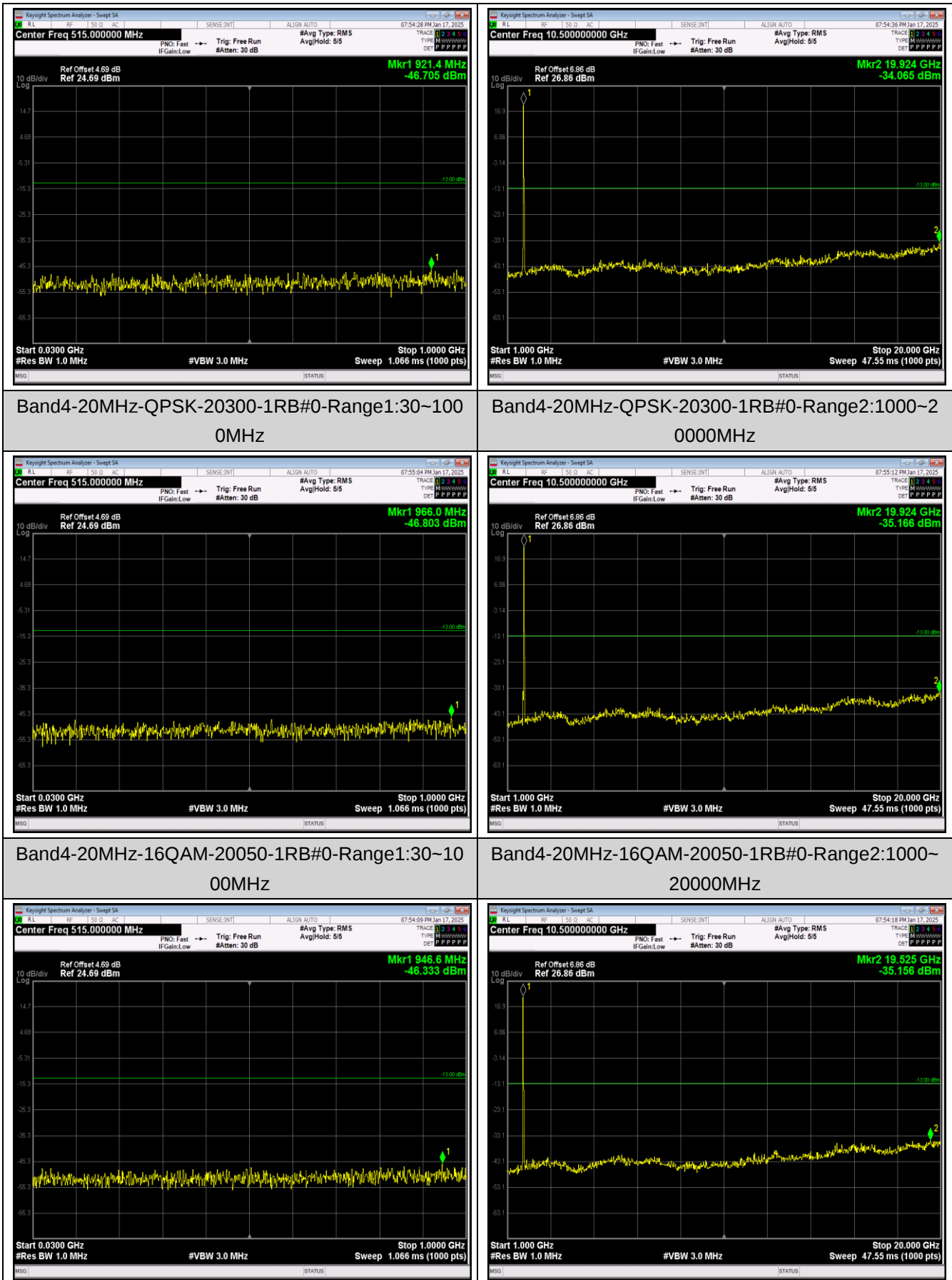
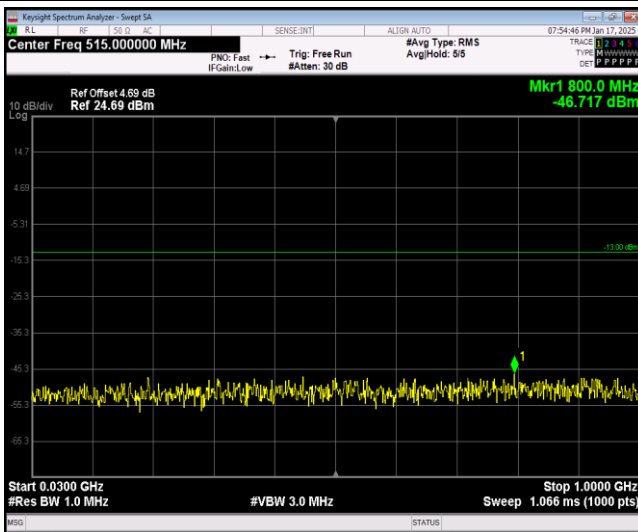
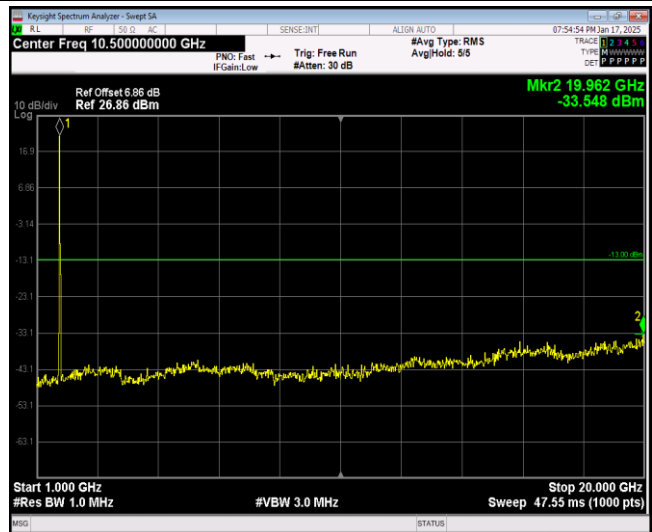




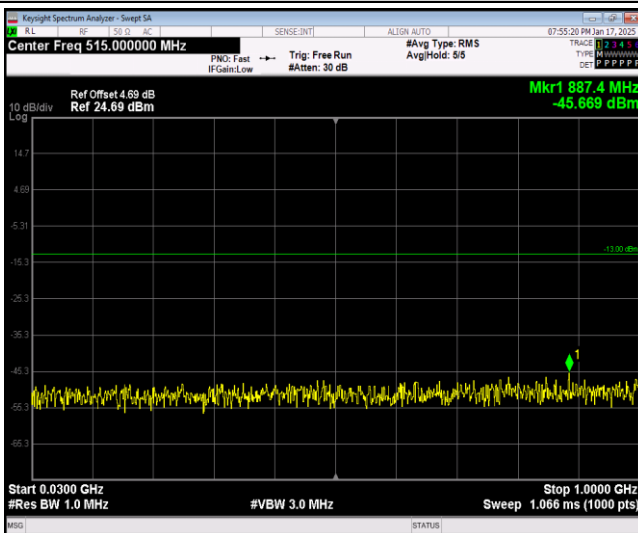
Band4-20MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



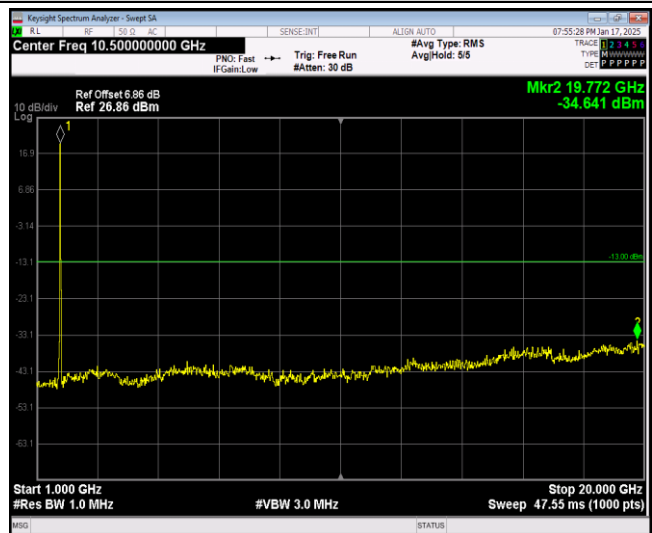
Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~20000MHz



Band4-20MHz-16QAM-20300-1RB#0-Range1:30~1000MHz

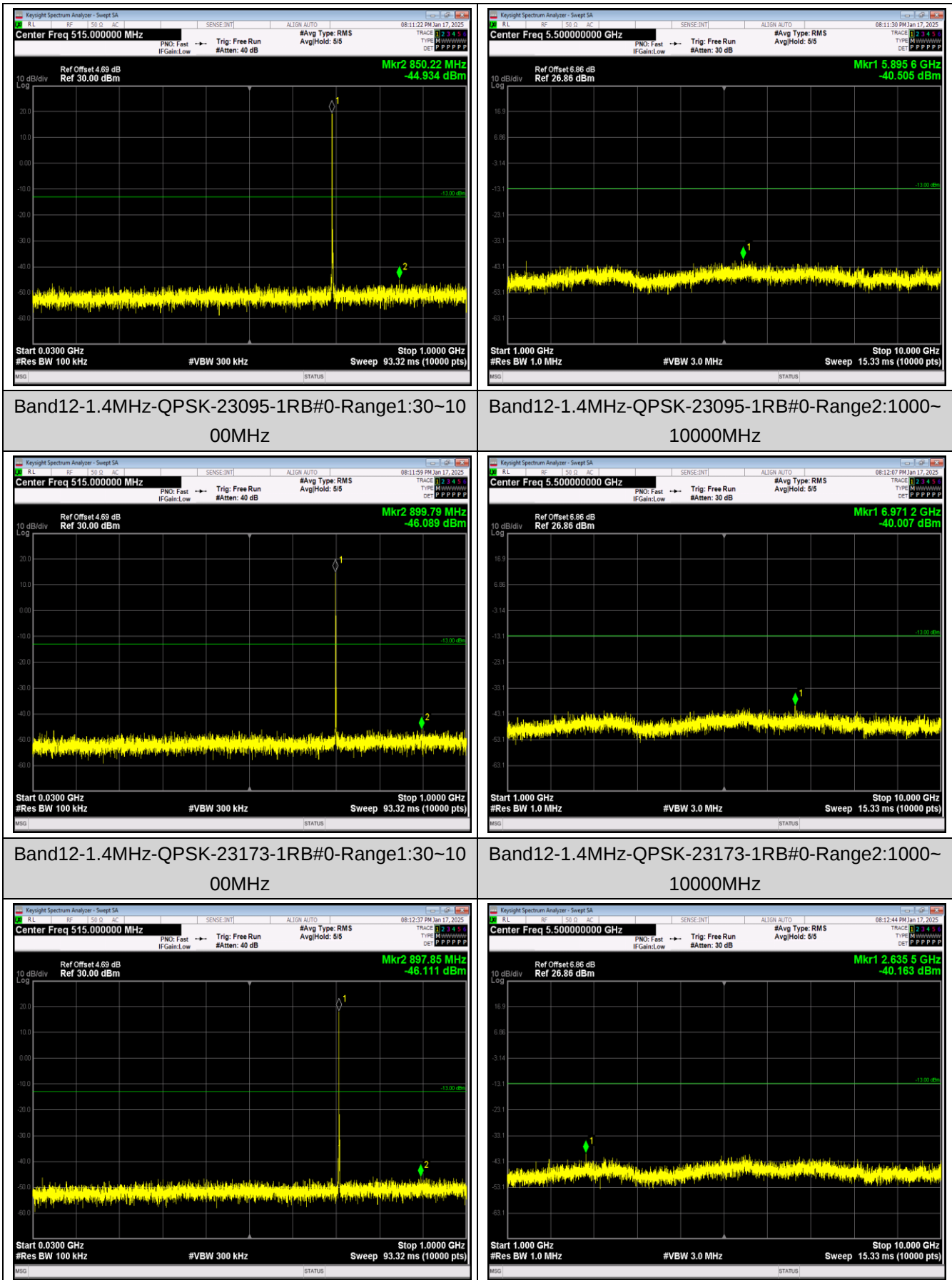


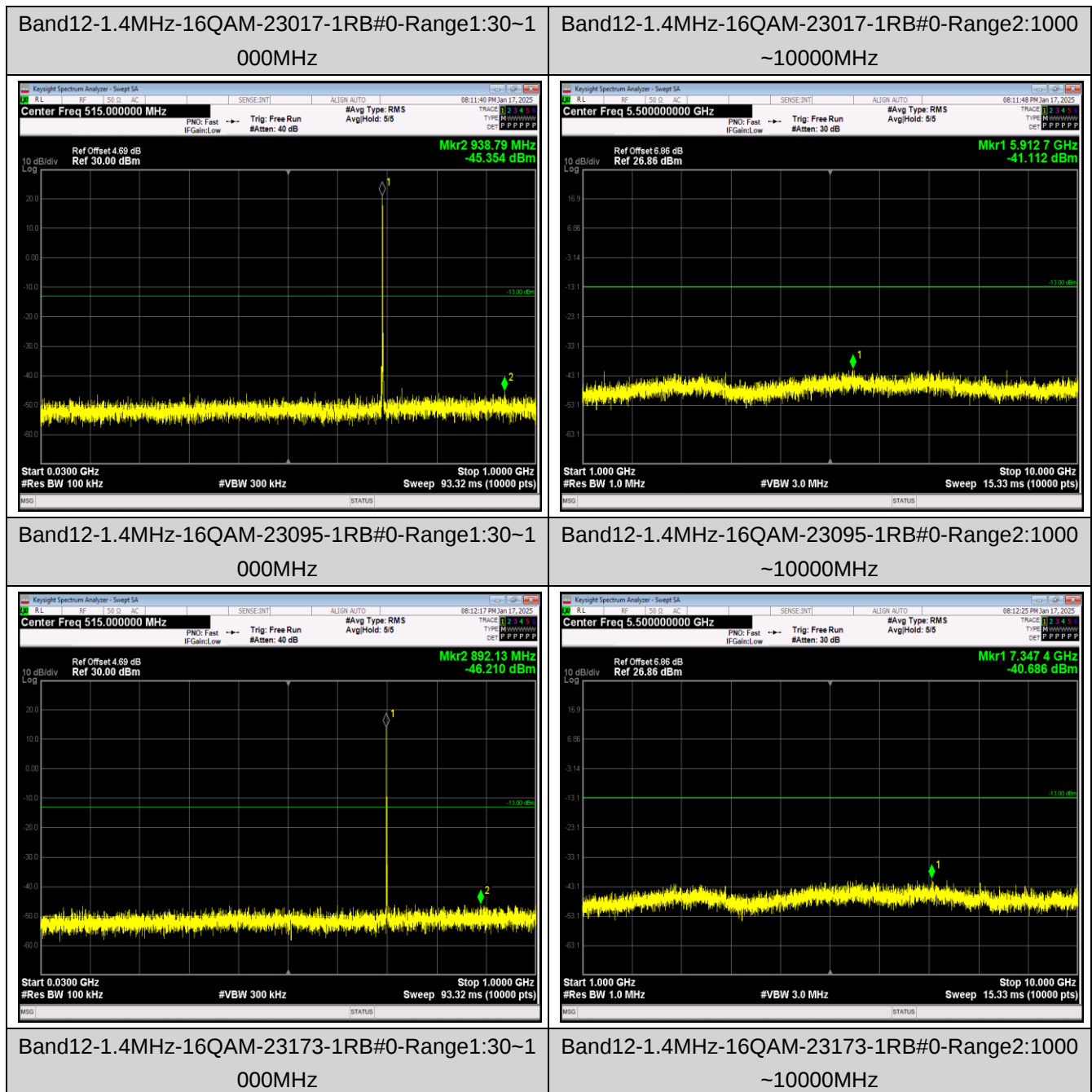
Band4-20MHz-16QAM-20300-1RB#0-Range2:1000~20000MHz

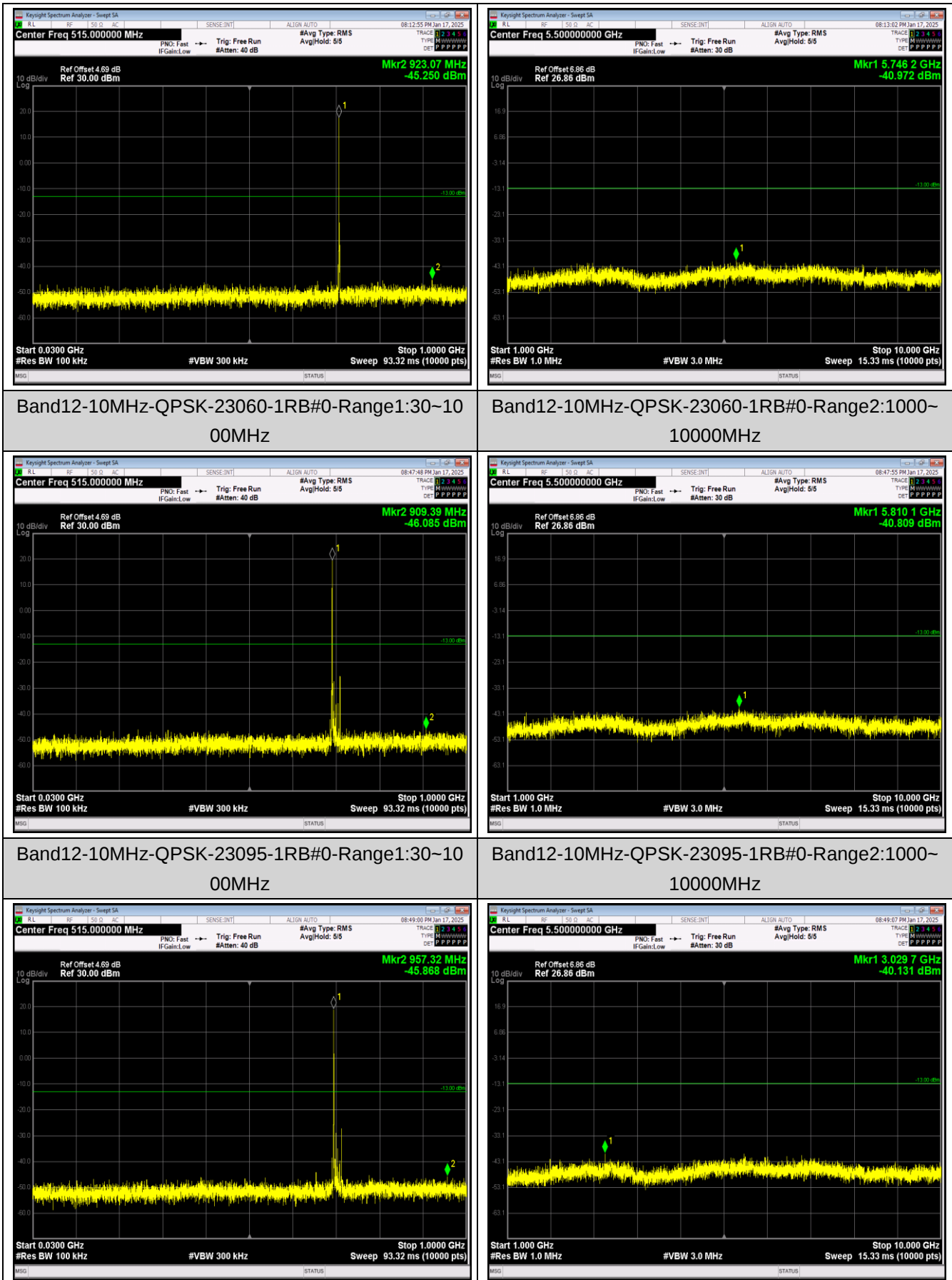


Band12-1.4MHz-QPSK-23017-1RB#0-Range1:30~1000MHz

Band12-1.4MHz-QPSK-23017-1RB#0-Range2:1000~10000MHz







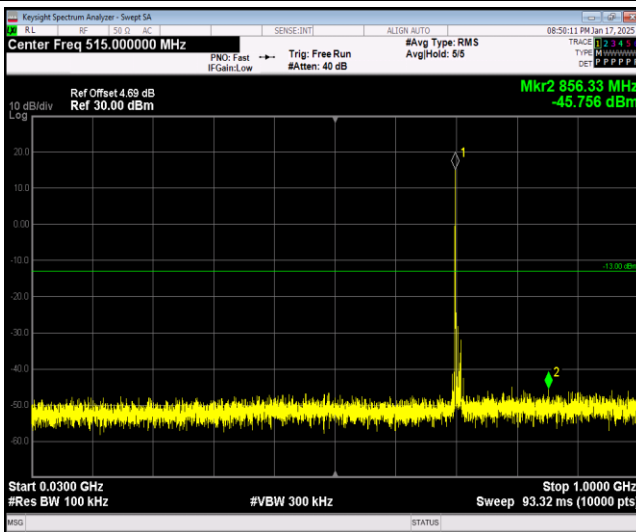
Band12-10MHz-QPSK-23060-1RB#0-Range1:30~1000MHz

Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~10000MHz

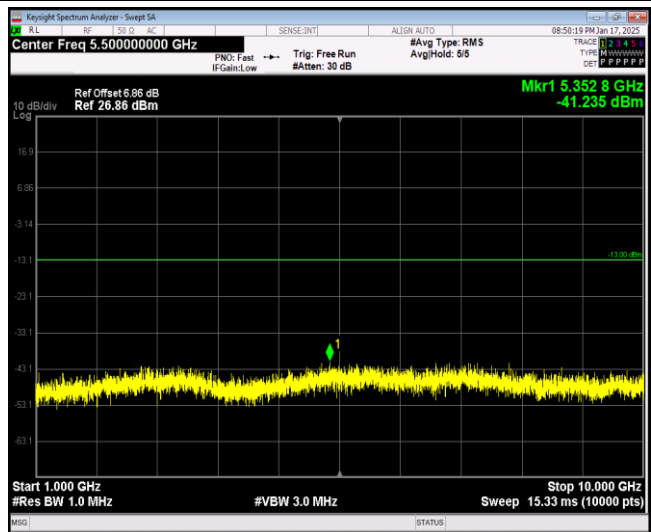
Band12-10MHz-QPSK-23095-1RB#0-Range1:30~1000MHz

Band12-10MHz-QPSK-23095-1RB#0-Range2:1000~10000MHz

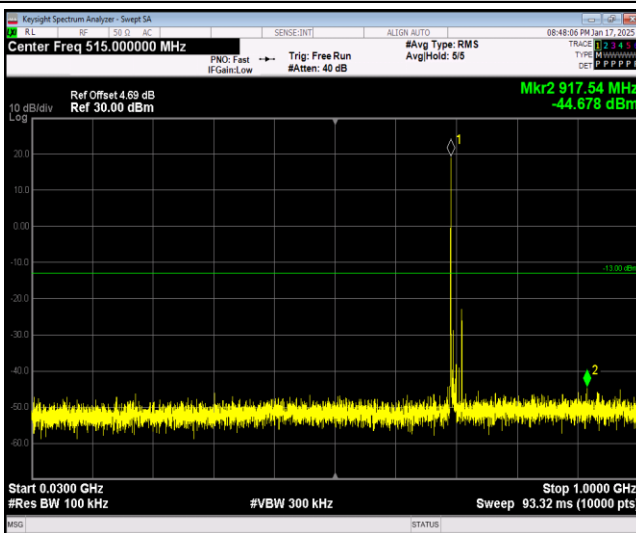
Band12-10MHz-QPSK-23130-1RB#0-Range1:30~1000MHz



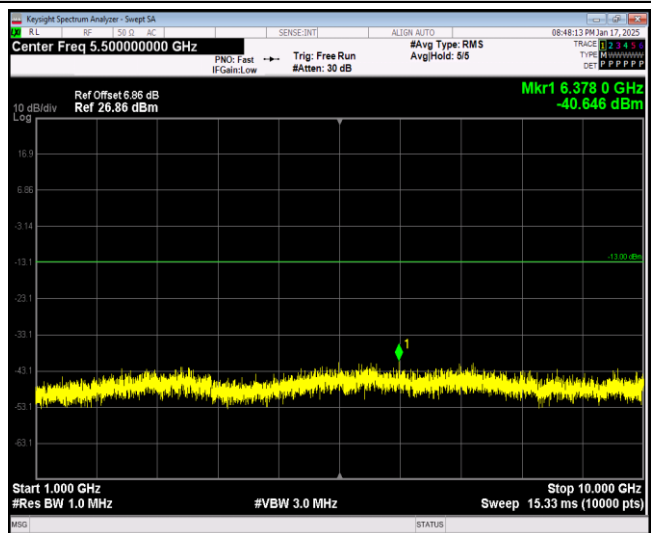
Band12-10MHz-QPSK-23130-1RB#0-Range2:1000~10000MHz



Band12-10MHz-16QAM-23060-1RB#0-Range1:30~1000MHz



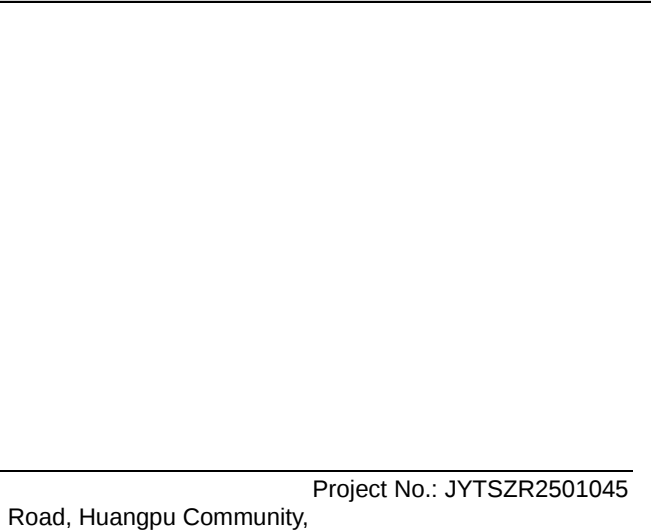
Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~10000MHz

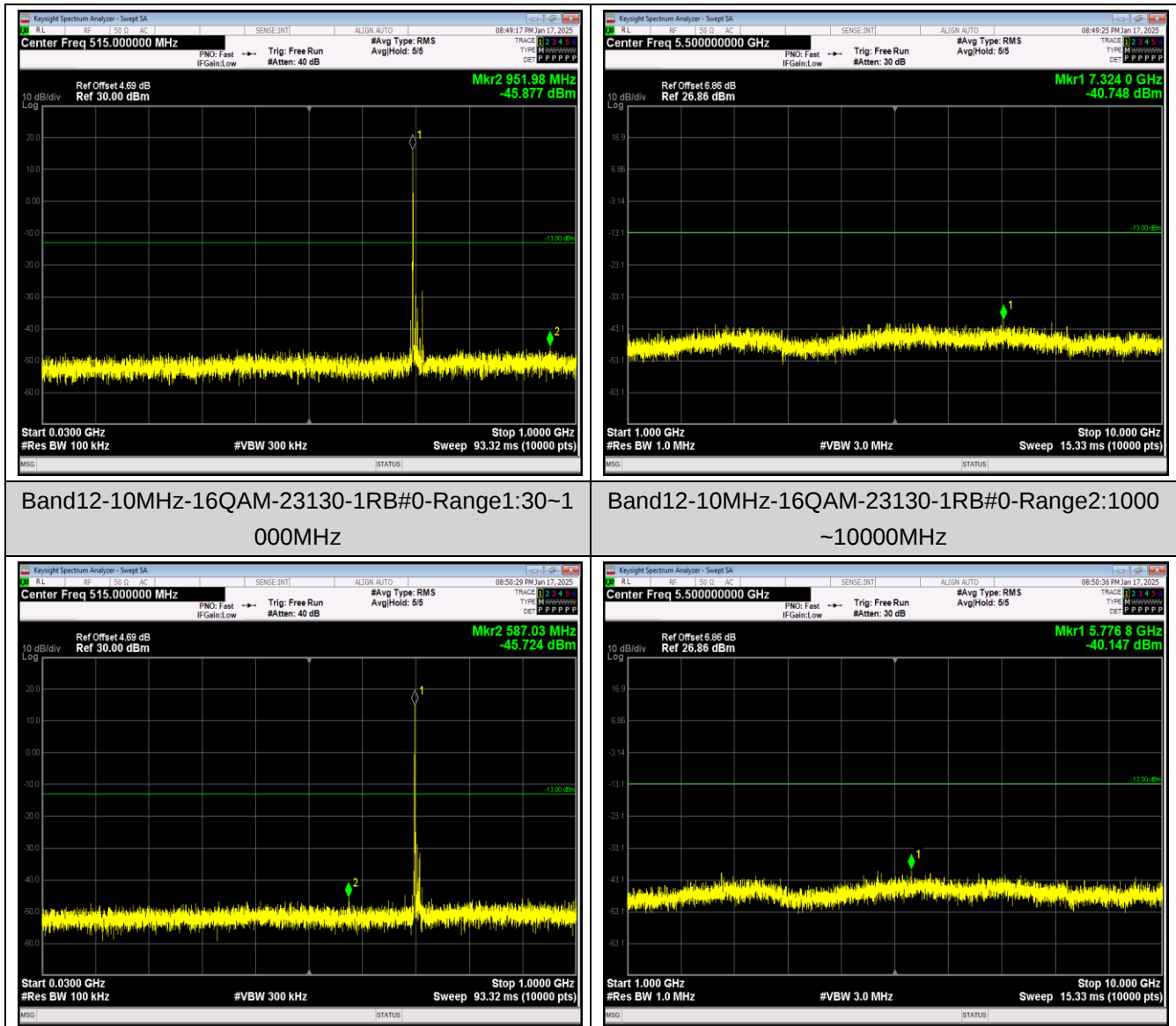


Band12-10MHz-16QAM-23095-1RB#0-Range1:30~1000MHz



Band12-10MHz-16QAM-23095-1RB#0-Range2:1000~10000MHz





Appendix F: Frequency Stability

Test Result

LTE Band 4 part:

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175 Frequency=1732.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	34.22	0.019752	Within authorized band for Band 4	Pass
	-20	27.39	0.015810		
	-10	28.14	0.016242		
	0	24.20	0.013968		
	10	18.42	0.010632		
	20	27.51	0.015879		
	30	29.27	0.016895		
	40	27.41	0.015821		
	50	24.08	0.013899		
16QAM					
3.70	-30	22.79	0.013154	Within authorized band for Band 4	Pass
	-20	13.55	0.007821		
	-10	26.29	0.015175		
	0	25.96	0.014984		
	10	26.34	0.015203		
	20	21.93	0.012658		
	30	23.85	0.013766		
	40	28.85	0.016652		
	50	12.06	0.006961		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	33.22	0.019175	Within authorized band for Band 4	Pass
	3.70	40.28	0.023250		
	4.20	32.13	0.018545		
16QAM					
25	3.50	26.28	0.015169	Within authorized band for Band 4	Pass
	3.70	26.22	0.015134		
	4.20	26.02	0.015019		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 12 part:

Reference Frequency: LTE Band 12(10MHz) Middle channel=23095 Frequency=707.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	27.74	0.039208	Within authorized band for Band 12	Pass
	-20	23.65	0.033428		
	-10	26.85	0.037951		
	0	29.75	0.042049		
	10	26.11	0.036905		
	20	22.99	0.032495		
	30	23.39	0.033060		
	40	25.13	0.035519		
	50	29.10	0.041131		
16QAM					
3.70	-30	-13.58	-0.019194	Within authorized band for Band 12	Pass
	-20	-13.42	-0.018968		
	-10	5.95	0.008410		
	0	4.62	0.006530		
	10	25.29	0.035746		
	20	2.17	0.003067		
	30	-16.37	-0.023138		
	40	-14.63	-0.020678		
	50	11.87	0.016777		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	30.44	0.043025	Within authorized band for Band 12	Pass
	3.70	25.75	0.036396		
	4.20	19.88	0.028099		
16QAM					
25	3.50	-13.80	-0.019505	Within authorized band for Band 12	Pass
	3.70	-29.71	-0.041993		
	4.20	-18.93	-0.026756		
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
Band4	20MHz	QPSK	20175	100RB#0	PASS	PASS
Band4	20MHz	16QAM	20175	27RB#0	PASS	PASS
Band12	10MHz	QPSK	23095	50RB#0	PASS	PASS
Band12	10MHz	16QAM	23095	27RB#0	PASS	PASS

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

Test Graphs

