



Band12-10MHz-QPSK-23095-1RB#0-Range1:0.009~0.15MHz



Band12-10MHz-QPSK-23095-1RB#0-Range2:0.15~30MHz



Band12-10MHz-QPSK-23095-1RB#0-Range3:30~1000MHz



Band12-10MHz-QPSK-23095-1RB#0-Range4:1000~10000MHz



Band12-10MHz-QPSK-23130-1RB#0-Range1:0.009~0.15MHz



Band12-10MHz-QPSK-23130-1RB#0-Range2:0.15~30MHz



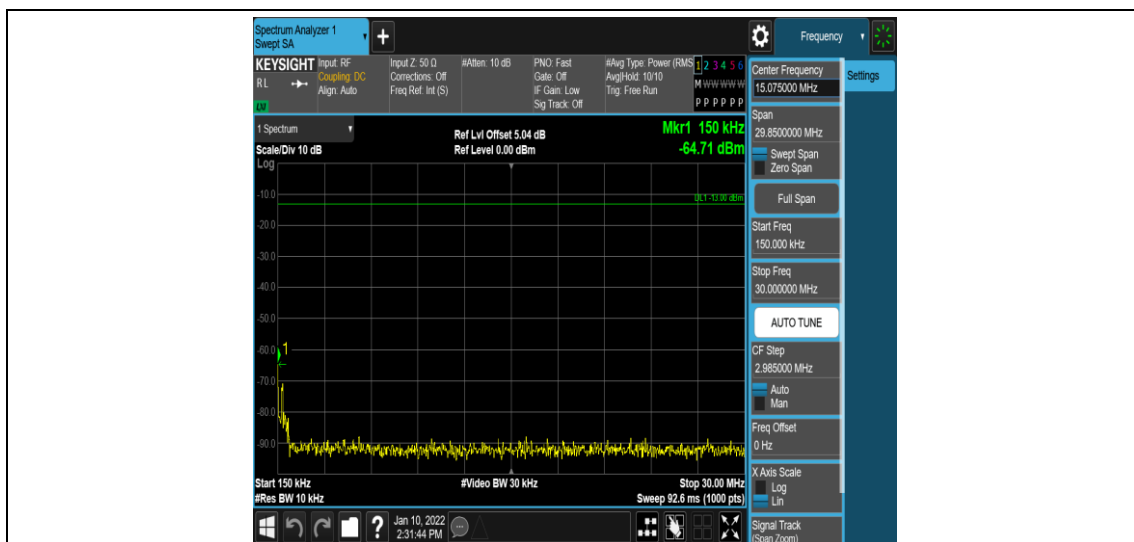
Band12-10MHz-QPSK-23130-1RB#0-Range3:30~1000MHz



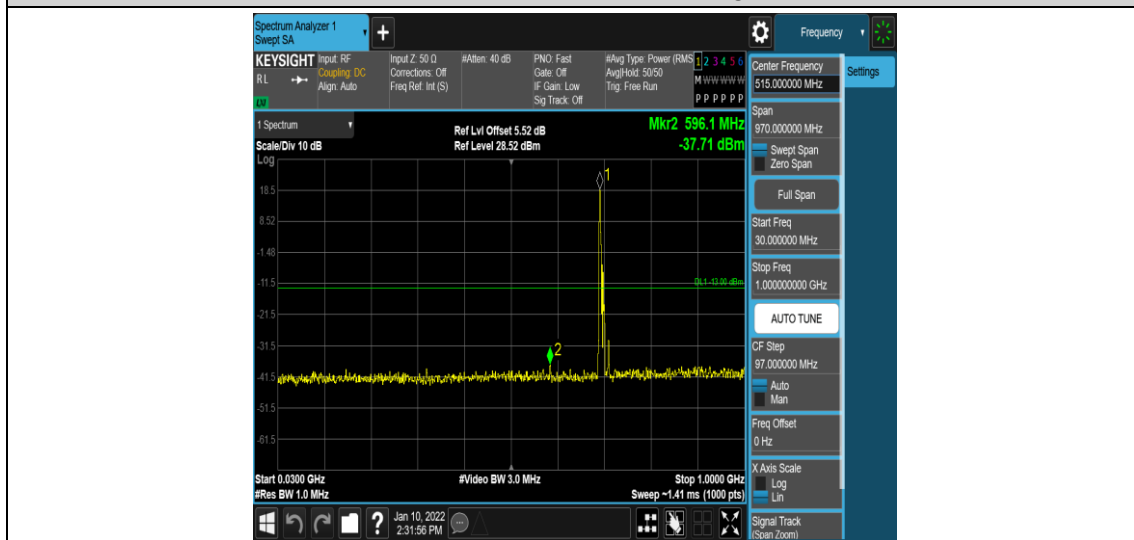
Band12-10MHz-QPSK-23130-1RB#0-Range4:1000~10000MHz



Band12-10MHz-16QAM-23060-1RB#0-Range1:0.009~0.15MHz



Band12-10MHz-16QAM-23060-1RB#0-Range2:0.15~30MHz



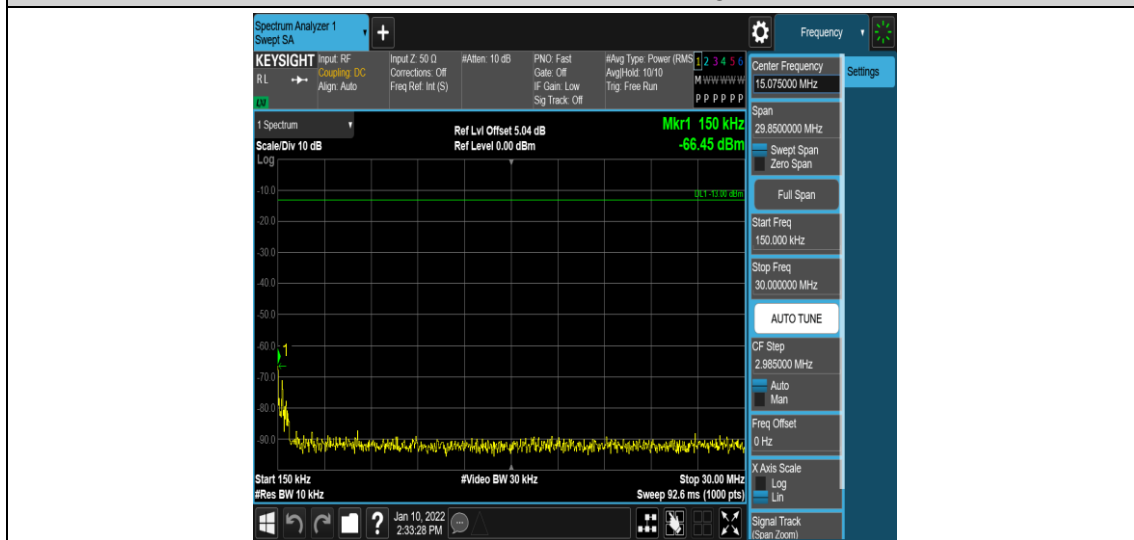
Band12-10MHz-16QAM-23060-1RB#0-Range3:30~1000MHz



Band12-10MHz-16QAM-23060-1RB#0-Range4:1000~10000MHz



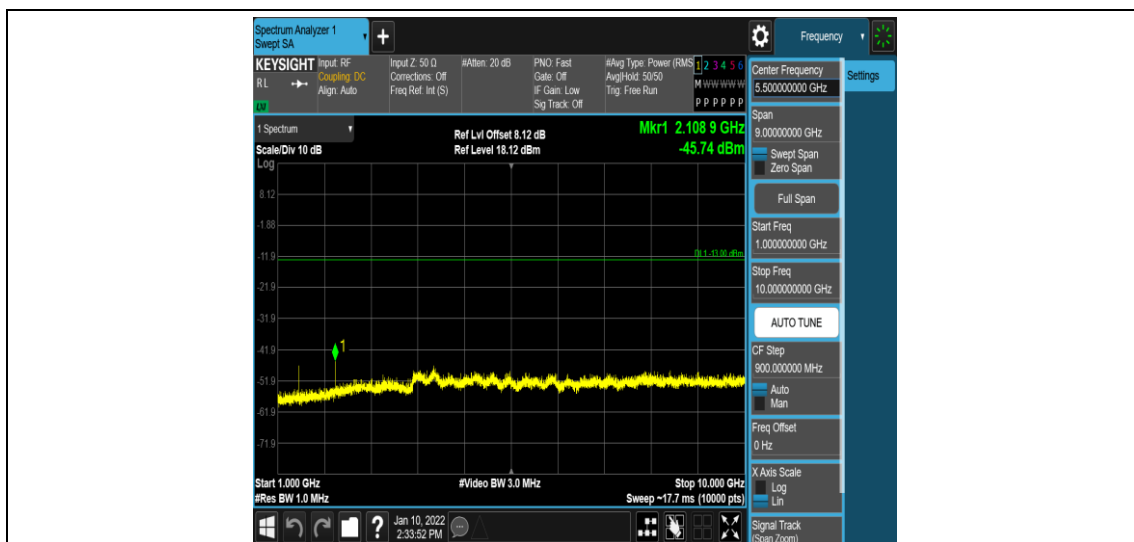
Band12-10MHz-16QAM-23095-1RB#0-Range1:0.009~0.15MHz



Band12-10MHz-16QAM-23095-1RB#0-Range2:0.15~30MHz



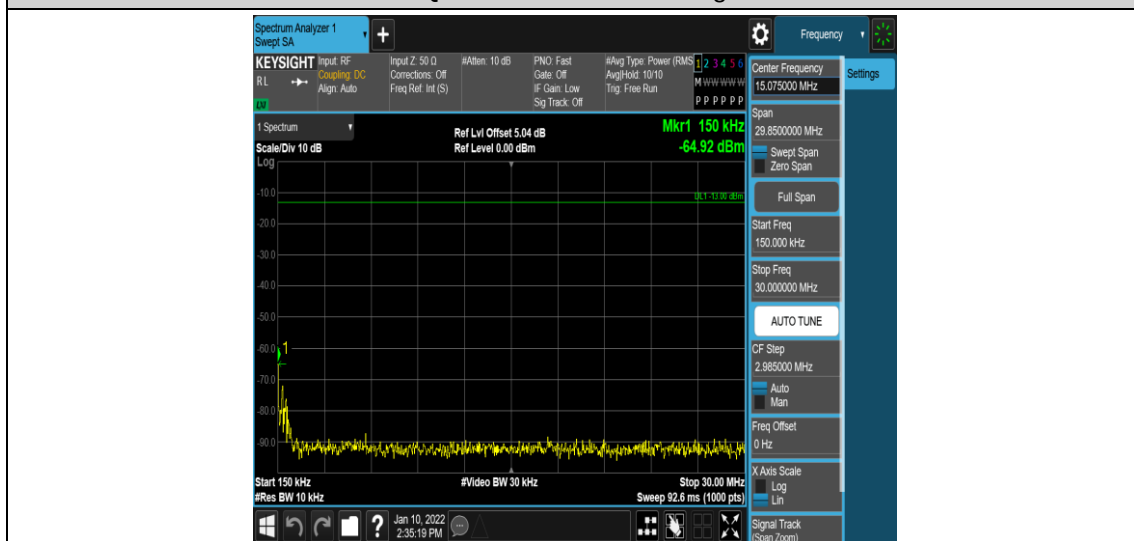
Band12-10MHz-16QAM-23095-1RB#0-Range3:30~1000MHz



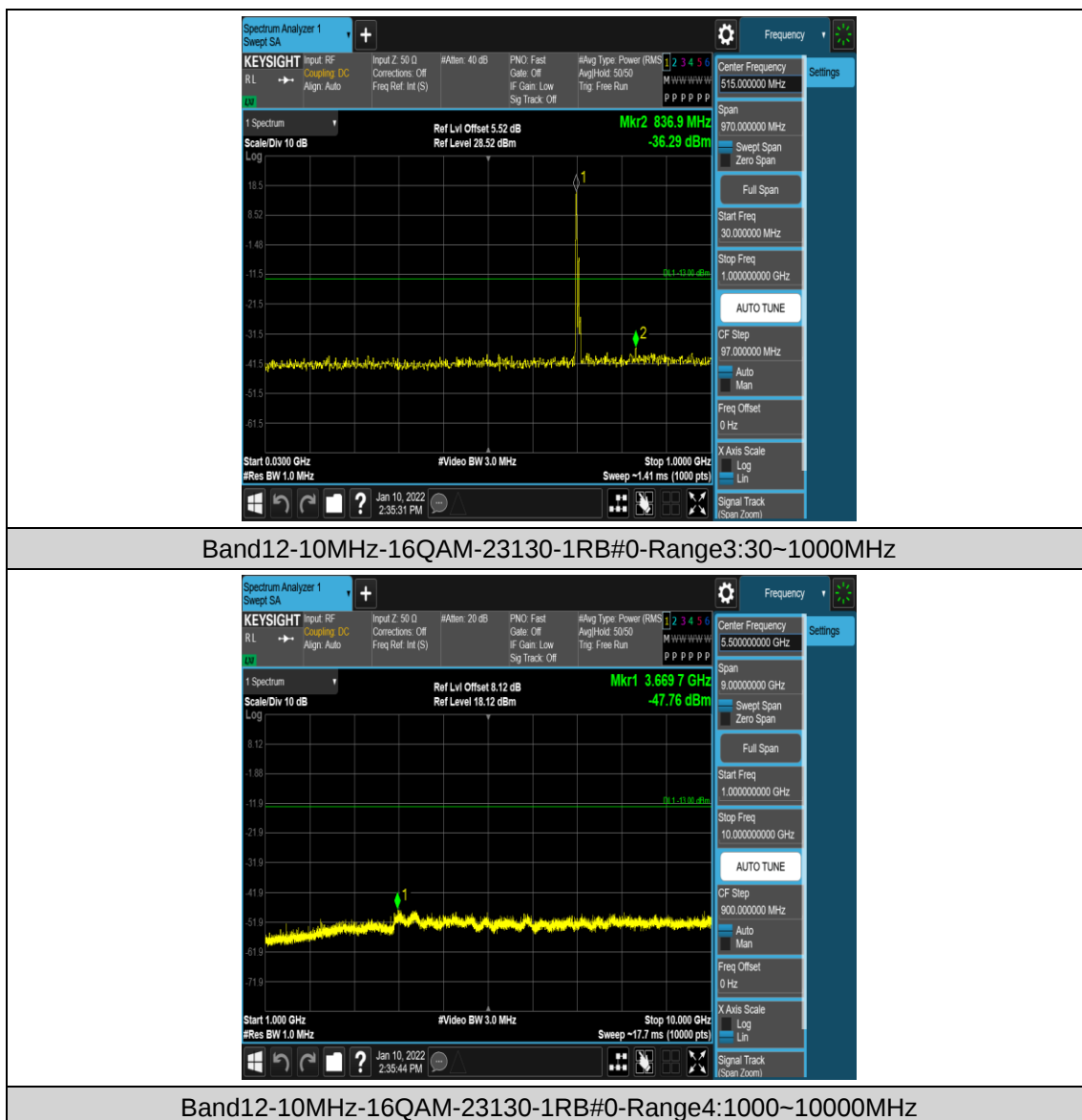
Band12-10MHz-16QAM-23095-1RB#0-Range4:1000~10000MHz



Band12-10MHz-16QAM-23130-1RB#0-Range1:0.009~0.15MHz



Band12-10MHz-16QAM-23130-1RB#0-Range2:0.15~30MHz



Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configuration	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	VL	NT	4.02	0.005745	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	VN	NT	2.13	0.003044	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	VH	NT	5.55	0.007932	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	VL	NT	12.26	0.017329	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	VN	NT	7.97	0.011265	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	VH	NT	16.72	0.023633	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	VL	NT	6.88	0.009618	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	VN	NT	1.97	0.002754	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	VH	NT	8.61	0.012037	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	VL	NT	-16.39	-0.023424	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	VN	NT	19.78	0.028269	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	VH	NT	-3.20	-0.004573	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	VL	NT	16.75	0.023675	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	VN	NT	11.04	0.015604	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	VH	NT	22.63	0.031986	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	VL	NT	5.62	0.007857	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	VN	NT	3.16	0.004418	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	VH	NT	7.81	0.010918	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	VL	NT	-17.68	-0.025239	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	VN	NT	-18.65	-0.026624	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	VH	NT	-15.18	-0.021670	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	VL	NT	15.56	0.021993	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	VN	NT	2.60	0.003675	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	VH	NT	17.35	0.024523	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	VL	NT	2.92	0.004087	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	VN	NT	1.37	0.001917	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	VH	NT	2.99	0.004185	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	VL	NT	7.42	0.010592	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	VN	NT	4.26	0.006081	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	VH	NT	10.34	0.014761	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	VL	NT	29.40	0.041555	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	VN	NT	26.08	0.036862	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	VH	NT	31.64	0.044721	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	VL	NT	-9.64	-0.013492	±2.5	PASS

Band12	3MHz	16QAM	23165	15RB#0	VN	NT	-26.38	-0.036921	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	VH	NT	-4.28	-0.005990	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	VL	NT	9.44	0.013457	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	VN	NT	6.31	0.008995	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	VH	NT	10.69	0.015239	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	VL	NT	15.61	0.022064	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	VN	NT	9.20	0.013004	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	VH	NT	20.24	0.028608	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	VL	NT	7.77	0.010890	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	VN	NT	7.67	0.010750	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	VH	NT	9.46	0.013259	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	VL	NT	13.49	0.019230	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	VN	NT	14.53	0.020713	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	VH	NT	15.65	0.022309	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	VL	NT	25.36	0.035845	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	VN	NT	20.08	0.028382	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	VH	NT	30.80	0.043534	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	VL	NT	-2.72	-0.003812	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	VN	NT	-5.22	-0.007316	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	VH	NT	1.82	0.002551	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VL	NT	5.08	0.007216	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VN	NT	4.82	0.006847	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	VH	NT	3.93	0.005582	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VL	NT	5.14	0.007265	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VN	NT	4.51	0.006375	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	VH	NT	5.94	0.008396	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VL	NT	-37.35	-0.052532	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VN	NT	7.01	0.009859	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	VH	NT	-20.61	-0.028987	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VL	NT	-21.94	-0.031165	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VN	NT	8.51	0.012088	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	VH	NT	-11.84	-0.016818	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VL	NT	4.65	0.006572	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VN	NT	1.96	0.002770	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	VH	NT	4.95	0.006996	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VL	NT	-3.15	-0.004430	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VN	NT	-5.95	-0.008368	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	VH	NT	-5.06	-0.007117	±2.5	PASS
Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict

Band12	1.4MHz	QPSK	23017	6RB#0	NV	-30	3.89	0.005560	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	-20	9.54	0.013634	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	0	9.28	0.013263	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	10	10.04	0.014349	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	20	14.83	0.021195	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	-30	14.69	0.020763	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	-20	18.41	0.026021	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	0	19.38	0.027392	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	10	22.37	0.031618	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	20	25.88	0.036580	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	-30	9.31	0.013016	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	-20	12.72	0.017783	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	0	14.25	0.019922	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	10	-25.05	-0.035020	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	20	-6.77	-0.009465	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	-30	7.05	0.010076	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	-20	10.07	0.014392	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	0	13.56	0.019380	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	10	14.66	0.020952	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	20	19.00	0.027154	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	-30	27.62	0.039039	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	-20	30.86	0.043618	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	0	39.25	0.055477	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	10	45.58	0.064424	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	20	49.38	0.069795	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	-30	13.07	0.018272	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	-20	13.78	0.019265	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	0	16.51	0.023081	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	10	20.44	0.028575	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	20	20.38	0.028492	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	-30	-12.46	-0.017787	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	-20	-9.30	-0.013276	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	0	-6.58	-0.009393	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	10	-2.86	-0.004083	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	20	-2.02	-0.002884	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	-30	18.50	0.026148	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	-20	17.15	0.024240	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	0	21.01	0.029696	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	10	22.50	0.031802	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	20	23.93	0.033823	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	-30	1.79	0.002505	±2.5	PASS

Band12	3MHz	QPSK	23165	15RB#0	NV	-20	3.83	0.005360	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	0	7.98	0.011169	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	10	5.11	0.007152	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	20	11.40	0.015955	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	-30	8.97	0.012805	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	-20	13.90	0.019843	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	0	-11.84	-0.016902	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	10	-19.67	-0.028080	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	20	-7.21	-0.010293	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	-30	-9.43	-0.013329	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	-20	10.86	0.015350	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	0	11.12	0.015717	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	10	12.70	0.017951	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	20	15.81	0.022346	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	-30	3.75	0.005248	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	-20	7.65	0.010707	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	0	10.94	0.015311	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	10	14.26	0.019958	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	20	15.78	0.022085	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	-30	9.68	0.013799	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	-20	12.29	0.017520	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	0	12.12	0.017277	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	10	15.02	0.021411	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	20	14.98	0.021354	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	-30	26.31	0.037187	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	-20	27.64	0.039067	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	0	31.71	0.044820	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	10	33.96	0.048000	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	20	9.01	0.012735	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	-30	7.98	0.011184	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	-20	-31.40	-0.044008	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	0	-14.92	-0.020911	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	10	-16.26	-0.022789	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	20	-9.07	-0.012712	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	-30	16.34	0.023293	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	-20	14.73	0.020998	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	0	17.47	0.024904	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	10	-15.51	-0.022110	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	20	-31.57	-0.045004	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	-30	33.13	0.046827	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	-20	36.84	0.052071	±2.5	PASS

Band12	5MHz	16QAM	23095	25RB#0	NV	0	37.87	0.053527	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	10	41.66	0.058883	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	20	44.70	0.063180	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	-30	4.76	0.006671	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	-20	5.71	0.008003	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	0	8.74	0.012249	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	10	6.91	0.009685	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	20	7.44	0.010427	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	3.83	0.005440	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	4.84	0.006875	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	8.34	0.011847	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	7.28	0.010341	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	7.51	0.010668	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	8.33	0.011774	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	8.20	0.011590	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	10.20	0.014417	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	-25.48	-0.036014	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	-10.33	-0.014601	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-15.16	-0.021322	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-16.54	-0.023263	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-11.69	-0.016442	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-9.16	-0.012883	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-6.48	-0.009114	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-30	-4.58	-0.006506	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	-20	1.72	0.002443	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	0	4.75	0.006747	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	10	5.36	0.007614	±2.5	PASS
Band12	10MHz	16QAM	23060	50RB#0	NV	20	2.52	0.003580	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-30	10.56	0.014926	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	-20	14.56	0.020580	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	0	15.98	0.022587	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	10	20.40	0.028834	±2.5	PASS
Band12	10MHz	16QAM	23095	50RB#0	NV	20	20.01	0.028283	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-30	-2.23	-0.003136	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	-20	1.87	0.002630	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	0	3.95	0.005556	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	10	-35.52	-0.049958	±2.5	PASS
Band12	10MHz	16QAM	23130	50RB#0	NV	20	-25.32	-0.035612	±2.5	PASS