





















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	-0.04	-0.000023	± 2.5	PASS
		VN	TN	-0.65	-0.000380	± 2.5	PASS
		VH	TN	3.12	0.001824	± 2.5	PASS
	MCH	VL	TN	2.14	0.001235	± 2.5	PASS
		VN	TN	4.04	0.002332	± 2.5	PASS
		VH	TN	-1.82	-0.001051	± 2.5	PASS
	HCH	VL	TN	0.46	0.000262	± 2.5	PASS
		VN	TN	0.2	0.000114	± 2.5	PASS
		VH	TN	-1.01	-0.000576	± 2.5	PASS
16QAM	LCH	VL	TN	3.65	0.002134	± 2.5	PASS
		VN	TN	3.81	0.002227	± 2.5	PASS
		VH	TN	3.37	0.001970	± 2.5	PASS
	MCH	VL	TN	3.43	0.001980	± 2.5	PASS
		VN	TN	4.25	0.002453	± 2.5	PASS
		VH	TN	4.94	0.002851	± 2.5	PASS
	HCH	VL	TN	1.49	0.000849	± 2.5	PASS
		VN	TN	1.75	0.000998	± 2.5	PASS
		VH	TN	1.39	0.000792	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.58	0.002093	± 2.5	PASS
		VN	-20	3.75	0.002192	± 2.5	PASS
		VN	-10	3.62	0.002116	± 2.5	PASS
		VN	0	4.05	0.002367	± 2.5	PASS
		VN	10	-0.23	-0.000134	± 2.5	PASS
		VN	20	0.55	0.000322	± 2.5	PASS
		VN	30	1.18	0.000690	± 2.5	PASS
		VN	40	1.35	0.000789	± 2.5	PASS
		VN	50	-1.6	-0.000935	± 2.5	PASS

	MCH	VN	-30	3.56	0.002055	± 2.5	PASS
		VN	-20	1.95	0.001126	± 2.5	PASS
		VN	-10	3.85	0.002222	± 2.5	PASS
		VN	0	-1.41	-0.000814	± 2.5	PASS
		VN	10	1.45	0.000837	± 2.5	PASS
		VN	20	-0.62	-0.000358	± 2.5	PASS
		VN	30	1.56	0.000900	± 2.5	PASS
		VN	40	4.95	0.002857	± 2.5	PASS
		VN	50	2.55	0.001472	± 2.5	PASS
	HCH	VN	-30	0.61	0.000348	± 2.5	PASS
		VN	-20	3.54	0.002018	± 2.5	PASS
		VN	-10	-0.79	-0.000450	± 2.5	PASS
		VN	0	2.77	0.001579	± 2.5	PASS
		VN	10	-1.51	-0.000861	± 2.5	PASS
		VN	20	0.11	0.000063	± 2.5	PASS
		VN	30	2.19	0.001248	± 2.5	PASS
		VN	40	1.7	0.000969	± 2.5	PASS
		VN	50	1.7	0.000969	± 2.5	PASS
16QAM	LCH	VN	-30	1.87	0.001093	± 2.5	PASS
		VN	-20	3.43	0.002005	± 2.5	PASS
		VN	-10	-1.97	-0.001152	± 2.5	PASS
		VN	0	-0.44	-0.000257	± 2.5	PASS
		VN	10	-1.01	-0.000590	± 2.5	PASS
		VN	20	2.38	0.001391	± 2.5	PASS
		VN	30	-0.37	-0.000216	± 2.5	PASS
		VN	40	4.45	0.002601	± 2.5	PASS
		VN	50	3.72	0.002175	± 2.5	PASS
	MCH	VN	-30	-0.3	-0.000171	± 2.5	PASS
		VN	-20	1.83	0.001043	± 2.5	PASS
		VN	-10	4.83	0.002753	± 2.5	PASS
		VN	0	2.53	0.001442	± 2.5	PASS
		VN	10	-0.78	-0.000445	± 2.5	PASS
		VN	20	2.96	0.001687	± 2.5	PASS
		VN	30	-0.19	-0.000108	± 2.5	PASS
		VN	40	1.55	0.000884	± 2.5	PASS
		VN	50	4.28	0.002440	± 2.5	PASS
	HCH	VN	-30	2.3	0.001311	± 2.5	PASS
		VN	-20	0.93	0.000530	± 2.5	PASS
		VN	-10	-0.47	-0.000268	± 2.5	PASS
		VN	0	2.79	0.001590	± 2.5	PASS
		VN	10	-0.74	-0.000422	± 2.5	PASS

		VN	20	4.51	0.002571	± 2.5	PASS
		VN	30	2.58	0.001471	± 2.5	PASS
		VN	40	2.48	0.001414	± 2.5	PASS
		VN	50	-0.22	-0.000125	± 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	1.86	0.001087	± 2.5	PASS
		VN	TN	2.37	0.001385	± 2.5	PASS
		VH	TN	-0.2	-0.000117	± 2.5	PASS
	MCH	VL	TN	3.13	0.001807	± 2.5	PASS
		VN	TN	2.44	0.001408	± 2.5	PASS
		VH	TN	2.68	0.001547	± 2.5	PASS
	HCH	VL	TN	2.34	0.001334	± 2.5	PASS
		VN	TN	0.98	0.000559	± 2.5	PASS
		VH	TN	1.35	0.000770	± 2.5	PASS
16QAM	LCH	VL	TN	4.66	0.002723	± 2.5	PASS
		VN	TN	2.71	0.001583	± 2.5	PASS
		VH	TN	1.36	0.000795	± 2.5	PASS
	MCH	VL	TN	3.04	0.001755	± 2.5	PASS
		VN	TN	-1.98	-0.001143	± 2.5	PASS
		VH	TN	1.73	0.000999	± 2.5	PASS
	HCH	VL	TN	-0.51	-0.000291	± 2.5	PASS
		VN	TN	-1.21	-0.000690	± 2.5	PASS
		VH	TN	-0.08	-0.000046	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.98	0.000573	± 2.5	PASS
		VN	-20	-1.69	-0.000987	± 2.5	PASS
		VN	-10	2.52	0.001472	± 2.5	PASS
		VN	0	-1.12	-0.000654	± 2.5	PASS
		VN	10	-0.48	-0.000280	± 2.5	PASS
		VN	20	-0.29	-0.000169	± 2.5	PASS
		VN	30	4.91	0.002869	± 2.5	PASS
		VN	40	1.41	0.000824	± 2.5	PASS
		VN	50	2.32	0.001356	± 2.5	PASS
	MCH	VN	-30	-0.21	-0.000121	± 2.5	PASS

		VN	-20	3.92	0.002263	± 2.5	PASS
		VN	-10	-1.44	-0.000831	± 2.5	PASS
		VN	0	3.4	0.001962	± 2.5	PASS
		VN	10	2.3	0.001328	± 2.5	PASS
		VN	20	0.72	0.000416	± 2.5	PASS
		VN	30	3.09	0.001784	± 2.5	PASS
		VN	40	2.77	0.001599	± 2.5	PASS
		VN	50	0.72	0.000416	± 2.5	PASS
	HCH	VN	-30	4.26	0.002429	± 2.5	PASS
		VN	-20	0.37	0.000211	± 2.5	PASS
		VN	-10	4.24	0.002418	± 2.5	PASS
		VN	0	0.28	0.000160	± 2.5	PASS
		VN	10	1.38	0.000787	± 2.5	PASS
		VN	20	2.04	0.001163	± 2.5	PASS
		VN	30	-0.78	-0.000445	± 2.5	PASS
		VN	40	-1.25	-0.000713	± 2.5	PASS
		VN	50	3.95	0.002253	± 2.5	PASS
		16QAM	LCH	VN	-30	-1.98	-0.001143
VN	-20			4.32	0.002494	± 2.5	PASS
VN	-10			1.31	0.000756	± 2.5	PASS
VN	0			2.29	0.001322	± 2.5	PASS
VN	10			1.14	0.000658	± 2.5	PASS
VN	20			-1.4	-0.000808	± 2.5	PASS
VN	30			4.67	0.002696	± 2.5	PASS
VN	40			3.83	0.002211	± 2.5	PASS
VN	50			-0.32	-0.000185	± 2.5	PASS
MCH	VN		-30	4.86	0.002772	± 2.5	PASS
	VN		-20	0.42	0.000240	± 2.5	PASS
	VN		-10	4.18	0.002384	± 2.5	PASS
	VN		0	4.43	0.002526	± 2.5	PASS
	VN		10	2.3	0.001312	± 2.5	PASS
	VN		20	1.44	0.000821	± 2.5	PASS
	VN		30	2.4	0.001369	± 2.5	PASS
	VN		40	2.85	0.001625	± 2.5	PASS
	VN		50	2.73	0.001557	± 2.5	PASS
HCH	VN		-30	3.94	0.002247	± 2.5	PASS
	VN		-20	0.7	0.000399	± 2.5	PASS
	VN		-10	3.69	0.002104	± 2.5	PASS
	VN		0	1.56	0.000890	± 2.5	PASS
	VN		10	0.75	0.000428	± 2.5	PASS
	VN		20	-1.91	-0.001089	± 2.5	PASS

		VN	30	-0.07	-0.000040	± 2.5	PASS
		VN	40	-0.84	-0.000479	± 2.5	PASS
		VN	50	-1.65	-0.000941	± 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	4.02	0.002347	± 2.5	PASS
		VN	TN	3.1	0.001810	± 2.5	PASS
		VH	TN	3.17	0.001851	± 2.5	PASS
	MCH	VL	TN	4.5	0.002597	± 2.5	PASS
		VN	TN	3.23	0.001864	± 2.5	PASS
		VH	TN	4.87	0.002811	± 2.5	PASS
	HCH	VL	TN	-0.5	-0.000285	± 2.5	PASS
		VN	TN	3.24	0.001849	± 2.5	PASS
		VH	TN	4.28	0.002442	± 2.5	PASS
16QAM	LCH	VL	TN	2.48	0.001448	± 2.5	PASS
		VN	TN	4.14	0.002418	± 2.5	PASS
		VH	TN	-0.45	-0.000263	± 2.5	PASS
	MCH	VL	TN	-0.76	-0.000439	± 2.5	PASS
		VN	TN	-0.51	-0.000294	± 2.5	PASS
		VH	TN	3.09	0.001784	± 2.5	PASS
	HCH	VL	TN	-0.98	-0.000559	± 2.5	PASS
		VN	TN	1.6	0.000913	± 2.5	PASS
		VH	TN	2.72	0.001552	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1	-0.000584	± 2.5	PASS
		VN	-20	-0.25	-0.000146	± 2.5	PASS
		VN	-10	-0.51	-0.000298	± 2.5	PASS
		VN	0	-1.52	-0.000888	± 2.5	PASS
		VN	10	4.33	0.002528	± 2.5	PASS
		VN	20	-0.21	-0.000123	± 2.5	PASS
		VN	30	-0.46	-0.000269	± 2.5	PASS
		VN	40	3.23	0.001886	± 2.5	PASS
		VN	50	3.96	0.002312	± 2.5	PASS
	MCH	VN	-30	4.87	0.002811	± 2.5	PASS
		VN	-20	0.41	0.000237	± 2.5	PASS

		VN	-10	3.35	0.001934	± 2.5	PASS		
		VN	0	-1.78	-0.001027	± 2.5	PASS		
		VN	10	-1.42	-0.000820	± 2.5	PASS		
		VN	20	0.31	0.000179	± 2.5	PASS		
		VN	30	2.76	0.001593	± 2.5	PASS		
		VN	40	2.13	0.001229	± 2.5	PASS		
		VN	50	3.45	0.001991	± 2.5	PASS		
	HCH	VN	-30	0.36	0.000205	± 2.5	PASS		
		VN	-20	-1.89	-0.000991	± 2.5	PASS		
		VN	-10	-1.16	-0.000608	± 2.5	PASS		
		VN	0	-1.72	-0.000902	± 2.5	PASS		
		VN	10	2.48	0.001300	± 2.5	PASS		
		VN	20	3.34	0.001751	± 2.5	PASS		
		VN	30	4.2	0.002202	± 2.5	PASS		
		VN	40	2.59	0.001358	± 2.5	PASS		
		VN	50	1.81	0.000949	± 2.5	PASS		
		16QAM	LCH	VN	-30	4.56	0.002632	± 2.5	PASS
				VN	-20	0.79	0.000456	± 2.5	PASS
				VN	-10	2.43	0.001403	± 2.5	PASS
VN	0			0.12	0.000069	± 2.5	PASS		
VN	10			2.2	0.001270	± 2.5	PASS		
VN	20			2.09	0.001206	± 2.5	PASS		
VN	30			-1.66	-0.000958	± 2.5	PASS		
VN	40			-1.05	-0.000606	± 2.5	PASS		
VN	50			2.59	0.001495	± 2.5	PASS		
MCH	VN		-30	-1.66	-0.000947	± 2.5	PASS		
	VN		-20	2.9	0.001655	± 2.5	PASS		
	VN		-10	4.59	0.002619	± 2.5	PASS		
	VN		0	-0.68	-0.000388	± 2.5	PASS		
	VN		10	4.14	0.002362	± 2.5	PASS		
	VN		20	-0.72	-0.000411	± 2.5	PASS		
	VN		30	3.47	0.001980	± 2.5	PASS		
	VN		40	-0.9	-0.000514	± 2.5	PASS		
	VN		50	0.71	0.000405	± 2.5	PASS		
HCH	VN		-30	0.37	0.000194	± 2.5	PASS		
	VN		-20	-0.57	-0.000299	± 2.5	PASS		
	VN		-10	0.42	0.000220	± 2.5	PASS		
	VN		0	-0.08	-0.000042	± 2.5	PASS		
	VN		10	-1.88	-0.000986	± 2.5	PASS		
	VN		20	2.12	0.001111	± 2.5	PASS		
	VN		30	1.42	0.000744	± 2.5	PASS		

		VN	40	4.59	0.002406	± 2.5	PASS
		VN	50	-0.72	-0.000377	± 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	-1.19	-0.000694	± 2.5	PASS
		VN	TN	-1.82	-0.001061	± 2.5	PASS
		VH	TN	2.86	0.001668	± 2.5	PASS
	MCH	VL	TN	-1.33	-0.000768	± 2.5	PASS
		VN	TN	-0.33	-0.000190	± 2.5	PASS
		VH	TN	2.55	0.001472	± 2.5	PASS
	HCH	VL	TN	0.37	0.000211	± 2.5	PASS
		VN	TN	3.63	0.002074	± 2.5	PASS
		VH	TN	2.07	0.001183	± 2.5	PASS
16QAM	LCH	VL	TN	2.99	0.001743	± 2.5	PASS
		VN	TN	-1.15	-0.000671	± 2.5	PASS
		VH	TN	-0.61	-0.000356	± 2.5	PASS
	MCH	VL	TN	-0.17	-0.000098	± 2.5	PASS
		VN	TN	3.87	0.002234	± 2.5	PASS
		VH	TN	1.64	0.000947	± 2.5	PASS
	HCH	VL	TN	2.69	0.001537	± 2.5	PASS
		VN	TN	-1.54	-0.000880	± 2.5	PASS
		VH	TN	4.76	0.002720	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.85	0.002245	± 2.5	PASS
		VN	-20	3.59	0.002093	± 2.5	PASS
		VN	-10	1.65	0.000962	± 2.5	PASS
		VN	0	2.77	0.001615	± 2.5	PASS
		VN	10	1.12	0.000653	± 2.5	PASS
		VN	20	-0.34	-0.000198	± 2.5	PASS
		VN	30	0.9	0.000525	± 2.5	PASS
		VN	40	1.71	0.000997	± 2.5	PASS
		VN	50	0.36	0.000210	± 2.5	PASS
	MCH	VN	-30	-0.76	-0.000439	± 2.5	PASS
		VN	-20	-0.25	-0.000144	± 2.5	PASS
		VN	-10	4.53	0.002615	± 2.5	PASS

		VN	0	0.68	0.000392	± 2.5	PASS		
		VN	10	-0.92	-0.000531	± 2.5	PASS		
		VN	20	-0.19	-0.000110	± 2.5	PASS		
		VN	30	0.38	0.000219	± 2.5	PASS		
		VN	40	-0.71	-0.000410	± 2.5	PASS		
		VN	50	-1.72	-0.000993	± 2.5	PASS		
	HCH	VN	-30	-1.02	-0.000583	± 2.5	PASS		
		VN	-20	0.21	0.000120	± 2.5	PASS		
		VN	-10	4.56	0.002606	± 2.5	PASS		
		VN	0	1.01	0.000577	± 2.5	PASS		
		VN	10	3.87	0.002211	± 2.5	PASS		
		VN	20	-0.47	-0.000269	± 2.5	PASS		
		VN	30	1.37	0.000783	± 2.5	PASS		
		VN	40	0.28	0.000160	± 2.5	PASS		
		VN	50	4.36	0.002491	± 2.5	PASS		
		16QAM	LCH	VN	-30	-1.76	-0.001016	± 2.5	PASS
				VN	-20	0.49	0.000283	± 2.5	PASS
				VN	-10	2.68	0.001547	± 2.5	PASS
				VN	0	2.77	0.001599	± 2.5	PASS
VN	10			-0.74	-0.000427	± 2.5	PASS		
VN	20			0.91	0.000525	± 2.5	PASS		
VN	30			2.96	0.001709	± 2.5	PASS		
VN	40			0.03	0.000017	± 2.5	PASS		
VN	50			0.14	0.000081	± 2.5	PASS		
MCH	VN		-30	3.36	0.001920	± 2.5	PASS		
	VN		-20	-1.32	-0.000754	± 2.5	PASS		
	VN		-10	4.32	0.002469	± 2.5	PASS		
	VN		0	-1.22	-0.000697	± 2.5	PASS		
	VN		10	4.24	0.002423	± 2.5	PASS		
	VN		20	-1.39	-0.000794	± 2.5	PASS		
	VN		30	-1.54	-0.000880	± 2.5	PASS		
	VN		40	1.44	0.000823	± 2.5	PASS		
	VN		50	3.66	0.002091	± 2.5	PASS		
HCH	VN		-30	3.53	0.002017	± 2.5	PASS		
	VN	-20	2.62	0.001497	± 2.5	PASS			
	VN	-10	4.69	0.002680	± 2.5	PASS			
	VN	0	2.06	0.001177	± 2.5	PASS			
	VN	10	-1.84	-0.001051	± 2.5	PASS			
	VN	20	-1.13	-0.000646	± 2.5	PASS			
	VN	30	1.63	0.000931	± 2.5	PASS			
	VN	40	1.82	0.001040	± 2.5	PASS			

		VN	50	2.66	0.001520	± 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	3.3	0.001921	± 2.5	PASS
		VN	TN	3.75	0.002183	± 2.5	PASS
		VH	TN	1.68	0.000978	± 2.5	PASS
	MCH	VL	TN	-0.1	-0.000058	± 2.5	PASS
		VN	TN	2.53	0.001460	± 2.5	PASS
		VH	TN	1.98	0.001143	± 2.5	PASS
	HCH	VL	TN	2.75	0.001574	± 2.5	PASS
		VN	TN	3.34	0.001911	± 2.5	PASS
		VH	TN	4.03	0.002306	± 2.5	PASS
16QAM	LCH	VL	TN	1.06	0.000617	± 2.5	PASS
		VN	TN	-1.36	-0.000792	± 2.5	PASS
		VH	TN	-0.58	-0.000338	± 2.5	PASS
	MCH	VL	TN	3.44	0.001986	± 2.5	PASS
		VN	TN	3.37	0.001945	± 2.5	PASS
		VH	TN	1.36	0.000785	± 2.5	PASS
	HCH	VL	TN	2.09	0.001196	± 2.5	PASS
		VN	TN	-1.59	-0.000910	± 2.5	PASS
		VH	TN	-0.86	-0.000492	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.36	-0.000792	± 2.5	PASS
		VN	-20	3.68	0.002143	± 2.5	PASS
		VN	-10	3.72	0.002166	± 2.5	PASS
		VN	0	-1	-0.000582	± 2.5	PASS
		VN	10	4.23	0.002463	± 2.5	PASS
		VN	20	0.16	0.000093	± 2.5	PASS
		VN	30	0.09	0.000052	± 2.5	PASS
		VN	40	3.69	0.002148	± 2.5	PASS
		VN	50	0.18	0.000105	± 2.5	PASS
	MCH	VN	-30	3.02	0.001743	± 2.5	PASS
		VN	-20	3.88	0.002240	± 2.5	PASS
		VN	-10	4.19	0.002418	± 2.5	PASS
		VN	0	3.92	0.002263	± 2.5	PASS

		VN	10	2.54	0.001466	± 2.5	PASS
		VN	20	4.94	0.002851	± 2.5	PASS
		VN	30	-0.69	-0.000398	± 2.5	PASS
		VN	40	4.56	0.002632	± 2.5	PASS
		VN	50	0.86	0.000496	± 2.5	PASS
	HCH	VN	-30	1.18	0.000675	± 2.5	PASS
		VN	-20	2.51	0.001436	± 2.5	PASS
		VN	-10	-0.05	-0.000029	± 2.5	PASS
		VN	0	-1.97	-0.001127	± 2.5	PASS
		VN	10	-0.52	-0.000298	± 2.5	PASS
		VN	20	-0.6	-0.000343	± 2.5	PASS
		VN	30	-0.07	-0.000040	± 2.5	PASS
		VN	40	-0.01	-0.000006	± 2.5	PASS
		VN	50	-0.59	-0.000338	± 2.5	PASS
		16QAM	LCH	VN	-30	3.39	0.001957
VN	-20			-1.5	-0.000866	± 2.5	PASS
VN	-10			-0.19	-0.000110	± 2.5	PASS
VN	0			0.75	0.000433	± 2.5	PASS
VN	10			0.85	0.000491	± 2.5	PASS
VN	20			2.93	0.001691	± 2.5	PASS
VN	30			4.48	0.002586	± 2.5	PASS
VN	40			-0.64	-0.000369	± 2.5	PASS
VN	50			3.16	0.001824	± 2.5	PASS
MCH	VN		-30	4.98	0.002850	± 2.5	PASS
	VN		-20	2.3	0.001316	± 2.5	PASS
	VN		-10	4.21	0.002409	± 2.5	PASS
	VN		0	4.97	0.002844	± 2.5	PASS
	VN		10	-0.82	-0.000469	± 2.5	PASS
	VN		20	-2	-0.001144	± 2.5	PASS
	VN		30	-0.36	-0.000206	± 2.5	PASS
	VN		40	-1.96	-0.001122	± 2.5	PASS
	VN		50	0.48	0.000275	± 2.5	PASS
HCH	VN		-30	4.75	0.002718	± 2.5	PASS
	VN		-20	0.33	0.000189	± 2.5	PASS
	VN		-10	2.36	0.001351	± 2.5	PASS
	VN		0	1.6	0.000916	± 2.5	PASS
	VN		10	-1.83	-0.001047	± 2.5	PASS
	VN		20	-0.21	-0.000120	± 2.5	PASS
	VN		30	-0.18	-0.000103	± 2.5	PASS
	VN		40	-0.79	-0.000452	± 2.5	PASS
	VN		50	4.72	0.002701	± 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	3.56	0.002070	± 2.5	PASS
		VN	TN	3.85	0.002238	± 2.5	PASS
		VH	TN	4.77	0.002773	± 2.5	PASS
	MCH	VL	TN	2.18	0.001258	± 2.5	PASS
		VN	TN	0.91	0.000525	± 2.5	PASS
		VH	TN	4.08	0.002355	± 2.5	PASS
	HCH	VL	TN	3.87	0.002218	± 2.5	PASS
		VN	TN	1.88	0.001077	± 2.5	PASS
		VH	TN	1.25	0.000716	± 2.5	PASS
16QAM	LCH	VL	TN	3.35	0.001948	± 2.5	PASS
		VN	TN	1.66	0.000965	± 2.5	PASS
		VH	TN	-1.3	-0.000756	± 2.5	PASS
	MCH	VL	TN	2.17	0.001253	± 2.5	PASS
		VN	TN	0	0.000000	± 2.5	PASS
		VH	TN	4.17	0.002407	± 2.5	PASS
	HCH	VL	TN	0.17	0.000097	± 2.5	PASS
		VN	TN	4.78	0.002739	± 2.5	PASS
		VH	TN	2.82	0.001616	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.06	-0.000035	± 2.5	PASS
		VN	-20	1.28	0.000744	± 2.5	PASS
		VN	-10	3.33	0.001936	± 2.5	PASS
		VN	0	3.63	0.002110	± 2.5	PASS
		VN	10	1.17	0.000680	± 2.5	PASS
		VN	20	1.02	0.000593	± 2.5	PASS
		VN	30	1.08	0.000628	± 2.5	PASS
		VN	40	4.5	0.002616	± 2.5	PASS
		VN	50	-0.27	-0.000157	± 2.5	PASS
	MCH	VN	-30	3.04	0.001755	± 2.5	PASS
		VN	-20	0.17	0.000098	± 2.5	PASS
		VN	-10	4.88	0.002817	± 2.5	PASS
		VN	0	4.38	0.002528	± 2.5	PASS
		VN	10	1.42	0.000820	± 2.5	PASS

		VN	20	-0.46	-0.000266	± 2.5	PASS
		VN	30	3.86	0.002228	± 2.5	PASS
		VN	40	-0.46	-0.000266	± 2.5	PASS
		VN	50	4.49	0.002592	± 2.5	PASS
	HCH	VN	-30	-0.18	-0.000103	± 2.5	PASS
		VN	-20	-0.07	-0.000040	± 2.5	PASS
		VN	-10	-1.49	-0.000854	± 2.5	PASS
		VN	0	4.78	0.002739	± 2.5	PASS
		VN	10	1.32	0.000756	± 2.5	PASS
		VN	20	3.44	0.001971	± 2.5	PASS
		VN	30	-0.64	-0.000367	± 2.5	PASS
		VN	40	3.68	0.002109	± 2.5	PASS
		VN	50	-1.76	-0.001009	± 2.5	PASS
16QAM	LCH	VN	-30	4.03	0.002326	± 2.5	PASS
		VN	-20	0.6	0.000346	± 2.5	PASS
		VN	-10	-1.4	-0.000808	± 2.5	PASS
		VN	0	-0.54	-0.000312	± 2.5	PASS
		VN	10	1.23	0.000710	± 2.5	PASS
		VN	20	2.41	0.001391	± 2.5	PASS
		VN	30	1.53	0.000883	± 2.5	PASS
		VN	40	3.56	0.002055	± 2.5	PASS
		VN	50	2.22	0.001281	± 2.5	PASS
	MCH	VN	-30	-0.75	-0.000430	± 2.5	PASS
		VN	-20	1.66	0.000951	± 2.5	PASS
		VN	-10	4.32	0.002476	± 2.5	PASS
		VN	0	0.05	0.000029	± 2.5	PASS
		VN	10	3.25	0.001862	± 2.5	PASS
		VN	20	0.75	0.000430	± 2.5	PASS
		VN	30	3.54	0.002029	± 2.5	PASS
		VN	40	0.31	0.000178	± 2.5	PASS
		VN	50	2.47	0.001415	± 2.5	PASS
	HCH	VN	-30	3.4	0.001948	± 2.5	PASS
		VN	-20	2.46	0.001410	± 2.5	PASS
		VN	-10	3.26	0.001868	± 2.5	PASS
		VN	0	-0.74	-0.000424	± 2.5	PASS
		VN	10	4.53	0.002596	± 2.5	PASS
		VN	20	4.97	0.002848	± 2.5	PASS
		VN	30	1.4	0.000802	± 2.5	PASS
		VN	40	2.34	0.001341	± 2.5	PASS
		VN	50	-1.26	-0.000722	± 2.5	PASS