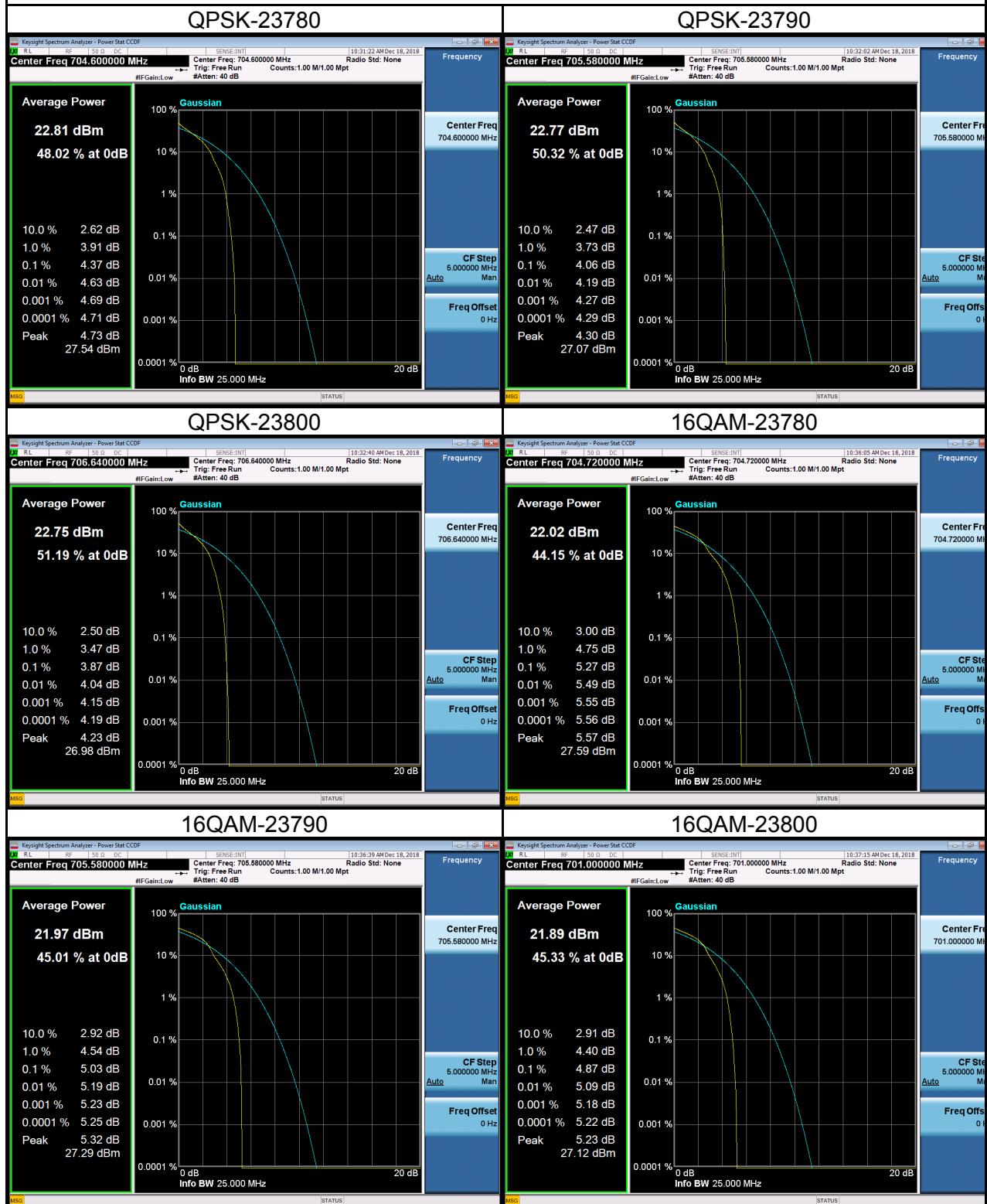
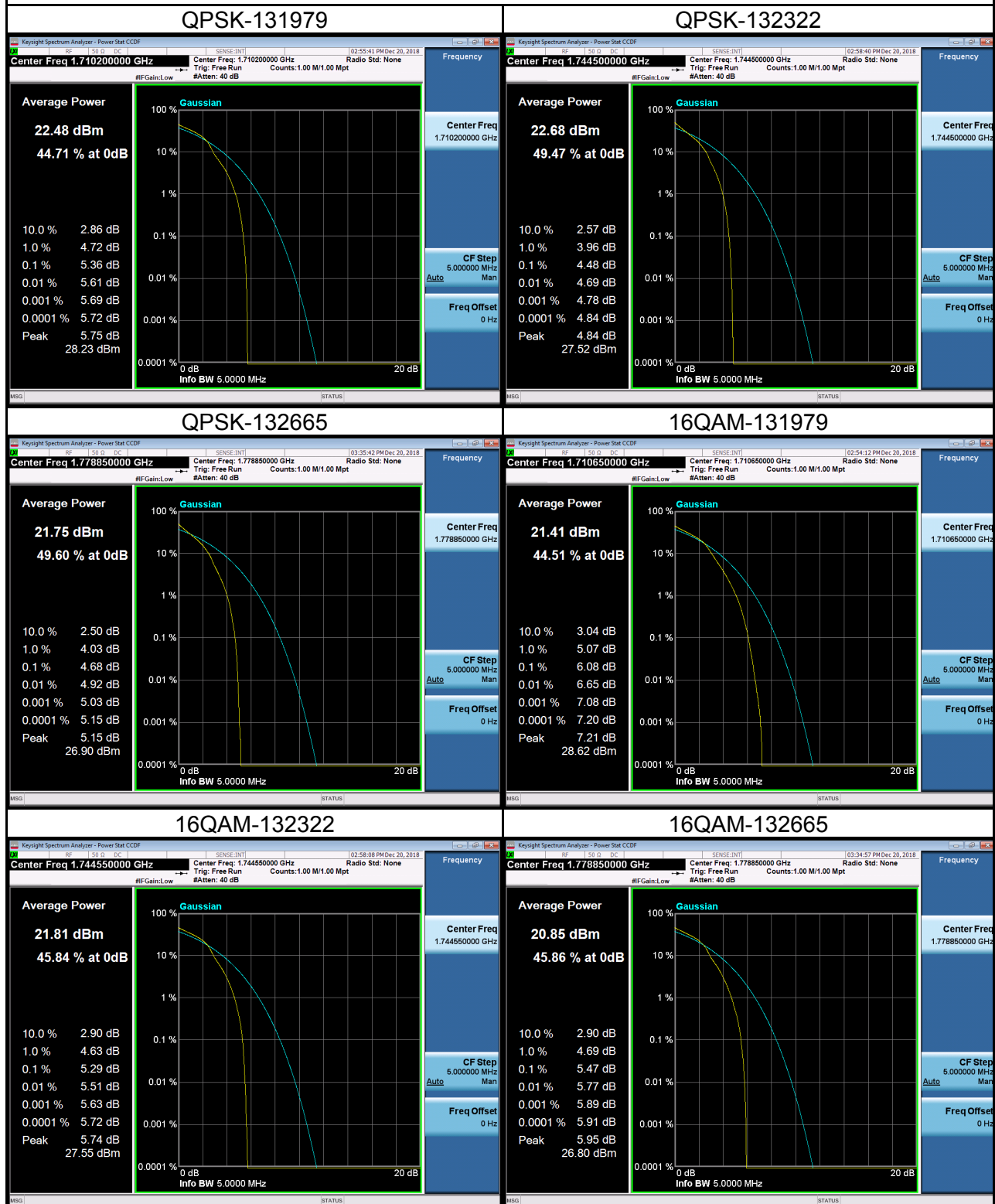


LTE Band 17 Spectrum Plot_10M

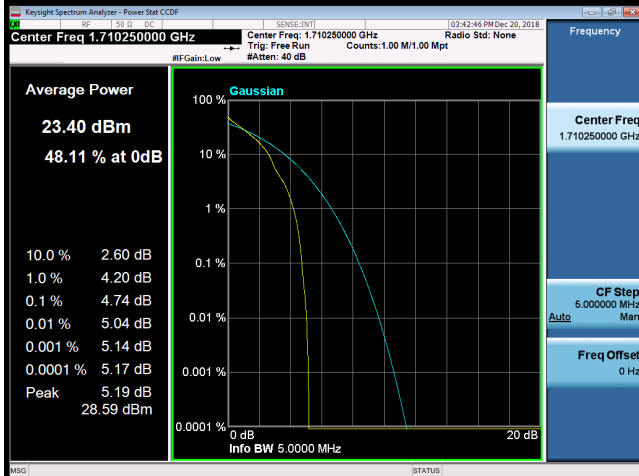


LTE Band 66 Spectrum Plot_1.4M

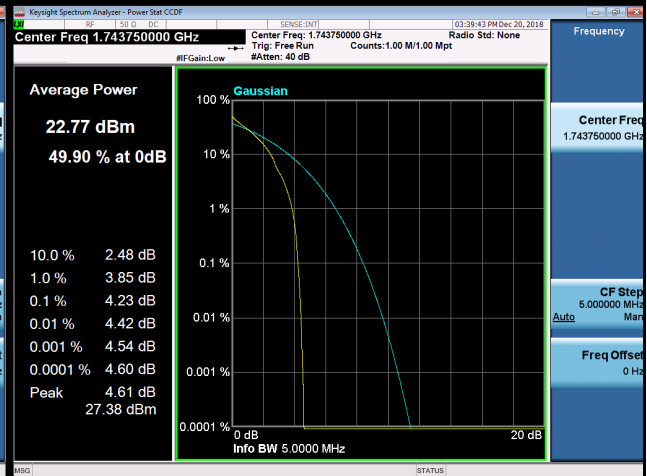


LTE Band 66 Spectrum Plot_3M

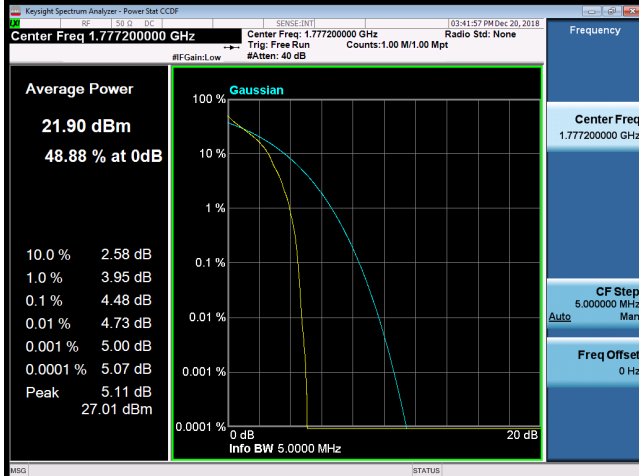
QPSK-131987



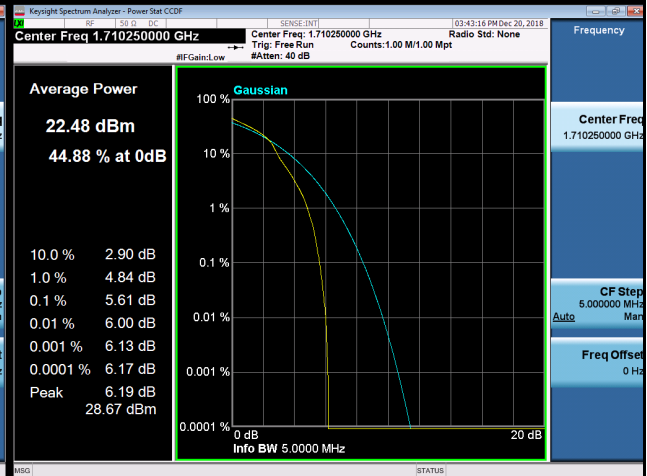
QPSK-132322



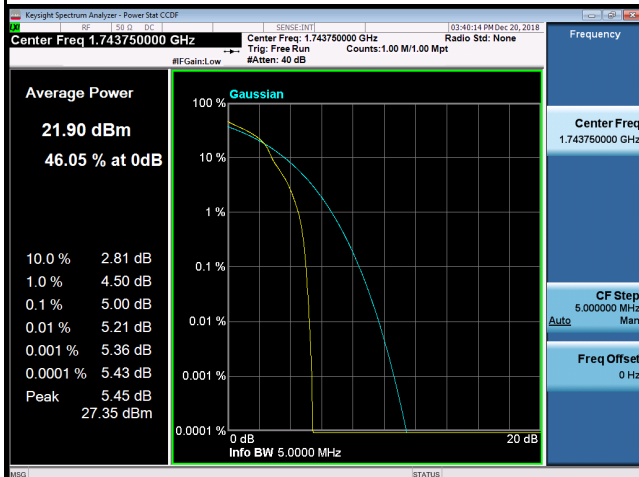
QPSK-132657



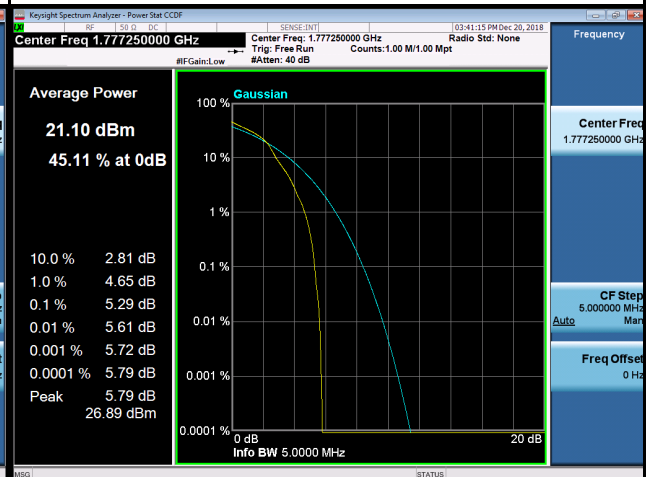
16QAM-131987



16QAM-132322

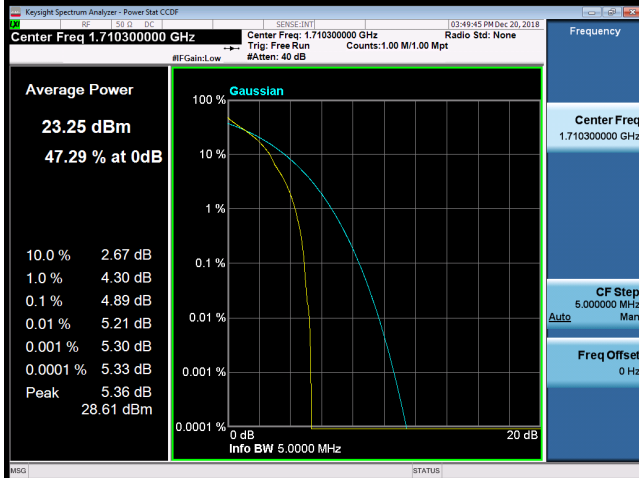


16QAM-132657

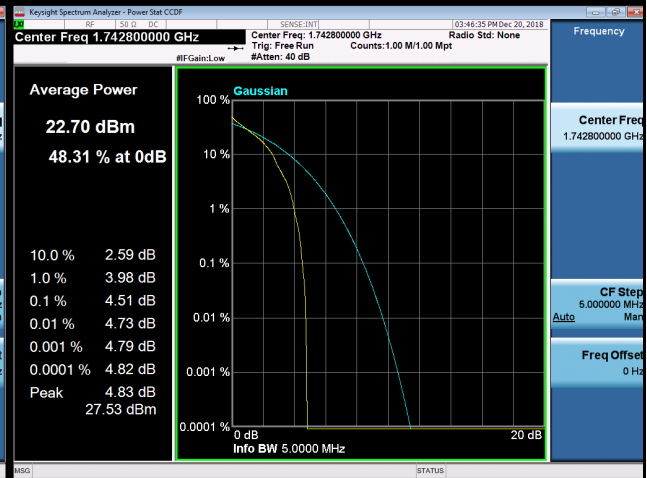


LTE Band 66 Spectrum Plot_5M

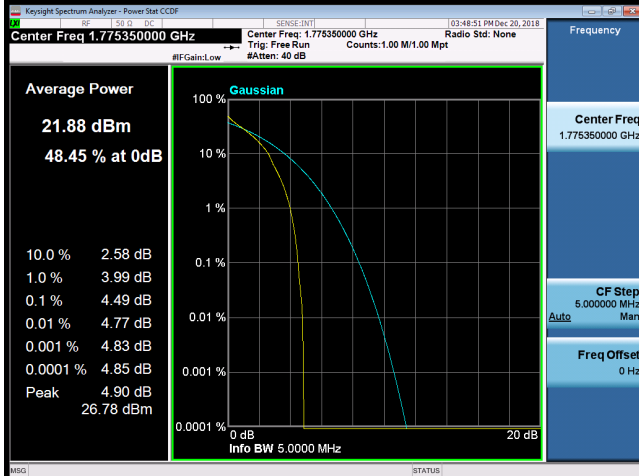
QPSK-131997



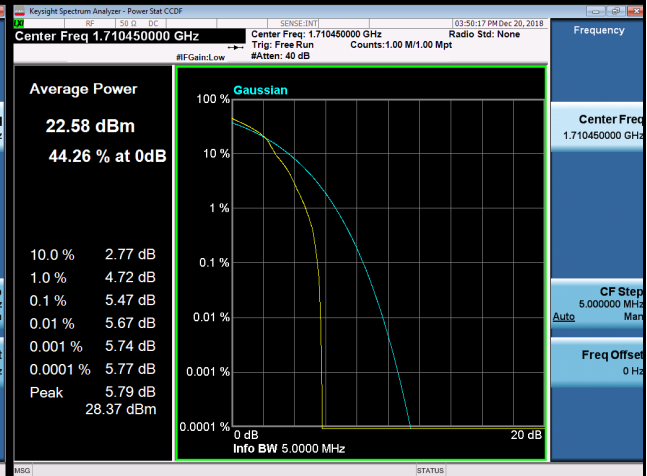
QPSK-132322



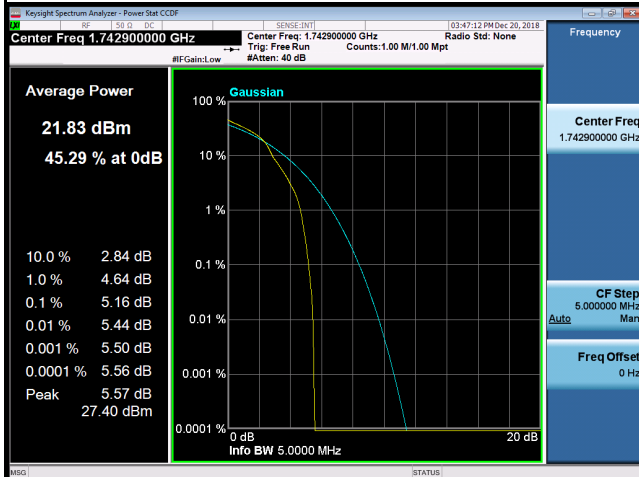
QPSK-132647



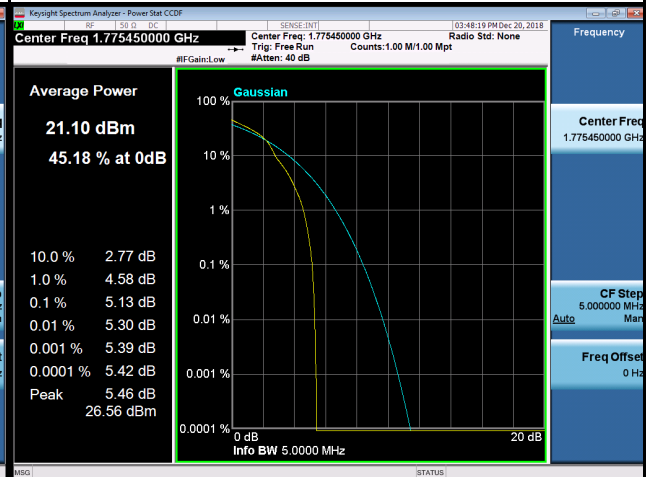
16QAM-131997



16QAM-132322



16QAM-132647

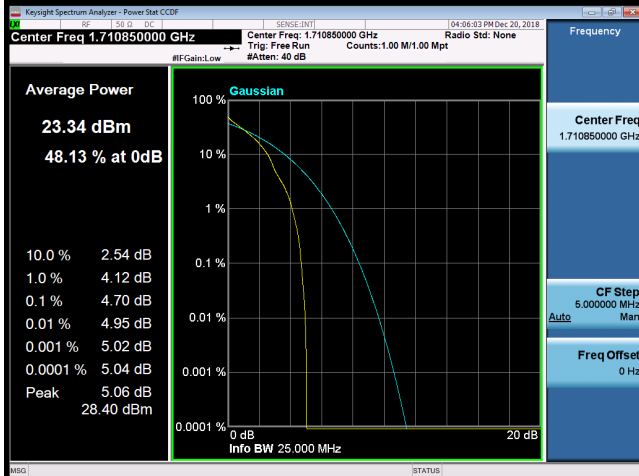


LTE Band 66 Spectrum Plot_10M

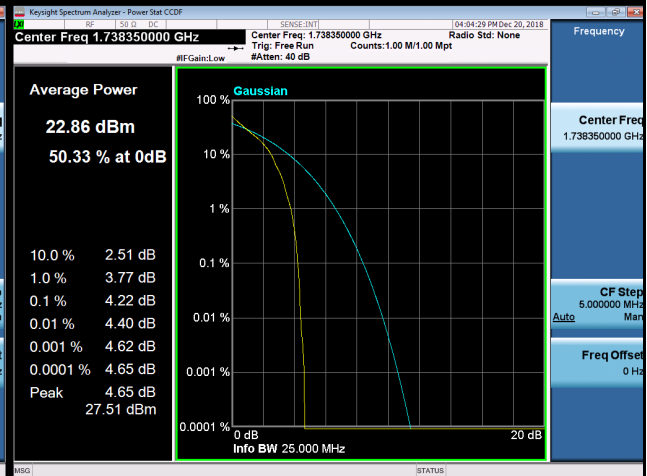


LTE Band 66 Spectrum Plot_15M

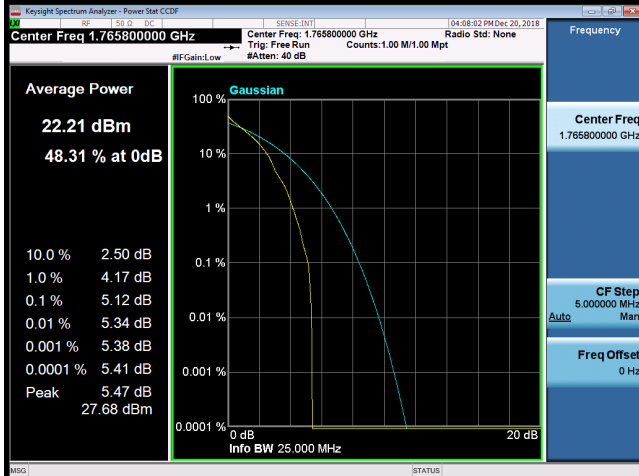
QPSK-132047



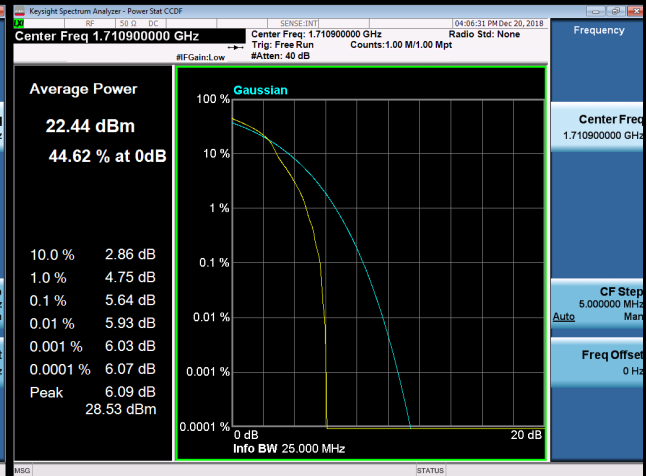
QPSK-132322



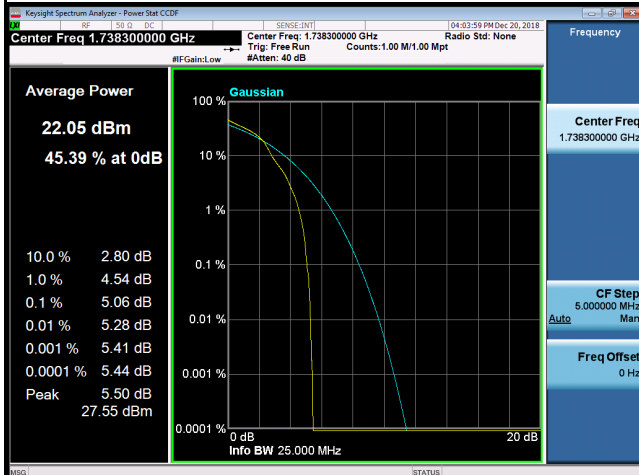
QPSK-132597



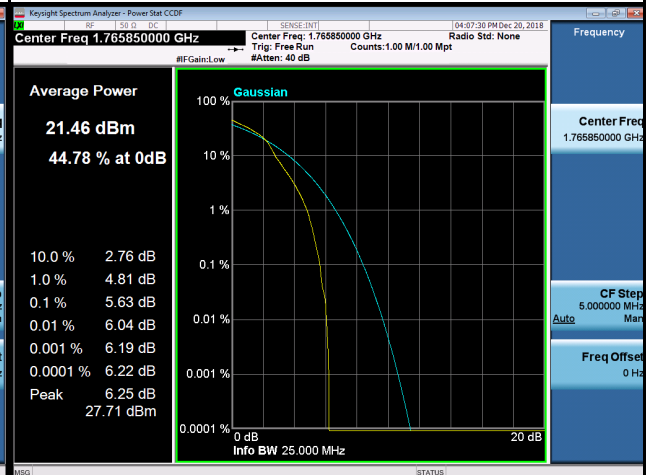
16QAM-132047



16QAM-132322

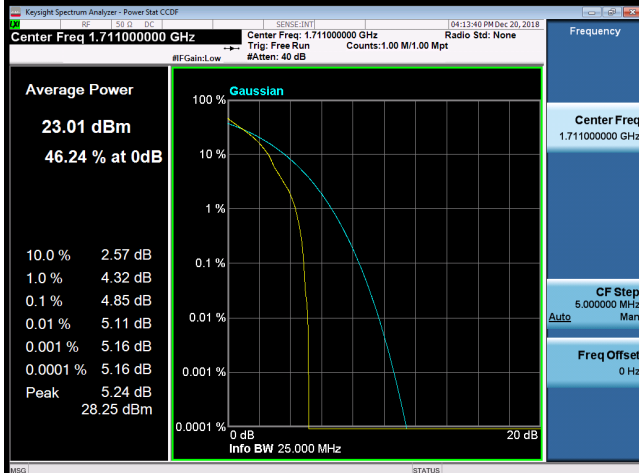


16QAM-132597

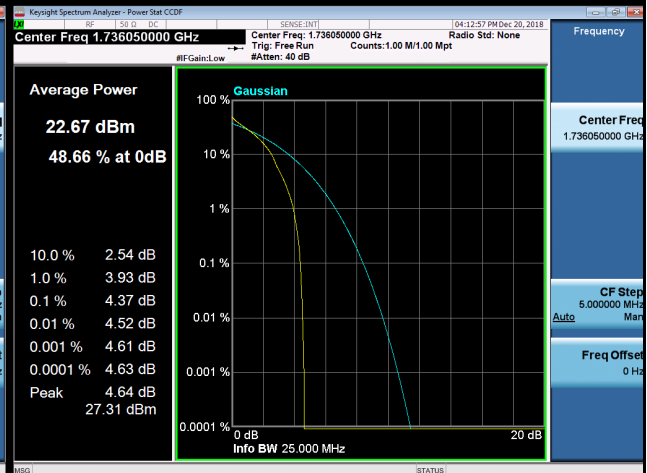


LTE Band 66 Spectrum Plot_20M

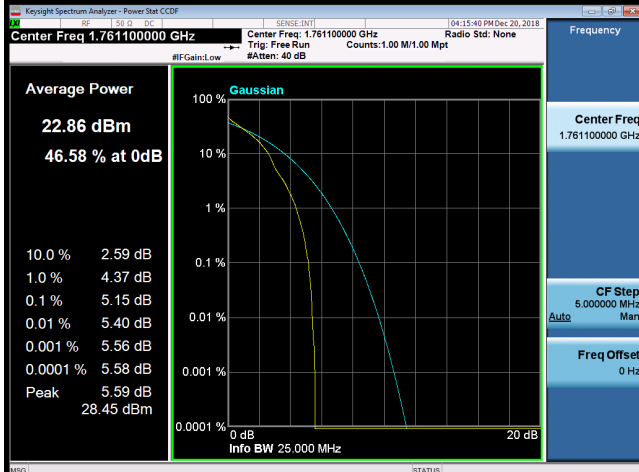
QPSK-132072



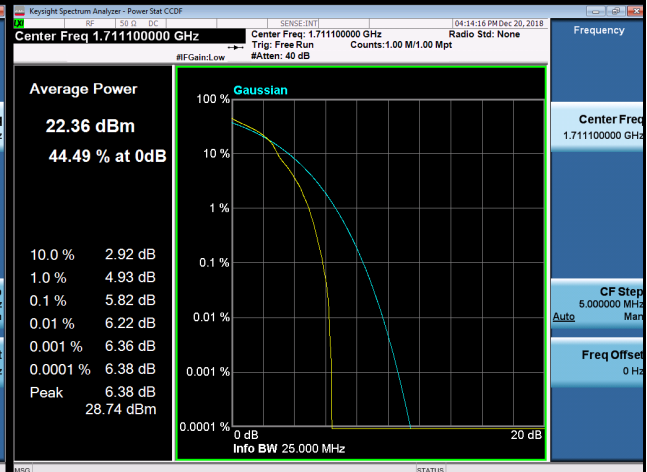
QPSK-132322



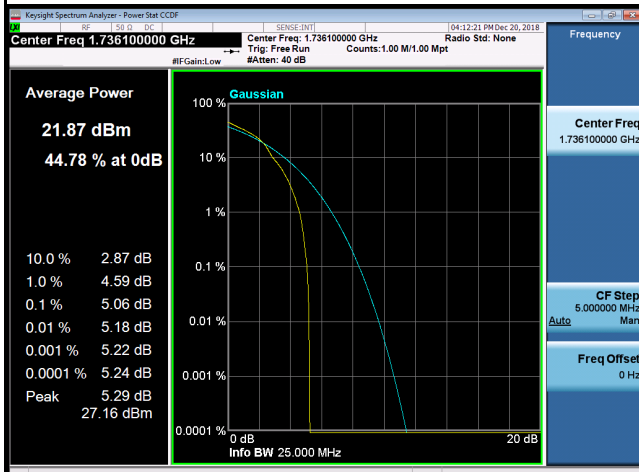
QPSK-132572



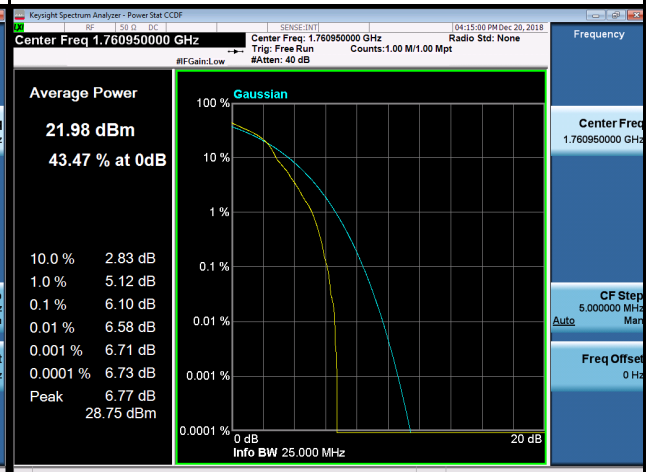
16QAM-132072



16QAM-132322



16QAM-132572



APPENDIX I - FREQUENCY STABILITY

Test Mode:	WCDMA Band IV _CH1413
------------	-----------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.52	0.002031629	± 2.5
0	2.29	0.001321713	
10	5.65	0.003260995	
20	2.94	0.001696872	
30	3.73	0.002152834	
40	2.95	0.001702643	
50	3.64	0.002100889	
60	4.80	0.002770403	
Max. Deviation (ppm)	5.65	0.003260995	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.57	0.002060487	± 2.5
3.80	3.77	0.002175921	
3.50	5.95	0.003434145	
Max. Deviation (ppm)	5.95	0.003434145	

Test Mode:	LTE Band 4_CH20175_1.4M
------------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.33	0.001922078	± 2.5
0	-2.33	-0.001344877	
10	-3.36	-0.001939394	
20	5.02	0.002897547	
30	-5.39	-0.003111111	
40	-3.73	-0.002152958	
50	4.02	0.002320346	
60	3.18	0.001835498	
Max. Deviation (ppm)	-5.39	-0.003111111	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-7.72	-0.004455988	± 2.5
3.80	-3.21	-0.001852814	
3.50	-2.67	-0.001541126	
Max. Deviation (ppm)	-7.72	-0.004455988	

Test Mode:	LTE Band 4_CH20175_3M
------------	-----------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	-4.58	-0.002643579	± 2.5
0	3.83	0.002210678	
10	-4.58	-0.002643579	
20	0.77	0.000444444	
30	-6.11	-0.003526696	
40	-2.67	-0.001541126	
50	3.42	0.001974026	
60	5.87	0.003388167	
Max. Deviation (ppm)	-6.11	-0.003526696	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	6.10	0.003520924	± 2.5
3.80	-6.23	-0.00359596	
3.50	3.93	0.002268398	
Max. Deviation (ppm)	-6.23	-0.00359596	

Test Mode:	LTE Band 4_CH20175_5M
------------	-----------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	-2.61	-0.001506494	± 2.5
0	6.39	0.003688312	
10	-2.72	-0.001569986	
20	-4.04	-0.00233189	
30	5.64	0.003255411	
40	-2.41	-0.001391053	
50	-0.23	-0.000132756	
60	-5.65	-0.003261183	
Max. Deviation (ppm)	6.39	0.003688312	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.51	0.002025974	± 2.5
3.80	2.92	0.001685426	
3.50	3.68	0.002124098	
Max. Deviation (ppm)	3.68	0.002124098	

Test Mode: LTE Band 4_CH20175_10M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.53	0.002037518	± 2.5
0	6.63	0.00382684	
10	5.72	0.003301587	
20	4.06	0.002343434	
30	-5.95	-0.003434343	
40	0.63	0.000363636	
50	5.40	0.003116883	
60	1.08	0.000623377	
Max. Deviation (ppm)	6.63	0.00382684	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-2.01	-0.001160173	± 2.5
3.80	-3.50	-0.002020202	
3.50	4.50	0.002597403	
Max. Deviation (ppm)	4.50	0.002597403	

Test Mode:	LTE Band 4_CH20175_15M
------------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	4.12	0.002378066	± 2.5
0	2.37	0.001367965	
10	-4.93	-0.002845022	
20	4.69	0.002707071	
30	-2.07	-0.001194805	
40	3.65	0.002106782	
50	-3.39	-0.00195671	
60	-2.30	-0.001327561	
Max. Deviation (ppm)	-4.93	-0.002845022	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	6.14	0.003544012	± 2.5
3.80	2.14	0.001235209	
3.50	-3.79	-0.00218759	
Max. Deviation (ppm)	6.14	0.003544012	

Test Mode:	LTE Band 4_CH20175_20M
------------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.97	0.002291486	± 2.5
0	4.96	0.002862915	
10	3.42	0.001974026	
20	-3.24	-0.00187013	
30	-7.65	-0.004415584	
40	6.41	0.003699856	
50	-3.08	-0.001777778	
60	5.03	0.002903319	
Max. Deviation (ppm)	-7.65	-0.004415584	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	5.94	0.003428571	± 2.5
3.80	-3.13	-0.001806638	
3.50	3.02	0.001743146	
Max. Deviation (ppm)	5.94	0.003428571	

Test Mode:	LTE Band 7_CH21100_5M
------------	-----------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.37	0.001329389	± 2.5
0	7.61	0.003001972	
10	-1.07	-0.000422091	
20	5.22	0.002059172	
30	-5.01	-0.001976331	
40	5.14	0.002027613	
50	5.86	0.002311637	
60	-1.62	-0.000639053	
Max. Deviation (ppm)	7.61	0.003001972	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-1.51	-0.000595661	± 2.5
3.80	1.12	0.000441815	
3.50	2.35	0.000927022	
Max. Deviation (ppm)	2.35	0.000927022	

Test Mode: LTE Band 7_CH21100_10M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	5.00	0.001972387	± 2.5
0	3.74	0.001475345	
10	4.60	0.001814596	
20	2.77	0.001092702	
30	-1.41	-0.000556213	
40	5.04	0.001988166	
50	3.21	0.001266272	
60	3.62	0.001428008	
Max. Deviation (ppm)	5.04	0.001988166	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-2.66	-0.00104931	± 2.5
3.80	3.93	0.001550296	
3.50	-3.21	-0.001266272	
Max. Deviation (ppm)	3.93	0.001550296	

Test Mode: LTE Band 7_CH21100_15M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	6.03	0.002378698	± 2.5
0	-3.33	-0.001313609	
10	-2.24	-0.000883629	
20	3.08	0.00121499	
30	3.48	0.001372781	
40	-2.24	-0.000883629	
50	4.20	0.001656805	
60	4.55	0.001794872	
Max. Deviation (ppm)	6.03	0.002378698	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.68	0.001451677	± 2.5
3.80	-5.88	-0.002319527	
3.50	2.79	0.001100592	
Max. Deviation (ppm)	-5.88	-0.002319527	

Test Mode:	LTE Band 7_CH21100_20M
------------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	-5.98	-0.002358974	± 2.5
0	-4.63	-0.00182643	
10	3.90	0.001538462	
20	1.76	0.00069428	
30	7.06	0.00278501	
40	-6.81	-0.002686391	
50	2.89	0.001140039	
60	-2.87	-0.00113215	
Max. Deviation (ppm)	7.06	0.00278501	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-4.73	-0.001865878	± 2.5
3.80	4.76	0.001877712	
3.50	4.23	0.001668639	
Max. Deviation (ppm)	4.76	0.001877712	

Test Mode:	LTE Band 12_CH23095_1.4M
------------	--------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	-3.06	0.004325088	± 2.5
0	-1.71	0.002416961	
10	6.45	0.009116608	
20	4.31	0.006091873	
30	9.61	0.013583039	
40	-4.26	0.006021201	
50	5.44	0.007689046	
60	-0.32	0.000452297	
Max. Deviation (ppm)	9.61	0.013583039	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	2.75	0.003886926	± 2.5
3.80	-6.81	0.009625442	
3.50	1.86	0.002628975	
Max. Deviation (ppm)	-6.81	0.009625442	

Test Mode: LTE Band 12_CH23095_3M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	6.59	0.009314488	± 2.5
0	-2.77	0.003915194	
10	-1.31	0.00185159	
20	4.01	0.005667845	
30	4.41	0.006233216	
40	-1.31	0.00185159	
50	5.13	0.007250883	
60	5.48	0.007745583	
Max. Deviation (ppm)	6.59	0.009314488	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-7.28	0.010289753	± 2.5
3.80	2.21	0.003123675	
3.50	1.68	0.002374558	
Max. Deviation (ppm)	-7.28	0.010289753	

Test Mode:	LTE Band 12_CH23095_5M
------------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	4.27	0.006035336	± 2.5
0	8.48	0.011985866	
10	-0.57	-0.000805654	
20	5.72	0.008084806	
30	-4.51	-0.006374558	
40	5.64	0.007971731	
50	6.73	0.009512367	
60	-0.75	-0.001060071	
Max. Deviation (ppm)	8.48	0.011985866	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-2.44	-0.003448763	± 2.5
3.80	0.19	0.000268551	
3.50	1.42	0.002007067	
Max. Deviation (ppm)	-2.44	-0.003448763	

Test Mode:	LTE Band 12_CH23095_10M
------------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	5.56	0.007858657	± 2.5
0	3.93	0.00555477	
10	4.79	0.006770318	
20	2.96	0.004183746	
30	-1.22	-0.001724382	
40	5.23	0.007392226	
50	3.40	0.004805654	
60	3.81	0.005385159	
Max. Deviation (ppm)	5.56	0.007858657	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.59	-0.005074205	± 2.5
3.80	3.00	0.004240283	
3.50	-4.14	-0.00585159	
Max. Deviation (ppm)	-4.14	-0.00585159	

Test Mode:	LTE Band 17_CH23790_5M
------------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	4.95	0.006971831	± 2.5
0	8.82	0.012422535	
10	-0.23	-0.000323944	
20	6.06	0.008535211	
30	-4.17	-0.005873239	
40	5.98	0.008422535	
50	7.07	0.009957746	
60	-0.41	-0.000577465	
Max. Deviation (ppm)	8.82	0.012422535	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-3.46	-0.004873239	± 2.5
3.80	-0.83	-0.001169014	
3.50	0.40	0.00056338	
Max. Deviation (ppm)	-3.46	-0.004873239	

Test Mode: LTE Band 17_CH23790_10M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	1.74	0.002450704	± 2.5
0	0.11	0.00015493	
10	0.97	0.001366197	
20	-0.86	-0.001211268	
30	-5.04	-0.007098592	
40	1.41	0.001985915	
50	-0.42	-0.000591549	
60	-0.01	-1.40845E-05	
Max. Deviation (ppm)	-5.04	-0.007098592	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	0.23	0.000323944	± 2.5
3.80	6.82	0.009605634	
3.50	-0.32	-0.000450704	
Max. Deviation (ppm)	6.82	0.009605634	

Test Mode: LTE Band 66_CH132322_1.4M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	5.00	0.002659574	± 2.5
0	-5.02	-0.002670213	
10	4.87	0.002590426	
20	-2.75	-0.001462766	
30	-0.90	-0.000478723	
40	0.06	3.19149E-05	
50	1.67	0.000888298	
60	-2.45	-0.001303191	
Max. Deviation (ppm)	-5.02	-0.002670213	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	4.23	0.00225	± 2.5
3.80	-1.38	-0.000734043	
3.50	5.70	0.003031915	
Max. Deviation (ppm)	5.70	0.003031915	

Test Mode: LTE Band 66_CH132322_3M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	3.64	0.00193617	± 2.5
0	-6.21	-0.003303191	
10	-4.54	-0.002414894	
20	-4.14	-0.002202128	
30	4.18	0.002223404	
40	3.34	0.001776596	
50	-2.96	-0.001574468	
60	-5.46	-0.002904255	
Max. Deviation (ppm)	-6.21	-0.003303191	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	-4.66	-0.002478723	± 2.5
3.80	-6.83	-0.003632979	
3.50	3.45	0.001835106	
Max. Deviation (ppm)	-6.83	-0.003632979	

Test Mode: LTE Band 66_CH132322_5M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	2.98	0.001585106	± 2.5
0	4.19	0.002228723	
10	-6.37	-0.003388298	
20	-4.10	-0.002180851	
30	1.95	0.001037234	
40	-9.13	-0.004856383	
50	-2.57	-0.001367021	
60	4.92	0.002617021	
Max. Deviation (ppm)	-9.13	-0.004856383	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	2.59	0.00137766	± 2.5
3.80	-4.96	-0.002638298	
3.50	-1.47	-0.000781915	
Max. Deviation (ppm)	-4.96	-0.002638298	

Test Mode:	LTE Band 66_CH132322_10M
------------	--------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	4.21	0.002239362	± 2.5
0	-1.87	-0.000994681	
10	-2.85	-0.001515957	
20	-1.91	-0.001015957	
30	2.31	0.001228723	
40	3.87	0.002058511	
50	4.46	0.00237234	
60	4.78	0.002542553	
Max. Deviation (ppm)	4.78	0.002542553	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	3.32	0.001765957	± 2.5
3.80	4.40	0.002340426	
3.50	4.77	0.002537234	
Max. Deviation (ppm)	4.77	0.002537234	

Test Mode: LTE Band 66_CH132322_15M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	2.25	0.001196809	± 2.5
0	5.88	0.00312766	
10	3.96	0.002106383	
20	-1.92	-0.001021277	
30	-4.10	-0.002180851	
40	6.19	0.003292553	
50	4.66	0.002478723	
60	1.68	0.000893617	
Max. Deviation (ppm)	6.19	0.003292553	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	1.55	0.000824468	± 2.5
3.80	-1.70	-0.000904255	
3.50	6.12	0.003255319	
Max. Deviation (ppm)	6.12	0.003255319	

Test Mode: LTE Band 66_CH132322_20M

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-10	4.24	0.002255319	± 2.5
0	3.58	0.001904255	
10	-2.64	-0.001404255	
20	-1.48	-0.000787234	
30	7.35	0.003909574	
40	3.05	0.00162234	
50	6.02	0.003202128	
60	-2.78	-0.001478723	
Max. Deviation (ppm)	7.35	0.003909574	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.35	5.76	0.00306383	± 2.5
3.80	3.04	0.001617021	
3.50	-2.36	-0.001255319	
Max. Deviation (ppm)	5.76	0.00306383	

End of Test Report