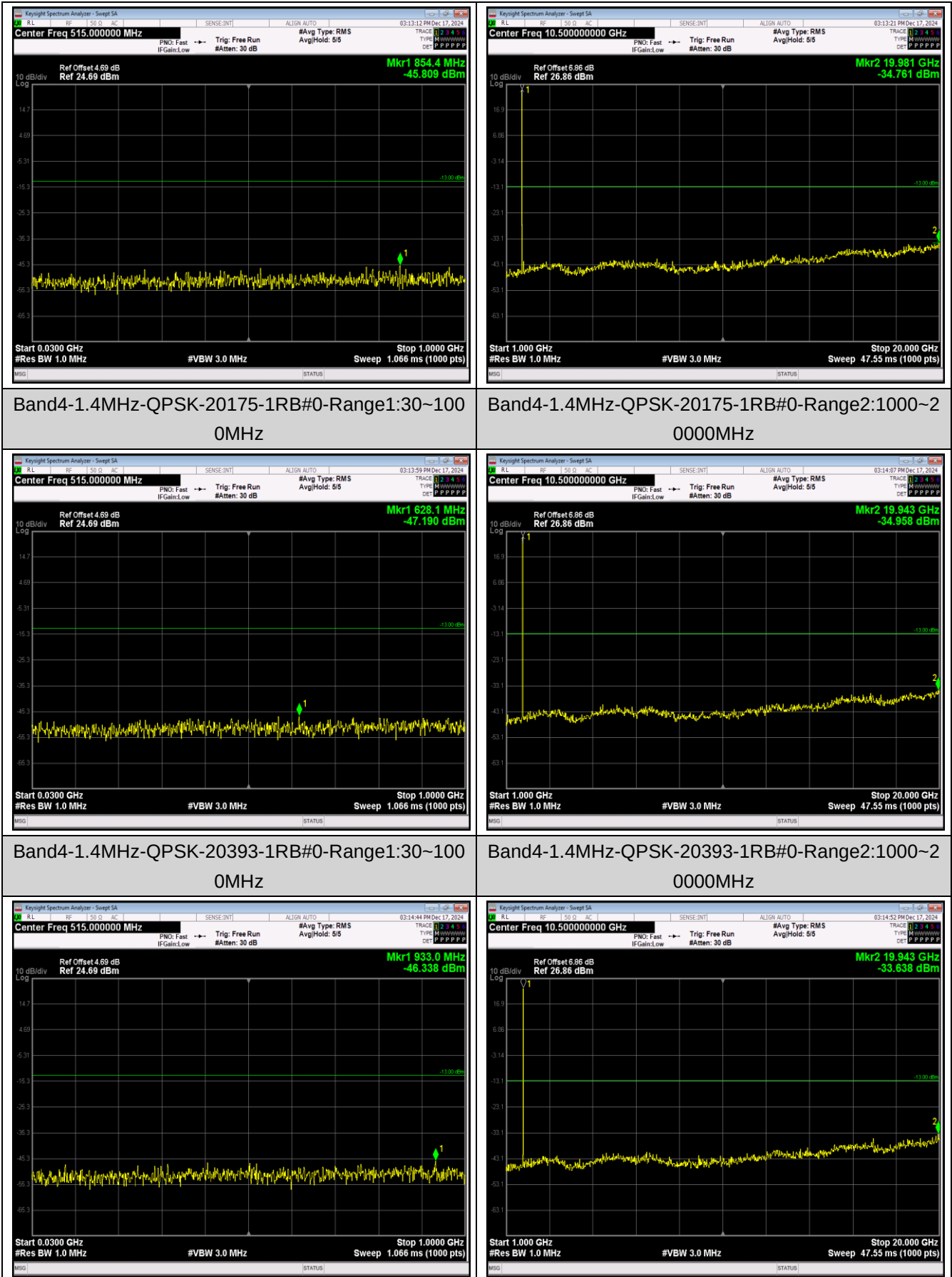
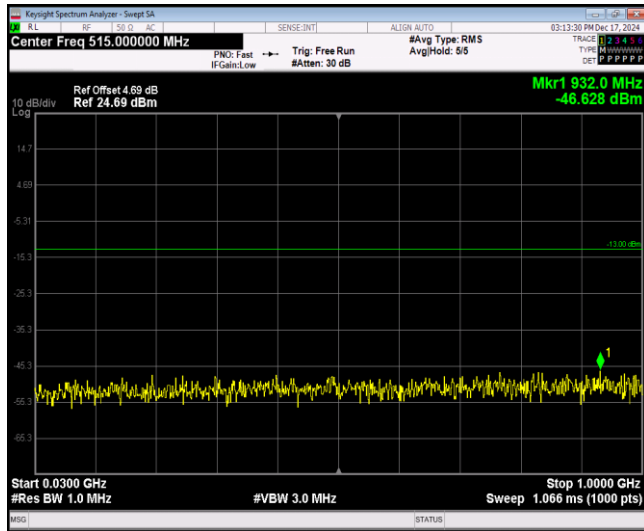
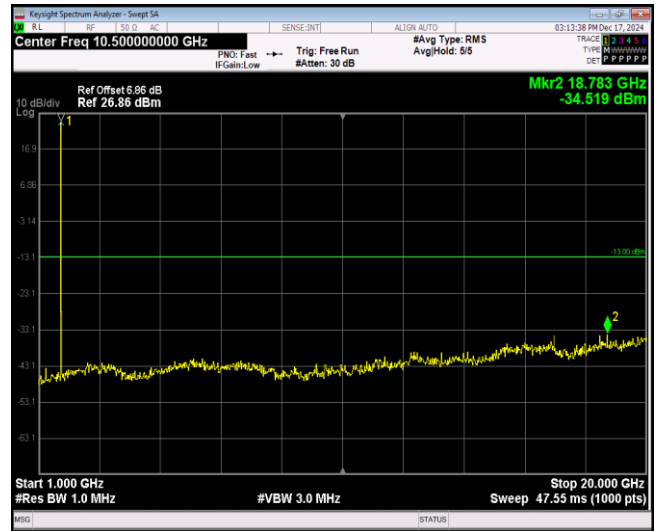




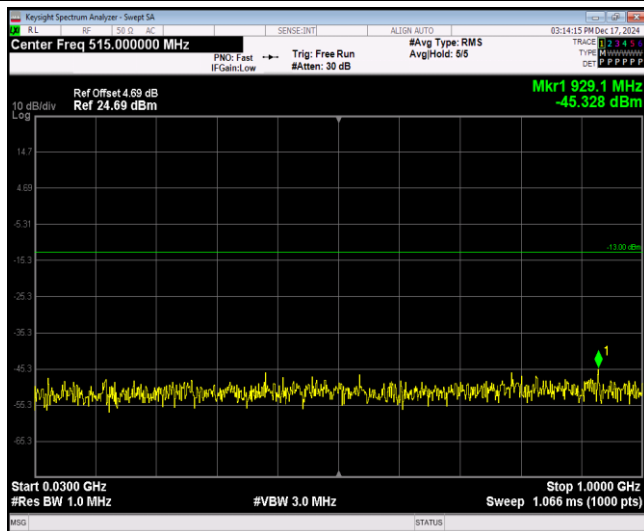
Band4-1.4MHz-16QAM-19957-1RB#0-Range1:30~1000MHz



Band4-1.4MHz-16QAM-19957-1RB#0-Range2:1000~20000MHz



Band4-1.4MHz-16QAM-20175-1RB#0-Range1:30~1000MHz



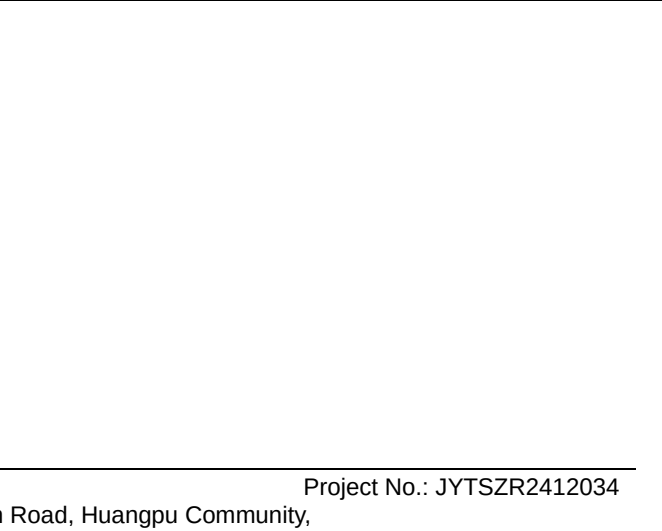
Band4-1.4MHz-16QAM-20175-1RB#0-Range2:1000~20000MHz

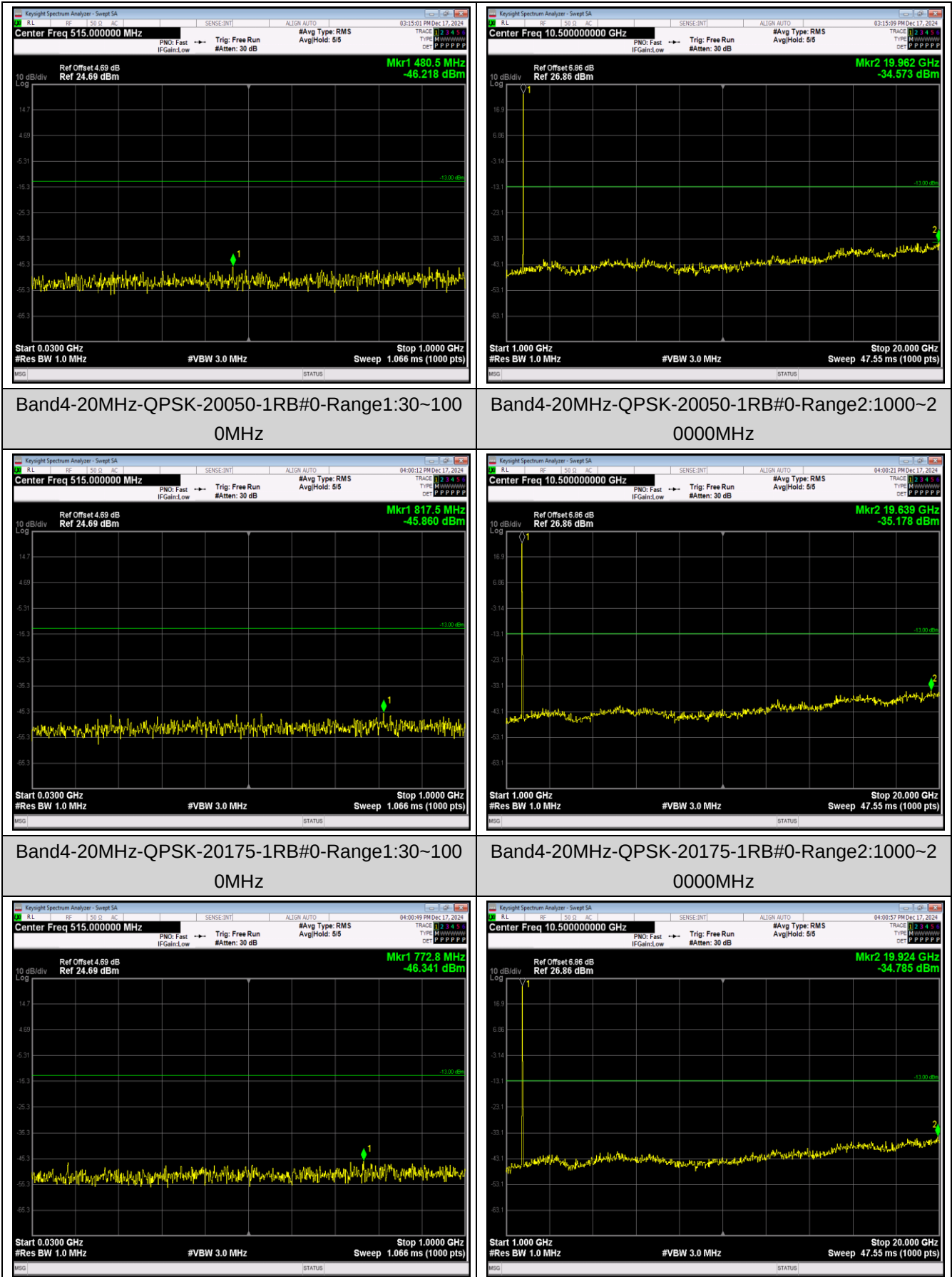


Band4-1.4MHz-16QAM-20393-1RB#0-Range1:30~1000MHz

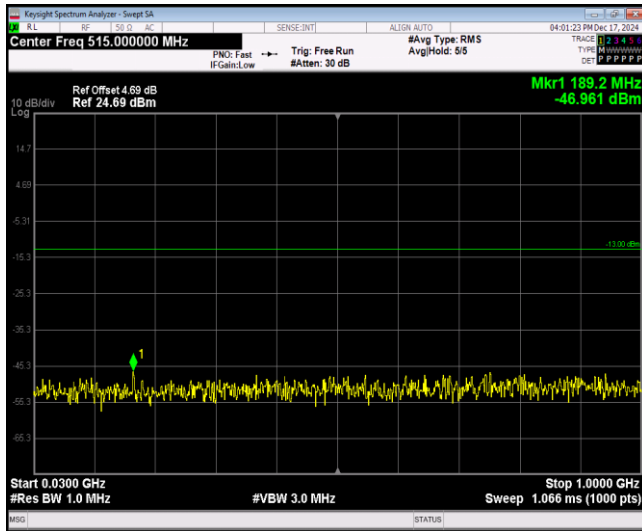


Band4-1.4MHz-16QAM-20393-1RB#0-Range2:1000~20000MHz

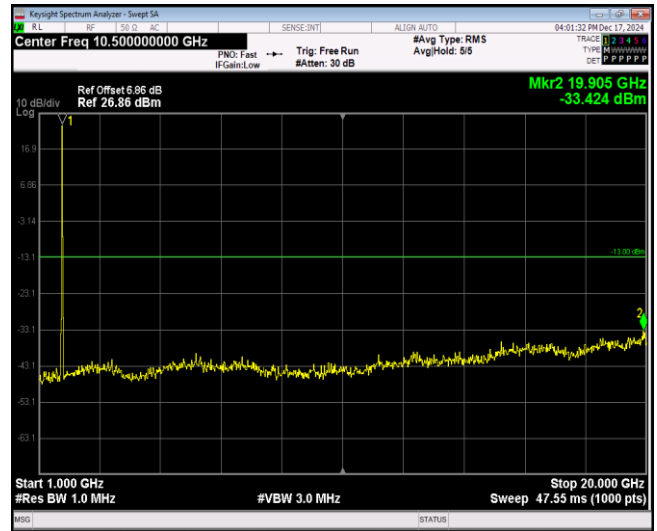




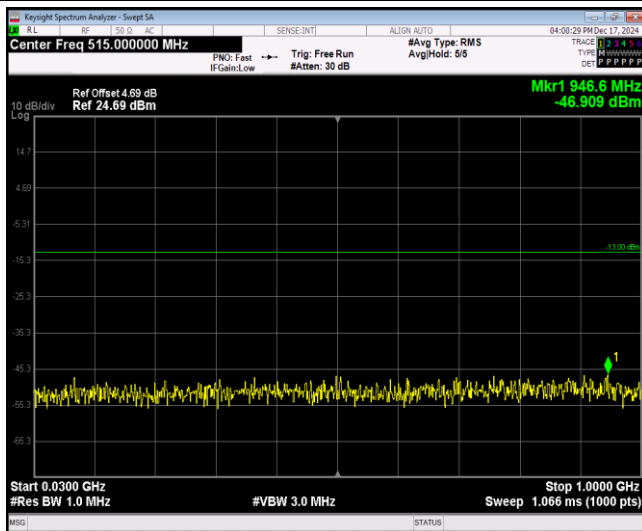
Band4-20MHz-QPSK-20300-1RB#0-Range1:30~100
0MHz



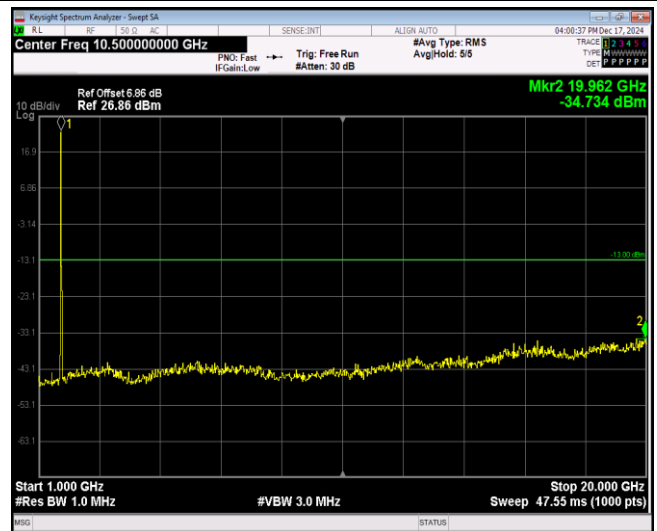
Band4-20MHz-QPSK-20300-1RB#0-Range2:1000~2
0000MHz



Band4-20MHz-16QAM-20050-1RB#0-Range1:30~10
00MHz

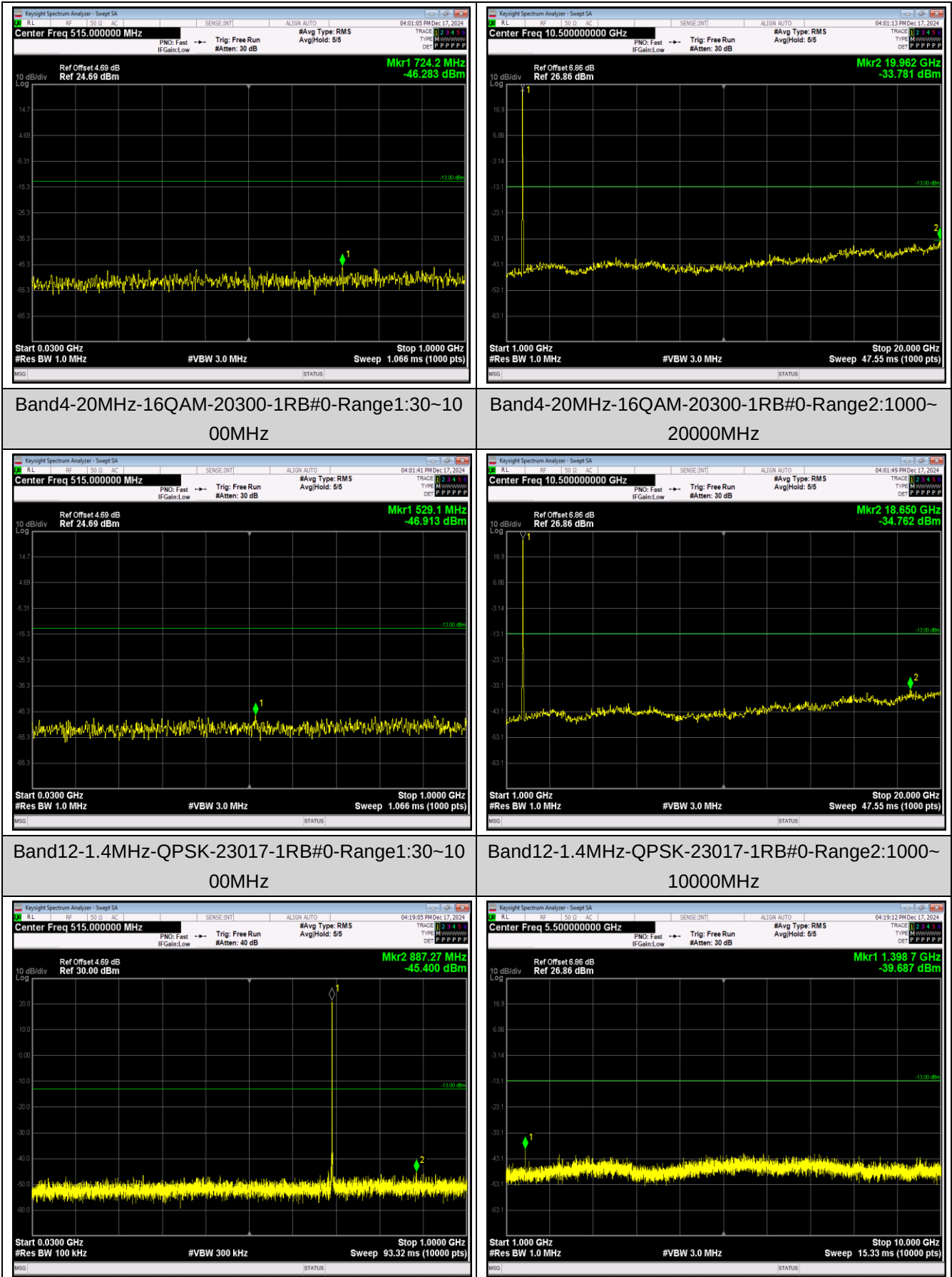


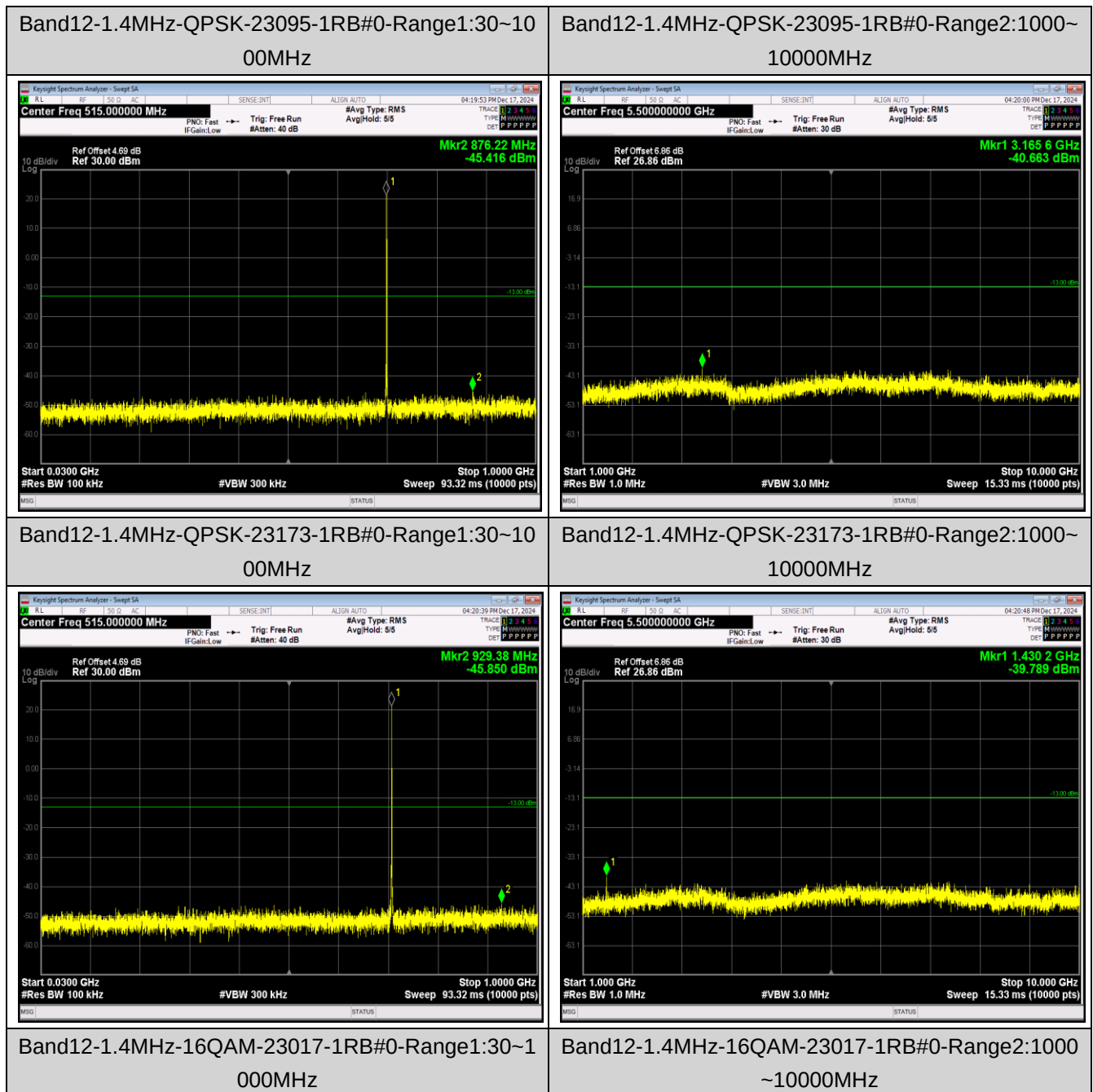
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20000MHz

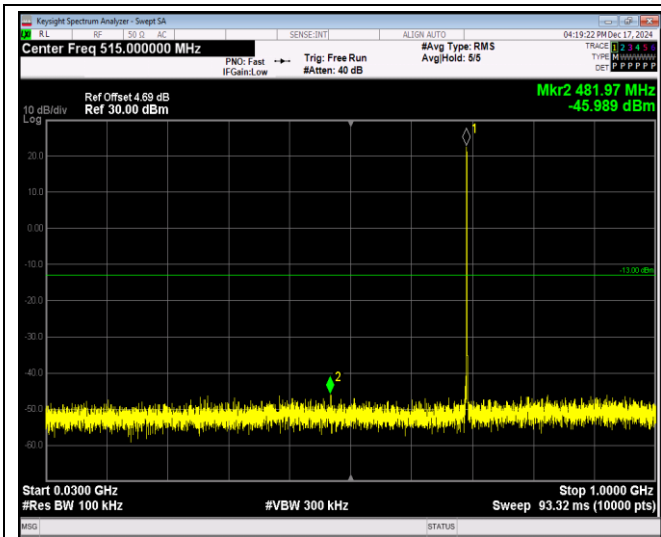


Band4-20MHz-16QAM-20175-1RB#0-Range1:30~10
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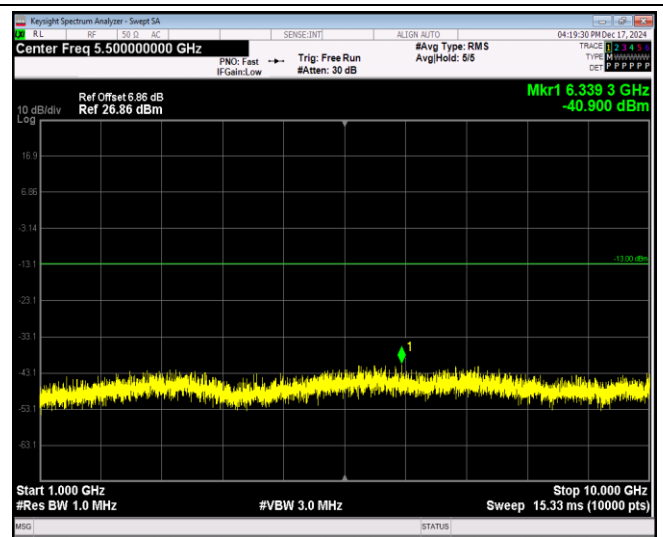
Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~
20000MHz



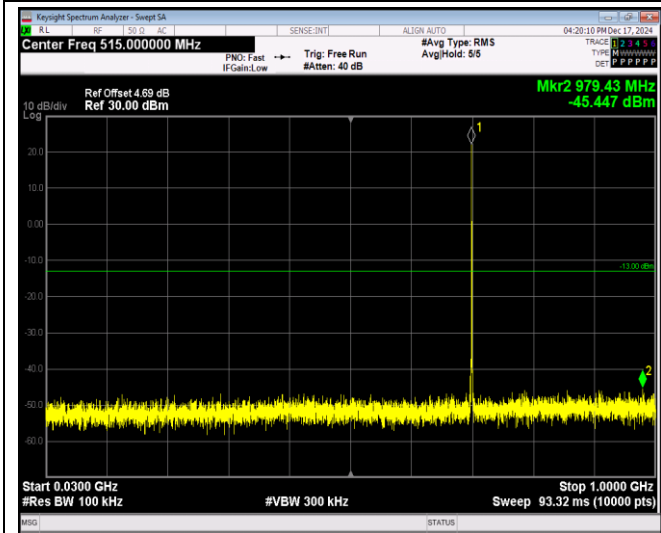




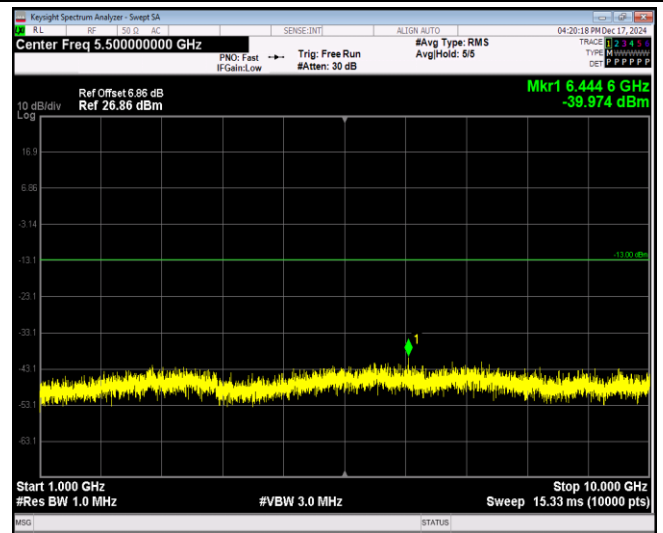
Band12-1.4MHz-16QAM-23095-1RB#0-Range1:30~1 000MHz



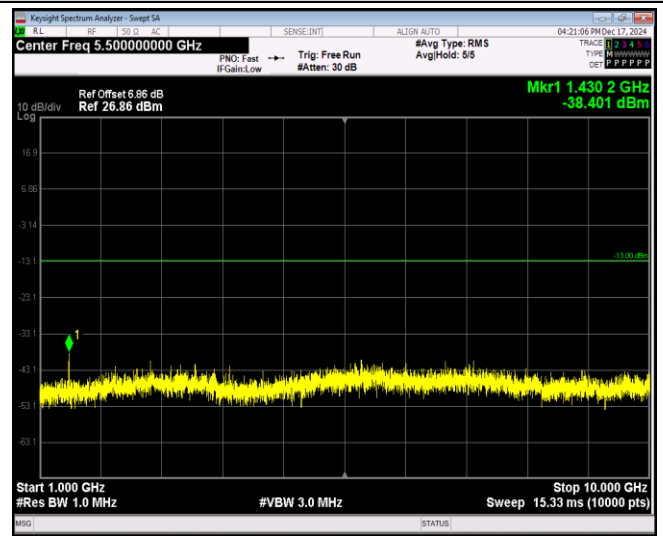
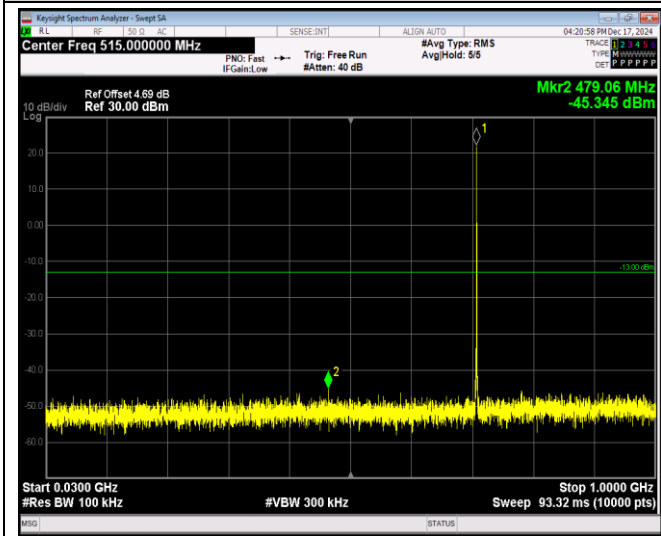
Band12-1.4MHz-16QAM-23095-1RB#0-Range2:1000 ~10000MHz



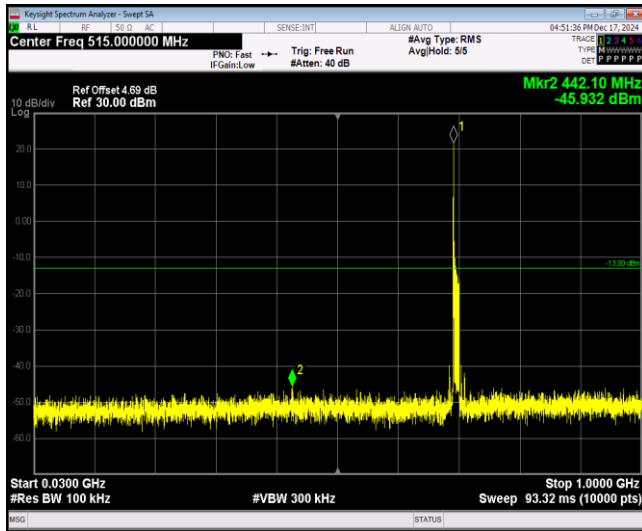
Band12-1.4MHz-16QAM-23173-1RB#0-Range1:30~1 000MHz



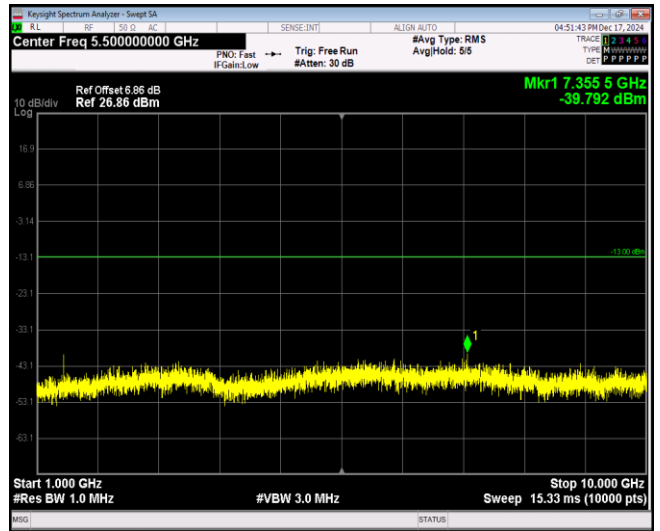
Band12-1.4MHz-16QAM-23173-1RB#0-Range2:1000 ~10000MHz



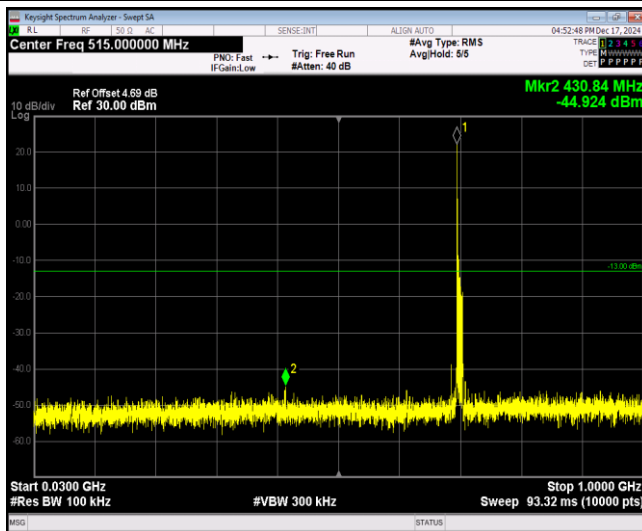
Band12-10MHz-QPSK-23060-1RB#0-Range1:30~1000MHz



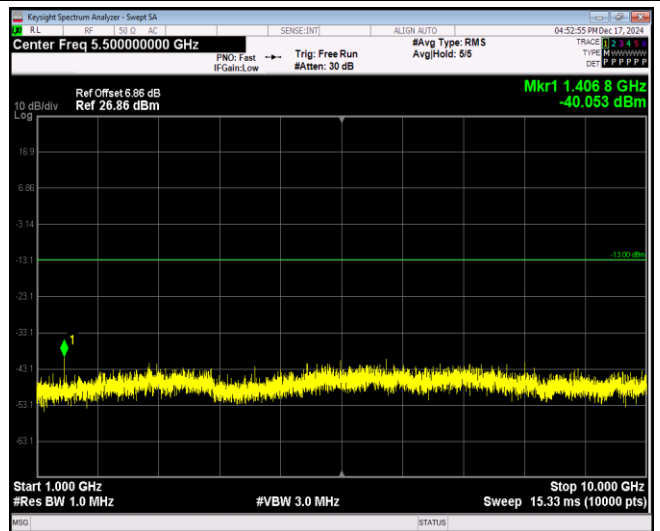
Band12-10MHz-QPSK-23060-1RB#0-Range2:1000~10000MHz



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



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

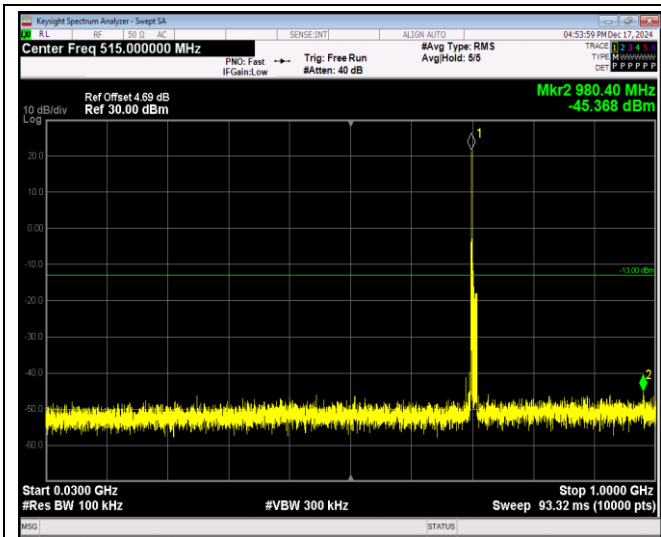


Band12-10MHz-QPSK-23130-1RB#0-Range1:30~1000MHz

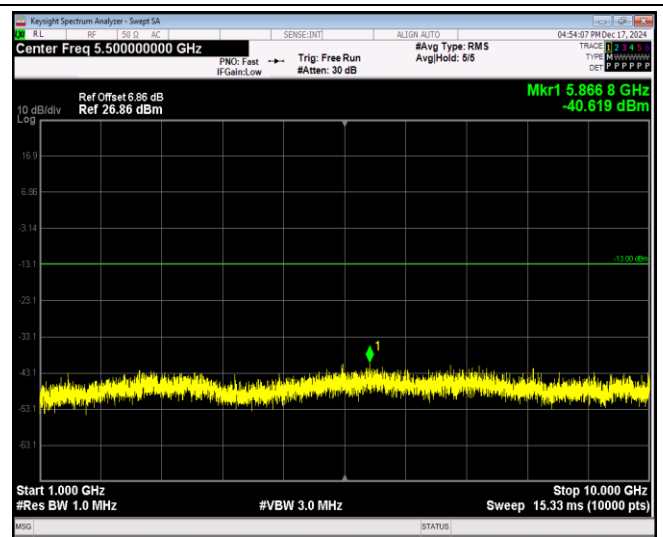


Band12-10MHz-QPSK-23130-1RB#0-Range2:1000~10000MHz

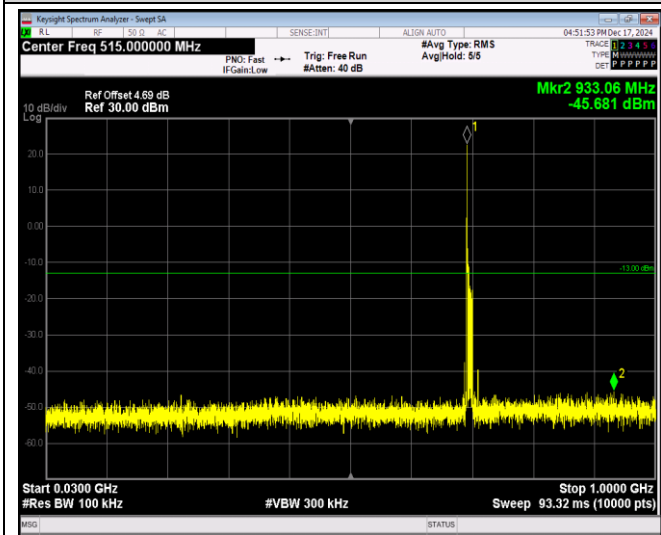




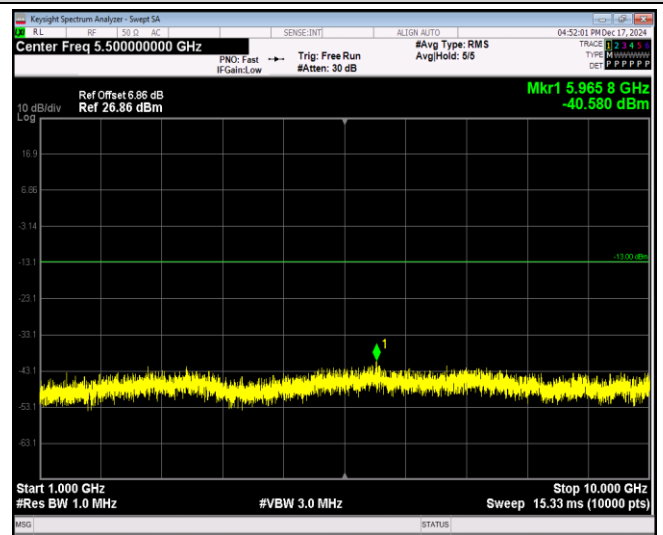
Band12-10MHz-16QAM-23060-1RB#0-Range1:30~-1000MHz



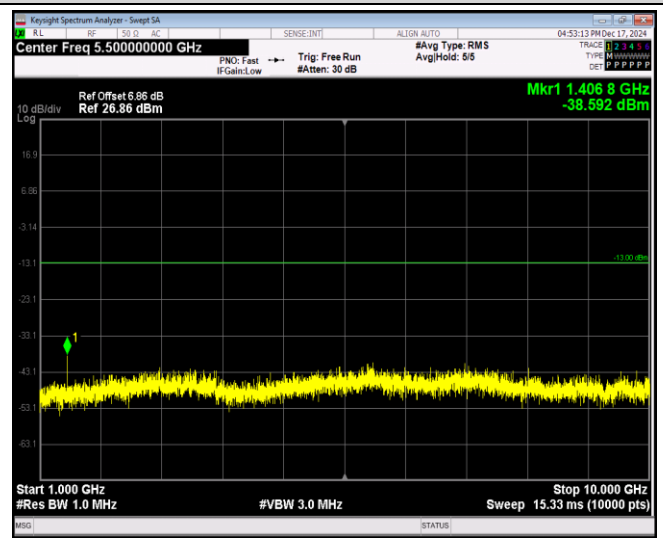
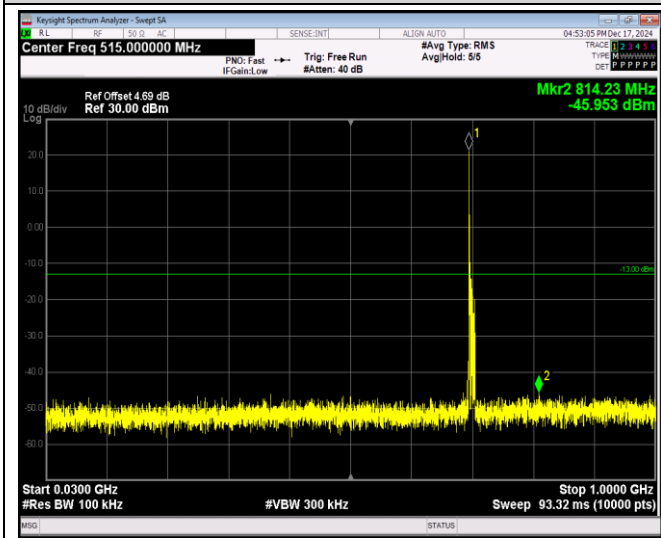
Band12-10MHz-16QAM-23060-1RB#0-Range2:1000~10000MHz

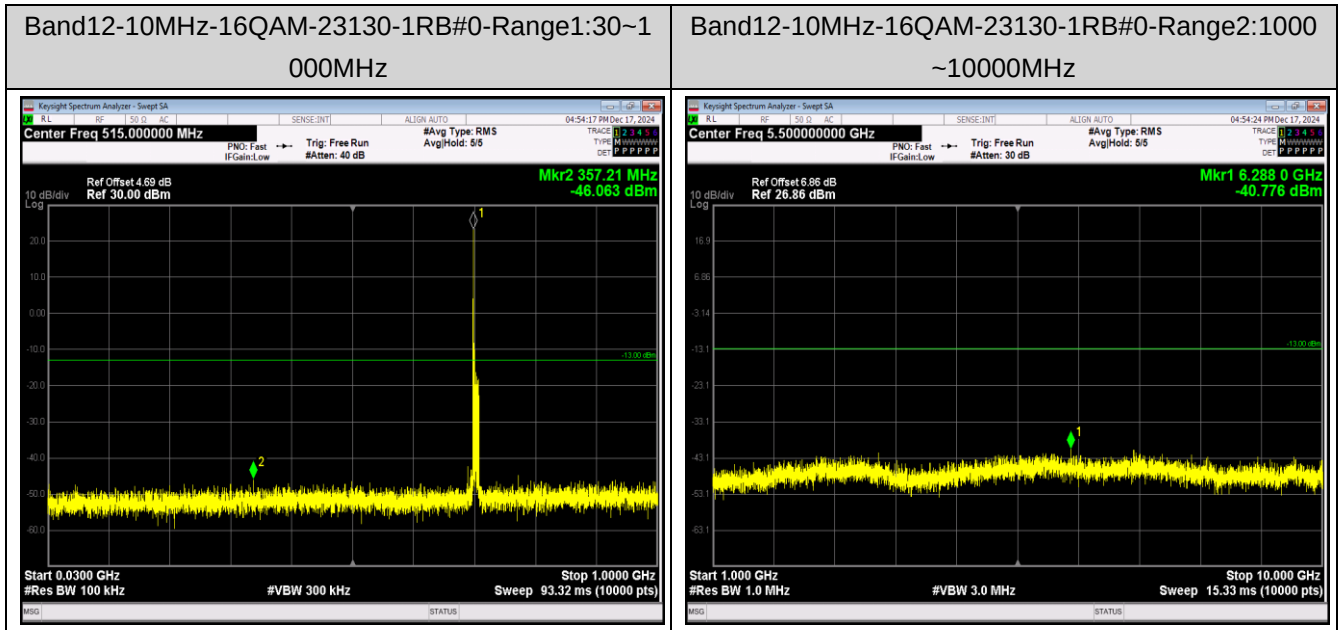


Band12-10MHz-16QAM-23095-1RB#0-Range1:30~-1000MHz



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





Appendix F: Frequency Stability

Test Result LTE Band 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					
3.70	-30	24.63	0.013101	Within authorized band for Band 2	Pass
	-20	44.63	0.023739		
	-10	13.09	0.006963		
	0	43.85	0.023324		
	10	48.22	0.025649		
	20	36.91	0.019633		
	30	40.43	0.021505		
	40	18.98	0.010096		
	50	21.13	0.011239		
16QAM					
3.70	-30	40.30	0.021436	Within authorized band for Band 2	Pass
	-20	22.69	0.012069		
	-10	29.85	0.015878		
	0	39.34	0.020926		
	10	50.25	0.026729		
	20	-6.84	-0.003638		
	30	8.48	0.004511		
	40	22.87	0.012165		
	50	26.85	0.014282		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	49.60	0.026383	Within authorized band for Band 2	Pass
	3.70	49.97	0.026580		
	4.20	55.73	0.029644		
16QAM					
25	3.40	18.07	0.009612	Within authorized band for Band 2	Pass
	3.70	-13.15	-0.006995		
	4.20	29.10	0.015479		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

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	37.74	0.021784	Within authorized band for Band 4	Pass
	-20	56.68	0.032716		
	-10	9.36	0.005403		
	0	37.01	0.021362		
	10	8.14	0.004698		
	20	38.42	0.022176		
	30	34.69	0.020023		
	40	46.58	0.026886		
	50	34.99	0.020196		
16QAM					
3.70	-30	32.11	0.018534	Within authorized band for Band 4	Pass
	-20	40.04	0.023111		
	-10	46.85	0.027042		
	0	-11.70	-0.006753		
	10	4.55	0.002626		
	20	15.45	0.008918		
	30	23.67	0.013662		
	40	38.09	0.021986		
	50	11.97	0.006909		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	46.45	0.026811	Within authorized band for Band 4	Pass
	3.70	34.83	0.020104		
	4.20	36.78	0.021229		
16QAM					
25	3.40	27.25	0.015729	Within authorized band for Band 4	Pass
	3.70	45.49	0.026257		
	4.20	29.01	0.016745		
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	8.44	0.011929	Within authorized band for Band 12	Pass
	-20	39.18	0.055378		
	-10	47.59	0.067265		
	0	50.21	0.070968		
	10	36.12	0.051053		
	20	25.35	0.035830		
	30	11.66	0.016481		
	40	41.90	0.059223		
	50	13.40	0.018940		
16QAM					
3.70	-30	38.19	0.053979	Within authorized band for Band 12	Pass
	-20	40.24	0.056876		
	-10	41.51	0.058671		
	0	44.25	0.062544		
	10	48.61	0.068707		
	20	7.07	0.009993		
	30	12.73	0.017993		
	40	16.02	0.022643		
	50	19.37	0.027378		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	47.52	0.067166	Within authorized band for Band 12	Pass
	3.70	21.64	0.030587		
	4.20	39.80	0.056254		
16QAM					
25	3.40	45.32	0.064057	Within authorized band for Band 12	Pass
	3.70	40.00	0.056537		
	4.20	39.97	0.056495		
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
Band4	20MHz	QPSK	20175	100RB#0	PASS	PASS
Band4	20MHz	16QAM	20175	100RB#0	PASS	PASS
Band12	10MHz	QPSK	23095	50RB#0	PASS	PASS
Band12	10MHz	16QAM	23095	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

