

LTE Cat NB Appendix-Frequency Stability

Band: 2 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	15.030	0.0081	/	Pass
					3.8	-5.360	-0.0029	/	Pass
					4.3	0.330	0.0002	/	Pass
				-30	3.8	0.306	0.0002	/	Pass
				-20	3.8	3.037	0.0016	/	Pass
				-10	3.8	0.399	0.0002	/	Pass
				0	3.8	4.541	0.0025	/	Pass
				10	3.8	-0.682	-0.0004	/	Pass
				30	3.8	-4.718	-0.0026	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	1.105	0.0006	/	Pass
	M	1	0	20	3.3	4.512	0.0024	/	Pass
					3.8	-0.888	-0.0005	/	Pass
					4.3	-0.996	-0.0005	/	Pass
				-30	3.8	-0.113	-0.0001	/	Pass
				-20	3.8	-0.266	-0.0001	/	Pass
				-10	3.8	1.178	0.0006	/	Pass
				0	3.8	4.221	0.0022	/	Pass
				10	3.8	-3.952	-0.0021	/	Pass
				30	3.8	-2.854	-0.0015	/	Pass
				40	3.8	-3.826	-0.002	/	Pass
				50	3.8	3.351	0.0018	/	Pass
	H	1	47	20	3.3	-0.967	-0.0005	/	Pass
					3.8	-3.171	-0.0017	/	Pass
					4.3	-3.422	-0.0018	/	Pass
				-30	3.8	0.286	0.0001	/	Pass
				-20	3.8	-3.980	-0.0021	/	Pass
				-10	3.8	1.715	0.0009	/	Pass
				0	3.8	1.423	0.0007	/	Pass
				10	3.8	-4.947	-0.0026	/	Pass
				30	3.8	1.096	0.0006	/	Pass
				40	3.8	-3.155	-0.0017	/	Pass
				50	3.8	4.033	0.0021	/	Pass
BPSK	L	1	0	20	3.3	15.030	0.0081	/	Pass
					3.8	-5.360	-0.0029	/	Pass
					4.3	0.330	0.0002	/	Pass
				-30	3.8	0.306	0.0002	/	Pass
				-20	3.8	3.037	0.0016	/	Pass
				-10	3.8	0.399	0.0002	/	Pass
				0	3.8	4.541	0.0025	/	Pass
				10	3.8	-0.682	-0.0004	/	Pass
				30	3.8	-4.718	-0.0026	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	1.105	0.0006	/	Pass
	M	1	0	20	3.3	4.512	0.0024	/	Pass
					3.8	-0.888	-0.0005	/	Pass
					4.3	-0.996	-0.0005	/	Pass
				-30	3.8	-0.113	-0.0001	/	Pass
				-20	3.8	-0.266	-0.0001	/	Pass
				-10	3.8	1.178	0.0006	/	Pass
				0	3.8	4.221	0.0022	/	Pass

				10	3.8	-3.952	-0.0021	/	Pass
				30	3.8	-2.854	-0.0015	/	Pass
				40	3.8	-3.826	-0.002	/	Pass
				50	3.8	3.351	0.0018	/	Pass
	H	1	47	20	3.3	-0.967	-0.0005	/	Pass
					3.8	-3.171	-0.0017	/	Pass
					4.3	-3.422	-0.0018	/	Pass
				-30	3.8	0.286	0.0001	/	Pass
				-20	3.8	-3.980	-0.0021	/	Pass
				-10	3.8	1.715	0.0009	/	Pass
				0	3.8	1.423	0.0007	/	Pass
				10	3.8	-4.947	-0.0026	/	Pass
				30	3.8	1.096	0.0006	/	Pass
				40	3.8	-3.155	-0.0017	/	Pass
				50	3.8	4.033	0.0021	/	Pass

Band: 2 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	15.030	0.0081	/	Pass
					3.8	-5.360	-0.0029	/	Pass
					4.3	0.330	0.0002	/	Pass
				-30	3.8	0.672	0.0004	/	Pass
				-20	3.8	1.143	0.0006	/	Pass
				-10	3.8	-1.849	-0.001	/	Pass
				0	3.8	2.525	0.0014	/	Pass
				10	3.8	-3.643	-0.002	/	Pass
				30	3.8	-0.372	-0.0002	/	Pass
				40	3.8	-0.091	0	/	Pass
				50	3.8	2.272	0.0012	/	Pass
	M	12	0	20	3.3	1.576	0.0008	/	Pass
					3.8	-0.858	-0.0005	/	Pass
					4.3	1.349	0.0007	/	Pass
				-30	3.8	3.567	0.0019	/	Pass
				-20	3.8	1.973	0.001	/	Pass
				-10	3.8	-0.999	-0.0005	/	Pass
				0	3.8	2.985	0.0016	/	Pass
				10	3.8	4.629	0.0025	/	Pass
				30	3.8	-4.454	-0.0024	/	Pass
				40	3.8	-2.625	-0.0014	/	Pass
				50	3.8	-2.275	-0.0012	/	Pass
	H	12	0	20	3.3	-3.037	-0.0016	/	Pass
					3.8	3.785	0.002	/	Pass
					4.3	-2.846	-0.0015	/	Pass
				-30	3.8	4.767	0.0025	/	Pass
				-20	3.8	-0.640	-0.0003	/	Pass
				-10	3.8	1.061	0.0006	/	Pass
				0	3.8	1.113	0.0006	/	Pass
				10	3.8	-4.493	-0.0024	/	Pass
				30	3.8	-4.623	-0.0024	/	Pass
				40	3.8	-1.785	-0.0009	/	Pass
				50	3.8	-3.656	-0.0019	/	Pass
BPSK	L	1	0	20	3.3	15.030	0.0081	/	Pass
					3.8	-5.360	-0.0029	/	Pass
					4.3	0.330	0.0002	/	Pass
				-30	3.8	0.672	0.0004	/	Pass
				-20	3.8	1.143	0.0006	/	Pass
				-10	3.8	-1.849	-0.001	/	Pass

				0	3.8	2.525	0.0014	/	Pass
				10	3.8	-3.643	-0.002	/	Pass
				30	3.8	-0.372	-0.0002	/	Pass
				40	3.8	-0.091	0	/	Pass
				50	3.8	2.272	0.0012	/	Pass
	M	1	0	20	3.3	1.576	0.0008	/	Pass
					3.8	-0.858	-0.0005	/	Pass
					4.3	1.349	0.0007	/	Pass
				-30	3.8	3.567	0.0019	/	Pass
				-20	3.8	1.973	0.001	/	Pass
				-10	3.8	-0.999	-0.0005	/	Pass
				0	3.8	2.985	0.0016	/	Pass
				10	3.8	4.629	0.0025	/	Pass
				30	3.8	-4.454	-0.0024	/	Pass
				40	3.8	-2.625	-0.0014	/	Pass
				50	3.8	-2.275	-0.0012	/	Pass
	H	1	47	20	3.3	-3.037	-0.0016	/	Pass
					3.8	3.785	0.002	/	Pass
					4.3	-2.846	-0.0015	/	Pass
				-30	3.8	4.767	0.0025	/	Pass
				-20	3.8	-0.640	-0.0003	/	Pass
				-10	3.8	1.061	0.0006	/	Pass
				0	3.8	1.113	0.0006	/	Pass
				10	3.8	-4.493	-0.0024	/	Pass
				30	3.8	-4.623	-0.0024	/	Pass
				40	3.8	-1.785	-0.0009	/	Pass
				50	3.8	-3.656	-0.0019	/	Pass

Band: 4 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	1.200	0.0007	/	Pass
					3.8	-7.580	-0.0044	/	Pass
					4.3	-1.660	-0.001	/	Pass
				-30	3.8	2.591	0.0015	/	Pass
				-20	3.8	-1.235	-0.0007	/	Pass
				-10	3.8	-4.496	-0.0026	/	Pass
				0	3.8	2.541	0.0015	/	Pass
				10	3.8	1.638	0.001	/	Pass
				30	3.8	-3.441	-0.002	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	4.543	0.0027	/	Pass
	M	1	0	20	3.3	-3.890	-0.0022	/	Pass
					3.8	3.837	0.0022	/	Pass
					4.3	3.245	0.0019	/	Pass
				-30	3.8	0.715	0.0004	/	Pass
				-20	3.8	3.396	0.002	/	Pass
				-10	3.8	-0.482	-0.0003	/	Pass
				0	3.8	-0.146	-0.0001	/	Pass
				10	3.8	2.069	0.0012	/	Pass
				30	3.8	2.421	0.0014	/	Pass
				40	3.8	-4.389	-0.0025	/	Pass
				50	3.8	1.109	0.0006	/	Pass
	H	1	47	20	3.3	0.254	0.0001	/	Pass
					3.8	-2.090	-0.0012	/	Pass
					4.3	-0.100	-0.0001	/	Pass
				-30	3.8	-2.130	-0.0012	/	Pass
				-20	3.8	-4.536	-0.0026	/	Pass
				-10	3.8	2.664	0.0015	/	Pass
				0	3.8	0.218	0.0001	/	Pass
				10	3.8	0.559	0.0003	/	Pass
				30	3.8	1.727	0.001	/	Pass
				40	3.8	0.184	0.0001	/	Pass
				50	3.8	3.014	0.0017	/	Pass
BPSK	L	1	0	20	3.3	1.200	0.0007	/	Pass
					3.8	-7.580	-0.0044	/	Pass
					4.3	-1.660	-0.001	/	Pass
				-30	3.8	2.591	0.0015	/	Pass
				-20	3.8	-1.235	-0.0007	/	Pass
				-10	3.8	-4.496	-0.0026	/	Pass
				0	3.8	2.541	0.0015	/	Pass
				10	3.8	1.638	0.001	/	Pass
				30	3.8	-3.441	-0.002	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	4.543	0.0027	/	Pass
	M	1	0	20	3.3	-3.890	-0.0022	/	Pass
					3.8	3.837	0.0022	/	Pass
					4.3	3.245	0.0019	/	Pass
				-30	3.8	0.715	0.0004	/	Pass
				-20	3.8	3.396	0.002	/	Pass
				-10	3.8	-0.482	-0.0003	/	Pass
				0	3.8	-0.146	-0.0001	/	Pass
				10	3.8	2.069	0.0012	/	Pass
				30	3.8	2.421	0.0014	/	Pass
				40	3.8	-4.389	-0.0025	/	Pass

	H	1	47	50	3.8	1.109	0.0006	/	Pass
				20	3.3	0.254	0.0001	/	Pass
					3.8	-2.090	-0.0012	/	Pass
					4.3	-0.100	-0.0001	/	Pass
				-30	3.8	-2.130	-0.0012	/	Pass
				-20	3.8	-4.536	-0.0026	/	Pass
				-10	3.8	2.664	0.0015	/	Pass
				0	3.8	0.218	0.0001	/	Pass
				10	3.8	0.559	0.0003	/	Pass
				30	3.8	1.727	0.001	/	Pass
				40	3.8	0.184	0.0001	/	Pass
				50	3.8	3.014	0.0017	/	Pass

Band: 4 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	5.960	0.0035	/	Pass
					3.8	-7.580	-0.0044	/	Pass
					4.3	-1.660	-0.001	/	Pass
				-30	3.8	-4.816	-0.0028	/	Pass
				-20	3.8	2.529	0.0015	/	Pass
				-10	3.8	-2.703	-0.0016	/	Pass
				0	3.8	1.123	0.0007	/	Pass
				10	3.8	-3.184	-0.0019	/	Pass
				30	3.8	1.841	0.0011	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	2.177	0.0013	/	Pass
	M	12	0	20	3.3	-1.966	-0.0011	/	Pass
					3.8	3.792	0.0022	/	Pass
					4.3	-2.037	-0.0012	/	Pass
				-30	3.8	0.603	0.0003	/	Pass
				-20	3.8	-0.256	-0.0001	/	Pass
				-10	3.8	-2.536	-0.0015	/	Pass
				0	3.8	-2.981	-0.0017	/	Pass
				10	3.8	4.580	0.0026	/	Pass
				30	3.8	1.038	0.0006	/	Pass
				40	3.8	4.903	0.0028	/	Pass
				50	3.8	2.699	0.0016	/	Pass
	H	12	0	20	3.3	3.211	0.0018	/	Pass
					3.8	2.167	0.0012	/	Pass
					4.3	0.493	0.0003	/	Pass
				-30	3.8	-1.559	-0.0009	/	Pass
				-20	3.8	3.613	0.0021	/	Pass
				-10	3.8	1.471	0.0008	/	Pass
				0	3.8	2.000	0.0011	/	Pass
				10	3.8	-3.443	-0.002	/	Pass
				30	3.8	-1.935	-0.0011	/	Pass
				40	3.8	3.914	0.0022	/	Pass
				50	3.8	1.272	0.0007	/	Pass
BPSK	L	1	0	20	3.3	5.960	0.0035	/	Pass
					3.8	-7.580	-0.0044	/	Pass
					4.3	-1.660	-0.001	/	Pass
				-30	3.8	-4.816	-0.0028	/	Pass
				-20	3.8	2.529	0.0015	/	Pass
				-10	3.8	-2.703	-0.0016	/	Pass
				0	3.8	1.123	0.0007	/	Pass
				10	3.8	-3.184	-0.0019	/	Pass
				30	3.8	1.841	0.0011	/	Pass

				40	3.8	0.320	0.0002	/	Pass
				50	3.8	2.177	0.0013	/	Pass
	M	1	0	20	3.3	-1.966	-0.0011	/	Pass
					3.8	3.792	0.0022	/	Pass
					4.3	-2.037	-0.0012	/	Pass
				-30	3.8	0.603	0.0003	/	Pass
				-20	3.8	-0.256	-0.0001	/	Pass
				-10	3.8	-2.536	-0.0015	/	Pass
				0	3.8	-2.981	-0.0017	/	Pass
				10	3.8	4.580	0.0026	/	Pass
				30	3.8	1.038	0.0006	/	Pass
				40	3.8	4.903	0.0028	/	Pass
				50	3.8	2.699	0.0016	/	Pass
	H	1	47	20	3.3	3.211	0.0018	/	Pass
					3.8	2.167	0.0012	/	Pass
					4.3	0.493	0.0003	/	Pass
				-30	3.8	-1.559	-0.0009	/	Pass
				-20	3.8	3.613	0.0021	/	Pass
				-10	3.8	1.471	0.0008	/	Pass
				0	3.8	2.000	0.0011	/	Pass
				10	3.8	-3.443	-0.002	/	Pass
				30	3.8	-1.935	-0.0011	/	Pass
				40	3.8	3.914	0.0022	/	Pass
				50	3.8	1.272	0.0007	/	Pass

Band: 5 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	2.450	0.003	-2.5 to 2.5	Pass
					3.8	3.380	0.0041	-2.5 to 2.5	Pass
					4.3	6.530	0.0079	-2.5 to 2.5	Pass
				-30	3.8	-2.799	-0.0034	-2.5 to 2.5	Pass
				-20	3.8	-0.588	-0.0007	-2.5 to 2.5	Pass
				-10	3.8	-2.238	-0.0027	-2.5 to 2.5	Pass
				0	3.8	-0.136	-0.0002	-2.5 to 2.5	Pass
				10	3.8	0.993	0.0012	-2.5 to 2.5	Pass
				30	3.8	1.332	0.0016	-2.5 to 2.5	Pass
				40	3.8	0.320	0.0004	-2.5 to 2.5	Pass
				50	3.8	-4.125	-0.005	-2.5 to 2.5	Pass
	M	1	0	20	3.3	2.935	0.0035	-2.5 to 2.5	Pass
					3.8	-2.357	-0.0028	-2.5 to 2.5	Pass
					4.3	4.509	0.0054	-2.5 to 2.5	Pass
				-30	3.8	1.409	0.0017	-2.5 to 2.5	Pass
				-20	3.8	-3.515	-0.0042	-2.5 to 2.5	Pass
				-10	3.8	-2.136	-0.0026	-2.5 to 2.5	Pass
				0	3.8	2.204	0.0026	-2.5 to 2.5	Pass
				10	3.8	-1.217	-0.0015	-2.5 to 2.5	Pass
				30	3.8	-0.616	-0.0007	-2.5 to 2.5	Pass
				40	3.8	-2.630	-0.0031	-2.5 to 2.5	Pass
				50	3.8	4.405	0.0053	-2.5 to 2.5	Pass
	H	1	47	20	3.3	-4.424	-0.0052	-2.5 to 2.5	Pass
					3.8	-0.568	-0.0007	-2.5 to 2.5	Pass
					4.3	1.300	0.0015	-2.5 to 2.5	Pass
				-30	3.8	-4.822	-0.0057	-2.5 to 2.5	Pass
				-20	3.8	-1.804	-0.0021	-2.5 to 2.5	Pass
				-10	3.8	1.126	0.0013	-2.5 to 2.5	Pass
				0	3.8	1.253	0.0015	-2.5 to 2.5	Pass
				10	3.8	-4.558	-0.0054	-2.5 to 2.5	Pass
				30	3.8	4.716	0.0056	-2.5 to 2.5	Pass
				40	3.8	1.326	0.0016	-2.5 to 2.5	Pass
				50	3.8	4.966	0.0059	-2.5 to 2.5	Pass
BPSK	L	1	0	20	3.3	2.450	0.003	-2.5 to 2.5	Pass
					3.8	3.380	0.0041	-2.5 to 2.5	Pass
					4.3	6.530	0.0079	-2.5 to 2.5	Pass
				-30	3.8	-2.799	-0.0034	-2.5 to 2.5	Pass
				-20	3.8	-0.588	-0.0007	-2.5 to 2.5	Pass
				-10	3.8	-2.238	-0.0027	-2.5 to 2.5	Pass
				0	3.8	-0.136	-0.0002	-2.5 to 2.5	Pass
				10	3.8	0.993	0.0012	-2.5 to 2.5	Pass
				30	3.8	1.332	0.0016	-2.5 to 2.5	Pass
				40	3.8	0.320	0.0004	-2.5 to 2.5	Pass
				50	3.8	-4.125	-0.005	-2.5 to 2.5	Pass
	M	1	0	20	3.3	2.935	0.0035	-2.5 to 2.5	Pass
					3.8	-2.357	-0.0028	-2.5 to 2.5	Pass
					4.3	4.509	0.0054	-2.5 to 2.5	Pass
				-30	3.8	1.409	0.0017	-2.5 to 2.5	Pass
				-20	3.8	-3.515	-0.0042	-2.5 to 2.5	Pass
				-10	3.8	-2.136	-0.0026	-2.5 to 2.5	Pass
				0	3.8	2.204	0.0026	-2.5 to 2.5	Pass
				10	3.8	-1.217	-0.0015	-2.5 to 2.5	Pass
				30	3.8	-0.616	-0.0007	-2.5 to 2.5	Pass
				40	3.8	-2.630	-0.0031	-2.5 to 2.5	Pass

	H	1	47	50	3.8	4.405	0.0053	-2.5 to 2.5	Pass
				20	3.3	-4.424	-0.0052	-2.5 to 2.5	Pass
					3.8	-0.568	-0.0007	-2.5 to 2.5	Pass
					4.3	1.300	0.0015	-2.5 to 2.5	Pass
				-30	3.8	-4.822	-0.0057	-2.5 to 2.5	Pass
				-20	3.8	-1.804	-0.0021	-2.5 to 2.5	Pass
				-10	3.8	1.126	0.0013	-2.5 to 2.5	Pass
				0	3.8	1.253	0.0015	-2.5 to 2.5	Pass
				10	3.8	-4.558	-0.0054	-2.5 to 2.5	Pass
				30	3.8	4.716	0.0056	-2.5 to 2.5	Pass
				40	3.8	1.326	0.0016	-2.5 to 2.5	Pass
				50	3.8	4.966	0.0059	-2.5 to 2.5	Pass

Band: 5 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	2.450	0.003	-2.5 to 2.5	Pass
					3.8	3.380	0.0041	-2.5 to 2.5	Pass
					4.3	6.530	0.0079	-2.5 to 2.5	Pass
				-30	3.8	2.353	0.0029	-2.5 to 2.5	Pass
				-20	3.8	1.414	0.0017	-2.5 to 2.5	Pass
				-10	3.8	4.344	0.0053	-2.5 to 2.5	Pass
				0	3.8	-3.569	-0.0043	-2.5 to 2.5	Pass
				10	3.8	-3.014	-0.0037	-2.5 to 2.5	Pass
				30	3.8	3.898	0.0047	-2.5 to 2.5	Pass
				40	3.8	0.320	0.0004	-2.5 to 2.5	Pass
				50	3.8	-4.766	-0.0058	-2.5 to 2.5	Pass
	M	12	0	20	3.3	-4.670	-0.0056	-2.5 to 2.5	Pass
					3.8	4.825	0.0058	-2.5 to 2.5	Pass
					4.3	2.410	0.0029	-2.5 to 2.5	Pass
				-30	3.8	1.391	0.0017	-2.5 to 2.5	Pass
				-20	3.8	3.954	0.0047	-2.5 to 2.5	Pass
				-10	3.8	-0.367	-0.0004	-2.5 to 2.5	Pass
				0	3.8	3.856	0.0046	-2.5 to 2.5	Pass
				10	3.8	4.789	0.0057	-2.5 to 2.5	Pass
				30	3.8	3.492	0.0042	-2.5 to 2.5	Pass
				40	3.8	-1.271	-0.0015	-2.5 to 2.5	Pass
				50	3.8	-4.246	-0.0051	-2.5 to 2.5	Pass
	H	12	0	20	3.3	-0.689	-0.0008	-2.5 to 2.5	Pass
					3.8	-0.612	-0.0007	-2.5 to 2.5	Pass
					4.3	1.208	0.0014	-2.5 to 2.5	Pass
				-30	3.8	-0.481	-0.0006	-2.5 to 2.5	Pass
				-20	3.8	-2.092	-0.0025	-2.5 to 2.5	Pass
				-10	3.8	2.714	0.0032	-2.5 to 2.5	Pass
				0	3.8	-1.387	-0.0016	-2.5 to 2.5	Pass
				10	3.8	-1.388	-0.0016	-2.5 to 2.5	Pass
				30	3.8	-3.195	-0.0038	-2.5 to 2.5	Pass
				40	3.8	1.175	0.0014	-2.5 to 2.5	Pass
				50	3.8	-4.316	-0.0051	-2.5 to 2.5	Pass
BPSK	L	1	0	20	3.3	2.450	0.003	-2.5 to 2.5	Pass
					3.8	3.380	0.0041	-2.5 to 2.5	Pass
					4.3	6.530	0.0079	-2.5 to 2.5	Pass
				-30	3.8	2.353	0.0029	-2.5 to 2.5	Pass
				-20	3.8	1.414	0.0017	-2.5 to 2.5	Pass
				-10	3.8	4.344	0.0053	-2.5 to 2.5	Pass
				0	3.8	-3.569	-0.0043	-2.5 to 2.5	Pass
				10	3.8	-3.014	-0.0037	-2.5 to 2.5	Pass
				30	3.8	3.898	0.0047	-2.5 to 2.5	Pass

				40	3.8	0.320	0.0004	-2.5 to 2.5	Pass
				50	3.8	-4.766	-0.0058	-2.5 to 2.5	Pass
	M	1	0	20	3.3	-4.670	-0.0056	-2.5 to 2.5	Pass
					3.8	4.825	0.0058	-2.5 to 2.5	Pass
					4.3	2.410	0.0029	-2.5 to 2.5	Pass
				-30	3.8	1.391	0.0017	-2.5 to 2.5	Pass
				-20	3.8	3.954	0.0047	-2.5 to 2.5	Pass
				-10	3.8	-0.367	-0.0004	-2.5 to 2.5	Pass
				0	3.8	3.856	0.0046	-2.5 to 2.5	Pass
				10	3.8	4.789	0.0057	-2.5 to 2.5	Pass
				30	3.8	3.492	0.0042	-2.5 to 2.5	Pass
				40	3.8	-1.271	-0.0015	-2.5 to 2.5	Pass
				50	3.8	-4.246	-0.0051	-2.5 to 2.5	Pass
	H	1	47	20	3.3	-0.689	-0.0008	-2.5 to 2.5	Pass
					3.8	-0.612	-0.0007	-2.5 to 2.5	Pass
					4.3	1.208	0.0014	-2.5 to 2.5	Pass
				-30	3.8	-0.481	-0.0006	-2.5 to 2.5	Pass
				-20	3.8	-2.092	-0.0025	-2.5 to 2.5	Pass
				-10	3.8	2.714	0.0032	-2.5 to 2.5	Pass
				0	3.8	-1.387	-0.0016	-2.5 to 2.5	Pass
				10	3.8	-1.388	-0.0016	-2.5 to 2.5	Pass
				30	3.8	-3.195	-0.0038	-2.5 to 2.5	Pass
				40	3.8	1.175	0.0014	-2.5 to 2.5	Pass
				50	3.8	-4.316	-0.0051	-2.5 to 2.5	Pass

Band: 12 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	6.470	0.0093	/	Pass
					3.8	7.110	0.0102	/	Pass
					4.3	0.580	0.0008	/	Pass
				-30	3.8	2.421	0.0035	/	Pass
				-20	3.8	1.982	0.0028	/	Pass
				-10	3.8	0.248	0.0004	/	Pass
				0	3.8	0.993	0.0014	/	Pass
				10	3.8	3.396	0.0049	/	Pass
				30	3.8	3.982	0.0057	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	-0.032	0	/	Pass
	M	1	0	20	3.3	-0.376	-0.0005	/	Pass
					3.8	-2.264	-0.0032	/	Pass
					4.3	0.818	0.0012	/	Pass
				-30	3.8	0.529	0.0007	/	Pass
				-20	3.8	-0.454	-0.0006	/	Pass
				-10	3.8	-0.334	-0.0005	/	Pass
				0	3.8	4.282	0.0061	/	Pass
				10	3.8	-0.571	-0.0008	/	Pass
				30	3.8	-1.141	-0.0016	/	Pass
				40	3.8	-2.700	-0.0038	/	Pass
				50	3.8	0.350	0.0005	/	Pass
	H	1	47	20	3.3	-2.165	-0.003	/	Pass
					3.8	-1.969	-0.0028	/	Pass
					4.3	4.467	0.0062	/	Pass
				-30	3.8	4.653	0.0065	/	Pass
				-20	3.8	-2.529	-0.0035	/	Pass
				-10	3.8	-3.067	-0.0043	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-4.291	-0.006	/	Pass
				30	3.8	3.816	0.0053	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-1.890	-0.0026	/	Pass
BPSK	L	1	0	20	3.3	6.470	0.0093	/	Pass
					3.8	7.110	0.0102	/	Pass
					4.3	0.580	0.0008	/	Pass
				-30	3.8	2.421	0.0035	/	Pass
				-20	3.8	1.982	0.0028	/	Pass
				-10	3.8	0.248	0.0004	/	Pass
				0	3.8	0.993	0.0014	/	Pass
				10	3.8	3.396	0.0049	/	Pass
				30	3.8	3.982	0.0057	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	-0.032	0	/	Pass
	M	1	0	20	3.3	-0.376	-0.0005	/	Pass
					3.8	-2.264	-0.0032	/	Pass
					4.3	0.818	0.0012	/	Pass
				-30	3.8	0.529	0.0007	/	Pass
				-20	3.8	-0.454	-0.0006	/	Pass
				-10	3.8	-0.334	-0.0005	/	Pass
				0	3.8	4.282	0.0061	/	Pass
				10	3.8	-0.571	-0.0008	/	Pass
				30	3.8	-1.141	-0.0016	/	Pass
				40	3.8	-2.700	-0.0038	/	Pass

	H	1	47	50	3.8	0.350	0.0005	/	Pass
				20	3.3	-2.165	-0.003	/	Pass
					3.8	-1.969	-0.0028	/	Pass
					4.3	4.467	0.0062	/	Pass
				-30	3.8	4.653	0.0065	/	Pass
				-20	3.8	-2.529	-0.0035	/	Pass
				-10	3.8	-3.067	-0.0043	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-4.291	-0.006	/	Pass
				30	3.8	3.816	0.0053	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-1.890	-0.0026	/	Pass

Band: 12 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	6.470	0.0093	/	Pass
					3.8	7.110	0.0102	/	Pass
					4.3	0.580	0.0008	/	Pass
				-30	3.8	-1.970	-0.0028	/	Pass
				-20	3.8	1.767	0.0025	/	Pass
				-10	3.8	-2.458	-0.0035	/	Pass
				0	3.8	-1.628	-0.0023	/	Pass
				10	3.8	-0.625	-0.0009	/	Pass
				30	3.8	-0.765	-0.0011	/	Pass
				40	3.8	0.320	0.0005	/	Pass
	M	12	0	20	3.3	3.260	0.0046	/	Pass
					3.8	-1.601	-0.0023	/	Pass
					4.3	-1.201	-0.0017	/	Pass
				-30	3.8	-1.595	-0.0023	/	Pass
				-20	3.8	4.297	0.0061	/	Pass
				-10	3.8	-3.343	-0.0047	/	Pass
				0	3.8	-0.126	-0.0002	/	Pass
				10	3.8	1.550	0.0022	/	Pass
				30	3.8	-3.379	-0.0048	/	Pass
				40	3.8	4.381	0.0062	/	Pass
	H	12	0	20	3.3	-1.420	-0.002	/	Pass
					3.8	-2.093	-0.0029	/	Pass
					4.3	2.752	0.0038	/	Pass
				-30	3.8	3.538	0.0049	/	Pass
				-20	3.8	-2.448	-0.0034	/	Pass
				-10	3.8	2.090	0.0029	/	Pass
				0	3.8	-4.836	-0.0068	/	Pass
				10	3.8	-0.291	-0.0004	/	Pass
				30	3.8	0.576	0.0008	/	Pass
				40	3.8	1.326	0.0019	/	Pass
BPSK	L	1	0	20	3.3	6.470	0.0093	/	Pass
					3.8	7.110	0.0102	/	Pass
					4.3	0.580	0.0008	/	Pass
				-30	3.8	-1.970	-0.0028	/	Pass
				-20	3.8	1.767	0.0025	/	Pass
				-10	3.8	-2.458	-0.0035	/	Pass
				0	3.8	-1.628	-0.0023	/	Pass
				10	3.8	-0.625	-0.0009	/	Pass
				30	3.8	-0.765	-0.0011	/	Pass

				40	3.8	0.320	0.0005	/	Pass
				50	3.8	-3.780	-0.0054	/	Pass
	M	1	0	20	3.3	3.260	0.0046	/	Pass
					3.8	-1.601	-0.0023	/	Pass
					4.3	-1.201	-0.0017	/	Pass
				-30	3.8	-1.595	-0.0023	/	Pass
				-20	3.8	4.297	0.0061	/	Pass
				-10	3.8	-3.343	-0.0047	/	Pass
				0	3.8	-0.126	-0.0002	/	Pass
				10	3.8	1.550	0.0022	/	Pass
				30	3.8	-3.379	-0.0048	/	Pass
				40	3.8	4.381	0.0062	/	Pass
				50	3.8	-3.677	-0.0052	/	Pass
	H	1	47	20	3.3	-1.420	-0.002	/	Pass
					3.8	-2.093	-0.0029	/	Pass
					4.3	2.752	0.0038	/	Pass
				-30	3.8	3.538	0.0049	/	Pass
				-20	3.8	-2.448	-0.0034	/	Pass
				-10	3.8	2.090	0.0029	/	Pass
				0	3.8	-4.836	-0.0068	/	Pass
				10	3.8	-0.291	-0.0004	/	Pass
				30	3.8	0.576	0.0008	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	2.227	0.0031	/	Pass

Band: 13 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	3.520	0.0045	/	Pass
					3.8	1.360	0.0017	/	Pass
					4.3	3.830	0.0049	/	Pass
				-30	3.8	1.887	0.0024	/	Pass
				-20	3.8	4.213	0.0054	/	Pass
				-10	3.8	-1.997	-0.0026	/	Pass
				0	3.8	-1.511	-0.0019	/	Pass
				10	3.8	0.872	0.0011	/	Pass
				30	3.8	2.988	0.0038	/	Pass
				40	3.8	0.320	0.0004	/	Pass
				50	3.8	4.281	0.0055	/	Pass
	M	1	0	20	3.3	4.116	0.0053	/	Pass
					3.8	4.574	0.0058	/	Pass
					4.3	2.168	0.0028	/	Pass
				-30	3.8	1.997	0.0026	/	Pass
				-20	3.8	-3.164	-0.004	/	Pass
				-10	3.8	3.020	0.0039	/	Pass
				0	3.8	2.834	0.0036	/	Pass
				10	3.8	1.019	0.0013	/	Pass
				30	3.8	0.268	0.0003	/	Pass
				40	3.8	-4.516	-0.0058	/	Pass
				50	3.8	4.585	0.0059	/	Pass
	H	1	47	20	3.3	3.610	0.0046	/	Pass
					3.8	-2.400	-0.0031	/	Pass
					4.3	-4.160	-0.0053	/	Pass
				-30	3.8	-2.568	-0.0033	/	Pass
				-20	3.8	2.696	0.0034	/	Pass
				-10	3.8	-3.678	-0.0047	/	Pass
				0	3.8	-1.430	-0.0018	/	Pass
				10	3.8	-1.939	-0.0025	/	Pass
				30	3.8	1.079	0.0014	/	Pass
				40	3.8	1.326	0.0017	/	Pass
				50	3.8	-0.532	-0.0007	/	Pass
BPSK	L	1	0	20	3.3	3.520	0.0045	/	Pass
					3.8	1.360	0.0017	/	Pass
					4.3	3.830	0.0049	/	Pass
				-30	3.8	1.887	0.0024	/	Pass
				-20	3.8	4.213	0.0054	/	Pass
				-10	3.8	-1.997	-0.0026	/	Pass
				0	3.8	-1.511	-0.0019	/	Pass
				10	3.8	0.872	0.0011	/	Pass
				30	3.8	2.988	0.0038	/	Pass
				40	3.8	0.320	0.0004	/	Pass
				50	3.8	4.281	0.0055	/	Pass
	M	1	0	20	3.3	4.116	0.0053	/	Pass
					3.8	4.574	0.0058	/	Pass
					4.3	2.168	0.0028	/	Pass
				-30	3.8	1.997	0.0026	/	Pass
				-20	3.8	-3.164	-0.004	/	Pass
				-10	3.8	3.020	0.0039	/	Pass
				0	3.8	2.834	0.0036	/	Pass
				10	3.8	1.019	0.0013	/	Pass
				30	3.8	0.268	0.0003	/	Pass
				40	3.8	-4.516	-0.0058	/	Pass

	H	1	47	50	3.8	4.585	0.0059	/	Pass
				20	3.3	3.610	0.0046	/	Pass
					3.8	-2.400	-0.0031	/	Pass
					4.3	-4.160	-0.0053	/	Pass
				-30	3.8	-2.568	-0.0033	/	Pass
				-20	3.8	2.696	0.0034	/	Pass
				-10	3.8	-3.678	-0.0047	/	Pass
				0	3.8	-1.430	-0.0018	/	Pass
				10	3.8	-1.939	-0.0025	/	Pass
				30	3.8	1.079	0.0014	/	Pass
				40	3.8	1.326	0.0017	/	Pass
				50	3.8	-0.532	-0.0007	/	Pass

Band: 13 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	3.520	0.0045	/	Pass
					3.8	1.360	0.0017	/	Pass
					4.3	3.830	0.0049	/	Pass
				-30	3.8	-2.151	-0.0028	/	Pass
				-20	3.8	3.799	0.0049	/	Pass
				-10	3.8	-2.553	-0.0033	/	Pass
				0	3.8	4.279	0.0055	/	Pass
				10	3.8	4.031	0.0052	/	Pass
				30	3.8	1.534	0.002	/	Pass
				40	3.8	0.320	0.0004	/	Pass
				50	3.8	-1.486	-0.0019	/	Pass
	M	12	0	20	3.3	-2.072	-0.0026	/	Pass
					3.8	0.387	0.0005	/	Pass
					4.3	-4.874	-0.0062	/	Pass
				-30	3.8	1.581	0.002	/	Pass
				-20	3.8	-3.652	-0.0047	/	Pass
				-10	3.8	-1.801	-0.0023	/	Pass
				0	3.8	4.474	0.0057	/	Pass
				10	3.8	-2.096	-0.0027	/	Pass
				30	3.8	2.725	0.0035	/	Pass
				40	3.8	-0.971	-0.0012	/	Pass
				50	3.8	0.937	0.0012	/	Pass
	H	12	0	20	3.3	-2.642	-0.0034	/	Pass
					3.8	4.387	0.0056	/	Pass
					4.3	2.108	0.0027	/	Pass
				-30	3.8	-2.518	-0.0032	/	Pass
				-20	3.8	-1.376	-0.0017	/	Pass
				-10	3.8	3.782	0.0048	/	Pass
				0	3.8	-1.430	-0.0018	/	Pass
				10	3.8	-2.144	-0.0027	/	Pass
				30	3.8	-0.532	-0.0007	/	Pass
				40	3.8	1.326	0.0017	/	Pass
				50	3.8	-4.702	-0.006	/	Pass
BPSK	L	1	0	20	3.3	3.520	0.0045	/	Pass
					3.8	1.360	0.0017	/	Pass
					4.3	3.830	0.0049	/	Pass
				-30	3.8	-2.151	-0.0028	/	Pass
				-20	3.8	3.799	0.0049	/	Pass
				-10	3.8	-2.553	-0.0033	/	Pass
				0	3.8	4.279	0.0055	/	Pass
				10	3.8	4.031	0.0052	/	Pass
				30	3.8	1.534	0.002	/	Pass

				40	3.8	0.320	0.0004	/	Pass
				50	3.8	-1.486	-0.0019	/	Pass
	M	1	0	20	3.3	-2.072	-0.0026	/	Pass
					3.8	0.387	0.0005	/	Pass
					4.3	-4.874	-0.0062	/	Pass
				-30	3.8	1.581	0.002	/	Pass
				-20	3.8	-3.652	-0.0047	/	Pass
				-10	3.8	-1.801	-0.0023	/	Pass
				0	3.8	4.474	0.0057	/	Pass
				10	3.8	-2.096	-0.0027	/	Pass
				30	3.8	2.725	0.0035	/	Pass
				40	3.8	-0.971	-0.0012	/	Pass
				50	3.8	0.937	0.0012	/	Pass
	H	1	47	20	3.3	-2.642	-0.0034	/	Pass
					3.8	4.387	0.0056	/	Pass
					4.3	2.108	0.0027	/	Pass
				-30	3.8	-2.518	-0.0032	/	Pass
				-20	3.8	-1.376	-0.0017	/	Pass
				-10	3.8	3.782	0.0048	/	Pass
				0	3.8	-1.430	-0.0018	/	Pass
				10	3.8	-2.144	-0.0027	/	Pass
				30	3.8	-0.532	-0.0007	/	Pass
				40	3.8	1.326	0.0017	/	Pass
				50	3.8	-4.702	-0.006	/	Pass

Band: 25 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	6.140	0.0033	/	Pass
					3.8	3.930	0.0021	/	Pass
					4.3	-5.610	-0.003	/	Pass
				-30	3.8	-4.061	-0.0022	/	Pass
				-20	3.8	4.213	0.0023	/	Pass
				-10	3.8	-3.365	-0.0018	/	Pass
				0	3.8	-1.994	-0.0011	/	Pass
				10	3.8	3.637	0.002	/	Pass
				30	3.8	1.939	0.001	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	-2.763	-0.0015	/	Pass
	M	1	0	20	3.3	3.645	0.0019	/	Pass
					3.8	-4.004	-0.0021	/	Pass
					4.3	-0.277	-0.0001	/	Pass
				-30	3.8	1.328	0.0007	/	Pass
				-20	3.8	-0.194	-0.0001	/	Pass
				-10	3.8	2.585	0.0014	/	Pass
				0	3.8	-3.054	-0.0016	/	Pass
				10	3.8	4.230	0.0022	/	Pass
				30	3.8	-1.465	-0.0008	/	Pass
				40	3.8	-1.706	-0.0009	/	Pass
				50	3.8	-2.047	-0.0011	/	Pass
	H	1	47	20	3.3	-2.126	-0.0011	/	Pass
					3.8	0.511	0.0003	/	Pass
					4.3	4.042	0.0021	/	Pass
				-30	3.8	-4.461	-0.0023	/	Pass
				-20	3.8	-3.308	-0.0017	/	Pass
				-10	3.8	4.746	0.0025	/	Pass
				0	3.8	-1.430	-0.0007	/	Pass
				10	3.8	-4.130	-0.0022	/	Pass
				30	3.8	4.318	0.0023	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	2.385	0.0012	/	Pass
BPSK	L	1	0	20	3.3	6.140	0.0033	/	Pass
					3.8	3.930	0.0021	/	Pass
					4.3	-5.610	-0.003	/	Pass
				-30	3.8	-4.061	-0.0022	/	Pass
				-20	3.8	4.213	0.0023	/	Pass
				-10	3.8	-3.365	-0.0018	/	Pass
				0	3.8	-1.994	-0.0011	/	Pass
				10	3.8	3.637	0.002	/	Pass
				30	3.8	1.939	0.001	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	-2.763	-0.0015	/	Pass
	M	1	0	20	3.3	3.645	0.0019	/	Pass
					3.8	-4.004	-0.0021	/	Pass
					4.3	-0.277	-0.0001	/	Pass
				-30	3.8	1.328	0.0007	/	Pass
				-20	3.8	-0.194	-0.0001	/	Pass
				-10	3.8	2.585	0.0014	/	Pass
				0	3.8	-3.054	-0.0016	/	Pass
				10	3.8	4.230	0.0022	/	Pass
				30	3.8	-1.465	-0.0008	/	Pass
				40	3.8	-1.706	-0.0009	/	Pass

	H	1	47	50	3.8	-2.047	-0.0011	/	Pass
				20	3.3	-2.126	-0.0011	/	Pass
					3.8	0.511	0.0003	/	Pass
					4.3	4.042	0.0021	/	Pass
				-30	3.8	-4.461	-0.0023	/	Pass
				-20	3.8	-3.308	-0.0017	/	Pass
				-10	3.8	4.746	0.0025	/	Pass
				0	3.8	-1.430	-0.0007	/	Pass
				10	3.8	-4.130	-0.0022	/	Pass
				30	3.8	4.318	0.0023	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	2.385	0.0012	/	Pass

Band: 25 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	6.140	0.0033	/	Pass
					3.8	3.930	0.0021	/	Pass
					4.3	-5.610	-0.003	/	Pass
				-30	3.8	-3.581	-0.0019	/	Pass
				-20	3.8	4.213	0.0023	/	Pass
				-10	3.8	-0.759	-0.0004	/	Pass
				0	3.8	-0.056	0	/	Pass
				10	3.8	1.796	0.001	/	Pass
				30	3.8	4.696	0.0025	/	Pass
				40	3.8	0.320	0.0002	/	Pass
	M	12	0	20	3.3	-0.623	-0.0003	/	Pass
					3.8	0.865	0.0005	/	Pass
					4.3	1.651	0.0009	/	Pass
				-30	3.8	2.227	0.0012	/	Pass
				-20	3.8	1.789	0.001	/	Pass
				-10	3.8	-3.745	-0.002	/	Pass
				0	3.8	-1.018	-0.0005	/	Pass
				10	3.8	1.481	0.0008	/	Pass
				30	3.8	0.255	0.0001	/	Pass
				40	3.8	-2.018	-0.0011	/	Pass
	H	12	0	20	3.3	3.908	0.002	/	Pass
					3.8	0.387	0.0002	/	Pass
					4.3	2.118	0.0011	/	Pass
				-30	3.8	-0.330	-0.0002	/	Pass
				-20	3.8	-4.448	-0.0023	/	Pass
				-10	3.8	3.845	0.002	/	Pass
				0	3.8	-1.430	-0.0007	/	Pass
				10	3.8	-3.944	-0.0021	/	Pass
				30	3.8	-0.864	-0.0005	/	Pass
				40	3.8	1.326	0.0007	/	Pass
BPSK	L	1	0	20	3.3	6.140	0.0033	/	Pass
					3.8	3.930	0.0021	/	Pass
					4.3	-5.610	-0.003	/	Pass
				-30	3.8	-3.581	-0.0019	/	Pass
				-20	3.8	4.213	0.0023	/	Pass
				-10	3.8	-0.759	-0.0004	/	Pass
				0	3.8	-0.056	0	/	Pass
				10	3.8	1.796	0.001	/	Pass
				30	3.8	4.696	0.0025	/	Pass

				40	3.8	0.320	0.0002	/	Pass
				50	3.8	-0.580	-0.0003	/	Pass
	M	1	0	20	3.3	-0.623	-0.0003	/	Pass
					3.8	0.865	0.0005	/	Pass
					4.3	1.651	0.0009	/	Pass
				-30	3.8	2.227	0.0012	/	Pass
				-20	3.8	1.789	0.001	/	Pass
				-10	3.8	-3.745	-0.002	/	Pass
				0	3.8	-1.018	-0.0005	/	Pass
				10	3.8	1.481	0.0008	/	Pass
				30	3.8	0.255	0.0001	/	Pass
				40	3.8	-2.018	-0.0011	/	Pass
				50	3.8	-1.912	-0.001	/	Pass
	H	1	47	20	3.3	3.908	0.002	/	Pass
					3.8	0.387	0.0002	/	Pass
					4.3	2.118	0.0011	/	Pass
				-30	3.8	-0.330	-0.0002	/	Pass
				-20	3.8	-4.448	-0.0023	/	Pass
				-10	3.8	3.845	0.002	/	Pass
				0	3.8	-1.430	-0.0007	/	Pass
				10	3.8	-3.944	-0.0021	/	Pass
				30	3.8	-0.864	-0.0005	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	0.233	0.0001	/	Pass

Band: 66 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	6.130	0.0036	/	Pass
					3.8	6.480	0.0038	/	Pass
					4.3	3.890	0.0023	/	Pass
				-30	3.8	0.053	0	/	Pass
				-20	3.8	4.213	0.0025	/	Pass
				-10	3.8	-4.901	-0.0029	/	Pass
				0	3.8	3.483	0.002	/	Pass
				10	3.8	-0.507	-0.0003	/	Pass
				30	3.8	0.325	0.0002	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	1.839	0.0011	/	Pass
	M	1	0	20	3.3	-3.708	-0.0021	/	Pass
					3.8	4.405	0.0025	/	Pass
					4.3	1.885	0.0011	/	Pass
				-30	3.8	2.163	0.0012	/	Pass
				-20	3.8	-1.087	-0.0006	/	Pass
				-10	3.8	-3.322	-0.0019	/	Pass
				0	3.8	4.124	0.0024	/	Pass
				10	3.8	4.230	0.0024	/	Pass
				30	3.8	-1.349	-0.0008	/	Pass
				40	3.8	3.834	0.0022	/	Pass
				50	3.8	-0.055	0	/	Pass
	H	1	47	20	3.3	3.017	0.0017	/	Pass
					3.8	-1.384	-0.0008	/	Pass
					4.3	-0.832	-0.0005	/	Pass
				-30	3.8	0.678	0.0004	/	Pass
				-20	3.8	4.379	0.0025	/	Pass
				-10	3.8	4.333	0.0024	/	Pass
				0	3.8	-1.430	-0.0008	/	Pass
				10	3.8	-1.644	-0.0009	/	Pass
				30	3.8	1.837	0.001	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	-2.601	-0.0015	/	Pass
BPSK	L	1	0	20	3.3	6.130	0.0036	/	Pass
					3.8	6.480	0.0038	/	Pass
					4.3	3.890	0.0023	/	Pass
				-30	3.8	0.053	0	/	Pass
				-20	3.8	4.213	0.0025	/	Pass
				-10	3.8	-4.901	-0.0029	/	Pass
				0	3.8	3.483	0.002	/	Pass
				10	3.8	-0.507	-0.0003	/	Pass
				30	3.8	0.325	0.0002	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	1.839	0.0011	/	Pass
	M	1	0	20	3.3	-3.708	-0.0021	/	Pass
					3.8	4.405	0.0025	/	Pass
					4.3	1.885	0.0011	/	Pass
				-30	3.8	2.163	0.0012	/	Pass
				-20	3.8	-1.087	-0.0006	/	Pass
				-10	3.8	-3.322	-0.0019	/	Pass
				0	3.8	4.124	0.0024	/	Pass
				10	3.8	4.230	0.0024	/	Pass
				30	3.8	-1.349	-0.0008	/	Pass
				40	3.8	3.834	0.0022	/	Pass
				50	3.8	-0.055	0	/	Pass
	H	1	47	20	3.3	3.017	0.0017	/	Pass

					3.8	-1.384	-0.0008	/	Pass
					4.3	-0.832	-0.0005	/	Pass
				-30	3.8	0.678	0.0004	/	Pass
				-20	3.8	4.379	0.0025	/	Pass
				-10	3.8	4.333	0.0024	/	Pass
				0	3.8	-1.430	-0.0008	/	Pass
				10	3.8	-1.644	-0.0009	/	Pass
				30	3.8	1.837	0.001	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	-2.601	-0.0015	/	Pass

Band: 66 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	6.130	0.0036	/	Pass
					3.8	6.480	0.0038	/	Pass
					4.3	3.890	0.0023	/	Pass
				-30	3.8	1.523	0.0009	/	Pass
				-20	3.8	4.213	0.0025	/	Pass
				-10	3.8	-4.016	-0.0023	/	Pass
				0	3.8	0.202	0.0001	/	Pass
				10	3.8	-3.366	-0.002	/	Pass
				30	3.8	-1.652	-0.001	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	-0.581	-0.0003	/	Pass
	M	12	0	20	3.3	-0.832	-0.0005	/	Pass
					3.8	-1.400	-0.0008	/	Pass
					4.3	0.813	0.0005	/	Pass
				-30	3.8	1.446	0.0008	/	Pass
				-20	3.8	-4.316	-0.0025	/	Pass
				-10	3.8	4.273	0.0024	/	Pass
				0	3.8	-1.033	-0.0006	/	Pass
				10	3.8	4.230	0.0024	/	Pass
				30	3.8	1.892	0.0011	/	Pass
				40	3.8	3.407	0.002	/	Pass
				50	3.8	4.739	0.0027	/	Pass
	H	12	0	20	3.3	3.519	0.002	/	Pass
					3.8	0.431	0.0002	/	Pass
					4.3	1.425	0.0008	/	Pass
				-30	3.8	-2.282	-0.0013	/	Pass
				-20	3.8	4.719	0.0027	/	Pass
				-10	3.8	-2.393	-0.0013	/	Pass
				0	3.8	-1.430	-0.0008	/	Pass
				10	3.8	-2.079	-0.0012	/	Pass
				30	3.8	2.981	0.0017	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	0.495	0.0003	/	Pass
BPSK	L	1	0	20	3.3	6.130	0.0036	/	Pass
					3.8	6.480	0.0038	/	Pass
					4.3	3.890	0.0023	/	Pass
				-30	3.8	1.523	0.0009	/	Pass
				-20	3.8	4.213	0.0025	/	Pass
				-10	3.8	-4.016	-0.0023	/	Pass
				0	3.8	0.202	0.0001	/	Pass
				10	3.8	-3.366	-0.002	/	Pass
				30	3.8	-1.652	-0.001	/	Pass
				40	3.8	0.320	0.0002	/	Pass
				50	3.8	-0.581	-0.0003	/	Pass

	M	1	0	20	3.3	-0.832	-0.0005	/	Pass
					3.8	-1.400	-0.0008	/	Pass
					4.3	0.813	0.0005	/	Pass
				-30	3.8	1.446	0.0008	/	Pass
				-20	3.8	-4.316	-0.0025	/	Pass
				-10	3.8	4.273	0.0024	/	Pass
				0	3.8	-1.033	-0.0006	/	Pass
				10	3.8	4.230	0.0024	/	Pass
				30	3.8	1.892	0.0011	/	Pass
				40	3.8	3.407	0.002	/	Pass
	H	1	47	50	3.8	4.739	0.0027	/	Pass
				20	3.3	3.519	0.002	/	Pass
					3.8	0.431	0.0002	/	Pass
					4.3	1.425	0.0008	/	Pass
				-30	3.8	-2.282	-0.0013	/	Pass
				-20	3.8	4.719	0.0027	/	Pass
				-10	3.8	-2.393	-0.0013	/	Pass
				0	3.8	-1.430	-0.0008	/	Pass
				10	3.8	-2.079	-0.0012	/	Pass
				30	3.8	2.981	0.0017	/	Pass
				40	3.8	1.326	0.0007	/	Pass
				50	3.8	0.495	0.0003	/	Pass

Band: 71 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	3.133	0.0047	/	Pass
					3.8	0.650	0.001	/	Pass
					4.3	3.670	0.0055	/	Pass
				-30	3.8	1.031	0.0016	/	Pass
				-20	3.8	4.213	0.0064	/	Pass
				-10	3.8	0.341	0.0005	/	Pass
				0	3.8	-4.764	-0.0072	/	Pass
				10	3.8	4.423	0.0067	/	Pass
				30	3.8	-0.553	-0.0008	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	4.597	0.0069	/	Pass
	M	1	0	20	3.3	-4.356	-0.0064	/	Pass
					3.8	0.829	0.0012	/	Pass
					4.3	4.144	0.0061	/	Pass
				-30	3.8	2.163	0.0032	/	Pass
				-20	3.8	1.786	0.0026	/	Pass
				-10	3.8	0.020	0	/	Pass
				0	3.8	0.145	0.0002	/	Pass
				10	3.8	4.230	0.0062	/	Pass
				30	3.8	2.801	0.0041	/	Pass
				40	3.8	-2.970	-0.0044	/	Pass
				50	3.8	0.411	0.0006	/	Pass
	H	1	47	20	3.3	-3.430	-0.0049	/	Pass
					3.8	-2.139	-0.0031	/	Pass
					4.3	-0.621	-0.0009	/	Pass
				-30	3.8	0.123	0.0002	/	Pass
				-20	3.8	2.858	0.0041	/	Pass
				-10	3.8	3.042	0.0044	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-0.801	-0.0011	/	Pass
				30	3.8	3.136	0.0045	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	2.142	0.0031	/	Pass
BPSK	L	1	0	20	3.3	3.133	0.0047	/	Pass
					3.8	0.650	0.001	/	Pass
					4.3	3.670	0.0055	/	Pass
				-30	3.8	1.031	0.0016	/	Pass
				-20	3.8	4.213	0.0064	/	Pass
				-10	3.8	0.341	0.0005	/	Pass
				0	3.8	-4.764	-0.0072	/	Pass
				10	3.8	4.423	0.0067	/	Pass
				30	3.8	-0.553	-0.0008	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	4.597	0.0069	/	Pass
	M	1	0	20	3.3	-4.356	-0.0064	/	Pass
					3.8	0.829	0.0012	/	Pass
					4.3	4.144	0.0061	/	Pass
				-30	3.8	2.163	0.0032	/	Pass
				-20	3.8	1.786	0.0026	/	Pass
				-10	3.8	0.020	0	/	Pass
				0	3.8	0.145	0.0002	/	Pass
				10	3.8	4.230	0.0062	/	Pass
				30	3.8	2.801	0.0041	/	Pass
				40	3.8	-2.970	-0.0044	/	Pass

	H	1	47	50	3.8	0.411	0.0006	/	Pass
				20	3.3	-3.430	-0.0049	/	Pass
					3.8	-2.139	-0.0031	/	Pass
					4.3	-0.621	-0.0009	/	Pass
				-30	3.8	0.123	0.0002	/	Pass
				-20	3.8	2.858	0.0041	/	Pass
				-10	3.8	3.042	0.0044	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-0.801	-0.0011	/	Pass
				30	3.8	3.136	0.0045	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	2.142	0.0031	/	Pass

Band: 71 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	3.000	0.0045	/	Pass
					3.8	0.650	0.001	/	Pass
					4.3	3.670	0.0055	/	Pass
				-30	3.8	2.997	0.0045	/	Pass
				-20	3.8	4.213	0.0064	/	Pass
				-10	3.8	4.834	0.0073	/	Pass
				0	3.8	-0.285	-0.0004	/	Pass
				10	3.8	4.903	0.0074	/	Pass
				30	3.8	-3.487	-0.0053	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	3.362	0.0051	/	Pass
	M	12	0	20	3.3	0.353	0.0005	/	Pass
					3.8	-0.020	0	/	Pass
					4.3	-4.933	-0.0072	/	Pass
				-30	3.8	2.163	0.0032	/	Pass
				-20	3.8	-3.217	-0.0047	/	Pass
				-10	3.8	-1.180	-0.0017	/	Pass
				0	3.8	0.443	0.0006	/	Pass
				10	3.8	4.230	0.0062	/	Pass
				30	3.8	-2.656	-0.0039	/	Pass
				40	3.8	0.599	0.0009	/	Pass
				50	3.8	-1.223	-0.0018	/	Pass
	H	12	0	20	3.3	2.834	0.0041	/	Pass
					3.8	-1.606	-0.0023	/	Pass
					4.3	2.633	0.0038	/	Pass
				-30	3.8	1.116	0.0016	/	Pass
				-20	3.8	-3.902	-0.0056	/	Pass
				-10	3.8	-2.889	-0.0041	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	3.457	0.005	/	Pass
				30	3.8	0.901	0.0013	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-0.205	-0.0003	/	Pass
BPSK	L	1	0	20	3.3	3.000	0.0045	/	Pass
					3.8	0.650	0.001	/	Pass
					4.3	3.670	0.0055	/	Pass
				-30	3.8	2.997	0.0045	/	Pass
				-20	3.8	4.213	0.0064	/	Pass
				-10	3.8	4.834	0.0073	/	Pass
				0	3.8	-0.285	-0.0004	/	Pass
				10	3.8	4.903	0.0074	/	Pass
				20	3.3	3.000	0.0045	/	Pass
					3.8	0.650	0.001	/	Pass
					4.3	3.670	0.0055	/	Pass
				-30	3.8	2.997	0.0045	/	Pass
				-20	3.8	4.213	0.0064	/	Pass
				-10	3.8	4.834	0.0073	/	Pass
				0	3.8	-0.285	-0.0004	/	Pass
				10	3.8	4.903	0.0074	/	Pass

				40	3.8	0.320	0.0005	/	Pass
				50	3.8	3.362	0.0051	/	Pass
	M	1	0	20	3.3	0.353	0.0005	/	Pass
					3.8	-0.020	0	/	Pass
					4.3	-4.933	-0.0072	/	Pass
				-30	3.8	2.163	0.0032	/	Pass
				-20	3.8	-3.217	-0.0047	/	Pass
				-10	3.8	-1.180	-0.0017	/	Pass
				0	3.8	0.443	0.0006	/	Pass
				10	3.8	4.230	0.0062	/	Pass
				30	3.8	-2.656	-0.0039	/	Pass
				40	3.8	0.599	0.0009	/	Pass
				50	3.8	-1.223	-0.0018	/	Pass
	H	1	47	20	3.3	2.834	0.0041	/	Pass
					3.8	-1.606	-0.0023	/	Pass
					4.3	2.633	0.0038	/	Pass
				-30	3.8	1.116	0.0016	/	Pass
				-20	3.8	-3.902	-0.0056	/	Pass
				-10	3.8	-2.889	-0.0041	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	3.457	0.005	/	Pass
				30	3.8	0.901	0.0013	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-0.205	-0.0003	/	Pass

Band: 85 / SCS:3.75KHz									
Modulation	Channel	N _{tone}		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	1	0	20	3.3	7.560	0.0108	/	Pass
					3.8	3.550	0.0051	/	Pass
					4.3	0.420	0.0006	/	Pass
				-30	3.8	0.436	0.0006	/	Pass
				-20	3.8	4.213	0.006	/	Pass
				-10	3.8	2.462	0.0035	/	Pass
				0	3.8	-1.009	-0.0014	/	Pass
				10	3.8	-3.454	-0.0049	/	Pass
				30	3.8	-4.375	-0.0063	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	-4.962	-0.0071	/	Pass
	M	1	0	20	3.3	1.789	0.0025	/	Pass
					3.8	-1.851	-0.0026	/	Pass
					4.3	0.503	0.0007	/	Pass
				-30	3.8	2.163	0.0031	/	Pass
				-20	3.8	-0.340	-0.0005	/	Pass
				-10	3.8	-3.449	-0.0049	/	Pass
				0	3.8	-0.585	-0.0008	/	Pass
				10	3.8	4.230	0.006	/	Pass
				30	3.8	-3.340	-0.0047	/	Pass
				40	3.8	0.917	0.0013	/	Pass
				50	3.8	-3.416	-0.0048	/	Pass
	H	1	47	20	3.3	1.650	0.0023	/	Pass
					3.8	0.918	0.0013	/	Pass
					4.3	1.114	0.0016	/	Pass
				-30	3.8	2.472	0.0035	/	Pass
				-20	3.8	2.668	0.0037	/	Pass
				-10	3.8	4.738	0.0066	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-1.357	-0.0019	/	Pass
				30	3.8	0.262	0.0004	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	2.296	0.0032	/	Pass
BPSK	L	1	0	20	3.3	7.560	0.0108	/	Pass
					3.8	3.550	0.0051	/	Pass
					4.3	0.420	0.0006	/	Pass
				-30	3.8	0.436	0.0006	/	Pass
				-20	3.8	4.213	0.006	/	Pass
				-10	3.8	2.462	0.0035	/	Pass
				0	3.8	-1.009	-0.0014	/	Pass
				10	3.8	-3.454	-0.0049	/	Pass
				30	3.8	-4.375	-0.0063	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	-4.962	-0.0071	/	Pass
	M	1	0	20	3.3	1.789	0.0025	/	Pass
					3.8	-1.851	-0.0026	/	Pass
					4.3	0.503	0.0007	/	Pass
				-30	3.8	2.163	0.0031	/	Pass
				-20	3.8	-0.340	-0.0005	/	Pass
				-10	3.8	-3.449	-0.0049	/	Pass
				0	3.8	-0.585	-0.0008	/	Pass
				10	3.8	4.230	0.006	/	Pass
				30	3.8	-3.340	-0.0047	/	Pass
				40	3.8	0.917	0.0013	/	Pass
				50	3.8	-3.416	-0.0048	/	Pass
	H	1	47	20	3.3	1.650	0.0023	/	Pass

					3.8	0.918	0.0013	/	Pass
					4.3	1.114	0.0016	/	Pass
				-30	3.8	2.472	0.0035	/	Pass
				-20	3.8	2.668	0.0037	/	Pass
				-10	3.8	4.738	0.0066	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-1.357	-0.0019	/	Pass
				30	3.8	0.262	0.0004	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	2.296	0.0032	/	Pass

Band: 85 / SCS:15KHz									
Modulation	Channel	RB Allocation		Temp. (°C)	Voltage (VDC)	Freq. Error (Hz)	Freq. vs. Rated (ppm)		Verdict
		Size	Offset				Result	Limit	
QPSK	L	12	0	20	3.3	7.560	0.0108	/	Pass
					3.8	3.550	0.0051	/	Pass
					4.3	0.420	0.0006	/	Pass
				-30	3.8	2.551	0.0037	/	Pass
				-20	3.8	4.213	0.006	/	Pass
				-10	3.8	3.304	0.0047	/	Pass
				0	3.8	-3.294	-0.0047	/	Pass
				10	3.8	3.727	0.0053	/	Pass
				30	3.8	3.482	0.005	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	4.167	0.006	/	Pass
	M	12	0	20	3.3	-4.461	-0.0063	/	Pass
					3.8	-0.675	-0.001	/	Pass
					4.3	3.838	0.0054	/	Pass
				-30	3.8	2.163	0.0031	/	Pass
				-20	3.8	0.916	0.0013	/	Pass
				-10	3.8	3.308	0.0047	/	Pass
				0	3.8	-0.893	-0.0013	/	Pass
				10	3.8	4.230	0.006	/	Pass
				30	3.8	0.295	0.0004	/	Pass
				40	3.8	4.732	0.0067	/	Pass
				50	3.8	-0.776	-0.0011	/	Pass
	H	12	0	20	3.3	-0.086	-0.0001	/	Pass
					3.8	4.053	0.0057	/	Pass
					4.3	3.742	0.0052	/	Pass
				-30	3.8	-4.705	-0.0066	/	Pass
				-20	3.8	1.176	0.0016	/	Pass
				-10	3.8	0.748	0.001	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-1.944	-0.0027	/	Pass
				30	3.8	-1.517	-0.0021	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-3.949	-0.0055	/	Pass
BPSK	L	1	0	20	3.3	7.560	0.0108	/	Pass
					3.8	3.550	0.0051	/	Pass
					4.3	0.420	0.0006	/	Pass
				-30	3.8	2.551	0.0037	/	Pass
				-20	3.8	4.213	0.006	/	Pass
				-10	3.8	3.304	0.0047	/	Pass
				0	3.8	-3.294	-0.0047	/	Pass
				10	3.8	3.727	0.0053	/	Pass
				30	3.8	3.482	0.005	/	Pass
				40	3.8	0.320	0.0005	/	Pass
				50	3.8	4.167	0.006	/	Pass

	M	1	0	20	3.3	-4.461	-0.0063	/	Pass
					3.8	-0.675	-0.001	/	Pass
					4.3	3.838	0.0054	/	Pass
				-30	3.8	2.163	0.0031	/	Pass
				-20	3.8	0.916	0.0013	/	Pass
				-10	3.8	3.308	0.0047	/	Pass
				0	3.8	-0.893	-0.0013	/	Pass
				10	3.8	4.230	0.006	/	Pass
				30	3.8	0.295	0.0004	/	Pass
				40	3.8	4.732	0.0067	/	Pass
				50	3.8	-0.776	-0.0011	/	Pass
	H	1	47	20	3.3	-0.086	-0.0001	/	Pass
					3.8	4.053	0.0057	/	Pass
					4.3	3.742	0.0052	/	Pass
				-30	3.8	-4.705	-0.0066	/	Pass
				-20	3.8	1.176	0.0016	/	Pass
				-10	3.8	0.748	0.001	/	Pass
				0	3.8	-1.430	-0.002	/	Pass
				10	3.8	-1.944	-0.0027	/	Pass
				30	3.8	-1.517	-0.0021	/	Pass
				40	3.8	1.326	0.0019	/	Pass
				50	3.8	-3.949	-0.0055	/	Pass