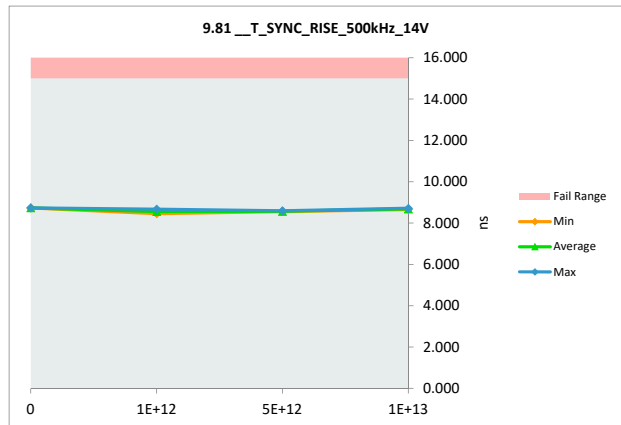
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.162	8.734	0.572
1E+12	243	8.050	8.456	0.406
1E+12	244	8.174	8.670	0.496
1E+12	247	8.070	8.550	0.480
5E+12	251	8.082	8.596	0.514
5E+12	252	8.063	8.551	0.488
5E+12	259	8.055	8.553	0.498
1E+13	261	8.146	8.682	0.536
1E+13	263	8.124	8.654	0.530
1E+13	264	8.127	8.711	0.584
Max		8.174	8.734	0.584
Average		8.105	8.616	0.510
Min		8.050	8.456	0.406
Std Dev		0.047	0.088	0.050



9.81 __T_SYNC_RISE_500kHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.734	8.456	8.551	8.654
Average	8.734	8.559	8.567	8.682
Max	8.734	8.670	8.596	8.711
UL	15.000	15.000	15.000	15.000

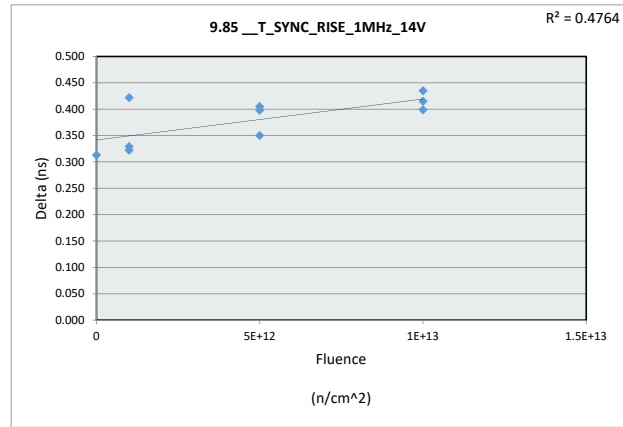


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.85 __T_SYNC_RISE_1MHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

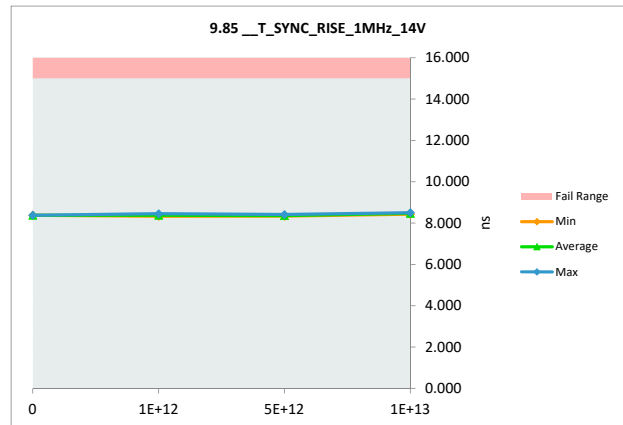
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.061	8.374	0.313
1E+12	243	7.909	8.331	0.422
1E+12	244	8.128	8.450	0.322
1E+12	247	8.018	8.347	0.329
5E+12	251	8.012	8.410	0.398
5E+12	252	7.984	8.334	0.350
5E+12	259	7.929	8.334	0.405
1E+13	261	8.065	8.500	0.435
1E+13	263	8.029	8.428	0.399
1E+13	264	8.072	8.487	0.415
Max		8.128	8.500	0.435
Average		8.021	8.399	0.379
Min		7.909	8.331	0.313
Std Dev		0.067	0.065	0.046



9.85 __T_SYNC_RISE_1MHz_1

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.374	8.331	8.334	8.428
Average	8.374	8.376	8.359	8.472
Max	8.374	8.450	8.410	8.500
UL	15.000	15.000	15.000	15.000

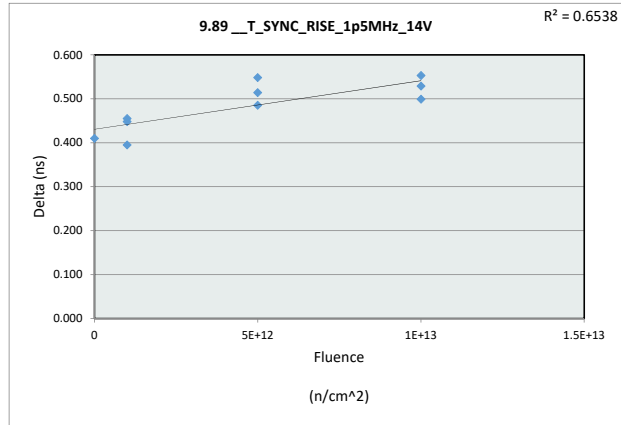


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.89 __T_SYNC_RISE_1p5MHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

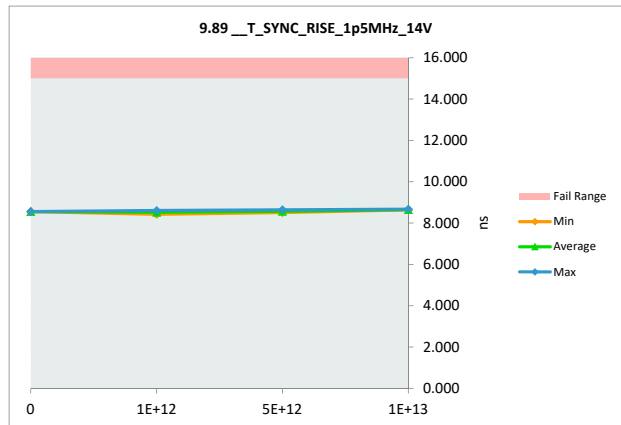
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.145	8.555	0.410
1E+12	243	7.966	8.421	0.455
1E+12	244	8.208	8.603	0.395
1E+12	247	8.093	8.541	0.448
5E+12	251	8.091	8.639	0.548
5E+12	252	8.048	8.562	0.514
5E+12	259	8.021	8.506	0.485
1E+13	261	8.145	8.644	0.499
1E+13	263	8.084	8.637	0.553
1E+13	264	8.145	8.674	0.529
Max		8.208	8.674	0.553
Average		8.095	8.578	0.484
Min		7.966	8.421	0.395
Std Dev		0.071	0.077	0.055



9.89 __T_SYNC_RISE_1p5MHz

Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.555	8.421	8.506	8.637
Average	8.555	8.522	8.569	8.652
Max	8.555	8.603	8.639	8.674
UL	15.000	15.000	15.000	15.000

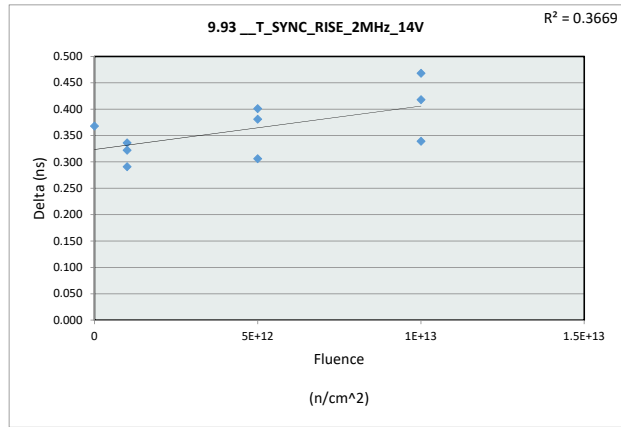


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.93 __T_SYNC_RISE_2MHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	15	15
Min Limit		

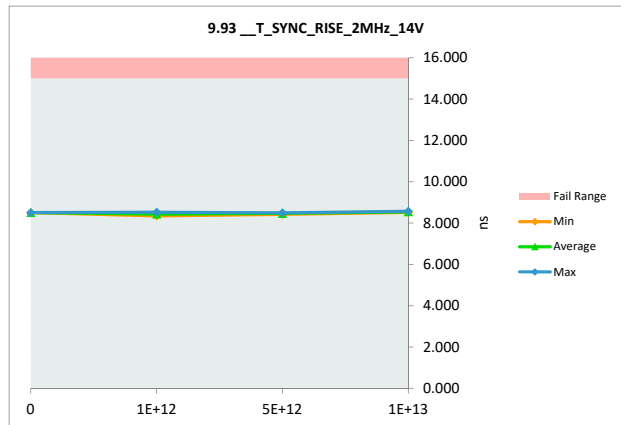
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.135	8.503	0.368
1E+12	243	8.054	8.345	0.291
1E+12	244	8.185	8.521	0.336
1E+12	247	8.103	8.425	0.322
5E+12	251	8.093	8.494	0.401
5E+12	252	8.090	8.471	0.381
5E+12	259	8.118	8.424	0.306
1E+13	261	8.201	8.540	0.339
1E+13	263	8.050	8.518	0.468
1E+13	264	8.151	8.569	0.418
Max		8.201	8.569	0.468
Average		8.118	8.481	0.363
Min		8.050	8.345	0.291
Std Dev		0.051	0.067	0.055



9.93 __T_SYNC_RISE_2MHz_1

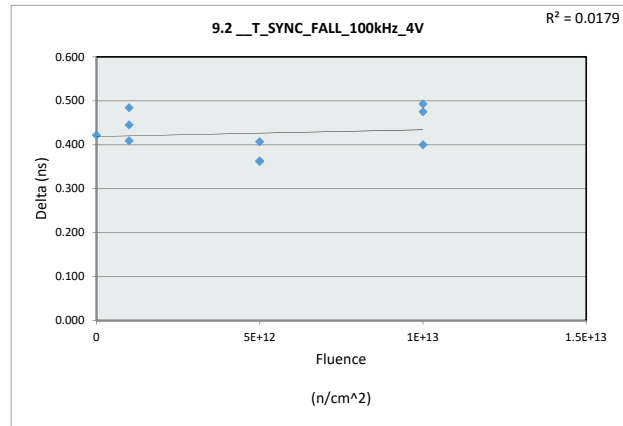
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.503	8.345	8.424	8.518
Average	8.503	8.430	8.463	8.542
Max	8.503	8.521	8.494	8.569
UL	15.000	15.000	15.000	15.000

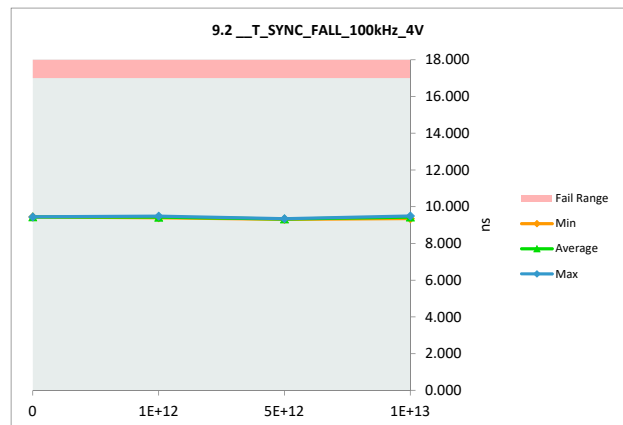


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.2 __T_SYNC_FALL_100kHz_4V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.024	9.446	0.422
1E+12	243	8.998	9.482	0.484
1E+12	244	8.988	9.397	0.409
1E+12	247	8.952	9.397	0.445
5E+12	251	8.986	9.349	0.363
5E+12	252	8.967	9.329	0.362
5E+12	259	8.908	9.315	0.407
1E+13	261	9.003	9.496	0.493
1E+13	263	8.969	9.444	0.475
1E+13	264	8.948	9.348	0.400
Max		9.024	9.496	0.493
Average		8.974	9.400	0.426
Min		8.908	9.315	0.362
Std Dev		0.033	0.065	0.047



9.2 __T_SYNC_FALL_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.446	9.397	9.315	9.348
Average	9.446	9.425	9.331	9.429
Max	9.446	9.482	9.349	9.496
UL	17.000	17.000	17.000	17.000

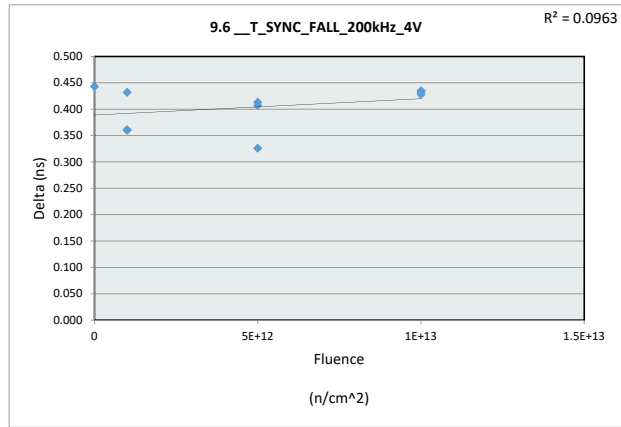


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.6 __T_SYNC_FALL_200kHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

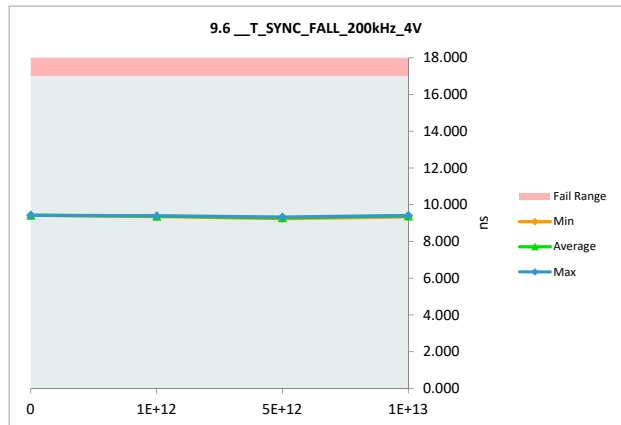
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.982	9.425	0.443
1E+12	243	9.023	9.383	0.360
1E+12	244	8.994	9.355	0.361
1E+12	247	8.960	9.392	0.432
5E+12	251	8.914	9.327	0.413
5E+12	252	8.884	9.291	0.407
5E+12	259	8.918	9.244	0.326
1E+13	261	8.968	9.396	0.428
1E+13	263	8.983	9.415	0.432
1E+13	264	8.899	9.334	0.435
Max		9.023	9.425	0.443
Average		8.953	9.356	0.404
Min		8.884	9.244	0.326
Std Dev		0.046	0.058	0.040



9.6 __T_SYNC_FALL_200kHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.425	9.355	9.244	9.334
Average	9.425	9.377	9.287	9.382
Max	9.425	9.392	9.327	9.415
UL	17.000	17.000	17.000	17.000

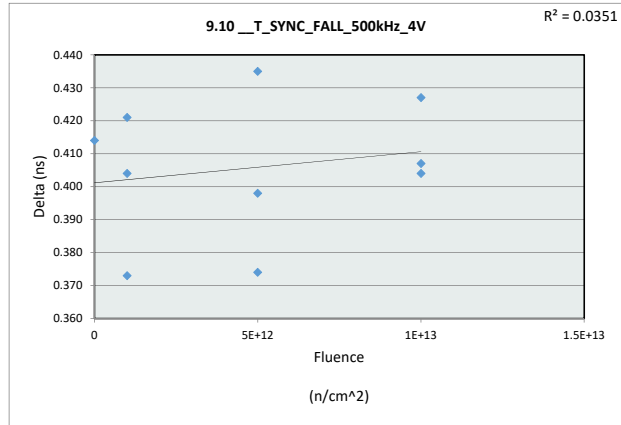


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.10 __T_SYNC_FALL_500kHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

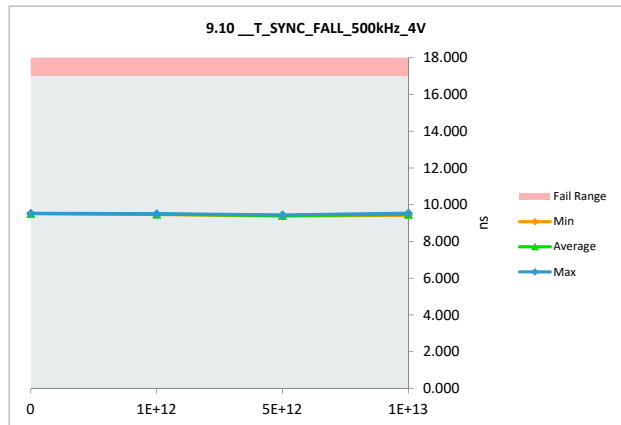
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.107	9.521	0.414
1E+12	243	9.102	9.506	0.404
1E+12	244	9.056	9.477	0.421
1E+12	247	9.094	9.467	0.373
5E+12	251	9.010	9.445	0.435
5E+12	252	8.981	9.379	0.398
5E+12	259	9.032	9.406	0.374
1E+13	261	9.131	9.538	0.407
1E+13	263	9.063	9.467	0.404
1E+13	264	8.996	9.423	0.427
Max		9.131	9.538	0.435
Average		9.057	9.463	0.406
Min		8.981	9.379	0.373
Std Dev		0.051	0.051	0.020



9.10 T_SYNC_FALL_500kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.521	9.467	9.379	9.423
Average	9.521	9.483	9.410	9.476
Max	9.521	9.506	9.445	9.538
UL	17.000	17.000	17.000	17.000

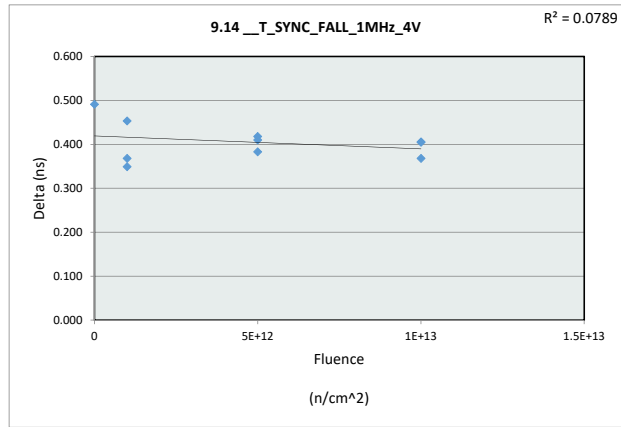


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.14 __T_SYNC_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

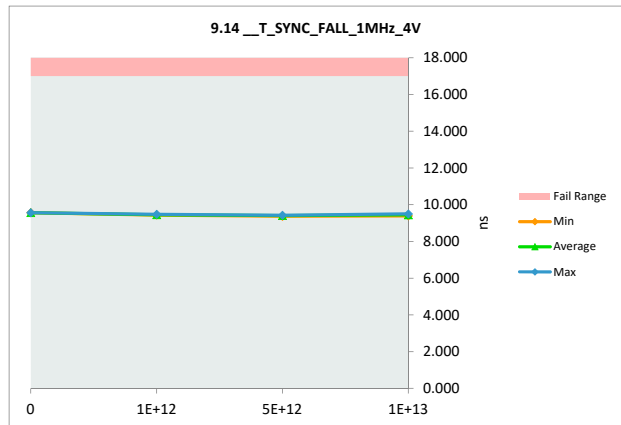
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.071	9.562	0.491
1E+12	243	9.107	9.475	0.368
1E+12	244	9.084	9.433	0.349
1E+12	247	8.986	9.439	0.453
5E+12	251	9.018	9.428	0.410
5E+12	252	8.985	9.368	0.383
5E+12	259	9.004	9.422	0.418
1E+13	261	9.090	9.495	0.405
1E+13	263	9.077	9.445	0.368
1E+13	264	8.984	9.389	0.405
Max		9.107	9.562	0.491
Average		9.041	9.446	0.405
Min		8.984	9.368	0.349
Std Dev		0.050	0.055	0.042



9.14 __T_SYNC_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.562	9.433	9.368	9.389
Average	9.562	9.449	9.406	9.443
Max	9.562	9.475	9.428	9.495
UL	17.000	17.000	17.000	17.000

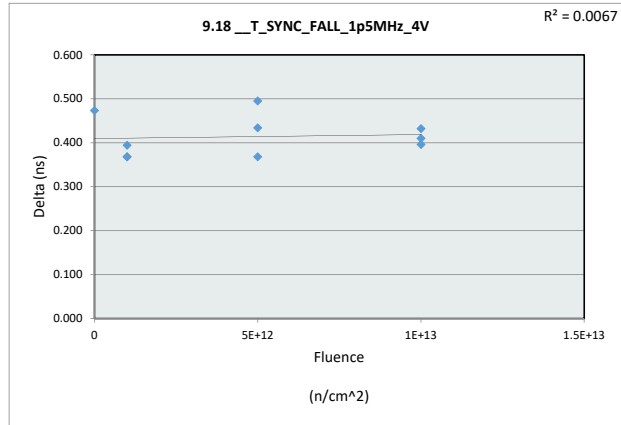


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.18 __T_SYNC_FALL_1p5MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

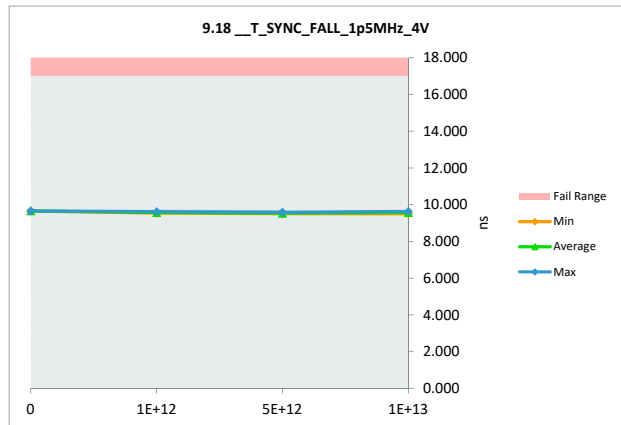
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.185	9.658	0.473
1E+12	243	9.223	9.617	0.394
1E+12	244	9.191	9.559	0.368
1E+12	247	9.162	9.530	0.368
5E+12	251	9.148	9.516	0.368
5E+12	252	9.071	9.505	0.434
5E+12	259	9.098	9.593	0.495
1E+13	261	9.234	9.630	0.396
1E+13	263	9.174	9.584	0.410
1E+13	264	9.070	9.502	0.432
Max		9.234	9.658	0.495
Average		9.156	9.569	0.414
Min		9.070	9.502	0.368
Std Dev		0.059	0.056	0.045



9.18 T_SYNC_FALL_1p5MHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.658	9.530	9.505	9.502
Average	9.658	9.569	9.538	9.572
Max	9.658	9.617	9.593	9.630
UL	17.000	17.000	17.000	17.000

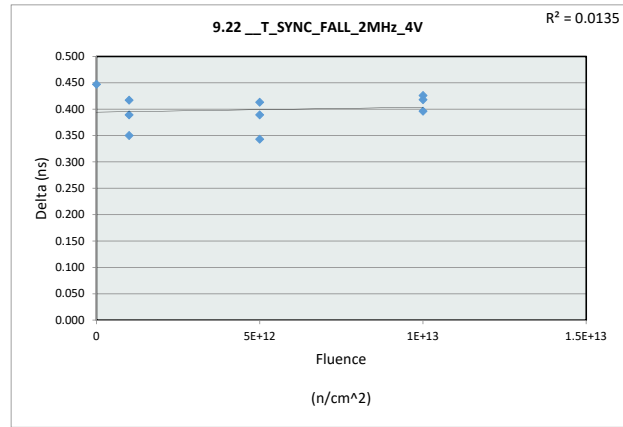


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.22 __T_SYNC_FALL_2MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

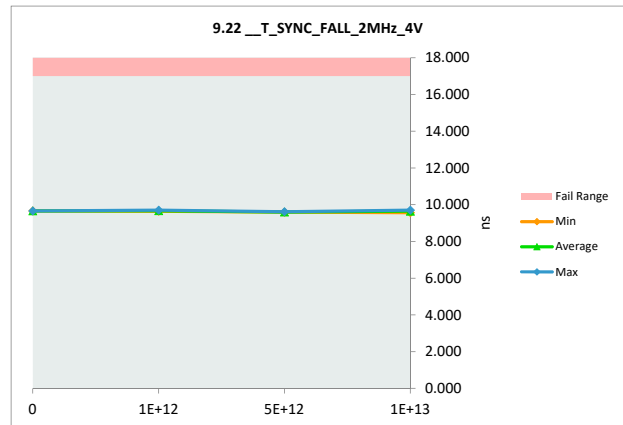
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.210	9.657	0.447
1E+12	243	9.351	9.701	0.350
1E+12	244	9.253	9.642	0.389
1E+12	247	9.255	9.672	0.417
5E+12	251	9.251	9.594	0.343
5E+12	252	9.185	9.598	0.413
5E+12	259	9.225	9.614	0.389
1E+13	261	9.287	9.705	0.418
1E+13	263	9.241	9.667	0.426
1E+13	264	9.169	9.565	0.396
Max		9.351	9.705	0.447
Average		9.243	9.641	0.399
Min		9.169	9.565	0.343
Std Dev		0.052	0.047	0.033



9.22 __T_SYNC_FALL_2MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.657	9.642	9.594	9.565
Average	9.657	9.672	9.602	9.646
Max	9.657	9.701	9.614	9.705
UL	17.000	17.000	17.000	17.000

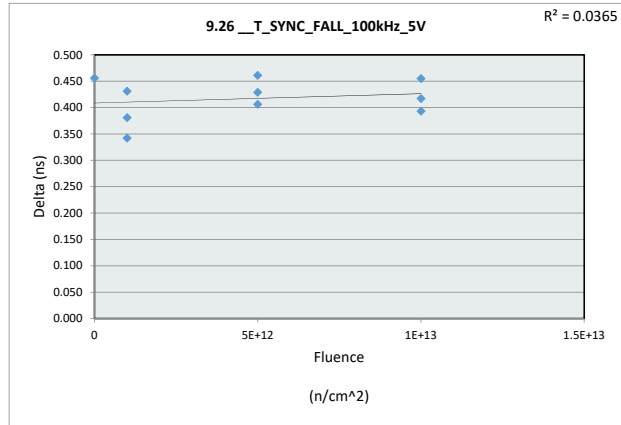


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.26 __T_SYNC_FALL_100kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

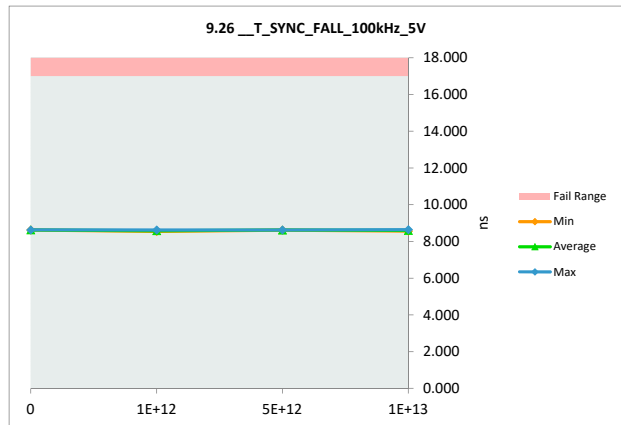
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.168	8.624	0.456
1E+12	243	8.189	8.620	0.431
1E+12	244	8.201	8.543	0.342
1E+12	247	8.198	8.579	0.381
5E+12	251	8.182	8.611	0.429
5E+12	252	8.159	8.620	0.461
5E+12	259	8.212	8.618	0.406
1E+13	261	8.194	8.587	0.393
1E+13	263	8.183	8.638	0.455
1E+13	264	8.142	8.559	0.417
Max		8.212	8.638	0.461
Average		8.183	8.600	0.417
Min		8.142	8.543	0.342
Std Dev		0.021	0.031	0.038



9.26 __T_SYNC_FALL_100kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.624	8.543	8.611	8.559
Average	8.624	8.581	8.616	8.595
Max	8.624	8.620	8.620	8.638
UL	17.000	17.000	17.000	17.000

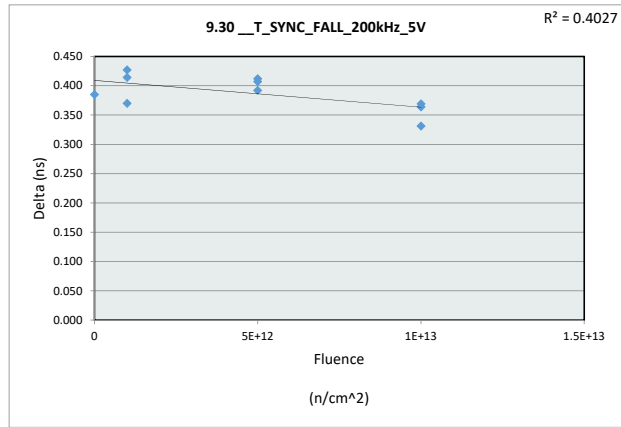


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.30 __T_SYNC_FALL_200kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

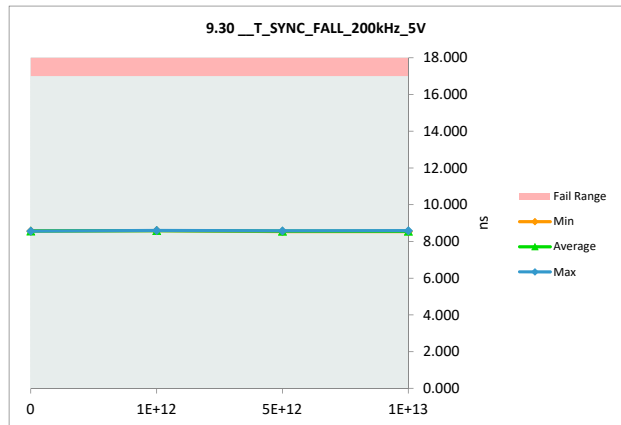
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.181	8.566	0.385
1E+12	243	8.222	8.592	0.370
1E+12	244	8.167	8.594	0.427
1E+12	247	8.178	8.592	0.414
5E+12	251	8.180	8.572	0.392
5E+12	252	8.124	8.536	0.412
5E+12	259	8.159	8.566	0.407
1E+13	261	8.211	8.580	0.369
1E+13	263	8.175	8.539	0.364
1E+13	264	8.202	8.533	0.331
Max		8.222	8.594	0.427
Average		8.180	8.567	0.387
Min		8.124	8.533	0.331
Std Dev		0.028	0.024	0.029



9.30 __T_SYNC_FALL_200kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.566	8.592	8.536	8.533
Average	8.566	8.593	8.558	8.551
Max	8.566	8.594	8.572	8.580
UL	17.000	17.000	17.000	17.000

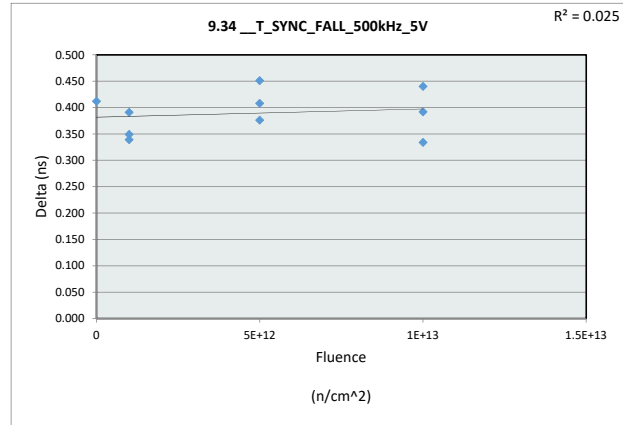


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.34 __T_SYNC_FALL_500kHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

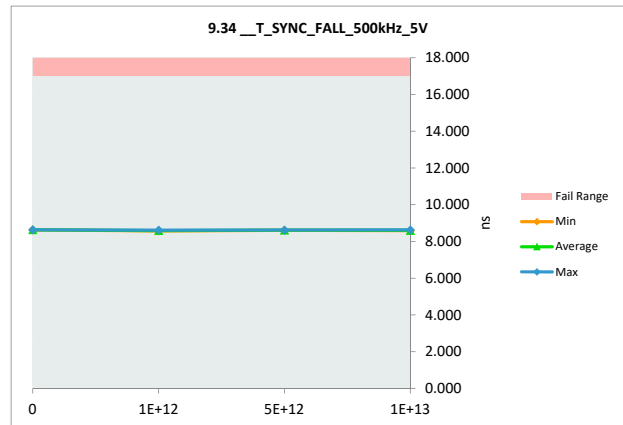
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.219	8.631	0.412
1E+12	243	8.238	8.587	0.349
1E+12	244	8.223	8.614	0.391
1E+12	247	8.235	8.574	0.339
5E+12	251	8.205	8.613	0.408
5E+12	252	8.152	8.603	0.451
5E+12	259	8.243	8.619	0.376
1E+13	261	8.234	8.626	0.392
1E+13	263	8.248	8.582	0.334
1E+13	264	8.157	8.597	0.440
Max		8.248	8.631	0.451
Average		8.215	8.605	0.389
Min		8.152	8.574	0.334
Std Dev		0.034	0.019	0.040



9.34 __T_SYNC_FALL_500kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.631	8.574	8.603	8.582
Average	8.631	8.592	8.612	8.602
Max	8.631	8.614	8.619	8.626
UL	17.000	17.000	17.000	17.000

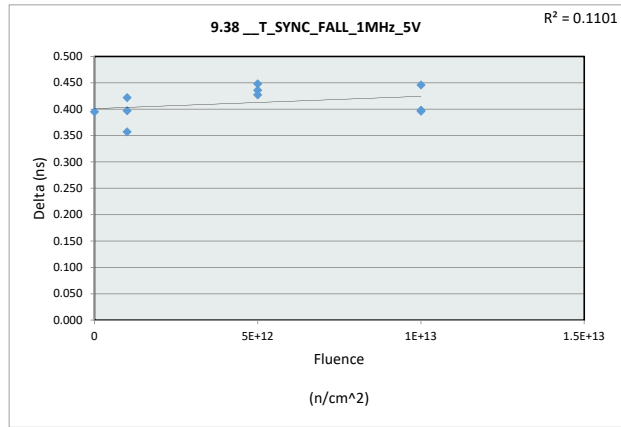


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.38 __T_SYNC_FALL_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

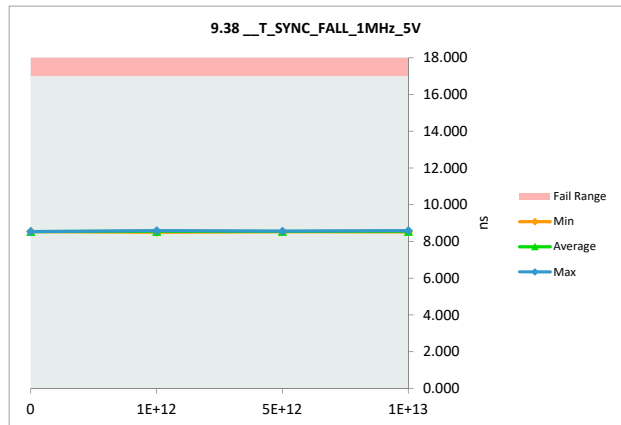
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.144	8.539	0.395
1E+12	243	8.159	8.556	0.397
1E+12	244	8.142	8.499	0.357
1E+12	247	8.160	8.582	0.422
5E+12	251	8.120	8.547	0.427
5E+12	252	8.120	8.556	0.436
5E+12	259	8.077	8.525	0.448
1E+13	261	8.145	8.541	0.396
1E+13	263	8.143	8.589	0.446
1E+13	264	8.120	8.518	0.398
Max		8.160	8.589	0.448
Average		8.133	8.545	0.412
Min		8.077	8.499	0.357
Std Dev		0.025	0.028	0.029



9.38 __T_SYNC_FALL_1MHz_5V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.539	8.499	8.525	8.518
Average	8.539	8.546	8.543	8.549
Max	8.539	8.582	8.556	8.589
UL	17.000	17.000	17.000	17.000

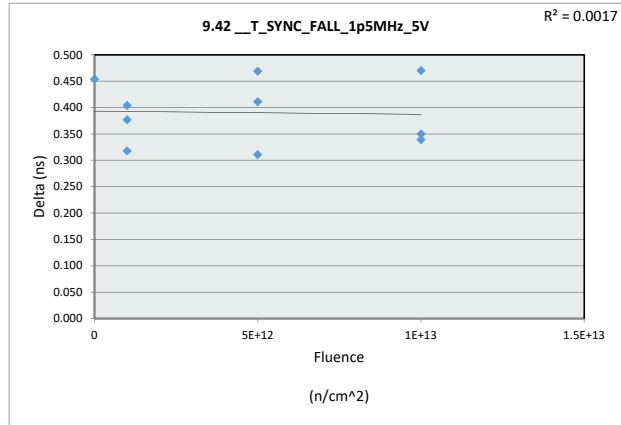


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.42 __T_SYNC_FALL_1p5MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

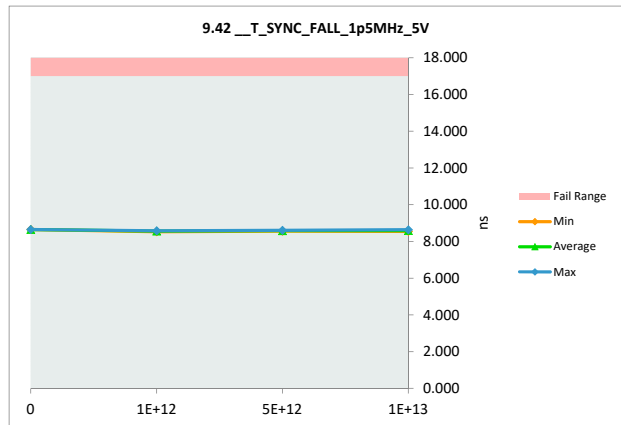
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.198	8.652	0.454
1E+12	243	8.172	8.576	0.404
1E+12	244	8.212	8.530	0.318
1E+12	247	8.194	8.571	0.377
5E+12	251	8.167	8.578	0.411
5E+12	252	8.136	8.605	0.469
5E+12	259	8.246	8.557	0.311
1E+13	261	8.236	8.586	0.350
1E+13	263	8.164	8.634	0.470
1E+13	264	8.202	8.541	0.339
Max		8.246	8.652	0.470
Average		8.193	8.583	0.390
Min		8.136	8.530	0.311
Std Dev		0.034	0.038	0.061



9.42 __T_SYNC_FALL_1p5MHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.652	8.530	8.557	8.541
Average	8.652	8.559	8.580	8.587
Max	8.652	8.576	8.605	8.634
UL	17.000	17.000	17.000	17.000

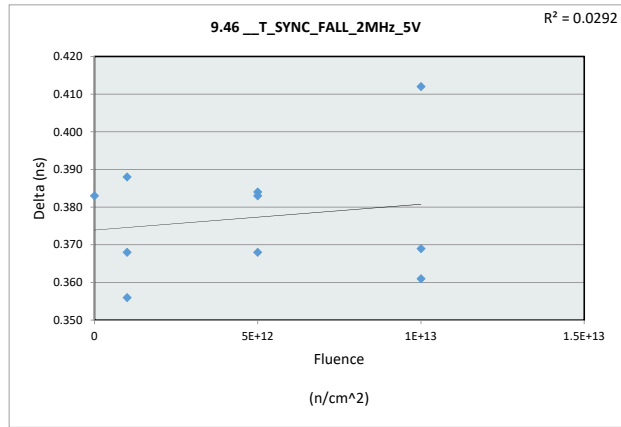


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.46 __T_SYNC_FALL_2MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

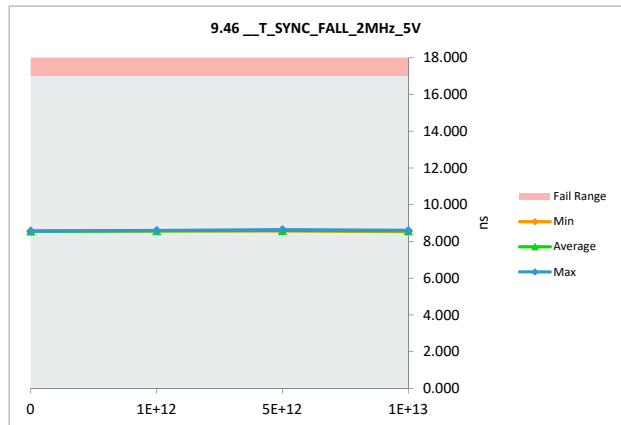
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.178	8.561	0.383
1E+12	243	8.226	8.594	0.368
1E+12	244	8.217	8.573	0.356
1E+12	247	8.177	8.565	0.388
5E+12	251	8.202	8.570	0.368
5E+12	252	8.184	8.568	0.384
5E+12	259	8.261	8.644	0.383
1E+13	261	8.231	8.592	0.361
1E+13	263	8.187	8.599	0.412
1E+13	264	8.166	8.535	0.369
Max		8.261	8.644	0.412
Average		8.203	8.580	0.377
Min		8.166	8.535	0.356
Std Dev		0.030	0.029	0.016



9.46 __T_SYNC_FALL_2MHz_5V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.561	8.565	8.568	8.535
Average	8.561	8.577	8.594	8.575
Max	8.561	8.594	8.644	8.599
UL	17.000	17.000	17.000	17.000

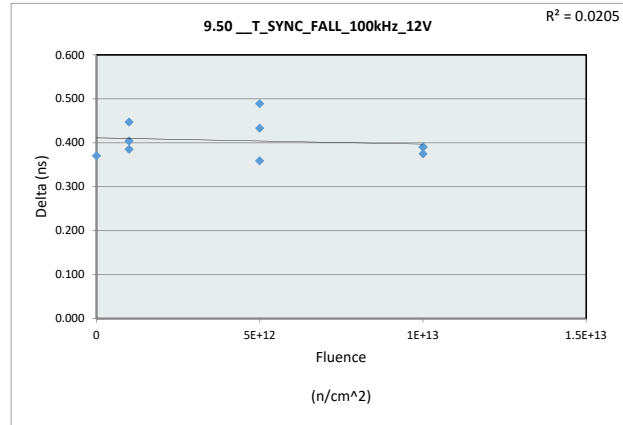


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.50 __T_SYNC_FALL_100kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

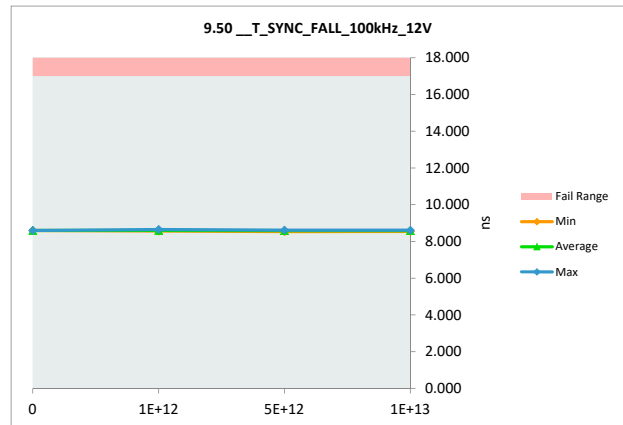
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.230	8.600	0.370
1E+12	243	8.267	8.652	0.385
1E+12	244	8.121	8.568	0.447
1E+12	247	8.159	8.563	0.404
5E+12	251	8.179	8.612	0.433
5E+12	252	8.176	8.535	0.359
5E+12	259	8.124	8.613	0.489
1E+13	261	8.235	8.610	0.375
1E+13	263	8.220	8.610	0.390
1E+13	264	8.154	8.544	0.390
Max		8.267	8.652	0.489
Average		8.186	8.591	0.404
Min		8.121	8.535	0.359
Std Dev		0.049	0.037	0.040



9.50 __T_SYNC_FALL_100kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.600	8.563	8.535	8.544
Average	8.600	8.594	8.587	8.588
Max	8.600	8.652	8.613	8.610
UL	17.000	17.000	17.000	17.000

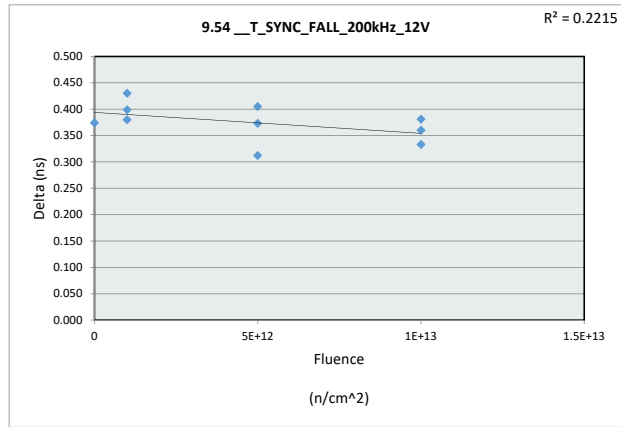


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.54 __T_SYNC_FALL_200kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

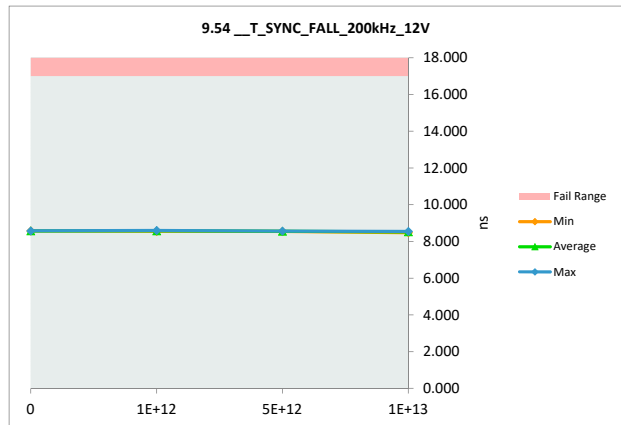
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.201	8.575	0.374
1E+12	243	8.214	8.594	0.380
1E+12	244	8.150	8.549	0.399
1E+12	247	8.145	8.575	0.430
5E+12	251	8.155	8.560	0.405
5E+12	252	8.184	8.557	0.373
5E+12	259	8.226	8.538	0.312
1E+13	261	8.171	8.531	0.360
1E+13	263	8.160	8.541	0.381
1E+13	264	8.144	8.477	0.333
Max		8.226	8.594	0.430
Average		8.175	8.550	0.375
Min		8.144	8.477	0.312
Std Dev		0.030	0.032	0.034



9.54 __T_SYNC_FALL_200kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.575	8.549	8.538	8.477
Average	8.575	8.573	8.552	8.516
Max	8.575	8.594	8.560	8.541
UL	17.000	17.000	17.000	17.000

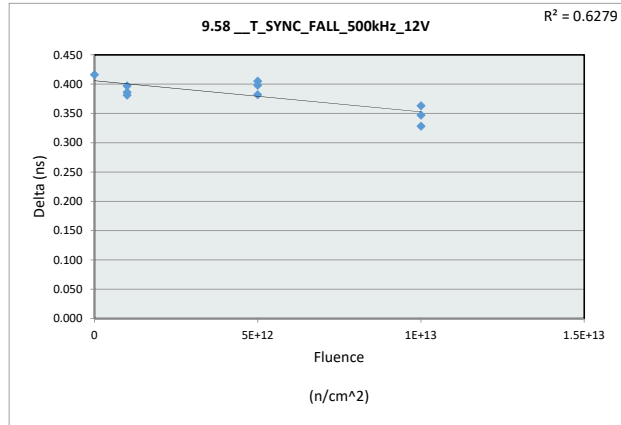


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.58 __T_SYNC_FALL_500kHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

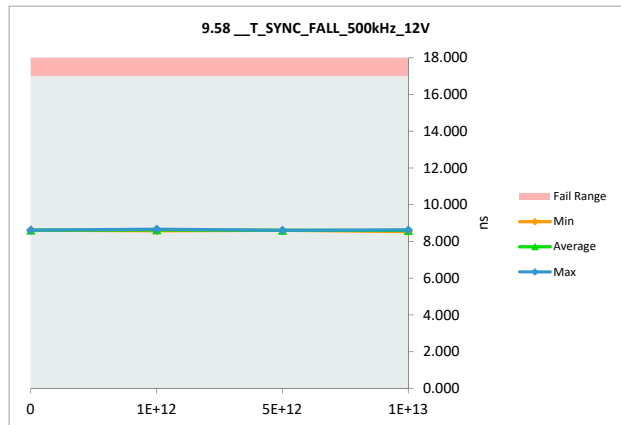
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.196	8.612	0.416
1E+12	243	8.282	8.663	0.381
1E+12	244	8.191	8.577	0.386
1E+12	247	8.236	8.633	0.397
5E+12	251	8.216	8.598	0.382
5E+12	252	8.202	8.607	0.405
5E+12	259	8.210	8.608	0.398
1E+13	261	8.252	8.615	0.363
1E+13	263	8.280	8.627	0.347
1E+13	264	8.212	8.540	0.328
Max		8.282	8.663	0.416
Average		8.228	8.608	0.380
Min		8.191	8.540	0.328
Std Dev		0.033	0.033	0.027



9.58 __T_SYNC_FALL_500kHz

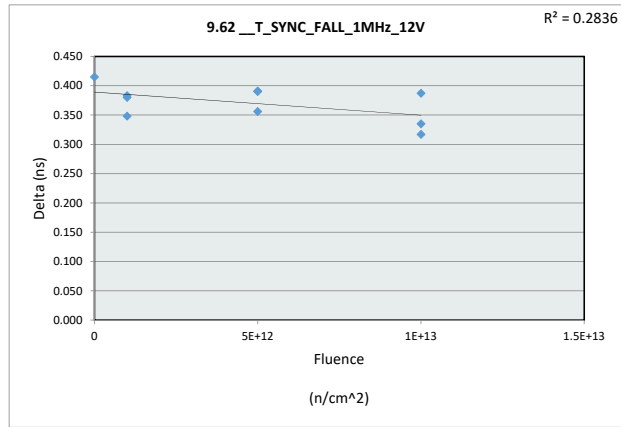
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.612	8.577	8.598	8.540
Average	8.612	8.624	8.604	8.594
Max	8.612	8.663	8.608	8.627
UL	17.000	17.000	17.000	17.000

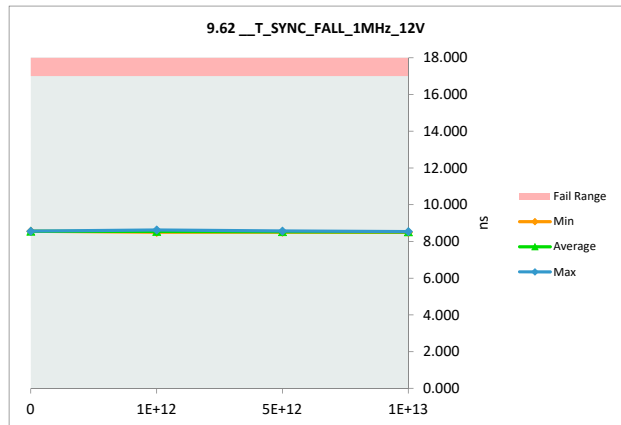


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.62 __T_SYNC_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.142	8.557	0.415
1E+12	243	8.241	8.624	0.383
1E+12	244	8.145	8.493	0.348
1E+12	247	8.127	8.507	0.380
5E+12	251	8.119	8.510	0.391
5E+12	252	8.144	8.500	0.356
5E+12	259	8.173	8.563	0.390
1E+13	261	8.217	8.534	0.317
1E+13	263	8.201	8.536	0.335
1E+13	264	8.104	8.491	0.387
Max		8.241	8.624	0.415
Average		8.161	8.532	0.370
Min		8.104	8.491	0.317
Std Dev		0.045	0.041	0.030



9.62 __T_SYNC_FALL_1MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.557	8.493	8.500	8.491
Average	8.557	8.541	8.524	8.520
Max	8.557	8.624	8.563	8.536
UL	17.000	17.000	17.000	17.000

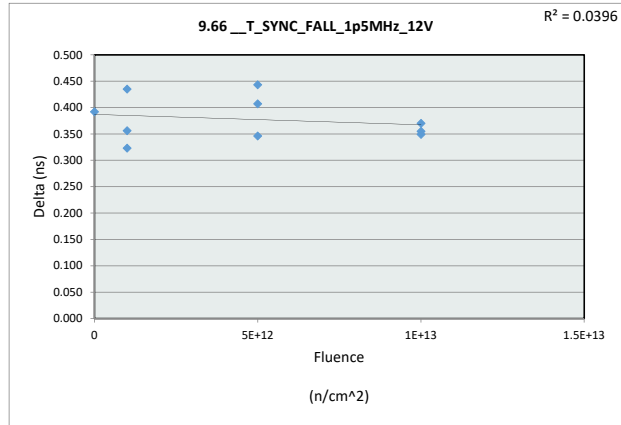


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.66 __T_SYNC_FALL_1p5MHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

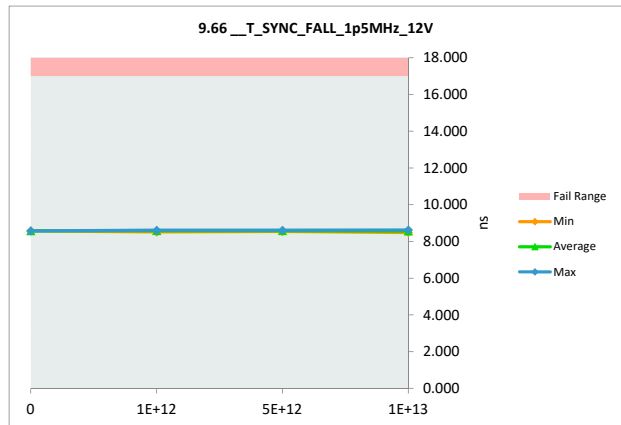
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.183	8.575	0.392
1E+12	243	8.253	8.609	0.356
1E+12	244	8.191	8.514	0.323
1E+12	247	8.171	8.606	0.435
5E+12	251	8.146	8.589	0.443
5E+12	252	8.192	8.538	0.346
5E+12	259	8.202	8.609	0.407
1E+13	261	8.250	8.620	0.370
1E+13	263	8.213	8.568	0.355
1E+13	264	8.139	8.488	0.349
Max		8.253	8.620	0.443
Average		8.194	8.572	0.378
Min		8.139	8.488	0.323
Std Dev		0.038	0.045	0.040



9.66 __T_SYNC_FALL_1p5MHz

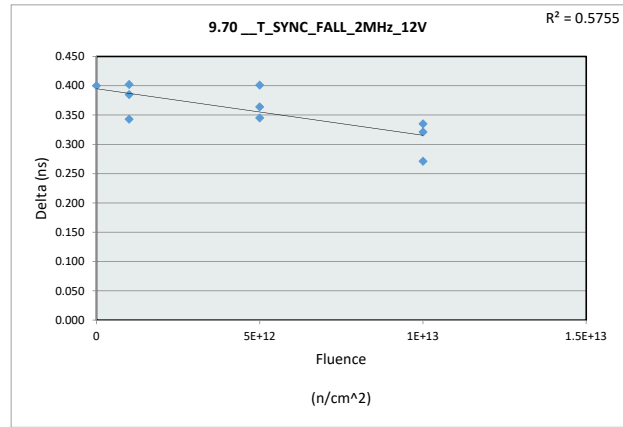
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.575	8.514	8.538	8.488
Average	8.575	8.576	8.579	8.559
Max	8.575	8.609	8.609	8.620
UL	17.000	17.000	17.000	17.000

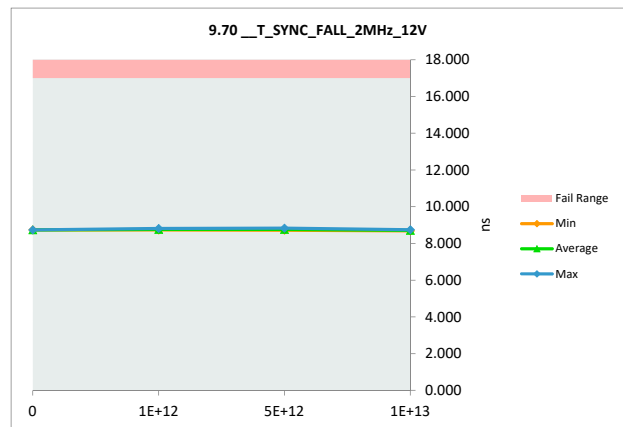


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.70 __T_SYNC_FALL_2MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.334	8.734	0.400
1E+12	243	8.472	8.815	0.343
1E+12	244	8.327	8.729	0.402
1E+12	247	8.353	8.738	0.385
5E+12	251	8.376	8.740	0.364
5E+12	252	8.370	8.715	0.345
5E+12	259	8.432	8.833	0.401
1E+13	261	8.422	8.743	0.321
1E+13	263	8.438	8.709	0.271
1E+13	264	8.346	8.681	0.335
Max		8.472	8.833	0.402
Average		8.387	8.744	0.357
Min		8.327	8.681	0.271
Std Dev		0.050	0.046	0.042



9.70 __T_SYNC_FALL_2MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.734	8.729	8.715	8.681
Average	8.734	8.761	8.763	8.711
Max	8.734	8.815	8.833	8.743
UL	17.000	17.000	17.000	17.000

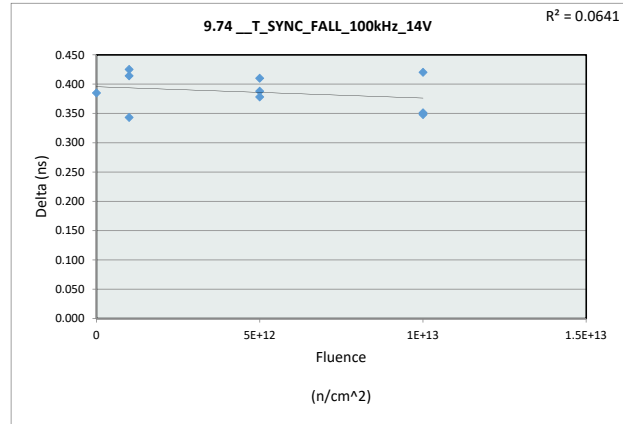


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.74 __T_SYNC_FALL_100kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

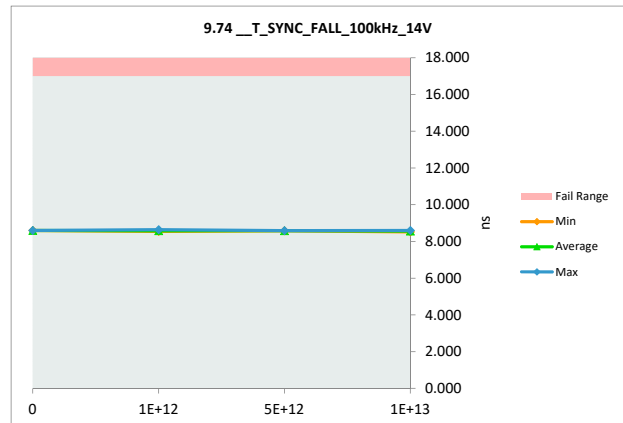
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.209	8.594	0.385
1E+12	243	8.214	8.639	0.425
1E+12	244	8.198	8.541	0.343
1E+12	247	8.141	8.555	0.414
5E+12	251	8.179	8.589	0.410
5E+12	252	8.198	8.576	0.378
5E+12	259	8.193	8.581	0.388
1E+13	261	8.232	8.583	0.351
1E+13	263	8.174	8.594	0.420
1E+13	264	8.172	8.520	0.348
Max		8.232	8.639	0.425
Average		8.191	8.577	0.386
Min		8.141	8.520	0.343
Std Dev		0.026	0.033	0.031



9.74 __T_SYNC_FALL_100kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.594	8.541	8.576	8.520
Average	8.594	8.578	8.582	8.566
Max	8.594	8.639	8.589	8.594
UL	17.000	17.000	17.000	17.000

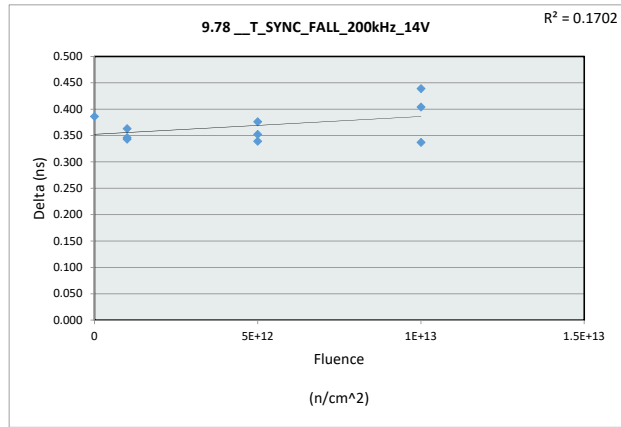


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.78 __T_SYNC_FALL_200kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

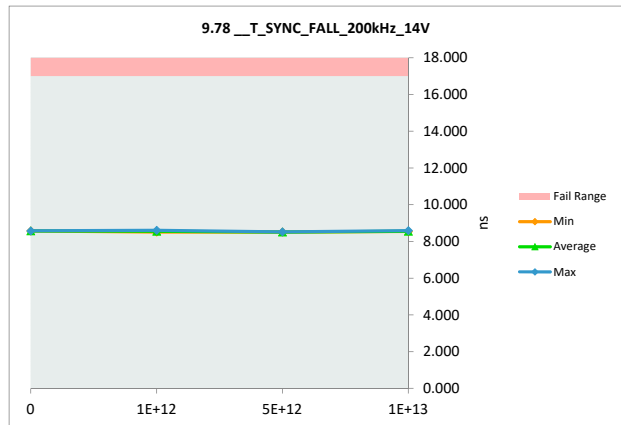
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.186	8.572	0.386
1E+12	243	8.261	8.604	0.343
1E+12	244	8.164	8.510	0.346
1E+12	247	8.172	8.535	0.363
5E+12	251	8.130	8.506	0.376
5E+12	252	8.182	8.521	0.339
5E+12	259	8.163	8.515	0.352
1E+13	261	8.146	8.585	0.439
1E+13	263	8.200	8.537	0.337
1E+13	264	8.134	8.538	0.404
Max		8.261	8.604	0.439
Average		8.174	8.542	0.369
Min		8.130	8.506	0.337
Std Dev		0.038	0.034	0.033



9.78 __T_SYNC_FALL_200kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.572	8.510	8.506	8.537
Average	8.572	8.550	8.514	8.553
Max	8.572	8.604	8.521	8.585
UL	17.000	17.000	17.000	17.000

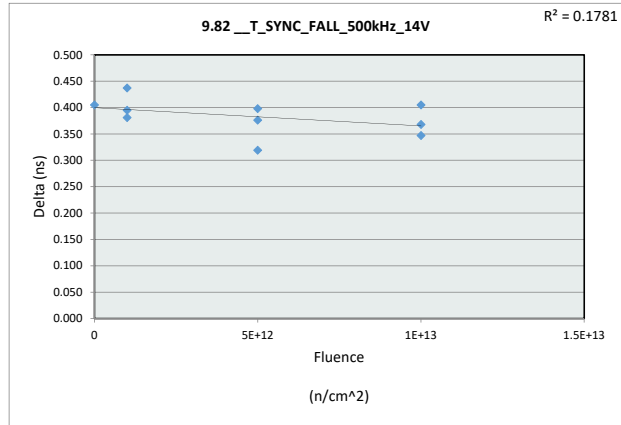


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.82 __T_SYNC_FALL_500kHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

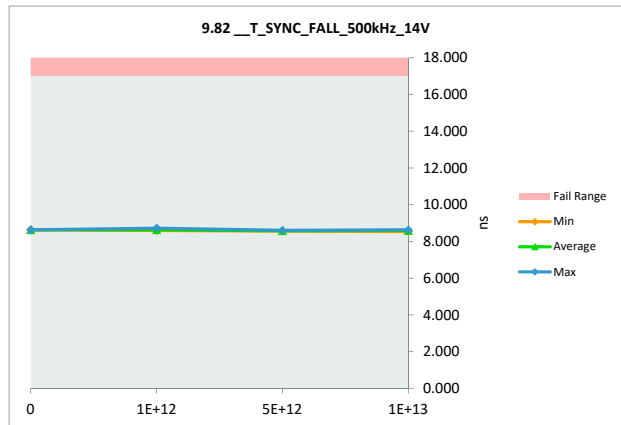
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.227	8.632	0.405
1E+12	243	8.281	8.718	0.437
1E+12	244	8.211	8.592	0.381
1E+12	247	8.194	8.589	0.395
5E+12	251	8.175	8.573	0.398
5E+12	252	8.235	8.554	0.319
5E+12	259	8.232	8.608	0.376
1E+13	261	8.258	8.626	0.368
1E+13	263	8.273	8.620	0.347
1E+13	264	8.134	8.539	0.405
Max		8.281	8.718	0.437
Average		8.222	8.605	0.383
Min		8.134	8.539	0.319
Std Dev		0.045	0.050	0.033



9.82 __T_SYNC_FALL_500kHz

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

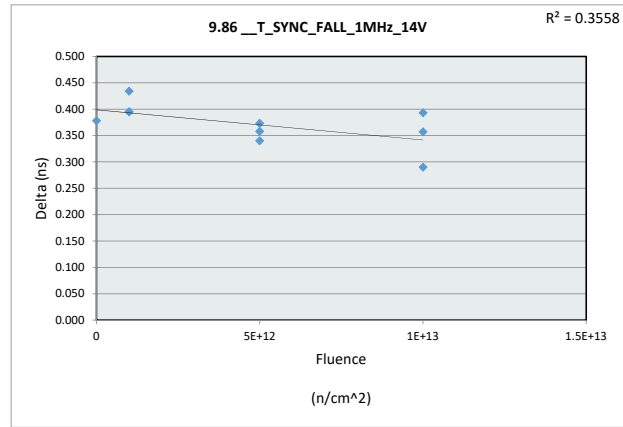
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.632	8.589	8.554	8.539
Average	8.632	8.633	8.578	8.595
Max	8.632	8.718	8.608	8.626
UL	17.000	17.000	17.000	17.000



Neutron Displacement Damage (NDD) Report TPS7H5004-SP

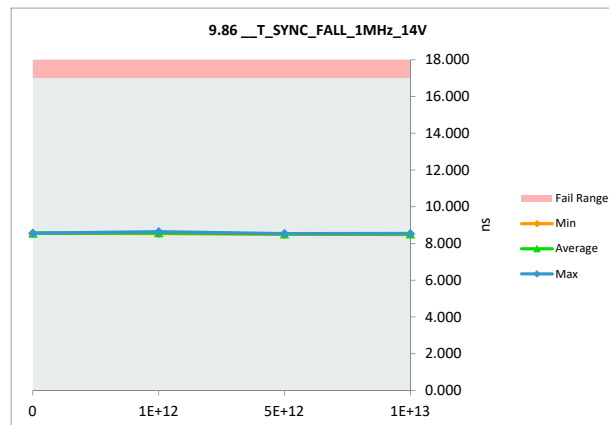
9.86 __T_SYNC_FALL_1MHz_14V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.178	8.556	0.378
1E+12	243	8.247	8.642	0.395
1E+12	244	8.099	8.533	0.434
1E+12	247	8.133	8.528	0.395
5E+12	251	8.175	8.533	0.358
5E+12	252	8.148	8.488	0.340
5E+12	259	8.145	8.518	0.373
1E+13	261	8.218	8.508	0.290
1E+13	263	8.180	8.537	0.357
1E+13	264	8.094	8.487	0.393
Max		8.247	8.642	0.434
Average		8.162	8.533	0.371
Min		8.094	8.487	0.290
Std Dev		0.048	0.044	0.039



9.86 __T_SYNC_FALL_1MHz_1

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.556	8.528	8.488	8.487
Average	8.556	8.568	8.513	8.511
Max	8.556	8.642	8.533	8.537
UL	17.000	17.000	17.000	17.000

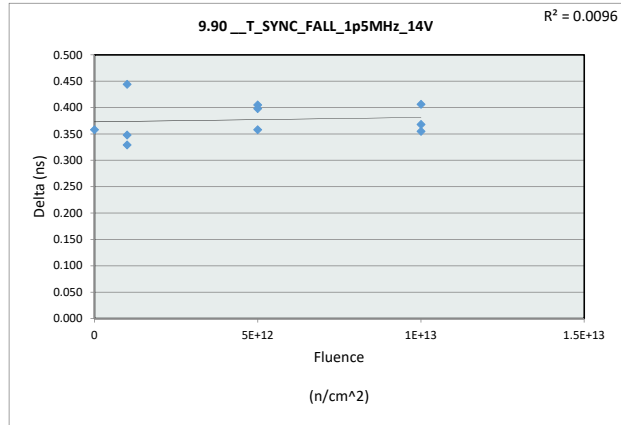


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.90 __T_SYNC_FALL_1p5MHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

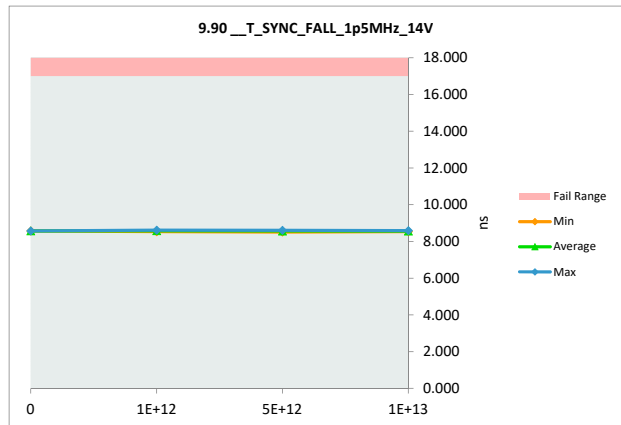
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.212	8.570	0.358
1E+12	243	8.261	8.590	0.329
1E+12	244	8.173	8.617	0.444
1E+12	247	8.183	8.531	0.348
5E+12	251	8.151	8.509	0.358
5E+12	252	8.176	8.581	0.405
5E+12	259	8.208	8.606	0.398
1E+13	261	8.215	8.570	0.355
1E+13	263	8.217	8.585	0.368
1E+13	264	8.127	8.533	0.406
Max		8.261	8.617	0.444
Average		8.192	8.569	0.377
Min		8.127	8.509	0.329
Std Dev		0.038	0.035	0.035



9.90 __T_SYNC_FALL_1p5MHz

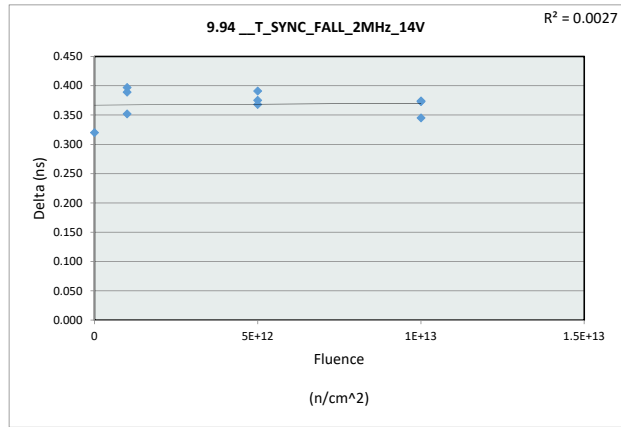
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.570	8.531	8.509	8.533
Average	8.570	8.579	8.565	8.563
Max	8.570	8.617	8.606	8.585
UL	17.000	17.000	17.000	17.000

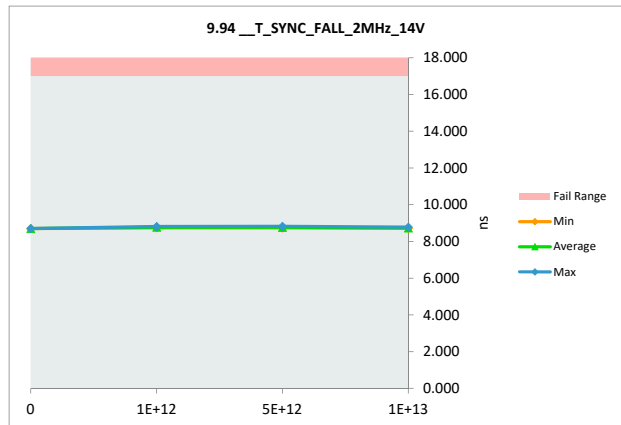


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.94 __T_SYNC_FALL_2MHz_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.382	8.702	0.320
1E+12	243	8.463	8.815	0.352
1E+12	244	8.351	8.740	0.389
1E+12	247	8.370	8.767	0.397
5E+12	251	8.362	8.730	0.368
5E+12	252	8.366	8.741	0.375
5E+12	259	8.436	8.827	0.391
1E+13	261	8.407	8.780	0.373
1E+13	263	8.366	8.711	0.345
1E+13	264	8.331	8.705	0.374
Max		8.463	8.827	0.397
Average		8.383	8.752	0.368
Min		8.331	8.702	0.320
Std Dev		0.040	0.044	0.024

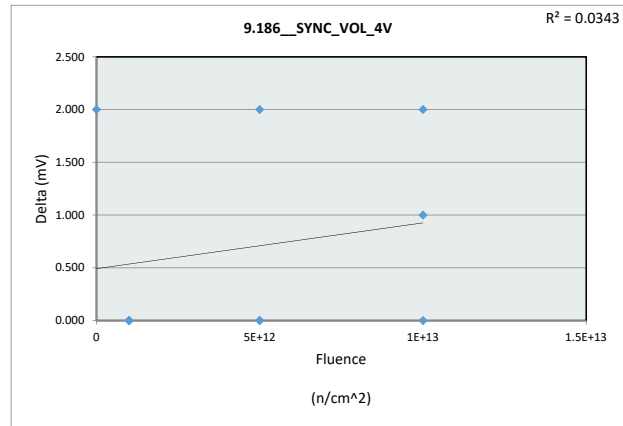


9.94 __T_SYNC_FALL_2MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.702	8.740	8.730	8.705
Average	8.702	8.774	8.766	8.732
Max	8.702	8.815	8.827	8.780
UL	17.000	17.000	17.000	17.000

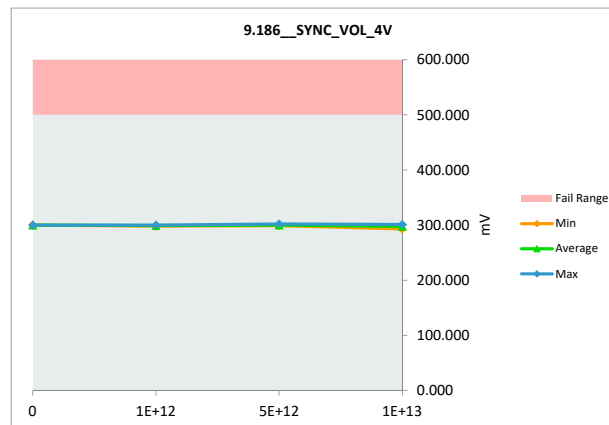


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.186_SYNC_VOL_4V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		500	500	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	298.000	300.000	2.000
1E+12	243	300.000	300.000	0.000
1E+12	244	299.000	299.000	0.000
1E+12	247	298.000	298.000	0.000
5E+12	251	300.000	302.000	2.000
5E+12	252	299.000	299.000	0.000
5E+12	259	299.000	299.000	0.000
1E+13	261	297.000	299.000	2.000
1E+13	263	300.000	301.000	1.000
1E+13	264	293.000	293.000	0.000
Max		300.000	302.000	2.000
Average		298.300	299.000	0.700
Min		293.000	293.000	0.000
Std Dev		2.111	2.404	0.949

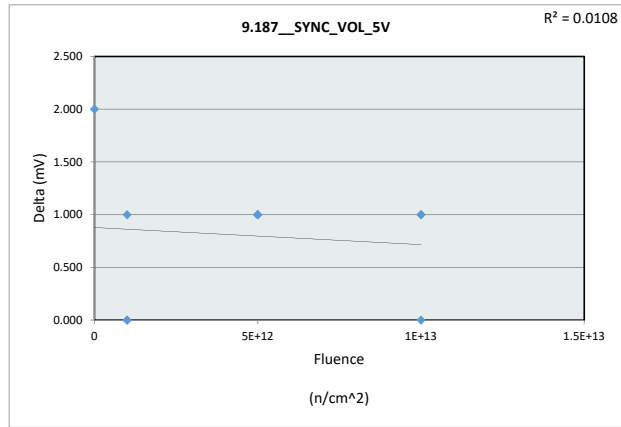


9.186_SYNC_VOL_4V				
Test Site				
Tester				
Test Number				
Max Limit	500	mV		
Min Limit		mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	300.000	298.000	299.000	293.000
Average	300.000	299.000	300.000	297.667
Max	300.000	300.000	302.000	301.000
UL	500.000	500.000	500.000	500.000

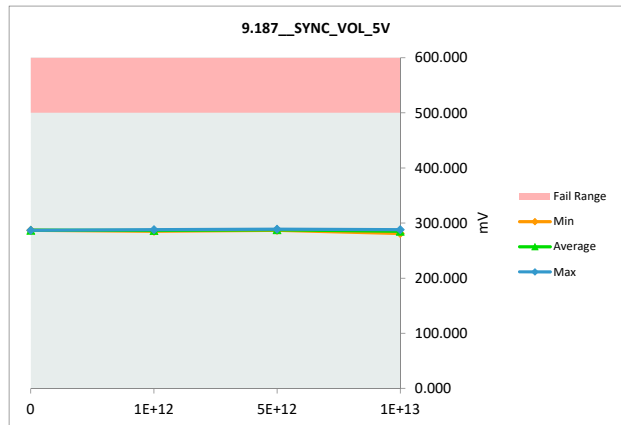


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.187_SYNC_VOL_5V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		500	500	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	285.000	287.000	2.000
1E+12	243	287.000	288.000	1.000
1E+12	244	286.000	286.000	0.000
1E+12	247	285.000	285.000	0.000
5E+12	251	288.000	289.000	1.000
5E+12	252	286.000	287.000	1.000
5E+12	259	286.000	287.000	1.000
1E+13	261	285.000	286.000	1.000
1E+13	263	287.000	288.000	1.000
1E+13	264	281.000	281.000	0.000
Max		288.000	289.000	2.000
Average		285.600	286.400	0.800
Min		281.000	281.000	0.000
Std Dev		1.897	2.221	0.632



9.187_SYNC_VOL_5V				
Test Site				
Tester				
Test Number				
Max Limit	500	mV		
Min Limit		mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	287.000	285.000	287.000	281.000
Average	287.000	286.333	287.667	285.000
Max	287.000	288.000	289.000	288.000
UL	500.000	500.000	500.000	500.000

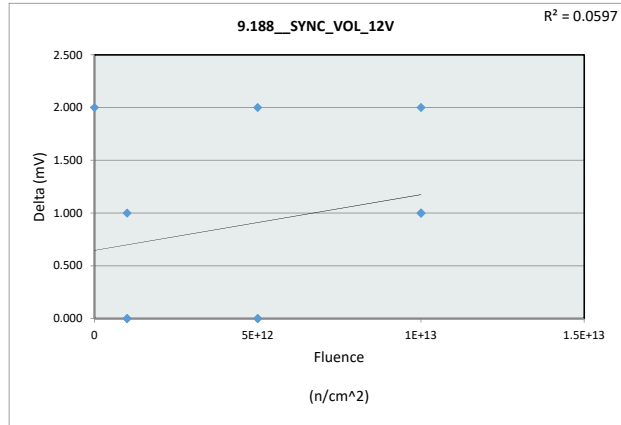


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.188_SYNC_VOL_12V

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	500	500
Min Limit		

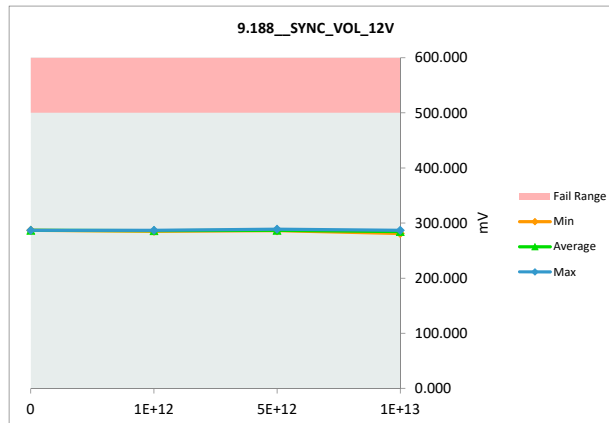
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	285.000	287.000	2.000
1E+12	243	286.000	287.000	1.000
1E+12	244	286.000	286.000	0.000
1E+12	247	285.000	285.000	0.000
5E+12	251	287.000	289.000	2.000
5E+12	252	286.000	286.000	0.000
5E+12	259	286.000	286.000	0.000
1E+13	261	284.000	286.000	2.000
1E+13	263	286.000	287.000	1.000
1E+13	264	280.000	281.000	1.000
Max		287.000	289.000	2.000
Average		285.100	286.000	0.900
Min		280.000	281.000	0.000
Std Dev		1.969	2.055	0.876



9.188_SYNC_VOL_12V

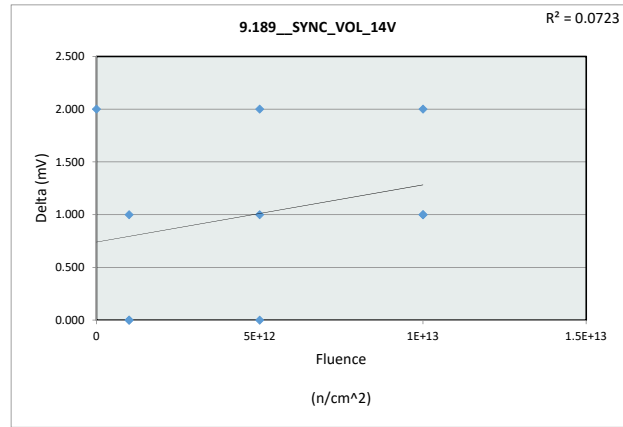
Test Site		
Tester		
Test Number		
Max Limit	500	mV
Min Limit		mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	287.000	285.000	286.000	281.000
Average	287.000	286.000	287.000	284.667
Max	287.000	287.000	289.000	287.000
UL	500.000	500.000	500.000	500.000

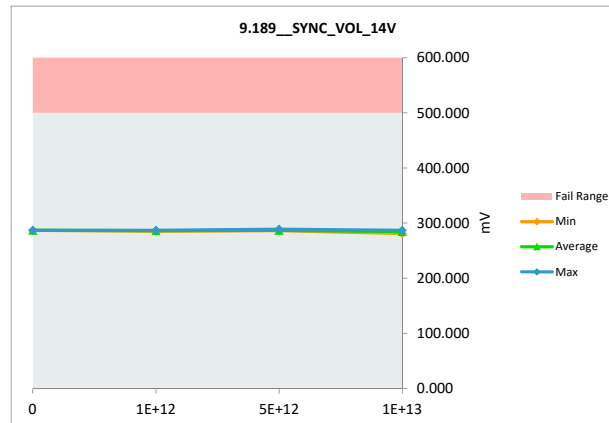


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.189_SYNC_VOL_14V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		500	500	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	285.000	287.000	2.000
1E+12	243	286.000	287.000	1.000
1E+12	244	286.000	286.000	0.000
1E+12	247	285.000	285.000	0.000
5E+12	251	287.000	289.000	2.000
5E+12	252	286.000	286.000	0.000
5E+12	259	285.000	286.000	1.000
1E+13	261	284.000	286.000	2.000
1E+13	263	286.000	287.000	1.000
1E+13	264	280.000	281.000	1.000
Max		287.000	289.000	2.000
Average		285.000	286.000	1.000
Min		280.000	281.000	0.000
Std Dev		1.944	2.055	0.816

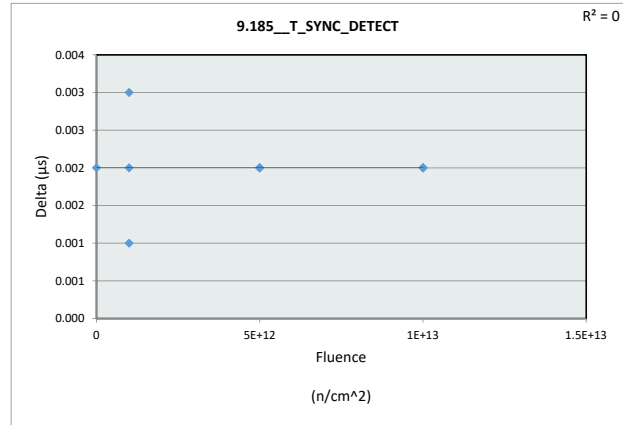


9.189_SYNC_VOL_14V				
Test Site				
Tester				
Test Number				
Max Limit	500	mV		
Min Limit		mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	287.000	285.000	286.000	281.000
Average	287.000	286.000	287.000	284.667
Max	287.000	287.000	289.000	287.000
UL	500.000	500.000	500.000	500.000

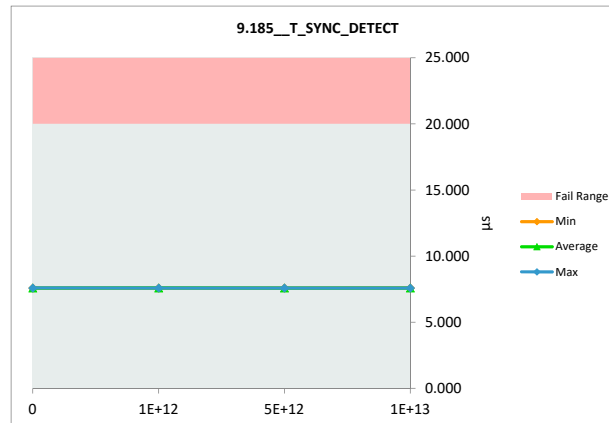


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.185__T_SYNC_DETECT				
Test Site				
Tester				
Test Number				
Unit		µs	µs	
Max Limit		20	20	
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.585	7.587	0.002
1E+12	243	7.584	7.585	0.001
1E+12	244	7.586	7.588	0.002
1E+12	247	7.584	7.587	0.003
5E+12	251	7.584	7.586	0.002
5E+12	252	7.584	7.586	0.002
5E+12	259	7.583	7.585	0.002
1E+13	261	7.586	7.588	0.002
1E+13	263	7.585	7.587	0.002
1E+13	264	7.584	7.586	0.002
Max		7.586	7.588	0.003
Average		7.585	7.586	0.002
Min		7.583	7.585	0.001
Std Dev		0.001	0.001	0.000



9.185__T_SYNC_DETECT				
Test Site				
Tester				
Test Number				
Max Limit	20	µs		
Min Limit		µs		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.587	7.585	7.585	7.586
Average	7.587	7.587	7.586	7.587
Max	7.587	7.588	7.586	7.588
UL	20.000	20.000	20.000	20.000

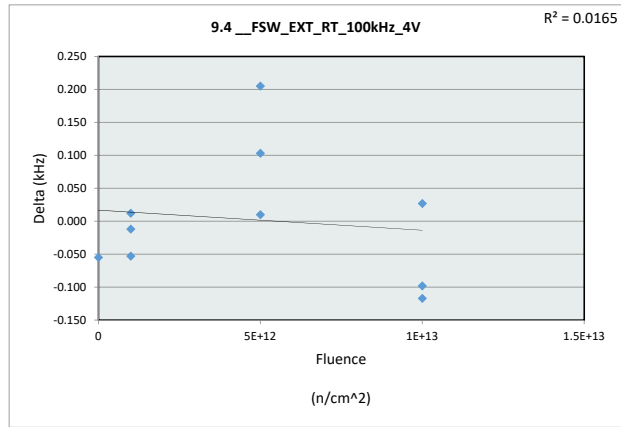


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.4 __FSW_EXT_RT_100kHz_4V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	115	115
Min Limit	95	95

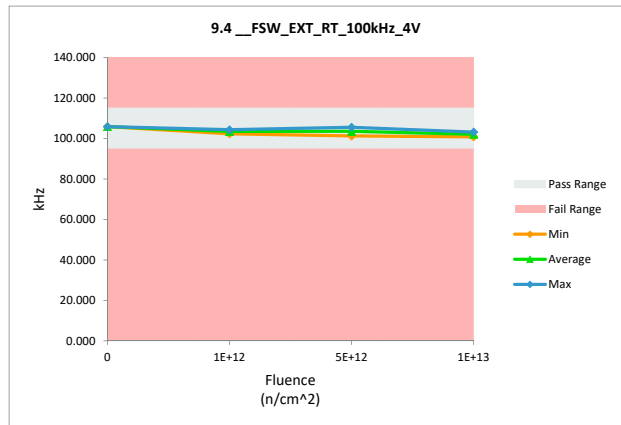
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	105.909	105.854	-0.055
1E+12	243	104.312	104.324	0.012
1E+12	244	102.367	102.314	-0.053
1E+12	247	103.731	103.719	-0.012
5E+12	251	101.228	101.238	0.010
5E+12	252	103.744	103.847	0.103
5E+12	259	105.350	105.555	0.205
1E+13	261	102.102	102.129	0.027
1E+13	263	103.318	103.220	-0.098
1E+13	264	100.932	100.815	-0.117
Max		105.909	105.854	0.205
Average		103.299	103.301	0.002
Min		100.932	100.815	-0.117
Std Dev		1.654	1.697	0.096



9.4 __FSW_EXT_RT_100kHz_4V

Test Site		
Tester		
Test Number		
Max Limit	115	kHz
Min Limit	95	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	105.854	102.314	101.238	100.815
Average	105.854	103.452	103.547	102.055
Max	105.854	104.324	105.555	103.220
UL	115.000	115.000	115.000	115.000

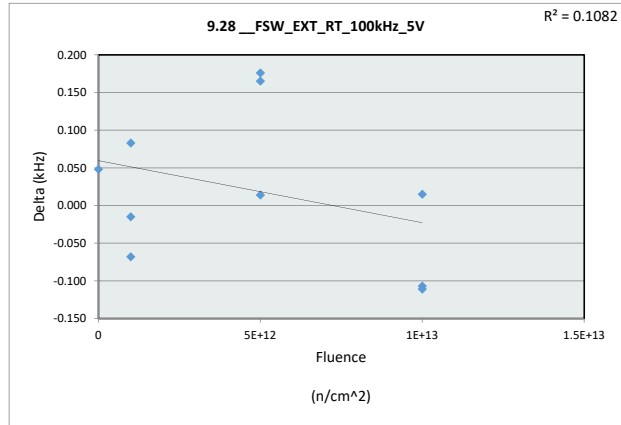


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.28_FSW_EXT_RT_100kHz_5V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	115	115
Min Limit	95	95

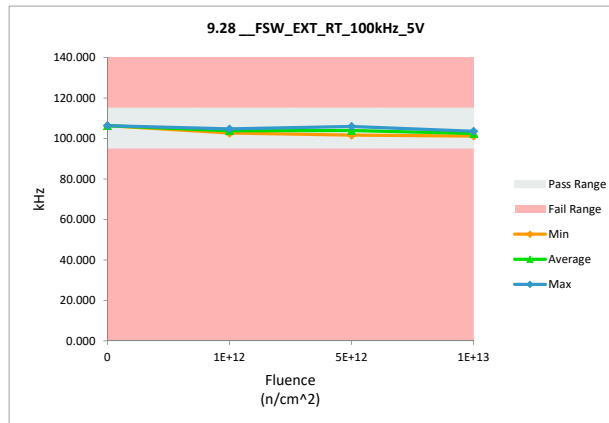
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	106.334	106.382	0.048
1E+12	243	104.633	104.716	0.083
1E+12	244	102.729	102.661	-0.068
1E+12	247	104.117	104.102	-0.015
5E+12	251	101.609	101.623	0.014
5E+12	252	104.042	104.207	0.165
5E+12	259	105.751	105.927	0.176
1E+13	261	102.497	102.512	0.015
1E+13	263	103.705	103.594	-0.111
1E+13	264	101.335	101.228	-0.107
Max		106.334	106.382	0.176
Average		103.675	103.695	0.020
Min		101.335	101.228	-0.111
Std Dev		1.655	1.717	0.101



9.28_FSW_EXT_RT_100kHz

Test Site		
Tester		
Test Number		
Max Limit	115	kHz
Min Limit	95	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	106.382	102.661	101.623	101.228
Average	106.382	103.826	103.919	102.445
Max	106.382	104.716	105.927	103.594
UL	115.000	115.000	115.000	115.000

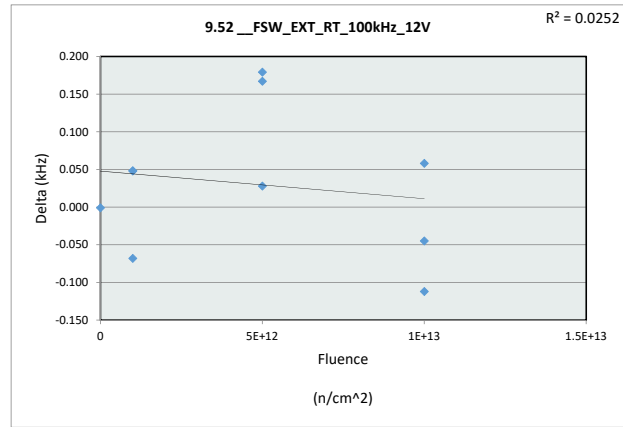


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.52_FSW_EXT_RT_100kHz_12V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	115	115
Min Limit	95	95

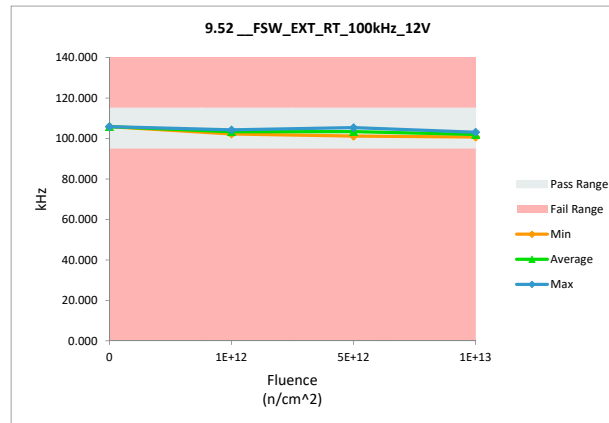
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	105.855	105.854	-0.001
1E+12	243	104.208	104.256	0.048
1E+12	244	102.283	102.215	-0.068
1E+12	247	103.531	103.579	0.048
5E+12	251	101.127	101.155	0.028
5E+12	252	103.539	103.706	0.167
5E+12	259	105.184	105.363	0.179
1E+13	261	102.033	102.091	0.058
1E+13	263	103.181	103.136	-0.045
1E+13	264	100.822	100.710	-0.112
Max		105.855	105.854	0.179
Average		103.176	103.206	0.030
Min		100.822	100.710	-0.112
Std Dev		1.646	1.694	0.094



9.52_FSW_EXT_RT_100kHz

Test Site		
Tester		
Test Number		
Max Limit	115	kHz
Min Limit	95	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	105.854	102.215	101.155	100.710
Average	105.854	103.350	103.408	101.979
Max	105.854	104.256	105.363	103.136
UL	115.000	115.000	115.000	115.000

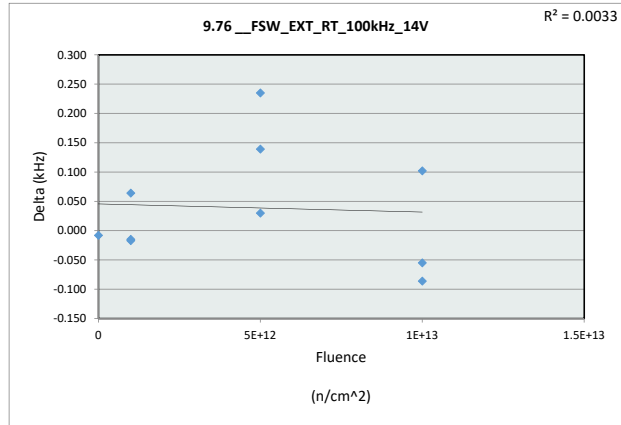


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.76_FSW_EXT_RT_100kHz_14V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	115	115
Min Limit	95	95

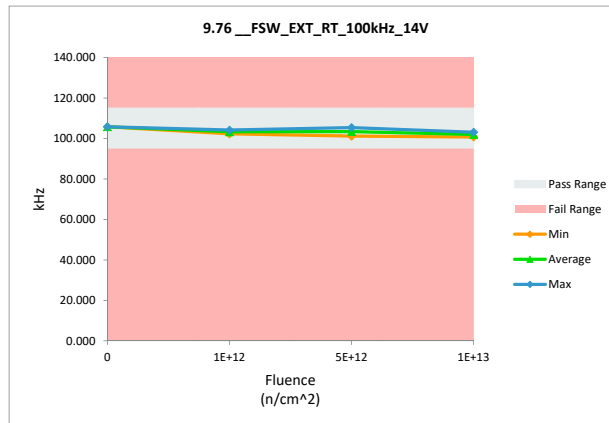
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	105.827	105.819	-0.008
1E+12	243	104.086	104.150	0.064
1E+12	244	102.271	102.254	-0.017
1E+12	247	103.547	103.532	-0.015
5E+12	251	101.137	101.167	0.030
5E+12	252	103.554	103.693	0.139
5E+12	259	105.141	105.376	0.235
1E+13	261	101.971	102.073	0.102
1E+13	263	103.181	103.126	-0.055
1E+13	264	100.815	100.729	-0.086
Max		105.827	105.819	0.235
Average		103.153	103.192	0.039
Min		100.815	100.729	-0.086
Std Dev		1.633	1.675	0.098



9.76_FSW_EXT_RT_100kHz

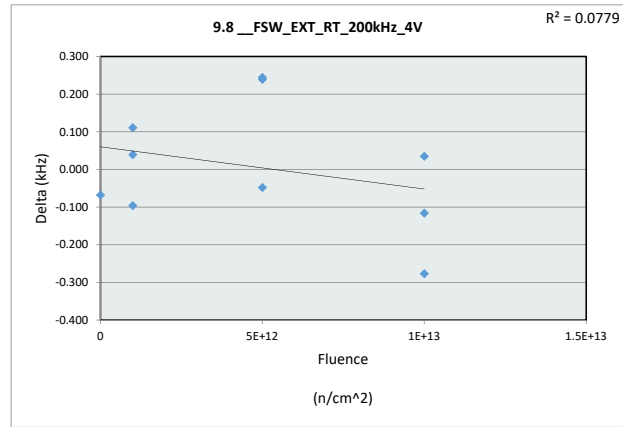
Test Site		
Tester		
Test Number		
Max Limit	115	kHz
Min Limit	95	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	105.819	102.254	101.167	100.729
Average	105.819	103.312	103.412	101.976
Max	105.819	104.150	105.376	103.126
UL	115.000	115.000	115.000	115.000

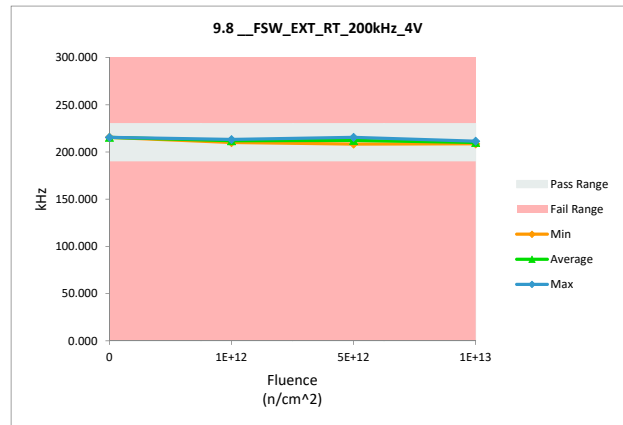


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.8_FSW_EXT_RT_200kHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		230	230	
Min Limit		190	190	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	215.598	215.530	-0.068
1E+12	243	213.160	213.199	0.039
1E+12	244	210.067	209.971	-0.096
1E+12	247	212.251	212.362	0.111
5E+12	251	208.452	208.404	-0.048
5E+12	252	212.349	212.593	0.244
5E+12	259	215.331	215.570	0.239
1E+13	261	210.087	210.122	0.035
1E+13	263	211.702	211.425	-0.277
1E+13	264	208.762	208.646	-0.116
Max		215.598	215.570	0.244
Average		211.776	211.782	0.006
Min		208.452	208.404	-0.277
Std Dev		2.486	2.556	0.163



9.8_FSW_EXT_RT_200kHz_4V					
Test Site					
Tester					
Test Number					
Max Limit		230	kHz		
Min Limit		190	kHz		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13	
LL	190.000	190.000	190.000	190.000	
Min	215.530	209.971	208.404	208.646	
Average	215.530	211.844	212.189	210.064	
Max	215.530	213.199	215.570	211.425	
UL	230.000	230.000	230.000	230.000	

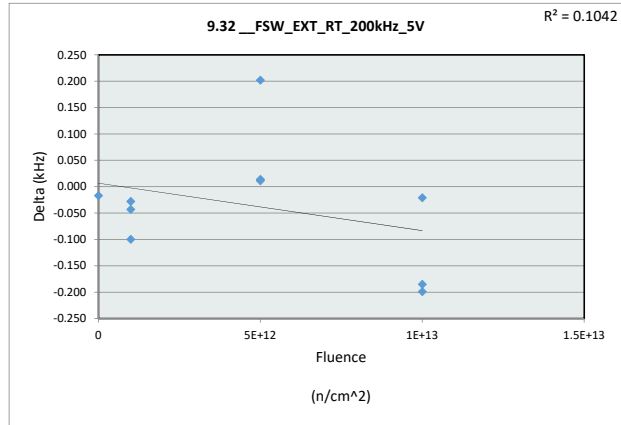


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.32 FSW_EXT_RT_200kHz_5V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	230	230
Min Limit	190	190

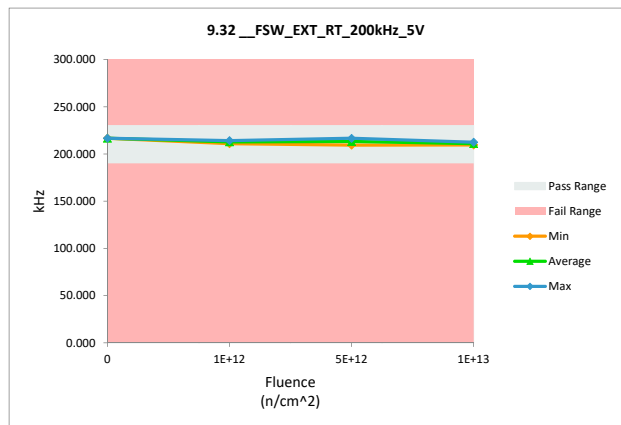
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	216.708	216.691	-0.017
1E+12	243	214.181	214.153	-0.028
1E+12	244	211.049	210.949	-0.100
1E+12	247	213.406	213.363	-0.043
5E+12	251	209.457	209.471	0.014
5E+12	252	213.346	213.548	0.202
5E+12	259	216.564	216.575	0.011
1E+13	261	211.144	211.123	-0.021
1E+13	263	212.588	212.403	-0.185
1E+13	264	209.747	209.548	-0.199
Max		216.708	216.691	0.202
Average		212.819	212.782	-0.037
Min		209.457	209.471	-0.199
Std Dev		2.546	2.585	0.113



9.32 FSW_EXT_RT_200kHz

Test Site		
Tester		
Test Number		
Max Limit	230	kHz
Min Limit	190	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	216.691	210.949	209.471	209.548
Average	216.691	212.822	213.198	211.025
Max	216.691	214.153	216.575	212.403
UL	230.000	230.000	230.000	230.000

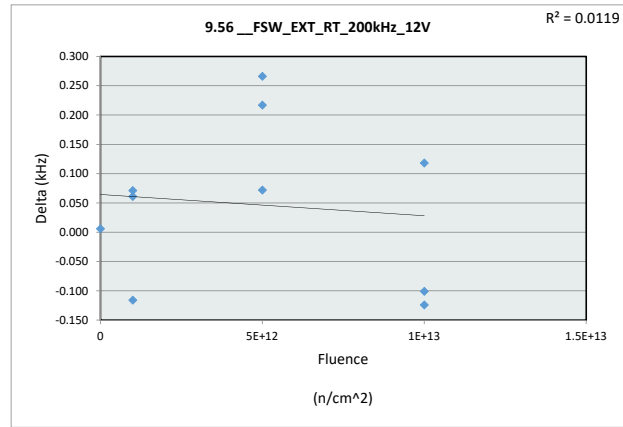


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.56_FSW_EXT_RT_200kHz_12V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	230	230
Min Limit	190	190

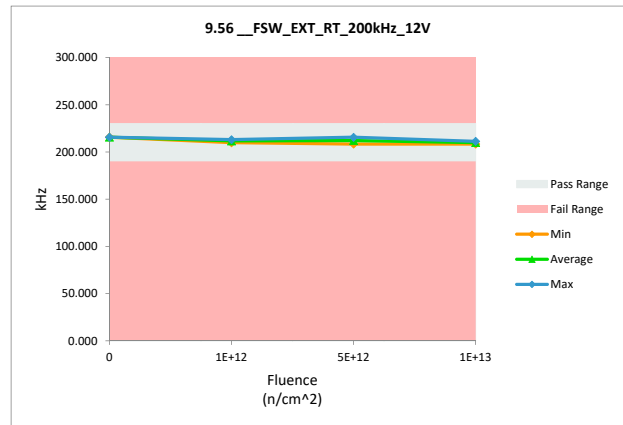
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	215.636	215.642	0.006
1E+12	243	212.959	213.030	0.071
1E+12	244	209.946	209.830	-0.116
1E+12	247	212.157	212.218	0.061
5E+12	251	208.283	208.355	0.072
5E+12	252	212.025	212.291	0.266
5E+12	259	215.356	215.573	0.217
1E+13	261	210.051	210.169	0.118
1E+13	263	211.446	211.322	-0.124
1E+13	264	208.511	208.410	-0.101
Max		215.636	215.642	0.266
Average		211.637	211.684	0.047
Min		208.283	208.355	-0.124
Std Dev		2.548	2.602	0.134



9.56_FSW_EXT_RT_200kHz

Test Site		
Tester		
Test Number		
Max Limit	230	kHz
Min Limit	190	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	215.642	209.830	208.355	208.410
Average	215.642	211.693	212.073	209.967
Max	215.642	213.030	215.573	211.322
UL	230.000	230.000	230.000	230.000

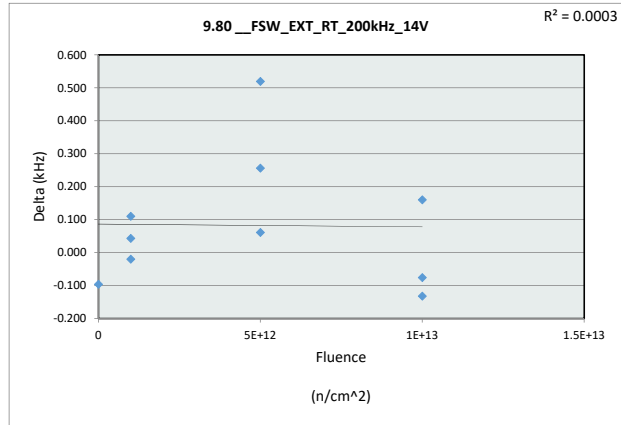


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.80_FSW_EXT_RT_200kHz_14V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	230	230
Min Limit	190	190

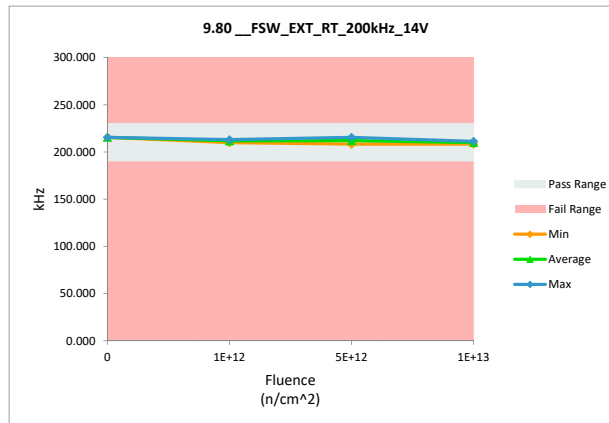
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	215.560	215.464	-0.096
1E+12	243	212.918	213.028	0.110
1E+12	244	209.898	209.878	-0.020
1E+12	247	212.111	212.154	0.043
5E+12	251	208.273	208.334	0.061
5E+12	252	212.031	212.287	0.256
5E+12	259	215.017	215.536	0.519
1E+13	261	210.005	210.165	0.160
1E+13	263	211.422	211.346	-0.076
1E+13	264	208.527	208.395	-0.132
Max		215.560	215.536	0.519
Average		211.576	211.659	0.083
Min		208.273	208.334	-0.132
Std Dev		2.484	2.565	0.195



9.80_FSW_EXT_RT_200kHz

Test Site		
Tester		
Test Number		
Max Limit	230	kHz
Min Limit	190	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	190.000	190.000	190.000	190.000
Min	215.464	209.878	208.334	208.395
Average	215.464	211.687	212.052	209.969
Max	215.464	213.028	215.536	211.346
UL	230.000	230.000	230.000	230.000

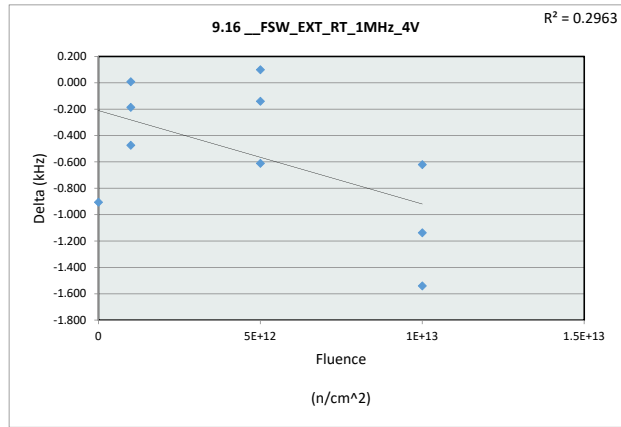


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.16 __FSW_EXT_RT_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	1100	1100
Min Limit	900	900

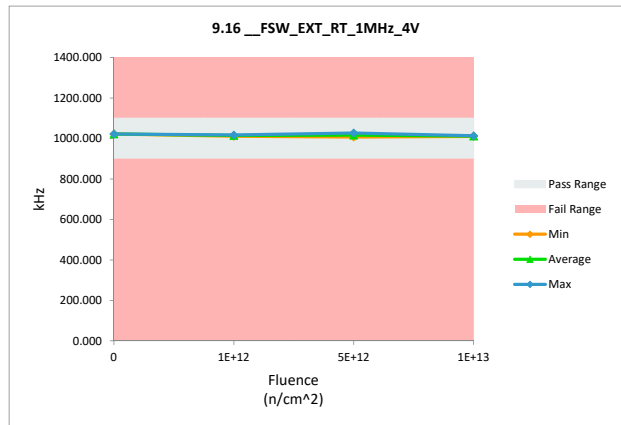
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1023.045	1022.139	-0.906
1E+12	243	1017.776	1017.302	-0.474
1E+12	244	1011.191	1011.005	-0.186
1E+12	247	1016.834	1016.842	0.008
5E+12	251	1007.702	1007.091	-0.611
5E+12	252	1015.759	1015.858	0.099
5E+12	259	1027.580	1027.440	-0.140
1E+13	261	1013.937	1012.800	-1.137
1E+13	263	1011.184	1010.563	-0.621
1E+13	264	1014.888	1013.347	-1.541
Max		1027.580	1027.440	0.099
Average		1015.990	1015.439	-0.551
Min		1007.702	1007.091	-1.541
Std Dev		5.853	5.953	0.527



9.16 __FSW_EXT_RT_1MHz_4V

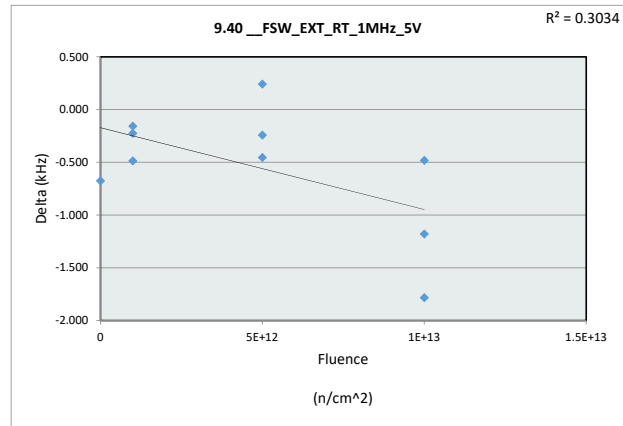
Test Site		
Tester		
Test Number		
Max Limit	1100	kHz
Min Limit	900	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1022.139	1011.005	1007.091	1010.563
Average	1022.139	1015.050	1016.796	1012.237
Max	1022.139	1017.302	1027.440	1013.347
UL	1100.000	1100.000	1100.000	1100.000

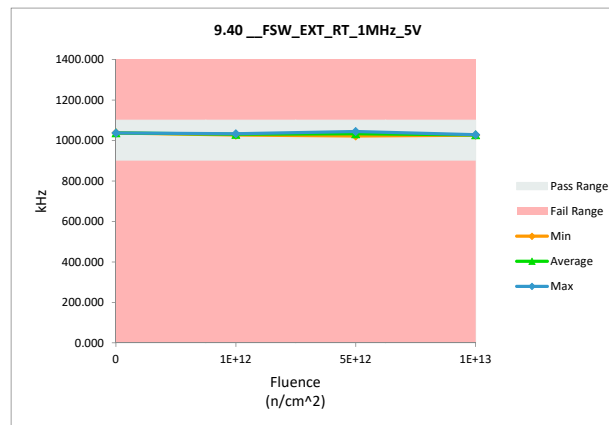


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.40 __FSW_EXT_RT_1MHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1038.075	1037.399	-0.676
1E+12	243	1033.775	1033.289	-0.486
1E+12	244	1026.684	1026.526	-0.158
1E+12	247	1031.681	1031.456	-0.225
5E+12	251	1022.596	1022.141	-0.455
5E+12	252	1031.785	1032.026	0.241
5E+12	259	1045.002	1044.760	-0.242
1E+13	261	1030.132	1028.953	-1.179
1E+13	263	1026.491	1026.009	-0.482
1E+13	264	1029.728	1027.945	-1.783
Max		1045.002	1044.760	0.241
Average		1031.595	1031.050	-0.544
Min		1022.596	1022.141	-1.783
Std Dev		6.354	6.444	0.570

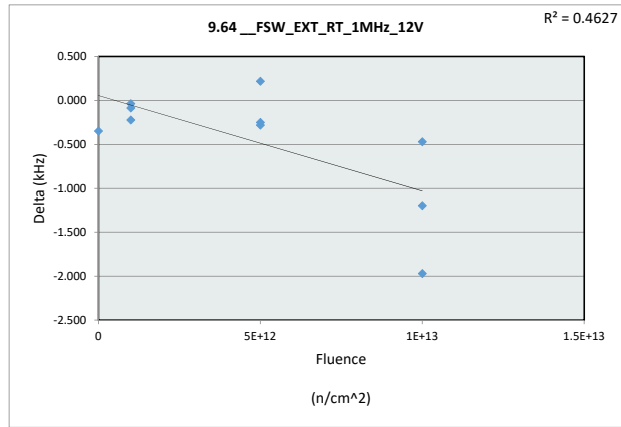


9.40 __FSW_EXT_RT_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1037.399	1026.526	1022.141	1026.009
Average	1037.399	1030.424	1032.976	1027.636
Max	1037.399	1033.289	1044.760	1028.953
UL	1100.000	1100.000	1100.000	1100.000

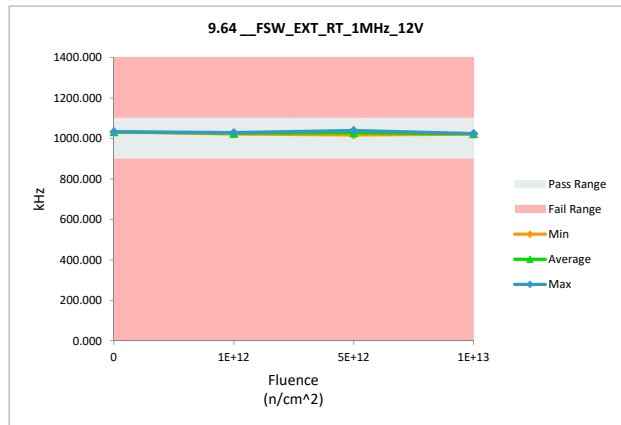


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.64_FSW_EXT_RT_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		1100	1100	
Min Limit		900	900	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1033.216	1032.867	-0.349
1E+12	243	1029.119	1028.896	-0.223
1E+12	244	1022.084	1021.997	-0.087
1E+12	247	1026.474	1026.437	-0.037
5E+12	251	1017.852	1017.602	-0.250
5E+12	252	1026.937	1027.154	0.217
5E+12	259	1040.198	1039.916	-0.282
1E+13	261	1025.785	1024.586	-1.199
1E+13	263	1022.040	1021.569	-0.471
1E+13	264	1024.825	1022.855	-1.970
	Max	1040.198	1039.916	0.217
	Average	1026.853	1026.388	-0.465
	Min	1017.852	1017.602	-1.970
	Std Dev	6.290	6.388	0.645



9.64_FSW_EXT_RT_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1032.867	1021.997	1017.602	1021.569
Average	1032.867	1025.777	1028.224	1023.003
Max	1032.867	1028.896	1039.916	1024.586
UL	1100.000	1100.000	1100.000	1100.000

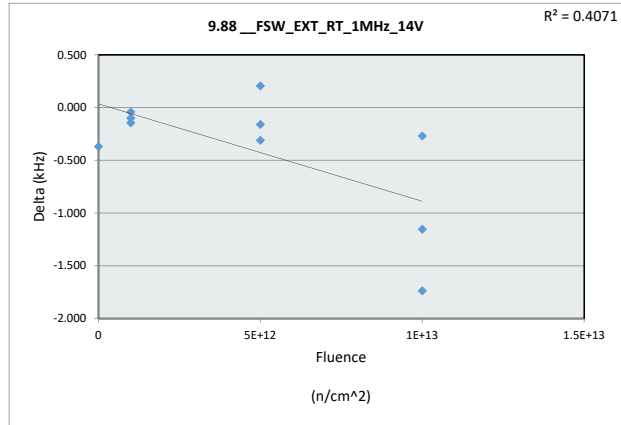


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.88_FSW_EXT_RT_1MHz_14V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	1100	1100
Min Limit	900	900

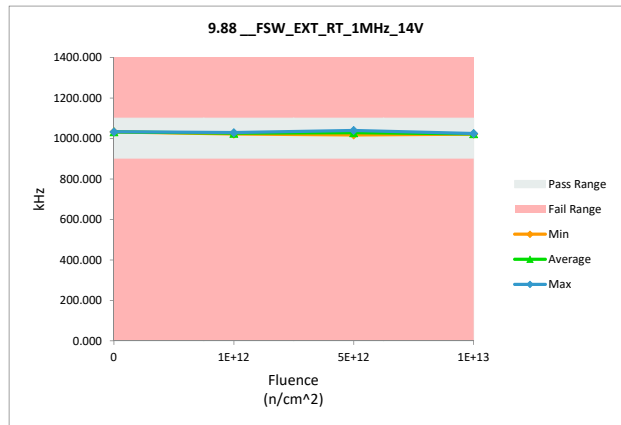
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1033.141	1032.772	-0.369
1E+12	243	1028.935	1028.790	-0.145
1E+12	244	1021.980	1021.880	-0.100
1E+12	247	1026.465	1026.423	-0.042
5E+12	251	1017.683	1017.372	-0.311
5E+12	252	1026.930	1027.135	0.205
5E+12	259	1040.040	1039.879	-0.161
1E+13	261	1025.795	1024.642	-1.153
1E+13	263	1021.904	1021.635	-0.269
1E+13	264	1024.651	1022.913	-1.738
Max		1040.040	1039.879	0.205
Average		1026.752	1026.344	-0.408
Min		1017.683	1017.372	-1.738
Std Dev		6.290	6.398	0.586



9.88_FSW_EXT_RT_1MHz_14V

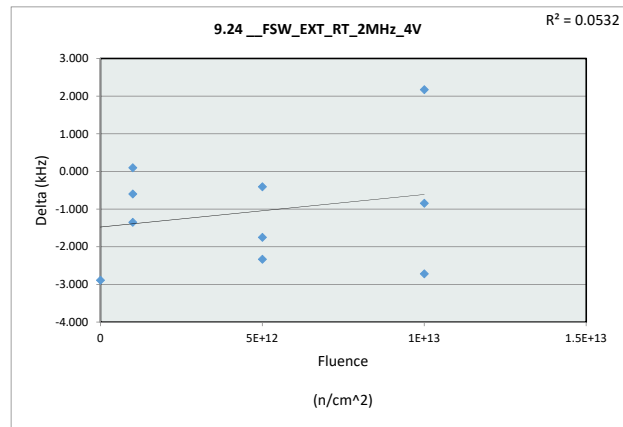
Test Site		
Tester		
Test Number		
Max Limit	1100	kHz
Min Limit	900	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1032.772	1021.880	1017.372	1021.635
Average	1032.772	1025.698	1028.129	1023.063
Max	1032.772	1028.790	1039.879	1024.642
UL	1100.000	1100.000	1100.000	1100.000

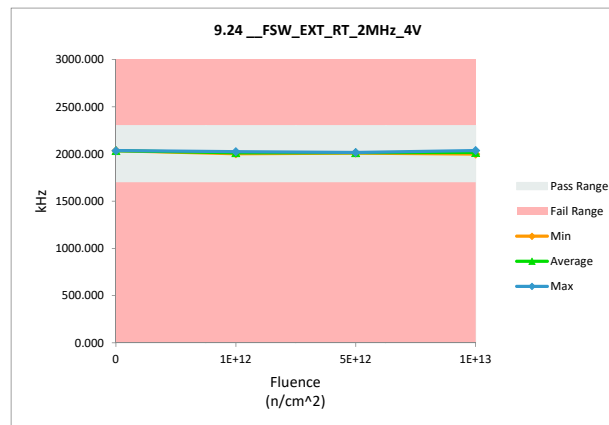


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.24_FSW_EXT_RT_2MHz_4V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2038.257	2035.371	-2.886
1E+12	243	2014.315	2012.963	-1.352
1E+12	244	2003.413	2002.813	-0.600
1E+12	247	2024.150	2024.249	0.099
5E+12	251	2016.307	2013.977	-2.330
5E+12	252	2011.181	2009.430	-1.751
5E+12	259	2017.068	2016.660	-0.408
1E+13	261	2000.837	1999.993	-0.844
1E+13	263	2012.942	2010.224	-2.718
1E+13	264	2034.318	2036.488	2.170
Max		2038.257	2036.488	2.170
Average		2017.279	2016.217	-1.062
Min		2000.837	1999.993	-2.886
Std Dev		12.046	12.396	1.517

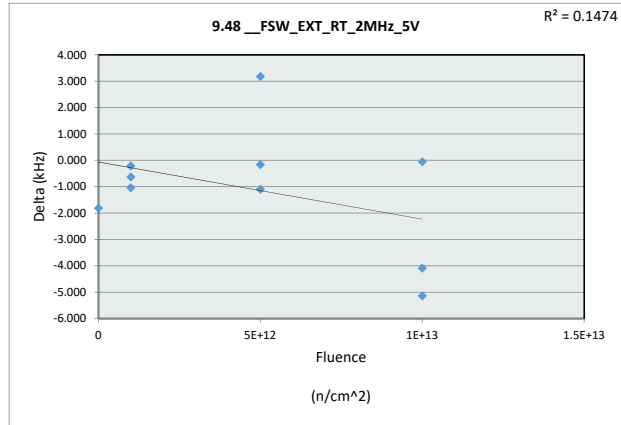


9.24_FSW_EXT_RT_2MHz_4V					
Test Site					
Tester					
Test Number					
Max Limit		2300	kHz		
Min Limit		1700	kHz		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13	
LL	1700.000	1700.000	1700.000	1700.000	
Min	2035.371	2002.813	2009.430	1999.993	
Average	2035.371	2013.342	2013.356	2015.568	
Max	2035.371	2024.249	2016.660	2036.488	
UL	2300.000	2300.000	2300.000	2300.000	

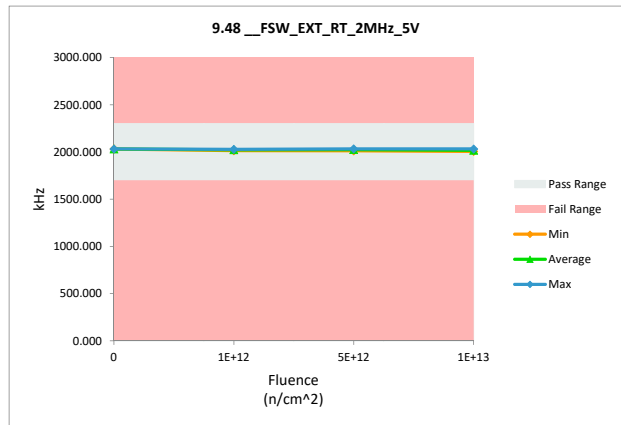


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.48 __FSW_EXT_RT_2MHz_5V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2034.106	2032.289	-1.817
1E+12	243	2027.422	2026.385	-1.037
1E+12	244	2014.395	2013.765	-0.630
1E+12	247	2029.044	2028.828	-0.216
5E+12	251	2012.805	2011.709	-1.096
5E+12	252	2028.656	2028.490	-0.166
5E+12	259	2030.102	2033.281	3.179
1E+13	261	2018.743	2014.656	-4.087
1E+13	263	2006.383	2006.330	-0.053
1E+13	264	2037.362	2032.222	-5.140
Max		2037.362	2033.281	3.179
Average		2023.902	2022.795	-1.106
Min		2006.383	2006.330	-5.140
Std Dev		10.177	10.069	2.286



9.48 __FSW_EXT_RT_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	2032.289	2013.765	2011.709	2006.330
Average	2032.289	2022.993	2024.493	2017.736
Max	2032.289	2028.828	2033.281	2032.222
UL	2300.000	2300.000	2300.000	2300.000

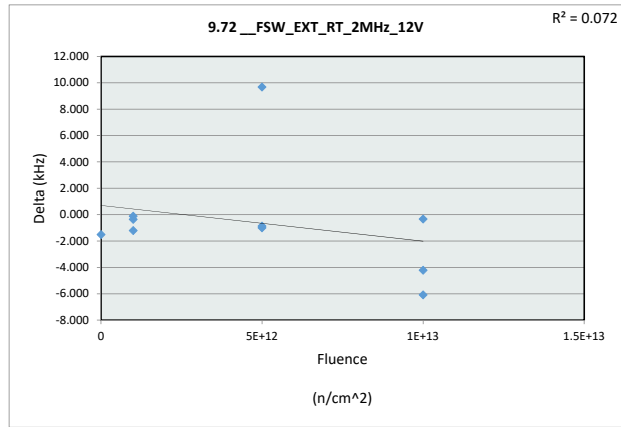


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.72_FSW_EXT_RT_2MHz_12V

Test Site		
Tester		
Test Number		
Unit	kHz	kHz
Max Limit	2300	2300
Min Limit	1700	1700

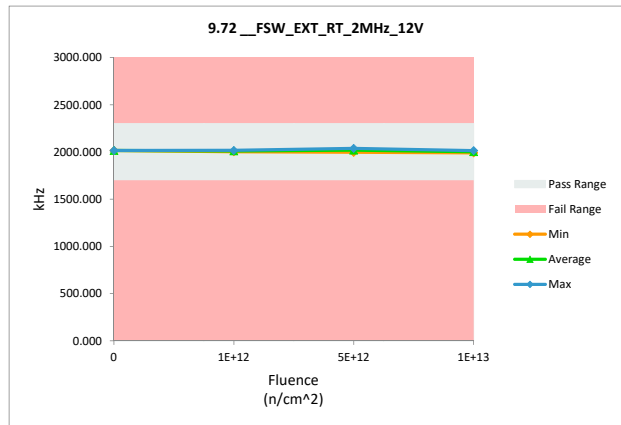
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2017.343	2015.828	-1.515
1E+12	243	2018.277	2017.067	-1.210
1E+12	244	2002.431	2002.072	-0.359
1E+12	247	2013.459	2013.340	-0.119
5E+12	251	1997.286	1996.287	-0.999
5E+12	252	2016.509	2026.189	9.680
5E+12	259	2039.059	2038.197	-0.862
1E+13	261	2006.783	2002.568	-4.215
1E+13	263	1991.343	1991.013	-0.330
1E+13	264	2019.998	2013.916	-6.082
Max		2039.059	2038.197	9.680
Average		2012.249	2011.648	-0.601
Min		1991.343	1991.013	-6.082
Std Dev		13.532	14.170	4.091



9.72_FSW_EXT_RT_2MHz_12V

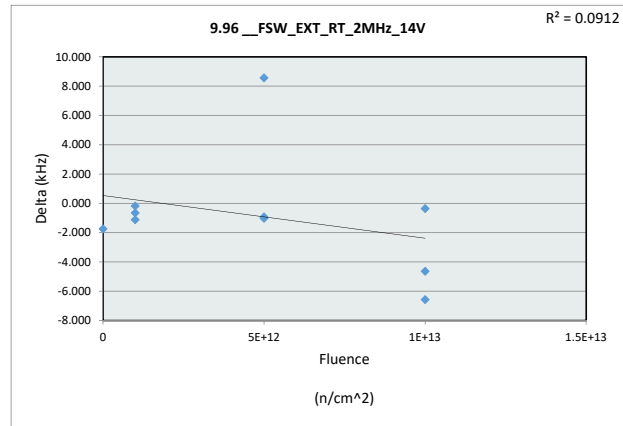
Test Site		
Tester		
Test Number		
Max Limit	2300	kHz
Min Limit	1700	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	2015.828	2002.072	1996.287	1991.013
Average	2015.828	2010.826	2020.224	2002.499
Max	2015.828	2017.067	2038.197	2013.916
UL	2300.000	2300.000	2300.000	2300.000

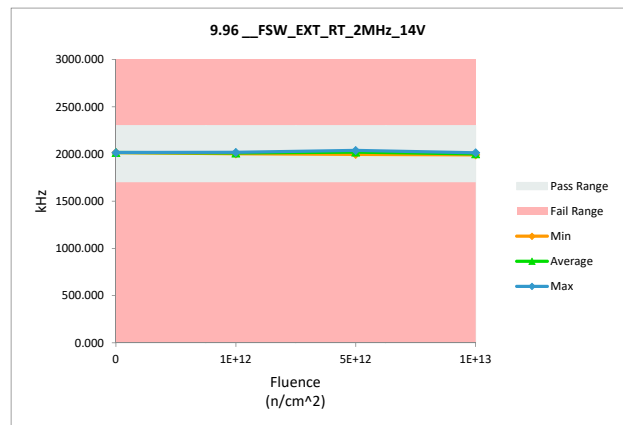


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

9.96_FSW_EXT_RT_2MHz_14V				
Test Site				
Tester				
Test Number				
Unit		kHz	kHz	
Max Limit		2300	2300	
Min Limit		1700	1700	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2017.118	2015.370	-1.748
1E+12	243	2017.705	2016.583	-1.122
1E+12	244	2001.915	2001.735	-0.180
1E+12	247	2013.482	2012.831	-0.651
5E+12	251	1996.792	1995.764	-1.028
5E+12	252	2016.649	2025.219	8.570
5E+12	259	2038.509	2037.586	-0.923
1E+13	261	2006.548	2001.912	-4.636
1E+13	263	1990.739	1990.380	-0.359
1E+13	264	2020.022	2013.448	-6.574
	Max	2038.509	2037.586	8.570
	Average	2011.948	2011.083	-0.865
	Min	1990.739	1990.380	-6.574
	Std Dev	13.599	14.120	3.908

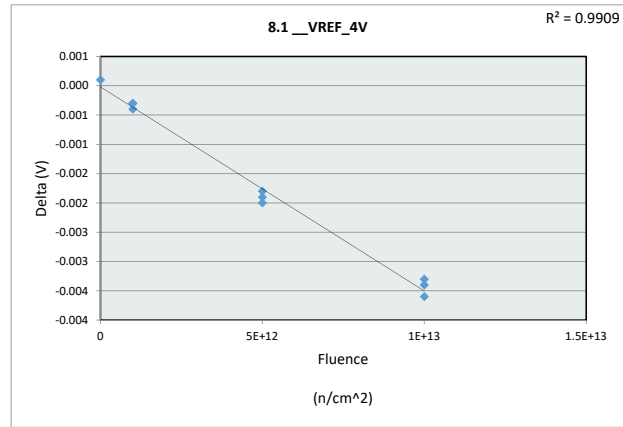


9.96_FSW_EXT_RT_2MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	2015.370	2001.735	1995.764	1990.380
Average	2015.370	2010.383	2019.523	2001.913
Max	2015.370	2016.583	2037.586	2013.448
UL	2300.000	2300.000	2300.000	2300.000

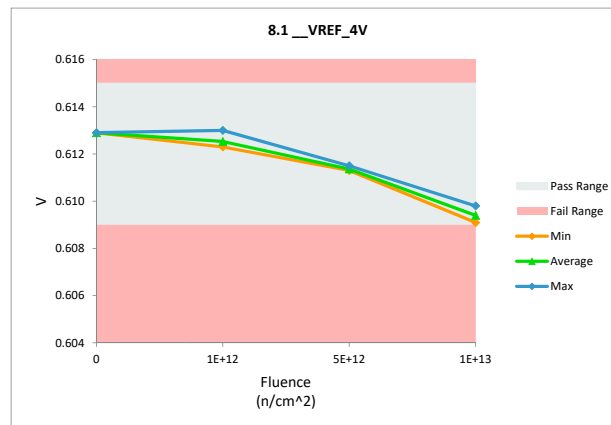


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.1_VREF_4V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.615	0.615		
Min Limit	0.609	0.609		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.613	0.613	0.000
1E+12	243	0.613	0.613	0.000
1E+12	244	0.613	0.612	0.000
1E+12	247	0.613	0.612	0.000
5E+12	251	0.613	0.611	-0.002
5E+12	252	0.613	0.612	-0.002
5E+12	259	0.613	0.611	-0.002
1E+13	261	0.613	0.610	-0.003
1E+13	263	0.613	0.609	-0.003
1E+13	264	0.613	0.609	-0.004
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.613	0.609	-0.004
Std Dev		0.000	0.001	0.001

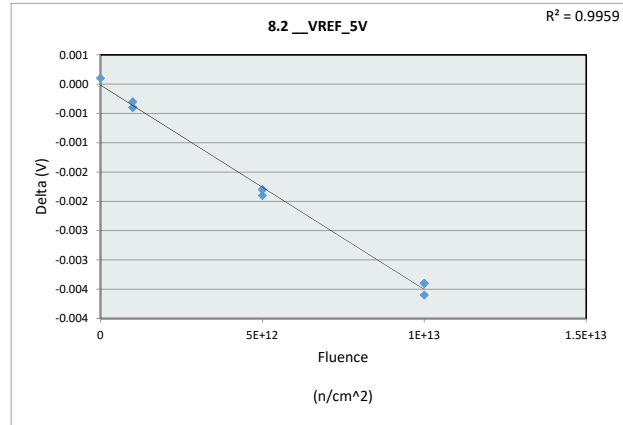


8.1_VREF_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.611	0.609
Average	0.613	0.613	0.611	0.609
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

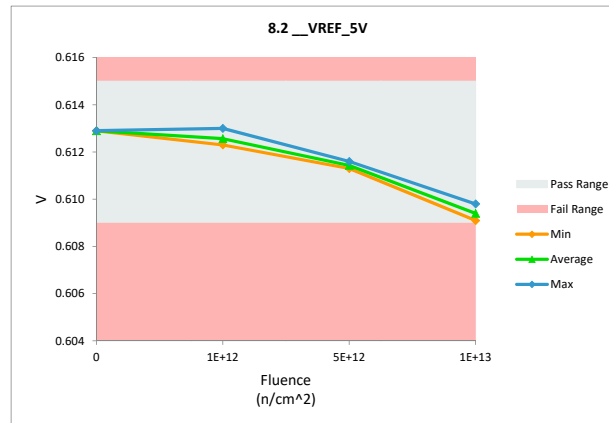


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.2 __VREF_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.615	0.615		
Min Limit	0.609	0.609		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.613	0.613	0.000
1E+12	243	0.613	0.613	0.000
1E+12	244	0.613	0.612	0.000
1E+12	247	0.613	0.612	0.000
5E+12	251	0.613	0.611	-0.002
5E+12	252	0.613	0.612	-0.002
5E+12	259	0.613	0.611	-0.002
1E+13	261	0.613	0.610	-0.003
1E+13	263	0.613	0.609	-0.003
1E+13	264	0.613	0.609	-0.004
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.613	0.609	-0.004
Std Dev		0.000	0.001	0.001

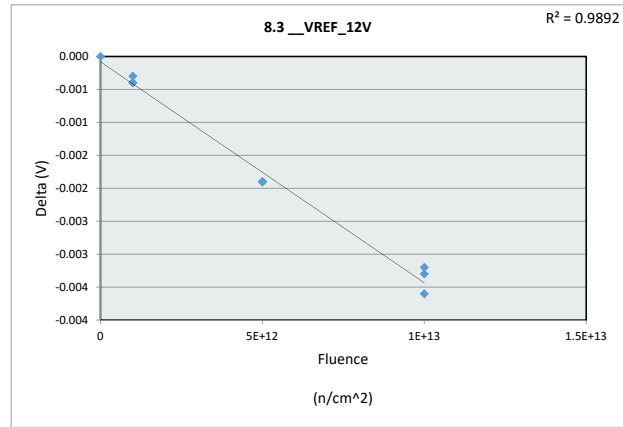


8.2 __VREF_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.611	0.609
Average	0.613	0.613	0.611	0.609
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

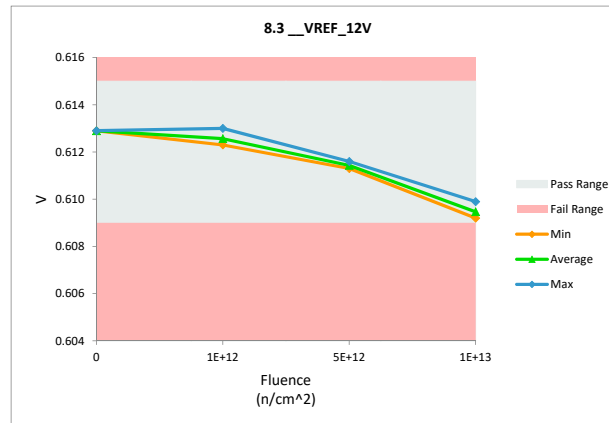


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.3_VREF_12V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.615	0.615		
Min Limit	0.609	0.609		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.613	0.613	0.000
1E+12	243	0.613	0.613	0.000
1E+12	244	0.613	0.612	0.000
1E+12	247	0.613	0.612	0.000
5E+12	251	0.613	0.611	-0.002
5E+12	252	0.613	0.612	-0.002
5E+12	259	0.613	0.611	-0.002
1E+13	261	0.613	0.610	-0.003
1E+13	263	0.613	0.609	-0.003
1E+13	264	0.613	0.609	-0.004
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.613	0.609	-0.004
Std Dev		0.000	0.001	0.001

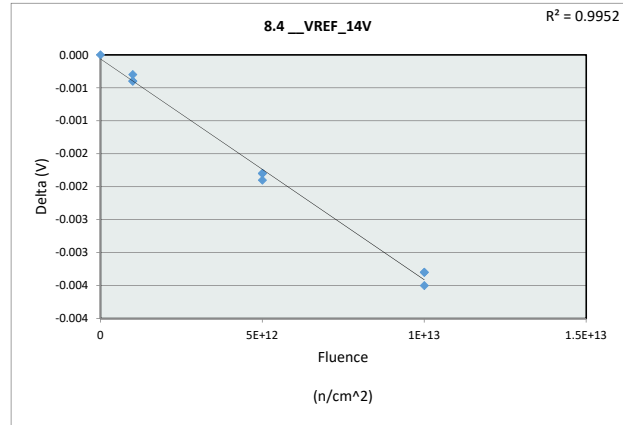


8.3_VREF_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.611	0.609
Average	0.613	0.613	0.611	0.609
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

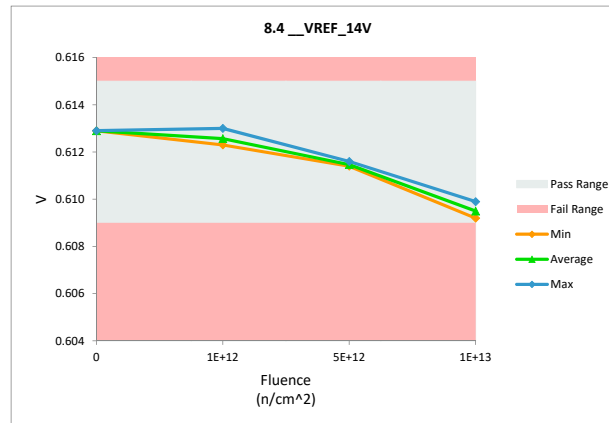


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

8.4_VREF_14V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.615	0.615		
Min Limit	0.609	0.609		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.613	0.613	0.000
1E+12	243	0.613	0.613	0.000
1E+12	244	0.613	0.612	0.000
1E+12	247	0.613	0.612	0.000
5E+12	251	0.613	0.611	-0.002
5E+12	252	0.613	0.612	-0.002
5E+12	259	0.613	0.611	-0.002
1E+13	261	0.613	0.610	-0.003
1E+13	263	0.613	0.609	-0.003
1E+13	264	0.613	0.609	-0.004
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.613	0.609	-0.004
Std Dev		0.000	0.001	0.001



8.4_VREF_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.612	0.611	0.609
Average	0.613	0.613	0.611	0.610
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

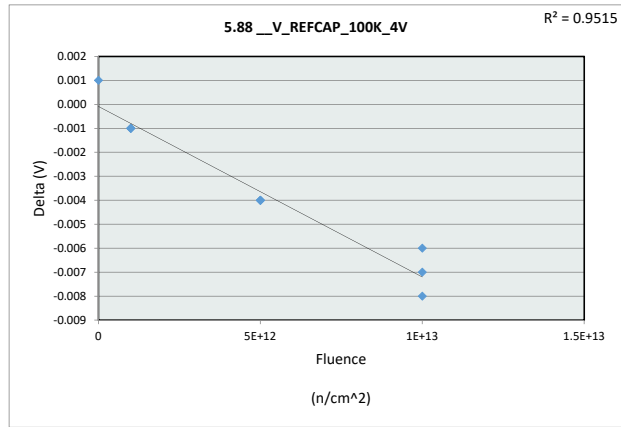


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.88 __V_REFCAP_100K_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

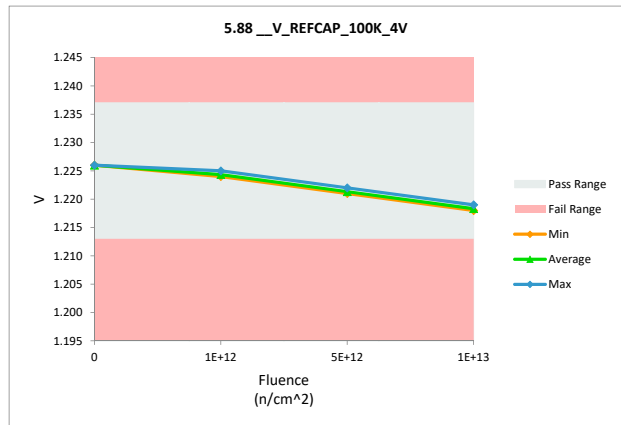
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.225	1.226	0.001
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.224	-0.001
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.218	-0.007
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.001
Average		1.225	1.222	-0.004
Min		1.225	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.88 __V_REFCAP_100K_4V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.224	1.221	1.218
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

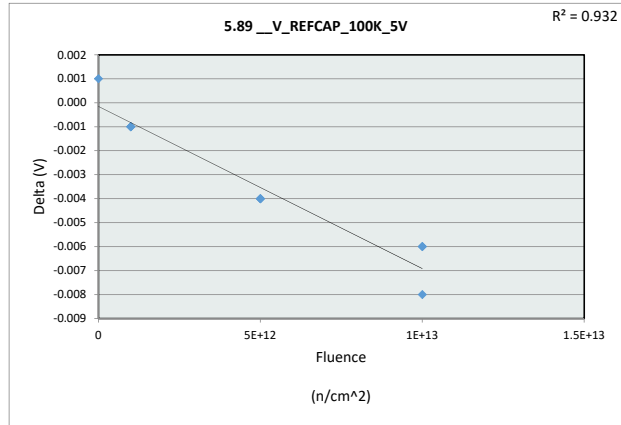


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.89 __V_REFCAP_100K_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

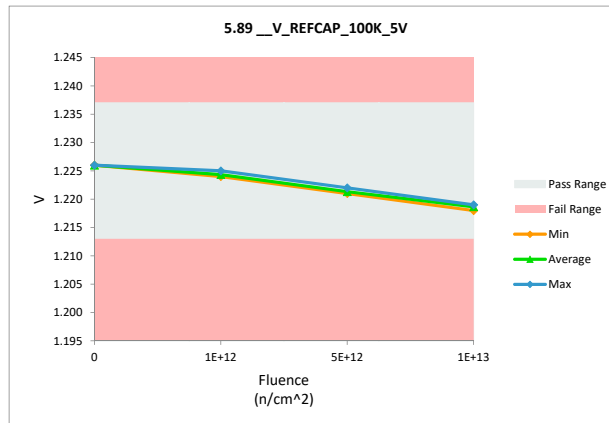
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.225	1.226	0.001
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.224	-0.001
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.001
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.89 __V_REFCAP_100K_5V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.224	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

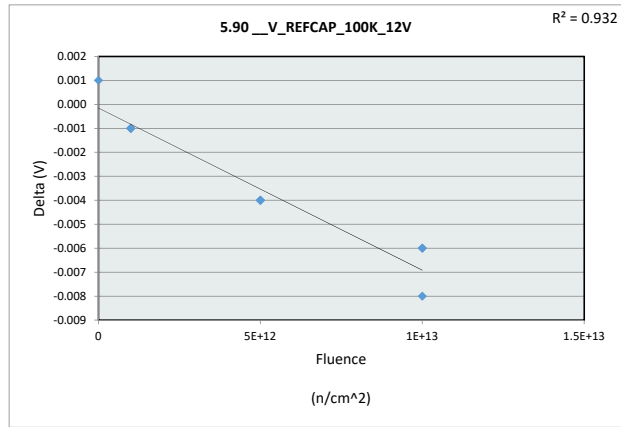


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.90 __V_REFCAP_100K_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

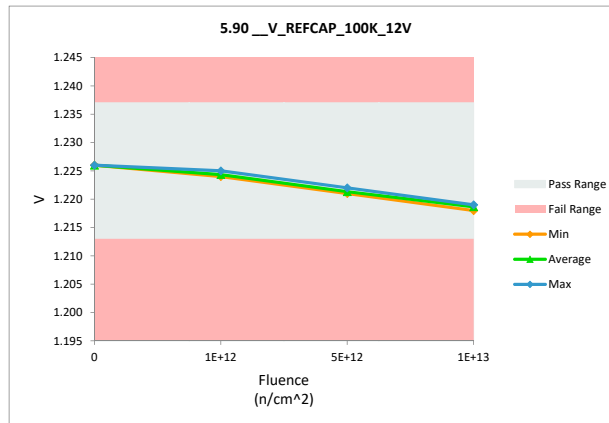
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.225	1.226	0.001
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.224	-0.001
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.001
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.90 __V_REFCAP_100K_12V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.224	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

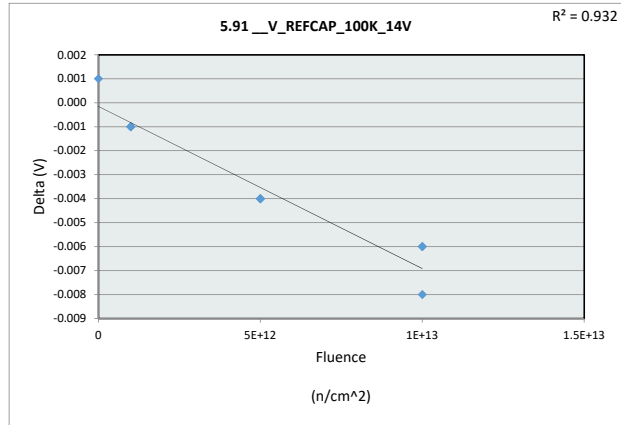


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.91_V_REFCAP_100K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

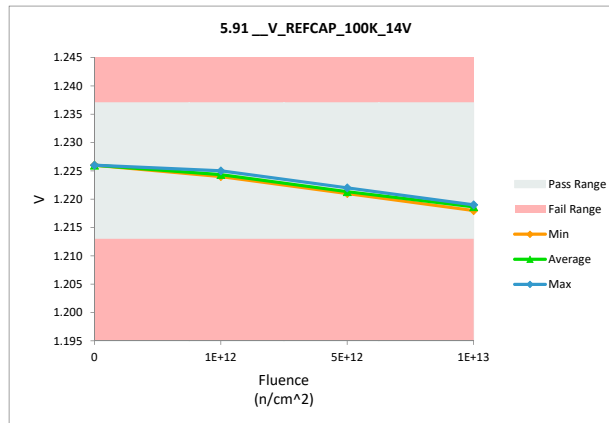
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.225	1.226	0.001
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.224	-0.001
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.001
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.91_V_REFCAP_100K_14V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.224	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

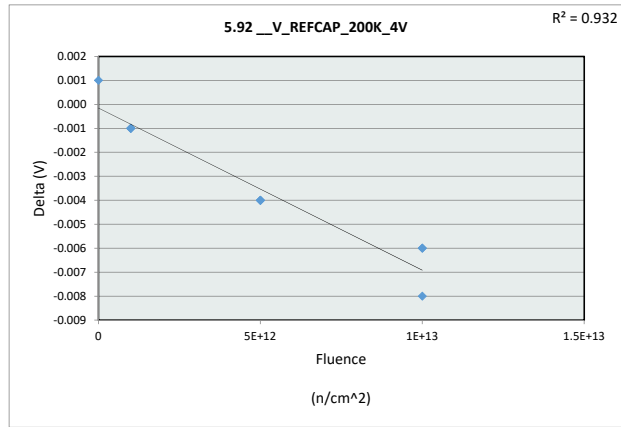


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.92 __V_REFCAP_200K_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

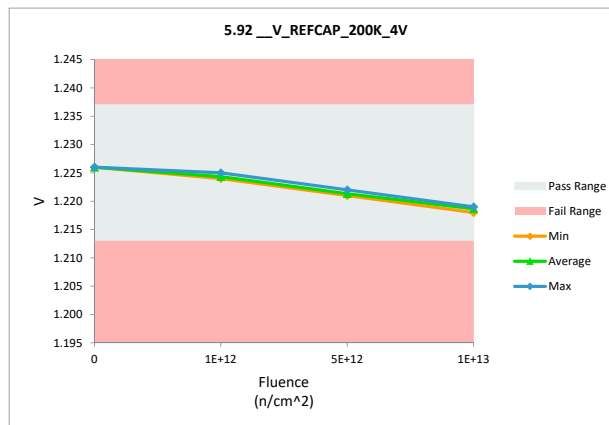
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.225	1.226	0.001
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.224	-0.001
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.001
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.92 __V_REFCAP_200K_4V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.224	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

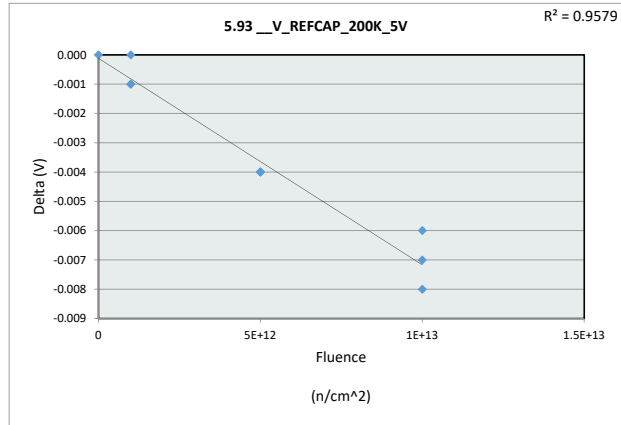


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.93 __V_REFCAP_200K_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

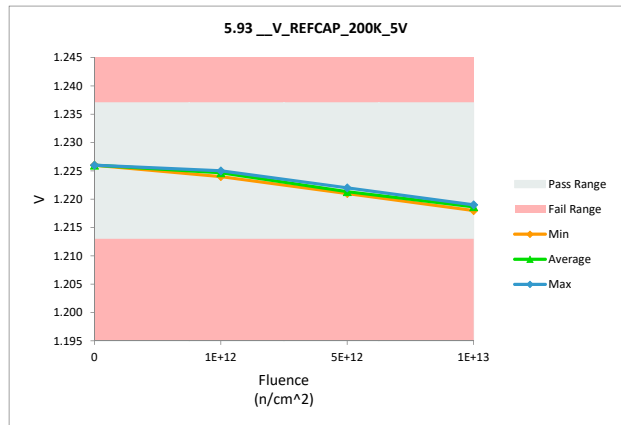
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.001	0.003	0.003



5.93 __V_REFCAP_200K_5V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.225	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

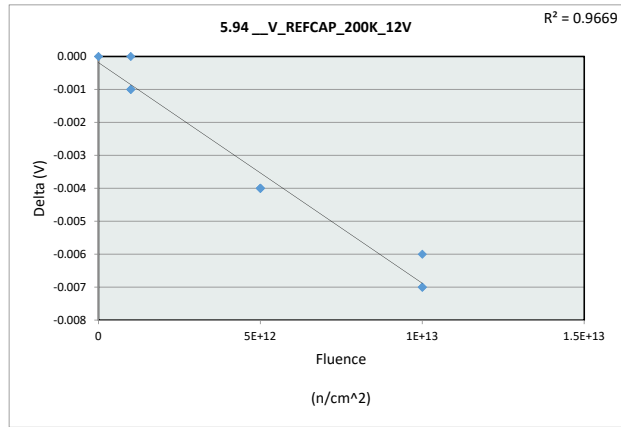


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.94_V_REFCAP_200K_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

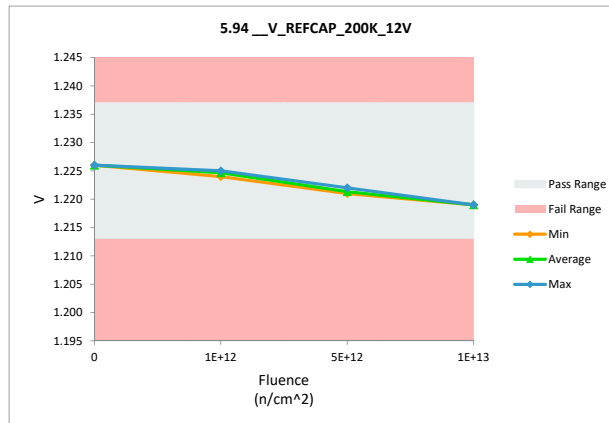
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.94_V_REFCAP_200K_12V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

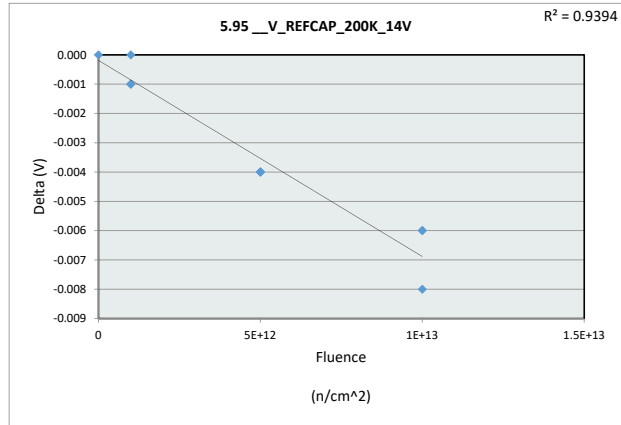


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.95_V_REFCAP_200K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

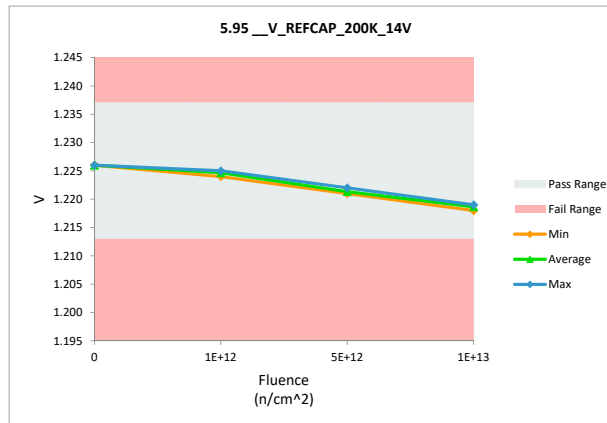
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.225	1.219	-0.006
1E+13	264	1.226	1.218	-0.008
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.218	-0.008
Std Dev		0.001	0.003	0.003



5.95_V_REFCAP_200K_14V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.218
Average	1.226	1.225	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

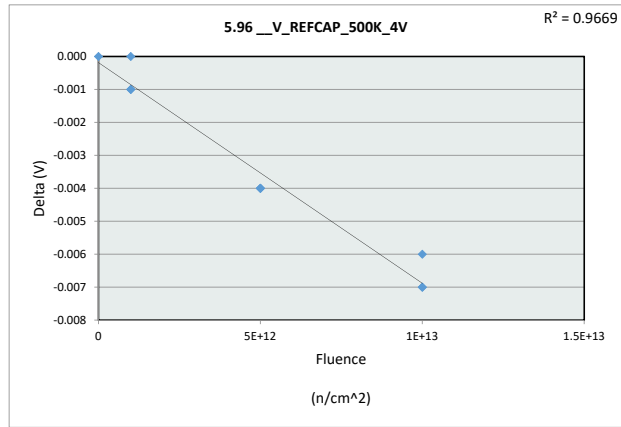


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.96 __V_REFCAP_500K_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

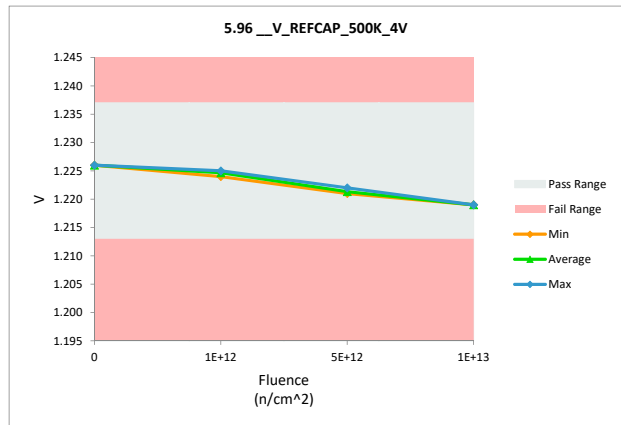
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.221	-0.004
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.96 __V_REFCAP_500K_4V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.221	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

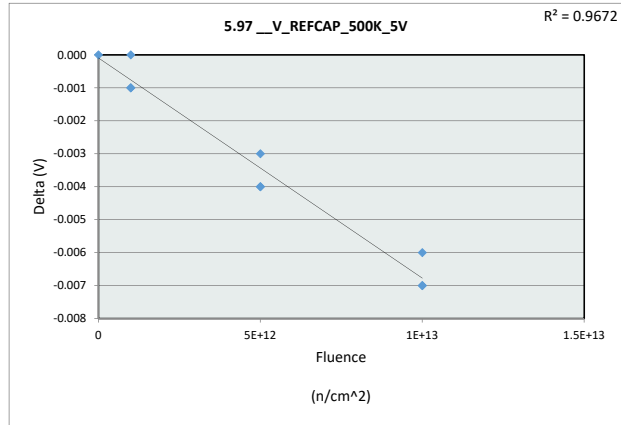


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.97 __V_REFCAP_500K_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

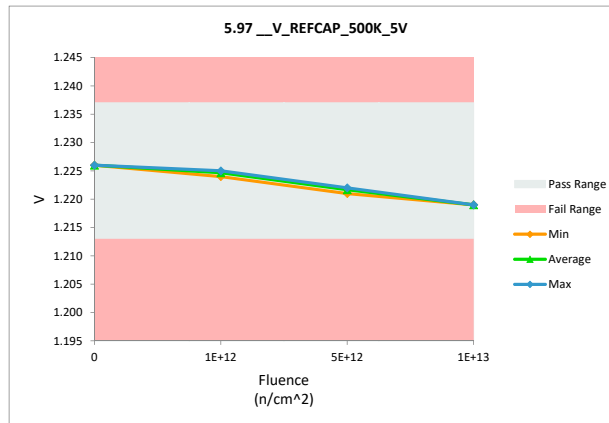
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.97 __V_REFCAP_500K_5V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

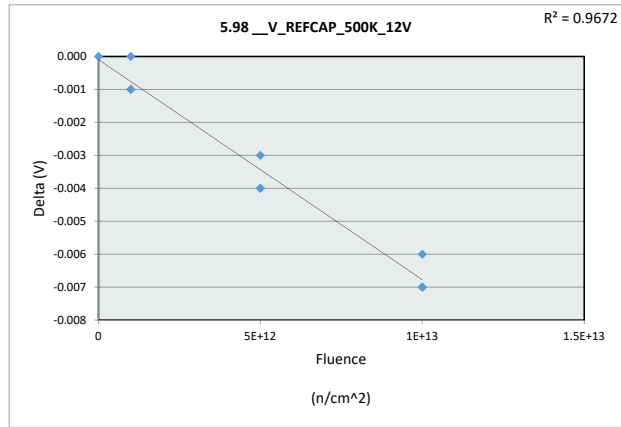


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.98 __V_REFCAP_500K_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

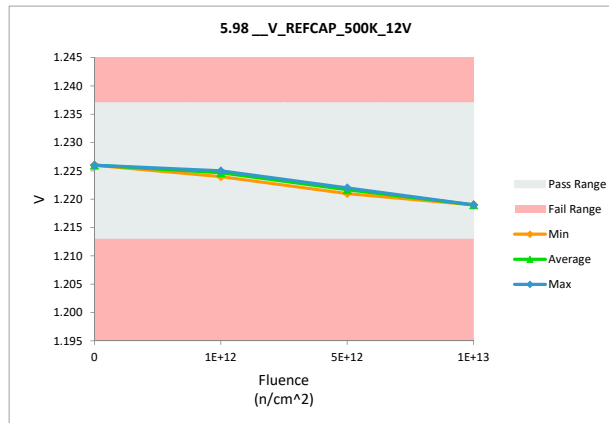
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.98 __V_REFCAP_500K_12V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

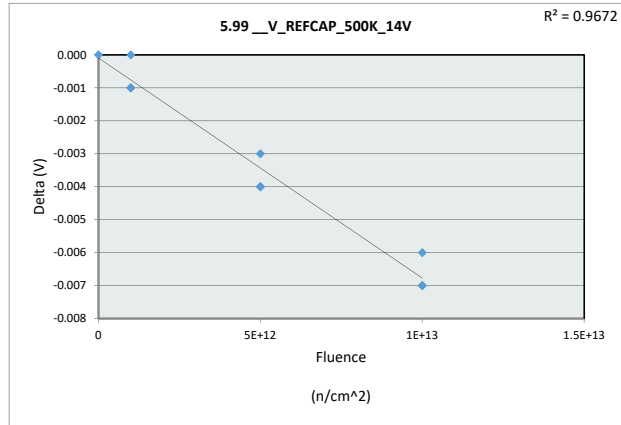


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.99 __V_REFCAP_500K_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

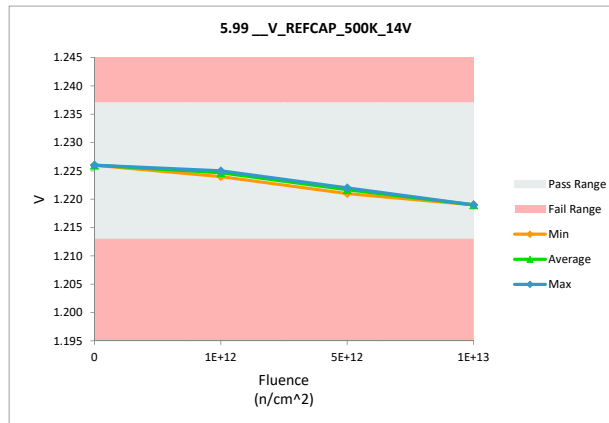
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.99 __V_REFCAP_500K_14V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

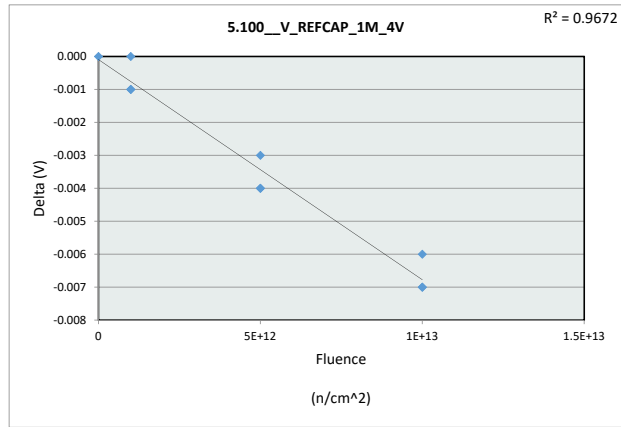


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.100_V_REFCAP_1M_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

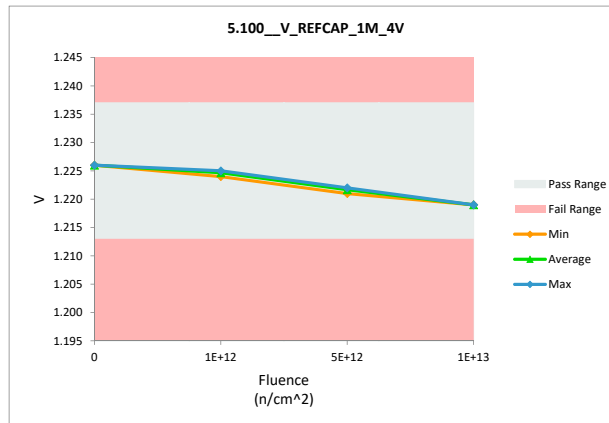
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.225	1.225	0.000
1E+12	247	1.225	1.224	-0.001
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.225	1.221	-0.004
5E+12	259	1.226	1.222	-0.004
1E+13	261	1.225	1.219	-0.006
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.225	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.001	0.003	0.003



5.100_V_REFCAP_1M_4V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.224	1.221	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.222	1.219
UL	1.237	1.237	1.237	1.237

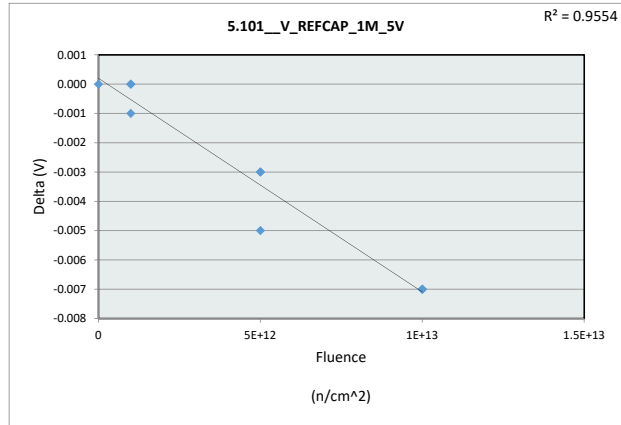


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.101_V_REFCAP_1M_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

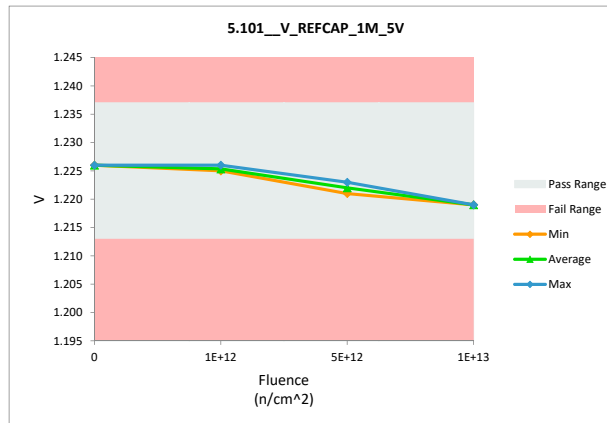
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.225	1.225	0.000
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.226	1.221	-0.005
5E+12	259	1.226	1.223	-0.003
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.101_V_REFCAP_1M_5V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.221	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

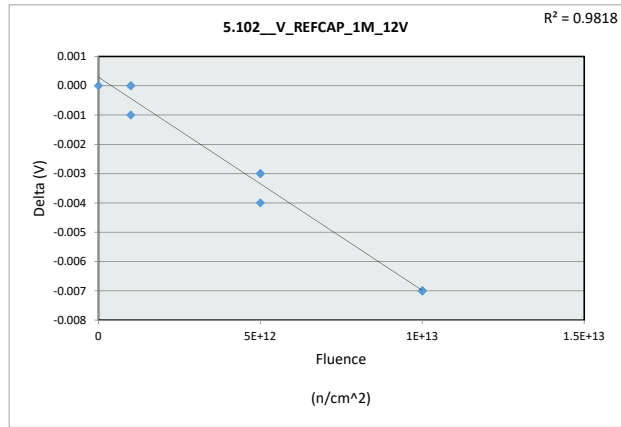


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.102_V_REFCAP_1M_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

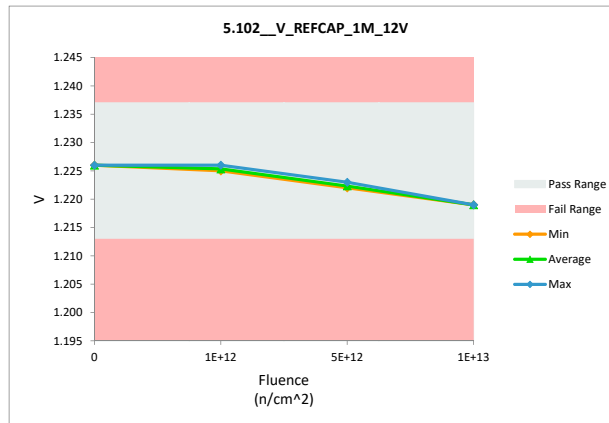
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.225	1.225	0.000
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.226	1.223	-0.003
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.102_V_REFCAP_1M_12V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

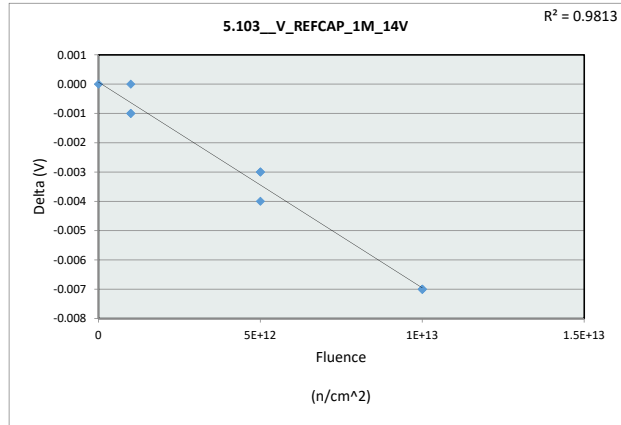


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.103_V_REFCAP_1M_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

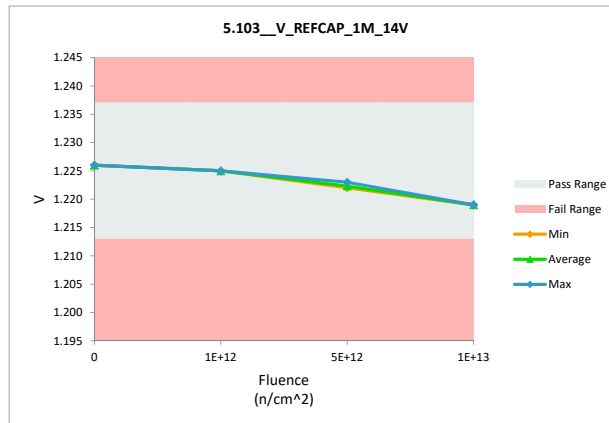
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.225	1.225	0.000
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.226	1.223	-0.003
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.103_V_REFCAP_1M_14V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

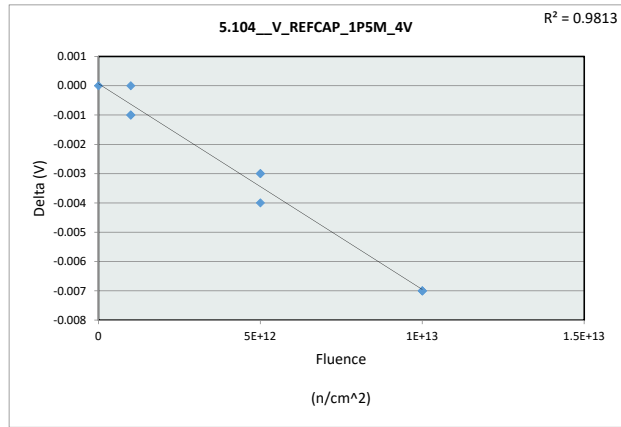


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.104_V_REFCAP_1P5M_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

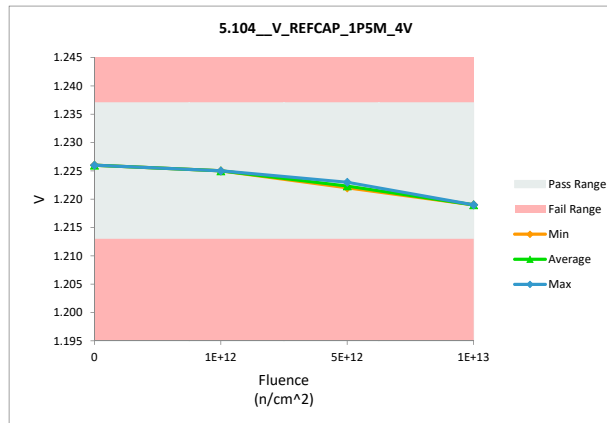
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.225	-0.001
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.225	1.225	0.000
5E+12	251	1.225	1.222	-0.003
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.226	1.223	-0.003
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.104_V_REFCAP_1P5M_4V

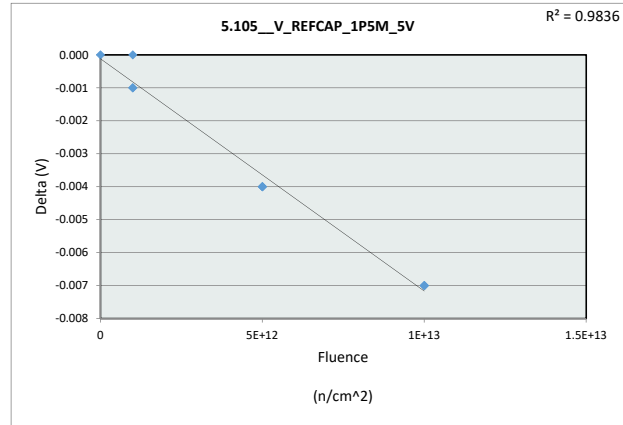
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

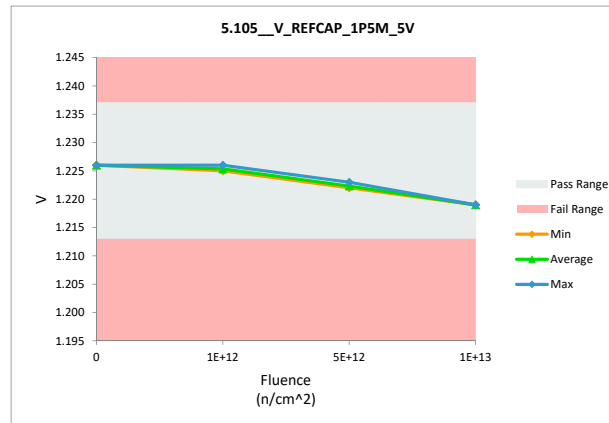


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.105_V_REFCAP_1P5M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	1.237	1.237		
Min Limit	1.213	1.213		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.105_V_REFCAP_1P5M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

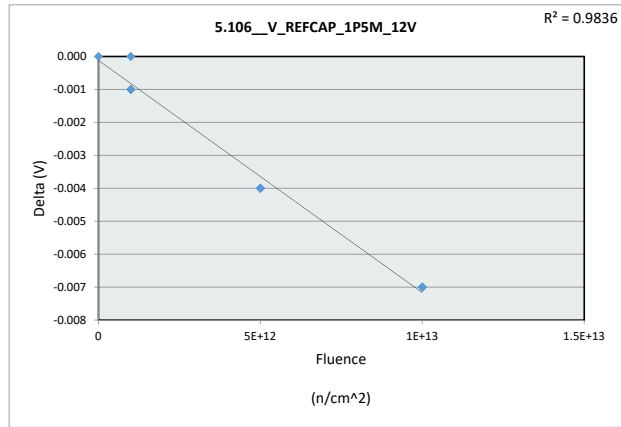


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.106_V_REFCAP_1P5M_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

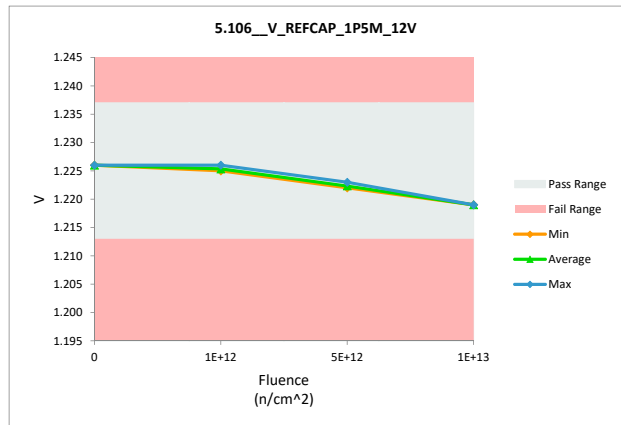
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.106_V_REFCAP_1P5M_12V

Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

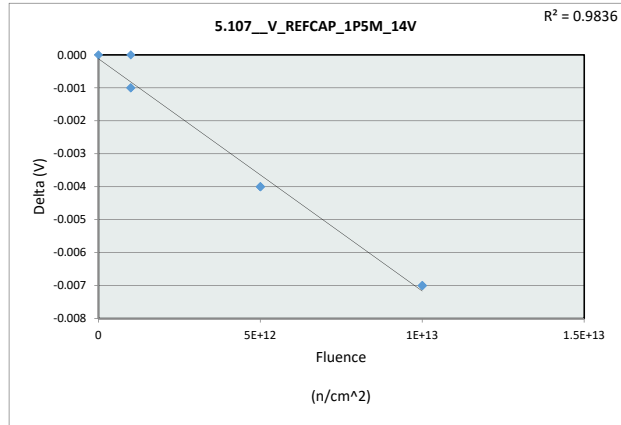


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.107_V_REFCAP_1P5M_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

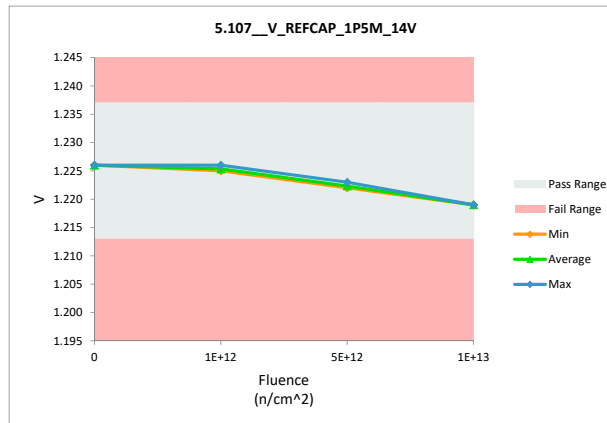
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.107_V_REFCAP_1P5M_14V

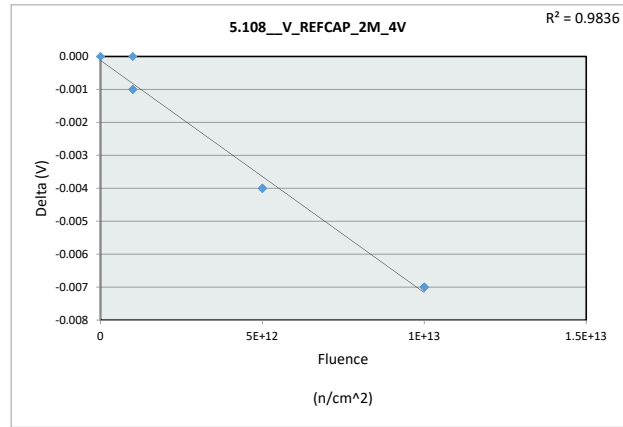
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

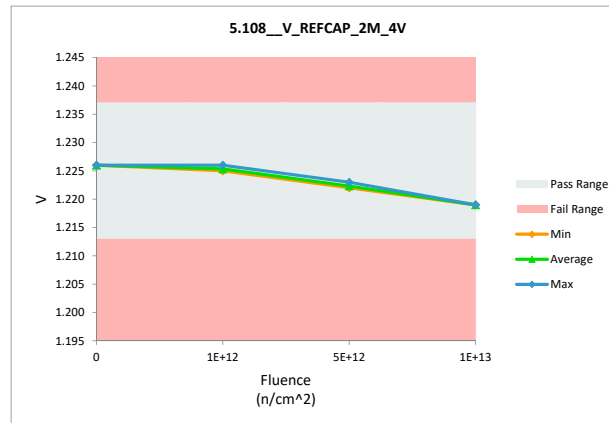


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.108_V_REFCAP_2M_4V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	1.237	1.237		
Min Limit	1.213	1.213		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.226	1.226	0.000
1E+12	243	1.226	1.226	0.000
1E+12	244	1.226	1.225	-0.001
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.219	-0.007
1E+13	264	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003

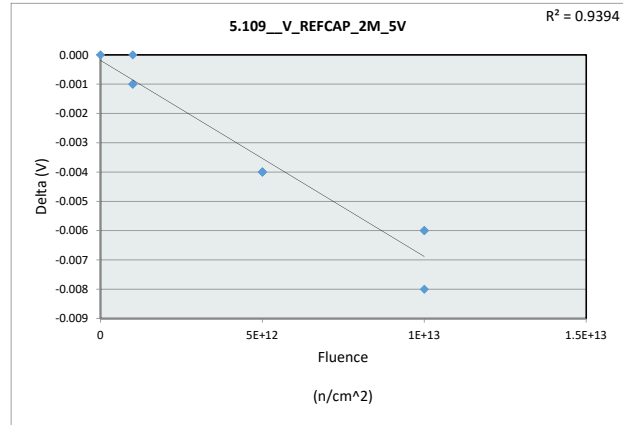


5.108_V_REFCAP_2M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.219
Average	1.226	1.225	1.222	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

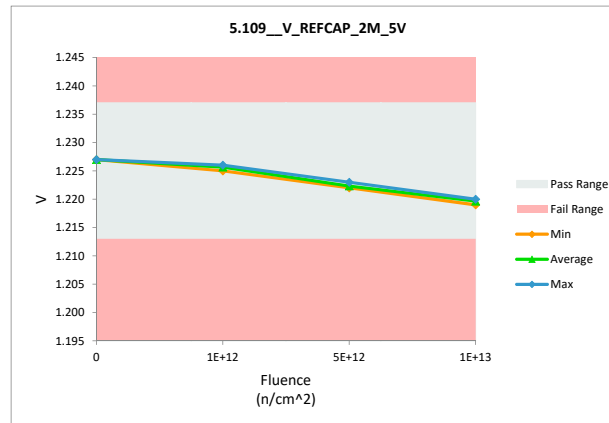


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.109_V_REFCAP_2M_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	1.237	1.237		
Min Limit	1.213	1.213		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.227	1.227	0.000
1E+12	243	1.227	1.226	-0.001
1E+12	244	1.226	1.226	0.000
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.220	-0.006
1E+13	263	1.226	1.220	-0.006
1E+13	264	1.227	1.219	-0.008
Max		1.227	1.227	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.008
Std Dev		0.001	0.003	0.003



5.109_V_REFCAP_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.225	1.222	1.219
Average	1.227	1.226	1.222	1.220
Max	1.227	1.226	1.223	1.220
UL	1.237	1.237	1.237	1.237

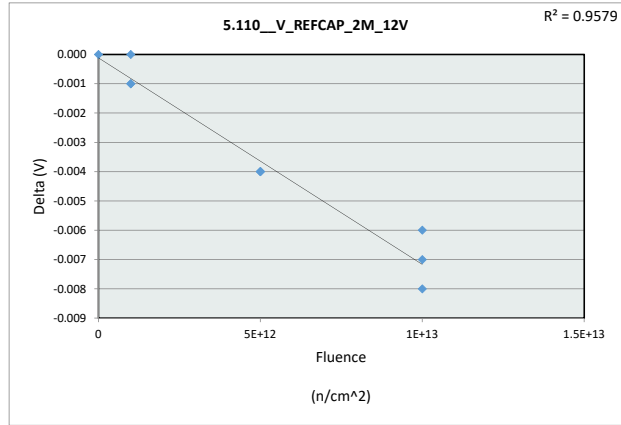


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.110_V_REFCAP_2M_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.237	1.237
Min Limit	1.213	1.213

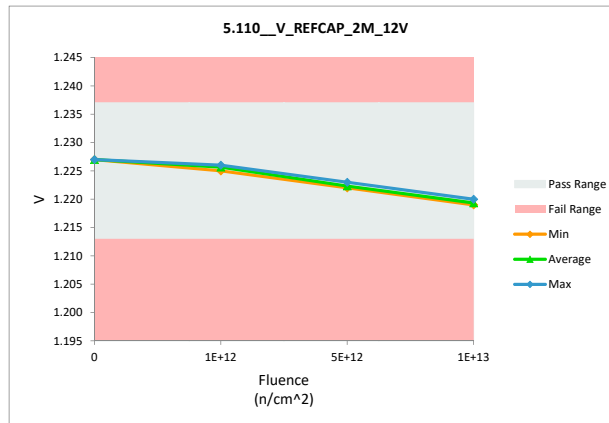
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.227	1.227	0.000
1E+12	243	1.227	1.226	-0.001
1E+12	244	1.226	1.226	0.000
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.220	-0.006
1E+13	264	1.227	1.219	-0.008
Max		1.227	1.227	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.008
Std Dev		0.001	0.003	0.003



5.110_V_REFCAP_2M_12V

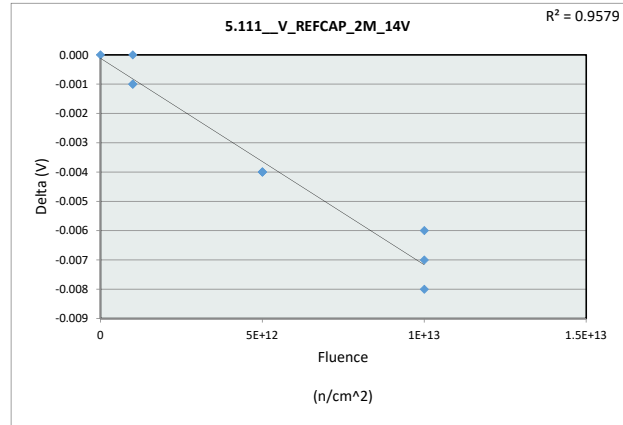
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.225	1.222	1.219
Average	1.227	1.226	1.222	1.219
Max	1.227	1.226	1.223	1.220
UL	1.237	1.237	1.237	1.237

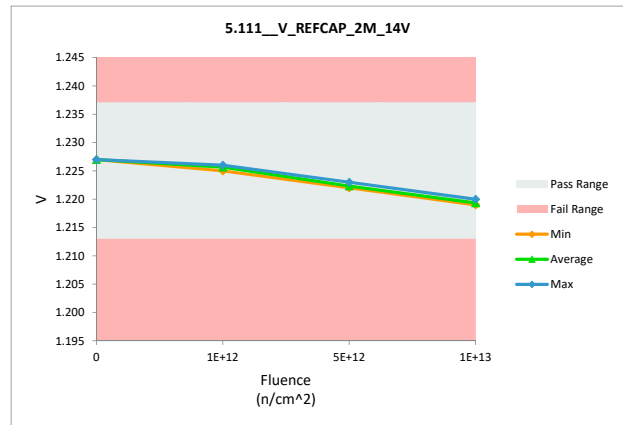


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

5.111_V_REFCAP_2M_14V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	1.237	1.237		
Min Limit	1.213	1.213		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.227	1.227	0.000
1E+12	243	1.227	1.226	-0.001
1E+12	244	1.226	1.226	0.000
1E+12	247	1.226	1.225	-0.001
5E+12	251	1.226	1.222	-0.004
5E+12	252	1.226	1.222	-0.004
5E+12	259	1.227	1.223	-0.004
1E+13	261	1.226	1.219	-0.007
1E+13	263	1.226	1.220	-0.006
1E+13	264	1.227	1.219	-0.008
Max		1.227	1.227	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.219	-0.008
Std Dev		0.001	0.003	0.003



5.111_V_REFCAP_2M_14V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.225	1.222	1.219
Average	1.227	1.226	1.222	1.219
Max	1.227	1.226	1.223	1.220
UL	1.237	1.237	1.237	1.237

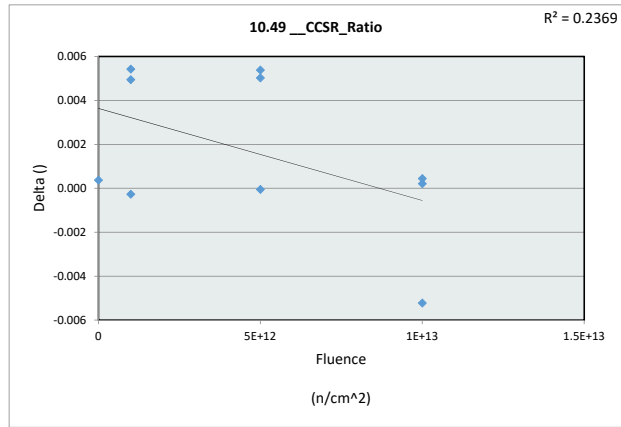


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.49 __CCSR_Ratio

Test Site		
Tester		
Test Number		
Unit		
Max Limit	2.12	2.12
Min Limit	2	2

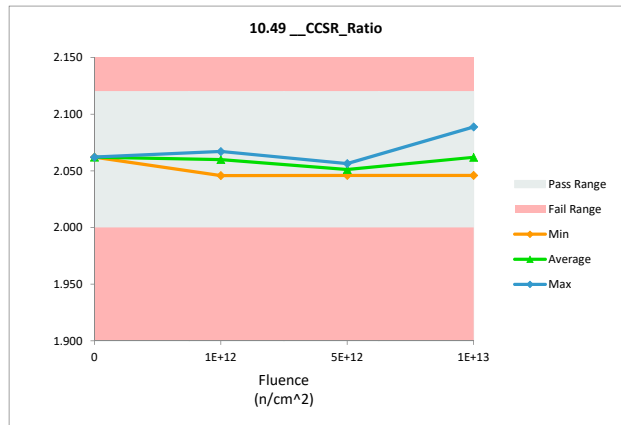
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	2.062	2.062	0.000
1E+12	243	2.046	2.046	0.000
1E+12	244	2.062	2.067	0.005
1E+12	247	2.062	2.067	0.005
5E+12	251	2.051	2.056	0.005
5E+12	252	2.046	2.051	0.005
5E+12	259	2.046	2.046	0.000
1E+13	261	2.051	2.051	0.000
1E+13	263	2.051	2.046	-0.005
1E+13	264	2.088	2.089	0.000
Max		2.088	2.089	0.005
Average		2.057	2.058	0.002
Min		2.046	2.046	-0.005
Std Dev		0.013	0.014	0.003



10.49 __CCSR_Ratio

Test Site	
Tester	
Test Number	
Max Limit	2.12
Min Limit	2

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	2.000	2.000	2.000	2.000
Min	2.062	2.046	2.046	2.046
Average	2.062	2.060	2.051	2.062
Max	2.062	2.067	2.056	2.089
UL	2.120	2.120	2.120	2.120

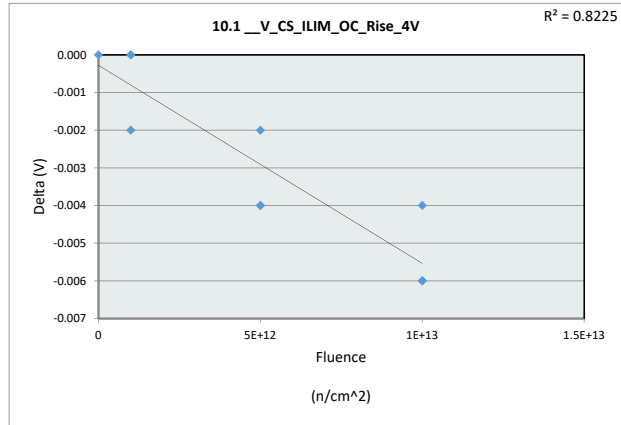


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.1 __V_CS_ILIM_OC_Rise_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

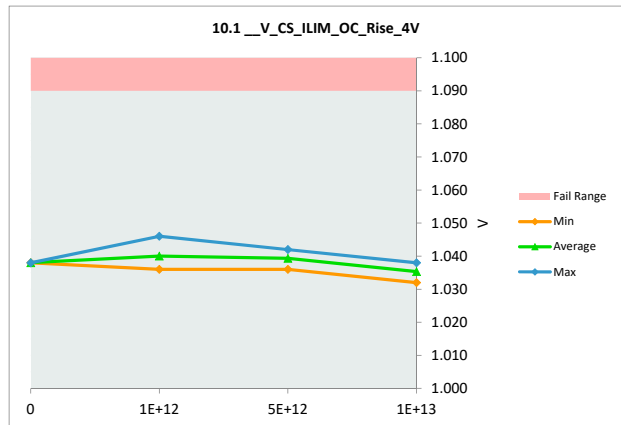
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.038	1.038	0.000
1E+12	243	1.036	1.036	0.000
1E+12	244	1.040	1.038	-0.002
1E+12	247	1.046	1.046	0.000
5E+12	251	1.040	1.036	-0.004
5E+12	252	1.044	1.042	-0.002
5E+12	259	1.044	1.040	-0.004
1E+13	261	1.038	1.032	-0.006
1E+13	263	1.042	1.038	-0.004
1E+13	264	1.042	1.036	-0.006
Max		1.046	1.046	0.000
Average		1.041	1.038	-0.003
Min		1.036	1.032	-0.006
Std Dev		0.003	0.004	0.002



10.1 __V_CS_ILIM_OC_Rise_4V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.038	1.036	1.036	1.032
Average	1.038	1.040	1.039	1.035
Max	1.038	1.046	1.042	1.038
UL	1.090	1.090	1.090	1.090

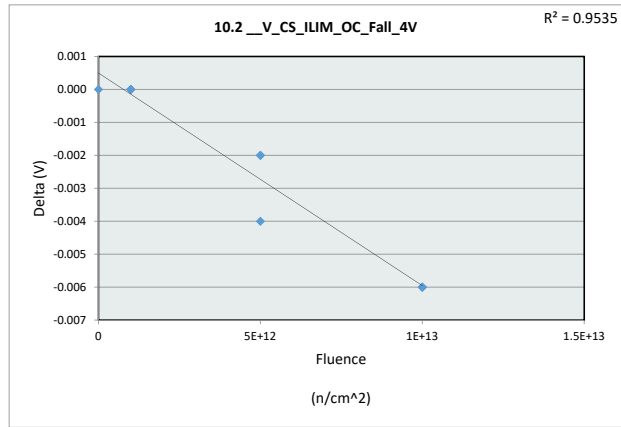


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.2 __V_CS_ILIM_OC_Fall_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

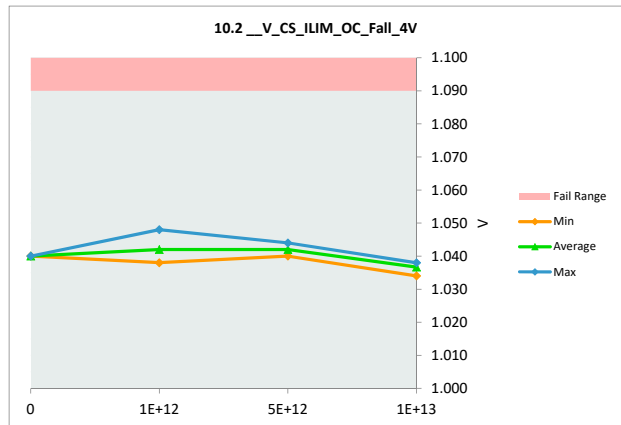
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.040	1.040	0.000
1E+12	243	1.038	1.038	0.000
1E+12	244	1.040	1.040	0.000
1E+12	247	1.048	1.048	0.000
5E+12	251	1.042	1.040	-0.002
5E+12	252	1.046	1.044	-0.002
5E+12	259	1.046	1.042	-0.004
1E+13	261	1.040	1.034	-0.006
1E+13	263	1.044	1.038	-0.006
1E+13	264	1.044	1.038	-0.006
Max		1.048	1.048	0.000
Average		1.043	1.040	-0.003
Min		1.038	1.034	-0.006
Std Dev		0.003	0.004	0.003



10.2 __V_CS_ILIM_OC_Fall_4V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.040	1.038	1.040	1.034
Average	1.040	1.042	1.042	1.037
Max	1.040	1.048	1.044	1.038
UL	1.090	1.090	1.090	1.090

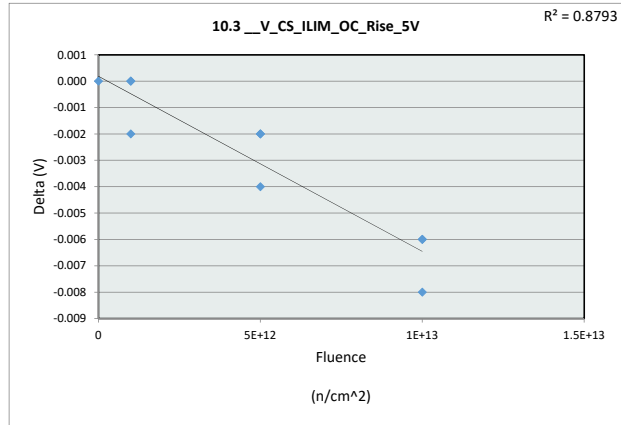


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.3 __V_CS_ILIM_OC_Rise_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

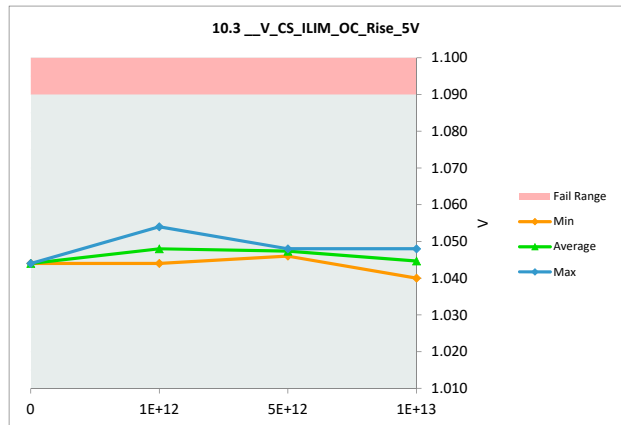
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.044	1.044	0.000
1E+12	243	1.044	1.044	0.000
1E+12	244	1.048	1.046	-0.002
1E+12	247	1.054	1.054	0.000
5E+12	251	1.048	1.046	-0.002
5E+12	252	1.052	1.048	-0.004
5E+12	259	1.050	1.048	-0.002
1E+13	261	1.048	1.040	-0.008
1E+13	263	1.054	1.048	-0.006
1E+13	264	1.052	1.046	-0.006
Max		1.054	1.054	0.000
Average		1.049	1.046	-0.003
Min		1.044	1.040	-0.008
Std Dev		0.004	0.004	0.003



10.3 __V_CS_ILIM_OC_Rise_5V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.044	1.044	1.046	1.040
Average	1.044	1.048	1.047	1.045
Max	1.044	1.054	1.048	1.048
UL	1.090	1.090	1.090	1.090

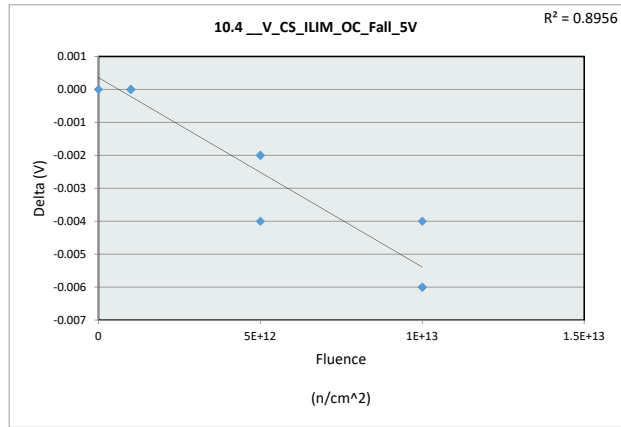


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.4 __V_CS_ILIM_OC_Fall_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

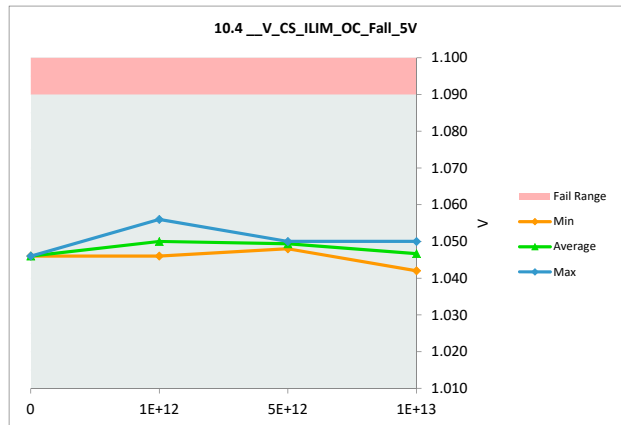
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.046	1.046	0.000
1E+12	243	1.046	1.046	0.000
1E+12	244	1.048	1.048	0.000
1E+12	247	1.056	1.056	0.000
5E+12	251	1.050	1.048	-0.002
5E+12	252	1.054	1.050	-0.004
5E+12	259	1.052	1.050	-0.002
1E+13	261	1.048	1.042	-0.006
1E+13	263	1.054	1.050	-0.004
1E+13	264	1.054	1.048	-0.006
Max		1.056	1.056	0.000
Average		1.051	1.048	-0.002
Min		1.046	1.042	-0.006
Std Dev		0.004	0.004	0.002



10.4 __V_CS_ILIM_OC_Fall_5V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.046	1.046	1.048	1.042
Average	1.046	1.050	1.049	1.047
Max	1.046	1.056	1.050	1.050
UL	1.090	1.090	1.090	1.090

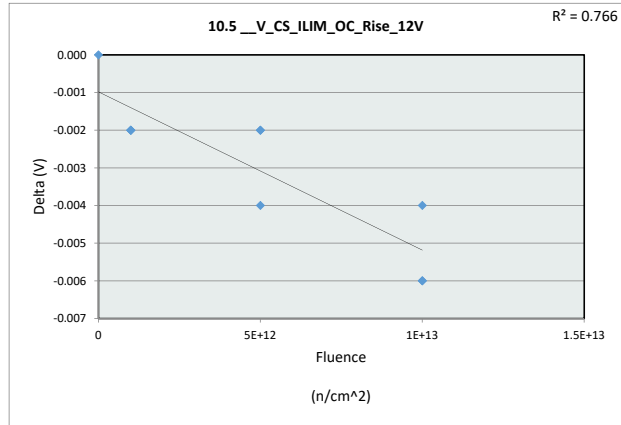


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.5 __V_CS_ILIM_OC_Rise_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

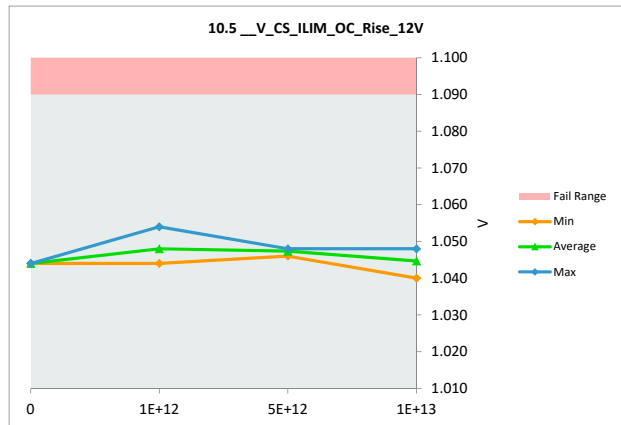
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.044	1.044	0.000
1E+12	243	1.046	1.044	-0.002
1E+12	244	1.048	1.046	-0.002
1E+12	247	1.056	1.054	-0.002
5E+12	251	1.048	1.046	-0.002
5E+12	252	1.052	1.048	-0.004
5E+12	259	1.050	1.048	-0.002
1E+13	261	1.046	1.040	-0.006
1E+13	263	1.052	1.048	-0.004
1E+13	264	1.052	1.046	-0.006
Max		1.056	1.054	0.000
Average		1.049	1.046	-0.003
Min		1.044	1.040	-0.006
Std Dev		0.004	0.004	0.002



10.5 __V_CS_ILIM_OC_Rise_1

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.044	1.044	1.046	1.040
Average	1.044	1.048	1.047	1.045
Max	1.044	1.054	1.048	1.048
UL	1.090	1.090	1.090	1.090

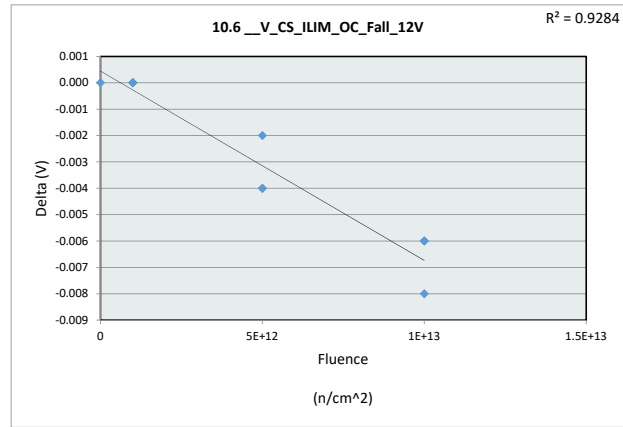


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.6 __V_CS_ILIM_OC_Fall_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

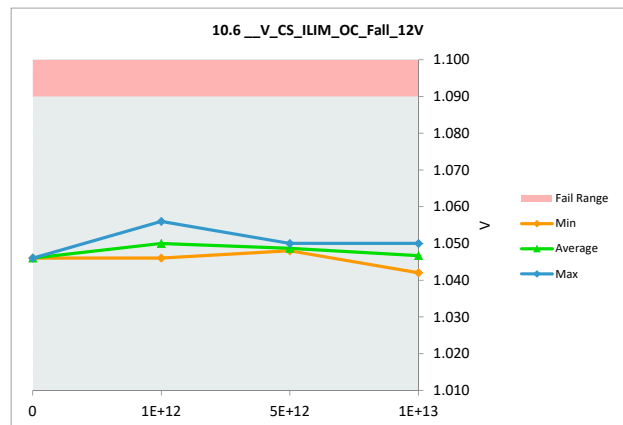
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.046	1.046	0.000
1E+12	243	1.046	1.046	0.000
1E+12	244	1.048	1.048	0.000
1E+12	247	1.056	1.056	0.000
5E+12	251	1.050	1.048	-0.002
5E+12	252	1.054	1.050	-0.004
5E+12	259	1.052	1.048	-0.004
1E+13	261	1.050	1.042	-0.008
1E+13	263	1.056	1.050	-0.006
1E+13	264	1.054	1.048	-0.006
Max		1.056	1.056	0.000
Average		1.051	1.048	-0.003
Min		1.046	1.042	-0.008
Std Dev		0.004	0.004	0.003



10.6 __V_CS_ILIM_OC_Fall_12V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.046	1.046	1.048	1.042
Average	1.046	1.050	1.049	1.047
Max	1.046	1.056	1.050	1.050
UL	1.090	1.090	1.090	1.090

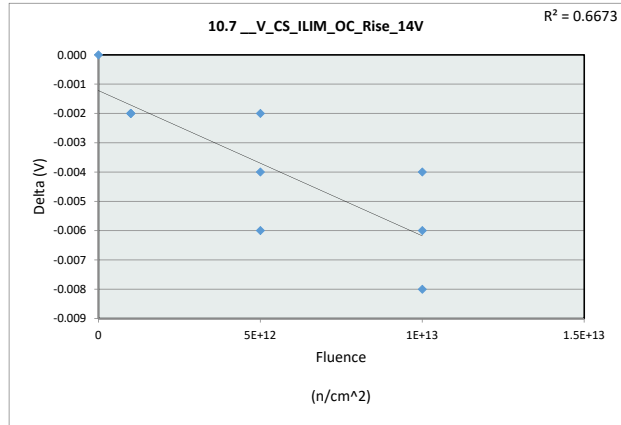


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.7 __V_CS_ILIM_OC_Rise_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

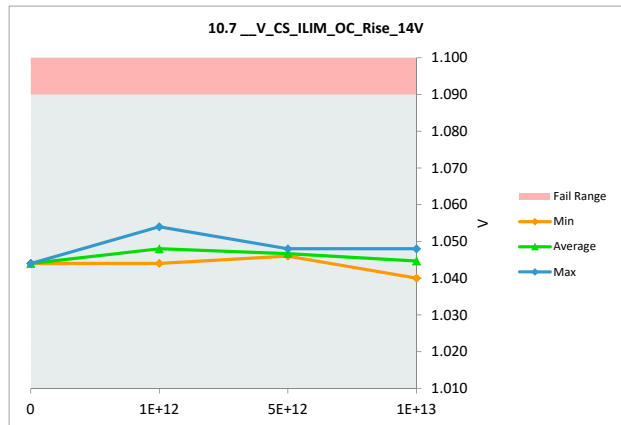
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.044	1.044	0.000
1E+12	243	1.046	1.044	-0.002
1E+12	244	1.048	1.046	-0.002
1E+12	247	1.056	1.054	-0.002
5E+12	251	1.048	1.046	-0.002
5E+12	252	1.052	1.048	-0.004
5E+12	259	1.052	1.046	-0.006
1E+13	261	1.048	1.040	-0.008
1E+13	263	1.054	1.048	-0.006
1E+13	264	1.050	1.046	-0.004
Max		1.056	1.054	0.000
Average		1.050	1.046	-0.004
Min		1.044	1.040	-0.008
Std Dev		0.004	0.004	0.002



10.7 __V_CS_ILIM_OC_Rise_1

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.044	1.044	1.046	1.040
Average	1.044	1.048	1.047	1.045
Max	1.044	1.054	1.048	1.048
UL	1.090	1.090	1.090	1.090

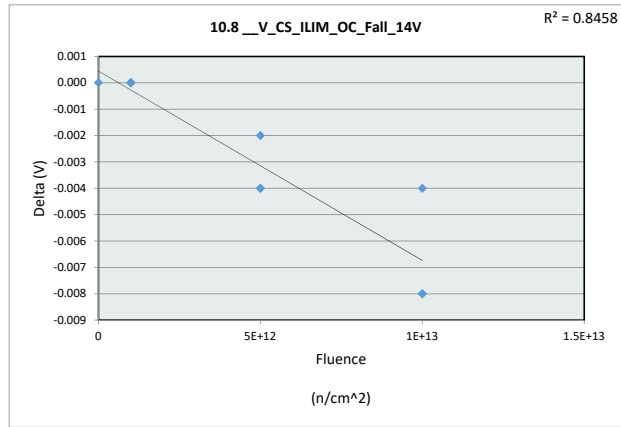


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

10.8 __V_CS_ILIM_OC_Fall_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	1.09	1.09
Min Limit		

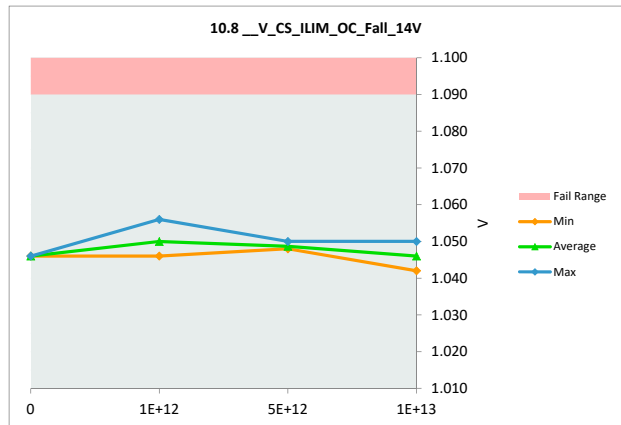
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	1.046	1.046	0.000
1E+12	243	1.046	1.046	0.000
1E+12	244	1.048	1.048	0.000
1E+12	247	1.056	1.056	0.000
5E+12	251	1.050	1.048	-0.002
5E+12	252	1.054	1.050	-0.004
5E+12	259	1.052	1.048	-0.004
1E+13	261	1.050	1.042	-0.008
1E+13	263	1.054	1.050	-0.004
1E+13	264	1.054	1.046	-0.008
Max		1.056	1.056	0.000
Average		1.051	1.048	-0.003
Min		1.046	1.042	-0.008
Std Dev		0.004	0.004	0.003



10.8 __V_CS_ILIM_OC_Fall_14V

Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.046	1.046	1.048	1.042
Average	1.046	1.050	1.049	1.046
Max	1.046	1.056	1.050	1.050
UL	1.090	1.090	1.090	1.090

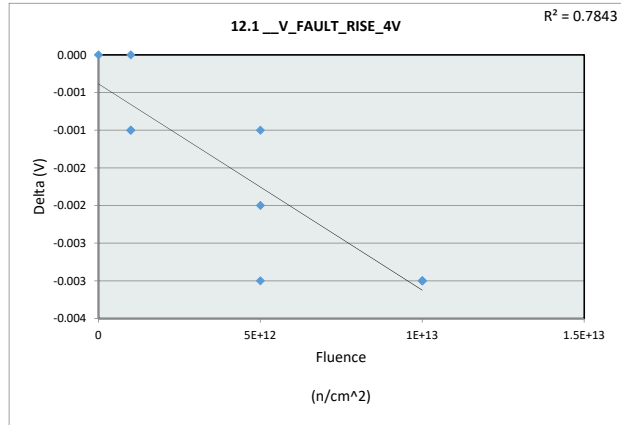


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.1 __V_FAULT_RISE_4V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.65	0.65
Min Limit	0.57	0.57

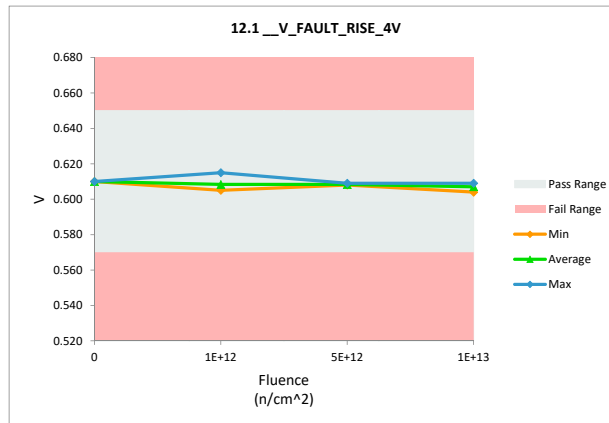
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.610	0.610	0.000
1E+12	243	0.615	0.615	0.000
1E+12	244	0.606	0.605	-0.001
1E+12	247	0.606	0.605	-0.001
5E+12	251	0.611	0.609	-0.002
5E+12	252	0.611	0.608	-0.003
5E+12	259	0.609	0.608	-0.001
1E+13	261	0.612	0.609	-0.003
1E+13	263	0.611	0.608	-0.003
1E+13	264	0.607	0.604	-0.003
Max		0.615	0.615	0.000
Average		0.610	0.608	-0.002
Min		0.606	0.604	-0.003
Std Dev		0.003	0.003	0.001



12.1 __V_FAULT_RISE_4V

Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.610	0.605	0.608	0.604
Average	0.610	0.608	0.608	0.607
Max	0.610	0.615	0.609	0.609
UL	0.650	0.650	0.650	0.650

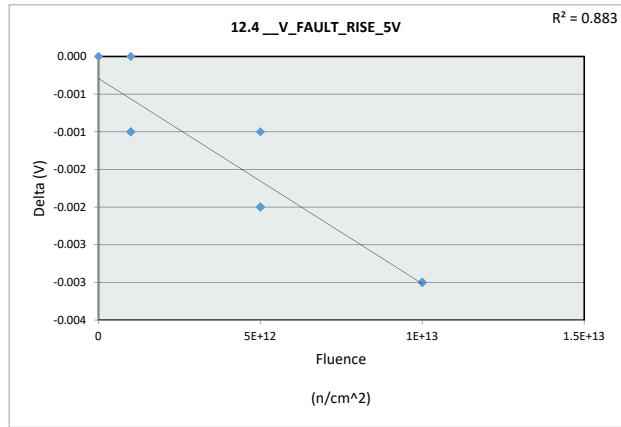


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.4 __V_FAULT_RISE_5V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.65	0.65
Min Limit	0.57	0.57

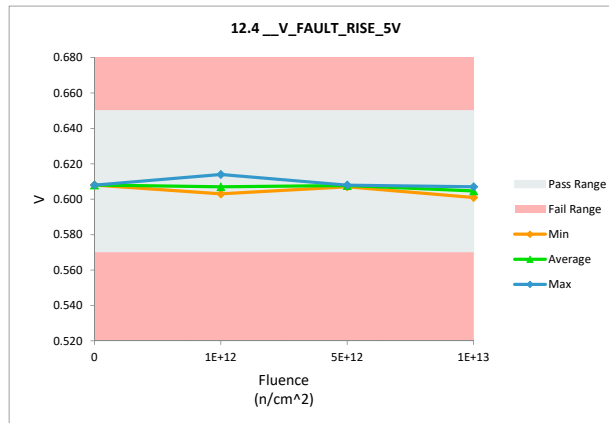
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.608	0.608	0.000
1E+12	243	0.614	0.614	0.000
1E+12	244	0.604	0.603	-0.001
1E+12	247	0.605	0.604	-0.001
5E+12	251	0.610	0.608	-0.002
5E+12	252	0.609	0.607	-0.002
5E+12	259	0.609	0.608	-0.001
1E+13	261	0.609	0.606	-0.003
1E+13	263	0.610	0.607	-0.003
1E+13	264	0.604	0.601	-0.003
Max		0.614	0.614	0.000
Average		0.608	0.607	-0.002
Min		0.604	0.601	-0.003
Std Dev		0.003	0.004	0.001



12.4 __V_FAULT_RISE_5V

Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.608	0.603	0.607	0.601
Average	0.608	0.607	0.608	0.605
Max	0.608	0.614	0.608	0.607
UL	0.650	0.650	0.650	0.650

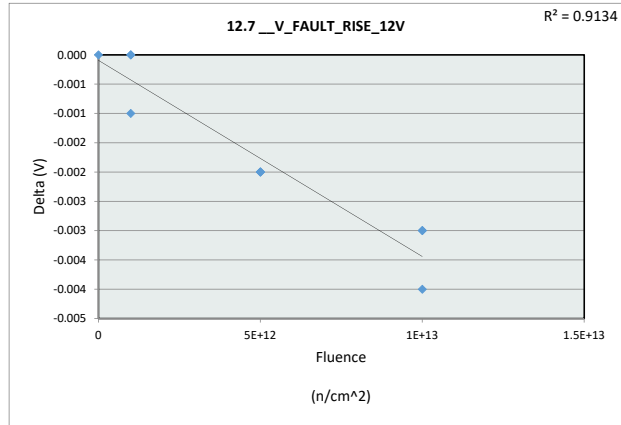


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.7 __V_FAULT_RISE_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.65	0.65
Min Limit	0.57	0.57

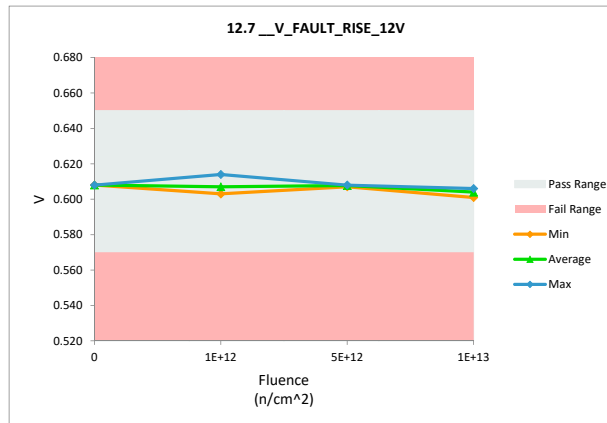
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.608	0.608	0.000
1E+12	243	0.614	0.614	0.000
1E+12	244	0.603	0.603	0.000
1E+12	247	0.605	0.604	-0.001
5E+12	251	0.610	0.608	-0.002
5E+12	252	0.609	0.607	-0.002
5E+12	259	0.610	0.608	-0.002
1E+13	261	0.608	0.605	-0.003
1E+13	263	0.610	0.606	-0.004
1E+13	264	0.604	0.601	-0.003
Max		0.614	0.614	0.000
Average		0.608	0.606	-0.002
Min		0.603	0.601	-0.004
Std Dev		0.003	0.004	0.001



12.7 __V_FAULT_RISE_12V

Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.608	0.603	0.607	0.601
Average	0.608	0.607	0.608	0.604
Max	0.608	0.614	0.608	0.606
UL	0.650	0.650	0.650	0.650

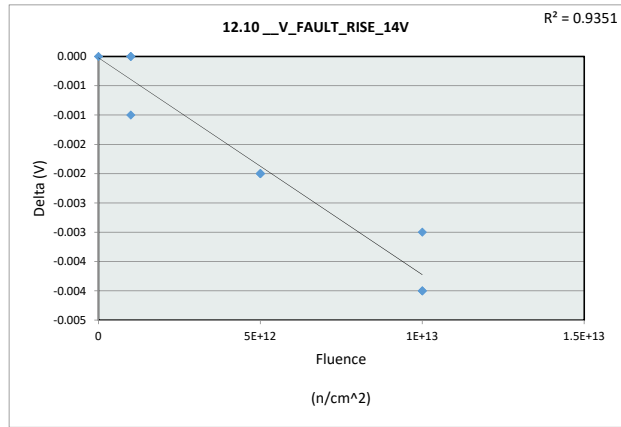


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.10 __V_FAULT_RISE_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.65	0.65
Min Limit	0.57	0.57

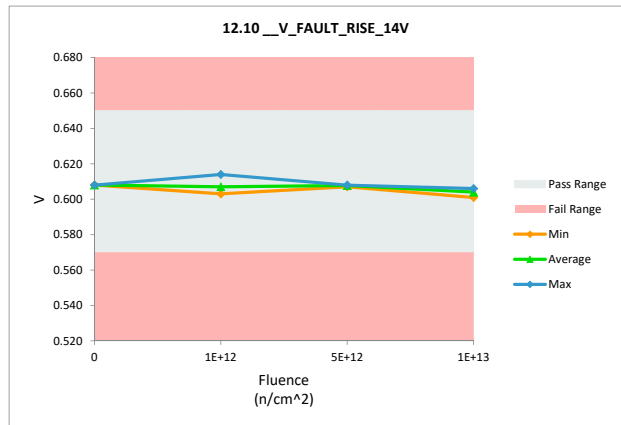
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.608	0.608	0.000
1E+12	243	0.614	0.614	0.000
1E+12	244	0.603	0.603	0.000
1E+12	247	0.605	0.604	-0.001
5E+12	251	0.610	0.608	-0.002
5E+12	252	0.609	0.607	-0.002
5E+12	259	0.610	0.608	-0.002
1E+13	261	0.609	0.605	-0.004
1E+13	263	0.610	0.606	-0.004
1E+13	264	0.604	0.601	-0.003
Max		0.614	0.614	0.000
Average		0.608	0.606	-0.002
Min		0.603	0.601	-0.004
Std Dev		0.003	0.004	0.002



12.10 __V_FAULT_RISE_14V

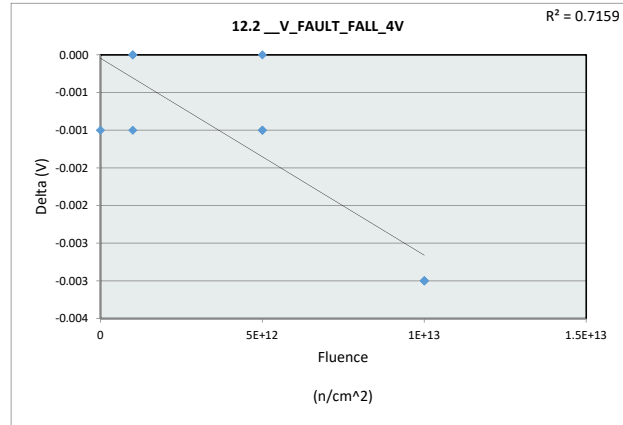
Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.608	0.603	0.607	0.601
Average	0.608	0.607	0.608	0.604
Max	0.608	0.614	0.608	0.606
UL	0.650	0.650	0.650	0.650

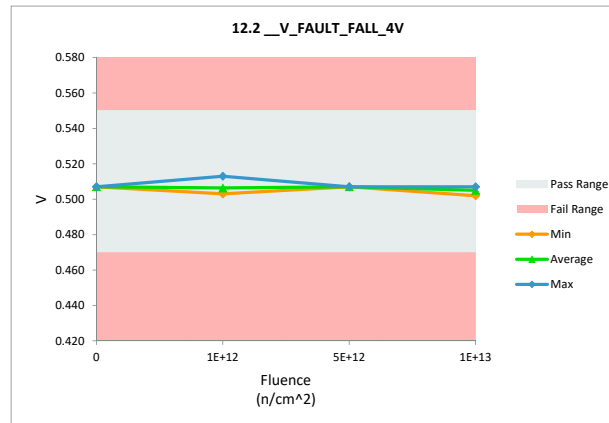


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.2 __V_FAULT_FALL_4V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.55	0.55		
Min Limit	0.47	0.47		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.508	0.507	-0.001
1E+12	243	0.513	0.513	0.000
1E+12	244	0.503	0.503	0.000
1E+12	247	0.504	0.503	-0.001
5E+12	251	0.508	0.507	-0.001
5E+12	252	0.508	0.507	-0.001
5E+12	259	0.507	0.507	0.000
1E+13	261	0.510	0.507	-0.003
1E+13	263	0.509	0.506	-0.003
1E+13	264	0.505	0.502	-0.003
Max		0.513	0.513	0.000
Average		0.508	0.506	-0.001
Min		0.503	0.502	-0.003
Std Dev		0.003	0.003	0.001

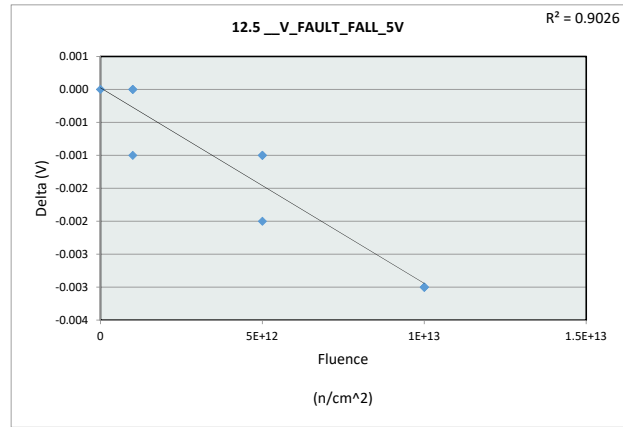


12.2 __V_FAULT_FALL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.507	0.503	0.507	0.502
Average	0.507	0.506	0.507	0.505
Max	0.507	0.513	0.507	0.507
UL	0.550	0.550	0.550	0.550

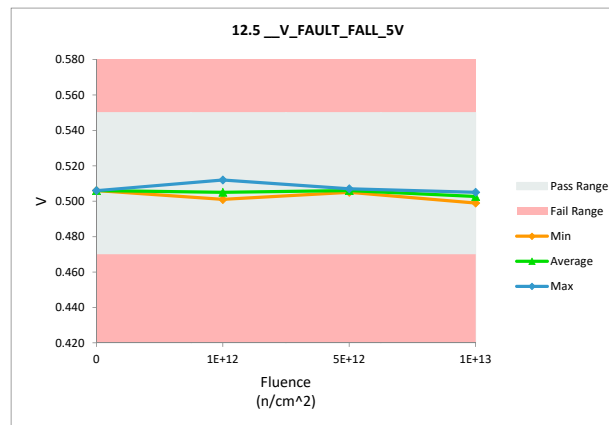


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.5 __V_FAULT_FALL_5V				
Test Site				
Tester				
Test Number				
Unit	V	V		
Max Limit	0.55	0.55		
Min Limit	0.47	0.47		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.506	0.506	0.000
1E+12	243	0.512	0.512	0.000
1E+12	244	0.501	0.501	0.000
1E+12	247	0.503	0.502	-0.001
5E+12	251	0.508	0.507	-0.001
5E+12	252	0.507	0.505	-0.002
5E+12	259	0.507	0.506	-0.001
1E+13	261	0.507	0.504	-0.003
1E+13	263	0.508	0.505	-0.003
1E+13	264	0.502	0.499	-0.003
Max		0.512	0.512	0.000
Average		0.506	0.505	-0.001
Min		0.501	0.499	-0.003
Std Dev		0.003	0.004	0.001



12.5 __V_FAULT_FALL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.501	0.505	0.499
Average	0.506	0.505	0.506	0.503
Max	0.506	0.512	0.507	0.505
UL	0.550	0.550	0.550	0.550

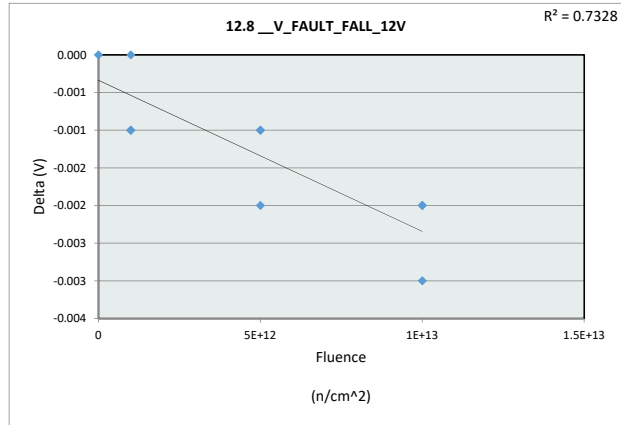


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.8 __V_FAULT_FALL_12V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.55	0.55
Min Limit	0.47	0.47

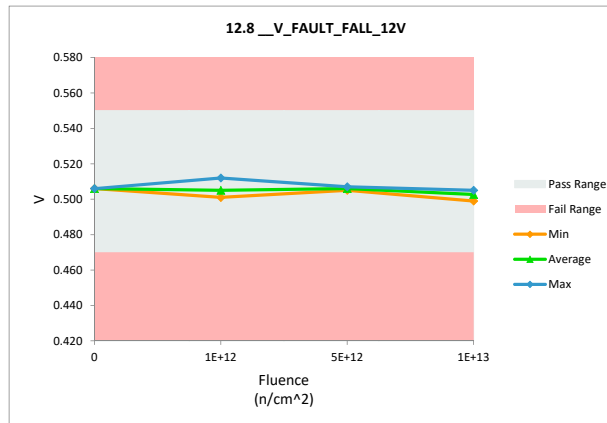
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.506	0.506	0.000
1E+12	243	0.513	0.512	-0.001
1E+12	244	0.501	0.501	0.000
1E+12	247	0.503	0.502	-0.001
5E+12	251	0.508	0.507	-0.001
5E+12	252	0.507	0.505	-0.002
5E+12	259	0.507	0.506	-0.001
1E+13	261	0.506	0.504	-0.002
1E+13	263	0.508	0.505	-0.003
1E+13	264	0.501	0.499	-0.002
Max		0.513	0.512	0.000
Average		0.506	0.505	-0.001
Min		0.501	0.499	-0.003
Std Dev		0.004	0.004	0.001



12.8 __V_FAULT_FALL_12V

Test Site		
Tester		
Test Number		
Max Limit	0.55	V
Min Limit	0.47	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.501	0.505	0.499
Average	0.506	0.505	0.506	0.503
Max	0.506	0.512	0.507	0.505
UL	0.550	0.550	0.550	0.550

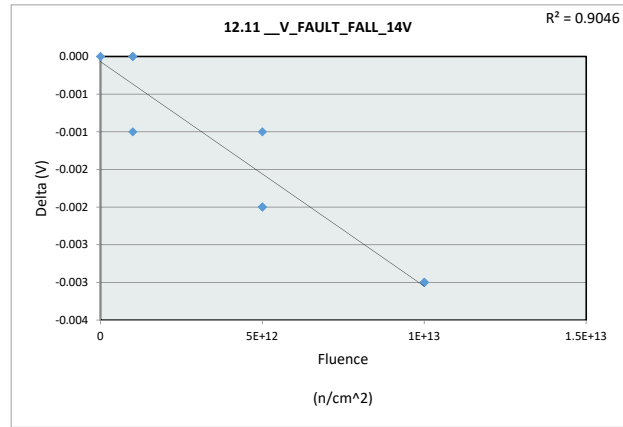


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.11 __V_FAULT_FALL_14V

Test Site		
Tester		
Test Number		
Unit	V	V
Max Limit	0.55	0.55
Min Limit	0.47	0.47

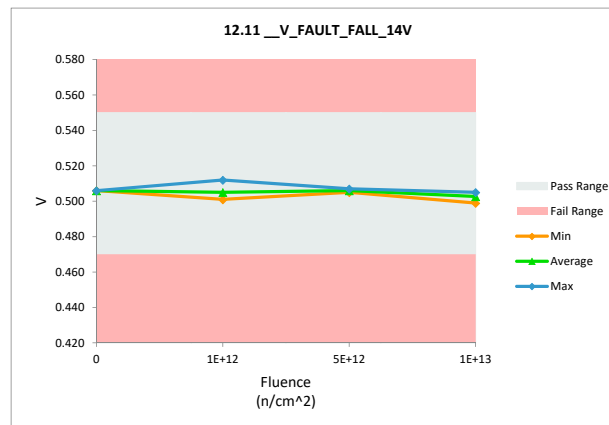
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.506	0.506	0.000
1E+12	243	0.513	0.512	-0.001
1E+12	244	0.501	0.501	0.000
1E+12	247	0.502	0.502	0.000
5E+12	251	0.508	0.507	-0.001
5E+12	252	0.507	0.505	-0.002
5E+12	259	0.508	0.506	-0.002
1E+13	261	0.507	0.504	-0.003
1E+13	263	0.508	0.505	-0.003
1E+13	264	0.502	0.499	-0.003
Max		0.513	0.512	0.000
Average		0.506	0.505	-0.002
Min		0.501	0.499	-0.003
Std Dev		0.004	0.004	0.001



12.11 __V_FAULT_FALL_14V

Test Site		
Tester		
Test Number		
Max Limit	0.55	V
Min Limit	0.47	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.506	0.501	0.505	0.499
Average	0.506	0.505	0.506	0.503
Max	0.506	0.512	0.507	0.505
UL	0.550	0.550	0.550	0.550

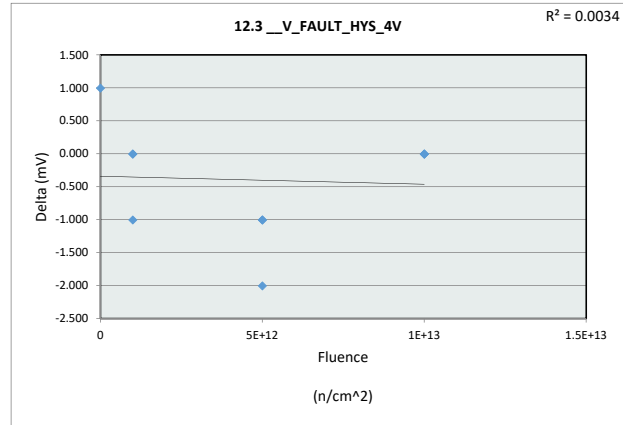


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.3 __V_FAULT_HYS_4V

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	110	110
Min Limit	90	90

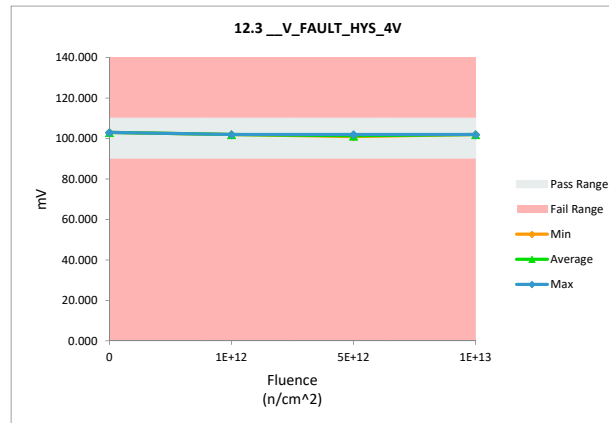
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	102.000	103.000	1.000
1E+12	243	102.000	102.000	0.000
1E+12	244	103.000	102.000	-1.000
1E+12	247	102.000	102.000	0.000
5E+12	251	103.000	102.000	-1.000
5E+12	252	103.000	101.000	-2.000
5E+12	259	102.000	101.000	-1.000
1E+13	261	102.000	102.000	0.000
1E+13	263	102.000	102.000	0.000
1E+13	264	102.000	102.000	0.000
Max		103.000	103.000	1.000
Average		102.300	101.900	-0.400
Min		102.000	101.000	-2.000
Std Dev		0.483	0.568	0.843



12.3 __V_FAULT_HYS_4V

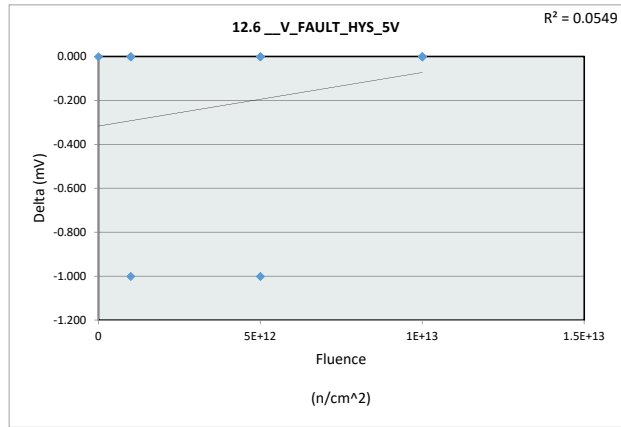
Test Site		
Tester		
Test Number		
Max Limit	110	mV
Min Limit	90	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	90.000	90.000	90.000	90.000
Min	103.000	102.000	101.000	102.000
Average	103.000	102.000	101.333	102.000
Max	103.000	102.000	102.000	102.000
UL	110.000	110.000	110.000	110.000

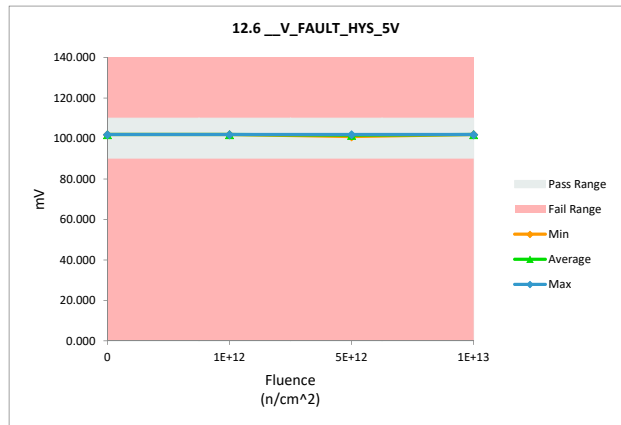


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.6 __V_FAULT_HYS_5V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		110	110	
Min Limit		90	90	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	102.000	102.000	0.000
1E+12	243	102.000	102.000	0.000
1E+12	244	103.000	102.000	-1.000
1E+12	247	102.000	102.000	0.000
5E+12	251	102.000	101.000	-1.000
5E+12	252	102.000	102.000	0.000
5E+12	259	102.000	102.000	0.000
1E+13	261	102.000	102.000	0.000
1E+13	263	102.000	102.000	0.000
1E+13	264	102.000	102.000	0.000
Max		103.000	102.000	0.000
Average		102.100	101.900	-0.200
Min		102.000	101.000	-1.000
Std Dev		0.316	0.316	0.422



12.6 __V_FAULT_HYS_5V				
Test Site				
Tester				
Test Number				
Max Limit	110	mV		
Min Limit	90	mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	90.000	90.000	90.000	90.000
Min	102.000	102.000	101.000	102.000
Average	102.000	102.000	101.667	102.000
Max	102.000	102.000	102.000	102.000
UL	110.000	110.000	110.000	110.000

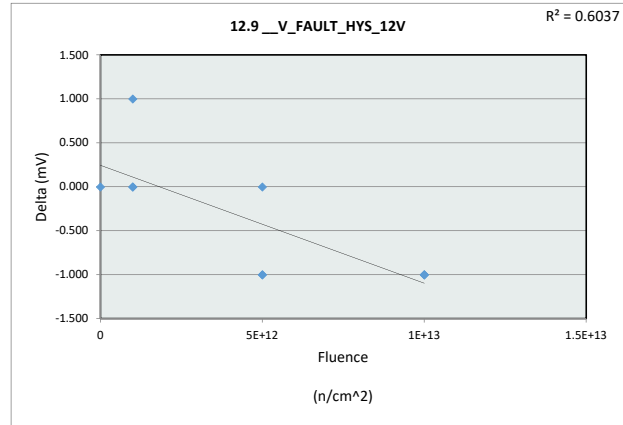


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.9 __V_FAULT_HYS_12V

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	110	110
Min Limit	90	90

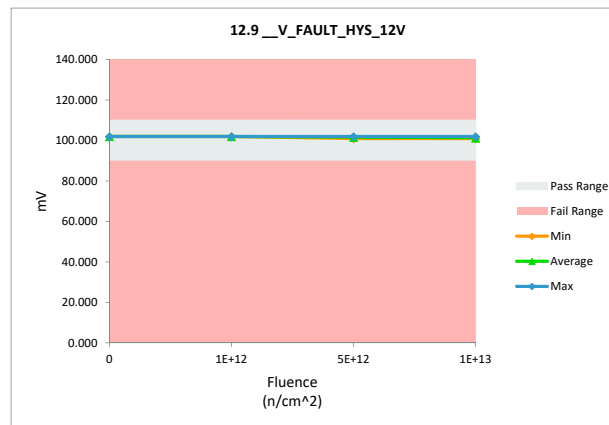
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	102.000	102.000	0.000
1E+12	243	101.000	102.000	1.000
1E+12	244	102.000	102.000	0.000
1E+12	247	102.000	102.000	0.000
5E+12	251	102.000	101.000	-1.000
5E+12	252	102.000	102.000	0.000
5E+12	259	103.000	102.000	-1.000
1E+13	261	102.000	101.000	-1.000
1E+13	263	102.000	101.000	-1.000
1E+13	264	103.000	102.000	-1.000
Max		103.000	102.000	1.000
Average		102.100	101.700	-0.400
Min		101.000	101.000	-1.000
Std Dev		0.568	0.483	0.699



12.9 __V_FAULT_HYS_12V

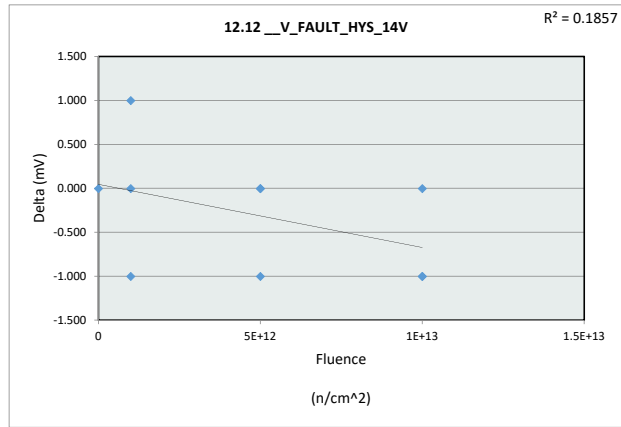
Test Site		
Tester		
Test Number		
Max Limit	110	mV
Min Limit	90	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	90.000	90.000	90.000	90.000
Min	102.000	102.000	101.000	101.000
Average	102.000	102.000	101.667	101.333
Max	102.000	102.000	102.000	102.000
UL	110.000	110.000	110.000	110.000

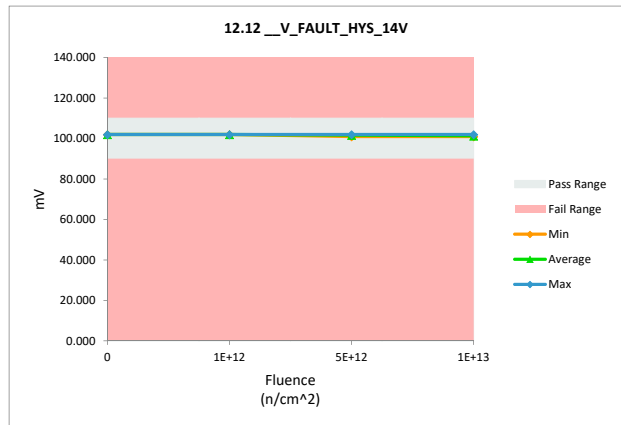


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.12 __V_FAULT_HYS_14V				
Test Site				
Tester				
Test Number				
Unit		mV	mV	
Max Limit		110	110	
Min Limit		90	90	
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	102.000	102.000	0.000
1E+12	243	101.000	102.000	1.000
1E+12	244	102.000	102.000	0.000
1E+12	247	103.000	102.000	-1.000
5E+12	251	102.000	101.000	-1.000
5E+12	252	102.000	102.000	0.000
5E+12	259	102.000	102.000	0.000
1E+13	261	102.000	101.000	-1.000
1E+13	263	102.000	101.000	-1.000
1E+13	264	102.000	102.000	0.000
Max		103.000	102.000	1.000
Average		102.000	101.700	-0.300
Min		101.000	101.000	-1.000
Std Dev		0.471	0.483	0.675



12.12 __V_FAULT_HYS_14V				
Test Site				
Tester				
Test Number				
Max Limit		110	mV	
Min Limit		90	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	90.000	90.000	90.000	90.000
Min	102.000	102.000	101.000	101.000
Average	102.000	102.000	101.667	101.333
Max	102.000	102.000	102.000	102.000
UL	110.000	110.000	110.000	110.000

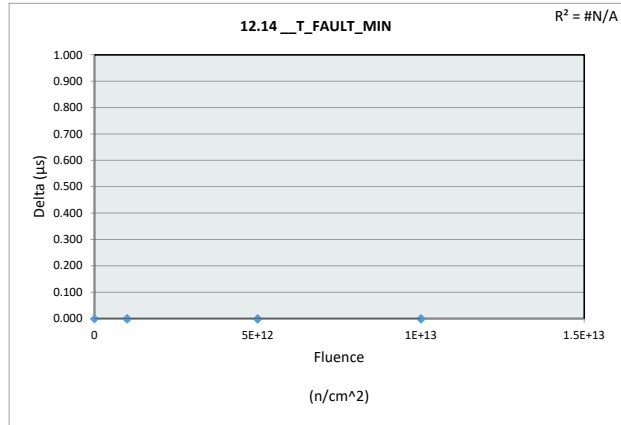


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.14 __T_FAULT_MIN

Test Site		
Tester		
Test Number		
Unit	µs	µs
Max Limit	1.4	1.4
Min Limit	0.4	0.4

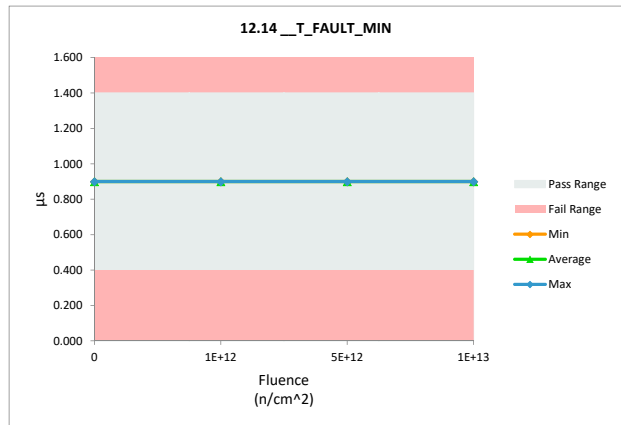
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	0.900	0.900	0.000
1E+12	243	0.900	0.900	0.000
1E+12	244	0.900	0.900	0.000
1E+12	247	0.900	0.900	0.000
5E+12	251	0.900	0.900	0.000
5E+12	252	0.900	0.900	0.000
5E+12	259	0.900	0.900	0.000
1E+13	261	0.900	0.900	0.000
1E+13	263	0.900	0.900	0.000
1E+13	264	0.900	0.900	0.000
Max		0.900	0.900	0.000
Average		0.900	0.900	0.000
Min		0.900	0.900	0.000
Std Dev		0.000	0.000	0.000



12.14 __T_FAULT_MIN

Test Site		
Tester		
Test Number		
Max Limit	1.4	µs
Min Limit	0.4	µs

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.400	0.400	0.400	0.400
Min	0.900	0.900	0.900	0.900
Average	0.900	0.900	0.900	0.900
Max	0.900	0.900	0.900	0.900
UL	1.400	1.400	1.400	1.400

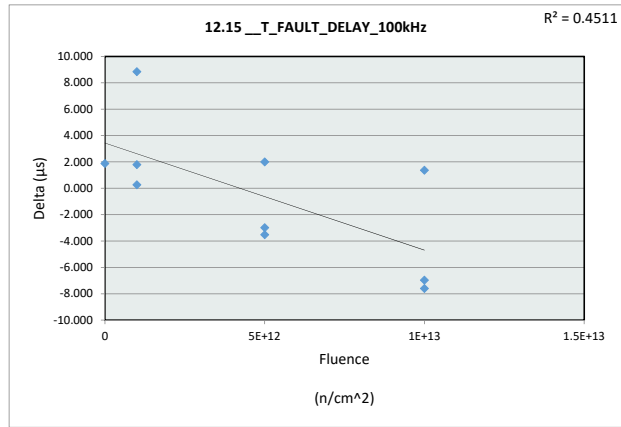


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.15 __T_FAULT_DELAY_100kHz

Test Site		
Tester		
Test Number		
Unit	µs	µs
Max Limit	169	169
Min Limit	140	140

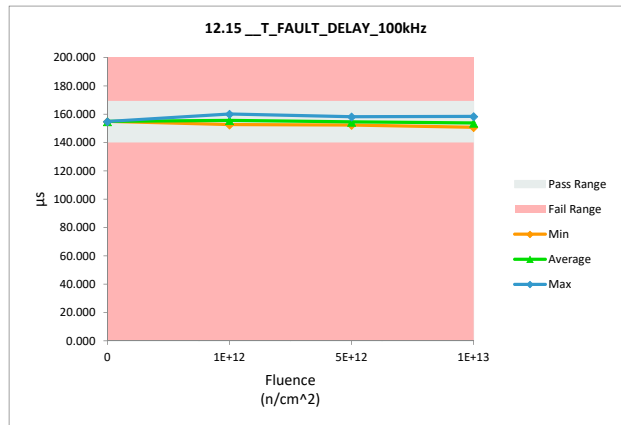
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	153.022	154.928	1.906
1E+12	243	152.377	154.188	1.811
1E+12	244	151.359	160.225	8.866
1E+12	247	152.336	152.628	0.292
5E+12	251	155.863	152.366	-3.497
5E+12	252	156.125	153.163	-2.962
5E+12	259	156.222	158.243	2.021
1E+13	261	159.951	152.380	-7.571
1E+13	263	157.775	150.837	-6.938
1E+13	264	157.037	158.435	1.398
Max		159.951	160.225	8.866
Average		155.207	154.739	-0.467
Min		151.359	150.837	-7.571
Std Dev		2.801	3.158	4.898



12.15 __T_FAULT_DELAY_100

Test Site		
Tester		
Test Number		
Max Limit	169	µs
Min Limit	140	µs

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	140.000	140.000	140.000	140.000
Min	154.928	152.628	152.366	150.837
Average	154.928	155.680	154.591	153.884
Max	154.928	160.225	158.243	158.435
UL	169.000	169.000	169.000	169.000

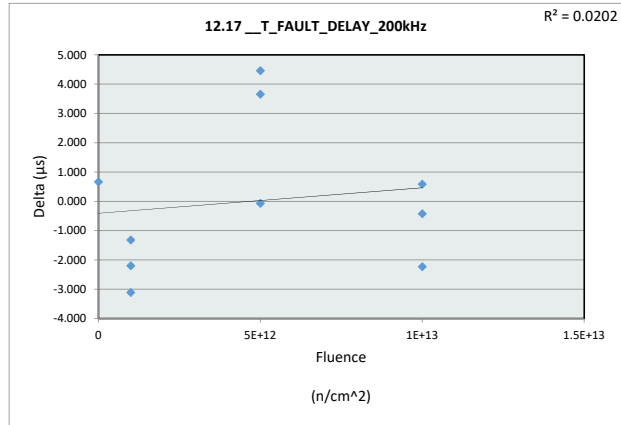


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.17 __T_FAULT_DELAY_200kHz

Test Site		
Tester		
Test Number		
Unit	µs	µs
Max Limit	86	86
Min Limit	66	66

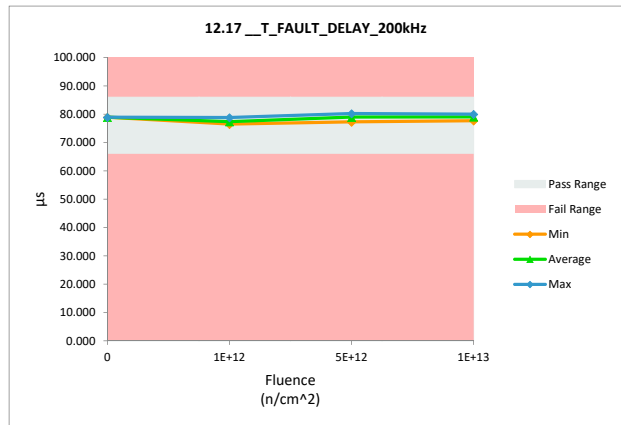
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	78.263	78.936	0.673
1E+12	243	78.902	76.712	-2.190
1E+12	244	79.607	76.505	-3.102
1E+12	247	80.172	78.861	-1.311
5E+12	251	75.694	79.360	3.666
5E+12	252	77.349	77.288	-0.061
5E+12	259	75.794	80.260	4.466
1E+13	261	78.854	79.453	0.599
1E+13	263	79.921	77.699	-2.222
1E+13	264	80.450	80.034	-0.416
Max		80.450	80.260	4.466
Average		78.501	78.511	0.010
Min		75.694	76.505	-3.102
Std Dev		1.723	1.362	2.482



12.17 __T_FAULT_DELAY_200

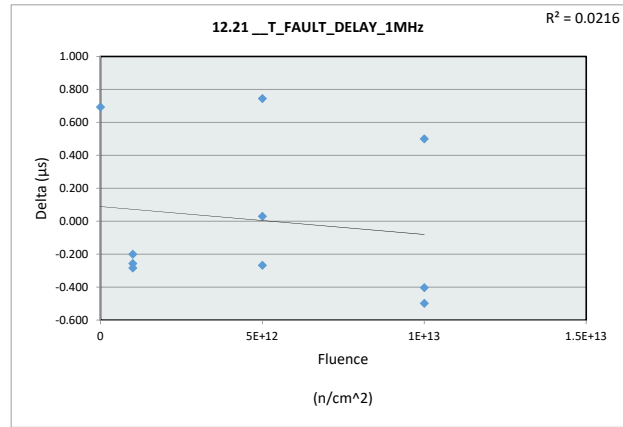
Test Site		
Tester		
Test Number		
Max Limit	86	µs
Min Limit	66	µs

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	66.000	66.000	66.000	66.000
Min	78.936	76.505	77.288	77.699
Average	78.936	77.359	78.969	79.062
Max	78.936	78.861	80.260	80.034
UL	86.000	86.000	86.000	86.000

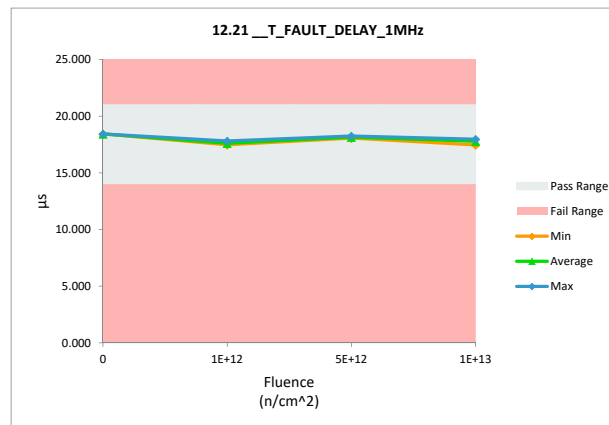


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.21 __T_FAULT_DELAY_1MHz				
Test Site				
Tester				
Test Number				
Unit	μs	μs		
Max Limit	21	21		
Min Limit	14	14		
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	17.747	18.442	0.695
1E+12	243	17.804	17.549	-0.255
1E+12	244	17.751	17.469	-0.282
1E+12	247	18.017	17.819	-0.198
5E+12	251	18.109	18.141	0.032
5E+12	252	17.507	18.253	0.746
5E+12	259	18.329	18.064	-0.265
1E+13	261	17.867	17.466	-0.401
1E+13	263	17.468	17.970	0.502
1E+13	264	18.407	17.911	-0.496
Max		18.407	18.442	0.746
Average		17.901	17.908	0.008
Min		17.468	17.466	-0.496
Std Dev		0.315	0.335	0.466

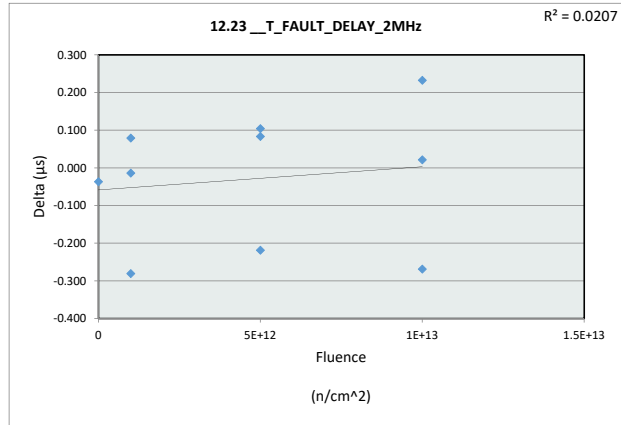


12.21 __T_FAULT_DELAY_1MHz				
Test Site				
Tester				
Test Number				
Max Limit	21	μs		
Min Limit	14	μs		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	14.000	14.000	14.000	14.000
Min	18.442	17.469	18.064	17.466
Average	18.442	17.612	18.153	17.782
Max	18.442	17.819	18.253	17.970
UL	21.000	21.000	21.000	21.000

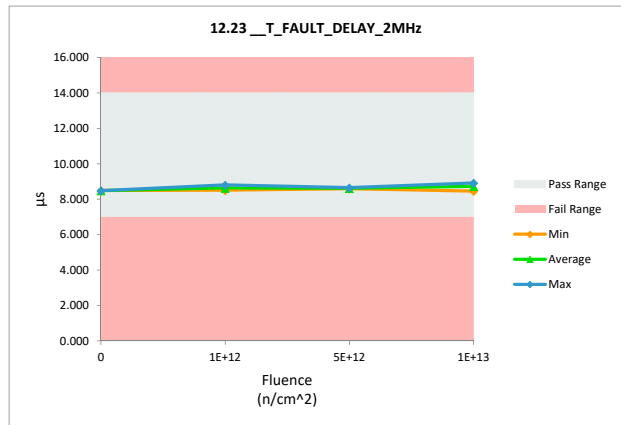


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

12.23 __T_FAULT_DELAY_2MHz				
Test Site				
Tester				
Test Number				
Unit	μs	μs		
Max Limit	14	14		
Min Limit	7	7		
Fluence (n/cm^2)	Serial #	PRE	POST	Delta
0	266	8.522	8.486	-0.036
1E+12	243	8.517	8.504	-0.013
1E+12	244	8.724	8.804	0.080
1E+12	247	8.873	8.593	-0.280
5E+12	251	8.547	8.652	0.105
5E+12	252	8.814	8.596	-0.218
5E+12	259	8.518	8.602	0.084
1E+13	261	8.730	8.462	-0.268
1E+13	263	8.683	8.916	0.233
1E+13	264	8.794	8.816	0.022
Max		8.873	8.916	0.233
Average		8.672	8.643	-0.029
Min		8.517	8.462	-0.280
Std Dev		0.136	0.154	0.173



12.23 __T_FAULT_DELAY_2MHz				
Test Site				
Tester				
Test Number				
Max Limit	14	μs		
Min Limit	7	μs		
Fluence (n/cm^2)	0	1E+12	5E+12	1E+13
LL	7.000	7.000	7.000	7.000
Min	8.486	8.504	8.596	8.462
Average	8.486	8.634	8.617	8.731
Max	8.486	8.804	8.652	8.916
UL	14.000	14.000	14.000	14.000

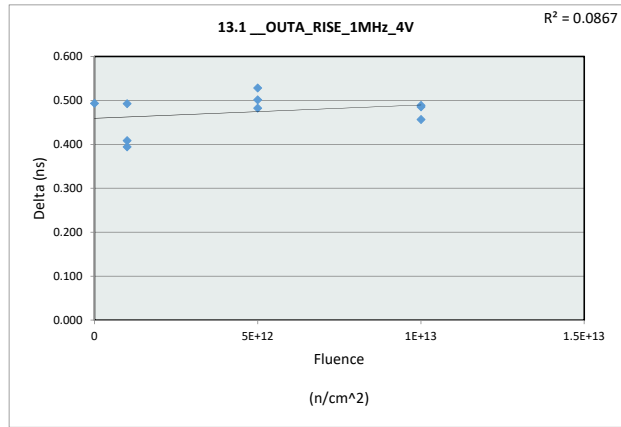


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.1 __OUTA_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

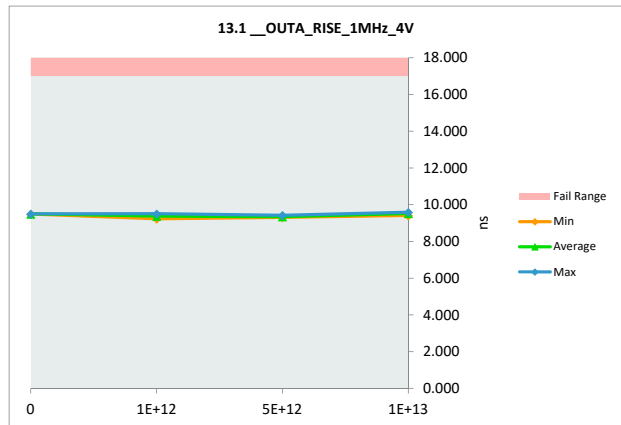
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	9.004	9.498	0.494
1E+12	243	8.915	9.408	0.493
1E+12	244	9.095	9.504	0.409
1E+12	247	8.836	9.231	0.395
5E+12	251	8.926	9.428	0.502
5E+12	252	8.830	9.313	0.483
5E+12	259	8.779	9.308	0.529
1E+13	261	9.132	9.589	0.457
1E+13	263	9.083	9.569	0.486
1E+13	264	8.920	9.409	0.489
Max		9.132	9.589	0.529
Average		8.952	9.426	0.474
Min		8.779	9.231	0.395
Std Dev		0.122	0.117	0.042



13.1 __OUTA_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.498	9.231	9.308	9.409
Average	9.498	9.381	9.350	9.522
Max	9.498	9.504	9.428	9.589
UL	17.000	17.000	17.000	17.000

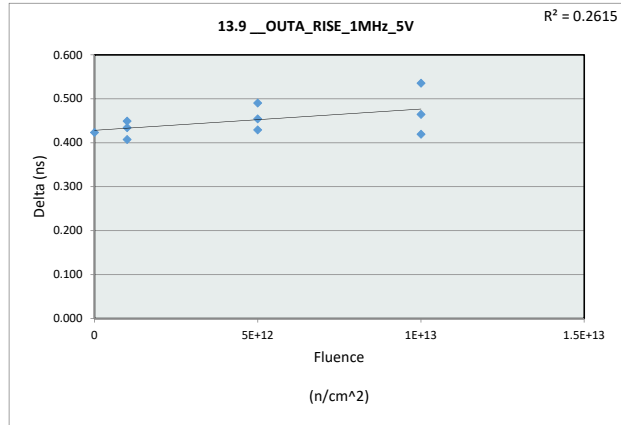


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.9 __OUTA_RISE_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

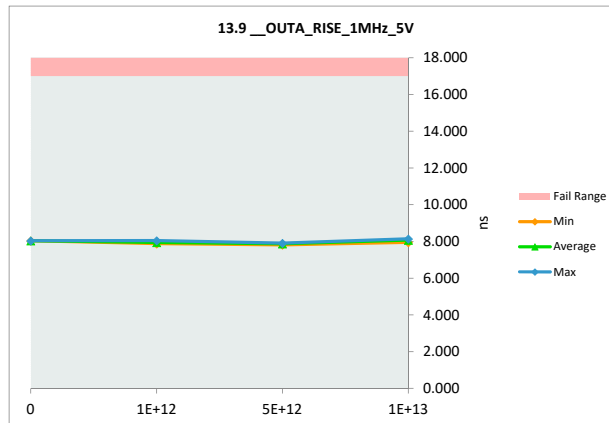
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.612	8.036	0.424
1E+12	243	7.465	7.900	0.435
1E+12	244	7.639	8.047	0.408
1E+12	247	7.425	7.875	0.450
5E+12	251	7.455	7.910	0.455
5E+12	252	7.415	7.906	0.491
5E+12	259	7.380	7.810	0.430
1E+13	261	7.718	8.138	0.420
1E+13	263	7.609	8.145	0.536
1E+13	264	7.482	7.947	0.465
Max		7.718	8.145	0.536
Average		7.520	7.971	0.451
Min		7.380	7.810	0.408
Std Dev		0.115	0.114	0.038



13.9 __OUTA_RISE_1MHz_5V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.036	7.875	7.810	7.947
Average	8.036	7.941	7.875	8.077
Max	8.036	8.047	7.910	8.145
UL	17.000	17.000	17.000	17.000

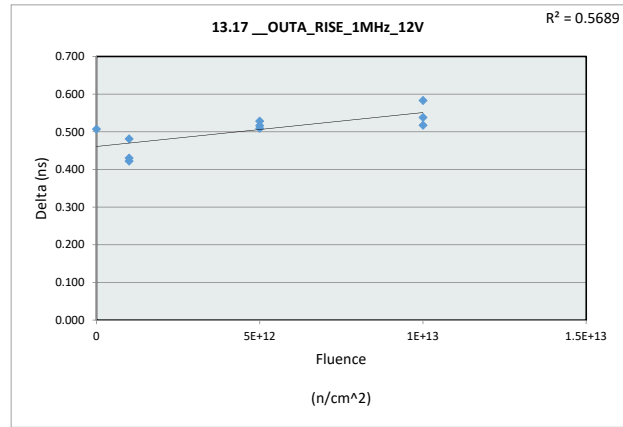


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.17 __OUTA_RISE_1MHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

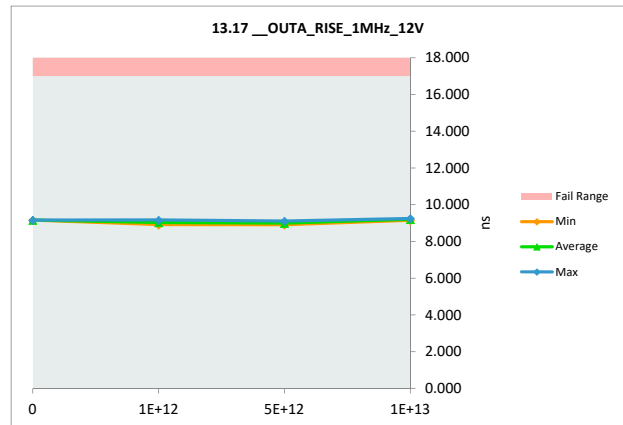
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.653	9.161	0.508
1E+12	243	8.431	8.913	0.482
1E+12	244	8.743	9.166	0.423
1E+12	247	8.579	9.010	0.431
5E+12	251	8.584	9.113	0.529
5E+12	252	8.468	8.985	0.517
5E+12	259	8.398	8.908	0.510
1E+13	261	8.663	9.247	0.584
1E+13	263	8.608	9.147	0.539
1E+13	264	8.699	9.217	0.518
Max		8.743	9.247	0.584
Average		8.583	9.087	0.504
Min		8.398	8.908	0.423
Std Dev		0.116	0.123	0.048



13.17 __OUTA_RISE_1MHz_12V

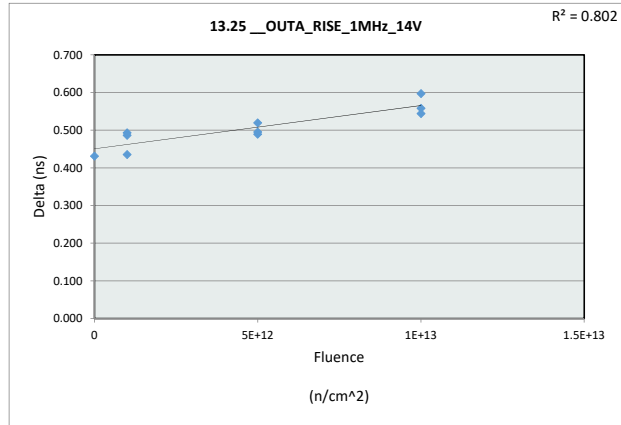
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.161	8.913	8.908	9.147
Average	9.161	9.030	9.002	9.204
Max	9.161	9.166	9.113	9.247
UL	17.000	17.000	17.000	17.000

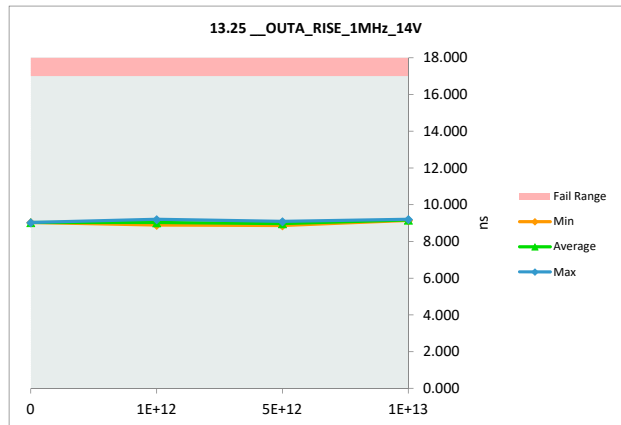


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.25 __OUTA_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.597	9.029	0.432
1E+12	243	8.404	8.891	0.487
1E+12	244	8.705	9.199	0.494
1E+12	247	8.559	8.995	0.436
5E+12	251	8.568	9.088	0.520
5E+12	252	8.454	8.950	0.496
5E+12	259	8.379	8.869	0.490
1E+13	261	8.644	9.203	0.559
1E+13	263	8.546	9.144	0.598
1E+13	264	8.618	9.163	0.545
Max		8.705	9.203	0.598
Average		8.547	9.053	0.506
Min		8.379	8.869	0.432
Std Dev		0.105	0.125	0.052



13.25 __OUTA_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.029	8.891	8.869	9.144
Average	9.029	9.028	8.969	9.170
Max	9.029	9.199	9.088	9.203
UL	17.000	17.000	17.000	17.000

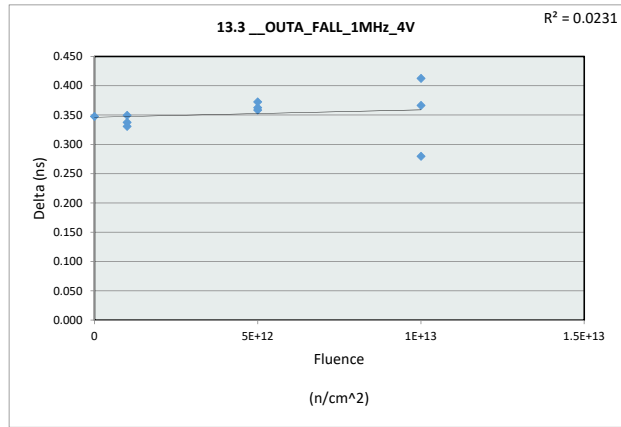


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.3 __OUTA_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

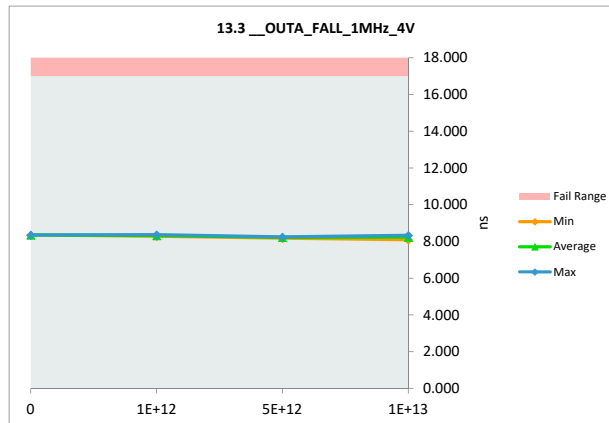
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.002	8.350	0.348
1E+12	243	7.961	8.299	0.338
1E+12	244	7.952	8.283	0.331
1E+12	247	8.021	8.371	0.350
5E+12	251	7.876	8.249	0.373
5E+12	252	7.871	8.234	0.363
5E+12	259	7.820	8.179	0.359
1E+13	261	7.921	8.334	0.413
1E+13	263	7.930	8.297	0.367
1E+13	264	7.808	8.088	0.280
Max		8.021	8.371	0.413
Average		7.916	8.268	0.352
Min		7.808	8.088	0.280
Std Dev		0.072	0.085	0.034



13.3 __OUTA_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.350	8.283	8.179	8.088
Average	8.350	8.318	8.221	8.240
Max	8.350	8.371	8.249	8.334
UL	17.000	17.000	17.000	17.000

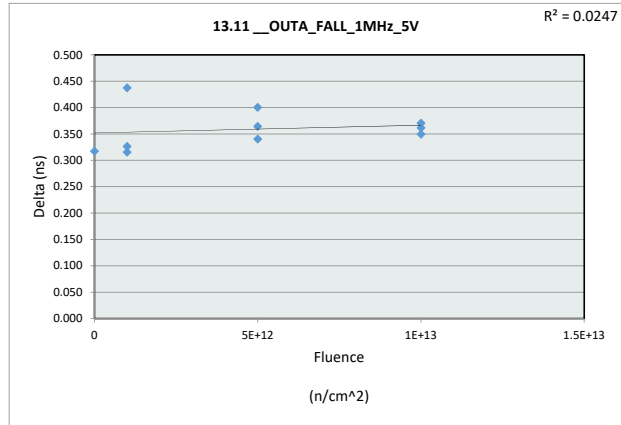


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.11 __OUTA_FALL_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

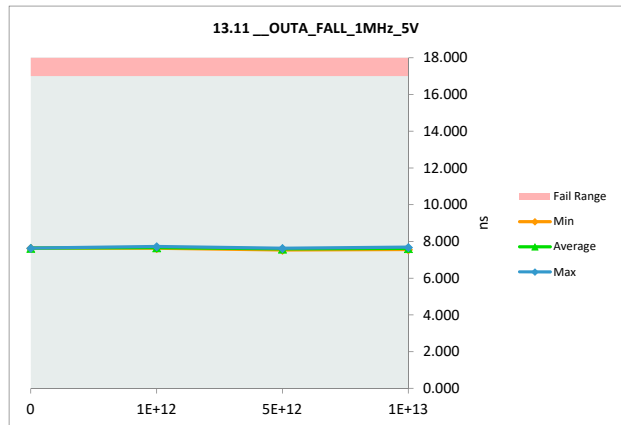
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.320	7.638	0.318
1E+12	243	7.328	7.655	0.327
1E+12	244	7.313	7.629	0.316
1E+12	247	7.285	7.723	0.438
5E+12	251	7.265	7.606	0.341
5E+12	252	7.233	7.634	0.401
5E+12	259	7.173	7.538	0.365
1E+13	261	7.255	7.617	0.362
1E+13	263	7.315	7.686	0.371
1E+13	264	7.208	7.558	0.350
Max		7.328	7.723	0.438
Average		7.270	7.628	0.359
Min		7.173	7.538	0.316
Std Dev		0.053	0.055	0.038



13.11 __OUTA_FALL_1MHz_5V

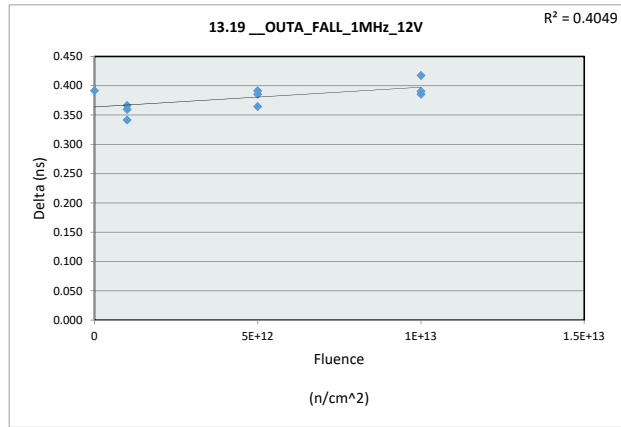
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.638	7.629	7.538	7.558
Average	7.638	7.669	7.593	7.620
Max	7.638	7.723	7.634	7.686
UL	17.000	17.000	17.000	17.000

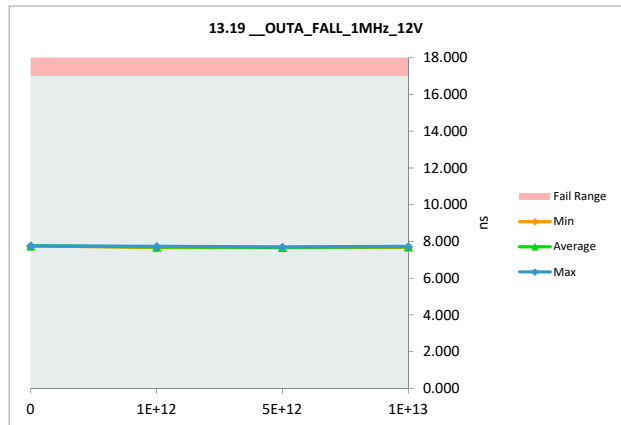


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.19_OUTA_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.371	7.763	0.392
1E+12	243	7.293	7.660	0.367
1E+12	244	7.365	7.707	0.342
1E+12	247	7.371	7.731	0.360
5E+12	251	7.332	7.697	0.365
5E+12	252	7.295	7.687	0.392
5E+12	259	7.266	7.652	0.386
1E+13	261	7.330	7.721	0.391
1E+13	263	7.310	7.728	0.418
1E+13	264	7.281	7.667	0.386
Max		7.371	7.763	0.418
Average		7.321	7.701	0.380
Min		7.266	7.652	0.342
Std Dev		0.039	0.036	0.022

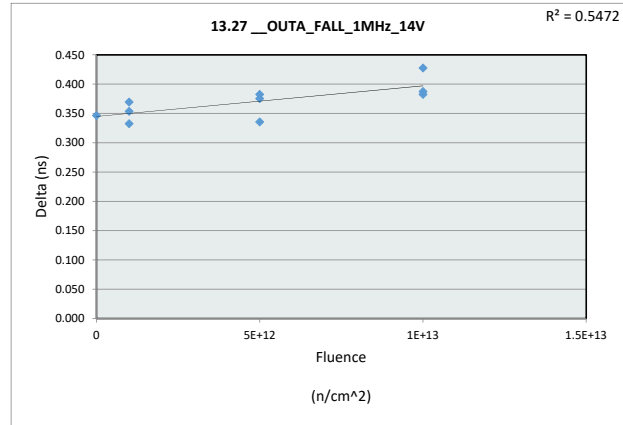


13.19_OUTA_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.763	7.660	7.652	7.667
Average	7.763	7.699	7.679	7.705
Max	7.763	7.731	7.697	7.728
UL	17.000	17.000	17.000	17.000

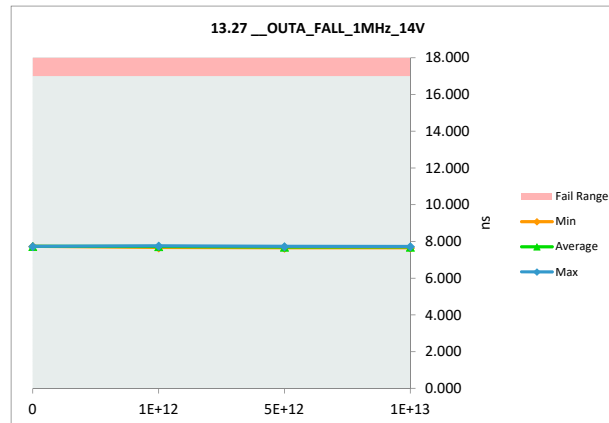


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.27 __OUTA_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.384	7.731	0.347
1E+12	243	7.333	7.666	0.333
1E+12	244	7.380	7.750	0.370
1E+12	247	7.408	7.762	0.354
5E+12	251	7.354	7.730	0.376
5E+12	252	7.374	7.710	0.336
5E+12	259	7.269	7.652	0.383
1E+13	261	7.296	7.724	0.428
1E+13	263	7.339	7.727	0.388
1E+13	264	7.273	7.656	0.383
Max		7.408	7.762	0.428
Average		7.341	7.711	0.370
Min		7.269	7.652	0.333
Std Dev		0.048	0.039	0.029



13.27 __OUTA_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.731	7.666	7.652	7.656
Average	7.731	7.726	7.697	7.702
Max	7.731	7.762	7.730	7.727
UL	17.000	17.000	17.000	17.000

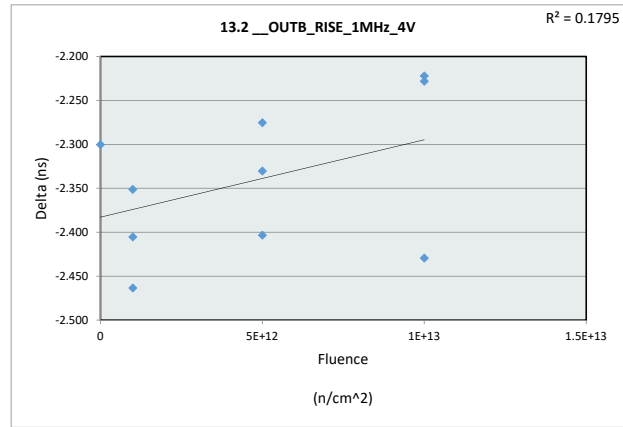


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.2_OUTB_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

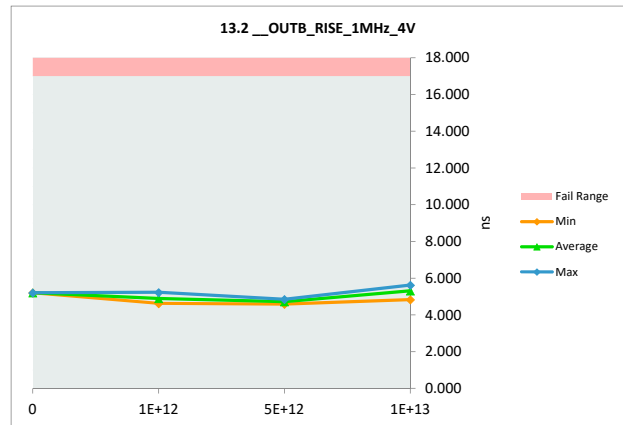
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.505	5.205	-2.300
1E+12	243	7.232	4.827	-2.405
1E+12	244	7.692	5.229	-2.463
1E+12	247	6.978	4.627	-2.351
5E+12	251	7.181	4.851	-2.330
5E+12	252	6.997	4.722	-2.275
5E+12	259	6.992	4.589	-2.403
1E+13	261	7.853	5.625	-2.228
1E+13	263	7.706	5.484	-2.222
1E+13	264	7.263	4.834	-2.429
Max		7.853	5.625	-2.222
Average		7.340	4.999	-2.341
Min		6.978	4.589	-2.463
Std Dev		0.327	0.363	0.084



13.2_OUTB_RISE_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	5.205	4.627	4.589	4.834
Average	5.205	4.894	4.721	5.314
Max	5.205	5.229	4.851	5.625
UL	17.000	17.000	17.000	17.000

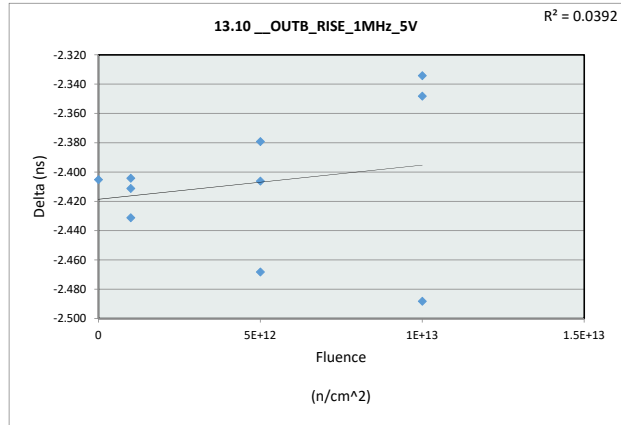


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.10 __OUTB_RISE_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

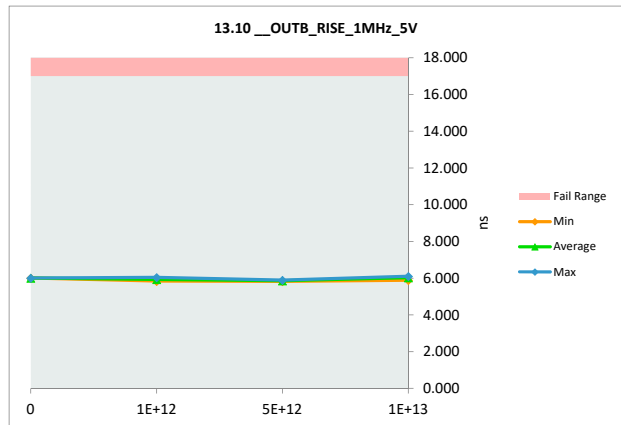
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.412	6.007	-2.405
1E+12	243	8.317	5.906	-2.411
1E+12	244	8.446	6.042	-2.404
1E+12	247	8.271	5.840	-2.431
5E+12	251	8.307	5.901	-2.406
5E+12	252	8.291	5.823	-2.468
5E+12	259	8.252	5.873	-2.379
1E+13	261	8.431	6.097	-2.334
1E+13	263	8.454	6.106	-2.348
1E+13	264	8.376	5.888	-2.488
Max		8.454	6.106	-2.334
Average		8.356	5.948	-2.407
Min		8.252	5.823	-2.488
Std Dev		0.077	0.105	0.048



13.10 __OUTB_RISE_1MHz_5V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.007	5.840	5.823	5.888
Average	6.007	5.929	5.866	6.030
Max	6.007	6.042	5.901	6.106
UL	17.000	17.000	17.000	17.000

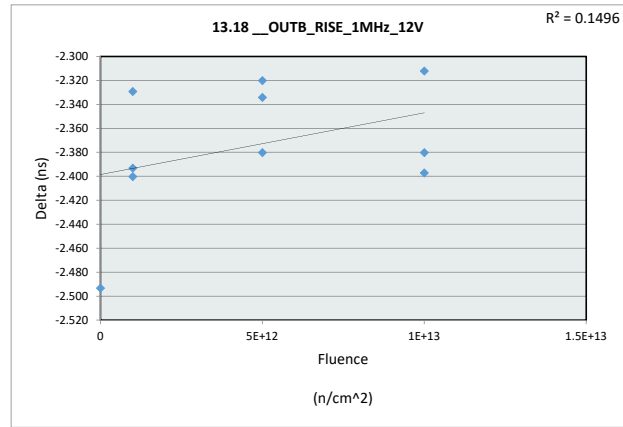


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.18 __OUTB_RISE_1MHz_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

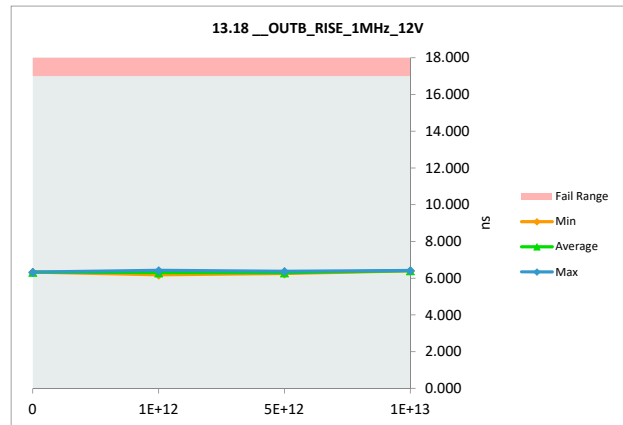
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.824	6.331	-2.493
1E+12	243	8.517	6.188	-2.329
1E+12	244	8.820	6.420	-2.400
1E+12	247	8.683	6.290	-2.393
5E+12	251	8.709	6.375	-2.334
5E+12	252	8.628	6.248	-2.380
5E+12	259	8.580	6.260	-2.320
1E+13	261	8.813	6.416	-2.397
1E+13	263	8.782	6.402	-2.380
1E+13	264	8.734	6.422	-2.312
Max		8.824	6.422	-2.312
Average		8.709	6.335	-2.374
Min		8.517	6.188	-2.493
Std Dev		0.107	0.085	0.054



13.18 __OUTB_RISE_1MHz_12V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.331	6.188	6.248	6.402
Average	6.331	6.299	6.294	6.413
Max	6.331	6.420	6.375	6.422
UL	17.000	17.000	17.000	17.000

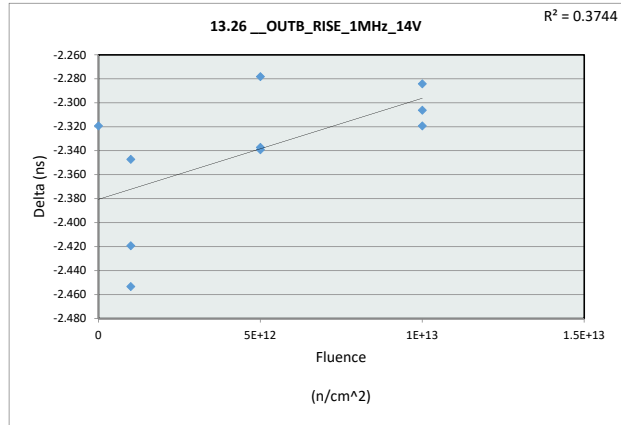


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.26 __OUTB_RISE_1MHz_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

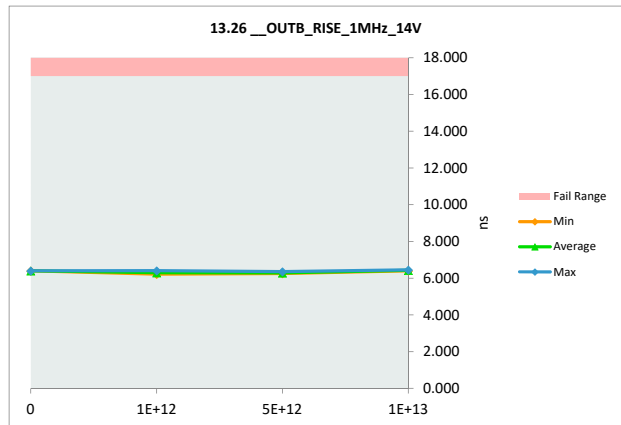
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	8.718	6.399	-2.319
1E+12	243	8.562	6.215	-2.347
1E+12	244	8.827	6.408	-2.419
1E+12	247	8.722	6.269	-2.453
5E+12	251	8.692	6.355	-2.337
5E+12	252	8.605	6.266	-2.339
5E+12	259	8.530	6.252	-2.278
1E+13	261	8.757	6.451	-2.306
1E+13	263	8.720	6.401	-2.319
1E+13	264	8.716	6.432	-2.284
Max		8.827	6.451	-2.278
Average		8.685	6.345	-2.340
Min		8.530	6.215	-2.453
Std Dev		0.092	0.086	0.056



13.26 __OUTB_RISE_1MHz_14V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.399	6.215	6.252	6.401
Average	6.399	6.297	6.291	6.428
Max	6.399	6.408	6.355	6.451
UL	17.000	17.000	17.000	17.000

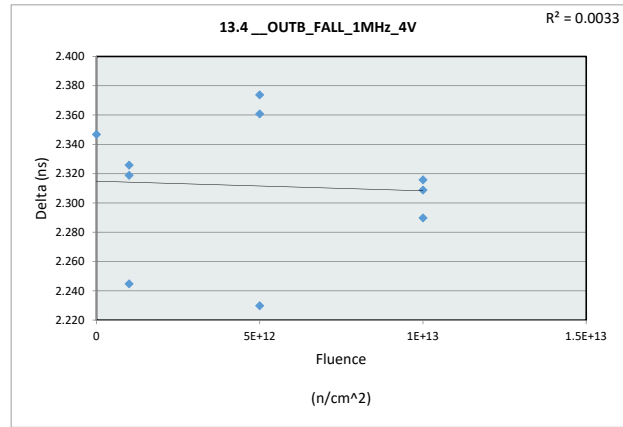


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.4_OUTB_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

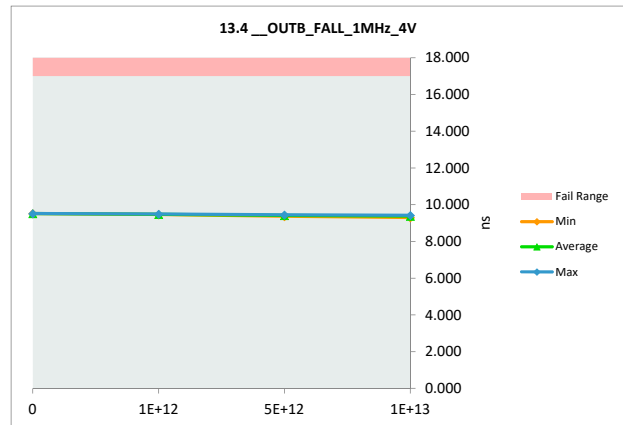
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	7.172	9.519	2.347
1E+12	243	7.166	9.492	2.326
1E+12	244	7.141	9.460	2.319
1E+12	247	7.233	9.478	2.245
5E+12	251	7.077	9.451	2.374
5E+12	252	7.064	9.425	2.361
5E+12	259	7.134	9.364	2.230
1E+13	261	7.101	9.410	2.309
1E+13	263	7.107	9.423	2.316
1E+13	264	7.012	9.302	2.290
Max		7.233	9.519	2.374
Average		7.121	9.432	2.312
Min		7.012	9.302	2.230
Std Dev		0.063	0.064	0.046



13.4_OUTB_FALL_1MHz_4V

Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.519	9.460	9.364	9.302
Average	9.519	9.477	9.413	9.378
Max	9.519	9.492	9.451	9.423
UL	17.000	17.000	17.000	17.000

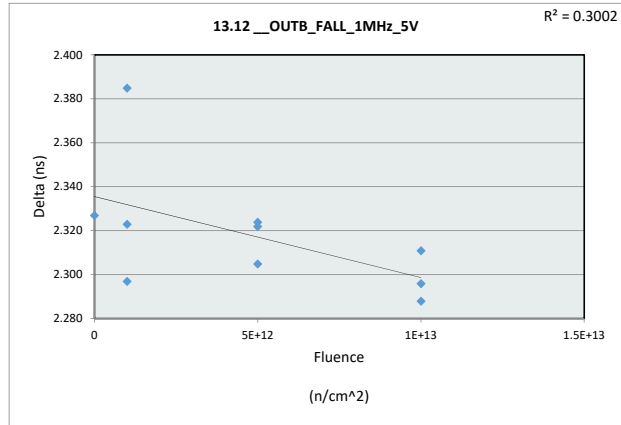


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.12 __OUTB_FALL_1MHz_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	17	17
Min Limit		

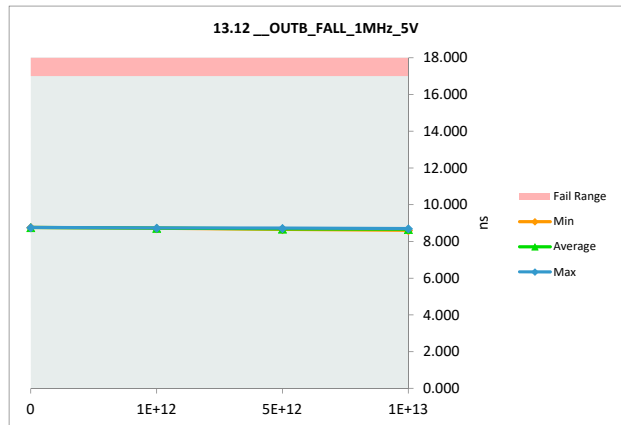
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.434	8.761	2.327
1E+12	243	6.432	8.729	2.297
1E+12	244	6.388	8.711	2.323
1E+12	247	6.351	8.736	2.385
5E+12	251	6.398	8.720	2.322
5E+12	252	6.369	8.674	2.305
5E+12	259	6.331	8.655	2.324
1E+13	261	6.392	8.688	2.296
1E+13	263	6.392	8.703	2.311
1E+13	264	6.320	8.608	2.288
Max		6.434	8.761	2.385
Average		6.381	8.698	2.318
Min		6.320	8.608	2.288
Std Dev		0.038	0.044	0.027



13.12 __OUTB_FALL_1MHz_5V

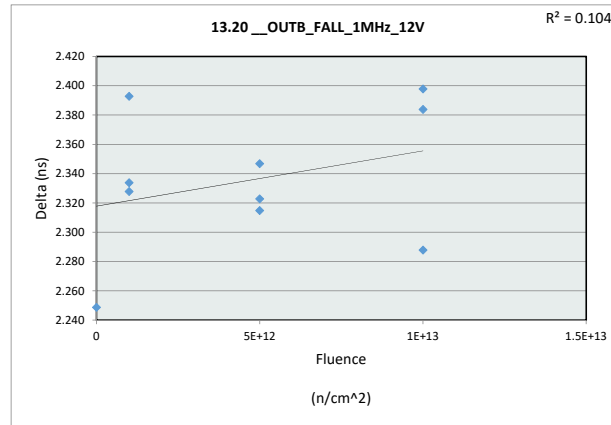
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.761	8.711	8.655	8.608
Average	8.761	8.725	8.683	8.666
Max	8.761	8.736	8.720	8.703
UL	17.000	17.000	17.000	17.000

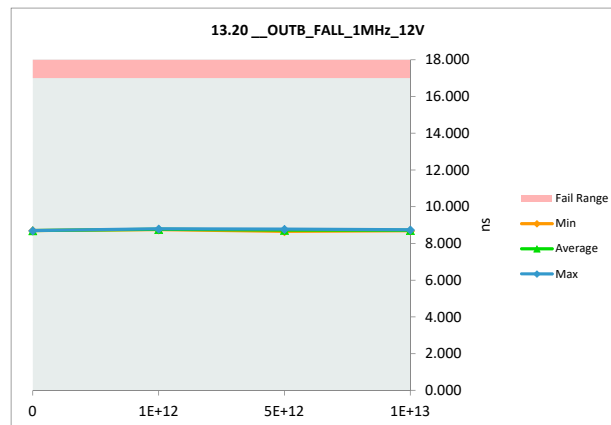


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.20_OUTB_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.451	8.700	2.249
1E+12	243	6.357	8.750	2.393
1E+12	244	6.441	8.769	2.328
1E+12	247	6.460	8.794	2.334
5E+12	251	6.433	8.780	2.347
5E+12	252	6.415	8.738	2.323
5E+12	259	6.343	8.658	2.315
1E+13	261	6.360	8.744	2.384
1E+13	263	6.401	8.689	2.288
1E+13	264	6.324	8.722	2.398
Max		6.460	8.794	2.398
Average		6.399	8.734	2.336
Min		6.324	8.658	2.249
Std Dev		0.049	0.043	0.047

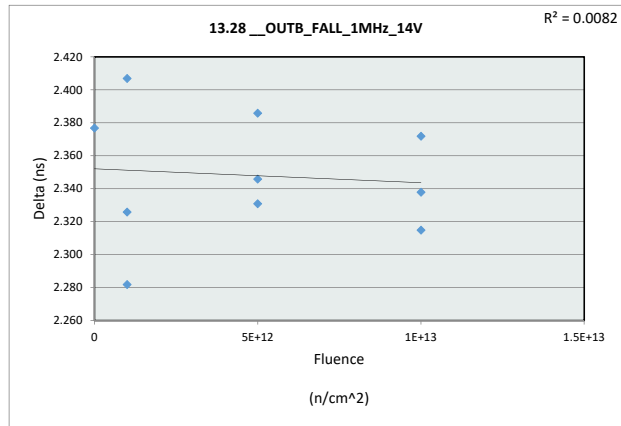


13.20_OUTB_FALL_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.700	8.750	8.658	8.689
Average	8.700	8.771	8.725	8.718
Max	8.700	8.794	8.780	8.744
UL	17.000	17.000	17.000	17.000

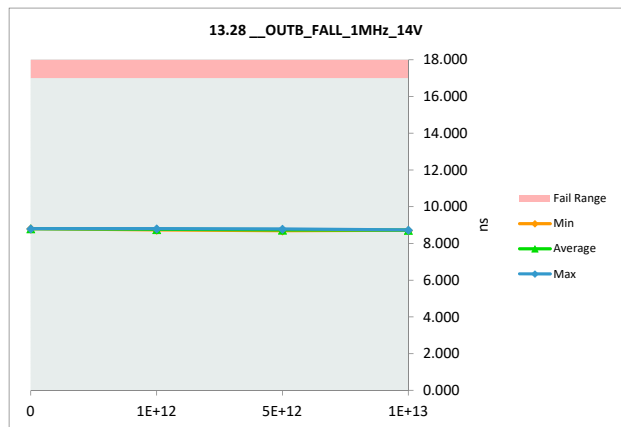


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.28_OUTB_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Unit	ns	ns		
Max Limit	17	17		
Min Limit				
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	6.425	8.802	2.377
1E+12	243	6.345	8.752	2.407
1E+12	244	6.453	8.735	2.282
1E+12	247	6.476	8.802	2.326
5E+12	251	6.401	8.787	2.386
5E+12	252	6.379	8.725	2.346
5E+12	259	6.359	8.690	2.331
1E+13	261	6.413	8.728	2.315
1E+13	263	6.362	8.734	2.372
1E+13	264	6.376	8.714	2.338
Max		6.476	8.802	2.407
Average		6.399	8.747	2.348
Min		6.345	8.690	2.282
Std Dev		0.043	0.038	0.038



13.28_OUTB_FALL_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.802	8.735	8.690	8.714
Average	8.802	8.763	8.734	8.725
Max	8.802	8.802	8.787	8.734
UL	17.000	17.000	17.000	17.000

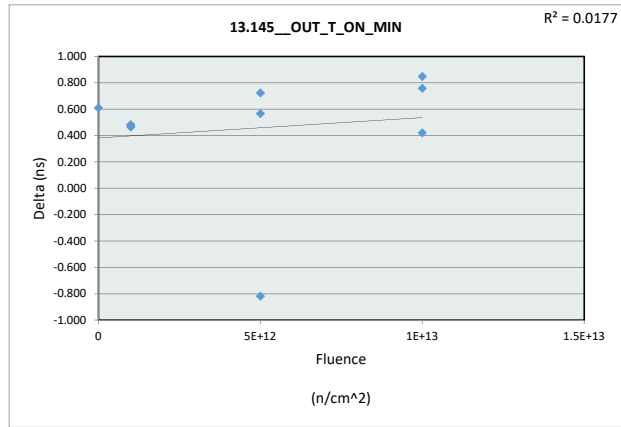


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.145_OUT_T_ON_MIN

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	85	85
Min Limit		

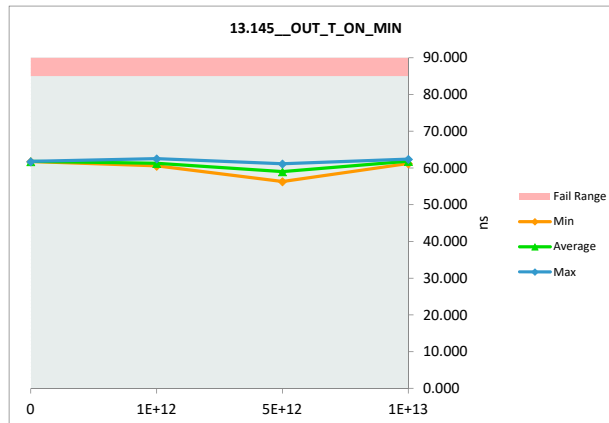
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	61.146	61.759	0.613
1E+12	243	60.257	60.741	0.484
1E+12	244	62.044	62.527	0.483
1E+12	247	60.078	60.545	0.467
5E+12	251	60.410	61.135	0.725
5E+12	252	57.128	56.312	-0.816
5E+12	259	59.037	59.606	0.569
1E+13	261	61.556	62.406	0.850
1E+13	263	60.778	61.201	0.423
1E+13	264	61.159	61.919	0.760
Max		62.044	62.527	0.850
Average		60.359	60.815	0.456
Min		57.128	56.312	-0.816
Std Dev		1.414	1.815	0.469



13.145_OUT_T_ON_MIN

Test Site		
Tester		
Test Number		
Max Limit	85	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	61.759	60.545	56.312	61.201
Average	61.759	61.271	59.018	61.842
Max	61.759	62.527	61.135	62.406
UL	85.000	85.000	85.000	85.000

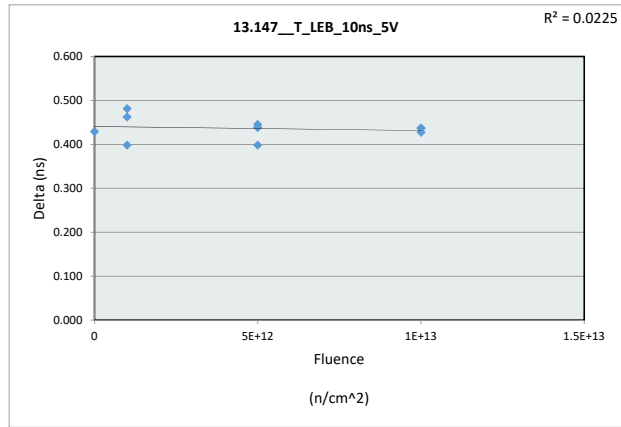


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.147_T_LEB_10ns_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	19	19
Min Limit	12	12

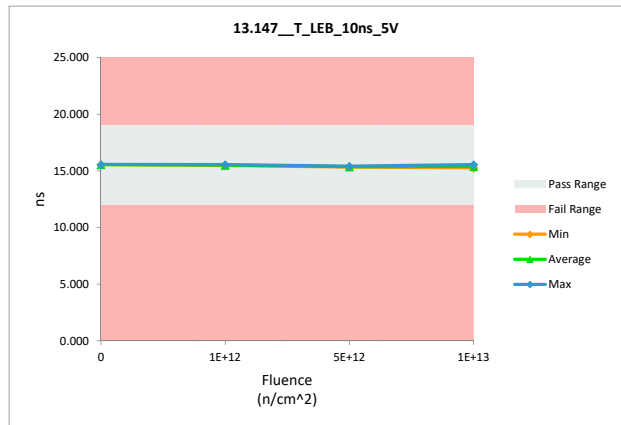
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	15.131	15.561	0.430
1E+12	243	15.099	15.498	0.399
1E+12	244	15.099	15.562	0.463
1E+12	247	14.993	15.475	0.482
5E+12	251	15.018	15.417	0.399
5E+12	252	14.895	15.334	0.439
5E+12	259	14.920	15.366	0.446
1E+13	261	15.121	15.559	0.438
1E+13	263	14.898	15.335	0.437
1E+13	264	14.854	15.282	0.428
Max		15.131	15.562	0.482
Average		15.003	15.439	0.436
Min		14.854	15.282	0.399
Std Dev		0.106	0.106	0.025



13.147_T_LEB_10ns_5V

Test Site		
Tester		
Test Number		
Max Limit	19	ns
Min Limit	12	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	12.000	12.000	12.000	12.000
Min	15.561	15.475	15.334	15.282
Average	15.561	15.512	15.372	15.392
Max	15.561	15.562	15.417	15.559
UL	19.000	19.000	19.000	19.000

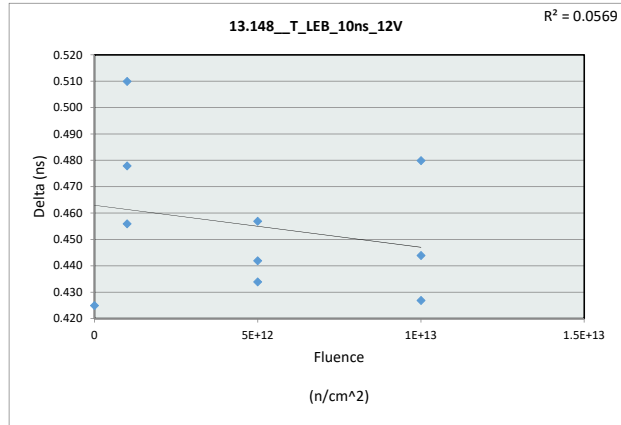


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.148_T_LEB_10ns_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	19	19
Min Limit	12	12

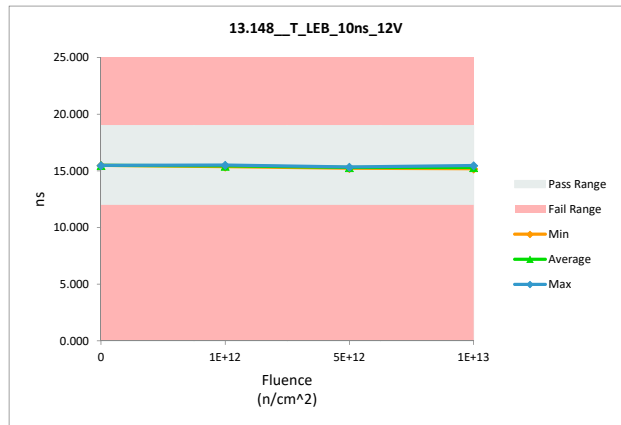
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	15.061	15.486	0.425
1E+12	243	14.958	15.436	0.478
1E+12	244	15.009	15.519	0.510
1E+12	247	14.910	15.366	0.456
5E+12	251	14.892	15.326	0.434
5E+12	252	14.793	15.235	0.442
5E+12	259	14.890	15.347	0.457
1E+13	261	15.049	15.476	0.427
1E+13	263	14.757	15.237	0.480
1E+13	264	14.745	15.189	0.444
Max		15.061	15.519	0.510
Average		14.906	15.362	0.455
Min		14.745	15.189	0.425
Std Dev		0.115	0.116	0.027



13.148_T_LEB_10ns_12V

Test Site		
Tester		
Test Number		
Max Limit	19	ns
Min Limit	12	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	12.000	12.000	12.000	12.000
Min	15.486	15.366	15.235	15.189
Average	15.486	15.440	15.303	15.301
Max	15.486	15.519	15.347	15.476
UL	19.000	19.000	19.000	19.000

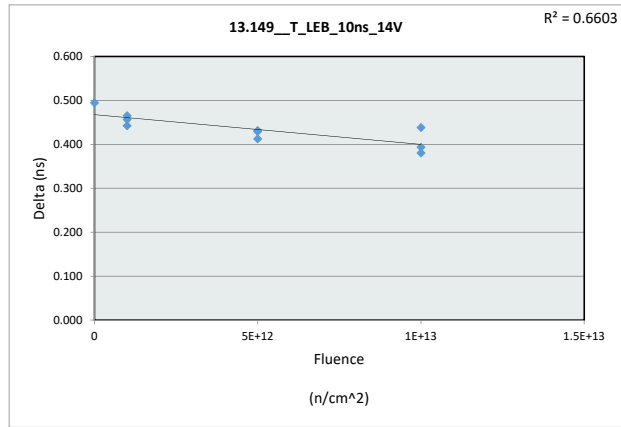


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.149_T_LEB_10ns_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	19	19
Min Limit	12	12

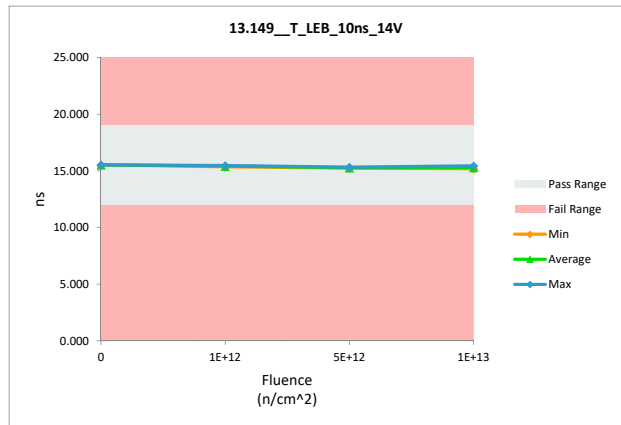
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	15.044	15.539	0.495
1E+12	243	14.979	15.436	0.457
1E+12	244	15.030	15.473	0.443
1E+12	247	14.895	15.361	0.466
5E+12	251	14.901	15.333	0.432
5E+12	252	14.811	15.241	0.430
5E+12	259	14.859	15.272	0.413
1E+13	261	15.065	15.446	0.381
1E+13	263	14.834	15.228	0.394
1E+13	264	14.753	15.192	0.439
Max		15.065	15.539	0.495
Average		14.917	15.352	0.435
Min		14.753	15.192	0.381
Std Dev		0.107	0.118	0.034



13.149_T_LEB_10ns_14V

Test Site		
Tester		
Test Number		
Max Limit	19	ns
Min Limit	12	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	12.000	12.000	12.000	12.000
Min	15.539	15.361	15.241	15.192
Average	15.539	15.423	15.282	15.289
Max	15.539	15.473	15.333	15.446
UL	19.000	19.000	19.000	19.000

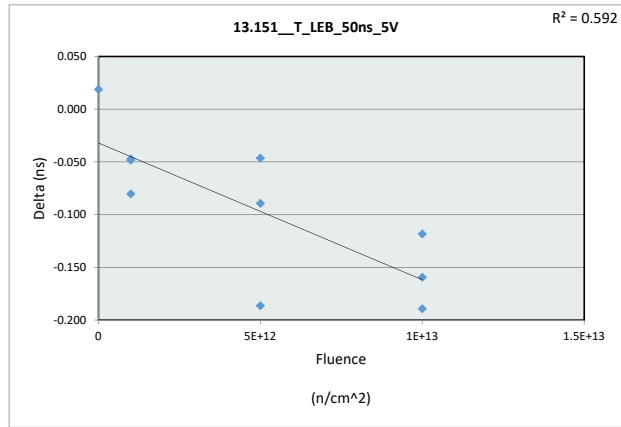


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.151_T_LEB_50ns_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	55	55
Min Limit	45	45

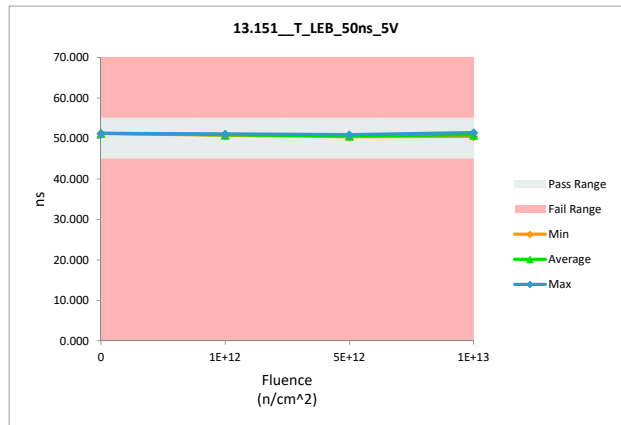
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	51.253	51.272	0.019
1E+12	243	50.873	50.793	-0.080
1E+12	244	51.188	51.141	-0.047
1E+12	247	50.817	50.769	-0.048
5E+12	251	50.616	50.430	-0.186
5E+12	252	50.624	50.578	-0.046
5E+12	259	51.041	50.952	-0.089
1E+13	261	51.676	51.487	-0.189
1E+13	263	50.822	50.663	-0.159
1E+13	264	50.630	50.512	-0.118
Max		51.676	51.487	0.019
Average		50.954	50.860	-0.094
Min		50.616	50.430	-0.189
Std Dev		0.341	0.348	0.068



13.151_T_LEB_50ns_5V

Test Site		
Tester		
Test Number		
Max Limit	55	ns
Min Limit	45	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	51.272	50.769	50.430	50.512
Average	51.272	50.901	50.653	50.887
Max	51.272	51.141	50.952	51.487
UL	55.000	55.000	55.000	55.000

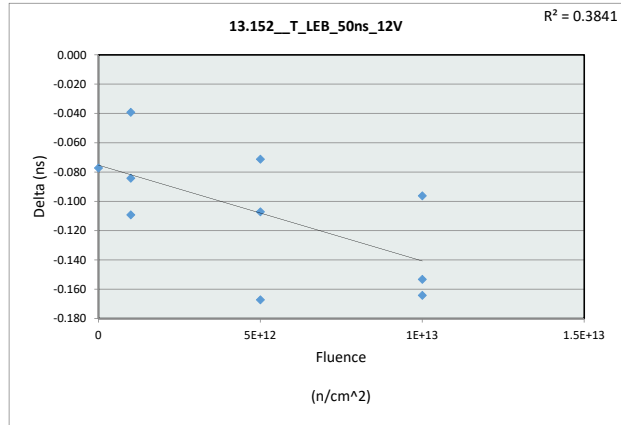


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.152_T_LEB_50ns_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	55	55
Min Limit	45	45

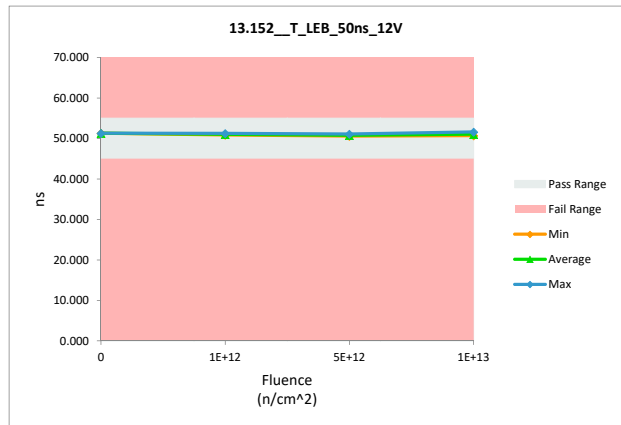
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	51.397	51.320	-0.077
1E+12	243	51.065	50.956	-0.109
1E+12	244	51.319	51.280	-0.039
1E+12	247	50.950	50.866	-0.084
5E+12	251	50.793	50.626	-0.167
5E+12	252	50.793	50.722	-0.071
5E+12	259	51.227	51.120	-0.107
1E+13	261	51.811	51.647	-0.164
1E+13	263	50.981	50.828	-0.153
1E+13	264	50.807	50.711	-0.096
Max		51.811	51.647	-0.039
Average		51.114	51.008	-0.107
Min		50.793	50.626	-0.167
Std Dev		0.328	0.327	0.043



13.152_T_LEB_50ns_12V

Test Site		
Tester		
Test Number		
Max Limit	55	ns
Min Limit	45	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	51.320	50.866	50.626	50.711
Average	51.320	51.034	50.823	51.062
Max	51.320	51.280	51.120	51.647
UL	55.000	55.000	55.000	55.000

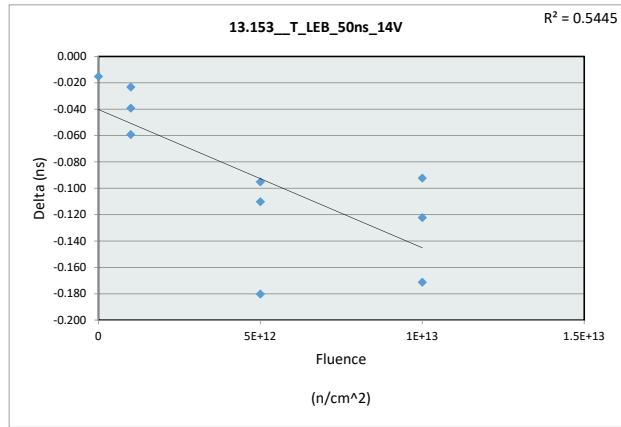


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.153_T_LEB_50ns_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	55	55
Min Limit	45	45

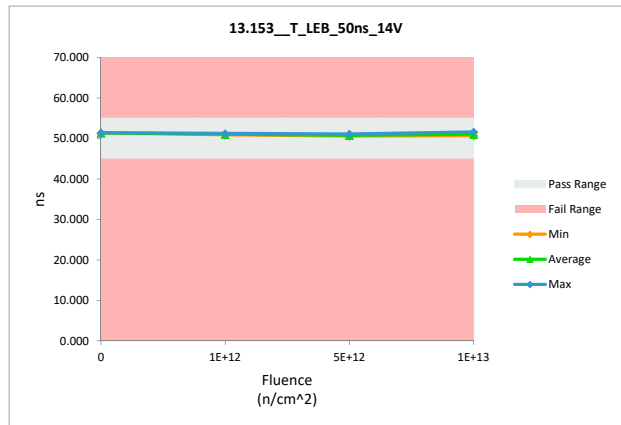
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	51.422	51.407	-0.015
1E+12	243	51.035	50.996	-0.039
1E+12	244	51.307	51.248	-0.059
1E+12	247	50.928	50.905	-0.023
5E+12	251	50.799	50.619	-0.180
5E+12	252	50.809	50.714	-0.095
5E+12	259	51.234	51.124	-0.110
1E+13	261	51.820	51.649	-0.171
1E+13	263	50.948	50.826	-0.122
1E+13	264	50.818	50.726	-0.092
Max		51.820	51.649	-0.015
Average		51.112	51.021	-0.091
Min		50.799	50.619	-0.180
Std Dev		0.332	0.333	0.058



13.153_T_LEB_50ns_14V

Test Site		
Tester		
Test Number		
Max Limit	55	ns
Min Limit	45	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	51.407	50.905	50.619	50.726
Average	51.407	51.050	50.819	51.067
Max	51.407	51.248	51.124	51.649
UL	55.000	55.000	55.000	55.000

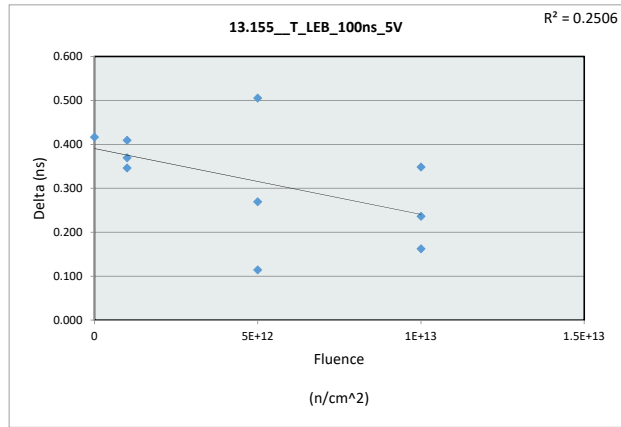


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.155_T_LEB_100ns_5V

Test Site	
Tester	
Test Number	
Unit	ns
Max Limit	110
Min Limit	85

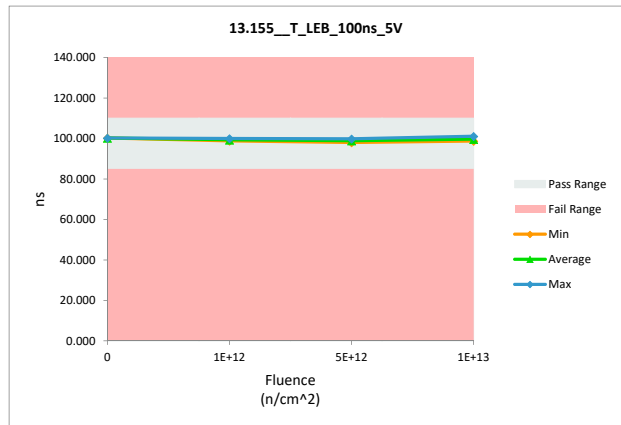
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	99.833	100.250	0.417
1E+12	243	98.835	99.205	0.370
1E+12	244	99.645	99.992	0.347
1E+12	247	98.431	98.841	0.410
5E+12	251	97.936	98.051	0.115
5E+12	252	98.328	98.834	0.506
5E+12	259	99.615	99.885	0.270
1E+13	261	100.936	101.173	0.237
1E+13	263	98.921	99.084	0.163
1E+13	264	98.407	98.756	0.349
Max		100.936	101.173	0.506
Average		99.089	99.407	0.318
Min		97.936	98.051	0.115
Std Dev		0.910	0.910	0.121



13.155_T_LEB_100ns_5V

Test Site	
Tester	
Test Number	
Max Limit	110
Min Limit	85

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.250	98.841	98.051	98.756
Average	100.250	99.346	98.923	99.671
Max	100.250	99.992	99.885	101.173
UL	110.000	110.000	110.000	110.000

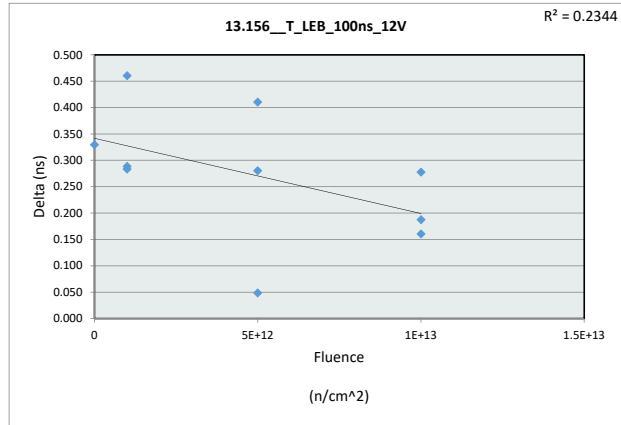


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.156_T_LEB_100ns_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	110	110
Min Limit	85	85

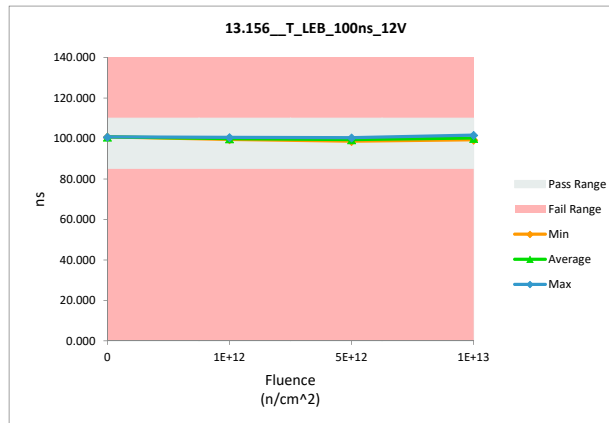
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	100.452	100.782	0.330
1E+12	243	99.428	99.712	0.284
1E+12	244	100.262	100.551	0.289
1E+12	247	99.070	99.531	0.461
5E+12	251	98.610	98.659	0.049
5E+12	252	98.940	99.351	0.411
5E+12	259	100.140	100.421	0.281
1E+13	261	101.495	101.683	0.188
1E+13	263	99.471	99.632	0.161
1E+13	264	99.045	99.323	0.278
Max		101.495	101.683	0.461
Average		99.691	99.964	0.273
Min		98.610	98.659	0.049
Std Dev		0.883	0.884	0.119



13.156_T_LEB_100ns_12V

Test Site		
Tester		
Test Number		
Max Limit	110	ns
Min Limit	85	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.782	99.531	98.659	99.323
Average	100.782	99.931	99.477	100.213
Max	100.782	100.551	100.421	101.683
UL	110.000	110.000	110.000	110.000

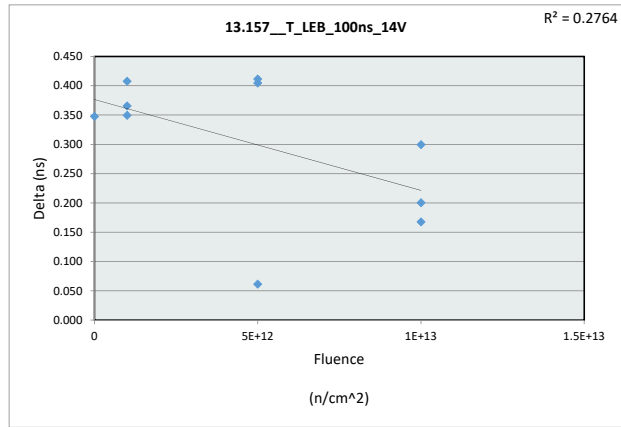


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.157_T_LEB_100ns_14V

Test Site	
Tester	
Test Number	
Unit	ns
Max Limit	110
Min Limit	85

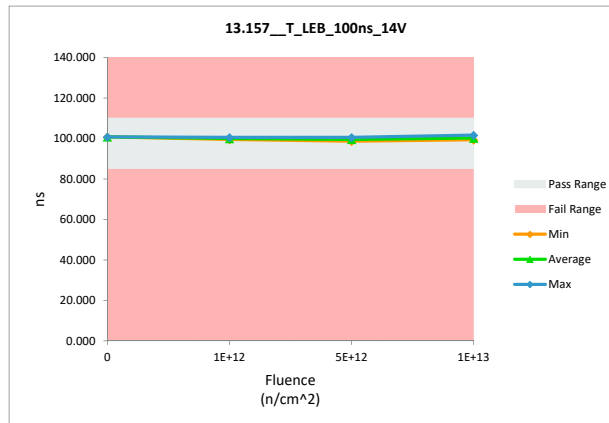
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	100.439	100.787	0.348
1E+12	243	99.396	99.804	0.408
1E+12	244	100.220	100.570	0.350
1E+12	247	99.132	99.498	0.366
5E+12	251	98.627	98.689	0.062
5E+12	252	98.947	99.359	0.412
5E+12	259	100.142	100.547	0.405
1E+13	261	101.491	101.692	0.201
1E+13	263	99.478	99.646	0.168
1E+13	264	99.033	99.333	0.300
Max		101.491	101.692	0.412
Average		99.690	99.993	0.302
Min		98.627	98.689	0.062
Std Dev		0.872	0.888	0.119



13.157_T_LEB_100ns_14V

Test Site	
Tester	
Test Number	
Max Limit	110
Min Limit	85

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.787	99.498	98.689	99.333
Average	100.787	99.957	99.532	100.224
Max	100.787	100.570	100.547	101.692
UL	110.000	110.000	110.000	110.000

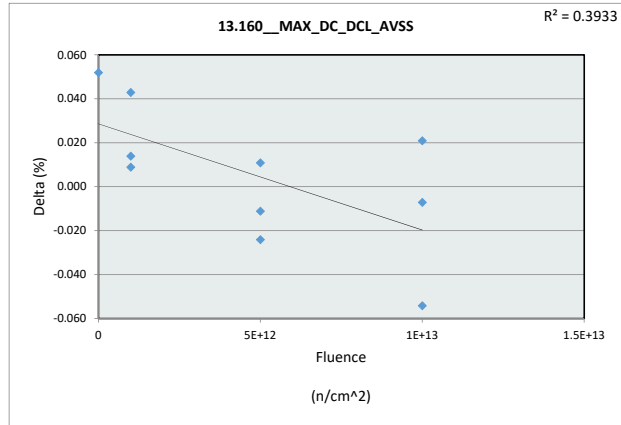


Neutron Displacement Damage (NDD) Report TPS7H5004-SP

13.160_MAX_DC_DCL_AVSS

Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	50	50
Min Limit	45	45

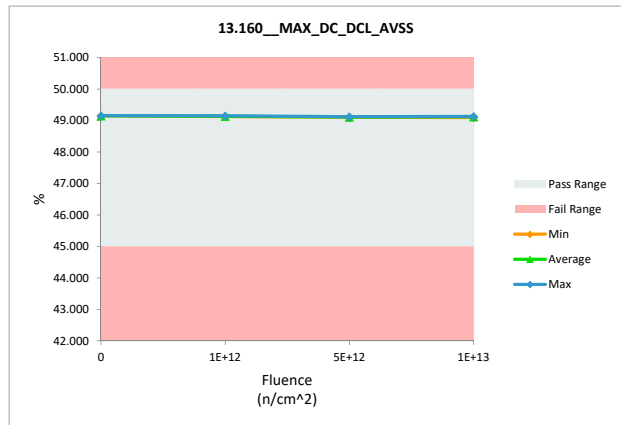
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	266	49.101	49.153	0.052
1E+12	243	49.116	49.125	0.009
1E+12	244	49.140	49.154	0.014
1E+12	247	49.083	49.126	0.043
5E+12	251	49.133	49.122	-0.011
5E+12	252	49.097	49.108	0.011
5E+12	259	49.126	49.102	-0.024
1E+13	261	49.110	49.131	0.021
1E+13	263	49.150	49.096	-0.054
1E+13	264	49.138	49.131	-0.007
Max		49.150	49.154	0.052
Average		49.119	49.125	0.005
Min		49.083	49.096	-0.054
Std Dev		0.022	0.019	0.031



13.160_MAX_DC_DCL_AVSS

Test Site		
Tester		
Test Number		
Max Limit	50	%
Min Limit	45	%

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	49.153	49.125	49.102	49.096
Average	49.153	49.135	49.111	49.119
Max	49.153	49.154	49.122	49.131
UL	50.000	50.000	50.000	50.000



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