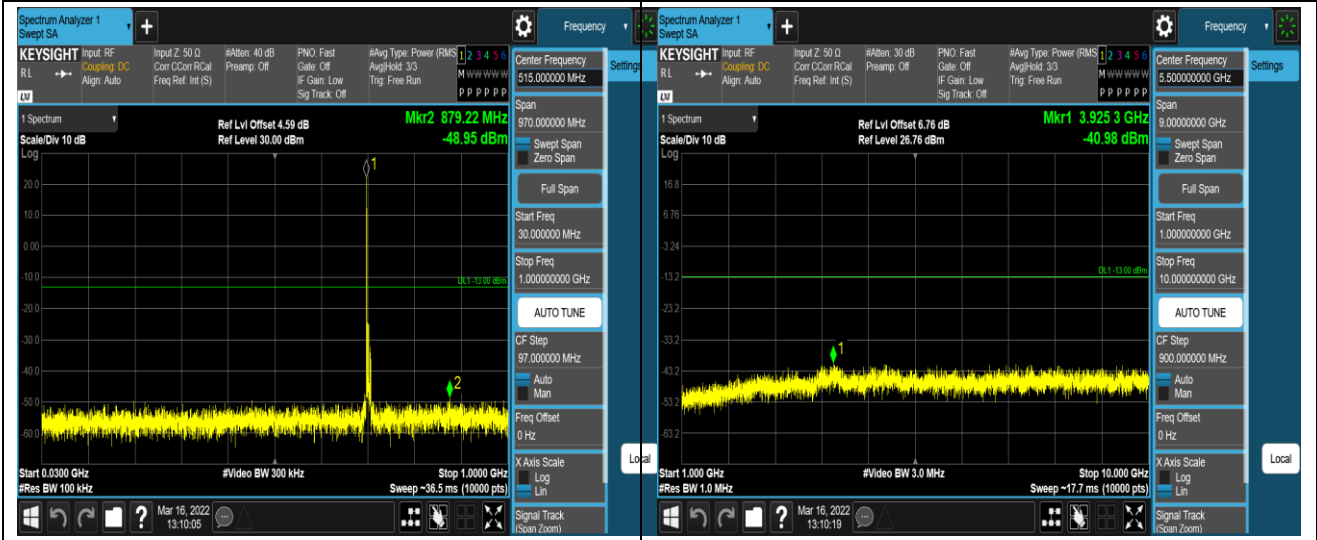


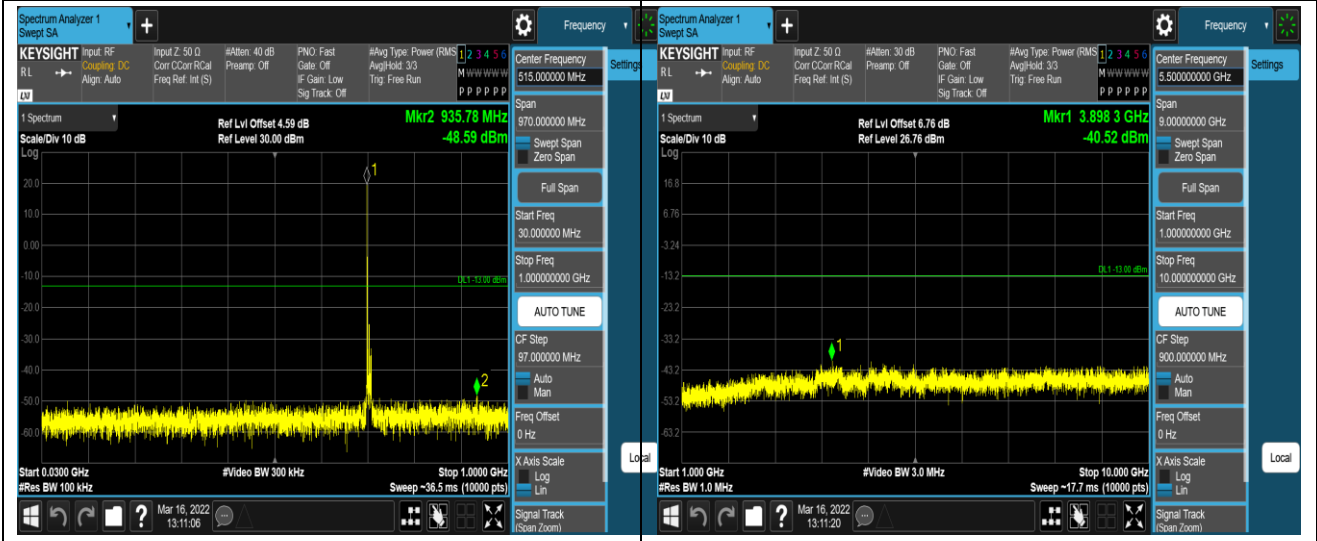
Band17-10MHz-QPSK-23790-1RB#0-Range1:30~1000MHz

Band17-10MHz-QPSK-23790-1RB#0-Range2:1000~10000MHz



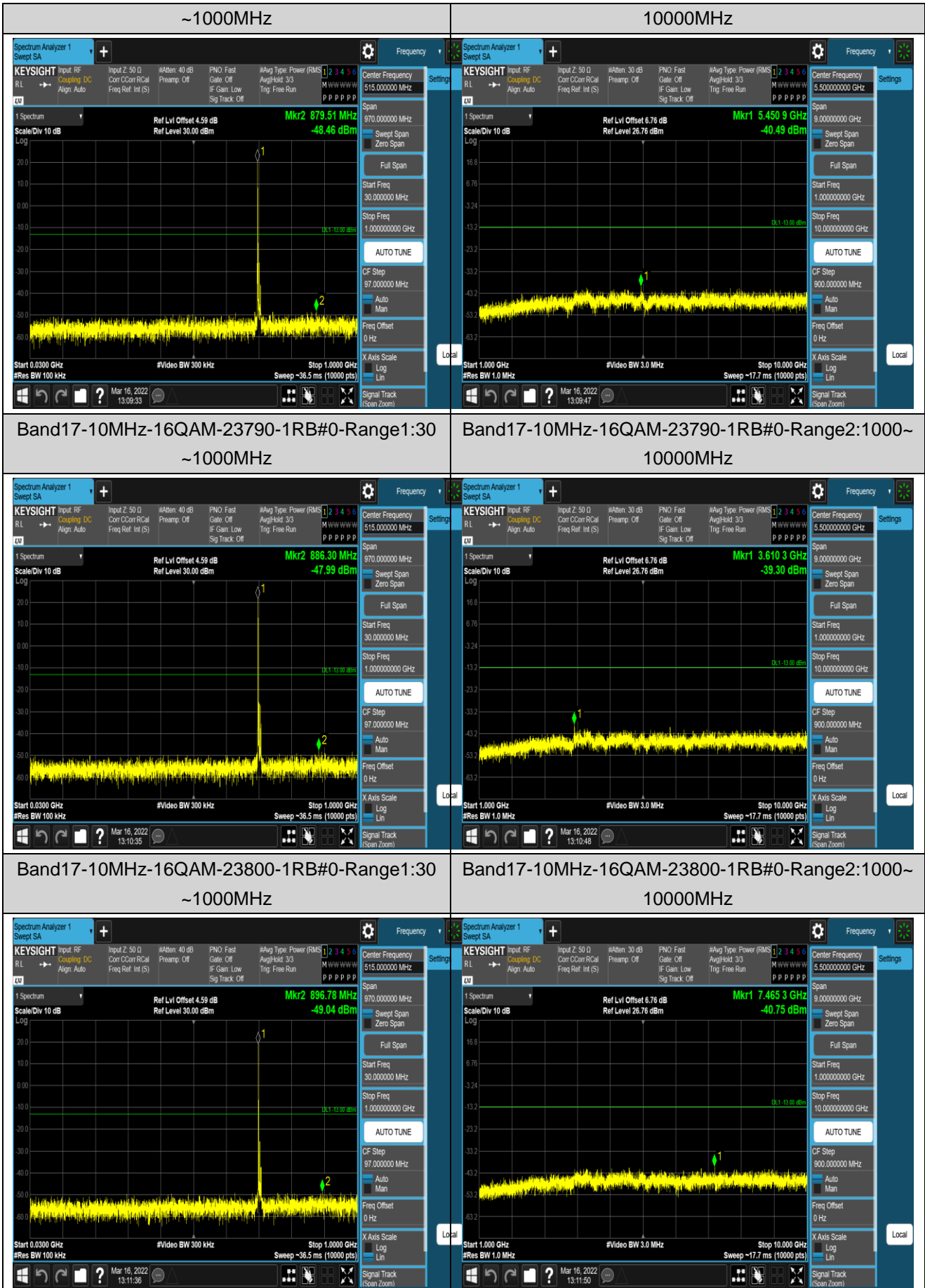
Band17-10MHz-QPSK-23800-1RB#0-Range1:30~1000MHz

Band17-10MHz-QPSK-23800-1RB#0-Range2:1000~10000MHz



Band17-10MHz-16QAM-23780-1RB#0-Range1:30~1000MHz

Band17-10MHz-16QAM-23780-1RB#0-Range2:1000~10000MHz



Appendix F: Frequency Stability

Test Result

LTE Band 2 part:

Reference Frequency: LTE Band 2 (10MHz) Middle channel=18900 Frequency=1880.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-5.45	-0.006515	Within authorized band for Band 2	Pass
	-20	-6.11	-0.007304		
	-10	2.09	0.002499		
	0	8.78	0.010496		
	10	5.79	0.006922		
	20	-6.34	-0.007579		
	30	-5.34	-0.006384		
	40	2.75	0.003288		
	50	7.21	0.008619		
16QAM					
3.85	-30	6.22	0.003309	Within authorized band for Band 2	Pass
	-20	-7.45	-0.003963		
	-10	-5.32	-0.002830		
	0	12.89	0.006856		
	10	16.94	0.009011		
	20	8.21	0.004367		
	30	10.63	0.005654		
	40	11.20	0.005957		
	50	-7.75	-0.004122		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	15.22	0.008096	Within authorized band for Band 2	Pass
	3.85	14.00	0.007447		
	4.40	18.05	0.009601		
16QAM					
25	3.50	12.50	0.006649	Within authorized band for Band 2	Pass
	3.85	15.76	0.008383		
	4.40	8.97	0.004771		

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

LTE Band 5 part:

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 Frequency=836.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-2.46	-0.002941	±2.5	Pass
	-20	-4.52	-0.005403		
	-10	-3.13	-0.003742		
	0	-10.73	-0.012827		
	10	-2.60	-0.003108		
	20	-9.51	-0.011369		
	30	6.97	0.008332		
	40	-13.59	-0.016246		
	50	-1.90	-0.002271		
16QAM					
3.85	-30	-5.45	-0.006515	±2.5	Pass
	-20	-6.11	-0.007304		
	-10	2.09	0.002499		
	0	8.78	0.010496		
	10	5.79	0.006922		
	20	-6.34	-0.007579		
	30	-5.34	-0.006384		
	40	2.75	0.003288		
	50	7.21	0.008619		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-9.90	-0.011835	±2.5	Pass
	3.85	-5.34	-0.006384		
	4.40	2.76	0.003299		
16QAM					
25	3.50	-5.29	-0.006324	±2.5	Pass
	3.85	2.68	0.003204		
	4.40	-6.94	-0.008296		

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

LTE Band 7 part:

Reference Frequency: LTE Band 7(10MHz) Middle channel=21100 Frequency=2535.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	23.63	0.009321	Within authorized band for Band 7	Pass
	-20	18.54	0.007314		
	-10	-24.28	-0.009578		
	0	16.67	0.006576		
	10	-15.59	-0.006150		
	20	-19.38	-0.007645		
	30	24.00	0.009467		
	40	-15.72	-0.006201		
	50	11.40	0.004497		
16QAM					
3.85	-30	10.04	0.003961	Within authorized band for Band 7	Pass
	-20	-8.67	-0.003420		
	-10	-18.01	-0.007105		
	0	10.90	0.004300		
	10	-10.37	-0.004091		
	20	13.79	0.005440		
	30	9.81	0.003870		
	40	-13.83	-0.005456		
	50	24.76	0.009767		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	24.22	0.009554	Within authorized band for Band 7	Pass
	3.85	19.43	0.007665		
	4.40	29.07	0.011467		
16QAM					
25	3.50	23.17	0.009140	Within authorized band for Band 7	Pass
	3.85	15.55	0.006134		
	4.40	19.91	0.007854		

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

LTE Band 17 part:

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 Frequency=710.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	8.97	0.012634	Within authorized band for Band 17	Pass
	-20	8.14	0.011465		
	-10	2.78	0.003915		
	0	7.50	0.010563		
	10	-2.16	-0.003042		
	20	-4.46	-0.006282		
	30	9.14	0.012873		
	40	-5.78	-0.008141		
	50	5.99	0.008437		
16QAM					
3.85	-30	-1.99	-0.002803	Within authorized band for Band 17	Pass
	-20	-3.71	-0.005225		
	-10	-1.52	-0.002141		
	0	6.97	0.009817		
	10	5.42	0.007634		
	20	9.50	0.013380		
	30	-2.79	-0.003930		
	40	-3.50	-0.004930		
	50	2.83	0.003986		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	7.25	0.010211	Within authorized band for Band 17	Pass
	3.85	6.90	0.009718		
	4.40	8.00	0.011268		
16QAM					
25	3.50	7.80	0.010986	Within authorized band for Band 17	Pass
	3.85	7.91	0.011141		
	4.40	4.86	0.006845		

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

Appendix G: Modulation Characteristics

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
Band2	20MHz	QPSK	18900	100RB#0	PASS	PASS
Band2	20MHz	16QAM	18900	100RB#0	PASS	PASS
Band5	10MHz	QPSK	20525	50RB#0	PASS	PASS
Band5	10MHz	16QAM	20525	50RB#0	PASS	PASS
Band7	20MHz	QPSK	21100	100RB#0	PASS	PASS
Band7	20MHz	16QAM	21100	100RB#0	PASS	PASS
Band17	10MHz	QPSK	23790	50RB#0	PASS	PASS
Band17	10MHz	16QAM	23790	50RB#0	PASS	PASS

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

