

TPS7H5003-SP Neutron Displacement Damage (NDD) Characterization



ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TPS7H5003-SP, Texas Instruments 4-V to 14-V radiation-hardness-assured, current mode, single output PWM controller optimized for DC-DC converters in space applications. The TPS7H5003-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 TPS7H5003-SP is a single output radiation-hardness-assured PWM controller that contains an integrated synchronous rectification output, optimized for DC-DC converters in space applications. The dead time and leading edge blank time are fixed at 50 ns for this device. The controller can be configured for maximum duty cycle of 75% or 100%. As such, the DCL pin can be left floating or connected to VLDO. Connection of the DCL pin to AVSS is not permissible for this device. The 0.613 +0.7%/-1% accurate internal reference allows design of high-current buck converters for FPGA core voltages.

The TPS7H5003-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 TPS7H5003-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	TPS7H5003-SP
TI Part Name	5962R1822203VXC
Device Function	PWM controller
Package	22-pin CFP (HFT)
Technology	LBC7
Lot Number / Date Code	2003085 / 2211A
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

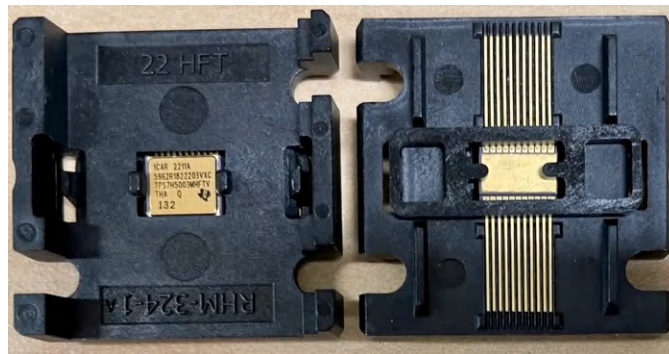


Figure 1-1. TPS7H5003-SP Device

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 TPS7H5003-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 TPS7H5003-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 the TPS7H5003-sp Electrical Parameters Table 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 TPS7H5003-sp Electrical Parameters Table are omitted either because there is no parametric data or because verification was done through bench testing.

See Appendix: NDD Report Data for NDD report up to 1.0×10^{13} n/cm².

3.2 Data Sheet Electrical Parameters and Associated Tests

Table 3-1. TPS7H5003-SP Electrical Parameters Table

PARAMETER	TEST CONDITION	TPS7H5003-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 SRA		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 SRA		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 SRA		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 SRA		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 SRA		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 SRA		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. TPS7H5003-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5003-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						
EA _{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
EA _{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
EA _{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
EA _{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

Table 3-1. TPS7H5003-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5003-SP DATA SHEET				TEST #
		MIN	TYP	MAX	UNIT	
EXT _{DT} Externally set frequency detection time	RT = Open, f = 200 kHz			20	μs	9.185__T_SYNC_DETECT
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. TPS7H5003-SP Electrical Parameters Table (continued)

PARAMETER	TEST CONDITION	TPS7H5003-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, 13.13 __SRA_RISE_1MHz_5V, 13.21 __SRA_RISE_1MHz_12V, 13.29 __SRA_RISE_1MHz_14V, 13.5 __SRA_RISE_1MHz_4V, 13.15 __SRA_FALL_1MHz_5V, 13.23 __SRA_FALL_1MHz_12V, 13.31 __SRA_FALL_1MHz_14V, 13.7 __SRA_FALL_1MHz_4V
MINIMUM ON-TIME AND DEAD TIME						
t_{MIN} Minimum on-time	$5\text{ V} \leq V_{IN} \leq 14\text{ V}$			115	ns	13.145 __OUT_T_ON_MIN
TD_{PS} Primary off to secondary on dead time	$5\text{ V} \leq V_{IN} \leq 14\text{ V}$, 90% of OUTA falling edge to 10% of SRA rising edge with OUTA and SRA floating	40	50	60	ns	13.53 __PSA_DT_50ns_1M_5V, 13.57 __PSA_DT_50ns_1M_12V, 13.61 __PSA_DT_50ns_1M_14V
TD_{SP} Secondary off to primary on dead time	$5\text{ V} \leq V_{IN} \leq 14\text{ V}$, 90% of SRA falling edge to 10% of OUTA rising edge with OUTA and SRA floating	40	50	60	ns	13.55 __SPA_DT_50ns_1M_5V, 13.59 __SPA_DT_50ns_1M_12V, 13.63 __SPA_DT_50ns_1M_14V
LEADING EDGE BLANK TIME AND DUTY CYCLE						
T_{LEB} , Leading edge blank time	$5\text{ V} \leq V_{IN} \leq 14\text{ V}$	45	50	55	ns	13.151 __T_LEB_50ns_5V, 13.152 __T_LEB_50ns_12V, 13.153 __T_LEB_50ns_14V
D_{MAX} Maximum duty cycle	DCL = floating, clock duty cycle = 50%	70	75	80	%	13.163 __MAX_DC_DCL_OPEN
	DCL =VLDO			100	%	13.166 __MAX_DC_DCL_VLDO

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, [TPS7H5003-SP Total Ionizing Dose \(TID\) \(Rev. A\)](#), Radiation Report
- Texas Instruments, [TPS7H500xEVM-CVAL User's Guide](#), User 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.

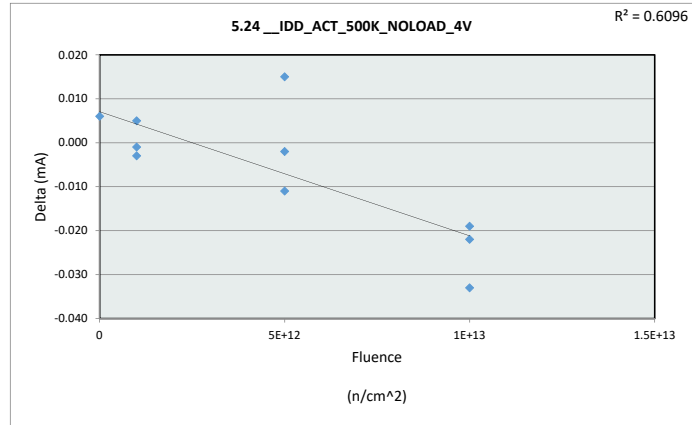
**Neutron Displacement Damage (NDD) Report
TPS7H5003-SP**

Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.24 IDD_ACT_500K_NOLOAD_4V

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

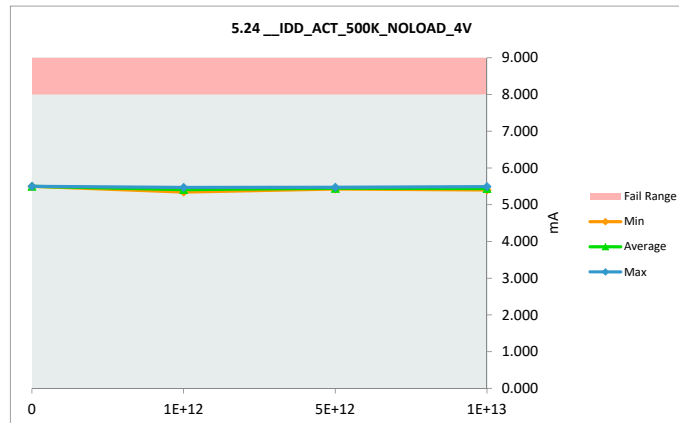
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	5.495	5.501	0.006
1E+12	129	5.409	5.414	0.005
1E+12	130	5.347	5.344	-0.003
1E+12	131	5.471	5.470	-0.001
5E+12	126	5.484	5.473	-0.011
5E+12	127	5.421	5.436	0.015
5E+12	128	5.428	5.426	-0.002
1E+13	123	5.461	5.428	-0.033
1E+13	124	5.510	5.491	-0.019
1E+13	125	5.422	5.400	-0.022
Max		5.510	5.501	0.015
Average		5.445	5.438	-0.007
Min		5.347	5.344	-0.033
Std Dev		0.049	0.047	0.015



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	5.501	5.344	5.426	5.400
Average	5.501	5.409	5.445	5.440
Max	5.501	5.470	5.473	5.491
UL	8.000	8.000	8.000	8.000

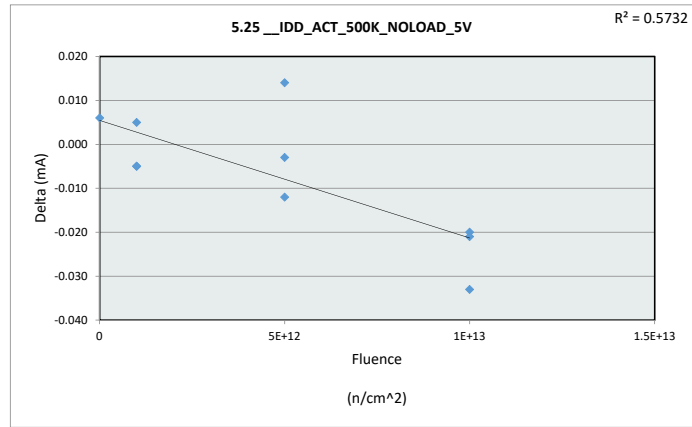


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.25 __IDD_ACT_500K_NOLOAD_5V

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

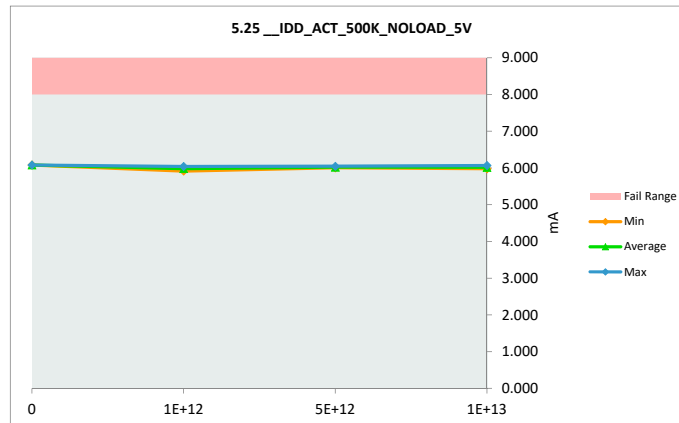
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.072	6.078	0.006
1E+12	129	5.982	5.987	0.005
1E+12	130	5.919	5.914	-0.005
1E+12	131	6.046	6.041	-0.005
5E+12	126	6.058	6.046	-0.012
5E+12	127	5.999	6.013	0.014
5E+12	128	6.005	6.002	-0.003
1E+13	123	6.039	6.006	-0.033
1E+13	124	6.085	6.065	-0.020
1E+13	125	5.997	5.976	-0.021
Max		6.085	6.078	0.014
Average		6.020	6.013	-0.007
Min		5.919	5.914	-0.033
Std Dev		0.050	0.048	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	6.078	5.914	6.002	5.976
Average	6.078	5.981	6.020	6.016
Max	6.078	6.041	6.046	6.065
UL	8.000	8.000	8.000	8.000

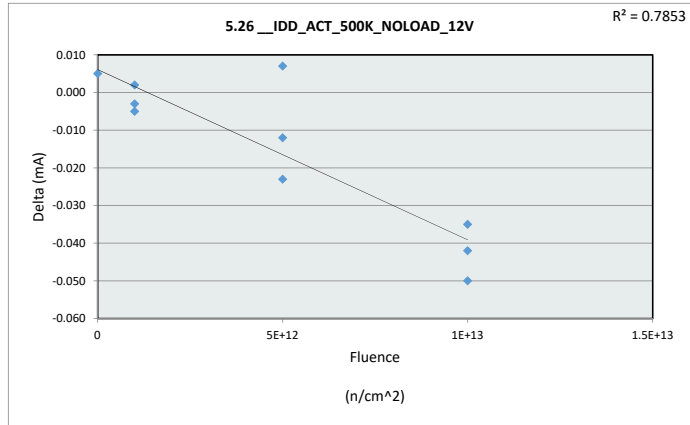


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.26 IDD_ACT_500K_NOLOAD_12V

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

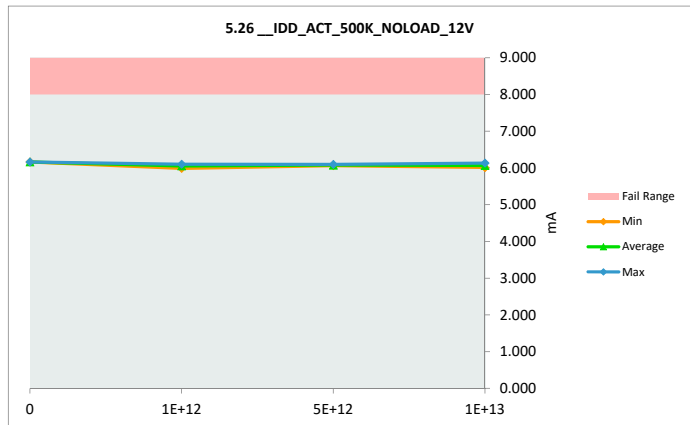
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.157	6.162	0.005
1E+12	129	6.067	6.069	0.002
1E+12	130	5.992	5.989	-0.003
1E+12	131	6.105	6.100	-0.005
5E+12	126	6.121	6.098	-0.023
5E+12	127	6.064	6.071	0.007
5E+12	128	6.073	6.061	-0.012
1E+13	123	6.095	6.045	-0.050
1E+13	124	6.166	6.131	-0.035
1E+13	125	6.054	6.012	-0.042
Max		6.166	6.162	0.007
Average		6.089	6.074	-0.016
Min		5.992	5.989	-0.050
Std Dev		0.051	0.052	0.021



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	6.162	5.989	6.061	6.012
Average	6.162	6.053	6.077	6.063
Max	6.162	6.100	6.098	6.131
UL	8.000	8.000	8.000	8.000

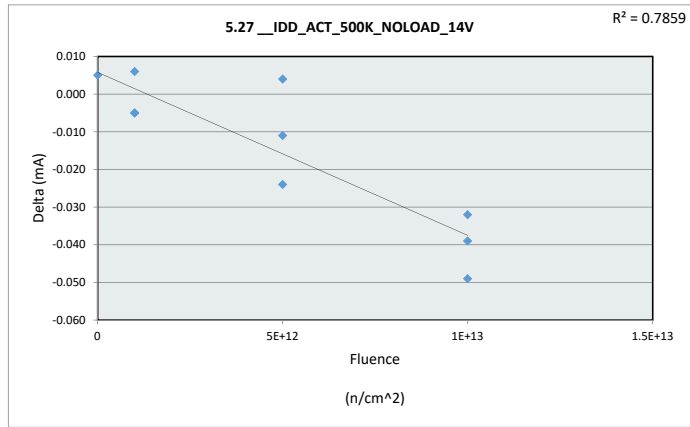


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.27 __IDD_ACT_500K_NOLOAD_14V

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

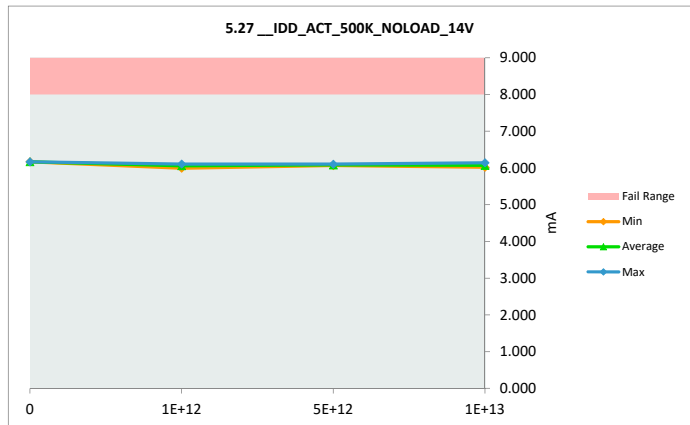
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.163	6.168	0.005
1E+12	129	6.069	6.075	0.006
1E+12	130	5.999	5.994	-0.005
1E+12	131	6.110	6.105	-0.005
5E+12	126	6.128	6.104	-0.024
5E+12	127	6.072	6.076	0.004
5E+12	128	6.075	6.064	-0.011
1E+13	123	6.097	6.048	-0.049
1E+13	124	6.171	6.139	-0.032
1E+13	125	6.057	6.018	-0.039
Max		6.171	6.168	0.006
Average		6.094	6.079	-0.015
Min		5.999	5.994	-0.049
Std Dev		0.052	0.053	0.020



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	6.168	5.994	6.064	6.018
Average	6.168	6.058	6.081	6.068
Max	6.168	6.105	6.104	6.139
UL	8.000	8.000	8.000	8.000

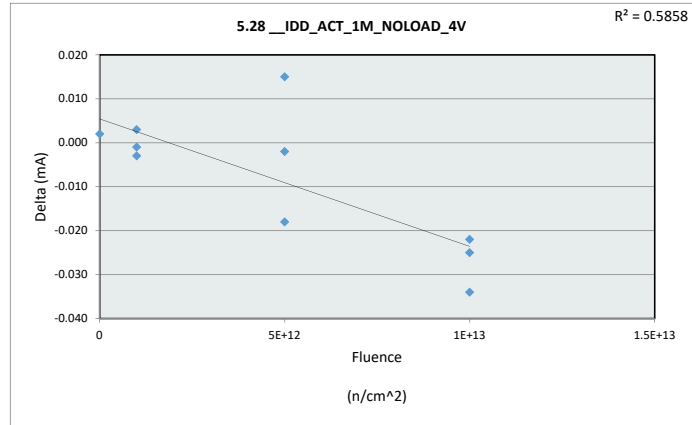


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.28 IDD_ACT_1M_NOLOAD_4V

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

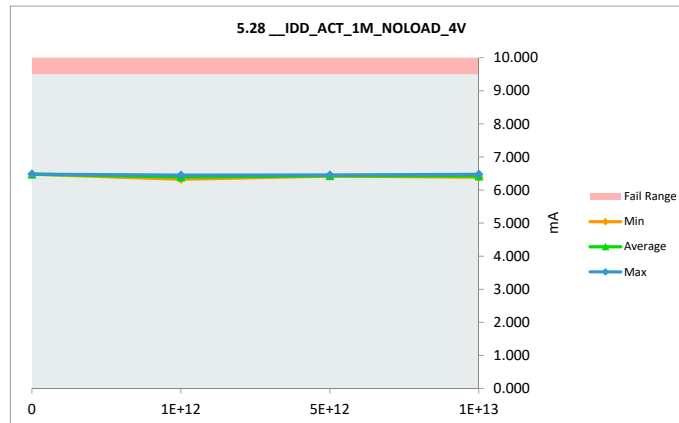
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.479	6.481	0.002
1E+12	129	6.396	6.399	0.003
1E+12	130	6.330	6.327	-0.003
1E+12	131	6.452	6.451	-0.001
5E+12	126	6.472	6.454	-0.018
5E+12	127	6.406	6.421	0.015
5E+12	128	6.419	6.417	-0.002
1E+13	123	6.447	6.413	-0.034
1E+13	124	6.495	6.473	-0.022
1E+13	125	6.410	6.385	-0.025
Max		6.495	6.481	0.015
Average		6.431	6.422	-0.008
Min		6.330	6.327	-0.034
Std Dev		0.049	0.046	0.015



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	6.481	6.327	6.417	6.385
Average	6.481	6.392	6.431	6.424
Max	6.481	6.451	6.454	6.473
UL	9.500	9.500	9.500	9.500

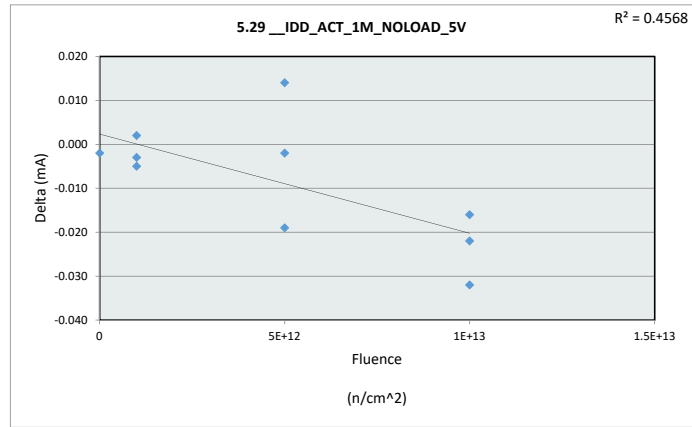


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.29 IDD_ACT_1M_NOLOAD_5V

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

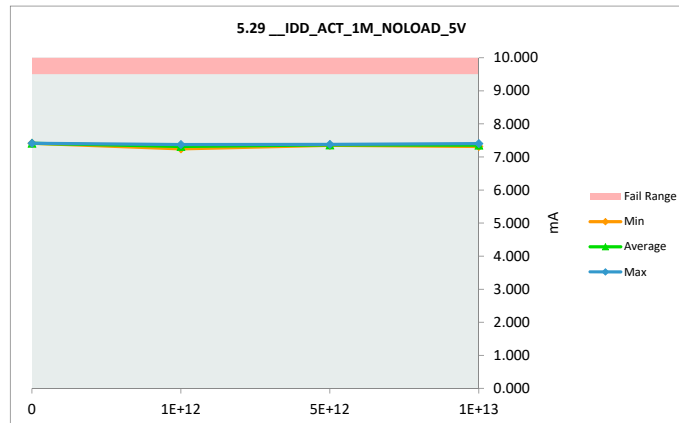
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.414	7.412	-0.002
1E+12	129	7.325	7.327	0.002
1E+12	130	7.249	7.246	-0.003
1E+12	131	7.380	7.375	-0.005
5E+12	126	7.398	7.379	-0.019
5E+12	127	7.340	7.354	0.014
5E+12	128	7.352	7.350	-0.002
1E+13	123	7.378	7.346	-0.032
1E+13	124	7.419	7.403	-0.016
1E+13	125	7.338	7.316	-0.022
Max		7.419	7.412	0.014
Average		7.359	7.351	-0.008
Min		7.249	7.246	-0.032
Std Dev		0.051	0.048	0.014



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	7.412	7.246	7.350	7.316
Average	7.412	7.316	7.361	7.355
Max	7.412	7.375	7.379	7.403
UL	9.500	9.500	9.500	9.500

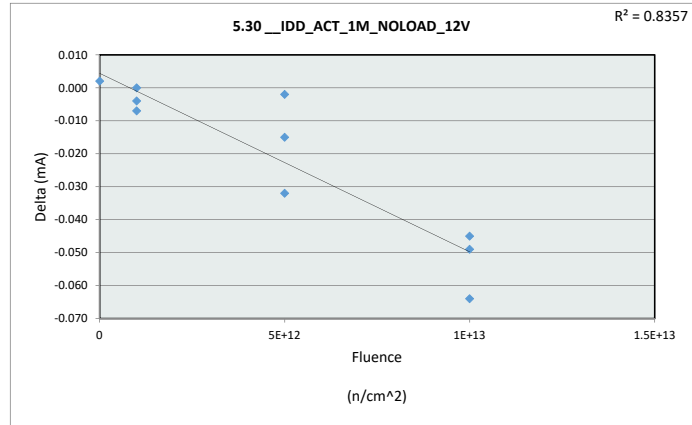


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.30 IDD_ACT_1M_NOLOAD_12V

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

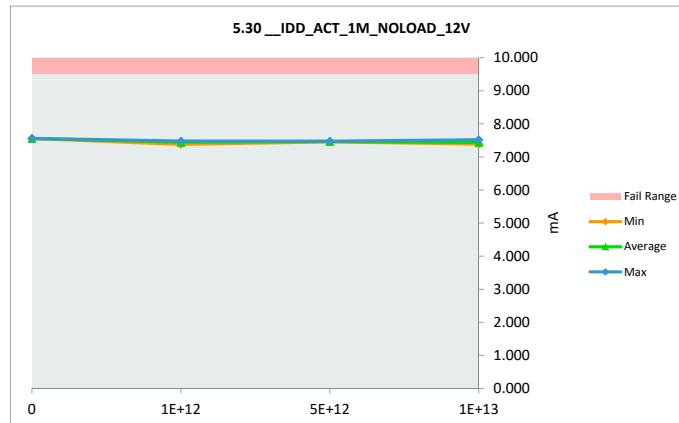
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.557	7.559	0.002
1E+12	129	7.471	7.471	0.000
1E+12	130	7.383	7.379	-0.004
1E+12	131	7.486	7.479	-0.007
5E+12	126	7.510	7.478	-0.032
5E+12	127	7.459	7.457	-0.002
5E+12	128	7.471	7.456	-0.015
1E+13	123	7.480	7.416	-0.064
1E+13	124	7.565	7.520	-0.045
1E+13	125	7.435	7.386	-0.049
Max		7.565	7.559	0.002
Average		7.482	7.460	-0.022
Min		7.383	7.379	-0.064
Std Dev		0.054	0.056	0.024



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	7.559	7.379	7.456	7.386
Average	7.559	7.443	7.464	7.441
Max	7.559	7.479	7.478	7.520
UL	9.500	9.500	9.500	9.500

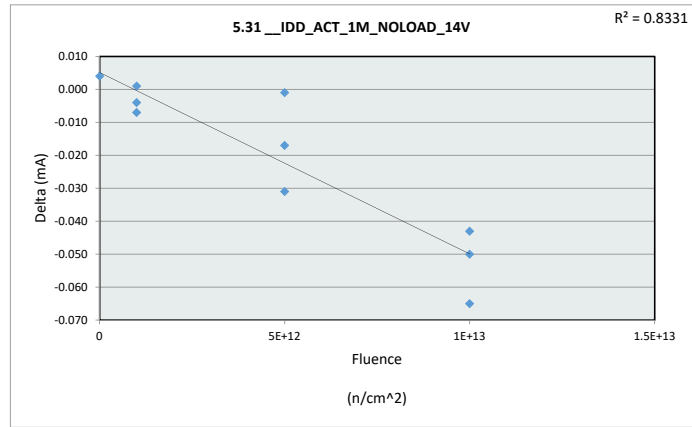


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.31 IDD_ACT_1M_NOLOAD_14V

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

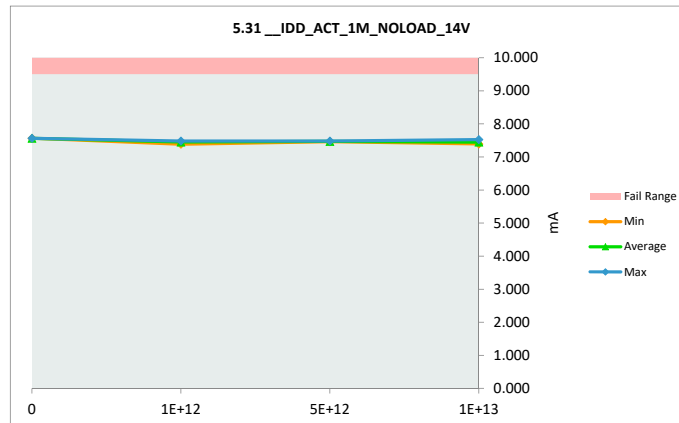
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.562	7.566	0.004
1E+12	129	7.476	7.477	0.001
1E+12	130	7.387	7.383	-0.004
1E+12	131	7.490	7.483	-0.007
5E+12	126	7.514	7.483	-0.031
5E+12	127	7.463	7.462	-0.001
5E+12	128	7.478	7.461	-0.017
1E+13	123	7.486	7.421	-0.065
1E+13	124	7.568	7.525	-0.043
1E+13	125	7.441	7.391	-0.050
Max		7.568	7.566	0.004
Average		7.486	7.465	-0.021
Min		7.387	7.383	-0.065
Std Dev		0.054	0.057	0.024



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	7.566	7.383	7.461	7.391
Average	7.566	7.448	7.469	7.446
Max	7.566	7.483	7.483	7.525
UL	9.500	9.500	9.500	9.500

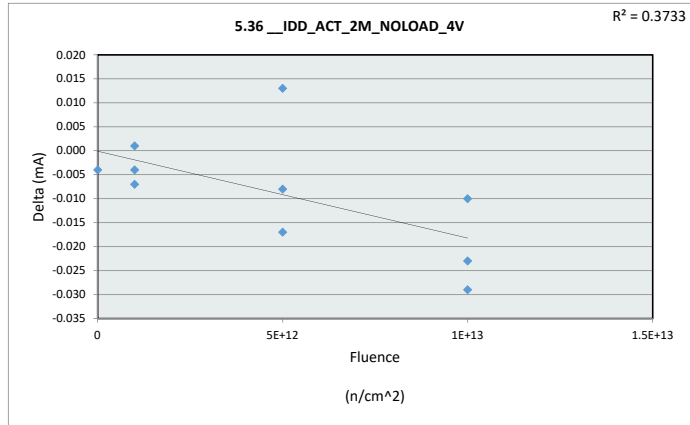


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.36 IDD_ACT_2M_NOLOAD_4V

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

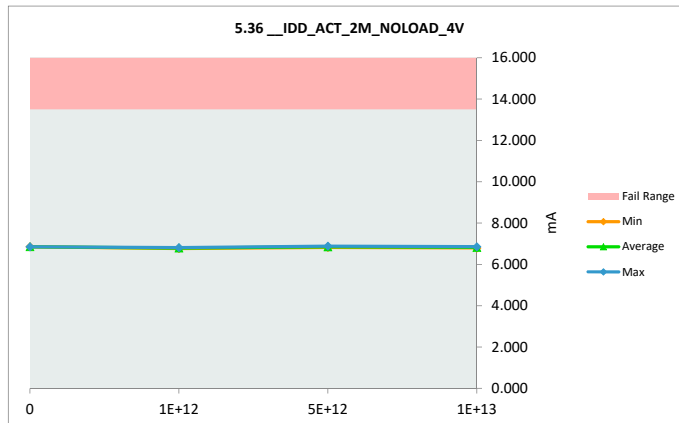
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.854	6.850	-0.004
1E+12	129	6.801	6.797	-0.004
1E+12	130	6.763	6.764	0.001
1E+12	131	6.819	6.812	-0.007
5E+12	126	6.899	6.882	-0.017
5E+12	127	6.820	6.833	0.013
5E+12	128	6.828	6.820	-0.008
1E+13	123	6.822	6.793	-0.029
1E+13	124	6.866	6.856	-0.010
1E+13	125	6.848	6.825	-0.023
Max		6.899	6.882	0.013
Average		6.832	6.823	-0.009
Min		6.763	6.764	-0.029
Std Dev		0.037	0.034	0.012



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	6.850	6.764	6.820	6.793
Average	6.850	6.791	6.845	6.825
Max	6.850	6.812	6.882	6.856
UL	13.500	13.500	13.500	13.500

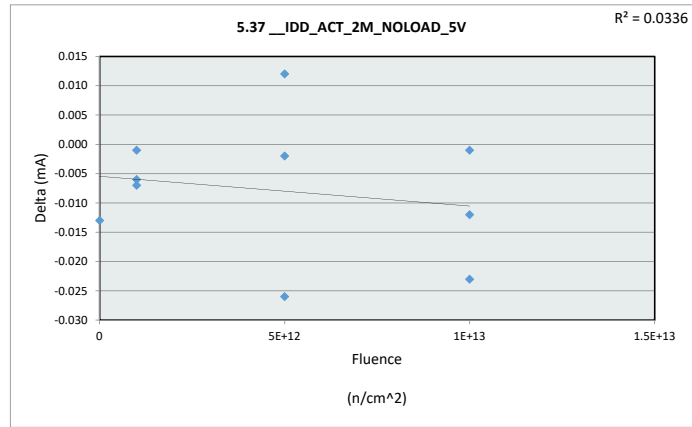


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.37 IDD_ACT_2M_NOLOAD_5V

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

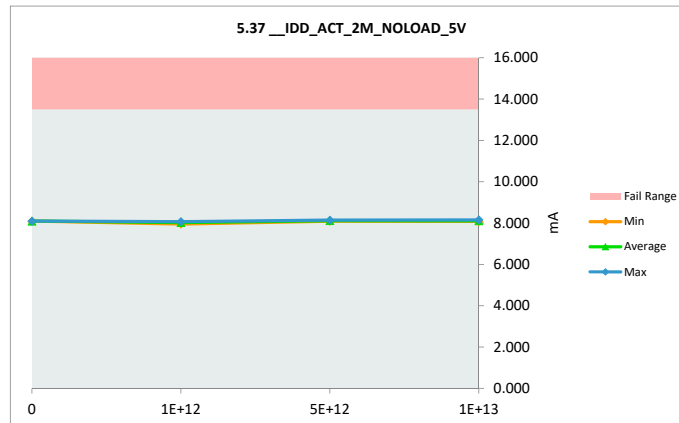
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.106	8.093	-0.013
1E+12	129	8.075	8.068	-0.007
1E+12	130	7.950	7.949	-0.001
1E+12	131	8.051	8.045	-0.006
5E+12	126	8.166	8.140	-0.026
5E+12	127	8.082	8.094	0.012
5E+12	128	8.111	8.109	-0.002
1E+13	123	8.077	8.076	-0.001
1E+13	124	8.165	8.153	-0.012
1E+13	125	8.104	8.081	-0.023
Max		8.166	8.153	0.012
Average		8.089	8.081	-0.008
Min		7.950	7.949	-0.026
Std Dev		0.061	0.056	0.011



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	8.093	7.949	8.094	8.076
Average	8.093	8.021	8.114	8.103
Max	8.093	8.068	8.140	8.153
UL	13.500	13.500	13.500	13.500

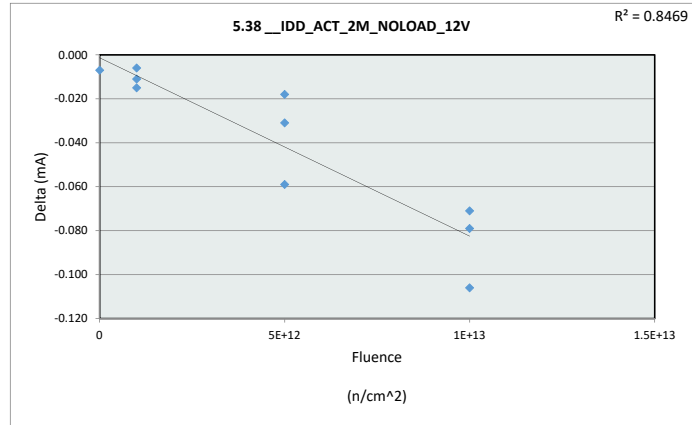


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.38 IDD_ACT_2M_NOLOAD_12V

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

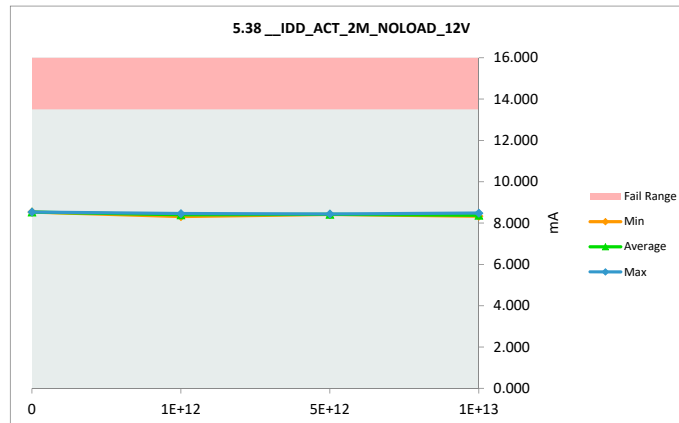
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.540	8.533	-0.007
1E+12	129	8.468	8.457	-0.011
1E+12	130	8.321	8.315	-0.006
1E+12	131	8.432	8.417	-0.015
5E+12	126	8.496	8.437	-0.059
5E+12	127	8.427	8.409	-0.018
5E+12	128	8.452	8.421	-0.031
1E+13	123	8.436	8.330	-0.106
1E+13	124	8.550	8.479	-0.071
1E+13	125	8.407	8.328	-0.079
Max		8.550	8.533	-0.006
Average		8.453	8.413	-0.040
Min		8.321	8.315	-0.106
Std Dev		0.067	0.071	0.036



5.38 IDD_ACT_2M_NOLOAD

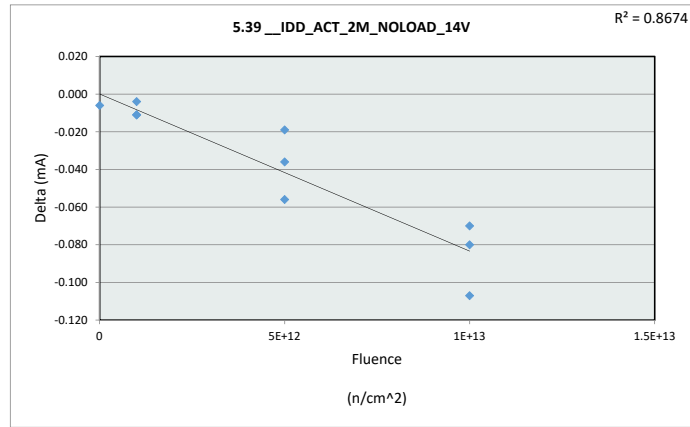
Test Site		
Tester		
Test Number		
Max Limit	13.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.533	8.315	8.409	8.328
Average	8.533	8.396	8.422	8.379
Max	8.533	8.457	8.437	8.479
UL	13.500	13.500	13.500	13.500

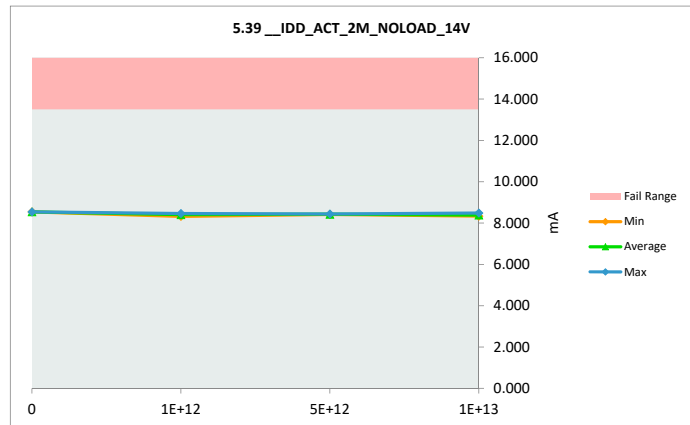


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.545	8.539	-0.006
1E+12	129	8.471	8.460	-0.011
1E+12	130	8.325	8.321	-0.004
1E+12	131	8.433	8.422	-0.011
5E+12	126	8.498	8.442	-0.056
5E+12	127	8.432	8.413	-0.019
5E+12	128	8.458	8.422	-0.036
1E+13	123	8.441	8.334	-0.107
1E+13	124	8.553	8.483	-0.070
1E+13	125	8.413	8.333	-0.080
Max		8.553	8.539	-0.004
Average		8.457	8.417	-0.040
Min		8.325	8.321	-0.107
Std Dev		0.066	0.071	0.036



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	8.539	8.321	8.413	8.333
Average	8.539	8.401	8.426	8.383
Max	8.539	8.460	8.442	8.483
UL	13.500	13.500	13.500	13.500

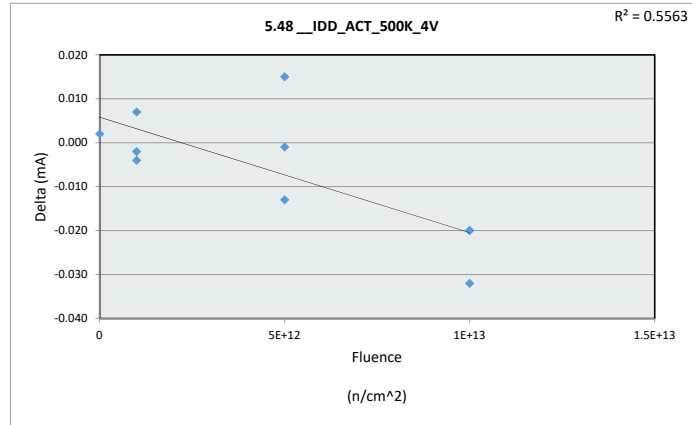


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.48 IDD_ACT_500K_4V

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

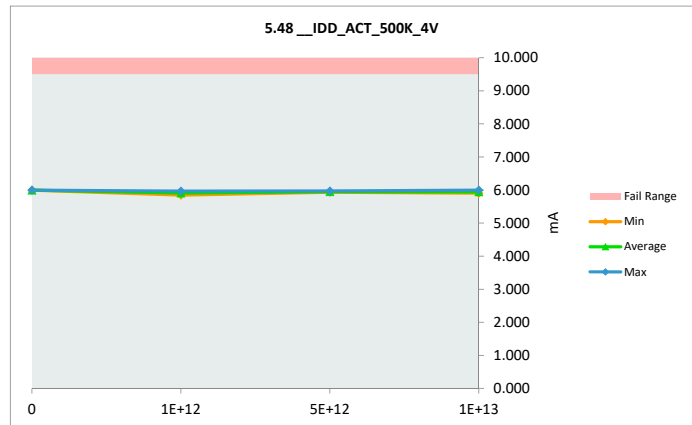
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	5.994	5.996	0.002
1E+12	129	5.907	5.914	0.007
1E+12	130	5.848	5.844	-0.004
1E+12	131	5.970	5.968	-0.002
5E+12	126	5.984	5.971	-0.013
5E+12	127	5.921	5.936	0.015
5E+12	128	5.932	5.931	-0.001
1E+13	123	5.960	5.928	-0.032
1E+13	124	6.014	5.994	-0.020
1E+13	125	5.922	5.902	-0.020
Max		6.014	5.996	0.015
Average		5.945	5.938	-0.007
Min		5.848	5.844	-0.032
Std Dev		0.049	0.046	0.014



5.48 IDD_ACT_500K_4V

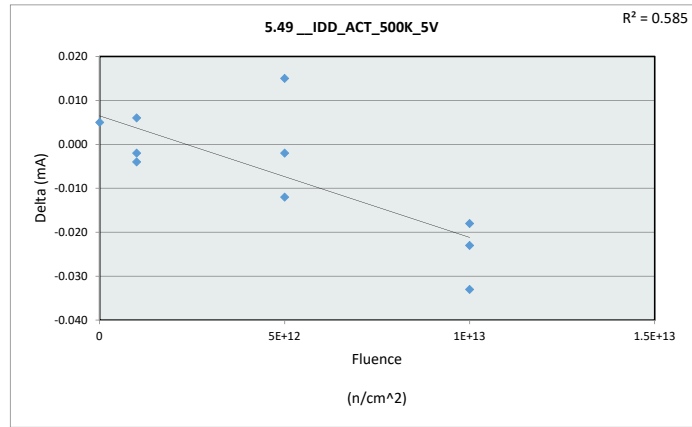
Test Site		
Tester		
Test Number		
Max Limit	9.5	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	5.996	5.844	5.931	5.902
Average	5.996	5.909	5.946	5.941
Max	5.996	5.968	5.971	5.994
UL	9.500	9.500	9.500	9.500

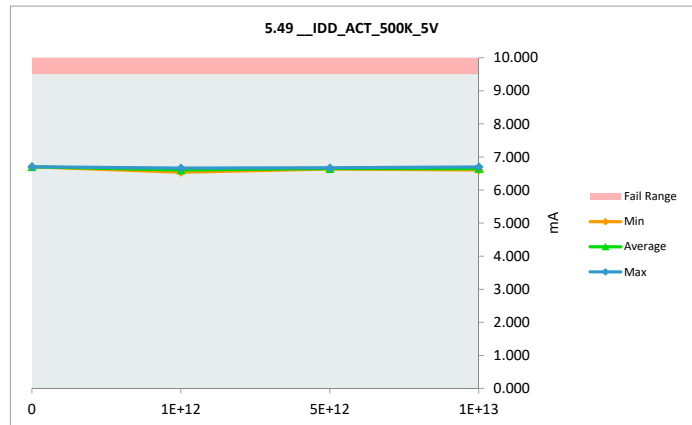


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	6.696	6.701	0.005
1E+12	129	6.609	6.615	0.006
1E+12	130	6.542	6.540	-0.002
1E+12	131	6.668	6.664	-0.004
5E+12	126	6.681	6.669	-0.012
5E+12	127	6.626	6.641	0.015
5E+12	128	6.633	6.631	-0.002
1E+13	123	6.664	6.631	-0.033
1E+13	124	6.714	6.696	-0.018
1E+13	125	6.624	6.601	-0.023
	Max	6.714	6.701	0.015
	Average	6.646	6.639	-0.007
	Min	6.542	6.540	-0.033
	Std Dev	0.050	0.048	0.015

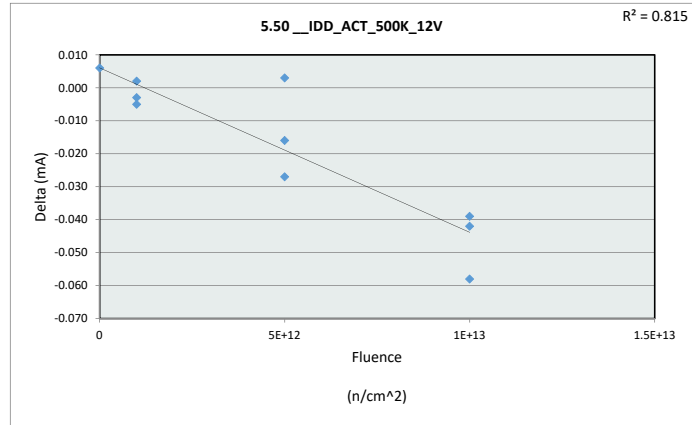


5.49 IDD_ACT_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit		9.5	mA	
Min Limit			mA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	6.701	6.540	6.631	6.601
Average	6.701	6.606	6.647	6.643
Max	6.701	6.664	6.669	6.696
UL	9.500	9.500	9.500	9.500

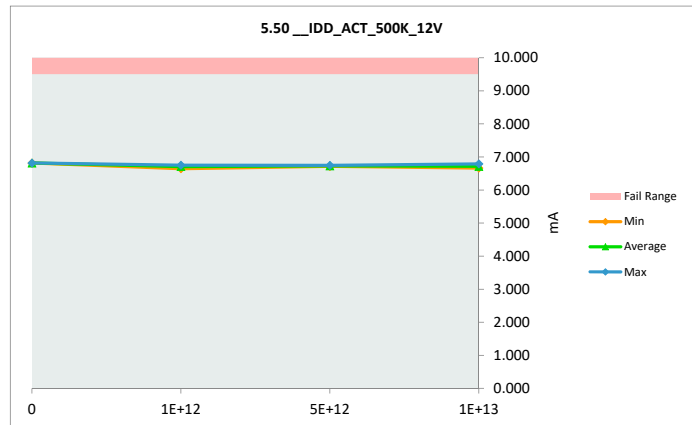


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	6.810	6.816	0.006
1E+12	129	6.725	6.727	0.002
1E+12	130	6.651	6.646	-0.005
1E+12	131	6.753	6.750	-0.003
5E+12	126	6.773	6.746	-0.027
5E+12	127	6.722	6.725	0.003
5E+12	128	6.730	6.714	-0.016
1E+13	123	6.746	6.688	-0.058
1E+13	124	6.827	6.788	-0.039
1E+13	125	6.704	6.662	-0.042
	Max	6.827	6.816	0.006
	Average	6.744	6.726	-0.018
	Min	6.651	6.646	-0.058
	Std Dev	0.051	0.053	0.022



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	6.816	6.646	6.714	6.662
Average	6.816	6.708	6.728	6.713
Max	6.816	6.750	6.746	6.788
UL	9.500	9.500	9.500	9.500

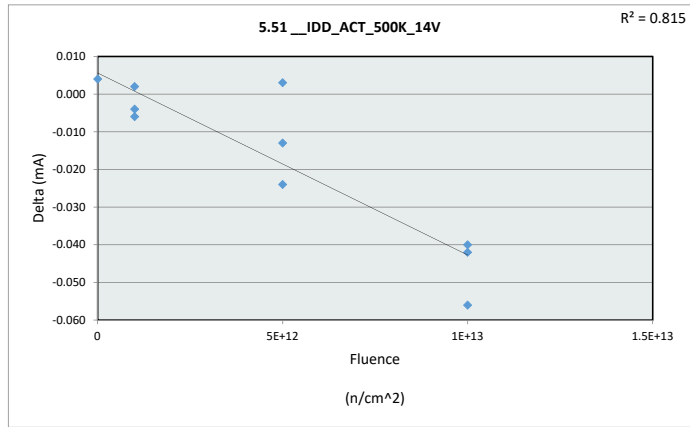


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.51 __IDD_ACT_500K_14V

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

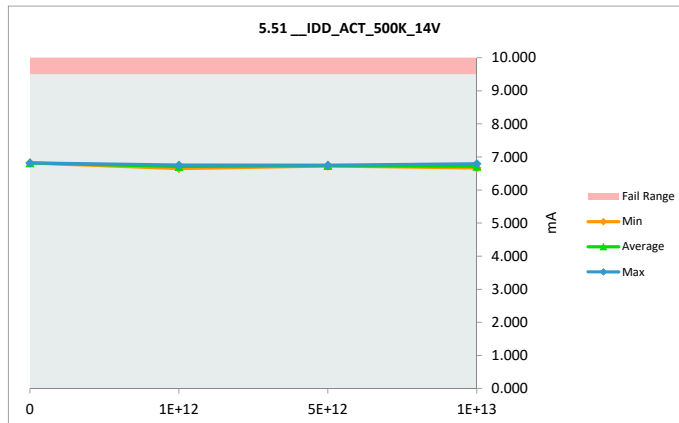
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	6.816	6.820	0.004
1E+12	129	6.729	6.731	0.002
1E+12	130	6.655	6.649	-0.006
1E+12	131	6.757	6.753	-0.004
5E+12	126	6.775	6.751	-0.024
5E+12	127	6.726	6.729	0.003
5E+12	128	6.735	6.722	-0.013
1E+13	123	6.752	6.696	-0.056
1E+13	124	6.833	6.793	-0.040
1E+13	125	6.710	6.668	-0.042
Max		6.833	6.820	0.004
Average		6.749	6.731	-0.018
Min		6.655	6.649	-0.056
Std Dev		0.051	0.052	0.022



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	6.820	6.649	6.722	6.668
Average	6.820	6.711	6.734	6.719
Max	6.820	6.753	6.751	6.793
UL	9.500	9.500	9.500	9.500

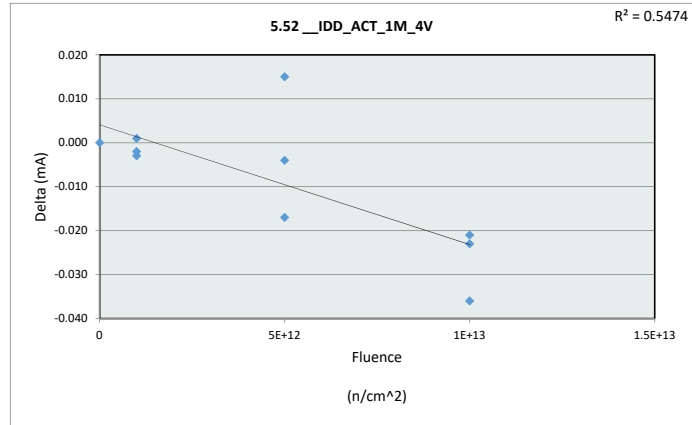


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.52 IDD_ACT_1M_4V

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

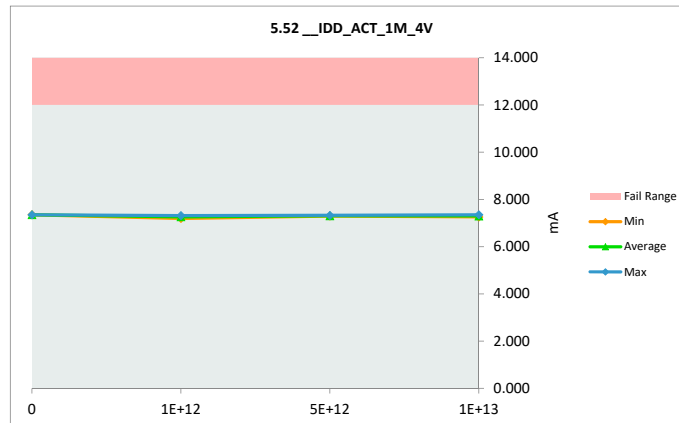
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.350	7.350	0.000
1E+12	129	7.269	7.270	0.001
1E+12	130	7.198	7.196	-0.002
1E+12	131	7.323	7.320	-0.003
5E+12	126	7.344	7.327	-0.017
5E+12	127	7.281	7.296	0.015
5E+12	128	7.298	7.294	-0.004
1E+13	123	7.323	7.287	-0.036
1E+13	124	7.372	7.351	-0.021
1E+13	125	7.282	7.259	-0.023
Max		7.372	7.351	0.015
Average		7.304	7.295	-0.009
Min		7.198	7.196	-0.036
Std Dev		0.050	0.047	0.015



5.52 IDD_ACT_1M_4V

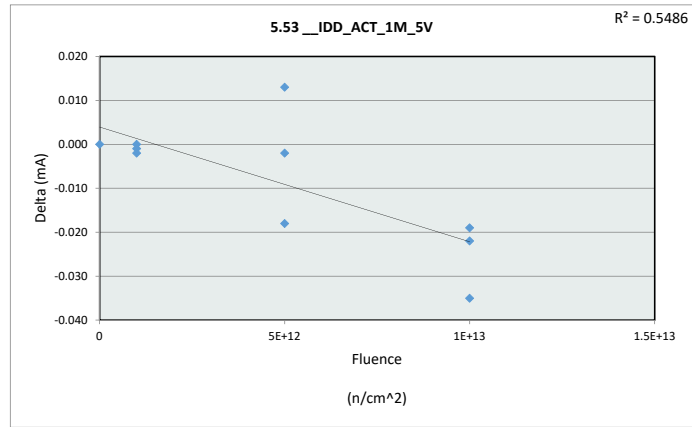
Test Site		
Tester		
Test Number		
Max Limit	12	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.350	7.196	7.294	7.259
Average	7.350	7.262	7.306	7.299
Max	7.350	7.320	7.327	7.351
UL	12.000	12.000	12.000	12.000

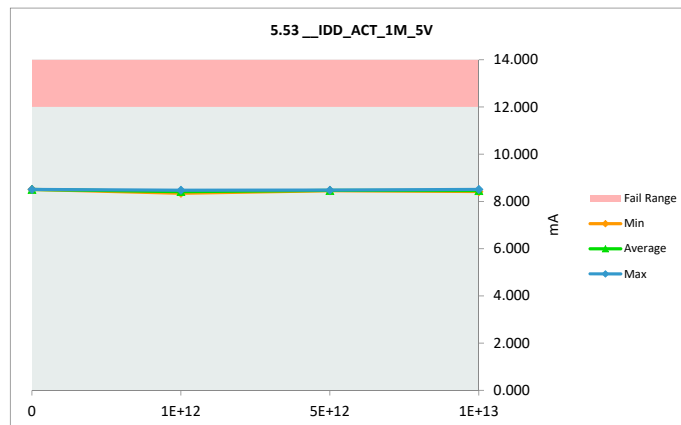


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.509	8.509	0.000
1E+12	129	8.426	8.426	0.000
1E+12	130	8.346	8.345	-0.001
1E+12	131	8.477	8.475	-0.002
5E+12	126	8.496	8.478	-0.018
5E+12	127	8.441	8.454	0.013
5E+12	128	8.458	8.456	-0.002
1E+13	123	8.482	8.447	-0.035
1E+13	124	8.527	8.508	-0.019
1E+13	125	8.439	8.417	-0.022
Max		8.527	8.509	0.013
Average		8.460	8.452	-0.009
Min		8.346	8.345	-0.035
Std Dev		0.052	0.048	0.014



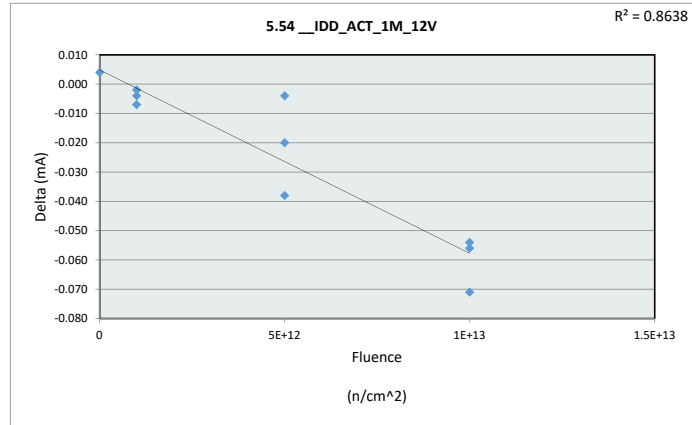
5.53 IDD_ACT_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit	12	mA		
Min Limit		mA		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.509	8.345	8.454	8.417
Average	8.509	8.415	8.463	8.457
Max	8.509	8.475	8.478	8.508
UL	12.000	12.000	12.000	12.000



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

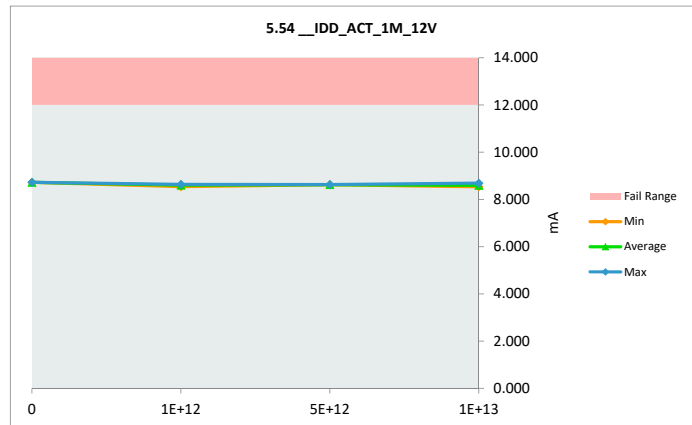
5.54 IDD_ACT_1M_12V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.723	8.727	0.004
1E+12	129	8.640	8.638	-0.002
1E+12	130	8.543	8.539	-0.004
1E+12	131	8.642	8.635	-0.007
5E+12	126	8.667	8.629	-0.038
5E+12	127	8.623	8.619	-0.004
5E+12	128	8.642	8.622	-0.020
1E+13	123	8.640	8.569	-0.071
1E+13	124	8.740	8.686	-0.054
1E+13	125	8.594	8.538	-0.056
Max		8.740	8.727	0.004
Average		8.645	8.620	-0.025
Min		8.543	8.538	-0.071
Std Dev		0.057	0.060	0.027



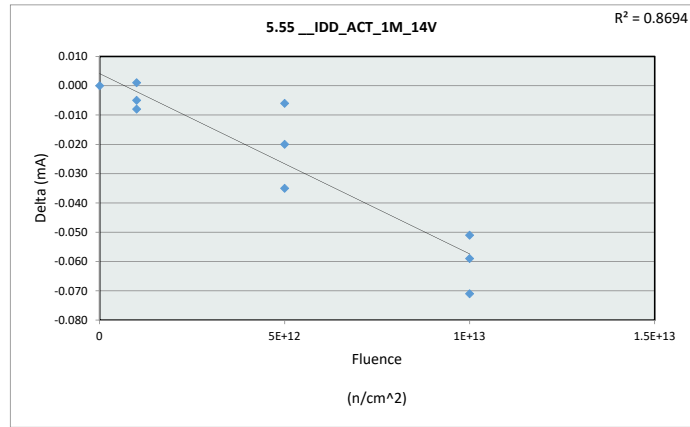
5.54 IDD_ACT_1M_12V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.727	8.539	8.619	8.538
Average	8.727	8.604	8.623	8.598
Max	8.727	8.638	8.629	8.686
UL	12.000	12.000	12.000	12.000

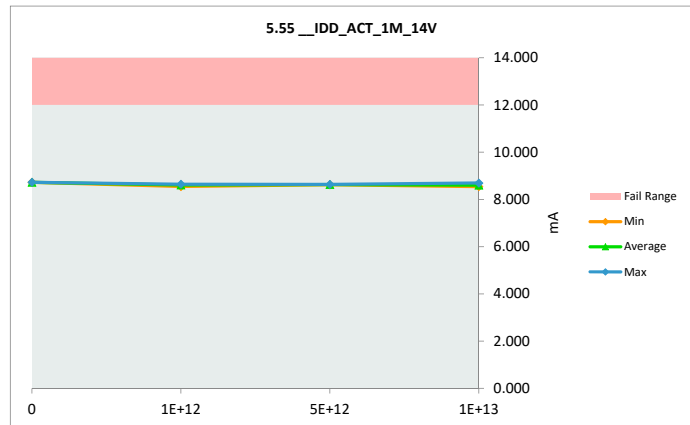


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.728	8.728	0.000
1E+12	129	8.643	8.644	0.001
1E+12	130	8.550	8.545	-0.005
1E+12	131	8.646	8.638	-0.008
5E+12	126	8.671	8.636	-0.035
5E+12	127	8.627	8.621	-0.006
5E+12	128	8.647	8.627	-0.020
1E+13	123	8.645	8.574	-0.071
1E+13	124	8.744	8.693	-0.051
1E+13	125	8.600	8.541	-0.059
Max		8.744	8.728	0.001
Average		8.650	8.625	-0.025
Min		8.550	8.541	-0.071
Std Dev		0.056	0.060	0.027

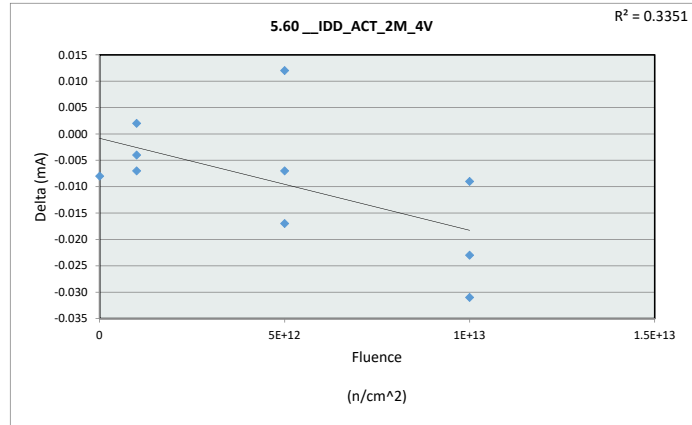


5.55 IDD_ACT_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit	12	mA		
Min Limit		mA		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.728	8.545	8.621	8.541
Average	8.728	8.609	8.628	8.603
Max	8.728	8.644	8.636	8.693
UL	12.000	12.000	12.000	12.000

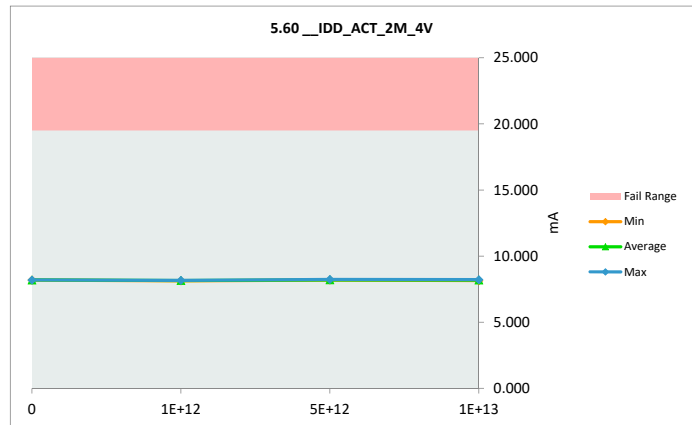


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.203	8.195	-0.008
1E+12	129	8.156	8.152	-0.004
1E+12	130	8.130	8.132	0.002
1E+12	131	8.171	8.164	-0.007
5E+12	126	8.261	8.244	-0.017
5E+12	127	8.180	8.192	0.012
5E+12	128	8.193	8.186	-0.007
1E+13	123	8.179	8.148	-0.031
1E+13	124	8.229	8.220	-0.009
1E+13	125	8.218	8.195	-0.023
Max		8.261	8.244	0.012
Average		8.192	8.183	-0.009
Min		8.130	8.132	-0.031
Std Dev		0.038	0.034	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	8.195	8.132	8.186	8.148
Average	8.195	8.149	8.207	8.188
Max	8.195	8.164	8.244	8.220
UL	19.500	19.500	19.500	19.500

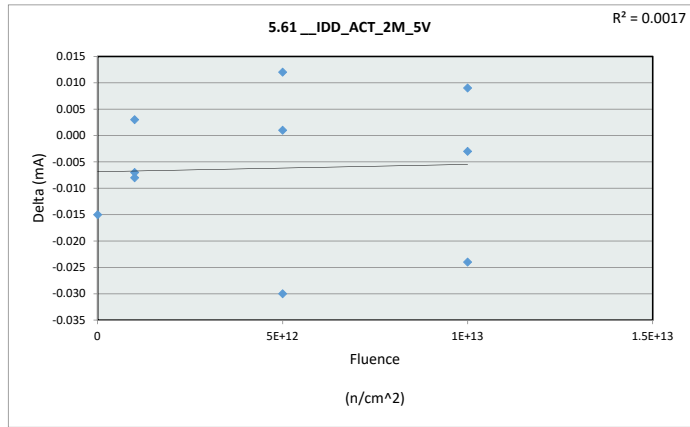


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.61 IDD_ACT_2M_5V

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

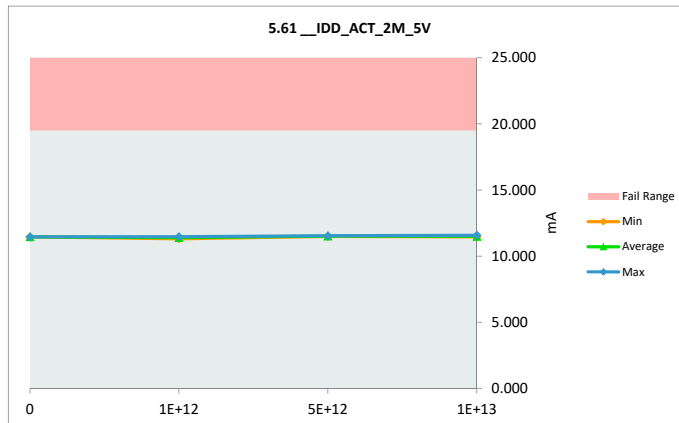
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	11.471	11.456	-0.015
1E+12	129	11.471	11.463	-0.008
1E+12	130	11.306	11.309	0.003
1E+12	131	11.423	11.416	-0.007
5E+12	126	11.551	11.521	-0.030
5E+12	127	11.479	11.491	0.012
5E+12	128	11.533	11.534	0.001
1E+13	123	11.456	11.453	-0.003
1E+13	124	11.566	11.575	0.009
1E+13	125	11.493	11.469	-0.024
Max		11.566	11.575	0.012
Average		11.475	11.469	-0.006
Min		11.306	11.309	-0.030
Std Dev		0.074	0.073	0.014



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	11.456	11.309	11.491	11.453
Average	11.456	11.396	11.515	11.499
Max	11.456	11.463	11.534	11.575
UL	19.500	19.500	19.500	19.500

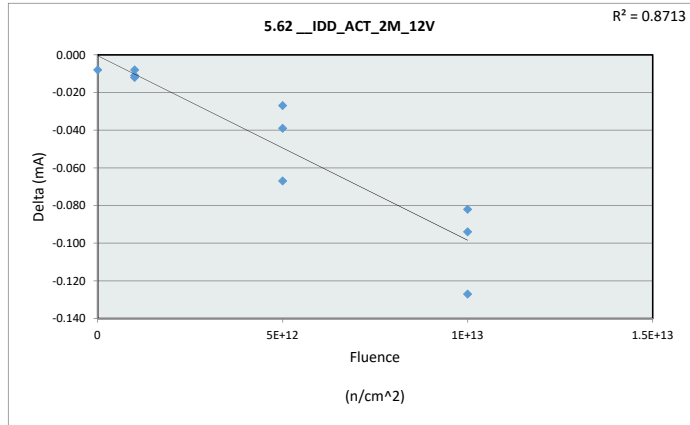


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.62 IDD_ACT_2M_12V

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

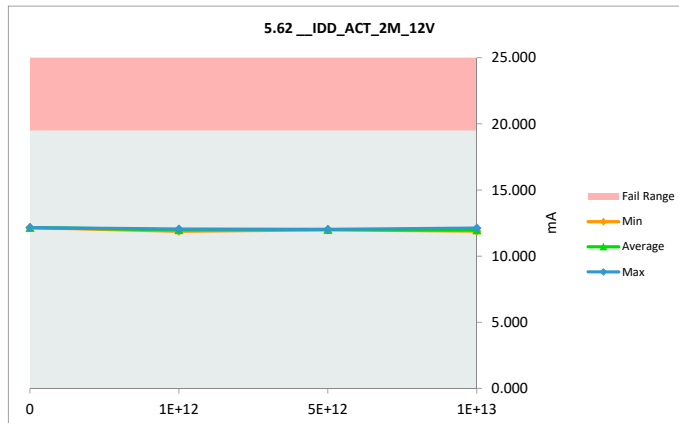
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	12.161	12.153	-0.008
1E+12	129	12.061	12.049	-0.012
1E+12	130	11.886	11.878	-0.008
1E+12	131	12.036	12.025	-0.011
5E+12	126	12.073	12.006	-0.067
5E+12	127	12.007	11.980	-0.027
5E+12	128	12.059	12.020	-0.039
1E+13	123	12.050	11.923	-0.127
1E+13	124	12.202	12.120	-0.082
1E+13	125	11.984	11.890	-0.094
Max		12.202	12.153	-0.008
Average		12.052	12.004	-0.048
Min		11.886	11.878	-0.127
Std Dev		0.088	0.091	0.043



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	12.153	11.878	11.980	11.890
Average	12.153	11.984	12.002	11.978
Max	12.153	12.049	12.020	12.120
UL	19.500	19.500	19.500	19.500

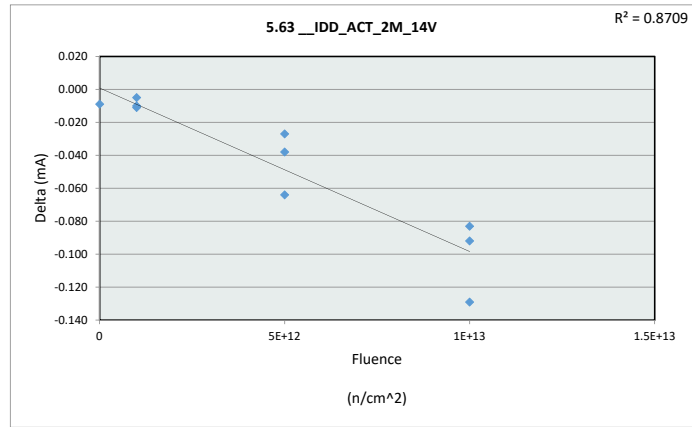


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.63 IDD_ACT_2M_14V

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

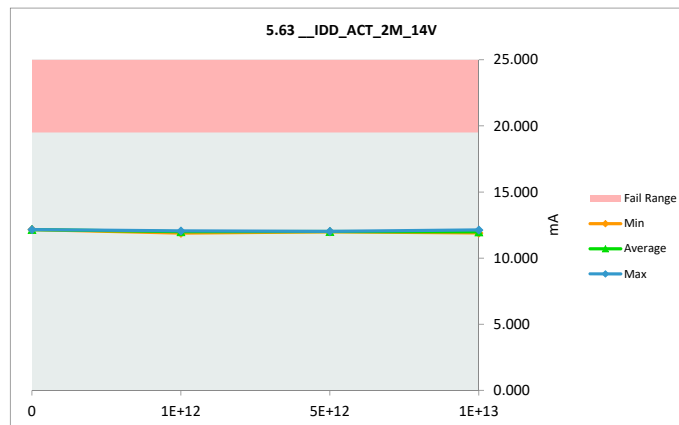
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	12.167	12.158	-0.009
1E+12	129	12.065	12.054	-0.011
1E+12	130	11.891	11.886	-0.005
1E+12	131	12.040	12.030	-0.010
5E+12	126	12.075	12.011	-0.064
5E+12	127	12.013	11.986	-0.027
5E+12	128	12.063	12.025	-0.038
1E+13	123	12.057	11.928	-0.129
1E+13	124	12.208	12.125	-0.083
1E+13	125	11.988	11.896	-0.092
Max		12.208	12.158	-0.005
Average		12.057	12.010	-0.047
Min		11.891	11.886	-0.129
Std Dev		0.088	0.090	0.043



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	12.158	11.886	11.986	11.896
Average	12.158	11.990	12.007	11.983
Max	12.158	12.054	12.025	12.125
UL	19.500	19.500	19.500	19.500

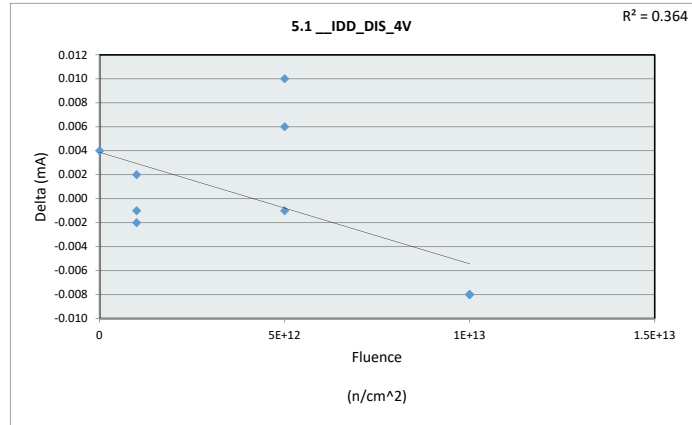


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.1_IDD_DIS_4V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	3	3
Min Limit		

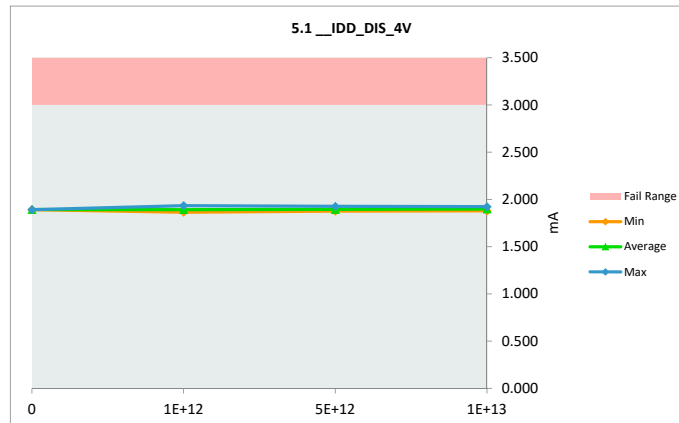
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.888	1.892	0.004
1E+12	129	1.933	1.935	0.002
1E+12	130	1.866	1.865	-0.001
1E+12	131	1.876	1.874	-0.002
5E+12	126	1.927	1.926	-0.001
5E+12	127	1.874	1.880	0.006
5E+12	128	1.866	1.876	0.010
1E+13	123	1.902	1.894	-0.008
1E+13	124	1.931	1.923	-0.008
1E+13	125	1.887	1.879	-0.008
Max		1.933	1.935	0.010
Average		1.895	1.894	-0.001
Min		1.866	1.865	-0.008
Std Dev		0.027	0.025	0.006



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	1.892	1.865	1.876	1.879
Average	1.892	1.891	1.894	1.899
Max	1.892	1.935	1.926	1.923
UL	3.000	3.000	3.000	3.000

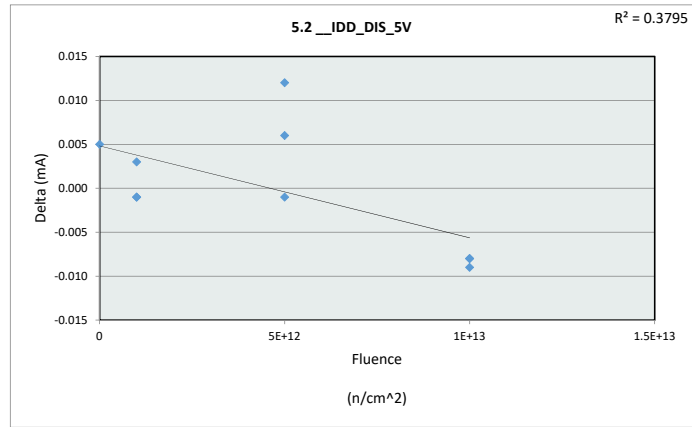


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.2 __IDD_DIS_5V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	3	3
Min Limit		

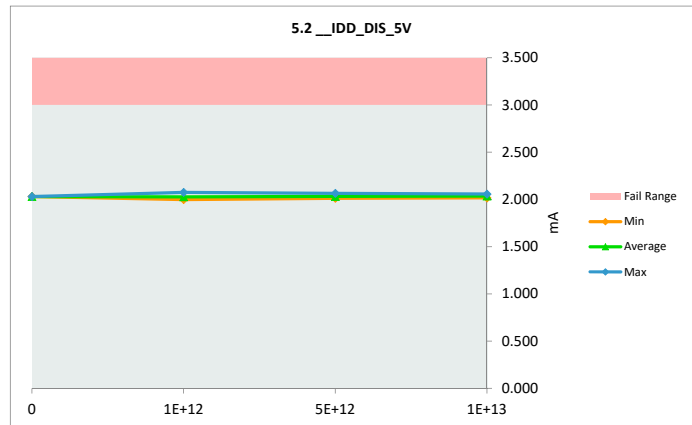
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	2.025	2.030	0.005
1E+12	129	2.071	2.074	0.003
1E+12	130	1.999	1.998	-0.001
1E+12	131	2.012	2.011	-0.001
5E+12	126	2.065	2.064	-0.001
5E+12	127	2.011	2.017	0.006
5E+12	128	2.000	2.012	0.012
1E+13	123	2.041	2.033	-0.008
1E+13	124	2.065	2.057	-0.008
1E+13	125	2.025	2.016	-0.009
Max		2.071	2.074	0.012
Average		2.031	2.031	0.000
Min		1.999	1.998	-0.009
Std Dev		0.028	0.026	0.007



5.2 __IDD_DIS_5V

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	2.030	1.998	2.012	2.016
Average	2.030	2.028	2.031	2.035
Max	2.030	2.074	2.064	2.057
UL	3.000	3.000	3.000	3.000

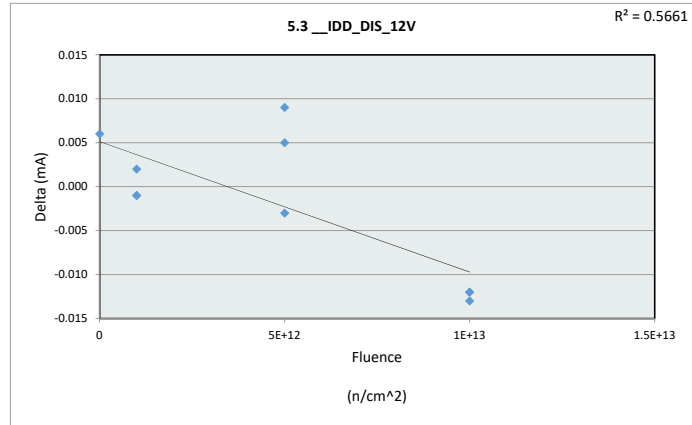


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.3 __IDD_DIS_12V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	3	3
Min Limit		

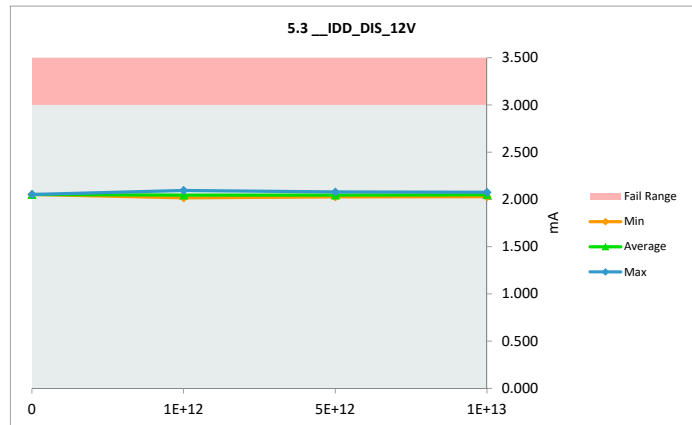
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	2.047	2.053	0.006
1E+12	129	2.093	2.095	0.002
1E+12	130	2.019	2.018	-0.001
1E+12	131	2.028	2.027	-0.001
5E+12	126	2.082	2.079	-0.003
5E+12	127	2.029	2.034	0.005
5E+12	128	2.018	2.027	0.009
1E+13	123	2.057	2.045	-0.012
1E+13	124	2.087	2.075	-0.012
1E+13	125	2.041	2.028	-0.013
Max		2.093	2.095	0.009
Average		2.050	2.048	-0.002
Min		2.018	2.018	-0.013
Std Dev		0.028	0.026	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	2.053	2.018	2.027	2.028
Average	2.053	2.047	2.047	2.049
Max	2.053	2.095	2.079	2.075
UL	3.000	3.000	3.000	3.000

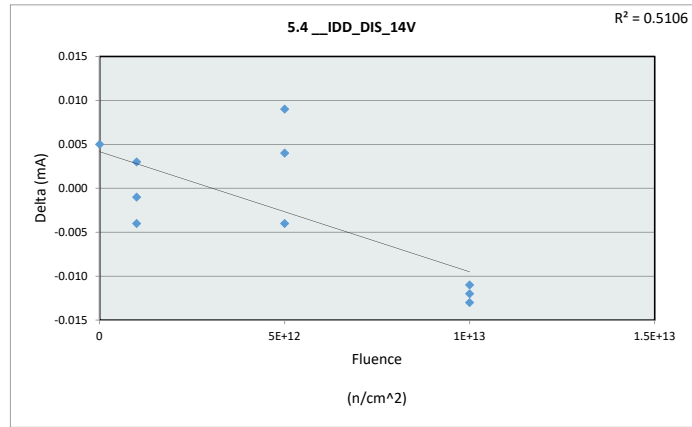


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

5.4 __IDD_DIS_14V

Test Site		
Tester		
Test Number		
Unit	mA	mA
Max Limit	3	3
Min Limit		

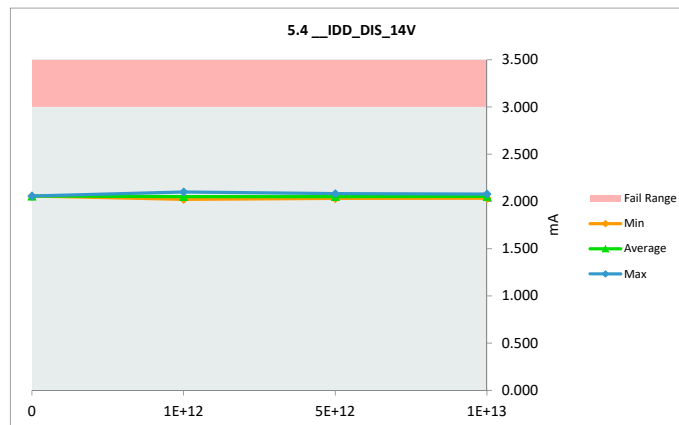
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	2.052	2.057	0.005
1E+12	129	2.097	2.100	0.003
1E+12	130	2.023	2.022	-0.001
1E+12	131	2.034	2.030	-0.004
5E+12	126	2.086	2.082	-0.004
5E+12	127	2.034	2.038	0.004
5E+12	128	2.022	2.031	0.009
1E+13	123	2.061	2.049	-0.012
1E+13	124	2.091	2.078	-0.013
1E+13	125	2.044	2.033	-0.011
Max		2.097	2.100	0.009
Average		2.054	2.052	-0.002
Min		2.022	2.022	-0.013
Std Dev		0.028	0.026	0.008



5.4 __IDD_DIS_14V

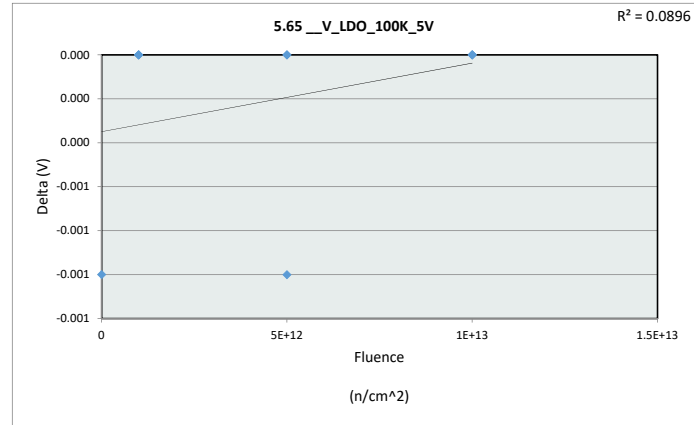
Test Site		
Tester		
Test Number		
Max Limit	3	mA
Min Limit		mA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	2.057	2.022	2.031	2.033
Average	2.057	2.051	2.050	2.053
Max	2.057	2.100	2.082	2.078
UL	3.000	3.000	3.000	3.000

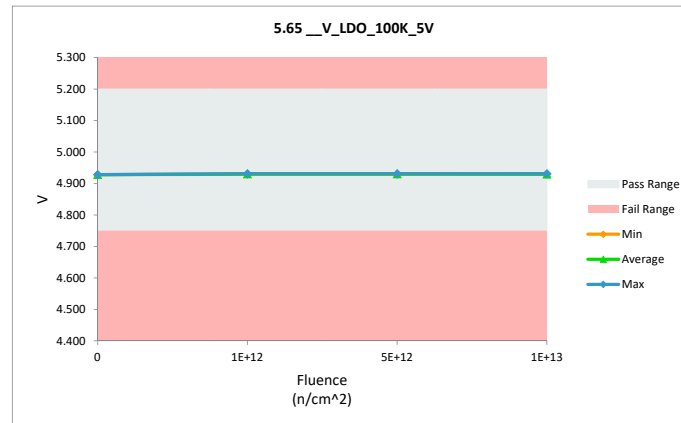


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	4.929	4.928	-0.001
1E+12	129	4.930	4.930	0.000
1E+12	130	4.931	4.931	0.000
1E+12	131	4.929	4.929	0.000
5E+12	126	4.929	4.929	0.000
5E+12	127	4.931	4.930	-0.001
5E+12	128	4.931	4.931	0.000
1E+13	123	4.929	4.929	0.000
1E+13	124	4.929	4.929	0.000
1E+13	125	4.931	4.931	0.000
Max		4.931	4.931	0.000
Average		4.930	4.930	0.000
Min		4.929	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	4.929	4.929	4.929
Average	4.928	4.930	4.930	4.930
Max	4.928	4.931	4.931	4.931
UL	5.200	5.200	5.200	5.200

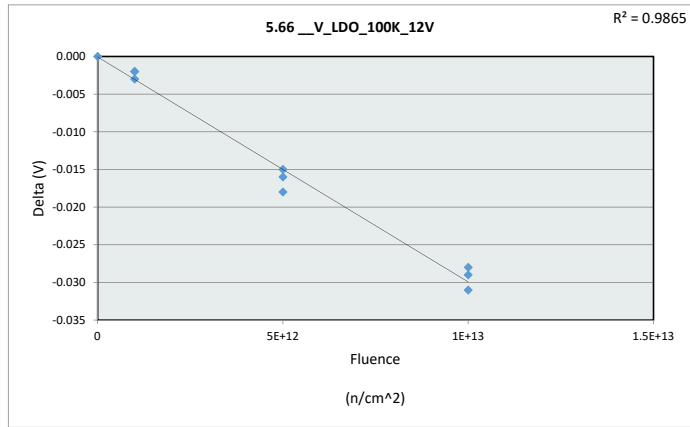


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

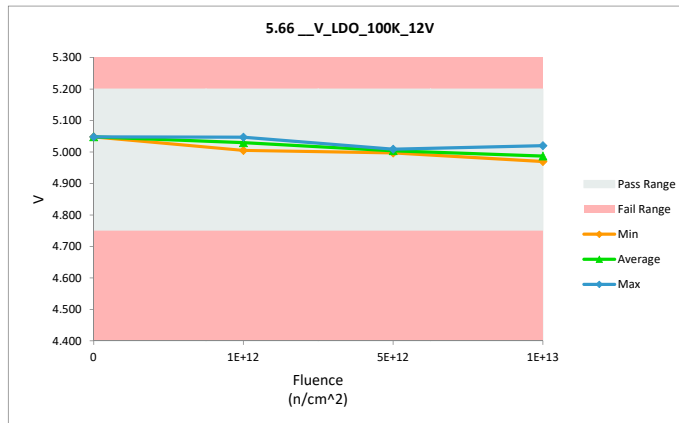
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	5.048	5.048	0.000
1E+12	129	5.049	5.047	-0.002
1E+12	130	5.039	5.036	-0.003
1E+12	131	5.007	5.005	-0.002
5E+12	126	5.013	4.997	-0.016
5E+12	127	5.023	5.005	-0.018
5E+12	128	5.024	5.009	-0.015
1E+13	123	5.001	4.970	-0.031
1E+13	124	5.048	5.020	-0.028
1E+13	125	5.001	4.972	-0.029
Max		5.049	5.048	0.000
Average		5.025	5.011	-0.014
Min		5.001	4.970	-0.031
Std Dev		0.020	0.028	0.012



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	5.048	5.005	4.997	4.970
Average	5.048	5.029	5.004	4.987
Max	5.048	5.047	5.009	5.020
UL	5.200	5.200	5.200	5.200

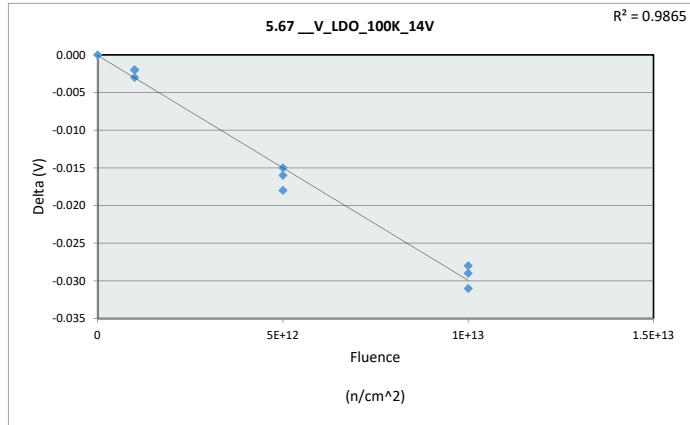


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

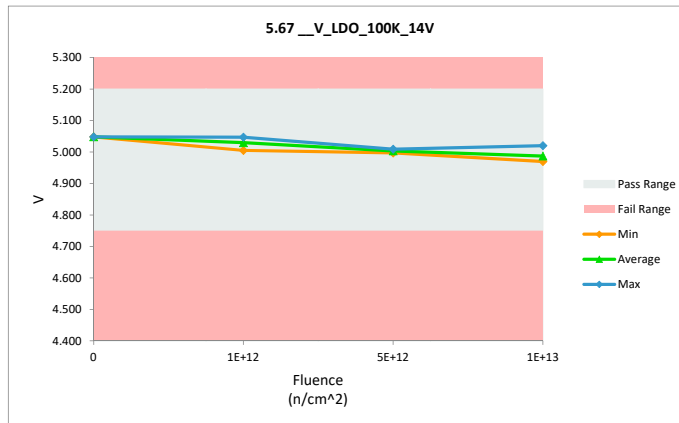
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	5.048	5.048	0.000
1E+12	129	5.049	5.047	-0.002
1E+12	130	5.039	5.036	-0.003
1E+12	131	5.007	5.005	-0.002
5E+12	126	5.013	4.997	-0.016
5E+12	127	5.022	5.004	-0.018
5E+12	128	5.024	5.009	-0.015
1E+13	123	5.001	4.970	-0.031
1E+13	124	5.048	5.020	-0.028
1E+13	125	5.001	4.972	-0.029
Max		5.049	5.048	0.000
Average		5.025	5.011	-0.014
Min		5.001	4.970	-0.031
Std Dev		0.020	0.028	0.012



5.67_V_LDO_100K_14V

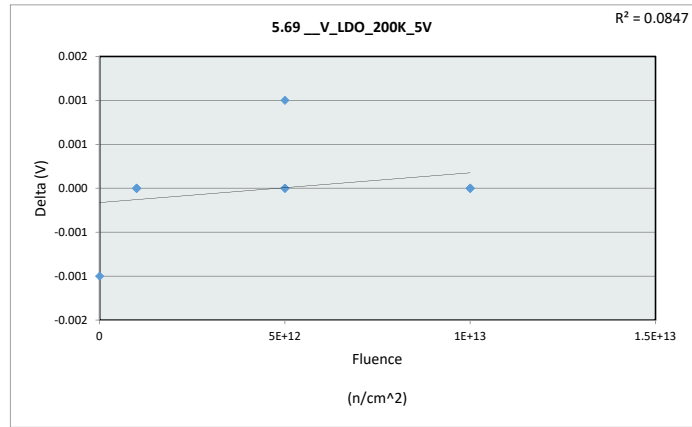
Test Site		
Tester		
Test Number		
Max Limit	5.2	V
Min Limit	4.75	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.048	5.005	4.997	4.970
Average	5.048	5.029	5.003	4.987
Max	5.048	5.047	5.009	5.020
UL	5.200	5.200	5.200	5.200

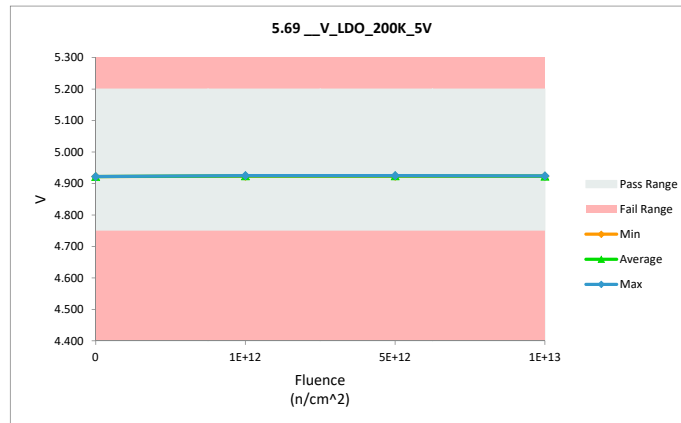


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	4.923	4.922	-0.001
1E+12	129	4.924	4.924	0.000
1E+12	130	4.925	4.925	0.000
1E+12	131	4.923	4.923	0.000
5E+12	126	4.923	4.923	0.000
5E+12	127	4.924	4.924	0.000
5E+12	128	4.924	4.925	0.001
1E+13	123	4.923	4.923	0.000
1E+13	124	4.923	4.923	0.000
1E+13	125	4.924	4.924	0.000
Max		4.925	4.925	0.001
Average		4.924	4.924	0.000
Min		4.923	4.922	-0.001
Std Dev		0.001	0.001	0.000

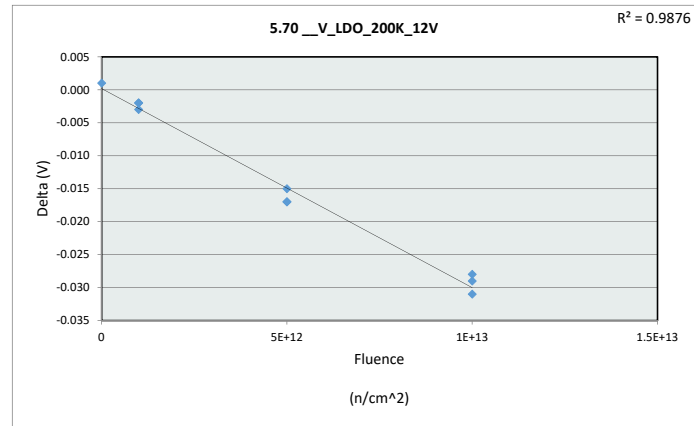


5.69 __V_LDO_200K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.922	4.923	4.923	4.923
Average	4.922	4.924	4.924	4.923
Max	4.922	4.925	4.925	4.924
UL	5.200	5.200	5.200	5.200

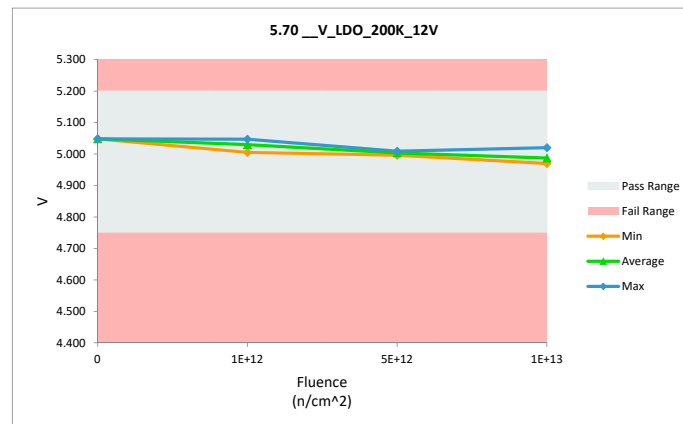


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.047	5.048	0.001
1E+12	129	5.049	5.047	-0.002
1E+12	130	5.039	5.036	-0.003
1E+12	131	5.007	5.005	-0.002
5E+12	126	5.013	4.996	-0.017
5E+12	127	5.022	5.005	-0.017
5E+12	128	5.024	5.009	-0.015
1E+13	123	5.001	4.970	-0.031
1E+13	124	5.048	5.020	-0.028
1E+13	125	5.001	4.972	-0.029
Max		5.049	5.048	0.001
Average		5.025	5.011	-0.014
Min		5.001	4.970	-0.031
Std Dev		0.019	0.028	0.012

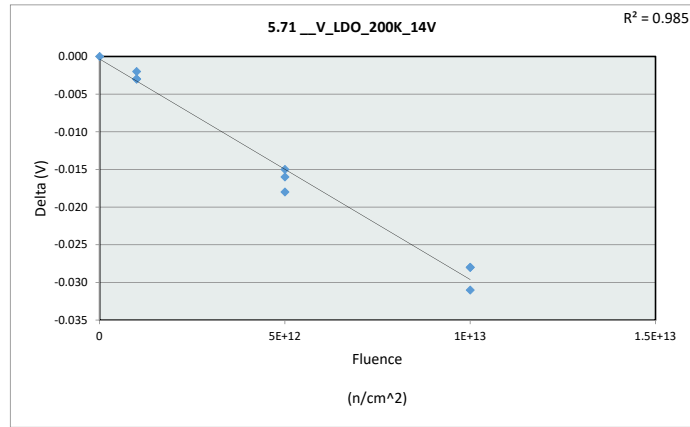


5.70_V_LDO_200K_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.048	5.005	4.996	4.970
Average	5.048	5.029	5.003	4.987
Max	5.048	5.047	5.009	5.020
UL	5.200	5.200	5.200	5.200

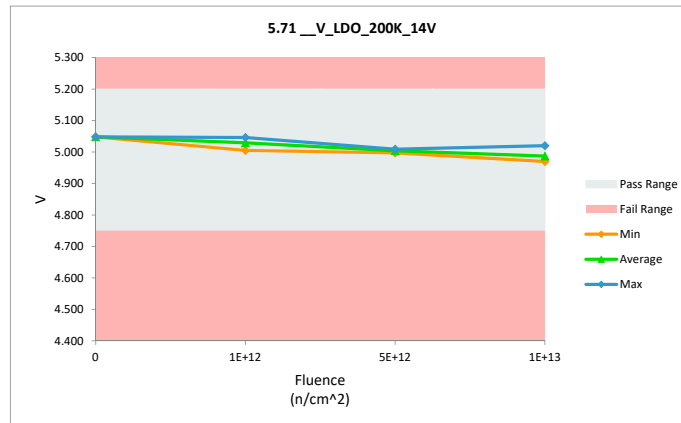


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.048	5.048	0.000
1E+12	129	5.049	5.046	-0.003
1E+12	130	5.039	5.036	-0.003
1E+12	131	5.007	5.005	-0.002
5E+12	126	5.013	4.997	-0.016
5E+12	127	5.023	5.005	-0.018
5E+12	128	5.024	5.009	-0.015
1E+13	123	5.001	4.970	-0.031
1E+13	124	5.048	5.020	-0.028
1E+13	125	5.000	4.972	-0.028
Max		5.049	5.048	0.000
Average		5.025	5.011	-0.014
Min		5.000	4.970	-0.031
Std Dev		0.020	0.027	0.012

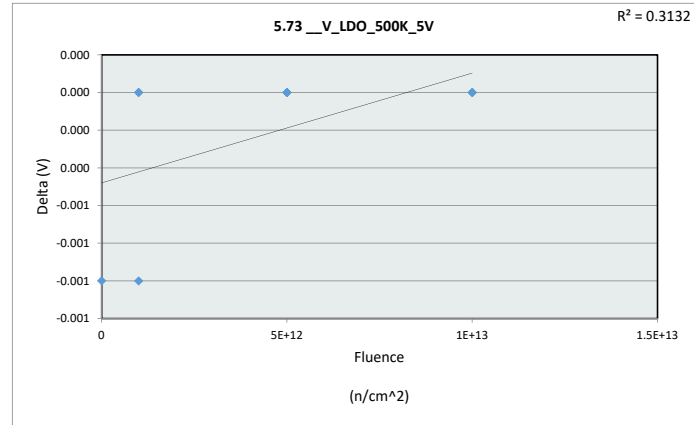


5.71_V_LDO_200K_14V					
Test Site					
Tester					
Test Number					
Max Limit		5.2	V		
Min Limit		4.75	V		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		4.750	4.750	4.750	4.750
Min		5.048	5.005	4.997	4.970
Average		5.048	5.029	5.004	4.987
Max		5.048	5.046	5.009	5.020
UL		5.200	5.200	5.200	5.200

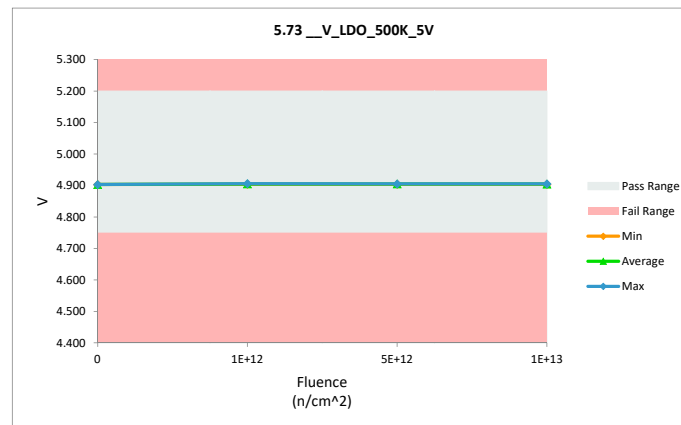


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	4.904	4.903	-0.001
1E+12	129	4.905	4.904	-0.001
1E+12	130	4.906	4.906	0.000
1E+12	131	4.904	4.904	0.000
5E+12	126	4.904	4.904	0.000
5E+12	127	4.905	4.905	0.000
5E+12	128	4.905	4.905	0.000
1E+13	123	4.904	4.904	0.000
1E+13	124	4.904	4.904	0.000
1E+13	125	4.905	4.905	0.000
Max		4.906	4.906	0.000
Average		4.905	4.904	0.000
Min		4.904	4.903	-0.001
Std Dev		0.001	0.001	0.000

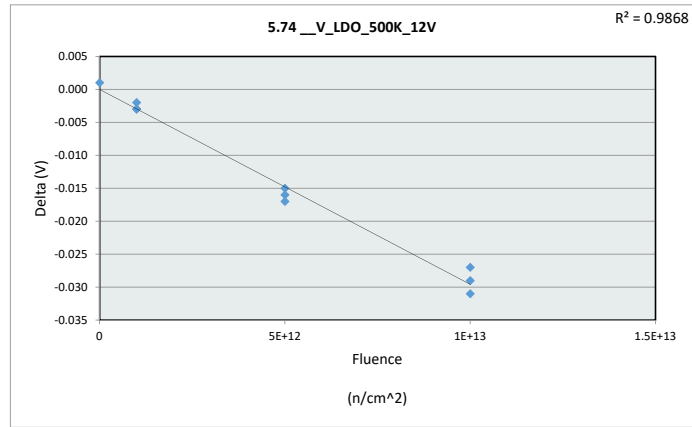


5.73 __V_LDO_500K_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.903	4.904	4.904	4.904
Average	4.903	4.905	4.905	4.904
Max	4.903	4.906	4.905	4.905
UL	5.200	5.200	5.200	5.200

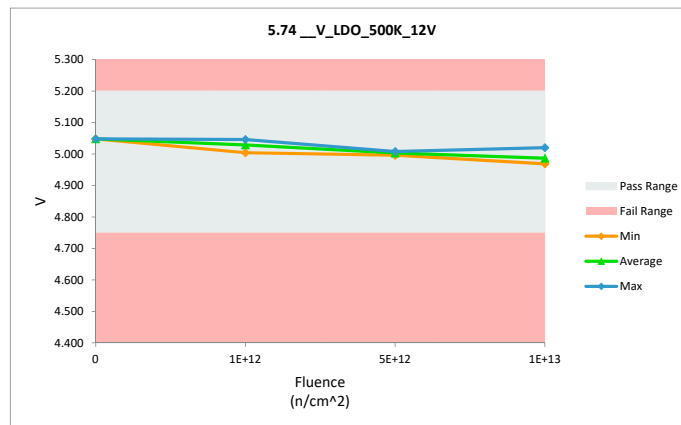


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.047	5.048	0.001
1E+12	129	5.048	5.046	-0.002
1E+12	130	5.039	5.036	-0.003
1E+12	131	5.007	5.004	-0.003
5E+12	126	5.012	4.996	-0.016
5E+12	127	5.022	5.005	-0.017
5E+12	128	5.023	5.008	-0.015
1E+13	123	5.000	4.969	-0.031
1E+13	124	5.047	5.020	-0.027
1E+13	125	5.000	4.971	-0.029
Max		5.048	5.048	0.001
Average		5.024	5.010	-0.014
Min		5.000	4.969	-0.031
Std Dev		0.020	0.028	0.012

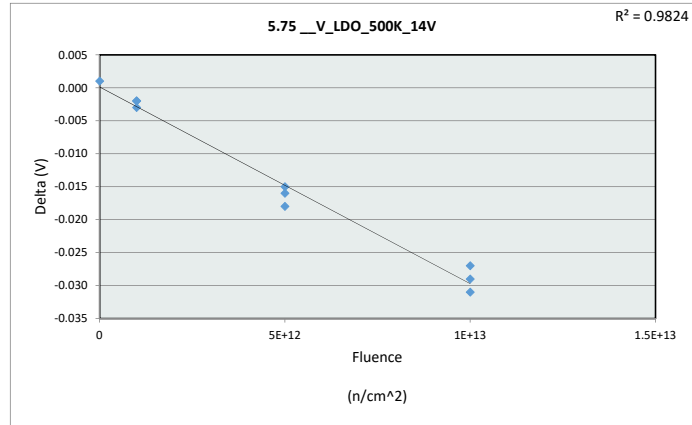


5.74_V_LDO_500K_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.048	5.004	4.996	4.969
Average	5.048	5.029	5.003	4.987
Max	5.048	5.046	5.008	5.020
UL	5.200	5.200	5.200	5.200

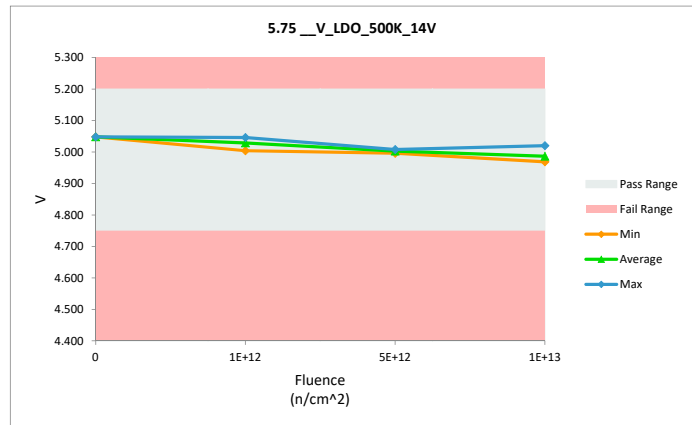


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.047	5.048	0.001
1E+12	129	5.048	5.046	-0.002
1E+12	130	5.038	5.036	-0.002
1E+12	131	5.007	5.004	-0.003
5E+12	126	5.012	4.996	-0.016
5E+12	127	5.022	5.004	-0.018
5E+12	128	5.023	5.008	-0.015
1E+13	123	5.000	4.969	-0.031
1E+13	124	5.047	5.020	-0.027
1E+13	125	5.000	4.971	-0.029
Max		5.048	5.048	0.001
Average		5.024	5.010	-0.014
Min		5.000	4.969	-0.031
Std Dev		0.019	0.028	0.012

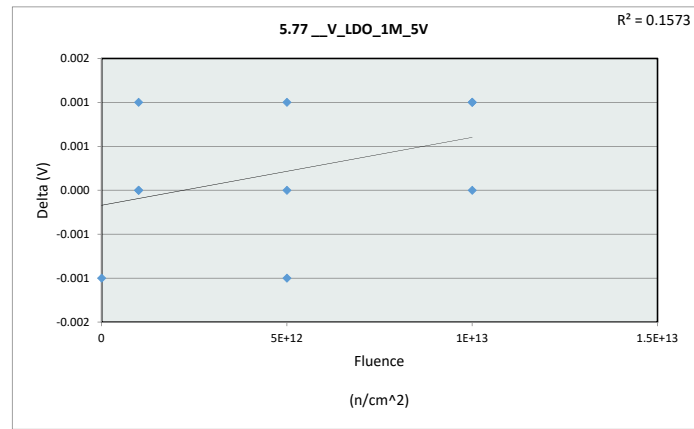


5.75_V_LDO_500K_14V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.048	5.004	4.996	4.969
Average	5.048	5.029	5.003	4.987
Max	5.048	5.046	5.008	5.020
UL	5.200	5.200	5.200	5.200

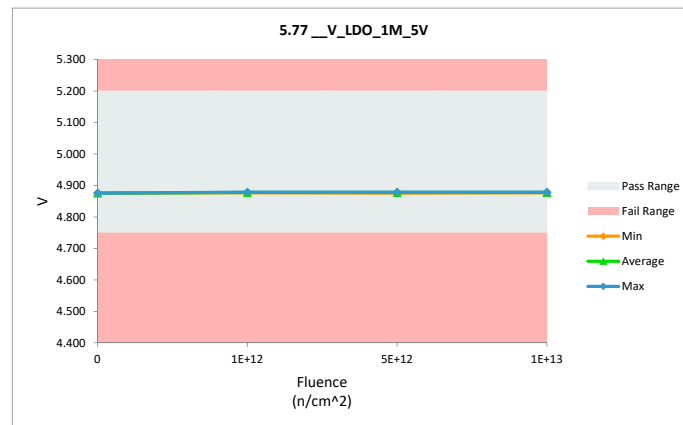


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	4.877	4.876	-0.001
1E+12	129	4.877	4.877	0.000
1E+12	130	4.879	4.879	0.000
1E+12	131	4.877	4.878	0.001
5E+12	126	4.877	4.876	-0.001
5E+12	127	4.878	4.878	0.000
5E+12	128	4.878	4.879	0.001
1E+13	123	4.877	4.877	0.000
1E+13	124	4.877	4.878	0.001
1E+13	125	4.878	4.879	0.001
Max		4.879	4.879	0.001
Average		4.877	4.878	0.000
Min		4.877	4.876	-0.001
Std Dev		0.001	0.001	0.001

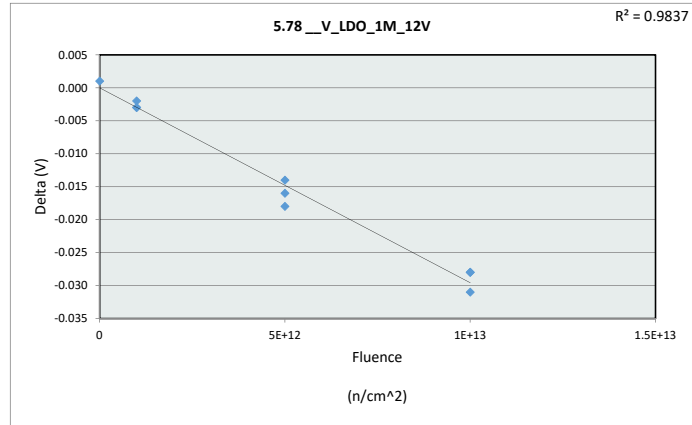


5.77 __V_LDO_1M_5V				
Test Site				
Tester				
Test Number				
Max Limit		5.2	V	
Min Limit		4.75	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	4.876	4.877	4.876	4.877
Average	4.876	4.878	4.878	4.878
Max	4.876	4.879	4.879	4.879
UL	5.200	5.200	5.200	5.200

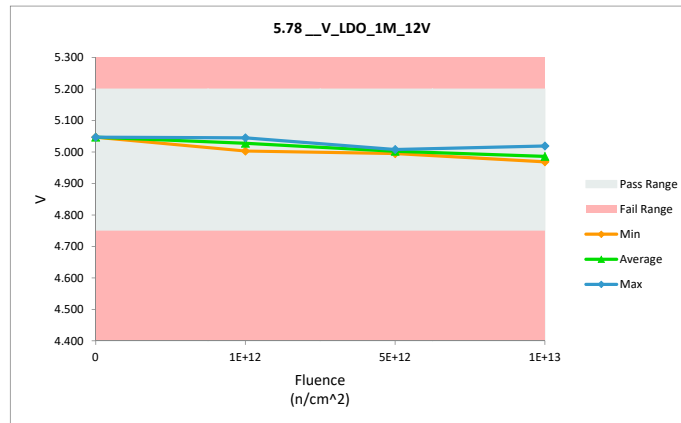


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.046	5.047	0.001
1E+12	129	5.047	5.045	-0.002
1E+12	130	5.038	5.035	-0.003
1E+12	131	5.006	5.003	-0.003
5E+12	126	5.011	4.995	-0.016
5E+12	127	5.022	5.004	-0.018
5E+12	128	5.022	5.008	-0.014
1E+13	123	5.000	4.969	-0.031
1E+13	124	5.047	5.019	-0.028
1E+13	125	4.999	4.971	-0.028
Max		5.047	5.047	0.001
Average		5.024	5.010	-0.014
Min		4.999	4.969	-0.031
Std Dev		0.020	0.028	0.012

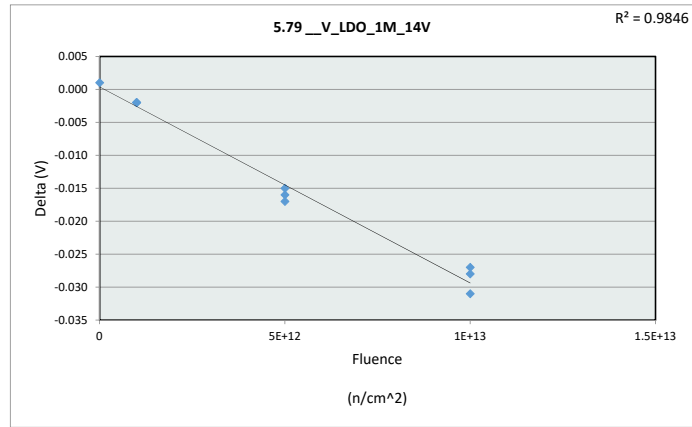


5.78_V_LDO_1M_12V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.75	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.047	5.003	4.995	4.969
Average	5.047	5.028	5.002	4.986
Max	5.047	5.045	5.008	5.019
UL	5.200	5.200	5.200	5.200

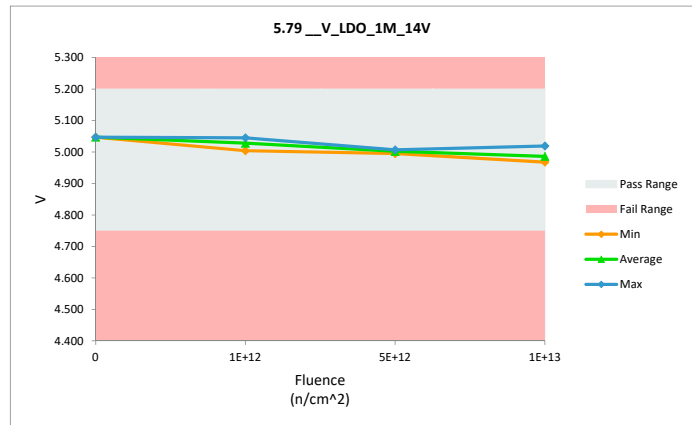


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.046	5.047	0.001
1E+12	129	5.047	5.045	-0.002
1E+12	130	5.037	5.035	-0.002
1E+12	131	5.006	5.004	-0.002
5E+12	126	5.011	4.995	-0.016
5E+12	127	5.021	5.004	-0.017
5E+12	128	5.022	5.007	-0.015
1E+13	123	4.999	4.968	-0.031
1E+13	124	5.046	5.019	-0.027
1E+13	125	4.999	4.971	-0.028
Max		5.047	5.047	0.001
Average		5.023	5.010	-0.014
Min		4.999	4.968	-0.031
Std Dev		0.019	0.028	0.012

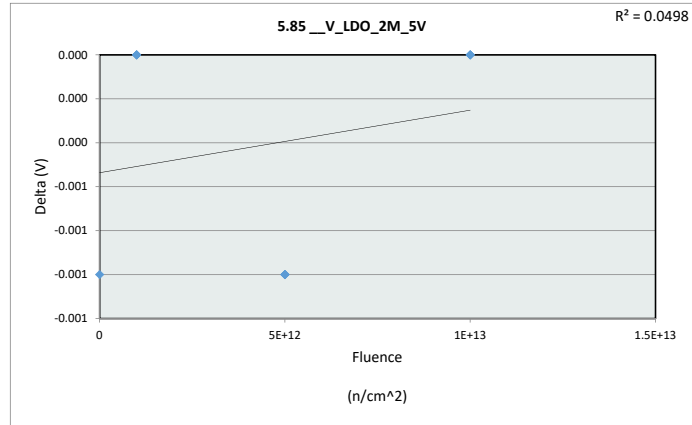


5.79 __V_LDO_1M_14V				
Test Site				
Tester				
Test Number				
Max Limit		5.2	V	
Min Limit		4.75	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.750	4.750	4.750	4.750
Min	5.047	5.004	4.995	4.968
Average	5.047	5.028	5.002	4.986
Max	5.047	5.045	5.007	5.019
UL	5.200	5.200	5.200	5.200

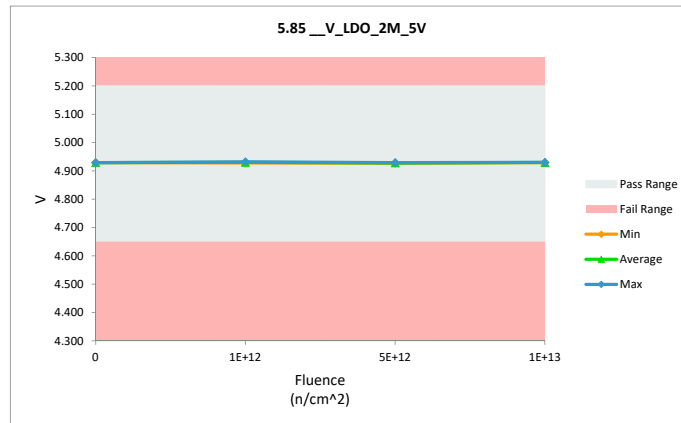


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	4.930	4.929	-0.001
1E+12	129	4.928	4.928	0.000
1E+12	130	4.932	4.932	0.000
1E+12	131	4.931	4.931	0.000
5E+12	126	4.928	4.927	-0.001
5E+12	127	4.930	4.929	-0.001
5E+12	128	4.930	4.929	-0.001
1E+13	123	4.929	4.929	0.000
1E+13	124	4.929	4.929	0.000
1E+13	125	4.930	4.930	0.000
Max		4.932	4.932	0.000
Average		4.930	4.929	0.000
Min		4.928	4.927	-0.001
Std Dev		0.001	0.001	0.001

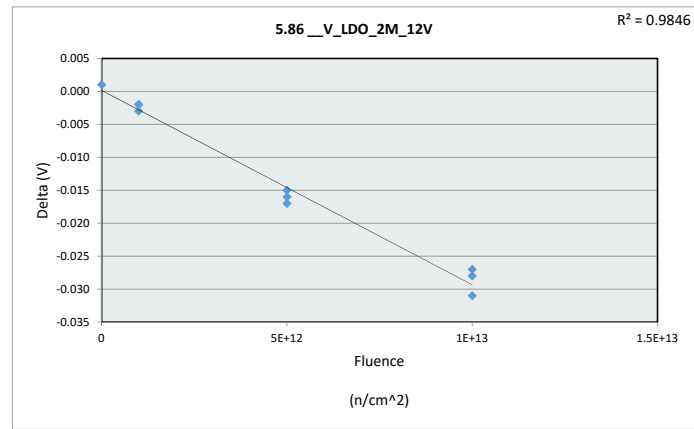


5.85 __V_LDO_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit	5.2	V		
Min Limit	4.65	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	4.929	4.928	4.927	4.929
Average	4.929	4.930	4.928	4.929
Max	4.929	4.932	4.929	4.930
UL	5.200	5.200	5.200	5.200

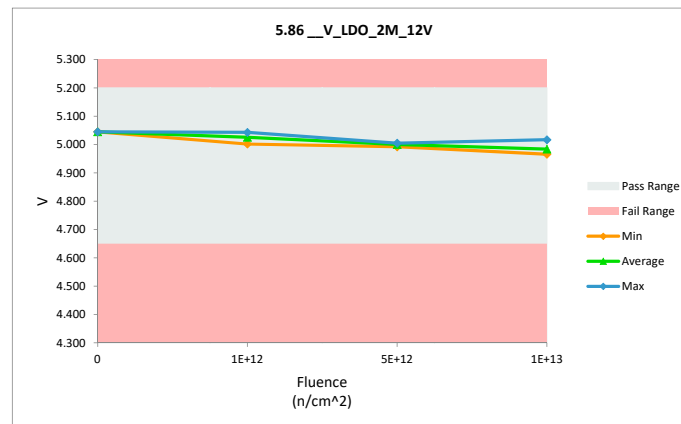


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.044	5.045	0.001
1E+12	129	5.045	5.043	-0.002
1E+12	130	5.035	5.032	-0.003
1E+12	131	5.004	5.002	-0.002
5E+12	126	5.008	4.992	-0.016
5E+12	127	5.020	5.003	-0.017
5E+12	128	5.020	5.005	-0.015
1E+13	123	4.997	4.966	-0.031
1E+13	124	5.044	5.017	-0.027
1E+13	125	4.997	4.969	-0.028
Max		5.045	5.045	0.001
Average		5.021	5.007	-0.014
Min		4.997	4.966	-0.031
Std Dev		0.020	0.028	0.012

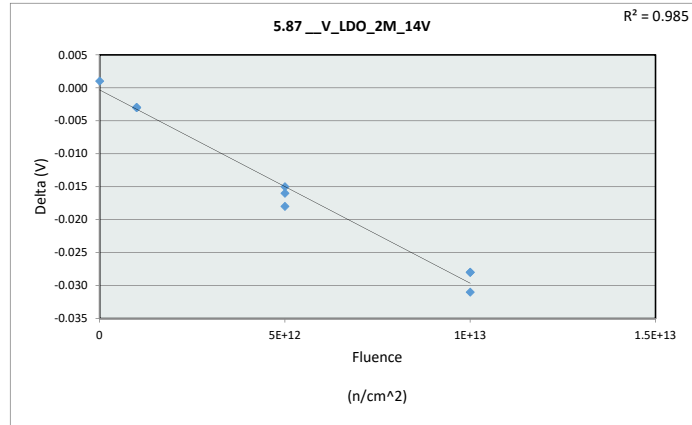


5.86 __V_LDO_2M_12V					
Test Site					
Tester					
Test Number					
Max Limit		5.2	V		
Min Limit		4.65	V		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		4.650	4.650	4.650	4.650
Min		5.045	5.002	4.992	4.966
Average		5.045	5.026	5.000	4.984
Max		5.045	5.043	5.005	5.017
UL		5.200	5.200	5.200	5.200

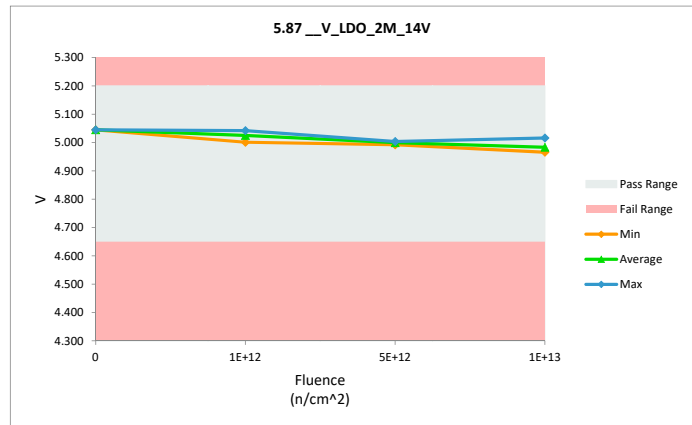


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	5.044	5.045	0.001
1E+12	129	5.045	5.042	-0.003
1E+12	130	5.035	5.032	-0.003
1E+12	131	5.004	5.001	-0.003
5E+12	126	5.008	4.992	-0.016
5E+12	127	5.020	5.002	-0.018
5E+12	128	5.019	5.004	-0.015
1E+13	123	4.997	4.966	-0.031
1E+13	124	5.044	5.016	-0.028
1E+13	125	4.997	4.969	-0.028
Max		5.045	5.045	0.001
Average		5.021	5.007	-0.014
Min		4.997	4.966	-0.031
Std Dev		0.020	0.027	0.012

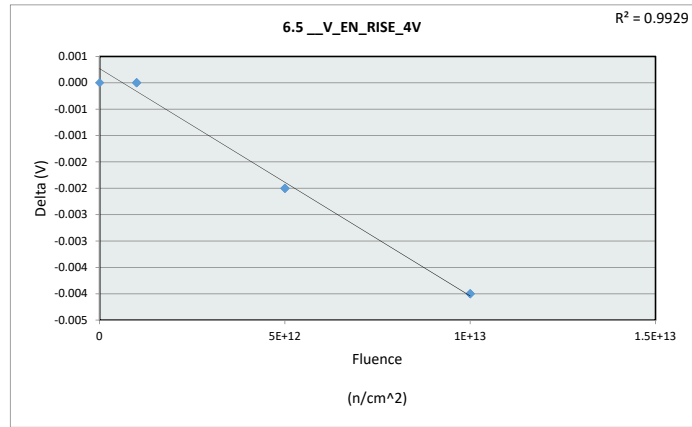


5.87 __V_LDO_2M_14V				
Test Site				
Tester				
Test Number				
Max Limit		5.2	V	
Min Limit		4.65	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	4.650	4.650	4.650	4.650
Min	5.045	5.001	4.992	4.966
Average	5.045	5.025	4.999	4.984
Max	5.045	5.042	5.004	5.016
UL	5.200	5.200	5.200	5.200

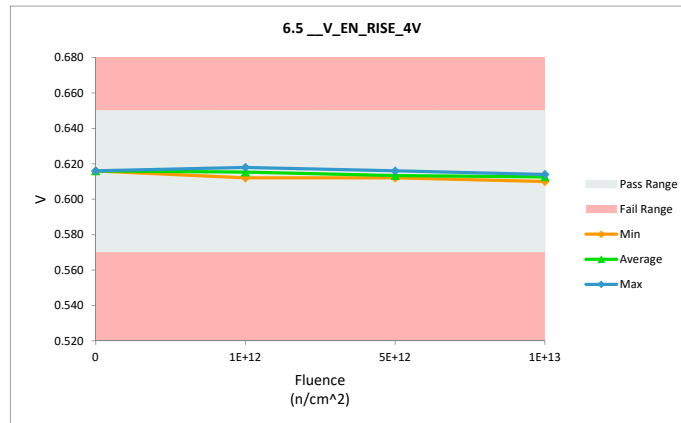


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.616	0.616	0.000
1E+12	129	0.618	0.618	0.000
1E+12	130	0.612	0.612	0.000
1E+12	131	0.616	0.616	0.000
5E+12	126	0.614	0.612	-0.002
5E+12	127	0.614	0.612	-0.002
5E+12	128	0.618	0.616	-0.002
1E+13	123	0.618	0.614	-0.004
1E+13	124	0.614	0.610	-0.004
1E+13	125	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	0.002

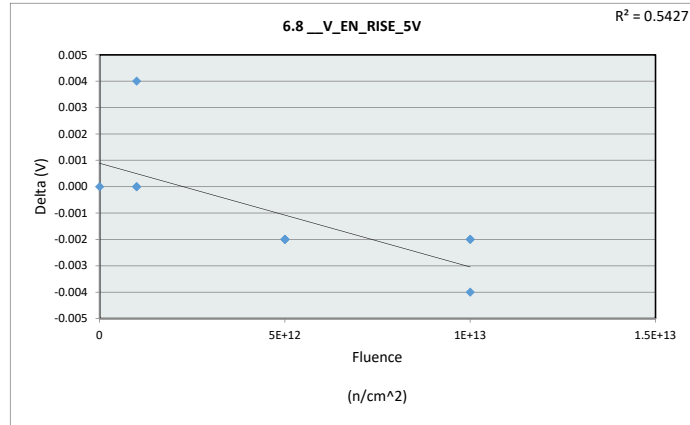


6.5 __V_EN_RISE_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.616	0.612	0.612	0.610
Average	0.616	0.615	0.613	0.613
Max	0.616	0.618	0.616	0.614
UL	0.650	0.650	0.650	0.650

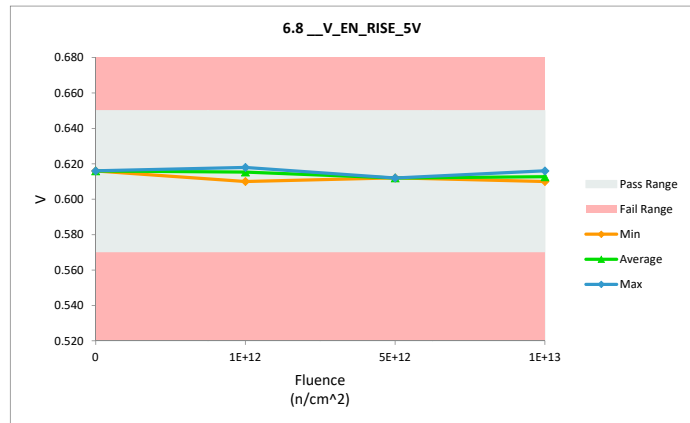


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.616	0.616	0.000
1E+12	129	0.618	0.618	0.000
1E+12	130	0.610	0.610	0.000
1E+12	131	0.614	0.618	0.004
5E+12	126	0.614	0.612	-0.002
5E+12	127	0.614	0.612	-0.002
5E+12	128	0.614	0.612	-0.002
1E+13	123	0.614	0.610	-0.004
1E+13	124	0.614	0.612	-0.002
1E+13	125	0.618	0.616	-0.002
Max		0.618	0.618	0.004
Average		0.615	0.614	-0.001
Min		0.610	0.610	-0.004
Std Dev		0.002	0.003	0.002

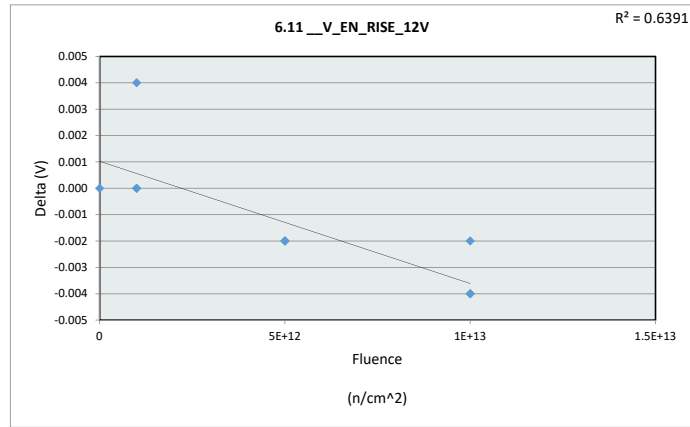


6.8 __V_EN_RISE_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.616	0.610	0.612	0.610
Average	0.616	0.615	0.612	0.613
Max	0.616	0.618	0.612	0.616
UL	0.650	0.650	0.650	0.650

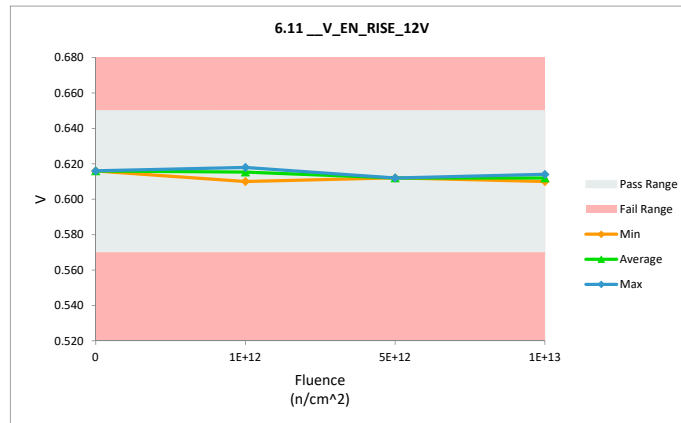


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.616	0.616	0.000
1E+12	129	0.618	0.618	0.000
1E+12	130	0.610	0.610	0.000
1E+12	131	0.614	0.618	0.004
5E+12	126	0.614	0.612	-0.002
5E+12	127	0.614	0.612	-0.002
5E+12	128	0.614	0.612	-0.002
1E+13	123	0.614	0.610	-0.004
1E+13	124	0.614	0.612	-0.002
1E+13	125	0.618	0.614	-0.004
Max		0.618	0.618	0.004
Average		0.615	0.613	-0.001
Min		0.610	0.610	-0.004
Std Dev		0.002	0.003	0.002

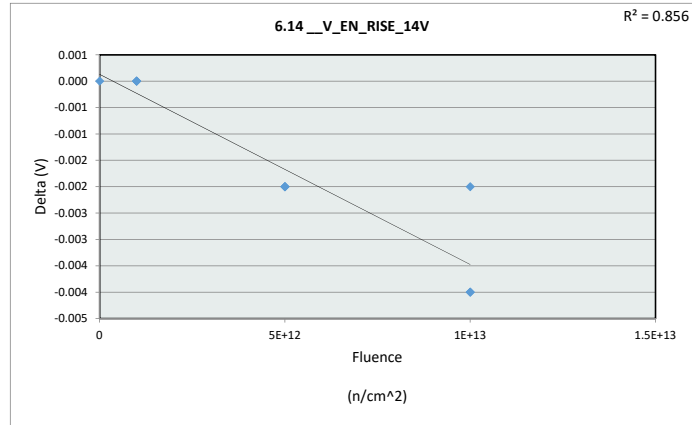


6.11 __V_EN_RISE_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.616	0.610	0.612	0.610
Average	0.616	0.615	0.612	0.612
Max	0.616	0.618	0.612	0.614
UL	0.650	0.650	0.650	0.650

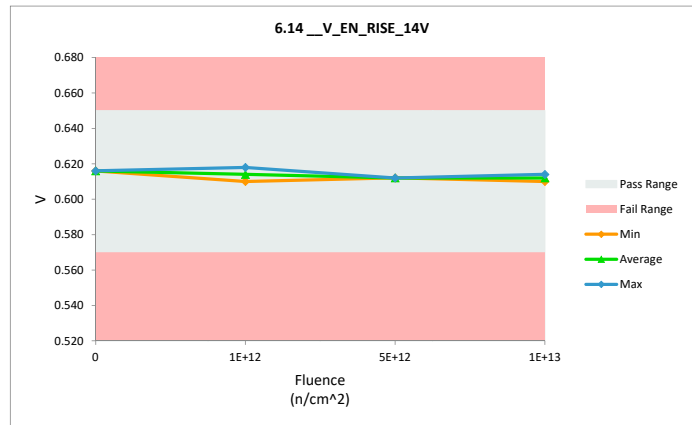


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.616	0.616	0.000
1E+12	129	0.618	0.618	0.000
1E+12	130	0.610	0.610	0.000
1E+12	131	0.614	0.614	0.000
5E+12	126	0.614	0.612	-0.002
5E+12	127	0.614	0.612	-0.002
5E+12	128	0.614	0.612	-0.002
1E+13	123	0.614	0.610	-0.004
1E+13	124	0.614	0.612	-0.002
1E+13	125	0.618	0.614	-0.004
Max		0.618	0.618	0.000
Average		0.615	0.613	-0.002
Min		0.610	0.610	-0.004
Std Dev		0.002	0.003	0.002

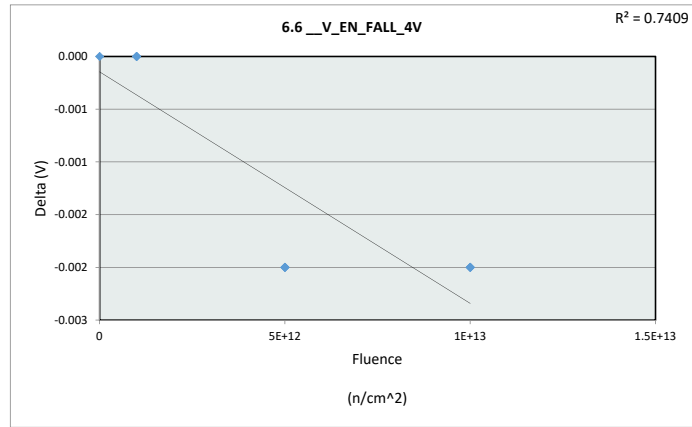


6.14 __V_EN_RISE_14V				
Test Site				
Tester				
Test Number				
Max Limit	0.65	V		
Min Limit	0.57	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.616	0.610	0.612	0.610
Average	0.616	0.614	0.612	0.612
Max	0.616	0.618	0.612	0.614
UL	0.650	0.650	0.650	0.650

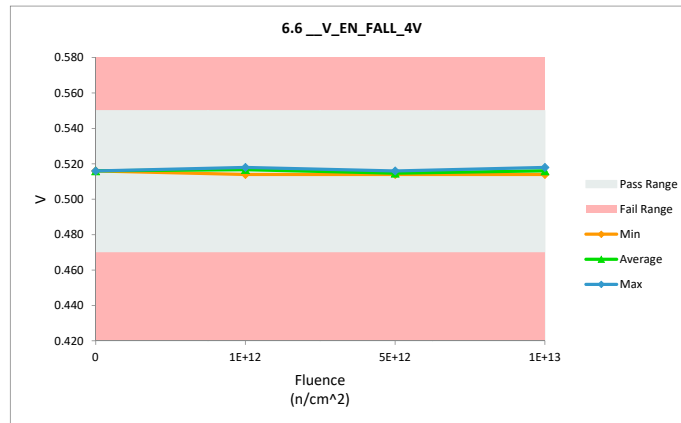


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.516	0.516	0.000
1E+12	129	0.518	0.518	0.000
1E+12	130	0.514	0.514	0.000
1E+12	131	0.518	0.518	0.000
5E+12	126	0.516	0.514	-0.002
5E+12	127	0.516	0.514	-0.002
5E+12	128	0.518	0.516	-0.002
1E+13	123	0.516	0.514	-0.002
1E+13	124	0.518	0.516	-0.002
1E+13	125	0.520	0.518	-0.002
Max		0.520	0.518	0.000
Average		0.517	0.516	-0.001
Min		0.514	0.514	-0.002
Std Dev		0.002	0.002	0.001

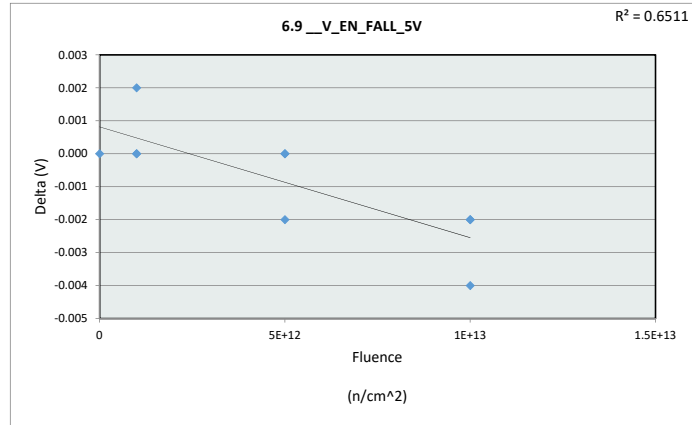


6.6 __V_EN_FALL_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.516	0.514	0.514	0.514
Average	0.516	0.517	0.515	0.516
Max	0.516	0.518	0.516	0.518
UL	0.550	0.550	0.550	0.550

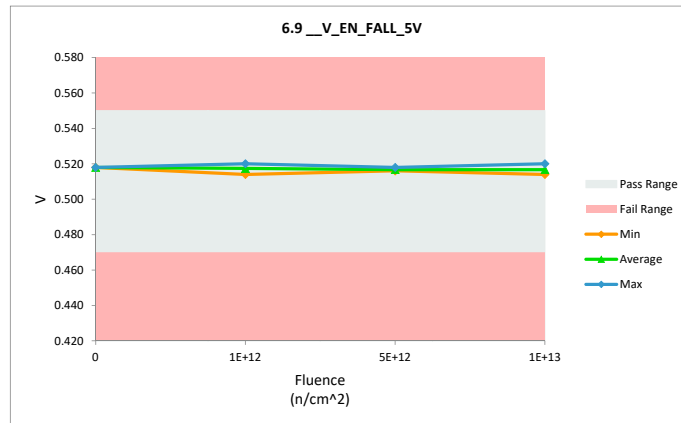


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.518	0.518	0.000
1E+12	129	0.518	0.518	0.000
1E+12	130	0.514	0.514	0.000
1E+12	131	0.518	0.520	0.002
5E+12	126	0.516	0.516	0.000
5E+12	127	0.518	0.516	-0.002
5E+12	128	0.518	0.518	0.000
1E+13	123	0.518	0.514	-0.004
1E+13	124	0.518	0.516	-0.002
1E+13	125	0.522	0.520	-0.002
Max		0.522	0.520	0.002
Average		0.518	0.517	-0.001
Min		0.514	0.514	-0.004
Std Dev		0.002	0.002	0.002

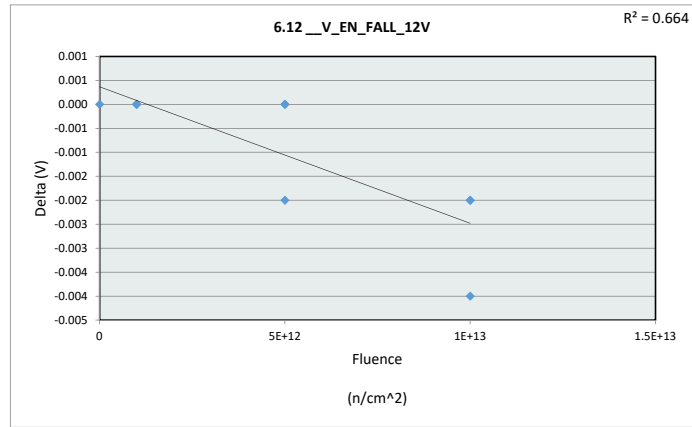


6.9 __V_EN_FALL_5V				
Test Site				
Tester				
Test Number				
Max Limit	0.55	V		
Min Limit	0.47	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.518	0.514	0.516	0.514
Average	0.518	0.517	0.517	0.517
Max	0.518	0.520	0.518	0.520
UL	0.550	0.550	0.550	0.550

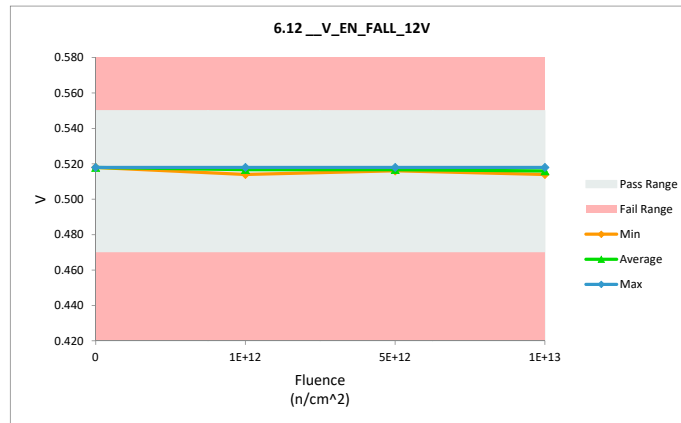


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.518	0.518	0.000
1E+12	129	0.518	0.518	0.000
1E+12	130	0.514	0.514	0.000
1E+12	131	0.518	0.518	0.000
5E+12	126	0.516	0.516	0.000
5E+12	127	0.518	0.516	-0.002
5E+12	128	0.518	0.518	0.000
1E+13	123	0.516	0.514	-0.002
1E+13	124	0.518	0.516	-0.002
1E+13	125	0.522	0.518	-0.004
Max		0.522	0.518	0.000
Average		0.518	0.517	-0.001
Min		0.514	0.514	-0.004
Std Dev		0.002	0.002	0.001

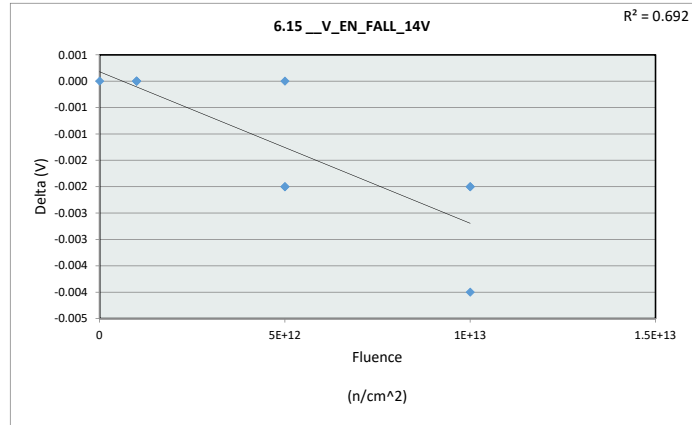


6.12 __V_EN_FALL_12V				
Test Site				
Tester				
Test Number				
Max Limit		0.55	V	
Min Limit		0.47	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.470	0.470	0.470	0.470
Min	0.518	0.514	0.516	0.514
Average	0.518	0.517	0.517	0.516
Max	0.518	0.518	0.518	0.518
UL	0.550	0.550	0.550	0.550

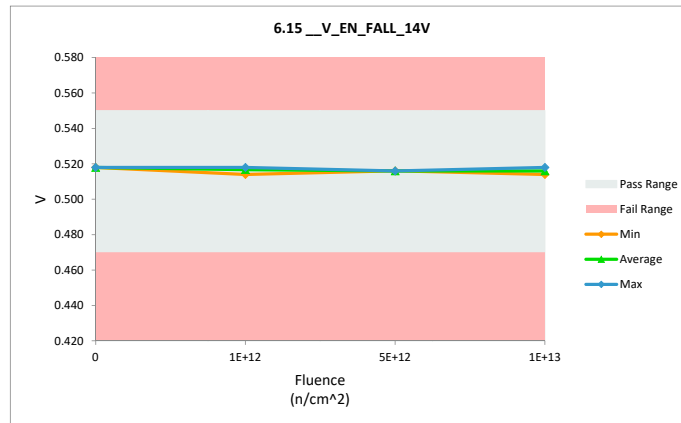


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.518	0.518	0.000
1E+12	129	0.518	0.518	0.000
1E+12	130	0.514	0.514	0.000
1E+12	131	0.518	0.518	0.000
5E+12	126	0.516	0.516	0.000
5E+12	127	0.518	0.516	-0.002
5E+12	128	0.518	0.516	-0.002
1E+13	123	0.516	0.514	-0.002
1E+13	124	0.518	0.516	-0.002
1E+13	125	0.522	0.518	-0.004
Max		0.522	0.518	0.000
Average		0.518	0.516	-0.001
Min		0.514	0.514	-0.004
Std Dev		0.002	0.002	0.001

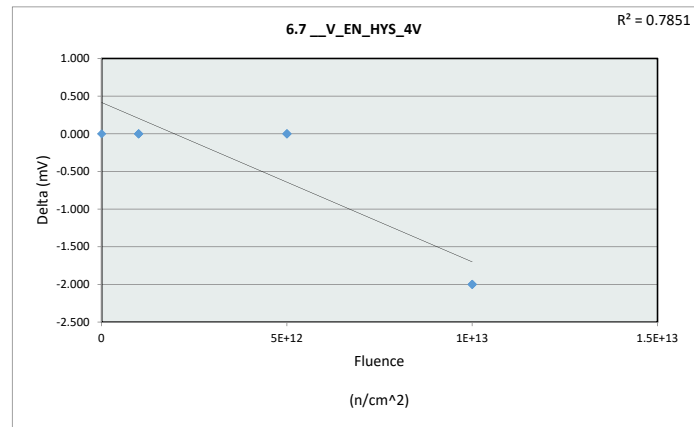


6.15 __V_EN_FALL_14V					
Test Site					
Tester					
Test Number					
Max Limit		0.55	V		
Min Limit		0.47	V		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		0.470	0.470	0.470	0.470
Min		0.518	0.514	0.516	0.514
Average		0.518	0.517	0.516	0.516
Max		0.518	0.518	0.516	0.518
UL		0.550	0.550	0.550	0.550

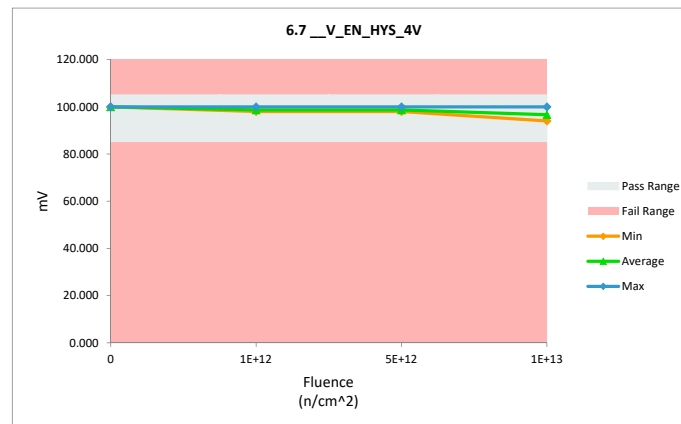


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	100.000	100.000	0.000
1E+12	129	100.000	100.000	0.000
1E+12	130	98.000	98.000	0.000
1E+12	131	98.000	98.000	0.000
5E+12	126	98.000	98.000	0.000
5E+12	127	98.000	98.000	0.000
5E+12	128	100.000	100.000	0.000
1E+13	123	102.000	100.000	-2.000
1E+13	124	96.000	94.000	-2.000
1E+13	125	98.000	96.000	-2.000
Max		102.000	100.000	0.000
Average		98.800	98.200	-0.600
Min		96.000	94.000	-2.000
Std Dev		1.687	1.989	0.966

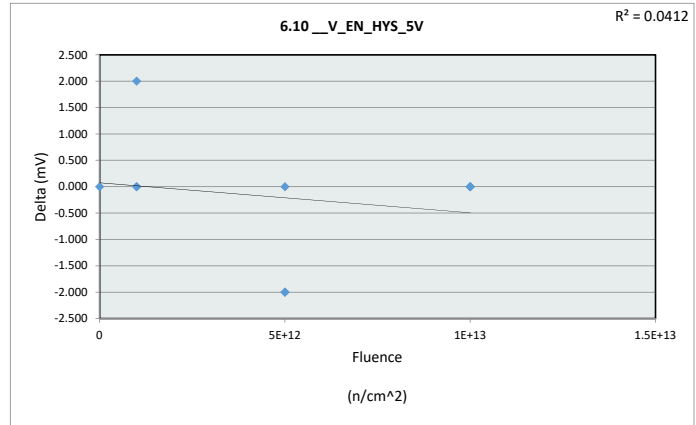


6.7 __V_EN_HYS_4V				
Test Site				
Tester				
Test Number				
Max Limit		105	mV	
Min Limit		85	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	100.000	98.000	98.000	94.000
Average	100.000	98.667	98.667	96.667
Max	100.000	100.000	100.000	100.000
UL	105.000	105.000	105.000	105.000

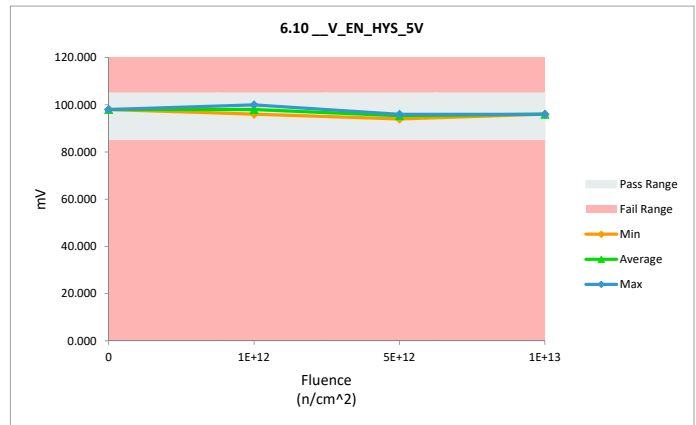


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	98.000	98.000	0.000
1E+12	129	100.000	100.000	0.000
1E+12	130	96.000	96.000	0.000
1E+12	131	96.000	98.000	2.000
5E+12	126	98.000	96.000	-2.000
5E+12	127	96.000	96.000	0.000
5E+12	128	96.000	94.000	-2.000
1E+13	123	96.000	96.000	0.000
1E+13	124	96.000	96.000	0.000
1E+13	125	96.000	96.000	0.000
Max		100.000	100.000	2.000
Average		96.800	96.600	-0.200
Min		96.000	94.000	-2.000
Std Dev		1.398	1.647	1.135



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	98.000	96.000	94.000	96.000
Average	98.000	98.000	95.333	96.000
Max	98.000	100.000	96.000	96.000
UL	105.000	105.000	105.000	105.000

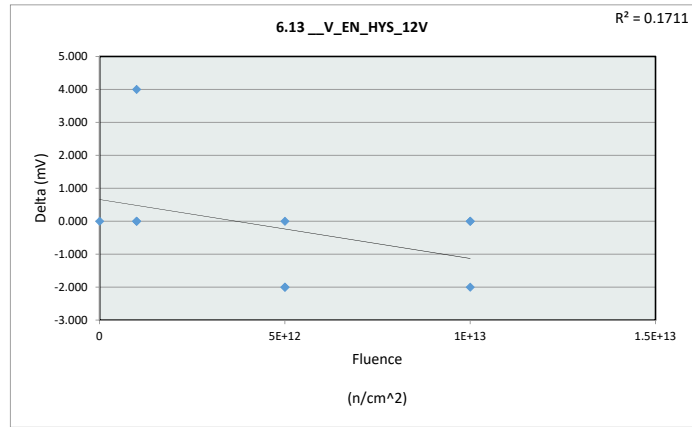


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.13 __V_EN_HYS_12V

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

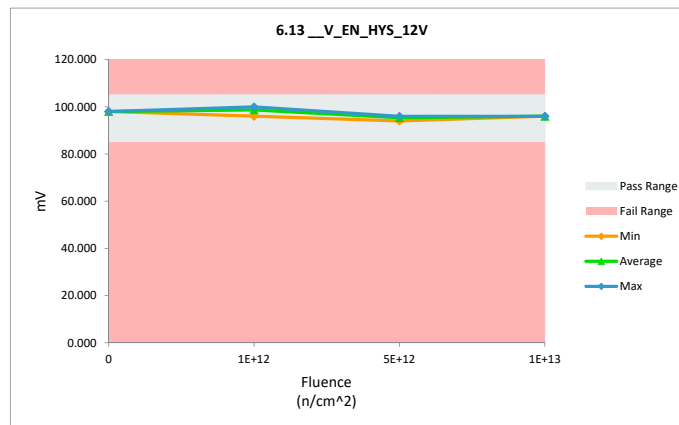
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	98.000	98.000	0.000
1E+12	129	100.000	100.000	0.000
1E+12	130	96.000	96.000	0.000
1E+12	131	96.000	100.000	4.000
5E+12	126	98.000	96.000	-2.000
5E+12	127	96.000	96.000	0.000
5E+12	128	96.000	94.000	-2.000
1E+13	123	98.000	96.000	-2.000
1E+13	124	96.000	96.000	0.000
1E+13	125	96.000	96.000	0.000
Max		100.000	100.000	4.000
Average		97.000	96.800	-0.200
Min		96.000	94.000	-2.000
Std Dev		1.414	1.932	1.751



6.13 __V_EN_HYS_12V

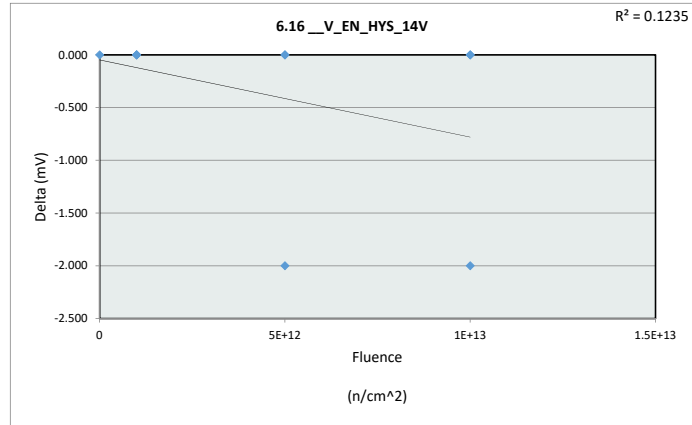
Test Site		
Tester		
Test Number		
Max Limit	105	mV
Min Limit	85	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	98.000	96.000	94.000	96.000
Average	98.000	98.667	95.333	96.000
Max	98.000	100.000	96.000	96.000
UL	105.000	105.000	105.000	105.000

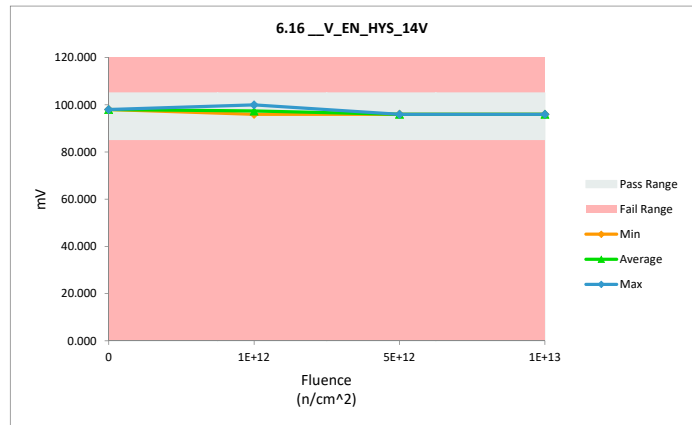


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	98.000	98.000	0.000
1E+12	129	100.000	100.000	0.000
1E+12	130	96.000	96.000	0.000
1E+12	131	96.000	96.000	0.000
5E+12	126	98.000	96.000	-2.000
5E+12	127	96.000	96.000	0.000
5E+12	128	96.000	96.000	0.000
1E+13	123	98.000	96.000	-2.000
1E+13	124	96.000	96.000	0.000
1E+13	125	96.000	96.000	0.000
Max		100.000	100.000	0.000
Average		97.000	96.600	-0.400
Min		96.000	96.000	-2.000
Std Dev		1.414	1.350	0.843

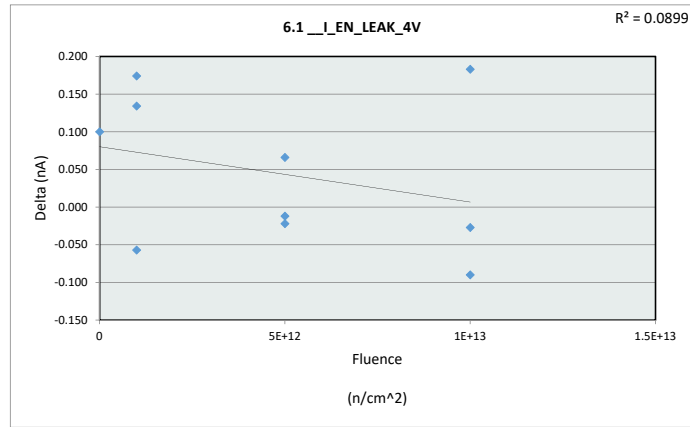


6.16 __V_EN_HYS_14V				
Test Site				
Tester				
Test Number				
Max Limit		105	mV	
Min Limit		85	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	85.000	85.000	85.000	85.000
Min	98.000	96.000	96.000	96.000
Average	98.000	97.333	96.000	96.000
Max	98.000	100.000	96.000	96.000
UL	105.000	105.000	105.000	105.000

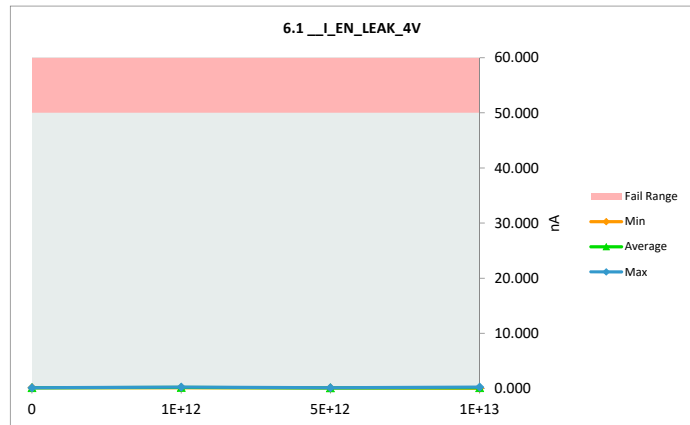


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.1_I_EN_LEAK_4V				
Fluence	Serial #	PRE	POST	Delta
0	132	0.015	0.115	0.100
1E+12	129	0.181	0.124	-0.057
1E+12	130	0.063	0.237	0.174
1E+12	131	0.005	0.139	0.134
5E+12	126	0.083	0.061	-0.022
5E+12	127	0.005	0.071	0.066
5E+12	128	0.122	0.110	-0.012
1E+13	123	0.122	0.095	-0.027
1E+13	124	0.112	0.022	-0.090
1E+13	125	0.044	0.227	0.183
	Max	0.181	0.237	0.183
	Average	0.075	0.120	0.045
	Min	0.005	0.022	-0.090
	Std Dev	0.059	0.068	0.099

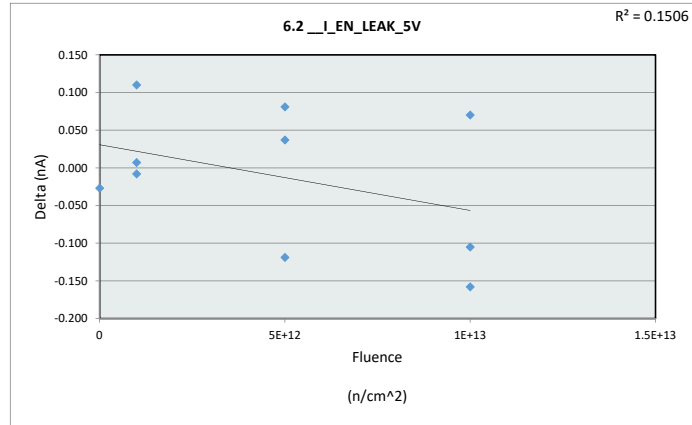


6.1_I_EN_LEAK_4V				
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	0.115	0.124	0.061	0.022
Average	0.115	0.167	0.081	0.115
Max	0.115	0.237	0.110	0.227
UL	50.000	50.000	50.000	50.000

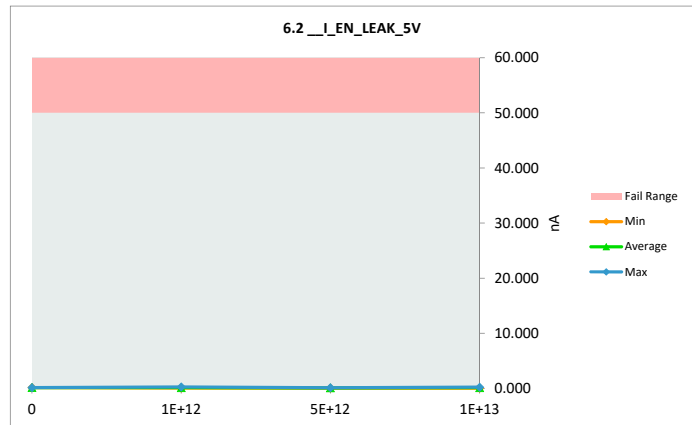


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.171	0.144	-0.027
1E+12	129	0.054	0.046	-0.008
1E+12	130	0.151	0.261	0.110
1E+12	131	0.054	0.061	0.007
5E+12	126	0.034	0.115	0.081
5E+12	127	0.034	0.071	0.037
5E+12	128	0.151	0.032	-0.119
1E+13	123	0.190	0.032	-0.158
1E+13	124	0.142	0.212	0.070
1E+13	125	0.249	0.144	-0.105
Max		0.249	0.261	0.110
Average		0.123	0.112	-0.011
Min		0.034	0.032	-0.158
Std Dev		0.075	0.079	0.091



6.2 __I_EN_LEAK_5V				
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	0.144	0.046	0.032	0.032
Average	0.144	0.123	0.073	0.129
Max	0.144	0.261	0.115	0.212
UL	50.000	50.000	50.000	50.000

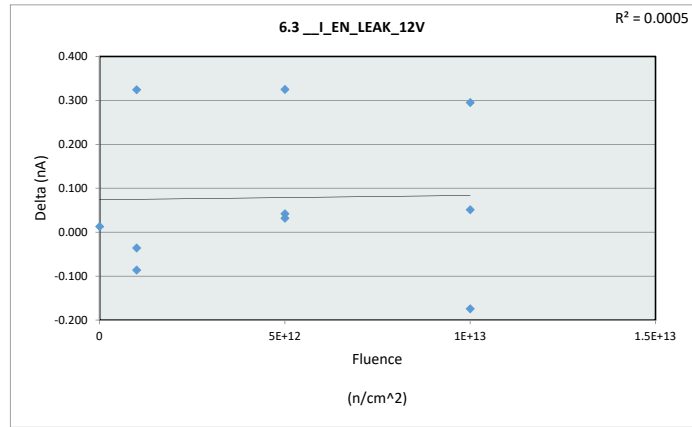


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.3_I_EN_LEAK_12V

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

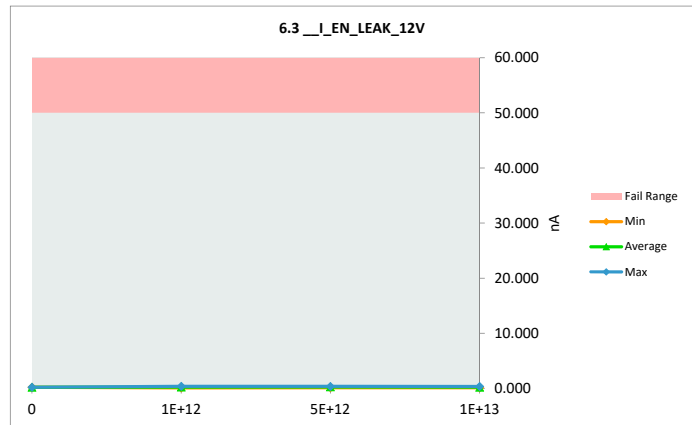
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.190	0.203	0.013
1E+12	129	0.181	0.095	-0.086
1E+12	130	0.054	0.378	0.324
1E+12	131	0.239	0.203	-0.036
5E+12	126	0.034	0.359	0.325
5E+12	127	0.083	0.115	0.032
5E+12	128	0.229	0.271	0.042
1E+13	123	0.122	0.173	0.051
1E+13	124	0.044	0.339	0.295
1E+13	125	0.298	0.124	-0.174
Max		0.298	0.378	0.325
Average		0.147	0.226	0.079
Min		0.034	0.095	-0.174
Std Dev		0.093	0.105	0.177



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	0.203	0.095	0.115	0.124
Average	0.203	0.225	0.248	0.212
Max	0.203	0.378	0.359	0.339
UL	50.000	50.000	50.000	50.000

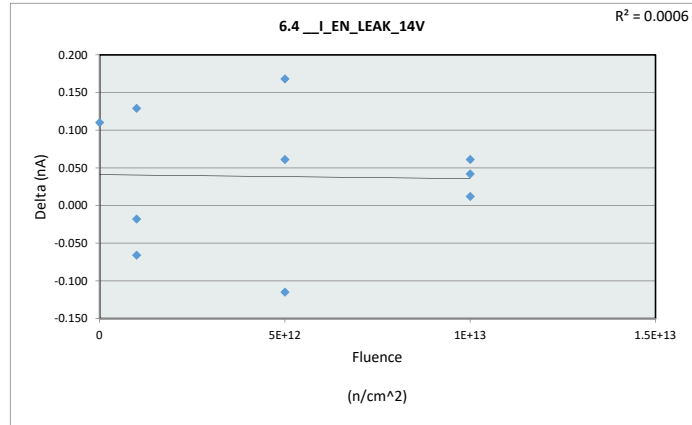


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.4_I_EN_LEAK_14V

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

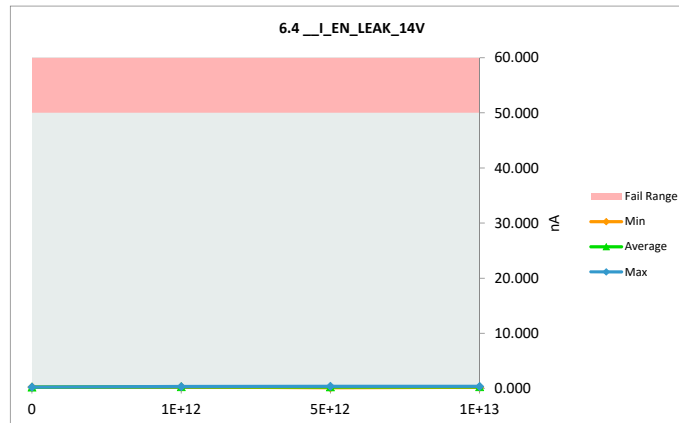
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.112	0.222	0.110
1E+12	129	0.347	0.329	-0.018
1E+12	130	0.142	0.271	0.129
1E+12	131	0.337	0.271	-0.066
5E+12	126	0.239	0.124	-0.115
5E+12	127	0.210	0.378	0.168
5E+12	128	0.210	0.271	0.061
1E+13	123	0.181	0.193	0.012
1E+13	124	0.229	0.290	0.061
1E+13	125	0.307	0.349	0.042
Max		0.347	0.378	0.168
Average		0.231	0.270	0.038
Min		0.112	0.124	-0.115
Std Dev		0.079	0.076	0.088



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	0.222	0.271	0.124	0.193
Average	0.222	0.290	0.258	0.277
Max	0.222	0.329	0.378	0.349
UL	50.000	50.000	50.000	50.000

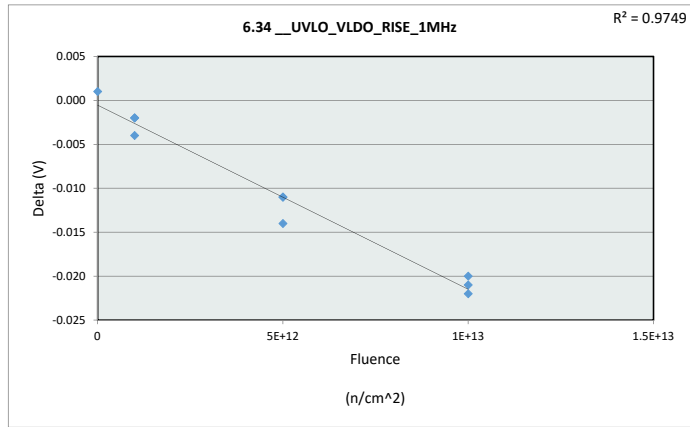


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

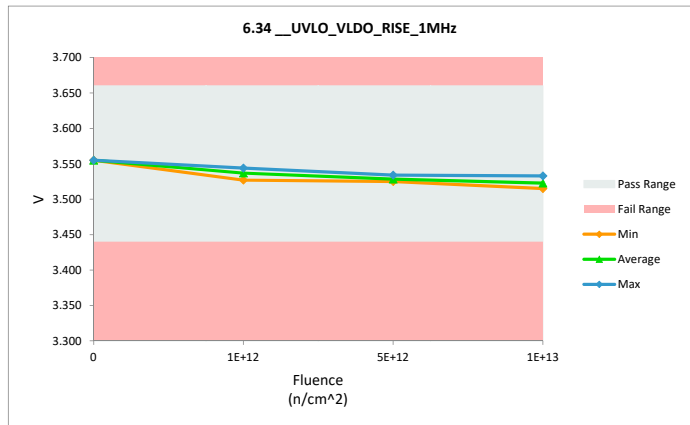
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.554	3.555	0.001
1E+12	129	3.529	3.527	-0.002
1E+12	130	3.542	3.540	-0.002
1E+12	131	3.548	3.544	-0.004
5E+12	126	3.537	3.526	-0.011
5E+12	127	3.545	3.534	-0.011
5E+12	128	3.539	3.525	-0.014
1E+13	123	3.554	3.533	-0.021
1E+13	124	3.535	3.515	-0.020
1E+13	125	3.542	3.520	-0.022
Max		3.554	3.555	0.001
Average		3.543	3.532	-0.011
Min		3.529	3.515	-0.022
Std Dev		0.008	0.012	0.009



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	3.555	3.527	3.525	3.515
Average	3.555	3.537	3.528	3.523
Max	3.555	3.544	3.534	3.533
UL	3.660	3.660	3.660	3.660

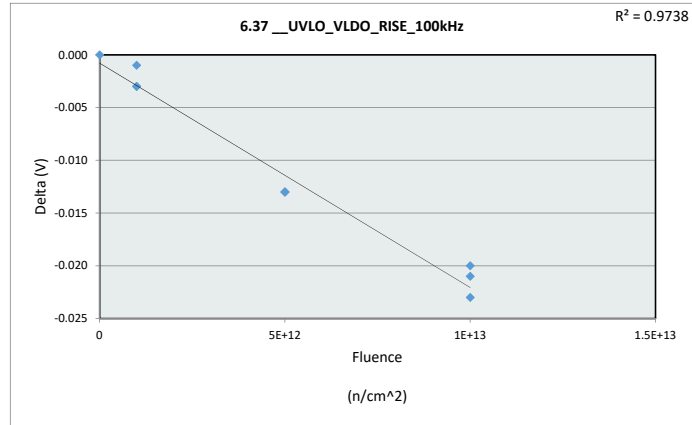


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

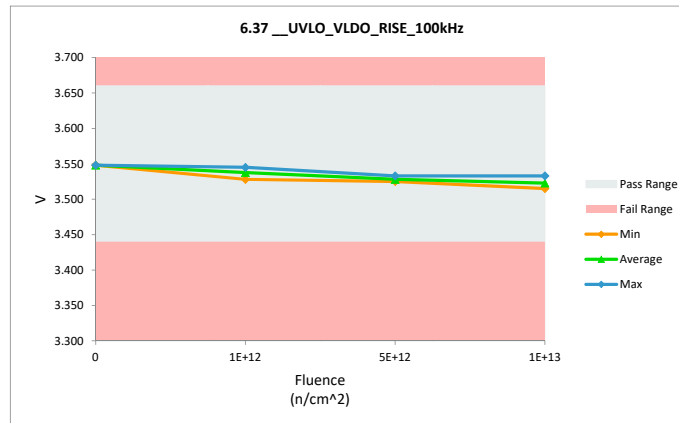
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.548	3.548	0.000
1E+12	129	3.529	3.528	-0.001
1E+12	130	3.543	3.540	-0.003
1E+12	131	3.548	3.545	-0.003
5E+12	126	3.538	3.525	-0.013
5E+12	127	3.546	3.533	-0.013
5E+12	128	3.539	3.526	-0.013
1E+13	123	3.554	3.533	-0.021
1E+13	124	3.535	3.515	-0.020
1E+13	125	3.543	3.520	-0.023
Max		3.554	3.548	0.000
Average		3.542	3.531	-0.011
Min		3.529	3.515	-0.023
Std Dev		0.007	0.011	0.009



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	3.548	3.528	3.525	3.515
Average	3.548	3.538	3.528	3.523
Max	3.548	3.545	3.533	3.533
UL	3.660	3.660	3.660	3.660

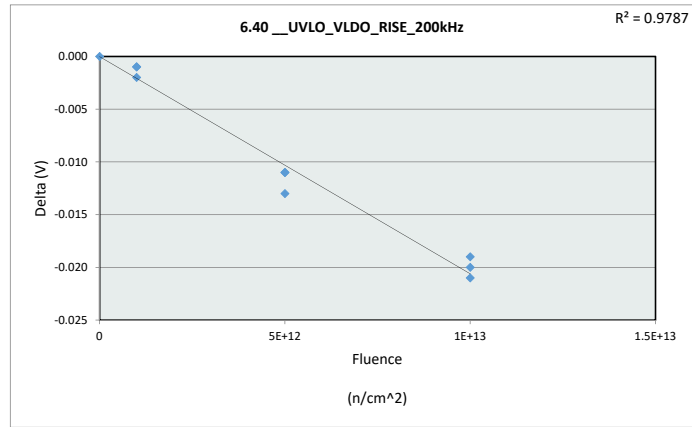


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.40 UVLO_VLDO_RISE_200kHz

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

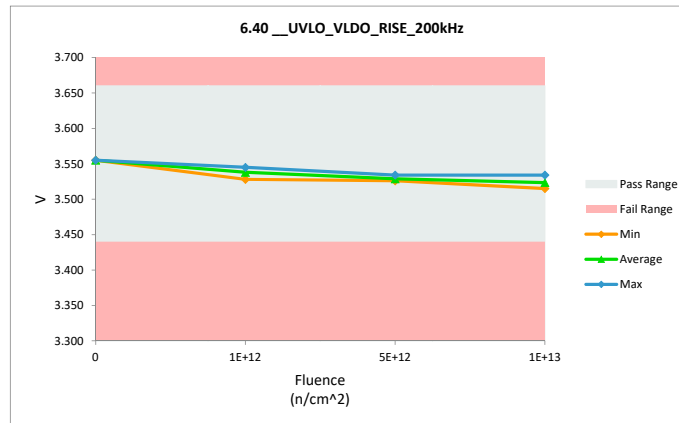
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.555	3.555	0.000
1E+12	129	3.529	3.528	-0.001
1E+12	130	3.542	3.541	-0.001
1E+12	131	3.547	3.545	-0.002
5E+12	126	3.537	3.526	-0.011
5E+12	127	3.545	3.534	-0.011
5E+12	128	3.539	3.526	-0.013
1E+13	123	3.554	3.534	-0.020
1E+13	124	3.534	3.515	-0.019
1E+13	125	3.542	3.521	-0.021
Max		3.555	3.555	0.000
Average		3.542	3.533	-0.010
Min		3.529	3.515	-0.021
Std Dev		0.008	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	3.555	3.528	3.526	3.515
Average	3.555	3.538	3.529	3.523
Max	3.555	3.545	3.534	3.534
UL	3.660	3.660	3.660	3.660

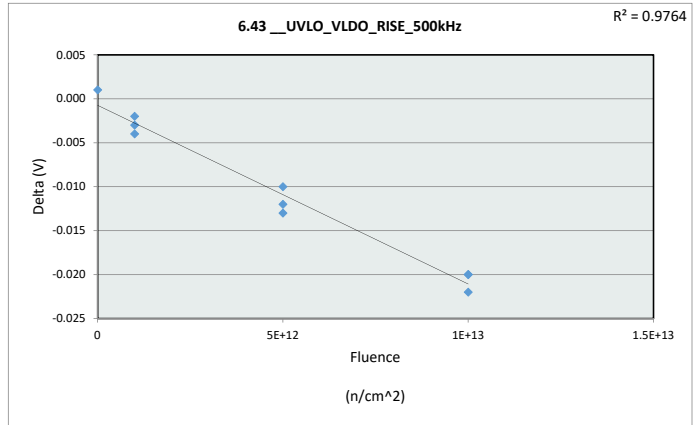


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

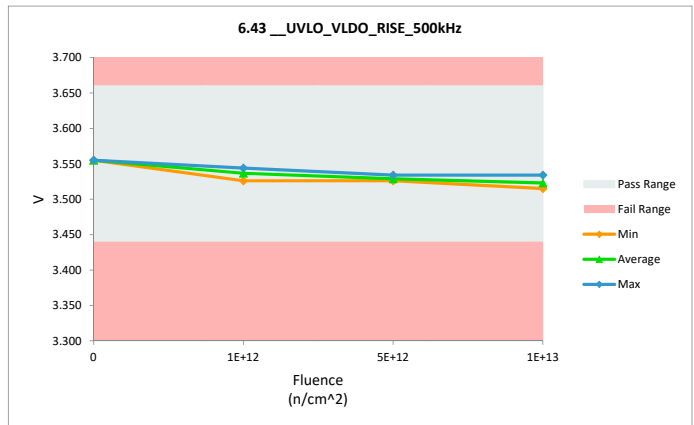
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.554	3.555	0.001
1E+12	129	3.529	3.526	-0.003
1E+12	130	3.542	3.540	-0.002
1E+12	131	3.548	3.544	-0.004
5E+12	126	3.538	3.526	-0.012
5E+12	127	3.544	3.534	-0.010
5E+12	128	3.539	3.526	-0.013
1E+13	123	3.554	3.534	-0.020
1E+13	124	3.535	3.515	-0.020
1E+13	125	3.542	3.520	-0.022
Max		3.554	3.555	0.001
Average		3.543	3.532	-0.011
Min		3.529	3.515	-0.022
Std Dev		0.008	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	3.555	3.526	3.526	3.515
Average	3.555	3.537	3.529	3.523
Max	3.555	3.544	3.534	3.534
UL	3.660	3.660	3.660	3.660

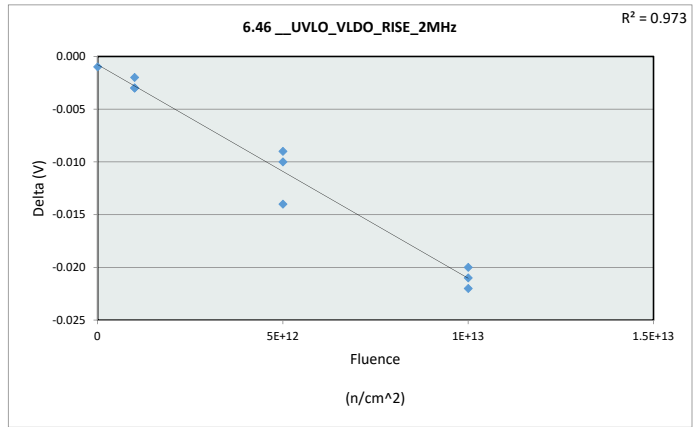


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

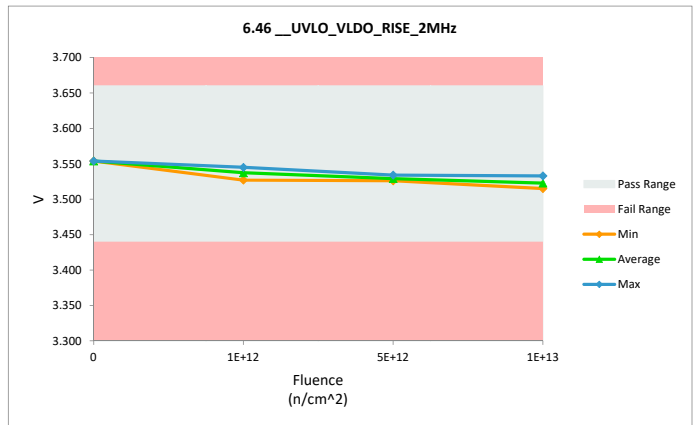
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.555	3.554	-0.001
1E+12	129	3.530	3.527	-0.003
1E+12	130	3.543	3.540	-0.003
1E+12	131	3.547	3.545	-0.002
5E+12	126	3.536	3.527	-0.009
5E+12	127	3.544	3.534	-0.010
5E+12	128	3.540	3.526	-0.014
1E+13	123	3.554	3.533	-0.021
1E+13	124	3.535	3.515	-0.020
1E+13	125	3.542	3.520	-0.022
Max		3.555	3.554	-0.001
Average		3.543	3.532	-0.011
Min		3.530	3.515	-0.022
Std Dev		0.008	0.012	0.008



6.46 UVLO_VLDO_RISE_2MHz

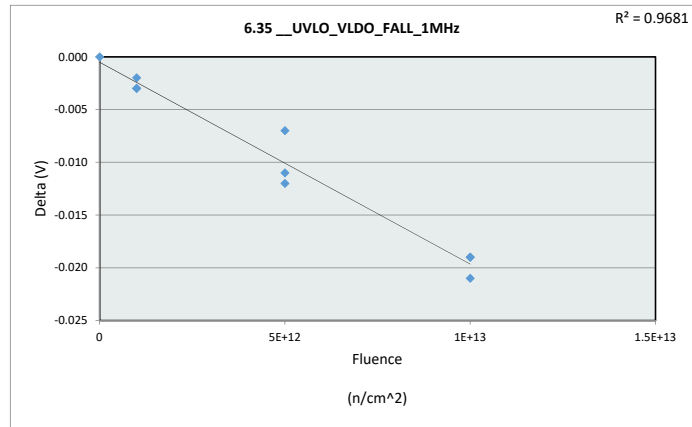
Test Site		
Tester		
Test Number		
Max Limit	3.66	V
Min Limit	3.44	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.440	3.440	3.440	3.440
Min	3.554	3.527	3.526	3.515
Average	3.554	3.537	3.529	3.523
Max	3.554	3.545	3.534	3.533
UL	3.660	3.660	3.660	3.660

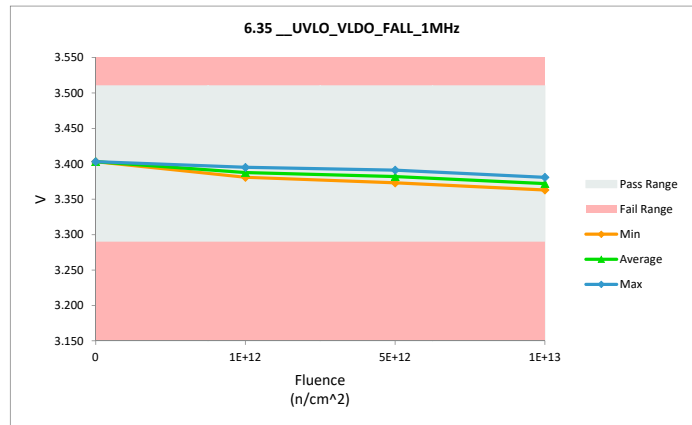


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	3.403	3.403	0.000
1E+12	129	3.383	3.381	-0.002
1E+12	130	3.390	3.387	-0.003
1E+12	131	3.398	3.395	-0.003
5E+12	126	3.384	3.373	-0.011
5E+12	127	3.403	3.391	-0.012
5E+12	128	3.389	3.382	-0.007
1E+13	123	3.402	3.381	-0.021
1E+13	124	3.382	3.363	-0.019
1E+13	125	3.391	3.372	-0.019
Max		3.403	3.403	0.000
Average		3.393	3.383	-0.010
Min		3.382	3.363	-0.021
Std Dev		0.008	0.012	0.008



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	3.403	3.381	3.373	3.363
Average	3.403	3.388	3.382	3.372
Max	3.403	3.395	3.391	3.381
UL	3.510	3.510	3.510	3.510

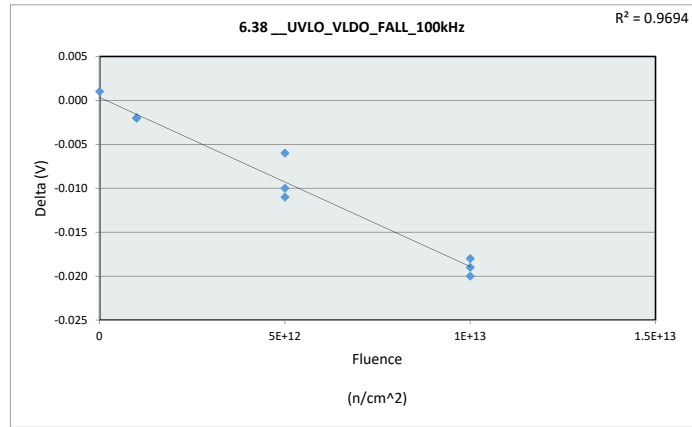


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

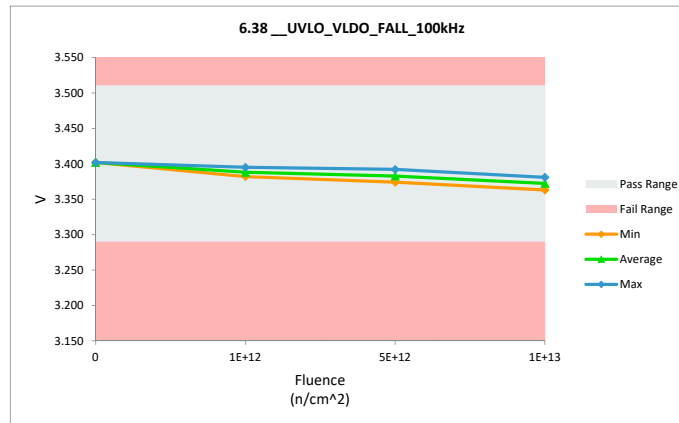
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.401	3.402	0.001
1E+12	129	3.384	3.382	-0.002
1E+12	130	3.389	3.387	-0.002
1E+12	131	3.397	3.395	-0.002
5E+12	126	3.385	3.374	-0.011
5E+12	127	3.402	3.392	-0.010
5E+12	128	3.388	3.382	-0.006
1E+13	123	3.401	3.381	-0.020
1E+13	124	3.382	3.363	-0.019
1E+13	125	3.391	3.373	-0.018
Max		3.402	3.402	0.001
Average		3.392	3.383	-0.009
Min		3.382	3.363	-0.020
Std Dev		0.008	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	3.402	3.382	3.374	3.363
Average	3.402	3.388	3.383	3.372
Max	3.402	3.395	3.392	3.381
UL	3.510	3.510	3.510	3.510

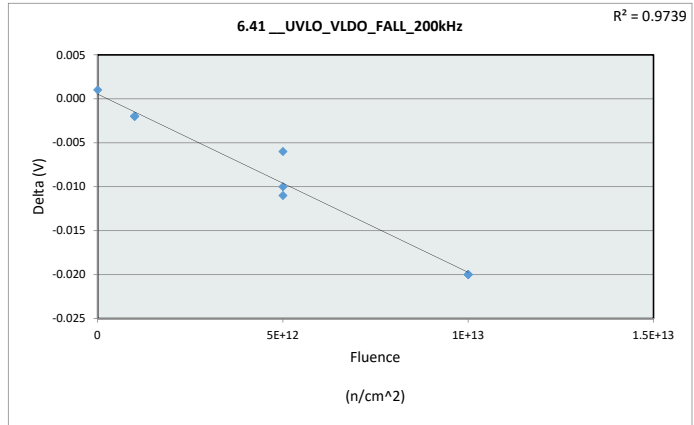


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

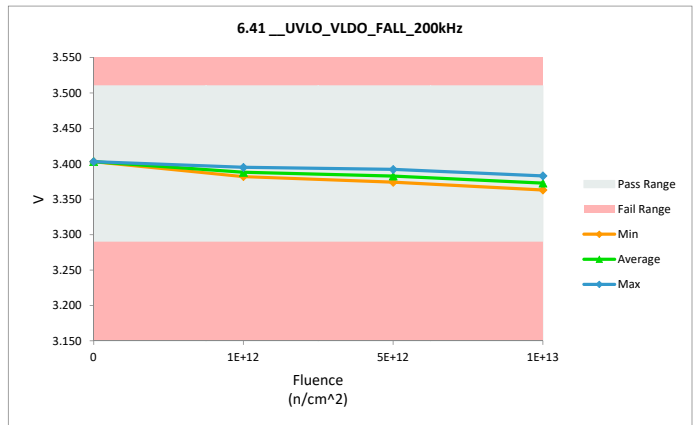
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.402	3.403	0.001
1E+12	129	3.384	3.382	-0.002
1E+12	130	3.389	3.387	-0.002
1E+12	131	3.397	3.395	-0.002
5E+12	126	3.384	3.374	-0.010
5E+12	127	3.403	3.392	-0.011
5E+12	128	3.388	3.382	-0.006
1E+13	123	3.403	3.383	-0.020
1E+13	124	3.383	3.363	-0.020
1E+13	125	3.392	3.372	-0.020
Max		3.403	3.403	0.001
Average		3.393	3.383	-0.009
Min		3.383	3.363	-0.020
Std Dev		0.008	0.012	0.008



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	3.403	3.382	3.374	3.363
Average	3.403	3.388	3.383	3.373
Max	3.403	3.395	3.392	3.383
UL	3.510	3.510	3.510	3.510

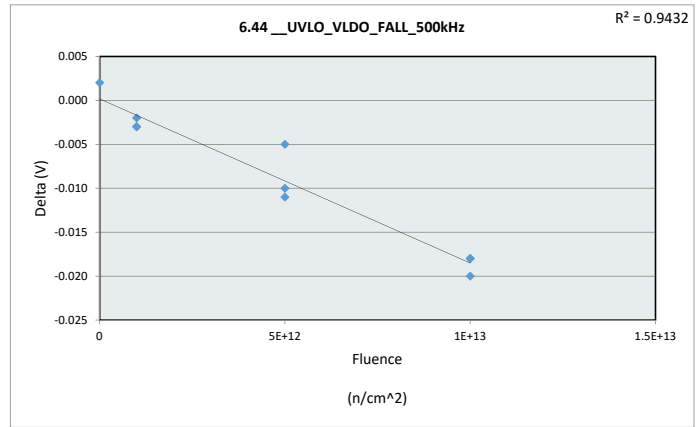


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

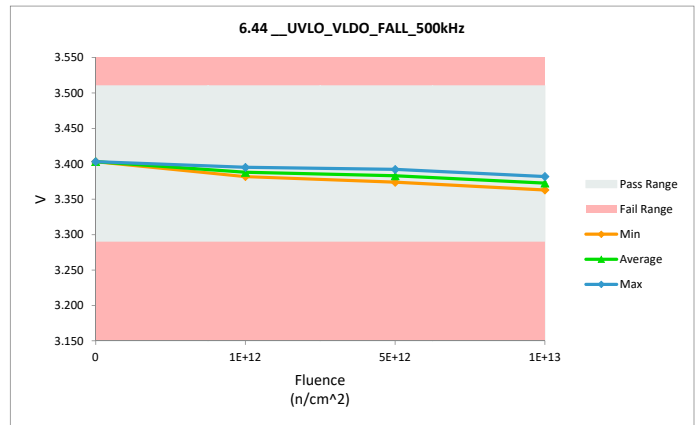
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.401	3.403	0.002
1E+12	129	3.385	3.382	-0.003
1E+12	130	3.390	3.387	-0.003
1E+12	131	3.397	3.395	-0.002
5E+12	126	3.384	3.374	-0.010
5E+12	127	3.403	3.392	-0.011
5E+12	128	3.388	3.383	-0.005
1E+13	123	3.402	3.382	-0.020
1E+13	124	3.381	3.363	-0.018
1E+13	125	3.391	3.373	-0.018
Max		3.403	3.403	0.002
Average		3.392	3.383	-0.009
Min		3.381	3.363	-0.020
Std Dev		0.008	0.012	0.008



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	3.403	3.382	3.374	3.363
Average	3.403	3.388	3.383	3.373
Max	3.403	3.395	3.392	3.382
UL	3.510	3.510	3.510	3.510

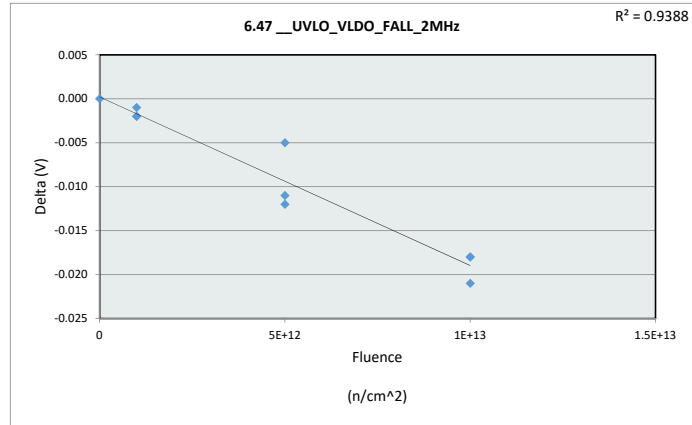


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

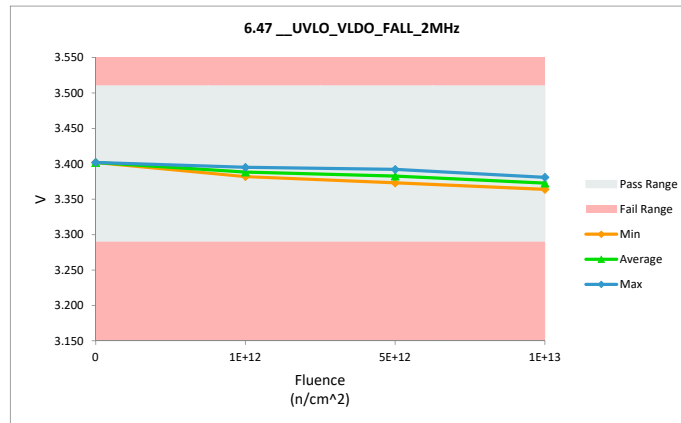
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	3.402	3.402	0.000
1E+12	129	3.384	3.382	-0.002
1E+12	130	3.389	3.388	-0.001
1E+12	131	3.397	3.395	-0.002
5E+12	126	3.385	3.373	-0.012
5E+12	127	3.403	3.392	-0.011
5E+12	128	3.388	3.383	-0.005
1E+13	123	3.402	3.381	-0.021
1E+13	124	3.382	3.364	-0.018
1E+13	125	3.391	3.373	-0.018
Max		3.403	3.402	0.000
Average		3.392	3.383	-0.009
Min		3.382	3.364	-0.021
Std Dev		0.008	0.011	0.008



6.47 __UVLO_VLDO_FALL_2MHz

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

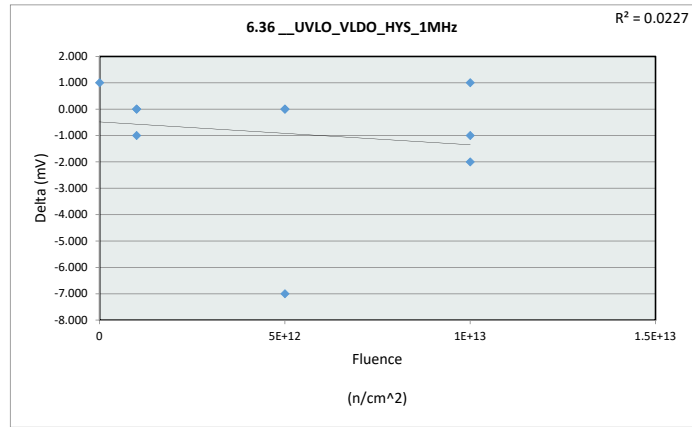
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	3.290	3.290	3.290	3.290
Min	3.402	3.382	3.373	3.364
Average	3.402	3.388	3.383	3.373
Max	3.402	3.395	3.392	3.381
UL	3.510	3.510	3.510	3.510



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

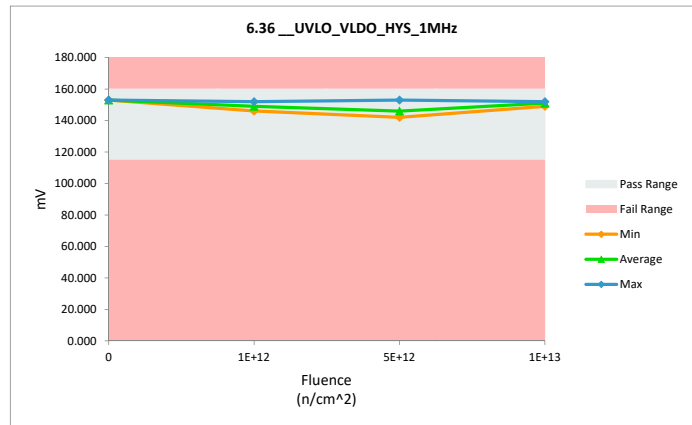
6.36 UVLO_VLDO_HYS_1MHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	152.000	153.000	1.000
1E+12	129	146.000	146.000	0.000
1E+12	130	152.000	152.000	0.000
1E+12	131	150.000	149.000	-1.000
5E+12	126	153.000	153.000	0.000
5E+12	127	142.000	142.000	0.000
5E+12	128	150.000	143.000	-7.000
1E+13	123	151.000	152.000	1.000
1E+13	124	153.000	152.000	-1.000
1E+13	125	151.000	149.000	-2.000
Max		153.000	153.000	1.000
Average		150.000	149.100	-0.900
Min		142.000	142.000	-7.000
Std Dev		3.464	4.122	2.331



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	153.000	146.000	142.000	149.000
Average	153.000	149.000	146.000	151.000
Max	153.000	152.000	153.000	152.000
UL	160.000	160.000	160.000	160.000

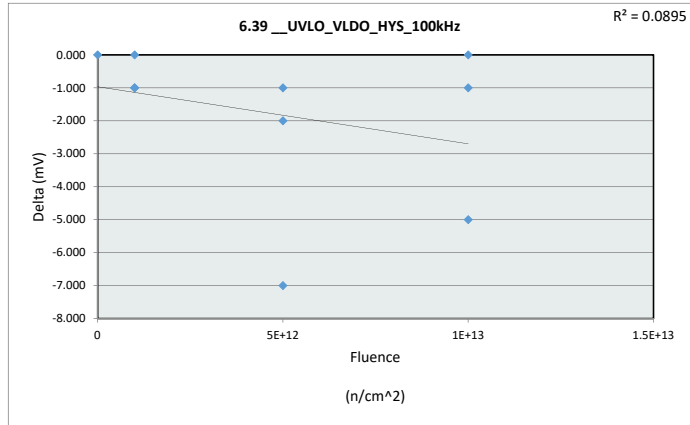


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.39 UVLO_VLDO_HYS_100kHz

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	160	160
Min Limit	115	115

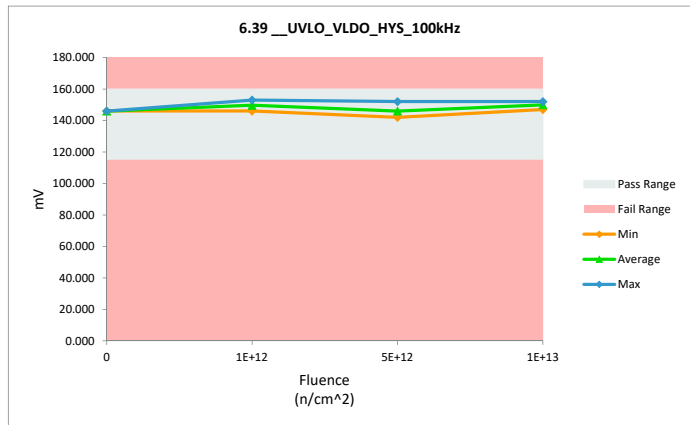
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	146.000	146.000	0.000
1E+12	129	146.000	146.000	0.000
1E+12	130	154.000	153.000	-1.000
1E+12	131	151.000	150.000	-1.000
5E+12	126	153.000	152.000	-1.000
5E+12	127	144.000	142.000	-2.000
5E+12	128	151.000	144.000	-7.000
1E+13	123	152.000	151.000	-1.000
1E+13	124	152.000	152.000	0.000
1E+13	125	152.000	147.000	-5.000
Max		154.000	153.000	0.000
Average		150.100	148.300	-1.800
Min		144.000	142.000	-7.000
Std Dev		3.446	3.802	2.348



6.39 UVLO_VLDO_HYS_100kHz

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	146.000	146.000	142.000	147.000
Average	146.000	149.667	146.000	150.000
Max	146.000	153.000	152.000	152.000
UL	160.000	160.000	160.000	160.000

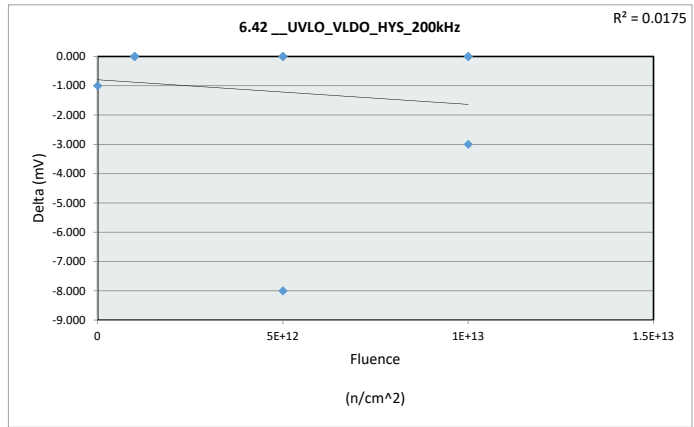


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

6.42 UVLO_VLDO_HYS_200kHz

Test Site		
Tester		
Test Number		
Unit	mV	mV
Max Limit	160	160
Min Limit	115	115

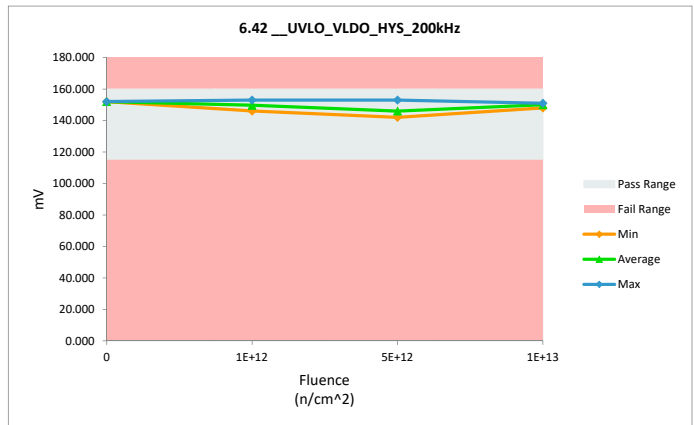
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	153.000	152.000	-1.000
1E+12	129	146.000	146.000	0.000
1E+12	130	153.000	153.000	0.000
1E+12	131	150.000	150.000	0.000
5E+12	126	153.000	153.000	0.000
5E+12	127	142.000	142.000	0.000
5E+12	128	151.000	143.000	-8.000
1E+13	123	151.000	151.000	0.000
1E+13	124	151.000	151.000	0.000
1E+13	125	151.000	148.000	-3.000
Max		153.000	153.000	0.000
Average		150.100	148.900	-1.200
Min		142.000	142.000	-8.000
Std Dev		3.510	4.012	2.573



6.42 UVLO_VLDO_HYS_200kHz

Test Site		
Tester		
Test Number		
Max Limit	160	mV
Min Limit	115	mV

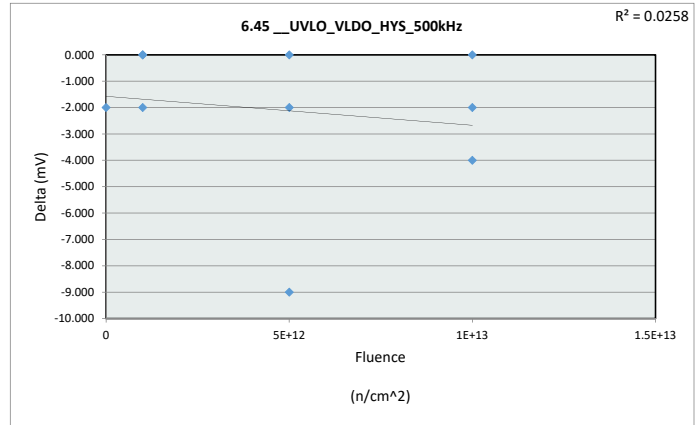
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	152.000	146.000	142.000	148.000
Average	152.000	149.667	146.000	150.000
Max	152.000	153.000	153.000	151.000
UL	160.000	160.000	160.000	160.000



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

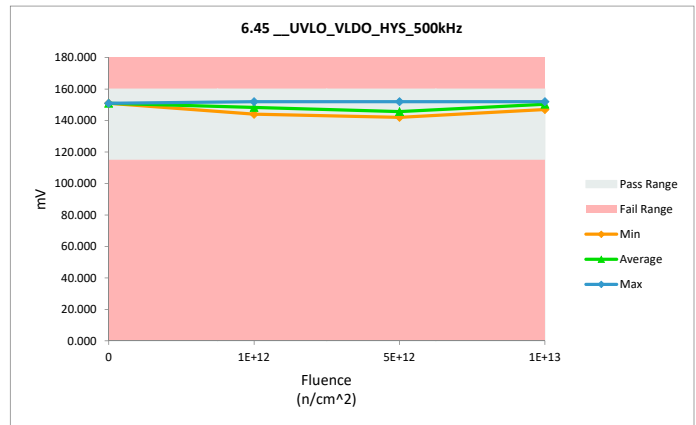
6.45 UVLO_VLDO_HYS_500kHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	153.000	151.000	-2.000
1E+12	129	144.000	144.000	0.000
1E+12	130	152.000	152.000	0.000
1E+12	131	151.000	149.000	-2.000
5E+12	126	154.000	152.000	-2.000
5E+12	127	142.000	142.000	0.000
5E+12	128	152.000	143.000	-9.000
1E+13	123	152.000	152.000	0.000
1E+13	124	154.000	152.000	-2.000
1E+13	125	151.000	147.000	-4.000
Max		154.000	152.000	0.000
Average		150.500	148.400	-2.100
Min		142.000	142.000	-9.000
Std Dev		4.116	4.088	2.767



6.45 UVLO_VLDO_HYS_500kHz

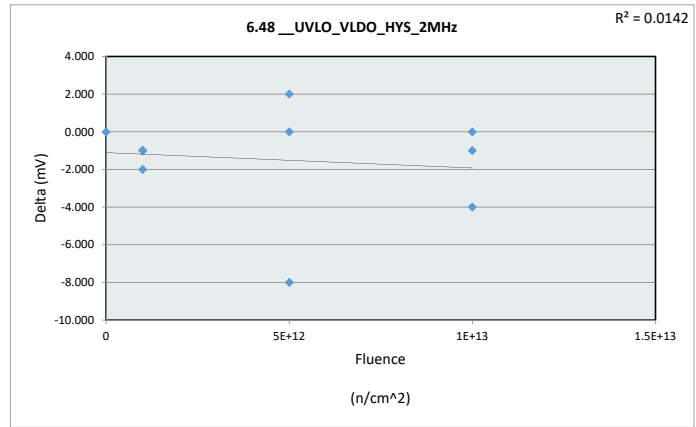
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	151.000	144.000	142.000	147.000
Average	151.000	148.333	145.667	150.333
Max	151.000	152.000	152.000	152.000
UL	160.000	160.000	160.000	160.000



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

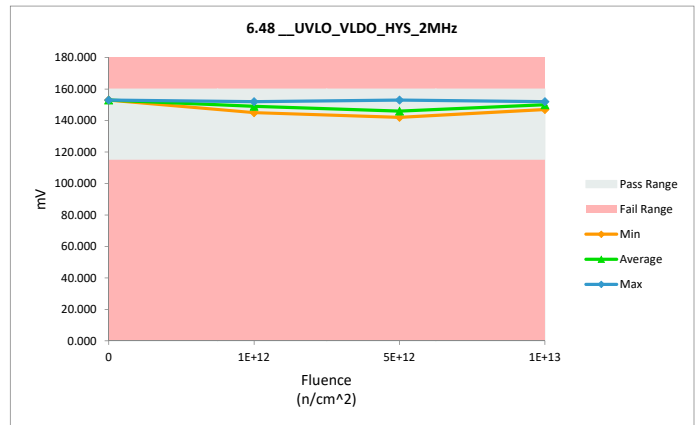
6.48 UVLO_VLDO_HYS_2MHz

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	153.000	153.000	0.000
1E+12	129	146.000	145.000	-1.000
1E+12	130	154.000	152.000	-2.000
1E+12	131	151.000	150.000	-1.000
5E+12	126	151.000	153.000	2.000
5E+12	127	142.000	142.000	0.000
5E+12	128	151.000	143.000	-8.000
1E+13	123	152.000	152.000	0.000
1E+13	124	152.000	151.000	-1.000
1E+13	125	151.000	147.000	-4.000
Max		154.000	153.000	2.000
Average		150.300	148.800	-1.500
Min		142.000	142.000	-8.000
Std Dev		3.592	4.211	2.759



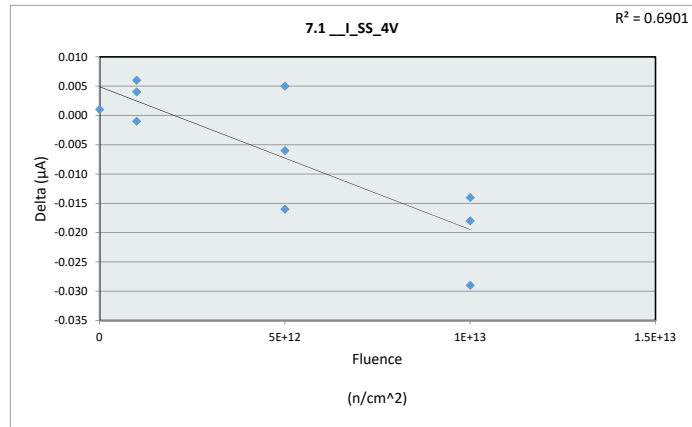
6.48 UVLO_VLDO_HYS_2MH

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	115.000	115.000	115.000	115.000
Min	153.000	145.000	142.000	147.000
Average	153.000	149.000	146.000	150.000
Max	153.000	152.000	153.000	152.000
UL	160.000	160.000	160.000	160.000

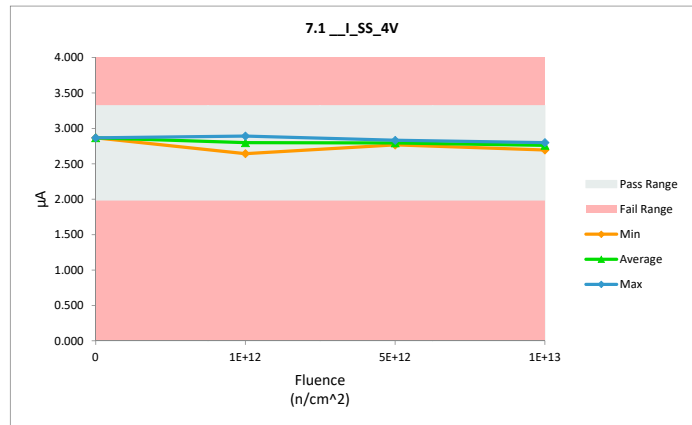


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	2.865	2.866	0.001
1E+12	129	2.852	2.858	0.006
1E+12	130	2.640	2.644	0.004
1E+12	131	2.892	2.891	-0.001
5E+12	126	2.800	2.784	-0.016
5E+12	127	2.826	2.831	0.005
5E+12	128	2.772	2.766	-0.006
1E+13	123	2.829	2.800	-0.029
1E+13	124	2.713	2.695	-0.018
1E+13	125	2.800	2.786	-0.014
	Max	2.892	2.891	0.006
	Average	2.799	2.792	-0.007
	Min	2.640	2.644	-0.029
	Std Dev	0.075	0.077	0.012

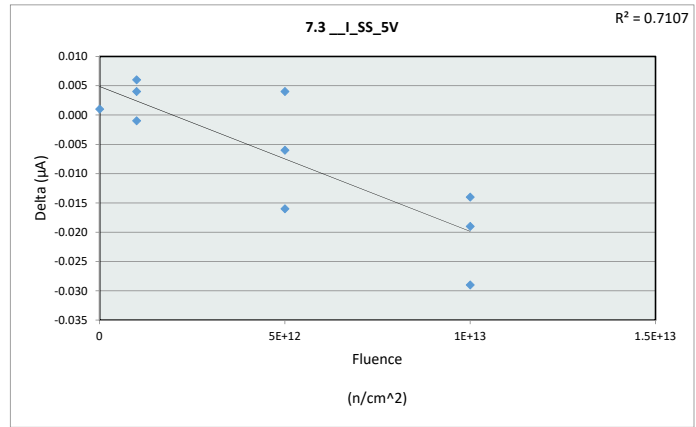


7.1_I_SS_4V					
Test Site					
Tester					
Test Number					
Max Limit		3.32	μA		
Min Limit		1.98	μA		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		1.980	1.980	1.980	1.980
Min		2.866	2.644	2.766	2.695
Average		2.866	2.798	2.794	2.760
Max		2.866	2.891	2.831	2.800
UL		3.320	3.320	3.320	3.320

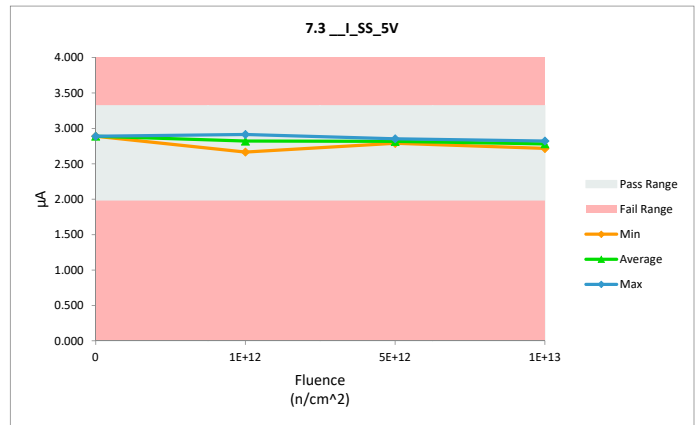


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	2.888	2.889	0.001
1E+12	129	2.875	2.881	0.006
1E+12	130	2.661	2.665	0.004
1E+12	131	2.915	2.914	-0.001
5E+12	126	2.822	2.806	-0.016
5E+12	127	2.849	2.853	0.004
5E+12	128	2.794	2.788	-0.006
1E+13	123	2.851	2.822	-0.029
1E+13	124	2.735	2.716	-0.019
1E+13	125	2.822	2.808	-0.014
	Max	2.915	2.914	0.006
	Average	2.821	2.814	-0.007
	Min	2.661	2.665	-0.029
	Std Dev	0.076	0.078	0.012

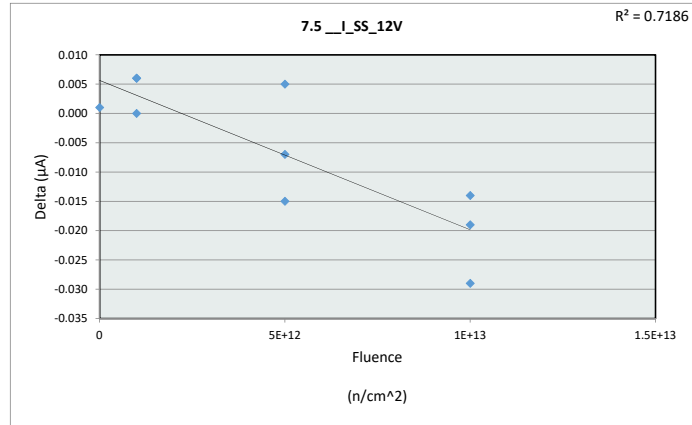


7.3_I_SS_5V				
Test Site				
Tester				
Test Number				
Max Limit		3.32	µA	
Min Limit		1.98	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.889	2.665	2.788	2.716
Average	2.889	2.820	2.816	2.782
Max	2.889	2.914	2.853	2.822
UL	3.320	3.320	3.320	3.320

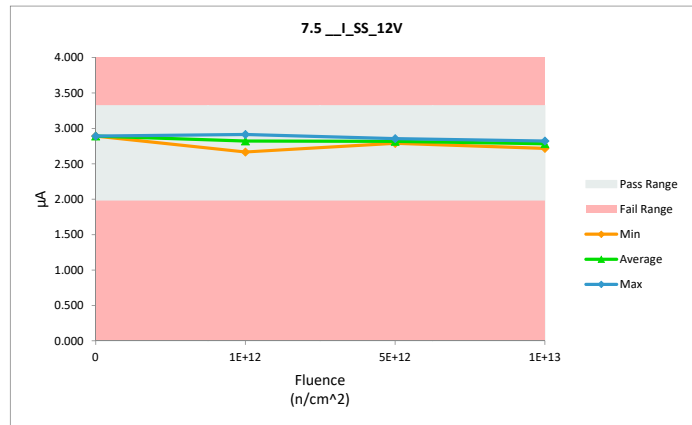


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	2.890	2.891	0.001
1E+12	129	2.876	2.882	0.006
1E+12	130	2.661	2.667	0.006
1E+12	131	2.915	2.915	0.000
5E+12	126	2.821	2.806	-0.015
5E+12	127	2.850	2.855	0.005
5E+12	128	2.795	2.788	-0.007
1E+13	123	2.851	2.822	-0.029
1E+13	124	2.736	2.717	-0.019
1E+13	125	2.822	2.808	-0.014
Max		2.915	2.915	0.006
Average		2.822	2.815	-0.007
Min		2.661	2.667	-0.029
Std Dev		0.076	0.078	0.012

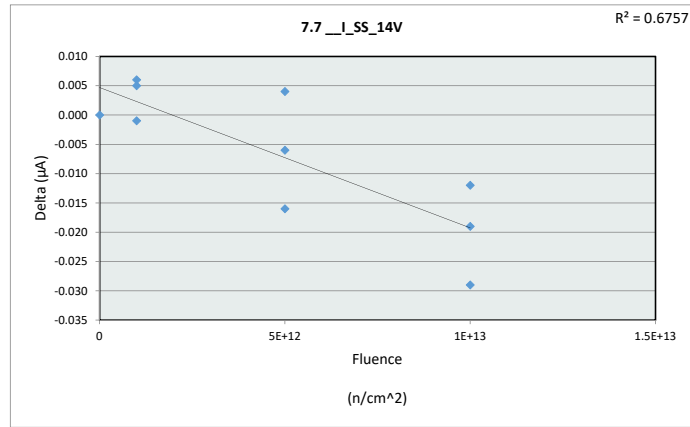


7.5_I_SS_12V					
Test Site					
Tester					
Test Number					
Max Limit		3.32	µA		
Min Limit		1.98	µA		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		1.980	1.980	1.980	1.980
Min		2.891	2.667	2.788	2.717
Average		2.891	2.821	2.816	2.782
Max		2.891	2.915	2.855	2.822
UL		3.320	3.320	3.320	3.320

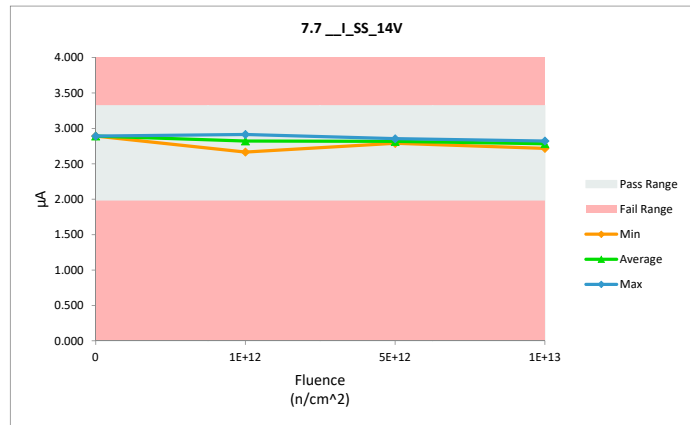


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

7.7_I_SS_14V				
Fluence	Serial #	PRE	POST	Delta
0	132	2.891	2.891	0.000
1E+12	129	2.876	2.882	0.006
1E+12	130	2.661	2.666	0.005
1E+12	131	2.916	2.915	-0.001
5E+12	126	2.822	2.806	-0.016
5E+12	127	2.850	2.854	0.004
5E+12	128	2.794	2.788	-0.006
1E+13	123	2.851	2.822	-0.029
1E+13	124	2.736	2.717	-0.019
1E+13	125	2.821	2.809	-0.012
	Max	2.916	2.915	0.006
	Average	2.822	2.815	-0.007
	Min	2.661	2.666	-0.029
	Std Dev	0.076	0.078	0.012

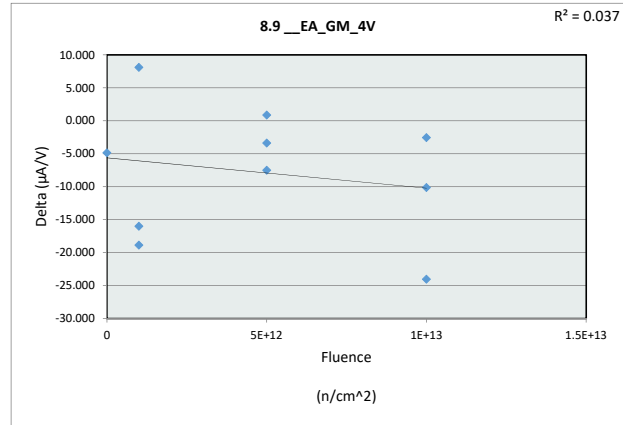


7.7_I_SS_14V				
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.980	1.980	1.980	1.980
Min	2.891	2.666	2.788	2.717
Average	2.891	2.821	2.816	2.783
Max	2.891	2.915	2.854	2.822
UL	3.320	3.320	3.320	3.320

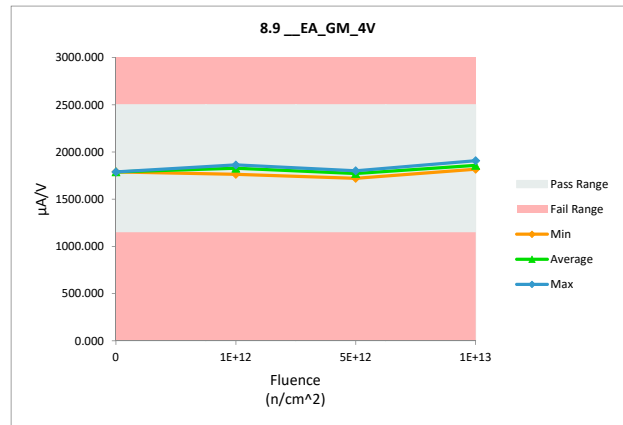


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1793.424	1788.568	-4.856
1E+12	129	1881.898	1863.028	-18.870
1E+12	130	1779.566	1763.572	-15.994
1E+12	131	1849.086	1857.171	8.085
5E+12	126	1804.099	1800.720	-3.379
5E+12	127	1804.021	1796.516	-7.505
5E+12	128	1721.332	1722.189	0.857
1E+13	123	1862.438	1852.311	-10.127
1E+13	124	1931.835	1907.803	-24.032
1E+13	125	1820.563	1818.018	-2.545
Max		1931.835	1907.803	8.085
Average		1824.826	1816.990	-7.837
Min		1721.332	1722.189	-24.032
Std Dev		59.008	54.326	9.671



8.9_EA_GM_4V				
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	1788.568	1763.572	1722.189	1818.018
Average	1788.568	1827.924	1773.142	1859.377
Max	1788.568	1863.028	1800.720	1907.803
UL	2500.000	2500.000	2500.000	2500.000

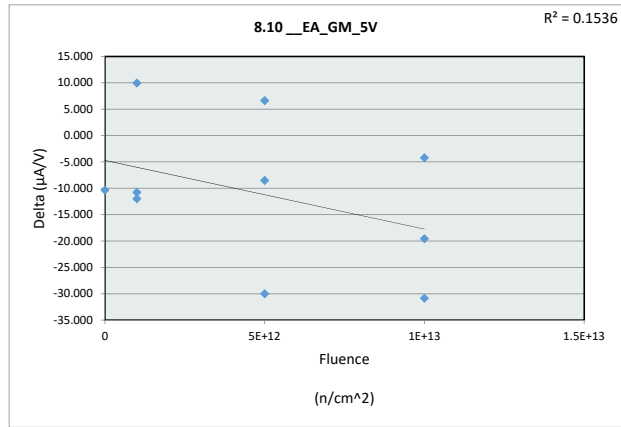


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.10_EA_GM_5V

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

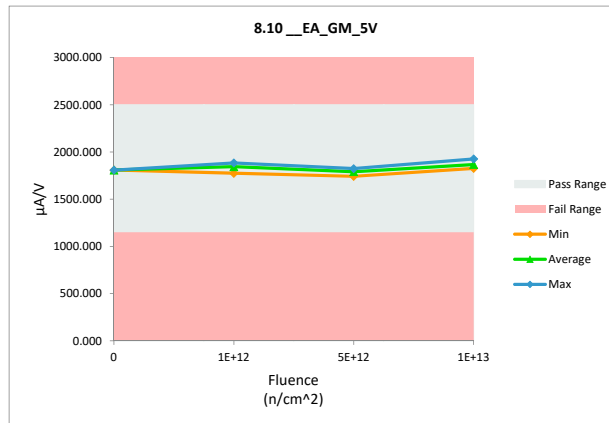
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1818.580	1808.240	-10.340
1E+12	129	1896.052	1884.085	-11.967
1E+12	130	1784.962	1774.203	-10.759
1E+12	131	1863.390	1873.346	9.956
5E+12	126	1835.009	1805.001	-30.008
5E+12	127	1832.154	1823.640	-8.514
5E+12	128	1736.107	1742.707	6.600
1E+13	123	1879.653	1848.821	-30.832
1E+13	124	1931.279	1927.064	-4.215
1E+13	125	1846.511	1826.937	-19.574
Max		1931.279	1927.064	9.956
Average		1842.370	1831.404	-10.965
Min		1736.107	1742.707	-30.832
Std Dev		55.725	54.203	13.461



8.10_EA_GM_5V

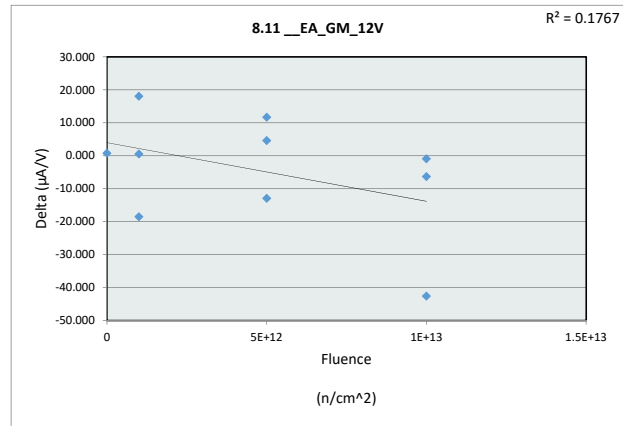
Test Site		
Tester		
Test Number		
Max Limit	2500	µA/V
Min Limit	1150	µA/V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1150.000	1150.000	1150.000	1150.000
Min	1808.240	1774.203	1742.707	1826.937
Average	1808.240	1843.878	1790.449	1867.607
Max	1808.240	1884.085	1823.640	1927.064
UL	2500.000	2500.000	2500.000	2500.000

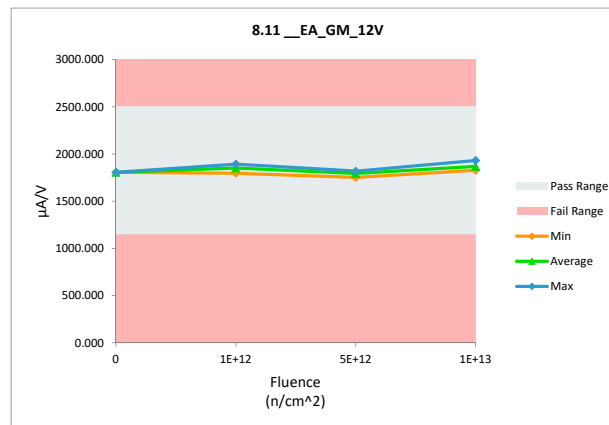


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1805.011	1805.749	0.738
1E+12	129	1891.733	1892.267	0.534
1E+12	130	1777.794	1795.834	18.040
1E+12	131	1881.898	1863.379	-18.519
5E+12	126	1806.858	1818.530	11.672
5E+12	127	1825.346	1812.411	-12.935
5E+12	128	1746.708	1751.303	4.595
1E+13	123	1890.359	1847.792	-42.567
1E+13	124	1937.614	1931.268	-6.346
1E+13	125	1829.307	1828.370	-0.937
Max		1937.614	1931.268	18.040
Average		1839.263	1834.690	-4.572
Min		1746.708	1751.303	-42.567
Std Dev		59.363	51.354	17.120



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	1805.749	1795.834	1751.303	1828.370
Average	1805.749	1850.493	1794.081	1869.143
Max	1805.749	1892.267	1818.530	1931.268
UL	2500.000	2500.000	2500.000	2500.000

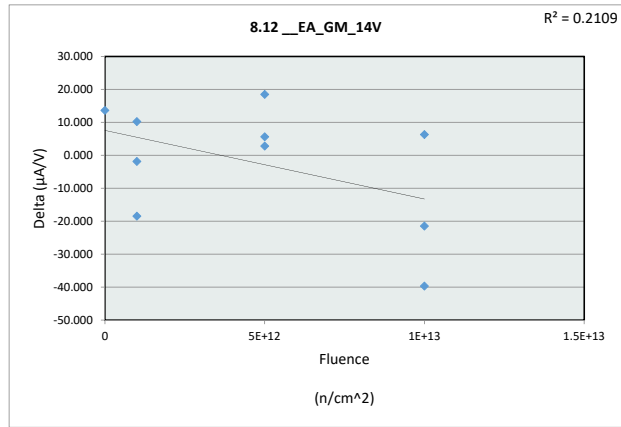


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.12_EA_GM_14V

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

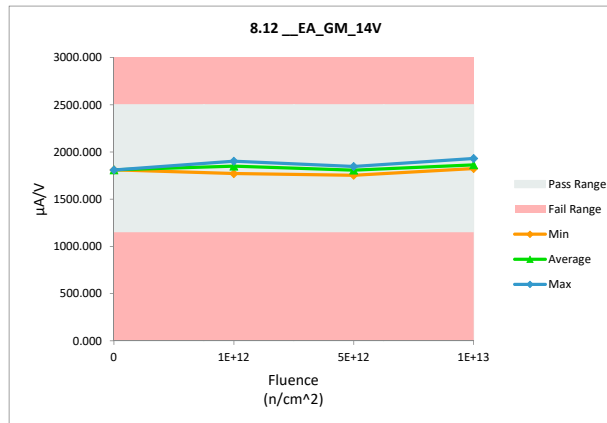
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1796.391	1810.025	13.634
1E+12	129	1904.024	1902.157	-1.867
1E+12	130	1789.303	1770.869	-18.434
1E+12	131	1866.987	1877.234	10.247
5E+12	126	1818.018	1823.640	5.622
5E+12	127	1828.041	1846.501	18.460
5E+12	128	1750.298	1753.087	2.789
1E+13	123	1876.772	1837.089	-39.683
1E+13	124	1924.953	1931.257	6.304
1E+13	125	1846.511	1825.029	-21.482
Max		1924.953	1931.257	18.460
Average		1840.130	1837.689	-2.441
Min		1750.298	1753.087	-39.683
Std Dev		54.348	55.074	18.351



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	1810.025	1770.869	1753.087	1825.029
Average	1810.025	1850.087	1807.743	1864.458
Max	1810.025	1902.157	1846.501	1931.257
UL	2500.000	2500.000	2500.000	2500.000

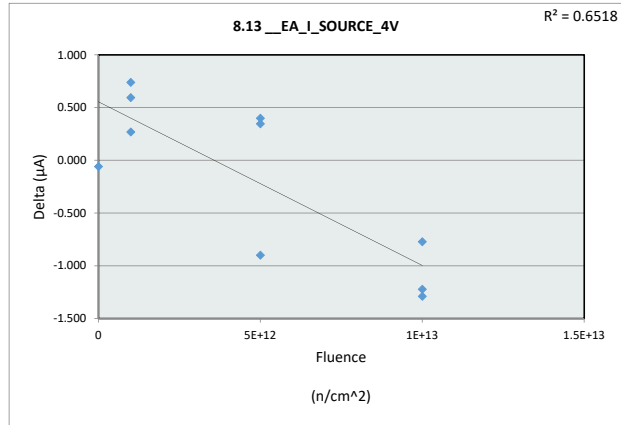


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.13_EA_I_SOURCE_4V

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

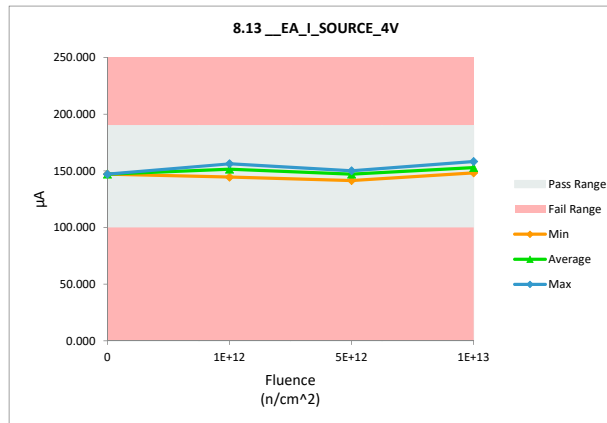
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	147.147	147.088	-0.059
1E+12	129	155.720	156.314	0.594
1E+12	130	143.736	144.474	0.738
1E+12	131	153.377	153.645	0.268
5E+12	126	150.689	149.790	-0.899
5E+12	127	149.641	150.040	0.399
5E+12	128	141.095	141.441	0.346
1E+13	123	153.563	152.274	-1.289
1E+13	124	159.115	158.343	-0.772
1E+13	125	149.515	148.292	-1.223
Max		159.115	158.343	0.738
Average		150.360	150.170	-0.190
Min		141.095	141.441	-1.289
Std Dev		5.438	5.195	0.778



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	147.088	144.474	141.441	148.292
Average	147.088	151.478	147.090	152.970
Max	147.088	156.314	150.040	158.343
UL	190.000	190.000	190.000	190.000

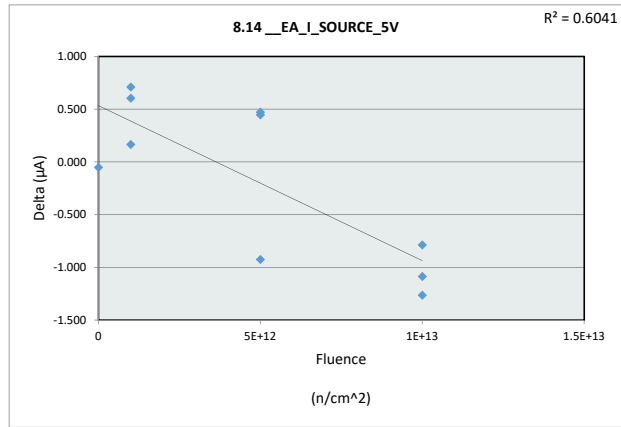


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.14_EA_I_SOURCE_5V

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

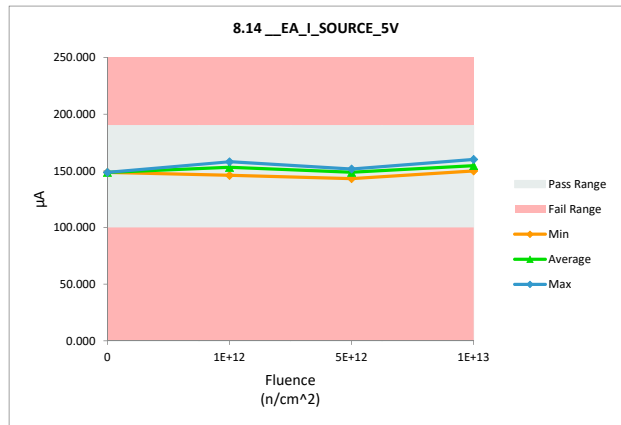
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	148.727	148.676	-0.051
1E+12	129	157.418	158.021	0.603
1E+12	130	145.319	146.029	0.710
1E+12	131	155.071	155.236	0.165
5E+12	126	152.398	151.473	-0.925
5E+12	127	151.167	151.638	0.471
5E+12	128	142.725	143.171	0.446
1E+13	123	155.080	153.817	-1.263
1E+13	124	160.928	160.140	-0.788
1E+13	125	151.110	150.024	-1.086
Max		160.928	160.140	0.710
Average		151.994	151.823	-0.172
Min		142.725	143.171	-1.263
Std Dev		5.487	5.217	0.766



8.14_EA_I_SOURCE_5V

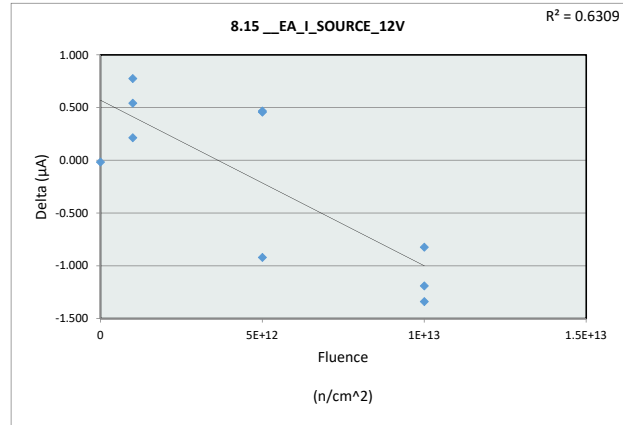
Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	148.676	146.029	143.171	150.024
Average	148.676	153.095	148.761	154.660
Max	148.676	158.021	151.638	160.140
UL	190.000	190.000	190.000	190.000

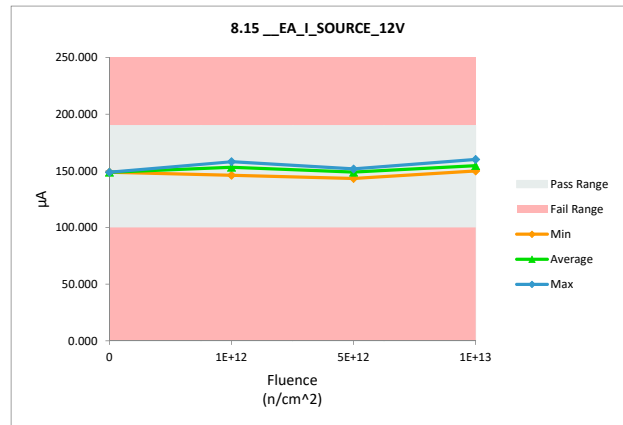


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	148.825	148.808	-0.017
1E+12	129	157.562	158.103	0.541
1E+12	130	145.368	146.143	0.775
1E+12	131	155.099	155.313	0.214
5E+12	126	152.449	151.529	-0.920
5E+12	127	151.241	151.708	0.467
5E+12	128	142.804	143.261	0.457
1E+13	123	155.158	153.819	-1.339
1E+13	124	161.009	160.185	-0.824
1E+13	125	151.154	149.964	-1.190
Max		161.009	160.185	0.775
Average		152.067	151.883	-0.184
Min		142.804	143.261	-1.339
Std Dev		5.495	5.204	0.800



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	148.808	146.143	143.261	149.964
Average	148.808	153.186	148.833	154.656
Max	148.808	158.103	151.708	160.185
UL	190.000	190.000	190.000	190.000

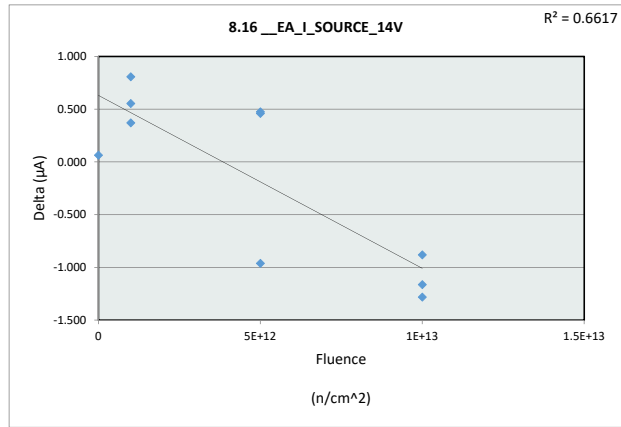


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.16 EA_I_SOURCE_14V

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

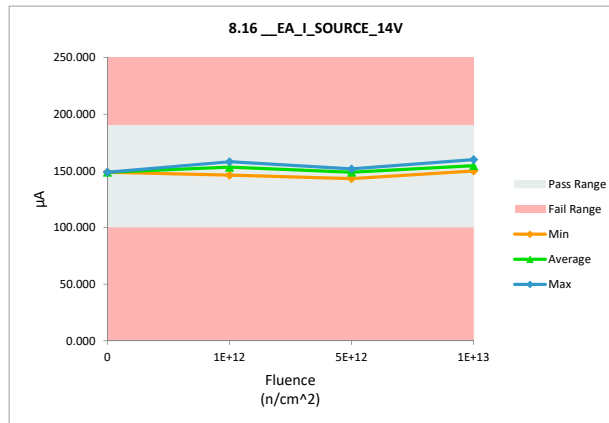
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	148.757	148.821	0.064
1E+12	129	157.502	158.055	0.553
1E+12	130	145.391	146.198	0.807
1E+12	131	155.025	155.395	0.370
5E+12	126	152.432	151.470	-0.962
5E+12	127	151.194	151.669	0.475
5E+12	128	142.734	143.193	0.459
1E+13	123	155.077	153.795	-1.282
1E+13	124	160.910	160.028	-0.882
1E+13	125	151.123	149.960	-1.163
Max		160.910	160.028	0.807
Average		152.015	151.858	-0.156
Min		142.734	143.193	-1.282
Std Dev		5.477	5.181	0.816



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	148.821	146.198	143.193	149.960
Average	148.821	153.216	148.777	154.594
Max	148.821	158.055	151.669	160.028
UL	190.000	190.000	190.000	190.000

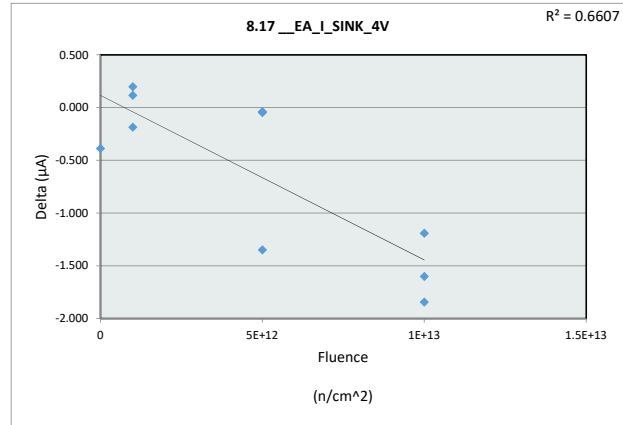


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.17 __EA_I_SINK_4V

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

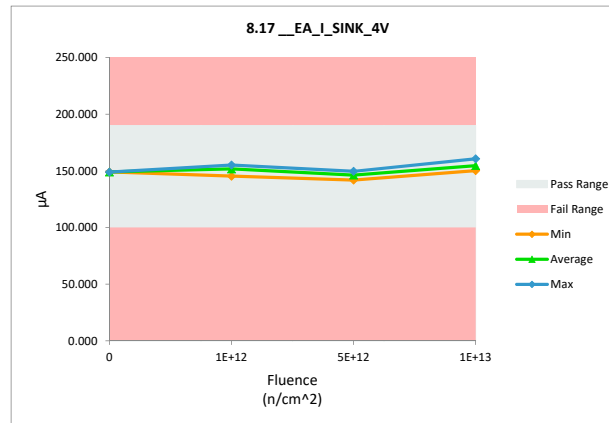
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	149.404	149.016	-0.388
1E+12	129	155.044	155.159	0.115
1E+12	130	145.113	145.311	0.198
1E+12	131	154.872	154.686	-0.186
5E+12	126	148.784	147.435	-1.349
5E+12	127	149.647	149.608	-0.039
5E+12	128	141.998	141.950	-0.048
1E+13	123	154.665	152.821	-1.844
1E+13	124	161.856	160.664	-1.192
1E+13	125	151.777	150.176	-1.601
Max		161.856	160.664	0.198
Average		151.316	150.683	-0.633
Min		141.998	141.950	-1.844
Std Dev		5.649	5.376	0.777



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	149.016	145.311	141.950	150.176
Average	149.016	151.719	146.331	154.554
Max	149.016	155.159	149.608	160.664
UL	190.000	190.000	190.000	190.000

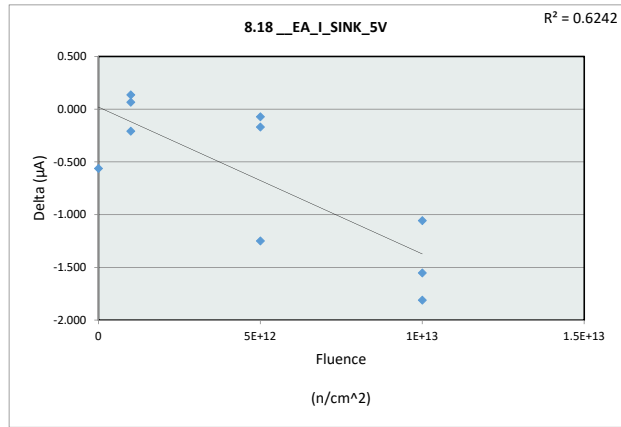


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.18 EA_I_SINK_5V

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

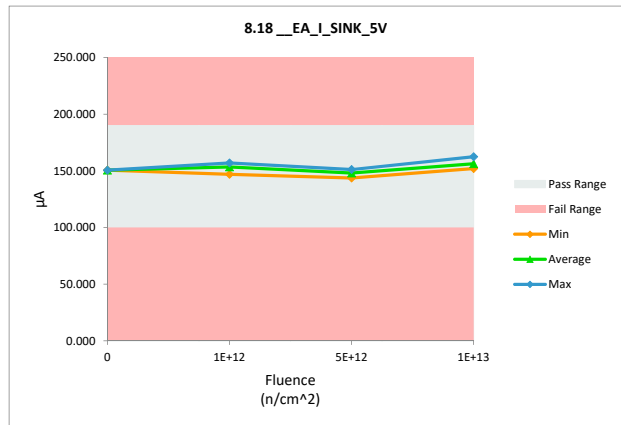
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	151.203	150.640	-0.563
1E+12	129	156.824	156.959	0.135
1E+12	130	146.925	146.991	0.066
1E+12	131	156.622	156.413	-0.209
5E+12	126	150.433	149.183	-1.250
5E+12	127	151.400	151.231	-0.169
5E+12	128	143.836	143.764	-0.072
1E+13	123	156.335	154.525	-1.810
1E+13	124	163.589	162.532	-1.057
1E+13	125	153.604	152.052	-1.552
Max		163.589	162.532	0.135
Average		153.077	152.429	-0.648
Min		143.836	143.764	-1.810
Std Dev		5.623	5.404	0.713



8.18 EA_I_SINK_5V

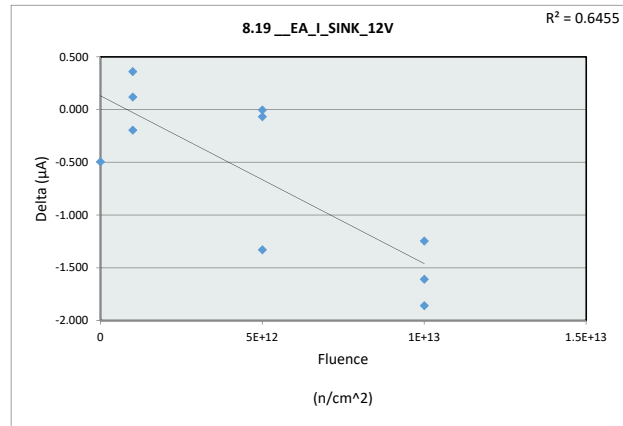
Test Site		
Tester		
Test Number		
Max Limit	190	µA
Min Limit	100	µA

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.640	146.991	143.764	152.052
Average	150.640	153.454	148.059	156.370
Max	150.640	156.959	151.231	162.532
UL	190.000	190.000	190.000	190.000

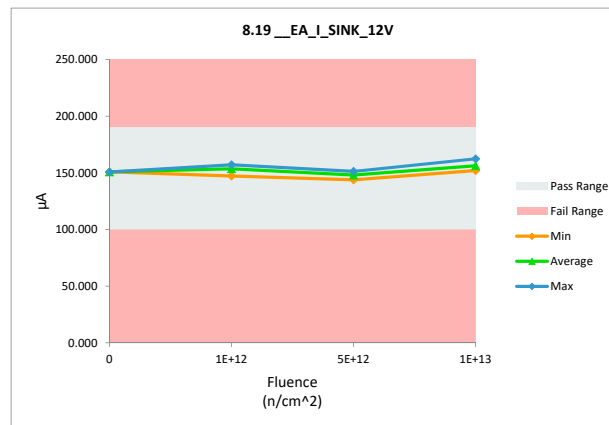


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.19_EA_I_SINK_12V				
Fluence	Serial #	PRE	POST	Delta
0	132	151.351	150.856	-0.495
1E+12	129	156.983	157.101	0.118
1E+12	130	146.871	147.231	0.360
1E+12	131	156.700	156.504	-0.196
5E+12	126	150.521	149.191	-1.330
5E+12	127	151.309	151.305	-0.004
5E+12	128	143.943	143.875	-0.068
1E+13	123	156.402	154.543	-1.859
1E+13	124	163.704	162.457	-1.247
1E+13	125	153.674	152.065	-1.609
	Max	163.704	162.457	0.360
	Average	153.146	152.513	-0.633
	Min	143.943	143.875	-1.859
	Std Dev	5.650	5.353	0.802

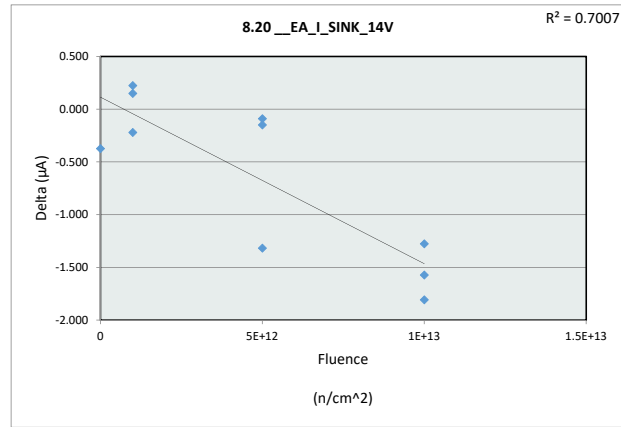


8.19_EA_I_SINK_12V				
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.856	147.231	143.875	152.065
Average	150.856	153.612	148.124	156.355
Max	150.856	157.101	151.305	162.457
UL	190.000	190.000	190.000	190.000

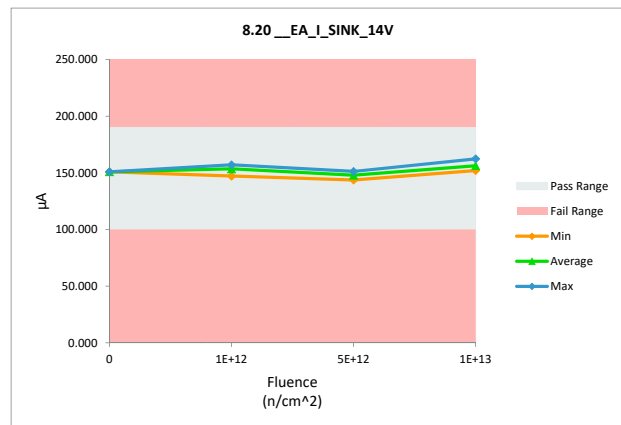


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	151.291	150.917	-0.374
1E+12	129	156.917	157.066	0.149
1E+12	130	146.968	147.191	0.223
1E+12	131	156.646	156.425	-0.221
5E+12	126	150.496	149.179	-1.317
5E+12	127	151.354	151.263	-0.091
5E+12	128	143.852	143.702	-0.150
1E+13	123	156.328	154.520	-1.808
1E+13	124	163.678	162.402	-1.276
1E+13	125	153.615	152.042	-1.573
Max		163.678	162.402	0.223
Average		153.115	152.471	-0.644
Min		143.852	143.702	-1.808
Std Dev		5.637	5.367	0.764

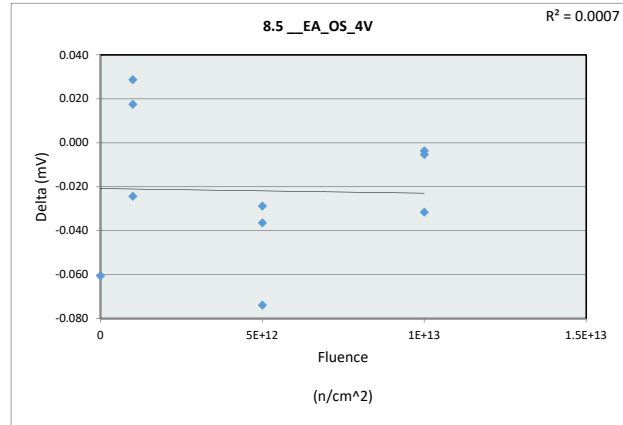


8.20_EA_I_SINK_14V				
Test Site				
Tester				
Test Number				
Max Limit		190	µA	
Min Limit		100	µA	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	100.000	100.000	100.000	100.000
Min	150.917	147.191	143.702	152.042
Average	150.917	153.561	148.048	156.321
Max	150.917	157.066	151.263	162.402
UL	190.000	190.000	190.000	190.000

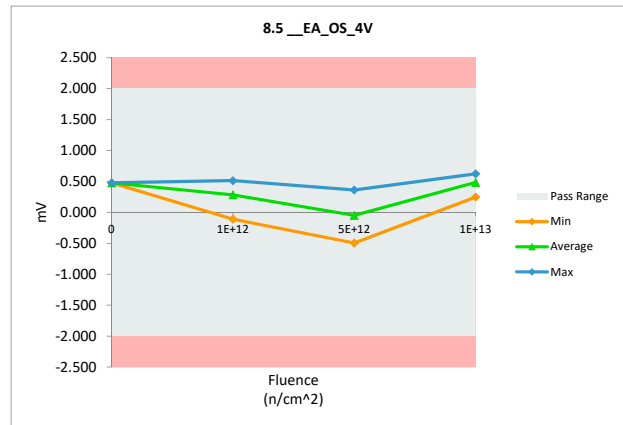


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.537	0.477	-0.061
1E+12	129	-0.087	-0.111	-0.024
1E+12	130	0.432	0.449	0.017
1E+12	131	0.484	0.512	0.029
5E+12	126	-0.467	-0.496	-0.029
5E+12	127	0.063	-0.011	-0.074
5E+12	128	0.399	0.363	-0.037
1E+13	123	0.251	0.247	-0.004
1E+13	124	0.655	0.624	-0.032
1E+13	125	0.587	0.581	-0.005
Max		0.655	0.624	0.029
Average		0.285	0.264	-0.022
Min		-0.467	-0.496	-0.074
Std Dev		0.353	0.361	0.032



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	0.477	-0.111	-0.496	0.247
Average	0.477	0.283	-0.048	0.484
Max	0.477	0.512	0.363	0.624
UL	2.000	2.000	2.000	2.000

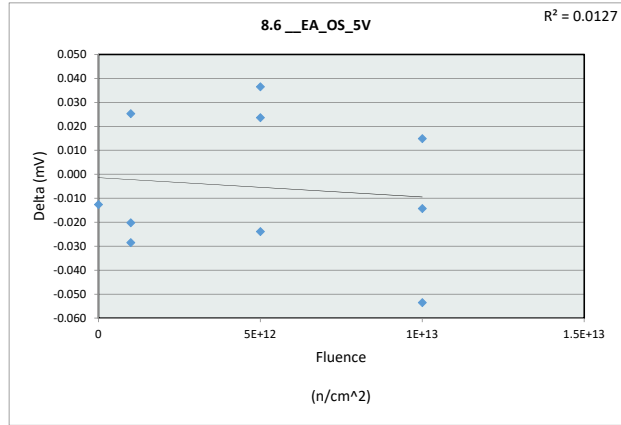


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.6 __EA_OS_5V

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

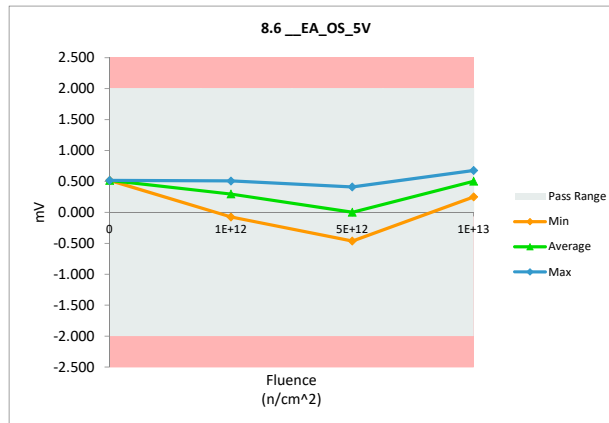
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.530	0.517	-0.013
1E+12	129	-0.054	-0.075	-0.020
1E+12	130	0.433	0.458	0.025
1E+12	131	0.536	0.507	-0.029
5E+12	126	-0.440	-0.463	-0.024
5E+12	127	0.034	0.058	0.024
5E+12	128	0.375	0.412	0.037
1E+13	123	0.304	0.250	-0.053
1E+13	124	0.692	0.678	-0.014
1E+13	125	0.568	0.583	0.015
Max		0.692	0.678	0.037
Average		0.298	0.292	-0.005
Min		-0.440	-0.463	-0.053
Std Dev		0.350	0.355	0.029



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	0.517	-0.075	-0.464	0.251
Average	0.517	0.297	0.002	0.504
Max	0.517	0.507	0.412	0.678
UL	2.000	2.000	2.000	2.000

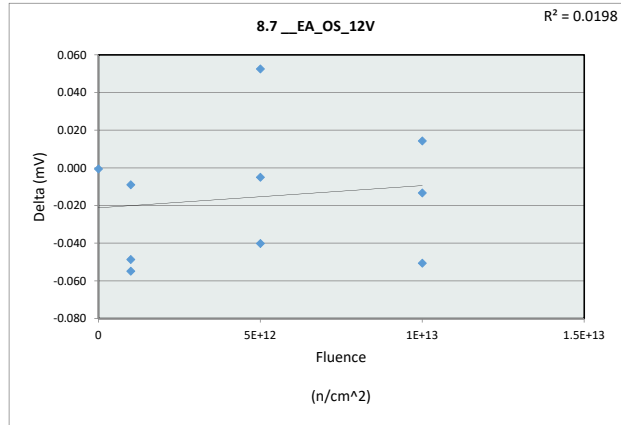


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

8.7 __EA_OS_12V

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

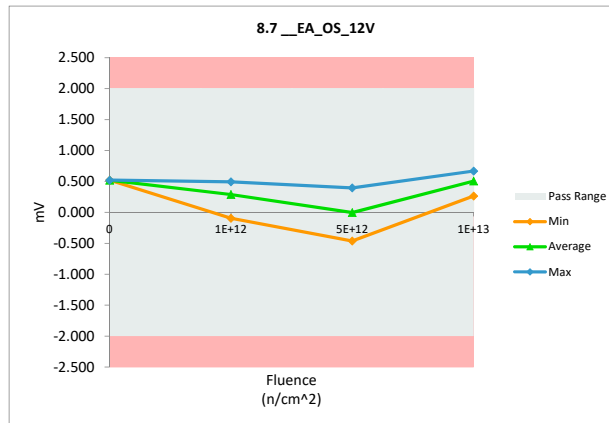
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.521	0.521	-0.001
1E+12	129	-0.046	-0.095	-0.049
1E+12	130	0.478	0.469	-0.009
1E+12	131	0.549	0.494	-0.055
5E+12	126	-0.458	-0.463	-0.005
5E+12	127	0.099	0.058	-0.040
5E+12	128	0.344	0.396	0.053
1E+13	123	0.316	0.265	-0.051
1E+13	124	0.682	0.669	-0.013
1E+13	125	0.570	0.584	0.014
Max		0.682	0.669	0.053
Average		0.305	0.290	-0.016
Min		-0.458	-0.463	-0.055
Std Dev		0.349	0.355	0.034



8.7 __EA_OS_12V

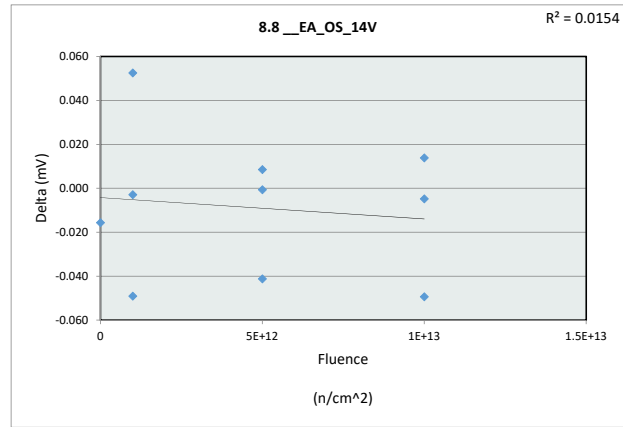
Test Site		
Tester		
Test Number		
Max Limit	2	mV
Min Limit	-2	mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.521	-0.095	-0.463	0.265
Average	0.521	0.289	-0.003	0.506
Max	0.521	0.494	0.396	0.669
UL	2.000	2.000	2.000	2.000

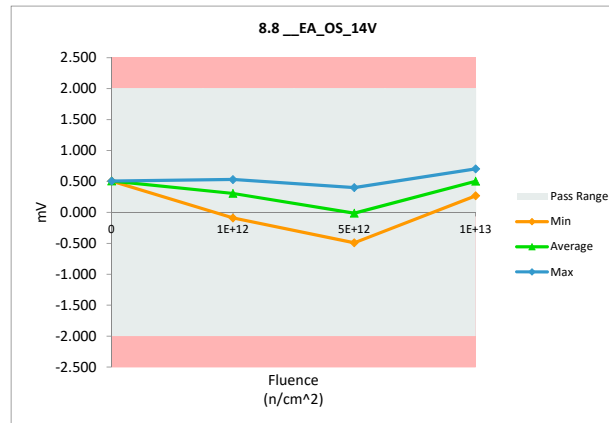


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.522	0.506	-0.016
1E+12	129	-0.041	-0.090	-0.049
1E+12	130	0.429	0.482	0.053
1E+12	131	0.534	0.531	-0.003
5E+12	126	-0.451	-0.492	-0.041
5E+12	127	0.053	0.052	-0.001
5E+12	128	0.393	0.401	0.008
1E+13	123	0.318	0.268	-0.049
1E+13	124	0.689	0.703	0.014
1E+13	125	0.547	0.542	-0.005
Max		0.689	0.703	0.053
Average		0.299	0.290	-0.009
Min		-0.451	-0.492	-0.049
Std Dev		0.347	0.365	0.032

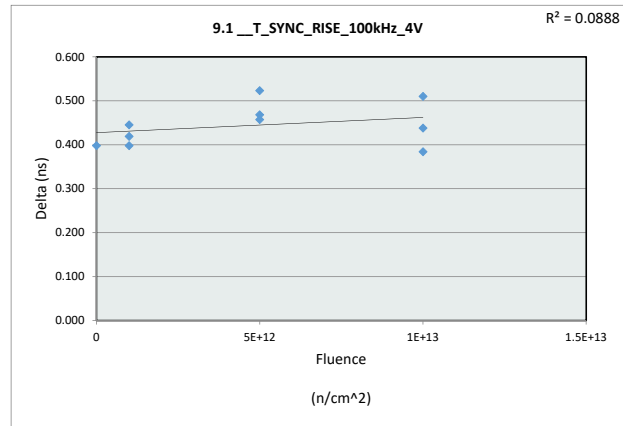


8.8_EA_OS_14V				
Test Site				
Tester				
Test Number				
Max Limit		2	mV	
Min Limit		-2	mV	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	-2.000	-2.000	-2.000	-2.000
Min	0.506	-0.090	-0.492	0.268
Average	0.506	0.308	-0.013	0.504
Max	0.506	0.531	0.402	0.703
UL	2.000	2.000	2.000	2.000

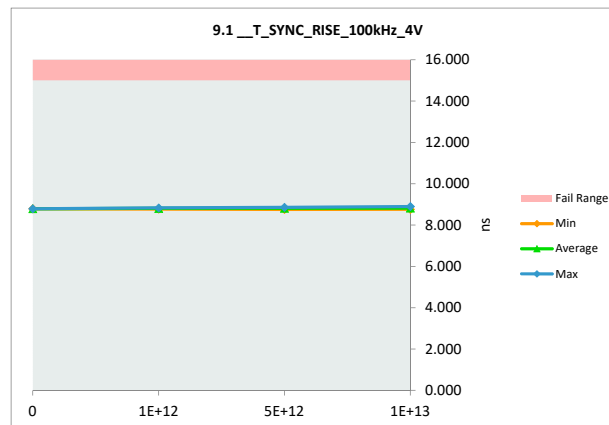


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.390	8.788	0.398
1E+12	129	8.370	8.815	0.445
1E+12	130	8.409	8.828	0.419
1E+12	131	8.371	8.769	0.398
5E+12	126	8.333	8.856	0.523
5E+12	127	8.299	8.756	0.457
5E+12	128	8.353	8.821	0.468
1E+13	123	8.387	8.897	0.510
1E+13	124	8.420	8.804	0.384
1E+13	125	8.321	8.759	0.438
Max		8.420	8.897	0.523
Average		8.365	8.809	0.444
Min		8.299	8.756	0.384
Std Dev		0.039	0.045	0.047

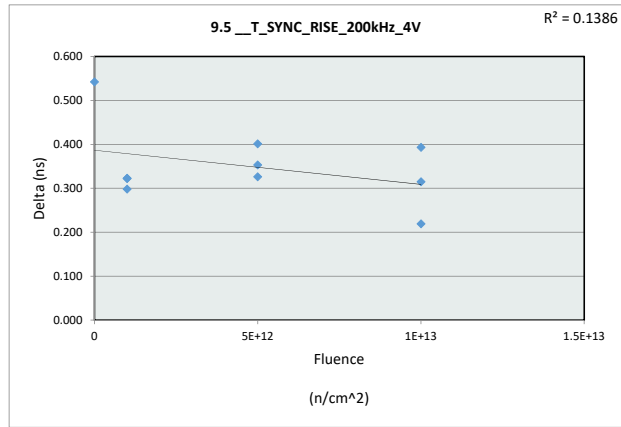


9.1 __T_SYNC_RISE_100kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.788	8.769	8.756	8.759
Average	8.788	8.804	8.811	8.820
Max	8.788	8.828	8.856	8.897
UL	15.000	15.000	15.000	15.000

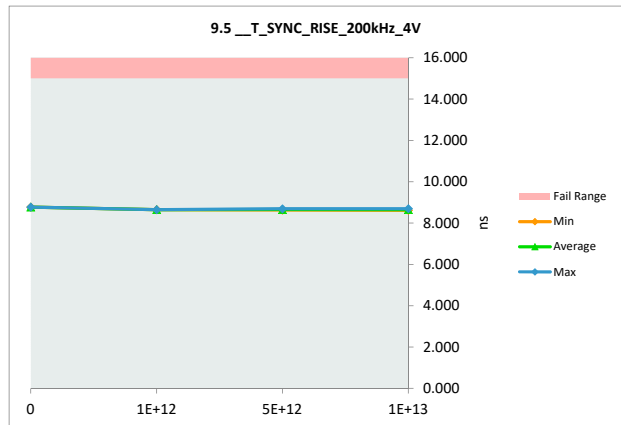


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.230	8.772	0.542
1E+12	129	8.349	8.647	0.298
1E+12	130	8.326	8.648	0.322
1E+12	131	8.323	8.646	0.323
5E+12	126	8.336	8.689	0.353
5E+12	127	8.236	8.637	0.401
5E+12	128	8.301	8.627	0.326
1E+13	123	8.300	8.693	0.393
1E+13	124	8.408	8.627	0.219
1E+13	125	8.301	8.616	0.315
Max		8.408	8.772	0.542
Average		8.311	8.660	0.349
Min		8.230	8.616	0.219
Std Dev		0.052	0.047	0.085

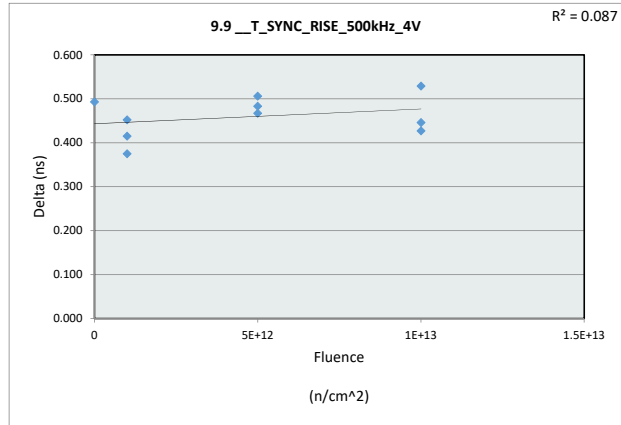


9.5 __T_SYNC_RISE_200kHz_4V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.772	8.646	8.627	8.616
Average	8.772	8.647	8.651	8.645
Max	8.772	8.648	8.689	8.693
UL	15.000	15.000	15.000	15.000

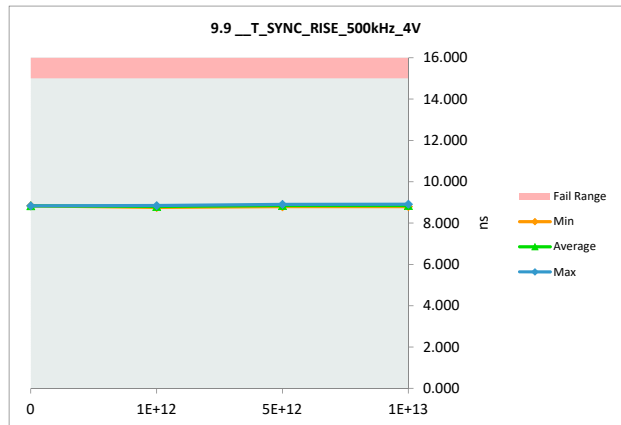


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.339	8.832	0.493
1E+12	129	8.394	8.846	0.452
1E+12	130	8.396	8.811	0.415
1E+12	131	8.381	8.756	0.375
5E+12	126	8.395	8.901	0.506
5E+12	127	8.324	8.791	0.467
5E+12	128	8.366	8.849	0.483
1E+13	123	8.382	8.911	0.529
1E+13	124	8.406	8.833	0.427
1E+13	125	8.349	8.795	0.446
Max		8.406	8.911	0.529
Average		8.373	8.832	0.459
Min		8.324	8.756	0.375
Std Dev		0.028	0.048	0.046



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	8.832	8.756	8.791	8.795
Average	8.832	8.804	8.847	8.846
Max	8.832	8.846	8.901	8.911
UL	15.000	15.000	15.000	15.000

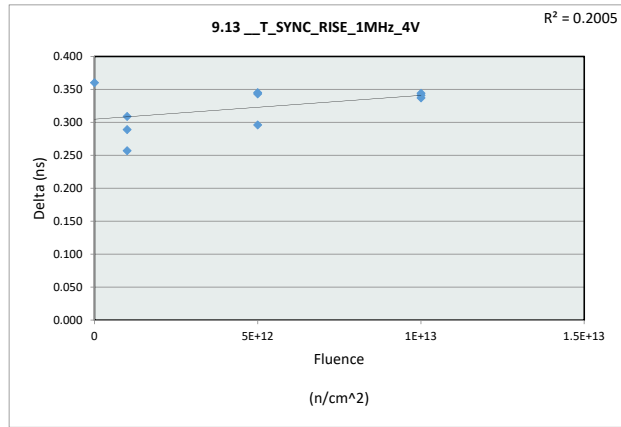


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.13 __T_SYNC_RISE_1MHz_4V

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

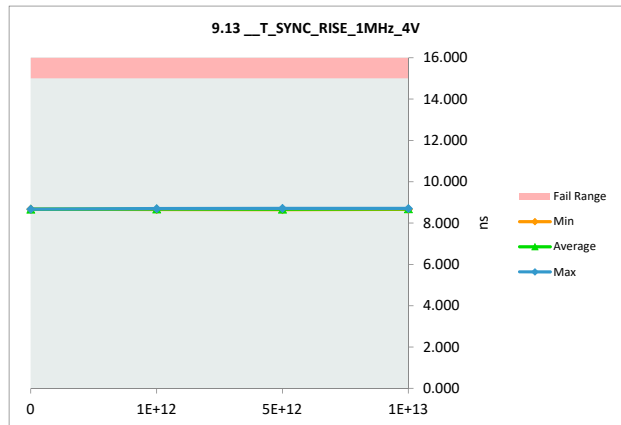
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.310	8.670	0.360
1E+12	129	8.398	8.687	0.289
1E+12	130	8.441	8.698	0.257
1E+12	131	8.345	8.654	0.309
5E+12	126	8.368	8.711	0.343
5E+12	127	8.305	8.650	0.345
5E+12	128	8.349	8.645	0.296
1E+13	123	8.363	8.704	0.341
1E+13	124	8.356	8.700	0.344
1E+13	125	8.324	8.661	0.337
Max		8.441	8.711	0.360
Average		8.356	8.678	0.322
Min		8.305	8.645	0.257
Std Dev		0.041	0.025	0.033



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	8.670	8.654	8.645	8.661
Average	8.670	8.680	8.669	8.688
Max	8.670	8.698	8.711	8.704
UL	15.000	15.000	15.000	15.000

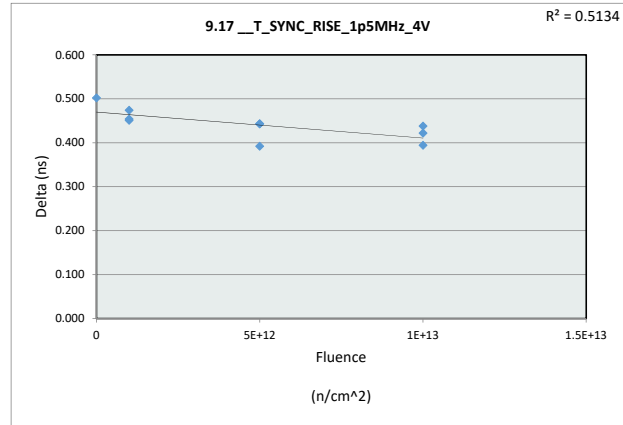


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.17 __T_SYNC_RISE_1p5MHz_4V

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

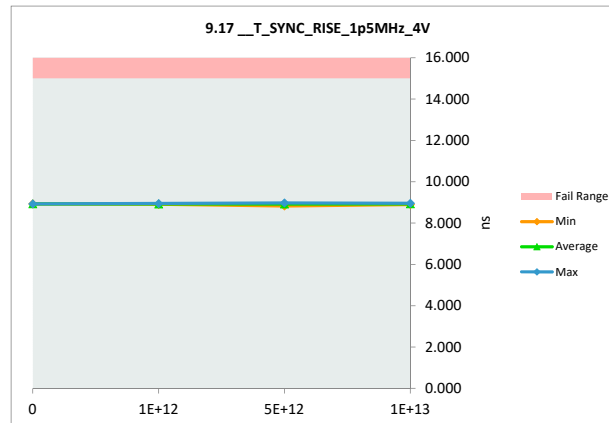
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.422	8.924	0.502
1E+12	129	8.461	8.912	0.451
1E+12	130	8.490	8.944	0.454
1E+12	131	8.433	8.907	0.474
5E+12	126	8.534	8.977	0.443
5E+12	127	8.438	8.830	0.392
5E+12	128	8.510	8.953	0.443
1E+13	123	8.533	8.955	0.422
1E+13	124	8.549	8.943	0.394
1E+13	125	8.456	8.894	0.438
Max		8.549	8.977	0.502
Average		8.483	8.924	0.441
Min		8.422	8.830	0.392
Std Dev		0.047	0.042	0.033



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	8.924	8.907	8.830	8.894
Average	8.924	8.921	8.920	8.931
Max	8.924	8.944	8.977	8.955
UL	15.000	15.000	15.000	15.000

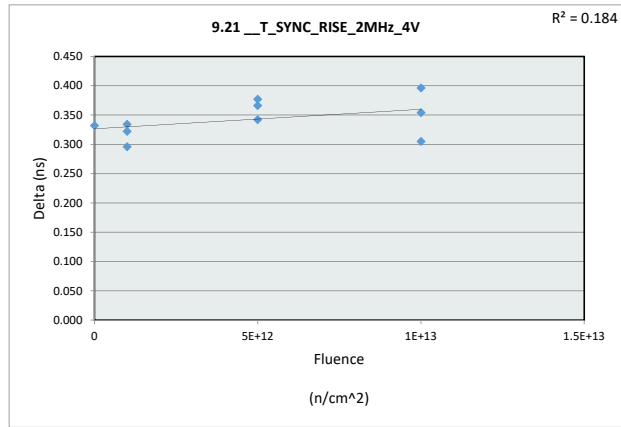


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.21 __T_SYNC_RISE_2MHz_4V

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

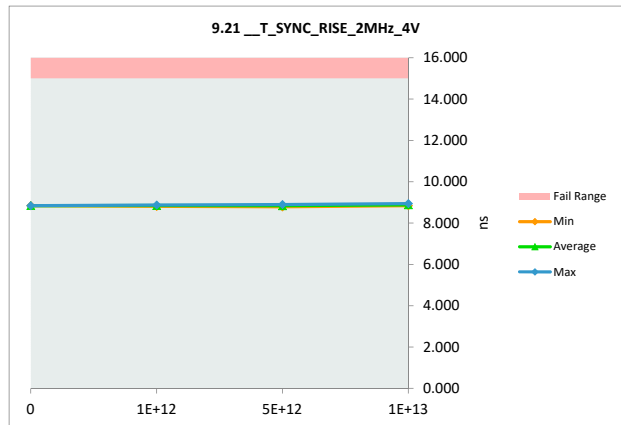
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.509	8.841	0.332
1E+12	129	8.548	8.870	0.322
1E+12	130	8.562	8.858	0.296
1E+12	131	8.473	8.807	0.334
5E+12	126	8.519	8.896	0.377
5E+12	127	8.418	8.784	0.366
5E+12	128	8.493	8.835	0.342
1E+13	123	8.546	8.942	0.396
1E+13	124	8.545	8.850	0.305
1E+13	125	8.489	8.843	0.354
Max		8.562	8.942	0.396
Average		8.510	8.853	0.342
Min		8.418	8.784	0.296
Std Dev		0.044	0.044	0.031



9.21 __T_SYNC_RISE_2MHz_4V

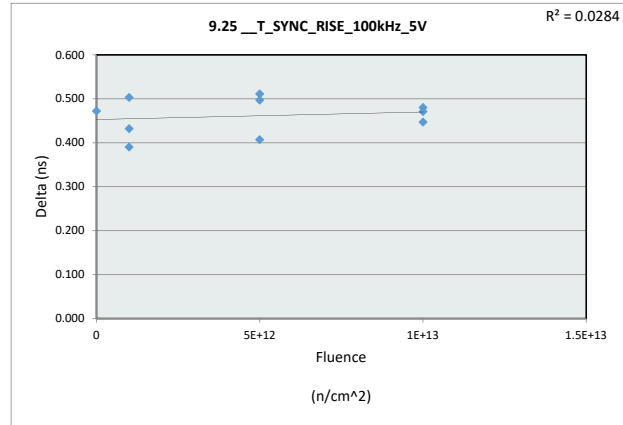
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.841	8.807	8.784	8.843
Average	8.841	8.845	8.838	8.878
Max	8.841	8.870	8.896	8.942
UL	15.000	15.000	15.000	15.000

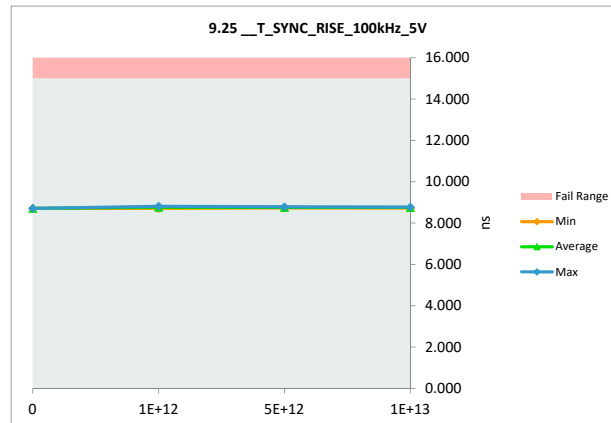


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.236	8.708	0.472
1E+12	129	8.310	8.813	0.503
1E+12	130	8.338	8.770	0.432
1E+12	131	8.318	8.708	0.390
5E+12	126	8.334	8.741	0.407
5E+12	127	8.240	8.737	0.497
5E+12	128	8.273	8.784	0.511
1E+13	123	8.322	8.769	0.447
1E+13	124	8.292	8.763	0.471
1E+13	125	8.239	8.719	0.480
Max		8.338	8.813	0.511
Average		8.290	8.751	0.461
Min		8.236	8.708	0.390
Std Dev		0.040	0.035	0.041



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	8.708	8.708	8.737	8.719
Average	8.708	8.764	8.754	8.750
Max	8.708	8.813	8.784	8.769
UL	15.000	15.000	15.000	15.000

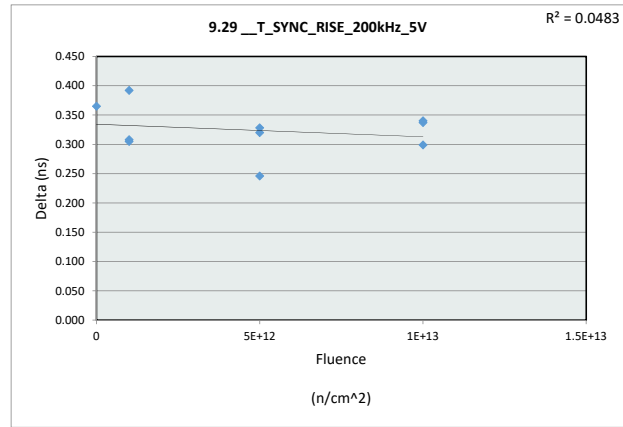


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.29 __T_SYNC_RISE_200kHz_5V

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

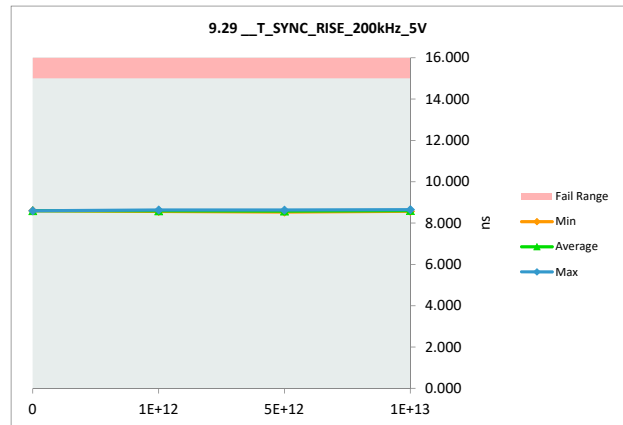
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.233	8.598	0.365
1E+12	129	8.271	8.576	0.305
1E+12	130	8.239	8.631	0.392
1E+12	131	8.252	8.560	0.308
5E+12	126	8.383	8.629	0.246
5E+12	127	8.202	8.530	0.328
5E+12	128	8.267	8.587	0.320
1E+13	123	8.308	8.648	0.340
1E+13	124	8.268	8.567	0.299
1E+13	125	8.256	8.593	0.337
Max		8.383	8.648	0.392
Average		8.268	8.592	0.324
Min		8.202	8.530	0.246
Std Dev		0.049	0.036	0.040



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	8.598	8.560	8.530	8.567
Average	8.598	8.589	8.582	8.603
Max	8.598	8.631	8.629	8.648
UL	15.000	15.000	15.000	15.000

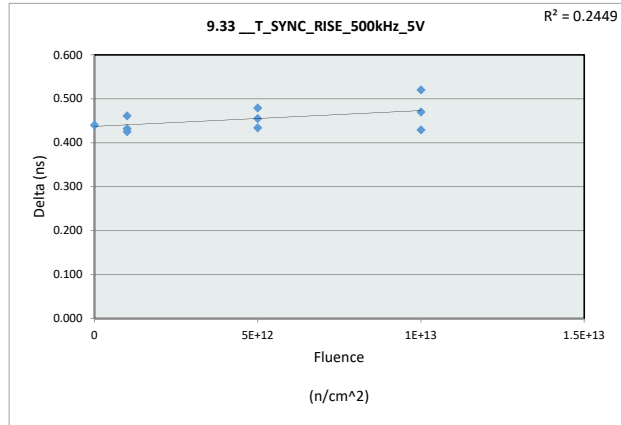


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.33 __T_SYNC_RISE_500kHz_5V

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

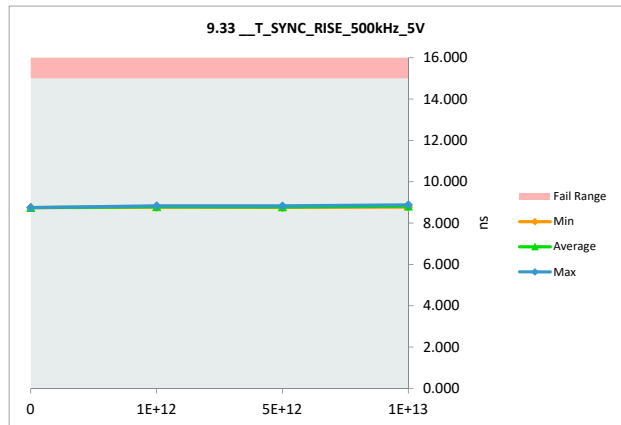
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.310	8.750	0.440
1E+12	129	8.336	8.761	0.425
1E+12	130	8.371	8.832	0.461
1E+12	131	8.337	8.769	0.432
5E+12	126	8.374	8.829	0.455
5E+12	127	8.272	8.751	0.479
5E+12	128	8.317	8.751	0.434
1E+13	123	8.360	8.880	0.520
1E+13	124	8.382	8.811	0.429
1E+13	125	8.299	8.769	0.470
Max		8.382	8.880	0.520
Average		8.336	8.790	0.455
Min		8.272	8.750	0.425
Std Dev		0.036	0.045	0.029



9.33 __T_SYNC_RISE_500kHz

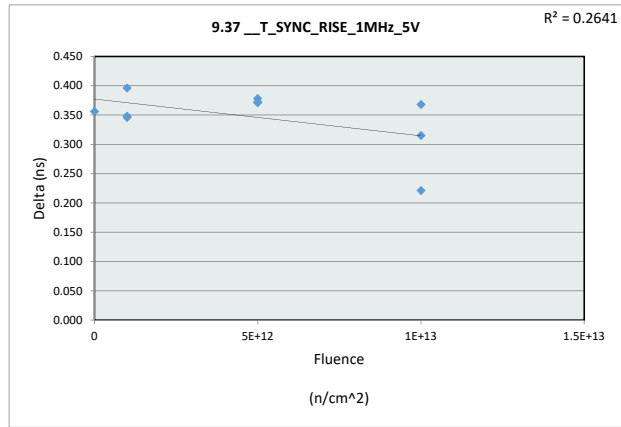
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.750	8.761	8.751	8.769
Average	8.750	8.787	8.777	8.820
Max	8.750	8.832	8.829	8.880
UL	15.000	15.000	15.000	15.000

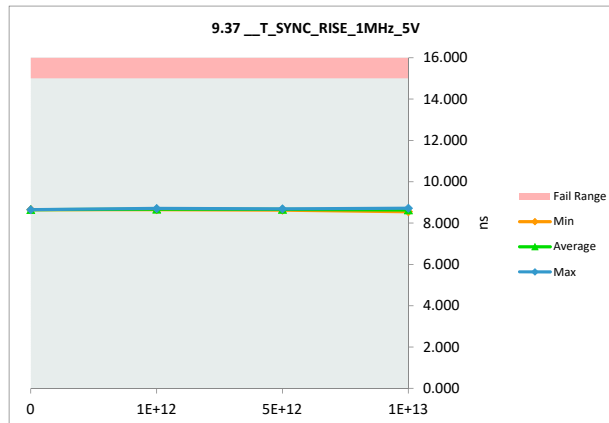


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.289	8.645	0.356
1E+12	129	8.276	8.672	0.396
1E+12	130	8.355	8.703	0.348
1E+12	131	8.299	8.645	0.346
5E+12	126	8.307	8.685	0.378
5E+12	127	8.252	8.624	0.372
5E+12	128	8.308	8.679	0.371
1E+13	123	8.332	8.647	0.315
1E+13	124	8.347	8.715	0.368
1E+13	125	8.324	8.545	0.221
Max		8.355	8.715	0.396
Average		8.309	8.656	0.347
Min		8.252	8.545	0.221
Std Dev		0.032	0.048	0.049

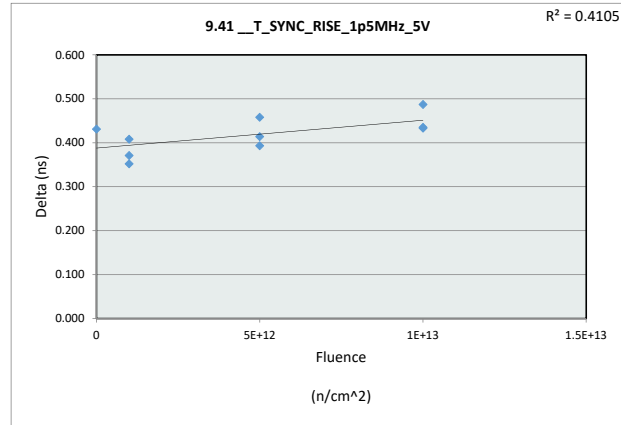


9.37 __T_SYNC_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.645	8.645	8.624	8.545
Average	8.645	8.673	8.663	8.636
Max	8.645	8.703	8.685	8.715
UL	15.000	15.000	15.000	15.000

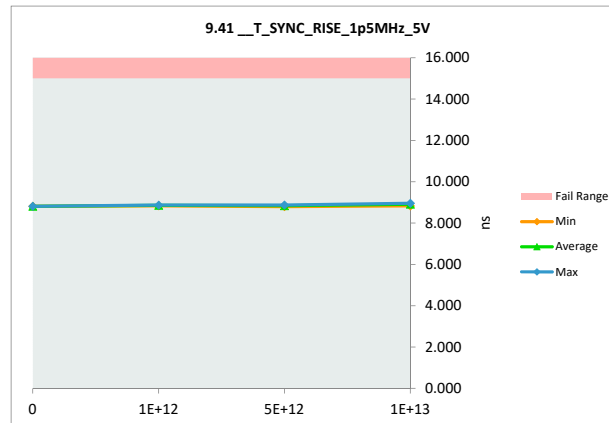


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.377	8.808	0.431
1E+12	129	8.452	8.860	0.408
1E+12	130	8.495	8.866	0.371
1E+12	131	8.485	8.837	0.352
5E+12	126	8.478	8.871	0.393
5E+12	127	8.385	8.799	0.414
5E+12	128	8.384	8.842	0.458
1E+13	123	8.509	8.942	0.433
1E+13	124	8.469	8.956	0.487
1E+13	125	8.394	8.829	0.435
Max		8.509	8.956	0.487
Average		8.443	8.861	0.418
Min		8.377	8.799	0.352
Std Dev		0.052	0.052	0.040

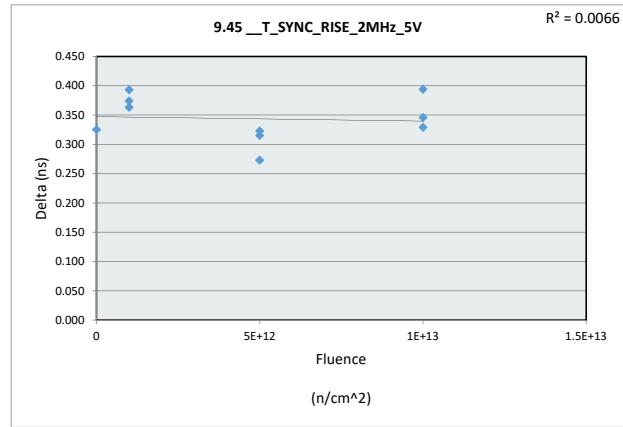


9.41 __T_SYNC_RISE_1p5MHz				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.808	8.837	8.799	8.829
Average	8.808	8.854	8.837	8.909
Max	8.808	8.866	8.871	8.956
UL	15.000	15.000	15.000	15.000

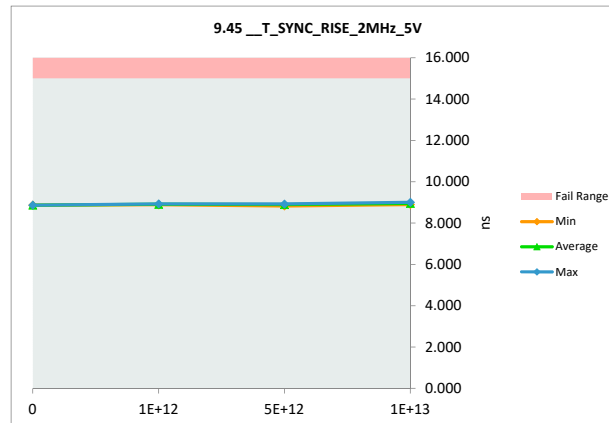


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.539	8.864	0.325
1E+12	129	8.532	8.925	0.393
1E+12	130	8.519	8.882	0.363
1E+12	131	8.538	8.912	0.374
5E+12	126	8.597	8.920	0.323
5E+12	127	8.551	8.824	0.273
5E+12	128	8.608	8.923	0.315
1E+13	123	8.609	9.003	0.394
1E+13	124	8.631	8.960	0.329
1E+13	125	8.547	8.893	0.346
Max		8.631	9.003	0.394
Average		8.567	8.911	0.344
Min		8.519	8.824	0.273
Std Dev		0.040	0.050	0.038



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	8.864	8.882	8.824	8.893
Average	8.864	8.906	8.889	8.952
Max	8.864	8.925	8.923	9.003
UL	15.000	15.000	15.000	15.000

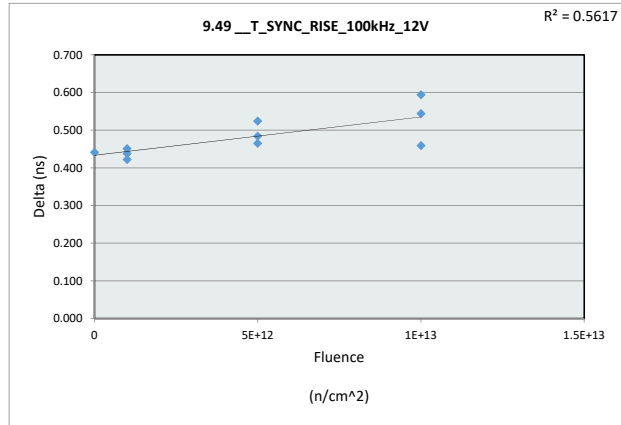


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.49 __T_SYNC_RISE_100kHz_12V

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

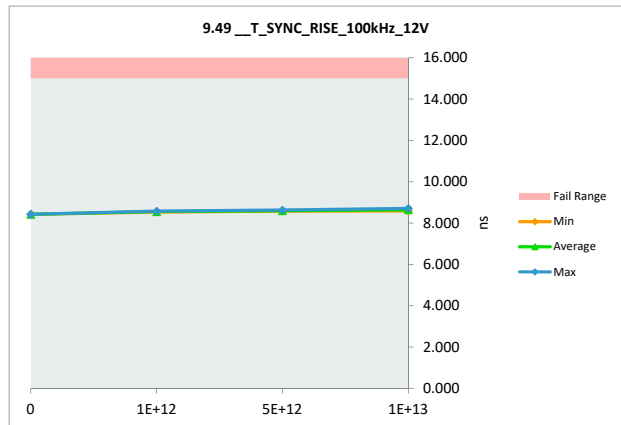
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.982	8.423	0.441
1E+12	129	8.091	8.529	0.438
1E+12	130	8.126	8.548	0.422
1E+12	131	8.122	8.573	0.451
5E+12	126	8.144	8.628	0.484
5E+12	127	8.052	8.576	0.524
5E+12	128	8.113	8.578	0.465
1E+13	123	8.167	8.711	0.544
1E+13	124	8.021	8.615	0.594
1E+13	125	8.127	8.586	0.459
Max		8.167	8.711	0.594
Average		8.094	8.577	0.482
Min		7.982	8.423	0.422
Std Dev		0.058	0.074	0.055



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	8.423	8.529	8.576	8.586
Average	8.423	8.550	8.594	8.637
Max	8.423	8.573	8.628	8.711
UL	15.000	15.000	15.000	15.000

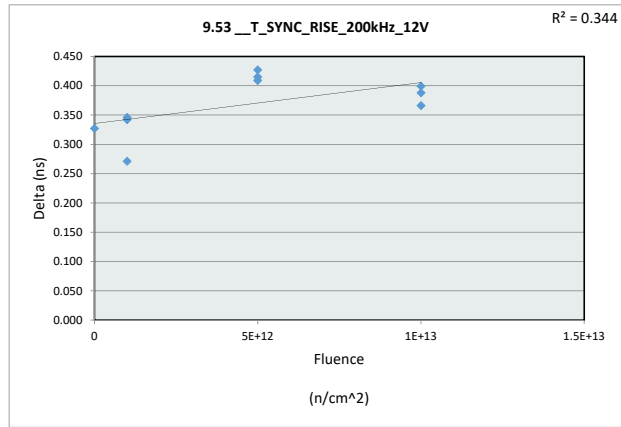


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.53 __T_SYNC_RISE_200kHz_12V

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

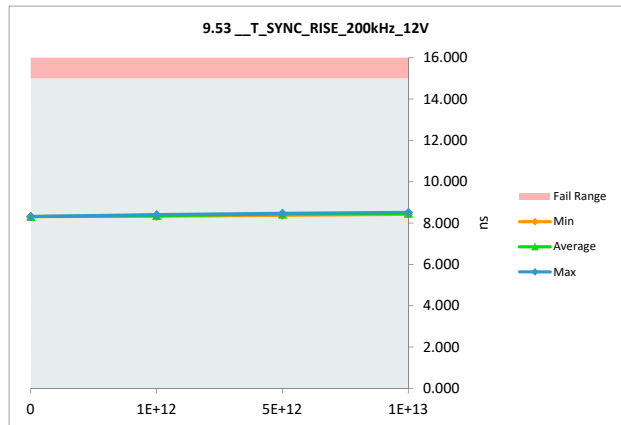
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.988	8.315	0.327
1E+12	129	7.978	8.324	0.346
1E+12	130	8.063	8.405	0.342
1E+12	131	8.085	8.356	0.271
5E+12	126	8.040	8.467	0.427
5E+12	127	7.961	8.370	0.409
5E+12	128	8.048	8.463	0.415
1E+13	123	8.118	8.517	0.399
1E+13	124	8.059	8.425	0.366
1E+13	125	8.087	8.475	0.388
Max		8.118	8.517	0.427
Average		8.043	8.412	0.369
Min		7.961	8.315	0.271
Std Dev		0.052	0.069	0.048



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	8.315	8.324	8.370	8.425
Average	8.315	8.362	8.433	8.472
Max	8.315	8.405	8.467	8.517
UL	15.000	15.000	15.000	15.000

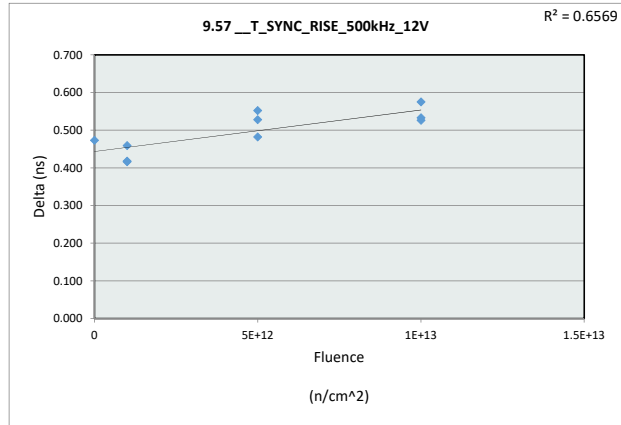


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.57 __T_SYNC_RISE_500kHz_12V

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

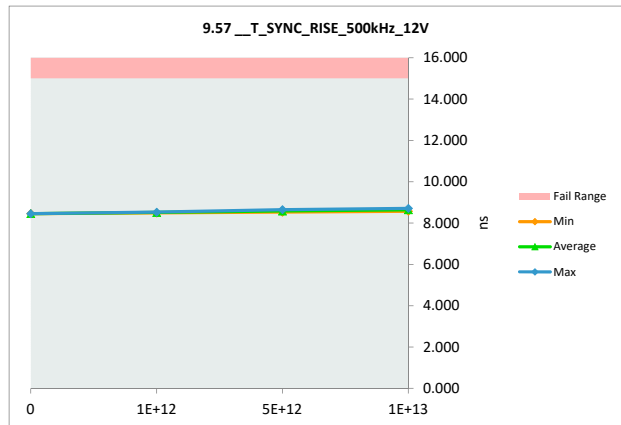
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.985	8.458	0.473
1E+12	129	8.028	8.487	0.459
1E+12	130	8.110	8.526	0.416
1E+12	131	8.101	8.519	0.418
5E+12	126	8.096	8.648	0.552
5E+12	127	8.000	8.528	0.528
5E+12	128	8.085	8.567	0.482
1E+13	123	8.139	8.714	0.575
1E+13	124	8.036	8.569	0.533
1E+13	125	8.106	8.632	0.526
Max		8.139	8.714	0.575
Average		8.069	8.565	0.496
Min		7.985	8.458	0.416
Std Dev		0.052	0.079	0.055



9.57 __T_SYNC_RISE_500kHz

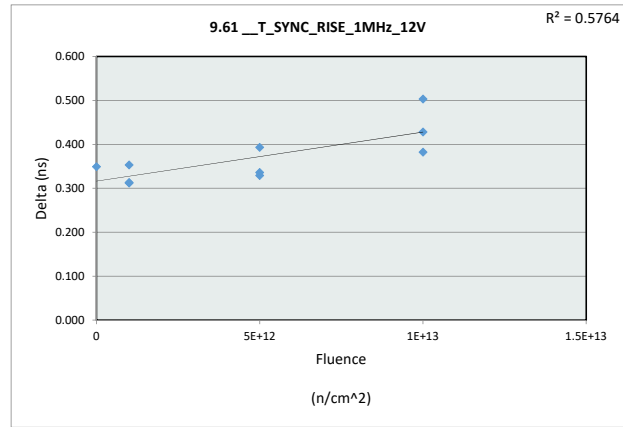
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.458	8.487	8.528	8.569
Average	8.458	8.511	8.581	8.638
Max	8.458	8.526	8.648	8.714
UL	15.000	15.000	15.000	15.000

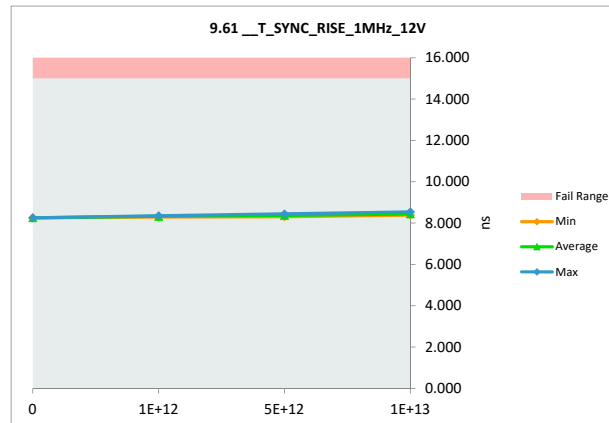


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.903	8.252	0.349
1E+12	129	7.976	8.288	0.312
1E+12	130	8.001	8.354	0.353
1E+12	131	8.027	8.340	0.313
5E+12	126	8.047	8.440	0.393
5E+12	127	7.969	8.305	0.336
5E+12	128	8.031	8.360	0.329
1E+13	123	8.038	8.541	0.503
1E+13	124	7.956	8.384	0.428
1E+13	125	8.022	8.404	0.382
Max		8.047	8.541	0.503
Average		7.997	8.367	0.370
Min		7.903	8.252	0.312
Std Dev		0.045	0.083	0.060



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	8.252	8.288	8.305	8.384
Average	8.252	8.327	8.368	8.443
Max	8.252	8.354	8.440	8.541
UL	15.000	15.000	15.000	15.000

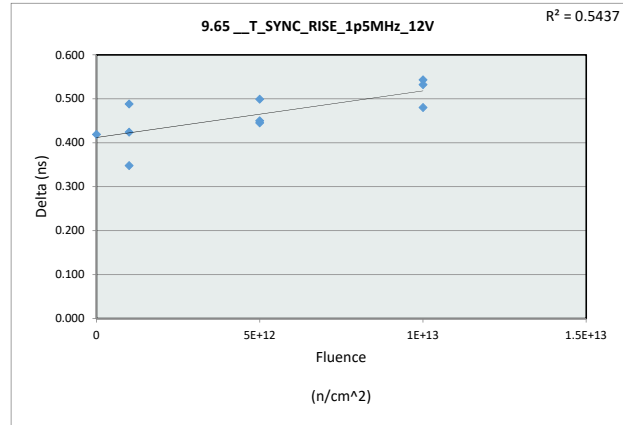


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.65 __T_SYNC_RISE_1p5MHz_12V

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

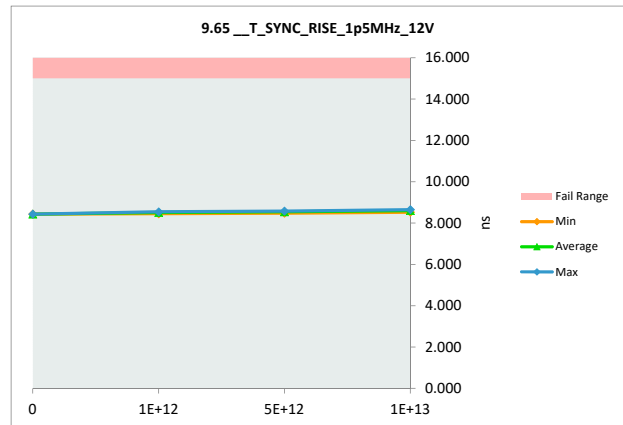
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.016	8.435	0.419
1E+12	129	8.100	8.448	0.348
1E+12	130	8.053	8.541	0.488
1E+12	131	8.106	8.530	0.424
5E+12	126	8.132	8.577	0.445
5E+12	127	8.027	8.477	0.450
5E+12	128	8.069	8.568	0.499
1E+13	123	8.170	8.650	0.480
1E+13	124	7.982	8.525	0.543
1E+13	125	8.092	8.624	0.532
Max		8.170	8.650	0.543
Average		8.075	8.537	0.463
Min		7.982	8.435	0.348
Std Dev		0.057	0.071	0.058



9.65 __T_SYNC_RISE_1p5MHz

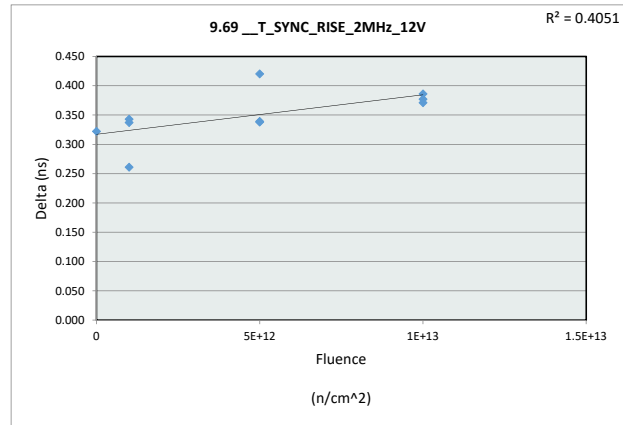
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.435	8.448	8.477	8.525
Average	8.435	8.506	8.541	8.600
Max	8.435	8.541	8.577	8.650
UL	15.000	15.000	15.000	15.000

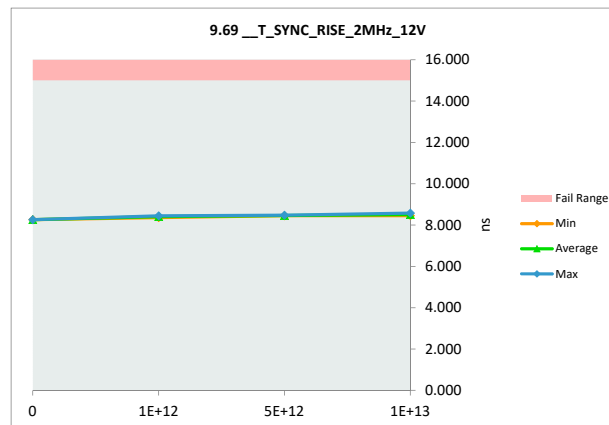


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.938	8.260	0.322
1E+12	129	8.025	8.362	0.337
1E+12	130	8.102	8.445	0.343
1E+12	131	8.153	8.414	0.261
5E+12	126	8.139	8.478	0.339
5E+12	127	8.032	8.452	0.420
5E+12	128	8.113	8.451	0.338
1E+13	123	8.200	8.577	0.377
1E+13	124	8.070	8.456	0.386
1E+13	125	8.129	8.500	0.371
Max		8.200	8.577	0.420
Average		8.090	8.439	0.349
Min		7.938	8.260	0.261
Std Dev		0.076	0.084	0.043

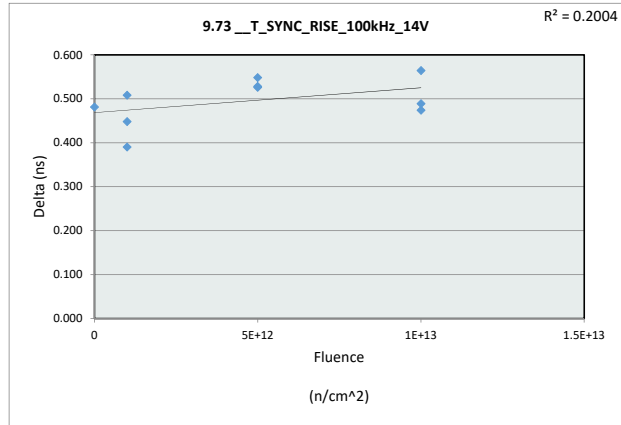


9.69 __T_SYNC_RISE_2MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.260	8.362	8.451	8.456
Average	8.260	8.407	8.460	8.511
Max	8.260	8.445	8.478	8.577
UL	15.000	15.000	15.000	15.000

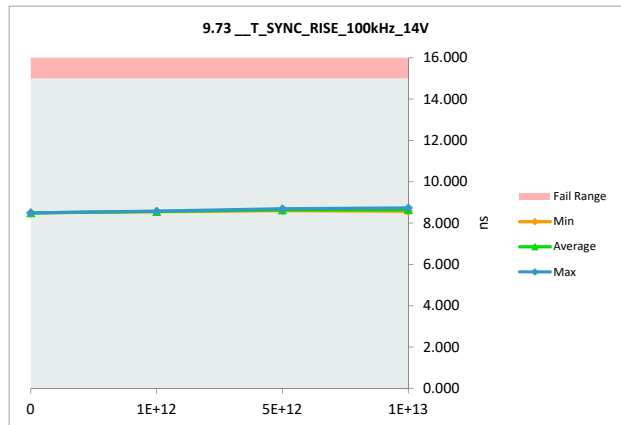


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.011	8.492	0.481
1E+12	129	8.050	8.558	0.508
1E+12	130	8.152	8.542	0.390
1E+12	131	8.126	8.574	0.448
5E+12	126	8.141	8.689	0.548
5E+12	127	8.073	8.599	0.526
5E+12	128	8.084	8.612	0.528
1E+13	123	8.173	8.737	0.564
1E+13	124	8.080	8.569	0.489
1E+13	125	8.149	8.623	0.474
Max		8.173	8.737	0.564
Average		8.104	8.600	0.496
Min		8.011	8.492	0.390
Std Dev		0.052	0.071	0.051



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	8.492	8.542	8.599	8.569
Average	8.492	8.558	8.633	8.643
Max	8.492	8.574	8.689	8.737
UL	15.000	15.000	15.000	15.000

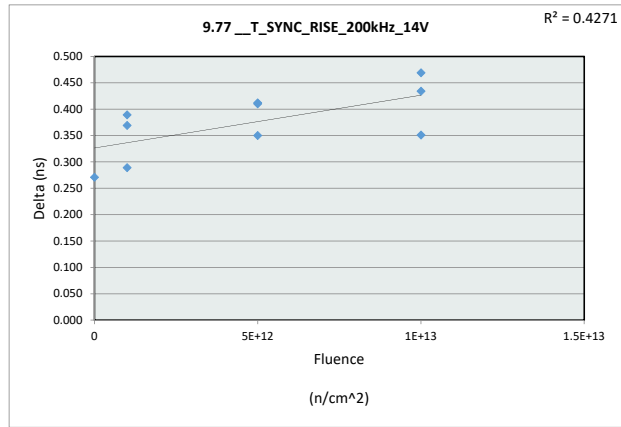


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.77 __T_SYNC_RISE_200kHz_14V

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

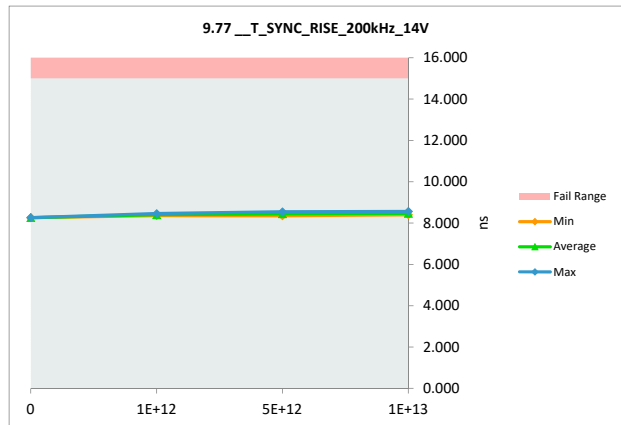
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.991	8.262	0.271
1E+12	129	7.991	8.360	0.369
1E+12	130	8.100	8.389	0.289
1E+12	131	8.067	8.456	0.389
5E+12	126	8.134	8.544	0.410
5E+12	127	8.003	8.353	0.350
5E+12	128	8.028	8.440	0.412
1E+13	123	8.097	8.566	0.469
1E+13	124	7.970	8.404	0.434
1E+13	125	8.095	8.446	0.351
Max		8.134	8.566	0.469
Average		8.048	8.422	0.374
Min		7.970	8.262	0.271
Std Dev		0.058	0.090	0.062



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	8.262	8.360	8.353	8.404
Average	8.262	8.402	8.446	8.472
Max	8.262	8.456	8.544	8.566
UL	15.000	15.000	15.000	15.000

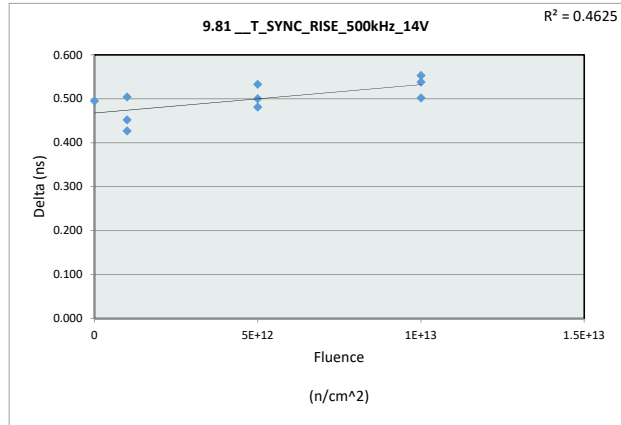


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.81 __T_SYNC_RISE_500kHz_14V

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

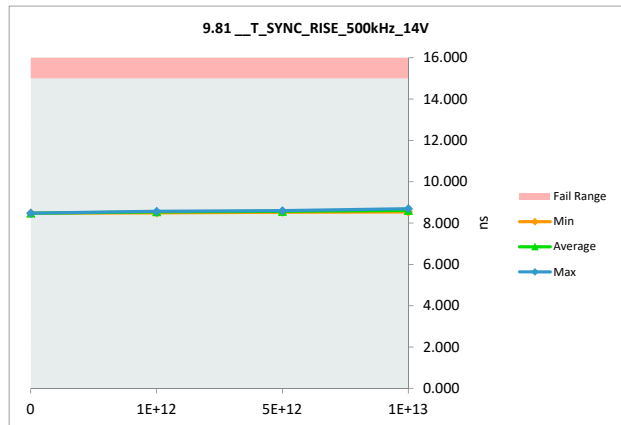
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.981	8.476	0.495
1E+12	129	8.065	8.492	0.427
1E+12	130	8.114	8.566	0.452
1E+12	131	8.056	8.560	0.504
5E+12	126	8.114	8.595	0.481
5E+12	127	8.024	8.524	0.500
5E+12	128	8.046	8.579	0.533
1E+13	123	8.156	8.694	0.538
1E+13	124	7.987	8.540	0.553
1E+13	125	8.101	8.603	0.502
Max		8.156	8.694	0.553
Average		8.064	8.563	0.499
Min		7.981	8.476	0.427
Std Dev		0.057	0.062	0.039



9.81 __T_SYNC_RISE_500kHz

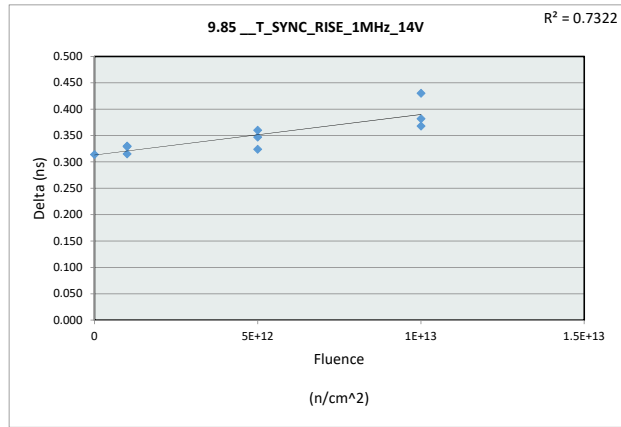
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.476	8.492	8.524	8.540
Average	8.476	8.539	8.566	8.612
Max	8.476	8.566	8.595	8.694
UL	15.000	15.000	15.000	15.000

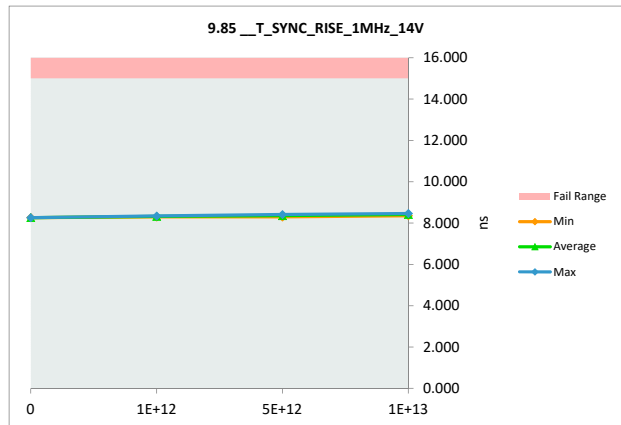


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.946	8.260	0.314
1E+12	129	7.965	8.295	0.330
1E+12	130	8.004	8.333	0.329
1E+12	131	8.024	8.339	0.315
5E+12	126	8.051	8.411	0.360
5E+12	127	7.969	8.293	0.324
5E+12	128	8.020	8.367	0.347
1E+13	123	8.081	8.463	0.382
1E+13	124	7.987	8.355	0.368
1E+13	125	7.994	8.424	0.430
Max		8.081	8.463	0.430
Average		8.004	8.354	0.350
Min		7.946	8.260	0.314
Std Dev		0.041	0.064	0.036



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	8.260	8.295	8.293	8.355
Average	8.260	8.322	8.357	8.414
Max	8.260	8.339	8.411	8.463
UL	15.000	15.000	15.000	15.000

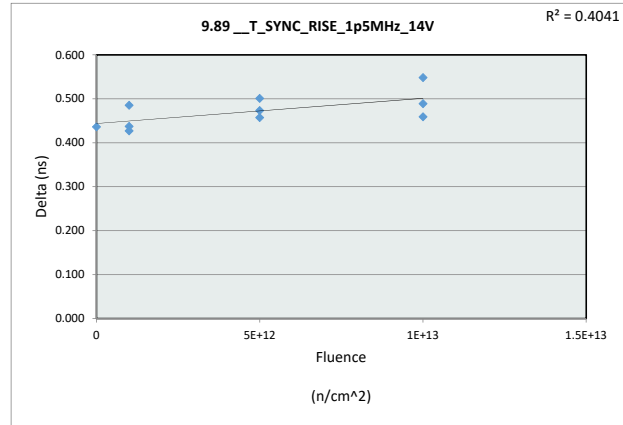


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.89 __T_SYNC_RISE_1p5MHz_14V

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

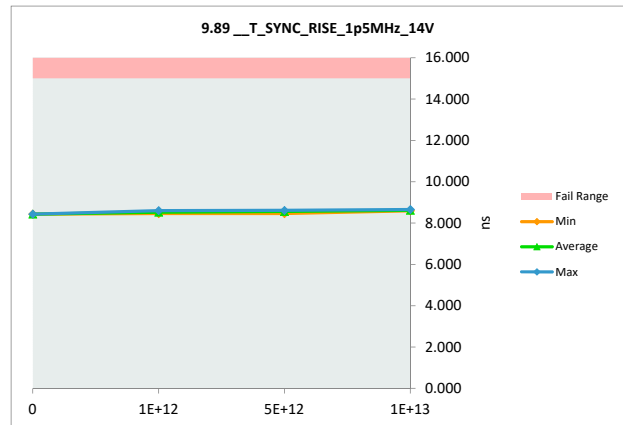
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.999	8.435	0.436
1E+12	129	8.029	8.456	0.427
1E+12	130	8.074	8.511	0.437
1E+12	131	8.114	8.599	0.485
5E+12	126	8.111	8.612	0.501
5E+12	127	7.999	8.456	0.457
5E+12	128	8.131	8.604	0.473
1E+13	123	8.167	8.656	0.489
1E+13	124	8.049	8.597	0.548
1E+13	125	8.147	8.606	0.459
Max		8.167	8.656	0.548
Average		8.082	8.553	0.471
Min		7.999	8.435	0.427
Std Dev		0.061	0.080	0.037



9.89 __T_SYNC_RISE_1p5MHz

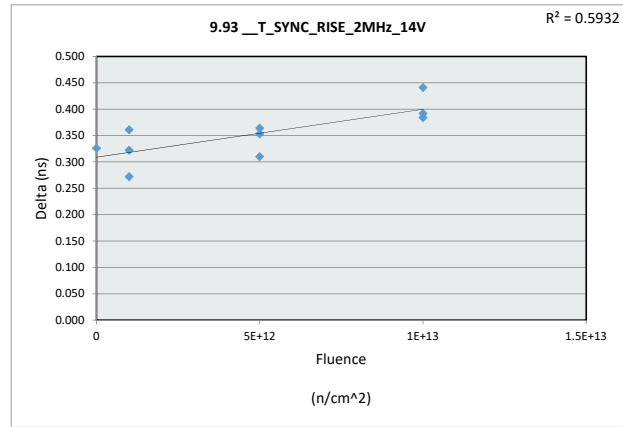
Test Site		
Tester		
Test Number		
Max Limit	15	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.435	8.456	8.456	8.597
Average	8.435	8.522	8.557	8.620
Max	8.435	8.599	8.612	8.656
UL	15.000	15.000	15.000	15.000

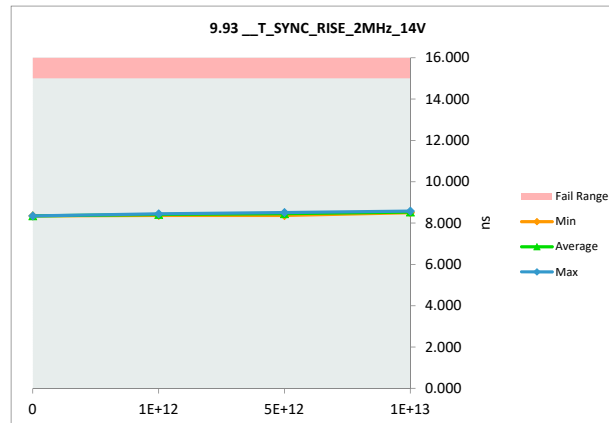


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.021	8.347	0.326
1E+12	129	8.006	8.367	0.361
1E+12	130	8.123	8.445	0.322
1E+12	131	8.161	8.433	0.272
5E+12	126	8.143	8.507	0.364
5E+12	127	8.053	8.363	0.310
5E+12	128	8.126	8.479	0.353
1E+13	123	8.194	8.578	0.384
1E+13	124	8.060	8.501	0.441
1E+13	125	8.129	8.521	0.392
Max		8.194	8.578	0.441
Average		8.102	8.454	0.352
Min		8.006	8.347	0.272
Std Dev		0.063	0.077	0.048



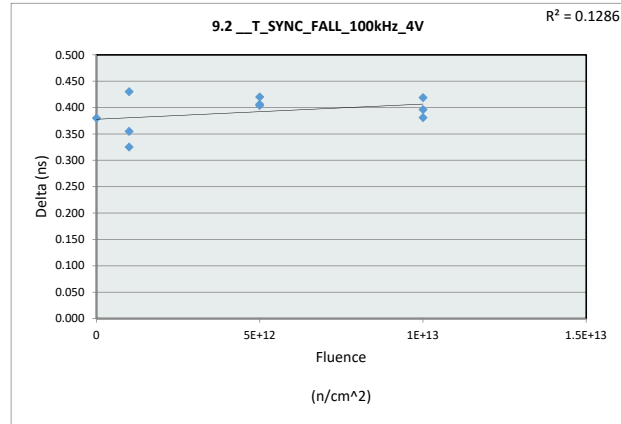
9.93 __T_SYNC_RISE_2MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	15	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.347	8.367	8.363	8.501
Average	8.347	8.415	8.450	8.533
Max	8.347	8.445	8.507	8.578
UL	15.000	15.000	15.000	15.000



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

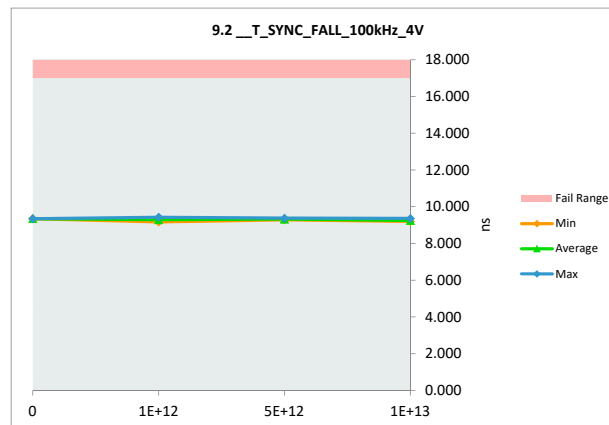
9.2 __T_SYNC_FALL_100kHz_4V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.970	9.350	0.380
1E+12	129	8.992	9.422	0.430
1E+12	130	8.911	9.266	0.355
1E+12	131	8.849	9.174	0.325
5E+12	126	8.953	9.373	0.420
5E+12	127	8.910	9.314	0.404
5E+12	128	8.879	9.285	0.406
1E+13	123	8.780	9.199	0.419
1E+13	124	8.977	9.358	0.381
1E+13	125	8.800	9.196	0.396
	Max	8.992	9.422	0.430
	Average	8.902	9.294	0.392
	Min	8.780	9.174	0.325
	Std Dev	0.074	0.084	0.032



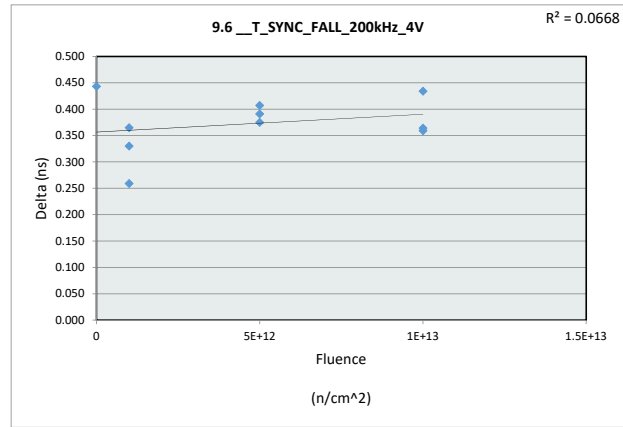
9.2 __T_SYNC_FALL_100kHz_4V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	9.350	9.174	9.285	9.196
Average	9.350	9.287	9.324	9.251
Max	9.350	9.422	9.373	9.358
UL	17.000	17.000	17.000	17.000

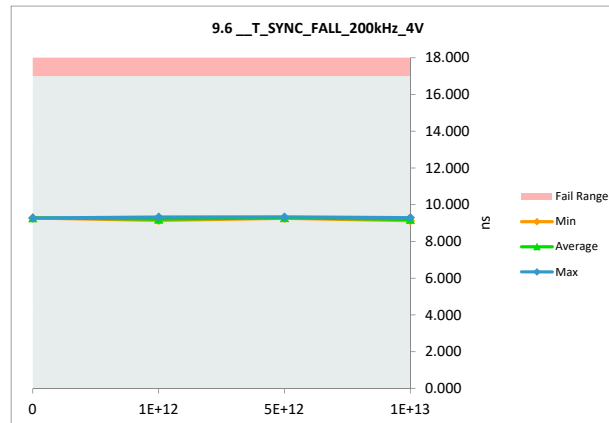


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.834	9.277	0.443
1E+12	129	9.003	9.333	0.330
1E+12	130	8.891	9.150	0.259
1E+12	131	8.781	9.146	0.365
5E+12	126	8.924	9.331	0.407
5E+12	127	8.888	9.279	0.391
5E+12	128	8.881	9.256	0.375
1E+13	123	8.744	9.178	0.434
1E+13	124	8.935	9.294	0.359
1E+13	125	8.765	9.129	0.364
Max		9.003	9.333	0.443
Average		8.865	9.237	0.373
Min		8.744	9.129	0.259
Std Dev		0.083	0.079	0.053



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	9.277	9.146	9.256	9.129
Average	9.277	9.210	9.289	9.200
Max	9.277	9.333	9.331	9.294
UL	17.000	17.000	17.000	17.000

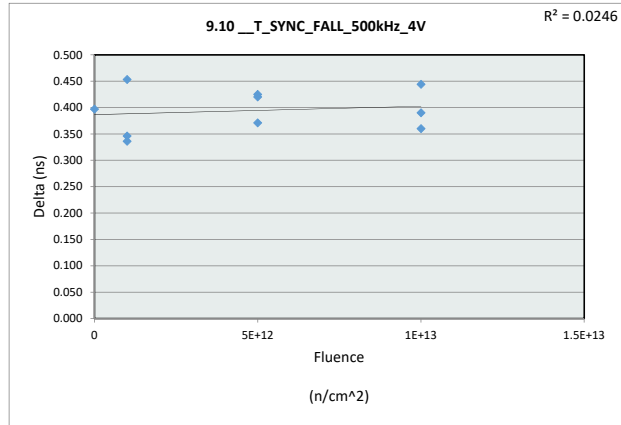


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.10 __T_SYNC_FALL_500kHz_4V

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

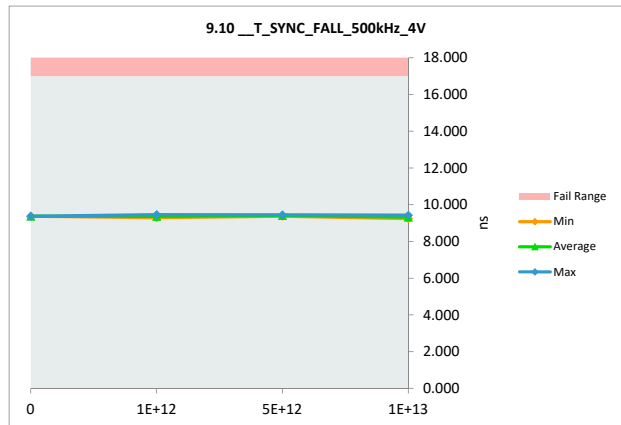
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.974	9.371	0.397
1E+12	129	9.116	9.462	0.346
1E+12	130	8.997	9.333	0.336
1E+12	131	8.838	9.291	0.453
5E+12	126	9.026	9.446	0.420
5E+12	127	8.983	9.408	0.425
5E+12	128	9.004	9.375	0.371
1E+13	123	8.839	9.283	0.444
1E+13	124	9.035	9.425	0.390
1E+13	125	8.883	9.243	0.360
Max		9.116	9.462	0.453
Average		8.969	9.364	0.394
Min		8.838	9.243	0.336
Std Dev		0.090	0.074	0.041



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	9.371	9.291	9.375	9.243
Average	9.371	9.362	9.410	9.317
Max	9.371	9.462	9.446	9.425
UL	17.000	17.000	17.000	17.000

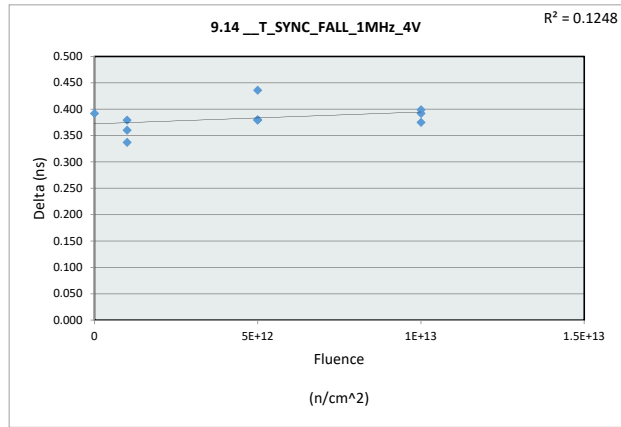


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.14 __T_SYNC_FALL_1MHz_4V

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

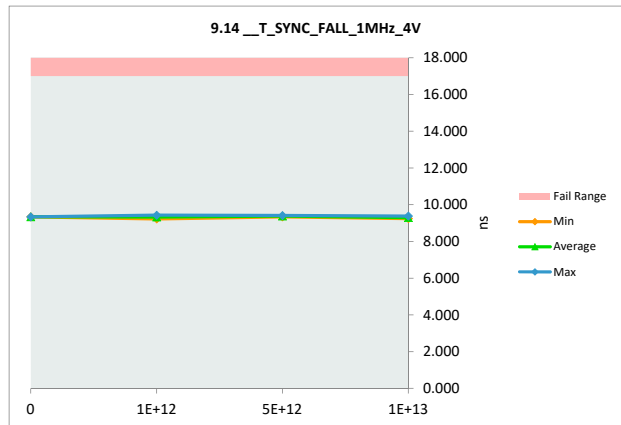
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.948	9.340	0.392
1E+12	129	9.069	9.429	0.360
1E+12	130	8.947	9.326	0.379
1E+12	131	8.885	9.222	0.337
5E+12	126	9.031	9.411	0.380
5E+12	127	8.957	9.393	0.436
5E+12	128	8.957	9.336	0.379
1E+13	123	8.867	9.259	0.392
1E+13	124	9.005	9.380	0.375
1E+13	125	8.839	9.238	0.399
Max		9.069	9.429	0.436
Average		8.950	9.333	0.383
Min		8.839	9.222	0.337
Std Dev		0.072	0.073	0.026



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	9.340	9.222	9.336	9.238
Average	9.340	9.326	9.380	9.292
Max	9.340	9.429	9.411	9.380
UL	17.000	17.000	17.000	17.000

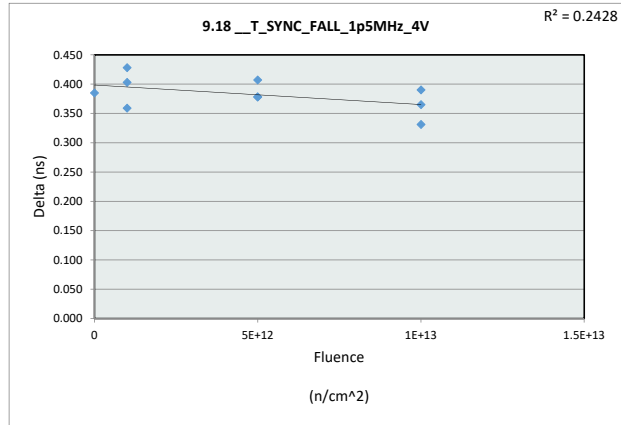


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.18 __T_SYNC_FALL_1p5MHz_4V

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

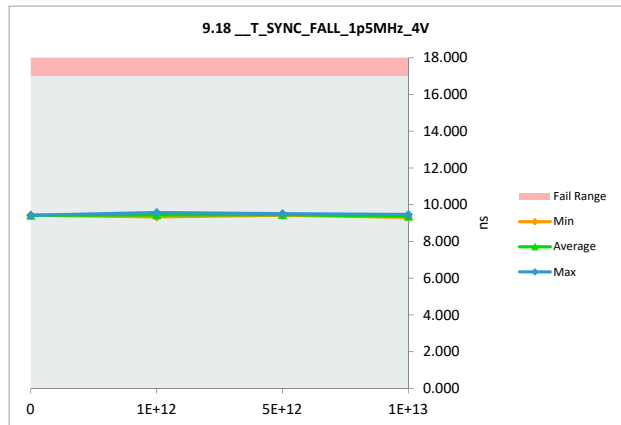
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	9.039	9.424	0.385
1E+12	129	9.143	9.571	0.428
1E+12	130	9.020	9.423	0.403
1E+12	131	8.972	9.331	0.359
5E+12	126	9.132	9.510	0.378
5E+12	127	9.047	9.425	0.378
5E+12	128	9.041	9.448	0.407
1E+13	123	8.982	9.347	0.365
1E+13	124	9.130	9.461	0.331
1E+13	125	8.921	9.311	0.390
Max		9.143	9.571	0.428
Average		9.043	9.425	0.382
Min		8.921	9.311	0.331
Std Dev		0.074	0.080	0.027



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	9.424	9.331	9.425	9.311
Average	9.424	9.442	9.461	9.373
Max	9.424	9.571	9.510	9.461
UL	17.000	17.000	17.000	17.000

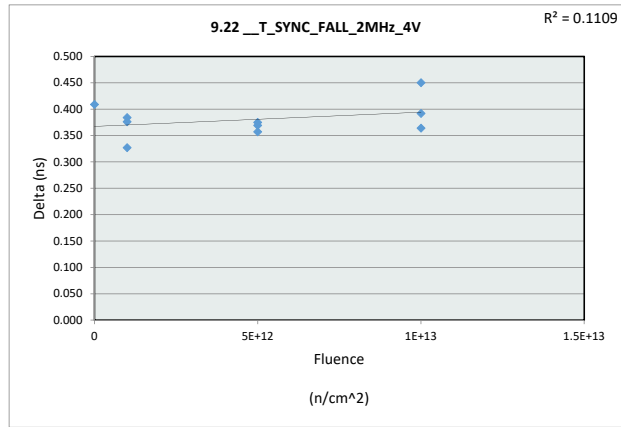


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.22 __T_SYNC_FALL_2MHz_4V

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

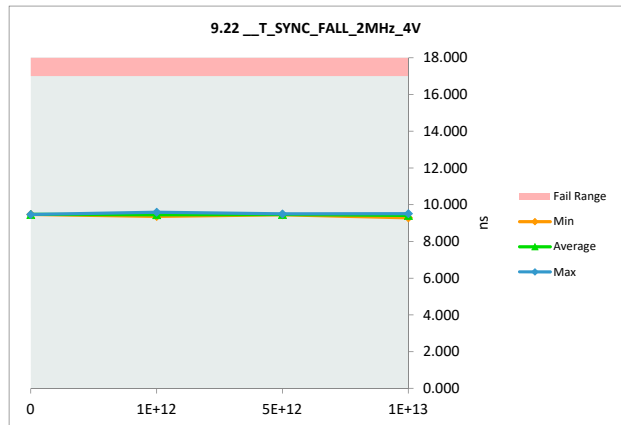
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	9.060	9.469	0.409
1E+12	129	9.211	9.587	0.376
1E+12	130	9.035	9.362	0.327
1E+12	131	9.013	9.397	0.384
5E+12	126	9.100	9.469	0.369
5E+12	127	9.139	9.496	0.357
5E+12	128	9.076	9.451	0.375
1E+13	123	9.002	9.452	0.450
1E+13	124	9.119	9.511	0.392
1E+13	125	8.923	9.287	0.364
Max		9.211	9.587	0.450
Average		9.068	9.448	0.380
Min		8.923	9.287	0.327
Std Dev		0.081	0.083	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	9.469	9.362	9.451	9.287
Average	9.469	9.449	9.472	9.417
Max	9.469	9.587	9.496	9.511
UL	17.000	17.000	17.000	17.000

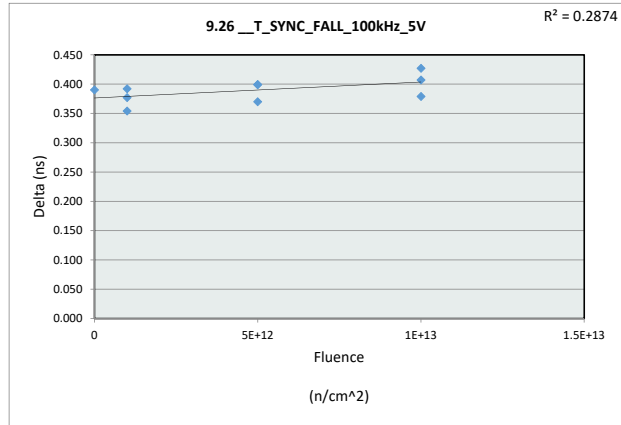


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.26 __T_SYNC_FALL_100kHz_5V

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

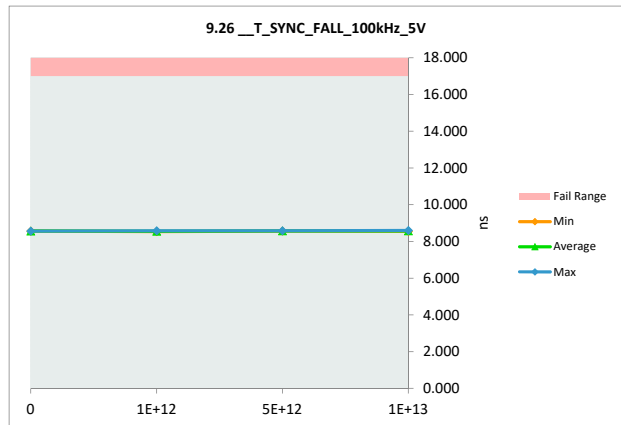
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.176	8.566	0.390
1E+12	129	8.182	8.559	0.377
1E+12	130	8.184	8.576	0.392
1E+12	131	8.180	8.534	0.354
5E+12	126	8.163	8.562	0.399
5E+12	127	8.207	8.577	0.370
5E+12	128	8.169	8.568	0.399
1E+13	123	8.167	8.594	0.427
1E+13	124	8.174	8.581	0.407
1E+13	125	8.167	8.546	0.379
Max		8.207	8.594	0.427
Average		8.177	8.566	0.389
Min		8.163	8.534	0.354
Std Dev		0.013	0.017	0.021



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	8.566	8.534	8.562	8.546
Average	8.566	8.556	8.569	8.574
Max	8.566	8.576	8.577	8.594
UL	17.000	17.000	17.000	17.000

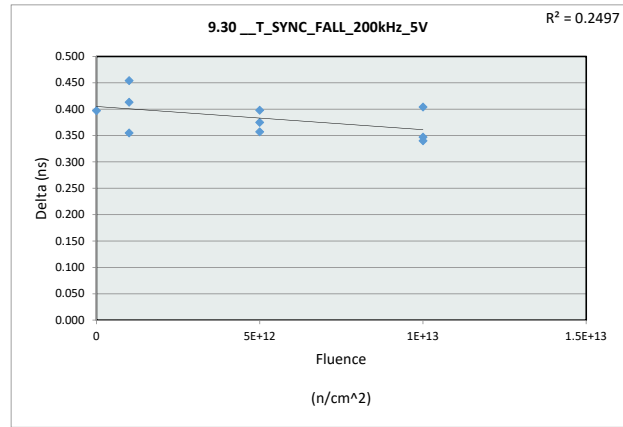


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.30 __T_SYNC_FALL_200kHz_5V

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

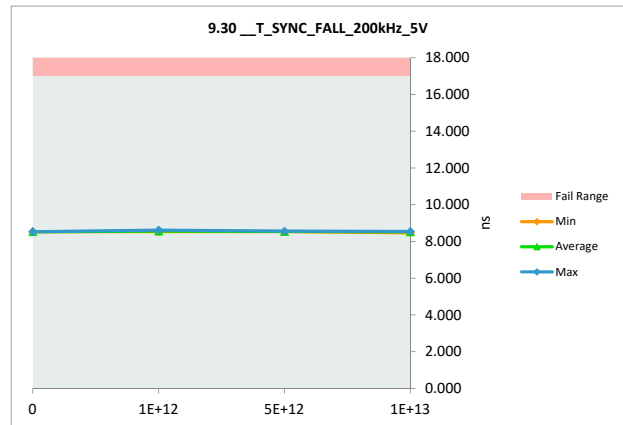
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.130	8.527	0.397
1E+12	129	8.159	8.613	0.454
1E+12	130	8.196	8.551	0.355
1E+12	131	8.117	8.530	0.413
5E+12	126	8.179	8.554	0.375
5E+12	127	8.175	8.532	0.357
5E+12	128	8.142	8.540	0.398
1E+13	123	8.123	8.470	0.347
1E+13	124	8.202	8.542	0.340
1E+13	125	8.129	8.533	0.404
Max		8.202	8.613	0.454
Average		8.155	8.539	0.384
Min		8.117	8.470	0.340
Std Dev		0.031	0.035	0.036



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	8.527	8.530	8.532	8.470
Average	8.527	8.565	8.542	8.515
Max	8.527	8.613	8.554	8.542
UL	17.000	17.000	17.000	17.000

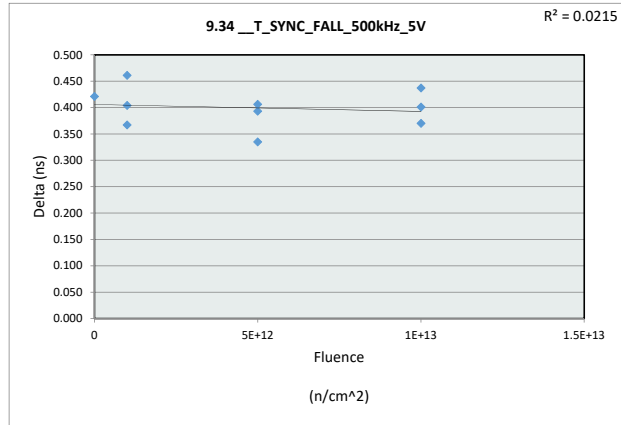


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.34 __T_SYNC_FALL_500kHz_5V

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

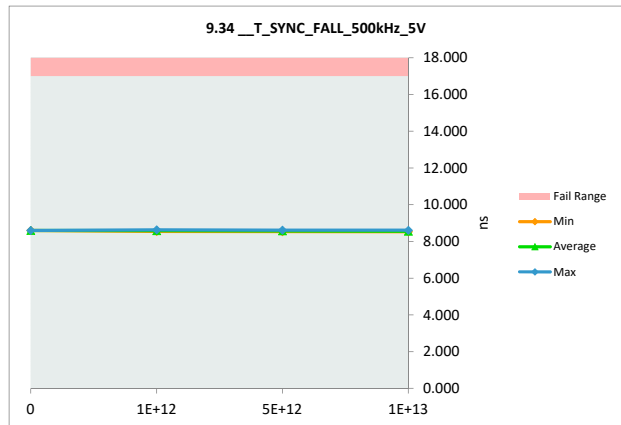
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.176	8.597	0.421
1E+12	129	8.172	8.633	0.461
1E+12	130	8.207	8.574	0.367
1E+12	131	8.139	8.543	0.404
5E+12	126	8.206	8.612	0.406
5E+12	127	8.171	8.564	0.393
5E+12	128	8.194	8.529	0.335
1E+13	123	8.157	8.527	0.370
1E+13	124	8.170	8.607	0.437
1E+13	125	8.127	8.528	0.401
Max		8.207	8.633	0.461
Average		8.172	8.571	0.400
Min		8.127	8.527	0.335
Std Dev		0.026	0.039	0.036



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	8.597	8.543	8.529	8.527
Average	8.597	8.583	8.568	8.554
Max	8.597	8.633	8.612	8.607
UL	17.000	17.000	17.000	17.000

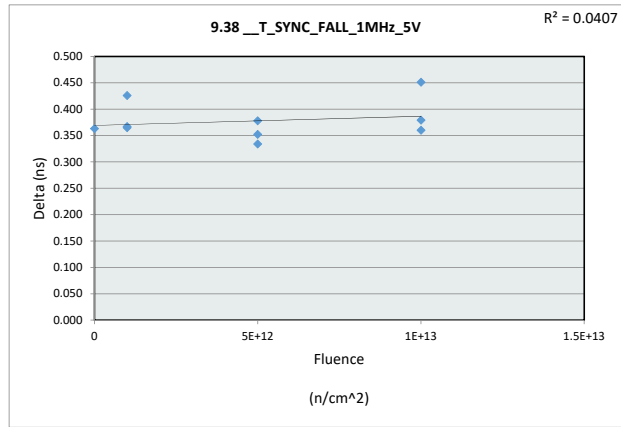


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.38 __T_SYNC_FALL_1MHz_5V

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

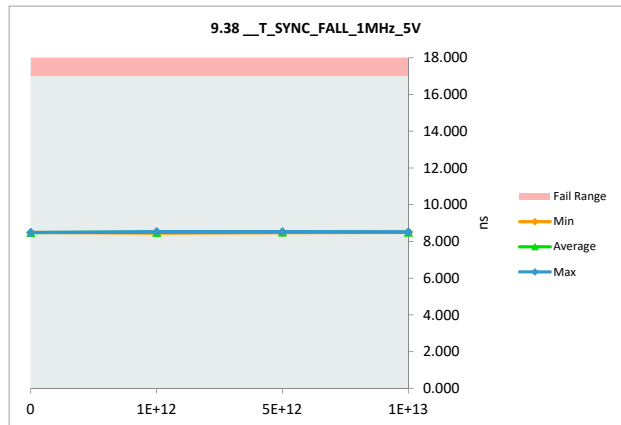
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.122	8.485	0.363
1E+12	129	8.114	8.540	0.426
1E+12	130	8.129	8.494	0.365
1E+12	131	8.085	8.452	0.367
5E+12	126	8.166	8.518	0.352
5E+12	127	8.153	8.531	0.378
5E+12	128	8.136	8.470	0.334
1E+13	123	8.070	8.521	0.451
1E+13	124	8.129	8.489	0.360
1E+13	125	8.110	8.489	0.379
Max		8.166	8.540	0.451
Average		8.121	8.499	0.378
Min		8.070	8.452	0.334
Std Dev		0.029	0.028	0.035



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	8.485	8.452	8.470	8.489
Average	8.485	8.495	8.506	8.500
Max	8.485	8.540	8.531	8.521
UL	17.000	17.000	17.000	17.000

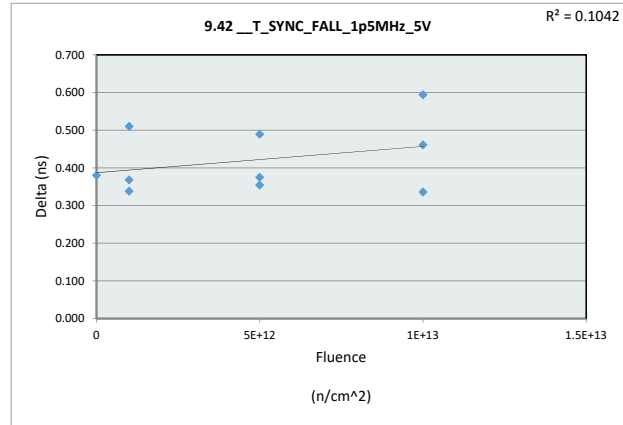


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.42 __T_SYNC_FALL_1p5MHz_5V

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

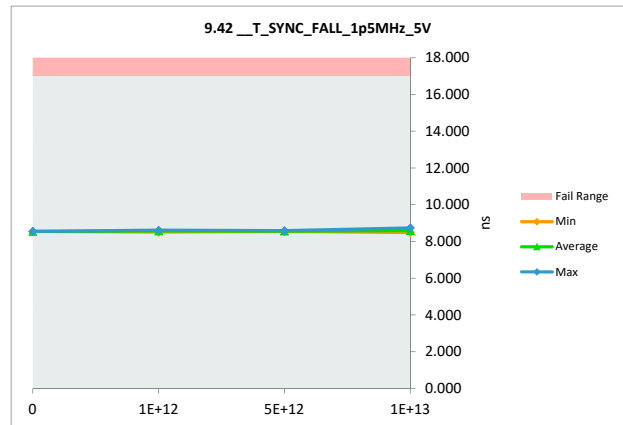
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.163	8.543	0.380
1E+12	129	8.229	8.597	0.368
1E+12	130	8.165	8.503	0.338
1E+12	131	8.097	8.607	0.510
5E+12	126	8.173	8.548	0.375
5E+12	127	8.191	8.545	0.354
5E+12	128	8.095	8.584	0.489
1E+13	123	8.090	8.551	0.461
1E+13	124	8.146	8.740	0.594
1E+13	125	8.150	8.486	0.336
Max		8.229	8.740	0.594
Average		8.150	8.570	0.420
Min		8.090	8.486	0.336
Std Dev		0.045	0.071	0.088



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	8.543	8.503	8.545	8.486
Average	8.543	8.569	8.559	8.592
Max	8.543	8.607	8.584	8.740
UL	17.000	17.000	17.000	17.000

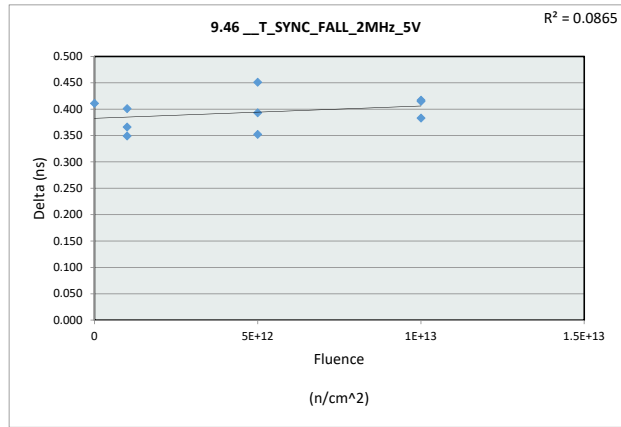


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.46 __T_SYNC_FALL_2MHz_5V

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

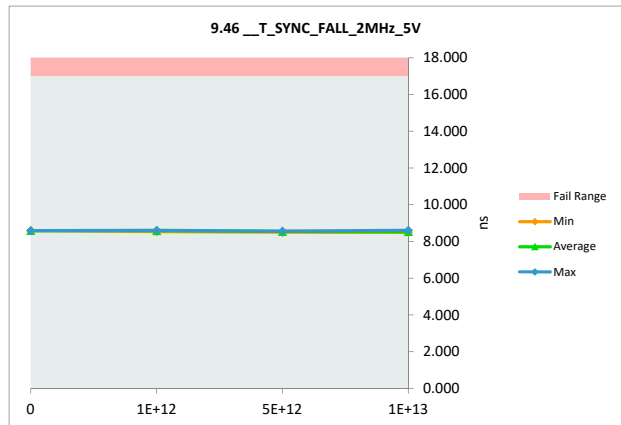
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.175	8.586	0.411
1E+12	129	8.238	8.587	0.349
1E+12	130	8.209	8.610	0.401
1E+12	131	8.169	8.535	0.366
5E+12	126	8.173	8.566	0.393
5E+12	127	8.100	8.551	0.451
5E+12	128	8.142	8.494	0.352
1E+13	123	8.074	8.489	0.415
1E+13	124	8.193	8.610	0.417
1E+13	125	8.110	8.493	0.383
Max		8.238	8.610	0.451
Average		8.158	8.552	0.394
Min		8.074	8.489	0.349
Std Dev		0.051	0.048	0.032



9.46 __T_SYNC_FALL_2MHz_5V

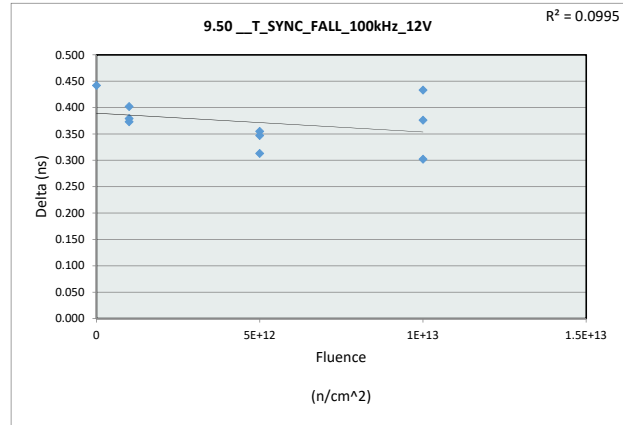
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.586	8.535	8.494	8.489
Average	8.586	8.577	8.537	8.531
Max	8.586	8.610	8.566	8.610
UL	17.000	17.000	17.000	17.000

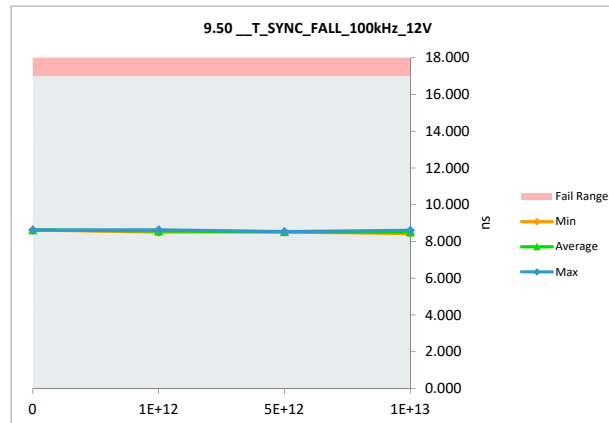


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.178	8.620	0.442
1E+12	129	8.233	8.635	0.402
1E+12	130	8.177	8.556	0.379
1E+12	131	8.131	8.504	0.373
5E+12	126	8.194	8.507	0.313
5E+12	127	8.185	8.540	0.355
5E+12	128	8.179	8.526	0.347
1E+13	123	8.108	8.484	0.376
1E+13	124	8.170	8.603	0.433
1E+13	125	8.131	8.433	0.302
Max		8.233	8.635	0.442
Average		8.169	8.541	0.372
Min		8.108	8.433	0.302
Std Dev		0.036	0.064	0.046



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	8.620	8.504	8.507	8.433
Average	8.620	8.565	8.524	8.507
Max	8.620	8.635	8.540	8.603
UL	17.000	17.000	17.000	17.000

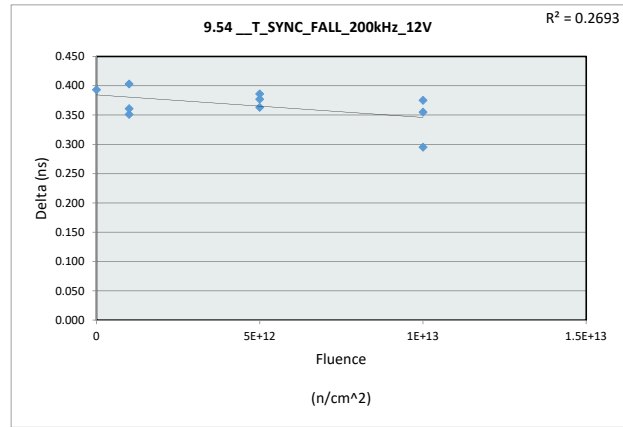


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.54 __T_SYNC_FALL_200kHz_12V

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

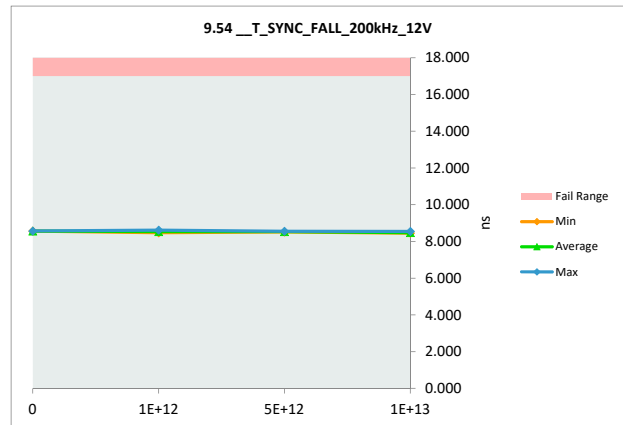
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.170	8.563	0.393
1E+12	129	8.213	8.616	0.403
1E+12	130	8.151	8.502	0.351
1E+12	131	8.109	8.470	0.361
5E+12	126	8.169	8.532	0.363
5E+12	127	8.174	8.551	0.377
5E+12	128	8.126	8.512	0.386
1E+13	123	8.091	8.446	0.355
1E+13	124	8.247	8.542	0.295
1E+13	125	8.072	8.447	0.375
Max		8.247	8.616	0.403
Average		8.152	8.518	0.366
Min		8.072	8.446	0.295
Std Dev		0.054	0.054	0.030



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	8.563	8.470	8.512	8.446
Average	8.563	8.529	8.532	8.478
Max	8.563	8.616	8.551	8.542
UL	17.000	17.000	17.000	17.000

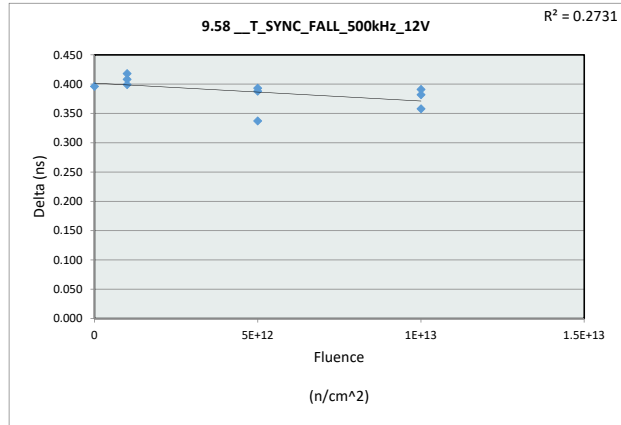


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.58 __T_SYNC_FALL_500kHz_12V

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

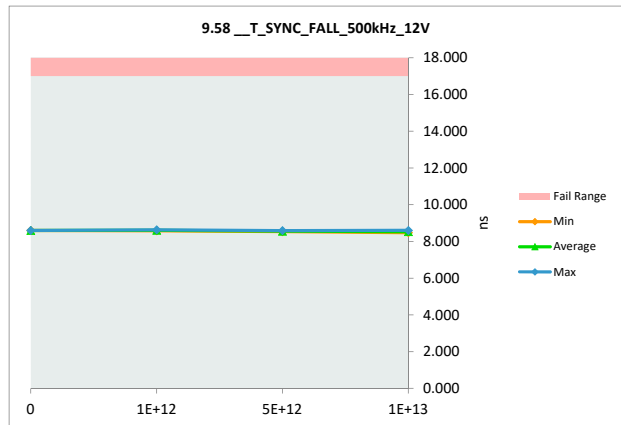
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.199	8.595	0.396
1E+12	129	8.221	8.629	0.408
1E+12	130	8.210	8.609	0.399
1E+12	131	8.160	8.578	0.418
5E+12	126	8.203	8.591	0.388
5E+12	127	8.195	8.532	0.337
5E+12	128	8.156	8.549	0.393
1E+13	123	8.119	8.477	0.358
1E+13	124	8.208	8.599	0.391
1E+13	125	8.117	8.499	0.382
Max		8.221	8.629	0.418
Average		8.179	8.566	0.387
Min		8.117	8.477	0.337
Std Dev		0.038	0.050	0.024



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	8.595	8.578	8.532	8.477
Average	8.595	8.605	8.557	8.525
Max	8.595	8.629	8.591	8.599
UL	17.000	17.000	17.000	17.000

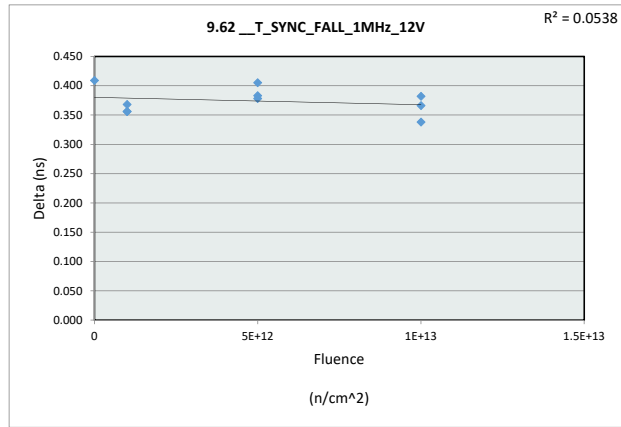


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.62 __T_SYNC_FALL_1MHz_12V

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

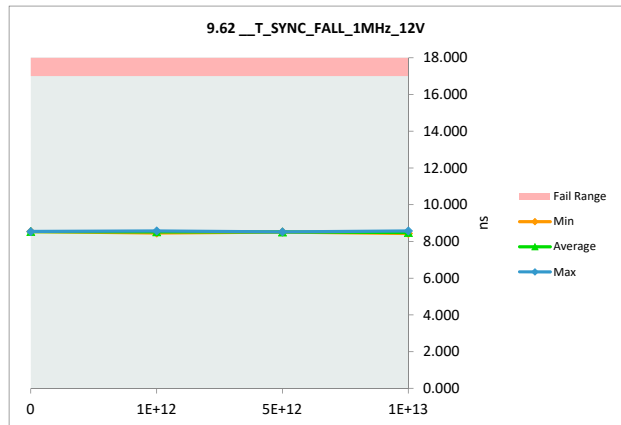
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.129	8.538	0.409
1E+12	129	8.213	8.569	0.356
1E+12	130	8.160	8.528	0.368
1E+12	131	8.100	8.456	0.356
5E+12	126	8.107	8.512	0.405
5E+12	127	8.124	8.507	0.383
5E+12	128	8.139	8.517	0.378
1E+13	123	8.083	8.449	0.366
1E+13	124	8.189	8.571	0.382
1E+13	125	8.090	8.428	0.338
Max		8.213	8.571	0.409
Average		8.133	8.508	0.374
Min		8.083	8.428	0.338
Std Dev		0.043	0.049	0.022



9.62 __T_SYNC_FALL_1MHz_1

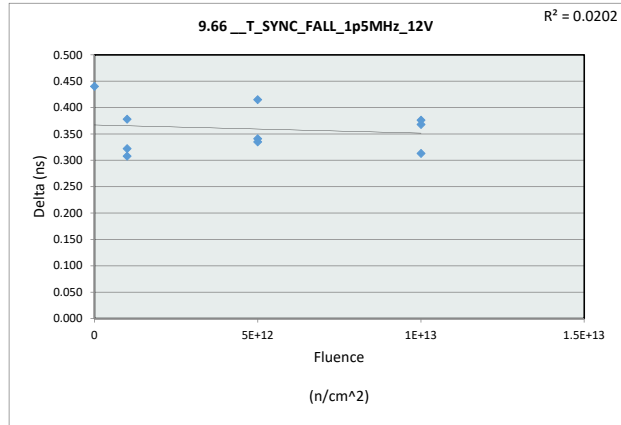
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.538	8.456	8.507	8.428
Average	8.538	8.518	8.512	8.483
Max	8.538	8.569	8.517	8.571
UL	17.000	17.000	17.000	17.000

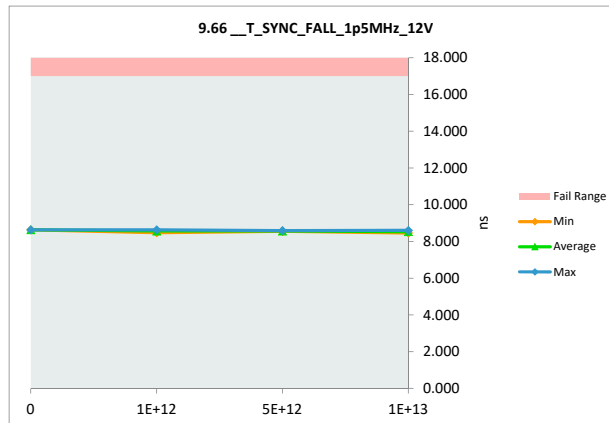


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.192	8.632	0.440
1E+12	129	8.313	8.635	0.322
1E+12	130	8.208	8.586	0.378
1E+12	131	8.166	8.474	0.308
5E+12	126	8.206	8.547	0.341
5E+12	127	8.218	8.553	0.335
5E+12	128	8.176	8.591	0.415
1E+13	123	8.137	8.513	0.376
1E+13	124	8.230	8.598	0.368
1E+13	125	8.148	8.461	0.313
Max		8.313	8.635	0.440
Average		8.199	8.559	0.360
Min		8.137	8.461	0.308
Std Dev		0.050	0.061	0.044

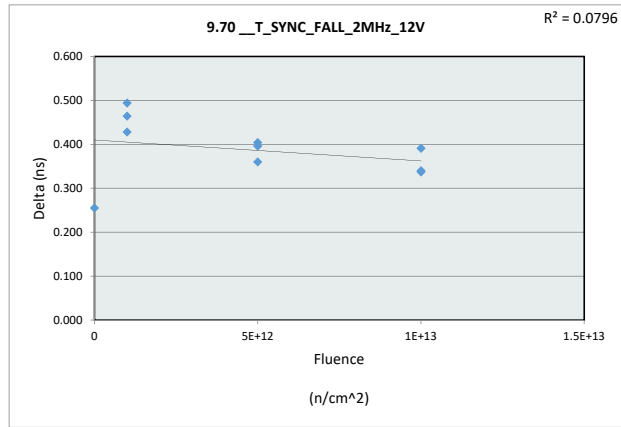


9.66 __T_SYNC_FALL_1p5MHz				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.632	8.474	8.547	8.461
Average	8.632	8.565	8.564	8.524
Max	8.632	8.635	8.591	8.598
UL	17.000	17.000	17.000	17.000

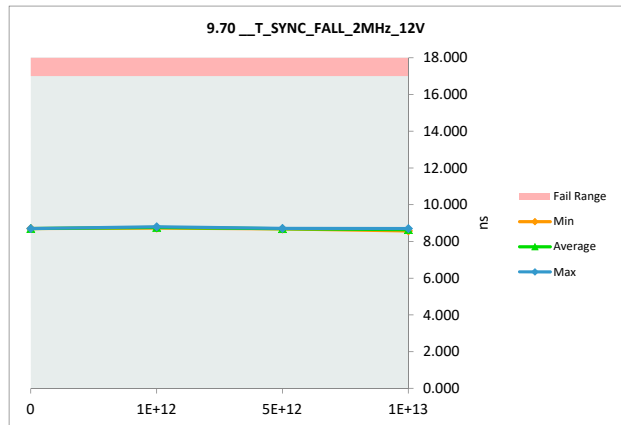


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.446	8.701	0.255
1E+12	129	8.349	8.777	0.428
1E+12	130	8.300	8.794	0.494
1E+12	131	8.260	8.724	0.464
5E+12	126	8.287	8.683	0.396
5E+12	127	8.316	8.676	0.360
5E+12	128	8.306	8.710	0.404
1E+13	123	8.244	8.635	0.391
1E+13	124	8.364	8.701	0.337
1E+13	125	8.235	8.575	0.340
Max		8.446	8.794	0.494
Average		8.311	8.698	0.387
Min		8.235	8.575	0.255
Std Dev		0.063	0.063	0.069



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	8.701	8.724	8.676	8.575
Average	8.701	8.765	8.690	8.637
Max	8.701	8.794	8.710	8.701
UL	17.000	17.000	17.000	17.000

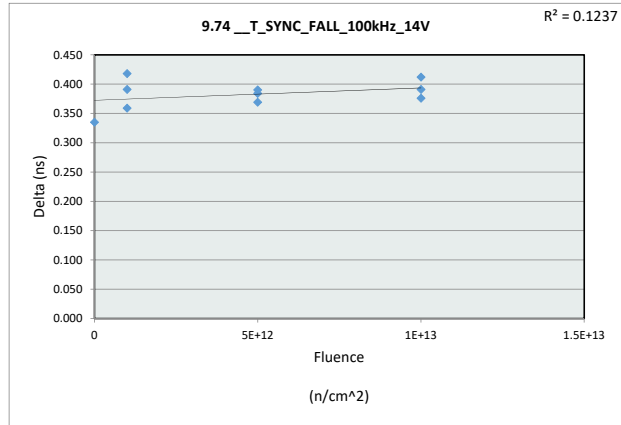


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.74 __T_SYNC_FALL_100kHz_14V

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

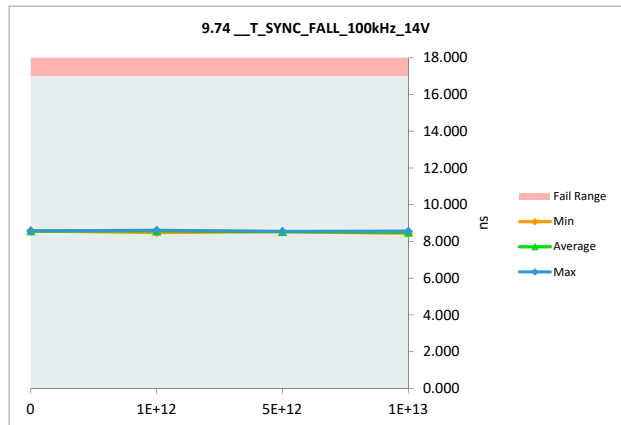
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.235	8.570	0.335
1E+12	129	8.243	8.602	0.359
1E+12	130	8.188	8.606	0.418
1E+12	131	8.089	8.480	0.391
5E+12	126	8.178	8.547	0.369
5E+12	127	8.142	8.526	0.384
5E+12	128	8.132	8.522	0.390
1E+13	123	8.046	8.437	0.391
1E+13	124	8.178	8.554	0.376
1E+13	125	8.092	8.504	0.412
Max		8.243	8.606	0.418
Average		8.152	8.535	0.382
Min		8.046	8.437	0.335
Std Dev		0.064	0.053	0.024



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	8.570	8.480	8.522	8.437
Average	8.570	8.563	8.532	8.498
Max	8.570	8.606	8.547	8.554
UL	17.000	17.000	17.000	17.000

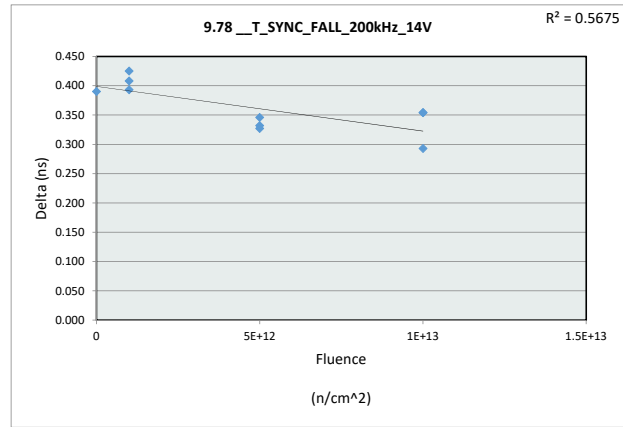


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.78 __T_SYNC_FALL_200kHz_14V

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

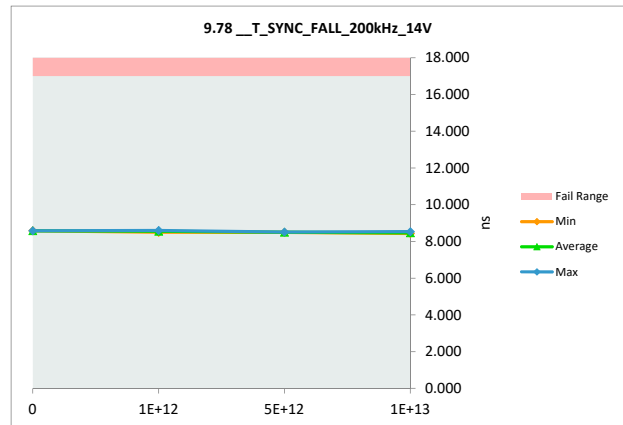
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.189	8.579	0.390
1E+12	129	8.173	8.566	0.393
1E+12	130	8.173	8.598	0.425
1E+12	131	8.088	8.496	0.408
5E+12	126	8.184	8.511	0.327
5E+12	127	8.159	8.491	0.332
5E+12	128	8.156	8.502	0.346
1E+13	123	8.079	8.433	0.354
1E+13	124	8.237	8.530	0.293
1E+13	125	8.080	8.434	0.354
Max		8.237	8.598	0.425
Average		8.152	8.514	0.362
Min		8.079	8.433	0.293
Std Dev		0.053	0.056	0.041



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	8.579	8.496	8.491	8.433
Average	8.579	8.553	8.501	8.466
Max	8.579	8.598	8.511	8.530
UL	17.000	17.000	17.000	17.000

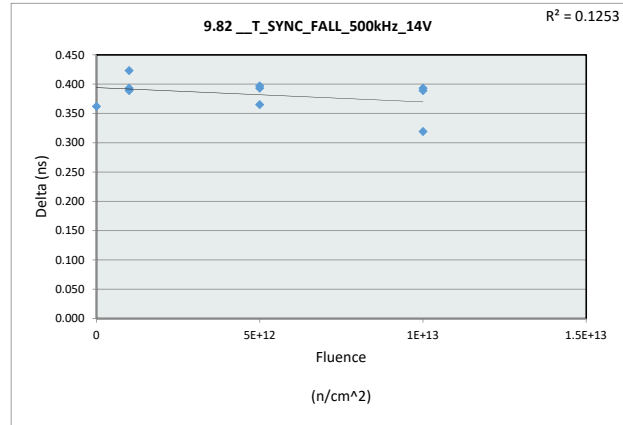


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.82 __T_SYNC_FALL_500kHz_14V

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

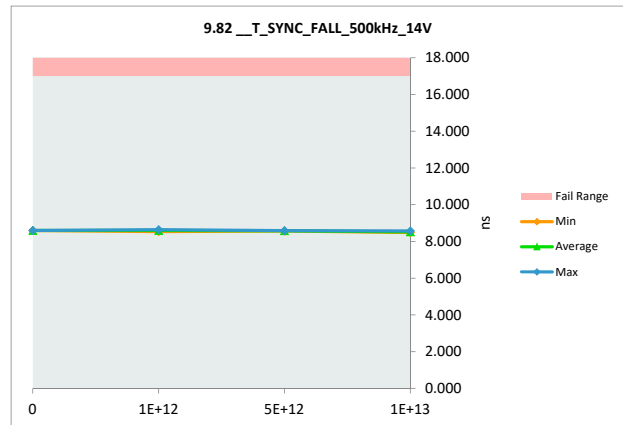
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.234	8.596	0.362
1E+12	129	8.222	8.645	0.423
1E+12	130	8.218	8.607	0.389
1E+12	131	8.141	8.534	0.393
5E+12	126	8.191	8.588	0.397
5E+12	127	8.199	8.564	0.365
5E+12	128	8.190	8.583	0.393
1E+13	123	8.112	8.505	0.393
1E+13	124	8.183	8.572	0.389
1E+13	125	8.169	8.488	0.319
Max		8.234	8.645	0.423
Average		8.186	8.568	0.382
Min		8.112	8.488	0.319
Std Dev		0.037	0.048	0.028



9.82 __T_SYNC_FALL_500kHz

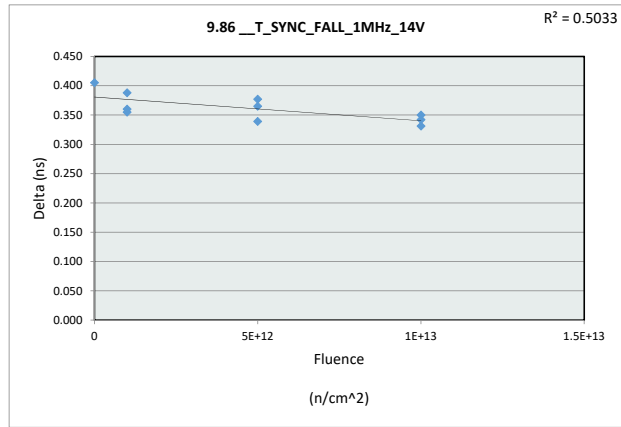
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.596	8.534	8.564	8.488
Average	8.596	8.595	8.578	8.522
Max	8.596	8.645	8.588	8.572
UL	17.000	17.000	17.000	17.000

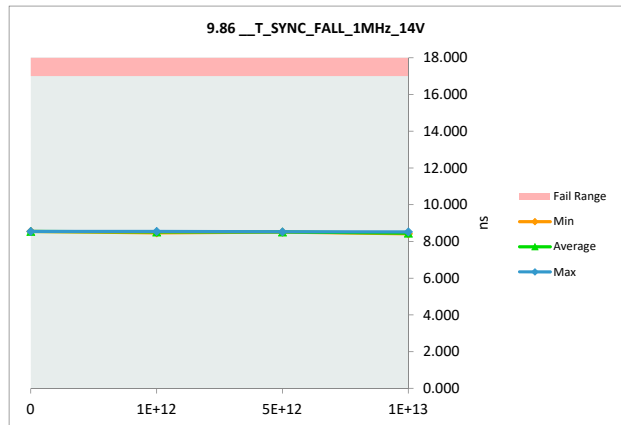


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.86 __T_SYNC_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	132	8.144	8.549	0.405
1E+12	129	8.187	8.542	0.355
1E+12	130	8.137	8.525	0.388
1E+12	131	8.106	8.466	0.360
5E+12	126	8.166	8.505	0.339
5E+12	127	8.145	8.522	0.377
5E+12	128	8.142	8.507	0.365
1E+13	123	8.064	8.414	0.350
1E+13	124	8.173	8.515	0.342
1E+13	125	8.093	8.424	0.331
Max		8.187	8.549	0.405
Average		8.136	8.497	0.361
Min		8.064	8.414	0.331
Std Dev		0.038	0.047	0.023

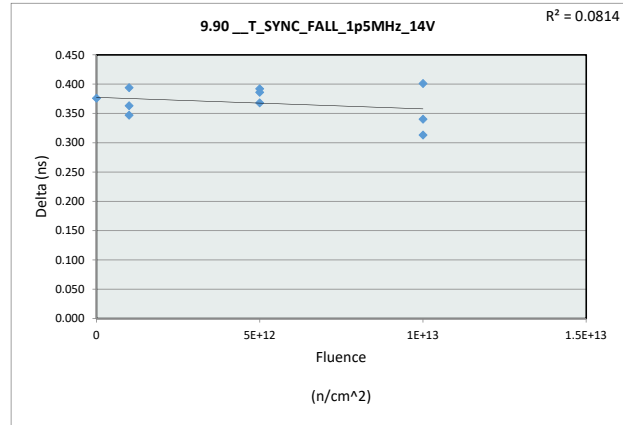


9.86 __T_SYNC_FALL_1MHz_1				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.549	8.466	8.505	8.414
Average	8.549	8.511	8.511	8.451
Max	8.549	8.542	8.522	8.515
UL	17.000	17.000	17.000	17.000

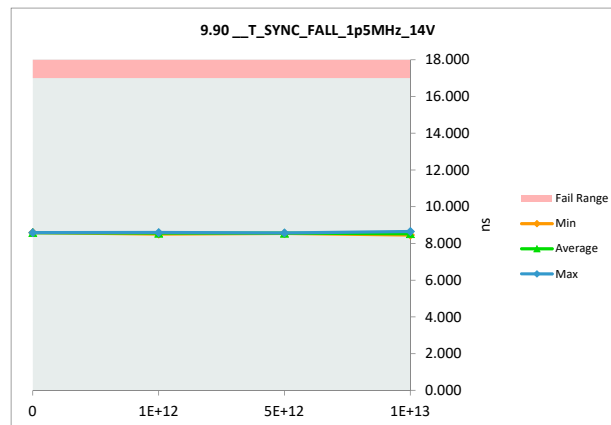


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.211	8.587	0.376
1E+12	129	8.245	8.592	0.347
1E+12	130	8.177	8.571	0.394
1E+12	131	8.146	8.509	0.363
5E+12	126	8.169	8.537	0.368
5E+12	127	8.178	8.564	0.386
5E+12	128	8.181	8.573	0.392
1E+13	123	8.145	8.458	0.313
1E+13	124	8.247	8.648	0.401
1E+13	125	8.139	8.479	0.340
Max		8.247	8.648	0.401
Average		8.184	8.552	0.368
Min		8.139	8.458	0.313
Std Dev		0.039	0.057	0.028



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	8.587	8.509	8.537	8.458
Average	8.587	8.557	8.558	8.528
Max	8.587	8.592	8.573	8.648
UL	17.000	17.000	17.000	17.000

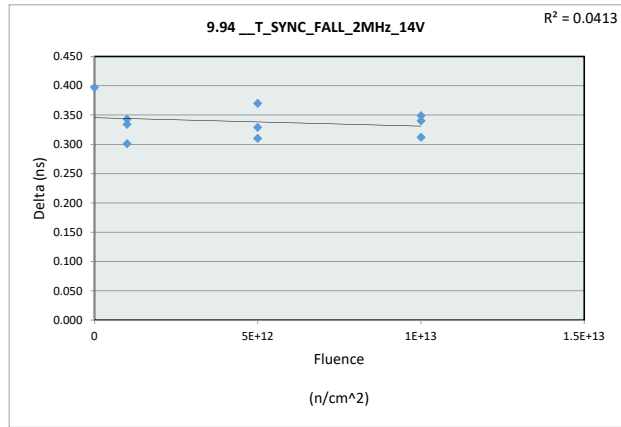


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.94 __T_SYNC_FALL_2MHz_14V

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

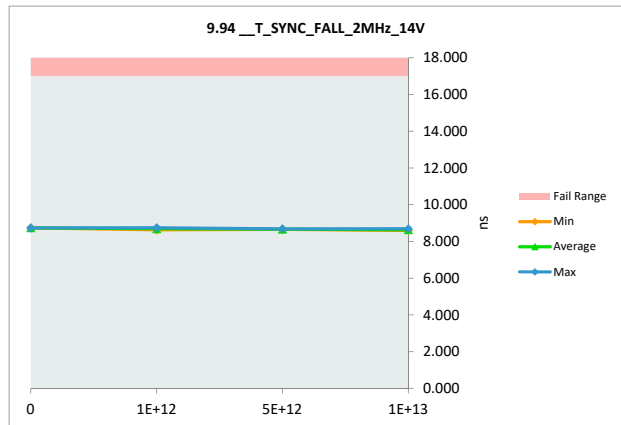
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.337	8.734	0.397
1E+12	129	8.413	8.747	0.334
1E+12	130	8.340	8.683	0.343
1E+12	131	8.326	8.627	0.301
5E+12	126	8.323	8.652	0.329
5E+12	127	8.311	8.681	0.370
5E+12	128	8.351	8.661	0.310
1E+13	123	8.265	8.605	0.340
1E+13	124	8.375	8.687	0.312
1E+13	125	8.246	8.595	0.349
Max		8.413	8.747	0.397
Average		8.329	8.667	0.338
Min		8.246	8.595	0.301
Std Dev		0.049	0.050	0.029



9.94 __T_SYNC_FALL_2MHz_1

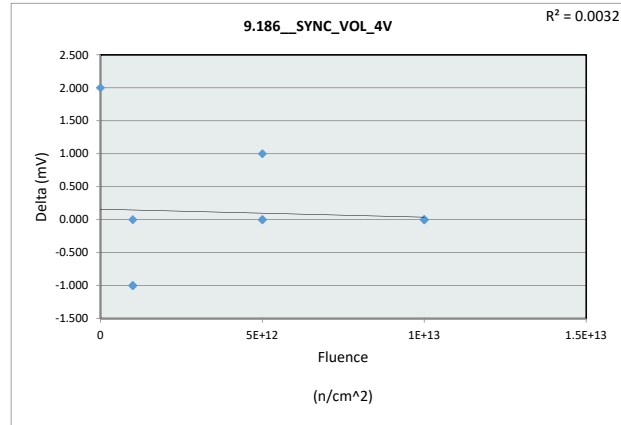
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.734	8.627	8.652	8.595
Average	8.734	8.686	8.665	8.629
Max	8.734	8.747	8.681	8.687
UL	17.000	17.000	17.000	17.000

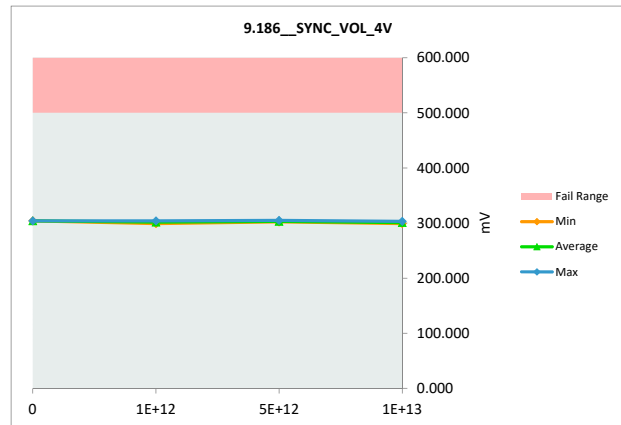


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	302.000	304.000	2.000
1E+12	129	304.000	304.000	0.000
1E+12	130	303.000	302.000	-1.000
1E+12	131	300.000	299.000	-1.000
5E+12	126	304.000	305.000	1.000
5E+12	127	302.000	302.000	0.000
5E+12	128	302.000	302.000	0.000
1E+13	123	303.000	303.000	0.000
1E+13	124	299.000	299.000	0.000
1E+13	125	300.000	300.000	0.000
Max		304.000	305.000	2.000
Average		301.900	302.000	0.100
Min		299.000	299.000	-1.000
Std Dev		1.729	2.108	0.876



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	304.000	299.000	302.000	299.000
Average	304.000	301.667	303.000	300.667
Max	304.000	304.000	305.000	303.000
UL	500.000	500.000	500.000	500.000

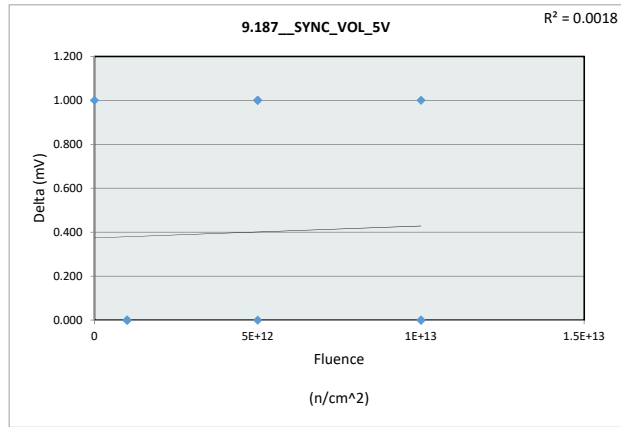


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.187_SYNC_VOL_5V

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

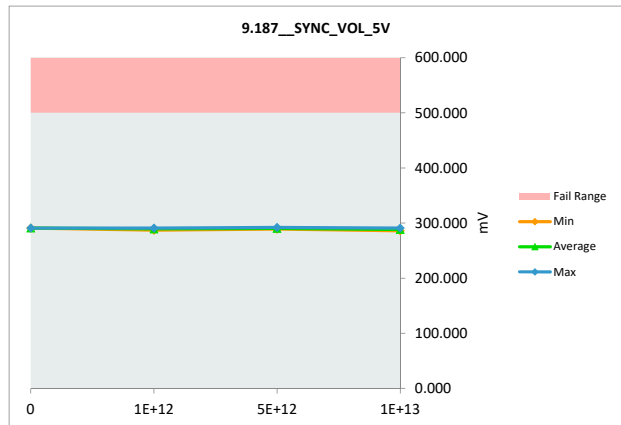
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	290.000	291.000	1.000
1E+12	129	291.000	291.000	0.000
1E+12	130	290.000	290.000	0.000
1E+12	131	287.000	287.000	0.000
5E+12	126	291.000	292.000	1.000
5E+12	127	289.000	290.000	1.000
5E+12	128	289.000	289.000	0.000
1E+13	123	290.000	291.000	1.000
1E+13	124	286.000	286.000	0.000
1E+13	125	288.000	288.000	0.000
Max		291.000	292.000	1.000
Average		289.100	289.500	0.400
Min		286.000	286.000	0.000
Std Dev		1.663	1.958	0.516



9.187_SYNC_VOL_5V

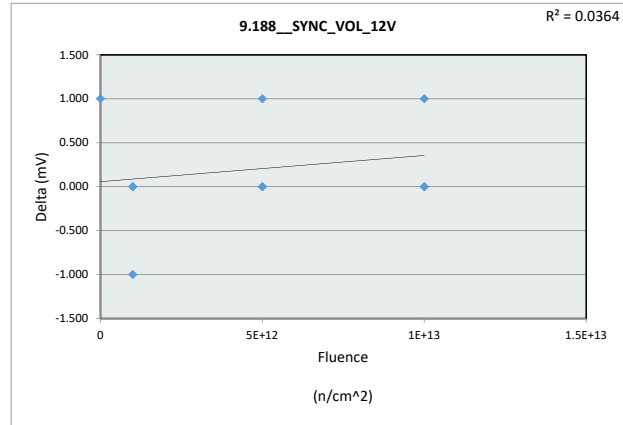
Test Site		
Tester		
Test Number		
Max Limit	500	mV
Min Limit		mV

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	291.000	287.000	289.000	286.000
Average	291.000	289.333	290.333	288.333
Max	291.000	291.000	292.000	291.000
UL	500.000	500.000	500.000	500.000

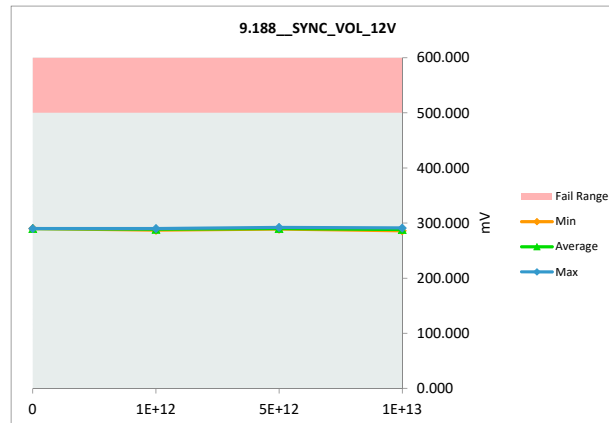


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	289.000	290.000	1.000
1E+12	129	290.000	290.000	0.000
1E+12	130	290.000	289.000	-1.000
1E+12	131	287.000	287.000	0.000
5E+12	126	291.000	292.000	1.000
5E+12	127	289.000	289.000	0.000
5E+12	128	289.000	289.000	0.000
1E+13	123	290.000	291.000	1.000
1E+13	124	286.000	286.000	0.000
1E+13	125	288.000	288.000	0.000
Max		291.000	292.000	1.000
Average		288.900	289.100	0.200
Min		286.000	286.000	-1.000
Std Dev		1.524	1.792	0.632

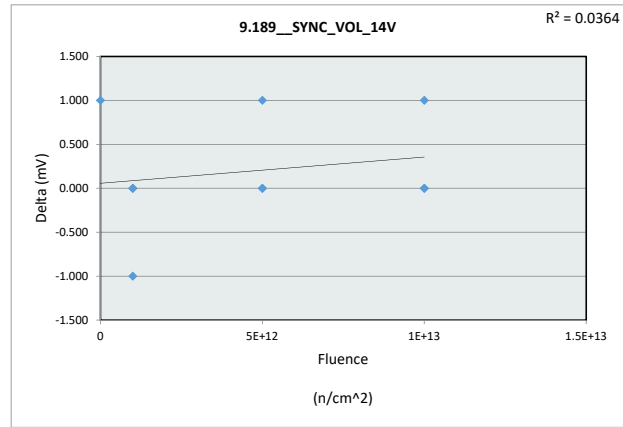


9.188_SYNC_VOL_12V				
Test Site				
Tester				
Test Number				
Max Limit	500	mV		
Min Limit		mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	290.000	287.000	289.000	286.000
Average	290.000	288.667	290.000	288.333
Max	290.000	290.000	292.000	291.000
UL	500.000	500.000	500.000	500.000

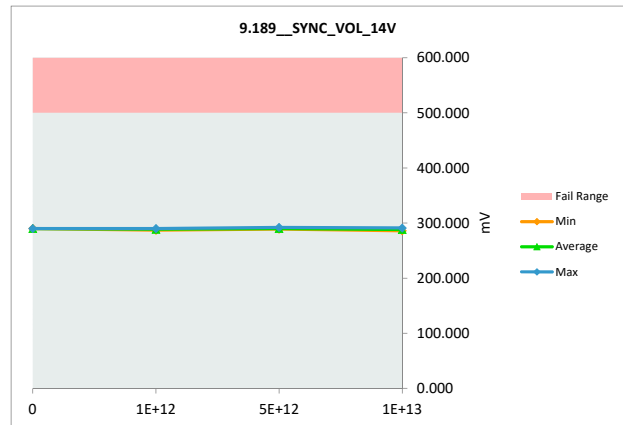


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	289.000	290.000	1.000
1E+12	129	290.000	290.000	0.000
1E+12	130	290.000	289.000	-1.000
1E+12	131	287.000	287.000	0.000
5E+12	126	291.000	292.000	1.000
5E+12	127	289.000	289.000	0.000
5E+12	128	289.000	289.000	0.000
1E+13	123	290.000	291.000	1.000
1E+13	124	286.000	286.000	0.000
1E+13	125	288.000	288.000	0.000
Max		291.000	292.000	1.000
Average		288.900	289.100	0.200
Min		286.000	286.000	-1.000
Std Dev		1.524	1.792	0.632

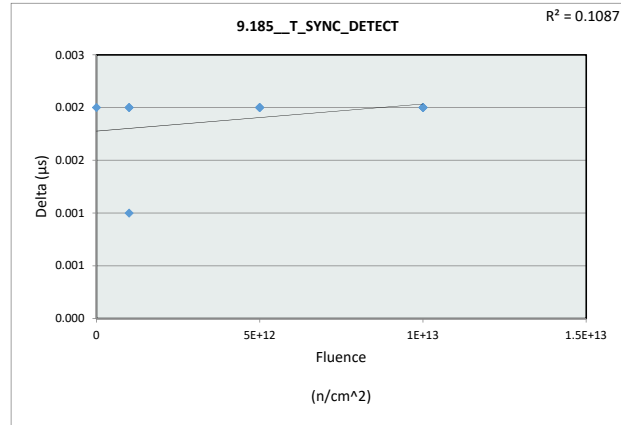


9.189_SYNC_VOL_14V				
Test Site				
Tester				
Test Number				
Max Limit	500	mV		
Min Limit		mV		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	290.000	287.000	289.000	286.000
Average	290.000	288.667	290.000	288.333
Max	290.000	290.000	292.000	291.000
UL	500.000	500.000	500.000	500.000

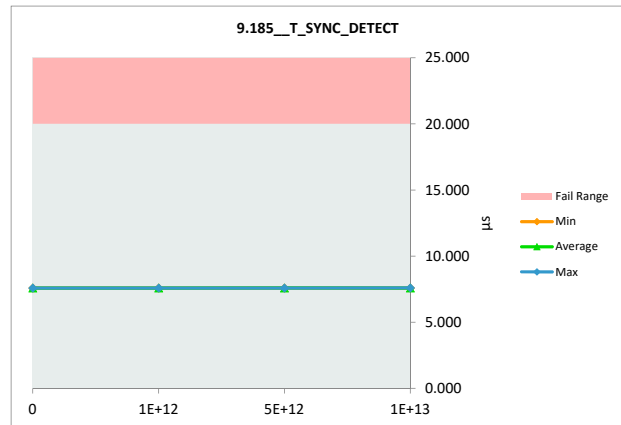


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.589	7.591	0.002
1E+12	129	7.589	7.591	0.002
1E+12	130	7.589	7.590	0.001
1E+12	131	7.588	7.590	0.002
5E+12	126	7.589	7.591	0.002
5E+12	127	7.589	7.591	0.002
5E+12	128	7.588	7.590	0.002
1E+13	123	7.589	7.591	0.002
1E+13	124	7.588	7.590	0.002
1E+13	125	7.590	7.592	0.002
Max		7.590	7.592	0.002
Average		7.589	7.591	0.002
Min		7.588	7.590	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	7.591	7.590	7.590	7.590
Average	7.591	7.590	7.591	7.591
Max	7.591	7.591	7.591	7.592
UL	20.000	20.000	20.000	20.000

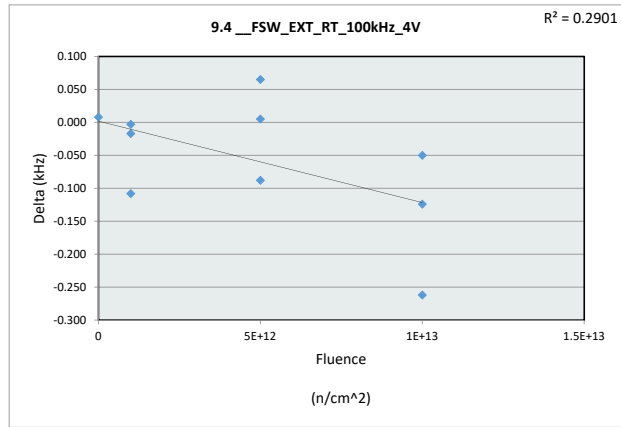


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.4 __FSW_EXT_RT_100kHz_4V

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

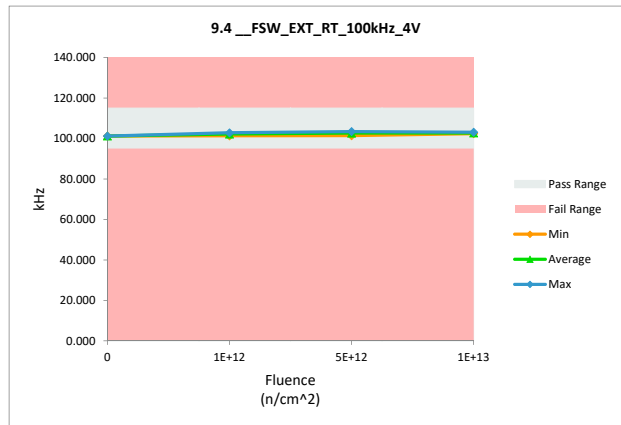
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	101.190	101.198	0.008
1E+12	129	102.551	102.443	-0.108
1E+12	130	102.813	102.810	-0.003
1E+12	131	101.331	101.314	-0.017
5E+12	126	101.315	101.380	0.065
5E+12	127	103.142	103.147	0.005
5E+12	128	103.548	103.460	-0.088
1E+13	123	102.920	102.658	-0.262
1E+13	124	103.152	103.102	-0.050
1E+13	125	102.556	102.432	-0.124
Max		103.548	103.460	0.065
Average		102.452	102.394	-0.057
Min		101.190	101.198	-0.262
Std Dev		0.861	0.822	0.093



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	101.198	101.314	101.380	102.432
Average	101.198	102.189	102.662	102.731
Max	101.198	102.810	103.460	103.102
UL	115.000	115.000	115.000	115.000

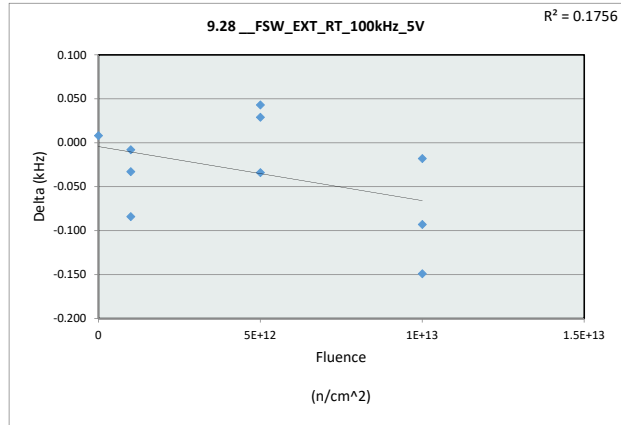


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.28_FSW_EXT_RT_100kHz_5V

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

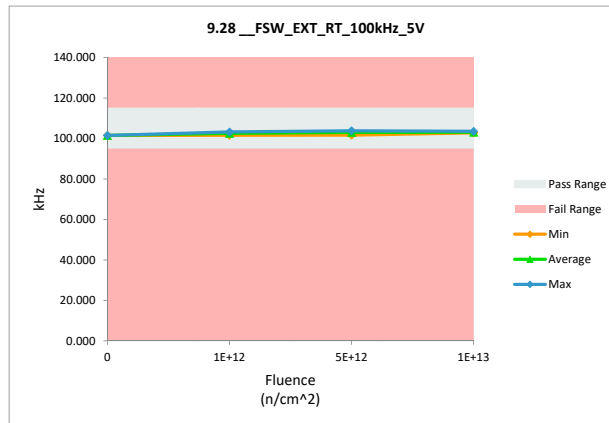
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	101.527	101.535	0.008
1E+12	129	102.861	102.777	-0.084
1E+12	130	103.231	103.198	-0.033
1E+12	131	101.603	101.595	-0.008
5E+12	126	101.655	101.684	0.029
5E+12	127	103.466	103.509	0.043
5E+12	128	103.887	103.853	-0.034
1E+13	123	103.187	103.038	-0.149
1E+13	124	103.556	103.538	-0.018
1E+13	125	102.861	102.768	-0.093
Max		103.887	103.853	0.043
Average		102.783	102.750	-0.034
Min		101.527	101.535	-0.149
Std Dev		0.876	0.859	0.059



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	101.535	101.595	101.684	102.768
Average	101.535	102.523	103.015	103.115
Max	101.535	103.198	103.853	103.538
UL	115.000	115.000	115.000	115.000

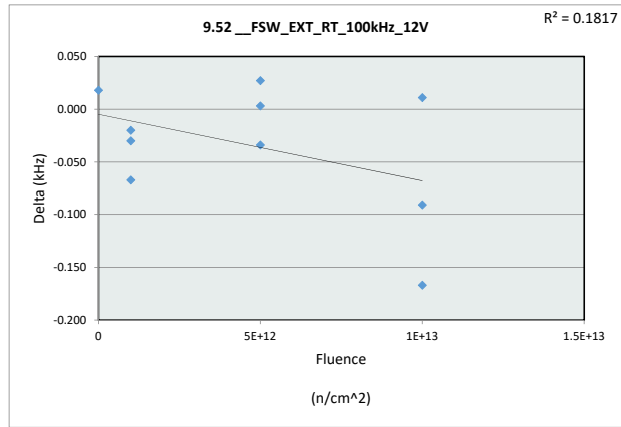


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.52_FSW_EXT_RT_100kHz_12V

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

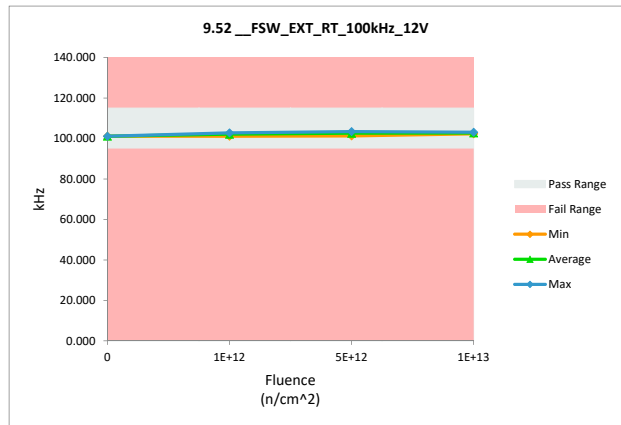
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	101.098	101.116	0.018
1E+12	129	102.429	102.409	-0.020
1E+12	130	102.831	102.764	-0.067
1E+12	131	101.155	101.125	-0.030
5E+12	126	101.250	101.277	0.027
5E+12	127	103.049	103.052	0.003
5E+12	128	103.457	103.423	-0.034
1E+13	123	102.781	102.614	-0.167
1E+13	124	103.097	103.108	0.011
1E+13	125	102.438	102.347	-0.091
Max		103.457	103.423	-0.027
Average		102.359	102.323	-0.035
Min		101.098	101.116	-0.167
Std Dev		0.876	0.858	0.060



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	101.116	101.125	101.277	102.347
Average	101.116	102.099	102.584	102.690
Max	101.116	102.764	103.423	103.108
UL	115.000	115.000	115.000	115.000

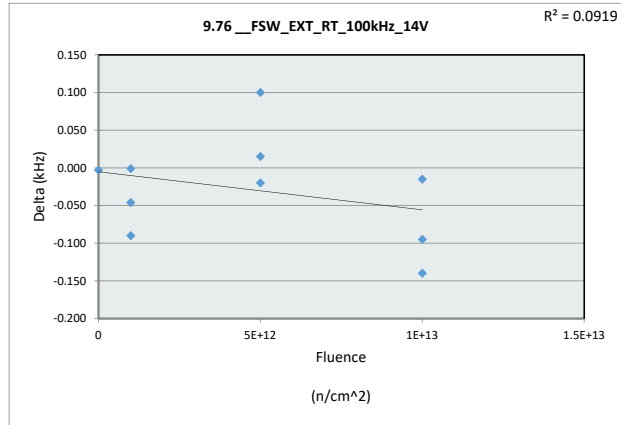


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.76_FSW_EXT_RT_100kHz_14V

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

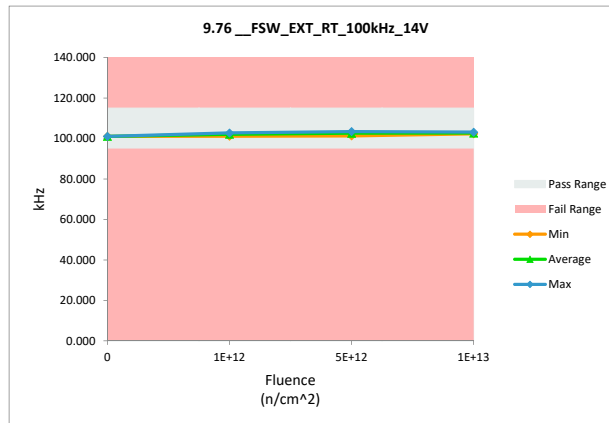
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	101.064	101.061	-0.003
1E+12	129	102.440	102.350	-0.090
1E+12	130	102.799	102.753	-0.046
1E+12	131	101.138	101.137	-0.001
5E+12	126	101.258	101.273	0.015
5E+12	127	102.992	103.092	0.100
5E+12	128	103.452	103.432	-0.020
1E+13	123	102.726	102.586	-0.140
1E+13	124	103.130	103.115	-0.015
1E+13	125	102.431	102.336	-0.095
Max		103.452	103.432	0.100
Average		102.343	102.313	-0.030
Min		101.064	101.061	-0.140
Std Dev		0.876	0.870	0.067



9.76_FSW_EXT_RT_100kHz

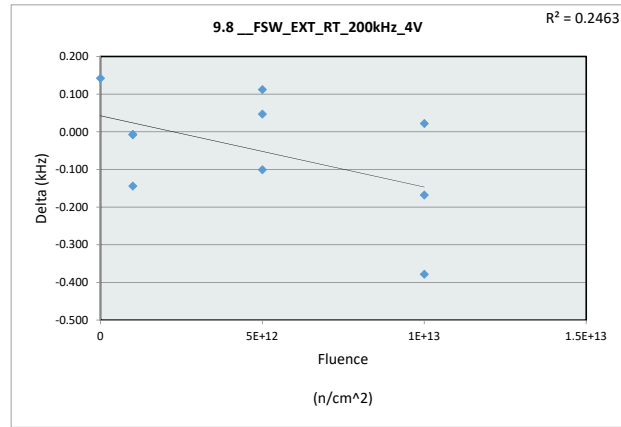
Test Site		
Tester		
Test Number		
Max Limit	115	kHz
Min Limit	95	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	95.000	95.000	95.000	95.000
Min	101.061	101.137	101.273	102.336
Average	101.061	102.080	102.599	102.679
Max	101.061	102.753	103.432	103.115
UL	115.000	115.000	115.000	115.000

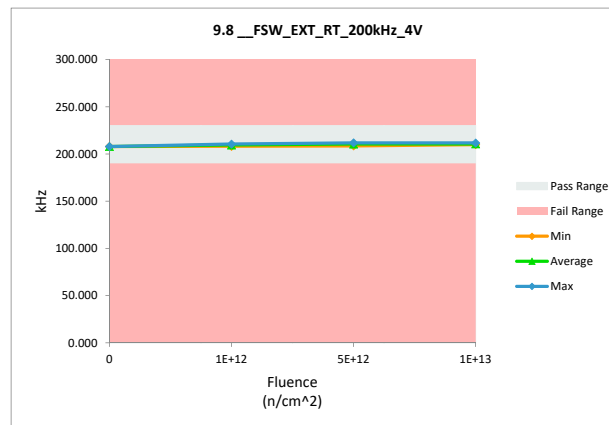


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	207.802	207.944	0.142
1E+12	129	210.100	209.956	-0.144
1E+12	130	210.466	210.458	-0.008
1E+12	131	208.089	208.082	-0.007
5E+12	126	208.420	208.532	0.112
5E+12	127	210.952	210.999	0.047
5E+12	128	211.964	211.863	-0.101
1E+13	123	210.443	210.065	-0.378
1E+13	124	211.624	211.646	0.022
1E+13	125	210.133	209.965	-0.168
Max		211.964	211.863	0.142
Average		209.999	209.951	-0.048
Min		207.802	207.944	-0.378
Std Dev		1.446	1.392	0.154



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	207.944	208.082	208.532	209.965
Average	207.944	209.499	210.465	210.559
Max	207.944	210.458	211.863	211.646
UL	230.000	230.000	230.000	230.000

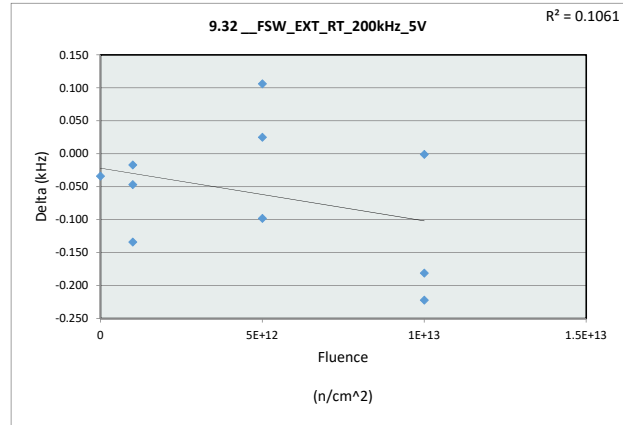


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.32_FSW_EXT_RT_200kHz_5V

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

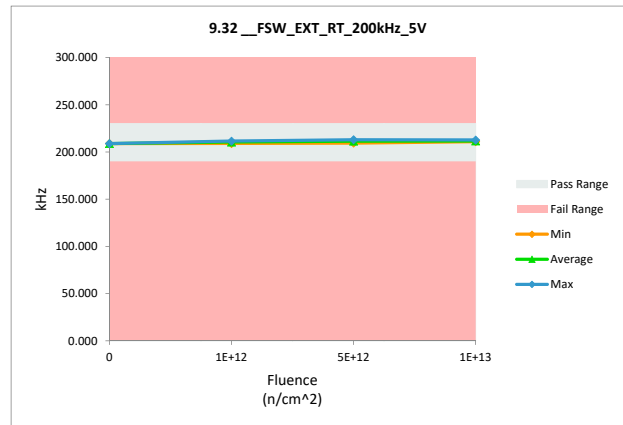
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	208.914	208.880	-0.034
1E+12	129	211.040	210.906	-0.134
1E+12	130	211.556	211.509	-0.047
1E+12	131	209.002	208.985	-0.017
5E+12	126	209.353	209.378	0.025
5E+12	127	211.901	212.007	0.106
5E+12	128	213.015	212.917	-0.098
1E+13	123	211.346	211.124	-0.222
1E+13	124	212.673	212.672	-0.001
1E+13	125	211.115	210.934	-0.181
Max		213.015	212.917	0.106
Average		210.991	210.931	-0.060
Min		208.914	208.880	-0.222
Std Dev		1.459	1.450	0.099



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	208.880	208.985	209.378	210.934
Average	208.880	210.467	211.434	211.577
Max	208.880	211.509	212.917	212.672
UL	230.000	230.000	230.000	230.000

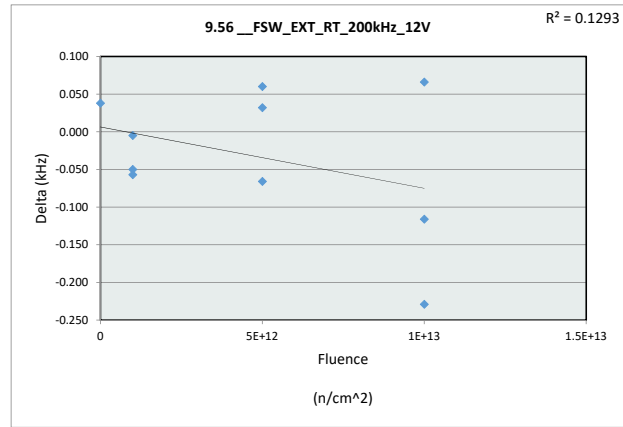


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.56_FSW_EXT_RT_200kHz_12V

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

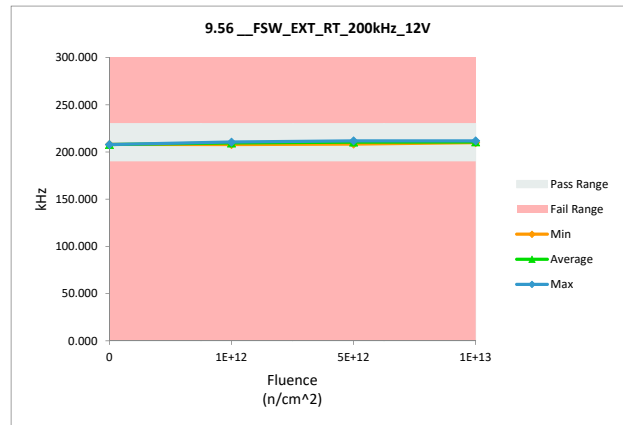
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	207.931	207.969	0.038
1E+12	129	210.019	210.014	-0.005
1E+12	130	210.561	210.511	-0.050
1E+12	131	207.983	207.926	-0.057
5E+12	126	208.378	208.410	0.032
5E+12	127	210.933	210.993	0.060
5E+12	128	211.907	211.841	-0.066
1E+13	123	210.354	210.125	-0.229
1E+13	124	211.672	211.738	0.066
1E+13	125	210.069	209.953	-0.116
Max		211.907	211.841	0.066
Average		209.981	209.948	-0.033
Min		207.931	207.926	-0.229
Std Dev		1.442	1.438	0.092



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	207.969	207.926	208.410	209.953
Average	207.969	209.484	210.415	210.605
Max	207.969	210.511	211.841	211.738
UL	230.000	230.000	230.000	230.000

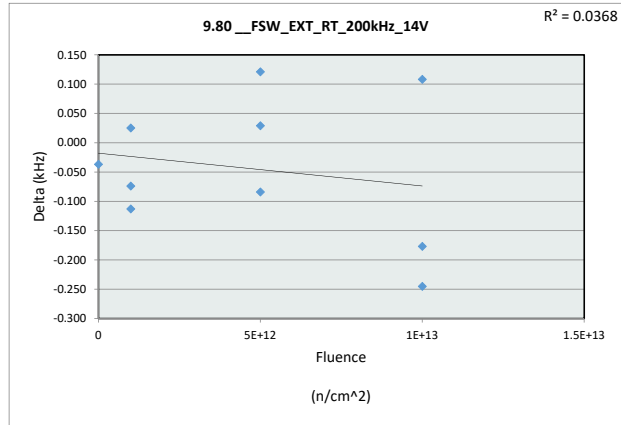


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.80_FSW_EXT_RT_200kHz_14V

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

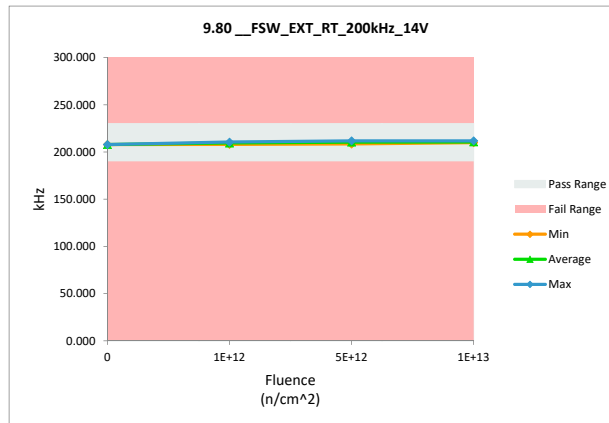
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	207.915	207.878	-0.037
1E+12	129	210.074	209.961	-0.113
1E+12	130	210.539	210.465	-0.074
1E+12	131	207.984	208.009	0.025
5E+12	126	208.353	208.474	0.121
5E+12	127	210.876	210.905	0.029
5E+12	128	211.957	211.873	-0.084
1E+13	123	210.417	210.172	-0.245
1E+13	124	211.642	211.750	0.108
1E+13	125	210.124	209.947	-0.177
Max		211.957	211.873	0.121
Average		209.988	209.943	-0.045
Min		207.915	207.878	-0.245
Std Dev		1.449	1.430	0.118



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	207.878	208.009	208.474	209.947
Average	207.878	209.478	210.417	210.623
Max	207.878	210.465	211.873	211.750
UL	230.000	230.000	230.000	230.000

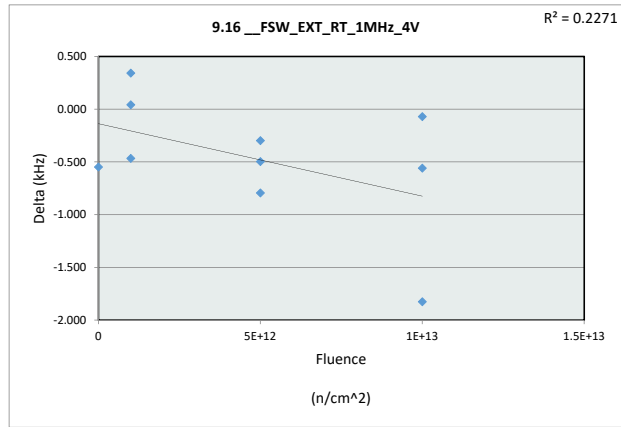


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.16 __FSW_EXT_RT_1MHz_4V

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

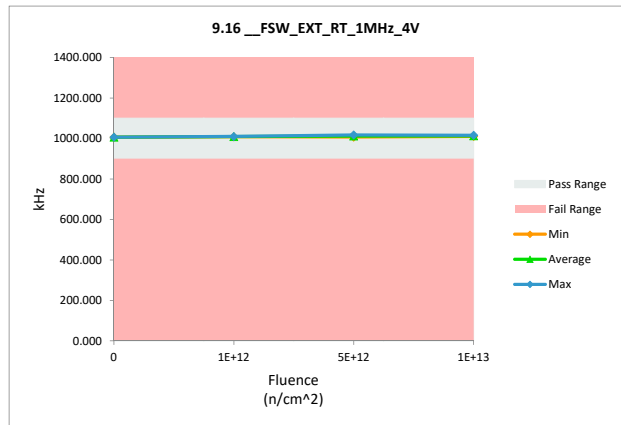
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1006.832	1006.284	-0.548
1E+12	129	1010.412	1009.945	-0.467
1E+12	130	1008.524	1008.865	0.341
1E+12	131	1008.288	1008.330	0.042
5E+12	126	1007.644	1006.849	-0.795
5E+12	127	1012.152	1011.854	-0.298
5E+12	128	1017.831	1017.334	-0.497
1E+13	123	1012.574	1010.748	-1.826
1E+13	124	1016.125	1016.054	-0.071
1E+13	125	1011.810	1011.251	-0.559
Max		1017.831	1017.334	0.341
Average		1011.219	1010.751	-0.468
Min		1006.832	1006.284	-1.826
Std Dev		3.642	3.624	0.584



9.16 __FSW_EXT_RT_1MHz_4V

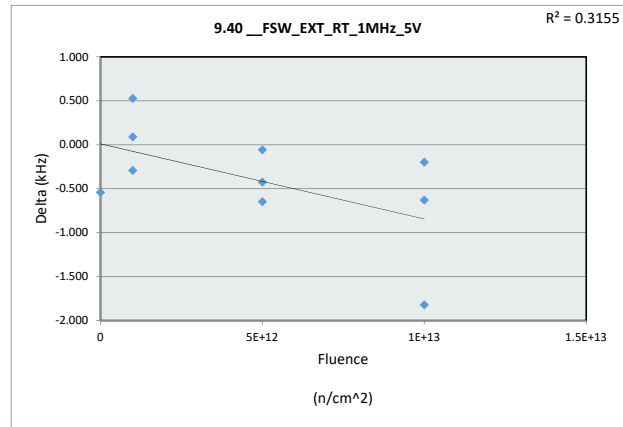
Test Site		
Tester		
Test Number		
Max Limit	1100	kHz
Min Limit	900	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1006.284	1008.330	1006.849	1010.748
Average	1006.284	1009.047	1012.012	1012.684
Max	1006.284	1009.945	1017.334	1016.054
UL	1100.000	1100.000	1100.000	1100.000

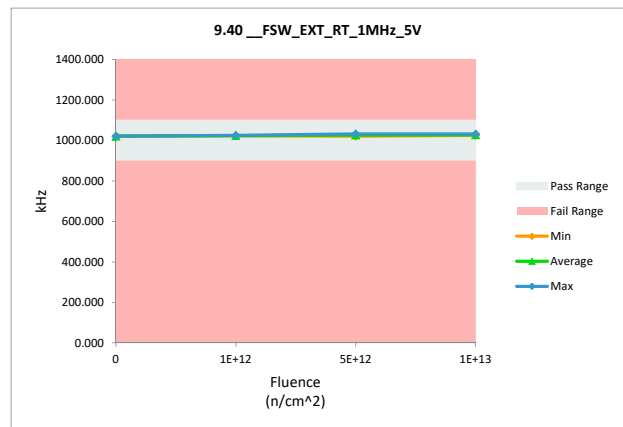


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1022.366	1021.823	-0.543
1E+12	129	1025.136	1024.843	-0.293
1E+12	130	1022.354	1022.880	0.526
1E+12	131	1023.527	1023.617	0.090
5E+12	126	1022.089	1021.441	-0.648
5E+12	127	1026.580	1026.521	-0.059
5E+12	128	1033.312	1032.886	-0.426
1E+13	123	1028.208	1026.387	-1.821
1E+13	124	1032.349	1032.151	-0.198
1E+13	125	1026.276	1025.646	-0.630
Max		1033.312	1032.886	0.526
Average		1026.220	1025.819	-0.400
Min		1022.089	1021.441	-1.821
Std Dev		4.045	3.950	0.617

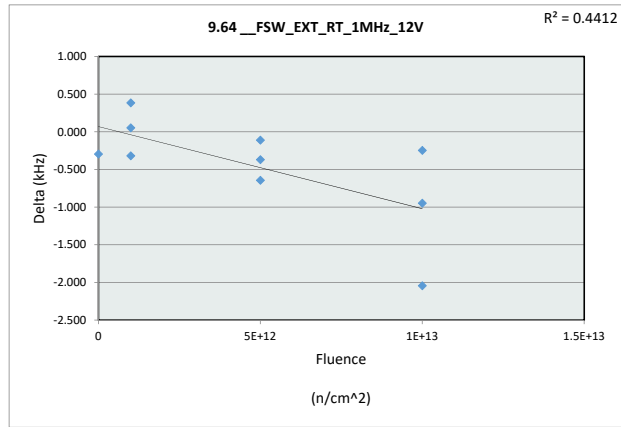


9.40 __FSW_EXT_RT_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit		1100	kHz	
Min Limit		900	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1021.823	1022.880	1021.441	1025.646
Average	1021.823	1023.780	1026.949	1028.061
Max	1021.823	1024.843	1032.886	1032.151
UL	1100.000	1100.000	1100.000	1100.000

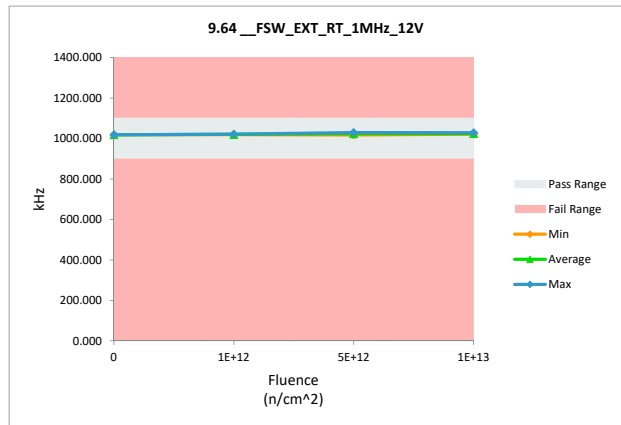


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1019.063	1018.767	-0.296
1E+12	129	1021.767	1021.448	-0.319
1E+12	130	1018.795	1019.179	0.384
1E+12	131	1019.990	1020.041	0.051
5E+12	126	1018.463	1017.818	-0.645
5E+12	127	1023.032	1022.921	-0.111
5E+12	128	1029.557	1029.186	-0.371
1E+13	123	1024.775	1022.731	-2.044
1E+13	124	1028.910	1028.663	-0.247
1E+13	125	1022.710	1021.761	-0.949
Max		1029.557	1029.186	0.384
Average		1022.706	1022.252	-0.455
Min		1018.463	1017.818	-2.044
Std Dev		4.009	3.900	0.665



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	1018.767	1019.179	1017.818	1021.761
Average	1018.767	1020.223	1023.308	1024.385
Max	1018.767	1021.448	1029.186	1028.663
UL	1100.000	1100.000	1100.000	1100.000

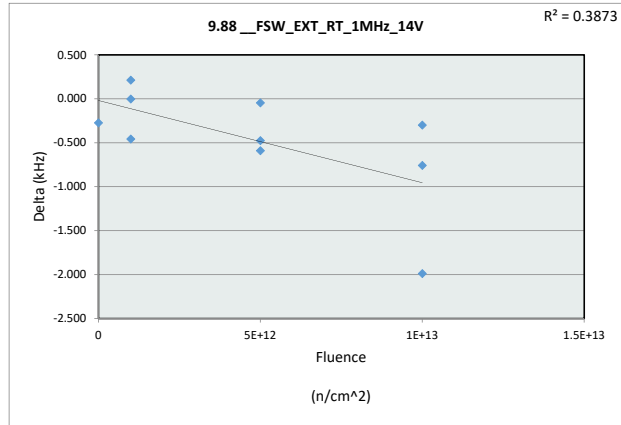


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

9.88_FSW_EXT_RT_1MHz_14V

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

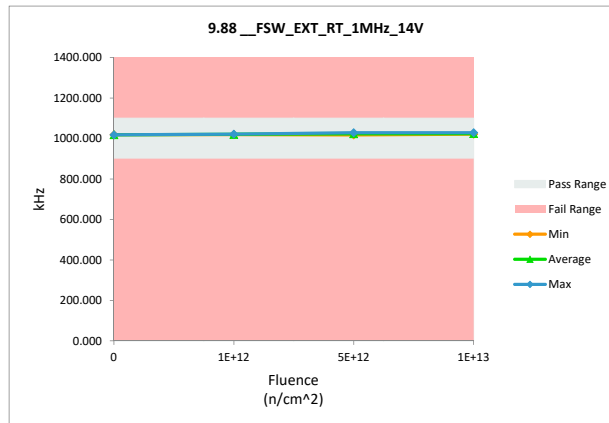
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1018.893	1018.618	-0.275
1E+12	129	1021.810	1021.352	-0.458
1E+12	130	1018.786	1018.997	0.211
1E+12	131	1019.954	1019.951	-0.003
5E+12	126	1018.380	1017.789	-0.591
5E+12	127	1022.911	1022.864	-0.047
5E+12	128	1029.539	1029.063	-0.476
1E+13	123	1024.657	1022.669	-1.988
1E+13	124	1028.784	1028.484	-0.300
1E+13	125	1022.441	1021.682	-0.759
Max		1029.539	1029.063	0.211
Average		1022.615	1022.147	-0.469
Min		1018.380	1017.789	-1.988
Std Dev		4.006	3.885	0.608



9.88_FSW_EXT_RT_1MHz_14V

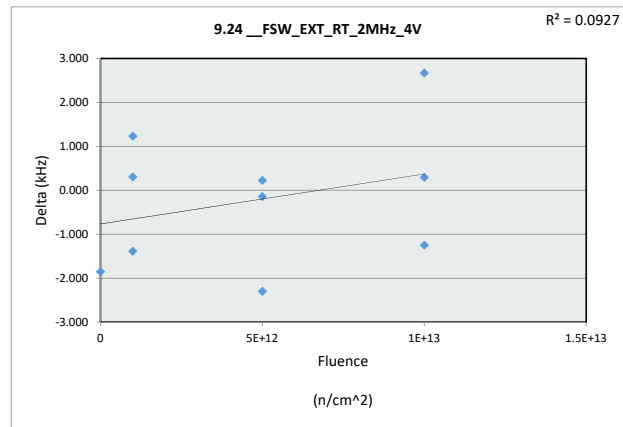
Test Site		
Tester		
Test Number		
Max Limit	1100	kHz
Min Limit	900	kHz

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	900.000	900.000	900.000	900.000
Min	1018.618	1018.997	1017.789	1021.682
Average	1018.618	1020.100	1023.239	1024.278
Max	1018.618	1021.352	1029.063	1028.484
UL	1100.000	1100.000	1100.000	1100.000

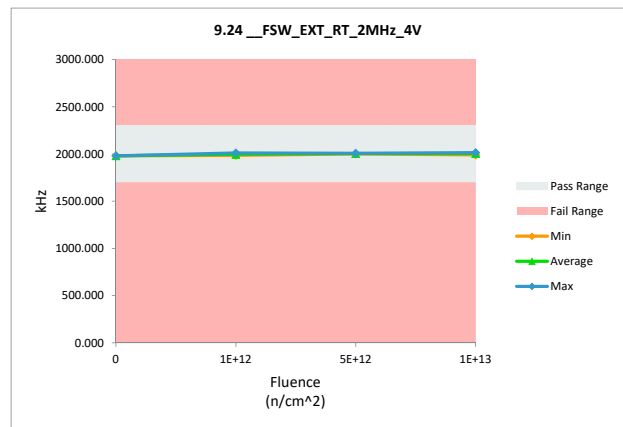


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1981.879	1980.027	-1.852
1E+12	129	1995.166	1993.780	-1.386
1E+12	130	2009.783	2011.013	1.230
1E+12	131	1985.106	1985.409	0.303
5E+12	126	2006.609	2006.832	0.223
5E+12	127	2000.678	2000.535	-0.143
5E+12	128	2009.732	2007.433	-2.299
1E+13	123	1991.280	1990.029	-1.251
1E+13	124	2004.420	2007.088	2.668
1E+13	125	2013.905	2014.199	0.294
	Max	2013.905	2014.199	2.668
	Average	1999.856	1999.635	-0.221
	Min	1981.879	1980.027	-2.299
	Std Dev	11.040	11.662	1.513

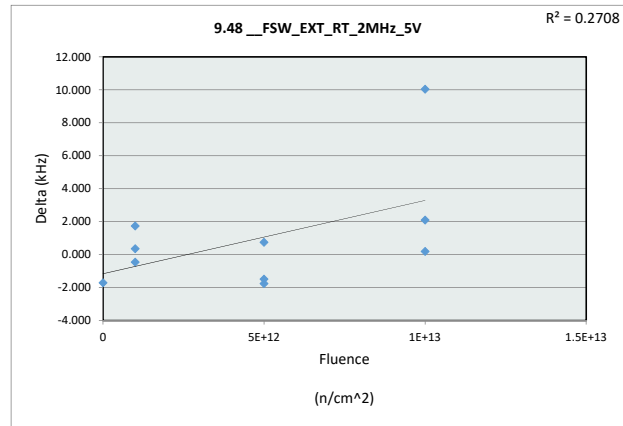


9.24_FSW_EXT_RT_2MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1980.027	1985.409	2000.535	1990.029
Average	1980.027	1996.734	2004.933	2003.772
Max	1980.027	2011.013	2007.433	2014.199
UL	2300.000	2300.000	2300.000	2300.000

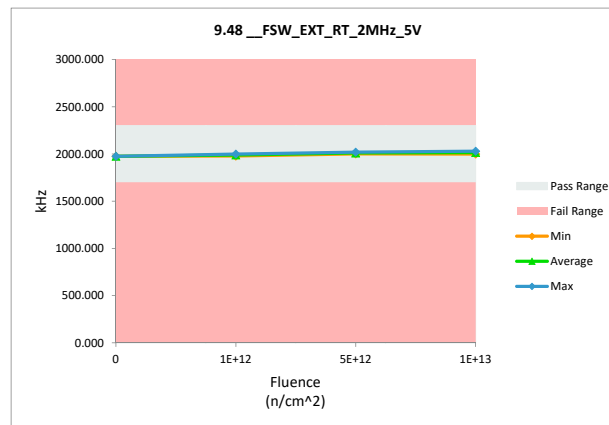


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1976.877	1975.163	-1.714
1E+12	129	1999.343	1998.881	-0.462
1E+12	130	1987.750	1989.484	1.734
1E+12	131	1977.836	1978.196	0.360
5E+12	126	2010.515	2008.758	-1.757
5E+12	127	2000.545	2001.292	0.747
5E+12	128	2021.218	2019.728	-1.490
1E+13	123	1989.395	1999.432	10.037
1E+13	124	2027.138	2029.236	2.098
1E+13	125	2014.139	2014.336	0.197
Max		2027.138	2029.236	10.037
Average		2000.476	2001.451	0.975
Min		1976.877	1975.163	-1.757
Std Dev		17.588	17.357	3.461

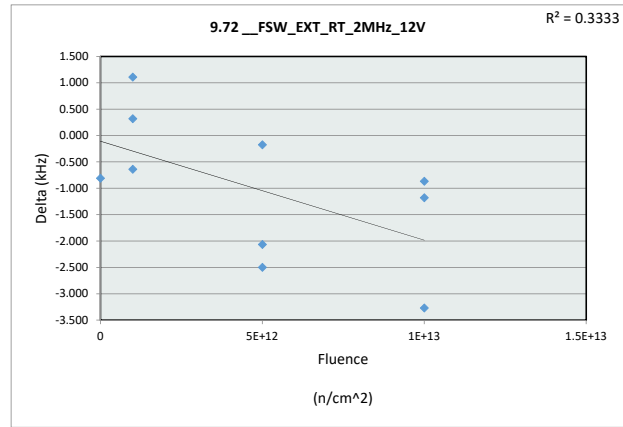


9.48_FSW_EXT_RT_2MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	2300		kHz	
Min Limit	1700		kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1975.163	1978.196	2001.292	1999.432
Average	1975.163	1988.854	2009.926	2014.335
Max	1975.163	1998.881	2019.728	2029.236
UL	2300.000	2300.000	2300.000	2300.000

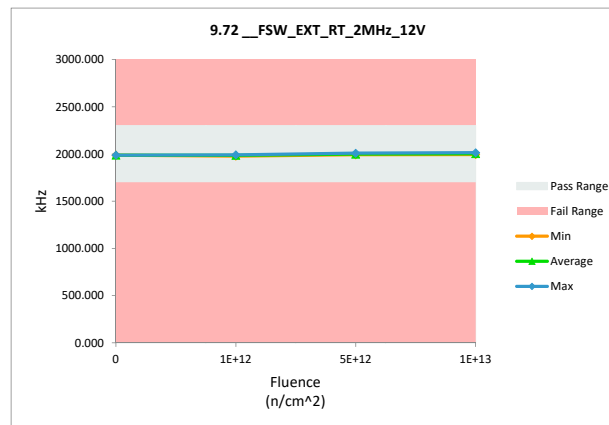


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1988.109	1987.299	-0.810
1E+12	129	1991.213	1990.574	-0.639
1E+12	130	1976.688	1977.794	1.106
1E+12	131	1989.104	1989.422	0.318
5E+12	126	1998.077	1995.579	-2.498
5E+12	127	1992.022	1991.846	-0.176
5E+12	128	2010.076	2008.011	-2.065
1E+13	123	1997.812	1994.542	-3.270
1E+13	124	2014.718	2013.850	-0.868
1E+13	125	2001.852	2000.671	-1.181
Max		2014.718	2013.850	1.106
Average		1995.967	1994.959	-1.008
Min		1976.688	1977.794	-3.270
Std Dev		11.115	10.399	1.316

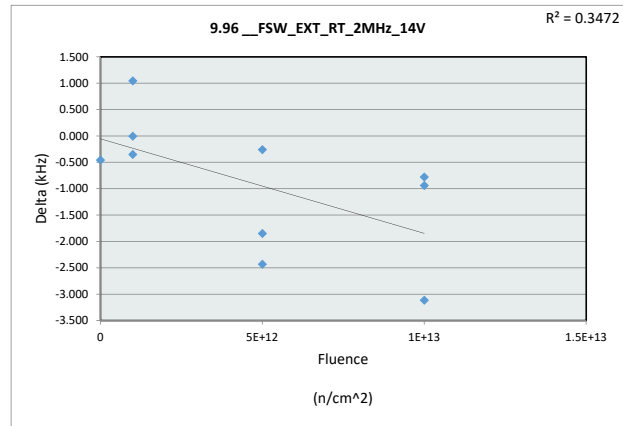


9.72_FSW_EXT_RT_2MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	2300		kHz	
Min Limit	1700		kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1987.299	1977.794	1991.846	1994.542
Average	1987.299	1985.930	1998.479	2003.021
Max	1987.299	1990.574	2008.011	2013.850
UL	2300.000	2300.000	2300.000	2300.000

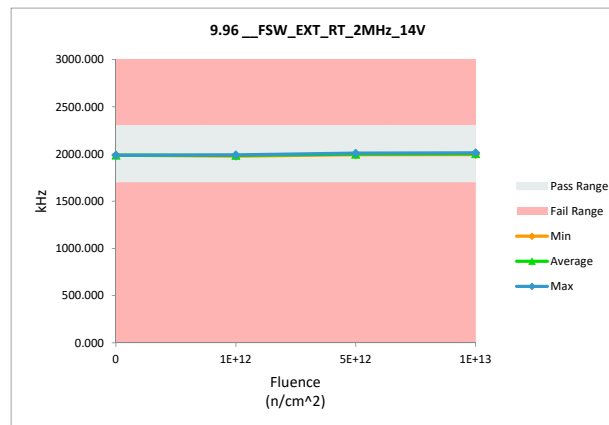


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1987.528	1987.071	-0.457
1E+12	129	1991.166	1990.815	-0.351
1E+12	130	1976.777	1977.820	1.043
1E+12	131	1989.004	1988.997	-0.007
5E+12	126	1997.853	1995.420	-2.433
5E+12	127	1991.952	1991.692	-0.260
5E+12	128	2010.018	2008.167	-1.851
1E+13	123	1997.588	1994.474	-3.114
1E+13	124	2014.213	2013.434	-0.779
1E+13	125	2001.375	2000.435	-0.940
Max		2014.213	2013.434	1.043
Average		1995.747	1994.832	-0.915
Min		1976.777	1977.820	-3.114
Std Dev		11.017	10.357	1.232

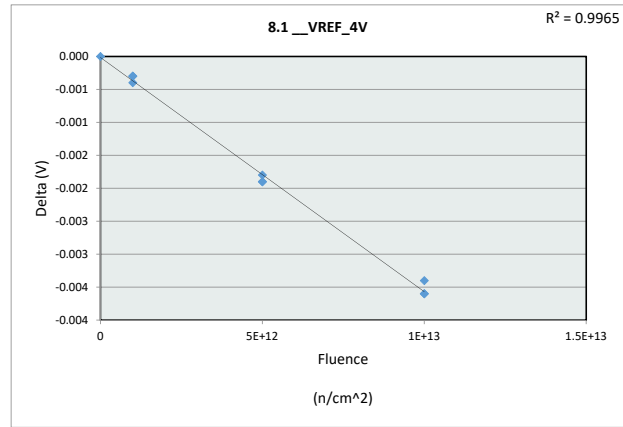


9.96_FSW_EXT_RT_2MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit		2300	kHz	
Min Limit		1700	kHz	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1700.000	1700.000	1700.000	1700.000
Min	1987.071	1977.820	1991.692	1994.474
Average	1987.071	1985.877	1998.426	2002.781
Max	1987.071	1990.815	2008.167	2013.434
UL	2300.000	2300.000	2300.000	2300.000

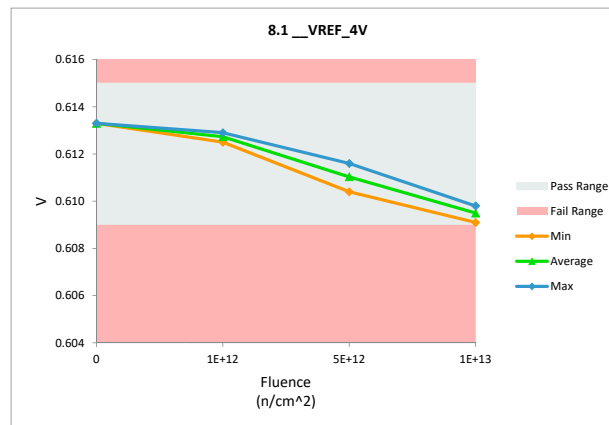


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.613	0.613	0.000
1E+12	129	0.613	0.613	0.000
1E+12	130	0.613	0.613	0.000
1E+12	131	0.613	0.613	0.000
5E+12	126	0.612	0.610	-0.002
5E+12	127	0.613	0.611	-0.002
5E+12	128	0.613	0.612	-0.002
1E+13	123	0.613	0.609	-0.004
1E+13	124	0.613	0.610	-0.004
1E+13	125	0.613	0.610	-0.003
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.612	0.609	-0.004
Std Dev		0.000	0.002	0.001

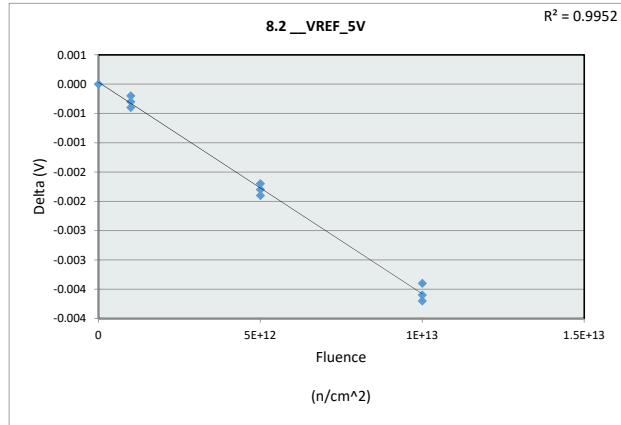


8.1_VREF_4V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.613	0.610	0.609
Average	0.613	0.613	0.611	0.610
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

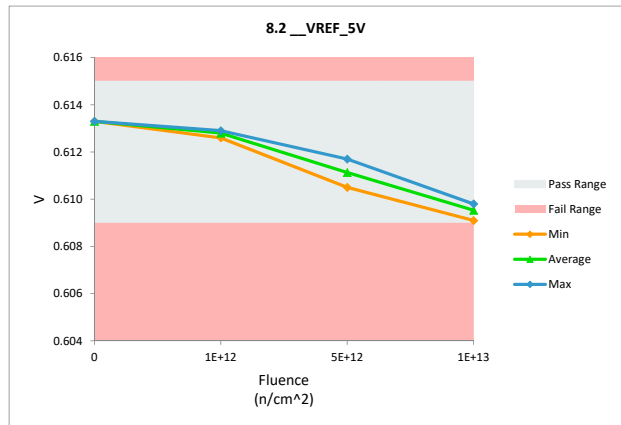


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.613	0.613	0.000
1E+12	129	0.613	0.613	0.000
1E+12	130	0.613	0.613	0.000
1E+12	131	0.613	0.613	0.000
5E+12	126	0.612	0.610	-0.002
5E+12	127	0.613	0.611	-0.002
5E+12	128	0.613	0.612	-0.002
1E+13	123	0.613	0.609	-0.004
1E+13	124	0.613	0.610	-0.004
1E+13	125	0.613	0.610	-0.003
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.612	0.609	-0.004
Std Dev		0.000	0.002	0.001

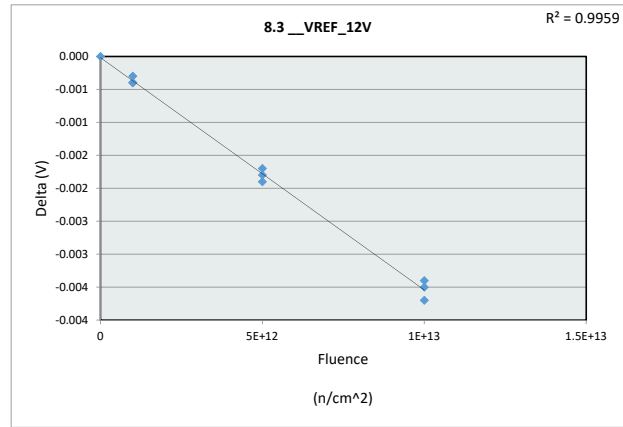


8.2 __VREF_5V					
Test Site					
Tester					
Test Number					
Max Limit		0.615	V		
Min Limit		0.609	V		
Fluence (n/cm ²)		0	1E+12	5E+12	1E+13
LL		0.609	0.609	0.609	0.609
Min		0.613	0.613	0.611	0.609
Average		0.613	0.613	0.611	0.610
Max		0.613	0.613	0.612	0.610
UL		0.615	0.615	0.615	0.615

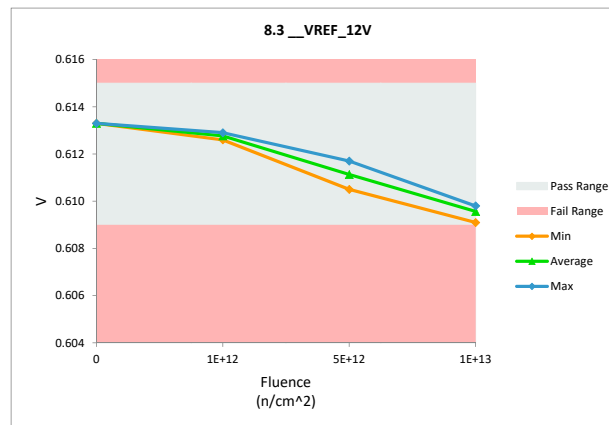


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.613	0.613	0.000
1E+12	129	0.613	0.613	0.000
1E+12	130	0.613	0.613	0.000
1E+12	131	0.613	0.613	0.000
5E+12	126	0.612	0.610	-0.002
5E+12	127	0.613	0.611	-0.002
5E+12	128	0.613	0.612	-0.002
1E+13	123	0.613	0.609	-0.004
1E+13	124	0.613	0.610	-0.004
1E+13	125	0.613	0.610	-0.003
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.612	0.609	-0.004
Std Dev		0.000	0.002	0.001

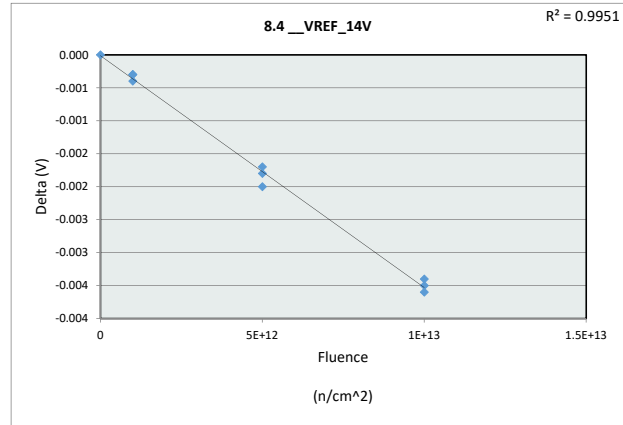


8.3_VREF_12V				
Test Site				
Tester				
Test Number				
Max Limit	0.615	V		
Min Limit	0.609	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.609	0.609	0.609	0.609
Min	0.613	0.613	0.611	0.609
Average	0.613	0.613	0.611	0.610
Max	0.613	0.613	0.612	0.610
UL	0.615	0.615	0.615	0.615

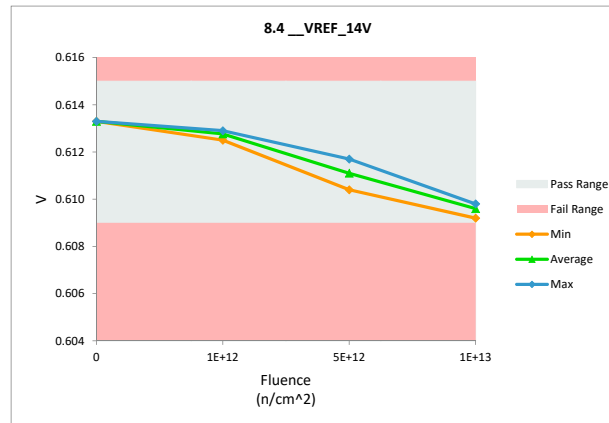


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.613	0.613	0.000
1E+12	129	0.613	0.613	0.000
1E+12	130	0.613	0.613	0.000
1E+12	131	0.613	0.613	0.000
5E+12	126	0.612	0.610	-0.002
5E+12	127	0.613	0.611	-0.002
5E+12	128	0.613	0.612	-0.002
1E+13	123	0.613	0.609	-0.004
1E+13	124	0.613	0.610	-0.004
1E+13	125	0.613	0.610	-0.003
Max		0.613	0.613	0.000
Average		0.613	0.611	-0.002
Min		0.612	0.609	-0.004
Std Dev		0.000	0.002	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	0.613	0.610	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

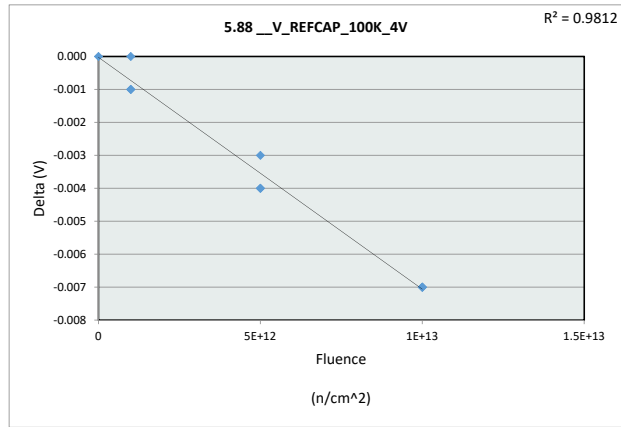


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

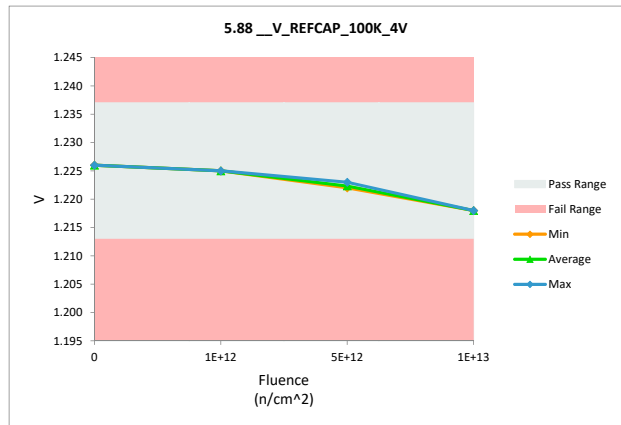
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.218	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.001	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.218
UL	1.237	1.237	1.237	1.237

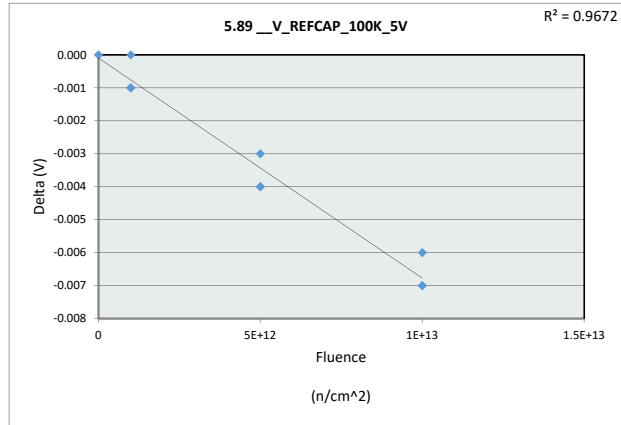


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

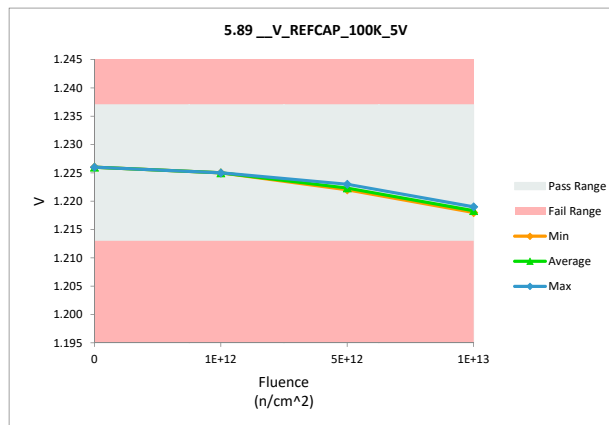
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.219	-0.006
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.001	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

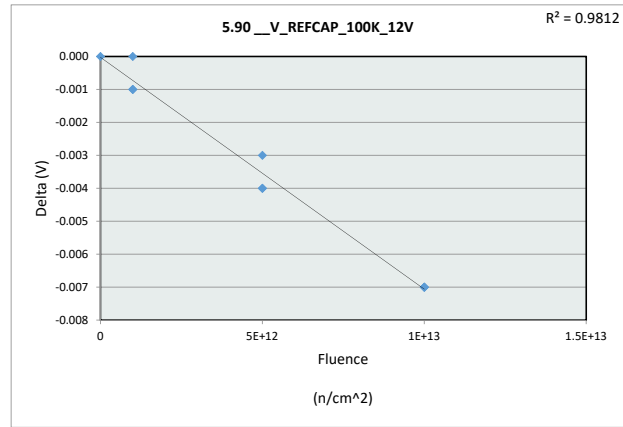


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

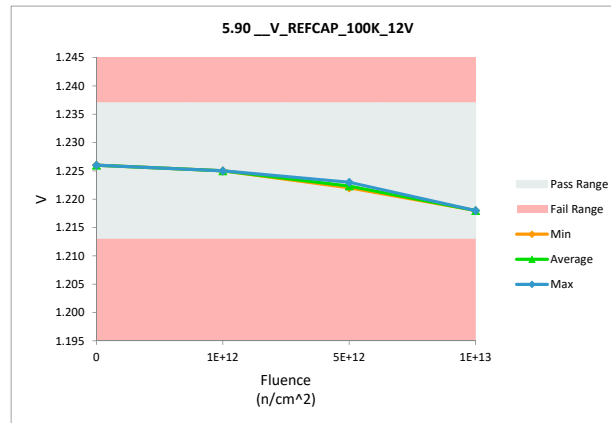
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.218	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.001	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.218
UL	1.237	1.237	1.237	1.237

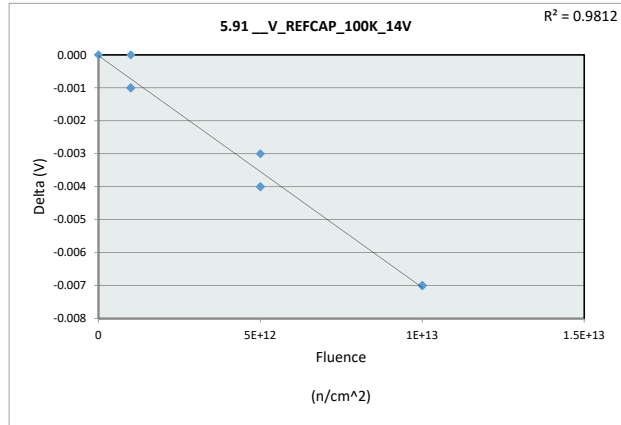


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

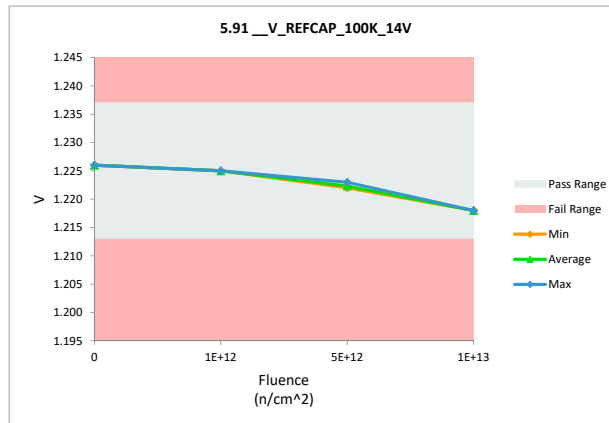
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.218	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.001	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.218
UL	1.237	1.237	1.237	1.237

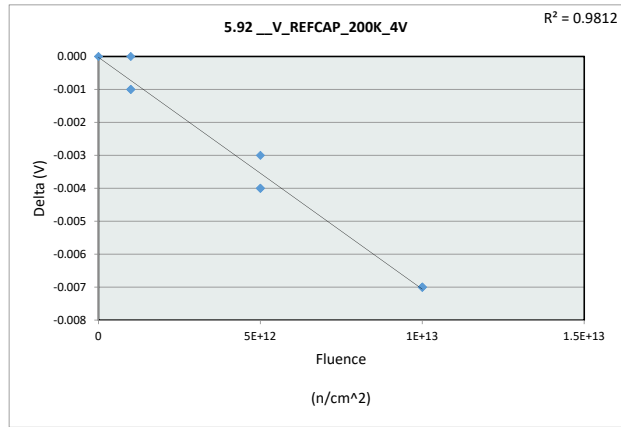


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

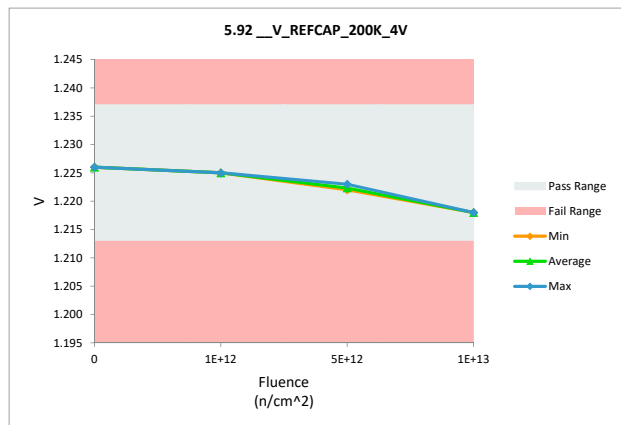
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.218	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.001	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.218
UL	1.237	1.237	1.237	1.237

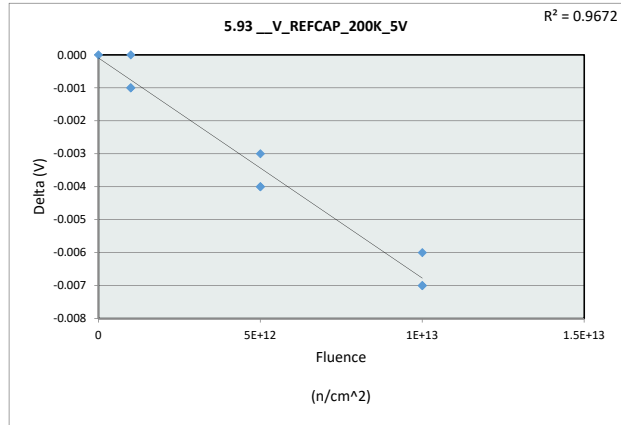


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

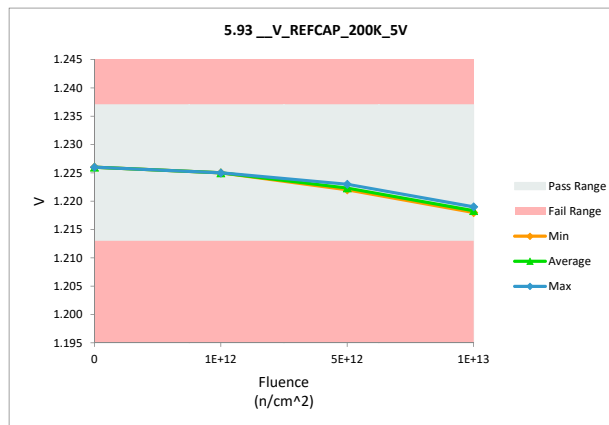
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.225	1.225	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.219	-0.006
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

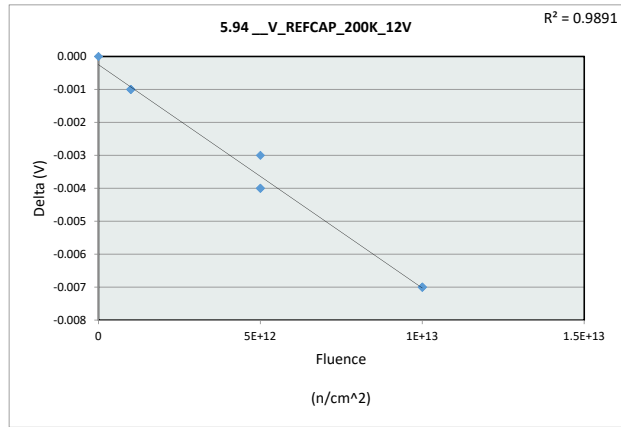


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

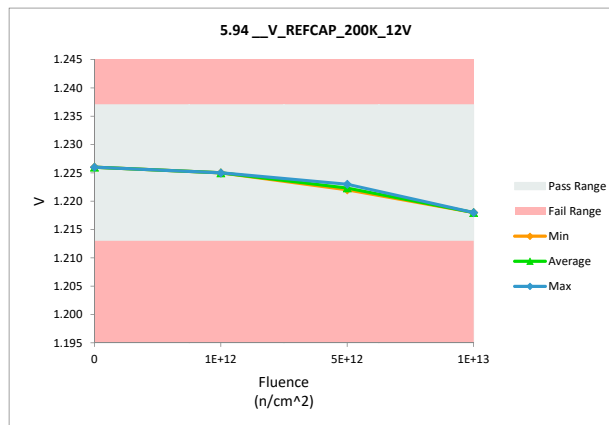
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.218	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.218
UL	1.237	1.237	1.237	1.237

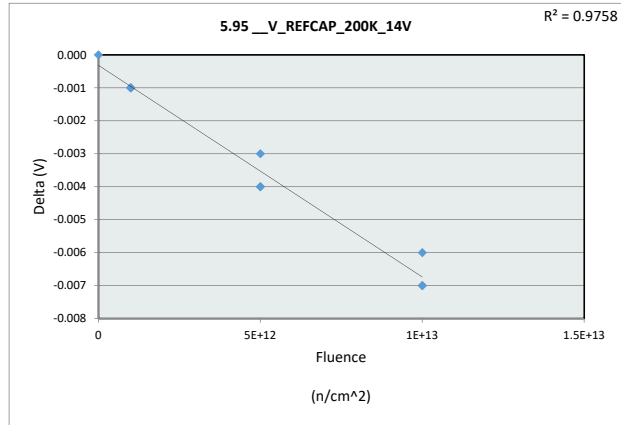


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

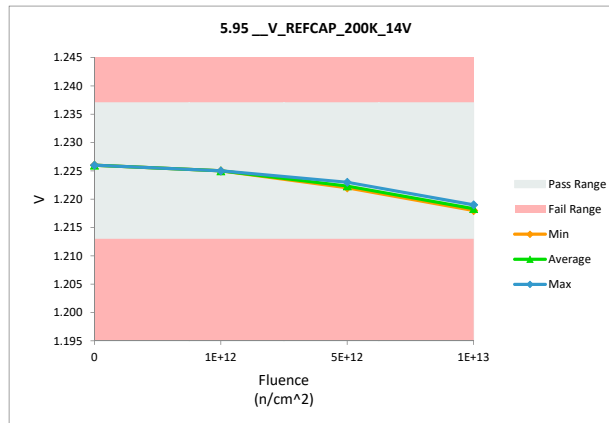
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.219	-0.006
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

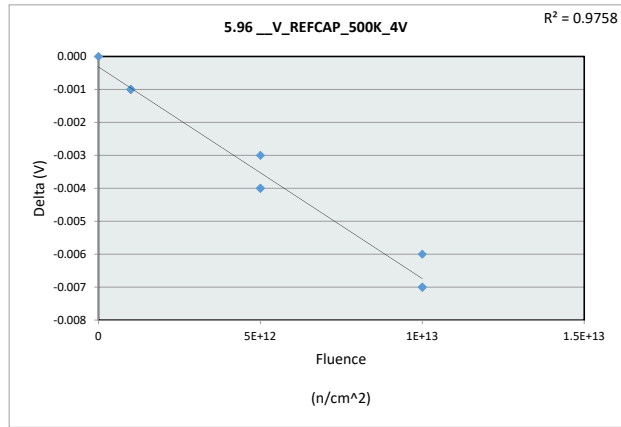


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

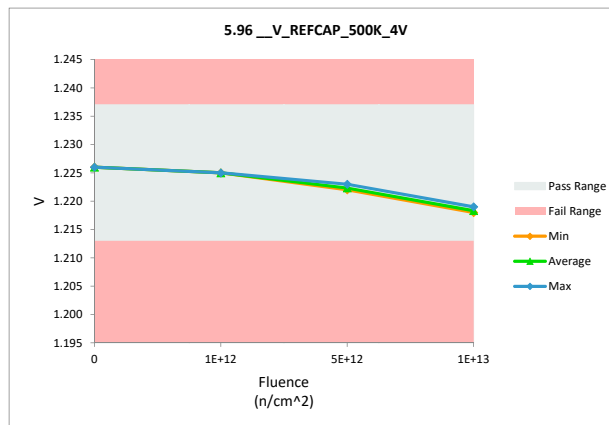
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.225	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.225	1.219	-0.006
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.225	1.223	1.219
UL	1.237	1.237	1.237	1.237

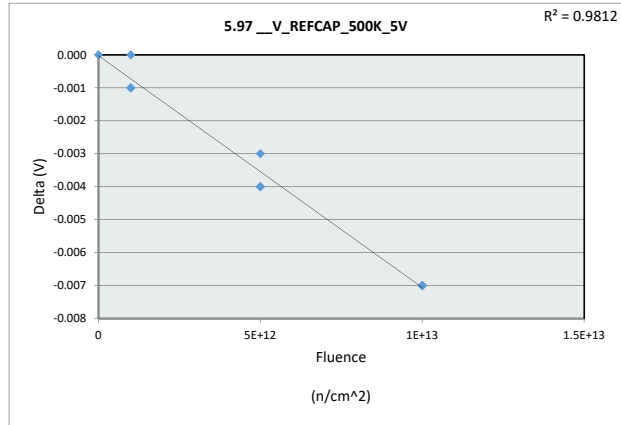


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

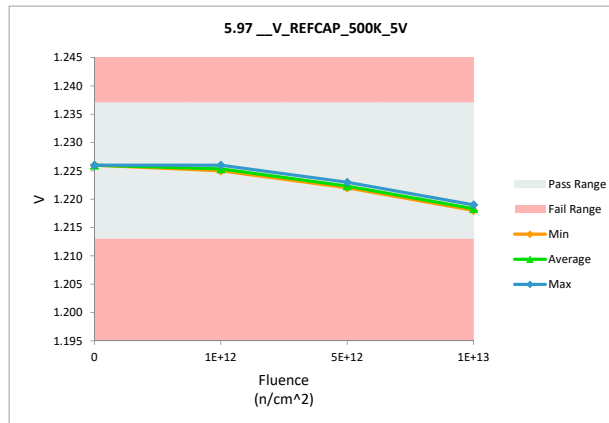
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	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	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

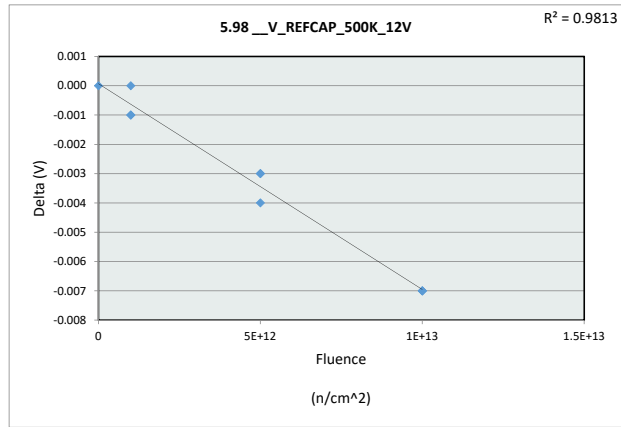


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

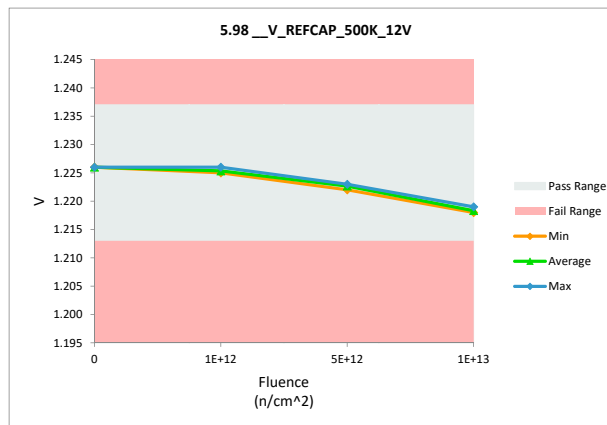
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	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	1.225	1.222	1.218
Average	1.226	1.225	1.223	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

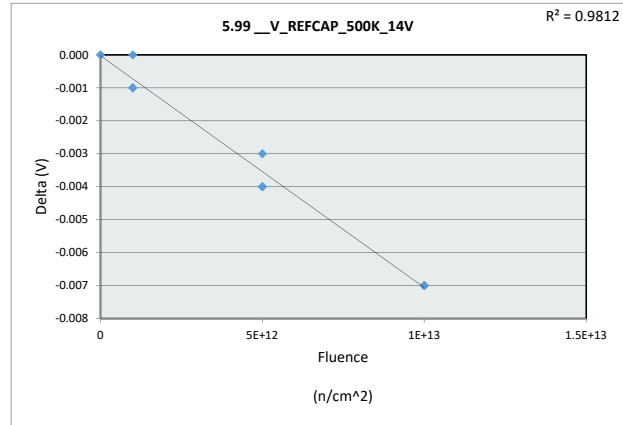


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

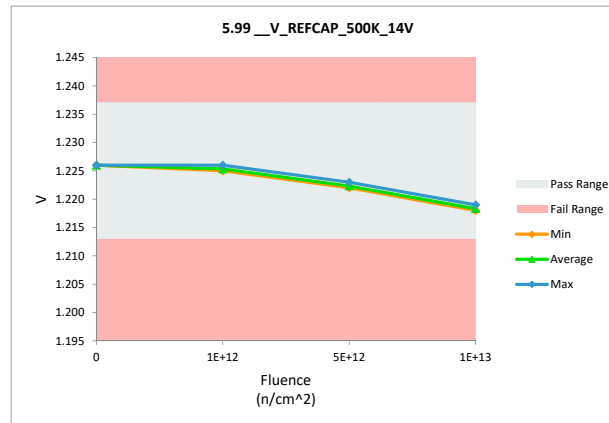
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.222	-0.004
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.222	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	0.003	0.003



5.99_V_REFCAP_500K_14V

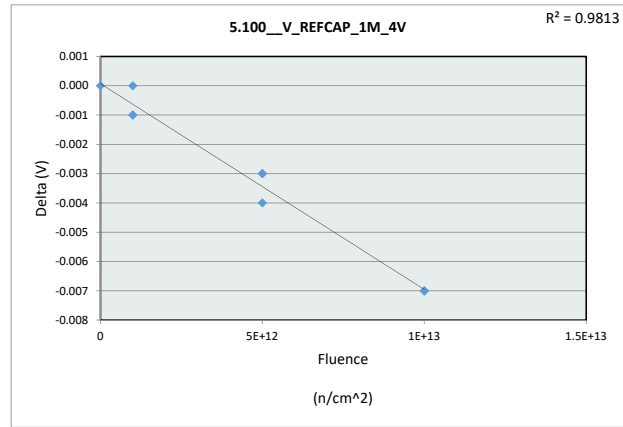
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.218
Average	1.226	1.225	1.222	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

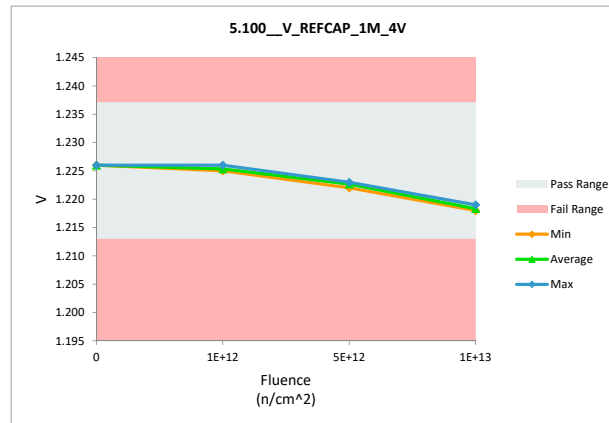


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.226	1.223	-0.003
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.225	1.218	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.226	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-0.007
Std Dev		0.000	0.003	0.003

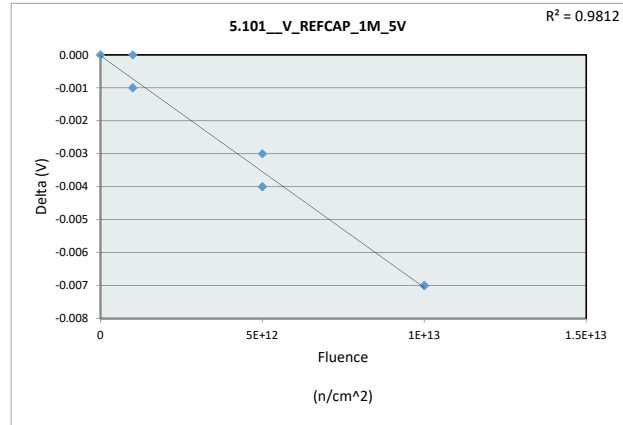


5.100_V_REFCAP_1M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.222	1.218
Average	1.226	1.225	1.223	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

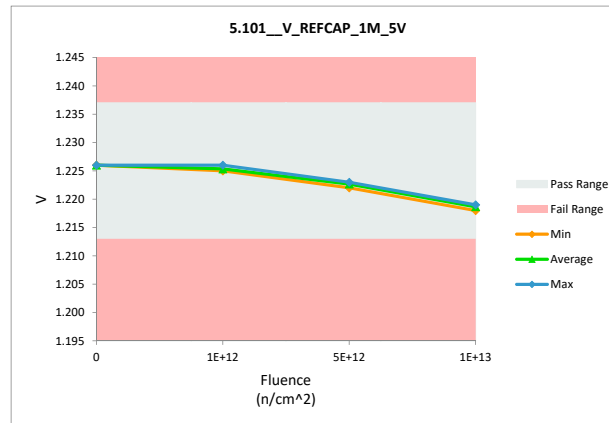


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-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	1.222	1.218
Average	1.226	1.225	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

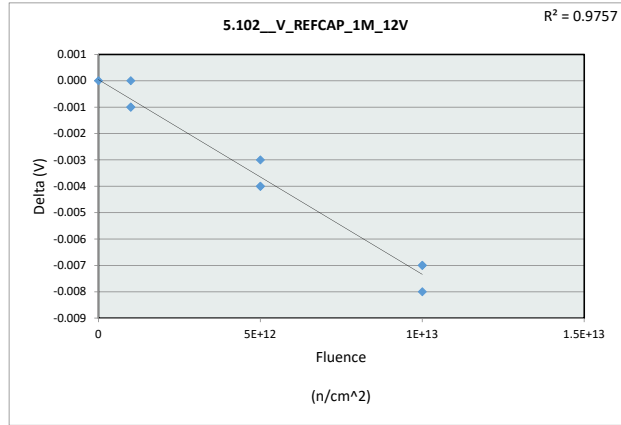


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

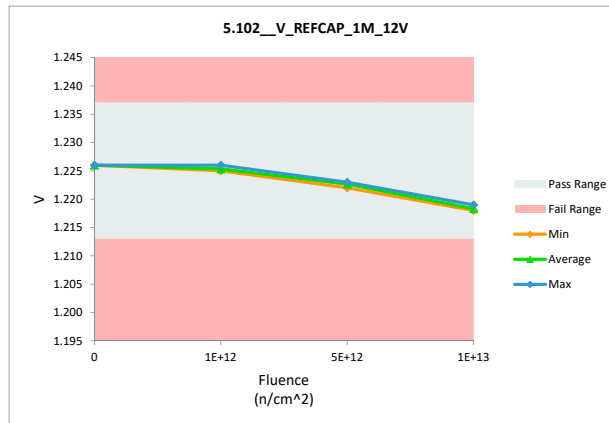
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.226	1.218	-0.008
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-0.008
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	1.218
Average	1.226	1.225	1.223	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

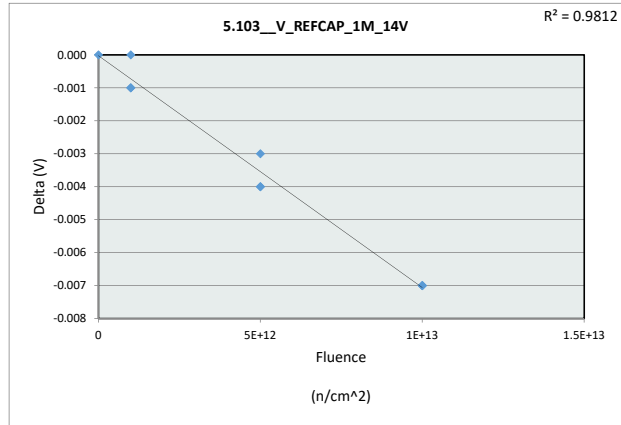


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

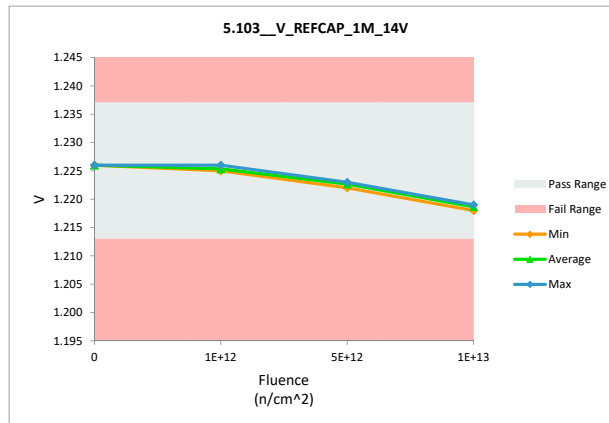
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-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	1.218
Average	1.226	1.225	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

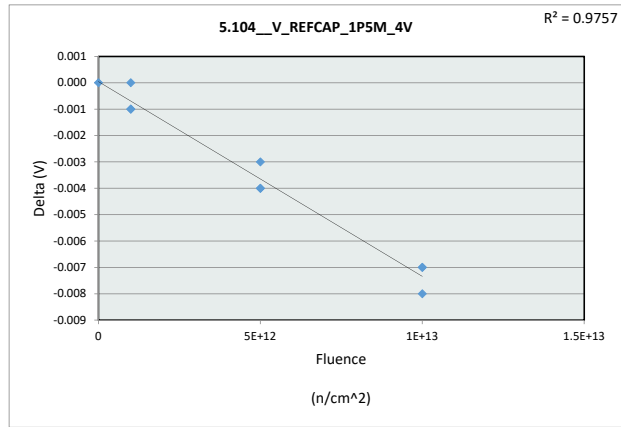


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

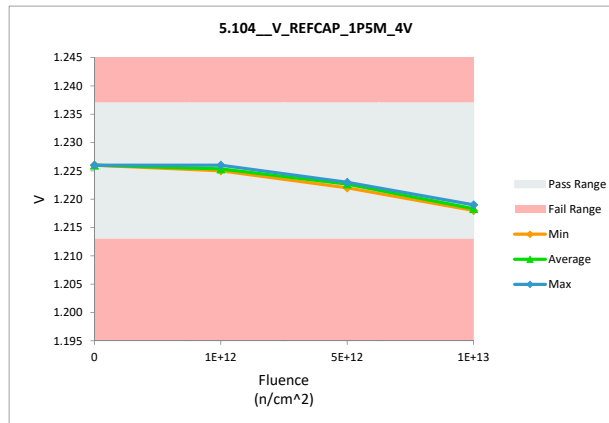
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.226	1.226	0.000
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.226	1.223	-0.003
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.225	1.218	-0.007
1E+13	124	1.226	1.218	-0.008
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.225	1.218	-0.008
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	1.218
Average	1.226	1.225	1.223	1.218
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

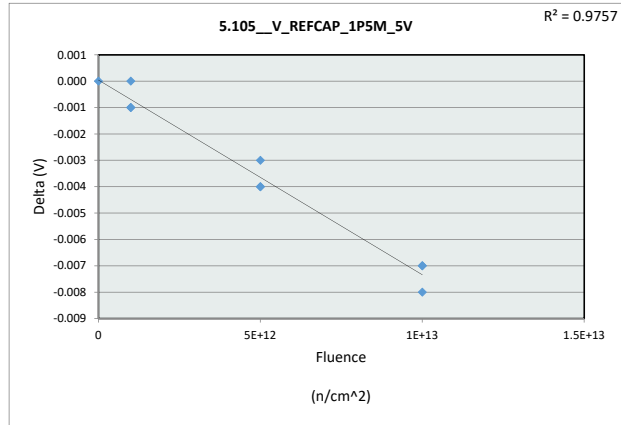


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

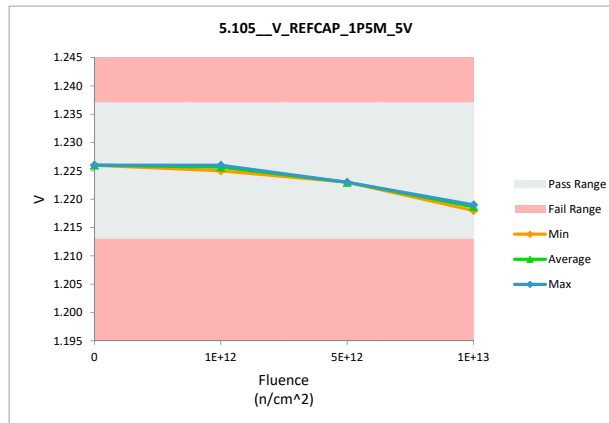
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.226	1.226	0.000
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.223	-0.003
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.226	1.218	-0.008
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.218	-0.008
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	1.223	1.218
Average	1.226	1.226	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

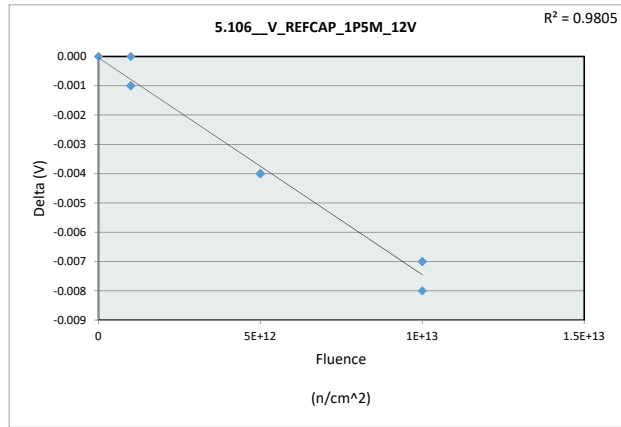


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

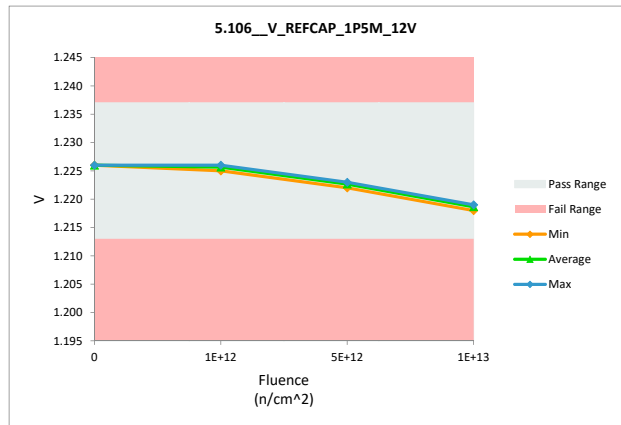
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.226	1.226	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.226	1.225	-0.001
1E+12	131	1.226	1.226	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.226	1.218	-0.008
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.004
Min		1.226	1.218	-0.008
Std Dev		0.000	0.003	0.003



5.106_V_REFCAP_1P5M_12V

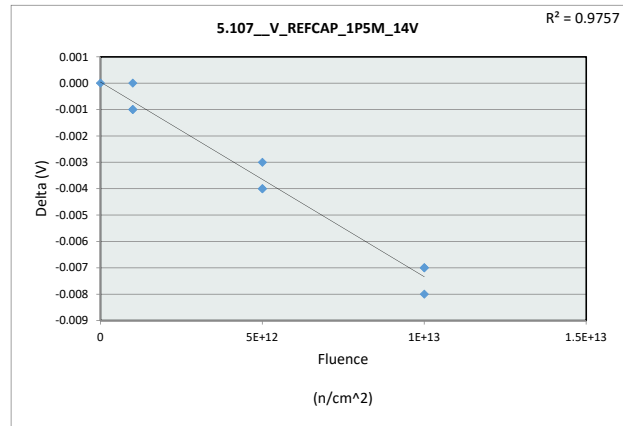
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

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	1.218
Average	1.226	1.226	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

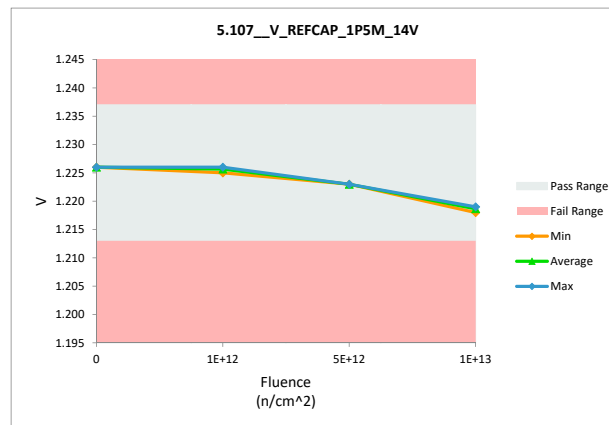


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.226	1.226	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.226	1.226	0.000
1E+12	131	1.226	1.225	-0.001
5E+12	126	1.226	1.223	-0.003
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.226	1.218	-0.008
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.218	-0.008
Std Dev		0.000	0.003	0.003

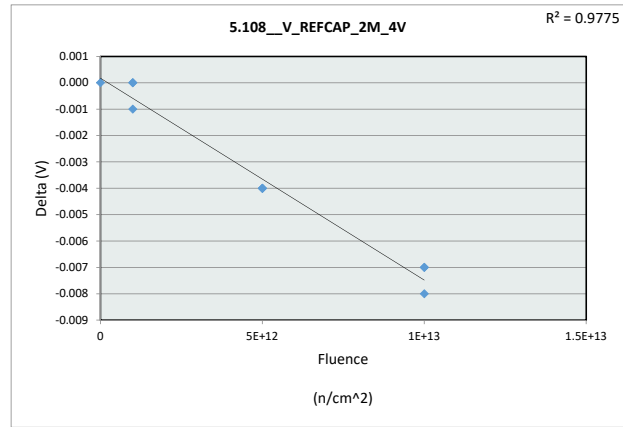


5.107_V_REFCAP_1P5M_14V				
Test Site				
Tester				
Test Number				
Max Limit		1.237	V	
Min Limit		1.213	V	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.225	1.223	1.218
Average	1.226	1.226	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

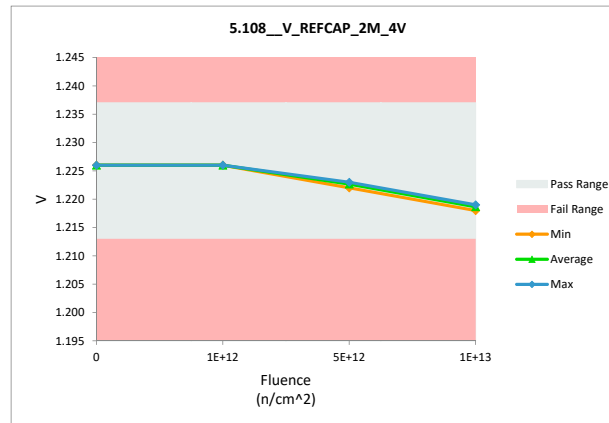


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.226	1.226	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.226	1.226	0.000
1E+12	131	1.226	1.226	0.000
5E+12	126	1.226	1.222	-0.004
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.223	-0.004
1E+13	123	1.226	1.218	-0.008
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.219	-0.007
Max		1.227	1.226	0.000
Average		1.226	1.223	-0.003
Min		1.226	1.218	-0.008
Std Dev		0.000	0.003	0.003

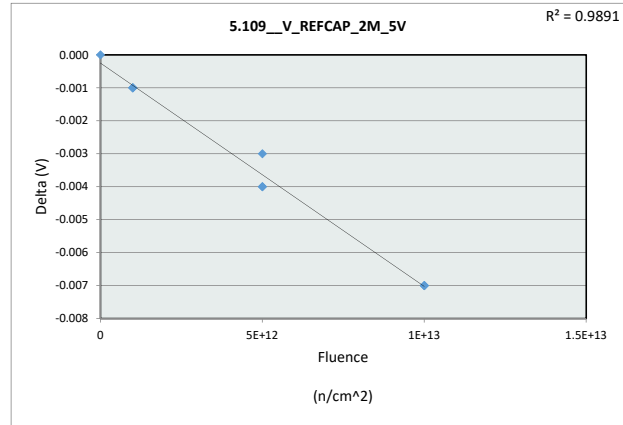


5.108_V_REFCAP_2M_4V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.226	1.226	1.222	1.218
Average	1.226	1.226	1.223	1.219
Max	1.226	1.226	1.223	1.219
UL	1.237	1.237	1.237	1.237

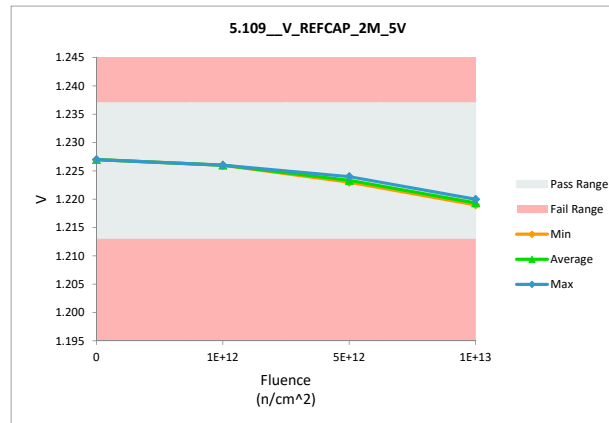


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.227	1.227	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.227	1.226	-0.001
1E+12	131	1.227	1.226	-0.001
5E+12	126	1.227	1.223	-0.004
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.224	-0.003
1E+13	123	1.226	1.219	-0.007
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.227	1.220	-0.007
Max		1.227	1.227	0.000
Average		1.227	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003

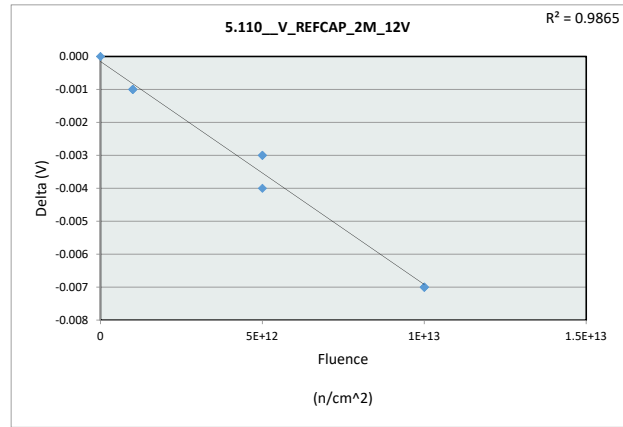


5.109_V_REFCAP_2M_5V				
Test Site				
Tester				
Test Number				
Max Limit	1.237	V		
Min Limit	1.213	V		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.226	1.223	1.219
Average	1.227	1.226	1.223	1.219
Max	1.227	1.226	1.224	1.220
UL	1.237	1.237	1.237	1.237

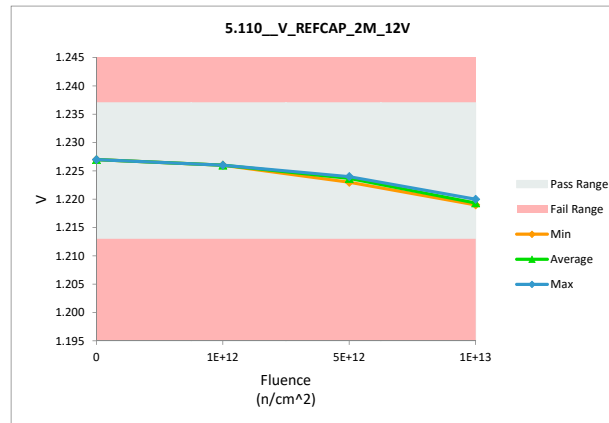


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.227	1.227	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.227	1.226	-0.001
1E+12	131	1.227	1.226	-0.001
5E+12	126	1.227	1.223	-0.004
5E+12	127	1.227	1.224	-0.003
5E+12	128	1.227	1.224	-0.003
1E+13	123	1.226	1.219	-0.007
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.227	1.220	-0.007
Max		1.227	1.227	0.000
Average		1.227	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	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	1.226	1.223	1.219
Average	1.227	1.226	1.224	1.219
Max	1.227	1.226	1.224	1.220
UL	1.237	1.237	1.237	1.237

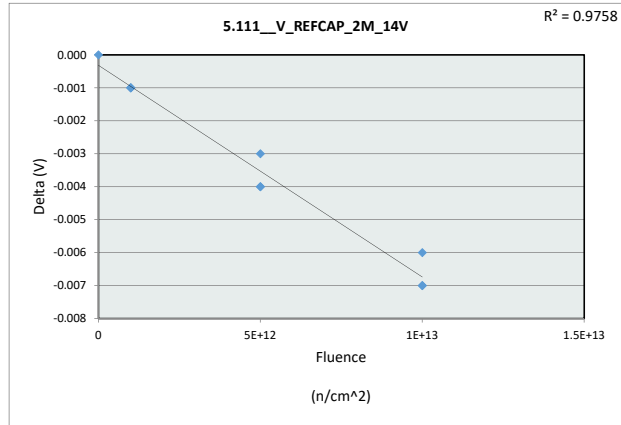


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

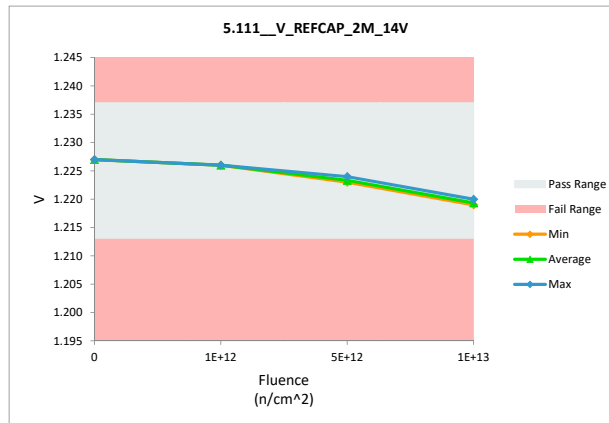
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.227	1.227	0.000
1E+12	129	1.227	1.226	-0.001
1E+12	130	1.227	1.226	-0.001
1E+12	131	1.227	1.226	-0.001
5E+12	126	1.227	1.223	-0.004
5E+12	127	1.227	1.223	-0.004
5E+12	128	1.227	1.224	-0.003
1E+13	123	1.226	1.219	-0.007
1E+13	124	1.226	1.219	-0.007
1E+13	125	1.226	1.220	-0.006
Max		1.227	1.227	0.000
Average		1.227	1.223	-0.003
Min		1.226	1.219	-0.007
Std Dev		0.000	0.003	0.003



5.111_V_REFCAP_2M_14V

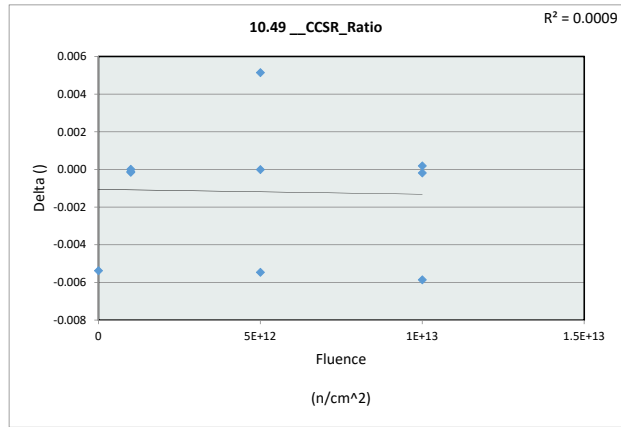
Test Site		
Tester		
Test Number		
Max Limit	1.237	V
Min Limit	1.213	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	1.213	1.213	1.213	1.213
Min	1.227	1.226	1.223	1.219
Average	1.227	1.226	1.223	1.219
Max	1.227	1.226	1.224	1.220
UL	1.237	1.237	1.237	1.237

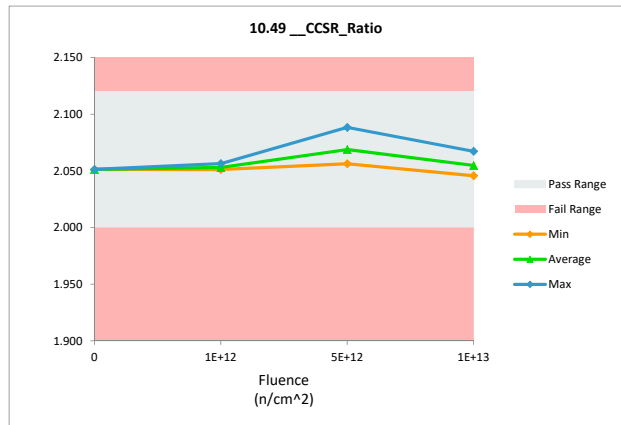


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	2.057	2.051	-0.005
1E+12	129	2.051	2.051	0.000
1E+12	130	2.057	2.056	0.000
1E+12	131	2.051	2.051	0.000
5E+12	126	2.067	2.062	-0.005
5E+12	127	2.056	2.056	0.000
5E+12	128	2.083	2.088	0.005
1E+13	123	2.052	2.046	-0.006
1E+13	124	2.067	2.067	0.000
1E+13	125	2.051	2.051	0.000
Max		2.083	2.088	0.005
Average		2.059	2.058	-0.001
Min		2.051	2.046	-0.006
Std Dev		0.010	0.012	0.003



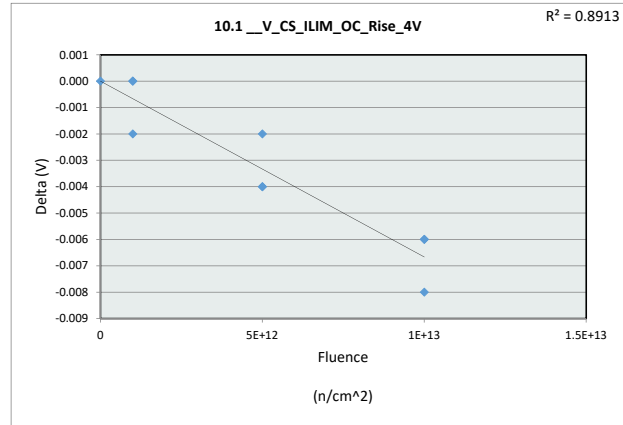
10.49 __CCSR_Ratio				
Test Site				
Tester				
Test Number				
Max Limit	2.12			
Min Limit	2			
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	2.000	2.000	2.000	2.000
Min	2.051	2.051	2.056	2.046
Average	2.051	2.053	2.069	2.055
Max	2.051	2.056	2.088	2.067
UL	2.120	2.120	2.120	2.120



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

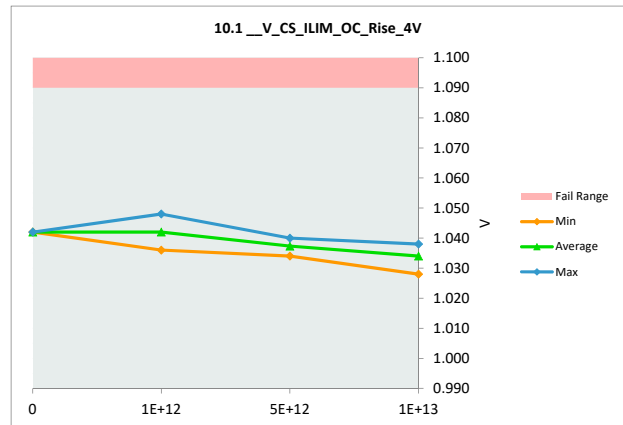
10.1 __V_CS_ILIM_OC_Rise_4V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.042	1.042	0.000
1E+12	129	1.048	1.048	0.000
1E+12	130	1.038	1.036	-0.002
1E+12	131	1.042	1.042	0.000
5E+12	126	1.038	1.034	-0.004
5E+12	127	1.044	1.040	-0.004
5E+12	128	1.040	1.038	-0.002
1E+13	123	1.036	1.028	-0.008
1E+13	124	1.044	1.038	-0.006
1E+13	125	1.042	1.036	-0.006
Max		1.048	1.048	0.000
Average		1.041	1.038	-0.003
Min		1.036	1.028	-0.008
Std Dev		0.004	0.005	0.003



10.1 __V_CS_ILIM_OC_Rise_4V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.042	1.036	1.034	1.028
Average	1.042	1.042	1.037	1.034
Max	1.042	1.048	1.040	1.038
UL	1.090	1.090	1.090	1.090

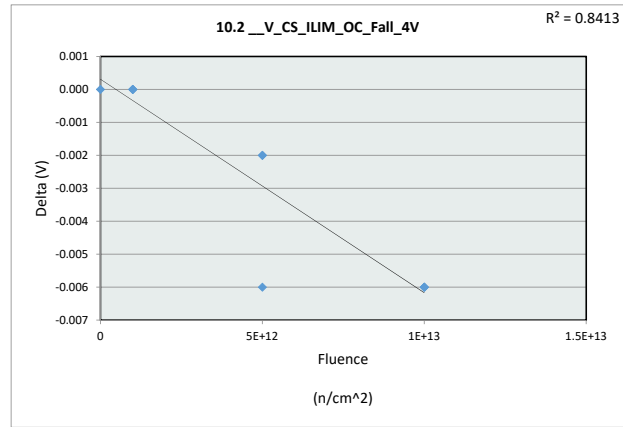


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

10.2 __V_CS_ILIM_OC_Fall_4V

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

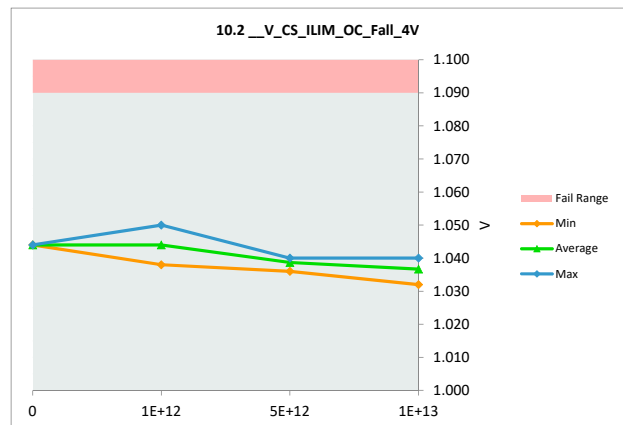
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.044	1.044	0.000
1E+12	129	1.050	1.050	0.000
1E+12	130	1.038	1.038	0.000
1E+12	131	1.044	1.044	0.000
5E+12	126	1.038	1.036	-0.002
5E+12	127	1.046	1.040	-0.006
5E+12	128	1.042	1.040	-0.002
1E+13	123	1.038	1.032	-0.006
1E+13	124	1.046	1.040	-0.006
1E+13	125	1.044	1.038	-0.006
Max		1.050	1.050	0.000
Average		1.043	1.040	-0.003
Min		1.038	1.032	-0.006
Std Dev		0.004	0.005	0.003



10.2 __V_CS_ILIM_OC_Fall_4V

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

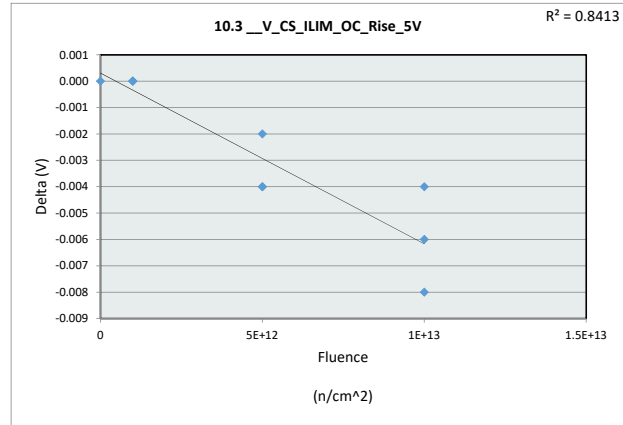
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.044	1.038	1.036	1.032
Average	1.044	1.044	1.039	1.037
Max	1.044	1.050	1.040	1.040
UL	1.090	1.090	1.090	1.090



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

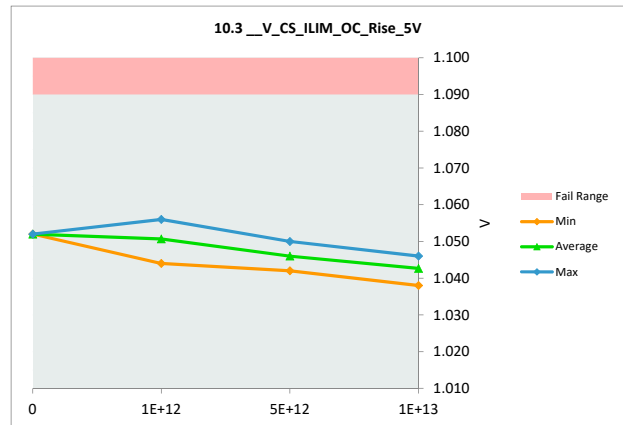
10.3 __V_CS_ILIM_OC_Rise_5V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.052	1.052	0.000
1E+12	129	1.056	1.056	0.000
1E+12	130	1.044	1.044	0.000
1E+12	131	1.052	1.052	0.000
5E+12	126	1.046	1.042	-0.004
5E+12	127	1.054	1.050	-0.004
5E+12	128	1.048	1.046	-0.002
1E+13	123	1.044	1.038	-0.006
1E+13	124	1.050	1.046	-0.004
1E+13	125	1.052	1.044	-0.008
Max		1.056	1.056	0.000
Average		1.050	1.047	-0.003
Min		1.044	1.038	-0.008
Std Dev		0.004	0.005	0.003



10.3 __V_CS_ILIM_OC_Rise_5V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.052	1.044	1.042	1.038
Average	1.052	1.051	1.046	1.043
Max	1.052	1.056	1.050	1.046
UL	1.090	1.090	1.090	1.090

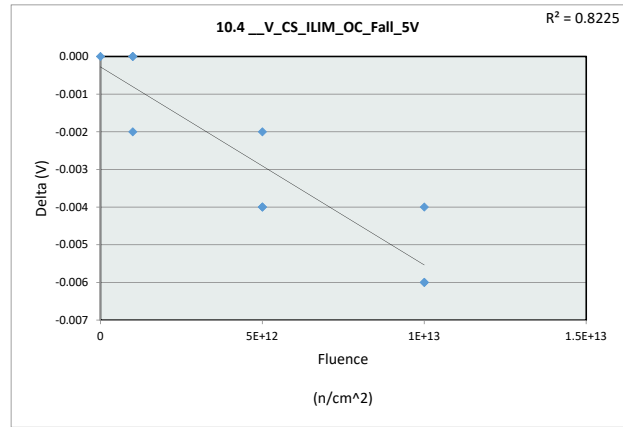


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

10.4 __V_CS_ILIM_OC_Fall_5V

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

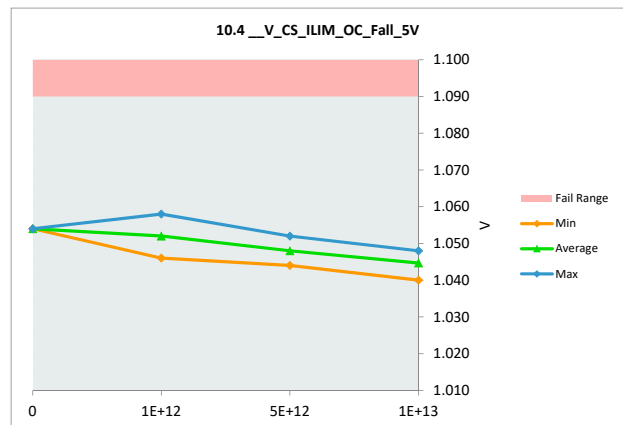
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.054	1.054	0.000
1E+12	129	1.058	1.058	0.000
1E+12	130	1.046	1.046	0.000
1E+12	131	1.054	1.052	-0.002
5E+12	126	1.048	1.044	-0.004
5E+12	127	1.056	1.052	-0.004
5E+12	128	1.050	1.048	-0.002
1E+13	123	1.046	1.040	-0.006
1E+13	124	1.052	1.048	-0.004
1E+13	125	1.052	1.046	-0.006
Max		1.058	1.058	0.000
Average		1.052	1.049	-0.003
Min		1.046	1.040	-0.006
Std Dev		0.004	0.005	0.002



10.4 __V_CS_ILIM_OC_Fall_5V

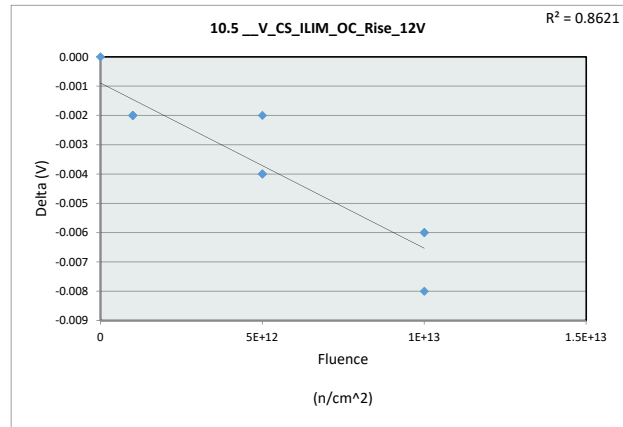
Test Site		
Tester		
Test Number		
Max Limit	1.09	V
Min Limit		V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	1.054	1.046	1.044	1.040
Average	1.054	1.052	1.048	1.045
Max	1.054	1.058	1.052	1.048
UL	1.090	1.090	1.090	1.090

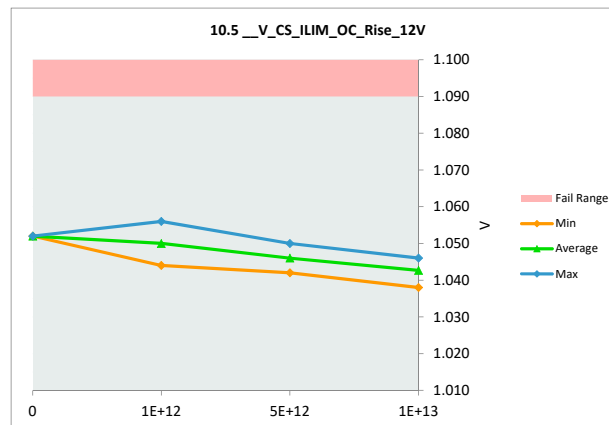


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	1.052	1.052	0.000
1E+12	129	1.058	1.056	-0.002
1E+12	130	1.046	1.044	-0.002
1E+12	131	1.052	1.050	-0.002
5E+12	126	1.046	1.042	-0.004
5E+12	127	1.054	1.050	-0.004
5E+12	128	1.048	1.046	-0.002
1E+13	123	1.044	1.038	-0.006
1E+13	124	1.052	1.046	-0.006
1E+13	125	1.052	1.044	-0.008
Max		1.058	1.056	0.000
Average		1.050	1.047	-0.004
Min		1.044	1.038	-0.008
Std Dev		0.004	0.005	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	1.052	1.044	1.042	1.038
Average	1.052	1.050	1.046	1.043
Max	1.052	1.056	1.050	1.046
UL	1.090	1.090	1.090	1.090

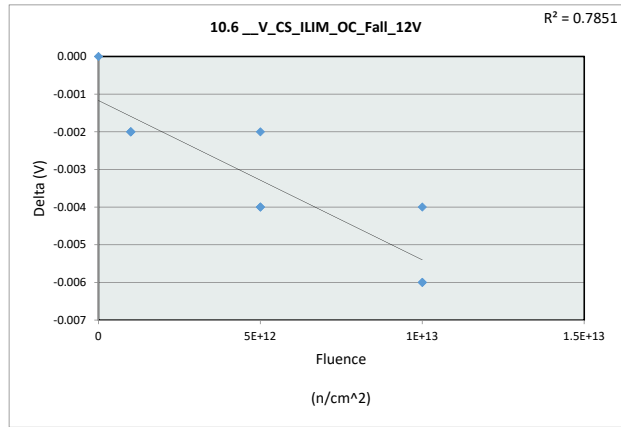


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

10.6 __V_CS_ILIM_OC_Fall_12V

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

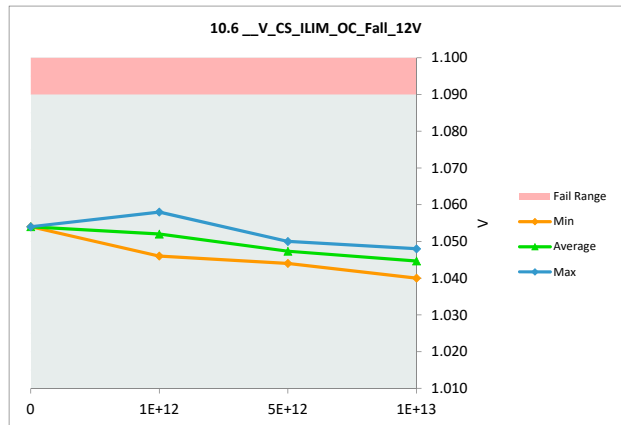
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.054	1.054	0.000
1E+12	129	1.060	1.058	-0.002
1E+12	130	1.048	1.046	-0.002
1E+12	131	1.054	1.052	-0.002
5E+12	126	1.048	1.044	-0.004
5E+12	127	1.054	1.050	-0.004
5E+12	128	1.050	1.048	-0.002
1E+13	123	1.046	1.040	-0.006
1E+13	124	1.052	1.048	-0.004
1E+13	125	1.052	1.046	-0.006
Max		1.060	1.058	0.000
Average		1.052	1.049	-0.003
Min		1.046	1.040	-0.006
Std Dev		0.004	0.005	0.002



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	1.054	1.046	1.044	1.040
Average	1.054	1.052	1.047	1.045
Max	1.054	1.058	1.050	1.048
UL	1.090	1.090	1.090	1.090

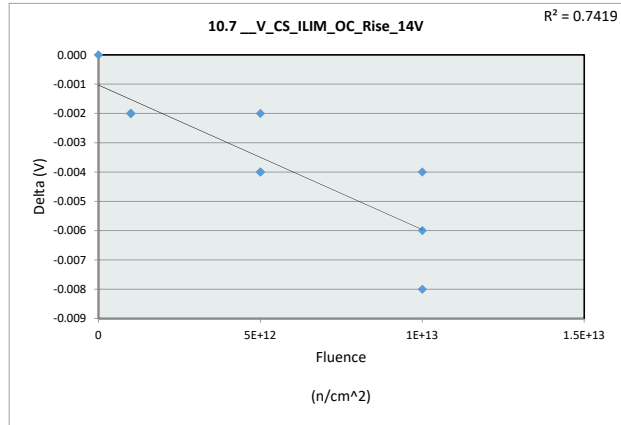


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

10.7 __V_CS_ILIM_OC_Rise_14V

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

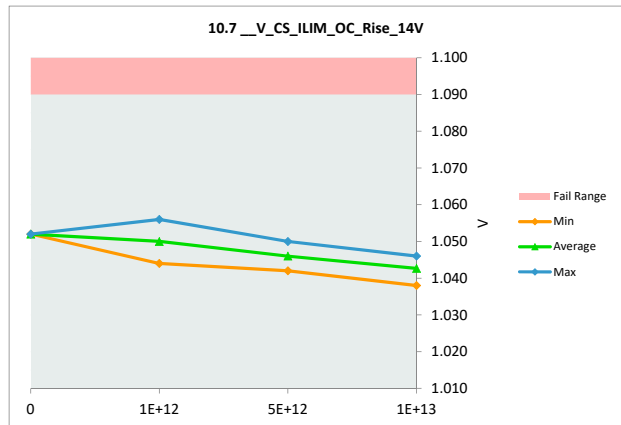
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.052	1.052	0.000
1E+12	129	1.058	1.056	-0.002
1E+12	130	1.046	1.044	-0.002
1E+12	131	1.052	1.050	-0.002
5E+12	126	1.046	1.042	-0.004
5E+12	127	1.054	1.050	-0.004
5E+12	128	1.048	1.046	-0.002
1E+13	123	1.044	1.038	-0.006
1E+13	124	1.050	1.046	-0.004
1E+13	125	1.052	1.044	-0.008
Max		1.058	1.056	0.000
Average		1.050	1.047	-0.003
Min		1.044	1.038	-0.008
Std Dev		0.004	0.005	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	1.052	1.044	1.042	1.038
Average	1.052	1.050	1.046	1.043
Max	1.052	1.056	1.050	1.046
UL	1.090	1.090	1.090	1.090

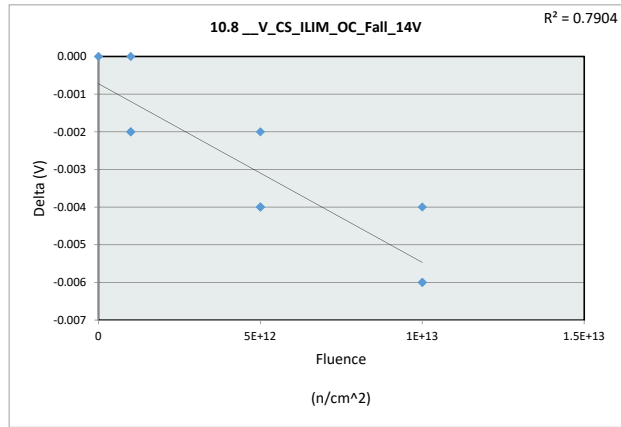


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

10.8 V_CS_ILIM_OC_Fall_14V

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

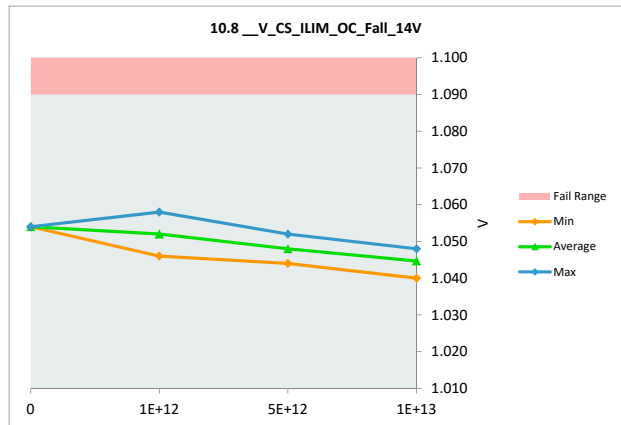
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	1.054	1.054	0.000
1E+12	129	1.060	1.058	-0.002
1E+12	130	1.046	1.046	0.000
1E+12	131	1.054	1.052	-0.002
5E+12	126	1.048	1.044	-0.004
5E+12	127	1.056	1.052	-0.004
5E+12	128	1.050	1.048	-0.002
1E+13	123	1.046	1.040	-0.006
1E+13	124	1.052	1.048	-0.004
1E+13	125	1.052	1.046	-0.006
Max		1.060	1.058	0.000
Average		1.052	1.049	-0.003
Min		1.046	1.040	-0.006
Std Dev		0.004	0.005	0.002



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	1.054	1.046	1.044	1.040
Average	1.054	1.052	1.048	1.045
Max	1.054	1.058	1.052	1.048
UL	1.090	1.090	1.090	1.090

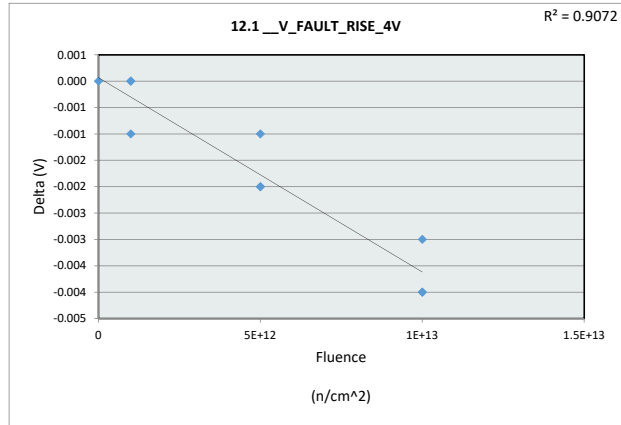


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

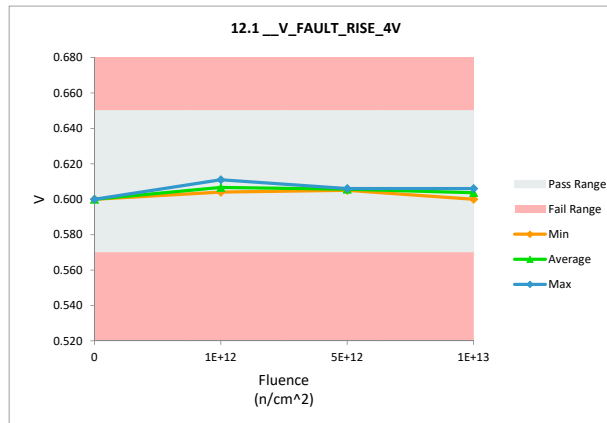
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.600	0.600	0.000
1E+12	129	0.604	0.604	0.000
1E+12	130	0.612	0.611	-0.001
1E+12	131	0.605	0.605	0.000
5E+12	126	0.607	0.606	-0.001
5E+12	127	0.607	0.605	-0.002
5E+12	128	0.608	0.606	-0.002
1E+13	123	0.610	0.606	-0.004
1E+13	124	0.609	0.605	-0.004
1E+13	125	0.603	0.600	-0.003
Max		0.612	0.611	0.000
Average		0.606	0.605	-0.002
Min		0.600	0.600	-0.004
Std Dev		0.004	0.003	0.002



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	0.600	0.604	0.605	0.600
Average	0.600	0.607	0.606	0.604
Max	0.600	0.611	0.606	0.606
UL	0.650	0.650	0.650	0.650

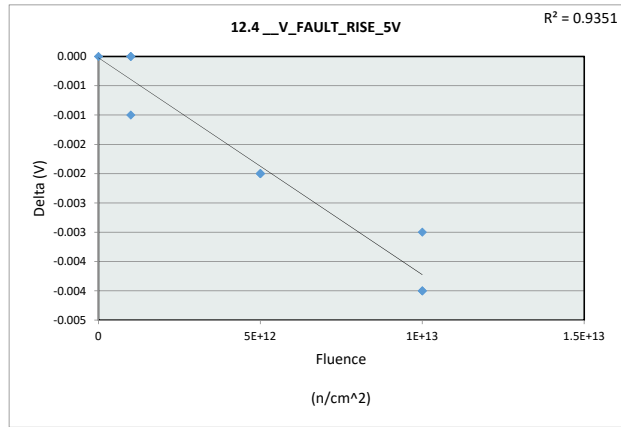


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

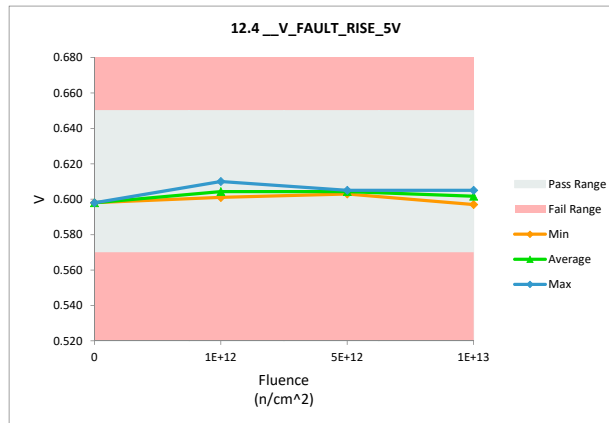
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.598	0.598	0.000
1E+12	129	0.601	0.601	0.000
1E+12	130	0.611	0.610	-0.001
1E+12	131	0.602	0.602	0.000
5E+12	126	0.607	0.605	-0.002
5E+12	127	0.605	0.603	-0.002
5E+12	128	0.607	0.605	-0.002
1E+13	123	0.608	0.605	-0.003
1E+13	124	0.607	0.603	-0.004
1E+13	125	0.601	0.597	-0.004
Max		0.611	0.610	0.000
Average		0.605	0.603	-0.002
Min		0.598	0.597	-0.004
Std Dev		0.004	0.004	0.002



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	0.598	0.601	0.603	0.597
Average	0.598	0.604	0.604	0.602
Max	0.598	0.610	0.605	0.605
UL	0.650	0.650	0.650	0.650

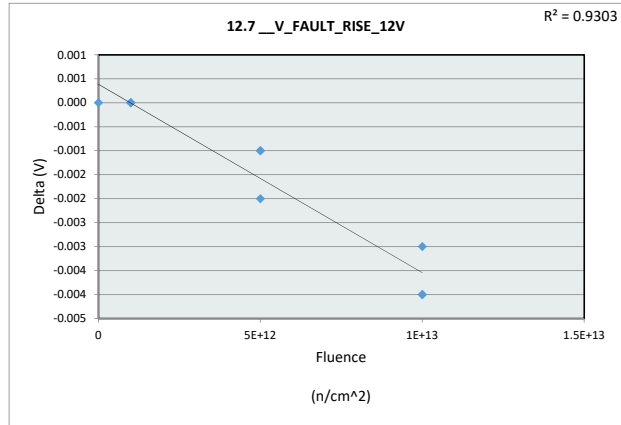


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

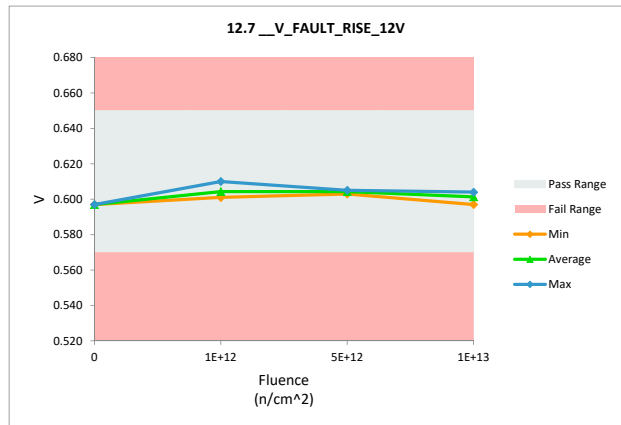
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.597	0.597	0.000
1E+12	129	0.601	0.601	0.000
1E+12	130	0.610	0.610	0.000
1E+12	131	0.602	0.602	0.000
5E+12	126	0.606	0.605	-0.001
5E+12	127	0.605	0.603	-0.002
5E+12	128	0.606	0.605	-0.001
1E+13	123	0.608	0.604	-0.004
1E+13	124	0.607	0.603	-0.004
1E+13	125	0.600	0.597	-0.003
Max		0.610	0.610	0.000
Average		0.604	0.603	-0.002
Min		0.597	0.597	-0.004
Std Dev		0.004	0.004	0.002



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	0.597	0.601	0.603	0.597
Average	0.597	0.604	0.604	0.601
Max	0.597	0.610	0.605	0.604
UL	0.650	0.650	0.650	0.650

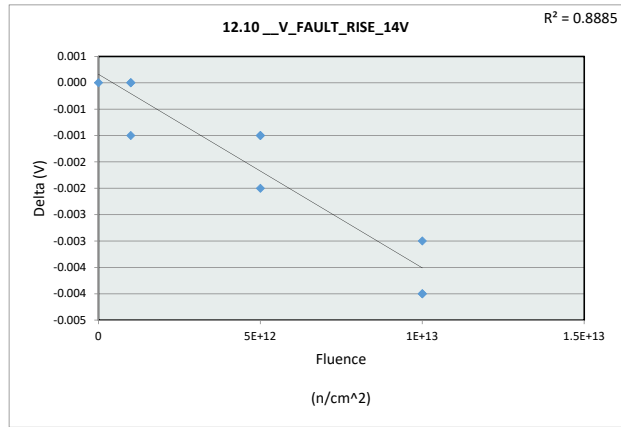


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

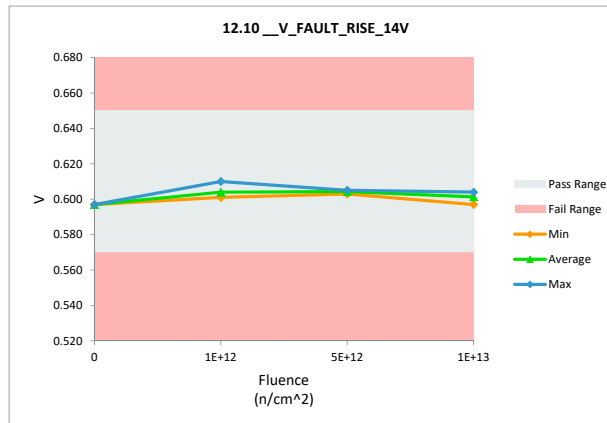
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.597	0.597	0.000
1E+12	129	0.601	0.601	0.000
1E+12	130	0.610	0.610	0.000
1E+12	131	0.602	0.601	-0.001
5E+12	126	0.606	0.605	-0.001
5E+12	127	0.605	0.603	-0.002
5E+12	128	0.606	0.605	-0.001
1E+13	123	0.608	0.604	-0.004
1E+13	124	0.607	0.603	-0.004
1E+13	125	0.600	0.597	-0.003
Max		0.610	0.610	0.000
Average		0.604	0.603	-0.002
Min		0.597	0.597	-0.004
Std Dev		0.004	0.004	0.002



12.10 __V_FAULT_RISE_14V

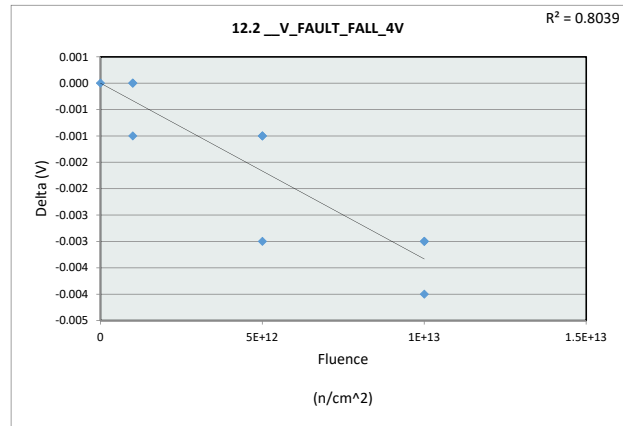
Test Site		
Tester		
Test Number		
Max Limit	0.65	V
Min Limit	0.57	V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	0.570	0.570	0.570	0.570
Min	0.597	0.601	0.603	0.597
Average	0.597	0.604	0.604	0.601
Max	0.597	0.610	0.605	0.604
UL	0.650	0.650	0.650	0.650

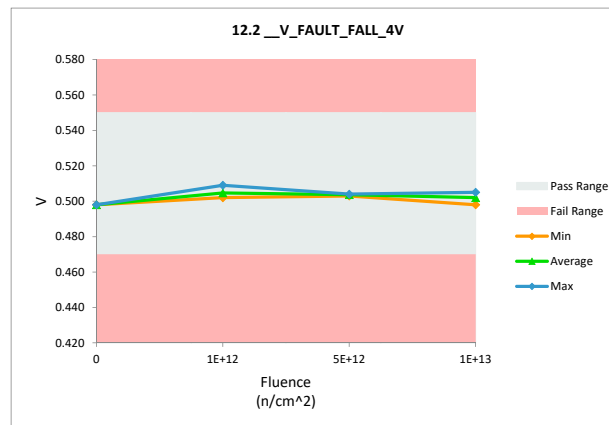


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.498	0.498	0.000
1E+12	129	0.502	0.502	0.000
1E+12	130	0.510	0.509	-0.001
1E+12	131	0.503	0.503	0.000
5E+12	126	0.505	0.504	-0.001
5E+12	127	0.506	0.503	-0.003
5E+12	128	0.505	0.504	-0.001
1E+13	123	0.508	0.505	-0.003
1E+13	124	0.507	0.503	-0.004
1E+13	125	0.501	0.498	-0.003
Max		0.510	0.509	0.000
Average		0.504	0.503	-0.002
Min		0.498	0.498	-0.004
Std Dev		0.004	0.003	0.002



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	0.498	0.502	0.503	0.498
Average	0.498	0.505	0.504	0.502
Max	0.498	0.509	0.504	0.505
UL	0.550	0.550	0.550	0.550

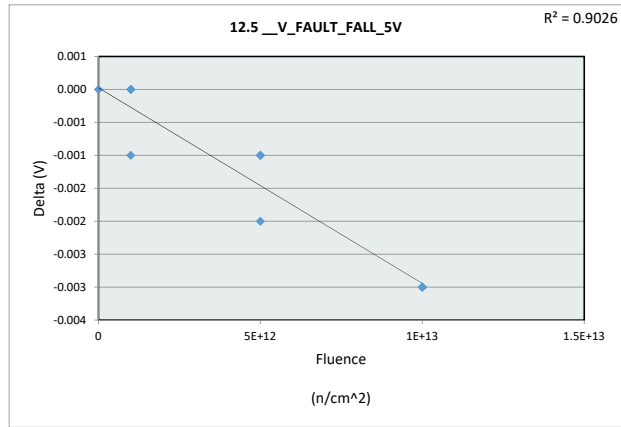


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

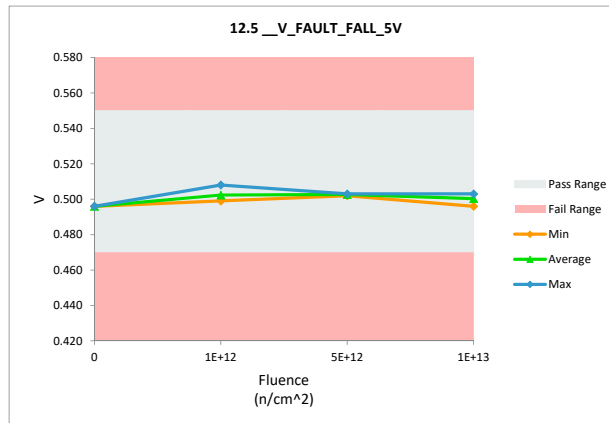
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.496	0.496	0.000
1E+12	129	0.499	0.499	0.000
1E+12	130	0.509	0.508	-0.001
1E+12	131	0.500	0.500	0.000
5E+12	126	0.505	0.503	-0.002
5E+12	127	0.503	0.502	-0.001
5E+12	128	0.504	0.503	-0.001
1E+13	123	0.506	0.503	-0.003
1E+13	124	0.505	0.502	-0.003
1E+13	125	0.499	0.496	-0.003
Max		0.509	0.508	0.000
Average		0.503	0.501	-0.001
Min		0.496	0.496	-0.003
Std Dev		0.004	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	0.496	0.499	0.502	0.496
Average	0.496	0.502	0.503	0.500
Max	0.496	0.508	0.503	0.503
UL	0.550	0.550	0.550	0.550

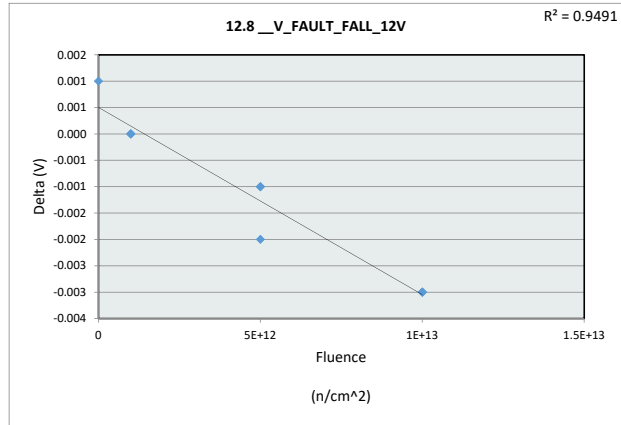


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

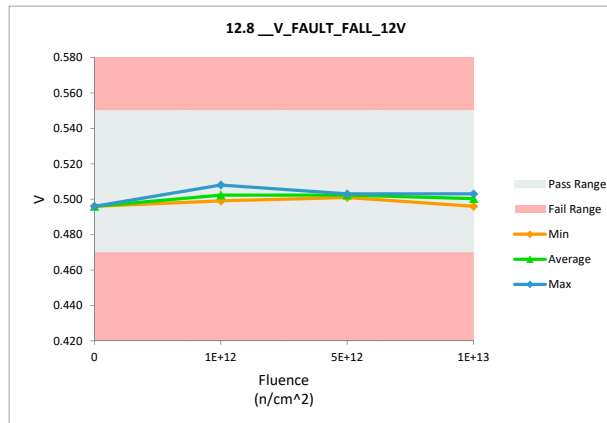
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.495	0.496	0.001
1E+12	129	0.499	0.499	0.000
1E+12	130	0.508	0.508	0.000
1E+12	131	0.500	0.500	0.000
5E+12	126	0.504	0.503	-0.001
5E+12	127	0.503	0.501	-0.002
5E+12	128	0.504	0.503	-0.001
1E+13	123	0.506	0.503	-0.003
1E+13	124	0.505	0.502	-0.003
1E+13	125	0.499	0.496	-0.003
Max		0.508	0.508	0.001
Average		0.502	0.501	-0.001
Min		0.495	0.496	-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	0.496	0.499	0.501	0.496
Average	0.496	0.502	0.502	0.500
Max	0.496	0.508	0.503	0.503
UL	0.550	0.550	0.550	0.550

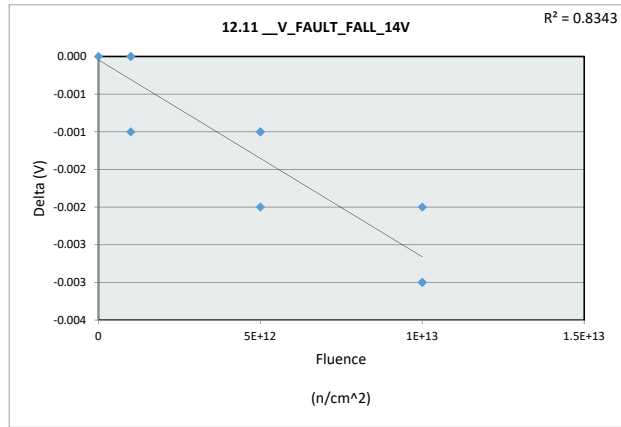


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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

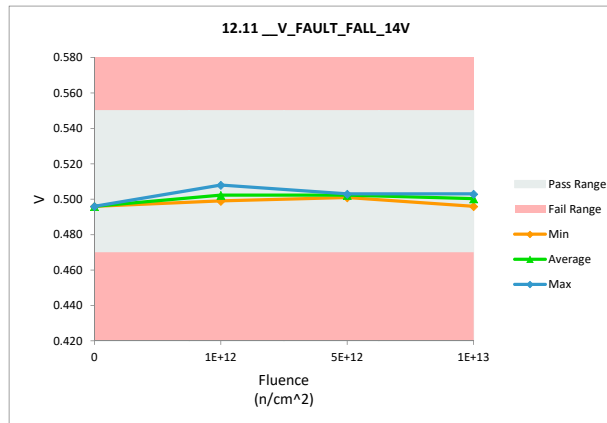
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	0.496	0.496	0.000
1E+12	129	0.499	0.499	0.000
1E+12	130	0.509	0.508	-0.001
1E+12	131	0.500	0.500	0.000
5E+12	126	0.504	0.503	-0.001
5E+12	127	0.503	0.501	-0.002
5E+12	128	0.504	0.503	-0.001
1E+13	123	0.506	0.503	-0.003
1E+13	124	0.505	0.502	-0.003
1E+13	125	0.498	0.496	-0.002
Max		0.509	0.508	0.000
Average		0.502	0.501	-0.001
Min		0.496	0.496	-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	0.496	0.499	0.501	0.496
Average	0.496	0.502	0.502	0.500
Max	0.496	0.508	0.503	0.503
UL	0.550	0.550	0.550	0.550

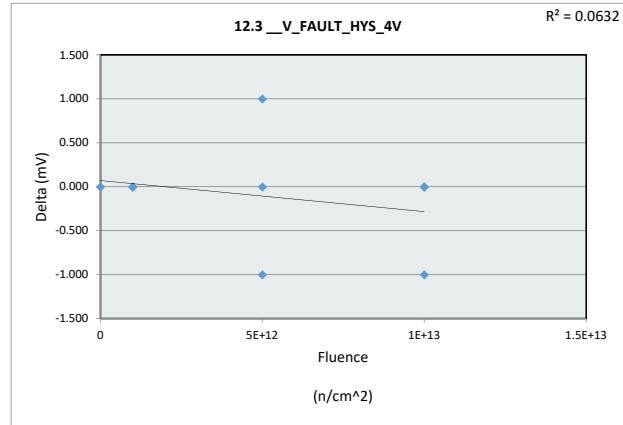


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.3 __V_FAULT_HYS_4V

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

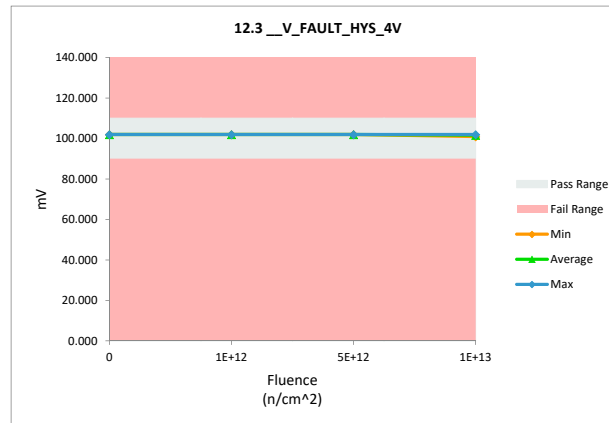
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	102.000	102.000	0.000
1E+12	129	102.000	102.000	0.000
1E+12	130	102.000	102.000	0.000
1E+12	131	102.000	102.000	0.000
5E+12	126	102.000	102.000	0.000
5E+12	127	101.000	102.000	1.000
5E+12	128	103.000	102.000	-1.000
1E+13	123	102.000	101.000	-1.000
1E+13	124	102.000	102.000	0.000
1E+13	125	102.000	102.000	0.000
Max		103.000	102.000	1.000
Average		102.000	101.900	-0.100
Min		101.000	101.000	-1.000
Std Dev		0.471	0.316	0.568



12.3 __V_FAULT_HYS_4V

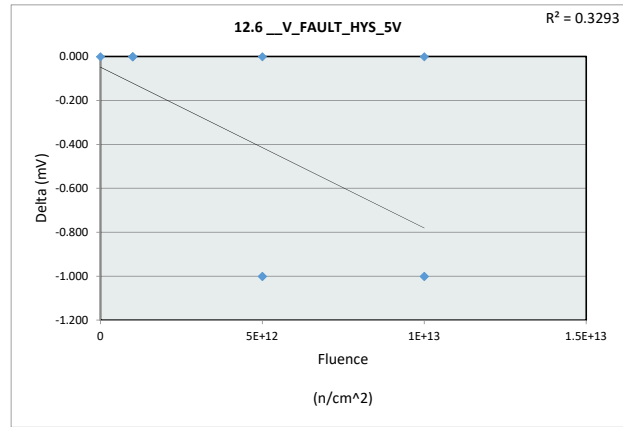
Test Site		
Tester		
Test Number		
Max Limit	110	mV
Min Limit	90	mV

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

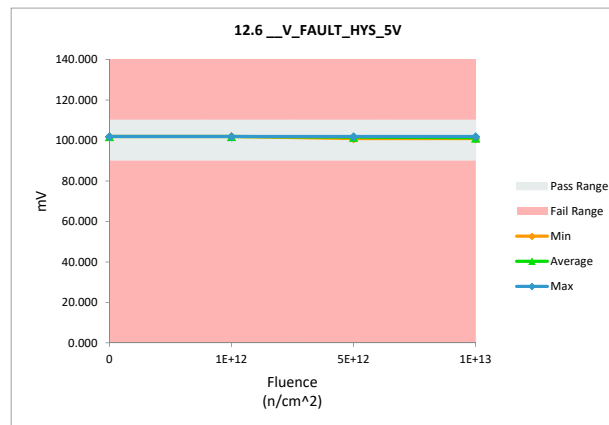


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	102.000	102.000	0.000
1E+12	129	102.000	102.000	0.000
1E+12	130	102.000	102.000	0.000
1E+12	131	102.000	102.000	0.000
5E+12	126	102.000	102.000	0.000
5E+12	127	102.000	101.000	-1.000
5E+12	128	103.000	102.000	-1.000
1E+13	123	102.000	102.000	0.000
1E+13	124	102.000	101.000	-1.000
1E+13	125	102.000	101.000	-1.000
Max		103.000	102.000	0.000
Average		102.100	101.700	-0.400
Min		102.000	101.000	-1.000
Std Dev		0.316	0.483	0.516



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	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

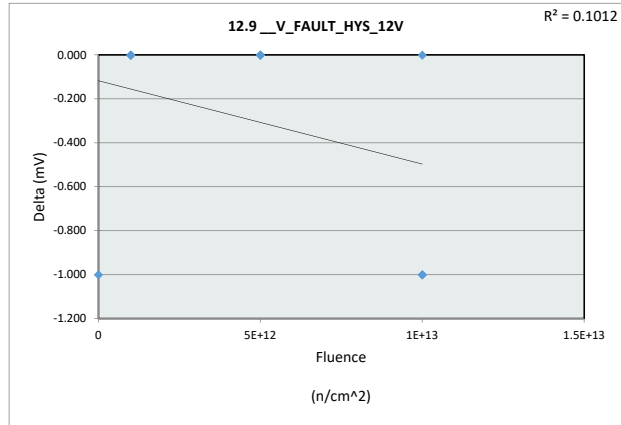


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.9 __V_FAULT_HYS_12V

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

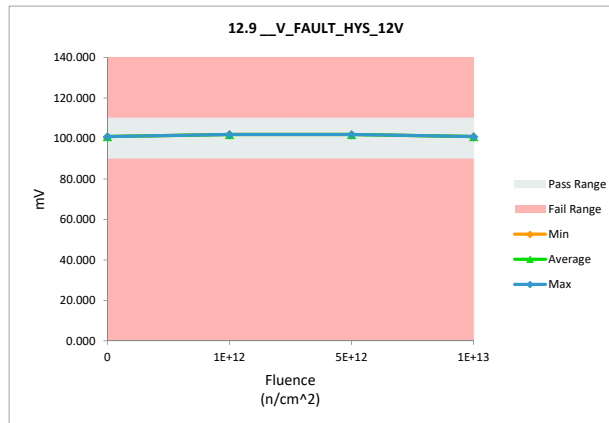
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	102.000	101.000	-1.000
1E+12	129	102.000	102.000	0.000
1E+12	130	102.000	102.000	0.000
1E+12	131	102.000	102.000	0.000
5E+12	126	102.000	102.000	0.000
5E+12	127	102.000	102.000	0.000
5E+12	128	102.000	102.000	0.000
1E+13	123	102.000	101.000	-1.000
1E+13	124	102.000	101.000	-1.000
1E+13	125	101.000	101.000	0.000
Max		102.000	102.000	0.000
Average		101.900	101.600	-0.300
Min		101.000	101.000	-1.000
Std Dev		0.316	0.516	0.483



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	101.000	102.000	102.000	101.000
Average	101.000	102.000	102.000	101.000
Max	101.000	102.000	102.000	101.000
UL	110.000	110.000	110.000	110.000

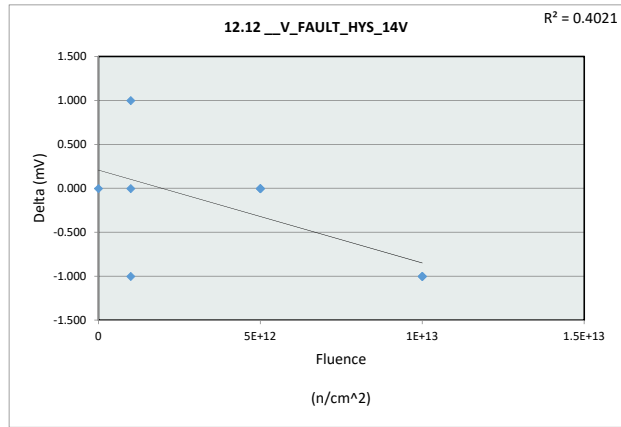


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.12 __V_FAULT_HYS_14V

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

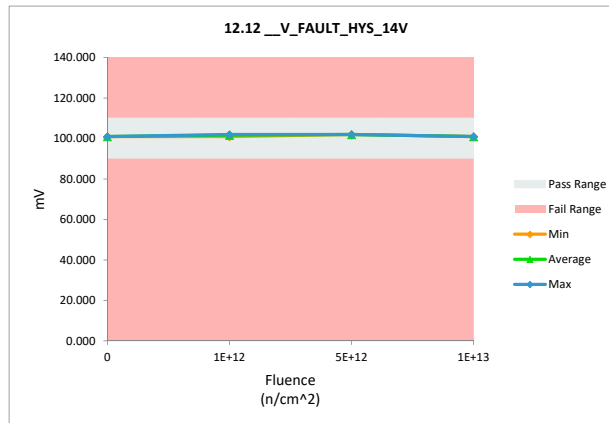
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	101.000	101.000	0.000
1E+12	129	102.000	102.000	0.000
1E+12	130	101.000	102.000	1.000
1E+12	131	102.000	101.000	-1.000
5E+12	126	102.000	102.000	0.000
5E+12	127	102.000	102.000	0.000
5E+12	128	102.000	102.000	0.000
1E+13	123	102.000	101.000	-1.000
1E+13	124	102.000	101.000	-1.000
1E+13	125	102.000	101.000	-1.000
Max		102.000	102.000	1.000
Average		101.800	101.500	-0.300
Min		101.000	101.000	-1.000
Std Dev		0.422	0.527	0.675



12.12 __V_FAULT_HYS_14V

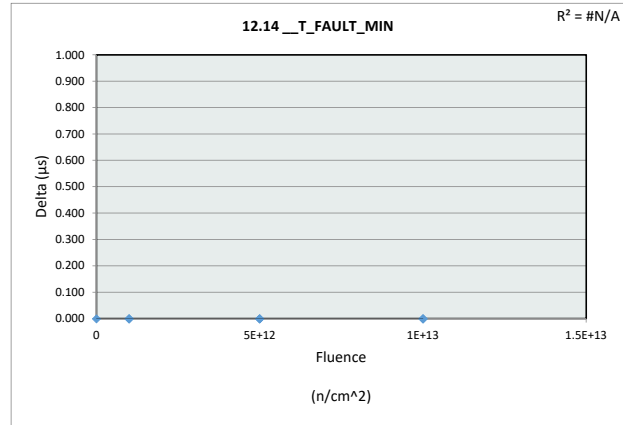
Test Site		
Tester		
Test Number		
Max Limit	110	mV
Min Limit	90	mV

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

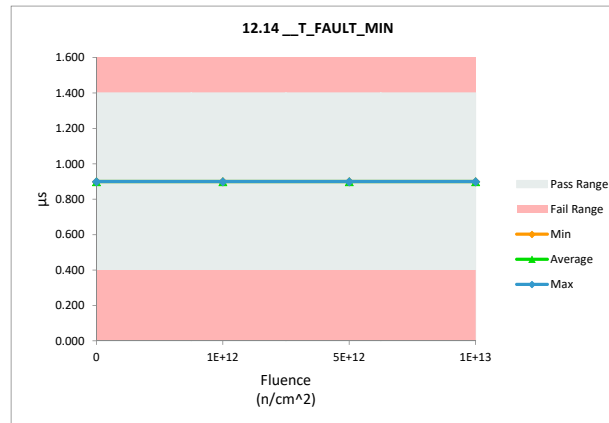


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	0.900	0.900	0.000
1E+12	129	0.900	0.900	0.000
1E+12	130	0.900	0.900	0.000
1E+12	131	0.900	0.900	0.000
5E+12	126	0.900	0.900	0.000
5E+12	127	0.900	0.900	0.000
5E+12	128	0.900	0.900	0.000
1E+13	123	0.900	0.900	0.000
1E+13	124	0.900	0.900 </td <td>0.000</td>	0.000
1E+13	125	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

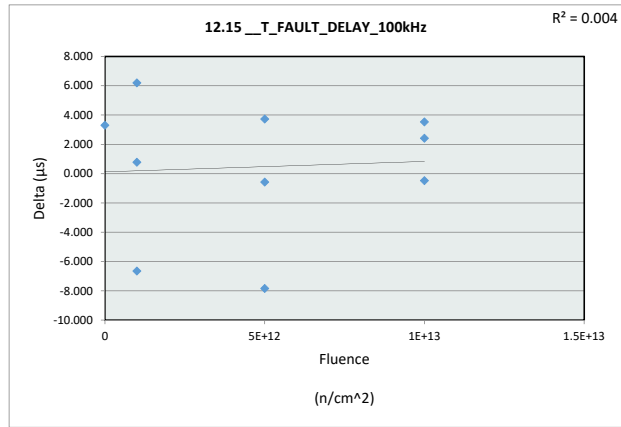


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.15 __T_FAULT_DELAY_100kHz

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

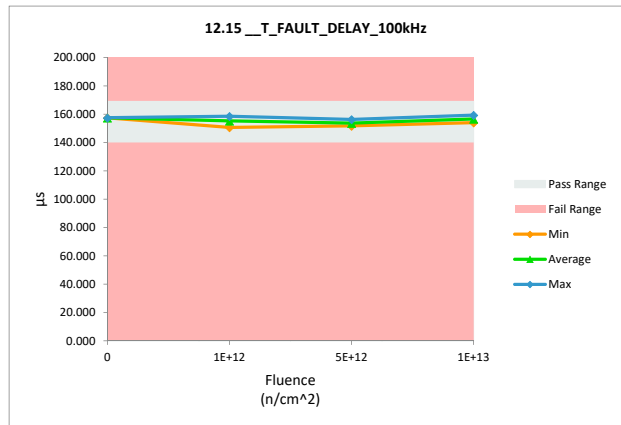
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	154.179	157.495	3.316
1E+12	129	155.855	156.656	0.801
1E+12	130	152.331	158.551	6.220
1E+12	131	157.308	150.686	-6.622
5E+12	126	159.539	151.723	-7.816
5E+12	127	152.583	156.326	3.743
5E+12	128	153.904	153.345	-0.559
1E+13	123	155.813	159.368	3.555
1E+13	124	154.524	154.072	-0.452
1E+13	125	154.154	156.593	2.439
Max		159.539	159.368	6.220
Average		155.019	155.482	0.463
Min		152.331	150.686	-7.816
Std Dev		2.188	2.898	4.549



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	157.495	150.686	151.723	154.072
Average	157.495	155.298	153.798	156.678
Max	157.495	158.551	156.326	159.368
UL	169.000	169.000	169.000	169.000

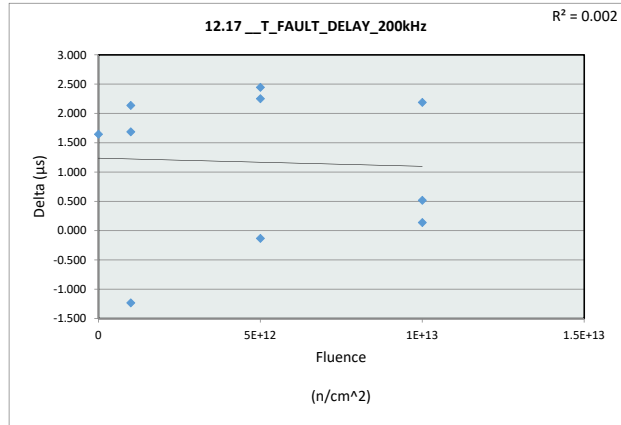


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.17 __T_FAULT_DELAY_200kHz

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

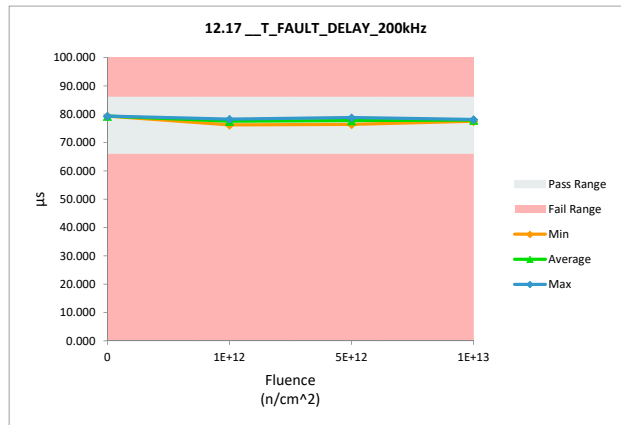
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	77.704	79.355	1.651
1E+12	129	76.593	78.284	1.691
1E+12	130	77.452	76.225	-1.227
1E+12	131	75.949	78.090	2.141
5E+12	126	76.551	78.806	2.255
5E+12	127	76.545	76.419	-0.126
5E+12	128	75.562	78.013	2.451
1E+13	123	77.393	77.535	0.142
1E+13	124	75.999	78.192	2.193
1E+13	125	77.532	78.055	0.523
Max		77.704	79.355	2.451
Average		76.728	77.897	1.169
Min		75.562	76.225	-1.227
Std Dev		0.756	0.965	1.257



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	79.355	76.225	76.419	77.535
Average	79.355	77.533	77.746	77.927
Max	79.355	78.284	78.806	78.192
UL	86.000	86.000	86.000	86.000

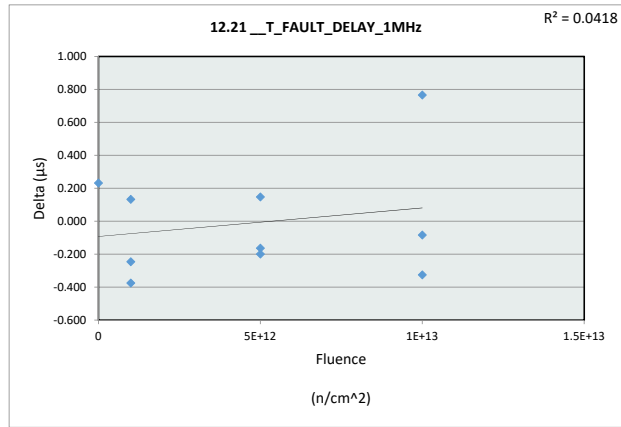


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

12.21 __T_FAULT_DELAY_1MHz

Test Site		
Tester		
Test Number		
Unit	µs	µs
Max Limit	21	21
Min Limit	14	14

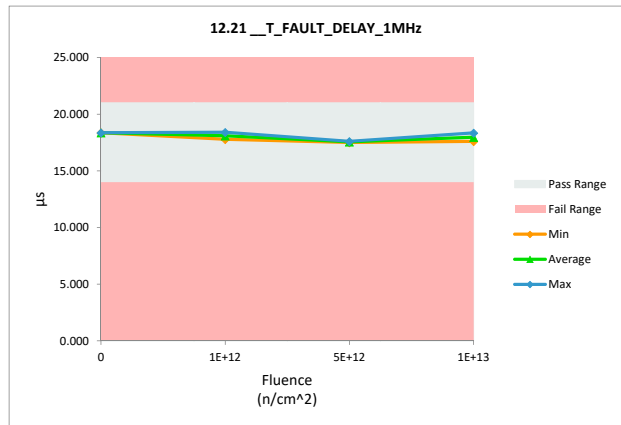
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	18.132	18.366	0.234
1E+12	129	18.165	17.792	-0.373
1E+12	130	18.283	18.418	0.135
1E+12	131	18.321	18.077	-0.244
5E+12	126	17.710	17.513	-0.197
5E+12	127	17.466	17.615	0.149
5E+12	128	17.720	17.559	-0.161
1E+13	123	18.285	17.962	-0.323
1E+13	124	17.684	17.602	-0.082
1E+13	125	17.585	18.353	0.768
Max		18.321	18.418	0.768
Average		17.935	17.926	-0.009
Min		17.466	17.513	-0.373
Std Dev		0.331	0.360	0.343



12.21 __T_FAULT_DELAY_1MHz

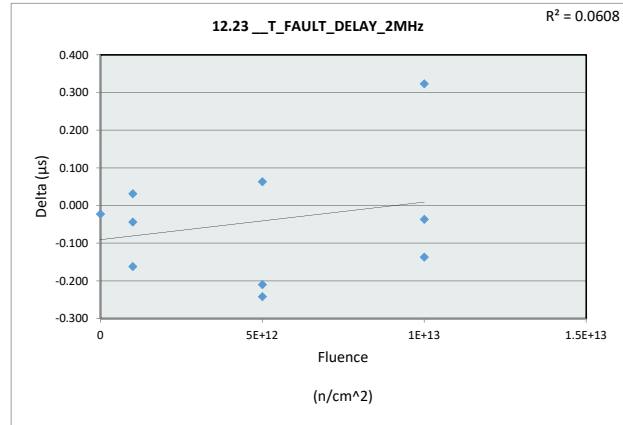
Test Site		
Tester		
Test Number		
Max Limit	21	µs
Min Limit	14	µs

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	14.000	14.000	14.000	14.000
Min	18.366	17.792	17.513	17.602
Average	18.366	18.096	17.562	17.972
Max	18.366	18.418	17.615	18.353
UL	21.000	21.000	21.000	21.000

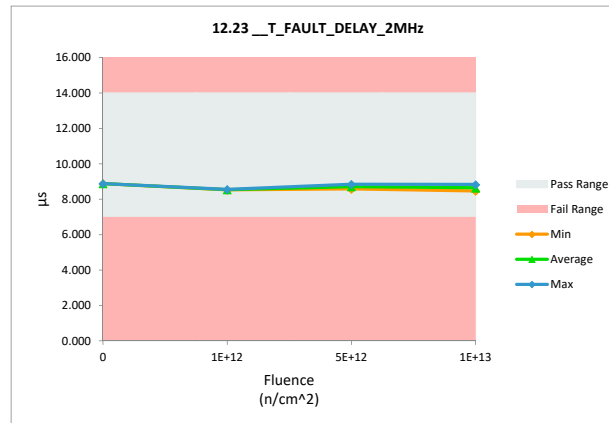


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.903	8.881	-0.022
1E+12	129	8.526	8.558	0.032
1E+12	130	8.590	8.547	-0.043
1E+12	131	8.687	8.526	-0.161
5E+12	126	8.786	8.577	-0.209
5E+12	127	8.939	8.698	-0.241
5E+12	128	8.783	8.847	0.064
1E+13	123	8.607	8.471	-0.136
1E+13	124	8.507	8.831	0.324
1E+13	125	8.658	8.622	-0.036
Max		8.939	8.881	0.324
Average		8.699	8.656	-0.043
Min		8.507	8.471	-0.241
Std Dev		0.150	0.149	0.164



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	8.881	8.526	8.577	8.471
Average	8.881	8.544	8.707	8.641
Max	8.881	8.558	8.847	8.831
UL	14.000	14.000	14.000	14.000

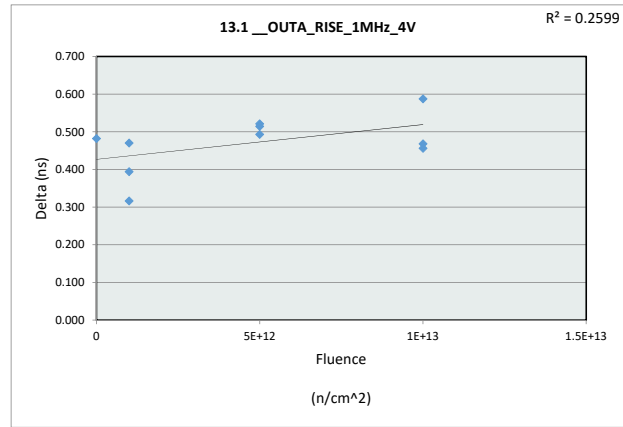


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.1 __OUTA_RISE_1MHz_4V

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

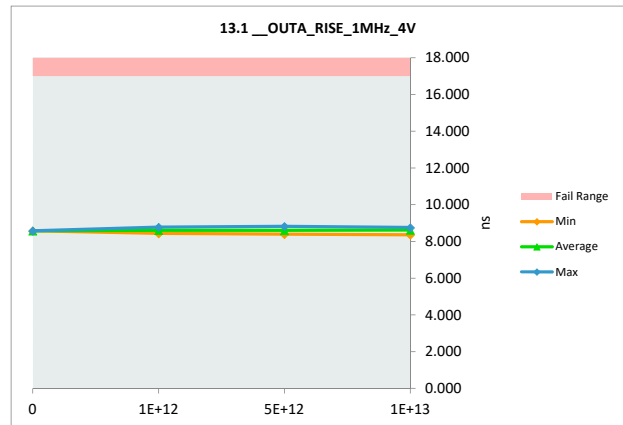
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.099	8.582	0.483
1E+12	129	8.308	8.779	0.471
1E+12	130	8.289	8.606	0.317
1E+12	131	8.037	8.432	0.395
5E+12	126	8.308	8.823	0.515
5E+12	127	7.867	8.389	0.522
5E+12	128	8.087	8.581	0.494
1E+13	123	8.169	8.757	0.588
1E+13	124	8.287	8.756	0.469
1E+13	125	7.908	8.365	0.457
Max		8.308	8.823	0.588
Average		8.136	8.607	0.471
Min		7.867	8.365	0.317
Std Dev		0.165	0.170	0.073



13.1 __OUTA_RISE_1MHz_4V

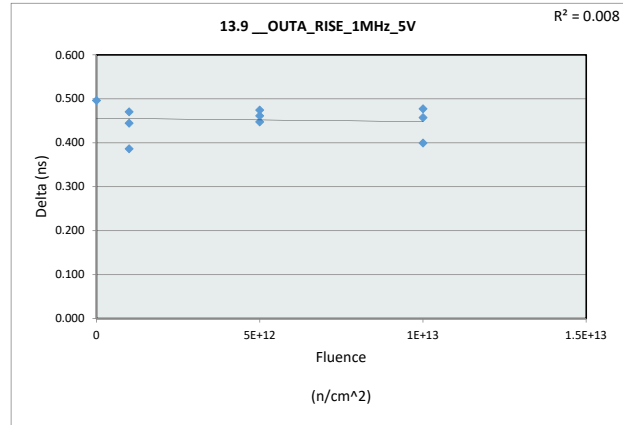
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.582	8.432	8.389	8.365
Average	8.582	8.606	8.598	8.626
Max	8.582	8.779	8.823	8.757
UL	17.000	17.000	17.000	17.000

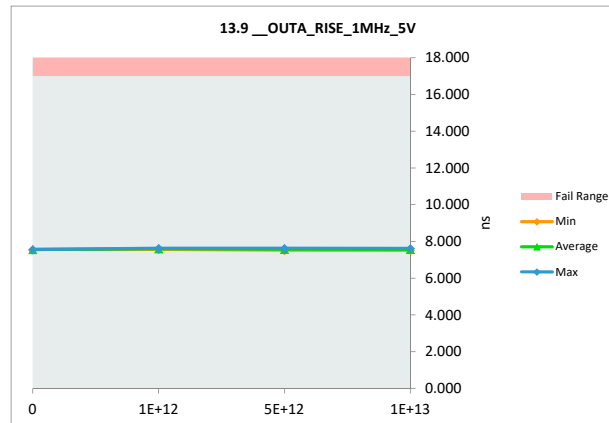


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.064	7.561	0.497
1E+12	129	7.159	7.630	0.471
1E+12	130	7.224	7.611	0.387
1E+12	131	7.125	7.570	0.445
5E+12	126	7.157	7.632	0.475
5E+12	127	7.056	7.518	0.462
5E+12	128	7.120	7.568	0.448
1E+13	123	7.169	7.569	0.400
1E+13	124	7.140	7.618	0.478
1E+13	125	7.055	7.513	0.458
Max		7.224	7.632	0.497
Average		7.127	7.579	0.452
Min		7.055	7.513	0.387
Std Dev		0.055	0.043	0.035



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	7.561	7.570	7.518	7.513
Average	7.561	7.604	7.573	7.567
Max	7.561	7.630	7.632	7.618
UL	17.000	17.000	17.000	17.000

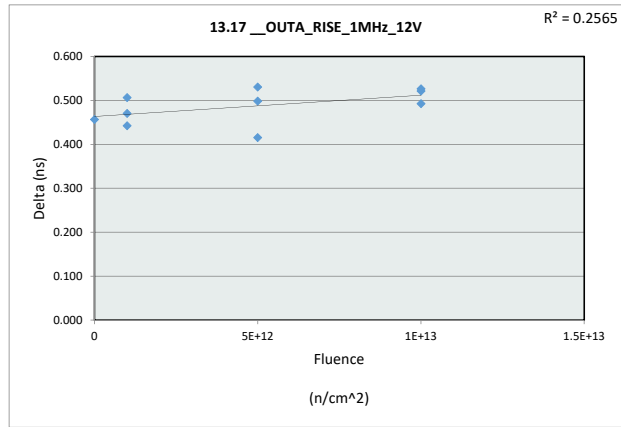


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.17 __OUTA_RISE_1MHz_12V

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

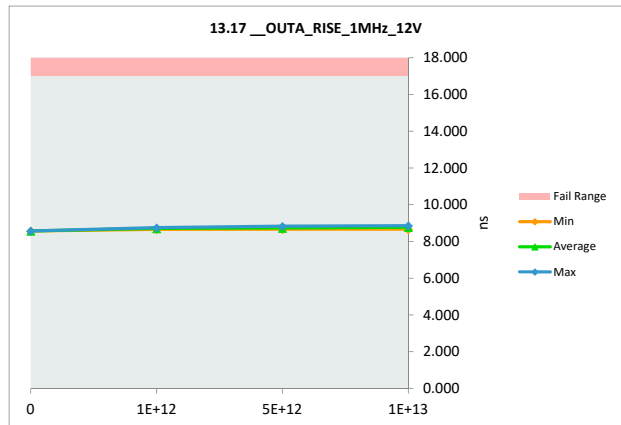
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	8.116	8.573	0.457
1E+12	129	8.212	8.655	0.443
1E+12	130	8.209	8.716	0.507
1E+12	131	8.276	8.747	0.471
5E+12	126	8.328	8.827	0.499
5E+12	127	8.168	8.699	0.531
5E+12	128	8.249	8.665	0.416
1E+13	123	8.333	8.860	0.527
1E+13	124	8.168	8.661	0.493
1E+13	125	8.269	8.791	0.522
Max		8.333	8.860	0.531
Average		8.233	8.719	0.487
Min		8.116	8.573	0.416
Std Dev		0.071	0.088	0.039



13.17 __OUTA_RISE_1MHz_12V

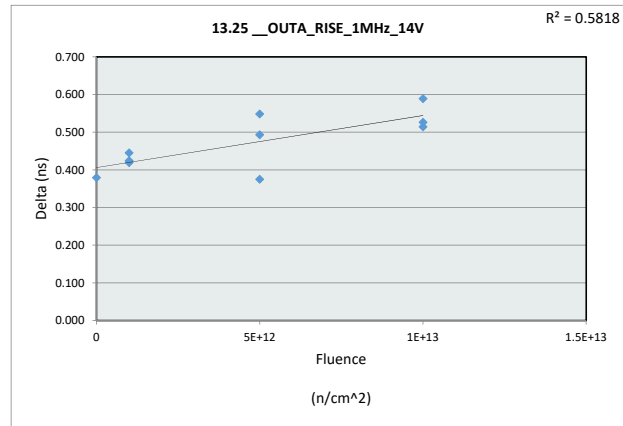
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.573	8.655	8.665	8.661
Average	8.573	8.706	8.730	8.771
Max	8.573	8.747	8.827	8.860
UL	17.000	17.000	17.000	17.000

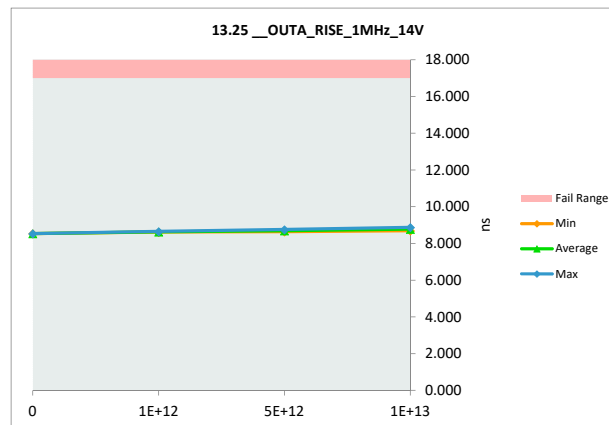


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	8.160	8.540	0.380
1E+12	129	8.171	8.617	0.446
1E+12	130	8.203	8.623	0.420
1E+12	131	8.228	8.653	0.425
5E+12	126	8.262	8.756	0.494
5E+12	127	8.126	8.675	0.549
5E+12	128	8.263	8.639	0.376
1E+13	123	8.284	8.874	0.590
1E+13	124	8.182	8.697	0.515
1E+13	125	8.233	8.760	0.527
Max		8.284	8.874	0.590
Average		8.211	8.683	0.472
Min		8.126	8.540	0.376
Std Dev		0.051	0.094	0.073



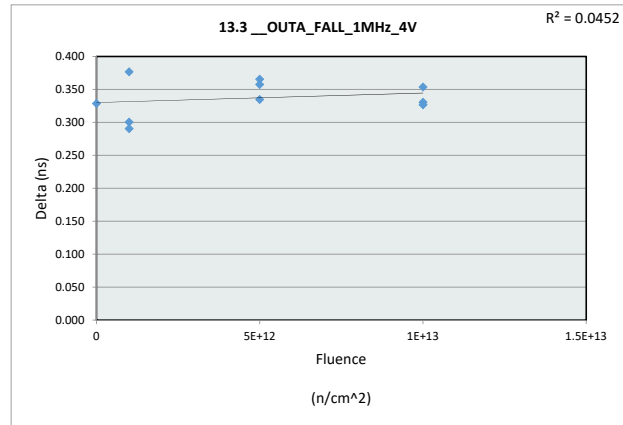
13.25 __OUTA_RISE_1MHz_14V				
Test Site				
Tester				
Test Number				
Max Limit	17		ns	
Min Limit			ns	
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.540	8.617	8.639	8.697
Average	8.540	8.631	8.690	8.777
Max	8.540	8.653	8.756	8.874
UL	17.000	17.000	17.000	17.000



Neutron Displacement Damage (NDD) Report TPS7H5003-SP

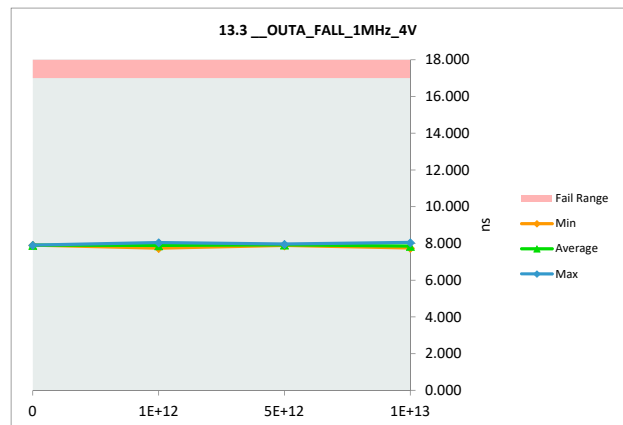
13.3_OUTA_FALL_1MHz_4V

Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.578	7.907	0.329
1E+12	129	7.675	8.052	0.377
1E+12	130	7.567	7.868	0.301
1E+12	131	7.449	7.740	0.291
5E+12	126	7.569	7.927	0.358
5E+12	127	7.596	7.962	0.366
5E+12	128	7.549	7.884	0.335
1E+13	123	7.421	7.752	0.331
1E+13	124	7.695	8.049	0.354
1E+13	125	7.446	7.773	0.327
	Max	7.695	8.052	0.377
	Average	7.555	7.891	0.337
	Min	7.421	7.740	0.291
	Std Dev	0.093	0.113	0.027



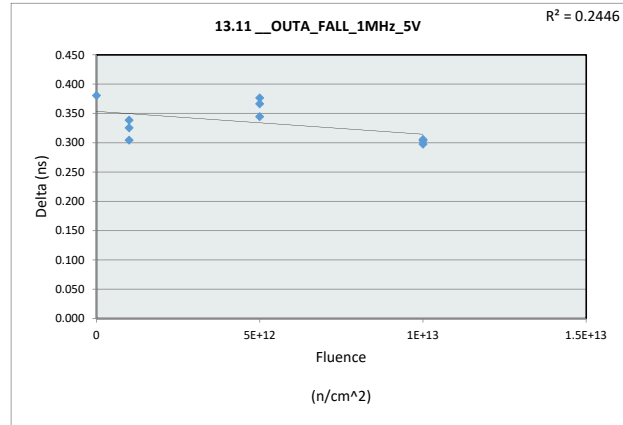
13.3_OUTA_FALL_1MHz_4V

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.907	7.740	7.884	7.752
Average	7.907	7.887	7.924	7.858
Max	7.907	8.052	7.962	8.049
UL	17.000	17.000	17.000	17.000

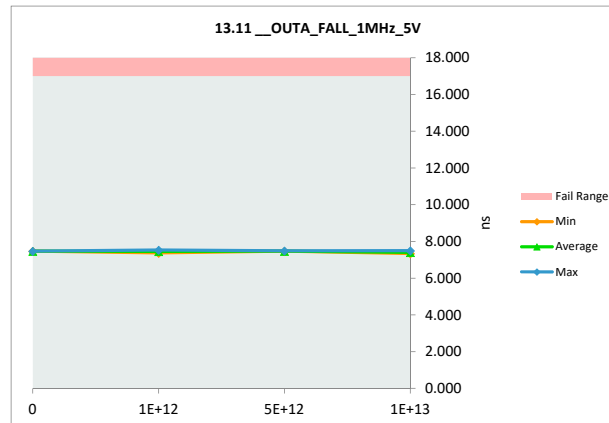


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

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	132	7.090	7.471	0.381
1E+12	129	7.207	7.533	0.326
1E+12	130	7.151	7.456	0.305
1E+12	131	7.034	7.373	0.339
5E+12	126	7.122	7.467	0.345
5E+12	127	7.101	7.468	0.367
5E+12	128	7.112	7.489	0.377
1E+13	123	7.046	7.344	0.298
1E+13	124	7.193	7.497	0.304
1E+13	125	7.057	7.363	0.306
Max		7.207	7.533	0.381
Average		7.111	7.446	0.335
Min		7.034	7.344	0.298
Std Dev		0.059	0.064	0.032



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	7.471	7.373	7.467	7.344
Average	7.471	7.454	7.475	7.401
Max	7.471	7.533	7.489	7.497
UL	17.000	17.000	17.000	17.000

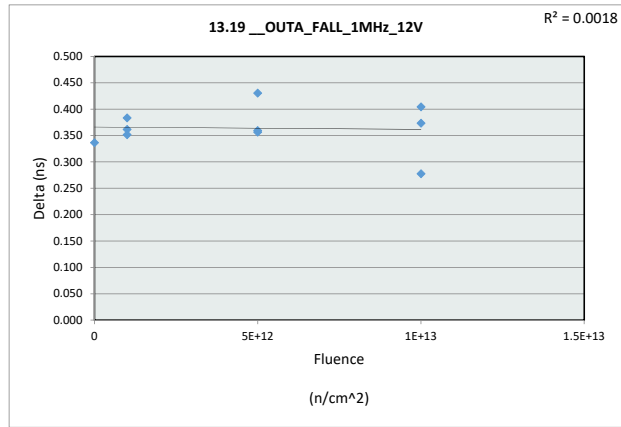


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.19 __OUTA_FALL_1MHz_12V

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

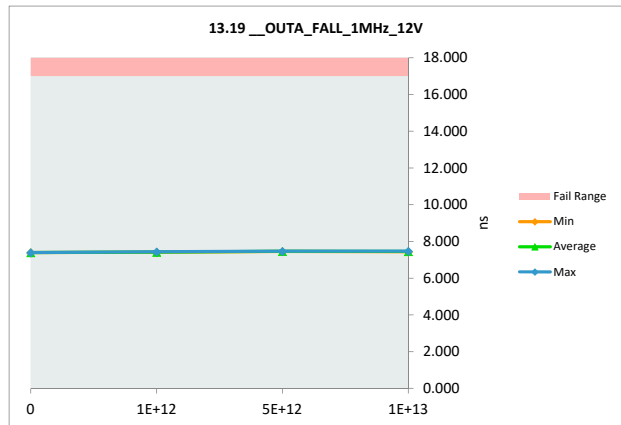
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.057	7.394	0.337
1E+12	129	7.076	7.438	0.362
1E+12	130	7.054	7.406	0.352
1E+12	131	7.032	7.416	0.384
5E+12	126	7.094	7.454	0.360
5E+12	127	7.110	7.467	0.357
5E+12	128	7.036	7.467	0.431
1E+13	123	7.045	7.450	0.405
1E+13	124	7.193	7.471	0.278
1E+13	125	7.063	7.437	0.374
Max		7.193	7.471	0.431
Average		7.076	7.440	0.364
Min		7.032	7.394	0.278
Std Dev		0.048	0.027	0.041



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	7.394	7.406	7.454	7.437
Average	7.394	7.420	7.463	7.453
Max	7.394	7.438	7.467	7.471
UL	17.000	17.000	17.000	17.000

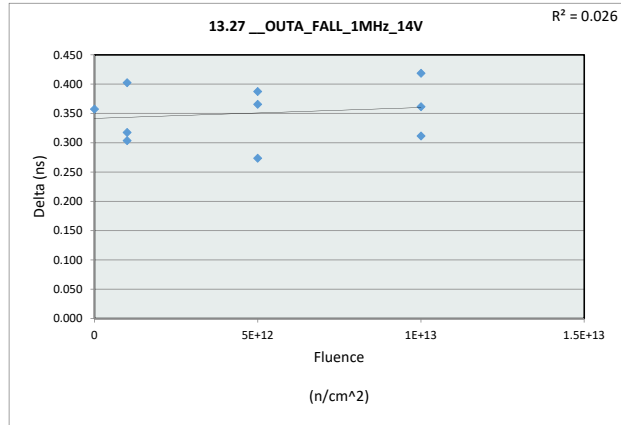


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.27 __OUTA_FALL_1MHz_14V

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

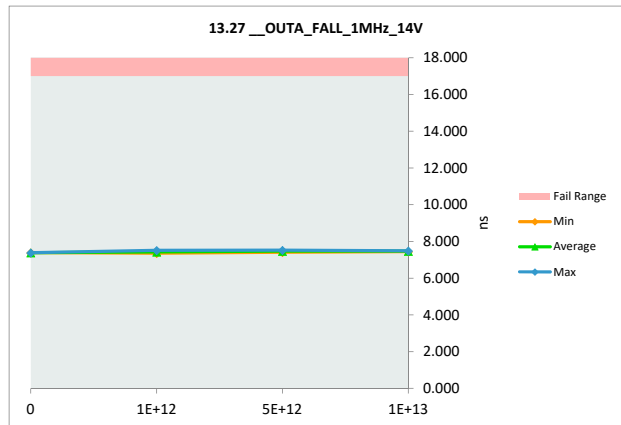
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.032	7.390	0.358
1E+12	129	7.113	7.516	0.403
1E+12	130	7.091	7.409	0.318
1E+12	131	7.054	7.358	0.304
5E+12	126	7.156	7.522	0.366
5E+12	127	7.094	7.482	0.388
5E+12	128	7.138	7.412	0.274
1E+13	123	7.028	7.447	0.419
1E+13	124	7.179	7.491	0.312
1E+13	125	7.119	7.481	0.362
Max		7.179	7.522	0.419
Average		7.100	7.451	0.350
Min		7.028	7.358	0.274
Std Dev		0.051	0.056	0.047



13.27 __OUTA_FALL_1MHz_14V

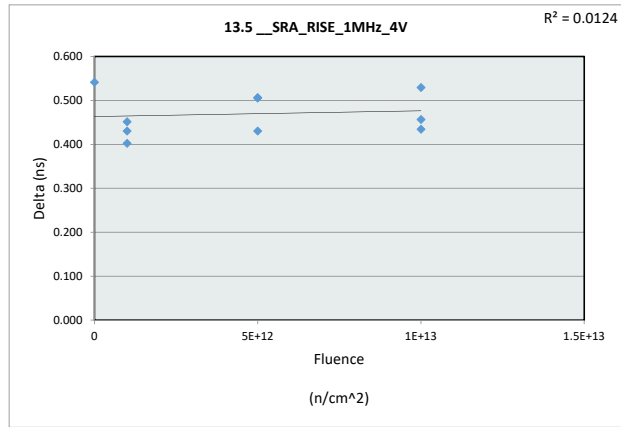
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.390	7.358	7.412	7.447
Average	7.390	7.428	7.472	7.473
Max	7.390	7.516	7.522	7.491
UL	17.000	17.000	17.000	17.000

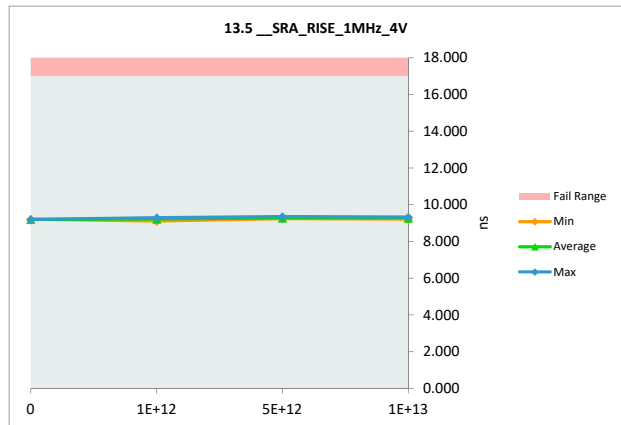


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.5_SRA_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	132	8.658	9.200	0.542
1E+12	129	8.838	9.290	0.452
1E+12	130	8.830	9.261	0.431
1E+12	131	8.709	9.112	0.403
5E+12	126	8.851	9.357	0.506
5E+12	127	8.735	9.242	0.507
5E+12	128	8.826	9.257	0.431
1E+13	123	8.865	9.300	0.435
1E+13	124	8.798	9.328	0.530
1E+13	125	8.754	9.211	0.457
Max		8.865	9.357	0.542
Average		8.786	9.256	0.469
Min		8.658	9.112	0.403
Std Dev		0.069	0.070	0.048

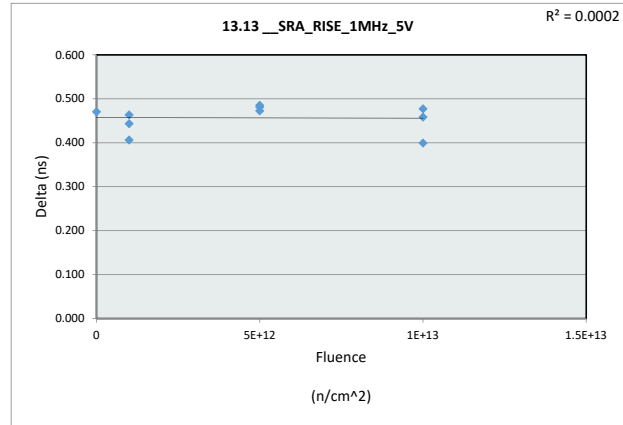


13.5_SRA_RISE_1MHz_4V				
Test Site				
Tester				
Test Number				
Max Limit		17	ns	
Min Limit			ns	
Fluence (n/cm ²)	LL	Min	Average	Max
0	9.200	9.200	9.200	9.200
1E+12	9.112	9.221	9.285	9.280
5E+12	9.242	9.285	9.357	9.328
1E+13	9.211	9.280	9.328	9.328
UL	17.000	17.000	17.000	17.000

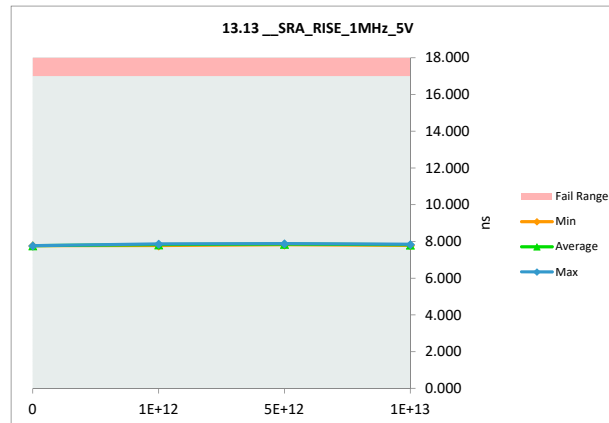


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.13_SRA_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	132	7.300	7.771	0.471
1E+12	129	7.391	7.835	0.444
1E+12	130	7.456	7.863	0.407
1E+12	131	7.308	7.772	0.464
5E+12	126	7.398	7.880	0.482
5E+12	127	7.347	7.820	0.473
5E+12	128	7.377	7.863	0.486
1E+13	123	7.383	7.783	0.400
1E+13	124	7.364	7.842	0.478
1E+13	125	7.362	7.821	0.459
Max		7.456	7.880	0.486
Average		7.369	7.825	0.456
Min		7.300	7.771	0.400
Std Dev		0.045	0.039	0.030

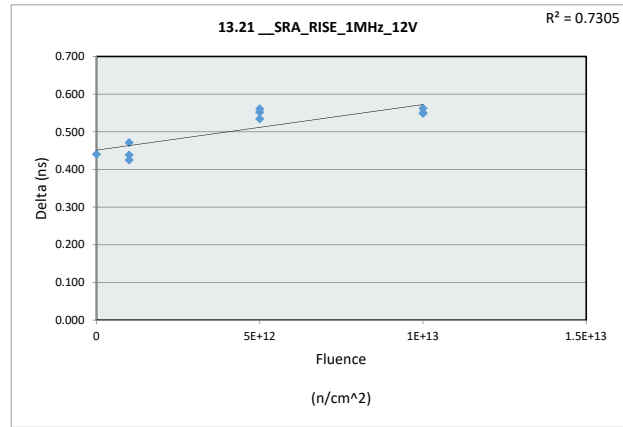


13.13_SRA_RISE_1MHz_5V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.771	7.772	7.820	7.783
Average	7.771	7.823	7.854	7.815
Max	7.771	7.863	7.880	7.842
UL	17.000	17.000	17.000	17.000

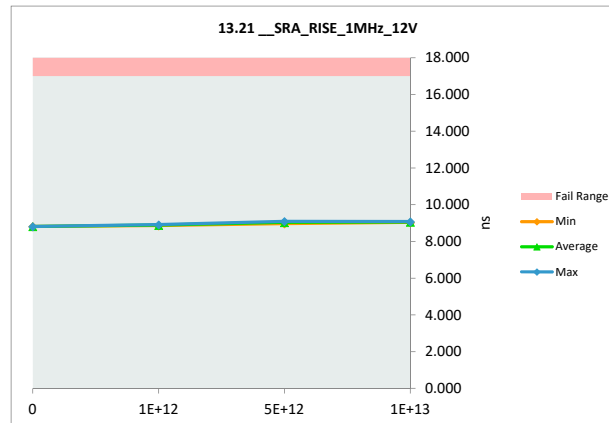


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.21 __SRA_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	132	8.376	8.817	0.441
1E+12	129	8.434	8.860	0.426
1E+12	130	8.416	8.888	0.472
1E+12	131	8.475	8.914	0.439
5E+12	126	8.487	9.049	0.562
5E+12	127	8.433	8.968	0.535
5E+12	128	8.537	9.090	0.553
1E+13	123	8.529	9.080	0.551
1E+13	124	8.474	9.037	0.563
1E+13	125	8.509	9.059	0.550
Max		8.537	9.090	0.563
Average		8.467	8.976	0.509
Min		8.376	8.817	0.426
Std Dev		0.052	0.100	0.057

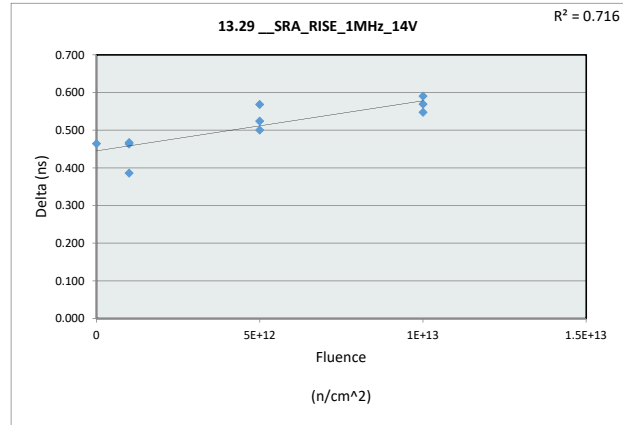


13.21 __SRA_RISE_1MHz_12V				
Test Site				
Tester				
Test Number				
Max Limit	17	ns		
Min Limit		ns		
Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.817	8.860	8.968	9.037
Average	8.817	8.887	9.036	9.059
Max	8.817	8.914	9.090	9.080
UL	17.000	17.000	17.000	17.000

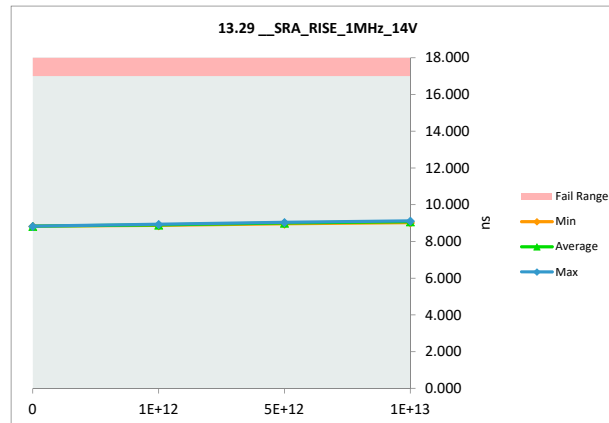


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.29_SRA_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	132	8.364	8.829	0.465
1E+12	129	8.402	8.870	0.468
1E+12	130	8.513	8.900	0.387
1E+12	131	8.470	8.934	0.464
5E+12	126	8.513	9.038	0.525
5E+12	127	8.454	8.955	0.501
5E+12	128	8.447	9.016	0.569
1E+13	123	8.525	9.116	0.591
1E+13	124	8.455	9.025	0.570
1E+13	125	8.528	9.076	0.548
Max		8.528	9.116	0.591
Average		8.467	8.976	0.509
Min		8.364	8.829	0.387
Std Dev		0.055	0.093	0.064



13.29_SRA_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	8.829	8.870	8.955	9.025
Average	8.829	8.901	9.003	9.072
Max	8.829	8.934	9.038	9.116
UL	17.000	17.000	17.000	17.000

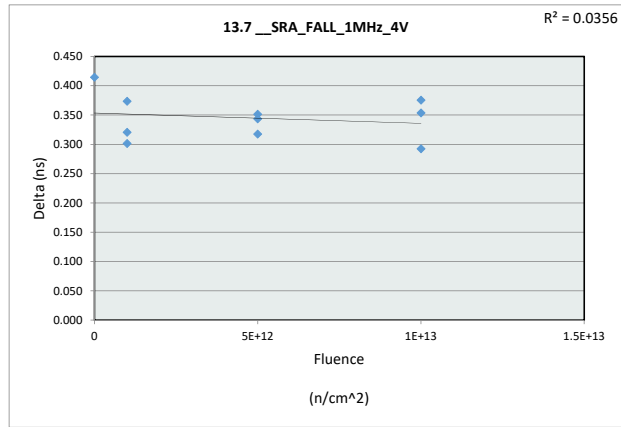


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.7 __SRA_FALL_1MHz_4V

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

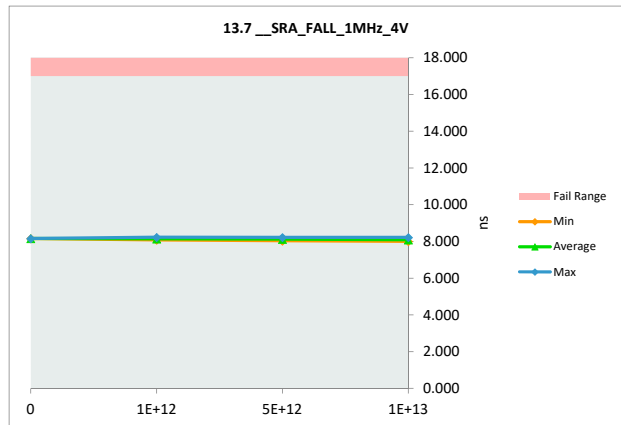
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.745	8.160	0.415
1E+12	129	7.858	8.232	0.374
1E+12	130	7.816	8.118	0.302
1E+12	131	7.758	8.079	0.321
5E+12	126	7.777	8.121	0.344
5E+12	127	7.870	8.222	0.352
5E+12	128	7.715	8.033	0.318
1E+13	123	7.674	8.050	0.376
1E+13	124	7.867	8.221	0.354
1E+13	125	7.710	8.003	0.293
Max		7.870	8.232	0.415
Average		7.779	8.124	0.345
Min		7.674	8.003	0.293
Std Dev		0.071	0.083	0.038



13.7 __SRA_FALL_1MHz_4V

Test Site	
Tester	
Test Number	
Max Limit	17
Min Limit	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	8.160	8.079	8.033	8.003
Average	8.160	8.143	8.125	8.091
Max	8.160	8.232	8.222	8.221
UL	17.000	17.000	17.000	17.000

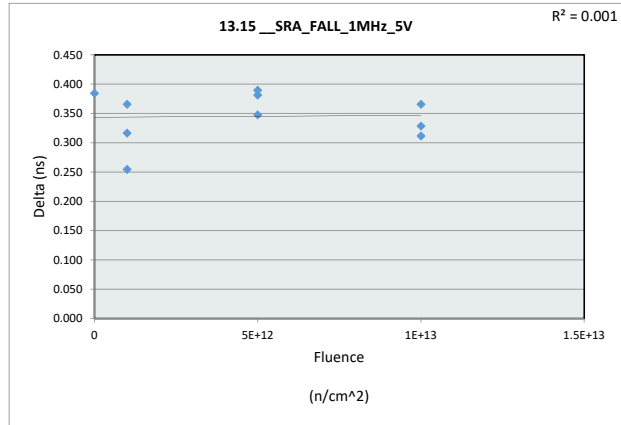


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.15_SRA_FALL_1MHz_5V

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

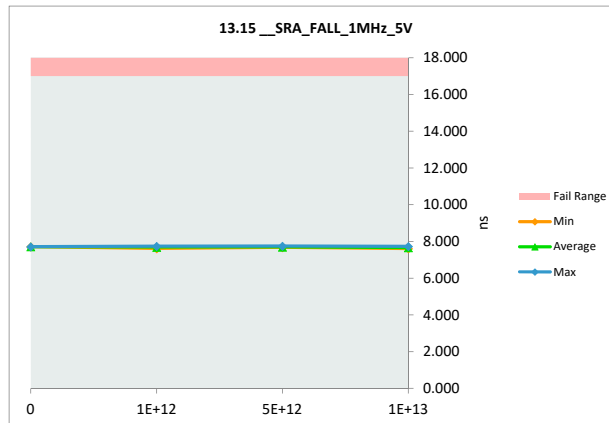
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.330	7.715	0.385
1E+12	129	7.424	7.741	0.317
1E+12	130	7.363	7.729	0.366
1E+12	131	7.359	7.614	0.255
5E+12	126	7.337	7.685	0.348
5E+12	127	7.359	7.749	0.390
5E+12	128	7.293	7.675	0.382
1E+13	123	7.282	7.648	0.366
1E+13	124	7.405	7.734	0.329
1E+13	125	7.299	7.611	0.312
Max		7.424	7.749	0.390
Average		7.345	7.690	0.345
Min		7.282	7.611	0.255
Std Dev		0.047	0.052	0.042



13.15_SRA_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	7.715	7.614	7.675	7.611
Average	7.715	7.695	7.703	7.664
Max	7.715	7.741	7.749	7.734
UL	17.000	17.000	17.000	17.000

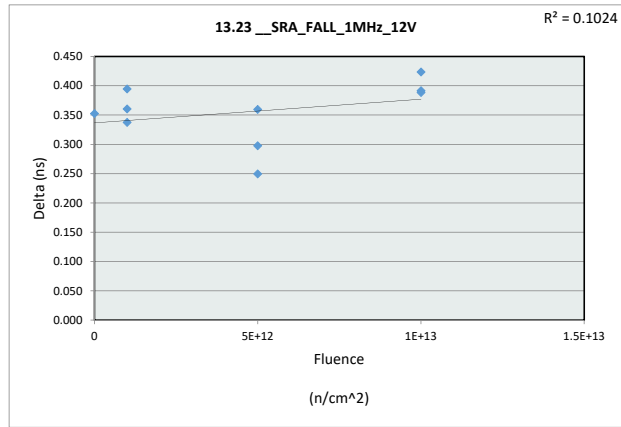


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.23 __SRA_FALL_1MHz_12V

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

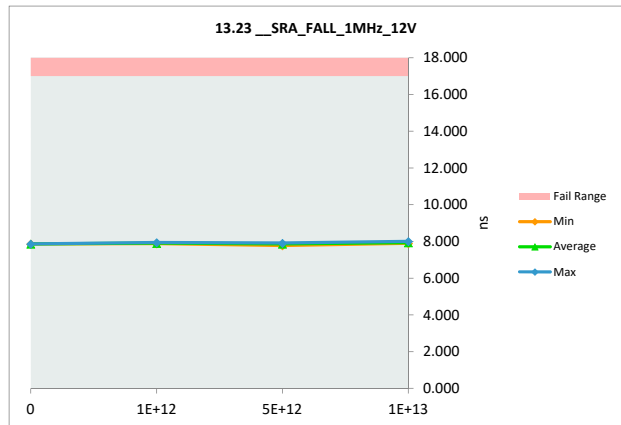
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	7.511	7.864	0.353
1E+12	129	7.547	7.942	0.395
1E+12	130	7.547	7.885	0.338
1E+12	131	7.518	7.879	0.361
5E+12	126	7.552	7.912	0.360
5E+12	127	7.605	7.903	0.298
5E+12	128	7.532	7.782	0.250
1E+13	123	7.509	7.901	0.392
1E+13	124	7.577	8.001	0.424
1E+13	125	7.510	7.899	0.389
Max		7.605	8.001	0.424
Average		7.541	7.897	0.356
Min		7.509	7.782	0.250
Std Dev		0.032	0.056	0.051



13.23 __SRA_FALL_1MHz_12V

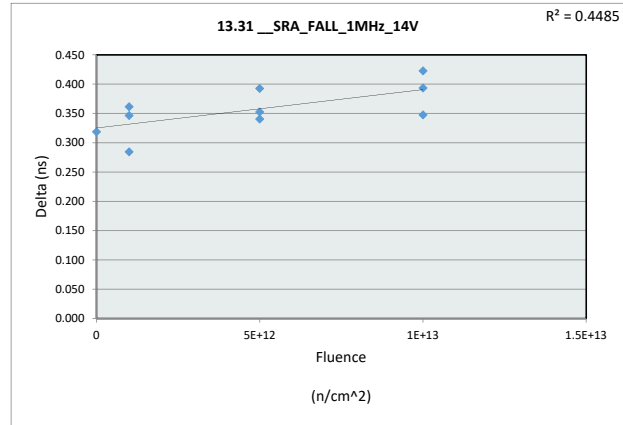
Test Site		
Tester		
Test Number		
Max Limit	17	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	7.864	7.879	7.782	7.899
Average	7.864	7.902	7.866	7.934
Max	7.864	7.942	7.912	8.001
UL	17.000	17.000	17.000	17.000

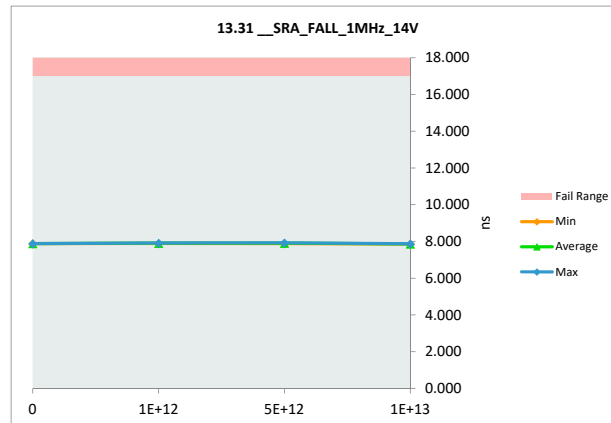


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.31_SRA_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	132	7.560	7.879	0.319
1E+12	129	7.623	7.908	0.285
1E+12	130	7.522	7.884	0.362
1E+12	131	7.564	7.911	0.347
5E+12	126	7.560	7.913	0.353
5E+12	127	7.584	7.925	0.341
5E+12	128	7.493	7.886	0.393
1E+13	123	7.483	7.877	0.394
1E+13	124	7.448	7.871	0.423
1E+13	125	7.508	7.856	0.348
Max		7.623	7.925	0.423
Average		7.534	7.891	0.357
Min		7.448	7.856	0.285
Std Dev		0.053	0.022	0.040



13.31_SRA_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	7.879	7.884	7.886	7.856
Average	7.879	7.901	7.908	7.868
Max	7.879	7.911	7.925	7.877
UL	17.000	17.000	17.000	17.000

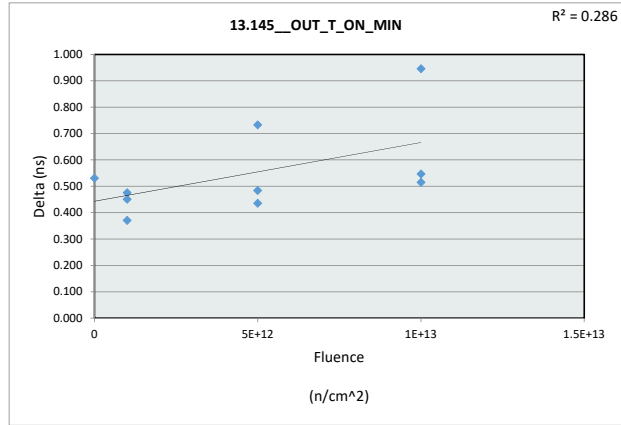


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.145_OUT_T_ON_MIN

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	115	115
Min Limit		

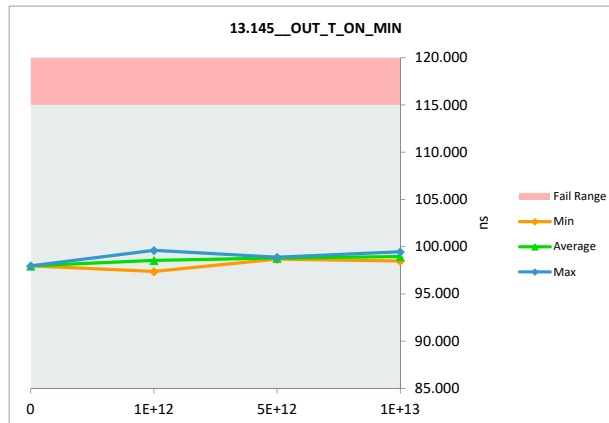
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	97.436	97.968	0.532
1E+12	129	99.170	99.622	0.452
1E+12	130	98.252	98.624	0.372
1E+12	131	96.910	97.387	0.477
5E+12	126	98.150	98.884	0.734
5E+12	127	98.251	98.688	0.437
5E+12	128	98.317	98.802	0.485
1E+13	123	98.509	99.456	0.947
1E+13	124	97.960	98.476	0.516
1E+13	125	98.412	98.960	0.548
Max		99.170	99.622	0.947
Average		98.137	98.687	0.550
Min		96.910	97.387	0.372
Std Dev		0.612	0.654	0.169



13.145_OUT_T_ON_MIN

Test Site		
Tester		
Test Number		
Max Limit	115	ns
Min Limit		ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL				
Min	97.968	97.387	98.688	98.476
Average	97.968	98.544	98.791	98.964
Max	97.968	99.622	98.884	99.456
UL	115.000	115.000	115.000	115.000

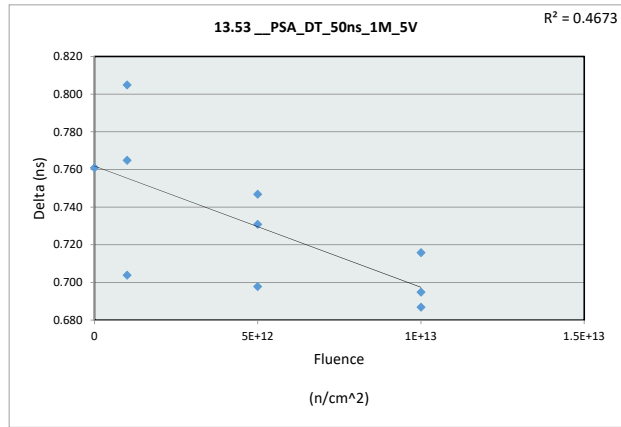


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.53 __PSA_DT_50ns_1M_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

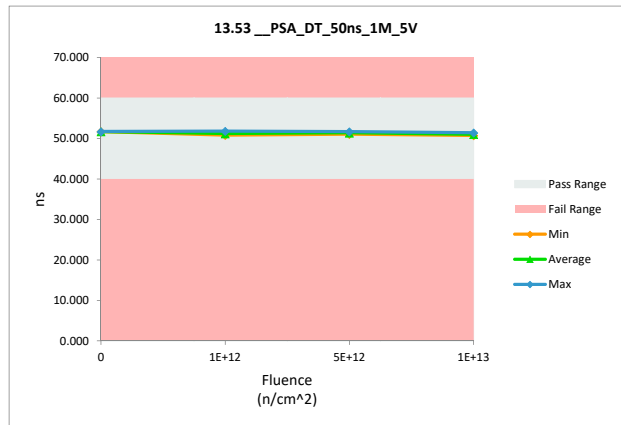
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	50.971	51.732	0.761
1E+12	129	51.135	51.839	0.704
1E+12	130	50.228	50.993	0.765
1E+12	131	50.022	50.827	0.805
5E+12	126	50.970	51.701	0.731
5E+12	127	50.751	51.449	0.698
5E+12	128	50.326	51.073	0.747
1E+13	123	50.755	51.442	0.687
1E+13	124	50.068	50.763	0.695
1E+13	125	50.175	50.891	0.716
Max		51.135	51.839	0.805
Average		50.540	51.271	0.731
Min		50.022	50.763	0.687
Std Dev		0.419	0.408	0.038



13.53 __PSA_DT_50ns_1M_5V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	51.732	50.827	51.073	50.763
Average	51.732	51.220	51.408	51.032
Max	51.732	51.839	51.701	51.442
UL	60.000	60.000	60.000	60.000

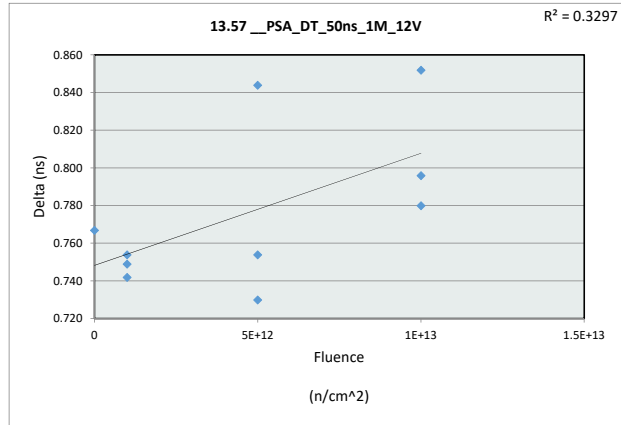


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.57 __ PSA_DT_50ns_1M_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

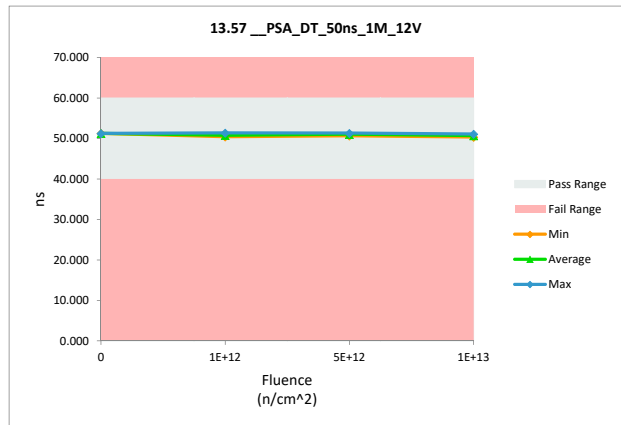
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	50.498	51.265	0.767
1E+12	129	50.647	51.389	0.742
1E+12	130	49.817	50.566	0.749
1E+12	131	49.694	50.448	0.754
5E+12	126	50.573	51.327	0.754
5E+12	127	50.295	51.139	0.844
5E+12	128	49.942	50.672	0.730
1E+13	123	50.353	51.133	0.780
1E+13	124	49.568	50.364	0.796
1E+13	125	49.783	50.635	0.852
Max		50.647	51.389	0.852
Average		50.117	50.894	0.777
Min		49.568	50.364	0.730
Std Dev		0.399	0.393	0.042



13.57 __ PSA_DT_50ns_1M_12V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	51.265	50.448	50.672	50.364
Average	51.265	50.801	51.046	50.711
Max	51.265	51.389	51.327	51.133
UL	60.000	60.000	60.000	60.000

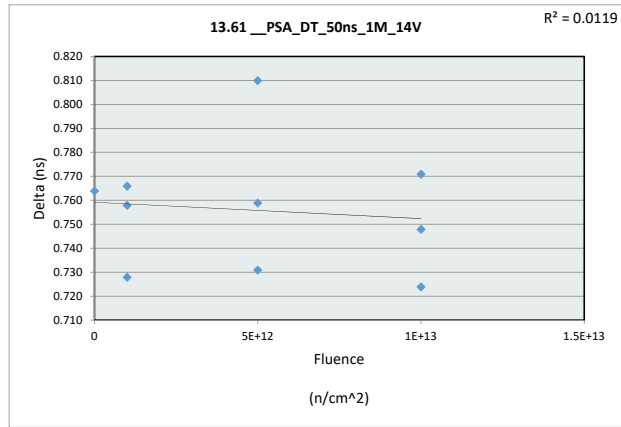


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.61_PSA_DT_50ns_1M_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

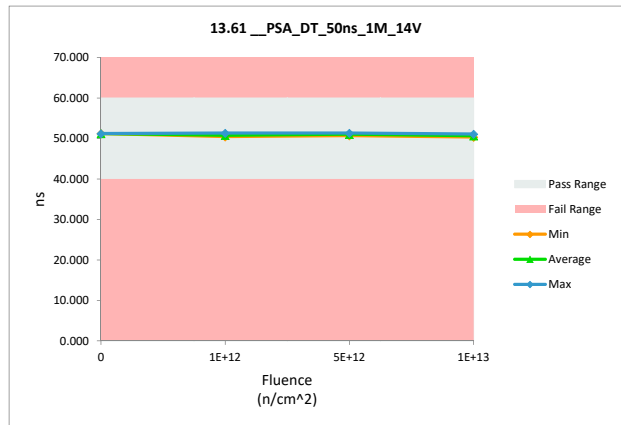
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	50.458	51.222	0.764
1E+12	129	50.645	51.373	0.728
1E+12	130	49.785	50.551	0.766
1E+12	131	49.702	50.460	0.758
5E+12	126	50.617	51.348	0.731
5E+12	127	50.308	51.118	0.810
5E+12	128	49.949	50.708	0.759
1E+13	123	50.380	51.128	0.748
1E+13	124	49.603	50.374	0.771
1E+13	125	49.856	50.580	0.724
Max		50.645	51.373	0.810
Average		50.130	50.886	0.756
Min		49.603	50.374	0.724
Std Dev		0.393	0.388	0.025



13.61_PSA_DT_50ns_1M_14V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	51.222	50.460	50.708	50.374
Average	51.222	50.795	51.058	50.694
Max	51.222	51.373	51.348	51.128
UL	60.000	60.000	60.000	60.000

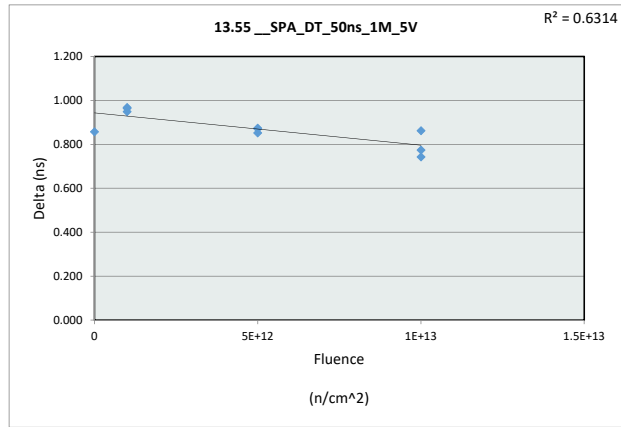


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.55 __SPA_DT_50ns_1M_5V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

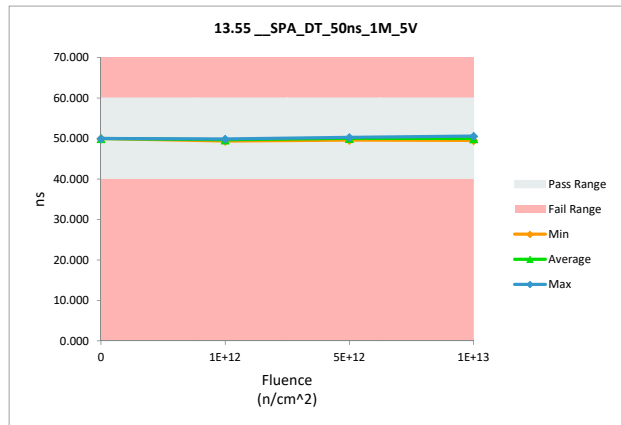
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	49.142	50.000	0.858
1E+12	129	48.946	49.896	0.950
1E+12	130	48.882	49.851	0.969
1E+12	131	48.416	49.381	0.965
5E+12	126	49.338	50.210	0.872
5E+12	127	49.431	50.284	0.853
5E+12	128	48.735	49.610	0.875
1E+13	123	49.073	49.817	0.744
1E+13	124	48.755	49.530	0.775
1E+13	125	49.742	50.605	0.863
Max		49.742	50.605	0.969
Average		49.046	49.918	0.872
Min		48.416	49.381	0.744
Std Dev		0.386	0.372	0.075



13.55 __SPA_DT_50ns_1M_5V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	50.000	49.381	49.610	49.530
Average	50.000	49.709	50.035	49.984
Max	50.000	49.896	50.284	50.605
UL	60.000	60.000	60.000	60.000

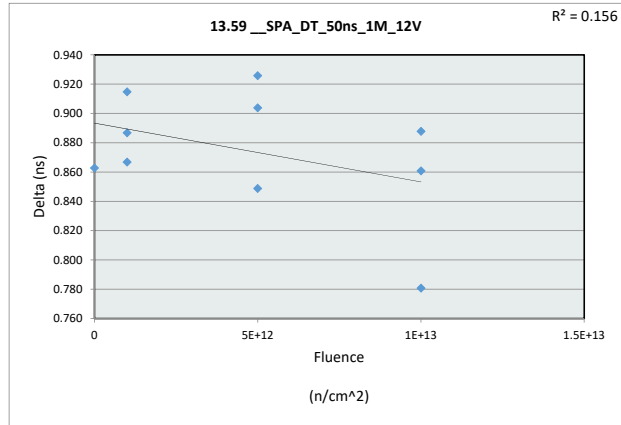


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.59 __SPA_DT_50ns_1M_12V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

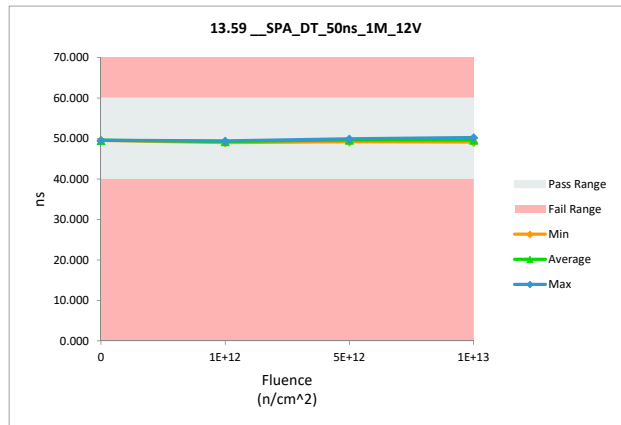
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	48.679	49.542	0.863
1E+12	129	48.543	49.410	0.867
1E+12	130	48.483	49.398	0.915
1E+12	131	48.090	48.977	0.887
5E+12	126	48.963	49.867	0.904
5E+12	127	48.996	49.922	0.926
5E+12	128	48.343	49.192	0.849
1E+13	123	48.661	49.549	0.888
1E+13	124	48.335	49.116	0.781
1E+13	125	49.408	50.269	0.861
Max		49.408	50.269	0.926
Average		48.650	49.524	0.874
Min		48.090	48.977	0.781
Std Dev		0.386	0.400	0.041



13.59 __SPA_DT_50ns_1M_12V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	49.542	48.977	49.192	49.116
Average	49.542	49.262	49.660	49.645
Max	49.542	49.410	49.922	50.269
UL	60.000	60.000	60.000	60.000

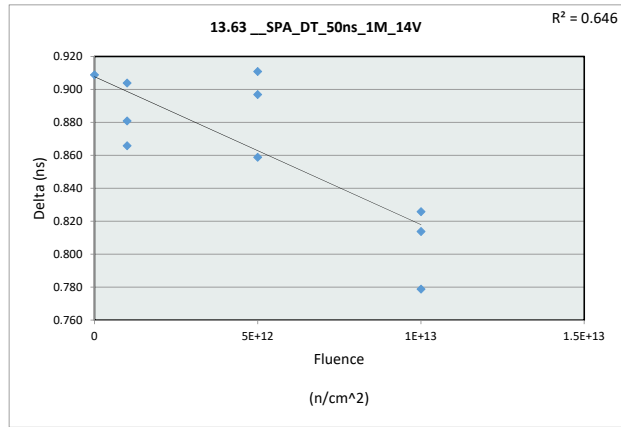


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.63_SPA_DT_50ns_1M_14V

Test Site		
Tester		
Test Number		
Unit	ns	ns
Max Limit	60	60
Min Limit	40	40

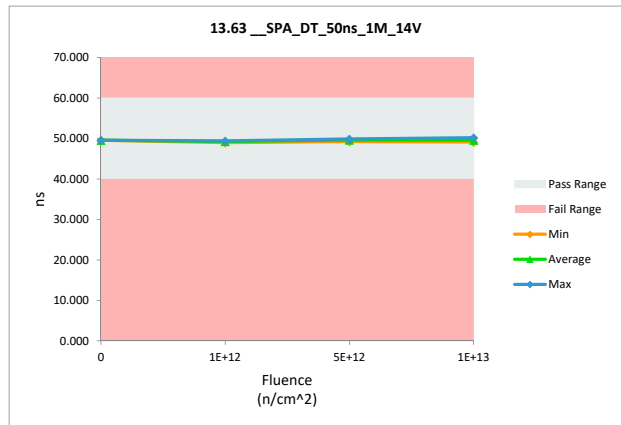
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	48.657	49.566	0.909
1E+12	129	48.523	49.427	0.904
1E+12	130	48.535	49.401	0.866
1E+12	131	48.106	48.987	0.881
5E+12	126	48.991	49.888	0.897
5E+12	127	48.987	49.846	0.859
5E+12	128	48.350	49.261	0.911
1E+13	123	48.704	49.483	0.779
1E+13	124	48.296	49.122	0.826
1E+13	125	49.413	50.227	0.814
Max		49.413	50.227	0.911
Average		48.656	49.521	0.865
Min		48.106	48.987	0.779
Std Dev		0.388	0.377	0.045



13.63_SPA_DT_50ns_1M_14V

Test Site		
Tester		
Test Number		
Max Limit	60	ns
Min Limit	40	ns

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	40.000	40.000	40.000	40.000
Min	49.566	48.987	49.261	49.122
Average	49.566	49.272	49.665	49.611
Max	49.566	49.427	49.888	50.227
UL	60.000	60.000	60.000	60.000

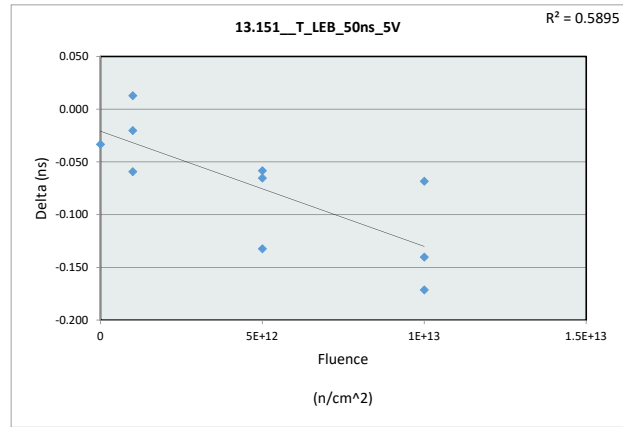


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.151_T_LEB_50ns_5V

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

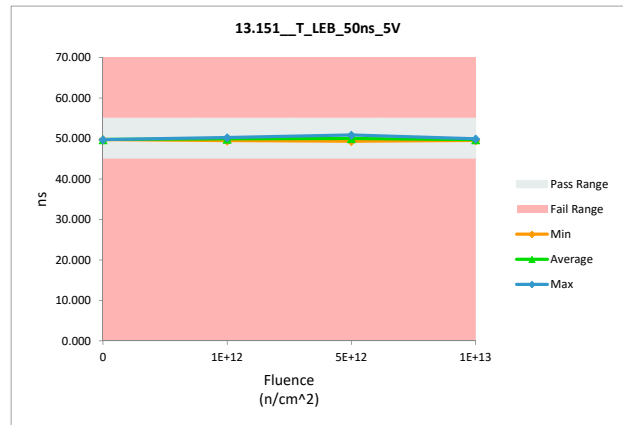
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	49.782	49.749	-0.033
1E+12	129	50.075	50.016	-0.059
1E+12	130	50.232	50.245	0.013
1E+12	131	49.483	49.463	-0.020
5E+12	126	49.896	49.838	-0.058
5E+12	127	49.414	49.349	-0.065
5E+12	128	51.004	50.872	-0.132
1E+13	123	49.593	49.525	-0.068
1E+13	124	50.070	49.930	-0.140
1E+13	125	49.945	49.774	-0.171
Max		51.004	50.872	0.013
Average		49.949	49.876	-0.073
Min		49.414	49.349	-0.171
Std Dev		0.458	0.441	0.058



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	49.749	49.463	49.349	49.525
Average	49.749	49.908	50.020	49.743
Max	49.749	50.245	50.872	49.930
UL	55.000	55.000	55.000	55.000

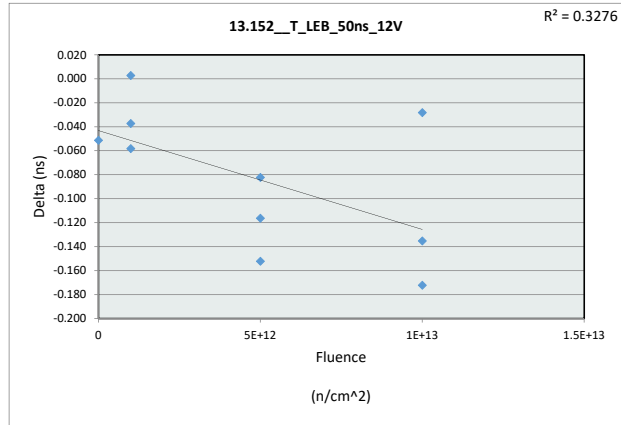


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.152_T_LEB_50ns_12V

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

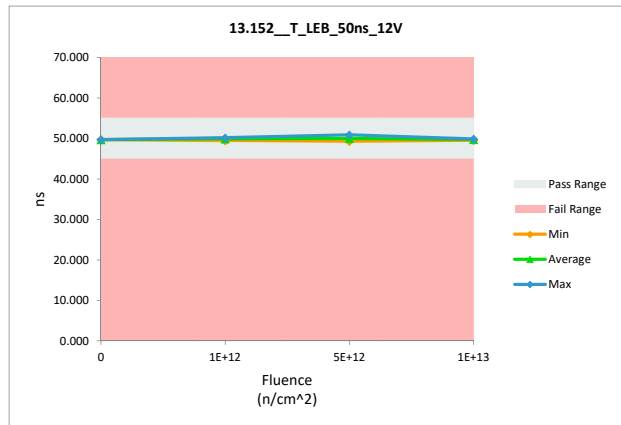
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	49.807	49.756	-0.051
1E+12	129	50.143	50.106	-0.037
1E+12	130	50.242	50.184	-0.058
1E+12	131	49.505	49.508	0.003
5E+12	126	49.933	49.817	-0.116
5E+12	127	49.480	49.328	-0.152
5E+12	128	51.025	50.943	-0.082
1E+13	123	49.600	49.572	-0.028
1E+13	124	50.057	49.885	-0.172
1E+13	125	49.961	49.826	-0.135
Max		51.025	50.943	0.003
Average		49.975	49.892	-0.083
Min		49.480	49.328	-0.172
Std Dev		0.453	0.451	0.058



13.152_T_LEB_50ns_12V

Test Site	
Tester	
Test Number	
Max Limit	55
Min Limit	45

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	45.000	45.000	45.000	45.000
Min	49.756	49.508	49.328	49.572
Average	49.756	49.933	50.029	49.761
Max	49.756	50.184	50.943	49.885
UL	55.000	55.000	55.000	55.000

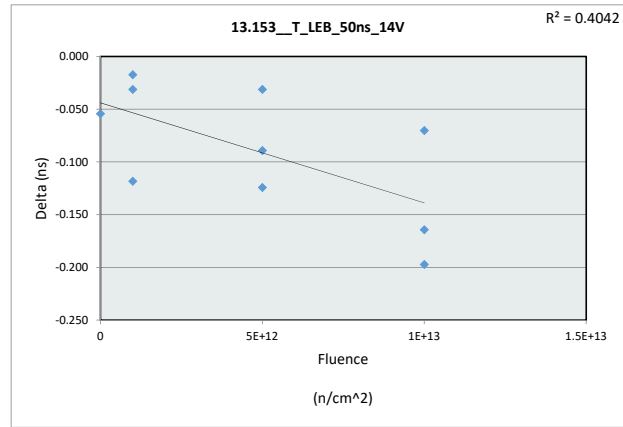


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.153_T_LEB_50ns_14V

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

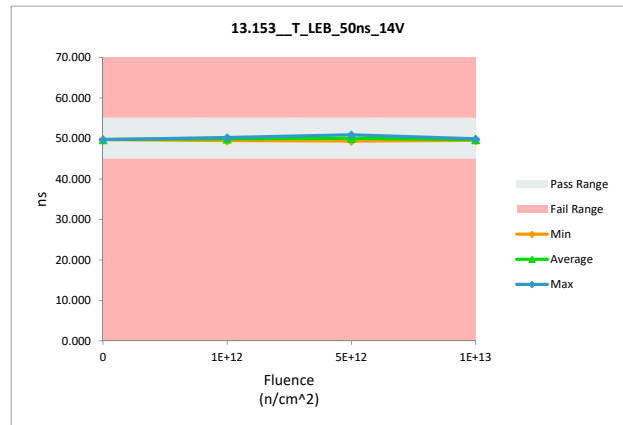
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	49.805	49.751	-0.054
1E+12	129	50.158	50.040	-0.118
1E+12	130	50.256	50.239	-0.017
1E+12	131	49.509	49.478	-0.031
5E+12	126	49.939	49.815	-0.124
5E+12	127	49.420	49.389	-0.031
5E+12	128	51.023	50.934	-0.089
1E+13	123	49.609	49.539	-0.070
1E+13	124	50.090	49.926	-0.164
1E+13	125	49.983	49.786	-0.197
Max		51.023	50.934	-0.017
Average		49.979	49.890	-0.090
Min		49.420	49.389	-0.197
Std Dev		0.461	0.449	0.060



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	49.751	49.478	49.389	49.539
Average	49.751	49.919	50.046	49.750
Max	49.751	50.239	50.934	49.926
UL	55.000	55.000	55.000	55.000

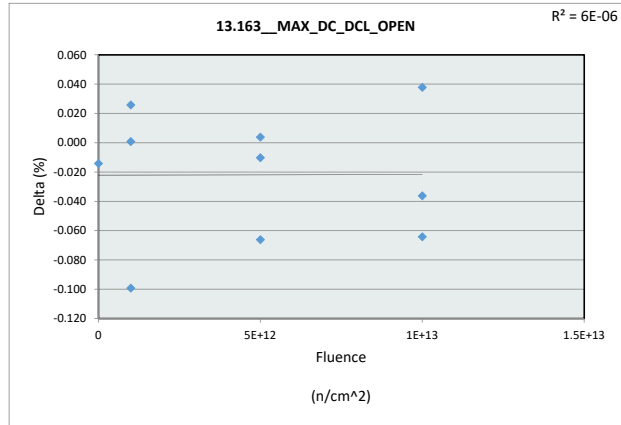


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.163_MAX_DC_DCL_OPEN

Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	80	80
Min Limit	70	70

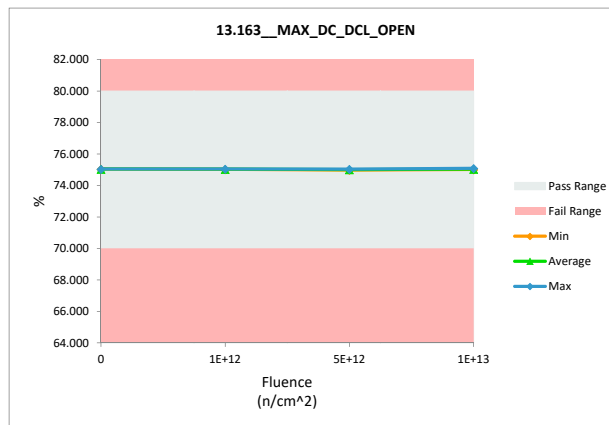
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	75.060	75.046	-0.014
1E+12	129	75.120	75.021	-0.099
1E+12	130	75.004	75.030	0.026
1E+12	131	75.050	75.051	0.001
5E+12	126	75.033	75.037	0.004
5E+12	127	75.066	75.000	-0.066
5E+12	128	74.992	74.982	-0.010
1E+13	123	75.082	75.018	-0.064
1E+13	124	75.048	75.012	-0.036
1E+13	125	75.054	75.092	0.038
Max		75.120	75.092	0.038
Average		75.051	75.029	-0.022
Min		74.992	74.982	-0.099
Std Dev		0.037	0.030	0.044



13.163_MAX_DC_DCL_OPEN

Test Site		
Tester		
Test Number		
Max Limit	80	%
Min Limit	70	%

Fluence (n/cm ²)	0	1E+12	5E+12	1E+13
LL	70.000	70.000	70.000	70.000
Min	75.046	75.021	74.982	75.012
Average	75.046	75.034	75.006	75.041
Max	75.046	75.051	75.037	75.092
UL	80.000	80.000	80.000	80.000

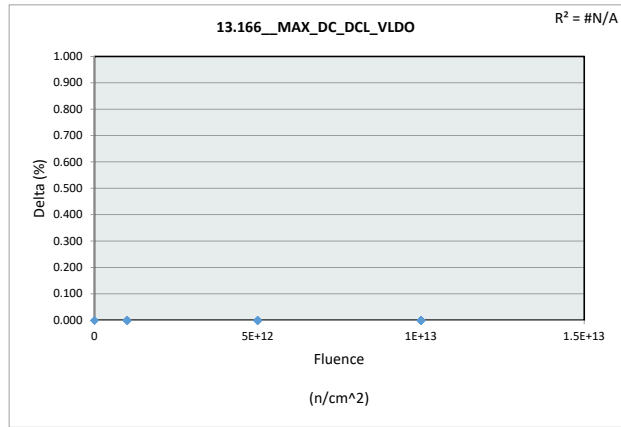


Neutron Displacement Damage (NDD) Report TPS7H5003-SP

13.166_MAX_DC_DCL_VLDO

Test Site		
Tester		
Test Number		
Unit	%	%
Max Limit	100	100
Min Limit		

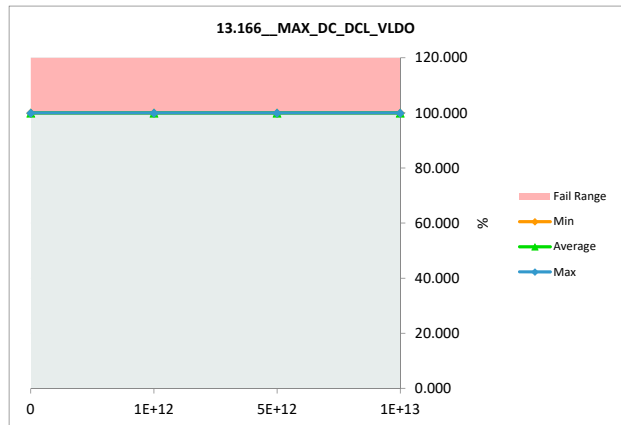
Fluence (n/cm ²)	Serial #	PRE	POST	Delta
0	132	100.000	100.000	0.000
1E+12	129	100.000	100.000	0.000
1E+12	130	100.000	100.000	0.000
1E+12	131	100.000	100.000	0.000
5E+12	126	100.000	100.000	0.000
5E+12	127	100.000	100.000	0.000
5E+12	128	100.000	100.000	0.000
1E+13	123	100.000	100.000	0.000
1E+13	124	100.000	100.000	0.000
1E+13	125	100.000	100.000	0.000
Max		100.000	100.000	0.000
Average		100.000	100.000	0.000
Min		100.000	100.000	0.000
Std Dev		0.000	0.000	0.000



13.166_MAX_DC_DCL_VLDO

Test Site		
Tester		
Test Number		
Max Limit	100	%
Min Limit		%

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



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