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# HIGH DOSE RADIATION TEST REPORT ADH365S

December 2019

Generic



Radiation Test Report	
Product:	ADH365S
Gamma:	0, 30k, 50k, 100k
Gamma Source:	Co60/TM1019 Condition A
Dose Rate:	136 Rad(si)/s
Facilities:	VPT RAD
Tested:	12/4/19

The RADTEST® 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.

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SN	Idyn +5V (mA)		Iq +5V (mA)		Pout 1GHz OdBm (dBm)	
	Pre	100k	Pre	100k	Pre	100k
13	118.2852	118.317	118.2919	118.3024	6.7681	6.8172
7	118.5204	118.3972	118.5306	118.4255	6.7904	6.8333
8	118.9501	118.8605	118.9725	118.8576	6.8077	6.8545
9	109.3536	109.2886	109.3331	109.2344	6.1723	6.1903
10	118.1264	117.9478	118.131	117.9674	6.8505	6.888
11	117.2797	117.2148	117.2853	117.2459	6.8152	6.8615
12	118.4025	118.2067	118.4046	118.2034	6.7897	6.8398
Min	109.3536	109.2886	109.3331	109.2344	6.1723	6.1903
Max	118.9501	118.8605	118.9725	118.8576	6.8505	6.888
Average	116.7721167	116.6526	116.776183	116.6557	6.7043	6.744566667
STDev	3.676530145	3.64844587	3.68911217	3.674792989	0.26157033	0.272208153
-3 Sigma	105.7425262	105.707262	105.708847	105.631321	5.91958902	5.927942207
+3 Sigma	127.8017071	127.597938	127.84352	127.680079	7.48901098	7.561191126

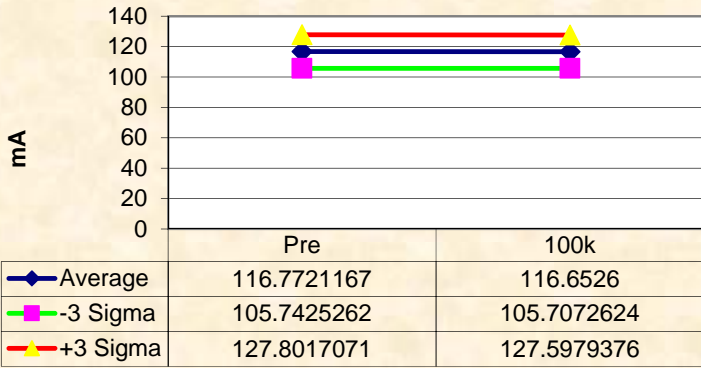
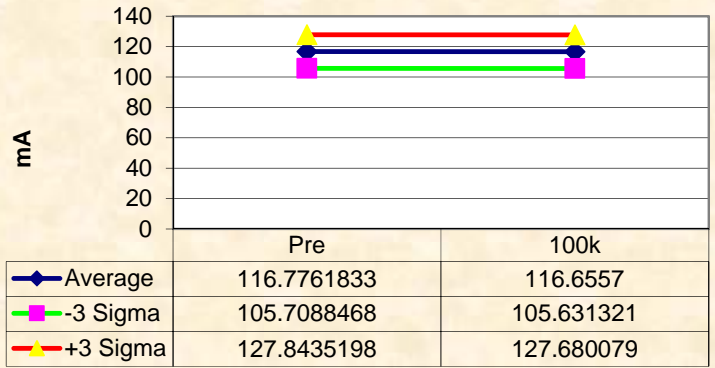
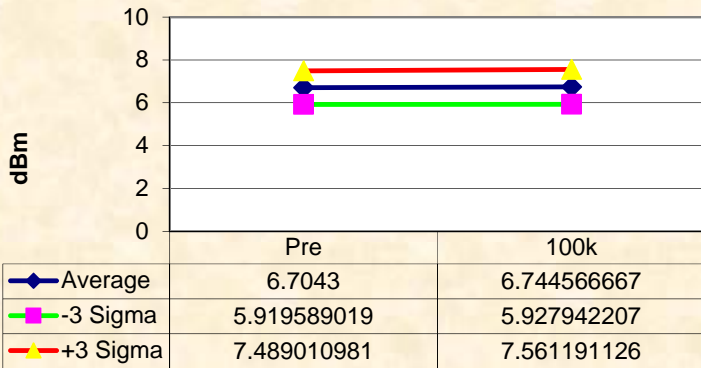
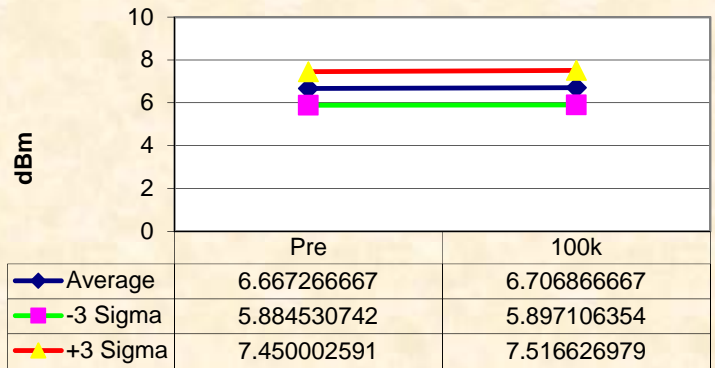
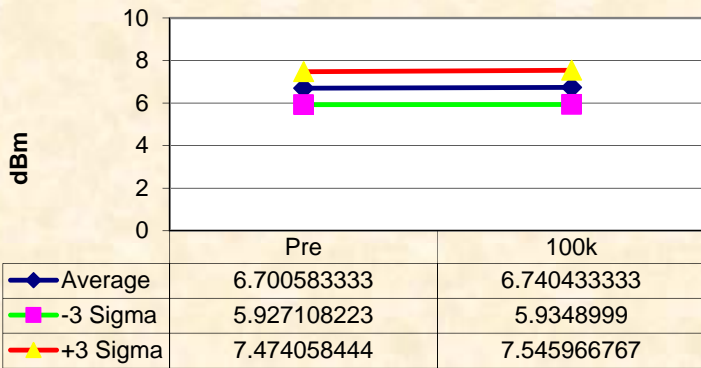
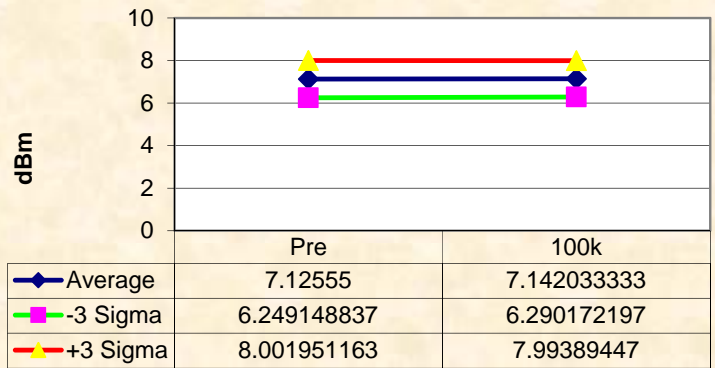
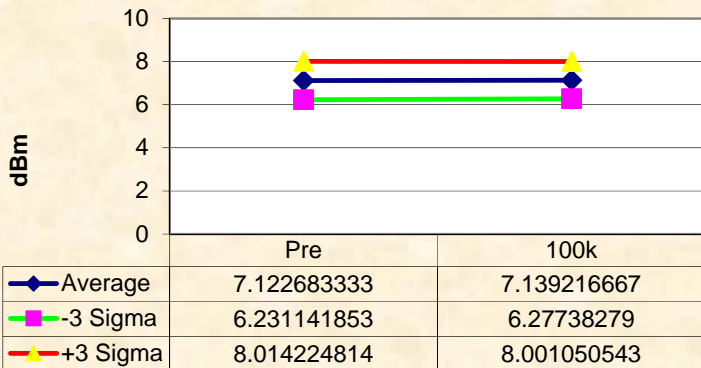
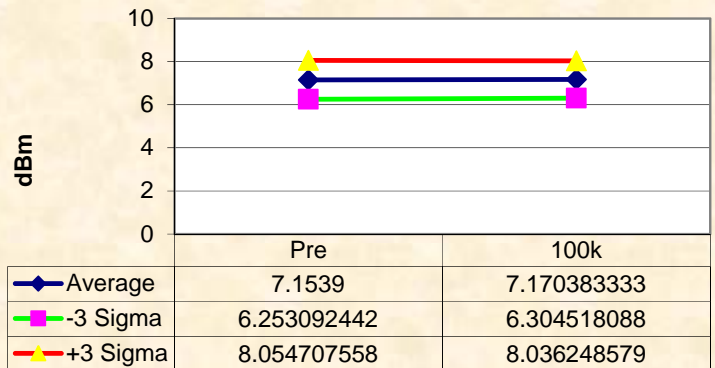
SN	Pout 1GHz 10dBm (dBm)		Pout 1GHz 15dBm (dBm)		Pout 4GHz OdBm (dBm)	
	Pre	100k	Pre	100k	Pre	100k
13	6.73	6.7802	6.7635	6.8101	7.2195	7.2339
7	6.7534	6.7932	6.7837	6.8266	7.2271	7.2439
8	6.7685	6.8149	6.8025	6.85	7.2561	7.2738
9	6.1367	6.1574	6.1766	6.1938	6.5305	6.5633
10	6.8141	6.8522	6.8486	6.8834	7.2754	7.2792
11	6.779	6.8196	6.8098	6.8543	7.2395	7.2507
12	6.7519	6.8039	6.7823	6.8345	7.2247	7.2413
Min	6.1367	6.1574	6.1766	6.1938	6.5305	6.5633
Max	6.8141	6.8522	6.8486	6.8834	7.2754	7.2792
Average	6.667266667	6.706866667	6.700583333	6.740433333	7.12555	7.142033333
STDev	0.260911975	0.2699201	0.25782504	0.268511144	0.29213372	0.283953712
-3 Sigma	5.884530742	5.89710635	5.92710822	5.9348999	6.24914884	6.290172197
+3 Sigma	7.450002591	7.51662698	7.47405844	7.545966767	8.00195116	7.99389447

SN	Pout 4GHz 10dBm (dBm)		Pout 4GHz 15dBm (dBm)		Pout 8GHz OdBm (dBm)	
	Pre	100k	Pre	100k	Pre	100k
13	7.2161	7.2314	7.2488	7.264	6.9568	6.9885
7	7.2261	7.2426	7.2609	7.2737	6.9356	6.9593
8	7.2554	7.2719	7.2879	7.3022	6.9812	6.9956
9	6.5174	6.5537	6.5423	6.5821	6.2003	6.2157
10	7.276	7.2787	7.3083	7.3103	7.018	7.0382
11	7.2379	7.2475	7.2703	7.2831	6.9505	6.9744
12	7.2233	7.2409	7.2537	7.2709	6.9669	6.9713
Min	6.5174	6.5537	6.5423	6.5821	6.2003	6.2157
Max	7.276	7.2787	7.3083	7.3103	7.018	7.0382
Average	7.122683333	7.13921667	7.1539	7.170383333	6.84208333	6.859083333
STDev	0.297180493	0.28727796	0.30026919	0.288621748	0.31567854	0.316416052
-3 Sigma	6.231141853	6.27738279	6.25309244	6.304518088	5.89504771	5.909835179
+3 Sigma	8.014224814	8.00105054	8.05470756	8.036248579	7.78911896	7.808331488

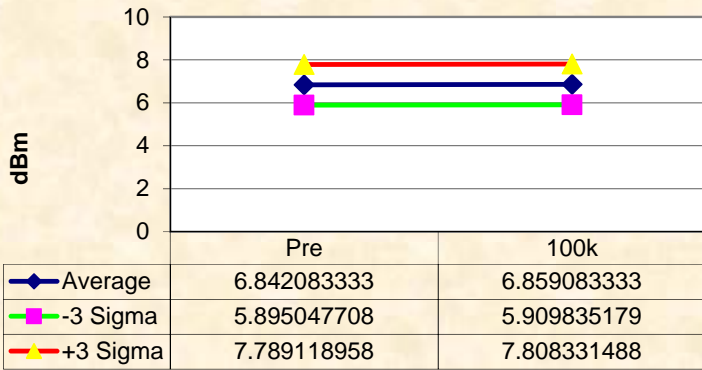
	Pout 8GHz 10dBm (dBm)		Pout 8GHz 15dBm (dBm)		Pout 11GHz -5dBm (dBm)	
SN	Pre	100k	Pre	100k	Pre	100k
13	6.9326	6.9679	6.9603	6.9858	7.062	7.1025
7	6.9131	6.9362	6.9369	6.9613	6.9993	7.0222
8	6.9642	6.9743	6.9835	6.9948	7.0667	7.0515
9	6.1482	6.1585	6.206	6.2258	6.2989	6.3094
10	6.9991	7.0263	7.0215	7.0387	7.0813	7.1156
11	6.9295	6.9447	6.9462	6.9687	7.0077	7.0635
12	6.9442	6.9526	6.9654	6.9724	7.0865	7.0427
Min	6.1482	6.1585	6.206	6.2258	6.2989	6.3094
Max	6.9991	7.0263	7.0215	7.0387	7.0865	7.1156
Average	6.816383333	6.8321	6.84325	6.860283333	6.9234	6.93415
STDev	0.32869156	0.3315742	0.31363046	0.31209775	0.30820008	0.307660532
-3 Sigma	5.830308653	5.83737739	5.90235861	5.923990083	5.99879975	6.011168404
+3 Sigma	7.802458014	7.82682261	7.78414139	7.796576584	7.84800025	7.857131596

	Pout 11GHz +5dBm (dBm)		Pout 11GHz -15dBm (dBm)		Pout 12GHz -5dBm (dBm)	
SN	Pre	100k	Pre	100k	Pre	100k
13	7.0689	7.1159	7.0925	7.1405	6.6951	6.7488
7	7.011	7.0353	7.031	7.0609	6.6215	6.6412
8	7.0781	7.0646	7.0982	7.0865	6.6887	6.6654
9	6.3327	6.3483	6.3644	6.3819	6.0526	6.0887
10	7.0962	7.127	7.1117	7.1483	6.6835	6.7289
11	7.024	7.0854	7.0358	7.1	6.5949	6.6675
12	7.0943	7.0589	7.1206	7.076	6.7153	6.6606
Min	6.3327	6.3483	6.3644	6.3819	6.0526	6.0887
Max	7.0962	7.127	7.1206	7.1483	6.7153	6.7289
Average	6.939383333	6.95325	6.96028333	6.9756	6.55941667	6.575383333
STDev	0.299394906	0.29796313	0.29442487	0.292381737	0.25234382	0.240254127
-3 Sigma	6.041198616	6.05936061	6.07700874	6.09845479	5.80238522	5.854620952
+3 Sigma	7.837568051	7.84713939	7.84355793	7.85274521	7.31644812	7.296145715

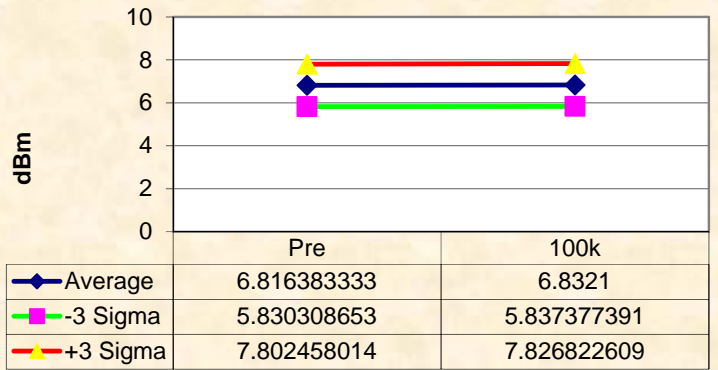
	Pout 12GHz 0dBm (dBm)		Pout 13GHz -5dBm (dBm)		Pout 13GHz 0dBm (dBm)	
SN	Pre	100k	Pre	100k	Pre	100k
13	6.6995	6.7521	6.3539	6.4351	6.4001	6.4853
7	6.6255	6.649	6.234	6.2742	6.2886	6.3295
8	6.6963	6.6729	6.3242	6.3147	6.3746	6.3595
9	6.0525	6.0898	5.6238	5.6675	5.6376	5.6771
10	6.6886	6.7368	6.3263	6.3796	6.3786	6.4221
11	6.6009	6.6722	6.1869	6.2906	6.2485	6.3574
12	6.725	6.666	6.3889	6.3174	6.4391	6.3681
Min	6.0525	6.0898	5.6238	5.6675	5.6376	5.6771
Max	6.725	6.7368	6.3889	6.3796	6.4391	6.4221
Average	6.5648	6.58111667	6.18068333	6.207333333	6.22783333	6.252283333
STDev	0.255233901	0.24255434	0.28218993	0.266886715	0.29711941	0.28340586
-3 Sigma	5.799098298	5.85345364	5.33411354	5.406673188	5.33647509	5.402065752
+3 Sigma	7.330501702	7.3087797	7.02725313	7.007993478	7.11919158	7.102500914

**Idynamic +5V****Iq +5V****Pout 1GHz 0dBm****Pout 1GHz 10dBm****Pout 1GHz 15dBm****Pout 4GHz 0dBm****Pout 4GHz 10dBm****Pout 4GHz 15dBm**

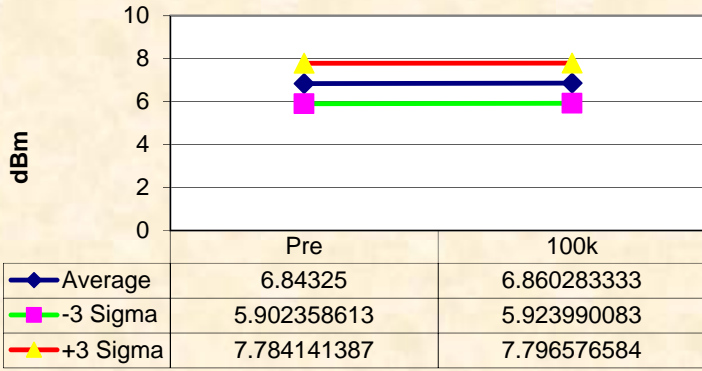
Pout 8GHz 0dBm



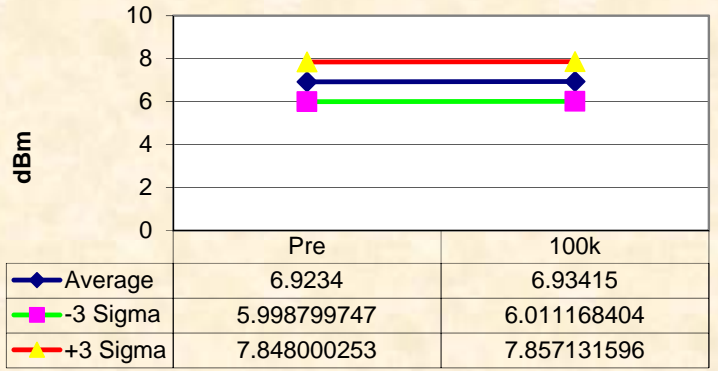
Pout 8GHz 10dBm



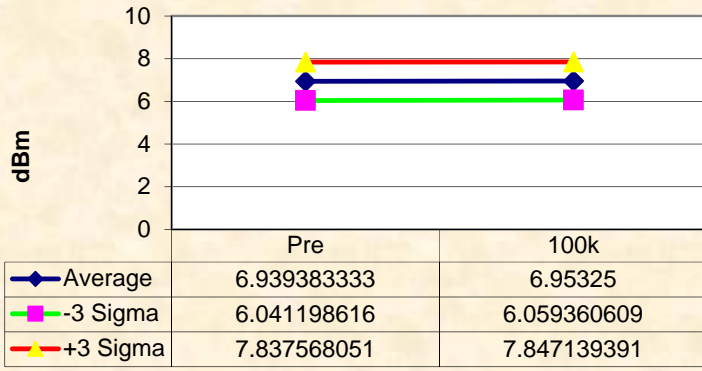
Pout 8GHz 15dBm



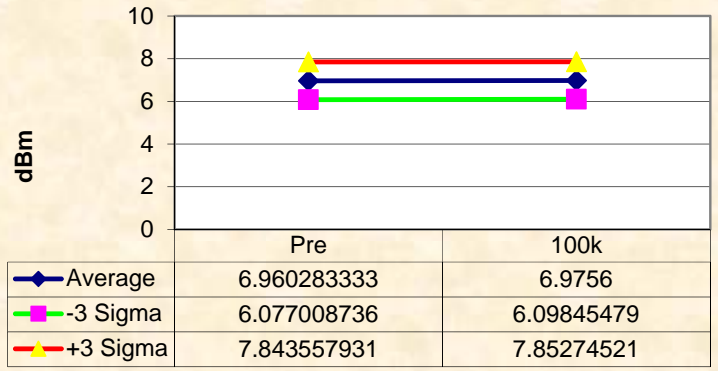
Pout 11GHz -5dBm



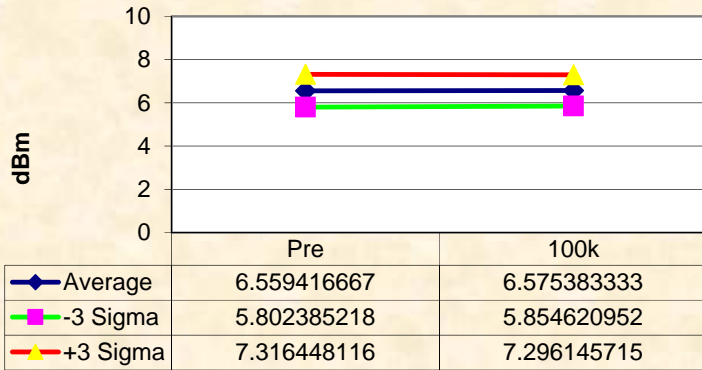
Pout 11GHz +5dBm



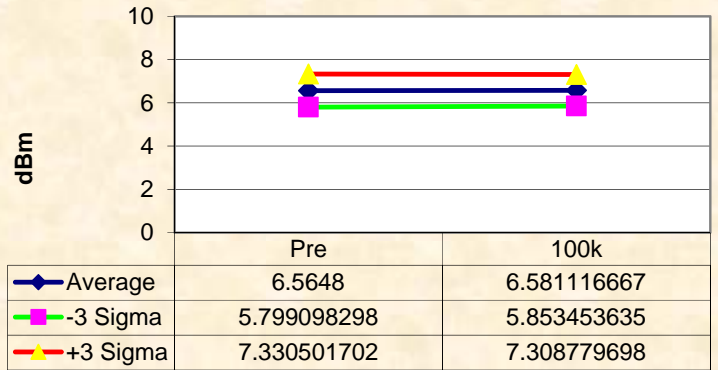
Pout 11GHz -15dBm



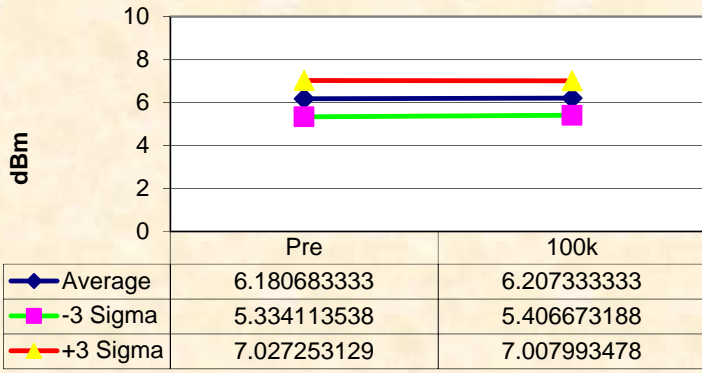
Pout 12GHz -5dBm



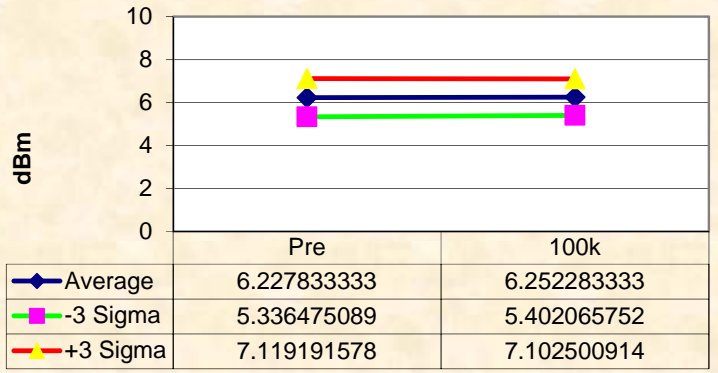
Pout 12GHz 0dBm



**Pout 13GHz -5dBm**



**Pout 13GHz 0dBm**



SN	Idyn +5V (mA)		Iq +5V (mA)		Pout 1GHz 0dBm (dBm)	
	Pre	50k	Pre	50k	Pre	50k
13	118.2852	118.317	118.2919	118.3024	6.7681	6.8172
3	118.6102	118.47	118.5948	118.4889	6.8003	6.8348
4	118.9604	118.8691	118.9629	118.8673	6.8108	6.8576
5	118.7705	118.6606	118.7941	118.6623	6.8054	6.8452
6	118.1909	118.0647	118.1324	118.0123	6.8455	6.8832
Min	118.1909	118.0647	118.1324	118.0123	6.8003	6.8348
Max	118.9604	118.8691	118.9629	118.8673	6.8455	6.8832
Average	118.633	118.5161	118.62105	118.5077	6.8155	6.8552
STDev	0.327652896	0.34223599	0.3588294	0.36468613	0.02045434	0.020864004
-3 Sigma	117.6500413	117.489392	117.544562	117.4136416	6.75413698	6.792607988
+3 Sigma	119.6159587	119.542808	119.697538	119.6017584	6.87686302	6.917792012

SN	Pout 1GHz 10dBm (dBm)		Pout 1GHz 15dBm (dBm)		Pout 4GHz 0dBm (dBm)	
	Pre	50k	Pre	50k	Pre	50k
13	6.73	6.7802	6.7635	6.8101	7.2195	7.2339
3	6.7605	6.7956	6.792	6.8298	7.2445	7.2457
4	6.7721	6.8195	6.801	6.8511	7.2558	7.272
5	6.7673	6.8086	6.8012	6.8377	7.2591	7.2637
6	6.8078	6.8464	6.8404	6.8772	7.2724	7.2754
Min	6.7605	6.7956	6.792	6.8298	7.2445	7.2457
Max	6.8078	6.8464	6.8404	6.8772	7.2724	7.2754
Average	6.776925	6.817525	6.80865	6.84895	7.25795	7.2642
STDev	0.021126346	0.02158725	0.02159714	0.020784369	0.01148405	0.013276295
-3 Sigma	6.713545962	6.75276326	6.74385857	6.786596893	7.22349786	7.224371116
+3 Sigma	6.840304038	6.88228674	6.87344143	6.911303107	7.29240214	7.304028884

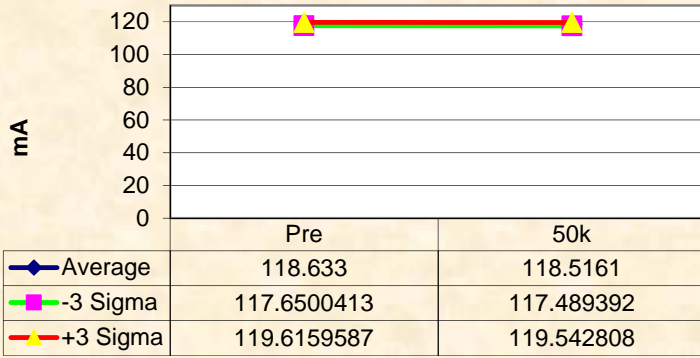
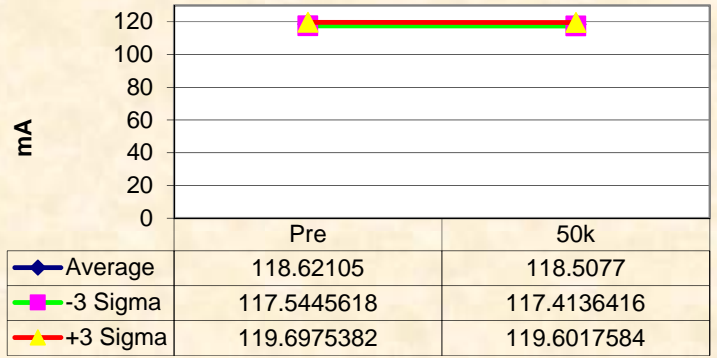
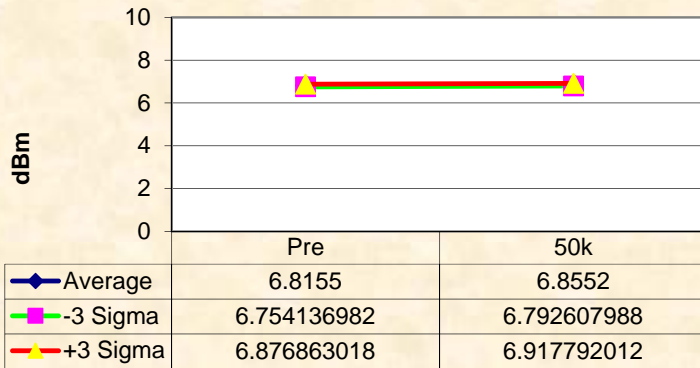
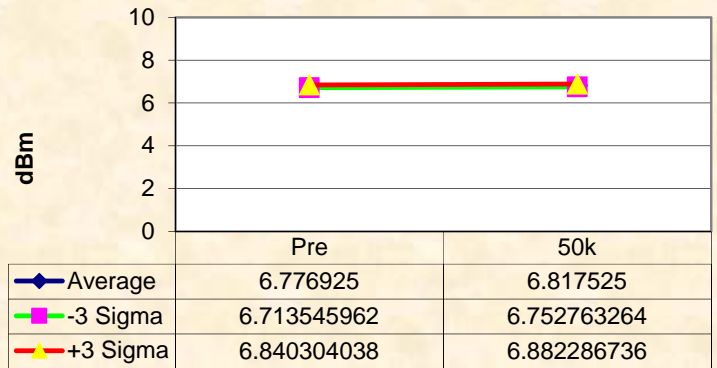
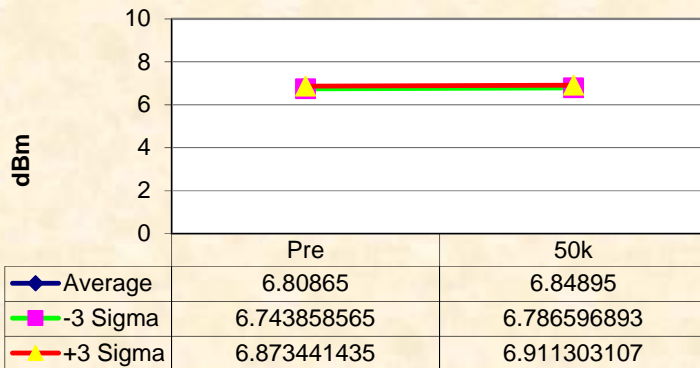
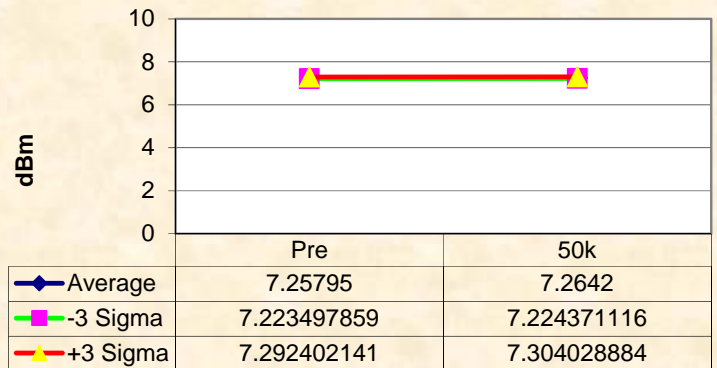
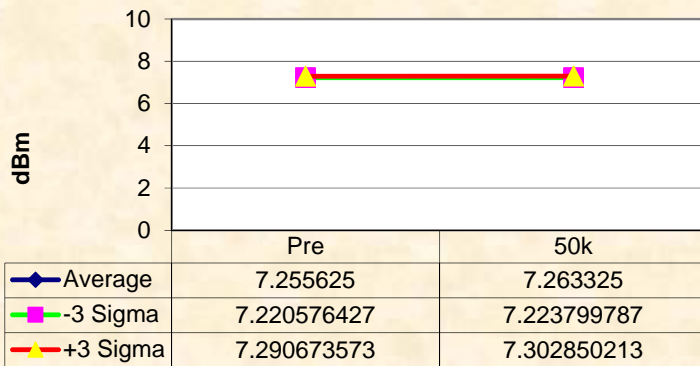
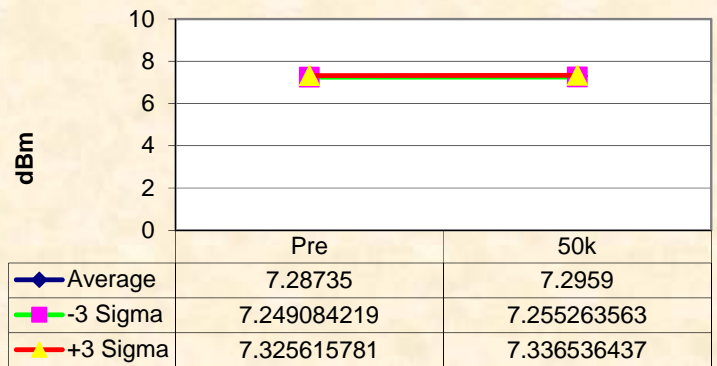
SN	Pout 4GHz 10dBm (dBm)		Pout 4GHz 15dBm (dBm)		Pout 8GHz 0dBm (dBm)	
	Pre	50k	Pre	50k	Pre	50k
13	7.2161	7.2314	7.2488	7.264	6.9568	6.9885
3	7.2417	7.2448	7.2725	7.2768	6.9757	6.984
4	7.2533	7.2713	7.2825	7.3038	6.9947	7.0083
5	7.2575	7.2632	7.2922	7.296	6.9676	6.9832
6	7.27	7.274	7.3022	7.307	7.0143	7.0384
Min	7.2417	7.2448	7.2725	7.2768	6.9676	6.9832
Max	7.27	7.274	7.3022	7.307	7.0143	7.0384
Average	7.255625	7.263325	7.28735	7.2959	6.988075	7.003475
STDev	0.011682858	0.01317507	0.01275526	0.013545479	0.02084872	0.026034512
-3 Sigma	7.220576427	7.22379979	7.24908422	7.255263563	6.92552884	6.925371463
+3 Sigma	7.290673573	7.30285021	7.32561578	7.336536437	7.05062116	7.081578537

	Pout 8GHz 10dBm (dBm)		Pout 8GHz 15dBm (dBm)		Pout 11GHz -5dBm (dBm)	
SN	Pre	50k	Pre	50k	Pre	50k
13	6.9326	6.9679	6.9603	6.9858	7.062	7.1025
3	6.949	6.9544	6.9789	6.9867	7.0702	7.0708
4	6.9828	7.0061	6.9918	7.0009	7.1105	7.078
5	6.95	6.9743	6.9718	6.9824	7.0184	7.028
6	6.9714	7.0115	7.0223	7.041	7.1132	7.1346
Min	6.949	6.9544	6.9718	6.9824	7.0184	7.028
Max	6.9828	7.0115	7.0223	7.041	7.1132	7.1346
Average	6.9633	6.986575	6.9912	7.00275	7.078075	7.07785
STDev	0.016605622	0.02700856	0.02232502	0.026697128	0.04437818	0.043799962
-3 Sigma	6.913483135	6.90554931	6.92422493	6.922658615	6.94494047	6.946450114
+3 Sigma	7.013116865	7.06760069	7.05817507	7.082841385	7.21120953	7.209249886

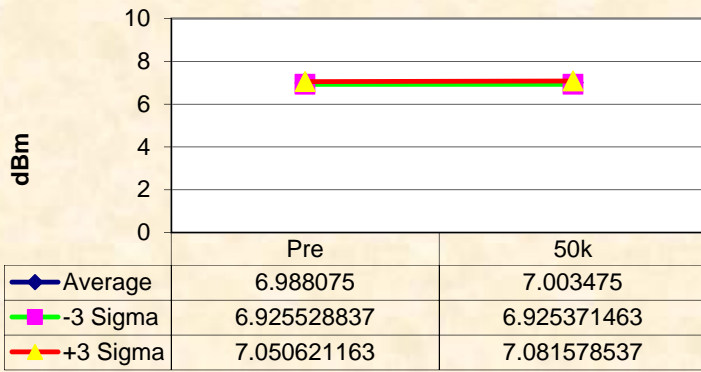
	Pout 11GHz +5dBm (dBm)		Pout 11GHz -15dBm (dBm)		Pout 12GHz -5dBm (dBm)	
SN	Pre	50k	Pre	50k	Pre	50k
13	7.0689	7.1159	7.0925	7.1405	6.6951	6.7488
3	7.0809	7.0841	7.1012	7.1068	6.6899	6.6907
4	7.12	7.0938	7.14	7.1161	6.7418	6.7015
5	7.0299	7.04	7.0473	7.0632	6.6278	6.6413
6	7.1257	7.1461	7.1452	7.1722	6.7178	6.7485
Min	7.0299	7.04	7.0473	7.0632	6.6278	6.6413
Max	7.1257	7.1461	7.1452	7.1722	6.7418	6.7485
Average	7.089125	7.091	7.108425	7.114575	6.694325	6.6955
STDev	0.044220084	0.04356015	0.04523217	0.044806277	0.04915997	0.043991211
-3 Sigma	6.956464748	6.96031955	6.97272849	6.980156168	6.54684509	6.563526366
+3 Sigma	7.221785252	7.22168045	7.24412151	7.248993832	6.84180491	6.827473634

	Pout 12GHz 0dBm (dBm)		Pout 13GHz -5dBm (dBm)		Pout 13GHz 0dBm (dBm)	
SN	Pre	50k	Pre	50k	Pre	50k
13	6.6995	6.7521	6.3539	6.4351	6.4001	6.4853
3	6.6945	6.6934	6.3484	6.3561	6.4035	6.4018
4	6.7429	6.7086	6.3768	6.3392	6.4324	6.3869
5	6.6329	6.6442	6.2073	6.2288	6.2633	6.2844
6	6.7168	6.7536	6.3882	6.4196	6.44	6.4638
Min	6.6329	6.6442	6.2073	6.2288	6.2633	6.2844
Max	6.7429	6.7536	6.3882	6.4196	6.44	6.4638
Average	6.696775	6.69995	6.330175	6.335925	6.3848	6.384225
STDev	0.04695284	0.04510769	0.08360863	0.079362097	0.0825121	0.074416054
-3 Sigma	6.555916481	6.56462694	6.07934912	6.097838708	6.1372637	6.160976837
+3 Sigma	6.837633519	6.83527306	6.58100088	6.574011292	6.6323363	6.607473163

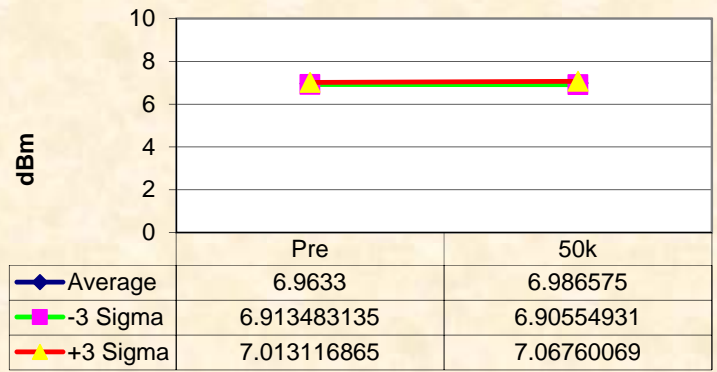


**Idynamic +5V****Iq +5V****Pout 1GHz 0dBm****Pout 1GHz 10dBm****Pout 1GHz 15dBm****Pout 4GHz 0dBm****Pout 4GHz 10dBm****Pout 4GHz 15dBm**

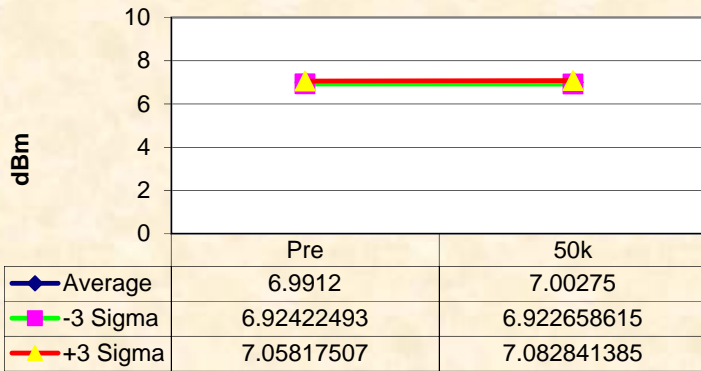
**Pout 8GHz 0dBm**



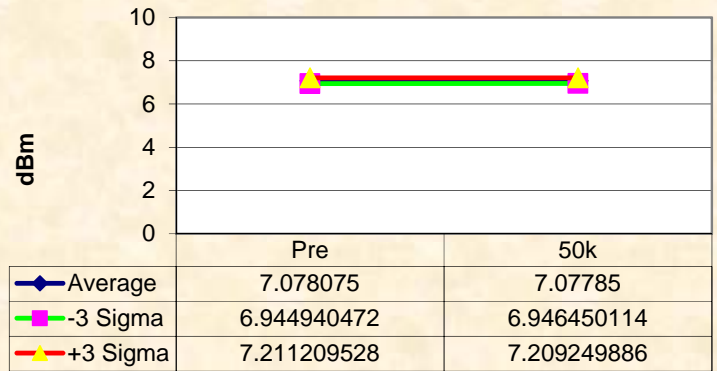
**Pout 8GHz 10dBm**



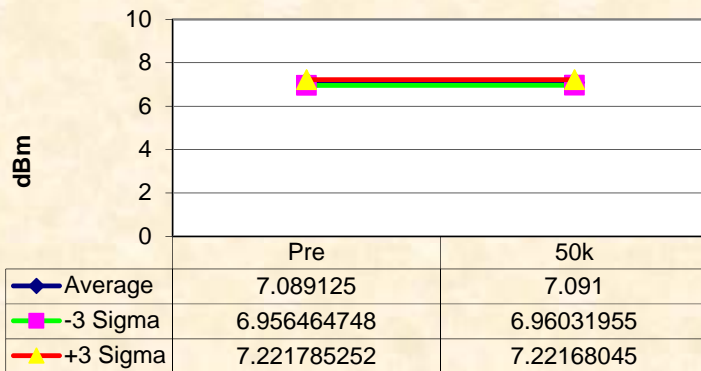
**Pout 8GHz 15dBm**



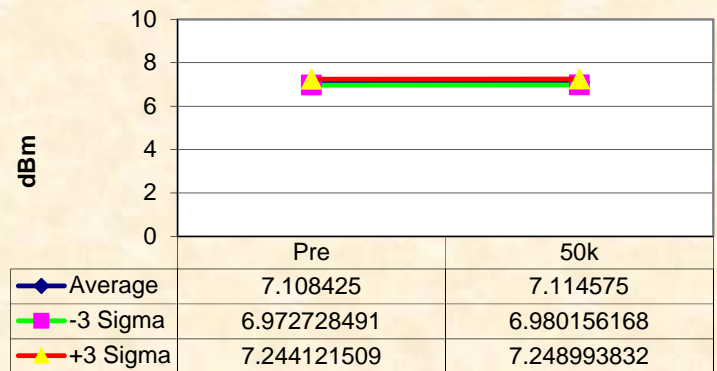
**Pout 11GHz -5dBm**



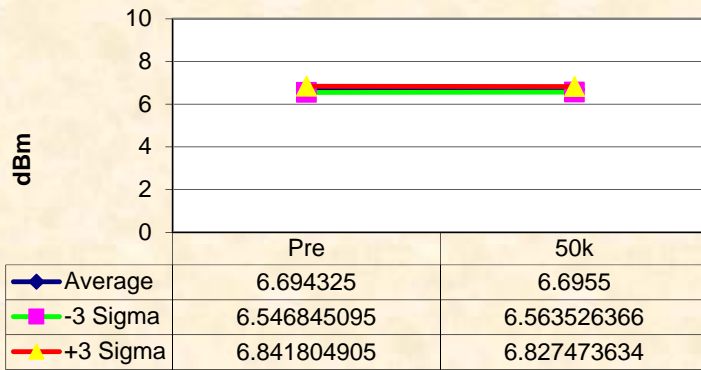
**Pout 11GHz +5dBm**



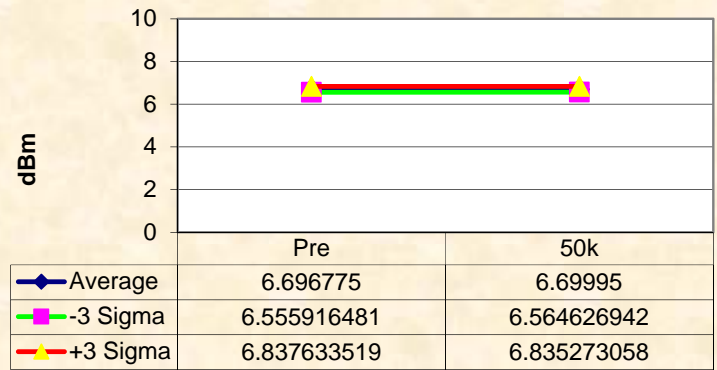
**Pout 11GHz -15dBm**



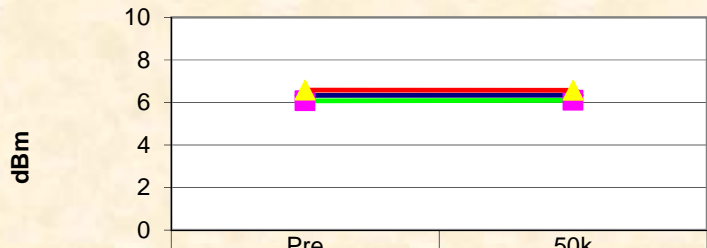
**Pout 12GHz -5dBm**



**Pout 12GHz 0dBm**

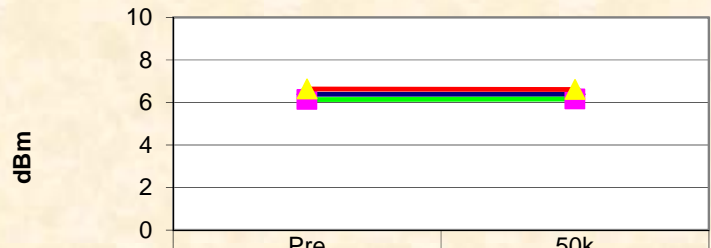


**Pout 13GHz -5dBm**



	Pre	50k
◆ Average	6.330175	6.335925
■ -3 Sigma	6.079349119	6.097838708
▲ +3 Sigma	6.581000881	6.574011292

**Pout 13GHz 0dBm**



	Pre	50k
◆ Average	6.3848	6.384225
■ -3 Sigma	6.1372637	6.160976837
▲ +3 Sigma	6.6323363	6.607473163

	Idyn +5V (mA)		Iq +5V (mA)		Pout 1GHz 0dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	118.2852	118.317	118.2919	118.3024	6.7681	6.8172
1	119.1273	118.9775	119.1217	118.9878	6.8361	6.869
2	119.2969	119.1396	119.2762	119.147	6.8124	6.8493
Min	119.1273	118.9775	119.1217	118.9878	6.8124	6.8493
Max	119.2969	119.1396	119.2762	119.147	6.8361	6.869
Average	119.2121	119.05855	119.19895	119.0674	6.82425	6.85915
STDev	0.11992531	0.11462201	0.109248	0.1125714	0.01675843	0.013930004
-3 Sigma	118.8523241	118.714684	118.871206	118.7296858	6.77397471	6.817359989
+3 Sigma	119.5718759	119.402416	119.526694	119.4051142	6.87452529	6.900940011

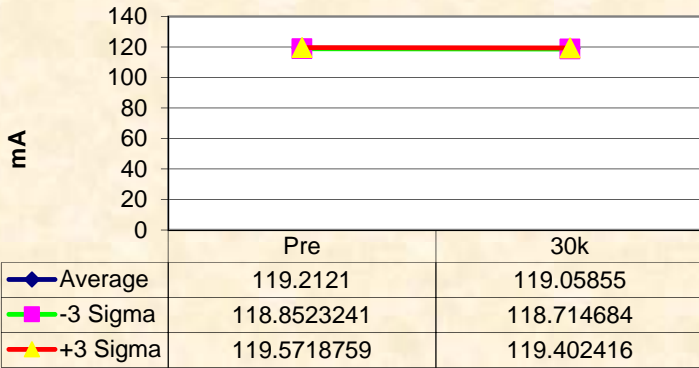
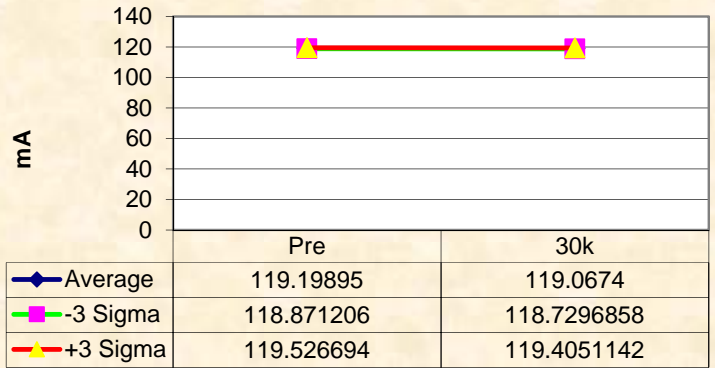
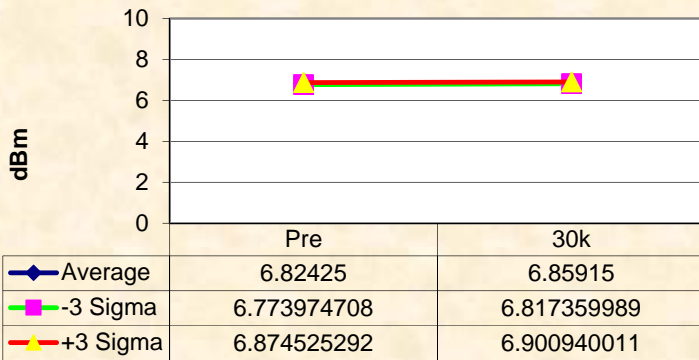
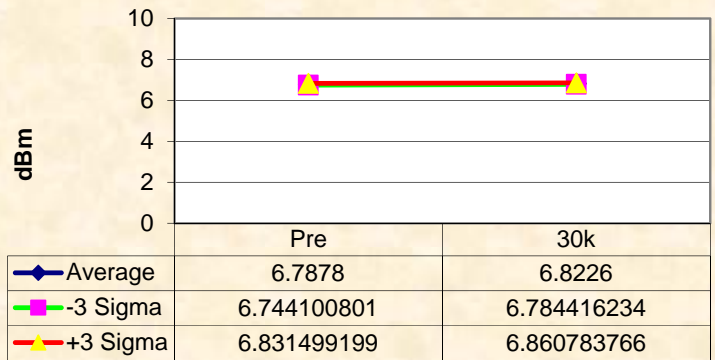
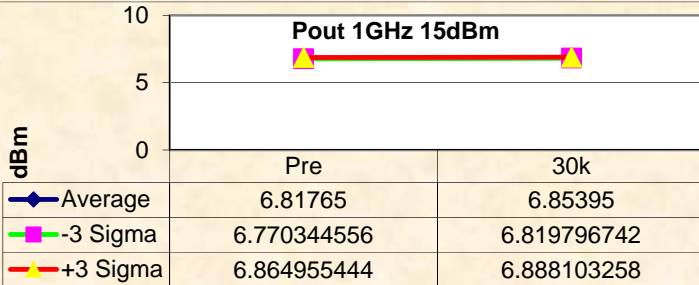
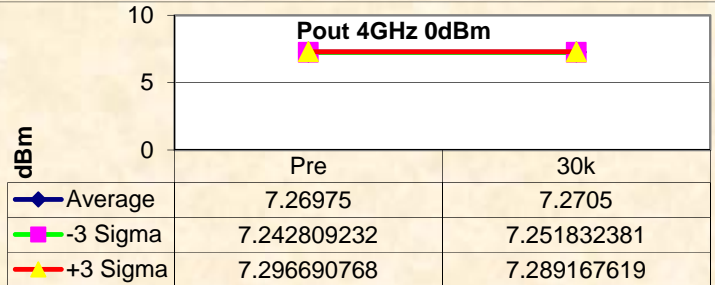
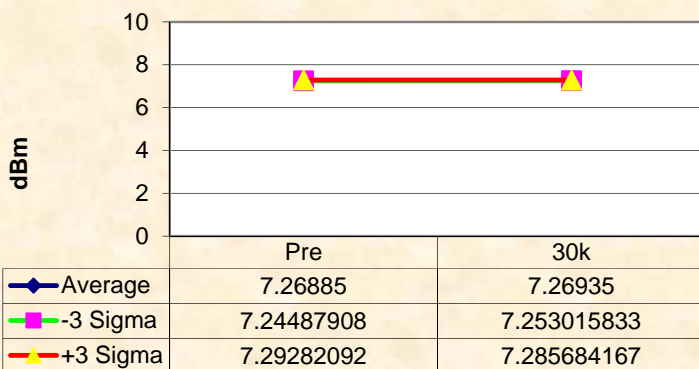
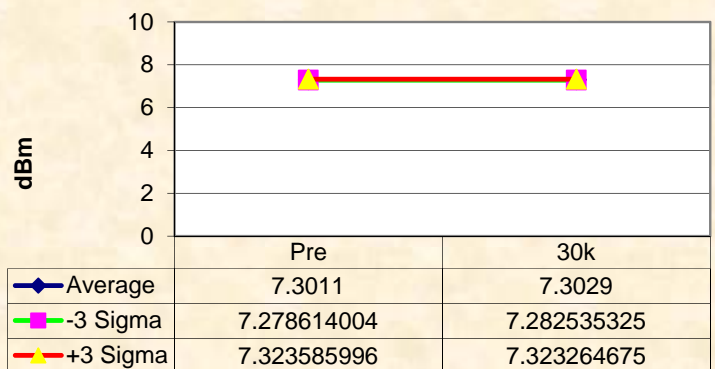
	Pout 1GHz 10dBm (dBm)		Pout 1GHz 15dBm (dBm)		Pout 4GHz 0dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	6.73	6.7802	6.7635	6.8101	7.2195	7.2339
1	6.7981	6.8316	6.8288	6.862	7.2761	7.2749
2	6.7775	6.8136	6.8065	6.8459	7.2634	7.2661
Min	6.7775	6.8136	6.8065	6.8459	7.2634	7.2661
Max	6.7981	6.8316	6.8288	6.862	7.2761	7.2749
Average	6.7878	6.8226	6.81765	6.85395	7.26975	7.2705
STDev	0.0145664	0.01272792	0.01576848	0.011384419	0.00898026	0.00622254
-3 Sigma	6.744100801	6.78441623	6.77034456	6.819796742	7.24280923	7.251832381
+3 Sigma	6.831499199	6.86078377	6.86495544	6.888103258	7.29669077	7.289167619

	Pout 4GHz 10dBm (dBm)		Pout 4GHz 15dBm (dBm)		Pout 8GHz 0dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	7.2161	7.2314	7.2488	7.264	6.9568	6.9885
1	7.2745	7.2732	7.3064	7.3077	6.9955	7.0058
2	7.2632	7.2655	7.2958	7.2981	6.9859	6.9877
Min	7.2632	7.2655	7.2958	7.2981	6.9859	6.9877
Max	7.2745	7.2732	7.3064	7.3077	6.9955	7.0058
Average	7.26885	7.26935	7.3011	7.3029	6.9907	6.99675
STDev	0.007990307	0.00544472	0.00749533	0.006788225	0.00678823	0.012798633
-3 Sigma	7.24487908	7.25301583	7.278614	7.282535325	6.97033532	6.958354102
+3 Sigma	7.29282092	7.28568417	7.323586	7.323264675	7.01106468	7.035145898

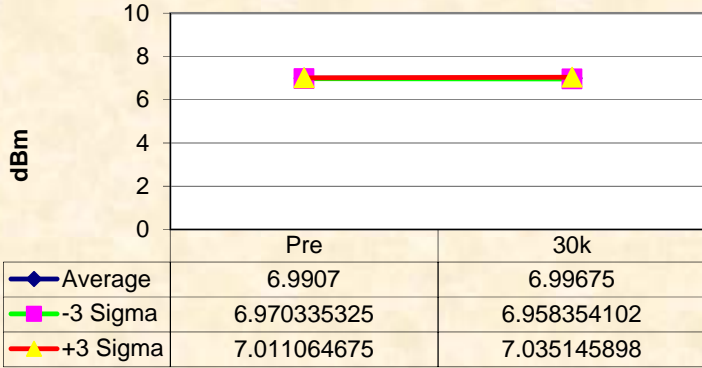
	Pout 8GHz 10dBm (dBm)		Pout 8GHz 15dBm (dBm)		Pout 11GHz -5dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	6.9326	6.9679	6.9603	6.9858	7.062	7.1025
1	6.9742	6.9834	6.9996	7.0076	7.0696	7.0687
2	6.9621	6.9641	6.989	6.9949	7.1014	7.0801
Min	6.9621	6.9641	6.989	6.9949	7.0696	7.0687
Max	6.9742	6.9834	6.9996	7.0076	7.1014	7.0801
Average	6.96815	6.97375	6.9943	7.00125	7.0855	7.0744
STDev	0.008555992	0.01364716	0.00749533	0.008980256	0.022486	0.008061017
-3 Sigma	6.942482024	6.93280852	6.971814	6.974309232	7.01804201	7.050216948
+3 Sigma	6.993817976	7.01469148	7.016786	7.028190768	7.15295799	7.098583052

	Pout 11GHz +5dBm (dBm)		Pout 11GHz -15dBm (dBm)		Pout 12GHz -5dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	7.0689	7.1159	7.0925	7.1405	6.6951	6.7488
1	7.0805	7.081	7.1001	7.102	6.6872	6.6845
2	7.102	7.0922	7.1285	7.1161	6.7354	6.7192
Min	7.0805	7.081	7.1001	7.102	6.6872	6.6845
Max	7.102	7.0922	7.1285	7.1161	6.7354	6.7192
Average	7.09125	7.0866	7.1143	7.10905	6.7113	6.70185
STDev	0.015202796	0.0079196	0.02008183	0.009970206	0.03408255	0.024536605
-3 Sigma	7.045641613	7.06284121	7.0540545	7.079139383	6.60905236	6.628240184
+3 Sigma	7.136858387	7.11035879	7.1745455	7.138960617	6.81354764	6.775459816

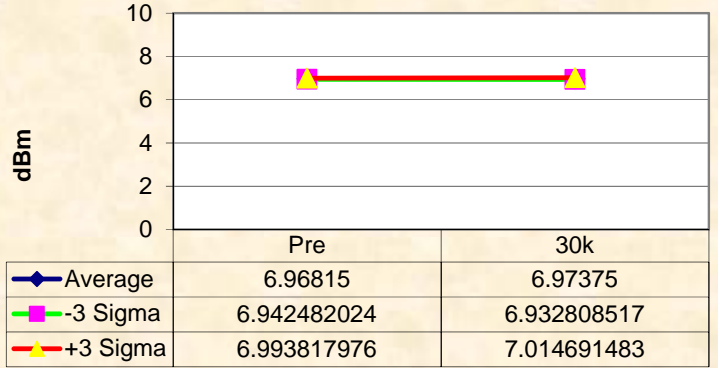
	Pout 12GHz 0dBm (dBm)		Pout 13GHz -5dBm (dBm)		Pout 13GHz 0dBm (dBm)	
SN	Pre	30k	Pre	30k	Pre	30k
13	6.6995	6.7521	6.3539	6.4351	6.4001	6.4853
1	6.6872	6.691	6.3329	6.3348	6.3837	6.3795
2	6.7411	6.7235	6.4045	6.3767	6.4461	6.4132
Min	6.6872	6.691	6.3329	6.3348	6.3837	6.3795
Max	6.7411	6.7235	6.4045	6.3767	6.4461	6.4132
Average	6.71415	6.70725	6.3687	6.35575	6.4149	6.39635
STDev	0.038113056	0.02298097	0.05062885	0.029627774	0.04412346	0.023829499
-3 Sigma	6.599810833	6.63830709	6.21681346	6.266866678	6.28252961	6.324861504
+3 Sigma	6.828489167	6.77619291	6.52058654	6.444633322	6.54727039	6.467838496

**Idynamic +5V****Iq +5V****Pout 1GHz 0dBm****Pout 1GHz 10dBm****Pout 1GHz 15dBm****Pout 4GHz 0dBm****Pout 4GHz 10dBm****Pout 4GHz 15dBm**

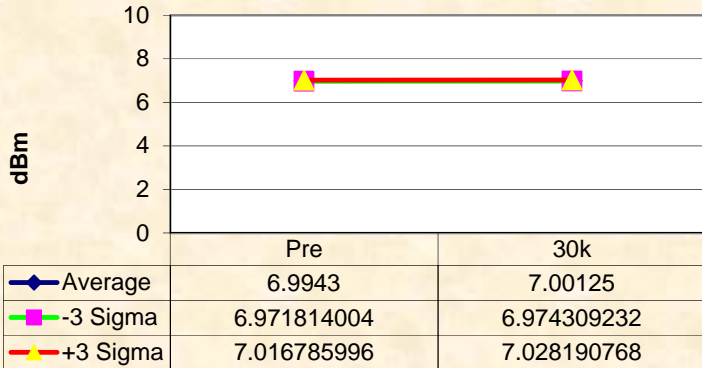
Pout 8GHz 0dBm



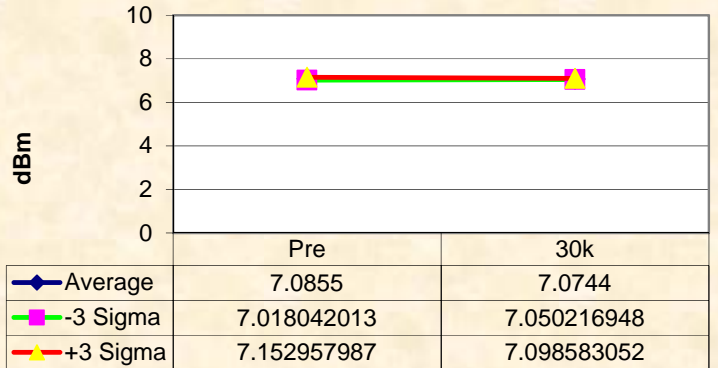
Pout 8GHz 10dBm



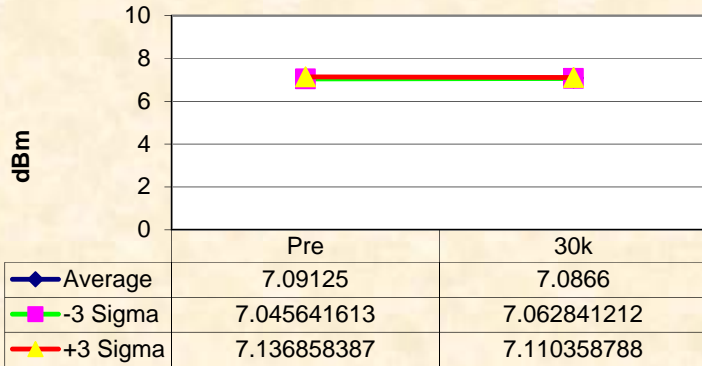
Pout 8GHz 15dBm



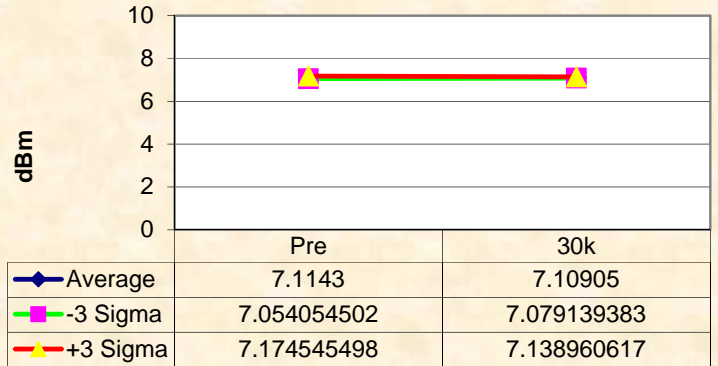
Pout 11GHz -5dBm



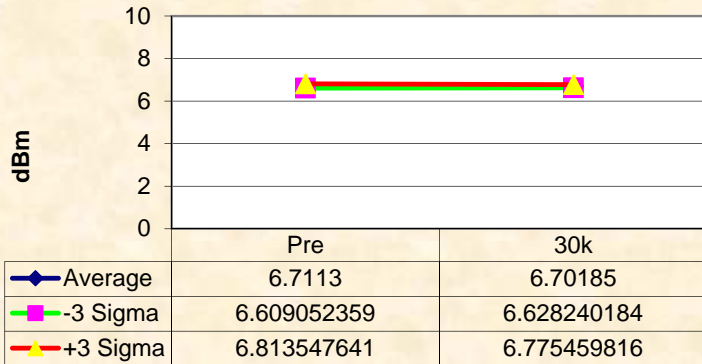
Pout 11GHz +5dBm



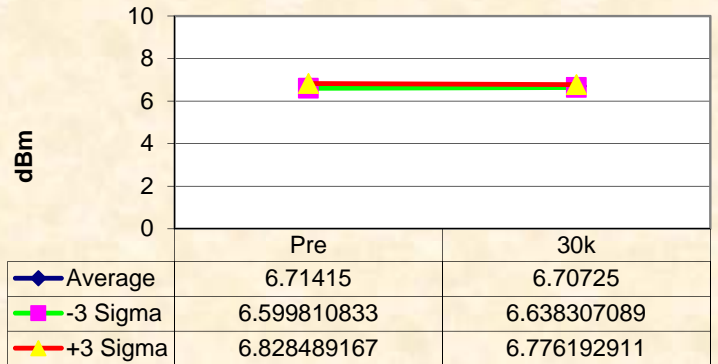
Pout 11GHz -15dBm



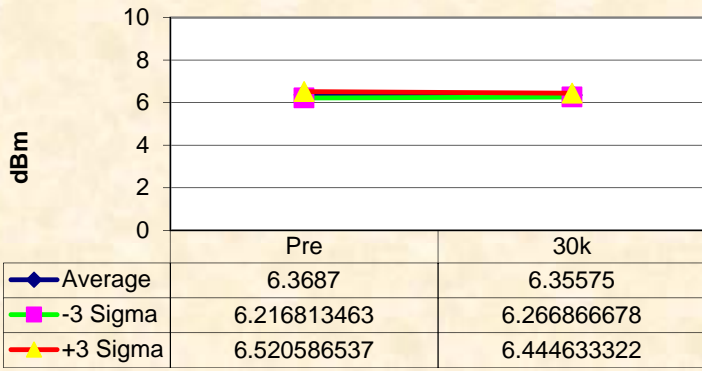
Pout 12GHz -5dBm



Pout 12GHz 0dBm



**Pout 13GHz -5dBm**



**Pout 13GHz 0dBm**

