FCC LTE Band Test Data

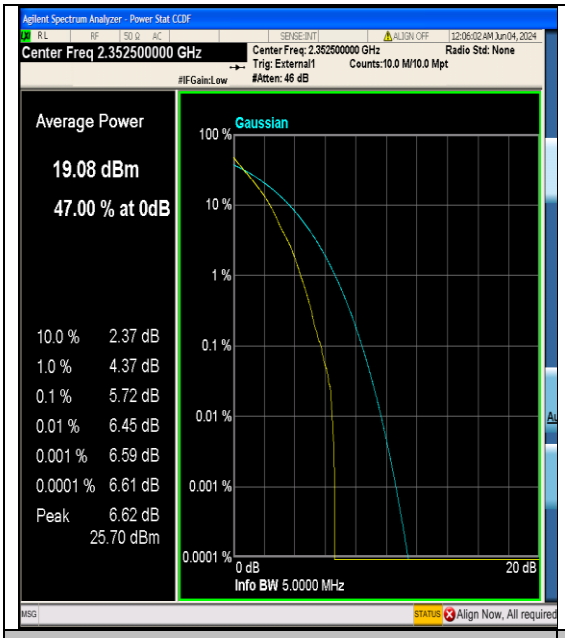
FCC ID	:	**2BG5S-CLR903**
Company:	:	**Shanghai Yuge information technology Co., Ltd.**
EUT	:	**4G LTE Wireless Communication Module**
Model Number	:	**CLR903**
Reviewed By	:	**Eric Wang**

Appendix B: Peak-to-Average Ratio(CCDF)

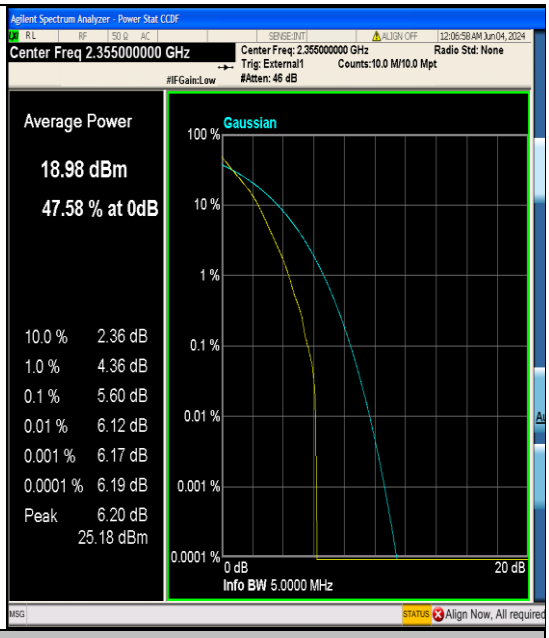
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	5.72	13	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	5.60	13	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	5.37	13	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	6.42	13	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	6.15	13	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	6.09	13	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	5.52	13	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	6.14	13	PASS

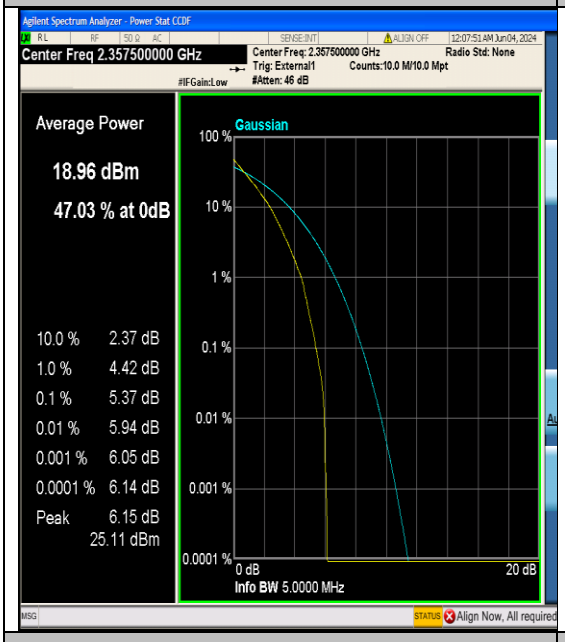
Test Graphs



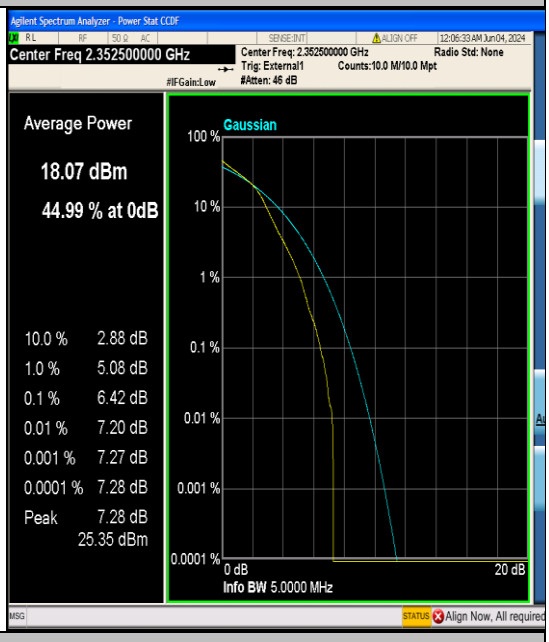
Band40(2350-2360)-5MHz-QPSK-39175-25RB#0-PASS



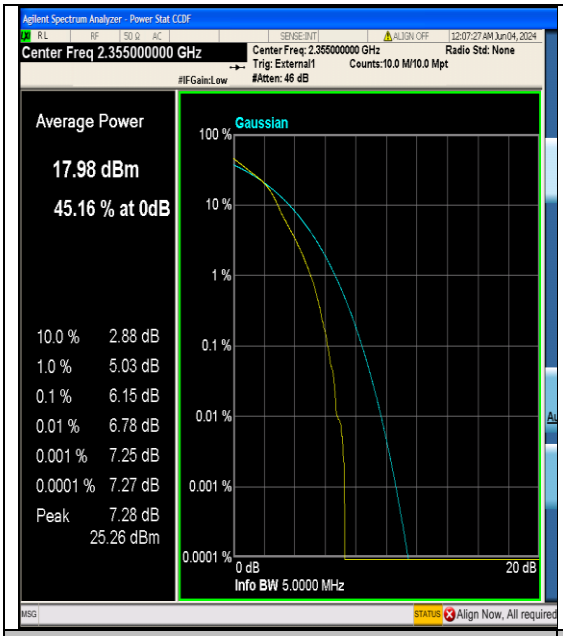
Band40(2350-2360)-5MHz-QPSK-39200-25RB#0-PASS



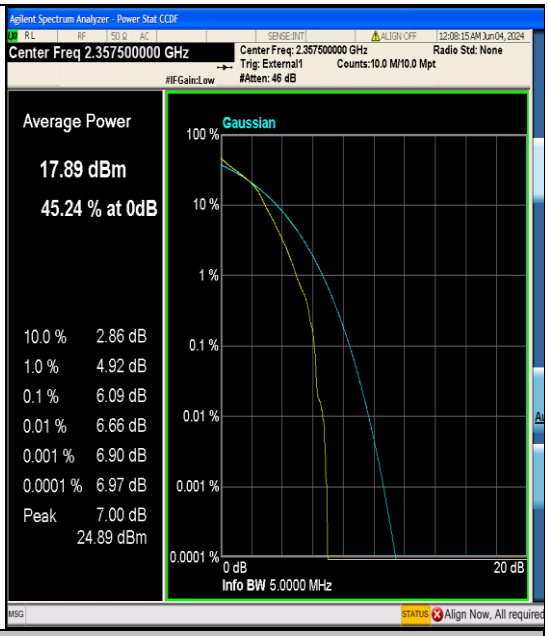
Band40(2350-2360)-5MHz-QPSK-39225-25RB#0-PASS



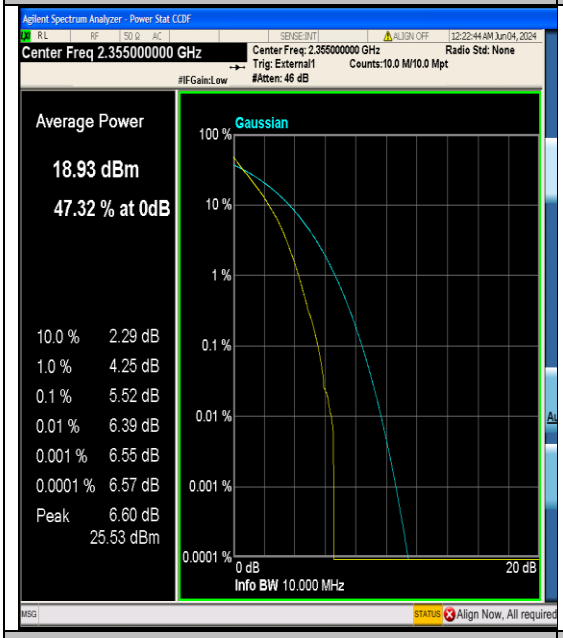
Band40(2350-2360)-5MHz-16QAM-39175-25RB#0-PASS



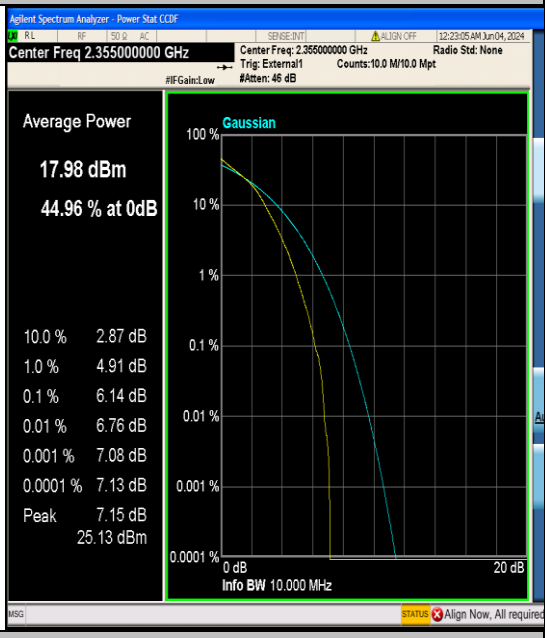
Band40(2350-2360)-5MHz-16QAM-39200-25RB#0-PASS



Band40(2350-2360)-5MHz-16QAM-39225-25RB#0-PASS



Band40(2350-2360)-10MHz-QPSK-39200-50RB#0-PASS



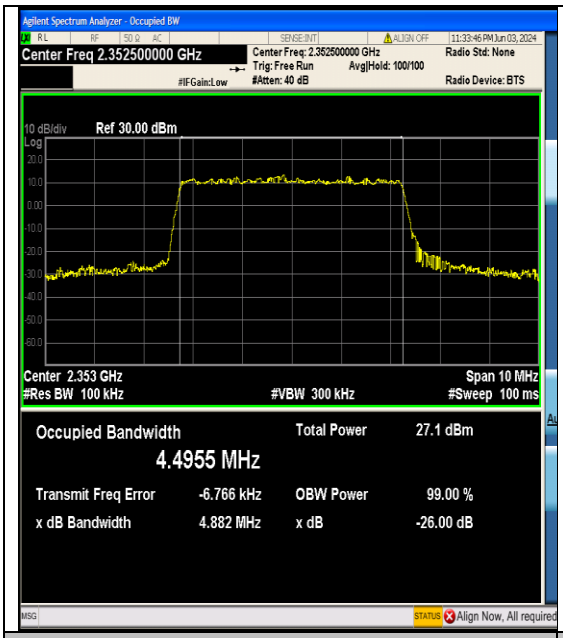
Band40(2350-2360)-10MHz-16QAM-39200-50RB#0-PASS

Appendix C: 26dB Bandwidth and Occupied Bandwidth

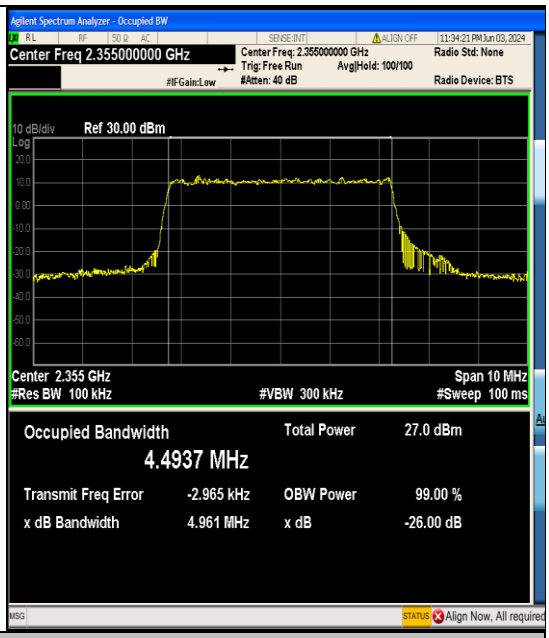
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	4.4955	4.882	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	4.4937	4.961	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	4.4978	4.891	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	4.4880	4.847	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	4.4964	4.835	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	4.5129	4.890	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	8.9685	9.701	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	8.9513	9.680	PASS

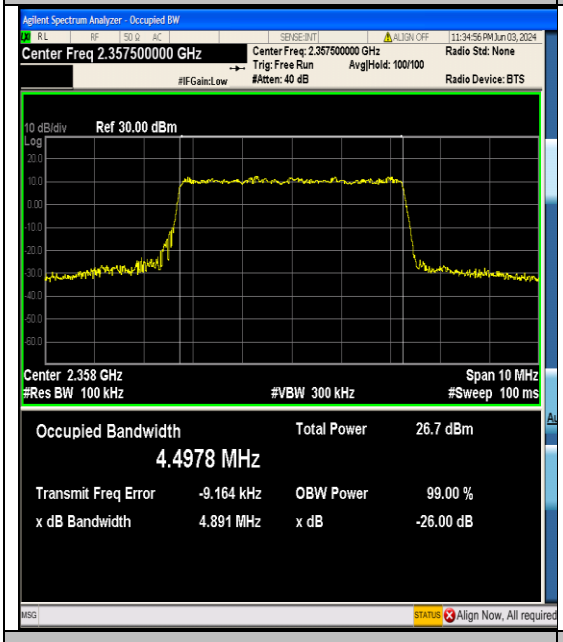
Test Graphs



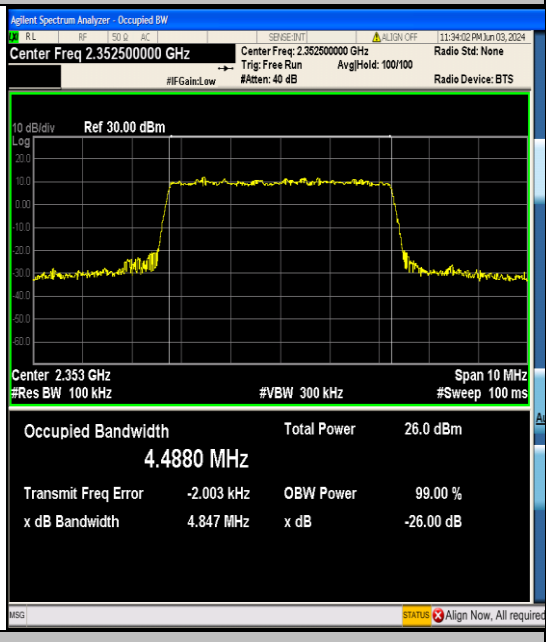
Band40(2350-2360)-5MHz-QPSK-39175-25RB#0-PASS



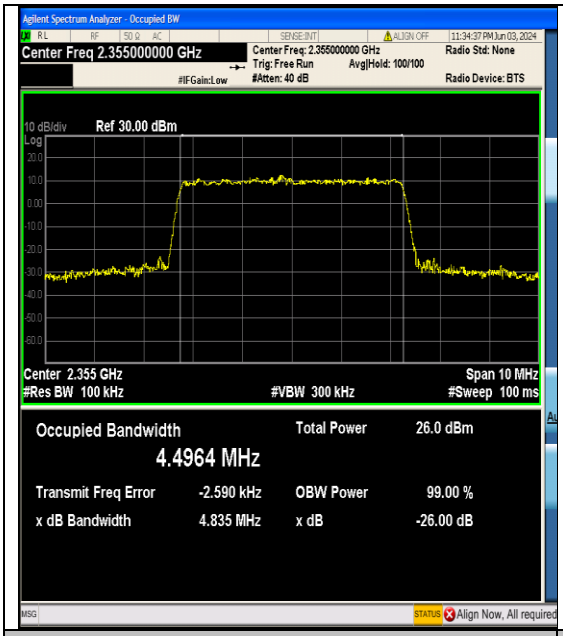
Band40(2350-2360)-5MHz-QPSK-39200-25RB#0-PASS



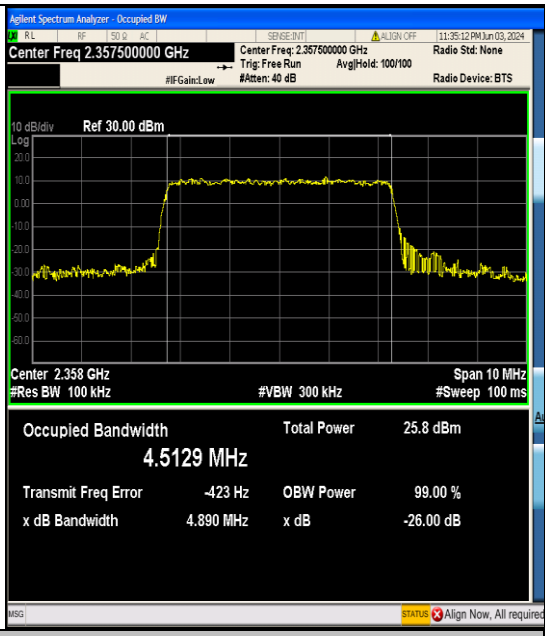
Band40(2350-2360)-5MHz-QPSK-39225-25RB#0-PASS



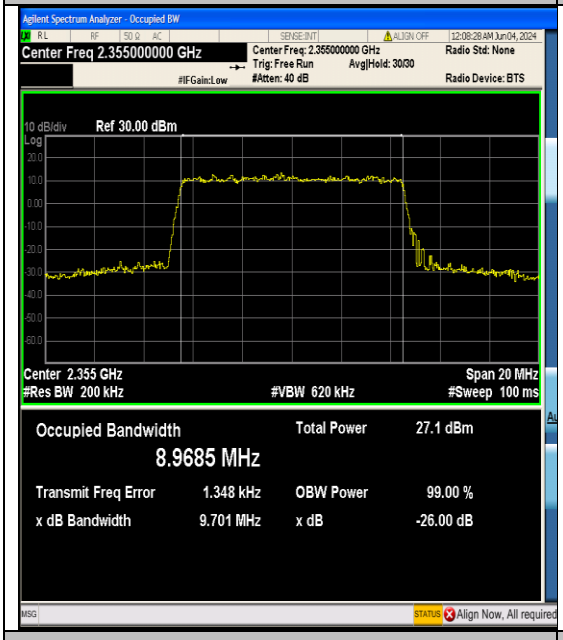
Band40(2350-2360)-5MHz-16QAM-39175-25RB#0-PASS



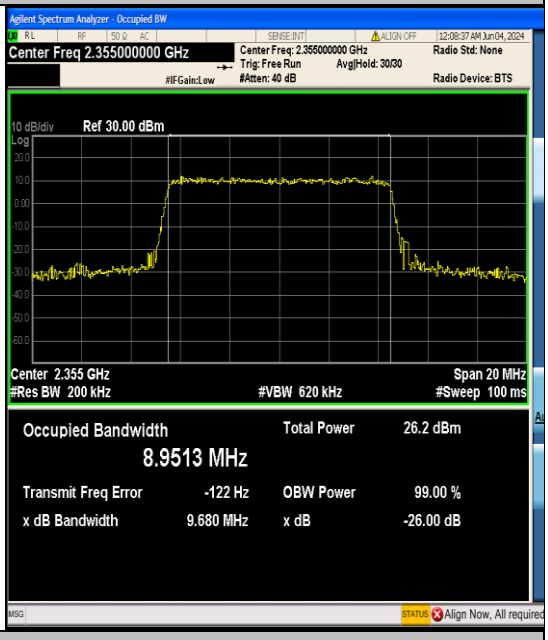
Band40(2350-2360)-5MHz-16QAM-39200-25RB#0-PASS



Band40(2350-2360)-5MHz-16QAM-39225-25RB#0-PASS



Band40(2350-2360)-10MHz-QPSK-39200-50RB#0-PASS



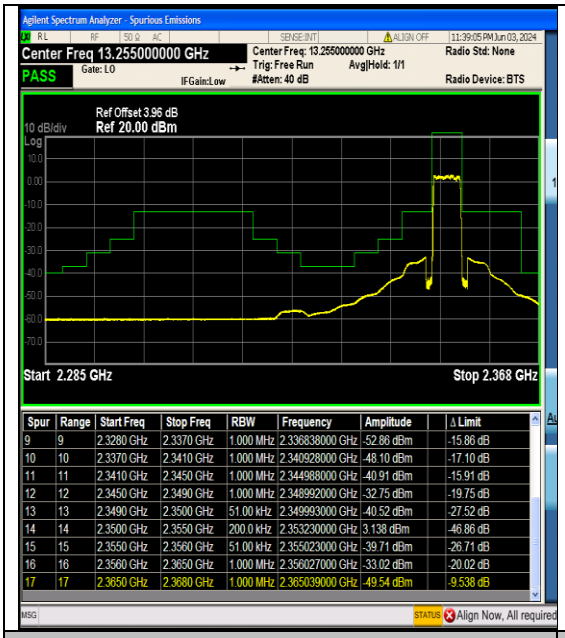
Band40(2350-2360)-10MHz-16QAM-39200-50RB#0-PASS

Appendix D: Band Edge

Test Result

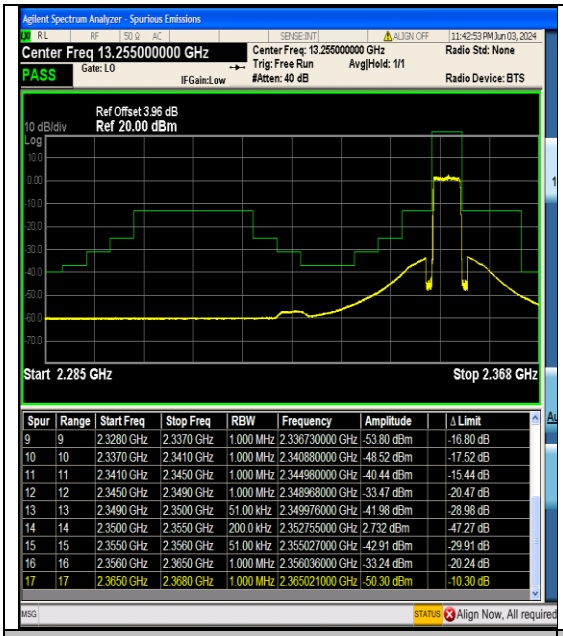
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	-49.54	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	-40.81	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	-50.30	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	-40.32	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	-41.40	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	-41.08	PASS

Test Graphs



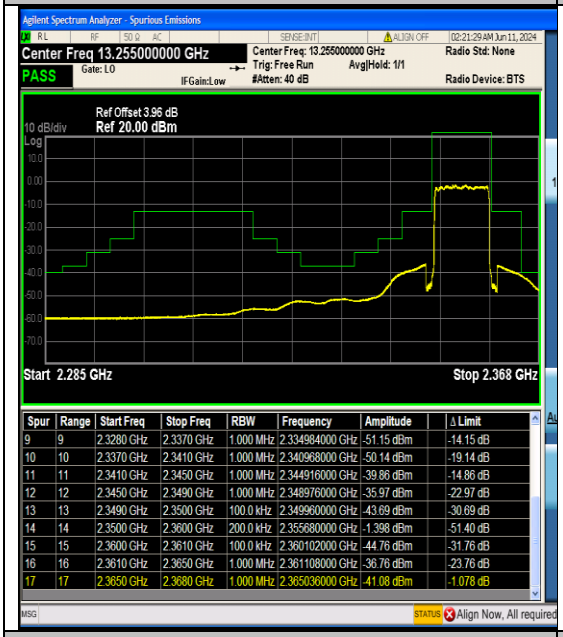
Band40_5MHz_QPSK_39175_25RB#0

Band40_5MHz_QPSK_39225_25RB#0



Band40_5MHz_16QAM_39175_25RB#0

Band40_5MHz_16QAM_39225_25RB#0



Band40_10MHz_16QAM_39200_50RB#0

Band40_10MHz_QPSK_39200_50RB#0

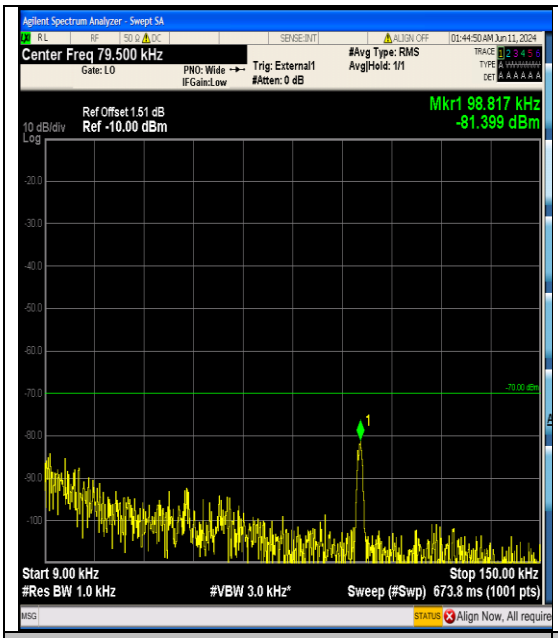
Appendix E: Conducted Spurious Emission

Test Result

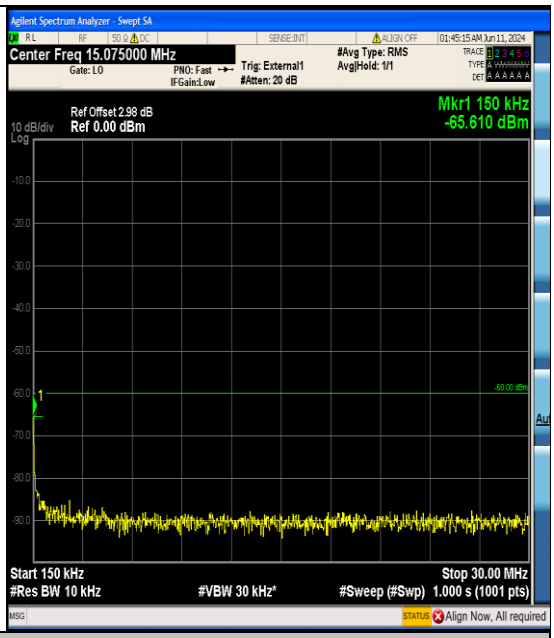
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	0.009~0.15	-81.40	PASS
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	0.15~30	-65.61	PASS
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	30~1000	-66.99	PASS
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	1000~3000	-54.17	PASS
Band40(2350-2360)	5MHz	QPSK	39175	25RB#0	3000~26500	-60.83	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	0.009~0.15	-80.80	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	0.15~30	-65.94	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	30~1000	-67.13	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	1000~3000	-54.28	PASS
Band40(2350-2360)	5MHz	QPSK	39200	25RB#0	3000~26500	-61.01	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	0.009~0.15	-83.85	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	0.15~30	-67.34	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	30~1000	-66.79	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	1000~3000	-54.22	PASS
Band40(2350-2360)	5MHz	QPSK	39225	25RB#0	3000~26500	-60.91	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	0.009~0.15	-84.23	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	0.15~30	-69.99	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	30~1000	-66.86	PASS

Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	1000~3000	-54.15	PASS
Band40(2350-2360)	5MHz	16QAM	39175	25RB#0	3000~26500	-60.91	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	0.009~0.15	-80.40	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	0.15~30	-66.54	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	30~1000	-67.15	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	1000~3000	-54.34	PASS
Band40(2350-2360)	5MHz	16QAM	39200	25RB#0	3000~26500	-60.83	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	0.009~0.15	-85.39	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	0.15~30	-68.40	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	30~1000	-67.01	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	1000~3000	-54.26	PASS
Band40(2350-2360)	5MHz	16QAM	39225	25RB#0	3000~26500	-60.94	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	0.009~0.15	-81.85	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	0.15~30	-67.71	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	30~1000	-66.96	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	1000~3000	-54.22	PASS
Band40(2350-2360)	10MHz	QPSK	39200	50RB#0	3000~26500	-60.80	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	0.009~0.15	-84.44	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	0.15~30	-62.81	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	30~1000	-66.68	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	1000~3000	-54.37	PASS
Band40(2350-2360)	10MHz	16QAM	39200	50RB#0	3000~26500	-60.94	PASS

Test Graphs



Band40_5MHz_QPSK_39175_25RB#0_0.009~0.15_0.009~0.15

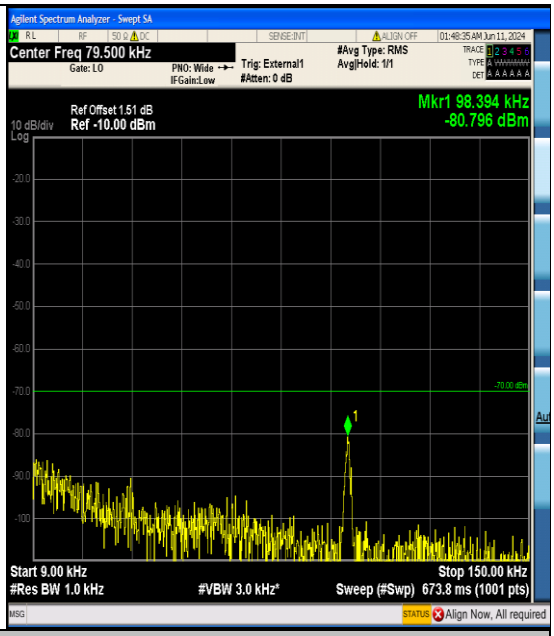


Band40_5MHz_QPSK_39175_25RB#0_0.15~30_0.15~30

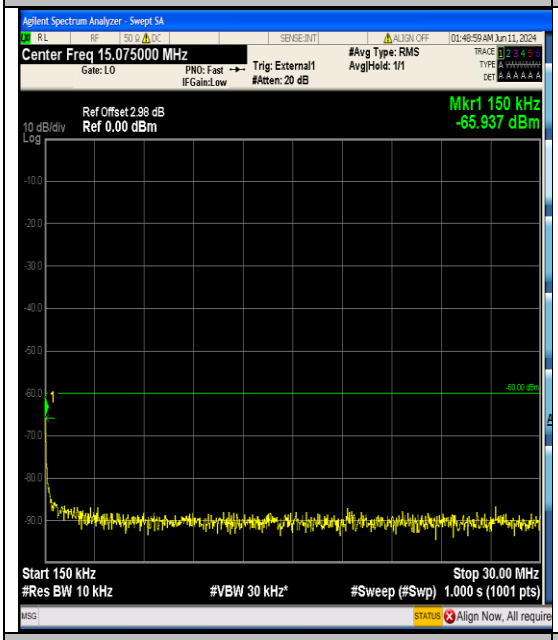
Band40_5MHz_QPSK_39175_25RB#0_30~1000_30~1000

Band40_5MHz_QPSK_39175_25RB#0_1000~3000_1000~3000

Band40_5MHz_QPSK_39175_25RB#0_3000~26500_3000~26500

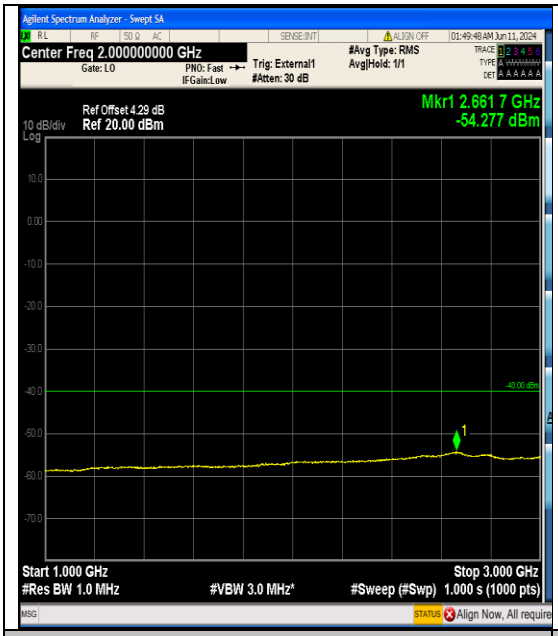


Band40_5MHz_QPSK_39200_25RB#0_0.009~0.15_0.009~0.15



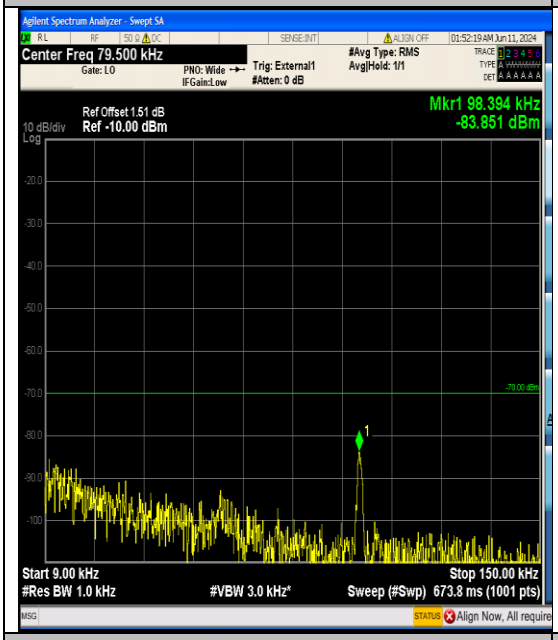
Band40_5MHz_QPSK_39200_25RB#0_0.15~30_0.15~30

Band40_5MHz_QPSK_39200_25RB#0_30~1000_30~1000

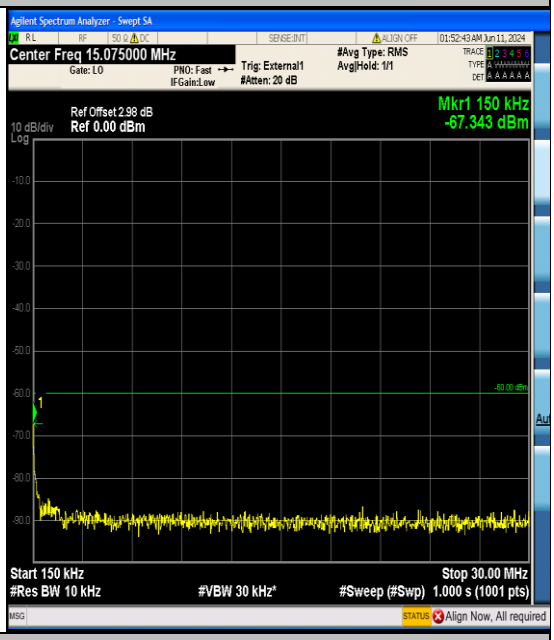


Band40_5MHz_QPSK_39200_25RB#0_1000~3000_1000~3000

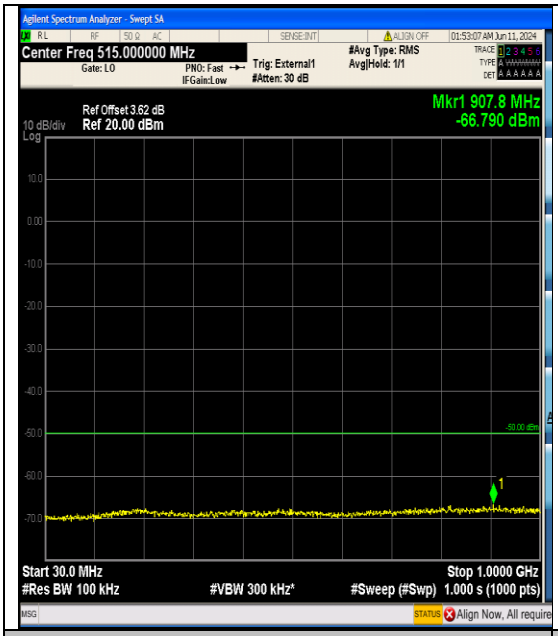
Band40_5MHz_QPSK_39200_25RB#0_3000~26500_3000~26500



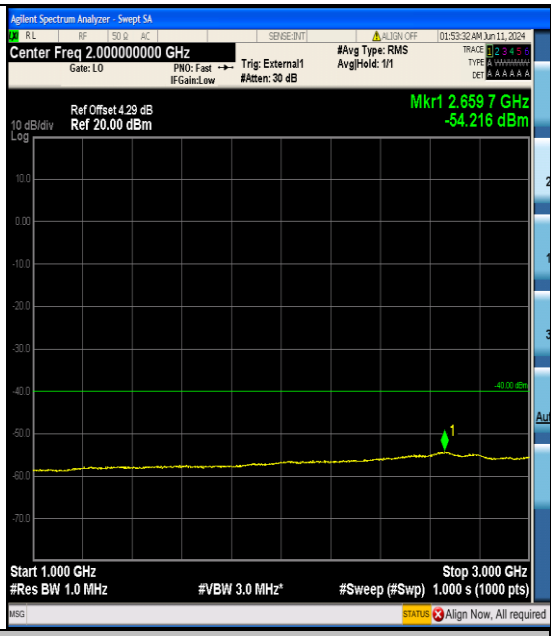
Band40_5MHz_QPSK_39225_25RB#0_0.009~0.15_0.009~0.15



Band40_5MHz_QPSK_39225_25RB#0_0.15~30_0.15~30

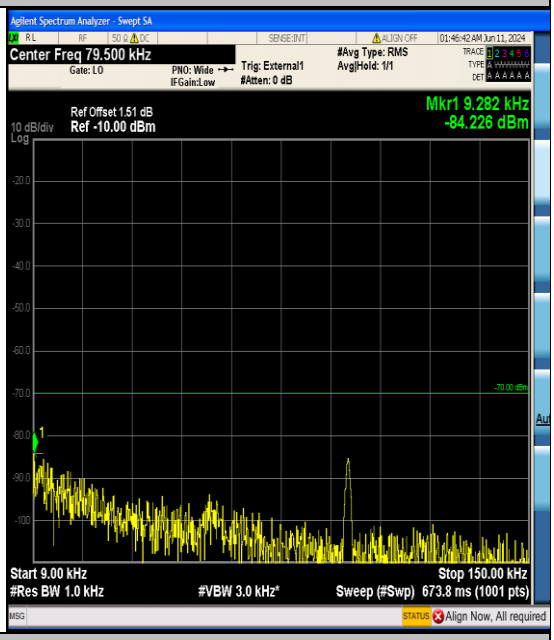


Band40_5MHz_QPSK_39225_25RB#0_30~1000_30~1000

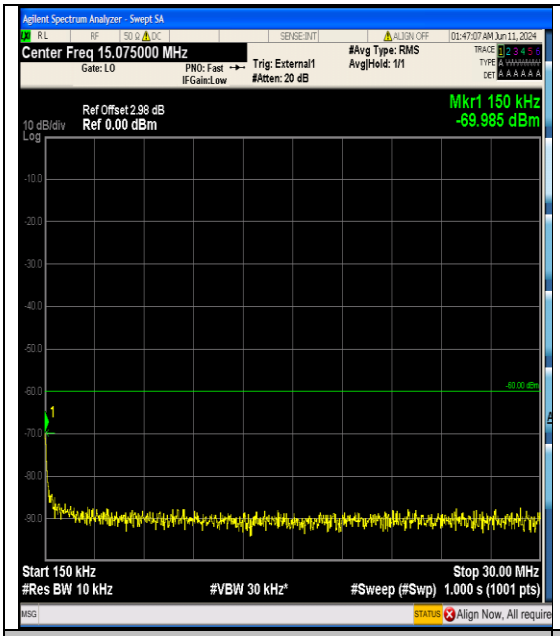


Band40_5MHz_QPSK_39225_25RB#0_1000~3000_1000~3000

Band40_5MHz_QPSK_39225_25RB#0_3000~26500_3000~26500

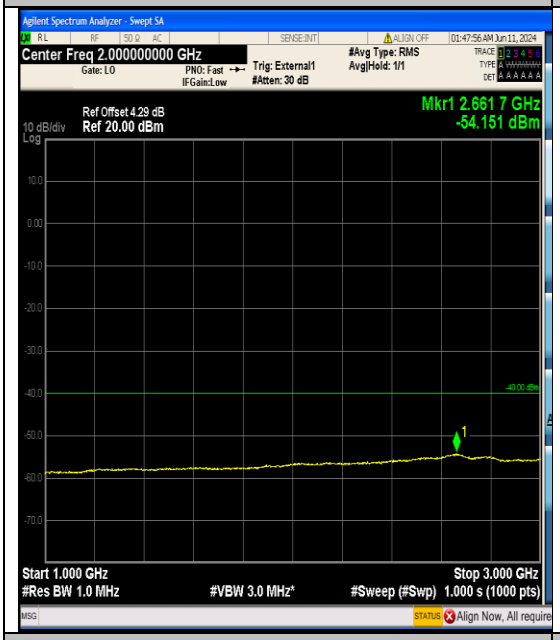


Band40_5MHz_16QAM_39175_25RB#0_0.009~0.15_0.009~0.15



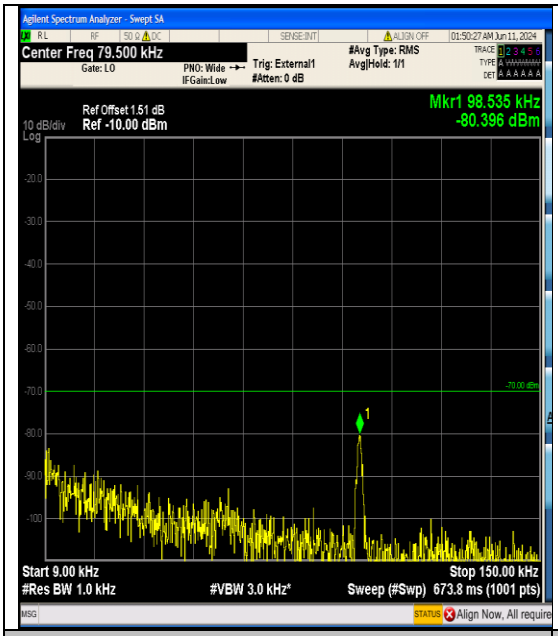
Band40_5MHz_16QAM_39175_25RB#0_0.15~30_0.15~30

Band40_5MHz_16QAM_39175_25RB#0_30~1000_30~1000

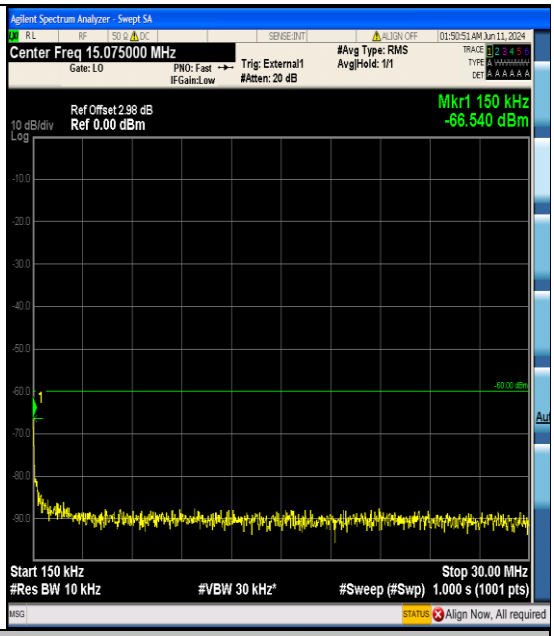


Band40_5MHz_16QAM_39175_25RB#0_1000~3000_1000~3000

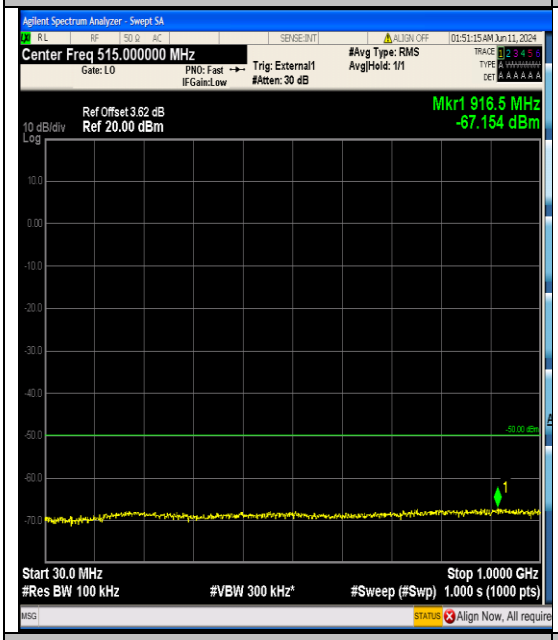
Band40_5MHz_16QAM_39175_25RB#0_3000~26500_3000~26500



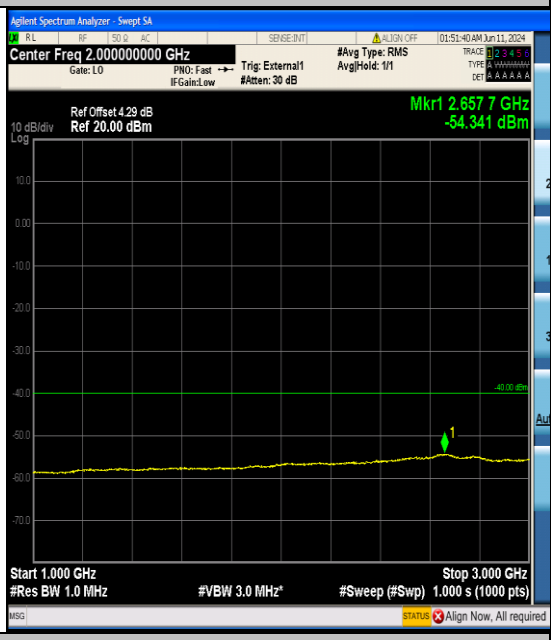
Band40_5MHz_16QAM_39200_25RB#0_0.009~0.15_0.009~0.15



Band40_5MHz_16QAM_39200_25RB#0_0.15~30_0.15~30

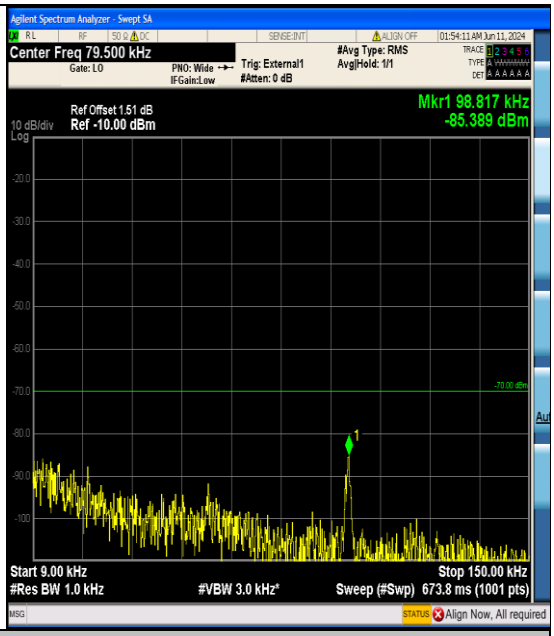


Band40_5MHz_16QAM_39200_25RB#0_30~1000_30~1000

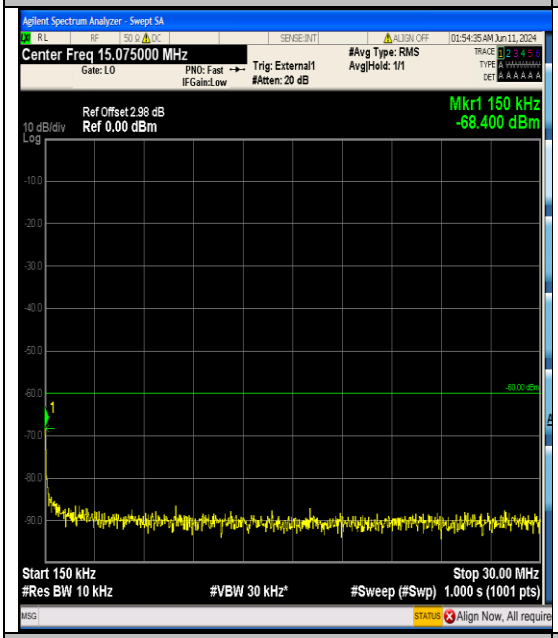


Band40_5MHz_16QAM_39200_25RB#0_1000~3000_1000~3000

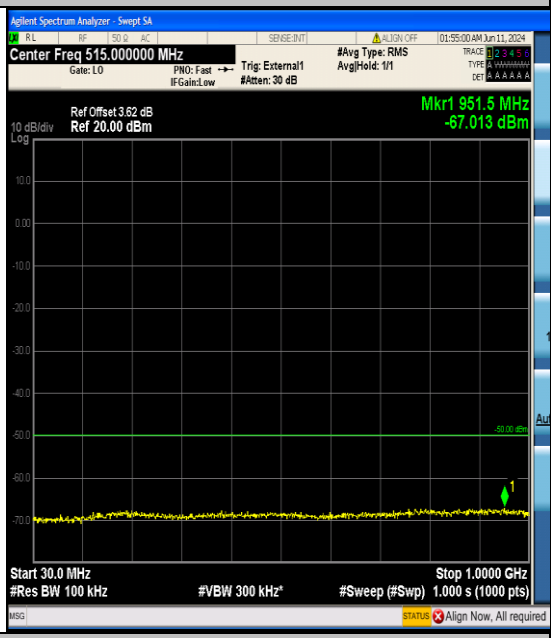
Band40_5MHz_16QAM_39200_25RB#0_3000~26500_3000~26500



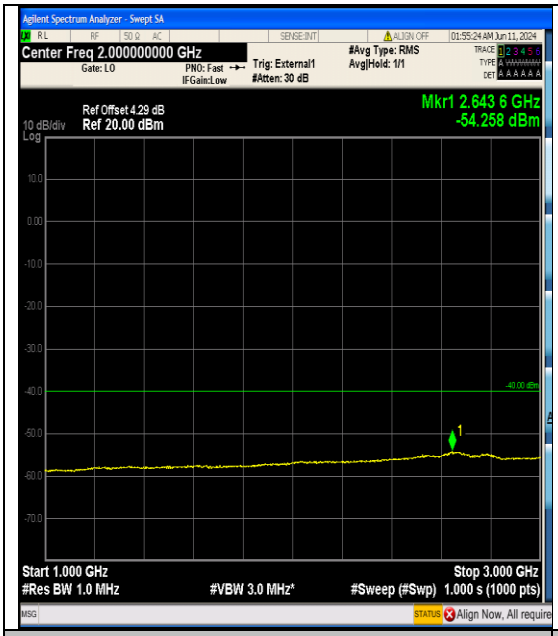
Band40_5MHz_16QAM_39225_25RB#0_0.009~0.15_0.009~0.15



Band40_5MHz_16QAM_39225_25RB#0_0.15~30_0.15~30

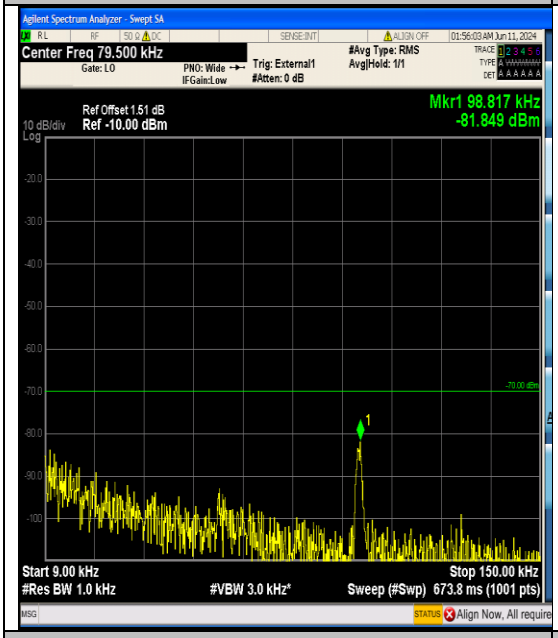


Band40_5MHz_16QAM_39225_25RB#0_30~1000_30~1000

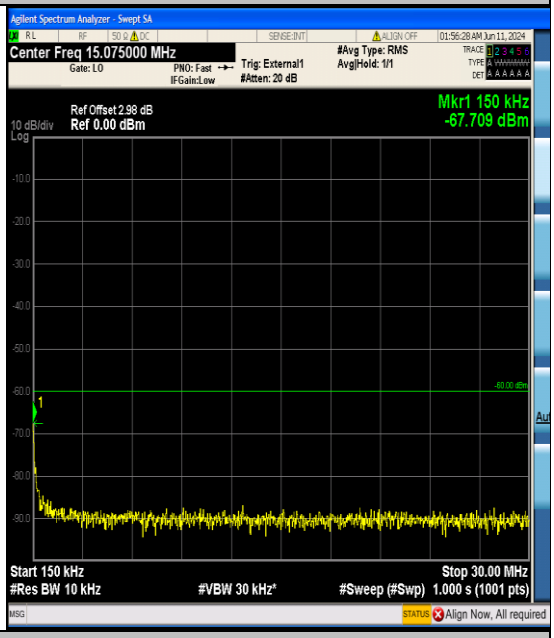


Band40_5MHz_16QAM_39225_25RB#0_1000~3000_1000~3000

Band40_5MHz_16QAM_39225_25RB#0_3000~26500_3000~26500

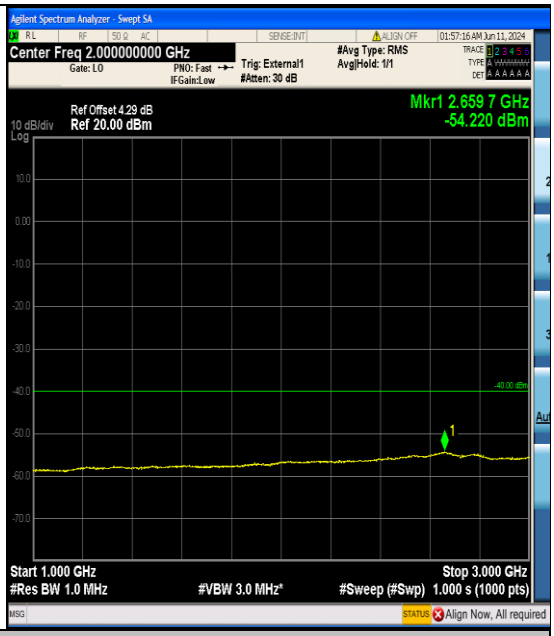


Band40_10MHz_QPSK_39200_50RB#0_0.009~0.15_0.009~0.15



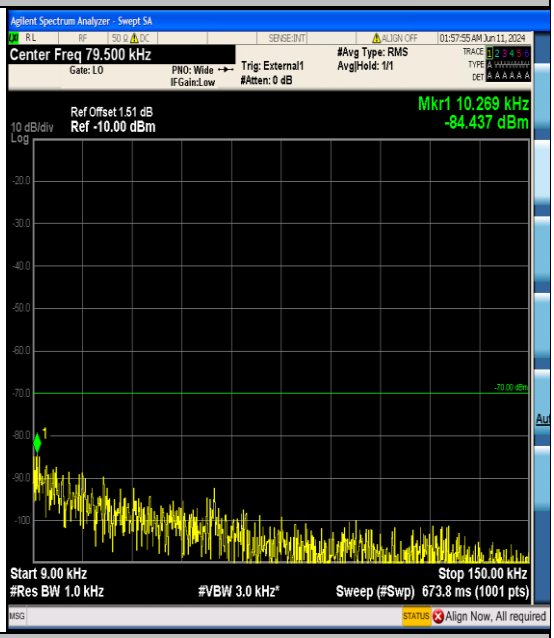
Band40_10MHz_QPSK_39200_50RB#0_0.15~30_0.15~30

Band40_10MHz_QPSK_39200_50RB#0_30~1000_30~1000

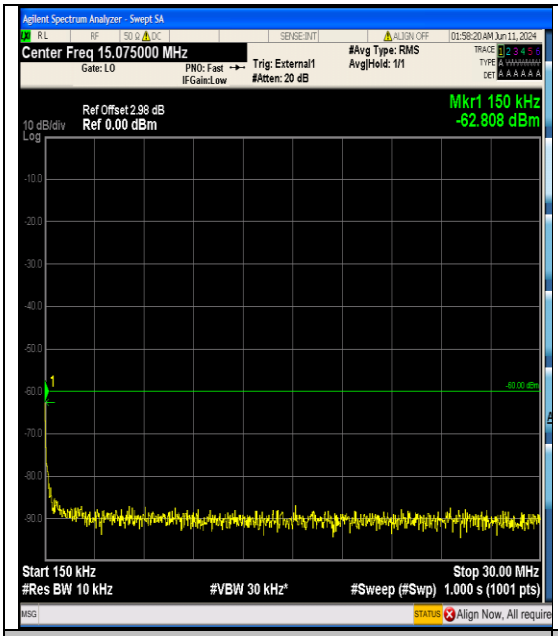


Band40_10MHz_QPSK_39200_50RB#0_1000~3000_1000~3000

Band40_10MHz_QPSK_39200_50RB#0_3000~26500_3000~26500



Band40_10MHz_16QAM_39200_50RB#0_0.009~0.15_0.009~0.15



Band40_10MHz_16QAM_39200_50RB#0_0.15~30_0.15~30

Band40_10MHz_16QAM_39200_50RB#0_30~1000_30~1000

Band40_10MHz_16QAM_39200_50RB#0_1000~3000_1000~3000

Band40_10MHz_16QAM_39200_50RB#0_3000~26500_3000~26500

Appendix F: Frequency Stability

Test Result

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	-30	-45.09	-0.019167	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	-20	-12.39	-0.005267	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	-10	-32.49	-0.013811	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	0	-37.47	-0.015928	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	10	-47.16	-0.020047	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	20	-10.34	-0.004395	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	30	-27.54	-0.011707	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	40	10.70	0.004548	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39175	25RB#0	NV	50	-51.14	-0.021739	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	-30	24.12	0.010242	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	-20	-41.46	-0.017605	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	-10	-44.53	-0.018909	±2.5	PASS

Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	0	-21.97	-0.009329	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	10	32.16	0.013656	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	20	-39.91	-0.016947	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	30	-34.30	-0.014565	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	40	-40.83	-0.017338	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39200	25RB#0	NV	50	-43.80	-0.018599	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	-30	-26.52	-0.011249	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	-20	-28.44	-0.012064	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	-10	-36.01	-0.015275	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	0	-51.24	-0.021735	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	10	-20.91	-0.008870	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	20	-49.21	-0.020874	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	30	-22.72	-0.009637	±2.5	PASS
Band40 (2350-2360)	5MHz	QPSK	39225	25RB#0	NV	40	-25.53	-0.010829	±2.5	PASS
Band40	5MHz	QPSK	39225	25RB#0	NV	50	-50.53	-0.021434	±2.5	PASS

(2350-2360)										
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	-30	-33.25	-0.014134	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	-20	-44.22	-0.018797	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	-10	-45.10	-0.019171	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	0	-14.66	-0.006232	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	10	-30.56	-0.012990	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	20	-32.63	-0.013870	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	30	-20.80	-0.008842	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	40	-23.75	-0.010096	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39175	25RB#0	NV	50	-23.35	-0.009926	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	-30	-33.49	-0.014221	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	-20	-24.93	-0.010586	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	-10	21.13	0.008972	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	0	-25.95	-0.011019	±2.5	PASS
Band40 (2350-	5MHz	16QAM	39200	25RB#0	NV	10	-26.28	-0.011159	±2.5	PASS

2360)										
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	20	-25.79	-0.010951	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	30	-35.29	-0.014985	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	40	-35.22	-0.014955	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39200	25RB#0	NV	50	-44.78	-0.019015	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	-30	-31.53	-0.013374	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	-20	-21.03	-0.008920	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	-10	-30.30	-0.012853	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	0	-27.01	-0.011457	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	10	-44.50	-0.018876	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	20	-31.17	-0.013222	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	30	-22.72	-0.009637	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	40	-21.62	-0.009171	±2.5	PASS
Band40 (2350-2360)	5MHz	16QAM	39225	25RB#0	NV	50	-33.83	-0.014350	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	-30	-34.93	-0.014832	±2.5	PASS

Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	-20	-28.57	-0.012132	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	-10	-45.00	-0.019108	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	0	-18.85	-0.008004	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	10	-39.51	-0.016777	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	20	-19.50	-0.008280	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	30	-36.66	-0.015567	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	40	-38.04	-0.016153	±2.5	PASS
Band40 (2350-2360)	10MHz	QPSK	39200	50RB#0	NV	50	-20.26	-0.008603	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	-30	-37.32	-0.015847	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	-20	-34.30	-0.014565	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	-10	-15.13	-0.006425	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	0	-45.88	-0.019482	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	10	-19.33	-0.008208	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	20	-23.03	-0.009779	±2.5	PASS
Band40	10MHz	16QAM	39200	50RB#0	NV	30	-23.73	-0.010076	±2.5	PASS

(2350-2360)										
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	40	-41.13	-0.017465	±2.5	PASS
Band40 (2350-2360)	10MHz	16QAM	39200	50RB#0	NV	50	-31.16	-0.013231	±2.5	PASS