





















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	-0.72	-0.000389	± 2.5	PASS
		VN	TN	-1.34	-0.000724	± 2.5	PASS
		VH	TN	-1.7	-0.000919	± 2.5	PASS
	MCH	VL	TN	-1.54	-0.000819	± 2.5	PASS
		VN	TN	2.11	0.001122	± 2.5	PASS
		VH	TN	3.58	0.001904	± 2.5	PASS
	HCH	VL	TN	2.99	0.001566	± 2.5	PASS
		VN	TN	1.47	0.000770	± 2.5	PASS
		VH	TN	4.22	0.002210	± 2.5	PASS
16QAM	LCH	VL	TN	-0.53	-0.000286	± 2.5	PASS
		VN	TN	1.5	0.000811	± 2.5	PASS
		VH	TN	3.87	0.002091	± 2.5	PASS
	MCH	VL	TN	-0.81	-0.000431	± 2.5	PASS
		VN	TN	-0.8	-0.000426	± 2.5	PASS
		VH	TN	4.84	0.002574	± 2.5	PASS
	HCH	VL	TN	3.51	0.001838	± 2.5	PASS
		VN	TN	4.94	0.002587	± 2.5	PASS
		VH	TN	3.13	0.001639	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.5	0.001351	± 2.5	PASS
		VN	-20	-0.16	-0.000086	± 2.5	PASS
		VN	-10	-1.54	-0.000832	± 2.5	PASS
		VN	0	0.95	0.000513	± 2.5	PASS
		VN	10	2.32	0.001254	± 2.5	PASS
		VN	20	2.89	0.001562	± 2.5	PASS
		VN	30	2.51	0.001356	± 2.5	PASS
		VN	40	-0.37	-0.000200	± 2.5	PASS
		VN	50	-1.52	-0.000821	± 2.5	PASS

	MCH	VN	-30	-1.09	-0.000580	± 2.5	PASS
		VN	-20	3.95	0.002101	± 2.5	PASS
		VN	-10	-0.16	-0.000085	± 2.5	PASS
		VN	0	-1.64	-0.000872	± 2.5	PASS
		VN	10	1.7	0.000904	± 2.5	PASS
		VN	20	3.95	0.002101	± 2.5	PASS
		VN	30	0.62	0.000330	± 2.5	PASS
		VN	40	2.62	0.001394	± 2.5	PASS
		VN	50	1.55	0.000824	± 2.5	PASS
	HCH	VN	-30	-0.57	-0.000299	± 2.5	PASS
		VN	-20	0.97	0.000508	± 2.5	PASS
		VN	-10	4.93	0.002582	± 2.5	PASS
		VN	0	4.61	0.002414	± 2.5	PASS
		VN	10	3.05	0.001597	± 2.5	PASS
		VN	20	3.4	0.001781	± 2.5	PASS
		VN	30	4.07	0.002132	± 2.5	PASS
		VN	40	2.99	0.001566	± 2.5	PASS
		VN	50	0.92	0.000482	± 2.5	PASS
16QAM	LCH	VN	-30	-0.21	-0.000113	± 2.5	PASS
		VN	-20	-0.67	-0.000362	± 2.5	PASS
		VN	-10	0.82	0.000443	± 2.5	PASS
		VN	0	1.81	0.000978	± 2.5	PASS
		VN	10	2.98	0.001610	± 2.5	PASS
		VN	20	0.79	0.000427	± 2.5	PASS
		VN	30	2.27	0.001227	± 2.5	PASS
		VN	40	0.22	0.000119	± 2.5	PASS
		VN	50	2.17	0.001173	± 2.5	PASS
	MCH	VN	-30	-0.14	-0.000074	± 2.5	PASS
		VN	-20	2.85	0.001516	± 2.5	PASS
		VN	-10	3.76	0.002000	± 2.5	PASS
		VN	0	-1.09	-0.000580	± 2.5	PASS
		VN	10	-1.27	-0.000676	± 2.5	PASS
		VN	20	-0.36	-0.000191	± 2.5	PASS
		VN	30	2.65	0.001410	± 2.5	PASS
		VN	40	-1.86	-0.000989	± 2.5	PASS
		VN	50	2.25	0.001197	± 2.5	PASS
	HCH	VN	-30	-1.13	-0.000592	± 2.5	PASS
		VN	-20	4.08	0.002137	± 2.5	PASS
		VN	-10	4.98	0.002608	± 2.5	PASS
		VN	0	3.63	0.001901	± 2.5	PASS
		VN	10	2.99	0.001566	± 2.5	PASS

		VN	20	0.97	0.000508	± 2.5	PASS
		VN	30	2.71	0.001419	± 2.5	PASS
		VN	40	0.4	0.000210	± 2.5	PASS
		VN	50	0.48	0.000251	± 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	1.99	0.001075	± 2.5	PASS
		VN	TN	3.18	0.001718	± 2.5	PASS
		VH	TN	2.86	0.001545	± 2.5	PASS
	MCH	VL	TN	1.94	0.001032	± 2.5	PASS
		VN	TN	0.22	0.000117	± 2.5	PASS
		VH	TN	0.49	0.000261	± 2.5	PASS
	HCH	VL	TN	2.85	0.001493	± 2.5	PASS
		VN	TN	-0.38	-0.000199	± 2.5	PASS
		VH	TN	0.91	0.000477	± 2.5	PASS
16QAM	LCH	VL	TN	3.74	0.002020	± 2.5	PASS
		VN	TN	0.59	0.000319	± 2.5	PASS
		VH	TN	0.05	0.000027	± 2.5	PASS
	MCH	VL	TN	2.65	0.001410	± 2.5	PASS
		VN	TN	0.27	0.000144	± 2.5	PASS
		VH	TN	4.03	0.002144	± 2.5	PASS
	HCH	VL	TN	2.04	0.001069	± 2.5	PASS
		VN	TN	0.81	0.000424	± 2.5	PASS
		VH	TN	3.99	0.002091	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.88	-0.000475	± 2.5	PASS
		VN	-20	-0.14	-0.000076	± 2.5	PASS
		VN	-10	0.39	0.000211	± 2.5	PASS
		VN	0	-1.05	-0.000567	± 2.5	PASS
		VN	10	1.94	0.001048	± 2.5	PASS
		VN	20	-0.24	-0.000130	± 2.5	PASS
		VN	30	2.46	0.001329	± 2.5	PASS
		VN	40	3.05	0.001647	± 2.5	PASS
		VN	50	-1.37	-0.000740	± 2.5	PASS
	MCH	VN	-30	3.29	0.001750	± 2.5	PASS

	VN	VN	-20	1.31	0.000697	± 2.5	PASS
		VN	-10	-1.79	-0.000952	± 2.5	PASS
		VN	0	0.66	0.000351	± 2.5	PASS
		VN	10	2.75	0.001463	± 2.5	PASS
		VN	20	2.34	0.001245	± 2.5	PASS
		VN	30	0.22	0.000117	± 2.5	PASS
		VN	40	1.01	0.000537	± 2.5	PASS
		VN	50	3.01	0.001601	± 2.5	PASS
	HCH	VN	-30	1.9	0.000996	± 2.5	PASS
		VN	-20	4.93	0.002583	± 2.5	PASS
		VN	-10	2.17	0.001137	± 2.5	PASS
		VN	0	3.71	0.001944	± 2.5	PASS
		VN	10	2.24	0.001174	± 2.5	PASS
		VN	20	0.61	0.000320	± 2.5	PASS
		VN	30	2.78	0.001457	± 2.5	PASS
		VN	40	-1.36	-0.000713	± 2.5	PASS
		VN	50	-0.77	-0.000403	± 2.5	PASS
		16QAM	LCH	VN	-30	-0.57	-0.000308
VN	-20			1.82	0.000983	± 2.5	PASS
VN	-10			0.05	0.000027	± 2.5	PASS
VN	0			-0.08	-0.000043	± 2.5	PASS
VN	10			3.1	0.001674	± 2.5	PASS
VN	20			4.04	0.002182	± 2.5	PASS
VN	30			4.06	0.002193	± 2.5	PASS
VN	40			1.83	0.000988	± 2.5	PASS
VN	50			0.1	0.000054	± 2.5	PASS
MCH	VN		-30	-1.8	-0.000957	± 2.5	PASS
	VN		-20	-1.19	-0.000633	± 2.5	PASS
	VN		-10	4.26	0.002266	± 2.5	PASS
	VN		0	1.28	0.000681	± 2.5	PASS
	VN		10	4.65	0.002473	± 2.5	PASS
	VN		20	1.08	0.000574	± 2.5	PASS
	VN		30	-1.49	-0.000793	± 2.5	PASS
	VN		40	4.81	0.002559	± 2.5	PASS
	VN		50	4.8	0.002553	± 2.5	PASS
HCH	VN		-30	4.89	0.002562	± 2.5	PASS
	VN		-20	0.9	0.000472	± 2.5	PASS
	VN		-10	0.54	0.000283	± 2.5	PASS
	VN		0	3.41	0.001787	± 2.5	PASS
	VN		10	-0.78	-0.000409	± 2.5	PASS
	VN		20	0.83	0.000435	± 2.5	PASS

		VN	30	1.69	0.000886	± 2.5	PASS
		VN	40	2.11	0.001106	± 2.5	PASS
		VN	50	-1.91	-0.001001	± 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	0.98	0.000529	± 2.5	PASS
		VN	TN	-1.8	-0.000972	± 2.5	PASS
		VH	TN	1.71	0.000923	± 2.5	PASS
	MCH	VL	TN	3.56	0.001894	± 2.5	PASS
		VN	TN	1.94	0.001032	± 2.5	PASS
		VH	TN	1.58	0.000840	± 2.5	PASS
	HCH	VL	TN	4.92	0.002579	± 2.5	PASS
		VN	TN	0.56	0.000294	± 2.5	PASS
		VH	TN	2.57	0.001347	± 2.5	PASS
16QAM	LCH	VL	TN	4.68	0.002526	± 2.5	PASS
		VN	TN	3.46	0.001868	± 2.5	PASS
		VH	TN	3.14	0.001695	± 2.5	PASS
	MCH	VL	TN	3.18	0.001691	± 2.5	PASS
		VN	TN	4.02	0.002138	± 2.5	PASS
		VH	TN	1.36	0.000723	± 2.5	PASS
	HCH	VL	TN	0.17	0.000089	± 2.5	PASS
		VN	TN	-0.01	-0.000005	± 2.5	PASS
		VH	TN	1.18	0.000619	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.6	0.000864	± 2.5	PASS
		VN	-20	2.38	0.001285	± 2.5	PASS
		VN	-10	3.78	0.002040	± 2.5	PASS
		VN	0	0.1	0.000054	± 2.5	PASS
		VN	10	3.29	0.001776	± 2.5	PASS
		VN	20	2.73	0.001474	± 2.5	PASS
		VN	30	4.41	0.002381	± 2.5	PASS
		VN	40	4.57	0.002467	± 2.5	PASS
		VN	50	3.13	0.001690	± 2.5	PASS
	MCH	VN	-30	2.38	0.001266	± 2.5	PASS
		VN	-20	-1.71	-0.000910	± 2.5	PASS

		VN	-10	1.64	0.000872	± 2.5	PASS		
		VN	0	-1.72	-0.000915	± 2.5	PASS		
		VN	10	2.26	0.001202	± 2.5	PASS		
		VN	20	3.23	0.001718	± 2.5	PASS		
		VN	30	3.51	0.001867	± 2.5	PASS		
		VN	40	-1.4	-0.000745	± 2.5	PASS		
		VN	50	1.81	0.000963	± 2.5	PASS		
	HCH	VN	-30	3.84	0.002013	± 2.5	PASS		
		VN	-20	-1.96	-0.001028	± 2.5	PASS		
		VN	-10	4.04	0.002118	± 2.5	PASS		
		VN	0	2.22	0.001164	± 2.5	PASS		
		VN	10	-1.51	-0.000792	± 2.5	PASS		
		VN	20	-1.54	-0.000807	± 2.5	PASS		
		VN	30	-1.71	-0.000896	± 2.5	PASS		
		VN	40	-0.81	-0.000425	± 2.5	PASS		
		VN	50	0.29	0.000152	± 2.5	PASS		
		16QAM	LCH	VN	-30	2.69	0.001452	± 2.5	PASS
				VN	-20	3.68	0.001987	± 2.5	PASS
				VN	-10	-1.1	-0.000594	± 2.5	PASS
VN	0			-1.83	-0.000988	± 2.5	PASS		
VN	10			2.33	0.001258	± 2.5	PASS		
VN	20			-0.45	-0.000243	± 2.5	PASS		
VN	30			2.86	0.001544	± 2.5	PASS		
VN	40			2.62	0.001414	± 2.5	PASS		
VN	50			3.23	0.001744	± 2.5	PASS		
MCH	VN		-30	1.58	0.000840	± 2.5	PASS		
	VN		-20	0.71	0.000378	± 2.5	PASS		
	VN		-10	2.65	0.001410	± 2.5	PASS		
	VN		0	-1.68	-0.000894	± 2.5	PASS		
	VN		10	2.87	0.001527	± 2.5	PASS		
	VN		20	1.64	0.000872	± 2.5	PASS		
	VN		30	1.92	0.001021	± 2.5	PASS		
	VN		40	1	0.000532	± 2.5	PASS		
	VN		50	3.13	0.001665	± 2.5	PASS		
HCH	VN		-30	4.32	0.002265	± 2.5	PASS		
	VN	-20	-0.38	-0.000199	± 2.5	PASS			
	VN	-10	2.7	0.001415	± 2.5	PASS			
	VN	0	-1.33	-0.000697	± 2.5	PASS			
	VN	10	1.42	0.000744	± 2.5	PASS			
	VN	20	1.11	0.000582	± 2.5	PASS			
	VN	30	-0.36	-0.000189	± 2.5	PASS			

		VN	40	4.62	0.002422	± 2.5	PASS
		VN	50	4.4	0.002307	± 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	2.27	0.001224	± 2.5	PASS
		VN	TN	3.31	0.001784	± 2.5	PASS
		VH	TN	1.36	0.000733	± 2.5	PASS
	MCH	VL	TN	3.31	0.001761	± 2.5	PASS
		VN	TN	3.46	0.001840	± 2.5	PASS
		VH	TN	3.76	0.002000	± 2.5	PASS
	HCH	VL	TN	1.82	0.000955	± 2.5	PASS
		VN	TN	2.95	0.001549	± 2.5	PASS
		VH	TN	1.03	0.000541	± 2.5	PASS
16QAM	LCH	VL	TN	4.01	0.002162	± 2.5	PASS
		VN	TN	2.76	0.001488	± 2.5	PASS
		VH	TN	0.45	0.000243	± 2.5	PASS
	MCH	VL	TN	1.85	0.000984	± 2.5	PASS
		VN	TN	2.69	0.001431	± 2.5	PASS
		VH	TN	4.02	0.002138	± 2.5	PASS
	HCH	VL	TN	3.02	0.001585	± 2.5	PASS
		VN	TN	0.74	0.000388	± 2.5	PASS
		VH	TN	-1.8	-0.000945	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.97	-0.000523	± 2.5	PASS
		VN	-20	3.8	0.002049	± 2.5	PASS
		VN	-10	3	0.001617	± 2.5	PASS
		VN	0	1.79	0.000965	± 2.5	PASS
		VN	10	0.05	0.000027	± 2.5	PASS
		VN	20	-1.47	-0.000792	± 2.5	PASS
		VN	30	3.47	0.001871	± 2.5	PASS
		VN	40	1.01	0.000544	± 2.5	PASS
		VN	50	1.13	0.000609	± 2.5	PASS
	MCH	VN	-30	1.08	0.000574	± 2.5	PASS
		VN	-20	4.55	0.002420	± 2.5	PASS
		VN	-10	1.19	0.000633	± 2.5	PASS

		VN	0	0.09	0.000048	± 2.5	PASS		
		VN	10	0.28	0.000149	± 2.5	PASS		
		VN	20	2.16	0.001149	± 2.5	PASS		
		VN	30	0.75	0.000399	± 2.5	PASS		
		VN	40	0.44	0.000234	± 2.5	PASS		
		VN	50	-0.68	-0.000362	± 2.5	PASS		
	HCH	VN	-30	-1.38	-0.000724	± 2.5	PASS		
		VN	-20	3.89	0.002042	± 2.5	PASS		
		VN	-10	0.54	0.000283	± 2.5	PASS		
		VN	0	4.14	0.002173	± 2.5	PASS		
		VN	10	-1.1	-0.000577	± 2.5	PASS		
		VN	20	3.02	0.001585	± 2.5	PASS		
		VN	30	4.2	0.002205	± 2.5	PASS		
		VN	40	4.12	0.002163	± 2.5	PASS		
		VN	50	3.12	0.001638	± 2.5	PASS		
		16QAM	LCH	VN	-30	-1.38	-0.000744	± 2.5	PASS
				VN	-20	4.26	0.002296	± 2.5	PASS
				VN	-10	1	0.000539	± 2.5	PASS
VN	0			4.14	0.002232	± 2.5	PASS		
VN	10			4.26	0.002296	± 2.5	PASS		
VN	20			4.75	0.002561	± 2.5	PASS		
VN	30			-1.47	-0.000792	± 2.5	PASS		
VN	40			2.45	0.001321	± 2.5	PASS		
VN	50			0.06	0.000032	± 2.5	PASS		
MCH	VN		-30	-0.9	-0.000479	± 2.5	PASS		
	VN		-20	-0.39	-0.000207	± 2.5	PASS		
	VN		-10	2.81	0.001495	± 2.5	PASS		
	VN		0	-1.81	-0.000963	± 2.5	PASS		
	VN		10	1.25	0.000665	± 2.5	PASS		
	VN		20	3.11	0.001654	± 2.5	PASS		
	VN		30	0.44	0.000234	± 2.5	PASS		
	VN		40	-0.42	-0.000223	± 2.5	PASS		
	VN		50	2.16	0.001149	± 2.5	PASS		
HCH	VN	-30	2.48	0.001302	± 2.5	PASS			
	VN	-20	3.77	0.001979	± 2.5	PASS			
	VN	-10	2.52	0.001323	± 2.5	PASS			
	VN	0	4.12	0.002163	± 2.5	PASS			
	VN	10	4.15	0.002178	± 2.5	PASS			
	VN	20	1.25	0.000656	± 2.5	PASS			
	VN	30	4.4	0.002310	± 2.5	PASS			
	VN	40	4.96	0.002604	± 2.5	PASS			

		VN	50	-1.57	-0.000824	± 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	-1.72	-0.000926	± 2.5	PASS
		VN	TN	-1.83	-0.000985	± 2.5	PASS
		VH	TN	4.43	0.002385	± 2.5	PASS
	MCH	VL	TN	1.44	0.000766	± 2.5	PASS
		VN	TN	-1.39	-0.000739	± 2.5	PASS
		VH	TN	4.92	0.002617	± 2.5	PASS
	HCH	VL	TN	2.47	0.001298	± 2.5	PASS
		VN	TN	-0.71	-0.000373	± 2.5	PASS
		VH	TN	4.22	0.002218	± 2.5	PASS
16QAM	LCH	VL	TN	2.59	0.001394	± 2.5	PASS
		VN	TN	4.15	0.002234	± 2.5	PASS
		VH	TN	3.62	0.001949	± 2.5	PASS
	MCH	VL	TN	0.57	0.000303	± 2.5	PASS
		VN	TN	3.16	0.001681	± 2.5	PASS
		VH	TN	-1.56	-0.000830	± 2.5	PASS
	HCH	VL	TN	1.55	0.000815	± 2.5	PASS
		VN	TN	-1.13	-0.000594	± 2.5	PASS
		VH	TN	4.49	0.002360	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.5	0.001346	± 2.5	PASS
		VN	-20	-1.16	-0.000624	± 2.5	PASS
		VN	-10	1.23	0.000662	± 2.5	PASS
		VN	0	1.55	0.000834	± 2.5	PASS
		VN	10	-0.4	-0.000215	± 2.5	PASS
		VN	20	3.2	0.001723	± 2.5	PASS
		VN	30	-1.47	-0.000791	± 2.5	PASS
		VN	40	4.64	0.002498	± 2.5	PASS
		VN	50	1.57	0.000845	± 2.5	PASS
	MCH	VN	-30	1.43	0.000761	± 2.5	PASS
		VN	-20	2.79	0.001484	± 2.5	PASS
		VN	-10	4.38	0.002330	± 2.5	PASS
		VN	0	-1.37	-0.000729	± 2.5	PASS

		VN	10	0.08	0.000043	± 2.5	PASS		
		VN	20	-0.45	-0.000239	± 2.5	PASS		
		VN	30	1.51	0.000803	± 2.5	PASS		
		VN	40	3.55	0.001888	± 2.5	PASS		
		VN	50	1.37	0.000729	± 2.5	PASS		
	HCH	VN	-30	0.76	0.000399	± 2.5	PASS		
		VN	-20	1.38	0.000725	± 2.5	PASS		
		VN	-10	0.61	0.000321	± 2.5	PASS		
		VN	0	-0.85	-0.000447	± 2.5	PASS		
		VN	10	3.77	0.001982	± 2.5	PASS		
		VN	20	4.1	0.002155	± 2.5	PASS		
		VN	30	0.02	0.000011	± 2.5	PASS		
		VN	40	0.65	0.000342	± 2.5	PASS		
		VN	50	1.33	0.000699	± 2.5	PASS		
		16QAM	LCH	VN	-30	-0.37	-0.000199	± 2.5	PASS
				VN	-20	-0.75	-0.000404	± 2.5	PASS
VN	-10			-0.72	-0.000388	± 2.5	PASS		
VN	0			-0.46	-0.000248	± 2.5	PASS		
VN	10			2.5	0.001346	± 2.5	PASS		
VN	20			0.37	0.000199	± 2.5	PASS		
VN	30			4.58	0.002466	± 2.5	PASS		
VN	40			3.9	0.002100	± 2.5	PASS		
VN	50			4.66	0.002509	± 2.5	PASS		
MCH	VN		-30	3.55	0.001888	± 2.5	PASS		
	VN		-20	3.33	0.001771	± 2.5	PASS		
	VN		-10	2.02	0.001074	± 2.5	PASS		
	VN		0	-0.64	-0.000340	± 2.5	PASS		
	VN		10	2.79	0.001484	± 2.5	PASS		
	VN		20	2.74	0.001457	± 2.5	PASS		
	VN		30	-1.52	-0.000809	± 2.5	PASS		
	VN	40	2.04	0.001085	± 2.5	PASS			
	VN	50	3.05	0.001622	± 2.5	PASS			
HCH	VN	-30	3.17	0.001666	± 2.5	PASS			
	VN	-20	-0.66	-0.000347	± 2.5	PASS			
	VN	-10	-0.48	-0.000252	± 2.5	PASS			
	VN	0	4.89	0.002570	± 2.5	PASS			
	VN	10	0.37	0.000194	± 2.5	PASS			
	VN	20	2.63	0.001382	± 2.5	PASS			
	VN	30	-0.77	-0.000405	± 2.5	PASS			
	VN	40	3.44	0.001808	± 2.5	PASS			
	VN	50	0.09	0.000047	± 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	-0.83	-0.000446	± 2.5	PASS
		VN	TN	0.41	0.000220	± 2.5	PASS
		VH	TN	4.5	0.002419	± 2.5	PASS
	MCH	VL	TN	3.11	0.001654	± 2.5	PASS
		VN	TN	2.86	0.001521	± 2.5	PASS
		VH	TN	0.27	0.000144	± 2.5	PASS
	HCH	VL	TN	-1.88	-0.000989	± 2.5	PASS
		VN	TN	-0.65	-0.000342	± 2.5	PASS
		VH	TN	3.73	0.001963	± 2.5	PASS
16QAM	LCH	VL	TN	-1.3	-0.000699	± 2.5	PASS
		VN	TN	4.83	0.002597	± 2.5	PASS
		VH	TN	2.79	0.001500	± 2.5	PASS
	MCH	VL	TN	3.36	0.001787	± 2.5	PASS
		VN	TN	3.84	0.002043	± 2.5	PASS
		VH	TN	4.57	0.002431	± 2.5	PASS
	HCH	VL	TN	-0.51	-0.000268	± 2.5	PASS
		VN	TN	1.78	0.000937	± 2.5	PASS
		VH	TN	4.7	0.002474	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.42	0.001839	± 2.5	PASS
		VN	-20	1.94	0.001043	± 2.5	PASS
		VN	-10	1.41	0.000758	± 2.5	PASS
		VN	0	4.18	0.002247	± 2.5	PASS
		VN	10	1.7	0.000914	± 2.5	PASS
		VN	20	3.13	0.001683	± 2.5	PASS
		VN	30	-1.24	-0.000667	± 2.5	PASS
		VN	40	-0.64	-0.000344	± 2.5	PASS
		VN	50	2.71	0.001457	± 2.5	PASS
	MCH	VN	-30	4.31	0.002293	± 2.5	PASS
		VN	-20	4.85	0.002580	± 2.5	PASS
		VN	-10	0.29	0.000154	± 2.5	PASS
		VN	0	-0.48	-0.000255	± 2.5	PASS
		VN	10	-1.1	-0.000585	± 2.5	PASS

		VN	20	4.39	0.002335	± 2.5	PASS
		VN	30	2.12	0.001128	± 2.5	PASS
		VN	40	0.08	0.000043	± 2.5	PASS
		VN	50	-0.24	-0.000128	± 2.5	PASS
	HCH	VN	-30	-0.45	-0.000237	± 2.5	PASS
		VN	-20	2.53	0.001332	± 2.5	PASS
		VN	-10	0.32	0.000168	± 2.5	PASS
		VN	0	4.42	0.002326	± 2.5	PASS
		VN	10	3.51	0.001847	± 2.5	PASS
		VN	20	4.52	0.002379	± 2.5	PASS
		VN	30	2.59	0.001363	± 2.5	PASS
		VN	40	-1.46	-0.000768	± 2.5	PASS
		VN	50	-0.07	-0.000037	± 2.5	PASS
16QAM	LCH	VN	-30	4.63	0.002489	± 2.5	PASS
		VN	-20	0.12	0.000065	± 2.5	PASS
		VN	-10	-0.43	-0.000231	± 2.5	PASS
		VN	0	0.67	0.000360	± 2.5	PASS
		VN	10	-0.65	-0.000349	± 2.5	PASS
		VN	20	2.04	0.001097	± 2.5	PASS
		VN	30	-1.74	-0.000935	± 2.5	PASS
		VN	40	4.98	0.002677	± 2.5	PASS
		VN	50	3.25	0.001747	± 2.5	PASS
	MCH	VN	-30	1.18	0.000628	± 2.5	PASS
		VN	-20	2.24	0.001191	± 2.5	PASS
		VN	-10	-0.88	-0.000468	± 2.5	PASS
		VN	0	1.06	0.000564	± 2.5	PASS
		VN	10	0.23	0.000122	± 2.5	PASS
		VN	20	4.43	0.002356	± 2.5	PASS
		VN	30	0.41	0.000218	± 2.5	PASS
		VN	40	2.45	0.001303	± 2.5	PASS
		VN	50	4.16	0.002213	± 2.5	PASS
	HCH	VN	-30	1.27	0.000668	± 2.5	PASS
		VN	-20	0.12	0.000063	± 2.5	PASS
		VN	-10	0.44	0.000232	± 2.5	PASS
		VN	0	-0.63	-0.000332	± 2.5	PASS
		VN	10	2.91	0.001532	± 2.5	PASS
		VN	20	4.49	0.002363	± 2.5	PASS
		VN	30	2.03	0.001068	± 2.5	PASS
		VN	40	-0.97	-0.000511	± 2.5	PASS
		VN	50	-1.24	-0.000653	± 2.5	PASS