

Appendix-B LTE Band 38

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	24.65	27.63	33.01	PASS
Band38	5MHz	QPSK	37775	25RB#0	23.75	26.73	33.01	PASS
Band38	5MHz	QPSK	37775	1RB#12	24.24	27.22	33.01	PASS
Band38	5MHz	QPSK	37775	1RB#24	24.03	27.01	33.01	PASS
Band38	5MHz	QPSK	38000	1RB#0	24.26	27.24	33.01	PASS
Band38	5MHz	QPSK	38000	25RB#0	23.59	26.57	33.01	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.95	26.93	33.01	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.29	26.27	33.01	PASS
Band38	5MHz	QPSK	38225	1RB#0	23.52	26.50	33.01	PASS
Band38	5MHz	QPSK	38225	25RB#0	23.61	26.59	33.01	PASS
Band38	5MHz	QPSK	38225	1RB#12	24.08	27.06	33.01	PASS
Band38	5MHz	QPSK	38225	1RB#24	24.3	27.28	33.01	PASS
Band38	5MHz	16QAM	37775	1RB#0	23.94	26.92	33.01	PASS
Band38	5MHz	16QAM	37775	25RB#0	22.91	25.89	33.01	PASS
Band38	5MHz	16QAM	37775	1RB#12	23.57	26.55	33.01	PASS
Band38	5MHz	16QAM	37775	1RB#24	23.29	26.27	33.01	PASS
Band38	5MHz	16QAM	38000	1RB#0	23.67	26.65	33.01	PASS
Band38	5MHz	16QAM	38000	25RB#0	22.69	25.67	33.01	PASS
Band38	5MHz	16QAM	38000	1RB#12	23.32	26.30	33.01	PASS
Band38	5MHz	16QAM	38000	1RB#24	22.61	25.59	33.01	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.74	25.72	33.01	PASS
Band38	5MHz	16QAM	38225	25RB#0	22.55	25.53	33.01	PASS
Band38	5MHz	16QAM	38225	1RB#12	23.31	26.29	33.01	PASS
Band38	5MHz	16QAM	38225	1RB#24	23.51	26.49	33.01	PASS
Band38	10MHz	QPSK	37800	1RB#0	24.74	27.72	33.01	PASS
Band38	10MHz	QPSK	37800	50RB#0	23.81	26.79	33.01	PASS
Band38	10MHz	QPSK	37800	1RB#24	24.54	27.52	33.01	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.68	26.66	33.01	PASS
Band38	10MHz	QPSK	38000	1RB#0	24.52	27.50	33.01	PASS
Band38	10MHz	QPSK	38000	50RB#0	23.6	26.58	33.01	PASS
Band38	10MHz	QPSK	38000	1RB#24	24.3	27.28	33.01	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.45	26.43	33.01	PASS
Band38	10MHz	QPSK	38200	1RB#0	23.18	26.16	33.01	PASS
Band38	10MHz	QPSK	38200	50RB#0	23.26	26.24	33.01	PASS
Band38	10MHz	QPSK	38200	1RB#24	23.97	26.95	33.01	PASS
Band38	10MHz	QPSK	38200	1RB#49	24.23	27.21	33.01	PASS

Band38	10MHz	16QAM	37800	1RB#0	24.1	27.08	33.01	PASS
Band38	10MHz	16QAM	37800	27RB#0	23.06	26.04	33.01	PASS
Band38	10MHz	16QAM	37800	1RB#24	23.85	26.83	33.01	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.96	25.94	33.01	PASS
Band38	10MHz	16QAM	38000	1RB#0	23.84	26.82	33.01	PASS
Band38	10MHz	16QAM	38000	27RB#0	22.6	25.58	33.01	PASS
Band38	10MHz	16QAM	38000	1RB#24	23.59	26.57	33.01	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.69	25.67	33.01	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.58	25.56	33.01	PASS
Band38	10MHz	16QAM	38200	27RB#0	22.43	25.41	33.01	PASS
Band38	10MHz	16QAM	38200	1RB#24	23.33	26.31	33.01	PASS
Band38	10MHz	16QAM	38200	1RB#49	23.56	26.54	33.01	PASS
Band38	15MHz	QPSK	37825	1RB#0	24.71	27.69	33.01	PASS
Band38	15MHz	QPSK	37825	75RB#0	23.65	26.63	33.01	PASS
Band38	15MHz	QPSK	37825	1RB#38	24.21	27.19	33.01	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.67	26.65	33.01	PASS
Band38	15MHz	QPSK	38000	1RB#0	24.68	27.66	33.01	PASS
Band38	15MHz	QPSK	38000	75RB#0	23.56	26.54	33.01	PASS
Band38	15MHz	QPSK	38000	1RB#38	24.07	27.05	33.01	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.59	26.57	33.01	PASS
Band38	15MHz	QPSK	38175	1RB#0	23.19	26.17	33.01	PASS
Band38	15MHz	QPSK	38175	75RB#0	23.51	26.49	33.01	PASS
Band38	15MHz	QPSK	38175	1RB#38	24.03	27.01	33.01	PASS
Band38	15MHz	QPSK	38175	1RB#74	24.44	27.42	33.01	PASS
Band38	15MHz	16QAM	37825	1RB#0	23.95	26.93	33.01	PASS
Band38	15MHz	16QAM	37825	27RB#0	23.04	26.02	33.01	PASS
Band38	15MHz	16QAM	37825	1RB#38	23.37	26.35	33.01	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.91	25.89	33.01	PASS
Band38	15MHz	16QAM	38000	1RB#0	23.85	26.83	33.01	PASS
Band38	15MHz	16QAM	38000	27RB#0	22.92	25.90	33.01	PASS
Band38	15MHz	16QAM	38000	1RB#38	23.2	26.18	33.01	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.7	25.68	33.01	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.27	25.25	33.01	PASS
Band38	15MHz	16QAM	38175	27RB#0	22.49	25.47	33.01	PASS
Band38	15MHz	16QAM	38175	1RB#38	23.16	26.14	33.01	PASS
Band38	15MHz	16QAM	38175	1RB#74	23.59	26.57	33.01	PASS
Band38	20MHz	QPSK	37850	1RB#0	24.61	27.59	33.01	PASS
Band38	20MHz	QPSK	37850	100RB#0	23.57	26.55	33.01	PASS
Band38	20MHz	QPSK	37850	1RB#49	24.45	27.43	33.01	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.56	26.54	33.01	PASS
Band38	20MHz	QPSK	38000	1RB#0	24.55	27.53	33.01	PASS
Band38	20MHz	QPSK	38000	100RB#0	23.48	26.46	33.01	PASS
Band38	20MHz	QPSK	38000	1RB#49	24.2	27.18	33.01	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.53	26.51	33.01	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.9	25.88	33.01	PASS

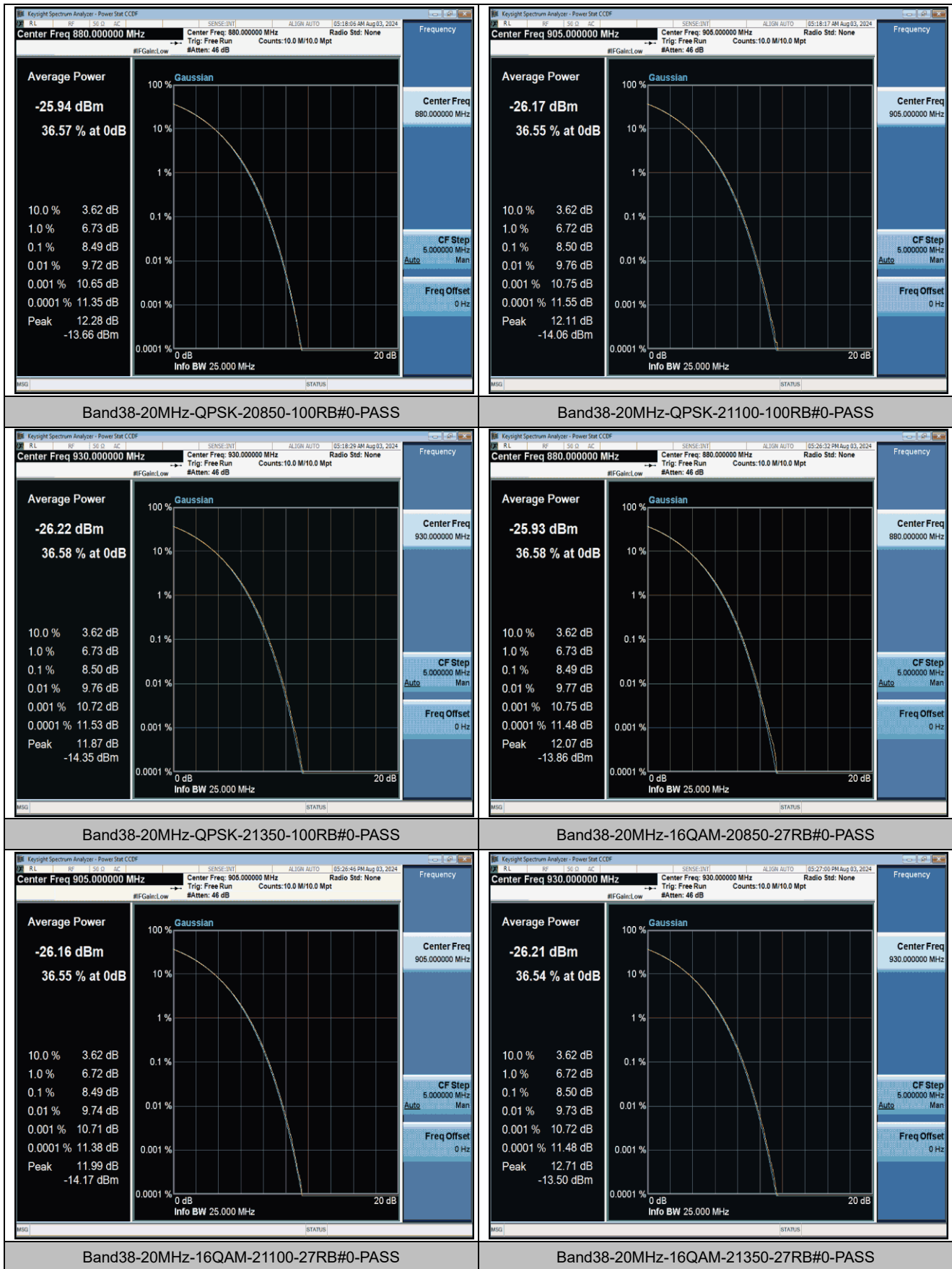
Band38	20MHz	QPSK	38150	100RB#0	23.43	26.41	33.01	PASS
Band38	20MHz	QPSK	38150	1RB#49	24.24	27.22	33.01	PASS
Band38	20MHz	QPSK	38150	1RB#99	24.19	27.17	33.01	PASS
Band38	20MHz	16QAM	37850	1RB#0	23.82	26.80	33.01	PASS
Band38	20MHz	16QAM	37850	27RB#0	23.04	26.02	33.01	PASS
Band38	20MHz	16QAM	37850	1RB#49	23.61	26.59	33.01	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.68	25.66	33.01	PASS
Band38	20MHz	16QAM	38000	1RB#0	23.81	26.79	33.01	PASS
Band38	20MHz	16QAM	38000	27RB#0	22.79	25.77	33.01	PASS
Band38	20MHz	16QAM	38000	1RB#49	23.42	26.40	33.01	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.73	25.71	33.01	PASS
Band38	20MHz	16QAM	38150	1RB#0	23.83	26.81	33.01	PASS
Band38	20MHz	16QAM	38150	27RB#0	22.48	25.46	33.01	PASS
Band38	20MHz	16QAM	38150	1RB#49	23.49	26.47	33.01	PASS
Band38	20MHz	16QAM	38150	1RB#99	23.35	26.33	33.01	PASS

Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	20MHz	QPSK	20850	100RB#0	8.49	13	PASS
Band38	20MHz	QPSK	21100	100RB#0	8.50	13	PASS
Band38	20MHz	QPSK	21350	100RB#0	8.50	13	PASS
Band38	20MHz	16QAM	20850	27RB#0	8.49	13	PASS
Band38	20MHz	16QAM	21100	27RB#0	8.49	13	PASS
Band38	20MHz	16QAM	21350	27RB#0	8.50	13	PASS

Test Graphs

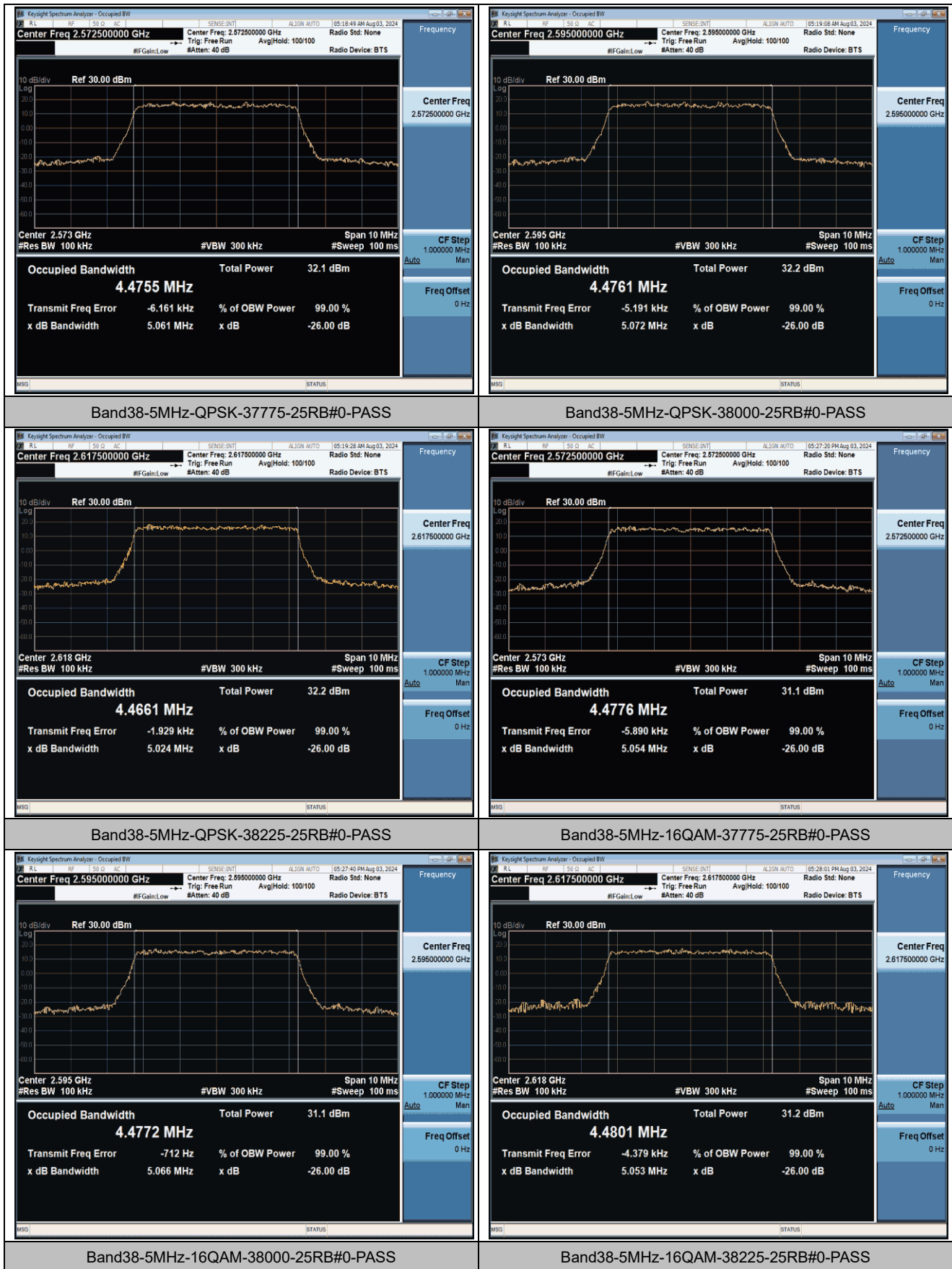


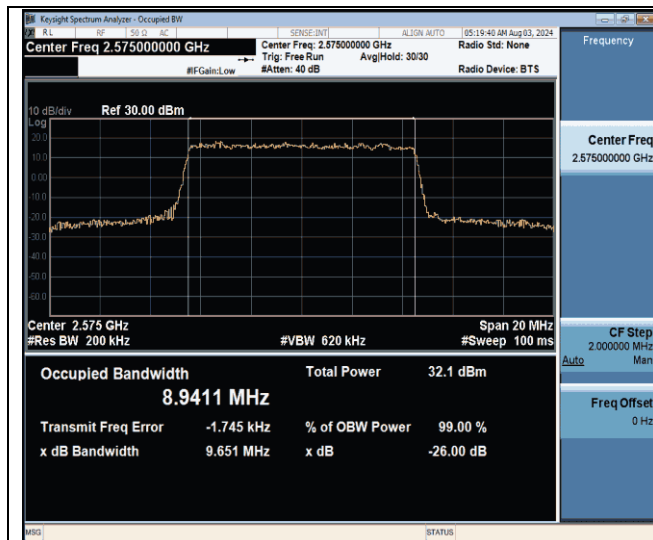
26dB Bandwidth and Occupied Bandwidth

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.4755	5.061	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4761	5.072	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4661	5.024	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4776	5.054	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4772	5.066	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4801	5.053	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9411	9.651	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9196	9.679	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9171	9.590	PASS
Band38	10MHz	16QAM	37800	27RB#0	5.2051	8.358	PASS
Band38	10MHz	16QAM	38000	27RB#0	5.2691	8.939	PASS
Band38	10MHz	16QAM	38200	27RB#0	5.3734	9.083	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.499	16.17	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.503	16.35	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.485	16.36	PASS
Band38	15MHz	16QAM	37825	27RB#0	5.9475	10.17	PASS
Band38	15MHz	16QAM	38000	27RB#0	5.8558	9.421	PASS
Band38	15MHz	16QAM	38175	27RB#0	5.7831	8.909	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.962	20.95	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.951	21.05	PASS
Band38	20MHz	QPSK	38150	100RB#0	18.011	20.99	PASS
Band38	20MHz	16QAM	37850	27RB#0	6.4135	9.355	PASS
Band38	20MHz	16QAM	38000	27RB#0	6.5702	10.37	PASS
Band38	20MHz	16QAM	38150	27RB#0	6.8256	9.828	PASS

Test Graphs





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



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



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



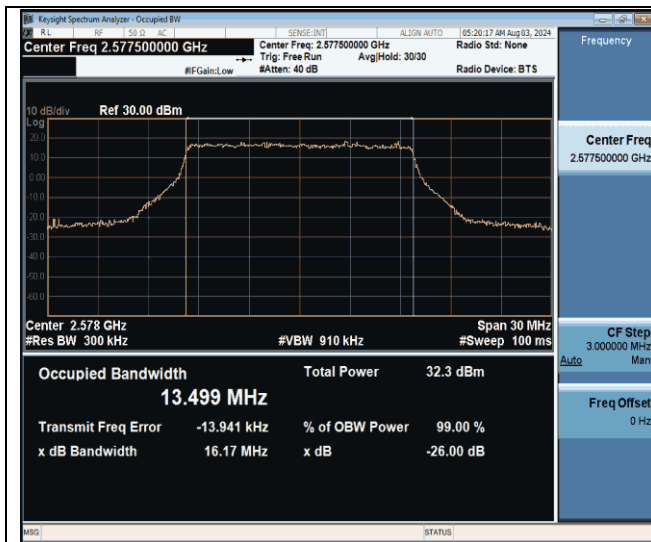
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Band38-10MHz-16QAM-38000-27RB#0-PASS



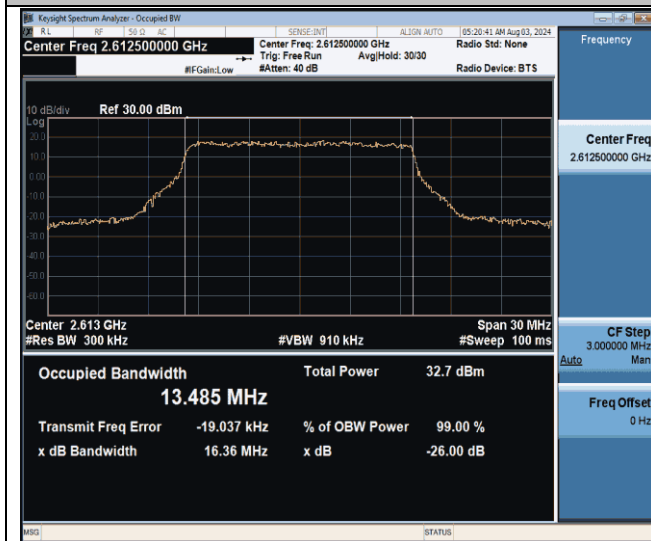
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Band38-15MHz-QPSK-37825-75RB#0-PASS



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



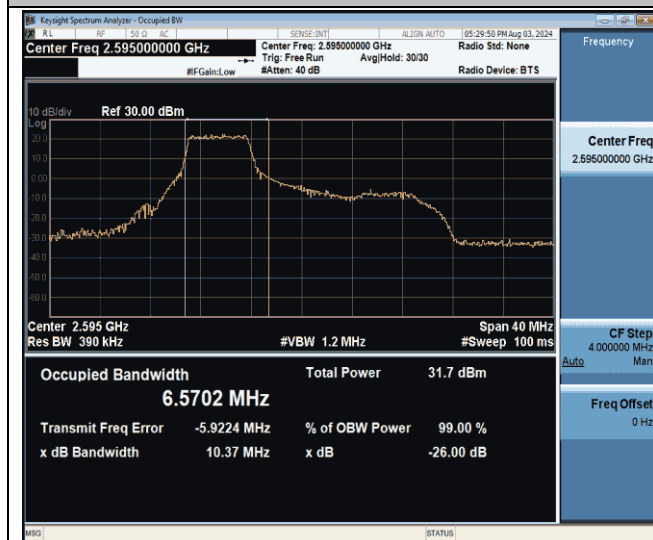
Band38-20MHz-QPSK-38000-100RB#0-PASS



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



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



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



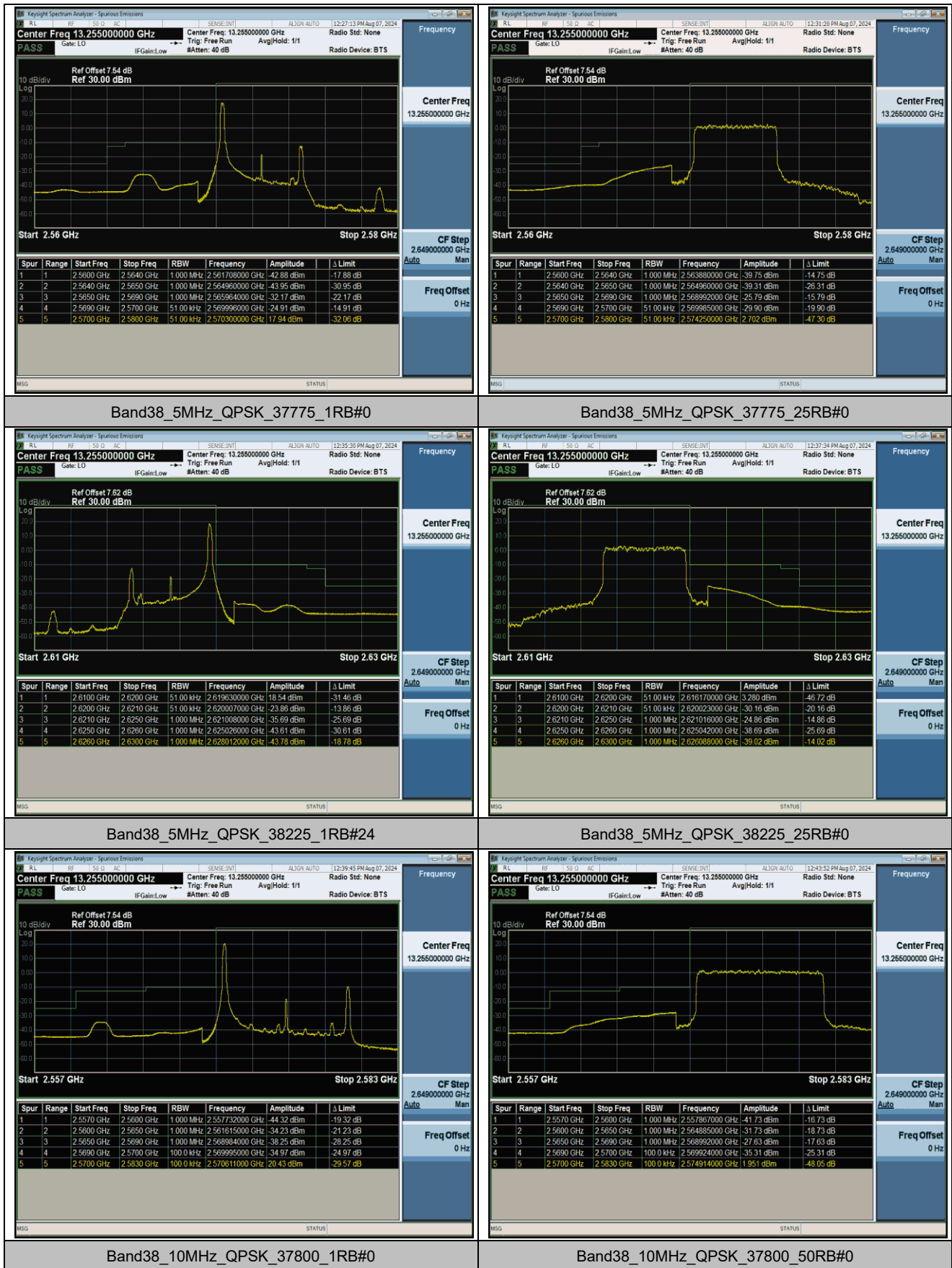
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Band Edge

Test Result

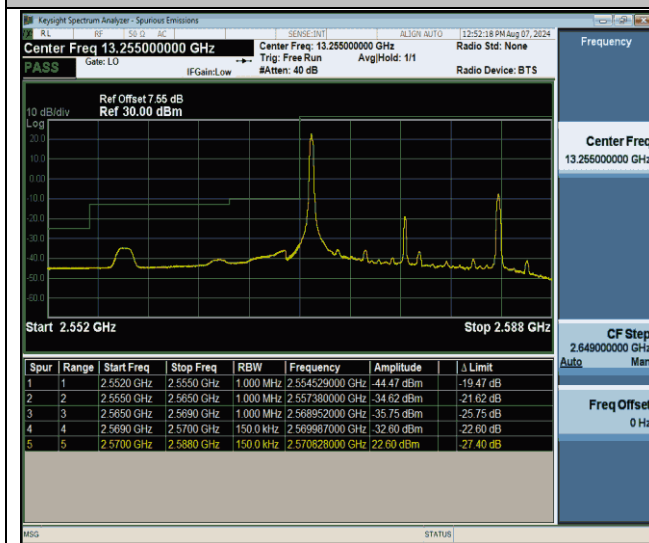
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	-43.98	PASS
Band38	5MHz	QPSK	37775	25RB#0	-41.78	PASS
Band38	5MHz	QPSK	38225	1RB#24	-29.45	PASS
Band38	5MHz	QPSK	38225	25RB#0	-41.79	PASS
Band38	10MHz	QPSK	37800	1RB#0	-44.92	PASS
Band38	10MHz	QPSK	37800	50RB#0	-43.53	PASS
Band38	10MHz	QPSK	38200	1RB#49	-44.64	PASS
Band38	10MHz	QPSK	38200	50RB#0	-42.87	PASS
Band38	15MHz	QPSK	37825	1RB#0	-44.74	PASS
Band38	15MHz	QPSK	37825	75RB#0	-43.36	PASS
Band38	15MHz	QPSK	38175	1RB#74	-44.03	PASS
Band38	15MHz	QPSK	38175	75RB#0	-42.14	PASS
Band38	20MHz	QPSK	37850	1RB#0	-44.75	PASS
Band38	20MHz	QPSK	37850	100RB#0	-44.11	PASS
Band38	20MHz	QPSK	38150	1RB#99	-42.72	PASS
Band38	20MHz	QPSK	38150	100RB#0	-43.31	PASS

Test Graphs

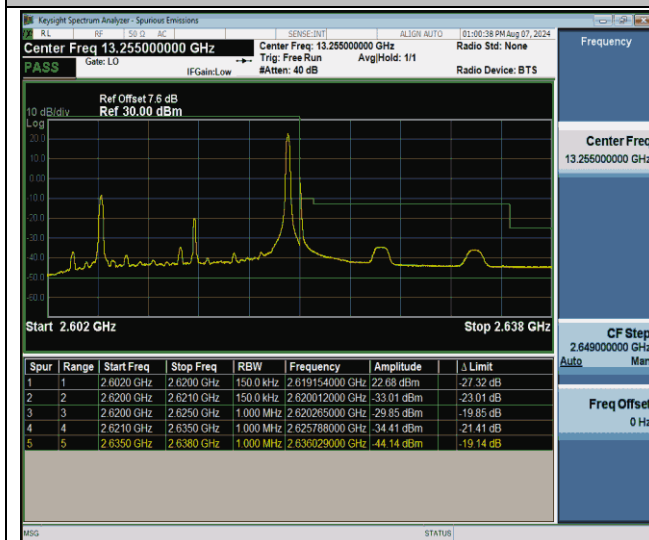




Band38_10MHz_QPSK_38200_1RB#49

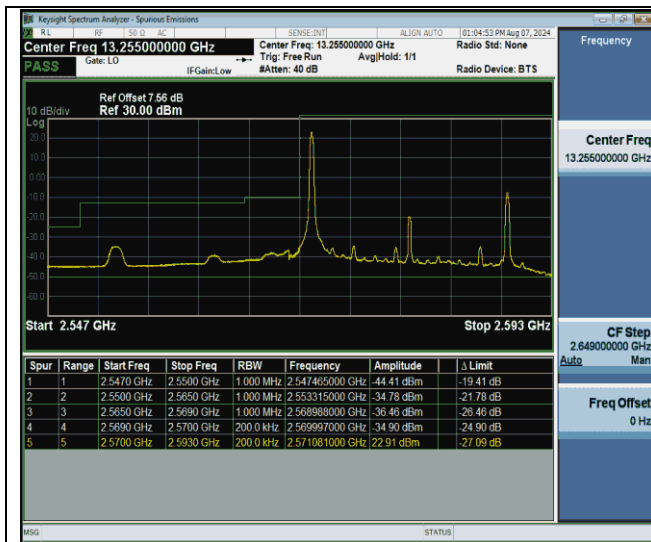


Band38_15MHz_QPSK_37825_1RB#0



Band38_15MHz_QPSK_38175_1RB#74

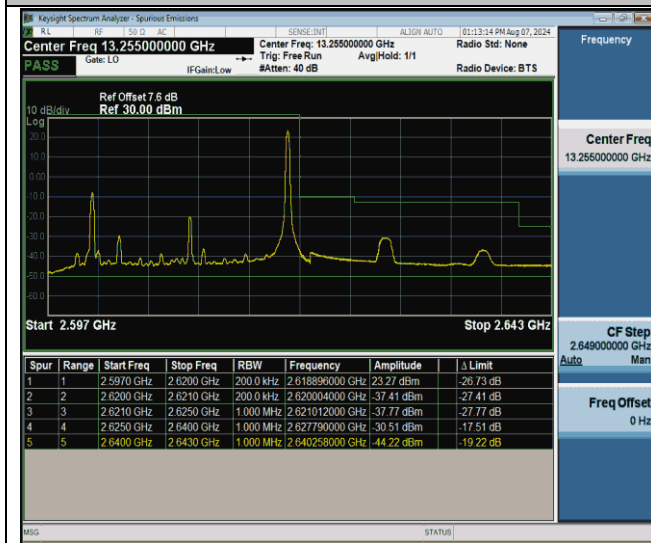
Band38_15MHz_QPSK_38175_75RB#0



Band38_20MHz_QPSK_37850_1RB#0



Band38_20MHz_QPSK_37850_100RB#0



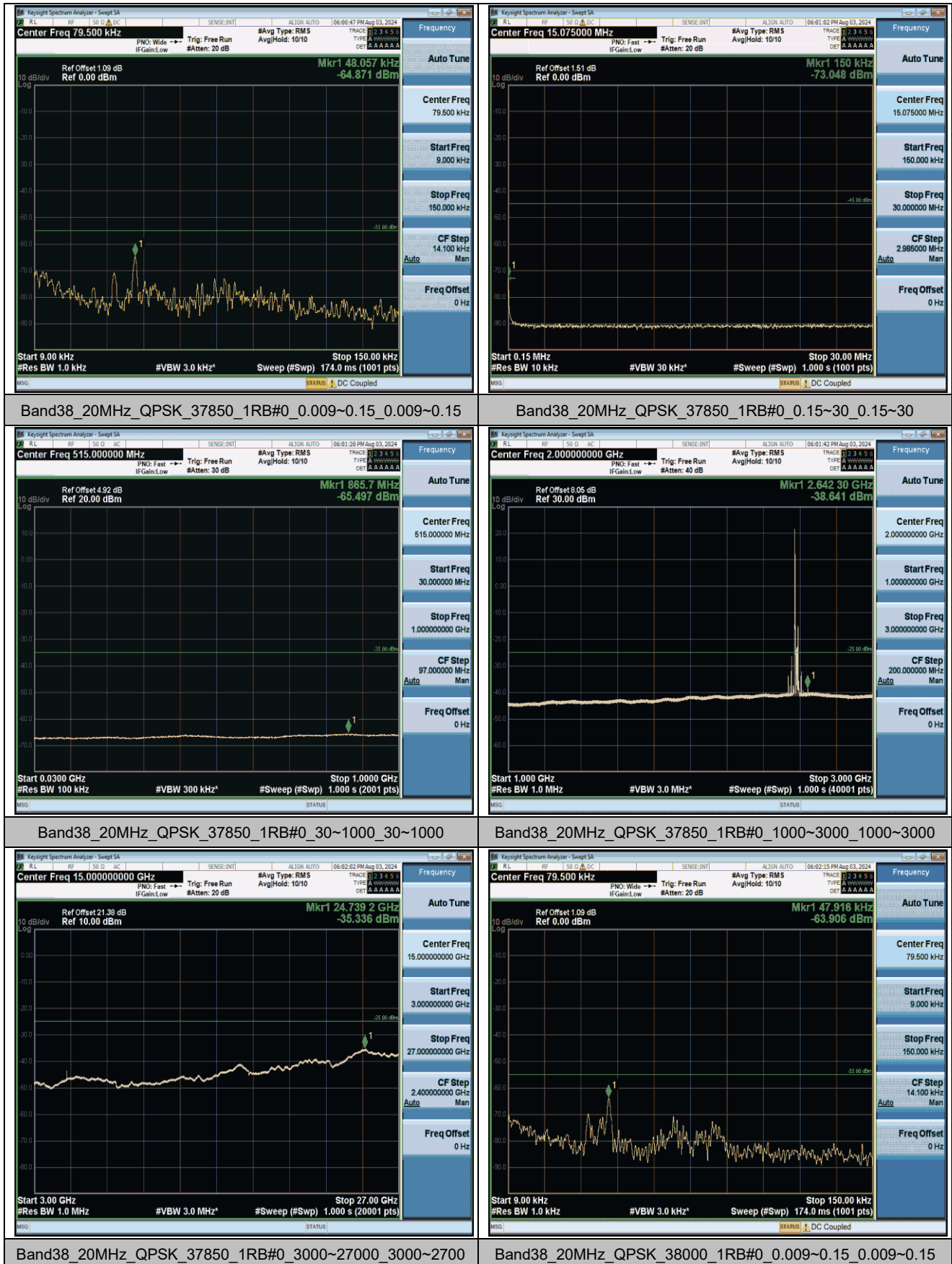
Band38_20MHz_QPSK_38150_1RB#99

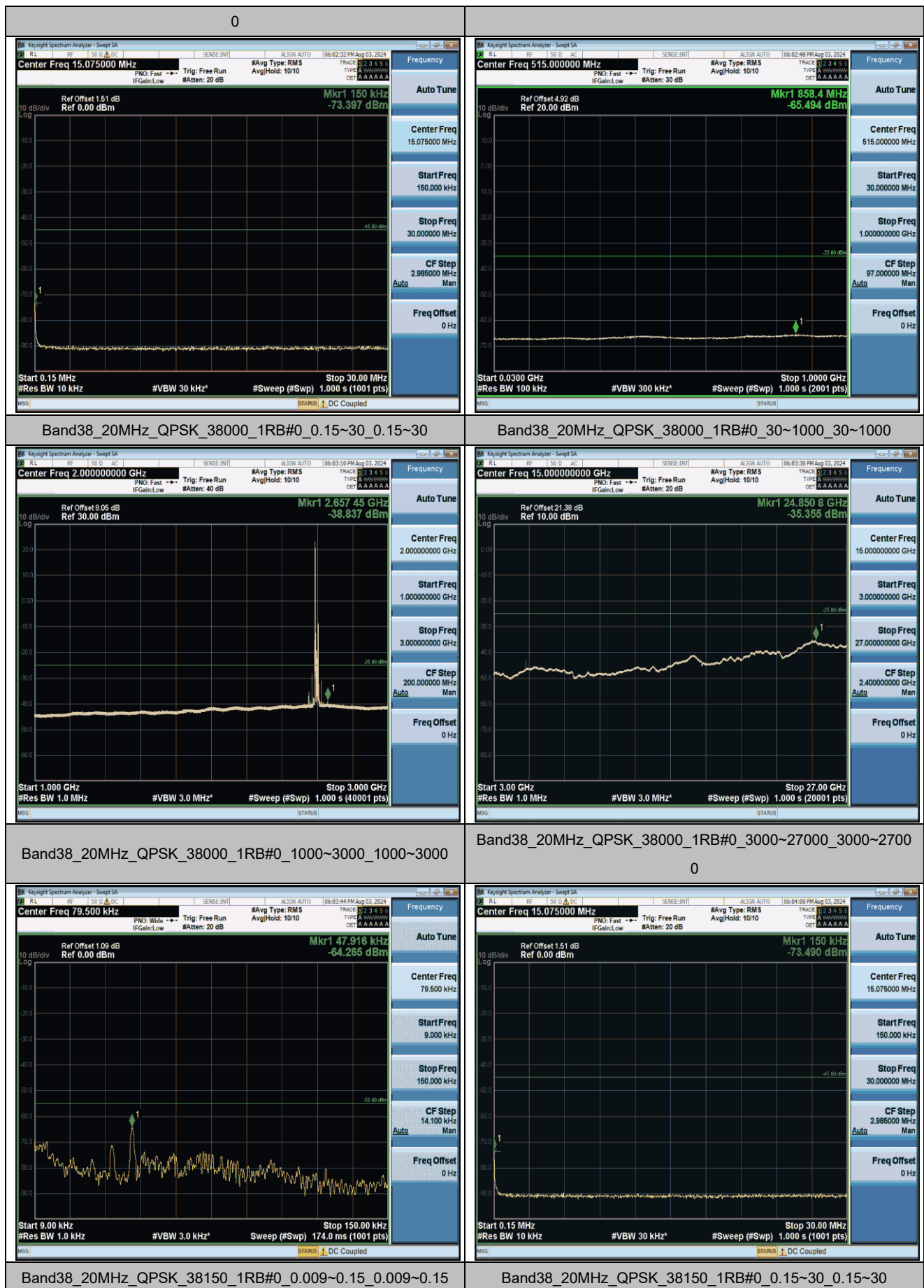


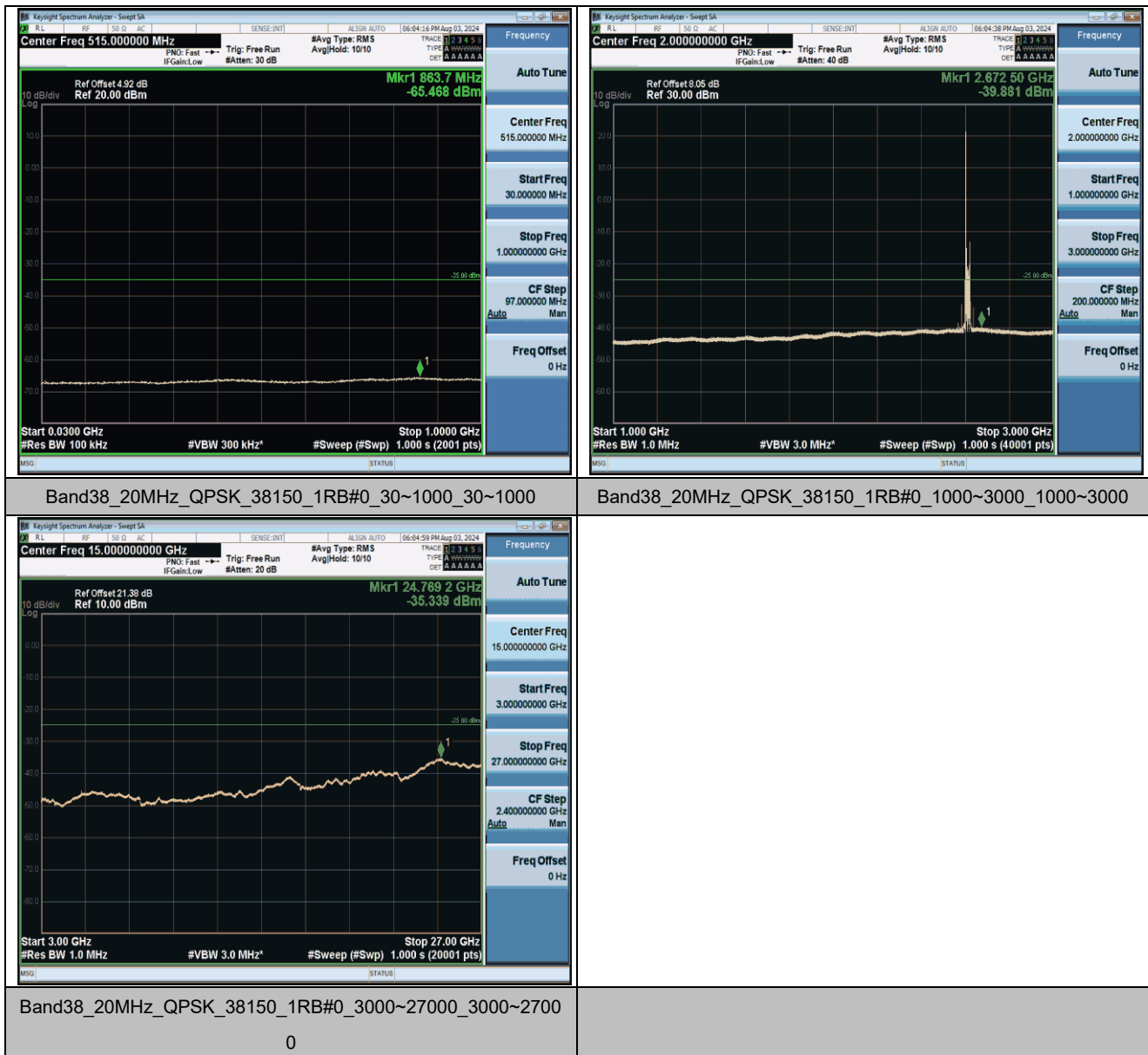
Band38_20MHz_QPSK_38150_100RB#0

Conducted Spurious Emission

Test Graphs







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	-14.20	-0.005472	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-12.29	-0.004736	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-12.52	-0.004825	PASS

Voltage									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	-11.49	-0.004428	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-15.76	-0.006073	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	-17.75	-0.006840	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	15.85	0.006108	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-11.34	-0.004370	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-13.72	-0.005287	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-14.33	-0.005522	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	-15.26	-0.005881	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	15.32	0.005904	PASS