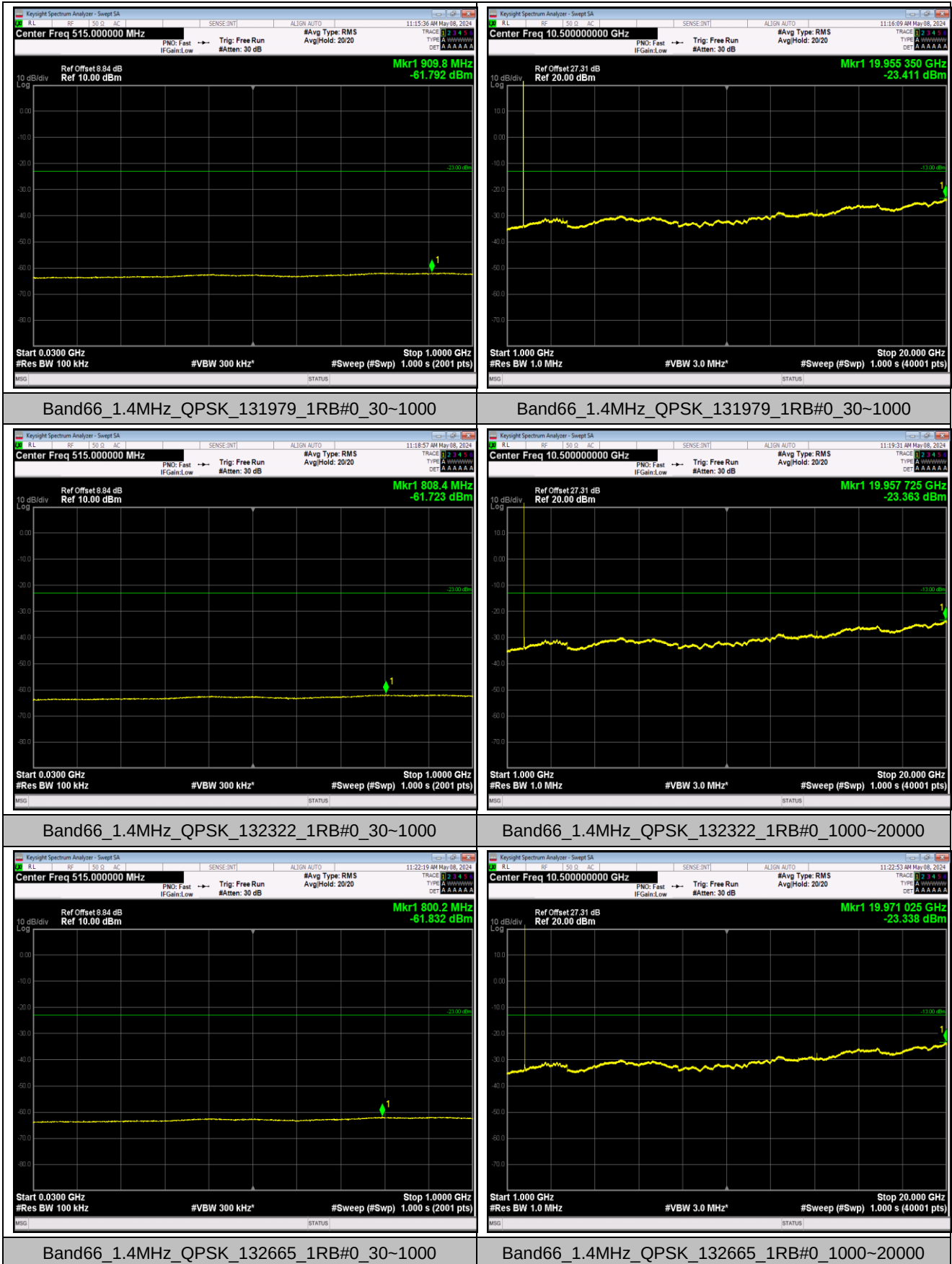
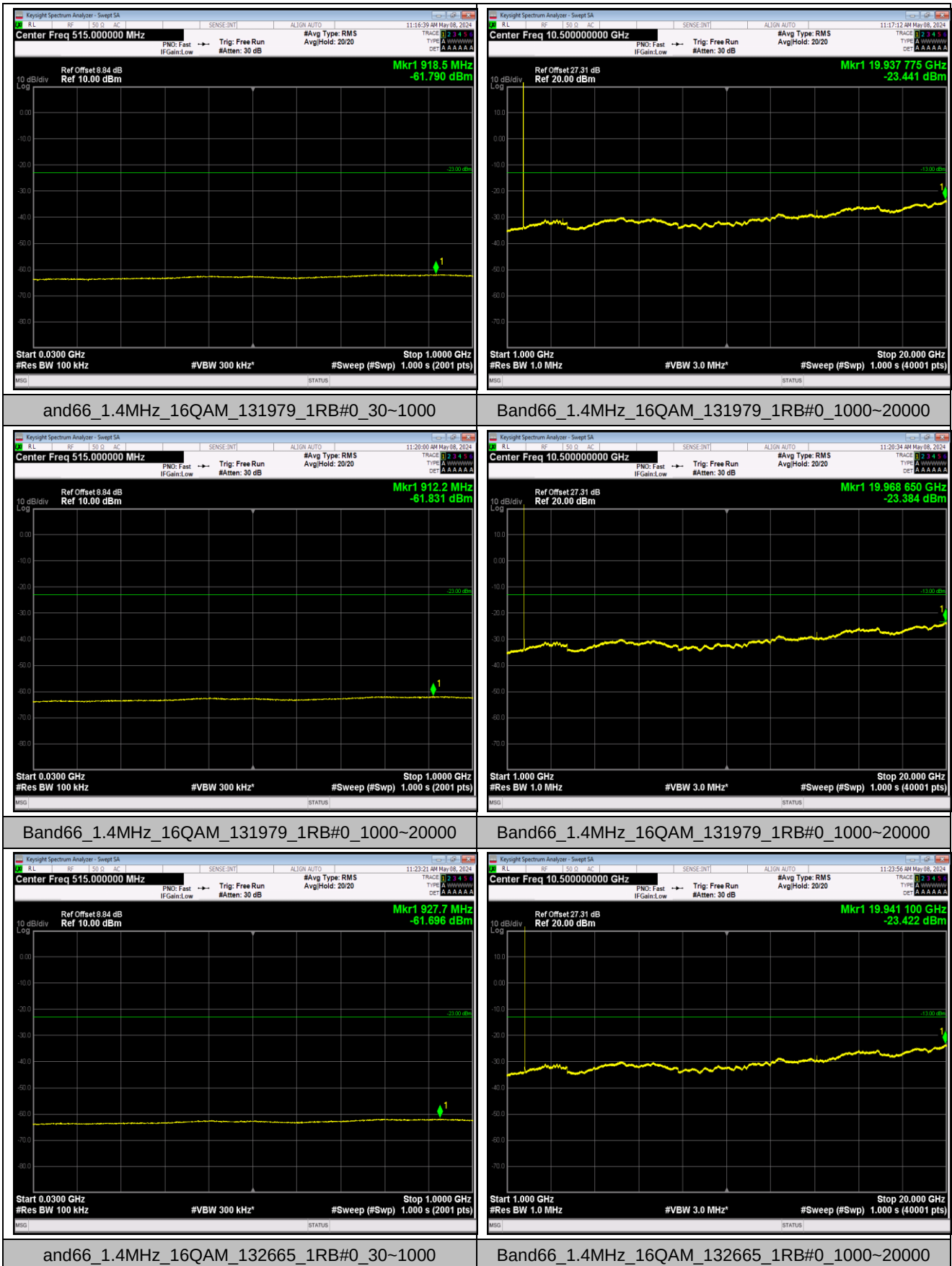
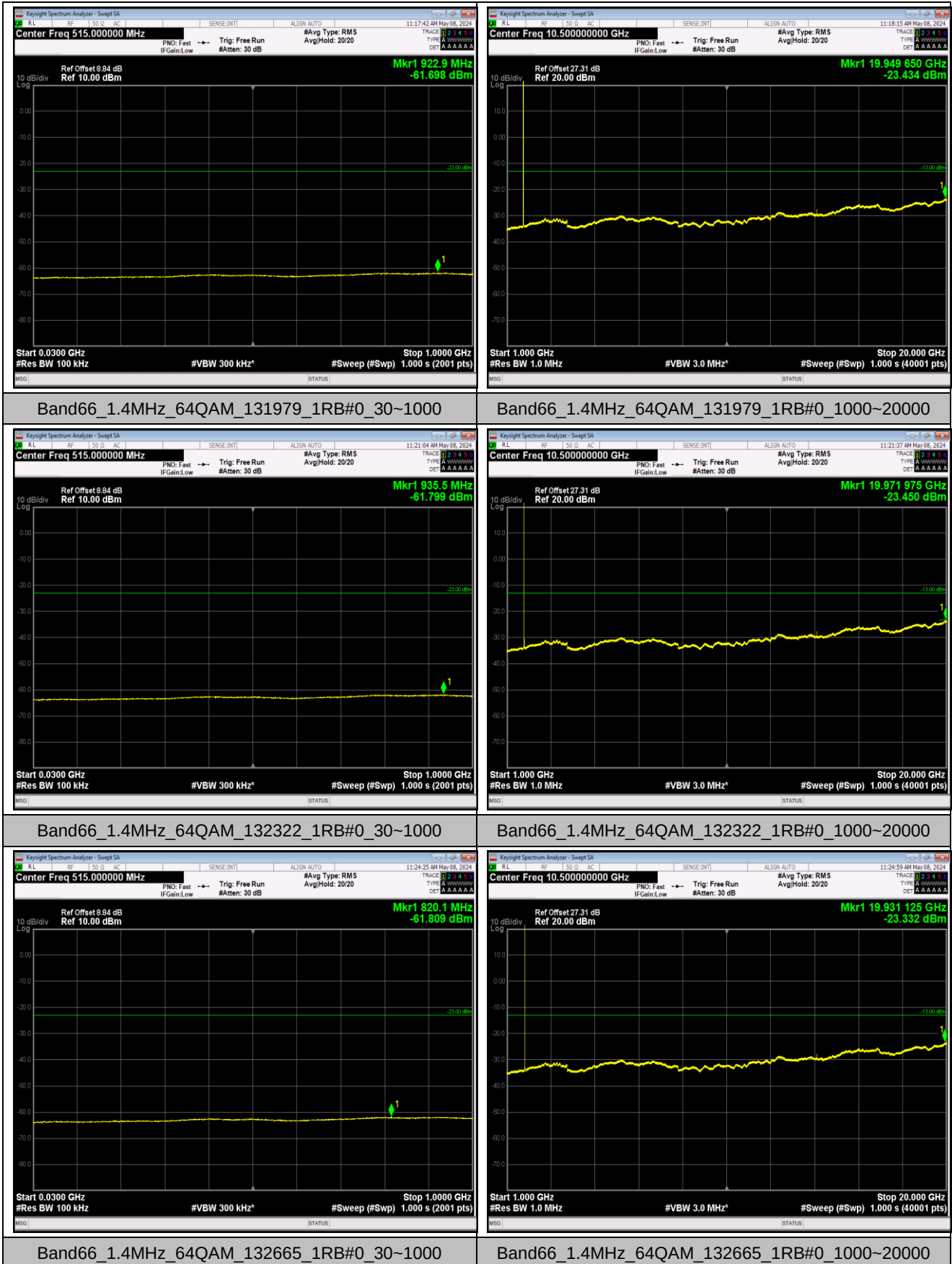
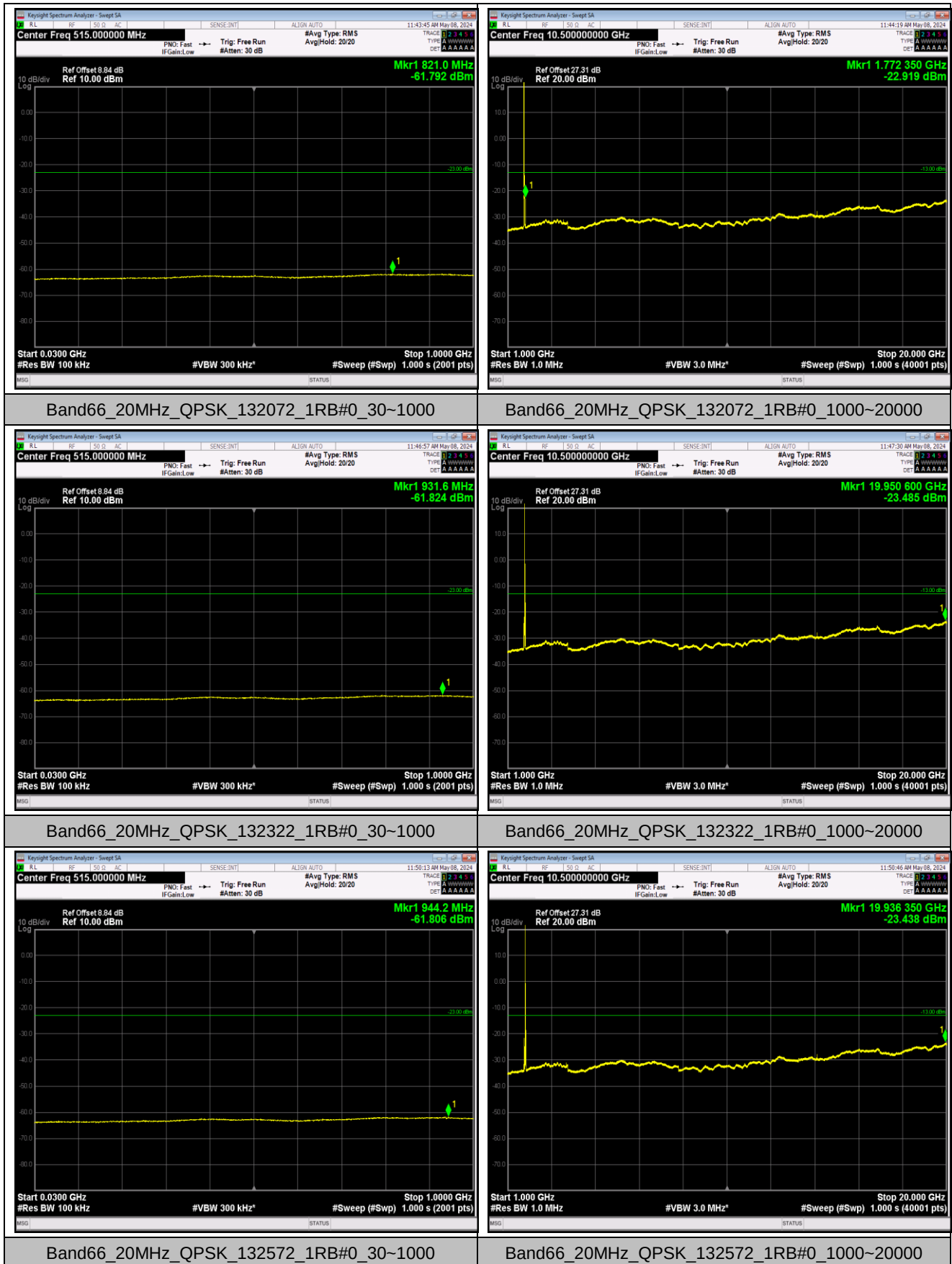
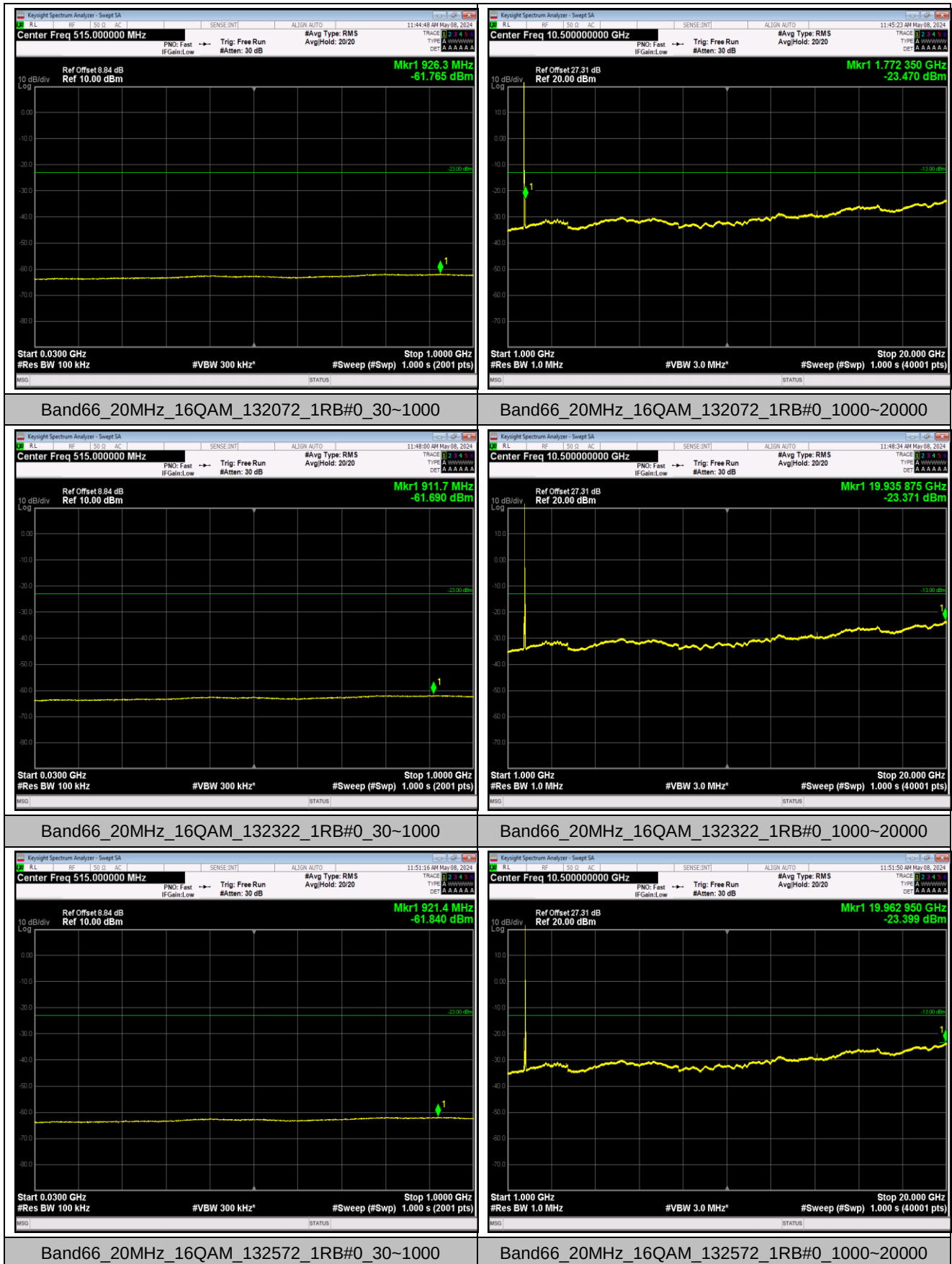


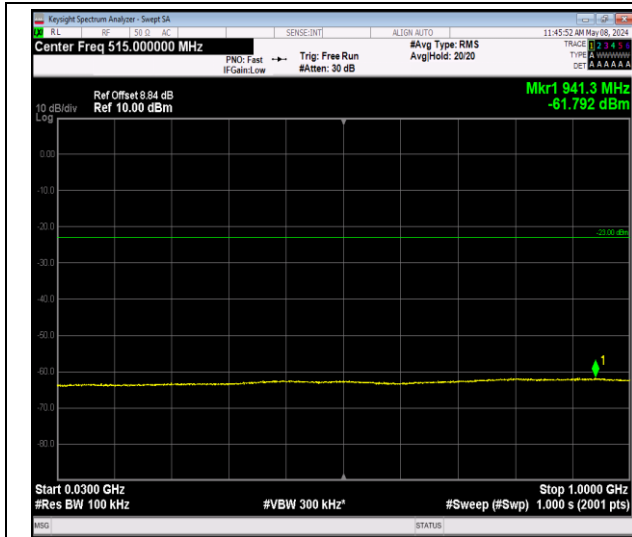




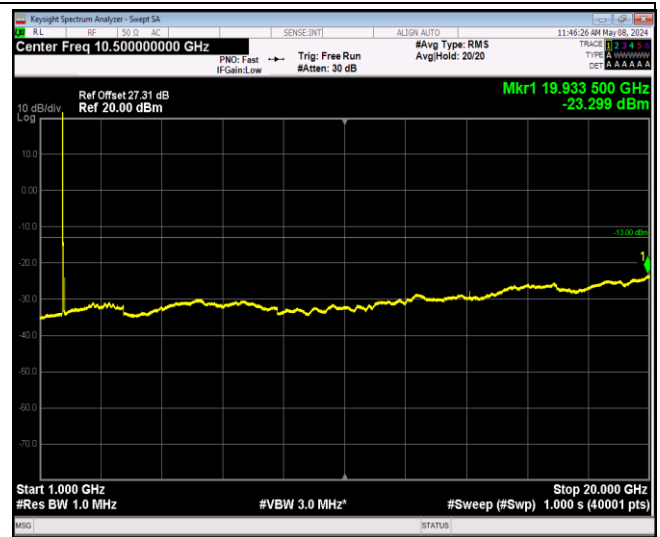




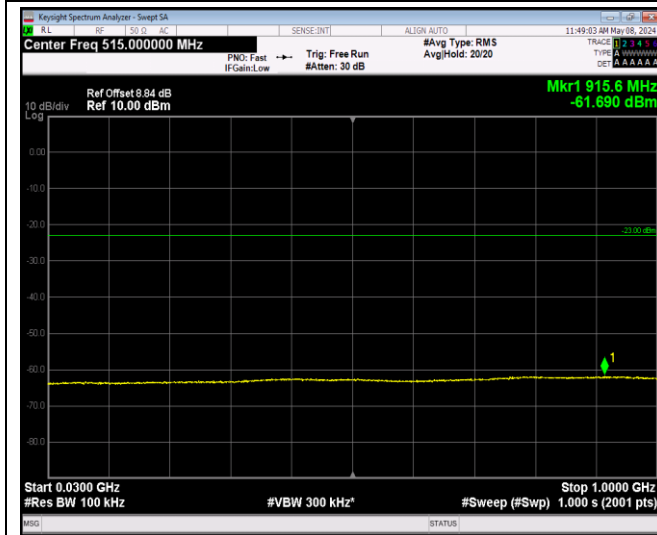




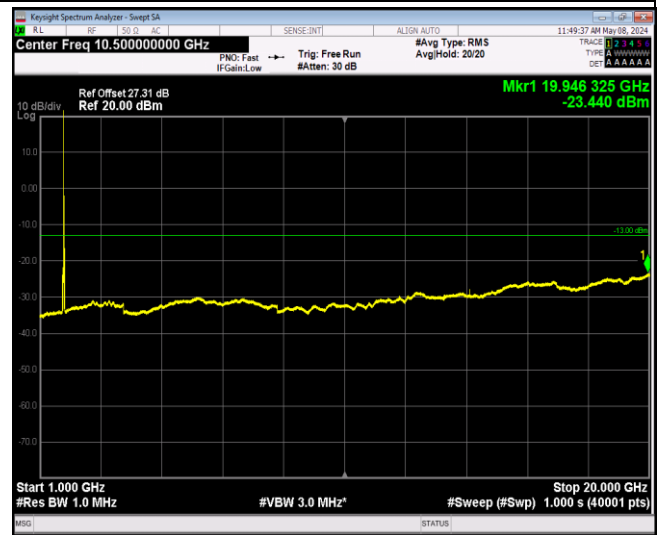
Band66_20MHz_64QAM_132072_1RB#0_30~1000



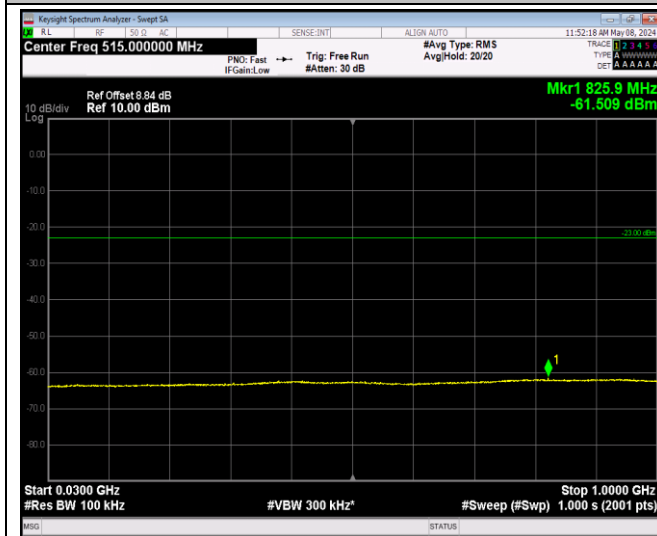
Band66_20MHz_64QAM_132072_1RB#0_1000~20000



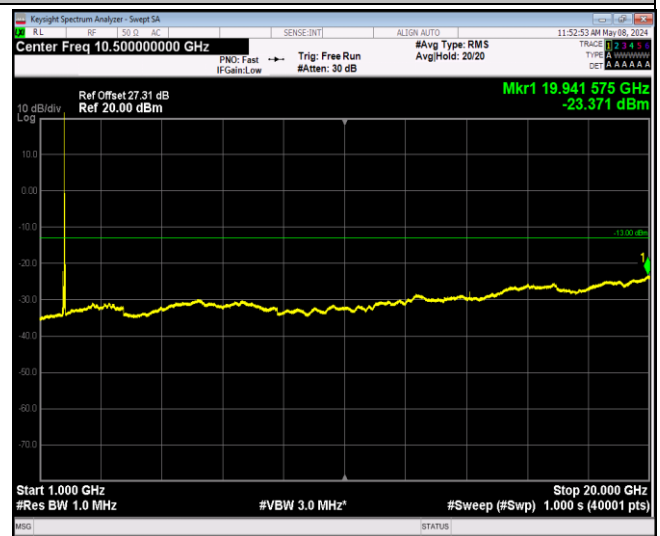
Band66_20MHz_64QAM_132322_1RB#0_30~1000



Band66_20MHz_64QAM_132322_1RB#0_1000~20000



Band66_20MHz_64QAM_132572_1RB#0_30~1000



Band66_20MHz_64QAM_132572_1RB#0_1000~20000

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	-27.82	-0.014798	Within authorized band for Band 2	Pass
	-20	5.84	0.003106		
	-10	-23.15	-0.012314		
	0	-32.07	-0.017059		
	10	-16.24	-0.008638		
	20	-15.23	-0.008101		
	30	-14.39	-0.007654		
	40	-19.40	-0.010319		
	50	-38.07	-0.020250		
16QAM					
3.85	-30	31.00	0.016489	Within authorized band for Band 2	Pass
	-20	43.75	0.023271		
	-10	14.41	0.007665		
	0	23.95	0.012739		
	10	10.21	0.005431		
	20	36.58	0.019457		
	30	51.51	0.027399		
	40	-3.50	-0.001862		
	50	14.95	0.007952		
64QAM					
3.85	-30	31.00	0.016489	Within authorized band for Band 2	Pass
	-20	43.75	0.023271		
	-10	14.41	0.007665		
	0	23.95	0.012739		
	10	10.21	0.005431		
	20	36.58	0.019457		
	30	51.51	0.027399		
	40	-3.50	-0.001862		
	50	14.95	0.007952		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	12.43	0.006612	Within authorized band for Band 2	Pass
	3.85	22.12	0.011766		
	4.40	-15.69	-0.008346		
16QAM					
25	3.00	-40.76	-0.021681	Within authorized band for Band 2	Pass
	3.85	-23.43	-0.012463		
	4.40	-8.71	-0.004633		
64QAM					
25	3.00	23.10	0.012287	Within authorized band for Band 2	Pass
	3.85	37.95	0.020186		
	4.40	29.71	0.015803		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	32.80	0.012939	Within authorized band for Band 7	Pass
	-20	-17.48	-0.006895		
	-10	-24.26	-0.009570		
	0	26.58	0.010485		
	10	20.73	0.008178		
	20	51.57	0.020343		
	30	42.10	0.016607		
	40	11.92	0.004702		
	50	32.16	0.012686		
16QAM					
3.85	-30	-33.66	-0.013278	Within authorized band for Band 7	Pass
	-20	12.04	0.004750		
	-10	-17.67	-0.006970		
	0	19.03	0.007507		
	10	-10.61	-0.004185		
	20	-25.85	-0.010197		
	30	-15.99	-0.006308		
	40	-37.58	-0.014824		
	50	-55.09	-0.021732		
64QAM					
3.85	-30	10.47	0.004130	Within authorized band for Band 7	Pass
	-20	25.29	0.009976		
	-10	26.95	0.010631		
	0	-29.74	-0.011732		
	10	-26.45	-0.010434		
	20	36.59	0.014434		
	30	53.79	0.021219		
	40	16.28	0.006422		
	50	39.42	0.015550		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-42.44	-0.016742	Within authorized band for Band 7	Pass
	3.85	-27.22	-0.010738		
	4.40	29.94	0.011811		
16QAM					
25	3.00	-11.86	-0.004679	Within authorized band for Band 7	Pass
	3.85	-37.15	-0.014655		
	4.40	-42.69	-0.016840		
64QAM					
25	3.00	-30.34	-0.011968	Within authorized band for Band 7	Pass
	3.85	27.82	0.010974		
	4.40	46.45	0.018323		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this 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					
3.85	-30	5.55	0.007845	Within authorized band for Band 12	Pass
	-20	2.83	0.004000		
	-10	1.82	0.002572		
	0	-2.68	-0.003788		
	10	-4.49	-0.006346		
	20	-6.17	-0.008721		
	30	-5.15	-0.007279		
	40	-5.25	-0.007420		
	50	-9.66	-0.013654		
16QAM					
3.85	-30	1.40	0.001979	Within authorized band for Band 12	Pass
	-20	5.35	0.007562		
	-10	11.77	0.016636		
	0	16.71	0.023618		
	10	19.98	0.028240		
	20	18.78	0.026544		
	30	18.91	0.026728		
	40	24.60	0.034770		
	50	33.56	0.047435		
64QAM					
3.85	-30	5.45	0.007703	Within authorized band for Band 12	Pass
	-20	14.68	0.020749		
	-10	20.53	0.029018		
	0	25.08	0.035449		
	10	30.28	0.042799		
	20	36.68	0.051845		
	30	38.07	0.053809		
	40	41.90	0.059223		
	50	7.28	0.010290		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	15.03	0.021244	Within authorized band for Band 12	Pass
	3.85	15.19	0.021470		
	4.40	9.76	0.013795		
16QAM					
25	3.00	-12.25	-0.017314	Within authorized band for Band 12	Pass
	3.85	-10.84	-0.015322		
	4.40	-5.78	-0.008170		
64QAM					
25	3.00	33.96	0.048000	Within authorized band for Band 12	Pass
	3.85	44.90	0.063463		
	4.40	47.61	0.067293		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 26 part: (814-824 MHz)

Reference Frequency: LTE Band 26(10MHz) Middle channel=26740 Frequency=819.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-35.72	-0.043614	Within authorized band for Band 26	Pass
	-20	-48.17	-0.058816		
	-10	-6.32	-0.007717		
	0	-5.69	-0.006947		
	10	-10.87	-0.013272		
	20	-12.93	-0.015788		
	30	-26.84	-0.032772		
	40	-35.19	-0.042967		
	50	-33.70	-0.041148		
16QAM					
3.85	-30	-13.20	-0.016117	Within authorized band for Band 26	Pass
	-20	-13.78	-0.016825		
	-10	-2.63	-0.003211		
	0	-9.24	-0.011282		
	10	-16.62	-0.020293		
	20	-18.70	-0.022833		
	30	-24.52	-0.029939		
	40	-28.34	-0.034603		
	50	-28.22	-0.034457		
64QAM					
3.85	-30	-3.95	-0.004823	Within authorized band for Band 26	Pass
	-20	8.01	0.009780		
	-10	12.67	0.015470		
	0	20.28	0.024762		
	10	19.91	0.024310		
	20	25.11	0.030659		
	30	38.67	0.047216		
	40	45.63	0.055714		
	50	47.94	0.058535		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	23.07	0.028168	Within authorized band for Band 26	Pass
	3.85	7.77	0.009487		
	4.40	-18.02	-0.022002		
16QAM					
25	3.00	-39.61	-0.048364	Within authorized band for Band 26	Pass
	3.85	-33.42	-0.040806		
	4.40	-24.69	-0.030147		
64QAM					
25	3.00	-21.50	-0.026252	Within authorized band for Band 26	Pass
	3.85	-14.33	-0.017497		
	4.40	-9.71	-0.011856		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 26 part: (824-849 MHz)

Reference Frequency: LTE Band 26(15MHz) Middle channel=26915 Frequency=836.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-35.59	-0.042546	Within authorized band for Band 26	Pass
	-20	-44.26	-0.052911		
	-10	-11.52	-0.013772		
	0	-20.89	-0.024973		
	10	-27.42	-0.032779		
	20	-36.01	-0.043048		
	30	-40.90	-0.048894		
	40	-36.78	-0.043969		
	50	-46.79	-0.055935		
16QAM					
3.85	-30	2.95	0.003527	Within authorized band for Band 26	Pass
	-20	7.28	0.008703		
	-10	7.64	0.009133		
	0	10.03	0.011990		
	10	15.75	0.018828		
	20	25.81	0.030855		
	30	25.62	0.030628		
	40	19.54	0.023359		
	50	12.45	0.014883		
64QAM					
3.85	-30	33.53	0.040084	Within authorized band for Band 26	Pass
	-20	39.95	0.047759		
	-10	44.05	0.052660		
	0	12.13	0.014501		
	10	33.39	0.039916		
	20	43.75	0.052301		
	30	43.53	0.052038		
	40	44.13	0.052756		
	50	7.25	0.008667		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	20.21	0.024379	Within authorized band for Band 26	Pass
	3.85	16.05	0.019361		
	4.40	-5.11	-0.006164		
16QAM					
25	3.00	-13.19	-0.015768	Within authorized band for Band 26	Pass
	3.85	-10.74	-0.012839		
	4.40	-5.64	-0.006742		
64QAM					
25	3.00	17.25	0.020622	Within authorized band for Band 26	Pass
	3.85	19.56	0.023383		
	4.40	27.72	0.033138		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 41 part:

Reference Frequency: LTE Band 41 (10MHz) Middle channel=40640 Frequency=2595.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.85	-30	-15.78	-0.006081	Within authorized band for Band 41	Pass
	-20	5.66	0.002181		
	-10	46.19	0.017800		
	0	-15.09	-0.005815		
	10	-55.69	-0.021461		
	20	-17.47	-0.006732		
	30	-18.95	-0.007303		
	40	-29.43	-0.011341		
	50	-34.29	-0.013214		
16QAM					
3.85	-30	48.14	0.018551	Within authorized band for Band 41	Pass
	-20	36.78	0.014173		
	-10	28.71	0.011064		
	0	11.53	0.004443		
	10	-14.66	-0.005649		
	20	-11.24	-0.004331		
	30	43.30	0.016686		
	40	42.61	0.016420		
	50	24.55	0.009461		
64QAM					
3.85	-30	17.41	0.006709	Within authorized band for Band 41	Pass
	-20	48.38	0.018644		
	-10	23.59	0.009091		
	0	9.18	0.003538		
	10	-47.34	-0.018243		
	20	-36.45	-0.014046		
	30	-58.81	-0.022663		
	40	-29.30	-0.011291		
	50	-16.99	-0.006547		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-5.28	-0.002035	Within authorized band for Band 41	Pass
	3.85	-23.27	-0.008967		
	4.40	13.85	0.005337		
16QAM					
25	3.00	7.45	0.002871	Within authorized band for Band41	Pass
	3.85	53.84	0.020748		
	4.40	45.53	0.017545		
64QAM					
25	3.00	10.57	0.004073	Within authorized band for Band41	Pass
	3.85	39.78	0.015329		
	4.40	17.55	0.006763		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this 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					
3.85	-30	-8.68	-0.004974	Within authorized band for Band 66	Pass
	-20	-45.78	-0.026235		
	-10	-27.59	-0.015811		
	0	-36.54	-0.020940		
	10	-42.31	-0.024246		
	20	-4.39	-0.002516		
	30	-17.88	-0.010246		
	40	-25.06	-0.014361		
	50	-33.07	-0.018951		
16QAM					
3.85	-30	11.39	0.006527	Within authorized band for Band 66	Pass
	-20	21.16	0.012126		
	-10	33.37	0.019123		
	0	-17.68	-0.010132		
	10	-13.45	-0.007708		
	20	-22.14	-0.012688		
	30	-22.12	-0.012676		
	40	-10.60	-0.006074		
	50	-4.92	-0.002819		
64QAM					
3.85	-30	30.36	0.017398	Within authorized band for Band 66	Pass
	-20	4.99	0.002860		
	-10	15.11	0.008659		
	0	29.31	0.016797		
	10	9.71	0.005564		
	20	29.34	0.016814		
	30	18.20	0.010430		
	40	23.52	0.013479		
	50	29.17	0.016716		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	31.56	0.018086	Within authorized band for Band 66	Pass
	3.85	24.68	0.014143		
	4.40	-15.01	-0.008602		
16QAM					
25	3.00	-45.48	-0.026063	Within authorized band for Band 66	Pass
	3.85	4.38	0.002510		
	4.40	35.45	0.020315		
64QAM					
25	3.00	-8.01	-0.004590	Within authorized band for Band 66	Pass
	3.85	-10.84	-0.006212		
	4.40	14.05	0.008052		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					