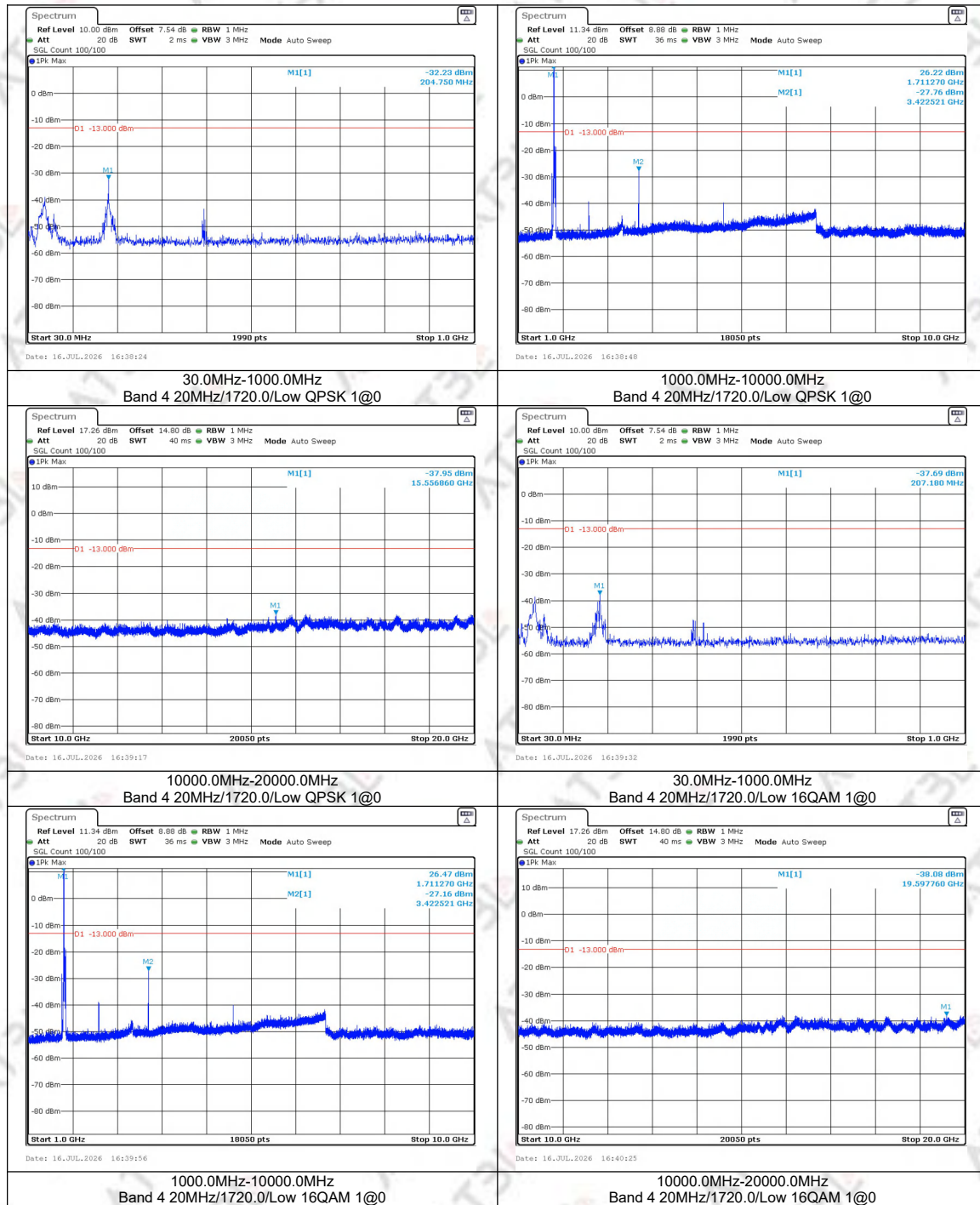
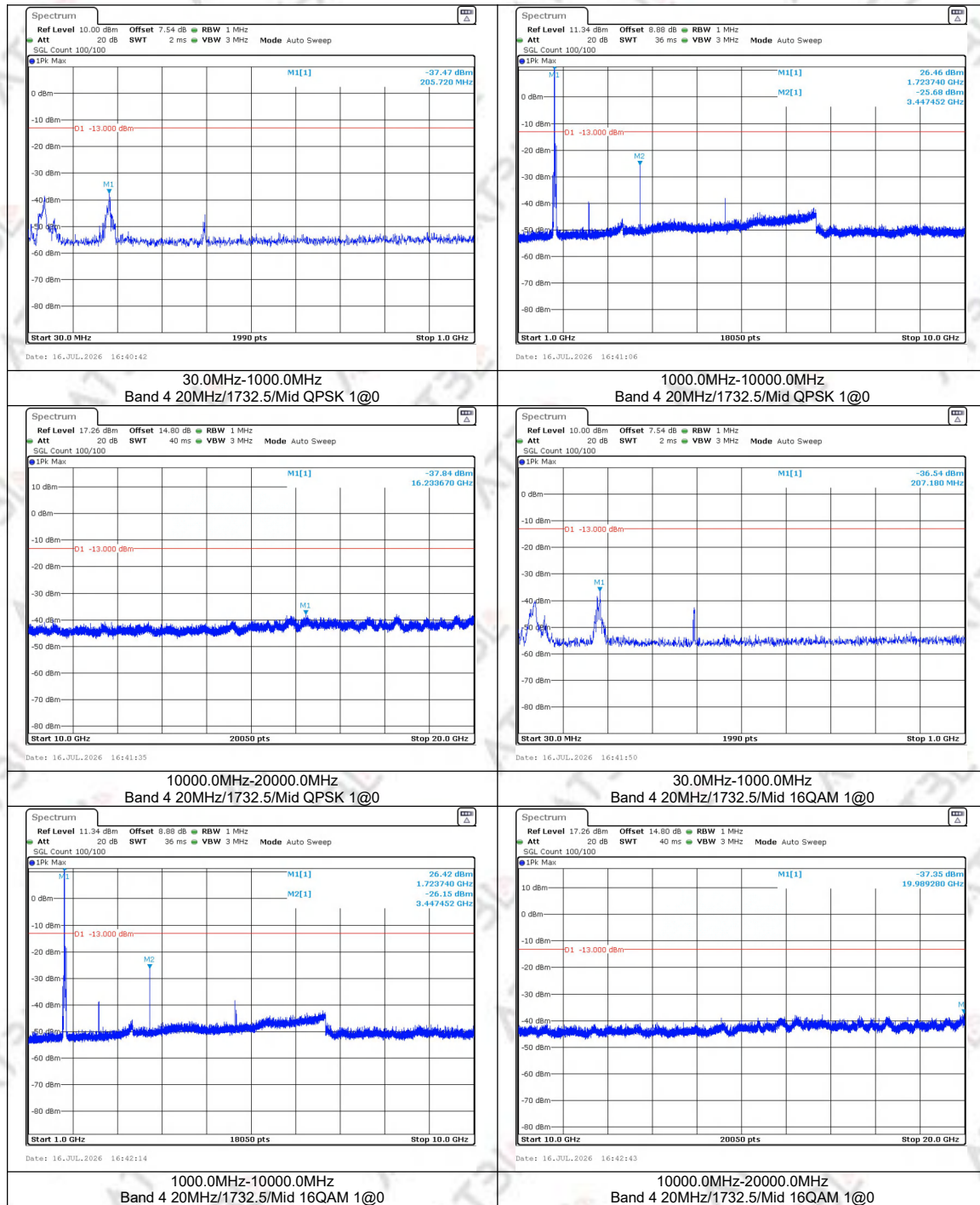
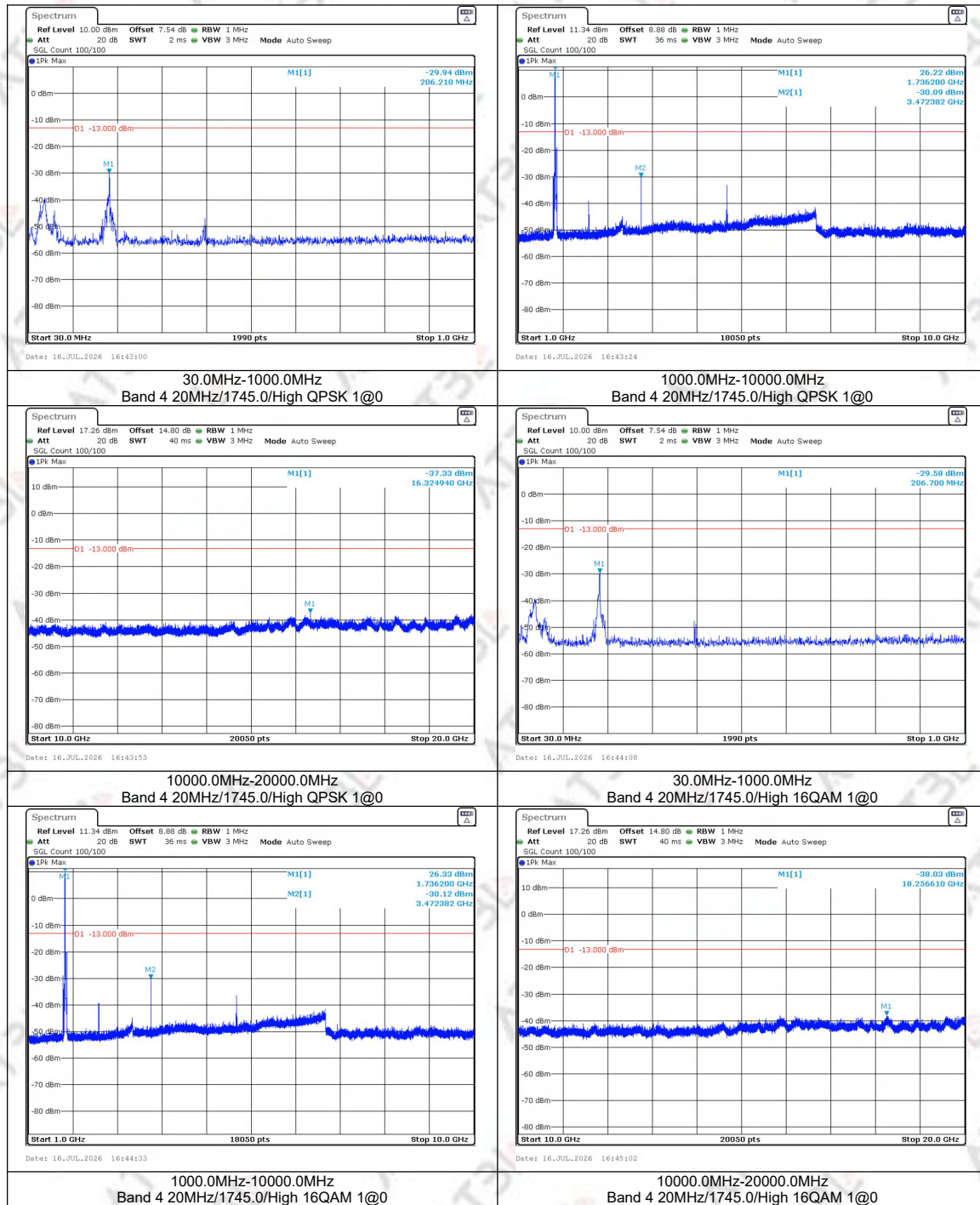








Frequency Stability-TH/VH

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	-1.76	-0.00103	±2.5	PASS	TH/VH
4	1.4	19957	1710.7	16QAM	6@0	-4.52	-0.00264	±2.5	PASS	TH/VH
4	1.4	20175	1732.5	QPSK	6@0	-1.96	-0.00113	±2.5	PASS	TH/VH
4	1.4	20175	1732.5	16QAM	6@0	-1.46	-0.00084	±2.5	PASS	TH/VH
4	1.4	20393	1754.3	QPSK	6@0	-1.17	-0.00067	±2.5	PASS	TH/VH
4	1.4	20393	1754.3	16QAM	6@0	-4.26	-0.00243	±2.5	PASS	TH/VH
4	3.0	19965	1711.5	QPSK	15@0	-0.64	-0.00038	±2.5	PASS	TH/VH
4	3.0	19965	1711.5	16QAM	15@0	-3.25	-0.0019	±2.5	PASS	TH/VH
4	3.0	20175	1732.5	QPSK	15@0	-2.6	-0.0015	±2.5	PASS	TH/VH
4	3.0	20175	1732.5	16QAM	15@0	-6.38	-0.00368	±2.5	PASS	TH/VH
4	3.0	20385	1753.5	QPSK	15@0	-3.36	-0.00192	±2.5	PASS	TH/VH
4	3.0	20385	1753.5	16QAM	15@0	-7.85	-0.00448	±2.5	PASS	TH/VH
4	5.0	19975	1712.5	QPSK	25@0	10.56	0.00616	±2.5	PASS	TH/VH
4	5.0	19975	1712.5	16QAM	25@0	-5.29	-0.00309	±2.5	PASS	TH/VH
4	5.0	20175	1732.5	QPSK	25@0	-6.79	-0.00392	±2.5	PASS	TH/VH
4	5.0	20175	1732.5	16QAM	25@0	-10.19	-0.00588	±2.5	PASS	TH/VH
4	5.0	20375	1752.5	QPSK	25@0	-3.98	-0.00227	±2.5	PASS	TH/VH
4	5.0	20375	1752.5	16QAM	25@0	-7.93	-0.00452	±2.5	PASS	TH/VH
4	10.0	20000	1715.0	QPSK	50@0	-5.38	-0.00314	±2.5	PASS	TH/VH
4	10.0	20000	1715.0	16QAM	50@0	-11.12	-0.00648	±2.5	PASS	TH/VH
4	10.0	20175	1732.5	QPSK	50@0	-0.57	-0.00033	±2.5	PASS	TH/VH
4	10.0	20175	1732.5	16QAM	50@0	-3.59	-0.00207	±2.5	PASS	TH/VH
4	10.0	20350	1750.0	QPSK	50@0	-2.12	-0.00121	±2.5	PASS	TH/VH
4	10.0	20350	1750.0	16QAM	50@0	-3.03	-0.00173	±2.5	PASS	TH/VH
4	15.0	20025	1717.5	QPSK	75@0	-5.42	-0.00316	±2.5	PASS	TH/VH
4	15.0	20025	1717.5	16QAM	75@0	-6.67	-0.00388	±2.5	PASS	TH/VH
4	15.0	20175	1732.5	QPSK	75@0	-1.77	-0.00102	±2.5	PASS	TH/VH
4	15.0	20175	1732.5	16QAM	75@0	-5.64	-0.00325	±2.5	PASS	TH/VH
4	15.0	20325	1747.5	QPSK	75@0	-6.72	-0.00385	±2.5	PASS	TH/VH
4	15.0	20325	1747.5	16QAM	75@0	-8.5	-0.00486	±2.5	PASS	TH/VH
4	20.0	20050	1720.0	QPSK	100@0	-12.07	-0.00702	±2.5	PASS	TH/VH
4	20.0	20050	1720.0	16QAM	100@0	-12.57	-0.00731	±2.5	PASS	TH/VH
4	20.0	20175	1732.5	QPSK	100@0	-2.85	-0.00164	±2.5	PASS	TH/VH
4	20.0	20175	1732.5	16QAM	100@0	-5.28	-0.00305	±2.5	PASS	TH/VH
4	20.0	20300	1745.0	QPSK	100@0	-2.16	-0.00124	±2.5	PASS	TH/VH
4	20.0	20300	1745.0	16QAM	100@0	-8.48	-0.00486	±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	-4.26	-0.00249	±2.5	PASS	TH/VL
4	1.4	19957	1710.7	16QAM	6@0	-8.65	-0.00506	±2.5	PASS	TH/VL
4	1.4	20175	1732.5	QPSK	6@0	-0.41	-0.00024	±2.5	PASS	TH/VL
4	1.4	20175	1732.5	16QAM	6@0	-6.69	-0.00386	±2.5	PASS	TH/VL
4	1.4	20393	1754.3	QPSK	6@0	-8.2	-0.00467	±2.5	PASS	TH/VL
4	1.4	20393	1754.3	16QAM	6@0	-5.46	-0.00311	±2.5	PASS	TH/VL
4	3.0	19965	1711.5	QPSK	15@0	-4.82	-0.00282	±2.5	PASS	TH/VL
4	3.0	19965	1711.5	16QAM	15@0	-12.66	-0.0074	±2.5	PASS	TH/VL
4	3.0	20175	1732.5	QPSK	15@0	-4.53	-0.00262	±2.5	PASS	TH/VL
4	3.0	20175	1732.5	16QAM	15@0	-6.32	-0.00365	±2.5	PASS	TH/VL
4	3.0	20385	1753.5	QPSK	15@0	-4.36	-0.00249	±2.5	PASS	TH/VL
4	3.0	20385	1753.5	16QAM	15@0	-8.6	-0.0049	±2.5	PASS	TH/VL
4	5.0	19975	1712.5	QPSK	25@0	-2.42	-0.00141	±2.5	PASS	TH/VL
4	5.0	19975	1712.5	16QAM	25@0	-7.85	-0.00459	±2.5	PASS	TH/VL
4	5.0	20175	1732.5	QPSK	25@0	-3.03	-0.00175	±2.5	PASS	TH/VL
4	5.0	20175	1732.5	16QAM	25@0	-4.43	-0.00256	±2.5	PASS	TH/VL
4	5.0	20375	1752.5	QPSK	25@0	-5.21	-0.00297	±2.5	PASS	TH/VL
4	5.0	20375	1752.5	16QAM	25@0	-7.9	-0.00451	±2.5	PASS	TH/VL
4	10.0	20000	1715.0	QPSK	50@0	-7.27	-0.00424	±2.5	PASS	TH/VL
4	10.0	20000	1715.0	16QAM	50@0	-9.0	-0.00525	±2.5	PASS	TH/VL
4	10.0	20175	1732.5	QPSK	50@0	-8.37	-0.00483	±2.5	PASS	TH/VL
4	10.0	20175	1732.5	16QAM	50@0	-5.39	-0.00311	±2.5	PASS	TH/VL
4	10.0	20350	1750.0	QPSK	50@0	-4.09	-0.00234	±2.5	PASS	TH/VL
4	10.0	20350	1750.0	16QAM	50@0	-12.63	-0.00722	±2.5	PASS	TH/VL
4	15.0	20025	1717.5	QPSK	75@0	-7.15	-0.00416	±2.5	PASS	TH/VL
4	15.0	20025	1717.5	16QAM	75@0	-12.09	-0.00704	±2.5	PASS	TH/VL
4	15.0	20175	1732.5	QPSK	75@0	-5.48	-0.00316	±2.5	PASS	TH/VL
4	15.0	20175	1732.5	16QAM	75@0	-11.26	-0.0065	±2.5	PASS	TH/VL
4	15.0	20325	1747.5	QPSK	75@0	-2.06	-0.00118	±2.5	PASS	TH/VL
4	15.0	20325	1747.5	16QAM	75@0	-6.94	-0.00397	±2.5	PASS	TH/VL
4	20.0	20050	1720.0	QPSK	100@0	-10.73	-0.00624	±2.5	PASS	TH/VL
4	20.0	20050	1720.0	16QAM	100@0	-7.67	-0.00446	±2.5	PASS	TH/VL
4	20.0	20175	1732.5	QPSK	100@0	-7.98	-0.00461	±2.5	PASS	TH/VL
4	20.0	20175	1732.5	16QAM	100@0	-1.13	-0.00065	±2.5	PASS	TH/VL
4	20.0	20300	1745.0	QPSK	100@0	-5.95	-0.00341	±2.5	PASS	TH/VL
4	20.0	20300	1745.0	16QAM	100@0	-6.07	-0.00348	±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	3.73	0.00218	±2.5	PASS	TH/VN
4	1.4	19957	1710.7	16QAM	6@0	-8.2	-0.00479	±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	-1.26	-0.00073	±2.5	PASS	TH/VN
4	1.4	20393	1754.3	QPSK	6@0	0.32	0.00018	±2.5	PASS	TH/VN
4	1.4	20393	1754.3	16QAM	6@0	-7.08	-0.00404	±2.5	PASS	TH/VN
4	3.0	19965	1711.5	QPSK	15@0	-6.35	-0.00371	±2.5	PASS	TH/VN
4	3.0	19965	1711.5	16QAM	15@0	-11.82	-0.0069	±2.5	PASS	TH/VN
4	3.0	20175	1732.5	QPSK	15@0	5.74	0.00331	±2.5	PASS	TH/VN
4	3.0	20175	1732.5	16QAM	15@0	-9.47	-0.00547	±2.5	PASS	TH/VN
4	3.0	20385	1753.5	QPSK	15@0	-5.14	-0.00293	±2.5	PASS	TH/VN
4	3.0	20385	1753.5	16QAM	15@0	1.7	0.00097	±2.5	PASS	TH/VN
4	5.0	19975	1712.5	QPSK	25@0	-3.95	-0.00231	±2.5	PASS	TH/VN
4	5.0	19975	1712.5	16QAM	25@0	-5.18	-0.00302	±2.5	PASS	TH/VN
4	5.0	20175	1732.5	QPSK	25@0	-1.29	-0.00074	±2.5	PASS	TH/VN
4	5.0	20175	1732.5	16QAM	25@0	-6.64	-0.00383	±2.5	PASS	TH/VN
4	5.0	20375	1752.5	QPSK	25@0	-8.05	-0.0046	±2.5	PASS	TH/VN
4	5.0	20375	1752.5	16QAM	25@0	-13.25	-0.00756	±2.5	PASS	TH/VN
4	10.0	20000	1715.0	QPSK	50@0	-3.03	-0.00177	±2.5	PASS	TH/VN
4	10.0	20000	1715.0	16QAM	50@0	-2.06	-0.0012	±2.5	PASS	TH/VN
4	10.0	20175	1732.5	QPSK	50@0	1.92	0.00111	±2.5	PASS	TH/VN
4	10.0	20175	1732.5	16QAM	50@0	-1.73	-0.001	±2.5	PASS	TH/VN
4	10.0	20350	1750.0	QPSK	50@0	-0.77	-0.00044	±2.5	PASS	TH/VN
4	10.0	20350	1750.0	16QAM	50@0	-11.06	-0.00632	±2.5	PASS	TH/VN
4	15.0	20025	1717.5	QPSK	75@0	-7.24	-0.00421	±2.5	PASS	TH/VN
4	15.0	20025	1717.5	16QAM	75@0	-9.47	-0.00551	±2.5	PASS	TH/VN
4	15.0	20175	1732.5	QPSK	75@0	2.69	0.00155	±2.5	PASS	TH/VN
4	15.0	20175	1732.5	16QAM	75@0	1.19	0.00069	±2.5	PASS	TH/VN
4	15.0	20325	1747.5	QPSK	75@0	1.12	0.00064	±2.5	PASS	TH/VN
4	15.0	20325	1747.5	16QAM	75@0	-4.51	-0.00258	±2.5	PASS	TH/VN
4	20.0	20050	1720.0	QPSK	100@0	-12.03	-0.00699	±2.5	PASS	TH/VN
4	20.0	20050	1720.0	16QAM	100@0	-3.62	-0.0021	±2.5	PASS	TH/VN
4	20.0	20175	1732.5	QPSK	100@0	-10.26	-0.00592	±2.5	PASS	TH/VN
4	20.0	20175	1732.5	16QAM	100@0	-5.91	-0.00341	±2.5	PASS	TH/VN
4	20.0	20300	1745.0	QPSK	100@0	-8.35	-0.00479	±2.5	PASS	TH/VN
4	20.0	20300	1745.0	16QAM	100@0	-9.34	-0.00535	±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	0.72	0.00042	±2.5	PASS	TL/VH
4	1.4	19957	1710.7	16QAM	6@0	-2.6	-0.00152	±2.5	PASS	TL/VH
4	1.4	20175	1732.5	QPSK	6@0	-3.71	-0.00214	±2.5	PASS	TL/VH
4	1.4	20175	1732.5	16QAM	6@0	-8.08	-0.00467	±2.5	PASS	TL/VH
4	1.4	20393	1754.3	QPSK	6@0	-9.37	-0.00534	±2.5	PASS	TL/VH
4	1.4	20393	1754.3	16QAM	6@0	-4.98	-0.00284	±2.5	PASS	TL/VH
4	3.0	19965	1711.5	QPSK	15@0	-4.55	-0.00266	±2.5	PASS	TL/VH
4	3.0	19965	1711.5	16QAM	15@0	-6.49	-0.00379	±2.5	PASS	TL/VH
4	3.0	20175	1732.5	QPSK	15@0	-1.49	-0.00086	±2.5	PASS	TL/VH
4	3.0	20175	1732.5	16QAM	15@0	-1.23	-0.00071	±2.5	PASS	TL/VH
4	3.0	20385	1753.5	QPSK	15@0	-0.86	-0.00049	±2.5	PASS	TL/VH
4	3.0	20385	1753.5	16QAM	15@0	-4.96	-0.00283	±2.5	PASS	TL/VH
4	5.0	19975	1712.5	QPSK	25@0	-10.3	-0.00601	±2.5	PASS	TL/VH
4	5.0	19975	1712.5	16QAM	25@0	-12.03	-0.00703	±2.5	PASS	TL/VH
4	5.0	20175	1732.5	QPSK	25@0	-11.42	-0.00659	±2.5	PASS	TL/VH
4	5.0	20175	1732.5	16QAM	25@0	-7.28	-0.0042	±2.5	PASS	TL/VH
4	5.0	20375	1752.5	QPSK	25@0	-11.47	-0.00655	±2.5	PASS	TL/VH
4	5.0	20375	1752.5	16QAM	25@0	-16.42	-0.00937	±2.5	PASS	TL/VH
4	10.0	20000	1715.0	QPSK	50@0	-8.53	-0.00497	±2.5	PASS	TL/VH
4	10.0	20000	1715.0	16QAM	50@0	-13.65	-0.00796	±2.5	PASS	TL/VH
4	10.0	20175	1732.5	QPSK	50@0	-10.74	-0.0062	±2.5	PASS	TL/VH
4	10.0	20175	1732.5	16QAM	50@0	-7.05	-0.00407	±2.5	PASS	TL/VH
4	10.0	20350	1750.0	QPSK	50@0	-9.53	-0.00544	±2.5	PASS	TL/VH
4	10.0	20350	1750.0	16QAM	50@0	-5.76	-0.00329	±2.5	PASS	TL/VH
4	15.0	20025	1717.5	QPSK	75@0	-0.63	-0.00037	±2.5	PASS	TL/VH
4	15.0	20025	1717.5	16QAM	75@0	-1.59	-0.00092	±2.5	PASS	TL/VH
4	15.0	20175	1732.5	QPSK	75@0	-4.12	-0.00238	±2.5	PASS	TL/VH
4	15.0	20175	1732.5	16QAM	75@0	-11.93	-0.00689	±2.5	PASS	TL/VH
4	15.0	20325	1747.5	QPSK	75@0	-12.65	-0.00724	±2.5	PASS	TL/VH
4	15.0	20325	1747.5	16QAM	75@0	-2.39	-0.00137	±2.5	PASS	TL/VH
4	20.0	20050	1720.0	QPSK	100@0	2.26	0.00131	±2.5	PASS	TL/VH
4	20.0	20050	1720.0	16QAM	100@0	-5.65	-0.00329	±2.5	PASS	TL/VH
4	20.0	20175	1732.5	QPSK	100@0	-1.54	-0.00089	±2.5	PASS	TL/VH
4	20.0	20175	1732.5	16QAM	100@0	-4.39	-0.00253	±2.5	PASS	TL/VH
4	20.0	20300	1745.0	QPSK	100@0	-5.94	-0.0034	±2.5	PASS	TL/VH
4	20.0	20300	1745.0	16QAM	100@0	0.67	0.00039	±2.5	PASS	TL/VH

Frequency Stability-TL/VL

Test Result

Band	Bandwidth (MHz)	Channel	Freq (MHz)	Modulation	RB	Deviation (Hz)	Deviation (ppm)	Limit(ppm)	Verdict	Environment
4	20.0	20050	1720.0	QPSK	100@0	-17.64	-0.01025	±2.5	PASS	TL/VL
4	20.0	20050	1720.0	16QAM	100@0	-4.36	-0.00254	±2.5	PASS	TL/VL
4	20.0	20175	1732.5	QPSK	100@0	-2.45	-0.00141	±2.5	PASS	TL/VL
4	20.0	20175	1732.5	16QAM	100@0	-6.52	-0.00377	±2.5	PASS	TL/VL
4	20.0	20300	1745.0	QPSK	100@0	1.09	0.00062	±2.5	PASS	TL/VL
4	20.0	20300	1745.0	16QAM	100@0	-1.67	-0.00096	±2.5	PASS	TL/VL

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	-8.53	-0.00498	±2.5	PASS	TL/VN
4	1.4	19957	1710.7	16QAM	6@0	-8.91	-0.00521	±2.5	PASS	TL/VN
4	1.4	20175	1732.5	QPSK	6@0	4.35	0.00251	±2.5	PASS	TL/VN
4	1.4	20175	1732.5	16QAM	6@0	-2.53	-0.00146	±2.5	PASS	TL/VN
4	1.4	20393	1754.3	QPSK	6@0	-6.55	-0.00373	±2.5	PASS	TL/VN
4	1.4	20393	1754.3	16QAM	6@0	-8.91	-0.00508	±2.5	PASS	TL/VN
4	3.0	19965	1711.5	QPSK	15@0	2.22	0.0013	±2.5	PASS	TL/VN
4	3.0	19965	1711.5	16QAM	15@0	1.95	0.00114	±2.5	PASS	TL/VN
4	3.0	20175	1732.5	QPSK	15@0	1.66	0.00096	±2.5	PASS	TL/VN
4	3.0	20175	1732.5	16QAM	15@0	-8.25	-0.00476	±2.5	PASS	TL/VN
4	3.0	20385	1753.5	QPSK	15@0	6.75	0.00385	±2.5	PASS	TL/VN
4	3.0	20385	1753.5	16QAM	15@0	3.28	0.00187	±2.5	PASS	TL/VN
4	5.0	19975	1712.5	QPSK	25@0	-5.14	-0.003	±2.5	PASS	TL/VN
4	5.0	19975	1712.5	16QAM	25@0	-11.22	-0.00655	±2.5	PASS	TL/VN
4	5.0	20175	1732.5	QPSK	25@0	-8.64	-0.00499	±2.5	PASS	TL/VN
4	5.0	20175	1732.5	16QAM	25@0	-7.61	-0.00439	±2.5	PASS	TL/VN
4	5.0	20375	1752.5	QPSK	25@0	-12.63	-0.00721	±2.5	PASS	TL/VN
4	5.0	20375	1752.5	16QAM	25@0	-6.97	-0.00398	±2.5	PASS	TL/VN
4	10.0	20000	1715.0	QPSK	50@0	-5.81	-0.00339	±2.5	PASS	TL/VN
4	10.0	20000	1715.0	16QAM	50@0	-2.12	-0.00123	±2.5	PASS	TL/VN
4	10.0	20175	1732.5	QPSK	50@0	-4.51	-0.0026	±2.5	PASS	TL/VN
4	10.0	20175	1732.5	16QAM	50@0	-10.71	-0.00618	±2.5	PASS	TL/VN
4	10.0	20350	1750.0	QPSK	50@0	-13.96	-0.00798	±2.5	PASS	TL/VN
4	10.0	20350	1750.0	16QAM	50@0	-5.18	-0.00296	±2.5	PASS	TL/VN
4	15.0	20025	1717.5	QPSK	75@0	2.42	0.00141	±2.5	PASS	TL/VN
4	15.0	20025	1717.5	16QAM	75@0	2.55	0.00148	±2.5	PASS	TL/VN
4	15.0	20175	1732.5	QPSK	75@0	-12.32	-0.00711	±2.5	PASS	TL/VN
4	15.0	20175	1732.5	16QAM	75@0	-3.19	-0.00184	±2.5	PASS	TL/VN
4	15.0	20325	1747.5	QPSK	75@0	1.49	0.00085	±2.5	PASS	TL/VN
4	15.0	20325	1747.5	16QAM	75@0	1.19	0.00068	±2.5	PASS	TL/VN
4	20.0	20050	1720.0	QPSK	100@0	-11.66	-0.00678	±2.5	PASS	TL/VN
4	20.0	20050	1720.0	16QAM	100@0	-17.05	-0.00991	±2.5	PASS	TL/VN
4	20.0	20175	1732.5	QPSK	100@0	-0.49	-0.00028	±2.5	PASS	TL/VN
4	20.0	20175	1732.5	16QAM	100@0	-11.3	-0.00652	±2.5	PASS	TL/VN
4	20.0	20300	1745.0	QPSK	100@0	-7.71	-0.00442	±2.5	PASS	TL/VN
4	20.0	20300	1745.0	16QAM	100@0	-1.24	-0.00071	±2.5	PASS	TL/VN

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	-9.31	-0.00544	±2.5	PASS	TN/VH
4	1.4	19957	1710.7	16QAM	6@0	-1.76	-0.00103	±2.5	PASS	TN/VH
4	1.4	20175	1732.5	QPSK	6@0	7.27	0.00419	±2.5	PASS	TN/VH
4	1.4	20175	1732.5	16QAM	6@0	0.43	0.00025	±2.5	PASS	TN/VH
4	1.4	20393	1754.3	QPSK	6@0	-4.15	-0.00236	±2.5	PASS	TN/VH
4	1.4	20393	1754.3	16QAM	6@0	-15.54	-0.00886	±2.5	PASS	TN/VH
4	3.0	19965	1711.5	QPSK	15@0	-7.61	-0.00445	±2.5	PASS	TN/VH
4	3.0	19965	1711.5	16QAM	15@0	-16.12	-0.00942	±2.5	PASS	TN/VH
4	3.0	20175	1732.5	QPSK	15@0	4.79	0.00277	±2.5	PASS	TN/VH
4	3.0	20175	1732.5	16QAM	15@0	-10.46	-0.00604	±2.5	PASS	TN/VH
4	3.0	20385	1753.5	QPSK	15@0	-5.89	-0.00336	±2.5	PASS	TN/VH
4	3.0	20385	1753.5	16QAM	15@0	-4.96	-0.00283	±2.5	PASS	TN/VH
4	5.0	19975	1712.5	QPSK	25@0	-0.92	-0.00053	±2.5	PASS	TN/VH
4	5.0	19975	1712.5	16QAM	25@0	-7.58	-0.00443	±2.5	PASS	TN/VH
4	5.0	20175	1732.5	QPSK	25@0	-10.19	-0.00588	±2.5	PASS	TN/VH
4	5.0	20175	1732.5	16QAM	25@0	-1.85	-0.00107	±2.5	PASS	TN/VH
4	5.0	20375	1752.5	QPSK	25@0	-8.74	-0.00499	±2.5	PASS	TN/VH
4	5.0	20375	1752.5	16QAM	25@0	-10.36	-0.00591	±2.5	PASS	TN/VH
4	10.0	20000	1715.0	QPSK	50@0	-3.53	-0.00206	±2.5	PASS	TN/VH
4	10.0	20000	1715.0	16QAM	50@0	-3.59	-0.00209	±2.5	PASS	TN/VH
4	10.0	20175	1732.5	QPSK	50@0	-9.63	-0.00556	±2.5	PASS	TN/VH
4	10.0	20175	1732.5	16QAM	50@0	-8.17	-0.00471	±2.5	PASS	TN/VH
4	10.0	20350	1750.0	QPSK	50@0	-0.86	-0.00049	±2.5	PASS	TN/VH
4	10.0	20350	1750.0	16QAM	50@0	3.32	0.0019	±2.5	PASS	TN/VH
4	15.0	20025	1717.5	QPSK	75@0	-8.73	-0.00508	±2.5	PASS	TN/VH
4	15.0	20025	1717.5	16QAM	75@0	-4.86	-0.00283	±2.5	PASS	TN/VH
4	15.0	20175	1732.5	QPSK	75@0	-7.68	-0.00443	±2.5	PASS	TN/VH
4	15.0	20175	1732.5	16QAM	75@0	-1.57	-0.00091	±2.5	PASS	TN/VH
4	15.0	20325	1747.5	QPSK	75@0	0.46	0.00026	±2.5	PASS	TN/VH
4	15.0	20325	1747.5	16QAM	75@0	-10.76	-0.00616	±2.5	PASS	TN/VH
4	20.0	20050	1720.0	QPSK	100@0	-8.57	-0.00498	±2.5	PASS	TN/VH
4	20.0	20050	1720.0	16QAM	100@0	-1.3	-0.00076	±2.5	PASS	TN/VH
4	20.0	20175	1732.5	QPSK	100@0	-8.3	-0.00479	±2.5	PASS	TN/VH
4	20.0	20175	1732.5	16QAM	100@0	-6.42	-0.00371	±2.5	PASS	TN/VH
4	20.0	20300	1745.0	QPSK	100@0	-13.53	-0.00776	±2.5	PASS	TN/VH
4	20.0	20300	1745.0	16QAM	100@0	-11.07	-0.00635	±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	4.75	0.00278	±2.5	PASS	TN/VL
4	1.4	19957	1710.7	16QAM	6@0	-9.2	-0.00538	±2.5	PASS	TN/VL
4	1.4	20175	1732.5	QPSK	6@0	0.87	0.0005	±2.5	PASS	TN/VL
4	1.4	20175	1732.5	16QAM	6@0	-1.97	-0.00114	±2.5	PASS	TN/VL
4	1.4	20393	1754.3	QPSK	6@0	-4.99	-0.00285	±2.5	PASS	TN/VL
4	1.4	20393	1754.3	16QAM	6@0	-14.76	-0.00842	±2.5	PASS	TN/VL
4	3.0	19965	1711.5	QPSK	15@0	-9.11	-0.00532	±2.5	PASS	TN/VL
4	3.0	19965	1711.5	16QAM	15@0	-10.29	-0.00601	±2.5	PASS	TN/VL
4	3.0	20175	1732.5	QPSK	15@0	-0.74	-0.00043	±2.5	PASS	TN/VL
4	3.0	20175	1732.5	16QAM	15@0	-4.66	-0.00269	±2.5	PASS	TN/VL
4	3.0	20385	1753.5	QPSK	15@0	-5.28	-0.00301	±2.5	PASS	TN/VL
4	3.0	20385	1753.5	16QAM	15@0	3.63	0.00207	±2.5	PASS	TN/VL
4	5.0	19975	1712.5	QPSK	25@0	-11.34	-0.00662	±2.5	PASS	TN/VL
4	5.0	19975	1712.5	16QAM	25@0	-7.98	-0.00466	±2.5	PASS	TN/VL
4	5.0	20175	1732.5	QPSK	25@0	-13.66	-0.00789	±2.5	PASS	TN/VL
4	5.0	20175	1732.5	16QAM	25@0	-4.02	-0.00232	±2.5	PASS	TN/VL
4	5.0	20375	1752.5	QPSK	25@0	0.33	0.00019	±2.5	PASS	TN/VL
4	5.0	20375	1752.5	16QAM	25@0	-5.78	-0.0033	±2.5	PASS	TN/VL
4	10.0	20000	1715.0	QPSK	50@0	-5.78	-0.00337	±2.5	PASS	TN/VL
4	10.0	20000	1715.0	16QAM	50@0	1.86	0.00108	±2.5	PASS	TN/VL
4	10.0	20175	1732.5	QPSK	50@0	-9.9	-0.00571	±2.5	PASS	TN/VL
4	10.0	20175	1732.5	16QAM	50@0	-4.52	-0.00261	±2.5	PASS	TN/VL
4	10.0	20350	1750.0	QPSK	50@0	-4.71	-0.00269	±2.5	PASS	TN/VL
4	10.0	20350	1750.0	16QAM	50@0	-13.69	-0.00782	±2.5	PASS	TN/VL
4	15.0	20025	1717.5	QPSK	75@0	-8.54	-0.00497	±2.5	PASS	TN/VL
4	15.0	20025	1717.5	16QAM	75@0	-11.9	-0.00693	±2.5	PASS	TN/VL
4	15.0	20175	1732.5	QPSK	75@0	-5.81	-0.00335	±2.5	PASS	TN/VL
4	15.0	20175	1732.5	16QAM	75@0	-9.94	-0.00574	±2.5	PASS	TN/VL
4	15.0	20325	1747.5	QPSK	75@0	1.76	0.00101	±2.5	PASS	TN/VL
4	15.0	20325	1747.5	16QAM	75@0	-3.56	-0.00204	±2.5	PASS	TN/VL
4	20.0	20050	1720.0	QPSK	100@0	-1.42	-0.00082	±2.5	PASS	TN/VL
4	20.0	20050	1720.0	16QAM	100@0	-6.44	-0.00374	±2.5	PASS	TN/VL
4	20.0	20175	1732.5	QPSK	100@0	-7.22	-0.00417	±2.5	PASS	TN/VL
4	20.0	20175	1732.5	16QAM	100@0	-3.6	-0.00208	±2.5	PASS	TN/VL
4	20.0	20300	1745.0	QPSK	100@0	-6.38	-0.00366	±2.5	PASS	TN/VL
4	20.0	20300	1745.0	16QAM	100@0	-9.21	-0.00528	±2.5	PASS	TN/VL

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	-6.9	-0.00403	±2.5	PASS	TN/VN
4	1.4	19957	1710.7	16QAM	6@0	-1.66	-0.00097	±2.5	PASS	TN/VN
4	1.4	20175	1732.5	QPSK	6@0	4.84	0.00279	±2.5	PASS	TN/VN
4	1.4	20175	1732.5	16QAM	6@0	1.67	0.00097	±2.5	PASS	TN/VN
4	1.4	20393	1754.3	QPSK	6@0	-9.37	-0.00534	±2.5	PASS	TN/VN
4	1.4	20393	1754.3	16QAM	6@0	-8.71	-0.00497	±2.5	PASS	TN/VN
4	3.0	19965	1711.5	QPSK	15@0	-10.41	-0.00608	±2.5	PASS	TN/VN
4	3.0	19965	1711.5	16QAM	15@0	-8.64	-0.00505	±2.5	PASS	TN/VN
4	3.0	20175	1732.5	QPSK	15@0	4.03	0.00233	±2.5	PASS	TN/VN
4	3.0	20175	1732.5	16QAM	15@0	-4.23	-0.00244	±2.5	PASS	TN/VN
4	3.0	20385	1753.5	QPSK	15@0	6.12	0.00349	±2.5	PASS	TN/VN
4	3.0	20385	1753.5	16QAM	15@0	-8.55	-0.00488	±2.5	PASS	TN/VN
4	5.0	19975	1712.5	QPSK	25@0	-10.44	-0.0061	±2.5	PASS	TN/VN
4	5.0	19975	1712.5	16QAM	25@0	1.3	0.00076	±2.5	PASS	TN/VN
4	5.0	20175	1732.5	QPSK	25@0	0.32	0.00018	±2.5	PASS	TN/VN
4	5.0	20175	1732.5	16QAM	25@0	-10.14	-0.00585	±2.5	PASS	TN/VN
4	5.0	20375	1752.5	QPSK	25@0	-11.2	-0.00639	±2.5	PASS	TN/VN
4	5.0	20375	1752.5	16QAM	25@0	-6.22	-0.00355	±2.5	PASS	TN/VN
4	10.0	20000	1715.0	QPSK	50@0	-9.88	-0.00576	±2.5	PASS	TN/VN
4	10.0	20000	1715.0	16QAM	50@0	-1.16	-0.00068	±2.5	PASS	TN/VN
4	10.0	20175	1732.5	QPSK	50@0	-1.54	-0.00089	±2.5	PASS	TN/VN
4	10.0	20175	1732.5	16QAM	50@0	-11.66	-0.00673	±2.5	PASS	TN/VN
4	10.0	20350	1750.0	QPSK	50@0	-0.92	-0.00052	±2.5	PASS	TN/VN
4	10.0	20350	1750.0	16QAM	50@0	1.07	0.00061	±2.5	PASS	TN/VN
4	15.0	20025	1717.5	QPSK	75@0	-8.35	-0.00486	±2.5	PASS	TN/VN
4	15.0	20025	1717.5	16QAM	75@0	-11.14	-0.00649	±2.5	PASS	TN/VN
4	15.0	20175	1732.5	QPSK	75@0	0.27	0.00016	±2.5	PASS	TN/VN
4	15.0	20175	1732.5	16QAM	75@0	2.9	0.00168	±2.5	PASS	TN/VN
4	15.0	20325	1747.5	QPSK	75@0	-13.42	-0.00768	±2.5	PASS	TN/VN
4	15.0	20325	1747.5	16QAM	75@0	-12.22	-0.00699	±2.5	PASS	TN/VN
4	20.0	20050	1720.0	QPSK	100@0	-5.32	-0.00309	±2.5	PASS	TN/VN
4	20.0	20050	1720.0	16QAM	100@0	-1.07	-0.00062	±2.5	PASS	TN/VN
4	20.0	20175	1732.5	QPSK	100@0	3.22	0.00186	±2.5	PASS	TN/VN
4	20.0	20175	1732.5	16QAM	100@0	-2.66	-0.00154	±2.5	PASS	TN/VN
4	20.0	20300	1745.0	QPSK	100@0	0.82	0.00047	±2.5	PASS	TN/VN
4	20.0	20300	1745.0	16QAM	100@0	-0.5	-0.00029	±2.5	PASS	TN/VN

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

