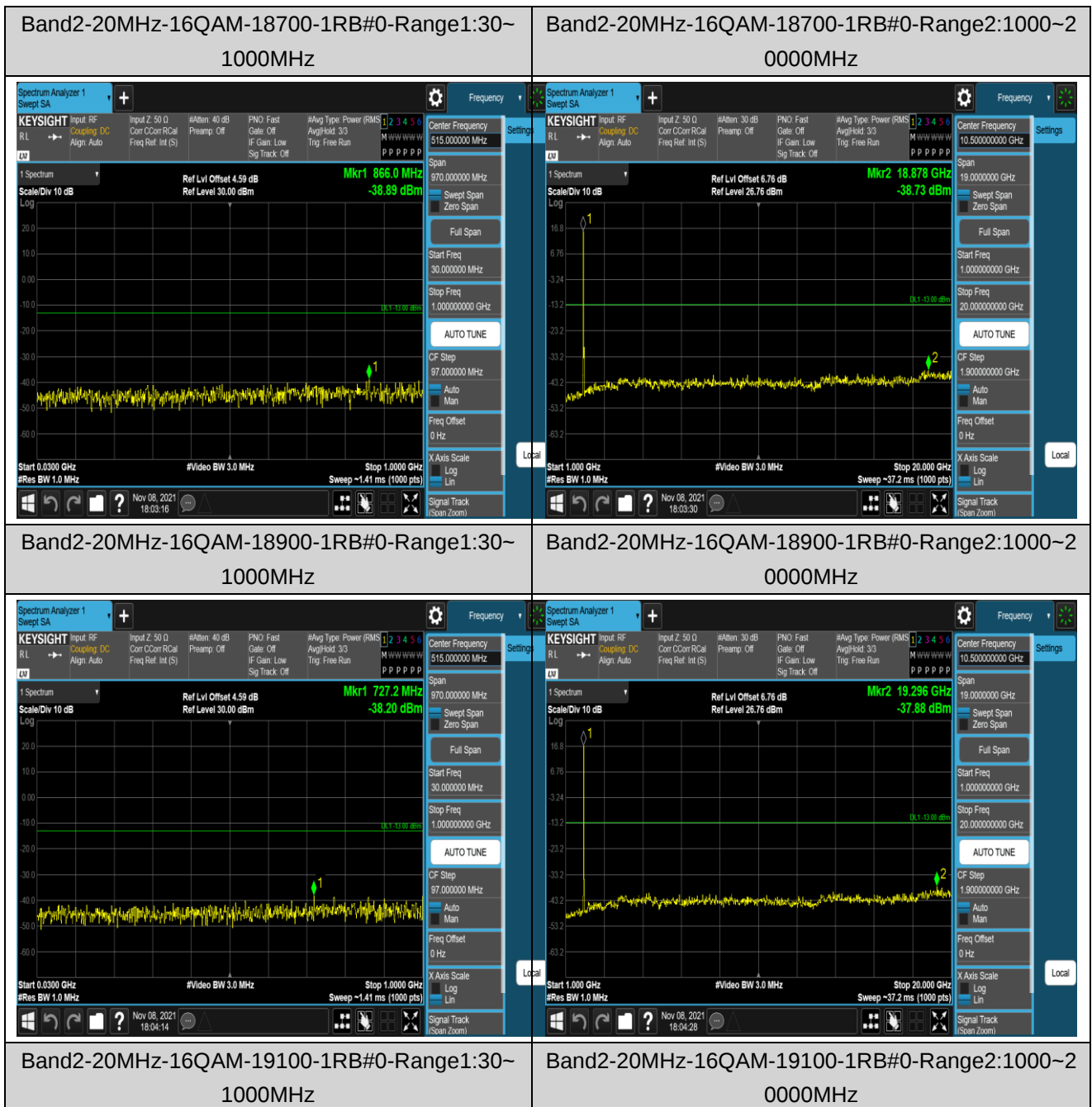
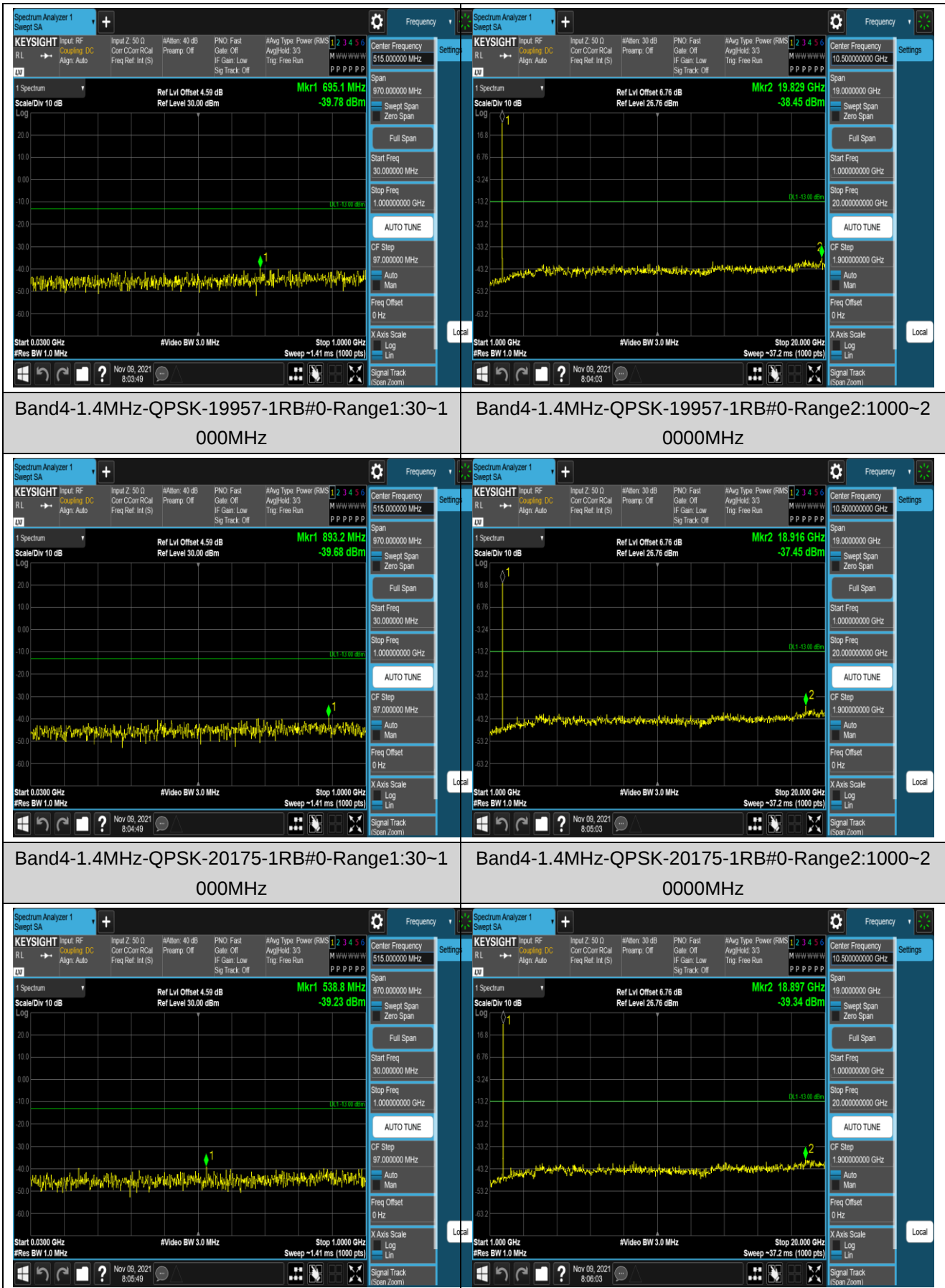




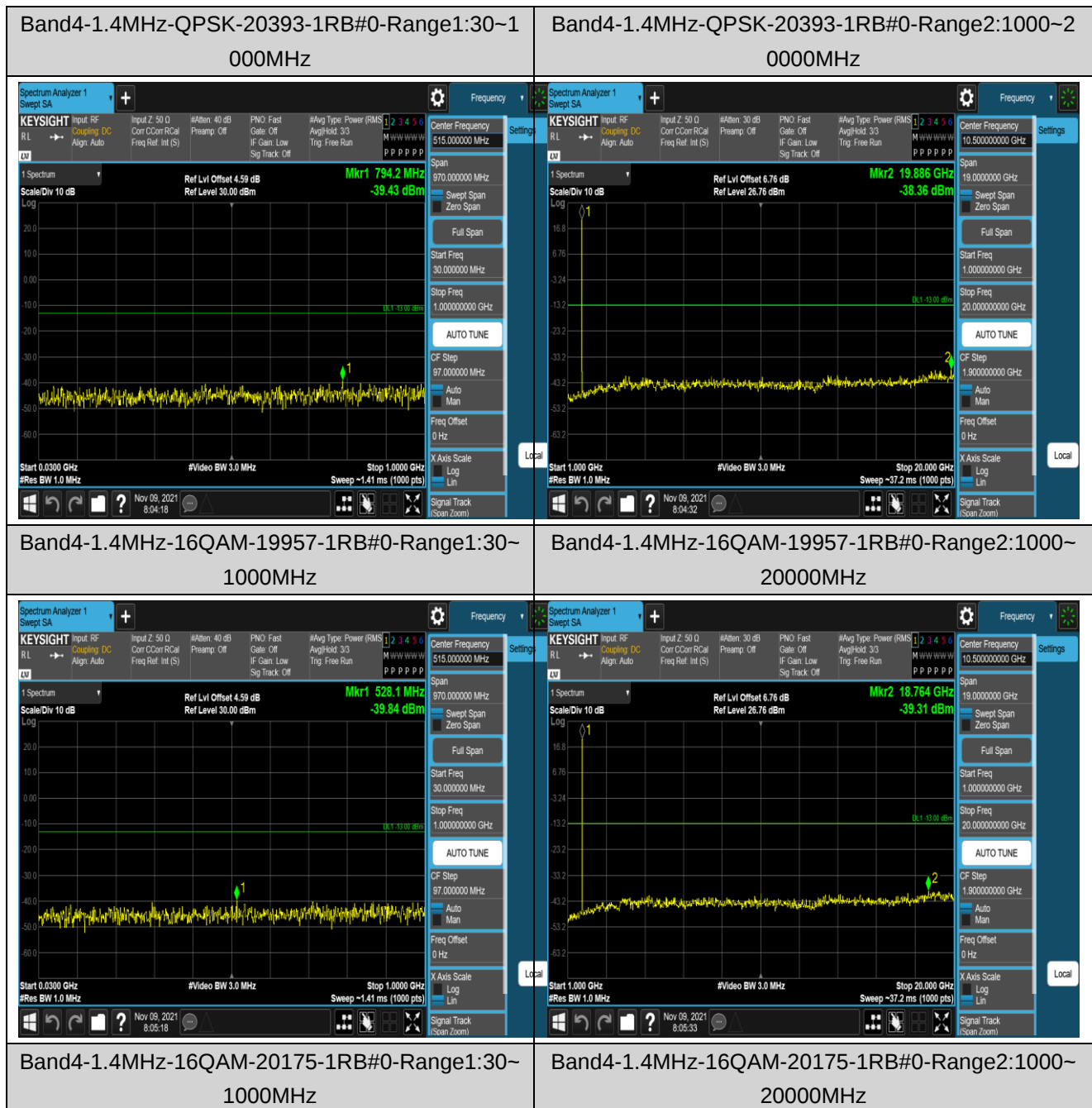


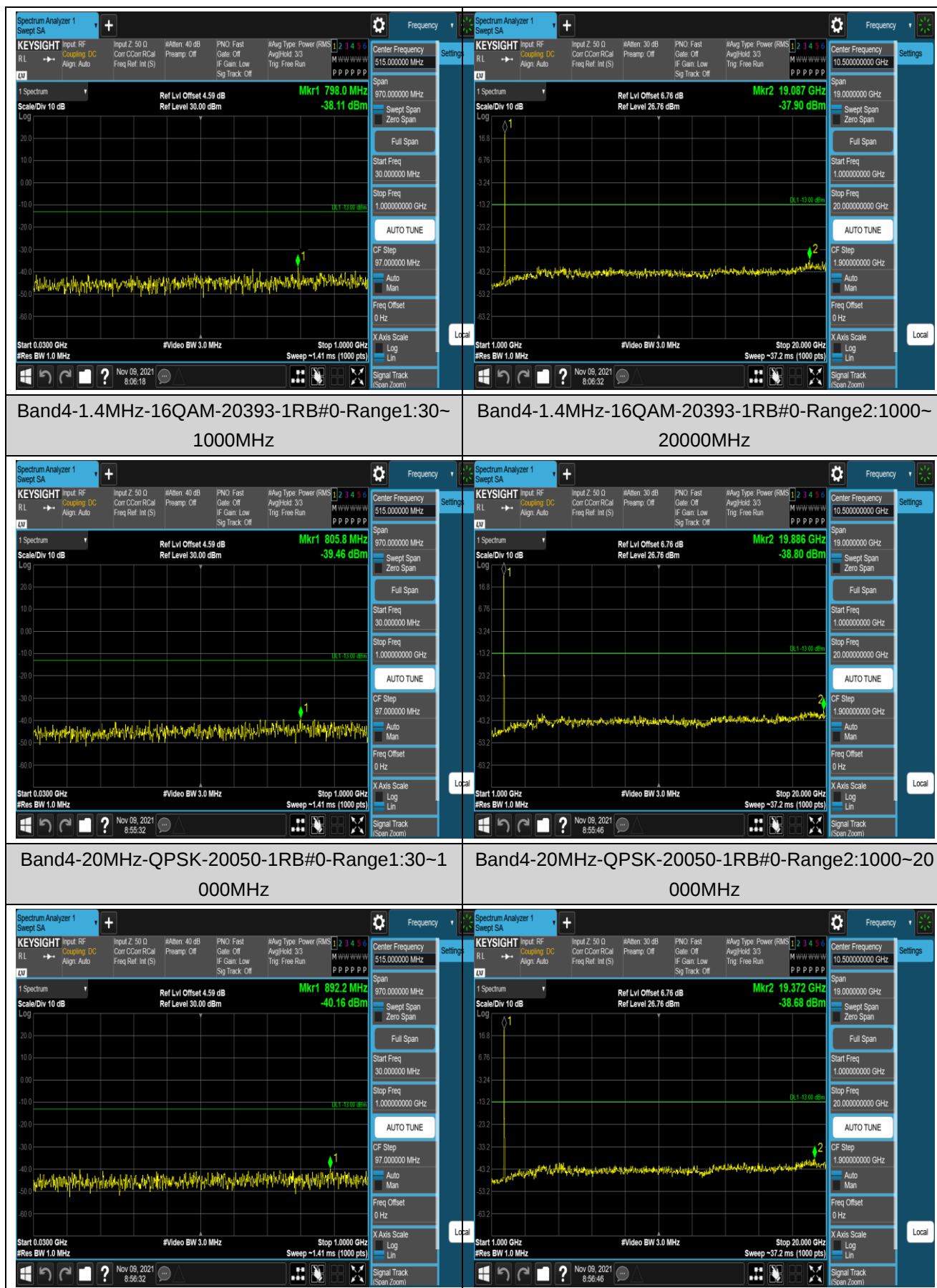
JianYan Testing Group Shenzhen Co., Ltd.

No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

Tel: +86-755-23118282, Fax: +86-755-23116366

Project No.: JYTSZE2111012



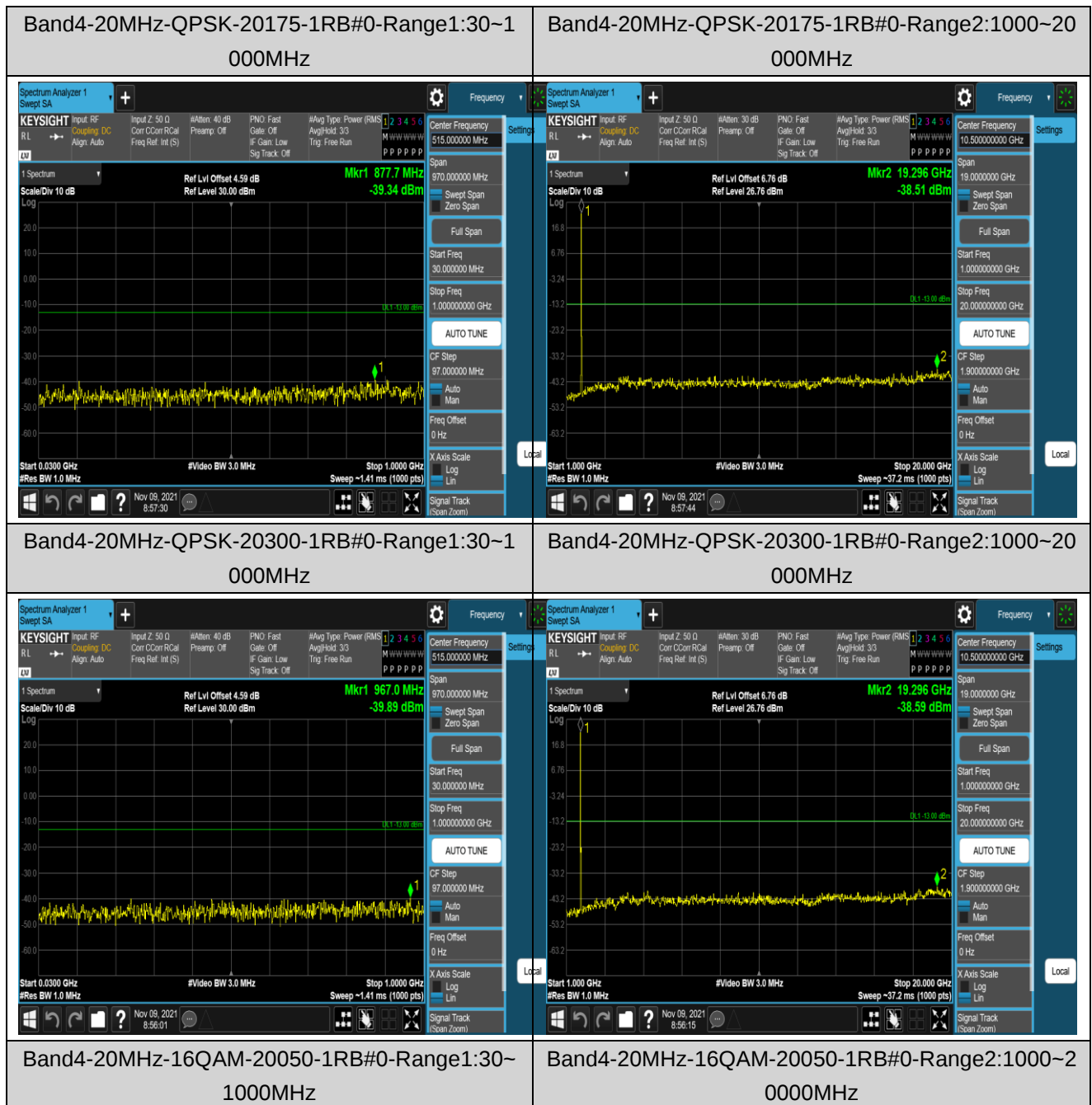


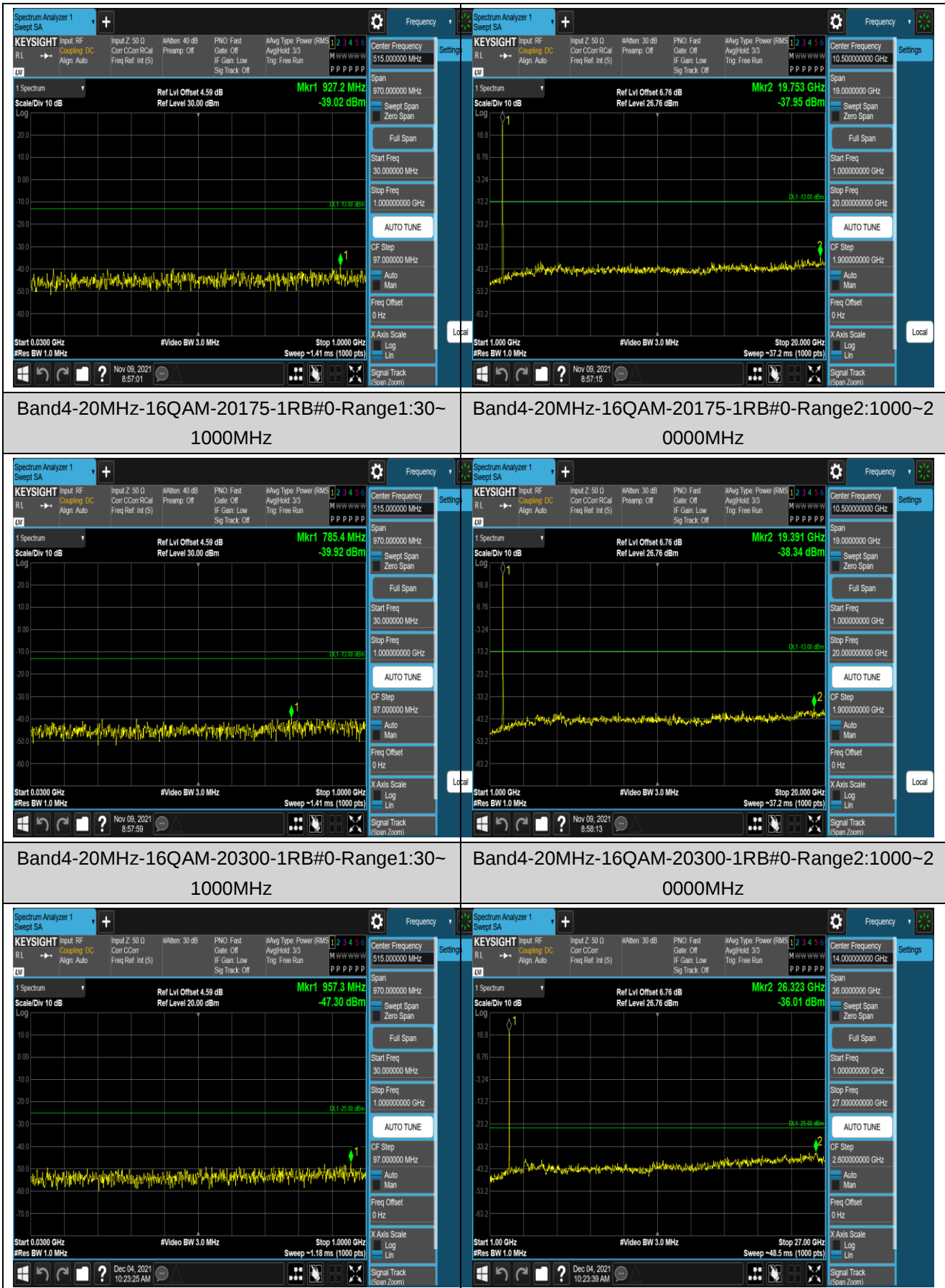
JianYan Testing Group Shenzhen Co., Ltd.

No.101, Building 8, Innovation Wisdom Port, No.155 Hongtian Road, Huangpu Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, People's Republic of China.

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Project No.: JYTSZE2111012



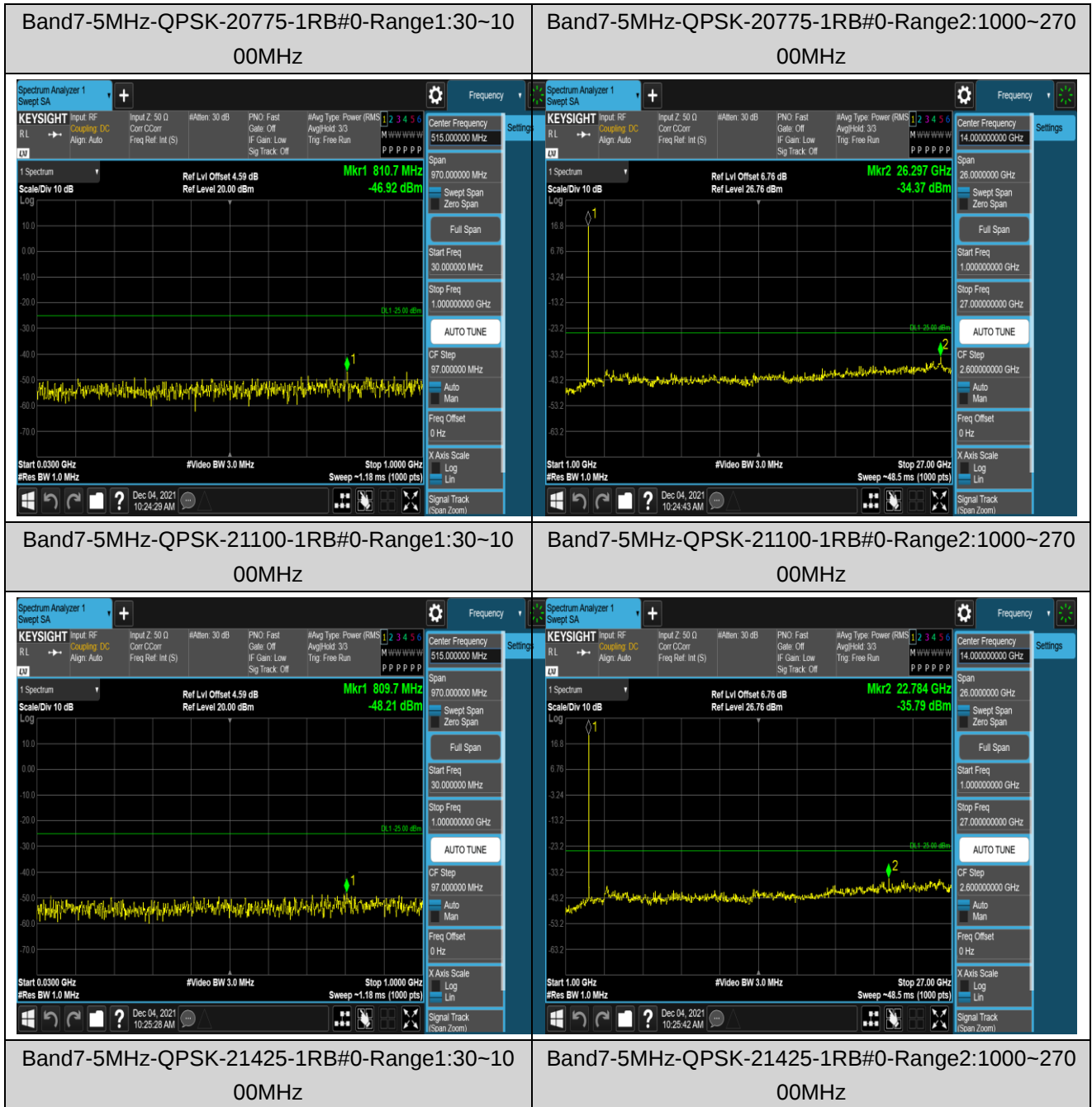


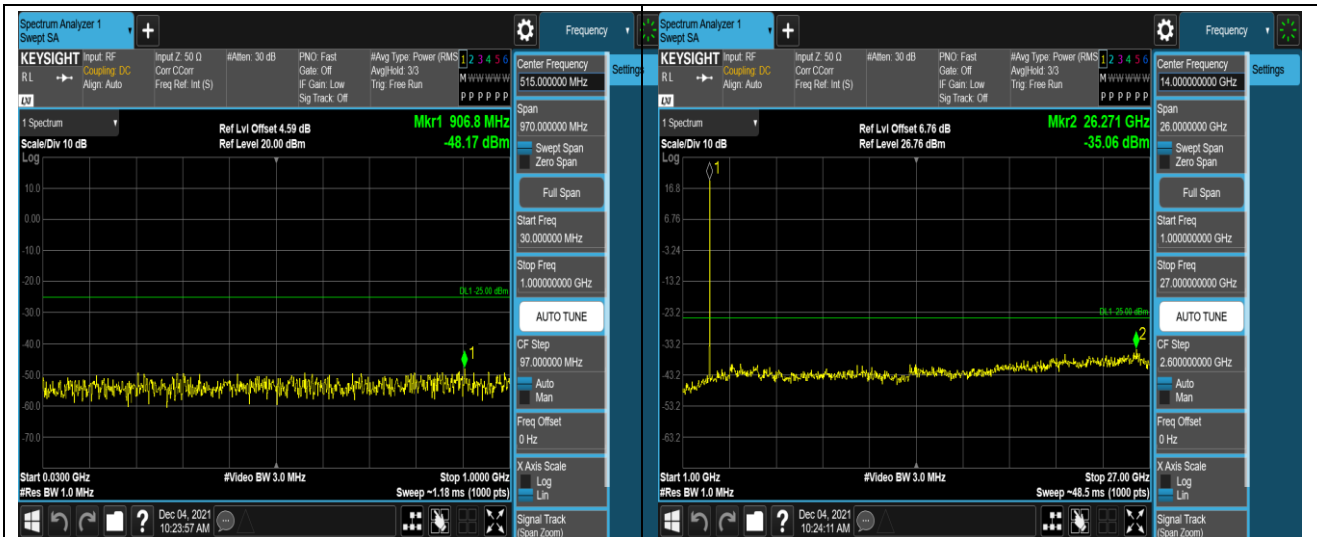
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Band4-20MHz-16QAM-20175-1RB#0-Range2:1000~2000MHz

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

Band4-20MHz-16QAM-20300-1RB#0-Range2:1000~2000MHz





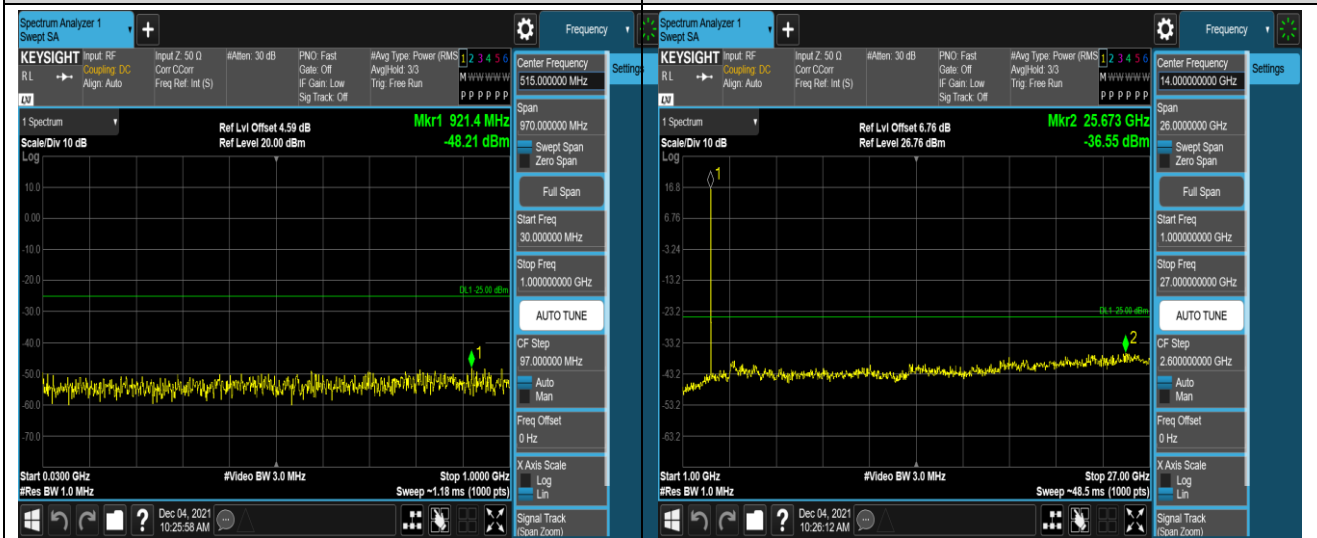
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000MHz

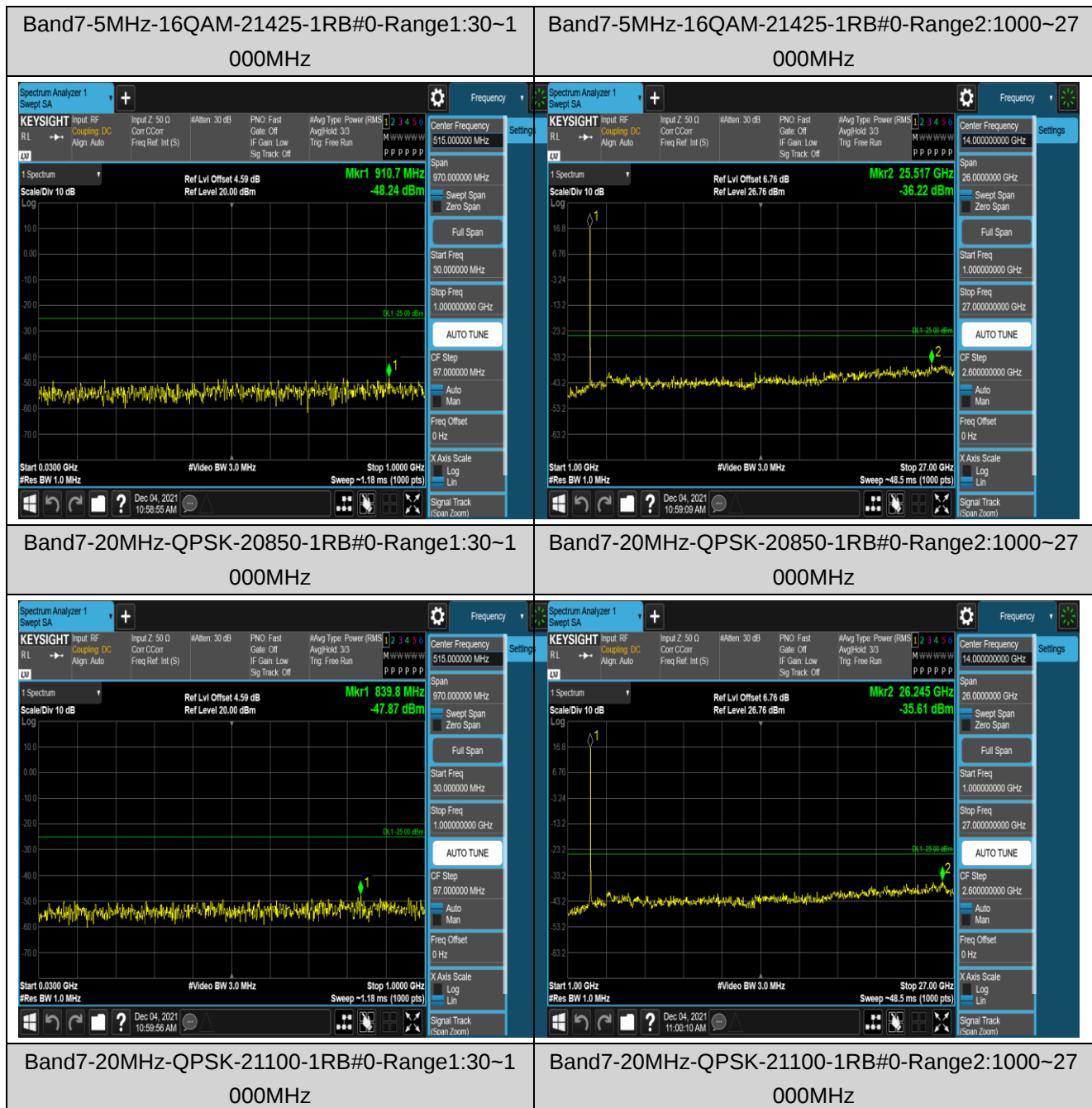
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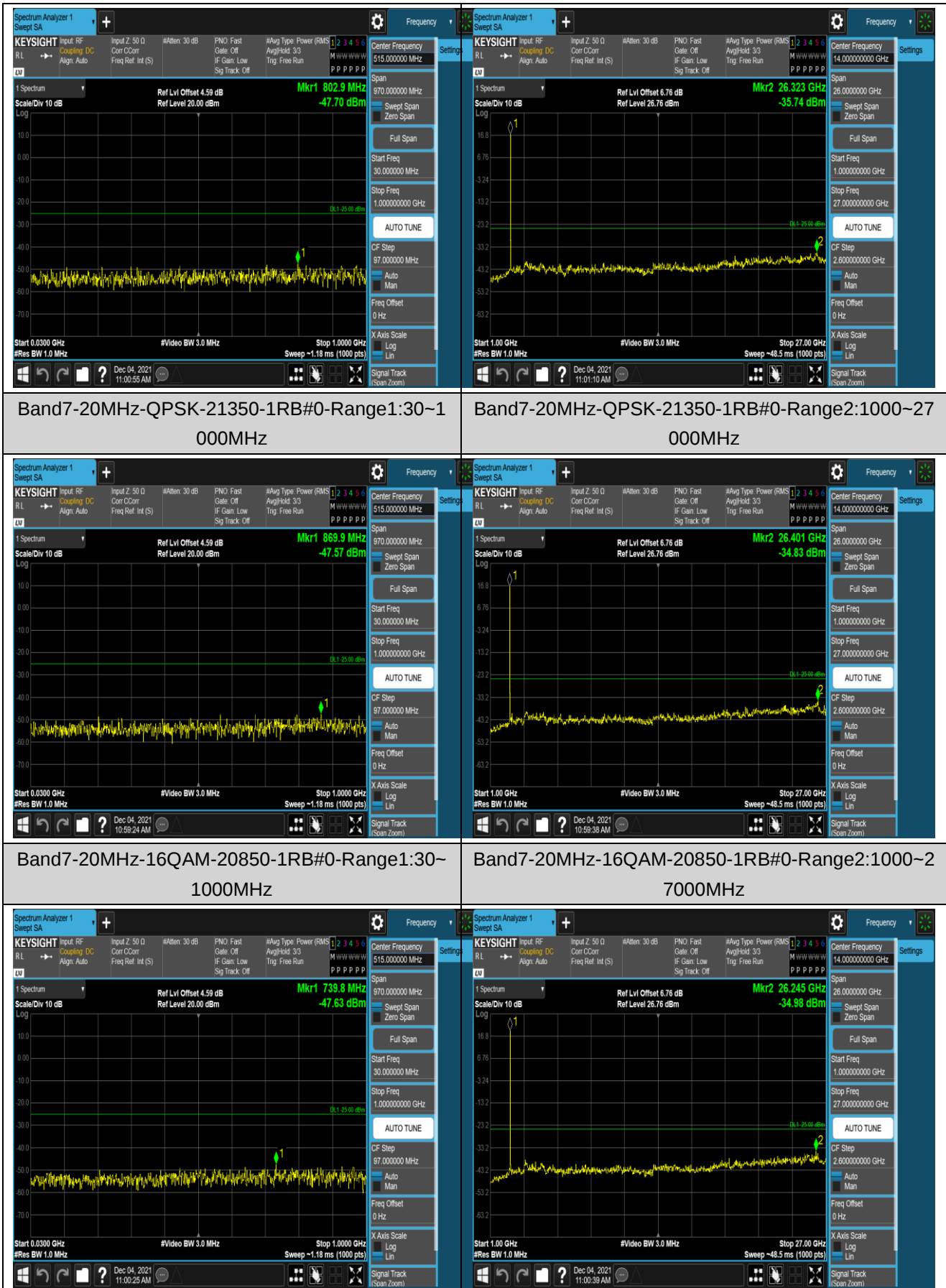


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Band7-5MHz-16QAM-21100-1RB#0-Range2:1000~27
000MHz





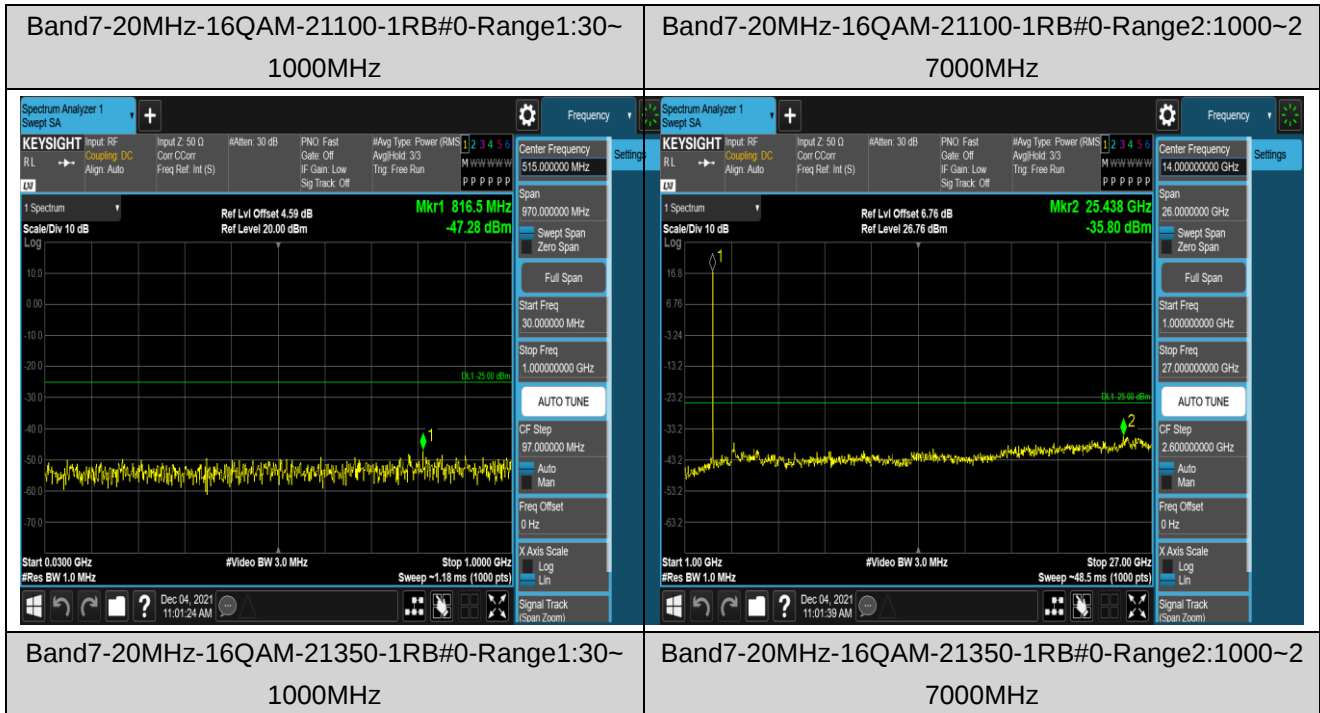


Band7-20MHz-QPSK-21350-1RB#0-Range1:30~1
000MHz

Band7-20MHz-QPSK-21350-1RB#0-Range2:1000~27
000MHz

Band7-20MHz-16QAM-20850-1RB#0-Range1:30~
1000MHz

Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~2
7000MHz



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					
3.80	-30	-20.90	-0.011117	Within authorized band for Band 2	Pass
	-20	-12.59	-0.006697		
	-10	-11.53	-0.006133		
	0	-10.66	-0.005670		
	10	-16.71	-0.008888		
	20	-14.09	-0.007495		
	30	-6.57	-0.003495		
	40	-9.71	-0.005165		
	50	-19.44	-0.010340		
16QAM					
3.80	-30	-15.64	-0.008319	Within authorized band for Band 2	Pass
	-20	-17.61	-0.009367		
	-10	-18.38	-0.009777		
	0	-14.55	-0.007739		
	10	12.47	0.006633		
	20	-9.21	-0.004899		
	30	-18.75	-0.009973		
	40	-11.06	-0.005883		
	50	-20.43	-0.010867		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-22.13	-0.011771	Within authorized band for Band 2	Pass
	3.80	-13.48	-0.007170		
	4.20	1.77	0.000941		
16QAM					
25	3.40	-19.04	-0.010128	Within authorized band for Band 2	Pass
	3.80	-17.80	-0.009468		
	4.20	-13.82	-0.007351		
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					
3.80	-30	-10.69	-0.006170	Within authorized band for Band 4	Pass
	-20	-7.08	-0.004087		
	-10	-2.80	-0.001616		
	0	-12.30	-0.007100		
	10	-15.99	-0.009229		
	20	-6.22	-0.003590		
	30	20.33	0.011734		
	40	-13.43	-0.007752		
	50	-1.99	-0.001149		
16QAM					
3.80	-30	-11.32	-0.006534	Within authorized band for Band 4	Pass
	-20	-14.49	-0.008364		
	-10	-11.86	-0.006846		
	0	-4.02	-0.002320		
	10	-12.10	-0.006984		
	20	-10.74	-0.006199		
	30	-6.82	-0.003937		
	40	-13.19	-0.007613		
	50	-16.34	-0.009431		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-14.76	-0.008519	Within authorized band for Band 4	Pass
	3.80	-13.88	-0.008012		
	4.20	-9.98	-0.005760		
16QAM					
25	3.40	-10.00	-0.005772	Within authorized band for Band 4	Pass
	3.80	-11.59	-0.006690		
	4.20	-4.76	-0.002747		
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					
3.80	-30	-20.89	-0.008241	Within authorized band for Band 7	Pass
	-20	-8.31	-0.003278		
	-10	-11.83	-0.004667		
	0	-7.70	-0.003037		
	10	8.24	0.003250		
	20	-18.80	-0.007416		
	30	-13.43	-0.005298		
	40	-9.68	-0.003819		
	50	-18.93	-0.007467		
16QAM					
3.80	-30	-9.41	-0.003712	Within authorized band for Band 7	Pass
	-20	5.41	0.002134		
	-10	-17.80	-0.007022		
	0	-12.80	-0.005049		
	10	11.69	0.004611		
	20	9.26	0.003653		
	30	2.82	0.001112		
	40	-13.16	-0.005191		
	50	12.26	0.004836		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-10.07	-0.003972	Within authorized band for Band 7	Pass
	3.80	-8.35	-0.003294		
	4.20	-11.70	-0.004615		
16QAM					
25	3.40	-15.25	-0.006016	Within authorized band for Band 7	Pass
	3.80	-12.82	-0.005057		
	4.20	13.65	0.005385		
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

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

Test Graphs

