

Appendix-C LTE Band 38

Effective (Isotropic) Radiated Power Output Data

Test Result

Ant8:

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dBm)	EIRP (dBm)	Limit (dBm)	Verdict
Band38	5MHz	QPSK	37775	1RB#0	24.49	21.79	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	24.38	21.68	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	24.39	21.69	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	23.51	20.81	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	23.25	20.55	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	23.33	20.63	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	23.46	20.76	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	22.49	19.79	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#0	22.79	20.09	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#12	22.8	20.1	33.00	PASS
Band38	5MHz	64QAM	37775	1RB#24	22.71	20.01	33.00	PASS
Band38	5MHz	64QAM	37775	25RB#0	21.49	18.79	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	24.64	21.94	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	24.58	21.88	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	24.51	21.81	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	23.4	20.7	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	23.61	20.91	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	23.51	20.81	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	23.48	20.78	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	22.58	19.88	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#0	22.59	19.89	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#12	22.76	20.06	33.00	PASS
Band38	5MHz	64QAM	38000	1RB#24	22.66	19.96	33.00	PASS
Band38	5MHz	64QAM	38000	25RB#0	21.47	18.77	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	24.56	21.86	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	24.41	21.71	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	24.37	21.67	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	23.51	20.81	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	23.29	20.59	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	23.37	20.67	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	23.55	20.85	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	22.5	19.8	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#0	22.61	19.91	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#12	23.05	20.35	33.00	PASS
Band38	5MHz	64QAM	38225	1RB#24	22.62	19.92	33.00	PASS

Band38	5MHz	64QAM	38225	25RB#0	21.48	18.78	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	24.45	21.75	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	24.31	21.61	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	24.4	21.7	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	23.5	20.8	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	23.58	20.88	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	23.46	20.76	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	23.31	20.61	33.00	PASS
Band38	10MHz	16QAM	37800	50RB#0	22.48	19.78	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#0	22.75	20.05	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#24	22.76	20.06	33.00	PASS
Band38	10MHz	64QAM	37800	1RB#49	22.3	19.6	33.00	PASS
Band38	10MHz	64QAM	37800	50RB#0	21.48	18.78	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	24.47	21.77	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	24.38	21.68	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	24.34	21.64	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	23.5	20.8	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#0	23.36	20.66	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	23.54	20.84	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	23.42	20.72	33.00	PASS
Band38	10MHz	16QAM	38000	50RB#0	22.51	19.81	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#0	22.91	20.21	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#24	22.9	20.2	33.00	PASS
Band38	10MHz	64QAM	38000	1RB#49	22.75	20.05	33.00	PASS
Band38	10MHz	64QAM	38000	50RB#0	21.35	18.65	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	24.35	21.65	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	24.24	21.54	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	24.32	21.62	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	23.39	20.69	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	23.29	20.59	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	23.43	20.73	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	23.38	20.68	33.00	PASS
Band38	10MHz	16QAM	38200	50RB#0	22.37	19.67	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#0	22.54	19.84	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#24	22.63	19.93	33.00	PASS
Band38	10MHz	64QAM	38200	1RB#49	22.71	20.01	33.00	PASS
Band38	10MHz	64QAM	38200	50RB#0	21.4	18.7	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	24.42	21.72	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	24.27	21.57	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	24.15	21.45	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	23.43	20.73	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	23.5	20.8	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	23.6	20.9	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	23.35	20.65	33.00	PASS

Band38	15MHz	16QAM	37825	75RB#0	22.43	19.73	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#0	22.51	19.81	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#38	22.72	20.02	33.00	PASS
Band38	15MHz	64QAM	37825	1RB#74	22.84	20.14	33.00	PASS
Band38	15MHz	64QAM	37825	75RB#0	21.44	18.74	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	24.49	21.79	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	24.32	21.62	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	24.31	21.61	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	23.44	20.74	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	23.16	20.46	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	23.71	21.01	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	23.42	20.72	33.00	PASS
Band38	15MHz	16QAM	38000	75RB#0	22.46	19.76	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#0	22.75	20.05	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#38	22.85	20.15	33.00	PASS
Band38	15MHz	64QAM	38000	1RB#74	22.63	19.93	33.00	PASS
Band38	15MHz	64QAM	38000	75RB#0	21.41	18.71	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	24.46	21.76	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	24.38	21.68	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	24.44	21.74	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	23.45	20.75	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	23.35	20.65	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	23.38	20.68	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	23.49	20.79	33.00	PASS
Band38	15MHz	16QAM	38175	75RB#0	22.5	19.8	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#0	22.52	19.82	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#38	22.52	19.82	33.00	PASS
Band38	15MHz	64QAM	38175	1RB#74	22.73	20.03	33.00	PASS
Band38	15MHz	64QAM	38175	75RB#0	21.49	18.79	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	24.21	21.51	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	24.28	21.58	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	24.19	21.49	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	23.49	20.79	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	23.28	20.58	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	23.53	20.83	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	23.28	20.58	33.00	PASS
Band38	20MHz	16QAM	37850	100RB#0	22.48	19.78	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#0	22.55	19.85	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#49	22.76	20.06	33.00	PASS
Band38	20MHz	64QAM	37850	1RB#99	22.6	19.9	33.00	PASS
Band38	20MHz	64QAM	37850	100RB#0	21.44	18.74	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	24.51	21.81	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#49	24.39	21.69	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	24.25	21.55	33.00	PASS

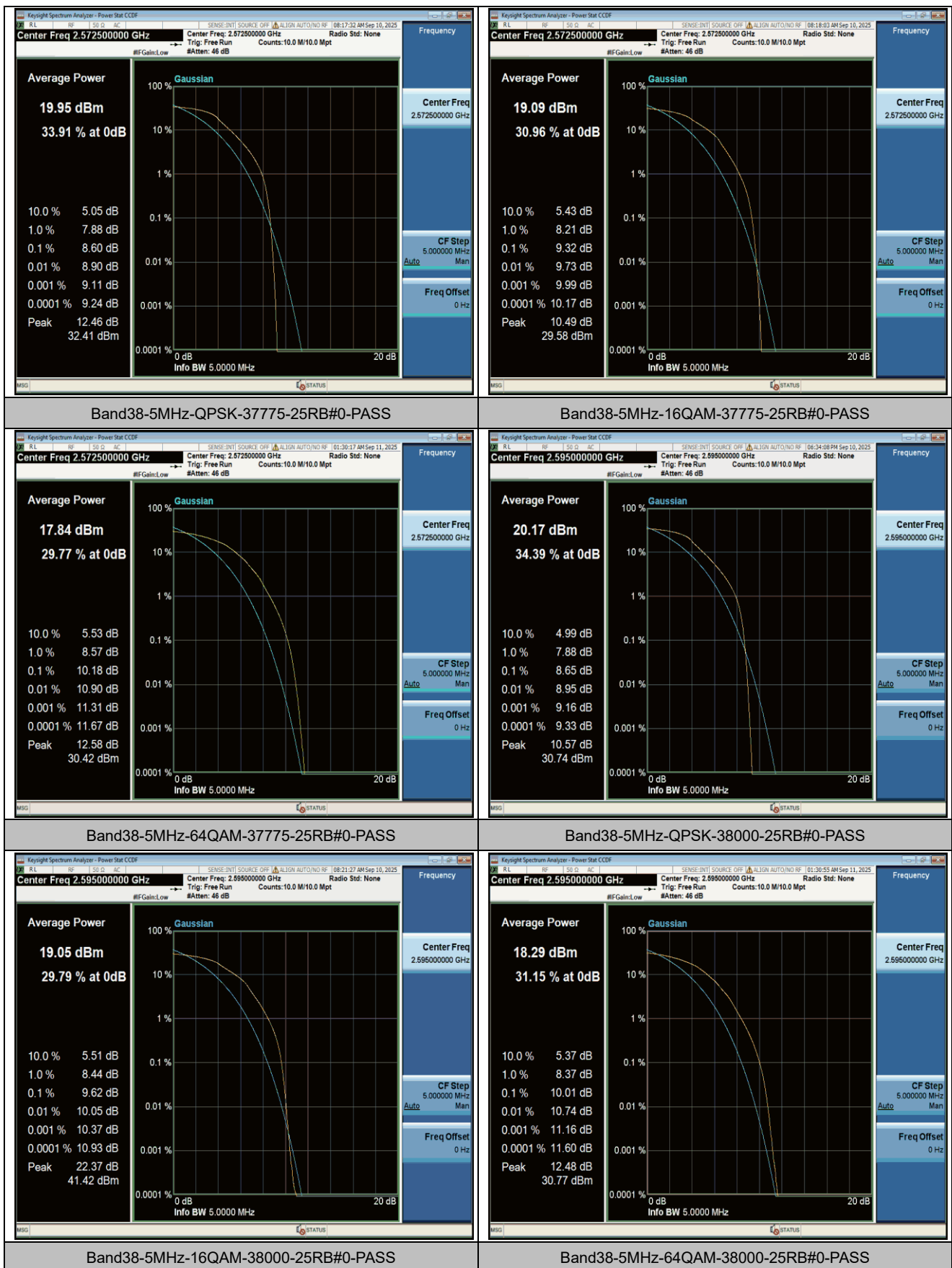
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Band38	20MHz	16QAM	38000	1RB#0	23.68	20.98	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	23.82	21.12	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	23.35	20.65	33.00	PASS
Band38	20MHz	16QAM	38000	100RB#0	22.44	19.74	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#0	22.64	19.94	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#49	22.9	20.2	33.00	PASS
Band38	20MHz	64QAM	38000	1RB#99	22.56	19.86	33.00	PASS
Band38	20MHz	64QAM	38000	100RB#0	21.44	18.74	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	24.48	21.78	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	24.34	21.64	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	24.49	21.79	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	23.51	20.81	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	23.57	20.87	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	23.49	20.79	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	23.12	20.42	33.00	PASS
Band38	20MHz	16QAM	38150	100RB#0	22.48	19.78	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#0	22.81	20.11	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#49	22.52	19.82	33.00	PASS
Band38	20MHz	64QAM	38150	1RB#99	22.66	19.96	33.00	PASS
Band38	20MHz	64QAM	38150	100RB#0	21.47	18.77	33.00	PASS

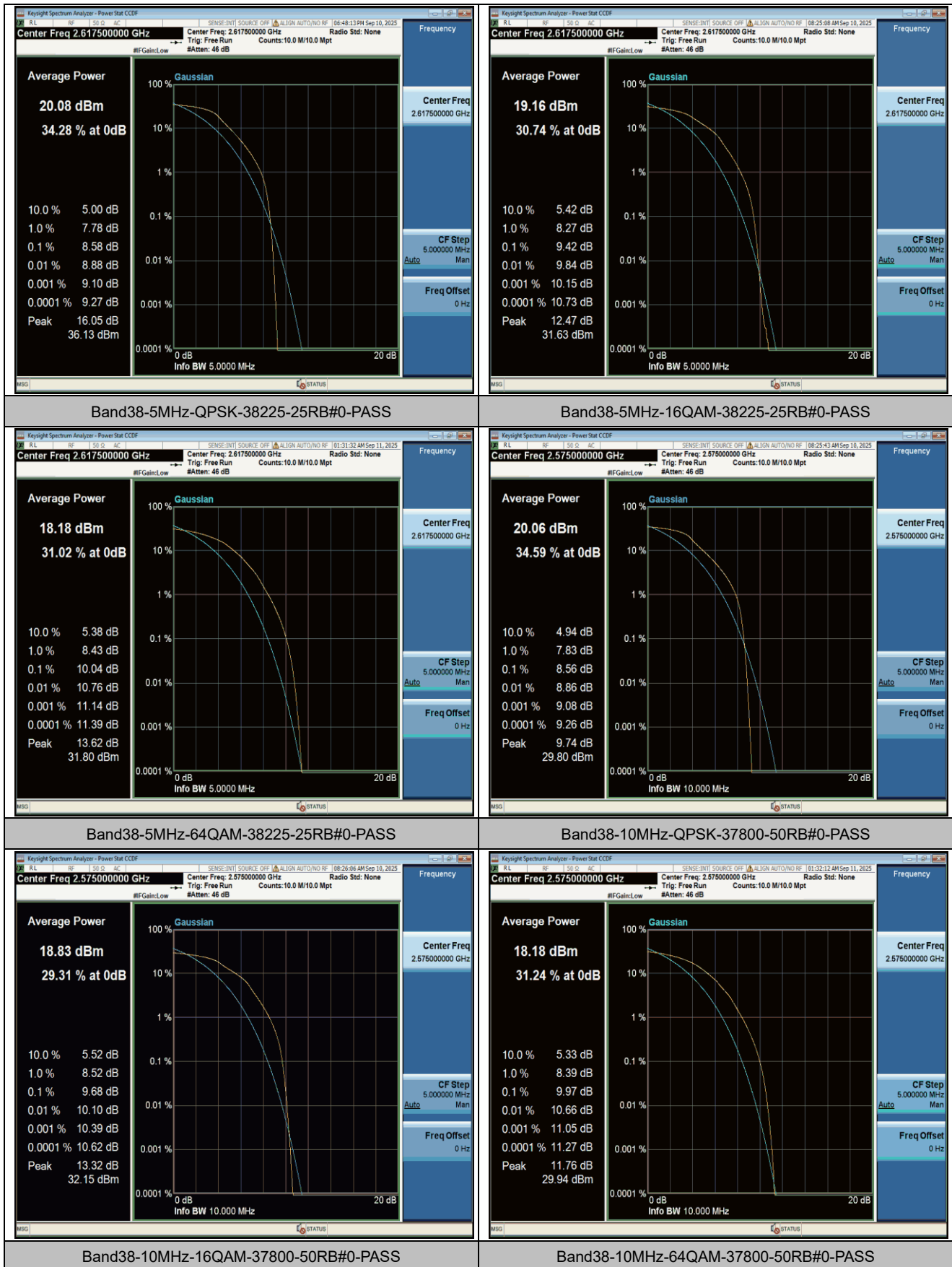
Peak-to-Average Ratio(CCDF)

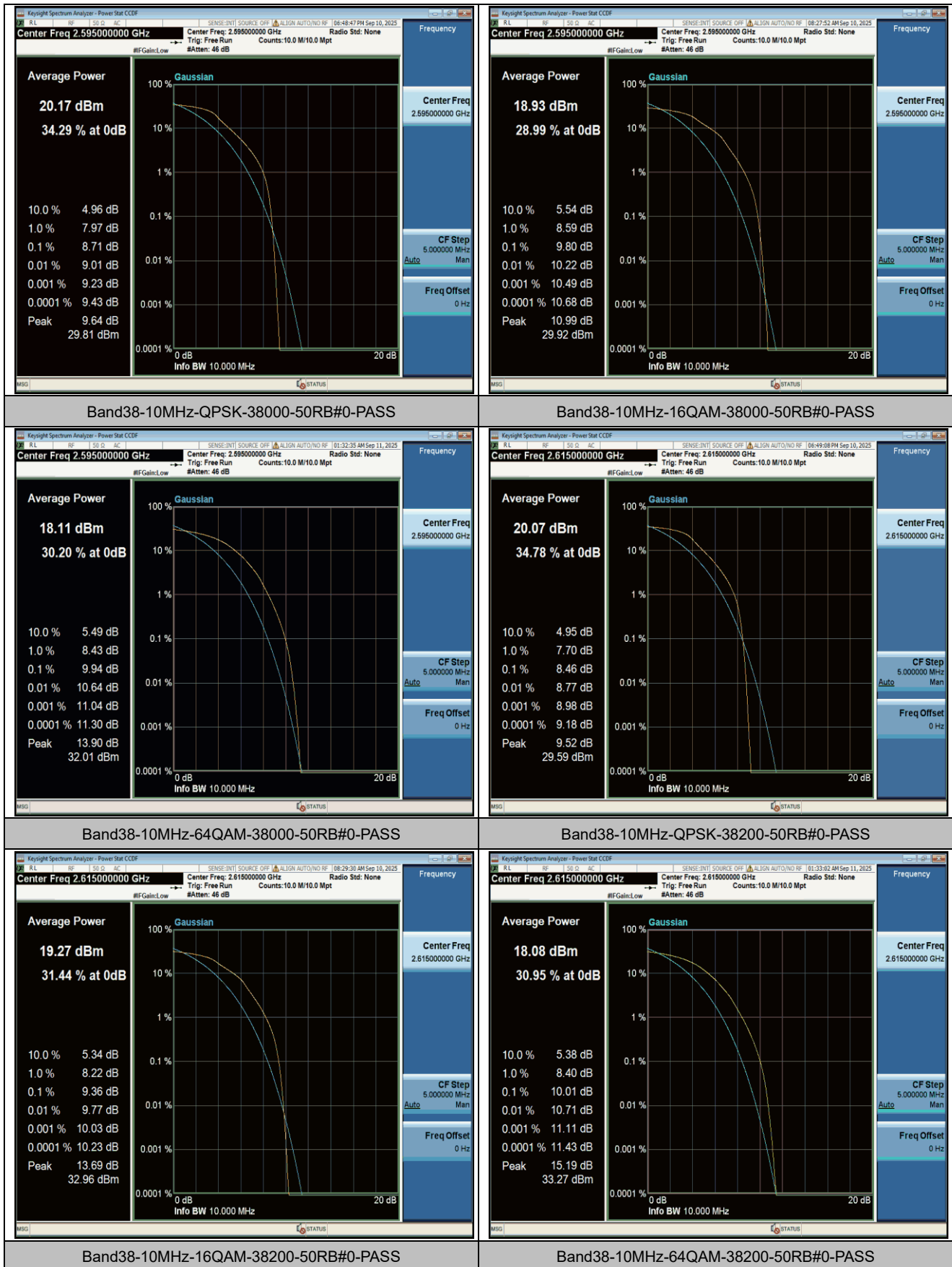
Test Result

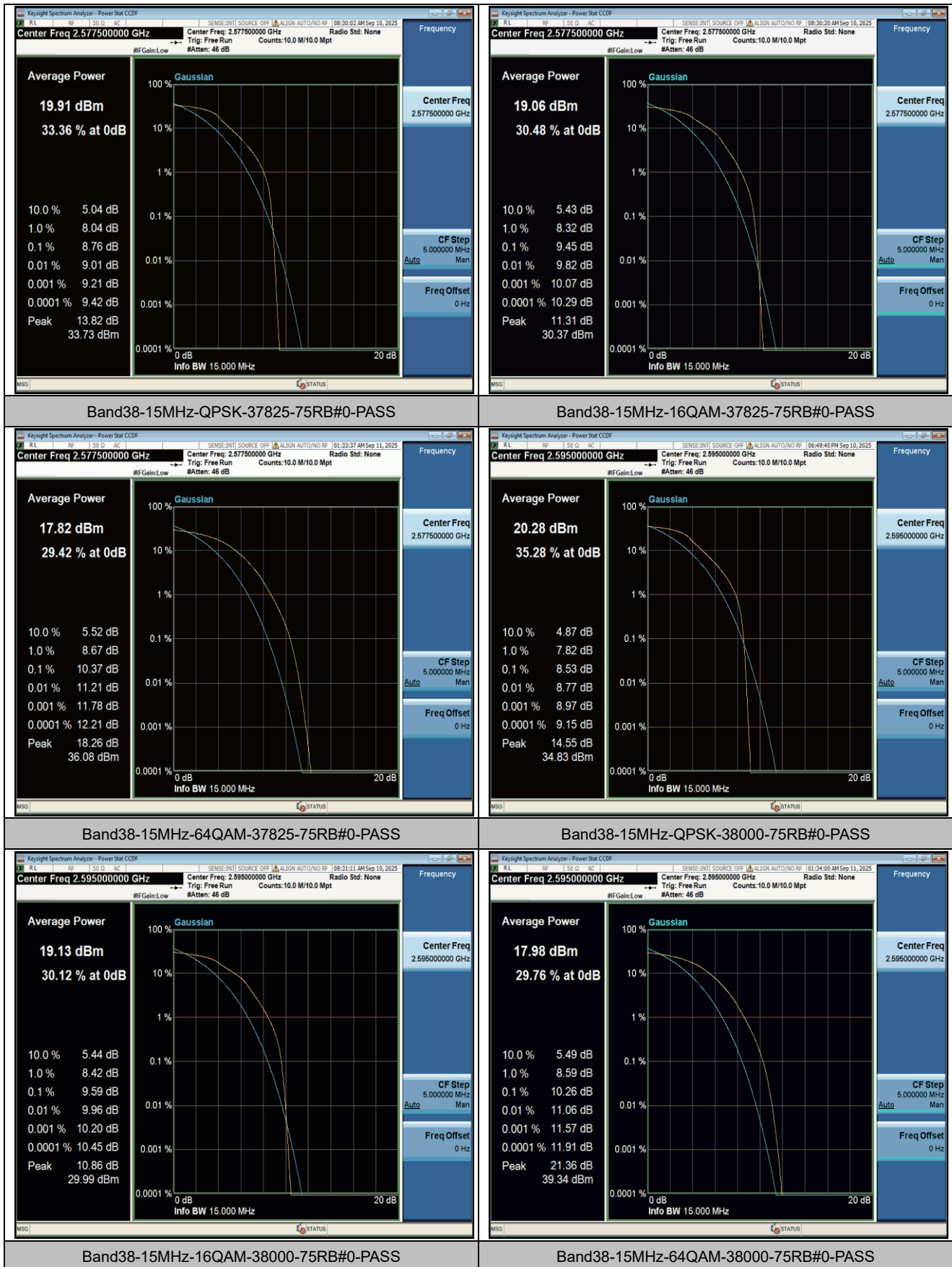
Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	8.60	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	9.32	13	PASS
Band38	5MHz	64QAM	37775	25RB#0	10.18	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	8.65	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	9.62	13	PASS
Band38	5MHz	64QAM	38000	25RB#0	10.01	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	8.58	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	9.42	13	PASS
Band38	5MHz	64QAM	38225	25RB#0	10.04	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.56	13	PASS
Band38	10MHz	16QAM	37800	50RB#0	9.68	13	PASS
Band38	10MHz	64QAM	37800	50RB#0	9.97	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.71	13	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.80	13	PASS
Band38	10MHz	64QAM	38000	50RB#0	9.94	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	8.46	13	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.36	13	PASS
Band38	10MHz	64QAM	38200	50RB#0	10.01	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	8.76	13	PASS
Band38	15MHz	16QAM	37825	75RB#0	9.45	13	PASS
Band38	15MHz	64QAM	37825	75RB#0	10.37	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	8.53	13	PASS
Band38	15MHz	16QAM	38000	75RB#0	9.59	13	PASS
Band38	15MHz	64QAM	38000	75RB#0	10.26	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	8.17	13	PASS
Band38	15MHz	16QAM	38175	75RB#0	9.56	13	PASS
Band38	15MHz	64QAM	38175	75RB#0	10.21	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	8.82	13	PASS
Band38	20MHz	16QAM	37850	100RB#0	9.70	13	PASS
Band38	20MHz	64QAM	37850	100RB#0	10.19	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	8.76	13	PASS
Band38	20MHz	16QAM	38000	100RB#0	9.43	13	PASS
Band38	20MHz	64QAM	38000	100RB#0	10.05	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.62	13	PASS
Band38	20MHz	16QAM	38150	100RB#0	9.54	13	PASS
Band38	20MHz	64QAM	38150	100RB#0	9.90	13	PASS

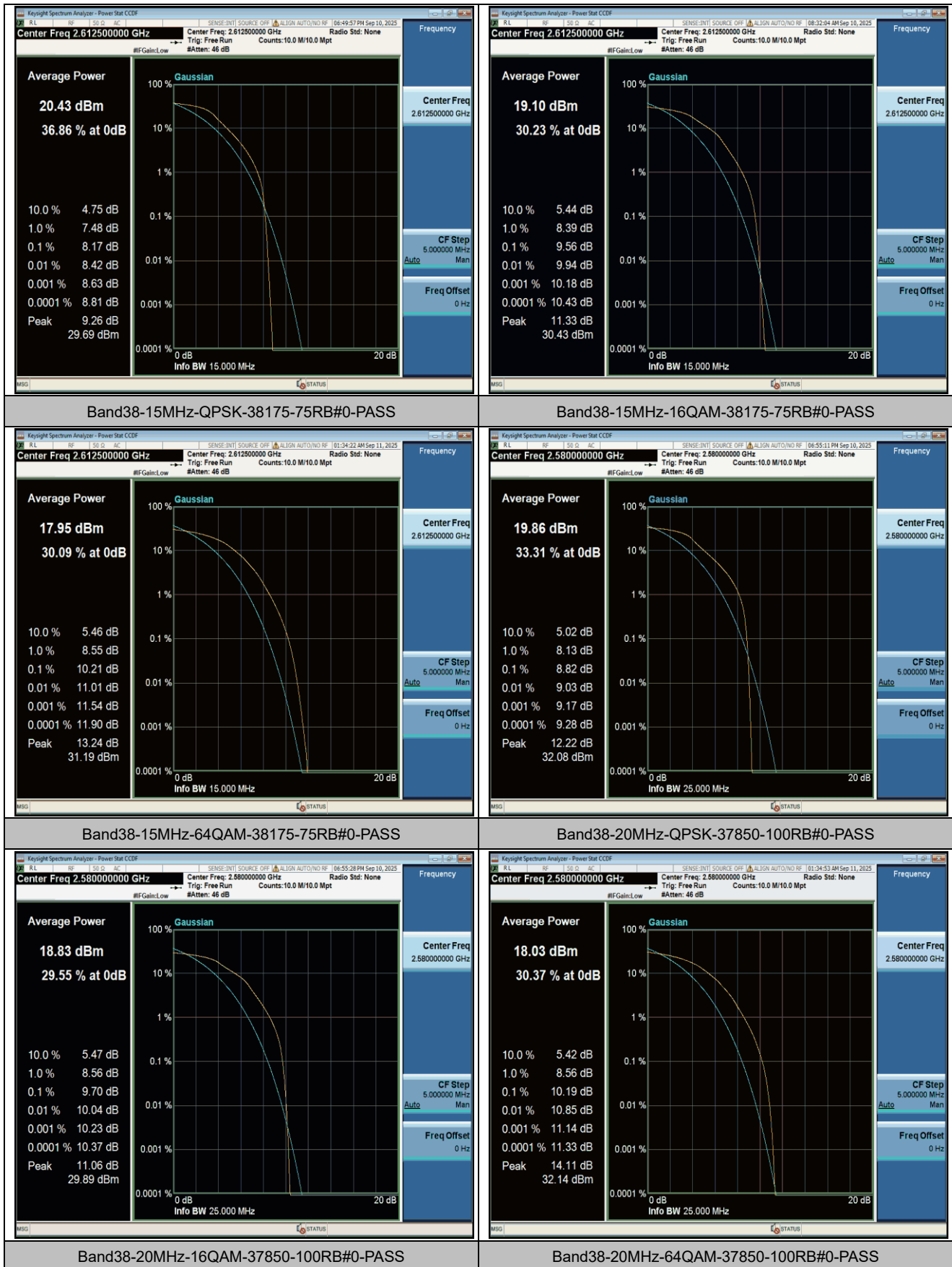
Test Graphs

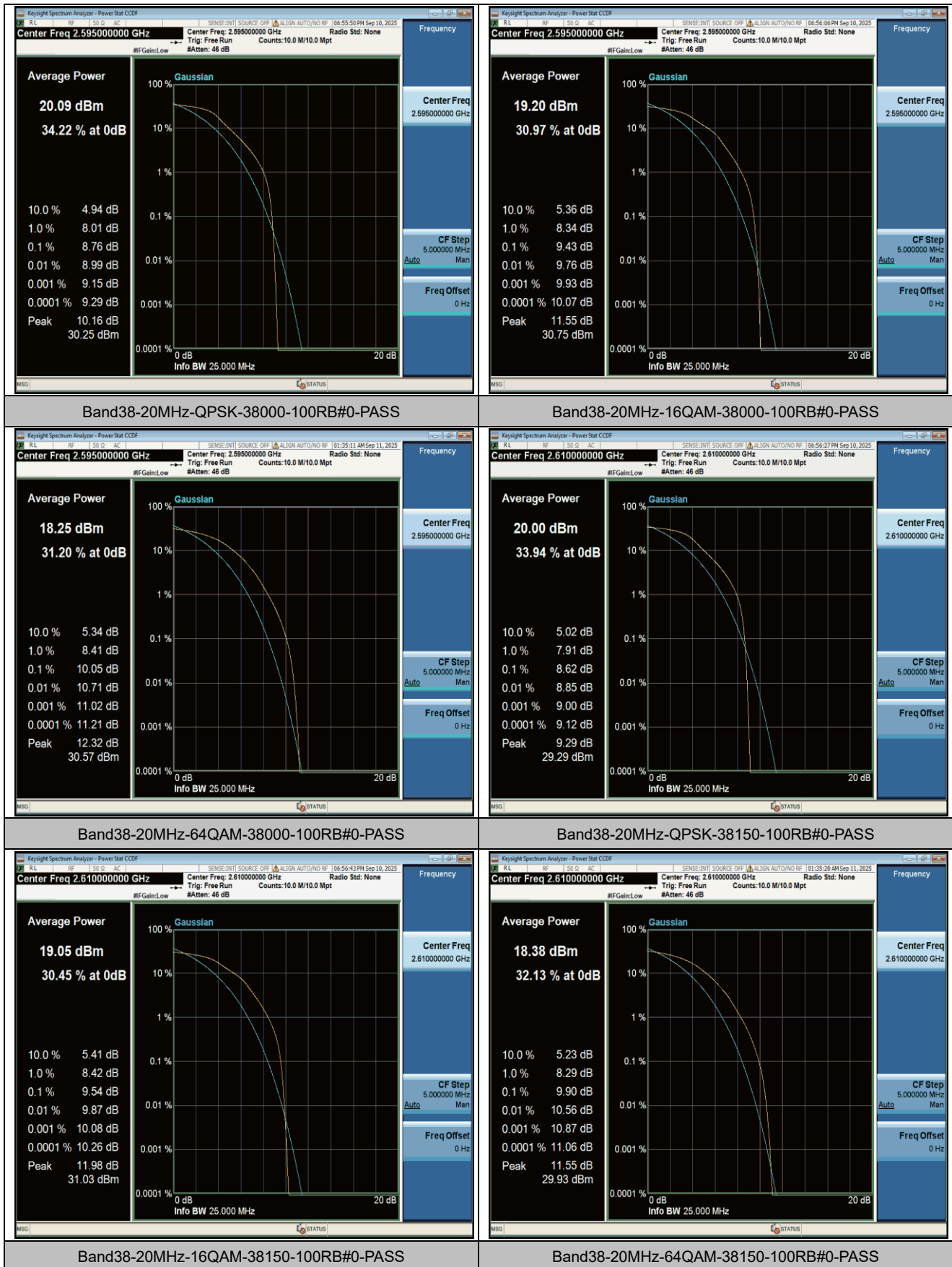










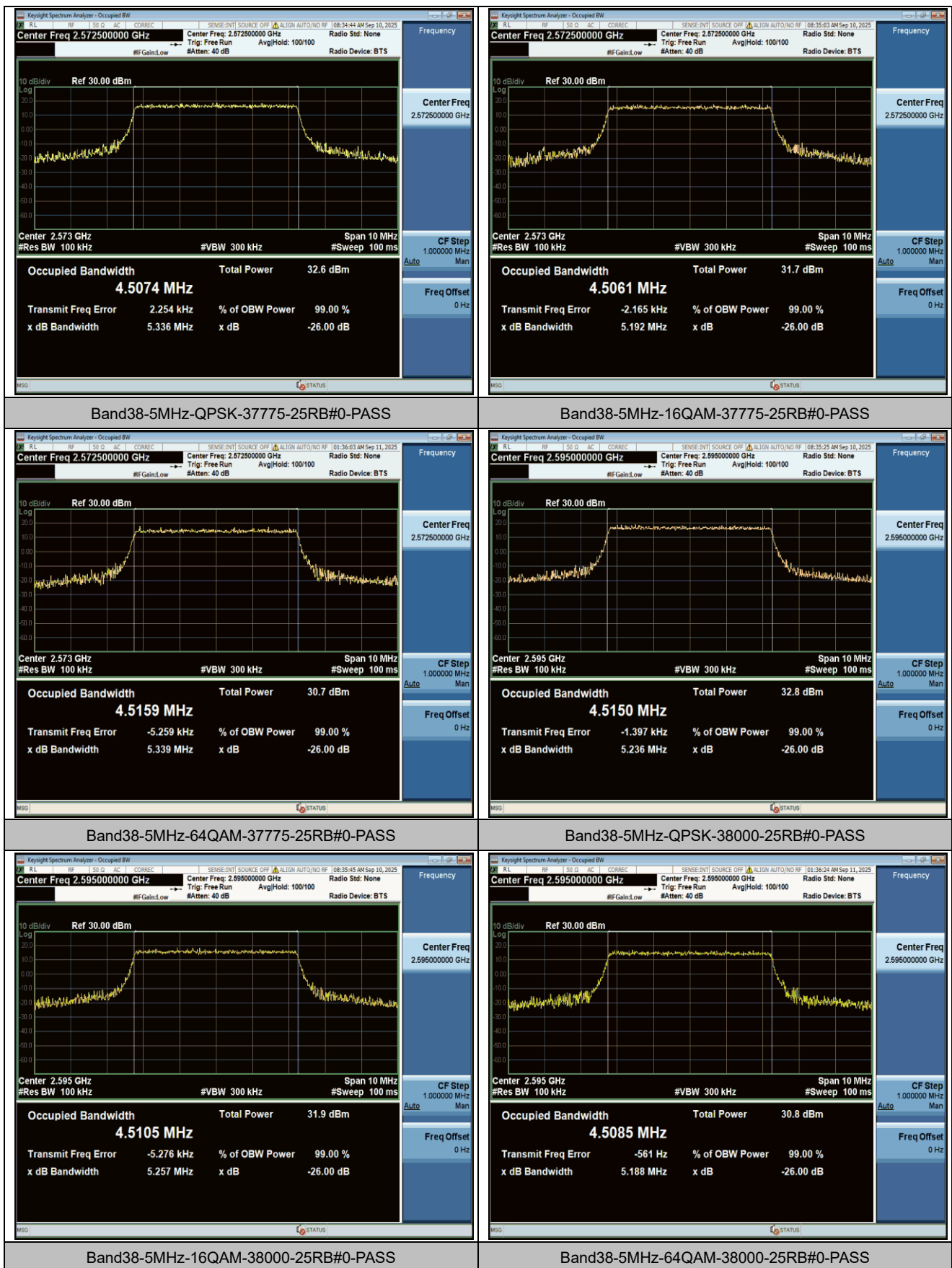


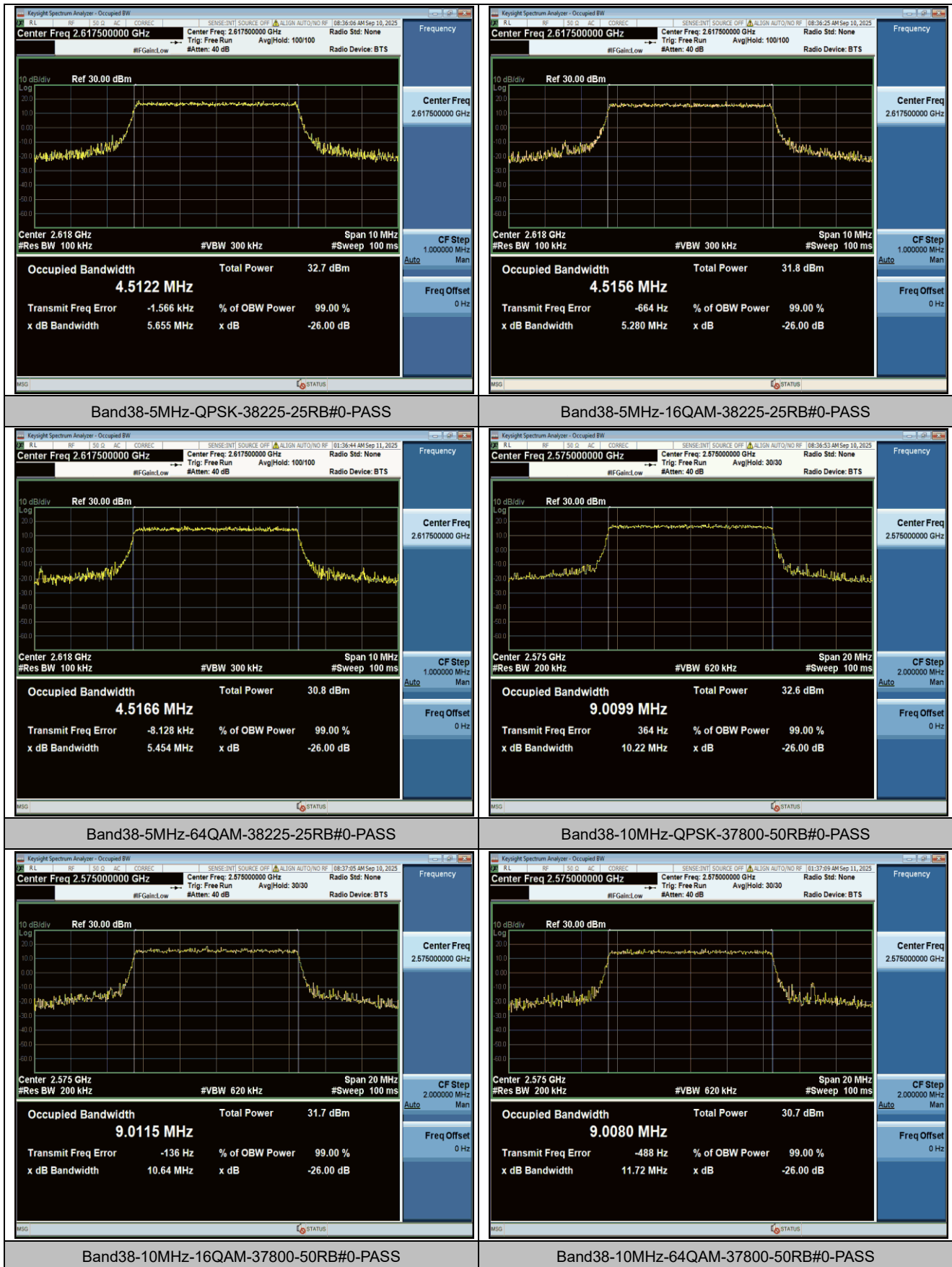
26dB Bandwidth and Occupied Bandwidth

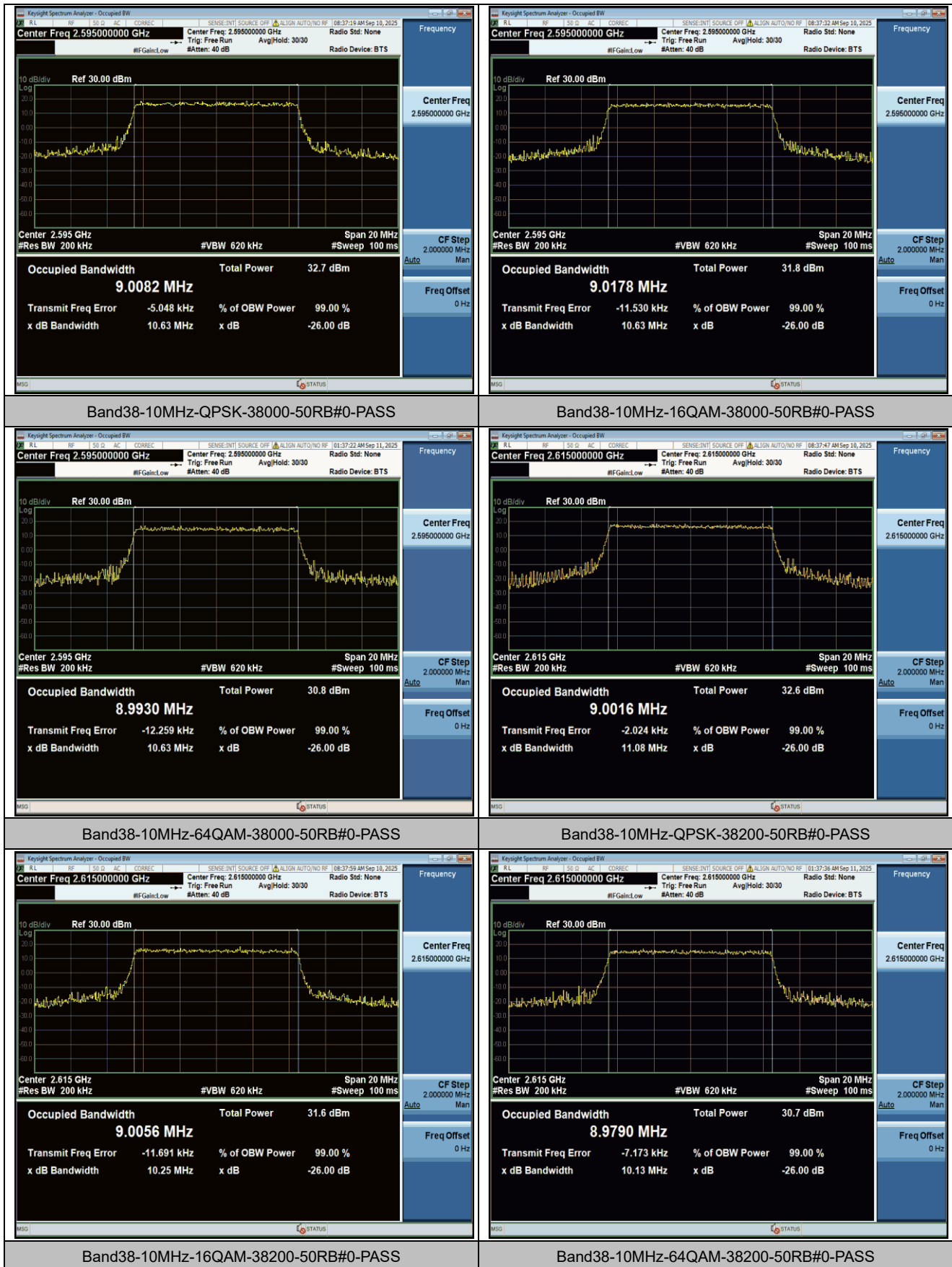
Test Result

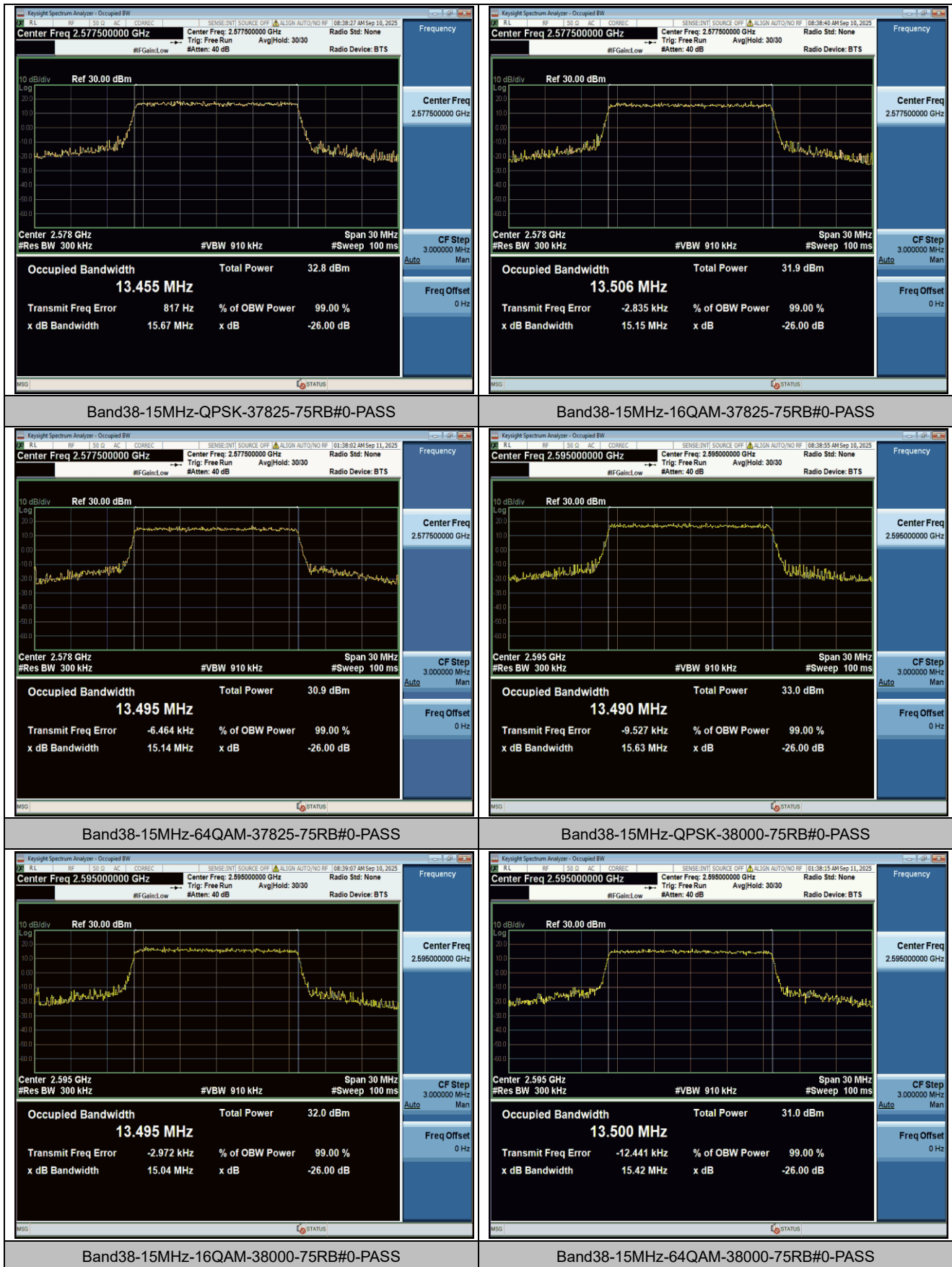
Band	Bandwidth	Modulation	Channel	RB Configuration	OBW (MHz)	26dB EBW (MHz)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	4.5074	5.336	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.5061	5.192	PASS
Band38	5MHz	64QAM	37775	25RB#0	4.5159	5.339	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.5150	5.236	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.5105	5.257	PASS
Band38	5MHz	64QAM	38000	25RB#0	4.5085	5.188	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.5122	5.655	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.5156	5.280	PASS
Band38	5MHz	64QAM	38225	25RB#0	4.5166	5.454	PASS
Band38	10MHz	QPSK	37800	50RB#0	9.0099	10.22	PASS
Band38	10MHz	16QAM	37800	50RB#0	9.0115	10.64	PASS
Band38	10MHz	64QAM	37800	50RB#0	9.0080	11.72	PASS
Band38	10MHz	QPSK	38000	50RB#0	9.0082	10.63	PASS
Band38	10MHz	16QAM	38000	50RB#0	9.0178	10.63	PASS
Band38	10MHz	64QAM	38000	50RB#0	8.9930	10.63	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.0016	11.08	PASS
Band38	10MHz	16QAM	38200	50RB#0	9.0056	10.25	PASS
Band38	10MHz	64QAM	38200	50RB#0	8.9790	10.13	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.455	15.67	PASS
Band38	15MHz	16QAM	37825	75RB#0	13.506	15.15	PASS
Band38	15MHz	64QAM	37825	75RB#0	13.495	15.14	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.490	15.63	PASS
Band38	15MHz	16QAM	38000	75RB#0	13.495	15.04	PASS
Band38	15MHz	64QAM	38000	75RB#0	13.500	15.42	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.513	15.47	PASS
Band38	15MHz	16QAM	38175	75RB#0	13.524	15.17	PASS
Band38	15MHz	64QAM	38175	75RB#0	13.495	15.27	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.976	20.87	PASS
Band38	20MHz	16QAM	37850	100RB#0	17.951	22.20	PASS
Band38	20MHz	64QAM	37850	100RB#0	17.979	21.37	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.981	20.44	PASS
Band38	20MHz	16QAM	38000	100RB#0	17.983	20.09	PASS
Band38	20MHz	64QAM	38000	100RB#0	17.975	20.74	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.989	21.14	PASS
Band38	20MHz	16QAM	38150	100RB#0	17.942	20.20	PASS
Band38	20MHz	64QAM	38150	100RB#0	17.988	19.84	PASS

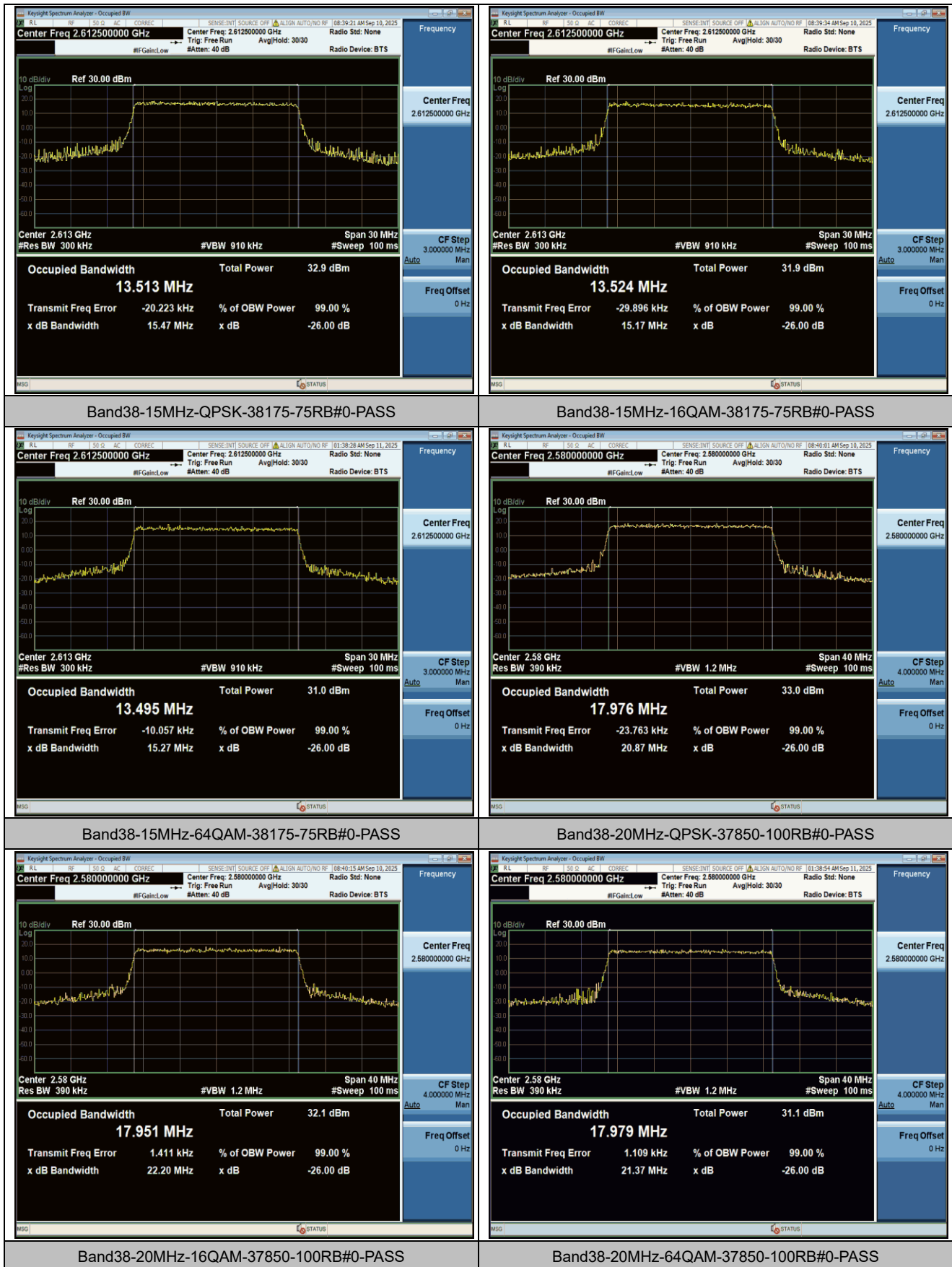
Test Graphs

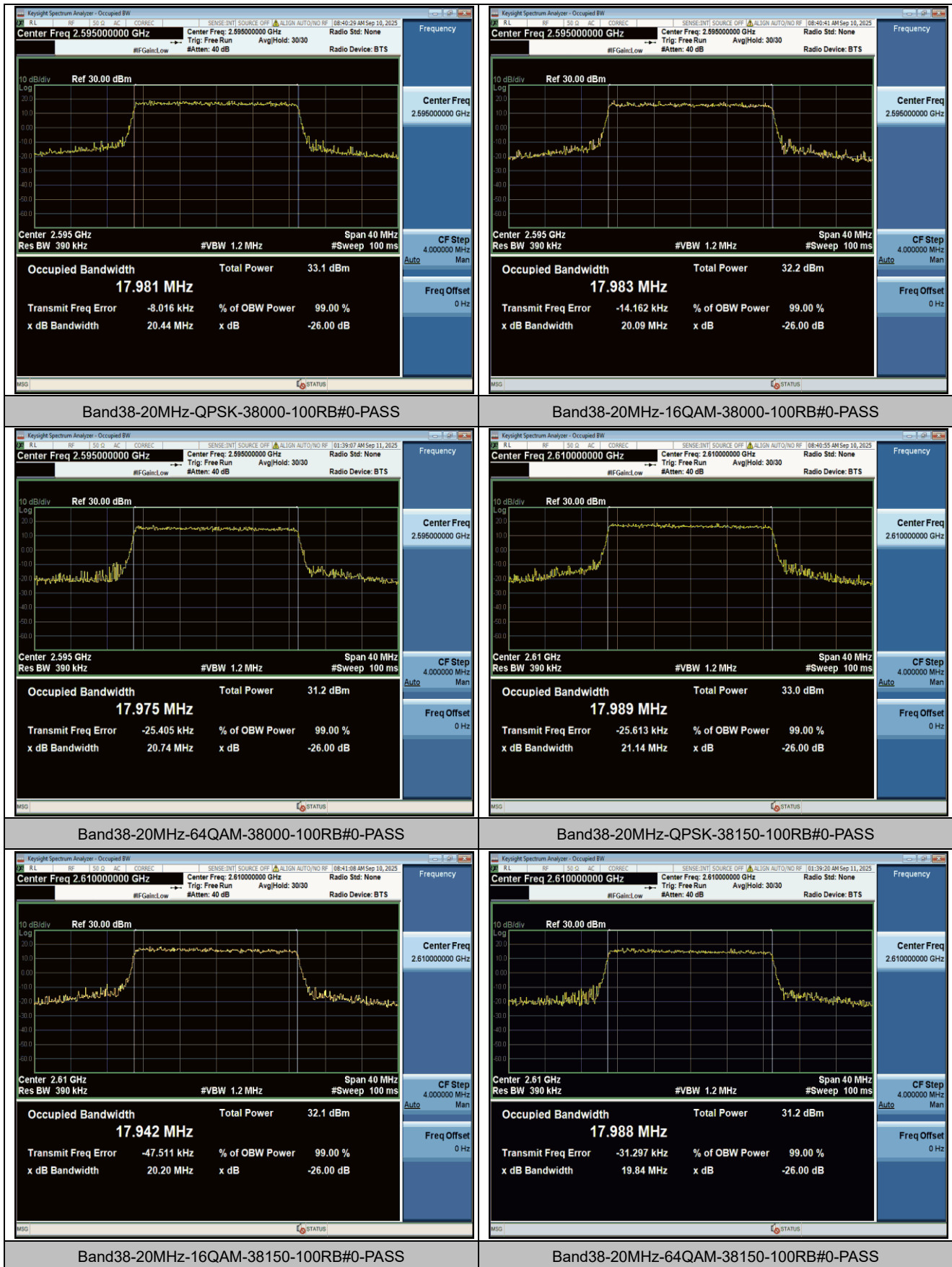






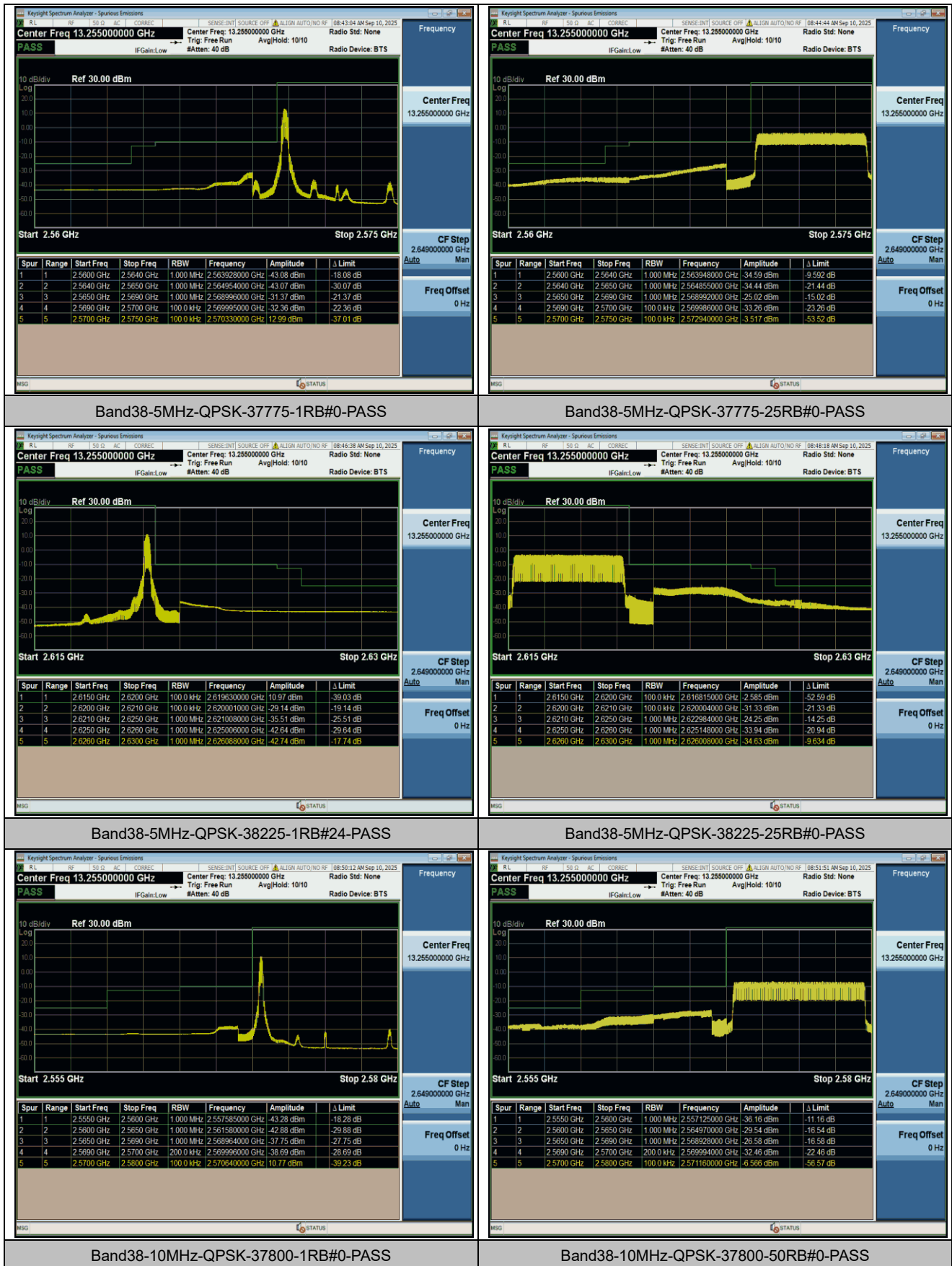


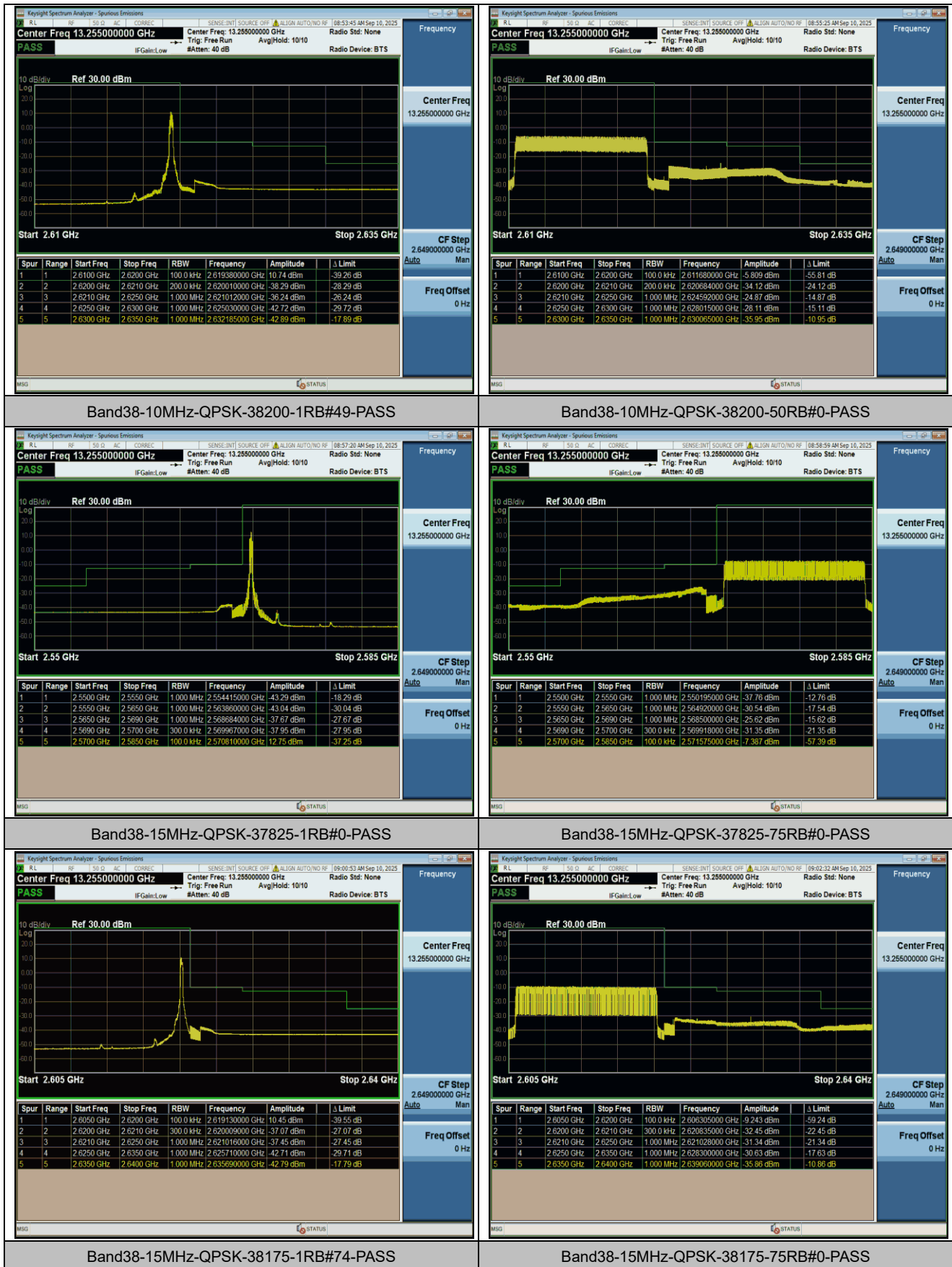


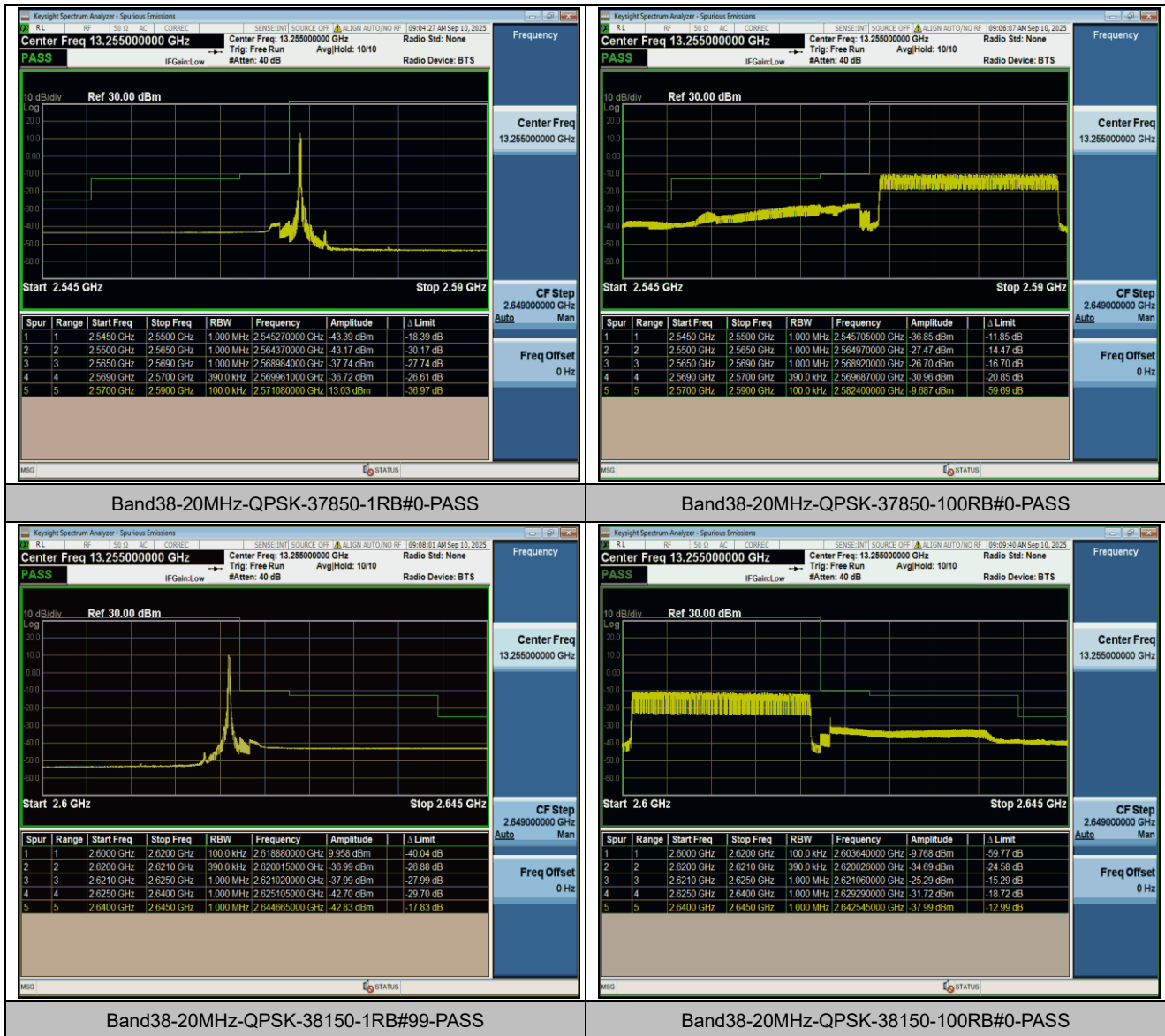


Band Edge

Test Graphs

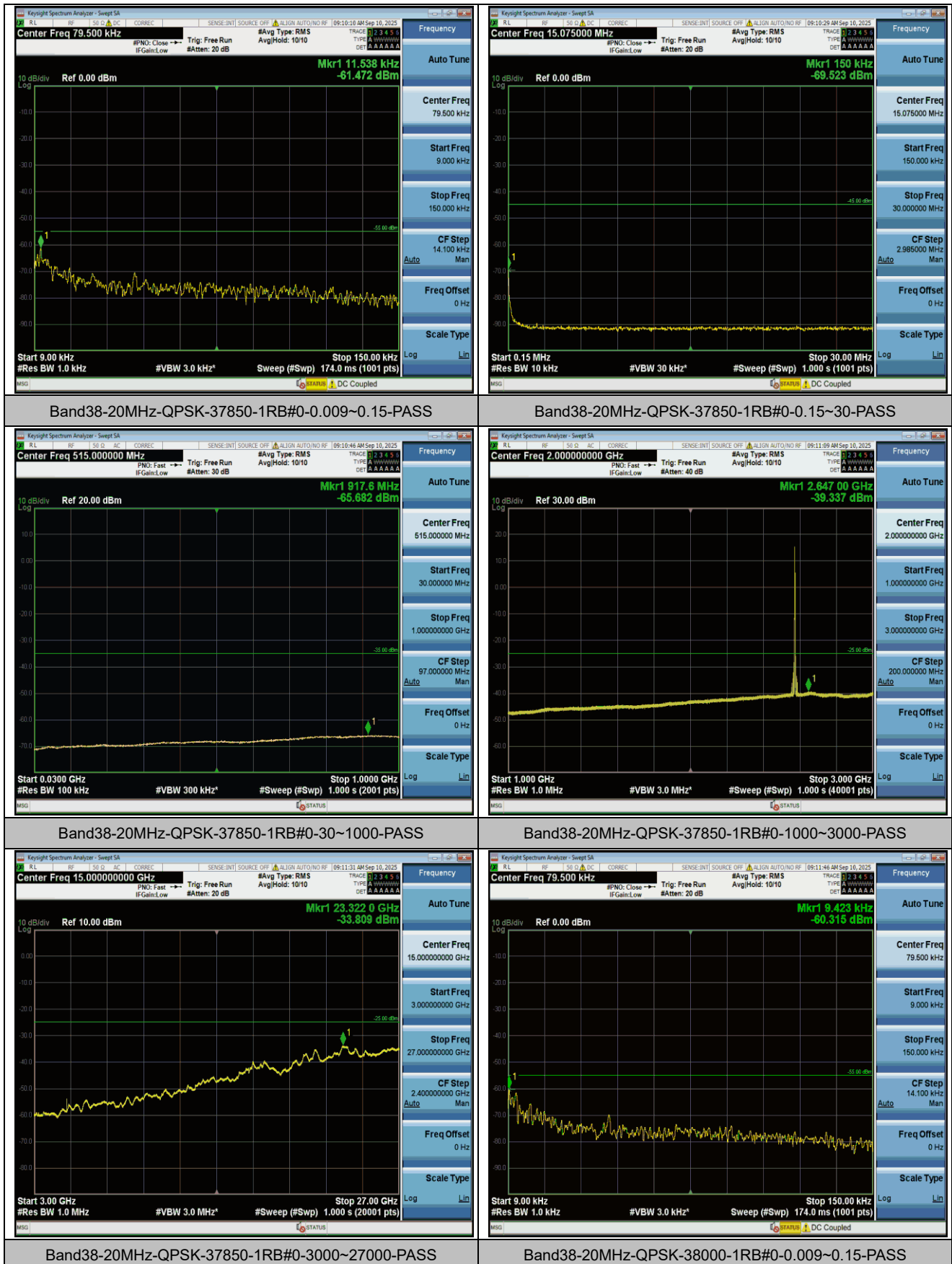


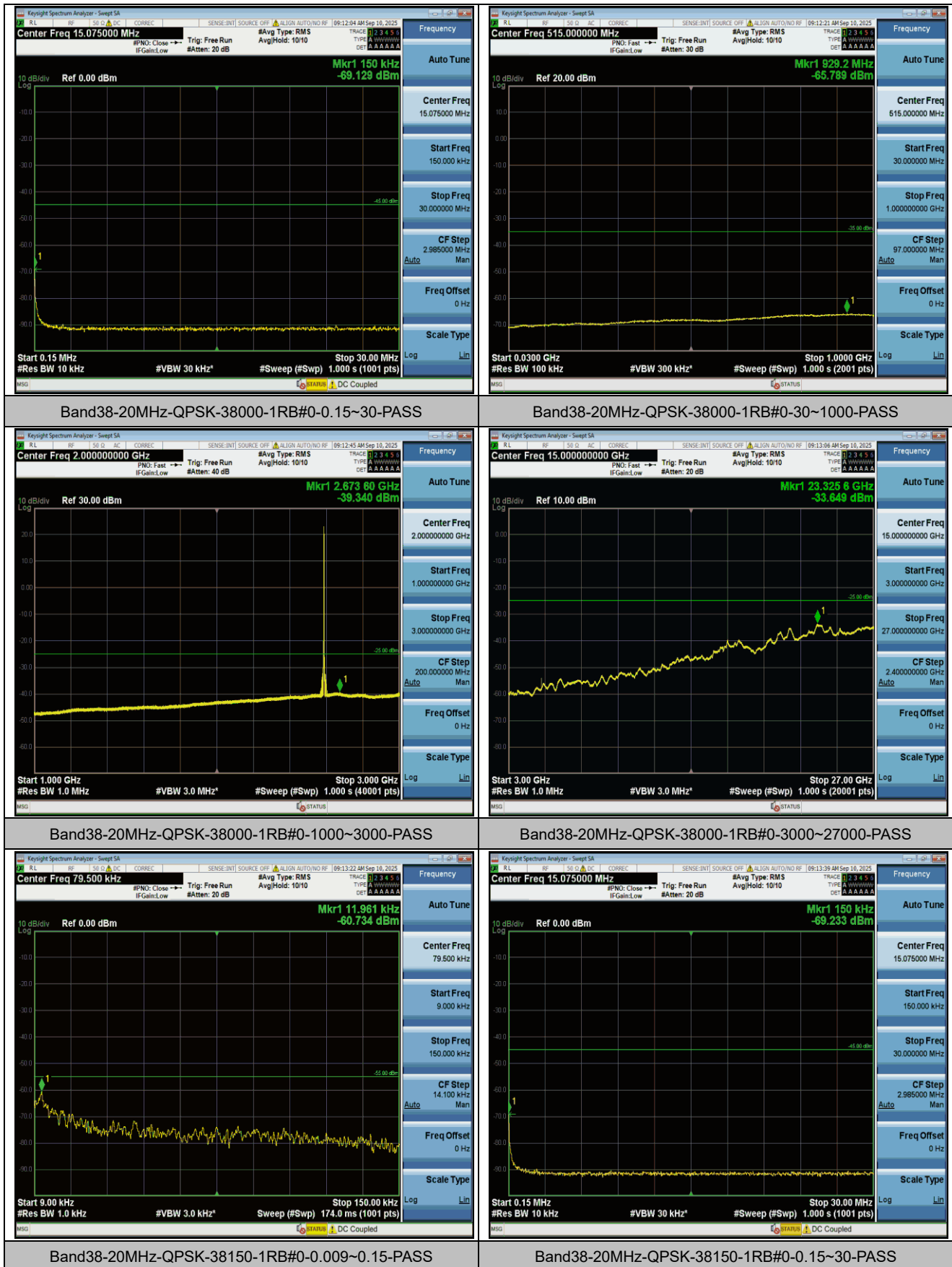




Conducted Spurious Emission

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	-0.90	-0.000347	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-1.40	-0.000539	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-2.70	-0.001040	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	0.80	0.000308	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	-2.30	-0.000886	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	-1.50	-0.000578	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-0.70	-0.000270	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	-2.00	-0.000771	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	-2.40	-0.000925	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	-0.80	-0.000308	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	0.10	0.000039	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	-0.80	-0.000308	PASS

~The End~