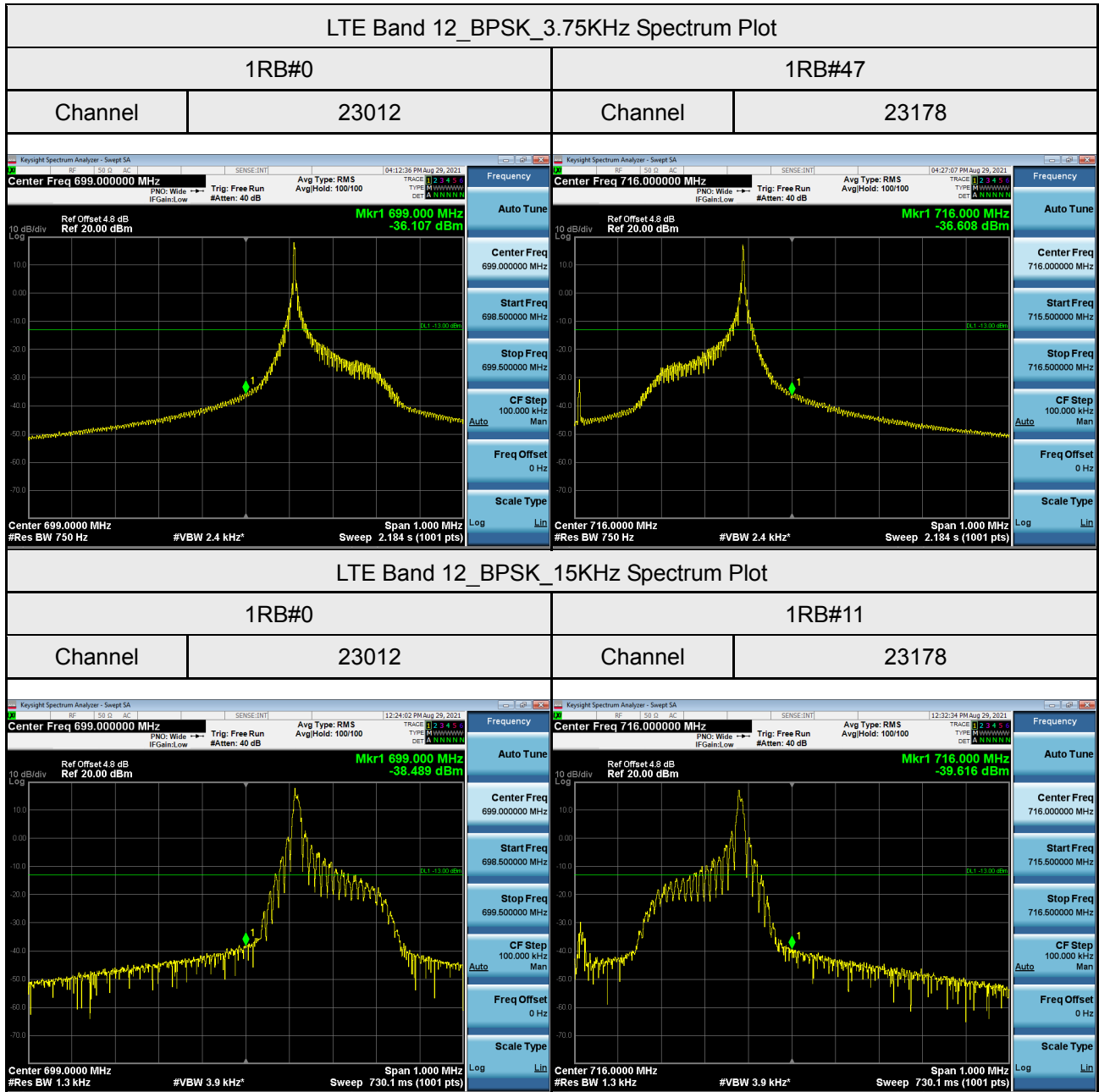
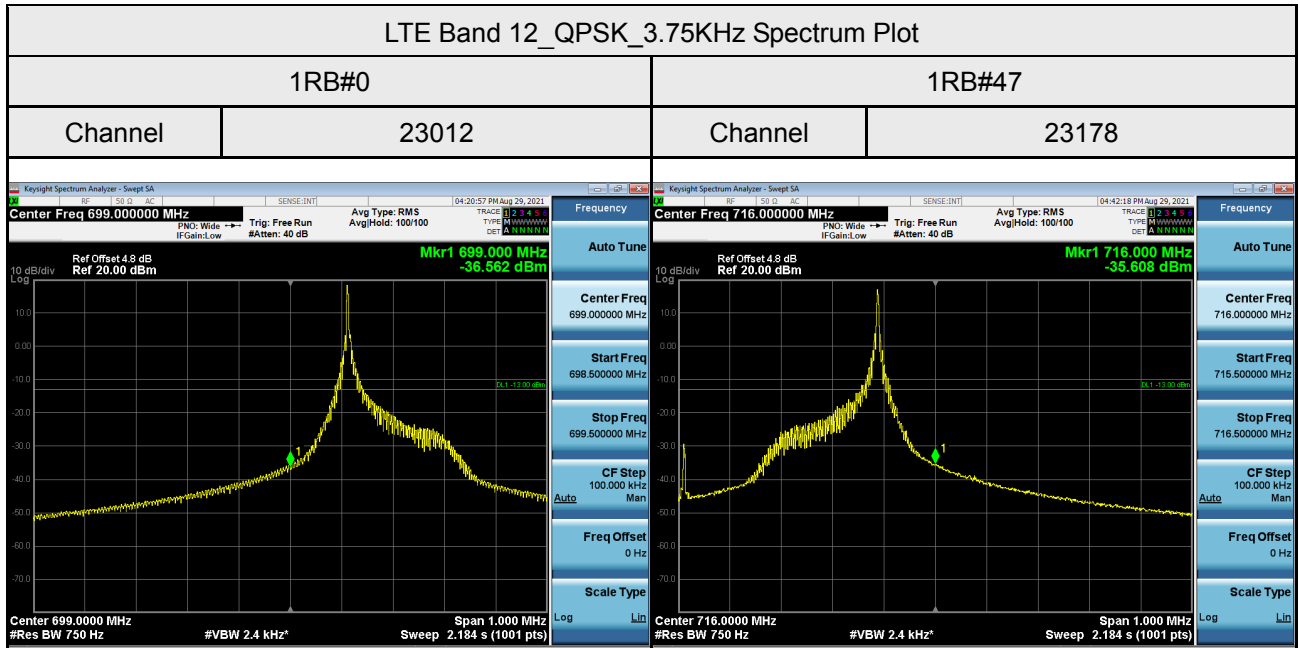
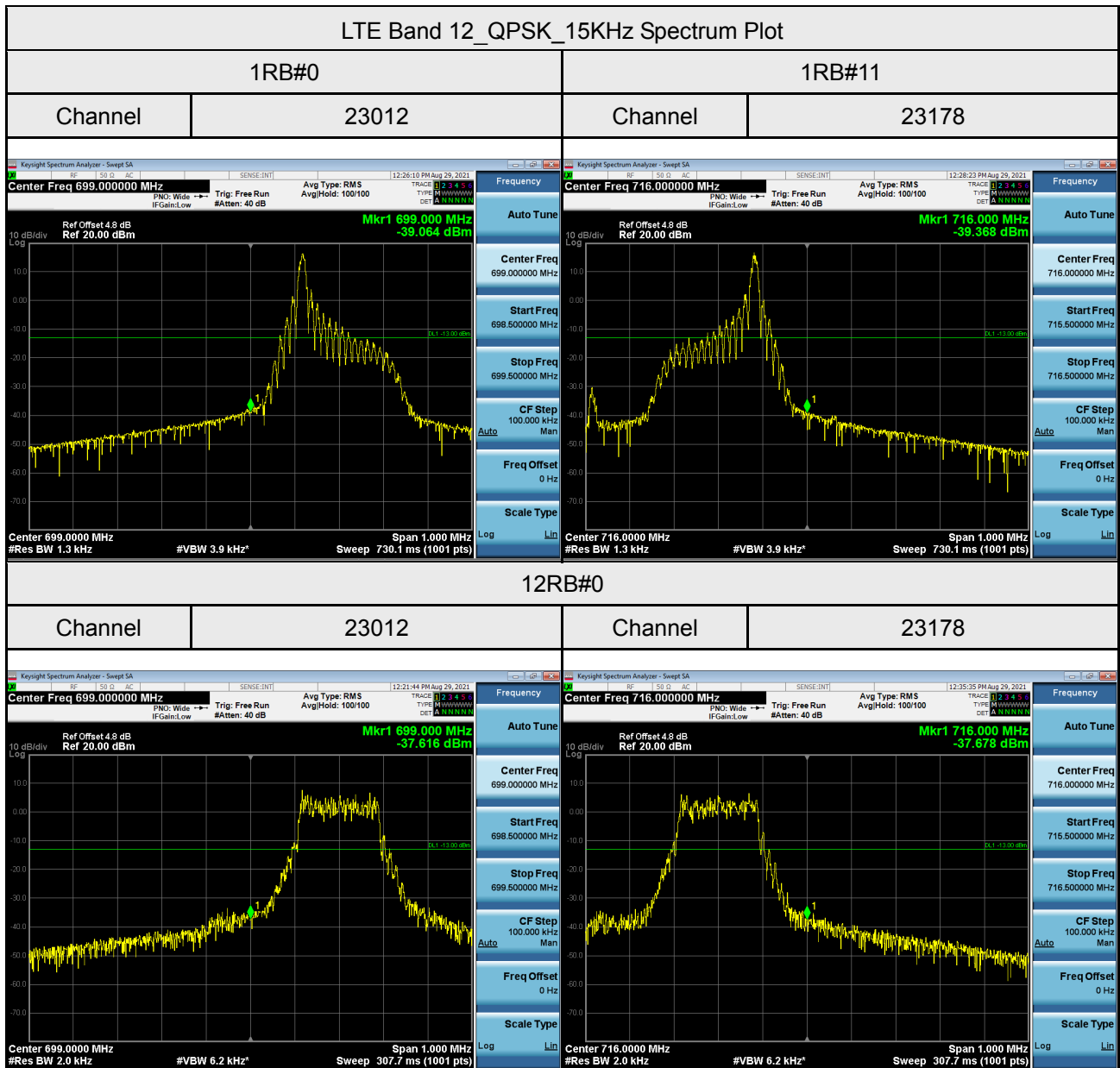
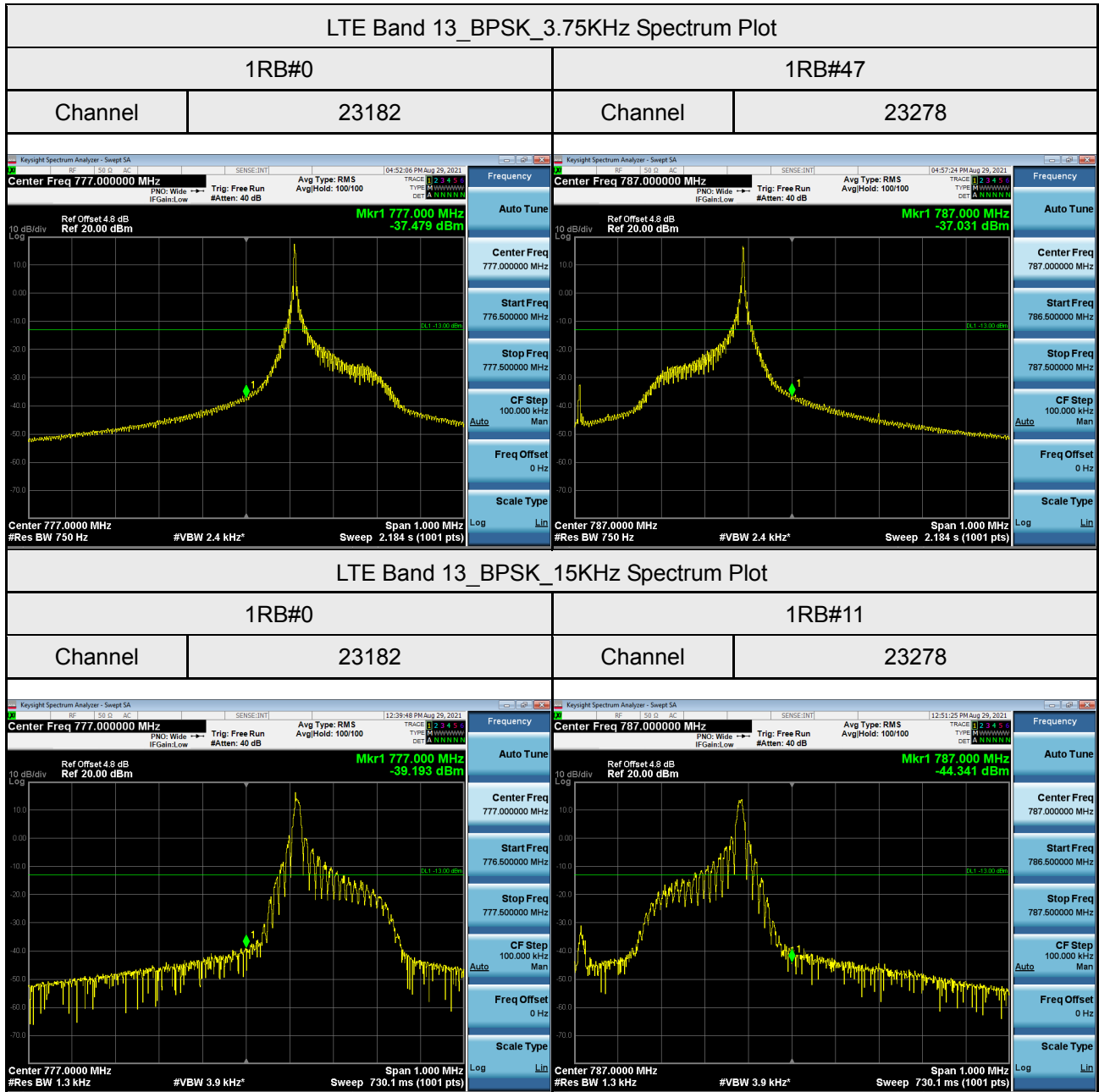
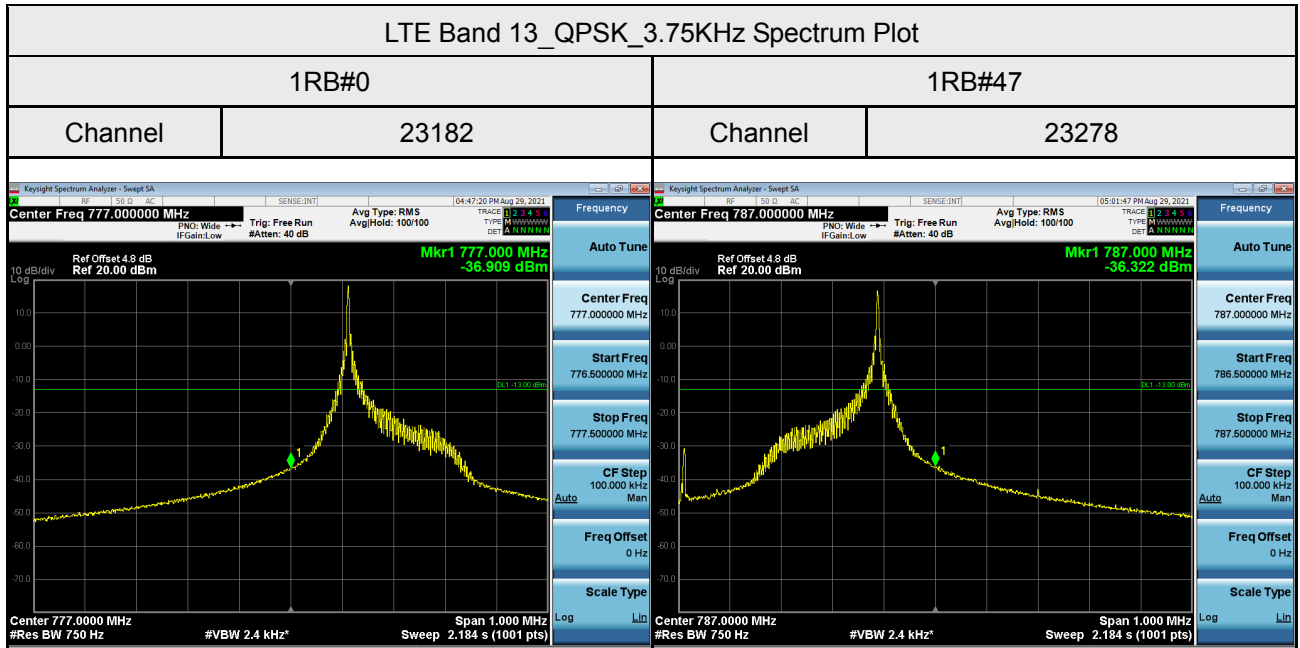


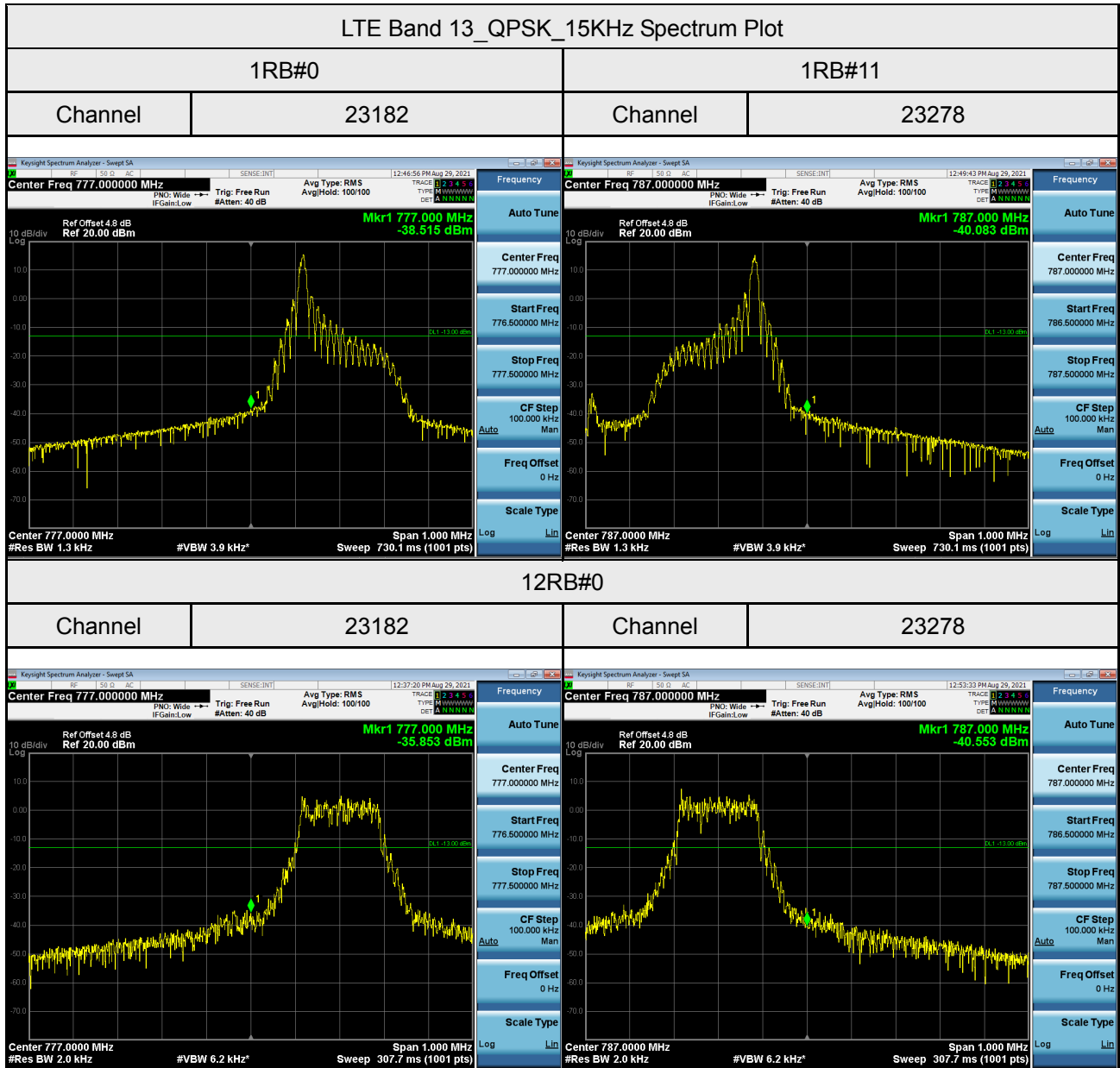


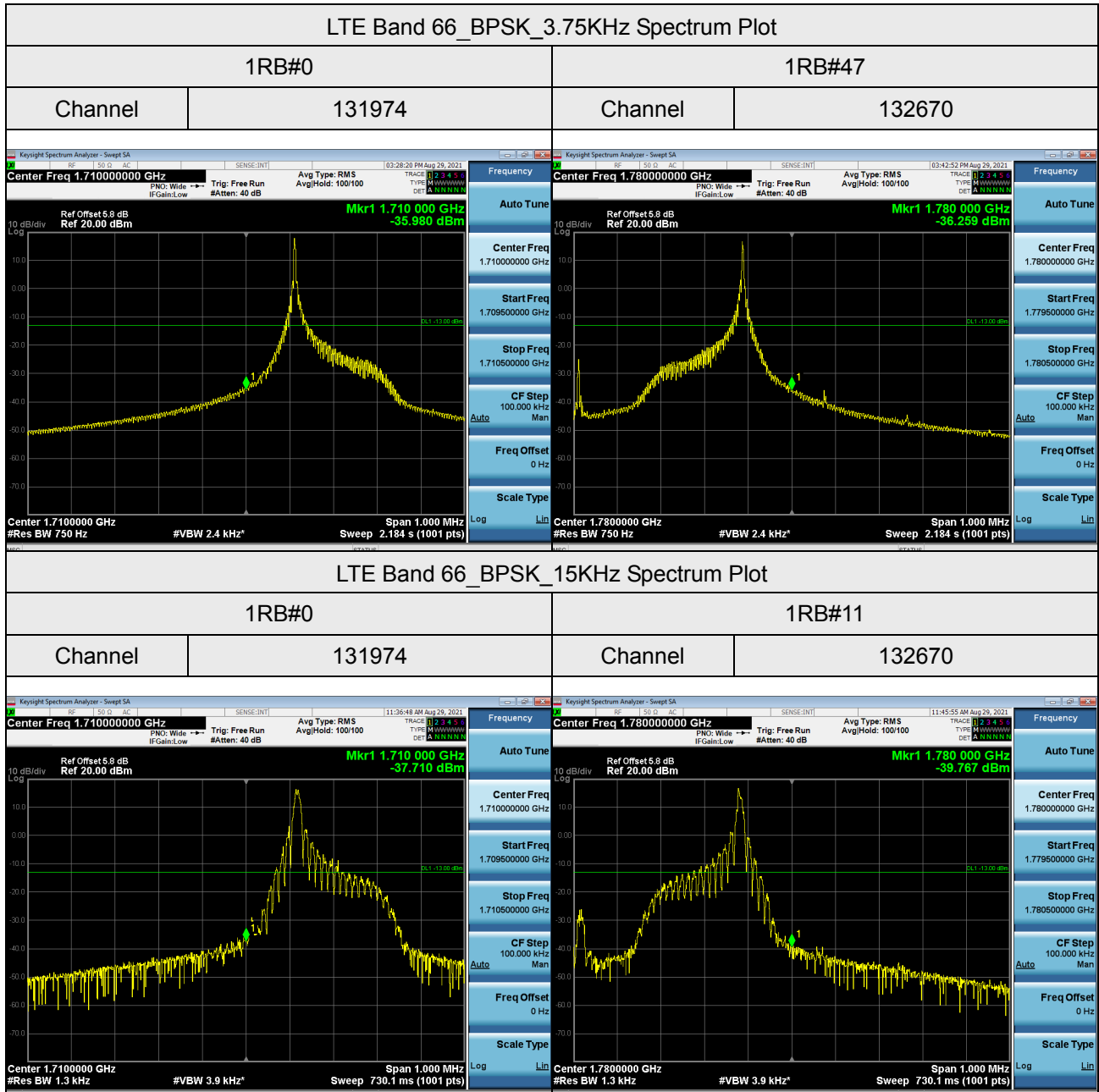


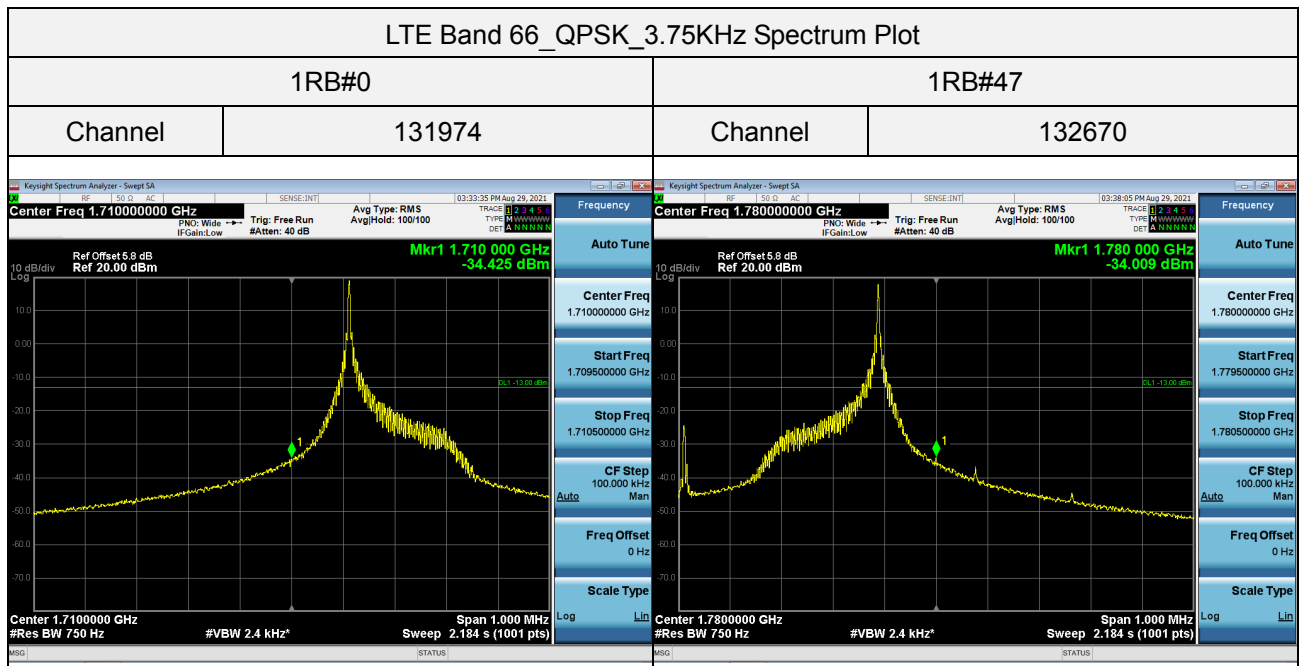


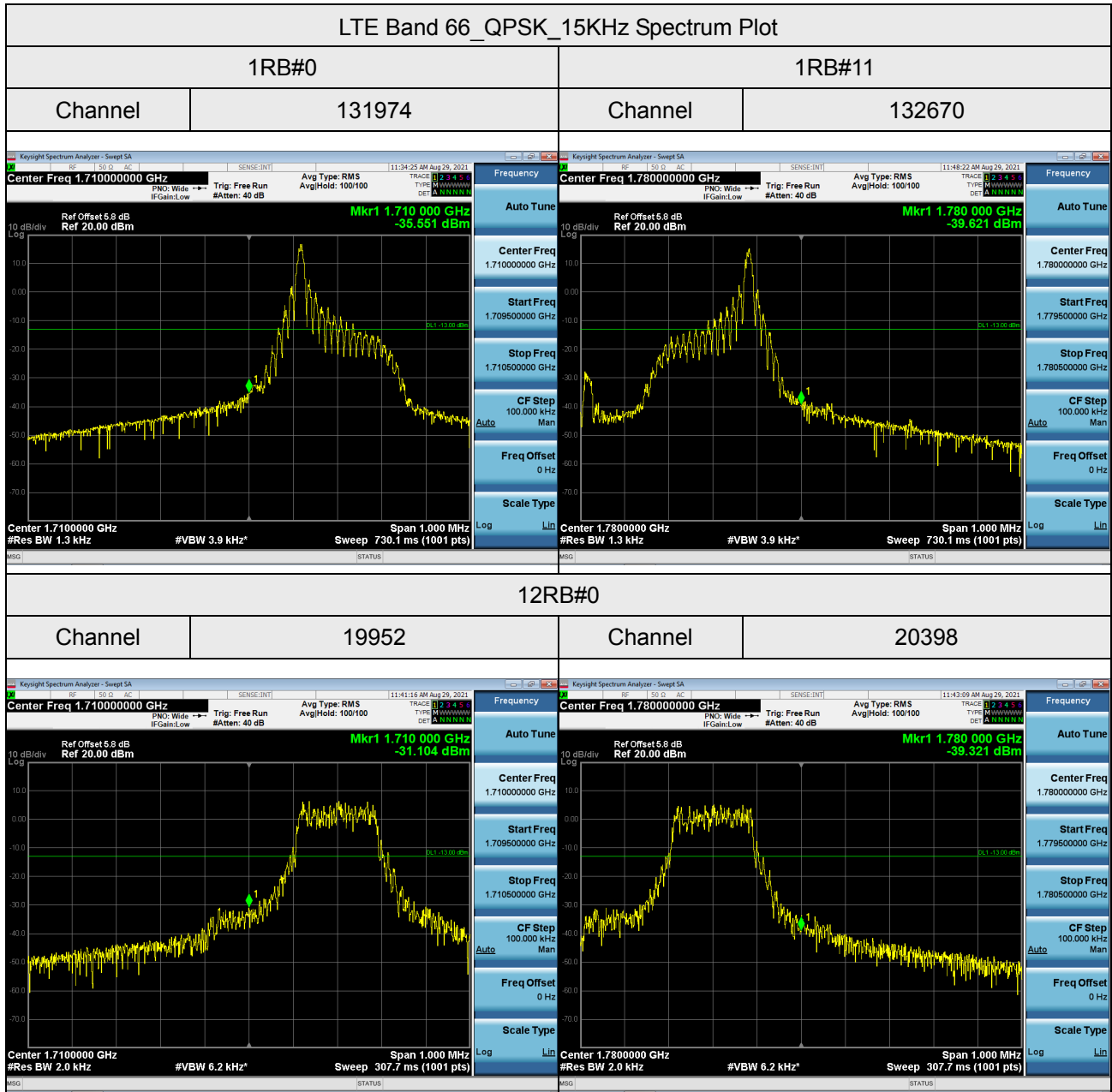


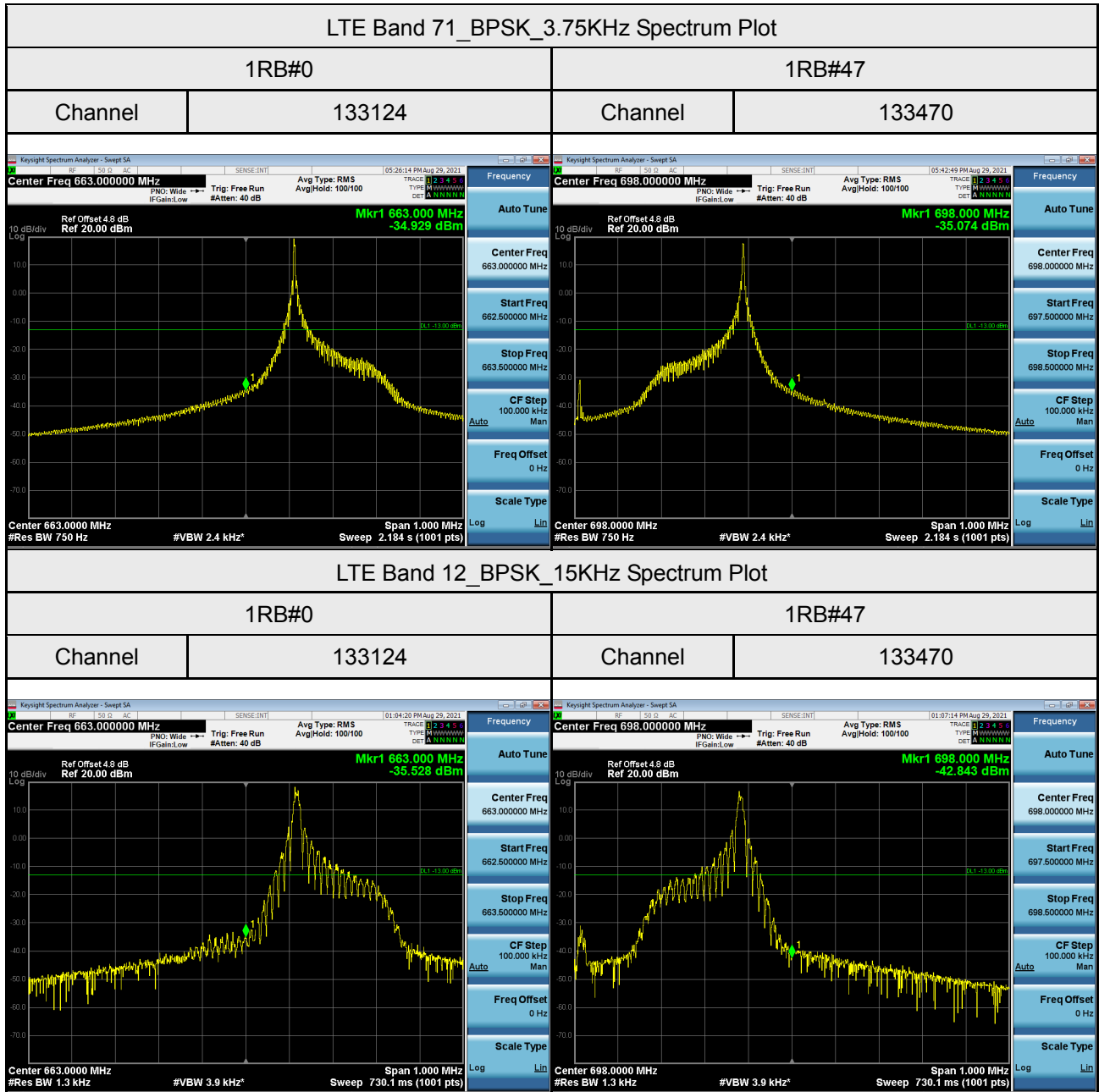


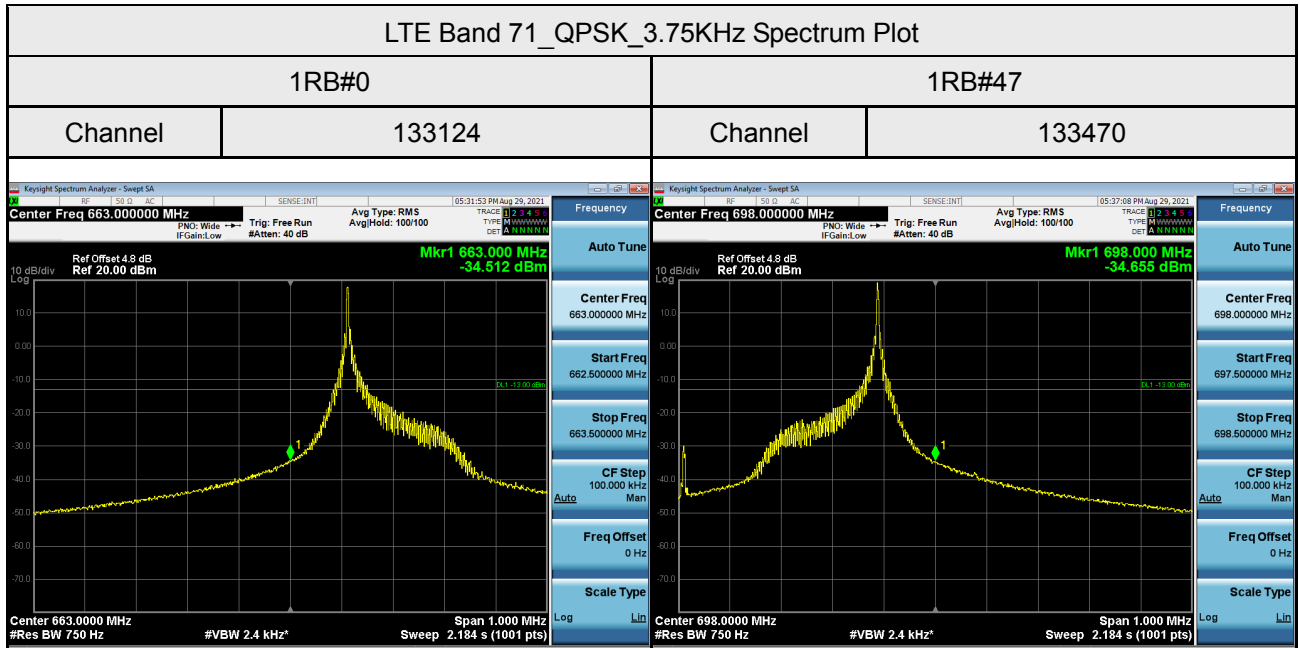


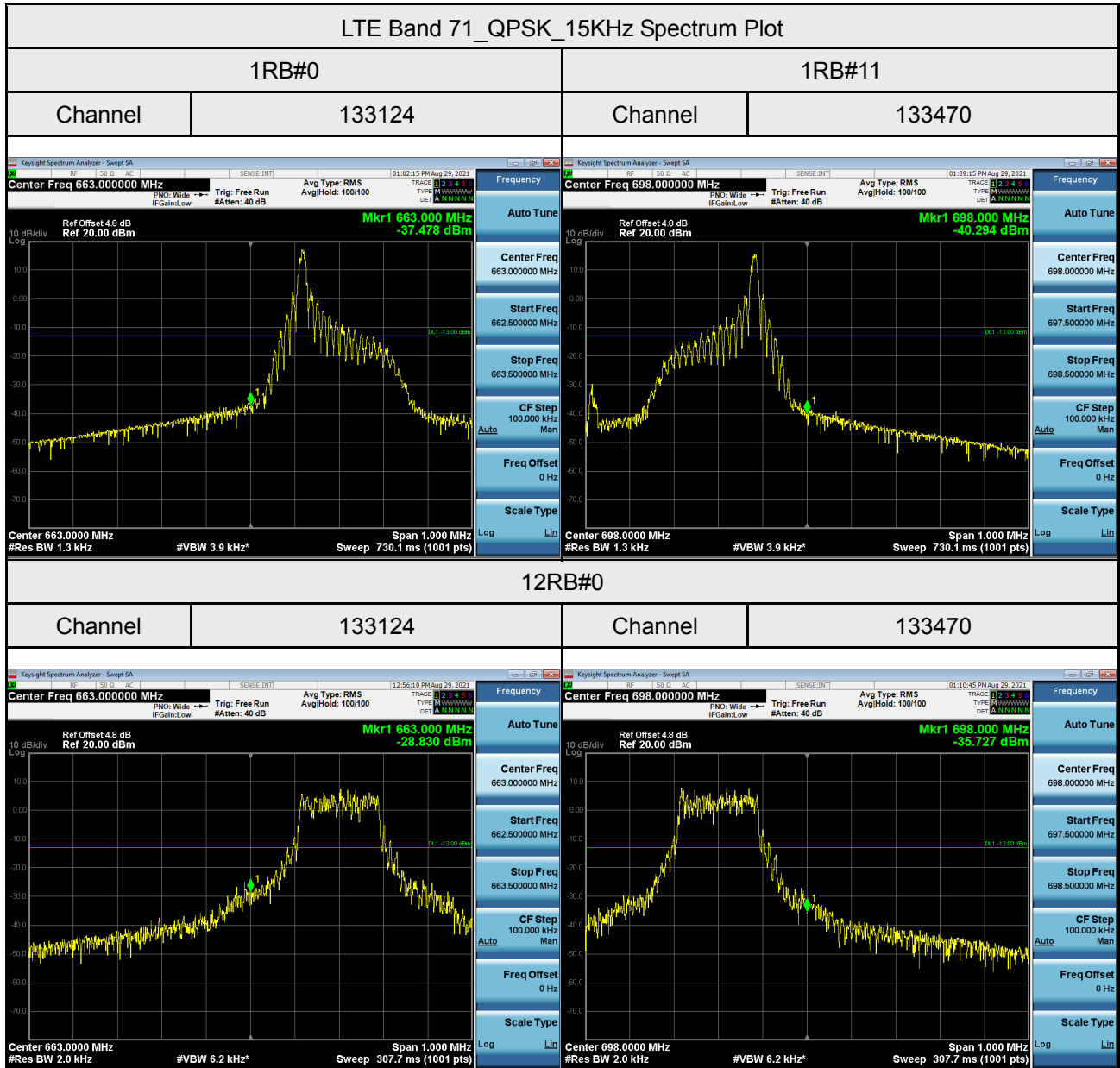


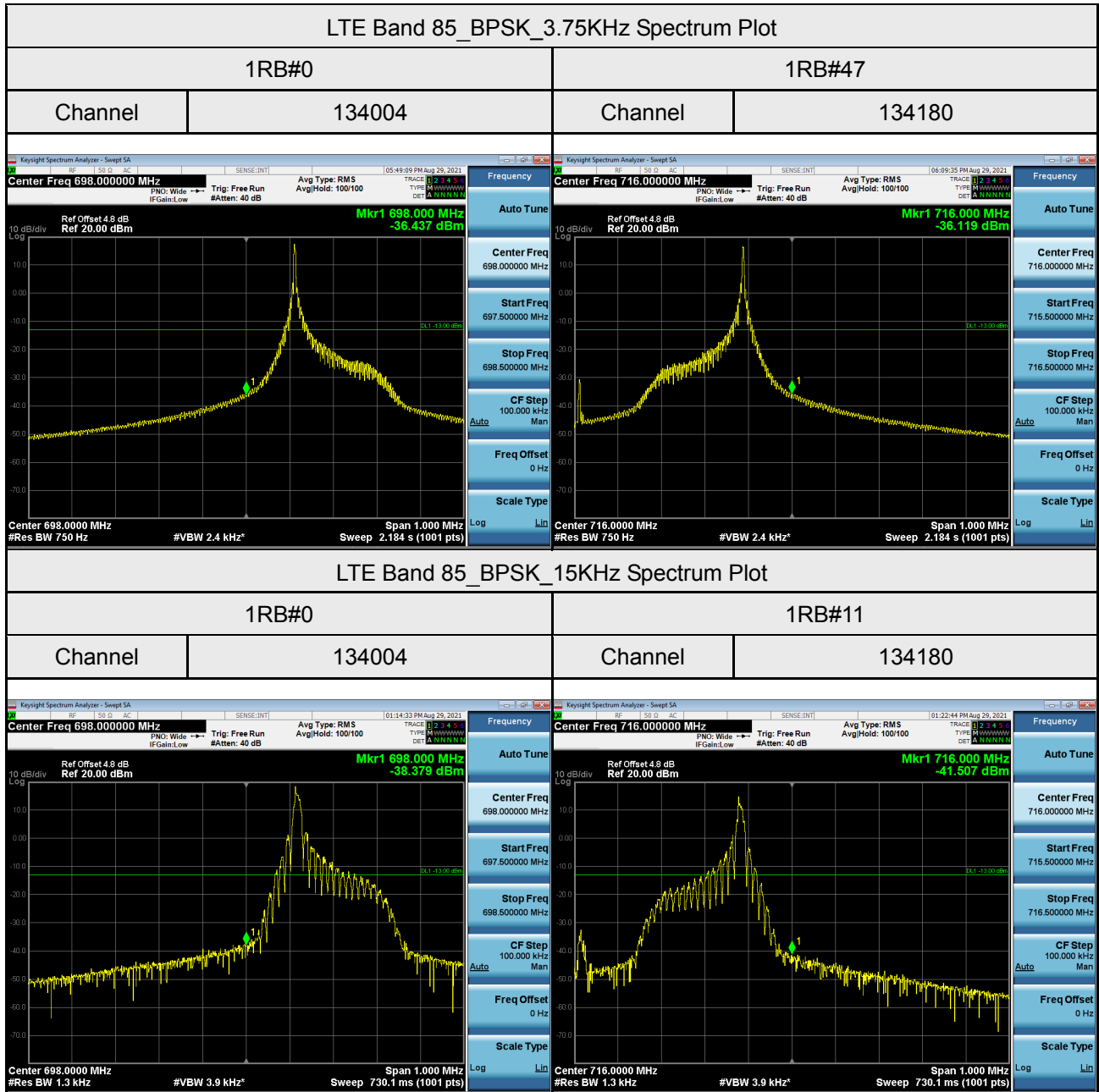


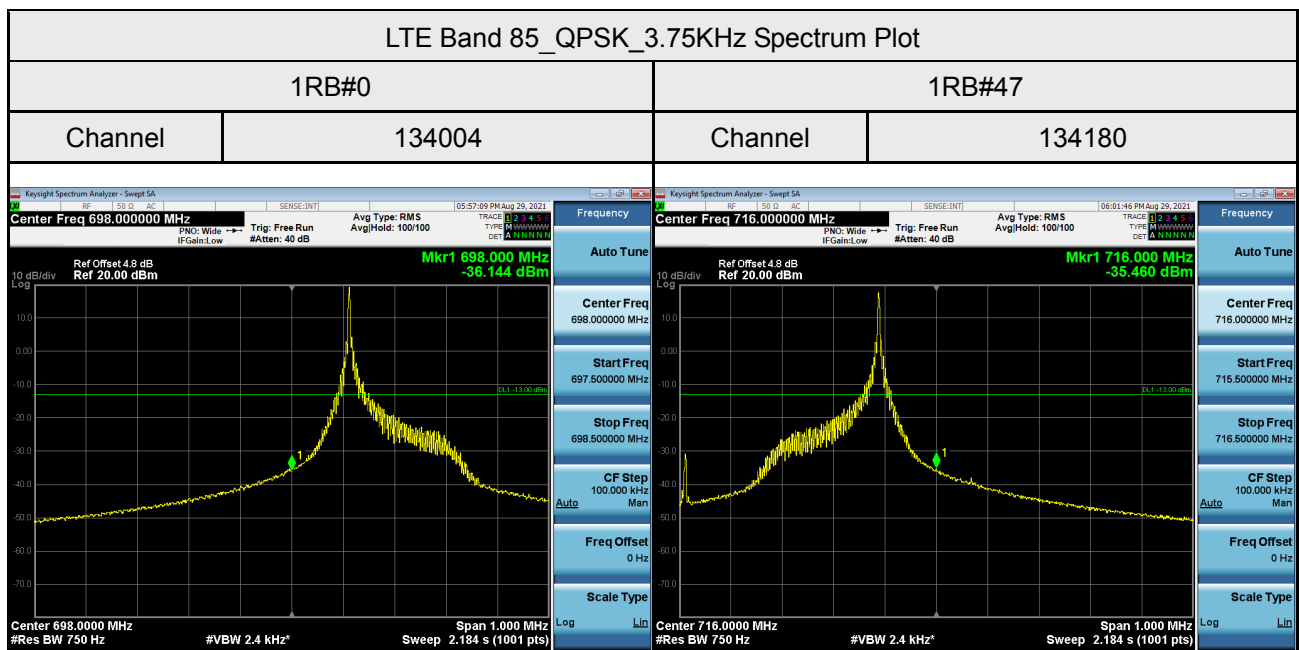


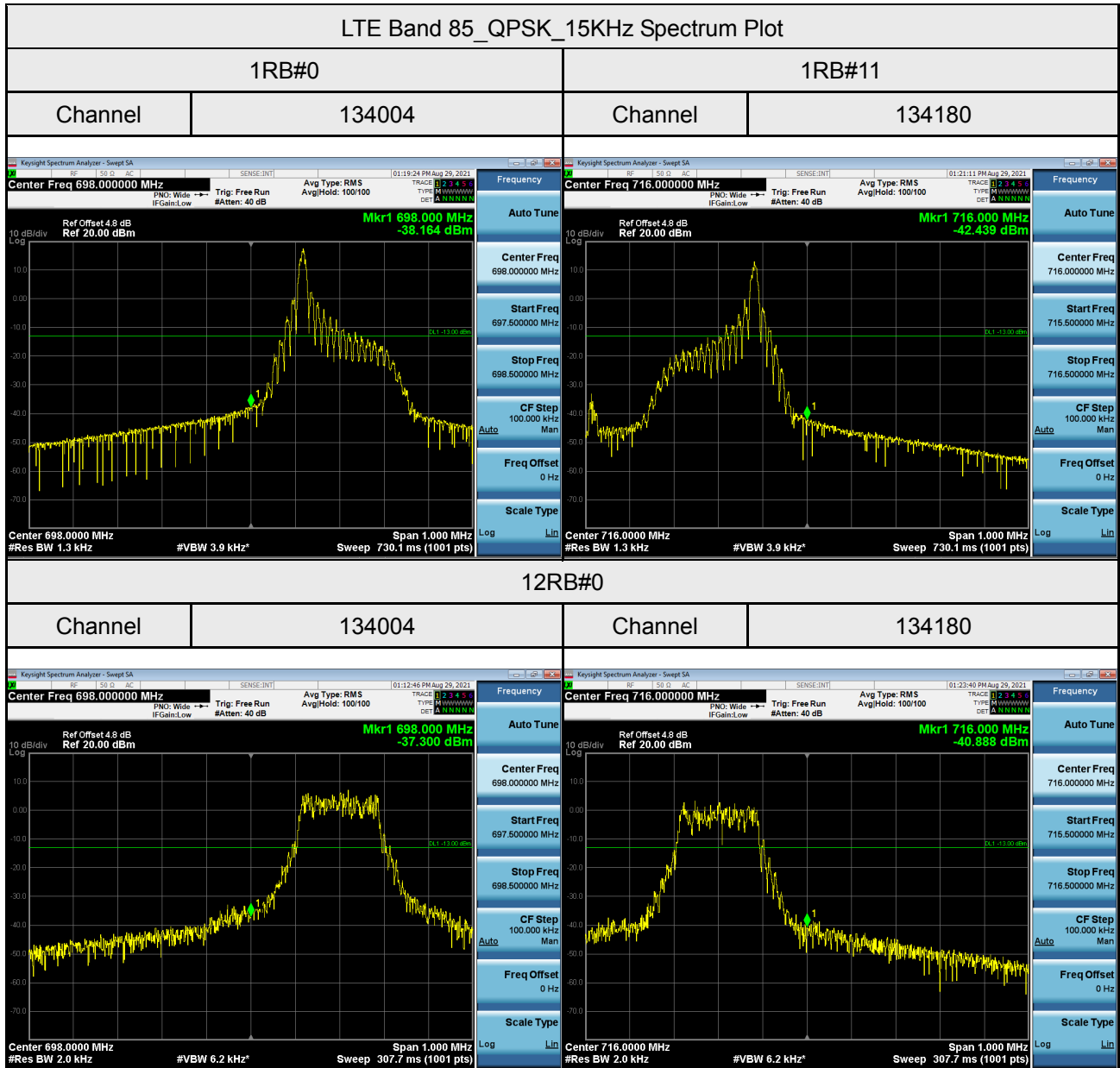












APPENDIX H - PEAK TO AVERAGE RATIO

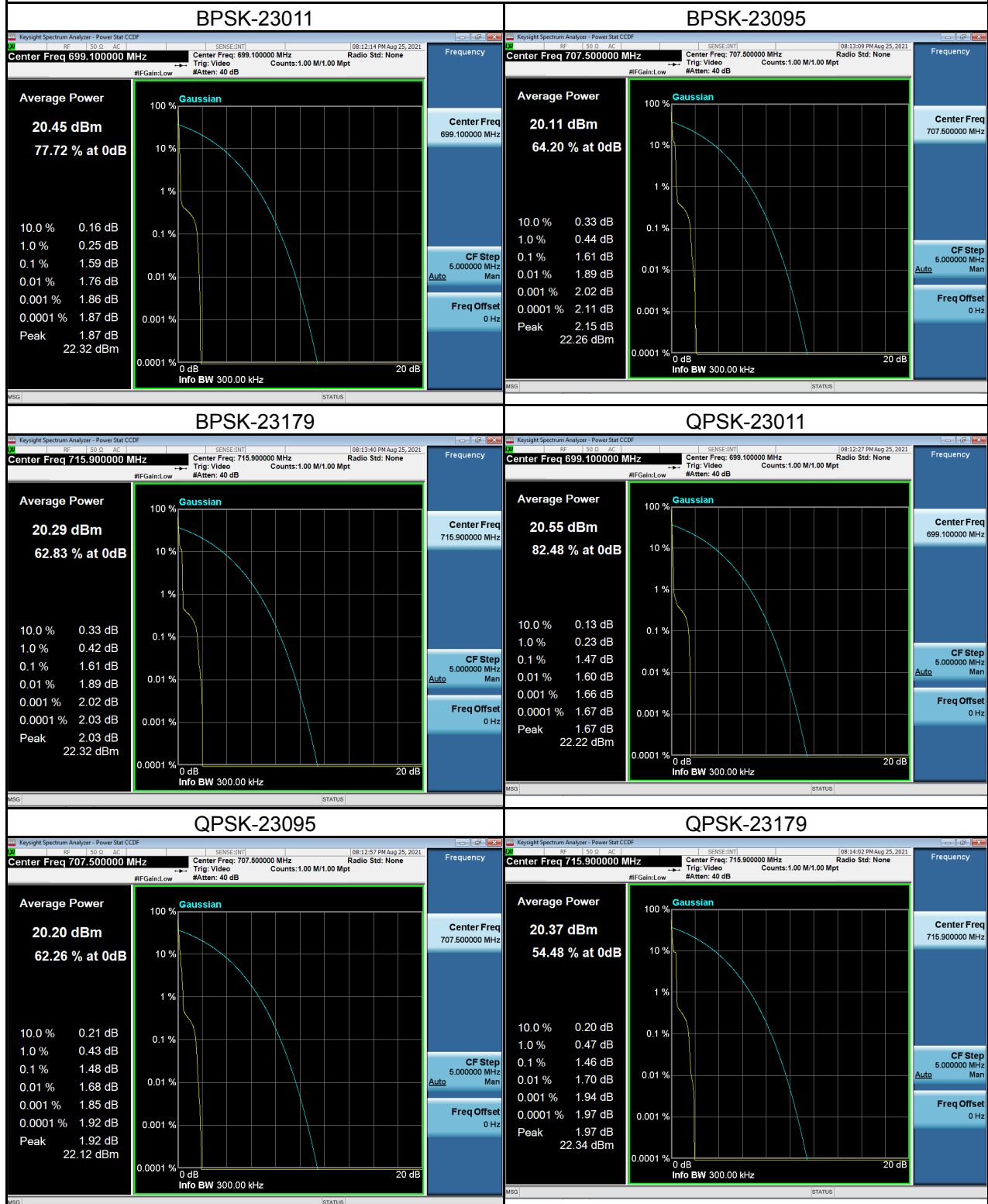
LTE Band 4_3.75KMz Spectrum Plot



LTE Band 4_15KMz Spectrum Plot



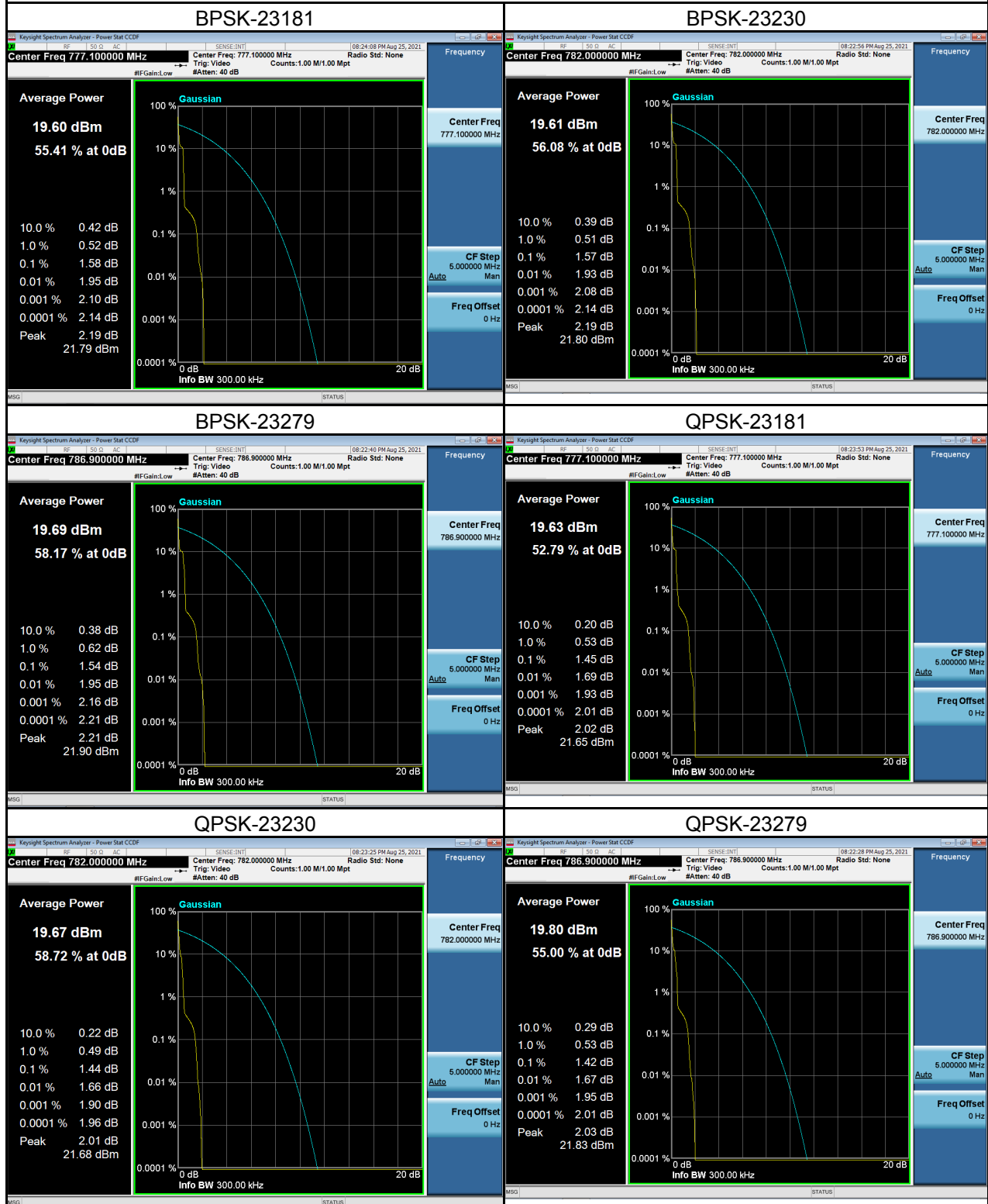
LTE Band 12_3.75KMz Spectrum Plot



LTE Band 12_15kHz Spectrum Plot



LTE Band 13_3.75KHz Spectrum Plot



LTE Band 13_15KHz Spectrum Plot



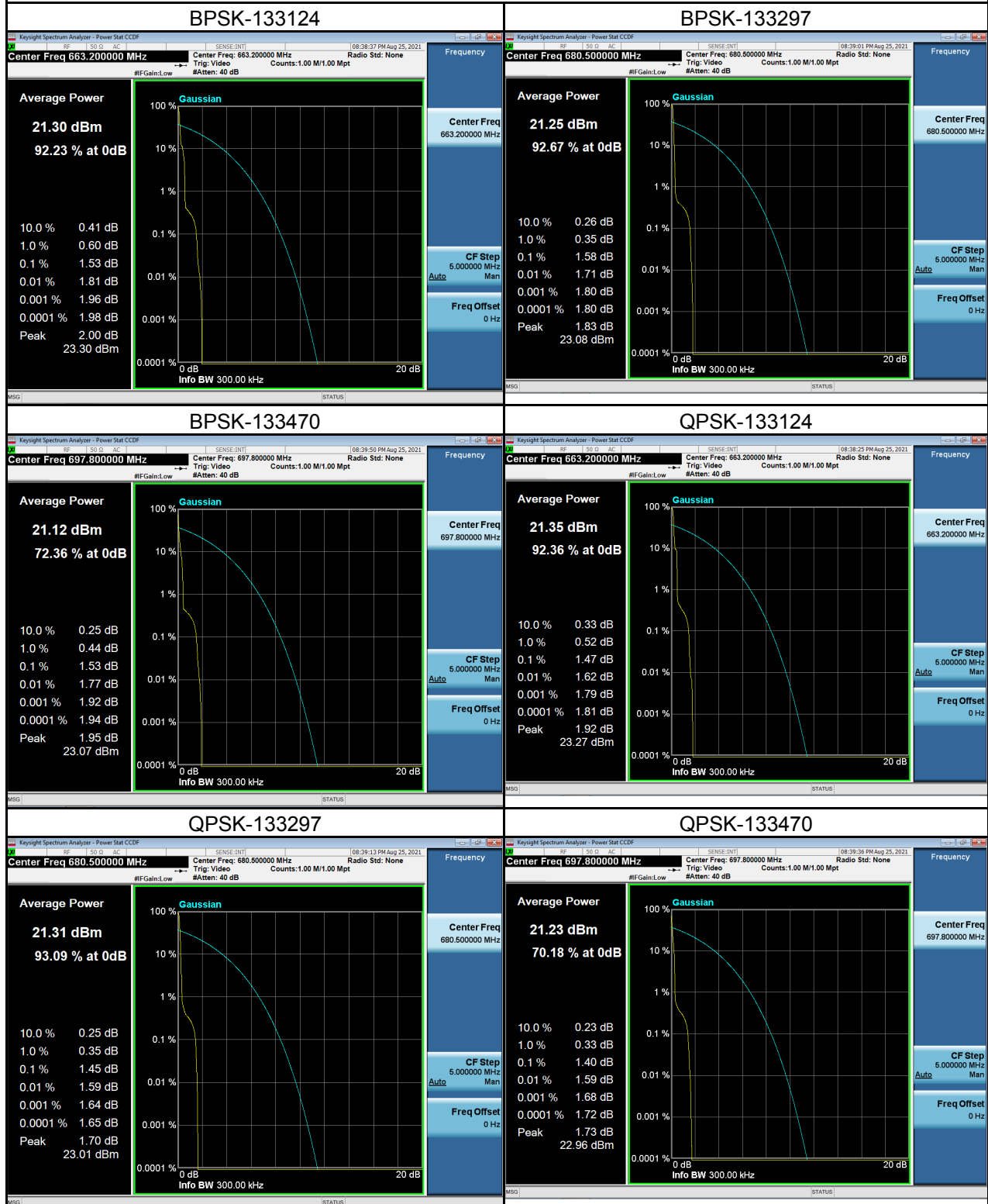
LTE Band 66_3.75KMz Spectrum Plot



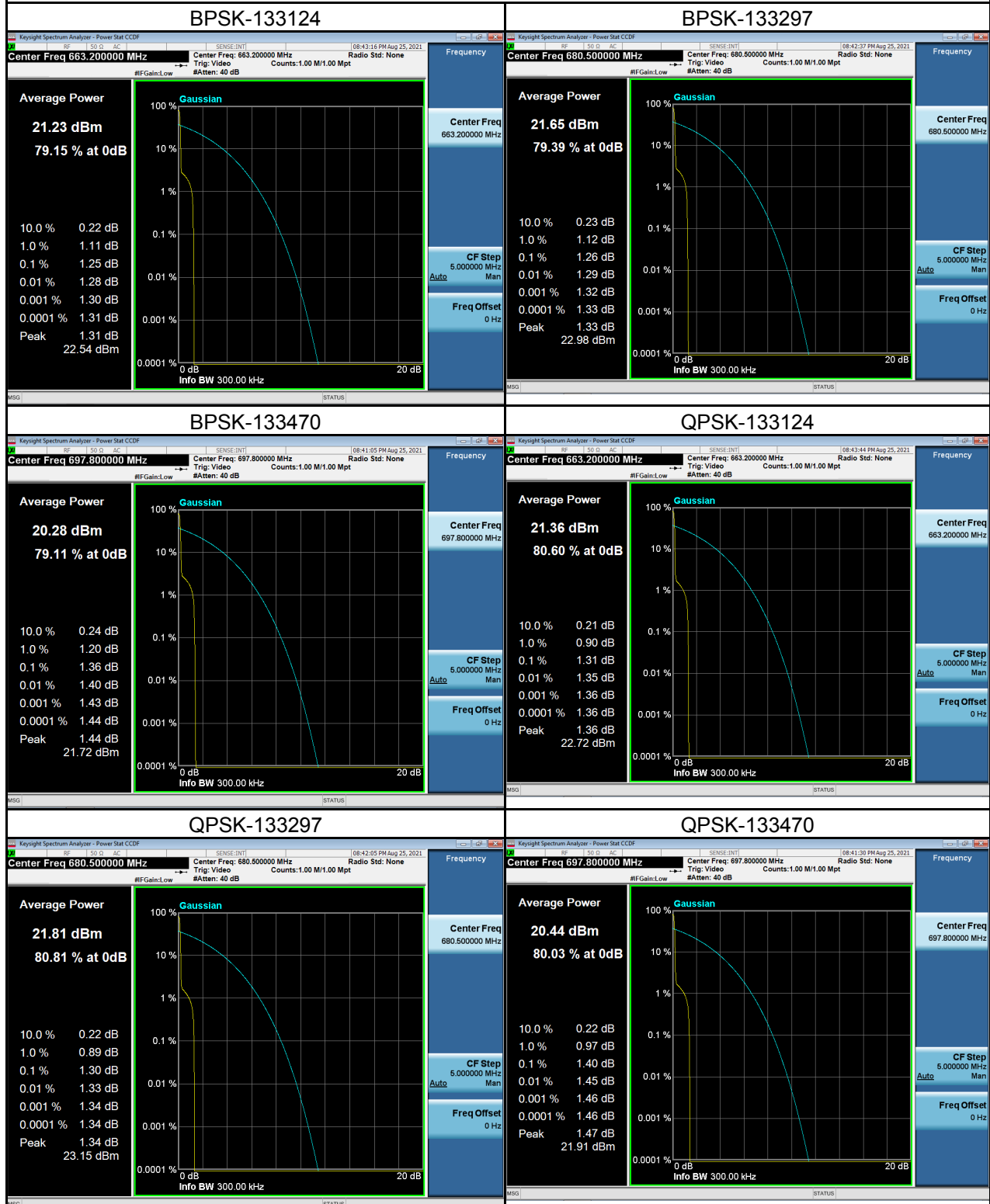
LTE Band 66_15KHz Spectrum Plot



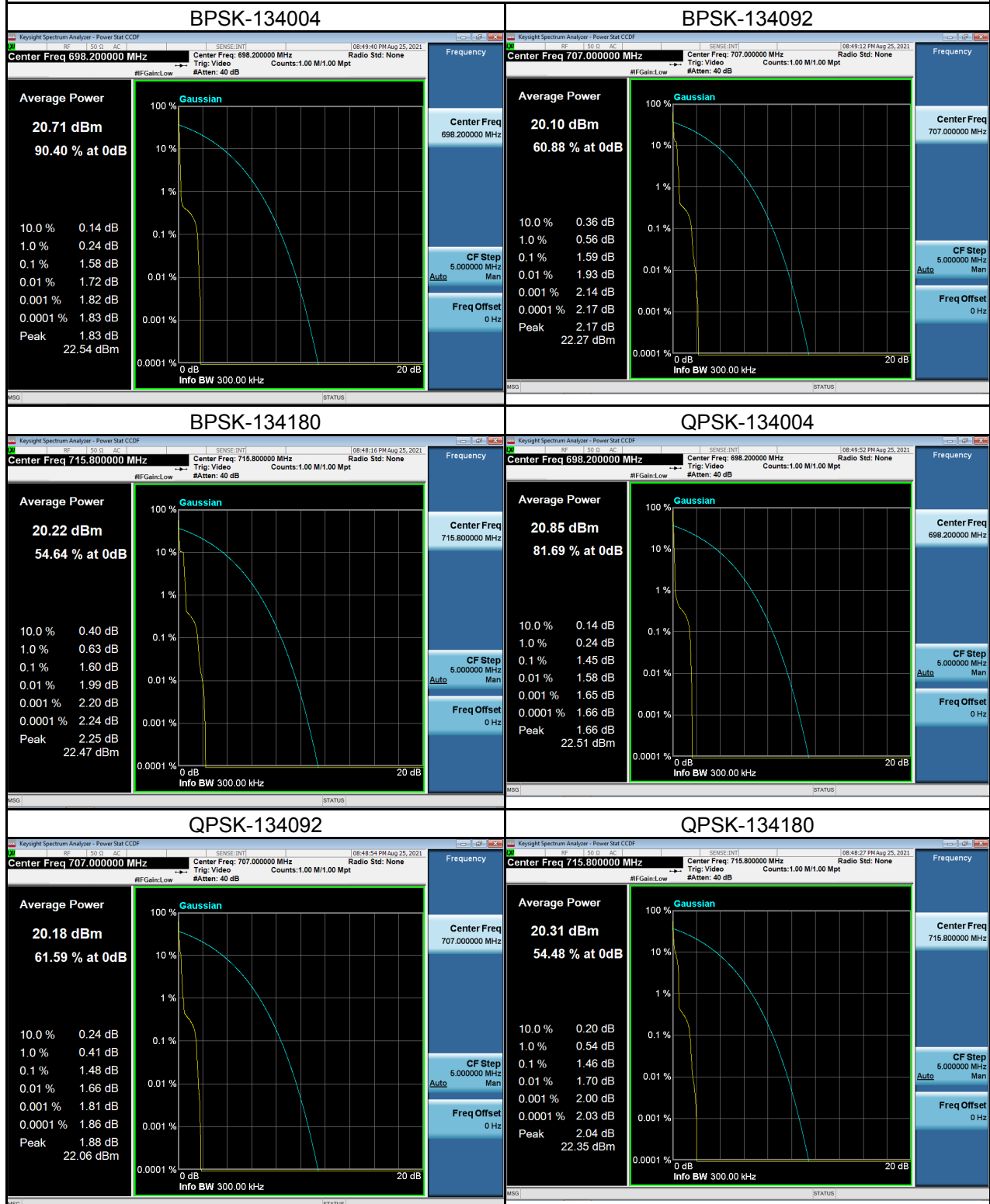
LTE Band 71_3.75KMz Spectrum Plot



LTE Band 71_15KHz Spectrum Plot



LTE Band 85_3.75KHz Spectrum Plot



LTE Band 85_15KHz Spectrum Plot



APPENDIX I - FREQUENCY STABILITY

Test Mode	LTE Band 4_BPSK_CH20175_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-10.26	-0.005922078	± 2.5
-20	-0.62	-0.000357864	
-10	4.71	0.002718615	
0	6.67	0.003849928	
10	4.66	0.002689755	
20	-13.55	-0.007821068	
30	-3.42	-0.001974026	
40	13.27	0.007659452	
50	-6.24	-0.003601732	
Max. Deviation (ppm)	-13.55	-0.007821068	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-3.04	-0.00175469	± 2.5
3.6	-0.99	-0.000571429	
2.0	-5.69	-0.003284271	
Max. Deviation (ppm)	-5.69	-0.003284271	

Test Mode	LTE Band 4_BPSK_CH20175_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	12.25	0.007070707	± 2.5
-20	8.94	0.005160173	
-10	-10.04	-0.005795094	
0	7.72	0.004455988	
10	10.07	0.00581241	
20	-2.95	-0.001702742	
30	-5.19	-0.002995671	
40	-3.31	-0.001910534	
50	-7.17	-0.004138528	
Max. Deviation (ppm)	10.07	0.00581241	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	7.86	0.004536797	± 2.5
3.6	9.22	0.005321789	
2.0	10.95	0.006320346	
Max. Deviation (ppm)	10.95	0.006320346	

Test Mode	LTE Band 12_BPSK_CH23095_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-1.05	-0.001484099	± 2.5
-20	7.41	0.010473498	
-10	2.73	0.003858657	
0	-10.02	-0.014162544	
10	-9.24	-0.013060071	
20	-12.16	-0.017187279	
30	14.57	0.02059364	
40	8.91	0.01259364	
50	9.01	0.012734982	
Max. Deviation (ppm)	14.57	0.02059364	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-10.57	0.014939929	± 2.5
3.6	11.75	0.016607774	
2.0	-5.99	0.008466431	
Max. Deviation (ppm)	11.75	0.016607774	

Test Mode	LTE Band 12_BPSK_CH23095_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	4.65	0.006572438	± 2.5
-20	1.12	0.001583039	
-10	1.78	0.002515901	
0	-13.63	-0.019265018	
10	4.14	0.00585159	
20	-12.71	-0.017964664	
30	12.13	0.017144876	
40	-10.66	-0.015067138	
50	-9.17	-0.012961131	
Max. Deviation (ppm)	-13.63	-0.019265018	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-5.41	-0.007646643	± 2.5
3.6	11.14	0.015745583	
2.0	12.58	0.017780919	
Max. Deviation (ppm)	12.58	0.017780919	

Test Mode	LTE Band 13_BPSK_CH23230_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	5.27	0.00673913	± 2.5
-20	-12.57	-0.016074169	
-10	-6.66	-0.008516624	
0	-0.56	-0.000716113	
10	6.01	0.007685422	
20	6.94	0.00887468	
30	13.81	0.017659847	
40	4.67	0.005971867	
50	-13.88	-0.017749361	
Max. Deviation (ppm)	-13.88	-0.017749361	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	10.90	0.013938619	± 2.5
3.6	-9.92	0.012685422	
2.0	-13.22	0.016905371	
Max. Deviation (ppm)	-13.22	0.016905371	

Test Mode	LTE Band 13_BPSK_CH23230_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-10.45	-0.013363171	± 2.5
-20	-8.81	-0.011265985	
-10	12.37	0.015818414	
0	3.72	0.004757033	
10	8.48	0.01084399	
20	-3.04	-0.003887468	
30	4.78	0.006112532	
40	5.86	0.007493606	
50	1.23	0.00157289	
Max. Deviation (ppm)	12.37	0.015818414	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-5.48	-0.007007673	± 2.5
3.6	1.89	0.00241688	
2.0	-5.18	-0.006624041	
Max. Deviation (ppm)	-5.48	-0.007007673	

Test Mode	LTE Band 66_BPSK_CH132322_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	13.37	0.007661891	± 2.5
-20	1.26	0.000722063	
-10	-14.88	-0.008527221	
0	-6.34	-0.003633238	
10	-6.15	-0.003524355	
20	11.16	0.006395415	
30	8.77	0.005025788	
40	-2.54	-0.001455587	
50	-13.04	-0.007472779	
Max. Deviation (ppm)	-14.88	-0.008527221	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-4.29	-0.002458453	± 2.5
3.6	13.18	0.007553009	
2.0	14.95	0.008567335	
Max. Deviation (ppm)	14.95	0.008567335	

Test Mode	LTE Band 66_BPSK_CH132322_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-7.03	-0.004028653	± 2.5
-20	-7.51	-0.004303725	
-10	-5.57	-0.003191977	
0	2.29	0.001312321	
10	-7.86	-0.004504298	
20	-9.47	-0.005426934	
30	0.31	0.00017765	
40	5.64	0.003232092	
50	-4.26	-0.002441261	
Max. Deviation (ppm)	-9.47	-0.005426934	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-12.02	-0.006888252	± 2.5
3.6	3.05	0.001747851	
2.0	-3.61	-0.002068768	
Max. Deviation (ppm)	-12.02	-0.006888252	

Test Mode	LTE Band 71_BPSK_CH23095_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-11.54	-0.016958119	± 2.5
-20	-12.29	-0.01806025	
-10	6.01	0.008831741	
0	-0.31	-0.000455547	
10	-10.06	-0.014783248	
20	-9.67	-0.01421014	
30	13.90	0.020426157	
40	-12.77	-0.018765614	
50	11.18	0.016429096	
Max. Deviation (ppm)	13.9	0.020426157	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	2.82	0.004144012	± 2.5
3.6	-10.96	-0.016105805	
2.0	6.27	0.009213813	
Max. Deviation (ppm)	-10.96	-0.016105805	

Test Mode	LTE Band 71_BPSK_CH23095_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-11.67	-0.017149155	± 2.5
-20	11.40	0.016752388	
-10	2.47	0.003629684	
0	6.46	0.00949302	
10	-7.28	-0.010698016	
20	-4.70	-0.006906686	
30	-4.85	-0.007127112	
40	7.14	0.010492285	
50	-6.36	-0.009346069	
Max. Deviation (ppm)	11.4	0.016752388	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	8.57	0.012593681	± 2.5
3.6	-8.97	-0.013181484	
2.0	0.69	0.00101396	
Max. Deviation (ppm)	-8.97	-0.013181484	

Test Mode	LTE Band 85_BPSK_CH23230_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-2.52	-0.003564356	± 2.5
-20	-4.69	-0.006633663	
-10	-10.89	-0.015403112	
0	7.67	0.010848656	
10	3.21	0.004540311	
20	-3.75	-0.005304102	
30	6.60	0.009335219	
40	-10.00	-0.014144272	
50	-10.56	-0.014936351	
Max. Deviation (ppm)	-10.89	-0.015403112	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-1.41	-0.001994342	± 2.5
3.6	14.62	0.020678925	
2.0	-1.61	-0.002277228	
Max. Deviation (ppm)	14.62	0.020678925	

Test Mode	LTE Band 85_BPSK_CH23230_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	11.14	0.015756719	± 2.5
-20	-3.02	-0.00427157	
-10	-13.42	-0.018981612	
0	-3.05	-0.004314003	
10	-2.98	-0.004214993	
20	-2.65	-0.003748232	
30	13.61	0.019250354	
40	10.74	0.015190948	
50	-3.60	-0.005091938	
Max. Deviation (ppm)	13.61	0.019250354	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	11.55	0.016336634	± 2.5
3.6	8.16	0.011541726	
2.0	14.37	0.020325318	
Max. Deviation (ppm)	14.37	0.020325318	

Test Mode	LTE Band 4_QPSK_CH20175_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-0.64	-0.000369408	± 2.5
-20	-4.43	-0.002556999	
-10	-13.23	-0.007636364	
0	-4.95	-0.002857143	
10	10.31	0.005950938	
20	-9.07	-0.005235209	
30	3.05	0.001760462	
40	14.32	0.008265512	
50	-0.54	-0.000311688	
Max. Deviation (ppm)	14.32	0.008265512	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-7.66	-0.004421356	± 2.5
3.6	-3.27	-0.001887446	
2.0	8.05	0.004646465	
Max. Deviation (ppm)	8.05	0.004646465	

Test Mode	LTE Band 4_QPSK_CH20175_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-9.96	-0.005748918	± 2.5
-20	4.06	0.002343434	
-10	-8.29	-0.004784993	
0	-4.90	-0.002828283	
10	1.16	0.000669553	
20	-11.06	-0.006383838	
30	0.58	0.000334776	
40	-0.92	-0.000531025	
50	13.50	0.007792208	
Max. Deviation (ppm)	13.5	0.007792208	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	12.02	0.006937951	± 2.5
3.6	-4.72	-0.002724387	
2.0	-8.99	-0.005189033	
Max. Deviation (ppm)	12.02	0.006937951	

Test Mode	LTE Band 12_QPSK_CH23095_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-14.61	-0.020650177	± 2.5
-20	-13.32	-0.018826855	
-10	13.32	0.018826855	
0	13.63	0.019265018	
10	-3.11	-0.00439576	
20	-0.87	-0.001229682	
30	-8.54	-0.012070671	
40	1.41	0.001992933	
50	-3.59	-0.005074205	
Max. Deviation (ppm)	13.63	0.019265018	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	0.37	0.000522968	± 2.5
3.6	7.21	0.010190813	
2.0	5.72	0.008084806	
Max. Deviation (ppm)	7.21	0.010190813	

Test Mode	LTE Band 12_QPSK_CH23095_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-6.66	-0.009413428	± 2.5
-20	1.18	0.001667845	
-10	-7.03	-0.009936396	
0	-9.42	-0.013314488	
10	-13.45	-0.019010601	
20	-4.72	-0.006671378	
30	-1.35	-0.001908127	
40	-11.23	-0.015872792	
50	-4.45	-0.006289753	
Max. Deviation (ppm)	-13.45	-0.019010601	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-8.67	-0.012254417	± 2.5
3.6	-2.66	-0.003759717	
2.0	13.86	0.019590106	
Max. Deviation (ppm)	13.86	0.019590106	

Test Mode	LTE Band 13_QPSK_CH23230_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-7.77	-0.009936061	± 2.5
-20	-4.21	-0.005383632	
-10	-10.26	-0.013120205	
0	7.78	0.009948849	
10	-11.17	-0.014283887	
20	-6.73	-0.008606138	
30	-3.66	-0.004680307	
40	-5.57	-0.007122762	
50	2.67	0.003414322	
Max. Deviation (ppm)	-11.17	-0.014283887	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	3.88	0.004961637	± 2.5
3.6	-6.48	0.008286445	
2.0	-1.26	0.001611253	
Max. Deviation (ppm)	-6.48	0.008286445	

Test Mode	LTE Band 13_QPSK_CH23230_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	12.81	0.016381074	± 2.5
-20	-0.84	-0.001074169	
-10	-2.04	-0.002608696	
0	2.07	0.002647059	
10	-9.29	-0.011879795	
20	-9.48	-0.012122762	
30	-3.88	-0.004961637	
40	-9.81	-0.012544757	
50	12.13	0.015511509	
Max. Deviation (ppm)	12.13	0.015511509	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-0.83	-0.001061381	± 2.5
3.6	-8.03	-0.010268542	
2.0	-12.87	-0.016457801	
Max. Deviation (ppm)	-12.87	-0.016457801	

Test Mode	LTE Band 66_QPSK_CH132322_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-5.58	-0.003197708	± 2.5
-20	6.94	0.003977077	
-10	-3.92	-0.002246418	
0	-9.05	-0.005186246	
10	9.12	0.005226361	
20	-9.89	-0.005667622	
30	-9.05	-0.005186246	
40	-7.63	-0.004372493	
50	8.48	0.004859599	
Max. Deviation (ppm)	-9.89	-0.005667622	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	6.22	0.00356447	± 2.5
3.6	8.81	0.005048711	
2.0	-7.23	-0.004143266	
Max. Deviation (ppm)	8.81	0.005048711	

Test Mode	LTE Band 66_QPSK_CH132322_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	9.79	0.005610315	± 2.5
-20	0.73	0.000418338	
-10	-2.44	-0.001398281	
0	1.40	0.000802292	
10	-3.41	-0.001954155	
20	6.51	0.003730659	
30	-4.87	-0.002790831	
40	12.84	0.007358166	
50	-0.43	-0.000246418	
Max. Deviation (ppm)	12.84	0.007358166	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	6.19	0.003547278	± 2.5
3.6	-4.24	-0.002429799	
2.0	-13.65	-0.00782235	
Max. Deviation (ppm)	-13.65	-0.00782235	

Test Mode	LTE Band 71_QPSK_CH23095_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	0.82	0.001204996	± 2.5
-20	-5.69	-0.008361499	
-10	0.08	0.000117561	
0	5.56	0.008170463	
10	2.26	0.003321087	
20	9.62	0.014136664	
30	8.23	0.012094048	
40	-0.78	-0.001146216	
50	14.49	0.021293167	
Max. Deviation (ppm)	14.49	0.021293167	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	4.57	0.00671565	± 2.5
3.6	8.25	0.012123439	
2.0	11.65	0.017119765	
Max. Deviation (ppm)	11.65	0.017119765	

Test Mode	LTE Band 71_QPSK_CH23095_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	13.09	0.019235856	± 2.5
-20	14.48	0.021278472	
-10	-12.28	-0.018045555	
0	7.58	0.011138868	
10	11.58	0.017016899	
20	-1.48	-0.002174871	
30	-7.32	-0.010756796	
40	-10.13	-0.014886113	
50	-0.51	-0.000749449	
Max. Deviation (ppm)	14.48	0.021278472	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	11.22	0.016487877	± 2.5
3.6	-14.15	-0.020793534	
2.0	13.29	0.019529758	
Max. Deviation (ppm)	-14.15	-0.020793534	

Test Mode	LTE Band 85_QPSK_CH23230_3.75KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-30	-12.83	-0.0181471	± 2.5
-20	-14.88	-0.021046676	
-10	-0.98	-0.001386139	
0	-10.60	-0.014992928	
10	-8.96	-0.012673267	
20	12.02	0.017001414	
30	6.65	0.009405941	
40	-8.27	-0.011697313	
50	-7.69	-0.010876945	
Max. Deviation (ppm)	-14.88	-0.021046676	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	0.36	0.000509194	± 2.5
3.6	-10.83	-0.015318246	
2.0	-5.65	-0.007991513	
Max. Deviation (ppm)	-10.83	-0.015318246	

Test Mode	LTE Band 85_QPSK_CH23230_15KHz
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
-20	9.01	0.012743989	± 2.5
-10	-0.90	-0.001272984	
0	6.59	0.009321075	
10	-11.14	-0.015756719	
20	-5.00	-0.007072136	
30	-10.06	-0.014229137	
40	-0.82	-0.00115983	
50	2.91	0.004115983	
60	-6.21	-0.008783593	
Max. Deviation (ppm)	-11.14	-0.015756719	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	10.67	0.015091938	± 2.5
3.6	-12.24	-0.017312588	
2.0	4.43	0.006265912	
Max. Deviation (ppm)	-12.24	-0.017312588	

End of Test Report