





## Appendix F: Frequency Stability

### Test Result

#### Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.75	0.000405	± 2.5	PASS
		VN	TN	1.4	0.000756	± 2.5	PASS
		VH	TN	4.87	0.002631	± 2.5	PASS
	MCH	VL	TN	2.98	0.001585	± 2.5	PASS
		VN	TN	-1.2	-0.000638	± 2.5	PASS
		VH	TN	-1.02	-0.000543	± 2.5	PASS
	HCH	VL	TN	0.11	0.000058	± 2.5	PASS
		VN	TN	-1.13	-0.000592	± 2.5	PASS
		VH	TN	-0.36	-0.000189	± 2.5	PASS
16QAM	LCH	VL	TN	-1.84	-0.000994	± 2.5	PASS
		VN	TN	4.51	0.002437	± 2.5	PASS
		VH	TN	3.72	0.002010	± 2.5	PASS
	MCH	VL	TN	-0.83	-0.000441	± 2.5	PASS
		VN	TN	2.2	0.001170	± 2.5	PASS
		VH	TN	1.9	0.001011	± 2.5	PASS
	HCH	VL	TN	-0.41	-0.000215	± 2.5	PASS
		VN	TN	4.87	0.002551	± 2.5	PASS
		VH	TN	-1.2	-0.000629	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.12	0.001686	± 2.5	PASS
		VN	-20	-1.71	-0.000924	± 2.5	PASS
		VN	-10	-0.36	-0.000195	± 2.5	PASS
		VN	0	1.21	0.000654	± 2.5	PASS
		VN	10	0.21	0.000113	± 2.5	PASS
		VN	20	0.81	0.000438	± 2.5	PASS
		VN	30	1.4	0.000756	± 2.5	PASS
		VN	40	3.73	0.002015	± 2.5	PASS
		VN	50	2.77	0.001497	± 2.5	PASS
	MCH	VN	-30	1.23	0.000654	± 2.5	PASS
		VN	-20	4.67	0.002484	± 2.5	PASS

		VN	-10	1.67	0.000888	± 2.5	PASS		
		VN	0	3.39	0.001803	± 2.5	PASS		
		VN	10	3.86	0.002053	± 2.5	PASS		
		VN	20	-1.22	-0.000649	± 2.5	PASS		
		VN	30	0.2	0.000106	± 2.5	PASS		
		VN	40	4.96	0.002638	± 2.5	PASS		
		VN	50	0.88	0.000468	± 2.5	PASS		
	HCH	VN	-30	1.51	0.000791	± 2.5	PASS		
		VN	-20	4.42	0.002315	± 2.5	PASS		
		VN	-10	2.6	0.001362	± 2.5	PASS		
		VN	0	0.6	0.000314	± 2.5	PASS		
		VN	10	4.83	0.002530	± 2.5	PASS		
		VN	20	2.95	0.001545	± 2.5	PASS		
		VN	30	3.27	0.001713	± 2.5	PASS		
		VN	40	4.97	0.002603	± 2.5	PASS		
		VN	50	-1.5	-0.000786	± 2.5	PASS		
		16QAM	LCH	VN	-30	-0.62	-0.000335	± 2.5	PASS
				VN	-20	-1.57	-0.000848	± 2.5	PASS
VN	-10			-1.22	-0.000659	± 2.5	PASS		
VN	0			-1.59	-0.000859	± 2.5	PASS		
VN	10			3.1	0.001675	± 2.5	PASS		
VN	20			1.27	0.000686	± 2.5	PASS		
VN	30			-1.93	-0.001043	± 2.5	PASS		
VN	40			1.4	0.000756	± 2.5	PASS		
VN	50			4.94	0.002669	± 2.5	PASS		
MCH	VN		-30	2.06	0.001096	± 2.5	PASS		
	VN		-20	4.29	0.002282	± 2.5	PASS		
	VN		-10	-1.67	-0.000888	± 2.5	PASS		
	VN		0	-0.03	-0.000016	± 2.5	PASS		
	VN		10	-0.36	-0.000191	± 2.5	PASS		
	VN		20	0.28	0.000149	± 2.5	PASS		
	VN		30	-1.79	-0.000952	± 2.5	PASS		
	VN		40	-0.06	-0.000032	± 2.5	PASS		
	VN		50	-0.42	-0.000223	± 2.5	PASS		
HCH	VN		-30	4.88	0.002556	± 2.5	PASS		
	VN		-20	1.5	0.000786	± 2.5	PASS		
	VN		-10	3.51	0.001838	± 2.5	PASS		
	VN		0	-0.73	-0.000382	± 2.5	PASS		
	VN		10	3.39	0.001776	± 2.5	PASS		
	VN		20	-0.56	-0.000293	± 2.5	PASS		
	VN		30	-1.5	-0.000786	± 2.5	PASS		

		VN	40	4.13	0.002163	± 2.5	PASS
		VN	50	2.36	0.001236	± 2.5	PASS

**Channel Bandwidth: 3 MHz**

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.5	-0.000810	± 2.5	PASS
		VN	TN	0.71	0.000383	± 2.5	PASS
		VH	TN	1.25	0.000675	± 2.5	PASS
	MCH	VL	TN	2.2	0.001170	± 2.5	PASS
		VN	TN	3.81	0.002027	± 2.5	PASS
		VH	TN	4.04	0.002149	± 2.5	PASS
	HCH	VL	TN	2.65	0.001389	± 2.5	PASS
		VN	TN	2.97	0.001556	± 2.5	PASS
		VH	TN	0.23	0.000121	± 2.5	PASS
16QAM	LCH	VL	TN	1.34	0.000724	± 2.5	PASS
		VN	TN	4.46	0.002409	± 2.5	PASS
		VH	TN	2.48	0.001339	± 2.5	PASS
	MCH	VL	TN	-0.32	-0.000170	± 2.5	PASS
		VN	TN	3.75	0.001995	± 2.5	PASS
		VH	TN	0.93	0.000495	± 2.5	PASS
	HCH	VL	TN	4.54	0.002379	± 2.5	PASS
		VN	TN	0.41	0.000215	± 2.5	PASS
		VH	TN	3.38	0.001771	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.32	0.000173	± 2.5	PASS
		VN	-20	0.35	0.000189	± 2.5	PASS
		VN	-10	-0.69	-0.000373	± 2.5	PASS
		VN	0	0.97	0.000524	± 2.5	PASS
		VN	10	3.96	0.002139	± 2.5	PASS
		VN	20	-0.51	-0.000275	± 2.5	PASS
		VN	30	3.1	0.001674	± 2.5	PASS
		VN	40	2	0.001080	± 2.5	PASS
		VN	50	3.41	0.001842	± 2.5	PASS
	MCH	VN	-30	2.36	0.001255	± 2.5	PASS
		VN	-20	4.52	0.002404	± 2.5	PASS
		VN	-10	-1.95	-0.001037	± 2.5	PASS

		VN	0	-0.92	-0.000489	± 2.5	PASS		
		VN	10	3.52	0.001872	± 2.5	PASS		
		VN	20	4.94	0.002628	± 2.5	PASS		
		VN	30	4.67	0.002484	± 2.5	PASS		
		VN	40	1.02	0.000543	± 2.5	PASS		
		VN	50	4.43	0.002356	± 2.5	PASS		
	HCH	VN	-30	-0.65	-0.000341	± 2.5	PASS		
		VN	-20	4.64	0.002431	± 2.5	PASS		
		VN	-10	1.59	0.000833	± 2.5	PASS		
		VN	0	2.34	0.001226	± 2.5	PASS		
		VN	10	-0.09	-0.000047	± 2.5	PASS		
		VN	20	-0.72	-0.000377	± 2.5	PASS		
		VN	30	1.2	0.000629	± 2.5	PASS		
		VN	40	1.13	0.000592	± 2.5	PASS		
		VN	50	-0.78	-0.000409	± 2.5	PASS		
		16QAM	LCH	VN	-30	0.58	0.000313	± 2.5	PASS
				VN	-20	3.7	0.001998	± 2.5	PASS
				VN	-10	4.36	0.002355	± 2.5	PASS
VN	0			3.93	0.002123	± 2.5	PASS		
VN	10			-0.9	-0.000486	± 2.5	PASS		
VN	20			4.73	0.002555	± 2.5	PASS		
VN	30			0.75	0.000405	± 2.5	PASS		
VN	40			2.68	0.001447	± 2.5	PASS		
VN	50			-1.03	-0.000556	± 2.5	PASS		
MCH	VN		-30	-1.37	-0.000729	± 2.5	PASS		
	VN		-20	-1.18	-0.000628	± 2.5	PASS		
	VN		-10	1.24	0.000660	± 2.5	PASS		
	VN		0	-1.62	-0.000862	± 2.5	PASS		
	VN		10	1.69	0.000899	± 2.5	PASS		
	VN		20	2.19	0.001165	± 2.5	PASS		
	VN		30	0.98	0.000521	± 2.5	PASS		
	VN		40	0.69	0.000367	± 2.5	PASS		
	VN		50	2.73	0.001452	± 2.5	PASS		
HCH	VN	-30	-0.93	-0.000487	± 2.5	PASS			
	VN	-20	3.19	0.001671	± 2.5	PASS			
	VN	-10	2.5	0.001310	± 2.5	PASS			
	VN	0	4.41	0.002311	± 2.5	PASS			
	VN	10	-0.87	-0.000456	± 2.5	PASS			
	VN	20	2.27	0.001189	± 2.5	PASS			
	VN	30	2.82	0.001478	± 2.5	PASS			
	VN	40	0.07	0.000037	± 2.5	PASS			

		VN	50	3.52	0.001844	± 2.5	PASS
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**Channel Bandwidth: 5 MHz**

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.79	-0.000426	± 2.5	PASS
		VN	TN	4.98	0.002688	± 2.5	PASS
		VH	TN	0.1	0.000054	± 2.5	PASS
	MCH	VL	TN	-1.54	-0.000819	± 2.5	PASS
		VN	TN	-0.45	-0.000239	± 2.5	PASS
		VH	TN	1.06	0.000564	± 2.5	PASS
	HCH	VL	TN	-0.63	-0.000330	± 2.5	PASS
		VN	TN	-1.68	-0.000881	± 2.5	PASS
		VH	TN	3.01	0.001578	± 2.5	PASS
16QAM	LCH	VL	TN	4.96	0.002677	± 2.5	PASS
		VN	TN	-1.84	-0.000993	± 2.5	PASS
		VH	TN	3.28	0.001771	± 2.5	PASS
	MCH	VL	TN	3.72	0.001979	± 2.5	PASS
		VN	TN	-1	-0.000532	± 2.5	PASS
		VH	TN	-0.38	-0.000202	± 2.5	PASS
	HCH	VL	TN	1.96	0.001028	± 2.5	PASS
		VN	TN	0.57	0.000299	± 2.5	PASS
		VH	TN	2.5	0.001311	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.34	0.001263	± 2.5	PASS
		VN	-20	1.93	0.001042	± 2.5	PASS
		VN	-10	3.62	0.001954	± 2.5	PASS
		VN	0	2.18	0.001177	± 2.5	PASS
		VN	10	1.37	0.000740	± 2.5	PASS
		VN	20	1.24	0.000669	± 2.5	PASS
		VN	30	0.36	0.000194	± 2.5	PASS
		VN	40	3.89	0.002100	± 2.5	PASS
		VN	50	4.07	0.002197	± 2.5	PASS
	MCH	VN	-30	0.46	0.000245	± 2.5	PASS
		VN	-20	4.28	0.002277	± 2.5	PASS
		VN	-10	2.9	0.001543	± 2.5	PASS
		VN	0	3.76	0.002000	± 2.5	PASS

		VN	10	4.44	0.002362	± 2.5	PASS
		VN	20	0.25	0.000133	± 2.5	PASS
		VN	30	3.07	0.001633	± 2.5	PASS
		VN	40	2.24	0.001191	± 2.5	PASS
		VN	50	3.72	0.001979	± 2.5	PASS
	HCH	VN	-30	4.01	0.002102	± 2.5	PASS
		VN	-20	0.72	0.000377	± 2.5	PASS
		VN	-10	4.92	0.002579	± 2.5	PASS
		VN	0	-0.19	-0.000100	± 2.5	PASS
		VN	10	-1.91	-0.001001	± 2.5	PASS
		VN	20	3.09	0.001620	± 2.5	PASS
		VN	30	-0.45	-0.000236	± 2.5	PASS
		VN	40	3.07	0.001609	± 2.5	PASS
		VN	50	3.99	0.002092	± 2.5	PASS
		16QAM	LCH	VN	-30	-0.71	-0.000383
VN	-20			3.47	0.001873	± 2.5	PASS
VN	-10			-1.94	-0.001047	± 2.5	PASS
VN	0			4.34	0.002343	± 2.5	PASS
VN	10			1.05	0.000567	± 2.5	PASS
VN	20			3.11	0.001679	± 2.5	PASS
VN	30			0.89	0.000480	± 2.5	PASS
VN	40			1.24	0.000669	± 2.5	PASS
VN	50			-0.58	-0.000313	± 2.5	PASS
MCH	VN		-30	-0.84	-0.000447	± 2.5	PASS
	VN		-20	4.93	0.002622	± 2.5	PASS
	VN		-10	-1.87	-0.000995	± 2.5	PASS
	VN		0	-1.85	-0.000984	± 2.5	PASS
	VN		10	1.32	0.000702	± 2.5	PASS
	VN		20	4.1	0.002181	± 2.5	PASS
	VN		30	3.17	0.001686	± 2.5	PASS
	VN		40	-0.4	-0.000213	± 2.5	PASS
	VN		50	2.73	0.001452	± 2.5	PASS
HCH	VN		-30	0.88	0.000461	± 2.5	PASS
	VN		-20	0.97	0.000509	± 2.5	PASS
	VN		-10	-0.27	-0.000142	± 2.5	PASS
	VN		0	4.99	0.002616	± 2.5	PASS
	VN		10	2.78	0.001457	± 2.5	PASS
	VN		20	2.68	0.001405	± 2.5	PASS
	VN	30	4.54	0.002380	± 2.5	PASS	
	VN	40	4.12	0.002160	± 2.5	PASS	
	VN	50	4.57	0.002396	± 2.5	PASS	



**Channel Bandwidth: 10 MHz**

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-1.42	-0.000765	± 2.5	PASS
		VN	TN	-0.66	-0.000356	± 2.5	PASS
		VH	TN	2.19	0.001181	± 2.5	PASS
	MCH	VL	TN	1.35	0.000718	± 2.5	PASS
		VN	TN	1.83	0.000973	± 2.5	PASS
		VH	TN	4.52	0.002404	± 2.5	PASS
	HCH	VL	TN	4.21	0.002210	± 2.5	PASS
		VN	TN	4.58	0.002404	± 2.5	PASS
		VH	TN	2.1	0.001102	± 2.5	PASS
16QAM	LCH	VL	TN	4.08	0.002199	± 2.5	PASS
		VN	TN	4.36	0.002350	± 2.5	PASS
		VH	TN	-1.35	-0.000728	± 2.5	PASS
	MCH	VL	TN	4.98	0.002649	± 2.5	PASS
		VN	TN	-0.37	-0.000197	± 2.5	PASS
		VH	TN	3.39	0.001803	± 2.5	PASS
	HCH	VL	TN	1.4	0.000735	± 2.5	PASS
		VN	TN	-1.46	-0.000766	± 2.5	PASS
		VH	TN	3.45	0.001811	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.78	0.000960	± 2.5	PASS
		VN	-20	2.35	0.001267	± 2.5	PASS
		VN	-10	4.74	0.002555	± 2.5	PASS
		VN	0	-1.24	-0.000668	± 2.5	PASS
		VN	10	-1.62	-0.000873	± 2.5	PASS
		VN	20	-1.52	-0.000819	± 2.5	PASS
		VN	30	2.57	0.001385	± 2.5	PASS
		VN	40	0.13	0.000070	± 2.5	PASS
		VN	50	1.2	0.000647	± 2.5	PASS
	MCH	VN	-30	3.61	0.001920	± 2.5	PASS
		VN	-20	1.36	0.000723	± 2.5	PASS
		VN	-10	2.2	0.001170	± 2.5	PASS
		VN	0	2.04	0.001085	± 2.5	PASS
		VN	10	3.69	0.001963	± 2.5	PASS

		VN	20	0.01	0.000005	± 2.5	PASS
		VN	30	-1.17	-0.000622	± 2.5	PASS
		VN	40	4.9	0.002606	± 2.5	PASS
		VN	50	1.56	0.000830	± 2.5	PASS
	HCH	VN	-30	-0.53	-0.000278	± 2.5	PASS
		VN	-20	-1.32	-0.000693	± 2.5	PASS
		VN	-10	2.55	0.001339	± 2.5	PASS
		VN	0	0.71	0.000373	± 2.5	PASS
		VN	10	3.15	0.001654	± 2.5	PASS
		VN	20	3.52	0.001848	± 2.5	PASS
		VN	30	-0.17	-0.000089	± 2.5	PASS
		VN	40	2.48	0.001302	± 2.5	PASS
		VN	50	1.03	0.000541	± 2.5	PASS
16QAM	LCH	VN	-30	3.1	0.001671	± 2.5	PASS
		VN	-20	4	0.002156	± 2.5	PASS
		VN	-10	-1.99	-0.001073	± 2.5	PASS
		VN	0	2.06	0.001111	± 2.5	PASS
		VN	10	3.63	0.001957	± 2.5	PASS
		VN	20	3.61	0.001946	± 2.5	PASS
		VN	30	-1.8	-0.000970	± 2.5	PASS
		VN	40	-1.96	-0.001057	± 2.5	PASS
		VN	50	1.76	0.000949	± 2.5	PASS
	MCH	VN	-30	-1.41	-0.000750	± 2.5	PASS
		VN	-20	-1.66	-0.000883	± 2.5	PASS
		VN	-10	3.05	0.001622	± 2.5	PASS
		VN	0	-0.45	-0.000239	± 2.5	PASS
		VN	10	3.43	0.001824	± 2.5	PASS
		VN	20	1.9	0.001011	± 2.5	PASS
		VN	30	2.7	0.001436	± 2.5	PASS
		VN	40	0.05	0.000027	± 2.5	PASS
		VN	50	4.61	0.002452	± 2.5	PASS
	HCH	VN	-30	0.51	0.000268	± 2.5	PASS
		VN	-20	2.44	0.001281	± 2.5	PASS
		VN	-10	1.67	0.000877	± 2.5	PASS
		VN	0	1.7	0.000892	± 2.5	PASS
		VN	10	-1.2	-0.000630	± 2.5	PASS
		VN	20	4.64	0.002436	± 2.5	PASS
		VN	30	-0.04	-0.000021	± 2.5	PASS
		VN	40	4.72	0.002478	± 2.5	PASS
		VN	50	2.34	0.001228	± 2.5	PASS

**Channel Bandwidth: 15 MHz**

Channel Bandwidth: 15 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	0.51	0.000275	± 2.5	PASS
		VN	TN	-1.7	-0.000915	± 2.5	PASS
		VH	TN	3.68	0.001981	± 2.5	PASS
	MCH	VL	TN	3.79	0.002016	± 2.5	PASS
		VN	TN	2.72	0.001447	± 2.5	PASS
		VH	TN	0.91	0.000484	± 2.5	PASS
	HCH	VL	TN	-0.36	-0.000189	± 2.5	PASS
		VN	TN	-1.29	-0.000678	± 2.5	PASS
		VH	TN	-1.99	-0.001046	± 2.5	PASS
16QAM	LCH	VL	TN	3.07	0.001653	± 2.5	PASS
		VN	TN	0.58	0.000312	± 2.5	PASS
		VH	TN	-0.94	-0.000506	± 2.5	PASS
	MCH	VL	TN	4.34	0.002309	± 2.5	PASS
		VN	TN	1.35	0.000718	± 2.5	PASS
		VH	TN	3.86	0.002053	± 2.5	PASS
	HCH	VL	TN	2.31	0.001214	± 2.5	PASS
		VN	TN	2.81	0.001477	± 2.5	PASS
		VH	TN	2.13	0.001120	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.82	0.000980	± 2.5	PASS
		VN	-20	4.8	0.002584	± 2.5	PASS
		VN	-10	3.18	0.001712	± 2.5	PASS
		VN	0	-1.67	-0.000899	± 2.5	PASS
		VN	10	0.28	0.000151	± 2.5	PASS
		VN	20	-1.89	-0.001017	± 2.5	PASS
		VN	30	0.74	0.000398	± 2.5	PASS
		VN	40	3.08	0.001658	± 2.5	PASS
		VN	50	-1.37	-0.000738	± 2.5	PASS
	MCH	VN	-30	-1.52	-0.000809	± 2.5	PASS
		VN	-20	2.44	0.001298	± 2.5	PASS
		VN	-10	2.92	0.001553	± 2.5	PASS
		VN	0	-0.85	-0.000452	± 2.5	PASS
		VN	10	-0.56	-0.000298	± 2.5	PASS
		VN	20	4	0.002128	± 2.5	PASS

		VN	30	-1.57	-0.000835	± 2.5	PASS
		VN	40	-0.01	-0.000005	± 2.5	PASS
		VN	50	0.63	0.000335	± 2.5	PASS
	HCH	VN	-30	-1.94	-0.001020	± 2.5	PASS
		VN	-20	3.46	0.001819	± 2.5	PASS
		VN	-10	-1.59	-0.000836	± 2.5	PASS
		VN	0	1.74	0.000915	± 2.5	PASS
		VN	10	-0.64	-0.000336	± 2.5	PASS
		VN	20	1.42	0.000746	± 2.5	PASS
		VN	30	0.85	0.000447	± 2.5	PASS
		VN	40	-0.91	-0.000478	± 2.5	PASS
		VN	50	-1.76	-0.000925	± 2.5	PASS
		16QAM	LCH	VN	-30	2.9	0.001561
VN	-20			3.49	0.001879	± 2.5	PASS
VN	-10			-0.27	-0.000145	± 2.5	PASS
VN	0			-1.51	-0.000813	± 2.5	PASS
VN	10			-1.17	-0.000630	± 2.5	PASS
VN	20			-0.66	-0.000355	± 2.5	PASS
VN	30			1.14	0.000614	± 2.5	PASS
VN	40			-0.44	-0.000237	± 2.5	PASS
VN	50			0.68	0.000366	± 2.5	PASS
MCH	VN		-30	4.92	0.002617	± 2.5	PASS
	VN		-20	-0.36	-0.000191	± 2.5	PASS
	VN		-10	1.13	0.000601	± 2.5	PASS
	VN		0	3.62	0.001926	± 2.5	PASS
	VN		10	2.22	0.001181	± 2.5	PASS
	VN		20	-1.59	-0.000846	± 2.5	PASS
	VN		30	2.25	0.001197	± 2.5	PASS
	VN		40	-1.93	-0.001027	± 2.5	PASS
	VN		50	0.72	0.000383	± 2.5	PASS
HCH	VN		-30	4.21	0.002213	± 2.5	PASS
	VN		-20	2.42	0.001272	± 2.5	PASS
	VN		-10	4.81	0.002528	± 2.5	PASS
	VN		0	-1.38	-0.000725	± 2.5	PASS
	VN		10	3.38	0.001777	± 2.5	PASS
	VN		20	-1.07	-0.000562	± 2.5	PASS
	VN		30	3.76	0.001976	± 2.5	PASS
	VN		40	0.96	0.000505	± 2.5	PASS
	VN		50	1.08	0.000568	± 2.5	PASS

**Channel Bandwidth: 20 MHz**

Channel Bandwidth: 20 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.16	0.000624	± 2.5	PASS
		VN	TN	-0.75	-0.000403	± 2.5	PASS
		VH	TN	-1.41	-0.000758	± 2.5	PASS
	MCH	VL	TN	4.74	0.002521	± 2.5	PASS
		VN	TN	-1.79	-0.000952	± 2.5	PASS
		VH	TN	3.41	0.001814	± 2.5	PASS
	HCH	VL	TN	4.25	0.002237	± 2.5	PASS
		VN	TN	4.29	0.002258	± 2.5	PASS
		VH	TN	4.43	0.002332	± 2.5	PASS
16QAM	LCH	VL	TN	0.28	0.000151	± 2.5	PASS
		VN	TN	0.17	0.000091	± 2.5	PASS
		VH	TN	0.92	0.000495	± 2.5	PASS
	MCH	VL	TN	1.05	0.000559	± 2.5	PASS
		VN	TN	1.53	0.000814	± 2.5	PASS
		VH	TN	2.83	0.001505	± 2.5	PASS
	HCH	VL	TN	3.33	0.001753	± 2.5	PASS
		VN	TN	-0.88	-0.000463	± 2.5	PASS
		VH	TN	0.99	0.000521	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.39	-0.000210	± 2.5	PASS
		VN	-20	3.19	0.001715	± 2.5	PASS
		VN	-10	4.66	0.002505	± 2.5	PASS
		VN	0	3.35	0.001801	± 2.5	PASS
		VN	10	1.77	0.000952	± 2.5	PASS
		VN	20	3.12	0.001677	± 2.5	PASS
		VN	30	3.98	0.002140	± 2.5	PASS
		VN	40	2.67	0.001435	± 2.5	PASS
	MCH	VN	50	3.06	0.001645	± 2.5	PASS
		VN	-30	1.38	0.000734	± 2.5	PASS
		VN	-20	2.06	0.001096	± 2.5	PASS
		VN	-10	1.52	0.000809	± 2.5	PASS
		VN	0	3.15	0.001676	± 2.5	PASS
		VN	10	0.35	0.000186	± 2.5	PASS
VN	20	0.27	0.000144	± 2.5	PASS		

		VN	30	3.83	0.002037	± 2.5	PASS
		VN	40	2.68	0.001426	± 2.5	PASS
		VN	50	-1.29	-0.000686	± 2.5	PASS
	HCH	VN	-30	2.97	0.001563	± 2.5	PASS
		VN	-20	-0.07	-0.000037	± 2.5	PASS
		VN	-10	0.02	0.000011	± 2.5	PASS
		VN	0	3.64	0.001916	± 2.5	PASS
		VN	10	0.82	0.000432	± 2.5	PASS
		VN	20	3.57	0.001879	± 2.5	PASS
		VN	30	1.16	0.000611	± 2.5	PASS
		VN	40	-0.65	-0.000342	± 2.5	PASS
		VN	50	3.04	0.001600	± 2.5	PASS
		16QAM	LCH	VN	-30	0.27	0.000145
VN	-20			-1.06	-0.000570	± 2.5	PASS
VN	-10			4.28	0.002301	± 2.5	PASS
VN	0			1.43	0.000769	± 2.5	PASS
VN	10			-1.94	-0.001043	± 2.5	PASS
VN	20			4.56	0.002452	± 2.5	PASS
VN	30			0.6	0.000323	± 2.5	PASS
VN	40			3.73	0.002005	± 2.5	PASS
VN	50			3.92	0.002108	± 2.5	PASS
MCH	VN		-30	-1.19	-0.000633	± 2.5	PASS
	VN		-20	3.14	0.001670	± 2.5	PASS
	VN		-10	2.54	0.001351	± 2.5	PASS
	VN		0	3.63	0.001931	± 2.5	PASS
	VN		10	4.3	0.002287	± 2.5	PASS
	VN		20	4.02	0.002138	± 2.5	PASS
	VN		30	4.97	0.002644	± 2.5	PASS
	VN		40	4.12	0.002191	± 2.5	PASS
	VN		50	-0.38	-0.000202	± 2.5	PASS
HCH	VN		-30	-0.08	-0.000042	± 2.5	PASS
	VN		-20	-0.54	-0.000284	± 2.5	PASS
	VN		-10	0.16	0.000084	± 2.5	PASS
	VN		0	1.31	0.000689	± 2.5	PASS
	VN		10	1.86	0.000979	± 2.5	PASS
	VN		20	1.75	0.000921	± 2.5	PASS
	VN		30	0.14	0.000074	± 2.5	PASS
	VN		40	2.76	0.001453	± 2.5	PASS
	VN		50	4.66	0.002453	± 2.5	PASS