

RADIATION TEST REPORT

PRODUCT:

DAC08AF/QMLL

GAMMA:

0, 50k, 75k, 100k/TM1019 Condition D

GAMMA SOURCE:

Co60

DOSE RATE:

7.3 mRad/s

FACILITIES:

University of Massachusetts @ Lowell

TESTED:

2010

The RADTESTSM DATA SERVICE is a compilation of radiation test results on Analog Devices' Space grade products. It is designed to assist customers in selecting the right product for applications where radiation is a consideration. Many products manufactured by Analog Devices, Inc. have been shown to be radiation tolerant to most tactical radiation environments. Analog Devices, Inc. does not make any claim to maintain or guarantee these levels of radiation tolerance without lot qualification test.

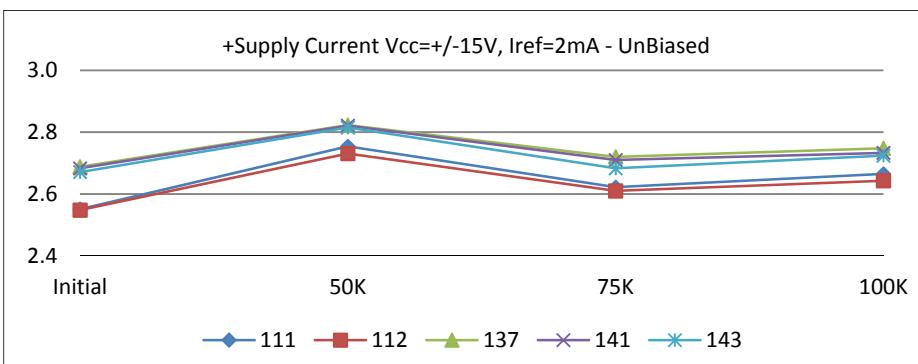
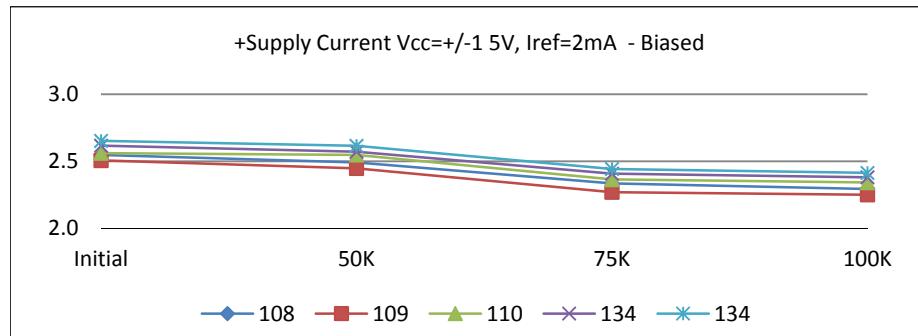
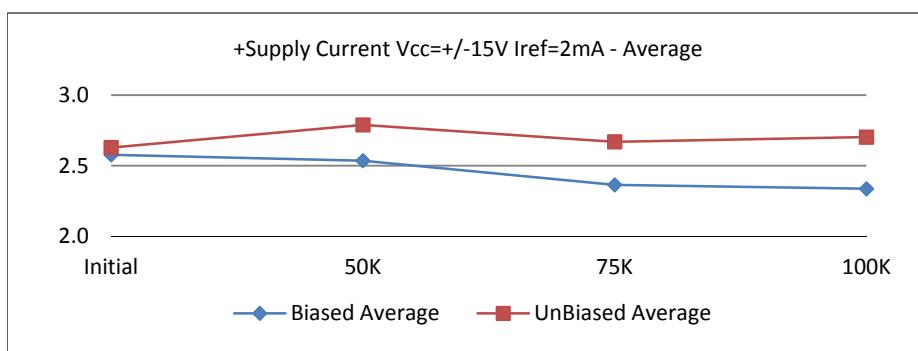
It is the responsibility of the Procuring Activity to screen products from Analog Devices, Inc. for compliance to Nuclear Hardness Critical Items (HCI) specifications.

WARNING:

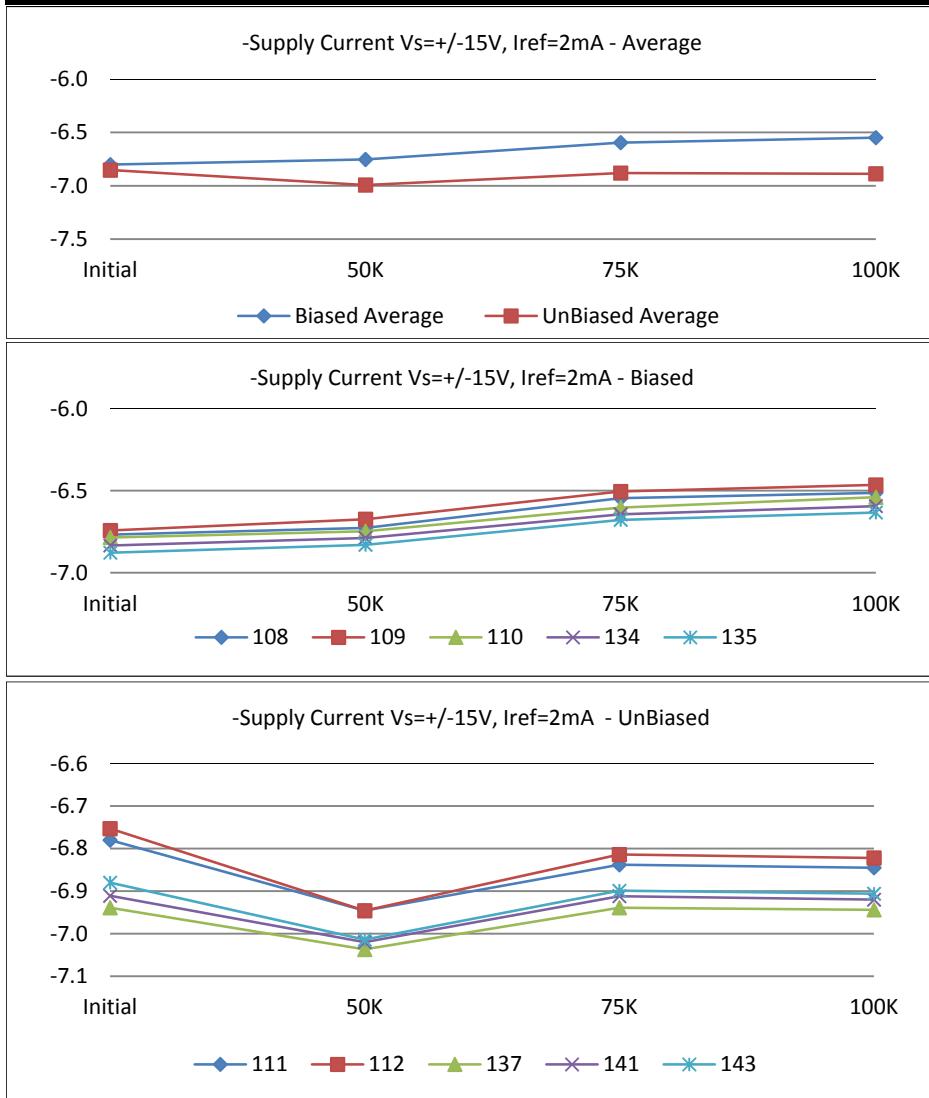
Analog Devices, Inc. does not recommend use of this data to qualify other product grades or process levels. Analog Devices, Inc. is not responsible and has no liability for any consequences, and all applicable Warranties are null and void if any Analog product is modified in any way or used outside of normal environmental and operating conditions, including the parameters specified in the corresponding data sheet. Analog Devices, Inc. does not guarantee that wafer manufacturing is the same for all process levels.



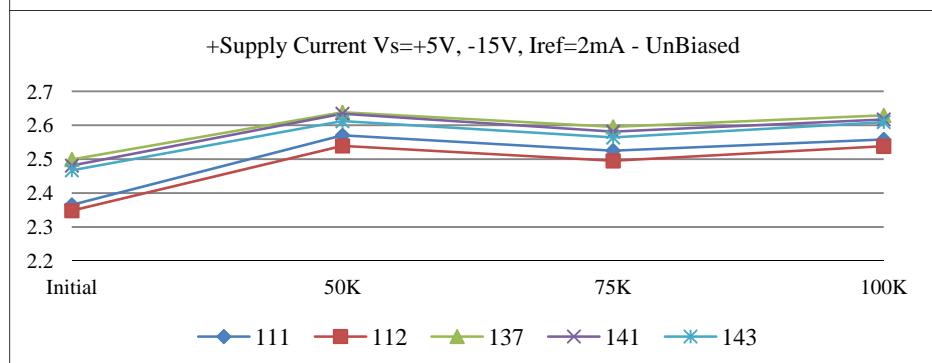
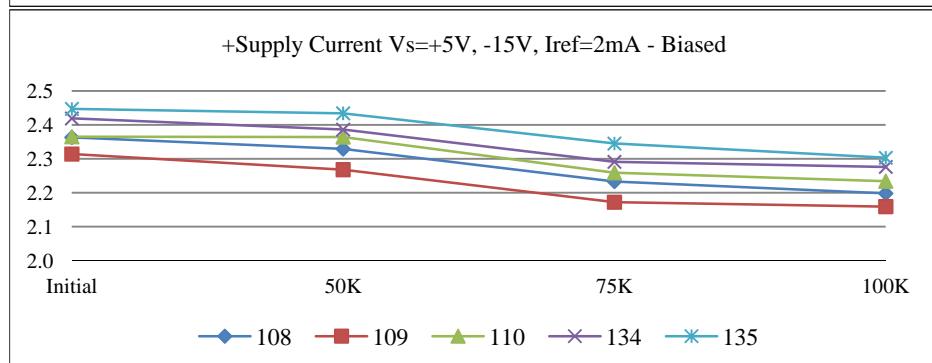
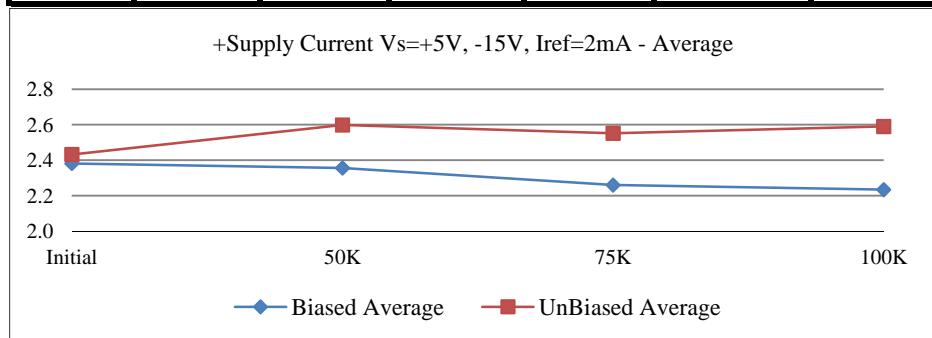
T# 1		ISY+, Vs=+-15V, Iref=2mA				mA
	SN	Initial	50K	75K	100K	Limit
Control	113	2.5900	2.5620	2.4480	2.4660	<4
	144	2.6830	2.6750	2.5380	2.5490	
Biased	108	2.5480	2.4920	2.3350	2.2930	
	109	2.5070	2.4480	2.2700	2.2510	
	110	2.5610	2.5480	2.3650	2.3420	
	134	2.6170	2.5720	2.4080	2.3810	
	135	2.6530	2.6160	2.4430	2.4140	
	Min	2.5070	2.4480	2.2700	2.2510	
	Max	2.6530	2.6160	2.4430	2.4140	
	Average	2.5772	2.5352	2.3642	2.3362	
	111	2.5510	2.7540	2.6220	2.6650	
UnBiased	112	2.5480	2.7310	2.6100	2.6430	
	137	2.6880	2.8230	2.7200	2.7480	
	141	2.6830	2.8210	2.7100	2.7330	
	143	2.6710	2.8150	2.6830	2.7240	
	Min	2.5480	2.7310	2.6100	2.6430	
	Max	2.6880	2.8230	2.7200	2.7480	
	Average	2.6282	2.7888	2.6690	2.7026	



T#2		ISY-,Vs=+/-15V,Iref=2mA				mA
SN	Initial	50K	75K	100K	Limit	
Control	113	-6.8100	-6.8030	-6.6800	-6.6720	>-8
	144	-6.9070	-6.8950	-6.7800	-6.7760	
Biased	108	-6.7680	-6.7270	-6.5460	-6.5130	
	109	-6.7430	-6.6740	-6.5050	-6.4650	
	110	-6.7850	-6.7470	-6.6030	-6.5400	
	134	-6.8340	-6.7880	-6.6440	-6.5940	
	135	-6.8780	-6.8300	-6.6780	-6.6330	
	Min	-6.8780	-6.8300	-6.6780	-6.6330	
	Max	-6.7430	-6.6740	-6.5050	-6.4650	
	Average	-6.8016	-6.7532	-6.5952	-6.5490	
	111	-6.7800	-6.9460	-6.8380	-6.8450	
UnBiased	112	-6.7530	-6.9460	-6.8140	-6.8220	
	137	-6.9390	-7.0370	-6.9390	-6.9440	
	141	-6.9110	-7.0200	-6.9120	-6.9200	
	143	-6.8800	-7.0140	-6.8990	-6.9060	
	Min	-6.9390	-7.0370	-6.9390	-6.9440	
	Max	-6.7530	-6.9460	-6.8140	-6.8220	
	Average	-6.8526	-6.9926	-6.8804	-6.8874	

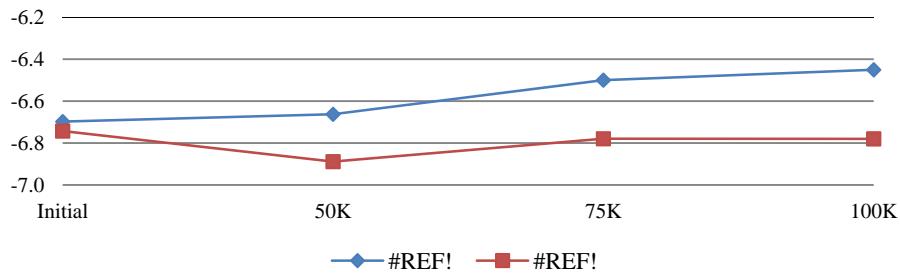


	T#3	ISY+, Vs=5V, -15V, Iref=2mA				mA
	SN	Initial	50K	75K	100K	Limit
Control	113	2.3740	2.3660	2.3300	2.3510	<4
	144	2.4720	2.4700	2.4230	2.4340	
Biased	108	2.3630	2.3290	2.2330	2.1980	
	109	2.3140	2.2680	2.1720	2.1590	
	110	2.3650	2.3640	2.2590	2.2340	
	134	2.4190	2.3860	2.2910	2.2760	
	135	2.4470	2.4340	2.3450	2.3030	
	Min	2.3140	2.2680	2.1720	2.1590	
	Max	2.4470	2.4340	2.3450	2.3030	
	Average	2.3816	2.3562	2.2600	2.2340	
	111	2.3650	2.5700	2.5250	2.5580	
UnBiased	112	2.3480	2.5390	2.4950	2.5380	
	137	2.4990	2.6380	2.5950	2.6290	
	141	2.4810	2.6340	2.5810	2.6170	
	143	2.4670	2.6120	2.5640	2.6090	
	Min	2.3480	2.5390	2.4950	2.5380	
	Max	2.4990	2.6380	2.5950	2.6290	
	Average	2.4320	2.5986	2.5520	2.5902	

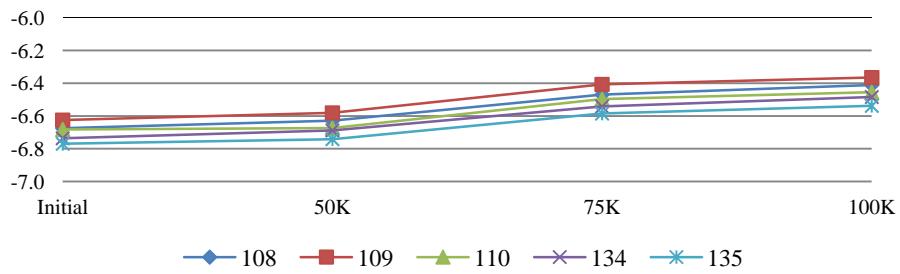


T#4		ISY-,Vs=5V,-15V,Iref=2mA				mA
	SN	Initial	50K	75K	100K	Limit
Control	113	-6.6980	-6.6860	-6.5760	-6.5690	>-8
	144	-6.7990	-6.7860	-6.6780	-6.6720	
Biased	108	-6.6750	-6.6290	-6.4690	-6.4110	
	109	-6.6250	-6.5810	-6.4070	-6.3650	
	110	-6.6830	-6.6740	-6.4970	-6.4550	
	134	-6.7360	-6.6880	-6.5420	-6.4840	
	135	-6.7700	-6.7420	-6.5850	-6.5380	
	Min	-6.7700	-6.7420	-6.5850	-6.5380	
	Max	-6.6250	-6.5810	-6.4070	-6.3650	
	Average	-6.6978	-6.6628	-6.5000	-6.4506	
UnBiased	111	-6.6750	-6.8510	-6.7440	-6.7400	
	112	-6.6710	-6.8290	-6.7270	-6.7370	
	137	-6.8100	-6.9370	-6.8150	-6.8100	
	141	-6.7930	-6.9190	-6.8120	-6.8080	
	143	-6.7660	-6.9080	-6.8000	-6.8050	
	Min	-6.8100	-6.9370	-6.8150	-6.8100	
	Max	-6.6710	-6.8290	-6.7270	-6.7370	
	Average	-6.7430	-6.8888	-6.7796	-6.7800	

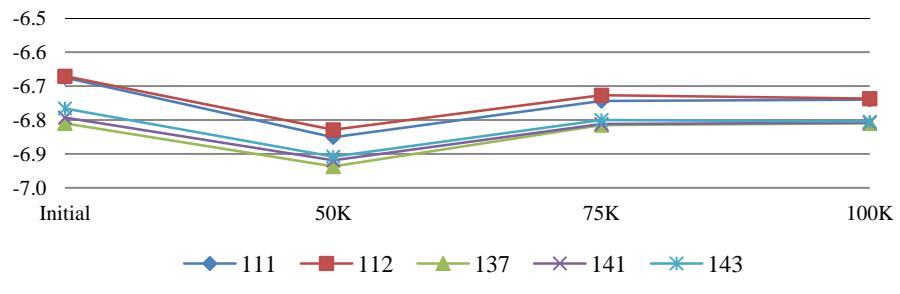
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-Supply Current Vs=+5V, -15V, Iref=2mA - Biased

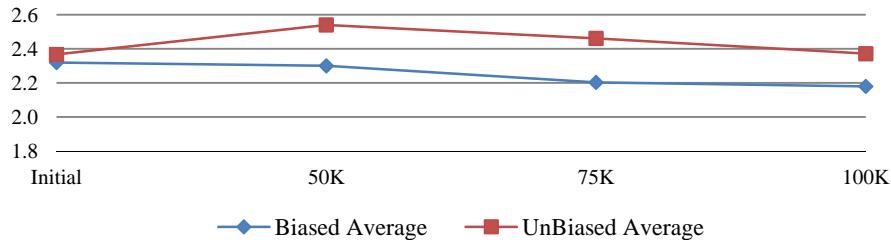


-Supply Current Vs=+5V, -15V, Iref=2mA - UnBiased

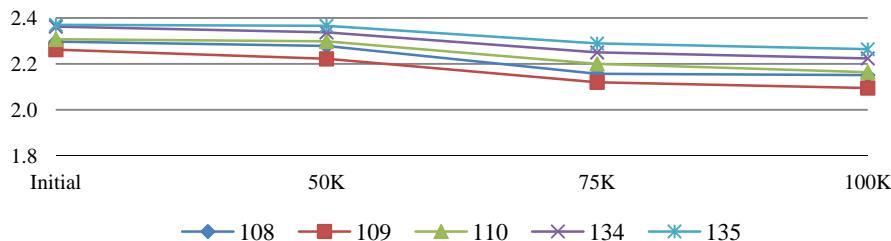


T#5		ISY+, Vs=+-5V, Iref=1mA				mA
SN	Initial	50K	75K	100K	Limit	
Control	113	2.3360	2.3200	2.2790	2.2950	<4
	144	2.4110	2.4000	2.3570	2.3660	
Biased	108	2.2970	2.2780	2.1570	2.1510	
	109	2.2620	2.2220	2.1200	2.0950	
	110	2.3070	2.2980	2.2000	2.1640	
	134	2.3620	2.3370	2.2500	2.2240	
	135	2.3700	2.3660	2.2890	2.2640	
	Min	2.2620	2.2220	2.1200	2.0950	
	Max	2.3700	2.3660	2.2890	2.2640	
	Average	2.3196	2.3002	2.2032	2.1796	
	111	2.3010	2.5020	2.4270	2.3460	
UnBiased	112	2.2940	2.4950	2.4200	2.3560	
	137	2.4310	2.5710	2.4690	2.3640	
	141	2.4180	2.5700	2.4930	2.3660	
	143	2.3910	2.5610	2.4960	2.4260	
	Min	2.2940	2.4950	2.4200	2.3460	
	Max	2.4310	2.5710	2.4960	2.4260	
	Average	2.3670	2.5398	2.4610	2.3716	

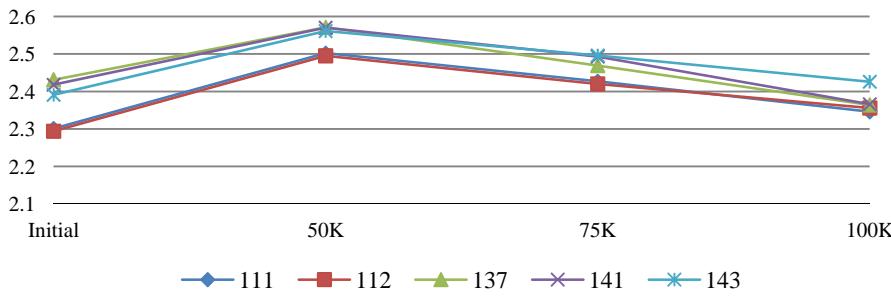
+Supply Current Vs=+/-5V, Iref=1mA - Average



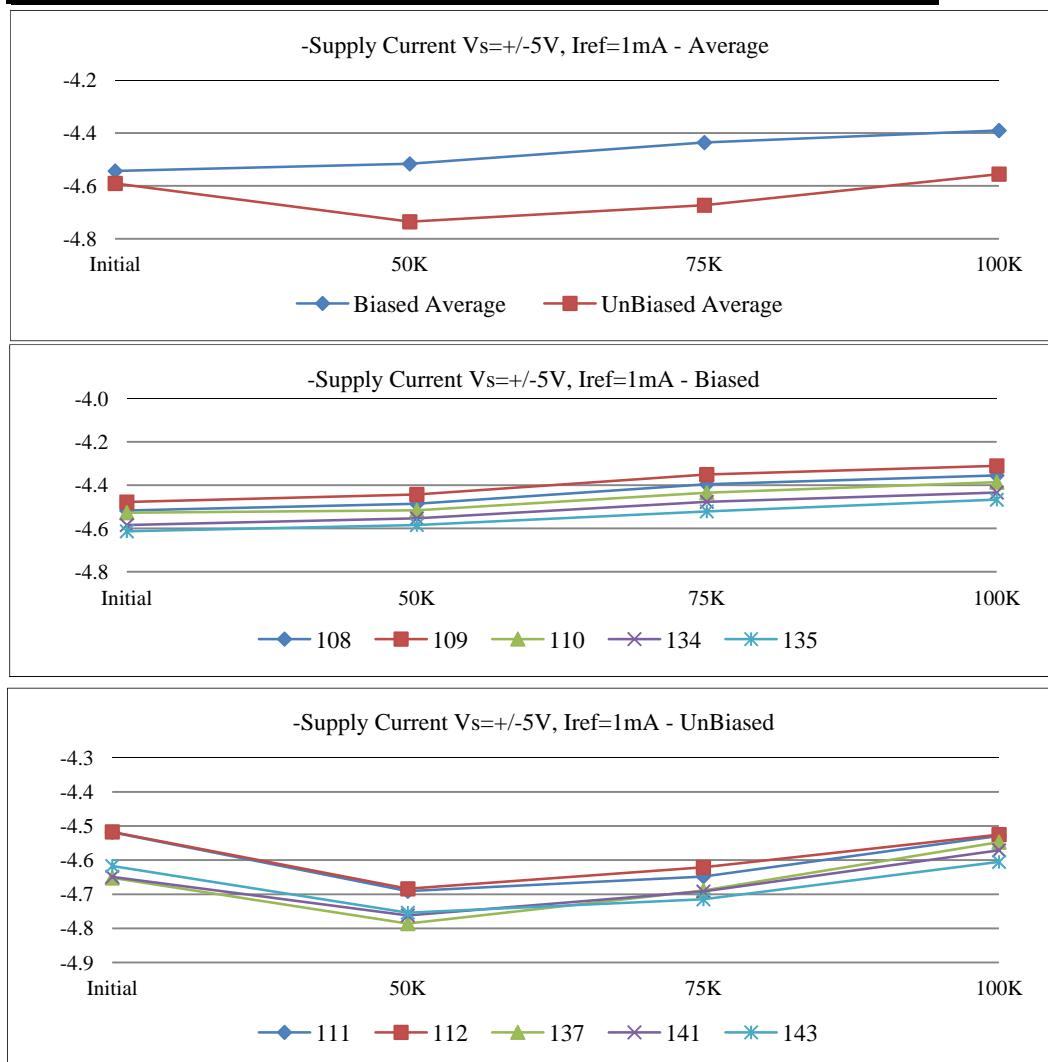
+Supply Current Vs=+/-5V, Iref=1mA - Biased



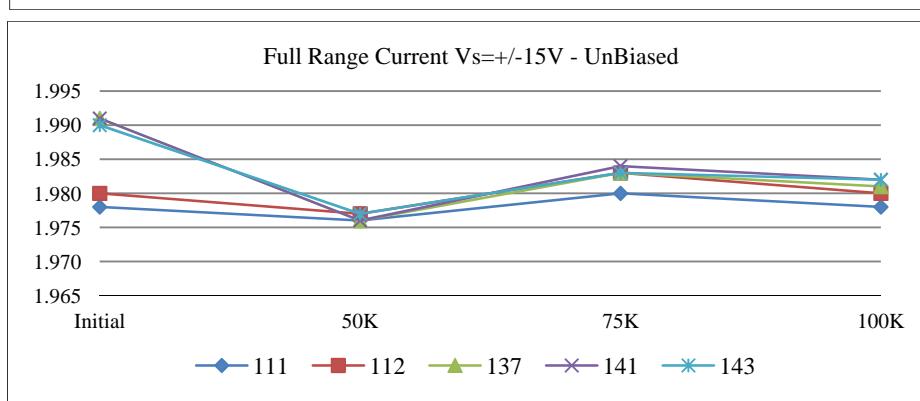
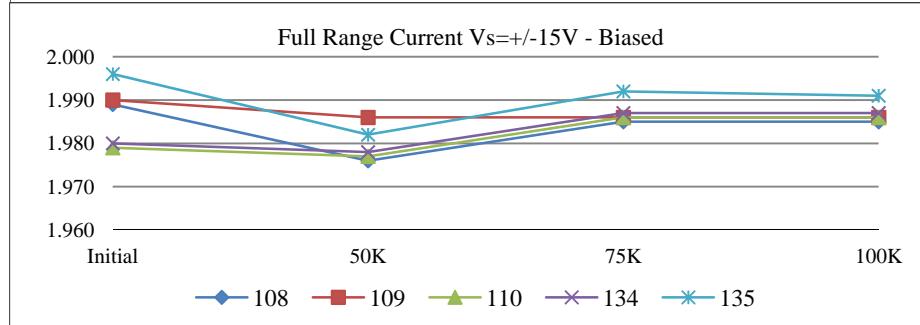
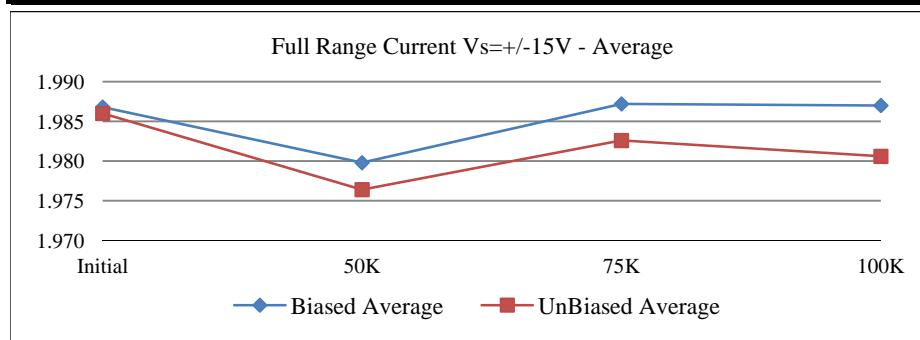
+Supply Current Vs=+/-5V, Iref=1mA - UnBiased



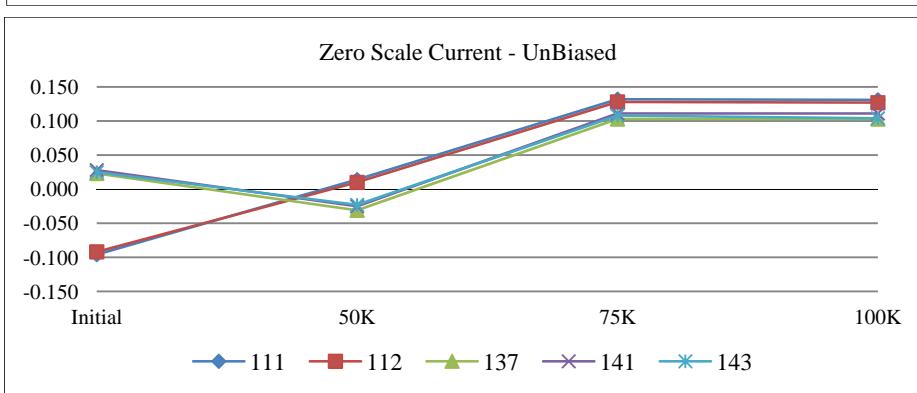
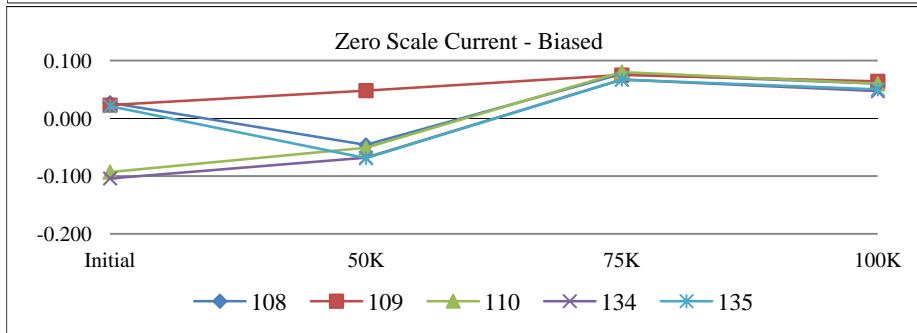
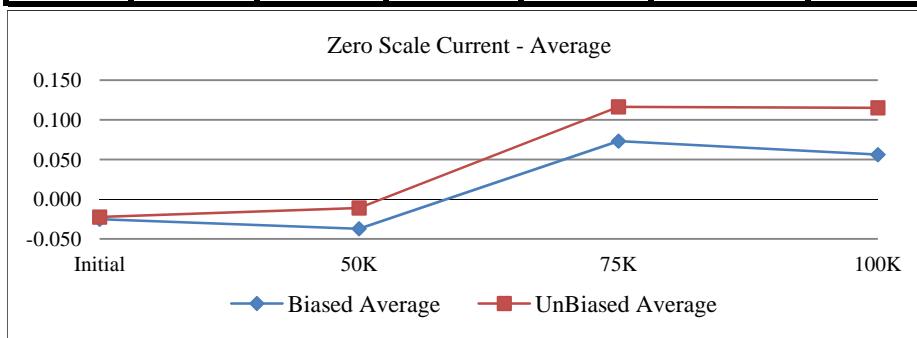
	T#6	ISY-,Vs=+/-5V,Iref=1mA				mA
	SN	Initial	50K	75K	100K	Limit
Control	113	-4.5500	-4.5430	-4.5210	-4.5130	>8
	144	-4.6420	-4.6420	-4.5890	-4.5830	
Biased	108	-4.5170	-4.4860	-4.3960	-4.3550	
	109	-4.4780	-4.4430	-4.3510	-4.3110	
	110	-4.5270	-4.5160	-4.4350	-4.3860	
	134	-4.5840	-4.5530	-4.4770	-4.4340	
	135	-4.6130	-4.5840	-4.5210	-4.4670	
	Min	-4.6130	-4.5840	-4.5210	-4.4670	
	Max	-4.4780	-4.4430	-4.3510	-4.3110	
	Average	-4.5438	-4.5164	-4.4360	-4.3906	
	111	-4.5180	-4.6910	-4.6480	-4.5290	
UnBiased	112	-4.5170	-4.6840	-4.6210	-4.5250	
	137	-4.6520	-4.7860	-4.6890	-4.5470	
	141	-4.6490	-4.7620	-4.6920	-4.5710	
	143	-4.6170	-4.7540	-4.7150	-4.6050	
	Min	-4.6520	-4.7860	-4.7150	-4.6050	
	Max	-4.5170	-4.6840	-4.6210	-4.5250	
	Average	-4.5906	-4.7354	-4.6730	-4.5554	



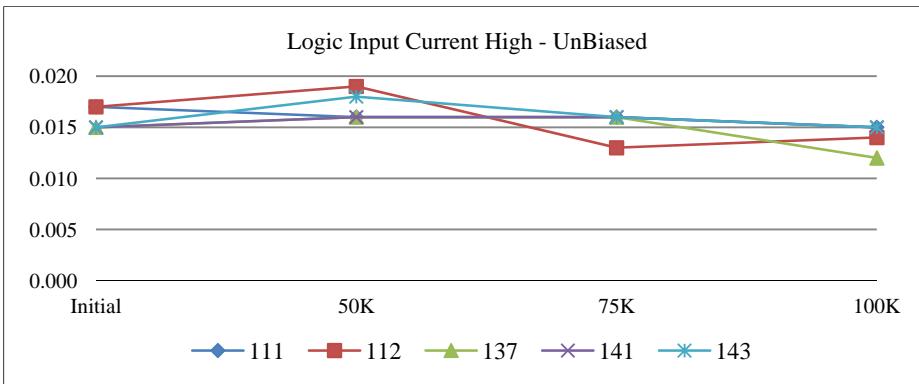
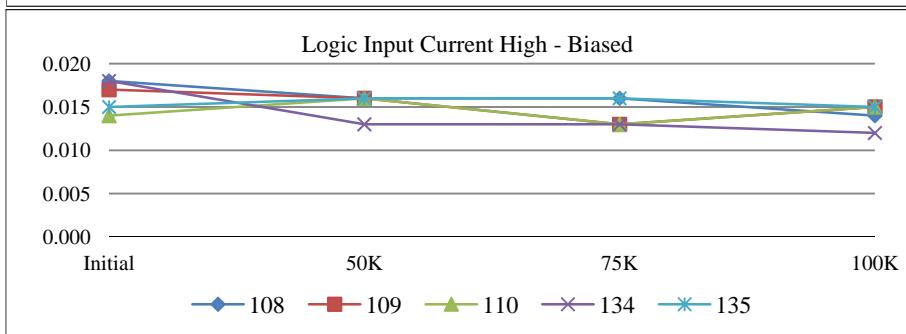
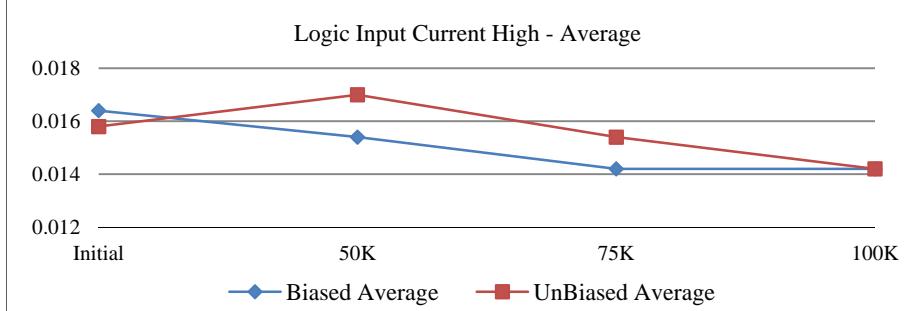
T#8		IFR4, Vs=+/-15V			mA
SN	Initial	50K	75K	100K	Limit
Control	113	1.9820	1.9930	1.9930	1.9930 >1.97
	144	1.9960	1.9960	1.9960	1.9960 <2.0
Biased	108	1.9890	1.9760	1.9850	
	109	1.9900	1.9860	1.9860	
	110	1.9790	1.9770	1.9860	
	134	1.9800	1.9780	1.9870	
	135	1.9960	1.9820	1.9920	1.9910
	Min	1.9790	1.9760	1.9850	
	Max	1.9960	1.9860	1.9920	1.9910
	Average	1.9868	1.9798	1.9872	1.9870
UnBiased	111	1.9780	1.9760	1.9800	1.9780
	112	1.9800	1.9770	1.9830	1.9800
	137	1.9910	1.9760	1.9830	1.9810
	141	1.9910	1.9760	1.9840	1.9820
	143	1.9900	1.9770	1.9830	1.9820
	Min	1.9780	1.9760	1.9800	1.9780
	Max	1.9910	1.9770	1.9840	1.9820
	Average	1.9860	1.9764	1.9826	1.9806



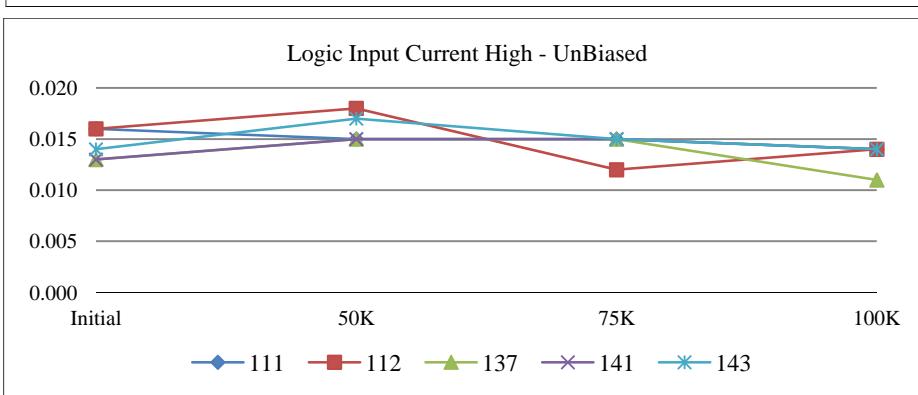
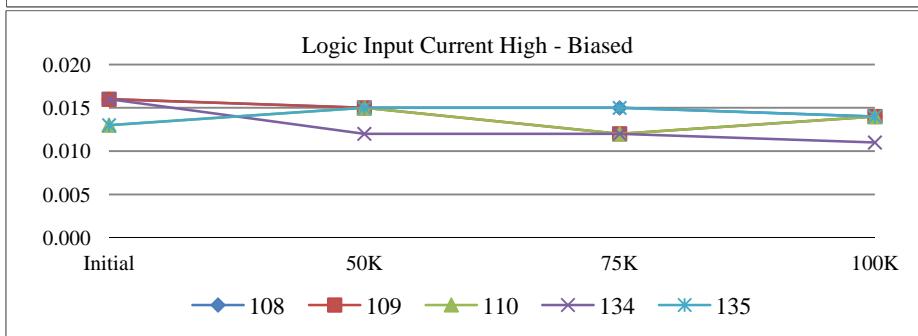
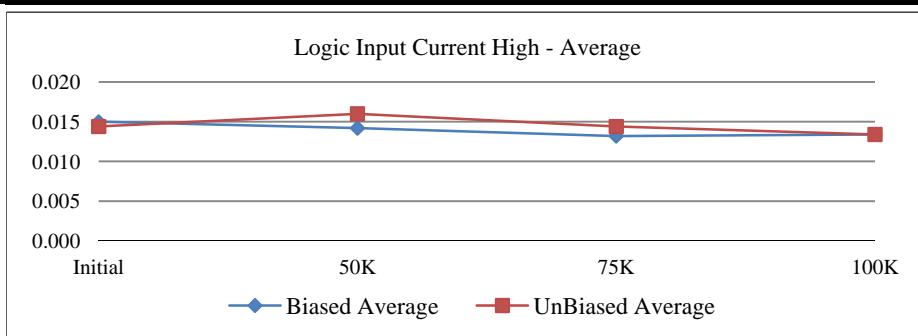
	T#9	IZS				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-0.1000	0.0110	0.0450	0.0270	<2
	144	0.0260	0.0180	0.0420	0.0230	
Biased	108	0.0270	-0.0460	0.0770	0.0600	
	109	0.0230	0.0480	0.0750	0.0640	
	110	-0.0930	-0.0510	0.0800	0.0600	
	134	-0.1040	-0.0680	0.0670	0.0470	
	135	0.0210	-0.0690	0.0670	0.0500	
	Min	-0.1040	-0.0690	0.0670	0.0470	
	Max	0.0270	0.0480	0.0800	0.0640	
	Average	-0.0252	-0.0372	0.0732	0.0562	
UnBiased	111	-0.0960	0.0140	0.1320	0.1310	
	112	-0.0920	0.0100	0.1280	0.1270	
	137	0.0230	-0.0310	0.1030	0.1030	
	141	0.0280	-0.0250	0.1110	0.1110	
	143	0.0250	-0.0230	0.1080	0.1040	
	Min	-0.0960	-0.0310	0.1030	0.1030	
	Max	0.0280	0.0140	0.1320	0.1310	
	Average	-0.0224	-0.0110	0.1164	0.1152	



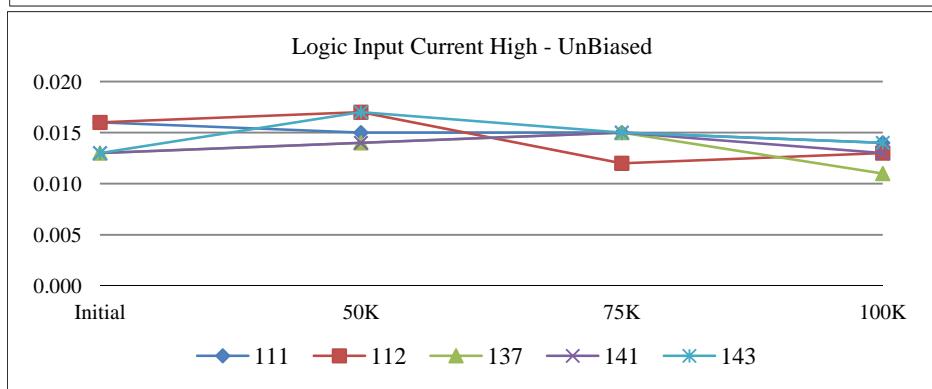
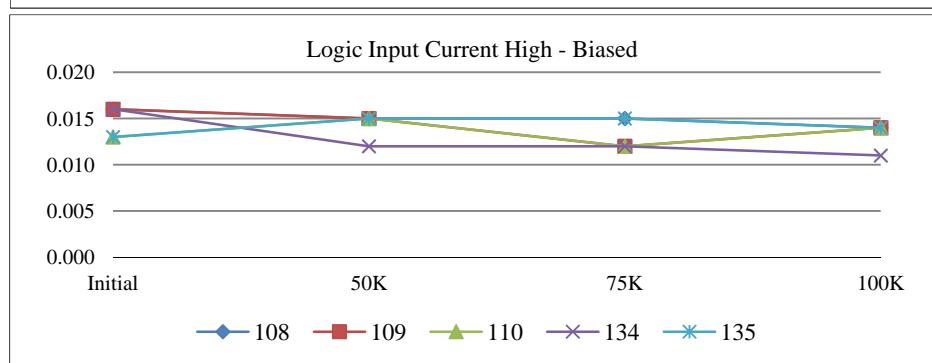
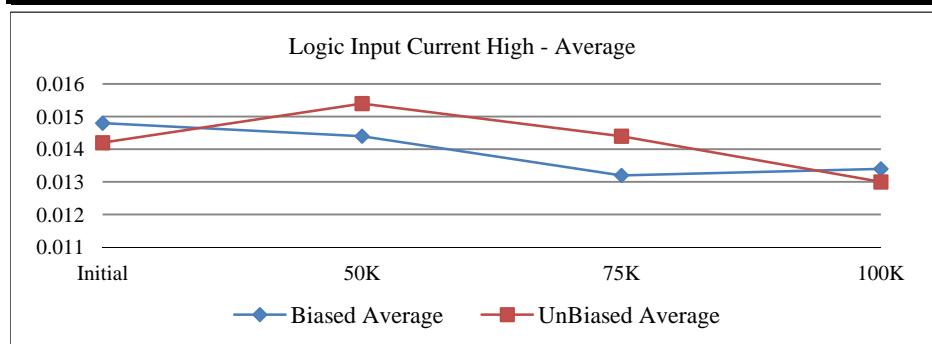
T#10		IIH VL=18V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	0.0150	0.0160	0.0120	0.0140	<10
	144	0.0150	0.0160	0.0150	0.0140	
Biased	108	0.0180	0.0160	0.0160	0.0140	
	109	0.0170	0.0160	0.0130	0.0150	
	110	0.0140	0.0160	0.0130	0.0150	
	134	0.0180	0.0130	0.0130	0.0120	
	135	0.0150	0.0160	0.0160	0.0150	
	Min	0.0140	0.0130	0.0130	0.0120	
	Max	0.0180	0.0160	0.0160	0.0150	
	Average	0.0164	0.0154	0.0142	0.0142	
UnBiased	111	0.0170	0.0160	0.0160	0.0150	
	112	0.0170	0.0190	0.0130	0.0140	
	137	0.0150	0.0160	0.0160	0.0120	
	141	0.0150	0.0160	0.0160	0.0150	
	143	0.0150	0.0180	0.0160	0.0150	
	Min	0.0150	0.0160	0.0130	0.0120	
	Max	0.0170	0.0190	0.0160	0.0150	
	Average	0.0158	0.0170	0.0154	0.0142	



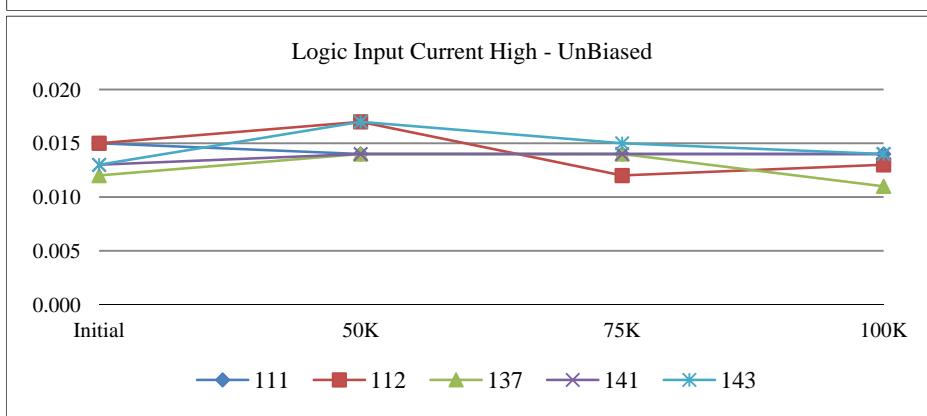
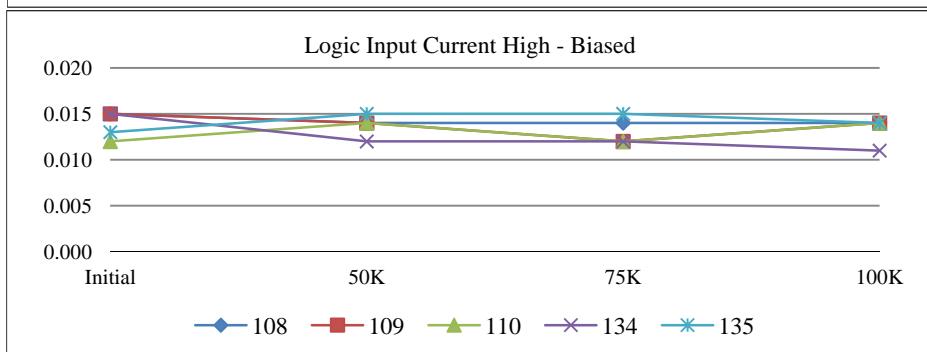
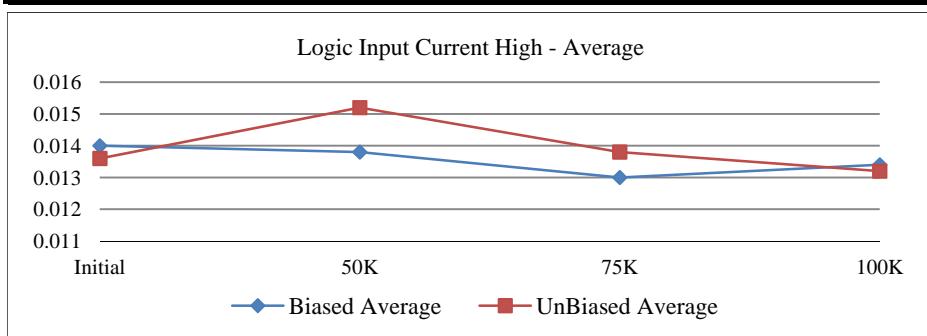
T#11		IIH VL=18V				uA
SN	Initial	50K	75K	100K	Limit	
Control	113	0.0130	0.0140	0.0110	0.0130	<10
	144	0.0140	0.0140	0.0150	0.0130	
Biased	108	0.0160	0.0150	0.0150	0.0140	
	109	0.0160	0.0150	0.0120	0.0140	
	110	0.0130	0.0140	0.0120	0.0140	
	134	0.0160	0.0120	0.0120	0.0110	
	135	0.0140	0.0150	0.0150	0.0140	
	Min	0.0130	0.0120	0.0120	0.0110	
	Max	0.0160	0.0150	0.0150	0.0140	
	Average	0.0150	0.0142	0.0132	0.0134	
UnBiased	111	0.0160	0.0150	0.0150	0.0140	
	112	0.0160	0.0180	0.0120	0.0140	
	137	0.0130	0.0150	0.0150	0.0110	
	141	0.0130	0.0150	0.0150	0.0140	
	143	0.0140	0.0170	0.0150	0.0140	
	Min	0.0130	0.0150	0.0120	0.0110	
	Max	0.0160	0.0180	0.0150	0.0140	
	Average	0.0144	0.0160	0.0144	0.0134	



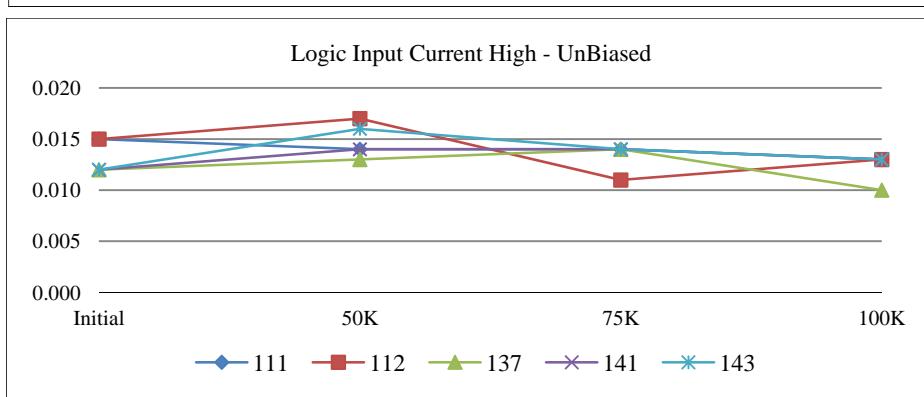
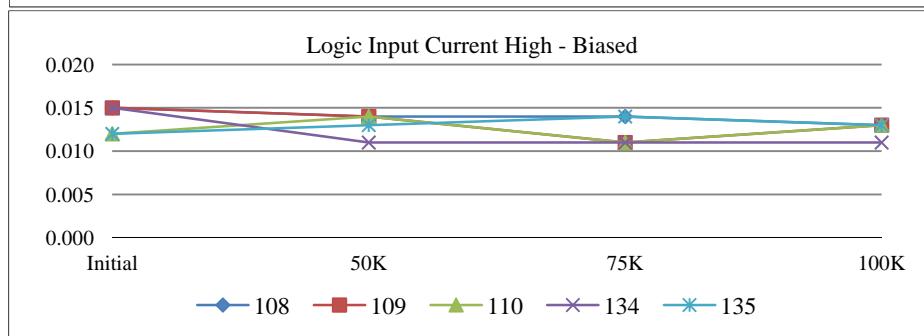
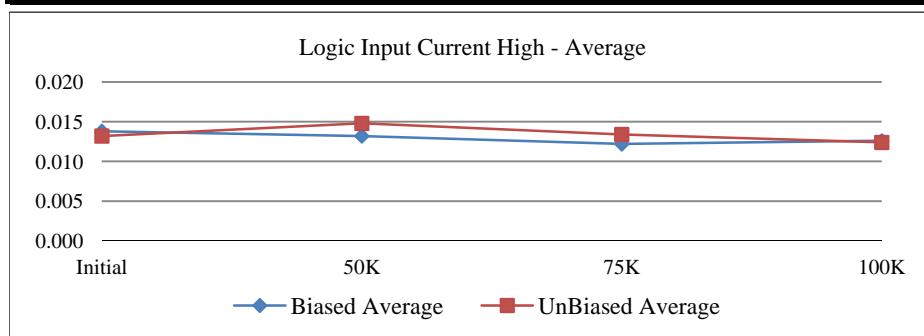
T#12		IIH VL=18V				uA
SN	Initial	50K	75K	100K		
Control	113	0.0130	0.0140	0.0110	0.0130	<10
	144	0.0130	0.0140	0.0140	0.0130	
Biased	108	0.0160	0.0150	0.0150	0.0140	
	109	0.0160	0.0150	0.0120	0.0140	
	110	0.0130	0.0150	0.0120	0.0140	
	134	0.0160	0.0120	0.0120	0.0110	
	135	0.0130	0.0150	0.0150	0.0140	
	Min	0.0130	0.0120	0.0120	0.0110	
	Max	0.0160	0.0150	0.0150	0.0140	
	Average	0.0148	0.0144	0.0132	0.0134	
UnBiased	111	0.0160	0.0150	0.0150	0.0140	
	112	0.0160	0.0170	0.0120	0.0130	
	137	0.0130	0.0140	0.0150	0.0110	
	141	0.0130	0.0140	0.0150	0.0130	
	143	0.0130	0.0170	0.0150	0.0140	
	Min	0.0130	0.0140	0.0120	0.0110	
	Max	0.0160	0.0170	0.0150	0.0140	
	Average	0.0142	0.0154	0.0144	0.0130	



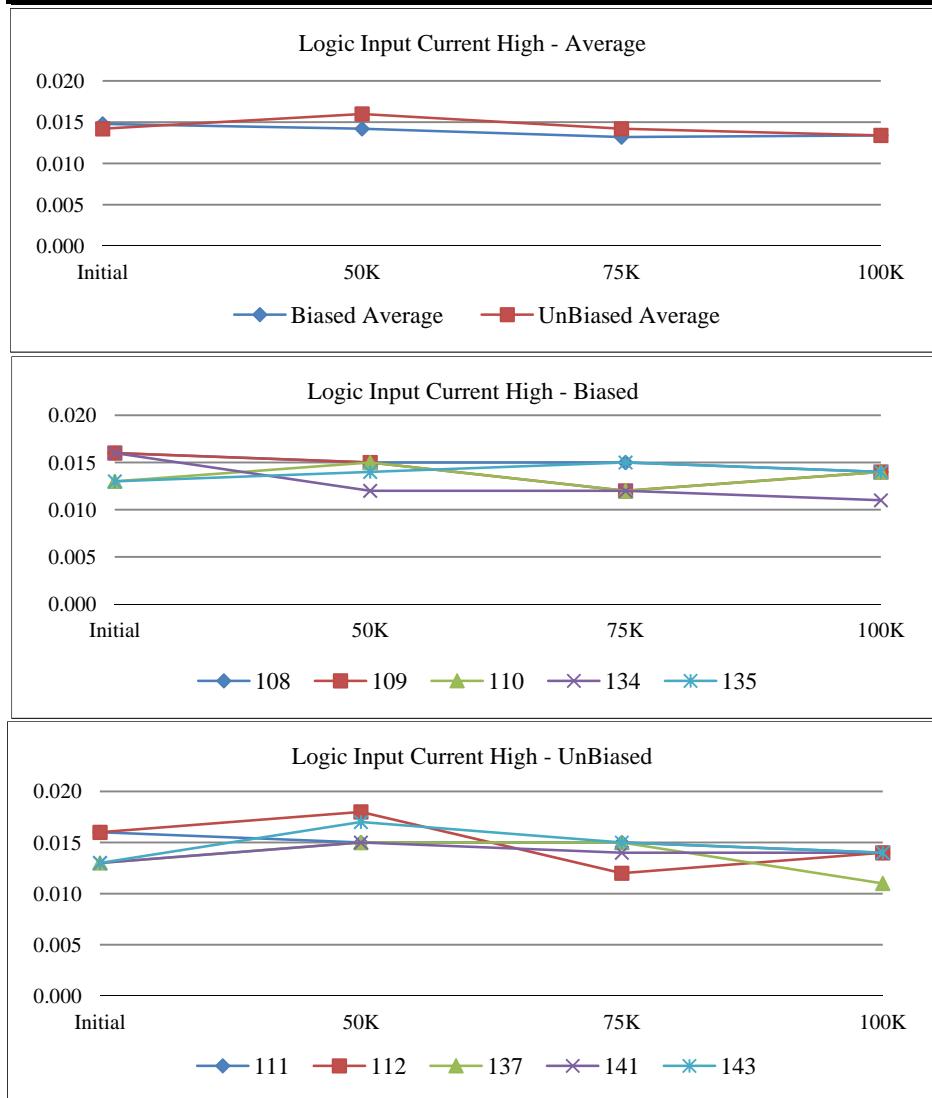
T#13		IIH VL=18V				uA
SN	Initial	50K	75K	100K	Limit	
Control	113	0.0120	0.0140	0.0110	0.0130	<10
	144	0.0130	0.0140	0.0140	0.0130	
Biased	108	0.0150	0.0140	0.0140	0.0140	
	109	0.0150	0.0140	0.0120	0.0140	
	110	0.0120	0.0140	0.0120	0.0140	
	134	0.0150	0.0120	0.0120	0.0110	
	135	0.0130	0.0150	0.0150	0.0140	
	Min	0.0120	0.0120	0.0120	0.0110	
	Max	0.0150	0.0150	0.0150	0.0140	
	Average	0.0140	0.0138	0.0130	0.0134	
	111	0.0150	0.0140	0.0140	0.0140	
UnBiased	112	0.0150	0.0170	0.0120	0.0130	
	137	0.0120	0.0140	0.0140	0.0110	
	141	0.0130	0.0140	0.0140	0.0140	
	143	0.0130	0.0170	0.0150	0.0140	
	Min	0.0120	0.0140	0.0120	0.0110	
	Max	0.0150	0.0170	0.0150	0.0140	
	Average	0.0136	0.0152	0.0138	0.0132	



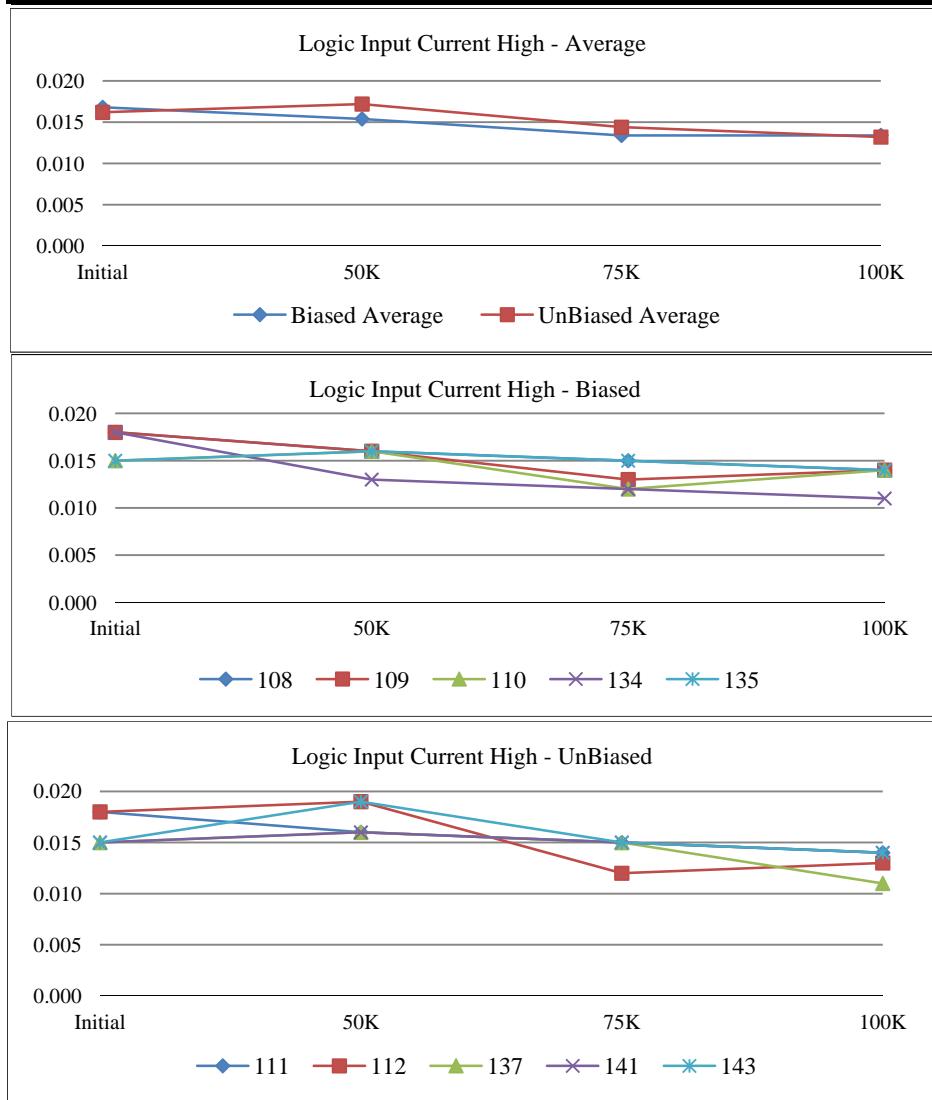
T#14		IIH VL=18V				uA
SN	Initial	50K	75K	100K		
Control	113	0.0120	0.0130	0.0100	0.0120	<10
	144	0.0120	0.0130	0.0130	0.0130	
Biased	108	0.0150	0.0140	0.0140	0.0130	
	109	0.0150	0.0140	0.0110	0.0130	
	110	0.0120	0.0140	0.0110	0.0130	
	134	0.0150	0.0110	0.0110	0.0110	
	135	0.0120	0.0130	0.0140	0.0130	
	Min	0.0120	0.0110	0.0110	0.0110	
	Max	0.0150	0.0140	0.0140	0.0130	
	Average	0.0138	0.0132	0.0122	0.0126	
UnBiased	111	0.0150	0.0140	0.0140	0.0130	
	112	0.0150	0.0170	0.0110	0.0130	
	137	0.0120	0.0130	0.0140	0.0100	
	141	0.0120	0.0140	0.0140	0.0130	
	143	0.0120	0.0160	0.0140	0.0130	
	Min	0.0120	0.0130	0.0110	0.0100	
	Max	0.0150	0.0170	0.0140	0.0130	
	Average	0.0132	0.0148	0.0134	0.0124	



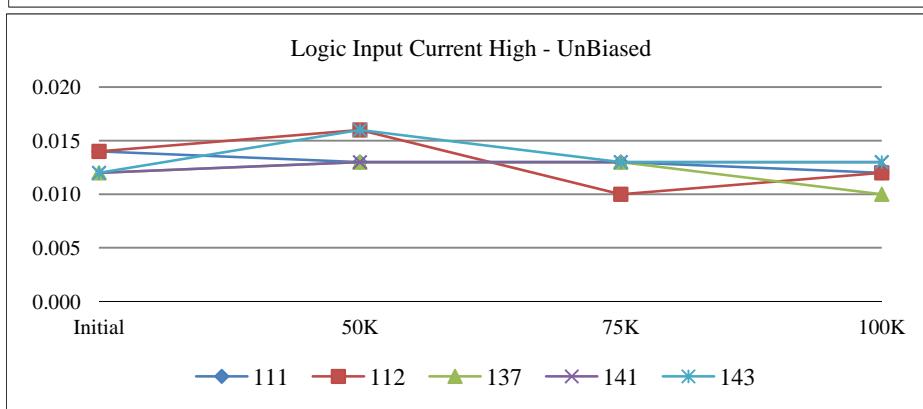
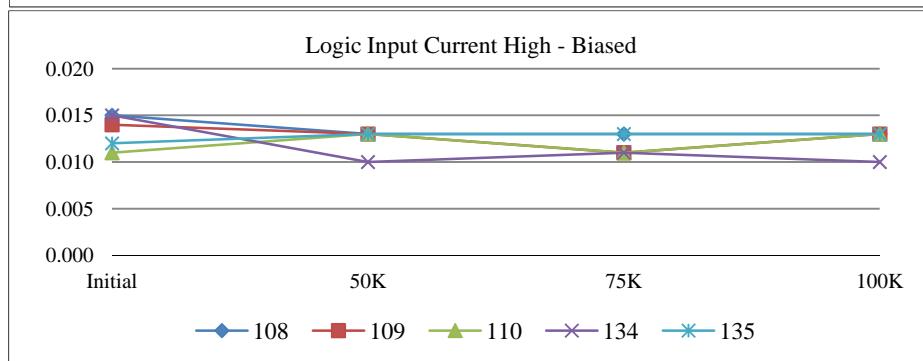
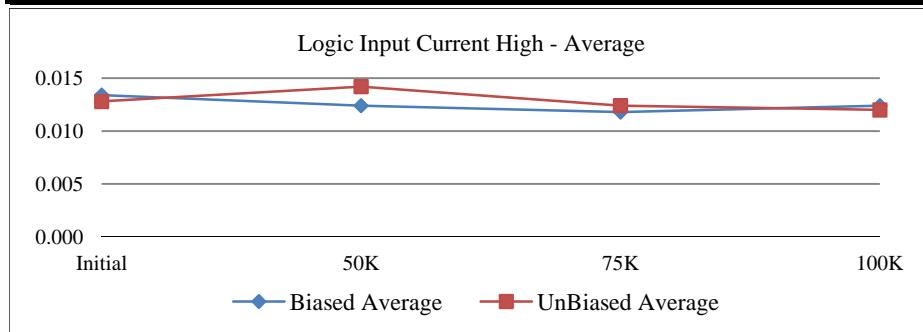
T#15		IIH VL=18V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	0.0130	0.0140	0.0110	0.0130	<10
	144	0.0130	0.0140	0.0140	0.0130	
Biased	108	0.0160	0.0150	0.0150	0.0140	
	109	0.0160	0.0150	0.0120	0.0140	
	110	0.0130	0.0150	0.0120	0.0140	
	134	0.0160	0.0120	0.0120	0.0110	
	135	0.0130	0.0140	0.0150	0.0140	
	Min	0.0130	0.0120	0.0120	0.0110	
	Max	0.0160	0.0150	0.0150	0.0140	
	Average	0.0148	0.0142	0.0132	0.0134	
UnBiased	111	0.0160	0.0150	0.0150	0.0140	
	112	0.0160	0.0180	0.0120	0.0140	
	137	0.0130	0.0150	0.0150	0.0110	
	141	0.0130	0.0150	0.0140	0.0140	
	143	0.0130	0.0170	0.0150	0.0140	
	Min	0.0130	0.0150	0.0120	0.0110	
	Max	0.0160	0.0180	0.0150	0.0140	
	Average	0.0142	0.0160	0.0142	0.0134	



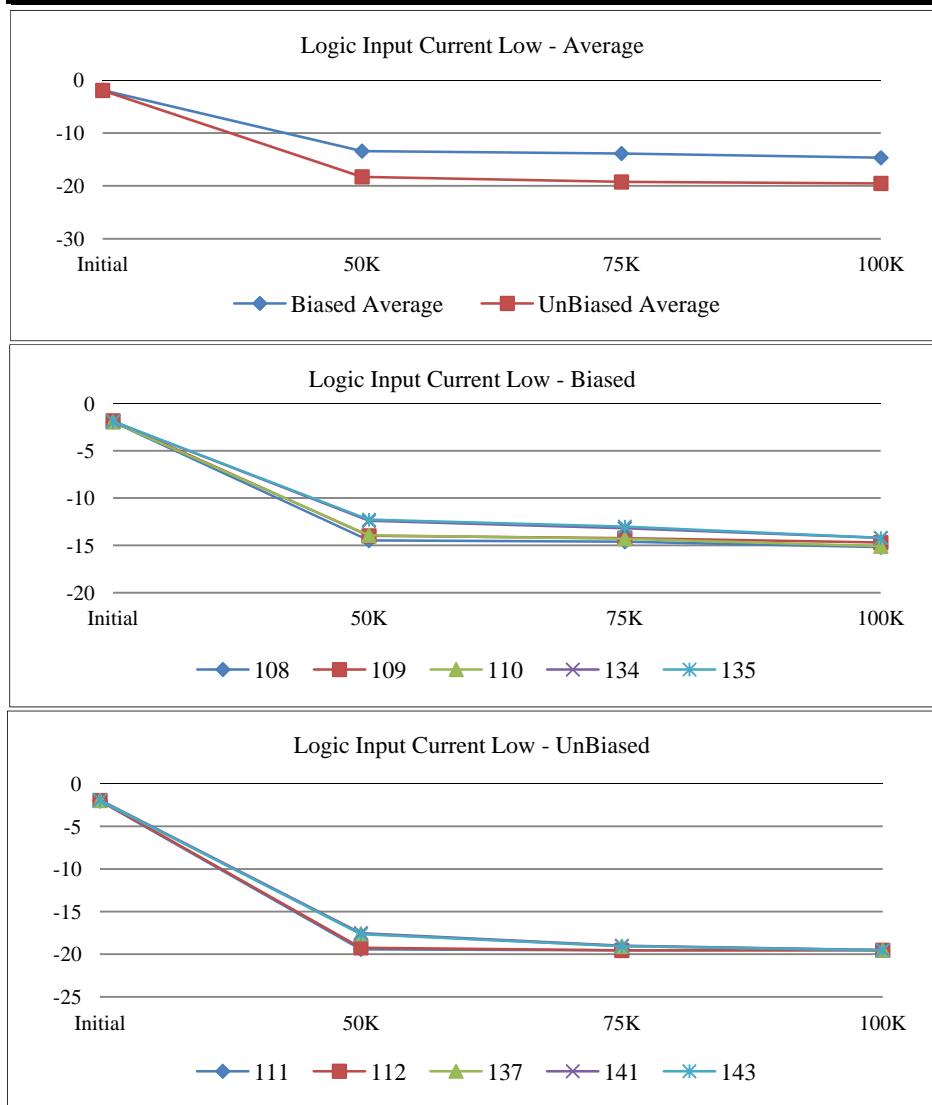
T#16		IIH VL=18V				uA
SN	Initial	50K	75K	100K	Limit	
Control	113	0.0150	0.0150	0.0120	0.0130	<10
	144	0.0160	0.0160	0.0140	0.0130	
Biased	108	0.0180	0.0160	0.0150	0.0140	
	109	0.0180	0.0160	0.0130	0.0140	
	110	0.0150	0.0160	0.0120	0.0140	
	134	0.0180	0.0130	0.0120	0.0110	
	135	0.0150	0.0160	0.0150	0.0140	
	Min	0.0150	0.0130	0.0120	0.0110	
	Max	0.0180	0.0160	0.0150	0.0140	
	Average	0.0168	0.0154	0.0134	0.0134	
UnBiased	111	0.0180	0.0160	0.0150	0.0140	
	112	0.0180	0.0190	0.0120	0.0130	
	137	0.0150	0.0160	0.0150	0.0110	
	141	0.0150	0.0160	0.0150	0.0140	
	143	0.0150	0.0190	0.0150	0.0140	
	Min	0.0150	0.0160	0.0120	0.0110	
	Max	0.0180	0.0190	0.0150	0.0140	
	Average	0.0162	0.0172	0.0144	0.0132	



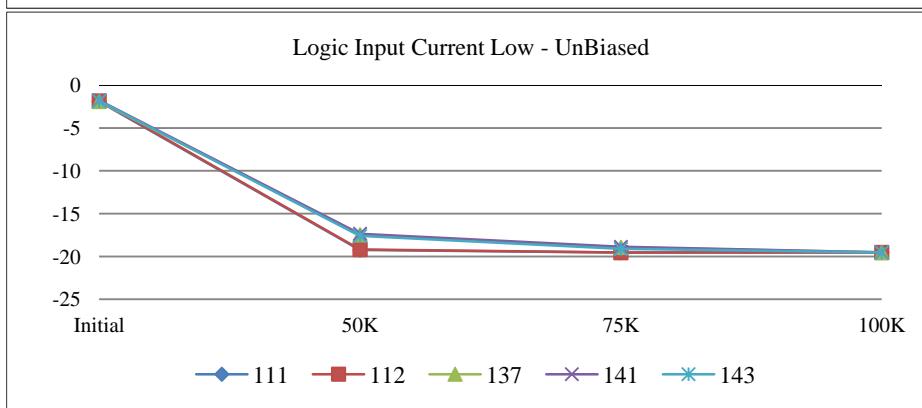
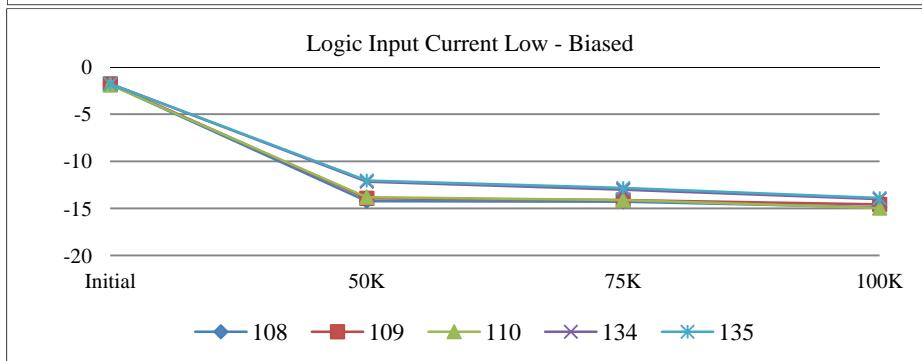
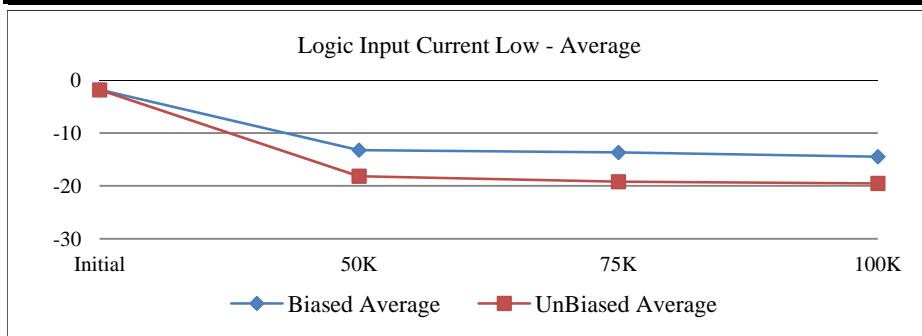
T#17		IIH VL=18V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	0.0120	0.0130	0.0100	0.0120	<10
	144	0.0120	0.0130	0.0130	0.0120	
Biased	108	0.0150	0.0130	0.0130	0.0130	
	109	0.0140	0.0130	0.0110	0.0130	
	110	0.0110	0.0130	0.0110	0.0130	
	134	0.0150	0.0100	0.0110	0.0100	
	135	0.0120	0.0130	0.0130	0.0130	
	Min	0.0110	0.0100	0.0110	0.0100	
	Max	0.0150	0.0130	0.0130	0.0130	
	Average	0.0134	0.0124	0.0118	0.0124	
UnBiased	111	0.0140	0.0130	0.0130	0.0120	
	112	0.0140	0.0160	0.0100	0.0120	
	137	0.0120	0.0130	0.0130	0.0100	
	141	0.0120	0.0130	0.0130	0.0130	
	143	0.0120	0.0160	0.0130	0.0130	
	Min	0.0120	0.0130	0.0100	0.0100	
	Max	0.0140	0.0160	0.0130	0.0130	
	Average	0.0128	0.0142	0.0124	0.0120	



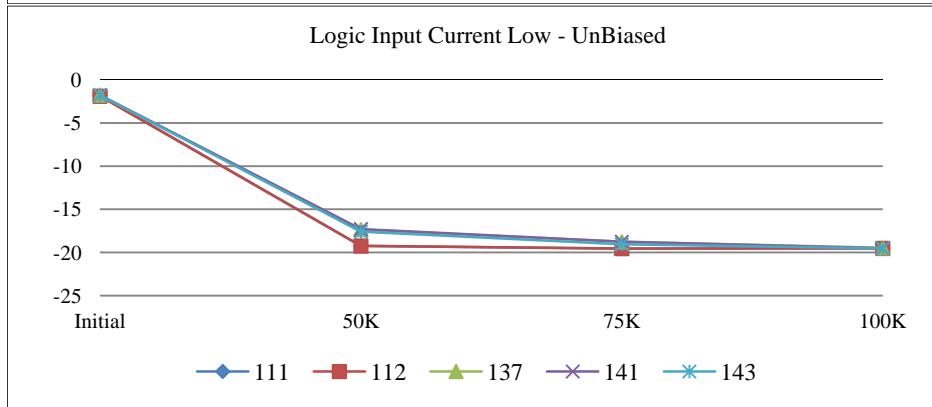
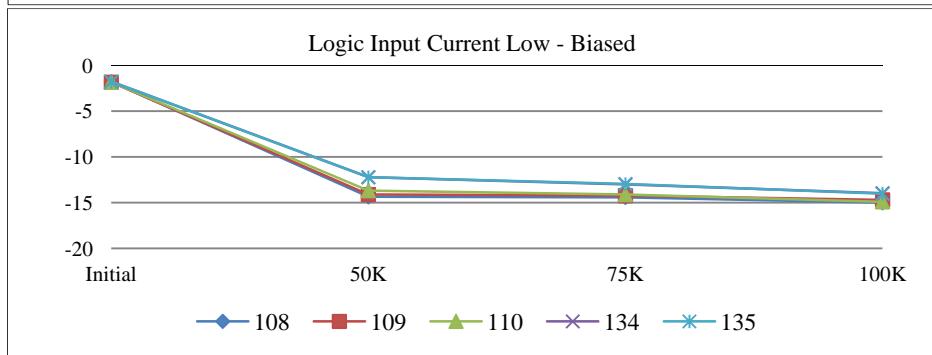
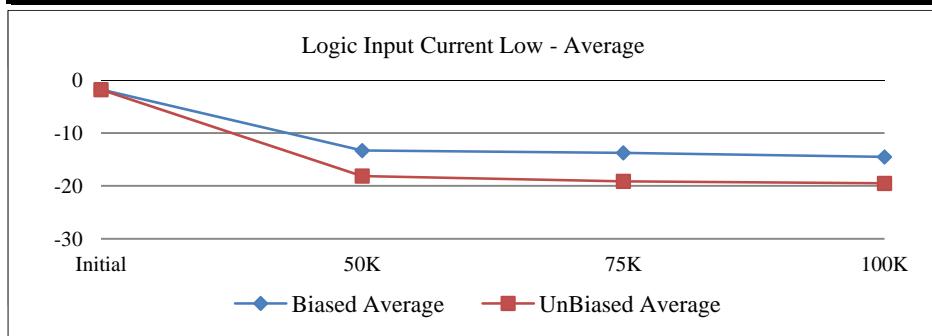
T#18		III L VL=-10V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-1.7720	-1.7110	-1.7160	-1.6880	>-30
	144	-1.8940	-1.8940	-1.8960	-1.8770	
Biased	108	-1.9580	-14.4800	-14.6020	-15.1900	
	109	-1.8330	-13.9880	-14.2360	-14.7010	
	110	-1.9550	-13.9300	-14.2970	-15.0900	
	134	-1.8940	-12.4030	-13.1950	-14.2100	
	135	-1.8990	-12.2840	-13.0140	-14.2100	
	Min	-1.9580	-14.4800	-14.6020	-15.1900	
	Max	-1.8330	-12.2840	-13.0140	-14.2100	
	Average	-1.9078	-13.4170	-13.8688	-14.6802	
UnBiased	111	-2.0160	-19.4250	-19.5490	-19.5240	
	112	-1.9550	-19.2420	-19.5490	-19.5290	
	137	-1.9550	-17.5920	-19.0610	-19.5260	
	141	-1.8970	-17.5310	-18.9990	-19.5210	
	143	-1.9550	-17.6540	-19.0580	-19.5260	
	Min	-2.0160	-19.4250	-19.5490	-19.5290	
	Max	-1.8970	-17.5310	-18.9990	-19.5210	
	Average	-1.9556	-18.2888	-19.2432	-19.5252	



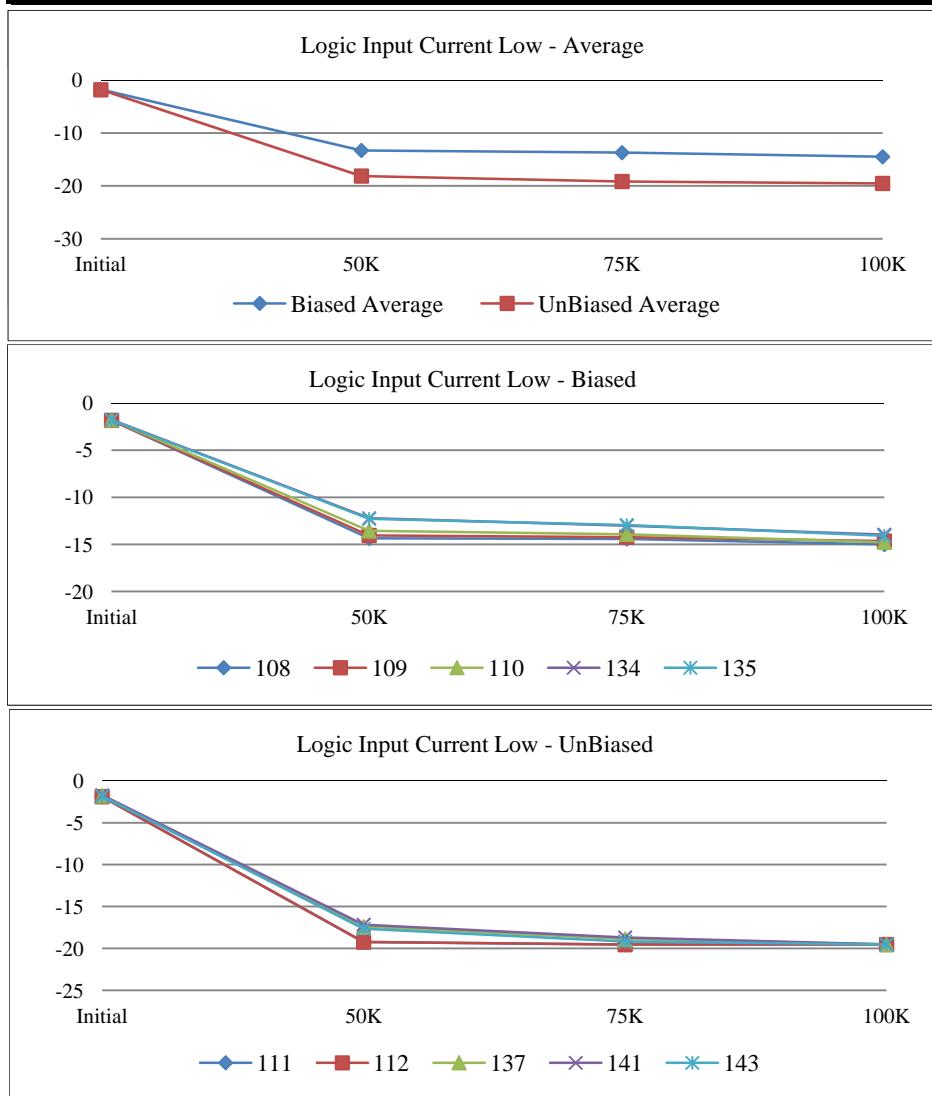
	T#19	III L VL=-10V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-1.5880	-1.5890	-1.5330	-1.5660	>-30
	144	-1.7720	-1.7720	-1.7740	-1.7550	
Biased	108	-1.8350	-14.2360	-14.2970	-14.8840	
	109	-1.7720	-13.9270	-14.1140	-14.5790	
	110	-1.8940	-13.8080	-14.1140	-14.9680	
	134	-1.7720	-12.1590	-13.0120	-14.0260	
	135	-1.7770	-12.0390	-12.8310	-13.9040	
	Min	-1.8940	-14.2360	-14.2970	-14.9680	
	Max	-1.7720	-12.0390	-12.8310	-13.9040	
	Average	-1.8100	-13.2338	-13.6736	-14.4722	
	111	-1.8940	-19.2420	-19.5490	-19.5240	
UnBiased	112	-1.8330	-19.1810	-19.5490	-19.5290	
	137	-1.8940	-17.4700	-18.9380	-19.5260	
	141	-1.7740	-17.3480	-18.8770	-19.5210	
	143	-1.8330	-17.5920	-19.1190	-19.5260	
	Min	-1.8940	-19.2420	-19.5490	-19.5290	
	Max	-1.7740	-17.3480	-18.8770	-19.5210	
	Average	-1.8456	-18.1666	-19.2064	-19.5252	



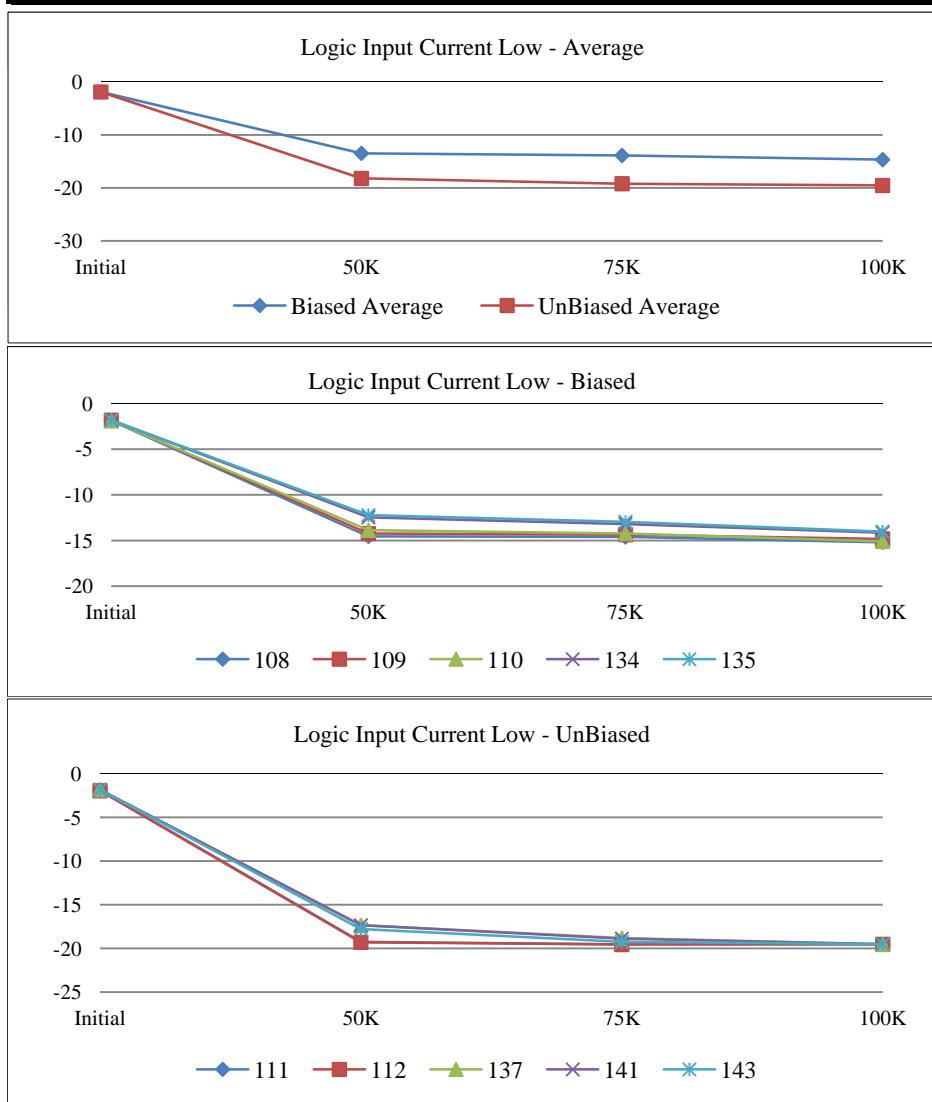
T#20		IIL VL=-10V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-1.7720	-1.7110	-1.7160	-1.6880	>-30
	144	-1.7110	-1.7110	-1.7130	-1.6940	
Biased	108	-1.7740	-14.3580	-14.4190	-15.0070	
	109	-1.8330	-14.1110	-14.2360	-14.7010	
	110	-1.8330	-13.6860	-14.1140	-14.9070	
	134	-1.7720	-12.2200	-13.0120	-13.9650	
	135	-1.7770	-12.2230	-12.9530	-14.0260	
	Min	-1.8330	-14.3580	-14.4190	-15.0070	
	Max	-1.7720	-12.2200	-12.9530	-13.9650	
	Average	-1.7978	-13.3196	-13.7468	-14.5212	
	111	-1.8330	-19.2420	-19.5490	-19.5240	
UnBiased	112	-1.8940	-19.2420	-19.5490	-19.5290	
	137	-1.7720	-17.3480	-18.7550	-19.4650	
	141	-1.7740	-17.2870	-18.7550	-19.5210	
	143	-1.7720	-17.5920	-19.0580	-19.5260	
	Min	-1.8940	-19.2420	-19.5490	-19.5290	
	Max	-1.7720	-17.2870	-18.7550	-19.4650	
	Average	-1.8090	-18.1422	-19.1332	-19.5130	



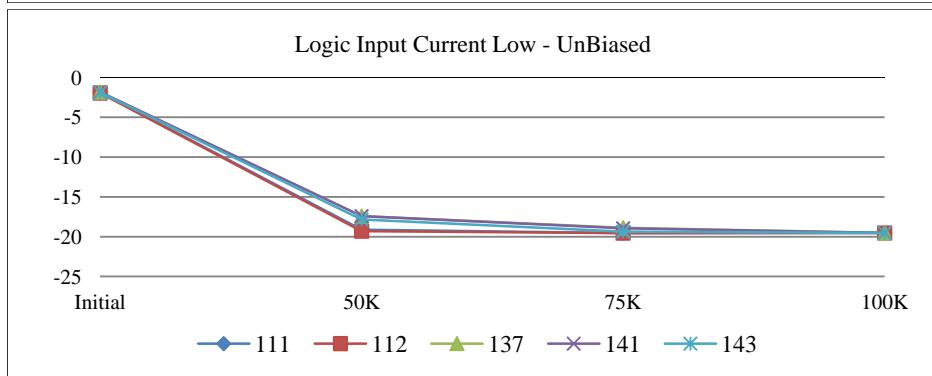
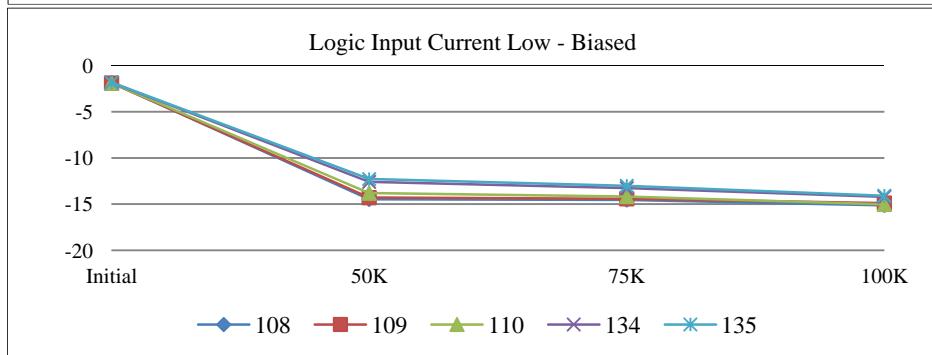
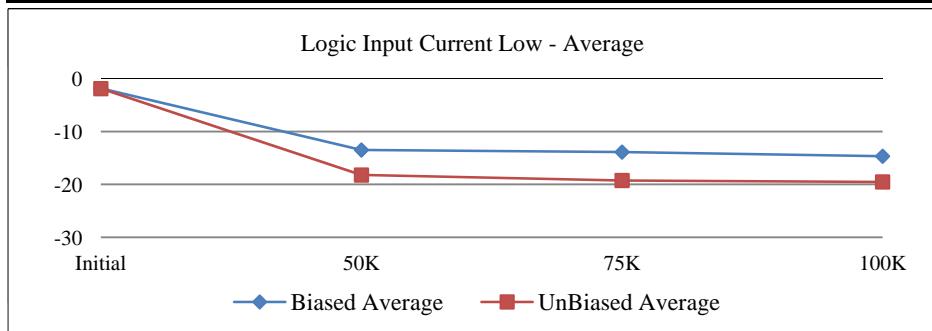
	T#21	III L VL=-10V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-1.5880	-1.5270	-1.5330	-1.5050	>-30
	144	-1.7110	-1.7110	-1.7130	-1.6940	
Biased	108	-1.8350	-14.3580	-14.4190	-15.0070	
	109	-1.8330	-14.0500	-14.2360	-14.6400	
	110	-1.7720	-13.5640	-13.9300	-14.7840	
	134	-1.7720	-12.2200	-13.0120	-13.9650	
	135	-1.7770	-12.2840	-12.9530	-14.0880	
	Min	-1.8350	-14.3580	-14.4190	-15.0070	
	Max	-1.7720	-12.2200	-12.9530	-13.9650	
	Average	-1.7978	-13.2952	-13.7100	-14.4968	
	111	-1.8940	-19.2420	-19.5490	-19.5240	
UnBiased	112	-1.8940	-19.2420	-19.5490	-19.5290	
	137	-1.7720	-17.4090	-18.8770	-19.5260	
	141	-1.7130	-17.1650	-18.6940	-19.5210	
	143	-1.8330	-17.6540	-19.1800	-19.5260	
	Min	-1.8940	-19.2420	-19.5490	-19.5290	
	Max	-1.7130	-17.1650	-18.6940	-19.5210	
	Average	-1.8212	-18.1424	-19.1698	-19.5252	



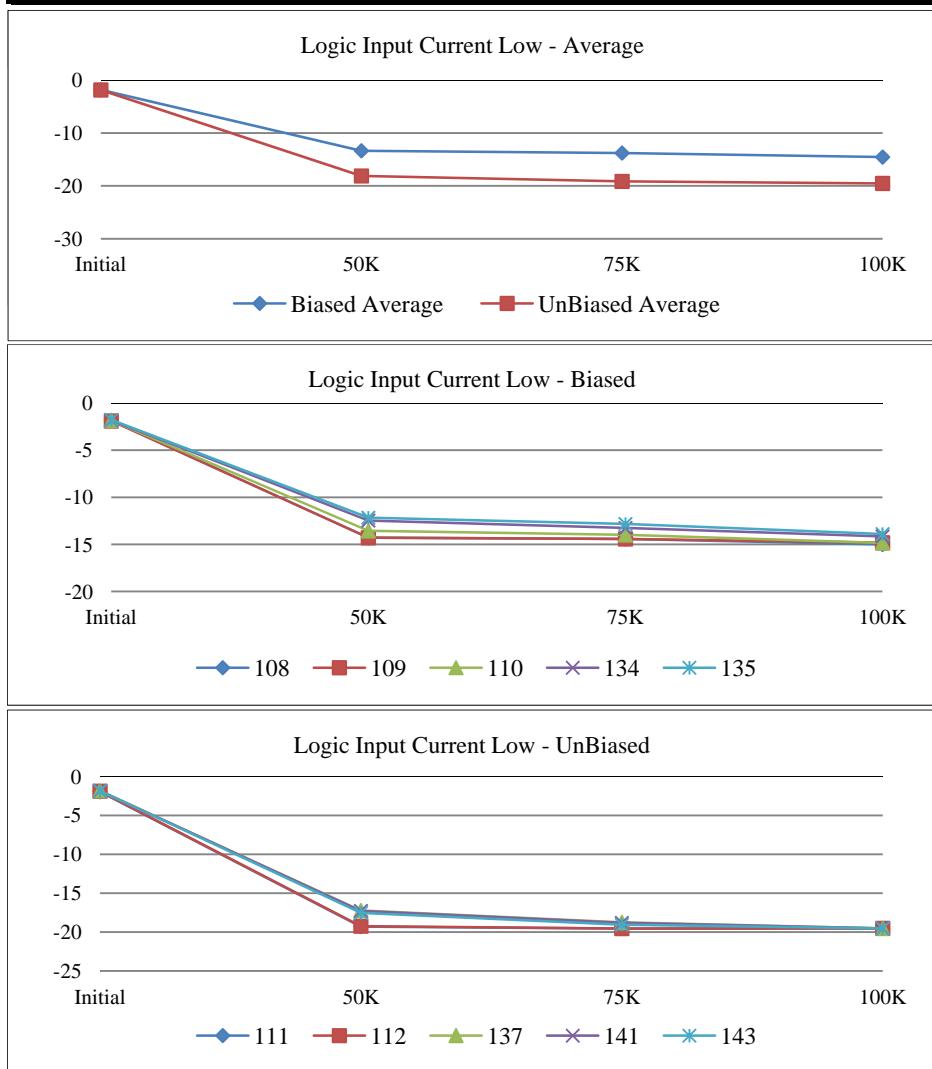
T#22		IIL VL=-10V				uA
	SN	Initial	50K	75K	100K	Limit
Control	113	-1.5880	-1.5890	-1.5940	-1.5660	>-30
	144	-1.8330	-1.8330	-1.7740	-1.8160	
Biased	108	-1.8970	-14.5410	-14.6020	-15.1900	
	109	-1.8330	-14.2330	-14.3580	-14.8230	
	110	-1.8940	-13.8690	-14.2360	-15.0900	
	134	-1.8330	-12.4640	-13.1950	-14.1490	
	135	-1.8380	-12.2230	-12.9530	-14.0260	
	Min	-1.8970	-14.5410	-14.6020	-15.1900	
	Max	-1.8330	-12.2230	-12.9530	-14.0260	
	Average	-1.8590	-13.4660	-13.8688	-14.6556	
	111	-1.8940	-19.2420	-19.5490	-19.5240	
UnBiased	112	-1.9550	-19.3030	-19.5490	-19.5290	
	137	-1.8330	-17.3480	-18.8160	-19.5260	
	141	-1.8350	-17.3480	-18.8770	-19.5210	
	143	-1.8330	-17.7760	-19.2410	-19.5260	
	Min	-1.9550	-19.3030	-19.5490	-19.5290	
	Max	-1.8330	-17.3480	-18.8160	-19.5210	
	Average	-1.8700	-18.2034	-19.2064	-19.5252	



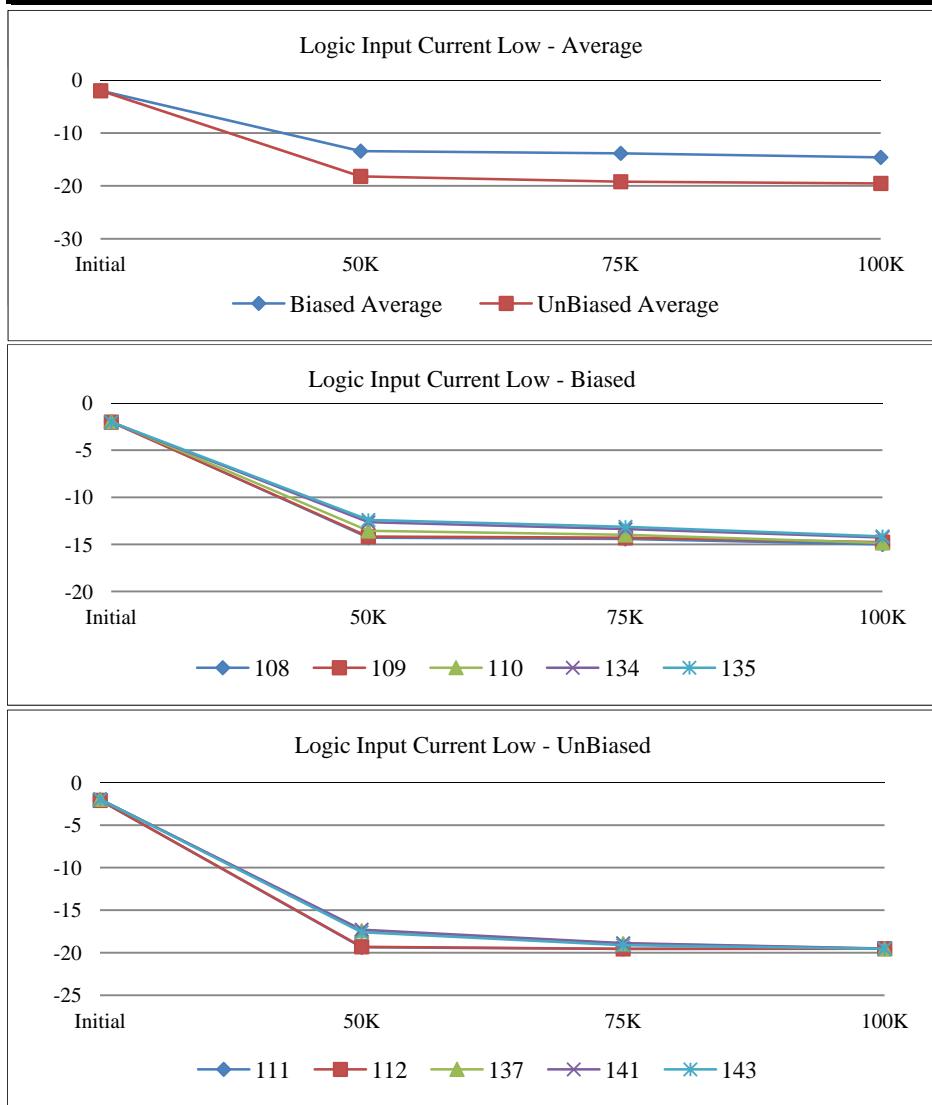
T#23		IIL VL=-10V				uA
SN	Initial	50K	75K	100K		
Control	113	-1.5880	-1.5270	-1.5330	-1.5050	>-30
	144	-1.8330	-1.8330	-1.8350	-1.8160	
Biased	108	-1.8350	-14.4800	-14.5410	-15.1290	
	109	-1.8940	-14.2940	-14.4190	-14.8840	
	110	-1.8940	-13.8080	-14.1750	-15.0290	
	134	-1.8330	-12.5860	-13.2560	-14.2100	
	135	-1.8380	-12.2840	-13.0140	-14.0880	
	Min	-1.8940	-14.4800	-14.5410	-15.1290	
	Max	-1.8330	-12.2840	-13.0140	-14.0880	
	Average	-1.8588	-13.4904	-13.8810	-14.6680	
	111	-1.8940	-19.1200	-19.5490	-19.5240	
UnBiased	112	-1.9550	-19.3030	-19.5490	-19.5290	
	137	-1.8330	-17.4090	-18.8770	-19.5260	
	141	-1.8350	-17.4090	-18.9380	-19.5210	
	143	-1.8940	-17.8370	-19.3630	-19.5260	
	Min	-1.9550	-19.3030	-19.5490	-19.5290	
	Max	-1.8330	-17.4090	-18.8770	-19.5210	
	Average	-1.8822	-18.2156	-19.2552	-19.5252	



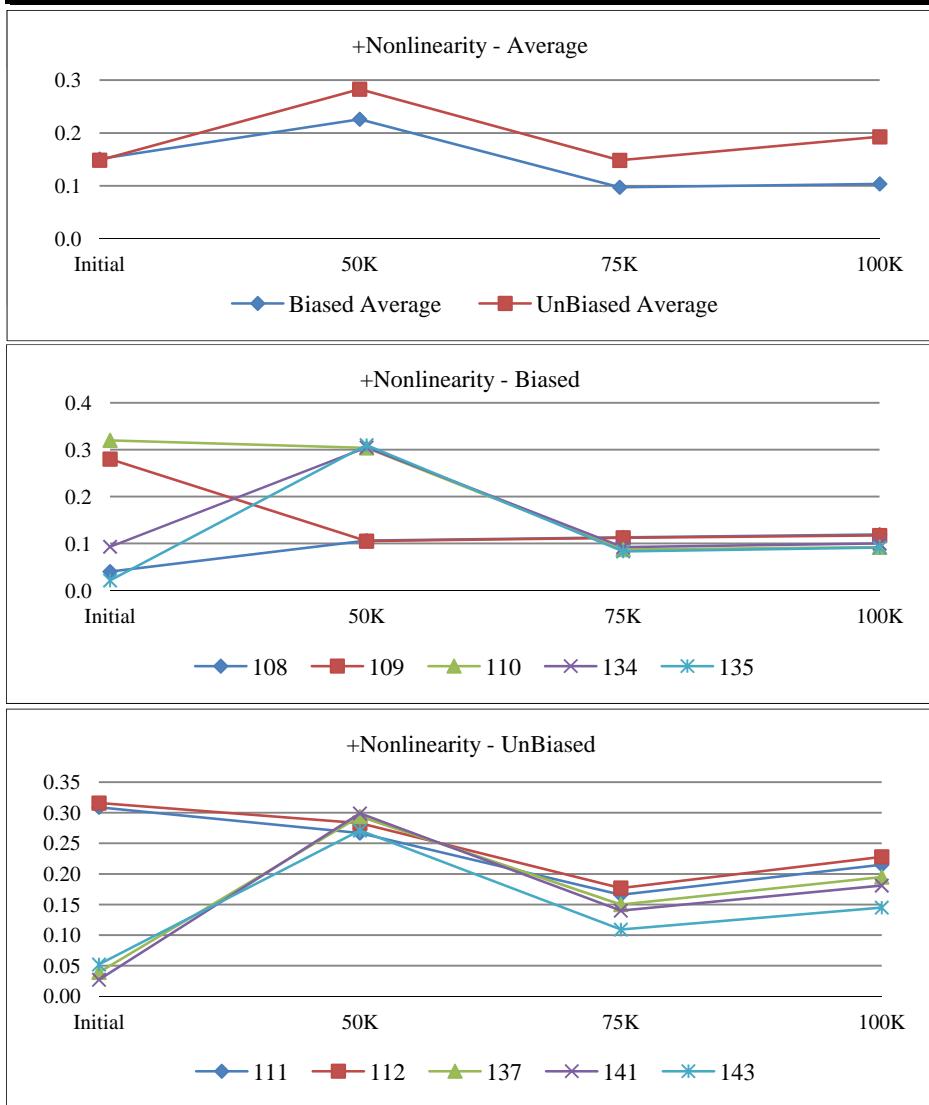
T#24		IIL VL=-10V				uA
SN	Initial	50K	75K	100K		
Control	113	-1.6490	-1.6500	-1.5940	-1.6270	>-30
	144	-1.7720	-1.7720	-1.7740	-1.7550	
Biased	108	-1.8350	-14.2970	-14.4190	-15.0070	
	109	-1.8940	-14.2940	-14.4190	-14.8230	
	110	-1.8330	-13.5640	-13.9920	-14.8460	
	134	-1.8330	-12.4640	-13.2560	-14.1490	
	135	-1.7770	-12.1620	-12.8310	-13.9040	
	Min	-1.8940	-14.2970	-14.4190	-15.0070	
	Max	-1.7770	-12.1620	-12.8310	-13.9040	
	Average	-1.8344	-13.3562	-13.7834	-14.5458	
UnBiased	111	-1.9550	-19.3030	-19.5490	-19.5240	
	112	-1.8940	-19.2420	-19.5490	-19.5290	
	137	-1.8330	-17.2260	-18.7550	-19.5260	
	141	-1.8350	-17.2870	-18.8160	-19.5210	
	143	-1.8330	-17.5310	-19.0580	-19.5260	
	Min	-1.9550	-19.3030	-19.5490	-19.5290	
	Max	-1.8330	-17.2260	-18.7550	-19.5210	
	Average	-1.8700	-18.1178	-19.1454	-19.5252	



T#25		IIL VL=-10V				uA
SN	Initial	50K	75K	100K	Limit	
Control	113	-1.7110	-1.7110	-1.7160	-1.6880	>-30
	144	-1.9550	-1.9550	-1.9580	-1.9380	
Biased	108	-1.9580	-14.2970	-14.4190	-15.0070	
	109	-2.0160	-14.1720	-14.2970	-14.7620	
	110	-1.9550	-13.5640	-13.9920	-14.8460	
	134	-2.0160	-12.6470	-13.3780	-14.2710	
	135	-2.0210	-12.4060	-13.1370	-14.1490	
	Min	-2.0210	-14.2970	-14.4190	-15.0070	
	Max	-1.9550	-12.4060	-13.1370	-14.1490	
	Average	-1.9932	-13.4172	-13.8446	-14.6070	
UnBiased	111	-2.0770	-19.3640	-19.5490	-19.5240	
	112	-2.0770	-19.3030	-19.5490	-19.5290	
	137	-1.9550	-17.4090	-18.9380	-19.5260	
	141	-1.9580	-17.2870	-18.8770	-19.5210	
	143	-1.9550	-17.5920	-19.1190	-19.5260	
	Min	-2.0770	-19.3640	-19.5490	-19.5290	
	Max	-1.9550	-17.2870	-18.8770	-19.5210	
	Average	-2.0044	-18.1910	-19.2064	-19.5252	



T#26		NL+				%FS
	SN	Initial	50K	75K	100K	Limit
Control	113	0.3110	0.0250	0.0250	0.0240	<0.35
	144	0.0270	0.0240	0.0250	0.0260	
Biased	108	0.0400	0.1060	0.1130	0.1190	
	109	0.2800	0.1050	0.1120	0.1170	
	110	0.3200	0.3040	0.0870	0.0920	
	134	0.0930	0.3050	0.0920	0.1000	
	135	0.0210	0.3100	0.0830	0.0910	
	Min	0.0210	0.1050	0.0830	0.0910	
	Max	0.3200	0.3100	0.1130	0.1190	
	Average	0.1508	0.2260	0.0974	0.1038	
	111	0.3090	0.2670	0.1660	0.2150	
UnBiased	112	0.3160	0.2830	0.1770	0.2280	
	137	0.0390	0.2940	0.1500	0.1950	
	141	0.0270	0.2990	0.1400	0.1810	
	143	0.0520	0.2710	0.1090	0.1450	
	Min	0.0270	0.2670	0.1090	0.1450	
	Max	0.3160	0.2990	0.1770	0.2280	
	Average	0.1486	0.2828	0.1484	0.1928	



T#27		NL-				%FS
	SN	Initial	50K	75K	100K	Limit
Control	113	-0.0030	-0.0260	-0.0260	-0.0260	>-.35
	144	-0.0270	-0.0270	-0.0270	-0.0260	
Biased	108	-0.0390	-0.1050	-0.1120	-0.1180	
	109	-0.0030	-0.1050	-0.1110	-0.1170	
	110	-0.0130	-0.0290	-0.0860	-0.0950	
	134	-0.0200	-0.0220	-0.0930	-0.0990	
	135	-0.0240	-0.0210	-0.0830	-0.0900	
	Min	-0.0390	-0.1050	-0.1120	-0.1180	
	Max	-0.0030	-0.0210	-0.0830	-0.0900	
	Average	-0.0198	-0.0564	-0.0970	-0.1038	
UnBiased	111	-0.0030	-0.0660	-0.1680	-0.2180	
	112	-0.0100	-0.0780	-0.1790	-0.2300	
	137	-0.0390	-0.0460	-0.1520	-0.1960	
	141	-0.0270	-0.0410	-0.1420	-0.1830	
	143	-0.0520	-0.0300	-0.1100	-0.1480	
	Min	-0.0520	-0.0780	-0.1790	-0.2300	
	Max	-0.0030	-0.0300	-0.1100	-0.1480	
	Average	-0.0262	-0.0522	-0.1502	-0.1950	

