





















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	3.08	0.001800	± 2.5	PASS
		VN	TN	-1.96	-0.001146	± 2.5	PASS
		VH	TN	4.88	0.002853	± 2.5	PASS
	MCH	VL	TN	4.37	0.002522	± 2.5	PASS
		VN	TN	-1.58	-0.000912	± 2.5	PASS
		VH	TN	2.24	0.001293	± 2.5	PASS
	HCH	VL	TN	-1.06	-0.000604	± 2.5	PASS
		VN	TN	3.87	0.002206	± 2.5	PASS
		VH	TN	3.52	0.002006	± 2.5	PASS
16QAM	LCH	VL	TN	1.31	0.000766	± 2.5	PASS
		VN	TN	-0.24	-0.000140	± 2.5	PASS
		VH	TN	3.97	0.002321	± 2.5	PASS
	MCH	VL	TN	-0.74	-0.000427	± 2.5	PASS
		VN	TN	0.64	0.000369	± 2.5	PASS
		VH	TN	2.97	0.001714	± 2.5	PASS
	HCH	VL	TN	1.66	0.000946	± 2.5	PASS
		VN	TN	1.22	0.000695	± 2.5	PASS
		VH	TN	3.18	0.001813	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.74	0.001602	± 2.5	PASS
		VN	-20	2.11	0.001233	± 2.5	PASS
		VN	-10	0.95	0.000555	± 2.5	PASS
		VN	0	3.77	0.002204	± 2.5	PASS
		VN	10	-1.34	-0.000783	± 2.5	PASS
		VN	20	0.01	0.000006	± 2.5	PASS
		VN	30	1.44	0.000842	± 2.5	PASS
		VN	40	3.17	0.001853	± 2.5	PASS
		VN	50	-0.91	-0.000532	± 2.5	PASS

	MCH	VN	-30	3.86	0.002228	± 2.5	PASS
		VN	-20	-0.63	-0.000364	± 2.5	PASS
		VN	-10	-0.51	-0.000294	± 2.5	PASS
		VN	0	3.82	0.002205	± 2.5	PASS
		VN	10	1.36	0.000785	± 2.5	PASS
		VN	20	4.61	0.002661	± 2.5	PASS
		VN	30	3.08	0.001778	± 2.5	PASS
		VN	40	0.83	0.000479	± 2.5	PASS
		VN	50	0.93	0.000537	± 2.5	PASS
	HCH	VN	-30	-1.39	-0.000792	± 2.5	PASS
		VN	-20	0.32	0.000182	± 2.5	PASS
		VN	-10	-1.24	-0.000707	± 2.5	PASS
		VN	0	3.39	0.001932	± 2.5	PASS
		VN	10	-0.03	-0.000017	± 2.5	PASS
		VN	20	1.26	0.000718	± 2.5	PASS
		VN	30	-1.18	-0.000673	± 2.5	PASS
		VN	40	2.26	0.001288	± 2.5	PASS
		VN	50	2.24	0.001277	± 2.5	PASS
16QAM	LCH	VN	-30	4.8	0.002806	± 2.5	PASS
		VN	-20	4.4	0.002572	± 2.5	PASS
		VN	-10	-1.28	-0.000748	± 2.5	PASS
		VN	0	0.53	0.000310	± 2.5	PASS
		VN	10	-1.17	-0.000684	± 2.5	PASS
		VN	20	-1.73	-0.001011	± 2.5	PASS
		VN	30	2.39	0.001397	± 2.5	PASS
		VN	40	-0.9	-0.000526	± 2.5	PASS
		VN	50	-1.98	-0.001157	± 2.5	PASS
	MCH	VN	-30	4.28	0.002440	± 2.5	PASS
		VN	-20	0.97	0.000553	± 2.5	PASS
		VN	-10	3.73	0.002126	± 2.5	PASS
		VN	0	3.37	0.001921	± 2.5	PASS
		VN	10	4.36	0.002485	± 2.5	PASS
		VN	20	3.22	0.001835	± 2.5	PASS
		VN	30	-1	-0.000570	± 2.5	PASS
		VN	40	-1.99	-0.001134	± 2.5	PASS
		VN	50	3.4	0.001938	± 2.5	PASS
	HCH	VN	-30	4.28	0.002440	± 2.5	PASS
		VN	-20	0.94	0.000536	± 2.5	PASS
		VN	-10	3.76	0.002143	± 2.5	PASS
		VN	0	0.59	0.000336	± 2.5	PASS
		VN	10	3.63	0.002069	± 2.5	PASS

		VN	20	2.04	0.001163	± 2.5	PASS
		VN	30	0.36	0.000205	± 2.5	PASS
		VN	40	3.93	0.002240	± 2.5	PASS
		VN	50	4.93	0.002810	± 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	-0.7	-0.000409	± 2.5	PASS
		VN	TN	3.83	0.002238	± 2.5	PASS
		VH	TN	3.05	0.001782	± 2.5	PASS
	MCH	VL	TN	4.62	0.002667	± 2.5	PASS
		VN	TN	-1.31	-0.000756	± 2.5	PASS
		VH	TN	4.21	0.002430	± 2.5	PASS
	HCH	VL	TN	-1.95	-0.001112	± 2.5	PASS
		VN	TN	1.34	0.000764	± 2.5	PASS
		VH	TN	0.52	0.000297	± 2.5	PASS
16QAM	LCH	VL	TN	1.49	0.000871	± 2.5	PASS
		VN	TN	-0.47	-0.000275	± 2.5	PASS
		VH	TN	-0.6	-0.000351	± 2.5	PASS
	MCH	VL	TN	1.15	0.000664	± 2.5	PASS
		VN	TN	-0.51	-0.000294	± 2.5	PASS
		VH	TN	3.3	0.001905	± 2.5	PASS
	HCH	VL	TN	1.06	0.000605	± 2.5	PASS
		VN	TN	1.04	0.000593	± 2.5	PASS
		VH	TN	0.44	0.000251	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.37	0.001385	± 2.5	PASS
		VN	-20	4.15	0.002425	± 2.5	PASS
		VN	-10	3.91	0.002285	± 2.5	PASS
		VN	0	2.25	0.001315	± 2.5	PASS
		VN	10	2.73	0.001595	± 2.5	PASS
		VN	20	1.06	0.000619	± 2.5	PASS
		VN	30	-0.32	-0.000187	± 2.5	PASS
		VN	40	-0.3	-0.000175	± 2.5	PASS
		VN	50	0.23	0.000134	± 2.5	PASS
	MCH	VN	-30	-1.81	-0.001045	± 2.5	PASS

	VN	VN	-20	-1.22	-0.000704	± 2.5	PASS
		VN	-10	2.41	0.001391	± 2.5	PASS
		VN	0	0.66	0.000381	± 2.5	PASS
		VN	10	2.16	0.001247	± 2.5	PASS
		VN	20	1.6	0.000924	± 2.5	PASS
		VN	30	1.23	0.000710	± 2.5	PASS
		VN	40	-1.4	-0.000808	± 2.5	PASS
		VN	50	-1.3	-0.000750	± 2.5	PASS
	HCH	VN	-30	2.49	0.001420	± 2.5	PASS
		VN	-20	-1.25	-0.000713	± 2.5	PASS
		VN	-10	-0.3	-0.000171	± 2.5	PASS
		VN	0	0.51	0.000291	± 2.5	PASS
		VN	10	2.54	0.001449	± 2.5	PASS
		VN	20	2.46	0.001403	± 2.5	PASS
		VN	30	1.1	0.000627	± 2.5	PASS
		VN	40	2.7	0.001540	± 2.5	PASS
		VN	50	3.72	0.002121	± 2.5	PASS
		16QAM	LCH	VN	-30	-0.15	-0.000087
VN	-20			-0.23	-0.000133	± 2.5	PASS
VN	-10			-0.28	-0.000162	± 2.5	PASS
VN	0			1.93	0.001114	± 2.5	PASS
VN	10			4.22	0.002436	± 2.5	PASS
VN	20			-1.9	-0.001097	± 2.5	PASS
VN	30			1.5	0.000866	± 2.5	PASS
VN	40			1.81	0.001045	± 2.5	PASS
VN	50			2.29	0.001322	± 2.5	PASS
MCH	VN		-30	4.73	0.002697	± 2.5	PASS
	VN		-20	1.1	0.000627	± 2.5	PASS
	VN		-10	-1.31	-0.000747	± 2.5	PASS
	VN		0	-0.04	-0.000023	± 2.5	PASS
	VN		10	1.07	0.000610	± 2.5	PASS
	VN		20	-1.41	-0.000804	± 2.5	PASS
	VN		30	0.19	0.000108	± 2.5	PASS
	VN		40	-1.73	-0.000987	± 2.5	PASS
	VN		50	-1.74	-0.000992	± 2.5	PASS
HCH	VN		-30	3.62	0.002064	± 2.5	PASS
	VN		-20	2.98	0.001699	± 2.5	PASS
	VN		-10	-1.21	-0.000690	± 2.5	PASS
	VN		0	2.47	0.001409	± 2.5	PASS
	VN		10	-1.13	-0.000644	± 2.5	PASS
	VN		20	2.8	0.001597	± 2.5	PASS

		VN	30	1.22	0.000696	± 2.5	PASS
		VN	40	3.23	0.001842	± 2.5	PASS
		VN	50	2.28	0.001300	± 2.5	PASS

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	0.43	0.000251	± 2.5	PASS
		VN	TN	3.78	0.002207	± 2.5	PASS
		VH	TN	0.54	0.000315	± 2.5	PASS
	MCH	VL	TN	3.97	0.002291	± 2.5	PASS
		VN	TN	2.16	0.001247	± 2.5	PASS
		VH	TN	0.77	0.000444	± 2.5	PASS
	HCH	VL	TN	3.01	0.001718	± 2.5	PASS
		VN	TN	2.13	0.001215	± 2.5	PASS
		VH	TN	2.44	0.001392	± 2.5	PASS
16QAM	LCH	VL	TN	1.95	0.001139	± 2.5	PASS
		VN	TN	0.61	0.000356	± 2.5	PASS
		VH	TN	4.38	0.002558	± 2.5	PASS
	MCH	VL	TN	3.33	0.001922	± 2.5	PASS
		VN	TN	-1.2	-0.000693	± 2.5	PASS
		VH	TN	2.62	0.001512	± 2.5	PASS
	HCH	VL	TN	2.07	0.001181	± 2.5	PASS
		VN	TN	0.83	0.000474	± 2.5	PASS
		VH	TN	1.23	0.000702	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.47	0.000858	± 2.5	PASS
		VN	-20	3.88	0.002266	± 2.5	PASS
		VN	-10	3	0.001752	± 2.5	PASS
		VN	0	-1.78	-0.001039	± 2.5	PASS
		VN	10	4.15	0.002423	± 2.5	PASS
		VN	20	-0.29	-0.000169	± 2.5	PASS
		VN	30	4.09	0.002388	± 2.5	PASS
		VN	40	-0.39	-0.000228	± 2.5	PASS
		VN	50	0.6	0.000350	± 2.5	PASS
	MCH	VN	-30	3.02	0.001743	± 2.5	PASS
		VN	-20	-1.45	-0.000837	± 2.5	PASS

		VN	-10	0.27	0.000156	± 2.5	PASS		
		VN	0	-1.78	-0.001027	± 2.5	PASS		
		VN	10	1.14	0.000658	± 2.5	PASS		
		VN	20	4.01	0.002315	± 2.5	PASS		
		VN	30	-1.07	-0.000618	± 2.5	PASS		
		VN	40	-0.72	-0.000416	± 2.5	PASS		
		VN	50	0.66	0.000381	± 2.5	PASS		
	HCH	VN	-30	4.81	0.002745	± 2.5	PASS		
		VN	-20	-0.41	-0.000215	± 2.5	PASS		
		VN	-10	0.27	0.000142	± 2.5	PASS		
		VN	0	-0.79	-0.000414	± 2.5	PASS		
		VN	10	1.98	0.001038	± 2.5	PASS		
		VN	20	0.59	0.000309	± 2.5	PASS		
		VN	30	3.08	0.001615	± 2.5	PASS		
		VN	40	3.77	0.001976	± 2.5	PASS		
		VN	50	-0.84	-0.000440	± 2.5	PASS		
		16QAM	LCH	VN	-30	0.36	0.000208	± 2.5	PASS
				VN	-20	1.92	0.001108	± 2.5	PASS
				VN	-10	-1.98	-0.001143	± 2.5	PASS
VN	0			2.93	0.001691	± 2.5	PASS		
VN	10			-0.3	-0.000173	± 2.5	PASS		
VN	20			-0.6	-0.000346	± 2.5	PASS		
VN	30			2.6	0.001501	± 2.5	PASS		
VN	40			2.91	0.001680	± 2.5	PASS		
VN	50			0.38	0.000219	± 2.5	PASS		
MCH	VN		-30	-1.18	-0.000673	± 2.5	PASS		
	VN		-20	-0.68	-0.000388	± 2.5	PASS		
	VN		-10	0.97	0.000553	± 2.5	PASS		
	VN		0	-0.76	-0.000434	± 2.5	PASS		
	VN		10	4.12	0.002351	± 2.5	PASS		
	VN		20	-1.81	-0.001033	± 2.5	PASS		
	VN		30	4.83	0.002756	± 2.5	PASS		
	VN		40	-0.38	-0.000217	± 2.5	PASS		
	VN		50	2.02	0.001153	± 2.5	PASS		
HCH	VN		-30	-1.58	-0.000828	± 2.5	PASS		
	VN		-20	0.16	0.000084	± 2.5	PASS		
	VN		-10	1.62	0.000849	± 2.5	PASS		
	VN		0	2.41	0.001263	± 2.5	PASS		
	VN		10	3.06	0.001604	± 2.5	PASS		
	VN		20	-0.99	-0.000519	± 2.5	PASS		
	VN		30	2.14	0.001122	± 2.5	PASS		

		VN	40	-1.39	-0.000729	± 2.5	PASS
		VN	50	-1.92	-0.001007	± 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	-0.68	-0.000397	± 2.5	PASS
		VN	TN	3.27	0.001907	± 2.5	PASS
		VH	TN	-0.88	-0.000513	± 2.5	PASS
	MCH	VL	TN	2.06	0.001189	± 2.5	PASS
		VN	TN	0.49	0.000283	± 2.5	PASS
		VH	TN	2.6	0.001501	± 2.5	PASS
	HCH	VL	TN	1	0.000571	± 2.5	PASS
		VN	TN	-0.88	-0.000503	± 2.5	PASS
		VH	TN	-0.62	-0.000354	± 2.5	PASS
16QAM	LCH	VL	TN	-0.12	-0.000070	± 2.5	PASS
		VN	TN	1.58	0.000921	± 2.5	PASS
		VH	TN	1.06	0.000618	± 2.5	PASS
	MCH	VL	TN	4.62	0.002667	± 2.5	PASS
		VN	TN	0.38	0.000219	± 2.5	PASS
		VH	TN	2.42	0.001397	± 2.5	PASS
	HCH	VL	TN	-1.62	-0.000926	± 2.5	PASS
		VN	TN	-1.4	-0.000800	± 2.5	PASS
		VH	TN	3.85	0.002200	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.26	-0.000735	± 2.5	PASS
		VN	-20	3.21	0.001872	± 2.5	PASS
		VN	-10	0.53	0.000309	± 2.5	PASS
		VN	0	4.86	0.002834	± 2.5	PASS
		VN	10	4.89	0.002851	± 2.5	PASS
		VN	20	0.25	0.000146	± 2.5	PASS
		VN	30	3.87	0.002257	± 2.5	PASS
		VN	40	2.48	0.001446	± 2.5	PASS
		VN	50	-0.96	-0.000560	± 2.5	PASS
	MCH	VN	-30	-0.04	-0.000023	± 2.5	PASS
		VN	-20	4.97	0.002869	± 2.5	PASS
		VN	-10	3.09	0.001784	± 2.5	PASS

		VN	0	4.25	0.002453	± 2.5	PASS		
		VN	10	2.56	0.001478	± 2.5	PASS		
		VN	20	-0.54	-0.000312	± 2.5	PASS		
		VN	30	-1.92	-0.001108	± 2.5	PASS		
		VN	40	0.45	0.000260	± 2.5	PASS		
		VN	50	1.66	0.000958	± 2.5	PASS		
	HCH	VN	-30	-1.54	-0.000880	± 2.5	PASS		
		VN	-20	-1.75	-0.001000	± 2.5	PASS		
		VN	-10	3.49	0.001994	± 2.5	PASS		
		VN	0	2.49	0.001423	± 2.5	PASS		
		VN	10	2.29	0.001309	± 2.5	PASS		
		VN	20	2.1	0.001200	± 2.5	PASS		
		VN	30	3.28	0.001874	± 2.5	PASS		
		VN	40	4.9	0.002800	± 2.5	PASS		
		VN	50	1.26	0.000720	± 2.5	PASS		
		16QAM	LCH	VN	-30	3.09	0.001784	± 2.5	PASS
				VN	-20	4.25	0.002453	± 2.5	PASS
				VN	-10	-1.75	-0.001010	± 2.5	PASS
				VN	0	-1.62	-0.000935	± 2.5	PASS
VN	10			-0.23	-0.000133	± 2.5	PASS		
VN	20			-1.39	-0.000802	± 2.5	PASS		
VN	30			3.77	0.002176	± 2.5	PASS		
VN	40			4.63	0.002672	± 2.5	PASS		
VN	50			-0.56	-0.000323	± 2.5	PASS		
MCH	VN		-30	-0.61	-0.000349	± 2.5	PASS		
	VN		-20	-0.49	-0.000280	± 2.5	PASS		
	VN		-10	0.27	0.000154	± 2.5	PASS		
	VN		0	-1.9	-0.001086	± 2.5	PASS		
	VN		10	3.01	0.001720	± 2.5	PASS		
	VN		20	-0.83	-0.000474	± 2.5	PASS		
	VN		30	-1.56	-0.000891	± 2.5	PASS		
	VN		40	-0.79	-0.000451	± 2.5	PASS		
	VN		50	0.48	0.000274	± 2.5	PASS		
HCH	VN		-30	0.87	0.000497	± 2.5	PASS		
	VN	-20	0.52	0.000297	± 2.5	PASS			
	VN	-10	0.57	0.000326	± 2.5	PASS			
	VN	0	2.87	0.001640	± 2.5	PASS			
	VN	10	-1.1	-0.000629	± 2.5	PASS			
	VN	20	-1.44	-0.000823	± 2.5	PASS			
	VN	30	-1.64	-0.000937	± 2.5	PASS			
	VN	40	0.36	0.000206	± 2.5	PASS			

		VN	50	1.77	0.001011	± 2.5	PASS
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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	4.26	0.002480	± 2.5	PASS
		VN	TN	2.08	0.001211	± 2.5	PASS
		VH	TN	2.02	0.001176	± 2.5	PASS
	MCH	VL	TN	0.57	0.000329	± 2.5	PASS
		VN	TN	4.4	0.002540	± 2.5	PASS
		VH	TN	2.73	0.001576	± 2.5	PASS
	HCH	VL	TN	4.53	0.002592	± 2.5	PASS
		VN	TN	-0.52	-0.000298	± 2.5	PASS
		VH	TN	-0.9	-0.000515	± 2.5	PASS
16QAM	LCH	VL	TN	1.29	0.000751	± 2.5	PASS
		VN	TN	1.65	0.000961	± 2.5	PASS
		VH	TN	-0.99	-0.000576	± 2.5	PASS
	MCH	VL	TN	3.35	0.001934	± 2.5	PASS
		VN	TN	1.27	0.000733	± 2.5	PASS
		VH	TN	4.7	0.002713	± 2.5	PASS
	HCH	VL	TN	1.4	0.000801	± 2.5	PASS
		VN	TN	2.4	0.001373	± 2.5	PASS
		VH	TN	2.9	0.001660	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.88	0.002259	± 2.5	PASS
		VN	-20	-0.64	-0.000373	± 2.5	PASS
		VN	-10	3.74	0.002178	± 2.5	PASS
		VN	0	2.99	0.001741	± 2.5	PASS
		VN	10	-0.48	-0.000279	± 2.5	PASS
		VN	20	-0.82	-0.000477	± 2.5	PASS
		VN	30	4.04	0.002352	± 2.5	PASS
		VN	40	3.68	0.002143	± 2.5	PASS
		VN	50	2.35	0.001368	± 2.5	PASS
	MCH	VN	-30	1.31	0.000756	± 2.5	PASS
		VN	-20	0.37	0.000214	± 2.5	PASS
		VN	-10	4.05	0.002338	± 2.5	PASS
		VN	0	3.18	0.001835	± 2.5	PASS

		VN	10	-1.56	-0.000900	± 2.5	PASS
		VN	20	-0.84	-0.000485	± 2.5	PASS
		VN	30	-0.55	-0.000317	± 2.5	PASS
		VN	40	1.16	0.000670	± 2.5	PASS
		VN	50	-1.82	-0.001051	± 2.5	PASS
	HCH	VN	-30	3.14	0.001797	± 2.5	PASS
		VN	-20	1.2	0.000687	± 2.5	PASS
		VN	-10	2.69	0.001539	± 2.5	PASS
		VN	0	4.27	0.002443	± 2.5	PASS
		VN	10	4.39	0.002512	± 2.5	PASS
		VN	20	-1.91	-0.001093	± 2.5	PASS
		VN	30	3.68	0.002106	± 2.5	PASS
		VN	40	-1.05	-0.000601	± 2.5	PASS
		VN	50	0.55	0.000315	± 2.5	PASS
		16QAM	LCH	VN	-30	1.09	0.000629
VN	-20			3.93	0.002268	± 2.5	PASS
VN	-10			2.9	0.001674	± 2.5	PASS
VN	0			3.19	0.001841	± 2.5	PASS
VN	10			1.16	0.000670	± 2.5	PASS
VN	20			2.28	0.001316	± 2.5	PASS
VN	30			2.65	0.001530	± 2.5	PASS
VN	40			2.35	0.001356	± 2.5	PASS
VN	50			-0.34	-0.000196	± 2.5	PASS
MCH	VN		-30	2.6	0.001488	± 2.5	PASS
	VN		-20	-0.93	-0.000532	± 2.5	PASS
	VN		-10	0.48	0.000275	± 2.5	PASS
	VN		0	-0.97	-0.000555	± 2.5	PASS
	VN		10	0.39	0.000223	± 2.5	PASS
	VN		20	2.95	0.001688	± 2.5	PASS
	VN		30	3.6	0.002060	± 2.5	PASS
	VN		40	-0.5	-0.000286	± 2.5	PASS
	VN		50	0.2	0.000114	± 2.5	PASS
HCH	VN		-30	1.3	0.000744	± 2.5	PASS
	VN		-20	-1	-0.000572	± 2.5	PASS
	VN		-10	0.58	0.000332	± 2.5	PASS
	VN		0	4.91	0.002810	± 2.5	PASS
	VN		10	2.21	0.001265	± 2.5	PASS
	VN		20	0.31	0.000177	± 2.5	PASS
	VN		30	4.96	0.002838	± 2.5	PASS
	VN		40	2.13	0.001219	± 2.5	PASS
	VN		50	3.25	0.001860	± 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	3.88	0.002256	± 2.5	PASS
		VN	TN	1.64	0.000953	± 2.5	PASS
		VH	TN	2.82	0.001640	± 2.5	PASS
	MCH	VL	TN	0.43	0.000248	± 2.5	PASS
		VN	TN	-1.36	-0.000785	± 2.5	PASS
		VH	TN	0.54	0.000312	± 2.5	PASS
	HCH	VL	TN	4.03	0.002309	± 2.5	PASS
		VN	TN	-0.76	-0.000436	± 2.5	PASS
		VH	TN	-1.3	-0.000745	± 2.5	PASS
16QAM	LCH	VL	TN	3.2	0.001860	± 2.5	PASS
		VN	TN	0.61	0.000355	± 2.5	PASS
		VH	TN	4.64	0.002698	± 2.5	PASS
	MCH	VL	TN	0.19	0.000110	± 2.5	PASS
		VN	TN	3.07	0.001772	± 2.5	PASS
		VH	TN	3.54	0.002043	± 2.5	PASS
	HCH	VL	TN	4.56	0.002613	± 2.5	PASS
		VN	TN	0.24	0.000138	± 2.5	PASS
		VH	TN	-0.87	-0.000499	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.55	-0.000320	± 2.5	PASS
		VN	-20	4.25	0.002471	± 2.5	PASS
		VN	-10	2.75	0.001599	± 2.5	PASS
		VN	0	-1.07	-0.000622	± 2.5	PASS
		VN	10	0.84	0.000488	± 2.5	PASS
		VN	20	3.12	0.001814	± 2.5	PASS
		VN	30	-0.01	-0.000006	± 2.5	PASS
		VN	40	-0.58	-0.000337	± 2.5	PASS
		VN	50	1.02	0.000593	± 2.5	PASS
	MCH	VN	-30	2.39	0.001380	± 2.5	PASS
		VN	-20	4.03	0.002326	± 2.5	PASS
		VN	-10	3.21	0.001853	± 2.5	PASS
		VN	0	3.69	0.002130	± 2.5	PASS
		VN	10	-0.1	-0.000058	± 2.5	PASS

		VN	20	1.72	0.000993	± 2.5	PASS
		VN	30	1.76	0.001016	± 2.5	PASS
		VN	40	0.86	0.000496	± 2.5	PASS
		VN	50	2.24	0.001293	± 2.5	PASS
	HCH	VN	-30	4.93	0.002825	± 2.5	PASS
		VN	-20	4.33	0.002481	± 2.5	PASS
		VN	-10	-0.21	-0.000120	± 2.5	PASS
		VN	0	-0.41	-0.000235	± 2.5	PASS
		VN	10	-1.75	-0.001003	± 2.5	PASS
		VN	20	-0.86	-0.000493	± 2.5	PASS
		VN	30	3.62	0.002074	± 2.5	PASS
		VN	40	4.68	0.002682	± 2.5	PASS
		VN	50	-0.14	-0.000080	± 2.5	PASS
16QAM	LCH	VN	-30	0.55	0.000317	± 2.5	PASS
		VN	-20	0.82	0.000473	± 2.5	PASS
		VN	-10	1.17	0.000675	± 2.5	PASS
		VN	0	1.71	0.000987	± 2.5	PASS
		VN	10	4.85	0.002799	± 2.5	PASS
		VN	20	0.97	0.000560	± 2.5	PASS
		VN	30	-1.48	-0.000854	± 2.5	PASS
		VN	40	3.56	0.002055	± 2.5	PASS
		VN	50	3.44	0.001986	± 2.5	PASS
	MCH	VN	-30	1.27	0.000728	± 2.5	PASS
		VN	-20	3.21	0.001840	± 2.5	PASS
		VN	-10	4.31	0.002470	± 2.5	PASS
		VN	0	2.93	0.001679	± 2.5	PASS
		VN	10	4.15	0.002378	± 2.5	PASS
		VN	20	-0.41	-0.000235	± 2.5	PASS
		VN	30	3.34	0.001914	± 2.5	PASS
		VN	40	-0.25	-0.000143	± 2.5	PASS
		VN	50	2.88	0.001650	± 2.5	PASS
	HCH	VN	-30	-0.45	-0.000258	± 2.5	PASS
		VN	-20	-0.23	-0.000132	± 2.5	PASS
		VN	-10	4.26	0.002441	± 2.5	PASS
		VN	0	-0.06	-0.000034	± 2.5	PASS
		VN	10	2.36	0.001352	± 2.5	PASS
		VN	20	-0.19	-0.000109	± 2.5	PASS
		VN	30	0.43	0.000246	± 2.5	PASS
		VN	40	0.9	0.000516	± 2.5	PASS
		VN	50	0.47	0.000269	± 2.5	PASS