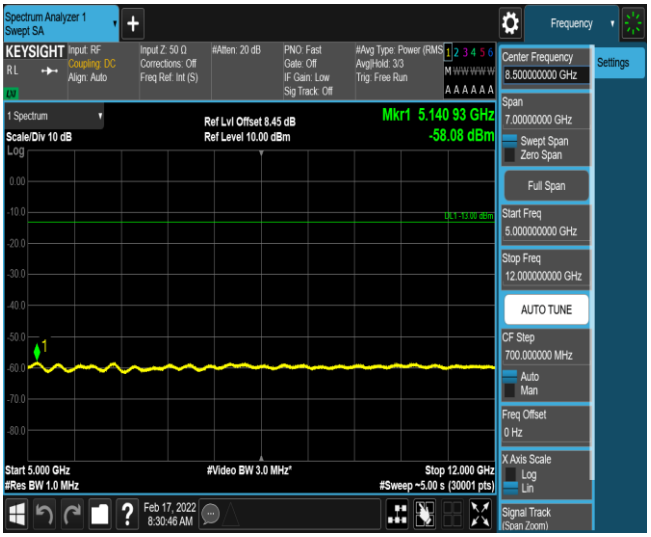
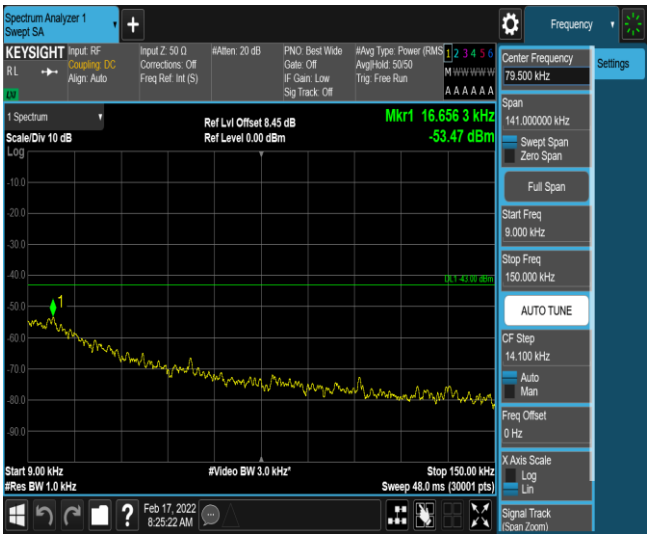
Band26-5MHz-QPSK-26765-1-0-High-1000-5000--36.7-PASS

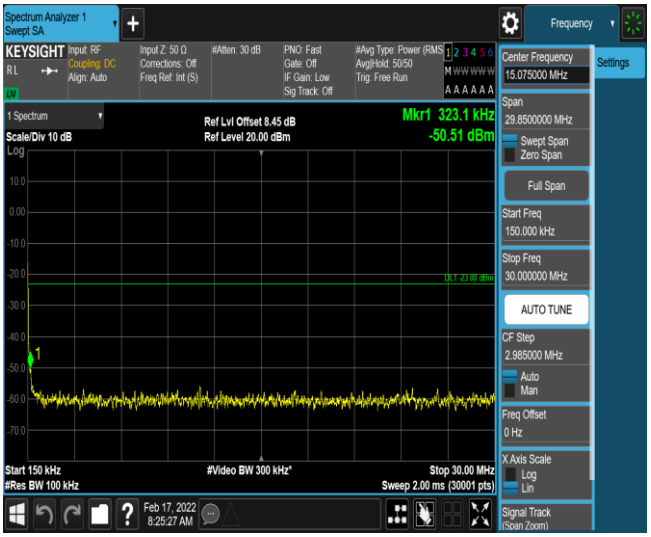


Band26-5MHz-QPSK-26765-1-0-High-5000-12000--58.08-PASS

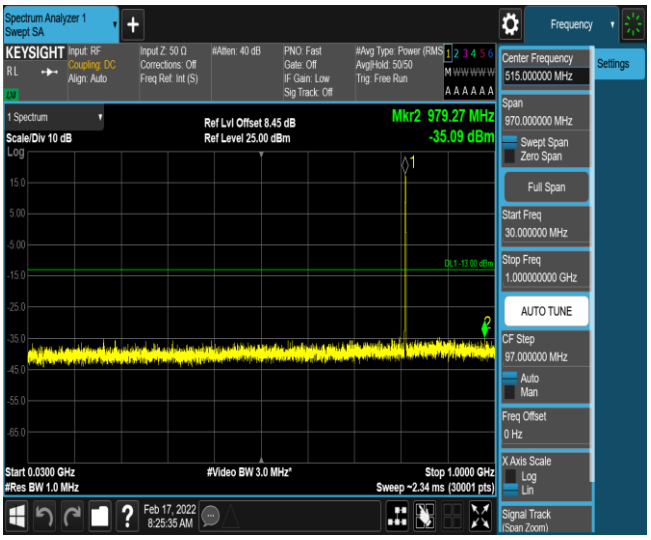
Band26-5MHz-QPSK-26765-1-0-High-12000-26500--52.57-PASS



Band26-5MHz-16QAM-26715-1-0-Low-0.009-0.15--53.47-PASS

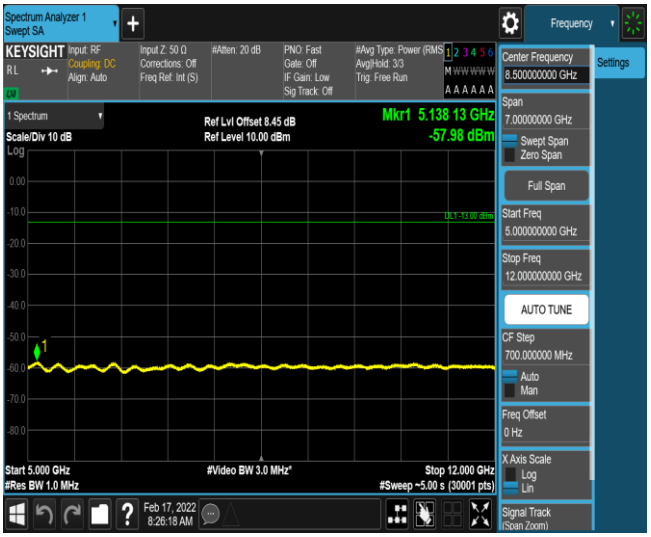


Band26-5MHz-16QAM-26715-1-0-Low-0.15-30--50.52-PASS

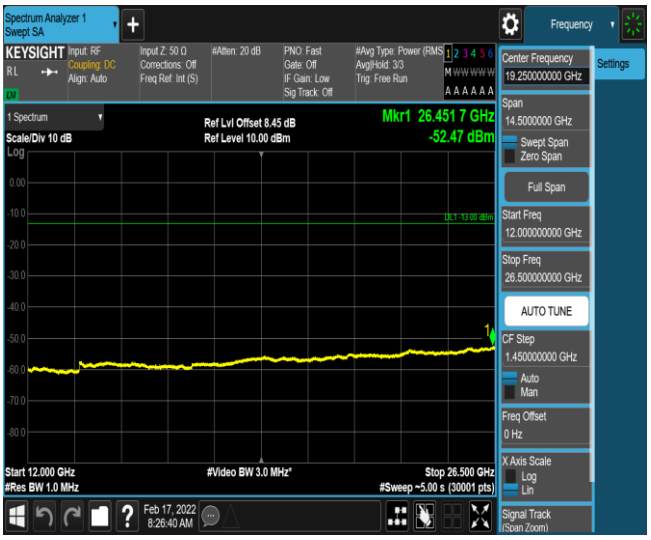


Band26-5MHz-16QAM-26715-1-0-Low-30-1000--35.09-PASS

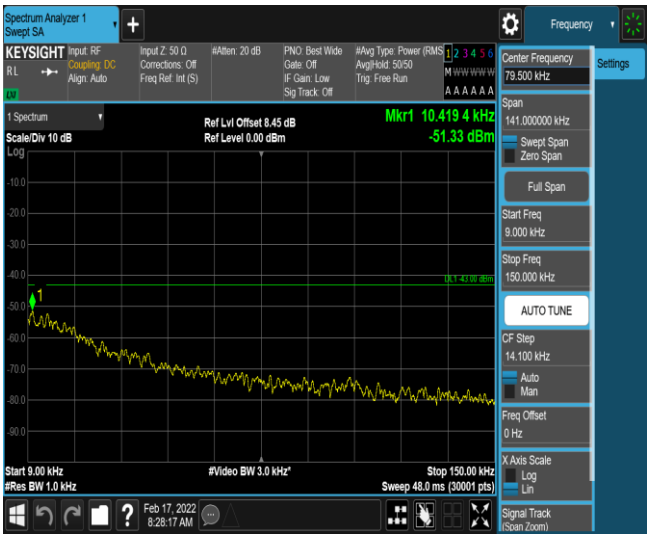
Band26-5MHz-16QAM-26715-1-0-Low-1000-5000--36.6-PASS



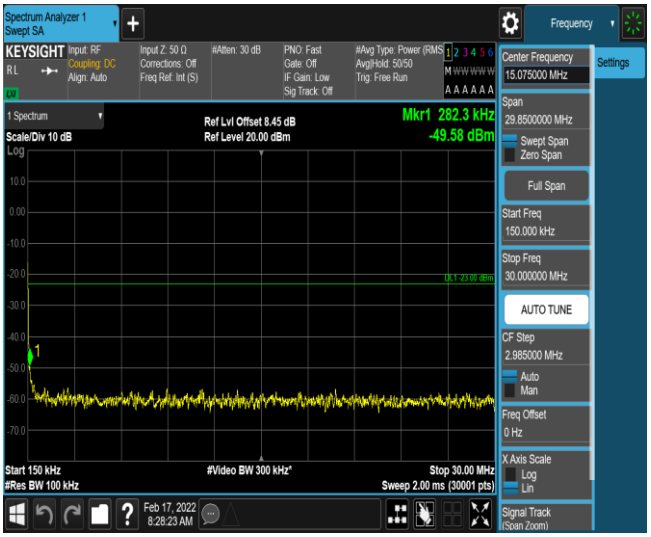
Band26-5MHz-16QAM-26715-1-0-Low-5000-12000--57.98-PASS



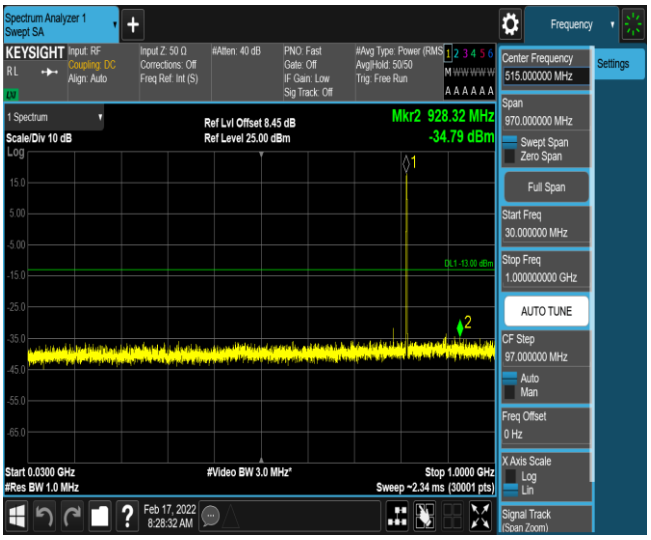
Band26-5MHz-16QAM-26715-1-0-Low-12000-26500--52.47-PASS



Band26-5MHz-16QAM-26740-1-0-Low-0.009-0.15--51.33-PASS

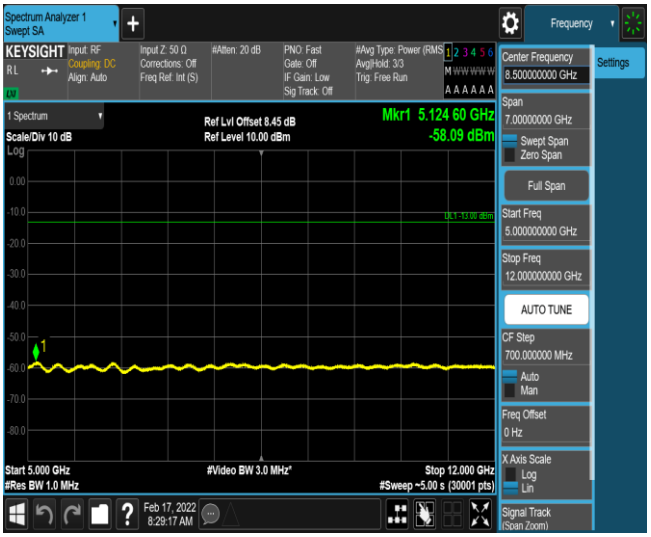


Band26-5MHz-16QAM-26740-1-0-Low-0.15-30--49.58-PASS

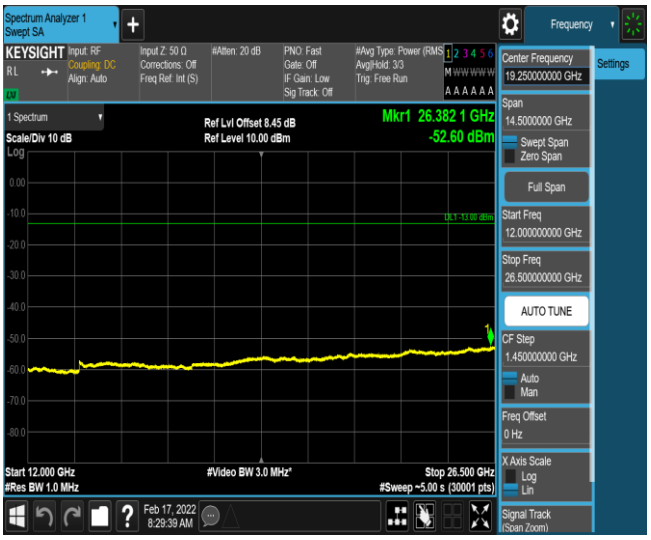


Band26-5MHz-16QAM-26740-1-0-Low-30-1000--34.79-PASS

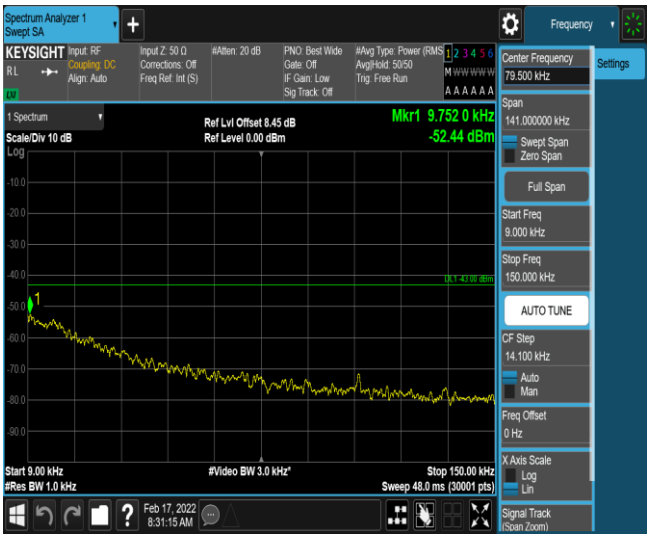
Band26-5MHz-16QAM-26740-1-0-Low-1000-5000--36.79-PASS



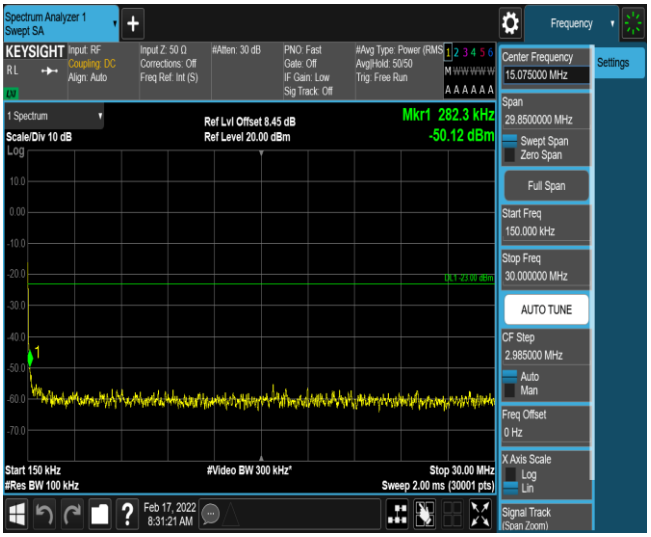
Band26-5MHz-16QAM-26740-1-0-Low-5000-12000--58.09-PASS



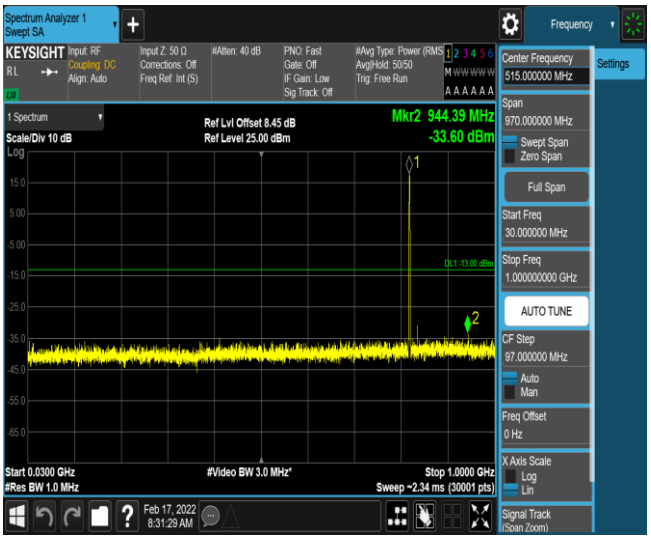
Band26-5MHz-16QAM-26740-1-0-Low-12000-26500--52.6-PASS



Band26-5MHz-16QAM-26765-1-0-High-0.009-0.15--52.44-PASS

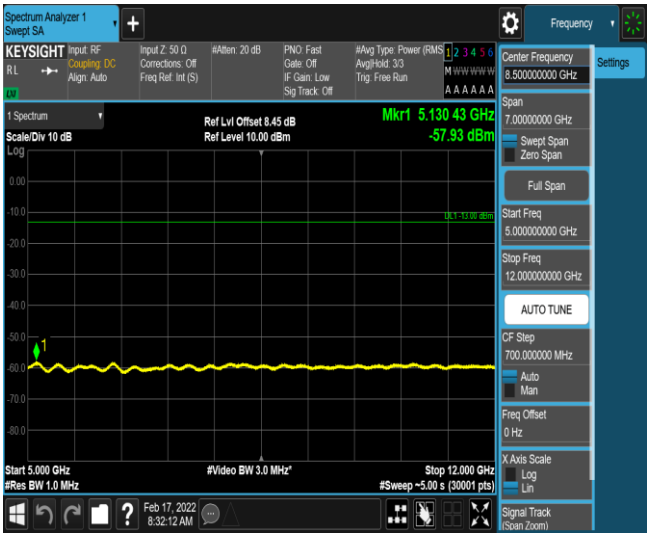


Band26-5MHz-16QAM-26765-1-0-High-0.15-30--50.12-PASS

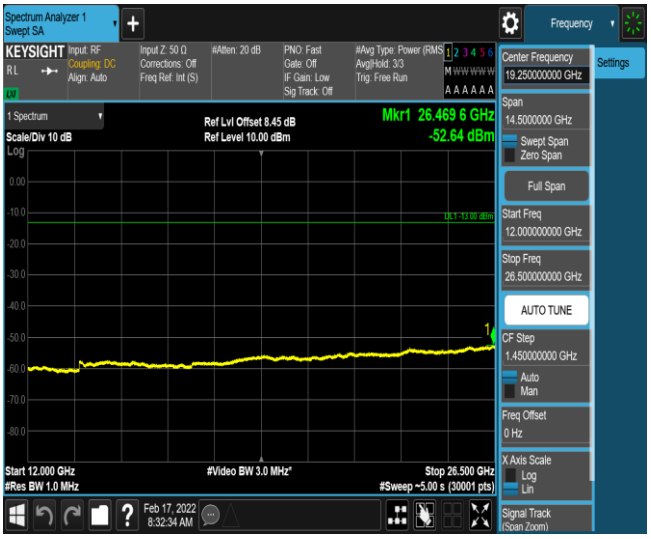


Band26-5MHz-16QAM-26765-1-0-High-30-1000--33.6-PASS

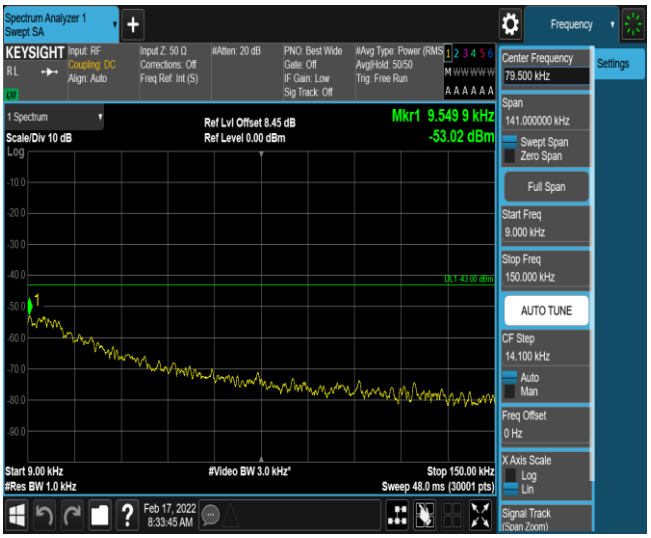
Band26-5MHz-16QAM-26765-1-0-High-1000-5000--36.6-PASS



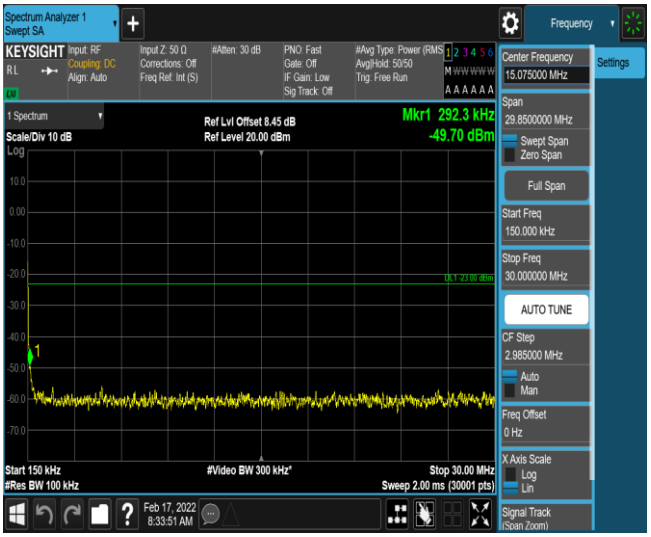
Band26-5MHz-16QAM-26765-1-0-High-5000-12000--57.93-PASS



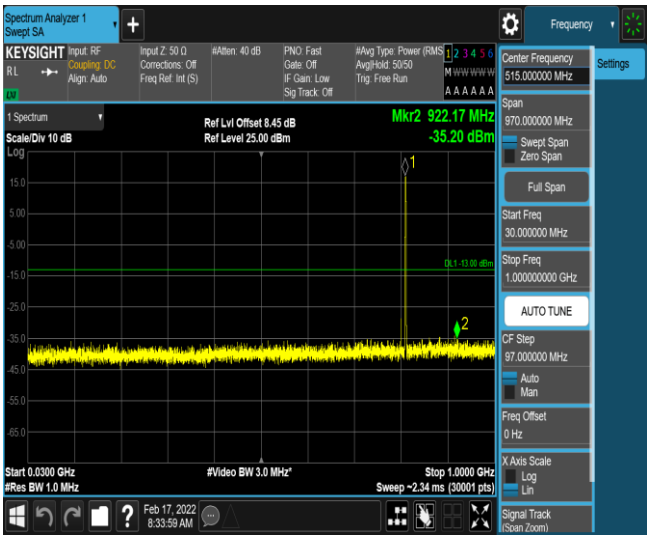
Band26-5MHz-16QAM-26765-1-0-High-12000-26500--52.64-PASS



Band26-10MHz-QPSK-26740-1-0-Low-0.009-0.15--53.02-PASS

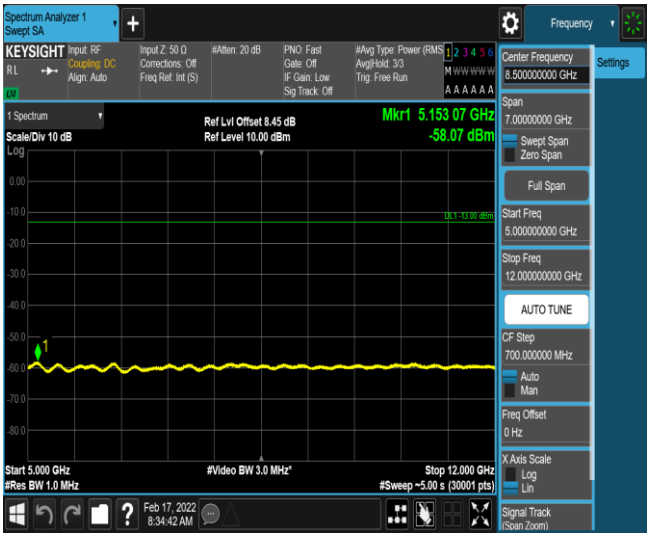


Band26-10MHz-QPSK-26740-1-0-Low-0.15-30--49.7-PASS

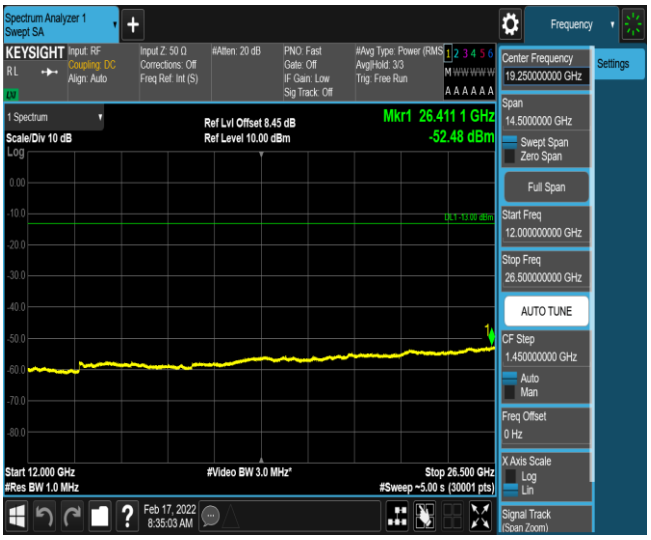


Band26-10MHz-QPSK-26740-1-0-Low-30-1000--35.2-PASS

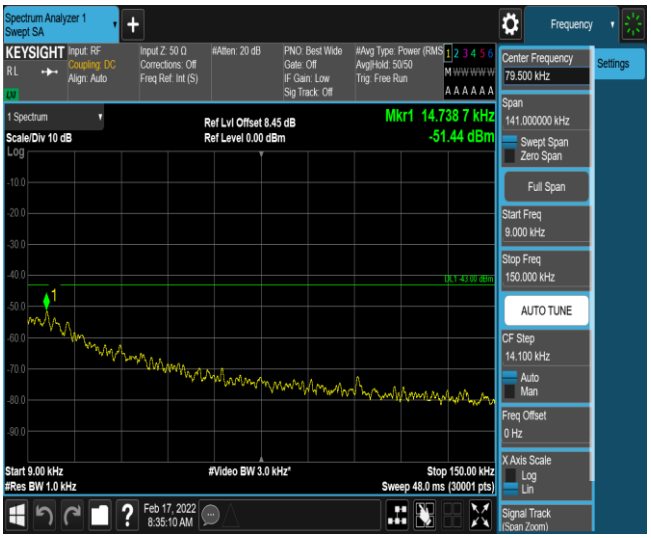
Band26-10MHz-QPSK-26740-1-0-Low-1000-5000--36.76-PASS



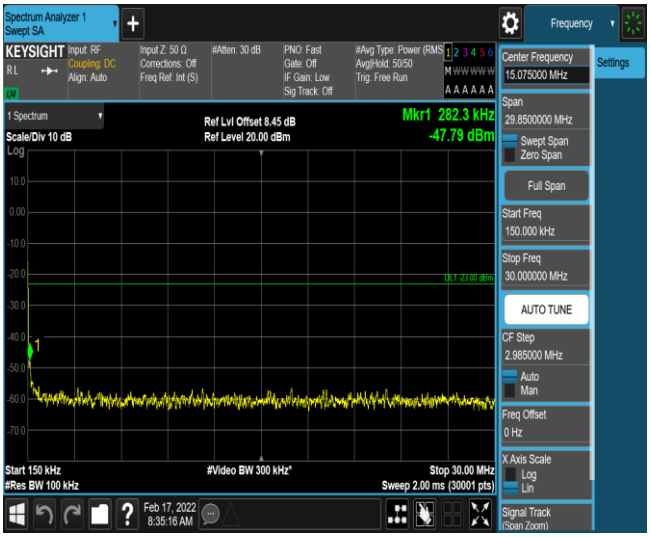
Band26-10MHz-QPSK-26740-1-0-Low-5000-12000--58.07-PASS



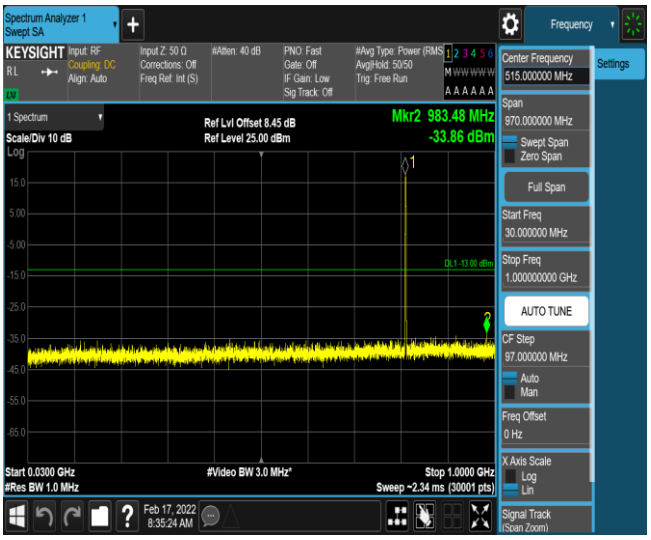
Band26-10MHz-QPSK-26740-1-0-Low-12000-26500--52.48-PASS



Band26-10MHz-16QAM-26740-1-0-Low-0.009-0.15--51.44-PASS

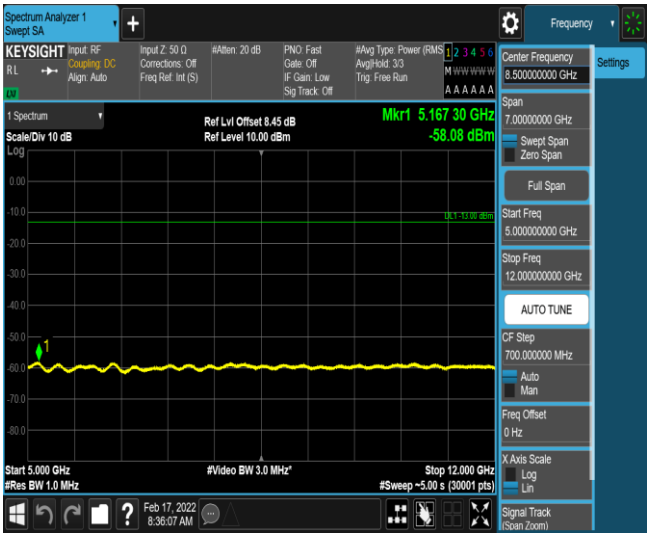


Band26-10MHz-16QAM-26740-1-0-Low-0.15-30--47.79-PASS

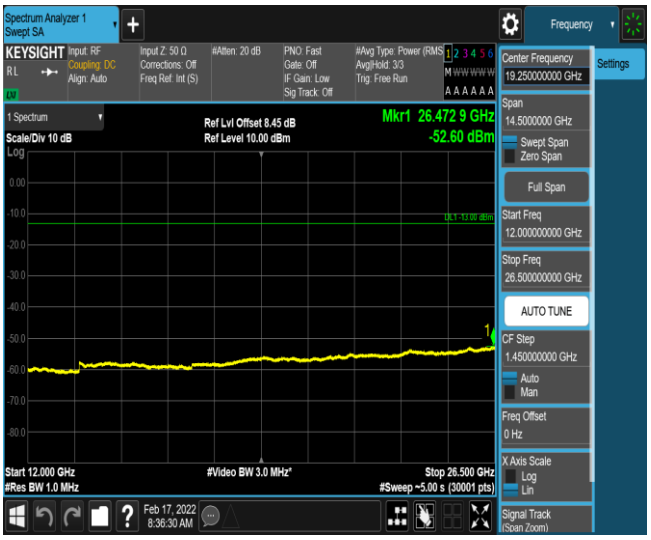


Band26-10MHz-16QAM-26740-1-0-Low-30-1000--33.86-PASS

Band26-10MHz-16QAM-26740-1-0-Low-1000-5000--36.78-PASS



Band26-10MHz-16QAM-26740-1-0-Low-5000-12000--58.08-PASS



Band26-10MHz-16QAM-26740-1-0-Low-12000-26500--52.6-PASS

Appendix F: Frequency Stability for M1

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	1.57	0.001927	± 2.5	PASS
		VN	TN	0.25	0.000307	± 2.5	PASS
		VH	TN	2.41	0.002958	± 2.5	PASS
	MCH	VL	TN	4.49	0.005482	± 2.5	PASS
		VN	TN	0.66	0.000806	± 2.5	PASS
		VH	TN	-1.2	-0.001465	± 2.5	PASS
	HCH	VL	TN	2.38	0.002891	± 2.5	PASS
		VN	TN	-0.73	-0.000887	± 2.5	PASS
		VH	TN	3.67	0.004458	± 2.5	PASS
16QAM	LCH	VL	TN	-0.33	-0.000405	± 2.5	PASS
		VN	TN	2.84	0.003486	± 2.5	PASS
		VH	TN	1.65	0.002025	± 2.5	PASS
	MCH	VL	TN	-1.75	-0.002137	± 2.5	PASS
		VN	TN	1.83	0.002234	± 2.5	PASS
		VH	TN	-0.41	-0.000501	± 2.5	PASS
	HCH	VL	TN	4.41	0.005356	± 2.5	PASS
		VN	TN	-1.83	-0.002223	± 2.5	PASS
		VH	TN	3.52	0.004275	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.06	-0.001301	± 2.5	PASS
		VN	-20	3.4	0.004173	± 2.5	PASS
		VN	-10	-1.22	-0.001497	± 2.5	PASS
		VN	0	1.26	0.001547	± 2.5	PASS
		VN	10	-0.75	-0.000921	± 2.5	PASS
		VN	20	1.93	0.002369	± 2.5	PASS
		VN	30	4.89	0.006002	± 2.5	PASS
		VN	40	-0.82	-0.001007	± 2.5	PASS
		VN	50	1.69	0.002074	± 2.5	PASS
	MCH	VN	-30	0.1	0.000122	± 2.5	PASS

		VN	-20	4	0.004884	± 2.5	PASS
		VN	-10	0.65	0.000794	± 2.5	PASS
		VN	0	2.04	0.002491	± 2.5	PASS
		VN	10	3.17	0.003871	± 2.5	PASS
		VN	20	-0.04	-0.000049	± 2.5	PASS
		VN	30	-0.19	-0.000232	± 2.5	PASS
		VN	40	3.33	0.004066	± 2.5	PASS
		VN	50	3.55	0.004335	± 2.5	PASS
	HCH	VN	-30	3.86	0.004688	± 2.5	PASS
		VN	-20	2.97	0.003607	± 2.5	PASS
		VN	-10	3.12	0.003790	± 2.5	PASS
		VN	0	1.85	0.002247	± 2.5	PASS
		VN	10	3.71	0.004506	± 2.5	PASS
		VN	20	-1.4	-0.001700	± 2.5	PASS
		VN	30	4.83	0.005867	± 2.5	PASS
		VN	40	4.65	0.005648	± 2.5	PASS
		VN	50	-1.8	-0.002186	± 2.5	PASS
16QAM	LCH	VN	-30	-0.51	-0.000626	± 2.5	PASS
		VN	-20	-0.21	-0.000258	± 2.5	PASS
		VN	-10	4.15	0.005094	± 2.5	PASS
		VN	0	0.97	0.001191	± 2.5	PASS
		VN	10	0.96	0.001178	± 2.5	PASS
		VN	20	3.14	0.003854	± 2.5	PASS
		VN	30	-0.86	-0.001056	± 2.5	PASS
		VN	40	0.16	0.000196	± 2.5	PASS
		VN	50	-0.42	-0.000516	± 2.5	PASS
	MCH	VN	-30	3.57	0.004359	± 2.5	PASS
		VN	-20	2.4	0.002930	± 2.5	PASS
		VN	-10	-1.08	-0.001319	± 2.5	PASS
		VN	0	1.19	0.001453	± 2.5	PASS
		VN	10	4.7	0.005739	± 2.5	PASS
		VN	20	2.41	0.002943	± 2.5	PASS
		VN	30	0.17	0.000208	± 2.5	PASS
		VN	40	4.29	0.005238	± 2.5	PASS
		VN	50	0.26	0.000317	± 2.5	PASS
	HCH	VN	-30	-1.04	-0.001263	± 2.5	PASS
		VN	-20	3.36	0.004081	± 2.5	PASS
		VN	-10	3.2	0.003887	± 2.5	PASS
		VN	0	-0.77	-0.000935	± 2.5	PASS
		VN	10	-1.61	-0.001956	± 2.5	PASS
		VN	20	3	0.003644	± 2.5	PASS

		VN	30	0.16	0.000194	± 2.5	PASS
		VN	40	2.92	0.003547	± 2.5	PASS
		VN	50	1	0.001215	± 2.5	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz+							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.72	-0.000883	± 2.5	PASS
		VN	TN	4.07	0.004991	± 2.5	PASS
		VH	TN	0.11	0.000135	± 2.5	PASS
	MCH	VL	TN	0.64	0.000781	± 2.5	PASS
		VN	TN	1.99	0.002430	± 2.5	PASS
		VH	TN	-1.74	-0.002125	± 2.5	PASS
	HCH	VL	TN	4.06	0.004936	± 2.5	PASS
		VN	TN	3.02	0.003672	± 2.5	PASS
		VH	TN	-0.38	-0.000462	± 2.5	PASS
16QAM	LCH	VL	TN	2.75	0.003372	± 2.5	PASS
		VN	TN	-1.71	-0.002097	± 2.5	PASS
		VH	TN	3.52	0.004316	± 2.5	PASS
	MCH	VL	TN	1.72	0.002100	± 2.5	PASS
		VN	TN	-1.18	-0.001441	± 2.5	PASS
		VH	TN	3.96	0.004835	± 2.5	PASS
	HCH	VL	TN	3.2	0.003891	± 2.5	PASS
		VN	TN	1.21	0.001471	± 2.5	PASS
		VH	TN	3.51	0.004267	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.15	-0.000184	± 2.5	PASS
		VN	-20	3.26	0.003998	± 2.5	PASS
		VN	-10	0.35	0.000429	± 2.5	PASS
		VN	0	3.52	0.004316	± 2.5	PASS
		VN	10	2.48	0.003041	± 2.5	PASS
		VN	20	1.62	0.001987	± 2.5	PASS
		VN	30	4.81	0.005898	± 2.5	PASS
		VN	40	3.05	0.003740	± 2.5	PASS
		VN	50	-0.73	-0.000895	± 2.5	PASS
	MCH	VN	-30	0.29	0.000354	± 2.5	PASS
		VN	-20	2.26	0.002759	± 2.5	PASS

		VN	-10	0.2	0.000244	± 2.5	PASS
		VN	0	3.65	0.004457	± 2.5	PASS
		VN	10	4.82	0.005885	± 2.5	PASS
		VN	20	1.84	0.002247	± 2.5	PASS
		VN	30	4.94	0.006032	± 2.5	PASS
		VN	40	3.58	0.004371	± 2.5	PASS
		VN	50	3.02	0.003687	± 2.5	PASS
	HCH	VN	-30	2.48	0.003015	± 2.5	PASS
		VN	-20	2.22	0.002699	± 2.5	PASS
		VN	-10	-1.75	-0.002128	± 2.5	PASS
		VN	0	1.77	0.002152	± 2.5	PASS
		VN	10	4.36	0.005301	± 2.5	PASS
		VN	20	-1.67	-0.002030	± 2.5	PASS
		VN	30	1.9	0.002310	± 2.5	PASS
		VN	40	2.08	0.002529	± 2.5	PASS
		VN	50	3.04	0.003696	± 2.5	PASS
16QAM	LCH	VN	-30	1.12	0.001373	± 2.5	PASS
		VN	-20	-0.99	-0.001214	± 2.5	PASS
		VN	-10	3.54	0.004341	± 2.5	PASS
		VN	0	3.81	0.004672	± 2.5	PASS
		VN	10	1.37	0.001680	± 2.5	PASS
		VN	20	2.93	0.003593	± 2.5	PASS
		VN	30	4.36	0.005346	± 2.5	PASS
		VN	40	2.22	0.002722	± 2.5	PASS
		VN	50	-0.51	-0.000625	± 2.5	PASS
	MCH	VN	-30	1.1	0.001343	± 2.5	PASS
		VN	-20	4.22	0.005153	± 2.5	PASS
		VN	-10	-1.71	-0.002088	± 2.5	PASS
		VN	0	3.54	0.004322	± 2.5	PASS
		VN	10	0.81	0.000989	± 2.5	PASS
		VN	20	4.6	0.005617	± 2.5	PASS
		VN	30	-0.88	-0.001074	± 2.5	PASS
		VN	40	4.09	0.004994	± 2.5	PASS
		VN	50	3.84	0.004689	± 2.5	PASS
	HCH	VN	-30	-0.71	-0.000863	± 2.5	PASS
		VN	-20	1.68	0.002043	± 2.5	PASS
		VN	-10	3.39	0.004122	± 2.5	PASS
		VN	0	1.7	0.002067	± 2.5	PASS
		VN	10	0.49	0.000596	± 2.5	PASS
		VN	20	-1.56	-0.001897	± 2.5	PASS
		VN	30	0.04	0.000049	± 2.5	PASS

		VN	40	3.03	0.003684	± 2.5	PASS
		VN	50	1.46	0.001775	± 2.5	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VL	TN	-0.44	-0.000539	± 2.5	PASS
		VN	TN	-1.96	-0.002400	± 2.5	PASS
		VH	TN	2.16	0.002645	± 2.5	PASS
	MCH	VL	TN	3.65	0.004457	± 2.5	PASS
		VN	TN	3.98	0.004860	± 2.5	PASS
		VH	TN	1.26	0.001538	± 2.5	PASS
	HCH	VL	TN	-1.49	-0.001814	± 2.5	PASS
		VN	TN	3.54	0.004309	± 2.5	PASS
		VH	TN	3.91	0.004760	± 2.5	PASS
16QAM	LCH	VL	TN	0.46	0.000563	± 2.5	PASS
		VN	TN	2.02	0.002474	± 2.5	PASS
		VH	TN	2.28	0.002792	± 2.5	PASS
	MCH	VL	TN	-0.99	-0.001209	± 2.5	PASS
		VN	TN	4.39	0.005360	± 2.5	PASS
		VH	TN	-1.61	-0.001966	± 2.5	PASS
	HCH	VL	TN	-0.44	-0.000536	± 2.5	PASS
		VN	TN	1.79	0.002179	± 2.5	PASS
		VH	TN	-0.99	-0.001205	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.12	0.005046	± 2.5	PASS
		VN	-20	3.16	0.003870	± 2.5	PASS
		VN	-10	-1.1	-0.001347	± 2.5	PASS
		VN	0	4.21	0.005156	± 2.5	PASS
		VN	10	3.6	0.004409	± 2.5	PASS
		VN	20	-0.54	-0.000661	± 2.5	PASS
		VN	30	4.71	0.005769	± 2.5	PASS
		VN	40	3.75	0.004593	± 2.5	PASS
		VN	50	-0.62	-0.000759	± 2.5	PASS
	MCH	VN	-30	2.85	0.003480	± 2.5	PASS
		VN	-20	2.41	0.002943	± 2.5	PASS
		VN	-10	0.74	0.000904	± 2.5	PASS

		VN	0	-1.86	-0.002271	± 2.5	PASS
		VN	10	1.07	0.001306	± 2.5	PASS
		VN	20	3.35	0.004090	± 2.5	PASS
		VN	30	0.18	0.000220	± 2.5	PASS
		VN	40	4.73	0.005775	± 2.5	PASS
		VN	50	0.58	0.000708	± 2.5	PASS
	HCH	VN	-30	1.44	0.001753	± 2.5	PASS
		VN	-20	1.31	0.001595	± 2.5	PASS
		VN	-10	2.04	0.002483	± 2.5	PASS
		VN	0	3.84	0.004674	± 2.5	PASS
		VN	10	4.42	0.005380	± 2.5	PASS
		VN	20	0.65	0.000791	± 2.5	PASS
		VN	30	3.4	0.004139	± 2.5	PASS
		VN	40	3.54	0.004309	± 2.5	PASS
		VN	50	2.74	0.003335	± 2.5	PASS
16QAM	LCH	VN	-30	1.71	0.002094	± 2.5	PASS
		VN	-20	3.11	0.003809	± 2.5	PASS
		VN	-10	4.64	0.005683	± 2.5	PASS
		VN	0	3.25	0.003980	± 2.5	PASS
		VN	10	0.86	0.001053	± 2.5	PASS
		VN	20	3.51	0.004299	± 2.5	PASS
		VN	30	1.11	0.001359	± 2.5	PASS
		VN	40	3.83	0.004691	± 2.5	PASS
		VN	50	2.31	0.002829	± 2.5	PASS
	MCH	VN	-30	2.84	0.003468	± 2.5	PASS
		VN	-20	-1.48	-0.001807	± 2.5	PASS
		VN	-10	1.01	0.001233	± 2.5	PASS
		VN	0	3.07	0.003748	± 2.5	PASS
		VN	10	0.12	0.000147	± 2.5	PASS
		VN	20	4.83	0.005897	± 2.5	PASS
		VN	30	-1.97	-0.002405	± 2.5	PASS
		VN	40	3.86	0.004713	± 2.5	PASS
		VN	50	4.9	0.005983	± 2.5	PASS
	HCH	VN	-30	0.33	0.000402	± 2.5	PASS
		VN	-20	-0.92	-0.001120	± 2.5	PASS
		VN	-10	4.47	0.005441	± 2.5	PASS
		VN	0	-0.36	-0.000438	± 2.5	PASS
		VN	10	2.76	0.003360	± 2.5	PASS
		VN	20	3.37	0.004102	± 2.5	PASS
		VN	30	-1.14	-0.001388	± 2.5	PASS
		VN	40	-0.87	-0.001059	± 2.5	PASS

		VN	50	1.66	0.002021	± 2.5	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz							
Voltage							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	MCH	VL	TN	1.72	0.002100	± 2.5	PASS
		VN	TN	4.09	0.004994	± 2.5	PASS
		VH	TN	-1.83	-0.002234	± 2.5	PASS
16QAM	MCH	VL	TN	-0.62	-0.000757	± 2.5	PASS
		VN	TN	4.96	0.006056	± 2.5	PASS
		VH	TN	4.21	0.005140	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	MCH	VN	-30	0.45	0.000549	± 2.5	PASS
		VN	-20	2.75	0.003358	± 2.5	PASS
		VN	-10	3.86	0.004713	± 2.5	PASS
		VN	0	2.73	0.003333	± 2.5	PASS
		VN	10	-1.93	-0.002357	± 2.5	PASS
		VN	20	4.52	0.005519	± 2.5	PASS
		VN	30	-1.03	-0.001258	± 2.5	PASS
		VN	40	4.33	0.005287	± 2.5	PASS
		VN	50	4.84	0.005910	± 2.5	PASS
16QAM	MCH	VN	-30	1.13	0.001380	± 2.5	PASS
		VN	-20	-0.11	-0.000134	± 2.5	PASS
		VN	-10	4.04	0.004933	± 2.5	PASS
		VN	0	1.51	0.001844	± 2.5	PASS
		VN	10	-1.51	-0.001844	± 2.5	PASS
		VN	20	1.73	0.002112	± 2.5	PASS
		VN	30	3.07	0.003748	± 2.5	PASS
		VN	40	0.54	0.000659	± 2.5	PASS
		VN	50	2.66	0.003248	± 2.5	PASS