

Appendix-B LTE Band38

Appendix A: Effective (Isotropic) Radiated Power Output Data

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	23.31	25.02	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.36	24.07	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	22.93	24.64	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	22.63	24.34	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.42	25.13	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.67	24.38	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.07	24.78	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	22.39	24.1	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	22.87	24.58	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.66	24.37	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.20	24.91	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.40	25.11	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	22.67	24.38	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.46	23.17	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.22	23.93	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.93	23.64	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	22.79	24.5	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.71	23.42	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.44	24.15	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.68	23.39	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.18	23.89	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.80	23.51	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.63	24.34	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.78	24.49	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	23.47	25.18	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.34	24.05	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.28	24.99	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	22.51	24.22	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	23.64	25.35	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.62	24.33	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.38	25.09	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.38	24.09	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.39	24.1	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.62	24.33	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.41	25.12	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	23.48	25.19	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.71	24.42	33.00	PASS

Band38	10MHz	16QAM	37800	27RB#0	21.61	23.32	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.49	24.2	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	21.81	23.52	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	23.02	24.73	33.00	PASS
Band38	10MHz	16QAM	38000	27RB#0	21.65	23.36	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.70	24.41	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	21.66	23.37	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	21.71	23.42	33.00	PASS
Band38	10MHz	16QAM	38200	27RB#0	21.77	23.48	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.72	24.43	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.76	24.47	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.40	25.11	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.32	24.03	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	22.96	24.67	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	22.73	24.44	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.78	25.49	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.60	24.31	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.15	24.86	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.58	24.29	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	22.39	24.1	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.83	24.54	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.42	25.13	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.65	25.36	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.46	24.17	33.00	PASS
Band38	15MHz	16QAM	37825	27RB#0	21.61	23.32	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.14	23.85	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	21.90	23.61	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.98	24.69	33.00	PASS
Band38	15MHz	16QAM	38000	27RB#0	22.03	23.74	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.29	24	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	21.71	23.42	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	21.48	23.19	33.00	PASS
Band38	15MHz	16QAM	38175	27RB#0	21.62	23.33	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.56	24.27	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.80	24.51	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.74	24.45	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.19	23.9	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.27	24.98	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.15	23.86	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	22.98	24.69	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.58	24.29	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	23.32	25.03	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.35	24.06	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	21.34	23.05	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.57	24.28	33.00	PASS

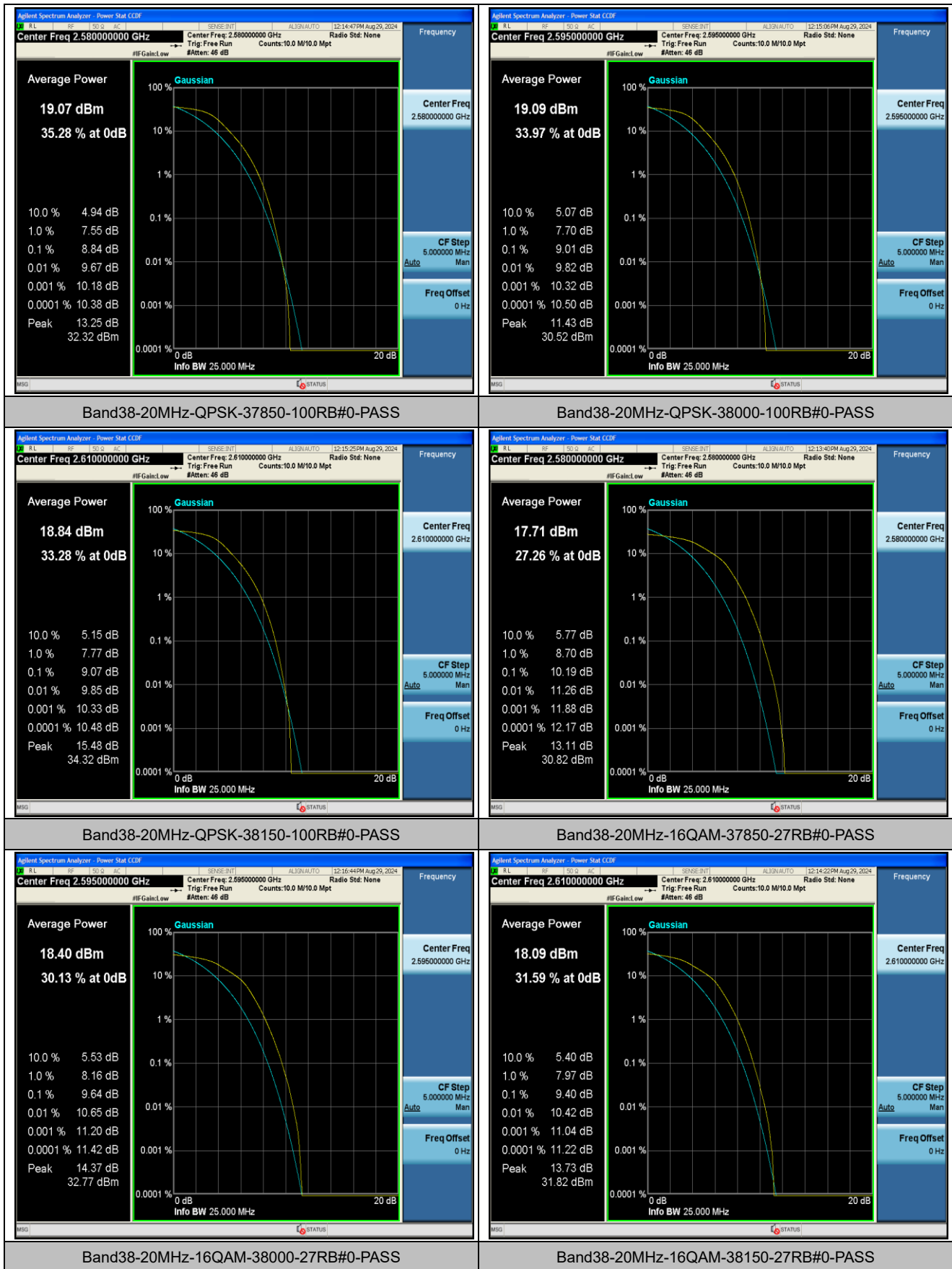
Band38	20MHz	QPSK	38150	1RB#49	23.47	25.18	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.98	24.69	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	21.82	23.53	33.00	PASS
Band38	20MHz	16QAM	37850	27RB#0	21.54	23.25	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.36	24.07	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	21.34	23.05	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	22.64	24.35	33.00	PASS
Band38	20MHz	16QAM	38000	27RB#0	21.78	23.49	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.39	24.1	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	21.39	23.1	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.66	24.37	33.00	PASS
Band38	20MHz	16QAM	38150	27RB#0	21.49	23.2	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.57	24.28	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.07	23.78	33.00	PASS

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

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	20MHz	QPSK	37850	100RB#0	8.39	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.40	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.41	13	PASS
Band38	20MHz	16QAM	37850	27RB#0	8.42	13	PASS
Band38	20MHz	16QAM	38000	27RB#0	8.40	13	PASS
Band38	20MHz	16QAM	38150	27RB#0	8.40	13	PASS

Test Graphs

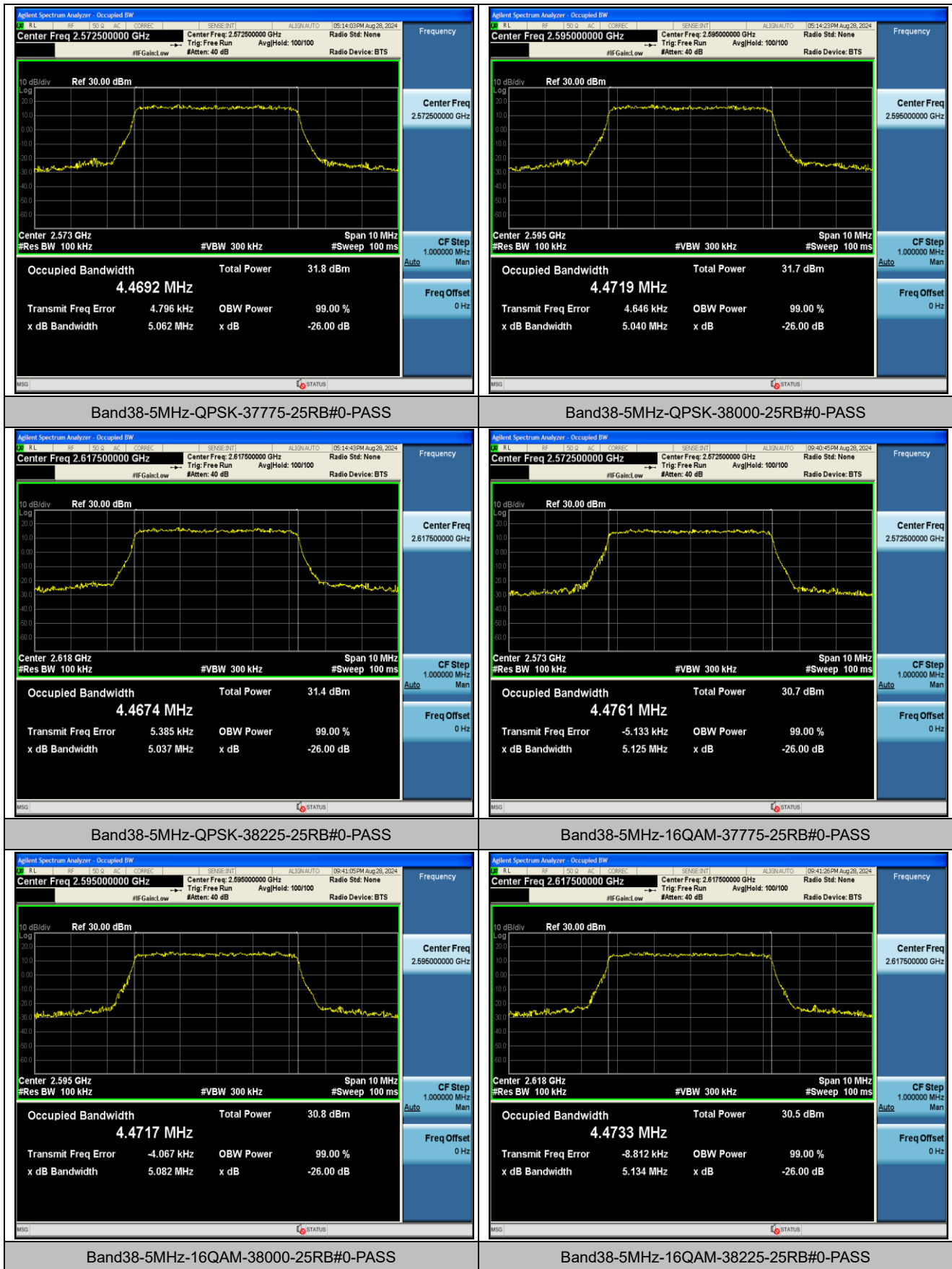


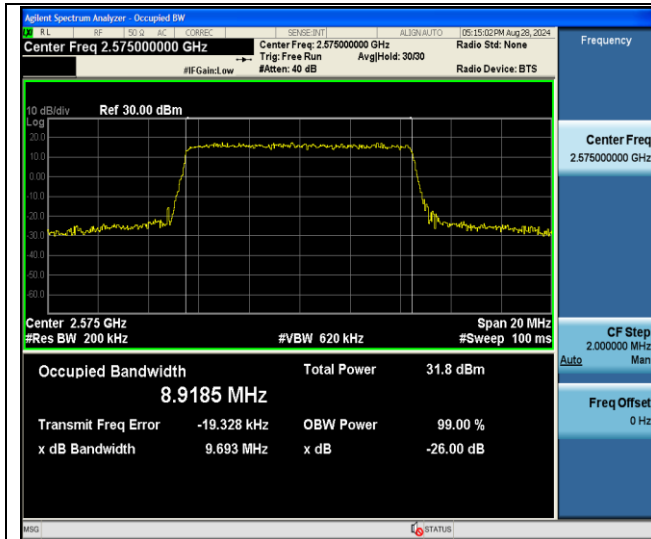
26dB Bandwidth and Occupied Bandwidth

Test Result

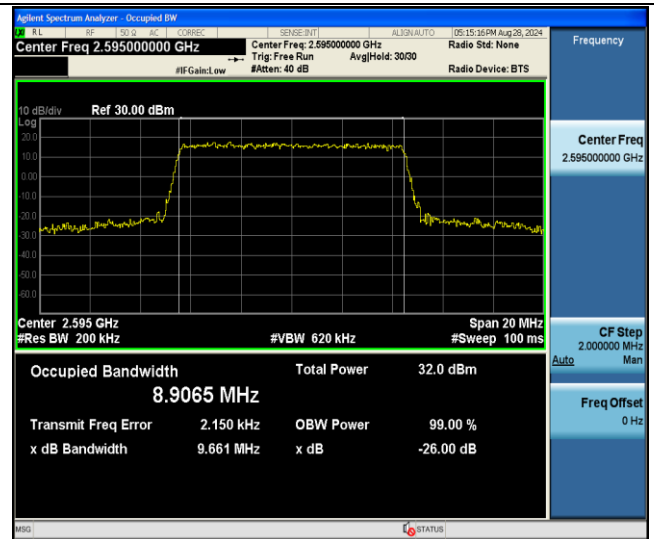
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.4692	5.062	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4719	5.040	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4674	5.037	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4761	5.125	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4717	5.082	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4733	5.134	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9185	9.693	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9065	9.661	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9207	9.709	PASS
Band38	10MHz	16QAM	37800	27RB#0	5.0825	7.416	PASS
Band38	10MHz	16QAM	38000	27RB#0	5.0201	8.554	PASS
Band38	10MHz	16QAM	38200	27RB#0	5.0515	8.553	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.537	16.24	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.513	16.36	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.553	16.29	PASS
Band38	15MHz	16QAM	37825	27RB#0	6.5171	9.421	PASS
Band38	15MHz	16QAM	38000	27RB#0	6.4185	9.407	PASS
Band38	15MHz	16QAM	38175	27RB#0	6.4675	9.491	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.975	20.63	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.927	20.59	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.924	20.64	PASS
Band38	20MHz	16QAM	37850	27RB#0	6.3051	9.992	PASS
Band38	20MHz	16QAM	38000	27RB#0	6.2577	9.522	PASS
Band38	20MHz	16QAM	38150	27RB#0	6.4524	9.982	PASS

Test Graphs

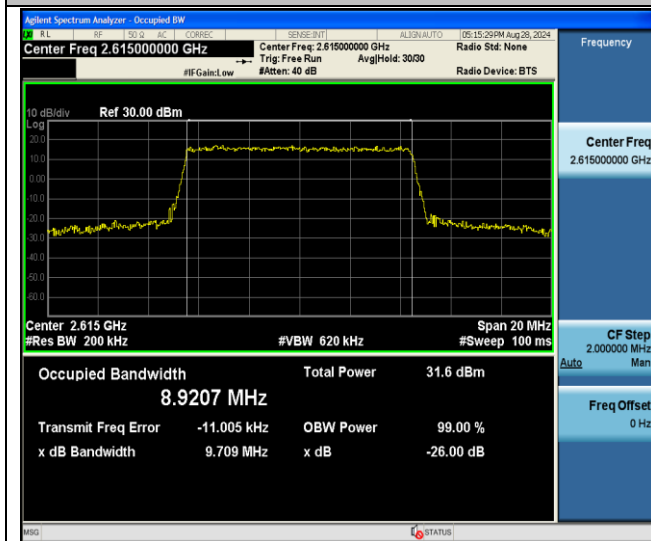




Band38-10MHz-QPSK-37800-50RB#0-PASS



Band38-10MHz-QPSK-38000-50RB#0-PASS



Band38-10MHz-QPSK-38200-50RB#0-PASS



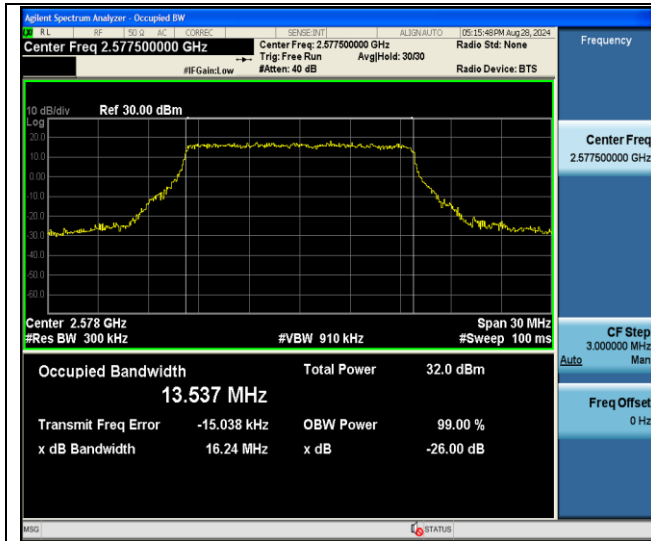
Band38-10MHz-16QAM-37800-27RB#0-PASS



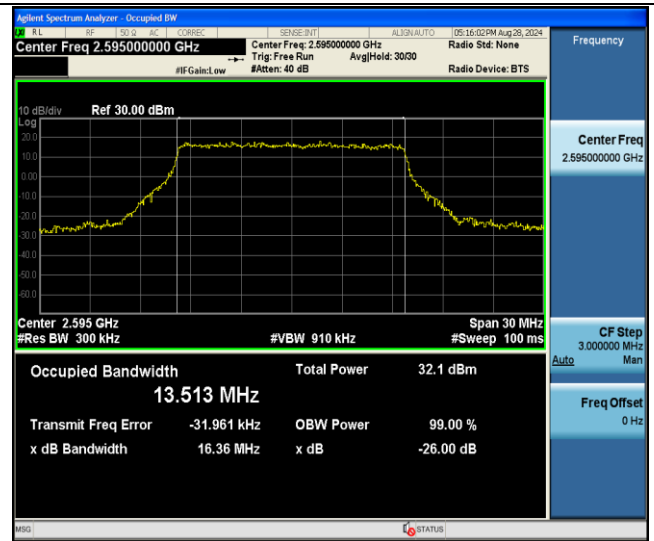
Band38-10MHz-16QAM-38000-27RB#0-PASS



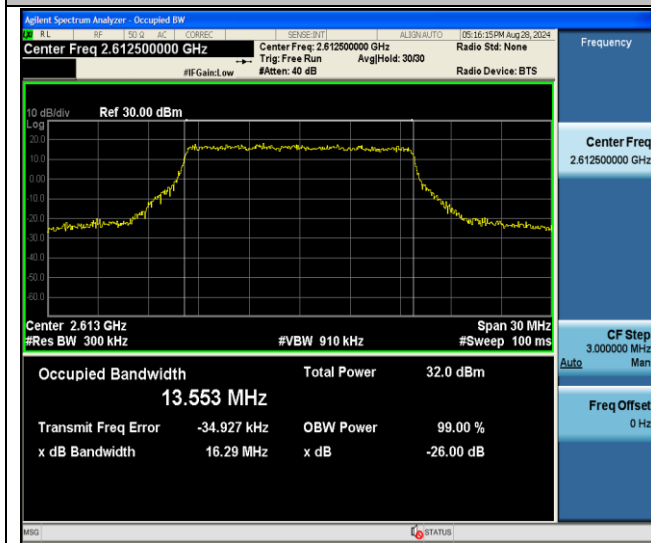
Band38-10MHz-16QAM-38200-27RB#0-PASS



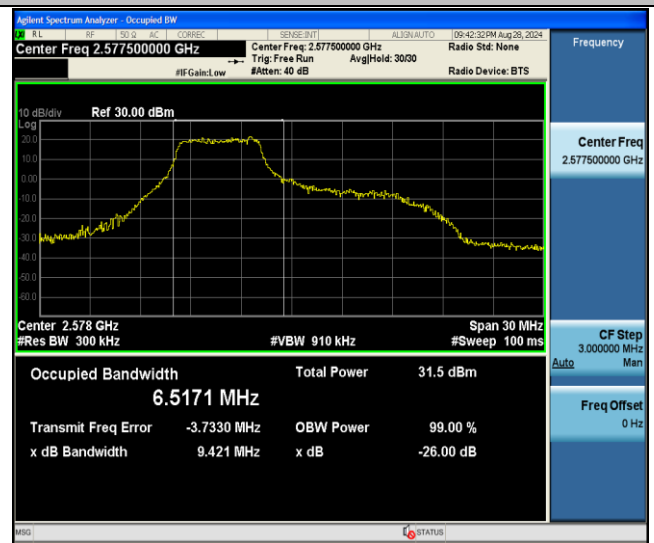
Band38-15MHz-QPSK-37825-75RB#0-PASS



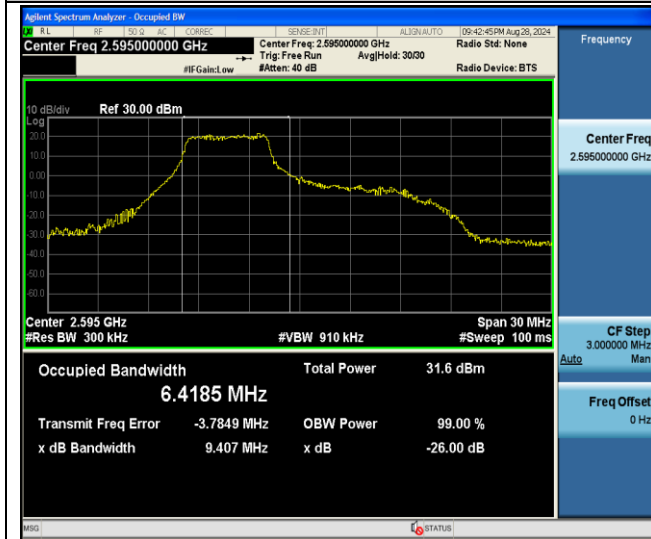
Band38-15MHz-QPSK-38000-75RB#0-PASS



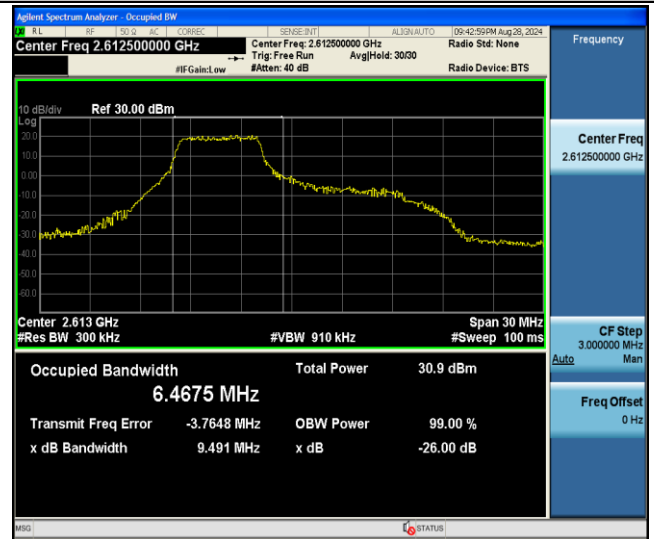
Band38-15MHz-QPSK-38175-75RB#0-PASS



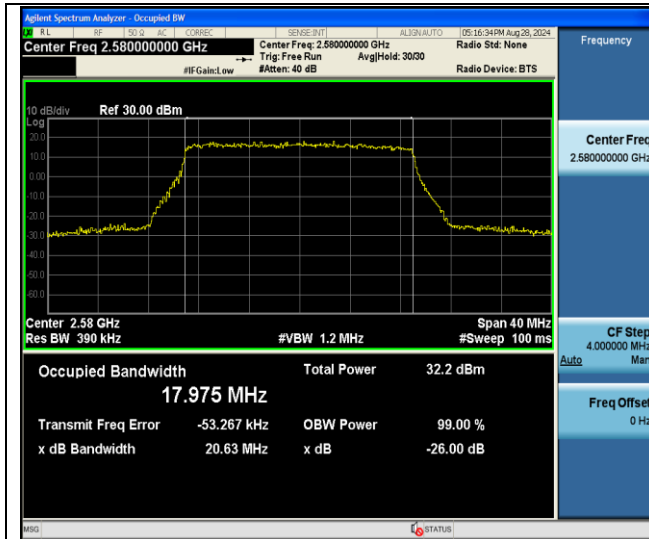
Band38-15MHz-16QAM-37825-27RB#0-PASS



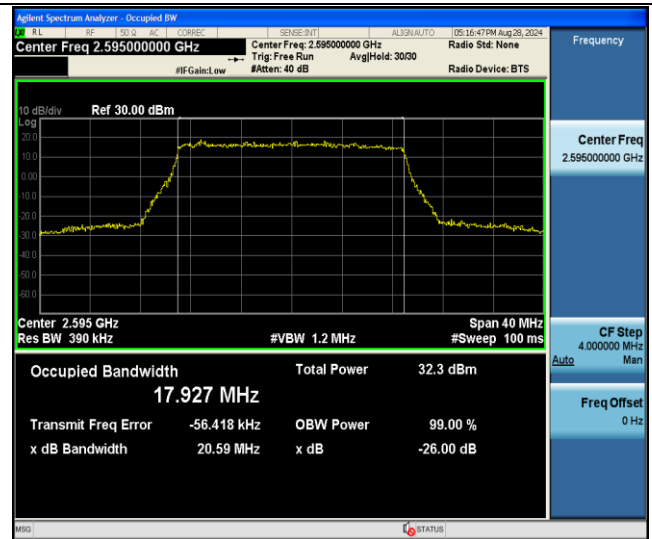
Band38-15MHz-16QAM-38000-27RB#0-PASS



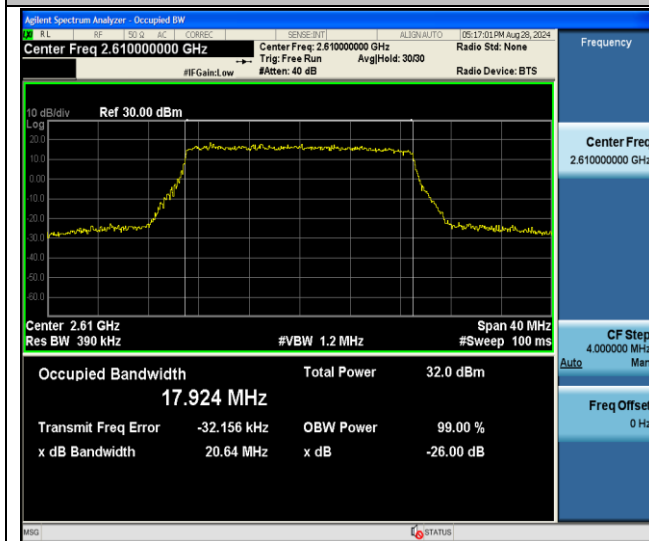
Band38-15MHz-16QAM-38175-27RB#0-PASS



Band38-20MHz-QPSK-37850-100RB#0-PASS



Band38-20MHz-QPSK-38000-100RB#0-PASS



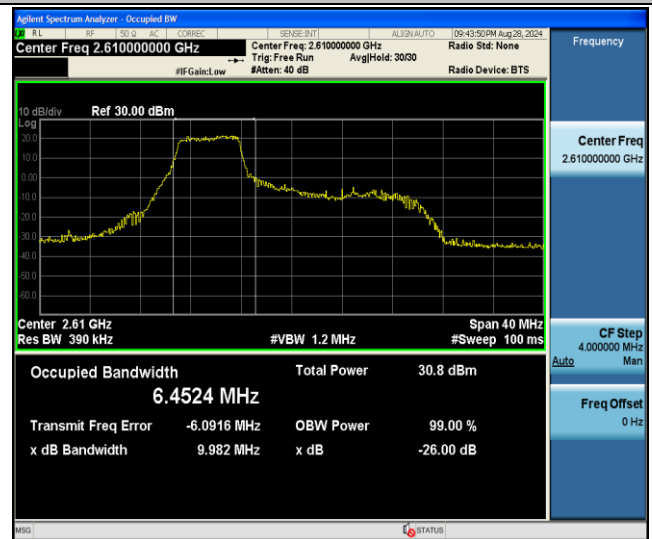
Band38-20MHz-QPSK-38150-100RB#0-PASS



Band38-20MHz-16QAM-37850-27RB#0-PASS



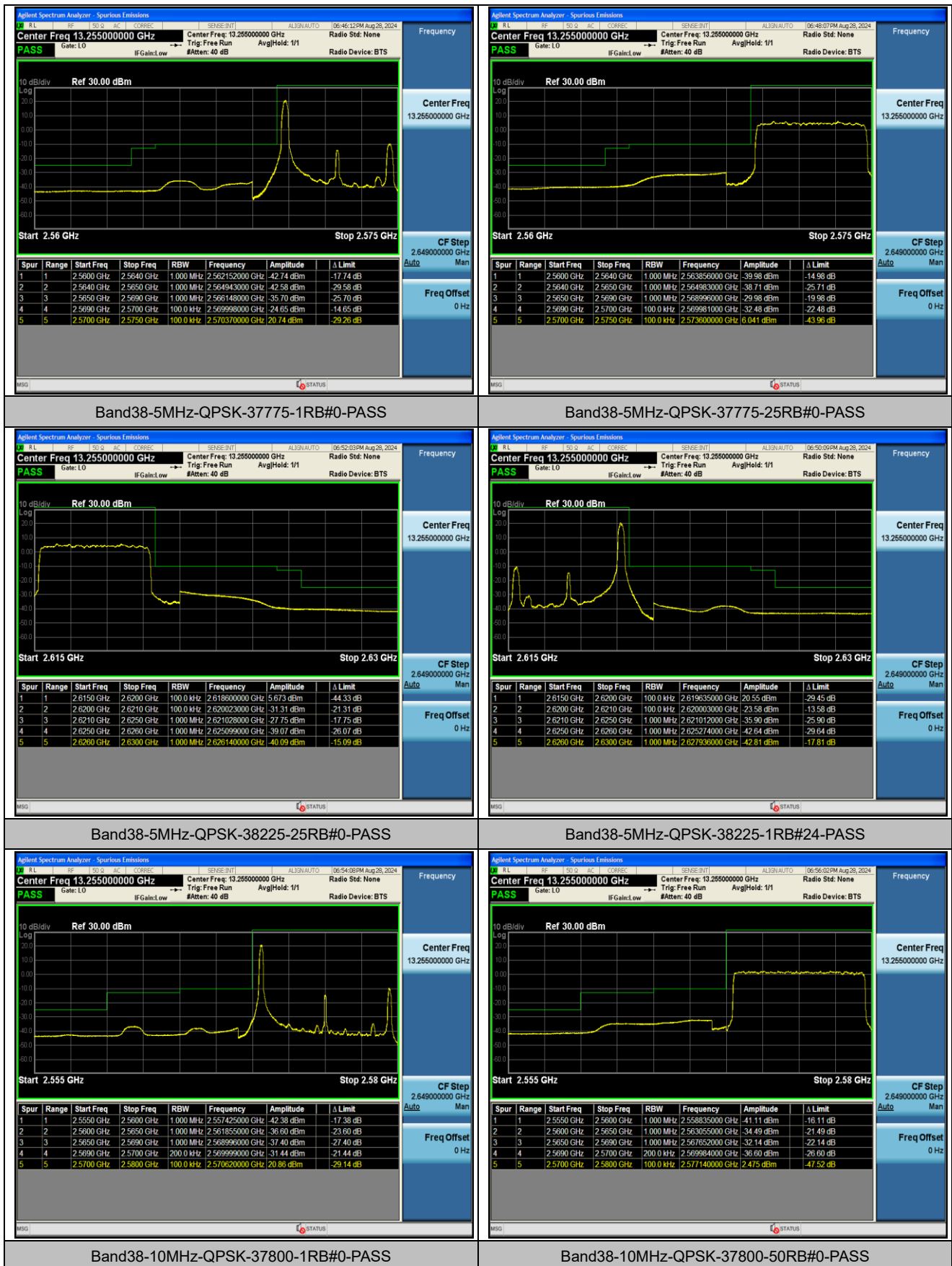
Band38-20MHz-16QAM-38000-27RB#0-PASS

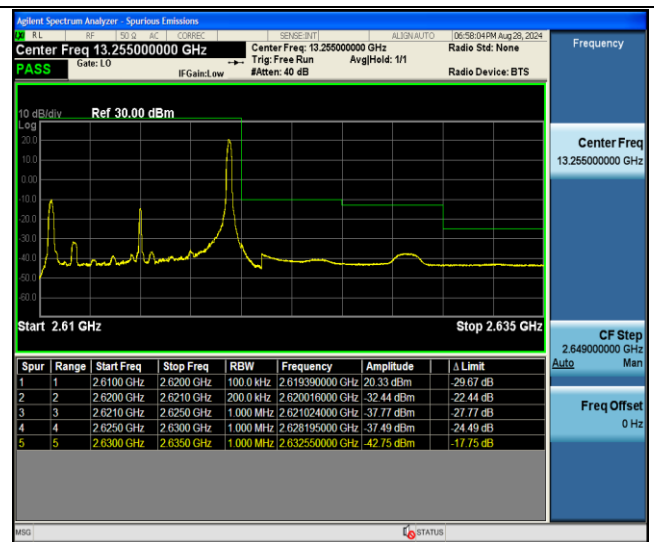
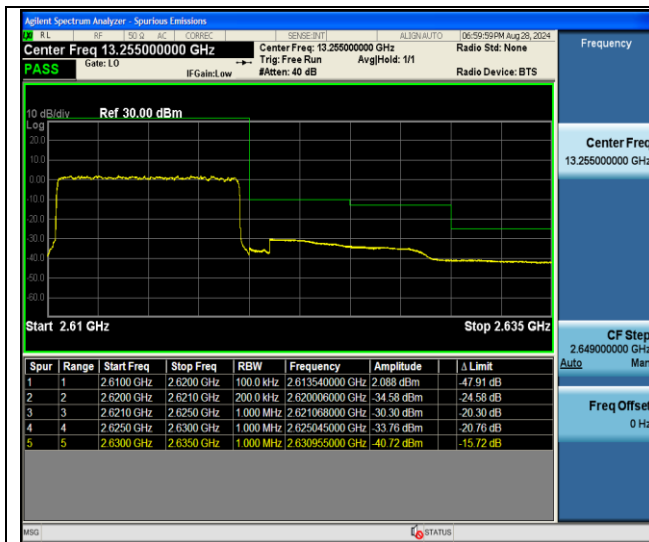


Band38-20MHz-16QAM-38150-27RB#0-PASS

Band Edge

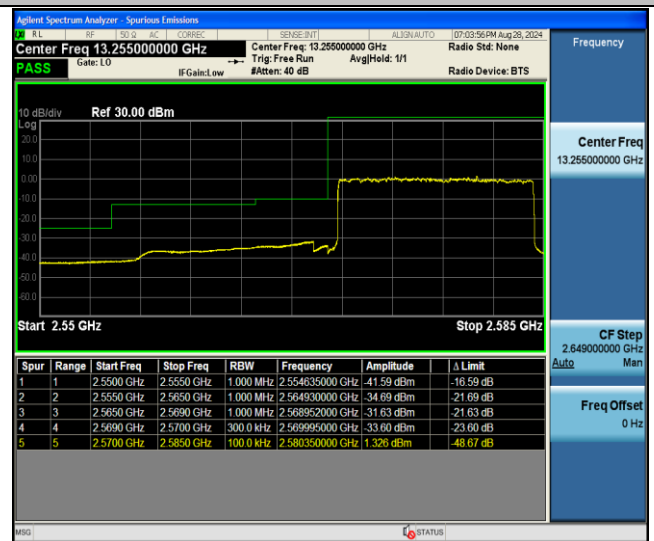
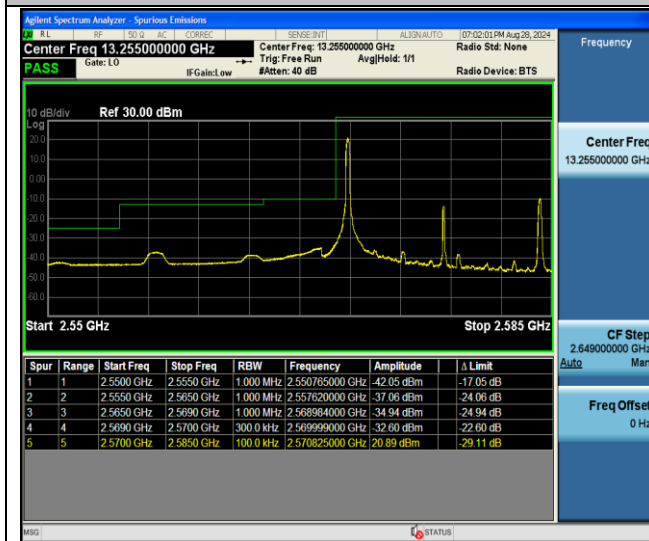
Test Graphs





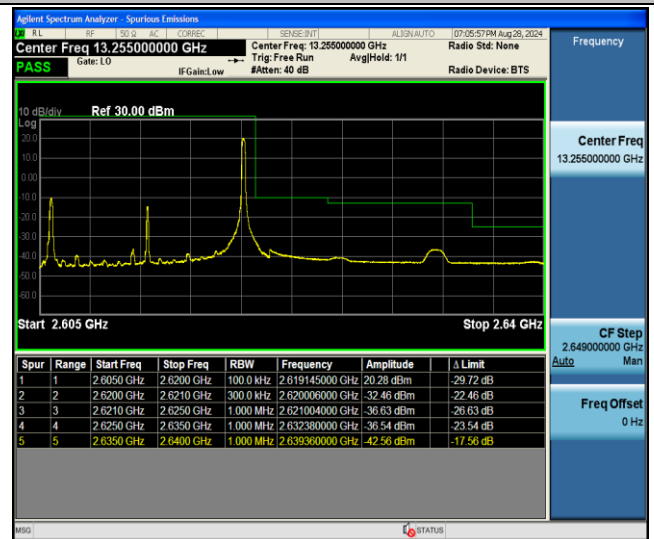
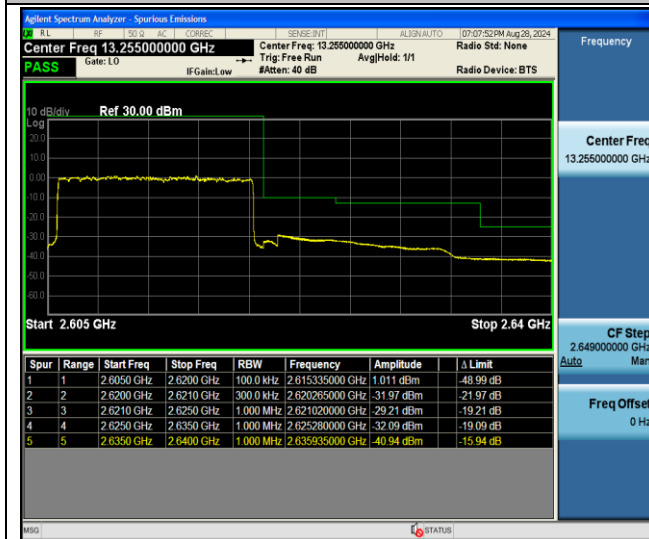
Band38-10MHz-QPSK-38200-50RB#0-PASS

Band38-10MHz-QPSK-38200-1RB#49-PASS



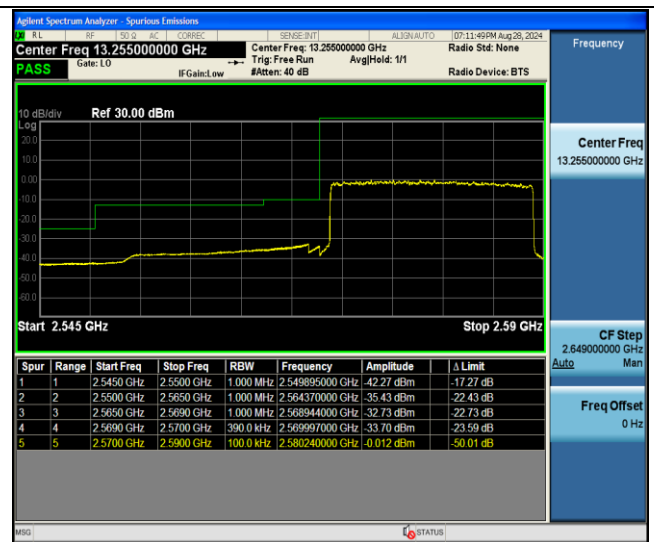
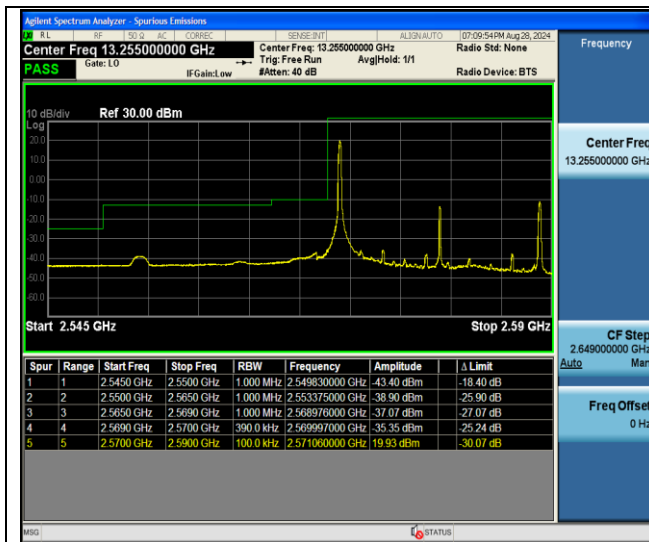
Band38-15MHz-QPSK-37825-1RB#0-PASS

Band38-15MHz-QPSK-37825-75RB#0-PASS



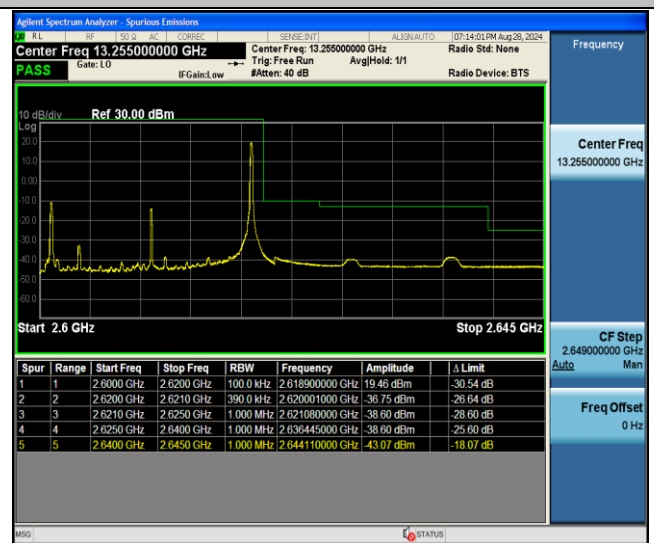
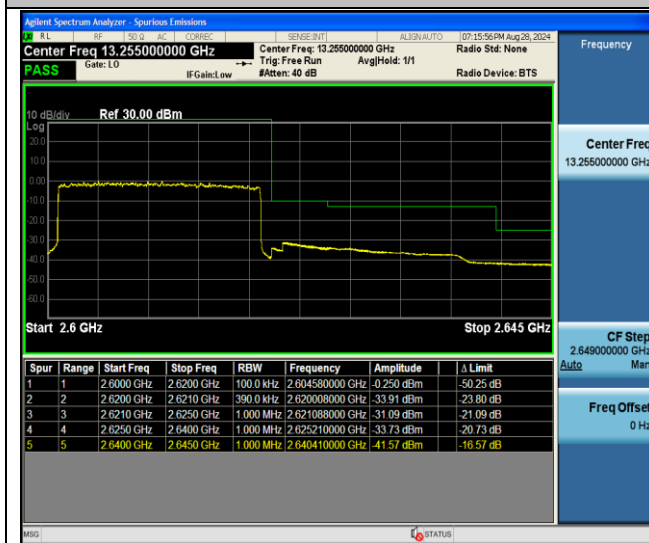
Band38-15MHz-QPSK-38175-75RB#0-PASS

Band38-15MHz-QPSK-38175-1RB#74-PASS



Band38-20MHz-QPSK-37850-1RB#0-PASS

Band38-20MHz-QPSK-37850-100RB#0-PASS



Band38-20MHz-QPSK-38150-100RB#0-PASS

Band38-20MHz-QPSK-38150-1RB#99-PASS

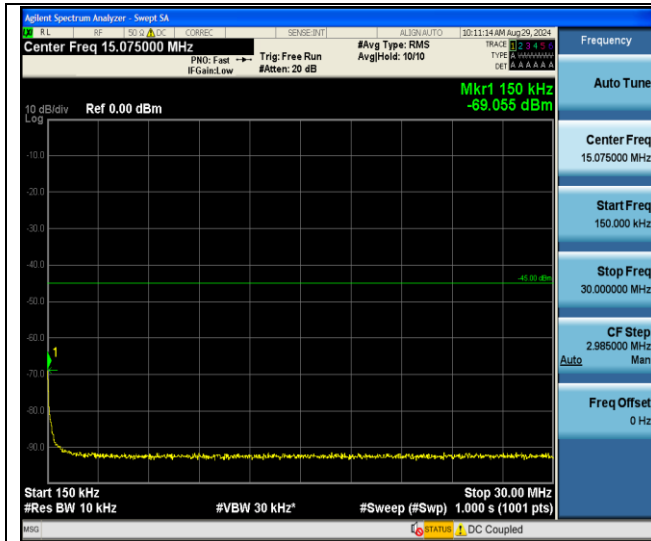
Appendix E: Conducted Spurious Emission

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Range	Result [dBm]	Limit [dBm]	Verdict
Band38	20MHz	QPSK	37850	1RB#0	0.009~0.15	-58.35	-55.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	0.15~30	-69.53	-45.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	30~1000	-64.84	-35.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	1000~3000	-39.20	-25.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	1000~20000	-32.74	-25.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	3000~27000	-36.41	-25.0	PASS
Band38	20MHz	QPSK	37850	1RB#0	20000~27000	-36.90	-25.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	0.009~0.15	-60.84	-55.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	0.15~30	-69.06	-45.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	30~1000	-64.70	-35.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	1000~3000	-39.29	-25.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	1000~20000	-32.61	-25.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	3000~27000	-36.67	-25.0	PASS
Band38	20MHz	QPSK	38000	1RB#0	20000~27000	-36.95	-25.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	0.009~0.15	-60.83	-55.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	0.15~30	-68.58	-45.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	30~1000	-64.83	-35.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	1000~3000	-39.10	-25.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	1000~20000	-32.71	-25.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	3000~27000	-36.71	-25.0	PASS
Band38	20MHz	QPSK	38150	1RB#0	20000~27000	-36.81	-25.0	PASS

Test Graphs





Band38-20MHz-QPSK-38000-1RB#0-0.15~30-PASS



Band38-20MHz-QPSK-38000-1RB#0-30~1000-PASS



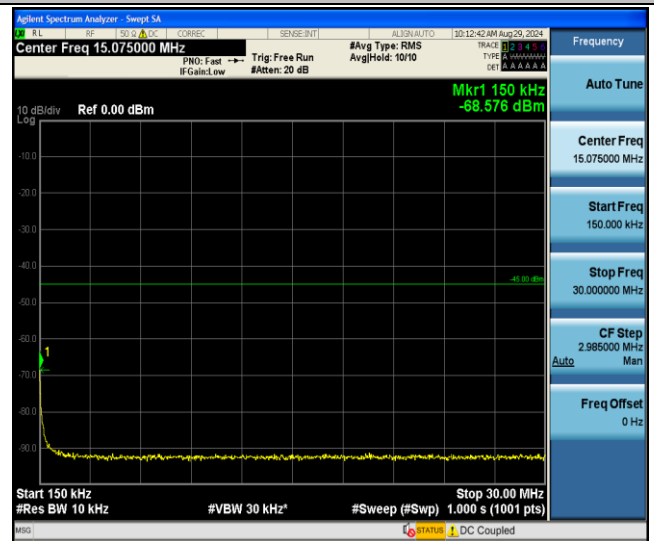
Band38-20MHz-QPSK-38000-1RB#0-1000~3000-PASS



Band38-20MHz-QPSK-38000-1RB#0-3000~27000-PASS



Band38-20MHz-QPSK-38150-1RB#0-0.009~0.15-PASS



Band38-20MHz-QPSK-38150-1RB#0-0.15~30-PASS



Band38-20MHz-QPSK-38150-1RB#0-30~1000-PASS



Band38-20MHz-QPSK-38150-1RB#0-1000~3000-PASS



Band38-20MHz-QPSK-38150-1RB#0-3000~27000-PASS

Appendix F: Frequency Stability

Test Result

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	VN	NT	-7.60	-0.002929	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-12.20	-0.004701	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-10.00	-0.003854	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-3.80	-0.001464	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-10.50	-0.004046	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-7.40	-0.002852	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-4.90	-0.001888	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-5.10	-0.001965	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-8.30	-0.003198	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	-0.60	-0.000231	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-9.90	-0.003815	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-8.60	-0.003314	PASS