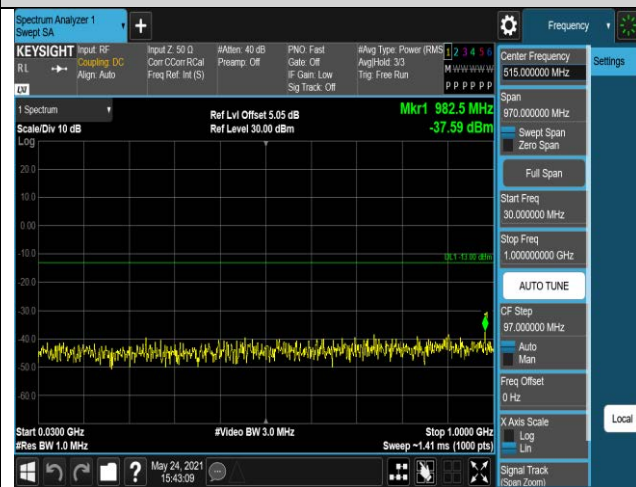


Band66-1.4MHz-QPSK-132665-1RB#0-Range1:30~1000MHz



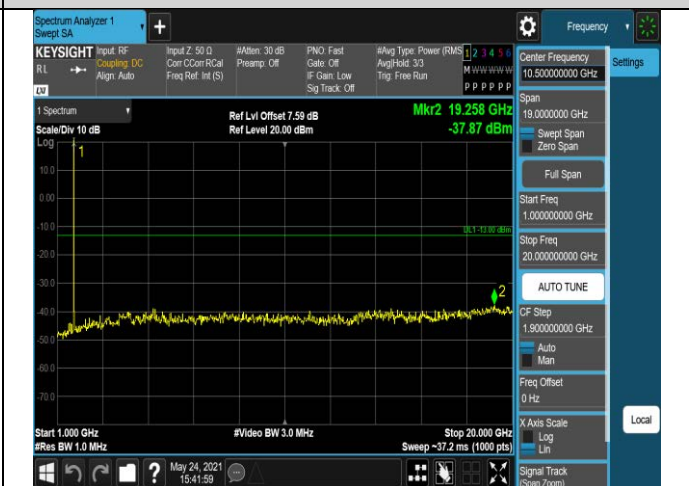
Band66-1.4MHz-QPSK-132665-1RB#0-Range2:1000~20000MHz



Band66-1.4MHz-16QAM-131979-1RB#0-Range1:30~1000MHz



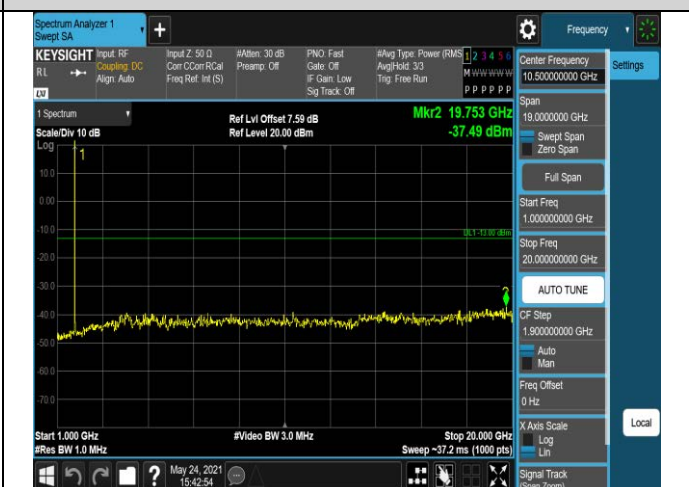
Band66-1.4MHz-16QAM-131979-1RB#0-Range2:1000~20000MHz

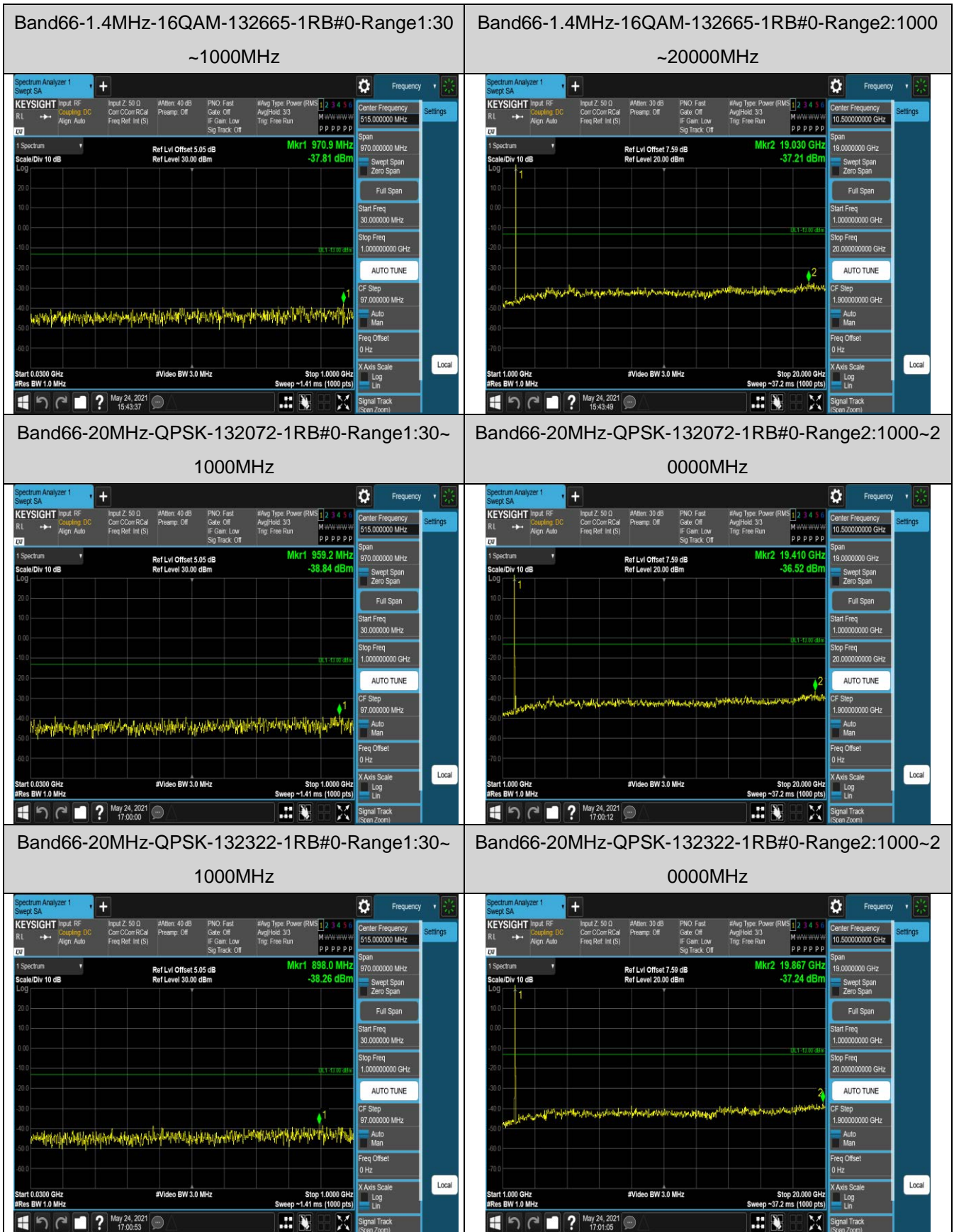


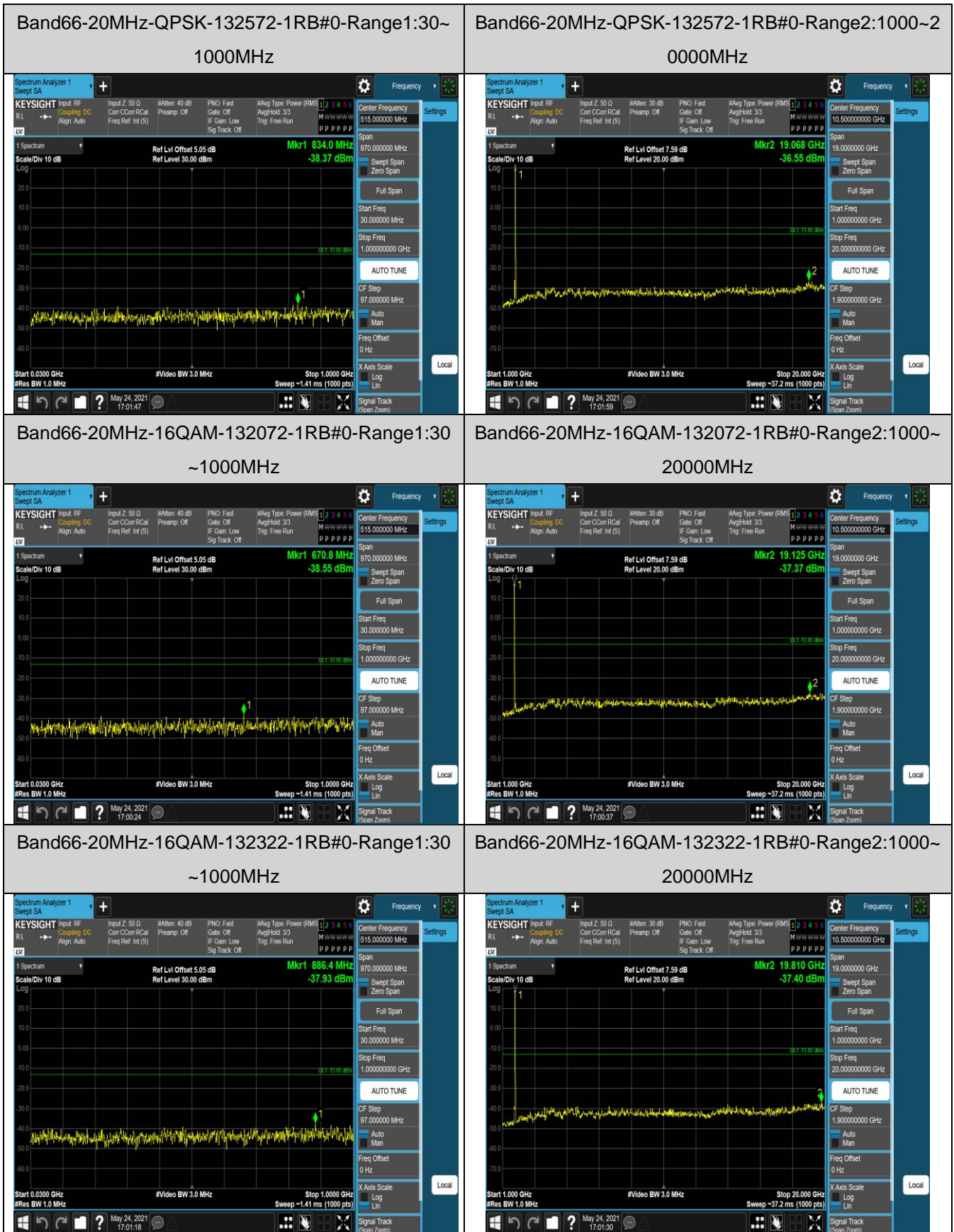
Band66-1.4MHz-16QAM-132322-1RB#0-Range1:30~1000MHz

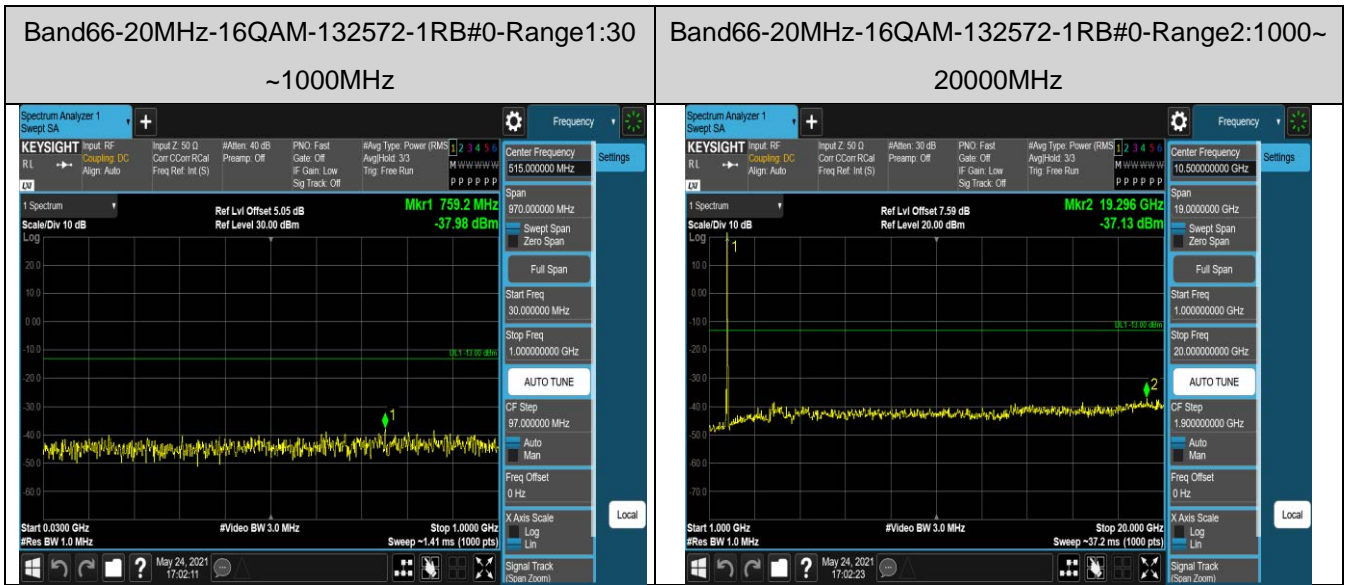


Band66-1.4MHz-16QAM-132322-1RB#0-Range2:1000~20000MHz









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					
3.80	-30	-23.17	-0.012324	Within authorized band for Band 2	Pass
	-20	-15.71	-0.008356		
	-10	-10.83	-0.005761		
	0	-11.89	-0.006324		
	10	-21.13	-0.011239		
	20	-15.64	-0.008319		
	30	-19.94	-0.010606		
	40	-15.95	-0.008484		
	50	-26.62	-0.014160		
16QAM					
3.80	-30	-44.12	-0.023468	Within authorized band for Band 2	Pass
	-20	-39.55	-0.021037		
	-10	-45.96	-0.024447		
	0	-48.02	-0.025543		
	10	-48.64	-0.025872		
	20	-55.15	-0.029335		
	30	20.97	0.011154		
	40	7.52	0.004000		
	50	13.78	0.007330		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-26.69	-0.014197	Within authorized band for Band 2	Pass
	3.80	-43.50	-0.023138		
	4.35	-20.56	-0.010936		
16QAM					
25	3.50	-12.19	-0.006484	Within authorized band for Band 2	Pass
	3.80	-21.41	-0.011388		
	4.35	-31.77	-0.016899		

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					
3.80	-30	-8.03	-0.004635	Within authorized band for Band 4	Pass
	-20	-14.91	-0.008606		
	-10	-6.87	-0.003965		
	0	-14.25	-0.008225		
	10	-7.34	-0.004237		
	20	-15.23	-0.008791		
	30	-13.36	-0.007711		
	40	-16.05	-0.009264		
	50	-9.34	-0.005391		
16QAM					
3.80	-30	-4.18	-0.002413	Within authorized band for Band 4	Pass
	-20	-11.79	-0.006805		
	-10	-7.64	-0.004410		
	0	-13.33	-0.007694		
	10	-8.53	-0.004924		
	20	-13.82	-0.007977		
	30	-8.08	-0.004664		
	40	-10.46	-0.006038		
	50	8.97	0.005177		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-5.42	-0.003128	Within authorized band for Band 4	Pass
	3.80	-6.49	-0.003746		
	4.35	-13.82	-0.007977		
16QAM					
25	3.50	-6.69	-0.003861	Within authorized band for Band 4	Pass
	3.80	-13.05	-0.007532		
	4.35	-13.56	-0.007827		

Note: Only the worst case shown in the 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					
3.80	-30	-57.01	-0.022489	Within authorized band for Band 7	Pass
	-20	-8.38	-0.003306		
	-10	-38.80	-0.015306		
	0	-27.82	-0.010974		
	10	20.18	0.007961		
	20	9.76	0.003850		
	30	36.81	0.014521		
	40	13.45	0.005306		
	50	-40.63	-0.016028		
16QAM					
3.80	-30	-48.47	-0.019120	Within authorized band for Band 7	Pass
	-20	-40.54	-0.015992		
	-10	-50.61	-0.019964		
	0	9.41	0.003712		
	10	-14.08	-0.005554		
	20	10.61	0.004185		
	30	-16.38	-0.006462		
	40	5.24	0.002067		
	50	8.54	0.003369		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-42.31	-0.016690	Within authorized band for Band 7	Pass
	3.80	-19.48	-0.007684		
	4.35	-49.60	-0.019566		
16QAM					
25	3.50	-24.66	-0.009728	Within authorized band for Band 7	Pass
	3.80	29.37	0.011586		
	4.35	-14.75	-0.005819		

Note: Only the worst case shown in the 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					
3.80	-30	-20.24	-0.028608	Within authorized band for Band 12	Pass
	-20	-17.74	-0.025074		
	-10	-37.22	-0.052608		
	0	-37.88	-0.053541		
	10	-10.94	-0.015463		
	20	-7.01	-0.009908		
	30	-19.87	-0.028085		
	40	-16.34	-0.023095		
	50	-31.00	-0.043816		
16QAM					
3.80	-30	-44.52	-0.062926	Within authorized band for Band 12	Pass
	-20	-40.24	-0.056876		
	-10	-45.69	-0.064580		
	0	-41.11	-0.058106		
	10	-47.69	-0.067406		
	20	-45.19	-0.063873		
	30	-48.14	-0.068042		
	40	-45.38	-0.064141		
	50	7.17	0.010134		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	4.89	0.006912	Within authorized band for Band 12	Pass
	3.80	25.98	0.036721		
	4.35	-4.69	-0.006629		
16QAM					
25	3.50	-40.68	-0.057498	Within authorized band for Band 12	Pass
	3.80	-34.42	-0.048650		
	4.35	-41.48	-0.058629		

Note: Only the worst case shown in the report.

LTE Band 17 part:

Reference Frequency: LTE Band 17(10MHz) Middle channel=23790 Frequency=710.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.80	-30	7.30	0.010282	Within authorized band for Band 17	Pass
	-20	6.07	0.008549		
	-10	4.65	0.006549		
	0	6.02	0.008479		
	10	3.09	0.004352		
	20	2.99	0.004211		
	30	4.15	0.005845		
	40	2.27	0.003197		
	50	-3.38	-0.004761		
16QAM					
3.80	-30	11.63	0.016380	Within authorized band for Band 17	Pass
	-20	15.89	0.022380		
	-10	18.01	0.025366		
	0	22.52	0.031718		
	10	25.06	0.035296		
	20	26.52	0.037352		
	30	26.38	0.037155		
	40	27.47	0.038690		
	50	25.81	0.036352		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	15.72	0.022141	Within authorized band for Band 17	Pass
	3.80	18.61	0.026211		
	4.35	12.95	0.018239		
16QAM					
25	3.50	2.98	0.004197	Within authorized band for Band 17	Pass
	3.80	-2.26	-0.003183		
	4.35	11.00	0.015493		

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					
3.80	-30	-14.58	-0.008355	Within authorized band for Band 66	Pass
	-20	-28.67	-0.016430		
	-10	-42.54	-0.024378		
	0	-4.08	-0.002338		
	10	-11.99	-0.006871		
	20	24.10	0.013811		
	30	18.27	0.010470		
	40	14.65	0.008395		
	50	4.96	0.002842		
16QAM					
3.80	-30	30.58	0.017524	Within authorized band for Band 66	Pass
	-20	29.30	0.016791		
	-10	41.48	0.023771		
	0	-9.00	-0.005158		
	10	34.78	0.019931		
	20	-17.72	-0.010155		
	30	3.58	0.002052		
	40	-7.97	-0.004567		
	50	14.76	0.008458		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.50	-21.97	-0.012590	Within authorized band for Band 66	Pass
	3.80	11.96	0.006854		
	4.35	-34.12	-0.019553		
16QAM					
25	3.50	-5.22	-0.002991	Within authorized band for Band 66	Pass
	3.80	16.04	0.009192		
	4.35	16.94	0.009708		

Note: Only the worst case shown in the report.