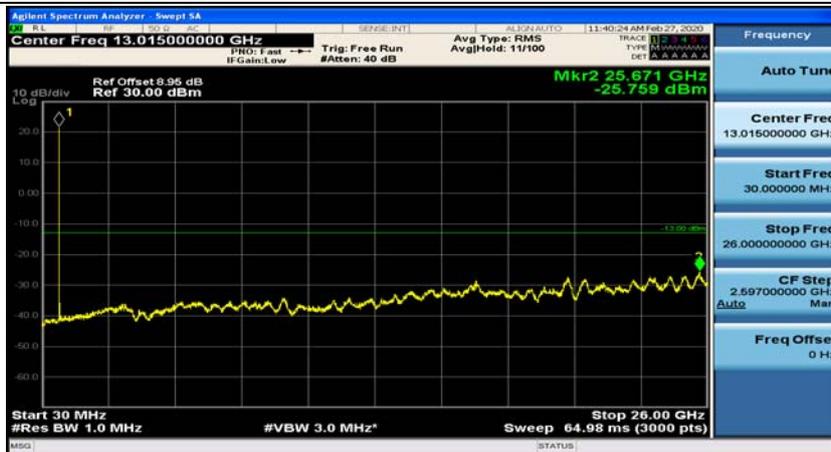
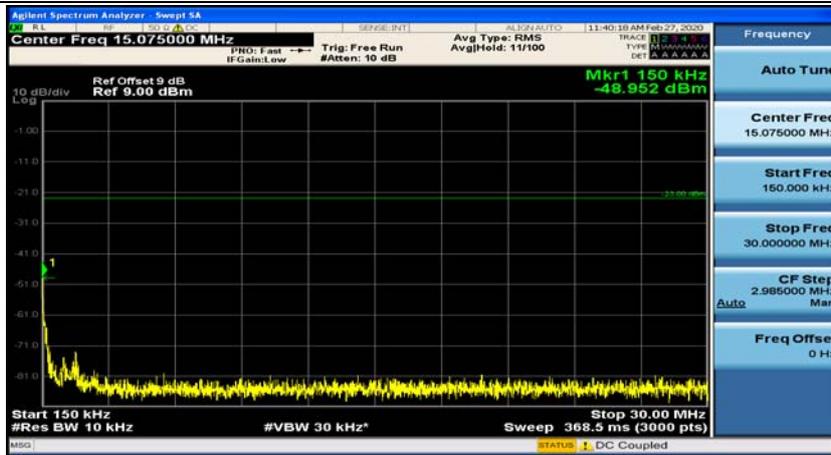
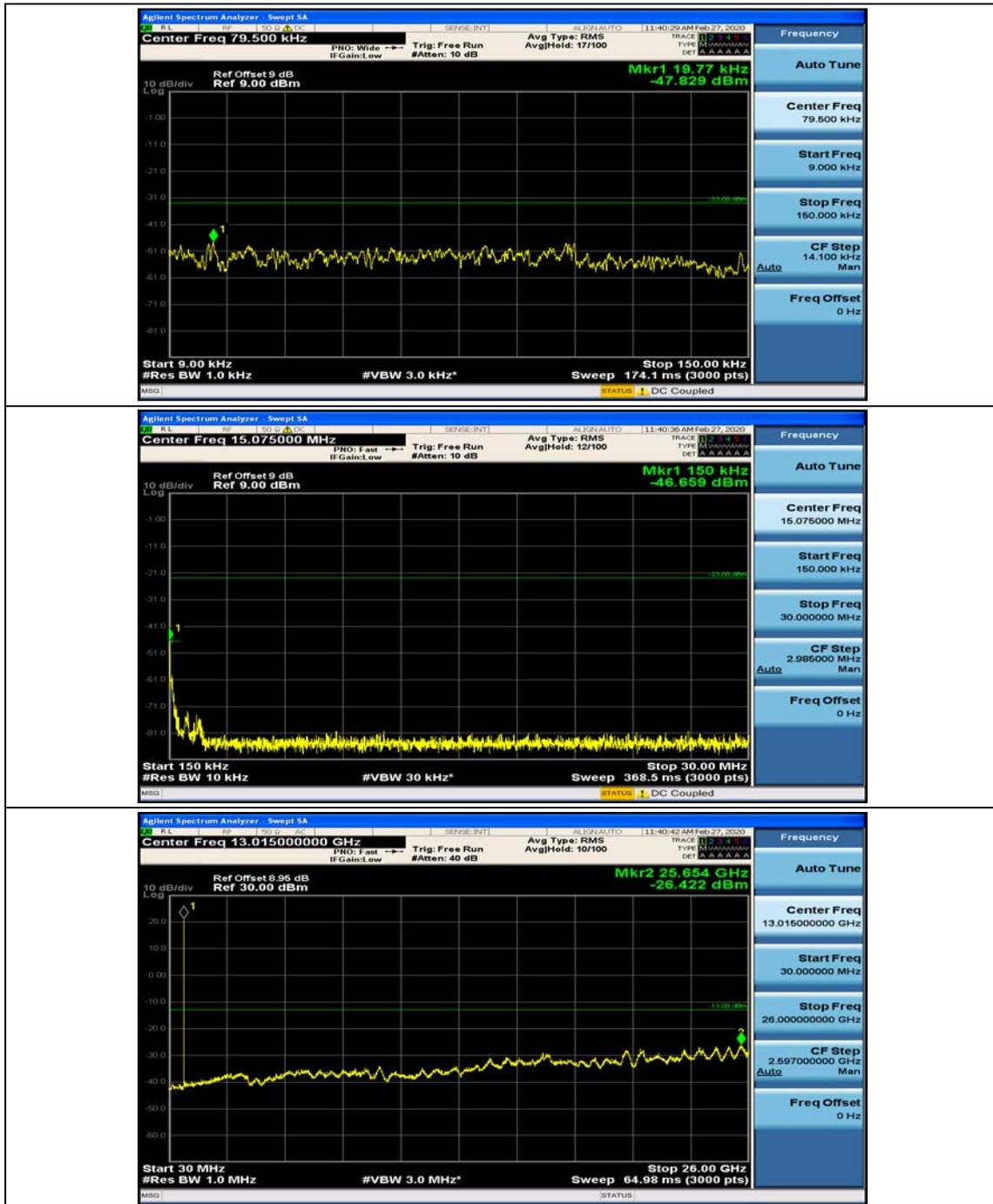




(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0

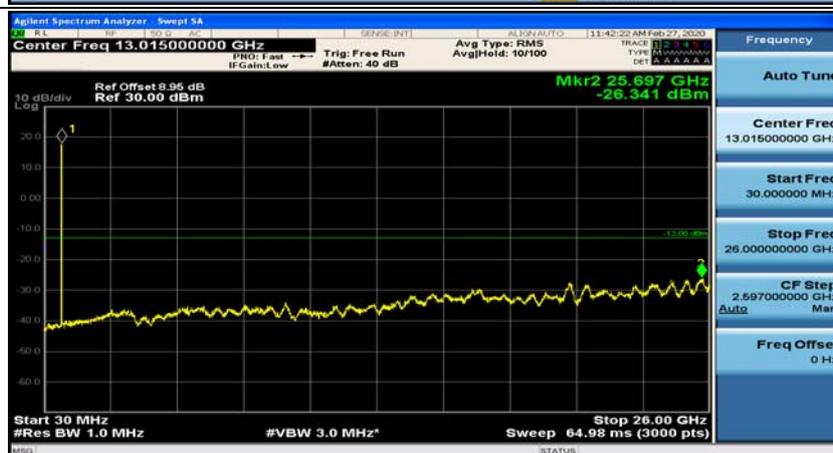
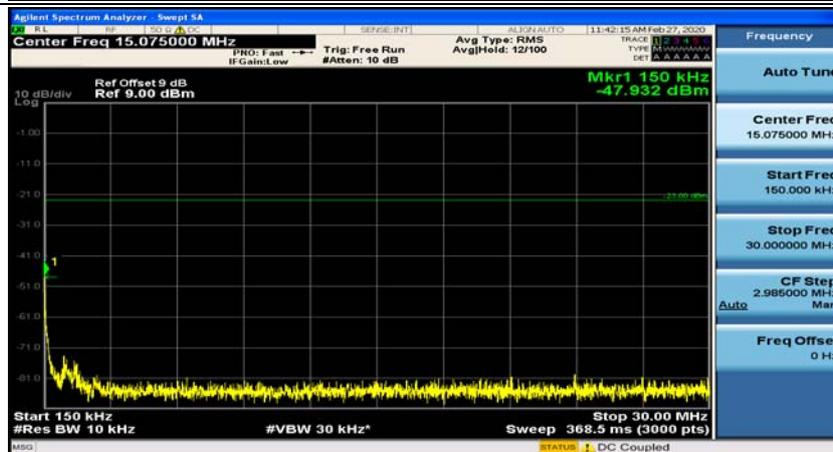


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

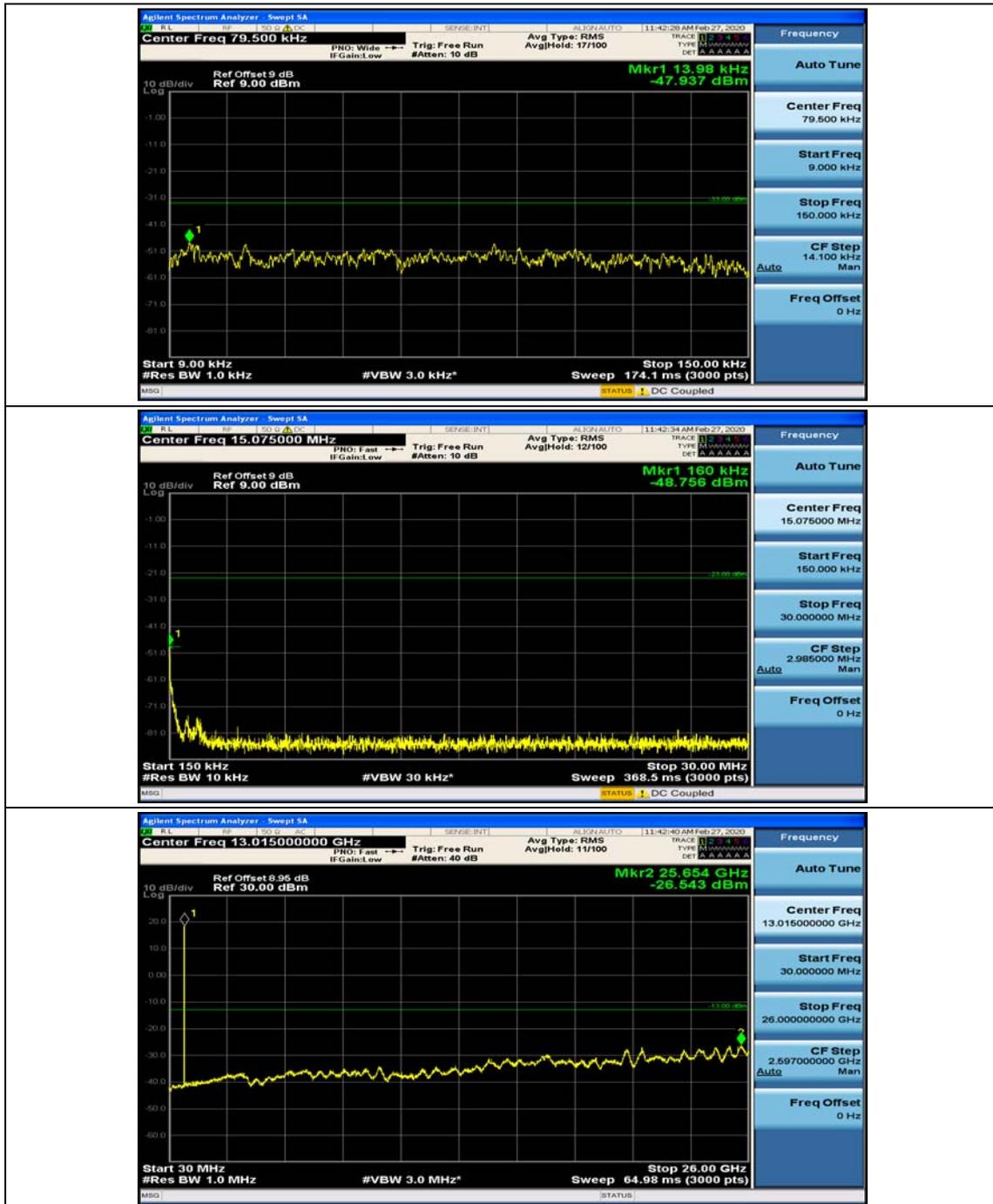




(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

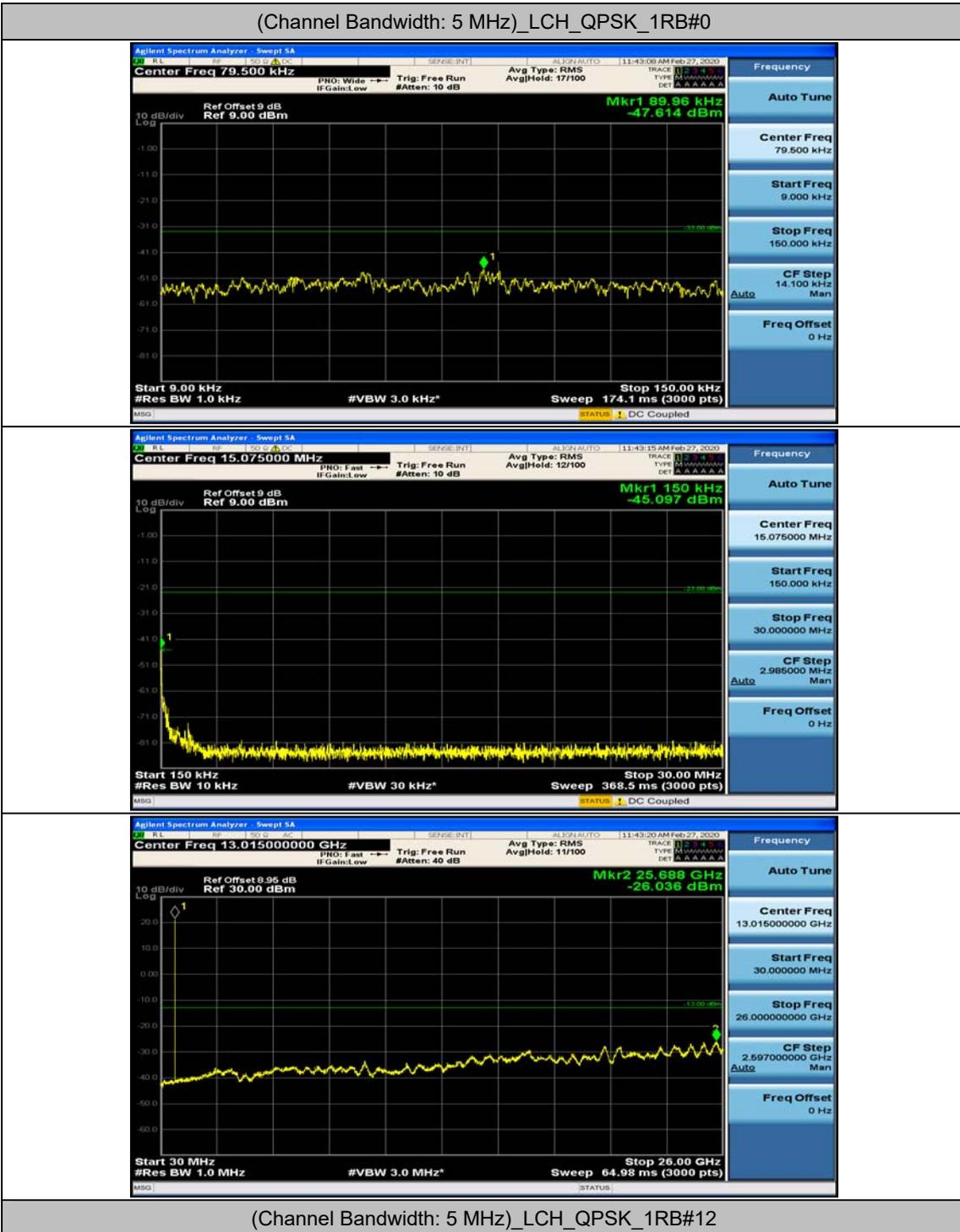


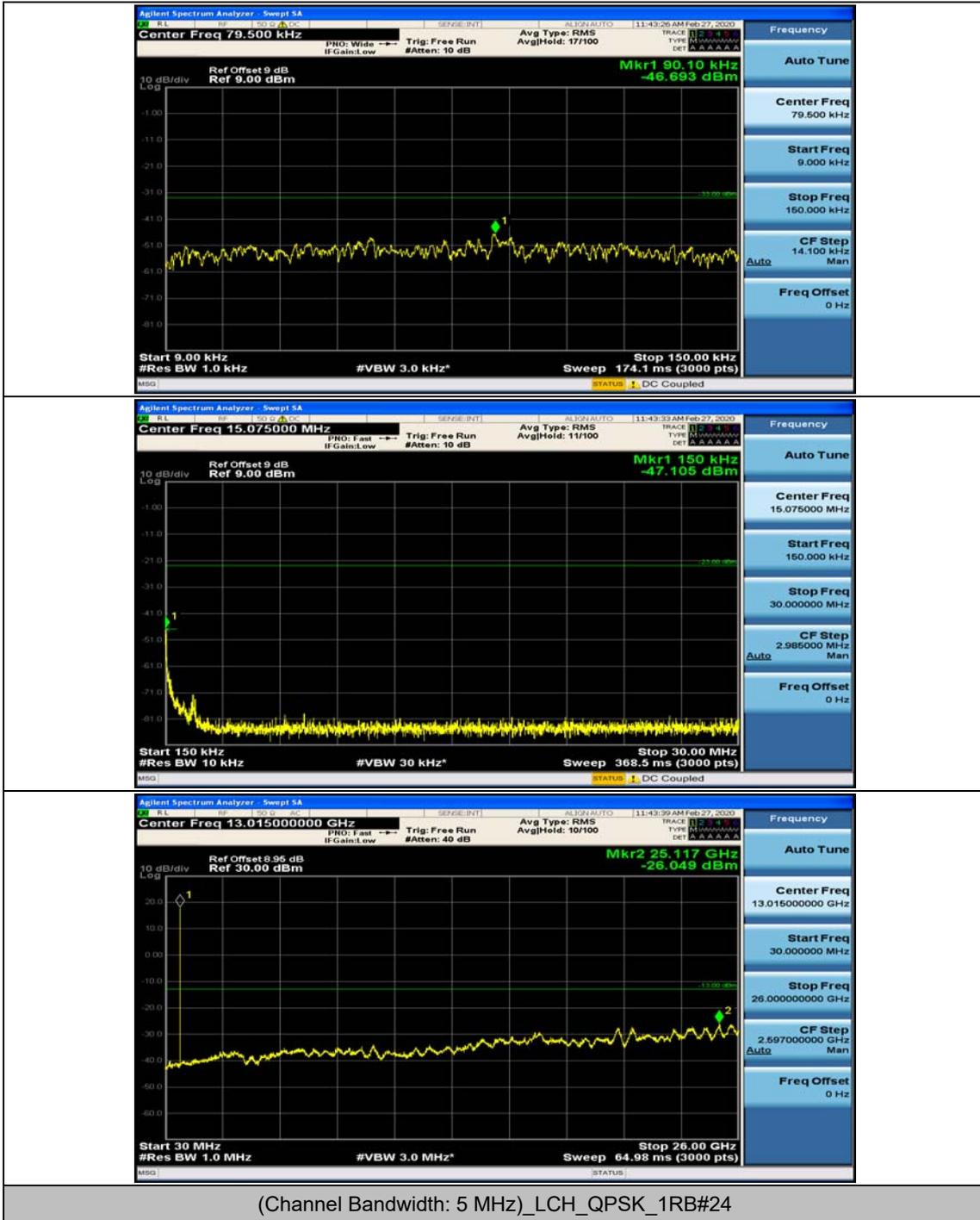
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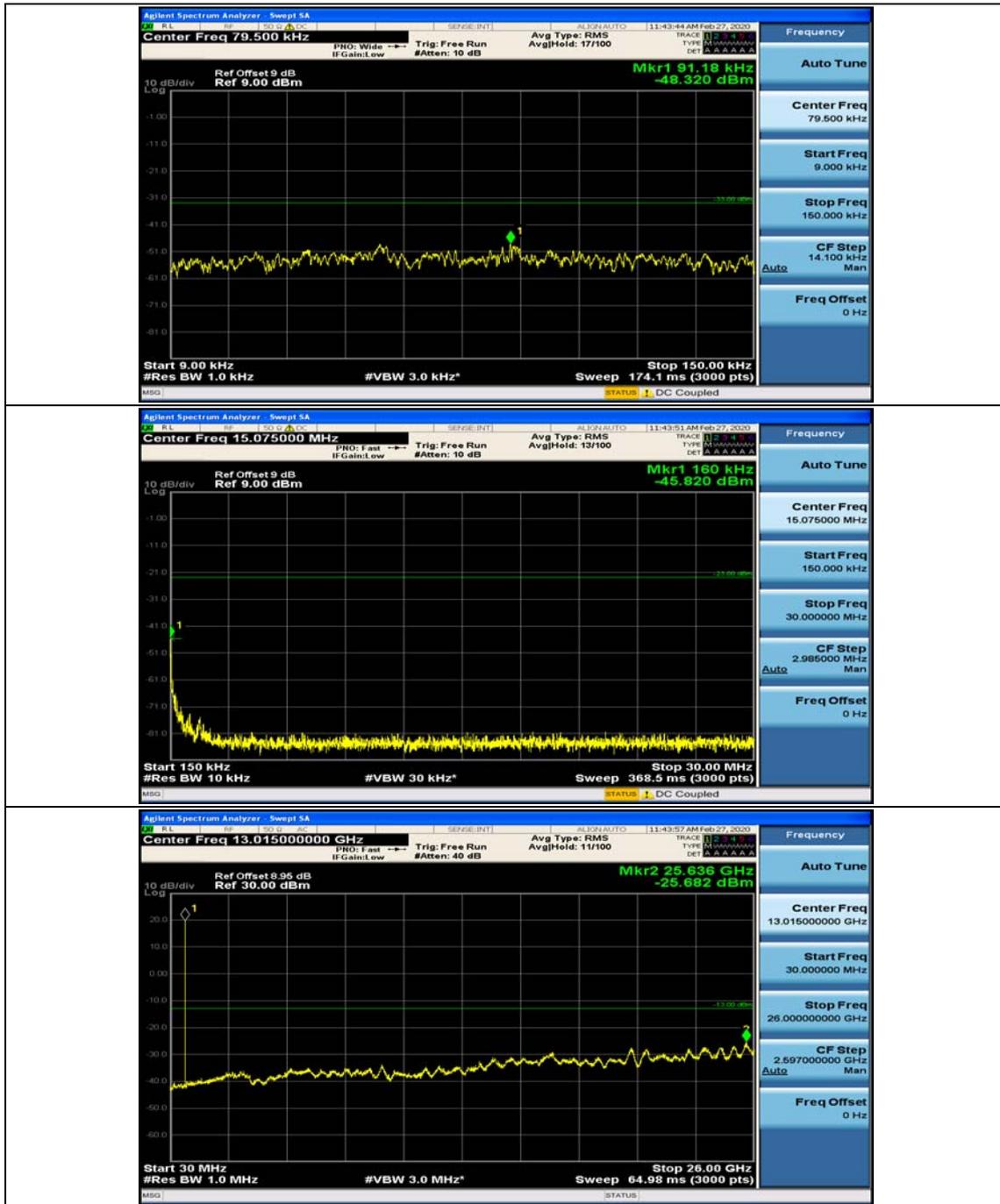




Channel Bandwidth: 5 MHz

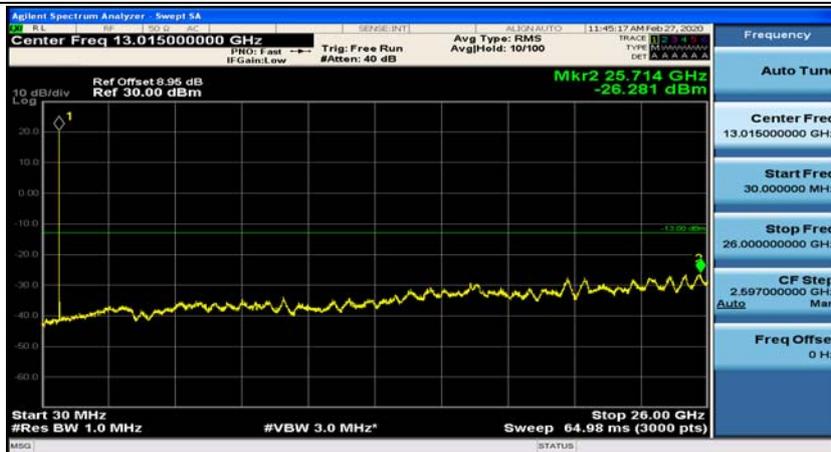
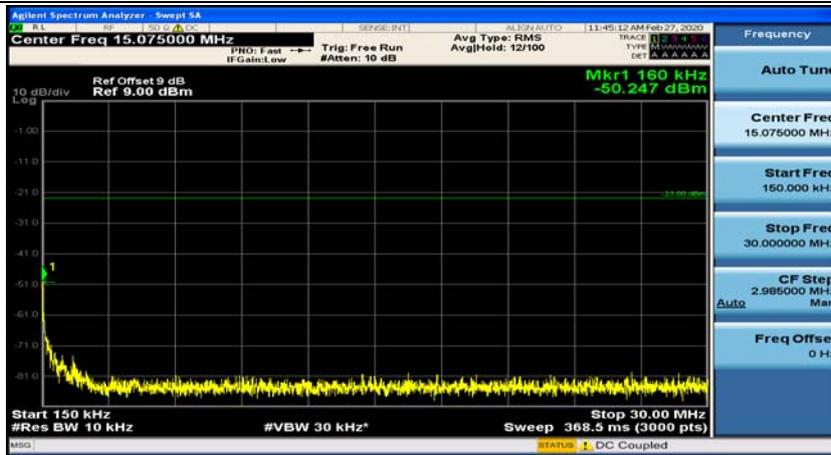




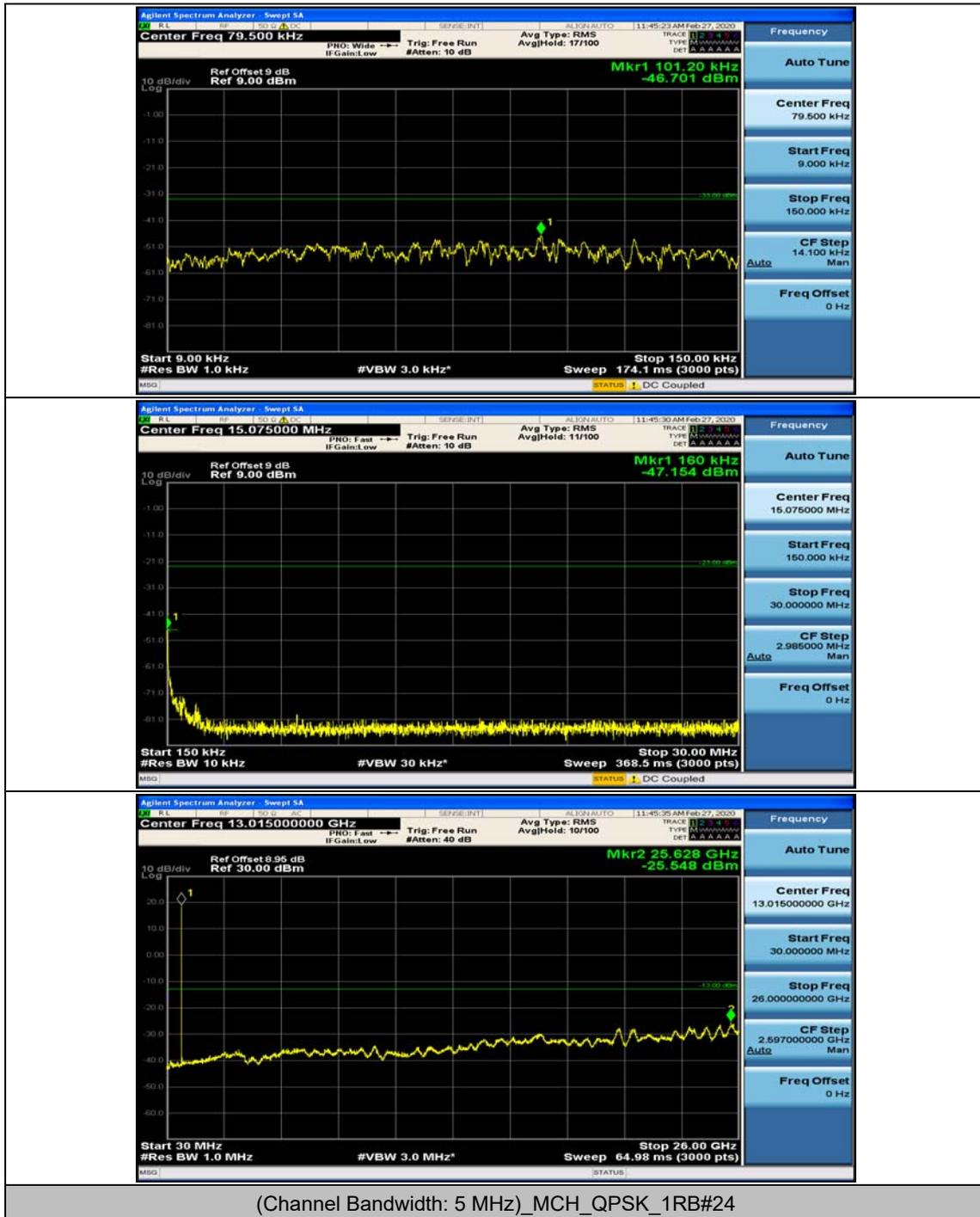


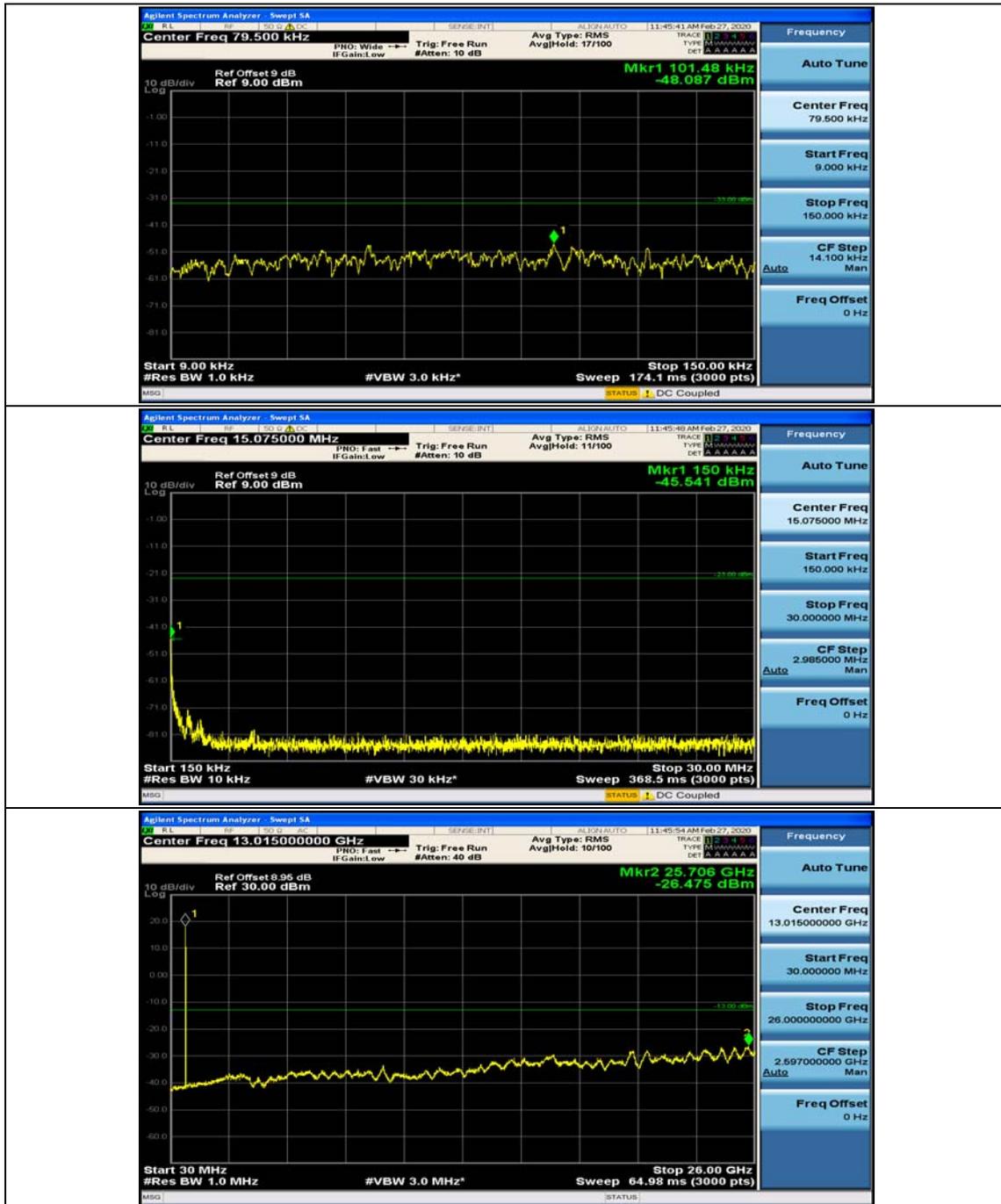


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



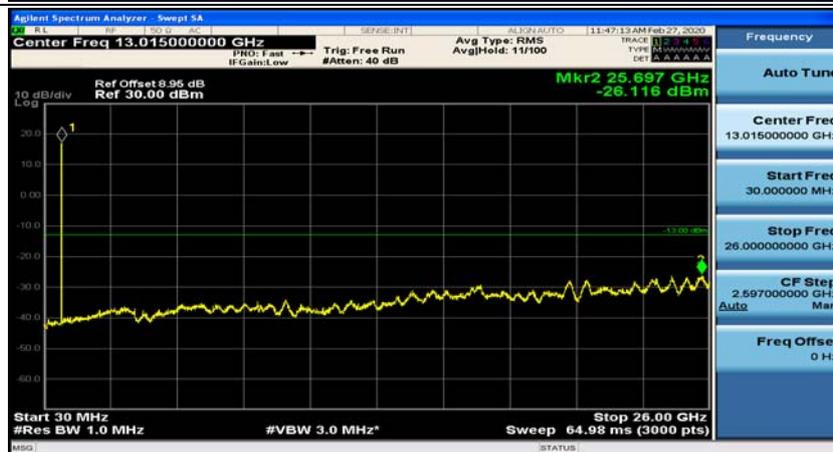
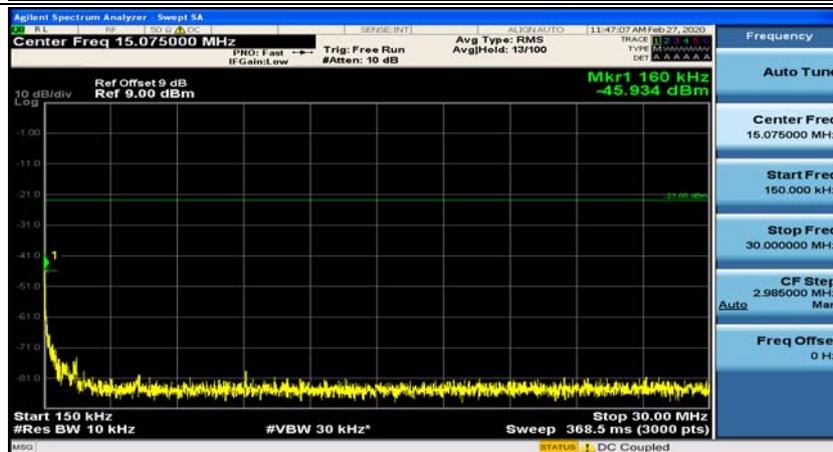
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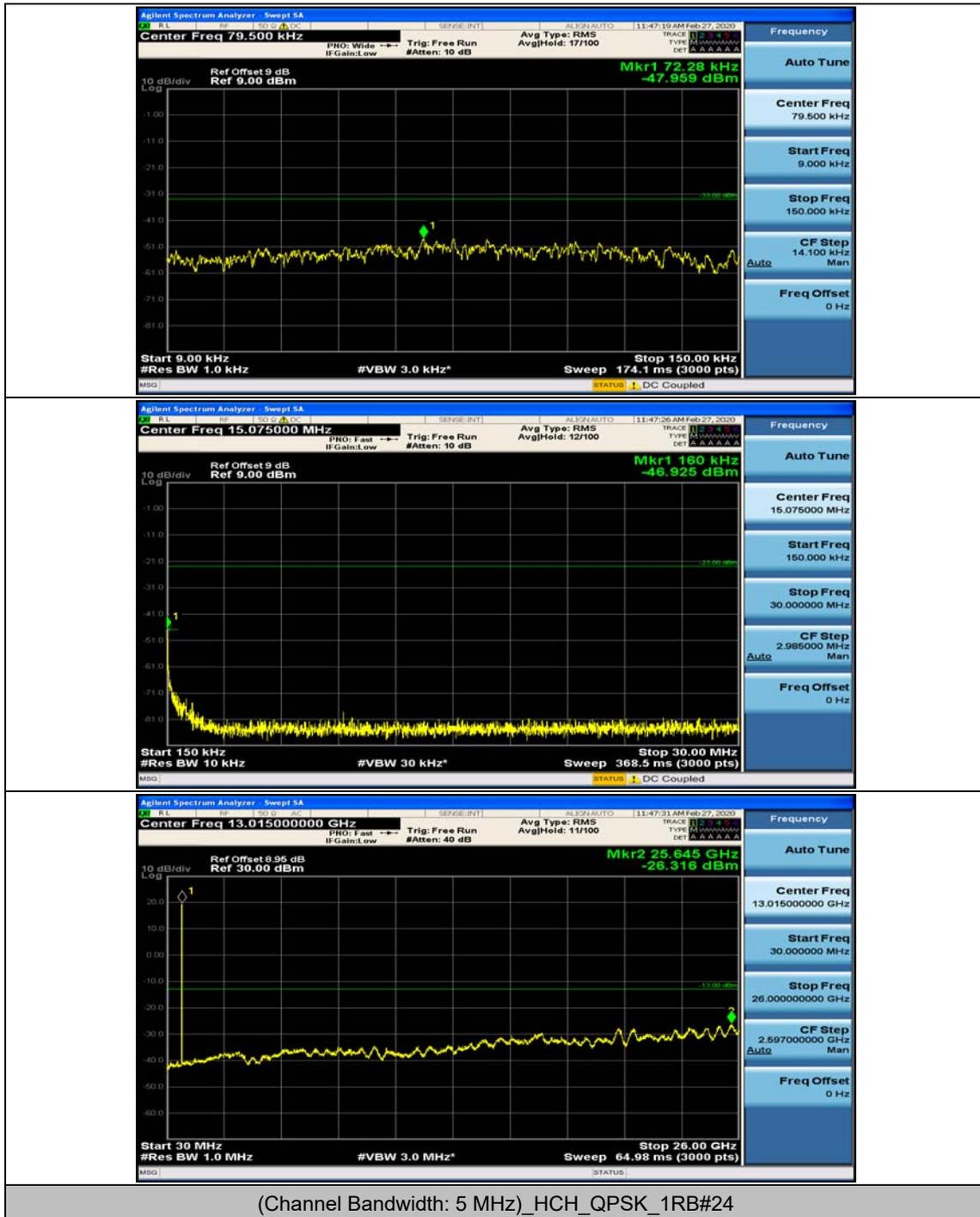


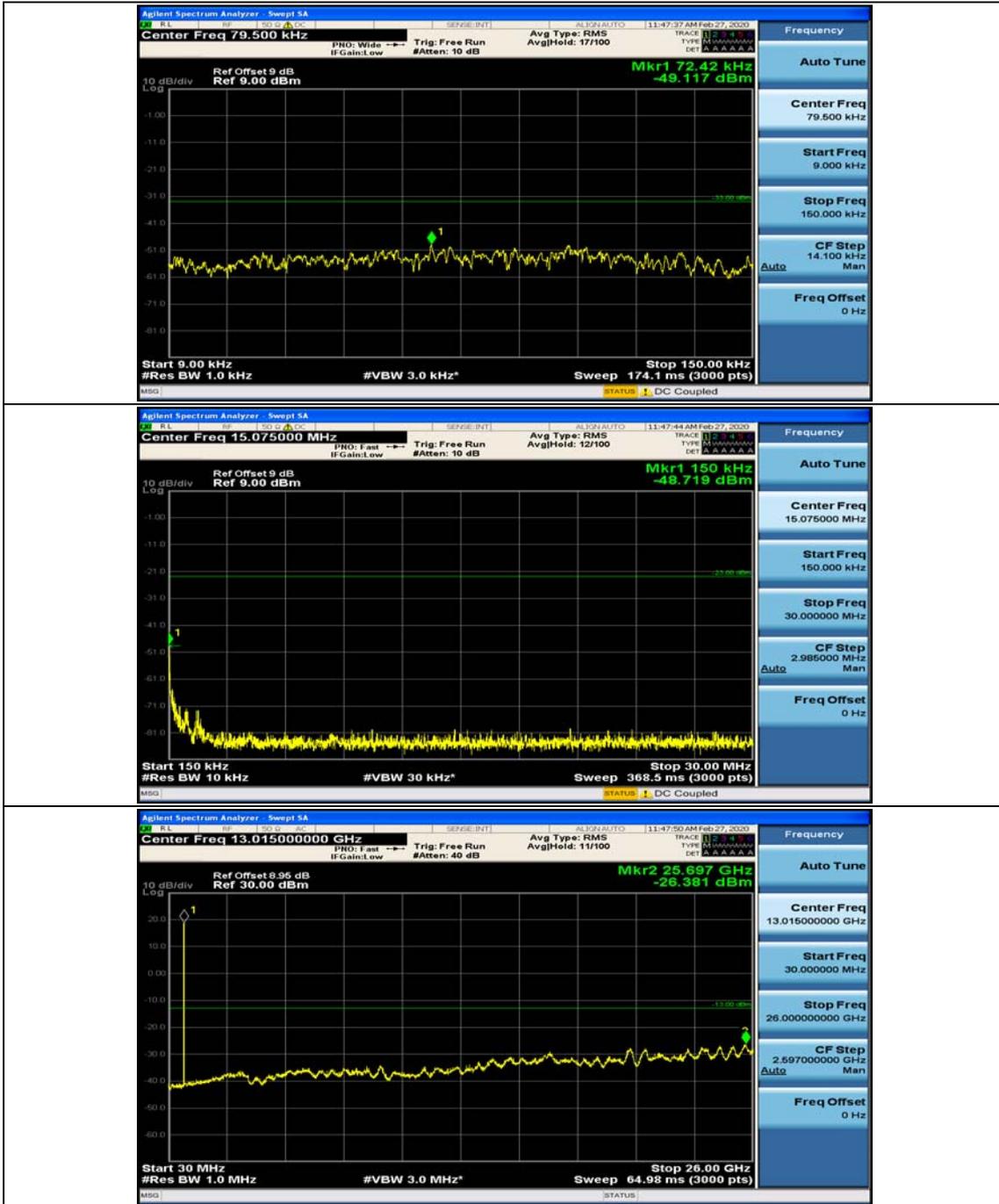


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



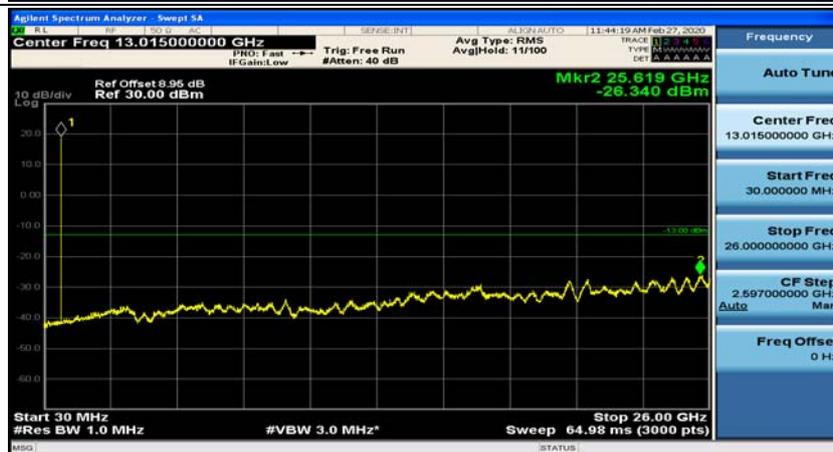
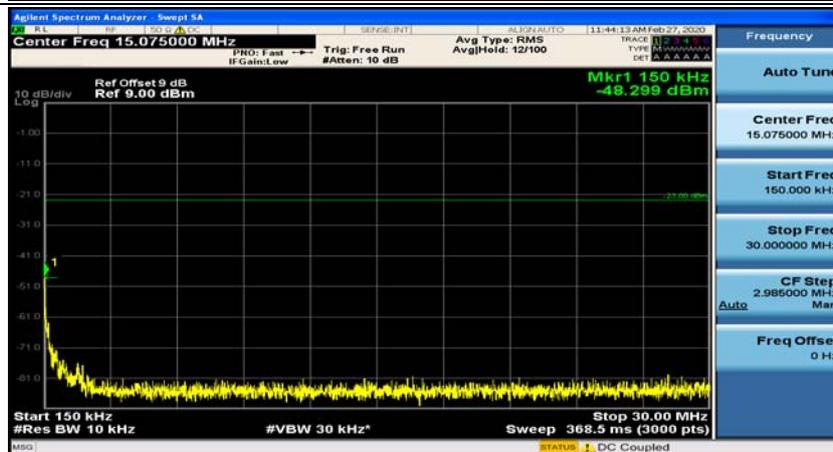
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



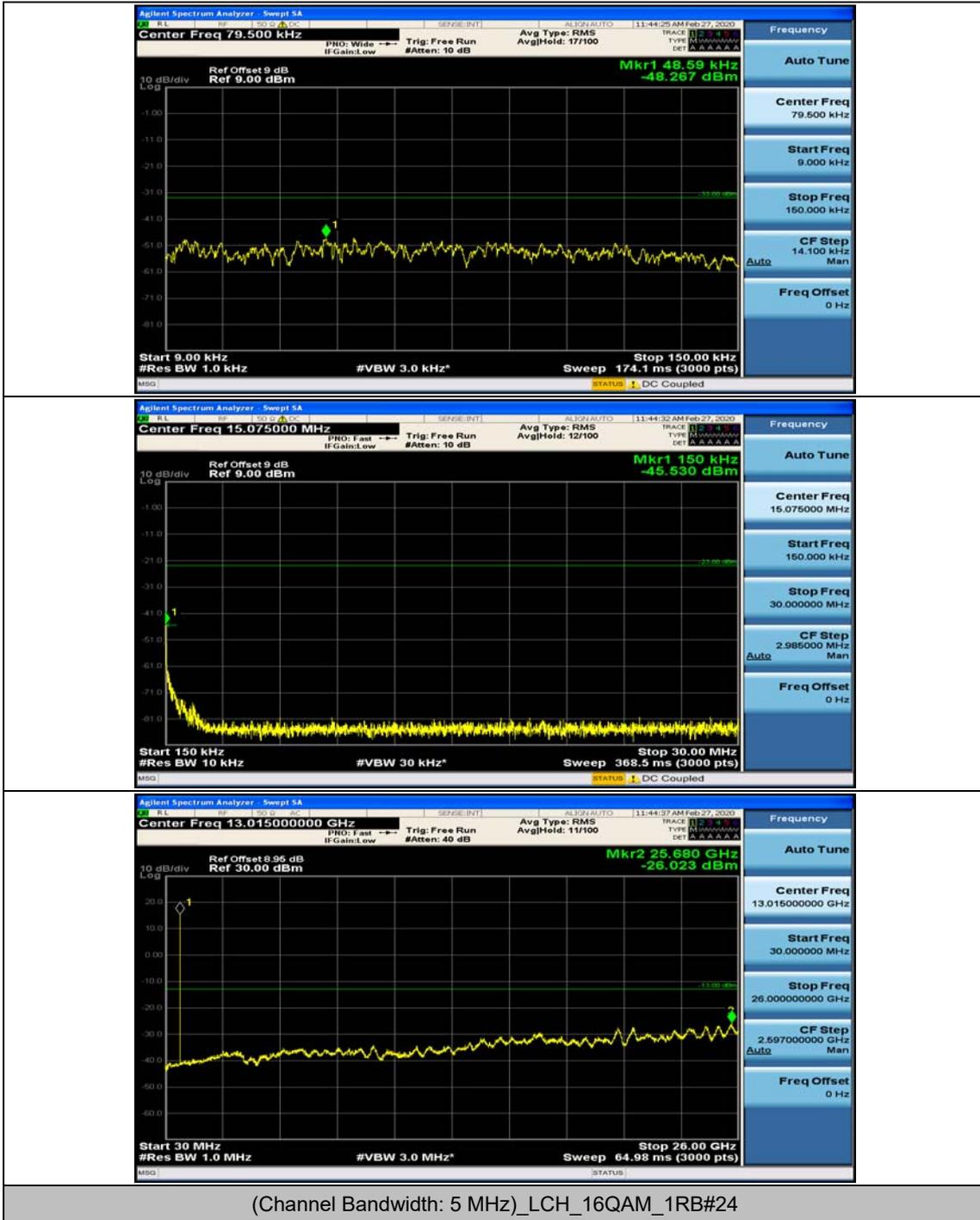


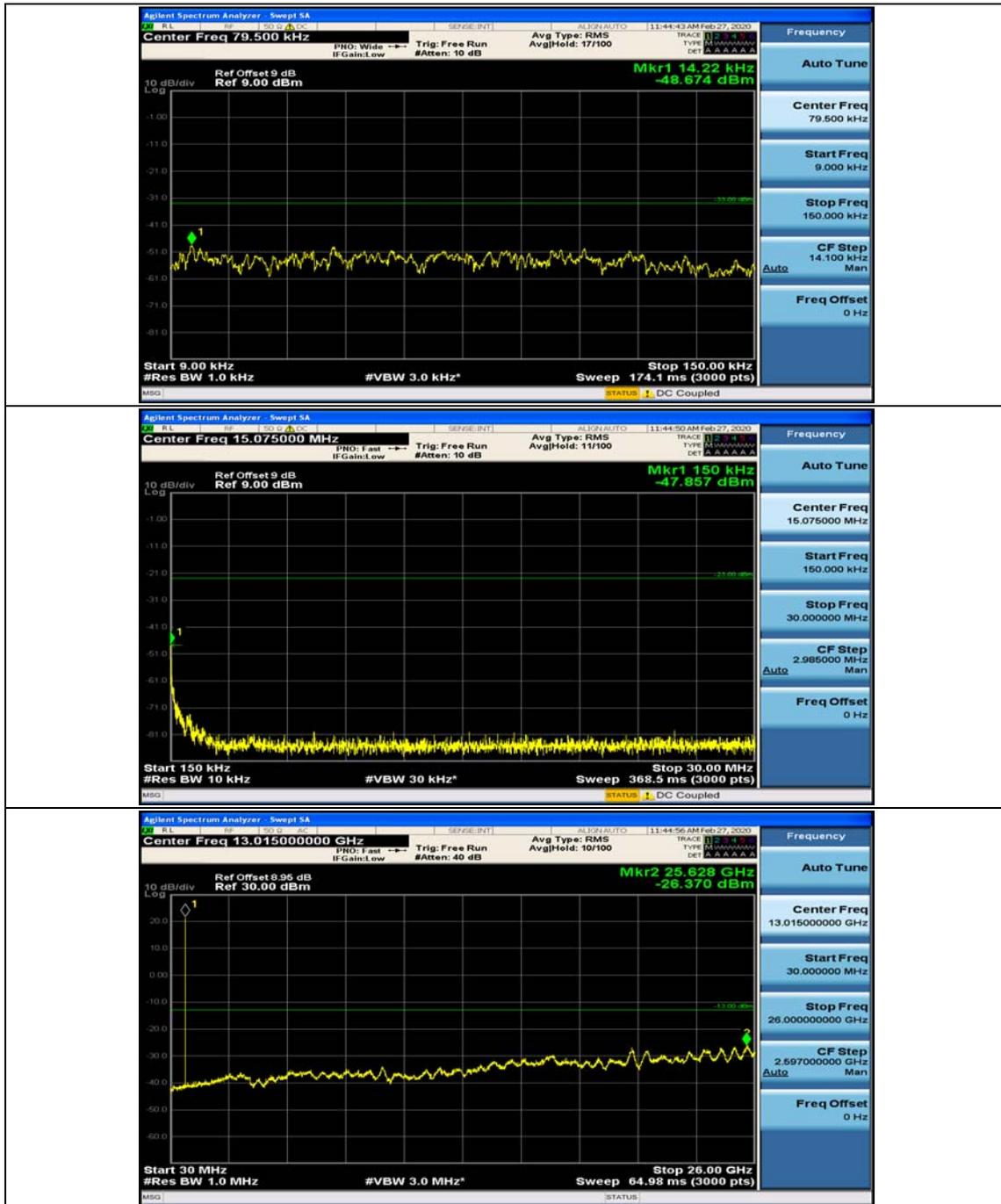


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



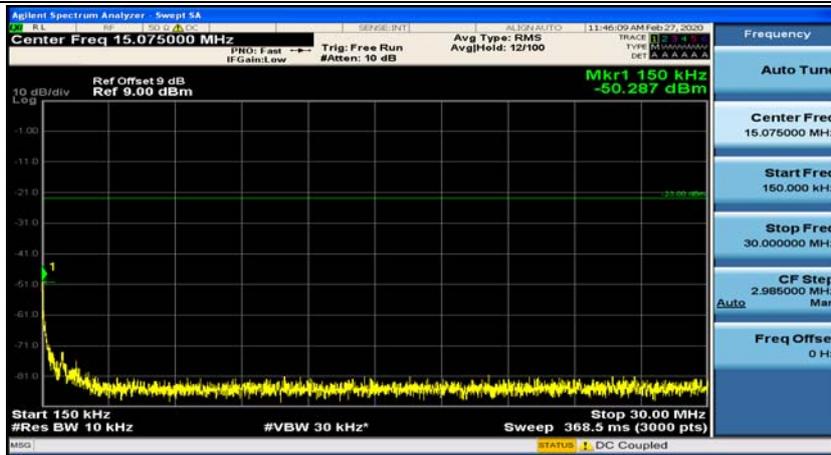
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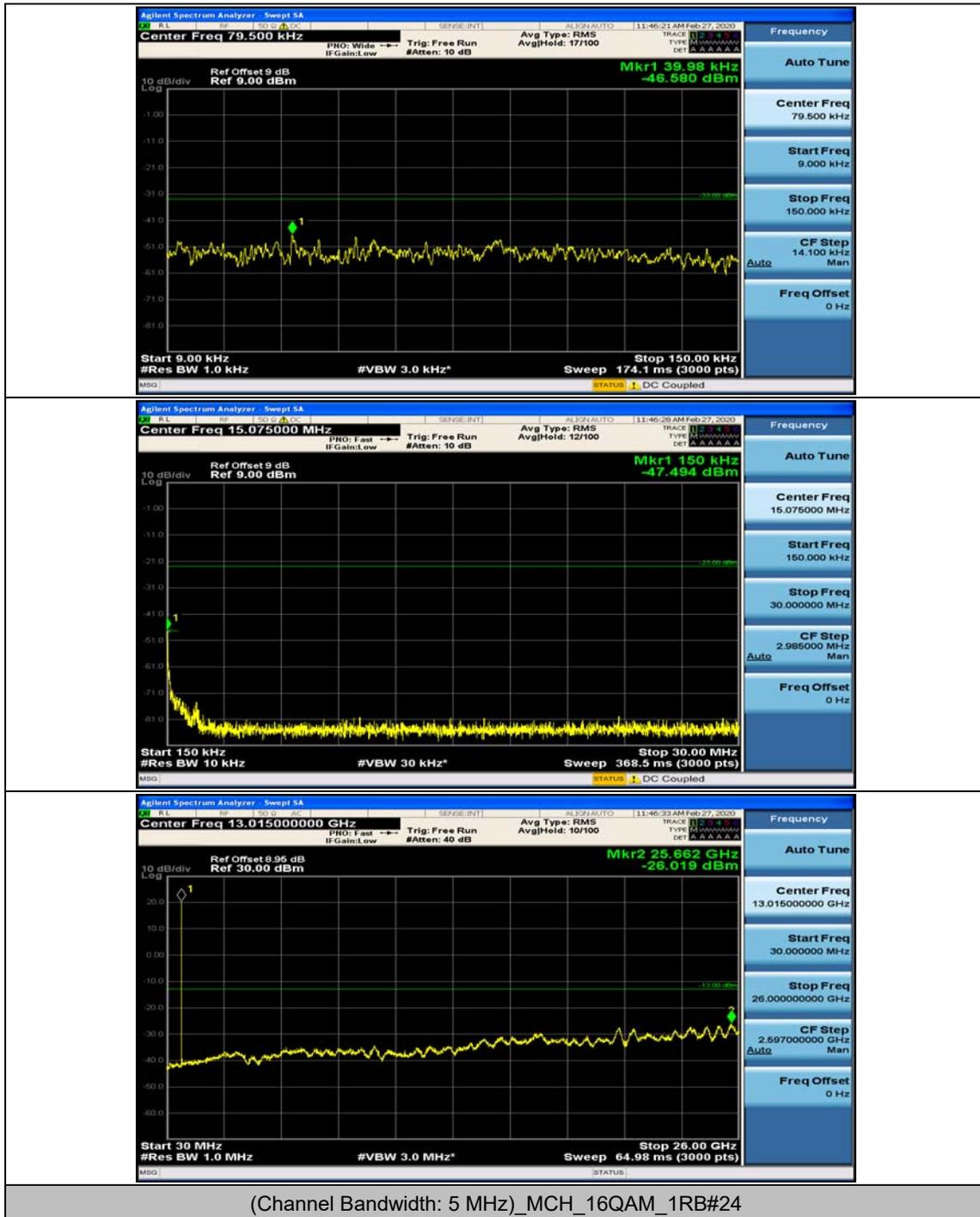


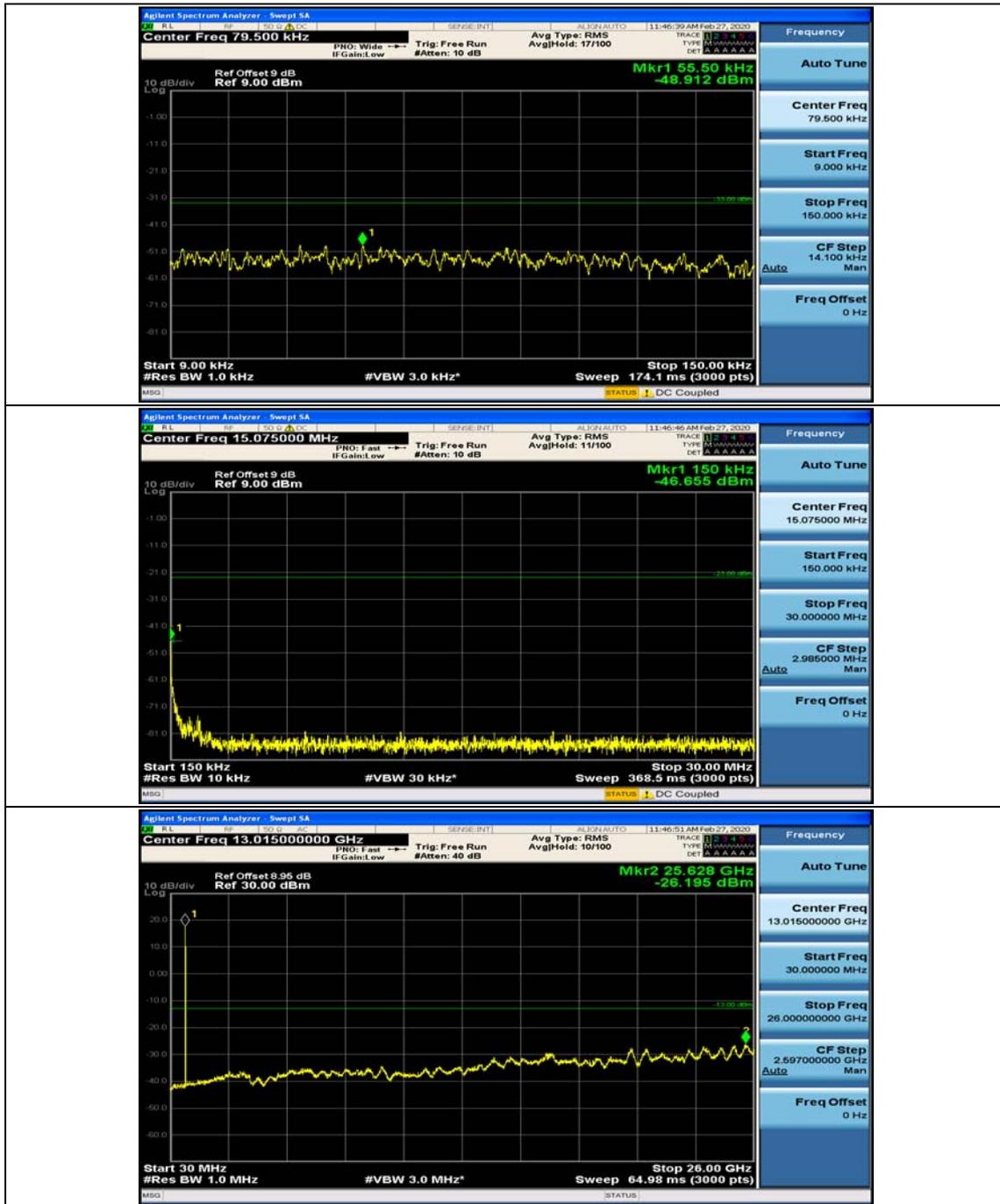


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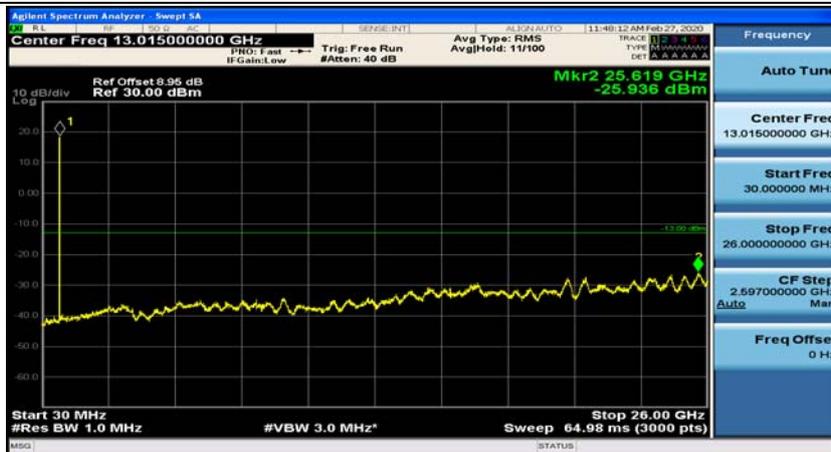
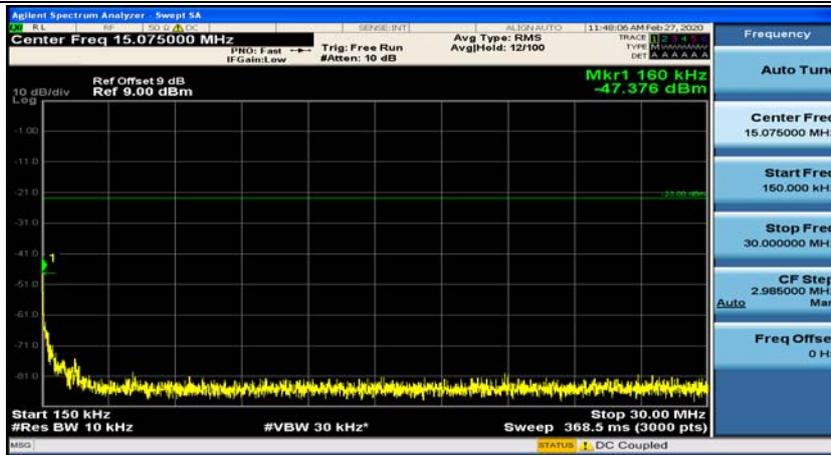
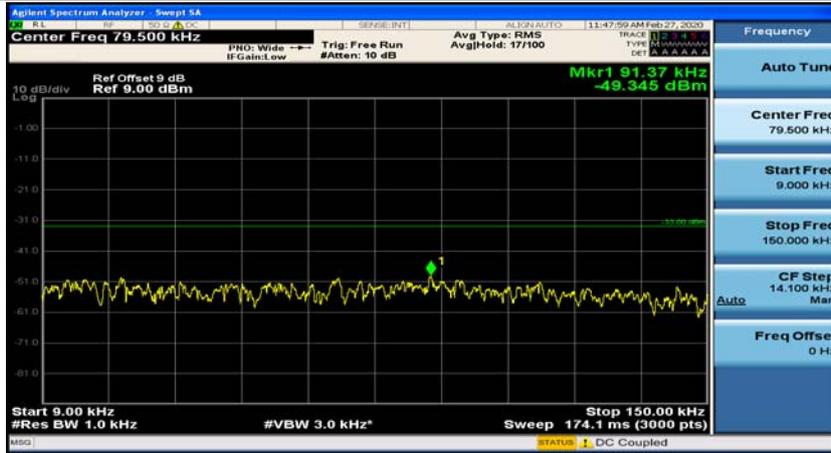
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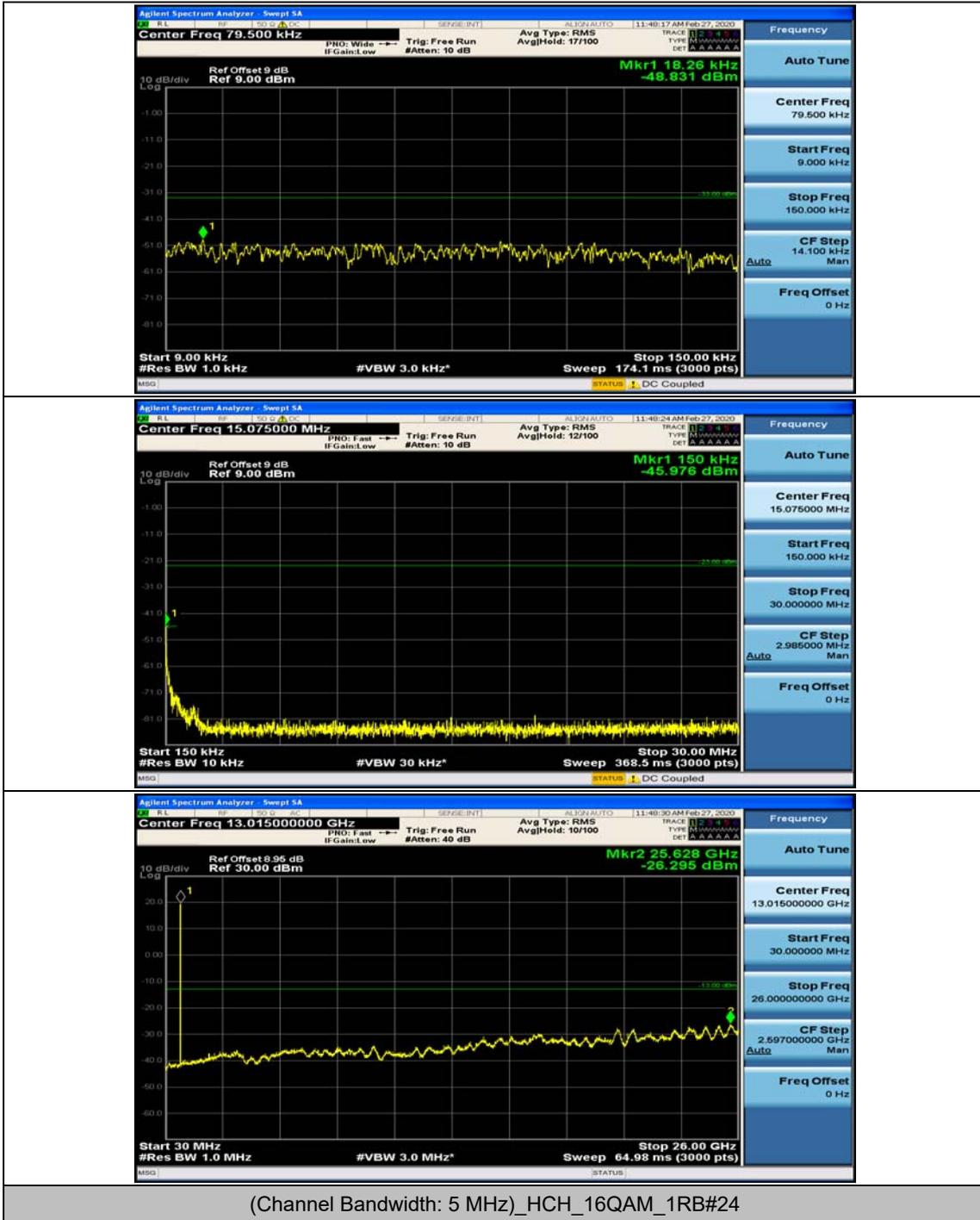


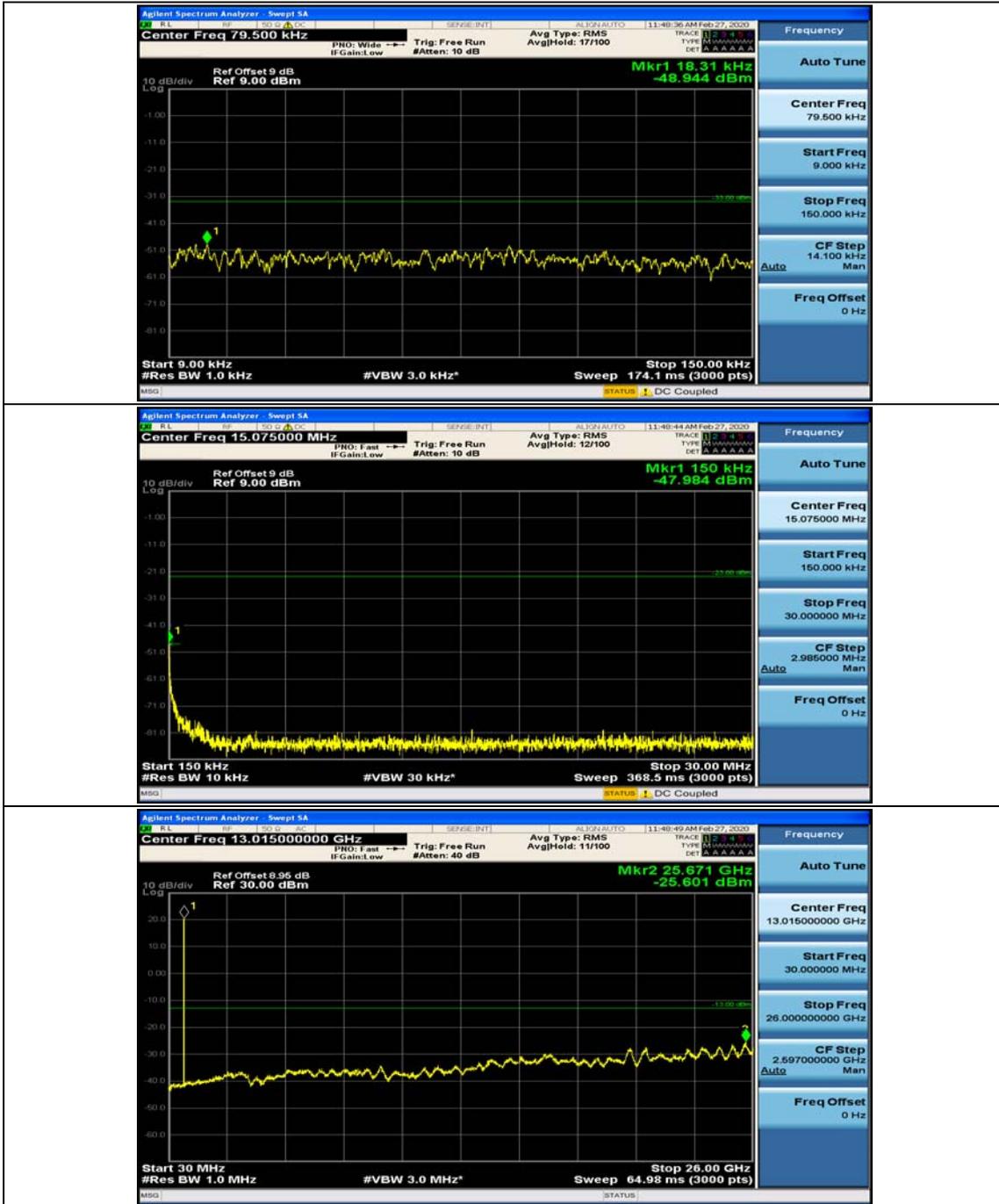


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



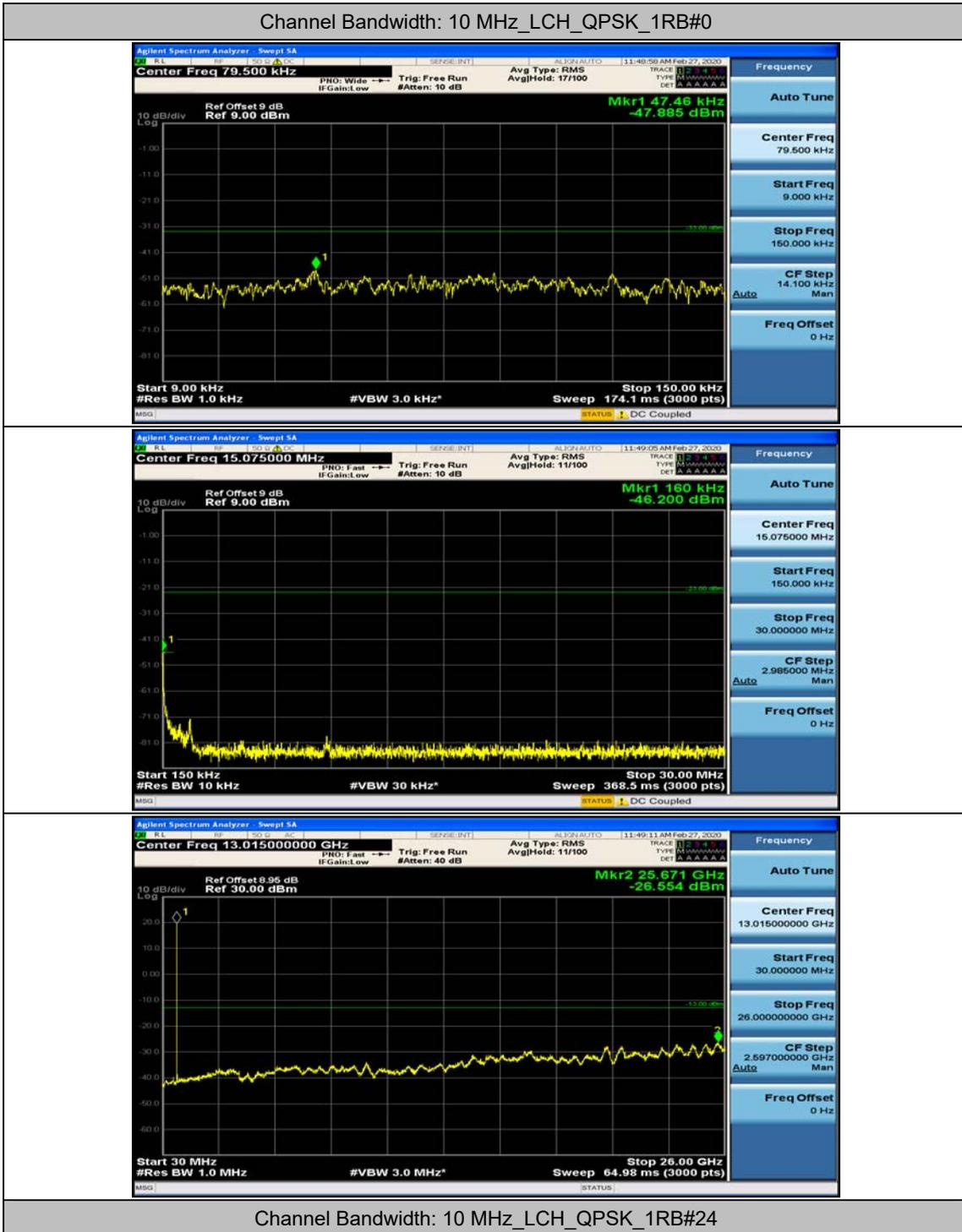
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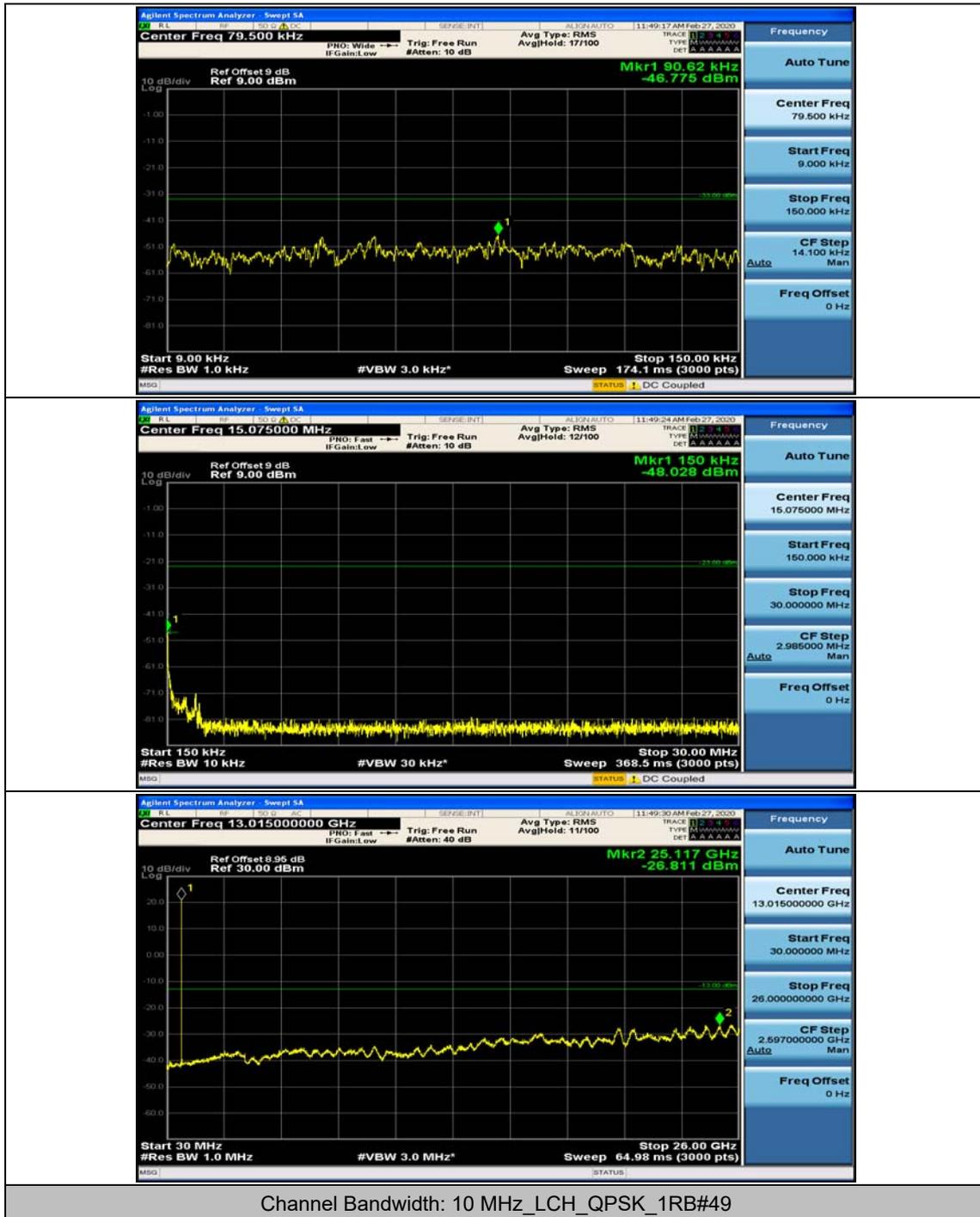


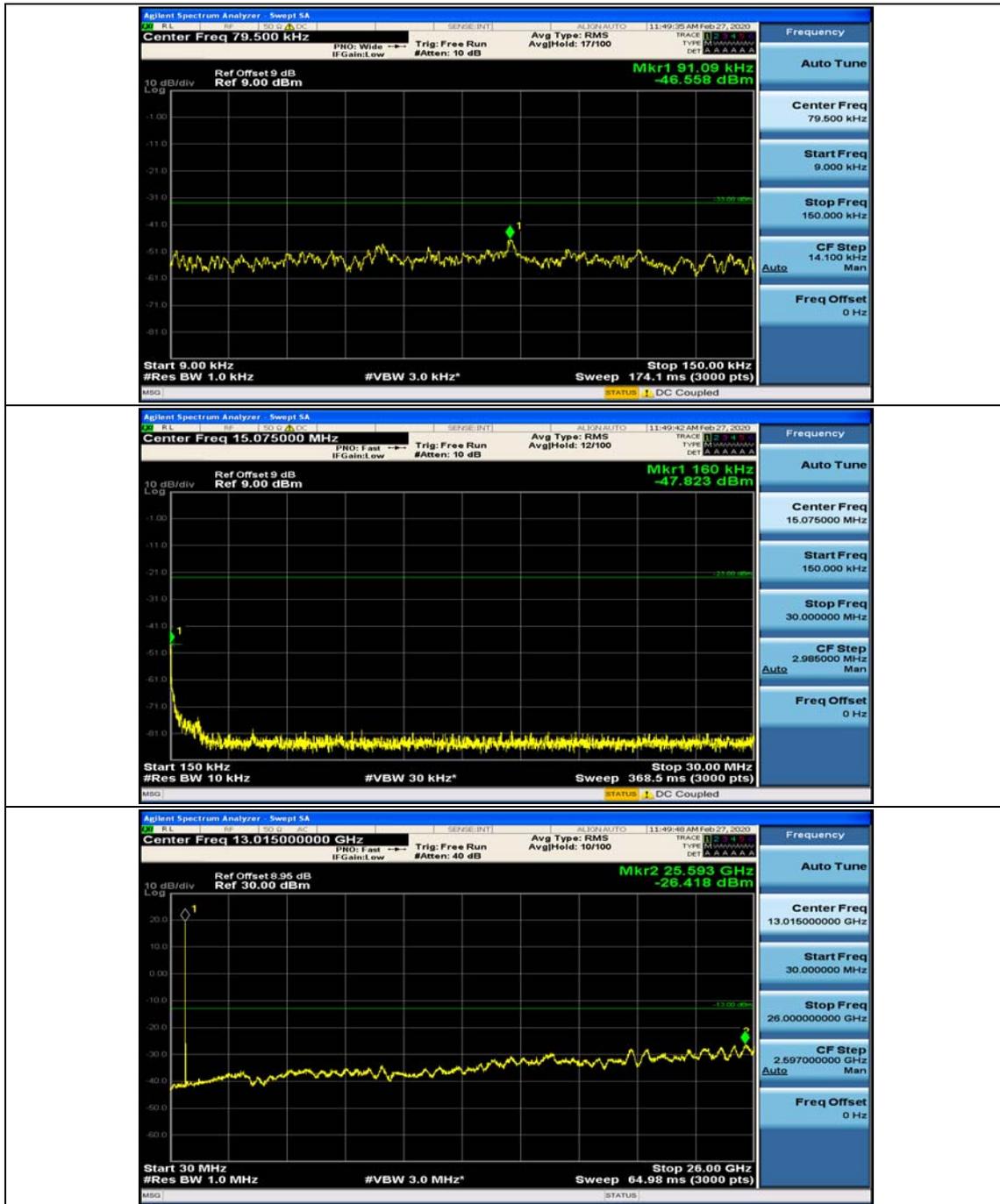




Channel Bandwidth: 10 MHz

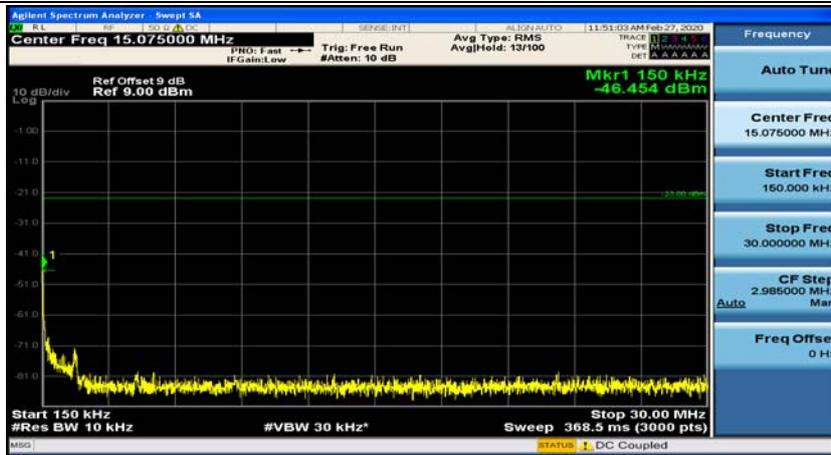




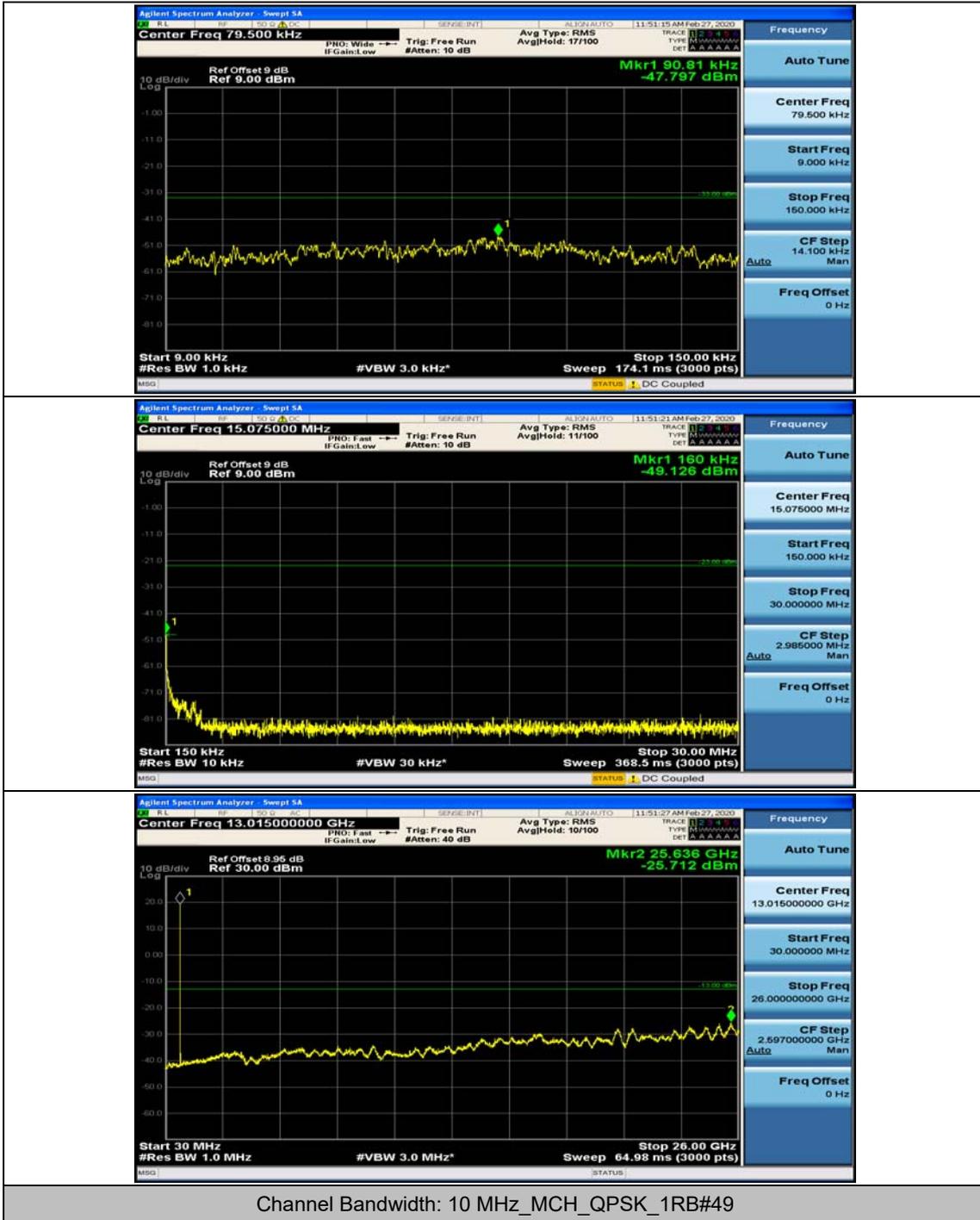


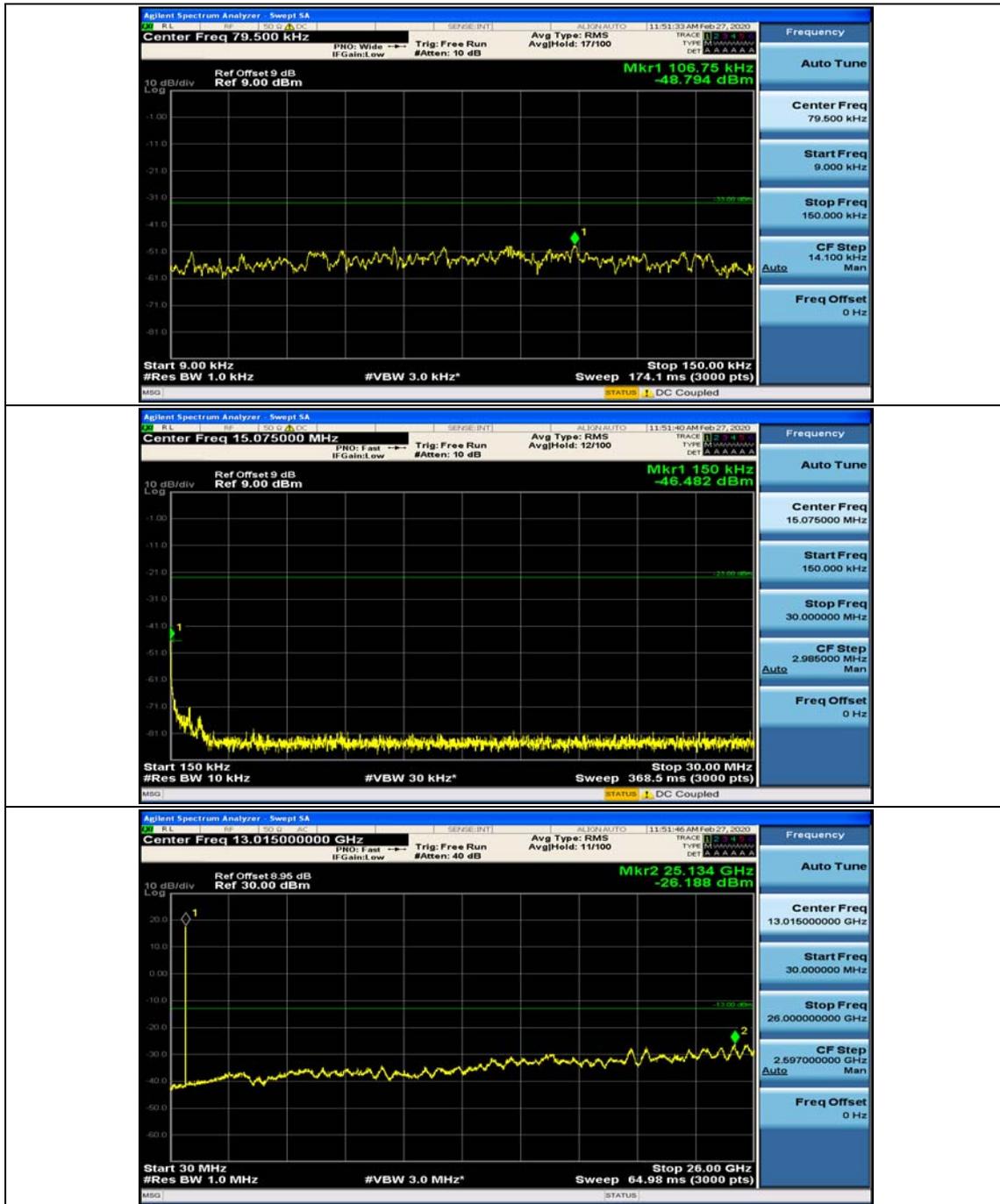


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



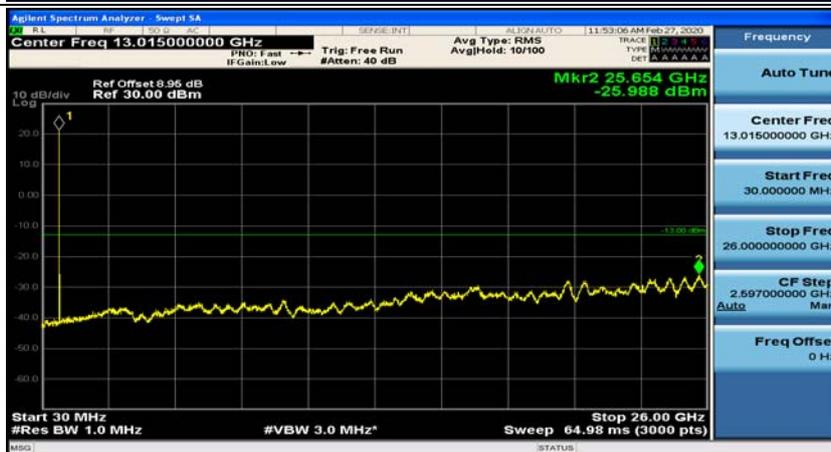
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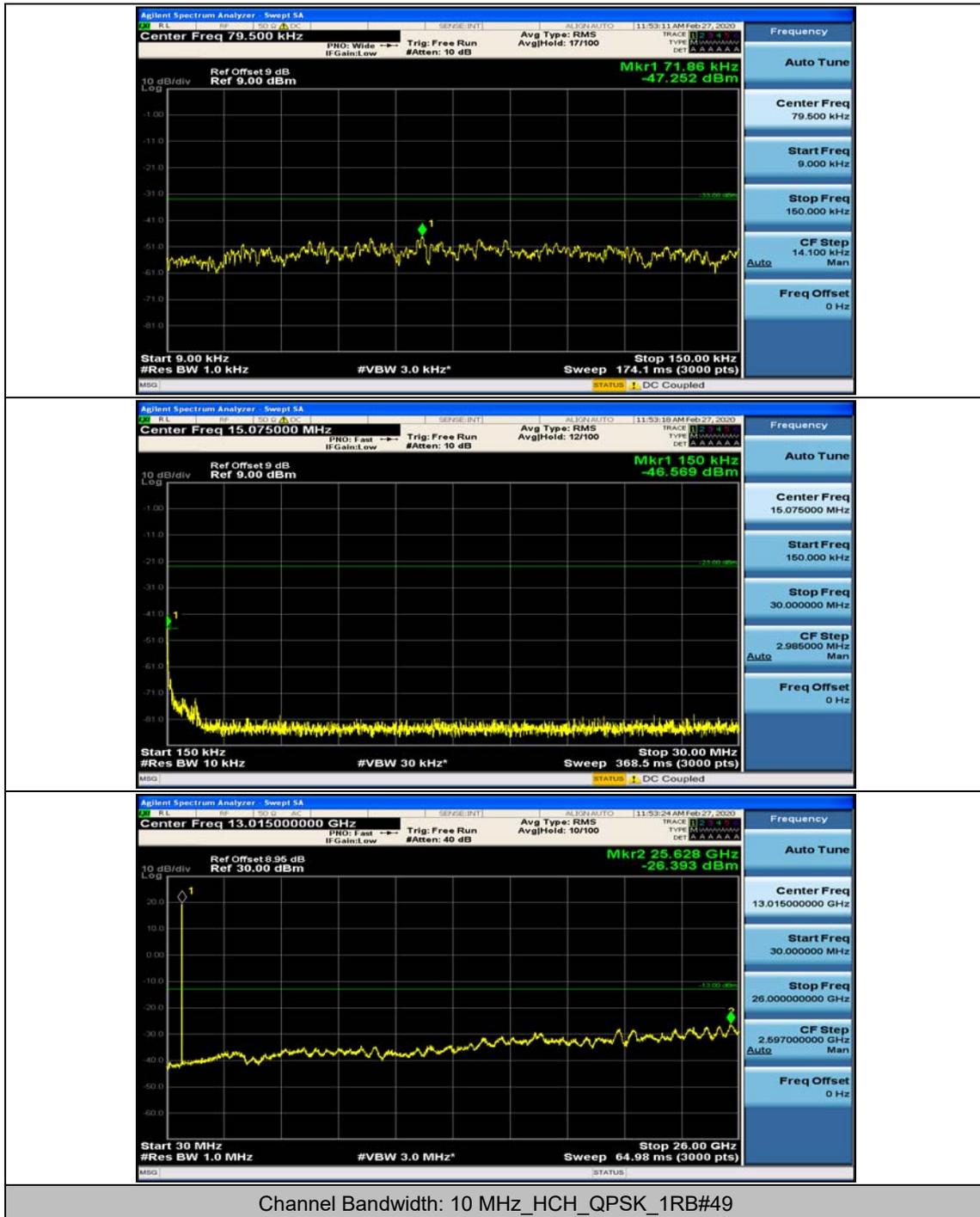


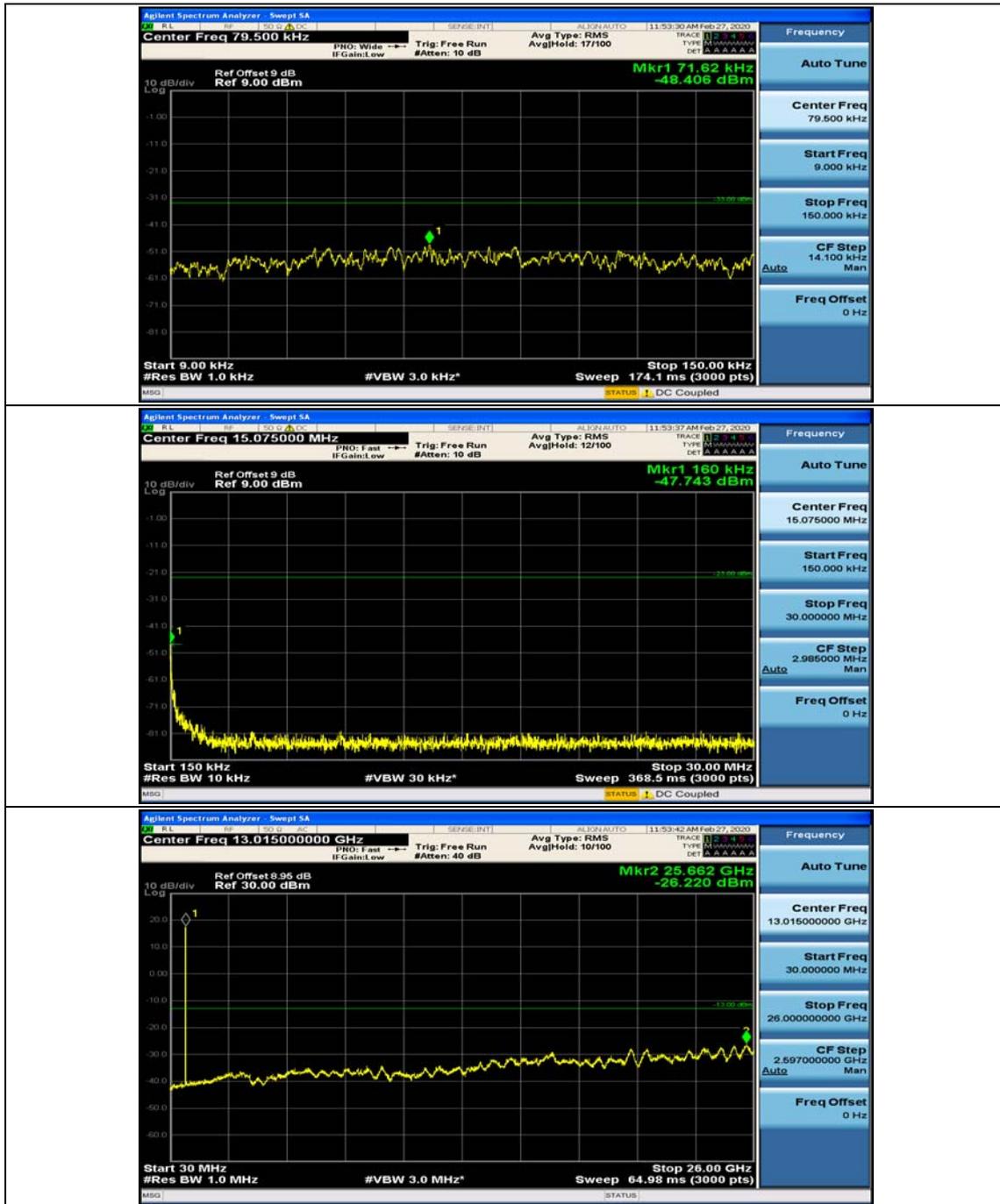


Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



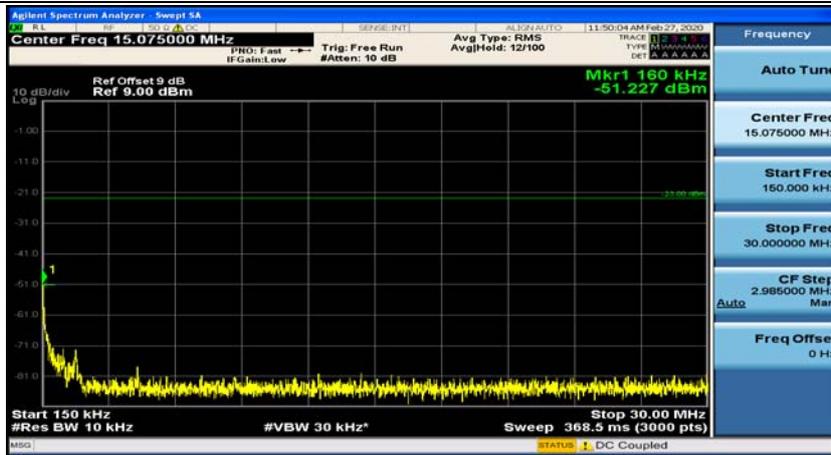
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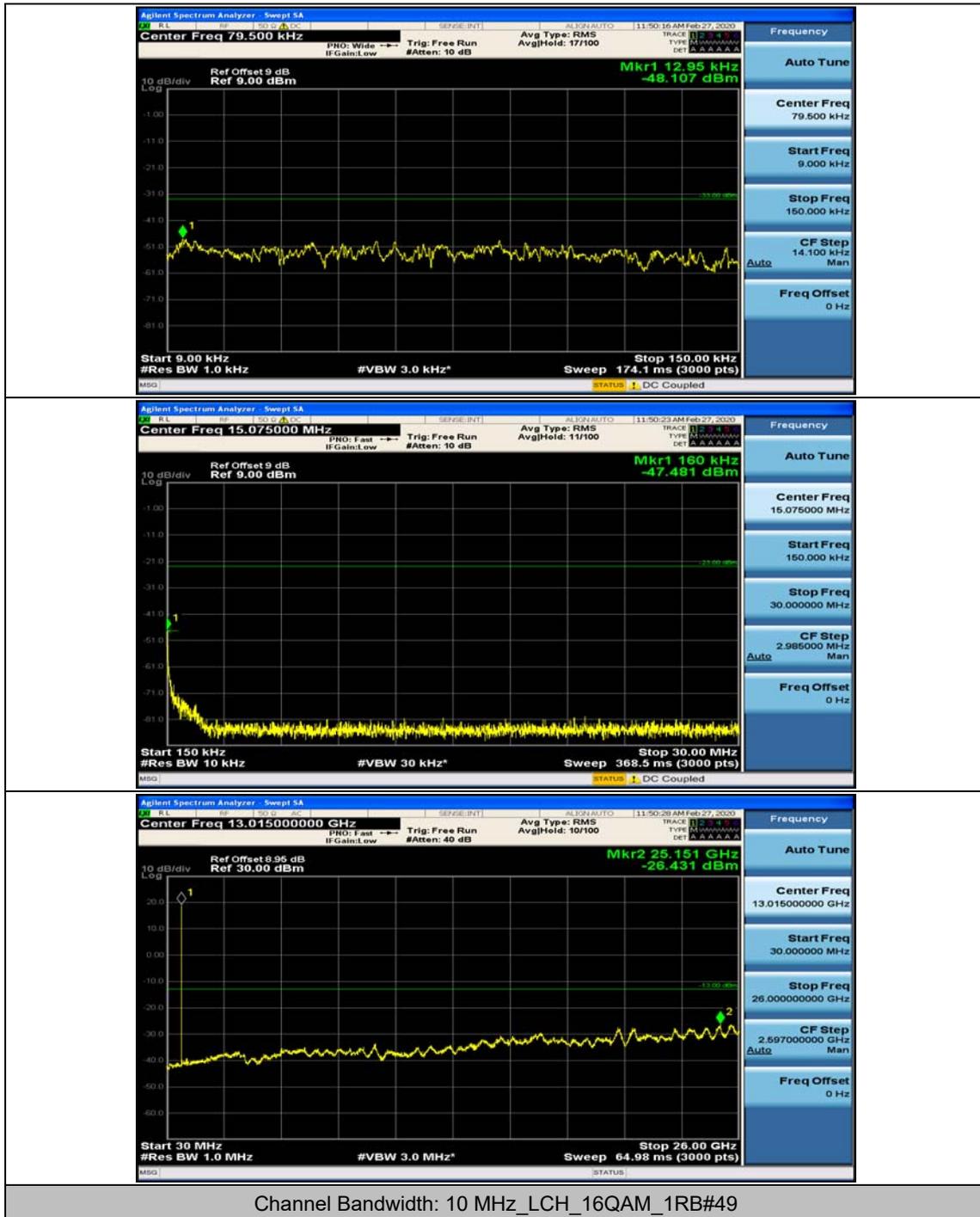


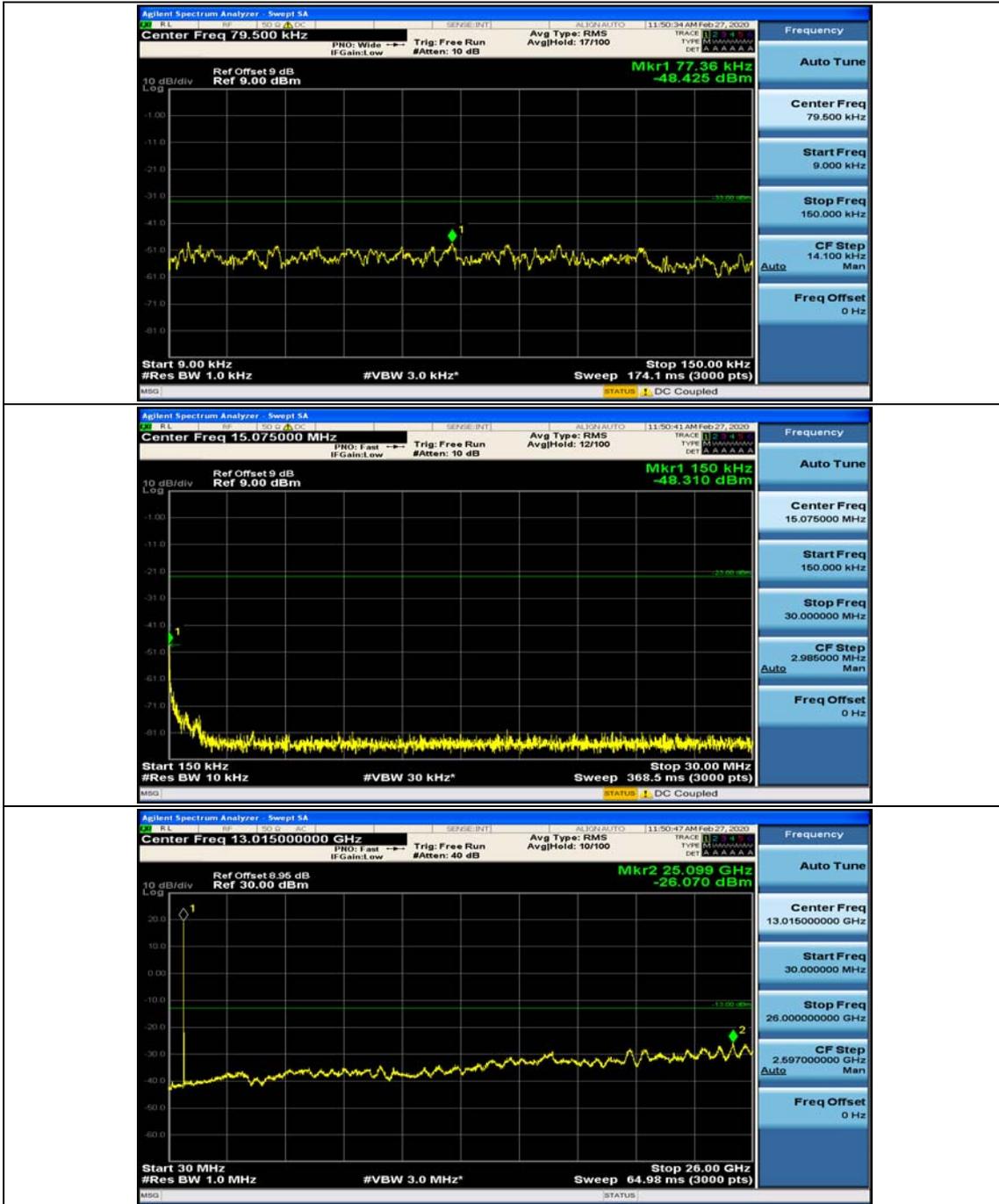


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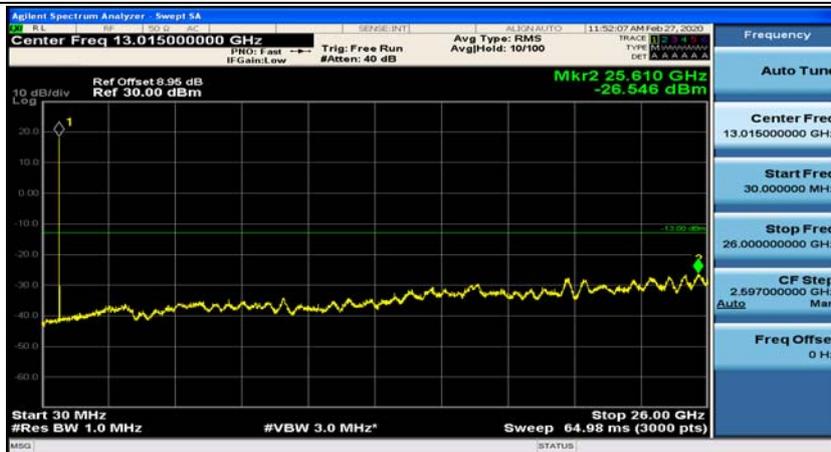
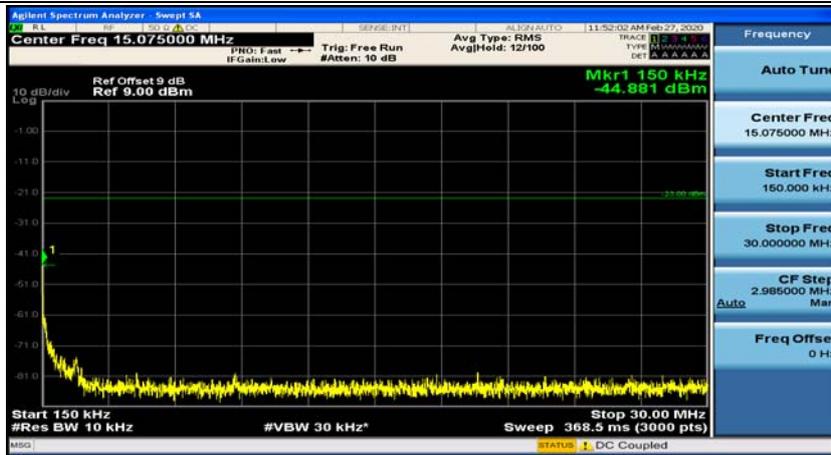
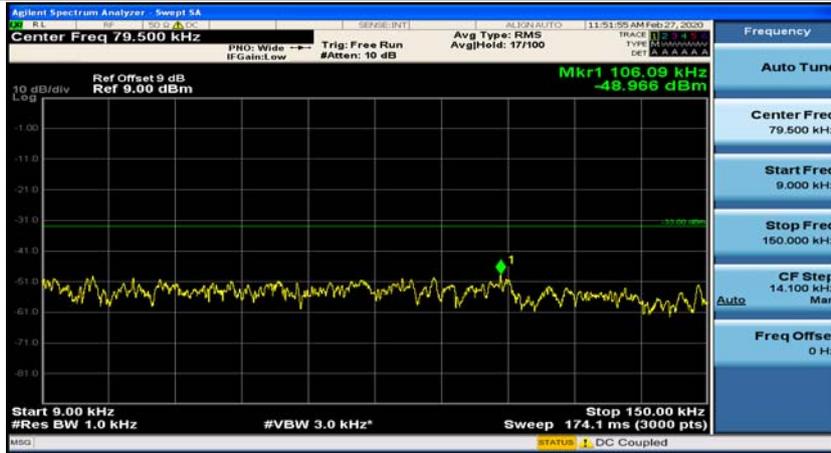
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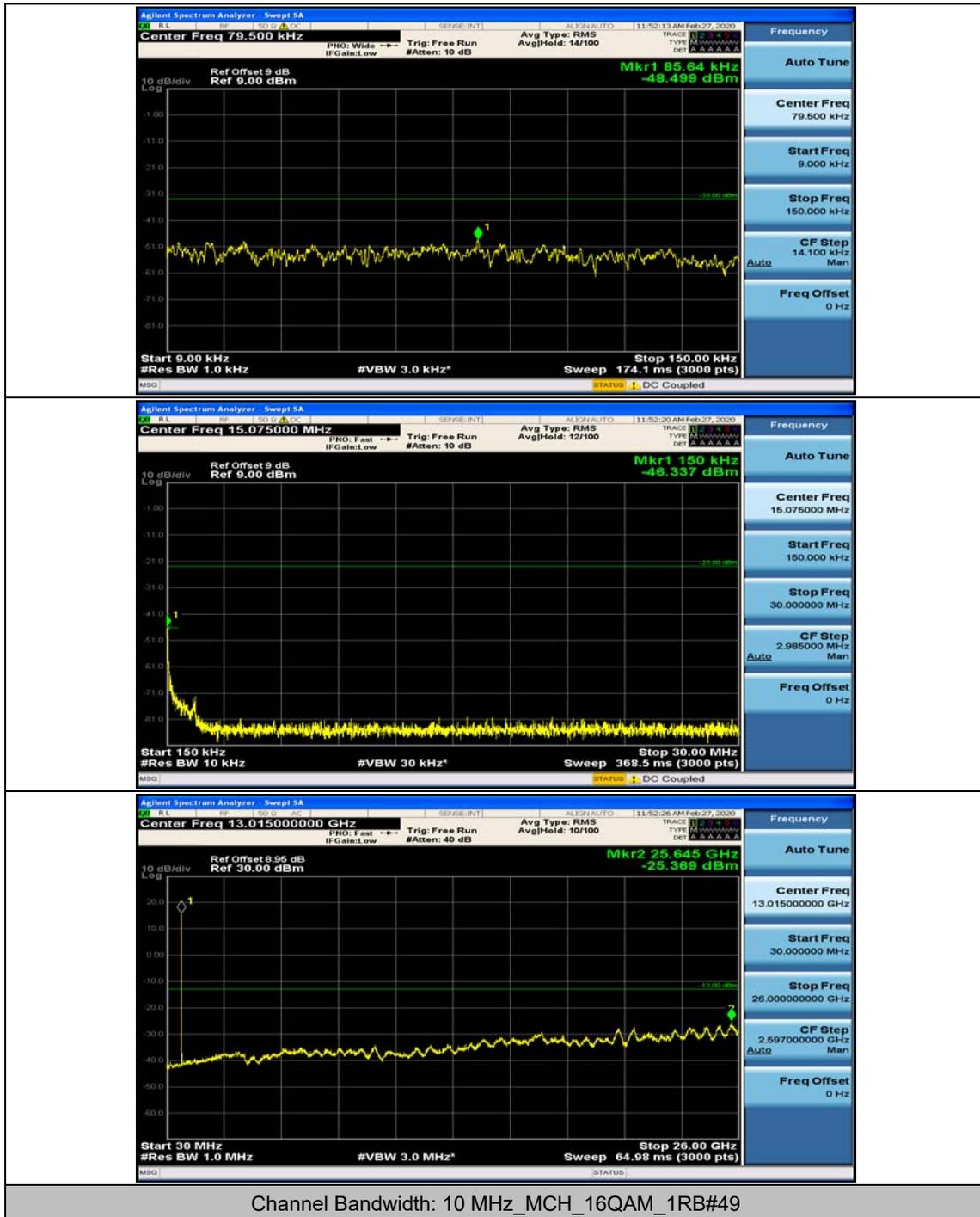


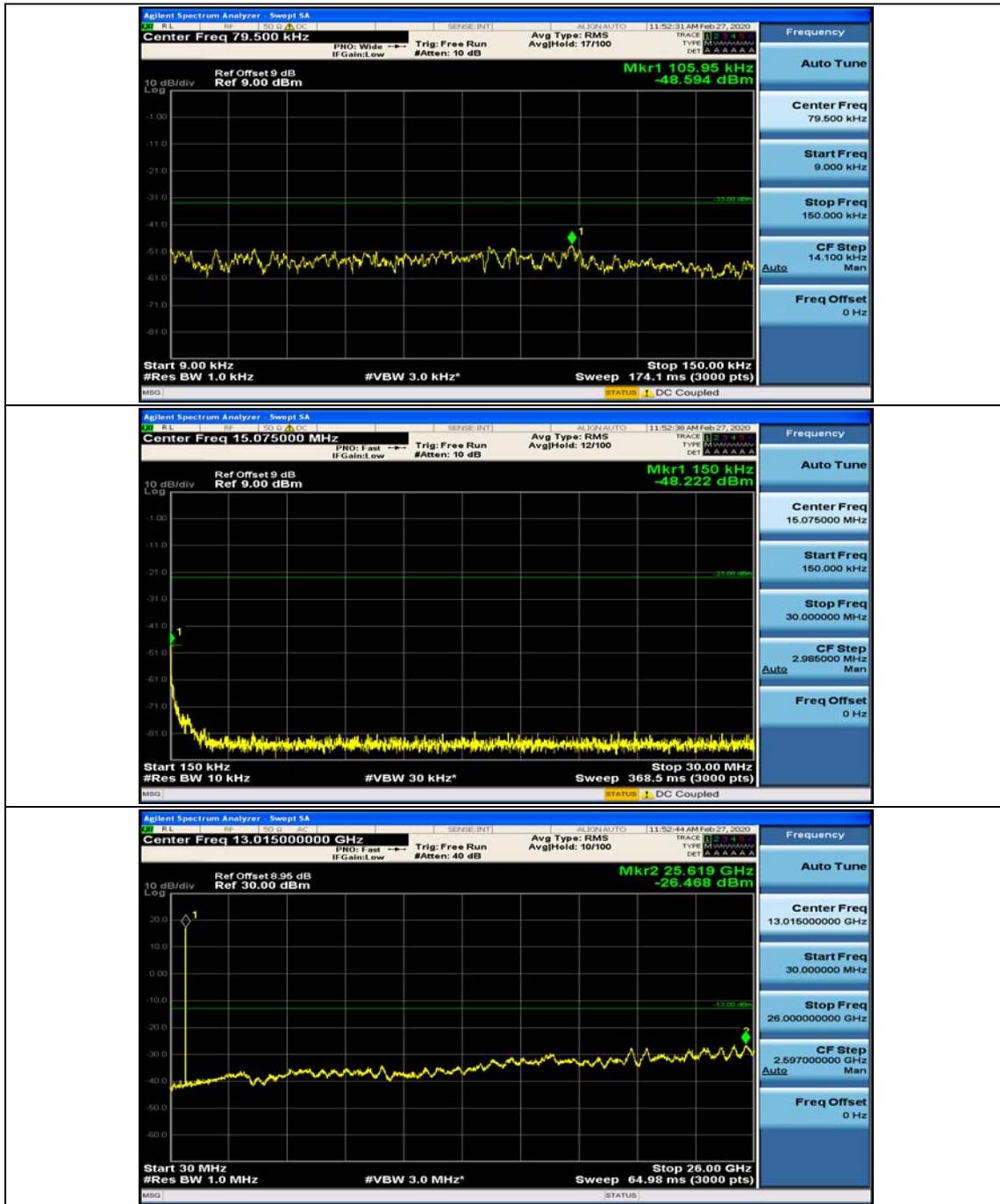


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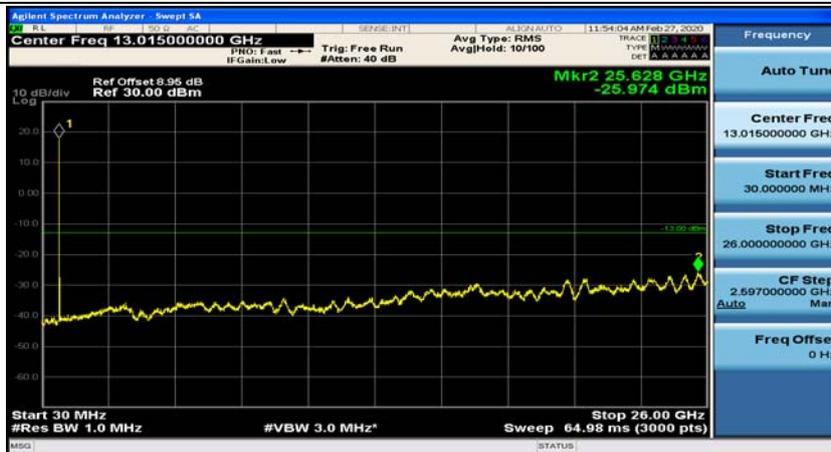
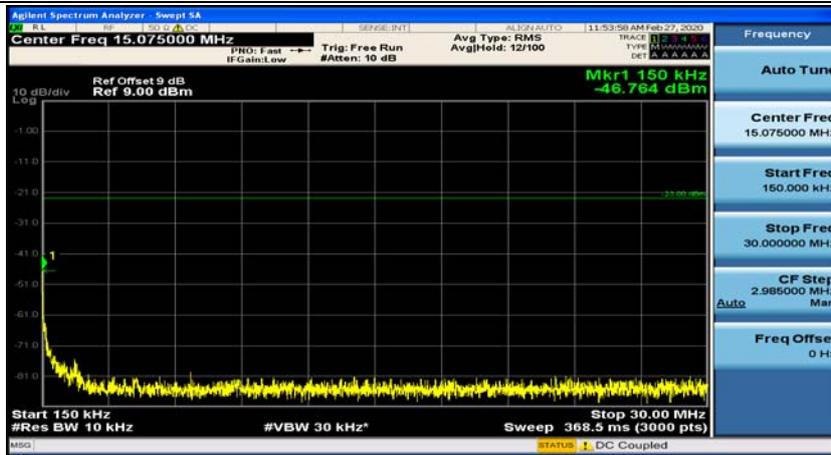
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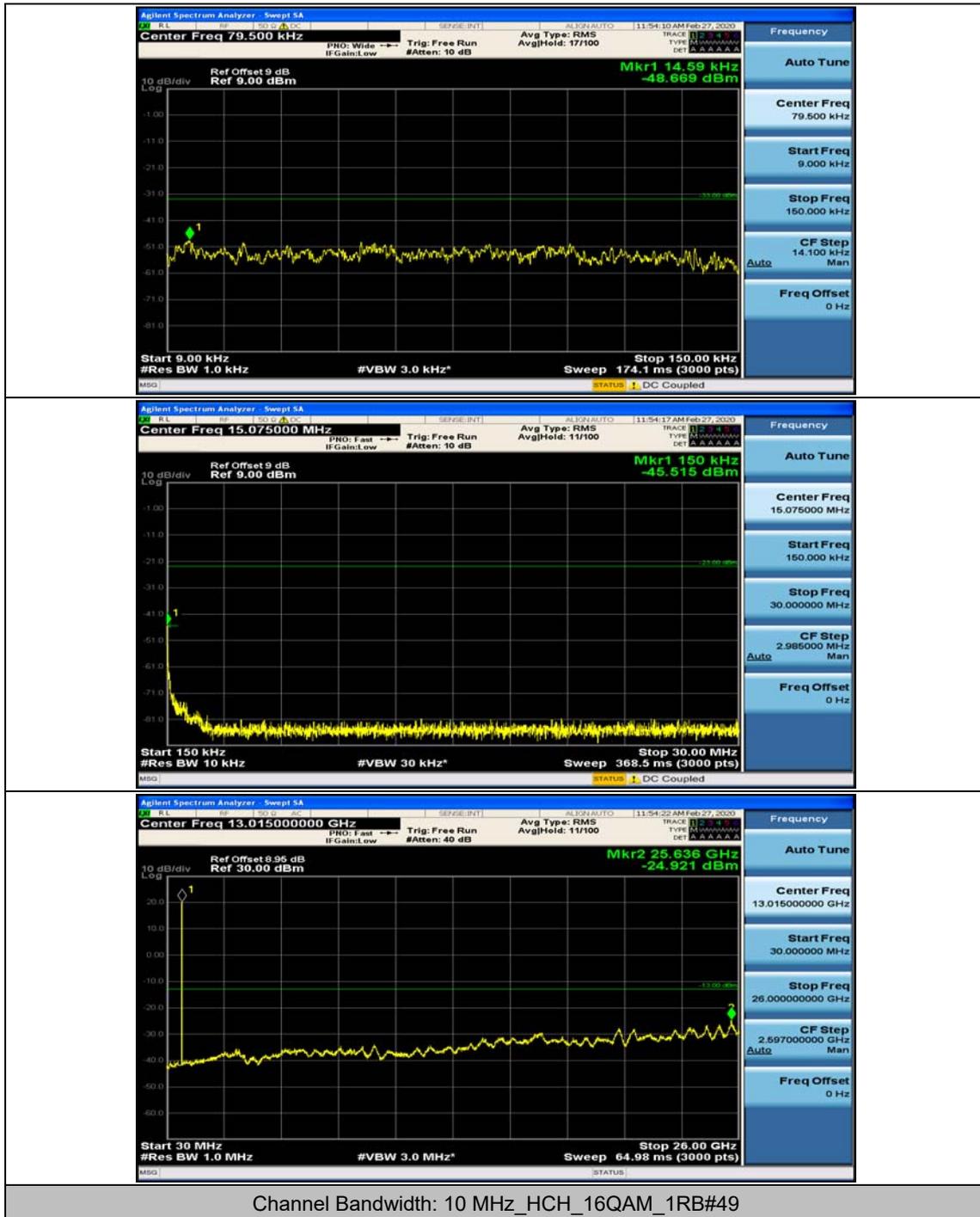


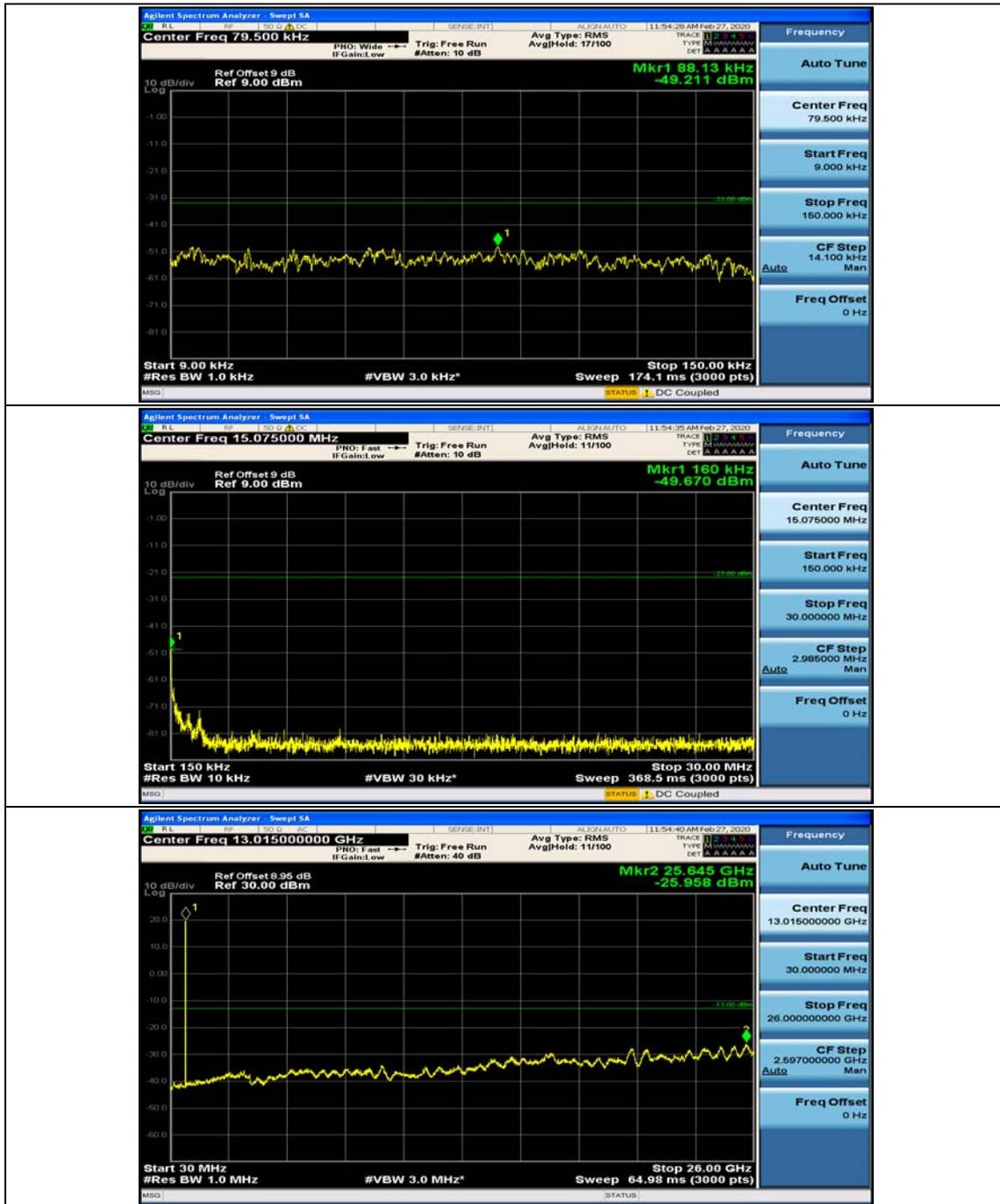


Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24







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	1.43	0.002044	± 2.5	PASS
		VN	TN	4.1	0.005860	± 2.5	PASS
		VH	TN	-1.61	-0.002301	± 2.5	PASS
	MCH	VL	TN	1.84	0.002601	± 2.5	PASS
		VN	TN	-0.3	-0.000424	± 2.5	PASS
		VH	TN	-1.66	-0.002346	± 2.5	PASS
	HCH	VL	TN	-0.38	-0.000531	± 2.5	PASS
		VN	TN	2.49	0.003481	± 2.5	PASS
		VH	TN	0.78	0.001090	± 2.5	PASS
16QAM	LCH	VL	TN	2.76	0.003945	± 2.5	PASS
		VN	TN	3.37	0.004816	± 2.5	PASS
		VH	TN	-0.89	-0.001272	± 2.5	PASS
	MCH	VL	TN	3.84	0.005428	± 2.5	PASS
		VN	TN	-1.9	-0.002686	± 2.5	PASS
		VH	TN	1.43	0.002021	± 2.5	PASS
	HCH	VL	TN	0.32	0.000447	± 2.5	PASS
		VN	TN	4.9	0.006850	± 2.5	PASS
		VH	TN	0.72	0.001007	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.82	0.002601	± 2.5	PASS
		VN	-20	4.74	0.006774	± 2.5	PASS
		VN	-10	1.32	0.001887	± 2.5	PASS
		VN	0	3.27	0.004673	± 2.5	PASS
		VN	10	0.44	0.000629	± 2.5	PASS
		VN	20	3.7	0.005288	± 2.5	PASS
		VN	30	-0.52	-0.000743	± 2.5	PASS
		VN	40	4.46	0.006374	± 2.5	PASS
		VN	50	2.06	0.002944	± 2.5	PASS
	MCH	VN	-30	-1.88	-0.002657	± 2.5	PASS
		VN	-20	0.27	0.000382	± 2.5	PASS



		VN	-10	1.2	0.001696	± 2.5	PASS		
		VN	0	3.52	0.004975	± 2.5	PASS		
		VN	10	-1.11	-0.001569	± 2.5	PASS		
		VN	20	1.88	0.002657	± 2.5	PASS		
		VN	30	3.56	0.005032	± 2.5	PASS		
		VN	40	-1.03	-0.001456	± 2.5	PASS		
		VN	50	-0.45	-0.000636	± 2.5	PASS		
	HCH	VN	-30	3.32	0.004641	± 2.5	PASS		
		VN	-20	2.18	0.003048	± 2.5	PASS		
		VN	-10	4.44	0.006207	± 2.5	PASS		
		VN	0	-1.34	-0.001873	± 2.5	PASS		
		VN	10	2.33	0.003257	± 2.5	PASS		
		VN	20	1.58	0.002209	± 2.5	PASS		
		VN	30	-0.36	-0.000503	± 2.5	PASS		
		VN	40	2.37	0.003313	± 2.5	PASS		
		VN	50	0.45	0.000629	± 2.5	PASS		
		16QAM	LCH	VN	-30	2.88	0.004116	± 2.5	PASS
				VN	-20	4.24	0.006060	± 2.5	PASS
VN	-10			1.13	0.001615	± 2.5	PASS		
VN	0			3.23	0.004616	± 2.5	PASS		
VN	10			0.63	0.000900	± 2.5	PASS		
VN	20			4.12	0.005888	± 2.5	PASS		
VN	30			0.95	0.001358	± 2.5	PASS		
VN	40			-0.79	-0.001129	± 2.5	PASS		
VN	50			2.46	0.003516	± 2.5	PASS		
MCH	VN		-30	-1.45	-0.002049	± 2.5	PASS		
	VN		-20	2.2	0.003110	± 2.5	PASS		
	VN		-10	2.89	0.004085	± 2.5	PASS		
	VN		0	2.72	0.003845	± 2.5	PASS		
	VN		10	2.89	0.004085	± 2.5	PASS		
	VN		20	0.18	0.000254	± 2.5	PASS		
	VN		30	1.51	0.002134	± 2.5	PASS		
	VN		40	3.99	0.005640	± 2.5	PASS		
	VN		50	2.92	0.004127	± 2.5	PASS		
HCH	VN		-30	0.76	0.001062	± 2.5	PASS		
	VN		-20	3.38	0.004725	± 2.5	PASS		
	VN		-10	0.39	0.000545	± 2.5	PASS		
	VN		0	2.49	0.003481	± 2.5	PASS		
	VN		10	2.34	0.003271	± 2.5	PASS		
	VN		20	1.2	0.001678	± 2.5	PASS		
	VN		30	0.66	0.000923	± 2.5	PASS		



		VN	40	4.18	0.005844	± 2.5	PASS
		VN	50	0.6	0.000839	± 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	4.98	0.007109	± 2.5	PASS
		VN	TN	1.45	0.002070	± 2.5	PASS
		VH	TN	1.93	0.002755	± 2.5	PASS
	MCH	VL	TN	4.24	0.005993	± 2.5	PASS
		VN	TN	1.18	0.001668	± 2.5	PASS
		VH	TN	0.73	0.001032	± 2.5	PASS
	HCH	VL	TN	1.66	0.002323	± 2.5	PASS
		VN	TN	-0.42	-0.000588	± 2.5	PASS
		VH	TN	4.24	0.005934	± 2.5	PASS
16QAM	LCH	VL	TN	0.71	0.001014	± 2.5	PASS
		VN	TN	3.58	0.005111	± 2.5	PASS
		VH	TN	4.92	0.007024	± 2.5	PASS
	MCH	VL	TN	3.3	0.004664	± 2.5	PASS
		VN	TN	2.81	0.003972	± 2.5	PASS
		VH	TN	4.35	0.006148	± 2.5	PASS
	HCH	VL	TN	2.73	0.003821	± 2.5	PASS
		VN	TN	1.1	0.001540	± 2.5	PASS
		VH	TN	-1.65	-0.002309	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	2.04	0.002912	± 2.5	PASS
		VN	-20	4.95	0.007066	± 2.5	PASS
		VN	-10	4.42	0.006310	± 2.5	PASS
		VN	0	0.87	0.001242	± 2.5	PASS
		VN	10	4.8	0.006852	± 2.5	PASS
		VN	20	-0.56	-0.000799	± 2.5	PASS
		VN	30	-1.09	-0.001556	± 2.5	PASS
		VN	40	-0.15	-0.000214	± 2.5	PASS
		VN	50	3.6	0.005139	± 2.5	PASS
	MCH	VN	-30	2.58	0.003647	± 2.5	PASS
		VN	-20	3.24	0.004580	± 2.5	PASS
		VN	-10	2.69	0.003802	± 2.5	PASS



		VN	0	1.87	0.002643	± 2.5	PASS		
		VN	10	-1.73	-0.002445	± 2.5	PASS		
		VN	20	4.62	0.006530	± 2.5	PASS		
		VN	30	-0.89	-0.001258	± 2.5	PASS		
		VN	40	1.51	0.002134	± 2.5	PASS		
		VN	50	-0.78	-0.001102	± 2.5	PASS		
	HCH	VN	-30	4.42	0.006186	± 2.5	PASS		
		VN	-20	2.68	0.003751	± 2.5	PASS		
		VN	-10	1.64	0.002295	± 2.5	PASS		
		VN	0	0.39	0.000546	± 2.5	PASS		
		VN	10	2.22	0.003107	± 2.5	PASS		
		VN	20	4.54	0.006354	± 2.5	PASS		
		VN	30	-0.04	-0.000056	± 2.5	PASS		
		VN	40	4.63	0.006480	± 2.5	PASS		
		VN	50	-1.87	-0.002617	± 2.5	PASS		
		16QAM	LCH	VN	-30	0.8	0.001142	± 2.5	PASS
				VN	-20	-0.09	-0.000128	± 2.5	PASS
				VN	-10	-1.34	-0.001913	± 2.5	PASS
VN	0			3.87	0.005525	± 2.5	PASS		
VN	10			4.41	0.006296	± 2.5	PASS		
VN	20			4.14	0.005910	± 2.5	PASS		
VN	30			2.12	0.003026	± 2.5	PASS		
VN	40			-1.98	-0.002827	± 2.5	PASS		
VN	50			4.13	0.005896	± 2.5	PASS		
MCH	VN		-30	3.65	0.005159	± 2.5	PASS		
	VN		-20	0.06	0.000085	± 2.5	PASS		
	VN		-10	4.62	0.006530	± 2.5	PASS		
	VN		0	-0.01	-0.000014	± 2.5	PASS		
	VN		10	4.52	0.006389	± 2.5	PASS		
	VN		20	0.67	0.000947	± 2.5	PASS		
	VN		30	-0.73	-0.001032	± 2.5	PASS		
	VN		40	2.55	0.003604	± 2.5	PASS		
	VN		50	1.76	0.002488	± 2.5	PASS		
HCH	VN		-30	1.71	0.002393	± 2.5	PASS		
	VN		-20	-1.69	-0.002365	± 2.5	PASS		
	VN		-10	1.91	0.002673	± 2.5	PASS		
	VN		0	2.32	0.003247	± 2.5	PASS		
	VN		10	4.93	0.006900	± 2.5	PASS		
	VN		20	4.32	0.006046	± 2.5	PASS		
	VN		30	0.03	0.000042	± 2.5	PASS		
	VN		40	2.16	0.003023	± 2.5	PASS		



		VN	50	-1.77	-0.002477	± 2.5	PASS
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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	3.01	0.004291	± 2.5	PASS
		VN	TN	2.01	0.002865	± 2.5	PASS
		VH	TN	3.27	0.004661	± 2.5	PASS
	MCH	VL	TN	4.41	0.006233	± 2.5	PASS
		VN	TN	-0.33	-0.000466	± 2.5	PASS
		VH	TN	0.32	0.000452	± 2.5	PASS
	HCH	VL	TN	0.16	0.000224	± 2.5	PASS
		VN	TN	0.34	0.000477	± 2.5	PASS
		VH	TN	4.1	0.005746	± 2.5	PASS
16QAM	LCH	VL	TN	-0.75	-0.001069	± 2.5	PASS
		VN	TN	2.23	0.003179	± 2.5	PASS
		VH	TN	1.89	0.002694	± 2.5	PASS
	MCH	VL	TN	3.23	0.004565	± 2.5	PASS
		VN	TN	0.46	0.000650	± 2.5	PASS
		VH	TN	-1.62	-0.002290	± 2.5	PASS
	HCH	VL	TN	2.77	0.003882	± 2.5	PASS
		VN	TN	1.38	0.001934	± 2.5	PASS
		VH	TN	2.11	0.002957	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	0.86	0.001226	± 2.5	PASS
		VN	-20	1.48	0.002110	± 2.5	PASS
		VN	-10	-1.54	-0.002195	± 2.5	PASS
		VN	0	0.76	0.001083	± 2.5	PASS
		VN	10	4.57	0.006515	± 2.5	PASS
		VN	20	1.18	0.001682	± 2.5	PASS
		VN	30	1.85	0.002637	± 2.5	PASS
		VN	40	-1.72	-0.002452	± 2.5	PASS
		VN	50	1.84	0.002623	± 2.5	PASS
	MCH	VN	-30	3.18	0.004495	± 2.5	PASS
		VN	-20	1.21	0.001710	± 2.5	PASS
		VN	-10	2.31	0.003265	± 2.5	PASS
		VN	0	-0.99	-0.001399	± 2.5	PASS



		VN	10	2.28	0.003223	± 2.5	PASS
		VN	20	-0.6	-0.000848	± 2.5	PASS
		VN	30	1.78	0.002516	± 2.5	PASS
		VN	40	-0.07	-0.000099	± 2.5	PASS
		VN	50	2.04	0.002883	± 2.5	PASS
	HCH	VN	-30	-0.48	-0.000673	± 2.5	PASS
		VN	-20	3.61	0.005060	± 2.5	PASS
		VN	-10	-1.46	-0.002046	± 2.5	PASS
		VN	0	0.85	0.001191	± 2.5	PASS
		VN	10	-1.17	-0.001640	± 2.5	PASS
		VN	20	4.41	0.006181	± 2.5	PASS
		VN	30	0.95	0.001331	± 2.5	PASS
		VN	40	1.36	0.001906	± 2.5	PASS
		VN	50	4.44	0.006223	± 2.5	PASS
		16QAM	LCH	VN	-30	3.45	0.004918
VN	-20			4.45	0.006344	± 2.5	PASS
VN	-10			1.77	0.002523	± 2.5	PASS
VN	0			4.66	0.006643	± 2.5	PASS
VN	10			1.91	0.002723	± 2.5	PASS
VN	20			2.41	0.003435	± 2.5	PASS
VN	30			3.41	0.004861	± 2.5	PASS
VN	40			1.04	0.001483	± 2.5	PASS
VN	50			4.14	0.005902	± 2.5	PASS
MCH	VN		-30	0.79	0.001117	± 2.5	PASS
	VN		-20	-1.46	-0.002064	± 2.5	PASS
	VN		-10	3.42	0.004834	± 2.5	PASS
	VN		0	4.45	0.006290	± 2.5	PASS
	VN		10	4.79	0.006770	± 2.5	PASS
	VN		20	0.41	0.000580	± 2.5	PASS
	VN		30	3.76	0.005314	± 2.5	PASS
	VN		40	0.46	0.000650	± 2.5	PASS
	VN		50	0.69	0.000975	± 2.5	PASS
HCH	VN		-30	0.07	0.000098	± 2.5	PASS
	VN		-20	4.55	0.006377	± 2.5	PASS
	VN		-10	3.76	0.005270	± 2.5	PASS
	VN		0	3.9	0.005466	± 2.5	PASS
	VN		10	4.33	0.006069	± 2.5	PASS
	VN		20	4.17	0.005844	± 2.5	PASS
	VN		30	0.46	0.000645	± 2.5	PASS
	VN		40	1.62	0.002270	± 2.5	PASS
	VN		50	2.64	0.003700	± 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	2.69	0.003821	± 2.5	PASS
		VN	TN	3.98	0.005653	± 2.5	PASS
		VH	TN	4.62	0.006563	± 2.5	PASS
	MCH	VL	TN	4.25	0.006007	± 2.5	PASS
		VN	TN	-1.1	-0.001555	± 2.5	PASS
		VH	TN	-1.98	-0.002799	± 2.5	PASS
	HCH	VL	TN	4.72	0.006639	± 2.5	PASS
		VN	TN	3.79	0.005331	± 2.5	PASS
		VH	TN	-0.6	-0.000844	± 2.5	PASS
16QAM	LCH	VL	TN	1.57	0.002230	± 2.5	PASS
		VN	TN	0.31	0.000440	± 2.5	PASS
		VH	TN	1.21	0.001719	± 2.5	PASS
	MCH	VL	TN	2.07	0.002926	± 2.5	PASS
		VN	TN	1.04	0.001470	± 2.5	PASS
		VH	TN	1.99	0.002813	± 2.5	PASS
	HCH	VL	TN	1.01	0.001421	± 2.5	PASS
		VN	TN	-0.17	-0.000239	± 2.5	PASS
		VH	TN	3.57	0.005021	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.66	-0.002358	± 2.5	PASS
		VN	-20	-1.48	-0.002102	± 2.5	PASS
		VN	-10	-0.99	-0.001406	± 2.5	PASS
		VN	0	-0.92	-0.001307	± 2.5	PASS
		VN	10	4.12	0.005852	± 2.5	PASS
		VN	20	3.31	0.004702	± 2.5	PASS
		VN	30	0.62	0.000881	± 2.5	PASS
		VN	40	-0.3	-0.000426	± 2.5	PASS
		VN	50	-1.62	-0.002301	± 2.5	PASS
	MCH	VN	-30	-1.88	-0.002657	± 2.5	PASS
		VN	-20	-0.42	-0.000594	± 2.5	PASS
		VN	-10	0.61	0.000862	± 2.5	PASS
		VN	0	2.69	0.003802	± 2.5	PASS
		VN	10	1.47	0.002078	± 2.5	PASS
		VN	20	-1.49	-0.002106	± 2.5	PASS



		VN	30	2.92	0.004127	± 2.5	PASS
		VN	40	-0.89	-0.001258	± 2.5	PASS
		VN	50	1.53	0.002163	± 2.5	PASS
	HCH	VN	-30	-1.34	-0.001885	± 2.5	PASS
		VN	-20	-0.49	-0.000689	± 2.5	PASS
		VN	-10	0.15	0.000211	± 2.5	PASS
		VN	0	0.98	0.001378	± 2.5	PASS
		VN	10	2.24	0.003150	± 2.5	PASS
		VN	20	1.1	0.001547	± 2.5	PASS
		VN	30	-0.16	-0.000225	± 2.5	PASS
		VN	40	1.07	0.001505	± 2.5	PASS
		VN	50	0.66	0.000928	± 2.5	PASS
16QAM	LCH	VN	-30	0.59	0.000838	± 2.5	PASS
		VN	-20	2.65	0.003764	± 2.5	PASS
		VN	-10	0.41	0.000582	± 2.5	PASS
		VN	0	1.96	0.002784	± 2.5	PASS
		VN	10	-0.93	-0.001321	± 2.5	PASS
		VN	20	3.3	0.004688	± 2.5	PASS
		VN	30	0.62	0.000881	± 2.5	PASS
		VN	40	-1.32	-0.001875	± 2.5	PASS
		VN	50	-0.27	-0.000384	± 2.5	PASS
	MCH	VN	-30	1.8	0.002544	± 2.5	PASS
		VN	-20	3.97	0.005611	± 2.5	PASS
		VN	-10	2.83	0.004000	± 2.5	PASS
		VN	0	2.56	0.003618	± 2.5	PASS
		VN	10	2.92	0.004127	± 2.5	PASS
		VN	20	4.78	0.006756	± 2.5	PASS
		VN	30	3.1	0.004382	± 2.5	PASS
		VN	40	3.6	0.005088	± 2.5	PASS
		VN	50	-1.87	-0.002643	± 2.5	PASS
	HCH	VN	-30	2.21	0.003108	± 2.5	PASS
		VN	-20	3.66	0.005148	± 2.5	PASS
		VN	-10	2.99	0.004205	± 2.5	PASS
		VN	0	4.9	0.006892	± 2.5	PASS
		VN	10	4.62	0.006498	± 2.5	PASS
		VN	20	-1.07	-0.001505	± 2.5	PASS
		VN	30	4.13	0.005809	± 2.5	PASS
		VN	40	4.78	0.006723	± 2.5	PASS
		VN	50	1.06	0.001491	± 2.5	PASS