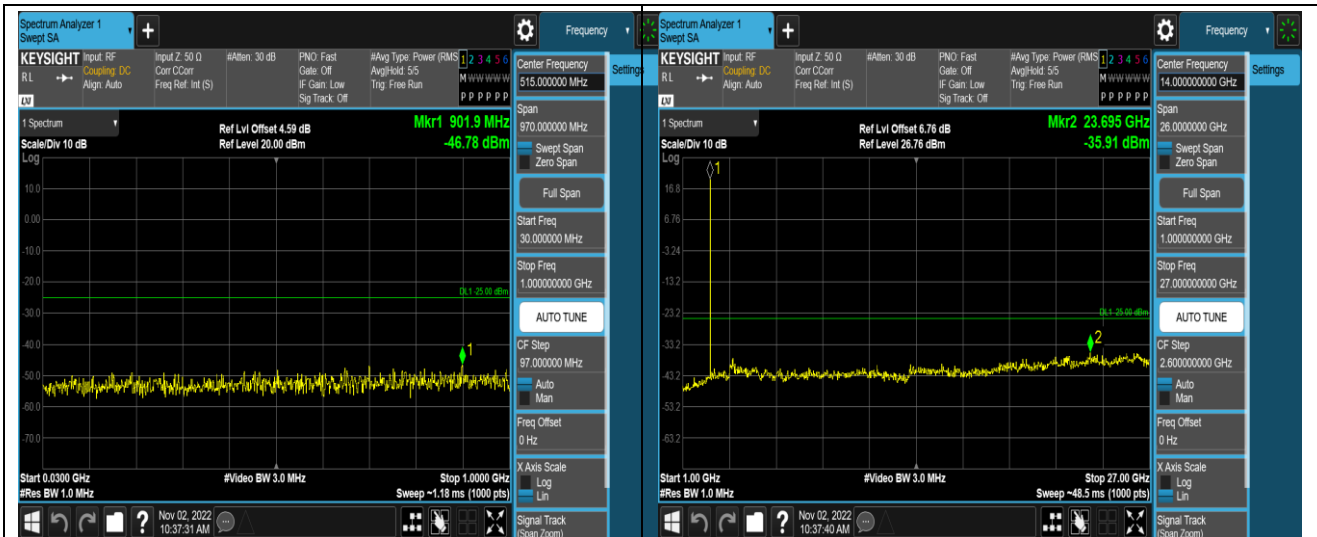
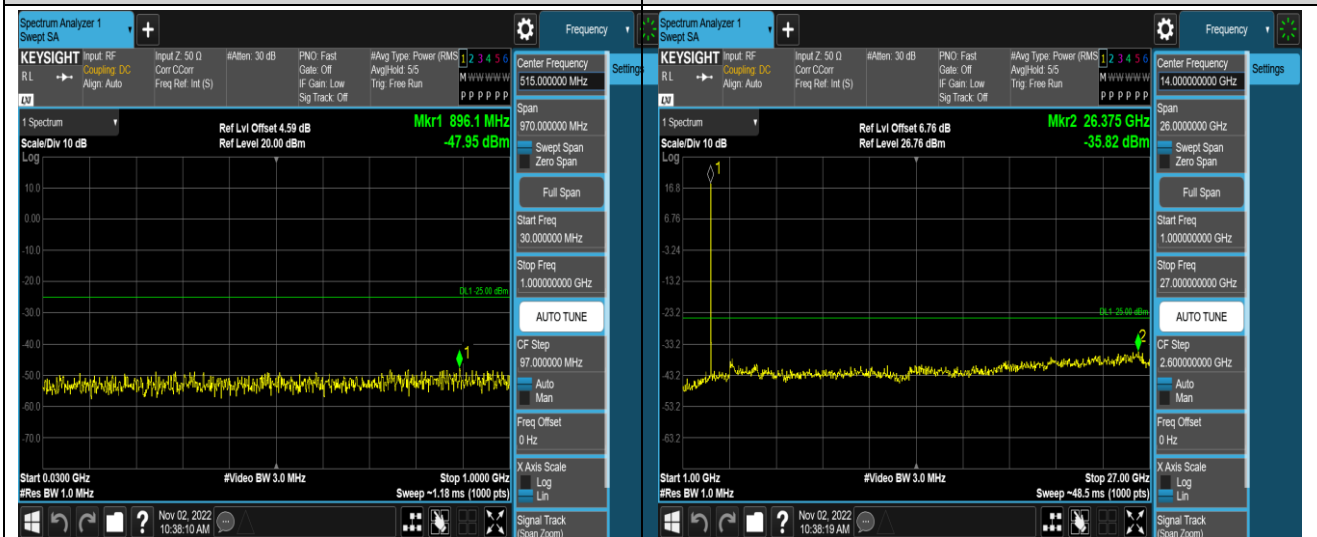




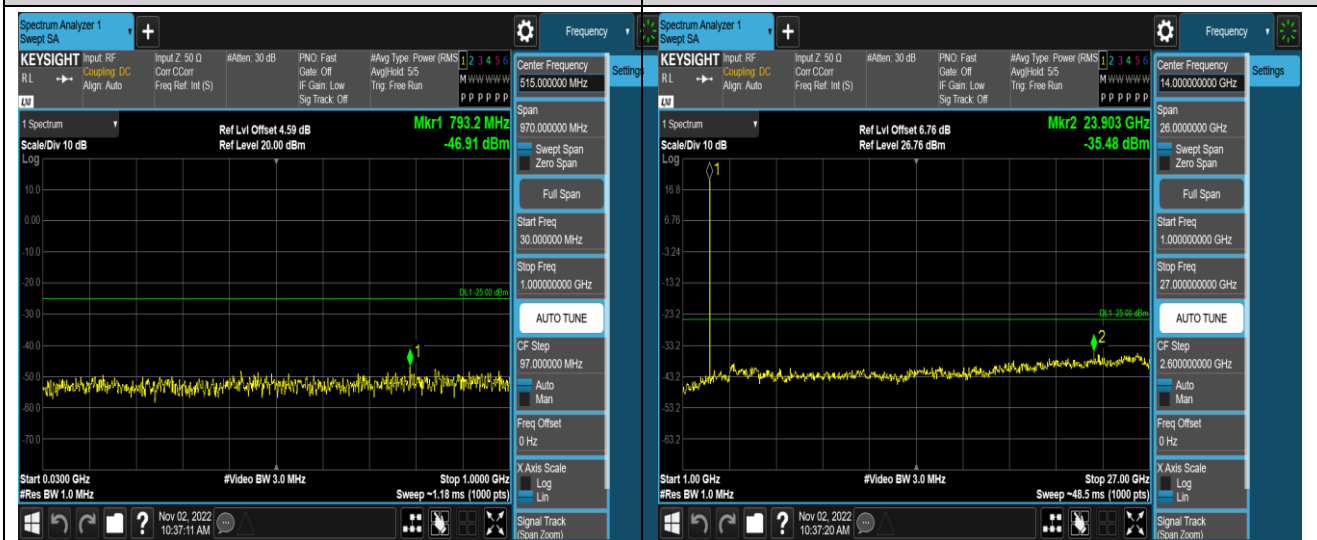
Band7-5MHz-QPSK-21425-1RB#0-Range1:30~1000MHz

Band7-5MHz-QPSK-21425-1RB#0-Range2:1000~2700MHz



Band7-5MHz-16QAM-20775-1RB#0-Range1:30~1000MHz

Band7-5MHz-16QAM-20775-1RB#0-Range2:1000~2700MHz

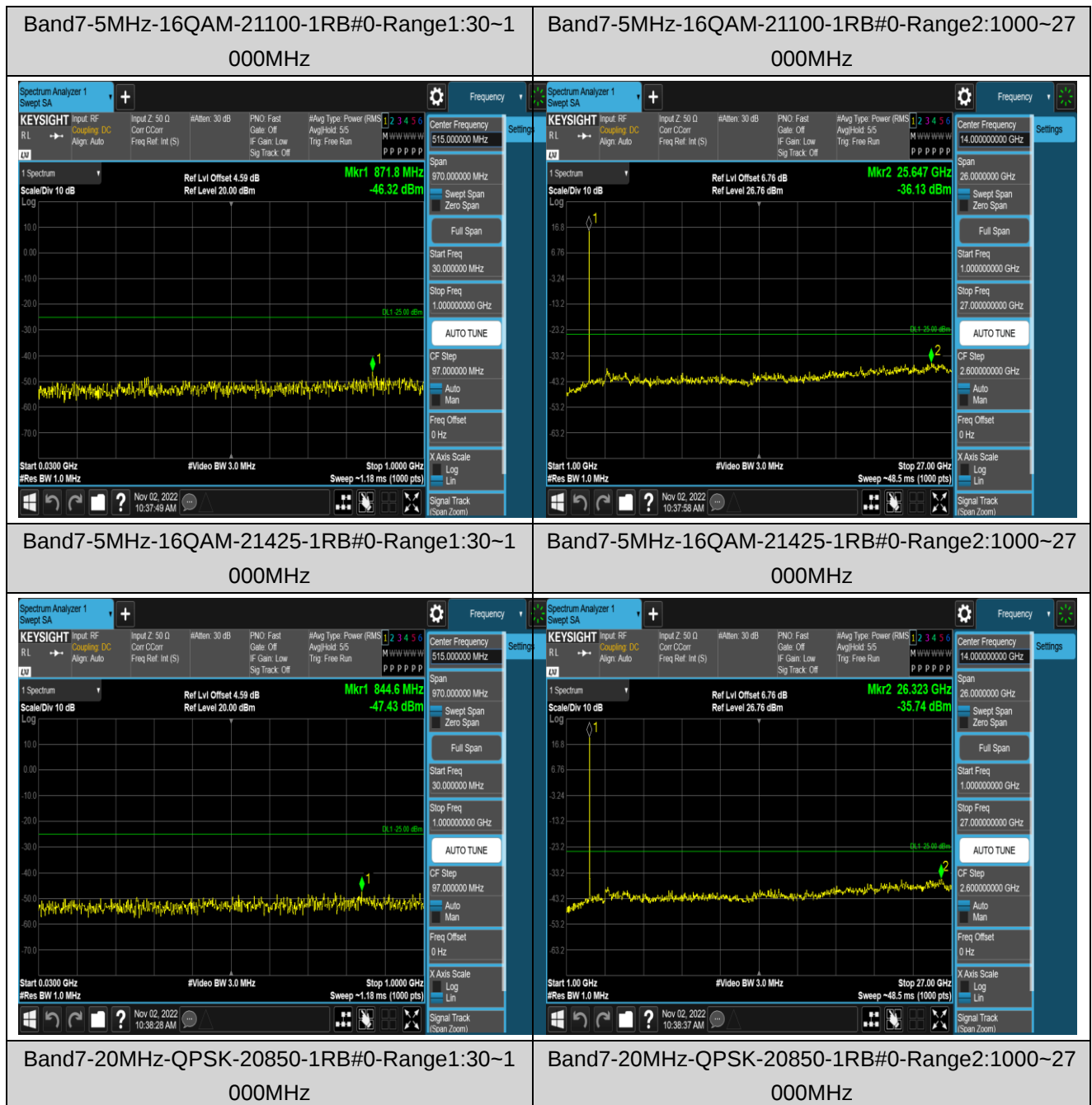


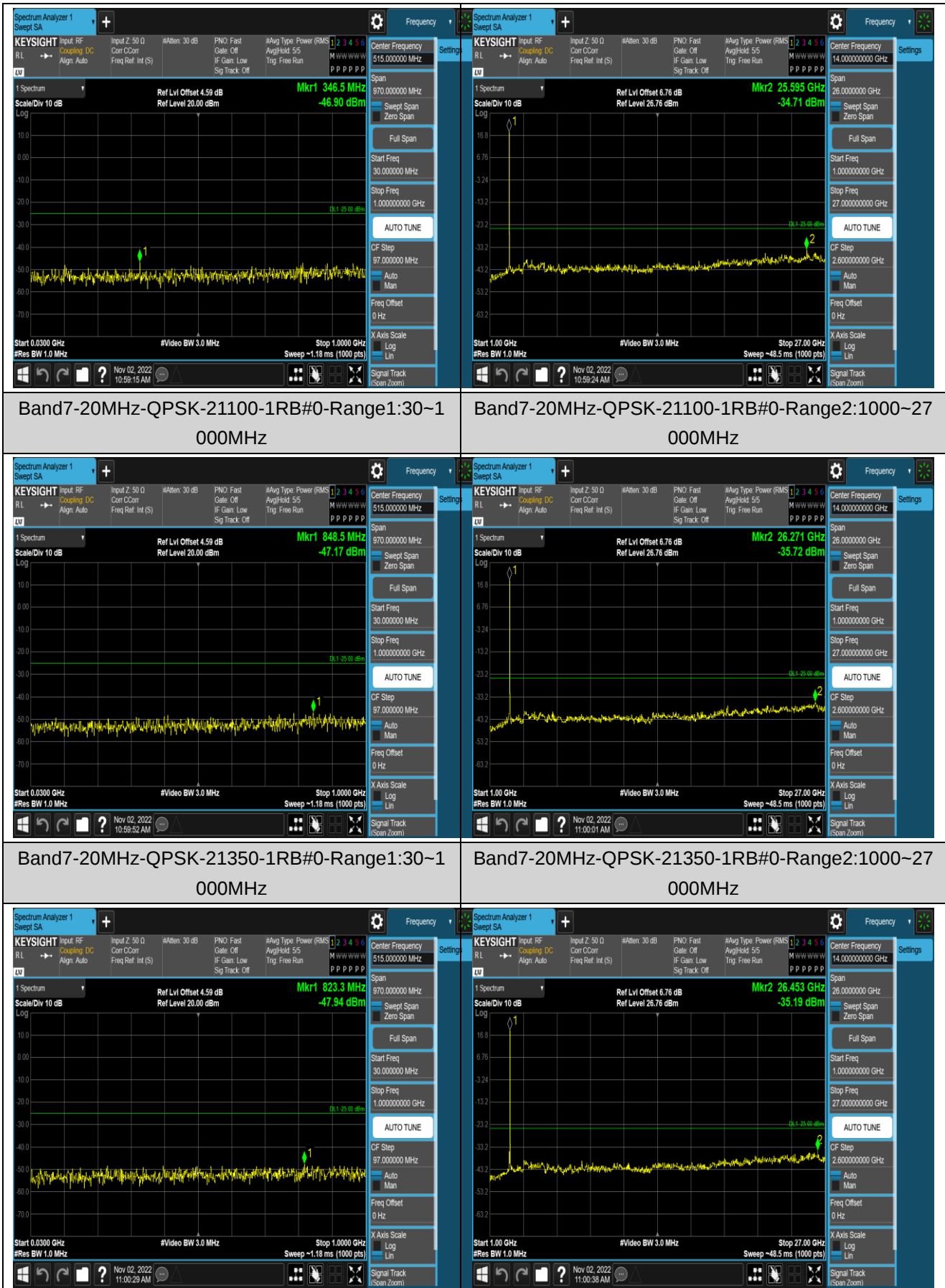
JianYan Testing Group Shenzhen Co., Ltd.

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.: JYTSZR2210060



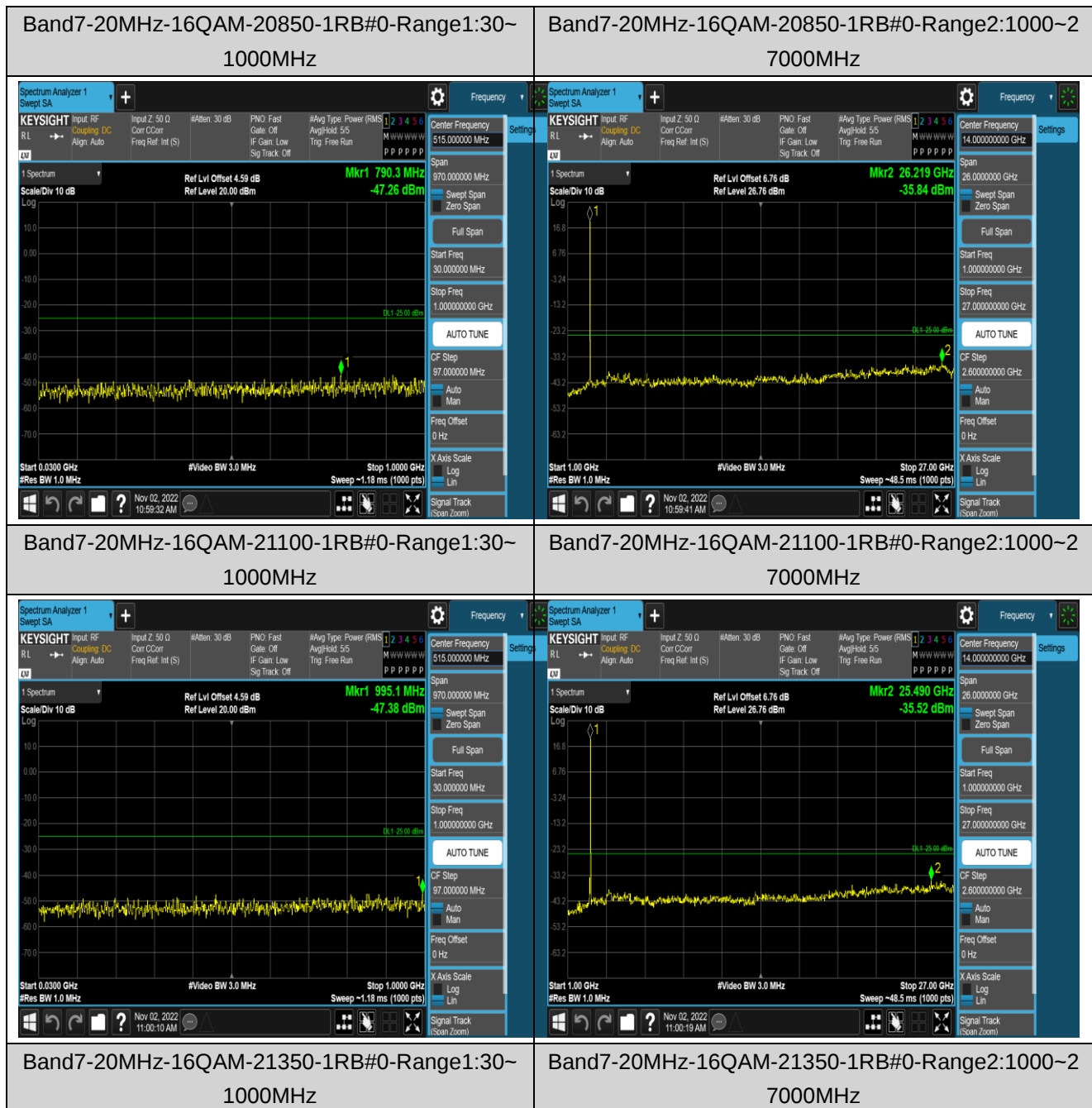


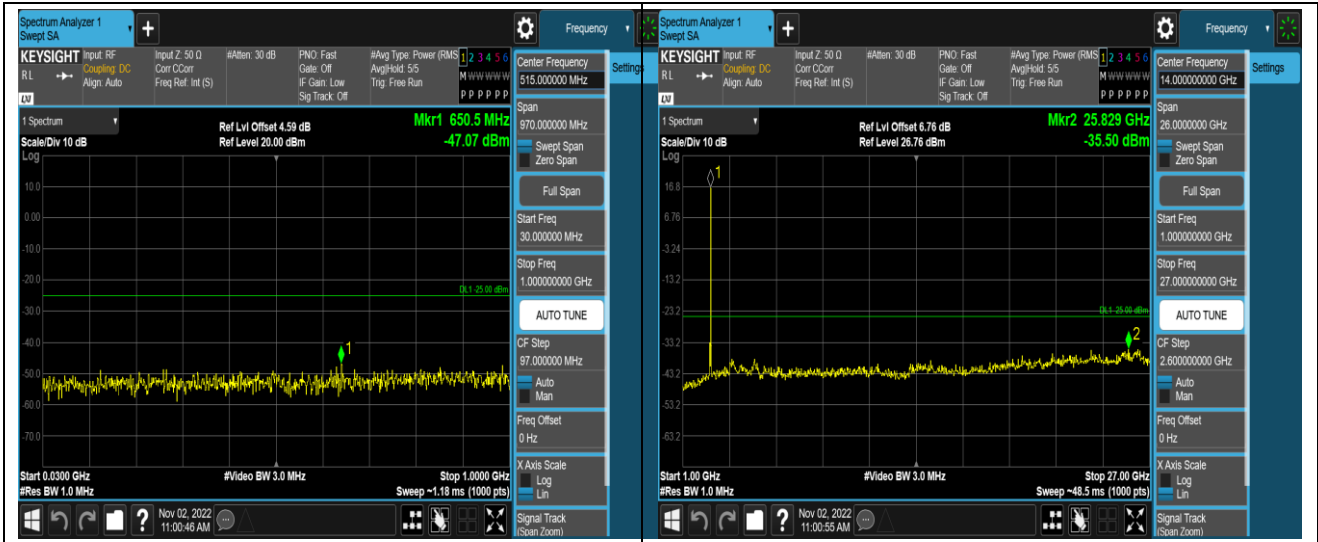
Band7-20MHz-QPSK-21100-1RB#0-Range1:30~1
000MHz

Band7-20MHz-QPSK-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





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	0	-15.56	-0.008277	Within authorized band for Band 2	Pass
	10	4.42	0.002351		
	20	-14.96	-0.007957		
	30	-6.42	-0.003415		
	40	-17.27	-0.009186		
	50	-4.63	-0.002463		
16QAM					
3.70	0	-18.42	-0.009798	Within authorized band for Band 2	Pass
	10	3.02	0.001606		
	20	-14.10	-0.007500		
	30	-20.28	-0.010787		
	40	-7.05	-0.003750		
	50	-22.34	-0.011883		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.33	-14.82	-0.007883	Within authorized band for Band 2	Pass
	3.70	-16.19	-0.008612		
	4.40	-14.45	-0.007686		
16QAM					
25	3.33	-3.26	-0.001734	Within authorized band for Band 2	Pass
	3.70	-5.44	-0.002894		
	4.40	-12.36	-0.006574		
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	0	-9.48	-0.005472	Within authorized band for Band 4	Pass
	10	-11.72	-0.006765		
	20	-9.66	-0.005576		
	30	-3.86	-0.002228		
	40	-9.16	-0.005287		
	50	-14.63	-0.008444		
16QAM					
3.70	0	-14.61	-0.008433	Within authorized band for Band 4	Pass
	10	4.41	0.002545		
	20	-14.03	-0.008098		
	30	-15.46	-0.008924		
	40	-9.76	-0.005633		
	50	-12.45	-0.007186		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.33	4.53	0.002615	Within authorized band for Band 4	Pass
	3.70	-15.52	-0.008958		
	4.40	8.04	0.004641		
16QAM					
25	3.33	-12.43	-0.007175	Within authorized band for Band 4	Pass
	3.70	-11.36	-0.006557		
	4.40	5.36	0.003094		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	0	-10.81	-0.012923	±2.5	Pass
	10	-11.63	-0.013903		
	20	-6.24	-0.007460		
	30	-6.21	-0.007424		
	40	-7.01	-0.008380		
	50	-11.76	-0.014059		
16QAM					
3.70	0	-2.17	-0.002594	±2.5	Pass
	10	-9.68	-0.011572		
	20	-8.63	-0.010317		
	30	-6.79	-0.008117		
	40	-3.20	-0.003825		
	50	-15.91	-0.019020		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.33	-8.91	-0.010652	±2.5	Pass
	3.70	-9.38	-0.011213		
	4.40	-6.92	-0.008273		
16QAM					
25	3.33	-5.54	-0.006623	±2.5	Pass
	3.70	-8.23	-0.009839		
	4.40	7.68	0.009181		
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					
3.70	0	-19.94	-0.007866	Within authorized band for Band 7	Pass
	10	-18.70	-0.007377		
	20	-13.43	-0.005298		
	30	2.88	0.001136		
	40	-15.69	-0.006189		
	50	-16.21	-0.006394		
16QAM					
3.70	0	-7.35	-0.002899	Within authorized band for Band 7	Pass
	10	5.34	0.002107		
	20	-15.95	-0.006292		
	30	-18.01	-0.007105		
	40	14.53	0.005732		
	50	-10.94	-0.004316		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.33	-14.52	-0.005728	Within authorized band for Band 7	Pass
	3.70	-7.65	-0.003018		
	4.40	-13.43	-0.005298		
16QAM					
25	3.33	-7.32	-0.002888	Within authorized band for Band 7	Pass
	3.70	-16.12	-0.006359		
	4.40	-17.45	-0.006884		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 12 part:

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
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

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

Test Graphs

