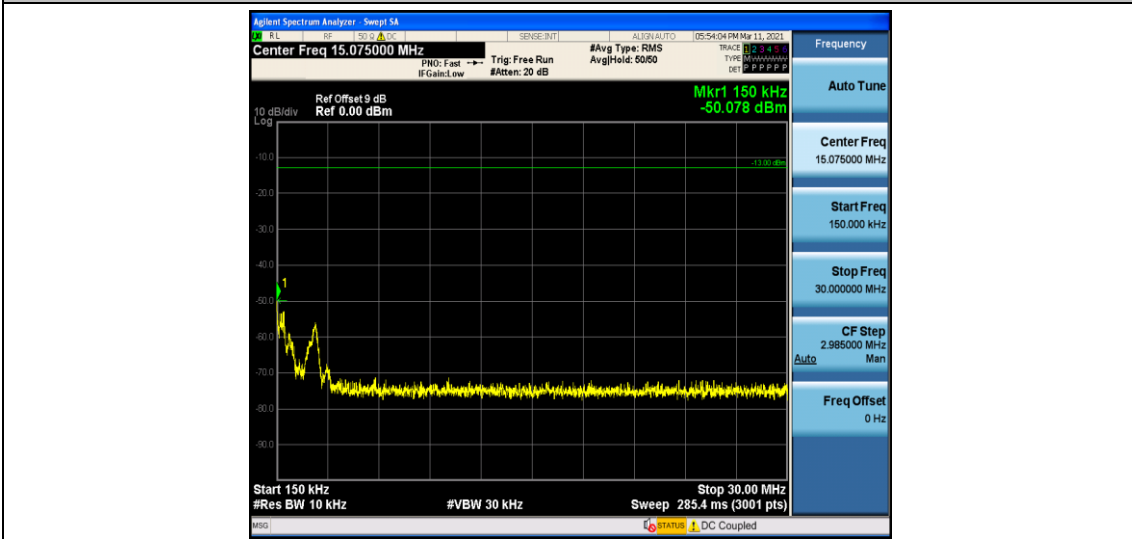
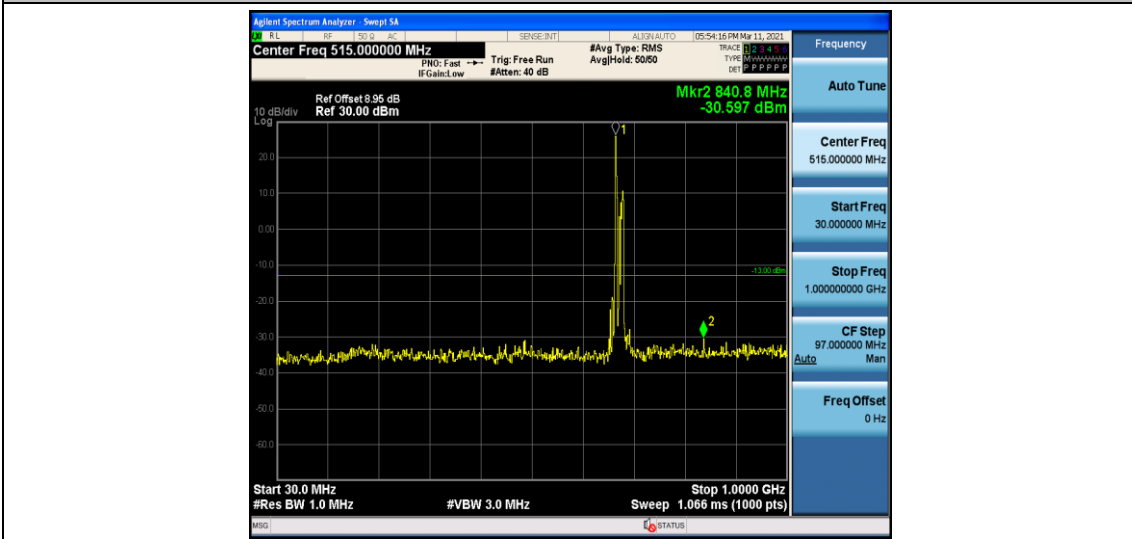


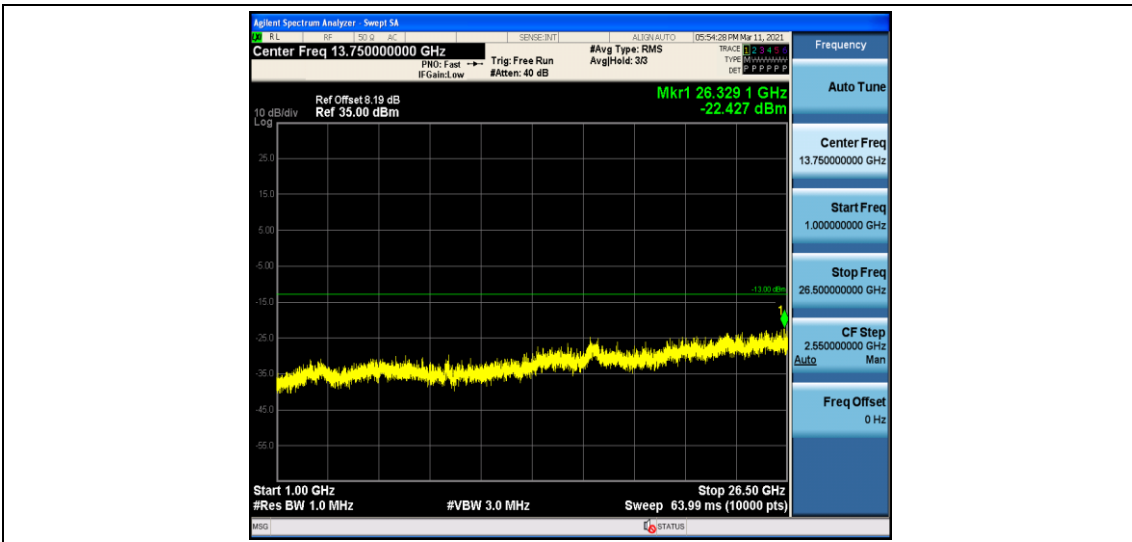
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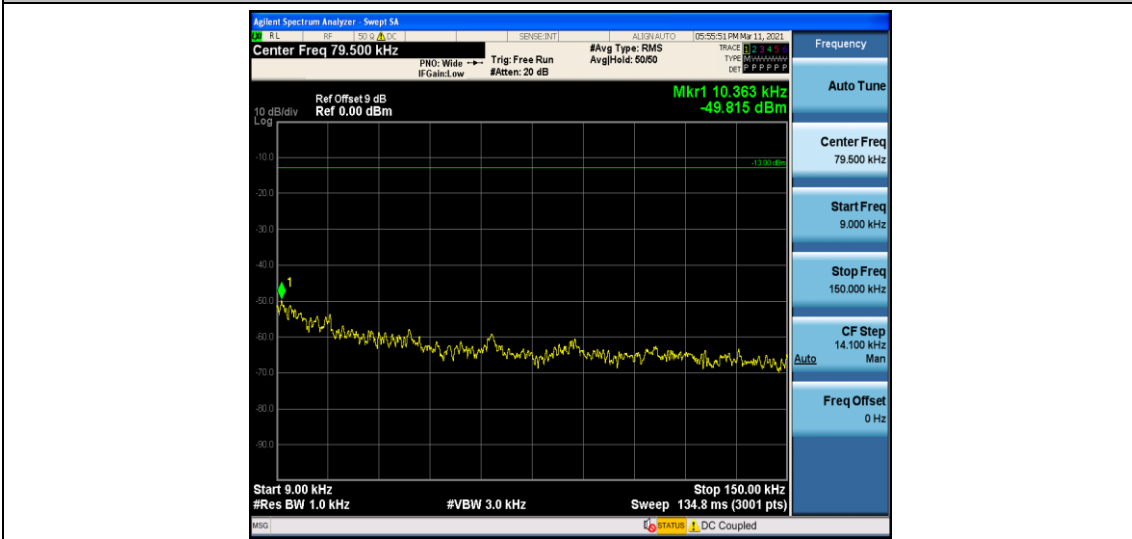
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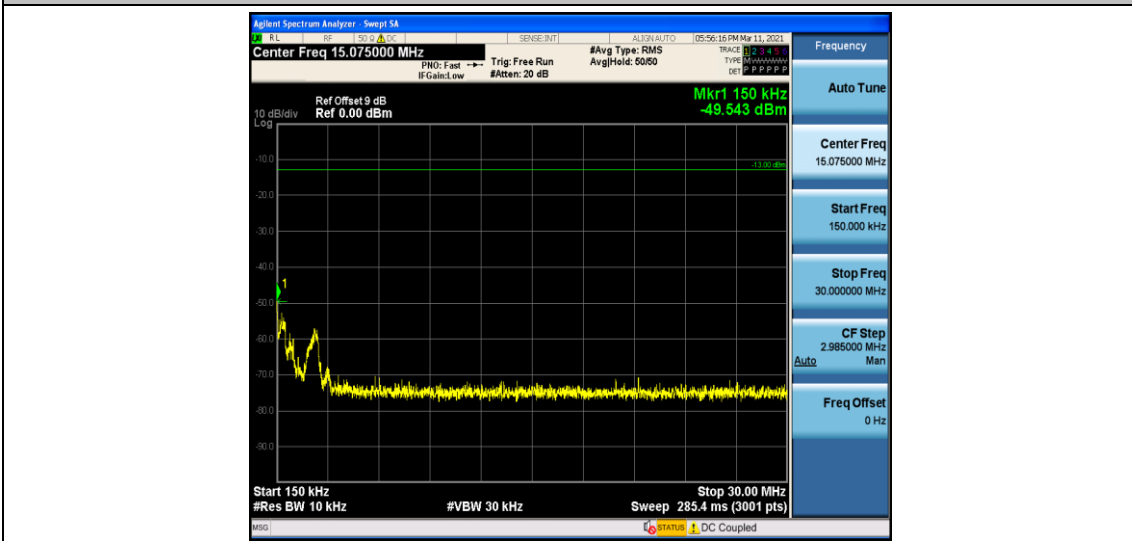
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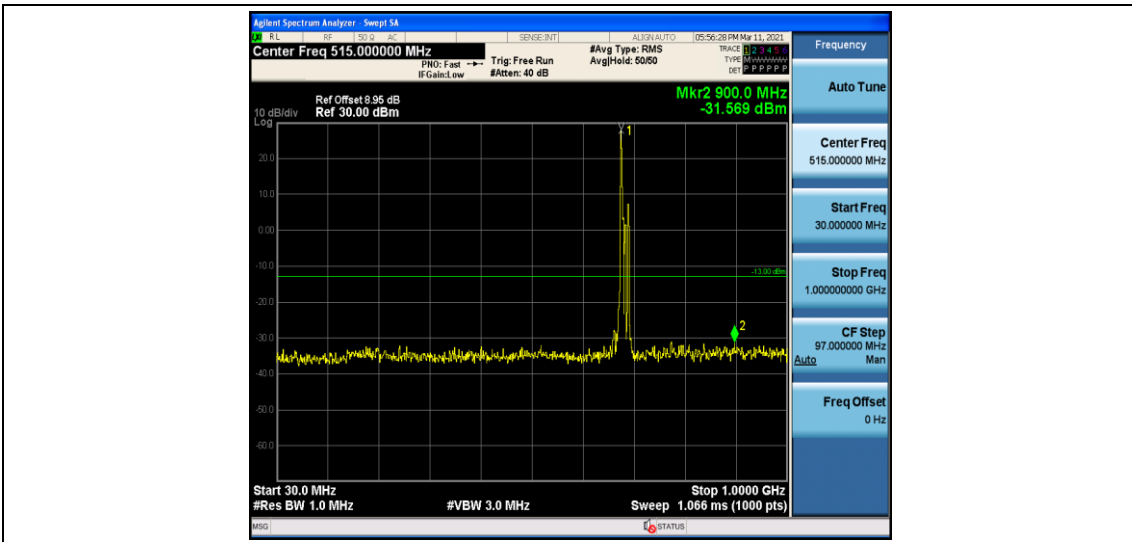
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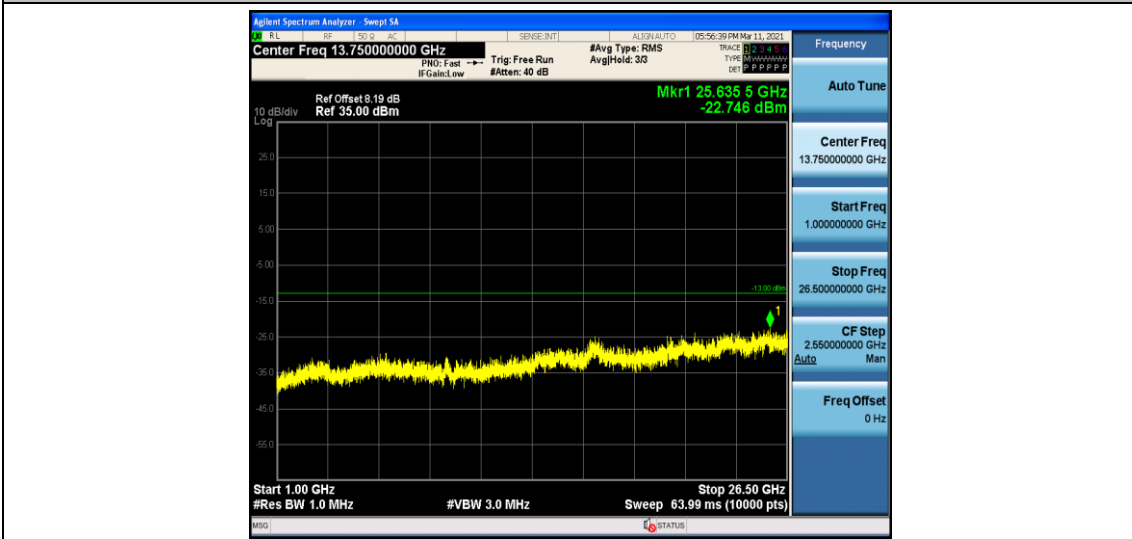
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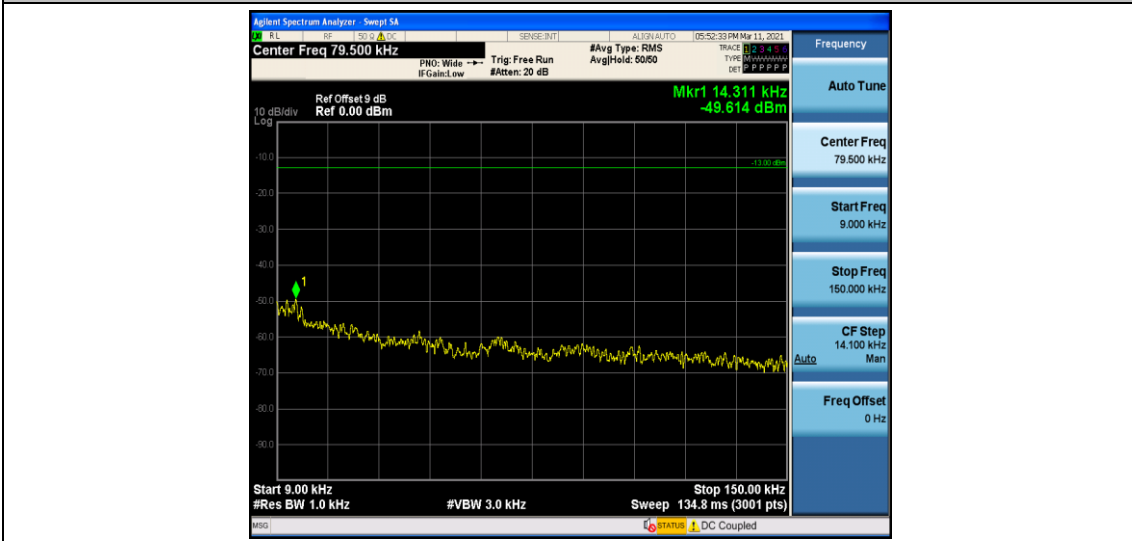
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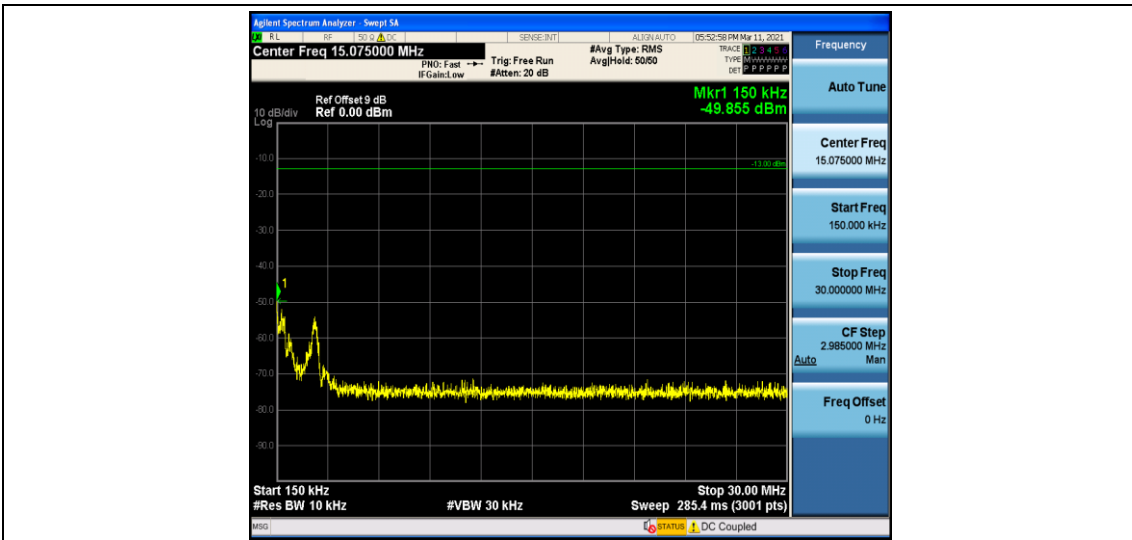
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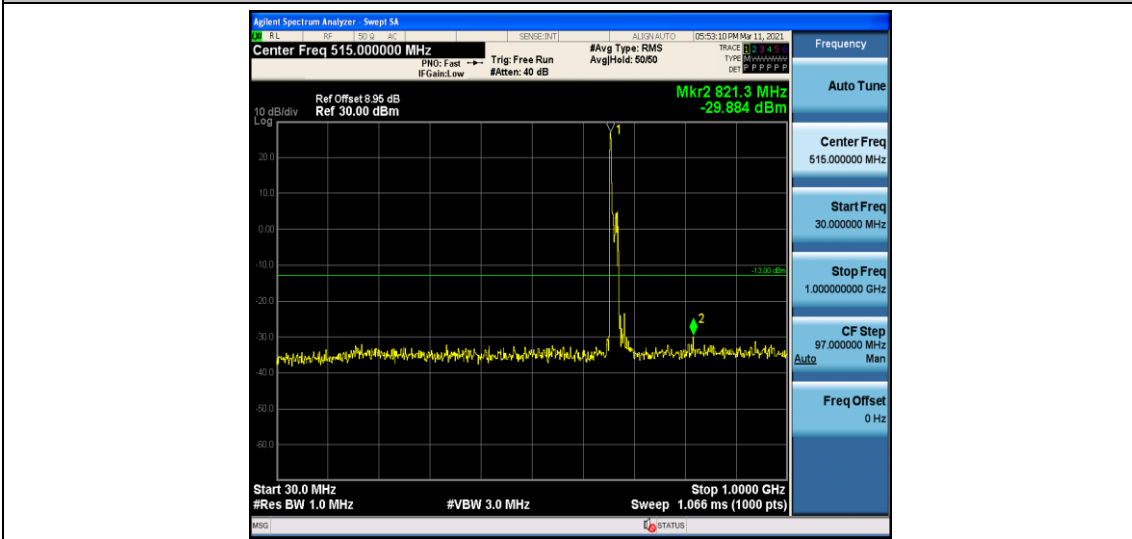
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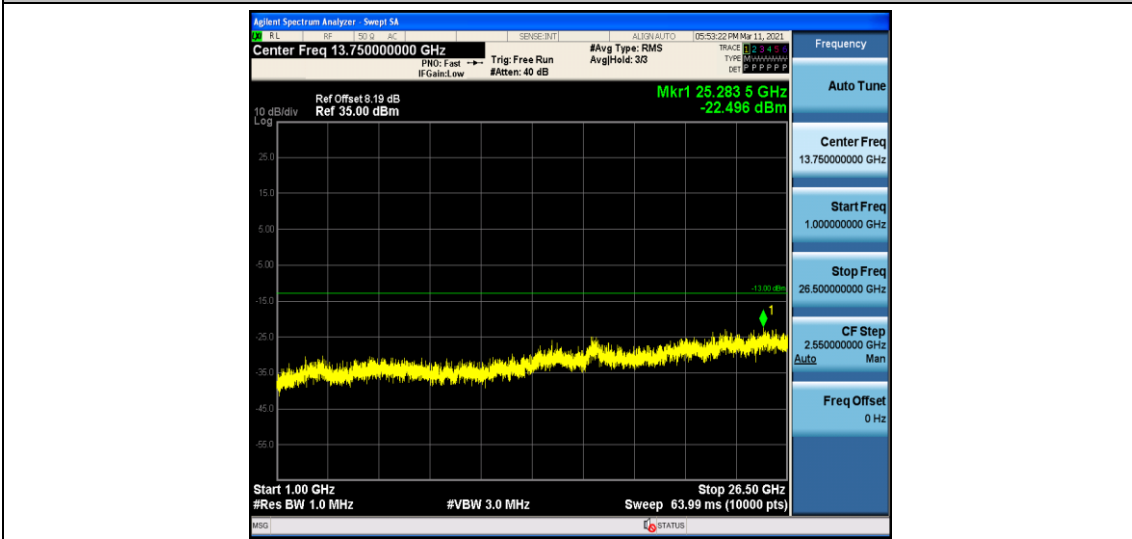
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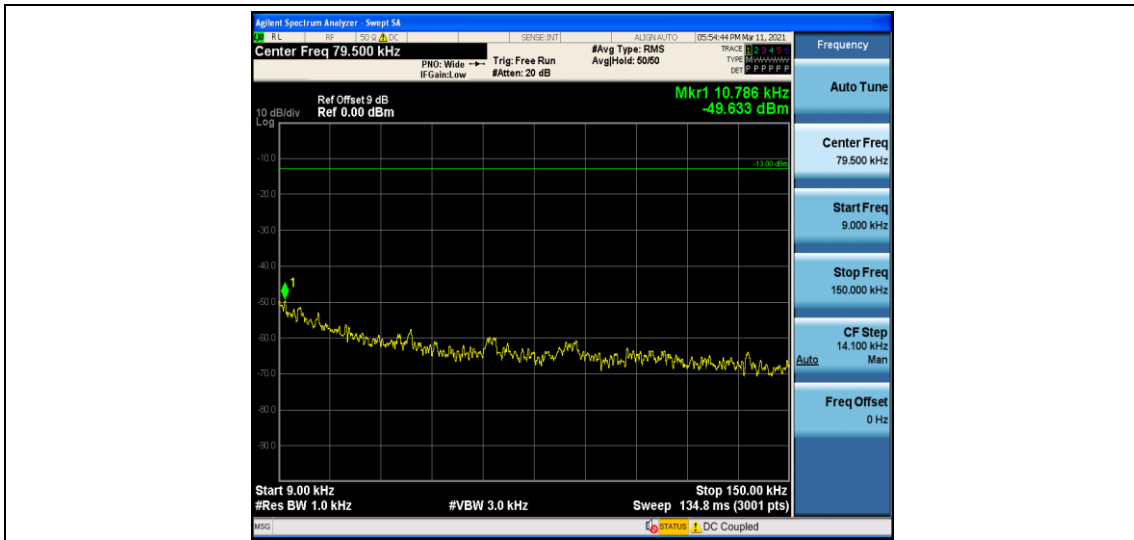
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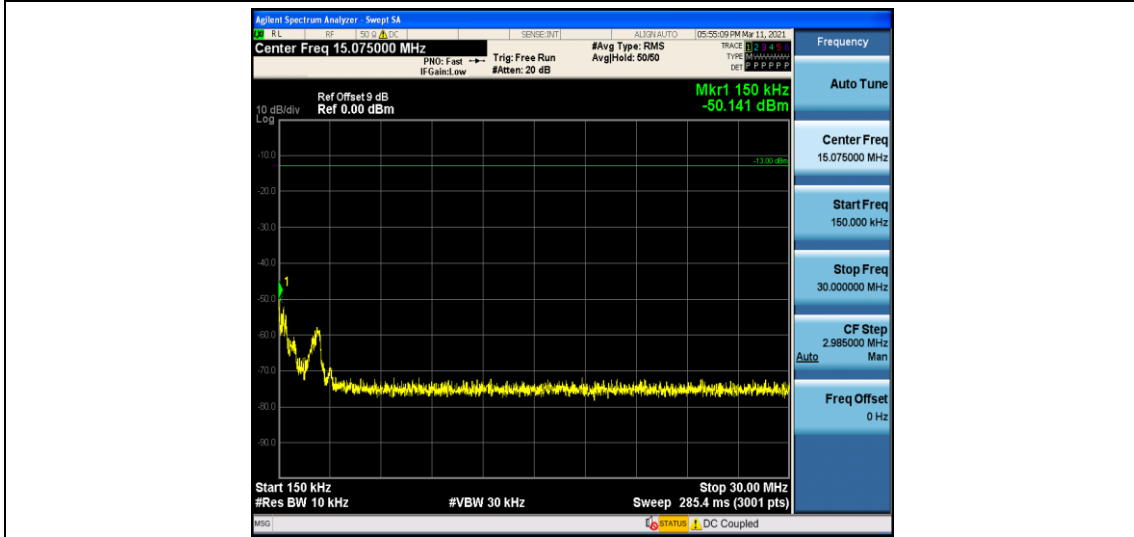
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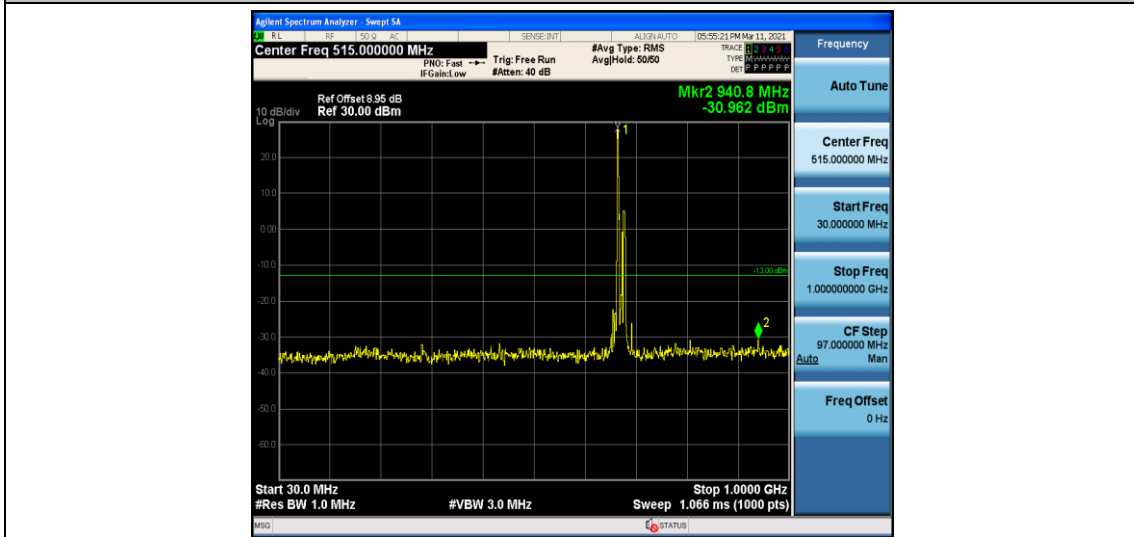
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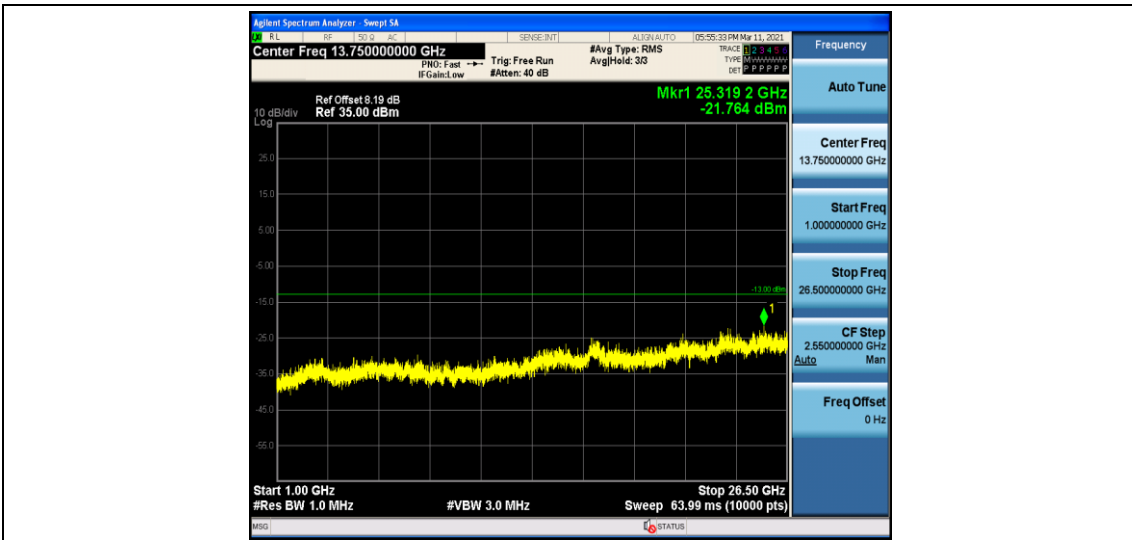
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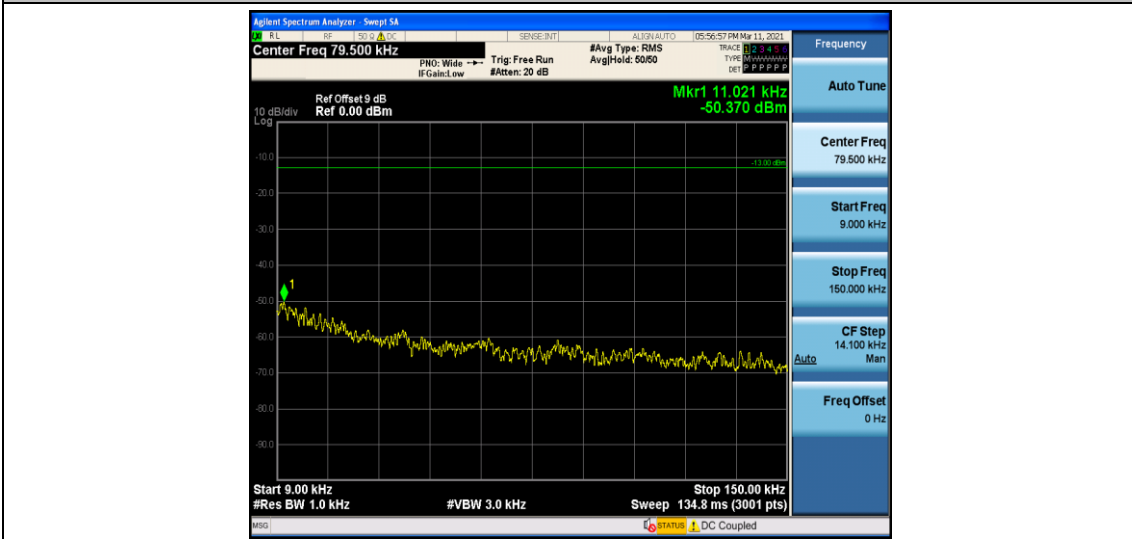
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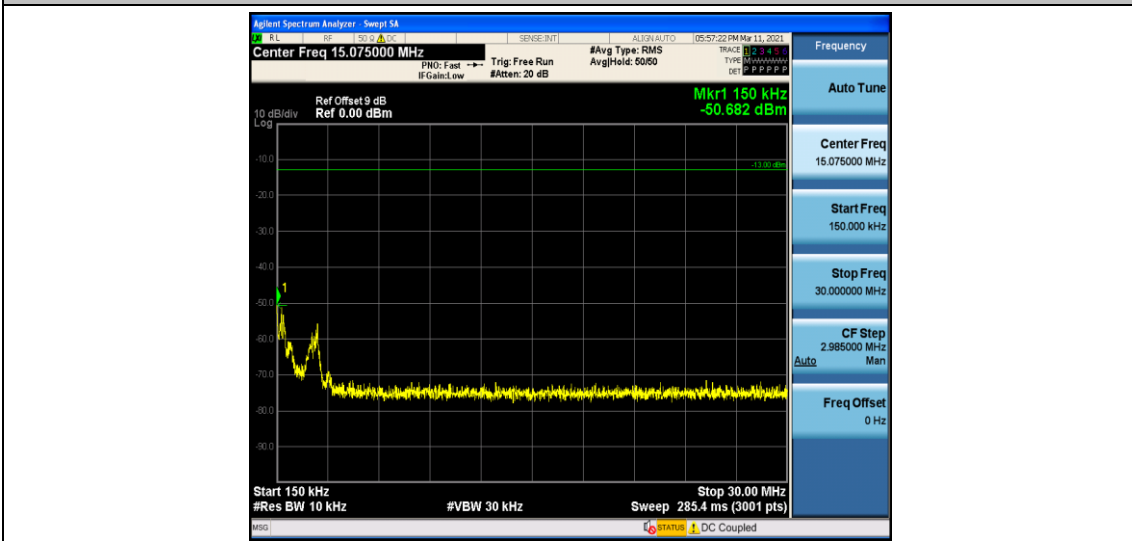
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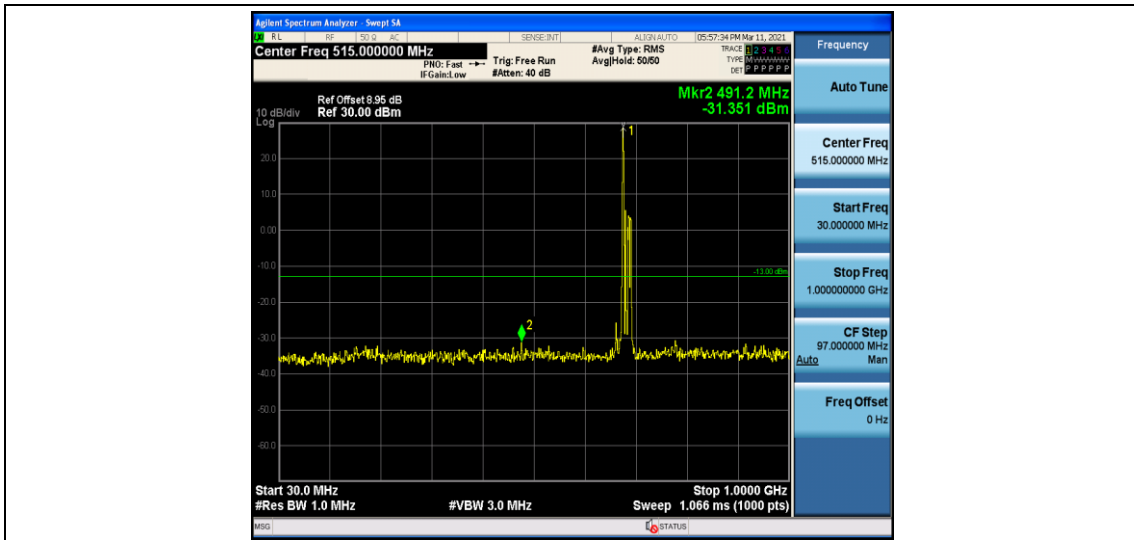
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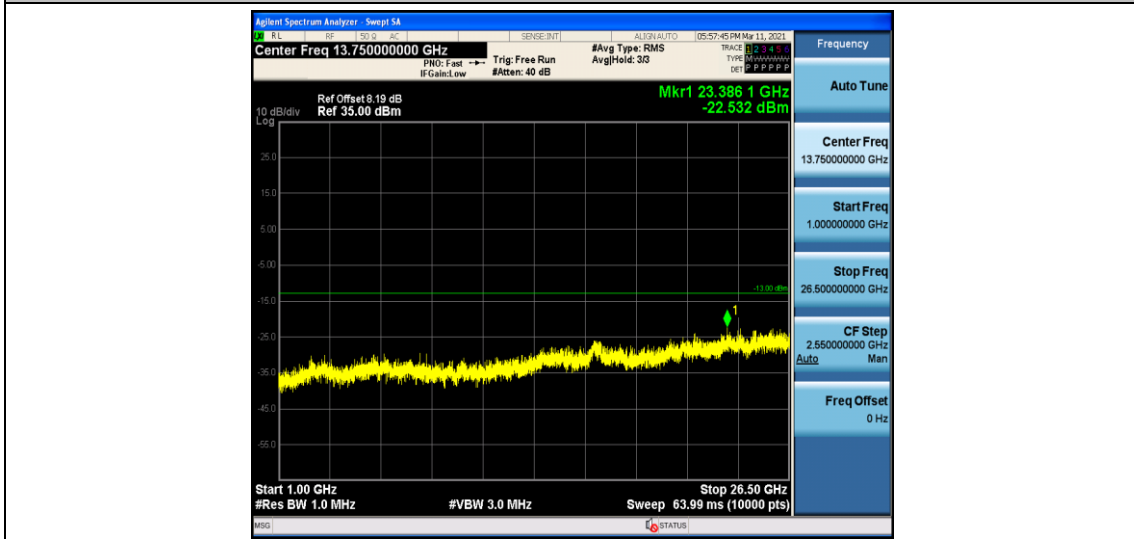
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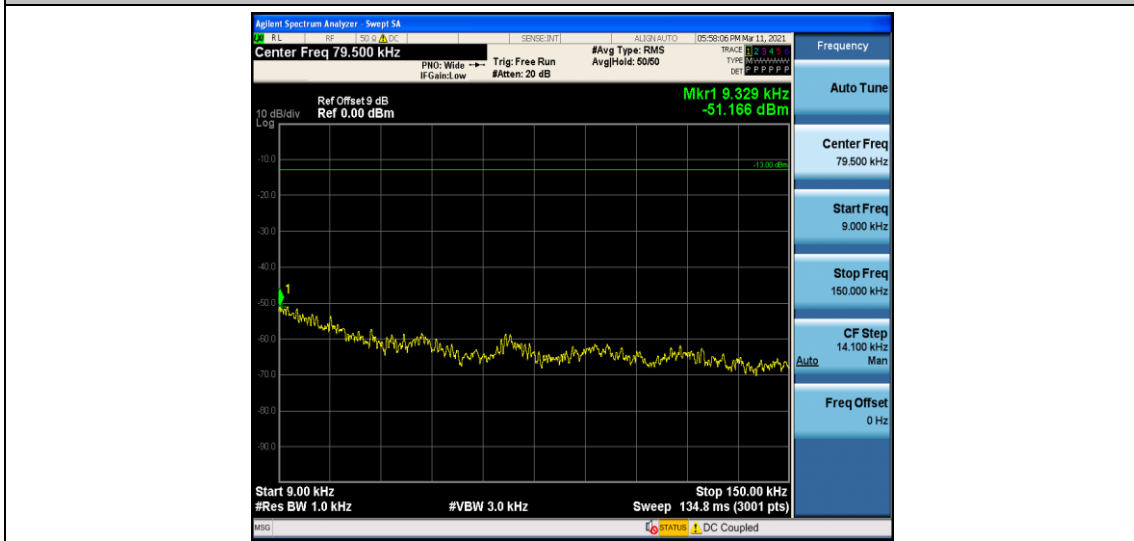
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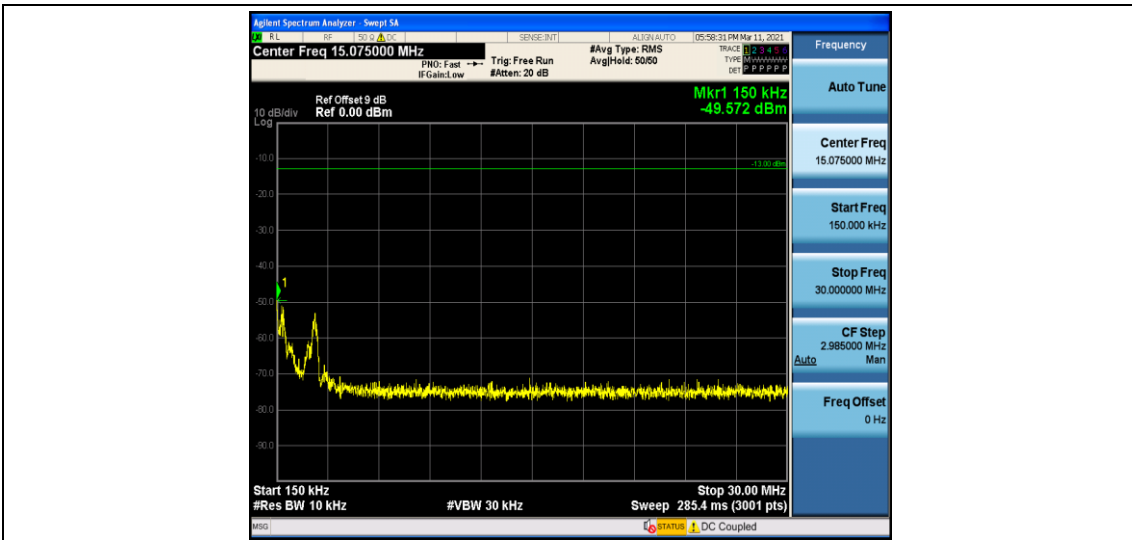
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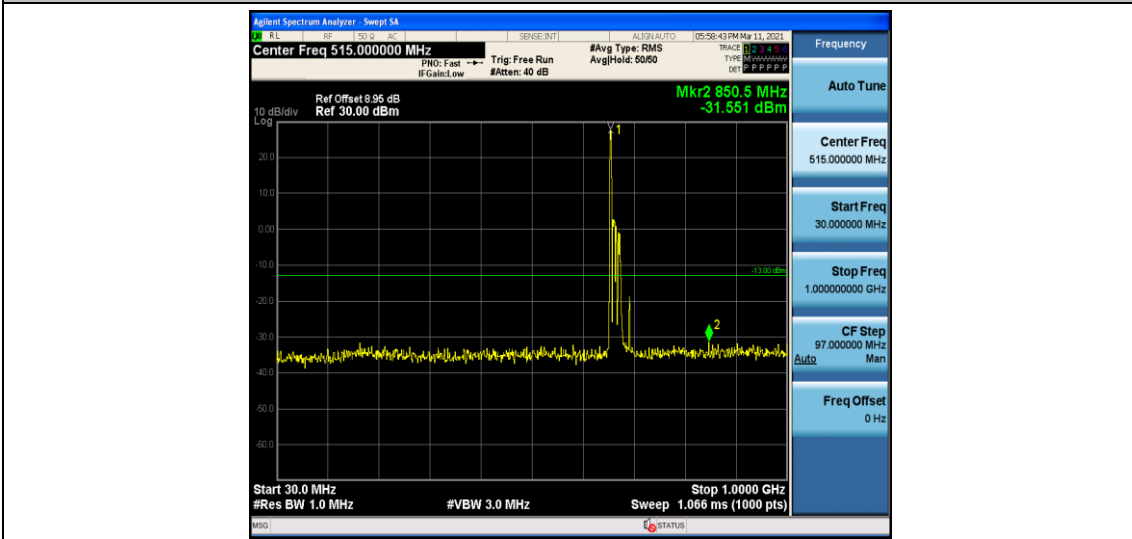
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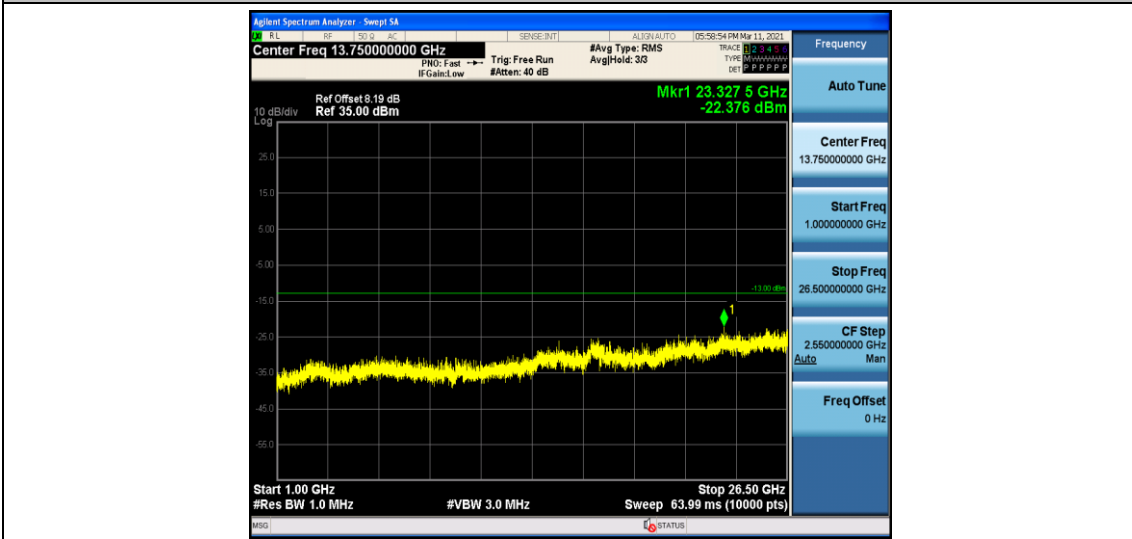
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Band 71\_20MHz\_QPSK\_133222\_1RB#0

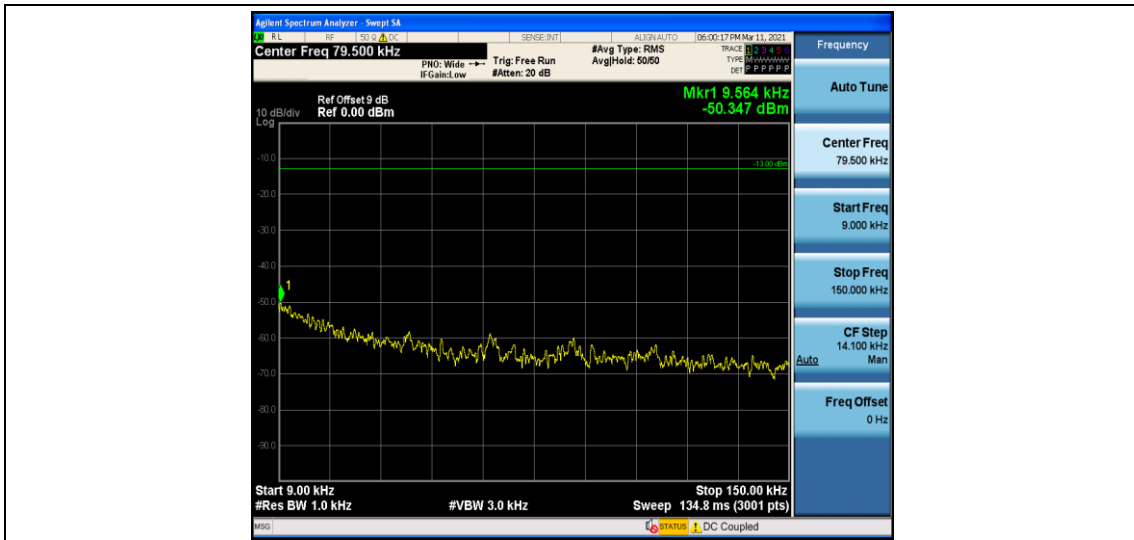


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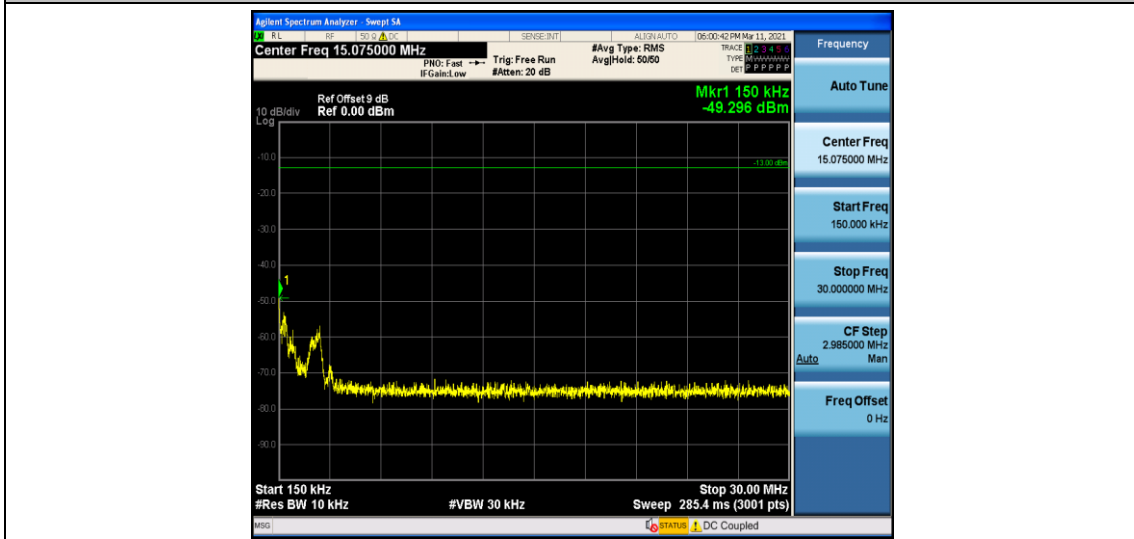


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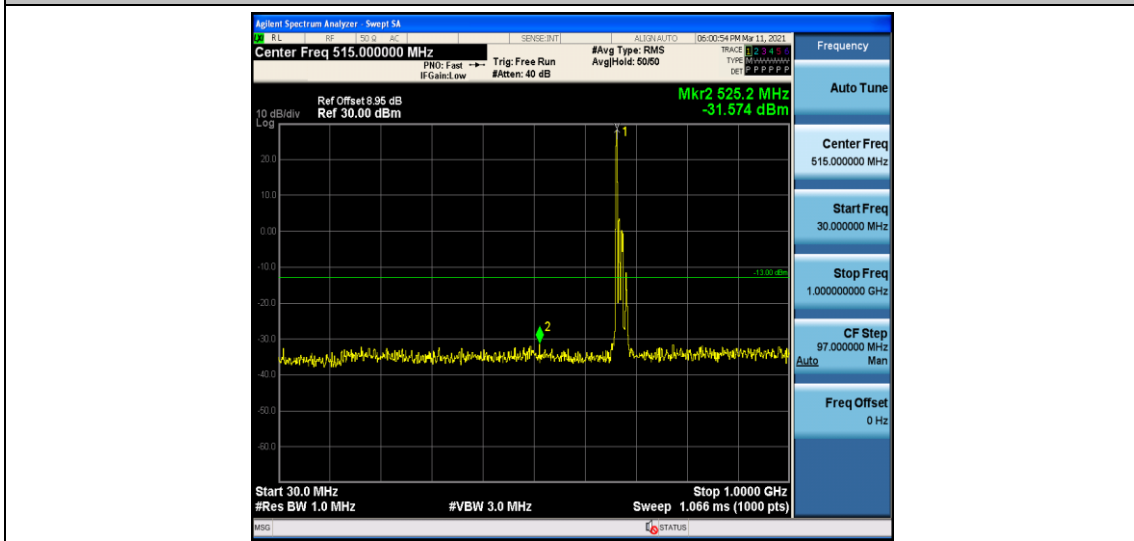




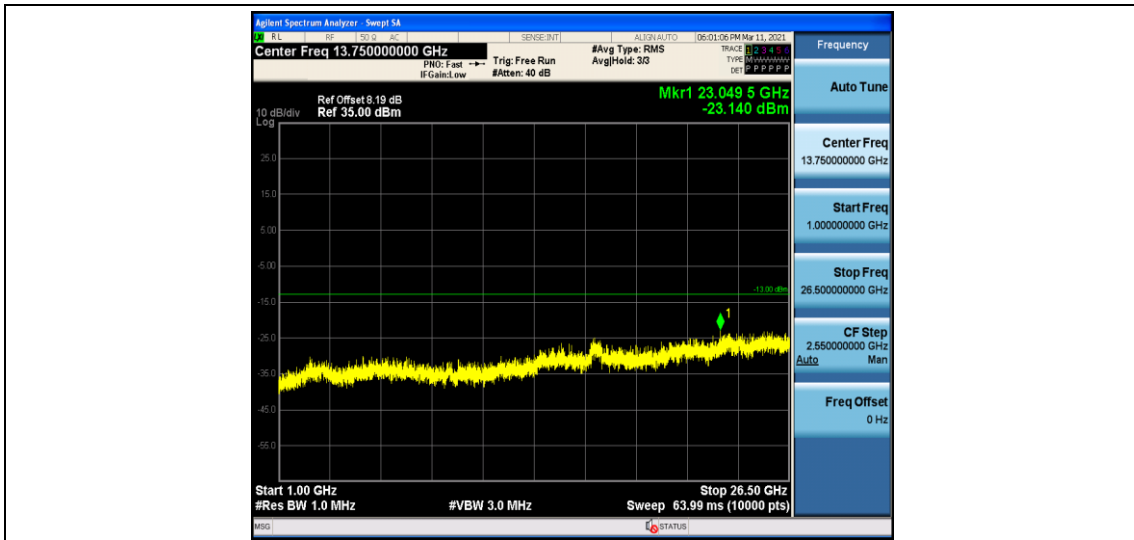
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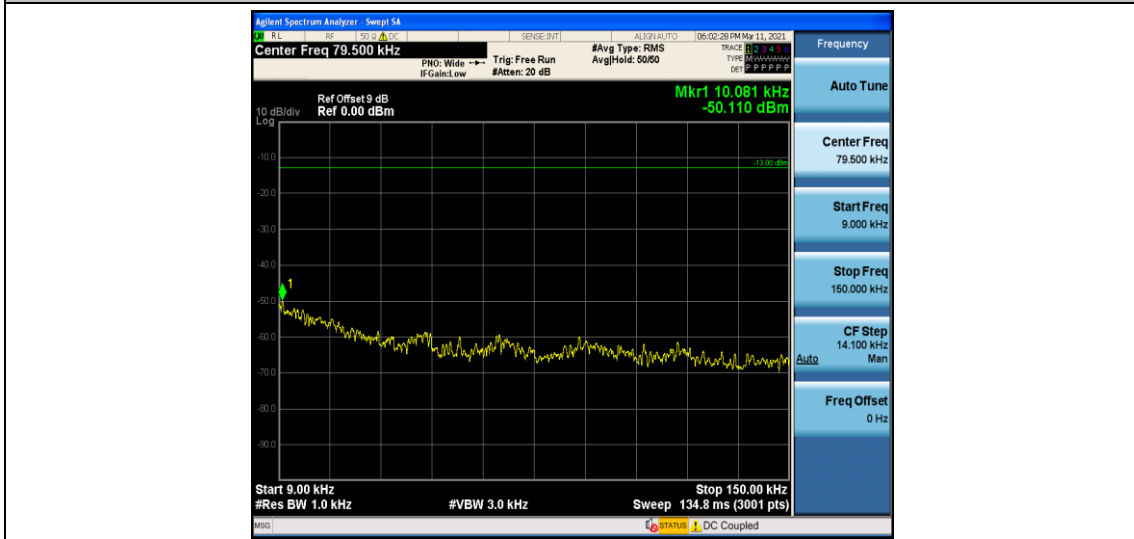
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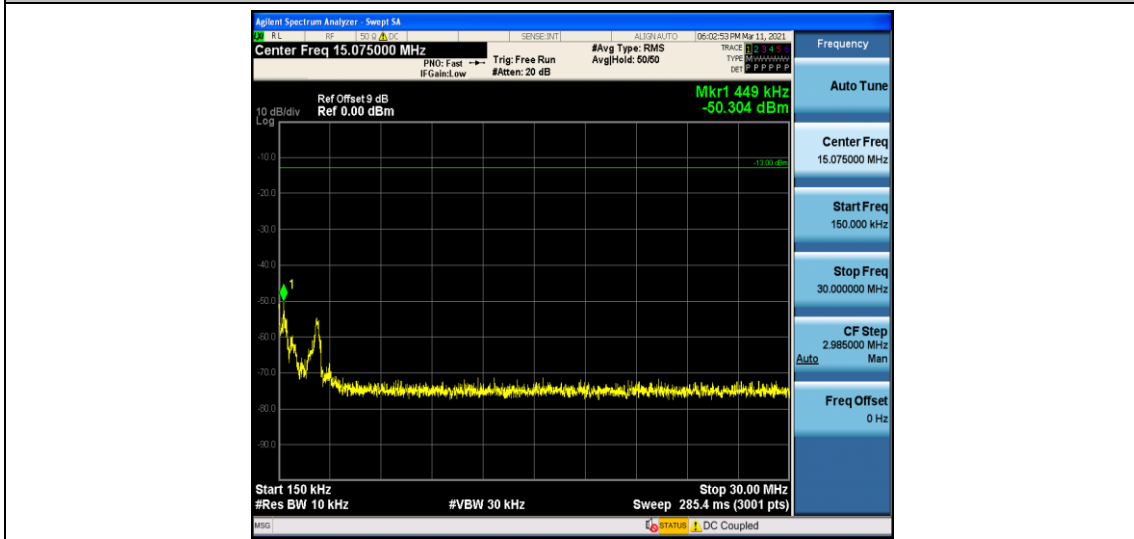
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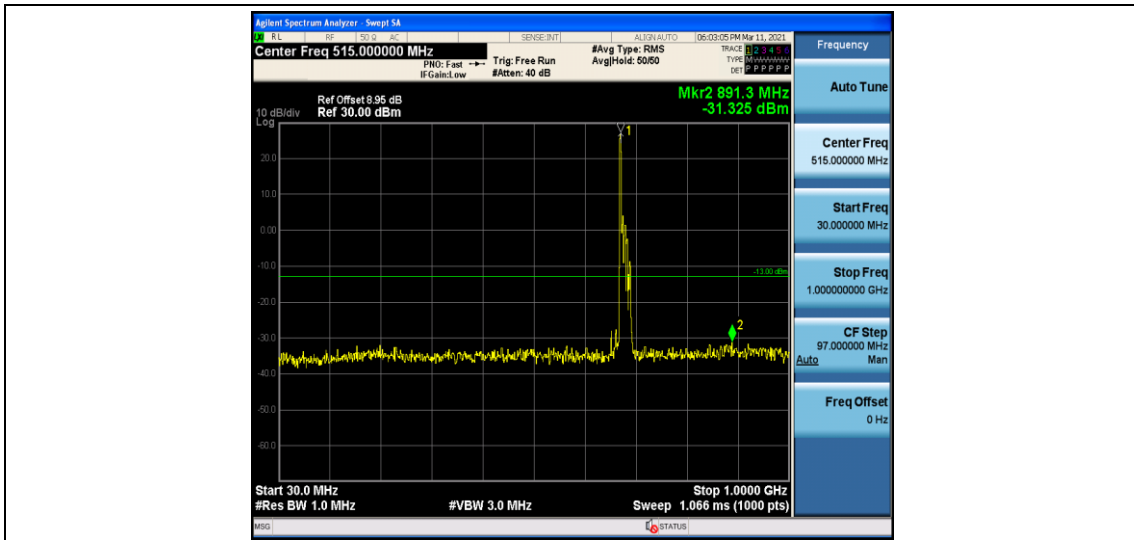
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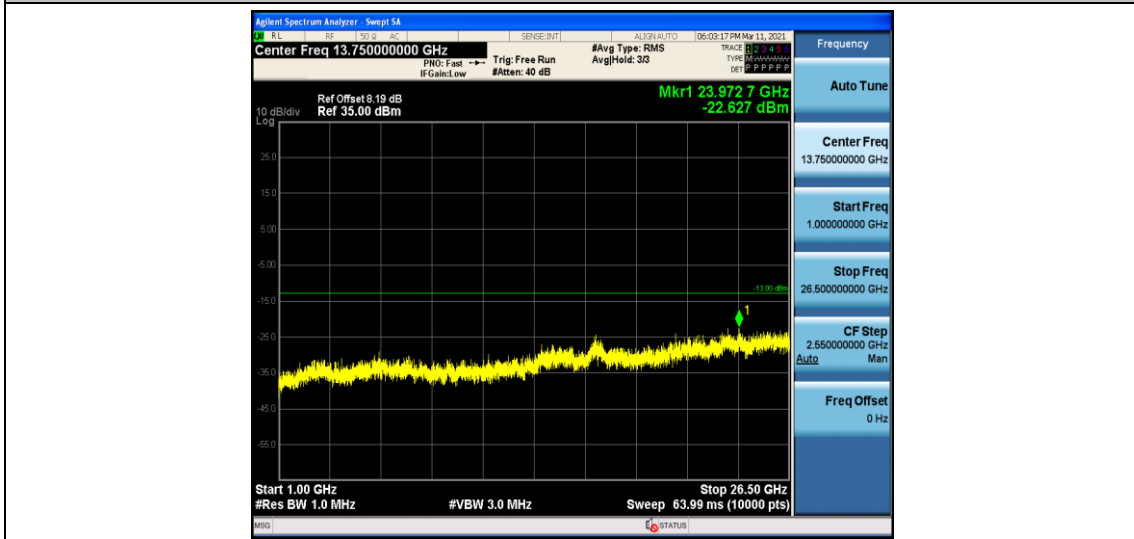
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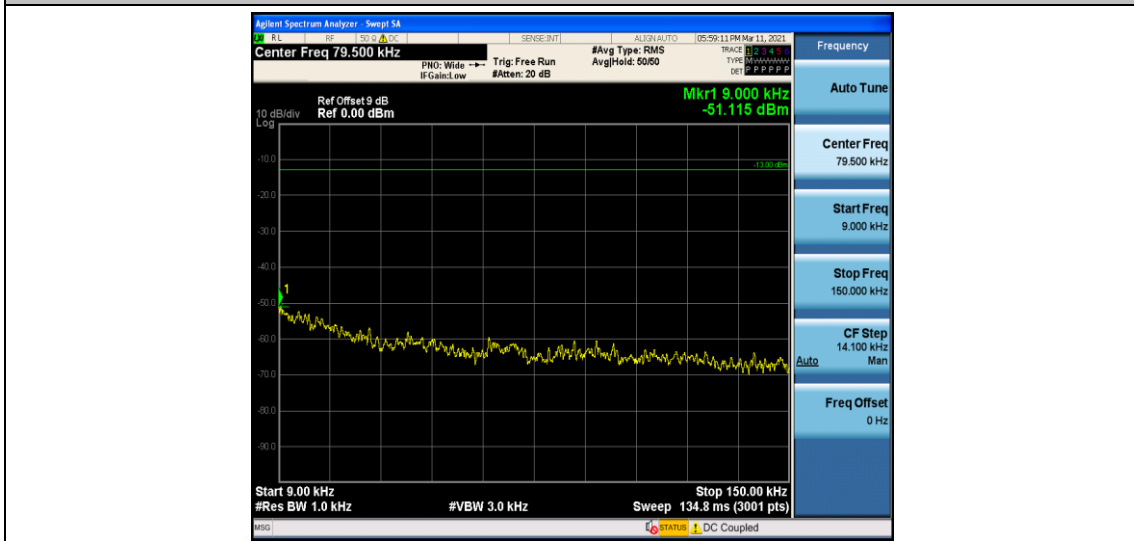
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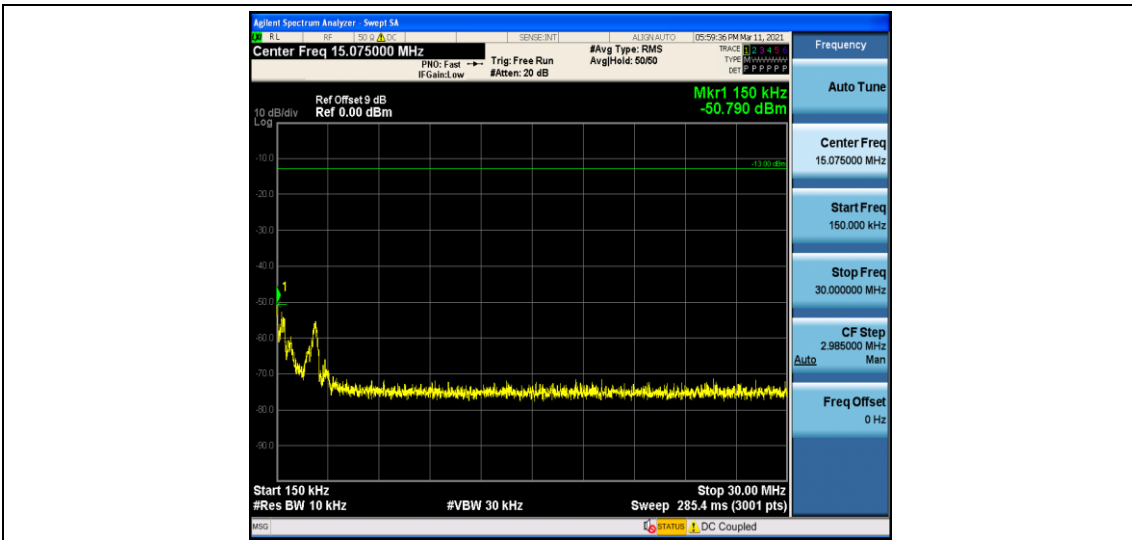
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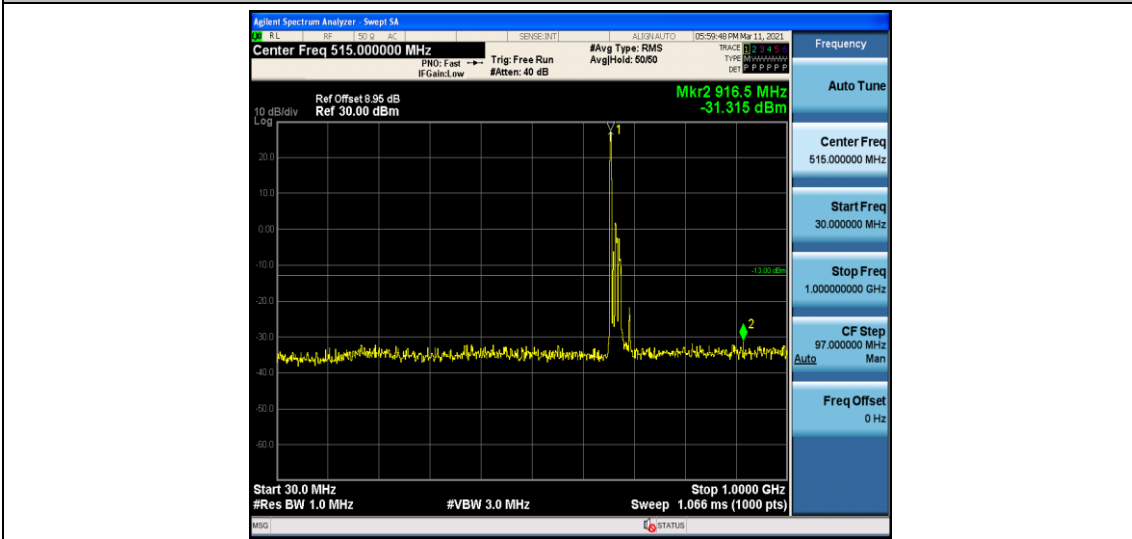
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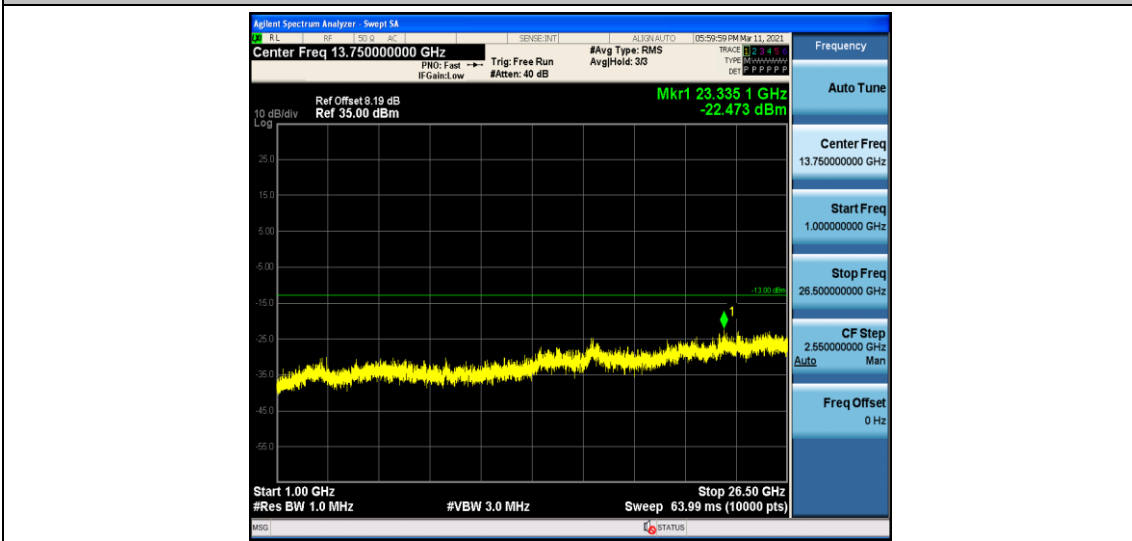
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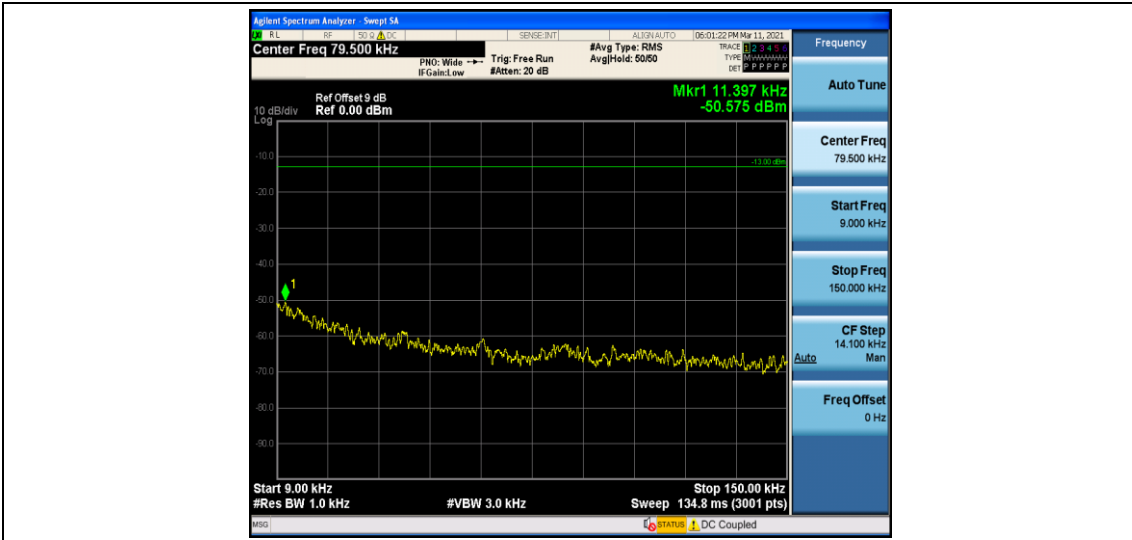
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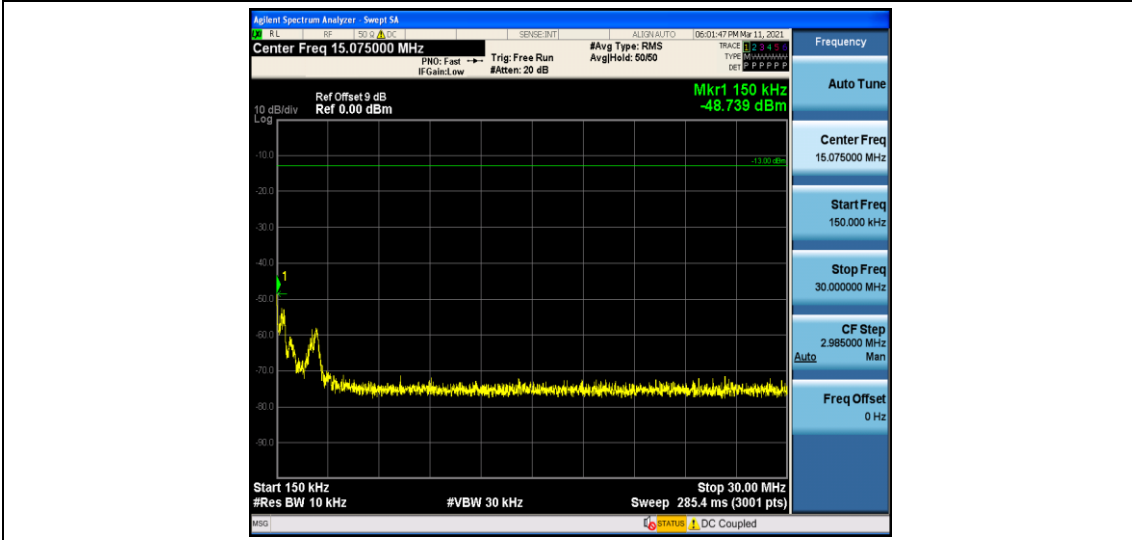
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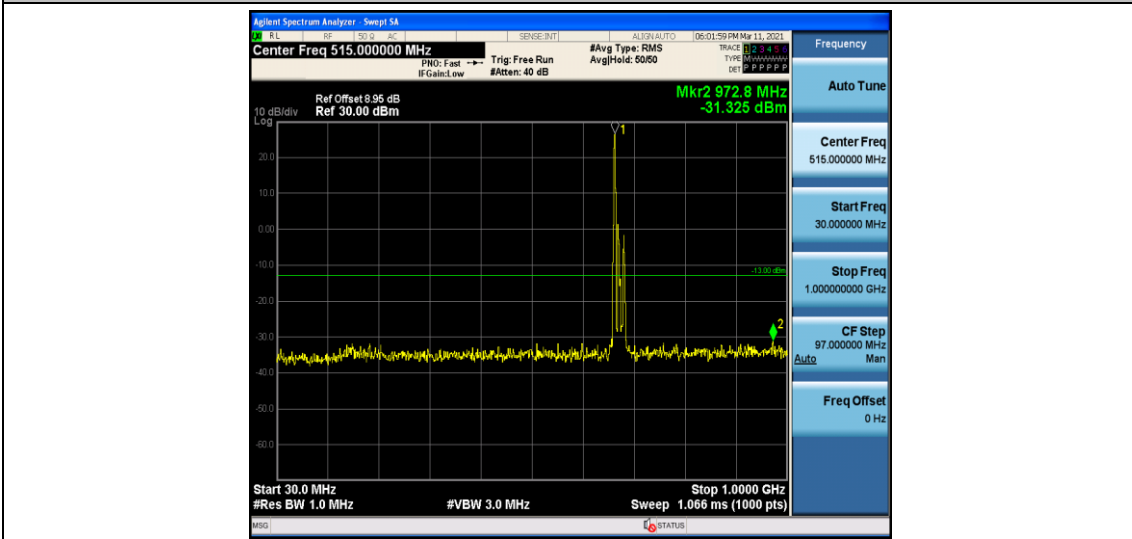
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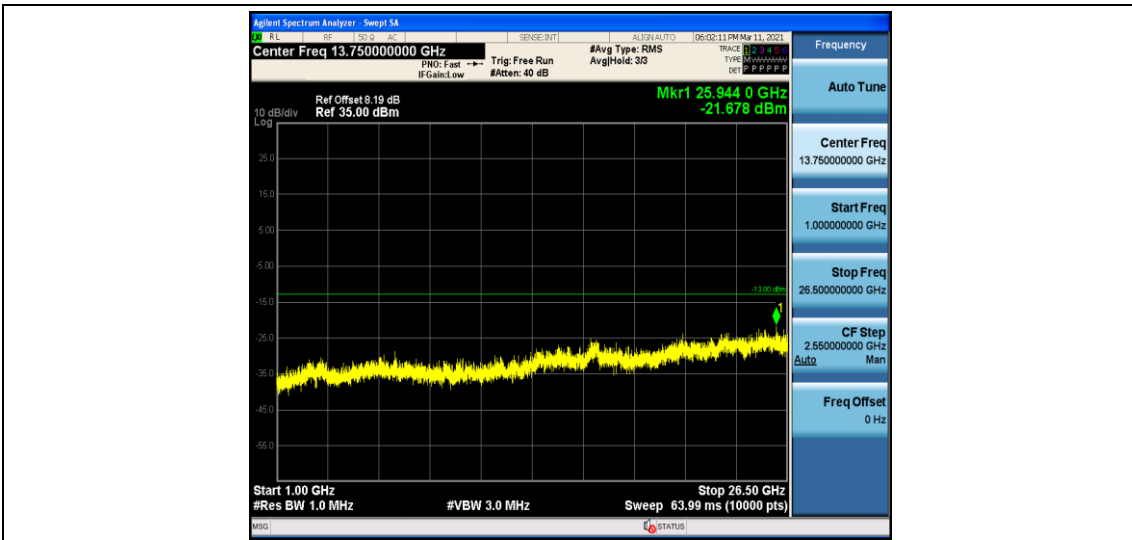
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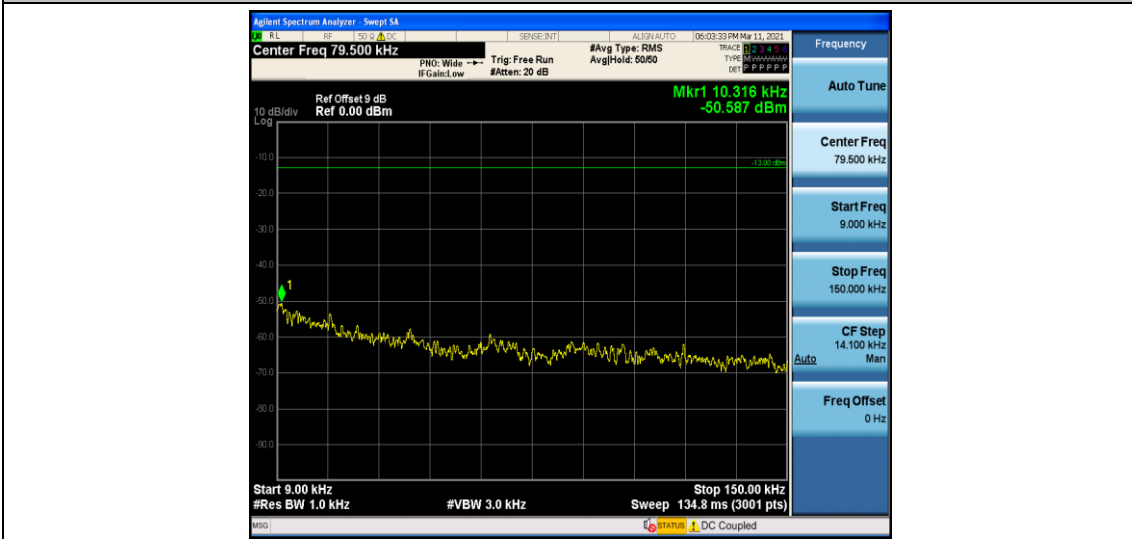
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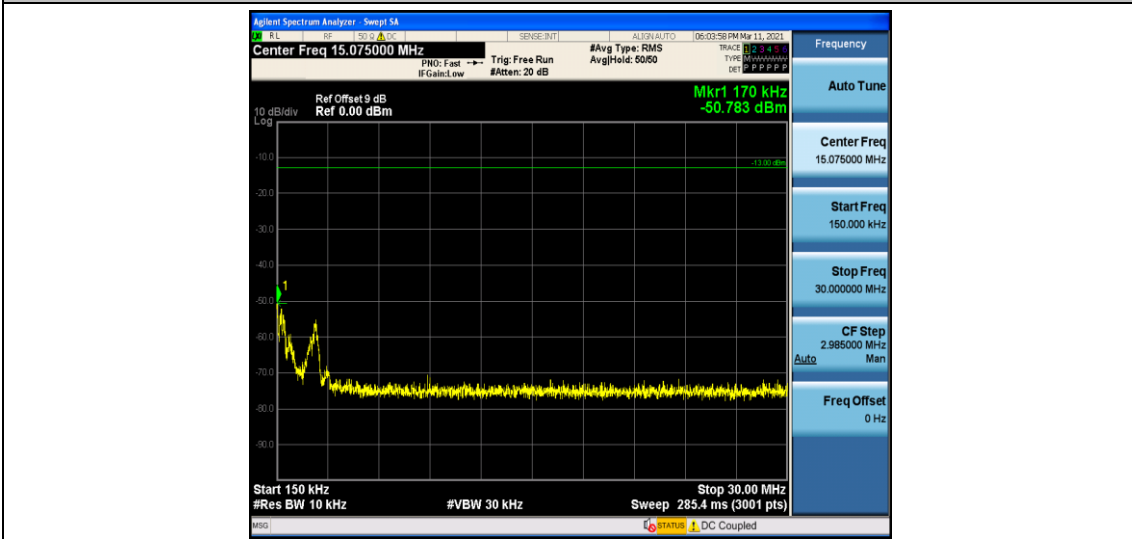
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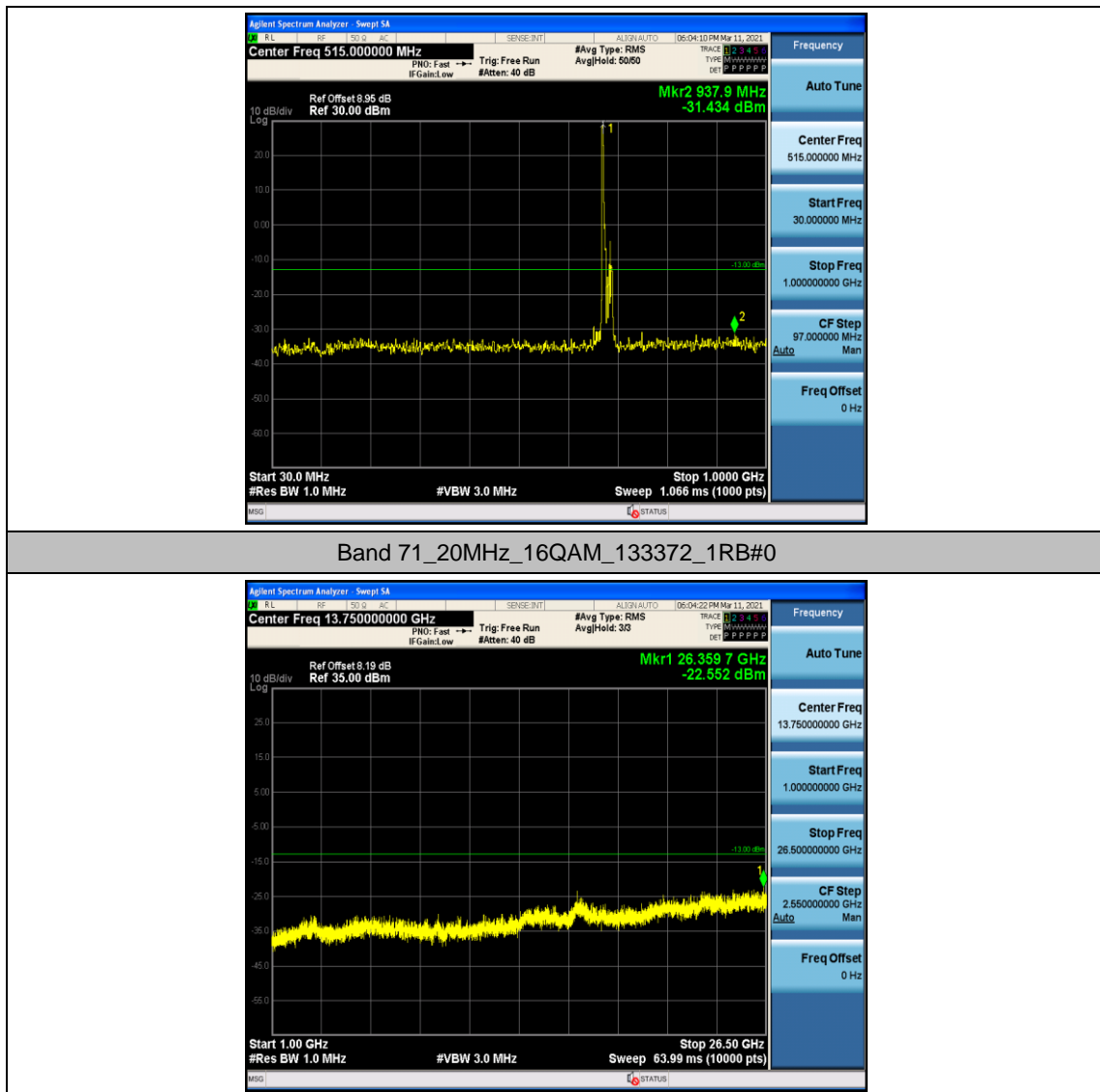
Band 71\_20MHz\_16QAM\_133372\_1RB#0



Band 71\_20MHz\_16QAM\_133372\_1RB#0



Band 71\_20MHz\_16QAM\_133372\_1RB#0



## 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	3.48	0.005229	± 2.5	PASS
		VN	TN	1.06	0.001593	± 2.5	PASS
		VH	TN	-1.47	-0.002209	± 2.5	PASS
	MCH	VL	TN	1.95	0.002866	± 2.5	PASS
		VN	TN	-1.57	-0.002307	± 2.5	PASS
		VH	TN	-1.73	-0.002542	± 2.5	PASS
	HCH	VL	TN	3.86	0.005550	± 2.5	PASS
		VN	TN	-1.37	-0.001970	± 2.5	PASS
		VH	TN	1.36	0.001955	± 2.5	PASS
16QAM	LCH	VL	TN	3.06	0.004598	± 2.5	PASS
		VN	TN	-1.64	-0.002464	± 2.5	PASS
		VH	TN	1	0.001503	± 2.5	PASS
	MCH	VL	TN	0.18	0.000265	± 2.5	PASS
		VN	TN	4.41	0.006481	± 2.5	PASS
		VH	TN	1.25	0.001837	± 2.5	PASS
	HCH	VL	TN	4.71	0.006772	± 2.5	PASS
		VN	TN	0.94	0.001352	± 2.5	PASS
		VH	TN	2.46	0.003537	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.86	0.004298	± 2.5	PASS
		VN	-20	-1.37	-0.002059	± 2.5	PASS
		VN	-10	2.11	0.003171	± 2.5	PASS
		VN	0	4.38	0.006582	± 2.5	PASS
		VN	10	3.58	0.005379	± 2.5	PASS
		VN	20	-0.74	-0.001112	± 2.5	PASS
		VN	30	4.6	0.006912	± 2.5	PASS
		VN	40	3.53	0.005304	± 2.5	PASS
		VN	50	-0.76	-0.001142	± 2.5	PASS
	MCH	VN	-30	-0.41	-0.000602	± 2.5	PASS



	VN	VN	-20	1.65	0.002425	± 2.5	PASS
		VN	-10	2.77	0.004071	± 2.5	PASS
		VN	0	3.56	0.005231	± 2.5	PASS
		VN	10	-1.27	-0.001866	± 2.5	PASS
		VN	20	-1.24	-0.001822	± 2.5	PASS
		VN	30	2.37	0.003483	± 2.5	PASS
		VN	40	-0.32	-0.000470	± 2.5	PASS
		VN	50	-1.42	-0.002087	± 2.5	PASS
	HCH	VN	-30	-1.08	-0.001553	± 2.5	PASS
		VN	-20	3.4	0.004889	± 2.5	PASS
		VN	-10	4.49	0.006456	± 2.5	PASS
		VN	0	3.02	0.004342	± 2.5	PASS
		VN	10	-1.52	-0.002185	± 2.5	PASS
		VN	20	4.01	0.005766	± 2.5	PASS
		VN	30	0.13	0.000187	± 2.5	PASS
		VN	40	-0.19	-0.000273	± 2.5	PASS
		VN	50	-1.86	-0.002674	± 2.5	PASS
		16QAM	LCH	VN	-30	4.59	0.006897
VN	-20			4.15	0.006236	± 2.5	PASS
VN	-10			3.12	0.004688	± 2.5	PASS
VN	0			4.27	0.006416	± 2.5	PASS
VN	10			0.92	0.001382	± 2.5	PASS
VN	20			2.82	0.004237	± 2.5	PASS
VN	30			1.8	0.002705	± 2.5	PASS
VN	40			1.85	0.002780	± 2.5	PASS
VN	50			1.29	0.001938	± 2.5	PASS
MCH	VN		-30	1.55	0.002278	± 2.5	PASS
	VN		-20	1.74	0.002557	± 2.5	PASS
	VN		-10	2.13	0.003130	± 2.5	PASS
	VN		0	2.41	0.003542	± 2.5	PASS
	VN		10	2.73	0.004012	± 2.5	PASS
	VN		20	-1.72	-0.002528	± 2.5	PASS
	VN		30	0.07	0.000103	± 2.5	PASS
	VN		40	3.47	0.005099	± 2.5	PASS
	VN		50	2.59	0.003806	± 2.5	PASS
HCH	VN		-30	-0.56	-0.000805	± 2.5	PASS
	VN		-20	3.15	0.004529	± 2.5	PASS
	VN		-10	4.59	0.006600	± 2.5	PASS
	VN		0	3.12	0.004486	± 2.5	PASS
	VN		10	-0.87	-0.001251	± 2.5	PASS
	VN		20	3.96	0.005694	± 2.5	PASS

		VN	30	2.28	0.003278	± 2.5	PASS
		VN	40	-1.53	-0.002200	± 2.5	PASS
		VN	50	-0.04	-0.000058	± 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	2.12	0.003174	± 2.5	PASS
		VN	TN	4.47	0.006692	± 2.5	PASS
		VH	TN	-0.11	-0.000165	± 2.5	PASS
	MCH	VL	TN	3.84	0.005643	± 2.5	PASS
		VN	TN	2.85	0.004188	± 2.5	PASS
		VH	TN	3.09	0.004541	± 2.5	PASS
	HCH	VL	TN	-1.62	-0.002338	± 2.5	PASS
		VN	TN	4.55	0.006566	± 2.5	PASS
		VH	TN	2.06	0.002973	± 2.5	PASS
16QAM	LCH	VL	TN	3.7	0.005539	± 2.5	PASS
		VN	TN	-0.72	-0.001078	± 2.5	PASS
		VH	TN	3.25	0.004865	± 2.5	PASS
	MCH	VL	TN	-1.05	-0.001543	± 2.5	PASS
		VN	TN	0.45	0.000661	± 2.5	PASS
		VH	TN	2.02	0.002968	± 2.5	PASS
	HCH	VL	TN	2.1	0.003030	± 2.5	PASS
		VN	TN	-1.18	-0.001703	± 2.5	PASS
		VH	TN	4.82	0.006955	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	4.6	0.006886	± 2.5	PASS
		VN	-20	3.37	0.005045	± 2.5	PASS
		VN	-10	-0.89	-0.001332	± 2.5	PASS
		VN	0	2.92	0.004371	± 2.5	PASS
		VN	10	0.8	0.001198	± 2.5	PASS
		VN	20	-1.95	-0.002919	± 2.5	PASS
		VN	30	4.42	0.006617	± 2.5	PASS
		VN	40	0.93	0.001392	± 2.5	PASS
		VN	50	3.22	0.004820	± 2.5	PASS
	MCH	VN	-30	4.8	0.007054	± 2.5	PASS
		VN	-20	2.06	0.003027	± 2.5	PASS

		VN	-10	4.98	0.007318	± 2.5	PASS		
		VN	0	0.6	0.000882	± 2.5	PASS		
		VN	10	1.71	0.002513	± 2.5	PASS		
		VN	20	-0.83	-0.001220	± 2.5	PASS		
		VN	30	-0.49	-0.000720	± 2.5	PASS		
		VN	40	4.14	0.006084	± 2.5	PASS		
		VN	50	3.1	0.004555	± 2.5	PASS		
	HCH	VN	-30	4.49	0.006479	± 2.5	PASS		
		VN	-20	-1.02	-0.001472	± 2.5	PASS		
		VN	-10	-0.23	-0.000332	± 2.5	PASS		
		VN	0	4.29	0.006190	± 2.5	PASS		
		VN	10	-0.64	-0.000924	± 2.5	PASS		
		VN	20	-1.65	-0.002381	± 2.5	PASS		
		VN	30	-1.6	-0.002309	± 2.5	PASS		
		VN	40	-0.87	-0.001255	± 2.5	PASS		
		VN	50	4.02	0.005801	± 2.5	PASS		
		16QAM	LCH	VN	-30	4.96	0.007425	± 2.5	PASS
				VN	-20	3.58	0.005359	± 2.5	PASS
				VN	-10	2.23	0.003338	± 2.5	PASS
VN	0			-0.73	-0.001093	± 2.5	PASS		
VN	10			1.38	0.002066	± 2.5	PASS		
VN	20			1.88	0.002814	± 2.5	PASS		
VN	30			2.1	0.003144	± 2.5	PASS		
VN	40			2.07	0.003099	± 2.5	PASS		
VN	50			-0.59	-0.000883	± 2.5	PASS		
MCH	VN		-30	-1.06	-0.001558	± 2.5	PASS		
	VN		-20	-0.08	-0.000118	± 2.5	PASS		
	VN		-10	3.05	0.004482	± 2.5	PASS		
	VN		0	0.33	0.000485	± 2.5	PASS		
	VN		10	3.88	0.005702	± 2.5	PASS		
	VN		20	1.35	0.001984	± 2.5	PASS		
	VN		30	-1.36	-0.001999	± 2.5	PASS		
	VN		40	2.66	0.003909	± 2.5	PASS		
	VN		50	3.57	0.005246	± 2.5	PASS		
HCH	VN		-30	-0.91	-0.001313	± 2.5	PASS		
	VN	-20	1.14	0.001645	± 2.5	PASS			
	VN	-10	3.41	0.004921	± 2.5	PASS			
	VN	0	-0.13	-0.000188	± 2.5	PASS			
	VN	10	-0.95	-0.001371	± 2.5	PASS			
	VN	20	4.89	0.007056	± 2.5	PASS			
	VN	30	0.57	0.000823	± 2.5	PASS			

		VN	40	2.43	0.003506	± 2.5	PASS
		VN	50	0.29	0.000418	± 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	-0.46	-0.000686	± 2.5	PASS
		VN	TN	1.33	0.001984	± 2.5	PASS
		VH	TN	4.51	0.006726	± 2.5	PASS
	MCH	VL	TN	-0.8	-0.001176	± 2.5	PASS
		VN	TN	-0.13	-0.000191	± 2.5	PASS
		VH	TN	2.25	0.003306	± 2.5	PASS
	HCH	VL	TN	4.59	0.006647	± 2.5	PASS
		VN	TN	5	0.007241	± 2.5	PASS
		VH	TN	0.2	0.000290	± 2.5	PASS
16QAM	LCH	VL	TN	-0.6	-0.000895	± 2.5	PASS
		VN	TN	3.84	0.005727	± 2.5	PASS
		VH	TN	3.18	0.004743	± 2.5	PASS
	MCH	VL	TN	-1.75	-0.002572	± 2.5	PASS
		VN	TN	-0.2	-0.000294	± 2.5	PASS
		VH	TN	-1.86	-0.002733	± 2.5	PASS
	HCH	VL	TN	2.78	0.004026	± 2.5	PASS
		VN	TN	-1.61	-0.002332	± 2.5	PASS
		VH	TN	-1.53	-0.002216	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.09	0.001626	± 2.5	PASS
		VN	-20	0.79	0.001178	± 2.5	PASS
		VN	-10	4.25	0.006339	± 2.5	PASS
		VN	0	3.35	0.004996	± 2.5	PASS
		VN	10	2.15	0.003207	± 2.5	PASS
		VN	20	3.24	0.004832	± 2.5	PASS
		VN	30	1.87	0.002789	± 2.5	PASS
		VN	40	0.94	0.001402	± 2.5	PASS
		VN	50	1.27	0.001894	± 2.5	PASS
	MCH	VN	-30	1.39	0.002043	± 2.5	PASS
		VN	-20	-1.45	-0.002131	± 2.5	PASS
		VN	-10	1.41	0.002072	± 2.5	PASS

		VN	0	-0.03	-0.000044	± 2.5	PASS		
		VN	10	-0.51	-0.000749	± 2.5	PASS		
		VN	20	0.85	0.001249	± 2.5	PASS		
		VN	30	0.62	0.000911	± 2.5	PASS		
		VN	40	3.52	0.005173	± 2.5	PASS		
		VN	50	2.26	0.003321	± 2.5	PASS		
	HCH	VN	-30	0.93	0.001347	± 2.5	PASS		
		VN	-20	4.22	0.006112	± 2.5	PASS		
		VN	-10	0.83	0.001202	± 2.5	PASS		
		VN	0	-0.8	-0.001159	± 2.5	PASS		
		VN	10	-1.7	-0.002462	± 2.5	PASS		
		VN	20	1.21	0.001752	± 2.5	PASS		
		VN	30	-0.06	-0.000087	± 2.5	PASS		
		VN	40	3.63	0.005257	± 2.5	PASS		
		VN	50	-1.05	-0.001521	± 2.5	PASS		
		16QAM	LCH	VN	-30	3.16	0.004713	± 2.5	PASS
				VN	-20	1.89	0.002819	± 2.5	PASS
				VN	-10	4.78	0.007129	± 2.5	PASS
VN	0			-1.5	-0.002237	± 2.5	PASS		
VN	10			1.29	0.001924	± 2.5	PASS		
VN	20			4.11	0.006130	± 2.5	PASS		
VN	30			3.15	0.004698	± 2.5	PASS		
VN	40			3.58	0.005339	± 2.5	PASS		
VN	50			-1.69	-0.002521	± 2.5	PASS		
MCH	VN		-30	3.19	0.004688	± 2.5	PASS		
	VN		-20	0.51	0.000749	± 2.5	PASS		
	VN		-10	-1.79	-0.002630	± 2.5	PASS		
	VN		0	1.12	0.001646	± 2.5	PASS		
	VN		10	2.03	0.002983	± 2.5	PASS		
	VN		20	-1.03	-0.001514	± 2.5	PASS		
	VN		30	1.2	0.001763	± 2.5	PASS		
	VN		40	3.48	0.005114	± 2.5	PASS		
	VN		50	0.64	0.000940	± 2.5	PASS		
HCH	VN		-30	-1.33	-0.001926	± 2.5	PASS		
	VN		-20	2.89	0.004185	± 2.5	PASS		
	VN		-10	3.49	0.005054	± 2.5	PASS		
	VN		0	-0.36	-0.000521	± 2.5	PASS		
	VN		10	2.56	0.003707	± 2.5	PASS		
	VN		20	0.56	0.000811	± 2.5	PASS		
	VN		30	4.71	0.006821	± 2.5	PASS		
	VN		40	1.97	0.002853	± 2.5	PASS		