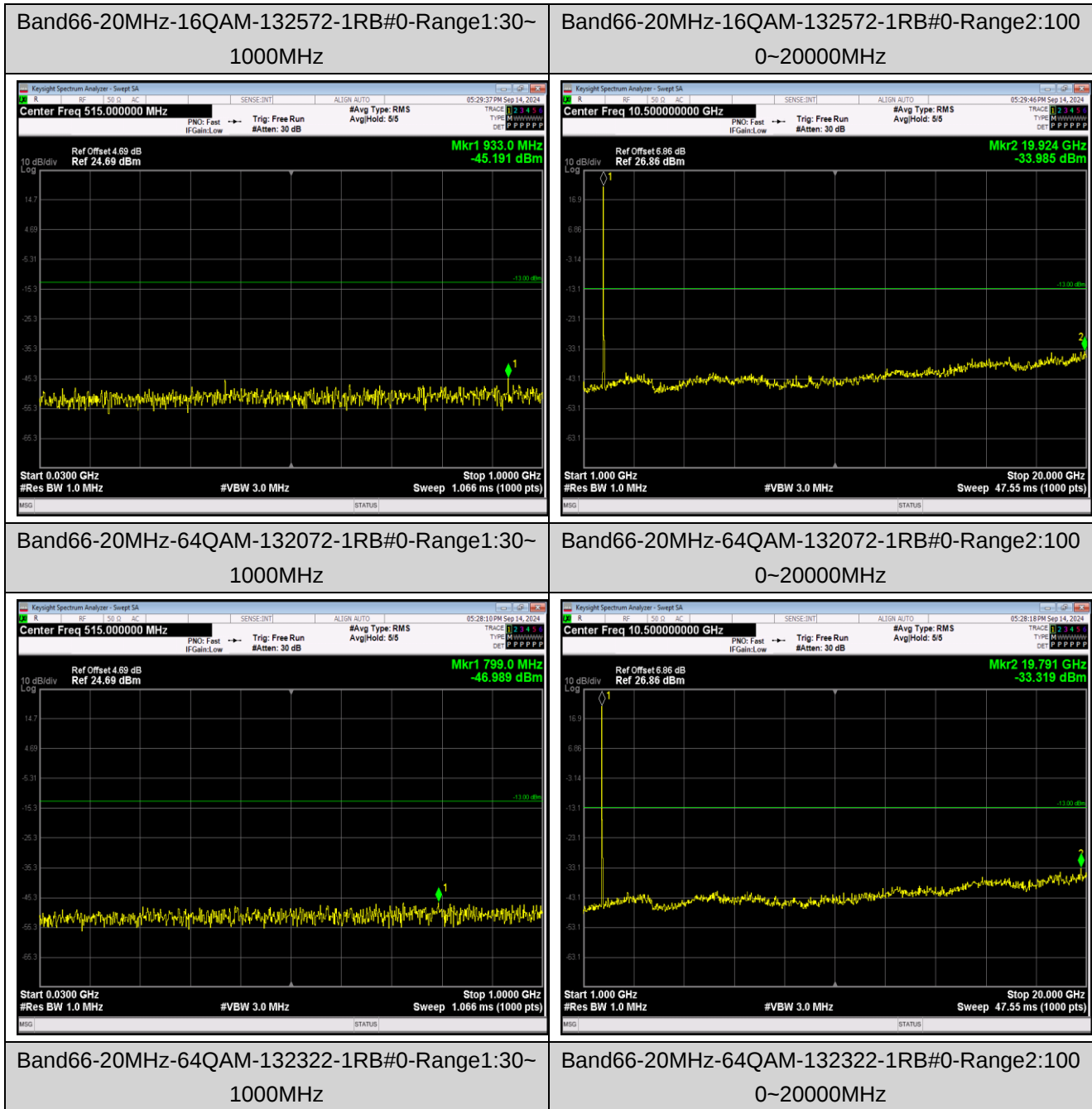
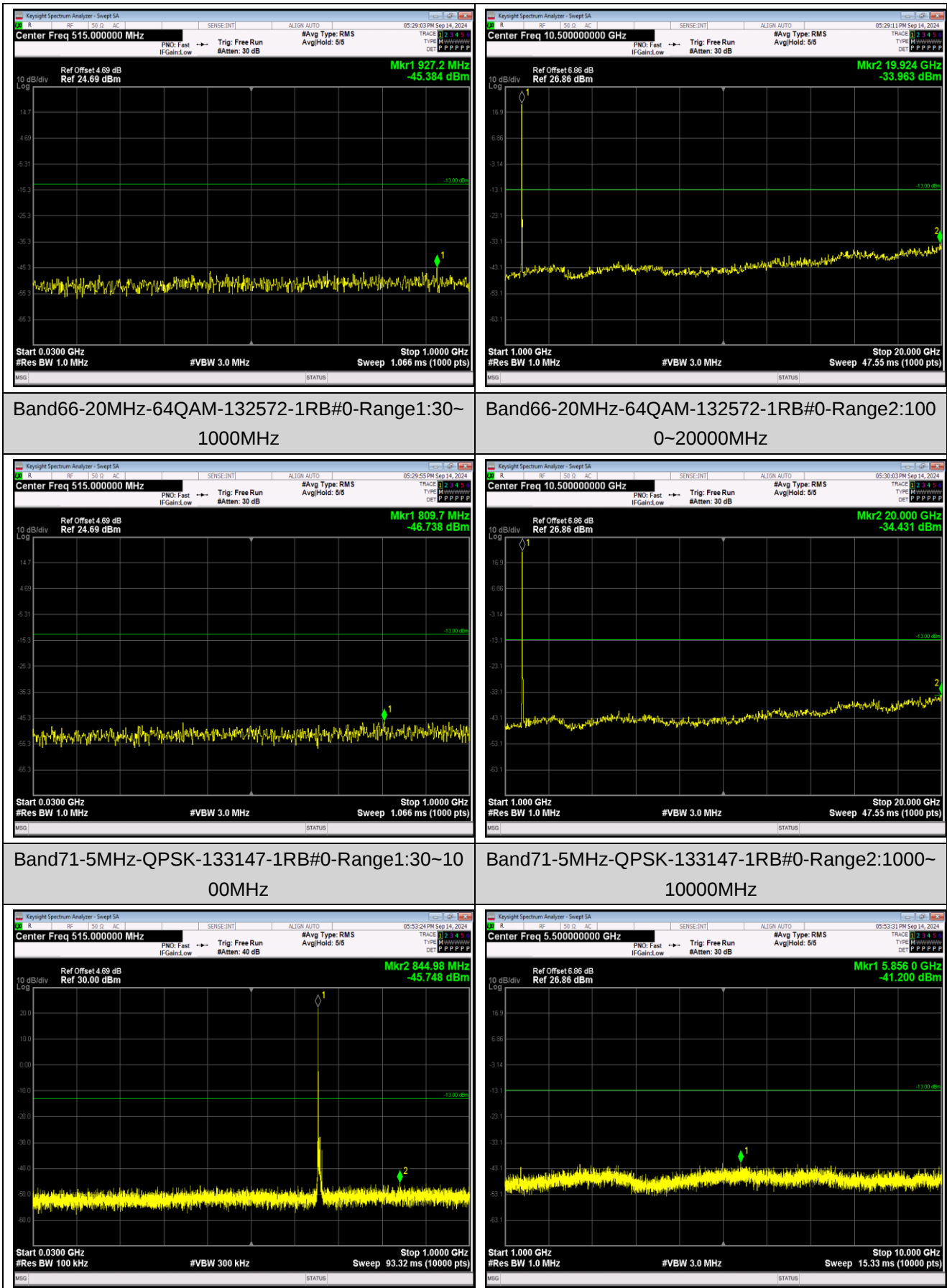
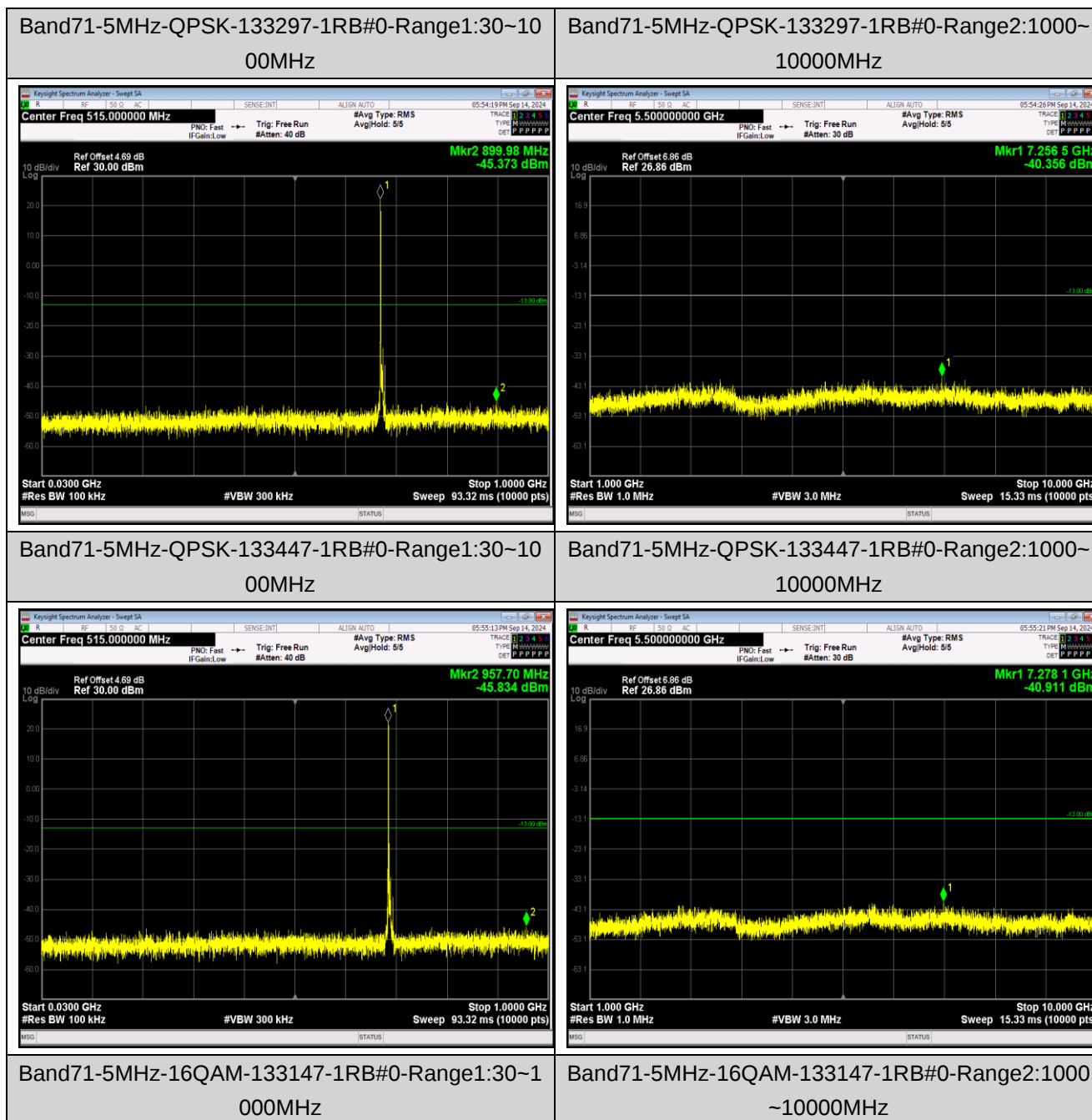
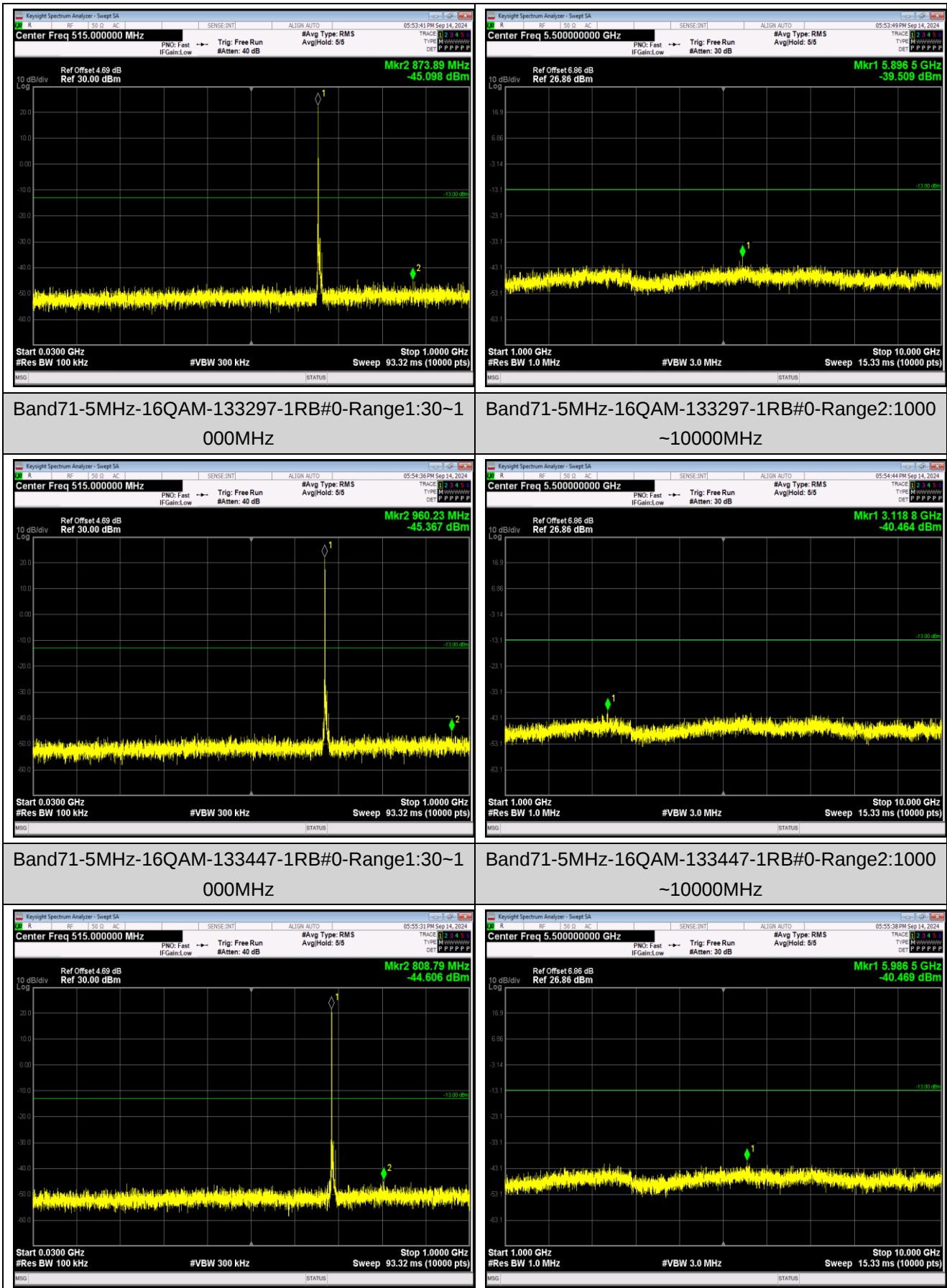
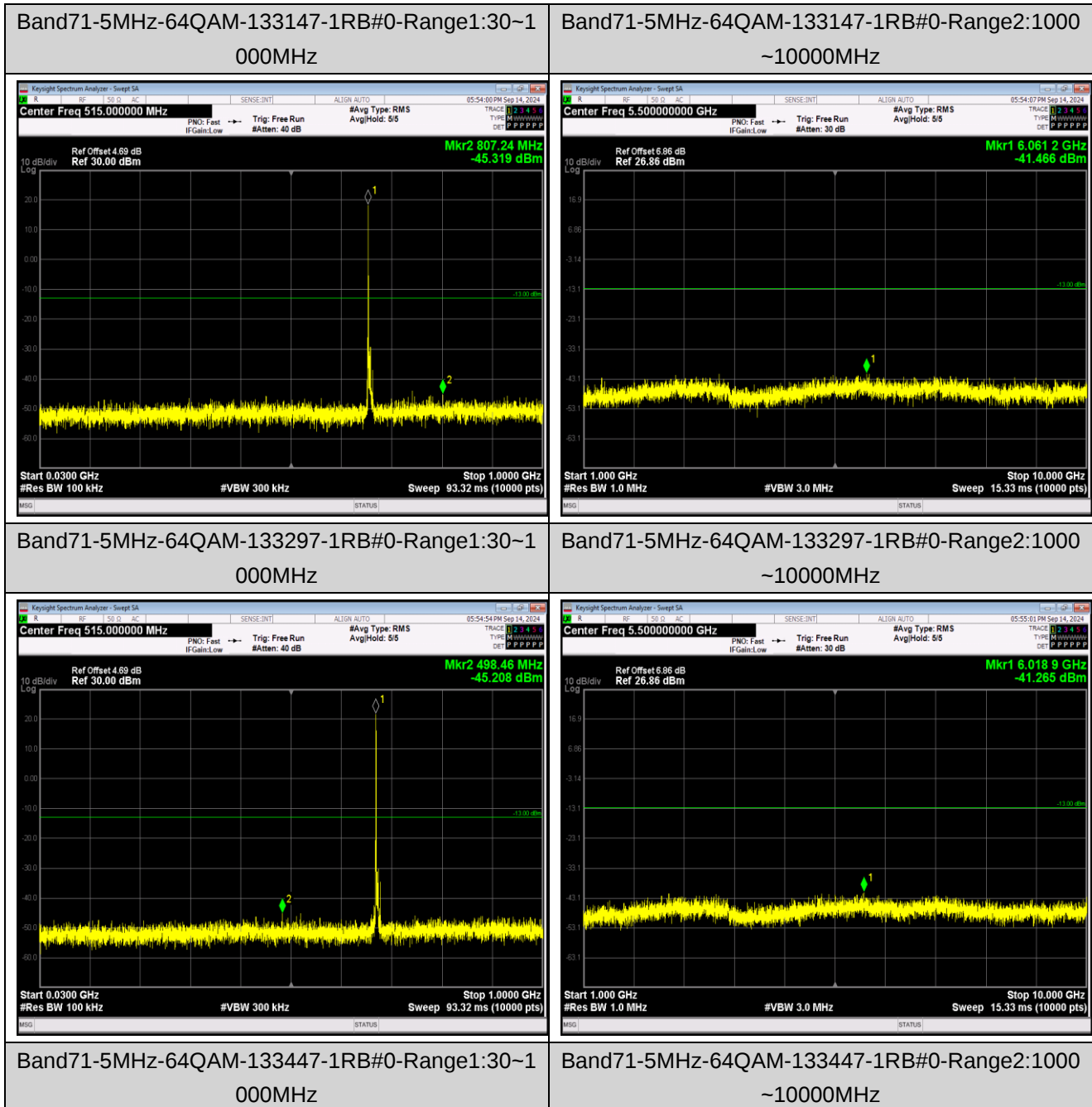


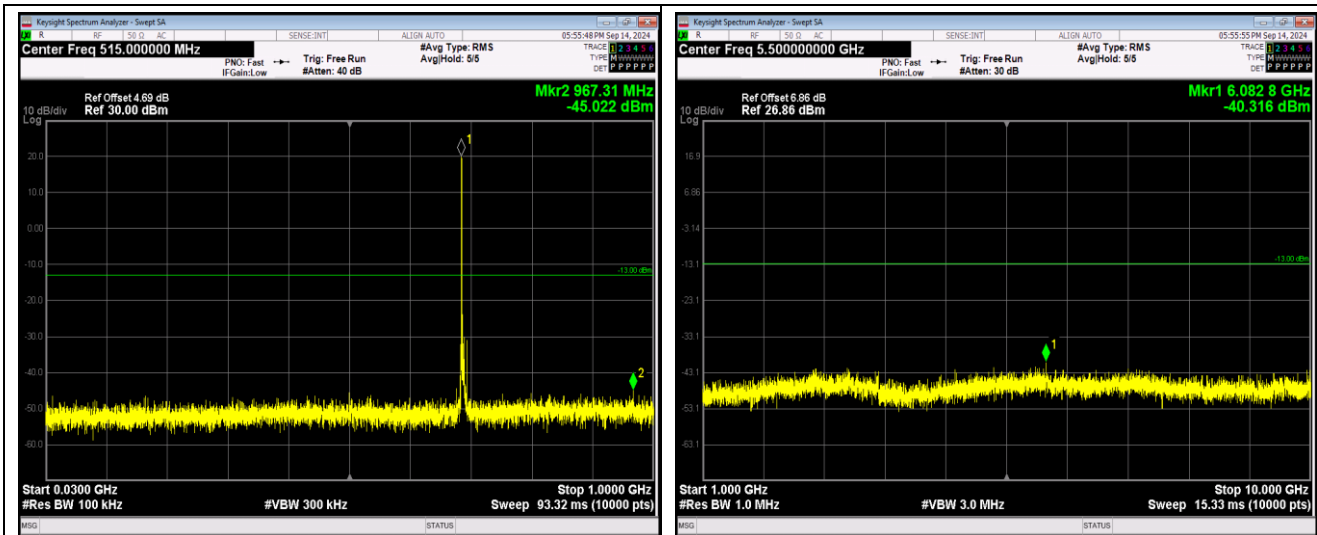






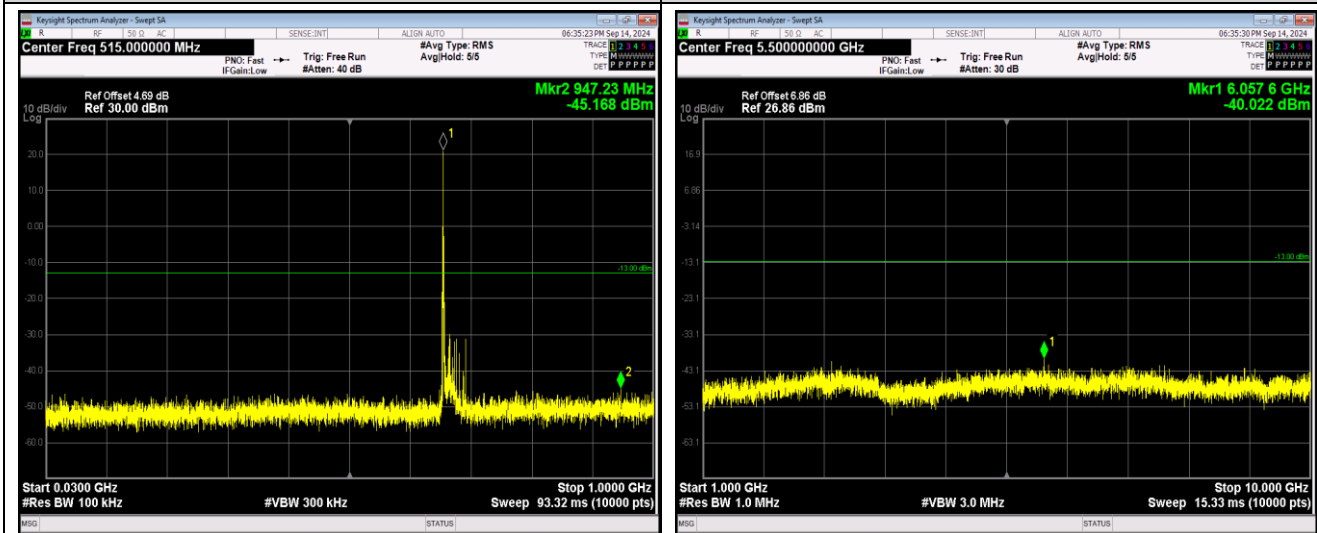






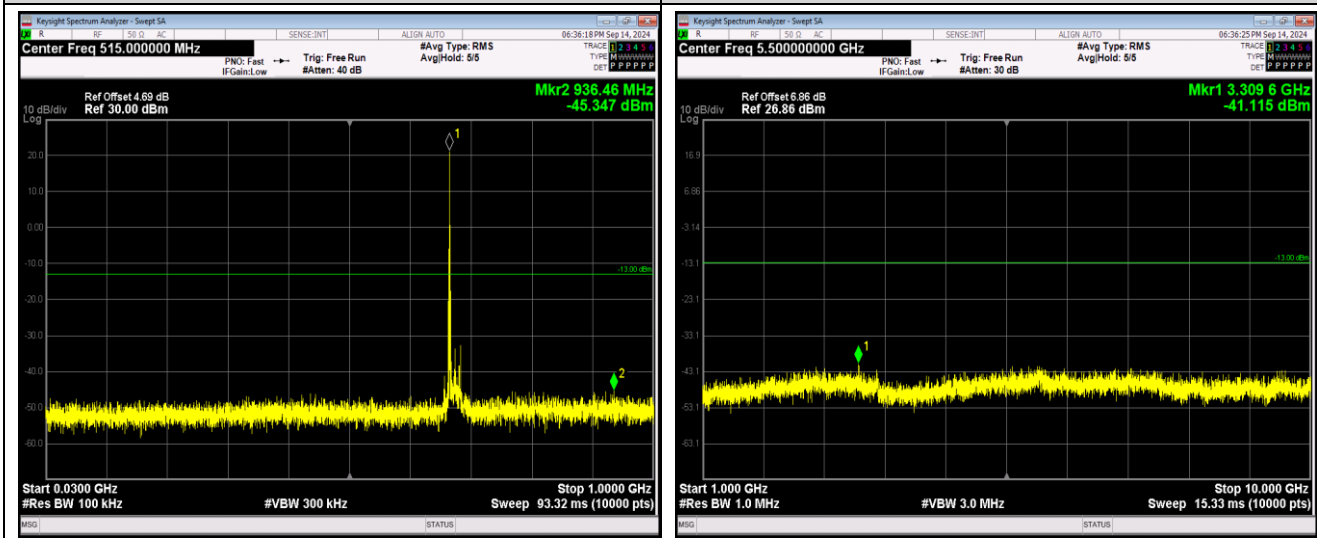
Band71-20MHz-QPSK-133222-1RB#0-Range1:30~1000MHz

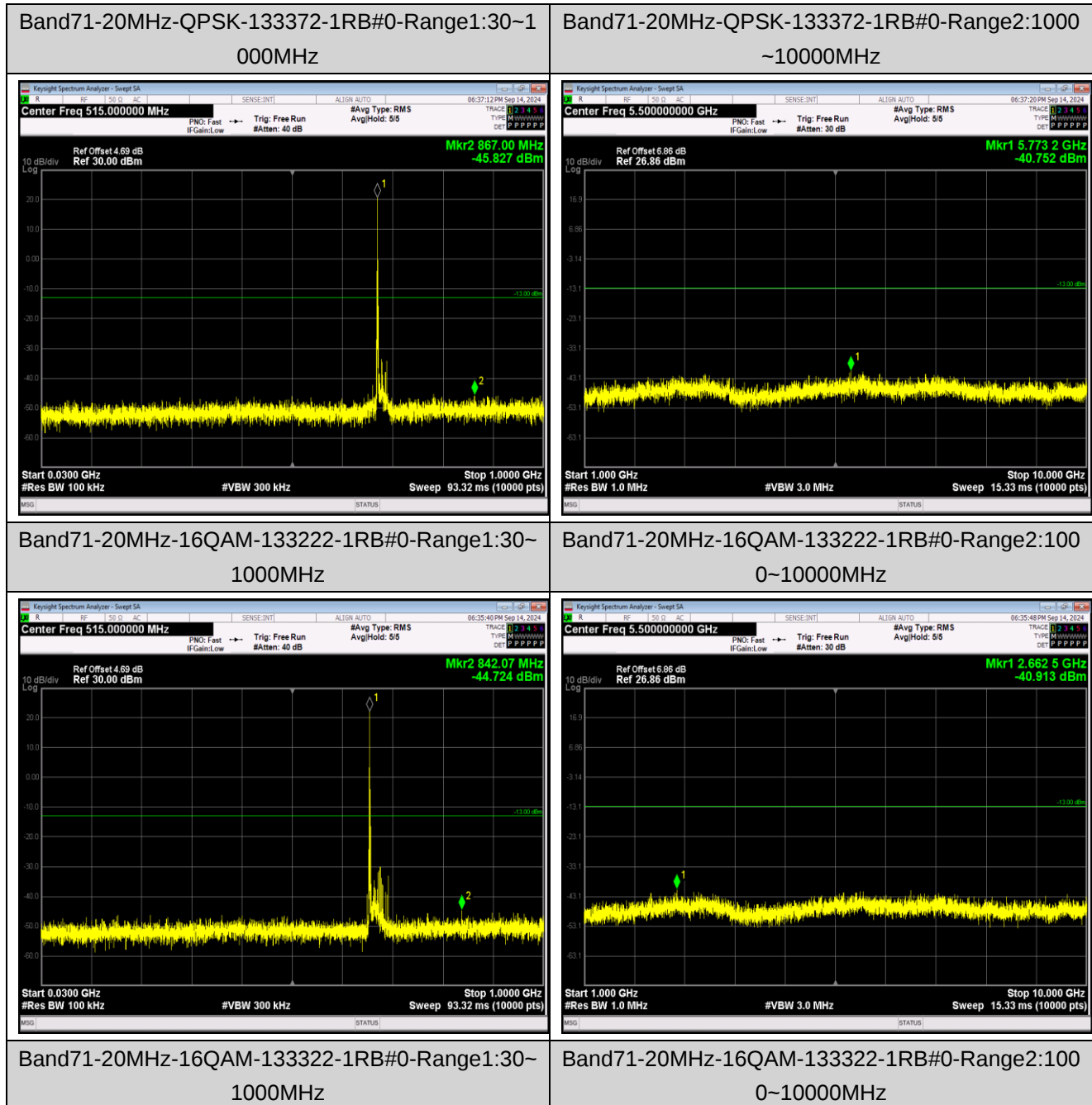
Band71-20MHz-QPSK-133222-1RB#0-Range2:1000~10000MHz

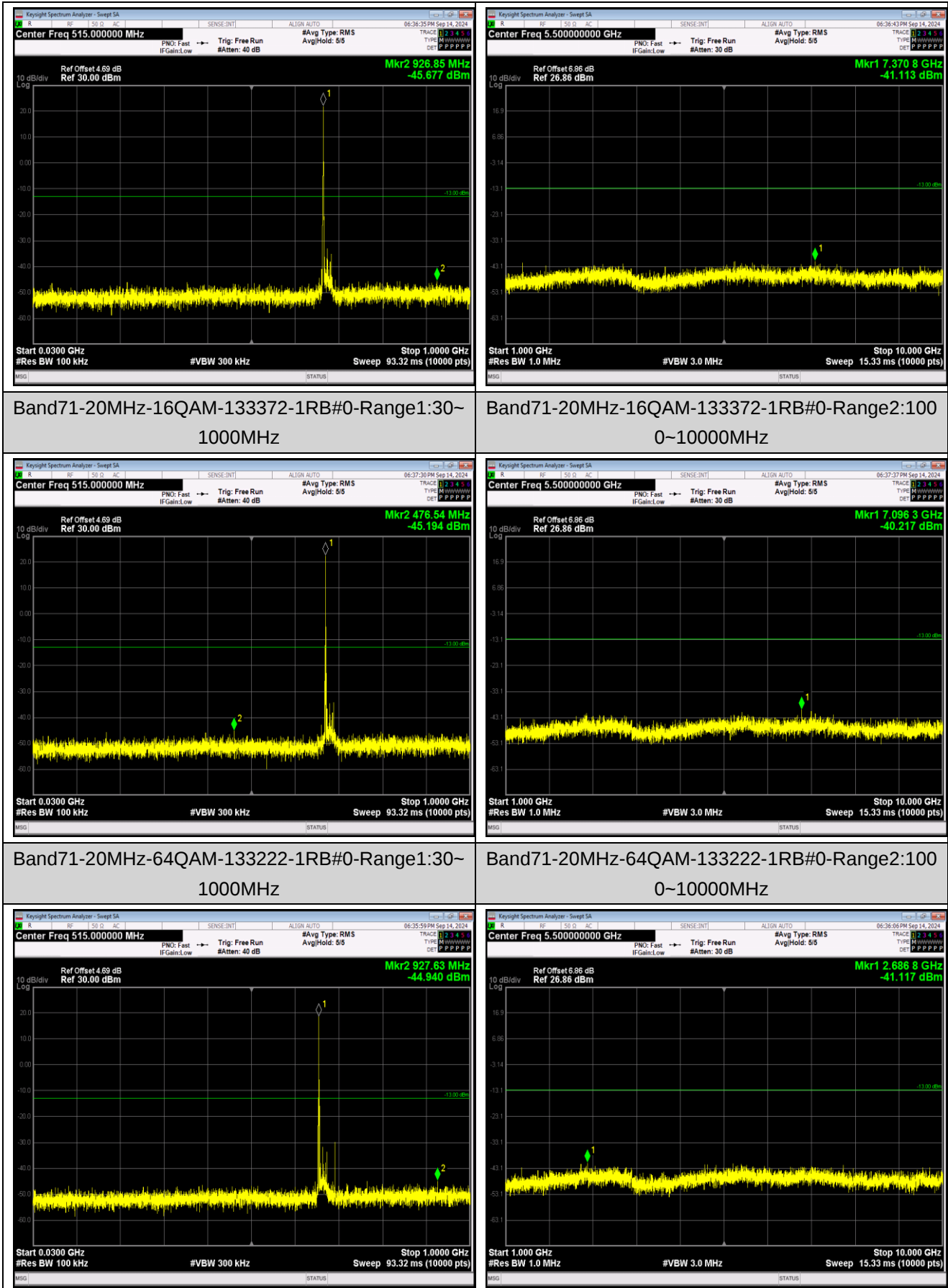


Band71-20MHz-QPSK-133322-1RB#0-Range1:30~1000MHz

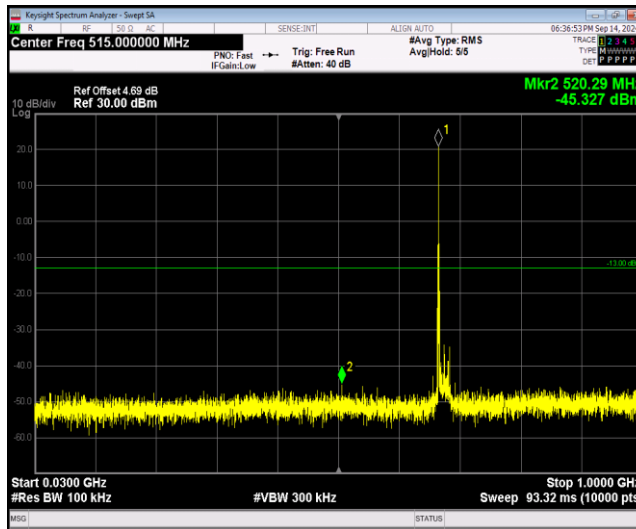
Band71-20MHz-QPSK-133322-1RB#0-Range2:1000~10000MHz



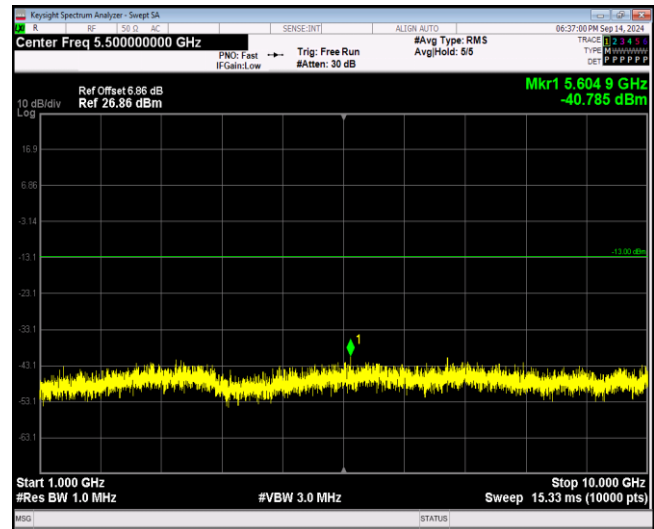




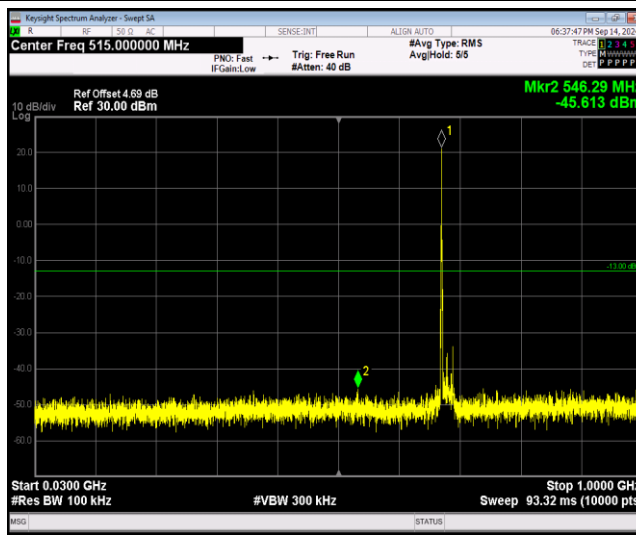
Band71-20MHz-64QAM-133322-1RB#0-Range1:30~1000MHz



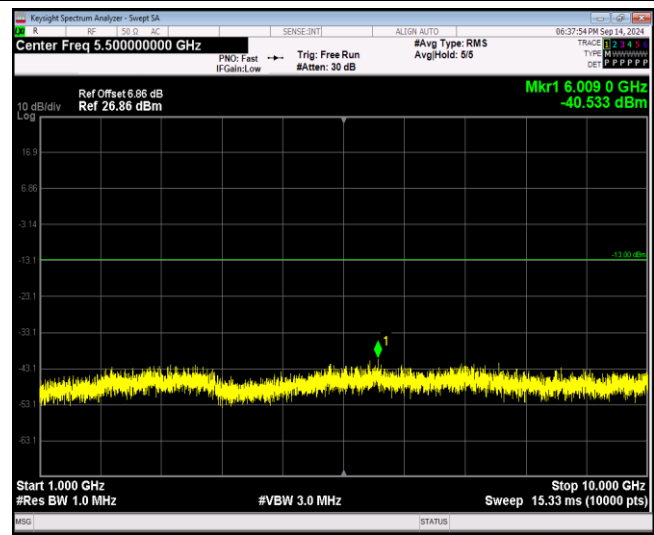
Band71-20MHz-64QAM-133322-1RB#0-Range2:1000~10000MHz



Band71-20MHz-64QAM-133372-1RB#0-Range1:30~1000MHz



Band71-20MHz-64QAM-133372-1RB#0-Range2:1000~10000MHz



Appendix F: Frequency Stability

Test Result

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					
3.87	-30	-13.26	-0.005231	Within authorized band for Band 7	Pass
	-20	-17.64	-0.006959		
	-10	8.37	0.003302		
	0	-14.98	-0.005909		
	10	-12.49	-0.004927		
	20	-14.78	-0.005830		
	30	-14.86	-0.005862		
	40	-14.22	-0.005609		
	50	-17.68	-0.006974		
16QAM					
3.87	-30	12.92	0.005097	Within authorized band for Band 7	Pass
	-20	-11.93	-0.004706		
	-10	-8.73	-0.003444		
	0	-8.90	-0.003511		
	10	-10.06	-0.003968		
	20	-12.50	-0.004931		
	30	-13.68	-0.005396		
	40	-12.90	-0.005089		
	50	-9.61	-0.003791		
64QAM					
3.87	-30	-13.35	-0.005266	Within authorized band for Band 7	Pass
	-20	-7.48	-0.002951		
	-10	-11.44	-0.004513		
	0	-8.28	-0.003266		
	10	-7.38	-0.002911		
	20	-9.11	-0.003594		
	30	10.61	0.004185		
	40	-10.60	-0.004181		
	50	8.43	0.003325		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-17.02	-0.006714	Within authorized band for Band 7	Pass
	3.87	-10.63	-0.004193		
	4.45	9.43	0.003720		
16QAM					
25	3.00	-13.53	-0.005337	Within authorized band for Band 7	Pass
	3.87	-19.04	-0.007511		
	4.45	8.47	0.003341		
64QAM					
25	3.00	-14.06	-0.005546	Within authorized band for Band 7	Pass
	3.87	-8.44	-0.003329		
	4.45	-7.88	-0.003108		
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					
3.87	-30	-5.92	-0.008367	Within authorized band for Band 12	Pass
	-20	-7.87	-0.011124		
	-10	-9.27	-0.013102		
	0	-10.84	-0.015322		
	10	-12.32	-0.017413		
	20	-12.07	-0.017060		
	30	-8.78	-0.012410		
	40	-2.59	-0.003661		
	50	-6.68	-0.009442		
16QAM					
3.87	-30	-11.52	-0.016283	Within authorized band for Band 12	Pass
	-20	-7.12	-0.010064		
	-10	-7.91	-0.011180		
	0	-8.77	-0.012396		
	10	-3.43	-0.004848		
	20	-4.85	-0.006855		
	30	-3.65	-0.005159		
	40	-8.71	-0.012311		
	50	-10.96	-0.015491		
64QAM					
3.87	-30	-5.82	-0.008226	Within authorized band for Band 12	Pass
	-20	-14.05	-0.019859		
	-10	-13.05	-0.018445		
	0	-6.11	-0.008636		
	10	-6.71	-0.009484		
	20	-6.85	-0.009682		
	30	-10.94	-0.015463		
	40	-10.76	-0.015208		
	50	-8.48	-0.011986		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-7.95	-0.011237	Within authorized band for Band 12	Pass
	3.87	-7.15	-0.010106		
	4.45	-11.54	-0.016311		
16QAM					
25	3.00	-6.59	-0.009314	Within authorized band for Band 12	Pass
	3.87	-4.84	-0.006841		
	4.45	-7.67	-0.010841		
64QAM					
25	3.00	-7.72	-0.010912	Within authorized band for Band 12	Pass
	3.87	-11.32	-0.016000		
	4.45	-4.89	-0.006912		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 13 part:

Reference Frequency: LTE Band 13(10MHz) Middle channel=23230 Frequency=782MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-11.04	-0.014118	Within authorized band for Band 13	Pass
	-20	-11.80	-0.015090		
	-10	-11.74	-0.015013		
	0	-4.46	-0.005703		
	10	-10.23	-0.013082		
	20	-7.70	-0.009847		
	30	-12.13	-0.015512		
	40	-7.37	-0.009425		
	50	-11.59	-0.014821		
16QAM					
3.87	-30	-9.30	-0.011893	Within authorized band for Band 13	Pass
	-20	-5.45	-0.006969		
	-10	-8.58	-0.010972		
	0	-11.80	-0.015090		
	10	-10.03	-0.012826		
	20	-7.90	-0.010102		
	30	-6.88	-0.008798		
	40	-9.17	-0.011726		
	50	-6.58	-0.008414		
64QAM					
3.87	-30	-9.77	-0.012494	Within authorized band for Band 13	Pass
	-20	-3.08	-0.003939		
	-10	-2.19	-0.002801		
	0	-11.40	-0.014578		
	10	-8.90	-0.011381		
	20	-8.63	-0.011036		
	30	-9.61	-0.012289		
	40	-3.79	-0.004847		
	50	-14.65	-0.018734		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-11.69	-0.014949	Within authorized band for Band 13	Pass
	3.87	-9.46	-0.012097		
	4.45	-8.27	-0.010575		
16QAM					
25	3.00	-9.11	-0.011650	Within authorized band for Band 13	Pass
	3.87	-11.99	-0.015332		
	4.45	-4.32	-0.005524		
64QAM					
25	3.00	-8.83	-0.011292	Within authorized band for Band 13	Pass
	3.87	-8.20	-0.010486		
	4.45	-8.94	-0.011432		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 25 part:

Reference Frequency: LTE Band 25(10MHz) Middle channel=26365 Frequency=1882.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-12.12	-0.006438	Within authorized band for Band 25	Pass
	-20	-10.41	-0.005530		
	-10	-13.69	-0.007272		
	0	-14.91	-0.007920		
	10	-8.48	-0.004505		
	20	-12.49	-0.006635		
	30	-9.20	-0.004887		
	40	-13.48	-0.007161		
	50	-11.64	-0.006183		
16QAM					
3.87	-30	-11.03	-0.005859	Within authorized band for Band 25	Pass
	-20	-7.50	-0.003984		
	-10	-15.44	-0.008202		
	0	-13.09	-0.006954		
	10	-8.90	-0.004728		
	20	-12.75	-0.006773		
	30	-10.61	-0.005636		
	40	-12.99	-0.006900		
	50	-10.76	-0.005716		
64QAM					
3.87	-30	-12.72	-0.006757	Within authorized band for Band 25	Pass
	-20	-15.19	-0.008069		
	-10	-6.01	-0.003193		
	0	-13.43	-0.007134		
	10	-12.70	-0.006746		
	20	-3.99	-0.002120		
	30	-12.29	-0.006529		
	40	-12.35	-0.006560		
	50	-8.94	-0.004749		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-10.00	-0.005312	Within authorized band for Band 25	Pass
	3.87	-13.83	-0.007347		
	4.45	-10.74	-0.005705		
16QAM					
25	3.00	-13.92	-0.007394	Within authorized band for Band 25	Pass
	3.87	-9.88	-0.005248		
	4.45	-9.46	-0.005025		
64QAM					
25	3.00	-8.31	-0.004414	Within authorized band for Band 25	Pass
	3.87	-12.13	-0.006444		
	4.45	-15.62	-0.008297		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 26 part:

Reference Frequency: LTE Band 26(10MHz) Middle channel=26740 Frequency=819MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-5.19	-0.006337	Within authorized band for Band 26	Pass
	-20	-7.93	-0.009683		
	-10	-3.09	-0.003773		
	0	-9.31	-0.011368		
	10	-6.61	-0.008071		
	20	-13.55	-0.016545		
	30	-3.09	-0.003773		
	40	-3.25	-0.003968		
	50	-7.84	-0.009573		
16QAM					
3.87	-30	-6.78	-0.008278	Within authorized band for Band 26	Pass
	-20	-8.21	-0.010024		
	-10	-12.60	-0.015385		
	0	-6.64	-0.008107		
	10	-6.71	-0.008193		
	20	-7.44	-0.009084		
	30	-9.33	-0.011392		
	40	-10.20	-0.012454		
	50	-7.05	-0.008608		
64QAM					
3.87	-30	-8.70	-0.010623	Within authorized band for Band 26	Pass
	-20	-6.22	-0.007595		
	-10	-3.68	-0.004493		
	0	-8.75	-0.010684		
	10	-10.43	-0.012735		
	20	-10.06	-0.012283		
	30	-6.98	-0.008523		
	40	-5.82	-0.007106		
	50	-2.75	-0.003358		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-4.01	-0.004896	Within authorized band for Band 26	Pass
	3.87	-6.05	-0.007387		
	4.45	2.92	0.003565		
16QAM					
25	3.00	-7.42	-0.009060	Within authorized band for Band 26	Pass
	3.87	-8.00	-0.009768		
	4.45	-13.46	-0.016435		
64QAM					
25	3.00	-4.92	-0.006007	Within authorized band for Band 26	Pass
	3.87	-7.84	-0.009573		
	4.45	-15.98	-0.019512		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 26 part:

Reference Frequency: LTE Band 26 (10MHz) Middle channel=26915 Frequency=836.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-10.94	-0.013078	Within authorized band for Band 26	Pass
	-20	-2.92	-0.003491		
	-10	-7.27	-0.008691		
	0	-7.52	-0.008990		
	10	-5.25	-0.006276		
	20	-5.28	-0.006312		
	30	-10.26	-0.012265		
	40	-4.46	-0.005332		
	50	-8.17	-0.009767		
16QAM					
3.87	-30	-8.93	-0.010675	Within authorized band for Band 26	Pass
	-20	-8.43	-0.010078		
	-10	-7.60	-0.009085		
	0	-5.61	-0.006707		
	10	-7.01	-0.008380		
	20	-6.82	-0.008153		
	30	-5.02	-0.006001		
	40	-5.15	-0.006157		
	50	-3.39	-0.004053		
64QAM					
3.87	-30	-5.16	-0.006169	Within authorized band for Band 26	Pass
	-20	-4.69	-0.005607		
	-10	-5.29	-0.006324		
	0	-11.63	-0.013903		
	10	-7.34	-0.008775		
	20	-8.70	-0.010400		
	30	-6.78	-0.008105		
	40	-4.32	-0.005164		
	50	-3.38	-0.004041		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-7.40	-0.008846	Within authorized band for Band 26	Pass
	3.87	-7.75	-0.009265		
	4.45	-7.97	-0.009528		
16QAM					
25	3.00	-10.30	-0.012313	Within authorized band for Band26	Pass
	3.87	-8.75	-0.010460		
	4.45	-9.97	-0.011919		
64QAM					
25	3.00	-10.60	-0.012672	Within authorized band for Band26	Pass
	3.87	-5.72	-0.006838		
	4.45	-9.64	-0.011524		
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					
3.87	-30	-12.56	-0.007198	Within authorized band for Band 66	Pass
	-20	-11.73	-0.006722		
	-10	-10.44	-0.005983		
	0	-8.80	-0.005043		
	10	-9.68	-0.005547		
	20	-9.74	-0.005582		
	30	-7.52	-0.004309		
	40	-6.21	-0.003559		
	50	-9.44	-0.005410		
16QAM					
3.87	-30	-13.30	-0.007622	Within authorized band for Band 66	Pass
	-20	-10.89	-0.006241		
	-10	-5.48	-0.003140		
	0	-6.88	-0.003943		
	10	-6.34	-0.003633		
	20	-7.12	-0.004080		
	30	-10.03	-0.005748		
	40	-7.80	-0.004470		
	50	-12.80	-0.007335		
64QAM					
3.87	-30	-5.92	-0.003393	Within authorized band for Band 66	Pass
	-20	-10.34	-0.005926		
	-10	-8.88	-0.005089		
	0	-8.55	-0.004900		
	10	-11.10	-0.006361		
	20	-11.09	-0.006355		
	30	-8.37	-0.004797		
	40	-5.61	-0.003215		
	50	-12.97	-0.007433		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	2.46	0.001410	Within authorized band for Band 66	Pass
	3.87	-11.27	-0.006458		
	4.45	-9.17	-0.005255		
16QAM					
25	3.00	1.46	0.000837	Within authorized band for Band 66	Pass
	3.87	-2.75	-0.001576		
	4.45	-10.99	-0.006298		
64QAM					
25	3.00	-5.15	-0.002951	Within authorized band for Band 66	Pass
	3.87	-10.33	-0.005920		
	4.45	-6.55	-0.003754		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 71 part:

Reference Frequency: LTE Band 71 (10MHz) Middle channel=133297 Frequency=680.5MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-11.23	-0.016503	Within authorized band for Band 71	Pass
	-20	-12.47	-0.018325		
	-10	-5.89	-0.008655		
	0	-8.00	-0.011756		
	10	-9.23	-0.013564		
	20	-11.00	-0.016165		
	30	-15.18	-0.022307		
	40	-15.13	-0.022234		
	50	-8.04	-0.011815		
16QAM					
3.87	-30	-7.51	-0.011036	Within authorized band for Band 71	Pass
	-20	-7.21	-0.010595		
	-10	-8.98	-0.013196		
	0	-10.47	-0.015386		
	10	-10.20	-0.014989		
	20	-9.70	-0.014254		
	30	-9.80	-0.014401		
	40	-9.67	-0.014210		
	50	-10.43	-0.015327		
64QAM					
3.87	-30	1.72	0.002528	Within authorized band for Band 71	Pass
	-20	-8.41	-0.012359		
	-10	-9.24	-0.013578		
	0	-11.06	-0.016253		
	10	-7.75	-0.011389		
	20	-7.44	-0.010933		
	30	-6.05	-0.008891		
	40	-5.14	-0.007553		
	50	-9.66	-0.014195		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-7.10	-0.010434	Within authorized band for Band 71	Pass
	3.87	-3.72	-0.005467		
	4.45	-5.74	-0.008435		
16QAM					
25	3.00	-11.63	-0.017090	Within authorized band for Band 71	Pass
	3.87	-15.69	-0.023057		
	4.45	-13.70	-0.020132		
64QAM					
25	3.00	-7.71	-0.011330	Within authorized band for Band 71	Pass
	3.87	-9.17	-0.013475		
	4.45	-6.84	-0.010051		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					