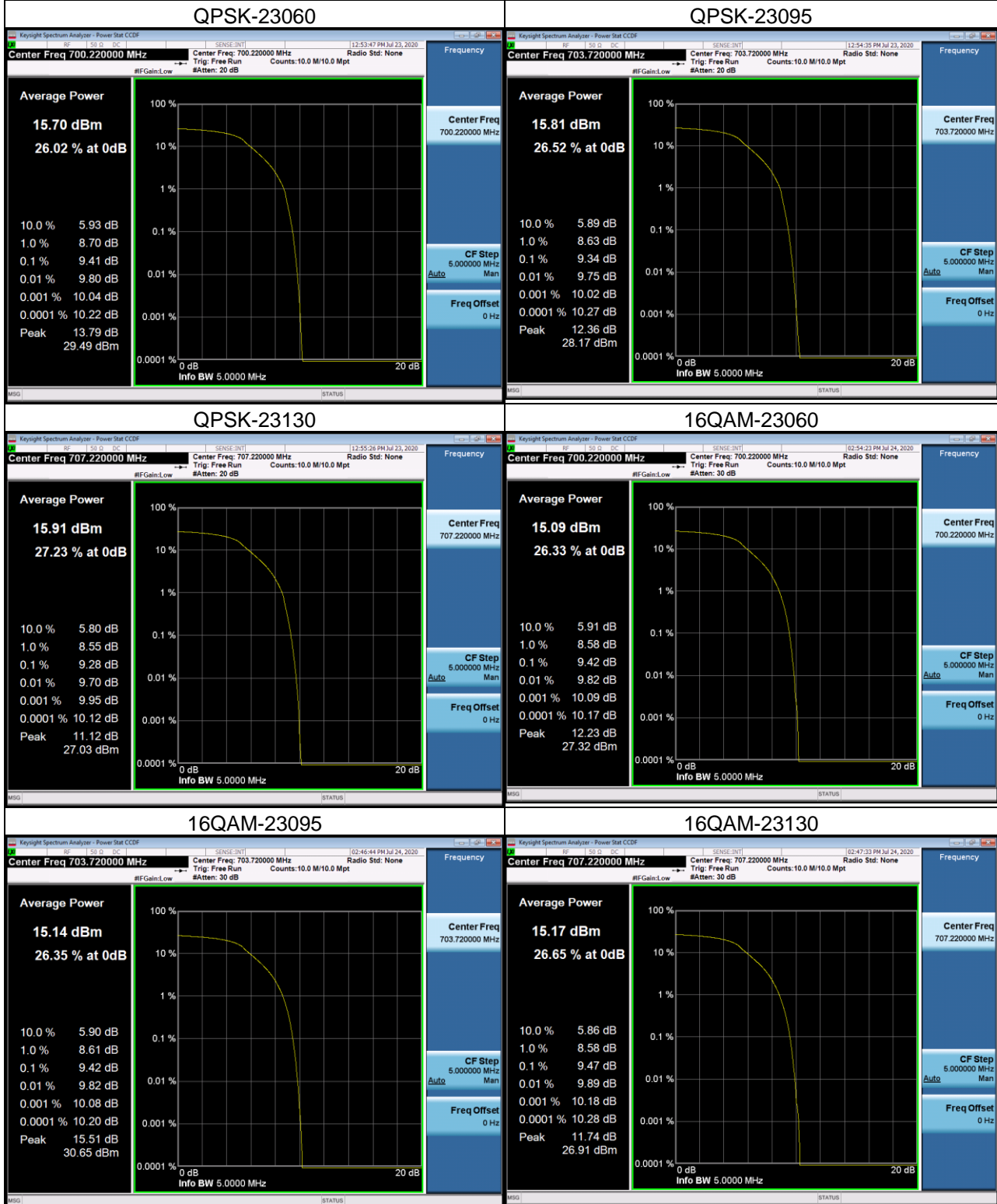


LTE Cat-M1 Band 12_10M Spectrum Plot



APPENDIX I - FREQUENCY STABILITY

Test Mode	LTE Cat-M1 Band 4	Test Date	2020/7/24
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Voltage Variation	Band 4				Limit(ppm)
	Frequency Error (ppm)				
	5MHz	10MHz	15MHz	20MHz	
High Voltage	0.0062	0.0026	0.0044	0.0063	±2.5
Normal Voltage	0.0073	0.0052	0.0053	0.0061	
Low Voltage	0.0047	0.0053	0.0052	0.0054	
Max. Deviation	0.0073	0.0053	0.0053	0.0063	

Temperature Variation	Band 4				Limit(ppm)
	Frequency Error (ppm)				
	5MHz	10MHz	15MHz	20MHz	
-30	0.0096	0.0042	0.0012	0.0019	±2.5
-20	0.0110	0.0092	0.0051	0.0013	
-10	0.0089	0.0074	0.0052	0.0094	
0	0.0061	0.0081	0.0044	0.0038	
10	0.0059	0.0062	0.0021	0.0022	
20	0.0072	0.0053	0.0042	0.0053	
30	0.0080	0.0039	0.0034	0.0046	
40	0.0068	0.0042	0.0041	0.0032	
50	0.0048	0.0021	0.0023	0.0039	
Max. Deviation	0.0110	0.0092	0.0052	0.0094	

Test Mode	LTE Cat-M1 Band 12	Test Date	2020/7/24
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Voltage Variation	Band 12		Limit(ppm)
	Frequency Error (ppm)		
	5MHz	10MHz	
High Voltage	0.0063	0.0023	±2.5
Normal Voltage	0.0031	0.0033	
Low Voltage	0.0041	0.0054	
Max. Deviation	0.0063	0.0054	

Temperature Variation	Band 12		Limit(ppm)
	Frequency Error (ppm)		
	5MHz	10MHz	
-30	0.0083	0.0112	±2.5
-20	0.0031	0.0093	
-10	0.0077	0.0076	
0	0.0066	0.0074	
10	0.0084	0.0024	
20	0.0057	0.0052	
30	0.0033	0.0069	
40	0.0045	0.0035	
50	0.0024	0.0049	
Max. Deviation	0.0084	0.0112	

End of Test Report