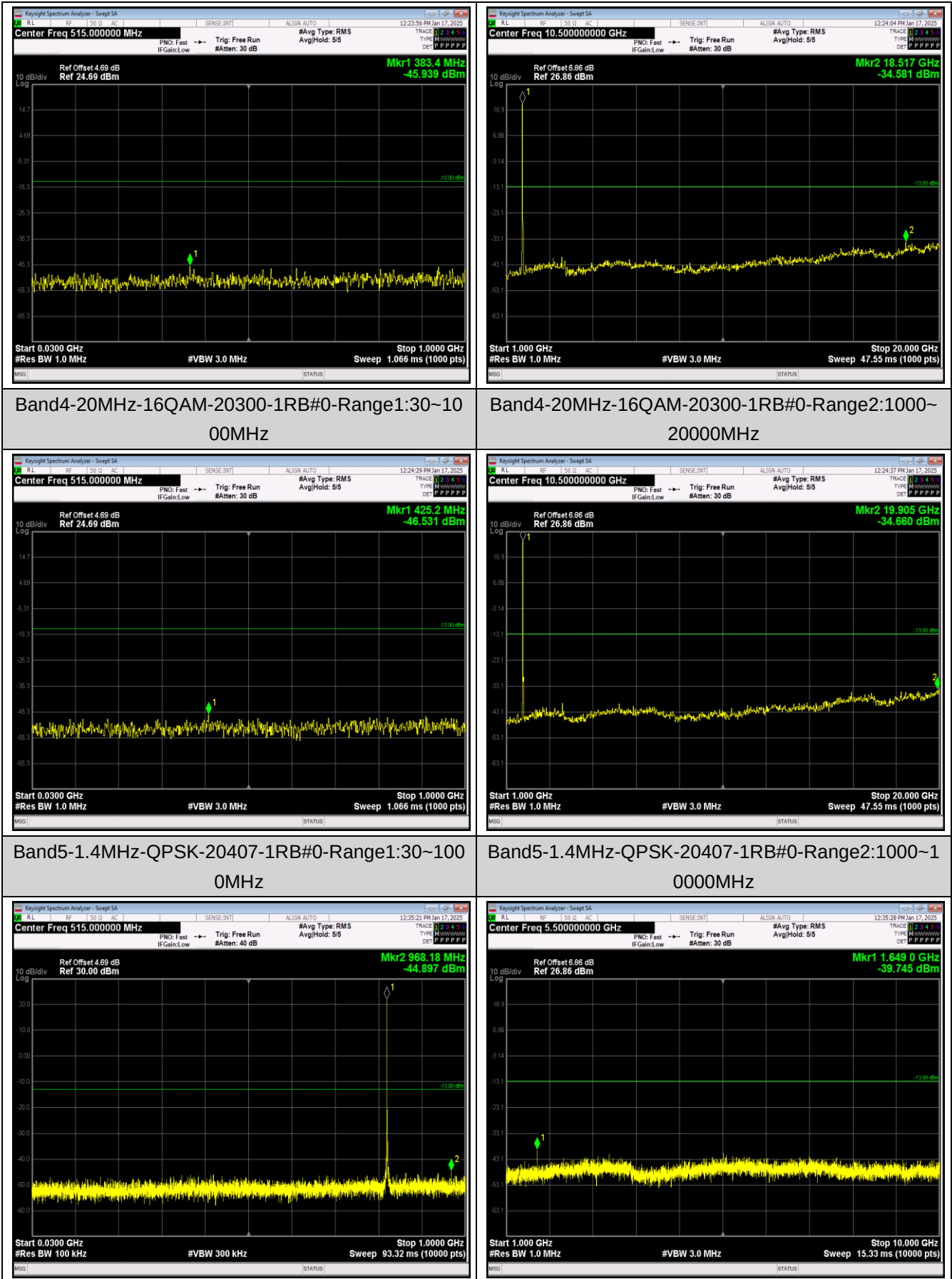
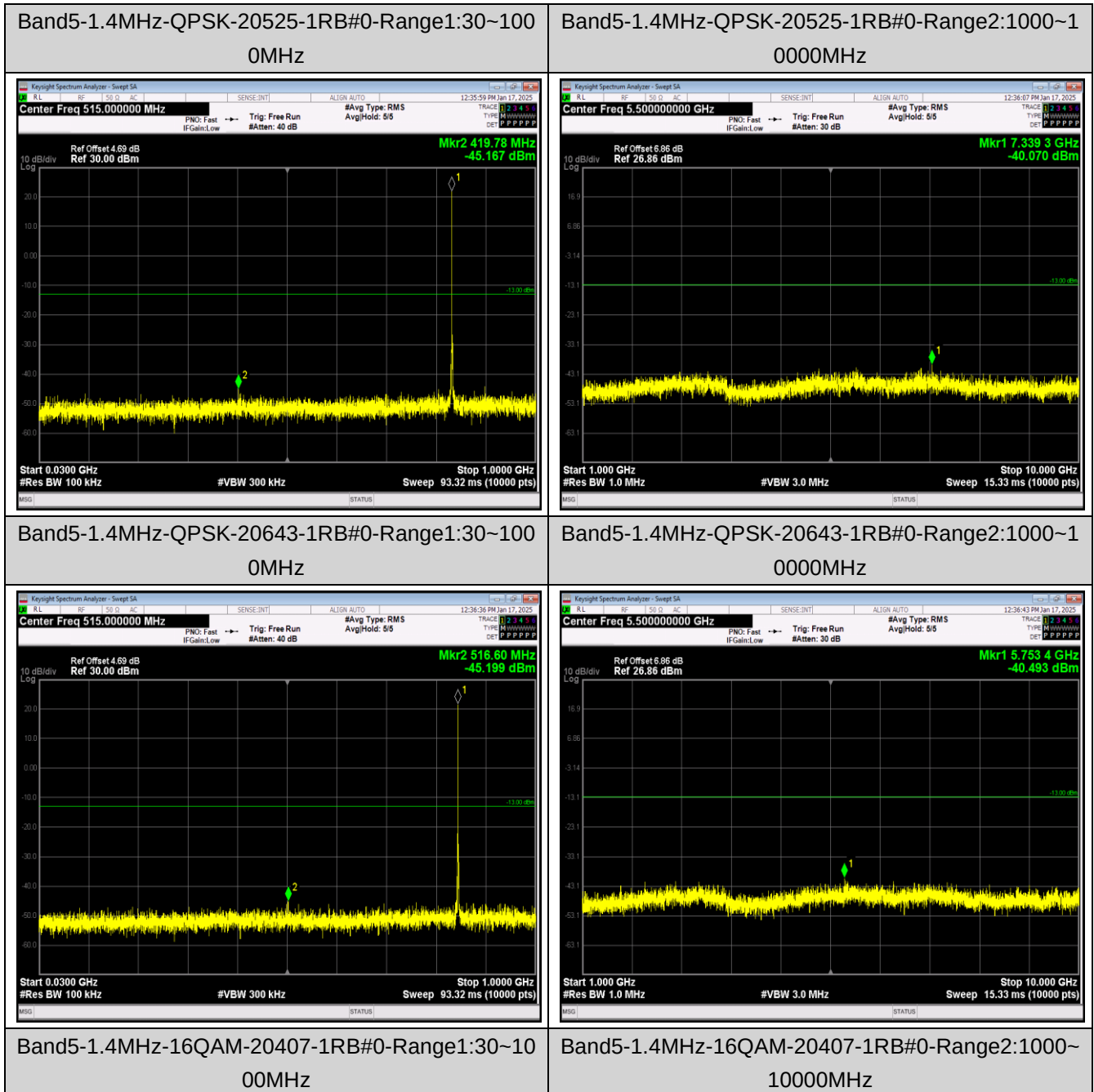
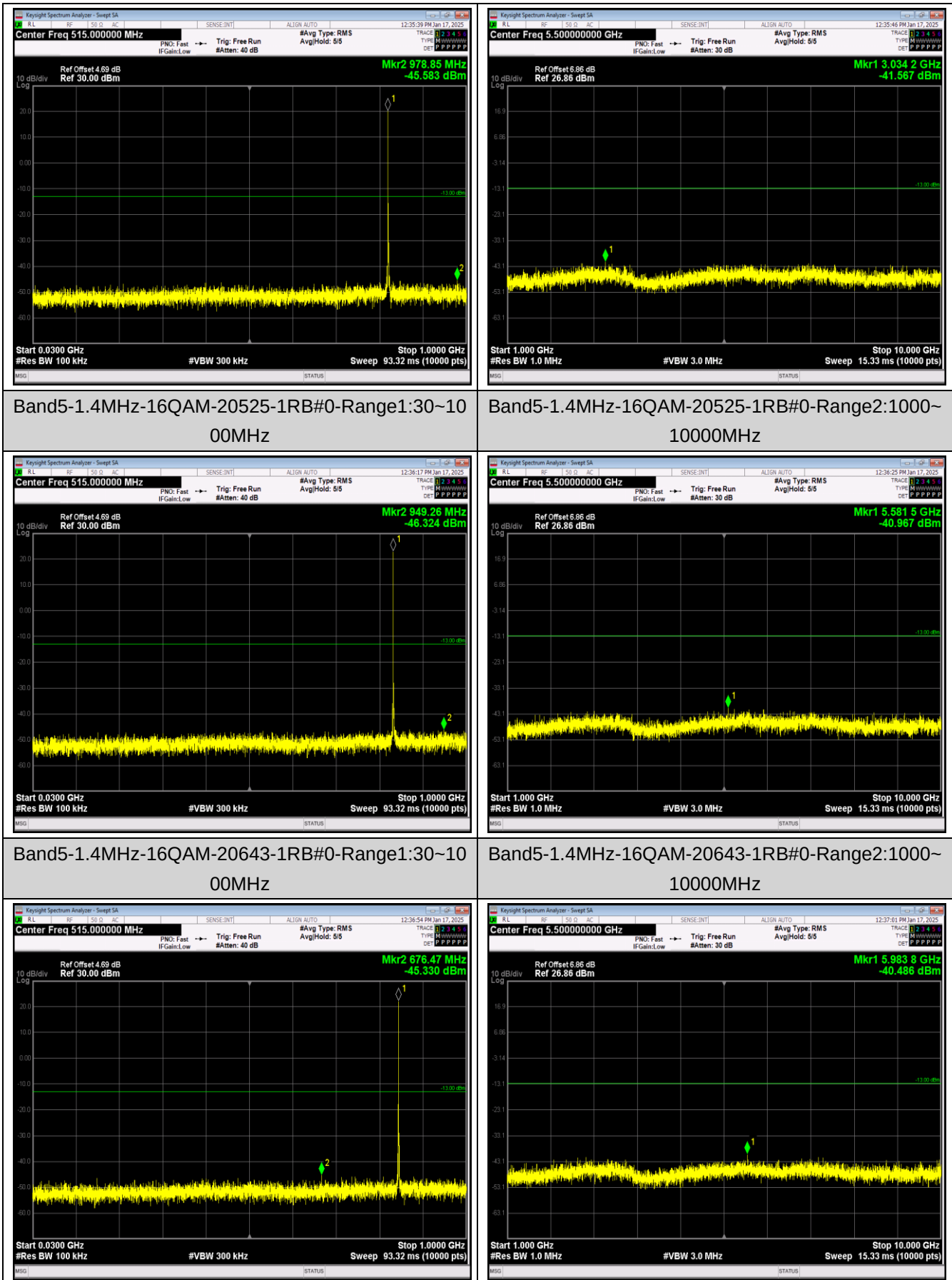
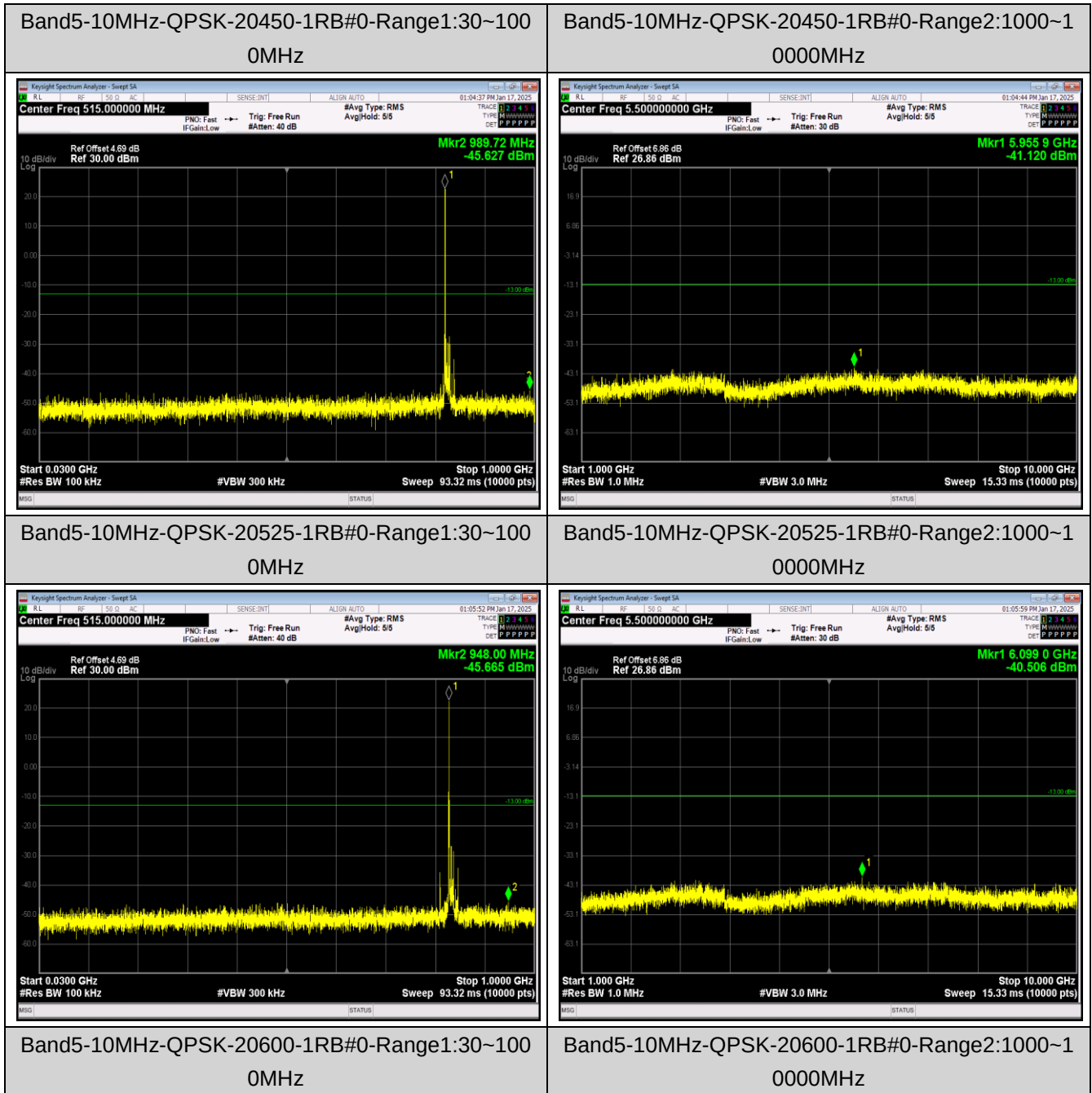
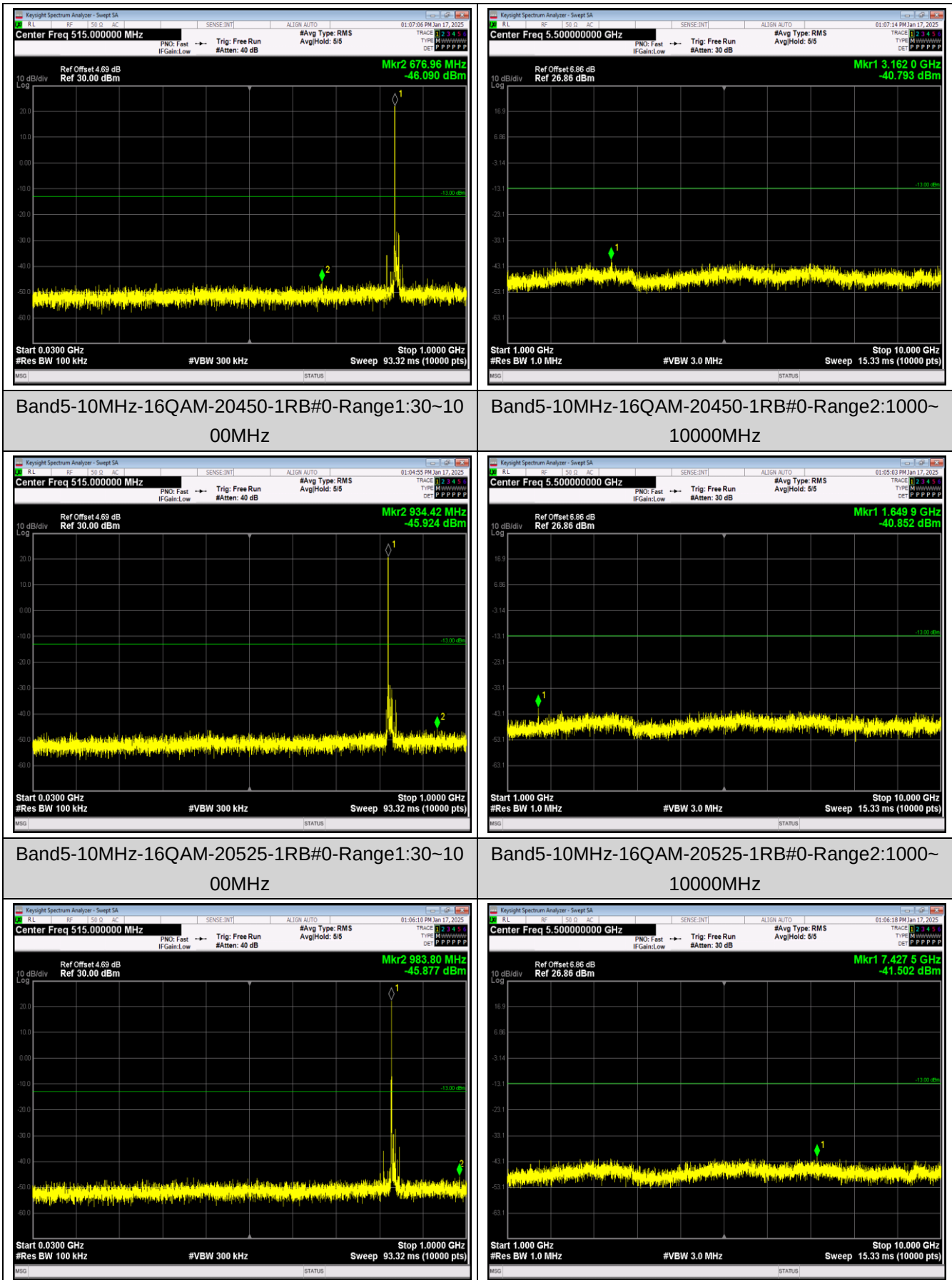




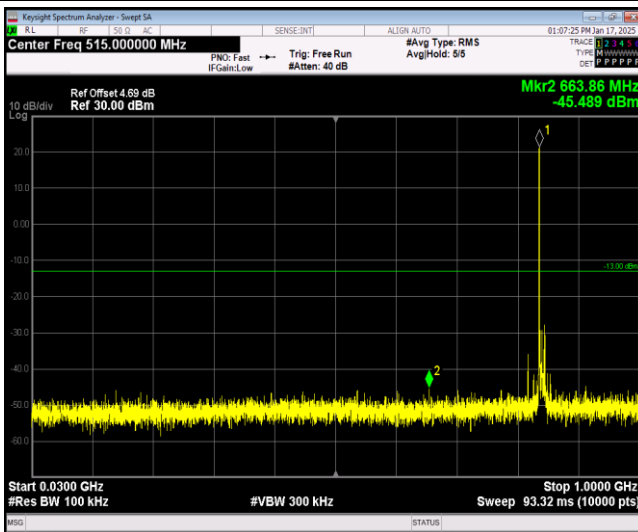




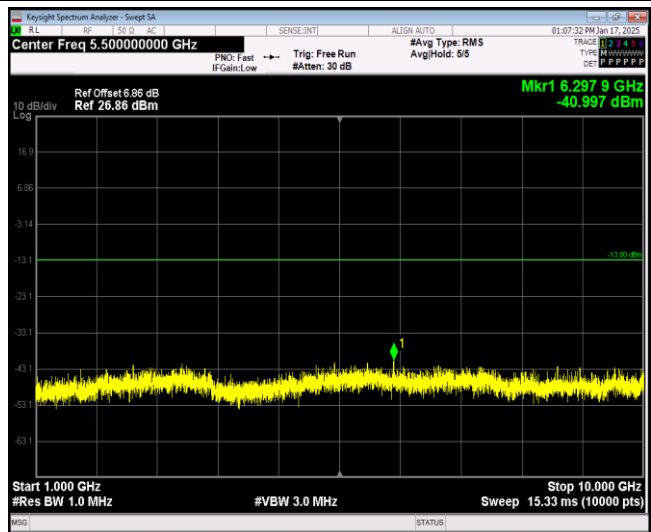




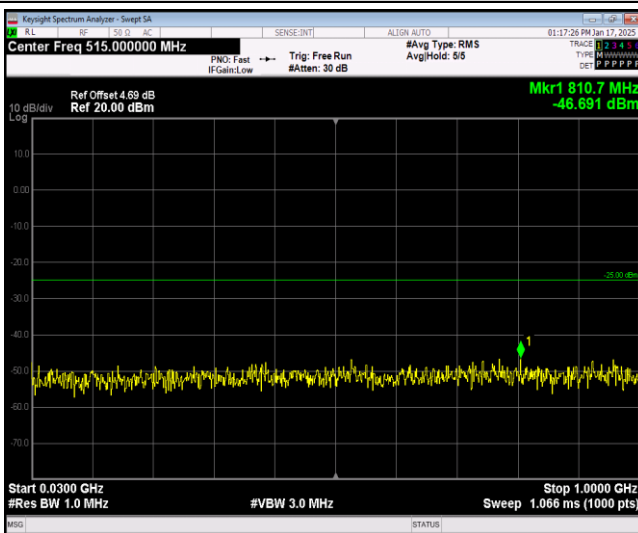
Band5-10MHz-16QAM-20600-1RB#0-Range1:30~1000MHz



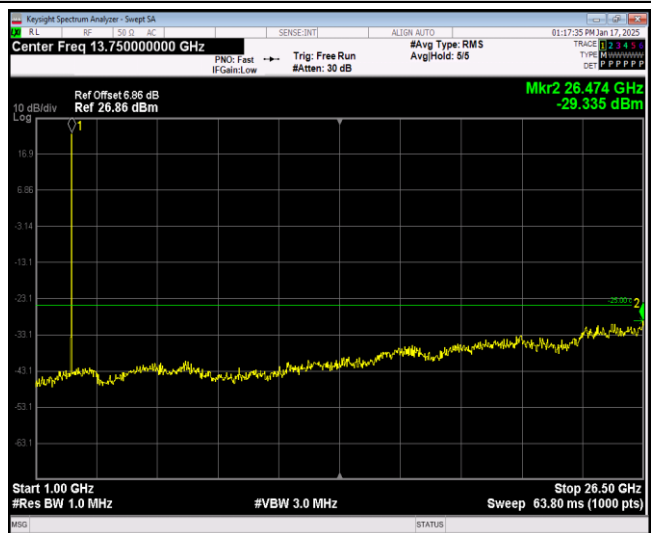
Band5-10MHz-16QAM-20600-1RB#0-Range2:1000~10000MHz



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



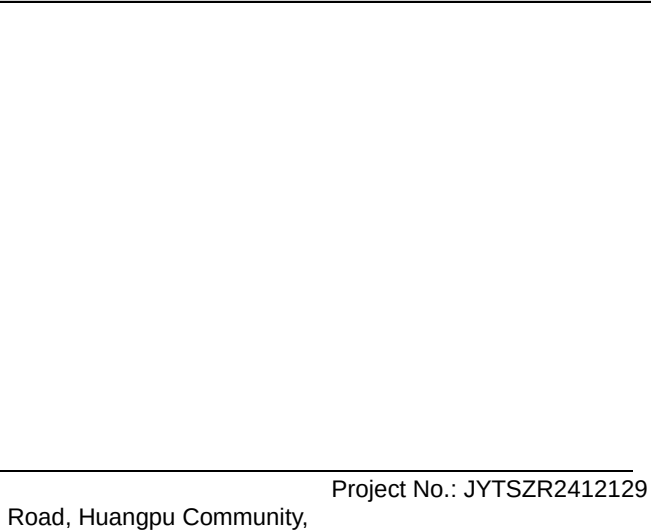
Band7-5MHz-QPSK-20775-1RB#0-Range2:1000~26500MHz

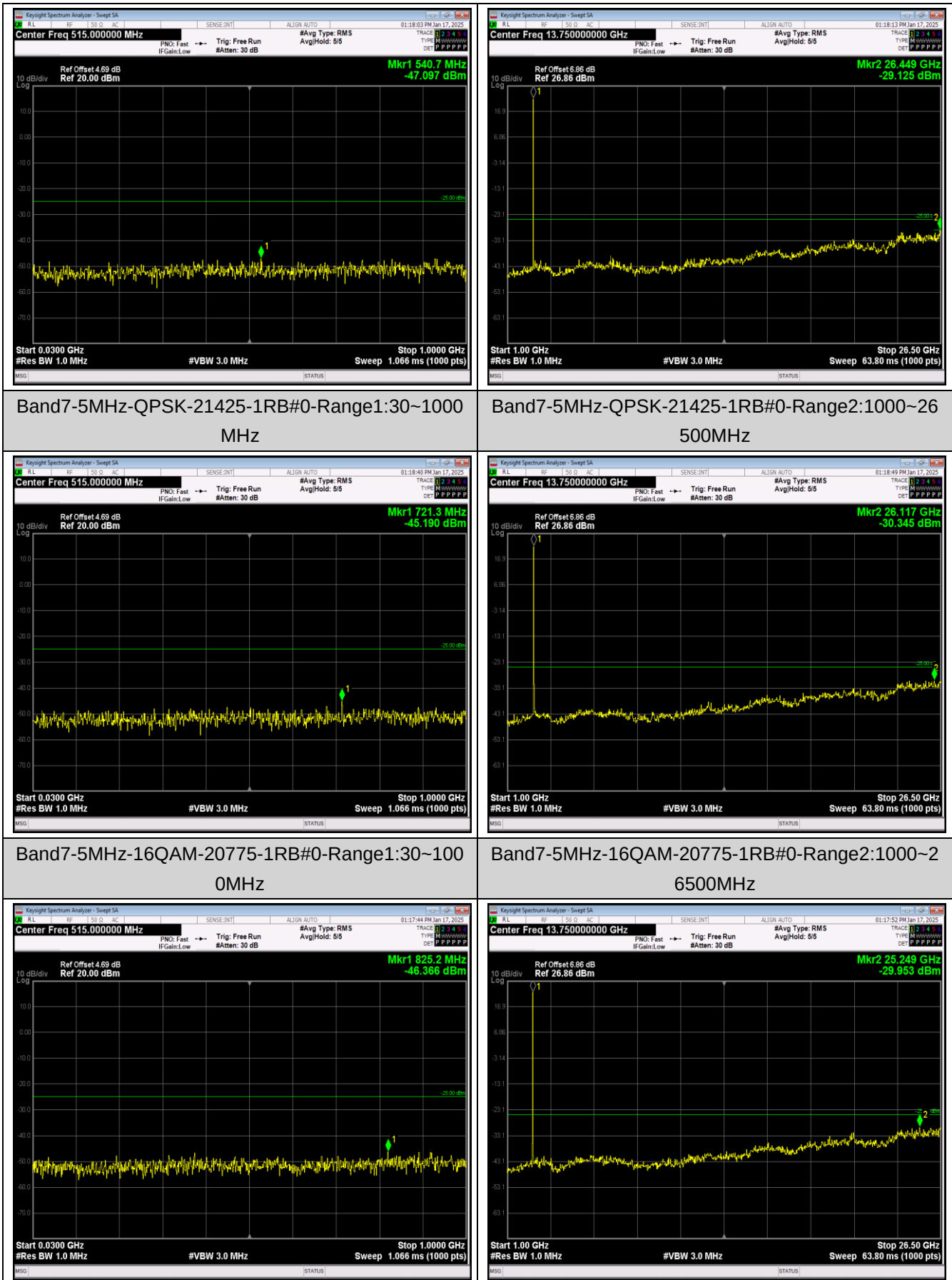


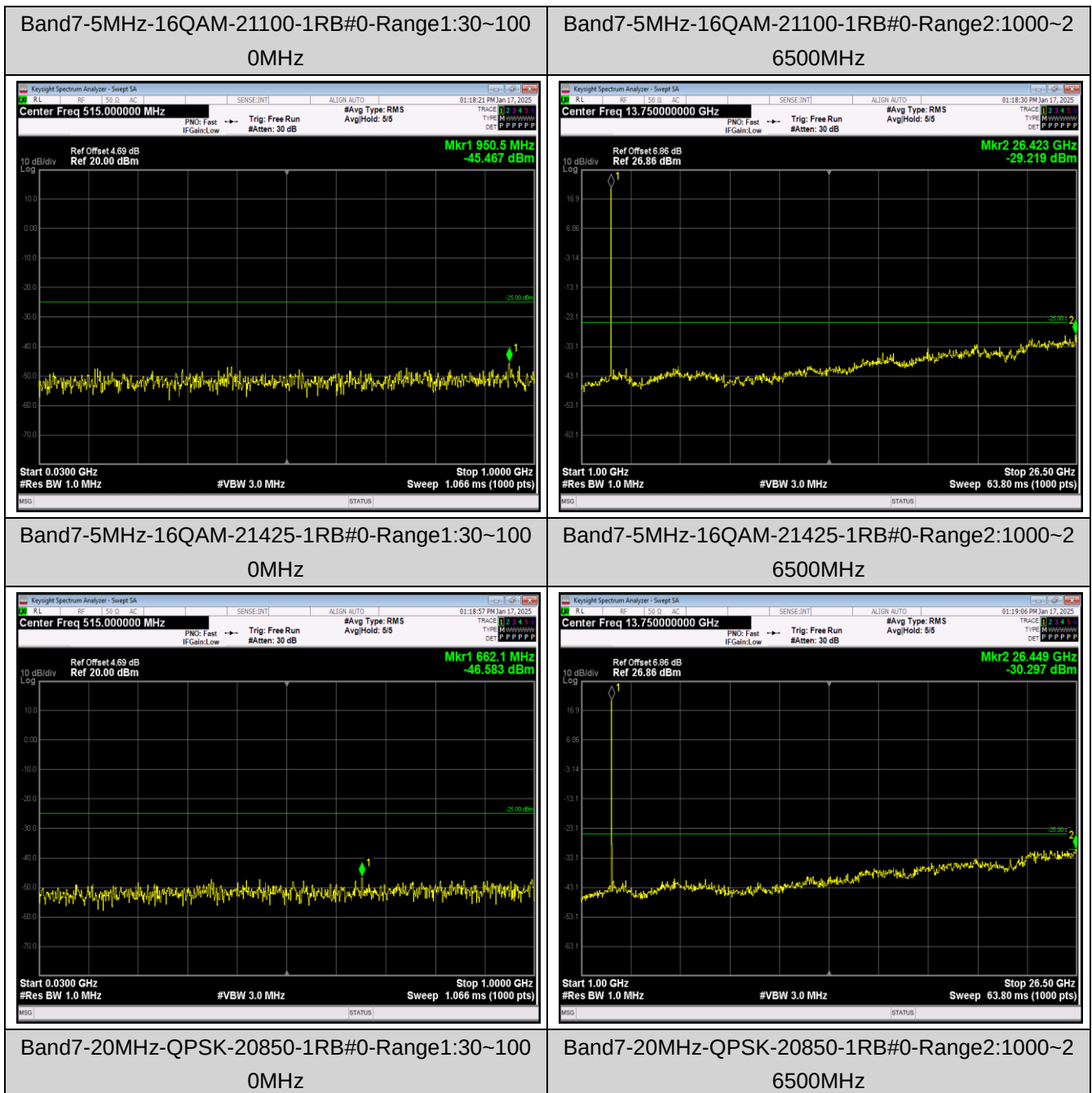
Band7-5MHz-QPSK-21100-1RB#0-Range1:30~1000MHz

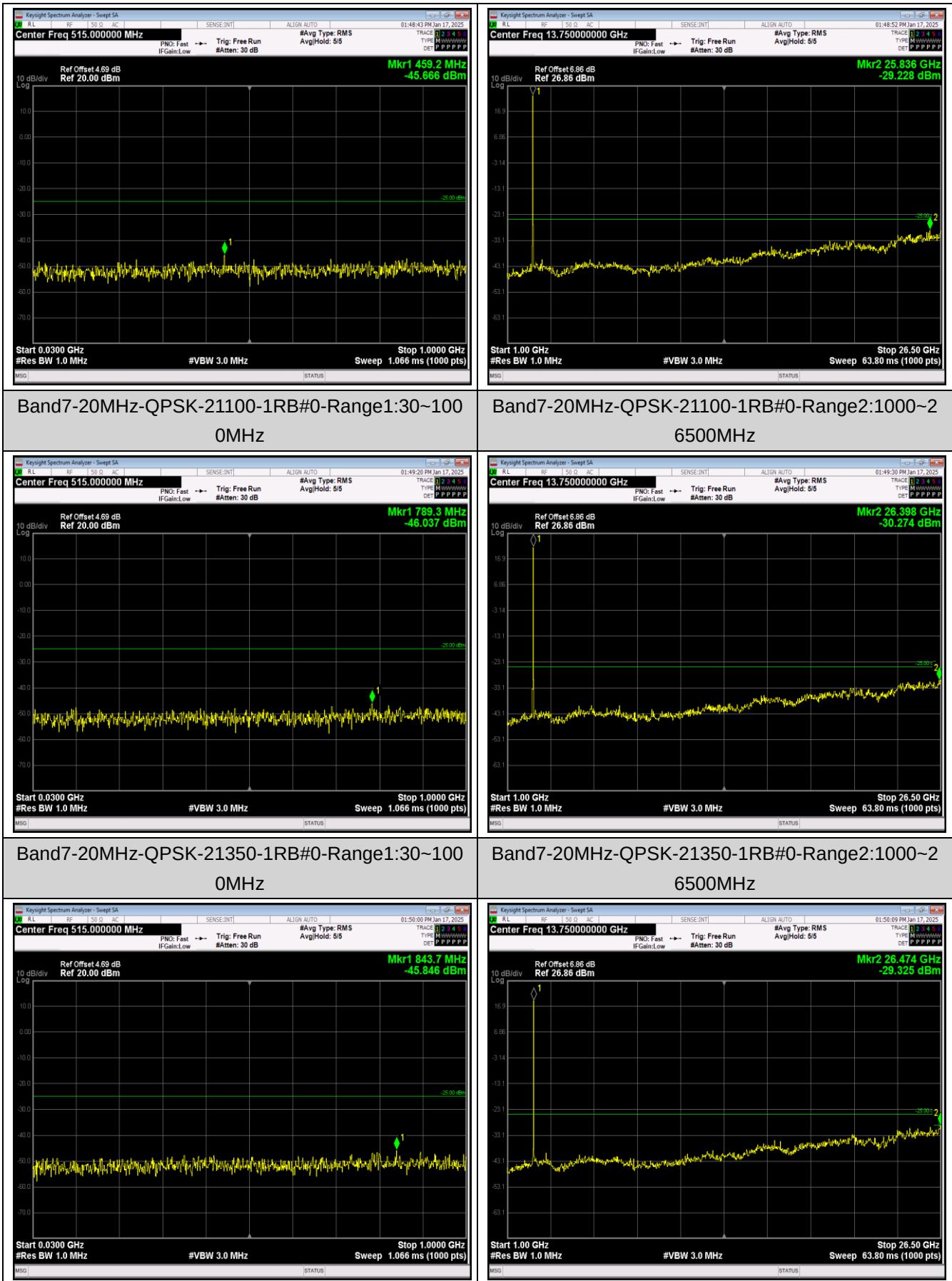


Band7-5MHz-QPSK-21100-1RB#0-Range2:1000~26500MHz

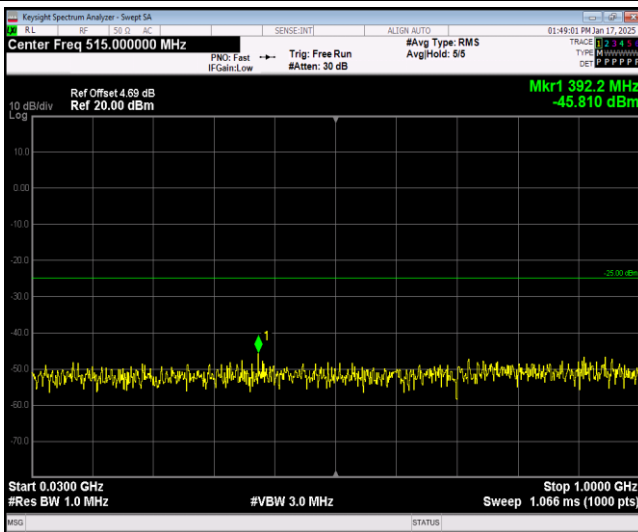




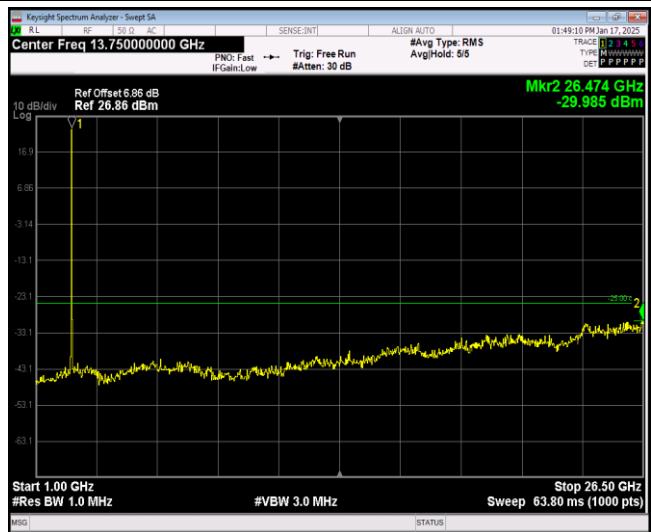




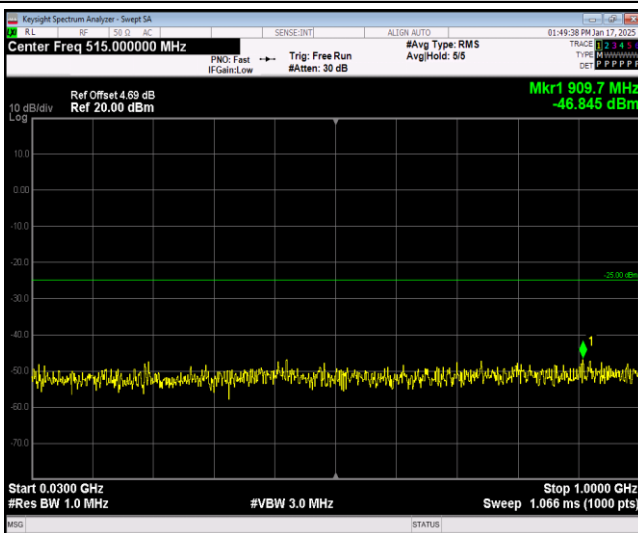
Band7-20MHz-16QAM-20850-1RB#0-Range1:30~1000MHz



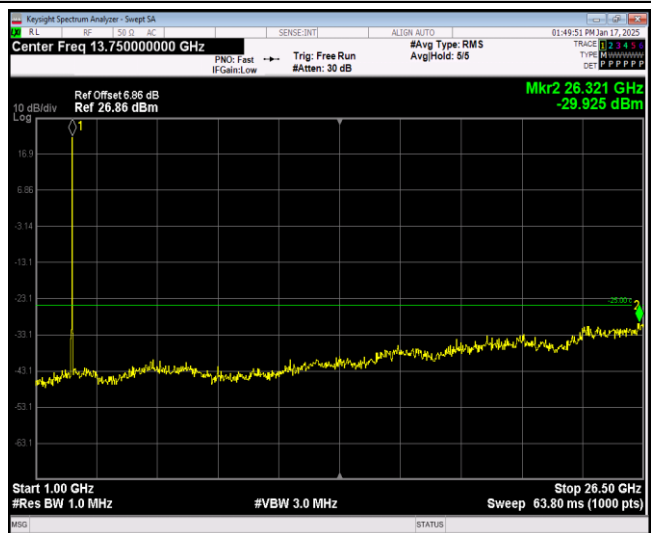
Band7-20MHz-16QAM-20850-1RB#0-Range2:1000~26500MHz



Band7-20MHz-16QAM-21100-1RB#0-Range1:30~1000MHz



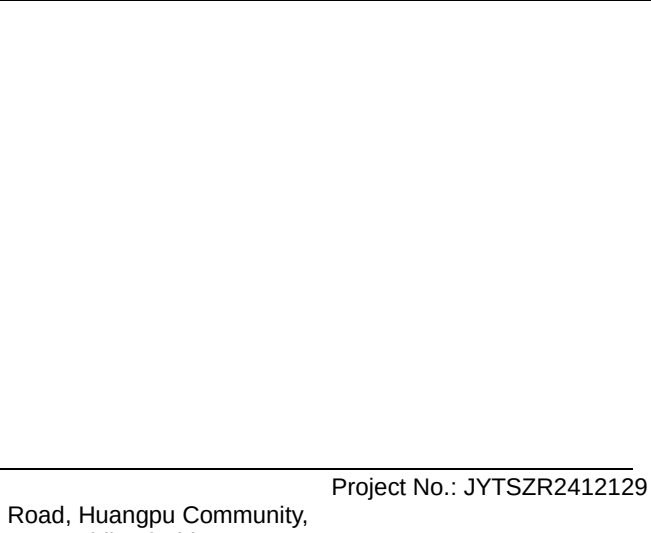
Band7-20MHz-16QAM-21100-1RB#0-Range2:1000~26500MHz

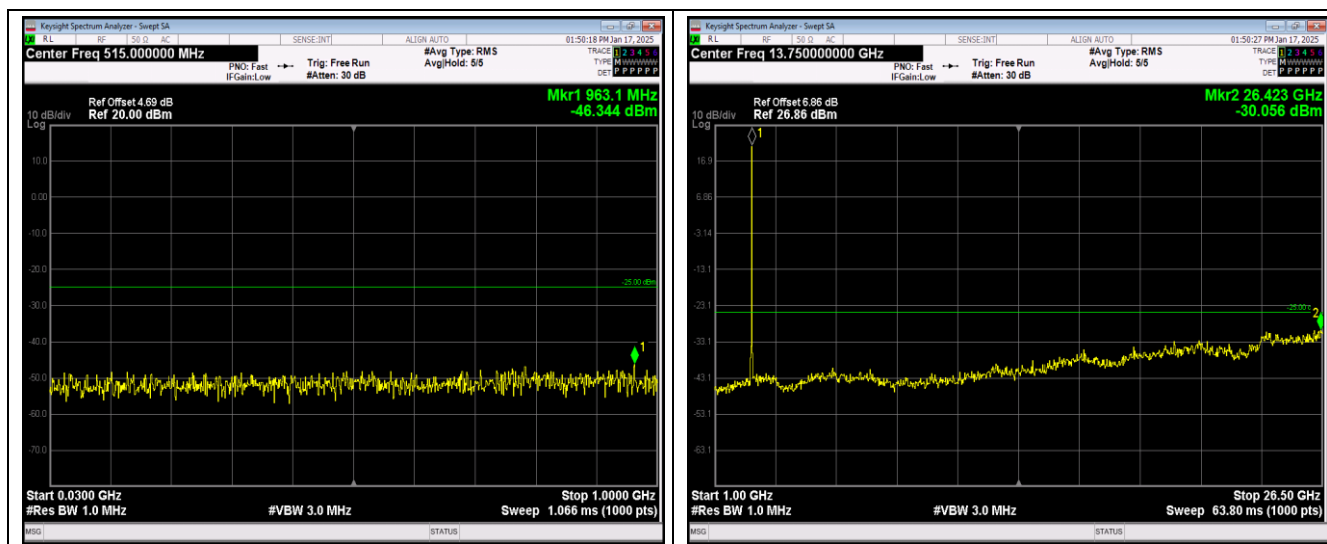


Band7-20MHz-16QAM-21350-1RB#0-Range1:30~1000MHz



Band7-20MHz-16QAM-21350-1RB#0-Range2:1000~26500MHz





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	-18.18	-0.009670	Within authorized band for Band 2	Pass
	-20	-30.06	-0.015989		
	-10	16.01	0.008516		
	0	-33.65	-0.017899		
	10	20.24	0.010766		
	20	-51.71	-0.027505		
	30	-30.58	-0.016266		
	40	-21.74	-0.011564		
	50	-42.64	-0.022681		
16QAM					
3.70	-30	29.34	0.015606	Within authorized band for Band 2	Pass
	-20	33.42	0.017777		
	-10	53.04	0.028213		
	0	29.58	0.015734		
	10	-46.94	-0.024968		
	20	-26.62	-0.014160		
	30	22.90	0.012181		
	40	-48.64	-0.025872		
	50	-41.90	-0.022287		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	17.02	0.009053	Within authorized band for Band 2	Pass
	3.70	-52.34	-0.027840		
	4.20	-19.41	-0.010324		
16QAM					
25	3.40	-27.48	-0.014617	Within authorized band for Band 2	Pass
	3.70	33.57	0.017856		
	4.20	-29.55	-0.015718		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	25.01	0.014436	Within authorized band for Band 4	Pass
	-20	11.06	0.006384		
	-10	-40.23	-0.023221		
	0	-24.22	-0.013980		
	10	-28.34	-0.016358		
	20	-30.91	-0.017841		
	30	27.38	0.015804		
	40	26.25	0.015152		
	50	30.93	0.017853		
16QAM					
3.70	-30	-23.43	-0.013524	Within authorized band for Band 4	Pass
	-20	32.93	0.019007		
	-10	-26.76	-0.015446		
	0	31.11	0.017957		
	10	-17.37	-0.010026		
	20	-23.52	-0.013576		
	30	18.70	0.010794		
	40	-38.14	-0.022014		
	50	-26.09	-0.015059		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-21.09	-0.012173	Within authorized band for Band 4	Pass
	3.70	28.78	0.016612		
	4.20	27.87	0.016087		
16QAM					
25	3.40	-20.48	-0.011821	Within authorized band for Band 4	Pass
	3.70	24.49	0.014136		
	4.20	30.48	0.017593		
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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	15.98	0.019103	±2.5	Pass
	-20	-13.79	-0.016485		
	-10	21.80	0.026061		
	0	23.35	0.027914		
	10	-17.18	-0.020538		
	20	-12.49	-0.014931		
	30	-8.05	-0.009623		
	40	-16.29	-0.019474		
	50	-10.23	-0.012230		
16QAM					
3.70	-30	14.09	0.016844	±2.5	Pass
	-20	24.60	0.029408		
	-10	-23.37	-0.027938		
	0	-16.11	-0.019259		
	10	10.80	0.012911		
	20	-23.96	-0.028643		
	30	29.11	0.034800		
	40	21.20	0.025344		
	50	-18.38	-0.021973		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-16.85	-0.020143	±2.5	Pass
	3.70	-22.47	-0.026862		
	4.20	14.31	0.017107		
16QAM					
25	3.40	15.68	0.018745	±2.5	Pass
	3.70	10.61	0.012684		
	4.20	-32.42	-0.038757		
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	-30	-53.46	-0.021089	Within authorized band for Band 7	Pass
	-20	42.06	0.016592		
	-10	57.18	0.022556		
	0	-41.00	-0.016174		
	10	29.14	0.011495		
	20	-27.68	-0.010919		
	30	-22.29	-0.008793		
	40	46.72	0.018430		
	50	-41.13	-0.016225		
16QAM					
3.70	-30	-29.41	-0.011602	Within authorized band for Band 7	Pass
	-20	36.89	0.014552		
	-10	-48.97	-0.019318		
	0	-11.69	-0.004611		
	10	-40.31	-0.015901		
	20	-37.75	-0.014892		
	30	-38.94	-0.015361		
	40	-59.41	-0.023436		
	50	-38.55	-0.015207		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.40	-30.33	-0.011964	Within authorized band for Band 7	Pass
	3.70	-34.25	-0.013511		
	4.20	-37.08	-0.014627		
16QAM					
25	3.40	-64.32	-0.025373	Within authorized band for Band 7	Pass
	3.70	-24.76	-0.009767		
	4.20	-22.79	-0.008990		
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	27RB#0	PASS	PASS
Band4	20MHz	QPSK	20175	100RB#0	PASS	PASS
Band4	20MHz	16QAM	20175	27RB#0	PASS	PASS
Band5	10MHz	QPSK	20525	50RB#0	PASS	PASS
Band5	10MHz	16QAM	20525	27RB#0	PASS	PASS
Band7	20MHz	QPSK	21100	100RB#0	PASS	PASS
Band7	20MHz	16QAM	21100	27RB#0	PASS	PASS

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

Test Graphs

