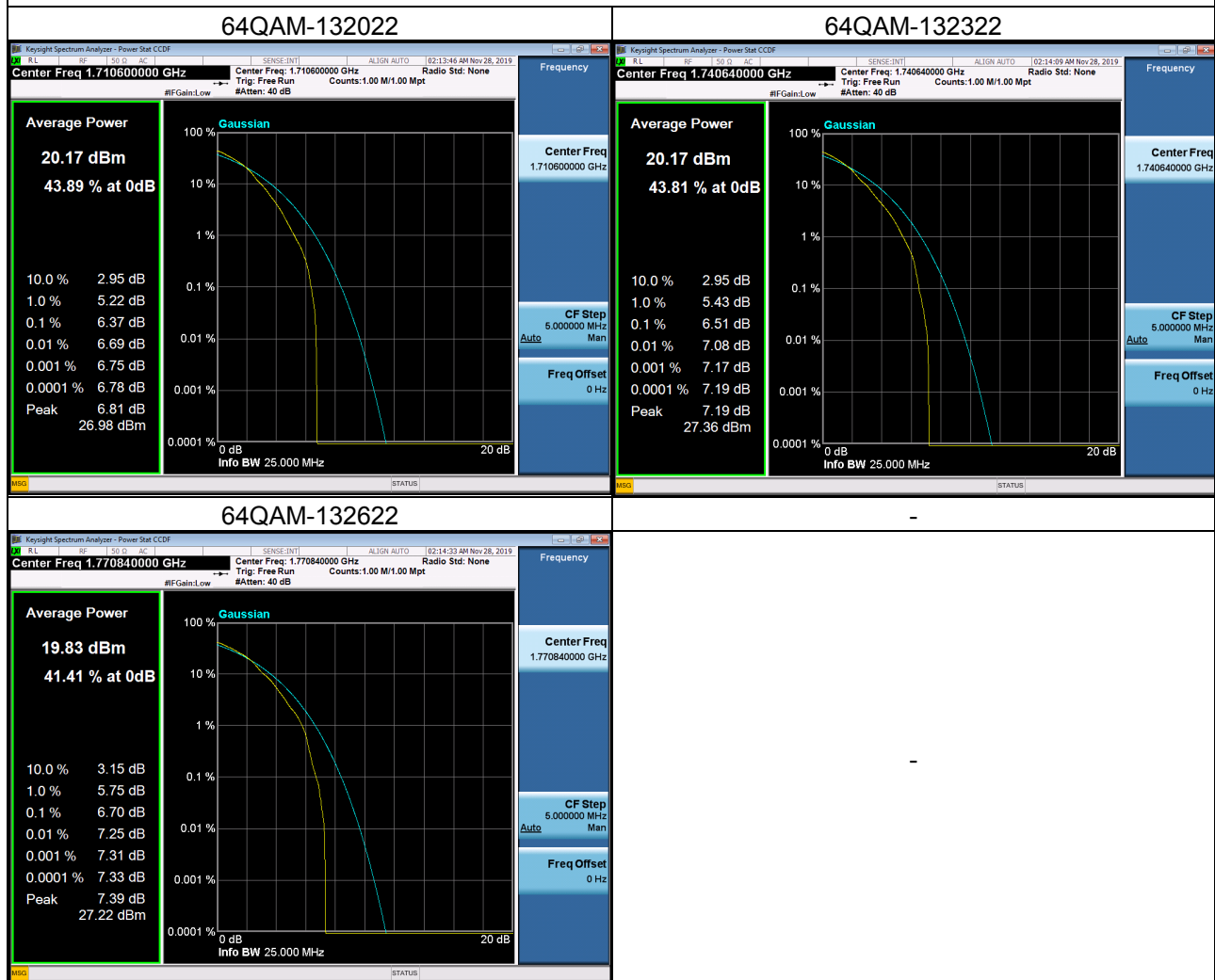


LTE Band 66_10M Spectrum Plot



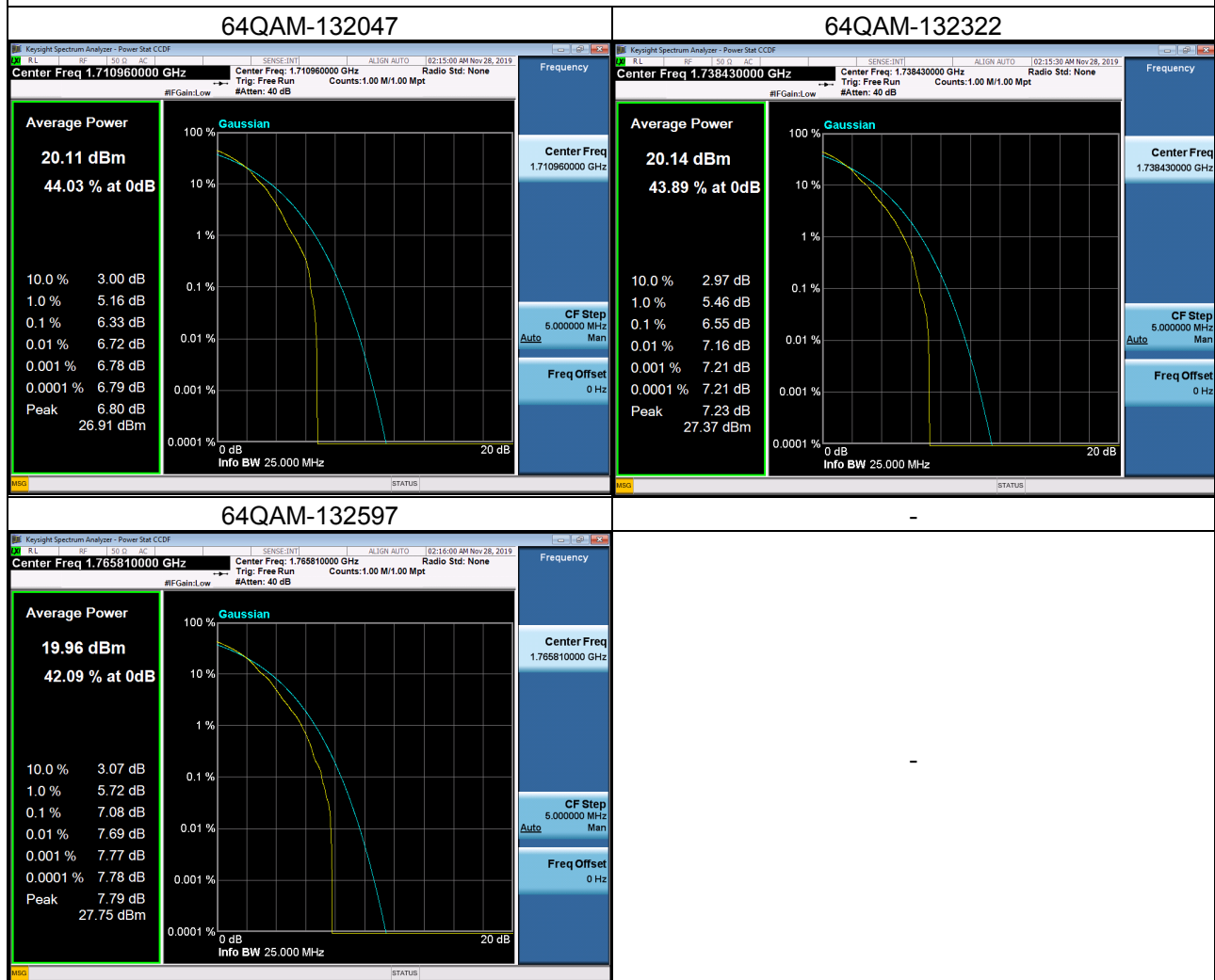
LTE Band 66_10M Spectrum Plot



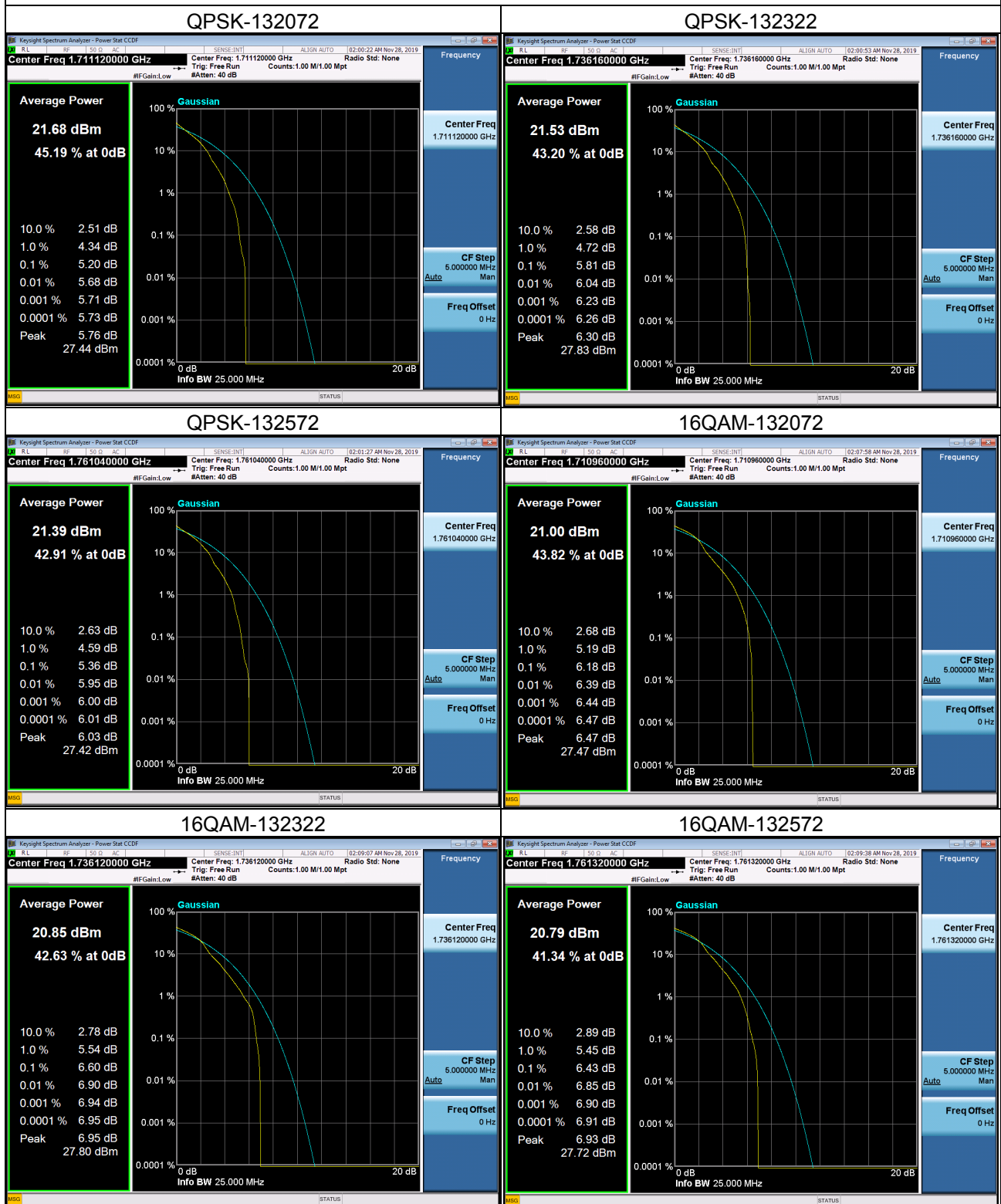
LTE Band 66_15M Spectrum Plot



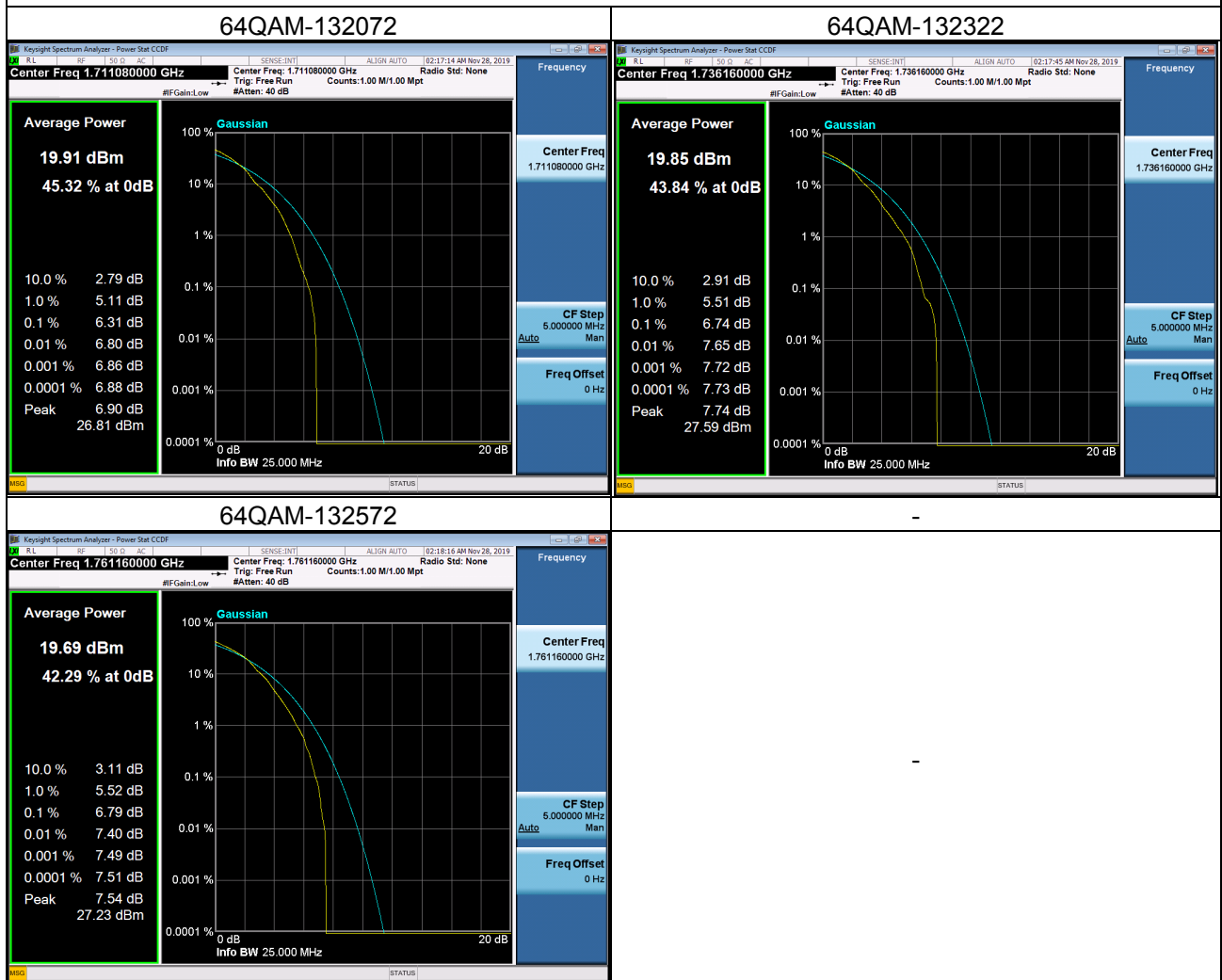
LTE Band 66_15M Spectrum Plot



LTE Band 66_20M Spectrum Plot



LTE Band 66_20M Spectrum Plot



APPENDIX I - FREQUENCY STABILITY

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.01	0.001160106	±2.5
5	6.93	0.003999769	
15	1.68	0.000969641	
25	5.06	0.002920466	
35	2.63	0.00151795	
Max. Deviation (ppm)	6.93	0.003999769	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	3.34	0.001927739	±2.5
3.85	2.66	0.001535265	
3.5	0.98	0.000565624	
Max. Deviation (ppm)	3.34	0.001927739	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.48	0.001431457	±2.5
5	6.08	0.00350938	
15	-0.26	-0.000150072	
25	-7.86	-0.004536797	
35	-8.02	-0.004629149	
Max. Deviation (ppm)	-8.02	-0.004629149	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	0.81	0.000467532	±2.5
3.85	-5.76	-0.003324675	
3.5	-1.70	-0.000981241	
Max. Deviation (ppm)	-5.76	-0.003324675	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-3.59	-0.00207215	±2.5
5	6.06	0.003497835	
15	-7.40	-0.004271284	
25	-0.37	-0.000213564	
35	-7.87	-0.004542569	
Max. Deviation (ppm)	-7.87	-0.004542569	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-0.69	-0.000398268	±2.5
3.85	-4.32	-0.002493506	
3.5	1.05	0.000606061	
Max. Deviation (ppm)	-4.32	-0.002493506	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.27	0.001310245	±2.5
5	-9.55	-0.005512266	
15	-6.82	-0.003936508	
25	2.28	0.001316017	
35	-0.70	-0.00040404	
Max. Deviation (ppm)	-9.55	-0.005512266	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-2.76	-0.001593074	±2.5
3.85	-5.63	-0.003249639	
3.5	-3.82	-0.002204906	
Max. Deviation (ppm)	-5.63	-0.003249639	

Test Mode	LTE Band 4_CH20175_10M
-----------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	3.41	0.001968254	±2.5
5	-0.35	-0.00020202	
15	-7.29	-0.004207792	
25	9.72	0.00561039	
35	8.21	0.004738817	
Max. Deviation (ppm)	9.72	0.00561039	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-5.98	-0.003451659	±2.5
3.85	1.21	0.000698413	
3.5	4.83	0.002787879	
Max. Deviation (ppm)	-5.98	-0.003451659	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	9.34	0.005391053	±2.5
5	9.19	0.005304473	
15	9.27	0.005350649	
25	2.32	0.001339105	
35	-3.39	-0.00195671	
Max. Deviation (ppm)	9.34	0.005391053	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-4.86	-0.002805195	±2.5
3.85	-4.99	-0.002880231	
3.5	-3.20	-0.001847042	
Max. Deviation (ppm)	-4.99	-0.002880231	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-7.10	-0.004098124	±2.5
5	-4.48	-0.002585859	
15	8.33	0.004808081	
25	-9.72	-0.00561039	
35	8.93	0.005154401	
Max. Deviation (ppm)	-9.72	-0.00561039	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-3.62	-0.002089466	±2.5
3.85	-0.60	-0.00034632	
3.5	-3.03	-0.001748918	
Max. Deviation (ppm)	-3.62	-0.002089466	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	0.80	0.000315582	±2.5
5	-7.13	-0.002812623	
15	0.73	0.000287968	
25	-9.99	-0.003940828	
35	5.02	0.001980276	
Max. Deviation (ppm)	-9.99	-0.003940828	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-2.03	-0.000800789	±2.5
3.85	3.96	0.00156213	
3.5	1.02	0.000402367	
Max. Deviation (ppm)	3.96	0.00156213	

Test Mode	LTE Band 7_CH21100_10M
-----------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-3.14	-0.001238659	±2.5
5	0.53	0.000209073	
15	-4.60	-0.001814596	
25	1.49	0.000587771	
35	0.28	0.000110454	
Max. Deviation (ppm)	-4.6	-0.001814596	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.05	-0.000414201	±2.5
3.85	-4.95	-0.001952663	
3.5	6.75	0.002662722	
Max. Deviation (ppm)	6.75	0.002662722	

Test Mode	LTE Band 7_CH21100_15M
-----------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-3.40	-0.001341223	±2.5
5	3.30	0.001301775	
15	9.84	0.003881657	
25	1.44	0.000568047	
35	-6.74	-0.002658777	
Max. Deviation (ppm)	9.84	0.003881657	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	1.38	0.000544379	±2.5
3.85	1.09	0.00042998	
3.5	3.16	0.001246548	
Max. Deviation (ppm)	3.16	0.001246548	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	6.88	0.002714004	±2.5
5	7.04	0.00277712	
15	5.04	0.001988166	
25	8.09	0.003191321	
35	-1.33	-0.000524655	
Max. Deviation (ppm)	8.09	0.003191321	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	6.04	0.002382643	±2.5
3.85	-0.92	-0.000362919	
3.5	4.55	0.001794872	
Max. Deviation (ppm)	6.04	0.002382643	

Test Mode	LTE Band 38_CH38000_5M
-----------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-3.12	-0.001202312	±2.5
5	-9.02	-0.003475915	
15	-0.77	-0.000296724	
25	9.25	0.003564547	
35	7.10	0.002736031	
Max. Deviation (ppm)	9.25	0.003564547	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-0.39	-0.000150289	±2.5
3.85	-1.35	-0.000520231	
3.5	-5.69	-0.002192678	
Max. Deviation (ppm)	-5.69	-0.002192678	

Test Mode	LTE Band 38_CH38000_10M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	6.89	0.002655106	±2.5
5	9.21	0.003549133	
15	-9.86	-0.003799615	
25	-3.60	-0.001387283	
35	-6.45	-0.002485549	
Max. Deviation (ppm)	-9.86	-0.003799615	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-0.06	-2.31214E-05	±2.5
3.85	3.70	0.001425819	
3.5	4.04	0.00155684	
Max. Deviation (ppm)	4.04	0.00155684	

Test Mode	LTE Band 38_CH38000_15M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	9.86	0.003799615	±2.5
5	-1.72	-0.000662813	
15	-4.65	-0.001791908	
25	-6.55	-0.002524085	
35	1.39	0.000535645	
Max. Deviation (ppm)	9.86	0.003799615	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	2.58	0.00099422	±2.5
3.85	6.04	0.002327553	
3.5	4.46	0.00171869	
Max. Deviation (ppm)	6.04	0.002327553	

Test Mode	LTE Band 38_CH38000_20M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-3.10	-0.001194605	±2.5
5	5.87	0.002262042	
15	-4.11	-0.001583815	
25	4.64	0.001788054	
35	5.95	0.002292871	
Max. Deviation (ppm)	5.95	0.002292871	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.49	-0.000574181	±2.5
3.85	-0.99	-0.000381503	
3.5	-5.15	-0.001984586	
Max. Deviation (ppm)	-5.15	-0.001984586	

Test Mode	LTE Band 41_CH40640_5M
-----------	------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	0.92	0.000354528	±2.5
5	5.91	0.002277457	
15	-4.21	-0.001622351	
25	5.63	0.002169557	
35	3.05	0.001175337	
Max. Deviation (ppm)	5.91	0.002277457	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-6.55	-0.002524085	±2.5
3.85	-5.77	-0.002223507	
3.5	-1.38	-0.000531792	
Max. Deviation (ppm)	-6.55	-0.002524085	

Test Mode	LTE Band 41_CH40640_10M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-6.32	-0.002435453	±2.5
5	4.29	0.001653179	
15	5.95	0.002292871	
25	0.80	0.000308285	
35	7.11	0.002739884	
Max. Deviation (ppm)	7.11	0.002739884	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.70	-0.000655106	±2.5
3.85	-6.47	-0.002493256	
3.5	4.50	0.001734104	
Max. Deviation (ppm)	-6.47	-0.002493256	

Test Mode	LTE Band 41_CH40640_15M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-2.21	-0.000851638	±2.5
5	8.97	0.003456647	
15	3.20	0.001233141	
25	-2.14	-0.000824663	
35	-1.98	-0.000763006	
Max. Deviation (ppm)	8.97	0.003456647	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-5.88	-0.002265896	±2.5
3.85	0.51	0.000196532	
3.5	-1.93	-0.000743738	
Max. Deviation (ppm)	-5.88	-0.002265896	

Test Mode	LTE Band 41_CH40640_20M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-6.76	-0.00260501	±2.5
5	6.71	0.002585742	
15	6.44	0.002481696	
25	6.63	0.002554913	
35	-6.19	-0.002385356	
Max. Deviation (ppm)	-6.76	-0.00260501	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-4.16	-0.001603083	±2.5
3.85	1.42	0.000547206	
3.5	5.03	0.001938343	
Max. Deviation (ppm)	5.03	0.001938343	

Test Mode	LTE Band 66_CH132322_1.4M
-----------	---------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-0.35	0.000200573	±2.5
5	-4.83	0.002767908	
15	-2.14	0.001226361	
25	-5.21	0.002985673	
35	-7.94	0.004550143	
Max. Deviation (ppm)	-7.94	0.004550143	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	4.96	0.002842407	±2.5
3.85	-1.23	0.000704871	
3.5	4.02	0.002303725	
Max. Deviation (ppm)	4.96	0.002842407	

Test Mode	LTE Band 66_CH132322_3M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-7.68	0.004401146	±2.5
5	-1.16	0.000664756	
15	5.23	0.002997135	
25	5.24	0.003002865	
35	3.66	0.002097421	
Max. Deviation (ppm)	-7.68	0.004401146	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	2.77	0.001587393	±2.5
3.85	2.48	0.001421203	
3.5	-3.02	0.001730659	
Max. Deviation (ppm)	-3.02	0.001730659	

Test Mode	LTE Band 66_CH132322_5M
-----------	-------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-6.02	-0.003449857	±2.5
5	0.84	0.000481375	
15	3.66	0.002097421	
25	-7.44	-0.00426361	
35	7.85	0.004498567	
Max. Deviation (ppm)	7.85	0.004498567	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	3.41	0.001954155	±2.5
3.85	4.35	0.002492837	
3.5	-3.32	-0.001902579	
Max. Deviation (ppm)	4.35	0.002492837	

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

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-5.90	-0.003381089	±2.5
5	-2.04	-0.001169054	
15	0.31	0.00017765	
25	0.32	0.000183381	
35	-6.64	-0.003805158	
Max. Deviation (ppm)	-6.64	-0.003805158	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.10	-0.000630372	±2.5
3.85	-3.53	-0.002022923	
3.5	4.02	0.002303725	
Max. Deviation (ppm)	4.02	0.002303725	

Test Mode	LTE Band 66_CH132322_15M
-----------	--------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-6.91	-0.003959885	±2.5
5	4.27	0.002446991	
15	-4.20	-0.002406877	
25	-3.65	-0.002091691	
35	0.91	0.00052149	
Max. Deviation (ppm)	-6.91	-0.003959885	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.53	-0.000876791	±2.5
3.85	6.59	0.003776504	
3.5	4.14	0.002372493	
Max. Deviation (ppm)	6.59	0.003776504	

Test Mode	LTE Band 66_CH132322_20M
-----------	--------------------------

Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.52	0.003163324	±2.5
5	0.57	0.000326648	
15	7.76	0.004446991	
25	3.72	0.002131805	
35	-0.41	-0.000234957	
Max. Deviation (ppm)	7.76	0.004446991	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	6.20	0.003553009	±2.5
3.85	-3.53	-0.002022923	
3.5	4.56	0.002613181	
Max. Deviation (ppm)	6.2	0.003553009	

End of Test Report