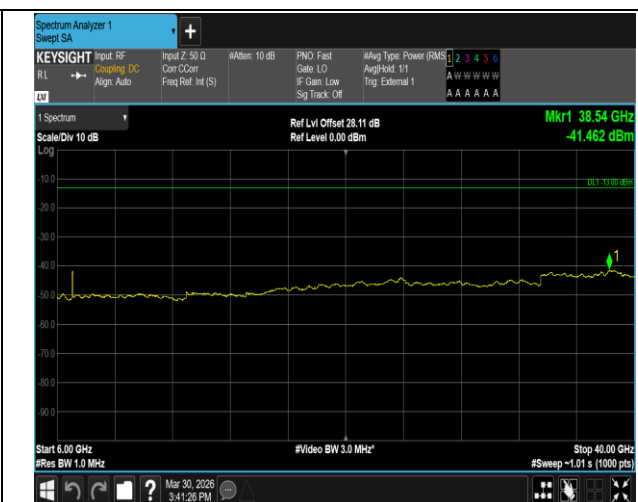
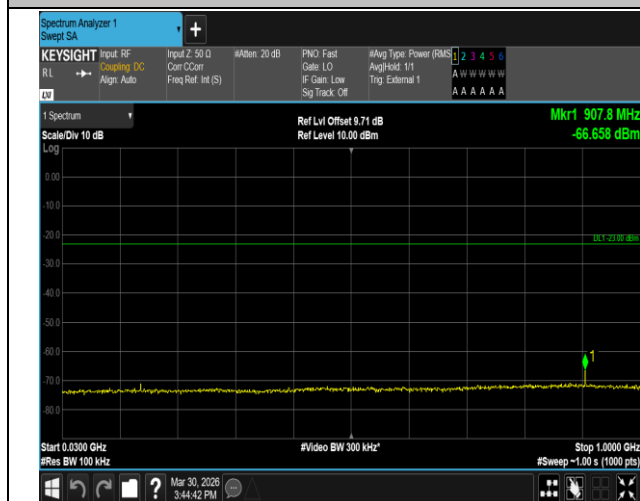




Band42(3450-3550)-20MHz-16QAM-42190-1RB#99-30~100-PASS



Band42(3450-3550)-20MHz-16QAM-42190-1RB#99-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42190-1RB#99-3000~6000-PASS



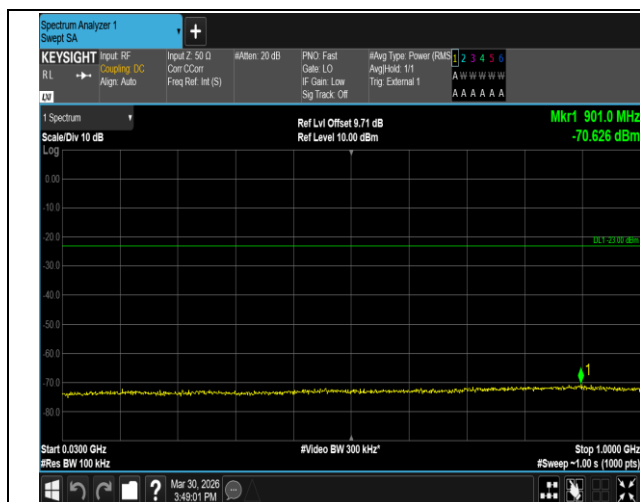
Band42(3450-3550)-20MHz-16QAM-42190-1RB#99-6000~40000-PASS



Band42(3450-3550)-20MHz-16QAM-42190-100RB#0-30~1000-PASS



Band42(3450-3550)-20MHz-16QAM-42190-100RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42190-100RB#0-3000
~6000-PASS



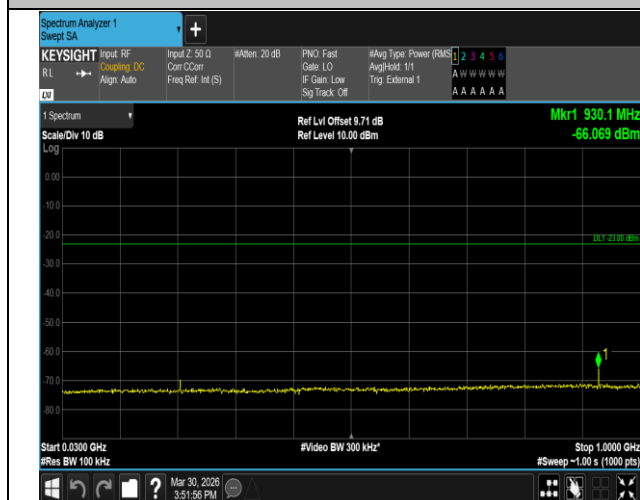
Band42(3450-3550)-20MHz-16QAM-42190-100RB#0-6000
~40000-PASS



Band42(3450-3550)-20MHz-QPSK-42590-1RB#0-30~1000
-PASS



Band42(3450-3550)-20MHz-QPSK-42590-1RB#0-1000~30
00-PASS



Band42(3450-3550)-20MHz-QPSK-42590-1RB#0-3000~60
00-PASS



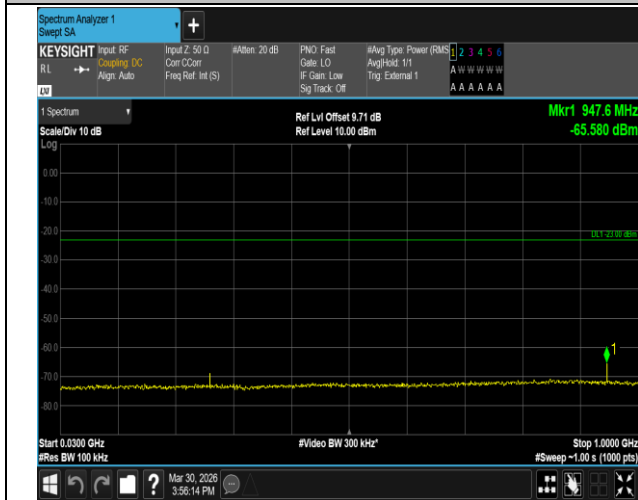
Band42(3450-3550)-20MHz-QPSK-42590-1RB#0-6000~40
000-PASS



Band42(3450-3550)-20MHz-QPSK-42590-1RB#99-30~100
0-PASS



Band42(3450-3550)-20MHz-QPSK-42590-1RB#99-1000~3
000-PASS



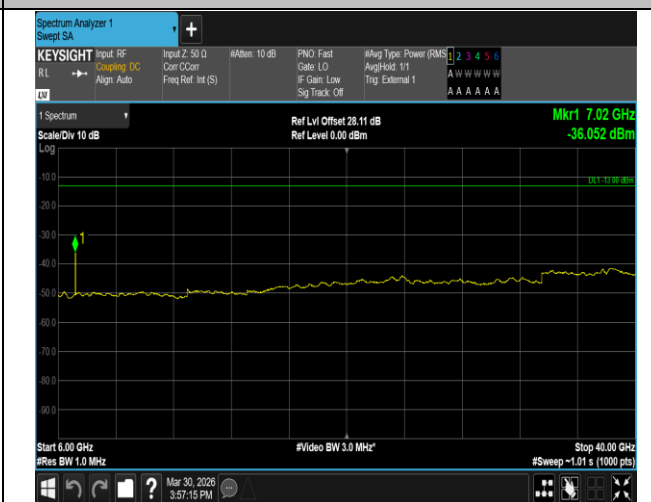
Band42(3450-3550)-20MHz-QPSK-42590-1RB#99-3000~6
000-PASS



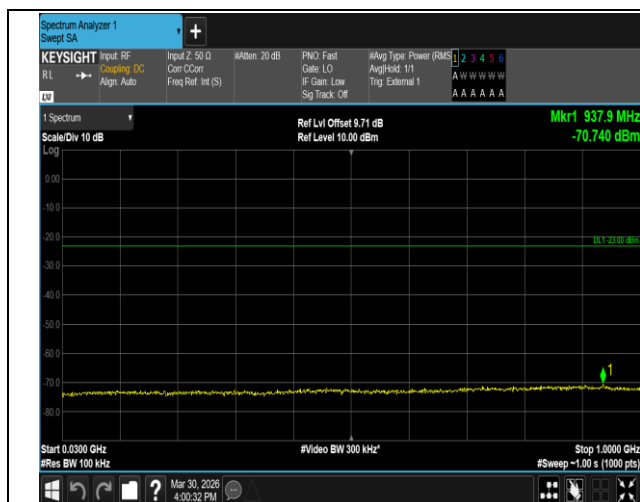
Band42(3450-3550)-20MHz-QPSK-42590-1RB#99-6000~4
0000-PASS



Band42(3450-3550)-20MHz-QPSK-42590-100RB#0-30~10
00-PASS



Band42(3450-3550)-20MHz-QPSK-42590-100RB#0-1000~
3000-PASS



Band42(3450-3550)-20MHz-QPSK-42590-100RB#0-3000~6000-PASS



Band42(3450-3550)-20MHz-QPSK-42590-100RB#0-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-1RB#0-30~1000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-1RB#0-1000~3000-PASS



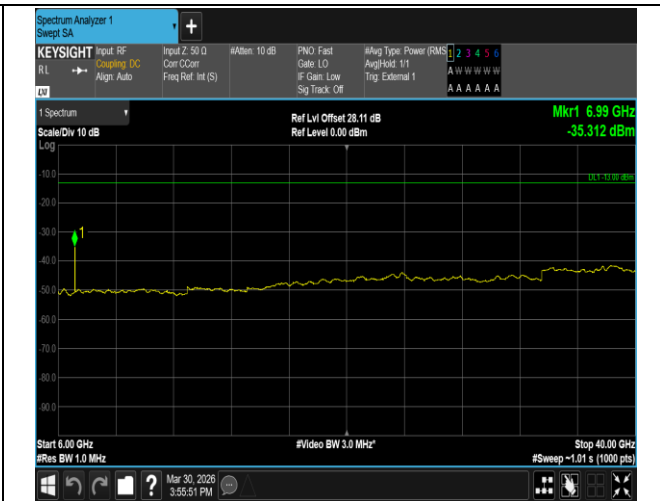
Band42(3450-3550)-20MHz-64QAM-42590-1RB#0-3000~6000-PASS



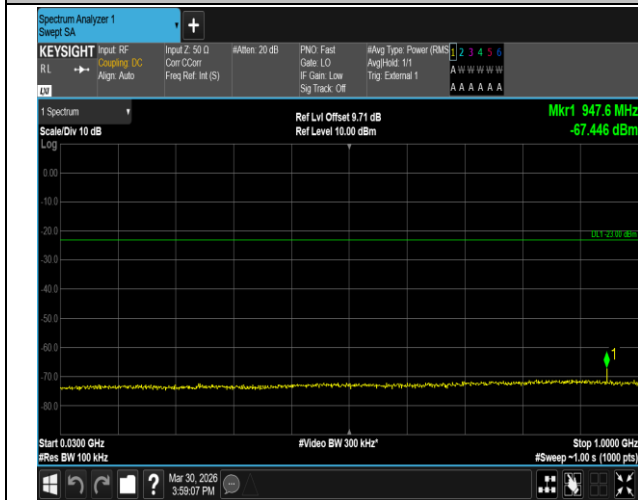
Band42(3450-3550)-20MHz-64QAM-42590-1RB#0-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-1RB#99-30~100-PASS



Band42(3450-3550)-20MHz-64QAM-42590-1RB#99-1000~3000-PASS



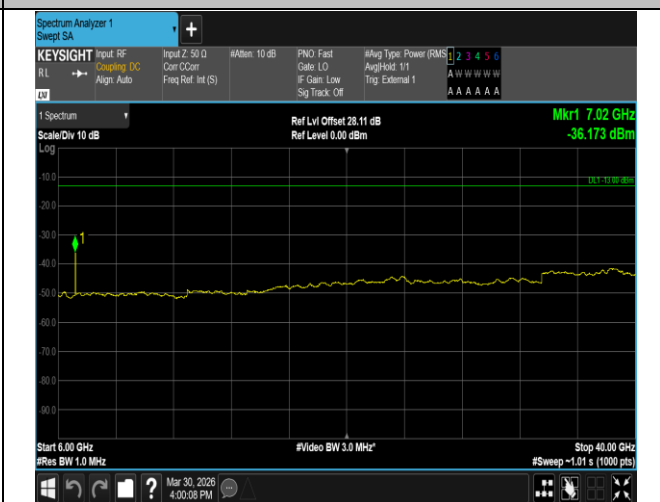
Band42(3450-3550)-20MHz-64QAM-42590-1RB#99-3000~6000-PASS



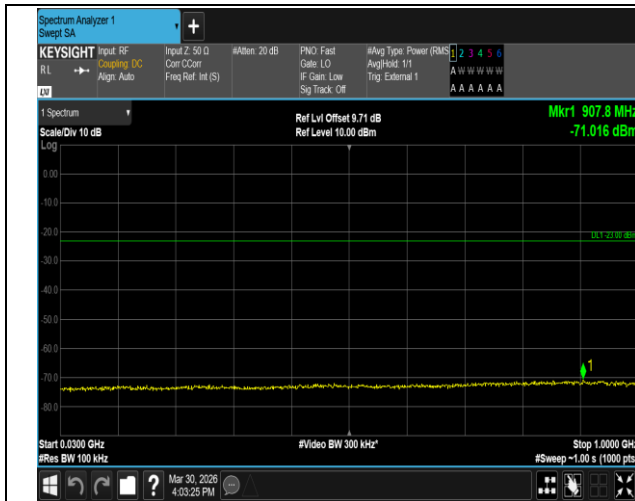
Band42(3450-3550)-20MHz-64QAM-42590-1RB#99-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-100RB#0-30~1000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-100RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-64QAM-42590-100RB#0-3000
~6000-PASS



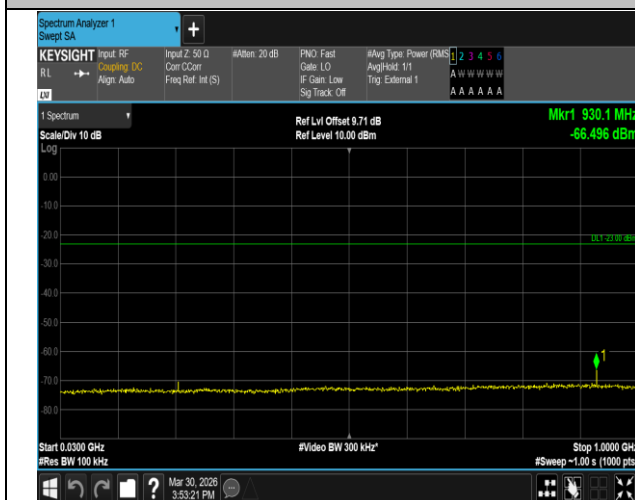
Band42(3450-3550)-20MHz-64QAM-42590-100RB#0-6000
~40000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#0-30~100
0-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#0-1000~3
000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#0-3000~6
000-PASS



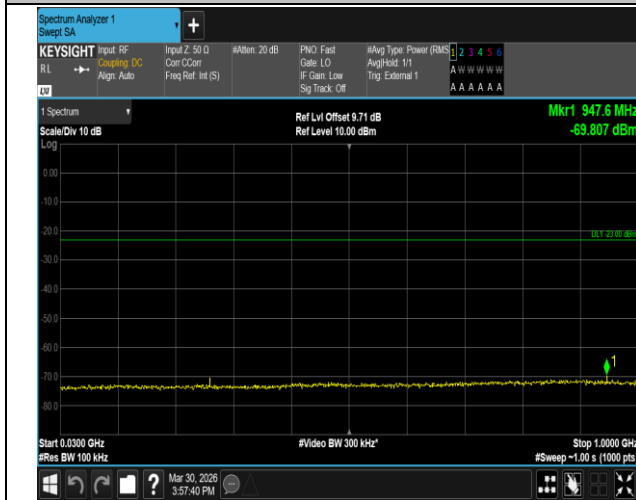
Band42(3450-3550)-20MHz-16QAM-42590-1RB#0-6000~4
0000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#99-30~100-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#99-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#99-3000~6000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-1RB#99-6000~40000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-100RB#0-30~1000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-100RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-100RB#0-3000
~6000-PASS



Band42(3450-3550)-20MHz-16QAM-42590-100RB#0-6000
~40000-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#0-30~1000
-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#0-1000~30
00-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#0-3000~60
00-PASS



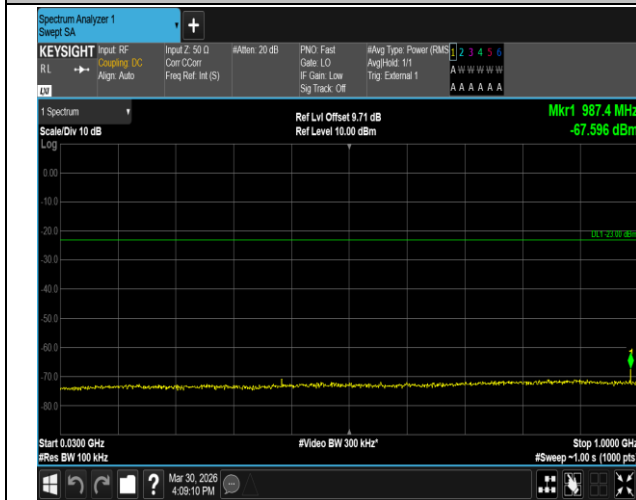
Band42(3450-3550)-20MHz-QPSK-42990-1RB#0-6000~40
000-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#99-30~100
0-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#99-1000~3
000-PASS



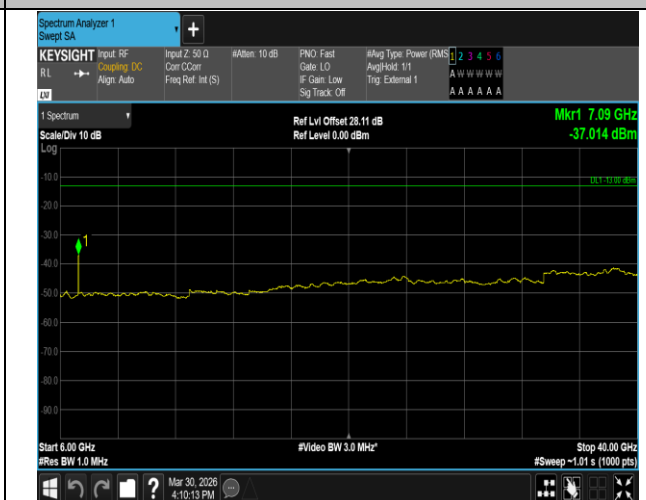
Band42(3450-3550)-20MHz-QPSK-42990-1RB#99-3000~6
000-PASS



Band42(3450-3550)-20MHz-QPSK-42990-1RB#99-6000~4
0000-PASS



Band42(3450-3550)-20MHz-QPSK-42990-100RB#0-30~10
00-PASS



Band42(3450-3550)-20MHz-QPSK-42990-100RB#0-1000~
3000-PASS



Band42(3450-3550)-20MHz-QPSK-42990-100RB#0-3000~6000-PASS



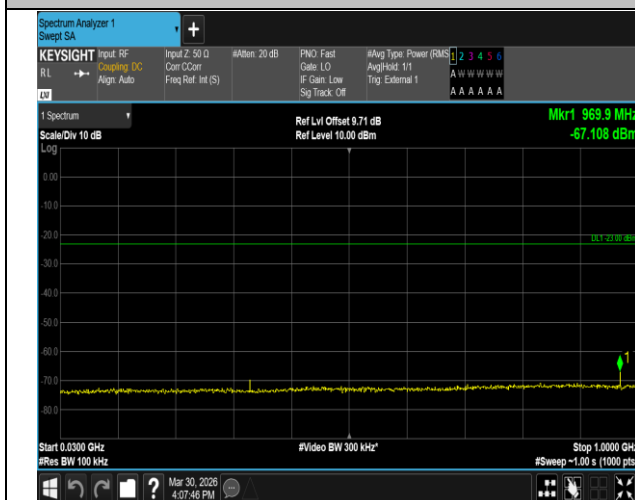
Band42(3450-3550)-20MHz-QPSK-42990-100RB#0-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#0-30~1000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#0-3000~6000-PASS



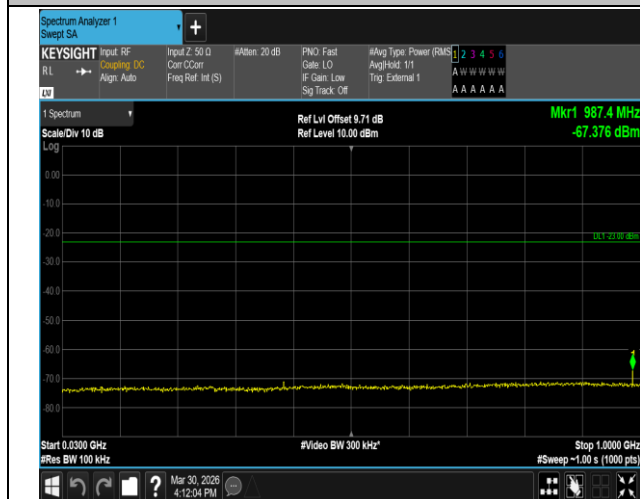
Band42(3450-3550)-20MHz-64QAM-42990-1RB#0-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#99-30~100-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#99-1000~3000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#99-3000~6000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-1RB#99-6000~40000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-100RB#0-30~1000-PASS



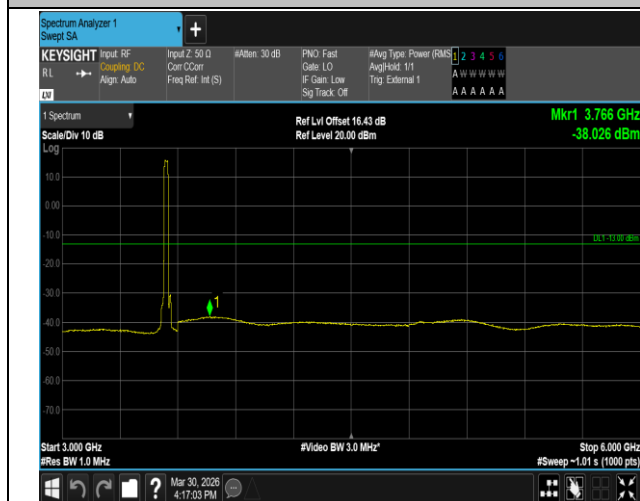
Band42(3450-3550)-20MHz-64QAM-42990-100RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-64QAM-42990-100RB#0-3000
~6000-PASS



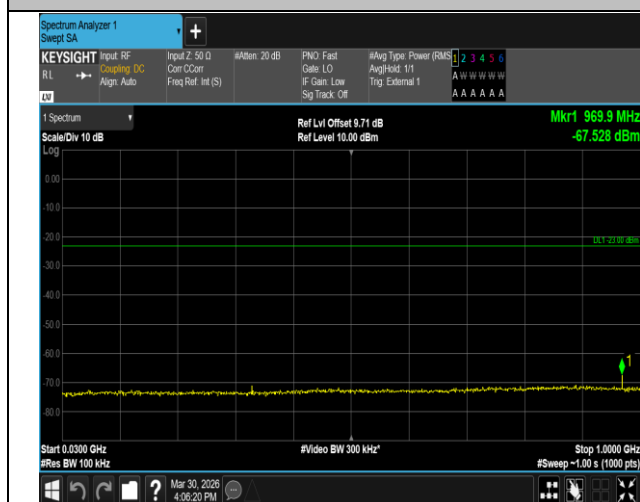
Band42(3450-3550)-20MHz-64QAM-42990-100RB#0-6000
~40000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#0-30~100
0-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#0-1000~3
000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#0-3000~6
000-PASS



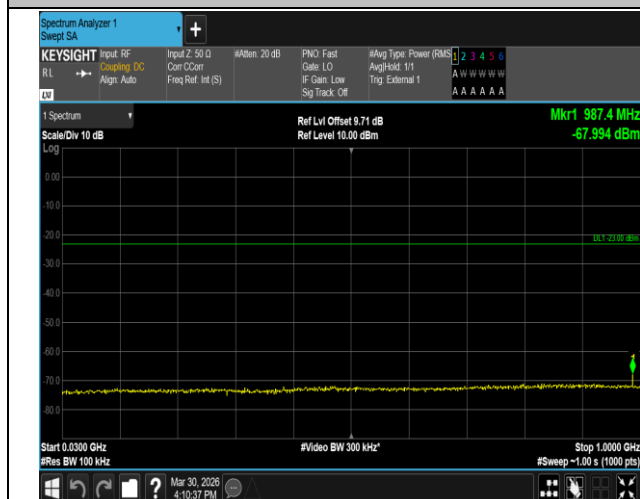
Band42(3450-3550)-20MHz-16QAM-42990-1RB#0-6000~4
0000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#99-30~100-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#99-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#99-3000~6000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-1RB#99-6000~40000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-100RB#0-30~1000-PASS



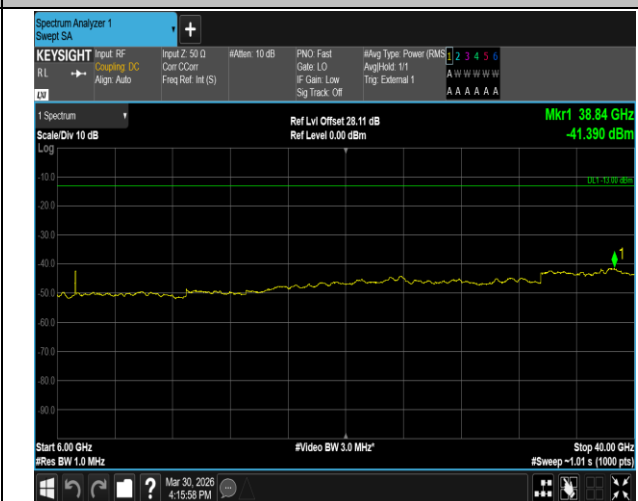
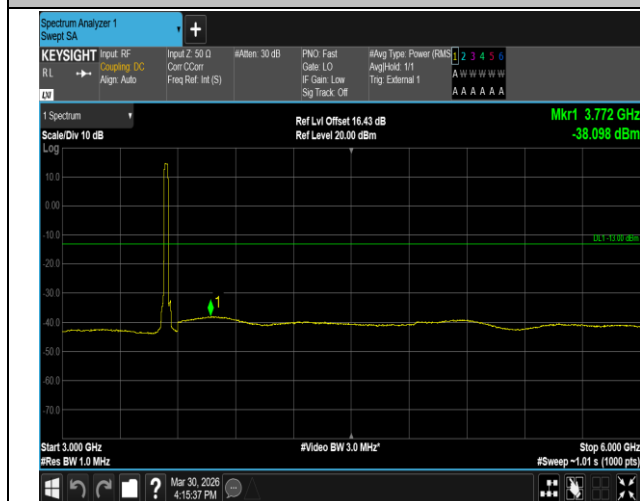
Band42(3450-3550)-20MHz-16QAM-42990-100RB#0-1000~3000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-100RB#0-3000
~6000-PASS



Band42(3450-3550)-20MHz-16QAM-42990-100RB#0-6000
~40000-PASS



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					
3.82	-30	-10.93	-0.005814	Within authorized band for Band 2	Pass
	-20	-12.19	-0.006484		
	-10	-11.64	-0.006191		
	0	-12.59	-0.006697		
	10	-11.56	-0.006149		
	20	-14.38	-0.007649		
	30	-10.34	-0.005500		
	40	11.54	0.006138		
	50	9.58	0.005096		
16QAM					
3.82	-30	-11.43	-0.006080	Within authorized band for Band 2	Pass
	-20	-10.56	-0.005617		
	-10	-15.13	-0.008048		
	0	-15.05	-0.008005		
	10	-13.20	-0.007021		
	20	-9.93	-0.005282		
	30	10.33	0.005495		
	40	-13.96	-0.007426		
	50	-12.17	-0.006473		
64QAM					
3.82	-30	9.76	0.005191	Within authorized band for Band 2	Pass
	-20	9.66	0.005138		
	-10	-13.30	-0.007074		
	0	-12.26	-0.006521		
	10	-13.43	-0.007144		
	20	-15.23	-0.008101		
	30	12.37	0.006580		
	40	-10.39	-0.005527		
	50	-9.73	-0.005176		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-12.27	-0.006527	Within authorized band for Band 2	Pass
	3.82	-16.45	-0.008750		
	4.53	-9.77	-0.005197		
16QAM					
25	3.45	-10.46	-0.005564	Within authorized band for Band 2	Pass
	3.82	-15.64	-0.008319		
	4.53	-10.60	-0.005638		
64QAM					
25	3.45	-11.40	-0.006064	Within authorized band for Band 2	Pass
	3.82	-11.14	-0.005926		
	4.53	-12.10	-0.006436		
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					
3.82	-30	-16.98	-0.009801	Within authorized band for Band 4	Pass
	-20	-10.80	-0.006234		
	-10	-15.98	-0.009224		
	0	-10.16	-0.005864		
	10	-11.23	-0.006482		
	20	-11.43	-0.006597		
	30	-15.81	-0.009126		
	40	-13.72	-0.007919		
	50	-11.16	-0.006442		
16QAM					
3.82	-30	-11.80	-0.006811	Within authorized band for Band 4	Pass
	-20	5.26	0.003036		
	-10	-13.03	-0.007521		
	0	-11.84	-0.006834		
	10	9.00	0.005195		
	20	-11.60	-0.006696		
	30	10.67	0.006159		
	40	-9.40	-0.005426		
	50	-11.27	-0.006505		
64QAM					
3.82	-30	-15.42	-0.008900	Within authorized band for Band 4	Pass
	-20	-15.16	-0.008750		
	-10	-14.25	-0.008225		
	0	-5.31	-0.003065		
	10	-15.05	-0.008687		
	20	-9.18	-0.005299		
	30	-12.02	-0.006938		
	40	-15.29	-0.008825		
	50	-13.30	-0.007677		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-17.11	-0.009876	Within authorized band for Band 4	Pass
	3.82	-11.66	-0.006730		
	4.53	10.59	0.006113		
16QAM					
25	3.45	-16.41	-0.009472	Within authorized band for Band 4	Pass
	3.82	-11.74	-0.006776		
	4.53	-8.10	-0.004675		
64QAM					
25	3.45	-18.73	-0.010811	Within authorized band for Band 4	Pass
	3.82	-12.26	-0.007076		
	4.53	12.53	0.007232		
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					
3.82	-30	-3.25	-0.003885	±2.5	Pass
	-20	-4.96	-0.005929		
	-10	-5.36	-0.006408		
	0	-4.21	-0.005033		
	10	6.19	0.007400		
	20	-3.09	-0.003694		
	30	-3.12	-0.003730		
	40	-4.41	-0.005272		
	50	-5.85	-0.006993		
16QAM					
3.82	-30	4.19	0.005009	±2.5	Pass
	-20	2.40	0.002869		
	-10	-4.02	-0.004806		
	0	-5.95	-0.007113		
	10	3.39	0.004053		
	20	-4.68	-0.005595		
	30	-6.65	-0.007950		
	40	-4.98	-0.005953		
	50	4.21	0.005033		
64QAM					
3.82	-30	3.63	0.004340	±2.5	Pass
	-20	4.05	0.004842		
	-10	-5.91	-0.007065		
	0	6.17	0.007376		
	10	-5.11	-0.006109		
	20	-5.24	-0.006264		
	30	3.75	0.004483		
	40	3.40	0.004065		
	50	3.68	0.004399		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-3.45	-0.004124	±2.5	Pass
	3.82	4.98	0.005953		
	4.53	4.89	0.005846		
16QAM					
25	3.45	4.42	0.005284	±2.5	Pass
	3.82	4.55	0.005439		
	4.53	3.60	0.004304		
64QAM					
25	3.45	4.39	0.005248	±2.5	Pass
	3.82	-3.66	-0.004375		
	4.53	4.26	0.005093		
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 (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.82	-30	-10.70	-0.004221	Within authorized band for Band 7	Pass
	-20	-12.73	-0.005022		
	-10	-14.48	-0.005712		
	0	-18.47	-0.007286		
	10	-13.90	-0.005483		
	20	14.03	0.005535		
	30	-16.28	-0.006422		
	40	-17.67	-0.006970		
	50	-17.52	-0.006911		
16QAM					
3.82	-30	-22.62	-0.008923	Within authorized band for Band 7	Pass
	-20	-16.68	-0.006580		
	-10	-16.31	-0.006434		
	0	14.46	0.005704		
	10	-17.48	-0.006895		
	20	-14.12	-0.005570		
	30	-17.42	-0.006872		
	40	-12.67	-0.004998		
	50	-11.56	-0.004560		
64QAM					
3.82	-30	-14.71	-0.005803	Within authorized band for Band 7	Pass
	-20	-15.72	-0.006201		
	-10	9.76	0.003850		
	0	-13.42	-0.005294		
	10	-10.67	-0.004209		
	20	-14.26	-0.005625		
	30	-15.81	-0.006237		
	40	-9.81	-0.003870		
	50	-16.55	-0.006529		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-15.29	-0.006032	Within authorized band for Band 7	Pass
	3.82	-16.05	-0.006331		
	4.53	8.44	0.003329		
16QAM					
25	3.45	-15.26	-0.006020	Within authorized band for Band 7	Pass
	3.82	6.90	0.002722		
	4.53	-16.42	-0.006477		
64QAM					
25	3.45	-17.78	-0.007014	Within authorized band for Band 7	Pass
	3.82	11.57	0.004564		
	4.53	-16.41	-0.006473		
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					
3.82	-30	-4.16	-0.005880	Within authorized band for Band 12	Pass
	-20	-4.78	-0.006756		
	-10	-3.89	-0.005498		
	0	-3.79	-0.005357		
	10	-3.79	-0.005357		
	20	1.65	0.002332		
	30	6.07	0.008580		
	40	-2.55	-0.003604		
	50	-8.57	-0.012113		
16QAM					
3.82	-30	3.05	0.004311	Within authorized band for Band 12	Pass
	-20	-5.61	-0.007929		
	-10	-3.09	-0.004367		
	0	-3.95	-0.005583		
	10	-4.18	-0.005908		
	20	-4.95	-0.006996		
	30	-4.61	-0.006516		
	40	-3.39	-0.004792		
	50	-7.98	-0.011279		
64QAM					
3.82	-30	-4.12	-0.005823	Within authorized band for Band 12	Pass
	-20	-5.24	-0.007406		
	-10	-7.12	-0.010064		
	0	3.68	0.005201		
	10	-8.07	-0.011406		
	20	-3.85	-0.005442		
	30	-7.38	-0.010431		
	40	3.63	0.005131		
	50	-7.21	-0.010191		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-6.31	-0.008919	Within authorized band for Band 12	Pass
	3.82	-3.59	-0.005074		
	4.53	5.22	0.007378		
16QAM					
25	3.45	-3.79	-0.005357	Within authorized band for Band 12	Pass
	3.82	-2.59	-0.003661		
	4.53	-4.73	-0.006686		
64QAM					
25	3.45	-5.64	-0.007972	Within authorized band for Band 12	Pass
	3.82	-0.67	-0.000947		
	4.53	-2.75	-0.003887		
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=782.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.82	-30	-7.12	-0.009105	Within authorized band for Band 13	Pass
	-20	-7.15	-0.009143		
	-10	-6.14	-0.007852		
	0	-4.75	-0.006074		
	10	-9.16	-0.011714		
	20	-6.84	-0.008747		
	30	4.06	0.005192		
	40	-7.42	-0.009488		
	50	-7.90	-0.010102		
16QAM					
3.82	-30	1.97	0.002519	Within authorized band for Band 13	Pass
	-20	-7.41	-0.009476		
	-10	-1.34	-0.001714		
	0	-4.99	-0.006381		
	10	-6.98	-0.008926		
	20	-8.77	-0.011215		
	30	5.01	0.006407		
	40	-8.83	-0.011292		
	50	-4.35	-0.005563		
64QAM					
3.82	-30	-7.50	-0.009591	Within authorized band for Band 13	Pass
	-20	5.24	0.006701		
	-10	4.23	0.005409		
	0	-6.75	-0.008632		
	10	-5.78	-0.007391		
	20	-5.69	-0.007276		
	30	-5.14	-0.006573		
	40	-8.01	-0.010243		
	50	-7.44	-0.009514		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	5.54	0.007084	Within authorized band for Band 13	Pass
	3.82	-8.85	-0.011317		
	4.53	5.56	0.007110		
16QAM					
25	3.45	-7.25	-0.009271	Within authorized band for Band 13	Pass
	3.82	-7.42	-0.009488		
	4.53	-8.13	-0.010396		
64QAM					
25	3.45	-5.72	-0.007315	Within authorized band for Band 13	Pass
	3.82	-6.08	-0.007775		
	4.53	-5.91	-0.007558		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this 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					
3.82	-30	-7.25	-0.010211	Within authorized band for Band 17	Pass
	-20	-6.79	-0.009563		
	-10	-6.79	-0.009563		
	0	-6.49	-0.009141		
	10	5.29	0.007451		
	20	-6.27	-0.008831		
	30	-7.25	-0.010211		
	40	-4.66	-0.006563		
	50	5.14	0.007239		
16QAM					
3.82	-30	-6.34	-0.008930	Within authorized band for Band 17	Pass
	-20	-5.01	-0.007056		
	-10	-5.75	-0.008099		
	0	-2.36	-0.003324		
	10	-4.18	-0.005887		
	20	-6.92	-0.009746		
	30	-4.99	-0.007028		
	40	-5.08	-0.007155		
	50	-7.00	-0.009859		
64QAM					
3.82	-30	-6.64	-0.009352	Within authorized band for Band 17	Pass
	-20	-5.45	-0.007676		
	-10	-6.34	-0.008930		
	0	-5.89	-0.008296		
	10	-8.63	-0.012155		
	20	-8.25	-0.011620		
	30	-5.98	-0.008423		
	40	-7.44	-0.010479		
	50	0.77	0.001085		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-6.07	-0.008549	Within authorized band for Band 17	Pass
	3.82	3.68	0.005183		
	4.53	-6.39	-0.009000		
16QAM					
25	3.45	-5.02	-0.007070	Within authorized band for Band 17	Pass
	3.82	-3.99	-0.005620		
	4.53	-7.07	-0.009958		
64QAM					
25	3.45	-6.62	-0.009324	Within authorized band for Band 17	Pass
	3.82	-6.07	-0.008549		
	4.53	-4.81	-0.006775		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 38 part:

Reference Frequency: LTE Band 38(10MHz) Middle channel=38000 Frequency=2595.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.82	-30	-9.04	-0.003484	Within authorized band for Band 38	Pass
	-20	-7.72	-0.002975		
	-10	-14.28	-0.005503		
	0	-8.71	-0.003356		
	10	-9.97	-0.003842		
	20	-8.11	-0.003125		
	30	-10.03	-0.003865		
	40	-7.38	-0.002844		
	50	7.58	0.002921		
16QAM					
3.82	-30	-15.71	-0.006054	Within authorized band for Band 38	Pass
	-20	-9.31	-0.003588		
	-10	-10.99	-0.004235		
	0	-5.89	-0.002270		
	10	-9.53	-0.003672		
	20	-9.44	-0.003638		
	30	-6.28	-0.002420		
	40	-7.01	-0.002701		
	50	-9.68	-0.003730		
64QAM					
3.82	-30	-7.15	-0.002755	Within authorized band for Band 38	Pass
	-20	-5.18	-0.001996		
	-10	-8.81	-0.003395		
	0	-6.39	-0.002462		
	10	-9.70	-0.003738		
	20	-7.55	-0.002909		
	30	-6.27	-0.002416		
	40	-7.98	-0.003075		
	50	-10.90	-0.004200		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-15.72	-0.006058	Within authorized band for Band 38	Pass
	3.82	-10.29	-0.003965		
	4.53	-8.85	-0.003410		
16QAM					
25	3.45	-14.03	-0.005407	Within authorized band for Band 38	Pass
	3.82	-7.70	-0.002967		
	4.53	-8.30	-0.003198		
64QAM					
25	3.45	-9.34	-0.003599	Within authorized band for Band 38	Pass
	3.82	-9.40	-0.003622		
	4.53	-10.81	-0.004166		
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=40620 Frequency=2593.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.82	-30	-17.75	-0.006845	Within authorized band for Band 41	Pass
	-20	-11.06	-0.004265		
	-10	-14.75	-0.005688		
	0	-12.93	-0.004987		
	10	-15.16	-0.005847		
	20	-12.45	-0.004801		
	30	11.83	0.004562		
	40	11.42	0.004404		
	50	8.55	0.003297		
16QAM					
3.82	-30	9.06	0.003494	Within authorized band for Band 41	Pass
	-20	-12.60	-0.004859		
	-10	11.56	0.004458		
	0	-11.74	-0.004528		
	10	-13.03	-0.005025		
	20	-14.58	-0.005623		
	30	-9.41	-0.003629		
	40	-12.82	-0.004944		
	50	-8.78	-0.003386		
64QAM					
3.82	-30	9.03	0.003482	Within authorized band for Band 41	Pass
	-20	16.75	0.006460		
	-10	-8.65	-0.003336		
	0	9.24	0.003563		
	10	-8.07	-0.003112		
	20	-17.35	-0.006691		
	30	-13.88	-0.005353		
	40	8.01	0.003089		
	50	-14.71	-0.005673		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-10.13	-0.003907	Within authorized band for Band 41	Pass
	3.82	-12.23	-0.004717		
	4.53	9.18	0.003540		
16QAM					
25	3.45	-12.04	-0.004643	Within authorized band for Band41	Pass
	3.82	-13.99	-0.005395		
	4.53	10.16	0.003918		
64QAM					
25	3.45	-16.57	-0.006390	Within authorized band for Band41	Pass
	3.82	-14.61	-0.005634		
	4.53	-12.15	-0.004686		
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					
3.82	-30	7.90	0.004527	Within authorized band for Band 66	Pass
	-20	-8.68	-0.004974		
	-10	12.40	0.007106		
	0	-6.37	-0.003650		
	10	-8.21	-0.004705		
	20	8.78	0.005032		
	30	5.58	0.003198		
	40	-6.18	-0.003542		
	50	12.00	0.006877		
16QAM					
3.82	-30	7.10	0.004069	Within authorized band for Band 66	Pass
	-20	6.88	0.003943		
	-10	9.81	0.005622		
	0	5.72	0.003278		
	10	10.44	0.005983		
	20	8.18	0.004688		
	30	13.60	0.007794		
	40	9.71	0.005564		
	50	7.88	0.004516		
64QAM					
3.82	-30	6.21	0.003559	Within authorized band for Band 66	Pass
	-20	11.76	0.006739		
	-10	11.24	0.006441		
	0	6.55	0.003754		
	10	9.88	0.005662		
	20	9.51	0.005450		
	30	9.27	0.005312		
	40	-6.71	-0.003845		
	50	-8.54	-0.004894		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-8.28	-0.004745	Within authorized band for Band 66	Pass
	3.82	-8.35	-0.004785		
	4.53	7.07	0.004052		
16QAM					
25	3.45	9.21	0.005278	Within authorized band for Band 66	Pass
	3.82	-6.82	-0.003908		
	4.53	8.90	0.005100		
64QAM					
25	3.45	8.57	0.004911	Within authorized band for Band 66	Pass
	3.82	-11.52	-0.006602		
	4.53	-10.94	-0.006269		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

LTE Band 42 (3450-3550MHz) part:

Reference Frequency: LTE Band 42 (20MHz) Middle channel=42590 Frequency=3500MHz					
Temperature					
Power supplied (Vdc)	Temperature (°C)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.82	-30	-9250.00	-2.642857	Within authorized band for Band 42	Pass
	-20	-9720.00	-2.777143		
	-10	-9700.00	-2.771429		
	0	-9330.00	-2.665714		
	10	-9310.00	-2.660000		
	20	-10270.00	-2.934286		
	30	-9550.00	-2.728571		
	40	-9760.00	-2.788571		
	50	-9230.00	-2.637143		
16QAM					
3.82	-30	-2210.00	-0.631429	Within authorized band for Band 42	Pass
	-20	-2130.00	-0.608571		
	-10	-2320.00	-0.662857		
	0	-2340.00	-0.668571		
	10	-2750.00	-0.785714		
	20	-2320.00	-0.662857		
	30	-1430.00	-0.408571		
	40	-1610.00	-0.460000		
	50	-1750.00	-0.500000		
64QAM					
3.82	-30	-14070.00	-4.020000	Within authorized band for Band 42	Pass
	-20	-13390.00	-3.825714		
	-10	-13480.00	-3.851429		
	0	-13300.00	-3.800000		
	10	-12220.00	-3.491429		
	20	-13730.00	-3.922857		
	30	-13240.00	-3.782857		
	40	-13160.00	-3.760000		
	50	-13460.00	-3.845714		

Voltage					
Temperature (°C)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.45	-10080.00	-2.880000	Within authorized band for Band 42	Pass
	3.82	-9250.00	-2.642857		
	4.53	-9740.00	-2.782857		
16QAM					
25	3.45	-2050.00	-0.585714	Within authorized band for Band 42	Pass
	3.82	-2360.00	-0.674286		
	4.53	-2540.00	-0.725714		
64QAM					
25	3.45	-14350.00	-4.100000	Within authorized band for Band 42	Pass
	3.82	-12660.00	-3.617143		
	4.53	-12990.00	-3.711429		
Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.					

Appendix G: Modulation Characteristics

Test Result

Band	Bandwidth h	Modulation	Channel	RB Configuration	Result	Verdict
Band2	20MHz	QPSK	18900	100RB#0	PASS	PASS
Band2	20MHz	16QAM	18900	100RB#0	PASS	PASS
Band2	20MHz	64QAM	18900	100RB#0	PASS	PASS
Band4	20MHz	QPSK	20175	100RB#0	PASS	PASS
Band4	20MHz	16QAM	20175	100RB#0	PASS	PASS
Band4	20MHz	64QAM	20175	100RB#0	PASS	PASS
Band5	10MHz	QPSK	20525	50RB#0	PASS	PASS
Band5	10MHz	16QAM	20525	50RB#0	PASS	PASS
Band5	10MHz	64QAM	20525	50RB#0	PASS	PASS
Band7	20MHz	QPSK	21100	100RB#0	PASS	PASS
Band7	20MHz	16QAM	21100	100RB#0	PASS	PASS
Band7	20MHz	64QAM	21100	100RB#0	PASS	PASS
Band12	10MHz	QPSK	23095	50RB#0	PASS	PASS
Band12	10MHz	16QAM	23095	50RB#0	PASS	PASS
Band12	10MHz	64QAM	23095	50RB#0	PASS	PASS
Band13	10MHz	QPSK	23230	50RB#0	PASS	PASS
Band13	10MHz	16QAM	23230	50RB#0	PASS	PASS
Band13	10MHz	64QAM	23230	50RB#0	PASS	PASS
Band17	10MHz	QPSK	23790	50RB#0	PASS	PASS
Band17	10MHz	16QAM	23790	50RB#0	PASS	PASS
Band17	10MHz	64QAM	23790	50RB#0	PASS	PASS
Band38	20MHz	QPSK	38000	100RB#0	PASS	PASS
Band38	20MHz	16QAM	38000	100RB#0	PASS	PASS
Band38	20MHz	64QAM	38000	100RB#0	PASS	PASS
Band41	20MHz	QPSK	40620	100RB#0	PASS	PASS
Band41	20MHz	16QAM	40620	100RB#0	PASS	PASS
Band41	20MHz	64QAM	40620	100RB#0	PASS	PASS
Band66	20MHz	QPSK	132322	100RB#0	PASS	PASS
Band66	20MHz	16QAM	132322	100RB#0	PASS	PASS
Band66	20MHz	64QAM	132322	100RB#0	PASS	PASS
Band42(3450-3550)	20MHz	QPSK	42590	100RB#0	PASS	PASS
Band42(3450-3550)	20MHz	64QAM	42590	100RB#0	PASS	PASS
Band42(3450-3550)	20MHz	16QAM	42590	100RB#0	PASS	PASS

Remark: All bandwidth and all modulation had been tested, but only the worst case data displayed in this report.

Test Graphs

