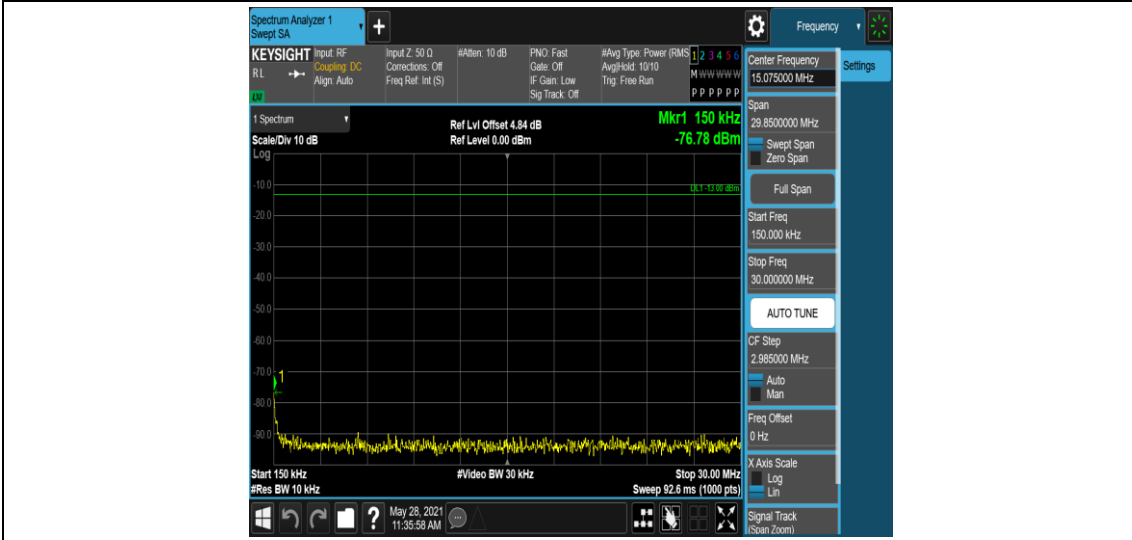


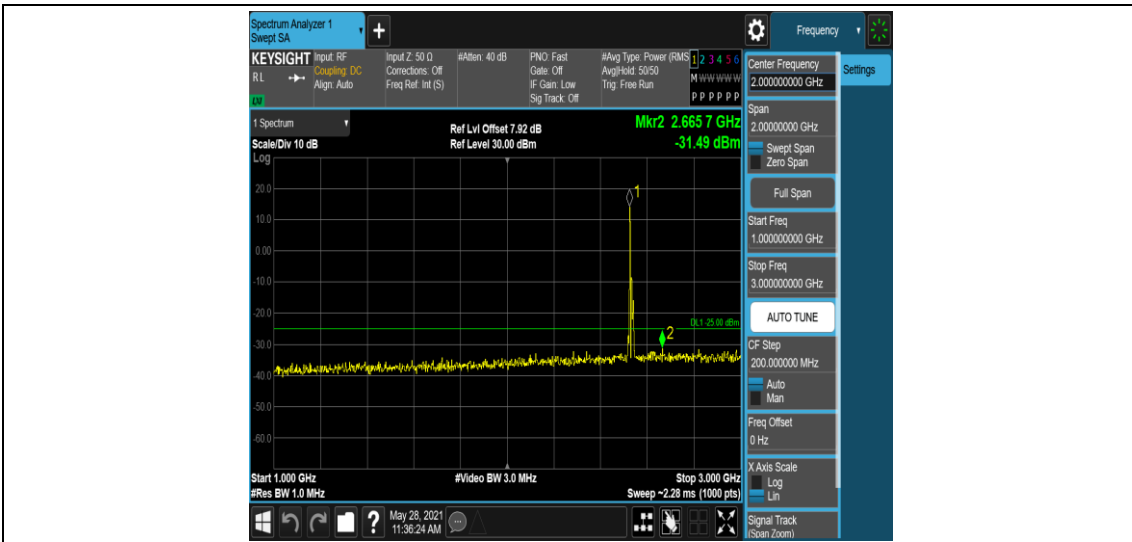
Band7-20MHz-QPSK-21100-1RB#0-Range2:0.15~30MHz



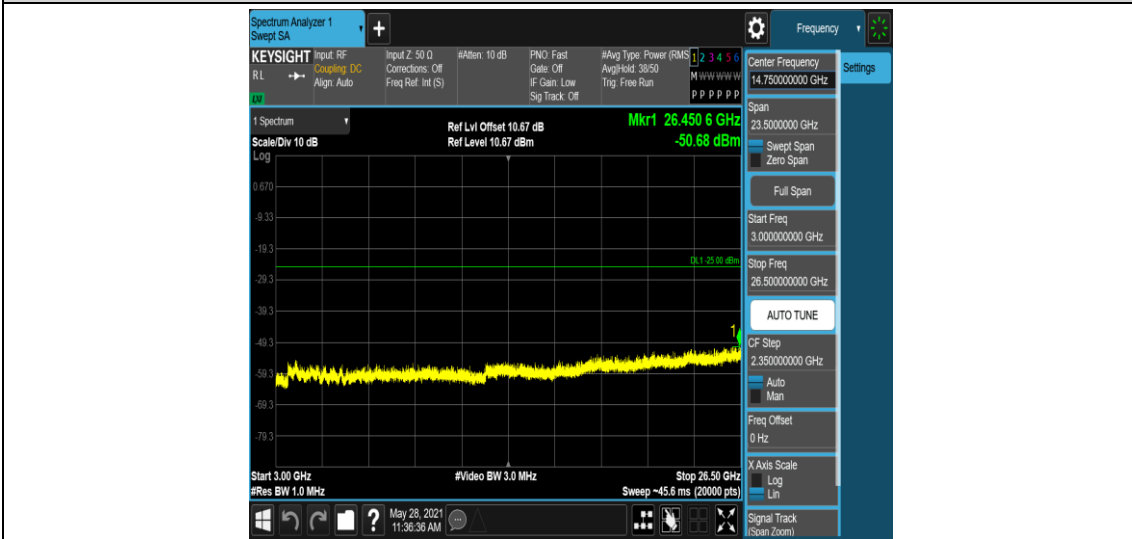
Band7-20MHz-QPSK-21100-1RB#0-Range3:30~1000MHz



Band7-20MHz-QPSK-21100-1RB#0-Range4:1000~3000MHz



Band7-20MHz-QPSK-21100-1RB#0-Range5:3000~26500MHz



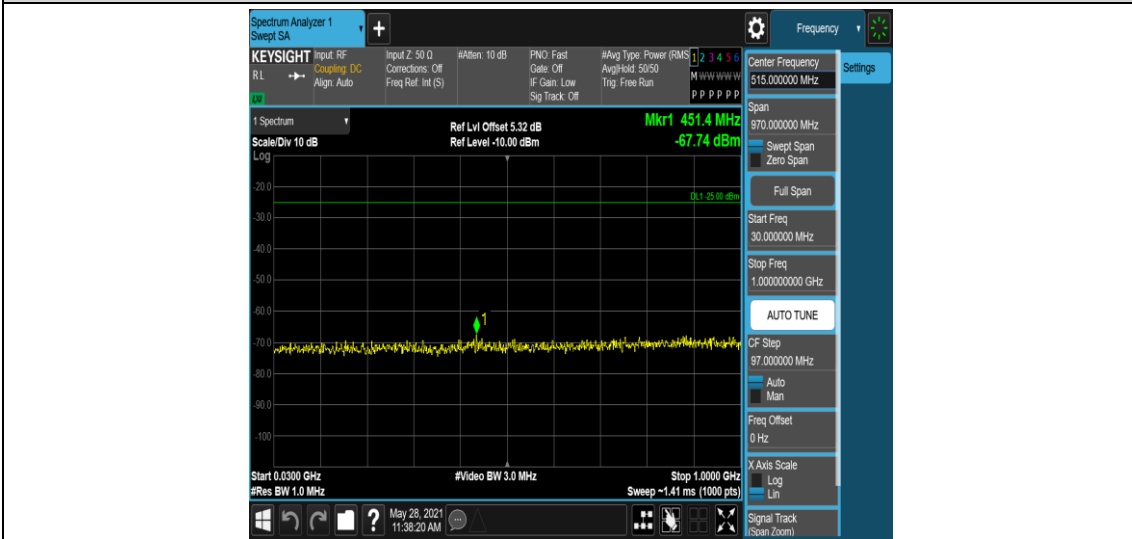
Band7-20MHz-QPSK-21350-1RB#0-Range1:0.009~0.15MHz



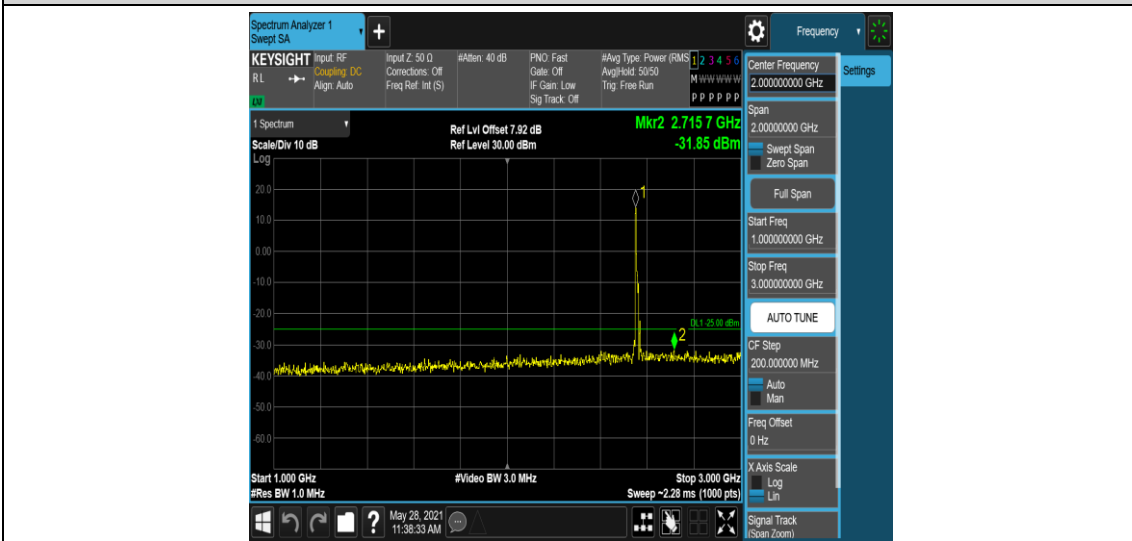
Band7-20MHz-QPSK-21350-1RB#0-Range2:0.15~30MHz



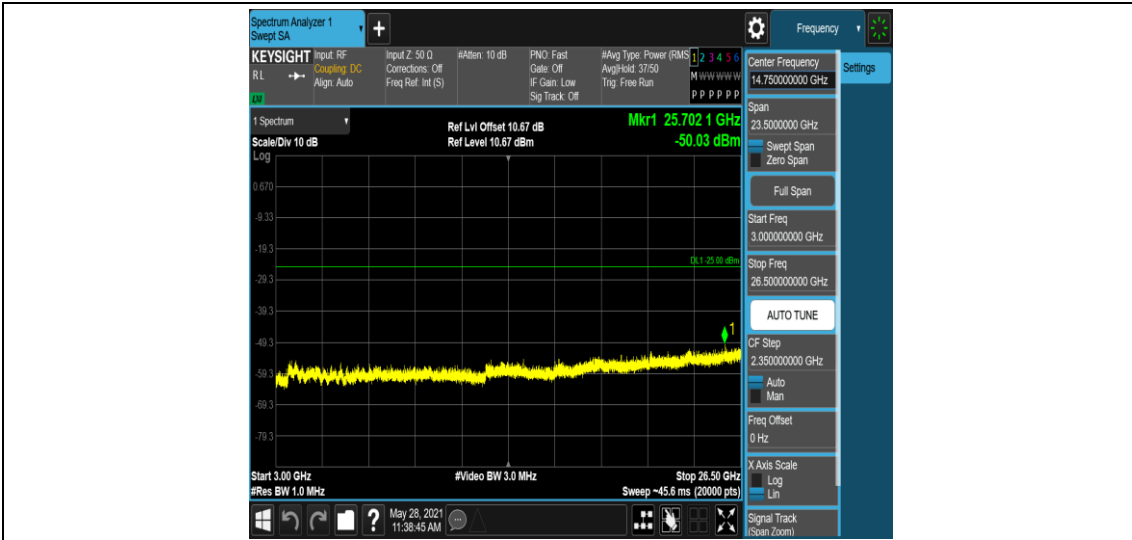
Band7-20MHz-QPSK-21350-1RB#0-Range3:30~1000MHz



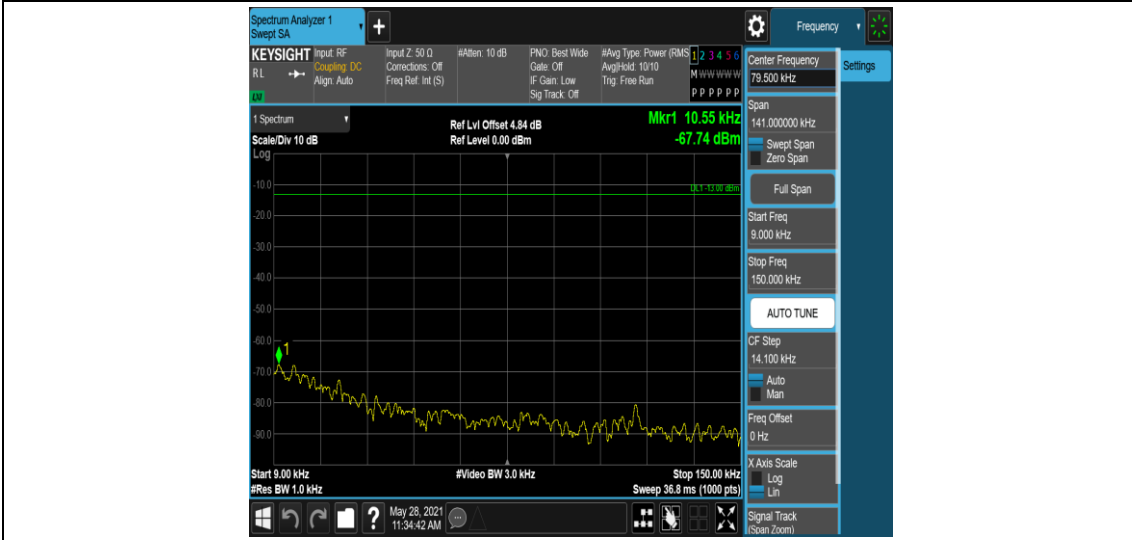
Band7-20MHz-QPSK-21350-1RB#0-Range4:100~3000MHz



Band7-20MHz-QPSK-21350-1RB#0-Range5:3000~26500MHz



Band7-20MHz-16QAM-20850-1RB#0-Range1:0.009~0.15MHz



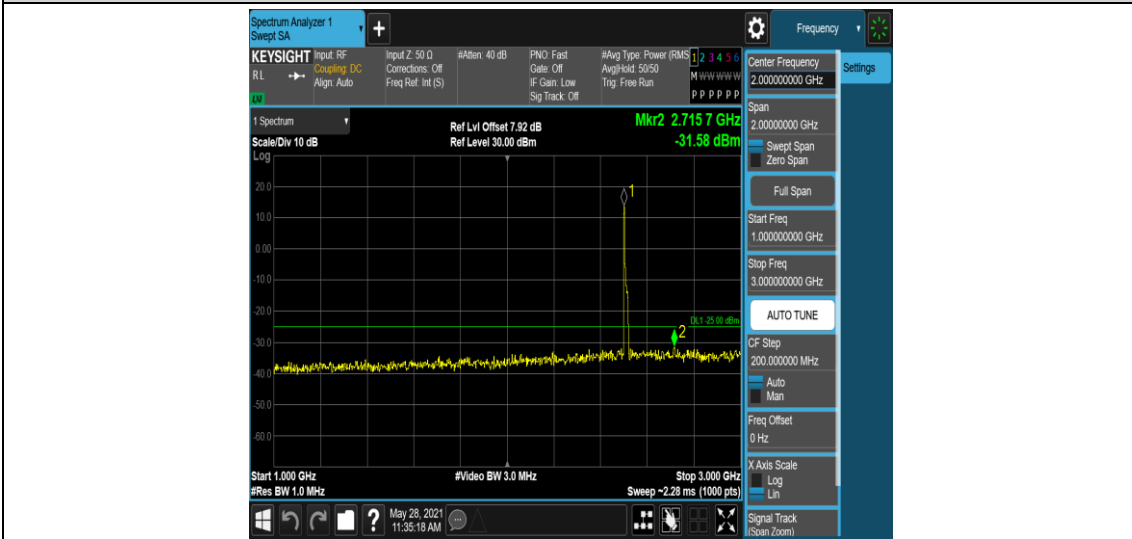
Band7-20MHz-16QAM-20850-1RB#0-Range2:0.15~30MHz



Band7-20MHz-16QAM-20850-1RB#0-Range3:30~1000MHz



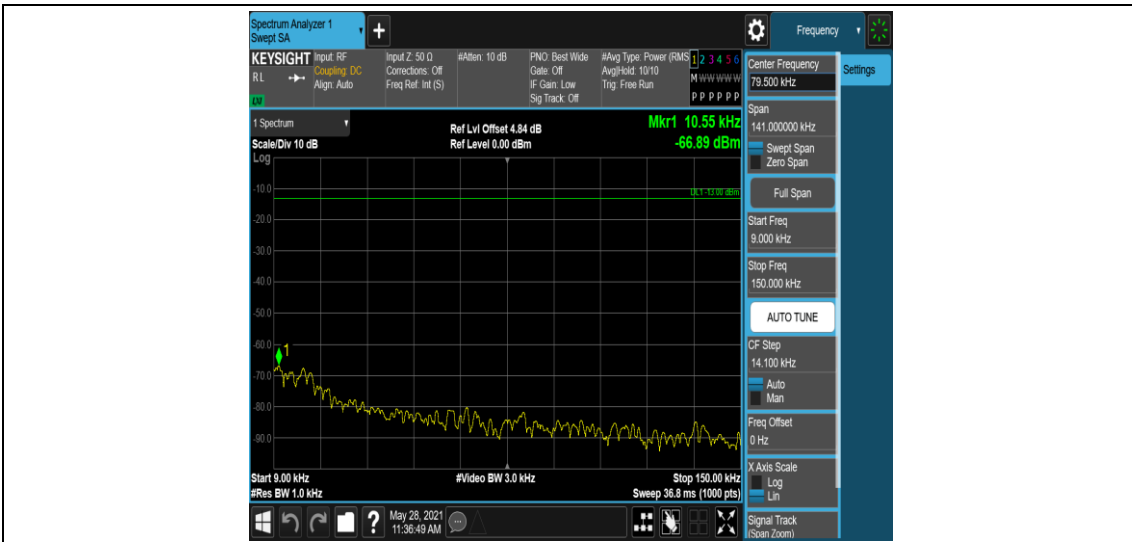
Band7-20MHz-16QAM-20850-1RB#0-Range4:1000~3000MHz



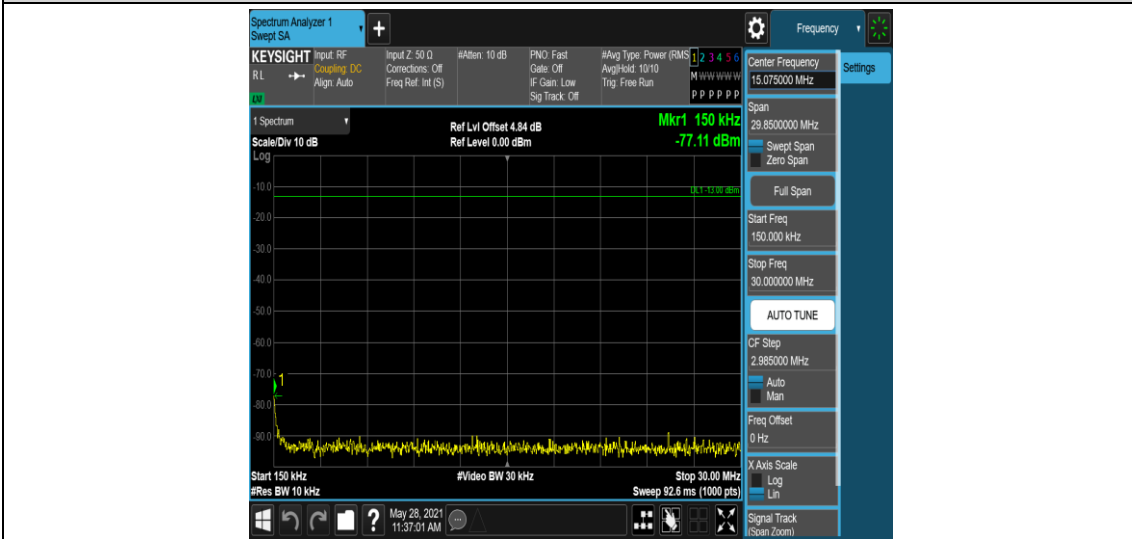
Band7-20MHz-16QAM-20850-1RB#0-Range5:3000~26500MHz



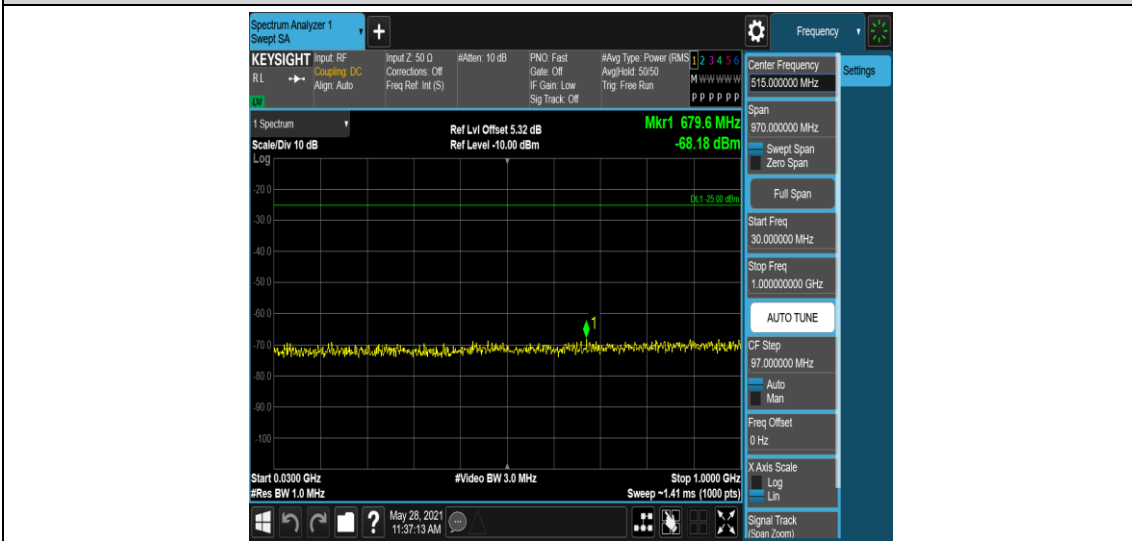
Band7-20MHz-16QAM-21100-1RB#0-Range1:0.009~0.15MHz



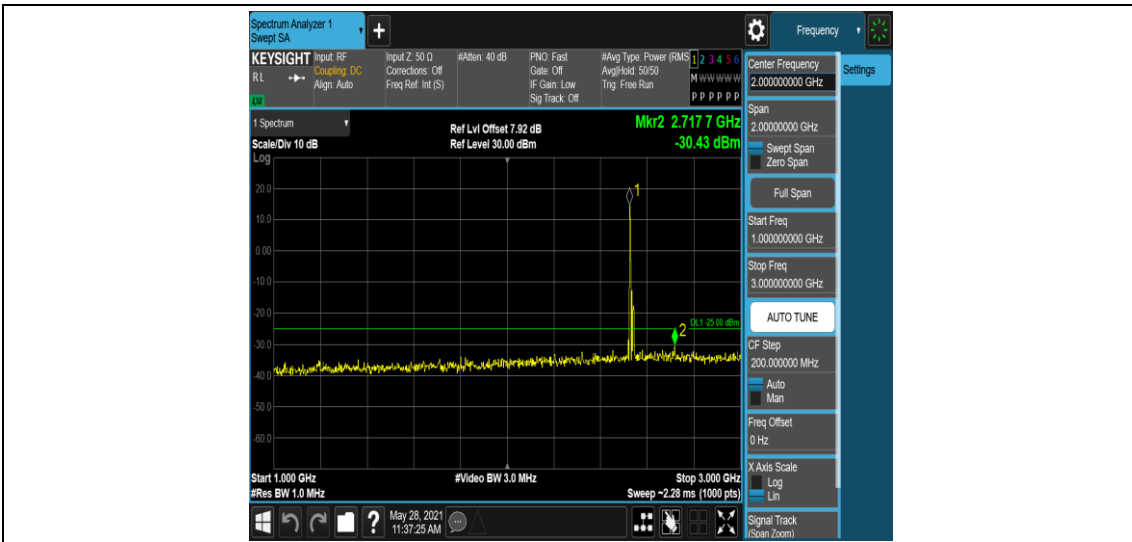
Band7-20MHz-16QAM-21100-1RB#0-Range2:0.15~30MHz



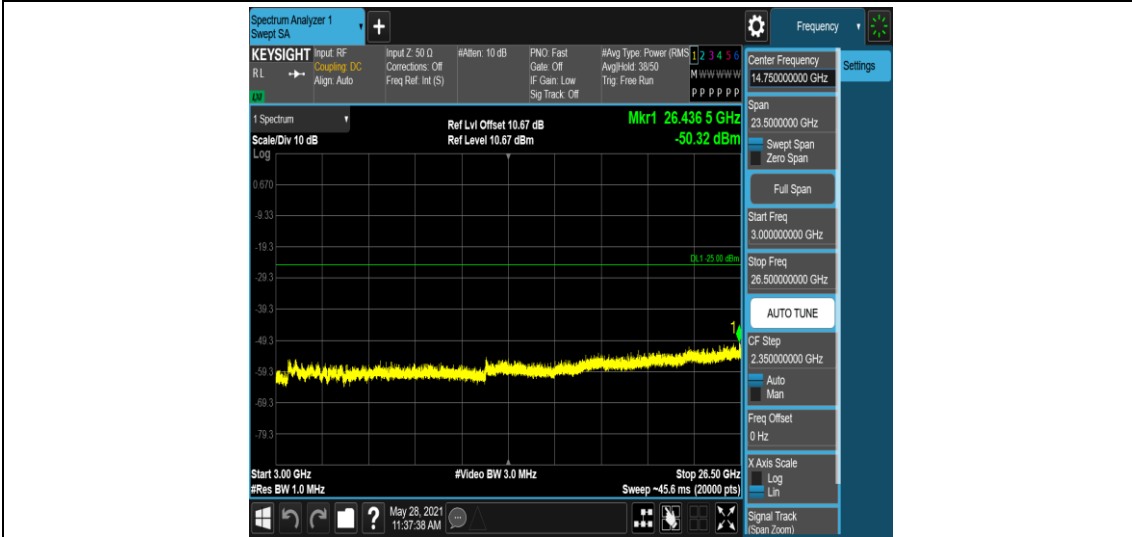
Band7-20MHz-16QAM-21100-1RB#0-Range3:30~1000MHz



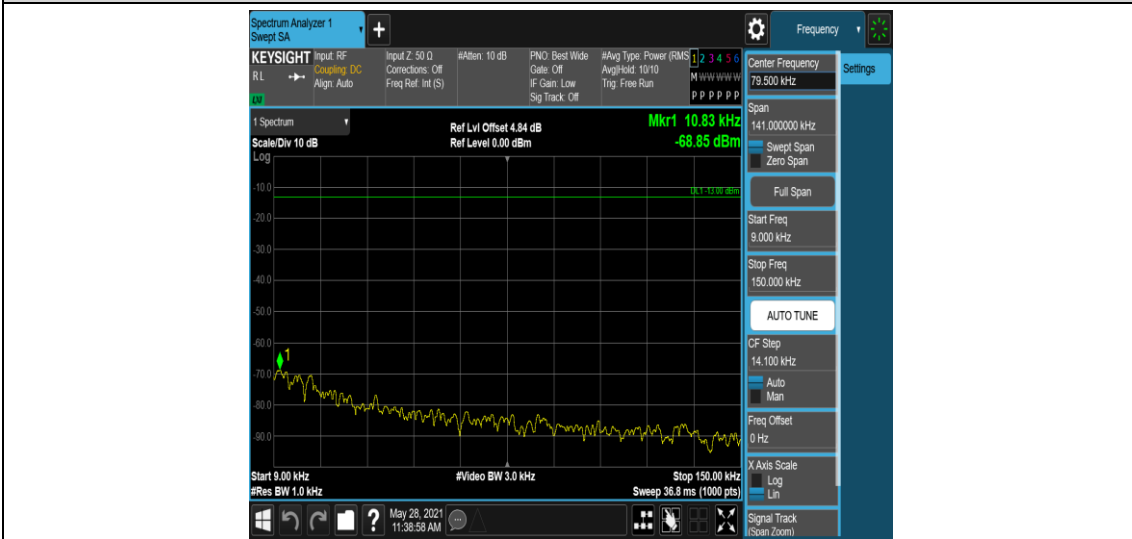
Band7-20MHz-16QAM-21100-1RB#0-Range4:1000~3000MHz



Band7-20MHz-16QAM-21100-1RB#0-Range5:3000~26500MHz



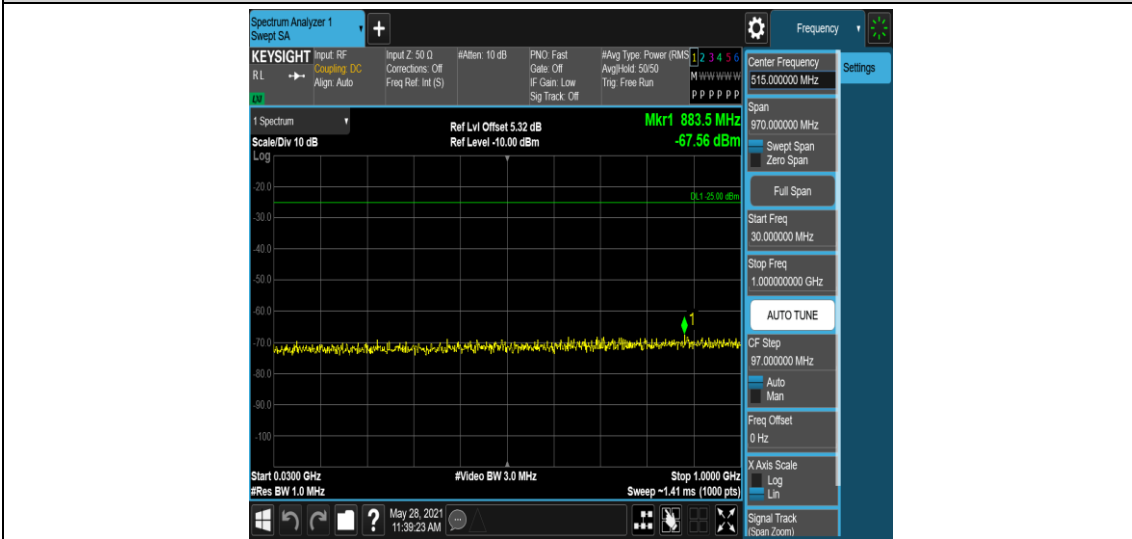
Band7-20MHz-16QAM-21350-1RB#0-Range1:0.009~0.15MHz



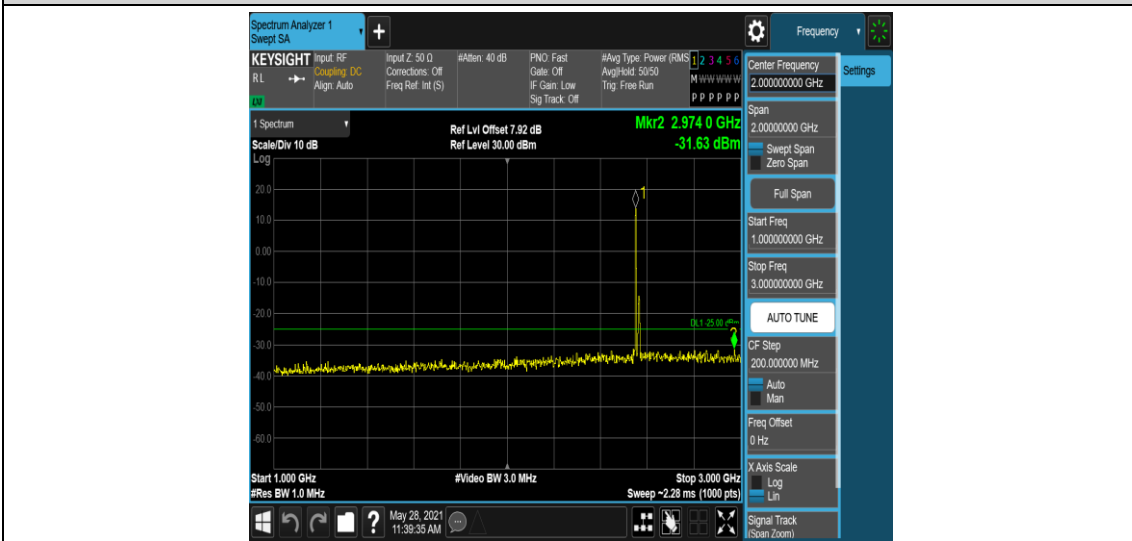
Band7-20MHz-16QAM-21350-1RB#0-Range2:0.15~30MHz



Band7-20MHz-16QAM-21350-1RB#0-Range3:30~1000MHz

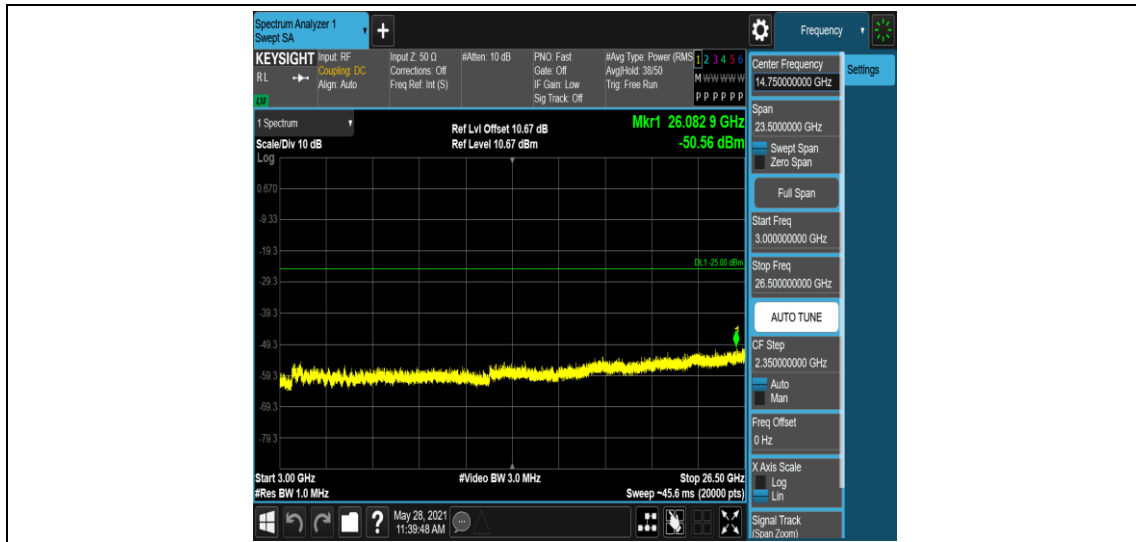


Band7-20MHz-16QAM-21350-1RB#0-Range4:1000~3000MHz



Band7-20MHz-16QAM-21350-1RB#0-Range5:3000~26500MHz





## Appendix F: Frequency Stability

### Test Result

#### 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	3.8	0.001518	± 2.5	PASS
		VN	TN	1.77	0.000707	± 2.5	PASS
		VH	TN	0.98	0.000392	± 2.5	PASS
	MCH	VL	TN	1.2	0.000473	± 2.5	PASS
		VN	TN	1.42	0.000560	± 2.5	PASS
		VH	TN	3.7	0.001460	± 2.5	PASS
	HCH	VL	TN	1.17	0.000456	± 2.5	PASS
		VN	TN	-1.29	-0.000502	± 2.5	PASS
		VH	TN	3.23	0.001258	± 2.5	PASS
16QAM	LCH	VL	TN	-0.27	-0.000108	± 2.5	PASS
		VN	TN	-0.03	-0.000012	± 2.5	PASS
		VH	TN	0.34	0.000136	± 2.5	PASS
	MCH	VL	TN	4.69	0.001850	± 2.5	PASS
		VN	TN	2.15	0.000848	± 2.5	PASS
		VH	TN	-0.52	-0.000205	± 2.5	PASS
	HCH	VL	TN	0.96	0.000374	± 2.5	PASS
		VN	TN	3.94	0.001535	± 2.5	PASS
		VH	TN	1.52	0.000592	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.72	-0.000687	± 2.5	PASS
		VN	-20	-0.25	-0.000100	± 2.5	PASS
		VN	-10	0.4	0.000160	± 2.5	PASS
		VN	0	-0.7	-0.000280	± 2.5	PASS
		VN	10	2.38	0.000951	± 2.5	PASS
		VN	20	-0.04	-0.000016	± 2.5	PASS
		VN	30	-1.82	-0.000727	± 2.5	PASS
		VN	40	-1.9	-0.000759	± 2.5	PASS
		VN	50	0.42	0.000168	± 2.5	PASS
	MCH	VN	-30	2.06	0.000813	± 2.5	PASS
		VN	-20	-1.2	-0.000473	± 2.5	PASS

		VN	-10	4.55	0.001795	± 2.5	PASS		
		VN	0	1.83	0.000722	± 2.5	PASS		
		VN	10	4.22	0.001665	± 2.5	PASS		
		VN	20	-1.9	-0.000750	± 2.5	PASS		
		VN	30	2.9	0.001144	± 2.5	PASS		
		VN	40	3.65	0.001440	± 2.5	PASS		
		VN	50	2.94	0.001160	± 2.5	PASS		
	HCH	VN	-30	1.15	0.000448	± 2.5	PASS		
		VN	-20	0.01	0.000004	± 2.5	PASS		
		VN	-10	1.16	0.000452	± 2.5	PASS		
		VN	0	0.95	0.000370	± 2.5	PASS		
		VN	10	4.15	0.001616	± 2.5	PASS		
		VN	20	0.8	0.000312	± 2.5	PASS		
		VN	30	0.41	0.000160	± 2.5	PASS		
		VN	40	0.91	0.000354	± 2.5	PASS		
		VN	50	4.97	0.001936	± 2.5	PASS		
		16QAM	LCH	VN	-30	2	0.000799	± 2.5	PASS
				VN	-20	0.86	0.000344	± 2.5	PASS
VN	-10			-0.58	-0.000232	± 2.5	PASS		
VN	0			1.33	0.000531	± 2.5	PASS		
VN	10			-1.65	-0.000659	± 2.5	PASS		
VN	20			-1.84	-0.000735	± 2.5	PASS		
VN	30			0.18	0.000072	± 2.5	PASS		
VN	40			1.17	0.000468	± 2.5	PASS		
VN	50			4.55	0.001818	± 2.5	PASS		
MCH	VN		-30	3	0.001183	± 2.5	PASS		
	VN		-20	1.34	0.000529	± 2.5	PASS		
	VN		-10	0.47	0.000185	± 2.5	PASS		
	VN		0	2.16	0.000852	± 2.5	PASS		
	VN		10	0.52	0.000205	± 2.5	PASS		
	VN		20	1.17	0.000462	± 2.5	PASS		
	VN		30	2.98	0.001176	± 2.5	PASS		
	VN		40	3.84	0.001515	± 2.5	PASS		
	VN		50	1.08	0.000426	± 2.5	PASS		
HCH	VN	-30	4.37	0.001702	± 2.5	PASS			
	VN	-20	4.53	0.001764	± 2.5	PASS			
	VN	-10	-1.82	-0.000709	± 2.5	PASS			
	VN	0	4.87	0.001897	± 2.5	PASS			
	VN	10	2.99	0.001165	± 2.5	PASS			
	VN	20	0.23	0.000090	± 2.5	PASS			
	VN	30	3.32	0.001293	± 2.5	PASS			

		VN	40	0.92	0.000358	± 2.5	PASS
		VN	50	3.22	0.001254	± 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	-0.35	-0.000140	± 2.5	PASS
		VN	TN	2.3	0.000918	± 2.5	PASS
		VH	TN	0.69	0.000275	± 2.5	PASS
	MCH	VL	TN	0.15	0.000059	± 2.5	PASS
		VN	TN	0.54	0.000213	± 2.5	PASS
		VH	TN	0.15	0.000059	± 2.5	PASS
	HCH	VL	TN	-0.54	-0.000211	± 2.5	PASS
		VN	TN	2.68	0.001045	± 2.5	PASS
		VH	TN	-0.48	-0.000187	± 2.5	PASS
16QAM	LCH	VL	TN	1.88	0.000750	± 2.5	PASS
		VN	TN	1.21	0.000483	± 2.5	PASS
		VH	TN	-0.1	-0.000040	± 2.5	PASS
	MCH	VL	TN	-0.33	-0.000130	± 2.5	PASS
		VN	TN	4.93	0.001945	± 2.5	PASS
		VH	TN	3.33	0.001314	± 2.5	PASS
	HCH	VL	TN	2.09	0.000815	± 2.5	PASS
		VN	TN	-1.29	-0.000503	± 2.5	PASS
		VH	TN	1.52	0.000593	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.12	0.000447	± 2.5	PASS
		VN	-20	3.73	0.001489	± 2.5	PASS
		VN	-10	0.82	0.000327	± 2.5	PASS
		VN	0	0.09	0.000036	± 2.5	PASS
		VN	10	4.6	0.001836	± 2.5	PASS
		VN	20	1.23	0.000491	± 2.5	PASS
		VN	30	3.75	0.001497	± 2.5	PASS
		VN	40	1.58	0.000631	± 2.5	PASS
		VN	50	2.64	0.001054	± 2.5	PASS
	MCH	VN	-30	-0.46	-0.000181	± 2.5	PASS
		VN	-20	1.73	0.000682	± 2.5	PASS
		VN	-10	2.6	0.001026	± 2.5	PASS

		VN	0	3.67	0.001448	± 2.5	PASS		
		VN	10	0.91	0.000359	± 2.5	PASS		
		VN	20	1.56	0.000615	± 2.5	PASS		
		VN	30	4.36	0.001720	± 2.5	PASS		
		VN	40	1.54	0.000607	± 2.5	PASS		
		VN	50	2.95	0.001164	± 2.5	PASS		
	HCH	VN	-30	4.8	0.001871	± 2.5	PASS		
		VN	-20	2.31	0.000901	± 2.5	PASS		
		VN	-10	3.56	0.001388	± 2.5	PASS		
		VN	0	-0.04	-0.000016	± 2.5	PASS		
		VN	10	-1.89	-0.000737	± 2.5	PASS		
		VN	20	-0.09	-0.000035	± 2.5	PASS		
		VN	30	0.43	0.000168	± 2.5	PASS		
		VN	40	2.79	0.001088	± 2.5	PASS		
		VN	50	1.19	0.000464	± 2.5	PASS		
		16QAM	LCH	VN	-30	0.61	0.000244	± 2.5	PASS
				VN	-20	4.66	0.001860	± 2.5	PASS
				VN	-10	0.43	0.000172	± 2.5	PASS
VN	0			-0.87	-0.000347	± 2.5	PASS		
VN	10			-1.7	-0.000679	± 2.5	PASS		
VN	20			3.74	0.001493	± 2.5	PASS		
VN	30			4	0.001597	± 2.5	PASS		
VN	40			2.07	0.000826	± 2.5	PASS		
VN	50			-0.6	-0.000240	± 2.5	PASS		
MCH	VN		-30	-1.22	-0.000481	± 2.5	PASS		
	VN		-20	-1.02	-0.000402	± 2.5	PASS		
	VN		-10	4.54	0.001791	± 2.5	PASS		
	VN		0	1.26	0.000497	± 2.5	PASS		
	VN		10	-1.61	-0.000635	± 2.5	PASS		
	VN		20	1.79	0.000706	± 2.5	PASS		
	VN		30	4.87	0.001921	± 2.5	PASS		
	VN		40	0.92	0.000363	± 2.5	PASS		
	VN		50	-0.58	-0.000229	± 2.5	PASS		
HCH	VN	-30	3.63	0.001415	± 2.5	PASS			
	VN	-20	2.64	0.001029	± 2.5	PASS			
	VN	-10	0.86	0.000335	± 2.5	PASS			
	VN	0	-1.79	-0.000698	± 2.5	PASS			
	VN	10	2.66	0.001037	± 2.5	PASS			
	VN	20	3.03	0.001181	± 2.5	PASS			
	VN	30	2.39	0.000932	± 2.5	PASS			
	VN	40	1.46	0.000569	± 2.5	PASS			

		VN	50	3.17	0.001236	± 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	-1.81	-0.000722	± 2.5	PASS
		VN	TN	3.29	0.001312	± 2.5	PASS
		VH	TN	3.02	0.001204	± 2.5	PASS
	MCH	VL	TN	2.66	0.001049	± 2.5	PASS
		VN	TN	4.08	0.001609	± 2.5	PASS
		VH	TN	-1.55	-0.000611	± 2.5	PASS
	HCH	VL	TN	-0.65	-0.000254	± 2.5	PASS
		VN	TN	1.18	0.000460	± 2.5	PASS
		VH	TN	-0.64	-0.000250	± 2.5	PASS
16QAM	LCH	VL	TN	1.91	0.000762	± 2.5	PASS
		VN	TN	-1.07	-0.000427	± 2.5	PASS
		VH	TN	-1.62	-0.000646	± 2.5	PASS
	MCH	VL	TN	3.18	0.001254	± 2.5	PASS
		VN	TN	2.18	0.000860	± 2.5	PASS
		VH	TN	-1.38	-0.000544	± 2.5	PASS
	HCH	VL	TN	1.25	0.000488	± 2.5	PASS
		VN	TN	3.51	0.001370	± 2.5	PASS
		VH	TN	-0.66	-0.000258	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.41	-0.000562	± 2.5	PASS
		VN	-20	-0.48	-0.000191	± 2.5	PASS
		VN	-10	-1.94	-0.000774	± 2.5	PASS
		VN	0	2.28	0.000909	± 2.5	PASS
		VN	10	2.3	0.000917	± 2.5	PASS
		VN	20	-0.19	-0.000076	± 2.5	PASS
		VN	30	-1.69	-0.000674	± 2.5	PASS
		VN	40	-0.27	-0.000108	± 2.5	PASS
		VN	50	3.46	0.001380	± 2.5	PASS
	MCH	VN	-30	0.15	0.000059	± 2.5	PASS
		VN	-20	3.29	0.001298	± 2.5	PASS
		VN	-10	0.53	0.000209	± 2.5	PASS
		VN	0	0.05	0.000020	± 2.5	PASS

		VN	10	2.22	0.000876	± 2.5	PASS
		VN	20	4.29	0.001692	± 2.5	PASS
		VN	30	-0.68	-0.000268	± 2.5	PASS
		VN	40	-0.21	-0.000083	± 2.5	PASS
		VN	50	0.66	0.000260	± 2.5	PASS
	HCH	VN	-30	4.97	0.001940	± 2.5	PASS
		VN	-20	1.13	0.000441	± 2.5	PASS
		VN	-10	-1.1	-0.000429	± 2.5	PASS
		VN	0	1.52	0.000593	± 2.5	PASS
		VN	10	3.4	0.001327	± 2.5	PASS
		VN	20	4.78	0.001865	± 2.5	PASS
		VN	30	2.71	0.001058	± 2.5	PASS
		VN	40	-1.52	-0.000593	± 2.5	PASS
		VN	50	-1.94	-0.000757	± 2.5	PASS
		16QAM	LCH	VN	-30	4.72	0.001882
VN	-20			0.44	0.000175	± 2.5	PASS
VN	-10			-1.71	-0.000682	± 2.5	PASS
VN	0			4.13	0.001647	± 2.5	PASS
VN	10			0.37	0.000148	± 2.5	PASS
VN	20			-0.37	-0.000148	± 2.5	PASS
VN	30			0.72	0.000287	± 2.5	PASS
VN	40			3.2	0.001276	± 2.5	PASS
VN	50			0.02	0.000008	± 2.5	PASS
MCH	VN		-30	4.59	0.001811	± 2.5	PASS
	VN		-20	1.19	0.000469	± 2.5	PASS
	VN		-10	1.52	0.000600	± 2.5	PASS
	VN		0	0.39	0.000154	± 2.5	PASS
	VN		10	4.9	0.001933	± 2.5	PASS
	VN		20	3.12	0.001231	± 2.5	PASS
	VN		30	1.46	0.000576	± 2.5	PASS
	VN		40	4.87	0.001921	± 2.5	PASS
	VN		50	0.3	0.000118	± 2.5	PASS
HCH	VN		-30	2.55	0.000995	± 2.5	PASS
	VN		-20	3.15	0.001229	± 2.5	PASS
	VN		-10	1.6	0.000624	± 2.5	PASS
	VN		0	0.4	0.000156	± 2.5	PASS
	VN		10	4.57	0.001783	± 2.5	PASS
	VN		20	1.63	0.000636	± 2.5	PASS
	VN		30	3.83	0.001495	± 2.5	PASS
	VN		40	1.63	0.000636	± 2.5	PASS
	VN		50	0.2	0.000078	± 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	2.06	0.000821	± 2.5	PASS
		VN	TN	4.26	0.001697	± 2.5	PASS
		VH	TN	2.29	0.000912	± 2.5	PASS
	MCH	VL	TN	-0.25	-0.000099	± 2.5	PASS
		VN	TN	-1.67	-0.000659	± 2.5	PASS
		VH	TN	2.53	0.000998	± 2.5	PASS
	HCH	VL	TN	1.25	0.000488	± 2.5	PASS
		VN	TN	1.69	0.000660	± 2.5	PASS
		VH	TN	4.73	0.001848	± 2.5	PASS
16QAM	LCH	VL	TN	-0.51	-0.000203	± 2.5	PASS
		VN	TN	-0.26	-0.000104	± 2.5	PASS
		VH	TN	0.52	0.000207	± 2.5	PASS
	MCH	VL	TN	-0.07	-0.000028	± 2.5	PASS
		VN	TN	-0.47	-0.000185	± 2.5	PASS
		VH	TN	2.25	0.000888	± 2.5	PASS
	HCH	VL	TN	2.59	0.001012	± 2.5	PASS
		VN	TN	2.98	0.001164	± 2.5	PASS
		VH	TN	4.9	0.001914	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.43	0.000570	± 2.5	PASS
		VN	-20	1.09	0.000434	± 2.5	PASS
		VN	-10	4.93	0.001964	± 2.5	PASS
		VN	0	0.37	0.000147	± 2.5	PASS
		VN	10	1.62	0.000645	± 2.5	PASS
		VN	20	4.03	0.001606	± 2.5	PASS
		VN	30	-1.89	-0.000753	± 2.5	PASS
		VN	40	2.41	0.000960	± 2.5	PASS
		VN	50	0.45	0.000179	± 2.5	PASS
	MCH	VN	-30	4.74	0.001870	± 2.5	PASS
		VN	-20	-0.01	-0.000004	± 2.5	PASS
		VN	-10	2.77	0.001093	± 2.5	PASS
		VN	0	0.8	0.000316	± 2.5	PASS
		VN	10	2.93	0.001156	± 2.5	PASS



		VN	20	3	0.001183	± 2.5	PASS
		VN	30	1.25	0.000493	± 2.5	PASS
		VN	40	4.95	0.001953	± 2.5	PASS
		VN	50	4.97	0.001961	± 2.5	PASS
	HCH	VN	-30	4.12	0.001609	± 2.5	PASS
		VN	-20	-0.74	-0.000289	± 2.5	PASS
		VN	-10	-0.97	-0.000379	± 2.5	PASS
		VN	0	-0.42	-0.000164	± 2.5	PASS
		VN	10	2.34	0.000914	± 2.5	PASS
		VN	20	1.04	0.000406	± 2.5	PASS
		VN	30	2.1	0.000820	± 2.5	PASS
		VN	40	4.98	0.001945	± 2.5	PASS
		VN	50	0.86	0.000336	± 2.5	PASS
16QAM	LCH	VN	-30	-1.07	-0.000426	± 2.5	PASS
		VN	-20	-0.54	-0.000215	± 2.5	PASS
		VN	-10	4.33	0.001725	± 2.5	PASS
		VN	0	3.93	0.001566	± 2.5	PASS
		VN	10	3.95	0.001574	± 2.5	PASS
		VN	20	-0.77	-0.000307	± 2.5	PASS
		VN	30	2.9	0.001155	± 2.5	PASS
		VN	40	1.92	0.000765	± 2.5	PASS
		VN	50	4.51	0.001797	± 2.5	PASS
	MCH	VN	-30	3.74	0.001475	± 2.5	PASS
		VN	-20	1.97	0.000777	± 2.5	PASS
		VN	-10	2.94	0.001160	± 2.5	PASS
		VN	0	4.55	0.001795	± 2.5	PASS
		VN	10	-0.96	-0.000379	± 2.5	PASS
		VN	20	2.65	0.001045	± 2.5	PASS
		VN	30	1.83	0.000722	± 2.5	PASS
		VN	40	4.33	0.001708	± 2.5	PASS
		VN	50	-0.96	-0.000379	± 2.5	PASS
	HCH	VN	-30	4.74	0.001852	± 2.5	PASS
		VN	-20	3.63	0.001418	± 2.5	PASS
		VN	-10	-1.58	-0.000617	± 2.5	PASS
		VN	0	4.66	0.001820	± 2.5	PASS
		VN	10	2.98	0.001164	± 2.5	PASS
		VN	20	-0.28	-0.000109	± 2.5	PASS
		VN	30	1.21	0.000473	± 2.5	PASS
		VN	40	-1.85	-0.000723	± 2.5	PASS
		VN	50	-0.5	-0.000195	± 2.5	PASS