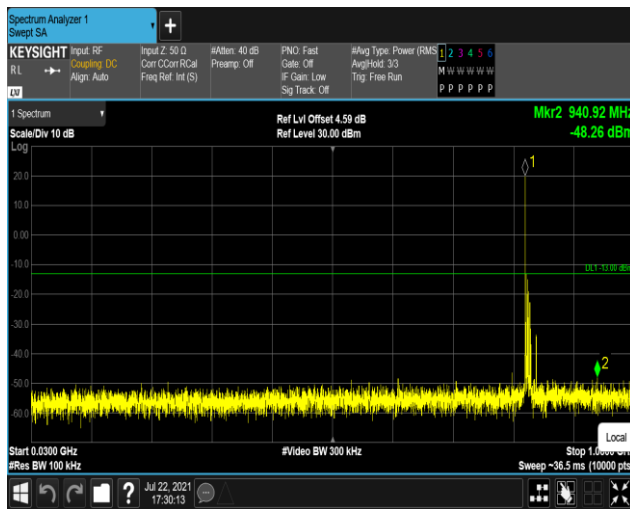
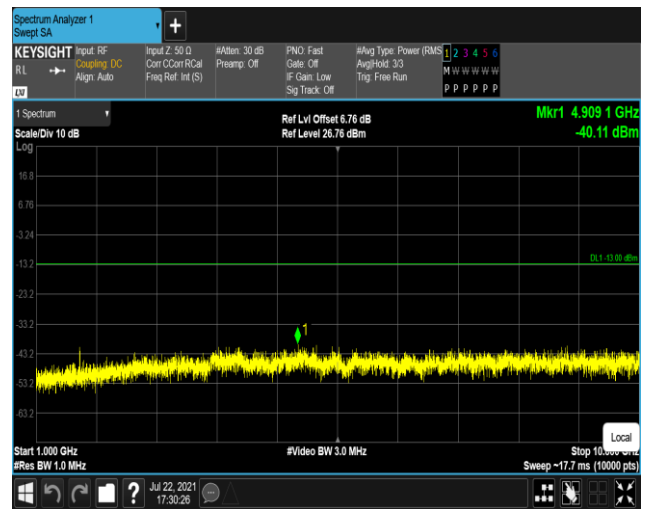


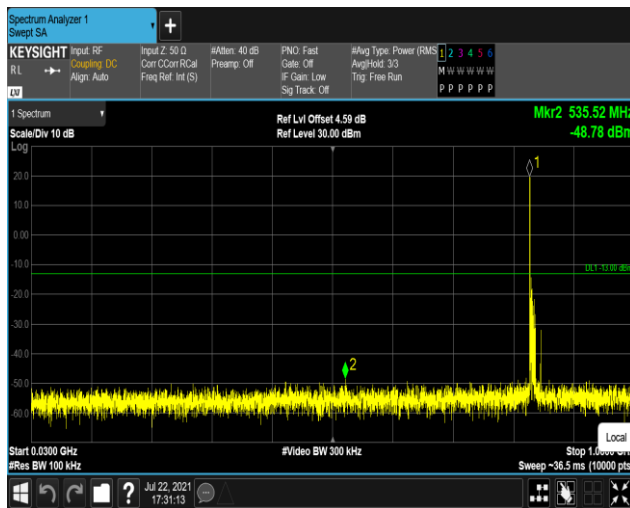
Band5-10MHz-16QAM-20450:30~1000MHz



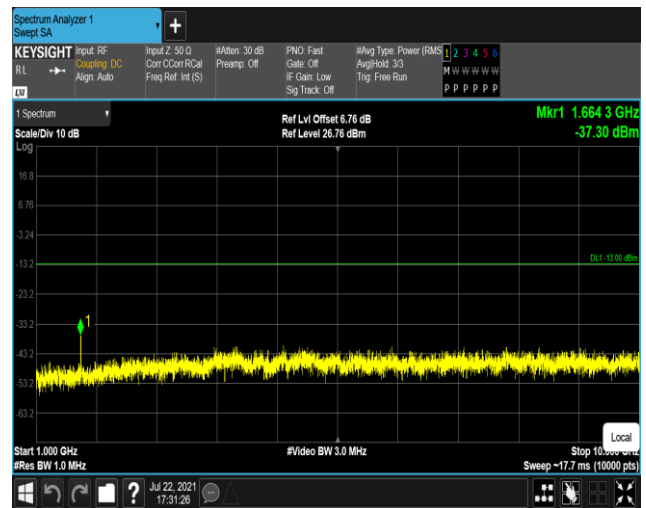
Band5-10MHz-16QAM-20450:1000~10000MHz



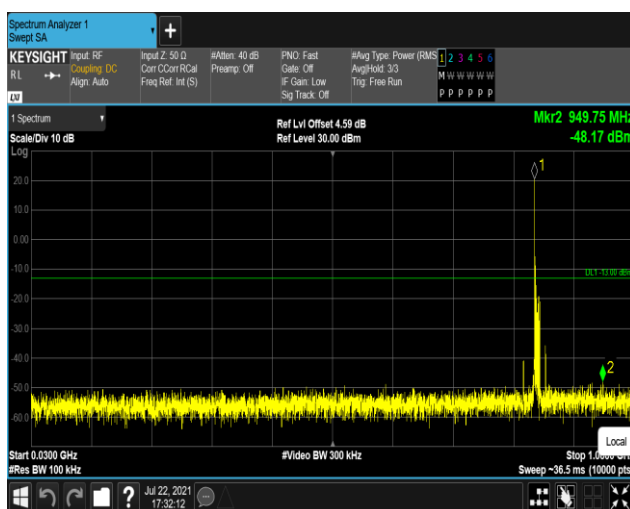
Band5-10MHz-16QAM-20525:30~1000MHz



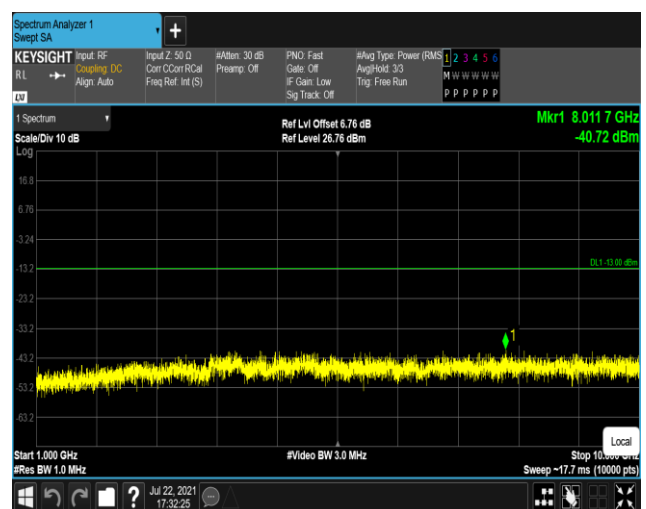
Band5-10MHz-16QAM-20525:1000~10000MHz



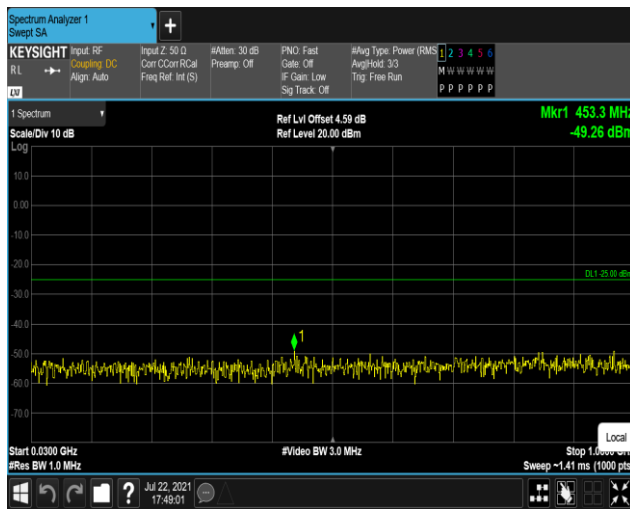
Band5-10MHz-16QAM-20600:30~1000MHz



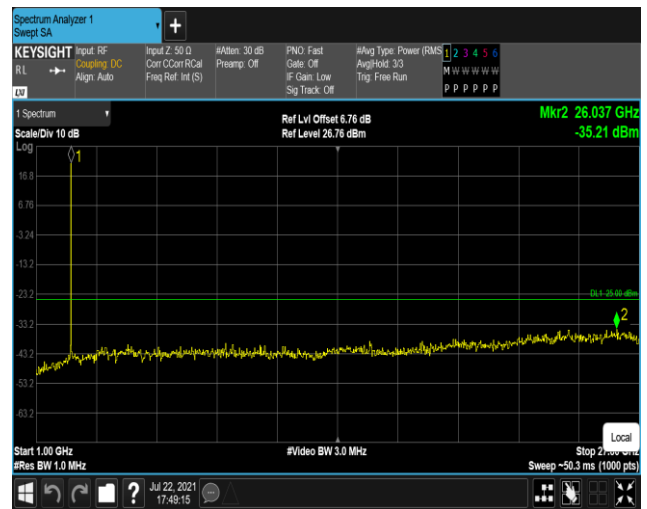
Band5-10MHz-16QAM-20600:1000~10000MHz



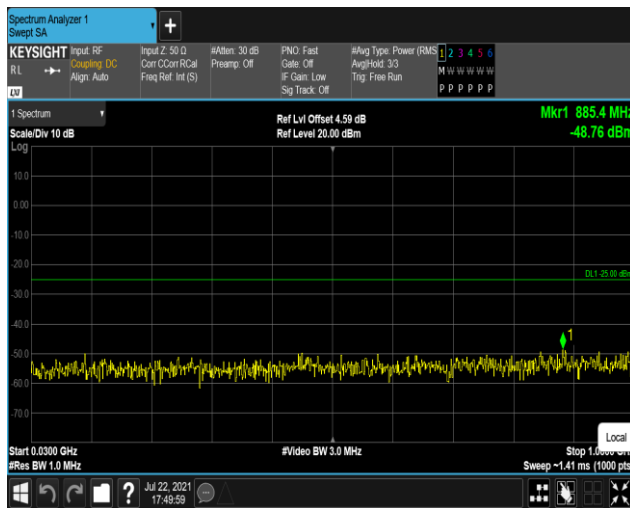
Band7-5MHz-QPSK-20775:30~1000MHz



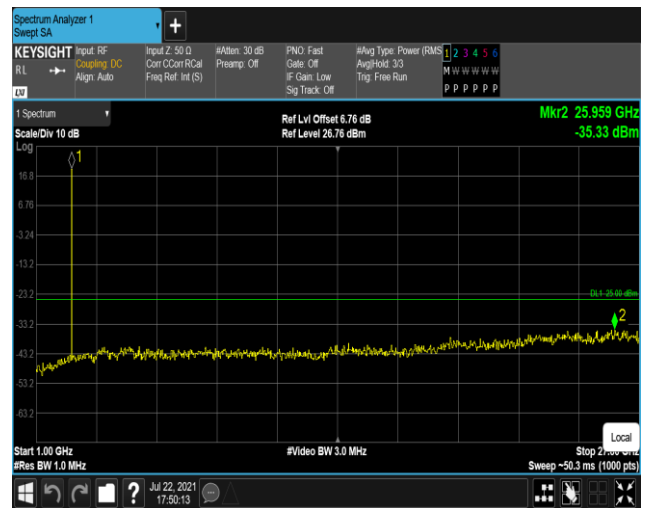
Band7-5MHz-QPSK-20775:-1000~27000MHz



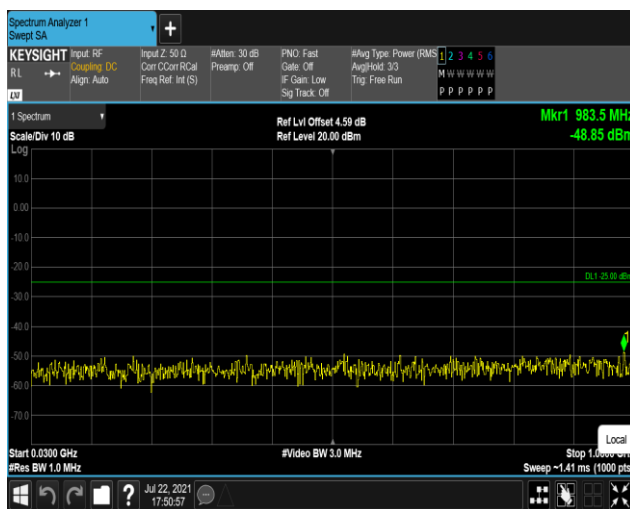
Band7-5MHz-QPSK-21100:30~1000MHz



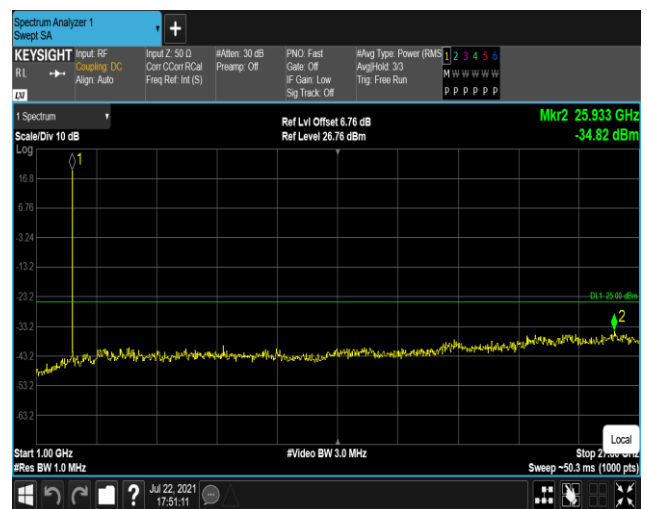
Band7-5MHz-QPSK-21100:-1000~27000MHz



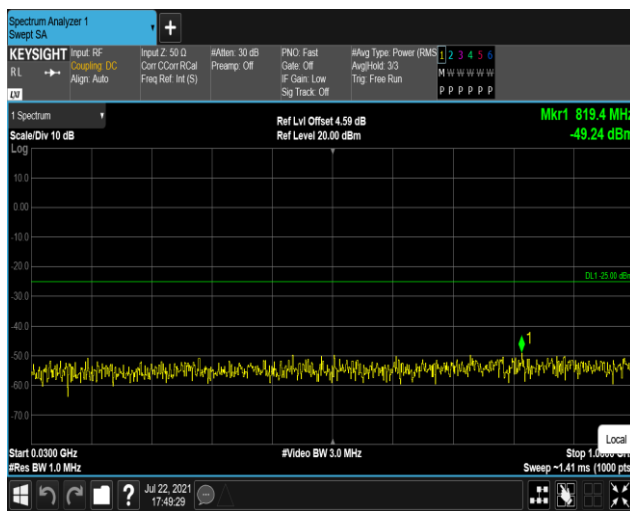
Band7-5MHz-QPSK-21425:30~1000MHz



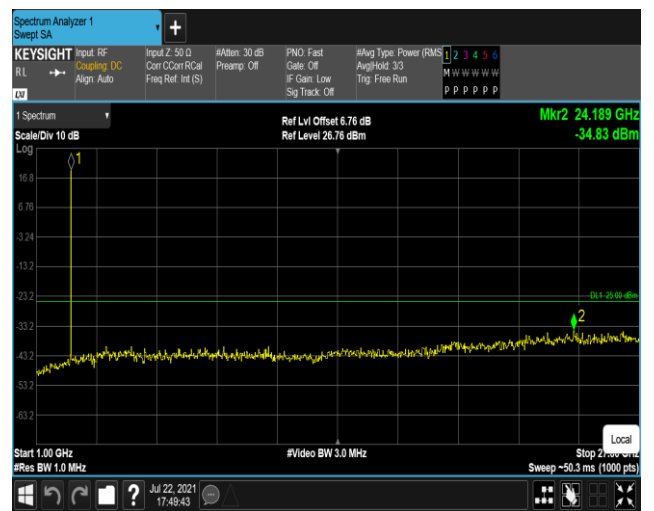
Band7-5MHz-QPSK-21425:-1000~27000MHz



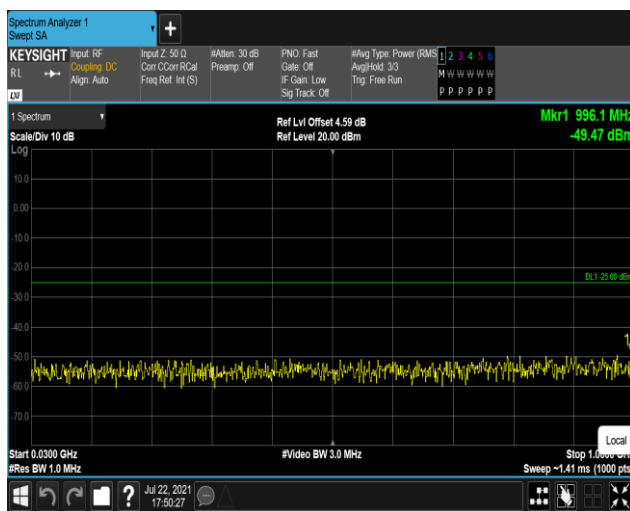
Band7-5MHz-16QAM-20775:30~1000MHz



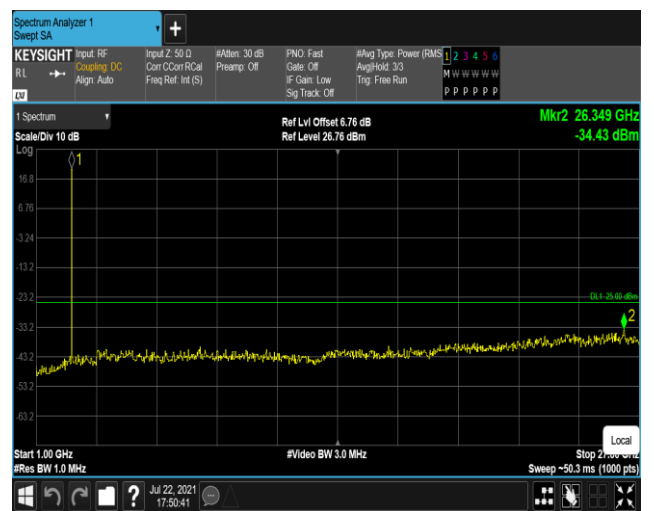
Band7-5MHz-16QAM-20775:1000~27000MHz



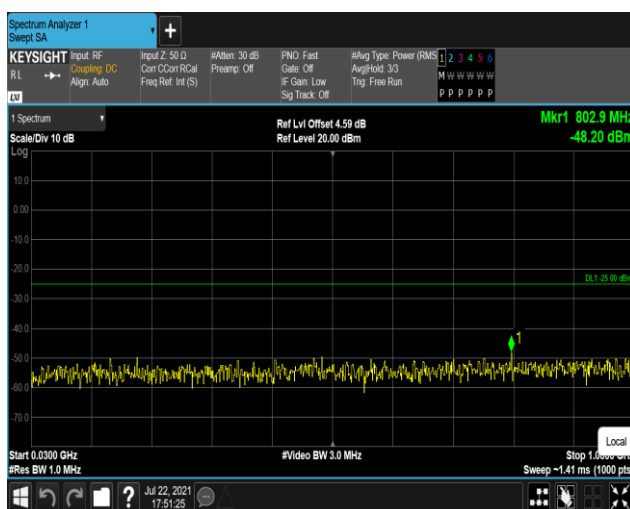
Band7-5MHz-16QAM-21100:30~1000MHz



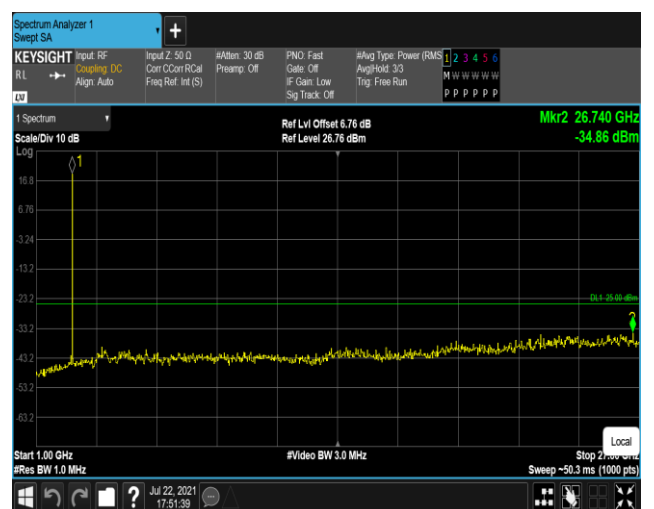
Band7-5MHz-16QAM-21100:1000~27000MHz



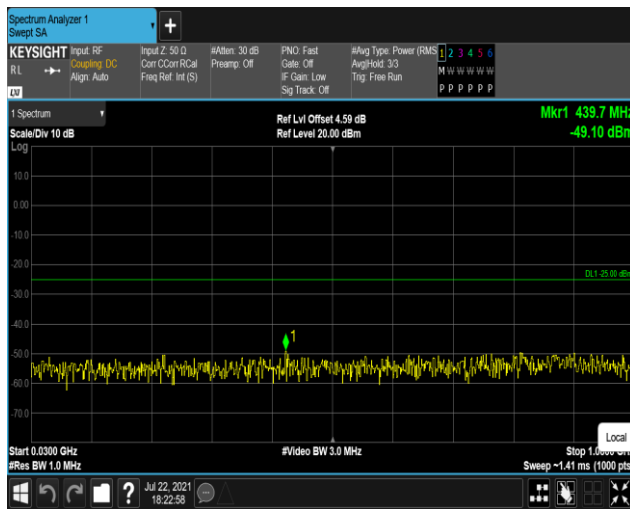
Band7-5MHz-16QAM-21425:30~1000MHz



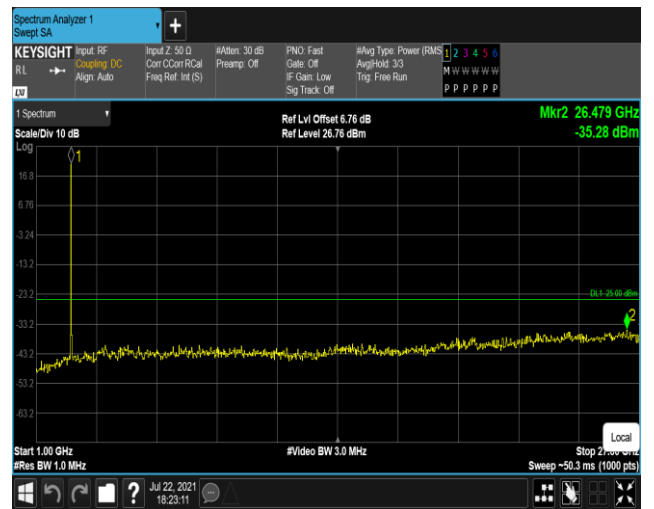
Band7-5MHz-16QAM-21425:1000~27000MHz



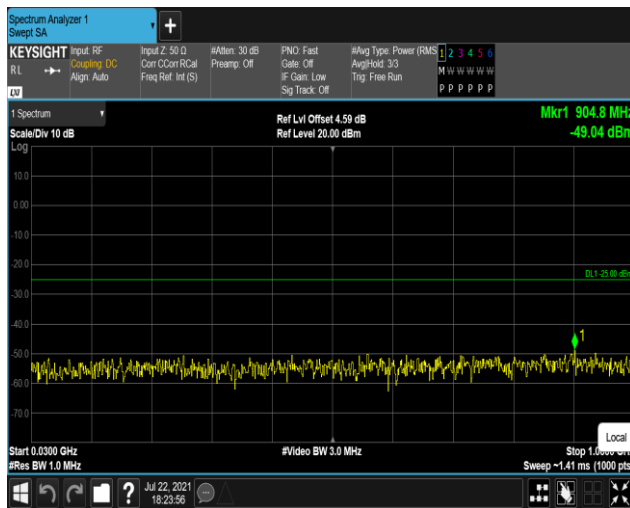
Band7-20MHz-QPSK-20850:30~1000MHz



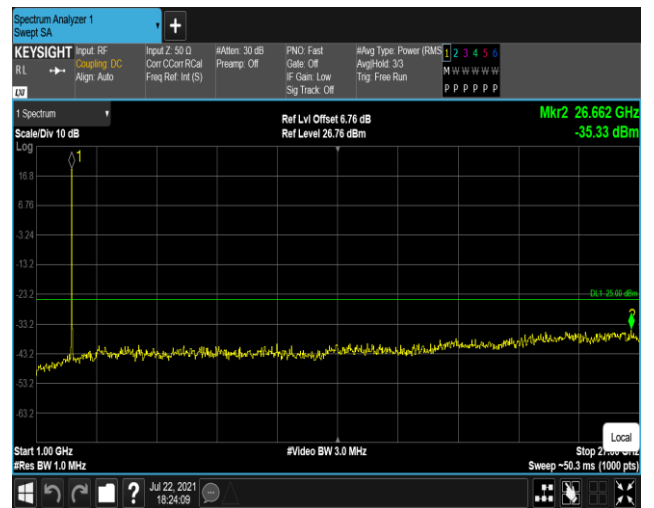
Band7-20MHz-QPSK-20850:1000~27000MHz



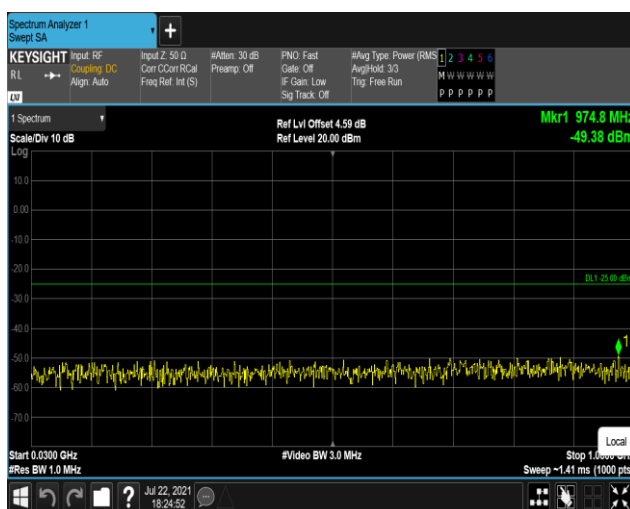
Band7-20MHz-QPSK-21100:30~1000MHz



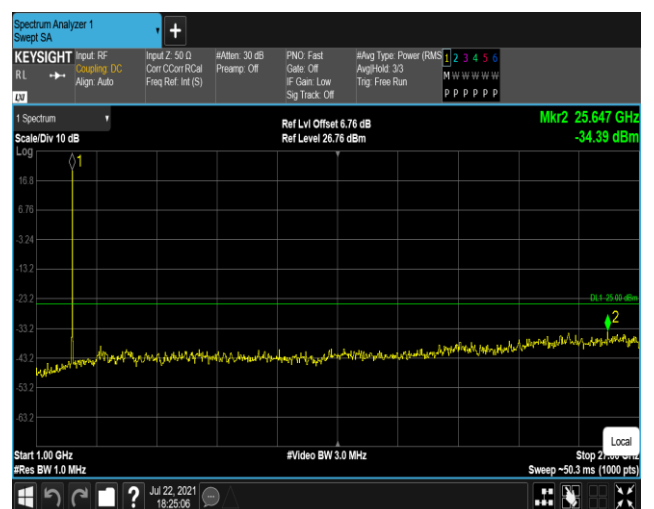
Band7-20MHz-QPSK-21100:1000~27000MHz



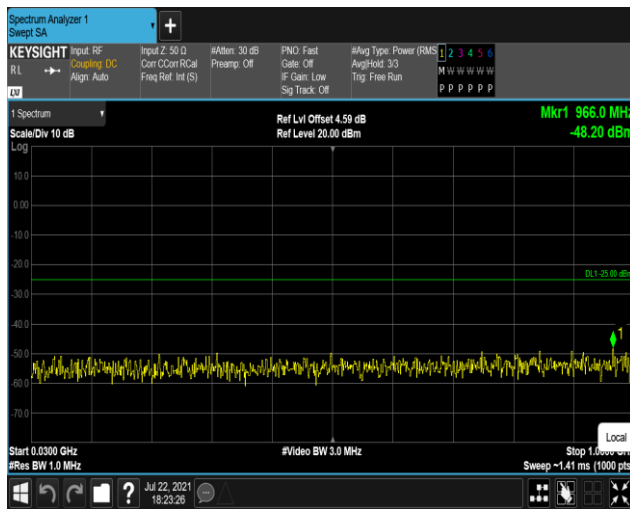
Band7-20MHz-QPSK-21350:30~1000MHz



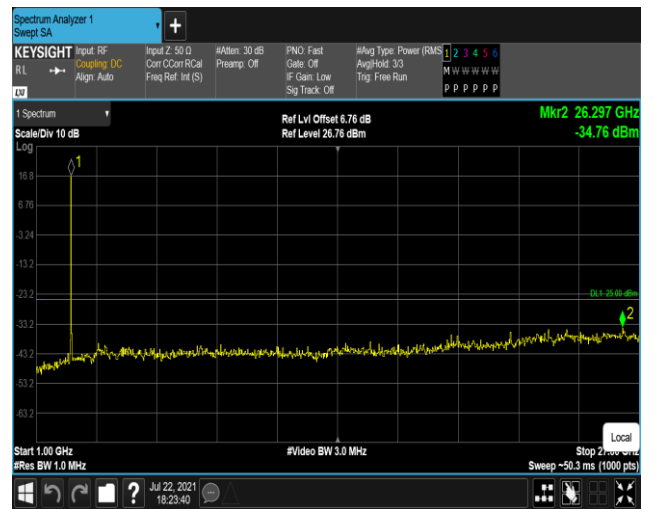
Band7-20MHz-QPSK-21350:1000~27000MHz



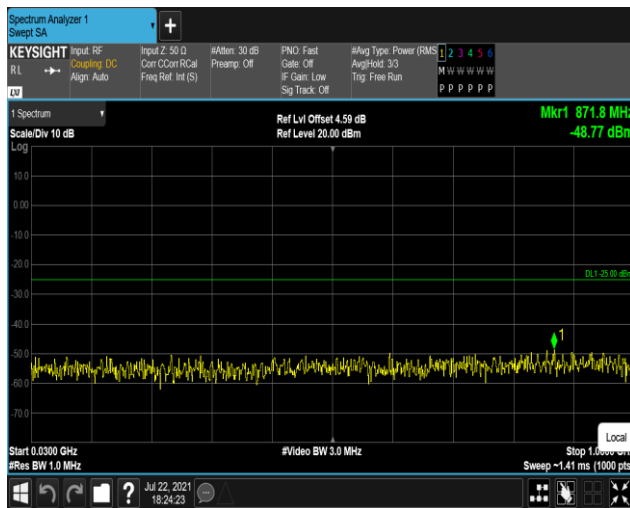
Band7-20MHz-16QAM-20850:30~1000MHz



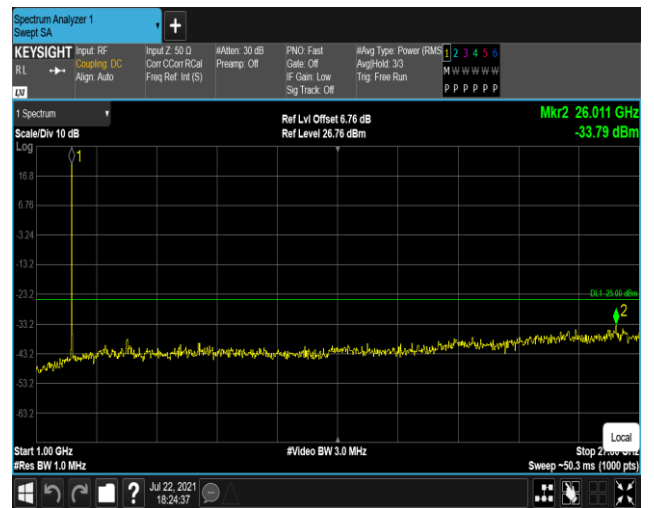
Band7-20MHz-16QAM-20850:~1000~27000MHz



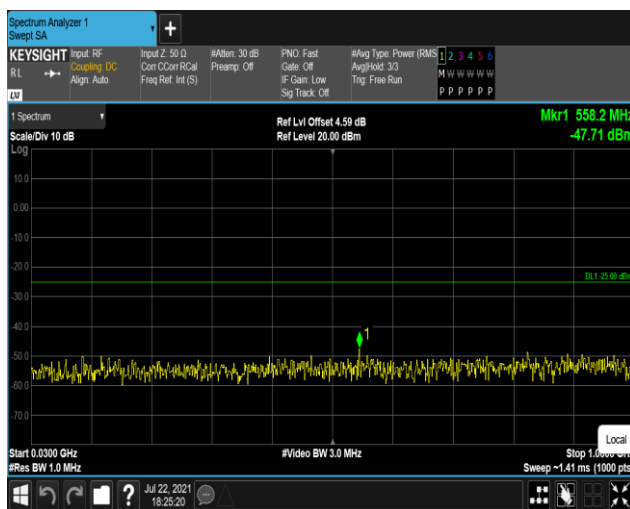
Band7-20MHz-16QAM-21100:30~1000MHz



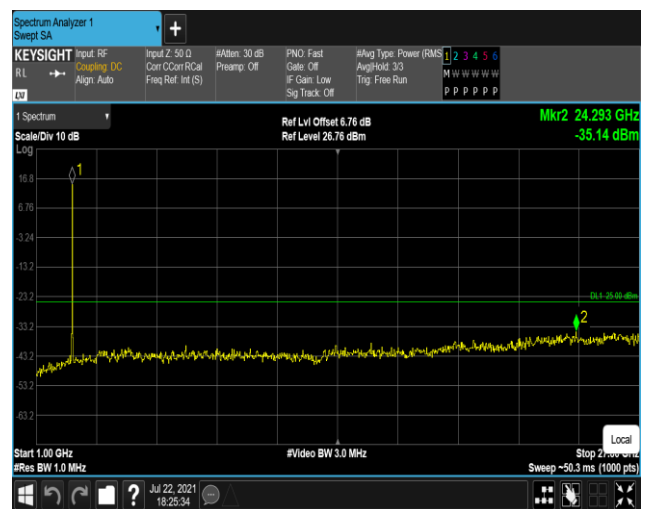
Band7-20MHz-16QAM-21100:~1000~27000MHz



Band7-20MHz-16QAM-21350:30~1000MHz



Band7-20MHz-16QAM-21350:~1000~27000MHz



Appendix F: Frequency Stability

Test Result (Worst case):

LTE Band 4 part:

Reference Frequency: LTE Band 4(10MHz) Middle channel=20175Frequency=1732.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	-15.28	-0.008820	Within authorized band for Band 4	Pass
	-20	5.12	0.002955		
	-10	-5.71	-0.003296		
	0	-3.59	-0.002072		
	10	4.58	0.002644		
	20	-9.38	-0.005414		
	30	-20.48	-0.011821		
	40	-44.95	-0.025945		
	50	-36.21	-0.020900		
16QAM					
3.70	-30	-42.01	-0.024248	Within authorized band for Band 4	Pass
	-20	-41.48	-0.023942		
	-10	-47.41	-0.027365		
	0	-13.03	-0.007521		
	10	-6.45	-0.003723		
	20	-36.74	-0.021206		
	30	-26.56	-0.015330		
	40	-13.28	-0.007665		
	50	12.50	0.007215		
Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-46.23	-0.026684	Within authorized band for Band 4	Pass
	3.70	-45.00	-0.025974		
	4.25	-23.60	-0.013622		
16QAM					
25	3.50	-26.44	-0.015261	Within authorized band for Band 4	Pass
	3.70	-8.07	-0.004658		
	4.25	-32.11	-0.018534		
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=20525Frequency=836.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.70	-30	6.51	0.007782	±2.5	Pass
	-20	13.03	0.015577		
	-10	9.61	0.011488		
	0	18.45	0.022056		
	10	11.20	0.013389		
	20	12.62	0.015087		
	30	12.29	0.014692		
	40	18.47	0.022080		
	50	9.77	0.011680		
16QAM					
3.70	-30	-26.25	-0.031381	±2.5	Pass
	-20	-25.42	-0.030389		
	-10	-36.49	-0.043622		
	0	-34.96	-0.041793		
	10	-40.08	-0.047914		
	20	-35.35	-0.042259		
	30	-44.13	-0.052756		
	40	-40.70	-0.048655		
	50	-48.05	-0.057442		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-1.65	-0.001973	±2.5	Pass
	3.70	7.15	0.008548		
	4.25	13.83	0.016533		
16QAM					
25	3.50	-11.40	-0.013628	±2.5	Pass
	3.70	12.22	0.014608		
	4.25	-15.46	-0.018482		
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	-33.73	-0.013306	Within authorized band for Band 7	Pass
	-20	39.71	0.015665		
	-10	-27.19	-0.010726		
	0	-8.23	-0.003247		
	10	-16.31	-0.006434		
	20	13.96	0.005507		
	30	-49.25	-0.019428		
	40	24.99	0.009858		
	50	-35.99	-0.014197		
16QAM					
3.70	-30	-42.57	-0.016793	Within authorized band for Band 7	Pass
	-20	12.07	0.004761		
	-10	-31.29	-0.012343		
	0	-7.00	-0.002761		
	10	-35.03	-0.013819		
	20	45.35	0.017890		
	30	-54.73	-0.021590		
	40	53.53	0.021116		
	50	-35.78	-0.014114		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	16.97	0.006694	Within authorized band for Band 7	Pass
	3.70	-41.21	-0.016256		
	4.25	45.16	0.017815		
16QAM					
25	3.50	-35.98	-0.014193	Within authorized band for Band 7	Pass
	3.70	26.69	0.010529		
	4.25	28.10	0.011085		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

AppendixG:Modulation Characteristics

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result	Verdict
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

