

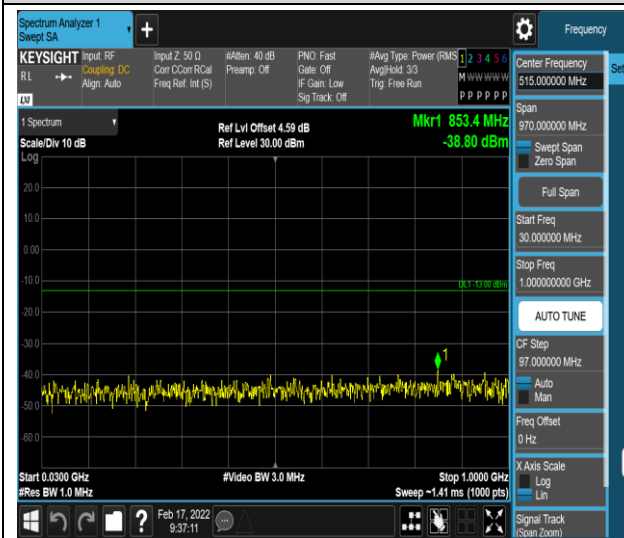
Band66-20MHz-16QAM-132072-1RB#0-Range1:3
0~1000MHz

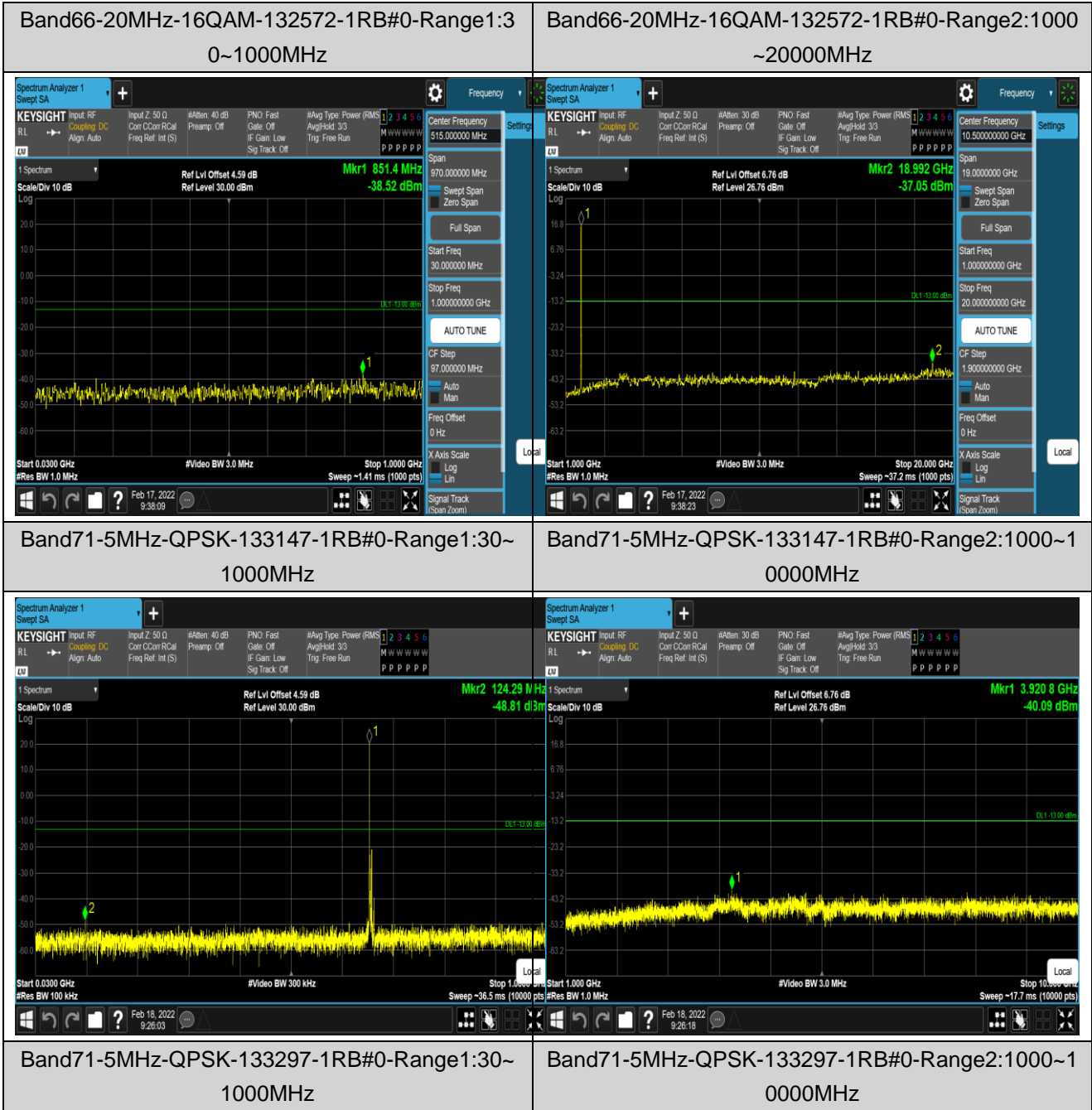
Band66-20MHz-16QAM-132072-1RB#0-Range2:1000
~20000MHz

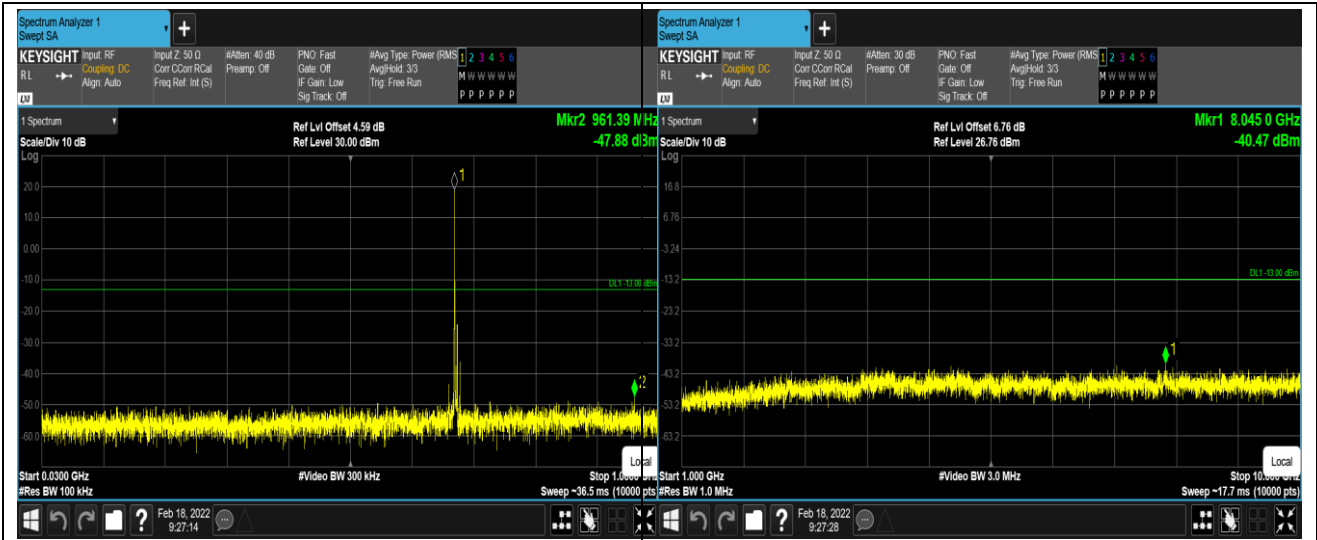


Band66-20MHz-16QAM-132322-1RB#0-Range1:3
0~1000MHz

Band66-20MHz-16QAM-132322-1RB#0-Range2:1000
~20000MHz

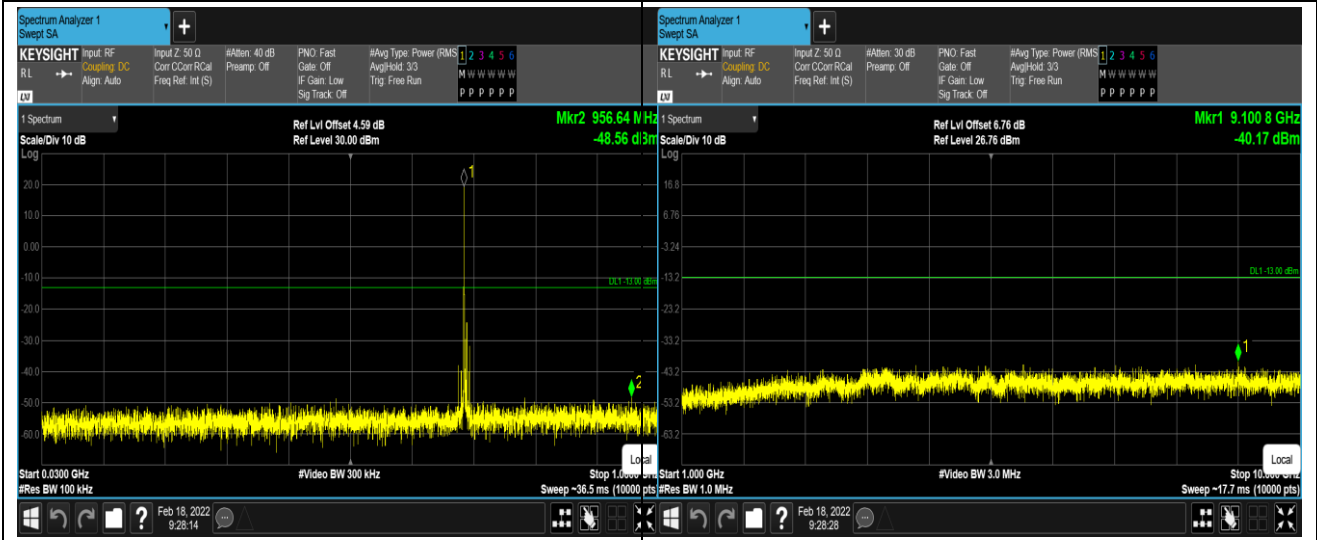






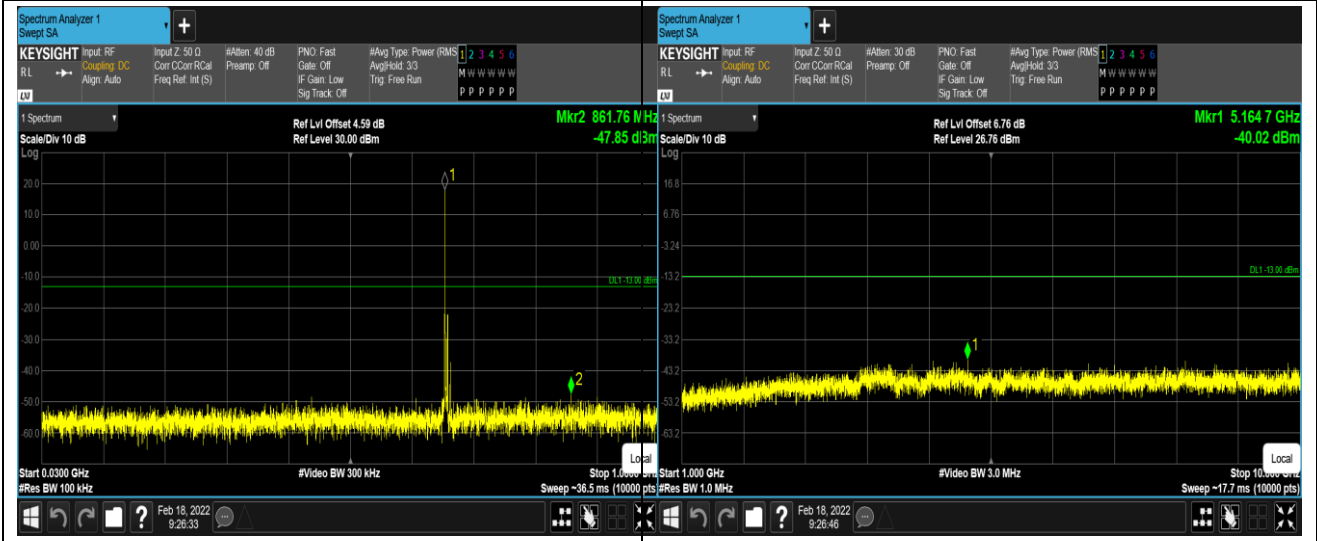
Band71-5MHz-QPSK-133447-1RB#0-Range1:30~1000MHz

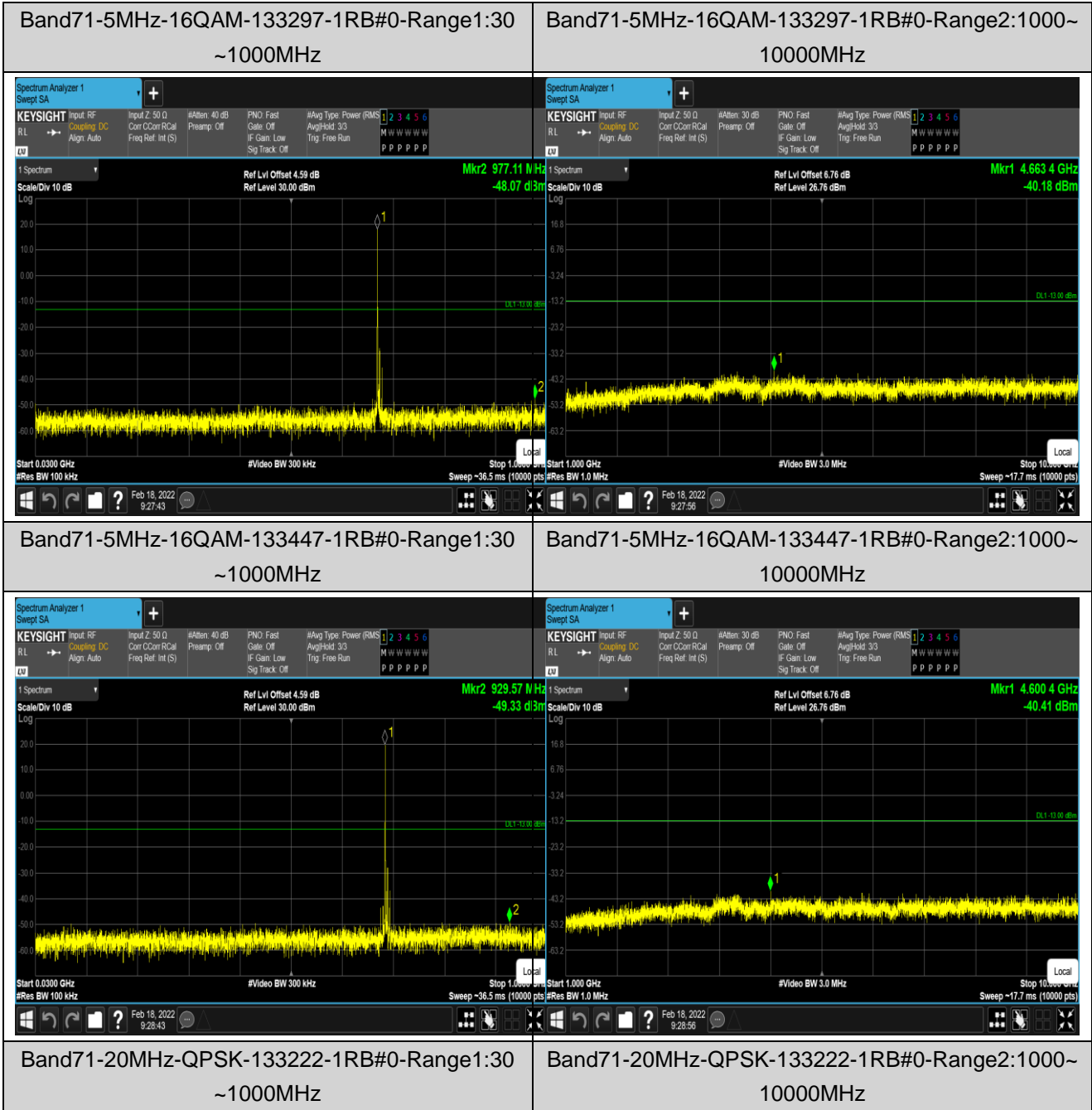
Band71-5MHz-QPSK-133447-1RB#0-Range2:1000~10000MHz

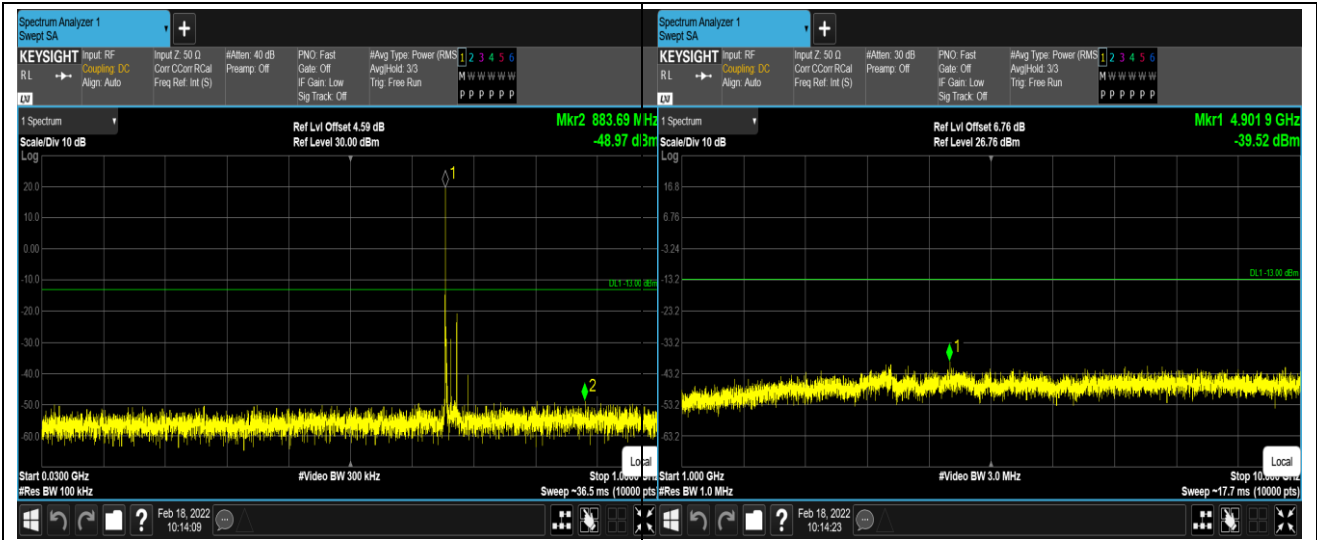


Band71-5MHz-16QAM-133147-1RB#0-Range1:30~1000MHz

Band71-5MHz-16QAM-133147-1RB#0-Range2:1000~10000MHz

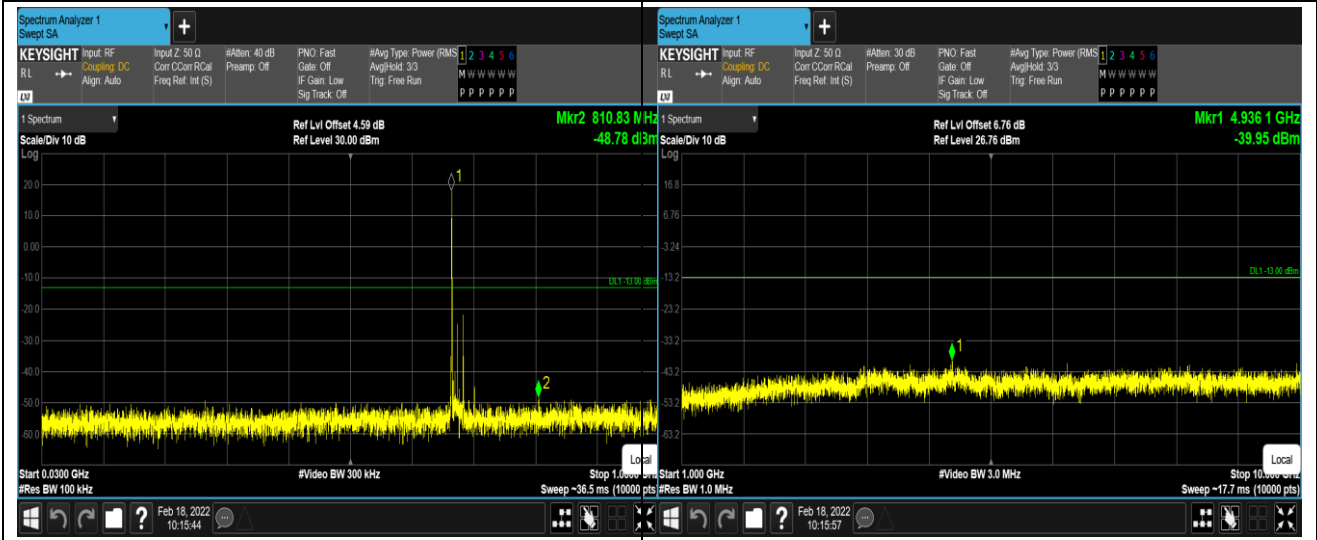






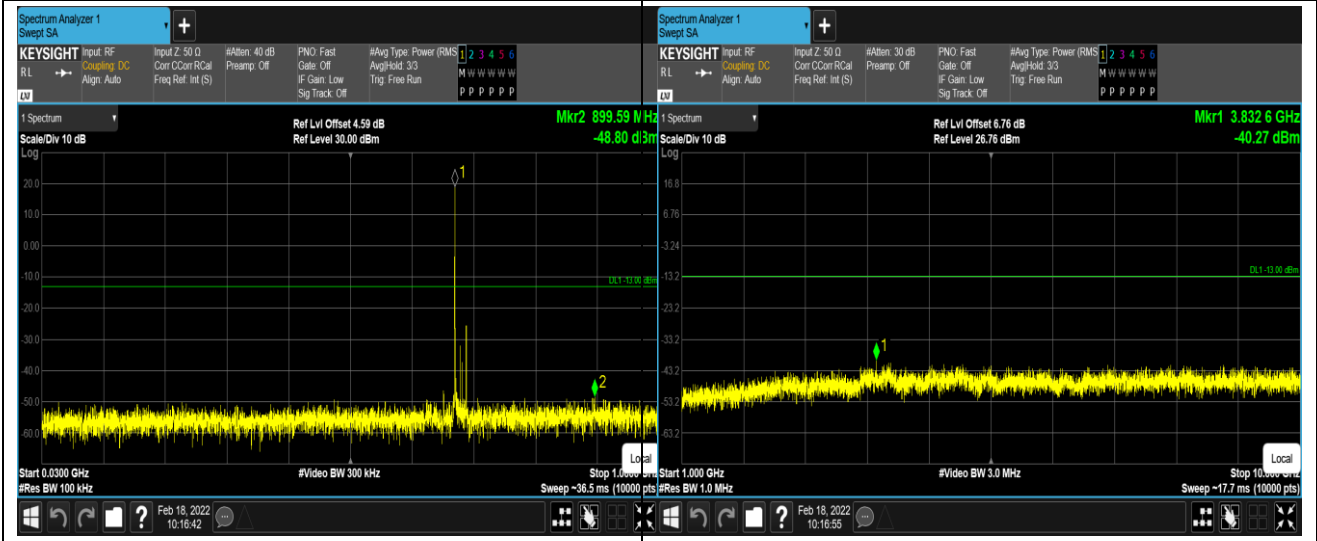
Band71-20MHz-QPSK-133322-1RB#0-Range1:30
~1000MHz

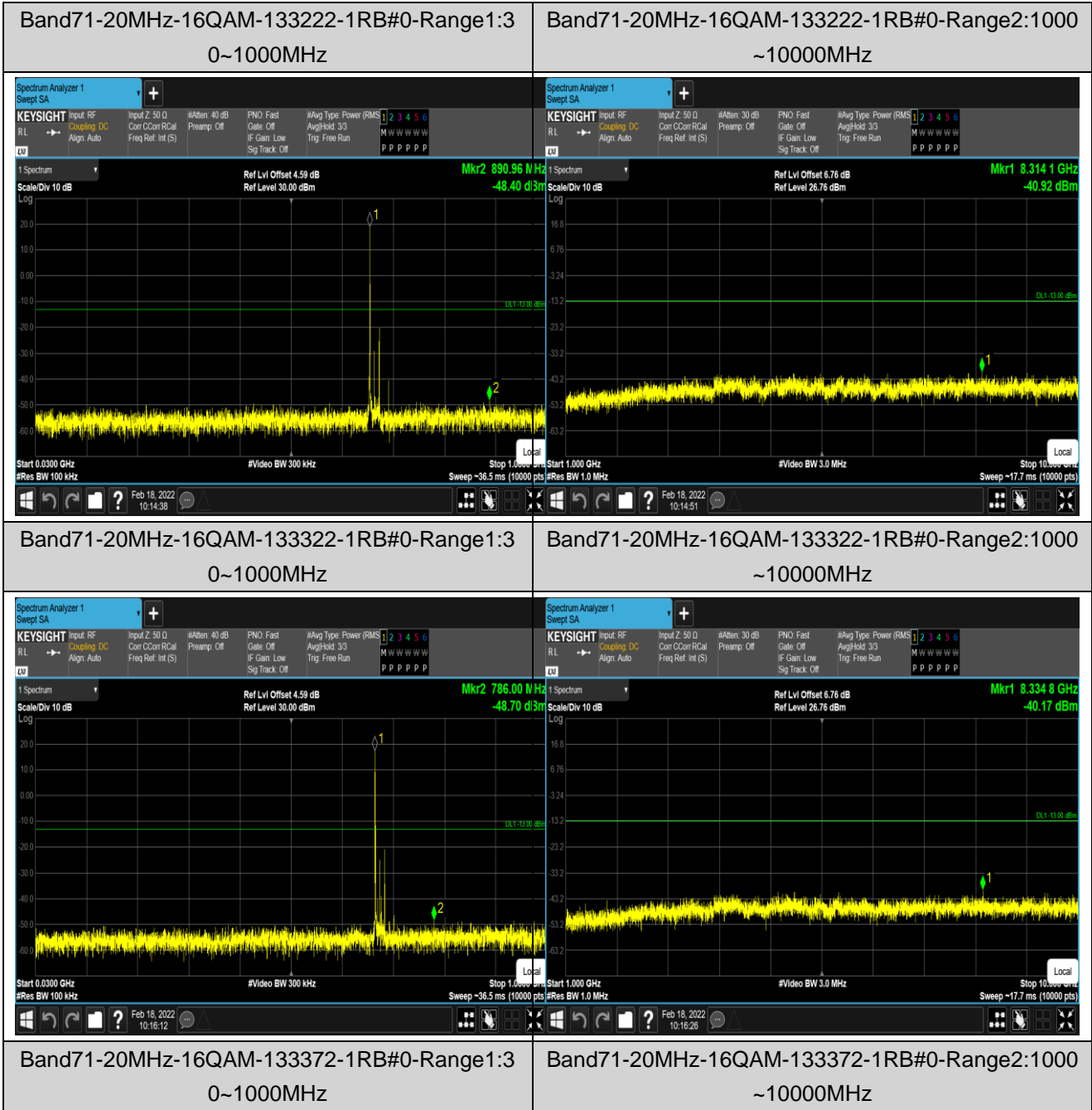
Band71-20MHz-QPSK-133322-1RB#0-Range2:1000~
10000MHz

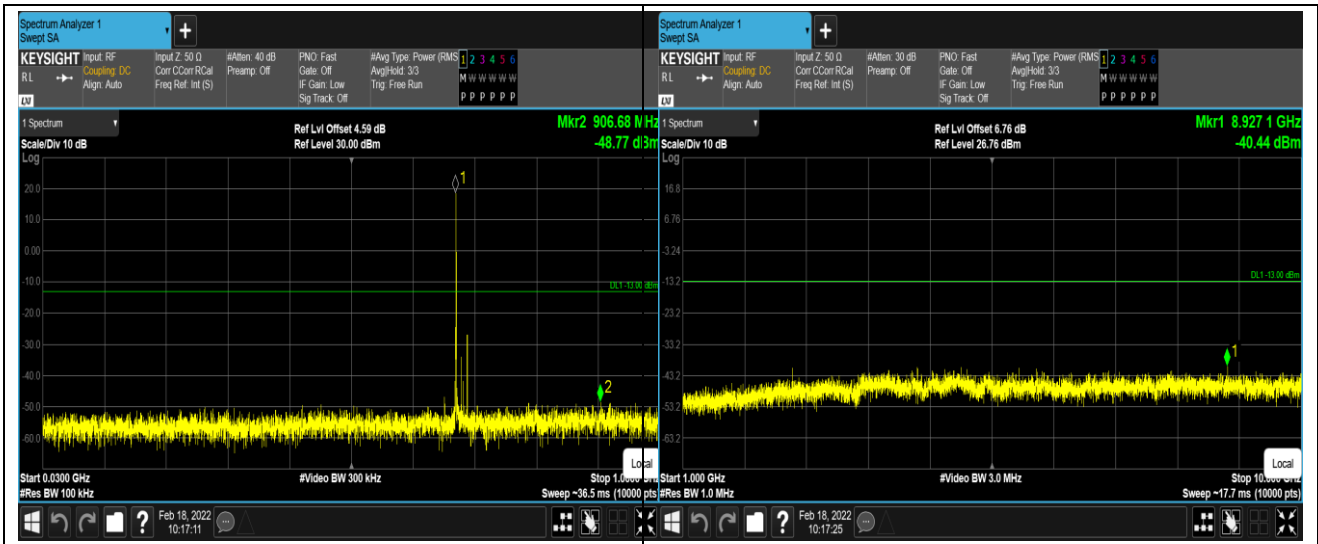


Band71-20MHz-QPSK-133372-1RB#0-Range1:30
~1000MHz

Band71-20MHz-QPSK-133372-1RB#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					
12	-30	-6.28	-0.00334	Within authorized band for Band 2	Pass
	-20	-6.01	-0.003197		
	-10	-6.19	-0.003293		
	0	-5.44	-0.002894		
	10	-6.97	-0.003707		
	20	-4.16	-0.002213		
	30	-5.49	-0.00292		
	40	4.33	0.002303		
	50	-4.73	-0.002516		
16QAM					
12	-30	-5.36	-0.002851	Within authorized band for Band 2	Pass
	-20	-8.27	-0.004399		
	-10	-4.41	-0.002346		
	0	-7.41	-0.003941		
	10	-4.31	-0.002293		
	20	-5.15	-0.002739		
	30	-6.9	-0.00367		
	40	-6.08	-0.003234		
	50	-5.78	-0.003074		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	9.6	-6.12	-0.003255	Within authorized band for Band 2	Pass
	12	-3.98	-0.002117		
	18	-6.61	-0.003516		
16QAM					
25	9.6	-6.48	-0.003447	Within authorized band for Band 2	Pass
	12	-5.78	-0.003074		
	18	-4.94	-0.002628		

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					
12	-30	-2.73	-0.003859	Within authorized band for Band 12	Pass
	-20	2.27	0.003208		
	-10	2.57	0.003633		
	0	2.65	0.003746		
	10	-1.66	-0.002346		
	20	-3.22	-0.004551		
	30	1.09	0.001541		
	40	1.6	0.002261		
	50	2.12	0.002996		
16QAM					
12	-30	1.92	0.002714	Within authorized band for Band 12	Pass
	-20	1.23	0.001739		
	-10	-2.09	-0.002954		
	0	2.02	0.002855		
	10	2.92	0.004127		
	20	2.15	0.003039		
	30	-1.8	-0.002544		
	40	2.42	0.00342		
	50	2.02	0.002855		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	9.6	2.3	0.003251	Within authorized band for Band 12	Pass
	12	-2.45	-0.003463		
	18	-2.22	-0.003138		
16QAM					
25	9.6	2.15	0.003039	Within authorized band for Band 12	Pass
	12	1.7	0.002403		
	18	3.22	0.004551		

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

LTE Band 66 part:

Reference Frequency: LTE Band 66 (10MHz) Middle channel=132322 Frequency=1745.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
12	-30	-5.78	-0.003312	Within authorized band for Band 66	Pass
	-20	-3.83	-0.002195		
	-10	-4.58	-0.002625		
	0	-2.73	-0.001564		
	10	-4.38	-0.00251		
	20	-3.83	-0.002195		
	30	-5.09	-0.002917		
	40	-4.29	-0.002458		
	50	-4.58	-0.002625		
16QAM					
12	-30	-5.85	-0.003352	Within authorized band for Band 66	Pass
	-20	-5.78	-0.003312		
	-10	3.13	0.001794		
	0	-3.69	-0.002115		
	10	-4.12	-0.002361		
	20	-4.46	-0.002556		
	30	-5.04	-0.002888		
	40	-4.38	-0.00251		
	50	-4.81	-0.002756		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	9.6	-6.14	-0.003519	Within authorized band for Band 66	Pass
	12	-3.99	-0.002287		
	18	-4.08	-0.002338		
16QAM					
25	9.6	-4.08	-0.002338	Within authorized band for Band 66	Pass
	12	-3.26	-0.001868		
	18	-3.48	-0.001994		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 71 part:

Reference Frequency: LTE Band 71 (10MHz) Middle channel=133297 Frequency=680.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
12	-30	-2.82	-0.004144	Within authorized band for Band 71	Pass
	-20	-2.69	-0.003953		
	-10	-3.81	-0.005599		
	0	-1.62	-0.002381		
	10	-5.38	-0.007906		
	20	-3.2	-0.004702		
	30	-4.05	-0.005952		
	40	-3.99	-0.005863		
	50	-2.53	-0.003718		
16QAM					
12	-30	-1.69	-0.002483	Within authorized band for Band 71	Pass
	-20	-2.79	-0.0041		
	-10	-3.33	-0.004893		
	0	-2.99	-0.004394		
	10	-1.57	-0.002307		
	20	-4.51	-0.006627		
	30	-4.32	-0.006348		
	40	-4.18	-0.006143		
	50	-1.53	-0.002248		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	9.6	-2.57	-0.003777	Within authorized band for Band 71	Pass
	12	-3.26	-0.004791		
	18	-2.33	-0.003424		
16QAM					
25	9.6	-3.72	-0.005467	Within authorized band for Band 71	Pass
	12	-1.75	-0.002572		
	18	-1.8	-0.002645		

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
Band12	10MHz	QPSK	23095	50RB#0	PASS	PASS
Band12	10MHz	16QAM	23095	50RB#0	PASS	PASS
Band66	20MHz	QPSK	132322	100RB#0	PASS	PASS
Band66	20MHz	16QAM	132322	100RB#0	PASS	PASS
Band71	20MHz	QPSK	133322	100RB#0	PASS	PASS
Band71	20MHz	16QAM	133322	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

