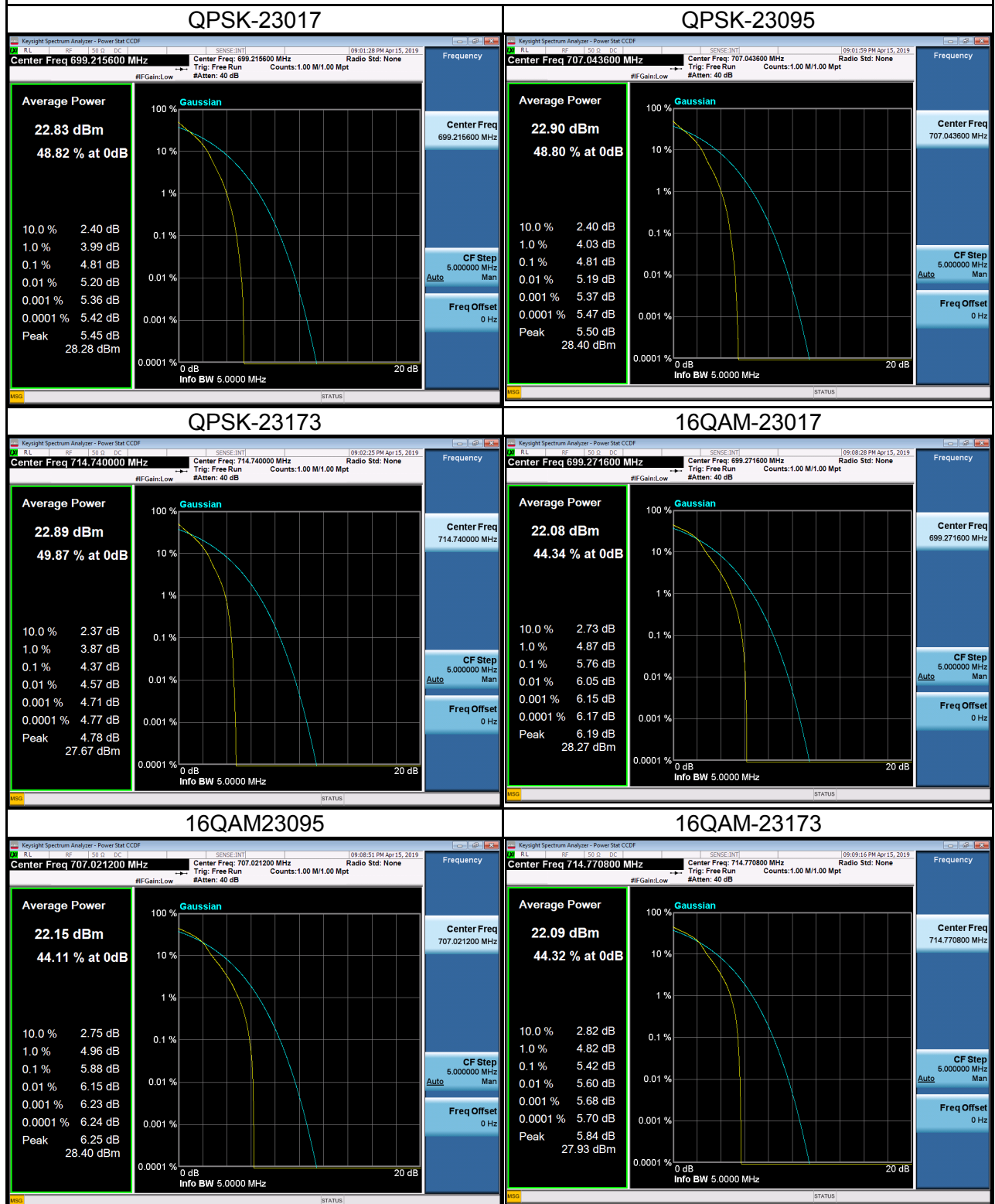
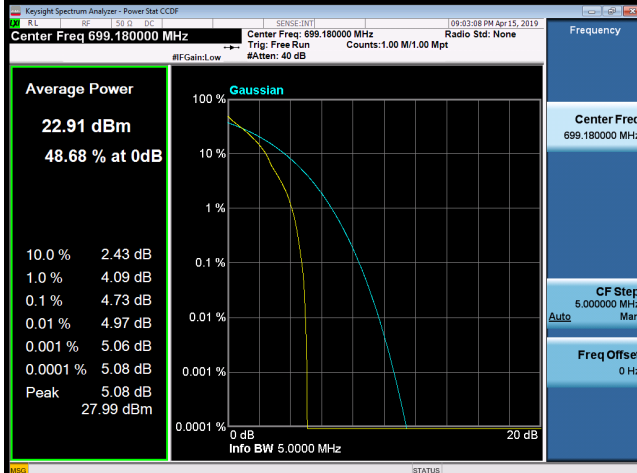


LTE Band 12 Spectrum Plot_1.4M

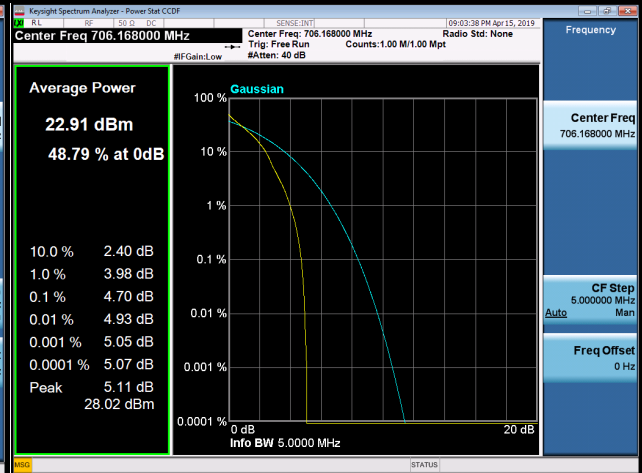


LTE Band 12 Spectrum Plot_3M

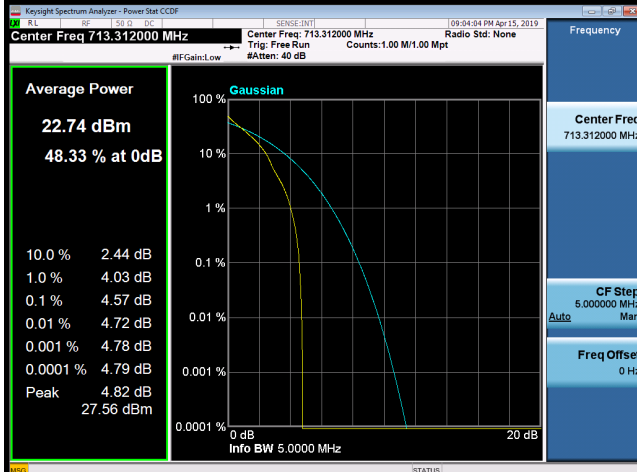
QPSK-23025



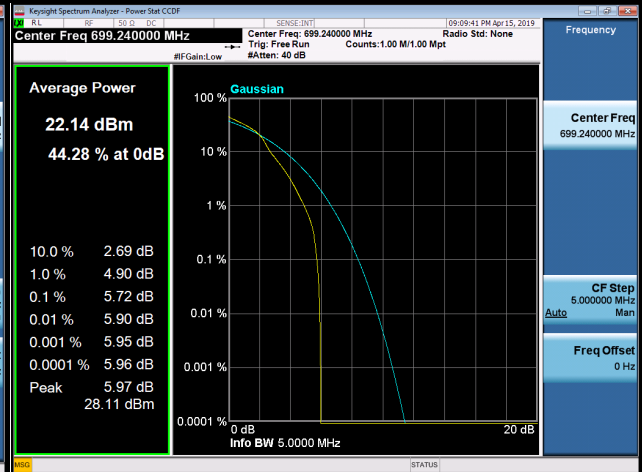
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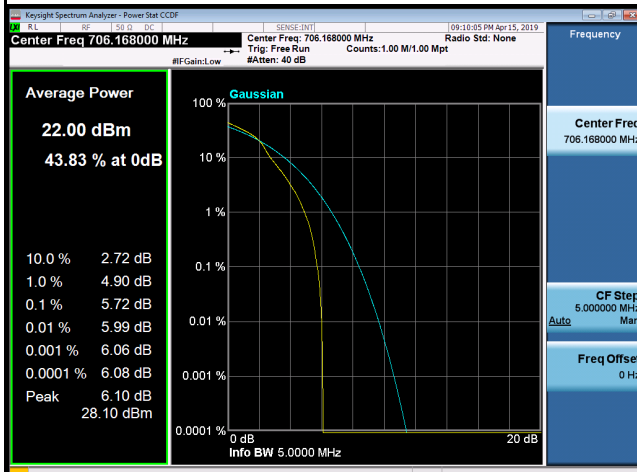
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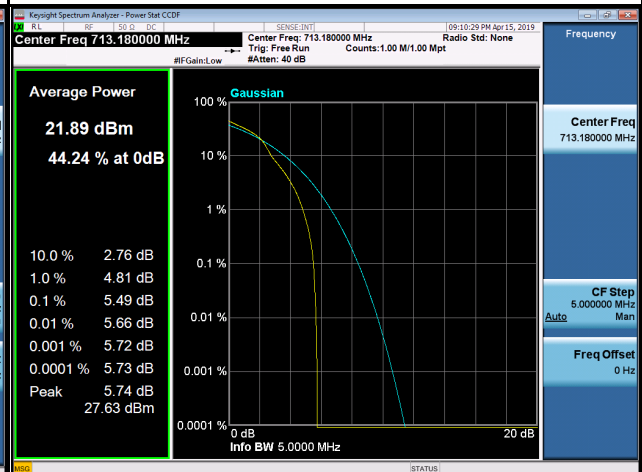
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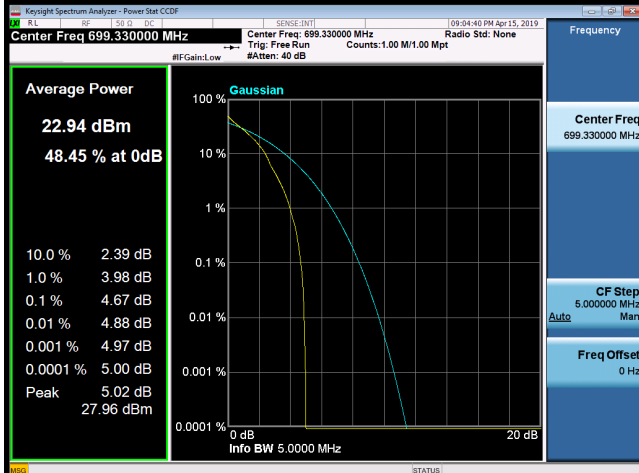


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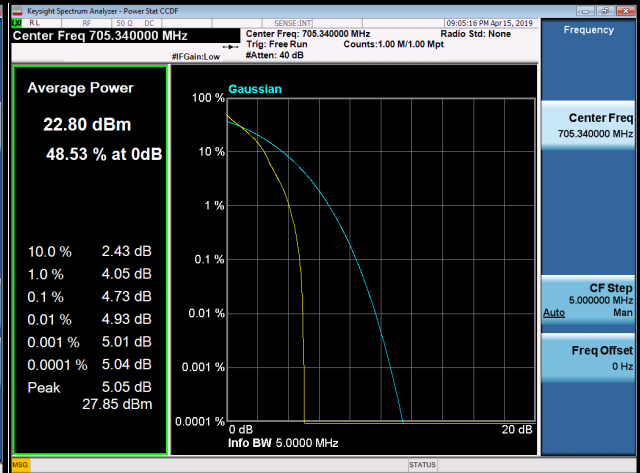


LTE Band 12 Spectrum Plot_5M

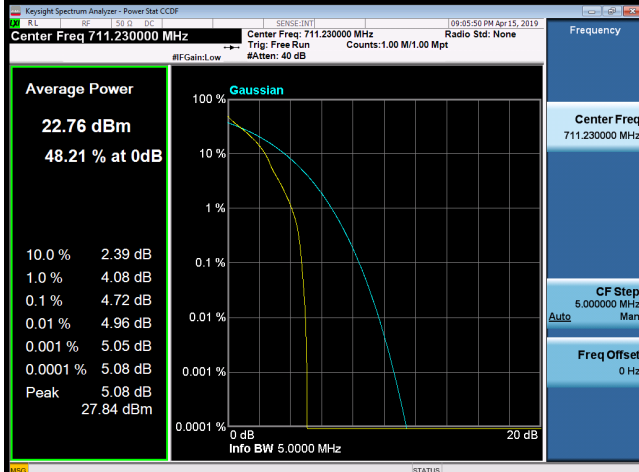
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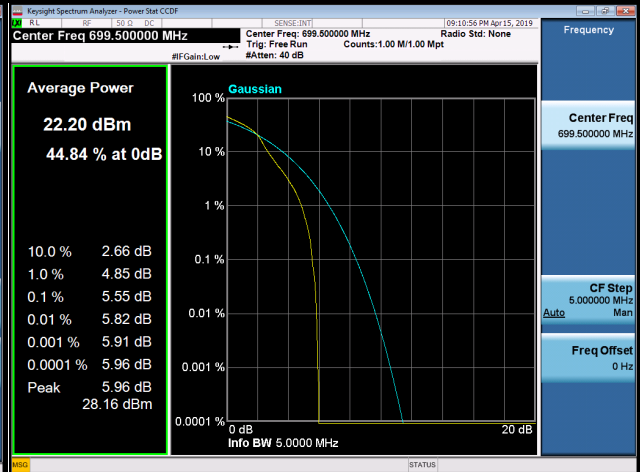
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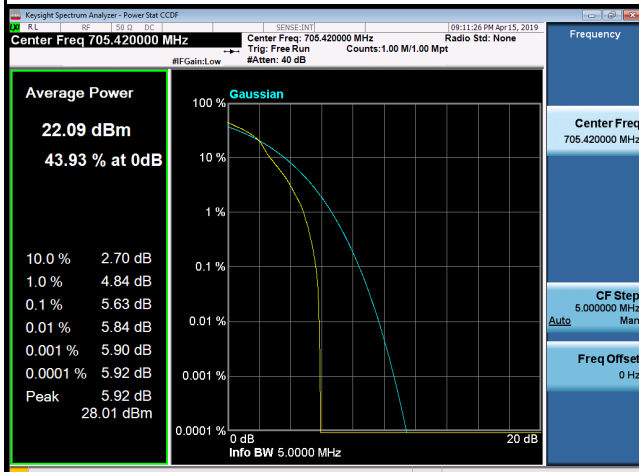
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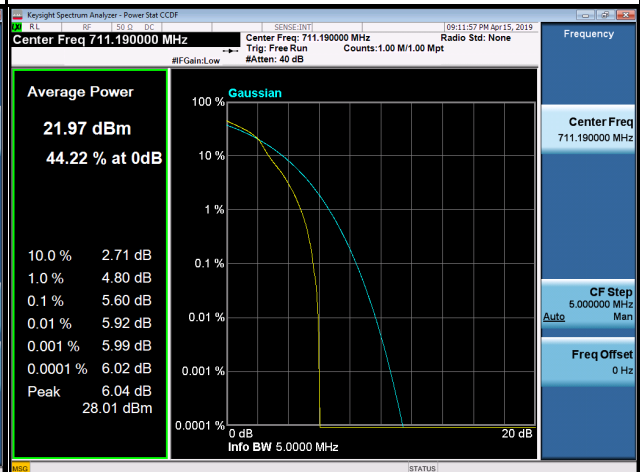
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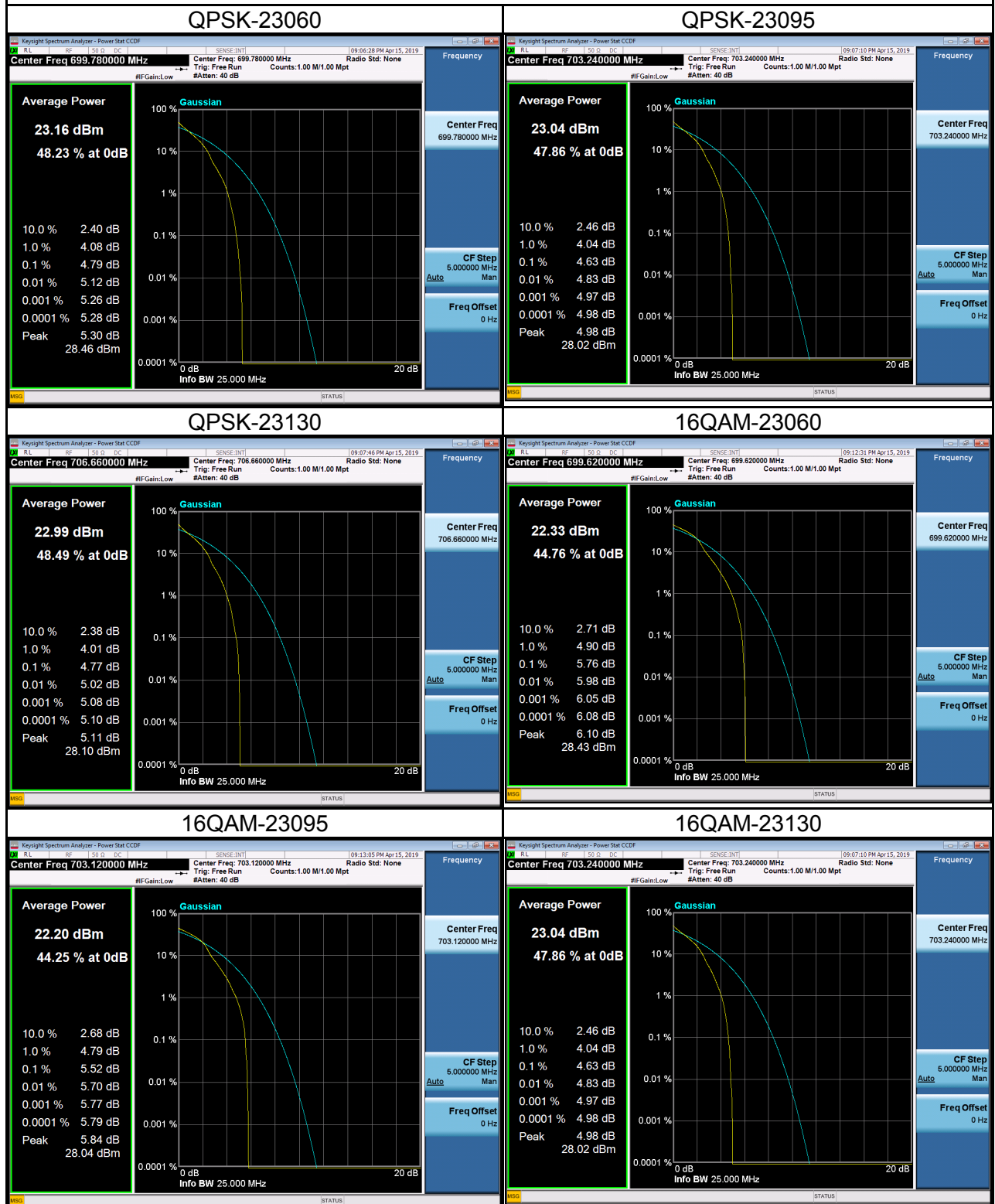
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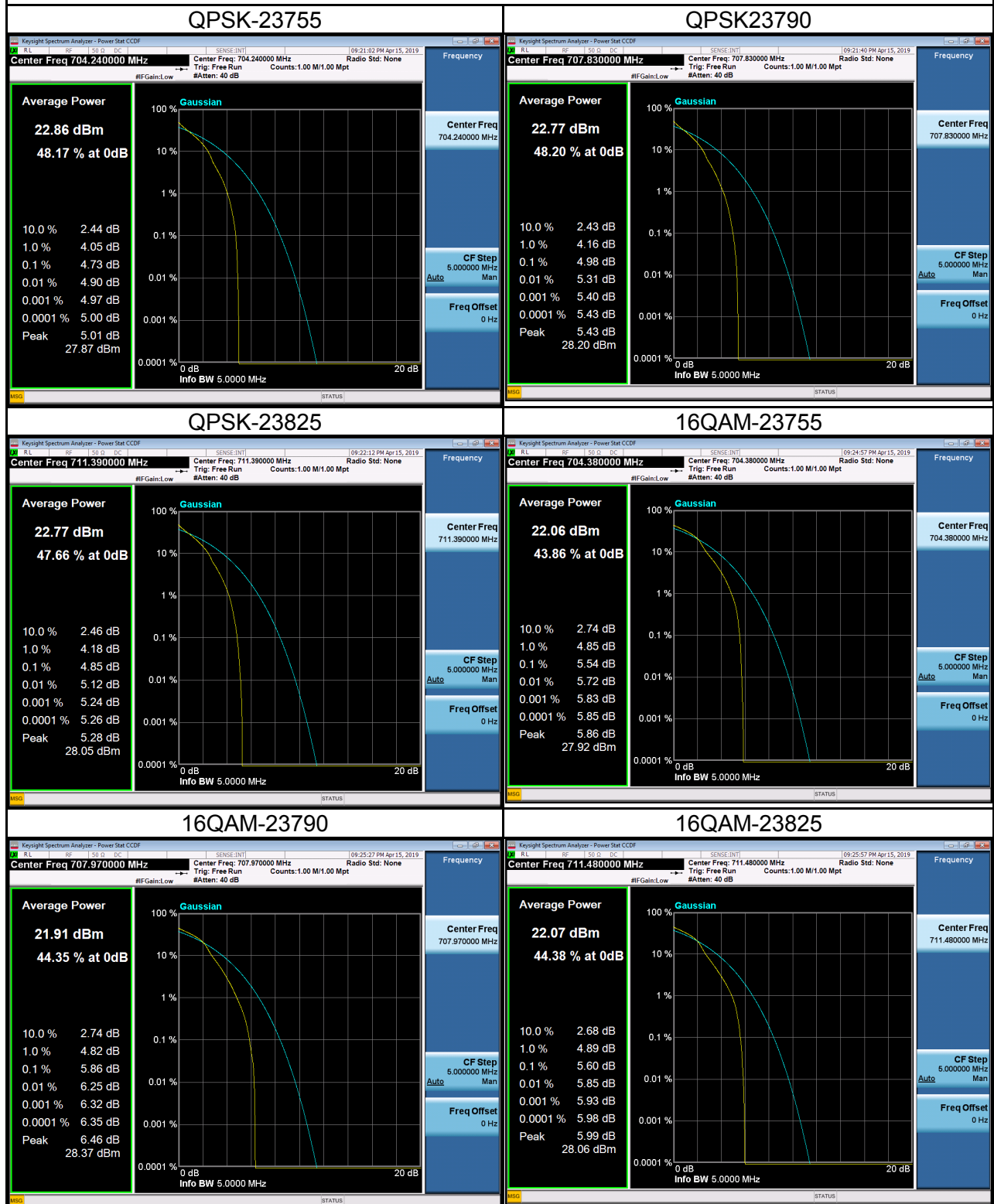
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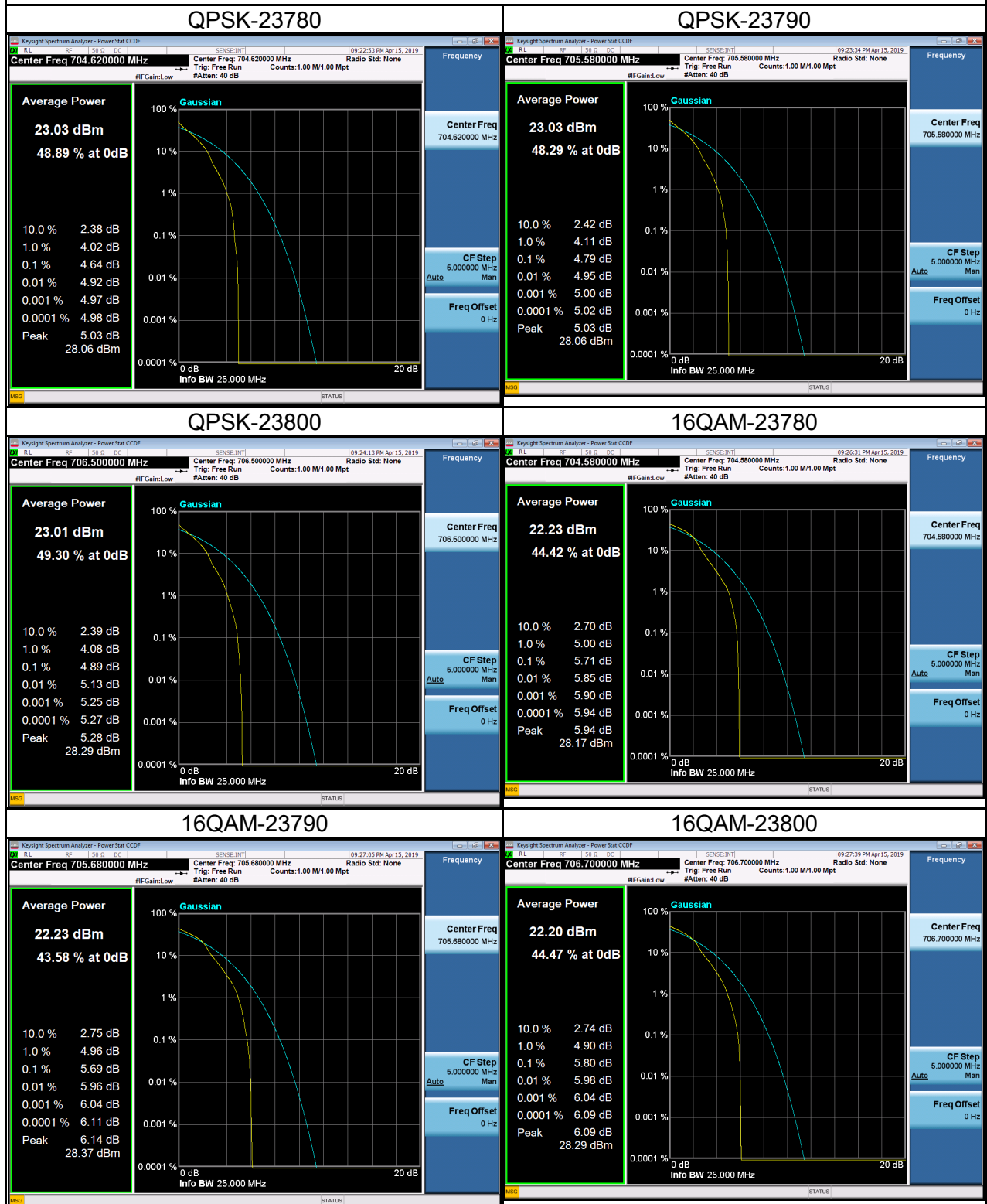
LTE Band 12 Spectrum Plot_10M



LTE Band 17 Spectrum Plot_5M



LTE Band 17 Spectrum Plot_10M

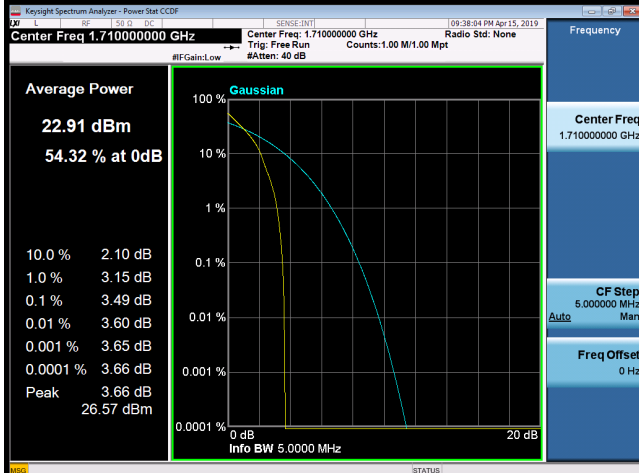


LTE Band 66 Spectrum Plot_1.4M

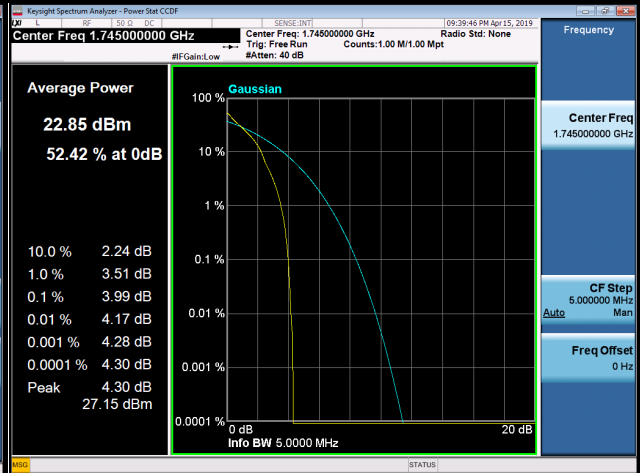


LTE Band 66 Spectrum Plot_3M

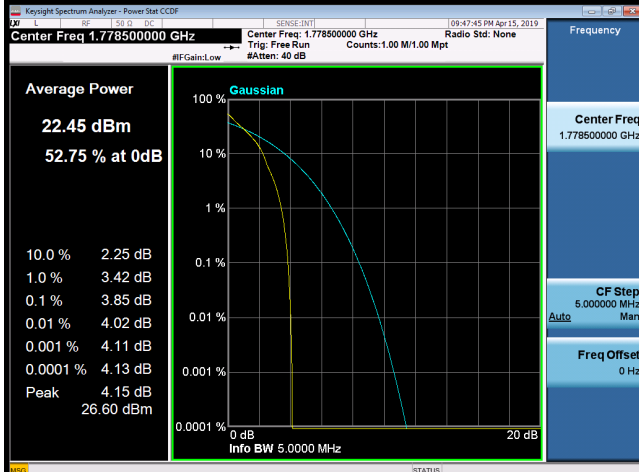
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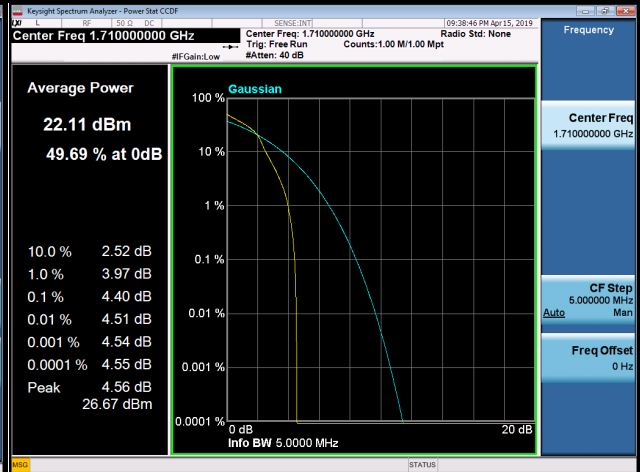
QPSK-132322



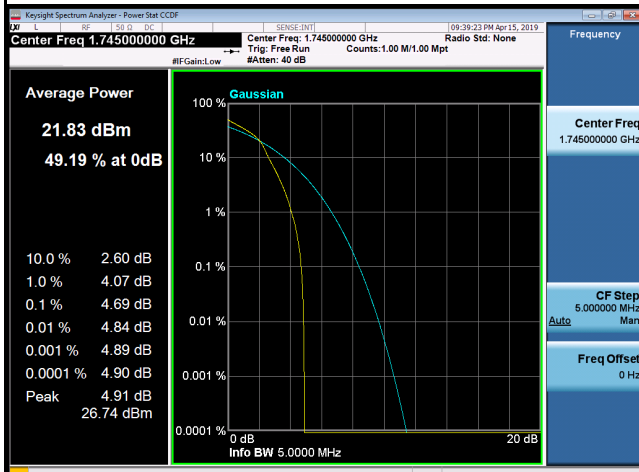
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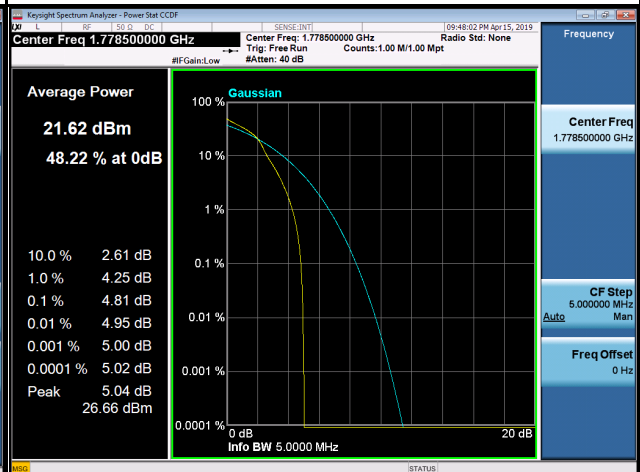
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16QAM-132322

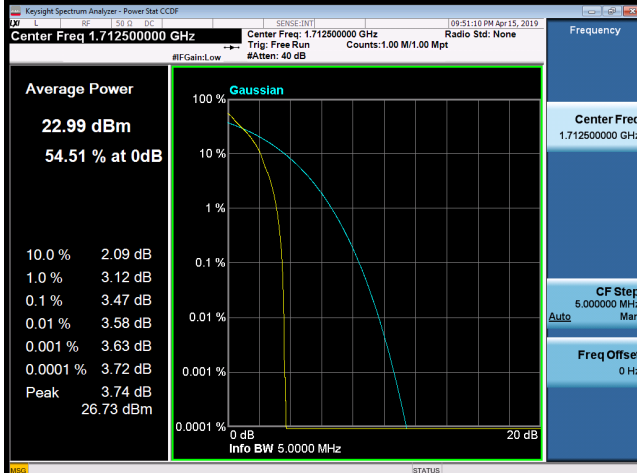


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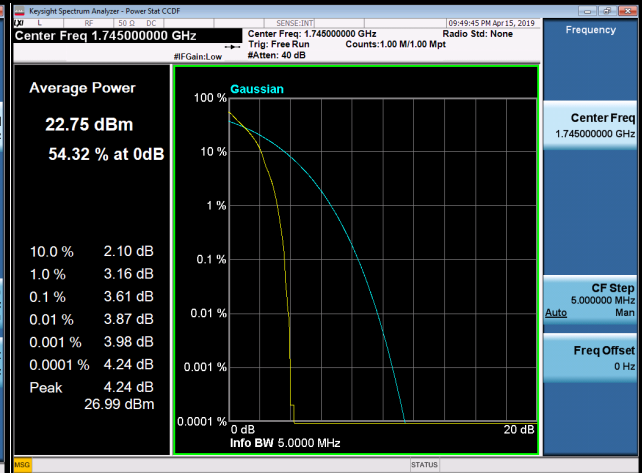


LTE Band 66 Spectrum Plot_5M

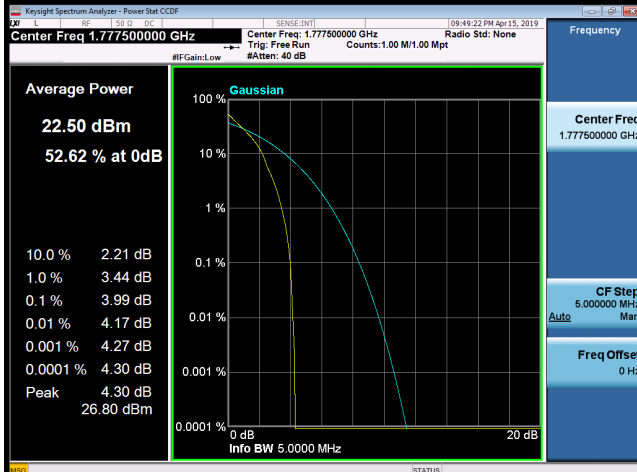
QPSK-131997



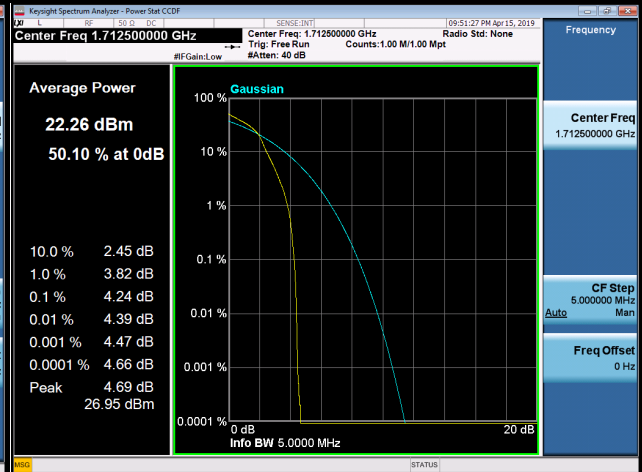
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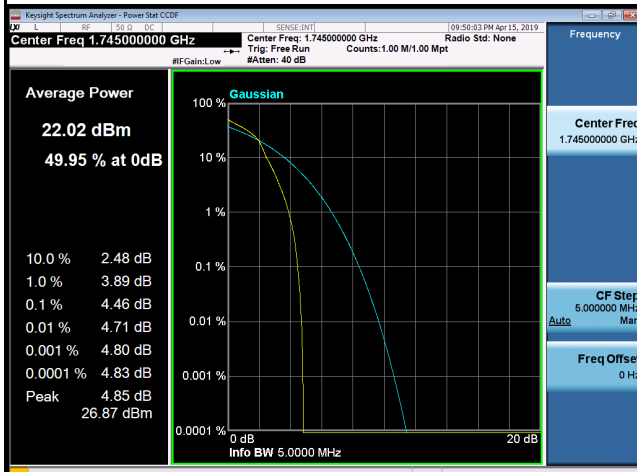
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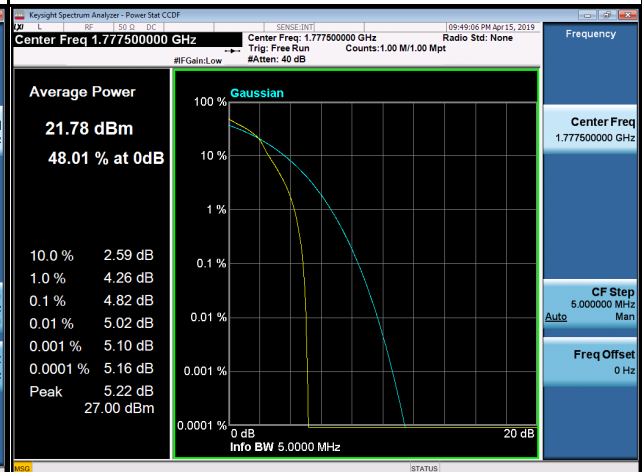
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16QAM-132322

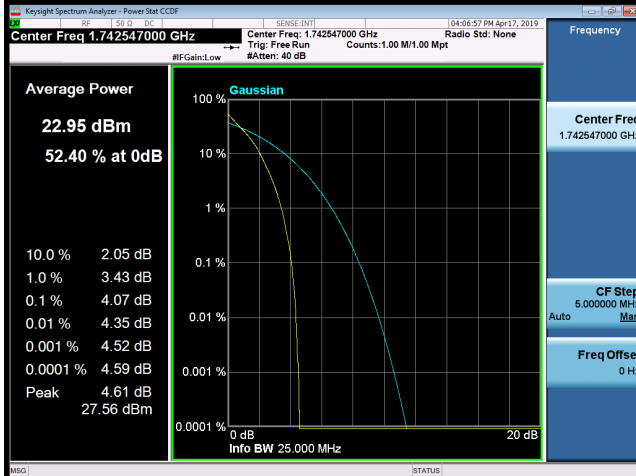


16QAM-132647

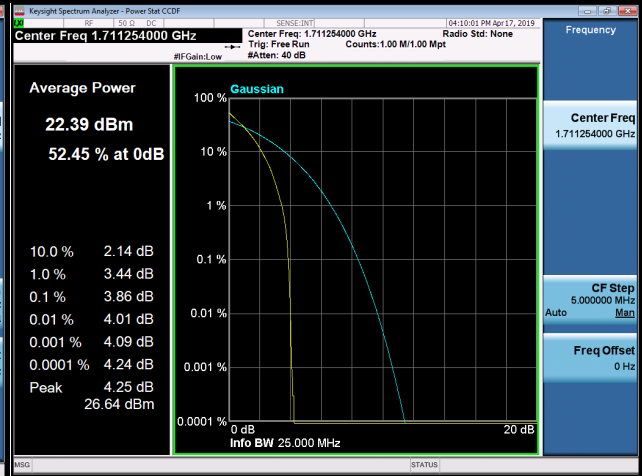


LTE Band 66 Spectrum Plot_10M

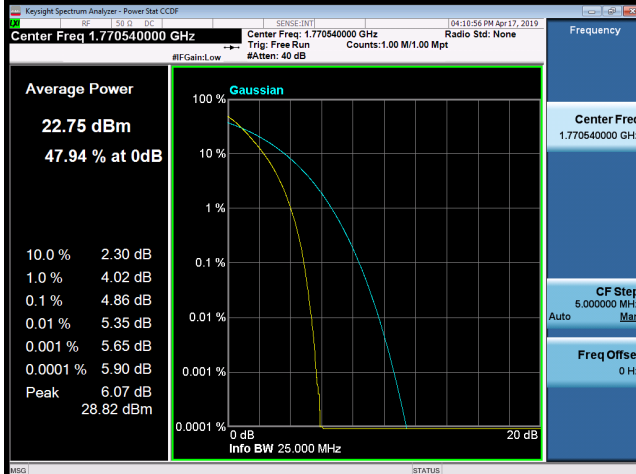
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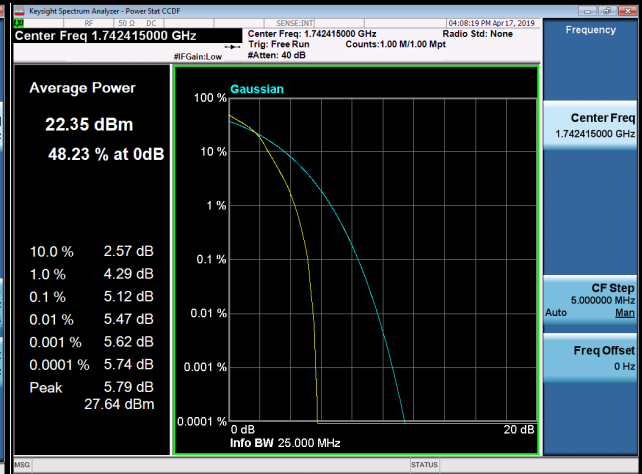
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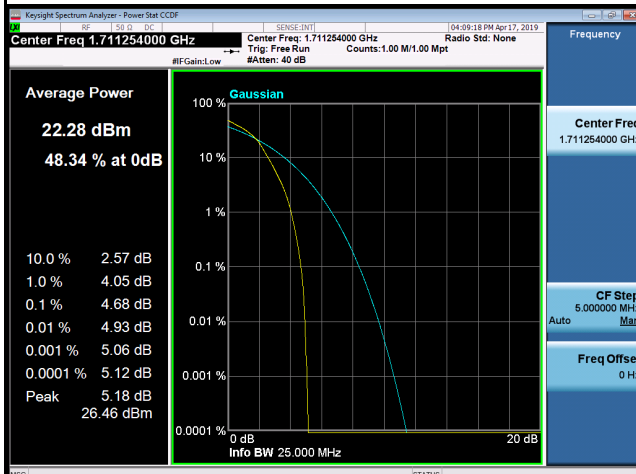
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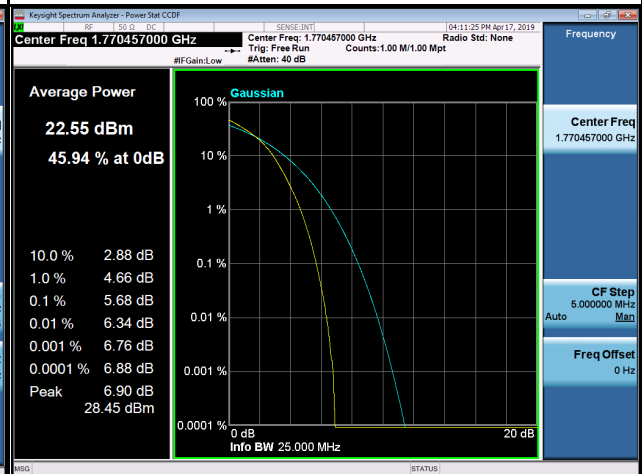
16QAM-132022



16QAM-132322

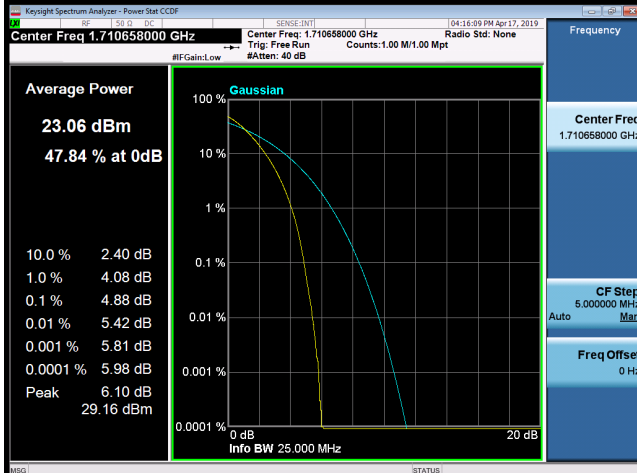


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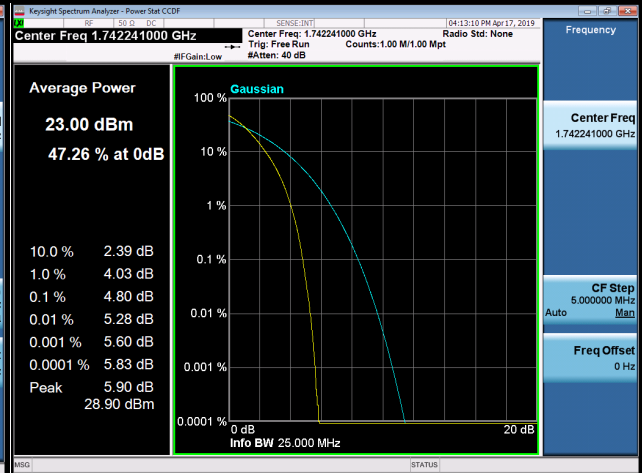


LTE Band 66 Spectrum Plot_15M

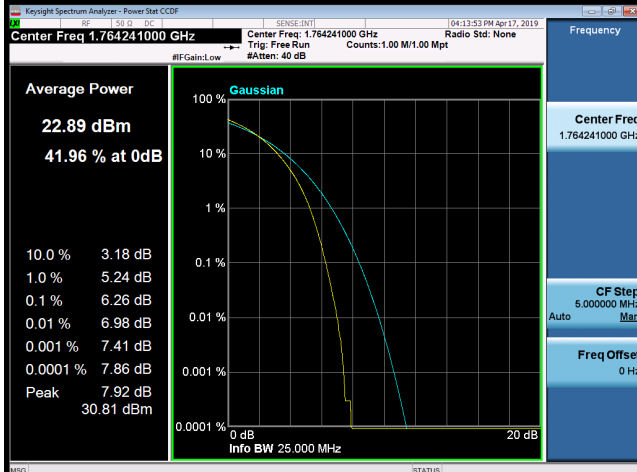
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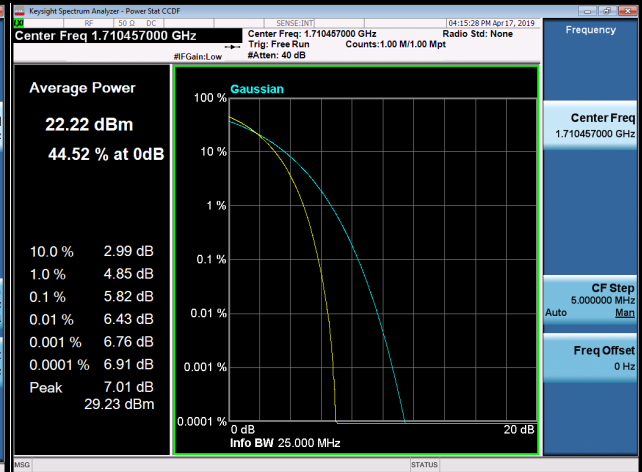
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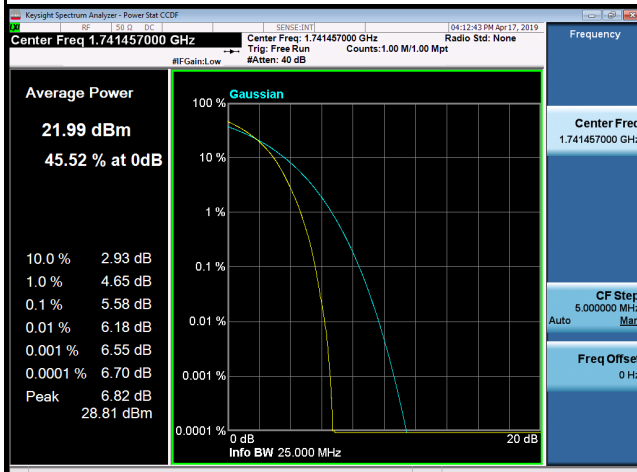
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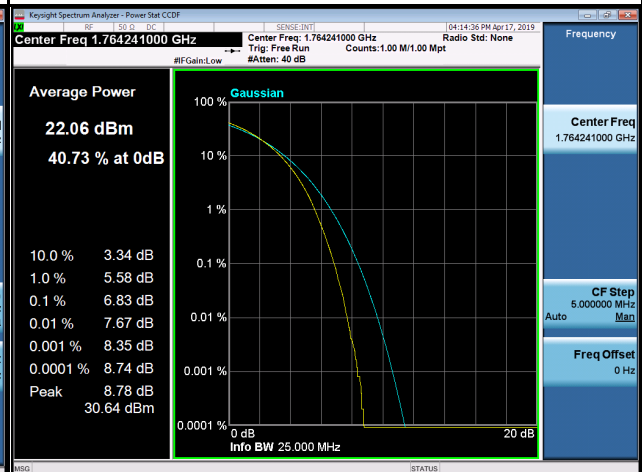
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16QAM-132322

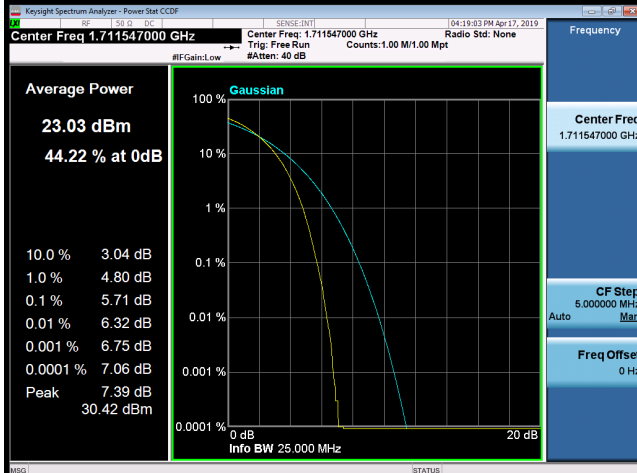


16QAM-132597

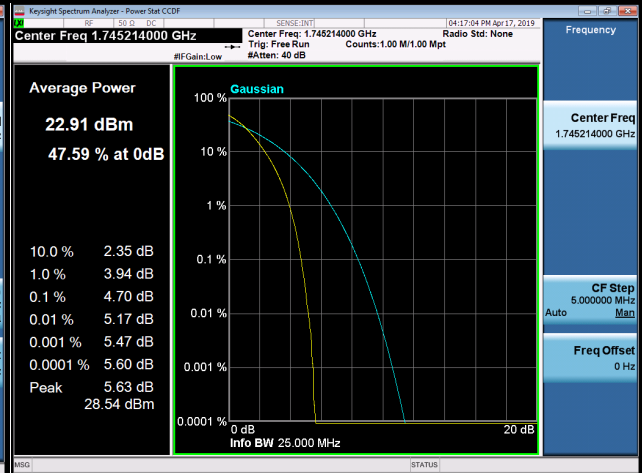


LTE Band 66 Spectrum Plot_20M

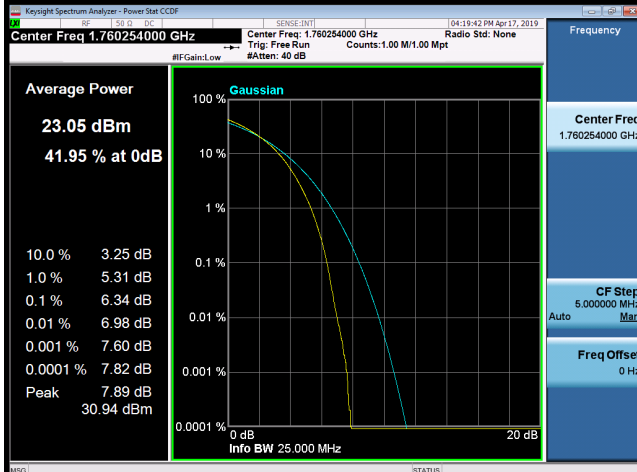
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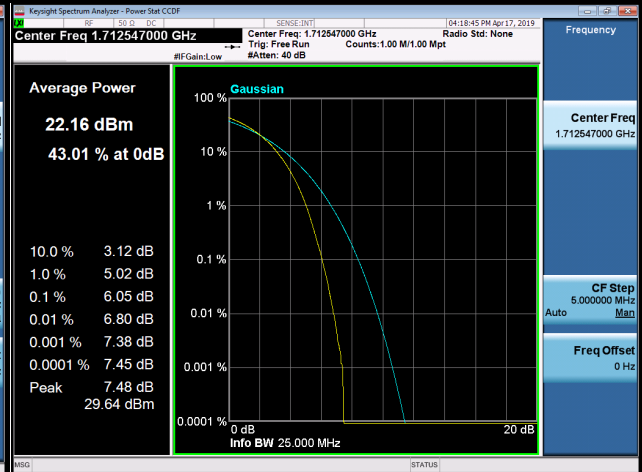
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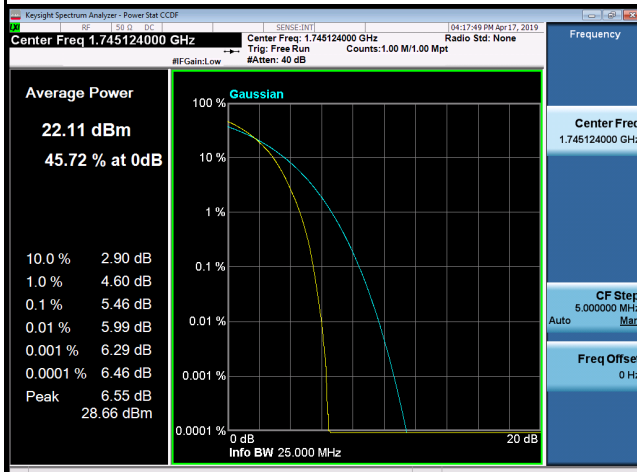
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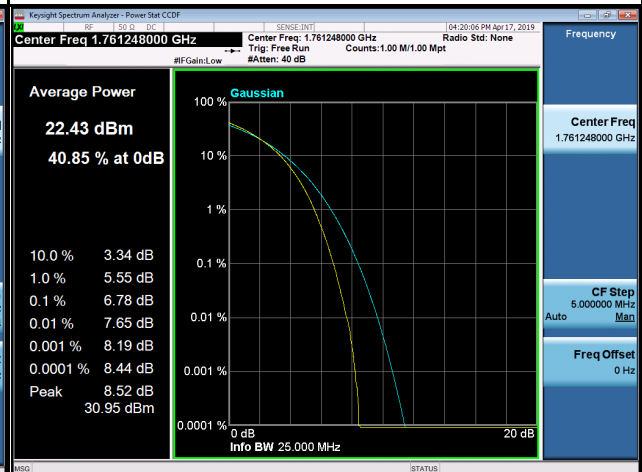
16QAM-132072



16QAM-132322



16QAM-132572



APPENDIX I - FREQUENCY STABILITY

Test Mode:	WCDMA Band IV _CH1413
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	3.83	0.002210551	±2.5
-20	2.60	0.001500635	
-10	5.80	0.00334757	
0	3.25	0.001875794	
10	4.04	0.002331756	
20	3.26	0.001881565	
30	3.95	0.002279811	
40	5.11	0.002949325	
50	5.26	0.0030359	
Max. Deviation (ppm)	5.8	0.00334757	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	2.94	0.001696872	±2.5
3.80	3.14	0.001812305	
3.60	5.32	0.00307053	
Max. Deviation (ppm)	5.32	0.00307053	

Test Mode:	LTE Band 4_CH20175_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	2.22	0.001281385	±2.5
-20	-3.44	-0.00198557	
-10	-4.47	-0.002580087	
0	3.91	0.002256854	
10	-6.50	-0.003751804	
20	-4.84	-0.002793651	
30	2.91	0.001679654	
40	2.07	0.001194805	
50	-7.17	-0.004138528	
Max. Deviation (ppm)	-7.17	-0.004138528	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-7.28	-0.00420202	±2.5
3.80	-2.77	-0.001598846	
3.60	-2.23	-0.001287157	
Max. Deviation (ppm)	-7.28	-0.00420202	

Test Mode:	LTE Band 4_CH20175_3M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-4.14	-0.00238961	±2.5
-20	4.27	0.002464646	
-10	-4.14	-0.00238961	
0	1.21	0.000698413	
10	-5.67	-0.003272727	
20	-2.23	-0.001287157	
30	3.86	0.002227994	
40	6.31	0.003642136	
50	-6.03	-0.003480519	
Max. Deviation (ppm)	6.31	0.003642136	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	5.43	0.003134199	±2.5
3.80	-6.90	-0.003982684	
3.60	3.26	0.001881674	
Max. Deviation (ppm)	-6.9	-0.003982684	

Test Mode:	LTE Band 4_CH20175_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-2.38	-0.001373737	±2.5
-20	6.62	0.003821068	
-10	-2.49	-0.001437229	
0	-3.81	-0.002199134	
10	5.87	0.003388167	
20	-2.18	-0.001258297	
30	0.00	6.40821E-20	
40	-5.42	-0.003128427	
50	-2.80	-0.001616162	
Max. Deviation (ppm)	6.62	0.003821068	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.95	0.002279942	±2.5
3.80	3.36	0.001939394	
3.60	4.12	0.002378066	
Max. Deviation (ppm)	4.12	0.002378066	

Test Mode:	LTE Band 4_CH20175_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	3.09	0.00178355	±2.5
-20	6.19	0.003572872	
-10	5.28	0.003047619	
0	3.62	0.002089466	
10	-6.39	-0.003688312	
20	0.19	0.000109668	
30	4.96	0.002862915	
40	0.64	0.000369408	
50	6.62	0.003821068	
Max. Deviation (ppm)	6.62	0.003821068	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-1.78	-0.001027417	±2.5
3.80	-3.27	-0.001887446	
3.60	5.17	0.002984127	
Max. Deviation (ppm)	5.17	0.002984127	

Test Mode:	LTE Band 4_CH20175_15M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	4.12	0.002378066	±2.5
-20	2.60	0.001500722	
-10	-4.70	-0.002712266	
0	4.92	0.002839827	
10	-1.84	-0.001062049	
20	3.88	0.002239538	
30	-3.16	-0.001823954	
40	-2.74	-0.00158153	
50	-6.73	-0.00388456	
Max. Deviation (ppm)	-6.73	-0.00388456	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	7.25	0.004184704	±2.5
3.80	3.25	0.001875902	
3.60	-2.68	-0.001546898	
Max. Deviation (ppm)	7.25	0.004184704	

Test Mode:	LTE Band 4_CH20175_20M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	3.97	0.002291486	±2.5
-20	4.29	0.00247619	
-10	3.19	0.00184127	
0	-3.47	-0.002002886	
10	-7.88	-0.004548341	
20	6.18	0.0035671	
30	-3.31	-0.001910534	
40	4.80	0.002770563	
50	-4.09	-0.00236075	
Max. Deviation (ppm)	-7.88	-0.004548341	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	5.50	0.003174603	±2.5
3.80	-3.57	-0.002060606	
3.60	2.58	0.001489177	
Max. Deviation (ppm)	5.5	0.003174603	

Test Mode:	LTE Band 7_CH21100_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	3.37	0.001329389	±2.5
-20	7.71	0.00304142	
-10	-1.34	-0.0005286	
0	4.95	0.001952663	
10	-5.28	-0.00208284	
20	4.87	0.001921105	
30	5.96	0.002351085	
40	-1.99	-0.00078501	
50	-0.18	-7.10059E-05	
Max. Deviation (ppm)	7.71	0.00304142	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-1.41	-0.000556213	±2.5
3.80	1.22	0.000481262	
3.60	2.45	0.000966469	
Max. Deviation (ppm)	2.45	0.000966469	

Test Mode:	LTE Band 7_CH21100_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	5.00	0.001972387	±2.5
-20	2.90	0.001143984	
-10	3.76	0.001483235	
0	1.93	0.000761341	
10	-2.25	-0.000887574	
20	4.20	0.001656805	
30	2.37	0.000934911	
40	2.78	0.001096647	
50	-1.67	-0.000658777	
Max. Deviation (ppm)	5	0.001972387	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.03	-0.001195266	±2.5
3.80	3.56	0.001404339	
3.60	-3.58	-0.001412229	
Max. Deviation (ppm)	-3.58	-0.001412229	

Test Mode:	LTE Band 7_CH21100_15M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	6.03	0.002378698	±2.5
-20	-2.86	-0.001128205	
-10	-1.40	-0.000552268	
0	3.92	0.001546351	
10	4.32	0.001704142	
20	-1.40	-0.000552268	
30	5.04	0.001988166	
40	5.39	0.002126233	
50	2.63	0.001037475	
Max. Deviation (ppm)	6.03	0.002378698	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.78	0.001491124	±2.5
3.80	-5.78	-0.002280079	
3.60	2.89	0.001140039	
Max. Deviation (ppm)	-5.78	-0.002280079	

Test Mode:	LTE Band 7_CH21100_20M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-6.45	-0.002544379	±2.5
-20	-5.10	-0.002011834	
-10	3.06	0.001207101	
0	0.92	0.000362919	
10	6.22	0.002453649	
20	-7.65	-0.003017751	
30	2.05	0.000808679	
40	-3.71	-0.001463511	
50	-4.20	-0.001656805	
Max. Deviation (ppm)	-7.65	-0.003017751	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-4.36	-0.001719921	±2.5
3.80	5.13	0.002023669	
3.60	4.60	0.001814596	
Max. Deviation (ppm)	5.13	0.002023669	

Test Mode:	LTE Band 12_CH23095_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-4.12	0.005823322	±2.5
-20	-2.77	0.003915194	
-10	5.39	0.007618375	
0	3.25	0.00459364	
10	8.55	0.012084806	
20	-5.32	0.007519435	
30	4.38	0.006190813	
40	-1.38	0.00195053	
50	-1.62	0.002289753	
Max. Deviation (ppm)	8.55	0.012084806	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	2.41	0.00340636	±2.5
3.80	-7.15	0.010106007	
3.60	1.52	0.00214841	
Max. Deviation (ppm)	-7.15	0.010106007	

Test Mode:	LTE Band 12_CH23095_3M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	6.93	0.009795053	±2.5
-20	-2.43	0.003434629	
-10	-0.97	0.001371025	
0	5.07	0.007166078	
10	5.47	0.007731449	
20	-0.25	0.000353357	
30	6.19	0.008749117	
40	6.54	0.009243816	
50	4.62	0.006530035	
Max. Deviation (ppm)	6.93	0.009795053	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-6.94	0.009809187	±2.5
3.80	3.27	0.004621908	
3.60	2.74	0.003872792	
Max. Deviation (ppm)	-6.94	0.009809187	

Test Mode:	LTE Band 12_CH23095_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	4.27	0.006035336	±2.5
-20	8.14	0.0115053	
-10	-0.19	-0.000268551	
0	6.10	0.008621908	
10	-4.13	-0.005837456	
20	6.02	0.008508834	
30	7.11	0.01004947	
40	-0.37	-0.000522968	
50	1.44	0.002035336	
Max. Deviation (ppm)	8.14	0.0115053	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-2.78	-0.003929329	±2.5
3.80	-0.15	-0.000212014	
3.60	1.08	0.001526502	
Max. Deviation (ppm)	-2.78	-0.003929329	

Test Mode:	LTE Band 12_CH23095_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	5.90	0.008339223	±2.5
-20	4.99	0.007053004	
-10	5.85	0.008268551	
0	4.02	0.005681979	
10	-0.16	-0.000226148	
20	6.29	0.008890459	
30	4.46	0.006303887	
40	4.87	0.006883392	
50	0.42	0.00059364	
Max. Deviation (ppm)	6.29	0.008890459	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-4.65	-0.006572438	±2.5
3.80	1.94	0.002742049	
3.60	-5.20	-0.007349823	
Max. Deviation (ppm)	-5.2	-0.007349823	

Test Mode:	LTE Band 17_CH23790_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	4.21	0.005929577	±2.5
-20	7.60	0.010704225	
-10	-1.45	-0.002042254	
0	4.84	0.006816901	
10	-5.39	-0.007591549	
20	4.76	0.006704225	
30	5.85	0.008239437	
40	-1.63	-0.002295775	
50	0.18	0.000253521	
Max. Deviation (ppm)	7.6	0.010704225	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.20	-0.004507042	±2.5
3.80	-0.57	-0.000802817	
3.60	0.66	0.000929577	
Max. Deviation (ppm)	-3.2	-0.004507042	

Test Mode: LTE Band 17_CH23790_10M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	2.00	0.002816901	±2.5
-20	0.37	0.000521127	
-10	1.23	0.001732394	
0	-0.60	-0.00084507	
10	-4.78	-0.006732394	
20	1.67	0.002352113	
30	-0.16	-0.000225352	
40	0.73	0.001028169	
50	-3.72	-0.005239437	
Max. Deviation (ppm)	-4.78	-0.006732394	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	0.48	0.000676056	±2.5
3.80	0.48	0.000676056	
3.60	0.48	0.000676056	
Max. Deviation (ppm)	0.48	0.000676056	

Test Mode:	LTE Band 66_CH132322_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	5.00	0.00286533	±2.5
-20	3.37	0.001931232	
-10	4.23	0.002424069	
0	2.40	0.001375358	
10	-1.78	0.001020057	
20	4.67	0.002676218	
30	2.84	0.001627507	
40	3.25	0.001862464	
50	-1.20	0.000687679	
Max. Deviation (ppm)	5	0.00286533	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-4.02	0.002303725	±2.5
3.80	1.27	0.000727794	
3.60	2.27	0.00130086	
Max. Deviation (ppm)	-4.02	0.002303725	

Test Mode: LTE Band 66_CH132322_3M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	4.24	0.002429799	±2.5
-20	7.24	0.004148997	
-10	-1.81	0.001037249	
0	4.48	0.002567335	
10	-5.75	0.003295129	
20	4.40	0.00252149	
30	5.49	0.003146132	
40	-1.99	0.001140401	
50	-0.18	0.000103152	
Max. Deviation (ppm)	7.24	0.004148997	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.15	0.001805158	±2.5
3.80	2.14	0.001226361	
3.60	3.14	0.001799427	
Max. Deviation (ppm)	-3.15	0.001805158	

Test Mode:	LTE Band 66_CH132322_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	3.37	0.001931232	±2.5
-20	6.37	0.00365043	
-10	-2.68	-0.001535817	
0	3.61	0.002068768	
10	-6.62	-0.003793696	
20	3.53	0.002022923	
30	4.62	0.002647564	
40	-2.86	-0.001638968	
50	-1.05	-0.000601719	
Max. Deviation (ppm)	-6.62	-0.003793696	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-2.75	-0.001575931	±2.5
3.80	-0.12	-6.87679E-05	
3.60	1.11	0.000636103	
Max. Deviation (ppm)	-2.75	-0.001575931	

Test Mode: LTE Band 66_CH132322_10M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	5.87	0.003363897	±2.5
-20	4.24	0.002429799	
-10	5.10	0.002922636	
0	3.27	0.001873926	
10	-0.91	-0.00052149	
20	5.54	0.003174785	
30	3.71	0.002126074	
40	4.12	0.002361032	
50	-0.33	-0.000189112	
Max. Deviation (ppm)	5.87	0.003363897	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.90	-0.002234957	±2.5
3.80	2.69	0.001541547	
3.60	-4.45	-0.002550143	
Max. Deviation (ppm)	-4.45	-0.002550143	

Test Mode:	LTE Band 66_CH132322_15M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	6.03	0.003455587	±2.5
-20	-4.20	-0.002406877	
-10	-2.74	-0.001570201	
0	2.58	0.00147851	
10	2.98	0.001707736	
20	-2.74	-0.001570201	
30	3.70	0.002120344	
40	4.05	0.002320917	
50	1.29	0.000739255	
Max. Deviation (ppm)	6.03	0.003455587	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.31	0.001896848	±2.5
3.80	-6.25	-0.003581662	
3.60	2.42	0.001386819	
Max. Deviation (ppm)	-6.25	-0.003581662	

Test Mode:	LTE Band 66_CH132322_20M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-5.98	-0.003426934	±2.5
-20	-4.63	-0.002653295	
-10	4.40	0.00252149	
0	2.26	0.001295129	
10	7.56	0.004332378	
20	-6.31	-0.003616046	
30	3.39	0.001942693	
40	-2.37	-0.001358166	
50	-3.33	-0.001908309	
Max. Deviation (ppm)	7.56	0.004332378	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.49	-0.002	±2.5
3.80	6.00	0.003438395	
3.60	5.47	0.00313467	
Max. Deviation (ppm)	6	0.003438395	

End of Test Report