

Appendix-A 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	23.01	24.41	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	22.98	24.38	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	22.87	24.27	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.1	23.5	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.02	24.42	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.11	24.51	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	22.84	24.24	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.01	23.41	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	22.98	24.38	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	22.93	24.33	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	22.93	24.33	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22	23.4	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	21.58	22.98	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	21.64	23.04	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	21.71	23.11	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.09	22.49	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	21.45	22.85	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	22.02	23.42	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	21.75	23.15	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	20.98	22.38	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	22.08	23.48	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	22.13	23.53	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	22.08	23.48	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	21.03	22.43	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#0	20.97	22.37	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#12	21.08	22.48	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#24	21.05	22.45	33.00	PASS
Band38	5MHz	64QAM	37775	25RB#0	20.17	21.57	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#0	20.9	22.3	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#12	20.9	22.3	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#24	20.93	22.33	33.00	PASS
Band38	5MHz	64QAM	38000	25RB#0	20.06	21.46	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#0	20.98	22.38	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#12	20.98	22.38	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#24	20.99	22.39	33.00	PASS
Band38	5MHz	64QAM	38225	25RB#0	20.11	21.51	33.00	PASS

Band38	10MHz	QPSK	37800	1RB#0	22.98	24.38	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.02	24.42	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.05	24.45	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.08	23.48	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	22.94	24.34	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	22.85	24.25	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	22.88	24.28	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	21.93	23.33	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	22.89	24.29	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	22.95	24.35	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	22.91	24.31	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	22.07	23.47	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	22.18	23.58	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.11	23.51	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.1	23.5	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	21.17	22.57	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	22.08	23.48	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.01	23.41	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	22.04	23.44	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	21.04	22.44	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	22.14	23.54	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	22.1	23.5	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	22.08	23.48	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	21.07	22.47	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#0	21.03	22.43	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#24	21.07	22.47	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#49	21.02	22.42	33.00	PASS
Band38	10MHz	64QAM	37800	50RB#0	20.14	21.54	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#0	20.92	22.32	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#24	20.91	22.31	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#49	20.94	22.34	33.00	PASS
Band38	10MHz	64QAM	38000	50RB#0	19.98	21.38	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#0	20.97	22.37	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#24	21	22.4	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#49	20.99	22.39	33.00	PASS
Band38	10MHz	64QAM	38200	50RB#0	20.09	21.49	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.07	24.47	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.05	24.45	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.05	24.45	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.1	23.5	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	23.12	24.52	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	22.93	24.33	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	22.93	24.33	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	21.96	23.36	33.00	PASS

Band38	15MHz	QPSK	38175	1RB#0	23.01	24.41	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	23.07	24.47	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	22.99	24.39	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	22.05	23.45	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.11	23.51	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.13	23.53	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.08	23.48	33.00	PASS
Band38	15MHz	16QAM	37825	75RB#0	21.13	22.53	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	22.02	23.42	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.03	23.43	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.01	23.41	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	20.98	22.38	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	22.14	23.54	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	22.11	23.51	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.12	23.52	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	21.11	22.51	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#0	21.06	22.46	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#38	21.08	22.48	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#74	20.96	22.36	33.00	PASS
Band38	15MHz	64QAM	37825	75RB#0	20.07	21.47	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#0	21.04	22.44	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#38	20.93	22.33	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#74	20.9	22.3	33.00	PASS
Band38	15MHz	64QAM	38000	75RB#0	20.01	21.41	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#0	21.04	22.44	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#38	21.07	22.47	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#74	21.05	22.45	33.00	PASS
Band38	15MHz	64QAM	38175	75RB#0	20.12	21.52	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	22.96	24.36	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	22.99	24.39	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	22.91	24.31	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.1	23.5	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	23.03	24.43	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	22.91	24.31	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	22.87	24.27	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	21.93	23.33	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	22.98	24.38	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	22.98	24.38	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	22.93	24.33	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	22.11	23.51	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	22.12	23.52	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.08	23.48	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.1	23.5	33.00	PASS
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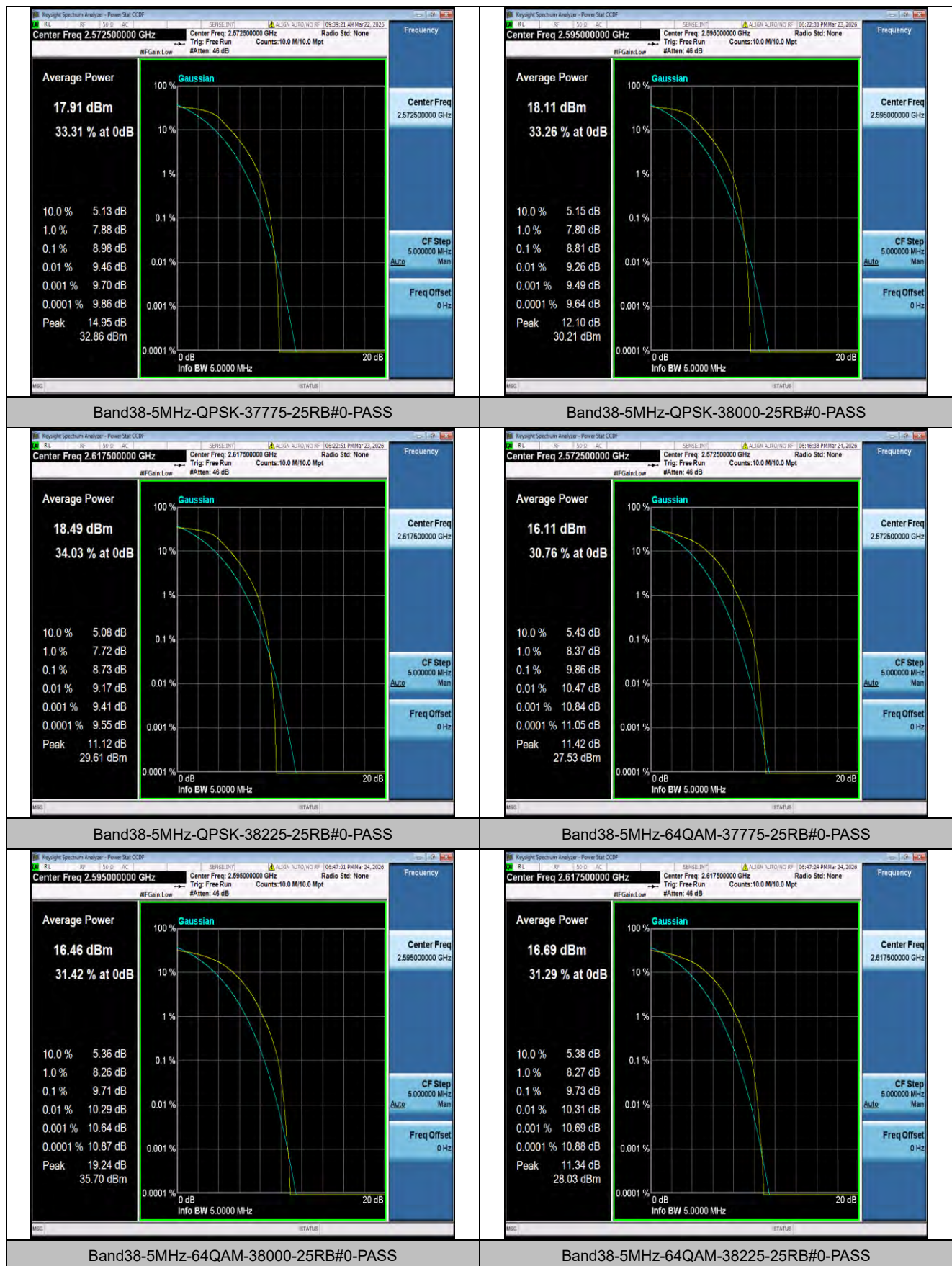
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Band38	20MHz	16QAM	38000	1RB#49	22.04	23.44	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.07	23.47	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	21.11	22.51	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	22.05	23.45	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	22.13	23.53	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.13	23.53	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	21.07	22.47	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#0	21.09	22.49	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#49	21.02	22.42	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#99	20.86	22.26	33.00	PASS
Band38	20MHz	64QAM	37850	100RB#0	20.12	21.52	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#0	20.93	22.33	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#49	20.92	22.32	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#99	20.88	22.28	33.00	PASS
Band38	20MHz	64QAM	38000	100RB#0	19.99	21.39	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#0	20.93	22.33	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#49	21.06	22.46	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#99	21.13	22.53	33.00	PASS
Band38	20MHz	64QAM	38150	100RB#0	20.1	21.5	33.00	PASS

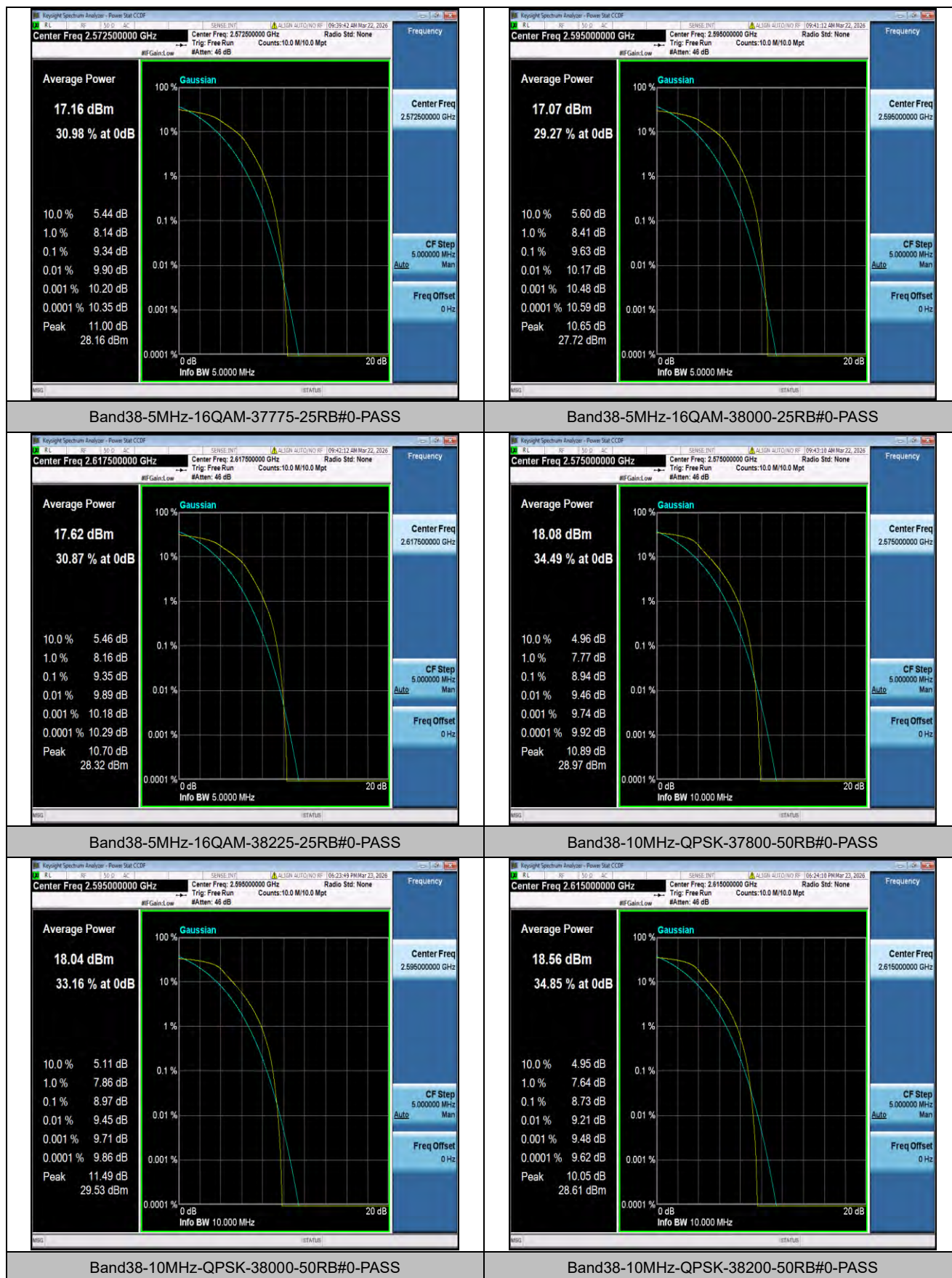
Peak-to-Average Ratio(CCDF)

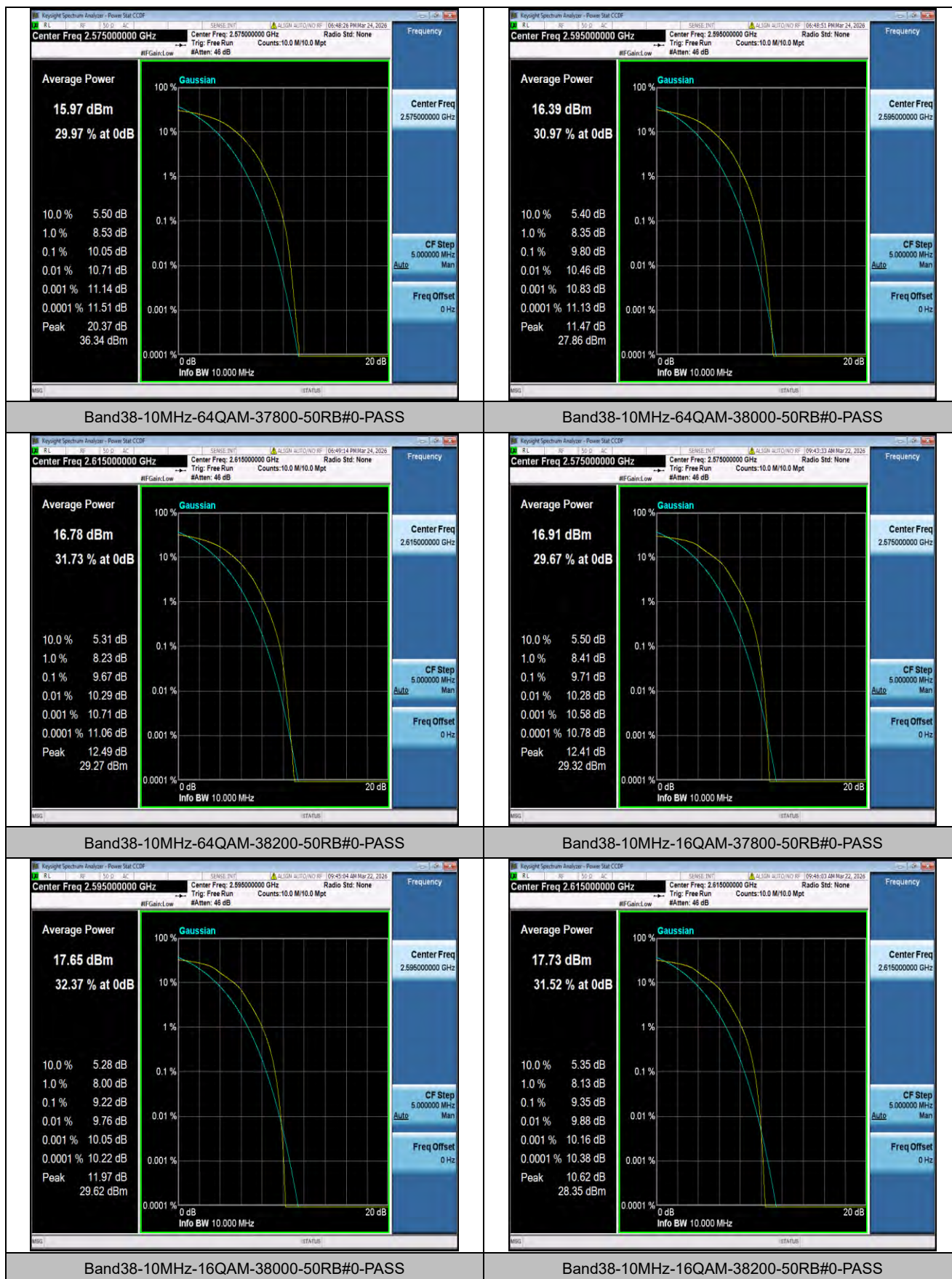
Test Result

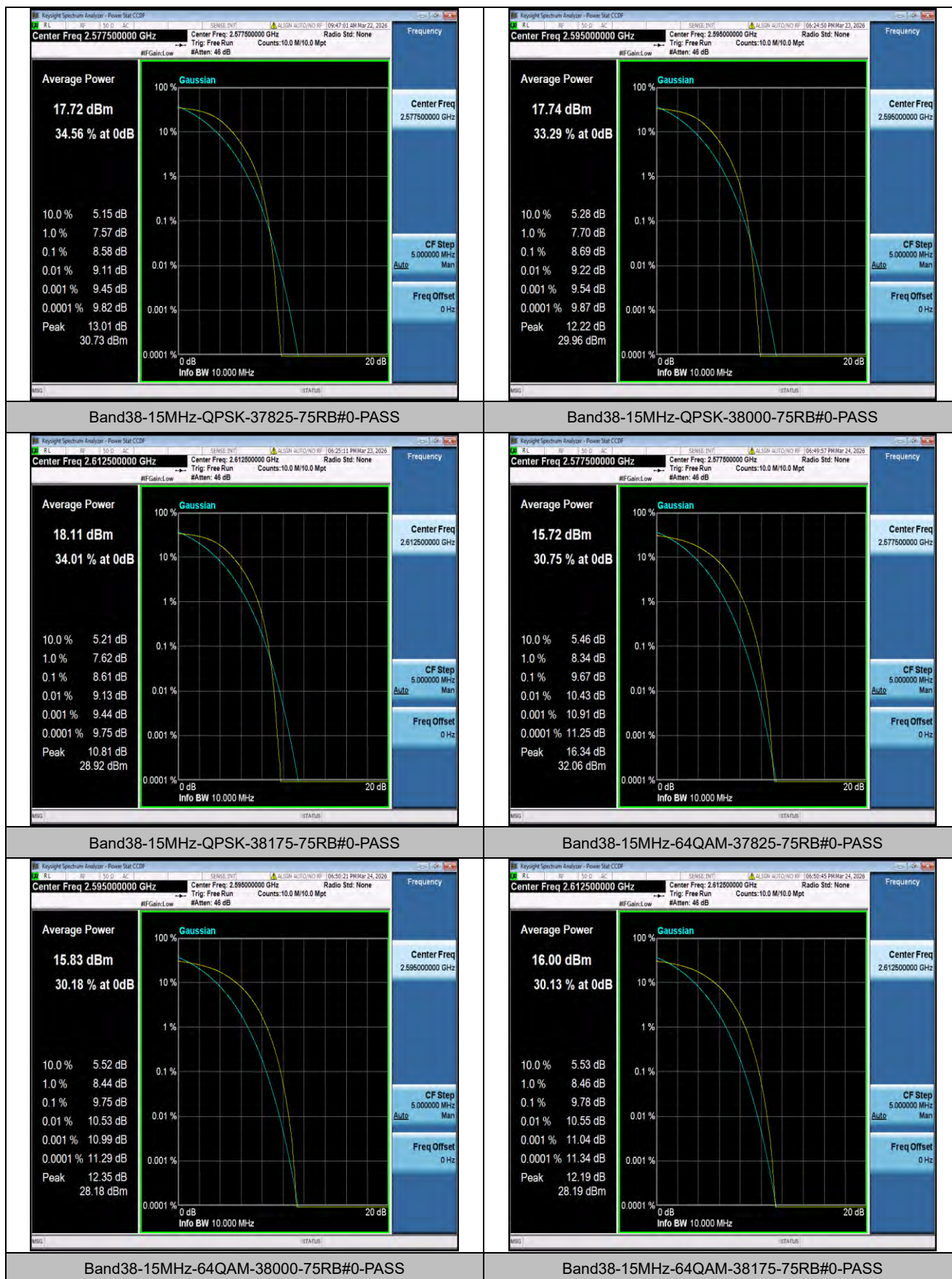
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	8.98	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	8.81	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	8.73	13	PASS
Band38	5MHz	64QAM	37775	25RB#0	9.86	13	PASS
Band38	5MHz	64QAM	38000	25RB#0	9.71	13	PASS
Band38	5MHz	64QAM	38225	25RB#0	9.73	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	9.34	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	9.63	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	9.35	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.94	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.97	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.73	13	PASS
Band38	10MHz	64QAM	37800	50RB#0	10.05	13	PASS
Band38	10MHz	64QAM	38000	50RB#0	9.80	13	PASS
Band38	10MHz	64QAM	38200	50RB#0	9.67	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	9.71	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.22	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.35	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	8.58	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	8.69	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	8.61	13	PASS
Band38	15MHz	64QAM	37825	75RB#0	9.67	13	PASS
Band38	15MHz	64QAM	38000	75RB#0	9.75	13	PASS
Band38	15MHz	64QAM	38175	75RB#0	9.78	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	9.55	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	9.39	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	9.47	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	9.45	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.41	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	9.10	13	PASS
Band38	20MHz	64QAM	37850	100RB#0	10.11	13	PASS
Band38	20MHz	64QAM	38000	100RB#0	9.54	13	PASS
Band38	20MHz	64QAM	38150	100RB#0	10.04	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.21	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.18	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.12	13	PASS

Test Graphs











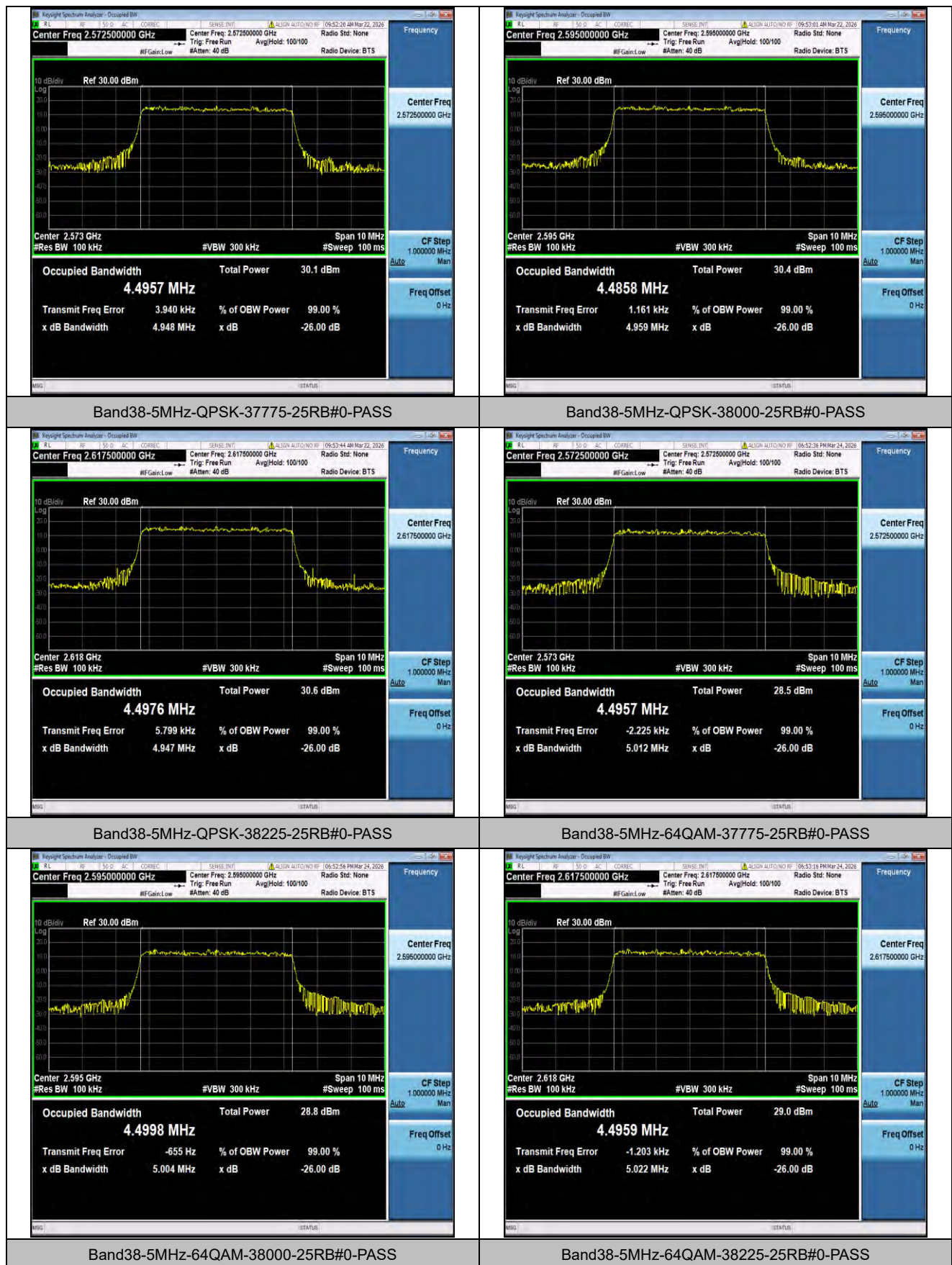


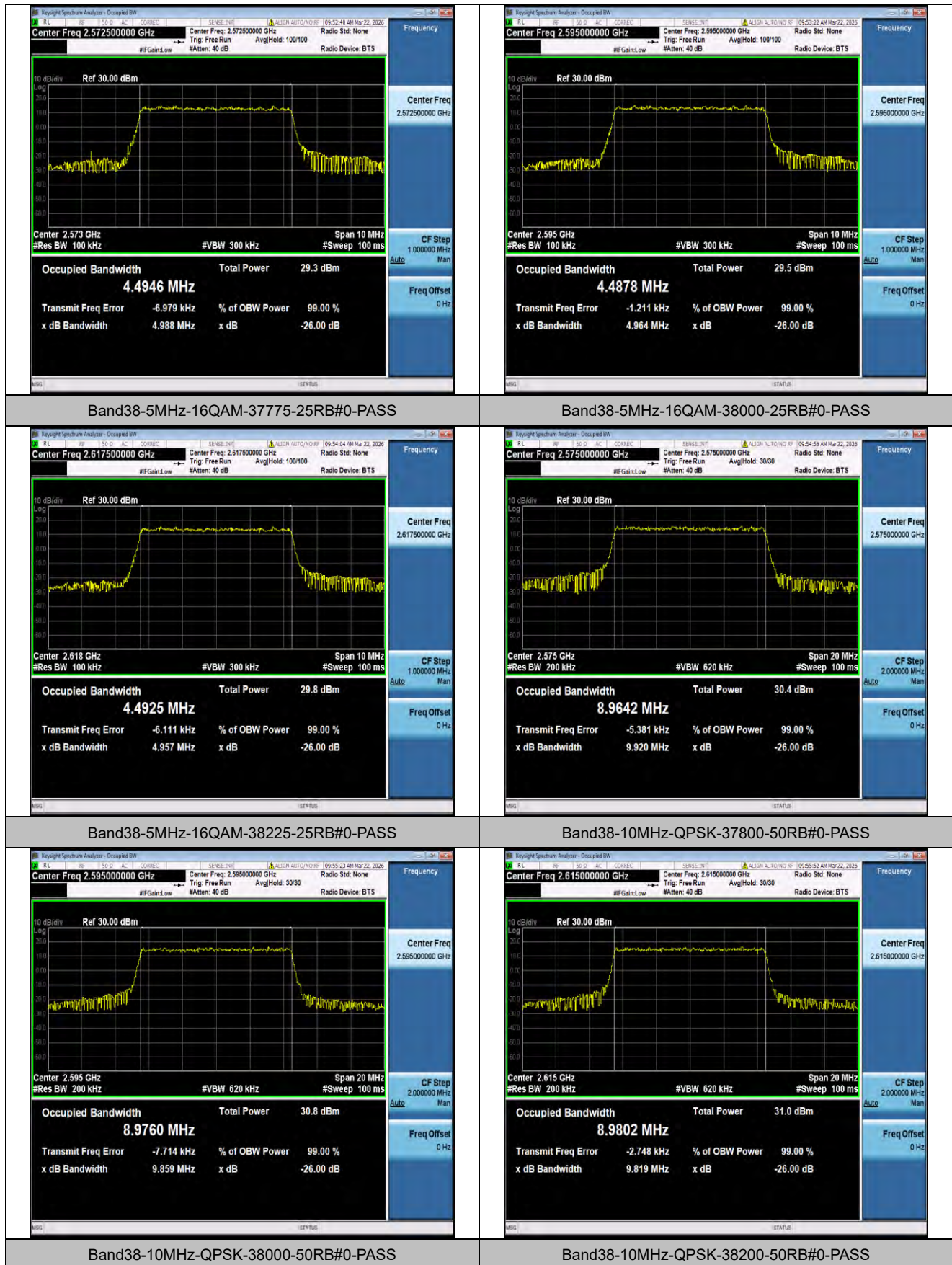
26dB Bandwidth and Occupied Bandwidth

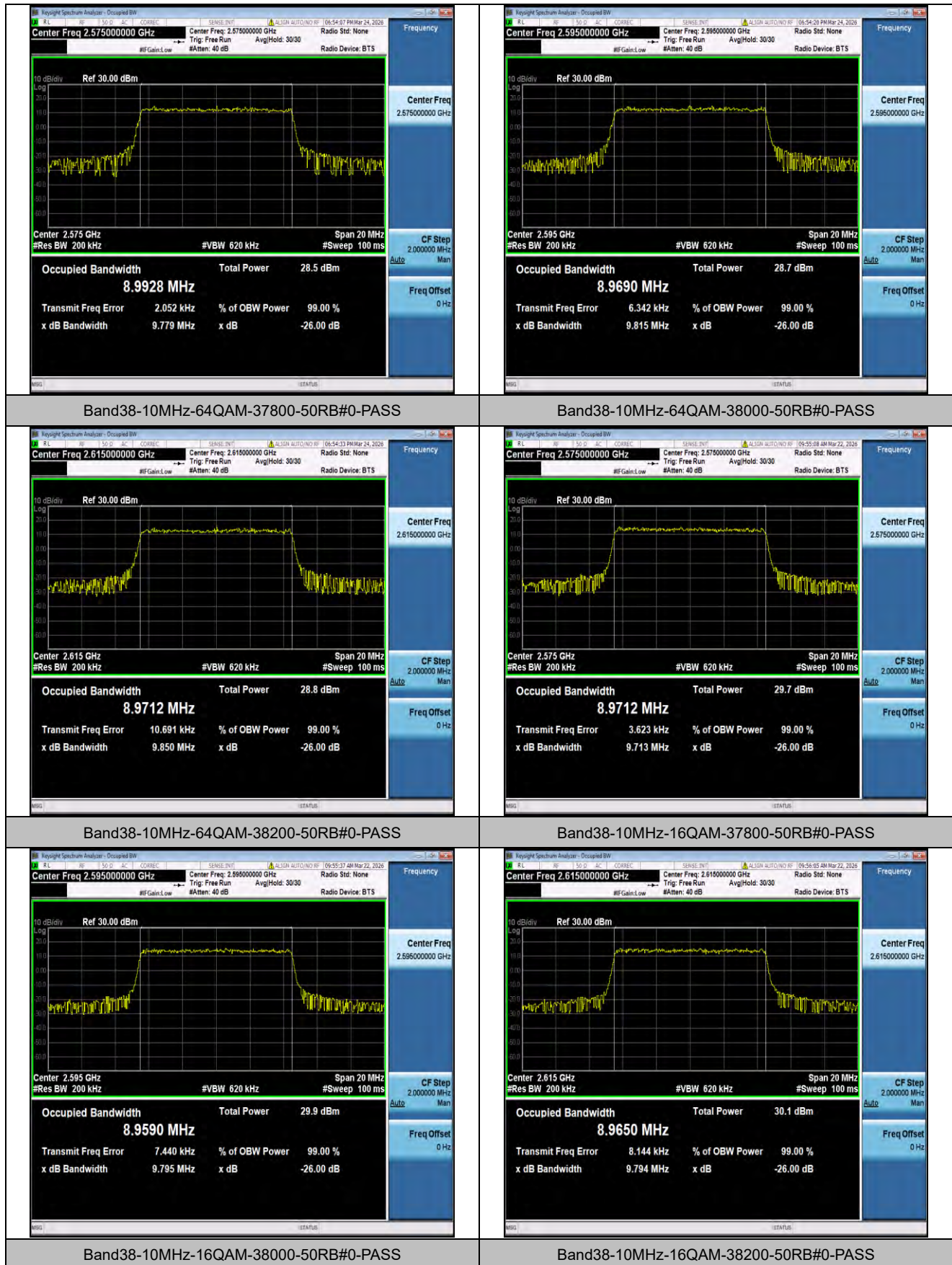
Test Result

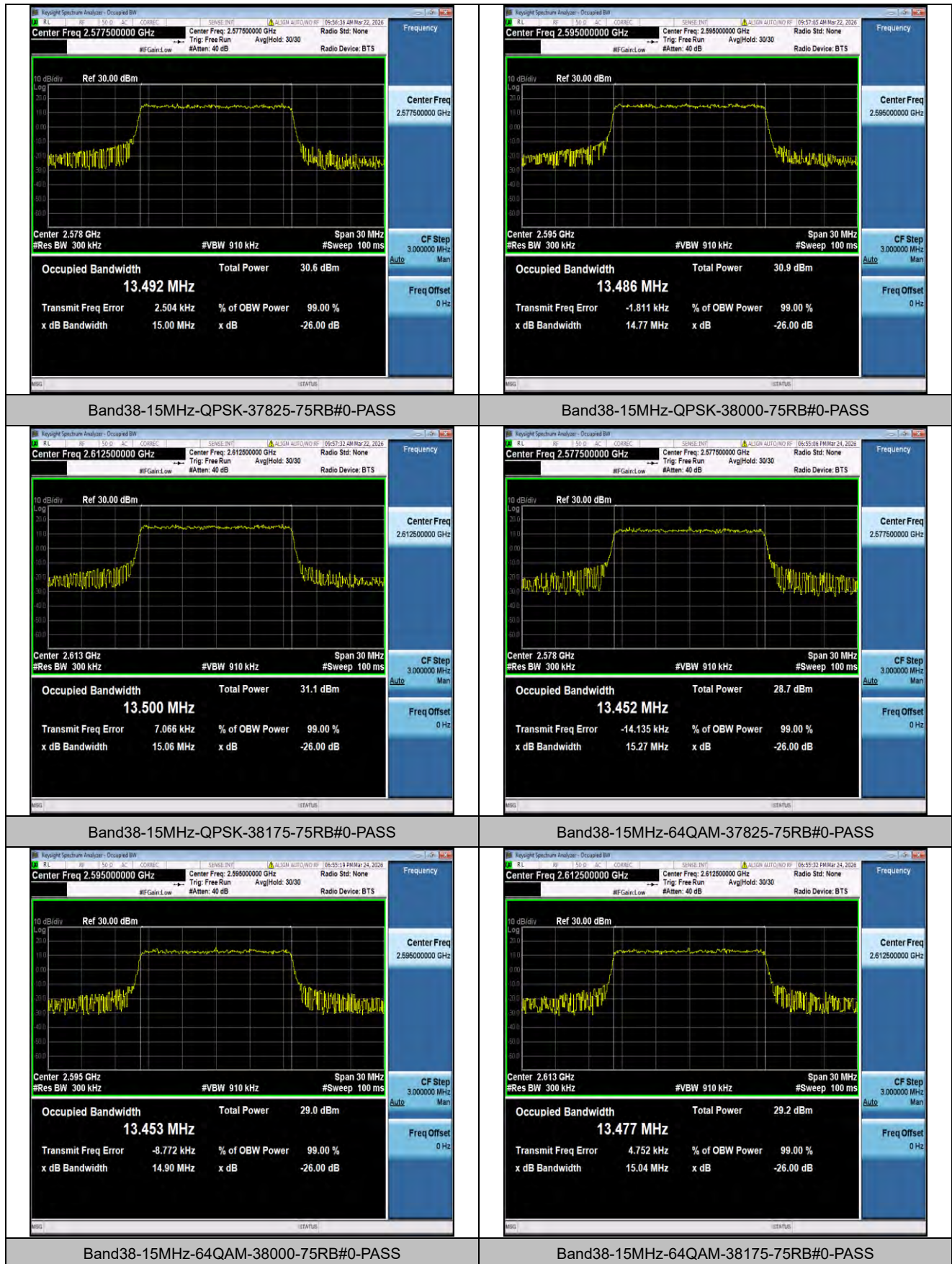
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Band38	5MHz	QPSK	37775	25RB#0	4.4957	4.948	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.4858	4.959	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.4976	4.947	PASS
Band38	5MHz	64QAM	37775	25RB#0	4.4957	5.012	PASS
Band38	5MHz	64QAM	38000	25RB#0	4.4998	5.004	PASS
Band38	5MHz	64QAM	38225	25RB#0	4.4959	5.022	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.4946	4.988	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.4878	4.964	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.4925	4.957	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9642	9.920	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9760	9.859	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.9802	9.819	PASS
Band38	10MHz	64QAM	37800	50RB#0	8.9928	9.779	PASS
Band38	10MHz	64QAM	38000	50RB#0	8.9690	9.815	PASS
Band38	10MHz	64QAM	38200	50RB#0	8.9712	9.850	PASS
Band38	10MHz	16QAM	37800	50RB#0	8.9712	9.713	PASS
Band38	10MHz	16QAM	38000	50RB#0	8.9590	9.795	PASS
Band38	10MHz	16QAM	38200	50RB#0	8.9650	9.794	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.492	15.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.486	14.77	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.500	15.06	PASS
Band38	15MHz	64QAM	37825	75RB#0	13.452	15.27	PASS
Band38	15MHz	64QAM	38000	75RB#0	13.453	14.90	PASS
Band38	15MHz	64QAM	38175	75RB#0	13.477	15.04	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.482	14.69	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.476	14.68	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.473	14.68	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.982	19.48	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.959	19.42	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.978	19.69	PASS
Band38	20MHz	64QAM	37850	100RB#0	17.962	19.79	PASS
Band38	20MHz	64QAM	38000	100RB#0	17.940	19.78	PASS
Band38	20MHz	64QAM	38150	100RB#0	17.931	20.02	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.970	19.87	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.927	20.06	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.954	19.99	PASS

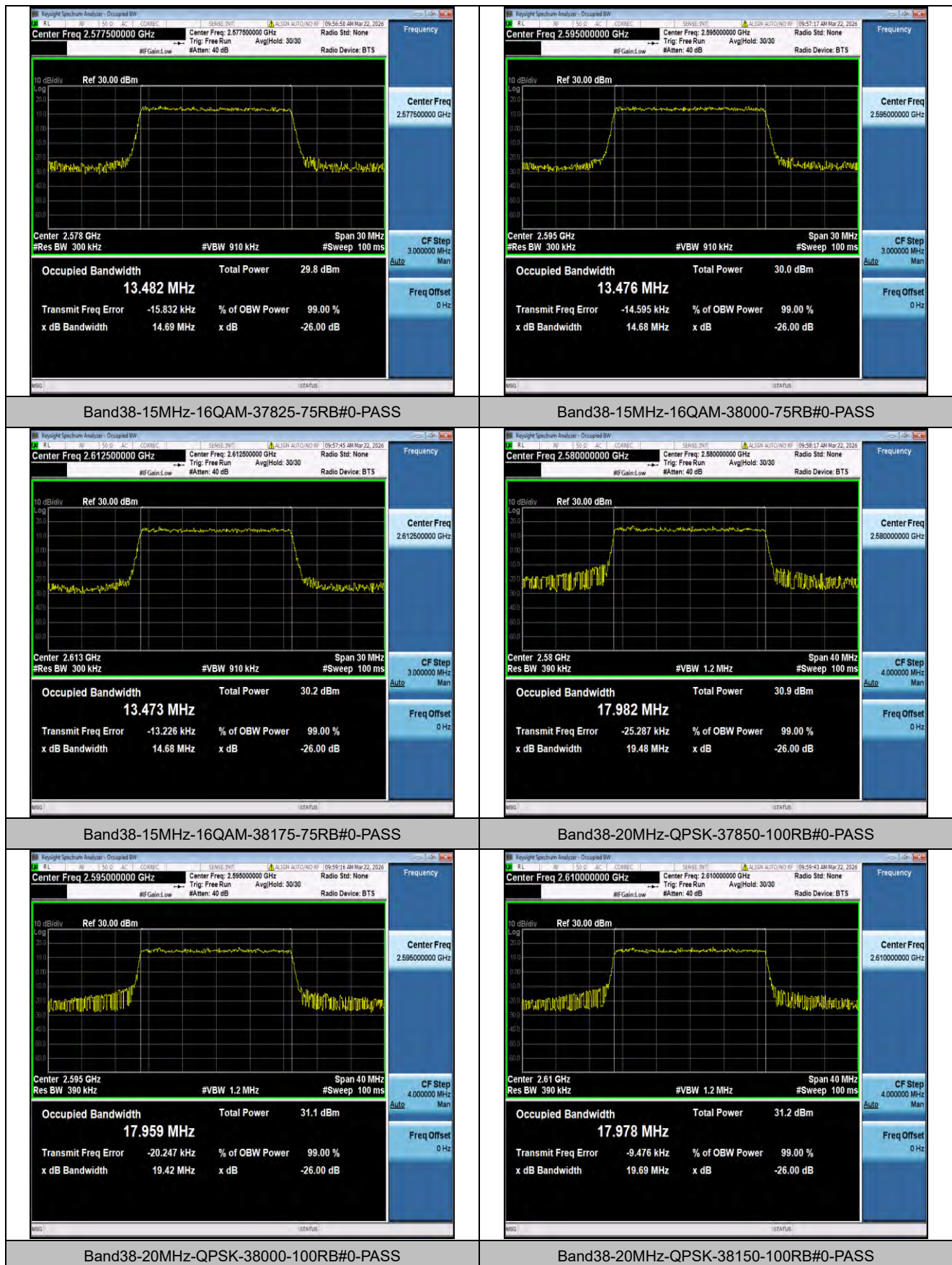
Test Graphs

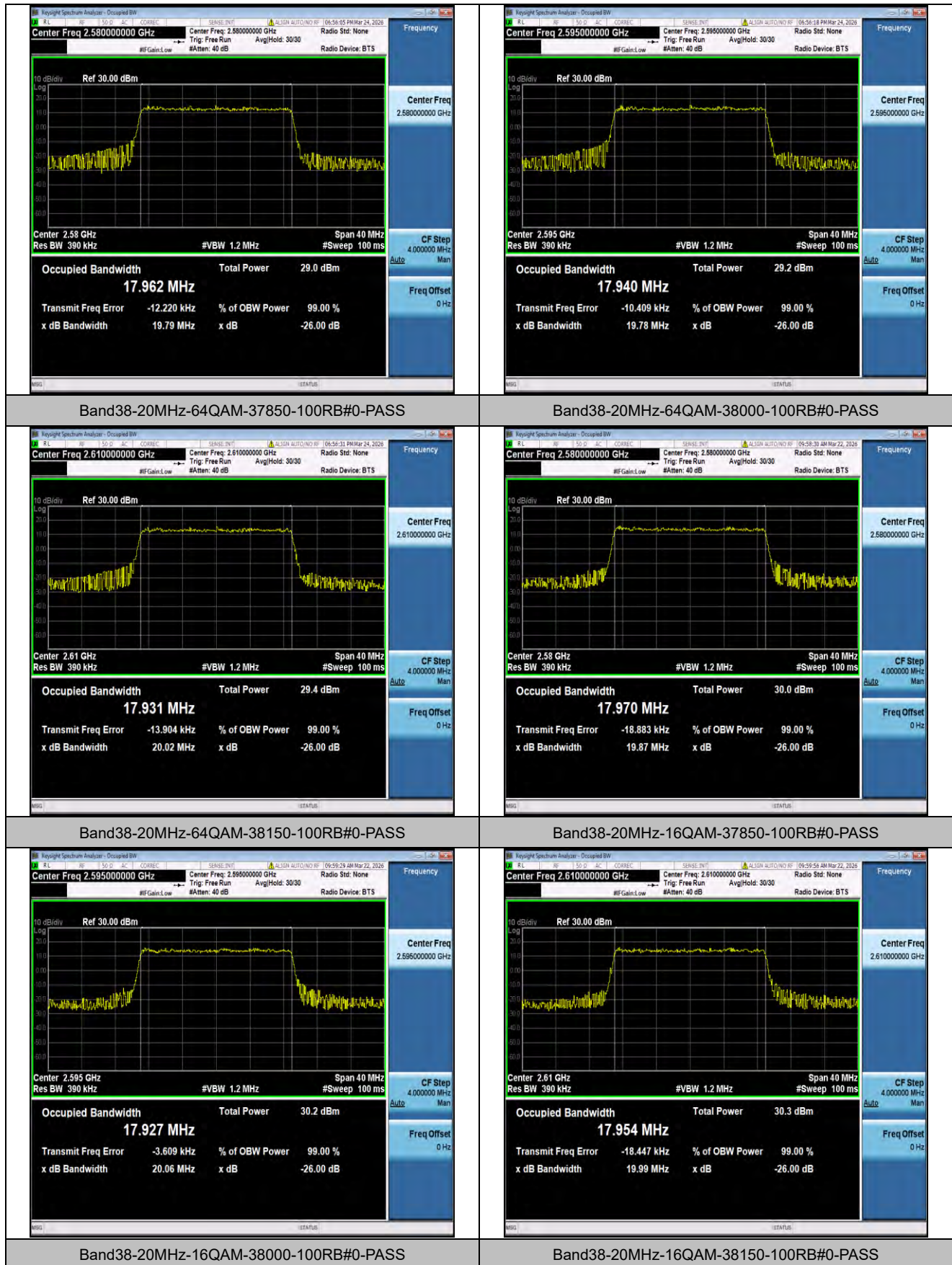






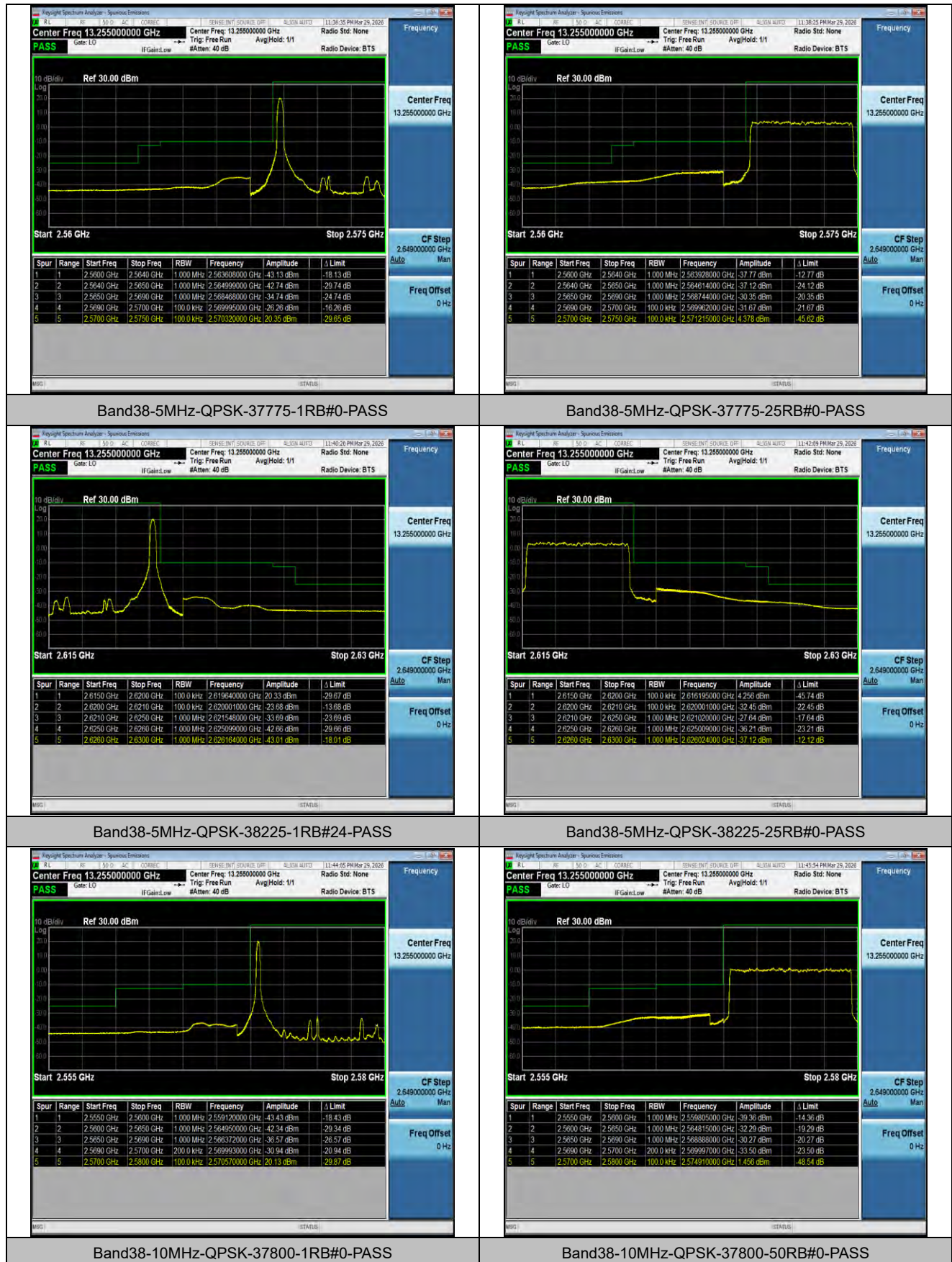


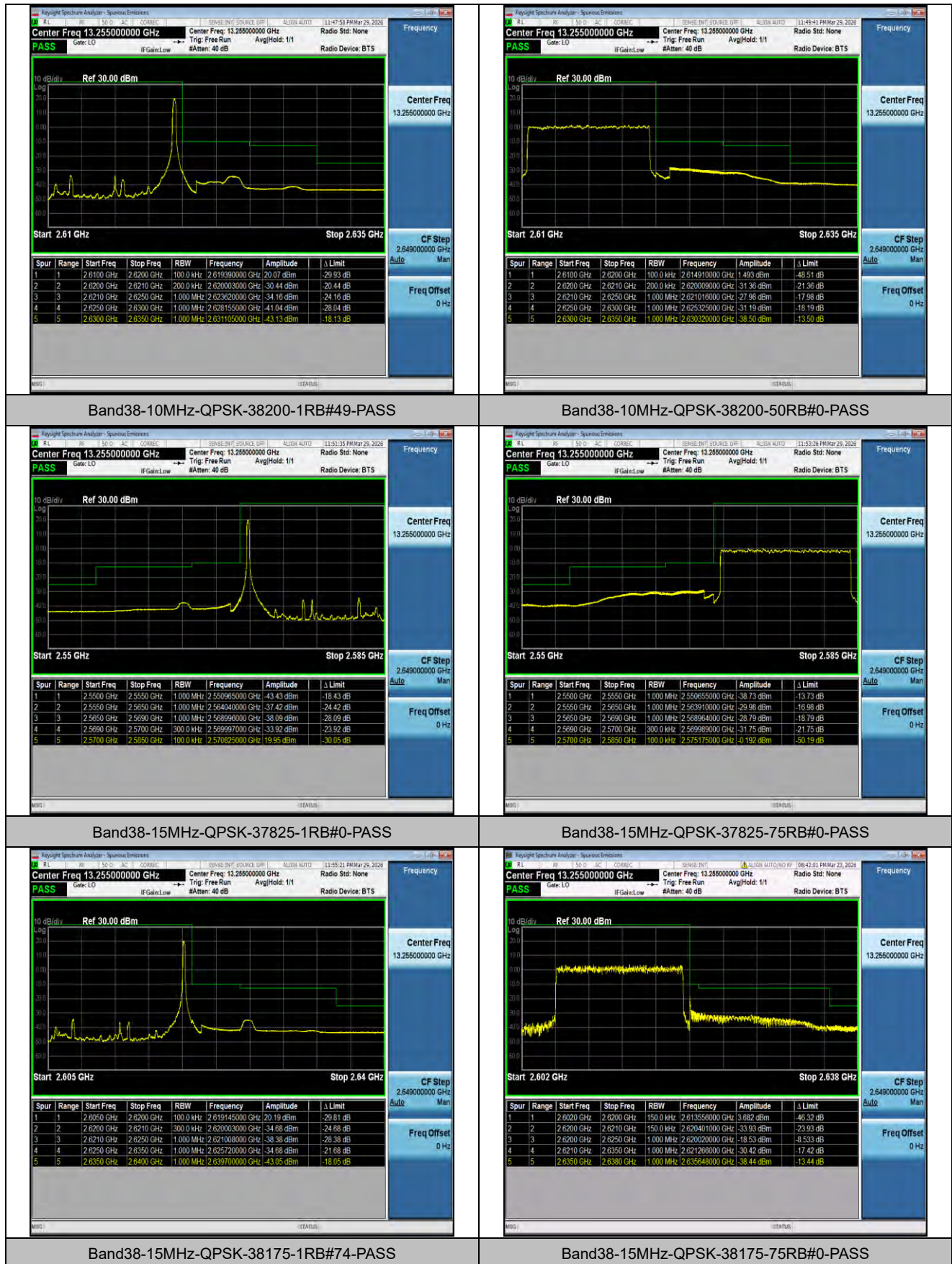


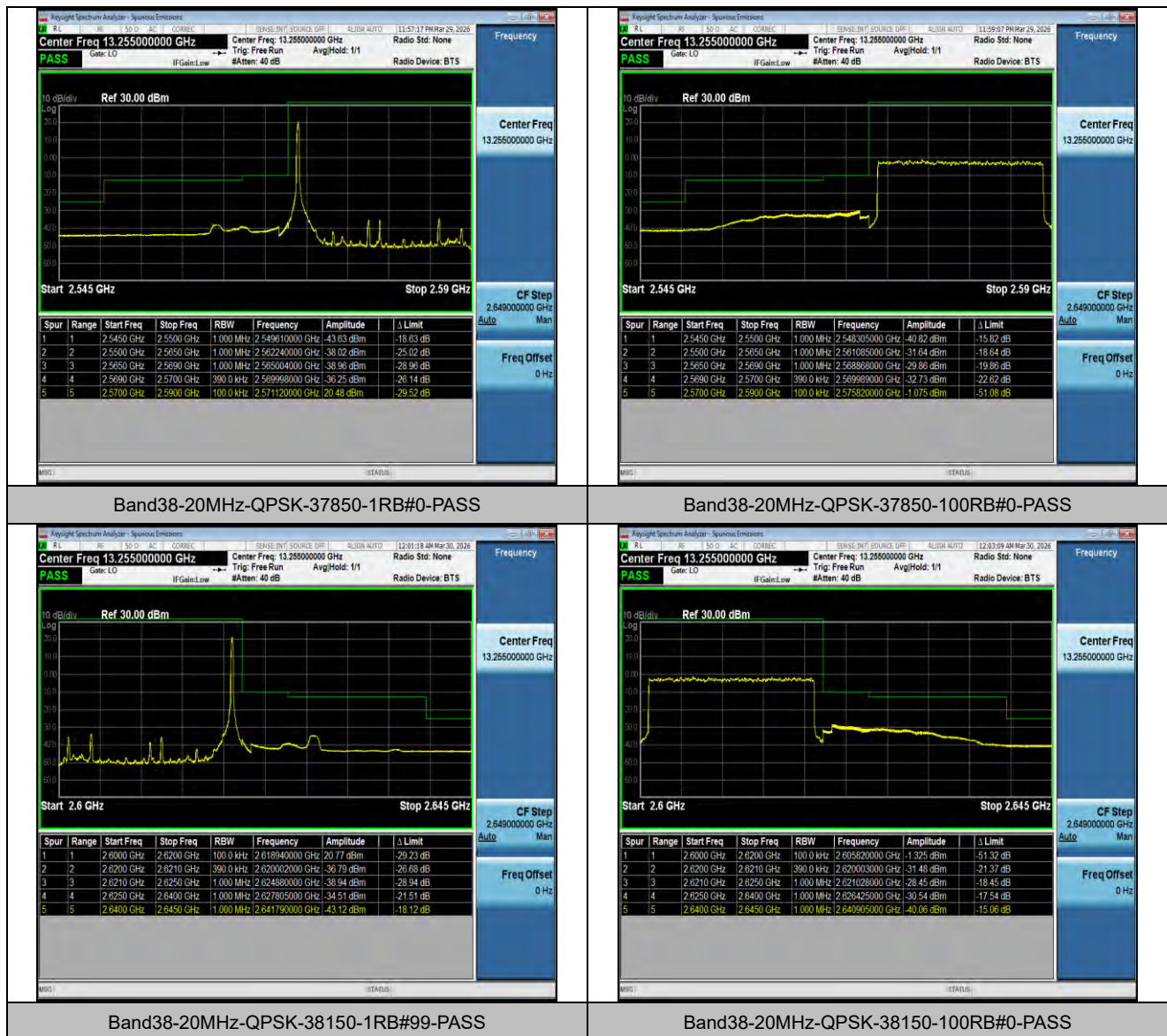


Band Edge

Test Graphs

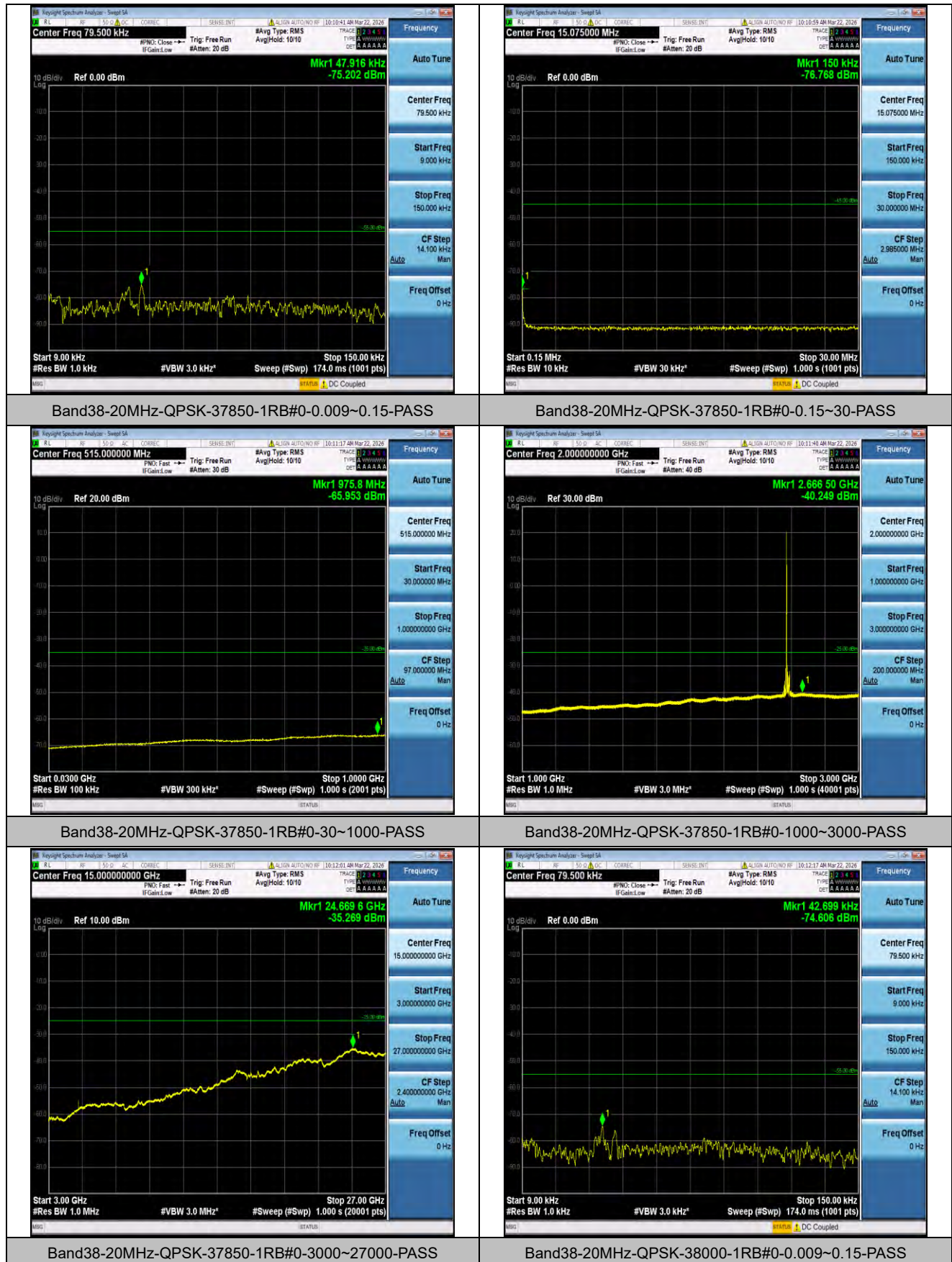


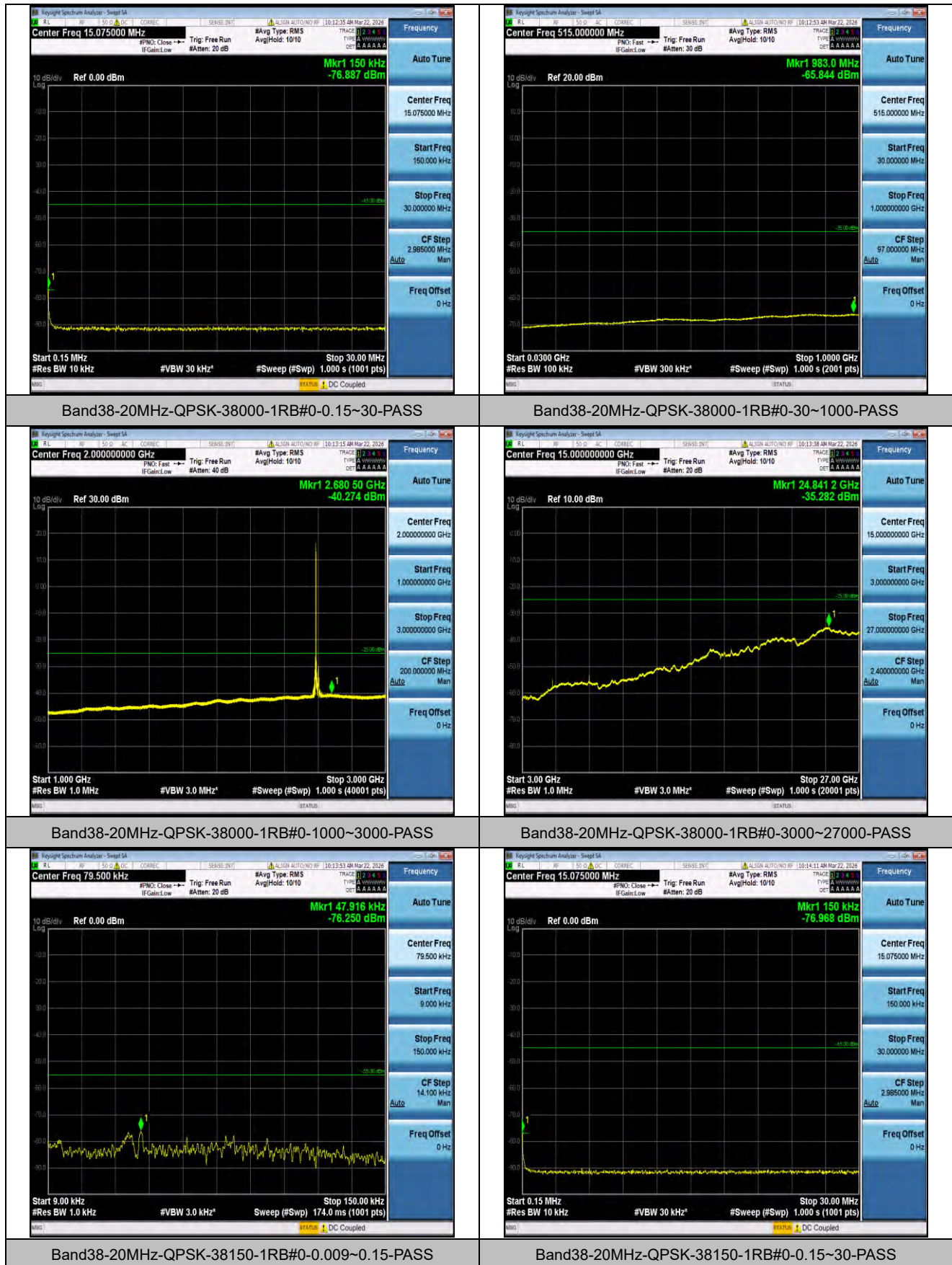


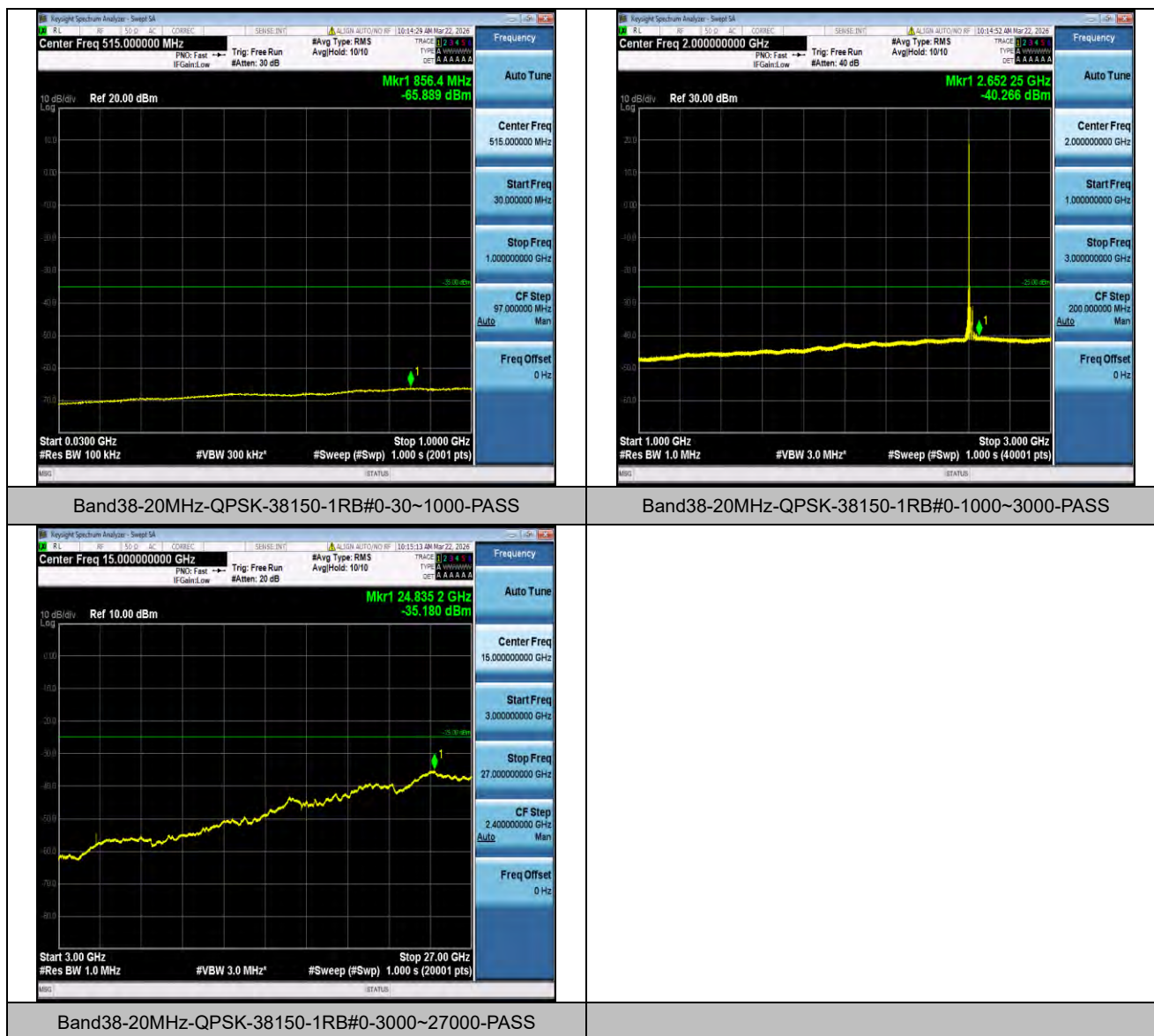


Conducted Spurious Emission

Test Graphs







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

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	8.80	0.003391	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-4.40	-0.001696	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	19.70	0.007592	PASS

Temperature									
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Verdict
Band38	20MHz	QPSK	38000	100RB#0	NV	-30	14.70	0.005665	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-6.70	-0.002582	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	-19.10	-0.007360	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-3.90	-0.001503	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	8.30	0.003198	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	13.40	0.005164	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	19.50	0.007514	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	2.10	0.000809	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-10.50	-0.004046	PASS

~The End~