



(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#0



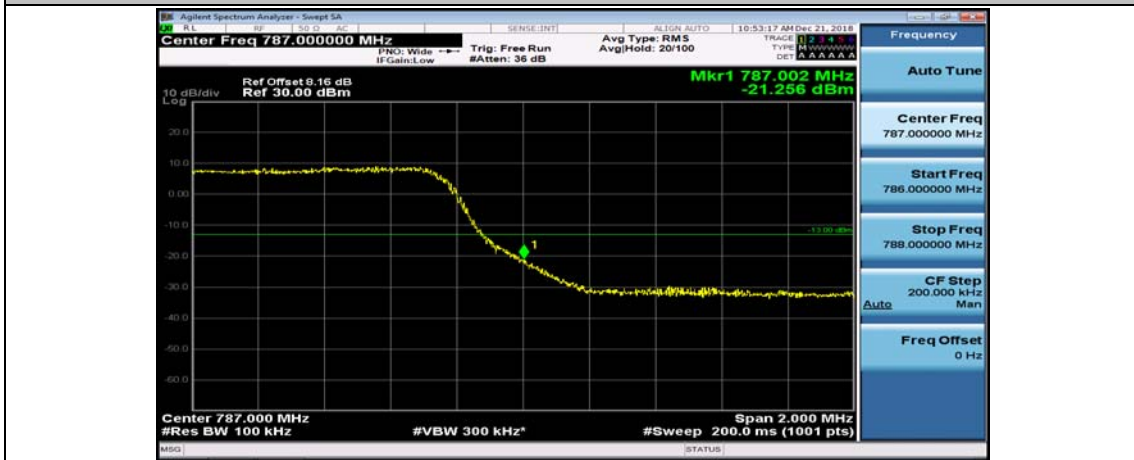
(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#6



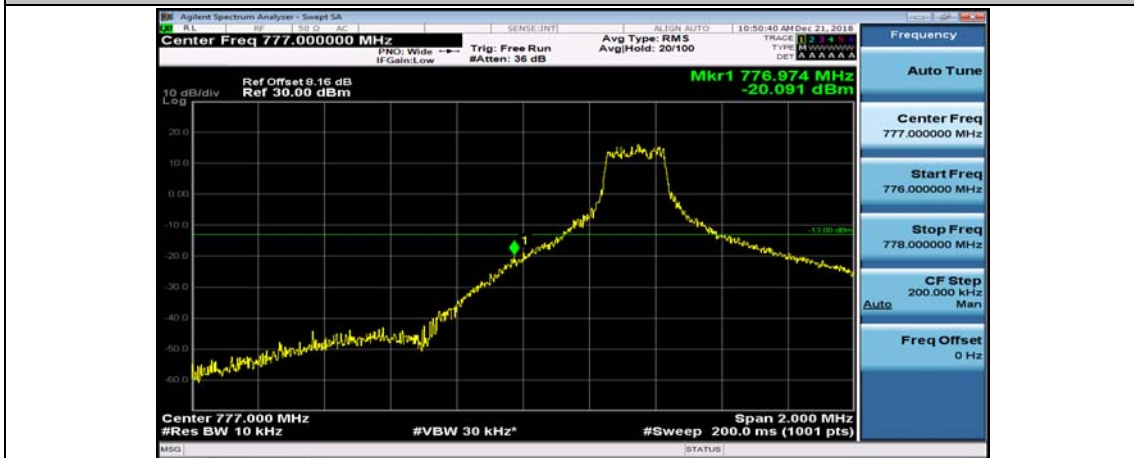
(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#13



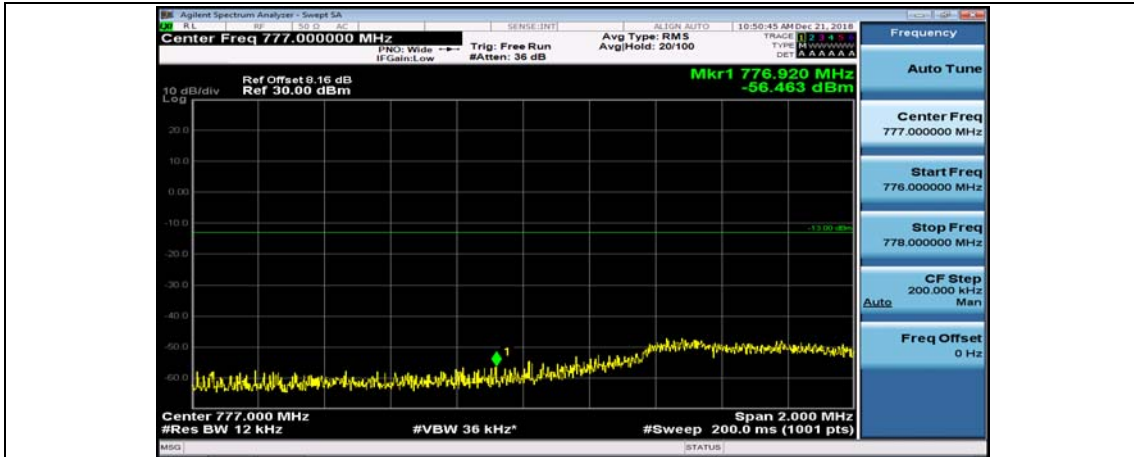
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



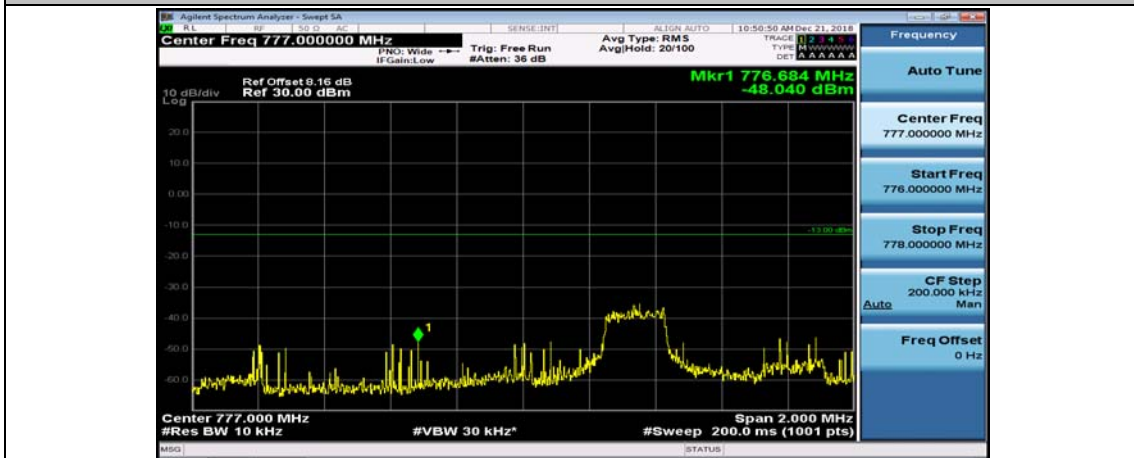
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



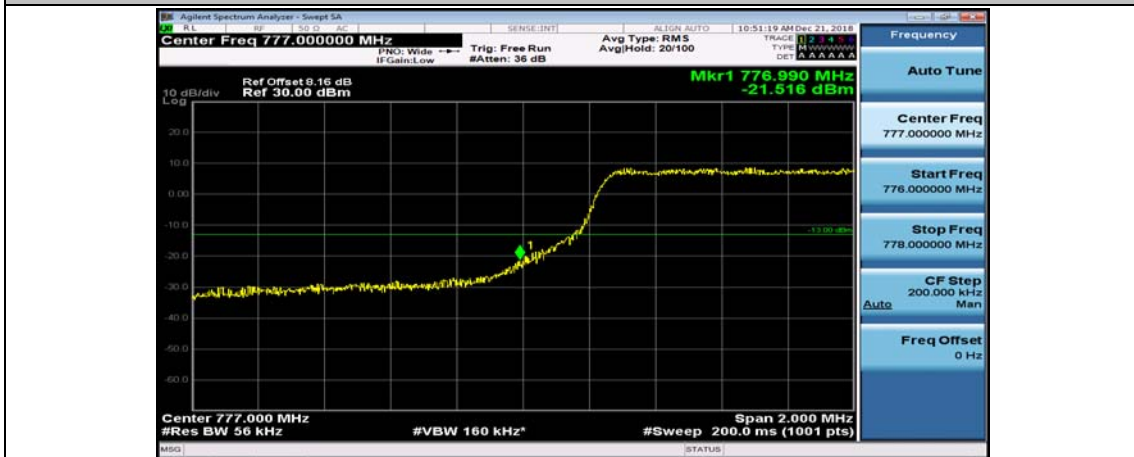
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



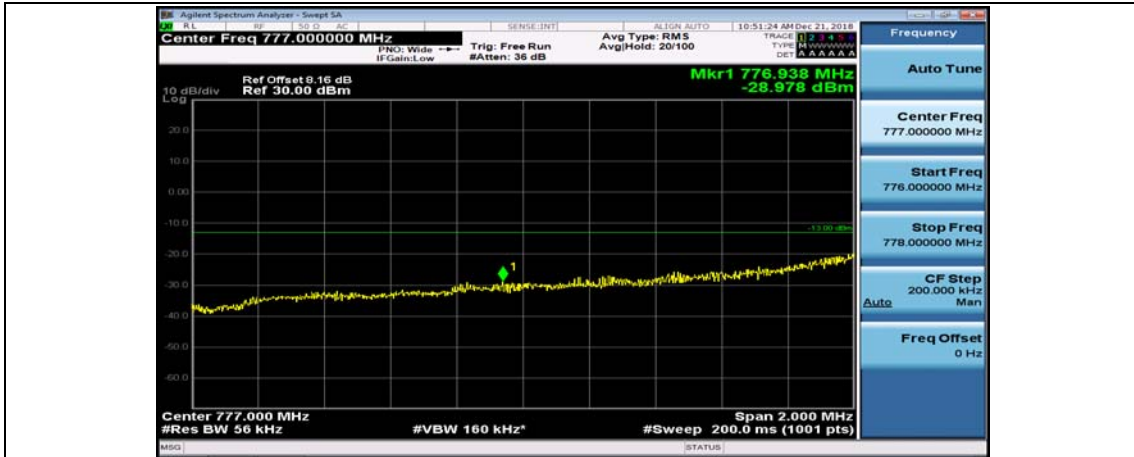
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#0



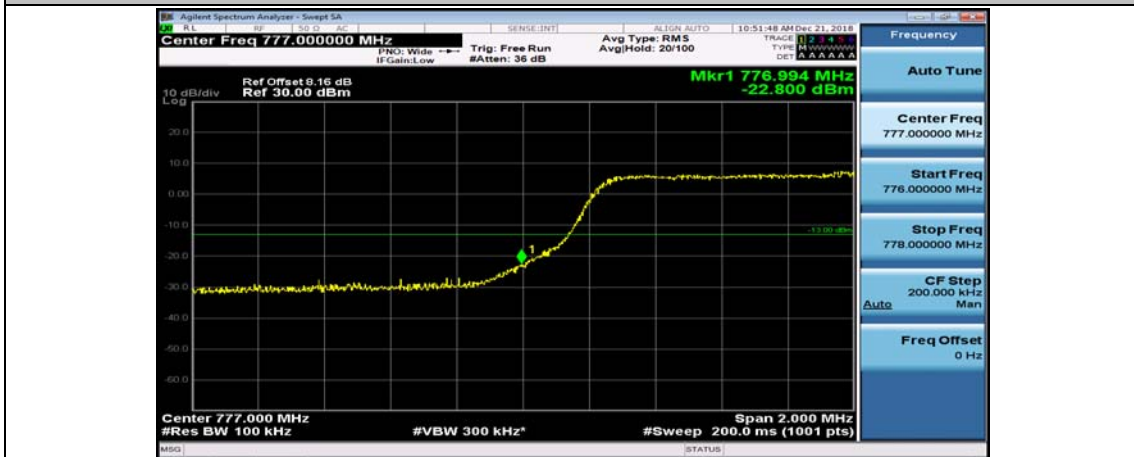
(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#6



(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#13



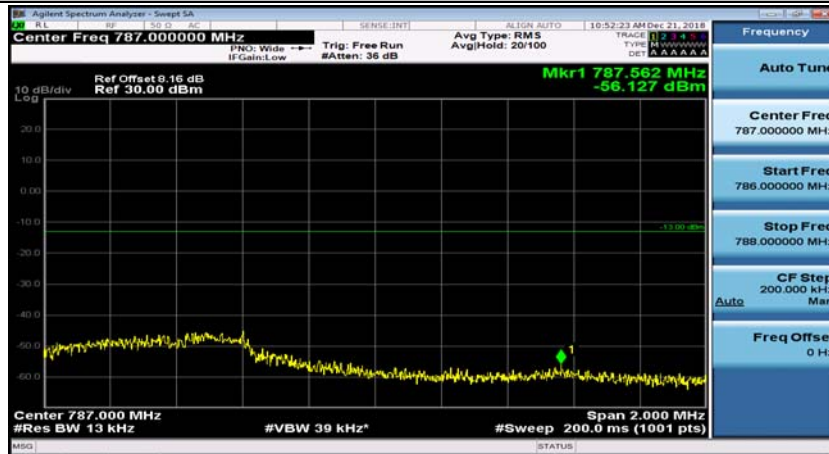
(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



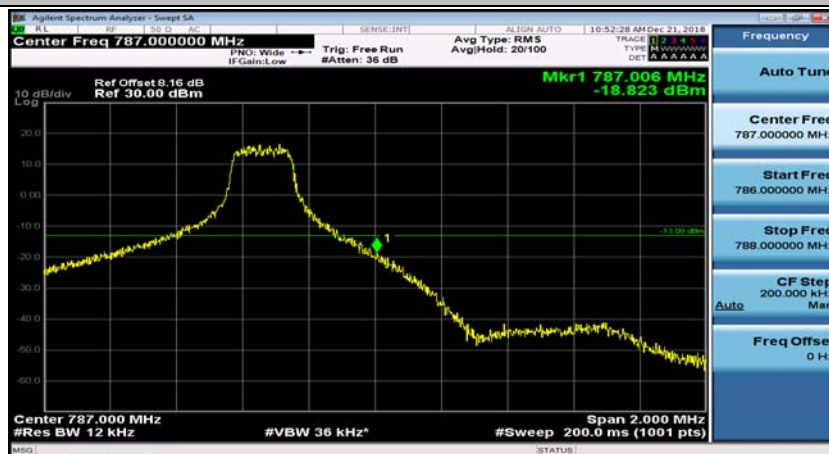
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



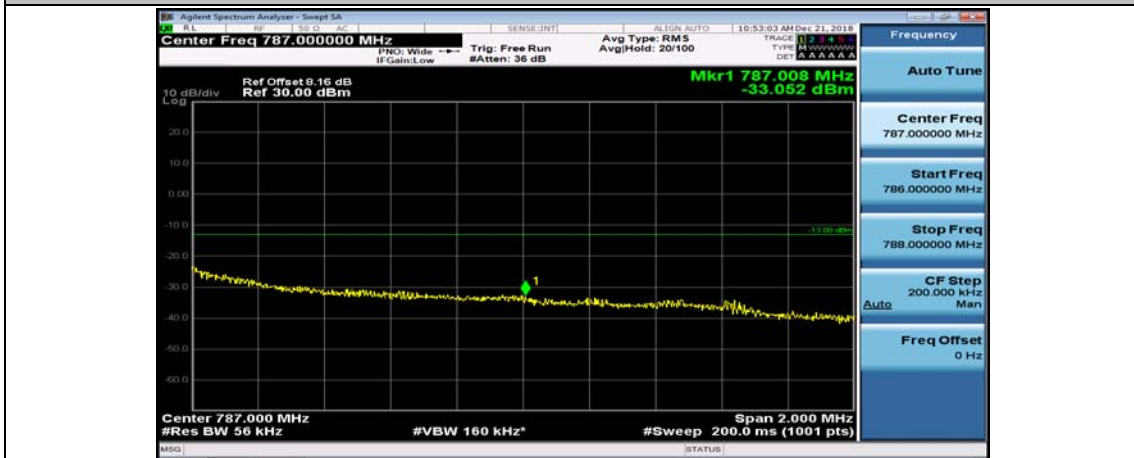
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#0



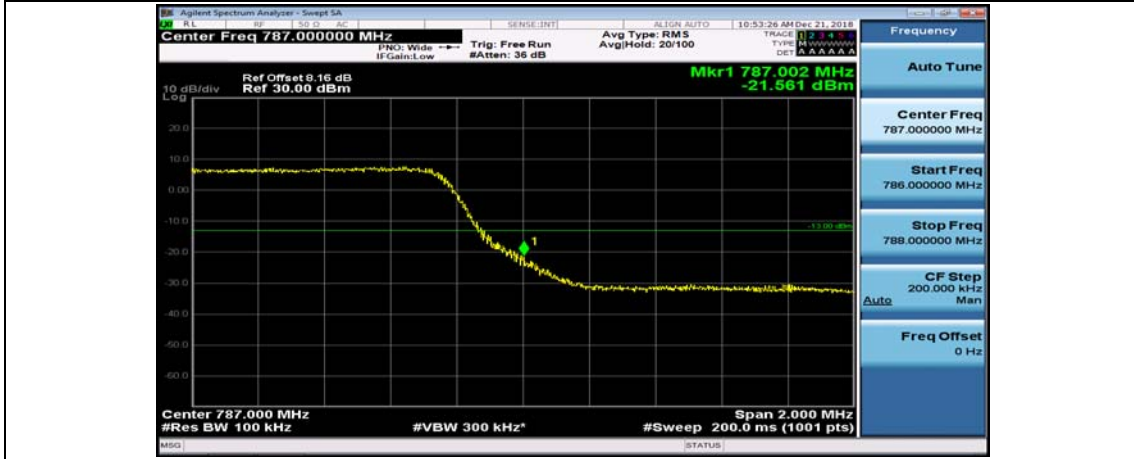
(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#6



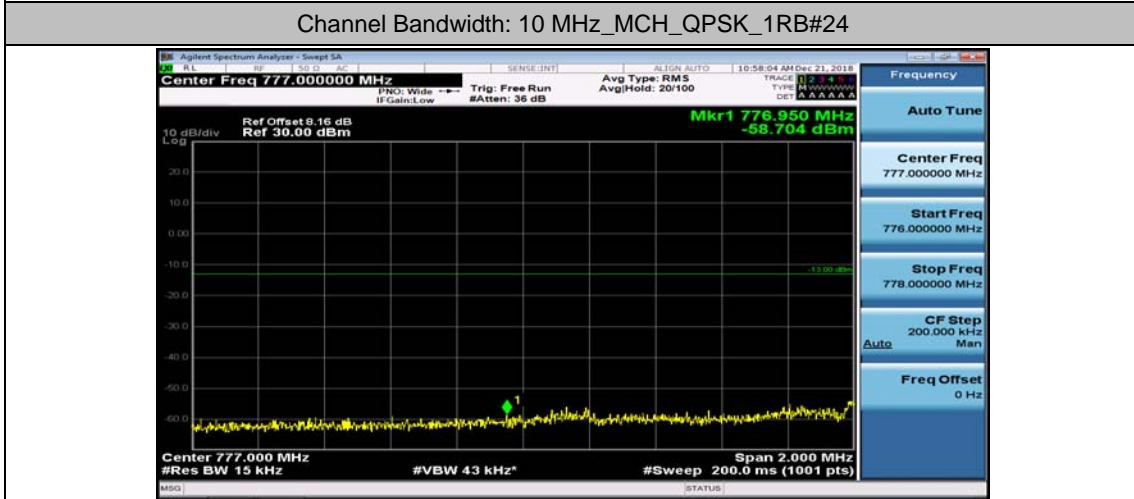
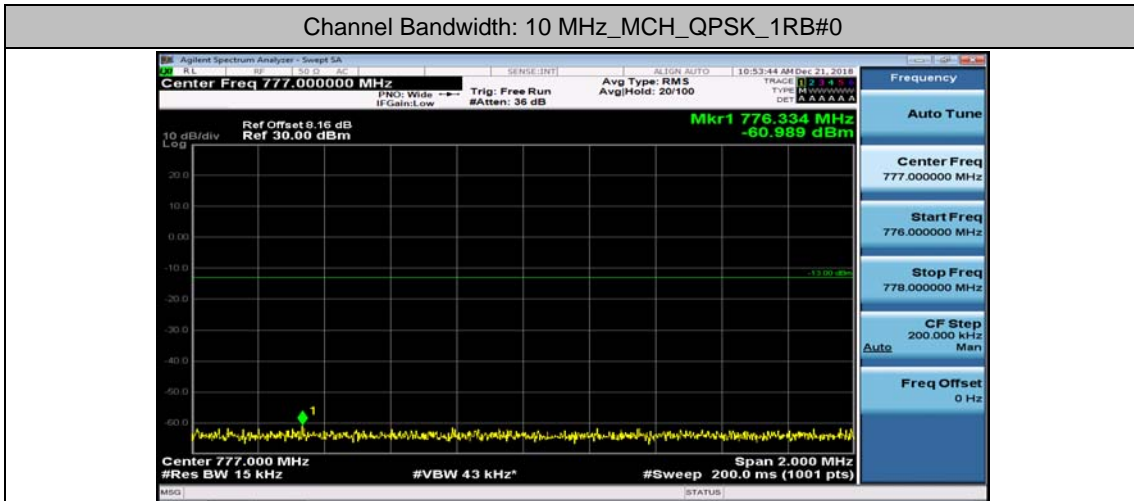
(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#13

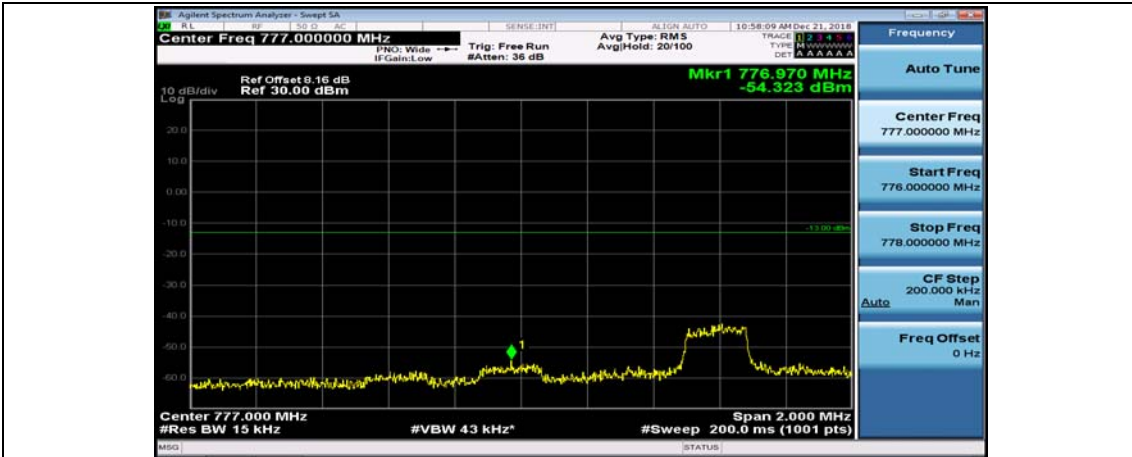


(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



Channel Bandwidth: 10 MHz

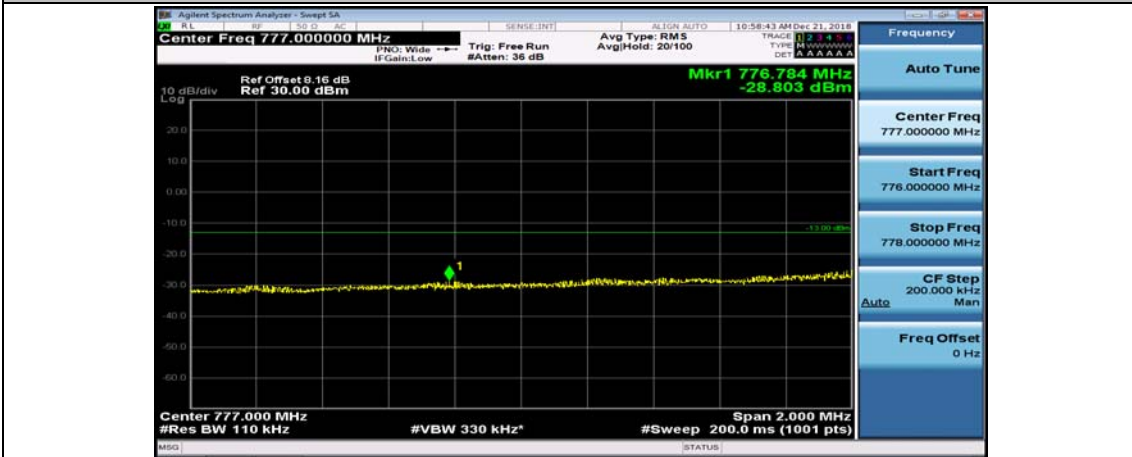




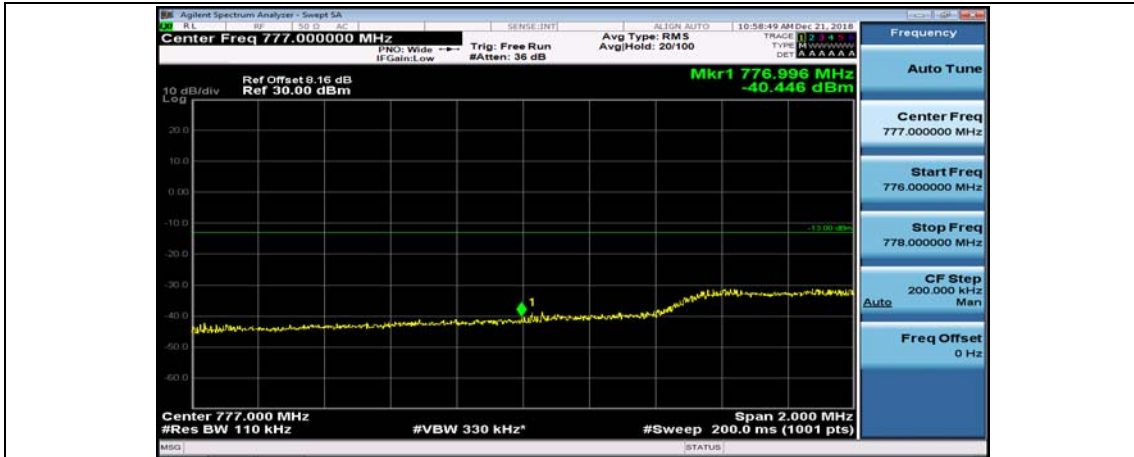
Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#12



Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#25



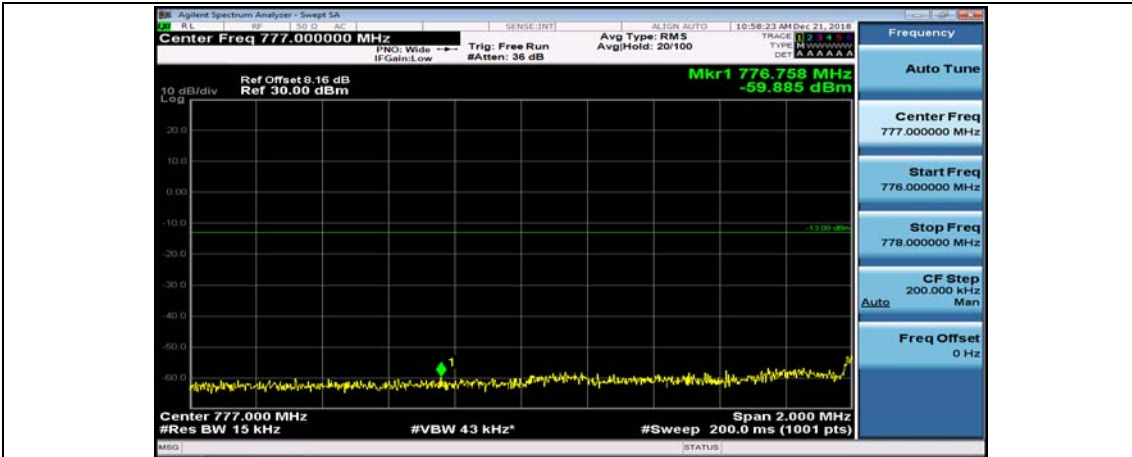
Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0



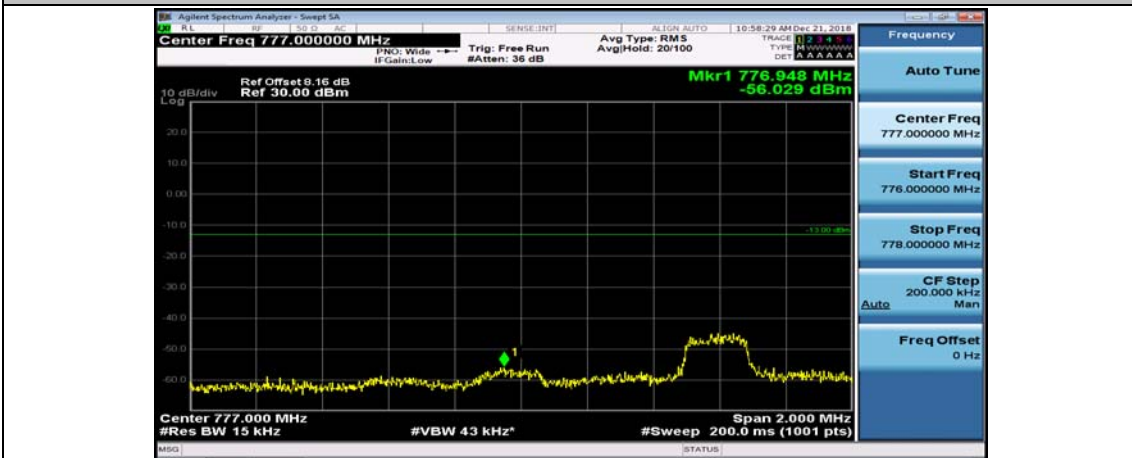
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



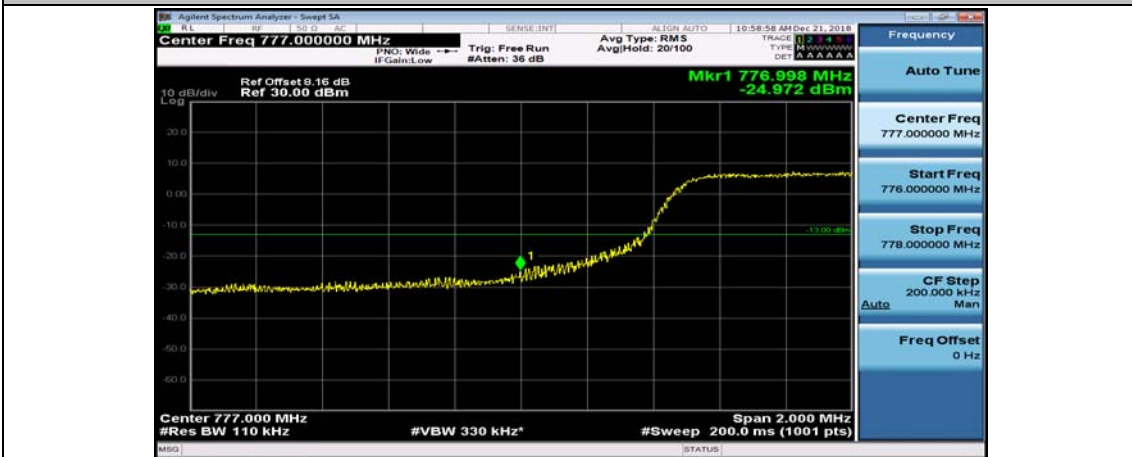
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



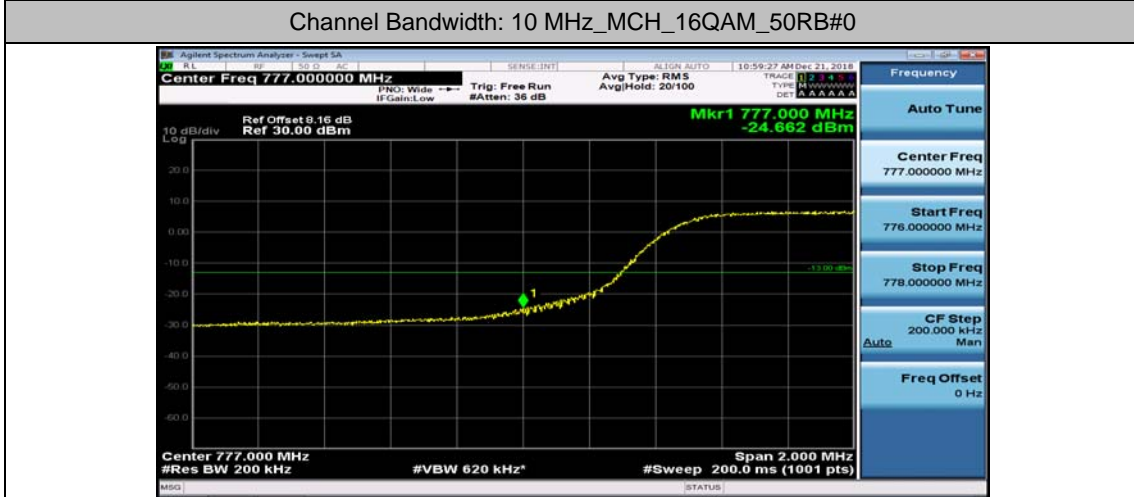
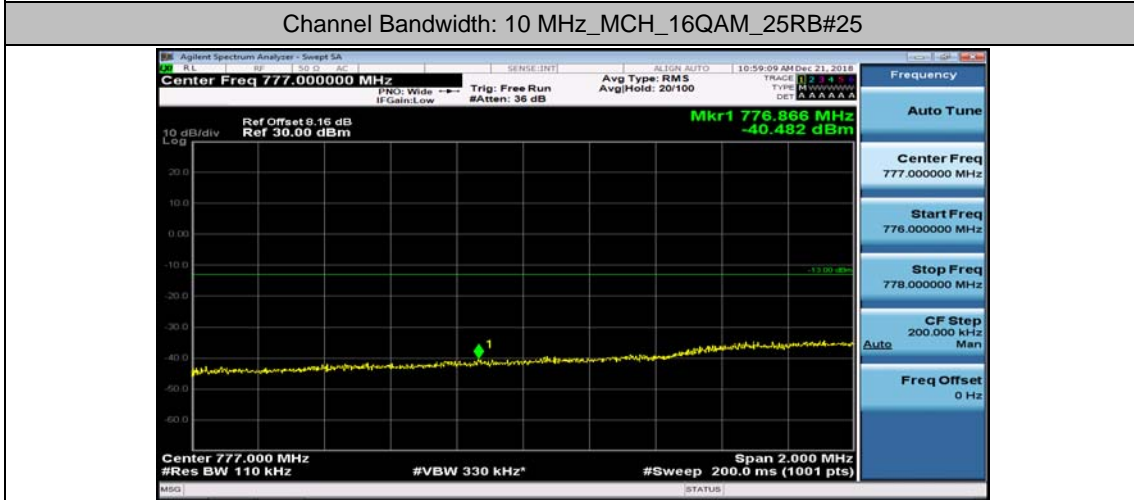
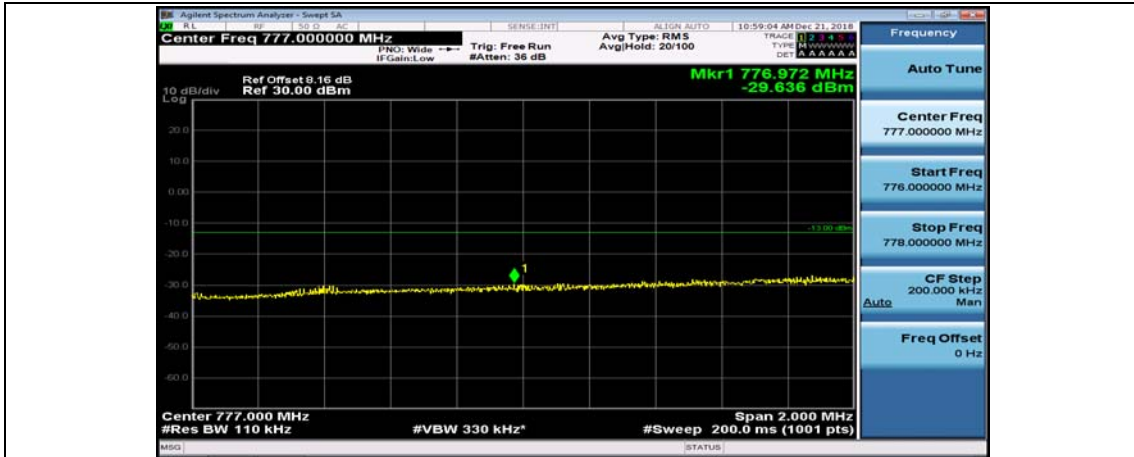
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49



Channel Bandwidth: 10 MHz_MCH_16QAM_25RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_25RB#12



Appendix E: Conducted Spurious Emission

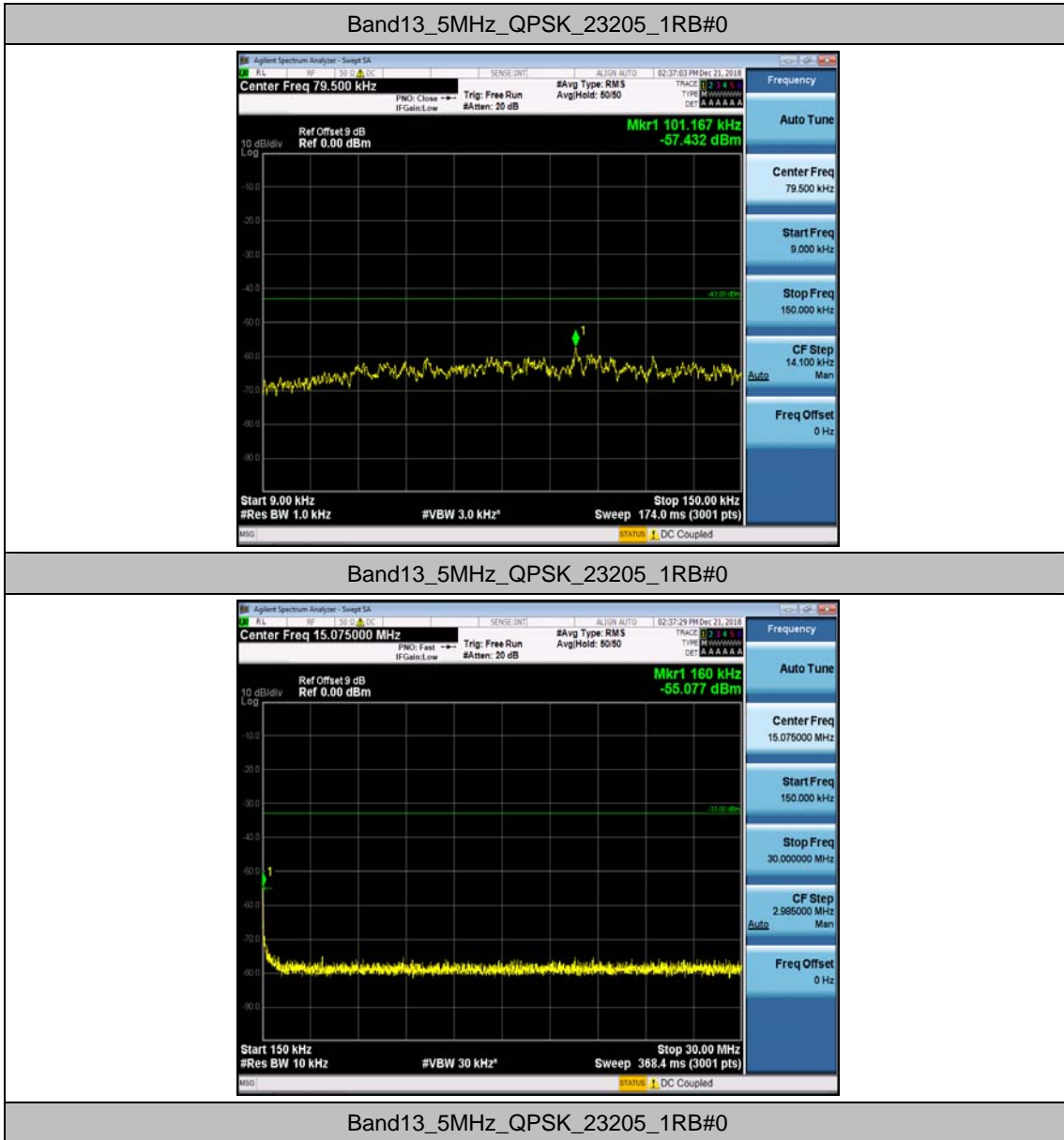
Test Result

Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band1 3	5MHz	QPSK	23205	1RB#0	Range1:0.009~0.15MHz	-57.43	PASS
Band1 3	5MHz	QPSK	23205	1RB#0	Range2:0.15~30MHz	-55.08	PASS
Band1 3	5MHz	QPSK	23205	1RB#0	Range3:30~1000MHz	-50.98	PASS
Band1 3	5MHz	QPSK	23205	1RB#0	Range4:1000~5000MHz	-43.33	PASS
Band1 3	5MHz	QPSK	23205	1RB#0	Range5:5000~12000MHz	-57.22	PASS
Band1 3	5MHz	QPSK	23205	1RB#0	Range6:12000~18000MHz	-44.06	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-59.95	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-57.54	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-50.57	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range4:1000~5000MHz	-43.47	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range5:5000~12000MHz	-56.88	PASS
Band1 3	5MHz	QPSK	23230	1RB#0	Range6:12000~18000MHz	-44.07	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range1:0.009~0.15MHz	-58.07	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range2:0.15~30MHz	-56.3	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range3:30~1000MHz	-51.1	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range4:1000~5000MHz	-43.41	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range5:5000~12000MHz	-57.21	PASS
Band1 3	5MHz	QPSK	23255	1RB#0	Range6:12000~18000MHz	-44.1	PASS

Band1 3	5MHz	16QAM	23205	1RB#0	Range1:0.009~0.15MHz	-59.54	PASS
Band1 3	5MHz	16QAM	23205	1RB#0	Range2:0.15~30MHz	-56.86	PASS
Band1 3	5MHz	16QAM	23205	1RB#0	Range3:30~1000MHz	-51.49	PASS
Band1 3	5MHz	16QAM	23205	1RB#0	Range4:1000~5000MHz	-43.29	PASS
Band1 3	5MHz	16QAM	23205	1RB#0	Range5:5000~12000MHz	-57.06	PASS
Band1 3	5MHz	16QAM	23205	1RB#0	Range6:12000~18000MHz	-44.18	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range1:0.009~0.15MHz	-60.56	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range2:0.15~30MHz	-59.11	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range3:30~1000MHz	-51.32	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range4:1000~5000MHz	-43.65	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range5:5000~12000MHz	-57.07	PASS
Band1 3	5MHz	16QAM	23230	1RB#0	Range6:12000~18000MHz	-44.04	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range1:0.009~0.15MHz	-58.93	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range2:0.15~30MHz	-58.17	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range3:30~1000MHz	-50.8	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range4:1000~5000MHz	-43.53	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range5:5000~12000MHz	-57.25	PASS
Band1 3	5MHz	16QAM	23255	1RB#0	Range6:12000~18000MHz	-44.1	PASS
Band1 3	10MHz	QPSK	23230	1RB#0	Range1:0.009~0.15MHz	-58.04	PASS
Band1 3	10MHz	QPSK	23230	1RB#0	Range2:0.15~30MHz	-56.33	PASS
Band1 3	10MHz	QPSK	23230	1RB#0	Range3:30~1000MHz	-51.2	PASS
Band1 3	10MHz	QPSK	23230	1RB#0	Range4:1000~5000MHz	-43.31	PASS

Band1 3	10MHz	QPSK	23230	1RB#0	Range5:5000~12 000MHz	-57.19	PASS
Band1 3	10MHz	QPSK	23230	1RB#0	Range6:12000~1 8000MHz	-44.13	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range1:0.009~0. 15MHz	-59.48	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range2:0.15~30 MHz	-58.6	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range3:30~1000 MHz	-51.28	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range4:1000~50 00MHz	-43.35	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range5:5000~12 000MHz	-57.17	PASS
Band1 3	10MHz	16QAM	23230	1RB#0	Range6:12000~1 8000MHz	-44.18	PASS

Test Graphs





Band13_5MHz_QPSK_23205_1RB#0



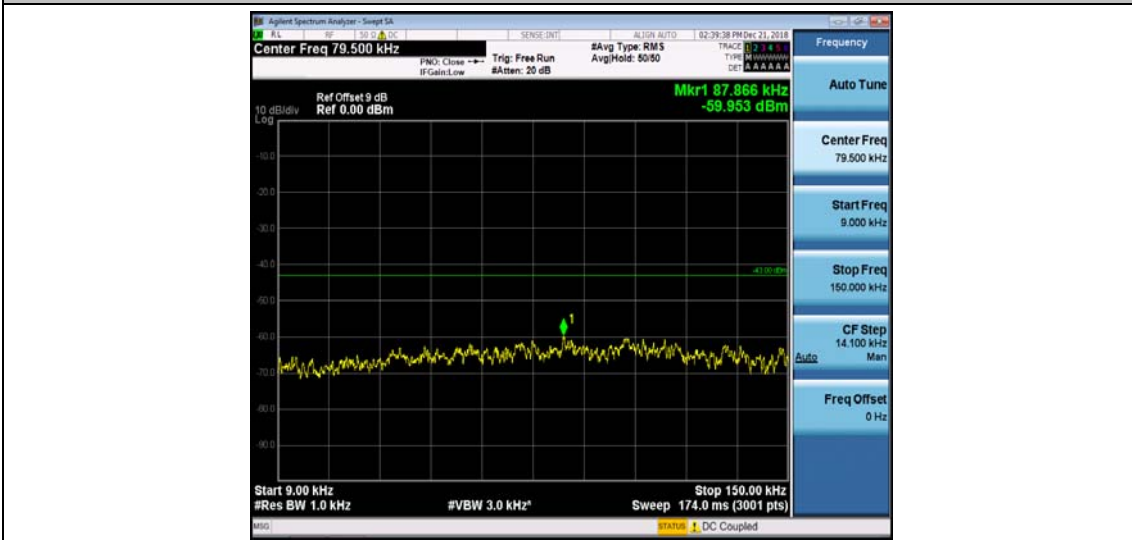
Band13_5MHz_QPSK_23205_1RB#0



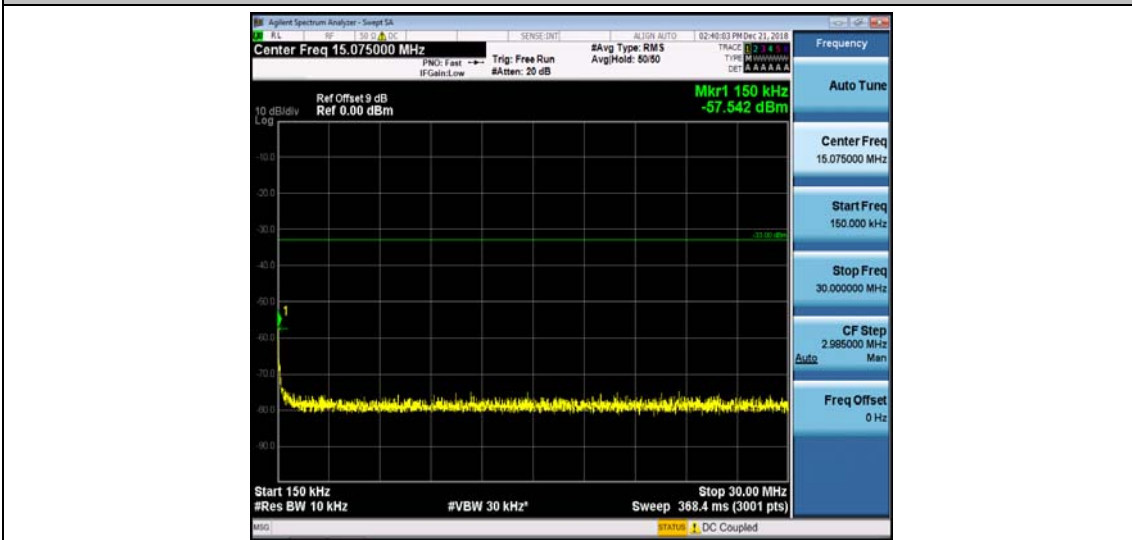
Band13_5MHz_QPSK_23205_1RB#0



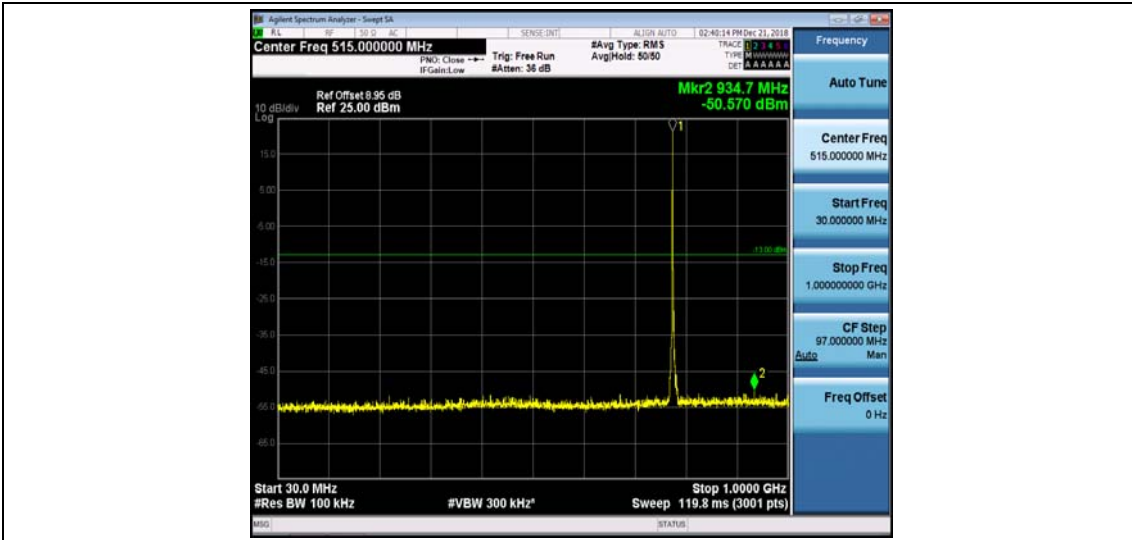
Band13_5MHz_QPSK_23230_1RB#0



Band13_5MHz_QPSK_23230_1RB#0



Band13_5MHz_QPSK_23230_1RB#0



Band13_5MHz_QPSK_23230_1RB#0



Band13_5MHz_QPSK_23230_1RB#0



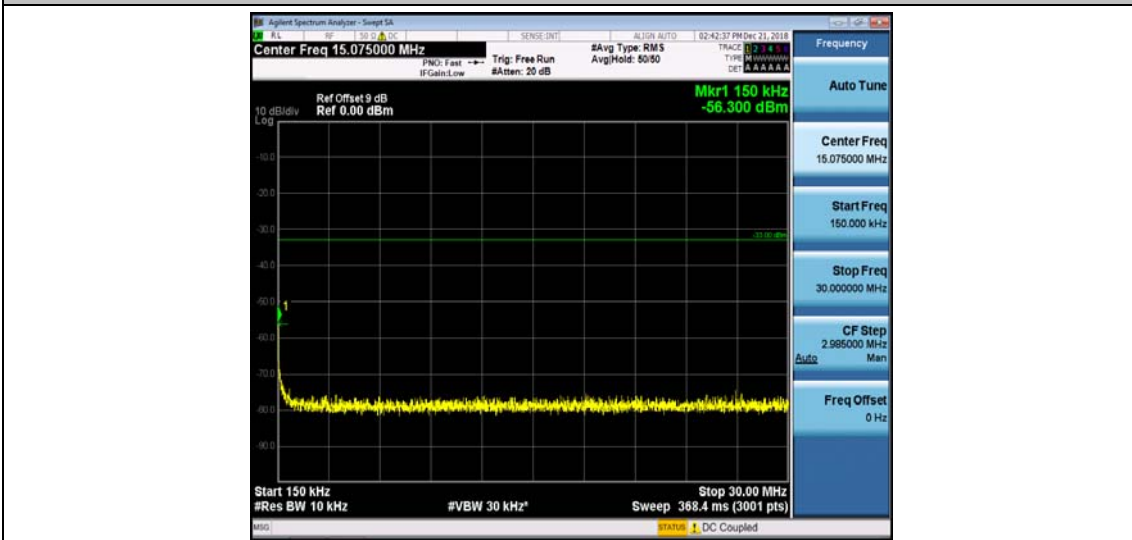
Band13_5MHz_QPSK_23230_1RB#0



Band13_5MHz_QPSK_23255_1RB#0



Band13_5MHz_QPSK_23255_1RB#0



Band13_5MHz_QPSK_23255_1RB#0



Band13_5MHz_QPSK_23255_1RB#0



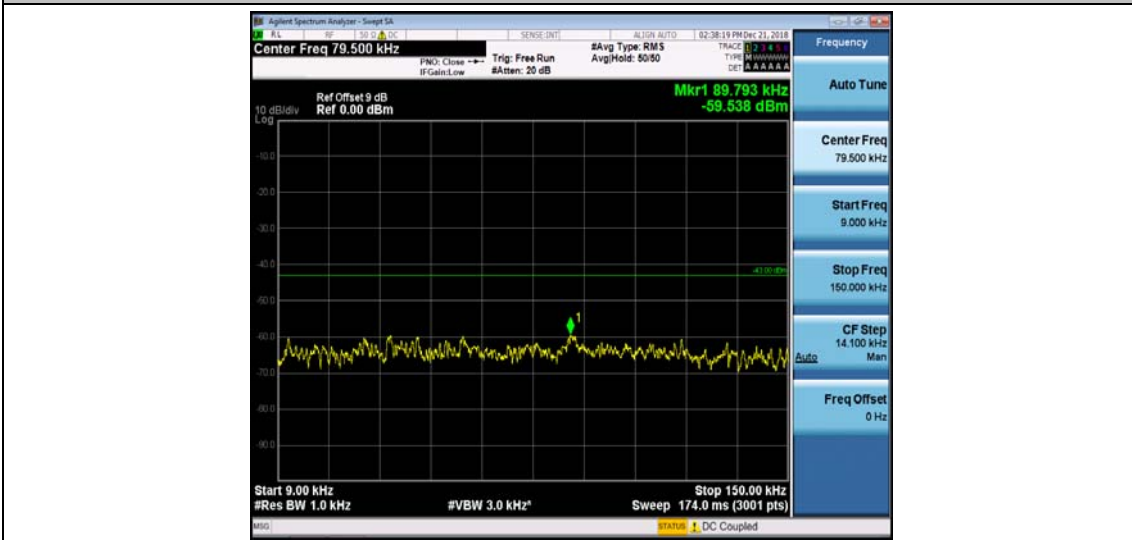
Band13_5MHz_QPSK_23255_1RB#0



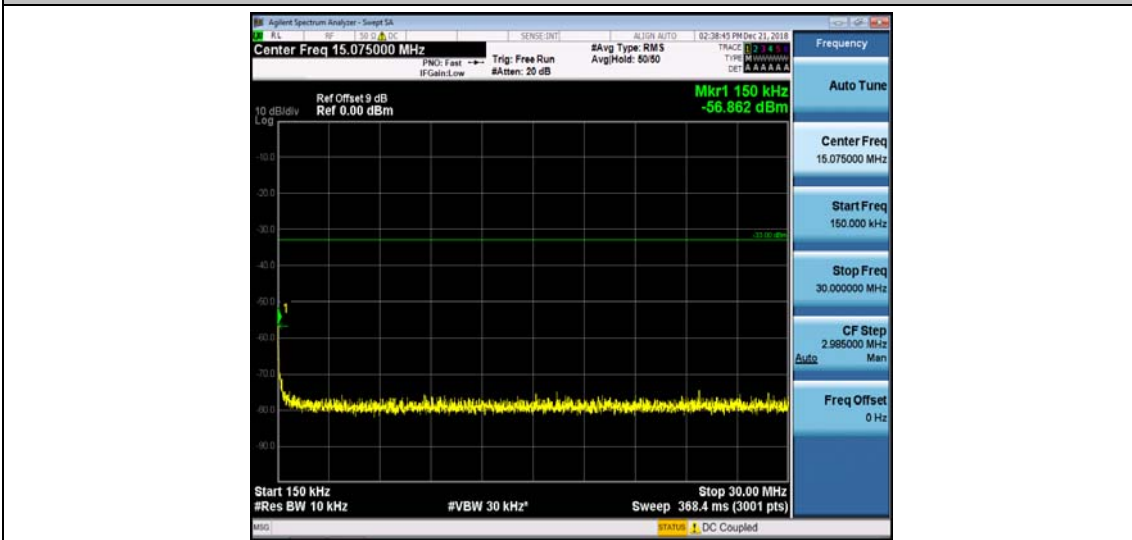
Band13_5MHz_QPSK_23255_1RB#0



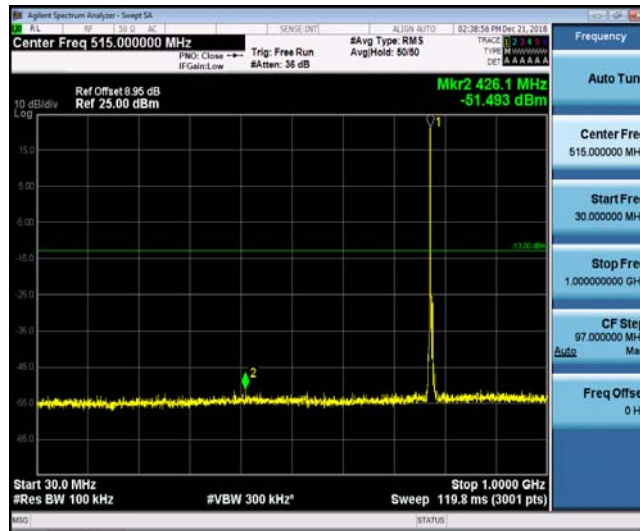
Band13_5MHz_16QAM_23205_1RB#0



Band13_5MHz_16QAM_23205_1RB#0



Band13_5MHz_16QAM_23205_1RB#0



Band13_5MHz_16QAM_23205_1RB#0



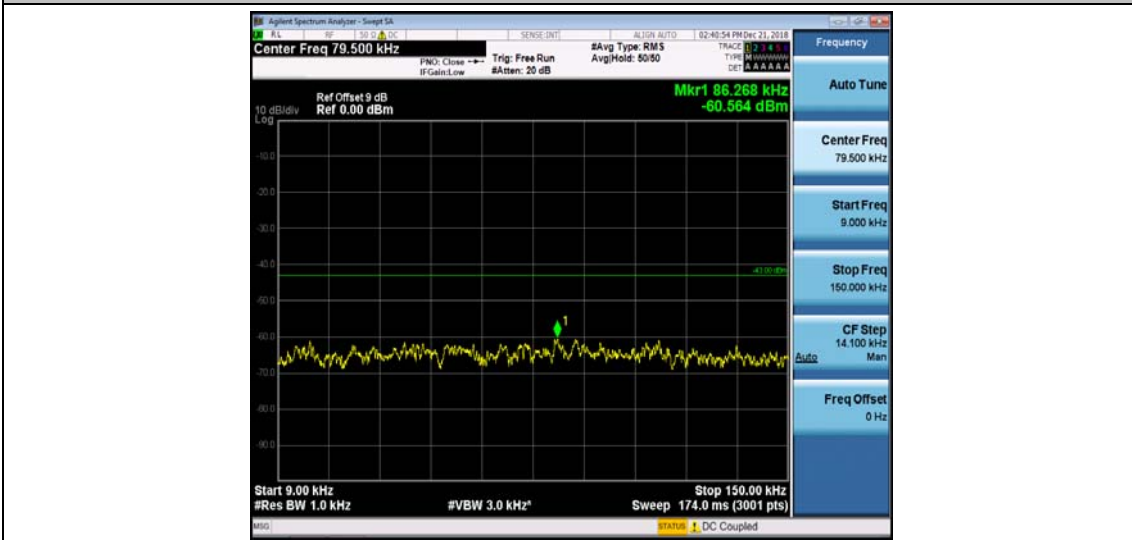
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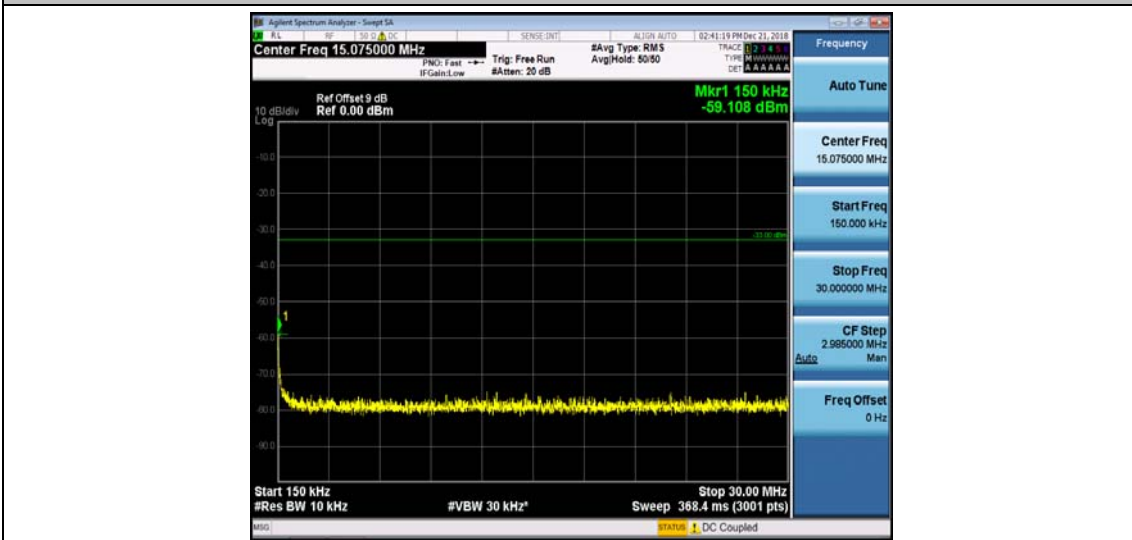
Band13_5MHz_16QAM_23205_1RB#0



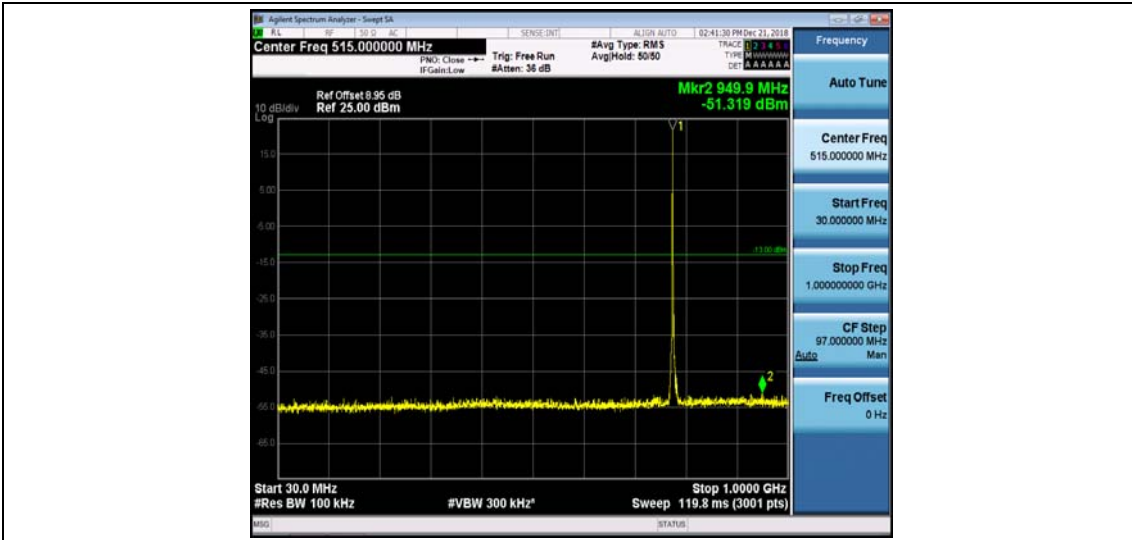
Band13_5MHz_16QAM_23230_1RB#0



Band13_5MHz_16QAM_23230_1RB#0



Band13_5MHz_16QAM_23230_1RB#0



Band13_5MHz_16QAM_23230_1RB#0



Band13_5MHz_16QAM_23230_1RB#0



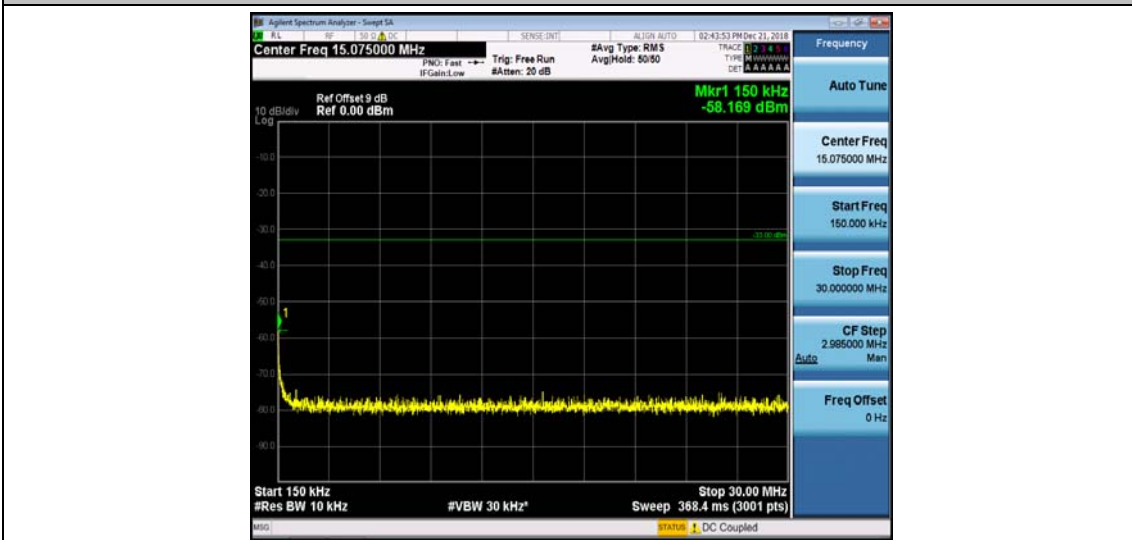
Band13_5MHz_16QAM_23230_1RB#0



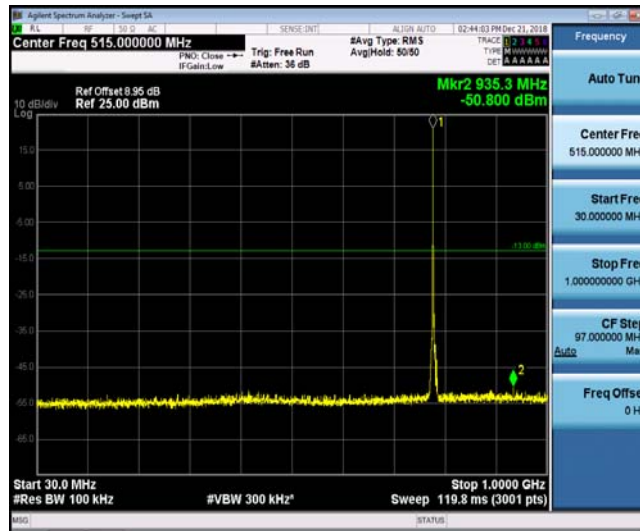
Band13_5MHz_16QAM_23255_1RB#0



Band13_5MHz_16QAM_23255_1RB#0



Band13_5MHz_16QAM_23255_1RB#0



Band13_5MHz_16QAM_23255_1RB#0



Band13_5MHz_16QAM_23255_1RB#0



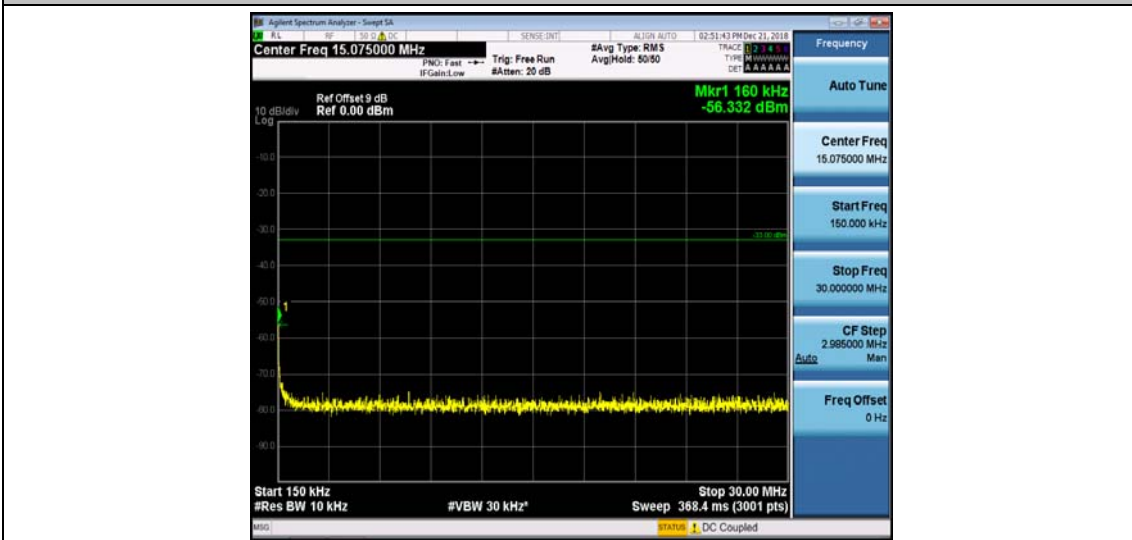
Band13_5MHz_16QAM_23255_1RB#0



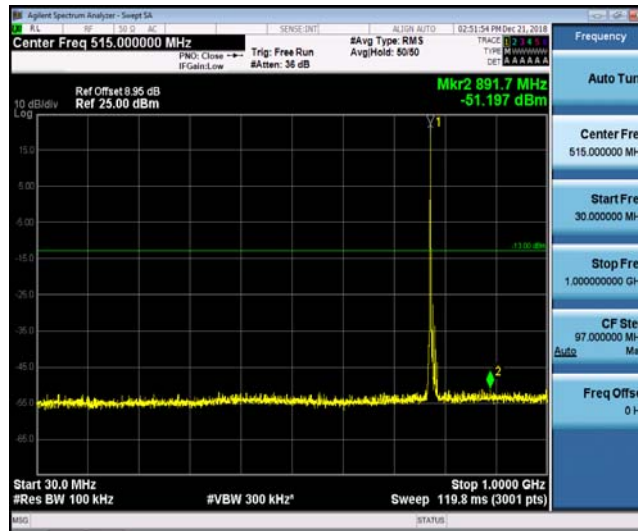
Band13_10MHz_QPSK_23230_1RB#0



Band13_10MHz_QPSK_23230_1RB#0



Band13_10MHz_QPSK_23230_1RB#0



Band13_10MHz_QPSK_23230_1RB#0



Band13_10MHz_QPSK_23230_1RB#0



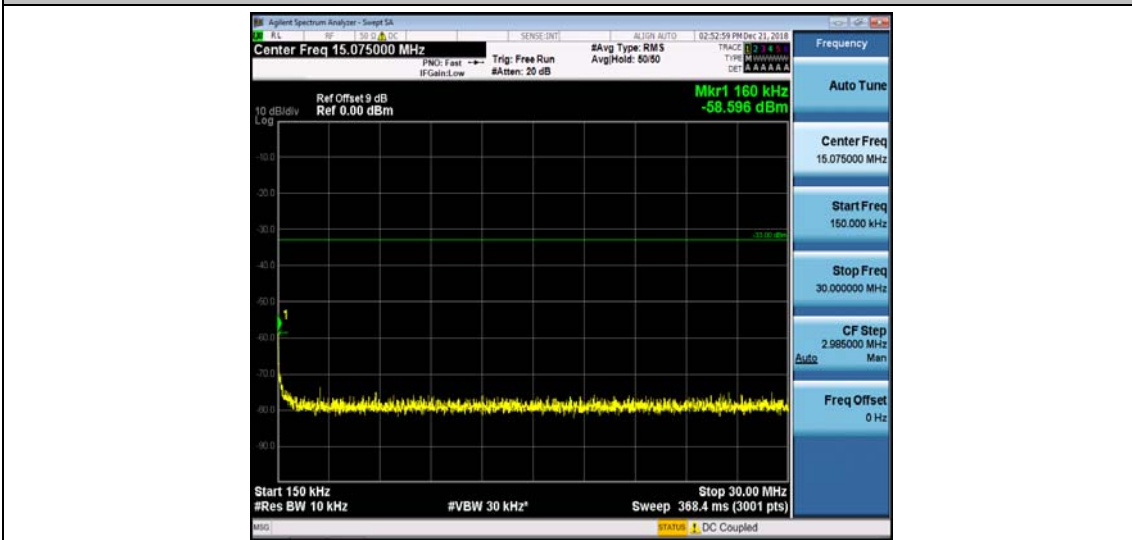
Band13_10MHz_QPSK_23230_1RB#0



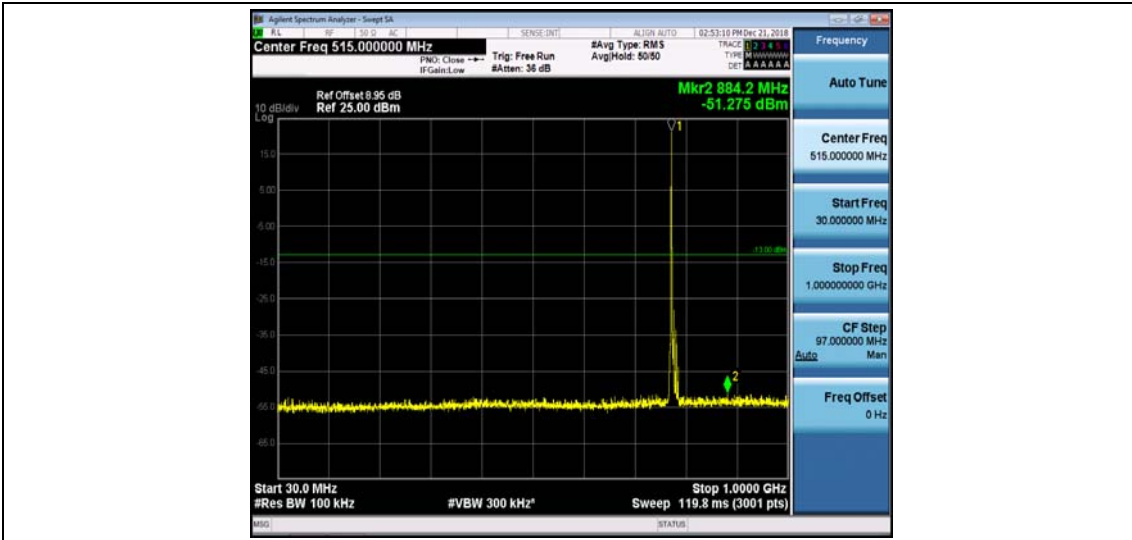
Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_1RB#0



Band13_10MHz_16QAM_23230_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	0.07	0.000090	± 2.5	PASS
		VN	TN	4.91	0.006299	± 2.5	PASS
		VH	TN	3.36	0.004310	± 2.5	PASS
	MCH	VL	TN	2.54	0.003248	± 2.5	PASS
		VN	TN	4.2	0.005371	± 2.5	PASS
		VH	TN	2.63	0.003363	± 2.5	PASS
	HCH	VL	TN	4.42	0.005634	± 2.5	PASS
		VN	TN	1.58	0.002014	± 2.5	PASS
		VH	TN	1.87	0.002384	± 2.5	PASS
16QAM	LCH	VL	TN	2.47	0.003169	± 2.5	PASS
		VN	TN	1.03	0.001321	± 2.5	PASS
		VH	TN	2.26	0.002899	± 2.5	PASS
	MCH	VL	TN	1.62	0.002072	± 2.5	PASS
		VN	TN	4.01	0.005128	± 2.5	PASS
		VH	TN	3.7	0.004731	± 2.5	PASS
	HCH	VL	TN	0.62	0.000790	± 2.5	PASS
		VN	TN	4.46	0.005685	± 2.5	PASS
		VH	TN	2.56	0.003263	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	1.14	0.001462	± 2.5	PASS
		VN	-20	-1.06	-0.001360	± 2.5	PASS
		VN	-10	-0.55	-0.000706	± 2.5	PASS
		VN	0	3.53	0.004529	± 2.5	PASS
		VN	10	-0.9	-0.001155	± 2.5	PASS
		VN	20	4.18	0.005362	± 2.5	PASS
		VN	30	-0.09	-0.000115	± 2.5	PASS
		VN	40	2.13	0.002733	± 2.5	PASS
		VN	50	0.51	0.000654	± 2.5	PASS
	MCH	VN	-30	0	0.000000	± 2.5	PASS
		VN	-20	-0.14	-0.000179	± 2.5	PASS

		VN	-10	-0.38	-0.000486	± 2.5	PASS	
		VN	0	-0.93	-0.001189	± 2.5	PASS	
		VN	10	-1.71	-0.002187	± 2.5	PASS	
		VN	20	3.76	0.004808	± 2.5	PASS	
		VN	30	1.15	0.001471	± 2.5	PASS	
		VN	40	3.41	0.004361	± 2.5	PASS	
		VN	50	1.36	0.001739	± 2.5	PASS	
	HCH	VN	-30	2.57	0.003276	± 2.5	PASS	
		VN	-20	-0.77	-0.000982	± 2.5	PASS	
		VN	-10	2.46	0.003136	± 2.5	PASS	
		VN	0	-0.03	-0.000038	± 2.5	PASS	
		VN	10	4.97	0.006335	± 2.5	PASS	
		VN	20	-0.13	-0.000166	± 2.5	PASS	
		VN	30	0.03	0.000038	± 2.5	PASS	
	16QAM	LCH	VN	40	2.66	0.003391	± 2.5	PASS
			VN	50	-1.47	-0.001874	± 2.5	PASS
			VN	-30	0.84	0.001078	± 2.5	PASS
			VN	-20	2.14	0.002745	± 2.5	PASS
VN			-10	1.99	0.002553	± 2.5	PASS	
VN			0	-0.74	-0.000949	± 2.5	PASS	
VN			10	3.16	0.004054	± 2.5	PASS	
VN			20	0.6	0.000770	± 2.5	PASS	
VN			30	-0.77	-0.000988	± 2.5	PASS	
MCH		VN	40	2.66	0.003412	± 2.5	PASS	
		VN	50	-0.91	-0.001167	± 2.5	PASS	
		VN	-30	-1.22	-0.001560	± 2.5	PASS	
		VN	-20	-0.36	-0.000460	± 2.5	PASS	
		VN	-10	3.29	0.004207	± 2.5	PASS	
		VN	0	1.82	0.002327	± 2.5	PASS	
		VN	10	0.7	0.000895	± 2.5	PASS	
		VN	20	4.89	0.006253	± 2.5	PASS	
		VN	30	1.61	0.002059	± 2.5	PASS	
HCH	VN	40	4.4	0.005627	± 2.5	PASS		
	VN	50	4.32	0.005524	± 2.5	PASS		
	VN	-30	1.07	0.001364	± 2.5	PASS		
	VN	-20	2.41	0.003072	± 2.5	PASS		
	VN	-10	0.96	0.001224	± 2.5	PASS		
	VN	0	4.6	0.005864	± 2.5	PASS		
	VN	10	-0.27	-0.000344	± 2.5	PASS		
VN	20	-1.17	-0.001491	± 2.5	PASS			
VN	30	2.23	0.002843	± 2.5	PASS			

		VN	40	4.57	0.005825	± 2.5	PASS
		VN	50	-1.14	-0.001453	± 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	MCH	VL	TN	1.37	0.001752	± 2.5	PASS
		VN	TN	-1.56	-0.001995	± 2.5	PASS
		VH	TN	1.27	0.001624	± 2.5	PASS
16QAM	MCH	VL	TN	1.37	0.001752	± 2.5	PASS
		VN	TN	-1.56	-0.001995	± 2.5	PASS
		VH	TN	1.27	0.001624	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
16QAM	MCH	VN	-30	-1.61	-0.002059	± 2.5	PASS
		VN	-20	1.78	0.002276	± 2.5	PASS
		VN	-10	1.83	0.002340	± 2.5	PASS
		VN	0	2.89	0.003696	± 2.5	PASS
		VN	10	-1.7	-0.002174	± 2.5	PASS
		VN	20	0.16	0.000205	± 2.5	PASS
		VN	30	2.34	0.002992	± 2.5	PASS
		VN	40	3.21	0.004105	± 2.5	PASS
		VN	50	-0.01	-0.000013	± 2.5	PASS
QPSK	MCH	VN	-30	3.21	0.004105	± 2.5	PASS
		VN	-20	-0.35	-0.000448	± 2.5	PASS
		VN	-10	2.55	0.003261	± 2.5	PASS
		VN	0	0.81	0.001036	± 2.5	PASS
		VN	10	0.83	0.001061	± 2.5	PASS
		VN	20	-1.64	-0.002097	± 2.5	PASS
		VN	30	0.18	0.000230	± 2.5	PASS
		VN	40	2.34	0.002992	± 2.5	PASS
		VN	50	0.2	0.000256	± 2.5	PASS