

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	23.98	27.98	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#12	23.78	27.78	33.00	PASS
Band38	5MHz	QPSK	37775	1RB#24	23.86	27.86	33.00	PASS
Band38	5MHz	QPSK	37775	25RB#0	22.82	26.82	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#0	23.03	27.03	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#12	22.84	26.84	33.00	PASS
Band38	5MHz	16QAM	37775	1RB#24	22.91	26.91	33.00	PASS
Band38	5MHz	16QAM	37775	25RB#0	21.87	25.87	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#0	23.88	27.88	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#12	23.74	27.74	33.00	PASS
Band38	5MHz	QPSK	38000	1RB#24	23.96	27.96	33.00	PASS
Band38	5MHz	QPSK	38000	25RB#0	22.96	26.96	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#0	23.19	27.19	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#12	23	27	33.00	PASS
Band38	5MHz	16QAM	38000	1RB#24	23.1	27.1	33.00	PASS
Band38	5MHz	16QAM	38000	25RB#0	21.99	25.99	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#0	24.14	28.14	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#12	23.92	27.92	33.00	PASS
Band38	5MHz	QPSK	38225	1RB#24	23.99	27.99	33.00	PASS
Band38	5MHz	QPSK	38225	25RB#0	22.99	26.99	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#0	23.37	27.37	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#12	23.05	27.05	33.00	PASS
Band38	5MHz	16QAM	38225	1RB#24	23.12	27.12	33.00	PASS
Band38	5MHz	16QAM	38225	25RB#0	22.03	26.03	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#0	24.4	28.4	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#24	23.83	27.83	33.00	PASS
Band38	10MHz	QPSK	37800	1RB#49	23.77	27.77	33.00	PASS
Band38	10MHz	QPSK	37800	50RB#0	22.81	26.81	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#0	23.26	27.26	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#24	22.85	26.85	33.00	PASS
Band38	10MHz	16QAM	37800	1RB#49	22.82	26.82	33.00	PASS
Band38	10MHz	16QAM	37800	27RB#0	21.77	25.77	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#0	24.23	28.23	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#24	23.8	27.8	33.00	PASS
Band38	10MHz	QPSK	38000	1RB#49	23.85	27.85	33.00	PASS
Band38	10MHz	QPSK	38000	50RB#0	22.92	26.92	33.00	PASS

Band38	10MHz	16QAM	38000	1RB#0	23.21	27.21	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#24	22.93	26.93	33.00	PASS
Band38	10MHz	16QAM	38000	1RB#49	23	27	33.00	PASS
Band38	10MHz	16QAM	38000	27RB#0	21.81	25.81	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#0	24.51	28.51	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#24	24.11	28.11	33.00	PASS
Band38	10MHz	QPSK	38200	1RB#49	24.08	28.08	33.00	PASS
Band38	10MHz	QPSK	38200	50RB#0	23.21	27.21	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#0	23.48	27.48	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#24	23.21	27.21	33.00	PASS
Band38	10MHz	16QAM	38200	1RB#49	23.21	27.21	33.00	PASS
Band38	10MHz	16QAM	38200	27RB#0	22.1	26.1	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#0	23.99	27.99	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#38	23.59	27.59	33.00	PASS
Band38	15MHz	QPSK	37825	1RB#74	23.35	27.35	33.00	PASS
Band38	15MHz	QPSK	37825	75RB#0	22.67	26.67	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#0	22.94	26.94	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#38	22.73	26.73	33.00	PASS
Band38	15MHz	16QAM	37825	1RB#74	22.48	26.48	33.00	PASS
Band38	15MHz	16QAM	37825	27RB#0	21.79	25.79	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#0	24.02	28.02	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#38	23.83	27.83	33.00	PASS
Band38	15MHz	QPSK	38000	1RB#74	23.63	27.63	33.00	PASS
Band38	15MHz	QPSK	38000	75RB#0	22.93	26.93	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#0	23	27	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#38	22.97	26.97	33.00	PASS
Band38	15MHz	16QAM	38000	1RB#74	22.76	26.76	33.00	PASS
Band38	15MHz	16QAM	38000	27RB#0	21.86	25.86	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#0	24.26	28.26	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#38	24.12	28.12	33.00	PASS
Band38	15MHz	QPSK	38175	1RB#74	23.81	27.81	33.00	PASS
Band38	15MHz	QPSK	38175	75RB#0	23.16	27.16	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#0	23.17	27.17	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#38	23.23	27.23	33.00	PASS
Band38	15MHz	16QAM	38175	1RB#74	22.92	26.92	33.00	PASS
Band38	15MHz	16QAM	38175	27RB#0	22.13	26.13	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#0	24.26	28.26	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#49	23.61	27.61	33.00	PASS
Band38	20MHz	QPSK	37850	1RB#99	23.52	27.52	33.00	PASS
Band38	20MHz	QPSK	37850	100RB#0	22.73	26.73	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#0	23.25	27.25	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#49	22.73	26.73	33.00	PASS
Band38	20MHz	16QAM	37850	1RB#99	22.66	26.66	33.00	PASS
Band38	20MHz	16QAM	37850	27RB#0	21.99	25.99	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#0	24.23	28.23	33.00	PASS

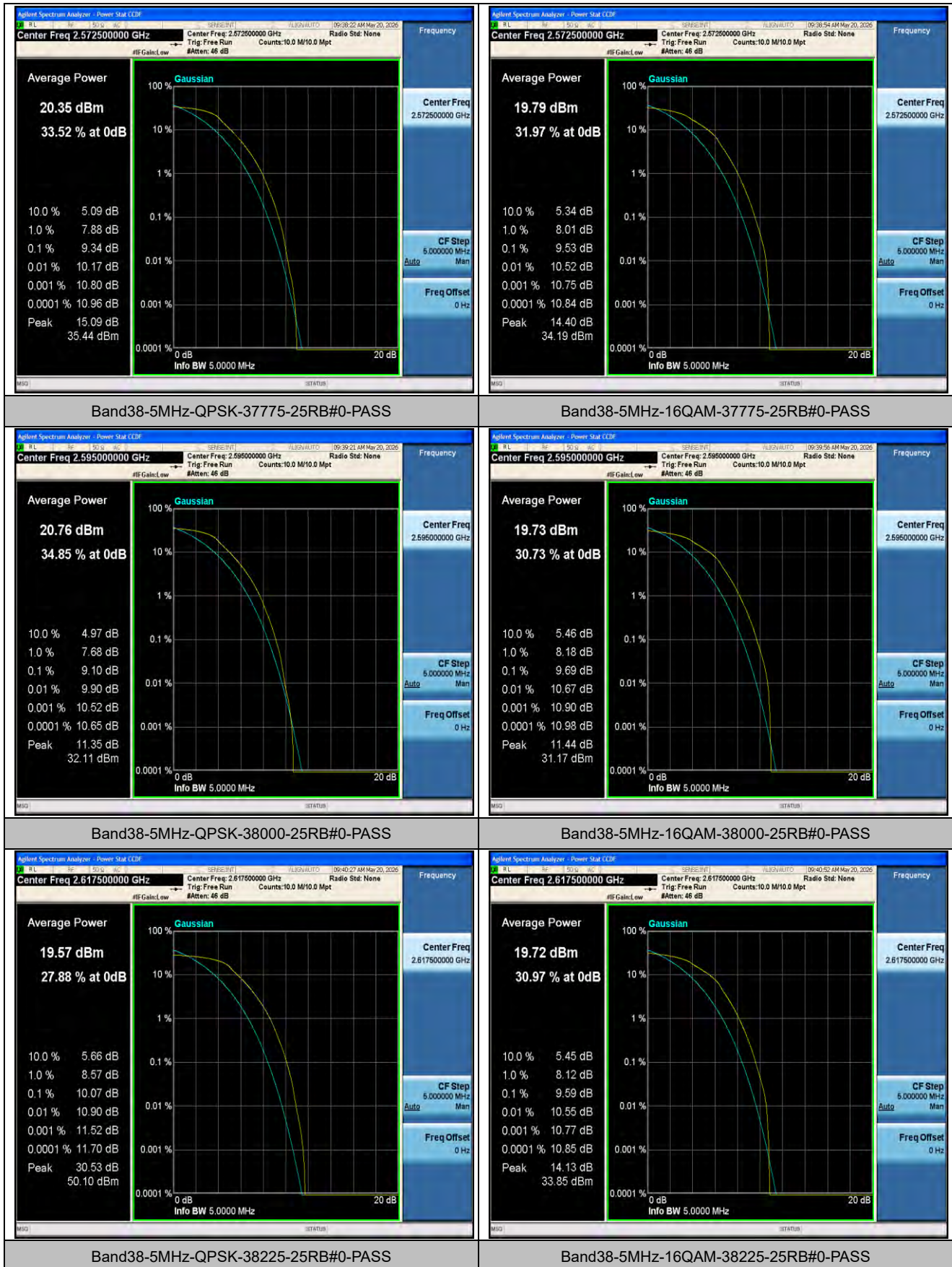
Band38	20MHz	QPSK	38000	1RB#49	23.83	27.83	33.00	PASS
Band38	20MHz	QPSK	38000	1RB#99	23.64	27.64	33.00	PASS
Band38	20MHz	QPSK	38000	100RB#0	22.92	26.92	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#0	23.2	27.2	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#49	22.97	26.97	33.00	PASS
Band38	20MHz	16QAM	38000	1RB#99	22.8	26.8	33.00	PASS
Band38	20MHz	16QAM	38000	27RB#0	22.03	26.03	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#0	24.41	28.41	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#49	24.04	28.04	33.00	PASS
Band38	20MHz	QPSK	38150	1RB#99	23.77	27.77	33.00	PASS
Band38	20MHz	QPSK	38150	100RB#0	23.12	27.12	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#0	23.36	27.36	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#49	23.14	27.14	33.00	PASS
Band38	20MHz	16QAM	38150	1RB#99	22.88	26.88	33.00	PASS
Band38	20MHz	16QAM	38150	27RB#0	22.2	26.2	33.00	PASS

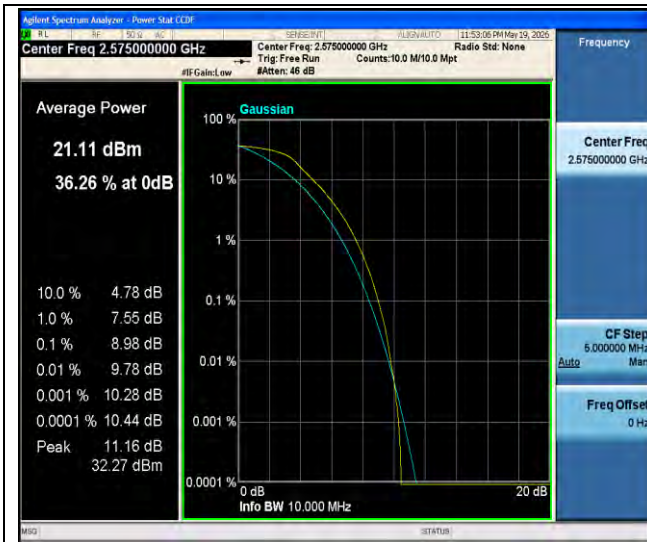
Peak-to-Average Ratio(CCDF)

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Result (dB)	Limit (dB)	Verdict
Band38	5MHz	QPSK	37775	25RB#0	9.34	13	PASS
Band38	5MHz	16QAM	37775	25RB#0	9.53	13	PASS
Band38	5MHz	QPSK	38000	25RB#0	9.10	13	PASS
Band38	5MHz	16QAM	38000	25RB#0	9.69	13	PASS
Band38	5MHz	QPSK	38225	25RB#0	10.07	13	PASS
Band38	5MHz	16QAM	38225	25RB#0	9.59	13	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.98	13	PASS
Band38	10MHz	16QAM	37800	27RB#0	9.94	13	PASS
Band38	10MHz	QPSK	38000	50RB#0	9.08	13	PASS
Band38	10MHz	16QAM	38000	27RB#0	9.92	13	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.18	13	PASS
Band38	10MHz	16QAM	38200	27RB#0	9.75	13	PASS
Band38	15MHz	QPSK	37825	75RB#0	8.68	13	PASS
Band38	15MHz	16QAM	37825	27RB#0	9.99	13	PASS
Band38	15MHz	QPSK	38000	75RB#0	9.12	13	PASS
Band38	15MHz	16QAM	38000	27RB#0	10.43	13	PASS
Band38	15MHz	QPSK	38175	75RB#0	8.93	13	PASS
Band38	15MHz	16QAM	38175	27RB#0	9.45	13	PASS
Band38	20MHz	QPSK	37850	100RB#0	9.30	13	PASS
Band38	20MHz	16QAM	37850	27RB#0	10.16	13	PASS
Band38	20MHz	QPSK	38000	100RB#0	9.18	13	PASS
Band38	20MHz	16QAM	38000	27RB#0	11.30	13	PASS
Band38	20MHz	QPSK	38150	100RB#0	8.54	13	PASS
Band38	20MHz	16QAM	38150	27RB#0	10.21	13	PASS

Test Graphs





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



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



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



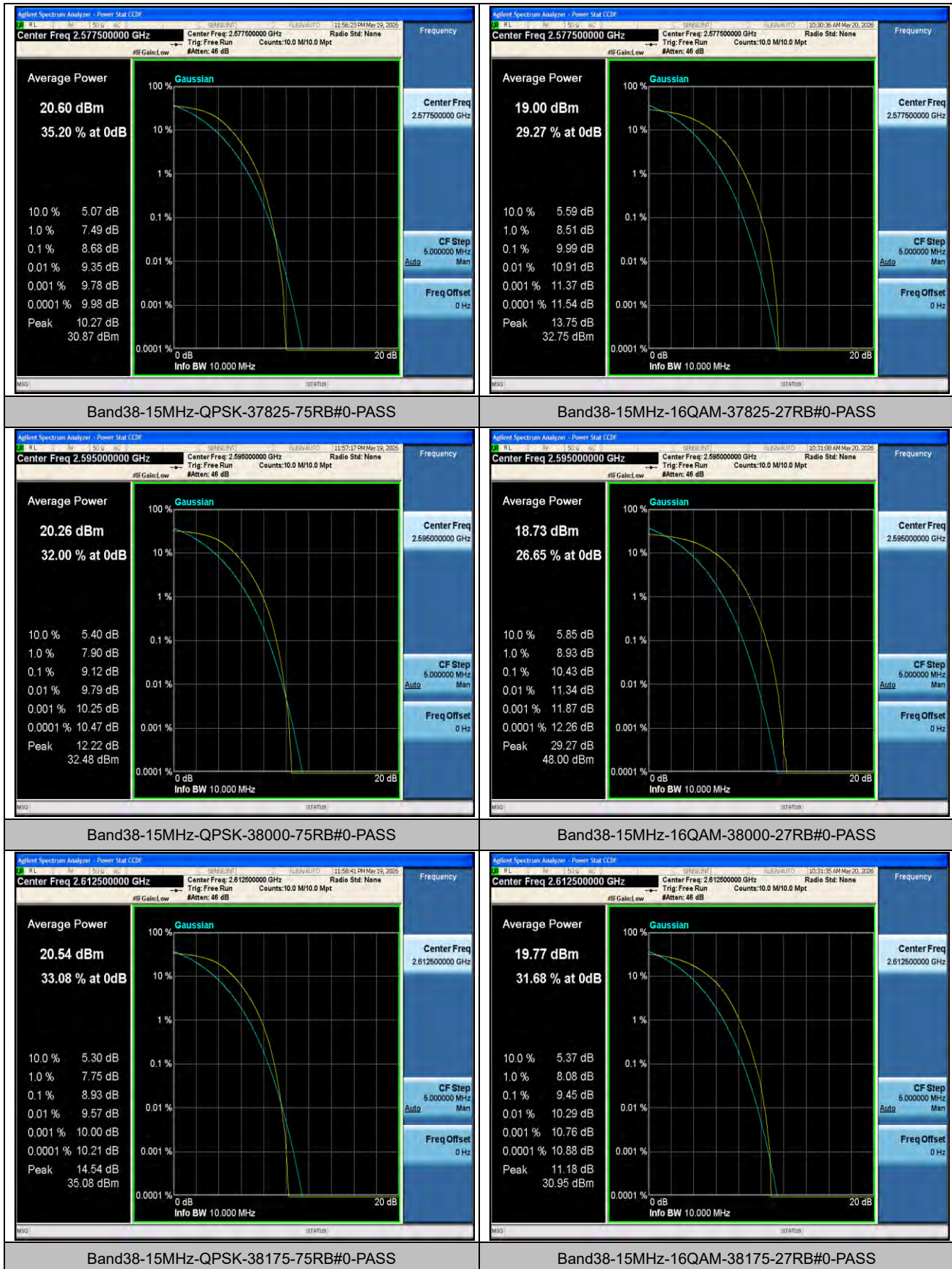
Band38-10MHz-16QAM-38000-27RB#0-PASS

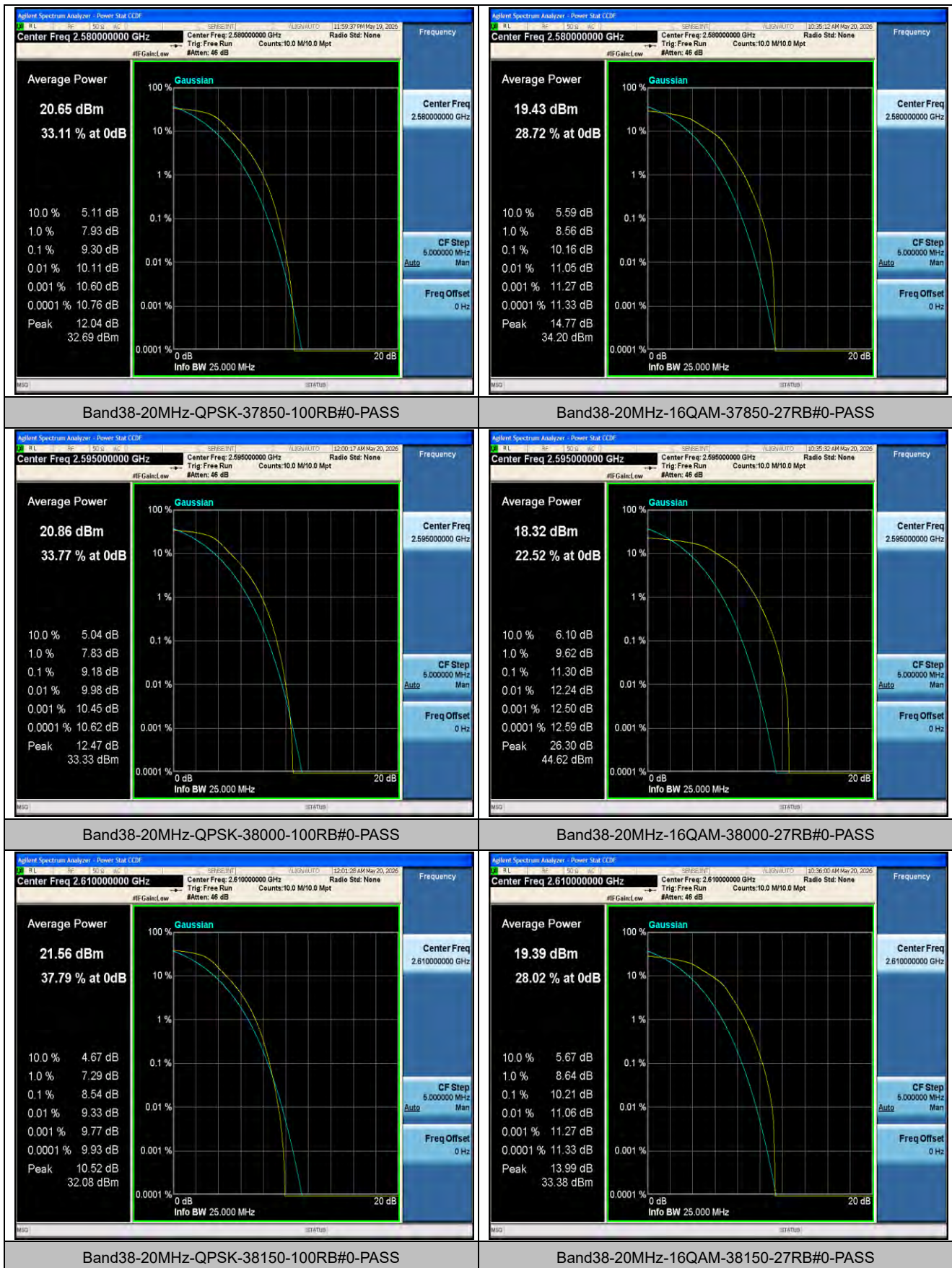


Band38-10MHz-QPSK-38200-50RB#0-PASS



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





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	4.5158	5.470	PASS
Band38	5MHz	16QAM	37775	25RB#0	4.5205	5.527	PASS
Band38	5MHz	QPSK	38000	25RB#0	4.5172	5.447	PASS
Band38	5MHz	16QAM	38000	25RB#0	4.5180	5.594	PASS
Band38	5MHz	QPSK	38225	25RB#0	4.5183	5.531	PASS
Band38	5MHz	16QAM	38225	25RB#0	4.5269	5.577	PASS
Band38	10MHz	QPSK	37800	50RB#0	8.9862	10.53	PASS
Band38	10MHz	16QAM	37800	27RB#0	4.9917	6.259	PASS
Band38	10MHz	QPSK	38000	50RB#0	8.9915	10.58	PASS
Band38	10MHz	16QAM	38000	27RB#0	4.9889	6.273	PASS
Band38	10MHz	QPSK	38200	50RB#0	9.0021	10.50	PASS
Band38	10MHz	16QAM	38200	27RB#0	4.9887	6.236	PASS
Band38	15MHz	QPSK	37825	75RB#0	13.516	15.92	PASS
Band38	15MHz	16QAM	37825	27RB#0	5.4258	7.919	PASS
Band38	15MHz	QPSK	38000	75RB#0	13.514	16.09	PASS
Band38	15MHz	16QAM	38000	27RB#0	5.4006	7.797	PASS
Band38	15MHz	QPSK	38175	75RB#0	13.517	15.94	PASS
Band38	15MHz	16QAM	38175	27RB#0	5.4257	7.799	PASS
Band38	20MHz	QPSK	37850	100RB#0	17.965	20.27	PASS
Band38	20MHz	16QAM	37850	27RB#0	5.3872	7.292	PASS
Band38	20MHz	QPSK	38000	100RB#0	17.974	20.21	PASS
Band38	20MHz	16QAM	38000	27RB#0	5.3870	7.310	PASS
Band38	20MHz	QPSK	38150	100RB#0	17.951	20.34	PASS
Band38	20MHz	16QAM	38150	27RB#0	5.3946	7.259	PASS

Test Graphs





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



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



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



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

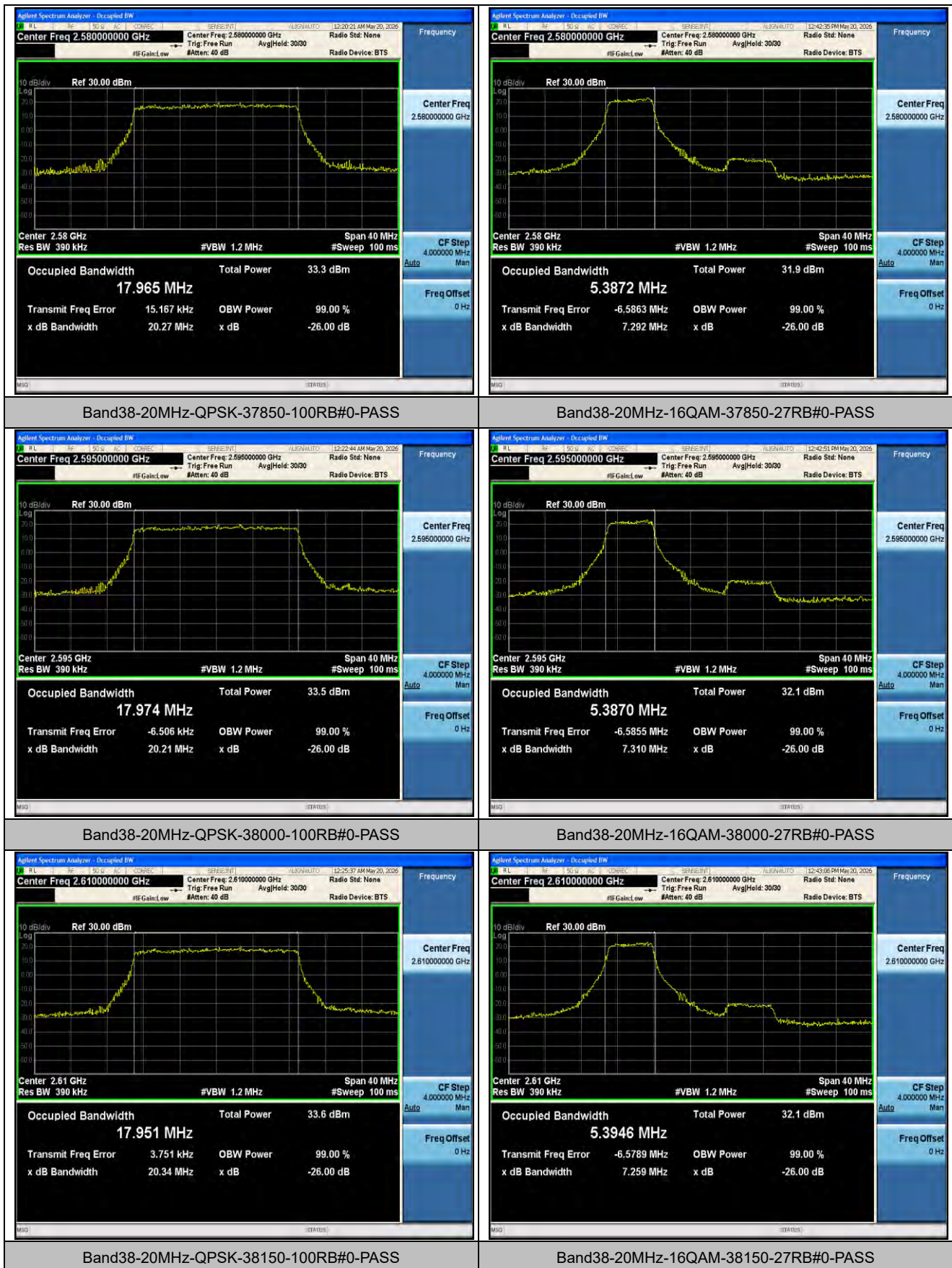


Band38-10MHz-QPSK-38200-50RB#0-PASS



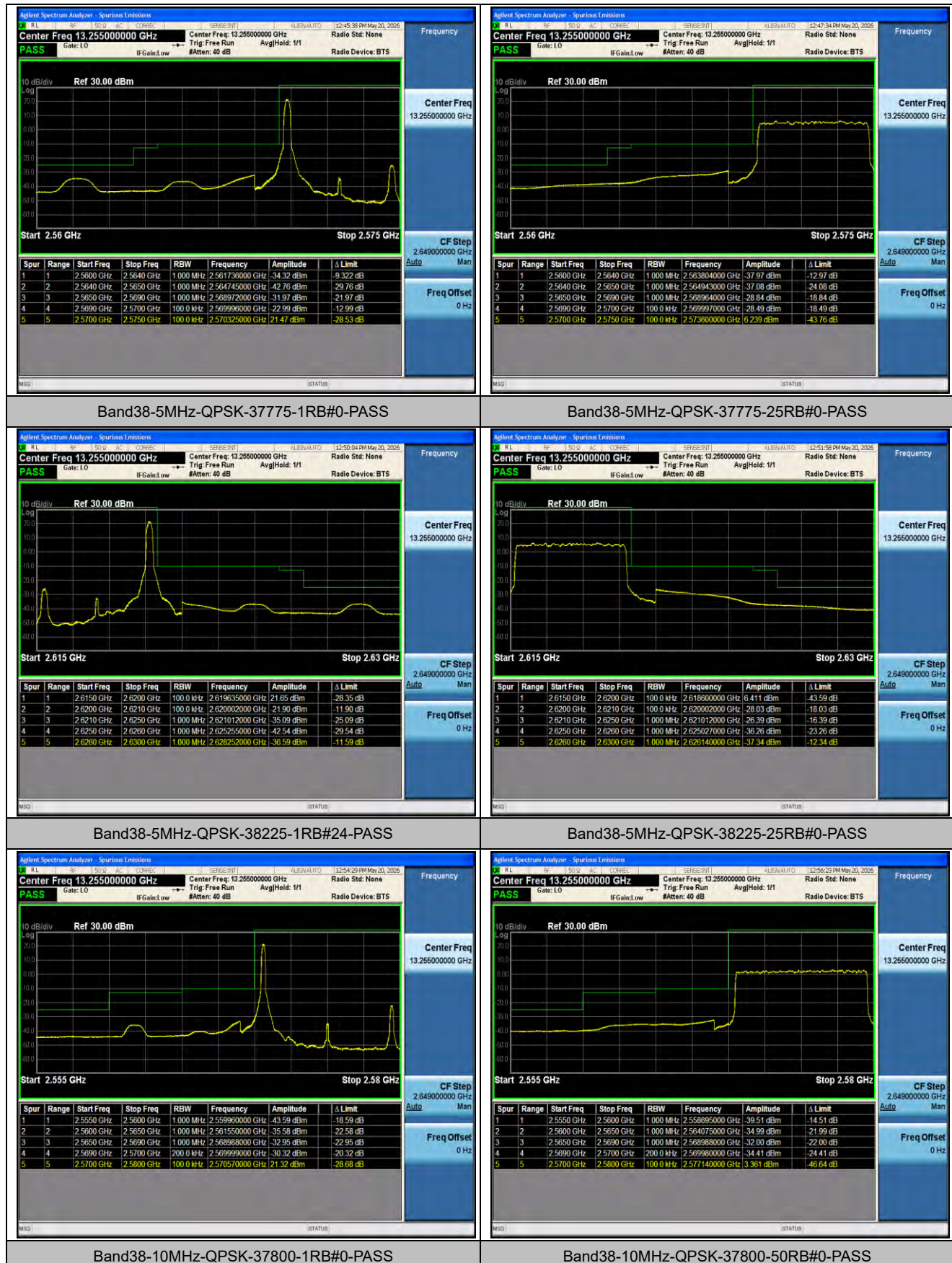
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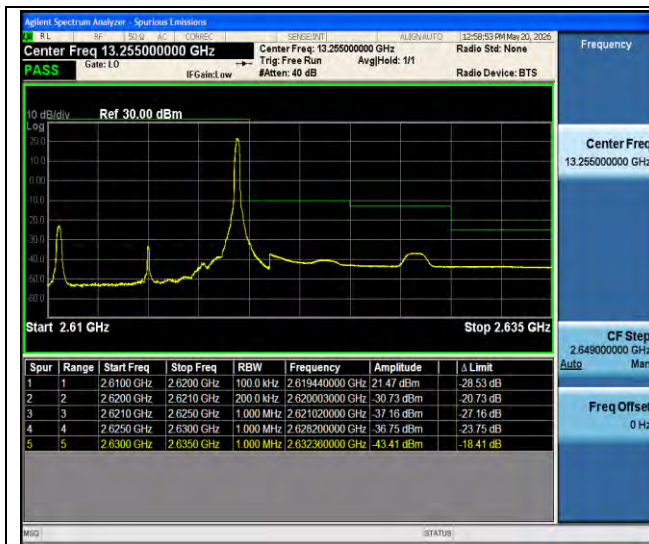




Band Edge

Test Graphs

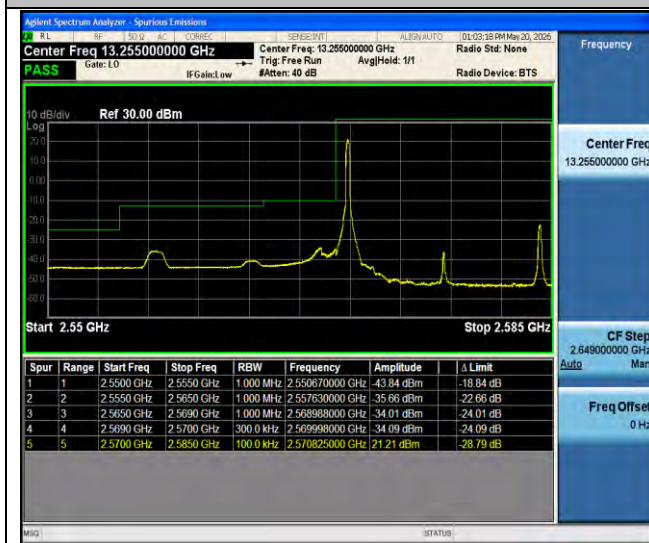




Band38-10MHz-QPSK-38200-1RB#49-PASS



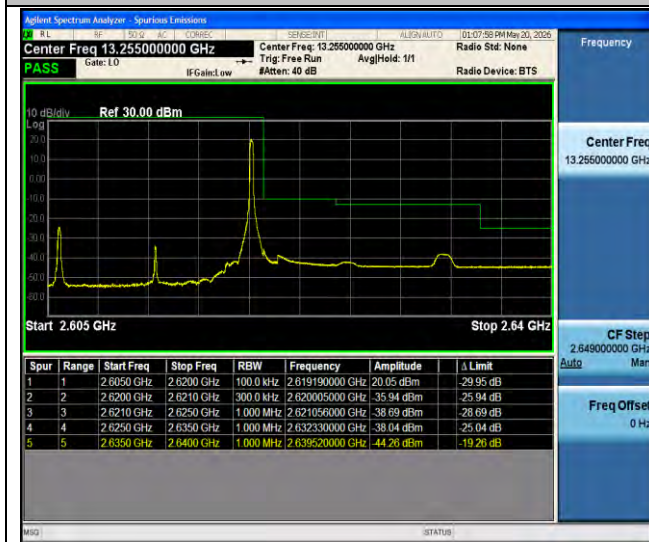
Band38-10MHz-QPSK-38200-50RB#0-PASS



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



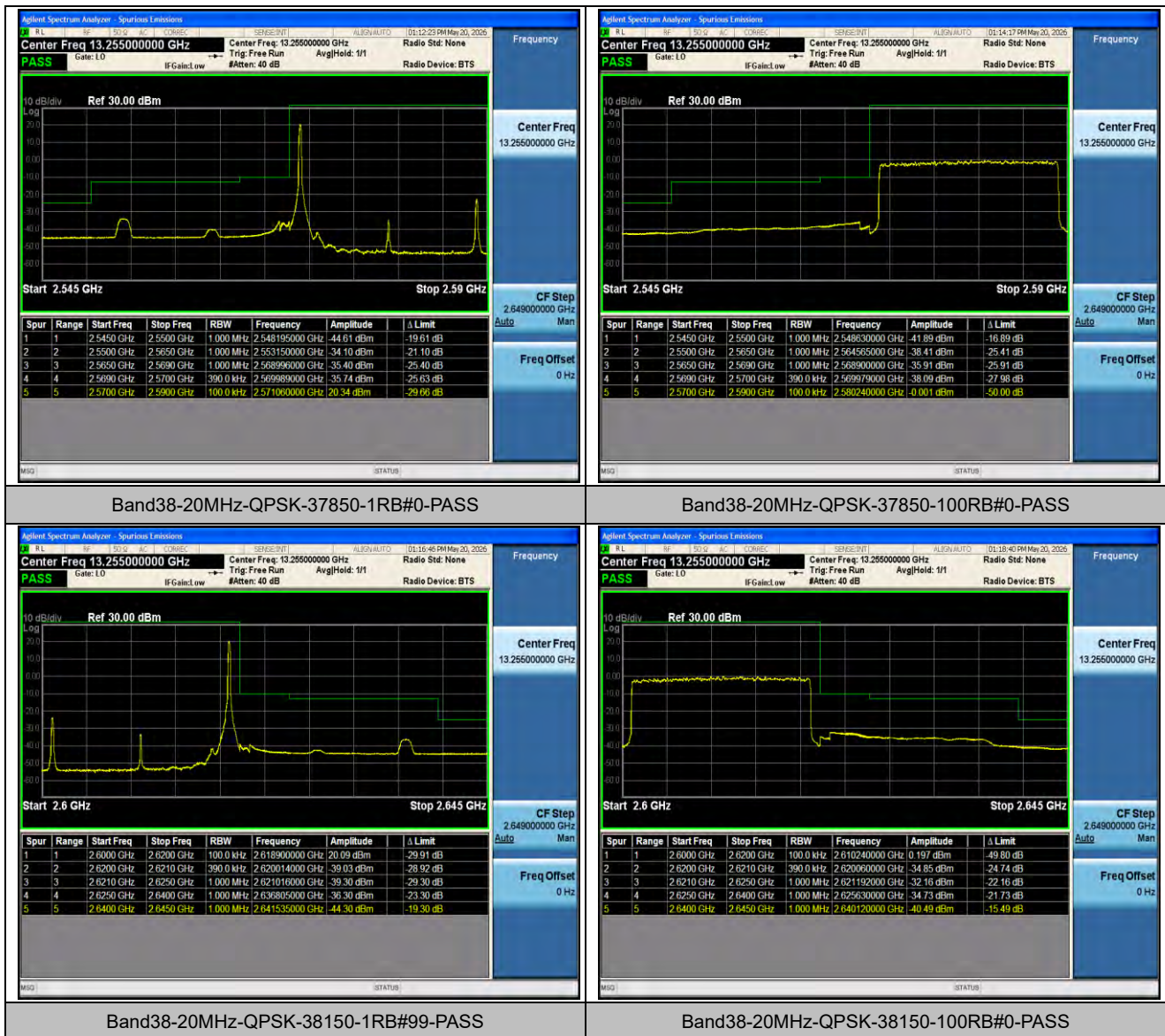
Band38-15MHz-QPSK-37825-75RB#0-PASS



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

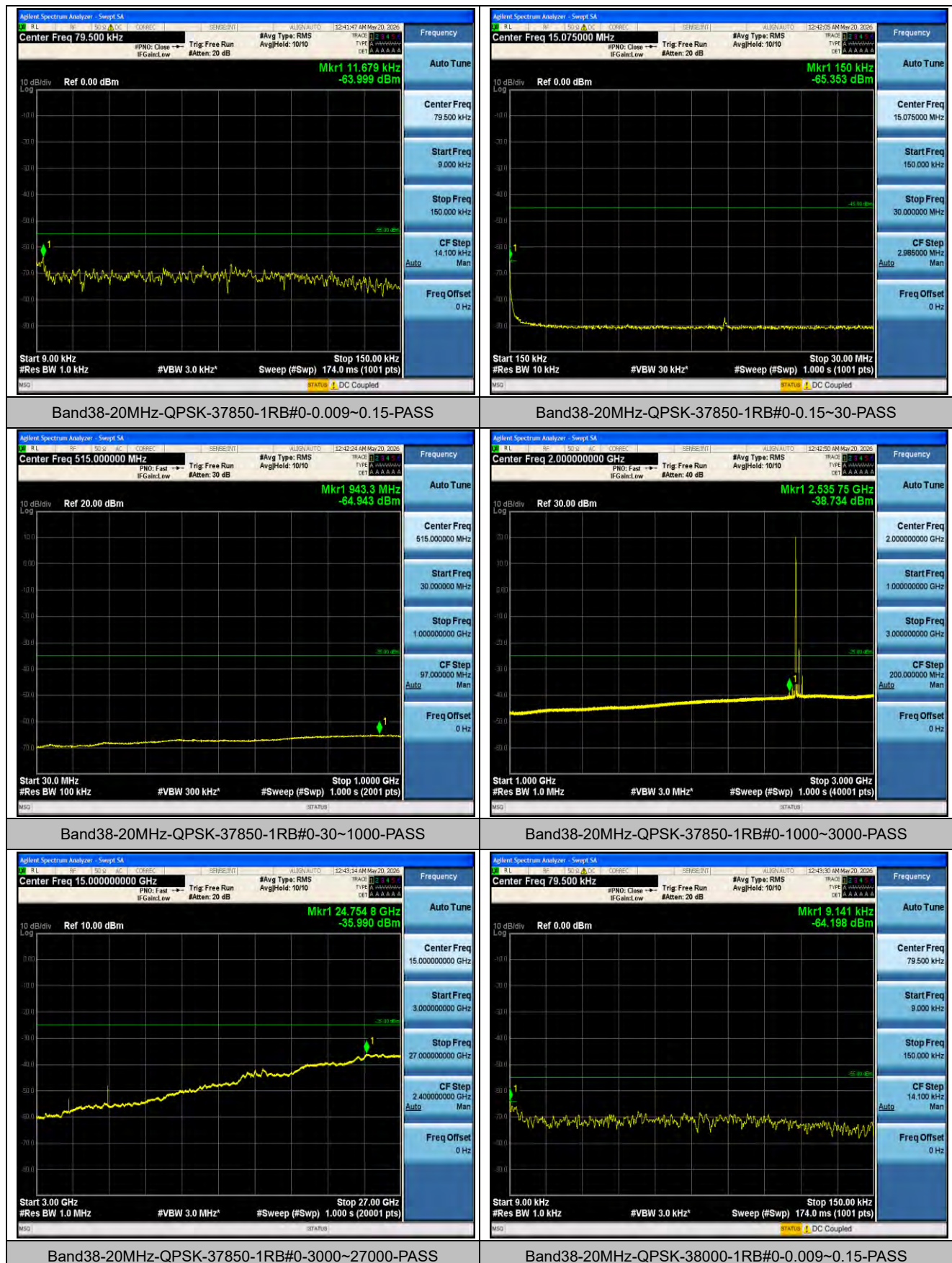


Band38-15MHz-QPSK-38175-75RB#0-PASS



Conducted Spurious Emission

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



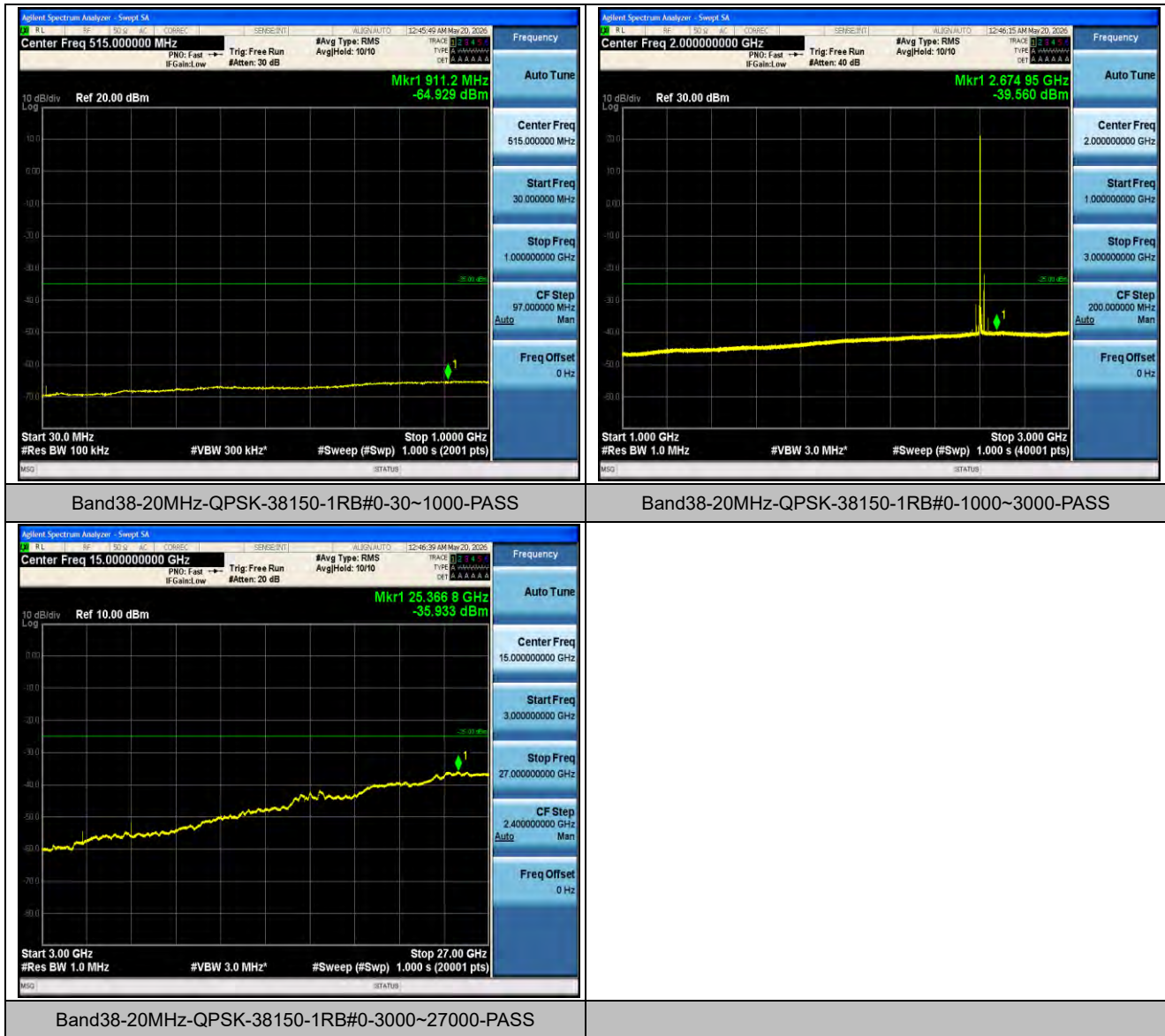
Band38-20MHz-QPSK-38000-1RB#0-3000~27000-PASS



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



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



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	-1.30	-0.000501	PASS
Band38	20MHz	QPSK	38000	100RB#0	VL	NT	-0.80	-0.000308	PASS
Band38	20MHz	QPSK	38000	100RB#0	VH	NT	-0.10	-0.000039	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	-1.00	-0.000385	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-20	1.10	0.000424	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	-10	2.30	0.000886	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	0	-0.70	-0.000270	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	10	0.70	0.000270	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	20	1.00	0.000385	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	30	2.90	0.001118	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	40	1.40	0.000539	PASS
Band38	20MHz	QPSK	38000	100RB#0	NV	50	2.40	0.000925	PASS

~The End~