

Appendix A Conduction Data for WCDMA

1.Transmitter Conducted Output Power And ERP/EIRP

Test Result

Band	Channel	Freq (MHz)	Connection Type	Conduct ed Power (dBm)	ERP/EIRP (dBm)	ERP/EIRP (W)	ERP/EIRP(Li mit) (dBm)	Verdict
2	9262	1852.4	Voice	21.95	19.72	0.0937	33.01	PASS
2	9400	1880.0	Voice	21.7	19.47	0.0886	33.01	PASS
2	9538	1907.6	Voice	21.9	19.67	0.0926	33.01	PASS
2	9262	1852.4	RMC	21.76	19.53	0.0898	33.01	PASS
2	9400	1880.0	RMC	21.91	19.68	0.0929	33.01	PASS
2	9538	1907.6	RMC	21.89	19.66	0.0924	33.01	PASS
2	9262	1852.4	HSDPA Subtest-1	21.67	19.44	0.0879	33.01	PASS
2	9400	1880.0	HSDPA Subtest-1	21.37	19.14	0.082	33.01	PASS
2	9538	1907.6	HSDPA Subtest-1	21.27	19.04	0.0802	33.01	PASS
2	9262	1852.4	HSDPA Subtest-2	21.26	19.03	0.0799	33.01	PASS
2	9400	1880.0	HSDPA Subtest-2	21.11	18.88	0.0773	33.01	PASS
2	9538	1907.6	HSDPA Subtest-2	21.07	18.84	0.0765	33.01	PASS
2	9262	1852.4	HSDPA Subtest-3	21.35	19.12	0.0817	33.01	PASS
2	9400	1880.0	HSDPA Subtest-3	21.14	18.91	0.0778	33.01	PASS
2	9538	1907.6	HSDPA Subtest-3	21.14	18.91	0.0778	33.01	PASS
2	9262	1852.4	HSDPA Subtest-4	21.28	19.05	0.0803	33.01	PASS
2	9400	1880.0	HSDPA Subtest-4	21.07	18.84	0.0766	33.01	PASS
2	9538	1907.6	HSDPA Subtest-4	21.02	18.79	0.0756	33.01	PASS
2	9262	1852.4	HSUPA Subtest-1	22.25	20.02	0.1005	33.01	PASS
2	9400	1880.0	HSUPA Subtest-1	22.07	19.84	0.0963	33.01	PASS
2	9538	1907.6	HSUPA Subtest-1	22.05	19.82	0.096	33.01	PASS
2	9262	1852.4	HSUPA Subtest-2	22.24	20.01	0.1002	33.01	PASS
2	9400	1880.0	HSUPA Subtest-2	22.11	19.88	0.0973	33.01	PASS
2	9538	1907.6	HSUPA Subtest-2	22.04	19.81	0.0957	33.01	PASS
2	9262	1852.4	HSUPA Subtest-3	22.41	20.18	0.1043	33.01	PASS
2	9400	1880.0	HSUPA Subtest-3	22.23	20.0	0.1001	33.01	PASS
2	9538	1907.6	HSUPA Subtest-3	22.03	19.8	0.0955	33.01	PASS
2	9262	1852.4	HSUPA Subtest-4	22.37	20.14	0.1032	33.01	PASS
2	9400	1880.0	HSUPA Subtest-4	22.14	19.91	0.0979	33.01	PASS
2	9538	1907.6	HSUPA Subtest-4	22.07	19.84	0.0964	33.01	PASS
2	9262	1852.4	HSUPA Subtest-5	22.37	20.14	0.1032	33.01	PASS
2	9400	1880.0	HSUPA Subtest-5	22.2	19.97	0.0992	33.01	PASS
2	9538	1907.6	HSUPA Subtest-5	22.12	19.89	0.0974	33.01	PASS
4	1312	1712.4	Voice	22.66	20.21	0.105	30	PASS
4	1412	1732.4	Voice	22.44	19.99	0.0999	30	PASS
4	1513	1752.6	Voice	22.42	19.97	0.0993	30	PASS
4	1312	1712.4	RMC	22.68	20.23	0.1055	30	PASS
4	1412	1732.4	RMC	22.66	20.21	0.105	30	PASS
4	1513	1752.6	RMC	22.42	19.97	0.0992	30	PASS
4	1312	1712.4	HSDPA Subtest-1	22.36	19.91	0.098	30	PASS
4	1412	1732.4	HSDPA Subtest-1	22.58	20.13	0.1031	30	PASS
4	1513	1752.6	HSDPA Subtest-1	22.36	19.91	0.098	30	PASS
4	1312	1712.4	HSDPA Subtest-2	22.11	19.66	0.0926	30	PASS
4	1412	1732.4	HSDPA Subtest-2	22.27	19.82	0.096	30	PASS
4	1513	1752.6	HSDPA Subtest-2	22.0	19.55	0.0901	30	PASS
4	1312	1712.4	HSDPA Subtest-3	21.87	19.42	0.0876	30	PASS
4	1412	1732.4	HSDPA Subtest-3	22.04	19.59	0.0909	30	PASS
4	1513	1752.6	HSDPA Subtest-3	21.71	19.26	0.0843	30	PASS
4	1312	1712.4	HSDPA Subtest-4	21.9	19.45	0.088	30	PASS
4	1412	1732.4	HSDPA Subtest-4	22.08	19.63	0.0918	30	PASS
4	1513	1752.6	HSDPA Subtest-4	21.79	19.34	0.0858	30	PASS
4	1312	1712.4	HSUPA Subtest-1	22.31	19.86	0.0968	30	PASS
4	1412	1732.4	HSUPA Subtest-1	22.51	20.06	0.1013	30	PASS
4	1513	1752.6	HSUPA Subtest-1	22.19	19.74	0.0942	30	PASS
4	1312	1712.4	HSUPA Subtest-2	22.29	19.84	0.0963	30	PASS
4	1412	1732.4	HSUPA Subtest-2	22.55	20.1	0.1023	30	PASS
4	1513	1752.6	HSUPA Subtest-2	22.2	19.75	0.0944	30	PASS
4	1312	1712.4	HSUPA Subtest-3	22.34	19.89	0.0975	30	PASS
4	1412	1732.4	HSUPA Subtest-3	22.5	20.05	0.1011	30	PASS
4	1513	1752.6	HSUPA Subtest-3	22.17	19.72	0.0938	30	PASS
4	1312	1712.4	HSUPA Subtest-4	22.26	19.81	0.0956	30	PASS
4	1412	1732.4	HSUPA Subtest-4	22.46	20.01	0.1002	30	PASS
4	1513	1752.6	HSUPA Subtest-4	22.21	19.76	0.0946	30	PASS
4	1312	1712.4	HSUPA Subtest-5	22.34	19.89	0.0975	30	PASS
4	1412	1732.4	HSUPA Subtest-5	22.5	20.05	0.1012	30	PASS
4	1513	1752.6	HSUPA Subtest-5	22.2	19.75	0.0944	30	PASS
5	4132	826.4	Voice	22.57	15.26	0.0335	38.45	PASS
5	4182	836.4	Voice	22.12	14.81	0.0	38.45	PASS
5	4233	846.6	Voice	22.39	15.08	0.0322	38.45	PASS
5	4132	826.4	RMC	22.56	15.25	0.0335	38.45	PASS
5	4182	836.4	RMC	22.6	15.29	0.0338	38.45	PASS
5	4233	846.6	RMC	22.58	15.27	0.0336	38.45	PASS
5	4132	826.4	HSDPA Subtest-1	22.59	15.28	0.0337	38.5	PASS
5	4182	836.4	HSDPA Subtest-1	22.8	15.49	0.0354	38.5	PASS

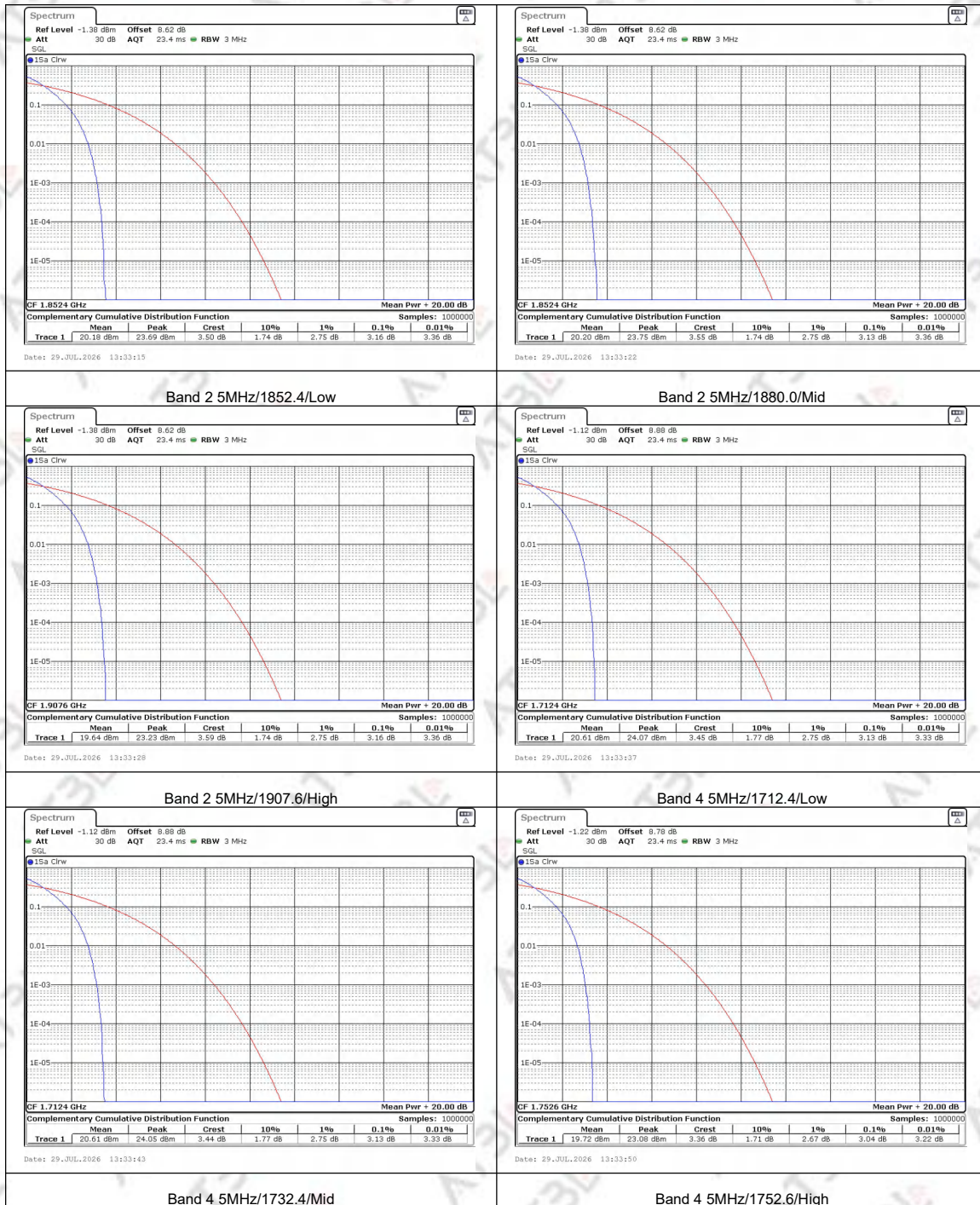
5	4233	846.6	HSDPA Subtest-1	22.52	15.21	0.0332	38.5	PASS
5	4132	826.4	HSDPA Subtest-2	22.3	14.99	0.0316	38.5	PASS
5	4182	836.4	HSDPA Subtest-2	22.51	15.2	0.0331	38.5	PASS
5	4233	846.6	HSDPA Subtest-2	22.32	15.01	0.0317	38.5	PASS
5	4132	826.4	HSDPA Subtest-3	20.87	13.56	0.0227	38.5	PASS
5	4182	836.4	HSDPA Subtest-3	21.06	13.75	0.0237	38.5	PASS
5	4233	846.6	HSDPA Subtest-3	20.81	13.5	0.0224	38.5	PASS
5	4132	826.4	HSDPA Subtest-4	20.97	13.66	0.0232	38.5	PASS
5	4182	836.4	HSDPA Subtest-4	21.13	13.82	0.0241	38.5	PASS
5	4233	846.6	HSDPA Subtest-4	20.83	13.52	0.0225	38.5	PASS
5	4132	826.4	HSUPA Subtest-1	22.48	15.17	0.0329	38.5	PASS
5	4182	836.4	HSUPA Subtest-1	22.75	15.44	0.035	38.5	PASS
5	4233	846.6	HSUPA Subtest-1	22.46	15.15	0.0327	38.5	PASS
5	4132	826.4	HSUPA Subtest-2	22.59	15.28	0.0338	38.5	PASS
5	4182	836.4	HSUPA Subtest-2	22.81	15.5	0.0355	38.5	PASS
5	4233	846.6	HSUPA Subtest-2	22.52	15.21	0.0332	38.5	PASS
5	4132	826.4	HSUPA Subtest-3	22.61	15.3	0.0339	38.5	PASS
5	4182	836.4	HSUPA Subtest-3	22.85	15.54	0.0358	38.5	PASS
5	4233	846.6	HSUPA Subtest-3	22.49	15.18	0.033	38.5	PASS
5	4132	826.4	HSUPA Subtest-4	22.61	15.3	0.0339	38.5	PASS
5	4182	836.4	HSUPA Subtest-4	22.84	15.53	0.0358	38.5	PASS
5	4233	846.6	HSUPA Subtest-4	22.54	15.23	0.0333	38.5	PASS
5	4132	826.4	HSUPA Subtest-5	22.61	15.3	0.0339	38.5	PASS
5	4182	836.4	HSUPA Subtest-5	22.86	15.55	0.0359	38.5	PASS
5	4233	846.6	HSUPA Subtest-5	22.58	15.27	0.0337	38.5	PASS

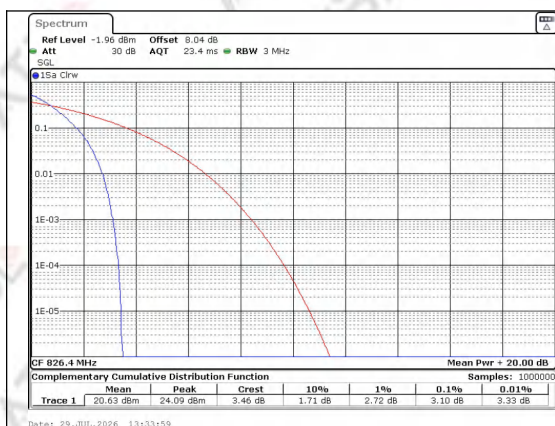
2. Peak to Average Ratio

Test Result

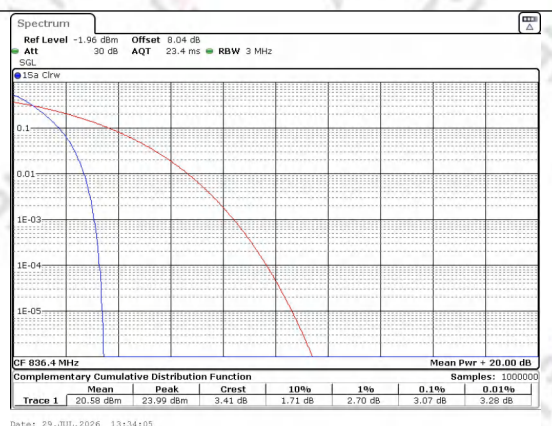
Band	Channel	Freq (MHz)	Result (dB)	Limit (dB)	Verdict
2	9262	1852.4	3.16	13	PASS
2	9400	1852.4	3.13	13	PASS
2	9538	1907.6	3.16	13	PASS
4	1312	1712.4	3.13	13	PASS
4	1412	1712.4	3.13	13	PASS
4	1513	1752.6	3.04	13	PASS
5	4132	826.4	3.10	13	PASS
5	4182	836.4	3.07	13	PASS
5	4233	846.6	3.16	13	PASS

Test Graphs

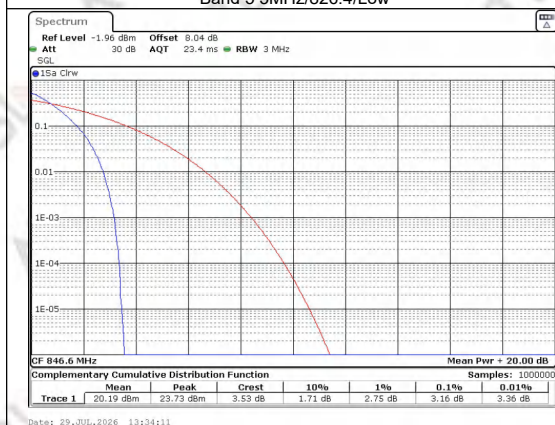




Band 5 5MHz/826.4/Low



Band 5 5MHz/836.4/Mid



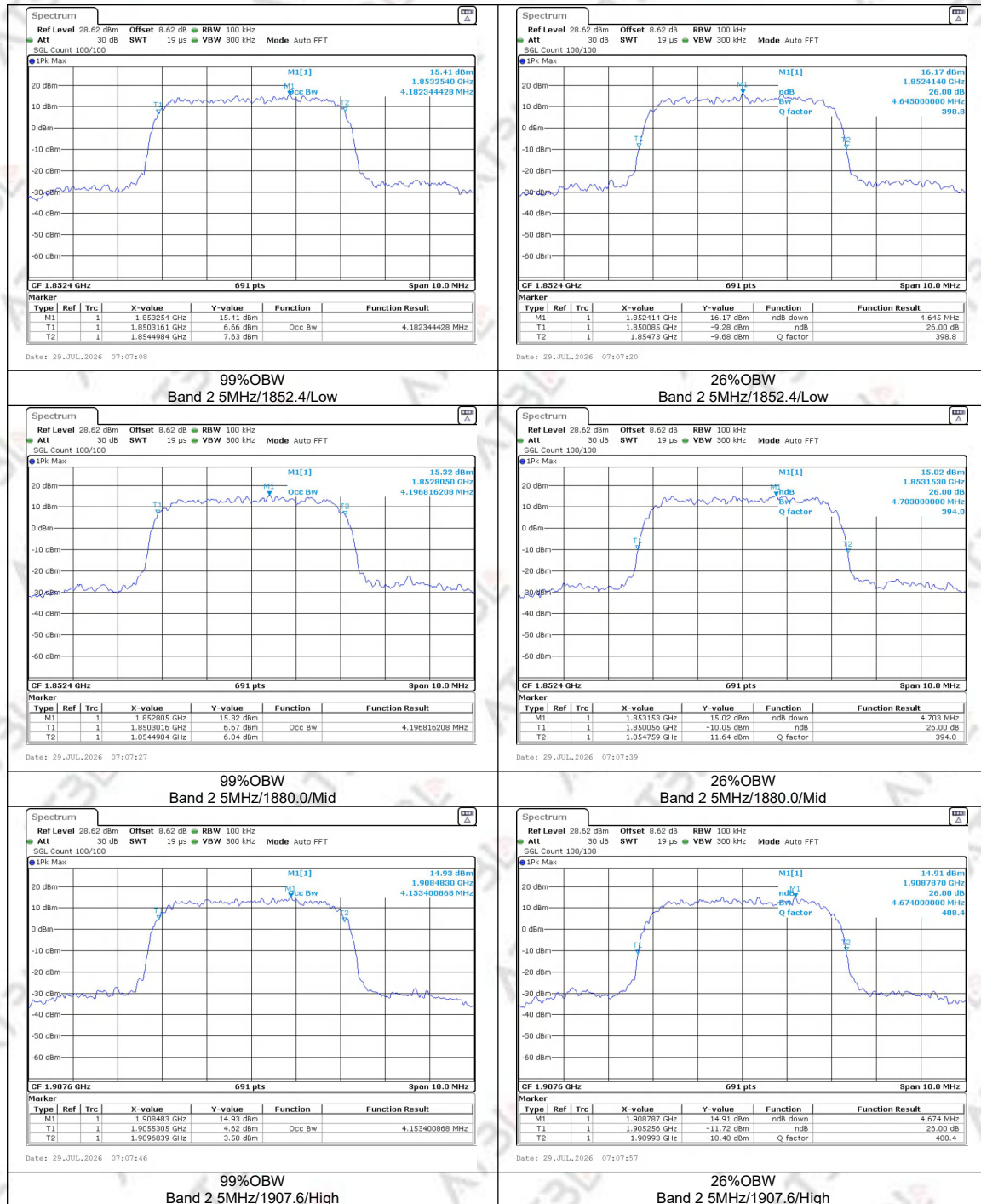
Band 5 5MHz/846.6/High

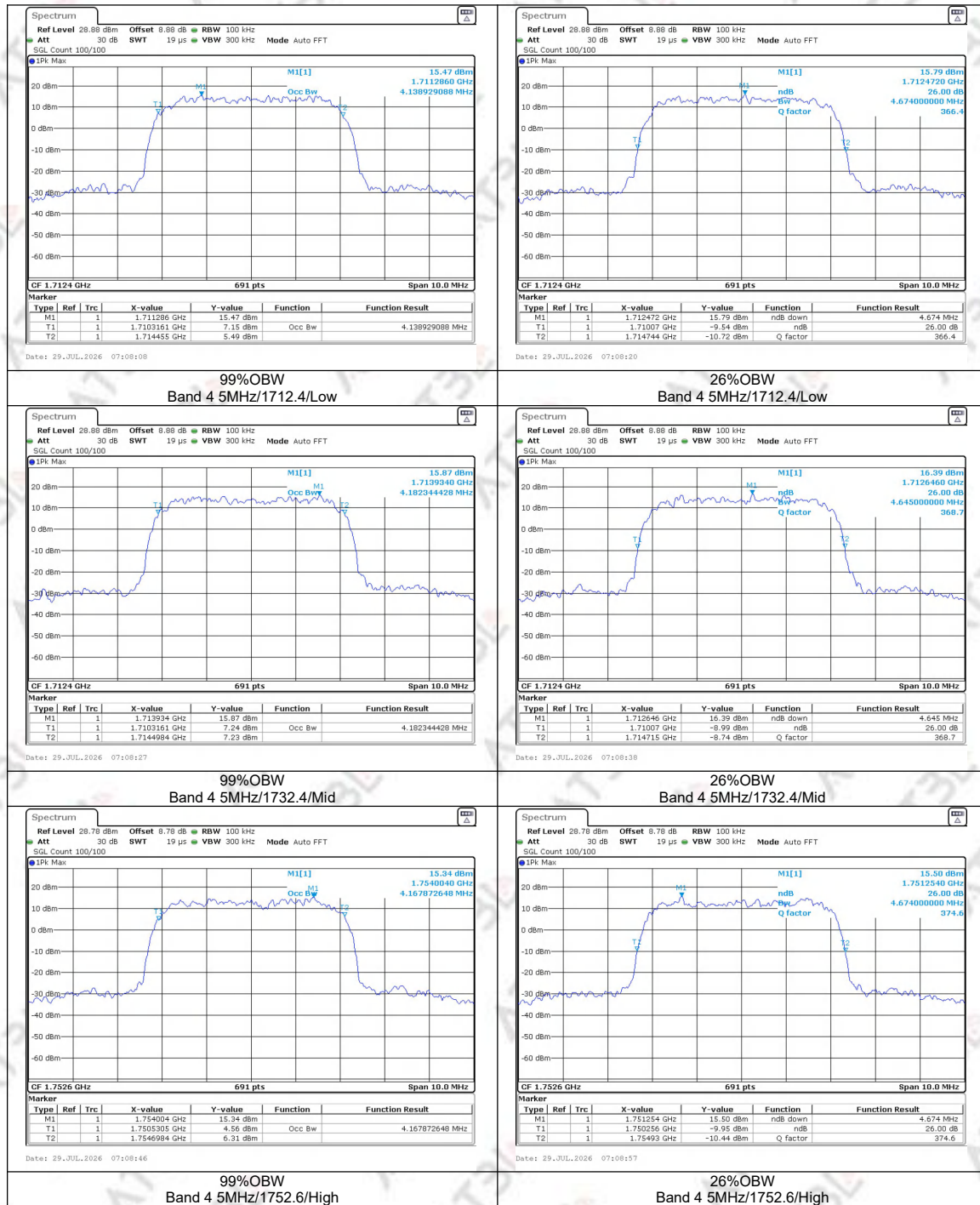
3.Occupied Bandwidth

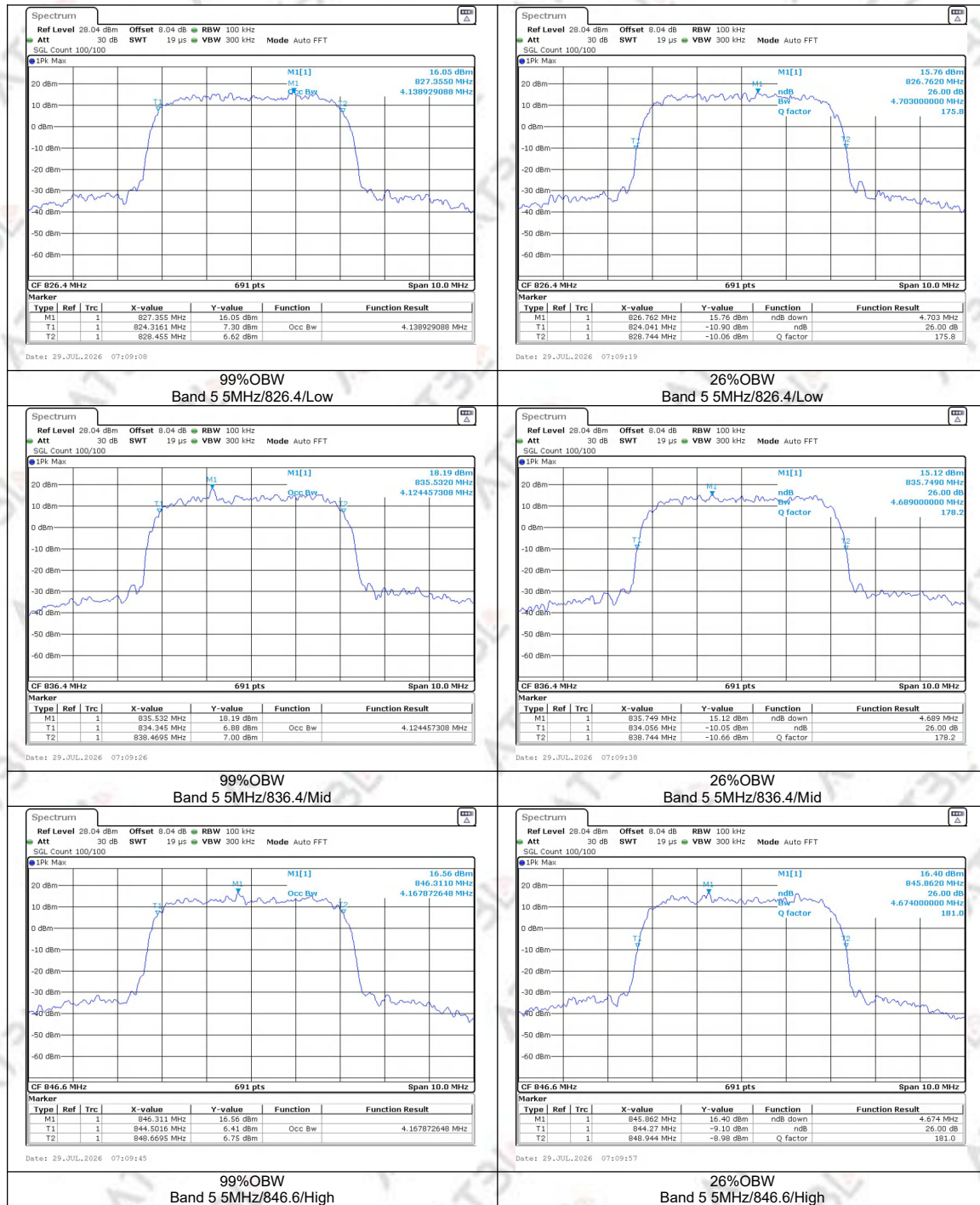
Test Result

Band	Channel	Freq (MHz)	OBW (MHz)	26dB BW (MHz)	Verdict
2	9262	1852.4	4.1823	4.645	PASS
2	9400	1852.4	4.1968	4.703	PASS
2	9538	1907.6	4.1534	4.674	PASS
4	1312	1712.4	4.1389	4.674	PASS
4	1412	1712.4	4.1823	4.645	PASS
4	1513	1752.6	4.1679	4.674	PASS
5	4132	826.4	4.1389	4.703	PASS
5	4182	836.4	4.1245	4.689	PASS
5	4233	846.6	4.1679	4.674	PASS

Test Graphs





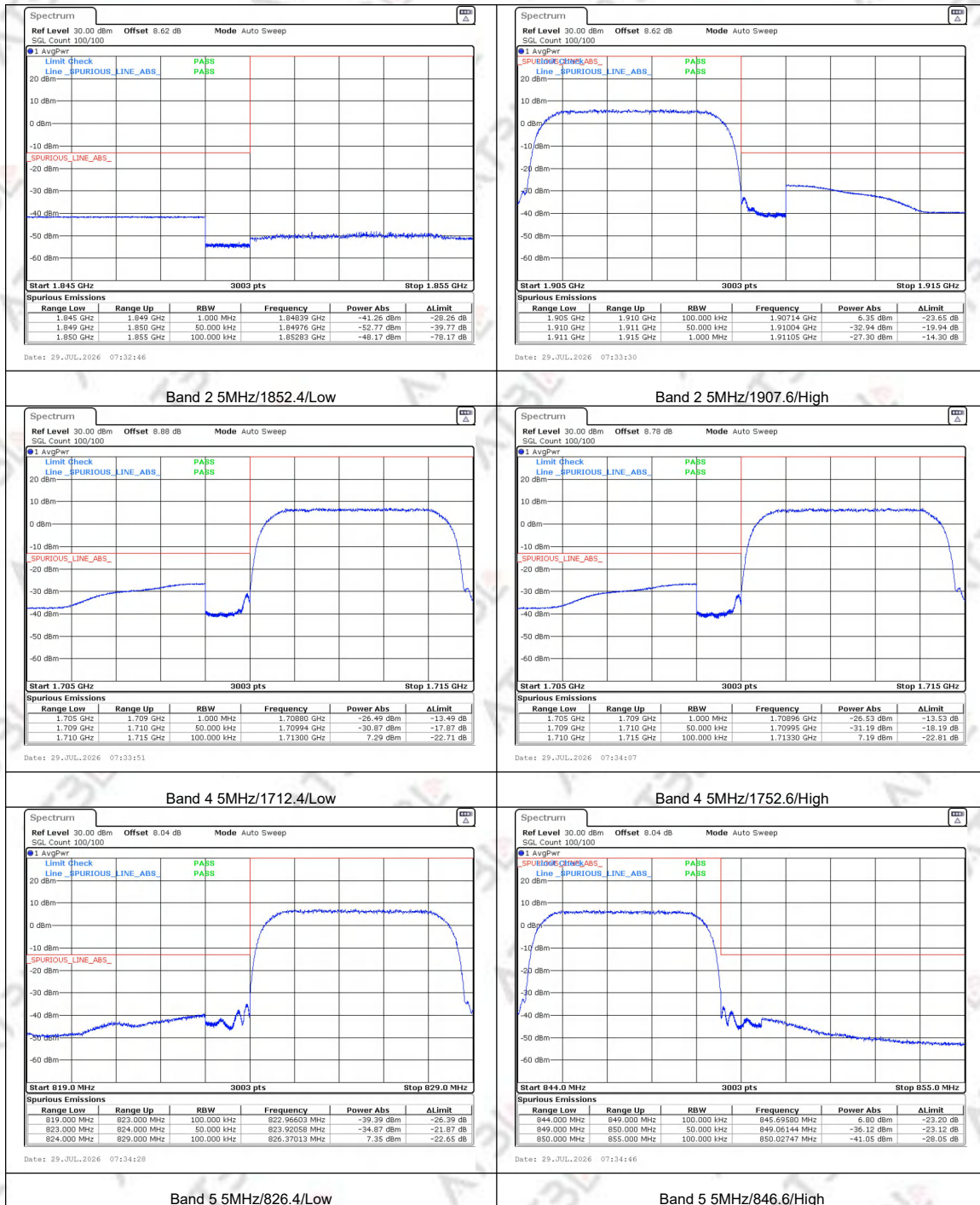


4. Conducted Band Edge

Test Result

Band	Channel	Freq (MHz)	Result	Verdict
2	9262	1852.4	see graph	PASS
2	9538	1907.6	see graph	PASS
4	1312	1712.4	see graph	PASS
4	1513	1712.4	see graph	PASS
5	4132	826.4	see graph	PASS
5	4233	846.6	see graph	PASS

Test Graphs



Band 5 5MHz/826.4/Low

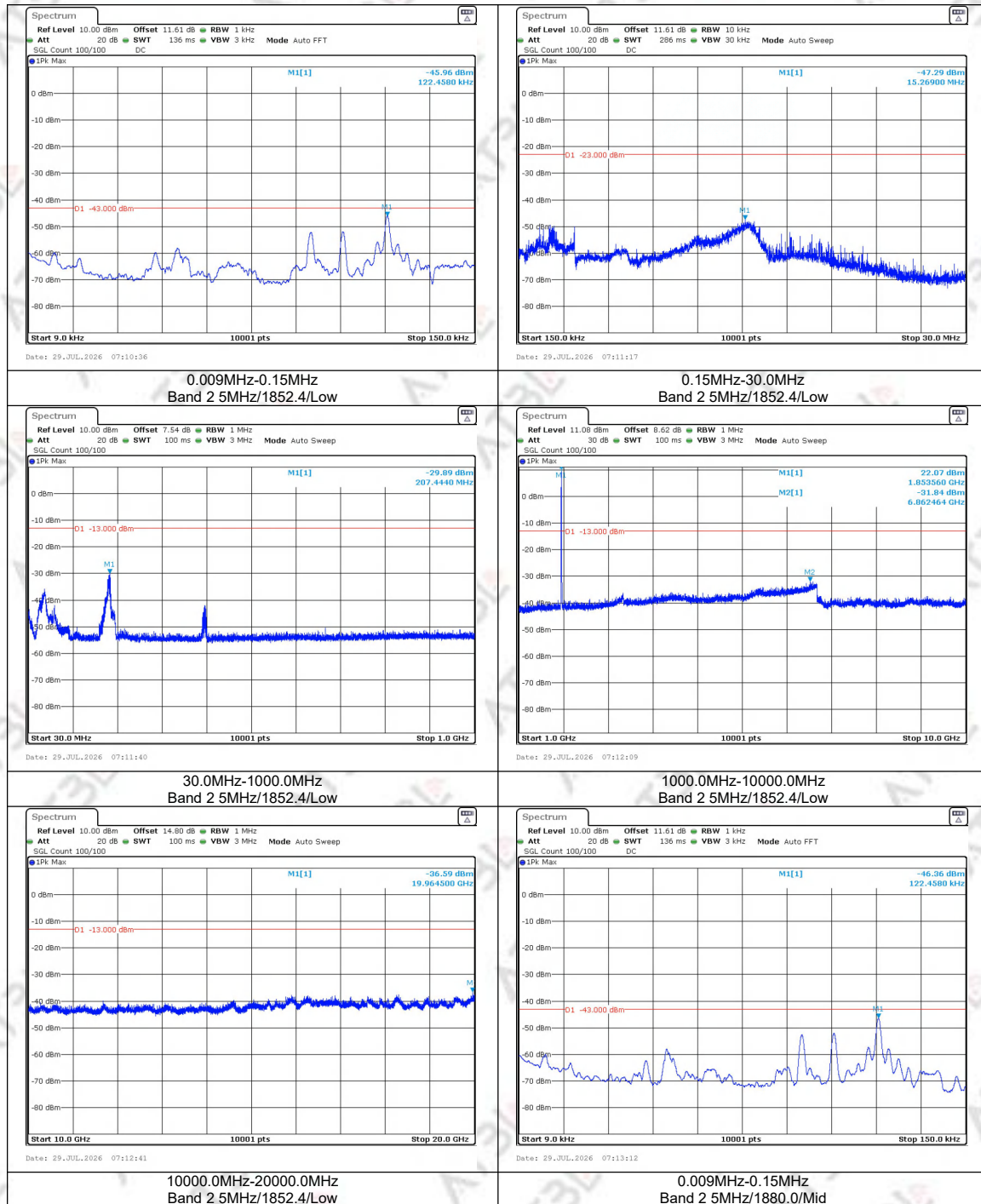
Band 5 5MHz/846.6/High

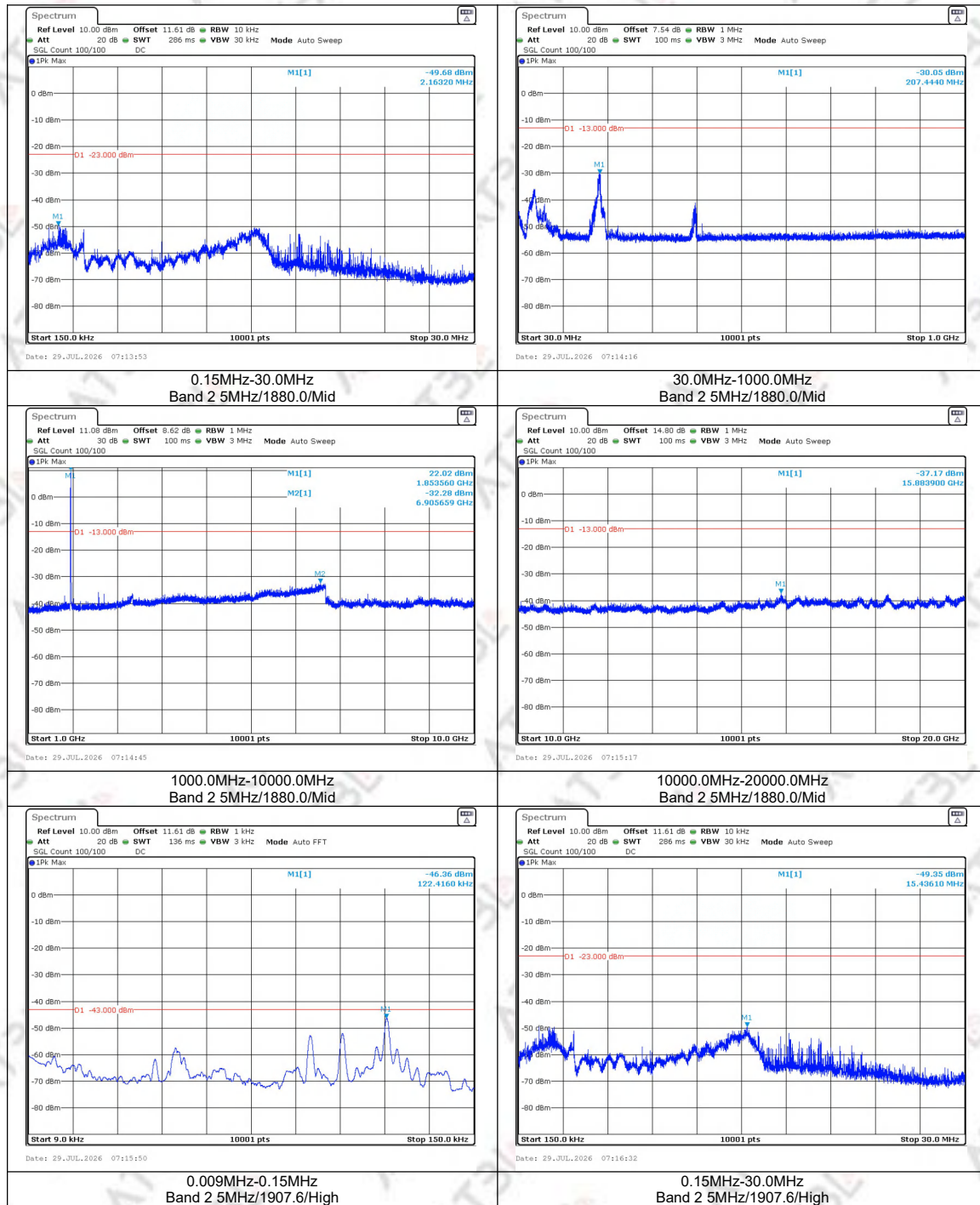
5. Conducted Spurious Emissions

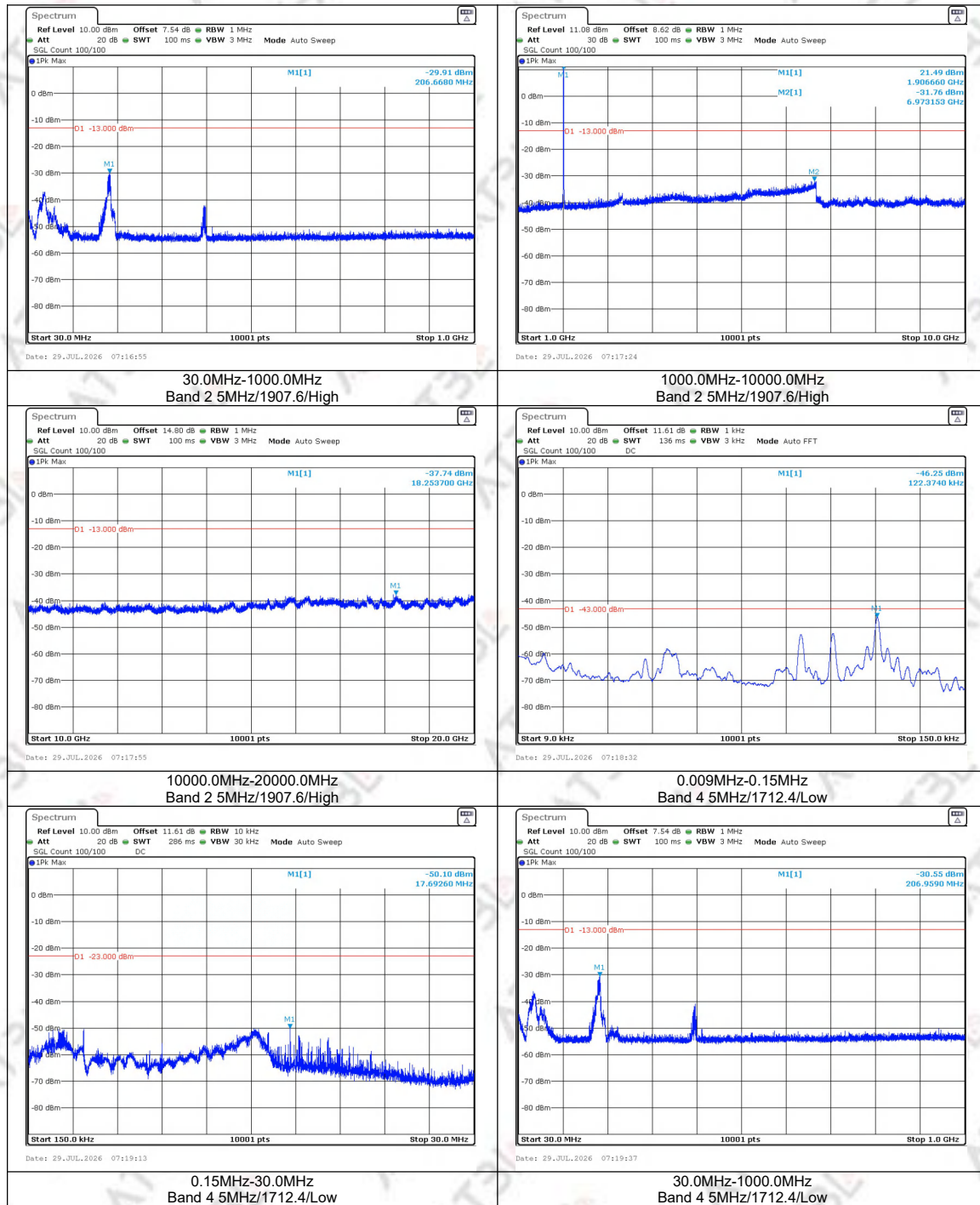
Test Result

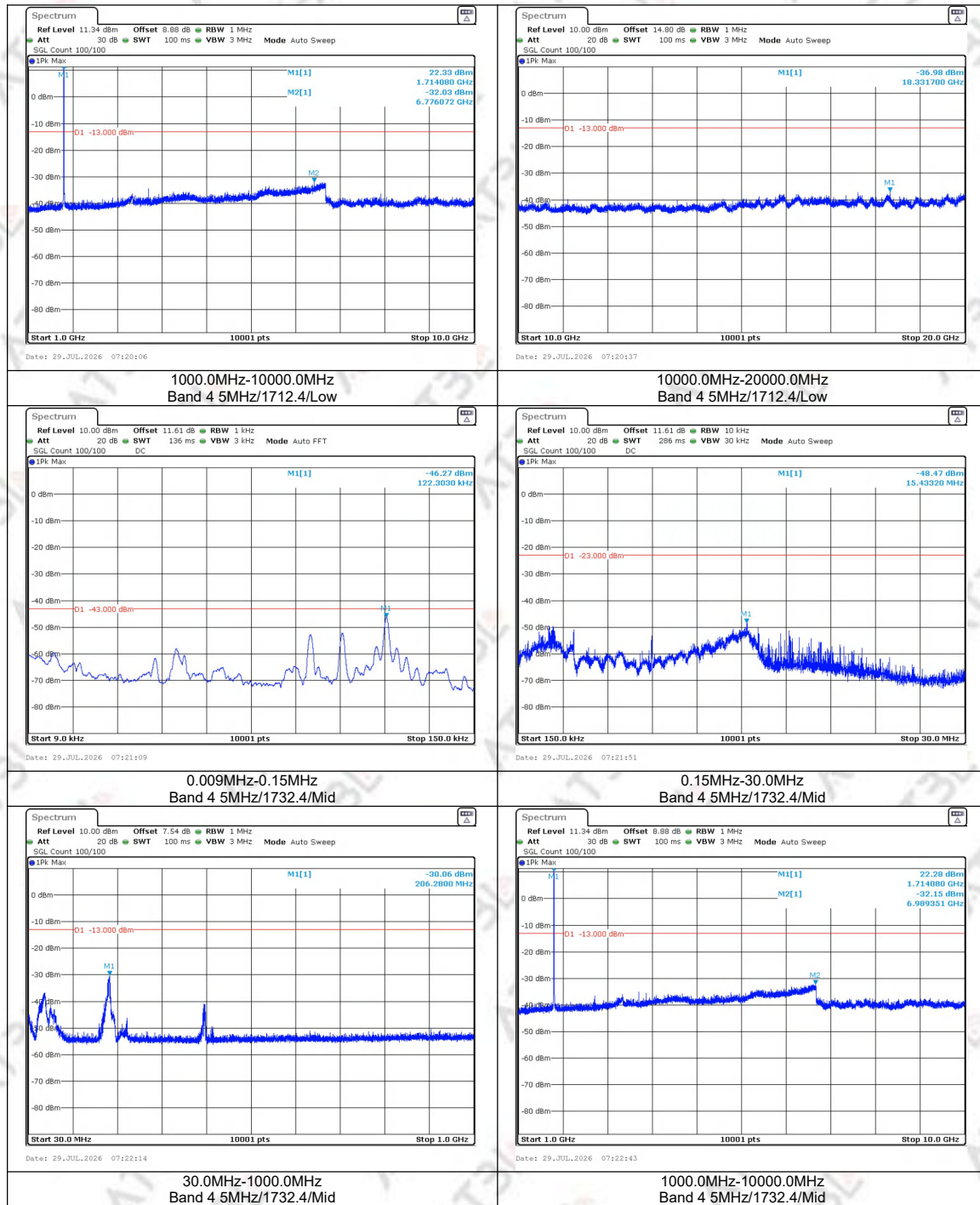
Band	Channel	Freq (MHz)	StartFreq (MHz)	StopFreq (MHz)	Result (dBm)	Limit (dBm)	Verdict
2	9262	1852.4	0.009	0.15	-45.96	-43	PASS
2	9262	1852.4	0.15	30.0	-47.29	-23	PASS
2	9262	1852.4	30.0	1000.0	-29.89	-13	PASS
2	9262	1852.4	1000.0	10000.0	-31.84	-13	PASS
2	9262	1852.4	10000.0	20000.0	-36.59	-13	PASS
2	9400	1852.4	0.009	0.15	-46.36	-43	PASS
2	9400	1852.4	0.15	30.0	-49.68	-23	PASS
2	9400	1852.4	30.0	1000.0	-30.05	-13	PASS
2	9400	1852.4	1000.0	10000.0	-32.28	-13	PASS
2	9400	1852.4	10000.0	20000.0	-37.17	-13	PASS
2	9538	1907.6	0.009	0.15	-46.36	-43	PASS
2	9538	1907.6	0.15	30.0	-49.35	-23	PASS
2	9538	1907.6	30.0	1000.0	-29.91	-13	PASS
2	9538	1907.6	1000.0	10000.0	-31.76	-13	PASS
2	9538	1907.6	10000.0	20000.0	-37.74	-13	PASS
4	1312	1712.4	0.009	0.15	-46.25	-43	PASS
4	1312	1712.4	0.15	30.0	-50.1	-23	PASS
4	1312	1712.4	30.0	1000.0	-30.55	-13	PASS
4	1312	1712.4	1000.0	10000.0	-32.03	-13	PASS
4	1312	1712.4	10000.0	20000.0	-36.98	-13	PASS
4	1412	1712.4	0.009	0.15	-46.27	-43	PASS
4	1412	1712.4	0.15	30.0	-48.47	-23	PASS
4	1412	1712.4	30.0	1000.0	-30.06	-13	PASS
4	1412	1712.4	1000.0	10000.0	-32.15	-13	PASS
4	1412	1712.4	10000.0	20000.0	-37.13	-13	PASS
4	1513	1752.6	0.009	0.15	-46.21	-43	PASS
4	1513	1752.6	0.15	30.0	-49.17	-23	PASS
4	1513	1752.6	30.0	1000.0	-30.21	-13	PASS
4	1513	1752.6	1000.0	10000.0	-31.66	-13	PASS
4	1513	1752.6	10000.0	20000.0	-37.54	-13	PASS
5	4132	826.4	0.009	0.15	-46.36	-33	PASS
5	4132	826.4	0.15	30.0	-46.54	-13	PASS
5	4132	826.4	30.0	1000.0	-40.15	-13	PASS
5	4132	826.4	1000.0	10000.0	-33.32	-13	PASS
5	4182	836.4	0.009	0.15	-46.29	-33	PASS
5	4182	836.4	0.15	30.0	-46.29	-13	PASS
5	4182	836.4	30.0	1000.0	-38.02	-13	PASS
5	4182	836.4	1000.0	10000.0	-32.58	-13	PASS
5	4233	846.6	0.009	0.15	-46.32	-33	PASS
5	4233	846.6	0.15	30.0	-46.76	-13	PASS
5	4233	846.6	30.0	1000.0	-36.87	-13	PASS
5	4233	846.6	1000.0	10000.0	-33.39	-13	PASS

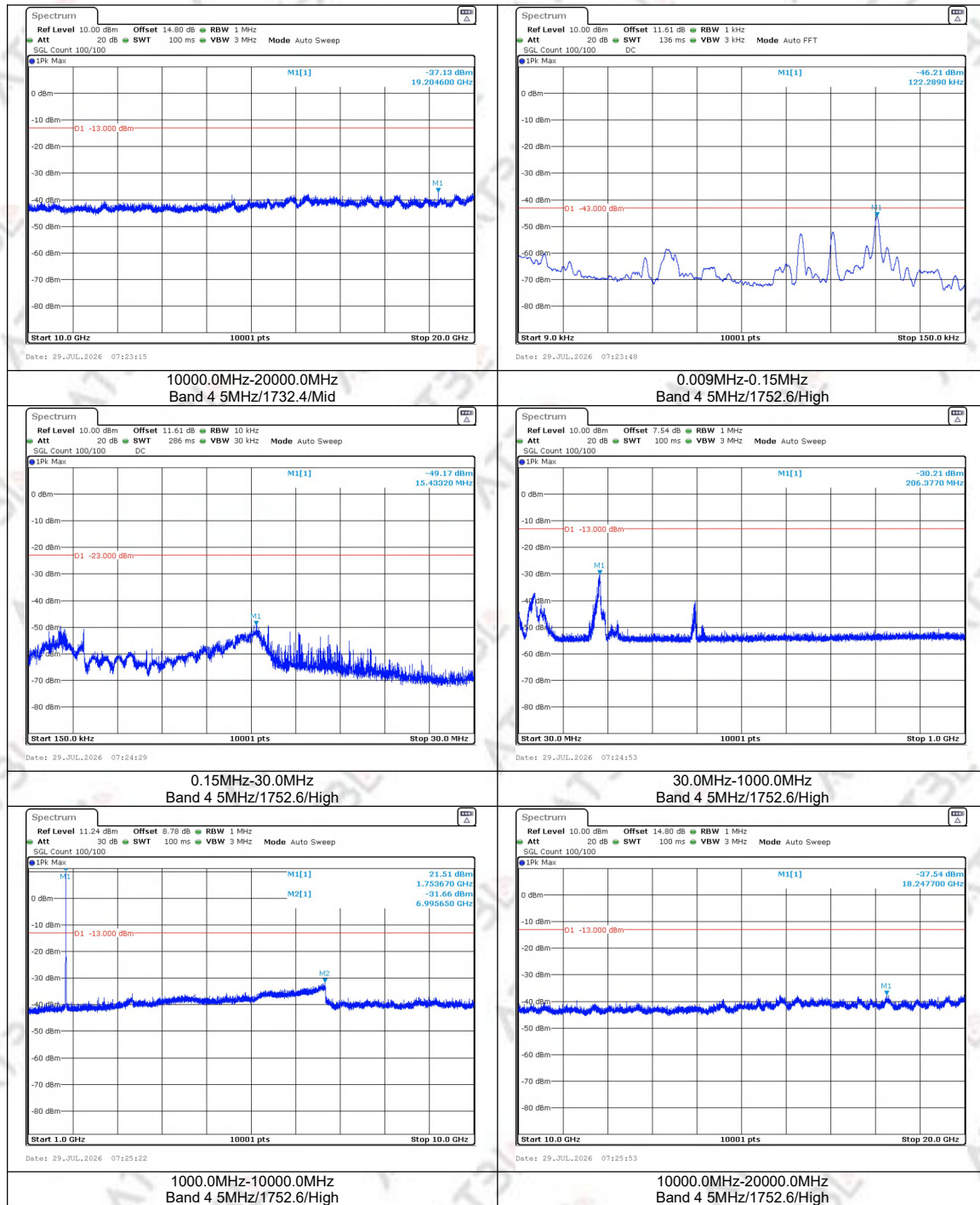
Test Graphs

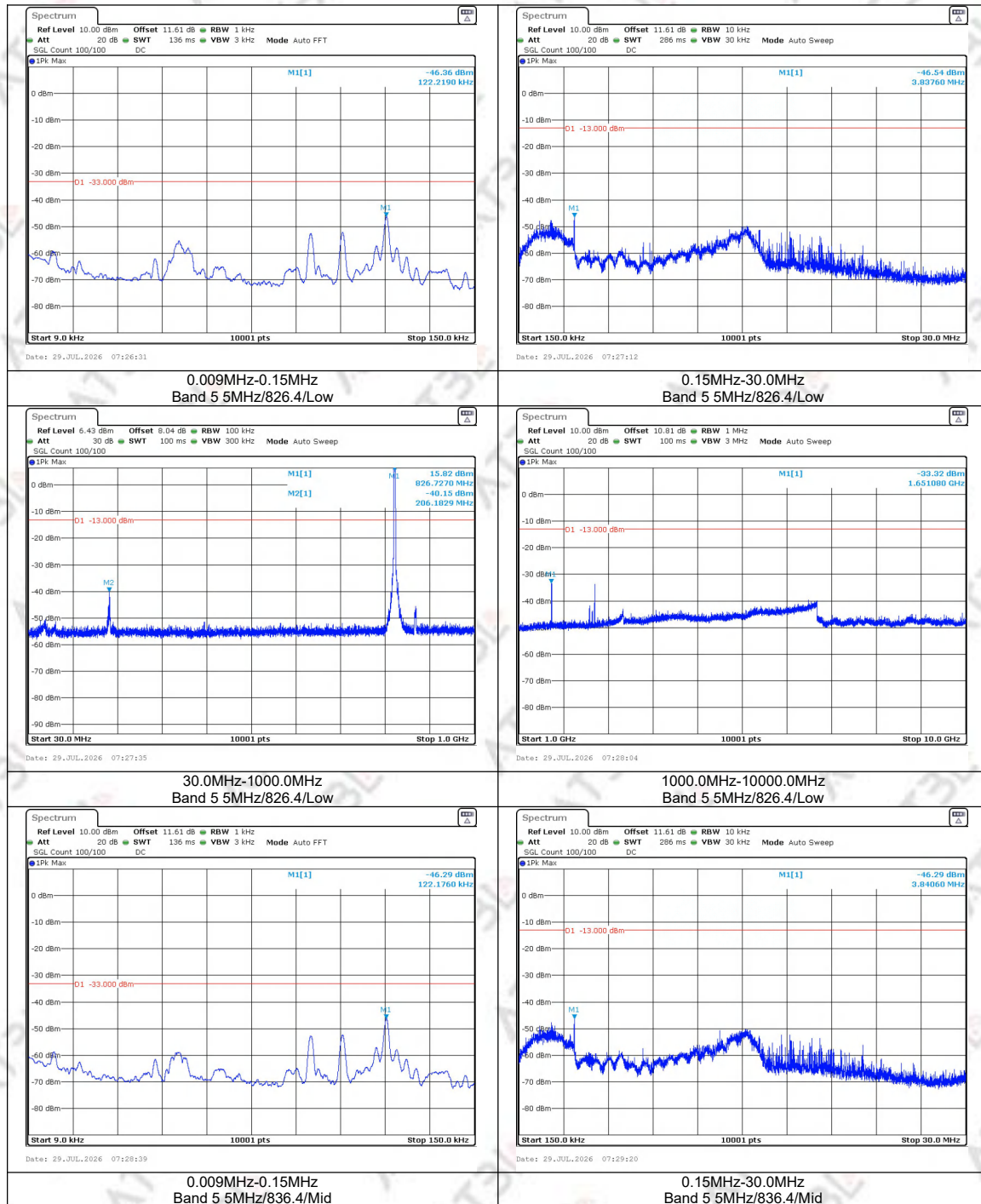


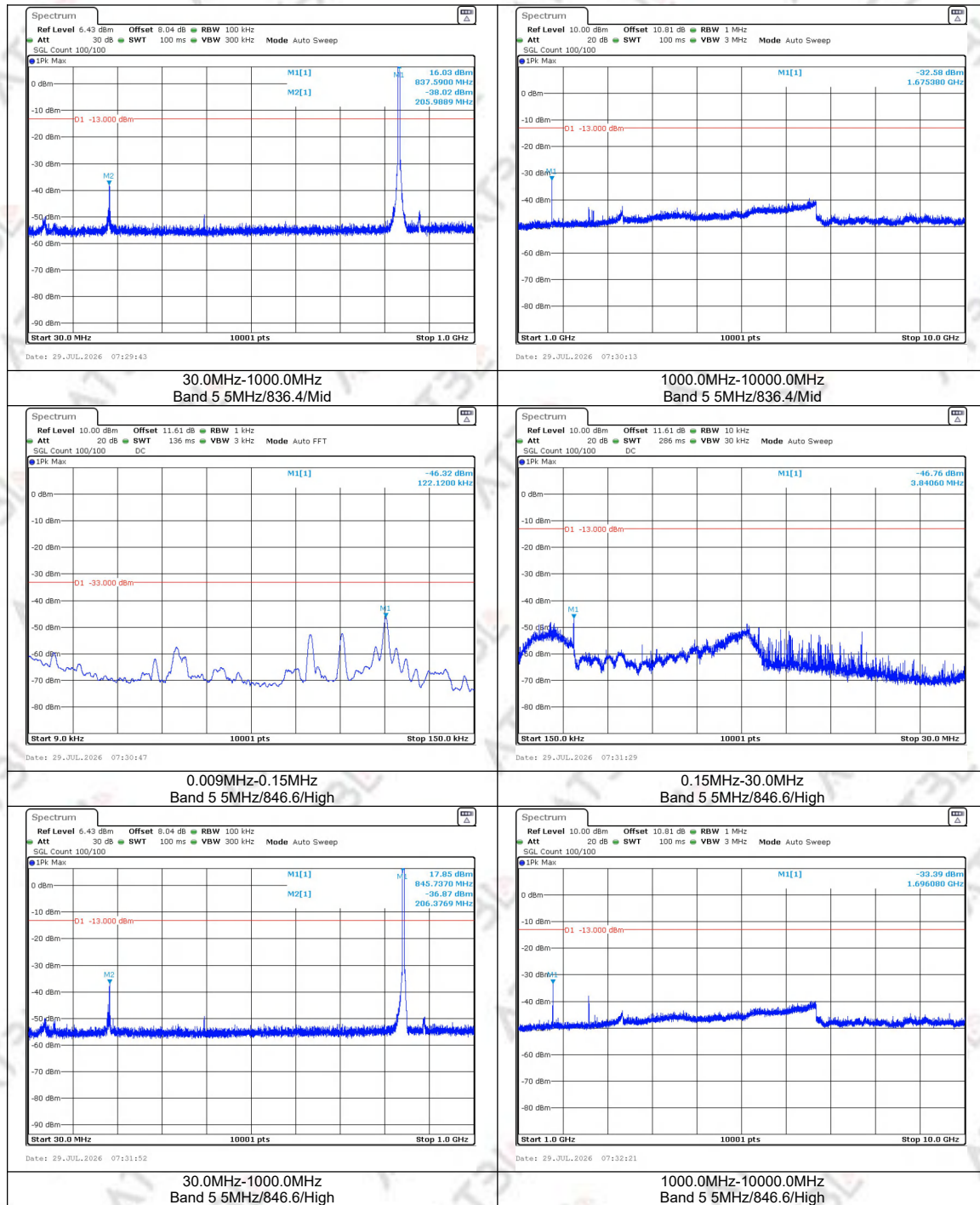












6.Frequency Stability-TN/VN

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	-1.39	-0.000749	±2.5	PASS	TN/VN
2	9400	1880.0	-0.72	-0.00038	±2.5	PASS	TN/VN
2	9538	1907.6	0.78	0.000409	±2.5	PASS	TN/VN
4	1312	1712.4	0.74	0.000434	±2.5	PASS	TN/VN
4	1412	1732.4	1.04	0.000599	±2.5	PASS	TN/VN
4	1513	1752.6	2.45	0.001396	±2.5	PASS	TN/VN
5	4132	826.4	0.35	0.000424	±2.5	PASS	TN/VN
5	4182	836.4	-1.49	-0.001787	±2.5	PASS	TN/VN
5	4233	846.6	1.95	0.002298	±2.5	PASS	TN/VN

Frequency Stability-TH/VH

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	-0.34	-0.000181	±2.5	PASS	TH/VH
2	9400	1880.0	-0.41	-0.000221	±2.5	PASS	TH/VH
2	9538	1907.6	0.32	0.000168	±2.5	PASS	TH/VH
4	1312	1712.4	0.26	0.00015	±2.5	PASS	TH/VH
4	1412	1732.4	-99.99	-0.057718	±2.5	PASS	TH/VH
4	1513	1752.6	-0.23	-0.000131	±2.5	PASS	TH/VH
5	4132	826.4	0.32	0.000387	±2.5	PASS	TH/VH
5	4182	836.4	-1.23	-0.001471	±2.5	PASS	TH/VH
5	4233	846.6	0.32	0.000378	±2.5	PASS	TH/VH

Frequency Stability-TH/VL

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	0.32	0.000173	±2.5	PASS	TH/VL
2	9400	1880.0	-1.29	-0.000689	±2.5	PASS	TH/VL
2	9538	1907.6	-1.07	-0.000562	±2.5	PASS	TH/VL
4	1312	1712.4	-1.32	-0.000769	±2.5	PASS	TH/VL
4	1412	1732.4	-99.99	-0.057718	±2.5	PASS	TH/VL
4	1513	1752.6	0.99	0.000567	±2.5	PASS	TH/VL
5	4132	826.4	-0.24	-0.000294	±2.5	PASS	TH/VL
5	4182	836.4	0.32	0.000383	±2.5	PASS	TH/VL
5	4233	846.6	-0.74	-0.000879	±2.5	PASS	TH/VL

Frequency Stability-TH/VN

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	-1.39	-0.000749	±2.5	PASS	TH/VN
2	9400	1880.0	-1.12	-0.000597	±2.5	PASS	TH/VN
2	9538	1907.6	0.62	0.000326	±2.5	PASS	TH/VN
4	1312	1712.4	0.32	0.000187	±2.5	PASS	TH/VN
4	1412	1732.4	-0.8	-0.000462	±2.5	PASS	TH/VN
4	1513	1752.6	-1.64	-0.000935	±2.5	PASS	TH/VN
5	4132	826.4	1.14	0.001385	±2.5	PASS	TH/VN
5	4182	836.4	-0.67	-0.000795	±2.5	PASS	TH/VN
5	4233	846.6	-0.4	-0.000473	±2.5	PASS	TH/VN

Frequency Stability-TL/VH

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	0.32	0.000173	±2.5	PASS	TLVH
2	9400	1880.0	-2.12	-0.001126	±2.5	PASS	TLVH
2	9538	1907.6	1.92	0.001009	±2.5	PASS	TLVH
4	1312	1712.4	-1.84	-0.001073	±2.5	PASS	TLVH
4	1412	1732.4	1.59	0.000917	±2.5	PASS	TLVH
4	1513	1752.6	-0.91	-0.000518	±2.5	PASS	TLVH
5	4132	826.4	-0.92	-0.001117	±2.5	PASS	TLVH
5	4182	836.4	0.49	0.00059	±2.5	PASS	TLVH
5	4233	846.6	-0.31	-0.000372	±2.5	PASS	TLVH

Frequency Stability-TL/VL

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	0.32	0.000173	±2.5	PASS	TL/VL
2	9400	1880.0	-3.99	-0.002123	±2.5	PASS	TL/VL
2	9538	1907.6	-0.54	-0.000285	±2.5	PASS	TL/VL
4	1312	1712.4	1.27	0.000743	±2.5	PASS	TL/VL
4	1412	1732.4	-1.55	-0.000896	±2.5	PASS	TL/VL
4	1513	1752.6	-4.11	-0.002343	±2.5	PASS	TL/VL
5	4132	826.4	-0.26	-0.00032	±2.5	PASS	TL/VL
5	4182	836.4	0.32	0.000383	±2.5	PASS	TL/VL
5	4233	846.6	0.32	0.000378	±2.5	PASS	TL/VL

Frequency Stability-TL/VN

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	-0.23	-0.000124	±2.5	PASS	TL/VN
2	9400	1880.0	3.52	0.001872	±2.5	PASS	TL/VN
2	9538	1907.6	0.67	0.000352	±2.5	PASS	TL/VN
4	1312	1712.4	2.05	0.001199	±2.5	PASS	TL/VN
4	1412	1732.4	-2.28	-0.001317	±2.5	PASS	TL/VN
4	1513	1752.6	-2.77	-0.001579	±2.5	PASS	TL/VN
5	4132	826.4	0.32	0.000387	±2.5	PASS	TL/VN
5	4182	836.4	-0.31	-0.000376	±2.5	PASS	TL/VN
5	4233	846.6	0.3	0.000355	±2.5	PASS	TL/VN

Frequency Stability-TN/VH

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	2.75	0.001483	±2.5	PASS	TN/VH
2	9400	1880.0	-0.82	-0.000438	±2.5	PASS	TN/VH
2	9538	1907.6	-0.62	-0.000326	±2.5	PASS	TN/VH
4	1312	1712.4	0.2	0.000117	±2.5	PASS	TN/VH
4	1412	1732.4	-0.64	-0.000372	±2.5	PASS	TN/VH
4	1513	1752.6	-2.76	-0.001575	±2.5	PASS	TN/VH
5	4132	826.4	-0.94	-0.001142	±2.5	PASS	TN/VH
5	4182	836.4	-0.69	-0.00083	±2.5	PASS	TN/VH
5	4233	846.6	-0.24	-0.000279	±2.5	PASS	TN/VH

Frequency Stability-TN/VL

Test Result

Band	Channel	Freq (MHz)	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
2	9262	1852.4	-1.01	-0.000544	±2.5	PASS	TN/VL
2	9400	1880.0	-1.05	-0.000559	±2.5	PASS	TN/VL
2	9538	1907.6	-99.99	-0.052417	±2.5	PASS	TN/VL
4	1312	1712.4	-1.04	-0.000606	±2.5	PASS	TN/VL
4	1412	1732.4	-0.96	-0.000553	±2.5	PASS	TN/VL
4	1513	1752.6	1.45	0.000828	±2.5	PASS	TN/VL
5	4132	826.4	0.32	0.000387	±2.5	PASS	TN/VL
5	4182	836.4	-1.1	-0.001317	±2.5	PASS	TN/VL
5	4233	846.6	-0.57	-0.000676	±2.5	PASS	TN/VL

7.Modulation Characteristics

Test Result

Band	Channel	Freq (MHz)	Verdict
2	9262	1852.4	PASS
2	9400	1880.0	PASS
2	9538	1907.6	PASS
4	1312	1712.4	PASS
4	1412	1732.4	PASS
4	1513	1752.6	PASS
5	4132	826.4	PASS
5	4182	836.4	PASS
5	4233	846.6	PASS