







Appendix F: Frequency Stability

Test Result

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
BandName	Bandwidth	Modulation	Channel	RBcfg	VolValue	TempValue	ValueHz	ValuePpm	Limit	Verdict

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	14.72	0.021038	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	-20	30.57	0.043690	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	-10	22.00	0.031442	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	0	15.02	0.021466	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	10	13.82	0.019751	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	20	28.57	0.040832	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	30	27.62	0.039474	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	40	8.91	0.012734	±2.5	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	NV	50	14.71	0.021023	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	-30	28.31	0.040014	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	-20	29.43	0.041597	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	-10	26.71	0.037753	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	0	21.93	0.030996	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	10	20.24	0.028608	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	20	17.97	0.025399	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	30	23.26	0.032876	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	40	22.00	0.031095	±2.5	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	NV	50	13.82	0.019534	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	-30	28.65	0.040053	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	-20	26.68	0.037299	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	-10	27.25	0.038096	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	0	20.63	0.028841	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	10	31.63	0.044219	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	20	30.17	0.042178	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	30	27.51	0.038459	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	40	28.28	0.039536	±2.5	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	NV	50	28.71	0.040137	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	-30	-9.96	-0.014235	±2.5	PASS

Band12	1.4MHz	16QAM	23017	6RB#0	NV	-20	-8.10	-0.011576	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	-10	-29.68	-0.042418	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	0	-29.77	-0.042547	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	10	-20.81	-0.029741	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	20	-22.26	-0.031814	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	30	-20.46	-0.029241	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	40	-12.82	-0.018322	±2.5	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	NV	50	-23.43	-0.033486	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	-30	-6.38	-0.009018	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	-20	-28.90	-0.040848	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	-10	-13.53	-0.019124	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	0	-30.26	-0.042770	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	10	13.56	0.019166	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	20	16.52	0.023350	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	30	-27.19	-0.038431	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	40	-5.19	-0.007336	±2.5	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	NV	50	-4.82	-0.006813	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	-30	-14.42	-0.020159	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	-20	15.41	0.021543	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	-10	-20.07	-0.028058	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	0	-24.02	-0.033580	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	10	24.39	0.034098	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	20	-11.19	-0.015644	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	30	8.45	0.011813	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	40	3.16	0.004418	±2.5	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	NV	50	-7.72	-0.010793	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	-30	29.50	0.042113	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	-20	17.17	0.024511	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	-10	28.81	0.041128	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	0	26.68	0.038087	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	10	22.89	0.032677	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	20	14.55	0.020771	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	30	22.53	0.032163	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	40	28.34	0.040457	±2.5	PASS
Band12	3MHz	QPSK	23025	15RB#0	NV	50	7.40	0.010564	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	-30	15.61	0.022064	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	-20	15.01	0.021216	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	-10	15.23	0.021527	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	0	3.38	0.004777	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	10	27.75	0.039223	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	20	16.02	0.022643	±2.5	PASS

Band12	3MHz	QPSK	23095	15RB#0	NV	30	24.60	0.034770	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	40	14.71	0.020792	±2.5	PASS
Band12	3MHz	QPSK	23095	15RB#0	NV	50	20.08	0.028382	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	-30	29.85	0.041777	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	-20	26.89	0.037635	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	-10	30.67	0.042925	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	0	11.22	0.015703	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	10	10.90	0.015255	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	20	18.95	0.026522	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	30	11.90	0.016655	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	40	7.47	0.010455	±2.5	PASS
Band12	3MHz	QPSK	23165	15RB#0	NV	50	27.98	0.039160	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	-30	-25.95	-0.037045	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	-20	-15.34	-0.021899	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	-10	-30.33	-0.043298	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	0	11.23	0.016031	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	10	-22.16	-0.031635	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	20	-26.61	-0.037987	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	30	-20.51	-0.029279	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	40	-16.77	-0.023940	±2.5	PASS
Band12	3MHz	16QAM	23025	15RB#0	NV	50	-31.11	-0.044411	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	-30	-20.89	-0.029527	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	-20	-19.23	-0.027180	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	-10	-17.04	-0.024085	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	0	-17.60	-0.024876	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	10	-8.61	-0.012170	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	20	-19.40	-0.027420	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	30	-3.43	-0.004848	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	40	-7.14	-0.010092	±2.5	PASS
Band12	3MHz	16QAM	23095	15RB#0	NV	50	-9.07	-0.012820	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	-30	-21.76	-0.030455	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	-20	21.87	0.030609	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	-10	5.34	0.007474	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	0	-18.00	-0.025192	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	10	-18.53	-0.025934	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	20	-8.44	-0.011812	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	30	15.36	0.021498	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	40	21.19	0.029657	±2.5	PASS
Band12	3MHz	16QAM	23165	15RB#0	NV	50	-16.28	-0.022785	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	-30	3.91	0.005574	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	-20	3.45	0.004918	±2.5	PASS

Band12	5MHz	QPSK	23035	25RB#0	NV	-10	4.63	0.006600	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	0	3.00	0.004277	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	10	3.99	0.005688	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	20	2.46	0.003507	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	30	5.24	0.007470	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	40	2.85	0.004063	±2.5	PASS
Band12	5MHz	QPSK	23035	25RB#0	NV	50	-2.66	-0.003792	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	-30	1.80	0.002544	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	-20	2.15	0.003039	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	-10	1.57	0.002219	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	0	1.72	0.002431	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	10	2.65	0.003746	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	20	1.83	0.002587	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	30	3.83	0.005413	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	40	2.52	0.003562	±2.5	PASS
Band12	5MHz	QPSK	23095	25RB#0	NV	50	3.71	0.005244	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	-30	2.95	0.004135	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	-20	2.10	0.002943	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	-10	2.32	0.003252	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	0	-2.49	-0.003490	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	10	2.59	0.003630	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	20	3.35	0.004695	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	30	2.13	0.002985	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	40	2.55	0.003574	±2.5	PASS
Band12	5MHz	QPSK	23155	25RB#0	NV	50	2.68	0.003756	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	-30	1.37	0.001953	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	-20	1.85	0.002637	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	-10	1.80	0.002566	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	0	2.59	0.003692	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	10	-2.16	-0.003079	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	20	-1.19	-0.001696	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	30	1.89	0.002694	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	40	2.63	0.003749	±2.5	PASS
Band12	5MHz	16QAM	23035	25RB#0	NV	50	-2.53	-0.003607	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	-30	-2.15	-0.003039	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	-20	2.37	0.003350	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	-10	3.06	0.004325	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	0	-1.49	-0.002106	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	10	-1.10	-0.001555	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	20	1.80	0.002544	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	30	-2.56	-0.003618	±2.5	PASS

Band12	5MHz	16QAM	23095	25RB#0	NV	40	2.13	0.003011	±2.5	PASS
Band12	5MHz	16QAM	23095	25RB#0	NV	50	1.52	0.002148	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	-30	1.69	0.002369	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	-20	1.57	0.002200	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	-10	0.97	0.001359	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	0	3.08	0.004317	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	10	-2.07	-0.002901	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	20	-1.62	-0.002270	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	30	-1.40	-0.001962	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	40	-2.25	-0.003153	±2.5	PASS
Band12	5MHz	16QAM	23155	25RB#0	NV	50	1.32	0.001850	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-30	-2.78	-0.003949	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-20	-1.75	-0.002486	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	-10	-2.83	-0.004020	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	0	-2.88	-0.004091	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	10	-2.12	-0.003011	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	20	-1.89	-0.002685	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	30	2.92	0.004148	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	40	-2.69	-0.003821	±2.5	PASS
Band12	10MHz	QPSK	23060	50RB#0	NV	50	-1.59	-0.002259	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-30	1.44	0.002035	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-20	-2.17	-0.003067	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	-10	2.73	0.003859	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	0	-1.44	-0.002035	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	10	2.27	0.003208	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	20	2.56	0.003618	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	30	1.79	0.002530	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	40	1.70	0.002403	±2.5	PASS
Band12	10MHz	QPSK	23095	50RB#0	NV	50	-2.43	-0.003435	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-30	-4.33	-0.006090	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-20	-3.20	-0.004501	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	-10	-2.43	-0.003418	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	0	-1.39	-0.001955	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	10	-2.43	-0.003418	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	20	-2.49	-0.003502	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	30	-1.70	-0.002391	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	40	-2.30	-0.003235	±2.5	PASS
Band12	10MHz	QPSK	23130	50RB#0	NV	50	-2.79	-0.003924	±2.5	PASS

Appendix G: Modulation Characteristics

Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Verdict
Band12	1.4MHz	QPSK	23017	6RB#0	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	PASS
Band12	3MHz	QPSK	23025	15RB#0	PASS
Band12	3MHz	QPSK	23095	15RB#0	PASS
Band12	3MHz	QPSK	23165	15RB#0	PASS
Band12	3MHz	16QAM	23025	15RB#0	PASS
Band12	3MHz	16QAM	23095	15RB#0	PASS
Band12	3MHz	16QAM	23165	15RB#0	PASS
Band12	5MHz	QPSK	23035	25RB#0	PASS
Band12	5MHz	QPSK	23095	25RB#0	PASS
Band12	5MHz	QPSK	23155	25RB#0	PASS
Band12	5MHz	16QAM	23035	25RB#0	PASS
Band12	5MHz	16QAM	23095	25RB#0	PASS
Band12	5MHz	16QAM	23155	25RB#0	PASS
Band12	10MHz	QPSK	23060	50RB#0	PASS
Band12	10MHz	QPSK	23095	50RB#0	PASS
Band12	10MHz	QPSK	23130	50RB#0	PASS
Band12	10MHz	16QAM	23060	1RB#0	PASS
Band12	10MHz	16QAM	23095	1RB#0	PASS
Band12	10MHz	16QAM	23130	1RB#0	PASS

Test Graphs







