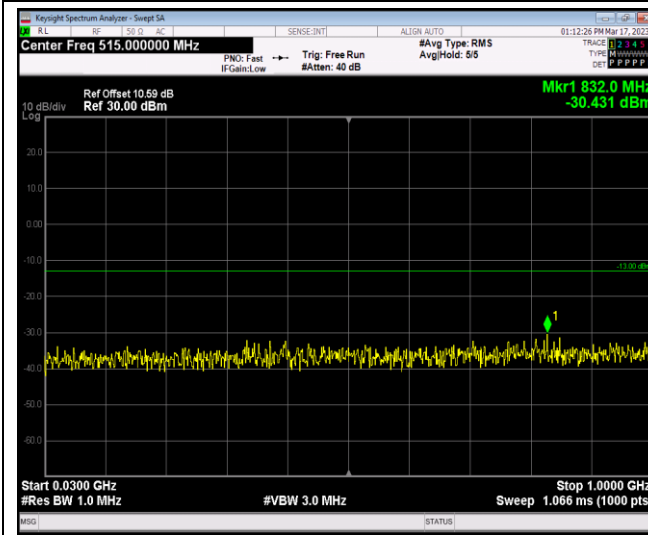


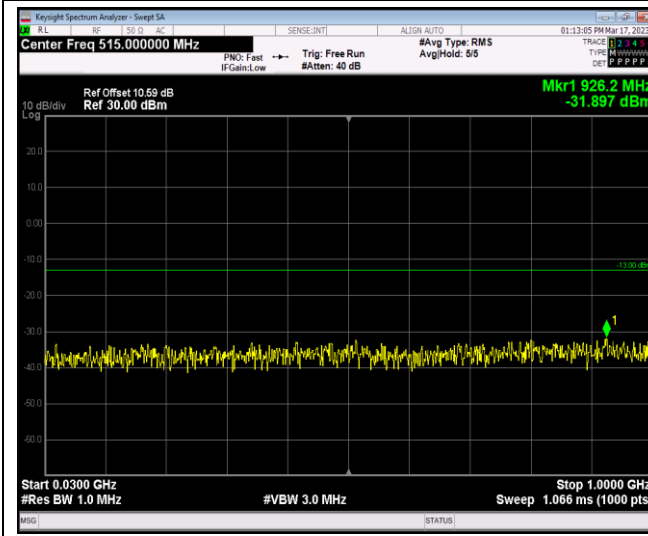
Band66-20MHz-16QAM-132072-1RB#0-Range1:30
~1000MHz

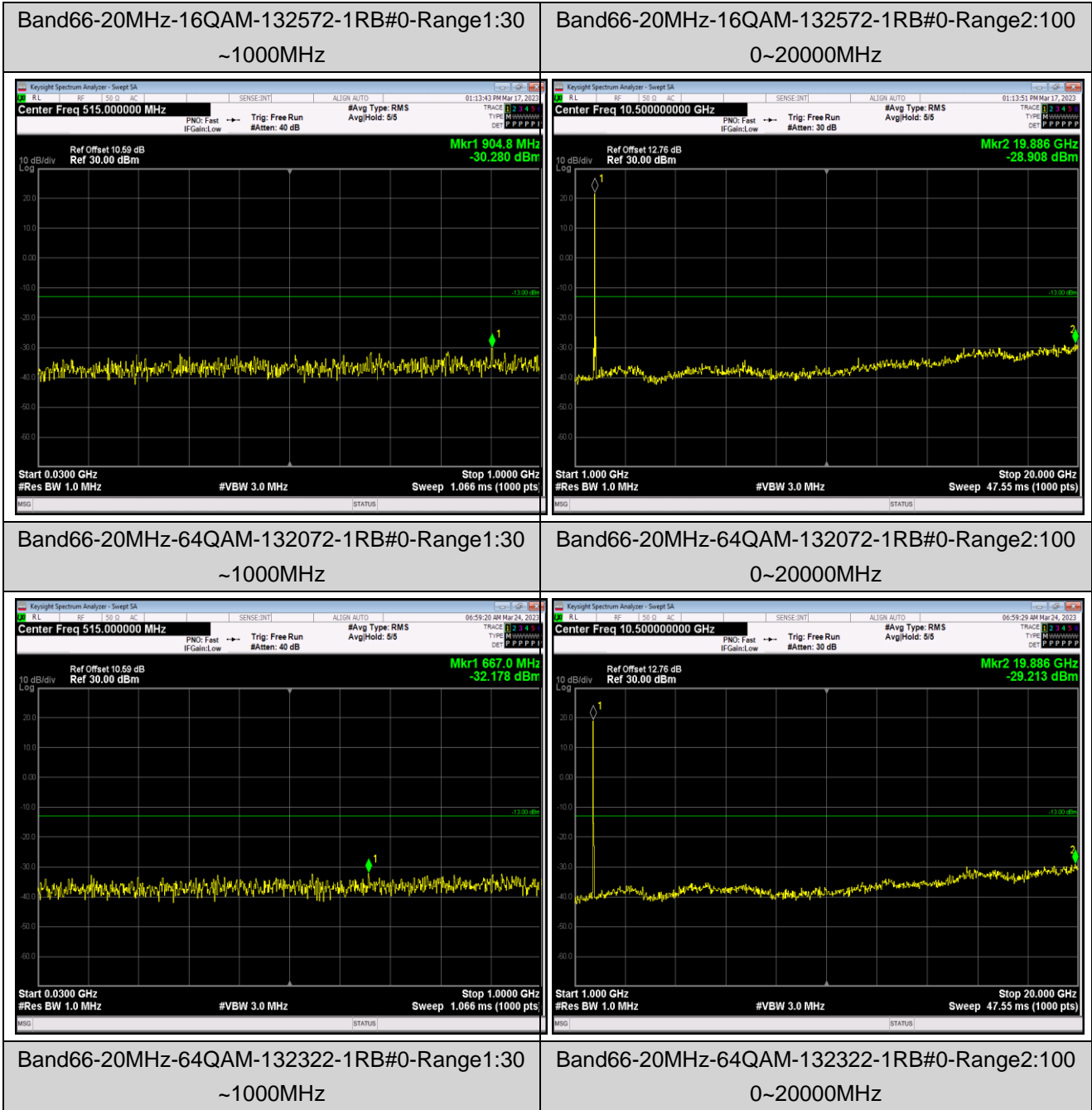
Band66-20MHz-16QAM-132072-1RB#0-Range2:100
0~20000MHz

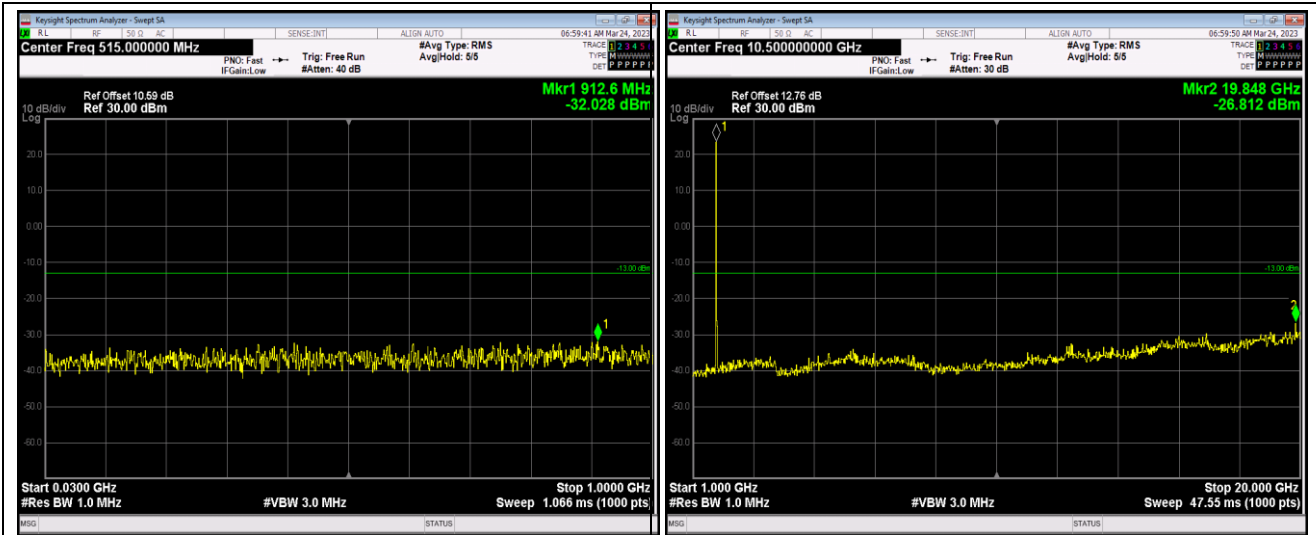


Band66-20MHz-16QAM-132322-1RB#0-Range1:30
~1000MHz

Band66-20MHz-16QAM-132322-1RB#0-Range2:100
0~20000MHz

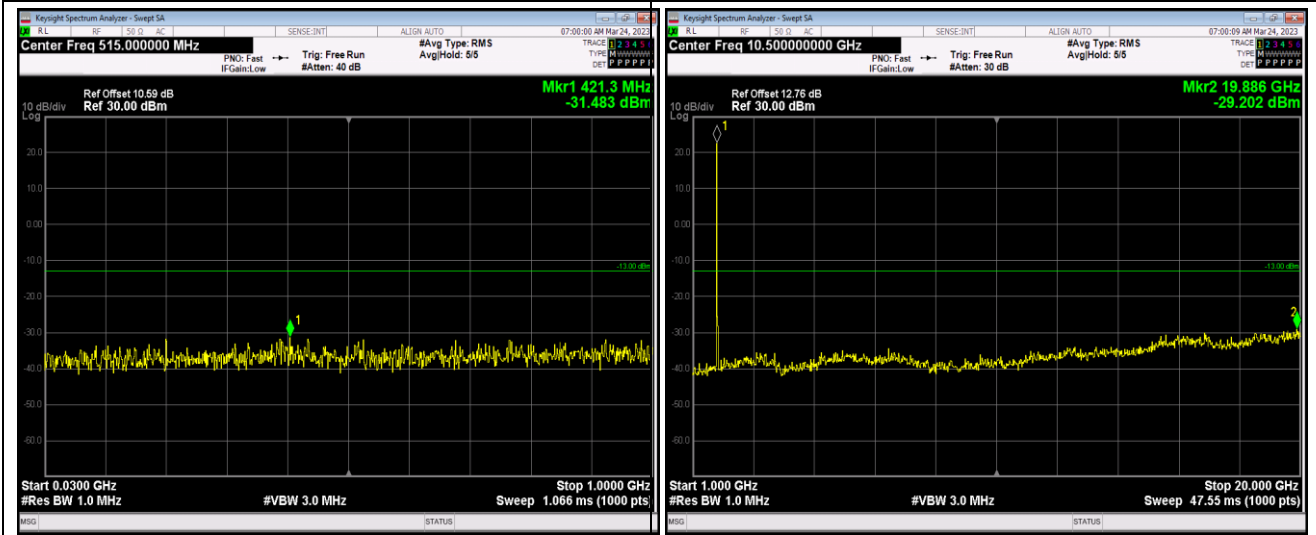






Band66-20MHz-64QAM-132572-1RB#0-Range1:30
~1000MHz

Band66-20MHz-64QAM-132572-1RB#0-Range2:100
0~20000MHz



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					
3.85	-30	-13.98	-0.007436	Within authorized band for Band 2	Pass
	-20	-9.91	-0.005271		
	-10	-15.99	-0.008505		
	0	-21.06	-0.011202		
	10	-12.27	-0.006527		
	20	-10.36	-0.005511		
	30	-12.80	-0.006809		
	40	-16.89	-0.008984		
	50	-7.54	-0.004011		
16QAM					
3.85	-30	1.73	0.000920	Within authorized band for Band 2	Pass
	-20	-19.04	-0.010128		
	-10	-9.11	-0.004846		
	0	-8.28	-0.004404		
	10	-5.31	-0.002824		
	20	-4.52	-0.002404		
	30	-1.54	-0.000819		
	40	-19.56	-0.010404		
	50	-15.51	-0.008250		
64QAM					
3.85	-30	-7.35	-0.003910	Within authorized band for Band 2	Pass
	-20	-15.32	-0.008149		
	-10	-10.19	-0.005420		
	0	-9.16	-0.004872		
	10	-16.32	-0.008681		
	20	-8.33	-0.004431		
	30	-23.47	-0.012484		
	40	-22.30	-0.011862		
	50	-5.22	-0.002777		
Voltage					
Temperature	Power supplied	Frequency error		Limit (ppm)	Result

(°C)	(Vdc)	Hz	ppm		
QPSK					
25	3.50	-14.05	-0.007473	Within authorized band for Band 2	Pass
	3.85	-16.87	-0.008973		
	4.40	-12.13	-0.006452		
16QAM					
25	3.50	4.19	0.002229	Within authorized band for Band 2	Pass
	3.85	-14.59	-0.007761		
	4.40	-12.75	-0.006782		
64QAM					
25	3.50	-15.23	-0.008101	Within authorized band for Band 2	Pass
	3.85	-18.88	-0.010043		
	4.40	-24.48	-0.013021		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					

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	-4.65	-0.001834	Within authorized band for Band 7	Pass
	-20	5.19	0.002047		
	-10	-13.76	-0.005428		
	0	-14.20	-0.005602		
	10	-13.86	-0.005467		
	20	-14.26	-0.005625		
	30	-11.82	-0.004663		
	40	-11.86	-0.004679		
	50	-11.47	-0.004525		
16QAM					
3.85	-30	-14.53	-0.005732	Within authorized band for Band 7	Pass
	-20	-15.96	-0.006296		
	-10	11.49	0.004533		
	0	-19.40	-0.007653		
	10	-12.82	-0.005057		
	20	-20.63	-0.008138		
	30	-11.54	-0.004552		
	40	-14.08	-0.005554		
	50	-14.36	-0.005665		
64QAM					
3.85	-30	-15.81	-0.006237	Within authorized band for Band 7	Pass
	-20	-25.35	-0.010000		
	-10	-19.51	-0.007696		
	0	-27.25	-0.010750		
	10	-14.22	-0.005609		
	20	-14.13	-0.005574		
	30	-6.64	-0.002619		
	40	-40.61	-0.016020		
	50	-30.11	-0.011878		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.50	13.88	0.005475	Within authorized band for Band 7	Pass
	3.85	-13.95	-0.005503		
	4.40	-16.87	-0.006655		
16QAM					
25	3.50	-19.58	-0.007724	Within authorized band for Band 7	Pass
	3.85	-14.95	-0.005897		
	4.40	5.14	0.002028		
64QAM					
25	3.50	-17.40	-0.006864	Within authorized band for Band 7	Pass
	3.85	-11.94	-0.004710		
	4.40	-13.63	-0.005377		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					

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					
3.85	-30	-7.97	-0.011265	Within authorized band for Band 12	Pass
	-20	-6.41	-0.009060		
	-10	-5.35	-0.007562		
	0	-3.55	-0.005018		
	10	-3.45	-0.004876		
	20	-7.25	-0.010247		
	30	-11.39	-0.016099		
	40	-11.00	-0.015548		
	50	-10.17	-0.014375		
16QAM					
3.85	-30	-5.08	-0.007180	Within authorized band for Band 12	Pass
	-20	-8.84	-0.012495		
	-10	-10.77	-0.015223		
	0	-12.04	-0.017018		
	10	-7.77	-0.010982		
	20	-13.28	-0.018770		
	30	-11.36	-0.016057		
	40	-7.28	-0.010290		
	50	-8.67	-0.012254		
64QAM					
3.85	-30	-4.36	-0.006163	Within authorized band for Band 12	Pass
	-20	-11.59	-0.016382		
	-10	-13.13	-0.018558		
	0	-9.00	-0.012721		
	10	-9.57	-0.013527		
	20	-8.85	-0.012509		
	30	-8.74	-0.012353		
	40	-7.45	-0.010530		
	50	-12.53	-0.017710		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.50	-11.01	-0.015562	Within authorized band for Band 12	Pass
	3.85	-14.22	-0.020099		
	4.40	-3.45	-0.004876		
16QAM					
25	3.50	-5.28	-0.007463	Within authorized band for Band 12	Pass
	3.85	-10.13	-0.014318		
	4.40	-8.65	-0.012226		
64QAM					
25	3.50	-6.68	-0.009442	Within authorized band for Band 12	Pass
	3.85	-12.46	-0.017611		
	4.40	-4.23	-0.005979		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					

LTE Band 13 part:

Reference Frequency: LTE Band 13 (10MHz) Middle channel=23230 Frequency=782.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-13.38	-0.017110	Within authorized band for Band 13	Pass
	-20	-9.53	-0.012187		
	-10	-14.23	-0.018197		
	0	-9.41	-0.012033		
	10	-9.76	-0.012481		
	20	-9.13	-0.011675		
	30	-10.91	-0.013951		
	40	-12.46	-0.015934		
	50	-11.27	-0.014412		
16QAM					
3.85	-30	-9.06	-0.011586	Within authorized band for Band 13	Pass
	-20	-9.10	-0.011637		
	-10	-9.27	-0.011854		
	0	-7.21	-0.009220		
	10	-3.60	-0.004604		
	20	-12.03	-0.015384		
	30	-7.27	-0.009297		
	40	-14.12	-0.018056		
	50	-12.73	-0.016279		
64QAM					
3.85	-30	-10.10	-0.012916	Within authorized band for Band 13	Pass
	-20	-7.91	-0.010115		
	-10	-10.77	-0.013772		
	0	7.95	0.010166		
	10	-14.55	-0.018606		
	20	-13.69	-0.017506		
	30	-14.59	-0.018657		
	40	-14.65	-0.018734		
	50	-8.04	-0.010281		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.50	-13.86	-0.017724	Within authorized band for Band 13	Pass
	3.85	-16.04	-0.020512		
	4.40	-9.96	-0.012737		
16QAM					
25	3.50	-13.72	-0.017545	Within authorized band for Band 13	Pass
	3.85	-11.12	-0.014220		
	4.40	-10.27	-0.013133		
64QAM					
25	3.50	-10.37	-0.013261	Within authorized band for Band 13	Pass
	3.85	-9.64	-0.012327		
	4.40	-10.76	-0.013760		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					

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					
3.85	-30	-5.51	-0.007761	Within authorized band for Band 17	Pass
	-20	-9.26	-0.013042		
	-10	-10.06	-0.014169		
	0	-7.70	-0.010845		
	10	-6.74	-0.009493		
	20	-13.79	-0.019423		
	30	-6.88	-0.009690		
	40	-8.24	-0.011606		
	50	-4.92	-0.006930		
16QAM					
3.85	-30	-12.22	-0.017211	Within authorized band for Band 17	Pass
	-20	-7.71	-0.010859		
	-10	-9.57	-0.013479		
	0	-9.08	-0.012789		
	10	-8.53	-0.012014		
	20	-11.94	-0.016817		
	30	-10.17	-0.014324		
	40	-10.70	-0.015070		
	50	-9.47	-0.013338		
64QAM					
3.85	-30	-12.19	-0.017169	Within authorized band for Band 17	Pass
	-20	-13.85	-0.019507		
	-10	-12.13	-0.017085		
	0	-10.77	-0.015169		
	10	-12.90	-0.018169		
	20	-11.56	-0.016282		
	30	-12.30	-0.017324		
	40	-10.20	-0.014366		
	50	-8.14	-0.011465		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.50	-5.55	-0.007817	Within authorized band for Band 17	Pass
	3.85	-12.92	-0.018197		
	4.40	-9.56	-0.013465		
16QAM					
25	3.50	-11.72	-0.016507	Within authorized band for Band 17	Pass
	3.85	-9.63	-0.013563		
	4.40	-12.69	-0.017873		
64QAM					
25	3.50	-7.32	-0.010310	Within authorized band for Band 17	Pass
	3.85	-7.94	-0.011183		
	4.40	-14.35	-0.020211		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					

LTE Band 25 part:

Reference Frequency: LTE Band 25 (10MHz) Middle channel=26365 Frequency=1882.50MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-15.28	-0.008117	Within authorized band for Band 25	Pass
	-20	-20.91	-0.011108		
	-10	-14.73	-0.007825		
	0	-9.68	-0.005142		
	10	-15.11	-0.008027		
	20	-12.27	-0.006518		
	30	-11.54	-0.006130		
	40	2.88	0.001530		
	50	-18.34	-0.009742		
16QAM					
3.85	-30	-12.85	-0.006826	Within authorized band for Band 25	Pass
	-20	-10.99	-0.005838		
	-10	-8.98	-0.004770		
	0	-16.09	-0.008547		
	10	-11.23	-0.005965		
	20	-17.88	-0.009498		
	30	-13.50	-0.007171		
	40	-17.15	-0.009110		
	50	-13.82	-0.007341		
64QAM					
3.85	-30	-35.02	-0.018603	Within authorized band for Band 25	Pass
	-20	-20.77	-0.011033		
	-10	-24.39	-0.012956		
	0	-26.16	-0.013896		
	10	-4.52	-0.002401		
	20	-16.34	-0.008680		
	30	-3.13	-0.001663		
	40	-12.76	-0.006778		
	50	-20.94	-0.011124		
Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					

25	3.50	-21.73	-0.011543	Within authorized band for Band 25	Pass
	3.85	-13.50	-0.007171		
	4.40	-19.17	-0.010183		
16QAM					
25	3.50	-13.59	-0.007219	Within authorized band for Band 25	Pass
	3.85	-15.13	-0.008037		
	4.40	-10.06	-0.005344		
64QAM					
25	3.50	-27.28	-0.014491	Within authorized band for Band 25	Pass
	3.85	-24.48	-0.013004		
	4.40	-16.95	-0.009004		
<i>Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.</i>					