# Reliability Report TRF0206-SP (5962R2122001VXC) Neutron Displacement Damage Characterization



## ABSTRACT

This report presents the effect of neutron displacement damage (NDD) on the TRF0206-SP device. The results show that all devices were fully functional and within production test limits after having been irradiated up to 1 × 1013 n/cm<sup>2</sup> (1-MeV equivalent). A sample size of fifteen units was exposed to radiation testing per (MIL-STD-883, Method 1017 for Neutron Irradiation) and an additional unirradiated sample device was used for correlation. All devices used in the experiment were from lot date code 2227B and assembly lot 2007400. Electrical testing was performed at Texas Instruments before and after neutron irradiation using the production test program for 5962R2122001VXC.

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# 1 Overview

The TRF0206-SP is a very high-performance, radiation hardened, differential amplifier optimized for radio frequency (RF), intermediate frequency (IF), or high-speed applications. The device is ideal for ac-coupled applications that may require a single-ended-to-differential (S2D) conversion when driving an analog-to-digital converter (ADC). The TRF0206-SP generates very low levels of second- and third-order distortion upto very high frequencies. General device information and testing conditions are listed in Table 1-1.

TI Part Number	TRF0206-SP					
SMD Number	5962-21220					
Device Function	6.5 GHz Bandwidth, High-linearity ADC Driver Amplifier					
Die Name	RTRF0206A0					
Technology	RF SiGe					
A/T Lot Number / Date Code	2007400 / 2227B					
Unbiased Quantity Tested	9					
Exposure Facility	VPT Rad					
Neutron Fluence (1-MeV Equivalent)	$1.0 \times 10^{12}, 5.0 \times 10^{12}, 1.0 \times 10^{13} \text{ n/cm}^2$					
Irradiation Temperature	25°C					
TI may provide technical applications or design advice quality chara	cterization, and reliability data or service providing these items shall					

### Table 1-1. Overview Information

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# **2 Test Procedures**

The TRF0206-SP was electrically pre-tested using the production automated test equipment program. General test procedures were IAW MIL-STD-883, Method 1017 for Neutron Irradiation of TRF0206-SP as modified in Table 2-1.

Group	Group Sample Qty Neutron Fluence (n/cm <sup>2</sup> )							
А	3	1.0 × 10 <sup>12</sup>	Unbiased					
В	3	5.0 × 10 <sup>12</sup>	Unbiased					
С	3	1.0 × 10 <sup>13</sup>	Unbiased					

# Table 2-1 Neutron Irradiation Conditions



Figure 2-1. TRF0206-SP Device



# 3 Facility

The University of Massachusetts's Fast Neutron Irradiation (FNI) facility is an experimental facility replaces three beam ports that originally existed on the left side of the research reactor. It is designed to give a fast flux level  $\geq 1011 \text{ n/cm}^2\text{-s}$ , with relatively low thermal fluence and gamma dose rates. Samples with a cross-sectional area as large as 30 cm (12 in) × 30 cm (12 in) and up to 15 cm (6 in) thick can be irradiated. The fast neutron flux is designed to be nearly uniform over the 30 cm (12 in) × 30 cm (12 in) area facing the core, and the fast fluence variation through the sample thickness is minimized via a single 180° rotation of the sample canister at the midpoint of the irradiation period. The FNI facility offers a significantly larger sample volume than previously available within the University of Massachusetts Lowell Research Reactor (UMLRR). The fluences are calculated based on 1-MeV equivalences.

Detailed information of the radiation facility is available at the following link: www.uml.edu/docs/ FNI%20Brochure\_tcm18-90375.pdf

# 4 Results

There were no functional failures at any irradiation level. All parametric measurements remained well within data sheet (SBOSA52A) limits and within the production test limits, which are guard-banded from the data sheet limits for all exposure levels. The full parameter list and graphs are found in Appendix A. In the graphs, Delta and Delta % refer to the deviation due to radiation exposure.

Delta = Pre NDD - Post NDD

Delta % = Delta / Pre NDD

% of Limit Range = ABS (Delta) / ABS (Max Limit - Min Limit)

The Fail Limit range is a guard-banded limit that Texas Instruments puts into test programs to insure device performance. It is always set within the data sheet limits to insure the device meets all data sheet parameters. In case of some parameters, the % of Limit Range is showing high due to tight test limit range, but the maximum Delta % is about 5%. Texas Instruments has collected more parameters than what is shown in this report for characterization purposes.

# A Test Results

This appendix contains the detailed test results.





1E+12

Fluence

5E+12

-15000.000

1E+13

	Radaitio NDD Rep TRF0206	n Site: VP port 5-SP	T Rad				
		5.16G TRF cur	r postfuse nor				
	Test Site	CLAB	CLAB				
	Tester	ETS36402	ETS36402				4.00
	Test Number	EB726500	EB726500				3.50
	Unit	mAMPS	mAMPS				3.00
	Max Limit	10000	10000				\$ 3.00
	Min Limit	-10000	-10000				2.50
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range	£ 2.00
0	24	128.584	125.204	3.379	2.63%	0.02%	5 1 50
1E+12	1	124.911	121.823	3.088	2.47%	0.02%	100
1E+12	82	125.706	122.979	2.727	2.17%	0.01%	1.00
1E+12	96	127.788	124.257	3.531	2.76%	0.02%	0.50
5E+12	38	125.409	122.241	3.168	2.53%	0.02%	0.00
5E+12	42	127.941	124.509	3.432	2.68%	0.02%	0.00
5E+12	65	127.980	124.557	3.423	2.67%	0.02%	
1E+13	34	126.342	122.913	3.429	2.71%	0.02%	
1E+13	52	125.483	122.329	3.155	2.51%	0.02%	
1E+13	68	126.849	123.803	3.046	2.40%	0.02%	
	Max	128.584	125.204	3.531	2.76%	0.02%	
	Average	126.699	123.462	3.238	2.55%	0.02%	Test Site
	Min	124.911	121.823	2.727	2.17%	0.01%	Tester
	Std Dev	1.308	1.158	0.247	0.18%	0.00%	Test Nur



Fluence



		5.16G_Fund1_	postfuse_noms			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-12,89999962	-12,44999981			
	Min Limit	-15.89999962	-16.45000076			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Ran
0	24	-14.233	-13.481	-0.752	5.29%	25.08%
1E+12	1	-13.716	-13.462	-0.254	1.85%	8.47%
1E+12	82	-14.302	-13.614	-0.689	4.82%	22.96%
1E+12	96	-14.394	-13.593	-0.801	5.56%	26.70%
5E+12	38	-14.235	-13.512	-0.724	5.08%	24.12%
5E+12	42	-14.248	-13.488	-0.760	5.33%	25.33%
5E+12	65	-14.400	-13.649	-0.751	5.22%	25.04%
1E+13	34	-14.267	-13,501	-0.766	5.37%	25,54%
1E+13	52	-14.313	-13.623	-0.691	4.82%	23.02%
1E+13	68	-14.209	-13.487	-0.721	5.08%	24.05%
	Max	-13.716	-13.462	-0.254	5.56%	26.70%
	Average	-14.232	-13.541	-0.691	4.84%	23.03%
	Min	-14.400	-13.649	-0.801	1.85%	8.47%
	Std Dev	0.193	0.070	0.157	1.08%	5.24%





5.16G\_Fund1\_postfuse\_nomsupply 0.000 5E+12 1E+1 1E+12 -2.000 -4.000 -6.000 Pass Rang Fail Range -8.000 -10.000 -12.000 -14.000 ---- Max -16.000 -18.000 Fluence

Radaition Site: VPT Rad NDD Report TRF0206-SP

		5.16G_Fund2_	postfuse_nomsi			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.11999989	-12.72000027			
	Min Limit	-16.12000084	-16.71999931			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.507	-13.807	-0.700	4.83%	23.35%
1E+12	1	-13.978	-13.786	-0.192	1.37%	6.40%
1E+12	82	-14.563	-13.942	-0.621	4.26%	20.69%
1E+12	96	-14.662	-13.917	-0.745	5.08%	24.83%
5E+12	38	-14.499	-13.829	-0.670	4.62%	22.33%
5E+12	42	-14.515	-13.803	-0.712	4.91%	23.74%
5E+12	65	-14.662	-13.973	-0.689	4.70%	22.97%
1E+13	34	-14.538	-13.815	-0.723	4.97%	24.10%
1E+13	52	-14.584	-13.936	-0.648	4.44%	21.61%
1E+13	68	-14.473	-13.802	-0.671	4.64%	22.38%
	Max	-13.978	-13.786	-0.192	5.08%	24.83%
	Average	-14.498	-13.861	-0.637	4.38%	21.24%
	Min	-14.662	-13.973	-0.745	1.37%	6.40%
	Std Dev	0.194	0.072	0.161	1.09%	5.35%











	Test Site	S.16G_dBFS1_	CLAR			
	Test Sile	CDAD STORE	CDAD CTC2C402			
	Tester Test Number	E1530402	E1530402			
	rest number	ED/20500	ED/20500			
	Unit	dB	0B			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Ra
0	24	-81.590	-80.254	-1.336	1.64%	0.01%
E+12	1	-82.443	-82.123	-0.320	0.39%	0.00%
E+12	82	-81.271	-80.425	-0.846	1.04%	0.00%
E+12	96	-80.871	-79.832	-1.039	1.29%	0.01%
E+12	38	-84.368	-83.536	-0.833	0.99%	0.00%
5E+12	42	-81.153	-80.271	-0.882	1.09%	0.00%
E+12	65	-81.845	-81.089	-0.757	0.92%	0.00%
E+13	34	-80.503	-79.114	-1.389	1.73%	0.01%
E+13	52	-80.944	-80.107	-0.837	1.03%	0.00%
E+13	68	-82.379	-81.422	-0.956	1.16%	0.00%
	Max	-80.503	-79.114	-0.320	1.73%	0.01%
	Average	-81.737	-80.817	-0.919	1.13%	0.00%
	Min	-84.368	-83.536	-1.389	0.39%	0.00%
	Std Dev	1.122	1.277	0.301	0.38%	0.00%







		5.16G_dBFs2_p	oostfuse_nomsu			
-	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-81.818	-80.856	-0.962	1.18%	0.00%
1E+12	1	-83.279	-83.075	-0.204	0.25%	0.00%
1E+12	82	-82.034	-81.181	-0.854	1.04%	0.00%
1E+12	96	-81.691	-80.849	-0.842	1.03%	0.00%
5E+12	38	-85.004	-84.738	-0.266	0.31%	0.00%
5E+12	42	-81.754	-80.759	-0.995	1.22%	0.00%
5E+12	65	-82.518	-81.473	-1.045	1.27%	0.01%
1E+13	34	-81.097	-79.995	-1.101	1.36%	0.01%
1E+13	52	-81.568	-81.081	-0.487	0.60%	0.00%
1E+13	68	-81.626	-82.256	0.630	-0.77%	0.00%
	Max	-81.097	-79.995	0.630	1.36%	0.01%
	Average	-82.239	-81.626	-0.613	0.75%	0.00%
	Min	-85.004	-84.738	-1.101	-0.77%	0.00%
	Std Dev	1,140	1.387	0.543	0.67%	0.00%





15000.000	1				
10000.000	-				
5000.000					Pass Baner
8 0.000	-	15+12	55+12	16+13	Min
-5000.000	-				Average Max
-10000.000					
15000.000					





	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	62	62			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	67.311	67.049	0.262	0.39%	0.79%
1E+12	1	69.301	69.289	0.012	0.02%	0.04%
1E+12	82	67.471	67.238	0.233	0.35%	0.71%
1E+12	96	67.029	66.931	0.097	0.15%	0.30%
5E+12	38	70.505	70.909	-0.404	-0.57%	1.22%
5E+12	42	67.239	66.956	0.283	0.42%	0.86%
5E+12	65	67.856	67.500	0.356	0.52%	1.08%
1E+13	34	66.559	66.181	0.378	0.57%	1.15%
1E+13	52	66.984	67.145	-0.161	-0.24%	0.49%
1E+13	68	67.153	68.454	-1.301	-1.94%	3.94%
	Max	70.505	70.909	0.378	0.57%	3.94%
	Average	67.741	67.765	-0.024	-0.03%	1.06%
	Min	66,559	66.181	-1.301	-1.94%	0.04%
	Std Dev	1.221	1,406	0.512	0.76%	1.08%











		TRF_input_con	nmon_mode_no			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	0.971000016	0.968999982			
	Min Limit	0.839999974	0.806999981			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	0.907	0.914	-0.007	-0.73%	5.03%
LE+12	1	0.927	0.934	-0.007	-0.78%	5.51%
LE+12	82	0.911	0.917	-0.006	-0.66%	4.58%
LE+12	96	0.917	0.925	-0.008	-0.83%	5.84%
5E+12	38	0.919	0.926	-0.006	-0.70%	4.89%
5E+12	42	0.907	0.911	-0.005	-0.54%	3.76%
5E+12	65	0.917	0.922	-0.005	-0.54%	3.81%
LE+13	34	0.916	0.923	-0.008	-0.82%	5.74%
LE+13	52	0.911	0.918	-0.007	-0.74%	5.17%
LE+13	68	0.923	0.930	-0.006	-0.66%	4.64%
	Max	0.927	0.934	-0.005	-0.54%	5.84%
	Average	0.916	0.922	-0.006	-0.70%	4.90%
	Min	0.907	0.911	-0.008	-0.83%	3.76%
	Std Dev	0.007	0.007	0.001	0.10%	0.72%











		5.16G_Fund1_p	ostfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-12.86999989	-12.5			
	Min Limit	-15.86999989	-16.5			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.257	-13.504	-0.753	5.28%	25.10%
1E+12	1	-13.735	-13.488	-0.247	1.80%	8.23%
1E+12	82	-14.323	-13.642	-0.681	4.75%	22.70%
1E+12	96	-14.415	-13.618	-0.796	5.52%	26.54%
5E+12	38	-14.259	-13.539	-0.719	5.04%	23.98%
5E+12	42	-14.270	-13.516	-0.754	5.28%	25.13%
5E+12	65	-14.422	-13.683	-0.740	5.13%	24.65%
1E+13	34	-14.287	-13.523	-0.764	5.35%	25.46%
1E+13	52	-14.334	-13.652	-0.682	4.76%	22.72%
1E+13	68	-14.229	-13.513	-0.715	5.03%	23.84%
	Max	-13.735	-13.488	-0.247	5.52%	26.54%
	Average	-14.253	-13.568	-0.685	4.79%	22.84%
	Min	-14.422	-13.683	-0.796	1.80%	8.23%
	Std Dev	0.193	0.073	0.158	1.08%	5.27%





	0.000		03100		
	-2.000	1E+12	5E+12	16+13	
	-4.000 -				
	-6.000 -				Pass Range
m	-8.000 -				Fail Range
σ	-10.000 -				Min
	-12.000 -				Average
	-14.000	•	•	-	Max
	-16.000 -				
	18.000				



	5	5.16G_Fund2_	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.13000011	-12.77999973			
	Min Limit	-16.12999916	-16.78000069			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-14.531	-13.832	-0.699	4.81%	23.29%
LE+12	1	-13.995	-13.814	-0.181	1.29%	6.02%
1E+12	82	-14.589	-13.972	-0.617	4.23%	20.56%
1E+12	96	-14.681	-13.944	-0.737	5.02%	24.57%
5E+12	38	-14.524	-13.862	-0.662	4.56%	22.06%
5E+12	42	-14.538	-13.833	-0.705	4.85%	23.50%
5E+12	65	-14.687	-14.001	-0.686	4.67%	22.85%
LE+13	34	-14.554	-13.841	-0.713	4.90%	23.76%
LE+13	52	-14.604	-13.968	-0.636	4.35%	21.19%
LE+13	68	-14.496	-13.831	-0.664	4.58%	22.14%
	Max	-13.995	-13.814	-0.181	5.02%	24.57%
	Average	-14.520	-13.890	-0.630	4.33%	20.99%
	Min	-14.687	-14.001	-0.737	1.29%	6.02%
	Std Dev	0.195	0.072	0.162	1.09%	5.40%



 -8.000
 Fail Range

 -12.000

 -14.000

 -15.000

 -16.000

 -18.000

 -18.000

		5.16G dBFs1 p	postfuse lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-82.573	-81.751	-0.822	1.00%	0.00%
1E+12	1	-84.017	-83.883	-0.133	0.16%	0.00%
1E+12	82	-82.905	-82.003	-0.903	1.09%	0.00%
1E+12	96	-82.201	-81.416	-0.785	0.95%	0.00%
5E+12	38	-85.513	-85.246	-0.266	0.31%	0.00%
5E+12	42	-82.563	-81.521	-1.042	1.26%	0.01%
5E+12	65	-83.631	-82.383	-1.248	1.49%	0.01%
1E+13	34	-81.560	-80.548	-1.012	1.24%	0.01%
1E+13	52	-82.598	-81.333	-1.265	1.53%	0.01%
1E+13	68	-84.559	-82.893	-1.666	1.97%	0.01%
	Max	-81.560	-80.548	-0.133	1.97%	0.01%
	Average	-83,212	-82,298	-0.914	1.10%	0.00%
	Min	-85,513	-85,246	-1.666	0.16%	0.00%
	Std Dev	1.201	1.388	0.457	0.55%	0.00%





45000.000	ited_doibi_p	ostrase_ion.	oppij	
15000.000			4	
10000.000				
5000.000				PassRange
# 0.000				Min
-5000.000	11412	50+12	10+15	Average Max
-10000.000			-	
-15000.000				



		5.16G dBFs2	oostfuse lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-83.584	-82.307	-1.277	1.53%	0.01%
1E+12	1	-84.922	-85.160	0.238	-0.28%	0.00%
1E+12	82	-83.732	-82.629	-1.103	1.32%	0.01%
1E+12	96	-82.838	-82.188	-0.651	0.79%	0.00%
5E+12	38	-86.836	-86.551	-0.285	0.33%	0.00%
5E+12	42	-82.864	-82.107	-0.757	0.91%	0.00%
5E+12	65	-83.955	-83.521	-0.435	0.52%	0.00%
1E+13	34	-82.304	-81.161	-1.143	1.39%	0.01%
1E+13	52	-83.178	-82.546	-0.632	0.76%	0.00%
1E+13	68	-84.502	-83.988	-0.514	0.61%	0.00%
	Max	-82.304	-81.161	0.238	1.53%	0.01%
	Average	-83.872	-83.216	-0.656	0.79%	0.00%
	Min	-86.836	-86.551	-1.277	-0.28%	0.00%
	Std Dev	1.309	1.623	0.452	0.54%	0.00%



est Site	CLAB			
ester	ETS36402			
est Number	EB726500			
lax Limit	10000	dB		
Ain Limit	-10000	dB		
Fluence	0	1E+12	5E+12	1E+13
LL	-10000.000	-10000.000	-10000.000	-10000.000
Min	-82.307	-85.160	-86.551	-83.988
Average	-82.307	-83.326	-84.060	-82.565
Max	-82.307	-82.188	-82.107	-81.161
UL	10000.000	10000.000	10000.000	10000.000
				2



3		5.16G_dBc1_pc	ostfuse_lowsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	62	62			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	68.316	68.247	0.069	0.10%	0.21%
LE+12	1	70.282	70.396	-0.114	-0.16%	0.35%
LE+12	82	68.583	68.361	0.222	0.32%	0.67%
LE+12	96	67.786	67.797	-0.011	-0.02%	0.03%
5E+12	38	71.254	71.707	-0.453	-0.64%	1.37%
5E+12	42	68.293	68.005	0.288	0.42%	0.87%
E+12	65	69.208	68.700	0.508	0.73%	1.54%
E+13	34	67.273	67.025	0.248	0.37%	0.75%
E+13	52	68.264	67.681	0.583	0.85%	1.77%
E+13	68	70.330	69.379	0.951	1.35%	2.88%
	Max	71.254	71.707	0.951	1.35%	2.88%
	Average	68.959	68.730	0.229	0.33%	1.04%
	Min	67.273	67.025	-0.453	-0.64%	0.03%
	Std Dev	1.276	1,408	0.394	0.56%	0.86%









		5.16G_dBc2_pc	ostfuse_lowsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	62	62			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	69.053	68.475	0.578	0.84%	1.75%
1E+12	1	70.926	71.345	-0.419	-0.59%	1.27%
1E+12	82	69.143	68.657	0.486	0.70%	1.47%
1E+12	96	68.157	68.243	-0.087	-0.13%	0.26%
5E+12	38	72.313	72.689	-0.376	-0.52%	1.14%
5E+12	42	68.326	68.275	0.052	0.08%	0.16%
5E+12	65	69.269	69.519	-0.251	-0.36%	0.76%
1E+13	34	67.750	67.320	0.430	0.64%	1.30%
1E+13	52	68.574	68.578	-0.004	-0.01%	0.01%
1E+13	68	70.006	70.156	-0.150	-0.21%	0.45%
	Max	72.313	72.689	0.578	0.84%	1.75%
	Average	69.352	69.326	0.026	0.04%	0.86%
	Min	67.750	67.320	-0.419	-0.59%	0.01%
	Std Dev	1.393	1.638	0.359	0.52%	0.61%







		TRF output co	mmon mode le			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	1.082000017	1.077000022			
	Min Limit	1.006999969	0.98299998			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	1.040	1.044	-0.004	-0.34%	4.76%
1E+12	1	1.054	1.058	-0.004	-0.37%	5.22%
1E+12	82	1.050	1.053	-0.003	-0.30%	4.17%
1E+12	96	1.046	1.050	-0.004	-0.41%	5.74%
5E+12	38	1.056	1.060	-0.005	-0.45%	6.28%
5E+12	42	1.039	1.042	-0.003	-0.24%	3.35%
5E+12	65	1.032	1.034	-0.002	-0.18%	2.48%
1E+13	34	1.051	1.055	-0.004	-0.40%	5.63%
1E+13	52	1.060	1.063	-0.003	-0.33%	4.64%
1E+13	68	1.061	1.064	-0.004	-0.37%	5.23%
	Max	1.061	1.064	-0.002	-0.18%	6.28%
	Average	1.049	1.052	-0.004	-0.34%	4.75%
	Min	1.032	1.034	-0.005	-0.45%	2.48%
	Std Dev	0.009	0.010	0.001	0.08%	1,16%









		TRF_input_con	nmon_mode_lov			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	0.879999995	0.879999995			
1	Min Limit	0.75	0.734000027			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	0.818	0.825	-0.006	-0.74%	4.68%
1E+12	1	0.838	0.844	-0.007	-0.79%	5.06%
1E+12	82	0.823	0.828	-0.005	-0.62%	3.93%
1E+12	96	0.828	0.835	-0.007	-0.82%	5.23%
5E+12	38	0.830	0.836	-0.006	-0.70%	4.49%
5E+12	42	0.817	0.821	-0.004	-0.48%	3.03%
5E+12	65	0.828	0.832	-0.004	-0.49%	3.11%
1E+13	34	0.826	0.833	-0.006	-0.76%	4.83%
1E+13	52	0.822	0.828	-0.006	-0.73%	4.60%
1E+13	68	0.834	0.839	-0.005	-0.60%	3.83%
	Max	0.838	0.844	-0.004	-0.48%	5.23%
	Average	0.827	0.832	-0.006	-0.67%	4.28%
	Min	0.817	0.821	-0.007	-0.82%	3.03%
	Std Dev	0.007	0.007	0.001	0.12%	0.77%







		5.16G TRF cu	r postfuse hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	131.030	127.198	3.832	2.92%	0.02%
1E+12	1	127.260	123.707	3.553	2.79%	0.02%
1E+12	82	128.091	124.933	3.158	2.47%	0.02%
1E+12	96	130.113	126.250	3.862	2.97%	0.02%
5E+12	38	127.804	124.130	3.674	2.87%	0.02%
5E+12	42	130.348	126.481	3.867	2.97%	0.02%
5E+12	65	130.322	126.599	3.723	2.86%	0.02%
1E+13	34	128.687	124.730	3.957	3.08%	0.02%
1E+13	52	127.804	124.232	3.573	2.80%	0.02%
1E+13	68	129.263	125.794	3.469	2.68%	0.02%
	Max	131.030	127.198	3.957	3.08%	0.02%
	Average	129.072	125.405	3.667	2.84%	0.02%
	Min	127.260	123.707	3.158	2.47%	0.02%
	Std Dev	1.323	1.212	0.239	0.17%	0.00%









		TRF_input_con	nmon_mode_hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	1.06099999	1.059999943			
	Min Limit	0.92900002	0.879999995			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	0.996	1.004	-0.008	-0.80%	6.00%
1E+12	1	1.016	1.024	-0.008	-0.80%	6.19%
1E+12	82	1.000	1.007	-0.007	-0.70%	5.29%
1E+12	96	1.005	1.014	-0.009	-0.86%	6.52%
5E+12	38	1.008	1.016	-0.007	-0.73%	5.57%
5E+12	42	0.996	1.001	-0.006	-0.57%	4.31%
5E+12	65	1.006	1.012	-0.006	-0.60%	4.58%
1E+13	34	1.005	1.013	-0.008	-0.82%	6.26%
1E+13	52	1.000	1.007	-0.007	-0.74%	5.63%
1E+13	68	1.013	1.019	-0.007	-0.67%	5.13%
	Max	1.016	1.024	-0.006	-0.57%	6.52%
	Average	1.004	1.012	-0.007	-0.73%	5.55%
	Min	0.996	1.001	-0.009	-0.86%	4.31%
	Std Dev	0.007	0.007	0.001	0.09%	0.73%





		5.16G_TRF_cu	r postfuse hig			
1	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
uence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	131.030	127.198	3.832	2.92%	0.02%
LE+12	1	127.260	123.707	3.553	2.79%	0.02%
LE+12	82	128.091	124.933	3.158	2.47%	0.02%
E+12	96	130.113	126.250	3.862	2.97%	0.02%
5E+12	38	127.804	124.130	3.674	2.87%	0.02%
E+12	42	130.348	126.481	3.867	2.97%	0.02%
5E+12	65	130.322	126.599	3.723	2.86%	0.02%
LE+13	34	128.687	124.730	3.957	3.08%	0.02%
E+13	52	127.804	124.232	3.573	2.80%	0.02%
E+13	68	129.263	125.794	3.469	2.68%	0.02%
	Max	131.030	127.198	3.957	3.08%	0.02%
	Average	129.072	125.405	3.667	2.84%	0.02%
	Min	127.260	123.707	3.158	2.47%	0.02%
	Std Dev	1.323	1.212	0.239	0.17%	0.00%









		5.16G Fund1	postfuse highsi			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-12.86999989	-12.47000027			
	Min Limit	-15.86999989	-16.46999931			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.264	-13.511	-0.753	5.28%	25.10%
1E+12	1	-13.744	-13.497	-0.247	1.80%	8.25%
1E+12	82	-14.333	-13.649	-0.683	4.77%	22.78%
1E+12	96	-14.422	-13.624	-0.798	5.53%	26.59%
5E+12	38	-14.266	-13.544	-0.723	5.07%	24.09%
5E+12	42	-14.275	-13.524	-0.751	5.26%	25.03%
5E+12	65	-14.425	-13.687	-0.738	5.12%	24.62%
1E+13	34	-14.296	-13.534	-0.761	5.33%	25.38%
1E+13	52	-14.344	-13.657	-0.687	4.79%	22.89%
1E+13	68	-14.235	-13.520	-0.715	5.02%	23.82%
	Max	-13.744	-13.497	-0.247	5.53%	26.59%
	Average	-14.260	-13.575	-0.686	4.80%	22.86%
	Min	-14,425	-13.687	-0.798	1.80%	8.25%
	Std Dev	0.193	0.071	0.158	1.08%	5.26%



St Number	20300				
x Limit	-12.47000027	dB			
n Limit	-16.46999931	dB			
Fluence	0	1E+12	5E+12	1E+13	
LL	-16.470	-16.470	-16.470	-16.470	1
Min	-13.511	-13.649	-13.687	-13.657	
Average	-13.511	-13.590	-13.585	-13.570	
Max	-13.511	-13.497	-13.524	-13.520	
UL	-12.470	-12.470	-12.470	-12.470	

0.000	7			
-2.000	1E+12	5E+12	16+13	
-4.000 -				
-6.000 -				Pass Range
-8.000				Fail Range
-10.000 -				Min
-12.000 -				Ave rage
-14.000		•	<b></b>	Max
-16.000 -				
-18 000				

		5.16G_Fund2_	postfuse_Highs			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.13000011	-12.75			
	Min Limit	-16.12999916	-16.75			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.537	-13.841	-0.696	4.79%	23.20%
1E+12	1	-14.003	-13.822	-0.181	1.30%	6.05%
1E+12	82	-14.595	-13.979	-0.616	4.22%	20.53%
1E+12	96	-14.687	-13.953	-0.734	5.00%	24.46%
5E+12	38	-14.528	-13.868	-0.660	4.54%	22.00%
5E+12	42	-14.545	-13.842	-0.703	4.83%	23.44%
5E+12	65	-14.694	-14.005	-0.688	4.69%	22.95%
1E+13	34	-14.565	-13.849	-0.717	4.92%	23.89%
1E+13	52	-14.614	-13.972	-0.642	4.39%	21.40%
1E+13	68	-14.499	-13.837	-0.662	4.57%	22.06%
	Max	-14.003	-13.822	-0.181	5.00%	24.46%
	Average	-14.527	-13.897	-0.630	4.32%	21.00%
	Min	-14.694	-14.005	-0.734	1.30%	6.05%
	Std Dev	0.195	0.071	0.162	1.09%	5,39%





5.16G_Fund2_postfuse_Highsupply							
0.000							
-2.000	16+12	5E+12	16+13				
-4.000 -							
-6.000 -				Pass Range			
m -8.000 -				Fail Range			
-10.000 -				Min			
-12.000 -				Ave rage			
-14.000 🔶				Max			
-16.000 -							
-18.000							
	Flue	ence					



		5.16G_dBFs1_	postfuse_highsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-80.223	-79.196	-1.028	1.28%	0.01%
1E+12	1	-81.307	-80.771	-0.536	0.66%	0.00%
1E+12	82	-80.537	-79.428	-1.109	1.38%	0.01%
1E+12	96	-79.977	-78.787	-1.190	1.49%	0.01%
5E+12	38	-82.581	-82.028	-0.553	0.67%	0.00%
5E+12	42	-80.099	-79.043	-1.057	1.32%	0.01%
5E+12	65	-81.117	-79.881	-1.236	1.52%	0.01%
1E+13	34	-79.618	-78.531	-1.086	1.36%	0.01%
1E+13	52	-80.372	-79.136	-1.236	1.54%	0.01%
1E+13	68	-81.052	-80.473	-0.579	0.71%	0.00%
	Max	-79.618	-78.531	-0.536	1.54%	0.01%
	Average	-80.688	-79.727	-0.961	1.19%	0.00%
	Min	-82.581	-82.028	-1.236	0.66%	0.00%
	Std Dev	0.857	1.078	0.288	0.36%	0.00%







		5.16G_dBFs2_	ostfuse_highs			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-80.924	-80.003	-0.921	1.14%	0.00%
1E+12	1	-82.003	-81.525	-0.478	0.58%	0.00%
1E+12	82	-81.095	-80.272	-0.822	1.01%	0.00%
1E+12	96	-80.605	-79.631	-0.974	1.21%	0.00%
5E+12	38	-83.154	-82.924	-0.230	0.28%	0.00%
5E+12	42	-80.884	-79.832	-1.051	1.30%	0.01%
5E+12	65	-81.684	-80.558	-1.125	1.38%	0.01%
1E+13	34	-80.479	-79.175	-1.304	1.62%	0.01%
1E+13	52	-80.791	-79.869	-0.923	1.14%	0.00%
1E+13	68	-81.684	-81.175	-0.509	0.62%	0.00%
	Max	-80.479	-79.175	-0.230	1.62%	0.01%
	Average	-81.330	-80.496	-0.834	1.03%	0.00%
	Min	-83.154	-82.924	-1.304	0.28%	0.00%
	Std Dev	0.816	1.107	0.331	0.41%	0.00%





		5.16G_dBc1_pc	ostfuse_highsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	61	61			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	65.959	65.684	0.275	0.42%	0.81%
1E+12	1	67.563	67.274	0.289	0.43%	0.85%
1E+12	82	66.205	65.779	0.425	0.64%	1.25%
1E+12	96	65.556	65.163	0.392	0.60%	1.15%
5E+12	38	68.314	68.484	-0.170	-0.25%	0.50%
5E+12	42	65.824	65.519	0.306	0.46%	0.90%
5E+12	65	66.692	66.194	0.498	0.75%	1.46%
1E+13	34	65.322	64.997	0.325	0.50%	0.96%
1E+13	52	66.028	65.478	0.549	0.83%	1.61%
1E+13	68	66.817	66.953	-0.136	-0.20%	0.40%
	Max	68.314	68.484	0.549	0.83%	1.61%
	Average	66.428	66.153	0.275	0.42%	0.99%
	Min	65.322	64.997	-0.170	-0.25%	0.40%
	Std Dev	0.934	1.099	0.243	0.37%	0.39%







		5.16G_dBc2_pd	ostfuse_highsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	61	61			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	66.388	66.163	0.225	0.34%	0.66%
1E+12	1	68.000	67.703	0.297	0.44%	0.87%
1E+12	82	66.500	66.293	0.206	0.31%	0.61%
1E+12	96	65.918	65.678	0.240	0.36%	0.71%
5E+12	38	68.626	69.056	-0.430	-0.63%	1.27%
5E+12	42	66.339	65.991	0.348	0.52%	1.02%
5E+12	65	66.990	66.553	0.437	0.65%	1.28%
1E+13	34	65.914	65.327	0.587	0.89%	1.73%
1E+13	52	66.177	65.896	0.281	0.42%	0.83%
1E+13	68	67.185	67.337	-0.152	-0.23%	0.45%
	Max	68.626	69.056	0.587	0.89%	1.73%
	Average	66.804	66.600	0.204	0.31%	0.94%
	Min	65.914	65.327	-0.430	-0.63%	0.45%
	Std Dev	0.906	1.126	0.292	0.43%	0.39%



	5.16G_dBc2_	postfuse_highs	
Test Site	CLAB		
Tester	ETS36402		
Test Number	EB726500		
Max Limit	95	dB	
Min Limit	61	dB	
Fluence	0	1E+12	5E+12
LL	61.000	61.000	61.000
Min	66.163	65.678	65.991
Average	66.163	66.558	67.200
Max	66.163	67.703	69.056
UL	95.000	95.000	95.000

	5.16G_dBc2_postfuse_highsupply	
120.000		
100.000 -		
80.000 -		Pass Rang
# 60.000		Fail Range
40.000 -		Min
20.000 -		
0.000		
0	1E+12 SE+12 1E- Fluence	-13



		TRF_output_co	mmon_mode_h			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	1.274999976	1.273000002			
	Min Limit	1.190000057	1.159999967			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rar
0	24	1.227	1.232	-0.005	-0.40%	5.73%
1E+12	1	1.241	1.245	-0.005	-0.38%	5.49%
1E+12	82	1.236	1.240	-0.004	-0.30%	4.38%
1E+12	96	1.232	1.238	-0.005	-0.43%	6.26%
5E+12	38	1.243	1.248	-0.005	-0.43%	6.24%
5E+12	42	1.225	1.228	-0.003	-0.28%	4.06%
5E+12	65	1.217	1.220	-0.003	-0.23%	3.33%
1E+13	34	1.237	1.242	-0.005	-0.40%	5.84%
1E+13	52	1.248	1.253	-0.004	-0.35%	5.18%
1E+13	68	1.249	1.254	-0.005	-0.38%	5.61%
	Max	1.249	1.254	-0.003	-0.23%	6.26%
	Average	1.236	1.240	-0.004	-0.36%	5.21%
	Min	1.217	1.220	-0.005	-0.43%	3.33%
	Std Dev	0.010	0.011	0.001	0.07%	0.98%







		TRF_input_con	nmon_mode_hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	1.06099999	1.059999943			
	Min Limit	0.92900002	0.879999995			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	0.996	1.004	-0.008	-0.80%	6.00%
1E+12	1	1.016	1.024	-0.008	-0.80%	6.19%
1E+12	82	1.000	1.007	-0.007	-0.70%	5.29%
1E+12	96	1.005	1.014	-0.009	-0.86%	6.52%
5E+12	38	1.008	1.016	-0.007	-0.73%	5.57%
5E+12	42	0.996	1.001	-0.006	-0.57%	4.31%
5E+12	65	1.006	1.012	-0.006	-0.60%	4.58%
1E+13	34	1.005	1.013	-0.008	-0.82%	6.26%
1E+13	52	1.000	1.007	-0.007	-0.74%	5.63%
1E+13	68	1.013	1.019	-0.007	-0.67%	5.13%
	Max	1.016	1.024	-0.006	-0.57%	6.52%
	Average	1.004	1.012	-0.007	-0.73%	5.55%
	Min	0.996	1.001	-0.009	-0.86%	4.31%
	Std Dev	0.007	0.007	0.001	0.09%	0.73%









		1.29G_TRF_cu	r_postfuse_no			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	129.239	125.549	3.691	2.86%	0.02%
1E+12	1	125.575	122.174	3.401	2.71%	0.02%
1E+12	82	126.402	123.355	3.048	2.41%	0.02%
1E+12	96	128.338	124.614	3.723	2.90%	0.02%
5E+12	38	126.018	122.640	3.378	2.68%	0.02%
5E+12	42	128.548	124.887	3.662	2.85%	0.02%
5E+12	65	128.597	124.982	3.615	2.81%	0.02%
1E+13	34	126.934	123.203	3.731	2.94%	0.02%
1E+13	52	126.157	122.654	3.503	2.78%	0.02%
1E+13	68	127.505	124.169	3.336	2.62%	0.02%
	Max	129.239	125.549	3.731	2.94%	0.02%
	Average	127.331	123.823	3.509	2.75%	0.02%
	Min	125.575	122.174	3.048	2.41%	0.02%
	Std Dev	1.290	1.168	0.220	0.16%	0.00%







		1 DOC Evends				
		1.29G_Fund1_	postruse_noms			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.35000038	-13.64999962			
	Min Limit	-15.85000038	-16.14999962			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Ran
0	24	-14.513	-14.321	-0.192	1.32%	7.68%
1E+12	1	-15.002	-14.393	-0.608	4.06%	24.34%
1E+12	82	-14.569	-14.400	-0.170	1.16%	6.79%
1E+12	96	-14.582	-14.378	-0.204	1.40%	8.17%
5E+12	38	-14.509	-14.339	-0.170	1.17%	6.82%
5E+12	42	-14.548	-14.355	-0.193	1.33%	7.71%
5E+12	65	-14.543	-14.369	-0.174	1.20%	6.96%
1E+13	34	-14.590	-14.392	-0.198	1.36%	7.91%
1E+13	52	-14.616	-14.427	-0.190	1.30%	7.58%
1E+13	68	-14.528	-14.344	-0.183	1.26%	7.32%
	Max	-14.509	-14.321	-0.170	4.06%	24.34%
	Average	-14.600	-14.372	-0.228	1.56%	9.13%
	Min	-15.002	-14.427	-0.608	1.16%	6.79%
	Std Dev	0.145	0.032	0.134	0.88%	5.36%



	1.29G_Fund1	_postfuse_nom	
Test Site	CLAB		
Tester	ETS36402		
Test Number	EB726500		
Max Limit	-13.64999962	dB	
Min Limit	-16.14999962	dB	
Fluence	0	1E+12	5E+12
	-16.150	-16.150	-16.150
Min	-14.321	-14.400	-14.369
Average	-14.321	-14.390	-14.354
Max	-14.321	-14.378	-14.339
UL	-13.650	-13.650	-13.650

		1	29G_Fund1_	postfuse_nom	supply	
	0.000					
	-2.000	,	1E+12	5E+12	1E+13	
	-4.000 -					
	-6.000 -					Pass Range
-	-8.000 -					Fail Range
°-1	10.000 -					Min
-1	12.000 -					Average
-1	14.000	_				Max
-1	16.000 -					
-1	18.000		El			
			FIUE	arce		



		1.29G_Fund2_	postfuse_noms			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.36999989	-13.64999962			
	Min Limit	-15.86999989	-16.14999962			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Ra
0	24	-14.548	-14.378	-0.170	1.17%	6.79%
1E+12	1	-15.031	-14.454	-0.577	3.84%	23.08%
1E+12	82	-14.590	-14.460	-0.130	0.89%	5.22%
1E+12	96	-14.608	-14.438	-0.169	1.16%	6.78%
5E+12	38	-14.537	-14.393	-0.144	0.99%	5.77%
5E+12	42	-14.575	-14.406	-0.169	1.16%	6.78%
5E+12	65	-14.568	-14.418	-0.150	1.03%	6.01%
1E+13	34	-14.625	-14.442	-0.182	1.25%	7.30%
1E+13	52	-14.648	-14.482	-0.166	1.13%	6.65%
1E+13	68	-14.557	-14.403	-0.154	1.06%	6.15%
	Max	-14.537	-14.378	-0.130	3.84%	23.08%
	Average	-14.629	-14.427	-0.201	1.37%	8.05%
	Min	-15.031	-14.482	-0.577	0.89%	5.22%
	Std Dev	0.145	0.033	0.133	0.87%	5.32%







		1.29G_dBFs1_	postfuse_noms			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-91.774	-92.469	0.695	-0.76%	0.00%
1E+12	1	-91.829	-89.490	-2.340	2.55%	0.01%
1E+12	82	-93.063	-91.036	-2.026	2.18%	0.01%
1E+12	96	-91.734	-91.329	-0.405	0.44%	0.00%
5E+12	38	-89.440	-89.125	-0.315	0.35%	0.00%
5E+12	42	-92.648	-91.389	-1.259	1.36%	0.01%
5E+12	65	-92.612	-91.647	-0.965	1.04%	0.00%
1E+13	34	-90.926	-90.582	-0.344	0.38%	0.00%
1E+13	52	-91.244	-89.616	-1.628	1.78%	0.01%
1E+13	68	-91.622	-90.697	-0.924	1.01%	0.00%
	Max	-89.440	-89.125	0.695	2.55%	0.01%
	Average	-91.689	-90.738	-0.951	1.03%	0.01%
	Min	-93.063	-92.469	-2.340	-0.76%	0.00%
	Std Dev	1.029	1.061	0.908	0.98%	0.00%

	1.29G_dBFs1_postfuse_nomsupply	R <sup>2</sup> = 0.0005
1.000		
0.500		
0.000		
B -0.500	• •	•
-1.000 ·	•	•
-1.500	•	•
-2.000	•	
-2.500	•	
	Fluence	

	1.29G_dBFs1_	_postfuse_nom		
Test Site	CLAB			
Tester	ETS36402			
Test Number	EB726500			
Max Limit	10000	dB		
Min Limit	-10000	dB		
Fluence	0	1E+12	5E+12	1E+13
	-10000.000	-10000.000	-10000.000	-10000.000
Min	-92.469	-91.329	-91.647	-90.697
Average	-92.469	-90.618	-90.720	-90.299
Max	-92.469	-89.490	-89.125	-89.616
UL	10000.000	10000.000	10000.000	10000.000

	1.290	G_dBFs1_pc	stfuse_nom	supply	
15000.000	]				
10000.000					
5000.000	1				Pass Range
සු 0.000	-	1E+12	5E+12	16+13	Min
-5000.000	-				
-10000.000					
-15000.000		Flue	nce		



		1.29G_dBFs2_	postfuse_noms			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-96.255	-93.036	-3.219	3.34%	0.02%
1E+12	1	-92.202	-90.799	-1.403	1.52%	0.01%
1E+12	82	-94.450	-92.579	-1.871	1.98%	0.01%
1E+12	96	-92.856	-92.600	-0.256	0.28%	0.00%
5E+12	38	-90.208	-90.709	0.501	-0.56%	0.00%
5E+12	42	-95.707	-93.045	-2.661	2.78%	0.01%
5E+12	65	-92.819	-92.572	-0.247	0.27%	0.00%
1E+13	34	-94.006	-92.255	-1.751	1.86%	0.01%
1E+13	52	-92.922	-92.304	-0.618	0.67%	0.00%
1E+13	68	-92.276	-91.509	-0.767	0.83%	0.00%
	Max	-90.208	-90.709	0.501	3.34%	0.02%
	Average	-93.370	-92.141	-1.229	1.30%	0.01%
	Min	-96.255	-93.045	-3.219	-0.56%	0.00%
	Std Dev	1.785	0.850	1.165	1.22%	0.01%









		1.29G_dBc2_p	ostfuse_nomsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	120	95			
	Min Limit	72	69			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	81.707	78.658	3.049	3.73%	6.35%
1E+12	1	77.171	76.346	0.826	1.07%	1.72%
1E+12	82	79.860	78.120	1.741	2.18%	3.63%
1E+12	96	78.249	78.162	0.087	0.11%	0.18%
5E+12	38	75.671	76.316	-0.645	-0.85%	1.34%
5E+12	42	81.131	78.639	2.492	3.07%	5.19%
5E+12	65	78.251	78.154	0.096	0.12%	0.20%
1E+13	34	79.381	77.813	1.568	1.98%	3.27%
LE+13	52	78.274	77.822	0.452	0.58%	0.94%
LE+13	68	77.719	77.105	0.613	0.79%	1.28%
	Max	81.707	78.658	3.049	3.73%	6.35%
	Average	78.741	77.713	1.028	1.28%	2.41%
	Min	75.671	76.316	-0.645	-0.85%	0.18%
	Std Dev	1.820	0.851	1.161	1.44%	2.12%







		1.29G_TRF_cu	rr_postfuse_low			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	127.396	123.850	3.546	2.78%	0.02%
1E+12	1	123.797	120.603	3.194	2.58%	0.02%
1E+12	82	124.607	121.714	2.893	2.32%	0.01%
1E+12	96	126.454	123.030	3.424	2.71%	0.02%
5E+12	38	124.249	121.044	3.204	2.58%	0.02%
5E+12	42	126.683	123.328	3.355	2.65%	0.02%
5E+12	65	126.743	123.324	3.419	2.70%	0.02%
1E+13	34	125.115	121.654	3.461	2.77%	0.02%
1E+13	52	124.336	121.126	3.210	2.58%	0.02%
1E+13	68	125.676	122.631	3.045	2.42%	0.02%
	Max	127.396	123.850	3.546	2.78%	0.02%
	Average	125.505	122.230	3.275	2.61%	0.02%
	Min	123.797	120.603	2.893	2.32%	0.01%
	Std Dev	1.258	1.140	0.203	0.15%	0.00%





		1.29G_TRF_curr_postfuse_lowsupply	
	15000.000		
	10000.000	-	
s	5000.000	-	Pass Range
AMP	0.000	15-12 55-12 15-13	Min
E	-5000.000		Average Max
	10000.000		
	15000.000	Fluence	



		1.29G_Fund1_	oostfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.34000015	-13.64999962			
	Min Limit	-15.84000015	-16.14999962			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.510	-14.320	-0.191	1.31%	7.63%
1E+12	1	-14.996	-14.386	-0.610	4.07%	24.41%
1E+12	82	-14.564	-14.397	-0.168	1.15%	6.70%
1E+12	96	-14.579	-14.372	-0.207	1.42%	8.26%
5E+12	38	-14.506	-14.334	-0.172	1.19%	6.88%
5E+12	42	-14.543	-14.349	-0.194	1.33%	7.76%
5E+12	65	-14.542	-14.363	-0.180	1.24%	7.19%
1E+13	34	-14.586	-14.386	-0.201	1.38%	8.03%
1E+13	52	-14.611	-14.425	-0.186	1.28%	7.46%
1E+13	68	-14.522	-14.341	-0.180	1.24%	7.22%
	Max	-14.506	-14.320	-0.168	4.07%	24.41%
	Average	-14.596	-14.367	-0.229	1.56%	9.15%
	Min	-14.996	-14.425	-0.610	1.15%	6.70%
	Std Dev	0.145	0.032	0.135	0.89%	5.38%





		1.29G_Fund2_	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.36999989	-13.64999962			
	Min Limit	-15.86999989	-16.14999962			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-14.543	-14.371	-0.172	1.18%	6.88%
1E+12	1	-15.023	-14.446	-0.577	3.84%	23.07%
1E+12	82	-14.588	-14.456	-0.132	0.90%	5.27%
1E+12	96	-14.605	-14.430	-0.175	1.20%	7.02%
5E+12	38	-14.532	-14.390	-0.142	0.97%	5.66%
5E+12	42	-14.574	-14.399	-0.175	1.20%	6.99%
5E+12	65	-14.565	-14.413	-0.152	1.04%	6.07%
1E+13	34	-14.616	-14.441	-0.175	1.20%	7.02%
1E+13	52	-14.642	-14.478	-0.164	1.12%	6.56%
1E+13	68	-14.550	-14.396	-0.154	1.06%	6.15%
	Max	-14.532	-14.371	-0.132	3.84%	23.07%
	Average	-14.624	-14.422	-0.202	1.37%	8.07%
	Min	-15.023	-14.478	-0.577	0.90%	5.27%
	Std Dev	0.145	0.034	0.133	0.87%	5.31%





	1.29G_Fund	2_postfuse_lov	supply	
0.000				
-2.000	1E+12	5E+12	16+13	
-4.000 -				
-6.000 -				Pass Range
-8.000 -				Fail Range
<sup>10</sup> -10.000 -				Min
-12.000 -				Average
-14.000 🛓				Max
-16.000 -				
-18.000				
	FI	uence		



		1.29G_dBFs1_p	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-92.049	-89.764	-2.284	2.48%	0.01%
1E+12	1	-90.804	-88.438	-2.366	2.61%	0.01%
1E+12	82	-91.539	-90.459	-1.080	1.18%	0.01%
1E+12	96	-91.057	-90.360	-0.697	0.77%	0.00%
5E+12	38	-88.656	-88.288	-0.368	0.41%	0.00%
5E+12	42	-91.450	-91.396	-0.054	0.06%	0.00%
5E+12	65	-91.353	-91.250	-0.103	0.11%	0.00%
1E+13	34	-91.308	-89.570	-1.737	1.90%	0.01%
1E+13	52	-90.234	-89.840	-0.394	0.44%	0.00%
1E+13	68	-89.592	-89.530	-0.062	0.07%	0.00%
	Max	-88.656	-88.288	-0.054	2.61%	0.01%
	Average	-90.804	-89.890	-0.915	1.00%	0.00%
	Min	-92.049	-91.396	-2.366	0.06%	0.00%
	Std Dev	1.029	1.032	0.909	0.99%	0.00%







		1.29G dBFs2	ostfuse lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-91.830	-92.333	0.503	-0.55%	0.00%
1E+12	1	-91.858	-90.236	-1.622	1.77%	0.01%
1E+12	82	-92.006	-91.230	-0.776	0.84%	0.00%
1E+12	96	-91.811	-92.178	0.368	-0.40%	0.00%
5E+12	38	-89.650	-89.534	-0.116	0.13%	0.00%
5E+12	42	-94.458	-91.863	-2.595	2.75%	0.01%
5E+12	65	-92.255	-92.648	0.393	-0.43%	0.00%
1E+13	34	-92.129	-91.495	-0.634	0.69%	0.00%
1E+13	52	-93.383	-91.655	-1.728	1.85%	0.01%
1E+13	68	-91.189	-91.773	0.585	-0.64%	0.00%
1	Max	-89.650	-89.534	0.585	2.75%	0.01%
	Average	-92.057	-91.495	-0.562	0.60%	0.00%
	Min	-94.458	-92.648	-2.595	-0.64%	0.00%
	Std Dev	1.259	0.957	1.110	1.19%	0.00%





	1.29G_dBFs2_p	ostfuse_low	supply	
15000.000				
10000.000				
5000.000				Pass Range
u 0.000	15-12	55-12	16-12	Min
-5000.000	11.11	36-12	10.13	Average Max
-10000.000				
-15000.000	Elu			



		1.29G dBc1 p	ostfuse lowsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	120	95			
	Min Limit	71	68			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	77.538	75.445	2.094	2.70%	4.27%
1E+12	1	75.808	74.052	1.756	2.32%	3.58%
1E+12	82	76.975	76.062	0.913	1.19%	1.86%
1E+12	96	76.478	75.987	0.491	0.64%	1.00%
5E+12	38	74.150	73.955	0.195	0.26%	0.40%
5E+12	42	76.907	77.047	-0.140	-0.18%	0.29%
5E+12	65	76.810	76.887	-0.077	-0.10%	0.16%
1E+13	34	76.721	75.185	1.537	2.00%	3.14%
1E+13	52	75.623	75.416	0.207	0.27%	0.42%
1E+13	68	75.070	75.189	-0.119	-0.16%	0.24%
	Max	77.538	77.047	2.094	2.70%	4.27%
	Average	76.208	75.522	0.686	0.89%	1.54%
	Min	74.150	73.955	-0.140	-0.18%	0.16%
	Std Dev	1.032	1.030	0.838	1.09%	1.57%







		1.29G dBc2 pc	stfuse_lowsup			
Т	est Site	CLAB	CLAB			
т	ester	ETS36402	ETS36402			
Т	est Number	EB726500	EB726500			
L	Jnit	dB	dB			
M	lax Limit	120	95			
M	lin Limit	72	68.5			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	77.287	77.962	-0.675	-0.87%	1.41%
1E+12	1	76.835	75.790	1.045	1.36%	2.18%
1E+12	82	77.418	76.775	0.644	0.83%	1.34%
1E+12	96	77.205	77.748	-0.543	-0.70%	1.13%
5E+12	38	75.118	75.144	-0.026	-0.03%	0.05%
5E+12	42	79.884	77.464	2.420	3.03%	5.04%
5E+12	65	77.691	78.235	-0.544	-0.70%	1.13%
1E+13	34	77.512	77.054	0.459	0.59%	0.96%
1E+13	52	78.742	77.177	1.564	1.99%	3.26%
1E+13	68	76.639	77.377	-0.738	-0.96%	1.54%
	Max	79.884	78.235	2.420	3.03%	5.04%
	Average	77.433	77.072	0.361	0.45%	1.80%
	Min	75.118	75.144	-0.738	-0.96%	0.05%
	Std Dev	1.257	0.961	1.070	1.36%	1.41%





120.000			
100.000			
80.000	 	-	Pass Range
60.000 -			Fail Range
40.000 -			Min
20.000 -			Max
0.000	 10		



		TRF_input_con	nmon_mode_hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	VOLTS	VOLTS			
	Max Limit	1.06099999	1.059999943			
	Min Limit	0.92900002	0.879999995			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	0.996	1.004	-0.008	-0.80%	6.00%
1E+12	1	1.016	1.024	-0.008	-0.80%	6.19%
1E+12	82	1.000	1.007	-0.007	-0.70%	5.29%
1E+12	96	1.005	1.014	-0.009	-0.86%	6.52%
5E+12	38	1.008	1.016	-0.007	-0.73%	5.57%
5E+12	42	0.996	1.001	-0.006	-0.57%	4.31%
5E+12	65	1.006	1.012	-0.006	-0.60%	4.58%
1E+13	34	1.005	1.013	-0.008	-0.82%	6.26%
1E+13	52	1.000	1.007	-0.007	-0.74%	5.63%
1E+13	68	1.013	1.019	-0.007	-0.67%	5.13%
	Max	1.016	1.024	-0.006	-0.57%	6.52%
	Average	1.004	1.012	-0.007	-0.73%	5.55%
	Min	0.996	1.001	-0.009	-0.86%	4.31%
	Std Dev	0.007	0.007	0.001	0.09%	0.73%





		1.29G_TRF_cu	rr_postfuse_hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	131.291	127.384	3.907	2.98%	0.02%
1E+12	1	127.543	123.907	3.636	2.85%	0.02%
1E+12	82	128.390	125.134	3.255	2.54%	0.02%
1E+12	96	130.319	126.450	3.869	2.97%	0.02%
5E+12	38	128.039	124.407	3.632	2.84%	0.02%
5E+12	42	130.536	126.718	3.818	2.92%	0.02%
5E+12	65	130.624	126.840	3.784	2.90%	0.02%
1E+13	34	128.981	124.995	3.986	3.09%	0.02%
1E+13	52	128.139	124.485	3.654	2.85%	0.02%
1E+13	68	129.554	125.954	3.599	2.78%	0.02%
	Max	131.291	127.384	3.986	3.09%	0.02%
	Average	129.342	125.628	3.714	2.87%	0.02%
	Min	127.543	123.907	3.255	2.54%	0.02%
	Std Dev	1.303	1.198	0.208	0.15%	0.00%



	1.29G_TRF_ct	.rr_postfuse_h		
Test Site	CLAB			
Tester	ETS36402			
Test Number	EB726500			
Max Limit	10000	mAMPS		
Min Limit	-10000	mAMPS		
Fluence	0	1E+12	5E+12	1E+13
LL	-10000.000	-10000.000	-10000.000	-10000.000
Min	127.384	123.907	124.407	124.485
Average	127.384	125.164	125.988	125.145
Max	127.384	126.450	126.840	125.954
UL	10000.000	10000.000	10000.000	10000.000

		1.29G	_TRF_curr_p	ostfuse_hig	hsupply	
	15000.000	1				
	10000.000					
10	5000.000					Pass Range
AMP	0.000		15+12	5E+12	15+13	→ Min
E	-5000.000	-				Average Max
	10000.000	-				
	15000.000		Flue	nce		



_		1.29G_Fund1_	postfuse_highsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.35000038	-13.64999962			
	Min Limit	-15.85000038	-16.14999962			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.525	-14.325	-0.201	1.38%	8.03%
1E+12	1	-15.010	-14.400	-0.610	4.07%	24.41%
1E+12	82	-14.579	-14.409	-0.170	1.17%	6.80%
1E+12	96	-14.595	-14.386	-0.209	1.44%	8.38%
5E+12	38	-14.523	-14.346	-0.177	1.22%	7.10%
5E+12	42	-14.557	-14.358	-0.199	1.37%	7.95%
5E+12	65	-14.557	-14.376	-0.181	1.25%	7.25%
1E+13	34	-14.599	-14.397	-0.203	1.39%	8.11%
1E+13	52	-14.625	-14.433	-0.191	1.31%	7.66%
1E+13	68	-14.536	-14.352	-0.184	1.27%	7.36%
	Max	-14.523	-14.325	-0.170	4.07%	24.41%
	Average	-14.611	-14.378	-0.233	1.58%	9.30%
	Min	-15.010	-14.433	-0.610	1.17%	6.80%
	Std Dev	0.144	0.033	0.133	0.88%	5.33%



	мах	-14.325	-14.386	-14.346	-14.
	UL	-13.650	-13.650	-13.650	-13.6
		1.29G Fund1	postfuse highsupp	ely.	
	0.000				
	0.000	1E+12	5E+12 1	16+13	
	-2.000 -				
	-4.000 -				
	-6.000 -			Pass Rang	pe
	-8.000 -			Fail Rang	
τ	-10.000 -			Min	
	-12.000 -			Ave rage	
	-14 000			Max	

Fluence

-16.000 -18.000

		1.29G Fund2	postfuse highsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.35000038	-13.64999962			
	Min Limit	-15.85000038	-16.14999962			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-14.554	-14.384	-0.171	1.17%	6.83%
1E+12	1	-15.040	-14.457	-0.582	3.87%	23.29%
1E+12	82	-14.601	-14.467	-0.134	0.92%	5.35%
1E+12	96	-14.618	-14.444	-0.174	1.19%	6.95%
5E+12	38	-14.547	-14.399	-0.148	1.02%	5.92%
5E+12	42	-14.585	-14.413	-0.172	1.18%	6.89%
5E+12	65	-14.580	-14.425	-0.154	1.06%	6.17%
1E+13	34	-14.631	-14.454	-0.177	1.21%	7.07%
1E+13	52	-14.658	-14.490	-0.168	1.15%	6.72%
1E+13	68	-14.565	-14.407	-0.158	1.09%	6.32%
	Max	-14.547	-14.384	-0.134	3.87%	23.29%
	Average	-14.638	-14.434	-0.204	1.38%	8.15%
	Min	-15.040	-14.490	-0.582	0.92%	5.35%
	Std Dev	0.145	0.034	0.134	0.88%	5.35%



	1.29G_Fund2_	_postfuse_high		
Test Site	CLAB			
Tester	ETS36402			
Test Number	EB726500			
Max Limit	-13.64999962	dB		
Min Limit	-16.14999962	dB		
Fluence	0	1E+12	5E+12	1E+13
LL	-16.150	-16.150	-16.150	-16.150
Min	-14.384	-14.467	-14.425	-14.490
Average	-14.384	-14.456	-14.412	-14.450
Max	-14.384	-14.444	-14.399	-14.407
			and the second	



		1.29G_dBFs1_	postfuse_highsu			
1	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-93.752	-93.102	-0.650	0.69%	0.00%
1E+12	1	-90.874	-89.729	-1.145	1.26%	0.01%
1E+12	82	-93.634	-92.717	-0.917	0.98%	0.00%
1E+12	96	-93.413	-92.469	-0.944	1.01%	0.00%
5E+12	38	-90.324	-89.587	-0.738	0.82%	0.00%
5E+12	42	-93.855	-92.995	-0.861	0.92%	0.00%
5E+12	65	-92.456	-91.629	-0.827	0.89%	0.00%
1E+13	34	-92.744	-91.846	-0.897	0.97%	0.00%
1E+13	52	-93.142	-91.461	-1.681	1.81%	0.01%
1E+13	68	-92.564	-90.913	-1.650	1.78%	0.01%
	Max	-90.324	-89.587	-0.650	1.81%	0.01%
	Average	-92.676	-91.645	-1.031	1.11%	0.01%
	Min	-93.855	-93.102	-1.681	0.69%	0.00%
	Std Dev	1,205	1,260	0.359	0.39%	0.00%











		1.29G dBc1 p	ostfuse highsur			
	Test Site	CLAB	CLAB	1		
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	120	95			
	Min Limit	73	70			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	79.227	78.777	0.450	0.57%	0.96%
1E+12	1	75.864	75.329	0.535	0.70%	1.14%
1E+12	82	79.055	78.308	0.747	0.94%	1.59%
1E+12	96	78.818	78.083	0.735	0.93%	1.56%
5E+12	38	75.801	75.241	0.560	0.74%	1.19%
5E+12	42	79.299	78.637	0.662	0.83%	1.41%
5E+12	65	77.899	77.253	0.646	0.83%	1.37%
1E+13	34	78.144	77.449	0.695	0.89%	1.48%
1E+13	52	78.517	77.027	1.490	1.90%	3.17%
1E+13	68	78.028	76.561	1.467	1.88%	3.12%
	Max	79.299	78.777	1.490	1.90%	3.17%
	Average	78.065	77.267	0.799	1.02%	1.70%
	Min	75.801	75.241	0.450	0.57%	0.96%
	Std Dev	1.275	1.263	0.370	0.47%	0.79%











		2.58G_TRF_cu	rr_postfuse_nor			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	129.517	124.032	5.485	4.23%	0.03%
1E+12	1	125.801	120.781	5.020	3.99%	0.03%
1E+12	82	126.563	121.901	4.663	3.68%	0.02%
1E+12	96	128.542	123.150	5.392	4.19%	0.03%
5E+12	38	126.214	121.171	5.042	4.00%	0.03%
5E+12	42	128.712	123.413	5.298	4.12%	0.03%
5E+12	65	128.835	123.432	5.403	4.19%	0.03%
1E+13	34	127.170	121.746	5.424	4.27%	0.03%
1E+13	52	126.394	121.267	5.127	4.06%	0.03%
1E+13	68	127.724	122.674	5.050	3.95%	0.03%
	Max	129.517	124.032	5.485	4.27%	0.03%
	Average	127,547	122.357	5.190	4.07%	0.03%
	Min	125.801	120.781	4.663	3.68%	0.02%
	Std Dev	1.299	1.129	0.256	0.17%	0.00%



Radaition Site: VPT Rad NDD Report TRF0206-SP

		2.58G Fund1	postfuse noms	1		
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.39000034	-13.60000038			
	Min Limit	-15.89000034	-16.10000038			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit F
0	24	-14.576	-14.198	-0.378	2.60%	15.14%
1E+12	1	-14.339	-14.316	-0.024	0.16%	0.94%
1E+12	82	-14.614	-14.301	-0.314	2.15%	12.55%
1E+12	96	-14.674	-14.273	-0.400	2.73%	16.01%
5E+12	38	-14.582	-14.240	-0.342	2.35%	13.69%
5E+12	42	-14.634	-14.245	-0.389	2.66%	15.54%
5E+12	65	-14.603	-14.260	-0.344	2.35%	13.74%
1E+13	34	-14.682	-14.276	-0.406	2.76%	16.23%
1E+13	52	-14.710	-14.329	-0.382	2.59%	15.26%
1E+13	68	-14.603	-14.244	-0.359	2.46%	14.36%
	Max	-14.339	-14.198	-0.024	2.76%	16.23%
	Average	-14.602	-14.268	-0.334	2.28%	13.35%
	Min	-14.710	-14.329	-0.406	0.16%	0.94%
	Std Dev	0.102	0.039	0.113	0.77%	4.51%



Fluence

-10000.000 -15000.000







		2.58G_Fund2_p	ostfuse_nomsi			
	Test Site	CLAB	CLAB			
-	Tester	ETS36402	ETS36402			
-	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.52999973	-13.75			
	Min Limit	-16.03000069	-16.25			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.693	-14.284	-0.409	2.78%	16.34%
1E+12	1	-14.454	-14.406	-0.047	0.33%	1.89%
1E+12	82	-14.728	-14.395	-0.333	2.26%	13.34%
1E+12	96	-14.789	-14.368	-0.422	2.85%	16.88%
5E+12	38	-14.703	-14.336	-0.367	2.49%	14.67%
5E+12	42	-14.752	-14.335	-0.417	2.83%	16.68%
5E+12	65	-14.726	-14.350	-0.376	2.55%	15.03%
1E+13	34	-14.801	-14.375	-0.426	2.88%	17.05%
1E+13	52	-14.832	-14.424	-0.408	2.75%	16.32%
1E+13	68	-14.727	-14.343	-0.383	2.60%	15.34%
	Max	-14.454	-14.284	-0.047	2.88%	17.05%
	Average	-14.720	-14.362	-0.359	2.43%	14.35%
	Min	-14.832	-14.424	-0.426	0.33%	1.89%
	Std Dev	0.104	0.041	0.113	0.76%	4.53%





		2.58G dBFs1 1	oostfuse nomsu			
	Fest Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Fest Number	EB726500	EB726500			
L	Jnit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-87.989	-88.377	0.388	-0.44%	0.00%
1E+12	1	-87.305	-87.333	0.028	-0.03%	0.00%
1E+12	82	-90.264	-89.953	-0.311	0.34%	0.00%
1E+12	96	-88.736	-88.680	-0.055	0.06%	0.00%
5E+12	38	-85.941	-85.844	-0.097	0.11%	0.00%
5E+12	42	-88.240	-88.973	0.734	-0.83%	0.00%
5E+12	65	-87.126	-87.559	0.433	-0.50%	0.00%
1E+13	34	-90.184	-90.663	0.479	-0.53%	0.00%
1E+13	52	-89.883	-90.431	0.549	-0.61%	0.00%
1E+13	68	-87.144	-86.539	-0.605	0.69%	0.00%
	Max	-85.941	-85.844	0.734	0.69%	0.00%
	Average	-88,281	-88,435	0.154	-0.17%	0.00%
	Min	-90.264	-90.663	-0.605	-0.83%	0.00%
	Std Dev	1.471	1.630	0.428	0.48%	0.00%





				15000.000
				10000.000
Pass Range				5000.000
Min	16+13	5E+12	16+12	0.000
Average Max				-5000.000
				10000.000
				15000.000



		2.58G dBFs2	postfuse nomsu			
2	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-86.945	-86.881	-0.065	0.07%	0.00%
1E+12	1	-87.485	-87.223	-0.261	0.30%	0.00%
1E+12	82	-88.643	-88.289	-0.353	0.40%	0.00%
1E+12	96	-87.517	-88.336	0.819	-0.94%	0.00%
5E+12	38	-85.986	-85.346	-0.640	0.74%	0.00%
5E+12	42	-87.408	-88.817	1.409	-1.61%	0.01%
5E+12	65	-86.232	-87.054	0.822	-0.95%	0.00%
1E+13	34	-89.173	-90.068	0.895	-1.00%	0.00%
1E+13	52	-89.014	-88,888	-0.126	0.14%	0.00%
1E+13	68	-86.911	-86.477	-0.434	0.50%	0.00%
	Max	-85.986	-85.346	1.409	0.74%	0.01%
	Average	-87.531	-87.738	0.207	-0.23%	0.00%
	Min	-89,173	-90.068	-0.640	-1.61%	0.00%
	Std Dev	1,103	1.389	0.708	0.81%	0.00%







_		2.58G_dBc1_p	ostfuse_nomsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	65	58			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	73.413	74.179	-0.766	-1.04%	2.55%
1E+12	1	72.966	73.017	-0.051	-0.07%	0.17%
1E+12	82	75.650	75.653	-0.003	0.00%	0.01%
1E+12	96	74.062	74.407	-0.345	-0.47%	1.15%
5E+12	38	71.359	71.604	-0.245	-0.34%	0.82%
5E+12	42	73.606	74.728	-1.122	-1.52%	3.74%
5E+12	65	72.523	73.299	-0.776	-1.07%	2.59%
1E+13	34	75.502	76.387	-0.885	-1.17%	2.95%
1E+13	52	75.173	76.103	-0.930	-1.24%	3.10%
1E+13	68	72.541	72.295	0.246	0.34%	0.82%
	Max	75.650	76.387	0.246	0.34%	3.74%
	Average	73.679	74.167	-0.488	-0.66%	1.79%
	Min	71.359	71.604	-1.122	-1.52%	0.01%
	Std Dev	1.421	1.613	0.467	0.63%	1.34%









		2.58G_dBc2_pc	ostfuse_nomsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	64	57.5			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	72.252	72.596	-0.344	-0.48%	1.11%
1E+12	1	73.031	72.817	0.214	0.29%	0.69%
1E+12	82	73.914	73.895	0.020	0.03%	0.06%
1E+12	96	72.728	73.968	-1.241	-1.71%	4.00%
5E+12	38	71.284	71.010	0.274	0.38%	0.88%
5E+12	42	72.656	74.482	-1.826	-2.51%	5.89%
5E+12	65	71.506	72.704	-1.198	-1.68%	3.86%
1E+13	34	74.372	75.693	-1.321	-1.78%	4.26%
1E+13	52	74.182	74.464	-0.282	-0.38%	0.91%
1E+13	68	72.184	72.133	0.051	0.07%	0.16%
	Max	74.372	75.693	0.274	0.38%	5.89%
	Average	72.811	73.376	-0.565	-0.78%	2.18%
	Min	71.284	71.010	-1.826	-2.51%	0.06%
	Std Dev	1.073	1.371	0.759	1.04%	2.09%



	2.58G_dBc2	_postfuse_noms		
Test Site	CLAB			
ester	ETS36402			
est Number	EB726500			
lax Limit	95	dB		
4in Limit	57.5	dB		
Fluence	0	1E+12	5E+12	1E+13
	57.500	57.500	57.500	57.500
Min	72.596	72.817	71.010	72.133
Average	72.596	73.560	72.732	74.097
Max	72.596	73.968	74.482	75.693
UL	95.000	95.000	95.000	95.000







		2.58G_Fund1_	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.39000034	-13.60000038			
	Min Limit	-15.89000034	-16.10000038			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-14.573	-14.205	-0.368	2.53%	14.73%
1E+12	1	-14.334	-14.322	-0.012	0.08%	0.48%
1E+12	82	-14.613	-14.310	-0.303	2.07%	12.11%
1E+12	96	-14.673	-14.284	-0.388	2.65%	15.53%
5E+12	38	-14.580	-14.247	-0.332	2.28%	13.28%
5E+12	42	-14.629	-14.250	-0.379	2.59%	15.15%
5E+12	65	-14.601	-14.265	-0.336	2.30%	13.44%
1E+13	34	-14.677	-14.285	-0.392	2.67%	15.68%
1E+13	52	-14.709	-14.336	-0.373	2.54%	14.93%
1E+13	68	-14.597	-14.251	-0.346	2.37%	13.85%
	Max	-14.334	-14.205	-0.012	2.67%	15.68%
	Average	-14.599	-14.276	-0.323	2.21%	12.92%
	Min	-14.709	-14.336	-0.392	0.08%	0.48%
	Std Dev	0.103	0.040	0.113	0.77%	4.51%







		2.58G_Fund2_p	ostfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.52999973	-13.75			
	Min Limit	-16.03000069	-16.25			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.688	-14.290	-0.398	2.71%	15.93%
1E+12	1	-14.451	-14.414	-0.037	0.26%	1.48%
1E+12	82	-14.724	-14.402	-0.322	2.19%	12.89%
1E+12	96	-14.791	-14.375	-0.416	2.81%	16.64%
5E+12	38	-14.698	-14.345	-0.354	2.41%	14.14%
5E+12	42	-14.750	-14.345	-0.405	2.75%	16.22%
5E+12	65	-14.724	-14.356	-0.368	2.50%	14.70%
1E+13	34	-14.800	-14.380	-0.421	2.84%	16.82%
1E+13	52	-14.830	-14.433	-0.397	2.67%	15.86%
1E+13	68	-14.724	-14.354	-0.370	2.51%	14.78%
	Max	-14.451	-14.290	-0.037	2.84%	16.82%
	Average	-14.718	-14.369	-0.349	2.36%	13.95%
	Min	-14.830	-14.433	-0.421	0.26%	1.48%
	Std Dev	0.104	0.041	0.114	0.77%	4.55%





				0.000
	16+13	5E+12	1E+12	-2.000
				-4.000 -
Pass Range				-6.000 -
Fail Range				-8.000 -
Min				-10.000 -
Average				-12.000 -
Max			-	-14.000
				-16.000 -
				-18.000



		2.58G_dBFs1_p	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	ĺ	Delta %
0	24	-86.970	-88.911	1.941		-2.23%
1E+12	1	-86.544	-88.302	1.758	Γ	-2.03%
1E+12	82	-88.578	-90.326	1.749		-1.97%
1E+12	96	-87.715	-89.118	1.403		-1.60%
5E+12	38	-85.702	-86.035	0.333	Г	-0.39%
5E+12	42	-87.600	-89.683	2.084		-2.38%
5E+12	65	-86.682	-87.794	1.111		-1.28%
1E+13	34	-89.489	-91.196	1.707		-1.91%
1E+13	52	-89.510	-90.487	0.977	-1	.09%
1E+13	68	-86.515	-87.822	1.306	-1.5	1%
	Max	-85.702	-86.035	2.084	-0.39	%
	Average	-87.530	-88.967	1.437	-1.64	%
	Min	-89.510	-91.196	0.333	-2.389	%
	Std Dev	1.303	1.542	0.527	0.60%	



	2.58	G_dBFs1_p	stfuse_low:	upply	
15000.000	1				
10000.000					
5000.000	-				Pass Range
쁑 0.000		-	-	-	Min
-5000.000	-	16+12	51+12	16+13	Ave rage
-10000.000					
-15000.000		Flue	nce		

		2.58G_dBFs2_	postfuse_lowsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	-86.438	-87.592	1.155	-1.34%	0.01%
1E+12	1	-86.449	-86.996	0.548	-0.63%	0.00%
1E+12	82	-87.995	-89.818	1.823	-2.07%	0.01%
1E+12	96	-86.906	-88.261	1.356	-1.56%	0.01%
5E+12	38	-85.156	-85.460	0.304	-0.36%	0.00%
5E+12	42	-86.689	-88.760	2.071	-2.39%	0.01%
5E+12	65	-85.923	-87.661	1.738	-2.02%	0.01%
1E+13	34	-88.900	-90.177	1.277	-1.44%	0.01%
1E+13	52	-89.018	-90.128	1.110	-1.25%	0.01%
1E+13	68	-85.916	-86.986	1.071	-1.25%	0.01%
	Max	-85.156	-85.460	2.071	-0.36%	0.01%
	Average	-86.939	-88.184	1.245	-1.43%	0.01%
	Min	-89.018	-90.177	0.304	-2.39%	0.00%
	Std Dev	1.295	1.551	0.548	0.63%	0.00%





1001100				
LL	-10000.000	-10000.000	-10000.000	-10000.000
Min	-87.592	-89.818	-88.760	-90.177
lverage	-87.592	-88.358	-87.294	-89.097
Max	-87.592	-86.996	-85.460	-86.986
UL	10000.000	10000.000	10000.000	10000.000





		2.58G dBc1 p	ostfuse lowsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	64.30000305	59			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	72.397	74.706	-2.309	-3.19%	7.52%
1E+12	1	72.210	73.980	-1.770	-2.45%	5.77%
1E+12	82	73.965	76.017	-2.052	-2.77%	6.68%
1E+12	96	73.042	74.833	-1.791	-2.45%	5.83%
5E+12	38	71.122	71.787	-0.665	-0.94%	2.17%
5E+12	42	72.971	75.433	-2.463	-3.37%	8.02%
5E+12	65	72.081	73.529	-1.447	-2.01%	4.71%
1E+13	34	74.812	76.911	-2.099	-2.81%	6.84%
1E+13	52	74.800	76.151	-1.351	-1.81%	4.40%
1E+13	68	71.918	73.570	-1.652	-2.30%	5.38%
	Max	74.812	76.911	-0.665	-0.94%	8.02%
	Average	72.932	74.692	-1.760	-2.41%	5.73%
	Min	71.122	71.787	-2.463	-3.37%	2.17%
	Std Dev	1.245	1,525	0.524	0.71%	1.71%







		2.58G_dBc2_p	ostfuse_lowsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	95	95			
	Min Limit	64.40000153	58.5			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	71.749	73.302	-1.553	-2.16%	5.07%
1E+12	1	71.997	72.582	-0.585	-0.81%	1.91%
1E+12	82	73.271	75.416	-2.145	-2.93%	7.01%
1E+12	96	72.115	73.886	-1.772	-2.46%	5.79%
5E+12	38	70.458	71.116	-0.658	-0.93%	2.15%
5E+12	42	71.939	74.416	-2.477	-3.44%	8.09%
5E+12	65	71.200	73.305	-2.106	-2.96%	6.88%
1E+13	34	74.100	75.797	-1.697	-2.29%	5.55%
1E+13	52	74.188	75.695	-1.507	-2.03%	4.92%
1E+13	68	71.192	72.632	-1.440	-2.02%	4.71%
	Max	74.188	75.797	-0.585	-0.81%	8.09%
	Average	72.221	73.815	-1.594	-2.20%	5.21%
	Min	70.458	71.116	-2.477	-3.44%	1.91%
	Std Dev	1.251	1.532	0.607	0.84%	1.98%









		2.58G TRE CU	r postfuse hig			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	mAMPS	mAMPS			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	131.596	127.592	4.005	3.04%	0.02%
1E+12	1	127.693	124.110	3.582	2.81%	0.02%
1E+12	82	128.567	125.329	3.238	2.52%	0.02%
1E+12	96	130.576	126.698	3.878	2.97%	0.02%
5E+12	38	128.275	124.565	3.709	2.89%	0.02%
5E+12	42	130.727	126.916	3.810	2.91%	0.02%
5E+12	65	130.830	127.015	3.815	2.92%	0.02%
1E+13	34	129.172	125.236	3.936	3.05%	0.02%
1E+13	52	128.349	124.693	3.657	2.85%	0.02%
1E+13	68	129.662	126.231	3.431	2.65%	0.02%
1	Max	131.596	127.592	4.005	3.05%	0.02%
	Average	129.545	125.839	3.706	2.86%	0.02%
	Min	127.693	124.110	3.238	2.52%	0.02%
	Std Dev	1.329	1.204	0.237	0.17%	0.00%



Radaition Site: VPT Rad NDD Report TRF0206-SP

		2.58G Fund1	postfuse highsu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.39999962	-13.60000038			
	Min Limit	-15.89999962	-16.10000038			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.586	-14.213	-0.372	2.55%	14.90%
1E+12	1	-14.352	-14.326	-0.026	0.18%	1.04%
1E+12	82	-14.626	-14.316	-0.310	2.12%	12.42%
1E+12	96	-14.682	-14.287	-0.395	2.69%	15.81%
5E+12	38	-14.593	-14.257	-0.335	2.30%	13.41%
5E+12	42	-14.642	-14.257	-0.385	2.63%	15.41%
5E+12	65	-14.615	-14.273	-0.342	2.34%	13.68%
1E+13	34	-14.691	-14.295	-0.396	2.70%	15.85%
1E+13	52	-14.720	-14.342	-0.378	2.56%	15.10%
1E+13	68	-14.612	-14.260	-0.352	2.41%	14.09%
	Max	-14.352	-14.213	-0.026	2.70%	15.85%
	Average	-14.612	-14.283	-0.329	2.25%	13.17%
	Min	-14.720	-14.342	-0.396	0.18%	1.04%
	Std Dev	0.101	0.039	0.110	0.75%	4.41%



Fluence

-10000.000



0.000	100	20150	100	
-2.000	1E+12	5E+12	1E+13	
-4.000 -				
-6.000 -				Pass Range
-8.000 -				Fail Range
-10.000				Min
-12.000 -				Ave rage
-14.000		-	-	Max
-16.000			_	
-18 000				



		2.58G Fund2	oostfuse highsi			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	-13.53999996	-13.75			
	Min Limit	-16.04000092	-16.25			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-14.702	-14.299	-0.403	2.74%	16.12%
1E+12	1	-14.466	-14.423	-0.044	0.30%	1.74%
1E+12	82	-14.741	-14.411	-0.330	2.24%	13.20%
1E+12	96	-14.805	-14.384	-0.421	2.85%	16.85%
5E+12	38	-14.712	-14.350	-0.362	2.46%	14.49%
5E+12	42	-14.763	-14.352	-0.411	2.78%	16.43%
5E+12	65	-14.737	-14.366	-0.371	2.52%	14.84%
1E+13	34	-14.812	-14.388	-0.425	2.87%	16.98%
1E+13	52	-14.842	-14.440	-0.401	2.70%	16.05%
1E+13	68	-14.740	-14.360	-0.380	2.58%	15.21%
	Max	-14.466	-14.299	-0.044	2.87%	16.98%
	Average	-14.732	-14.377	-0.355	2.40%	14.19%
	Min	-14.842	-14.440	-0.425	0.30%	1.74%
	Std Dev	0.104	0.041	0.113	0.76%	4.53%



-12.000 -14.000

-16.000 -18.000

Radaition Site: VPT Rad NDD Report TRF0206-SP

32		2.58G_dBFs1_	ostfuse_highSu			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
uence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	-87.843	-88.904	1.061	-1.21%	0.01%
LE+12	1	-87.903	-88.694	0.790	-0.90%	0.00%
LE+12	82	-89.809	-90.394	0.585	-0.65%	0.00%
LE+12	96	-88.907	-90.035	1.128	-1.27%	0.01%
5E+12	38	-86.886	-86.857	-0.029	0.03%	0.00%
5E+12	42	-88.421	-90.471	2.050	-2.32%	0.01%
5E+12	65	-87.486	-89.045	1.559	-1.78%	0.01%
E+13	34	-90.298	-91.382	1.084	-1.20%	0.01%
E+13	52	-91.766	-91.440	-0.326	0.36%	0.00%
E+13	68	-87.262	-88.373	1.111	-1.27%	0.01%
	Max	-86.886	-86.857	2.050	0.36%	0.01%
	Average	-88.658	-89.559	0.901	-1.02%	0.00%
	Min	-91.766	-91.440	-0.326	-2.32%	0.00%
	Std Dev	1.545	1.444	0.698	0.79%	0.00%



Fluence

Average



15000.000				
10000.000				
5000.000				Pass Range
8 0.000	15+12	55-17	15,12	Min
-5000.000				Average Max
-10000.000				
-15000.000			-	



		2.58G dBEs2	postfuse highsi			
	Test Site	CLAB	CLAB			
	Tester	ETS36402	ETS36402			
	Test Number	EB726500	EB726500			
	Unit	dB	dB			
	Max Limit	10000	10000			
	Min Limit	-10000	-10000			
Fluence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit R
0	24	-86.937	-87.705	0.768	-0.88%	0.00%
1E+12	1	-86.890	-87.598	0.708	-0.81%	0.00%
1E+12	82	-88.102	-89.452	1.350	-1.53%	0.01%
1E+12	96	-87.685	-89.146	1.461	-1.67%	0.01%
5E+12	38	-85.986	-85.726	-0.260	0.30%	0.00%
5E+12	42	-88.622	-88.958	0.335	-0.38%	0.00%
5E+12	65	-86.731	-87.174	0.443	-0.51%	0.00%
1E+13	34	-90.408	-91.041	0.633	-0.70%	0.00%
1E+13	52	-88.985	-90.222	1.237	-1.39%	0.01%
1E+13	68	-86.793	-87.121	0.329	-0.38%	0.00%
	Max	-85.986	-85.726	1.461	0.30%	0.01%
	Average	-87.714	-88.414	0.700	-0.80%	0.00%
	Min	-90.408	-91.041	-0.260	-1.67%	0.00%
	Std Dev	1.331	1.622	0.533	0.61%	0.00%



Radaition Site: VPT Rad NDD Report TRF0206-SP

		2.58G_dBc1_p	ostfuse_highsur			
Т	est Site	CLAB	CLAB			
Т	ester	ETS36402	ETS36402 EB726500 dB 95			
Т	est Number	EB726500 dB 95				
L	Init					
Ň	lax Limit					
N	1in Limit	65.5	59.5			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Range
0	24	73.257	74.691	-1.434	-1.96%	4.86%
1E+12	1	73.551	74.368	-0.816	-1.11%	2.77%
1E+12	82	75.183	76.078	-0.896	-1.19%	3.04%
1E+12	96	74.224	75.747	-1.523	-2.05%	5.16%
5E+12	38	72.294	72.600	-0.306	-0.42%	1.04%
5E+12	42	73.779	76.214	-2.435	-3.30%	8.25%
5E+12	65	72.871	74.773	-1.901	-2.61%	6.44%
1E+13	34	75.607	77.088	-1.480	-1.96%	5.02%
1E+13	52	77.046	77.098	-0.051	-0.07%	0.17%
1E+13	68	72.649	74.113	-1.463	-2.01%	4.96%
	Max	77.046	77.098	-0.051	-0.07%	8.25%
	Average	74.046	75.277	-1.231	-1.67%	4.17%
	Min	72.294	72.600	-2.435	-3.30%	0.17%
	Std Dev	1.494	1.425	0.720	0.98%	2.44%



Fluence

-15000.000







		2.58G_dBc2_p	stfuse_highsup			
	Test Site	CLAB	CLAB			
	Tester	ETS36402 EB726500 dB 95	ETS36402 EB726500 dB 95			
	Test Number					
	Unit					
	Max Limit					
	Min Limit	64.5	58.5			
luence	Serial #	Pre NDD	Post NDD	Delta	Delta %	% of Limit Rang
0	24	72.235	73.406	-1.171	-1.62%	3.84%
1E+12	1	72.424	73.176	-0.751	-1.04%	2.46%
1E+12	82	73.361	75.041	-1.680	-2.29%	5.51%
1E+12	96	72.880	74.762	-1.882	-2.58%	6.17%
5E+12	38	71.274	71.376	-0.102	-0.14%	0.33%
5E+12	42	73.859	74.605	-0.746	-1.01%	2.45%
5E+12	65	71.994	72.808	-0.814	-1.13%	2.67%
1E+13	34	75.596	76.653	-1.057	-1.40%	3.47%
1E+13	52	74.143	75.782	-1.638	-2.21%	5.37%
1E+13	68	72.052	72.761	-0.709	-0.98%	2.32%
	Max	75.596	76.653	-0.102	-0.14%	6.17%
	Average	72.982	74.037	-1.055	-1.44%	3.46%
	Min	71.274	71.376	-1.882	-2.58%	0.33%
	Std Dev	1.279	1.602	0.548	0.74%	1.80%

-0.200		•	
-0.400			
0.800			٠
3 -1.000			
-1.200			
-1.400			
-1.600 -	•		•
-1.800	•		
-2.000 -			





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