















## 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	0.59	0.000319	± 2.5	PASS
		VN	TN	-1.32	-0.000713	± 2.5	PASS
		VH	TN	3.36	0.001816	± 2.5	PASS
	MCH	VL	TN	4.55	0.002420	± 2.5	PASS
		VN	TN	-1.48	-0.000787	± 2.5	PASS
		VH	TN	1.65	0.000878	± 2.5	PASS
	HCH	VL	TN	1.37	0.000718	± 2.5	PASS
		VN	TN	0.03	0.000016	± 2.5	PASS
		VH	TN	2.51	0.001315	± 2.5	PASS
16QAM	LCH	VL	TN	-1.73	-0.000935	± 2.5	PASS
		VN	TN	-0.94	-0.000508	± 2.5	PASS
		VH	TN	2.84	0.001535	± 2.5	PASS
	MCH	VL	TN	1.79	0.000952	± 2.5	PASS
		VN	TN	4.29	0.002282	± 2.5	PASS
		VH	TN	-0.01	-0.000005	± 2.5	PASS
	HCH	VL	TN	1.59	0.000833	± 2.5	PASS
		VN	TN	0.18	0.000094	± 2.5	PASS
		VH	TN	2.41	0.001262	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.76	-0.000411	± 2.5	PASS
		VN	-20	-0.11	-0.000059	± 2.5	PASS
		VN	-10	0.66	0.000357	± 2.5	PASS
		VN	0	3.25	0.001756	± 2.5	PASS
		VN	10	3.96	0.002140	± 2.5	PASS
		VN	20	0.22	0.000119	± 2.5	PASS
		VN	30	-0.04	-0.000022	± 2.5	PASS
		VN	40	0.28	0.000151	± 2.5	PASS
		VN	50	-0.56	-0.000303	± 2.5	PASS



	MCH	VN	-30	0.1	0.000053	± 2.5	PASS
		VN	-20	1.25	0.000665	± 2.5	PASS
		VN	-10	-1.75	-0.000931	± 2.5	PASS
		VN	0	-0.6	-0.000319	± 2.5	PASS
		VN	10	2.47	0.001314	± 2.5	PASS
		VN	20	3.65	0.001941	± 2.5	PASS
		VN	30	4.47	0.002378	± 2.5	PASS
		VN	40	4.16	0.002213	± 2.5	PASS
		VN	50	4.78	0.002543	± 2.5	PASS
	HCH	VN	-30	-0.87	-0.000456	± 2.5	PASS
		VN	-20	-1.34	-0.000702	± 2.5	PASS
		VN	-10	2.3	0.001205	± 2.5	PASS
		VN	0	-0.35	-0.000183	± 2.5	PASS
		VN	10	-0.78	-0.000409	± 2.5	PASS
		VN	20	3.26	0.001707	± 2.5	PASS
		VN	30	0.07	0.000037	± 2.5	PASS
		VN	40	4.94	0.002587	± 2.5	PASS
		VN	50	0.03	0.000016	± 2.5	PASS
16QAM	LCH	VN	-30	-1.73	-0.000935	± 2.5	PASS
		VN	-20	-0.39	-0.000211	± 2.5	PASS
		VN	-10	-0.52	-0.000281	± 2.5	PASS
		VN	0	1.36	0.000735	± 2.5	PASS
		VN	10	3.04	0.001643	± 2.5	PASS
		VN	20	1.28	0.000692	± 2.5	PASS
		VN	30	0.17	0.000092	± 2.5	PASS
		VN	40	0.28	0.000151	± 2.5	PASS
		VN	50	1.03	0.000557	± 2.5	PASS
	MCH	VN	-30	1.4	0.000745	± 2.5	PASS
		VN	-20	-1.2	-0.000638	± 2.5	PASS
		VN	-10	1.03	0.000548	± 2.5	PASS
		VN	0	4.39	0.002335	± 2.5	PASS
		VN	10	-0.03	-0.000016	± 2.5	PASS
		VN	20	4.54	0.002415	± 2.5	PASS
		VN	30	4.36	0.002319	± 2.5	PASS
		VN	40	2.55	0.001356	± 2.5	PASS
		VN	50	3.17	0.001686	± 2.5	PASS
	HCH	VN	-30	4.71	0.002467	± 2.5	PASS
		VN	-20	0.88	0.000461	± 2.5	PASS
		VN	-10	-0.56	-0.000293	± 2.5	PASS
		VN	0	1.97	0.001032	± 2.5	PASS
		VN	10	0.91	0.000477	± 2.5	PASS

		VN	20	3.5	0.001833	± 2.5	PASS
		VN	30	-1.09	-0.000571	± 2.5	PASS
		VN	40	-0.02	-0.000010	± 2.5	PASS
		VN	50	0.27	0.000141	± 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	0.35	0.000189	± 2.5	PASS
		VN	TN	4.8	0.002592	± 2.5	PASS
		VH	TN	3.02	0.001631	± 2.5	PASS
	MCH	VL	TN	0.84	0.000447	± 2.5	PASS
		VN	TN	4.68	0.002489	± 2.5	PASS
		VH	TN	-1.57	-0.000835	± 2.5	PASS
	HCH	VL	TN	4.68	0.002452	± 2.5	PASS
		VN	TN	4.3	0.002253	± 2.5	PASS
		VH	TN	3.17	0.001661	± 2.5	PASS
16QAM	LCH	VL	TN	1.97	0.001064	± 2.5	PASS
		VN	TN	1.41	0.000762	± 2.5	PASS
		VH	TN	1.66	0.000897	± 2.5	PASS
	MCH	VL	TN	2.39	0.001271	± 2.5	PASS
		VN	TN	3.53	0.001878	± 2.5	PASS
		VH	TN	-1.14	-0.000606	± 2.5	PASS
	HCH	VL	TN	2.35	0.001231	± 2.5	PASS
		VN	TN	0.38	0.000199	± 2.5	PASS
		VH	TN	4.02	0.002106	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.58	0.000853	± 2.5	PASS
		VN	-20	-1.08	-0.000583	± 2.5	PASS
		VN	-10	4.33	0.002339	± 2.5	PASS
		VN	0	2.57	0.001388	± 2.5	PASS
		VN	10	3.16	0.001707	± 2.5	PASS
		VN	20	2.5	0.001350	± 2.5	PASS
		VN	30	1.05	0.000567	± 2.5	PASS
		VN	40	2.4	0.001296	± 2.5	PASS
	VN	50	1.01	0.000546	± 2.5	PASS	
MCH	VN	-30	-0.13	-0.000069	± 2.5	PASS	

		VN	-20	2.41	0.001282	± 2.5	PASS
		VN	-10	-1	-0.000532	± 2.5	PASS
		VN	0	0.21	0.000112	± 2.5	PASS
		VN	10	0.81	0.000431	± 2.5	PASS
		VN	20	0.95	0.000505	± 2.5	PASS
		VN	30	-0.47	-0.000250	± 2.5	PASS
		VN	40	1.84	0.000979	± 2.5	PASS
		VN	50	-0.97	-0.000516	± 2.5	PASS
	HCH	VN	-30	3.03	0.001588	± 2.5	PASS
		VN	-20	4.9	0.002567	± 2.5	PASS
		VN	-10	4.73	0.002478	± 2.5	PASS
		VN	0	0.3	0.000157	± 2.5	PASS
		VN	10	1.04	0.000545	± 2.5	PASS
		VN	20	2.17	0.001137	± 2.5	PASS
		VN	30	-0.7	-0.000367	± 2.5	PASS
		VN	40	2.34	0.001226	± 2.5	PASS
		VN	50	4.55	0.002384	± 2.5	PASS
		16QAM	LCH	VN	-30	3.09	0.001669
VN	-20			4.91	0.002652	± 2.5	PASS
VN	-10			1.68	0.000907	± 2.5	PASS
VN	0			2.49	0.001345	± 2.5	PASS
VN	10			0.87	0.000470	± 2.5	PASS
VN	20			-1.31	-0.000708	± 2.5	PASS
VN	30			4.09	0.002209	± 2.5	PASS
VN	40			0.09	0.000049	± 2.5	PASS
VN	50			-0.04	-0.000022	± 2.5	PASS
MCH	VN		-30	1.57	0.000835	± 2.5	PASS
	VN		-20	-1.94	-0.001032	± 2.5	PASS
	VN		-10	3.5	0.001862	± 2.5	PASS
	VN		0	1.3	0.000691	± 2.5	PASS
	VN		10	4.64	0.002468	± 2.5	PASS
	VN		20	-0.13	-0.000069	± 2.5	PASS
	VN		30	-1.89	-0.001005	± 2.5	PASS
	VN		40	-0.3	-0.000160	± 2.5	PASS
	VN		50	1.64	0.000872	± 2.5	PASS
HCH	VN		-30	4.05	0.002122	± 2.5	PASS
	VN		-20	4.73	0.002478	± 2.5	PASS
	VN		-10	2.3	0.001205	± 2.5	PASS
	VN		0	4.31	0.002258	± 2.5	PASS
	VN		10	0.42	0.000220	± 2.5	PASS
	VN		20	1.07	0.000561	± 2.5	PASS

		VN	30	1.45	0.000760	± 2.5	PASS
		VN	40	-0.76	-0.000398	± 2.5	PASS
		VN	50	2.06	0.001079	± 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	4.86	0.002623	± 2.5	PASS
		VN	TN	0.11	0.000059	± 2.5	PASS
		VH	TN	1.58	0.000853	± 2.5	PASS
	MCH	VL	TN	4.94	0.002628	± 2.5	PASS
		VN	TN	0.28	0.000149	± 2.5	PASS
		VH	TN	-0.2	-0.000106	± 2.5	PASS
	HCH	VL	TN	3.3	0.001730	± 2.5	PASS
		VN	TN	0.95	0.000498	± 2.5	PASS
		VH	TN	1.31	0.000687	± 2.5	PASS
16QAM	LCH	VL	TN	3.65	0.001970	± 2.5	PASS
		VN	TN	4.51	0.002435	± 2.5	PASS
		VH	TN	2.55	0.001377	± 2.5	PASS
	MCH	VL	TN	-0.85	-0.000452	± 2.5	PASS
		VN	TN	2.65	0.001410	± 2.5	PASS
		VH	TN	0.54	0.000287	± 2.5	PASS
	HCH	VL	TN	2.11	0.001106	± 2.5	PASS
		VN	TN	3.26	0.001709	± 2.5	PASS
		VH	TN	2.11	0.001106	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	3.8	0.002051	± 2.5	PASS
		VN	-20	3.65	0.001970	± 2.5	PASS
		VN	-10	-0.4	-0.000216	± 2.5	PASS
		VN	0	-1.18	-0.000637	± 2.5	PASS
		VN	10	3.5	0.001889	± 2.5	PASS
		VN	20	3.64	0.001965	± 2.5	PASS
		VN	30	3.22	0.001738	± 2.5	PASS
		VN	40	-1.13	-0.000610	± 2.5	PASS
		VN	50	1.4	0.000756	± 2.5	PASS
	MCH	VN	-30	2.47	0.001314	± 2.5	PASS
		VN	-20	0.02	0.000011	± 2.5	PASS

		VN	-10	0.97	0.000516	± 2.5	PASS		
		VN	0	-0.2	-0.000106	± 2.5	PASS		
		VN	10	1.07	0.000569	± 2.5	PASS		
		VN	20	4.04	0.002149	± 2.5	PASS		
		VN	30	0.28	0.000149	± 2.5	PASS		
		VN	40	4.66	0.002479	± 2.5	PASS		
		VN	50	3.56	0.001894	± 2.5	PASS		
	HCH	VN	-30	0.82	0.000430	± 2.5	PASS		
		VN	-20	3.33	0.001746	± 2.5	PASS		
		VN	-10	2.42	0.001269	± 2.5	PASS		
		VN	0	2.47	0.001295	± 2.5	PASS		
		VN	10	3.98	0.002087	± 2.5	PASS		
		VN	20	-1.18	-0.000619	± 2.5	PASS		
		VN	30	-1.78	-0.000933	± 2.5	PASS		
		VN	40	3.95	0.002071	± 2.5	PASS		
		VN	50	-0.97	-0.000509	± 2.5	PASS		
		16QAM	LCH	VN	-30	-1.83	-0.000988	± 2.5	PASS
				VN	-20	4.59	0.002478	± 2.5	PASS
VN	-10			-1.43	-0.000772	± 2.5	PASS		
VN	0			-1.01	-0.000545	± 2.5	PASS		
VN	10			2.99	0.001614	± 2.5	PASS		
VN	20			2.31	0.001247	± 2.5	PASS		
VN	30			2.3	0.001242	± 2.5	PASS		
VN	40			-0.69	-0.000372	± 2.5	PASS		
VN	50			1.94	0.001047	± 2.5	PASS		
MCH	VN		-30	4.46	0.002372	± 2.5	PASS		
	VN		-20	1.53	0.000814	± 2.5	PASS		
	VN		-10	-1.55	-0.000824	± 2.5	PASS		
	VN		0	4.77	0.002537	± 2.5	PASS		
	VN		10	-0.3	-0.000160	± 2.5	PASS		
	VN		20	2.81	0.001495	± 2.5	PASS		
	VN		30	2.77	0.001473	± 2.5	PASS		
	VN		40	3.22	0.001713	± 2.5	PASS		
	VN		50	4.52	0.002404	± 2.5	PASS		
HCH	VN	-30	0.52	0.000273	± 2.5	PASS			
	VN	-20	1.54	0.000807	± 2.5	PASS			
	VN	-10	2.42	0.001269	± 2.5	PASS			
	VN	0	3.07	0.001609	± 2.5	PASS			
	VN	10	-1.16	-0.000608	± 2.5	PASS			
	VN	20	2.79	0.001463	± 2.5	PASS			
	VN	30	1.6	0.000839	± 2.5	PASS			

		VN	40	2.65	0.001389	± 2.5	PASS
		VN	50	-0.15	-0.000079	± 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	1.82	0.000981	± 2.5	PASS
		VN	TN	4.28	0.002307	± 2.5	PASS
		VH	TN	2.86	0.001542	± 2.5	PASS
	MCH	VL	TN	2.32	0.001234	± 2.5	PASS
		VN	TN	4.63	0.002463	± 2.5	PASS
		VH	TN	-0.51	-0.000271	± 2.5	PASS
	HCH	VL	TN	-1.25	-0.000656	± 2.5	PASS
		VN	TN	4.3	0.002257	± 2.5	PASS
		VH	TN	0.2	0.000105	± 2.5	PASS
16QAM	LCH	VL	TN	3.23	0.001741	± 2.5	PASS
		VN	TN	-1.2	-0.000647	± 2.5	PASS
		VH	TN	2.35	0.001267	± 2.5	PASS
	MCH	VL	TN	4.89	0.002601	± 2.5	PASS
		VN	TN	4.91	0.002612	± 2.5	PASS
		VH	TN	-0.25	-0.000133	± 2.5	PASS
	HCH	VL	TN	1.91	0.001003	± 2.5	PASS
		VN	TN	1.9	0.000997	± 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	-1.79	-0.000965	± 2.5	PASS
		VN	-20	3.51	0.001892	± 2.5	PASS
		VN	-10	4.29	0.002313	± 2.5	PASS
		VN	0	1.21	0.000652	± 2.5	PASS
		VN	10	2.64	0.001423	± 2.5	PASS
		VN	20	-1.69	-0.000911	± 2.5	PASS
		VN	30	-0.99	-0.000534	± 2.5	PASS
		VN	40	1.49	0.000803	± 2.5	PASS
		VN	50	-0.57	-0.000307	± 2.5	PASS
	MCH	VN	-30	-0.05	-0.000027	± 2.5	PASS
		VN	-20	1.13	0.000601	± 2.5	PASS
		VN	-10	1.57	0.000835	± 2.5	PASS

		VN	0	-1.14	-0.000606	± 2.5	PASS		
		VN	10	4.19	0.002229	± 2.5	PASS		
		VN	20	1.23	0.000654	± 2.5	PASS		
		VN	30	0.71	0.000378	± 2.5	PASS		
		VN	40	-0.44	-0.000234	± 2.5	PASS		
		VN	50	-1.43	-0.000761	± 2.5	PASS		
	HCH	VN	-30	-0.65	-0.000341	± 2.5	PASS		
		VN	-20	1.1	0.000577	± 2.5	PASS		
		VN	-10	3.1	0.001627	± 2.5	PASS		
		VN	0	0.63	0.000331	± 2.5	PASS		
		VN	10	1.23	0.000646	± 2.5	PASS		
		VN	20	0.67	0.000352	± 2.5	PASS		
		VN	30	1.21	0.000635	± 2.5	PASS		
		VN	40	2.95	0.001549	± 2.5	PASS		
		VN	50	0.47	0.000247	± 2.5	PASS		
		16QAM	LCH	VN	-30	1.43	0.000771	± 2.5	PASS
				VN	-20	1.99	0.001073	± 2.5	PASS
				VN	-10	0.27	0.000146	± 2.5	PASS
VN	0			1.86	0.001003	± 2.5	PASS		
VN	10			4.63	0.002496	± 2.5	PASS		
VN	20			3.51	0.001892	± 2.5	PASS		
VN	30			2.98	0.001606	± 2.5	PASS		
VN	40			-0.33	-0.000178	± 2.5	PASS		
VN	50			-0.57	-0.000307	± 2.5	PASS		
MCH	VN		-30	4.81	0.002559	± 2.5	PASS		
	VN		-20	1.12	0.000596	± 2.5	PASS		
	VN		-10	3.03	0.001612	± 2.5	PASS		
	VN		0	4.63	0.002463	± 2.5	PASS		
	VN		10	-1.93	-0.001027	± 2.5	PASS		
	VN		20	1.42	0.000755	± 2.5	PASS		
	VN		30	-0.55	-0.000293	± 2.5	PASS		
	VN		40	-0.81	-0.000431	± 2.5	PASS		
	VN		50	-0.33	-0.000176	± 2.5	PASS		
HCH	VN		-30	-0.05	-0.000026	± 2.5	PASS		
	VN		-20	4.52	0.002373	± 2.5	PASS		
	VN		-10	4.18	0.002194	± 2.5	PASS		
	VN		0	1.57	0.000824	± 2.5	PASS		
	VN		10	1.37	0.000719	± 2.5	PASS		
	VN		20	4.11	0.002157	± 2.5	PASS		
	VN		30	1.19	0.000625	± 2.5	PASS		
	VN		40	-0.29	-0.000152	± 2.5	PASS		

		VN	50	3.16	0.001659	± 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	2.25	0.001211	± 2.5	PASS
		VN	TN	1.58	0.000851	± 2.5	PASS
		VH	TN	2.32	0.001249	± 2.5	PASS
	MCH	VL	TN	1.73	0.000920	± 2.5	PASS
		VN	TN	4.09	0.002176	± 2.5	PASS
		VH	TN	-1.14	-0.000606	± 2.5	PASS
	HCH	VL	TN	-0.84	-0.000442	± 2.5	PASS
		VN	TN	-0.87	-0.000457	± 2.5	PASS
		VH	TN	-0.31	-0.000163	± 2.5	PASS
16QAM	LCH	VL	TN	1.03	0.000555	± 2.5	PASS
		VN	TN	4.56	0.002455	± 2.5	PASS
		VH	TN	-0.81	-0.000436	± 2.5	PASS
	MCH	VL	TN	2.24	0.001191	± 2.5	PASS
		VN	TN	3.24	0.001723	± 2.5	PASS
		VH	TN	2.39	0.001271	± 2.5	PASS
	HCH	VL	TN	-1.06	-0.000557	± 2.5	PASS
		VN	TN	-0.79	-0.000415	± 2.5	PASS
		VH	TN	3.81	0.002003	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.87	0.001007	± 2.5	PASS
		VN	-20	-1.54	-0.000829	± 2.5	PASS
		VN	-10	4.05	0.002180	± 2.5	PASS
		VN	0	0.66	0.000355	± 2.5	PASS
		VN	10	-0.1	-0.000054	± 2.5	PASS
		VN	20	-0.19	-0.000102	± 2.5	PASS
		VN	30	-0.35	-0.000188	± 2.5	PASS
		VN	40	3.29	0.001771	± 2.5	PASS
		VN	50	1.1	0.000592	± 2.5	PASS
	MCH	VN	-30	0.04	0.000021	± 2.5	PASS
		VN	-20	1.55	0.000824	± 2.5	PASS
		VN	-10	1.69	0.000899	± 2.5	PASS
		VN	0	0.49	0.000261	± 2.5	PASS



		VN	10	2.2	0.001170	± 2.5	PASS	
		VN	20	4.27	0.002271	± 2.5	PASS	
		VN	30	-1.02	-0.000543	± 2.5	PASS	
		VN	40	3.57	0.001899	± 2.5	PASS	
		VN	50	3.27	0.001739	± 2.5	PASS	
	HCH	VN	-30	-1.56	-0.000820	± 2.5	PASS	
		VN	-20	4.02	0.002113	± 2.5	PASS	
		VN	-10	4.86	0.002555	± 2.5	PASS	
		VN	0	2.31	0.001214	± 2.5	PASS	
		VN	10	0.01	0.000005	± 2.5	PASS	
		VN	20	1.88	0.000988	± 2.5	PASS	
		VN	30	2.98	0.001566	± 2.5	PASS	
		VN	40	-1.1	-0.000578	± 2.5	PASS	
		VN	50	4.4	0.002313	± 2.5	PASS	
	16QAM	LCH	VN	-30	3.05	0.001642	± 2.5	PASS
			VN	-20	4.65	0.002503	± 2.5	PASS
			VN	-10	2.72	0.001464	± 2.5	PASS
			VN	0	-1.67	-0.000899	± 2.5	PASS
VN			10	1.31	0.000705	± 2.5	PASS	
VN			20	2.8	0.001507	± 2.5	PASS	
VN			30	2.78	0.001497	± 2.5	PASS	
VN			40	3.01	0.001620	± 2.5	PASS	
VN			50	1.92	0.001034	± 2.5	PASS	
MCH		VN	-30	-0.37	-0.000197	± 2.5	PASS	
		VN	-20	-1.57	-0.000835	± 2.5	PASS	
		VN	-10	0.75	0.000399	± 2.5	PASS	
		VN	0	1.17	0.000622	± 2.5	PASS	
		VN	10	3.15	0.001676	± 2.5	PASS	
		VN	20	1.29	0.000686	± 2.5	PASS	
		VN	30	3.23	0.001718	± 2.5	PASS	
		VN	40	-1.74	-0.000926	± 2.5	PASS	
		VN	50	-1.46	-0.000777	± 2.5	PASS	
HCH		VN	-30	1.49	0.000783	± 2.5	PASS	
		VN	-20	2.65	0.001393	± 2.5	PASS	
		VN	-10	1.03	0.000541	± 2.5	PASS	
		VN	0	-1.23	-0.000647	± 2.5	PASS	
		VN	10	-0.76	-0.000399	± 2.5	PASS	
		VN	20	0.22	0.000116	± 2.5	PASS	
		VN	30	2.35	0.001235	± 2.5	PASS	
		VN	40	1.44	0.000757	± 2.5	PASS	
		VN	50	4.52	0.002376	± 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	2.21	0.001188	± 2.5	PASS
		VN	TN	2.01	0.001081	± 2.5	PASS
		VH	TN	4.61	0.002478	± 2.5	PASS
	MCH	VL	TN	1.27	0.000676	± 2.5	PASS
		VN	TN	2.95	0.001569	± 2.5	PASS
		VH	TN	4.93	0.002622	± 2.5	PASS
	HCH	VL	TN	3.11	0.001637	± 2.5	PASS
		VN	TN	-1.62	-0.000853	± 2.5	PASS
		VH	TN	0.66	0.000347	± 2.5	PASS
16QAM	LCH	VL	TN	1.52	0.000817	± 2.5	PASS
		VN	TN	0.88	0.000473	± 2.5	PASS
		VH	TN	1.85	0.000995	± 2.5	PASS
	MCH	VL	TN	-0.31	-0.000165	± 2.5	PASS
		VN	TN	0.55	0.000293	± 2.5	PASS
		VH	TN	0.11	0.000059	± 2.5	PASS
	HCH	VL	TN	-1.39	-0.000732	± 2.5	PASS
		VN	TN	4.03	0.002121	± 2.5	PASS
		VH	TN	3.51	0.001847	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.42	-0.000226	± 2.5	PASS
		VN	-20	0.98	0.000527	± 2.5	PASS
		VN	-10	3.25	0.001747	± 2.5	PASS
		VN	0	4.6	0.002473	± 2.5	PASS
		VN	10	2.18	0.001172	± 2.5	PASS
		VN	20	1.09	0.000586	± 2.5	PASS
		VN	30	1.56	0.000839	± 2.5	PASS
		VN	40	-1.2	-0.000645	± 2.5	PASS
		VN	50	0.29	0.000156	± 2.5	PASS
	MCH	VN	-30	-0.94	-0.000500	± 2.5	PASS
		VN	-20	0.59	0.000314	± 2.5	PASS
		VN	-10	-1.52	-0.000809	± 2.5	PASS
		VN	0	-1.19	-0.000633	± 2.5	PASS
		VN	10	0.96	0.000511	± 2.5	PASS

		VN	20	-0.05	-0.000027	± 2.5	PASS
		VN	30	4.42	0.002351	± 2.5	PASS
		VN	40	3.76	0.002000	± 2.5	PASS
		VN	50	0.54	0.000287	± 2.5	PASS
	HCH	VN	-30	4.31	0.002268	± 2.5	PASS
		VN	-20	-0.29	-0.000153	± 2.5	PASS
		VN	-10	4.46	0.002347	± 2.5	PASS
		VN	0	1.58	0.000832	± 2.5	PASS
		VN	10	4.63	0.002437	± 2.5	PASS
		VN	20	3.8	0.002000	± 2.5	PASS
		VN	30	-0.92	-0.000484	± 2.5	PASS
		VN	40	-0.36	-0.000189	± 2.5	PASS
		VN	50	1.77	0.000932	± 2.5	PASS
		16QAM	LCH	VN	-30	-1.83	-0.000984
VN	-20			3.74	0.002011	± 2.5	PASS
VN	-10			2.56	0.001376	± 2.5	PASS
VN	0			3.79	0.002038	± 2.5	PASS
VN	10			1.33	0.000715	± 2.5	PASS
VN	20			2.21	0.001188	± 2.5	PASS
VN	30			4.54	0.002441	± 2.5	PASS
VN	40			4.04	0.002172	± 2.5	PASS
VN	50			-1.67	-0.000898	± 2.5	PASS
MCH	VN		-30	3.69	0.001963	± 2.5	PASS
	VN		-20	1.22	0.000649	± 2.5	PASS
	VN		-10	2.05	0.001090	± 2.5	PASS
	VN		0	4.81	0.002559	± 2.5	PASS
	VN		10	4.34	0.002309	± 2.5	PASS
	VN		20	1.29	0.000686	± 2.5	PASS
	VN		30	0.78	0.000415	± 2.5	PASS
	VN		40	-1.6	-0.000851	± 2.5	PASS
	VN		50	-1.08	-0.000574	± 2.5	PASS
HCH	VN		-30	1.76	0.000926	± 2.5	PASS
	VN		-20	0.26	0.000137	± 2.5	PASS
	VN		-10	-0.57	-0.000300	± 2.5	PASS
	VN		0	-1.59	-0.000837	± 2.5	PASS
	VN		10	2.07	0.001089	± 2.5	PASS
	VN		20	4.17	0.002195	± 2.5	PASS
	VN		30	3.01	0.001584	± 2.5	PASS
	VN		40	-1.44	-0.000758	± 2.5	PASS
	VN		50	2.49	0.001311	± 2.5	PASS