



Appendix F: Conducted Spurious Emission

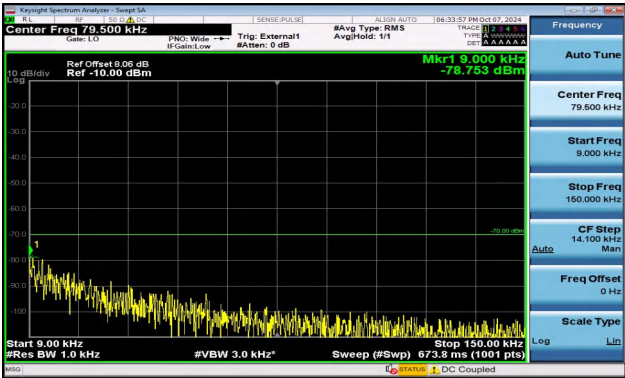
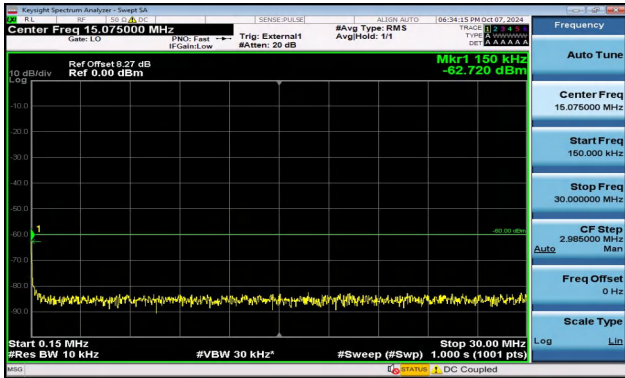
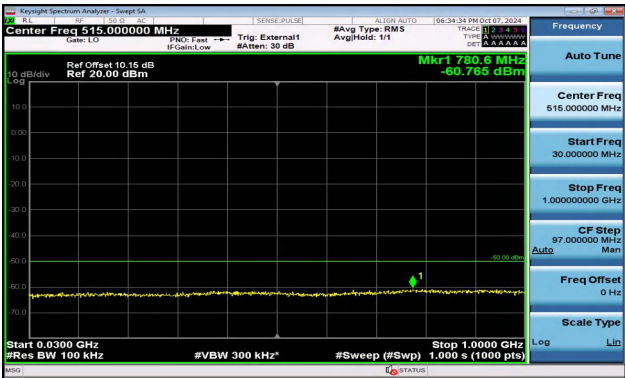
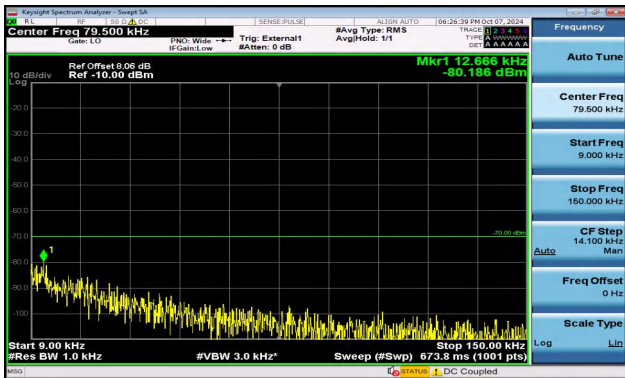
Test Result

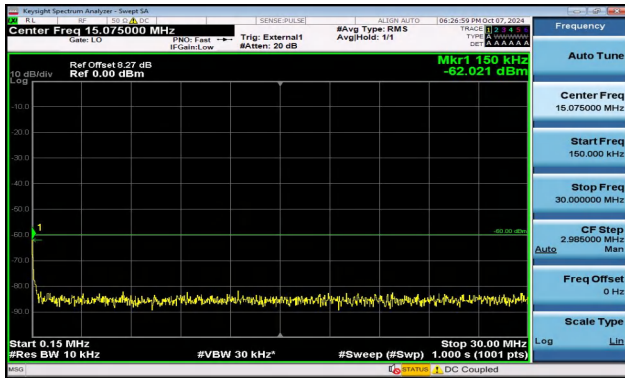
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	1RB#0	0.009~0.15	-78.75	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#0	0.15~30	-62.72	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#0	30~1000	-60.77	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#0	1000~3000	-47.09	PASS
40(2305-2315)	5MHz	QPSK	38725	1RB#0	3000~26500	-43.24	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	0.009~0.15	-80.19	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	0.15~30	-62.02	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	30~1000	-60.77	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	1000~3000	-46.90	PASS
40(2305-2315)	5MHz	16QAM	38725	1RB#0	3000~26500	-43.39	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	0.009~0.15	-77.90	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	0.15~30	-63.30	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	30~1000	-60.24	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	1000~3000	-46.97	PASS
40(2305-2315)	5MHz	QPSK	38750	1RB#0	3000~26500	-43.40	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	0.009~0.15	-80.05	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	0.15~30	-61.79	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	30~1000	-60.70	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	1000~3000	-47.08	PASS
40(2305-2315)	5MHz	16QAM	38750	1RB#0	3000~26500	-43.38	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	0.009~0.15	-77.98	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	0.15~30	-62.47	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	30~1000	-60.92	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	1000~3000	-47.00	PASS
40(2305-2315)	5MHz	QPSK	38775	1RB#0	3000~26500	-43.39	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	0.009~0.15	-76.79	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	0.15~30	-61.75	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	30~1000	-60.84	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	1000~3000	-47.03	PASS
40(2305-2315)	5MHz	16QAM	38775	1RB#0	3000~26500	-43.46	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	0.009~0.15	-78.57	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	0.15~30	-62.70	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	30~1000	-60.76	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	1000~3000	-46.97	PASS
40(2305-2315)	10MHz	QPSK	38750	1RB#0	3000~26500	-43.39	PASS



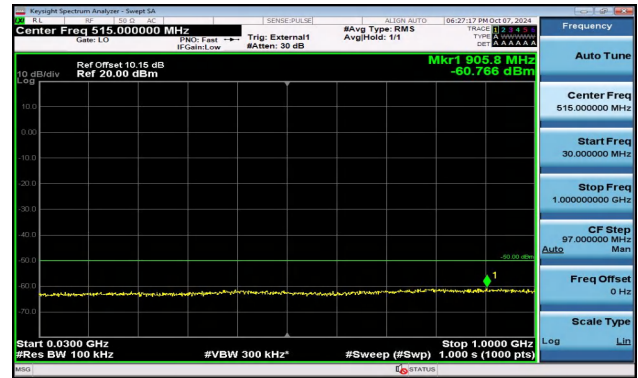
40(2305-2315)	10MHz	16QAM	38750	1RB#0	0.009~0.15	-79.17	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	0.15~30	-63.87	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	30~1000	-60.66	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	1000~3000	-46.96	PASS
40(2305-2315)	10MHz	16QAM	38750	1RB#0	3000~26500	-43.52	PASS

Test Graphs

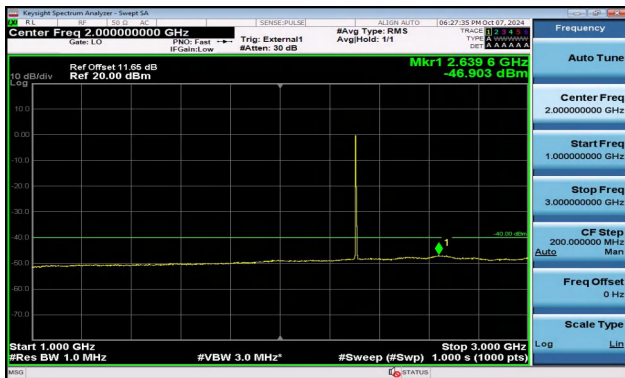
	
Band40_5MHz_QPSK_38725_1RB#0_0.009~0.15_0.009~0.15	Band40_5MHz_QPSK_38725_1RB#0_0.15~30_0.15~30
15	
	
Band40_5MHz_QPSK_38725_1RB#0_30~1000_30~1000	Band40_5MHz_QPSK_38725_1RB#0_1000~3000_1000~3000
	0
	
Band40_5MHz_QPSK_38725_1RB#0_3000~26500_3000~26500	Band40_5MHz_16QAM_38725_1RB#0_0.009~0.15_0.009~0.15
6500	15



Band40_5MHz_16QAM_38725_1RB#0_0.15~30_0.15~30



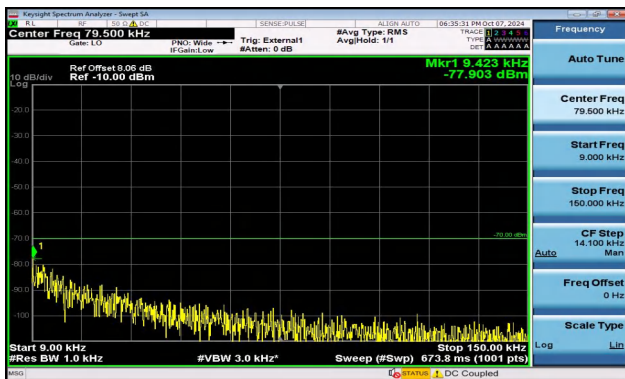
Band40_5MHz_16QAM_38725_1RB#0_30~1000_30~1000



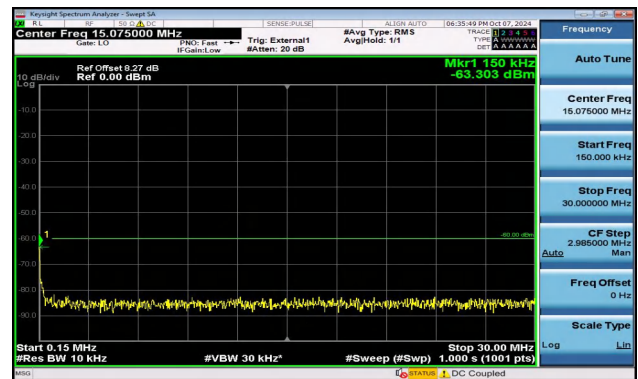
Band40_5MHz_16QAM_38725_1RB#0_1000~3000_1000~3000



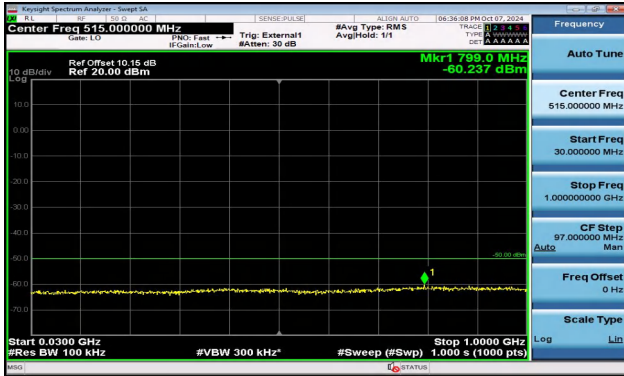
Band40_5MHz_16QAM_38725_1RB#0_3000~26500_3000~26500



Band40_5MHz_QPSK_38750_1RB#0_0.009~0.15_0.009~0.15



Band40_5MHz_QPSK_38750_1RB#0_0.15~30_0.15~30



Band40_5MHz_QPSK_38750_1RB#0_30~1000_30~1000



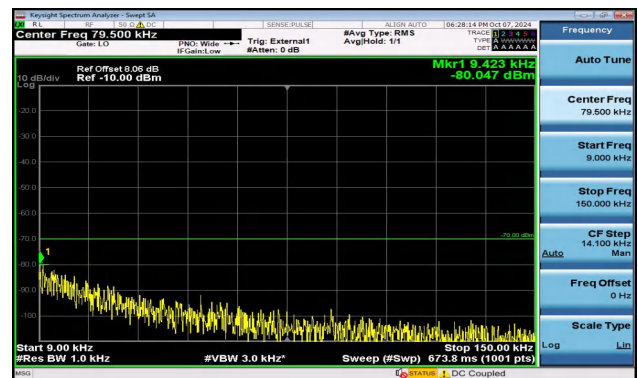
Band40_5MHz_QPSK_38750_1RB#0_1000~3000_1000~300

0



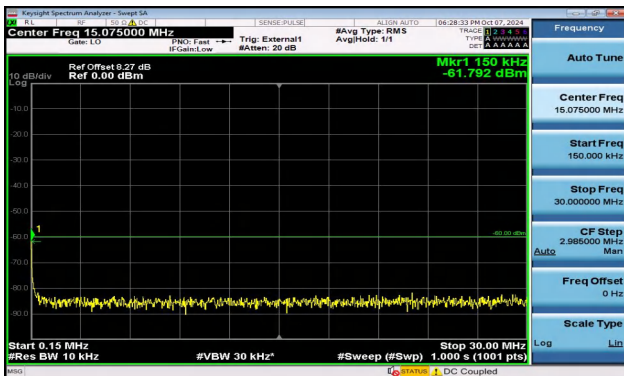
Band40_5MHz_QPSK_38750_1RB#0_3000~26500_3000~2

6500

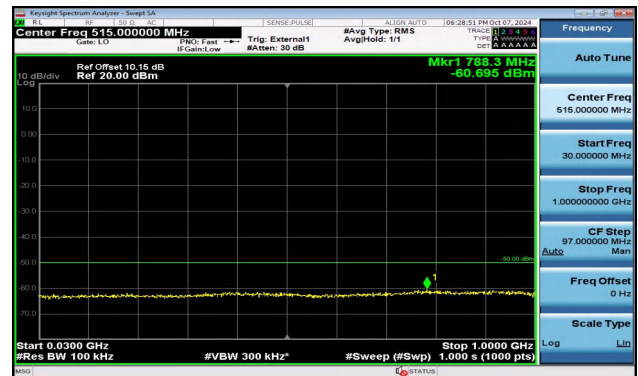


Band40_5MHz_16QAM_38750_1RB#0_0.009~0.15_0.009~0.

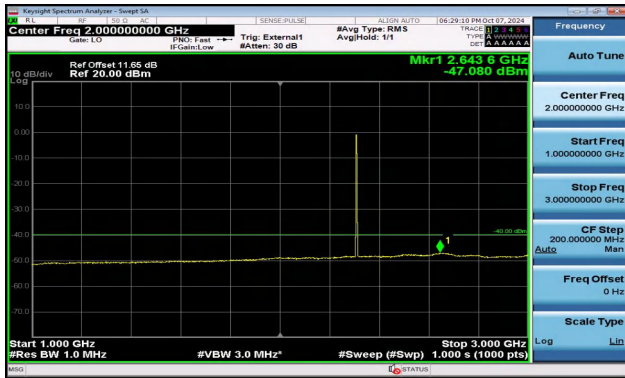
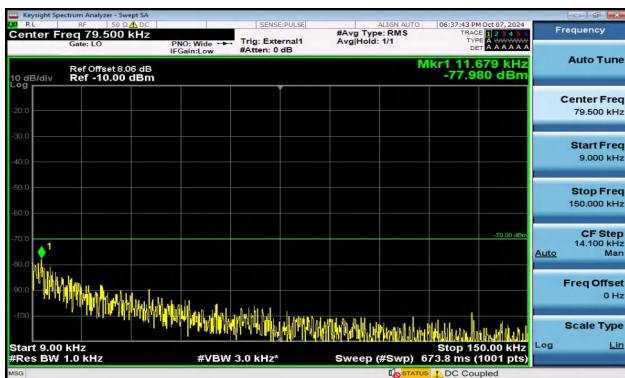
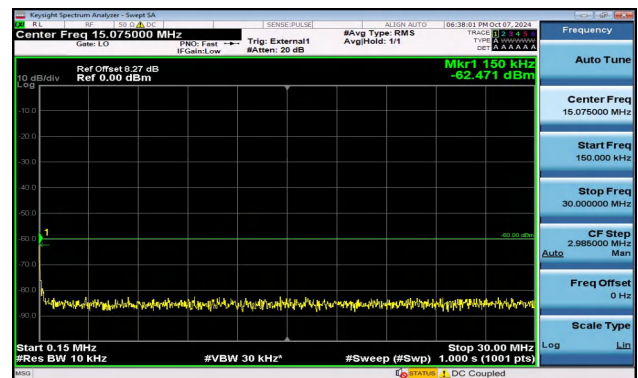
15



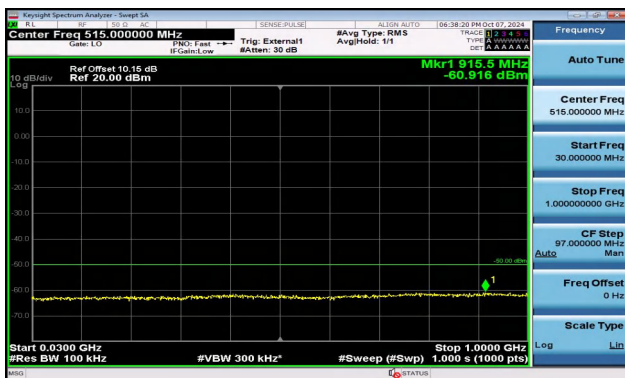
Band40_5MHz_16QAM_38750_1RB#0_0.15~30_0.15~30



Band40_5MHz_16QAM_38750_1RB#0_30~1000_30~1000

Band40_5MHz_16QAM_38750_1RB#0_1000~3000_1000~3
000Band40_5MHz_16QAM_38750_1RB#0_3000~26500_3000~2
6500Band40_5MHz_QPSK_38775_1RB#0_0.009~0.15_0.009~0.
15

Band40_5MHz_QPSK_38775_1RB#0_0.15~30_0.15~30

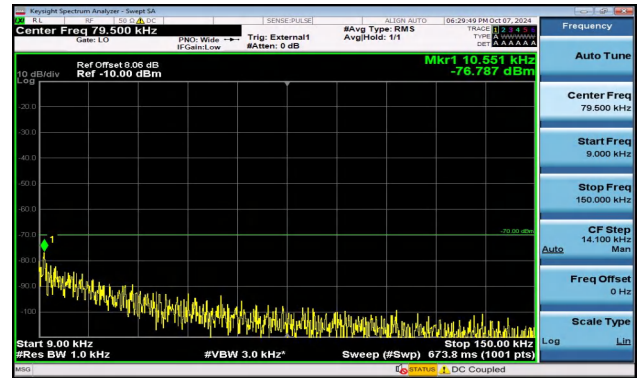


Band40_5MHz_QPSK_38775_1RB#0_30~1000_30~1000

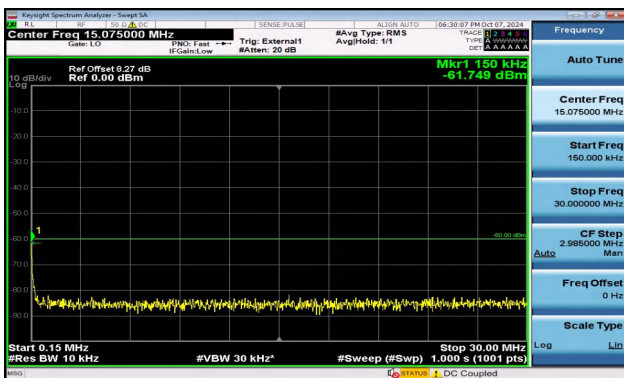
Band40_5MHz_QPSK_38775_1RB#0_1000~3000_1000~300
0



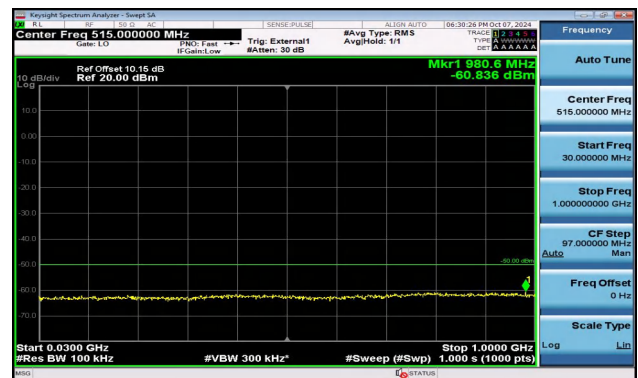
Band40_5MHz_QPSK_38775_1RB#0_3000~26500_3000~26500



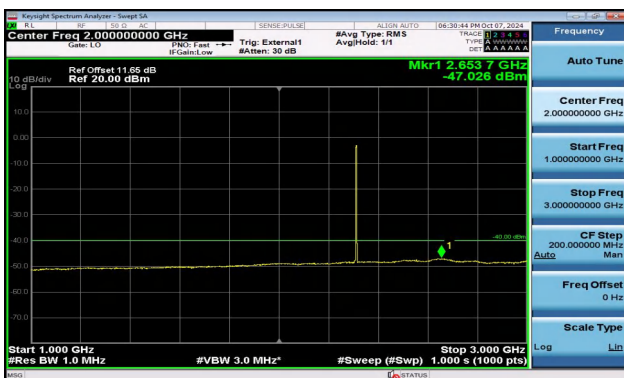
Band40_5MHz_16QAM_38775_1RB#0_0.009~0.15_0.009~0.15



Band40_5MHz_QPSK_38775_1RB#0_0.009~0.15_0.009~0.15



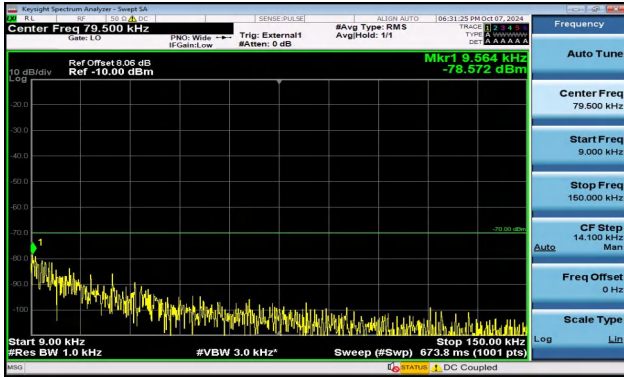
Band40_5MHz_16QAM_38775_1RB#0_0.15~30_0.15~30



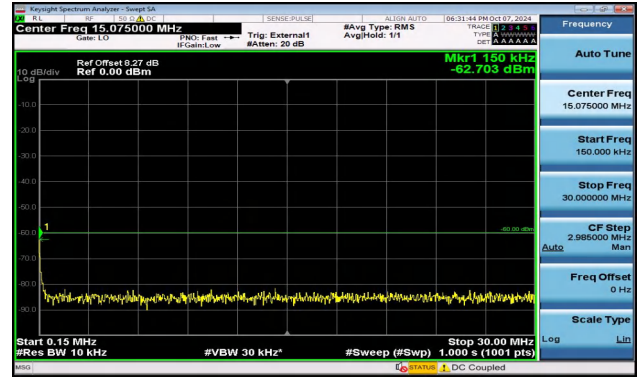
Band40_5MHz_QPSK_38775_1RB#0_1000~3000_1000~3000



Band40_5MHz_16QAM_38775_1RB#0_3000~26500_3000~26500



Band40_10MHz_QPSK_38750_1RB#0_0.009~0.15_0.009~0.15



Band40_10MHz_QPSK_38750_1RB#0_0.15~30_0.15~30



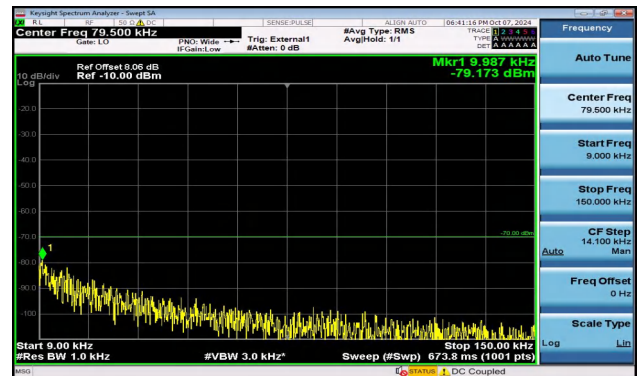
Band40_10MHz_QPSK_38750_1RB#0_30~1000_30~1000



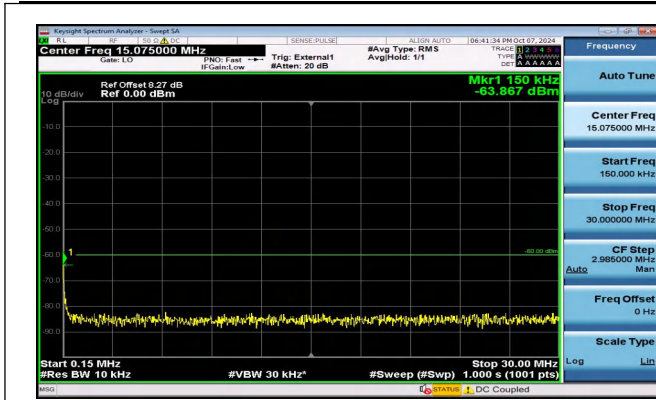
Band40_10MHz_QPSK_38750_1RB#0_1000~3000_1000~3000



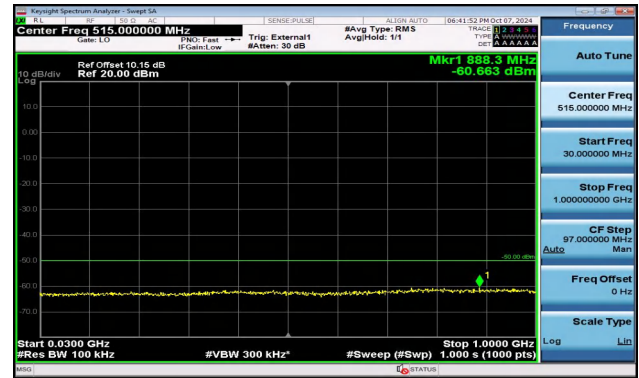
Band40_10MHz_QPSK_38750_1RB#0_3000~26500_3000~26500



Band40_10MHz_16QAM_38750_1RB#0_0.009~0.15_0.009~0.15



Band40_10MHz_16QAM_38750_1RB#0_0.15~30_0.15~30



Band40_10MHz_16QAM_38750_1RB#0_30~1000_30~1000



Band40_10MHz_16QAM_38750_1RB#0_1000~3000_1000~3000



Band40_10MHz_16QAM_38750_1RB#0_3000~26500_3000~26500



Appendix G: Frequency Stability

Test Result

Band	Bandwidth h	Modulation	Channel	RB Configure	Voltage		Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
					Voltage [Vdc]	Temperature (°C)				
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VN	NT	-14.33	-0.006210	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VL	NT	-87.78	-0.038041	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	VH	NT	41.89	0.018154	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VN	NT	6.27	0.002717	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VL	NT	-6.71	-0.002908	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	VH	NT	6.61	0.002865	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VN	NT	13.15	0.005693	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VL	NT	5.32	0.002303	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	VH	NT	9.70	0.004199	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VN	NT	8.70	0.003766	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VL	NT	5.76	0.002494	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	VH	NT	10.11	0.004377	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VN	NT	6.52	0.002819	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VL	NT	-8.00	-0.003459	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	VH	NT	-8.30	-0.003589	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	VN	NT	-5.65	-0.002443	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	VL	NT	-4.35	-0.001881	±2.5	PASS



40(2305-2315)	5MHz	16QAM	38775	25RB#0	VH	NT	7.80	0.003373	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VN	NT	-17.60	-0.007619	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VL	NT	-13.73	-0.005944	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	VH	NT	-40.30	-0.017446	±2.5	PASS

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-30	-7.62	-0.003302	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-20	-5.48	-0.002375	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	-10	48.42	0.020984	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	0	-73.79	-0.031978	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	10	-7.71	-0.003341	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	20	5.09	0.002206	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	30	15.34	0.006648	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	40	13.32	0.005772	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38725	25RB#0	NV	50	5.28	0.002288	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-30	7.08	0.003068	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-20	4.61	0.001998	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	-10	5.39	0.002336	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	0	8.01	0.003471	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	10	11.86	0.005140	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	20	6.45	0.002795	±2.5	PASS



40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	30	9.60	0.004160	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	40	5.36	0.002323	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38725	25RB#0	NV	50	8.67	0.003757	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-30	-9.68	-0.004190	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-20	8.11	0.003511	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	-10	9.21	0.003987	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	0	8.75	0.003788	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	10	-8.98	-0.003887	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	20	7.15	0.003095	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	30	-7.34	-0.003177	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	40	-6.25	-0.002706	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38750	25RB#0	NV	50	-6.92	-0.002996	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-30	10.59	0.004584	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-20	-11.96	-0.005177	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	-10	-7.60	-0.003290	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	0	3.43	0.001485	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	10	-2.83	-0.001225	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	20	-8.00	-0.003463	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	30	9.98	0.004320	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	40	4.26	0.001844	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38750	25RB#0	NV	50	7.87	0.003407	±2.5	PASS



40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-30	8.60	0.003719	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-20	10.36	0.004480	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	-10	8.58	0.003710	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	0	8.90	0.003849	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	10	10.61	0.004588	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	20	-10.39	-0.004493	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	30	9.24	0.003996	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	40	-7.72	-0.003338	±2.5	PASS
40(2305-2315)	5MHz	QPSK	38775	25RB#0	NV	50	-61.76	-0.026707	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-30	8.68	0.003754	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-20	-7.31	-0.003161	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	-10	11.14	0.004817	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	0	8.04	0.003477	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	10	5.06	0.002188	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	20	4.86	0.002102	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	30	7.78	0.003364	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	40	-9.80	-0.004238	±2.5	PASS
40(2305-2315)	5MHz	16QAM	38775	25RB#0	NV	50	9.91	0.004285	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-30	-14.33	-0.006203	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-20	-16.58	-0.007177	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	-10	-11.09	-0.004801	±2.5	PASS



40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	0	-15.71	-0.006801	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	10	-14.73	-0.006377	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	20	-13.46	-0.005827	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	30	-14.08	-0.006095	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	40	-9.58	-0.004147	±2.5	PASS
40(2305-2315)	10MHz	QPSK	38750	50RB#0	NV	50	-15.39	-0.006662	±2.5	PASS