



B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 3 5 - P A S S

B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 3 5 - P A S S



B a n d 1 2 - 5 M H z - Q P S K - 2 3 0 9 5 - P A S S

B a n d 1 2 - 5 M H z - Q P S K - 2 3 0 9 5 - P A S S



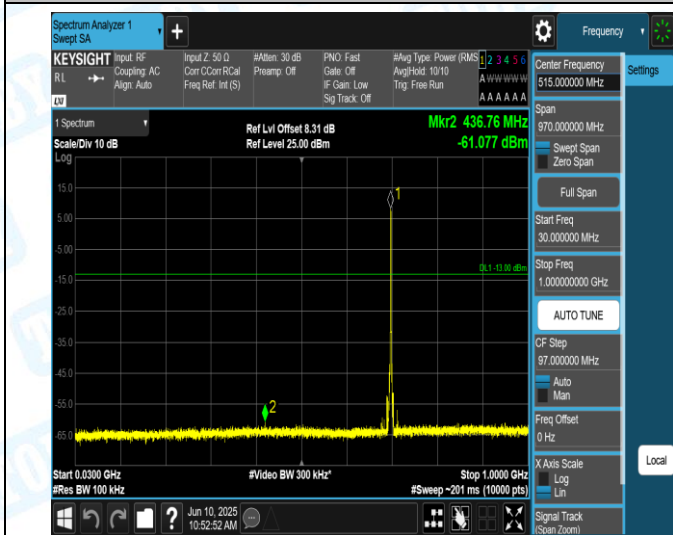
B a n d 1 2 - 5 M H z - Q P S K - 2 3 0 9 5 - P A S S

B a n d 1 2 - 5 M H z - Q P S K - 2 3 0 9 5 - P A S S



B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 9 5 - P A S S

B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 9 5 - P A S S



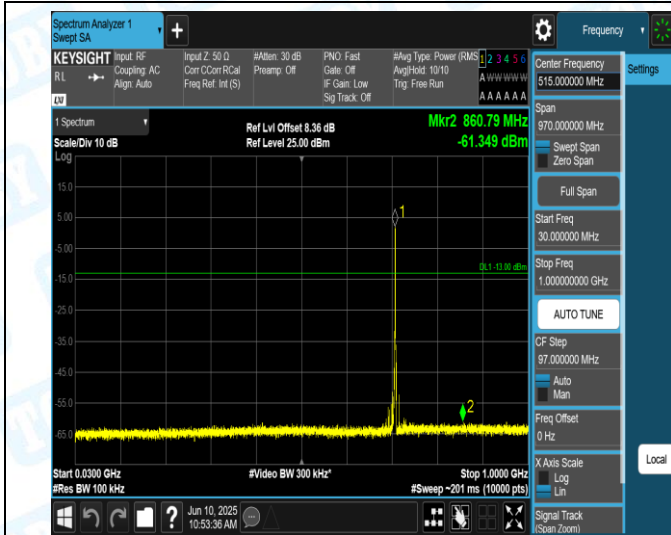
B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 9 5 - P A S S

B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 0 9 5 - P A S S



B a n d 1 2 - 5 M H z - Q P S K - 2 3 1 5 5 - P A S S

B a n d 1 2 - 5 M H z - Q P S K - 2 3 1 5 5 - P A S S



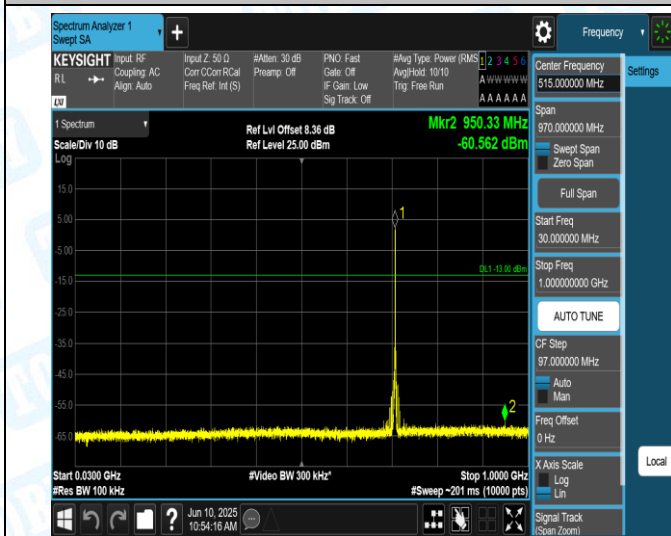
B a n d 1 2 - 5 M H z - Q P S K - 2 3 1 5 5 - P A S S

B a n d 1 2 - 5 M H z - Q P S K - 2 3 1 5 5 - P A S S



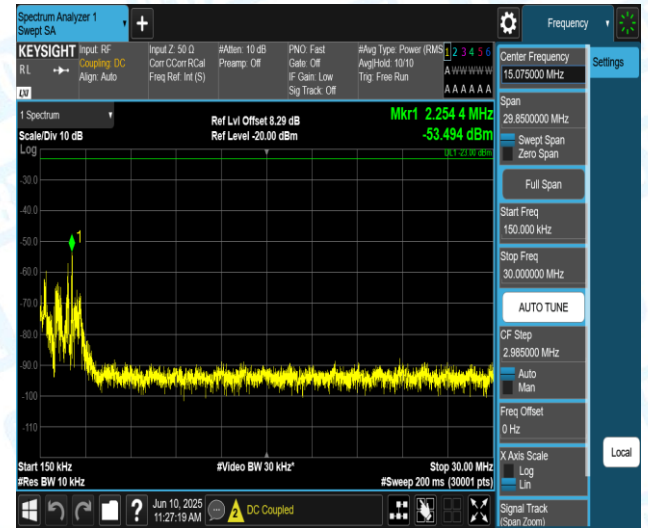
B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 1 5 5 - P A S S

B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 1 5 5 - P A S S



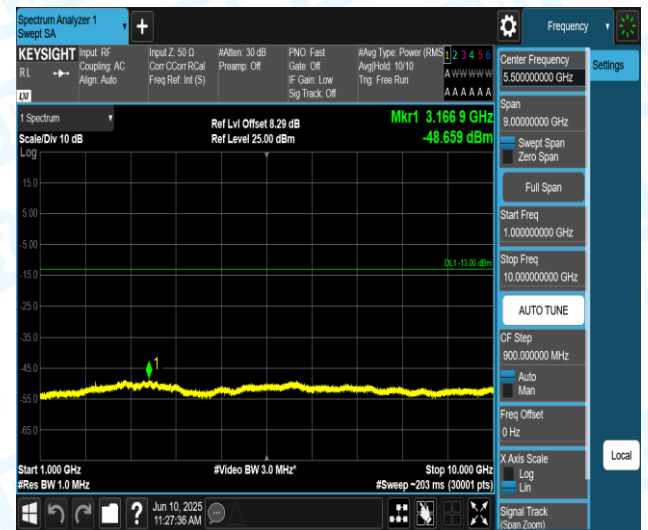
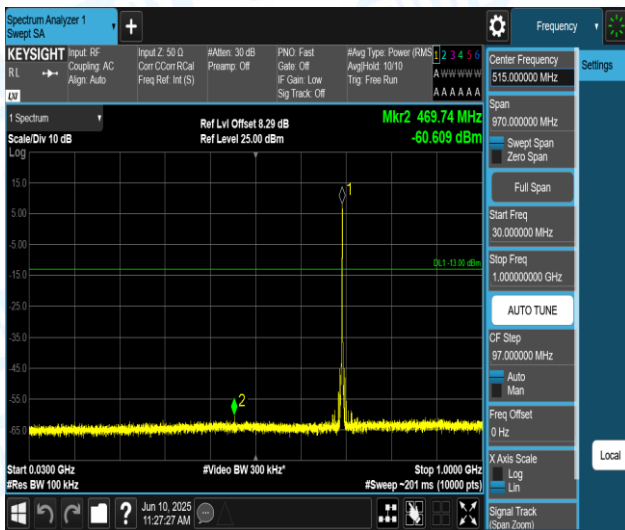
B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 1 5 5 - P A S S

B a n d 1 2 - 5 M H z - 1 6 Q A M - 2 3 1 5 5 - P A S S



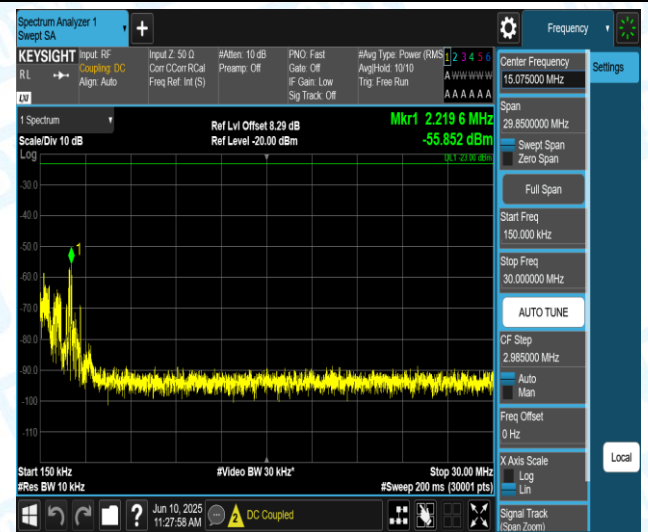
B a n d 1 2 - 1 0 M H z - Q P S K - 2 3 0 6 0 - P A S S

B a n d 1 2 - 1 0 M H z - Q P S K - 2 3 0 6 0 - P A S S



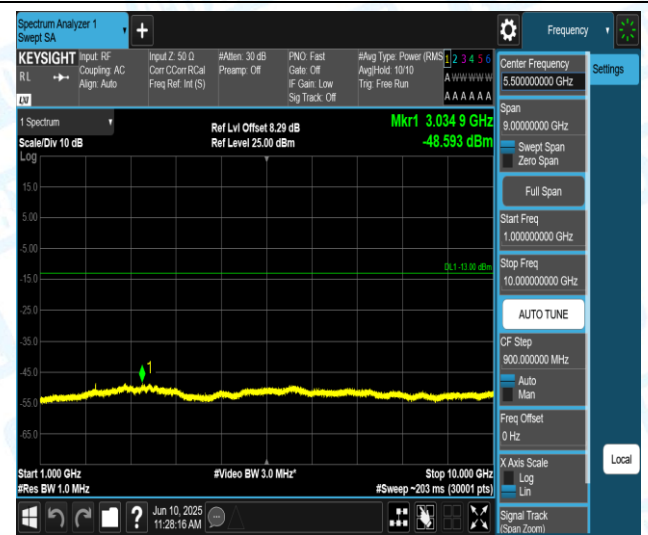
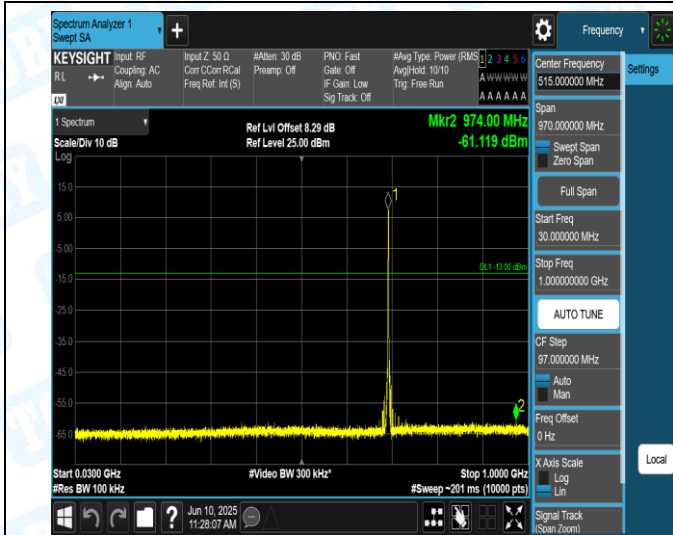
B a n d 1 2 - 1 0 M H z - Q P S K - 2 3 0 6 0 - P A S S

B a n d 1 2 - 1 0 M H z - Q P S K - 2 3 0 6 0 - P A S S



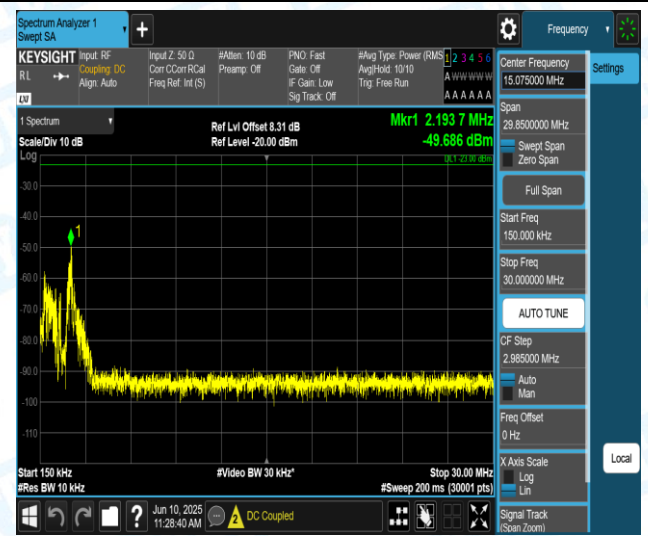
B a n d 1 2 - 1 0 M H z - 1 6 Q A M - 2 3 0 6 0 - P A S S

B a n d 1 2 - 1 0 M H z - 1 6 Q A M - 2 3 0 6 0 - P A S S



Band 12 - 10 MHz - 16 QAM - 23060 - PASS

Band 12 - 10 MHz - 16 QAM - 23060 - PASS



Band 12 - 10 MHz - QPSK - 23095 - PASS

Band 12 - 10 MHz - QPSK - 23095 - PASS



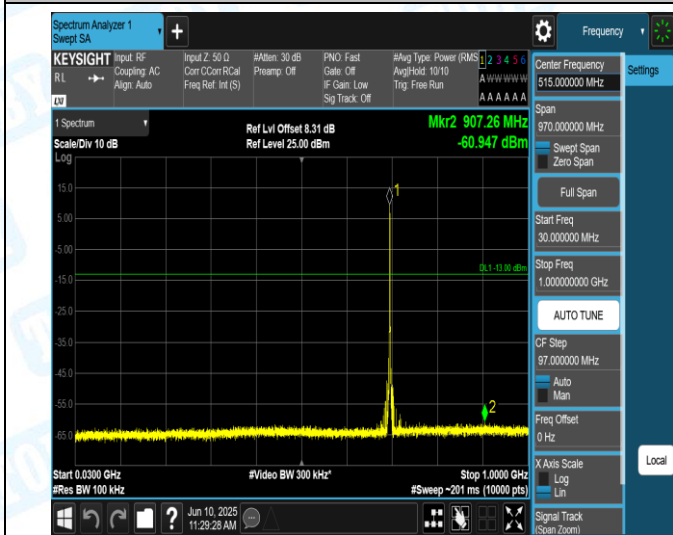
Band 12 - 10 MHz - QPSK - 23095 - PASS

Band 12 - 10 MHz - QPSK - 23095 - PASS



Band 12 - 10 MHz - 16 QAM - 23095 - PASS

Band 12 - 10 MHz - 16 QAM - 23095 - PASS



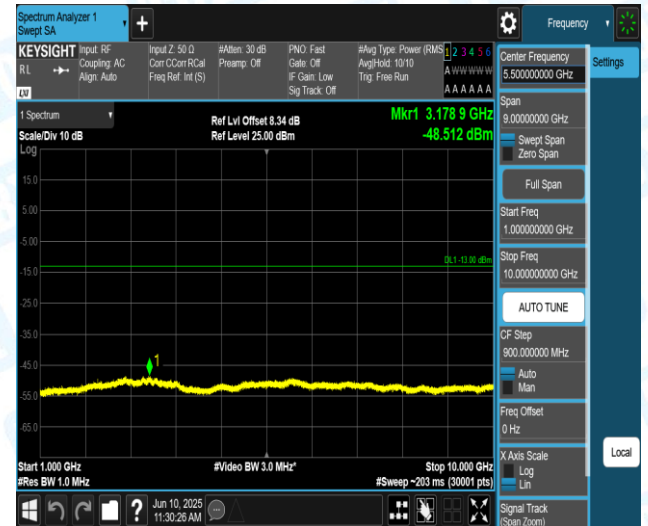
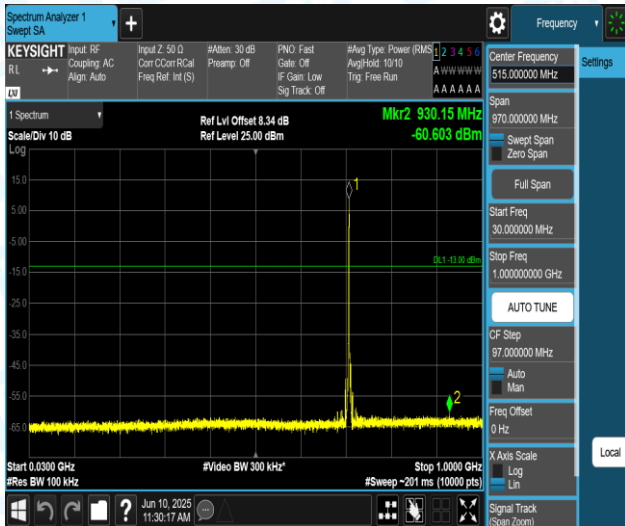
Band 12 - 10 MHz - 16 QAM - 23095 - PASS

Band 12 - 10 MHz - 16 QAM - 23095 - PASS



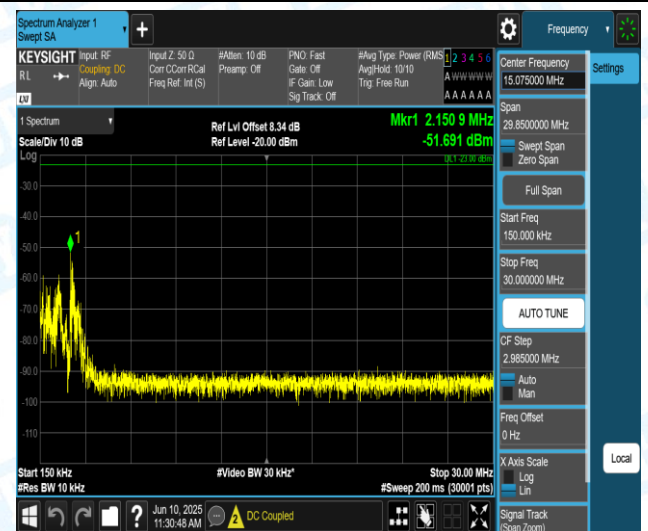
Band 12 - 10 MHz - QPSK - 23130 - PASS

Band 12 - 10 MHz - QPSK - 23130 - PASS



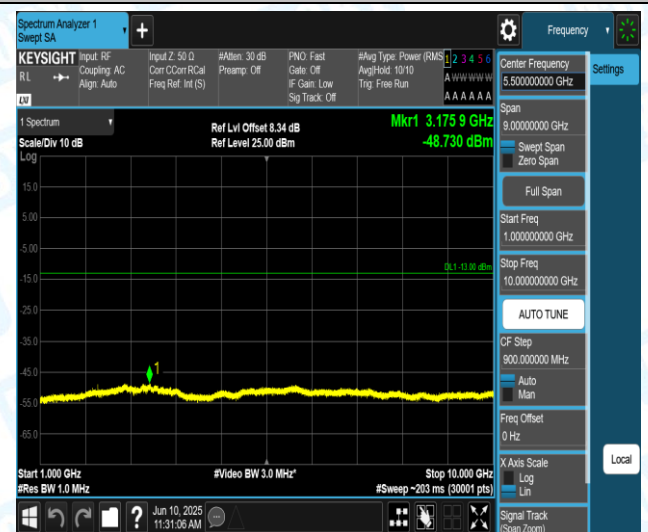
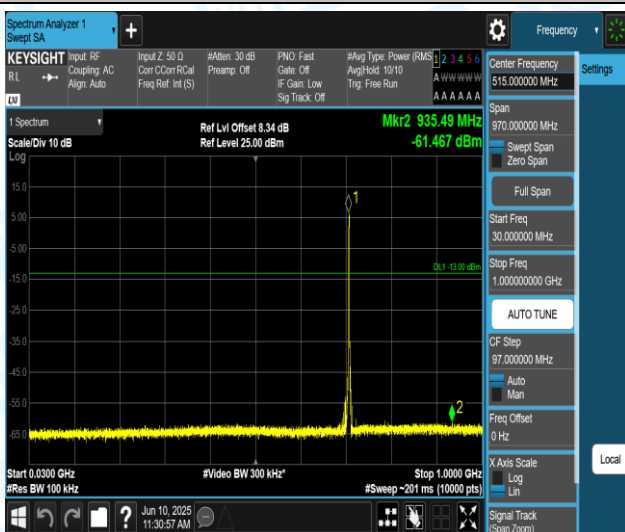
Band 12 - 10 MHz - QPSK - 23130 - PASS

Band 12 - 10 MHz - QPSK - 23130 - PASS



Band 12 - 10 MHz - 16 QAM - 23130 - PASS

Band 12 - 10 MHz - 16 QAM - 23130 - PASS



Band 12 - 10 MHz - 16 QAM - 23130 - PASS

Band 12 - 10 MHz - 16 QAM - 23130 - PASS

6: Frequency Stability for M1

Test Result

Voltage												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	1.4MHz	QPSK	23017	6	0	Low	VN	NT	-15.78	-0.022553	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	VL	NT	-13.23	-0.018908	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	VH	NT	-15.89	-0.022710	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	VN	NT	-6.05	-0.008647	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	VL	NT	-6.63	-0.009475	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	VH	NT	-5.65	-0.008075	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	VN	NT	-7.78	-0.010996	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	VL	NT	-7.15	-0.010106	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	VH	NT	-8.45	-0.011943	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	VN	NT	-7.39	-0.010445	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	VL	NT	-6.65	-0.009399	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	VH	NT	-6.26	-0.008848	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	VN	NT	-19.02	-0.026590	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	VL	NT	-19.11	-0.026716	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	VH	NT	-16.67	-0.023305	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	VN	NT	-18.16	-0.025388	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	VL	NT	-16.83	-0.023529	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	VH	NT	-15.78	-0.022061	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	VN	NT	-3.80	-0.005425	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	VL	NT	3.14	0.004483	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	VH	NT	3.49	0.004982	±2.5	PASS
Band12	3MHz	16QAM	23025	6	0	Low	VN	NT	3.92	0.005596	±2.5	PASS
Band12	3MHz	16QAM	23025	6	0	Low	VL	NT	4.12	0.005882	±2.5	PASS
Band12	3MHz	16QAM	23025	6	0	Low	VH	NT	3.91	0.005582	±2.5	PASS
Band12	3MHz	QPSK	23095	6	0	Low	VN	NT	-7.60	-0.010742	±2.5	PASS
Band12	3MHz	QPSK	23095	6	0	Low	VL	NT	-5.60	-0.007915	±2.5	PASS
Band12	3MHz	QPSK	23095	6	0	Low	VH	NT	-8.00	-0.011307	±2.5	PASS
Band12	3MHz	16QAM	23095	6	0	Low	VN	NT	-8.15	-0.011519	±2.5	PASS
Band12	3MHz	16QAM	23095	6	0	Low	VL	NT	-7.77	-0.010982	±2.5	PASS
Band12	3MHz	16QAM	23095	6	0	Low	VH	NT	-6.08	-0.008594	±2.5	PASS
Band12	3MHz	QPSK	23165	6	0	High	VN	NT	-7.83	-0.010959	±2.5	PASS
Band12	3MHz	QPSK	23165	6	0	High	VL	NT	-7.39	-0.010343	±2.5	PASS
Band12	3MHz	QPSK	23165	6	0	High	VH	NT	8.69	0.012162	±2.5	PASS
Band12	3MHz	16QAM	23165	6	0	High	VN	NT	7.40	0.010357	±2.5	PASS
Band12	3MHz	16QAM	23165	6	0	High	VL	NT	6.13	0.008579	±2.5	PASS
Band12	3MHz	16QAM	23165	6	0	High	VH	NT	-7.13	-0.009979	±2.5	PASS
Band12	5MHz	QPSK	23035	6	0	Low	VN	NT	-4.58	-0.006529	±2.5	PASS

Band12	5MHz	QPSK	23035	6	0	Low	VL	NT	-5.52	-0.007869	±2.5	PASS
Band12	5MHz	QPSK	23035	6	0	Low	VH	NT	-3.88	-0.005531	±2.5	PASS
Band12	5MHz	16QAM	23035	6	0	Low	VN	NT	-4.97	-0.007085	±2.5	PASS
Band12	5MHz	16QAM	23035	6	0	Low	VL	NT	-4.51	-0.006429	±2.5	PASS
Band12	5MHz	16QAM	23035	6	0	Low	VH	NT	-4.67	-0.006657	±2.5	PASS
Band12	5MHz	QPSK	23095	6	0	Low	VN	NT	-4.33	-0.006120	±2.5	PASS
Band12	5MHz	QPSK	23095	6	0	Low	VL	NT	-4.32	-0.006106	±2.5	PASS
Band12	5MHz	QPSK	23095	6	0	Low	VH	NT	-5.15	-0.007279	±2.5	PASS
Band12	5MHz	16QAM	23095	6	0	Low	VN	NT	-5.67	-0.008014	±2.5	PASS
Band12	5MHz	16QAM	23095	6	0	Low	VL	NT	-4.34	-0.006134	±2.5	PASS
Band12	5MHz	16QAM	23095	6	0	Low	VH	NT	-5.20	-0.007350	±2.5	PASS
Band12	5MHz	QPSK	23155	6	0	High	VN	NT	-6.08	-0.008521	±2.5	PASS
Band12	5MHz	QPSK	23155	6	0	High	VL	NT	-6.39	-0.008956	±2.5	PASS
Band12	5MHz	QPSK	23155	6	0	High	VH	NT	-7.02	-0.009839	±2.5	PASS
Band12	5MHz	16QAM	23155	6	0	High	VN	NT	-8.50	-0.011913	±2.5	PASS
Band12	5MHz	16QAM	23155	6	0	High	VL	NT	-7.77	-0.010890	±2.5	PASS
Band12	5MHz	16QAM	23155	6	0	High	VH	NT	-5.62	-0.007877	±2.5	PASS
Band12	10MHz	QPSK	23060	6	0	Low	VN	NT	8.87	0.012599	±2.5	PASS
Band12	10MHz	QPSK	23060	6	0	Low	VL	NT	8.22	0.011676	±2.5	PASS
Band12	10MHz	QPSK	23060	6	0	Low	VH	NT	7.83	0.011122	±2.5	PASS
Band12	10MHz	16QAM	23060	6	0	Low	VN	NT	7.82	0.011108	±2.5	PASS
Band12	10MHz	16QAM	23060	6	0	Low	VL	NT	9.87	0.014020	±2.5	PASS
Band12	10MHz	16QAM	23060	6	0	Low	VH	NT	10.13	0.014389	±2.5	PASS
Band12	10MHz	QPSK	23095	6	0	Low	VN	NT	3.23	0.004565	±2.5	PASS
Band12	10MHz	QPSK	23095	6	0	Low	VL	NT	4.36	0.006163	±2.5	PASS
Band12	10MHz	QPSK	23095	6	0	Low	VH	NT	3.38	0.004777	±2.5	PASS
Band12	10MHz	16QAM	23095	6	0	Low	VN	NT	3.69	0.005216	±2.5	PASS
Band12	10MHz	16QAM	23095	6	0	Low	VL	NT	2.89	0.004085	±2.5	PASS
Band12	10MHz	16QAM	23095	6	0	Low	VH	NT	3.85	0.005442	±2.5	PASS
Band12	10MHz	QPSK	23130	6	0	High	VN	NT	-3.48	-0.004895	±2.5	PASS
Band12	10MHz	QPSK	23130	6	0	High	VL	NT	4.49	0.006315	±2.5	PASS
Band12	10MHz	QPSK	23130	6	0	High	VH	NT	3.58	0.005035	±2.5	PASS
Band12	10MHz	16QAM	23130	6	0	High	VN	NT	4.46	0.006273	±2.5	PASS
Band12	10MHz	16QAM	23130	6	0	High	VL	NT	4.28	0.006020	±2.5	PASS
Band12	10MHz	16QAM	23130	6	0	High	VH	NT	3.29	0.004627	±2.5	PASS

Temperature												
Band	Bandwidth	Modulation	Channel	RB Size	RB Start	NB Index	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	-10	-19.44	-0.027783	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	0	-15.77	-0.022538	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	10	-14.33	-0.020480	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	20	-16.95	-0.024225	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	30	-6.06	-0.008661	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	40	-16.53	-0.023624	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6	0	Low	NV	50	-6.62	-0.009461	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	-10	-7.25	-0.010362	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	0	-8.77	-0.012534	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	10	-15.18	-0.021695	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	20	-7.25	-0.010362	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	30	-7.86	-0.011233	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	40	-8.27	-0.011819	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6	0	Low	NV	50	-7.89	-0.011276	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	-10	-8.02	-0.011336	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	0	-7.25	-0.010247	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	10	-7.18	-0.010148	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	20	-8.30	-0.011731	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	30	-5.38	-0.007604	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	40	-8.18	-0.011562	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6	0	Low	NV	50	-5.80	-0.008198	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	-10	-9.00	-0.012721	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	0	-7.62	-0.010770	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	10	-7.63	-0.010784	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	20	-6.80	-0.009611	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	30	-8.00	-0.011307	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	40	-9.68	-0.013682	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6	0	Low	NV	50	-7.20	-0.010177	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	-10	-17.09	-0.023892	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	0	-16.24	-0.022704	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	10	-16.50	-0.023067	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	20	-15.80	-0.022089	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	30	-15.84	-0.022145	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	40	-17.17	-0.024004	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6	0	High	NV	50	-15.59	-0.021795	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	-10	-15.20	-0.021250	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	0	-15.40	-0.021529	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	10	-15.86	-0.022173	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	20	-17.10	-0.023906	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	30	-16.14	-0.022564	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	40	-16.66	-0.023291	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6	0	High	NV	50	-17.31	-0.024200	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	-10	3.37	0.004811	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	0	-3.99	-0.005696	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	10	-3.65	-0.005211	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	20	-3.36	-0.004797	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	30	-4.27	-0.006096	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	40	2.73	0.003897	±2.5	PASS
Band12	3MHz	QPSK	23025	6	0	Low	NV	50	-4.20	-0.005996	±2.5	PASS
Band12	3MHz	16QAM	23025	6	0	Low	NV	-10	-2.76	-0.003940	±2.5	PASS