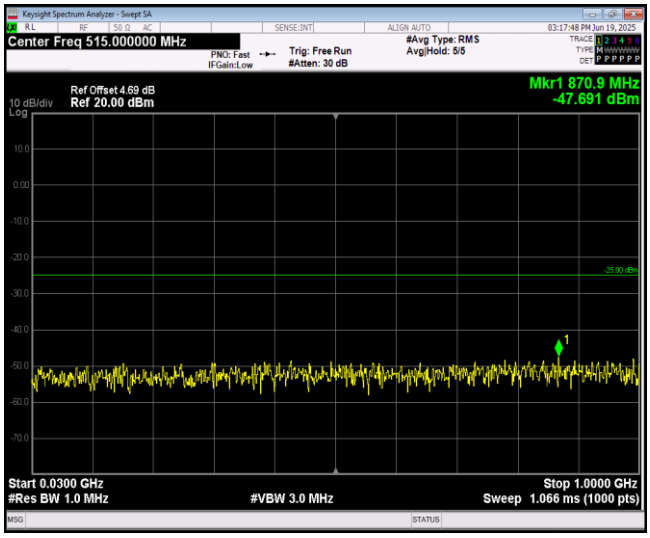
Band38-20MHz-16QAM-38150-1RB#0-Range1:30~1000MHz	Band38-20MHz-16QAM-38150-1RB#0-Range2:1000~26500MHz
	
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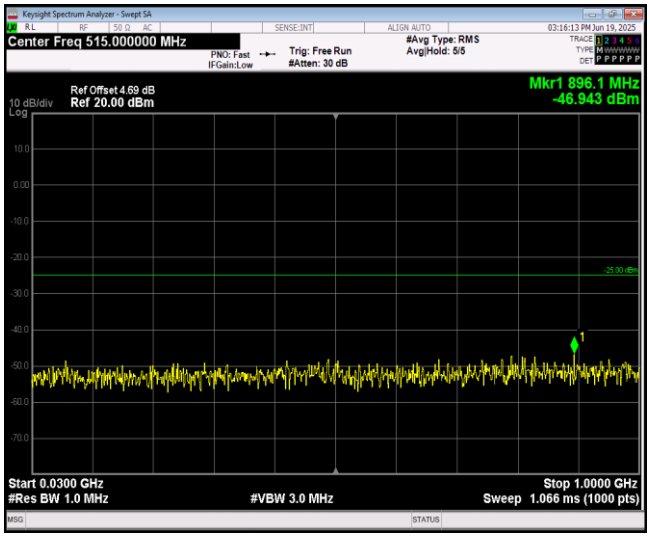
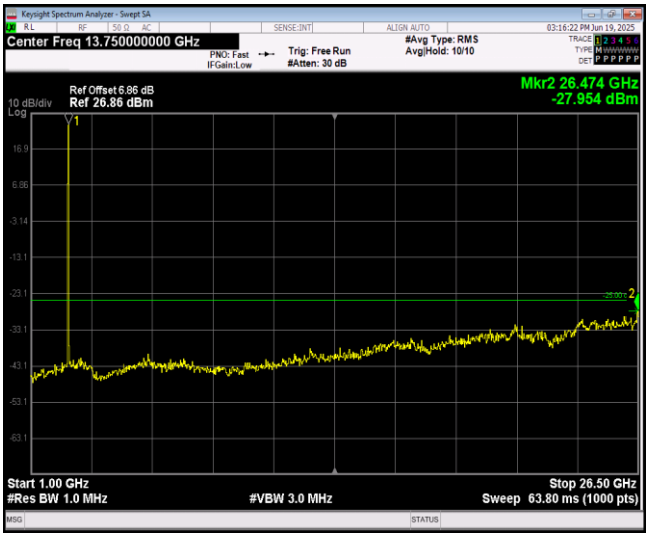
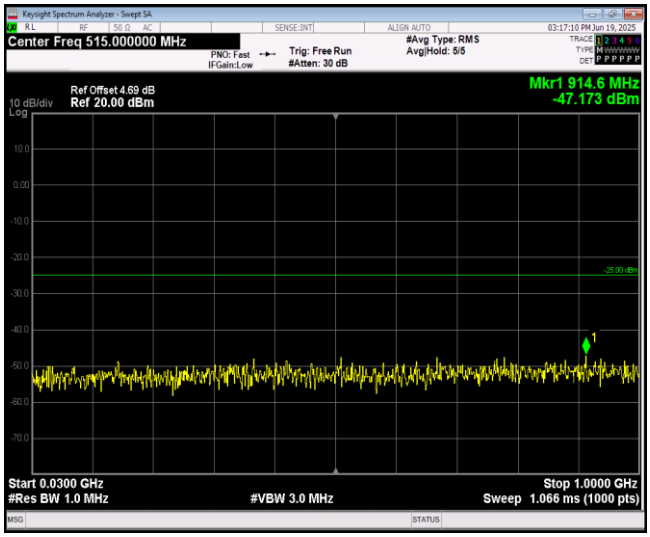
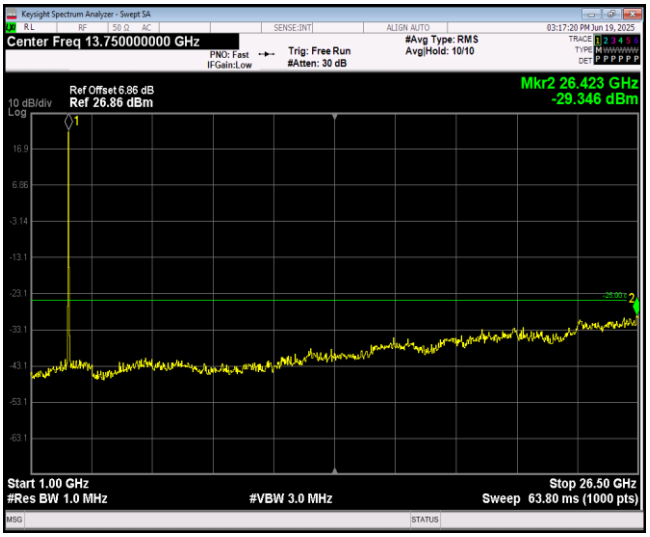
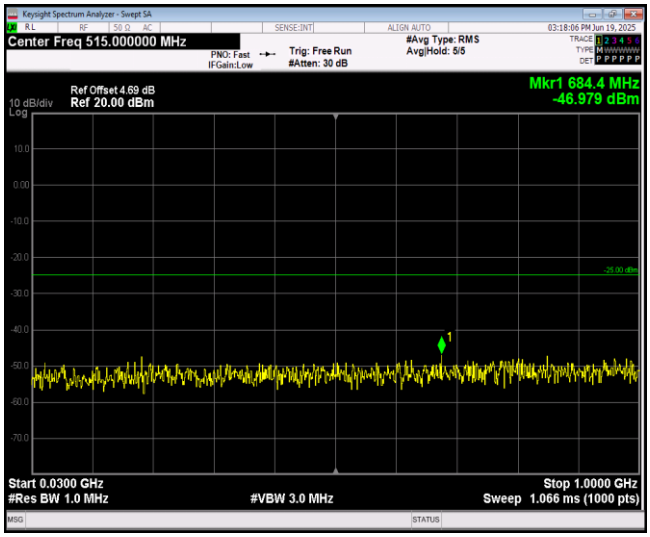
	
Band38-20MHz-64QAM-38000-1RB#0-Range1:30~1000MHz	Band38-20MHz-64QAM-38000-1RB#0-Range2:1000~26500MHz



Band38-20MHz-64QAM-38150-1RB#0-Range1:30~1000MHz

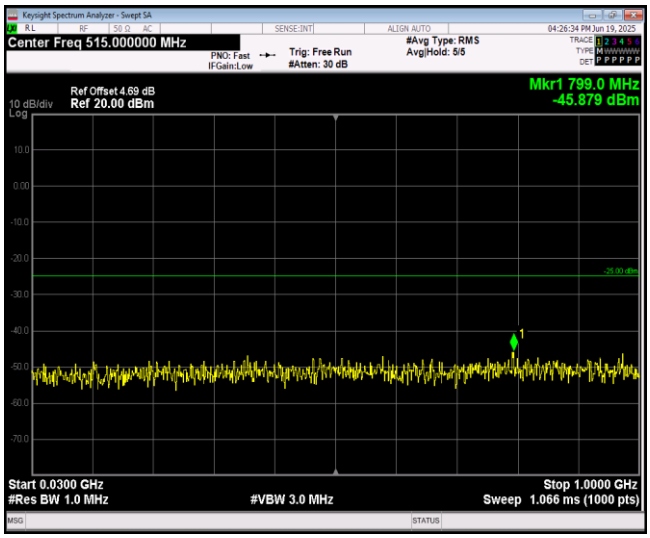


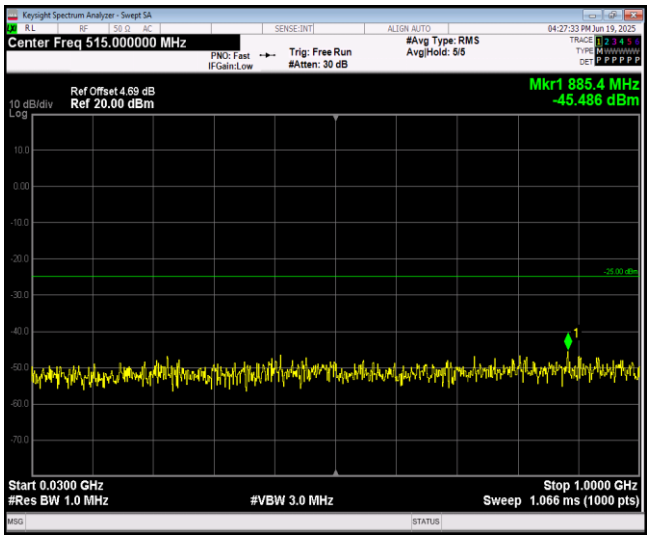
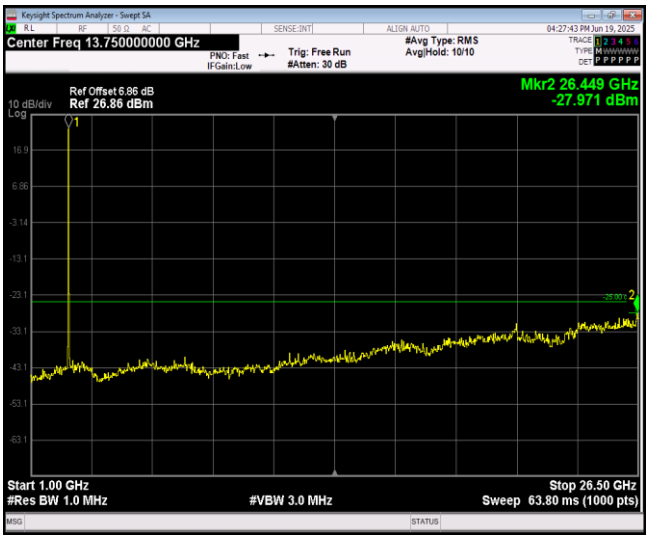
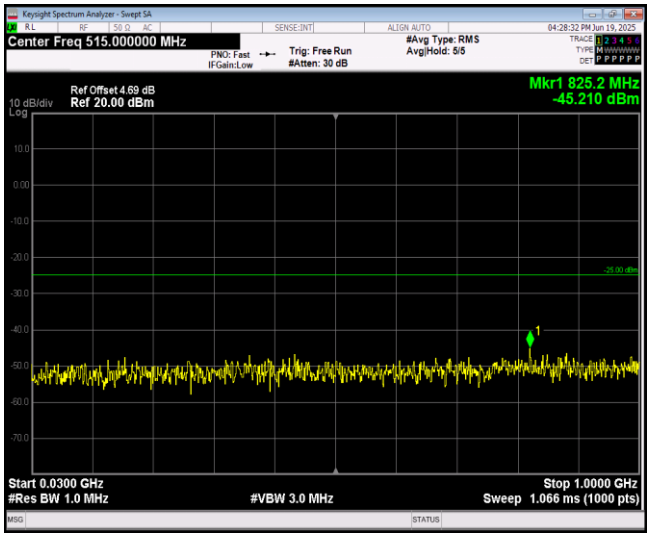
Band38-20MHz-64QAM-38150-1RB#0-Range2:1000~26500MHz

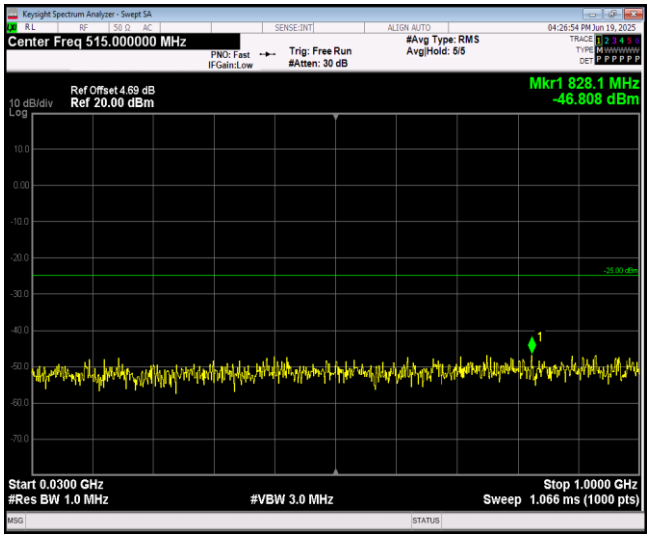


Band41-5MHz-QPSK-39675-1RB#0-Range1:30~1000MHz

Band41-5MHz-QPSK-39675-1RB#0-Range2:1000~26500MHz

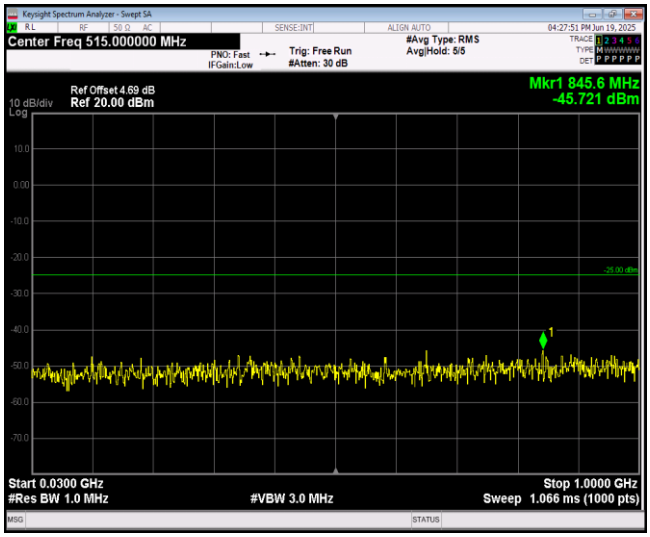


Band41-5MHz-QPSK-40620-1RB#0-Range1:30~1000MHz	Band41-5MHz-QPSK-40620-1RB#0-Range2:1000~26500MHz
	
Band41-5MHz-QPSK-41565-1RB#0-Range1:30~1000MHz	Band41-5MHz-QPSK-41565-1RB#0-Range2:1000~26500MHz
	
Band41-5MHz-16QAM-39675-1RB#0-Range1:30~1000MHz	Band41-5MHz-16QAM-39675-1RB#0-Range2:1000~26500MHz

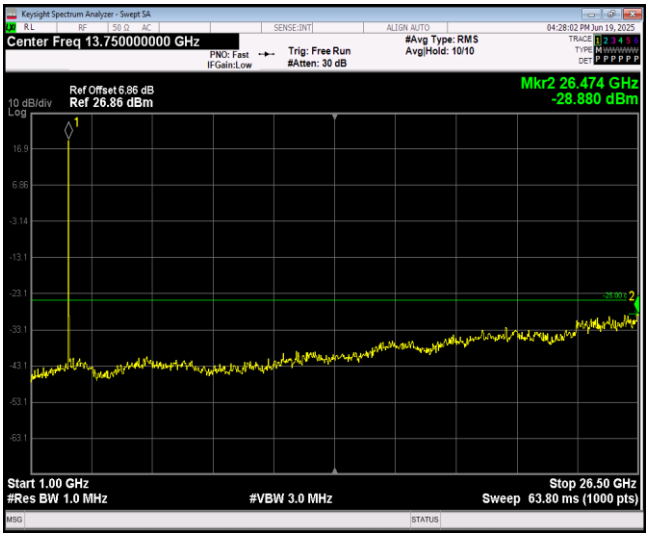


Band41-5MHz-16QAM-40620-1RB#0-Range1:30~1000MHz

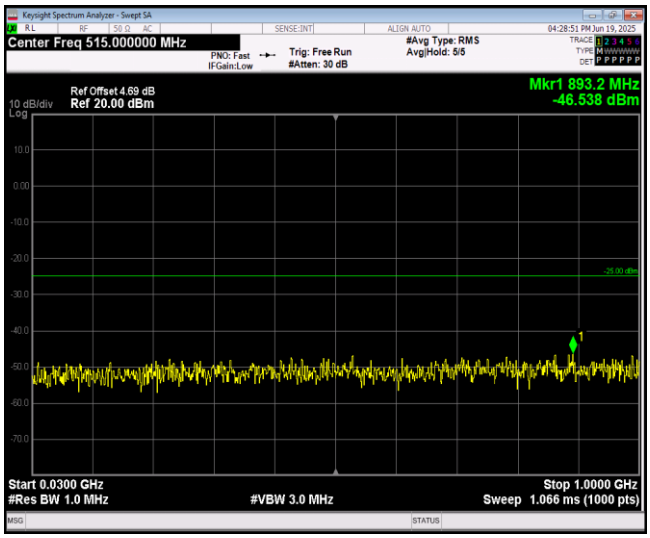
Band41-5MHz-16QAM-40620-1RB#0-Range2:1000~26500MHz

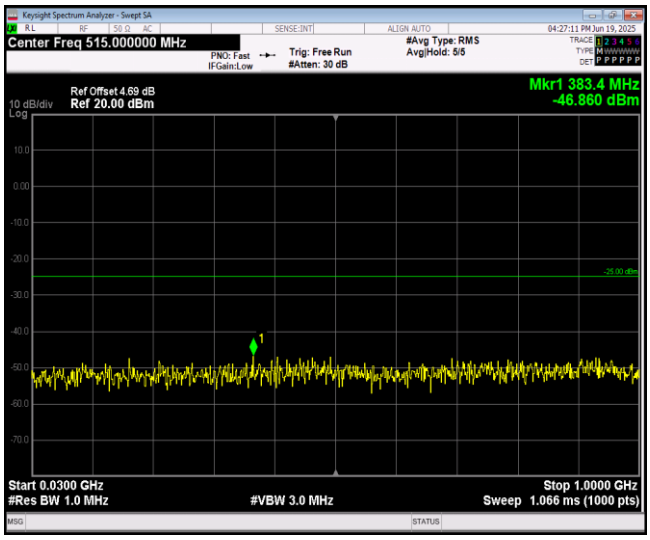
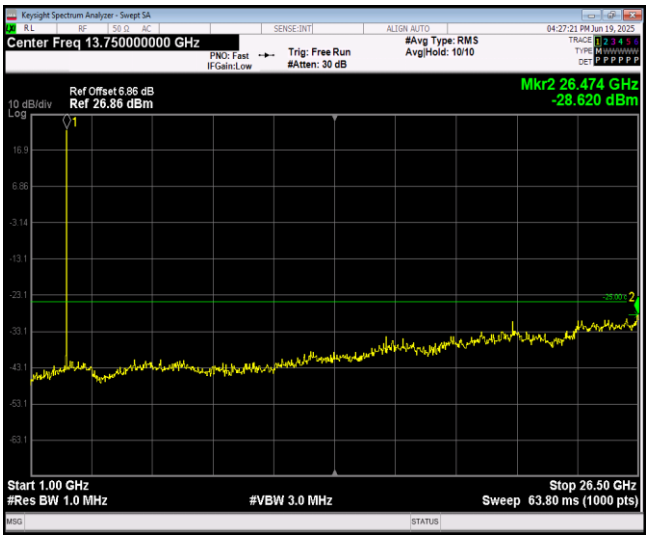
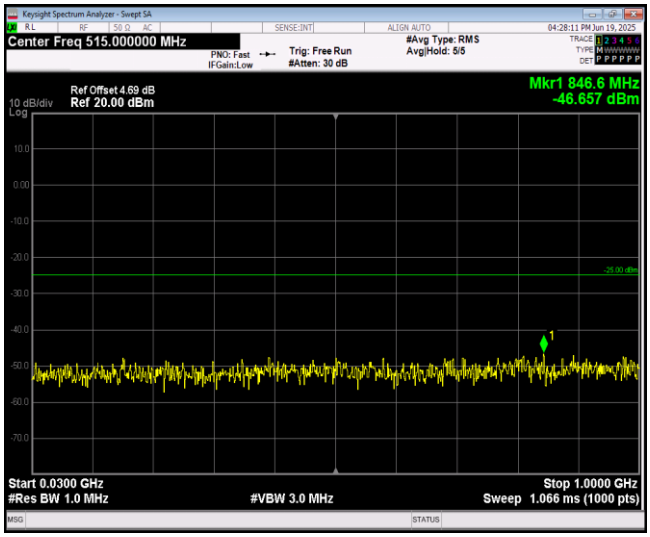
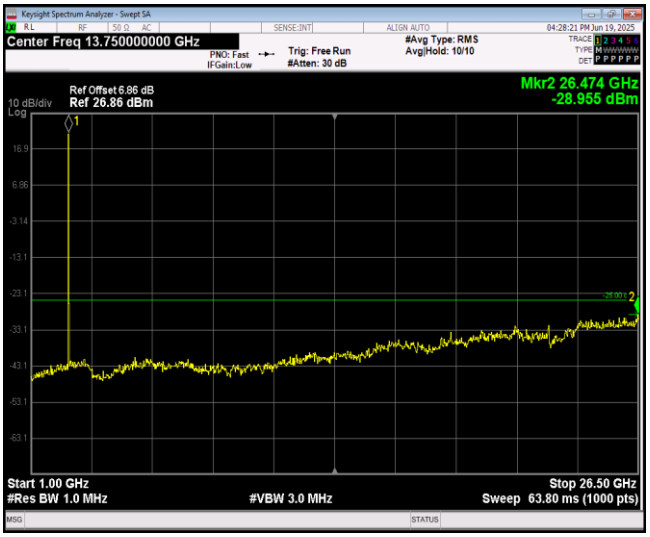


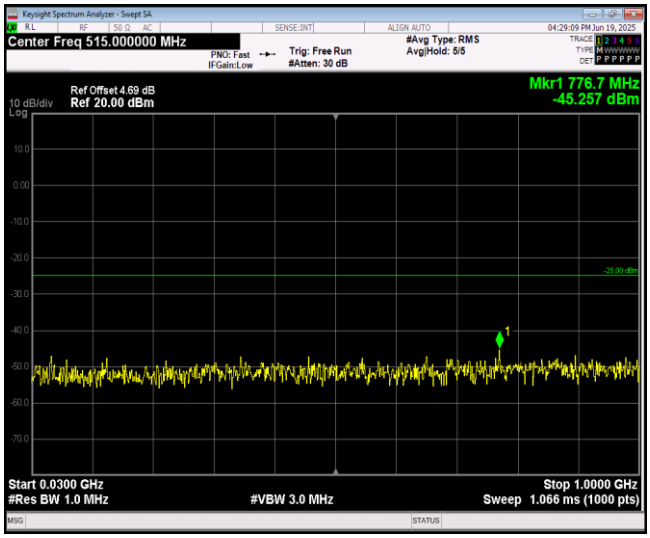
Band41-5MHz-16QAM-41565-1RB#0-Range1:30~1000MHz



Band41-5MHz-16QAM-41565-1RB#0-Range2:1000~26500MHz

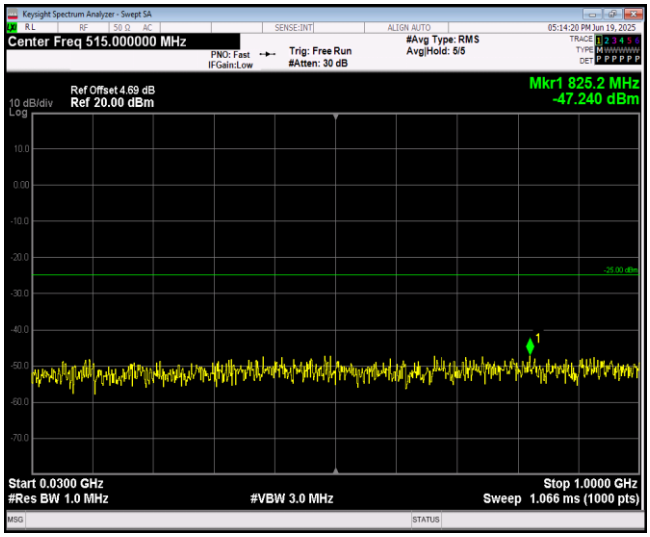


Band41-5MHz-64QAM-39675-1RB#0-Range1:30~1000MHz	Band41-5MHz-64QAM-39675-1RB#0-Range2:1000~26500MHz
	
Band41-5MHz-64QAM-40620-1RB#0-Range1:30~1000MHz	Band41-5MHz-64QAM-40620-1RB#0-Range2:1000~26500MHz
	
Band41-5MHz-64QAM-41565-1RB#0-Range1:30~1000MHz	Band41-5MHz-64QAM-41565-1RB#0-Range2:1000~26500MHz

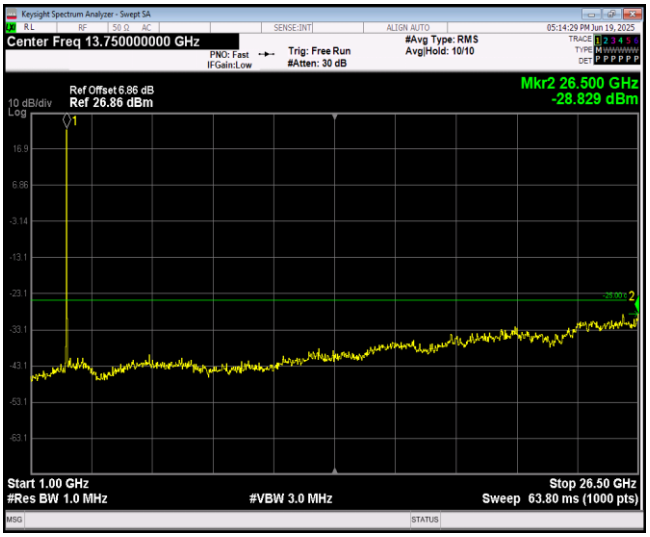


Band41-20MHz-QPSK-39750-1RB#0-Range1:30~1000MHz

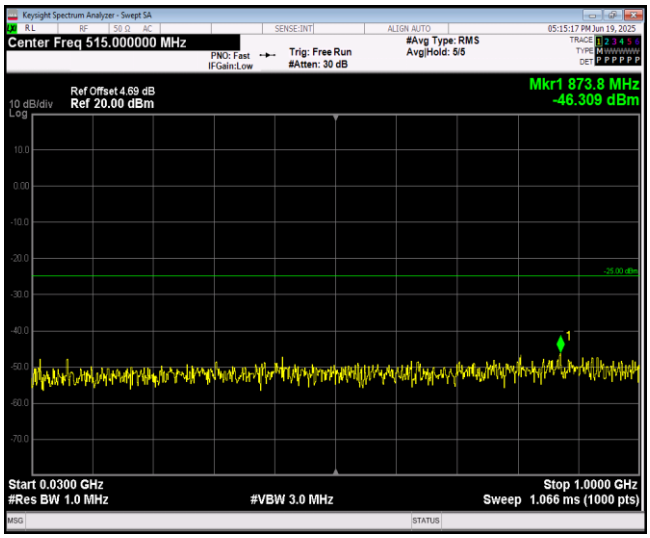
Band41-20MHz-QPSK-39750-1RB#0-Range2:1000~26500MHz

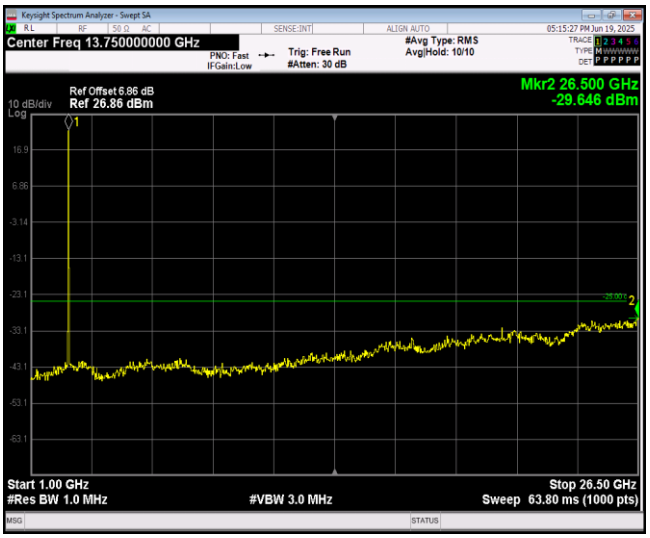


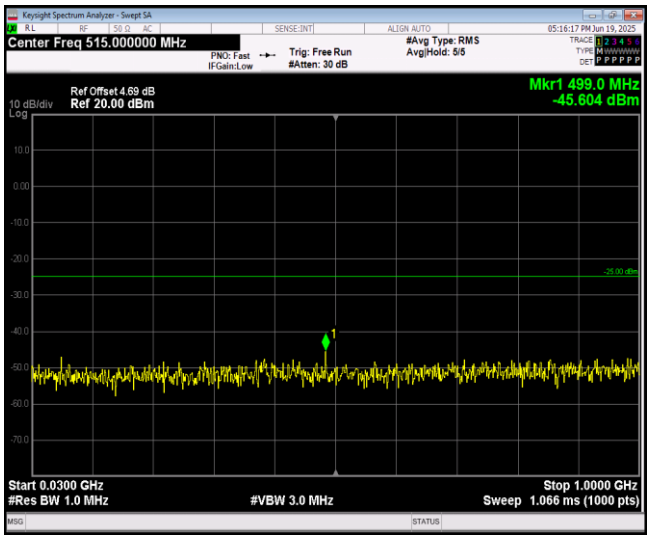
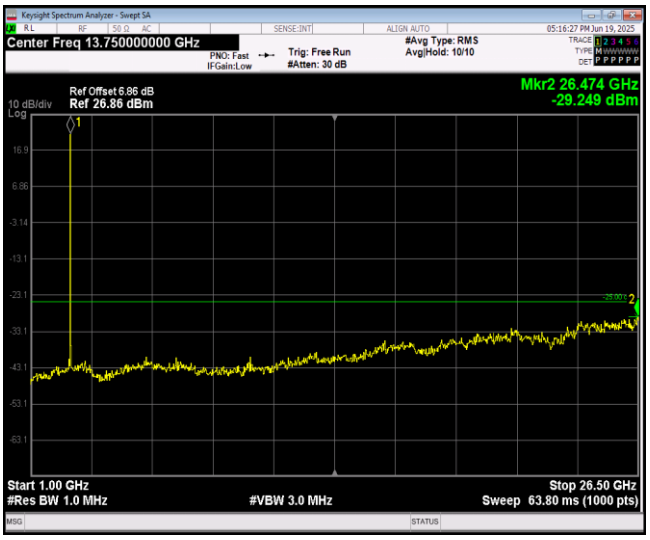
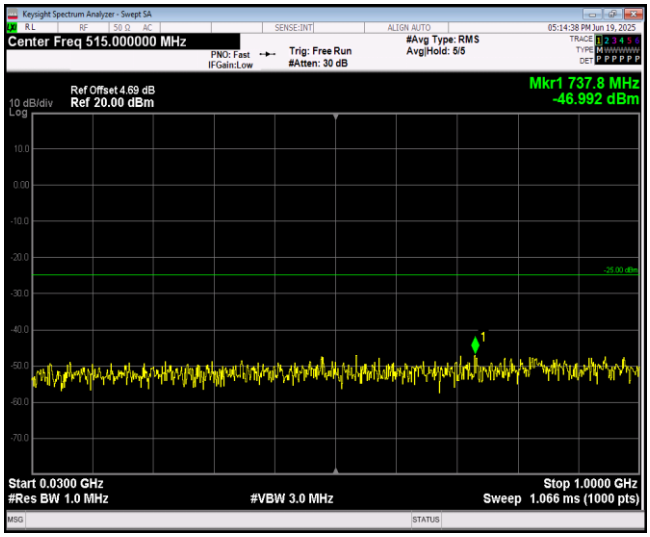
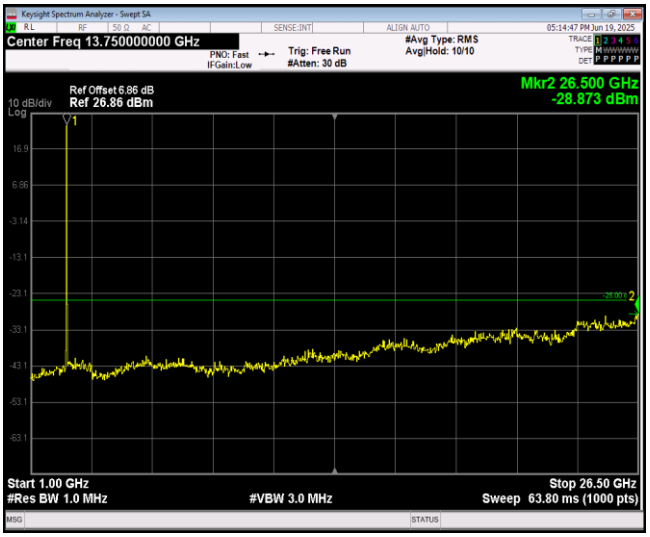
Band41-20MHz-QPSK-40620-1RB#0-Range1:30~1000MHz

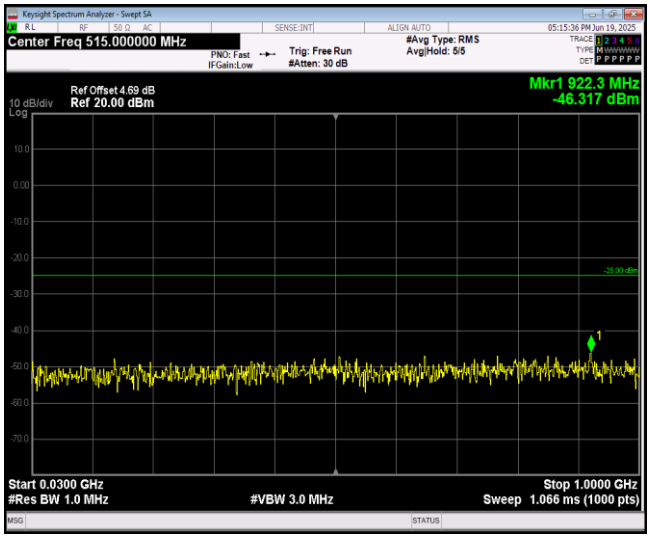


Band41-20MHz-QPSK-40620-1RB#0-Range2:1000~26500MHz

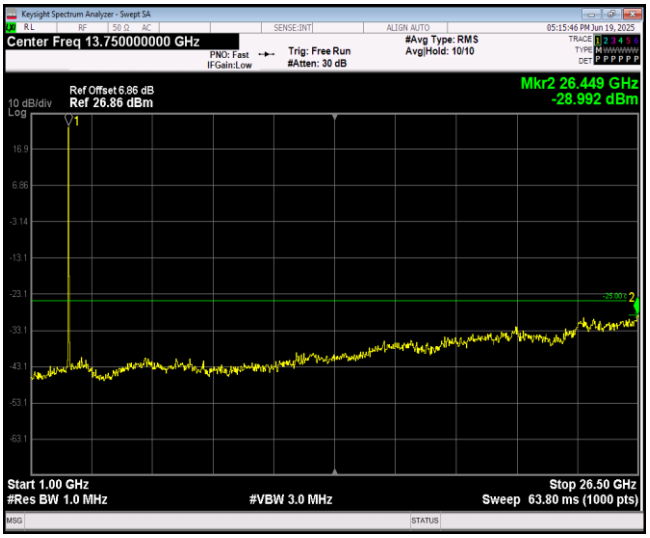




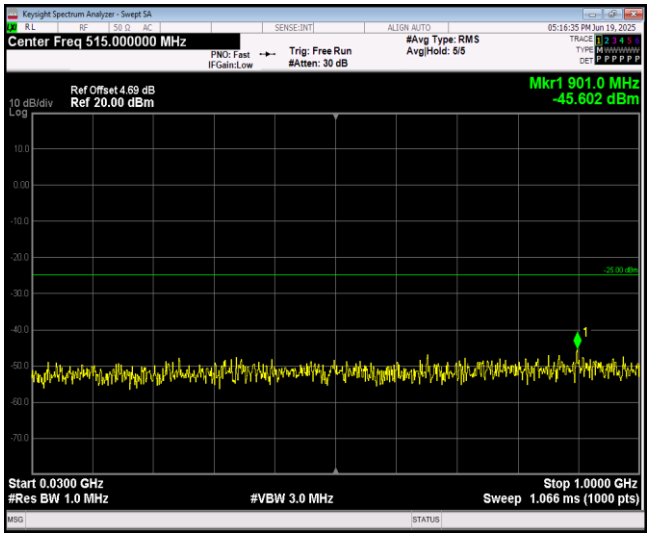
Band41-20MHz-QPSK-41490-1RB#0-Range1:30~1000MHz	Band41-20MHz-QPSK-41490-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-16QAM-39750-1RB#0-Range1:30~1000MHz	Band41-20MHz-16QAM-39750-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-16QAM-40620-1RB#0-Range1:30~1000MHz	Band41-20MHz-16QAM-40620-1RB#0-Range2:1000~26500MHz



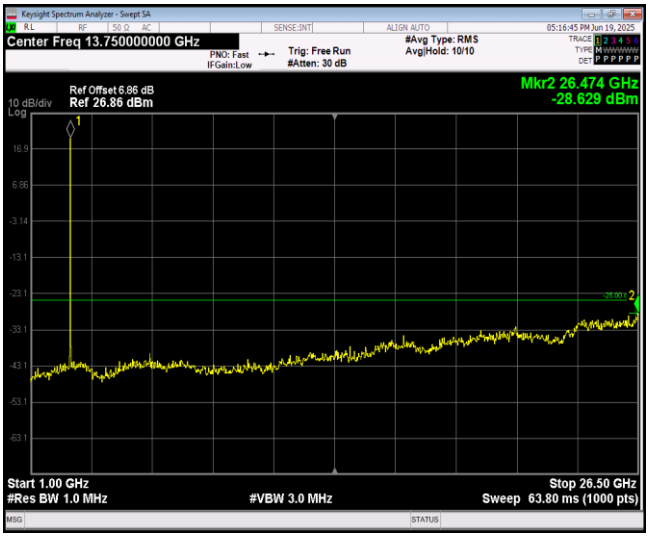
Band41-20MHz-16QAM-41490-1RB#0-Range1:30~1000MHz



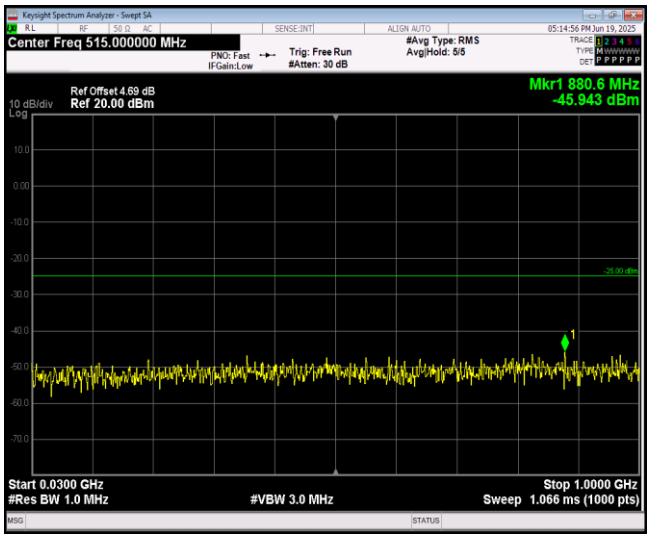
Band41-20MHz-16QAM-41490-1RB#0-Range2:1000~26500MHz

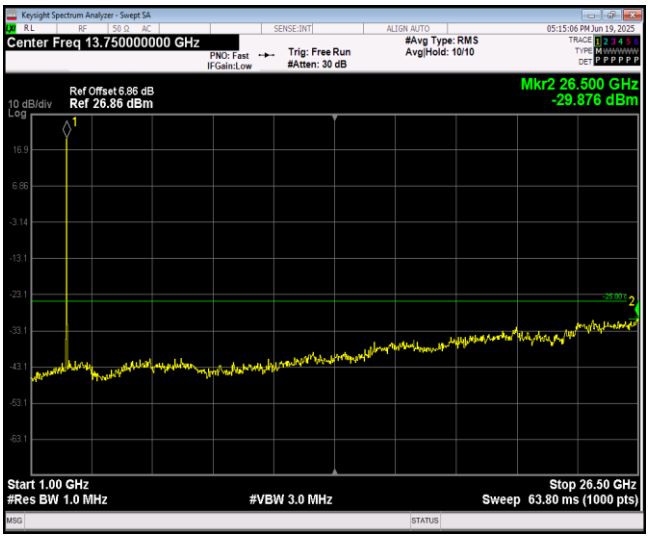


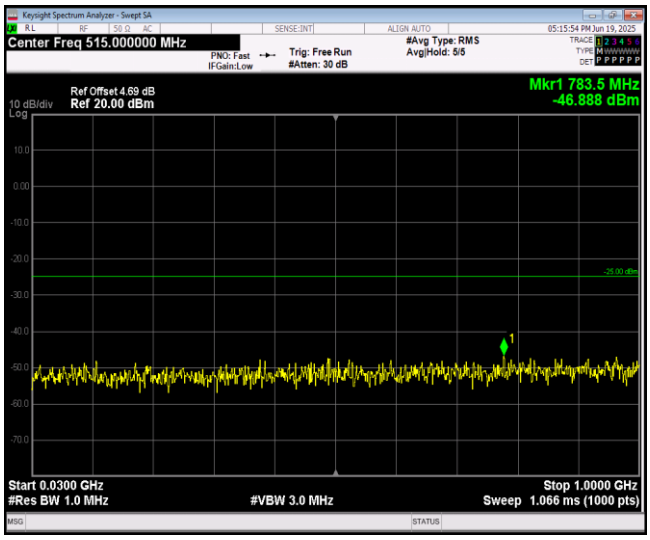
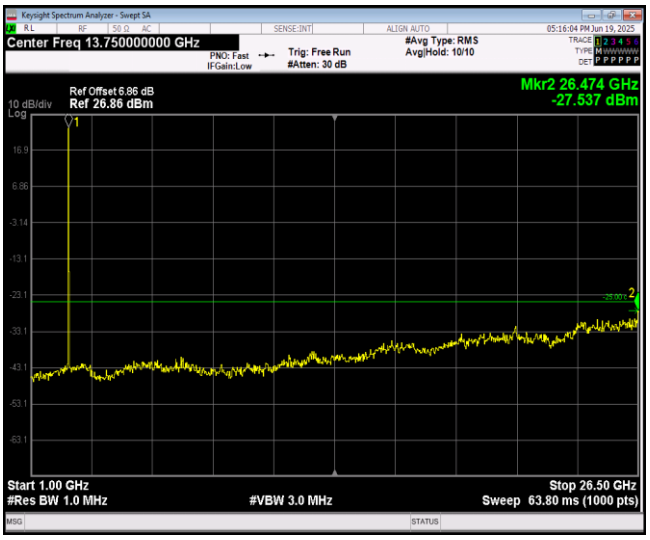
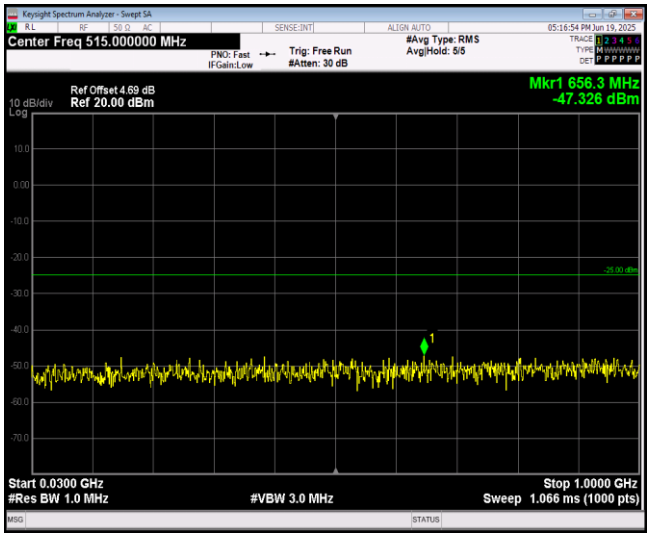
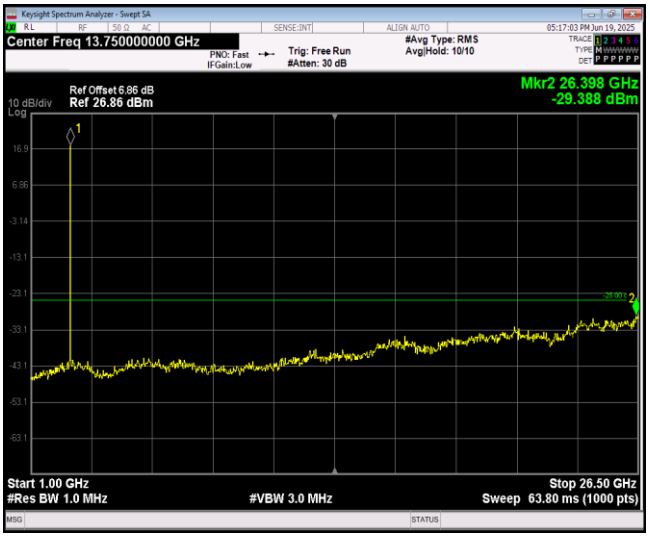
Band41-20MHz-64QAM-39750-1RB#0-Range1:30~1000MHz

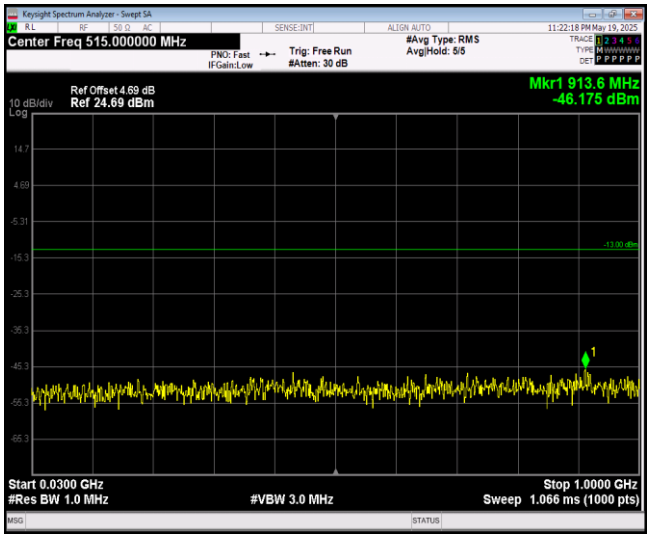


Band41-20MHz-64QAM-39750-1RB#0-Range2:1000~26500MHz

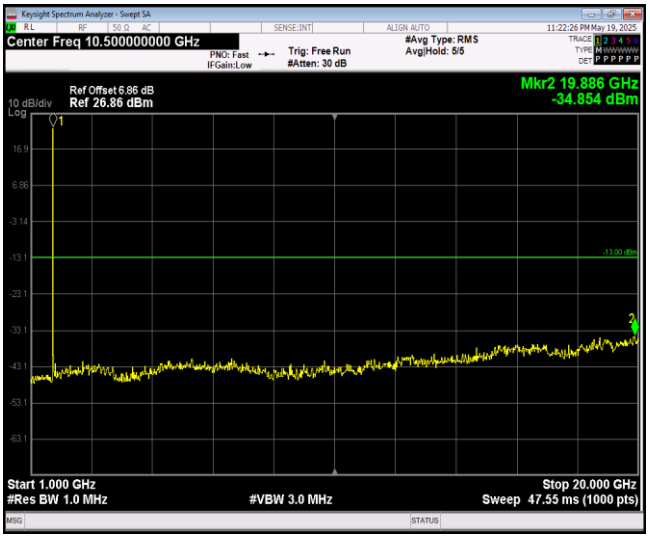




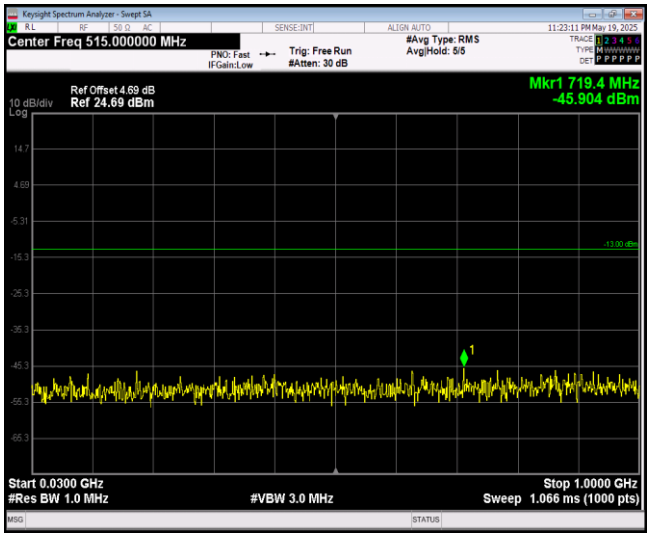
Band41-20MHz-64QAM-40620-1RB#0-Range1:30~1000MHz	Band41-20MHz-64QAM-40620-1RB#0-Range2:1000~26500MHz
	
Band41-20MHz-64QAM-41490-1RB#0-Range1:30~1000MHz	Band41-20MHz-64QAM-41490-1RB#0-Range2:1000~26500MHz
	
Band66-1.4MHz-QPSK-131979-1RB#0-Range1:30~1000MHz	Band66-1.4MHz-QPSK-131979-1RB#0-Range2:1000~20000MHz



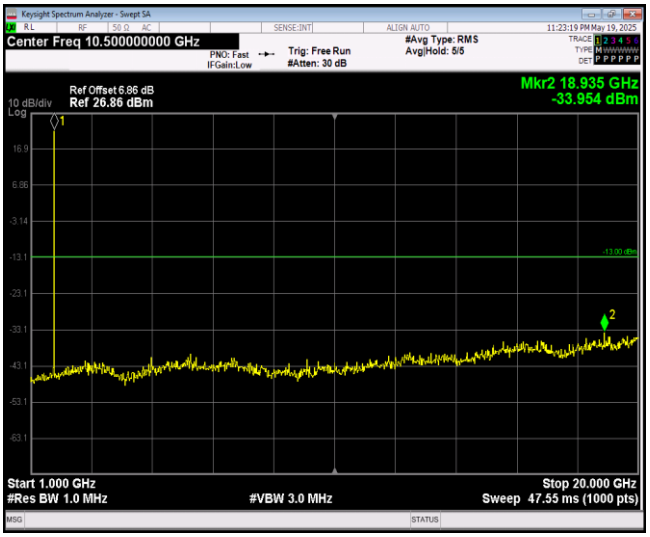
Band66-1.4MHz-QPSK-132322-1RB#0-Range1:30~1000MHz



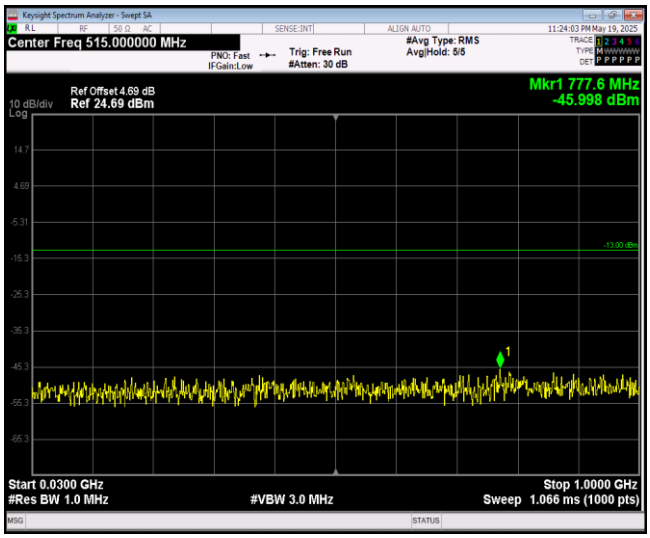
Band66-1.4MHz-QPSK-132322-1RB#0-Range2:1000~20000MHz

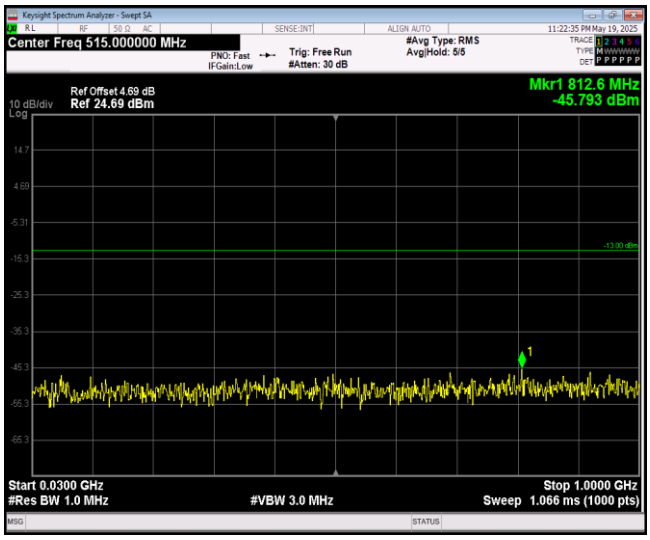
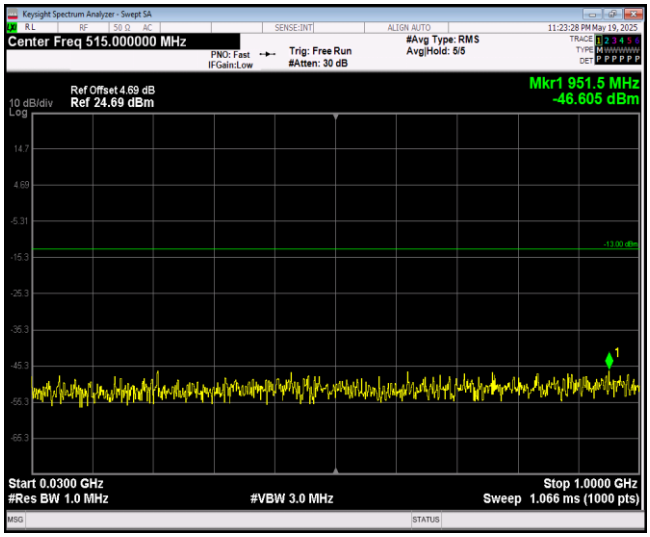
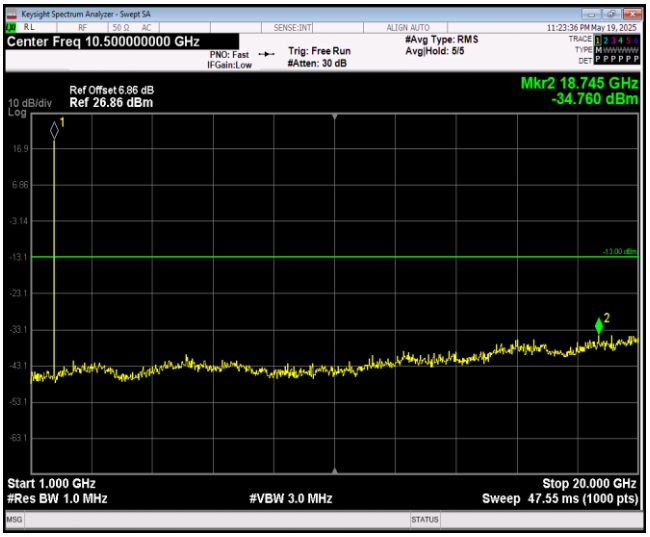


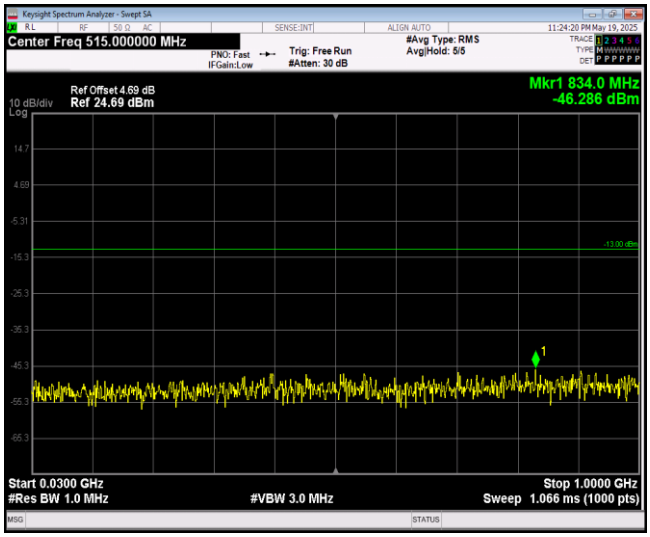
Band66-1.4MHz-QPSK-132665-1RB#0-Range1:30~1000MHz



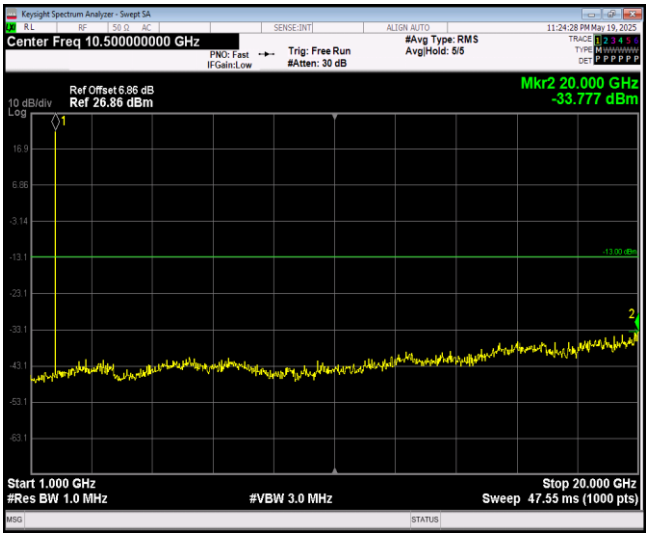
Band66-1.4MHz-QPSK-132665-1RB#0-Range2:1000~20000MHz



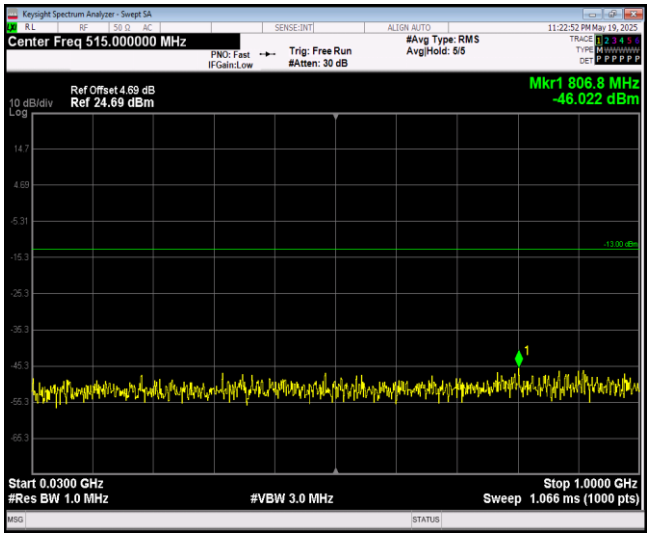
Band66-1.4MHz-16QAM-131979-1RB#0-Range1:30~1000MHz	Band66-1.4MHz-16QAM-131979-1RB#0-Range2:1000~20000MHz
	
Band66-1.4MHz-16QAM-132322-1RB#0-Range1:30~1000MHz	Band66-1.4MHz-16QAM-132322-1RB#0-Range2:1000~20000MHz
	
Band66-1.4MHz-16QAM-132665-1RB#0-Range1:30~1000MHz	Band66-1.4MHz-16QAM-132665-1RB#0-Range2:1000~20000MHz



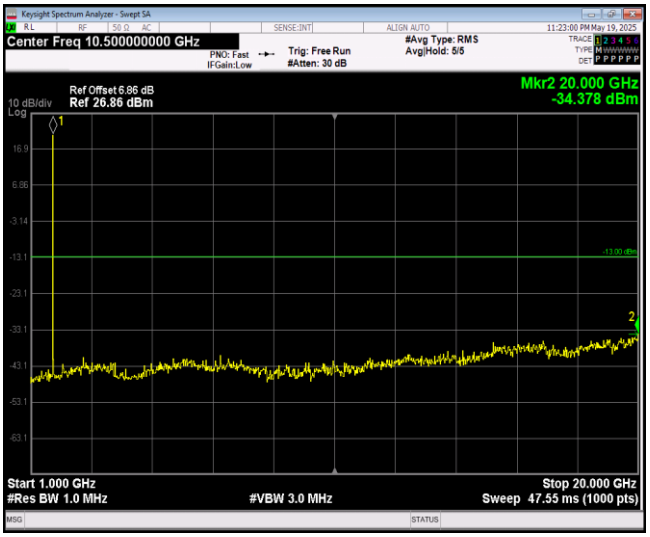
Band66-1.4MHz-64QAM-131979-1RB#0-Range1:30~1000MHz



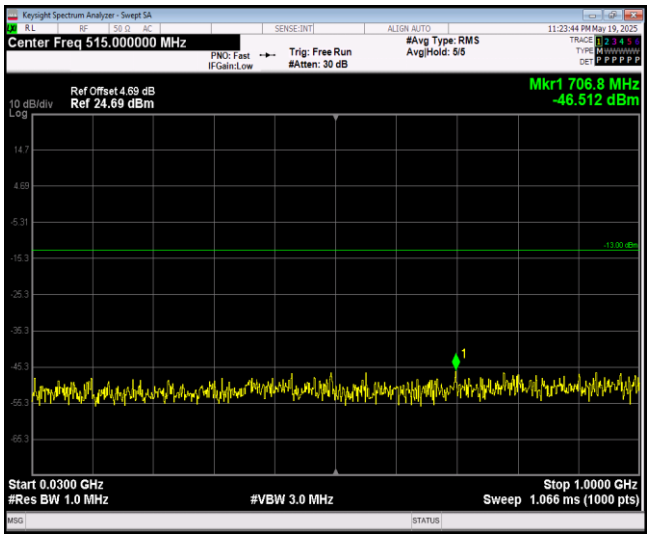
Band66-1.4MHz-64QAM-131979-1RB#0-Range2:1000~20000MHz

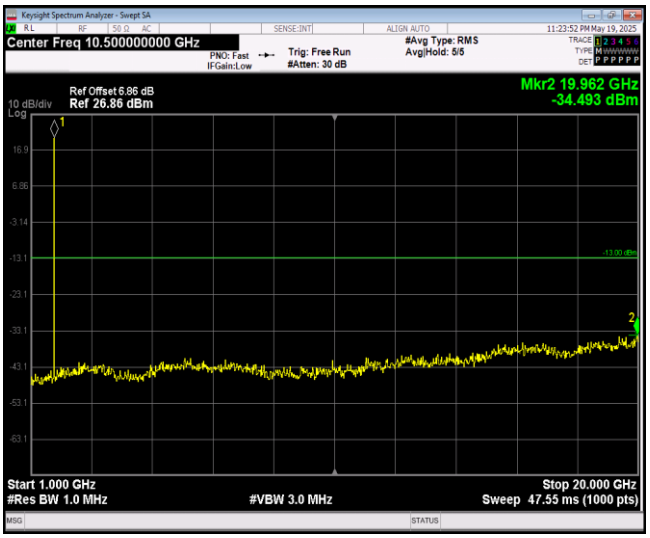


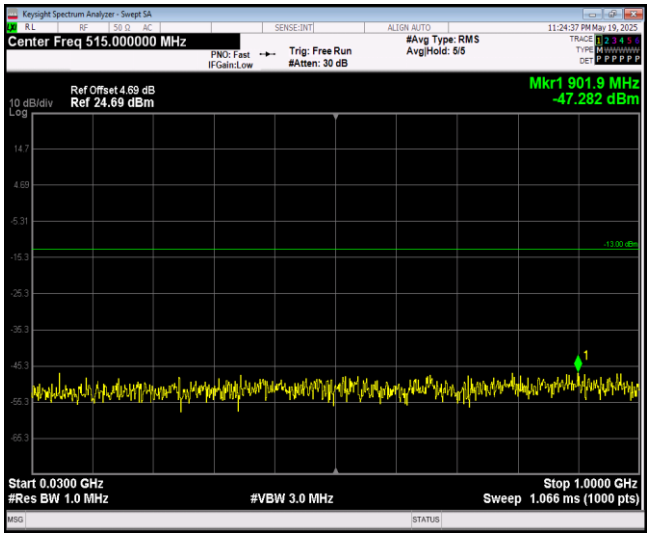
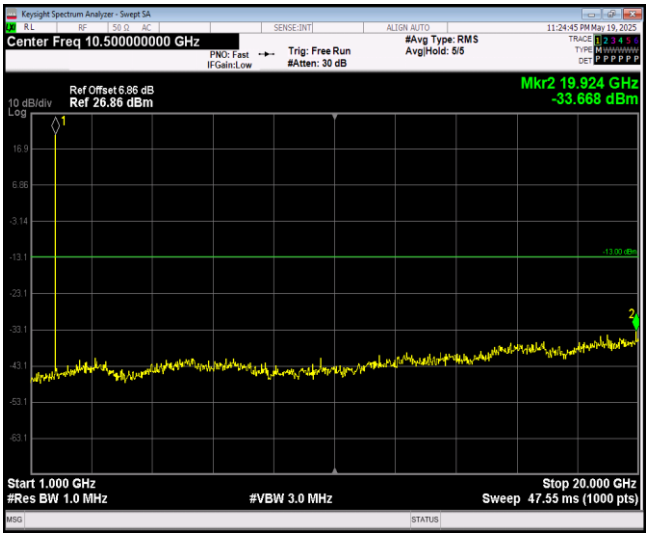
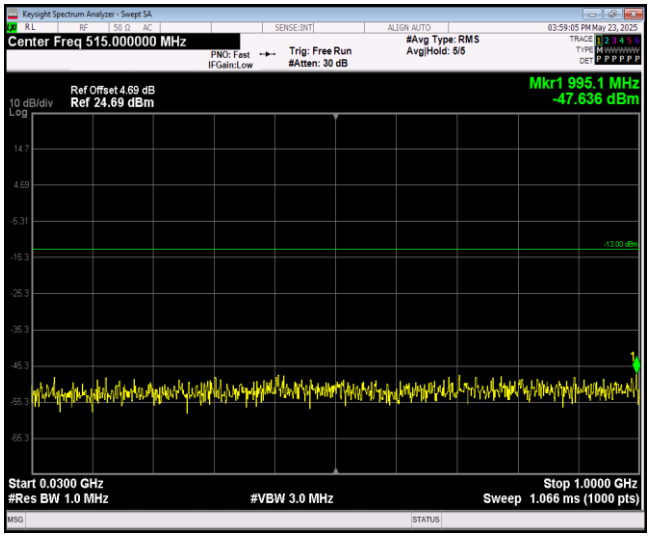
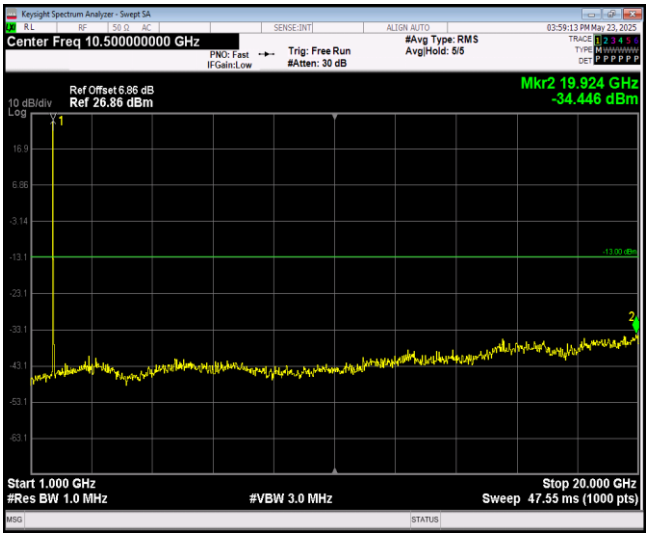
Band66-1.4MHz-64QAM-132322-1RB#0-Range1:30~1000MHz

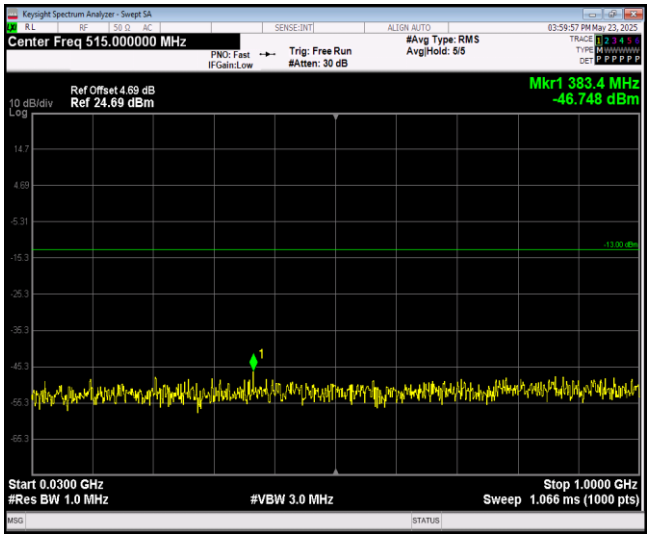


Band66-1.4MHz-64QAM-132322-1RB#0-Range2:1000~20000MHz

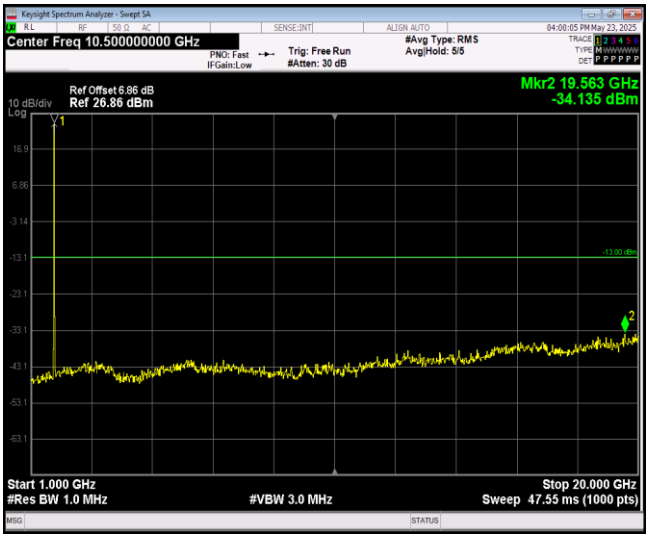




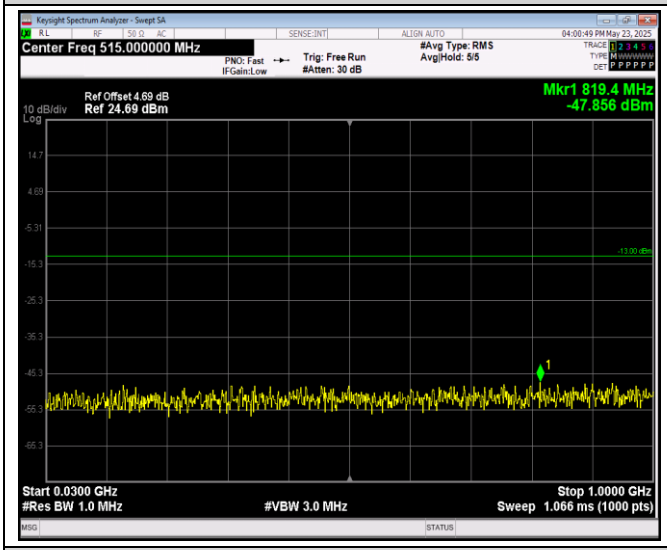
Band66-1.4MHz-64QAM-132665-1RB#0-Range1:30~1000MHz	Band66-1.4MHz-64QAM-132665-1RB#0-Range2:1000~20000MHz
	
Band66-20MHz-QPSK-132072-1RB#0-Range1:30~1000MHz	Band66-20MHz-QPSK-132072-1RB#0-Range2:1000~20000MHz
	
Band66-20MHz-QPSK-132322-1RB#0-Range1:30~1000MHz	Band66-20MHz-QPSK-132322-1RB#0-Range2:1000~20000MHz



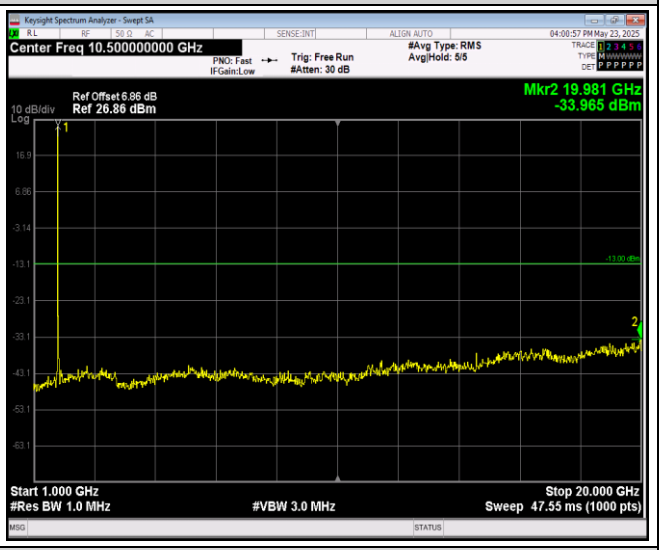
Band66-20MHz-QPSK-132572-1RB#0-Range1:30~1000MHz



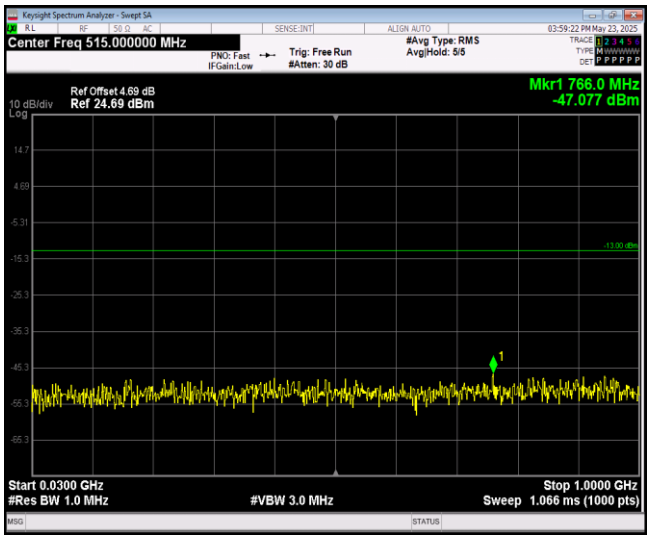
Band66-20MHz-QPSK-132572-1RB#0-Range2:1000~20000MHz

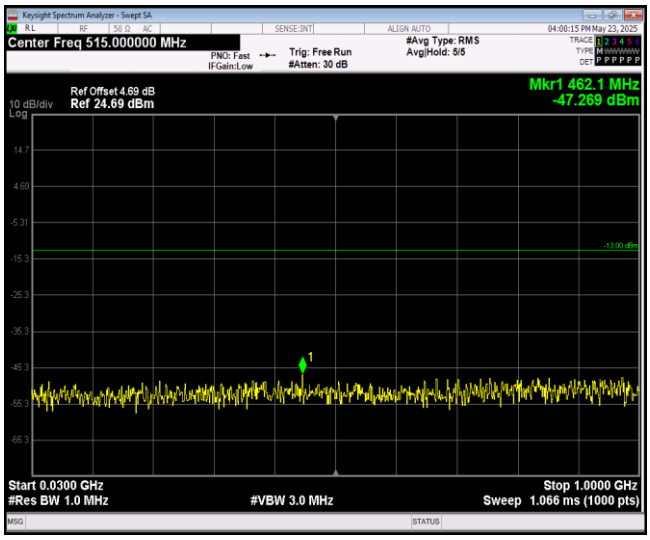
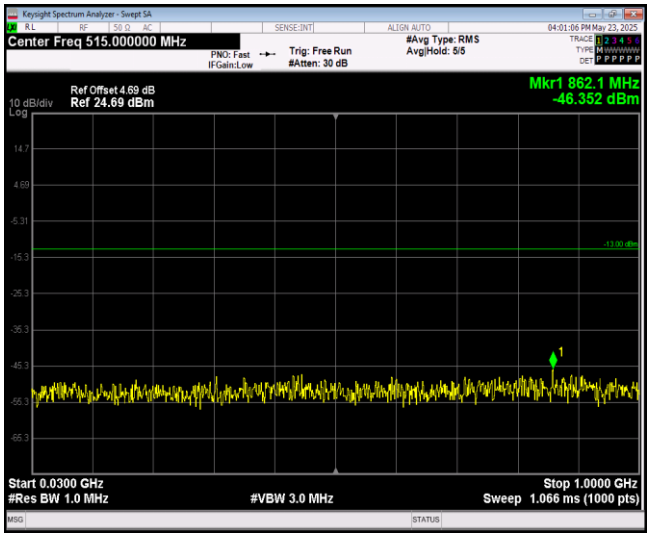
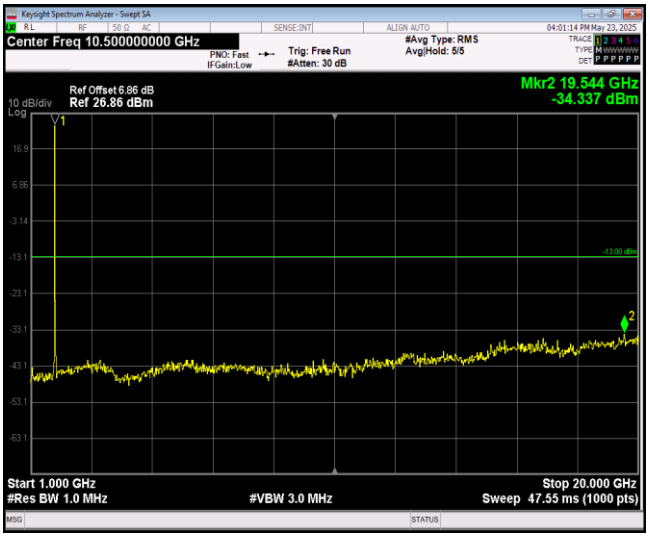


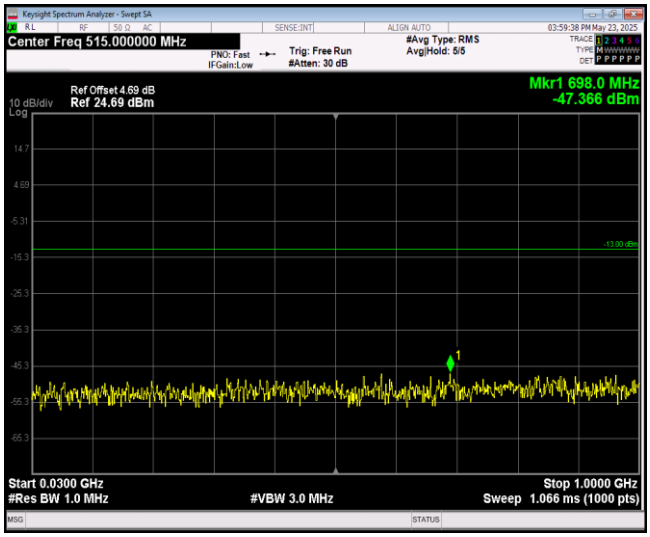
Band66-20MHz-16QAM-132072-1RB#0-Range1:30~1000MHz



Band66-20MHz-16QAM-132072-1RB#0-Range2:1000~20000MHz

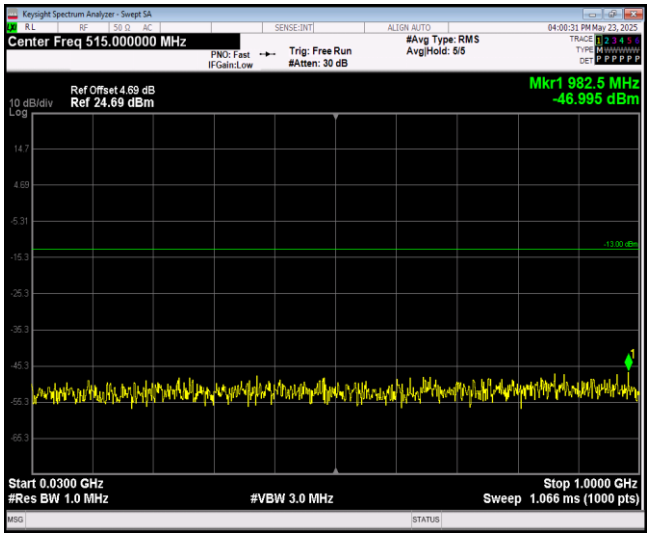


Band66-20MHz-16QAM-132322-1RB#0-Range1:30~1000MHz	Band66-20MHz-16QAM-132322-1RB#0-Range2:1000~20000MHz
	
Band66-20MHz-16QAM-132572-1RB#0-Range1:30~1000MHz	Band66-20MHz-16QAM-132572-1RB#0-Range2:1000~20000MHz
	
Band66-20MHz-64QAM-132072-1RB#0-Range1:30~1000MHz	Band66-20MHz-64QAM-132072-1RB#0-Range2:1000~20000MHz



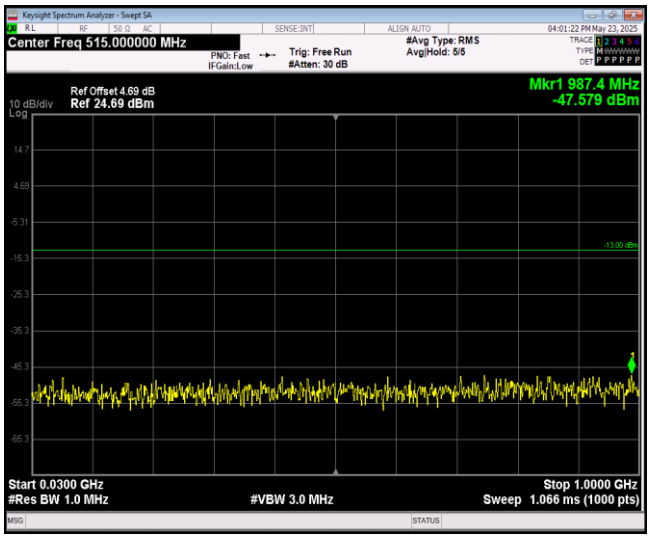
Band66-20MHz-64QAM-132322-1RB#0-Range1:30~1000MHz

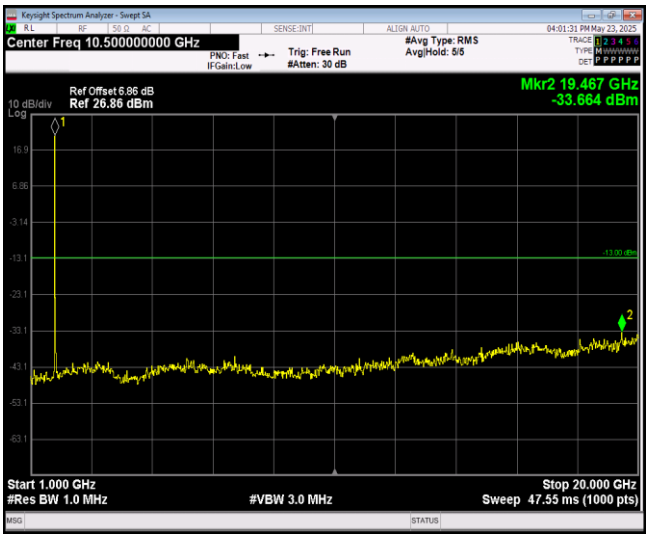
Band66-20MHz-64QAM-132322-1RB#0-Range2:1000~20000MHz



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

Band66-20MHz-64QAM-132572-1RB#0-Range2:1000~20000MHz





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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-18.65	-0.007357	Within authorized band for Band 7	Pass
	-20	-25.02	-0.009870		
	-10	-16.38	-0.006462		
	0	-14.95	-0.005897		
	10	-18.78	-0.007408		
	20	-14.42	-0.005688		
	30	7.81	0.003081		
	40	-21.49	-0.008477		
	50	42.79	0.016880		
16QAM					
3.87	-30	2.46	0.000970	Within authorized band for Band 7	Pass
	-20	-15.82	-0.006241		
	-10	11.19	0.004414		
	0	-21.99	-0.008675		
	10	-17.91	-0.007065		
	20	-16.55	-0.006529		
	30	-15.11	-0.005961		
	40	-17.52	-0.006911		
	50	-14.46	-0.005704		
64QAM					
3.87	-30	-21.86	-0.008623	Within authorized band for Band 7	Pass
	-20	14.99	0.005913		
	-10	-21.59	-0.008517		
	0	-17.12	-0.006753		
	10	-15.41	-0.006079		
	20	12.12	0.004781		
	30	4.75	0.001874		
	40	-19.57	-0.007720		
	50	-19.38	-0.007645		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-26.81	-0.010576	Within authorized band for Band 7	Pass
	3.87	7.82	0.003085		
	4.45	-23.09	-0.009108		
16QAM					
25	3.00	-17.72	-0.006990	Within authorized band for Band 7	Pass
	3.87	-18.35	-0.007239		
	4.45	-19.50	-0.007692		
64QAM					
25	3.00	-15.55	-0.006134	Within authorized band for Band 7	Pass
	3.87	-19.54	-0.007708		
	4.45	-18.10	-0.007140		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	10.83	0.005753	Within authorized band for Band 25	Pass
	-20	-13.12	-0.006969		
	-10	-14.42	-0.007660		
	0	-12.32	-0.006544		
	10	12.09	0.006422		
	20	-10.77	-0.005721		
	30	-12.35	-0.006560		
	40	13.38	0.007108		
	50	-10.77	-0.005721		
16QAM					
3.87	-30	-6.67	-0.003543	Within authorized band for Band 25	Pass
	-20	16.01	0.008505		
	-10	-9.76	-0.005185		
	0	-12.29	-0.006529		
	10	-11.53	-0.006125		
	20	6.81	0.003618		
	30	-11.43	-0.006072		
	40	-12.25	-0.006507		
	50	8.43	0.004478		
64QAM					
3.87	-30	11.52	0.006120	Within authorized band for Band 25	Pass
	-20	-9.77	-0.005190		
	-10	13.43	0.007134		
	0	-10.16	-0.005397		
	10	-10.94	-0.005811		
	20	11.03	0.005859		
	30	-9.28	-0.004930		
	40	-17.64	-0.009371		
	50	6.19	0.003288		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	12.42	0.006598	Within authorized band for Band 25	Pass
	3.87	-10.41	-0.005530		
	4.45	-8.81	-0.004680		
16QAM					
25	3.00	8.73	0.004637	Within authorized band for Band 25	Pass
	3.87	-11.47	-0.006093		
	4.45	-13.10	-0.006959		
64QAM					
25	3.00	-15.58	-0.008276	Within authorized band for Band 25	Pass
	3.87	12.09	0.006422		
	4.45	10.36	0.005503		
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=819.0MHz					
Temperature					
Power supplied (Vdc)	Temperature (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-5.87	-0.007167	Within authorized band for Band 26	Pass
	-20	-7.37	-0.008999		
	-10	-5.36	-0.006545		
	0	-4.05	-0.004945		
	10	-4.13	-0.005043		
	20	-6.12	-0.007473		
	30	-4.28	-0.005226		
	40	-4.25	-0.005189		
	50	-5.01	-0.006117		
16QAM					
3.87	-30	-8.00	-0.009768	Within authorized band for Band 26	Pass
	-20	-5.68	-0.006935		
	-10	-8.17	-0.009976		
	0	-4.02	-0.004908		
	10	1.57	0.001917		
	20	-6.34	-0.007741		
	30	-3.76	-0.004591		
	40	-4.38	-0.005348		
	50	-4.09	-0.004994		
64QAM					
3.87	-30	-3.23	-0.003944	Within authorized band for Band 26	Pass
	-20	-7.34	-0.008962		
	-10	3.13	0.003822		
	0	-5.72	-0.006984		
	10	-8.05	-0.009829		
	20	-5.81	-0.007094		
	30	2.66	0.003248		
	40	3.62	0.004420		
	50	-8.98	-0.010965		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-5.51	-0.006728	Within authorized band for Band 26	Pass
	3.87	-7.90	-0.009646		
	4.45	1.62	0.001978		
16QAM					
25	3.00	-2.45	-0.002991	Within authorized band for Band 26	Pass
	3.87	-6.74	-0.008230		
	4.45	-6.74	-0.008230		
64QAM					
25	3.00	-5.06	-0.006178	Within authorized band for Band 26	Pass
	3.87	-7.31	-0.008926		
	4.45	3.76	0.004591		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-7.50	-0.008966	Within authorized band for Band 26	Pass
	-20	-7.45	-0.008906		
	-10	5.38	0.006432		
	0	-8.27	-0.009886		
	10	-3.65	-0.004363		
	20	-7.47	-0.008930		
	30	-5.54	-0.006623		
	40	-5.56	-0.006647		
	50	-8.27	-0.009886		
16QAM					
3.87	-30	-9.04	-0.010807	Within authorized band for Band 26	Pass
	-20	-4.95	-0.005918		
	-10	-8.31	-0.009934		
	0	-5.89	-0.007041		
	10	-3.56	-0.004256		
	20	-6.22	-0.007436		
	30	-6.51	-0.007782		
	40	-6.55	-0.007830		
	50	-4.94	-0.005906		
64QAM					
3.87	-30	-6.18	-0.007388	Within authorized band for Band 26	Pass
	-20	-7.37	-0.008811		
	-10	-4.43	-0.005296		
	0	-6.88	-0.008225		
	10	-6.05	-0.007233		
	20	4.96	0.005929		
	30	-4.91	-0.005870		
	40	-6.42	-0.007675		
	50	-8.53	-0.010197		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-9.66	-0.011548	Within authorized band for Band 26	Pass
	3.87	-3.76	-0.004495		
	4.45	-8.53	-0.010197		
16QAM					
25	3.00	-5.14	-0.006145	Within authorized band for Band 26	Pass
	3.87	-5.97	-0.007137		
	4.45	-9.57	-0.011441		
64QAM					
25	3.00	-6.35	-0.007591	Within authorized band for Band 26	Pass
	3.87	-4.31	-0.005152		
	4.45	-6.02	-0.007197		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-21.38	-0.008239	Within authorized band for Band 38	Pass
	-20	-16.39	-0.006316		
	-10	-12.68	-0.004886		
	0	-11.58	-0.004462		
	10	8.35	0.003218		
	20	-20.03	-0.007719		
	30	19.69	0.007588		
	40	19.24	0.007414		
	50	-6.00	-0.002312		
16QAM					
3.87	-30	-9.05	-0.003487	Within authorized band for Band 38	Pass
	-20	-7.25	-0.002794		
	-10	-12.75	-0.004913		
	0	-6.73	-0.002593		
	10	8.48	0.003268		
	20	-7.83	-0.003017		
	30	3.57	0.001376		
	40	-16.88	-0.006505		
	50	7.49	0.002886		
64QAM					
3.87	-30	2.85	0.001098	Within authorized band for Band 38	Pass
	-20	7.95	0.003064		
	-10	6.85	0.002640		
	0	-11.05	-0.004258		
	10	-16.31	-0.006285		
	20	9.90	0.003815		
	30	-11.07	-0.004266		
	40	-23.35	-0.008998		
	50	10.16	0.003915		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	9.26	0.003568	Within authorized band for Band 38	Pass
	3.87	-18.83	-0.007256		
	4.45	4.08	0.001572		
16QAM					
25	3.00	-5.68	-0.002189	Within authorized band for Band 38	Pass
	3.87	3.16	0.001218		
	4.45	-19.15	-0.007380		
64QAM					
25	3.00	10.06	0.003877	Within authorized band for Band 38	Pass
	3.87	-10.89	-0.004197		
	4.45	4.28	0.001649		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	5.63	0.002171	Within authorized band for Band 41	Pass
	-20	-10.24	-0.003949		
	-10	-8.34	-0.003216		
	0	-3.07	-0.001184		
	10	-5.72	-0.002206		
	20	-5.10	-0.001967		
	30	3.56	0.001373		
	40	5.56	0.002144		
	50	4.07	0.001570		
16QAM					
3.87	-30	8.47	0.003266	Within authorized band for Band 41	Pass
	-20	-4.69	-0.001809		
	-10	-8.37	-0.003228		
	0	-1.98	-0.000764		
	10	4.73	0.001824		
	20	-4.69	-0.001809		
	30	-5.19	-0.002002		
	40	-4.34	-0.001674		
	50	-4.73	-0.001824		
64QAM					
3.87	-30	3.48	0.001342	Within authorized band for Band 41	Pass
	-20	-7.16	-0.002761		
	-10	-7.25	-0.002796		
	0	-3.10	-0.001196		
	10	2.31	0.000891		
	20	2.77	0.001068		
	30	-3.35	-0.001292		
	40	-6.12	-0.002360		
	50	4.46	0.001720		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-12.53	-0.004832	Within authorized band for Band 41	Pass
	3.87	-6.26	-0.002414		
	4.45	-6.70	-0.002584		
16QAM					
25	3.00	8.92	0.003440	Within authorized band for Band41	Pass
	3.87	-6.16	-0.002376		
	4.45	-3.74	-0.001442		
64QAM					
25	3.00	-6.27	-0.002418	Within authorized band for Band41	Pass
	3.87	-10.18	-0.003926		
	4.45	-4.88	-0.001882		
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 (℃)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
3.87	-30	-8.67	-0.004968	Within authorized band for Band 66	Pass
	-20	-7.05	-0.004040		
	-10	-10.79	-0.006183		
	0	6.97	0.003994		
	10	13.60	0.007794		
	20	-15.39	-0.008819		
	30	-10.69	-0.006126		
	40	-9.56	-0.005479		
	50	-11.53	-0.006607		
16QAM					
3.87	-30	-10.87	-0.006229	Within authorized band for Band 66	Pass
	-20	-13.38	-0.007668		
	-10	-11.39	-0.006527		
	0	9.61	0.005507		
	10	-15.72	-0.009009		
	20	-14.52	-0.008321		
	30	-15.89	-0.009106		
	40	-10.00	-0.005731		
	50	-12.59	-0.007215		
64QAM					
3.87	-30	-8.45	-0.004842	Within authorized band for Band 66	Pass
	-20	-14.96	-0.008573		
	-10	-15.18	-0.008699		
	0	-9.58	-0.005490		
	10	10.47	0.006000		
	20	-8.70	-0.004986		
	30	8.58	0.004917		
	40	-19.14	-0.010968		
	50	-14.33	-0.008212		

Voltage					
Temperature (℃)	Power supplied (Vdc)	Frequency error		Limit (ppm)	Result
		Hz	ppm		
QPSK					
25	3.00	-12.32	-0.007060	Within authorized band for Band 66	Pass
	3.87	-16.39	-0.009393		
	4.45	-13.65	-0.007822		
16QAM					
25	3.00	-14.09	-0.008074	Within authorized band for Band 66	Pass
	3.87	14.35	0.008223		
	4.45	-11.39	-0.006527		
64QAM					
25	3.00	-14.22	-0.008149	Within authorized band for Band 66	Pass
	3.87	-16.09	-0.009221		
	4.45	-10.23	-0.005862		
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	Modulation	Channel	RB Configuration	Result	Verdict
Band7	20MHz	QPSK	21100	100RB#0	PASS	PASS
Band7	20MHz	16QAM	21100	100RB#0	PASS	PASS
Band7	20MHz	64QAM	21100	100RB#0	PASS	PASS
Band25	20MHz	QPSK	26365	100RB#0	PASS	PASS
Band25	20MHz	16QAM	26365	100RB#0	PASS	PASS
Band25	20MHz	64QAM	26365	100RB#0	PASS	PASS
Band26	10MHz	QPSK	26740	50RB#0	PASS	PASS
Band26	10MHz	16QAM	26740	50RB#0	PASS	PASS
Band26	10MHz	64QAM	26740	50RB#0	PASS	PASS
Band26	15MHz	QPSK	26915	75RB#0	PASS	PASS
Band26	15MHz	16QAM	26915	75RB#0	PASS	PASS
Band26	15MHz	64QAM	26915	75RB#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

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