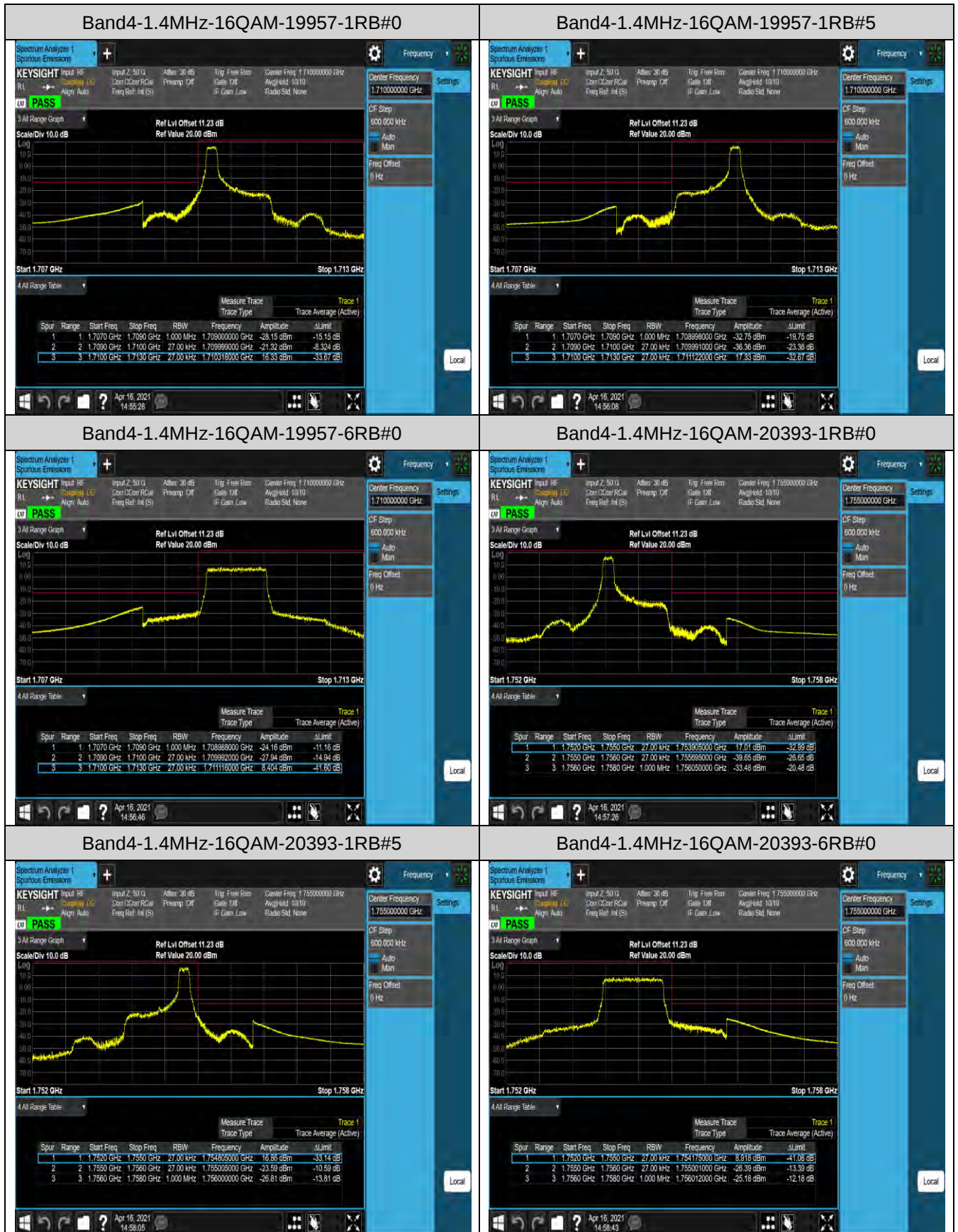
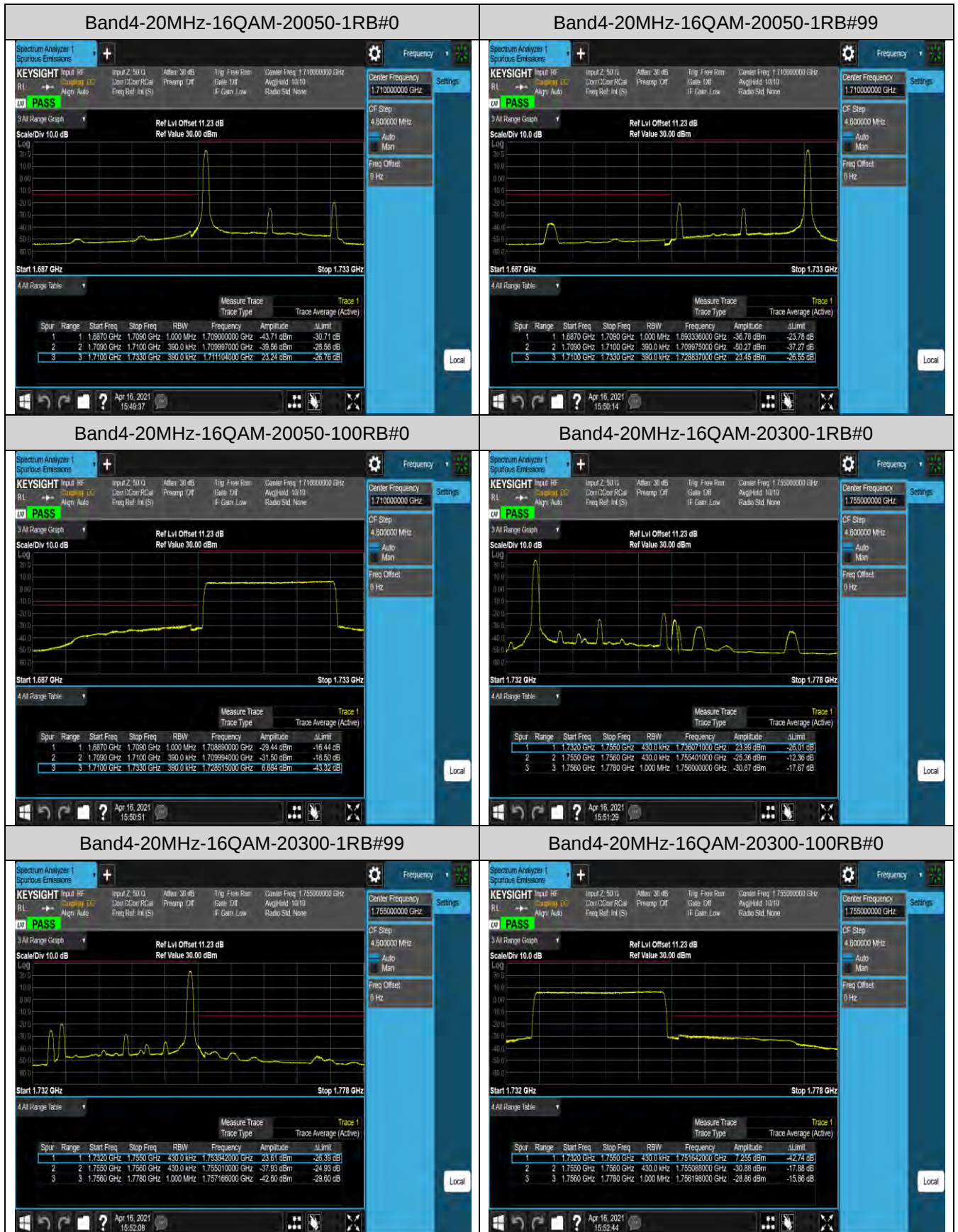








Band5-1.4MHz-QPSK-20407-1RB#0



Band5-1.4MHz-QPSK-20407-1RB#5



Band5-1.4MHz-QPSK-20407-6RB#0



Band5-1.4MHz-QPSK-20643-1RB#0

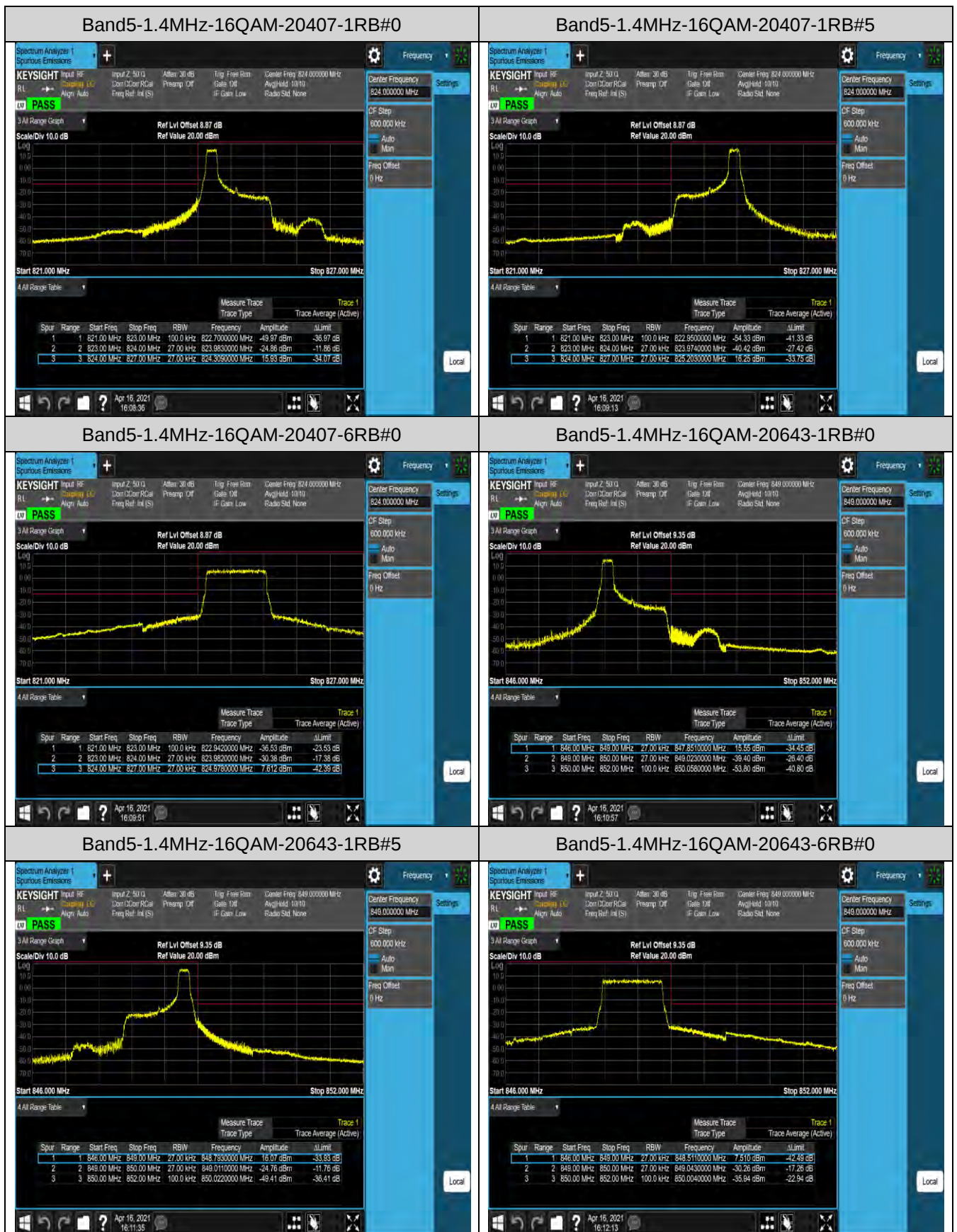


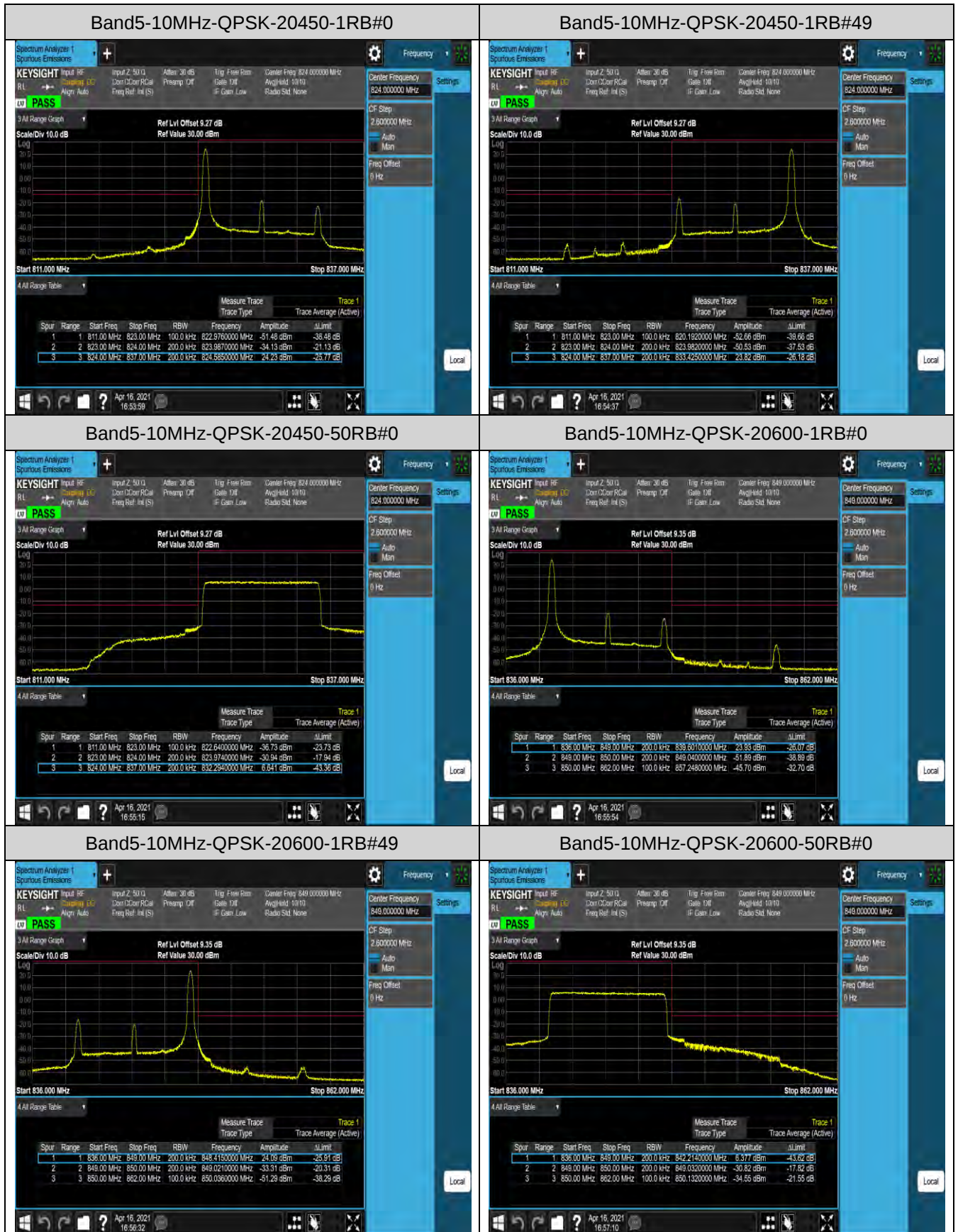
Band5-1.4MHz-QPSK-20643-1RB#5

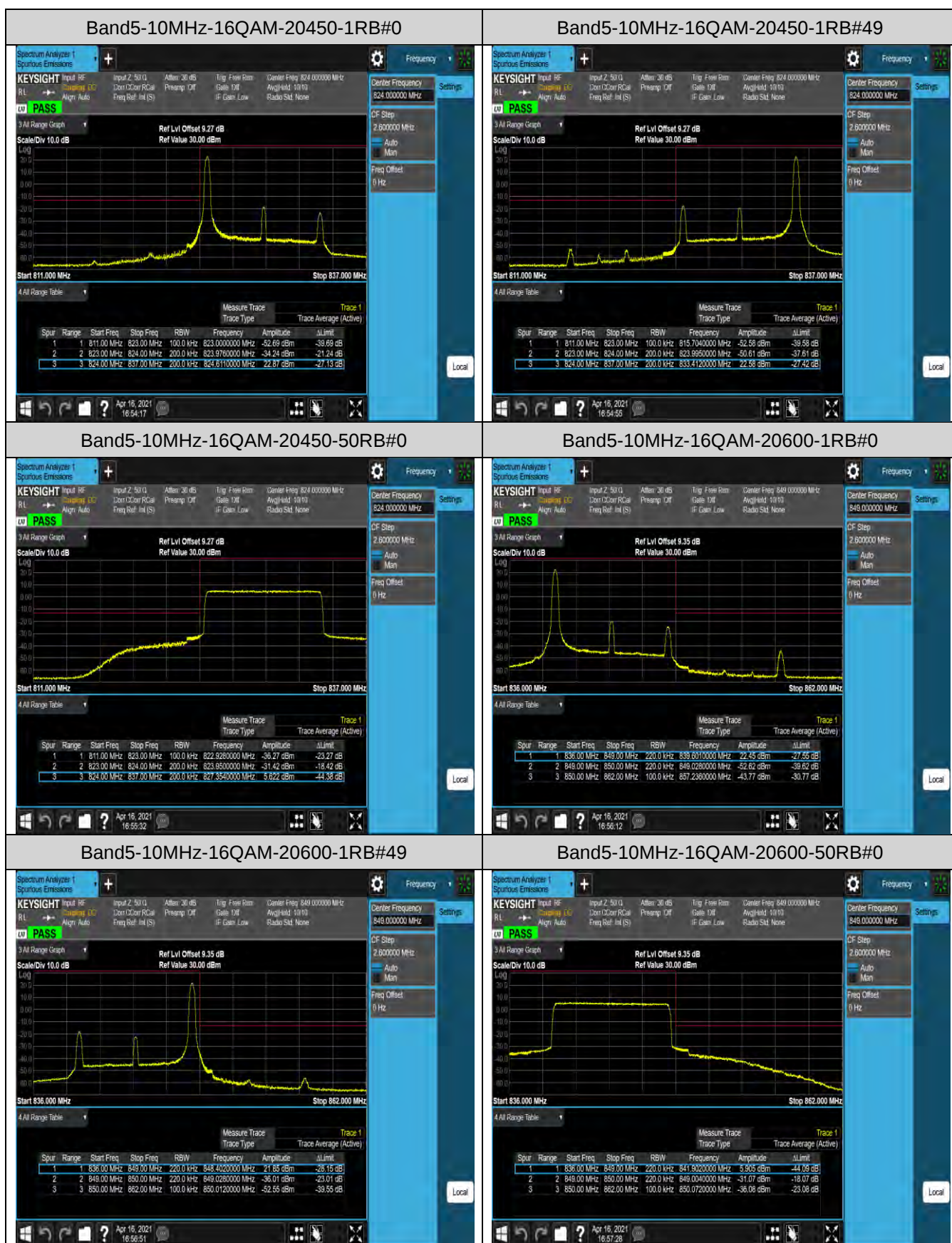


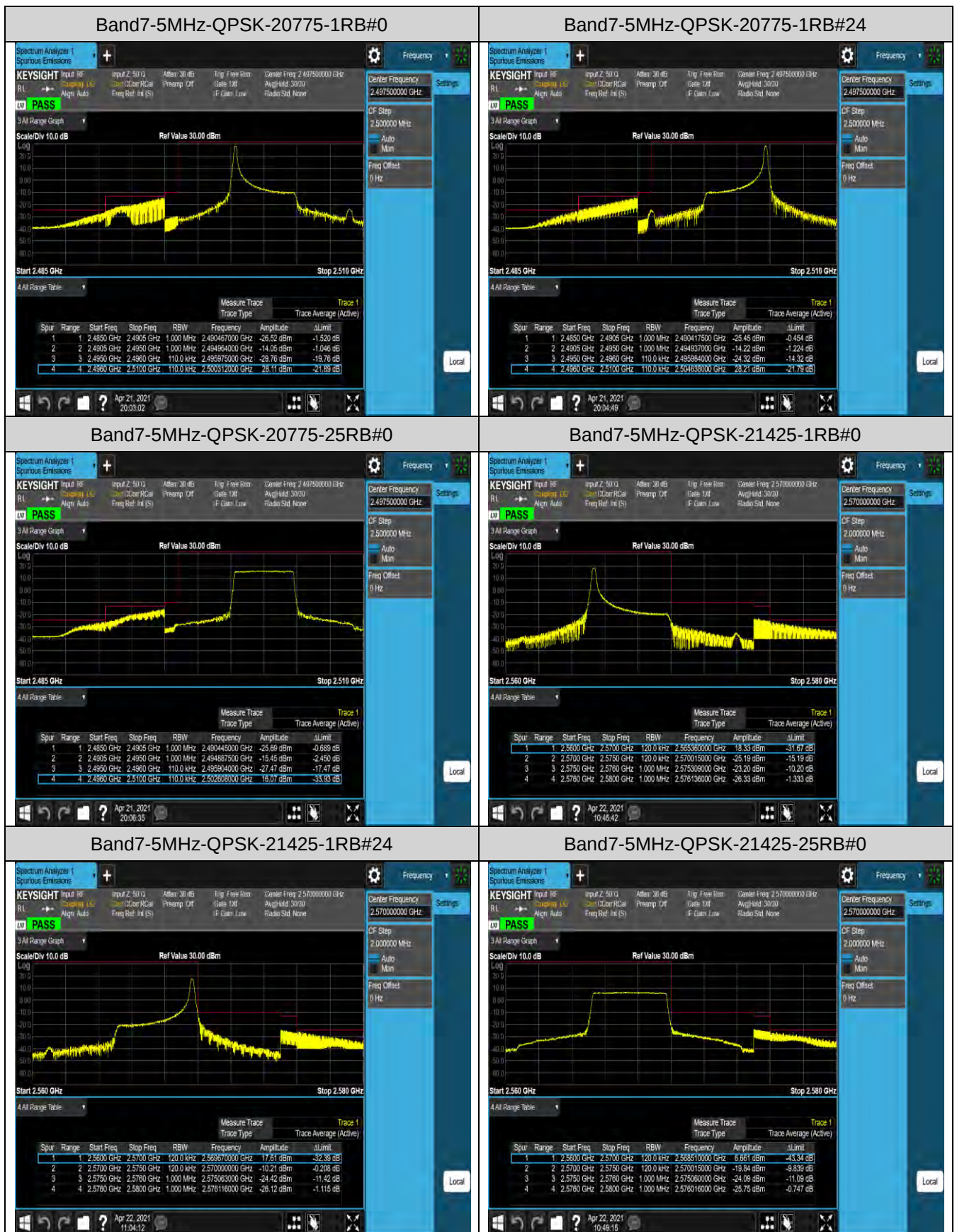
Band5-1.4MHz-QPSK-20643-6RB#0

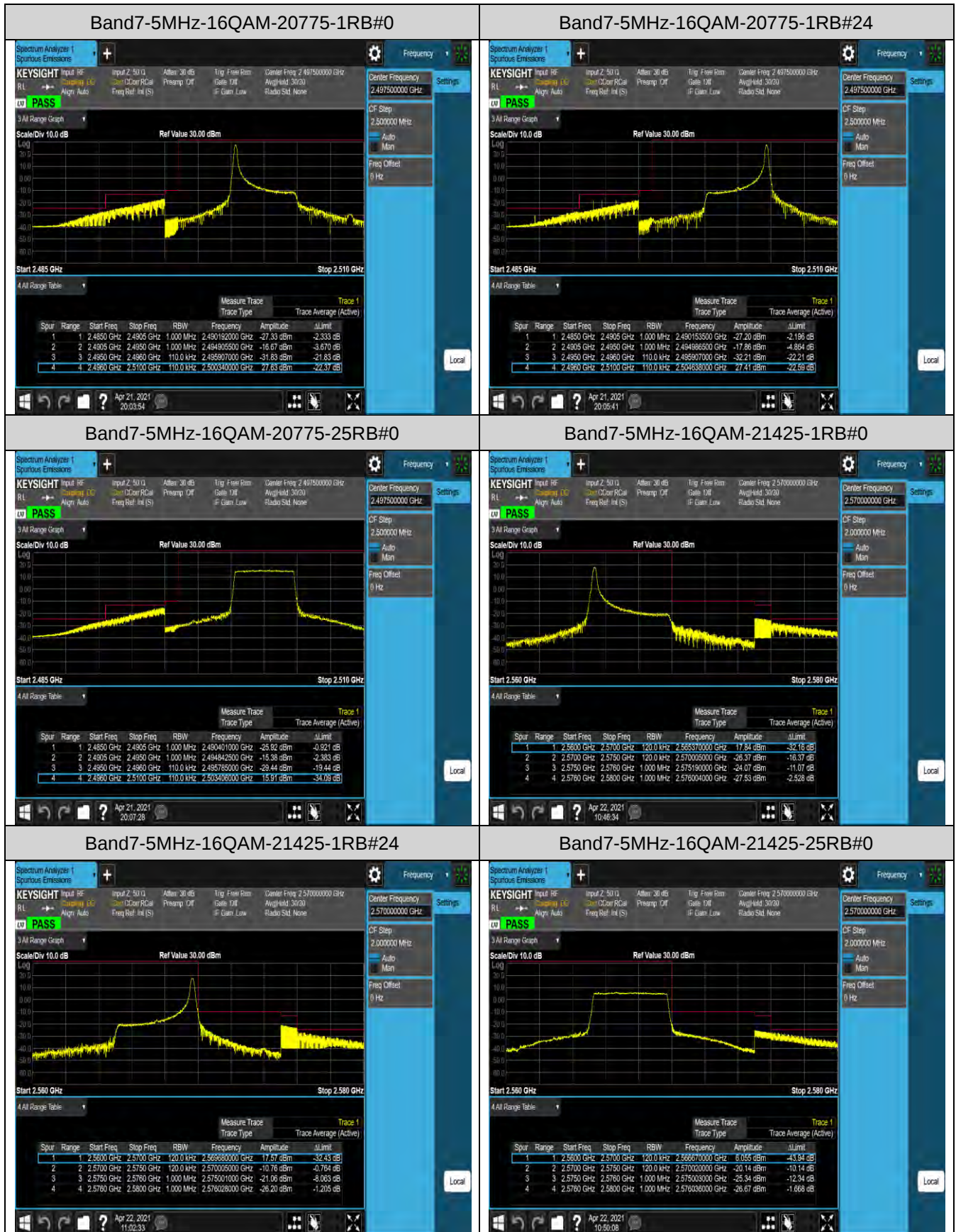


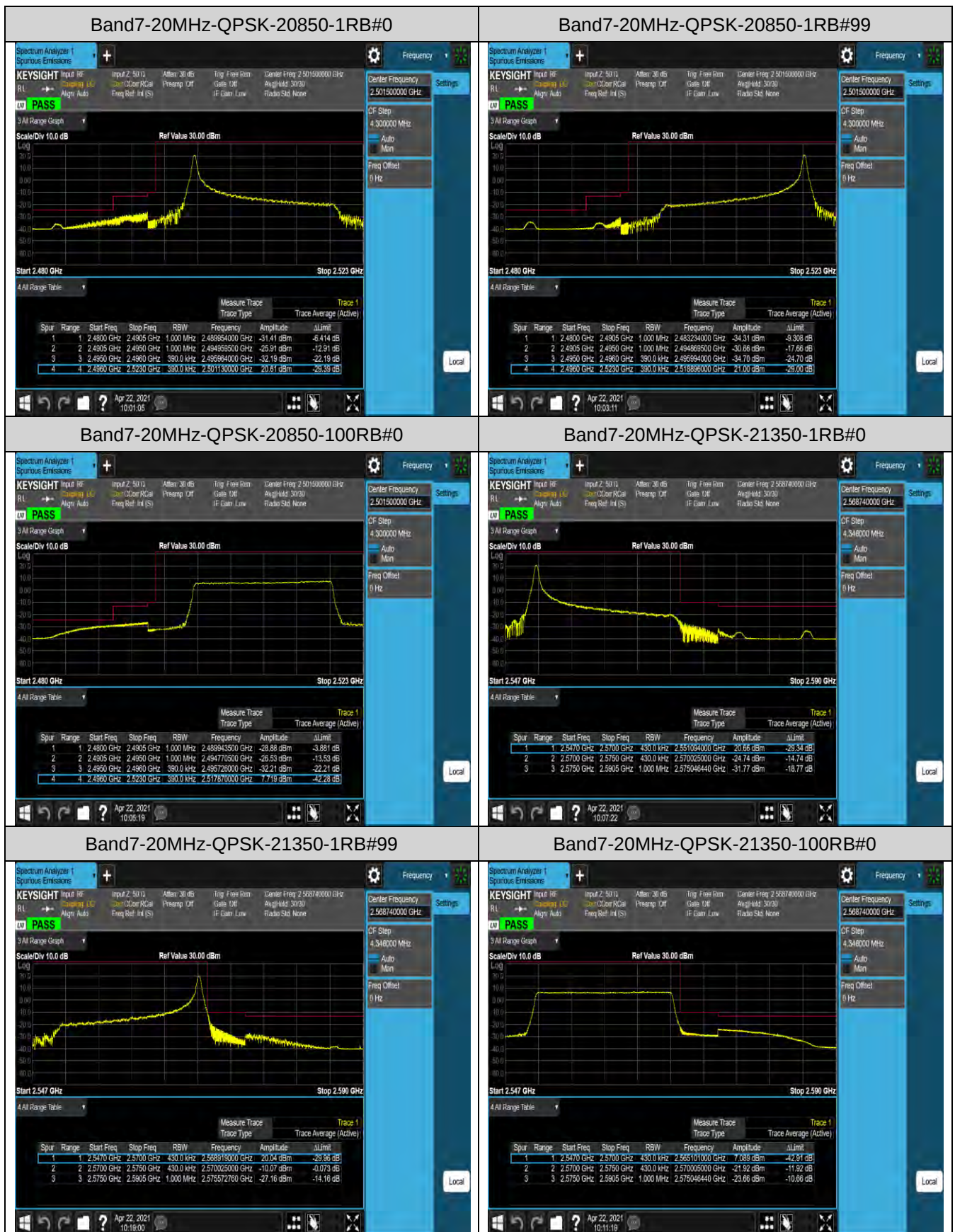


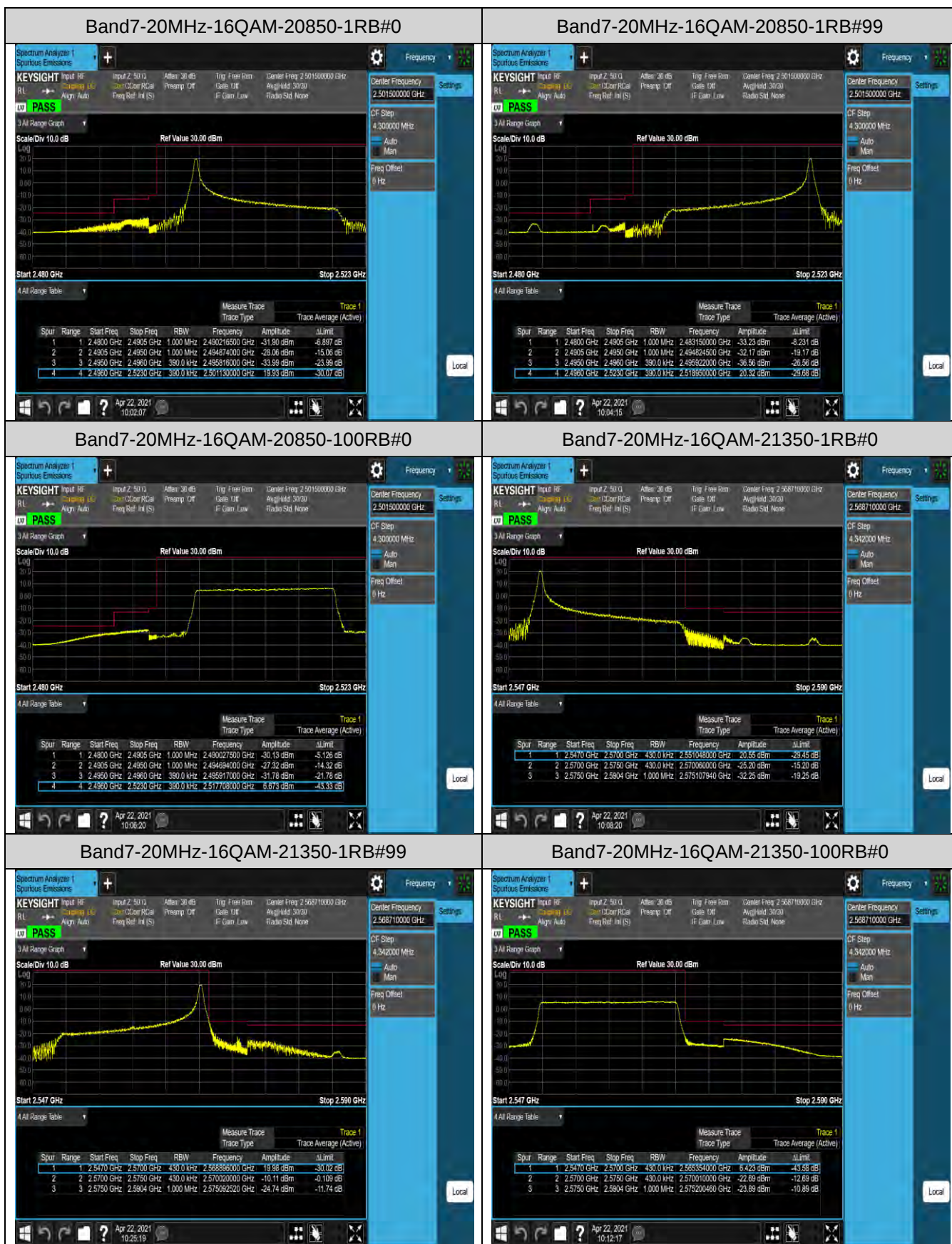


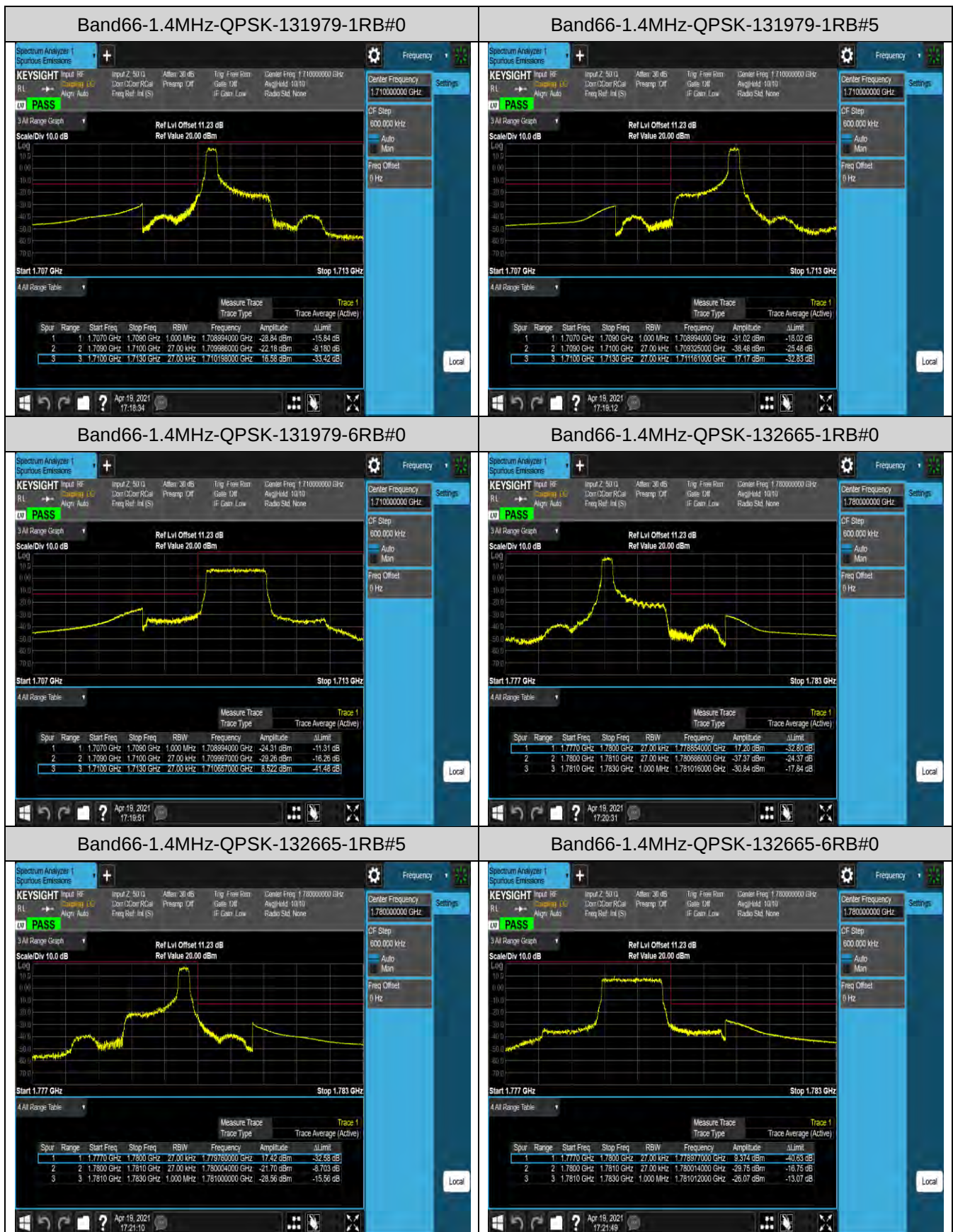


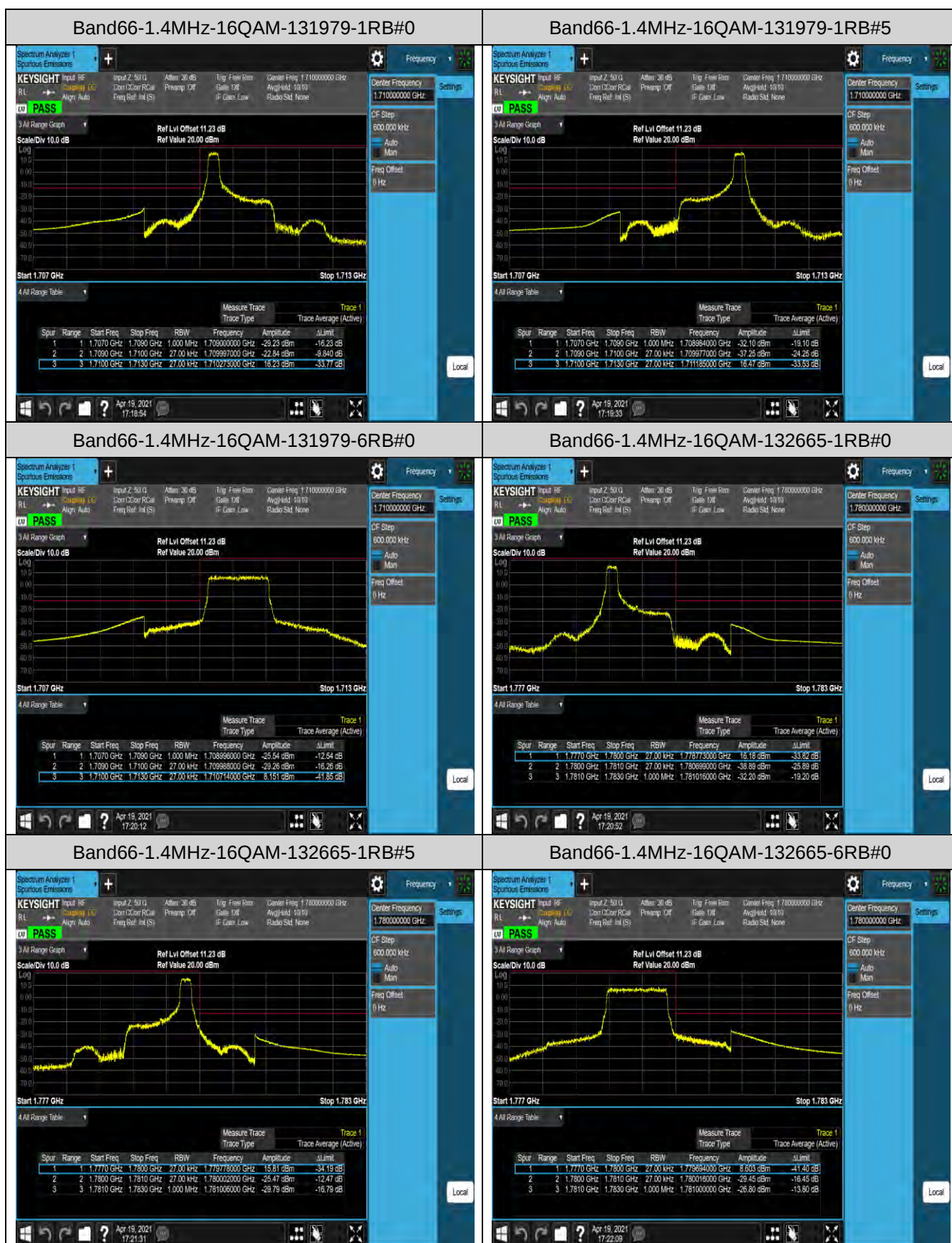
















Appendix E: Conducted Spurious Emission

Test Result

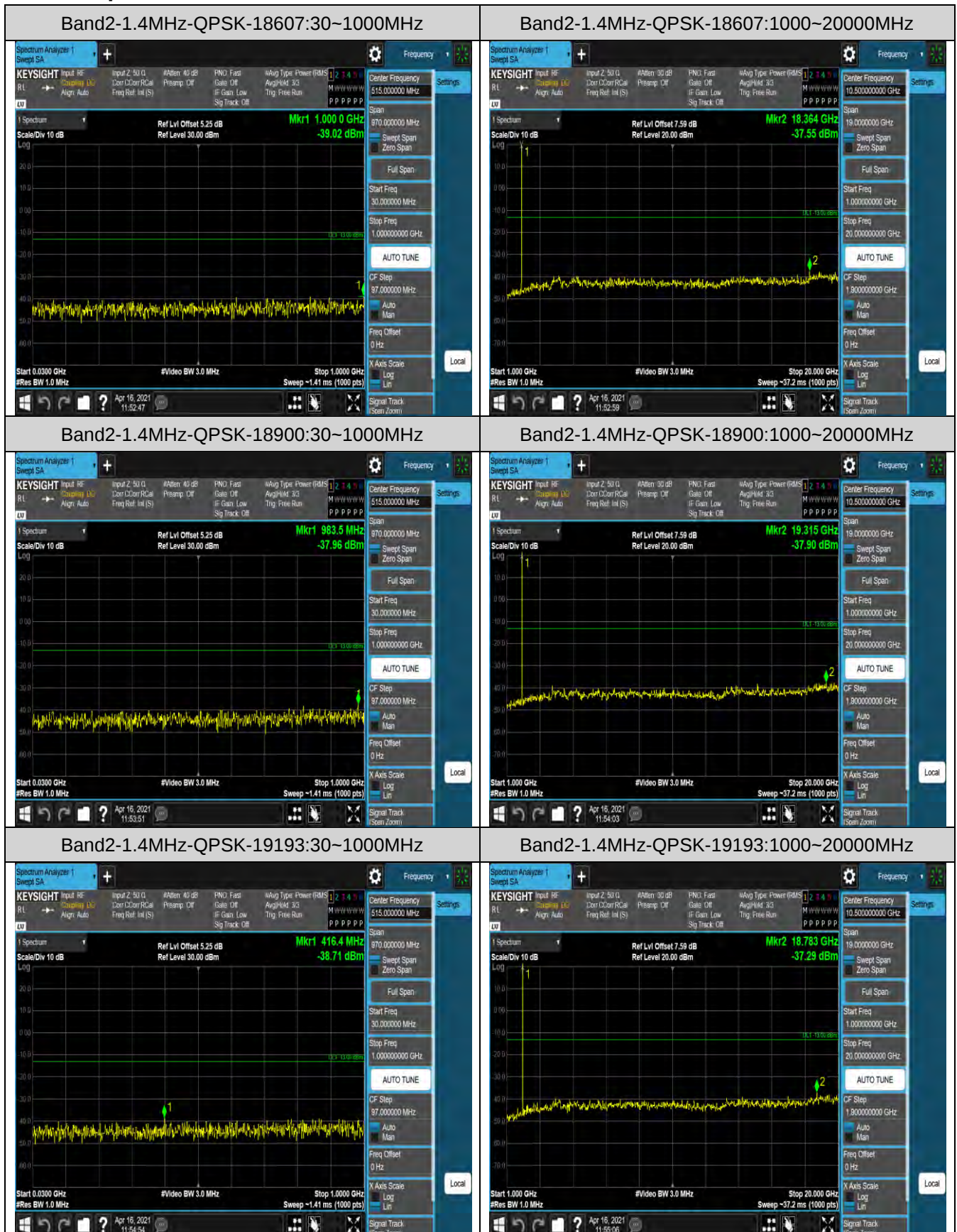
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	30~1000MHz	-39.02	PASS
Band2	1.4MHz	QPSK	18607	1RB#0	1000~20000MHz	-37.55	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	30~1000MHz	-37.96	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	1000~20000MHz	-37.9	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	30~1000MHz	-38.71	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	1000~20000MHz	-37.29	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	30~1000MHz	-38.69	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	1000~20000MHz	-37.43	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	30~1000MHz	-38.67	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	1000~20000MHz	-37.39	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	30~1000MHz	-39.1	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	1000~20000MHz	-37.64	PASS
Band2	20MHz	QPSK	18700	1RB#0	30~1000MHz	-38.38	PASS
Band2	20MHz	QPSK	18700	1RB#0	1000~20000MHz	-37.17	PASS
Band2	20MHz	QPSK	18900	1RB#0	30~1000MHz	-38.35	PASS
Band2	20MHz	QPSK	18900	1RB#0	1000~20000MHz	-37.23	PASS
Band2	20MHz	QPSK	19100	1RB#0	30~1000MHz	-38.15	PASS
Band2	20MHz	QPSK	19100	1RB#0	1000~20000MHz	-37.55	PASS
Band2	20MHz	16QAM	18700	1RB#0	30~1000MHz	-38.75	PASS
Band2	20MHz	16QAM	18700	1RB#0	1000~20000MHz	-37.15	PASS
Band2	20MHz	16QAM	18900	1RB#0	30~1000MHz	-37.82	PASS
Band2	20MHz	16QAM	18900	1RB#0	1000~20000MHz	-37.48	PASS
Band2	20MHz	16QAM	19100	1RB#0	30~1000MHz	-37.86	PASS
Band2	20MHz	16QAM	19100	1RB#0	1000~20000MHz	-38.35	PASS
Band4	1.4MHz	QPSK	19957	1RB#0	30~1000MHz	-38.59	PASS
Band4	1.4MHz	QPSK	19957	1RB#0	1000~20000MHz	-38.08	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	30~1000MHz	-37.95	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	1000~20000MHz	-37.52	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	30~1000MHz	-38.65	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	1000~20000MHz	-38.13	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	30~1000MHz	-38.4	PASS

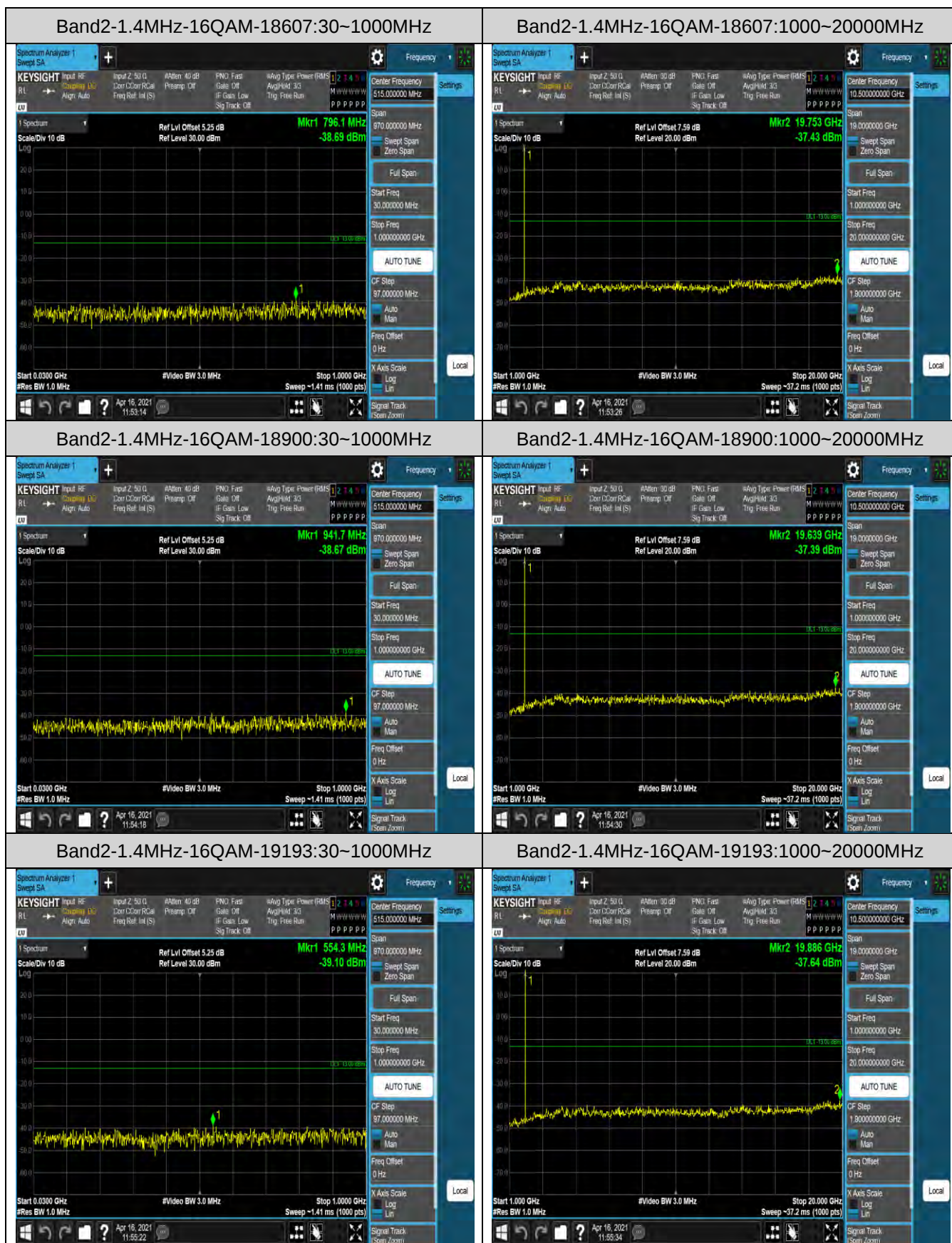
Band4	1.4MHz	16QAM	19957	1RB#0	1000~20000MHz	-37.27	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	30~1000MHz	-38.75	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	1000~20000MHz	-36.64	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	30~1000MHz	-38.6	PASS
Band4	1.4MHz	16QAM	20393	1RB#0	1000~20000MHz	-36.85	PASS
Band4	20MHz	QPSK	20050	1RB#0	30~1000MHz	-37.34	PASS
Band4	20MHz	QPSK	20050	1RB#0	1000~20000MHz	-37.29	PASS
Band4	20MHz	QPSK	20175	1RB#0	30~1000MHz	-38.58	PASS
Band4	20MHz	QPSK	20175	1RB#0	1000~20000MHz	-37.22	PASS
Band4	20MHz	QPSK	20300	1RB#0	30~1000MHz	-37.69	PASS
Band4	20MHz	QPSK	20300	1RB#0	1000~20000MHz	-36.96	PASS
Band4	20MHz	16QAM	20050	1RB#0	30~1000MHz	-38.29	PASS
Band4	20MHz	16QAM	20050	1RB#0	1000~20000MHz	-37.59	PASS
Band4	20MHz	16QAM	20175	1RB#0	30~1000MHz	-39.08	PASS
Band4	20MHz	16QAM	20175	1RB#0	1000~20000MHz	-36.69	PASS
Band4	20MHz	16QAM	20300	1RB#0	30~1000MHz	-38.15	PASS
Band4	20MHz	16QAM	20300	1RB#0	1000~20000MHz	-37.43	PASS
Band5	1.4MHz	QPSK	20407	1RB#0	30~1000MHz	-48.34	PASS
Band5	1.4MHz	QPSK	20407	1RB#0	1000~10000MHz	-35.81	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	30~1000MHz	-48.38	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	1000~10000MHz	-36.25	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	30~1000MHz	-48.49	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	1000~10000MHz	-37.38	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	30~1000MHz	-46.85	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	1000~10000MHz	-35.12	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	30~1000MHz	-48.49	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	1000~10000MHz	-38.1	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	30~1000MHz	-48.22	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	1000~10000MHz	-36.98	PASS
Band5	10MHz	QPSK	20450	1RB#0	30~1000MHz	-48.17	PASS
Band5	10MHz	QPSK	20450	1RB#0	1000~10000MHz	-39.7	PASS
Band5	10MHz	QPSK	20525	1RB#0	30~1000MHz	-48.44	PASS
Band5	10MHz	QPSK	20525	1RB#0	1000~10000MHz	-33.13	PASS
Band5	10MHz	QPSK	20600	1RB#0	30~1000MHz	-48.93	PASS
Band5	10MHz	QPSK	20600	1RB#0	1000~10000MHz	-36.51	PASS
Band5	10MHz	16QAM	20450	1RB#0	30~1000MHz	-47.33	PASS

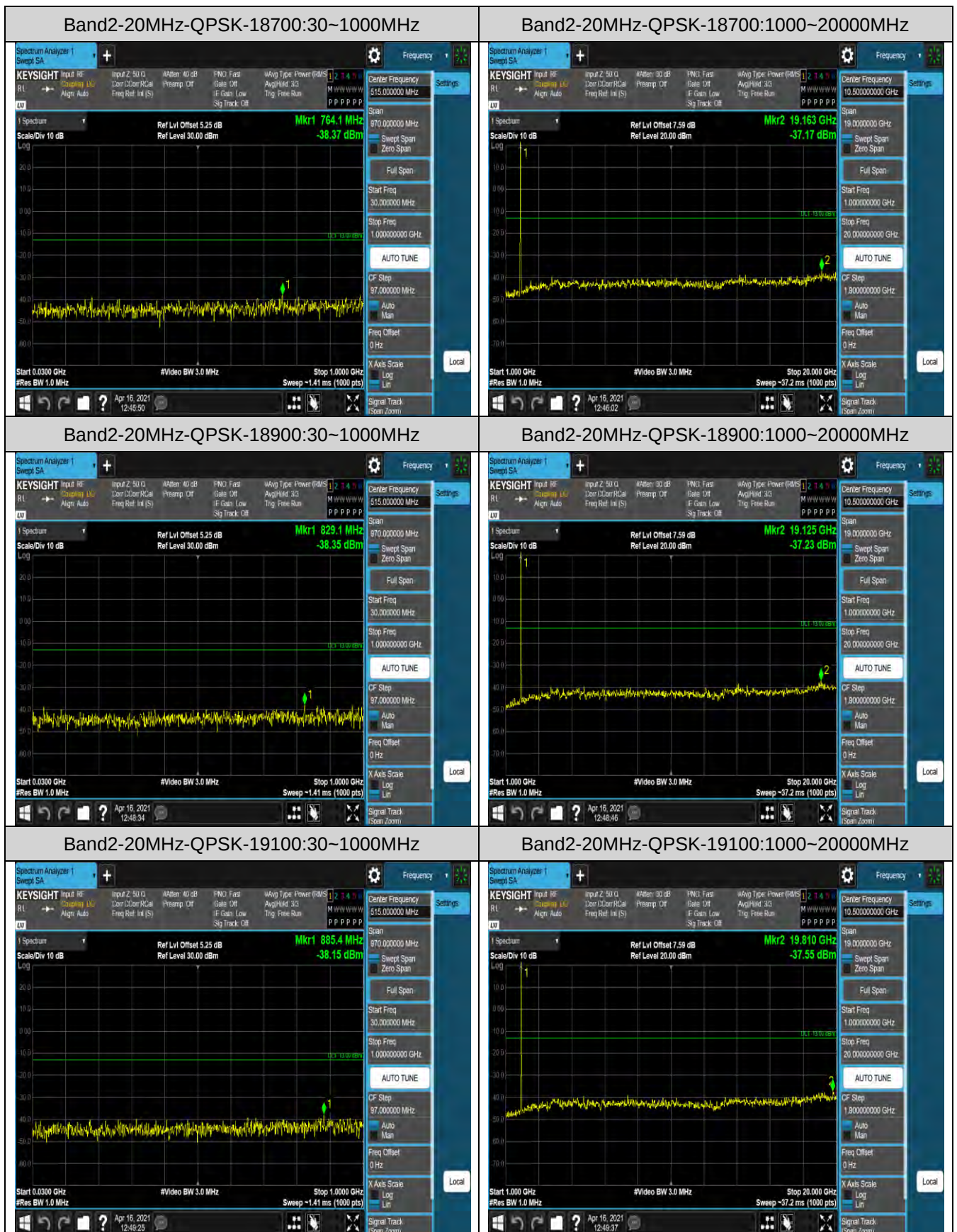
Band5	10MHz	16QAM	20450	1RB#0	1000~10000MHz	-36.06	PASS
Band5	10MHz	16QAM	20525	1RB#0	30~1000MHz	-47.83	PASS
Band5	10MHz	16QAM	20525	1RB#0	1000~10000MHz	-35.75	PASS
Band5	10MHz	16QAM	20600	1RB#0	30~1000MHz	-47.65	PASS
Band5	10MHz	16QAM	20600	1RB#0	1000~10000MHz	-35.37	PASS
Band7	5MHz	QPSK	20775	1RB#0	30~1000MHz	-48.55	PASS
Band7	5MHz	QPSK	20775	1RB#0	1000~27000MHz	-33.96	PASS
Band7	5MHz	QPSK	21100	1RB#0	30~1000MHz	-48.64	PASS
Band7	5MHz	QPSK	21100	1RB#0	1000~27000MHz	-32.89	PASS
Band7	5MHz	QPSK	21425	1RB#0	30~1000MHz	-48.2	PASS
Band7	5MHz	QPSK	21425	1RB#0	1000~27000MHz	-34.43	PASS
Band7	5MHz	16QAM	20775	1RB#0	30~1000MHz	-47.7	PASS
Band7	5MHz	16QAM	20775	1RB#0	1000~27000MHz	-34.48	PASS
Band7	5MHz	16QAM	21100	1RB#0	30~1000MHz	-49.06	PASS
Band7	5MHz	16QAM	21100	1RB#0	1000~27000MHz	-34.18	PASS
Band7	5MHz	16QAM	21425	1RB#0	30~1000MHz	-48.11	PASS
Band7	5MHz	16QAM	21425	1RB#0	1000~27000MHz	-34.16	PASS
Band7	20MHz	QPSK	20850	1RB#0	30~1000MHz	-48.05	PASS
Band7	20MHz	QPSK	20850	1RB#0	1000~27000MHz	-34.73	PASS
Band7	20MHz	QPSK	21100	1RB#0	30~1000MHz	-48.34	PASS
Band7	20MHz	QPSK	21100	1RB#0	1000~27000MHz	-34.05	PASS
Band7	20MHz	QPSK	21350	1RB#0	30~1000MHz	-47.12	PASS
Band7	20MHz	QPSK	21350	1RB#0	1000~27000MHz	-34.1	PASS
Band7	20MHz	16QAM	20850	1RB#0	30~1000MHz	-48.93	PASS
Band7	20MHz	16QAM	20850	1RB#0	1000~27000MHz	-34.25	PASS
Band7	20MHz	16QAM	21100	1RB#0	30~1000MHz	-47.41	PASS
Band7	20MHz	16QAM	21100	1RB#0	1000~27000MHz	-34.1	PASS
Band7	20MHz	16QAM	21350	1RB#0	30~1000MHz	-48.4	PASS
Band7	20MHz	16QAM	21350	1RB#0	1000~27000MHz	-34.62	PASS
Band66	1.4MHz	QPSK	131979	1RB#0	30~1000MHz	-37.72	PASS
Band66	1.4MHz	QPSK	131979	1RB#0	1000~20000MHz	-36.66	PASS
Band66	1.4MHz	QPSK	132322	1RB#0	30~1000MHz	-38.01	PASS
Band66	1.4MHz	QPSK	132322	1RB#0	1000~20000MHz	-36.54	PASS
Band66	1.4MHz	QPSK	132665	1RB#0	30~1000MHz	-38.57	PASS
Band66	1.4MHz	QPSK	132665	1RB#0	1000~20000MHz	-36.51	PASS
Band66	1.4MHz	16QAM	131979	1RB#0	30~1000MHz	-38.72	PASS

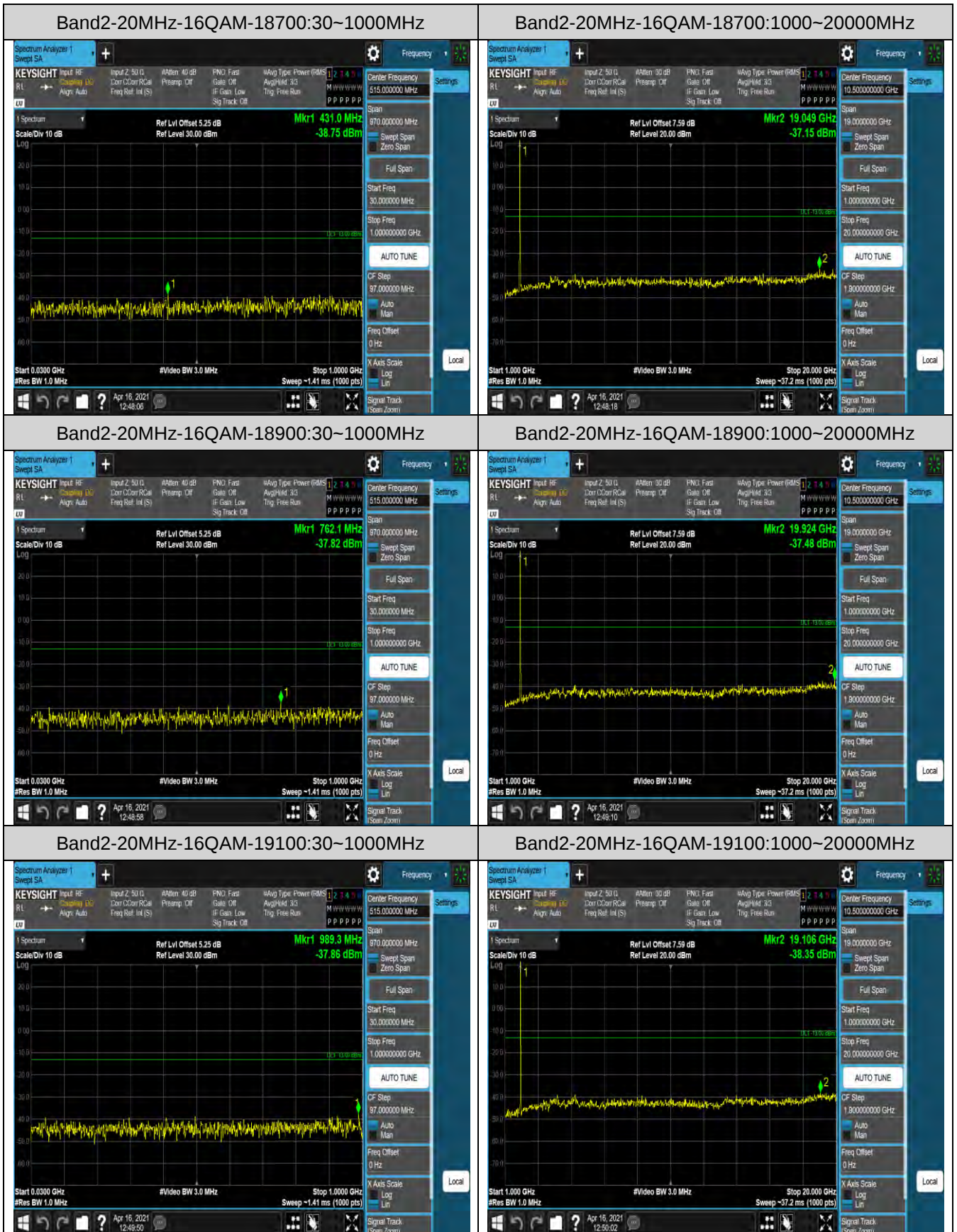
Band66	1.4MHz	16QAM	131979	1RB#0	1000~20000MHz	-37.7	PASS
Band66	1.4MHz	16QAM	132322	1RB#0	30~1000MHz	-38.78	PASS
Band66	1.4MHz	16QAM	132322	1RB#0	1000~20000MHz	-37.82	PASS
Band66	1.4MHz	16QAM	132665	1RB#0	30~1000MHz	-39.04	PASS
Band66	1.4MHz	16QAM	132665	1RB#0	1000~20000MHz	-37.52	PASS
Band66	20MHz	QPSK	132072	1RB#0	30~1000MHz	-38.45	PASS
Band66	20MHz	QPSK	132072	1RB#0	1000~20000MHz	-37.21	PASS
Band66	20MHz	QPSK	132322	1RB#0	30~1000MHz	-38.3	PASS
Band66	20MHz	QPSK	132322	1RB#0	1000~20000MHz	-37.91	PASS
Band66	20MHz	QPSK	132572	1RB#0	30~1000MHz	-37.7	PASS
Band66	20MHz	QPSK	132572	1RB#0	1000~20000MHz	-37.7	PASS
Band66	20MHz	16QAM	132072	1RB#0	30~1000MHz	-37.27	PASS
Band66	20MHz	16QAM	132072	1RB#0	1000~20000MHz	-36.98	PASS
Band66	20MHz	16QAM	132322	1RB#0	30~1000MHz	-38.79	PASS
Band66	20MHz	16QAM	132322	1RB#0	1000~20000MHz	-36.29	PASS
Band66	20MHz	16QAM	132572	1RB#0	30~1000MHz	-38.88	PASS
Band66	20MHz	16QAM	132572	1RB#0	1000~20000MHz	-37.87	PASS

Test Graphs





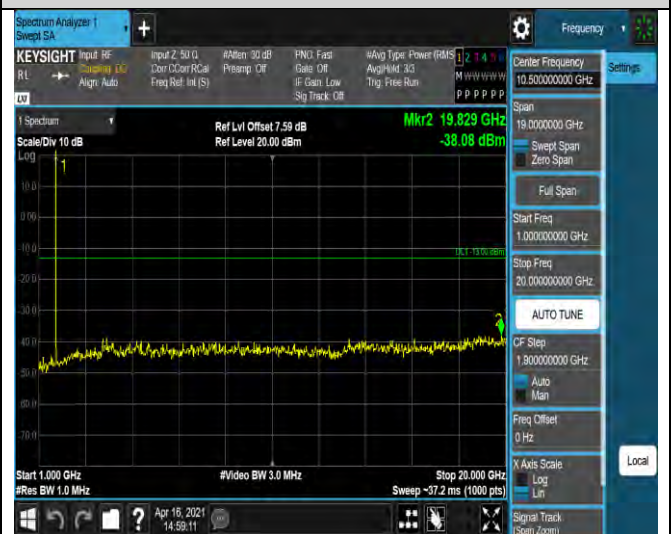




Band4-1.4MHz-QPSK-19957:30~1000MHz



Band4-1.4MHz-QPSK-19957:1000~20000MHz



Band4-1.4MHz-QPSK-20175:30~1000MHz



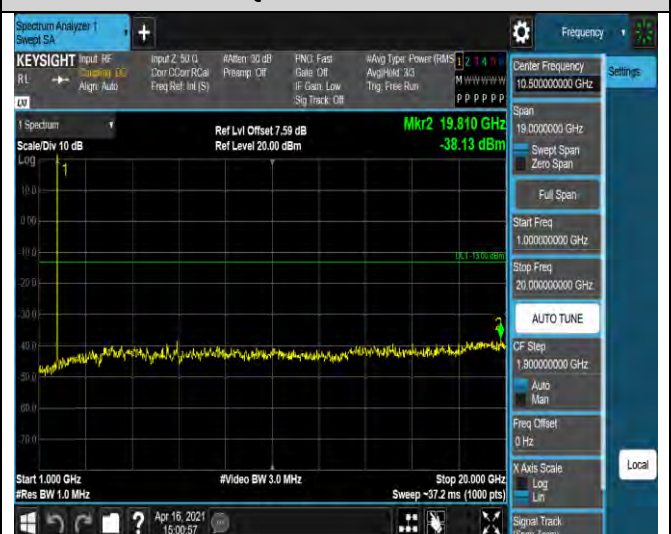
Band4-1.4MHz-QPSK-20175:1000~20000MHz

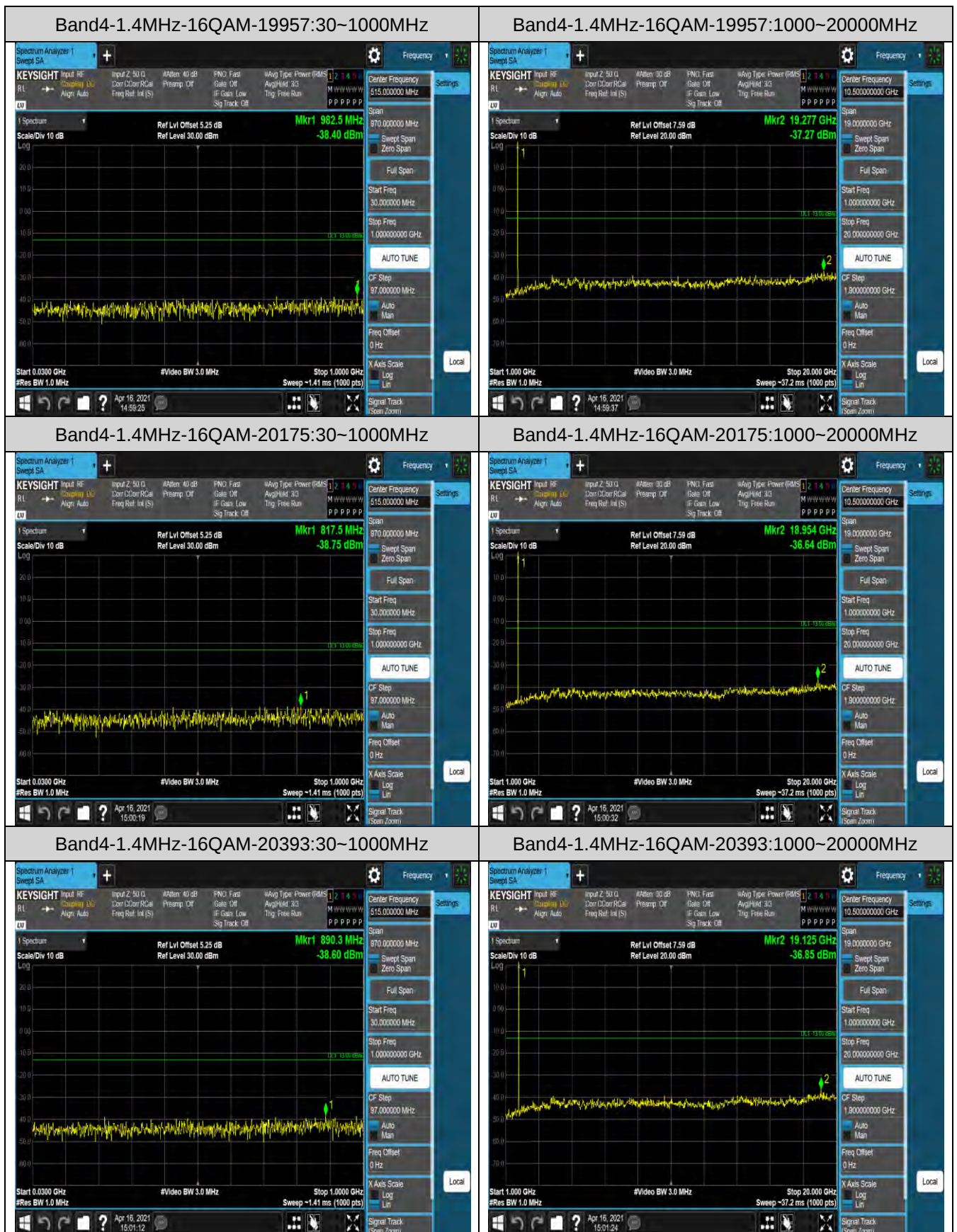


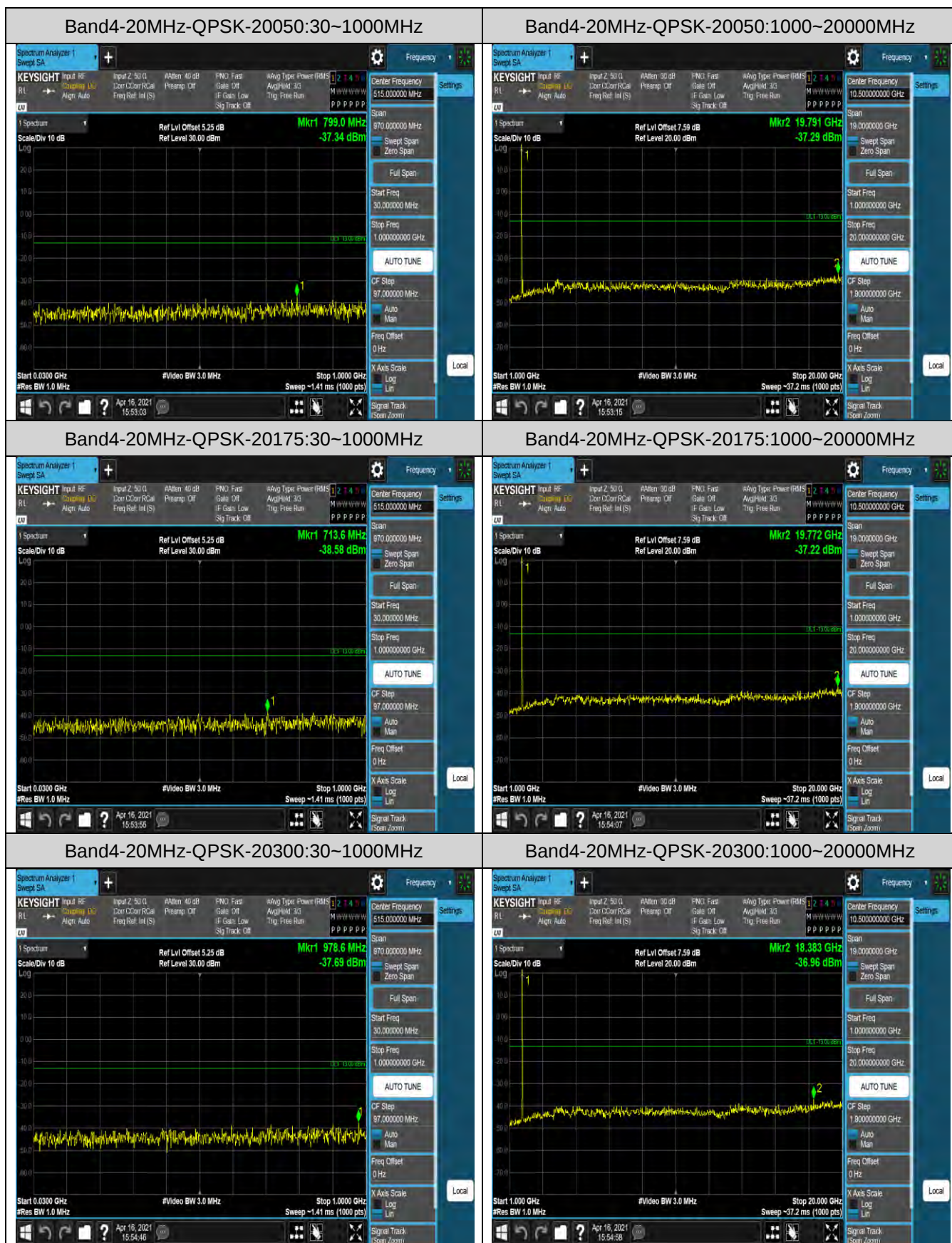
Band4-1.4MHz-QPSK-20393:30~1000MHz

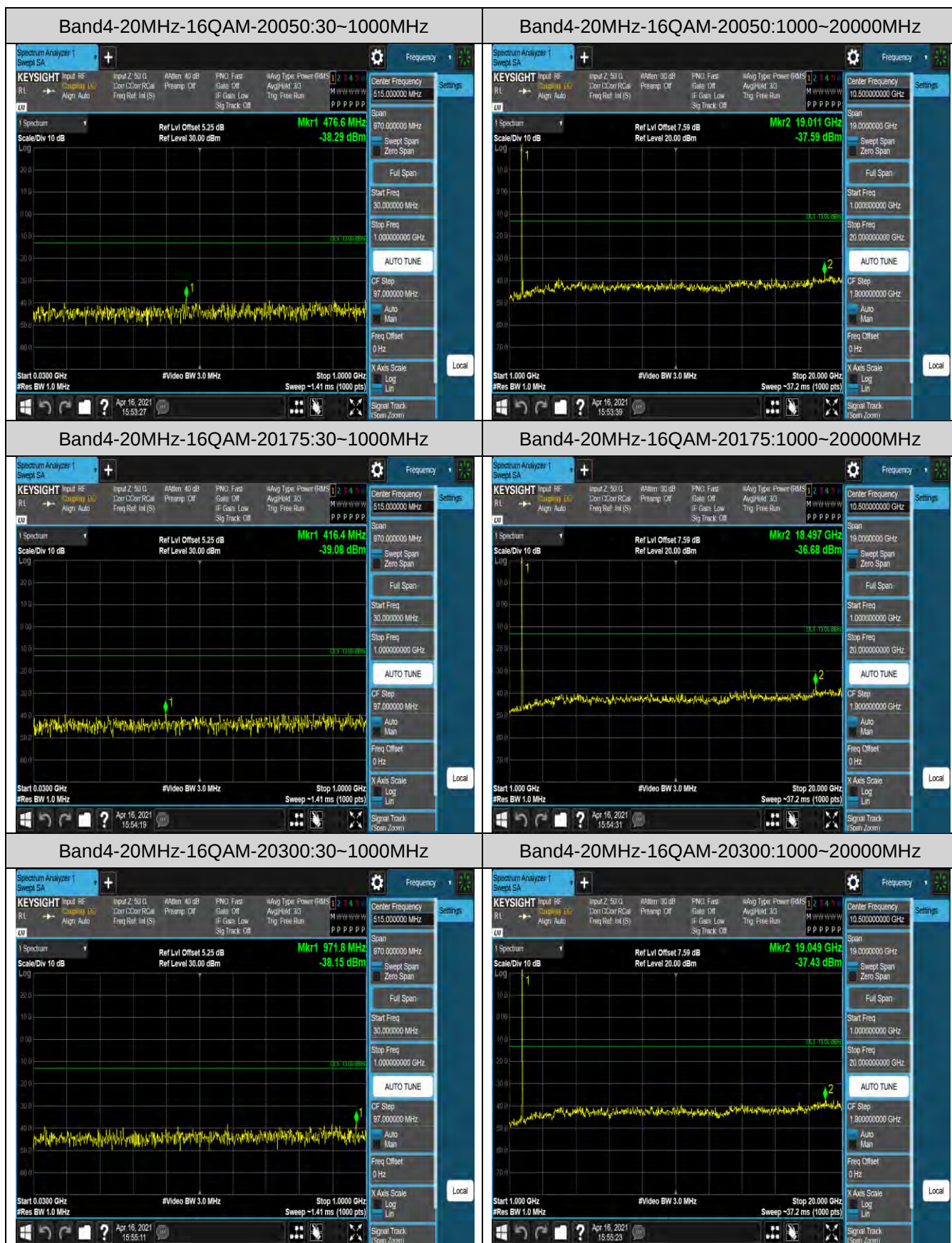


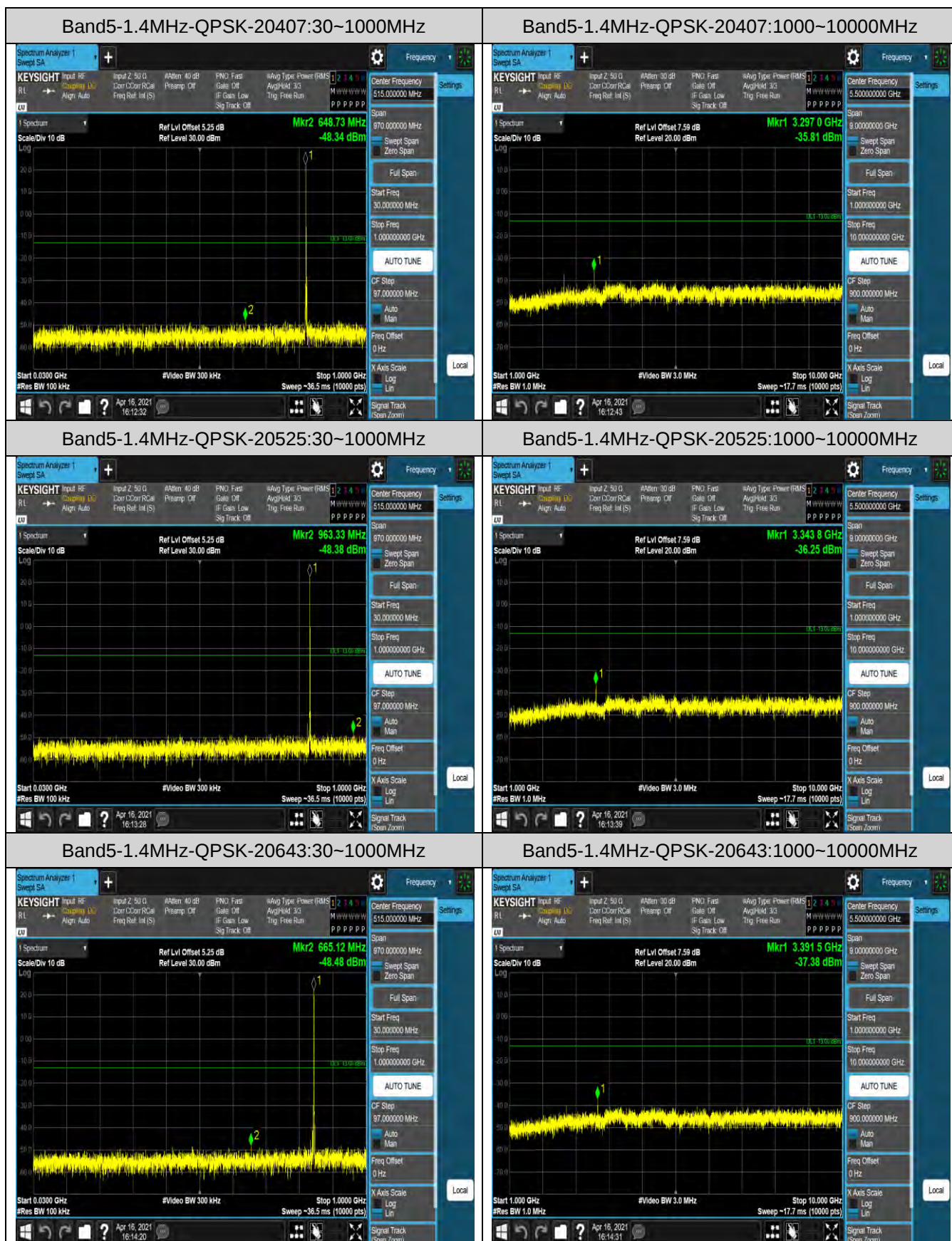
Band4-1.4MHz-QPSK-20393:1000~20000MHz



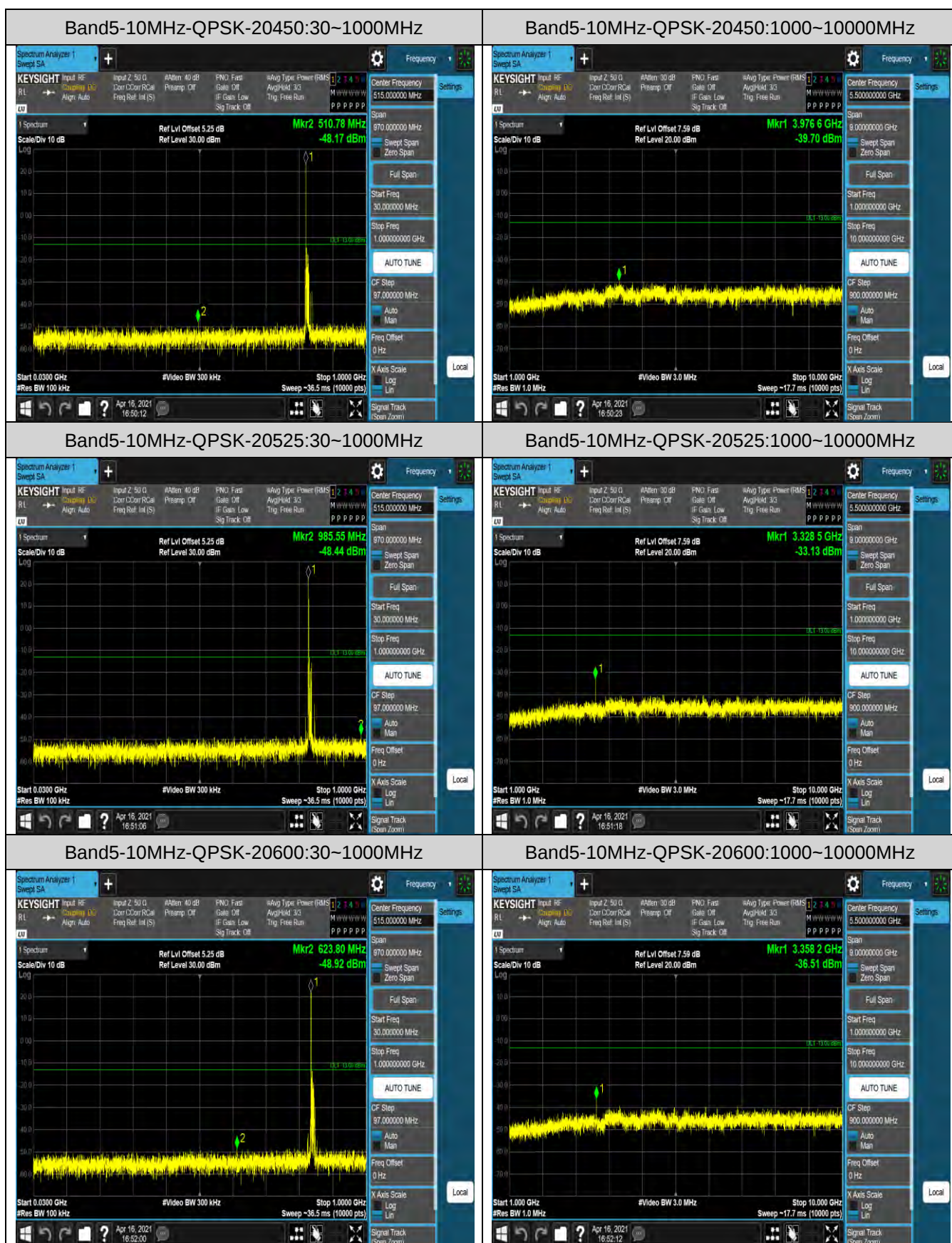


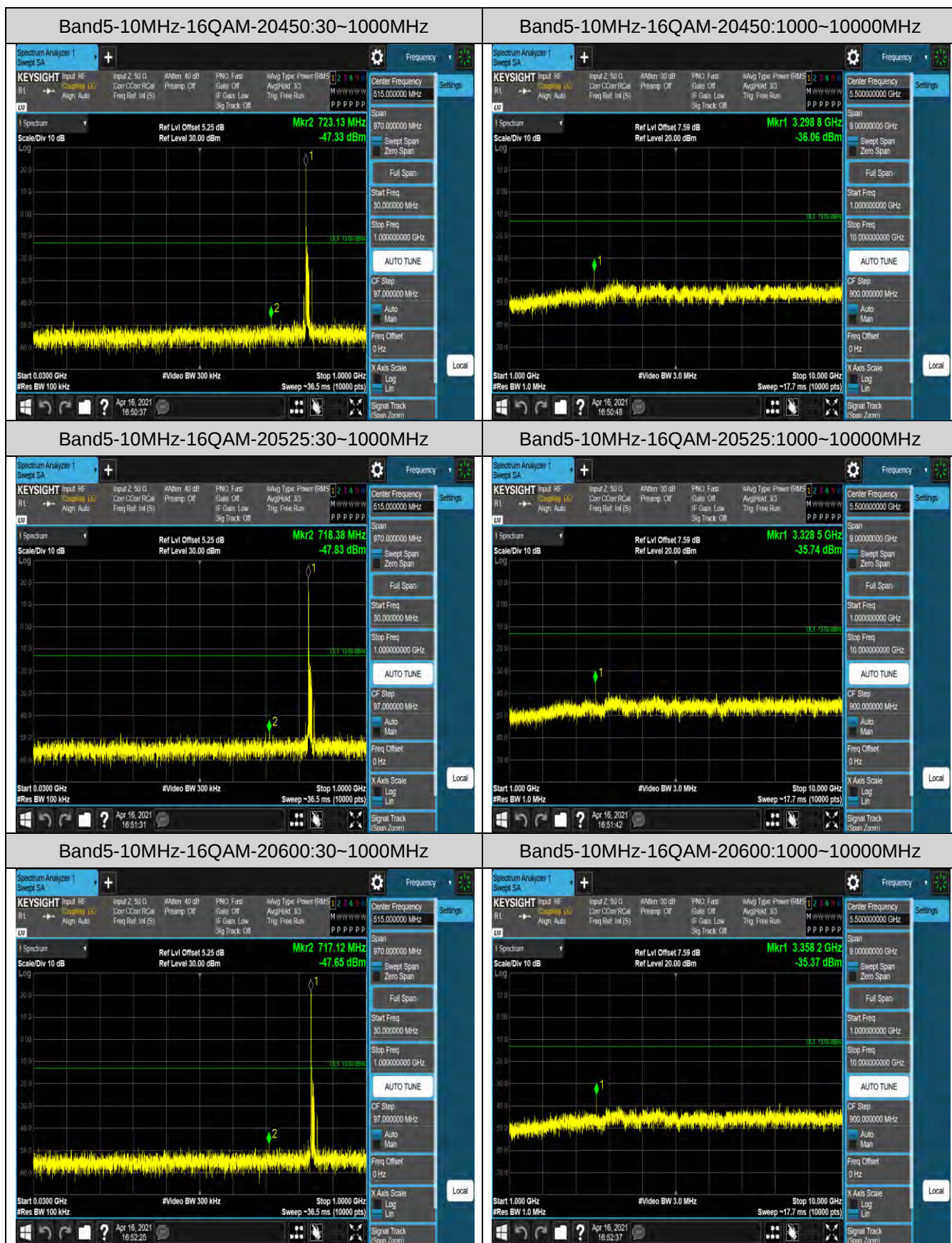


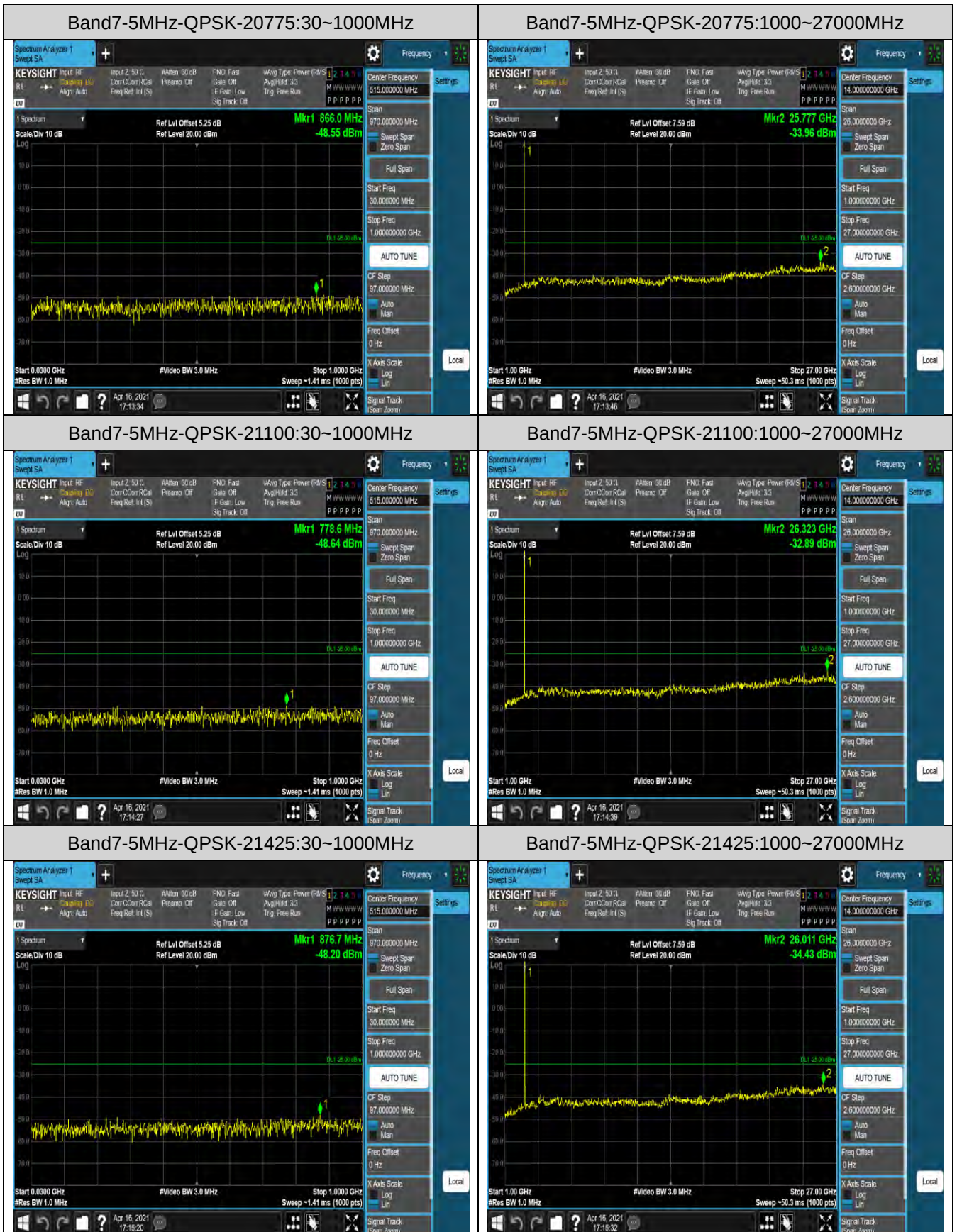


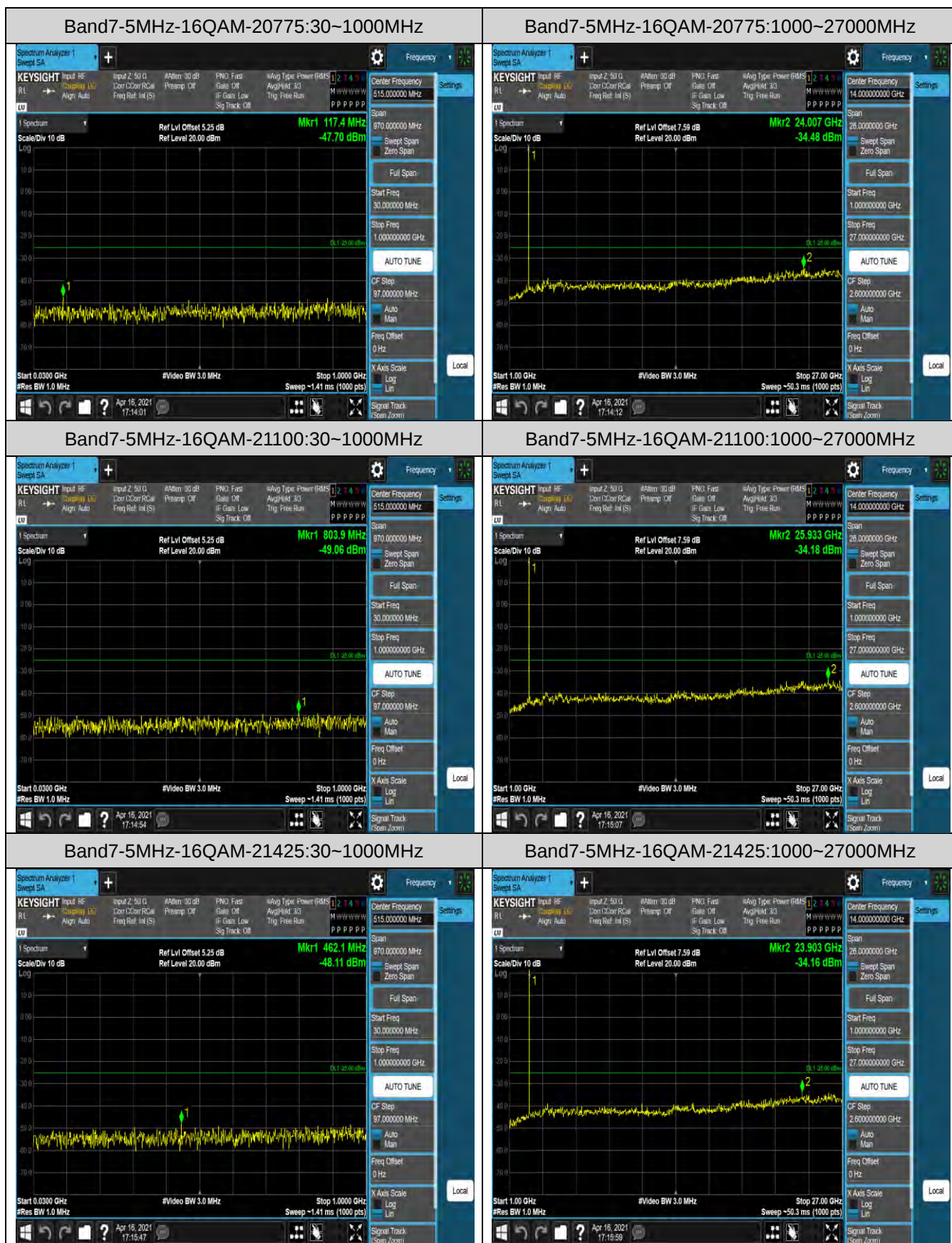


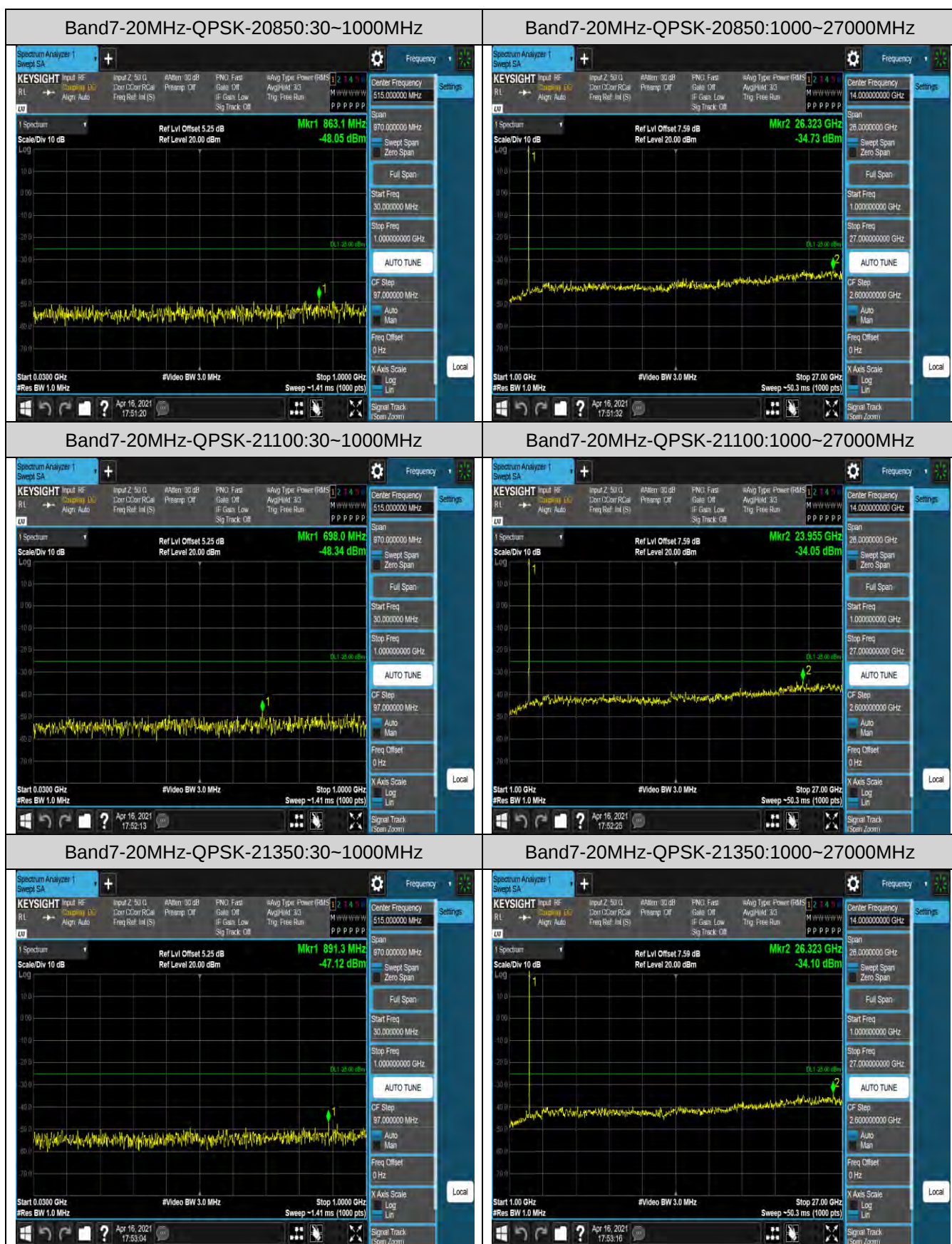


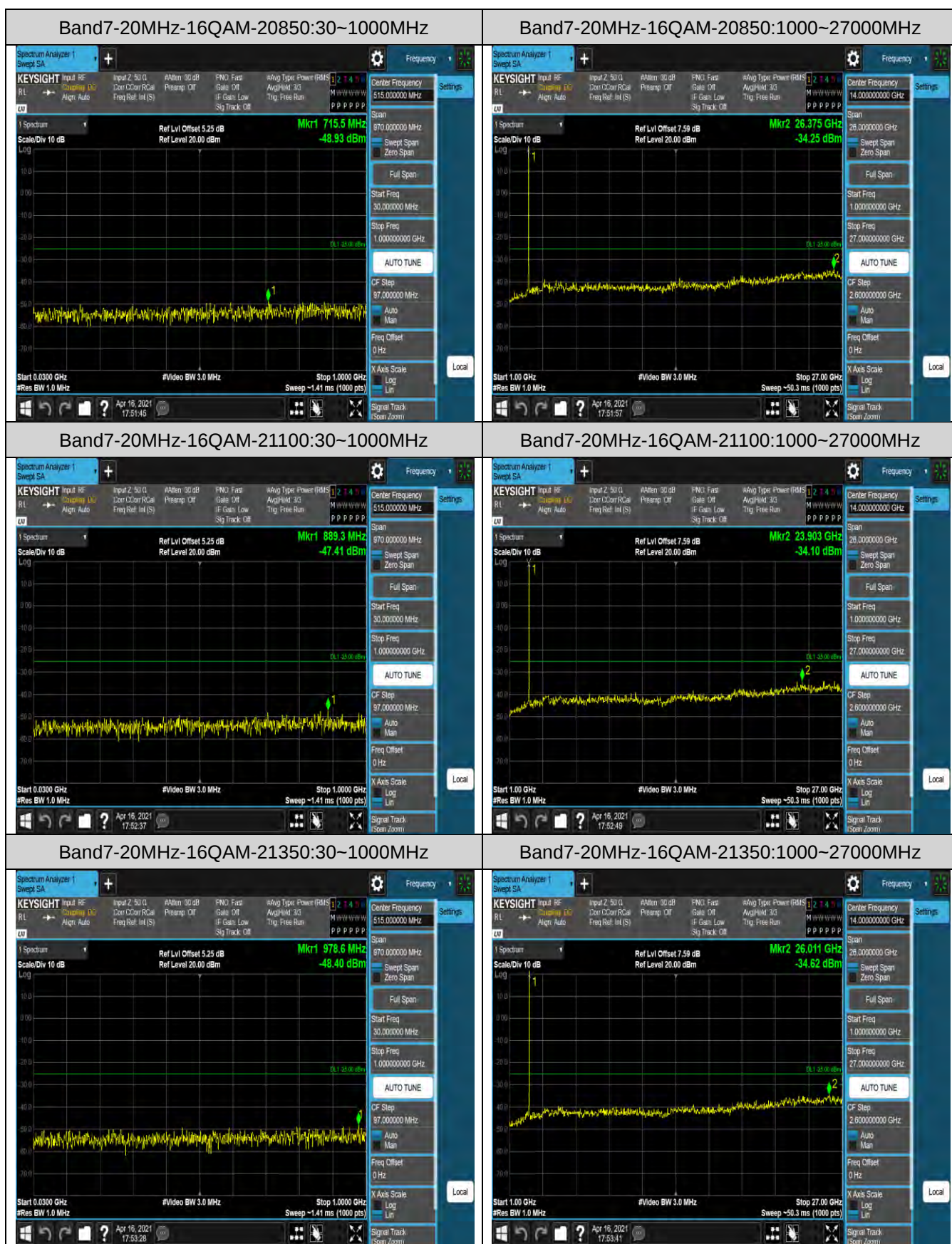


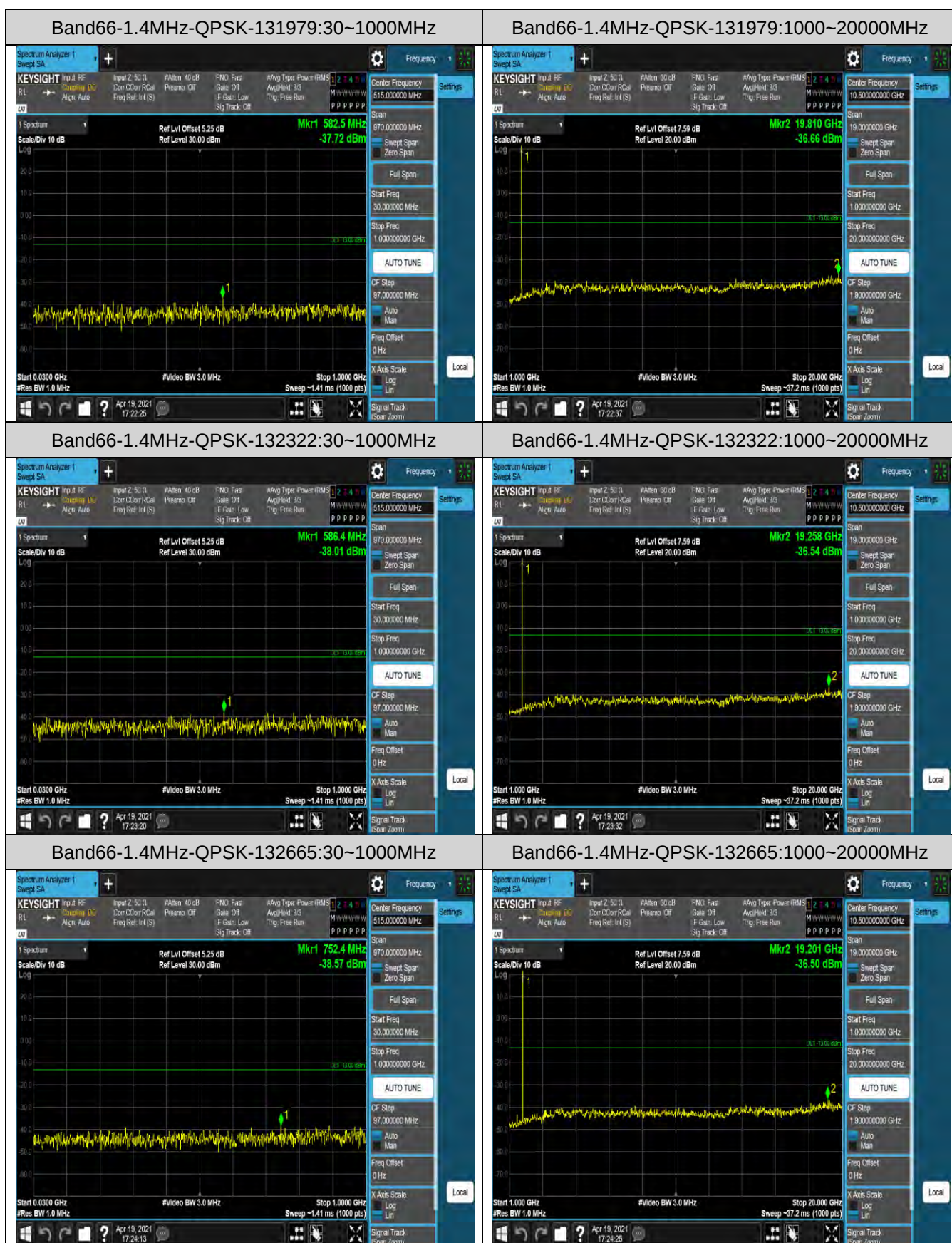












Band66-1.4MHz-16QAM-131979:30~1000MHz



Band66-1.4MHz-16QAM-131979:1000~20000MHz



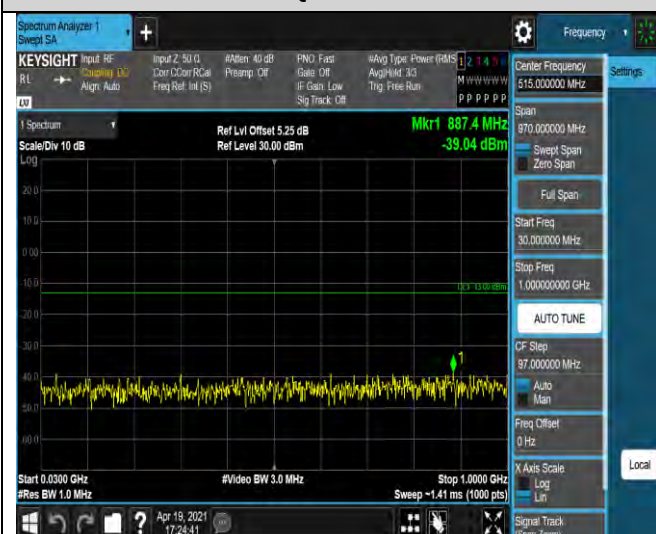
Band66-1.4MHz-16QAM-132322:30~1000MHz



Band66-1.4MHz-16QAM-132322:1000~20000MHz

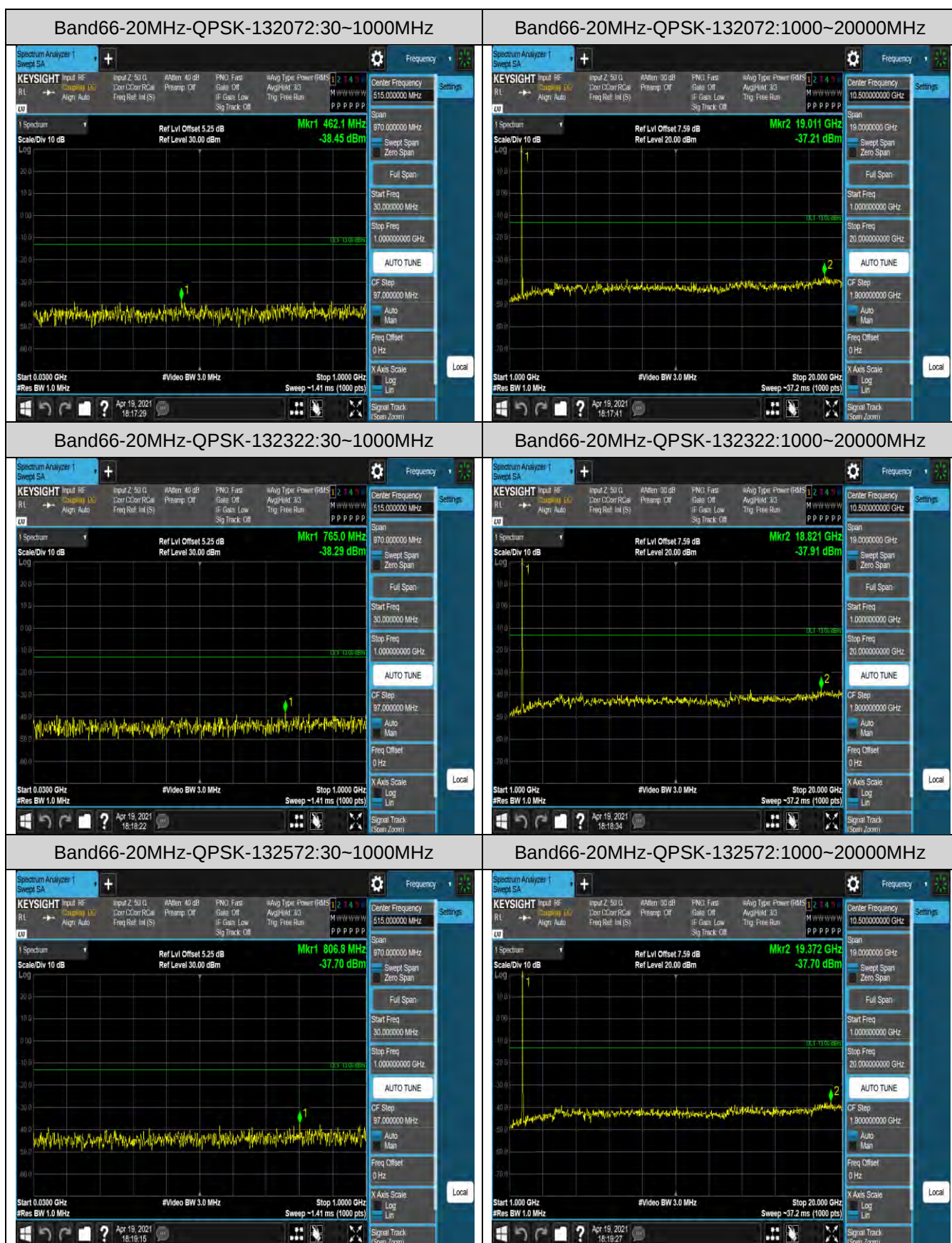


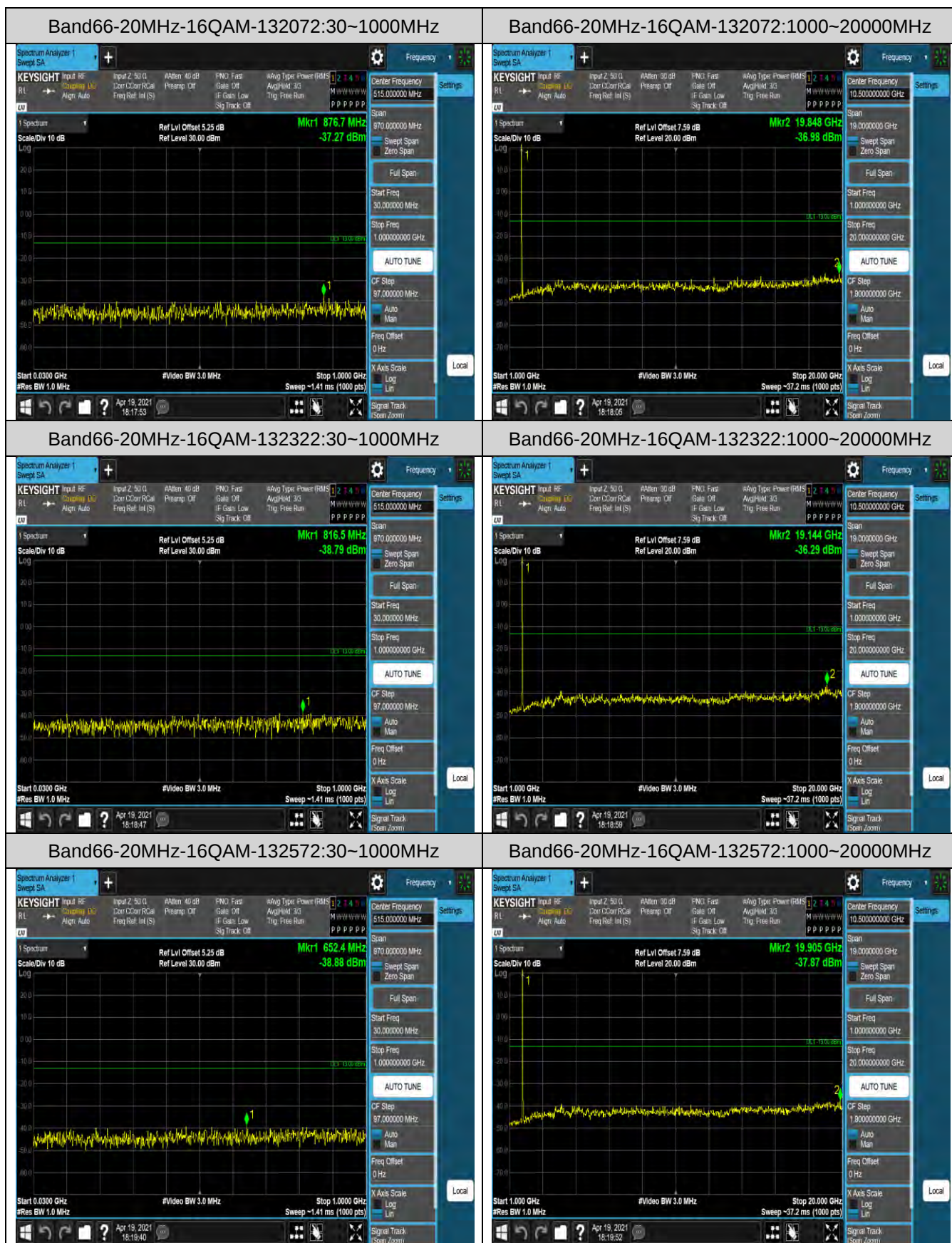
Band66-1.4MHz-16QAM-132665:30~1000MHz



Band66-1.4MHz-16QAM-132665:1000~20000MHz







Appendix F: Frequency Stability

Test Result (worst case)

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					
3.85	-30	-35.25	-0.018750	Within authorized band for Band 2	Pass
	-20	-24.00	-0.012766		
	-10	-34.07	-0.018122		
	0	-18.28	-0.009723		
	10	-34.25	-0.018218		
	20	-10.54	-0.005606		
	30	-45.43	-0.024165		
	40	-29.41	-0.015644		
	50	12.19	0.006484		
16QAM					
3.85	-30	-23.86	-0.012691	Within authorized band for Band 2	Pass
	-20	-32.93	-0.017516		
	-10	-32.94	-0.017521		
	0	-32.37	-0.017218		
	10	-40.04	-0.021298		
	20	-36.98	-0.019670		
	30	-49.80	-0.026489		
	40	-50.64	-0.026936		
	50	-53.00	-0.028191		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-51.26	-0.027266	Within authorized band for Band 2	Pass
	3.85	-40.01	-0.021282		
	4.40	-25.75	-0.013697		
16QAM					
25	3.50	-19.48	-0.010362	Within authorized band for Band 2	Pass
	3.85	-19.68	-0.010468		
	4.40	-12.20	-0.006489		
Note: Only the worst case shown in the report.					

Note: Only the worst case shown in the 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					
3.85	-30	-29.93	-0.017276	Within authorized band for Band 4	Pass
	-20	-34.16	-0.019717		
	-10	-28.02	-0.016173		
	0	-17.64	-0.010182		
	10	-33.47	-0.019319		
	20	-6.39	-0.003688		
	30	-13.25	-0.007648		
	40	-23.67	-0.013662		
	50	-28.42	-0.016404		
16QAM					
3.85	-30	-33.03	-0.019065	Within authorized band for Band 4	Pass
	-20	-27.17	-0.015683		
	-10	-26.76	-0.015446		
	0	-32.44	-0.018724		
	10	-31.44	-0.018147		
	20	-36.08	-0.020825		
	30	-29.33	-0.016929		
	40	-28.65	-0.016537		
	50	-29.01	-0.016745		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	7.95	0.004589	Within authorized band for Band 4	Pass
	3.85	-46.19	-0.026661		
	4.40	-36.15	-0.020866		
16QAM					
25	3.50	-28.58	-0.016496	Within authorized band for Band 4	Pass
	3.85	-40.08	-0.023134		
	4.40	-34.39	-0.019850		
Note: Only the worst case shown in the report.					

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LTE Band 5 part:

Reference Frequency: LTE Band 5(10MHz) Middle channel=20525 Frequency=836.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-3.03	-0.003622	±2.5	Pass
	-20	-20.01	-0.023921		
	-10	-25.81	-0.030855		
	0	-32.52	-0.038876		
	10	-34.53	-0.041279		
	20	-42.21	-0.050460		
	30	-44.79	-0.053545		
	40	-9.50	-0.011357		
	50	-10.67	-0.012756		
16QAM					
3.85	-30	-3.13	-0.003742	±2.5	Pass
	-20	4.86	0.005810		
	-10	-3.91	-0.004674		
	0	4.41	0.005272		
	10	3.25	0.003885		
	20	2.50	0.002989		
	30	4.02	0.004806		
	40	8.75	0.010460		
	50	5.62	0.006718		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-32.52	-0.038876	±2.5	Pass
	3.85	9.10	0.010879		
	4.40	-27.79	-0.033222		
16QAM					
25	3.50	-7.52	-0.008990	±2.5	Pass
	3.85	-12.87	-0.015386		
	4.40	-4.91	-0.005870		
Note: Only the worst case shown in the report.					

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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					
3.85	-30	-33.06	-0.013041	Within authorized band for Band 7	Pass
	-20	-19.57	-0.007720		
	-10	-13.03	-0.005140		
	0	-31.20	-0.012308		
	10	-38.48	-0.015179		
	20	12.86	0.005073		
	30	-12.19	-0.004809		
	40	-13.70	-0.005404		
	50	-15.54	-0.006130		
16QAM					
3.85	-30	-32.29	-0.012738	Within authorized band for Band 7	Pass
	-20	-32.33	-0.012753		
	-10	-31.86	-0.012568		
	0	-39.88	-0.015732		
	10	-34.56	-0.013633		
	20	-34.76	-0.013712		
	30	-32.84	-0.012955		
	40	-44.13	-0.017408		
	50	-39.88	-0.015732		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-29.60	-0.011677	Within authorized band for Band 7	Pass
	3.85	-23.06	-0.009097		
	4.40	-38.12	-0.015037		
16QAM					
25	3.50	-14.96	-0.005901	Within authorized band for Band 7	Pass
	3.85	-26.24	-0.010351		
	4.40	-33.14	-0.013073		
Note: Only the worst case shown in the report.					

Note: Only the worst case shown in the 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					
3.85	-30	-40.84	-0.023404	Within authorized band for Band 66	Pass
	-20	-24.83	-0.014229		
	-10	-40.74	-0.023347		
	0	-9.30	-0.005330		
	10	-16.59	-0.009507		
	20	-21.27	-0.012189		
	30	-22.22	-0.012734		
	40	-28.88	-0.016550		
	50	-35.61	-0.020407		
16QAM					
3.85	-30	-20.61	-0.011811	Within authorized band for Band 66	Pass
	-20	-21.94	-0.012573		
	-10	-20.91	-0.011983		
	0	-21.20	-0.012149		
	10	-10.89	-0.006241		
	20	-14.85	-0.008510		
	30	-5.62	-0.003221		
	40	-7.47	-0.004281		
	50	4.36	0.002499		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-28.51	-0.016338	Within authorized band for Band 66	Pass
	3.85	-40.10	-0.022980		
	4.40	14.10	0.008080		
16QAM					
25	3.50	-27.87	-0.015971	Within authorized band for Band 66	Pass
	3.85	-43.26	-0.024791		
	4.40	-26.92	-0.015427		
Note: Only the worst case shown in the report.					

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