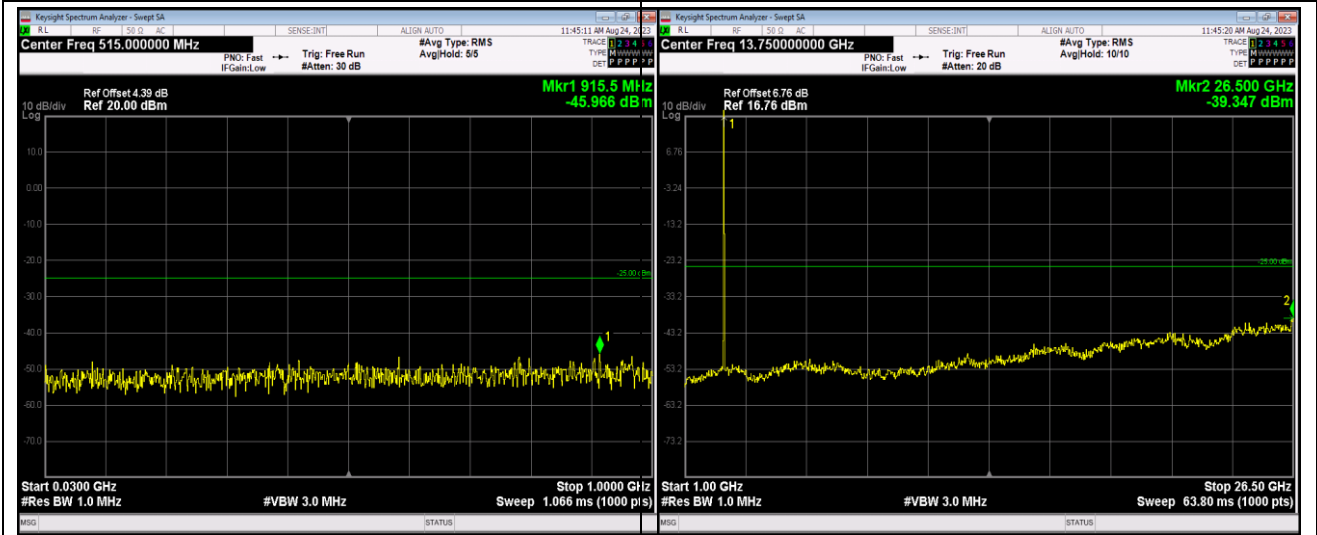


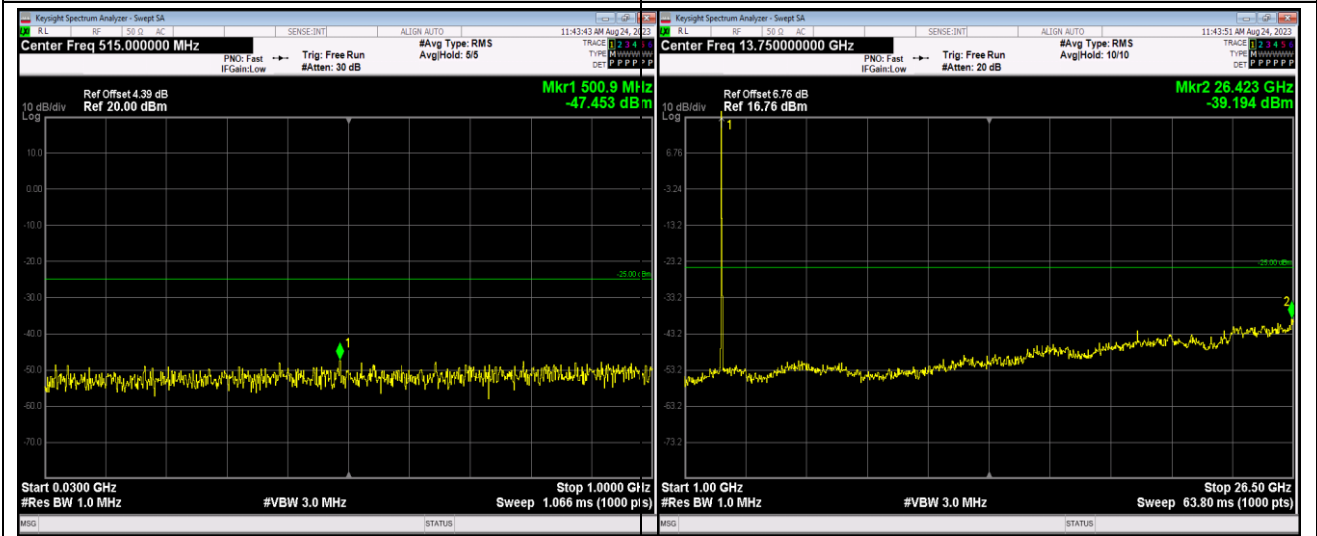
Band41-20MHz-QPSK-41140-1RB#0-Range1:30~1000MHz

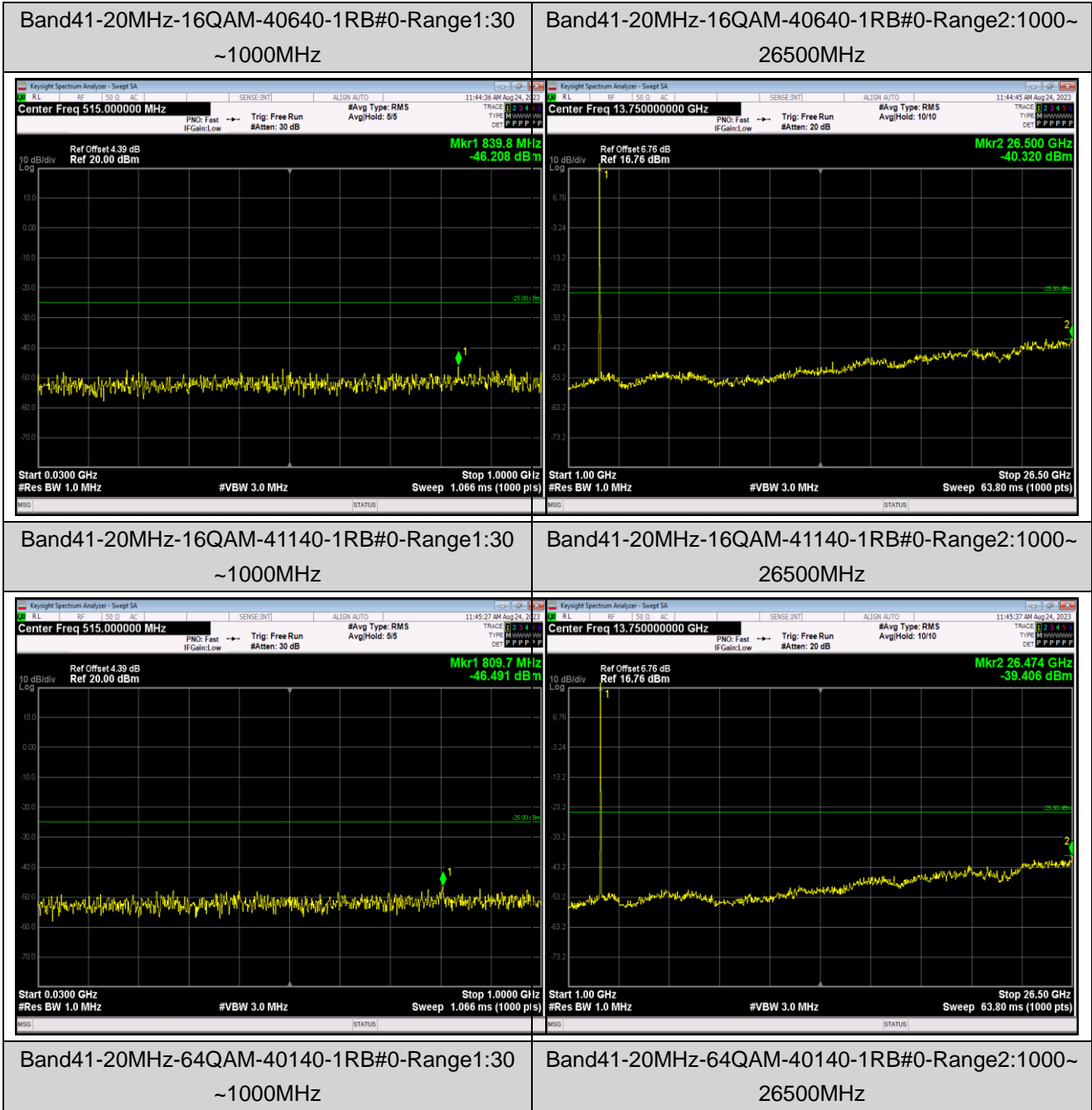
Band41-20MHz-QPSK-41140-1RB#0-Range2:1000~26500MHz

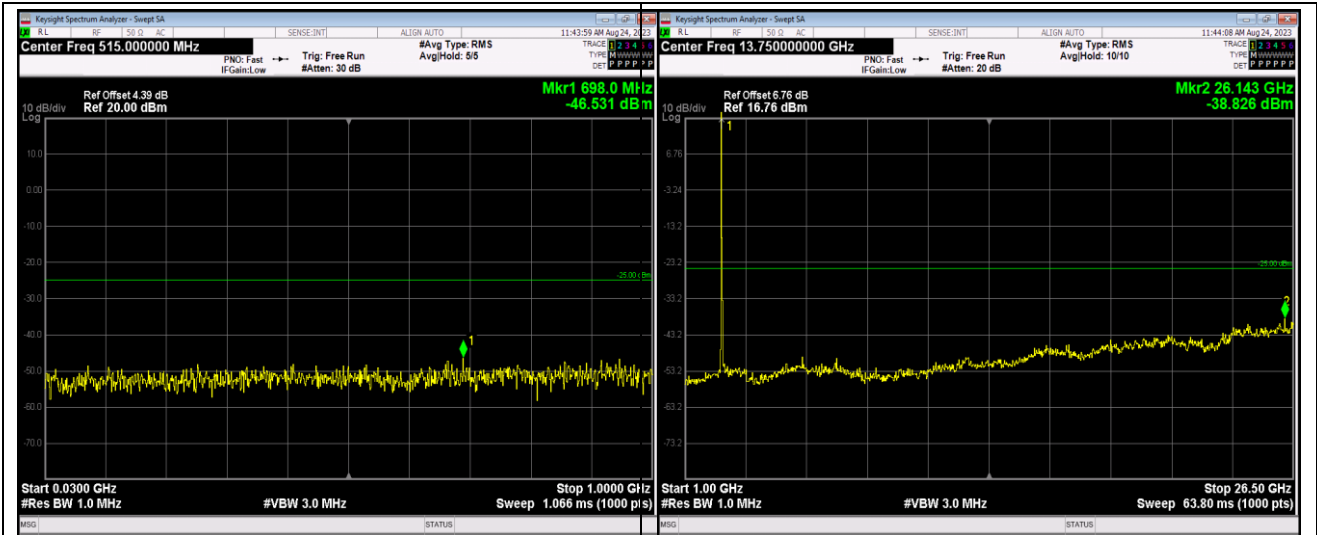


Band41-20MHz-16QAM-40140-1RB#0-Range1:30~1000MHz

Band41-20MHz-16QAM-40140-1RB#0-Range2:1000~26500MHz

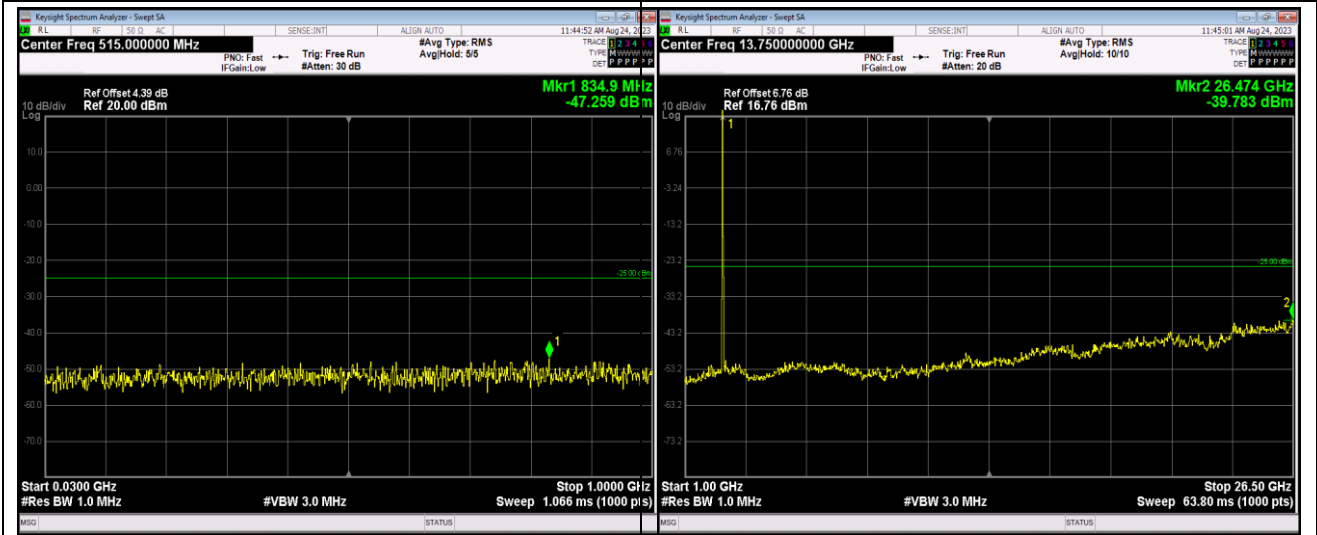






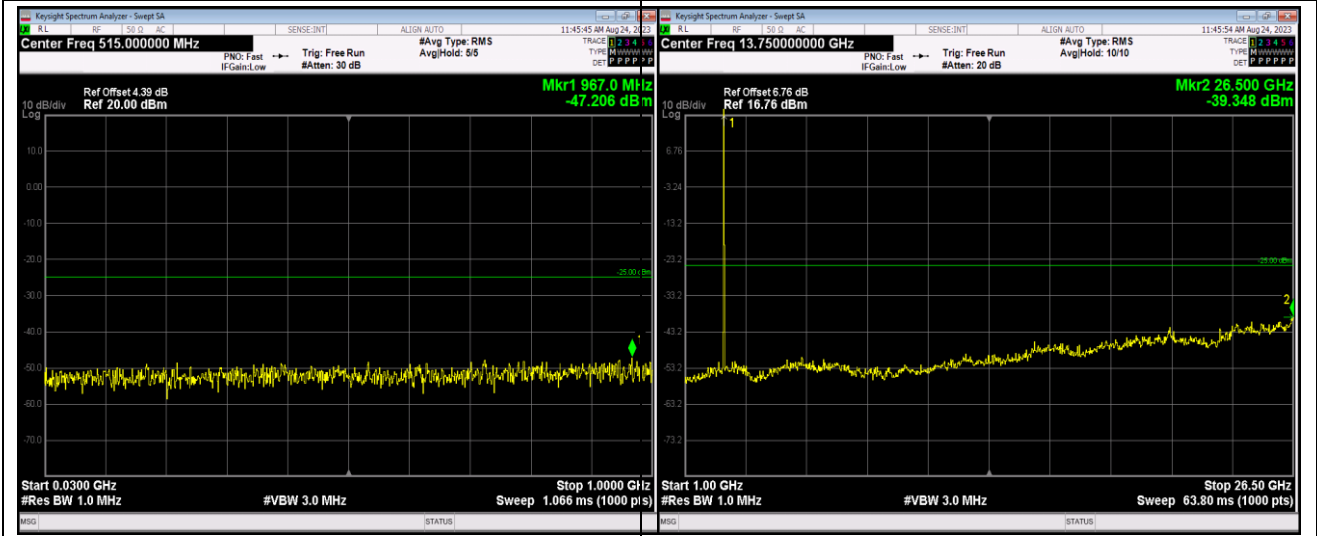
Band41-20MHz-64QAM-40640-1RB#0-Range1:30
~1000MHz

Band41-20MHz-64QAM-40640-1RB#0-Range2:1000~
26500MHz



Band41-20MHz-64QAM-41140-1RB#0-Range1:30
~1000MHz

Band41-20MHz-64QAM-41140-1RB#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					
3.87	-30	-8.00	-0.004255	Within authorized band for Band 2	Pass
	-20	-3.00	-0.001596		
	-10	-10.46	-0.005564		
	0	-9.60	-0.005106		
	10	-6.07	-0.003229		
	20	10.99	0.005846		
	30	6.69	0.003559		
	40	-9.20	-0.004894		
	50	-9.46	-0.005032		
16QAM					
3.87	-30	-7.20	-0.003830	Within authorized band for Band 2	Pass
	-20	-7.40	-0.003936		
	-10	-10.99	-0.005846		
	0	7.80	0.004149		
	10	-13.06	-0.006947		
	20	-3.93	-0.002090		
	30	-6.97	-0.003707		
	40	-7.72	-0.004106		
	50	-13.48	-0.007170		
64QAM					
3.87	-30	6.90	0.003670	Within authorized band for Band 2	Pass
	-20	6.12	0.003255		
	-10	-12.67	-0.006739		
	0	7.81	0.004154		
	10	-9.71	-0.005165		
	20	3.15	0.001676		
	30	3.18	0.001691		
	40	5.26	0.002798		
	50	-6.74	-0.003585		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-7.34	-0.003904	Within authorized band for Band 2	Pass
	3.87	-8.73	-0.004644		
	4.45	7.01	0.003729		
16QAM					
25	3.45	-12.06	-0.006415	Within authorized band for Band 2	Pass
	3.87	7.45	0.003963		
	4.45	-3.28	-0.001745		
64QAM					
25	3.45	-8.44	-0.004489	Within authorized band for Band 2	Pass
	3.87	13.19	0.007016		
	4.45	5.62	0.002989		
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					
3.87	-30	7.44	0.004294	Within authorized band for Band 4	Pass
	-20	-6.77	-0.003908		
	-10	-7.20	-0.004156		
	0	-10.63	-0.006136		
	10	-2.73	-0.001576		
	20	6.38	0.003683		
	30	7.01	0.004046		
	40	7.75	0.004473		
	50	5.75	0.003319		
16QAM					
3.87	-30	6.85	0.003954	Within authorized band for Band 4	Pass
	-20	-9.56	-0.005518		
	-10	7.04	0.004063		
	0	7.18	0.004144		
	10	-2.19	-0.001264		
	20	-4.21	-0.002430		
	30	3.85	0.002222		
	40	1.99	0.001149		
	50	-7.98	-0.004606		
64QAM					
3.87	-30	-8.35	-0.004820	Within authorized band for Band 4	Pass
	-20	-7.30	-0.004214		
	-10	-7.85	-0.004531		
	0	-7.35	-0.004242		
	10	-4.16	-0.002401		
	20	4.79	0.002765		
	30	8.38	0.004837		
	40	-4.15	-0.002395		
	50	-6.44	-0.003717		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-5.78	-0.003336	Within authorized band for Band 4	Pass
	3.87	-11.70	-0.006753		
	4.45	6.29	0.003631		
16QAM					
25	3.45	-7.42	-0.004283	Within authorized band for Band 4	Pass
	3.87	-5.15	-0.002973		
	4.45	-8.65	-0.004993		
64QAM					
25	3.45	-7.07	-0.004081	Within authorized band for Band 4	Pass
	3.87	10.94	0.006315		
	4.45	5.64	0.003255		
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					
3.87	-30	-8.97	-0.010723	±2.5	Pass
	-20	1.90	0.002271		
	-10	-4.21	-0.005033		
	0	-4.55	-0.005439		
	10	5.28	0.006312		
	20	-5.71	-0.006826		
	30	-3.95	-0.004722		
	40	-8.33	-0.009958		
	50	-6.77	-0.008093		
16QAM					
3.87	-30	-6.55	-0.007830	±2.5	Pass
	-20	-5.51	-0.006587		
	-10	-7.20	-0.008607		
	0	-7.74	-0.009253		
	10	-8.11	-0.009695		
	20	-9.08	-0.010855		
	30	-7.11	-0.008500		
	40	-5.66	-0.006766		
	50	-6.29	-0.007519		
64QAM					
3.87	-30	-4.94	-0.005906	±2.5	Pass
	-20	-6.27	-0.007496		
	-10	-3.39	-0.004053		
	0	-4.01	-0.004794		
	10	-3.99	-0.004770		
	20	-2.72	-0.003252		
	30	-2.73	-0.003264		
	40	-4.95	-0.005918		
	50	-3.81	-0.004555		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-7.85	-0.009384	±2.5	Pass
	3.87	-6.79	-0.008117		
	4.45	-4.69	-0.005607		
16QAM					
25	3.45	-7.18	-0.008583	±2.5	Pass
	3.87	-5.79	-0.006922		
	4.45	-4.21	-0.005033		
64QAM					
25	3.45	-4.85	-0.005798	±2.5	Pass
	3.87	-11.43	-0.013664		
	4.45	-4.33	-0.005176		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					