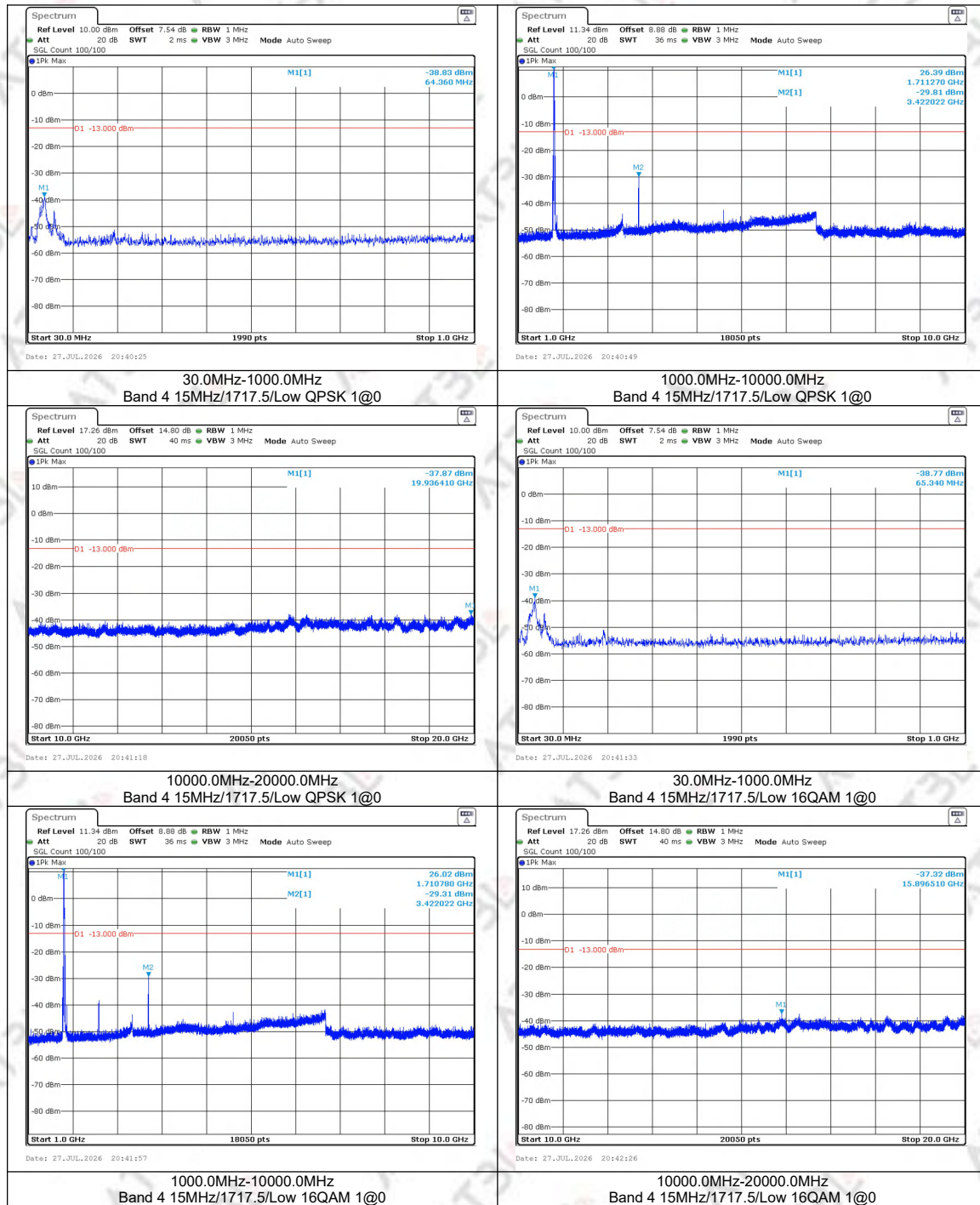
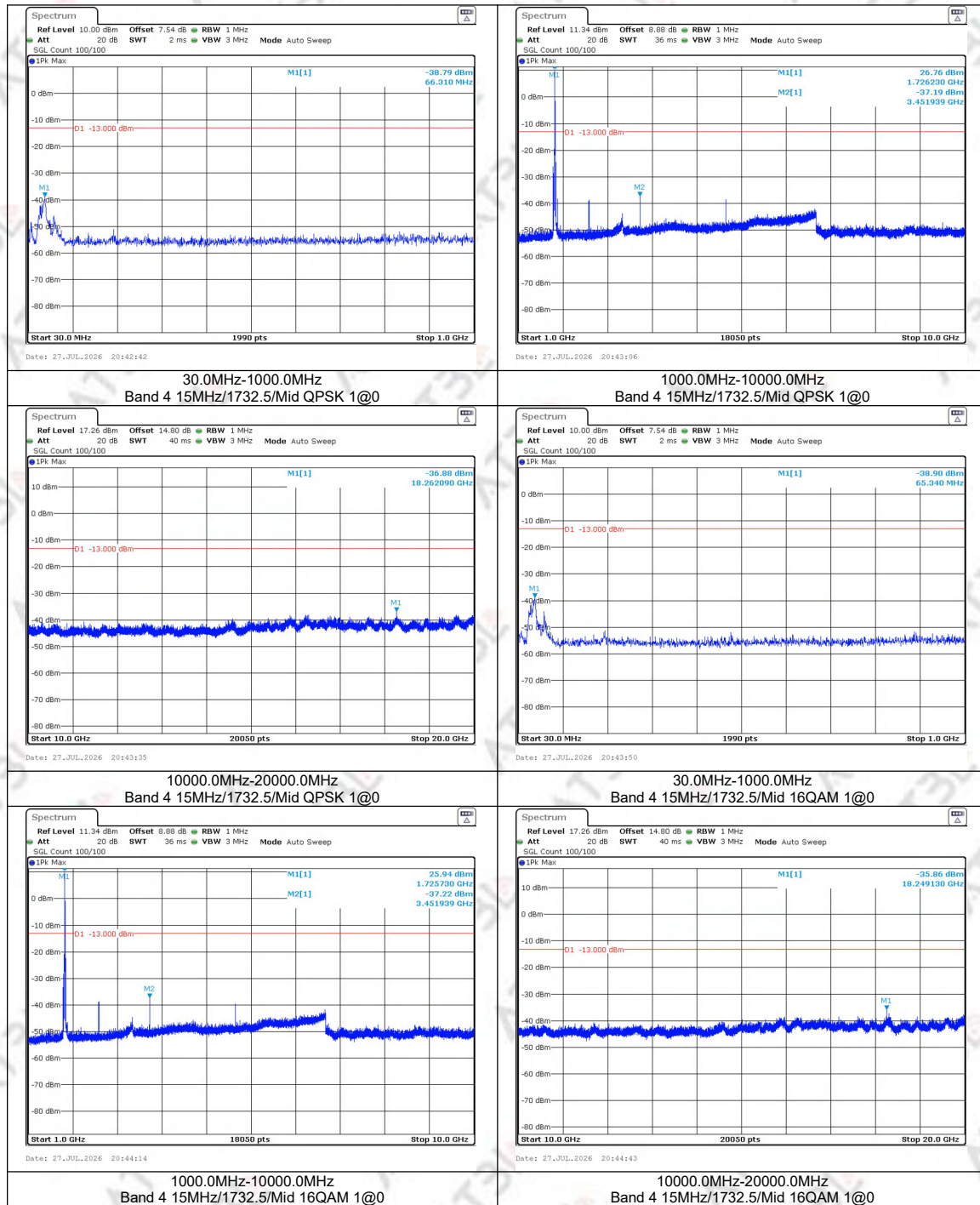
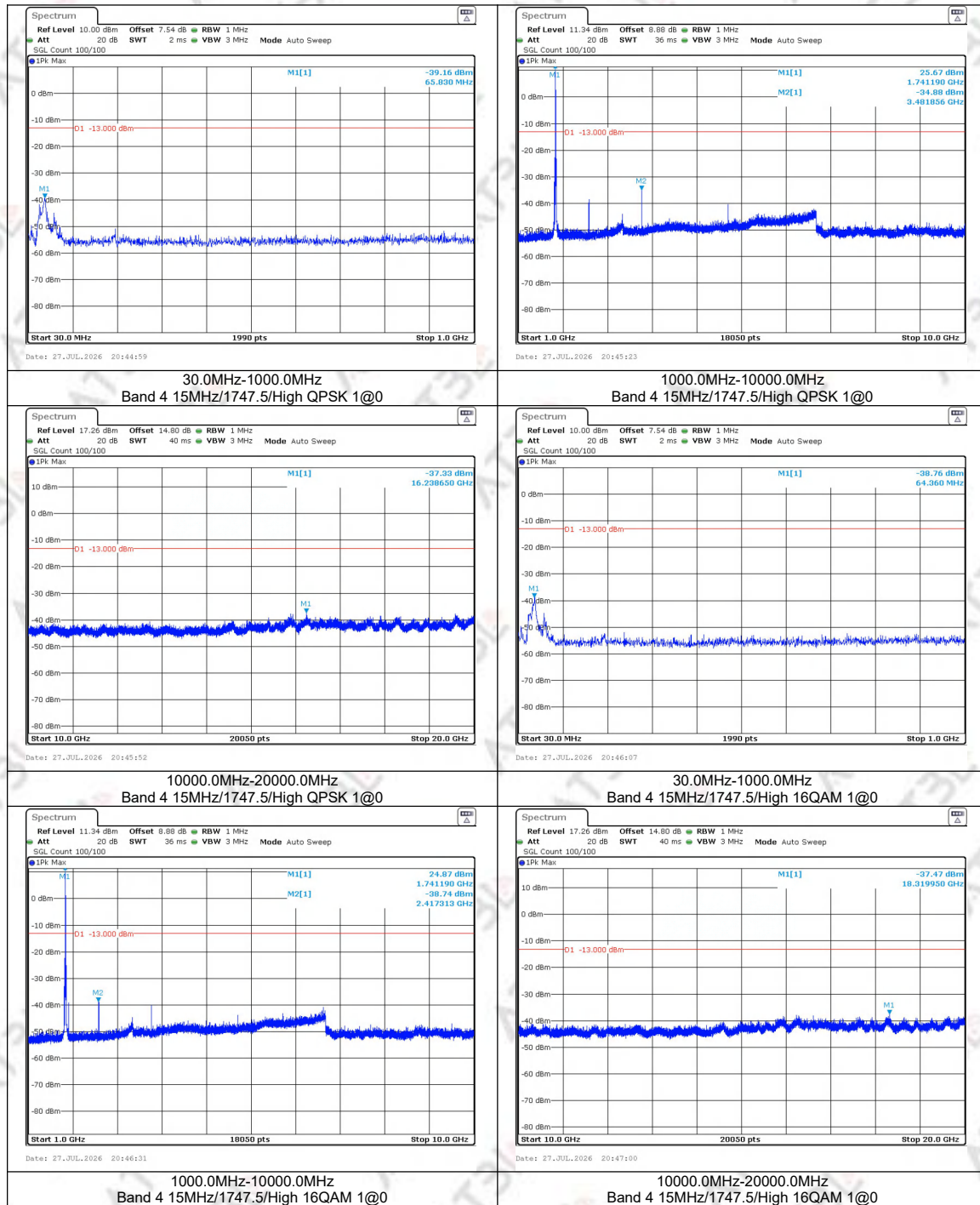
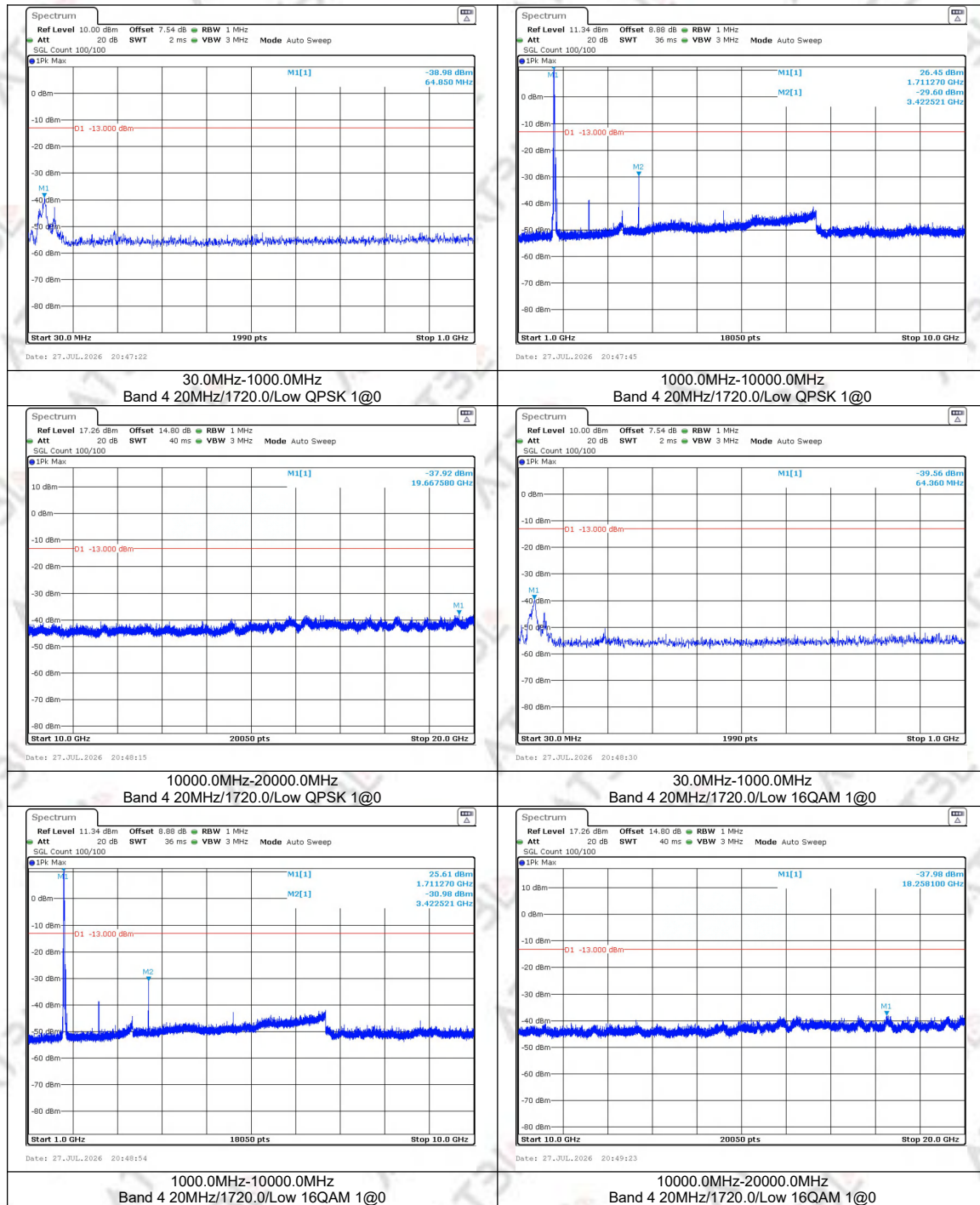
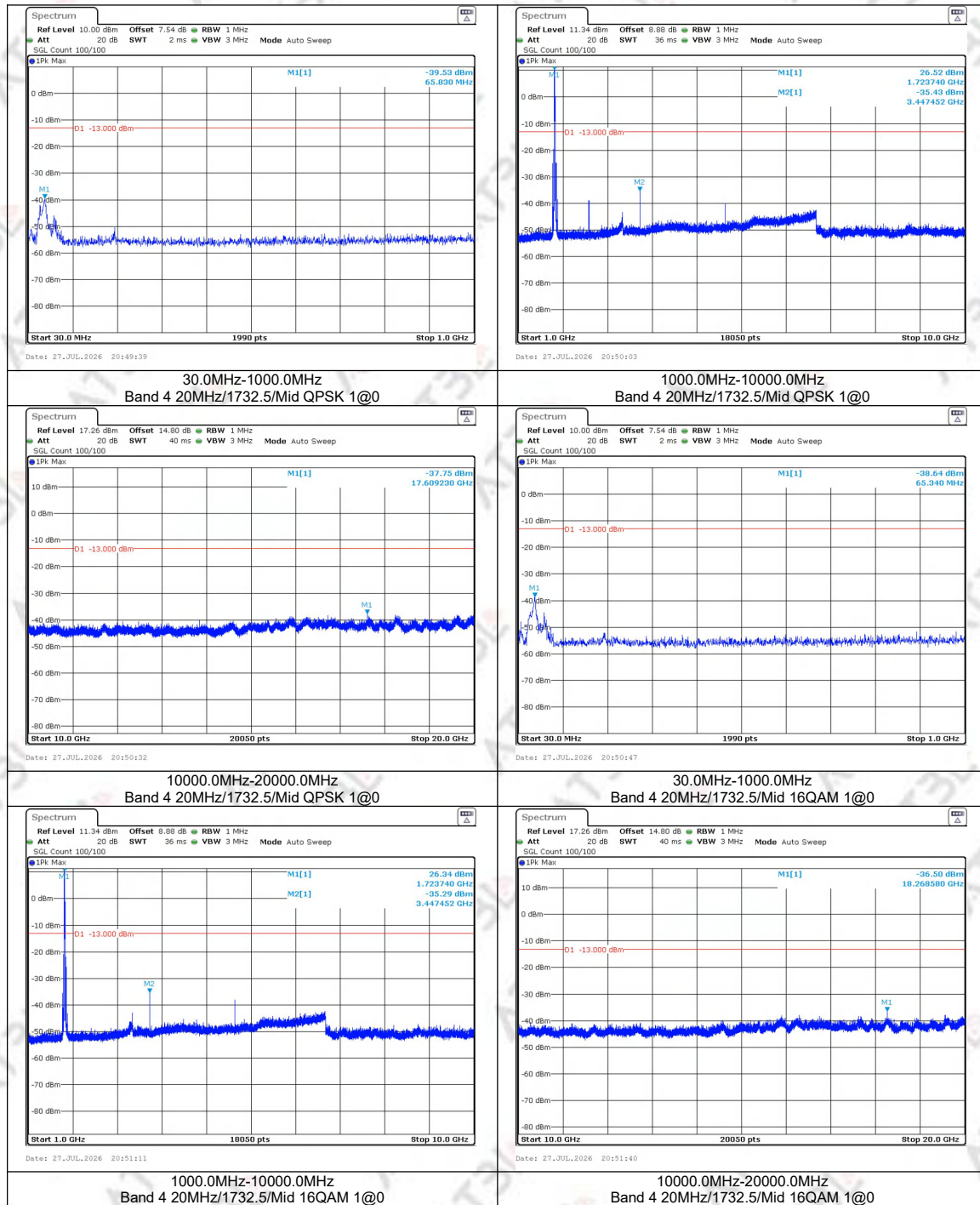


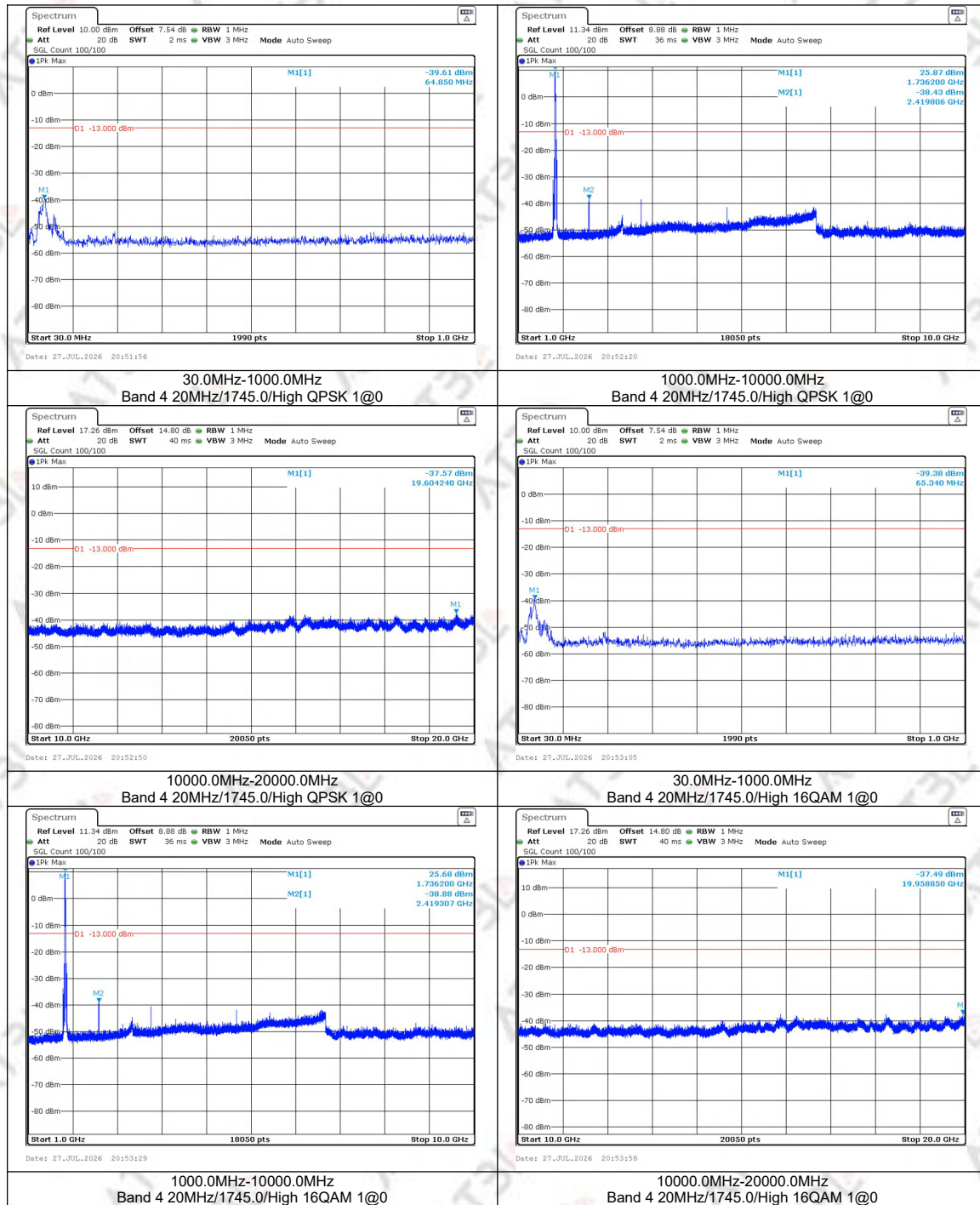












6.Frequency Stability-TN/VN

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-10.44	-0.0061	±2.5	PASS	TN/VN
4	1.4	19957	1710.7	16QAM	6@0	-31.94	-0.01867	±2.5	PASS	TN/VN
4	1.4	20175	1732.5	QPSK	6@0	-32.17	-0.01857	±2.5	PASS	TN/VN
4	1.4	20175	1732.5	16QAM	6@0	-26.34	-0.0152	±2.5	PASS	TN/VN
4	1.4	20393	1754.3	QPSK	6@0	-13.43	-0.00766	±2.5	PASS	TN/VN
4	1.4	20393	1754.3	16QAM	6@0	-23.42	-0.01335	±2.5	PASS	TN/VN
4	3.0	19965	1711.5	QPSK	15@0	-15.02	-0.00878	±2.5	PASS	TN/VN
4	3.0	19965	1711.5	16QAM	15@0	-34.65	-0.02024	±2.5	PASS	TN/VN
4	3.0	20175	1732.5	QPSK	15@0	-22.54	-0.01301	±2.5	PASS	TN/VN
4	3.0	20175	1732.5	16QAM	15@0	-23.19	-0.01338	±2.5	PASS	TN/VN
4	3.0	20385	1753.5	QPSK	15@0	0.83	0.00047	±2.5	PASS	TN/VN
4	3.0	20385	1753.5	16QAM	15@0	-8.58	-0.00489	±2.5	PASS	TN/VN
4	5.0	19975	1712.5	QPSK	25@0	-0.63	-0.00037	±2.5	PASS	TN/VN
4	5.0	19975	1712.5	16QAM	25@0	-43.04	-0.02514	±2.5	PASS	TN/VN
4	5.0	20175	1732.5	QPSK	25@0	-27.07	-0.01562	±2.5	PASS	TN/VN
4	5.0	20175	1732.5	16QAM	25@0	-47.61	-0.02748	±2.5	PASS	TN/VN
4	5.0	20375	1752.5	QPSK	25@0	-13.42	-0.00766	±2.5	PASS	TN/VN
4	5.0	20375	1752.5	16QAM	25@0	-9.93	-0.00566	±2.5	PASS	TN/VN
4	10.0	20000	1715.0	QPSK	50@0	-11.76	-0.00686	±2.5	PASS	TN/VN
4	10.0	20000	1715.0	16QAM	50@0	-23.13	-0.01349	±2.5	PASS	TN/VN
4	10.0	20175	1732.5	QPSK	50@0	-19.86	-0.01146	±2.5	PASS	TN/VN
4	10.0	20175	1732.5	16QAM	50@0	-20.44	-0.0118	±2.5	PASS	TN/VN
4	10.0	20350	1750.0	QPSK	50@0	-25.36	-0.01449	±2.5	PASS	TN/VN
4	10.0	20350	1750.0	16QAM	50@0	-38.07	-0.02175	±2.5	PASS	TN/VN
4	15.0	20025	1717.5	QPSK	75@0	6.08	0.00354	±2.5	PASS	TN/VN
4	15.0	20025	1717.5	16QAM	75@0	-10.07	-0.00586	±2.5	PASS	TN/VN
4	15.0	20175	1732.5	QPSK	75@0	-16.58	-0.00957	±2.5	PASS	TN/VN
4	15.0	20175	1732.5	16QAM	75@0	-39.02	-0.02252	±2.5	PASS	TN/VN
4	15.0	20325	1747.5	QPSK	75@0	-5.15	-0.00295	±2.5	PASS	TN/VN
4	15.0	20325	1747.5	16QAM	75@0	-15.21	-0.0087	±2.5	PASS	TN/VN
4	20.0	20050	1720.0	QPSK	100@0	-27.05	-0.01573	±2.5	PASS	TN/VN
4	20.0	20050	1720.0	16QAM	100@0	-32.09	-0.01865	±2.5	PASS	TN/VN
4	20.0	20175	1732.5	QPSK	100@0	-13.49	-0.00779	±2.5	PASS	TN/VN
4	20.0	20175	1732.5	16QAM	100@0	-7.4	-0.00427	±2.5	PASS	TN/VN
4	20.0	20300	1745.0	QPSK	100@0	-19.83	-0.01136	±2.5	PASS	TN/VN
4	20.0	20300	1745.0	16QAM	100@0	-2.53	-0.00145	±2.5	PASS	TN/VN

Frequency Stability-TL/VN

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-26.05	-0.01523	±2.5	PASS	TL/VN
4	1.4	19957	1710.7	16QAM	6@0	-12.02	-0.00702	±2.5	PASS	TL/VN
4	1.4	20175	1732.5	QPSK	6@0	-32.33	-0.01866	±2.5	PASS	TL/VN
4	1.4	20175	1732.5	16QAM	6@0	-29.94	-0.01728	±2.5	PASS	TL/VN
4	1.4	20393	1754.3	QPSK	6@0	-10.96	-0.00625	±2.5	PASS	TL/VN
4	1.4	20393	1754.3	16QAM	6@0	-26.99	-0.01539	±2.5	PASS	TL/VN
4	3.0	19965	1711.5	QPSK	15@0	32.82	0.01917	±2.5	PASS	TL/VN
4	3.0	19965	1711.5	16QAM	15@0	-25.28	-0.01477	±2.5	PASS	TL/VN
4	3.0	20175	1732.5	QPSK	15@0	-45.53	-0.02628	±2.5	PASS	TL/VN
4	3.0	20175	1732.5	16QAM	15@0	-27.25	-0.01573	±2.5	PASS	TL/VN
4	3.0	20385	1753.5	QPSK	15@0	-14.93	-0.00852	±2.5	PASS	TL/VN
4	3.0	20385	1753.5	16QAM	15@0	-30.67	-0.01749	±2.5	PASS	TL/VN
4	5.0	19975	1712.5	QPSK	25@0	28.82	0.01683	±2.5	PASS	TL/VN
4	5.0	19975	1712.5	16QAM	25@0	-23.8	-0.0139	±2.5	PASS	TL/VN
4	5.0	20175	1732.5	QPSK	25@0	-11.79	-0.0068	±2.5	PASS	TL/VN
4	5.0	20175	1732.5	16QAM	25@0	-36.08	-0.02082	±2.5	PASS	TL/VN
4	5.0	20375	1752.5	QPSK	25@0	-19.43	-0.01108	±2.5	PASS	TL/VN
4	5.0	20375	1752.5	16QAM	25@0	-14.61	-0.00833	±2.5	PASS	TL/VN
4	10.0	20000	1715.0	QPSK	50@0	0.63	0.00037	±2.5	PASS	TL/VN
4	10.0	20000	1715.0	16QAM	50@0	-21.72	-0.01266	±2.5	PASS	TL/VN
4	10.0	20175	1732.5	QPSK	50@0	-28.94	-0.0167	±2.5	PASS	TL/VN
4	10.0	20175	1732.5	16QAM	50@0	-13.62	-0.00786	±2.5	PASS	TL/VN
4	10.0	20350	1750.0	QPSK	50@0	-10.36	-0.00592	±2.5	PASS	TL/VN
4	10.0	20350	1750.0	16QAM	50@0	-16.45	-0.0094	±2.5	PASS	TL/VN
4	15.0	20025	1717.5	QPSK	75@0	17.75	0.01034	±2.5	PASS	TL/VN
4	15.0	20025	1717.5	16QAM	75@0	-35.22	-0.02051	±2.5	PASS	TL/VN
4	15.0	20175	1732.5	QPSK	75@0	-35.63	-0.02057	±2.5	PASS	TL/VN
4	15.0	20175	1732.5	16QAM	75@0	-19.94	-0.01151	±2.5	PASS	TL/VN
4	15.0	20325	1747.5	QPSK	75@0	-12.7	-0.00727	±2.5	PASS	TL/VN
4	15.0	20325	1747.5	16QAM	75@0	-29.51	-0.01689	±2.5	PASS	TL/VN
4	20.0	20050	1720.0	QPSK	100@0	32.82	0.01908	±2.5	PASS	TL/VN
4	20.0	20050	1720.0	16QAM	100@0	-18.51	-0.01076	±2.5	PASS	TL/VN
4	20.0	20175	1732.5	QPSK	100@0	11.73	0.00677	±2.5	PASS	TL/VN
4	20.0	20175	1732.5	16QAM	100@0	-6.35	-0.00367	±2.5	PASS	TL/VN
4	20.0	20300	1745.0	QPSK	100@0	-18.73	-0.01073	±2.5	PASS	TL/VN
4	20.0	20300	1745.0	16QAM	100@0	-49.71	-0.02849	±2.5	PASS	TL/VN

Frequency Stability-TH/VH

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-12.53	-0.00733	±2.5	PASS	TH/VH
4	1.4	19957	1710.7	16QAM	6@0	-22.59	-0.0132	±2.5	PASS	TH/VH
4	1.4	20175	1732.5	QPSK	6@0	-13.3	-0.00768	±2.5	PASS	TH/VH
4	1.4	20175	1732.5	16QAM	6@0	-28.82	-0.01664	±2.5	PASS	TH/VH
4	1.4	20393	1754.3	QPSK	6@0	-3.39	-0.00193	±2.5	PASS	TH/VH
4	1.4	20393	1754.3	16QAM	6@0	-10.66	-0.00607	±2.5	PASS	TH/VH
4	3.0	19965	1711.5	QPSK	15@0	-26.11	-0.01525	±2.5	PASS	TH/VH
4	3.0	19965	1711.5	16QAM	15@0	-20.91	-0.01222	±2.5	PASS	TH/VH
4	3.0	20175	1732.5	QPSK	15@0	-9.6	-0.00554	±2.5	PASS	TH/VH
4	3.0	20175	1732.5	16QAM	15@0	-16.19	-0.00935	±2.5	PASS	TH/VH
4	3.0	20385	1753.5	QPSK	15@0	11.76	0.00671	±2.5	PASS	TH/VH
4	3.0	20385	1753.5	16QAM	15@0	3.85	0.00219	±2.5	PASS	TH/VH
4	5.0	19975	1712.5	QPSK	25@0	17.24	0.01007	±2.5	PASS	TH/VH
4	5.0	19975	1712.5	16QAM	25@0	-24.86	-0.01452	±2.5	PASS	TH/VH
4	5.0	20175	1732.5	QPSK	25@0	-6.62	-0.00382	±2.5	PASS	TH/VH
4	5.0	20175	1732.5	16QAM	25@0	-10.21	-0.0059	±2.5	PASS	TH/VH
4	5.0	20375	1752.5	QPSK	25@0	-13.52	-0.00771	±2.5	PASS	TH/VH
4	5.0	20375	1752.5	16QAM	25@0	-32.49	-0.01854	±2.5	PASS	TH/VH
4	10.0	20000	1715.0	QPSK	50@0	15.32	0.00893	±2.5	PASS	TH/VH
4	10.0	20000	1715.0	16QAM	50@0	-7.37	-0.0043	±2.5	PASS	TH/VH
4	10.0	20175	1732.5	QPSK	50@0	-31.89	-0.0184	±2.5	PASS	TH/VH
4	10.0	20175	1732.5	16QAM	50@0	-13.2	-0.00762	±2.5	PASS	TH/VH
4	10.0	20350	1750.0	QPSK	50@0	-4.19	-0.0024	±2.5	PASS	TH/VH
4	10.0	20350	1750.0	16QAM	50@0	-13.23	-0.00756	±2.5	PASS	TH/VH
4	15.0	20025	1717.5	QPSK	75@0	-5.68	-0.00331	±2.5	PASS	TH/VH
4	15.0	20025	1717.5	16QAM	75@0	-17.8	-0.01036	±2.5	PASS	TH/VH
4	15.0	20175	1732.5	QPSK	75@0	-36.35	-0.02098	±2.5	PASS	TH/VH
4	15.0	20175	1732.5	16QAM	75@0	-18.64	-0.01076	±2.5	PASS	TH/VH
4	15.0	20325	1747.5	QPSK	75@0	-46.28	-0.02648	±2.5	PASS	TH/VH
4	15.0	20325	1747.5	16QAM	75@0	-34.02	-0.01947	±2.5	PASS	TH/VH
4	20.0	20050	1720.0	QPSK	100@0	23.15	0.01346	±2.5	PASS	TH/VH
4	20.0	20050	1720.0	16QAM	100@0	-47.98	-0.02789	±2.5	PASS	TH/VH
4	20.0	20175	1732.5	QPSK	100@0	-11.63	-0.00671	±2.5	PASS	TH/VH
4	20.0	20175	1732.5	16QAM	100@0	-44.19	-0.02551	±2.5	PASS	TH/VH
4	20.0	20300	1745.0	QPSK	100@0	-22.92	-0.01313	±2.5	PASS	TH/VH
4	20.0	20300	1745.0	16QAM	100@0	-2.33	-0.00134	±2.5	PASS	TH/VH

Frequency Stability-TH/VL

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-39.45	-0.02306	±2.5	PASS	TH/VL
4	1.4	19957	1710.7	16QAM	6@0	-52.67	-0.03079	±2.5	PASS	TH/VL
4	1.4	20175	1732.5	QPSK	6@0	-26.54	-0.01532	±2.5	PASS	TH/VL
4	1.4	20175	1732.5	16QAM	6@0	-50.17	-0.02896	±2.5	PASS	TH/VL
4	1.4	20393	1754.3	QPSK	6@0	-12.99	-0.0074	±2.5	PASS	TH/VL
4	1.4	20393	1754.3	16QAM	6@0	-23.03	-0.01313	±2.5	PASS	TH/VL
4	3.0	19965	1711.5	QPSK	15@0	-21.11	-0.01234	±2.5	PASS	TH/VL
4	3.0	19965	1711.5	16QAM	15@0	-17.15	-0.01002	±2.5	PASS	TH/VL
4	3.0	20175	1732.5	QPSK	15@0	-20.0	-0.01154	±2.5	PASS	TH/VL
4	3.0	20175	1732.5	16QAM	15@0	-40.66	-0.02347	±2.5	PASS	TH/VL
4	3.0	20385	1753.5	QPSK	15@0	-17.6	-0.01003	±2.5	PASS	TH/VL
4	3.0	20385	1753.5	16QAM	15@0	-28.05	-0.016	±2.5	PASS	TH/VL
4	5.0	19975	1712.5	QPSK	25@0	-1.62	-0.00094	±2.5	PASS	TH/VL
4	5.0	19975	1712.5	16QAM	25@0	-16.18	-0.00945	±2.5	PASS	TH/VL
4	5.0	20175	1732.5	QPSK	25@0	-24.12	-0.01392	±2.5	PASS	TH/VL
4	5.0	20175	1732.5	16QAM	25@0	-31.14	-0.01798	±2.5	PASS	TH/VL
4	5.0	20375	1752.5	QPSK	25@0	-23.62	-0.01348	±2.5	PASS	TH/VL
4	5.0	20375	1752.5	16QAM	25@0	-21.09	-0.01203	±2.5	PASS	TH/VL
4	10.0	20000	1715.0	QPSK	50@0	18.07	0.01053	±2.5	PASS	TH/VL
4	10.0	20000	1715.0	16QAM	50@0	-38.5	-0.02245	±2.5	PASS	TH/VL
4	10.0	20175	1732.5	QPSK	50@0	-8.11	-0.00468	±2.5	PASS	TH/VL
4	10.0	20175	1732.5	16QAM	50@0	-33.07	-0.01909	±2.5	PASS	TH/VL
4	10.0	20350	1750.0	QPSK	50@0	-31.23	-0.01784	±2.5	PASS	TH/VL
4	10.0	20350	1750.0	16QAM	50@0	-32.79	-0.01874	±2.5	PASS	TH/VL
4	15.0	20025	1717.5	QPSK	75@0	7.55	0.0044	±2.5	PASS	TH/VL
4	15.0	20025	1717.5	16QAM	75@0	-44.05	-0.02565	±2.5	PASS	TH/VL
4	15.0	20175	1732.5	QPSK	75@0	-6.65	-0.00384	±2.5	PASS	TH/VL
4	15.0	20175	1732.5	16QAM	75@0	-39.55	-0.02283	±2.5	PASS	TH/VL
4	15.0	20325	1747.5	QPSK	75@0	-37.79	-0.02163	±2.5	PASS	TH/VL
4	15.0	20325	1747.5	16QAM	75@0	-24.7	-0.01414	±2.5	PASS	TH/VL
4	20.0	20050	1720.0	QPSK	100@0	4.48	0.0026	±2.5	PASS	TH/VL
4	20.0	20050	1720.0	16QAM	100@0	-17.11	-0.00995	±2.5	PASS	TH/VL
4	20.0	20175	1732.5	QPSK	100@0	-11.66	-0.00673	±2.5	PASS	TH/VL
4	20.0	20175	1732.5	16QAM	100@0	-35.99	-0.02077	±2.5	PASS	TH/VL
4	20.0	20300	1745.0	QPSK	100@0	-36.29	-0.0208	±2.5	PASS	TH/VL
4	20.0	20300	1745.0	16QAM	100@0	-21.94	-0.01258	±2.5	PASS	TH/VL

Frequency Stability-TH/VN

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-16.39	-0.00958	±2.5	PASS	TH/VN
4	1.4	19957	1710.7	16QAM	6@0	-16.44	-0.00961	±2.5	PASS	TH/VN
4	1.4	20175	1732.5	QPSK	6@0	-1.56	-0.0009	±2.5	PASS	TH/VN
4	1.4	20175	1732.5	16QAM	6@0	-11.72	-0.00676	±2.5	PASS	TH/VN
4	1.4	20393	1754.3	QPSK	6@0	-29.01	-0.01654	±2.5	PASS	TH/VN
4	1.4	20393	1754.3	16QAM	6@0	-18.75	-0.01069	±2.5	PASS	TH/VN
4	3.0	19965	1711.5	QPSK	15@0	-13.1	-0.00766	±2.5	PASS	TH/VN
4	3.0	19965	1711.5	16QAM	15@0	-34.76	-0.02031	±2.5	PASS	TH/VN
4	3.0	20175	1732.5	QPSK	15@0	-4.81	-0.00277	±2.5	PASS	TH/VN
4	3.0	20175	1732.5	16QAM	15@0	-5.89	-0.0034	±2.5	PASS	TH/VN
4	3.0	20385	1753.5	QPSK	15@0	4.36	0.00249	±2.5	PASS	TH/VN
4	3.0	20385	1753.5	16QAM	15@0	22.66	0.01292	±2.5	PASS	TH/VN
4	5.0	19975	1712.5	QPSK	25@0	-11.29	-0.00659	±2.5	PASS	TH/VN
4	5.0	19975	1712.5	16QAM	25@0	1.47	0.00086	±2.5	PASS	TH/VN
4	5.0	20175	1732.5	QPSK	25@0	-24.81	-0.01432	±2.5	PASS	TH/VN
4	5.0	20175	1732.5	16QAM	25@0	-2.13	-0.00123	±2.5	PASS	TH/VN
4	5.0	20375	1752.5	QPSK	25@0	-4.52	-0.00258	±2.5	PASS	TH/VN
4	5.0	20375	1752.5	16QAM	25@0	2.03	0.00116	±2.5	PASS	TH/VN
4	10.0	20000	1715.0	QPSK	50@0	16.95	0.00988	±2.5	PASS	TH/VN
4	10.0	20000	1715.0	16QAM	50@0	-16.26	-0.00948	±2.5	PASS	TH/VN
4	10.0	20175	1732.5	QPSK	50@0	-10.33	-0.00596	±2.5	PASS	TH/VN
4	10.0	20175	1732.5	16QAM	50@0	-9.0	-0.00519	±2.5	PASS	TH/VN
4	10.0	20350	1750.0	QPSK	50@0	-25.75	-0.01471	±2.5	PASS	TH/VN
4	10.0	20350	1750.0	16QAM	50@0	-45.02	-0.02572	±2.5	PASS	TH/VN
4	15.0	20025	1717.5	QPSK	75@0	8.13	0.00473	±2.5	PASS	TH/VN
4	15.0	20025	1717.5	16QAM	75@0	-18.5	-0.01077	±2.5	PASS	TH/VN
4	15.0	20175	1732.5	QPSK	75@0	-29.95	-0.01729	±2.5	PASS	TH/VN
4	15.0	20175	1732.5	16QAM	75@0	-26.95	-0.01556	±2.5	PASS	TH/VN
4	15.0	20325	1747.5	QPSK	75@0	-19.7	-0.01127	±2.5	PASS	TH/VN
4	15.0	20325	1747.5	16QAM	75@0	-30.04	-0.01719	±2.5	PASS	TH/VN
4	20.0	20050	1720.0	QPSK	100@0	10.11	0.00588	±2.5	PASS	TH/VN
4	20.0	20050	1720.0	16QAM	100@0	-32.27	-0.01876	±2.5	PASS	TH/VN
4	20.0	20175	1732.5	QPSK	100@0	-19.05	-0.011	±2.5	PASS	TH/VN
4	20.0	20175	1732.5	16QAM	100@0	-41.43	-0.02391	±2.5	PASS	TH/VN
4	20.0	20300	1745.0	QPSK	100@0	-27.44	-0.01572	±2.5	PASS	TH/VN
4	20.0	20300	1745.0	16QAM	100@0	-16.91	-0.00969	±2.5	PASS	TH/VN

Frequency Stability-TL/VH

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-19.93	-0.01165	±2.5	PASS	TLVH
4	1.4	19957	1710.7	16QAM	6@0	-39.05	-0.02283	±2.5	PASS	TLVH
4	1.4	20175	1732.5	QPSK	6@0	-25.92	-0.01496	±2.5	PASS	TLVH
4	1.4	20175	1732.5	16QAM	6@0	-36.76	-0.02122	±2.5	PASS	TLVH
4	1.4	20393	1754.3	QPSK	6@0	5.68	0.00324	±2.5	PASS	TLVH
4	1.4	20393	1754.3	16QAM	6@0	4.03	0.0023	±2.5	PASS	TLVH
4	3.0	19965	1711.5	QPSK	15@0	26.24	0.01533	±2.5	PASS	TLVH
4	3.0	19965	1711.5	16QAM	15@0	-30.73	-0.01795	±2.5	PASS	TLVH
4	3.0	20175	1732.5	QPSK	15@0	-13.06	-0.00754	±2.5	PASS	TLVH
4	3.0	20175	1732.5	16QAM	15@0	-2.3	-0.00133	±2.5	PASS	TLVH
4	3.0	20385	1753.5	QPSK	15@0	-12.35	-0.00704	±2.5	PASS	TLVH
4	3.0	20385	1753.5	16QAM	15@0	-13.23	-0.00755	±2.5	PASS	TLVH
4	5.0	19975	1712.5	QPSK	25@0	-14.73	-0.0086	±2.5	PASS	TLVH
4	5.0	19975	1712.5	16QAM	25@0	-4.16	-0.00243	±2.5	PASS	TLVH
4	5.0	20175	1732.5	QPSK	25@0	-16.54	-0.00954	±2.5	PASS	TLVH
4	5.0	20175	1732.5	16QAM	25@0	-29.23	-0.01687	±2.5	PASS	TLVH
4	5.0	20375	1752.5	QPSK	25@0	-11.74	-0.0067	±2.5	PASS	TLVH
4	5.0	20375	1752.5	16QAM	25@0	-1.85	-0.00105	±2.5	PASS	TLVH
4	10.0	20000	1715.0	QPSK	50@0	-8.03	-0.00468	±2.5	PASS	TLVH
4	10.0	20000	1715.0	16QAM	50@0	-39.1	-0.0228	±2.5	PASS	TLVH
4	10.0	20175	1732.5	QPSK	50@0	-1.33	-0.00077	±2.5	PASS	TLVH
4	10.0	20175	1732.5	16QAM	50@0	-26.31	-0.01518	±2.5	PASS	TLVH
4	10.0	20350	1750.0	QPSK	50@0	-35.1	-0.02006	±2.5	PASS	TLVH
4	10.0	20350	1750.0	16QAM	50@0	-15.31	-0.00875	±2.5	PASS	TLVH
4	15.0	20025	1717.5	QPSK	75@0	13.06	0.0076	±2.5	PASS	TLVH
4	15.0	20025	1717.5	16QAM	75@0	-27.14	-0.0158	±2.5	PASS	TLVH
4	15.0	20175	1732.5	QPSK	75@0	-20.73	-0.01196	±2.5	PASS	TLVH
4	15.0	20175	1732.5	16QAM	75@0	-10.13	-0.00585	±2.5	PASS	TLVH
4	15.0	20325	1747.5	QPSK	75@0	-34.33	-0.01965	±2.5	PASS	TLVH
4	15.0	20325	1747.5	16QAM	75@0	-39.58	-0.02265	±2.5	PASS	TLVH
4	20.0	20050	1720.0	QPSK	100@0	-1.42	-0.00082	±2.5	PASS	TLVH
4	20.0	20050	1720.0	16QAM	100@0	-19.35	-0.01125	±2.5	PASS	TLVH
4	20.0	20175	1732.5	QPSK	100@0	-32.67	-0.01886	±2.5	PASS	TLVH
4	20.0	20175	1732.5	16QAM	100@0	-42.11	-0.02431	±2.5	PASS	TLVH
4	20.0	20300	1745.0	QPSK	100@0	-4.79	-0.00275	±2.5	PASS	TLVH
4	20.0	20300	1745.0	16QAM	100@0	-10.74	-0.00616	±2.5	PASS	TLVH

Frequency Stability-TL/VL

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-41.11	-0.02403	±2.5	PASS	TL/VL
4	1.4	19957	1710.7	16QAM	6@0	-15.89	-0.00929	±2.5	PASS	TL/VL
4	1.4	20175	1732.5	QPSK	6@0	-30.06	-0.01735	±2.5	PASS	TL/VL
4	1.4	20175	1732.5	16QAM	6@0	-39.53	-0.02281	±2.5	PASS	TL/VL
4	1.4	20393	1754.3	QPSK	6@0	-23.2	-0.01323	±2.5	PASS	TL/VL
4	1.4	20393	1754.3	16QAM	6@0	-0.62	-0.00035	±2.5	PASS	TL/VL
4	3.0	19965	1711.5	QPSK	15@0	11.19	0.00654	±2.5	PASS	TL/VL
4	3.0	19965	1711.5	16QAM	15@0	-21.6	-0.01262	±2.5	PASS	TL/VL
4	3.0	20175	1732.5	QPSK	15@0	-20.13	-0.01162	±2.5	PASS	TL/VL
4	3.0	20175	1732.5	16QAM	15@0	-19.67	-0.01135	±2.5	PASS	TL/VL
4	3.0	20385	1753.5	QPSK	15@0	-21.16	-0.01207	±2.5	PASS	TL/VL
4	3.0	20385	1753.5	16QAM	15@0	-10.51	-0.006	±2.5	PASS	TL/VL
4	5.0	19975	1712.5	QPSK	25@0	11.39	0.00665	±2.5	PASS	TL/VL
4	5.0	19975	1712.5	16QAM	25@0	-23.46	-0.0137	±2.5	PASS	TL/VL
4	5.0	20175	1732.5	QPSK	25@0	-30.6	-0.01766	±2.5	PASS	TL/VL
4	5.0	20175	1732.5	16QAM	25@0	-26.41	-0.01524	±2.5	PASS	TL/VL
4	5.0	20375	1752.5	QPSK	25@0	-31.51	-0.01798	±2.5	PASS	TL/VL
4	5.0	20375	1752.5	16QAM	25@0	-42.13	-0.02404	±2.5	PASS	TL/VL
4	10.0	20000	1715.0	QPSK	50@0	10.41	0.00607	±2.5	PASS	TL/VL
4	10.0	20000	1715.0	16QAM	50@0	-5.01	-0.00292	±2.5	PASS	TL/VL
4	10.0	20175	1732.5	QPSK	50@0	-21.8	-0.01258	±2.5	PASS	TL/VL
4	10.0	20175	1732.5	16QAM	50@0	-3.28	-0.00189	±2.5	PASS	TL/VL
4	10.0	20350	1750.0	QPSK	50@0	-3.25	-0.00186	±2.5	PASS	TL/VL
4	10.0	20350	1750.0	16QAM	50@0	9.06	0.00517	±2.5	PASS	TL/VL
4	15.0	20025	1717.5	QPSK	75@0	14.92	0.00869	±2.5	PASS	TL/VL
4	15.0	20025	1717.5	16QAM	75@0	0.67	0.00039	±2.5	PASS	TL/VL
4	15.0	20175	1732.5	QPSK	75@0	-47.05	-0.02716	±2.5	PASS	TL/VL
4	15.0	20175	1732.5	16QAM	75@0	-10.71	-0.00618	±2.5	PASS	TL/VL
4	15.0	20325	1747.5	QPSK	75@0	-34.8	-0.01992	±2.5	PASS	TL/VL
4	15.0	20325	1747.5	16QAM	75@0	-14.18	-0.00811	±2.5	PASS	TL/VL
4	20.0	20050	1720.0	QPSK	100@0	16.22	0.00943	±2.5	PASS	TL/VL
4	20.0	20050	1720.0	16QAM	100@0	-13.09	-0.00761	±2.5	PASS	TL/VL
4	20.0	20175	1732.5	QPSK	100@0	-13.82	-0.00798	±2.5	PASS	TL/VL
4	20.0	20175	1732.5	16QAM	100@0	-11.24	-0.00649	±2.5	PASS	TL/VL
4	20.0	20300	1745.0	QPSK	100@0	-25.46	-0.01459	±2.5	PASS	TL/VL
4	20.0	20300	1745.0	16QAM	100@0	-21.57	-0.01236	±2.5	PASS	TL/VL

Frequency Stability-TN/VH

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-8.18	-0.00478	±2.5	PASS	TN/VH
4	1.4	19957	1710.7	16QAM	6@0	-8.18	-0.00478	±2.5	PASS	TN/VH
4	1.4	20175	1732.5	QPSK	6@0	-8.13	-0.00469	±2.5	PASS	TN/VH
4	1.4	20175	1732.5	16QAM	6@0	-0.46	-0.00026	±2.5	PASS	TN/VH
4	1.4	20393	1754.3	QPSK	6@0	-9.43	-0.00537	±2.5	PASS	TN/VH
4	1.4	20393	1754.3	16QAM	6@0	-21.31	-0.01215	±2.5	PASS	TN/VH
4	3.0	19965	1711.5	QPSK	15@0	-5.01	-0.00293	±2.5	PASS	TN/VH
4	3.0	19965	1711.5	16QAM	15@0	-28.21	-0.01648	±2.5	PASS	TN/VH
4	3.0	20175	1732.5	QPSK	15@0	-46.51	-0.02684	±2.5	PASS	TN/VH
4	3.0	20175	1732.5	16QAM	15@0	-32.36	-0.01868	±2.5	PASS	TN/VH
4	3.0	20385	1753.5	QPSK	15@0	-22.0	-0.01255	±2.5	PASS	TN/VH
4	3.0	20385	1753.5	16QAM	15@0	-29.61	-0.01689	±2.5	PASS	TN/VH
4	5.0	19975	1712.5	QPSK	25@0	-19.8	-0.01156	±2.5	PASS	TN/VH
4	5.0	19975	1712.5	16QAM	25@0	-39.08	-0.02282	±2.5	PASS	TN/VH
4	5.0	20175	1732.5	QPSK	25@0	-24.79	-0.01431	±2.5	PASS	TN/VH
4	5.0	20175	1732.5	16QAM	25@0	-20.16	-0.01163	±2.5	PASS	TN/VH
4	5.0	20375	1752.5	QPSK	25@0	-23.3	-0.0133	±2.5	PASS	TN/VH
4	5.0	20375	1752.5	16QAM	25@0	-17.84	-0.01018	±2.5	PASS	TN/VH
4	10.0	20000	1715.0	QPSK	50@0	16.94	0.00988	±2.5	PASS	TN/VH
4	10.0	20000	1715.0	16QAM	50@0	-26.88	-0.01567	±2.5	PASS	TN/VH
4	10.0	20175	1732.5	QPSK	50@0	-26.94	-0.01555	±2.5	PASS	TN/VH
4	10.0	20175	1732.5	16QAM	50@0	-15.22	-0.00879	±2.5	PASS	TN/VH
4	10.0	20350	1750.0	QPSK	50@0	-18.28	-0.01045	±2.5	PASS	TN/VH
4	10.0	20350	1750.0	16QAM	50@0	-43.8	-0.02503	±2.5	PASS	TN/VH
4	15.0	20025	1717.5	QPSK	75@0	-5.36	-0.00312	±2.5	PASS	TN/VH
4	15.0	20025	1717.5	16QAM	75@0	-18.74	-0.01091	±2.5	PASS	TN/VH
4	15.0	20175	1732.5	QPSK	75@0	-38.09	-0.02199	±2.5	PASS	TN/VH
4	15.0	20175	1732.5	16QAM	75@0	-45.4	-0.02621	±2.5	PASS	TN/VH
4	15.0	20325	1747.5	QPSK	75@0	-41.44	-0.02371	±2.5	PASS	TN/VH
4	15.0	20325	1747.5	16QAM	75@0	-9.2	-0.00526	±2.5	PASS	TN/VH
4	20.0	20050	1720.0	QPSK	100@0	25.25	0.01468	±2.5	PASS	TN/VH
4	20.0	20050	1720.0	16QAM	100@0	-12.92	-0.00751	±2.5	PASS	TN/VH
4	20.0	20175	1732.5	QPSK	100@0	-1.29	-0.00074	±2.5	PASS	TN/VH
4	20.0	20175	1732.5	16QAM	100@0	-11.42	-0.00659	±2.5	PASS	TN/VH
4	20.0	20300	1745.0	QPSK	100@0	-2.23	-0.00128	±2.5	PASS	TN/VH
4	20.0	20300	1745.0	16QAM	100@0	-23.33	-0.01337	±2.5	PASS	TN/VH

Frequency Stability-TN/VL

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	1.4	19957	1710.7	QPSK	6@0	-42.96	-0.02511	±2.5	PASS	TN/VL
4	1.4	19957	1710.7	16QAM	6@0	-29.28	-0.01712	±2.5	PASS	TN/VL
4	1.4	20175	1732.5	QPSK	6@0	-19.86	-0.01146	±2.5	PASS	TN/VL
4	1.4	20175	1732.5	16QAM	6@0	-15.19	-0.00877	±2.5	PASS	TN/VL
4	1.4	20393	1754.3	QPSK	6@0	-7.98	-0.00455	±2.5	PASS	TN/VL
4	1.4	20393	1754.3	16QAM	6@0	-6.04	-0.00344	±2.5	PASS	TN/VL
4	3.0	19965	1711.5	QPSK	15@0	27.25	0.01592	±2.5	PASS	TN/VL
4	3.0	19965	1711.5	16QAM	15@0	-39.9	-0.02331	±2.5	PASS	TN/VL
4	3.0	20175	1732.5	QPSK	15@0	0.32	0.00018	±2.5	PASS	TN/VL
4	3.0	20175	1732.5	16QAM	15@0	7.75	0.00448	±2.5	PASS	TN/VL
4	3.0	20385	1753.5	QPSK	15@0	-20.76	-0.01184	±2.5	PASS	TN/VL
4	3.0	20385	1753.5	16QAM	15@0	-27.77	-0.01583	±2.5	PASS	TN/VL
4	5.0	19975	1712.5	QPSK	25@0	2.8	0.00164	±2.5	PASS	TN/VL
4	5.0	19975	1712.5	16QAM	25@0	-24.55	-0.01433	±2.5	PASS	TN/VL
4	5.0	20175	1732.5	QPSK	25@0	-34.92	-0.02016	±2.5	PASS	TN/VL
4	5.0	20175	1732.5	16QAM	25@0	-30.01	-0.01732	±2.5	PASS	TN/VL
4	5.0	20375	1752.5	QPSK	25@0	-15.94	-0.00909	±2.5	PASS	TN/VL
4	5.0	20375	1752.5	16QAM	25@0	-18.58	-0.0106	±2.5	PASS	TN/VL
4	10.0	20000	1715.0	QPSK	50@0	-7.85	-0.00458	±2.5	PASS	TN/VL
4	10.0	20000	1715.0	16QAM	50@0	-37.04	-0.0216	±2.5	PASS	TN/VL
4	10.0	20175	1732.5	QPSK	50@0	-12.75	-0.00736	±2.5	PASS	TN/VL
4	10.0	20175	1732.5	16QAM	50@0	-2.07	-0.0012	±2.5	PASS	TN/VL
4	10.0	20350	1750.0	QPSK	50@0	-31.97	-0.01827	±2.5	PASS	TN/VL
4	10.0	20350	1750.0	16QAM	50@0	-19.08	-0.0109	±2.5	PASS	TN/VL
4	15.0	20025	1717.5	QPSK	75@0	22.0	0.01281	±2.5	PASS	TN/VL
4	15.0	20025	1717.5	16QAM	75@0	-23.99	-0.01397	±2.5	PASS	TN/VL
4	15.0	20175	1732.5	QPSK	75@0	-22.82	-0.01317	±2.5	PASS	TN/VL
4	15.0	20175	1732.5	16QAM	75@0	-28.0	-0.01616	±2.5	PASS	TN/VL
4	15.0	20325	1747.5	QPSK	75@0	-28.25	-0.01617	±2.5	PASS	TN/VL
4	15.0	20325	1747.5	16QAM	75@0	-26.97	-0.01543	±2.5	PASS	TN/VL
4	20.0	20050	1720.0	QPSK	100@0	27.95	0.01625	±2.5	PASS	TN/VL
4	20.0	20050	1720.0	16QAM	100@0	-12.02	-0.00699	±2.5	PASS	TN/VL
4	20.0	20175	1732.5	QPSK	100@0	-6.32	-0.00365	±2.5	PASS	TN/VL
4	20.0	20175	1732.5	16QAM	100@0	-4.88	-0.00282	±2.5	PASS	TN/VL
4	20.0	20300	1745.0	QPSK	100@0	-22.34	-0.0128	±2.5	PASS	TN/VL
4	20.0	20300	1745.0	16QAM	100@0	-13.06	-0.00748	±2.5	PASS	TN/VL

7.Modulation Characteristics

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Verdict
4	1.4	19957	1710.7	QPSK	6@0	PASS
4	1.4	19957	1710.7	16QAM	6@0	PASS
4	1.4	20175	1732.5	QPSK	6@0	PASS
4	1.4	20175	1732.5	16QAM	6@0	PASS
4	1.4	20393	1754.3	QPSK	6@0	PASS
4	1.4	20393	1754.3	16QAM	6@0	PASS
4	3.0	19965	1711.5	QPSK	15@0	PASS
4	3.0	19965	1711.5	16QAM	15@0	PASS
4	3.0	20175	1732.5	QPSK	15@0	PASS
4	3.0	20175	1732.5	16QAM	15@0	PASS
4	3.0	20385	1753.5	QPSK	15@0	PASS
4	3.0	20385	1753.5	16QAM	15@0	PASS
4	5.0	19975	1712.5	QPSK	25@0	PASS
4	5.0	19975	1712.5	16QAM	25@0	PASS
4	5.0	20175	1732.5	QPSK	25@0	PASS
4	5.0	20175	1732.5	16QAM	25@0	PASS
4	5.0	20375	1752.5	QPSK	25@0	PASS
4	5.0	20375	1752.5	16QAM	25@0	PASS
4	10.0	20000	1715.0	QPSK	50@0	PASS
4	10.0	20000	1715.0	16QAM	50@0	PASS
4	10.0	20175	1732.5	QPSK	50@0	PASS
4	10.0	20175	1732.5	16QAM	50@0	PASS
4	10.0	20350	1750.0	QPSK	50@0	PASS
4	10.0	20350	1750.0	16QAM	50@0	PASS
4	15.0	20025	1717.5	QPSK	75@0	PASS
4	15.0	20025	1717.5	16QAM	75@0	PASS
4	15.0	20175	1732.5	QPSK	75@0	PASS
4	15.0	20175	1732.5	16QAM	75@0	PASS
4	15.0	20325	1747.5	QPSK	75@0	PASS
4	15.0	20325	1747.5	16QAM	75@0	PASS
4	20.0	20050	1720.0	QPSK	100@0	PASS
4	20.0	20050	1720.0	16QAM	100@0	PASS
4	20.0	20175	1732.5	QPSK	100@0	PASS
4	20.0	20175	1732.5	16QAM	100@0	PASS
4	20.0	20300	1745.0	QPSK	100@0	PASS
4	20.0	20300	1745.0	16QAM	100@0	PASS

Test Graphs

