



Appendix A: Average Output Power Data

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.49	PASS
		1	2	22.58	PASS
		1	5	22.52	PASS
		3	0	22.44	PASS
		3	1	22.56	PASS
		3	3	22.46	PASS
		6	0	21.46	PASS
	MCH	1	0	22.54	PASS
		1	2	22.49	PASS
		1	5	22.47	PASS
		3	0	22.38	PASS
		3	1	22.47	PASS
		3	3	22.4	PASS
		6	0	21.38	PASS
	HCH	1	0	22.53	PASS
		1	2	22.61	PASS
		1	5	22.47	PASS
		3	0	22.45	PASS
		3	1	22.59	PASS
		3	3	22.51	PASS
		6	0	21.45	PASS
16QAM	LCH	1	0	21.65	PASS
		1	2	21.77	PASS
		1	5	21.8	PASS
		3	0	21.63	PASS
		3	1	21.65	PASS
		3	3	21.64	PASS
		6	0	20.56	PASS
	MCH	1	0	21.69	PASS
		1	2	21.72	PASS
		1	5	21.77	PASS



		3	0	21.51	PASS
		3	1	21.56	PASS
		3	3	21.54	PASS
		6	0	20.46	PASS
	HCH	1	0	21.73	PASS
		1	2	21.79	PASS
		1	5	21.8	PASS
		3	0	21.62	PASS
		3	1	21.63	PASS
		3	3	21.63	PASS
		6	0	20.69	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.65	PASS
		1	7	22.75	PASS
		1	14	22.67	PASS
		8	0	21.52	PASS
		8	3	21.55	PASS
		8	7	21.54	PASS
		15	0	21.54	PASS
	MCH	1	0	22.48	PASS
		1	7	22.43	PASS
		1	14	22.48	PASS
		8	0	21.42	PASS
		8	3	21.48	PASS
		8	7	21.46	PASS
		15	0	21.48	PASS
	HCH	1	0	22.49	PASS
		1	7	22.58	PASS
		1	14	22.55	PASS
		8	0	21.48	PASS
		8	3	21.57	PASS
		8	7	21.59	PASS
		15	0	21.51	PASS
16QAM	LCH	1	0	21.93	PASS



		1	7	21.95	PASS
		1	14	21.83	PASS
		8	0	20.56	PASS
		8	3	20.59	PASS
		8	7	20.61	PASS
		15	0	20.5	PASS
	MCH	1	0	21.79	PASS
		1	7	21.92	PASS
		1	14	21.74	PASS
		8	0	20.45	PASS
		8	3	20.46	PASS
		8	7	20.45	PASS
		15	0	20.42	PASS
	HCH	1	0	21.7	PASS
		1	7	21.83	PASS
		1	14	21.82	PASS
		8	0	20.51	PASS
		8	3	20.59	PASS
		8	7	20.59	PASS
		15	0	20.48	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.63	PASS
		1	12	22.49	PASS
		1	24	22.59	PASS
		12	0	21.62	PASS
		12	6	21.67	PASS
		12	13	21.68	PASS
		25	0	21.6	PASS
	MCH	1	0	22.5	PASS
		1	12	22.38	PASS
		1	24	22.59	PASS
		12	0	21.47	PASS
		12	6	21.48	PASS
		12	13	21.5	PASS
		25	0	21.43	PASS



	HCH	1	0	22.6	PASS
		1	12	22.4	PASS
		1	24	22.53	PASS
		12	0	21.5	PASS
		12	6	21.51	PASS
		12	13	21.5	PASS
		25	0	21.49	PASS
16QAM	LCH	1	0	21.86	PASS
		1	12	21.95	PASS
		1	24	21.79	PASS
		12	0	20.66	PASS
		12	6	20.62	PASS
		12	13	20.64	PASS
		25	0	20.61	PASS
	MCH	1	0	21.76	PASS
		1	12	21.83	PASS
		1	24	21.78	PASS
		12	0	20.49	PASS
		12	6	20.49	PASS
		12	13	20.49	PASS
		25	0	20.43	PASS
	HCH	1	0	21.87	PASS
		1	12	21.83	PASS
		1	24	21.87	PASS
		12	0	20.55	PASS
		12	6	20.56	PASS
		12	13	20.56	PASS
		25	0	20.52	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.65	PASS
		1	24	22.68	PASS
		1	49	22.62	PASS
		25	0	21.52	PASS
		25	12	21.56	PASS
		25	25	21.48	PASS



	MCH	50	0	21.57	PASS
		1	0	22.52	PASS
		1	24	22.56	PASS
		1	49	22.5	PASS
		25	0	21.48	PASS
		25	12	21.45	PASS
		25	25	21.57	PASS
		50	0	21.46	PASS
	HCH	1	0	22.65	PASS
		1	24	22.74	PASS
		1	49	22.56	PASS
		25	0	21.59	PASS
		25	12	21.65	PASS
		25	25	21.51	PASS
		50	0	21.63	PASS
16QAM	LCH	1	0	21.83	PASS
		1	24	21.79	PASS
		1	49	21.72	PASS
		25	0	20.58	PASS
		25	12	20.6	PASS
		25	25	20.52	PASS
		50	0	20.59	PASS
	MCH	1	0	21.64	PASS
		1	24	21.68	PASS
		1	49	21.73	PASS
		25	0	20.49	PASS
		25	12	20.46	PASS
		25	25	20.56	PASS
		50	0	20.47	PASS
	HCH	1	0	21.65	PASS
		1	24	21.82	PASS
		1	49	21.72	PASS
		25	0	20.59	PASS
		25	12	20.63	PASS
		25	25	20.59	PASS
		50	0	20.68	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz



Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.63	PASS
		1	37	22.58	PASS
		1	74	22.33	PASS
		36	0	21.65	PASS
		36	19	21.66	PASS
		36	39	21.45	PASS
		75	0	21.48	PASS
	MCH	1	0	22.54	PASS
		1	37	22.72	PASS
		1	74	22.4	PASS
		36	0	21.65	PASS
		36	19	21.71	PASS
		36	39	21.62	PASS
		75	0	21.62	PASS
	HCH	1	0	22.66	PASS
		1	37	22.68	PASS
		1	74	22.62	PASS
		36	0	21.69	PASS
		36	19	21.86	PASS
		36	39	21.71	PASS
		75	0	21.74	PASS
16QAM	LCH	1	0	21.94	PASS
		1	37	21.92	PASS
		1	74	21.64	PASS
		36	0	20.62	PASS
		36	19	20.6	PASS
		36	39	20.5	PASS
		75	0	20.52	PASS
	MCH	1	0	21.82	PASS
		1	37	21.91	PASS
		1	74	21.7	PASS
		36	0	20.61	PASS
		36	19	20.68	PASS
		36	39	20.63	PASS
		75	0	20.56	PASS
	HCH	1	0	21.88	PASS
		1	37	21.92	PASS
		1	74	21.86	PASS



		36	0	20.7	PASS
		36	19	20.86	PASS
		36	39	20.65	PASS
		75	0	20.64	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.63	PASS
		1	49	22.58	PASS
		1	99	22.27	PASS
		50	0	21.57	PASS
		50	25	21.6	PASS
		50	50	21.44	PASS
		100	0	21.53	PASS
	MCH	1	0	22.55	PASS
		1	49	22.7	PASS
		1	99	22.36	PASS
		50	0	21.68	PASS
		50	25	21.75	PASS
		50	50	21.62	PASS
		100	0	21.66	PASS
	HCH	1	0	22.6	PASS
		1	49	22.71	PASS
		1	99	22.45	PASS
		50	0	21.73	PASS
		50	25	21.78	PASS
		50	50	21.58	PASS
		100	0	21.64	PASS
16QAM	LCH	1	0	21.77	PASS
		1	49	21.8	PASS
		1	99	21.32	PASS
		50	0	20.55	PASS
		50	25	20.61	PASS
		50	50	20.45	PASS
		100	0	20.59	PASS
	MCH	1	0	21.78	PASS
		1	49	21.98	PASS



		1	99	21.62	PASS
		50	0	20.7	PASS
		50	25	20.72	PASS
		50	50	20.62	PASS
		100	0	20.62	PASS
	HCH	1	0	21.74	PASS
		1	49	21.84	PASS
		1	99	21.64	PASS
		50	0	20.59	PASS
		50	25	20.64	PASS
		50	50	20.55	PASS
		100	0	20.63	PASS



Appendix B: Peak-to-Average Ratio

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.76	<13	PASS
16QAM	MCH	1	0	5.54	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.63	<13	PASS
16QAM	MCH	1	0	5.44	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.61	<13	PASS
16QAM	MCH	1	0	5.48	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.64	<13	PASS
16QAM	MCH	1	0	5.18	<13	PASS



Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.63	<13	PASS
16QAM	MCH	1	0	5.29	<13	PASS

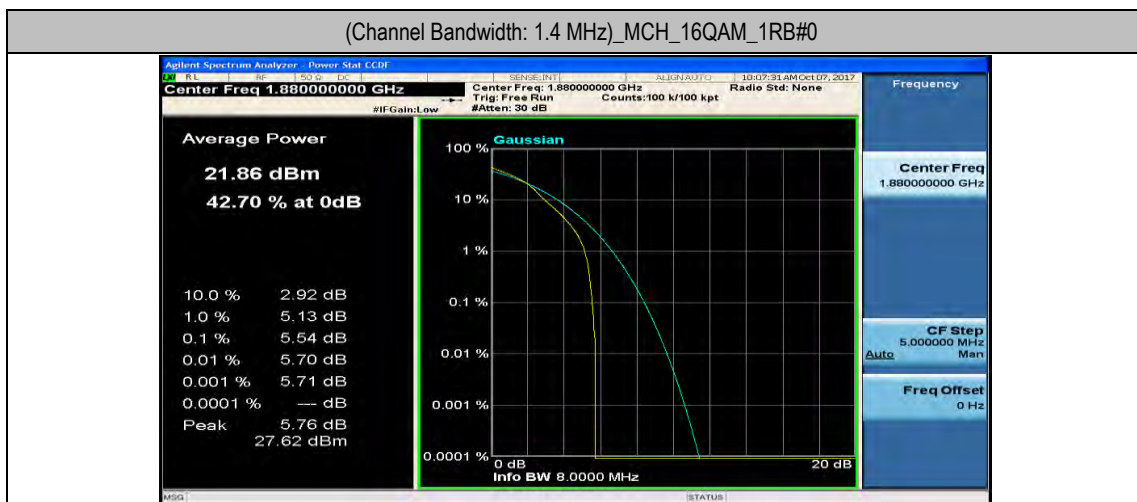
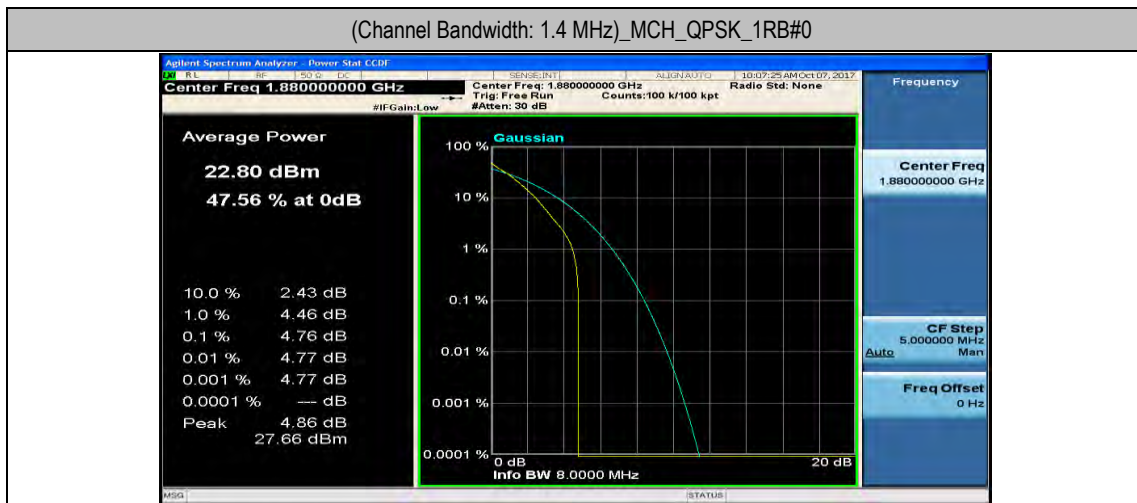
Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	3.59	<13	PASS
16QAM	MCH	1	0	4.49	<13	PASS

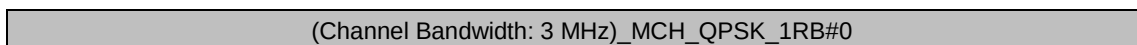


Test Graphs

Channel Bandwidth: 1.4 MHz



Channel Bandwidth: 3 MHz



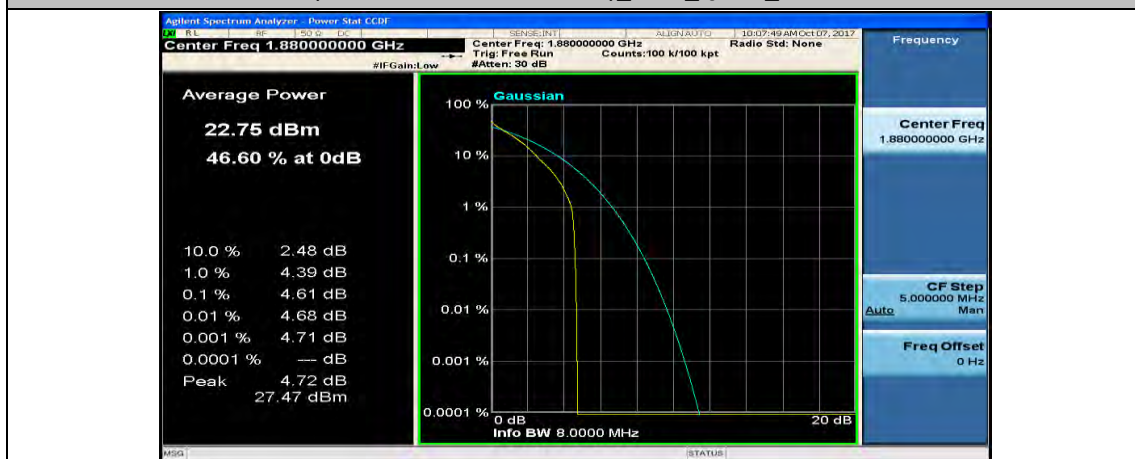


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



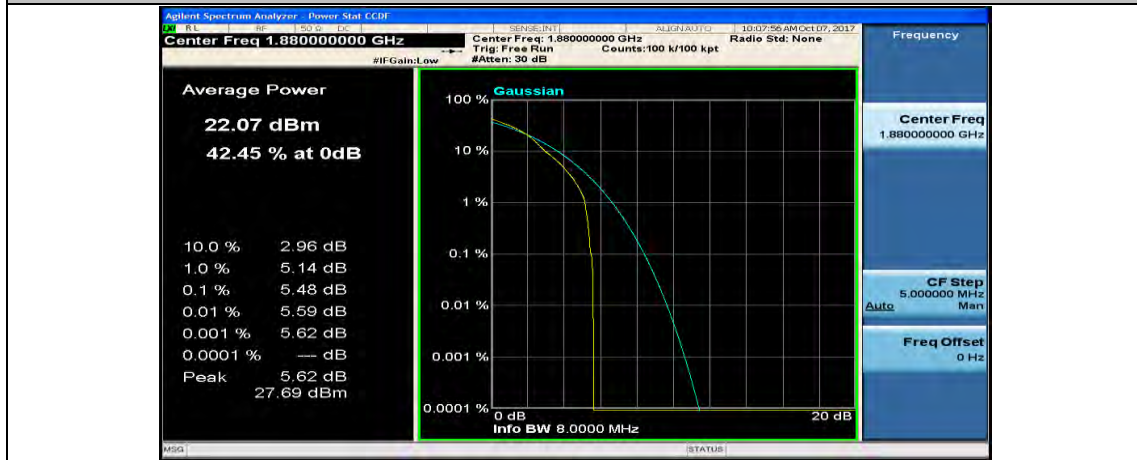
Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0





(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

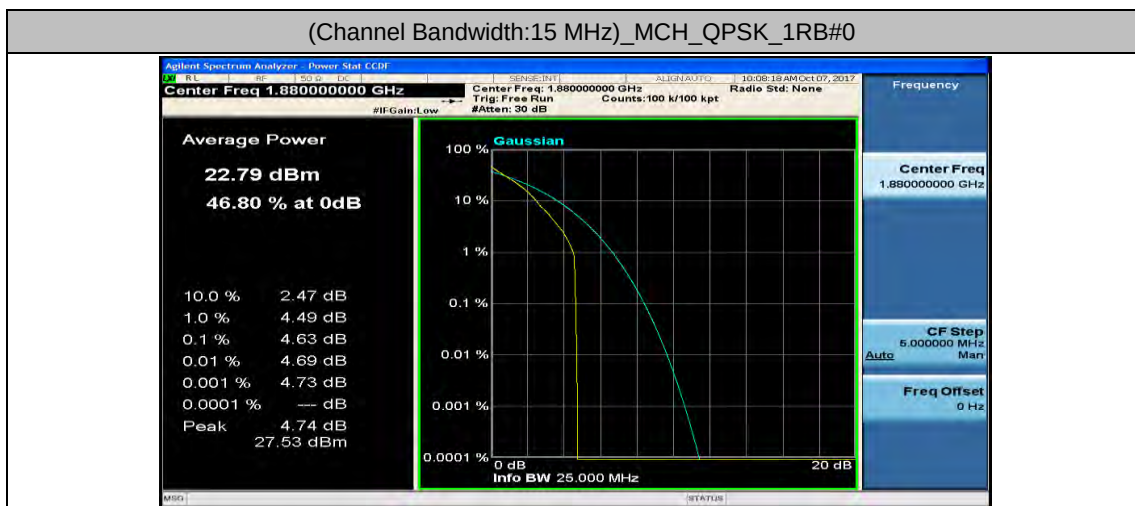


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

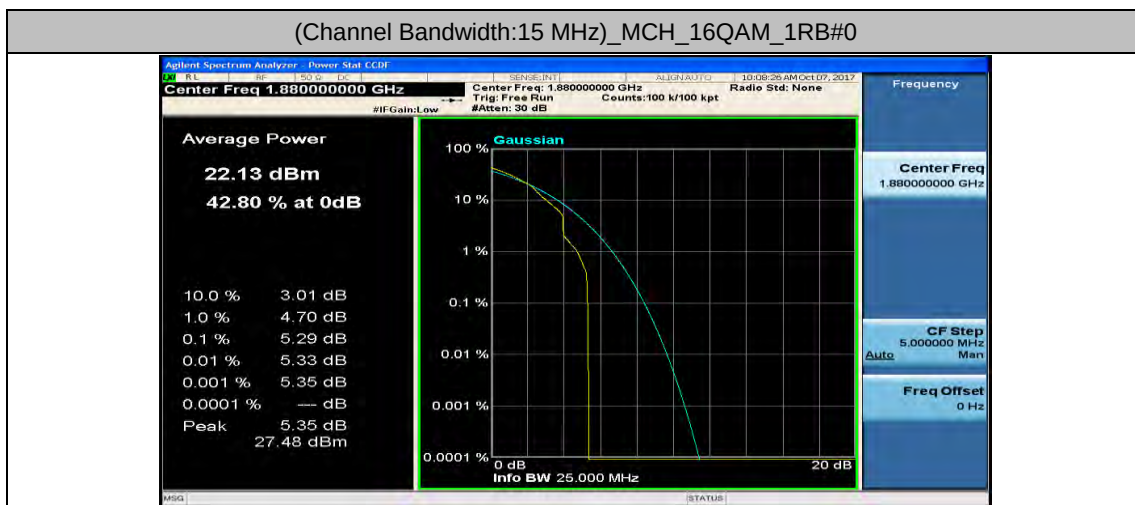


Channel Bandwidth: 15 MHz

(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0





Channel Bandwidth: 20 MHz

(Channel Bandwidth:20 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth:20 MHz)_MCH_16QAM_1RB#0





Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.0755	1.197	PASS
	MCH	6	0	1.0777	1.213	PASS
	HCH	6	0	1.0781	1.223	PASS
16QAM	LCH	6	0	1.0784	1.205	PASS
	MCH	6	0	1.0790	1.203	PASS
	HCH	6	0	1.0820	1.217	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.6856	2.931	PASS
	MCH	15	0	2.6846	2.917	PASS
	HCH	15	0	2.6807	2.885	PASS
16QAM	LCH	15	0	2.6821	2.886	PASS
	MCH	15	0	2.6820	2.904	PASS
	HCH	15	0	2.6795	2.903	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4759	4.829	PASS



16QAM	MCH	25	0	4.4766	4.789	PASS
	HCH	25	0	4.4596	4.766	PASS
	LCH	25	0	4.4754	4.804	PASS
16QAM	MCH	25	0	4.4746	4.773	PASS
	HCH	25	0	4.4727	4.809	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9332	9.475	PASS
	MCH	50	0	8.9278	9.483	PASS
	HCH	50	0	8.9186	9.412	PASS
16QAM	LCH	50	0	8.9346	9.422	PASS
	MCH	50	0	8.9398	9.355	PASS
	HCH	50	0	8.9163	9.381	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	75	0	13.409	14.09	PASS
	MCH	75	0	13.395	14.01	PASS
	HCH	75	0	13.397	14.07	PASS
16QAM	LCH	75	0	13.399	14.07	PASS
	MCH	75	0	13.404	14.14	PASS
	HCH	75	0	13.401	14.09	PASS

Channel Bandwidth: 20 MHz

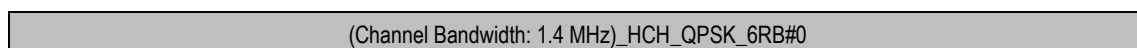
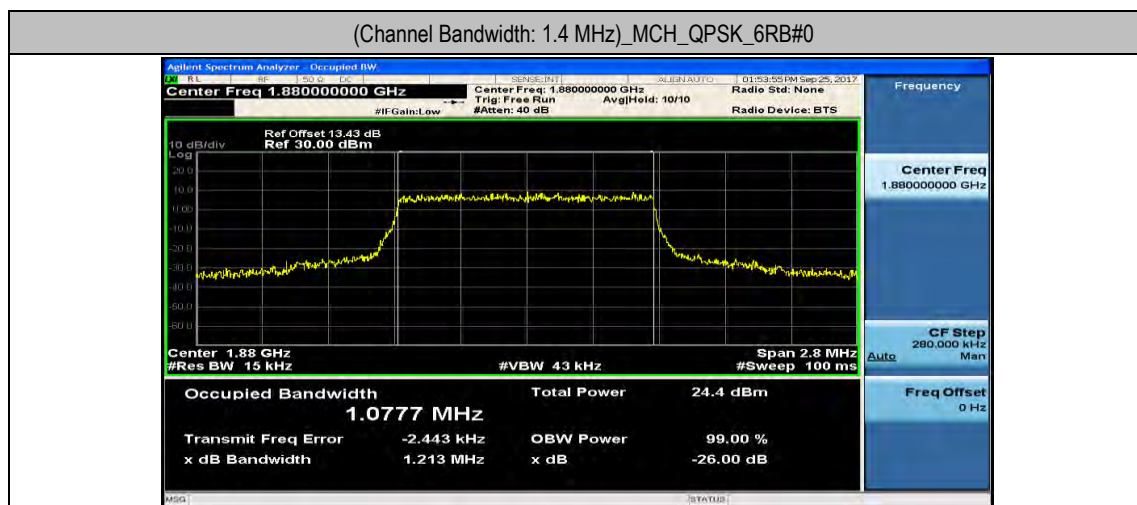
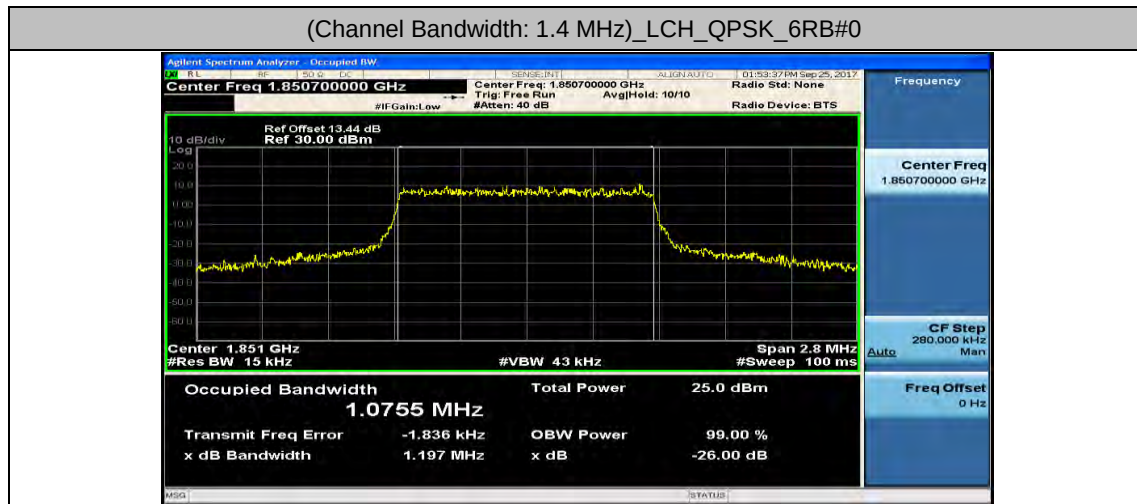


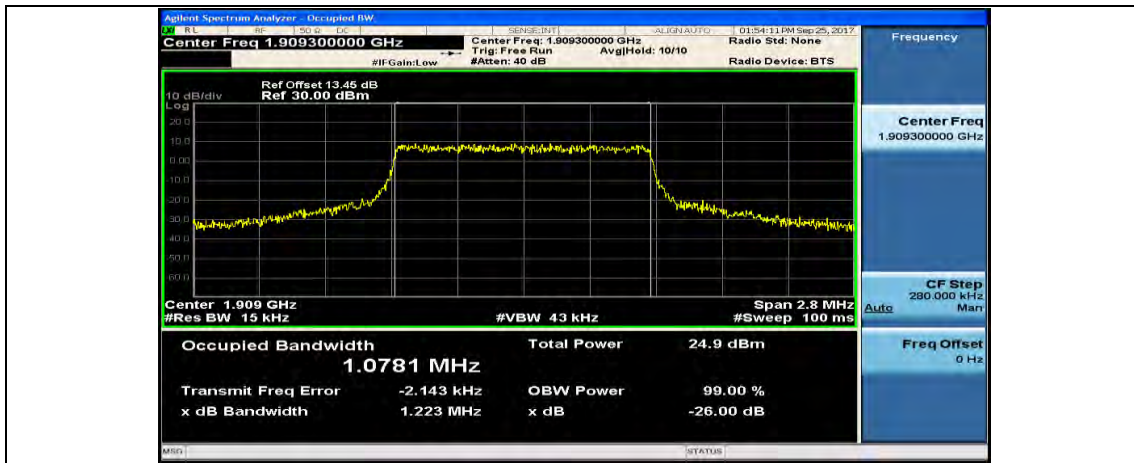
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.869	18.66	PASS
	MCH	100	0	17.849	18.62	PASS
	HCH	100	0	17.871	18.78	PASS
16QAM	LCH	100	0	17.883	18.64	PASS
	MCH	100	0	17.845	18.61	PASS
	HCH	100	0	17.847	18.62	PASS



Test Graphs

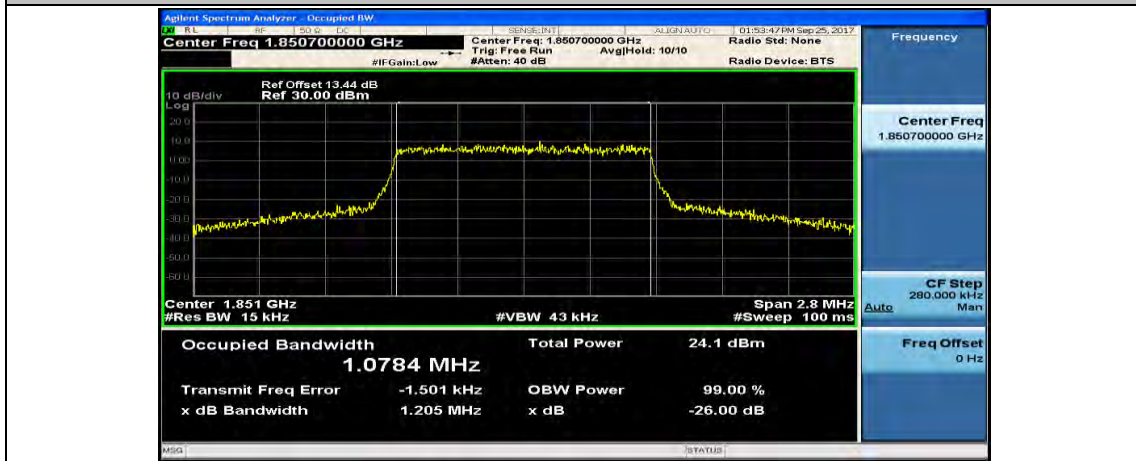
Channel Bandwidth: 1.4 MHz



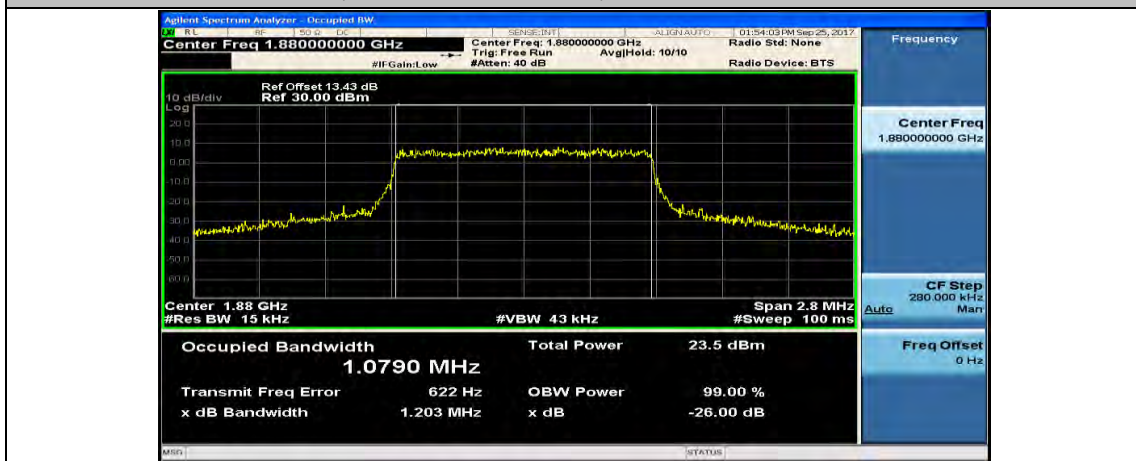




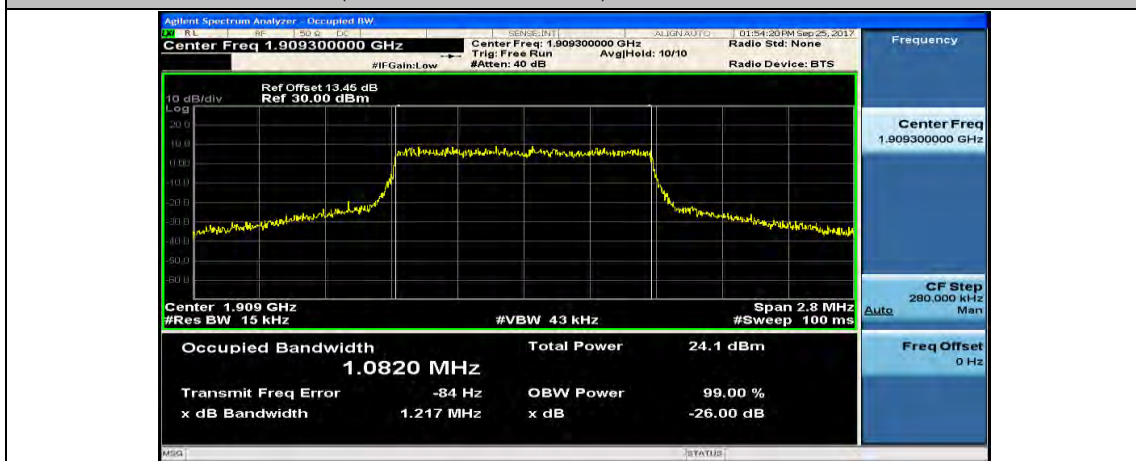
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_6RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0



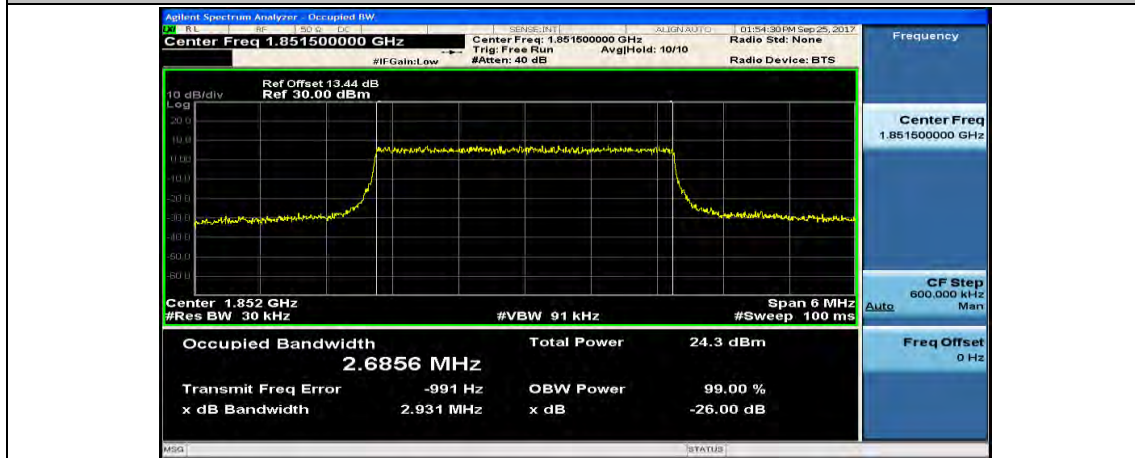
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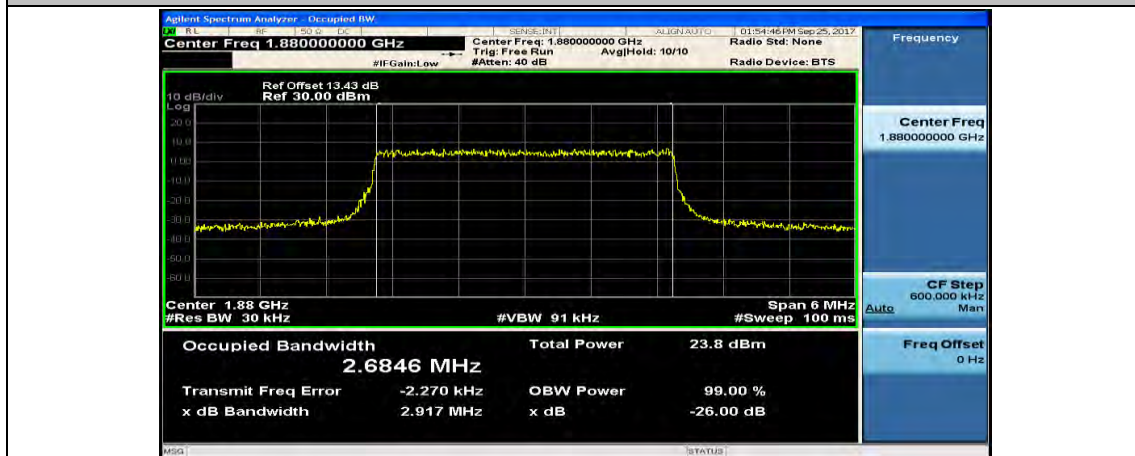


Channel Bandwidth: 3 MHz

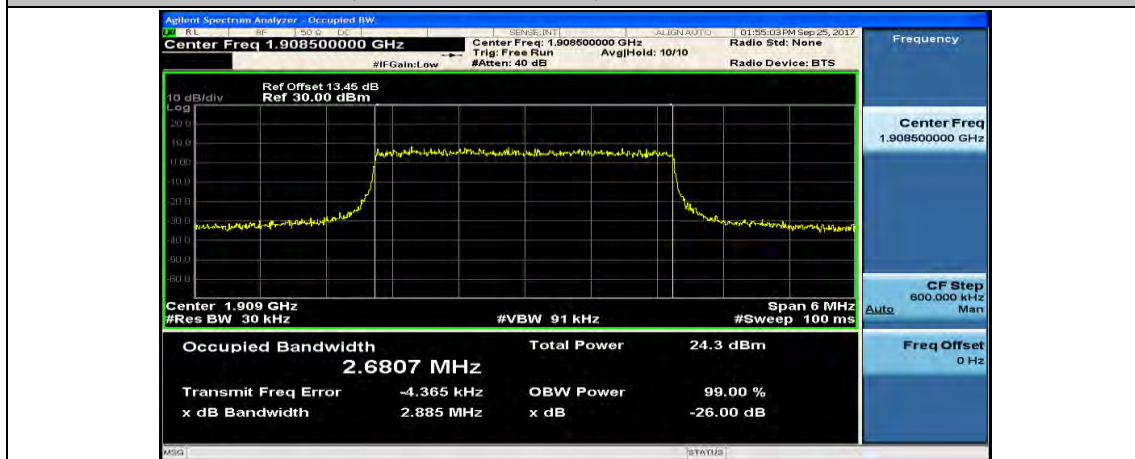
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(Channel Bandwidth: 3 MHz)_MCH_QPSK_15RB#0

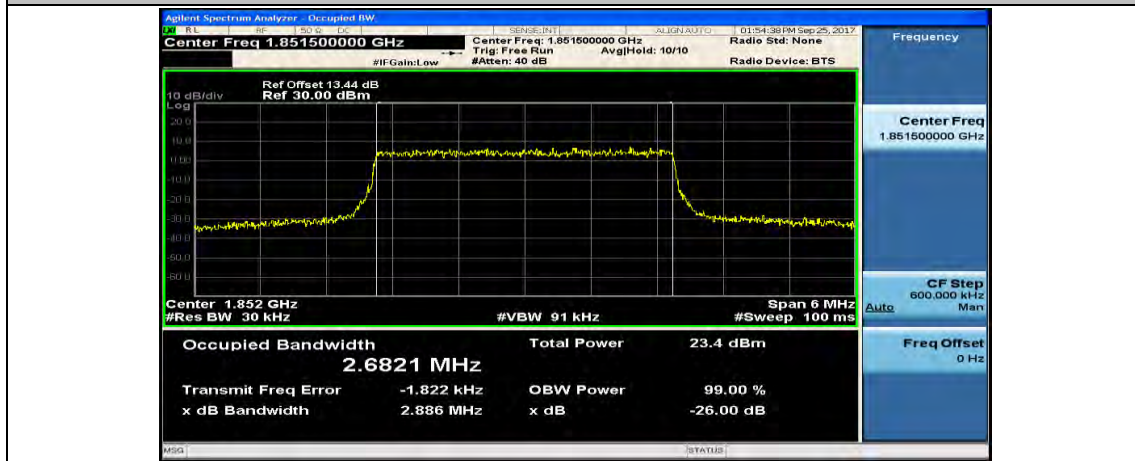


(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0

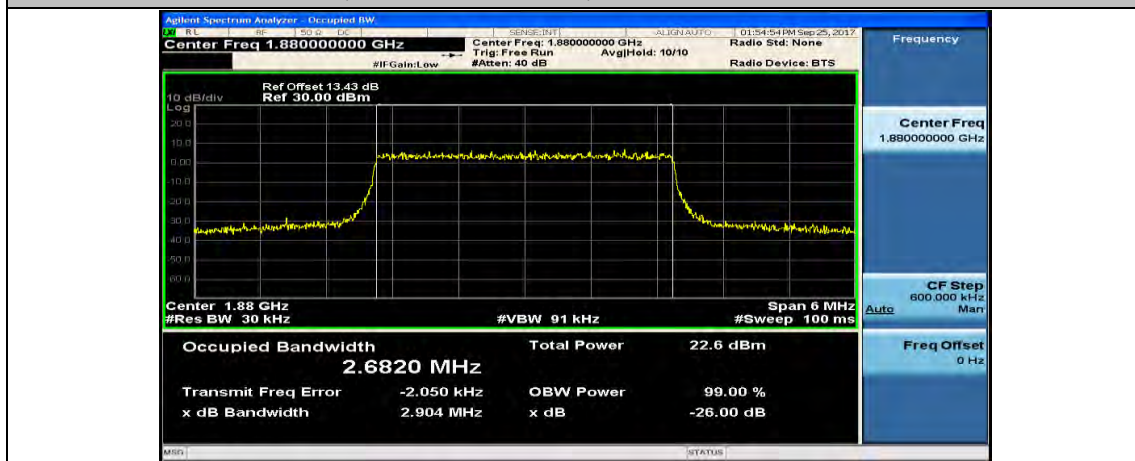




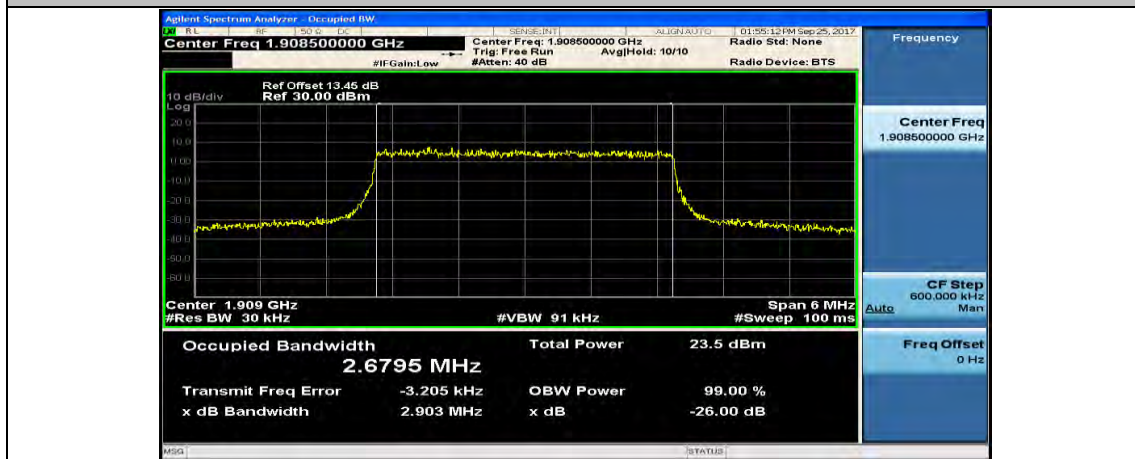
(Channel Bandwidth: 3 MHz)_LCH_16QAM_15RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0



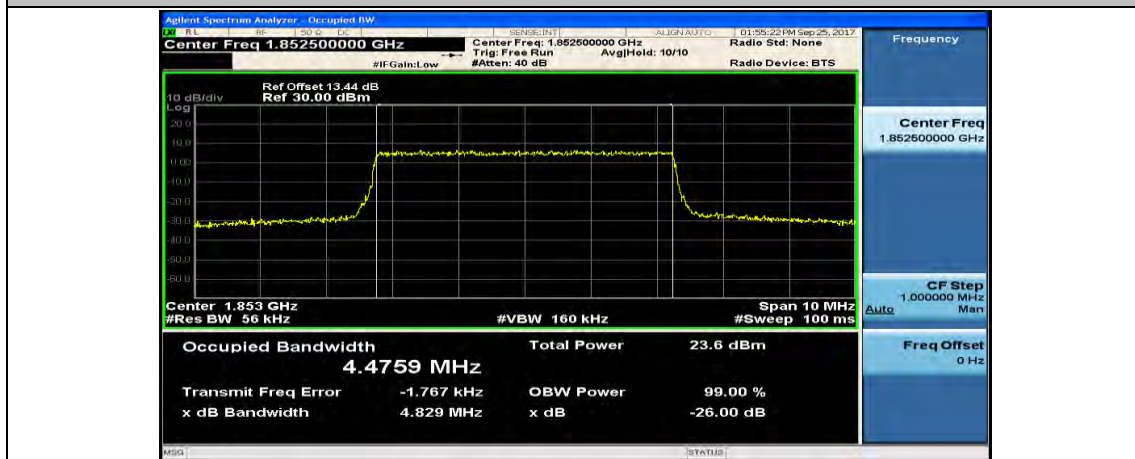
(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0



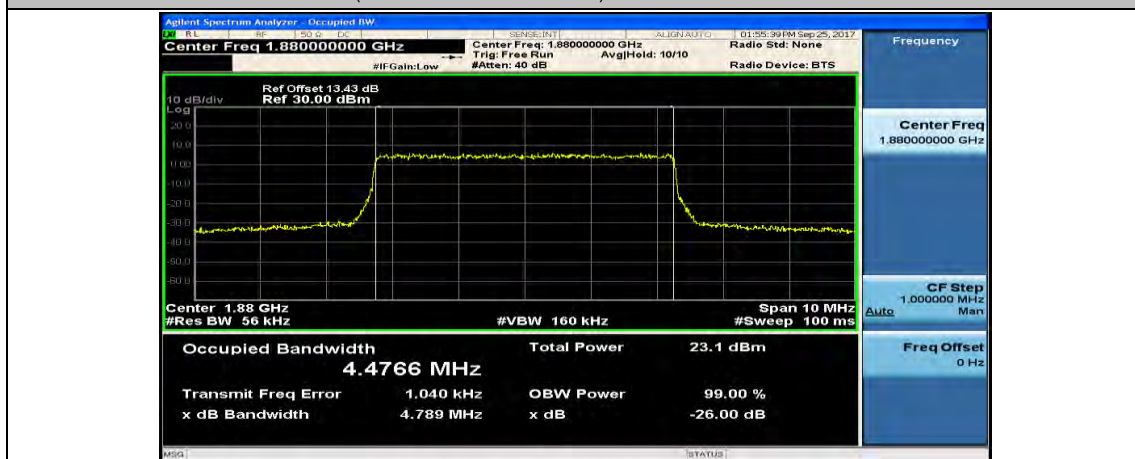


Channel Bandwidth: 5 MHz

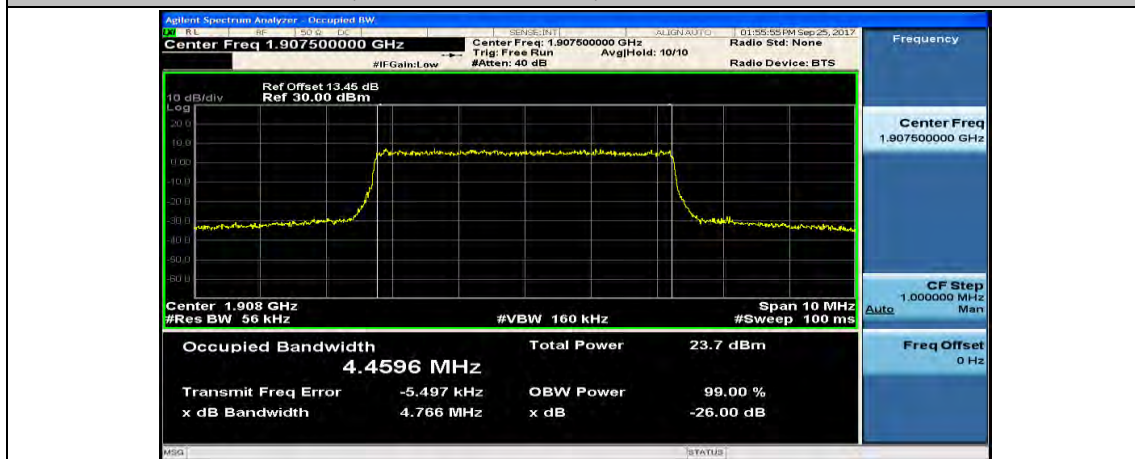
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(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0

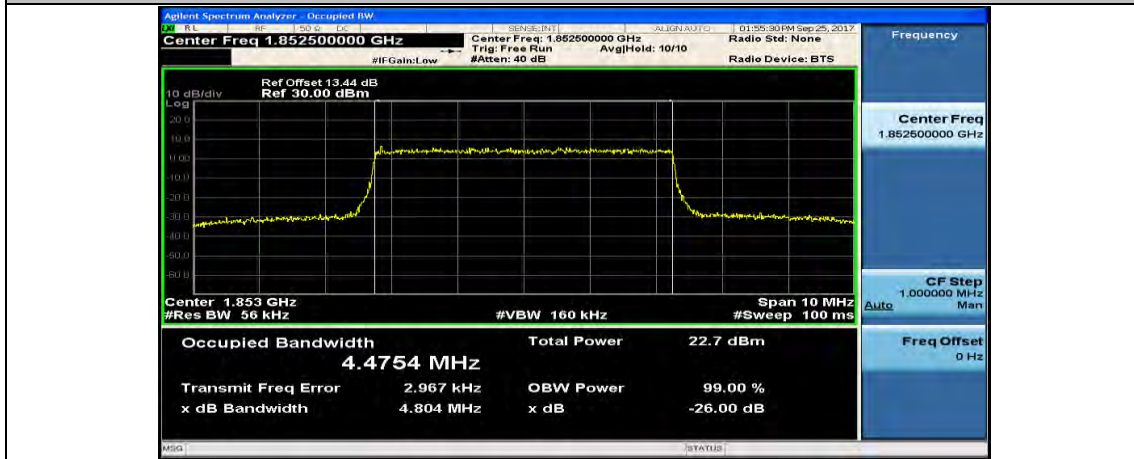


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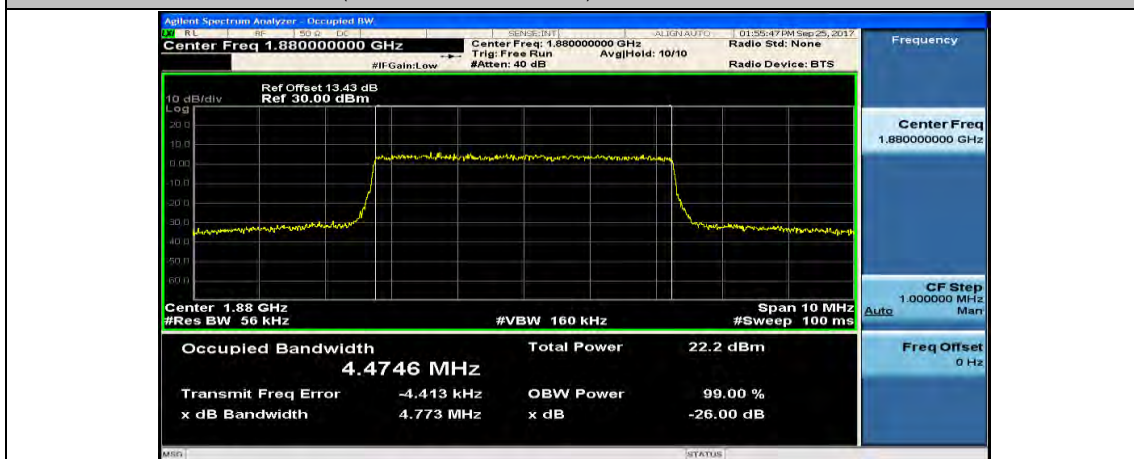




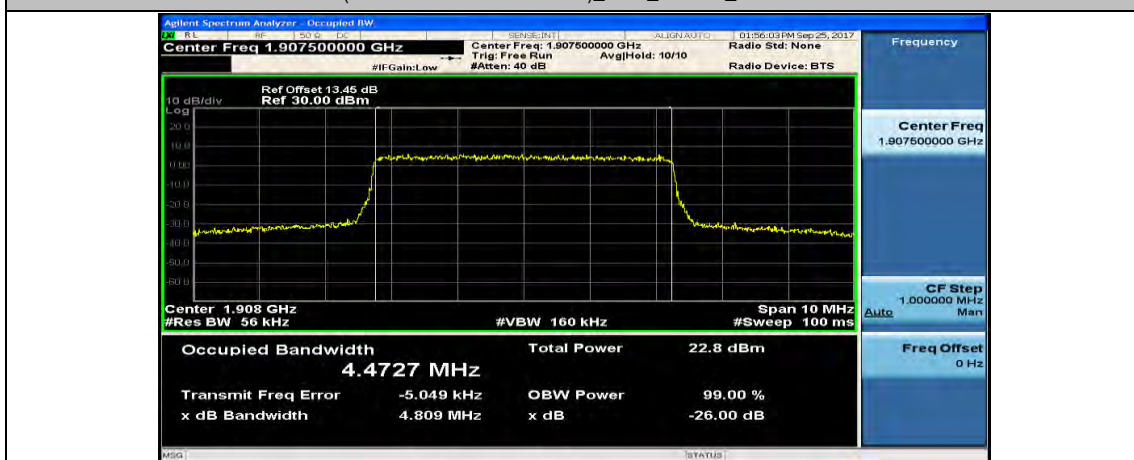
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



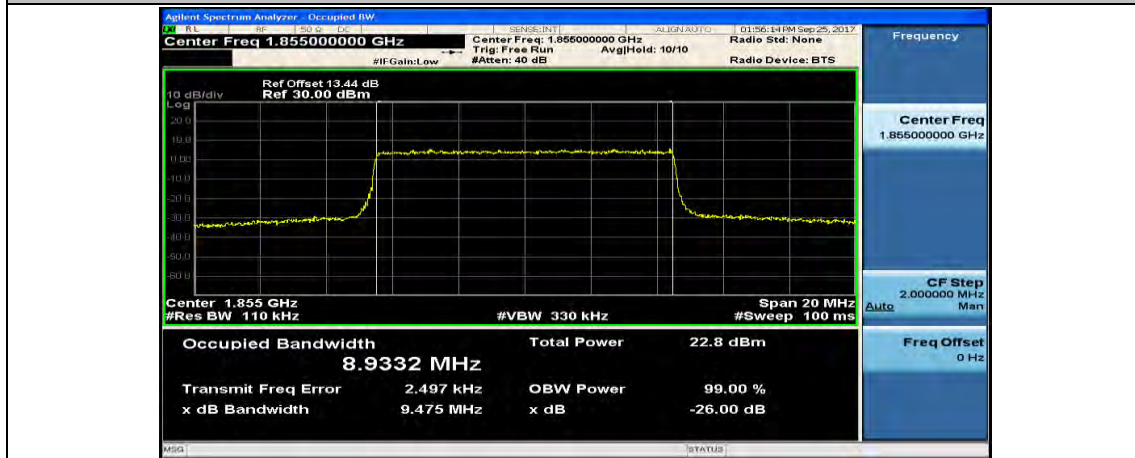
(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



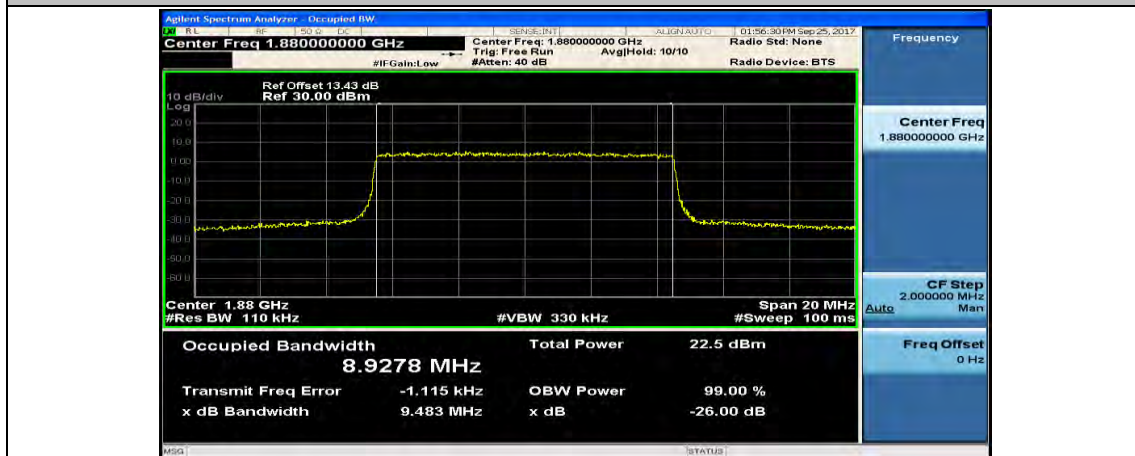


Channel Bandwidth: 10 MHz

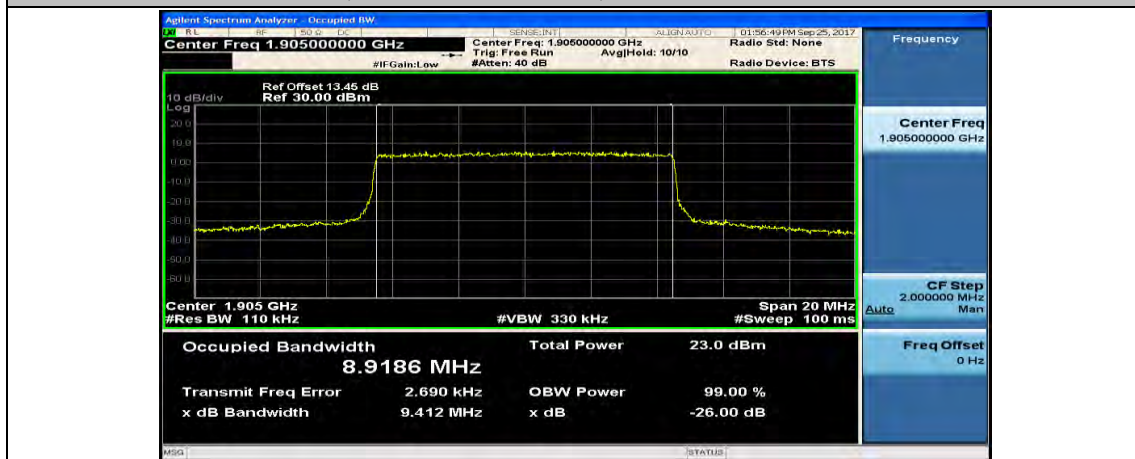
(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0



(Channel Bandwidth: 10 MHz)_MCH_QPSK_50RB#0

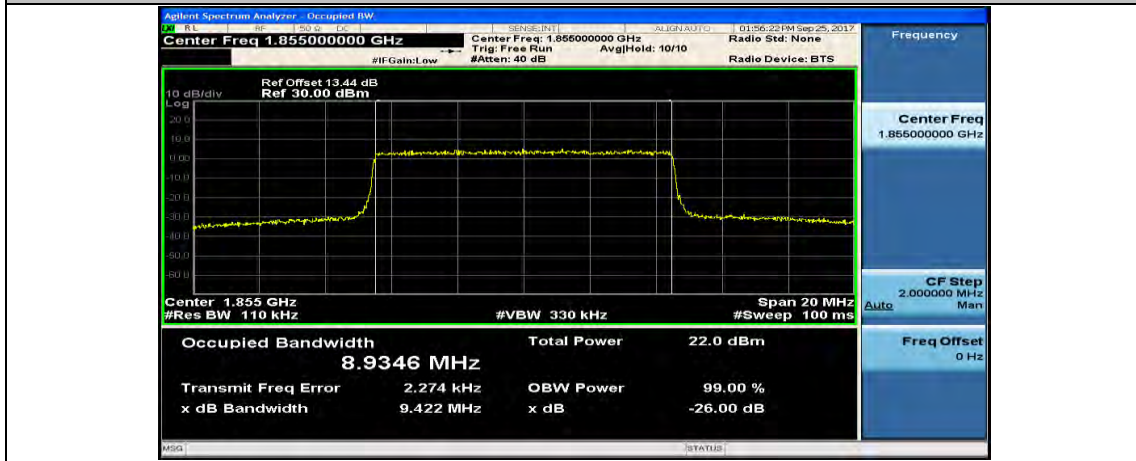


(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0

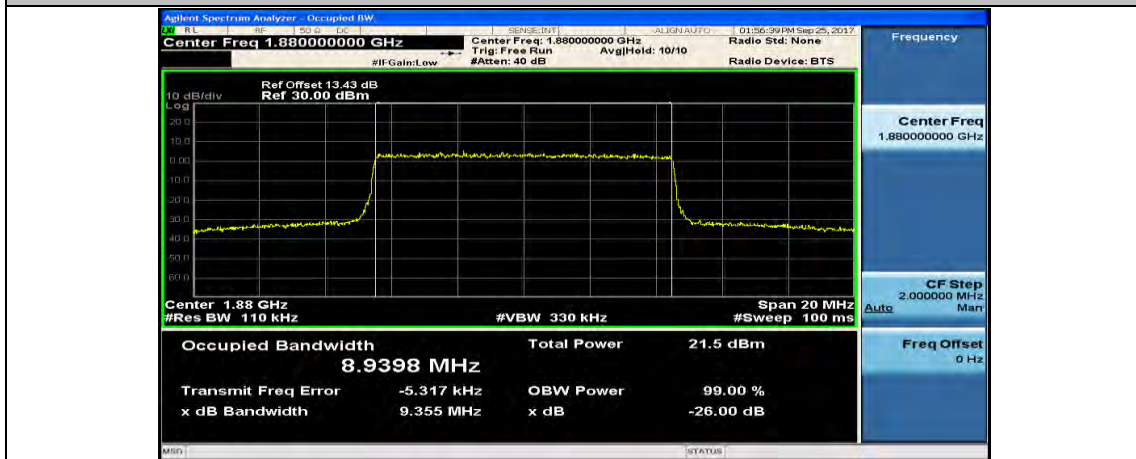




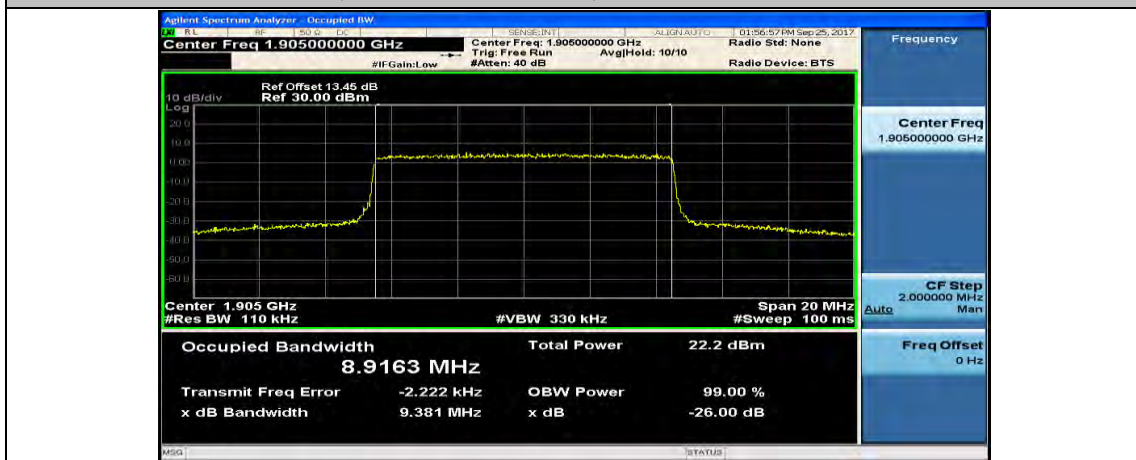
(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0



(Channel Bandwidth: 10 MHz)_MCH_16QAM_50RB#0



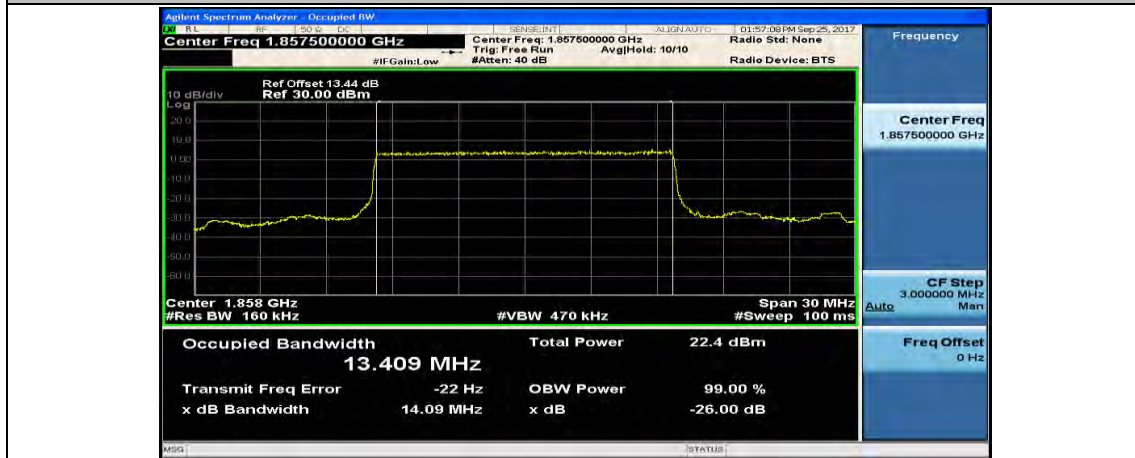
(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0



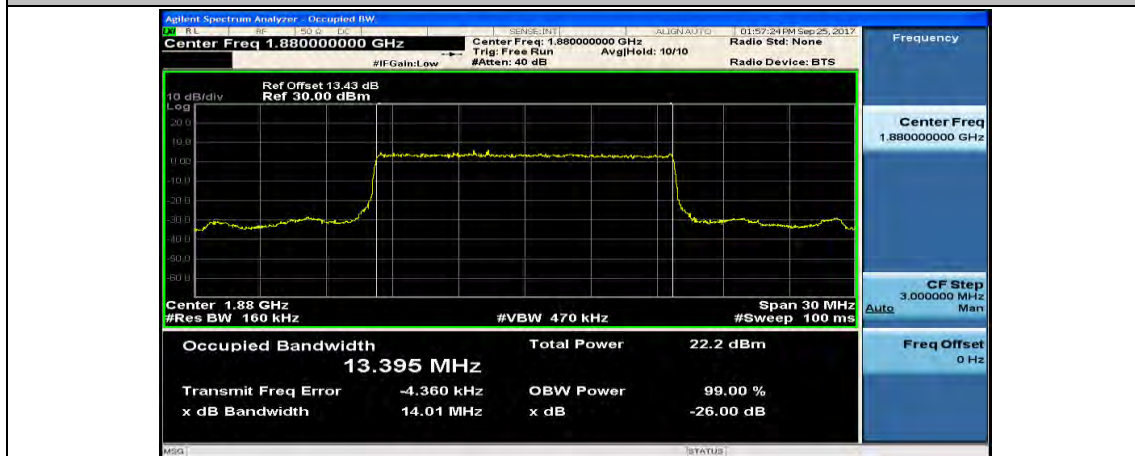


Channel Bandwidth: 15 MHz

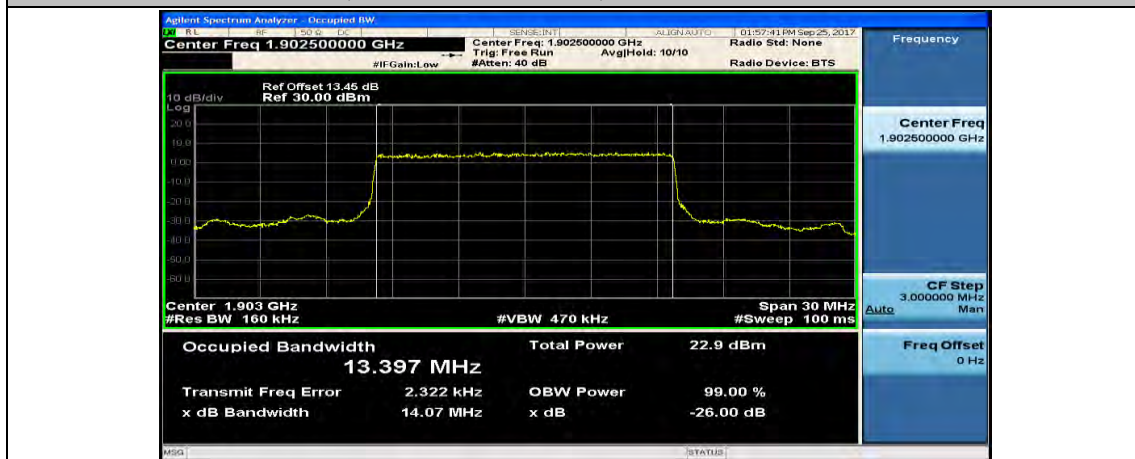
(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0



(Channel Bandwidth: 15 MHz)_MCH_QPSK_75RB#0

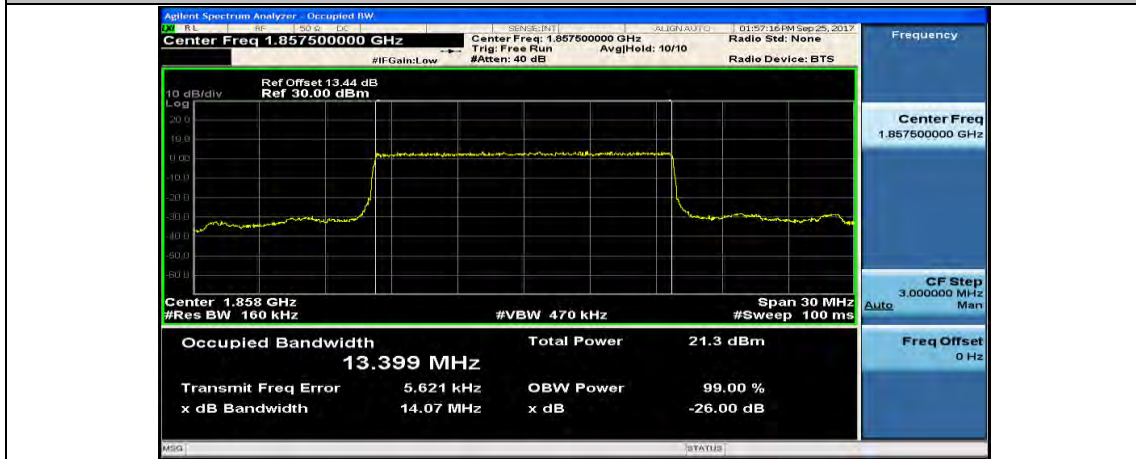


(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0

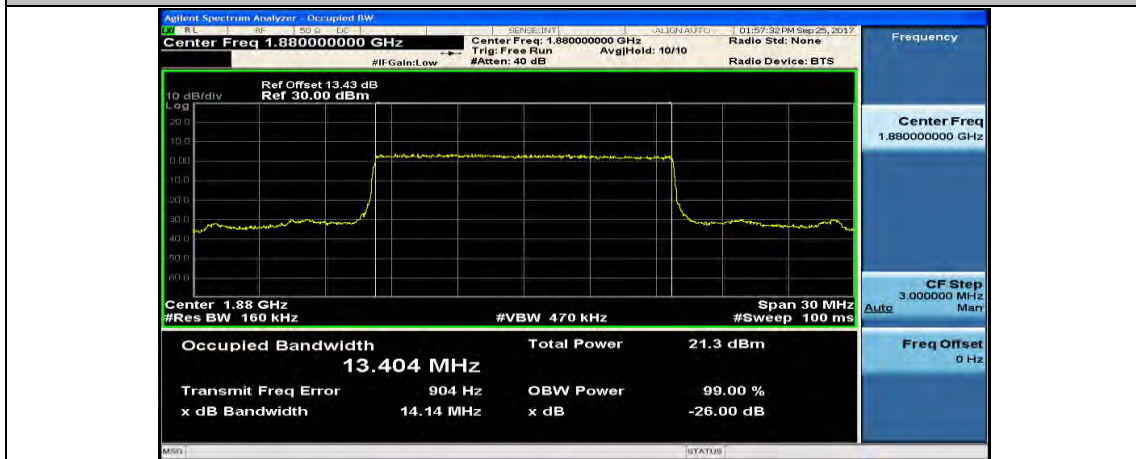




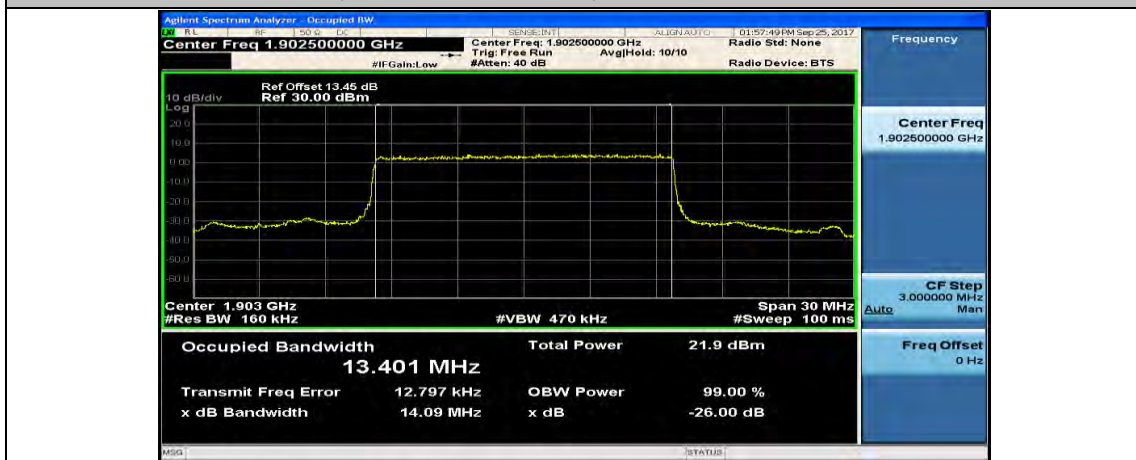
(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0



(Channel Bandwidth: 15 MHz)_MCH_16QAM_75RB#0



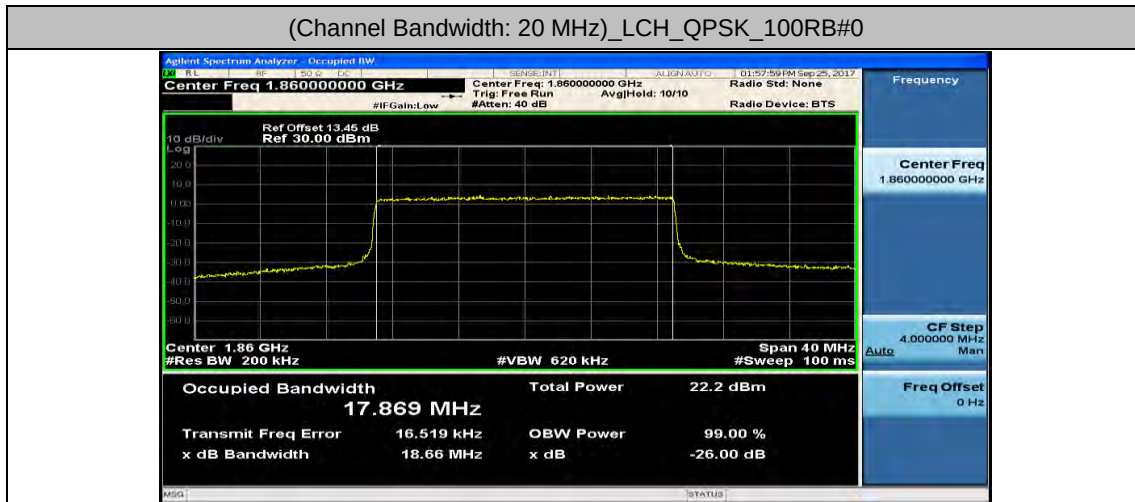
(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0



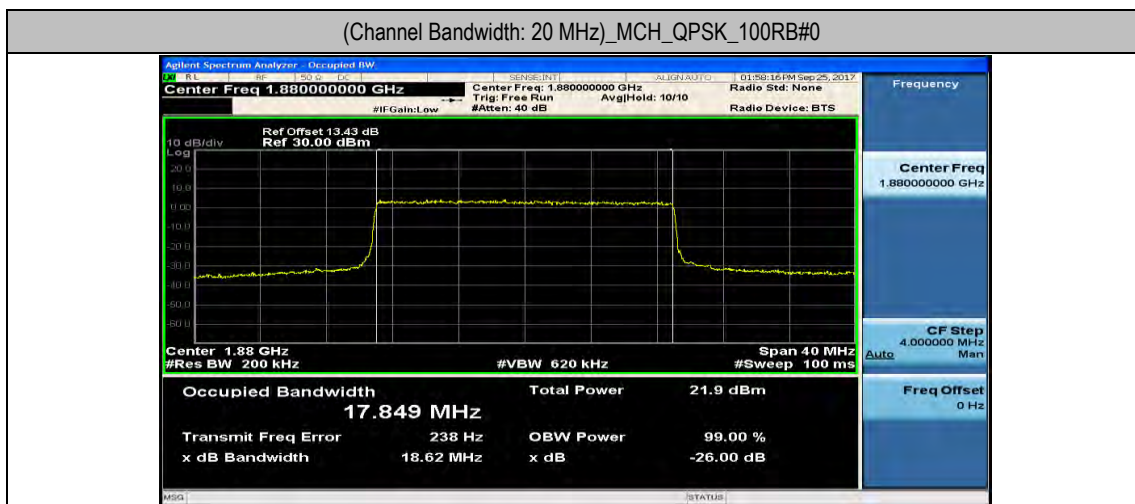


Channel Bandwidth: 20 MHz

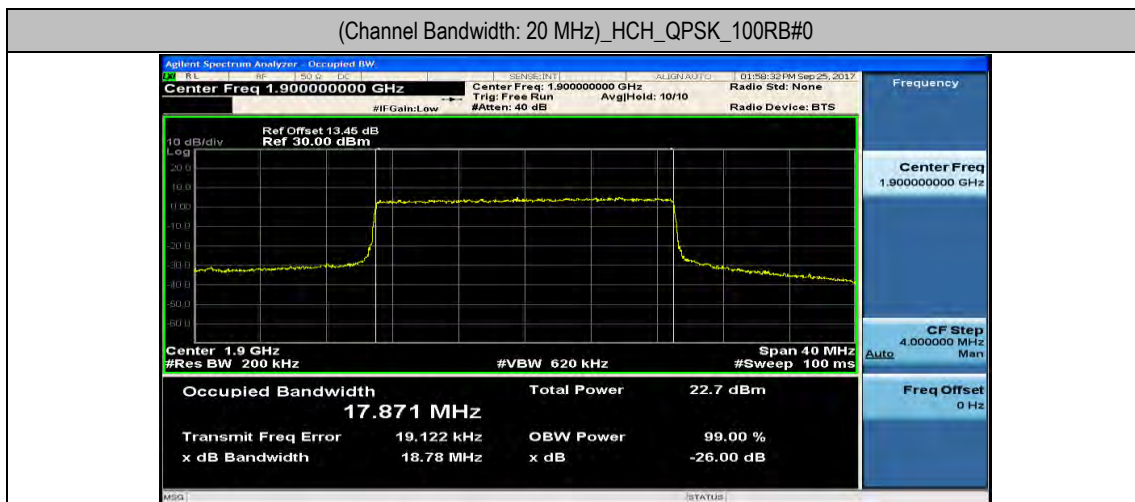
(Channel Bandwidth: 20 MHz)_LCH_QPSK_100RB#0



(Channel Bandwidth: 20 MHz)_MCH_QPSK_100RB#0

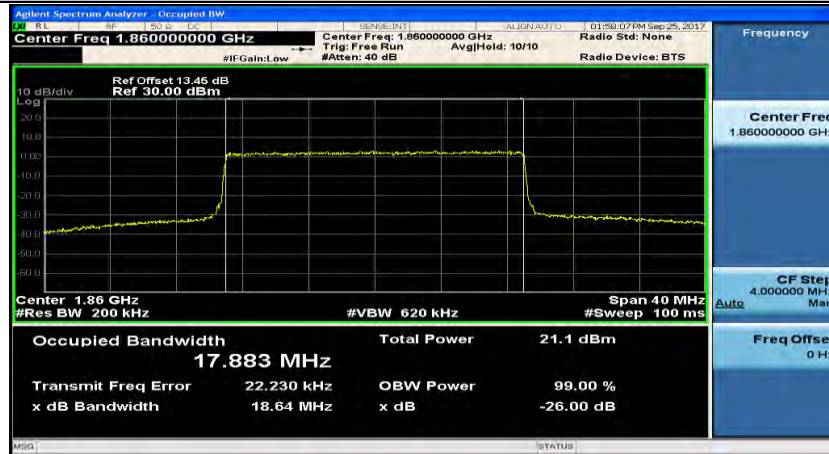


(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0

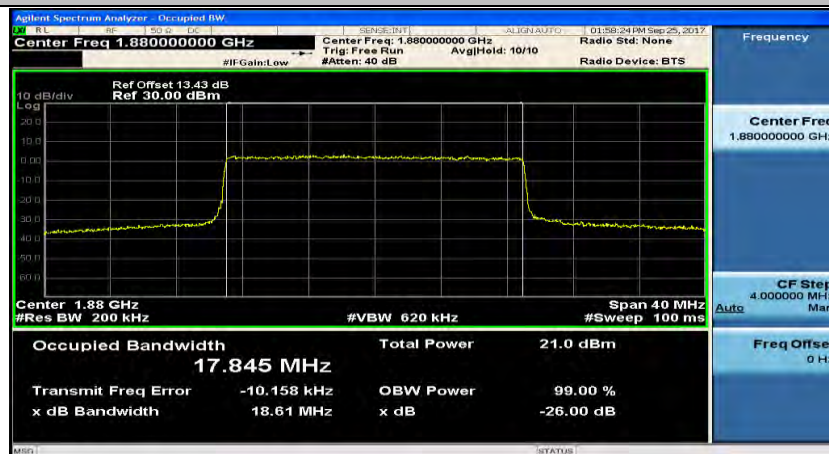




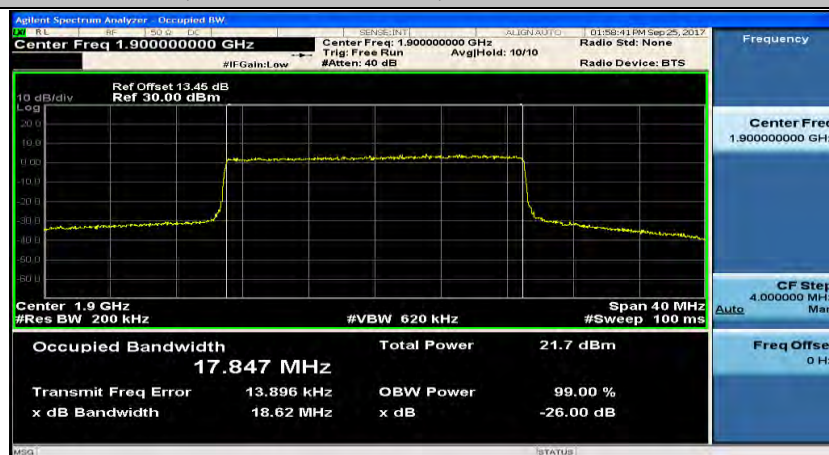
(Channel Bandwidth: 20 MHz)_LCH_16QAM_100RB#0



(Channel Bandwidth: 20 MHz)_MCH_16QAM_100RB#0



(Channel Bandwidth: 20 MHz)_HCH_16QAM_100RB#0



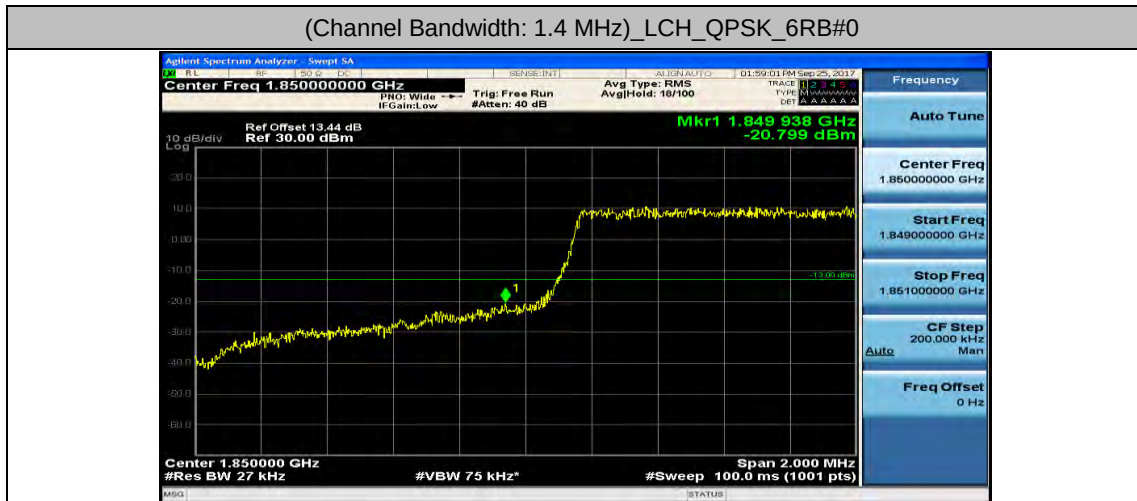


Appendix D: Band Edge

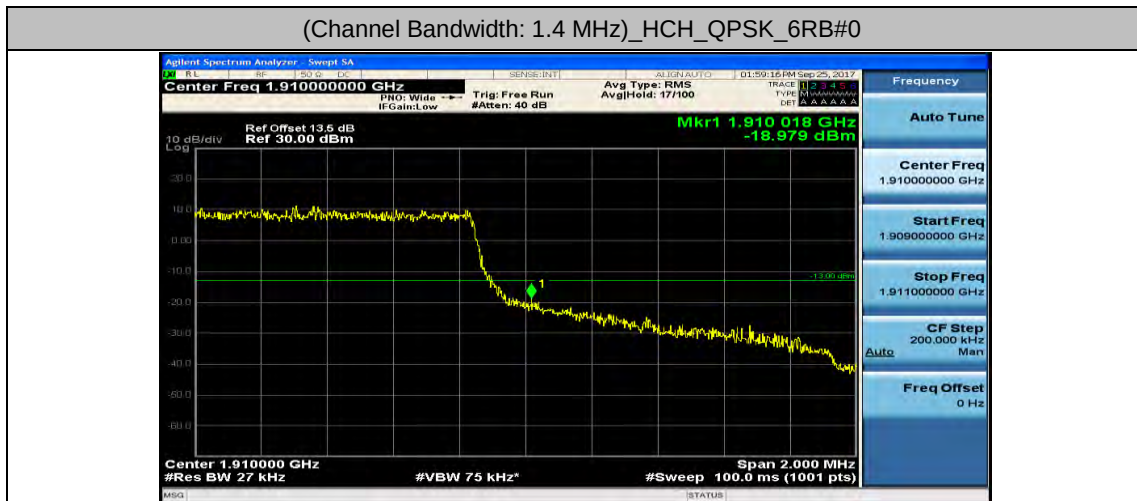
Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_6RB#0

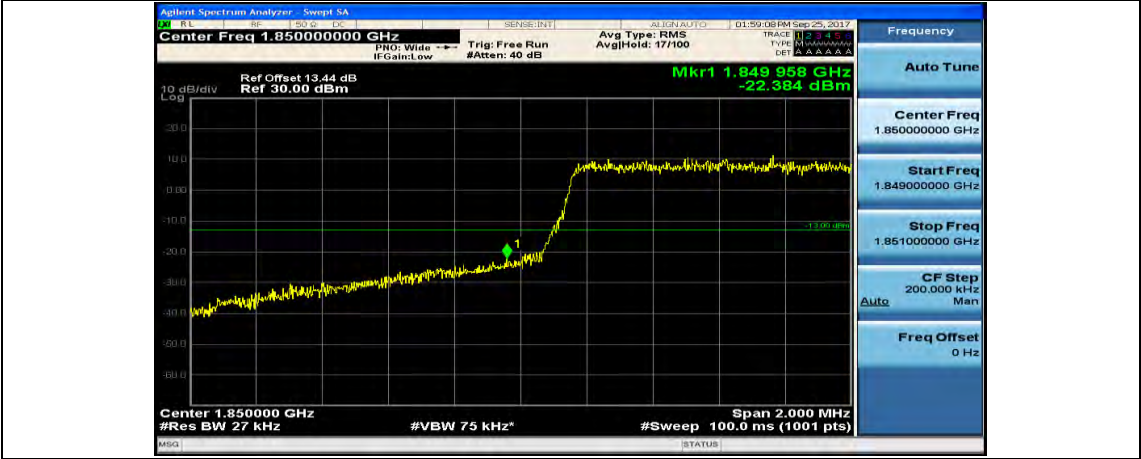


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0





(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_6RB#0

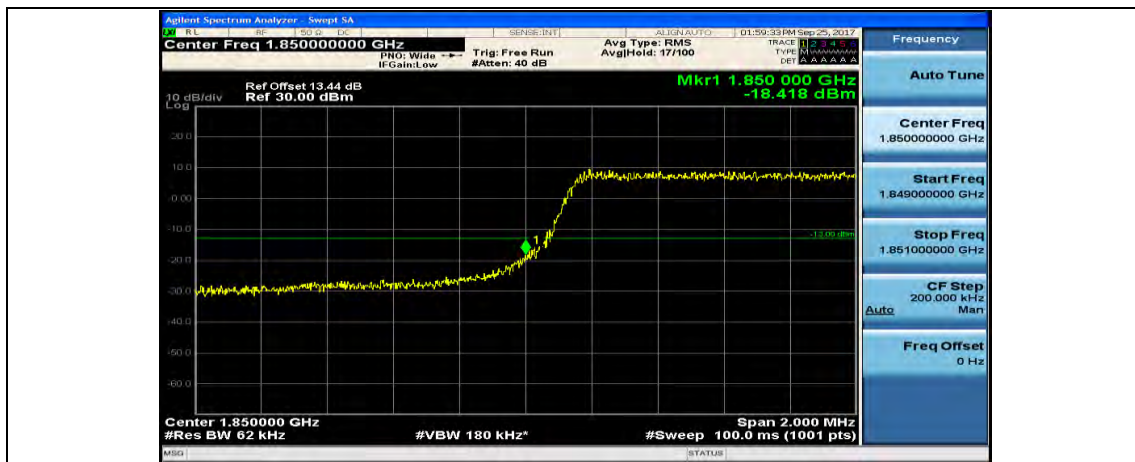


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0



Channel Bandwidth: 3 MHz

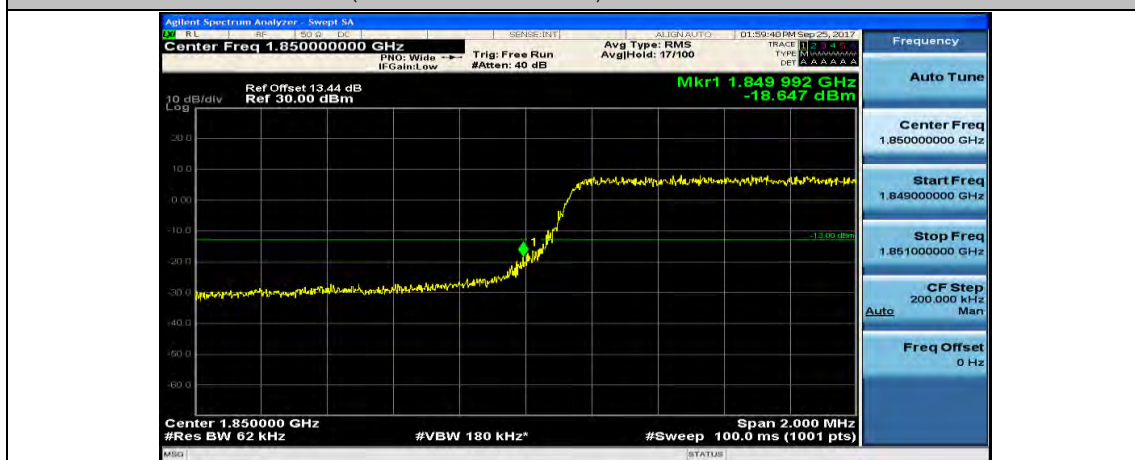
(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_15RB#0

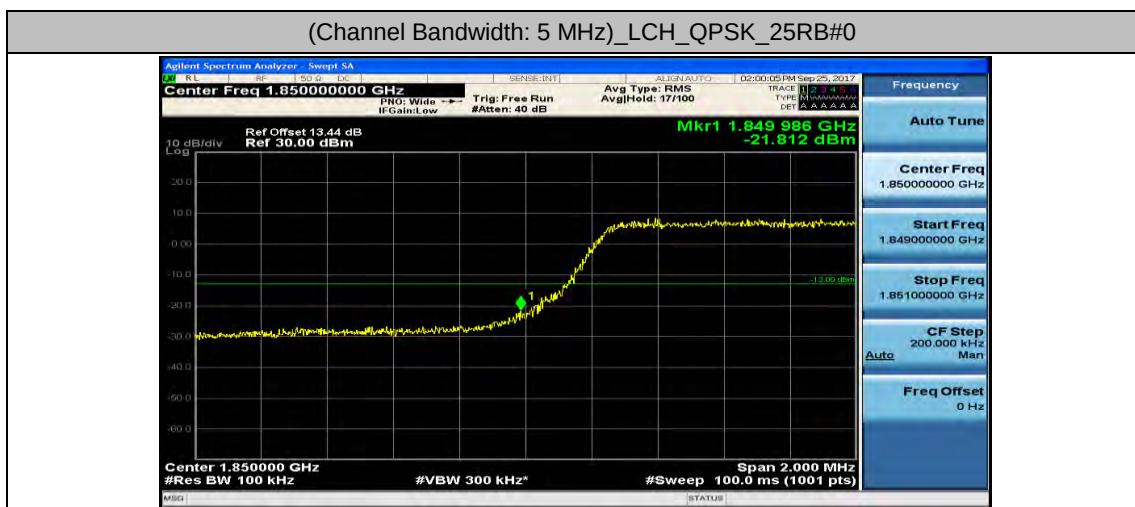


(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0

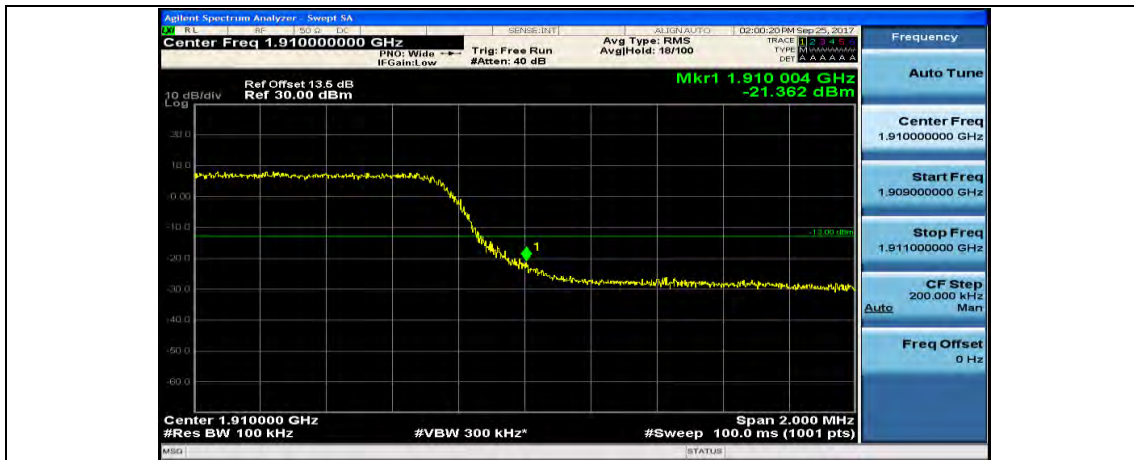


Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



Agilent Spectrum Analyzer - Swept SA

0.00 MHz 0.00 dBm 0.00 dB

Center Freq 1.850000000 GHz

PRF: Wide → Trig: Free Run Avg Type: RMS Avg/Hold: 18/100

IF Gain: Low #Atten: 40 dB

02:00:19 PM Sep 25, 2017

Ref Offset 13.44 dB Ref 30.00 dBm

Mkr1 1.849 996 GHz -22.592 dBm

10.0 dB/div Log

Center 1.850000 GHz #Res BW 100 kHz #VBW 300 kHz* #Sweep 100.0 ms (1001 pts)

Span 2.000 MHz

Frequency

Auto Tune

Center Freq 1.850000000 GHz

Start Freq 1.849000000 GHz

Stop Freq 1.851000000 GHz

CF Step 200.000 kHz Man

Freq Offset 0 Hz

Apilent Spectrum Analyzer - Swept SA

Center Freq 1.91000000 GHz

Ref Offset 13.5 dB
Ref 30.00 dBm

10 dB/div
Log

Mkr1 1.910 000 GHz
-23.806 dBm

Center 1.910000 GHz
Span 2.000 MHz
#Res BW 100 kHz
#VBW 300 kHz*
#Sweep 100.0 ms (1001 pts)

Frequency

Auto Tune

Center Freq
1.910000000 GHz

Start Freq
1.909000000 GHz

Stop Freq
1.911000000 GHz

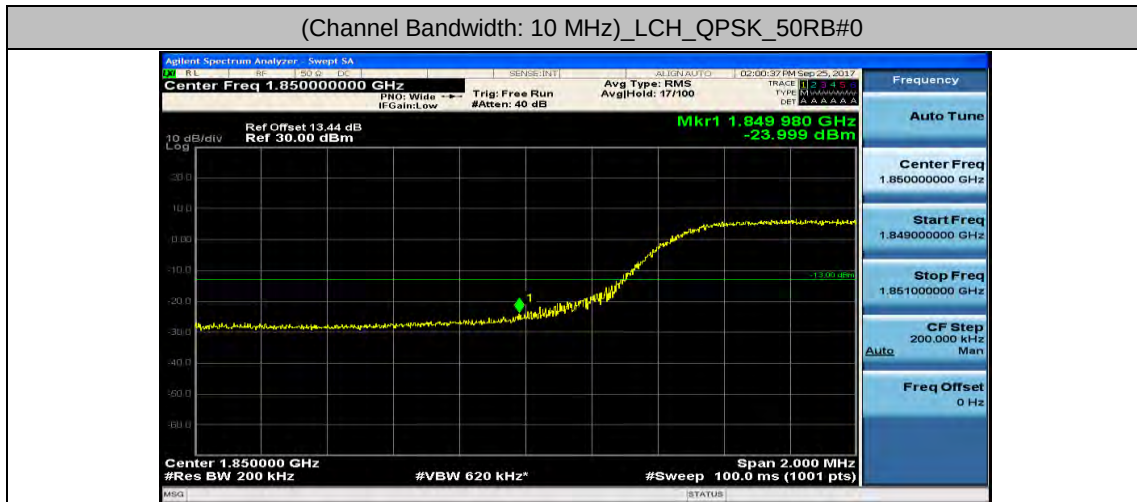
CF Step
200.000 kHz
Auto Man

Freq Offset
0 Hz

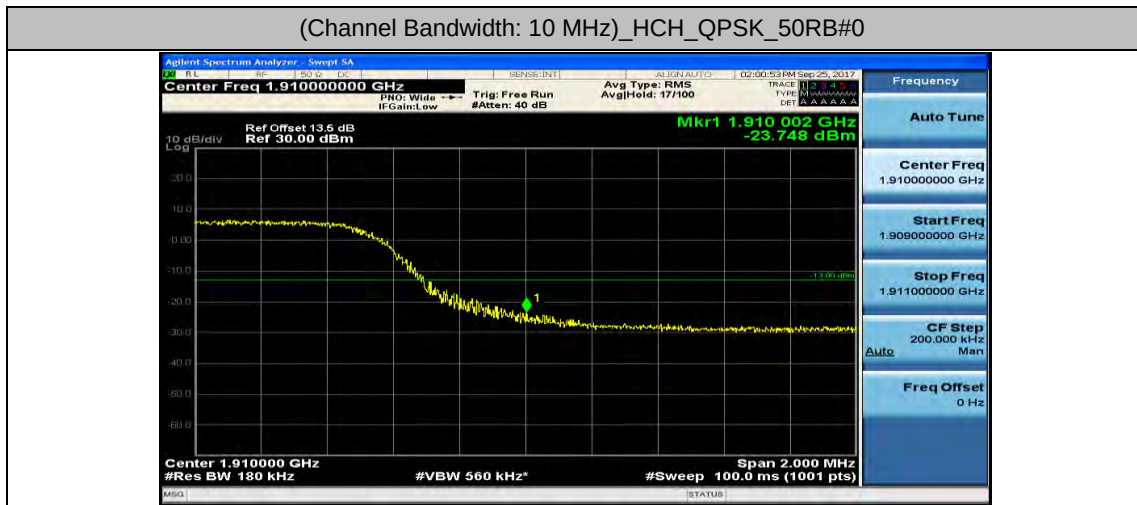


Channel Bandwidth: 10 MHz

(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0



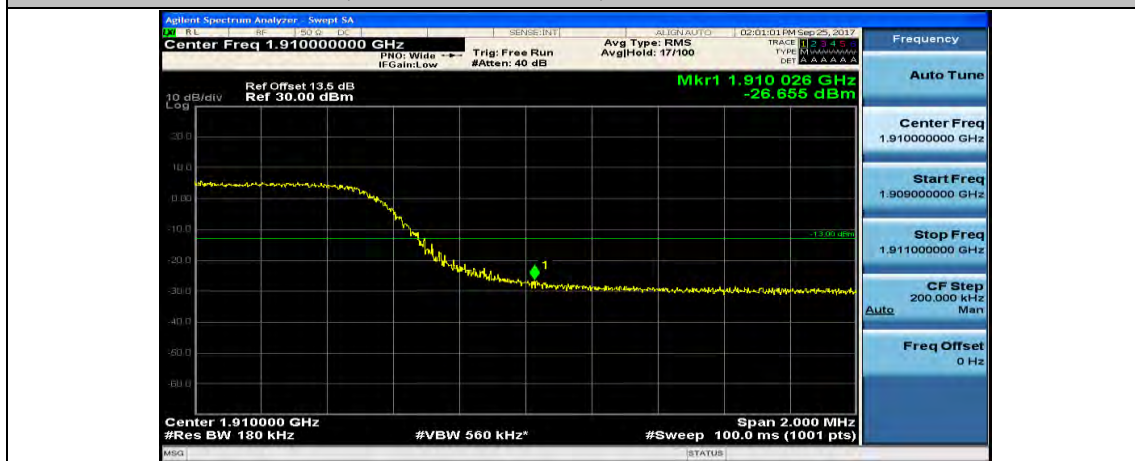
(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0



(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0



(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0



Channel Bandwidth: 15 MHz

(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0





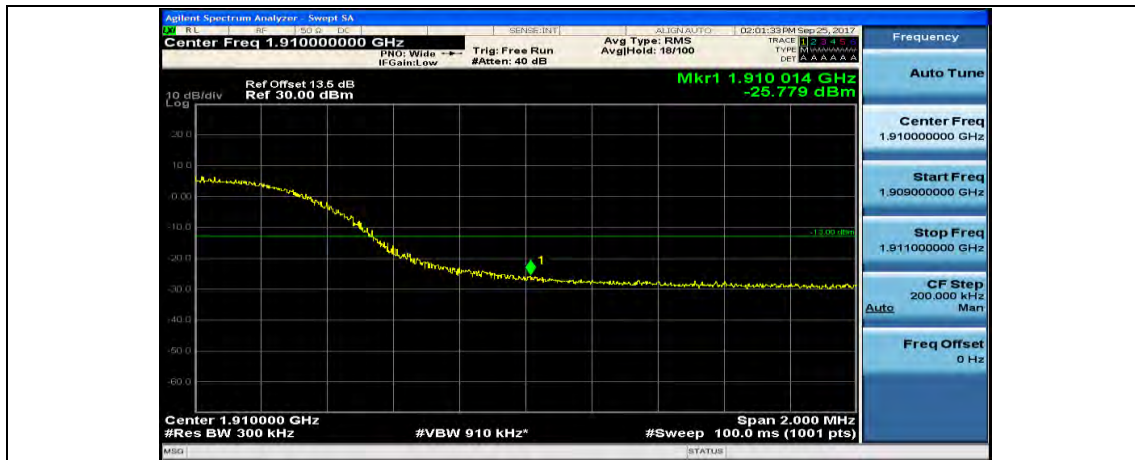
(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0



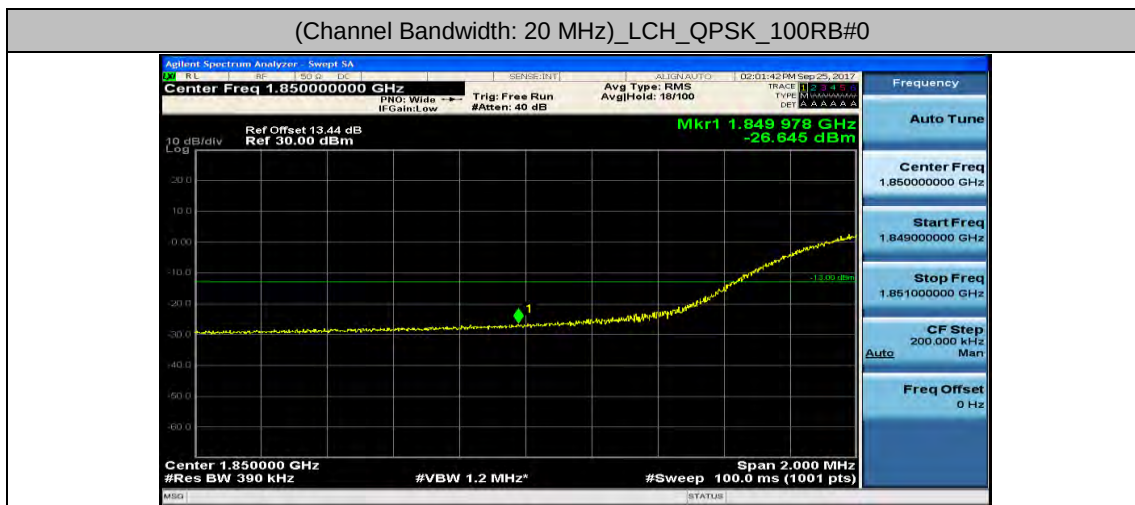
(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0



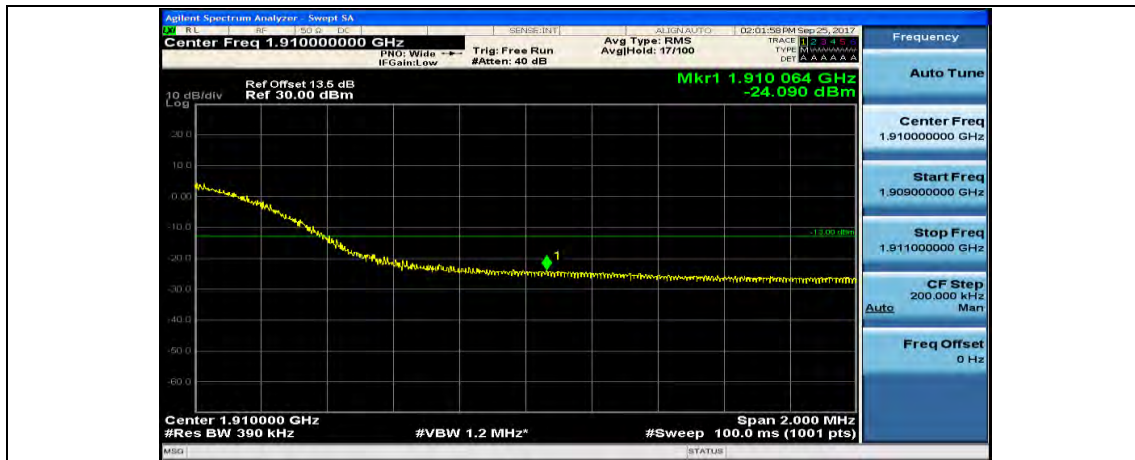
(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0



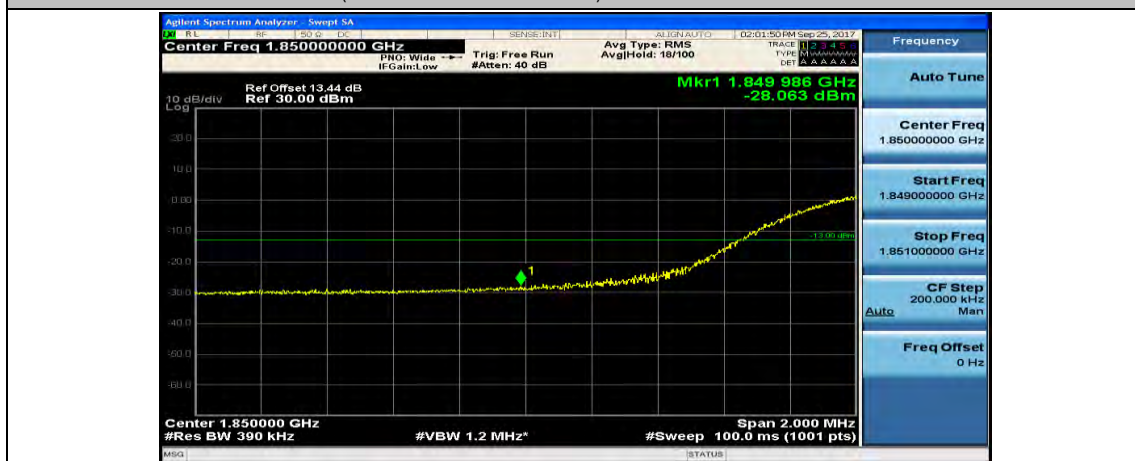
Channel Bandwidth: 20 MHz



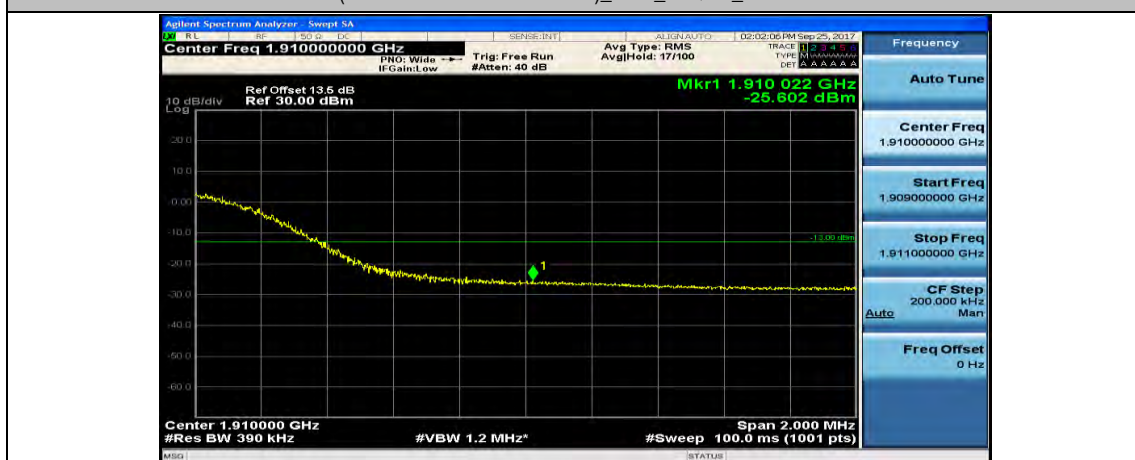
(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0



(Channel Bandwidth: 20 MHz)_LCH_16QAM_100RB#0



(Channel Bandwidth: 20 MHz)_HCH_16QAM_100RB#0



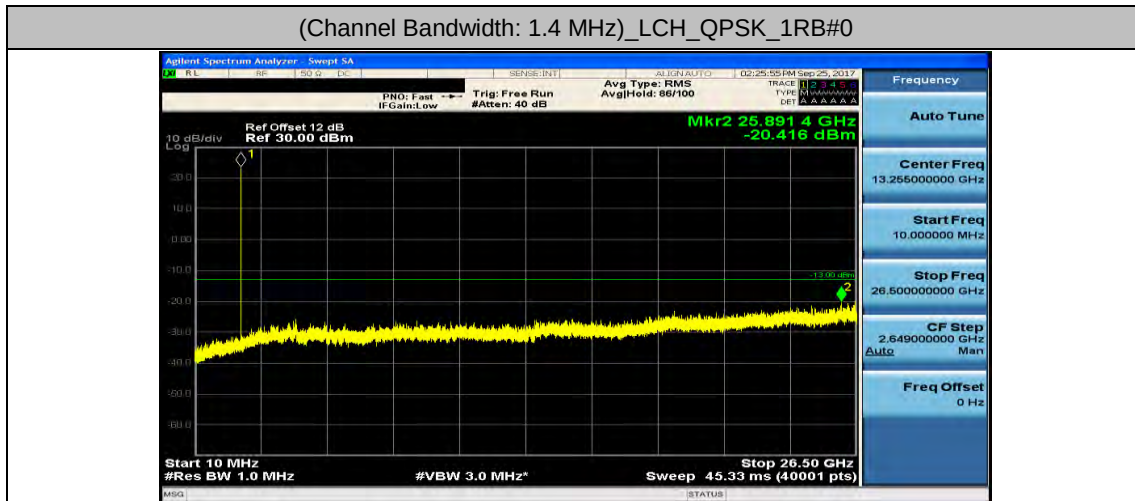


Appendix E: Conducted Spurious Emission

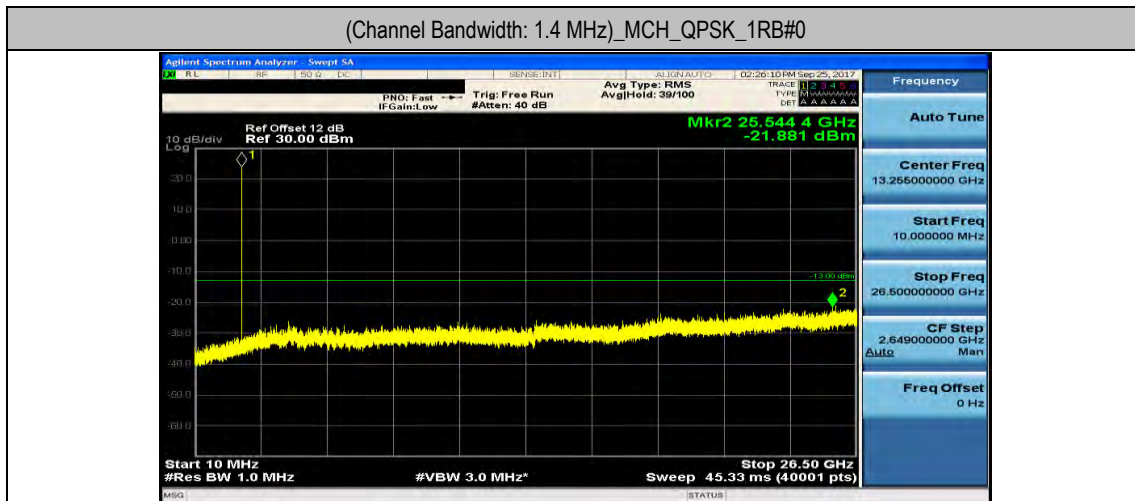
Test Graphs

Channel Bandwidth: 1.4 MHz

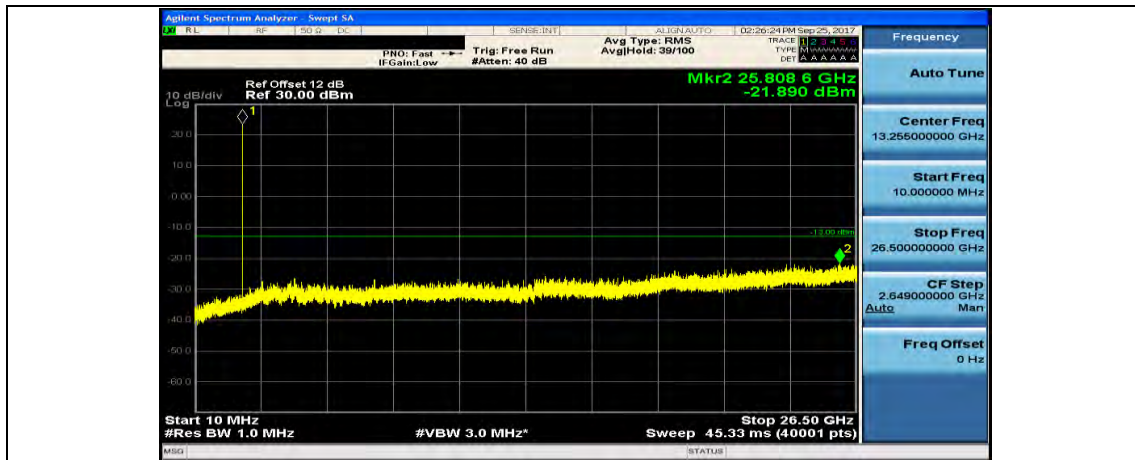
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

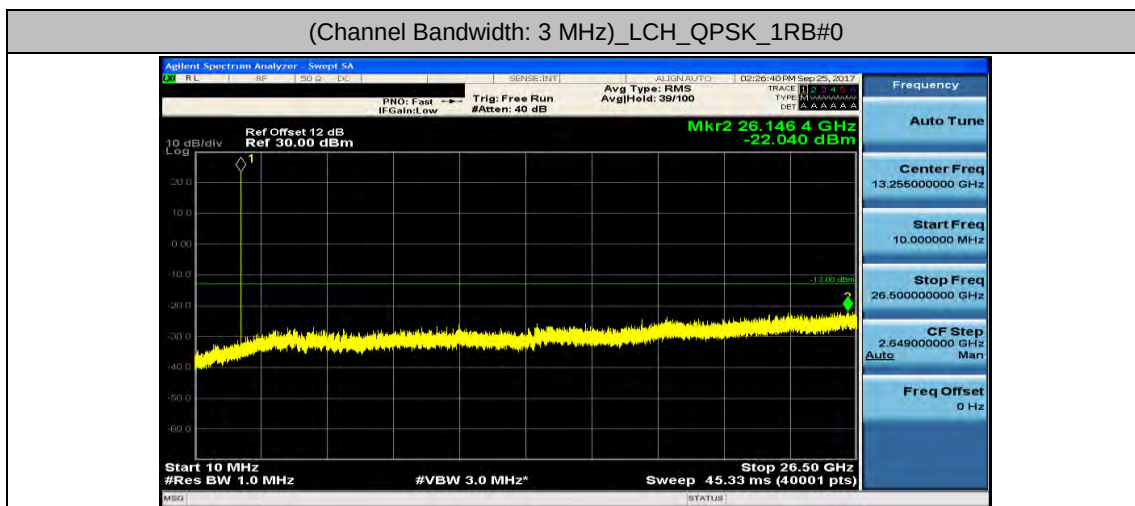


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

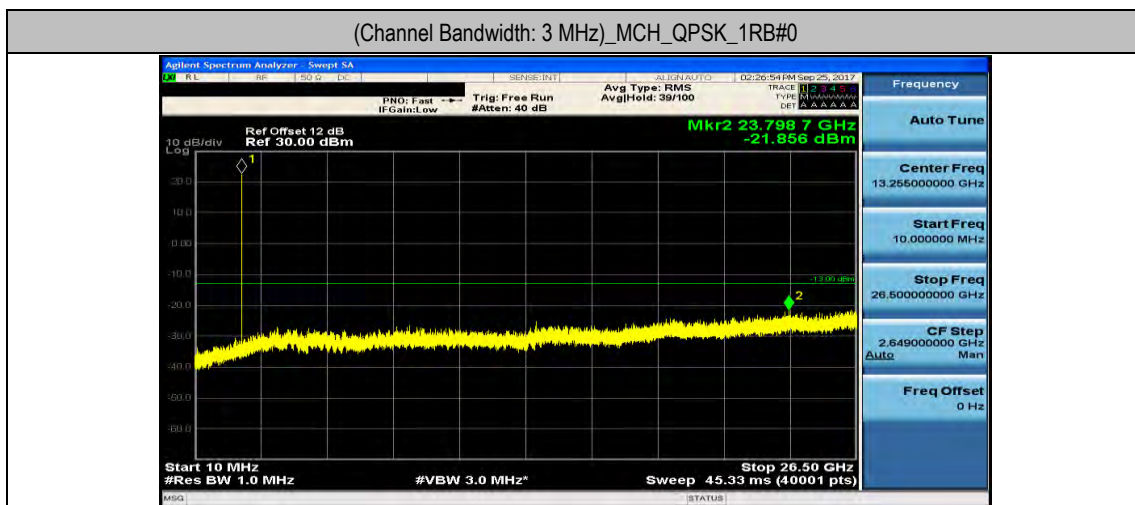


Channel Bandwidth: 3 MHz

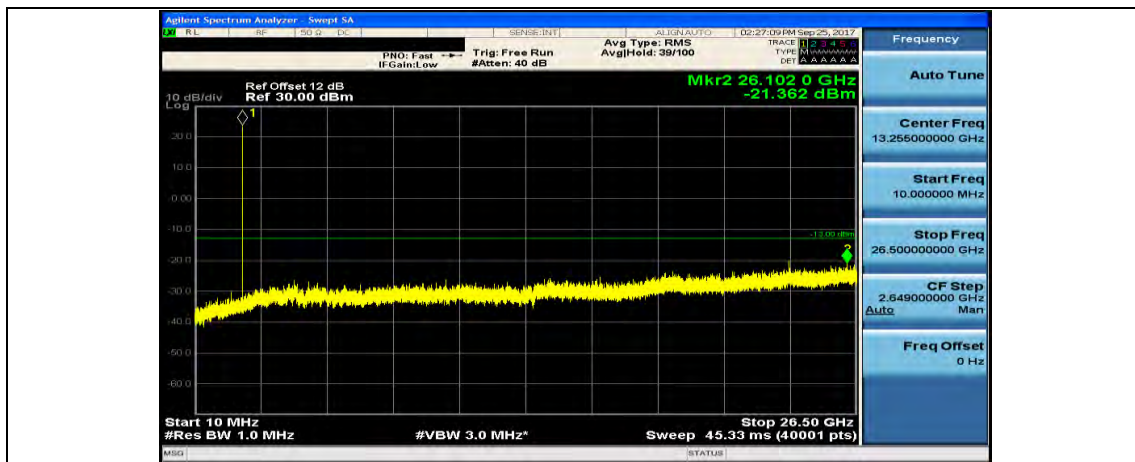
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

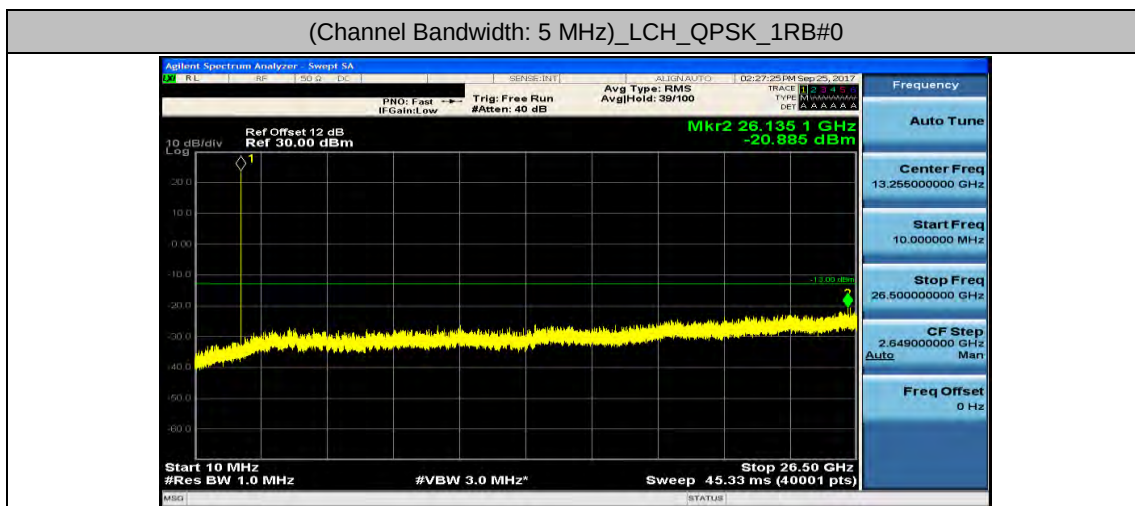


(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

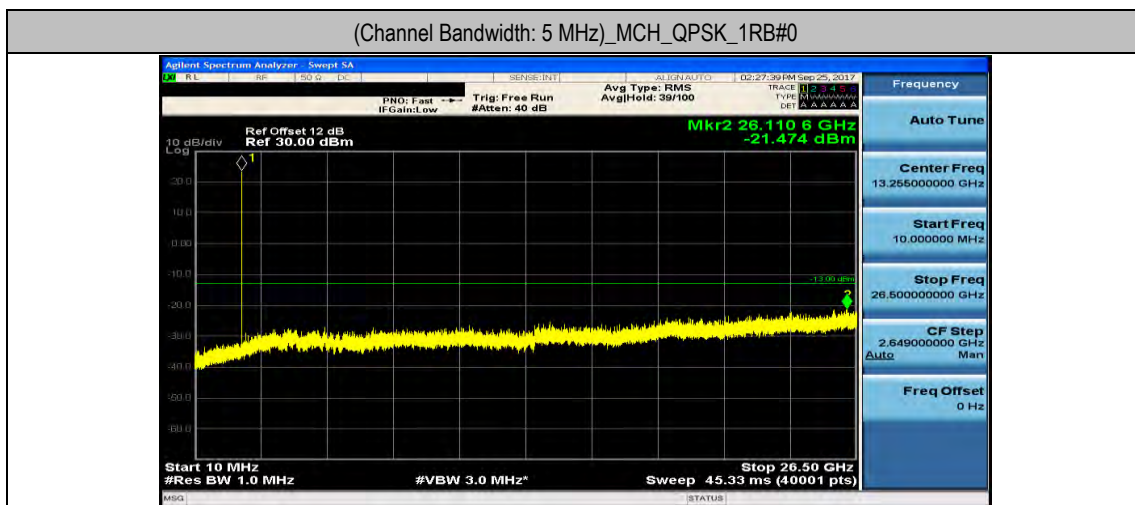


Channel Bandwidth: 5 MHz

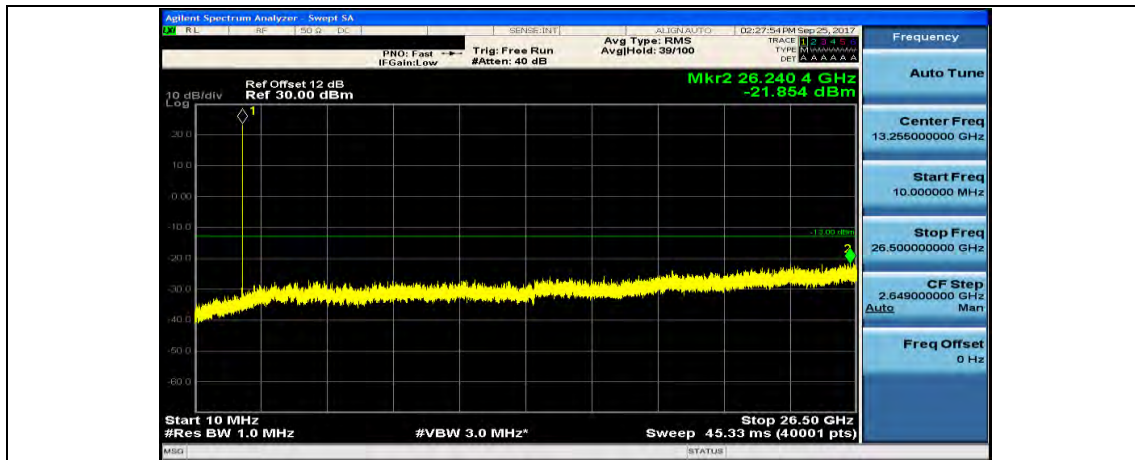
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

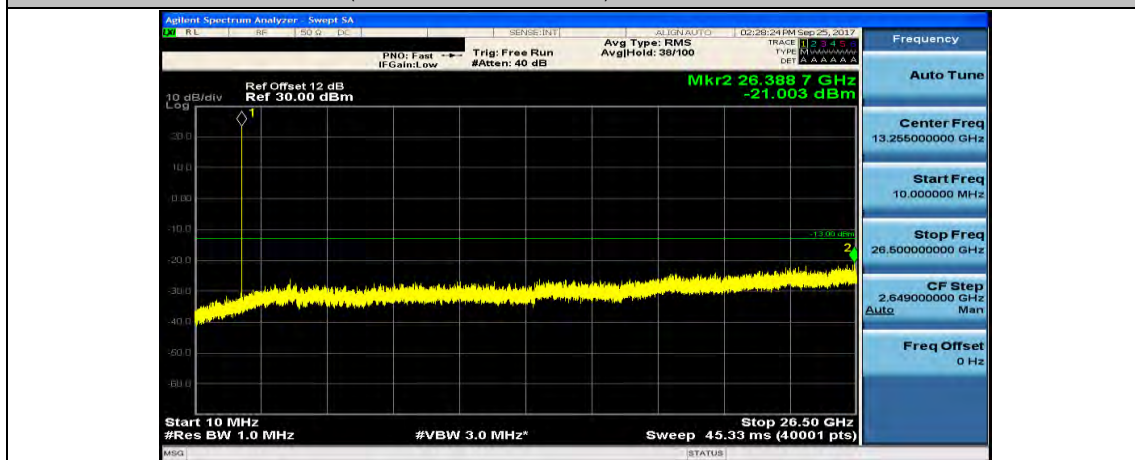


Channel Bandwidth: 10 MHz

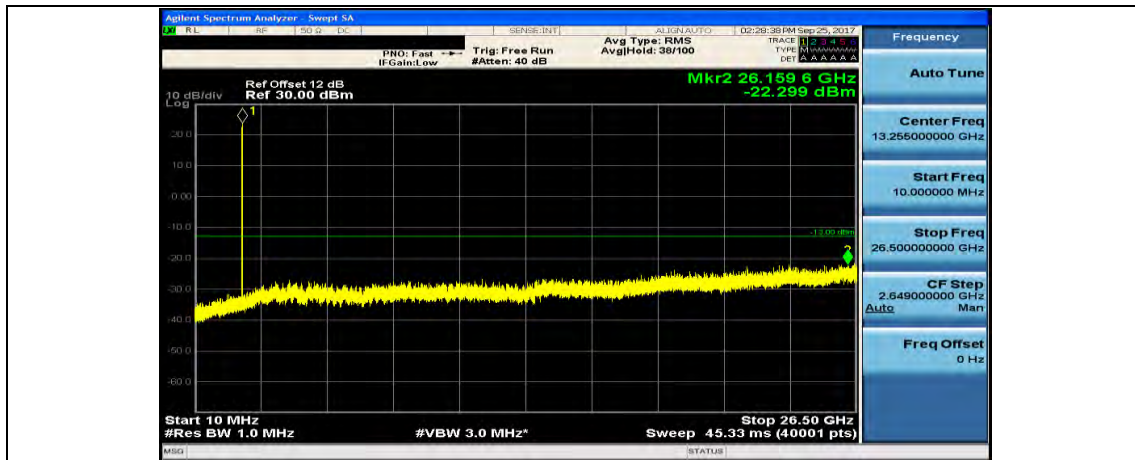
(Channel Bandwidth: 10 MHz)_LCH_QPSK_1RB#0



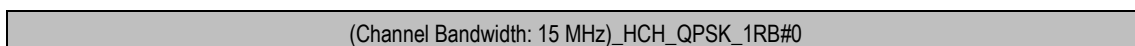
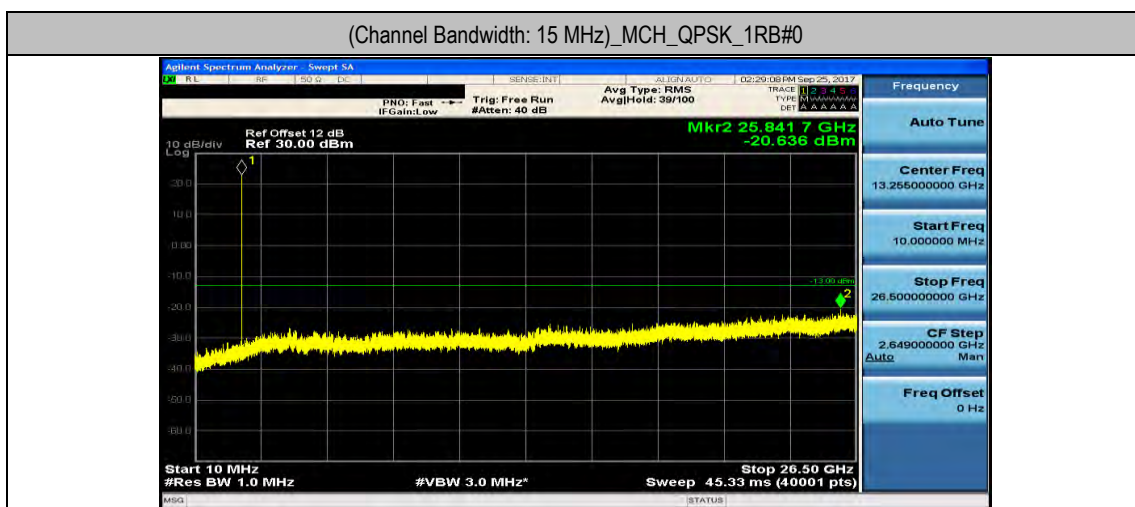
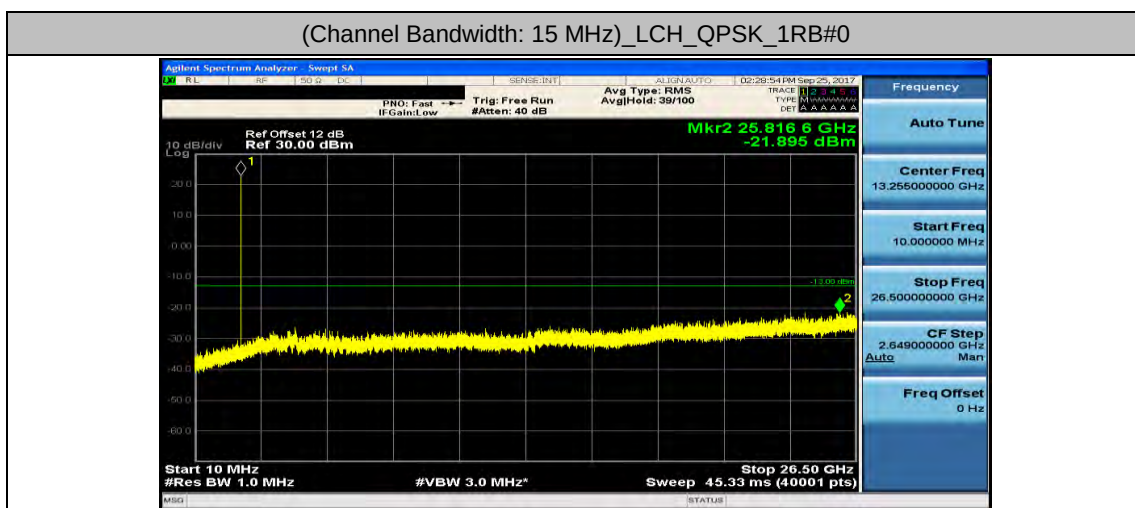
(Channel Bandwidth: 10 MHz)_MCH_QPSK_1RB#0

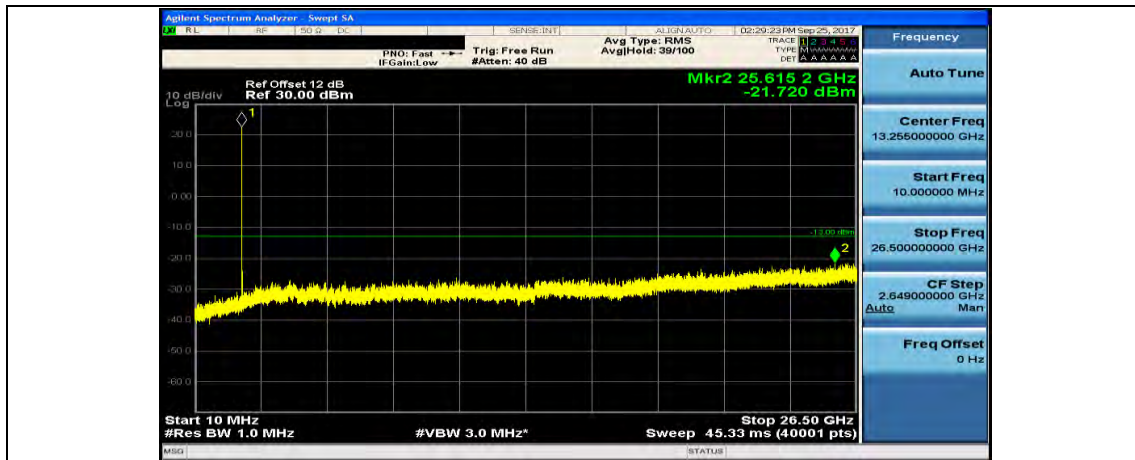


(Channel Bandwidth: 10 MHz)_HCH_QPSK_1RB#0

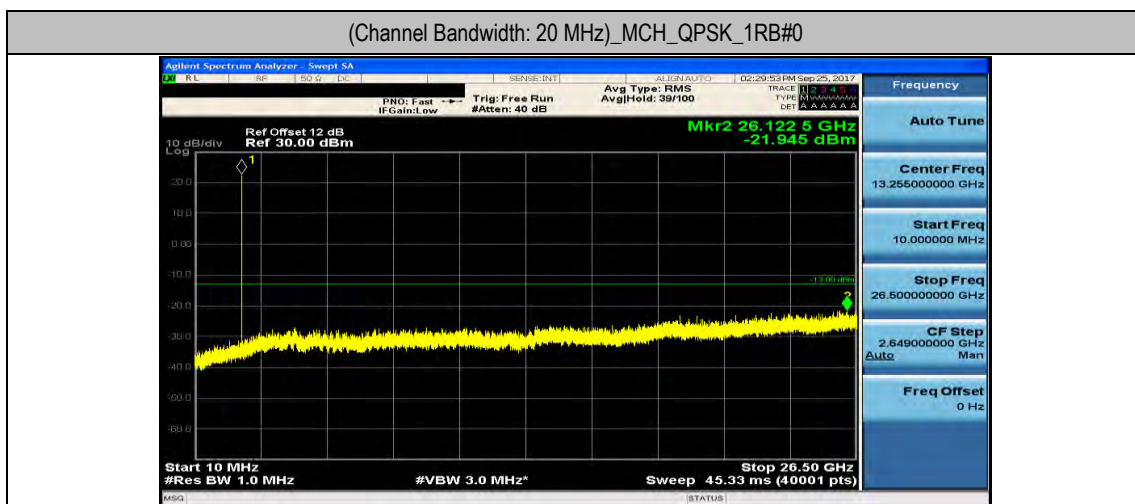
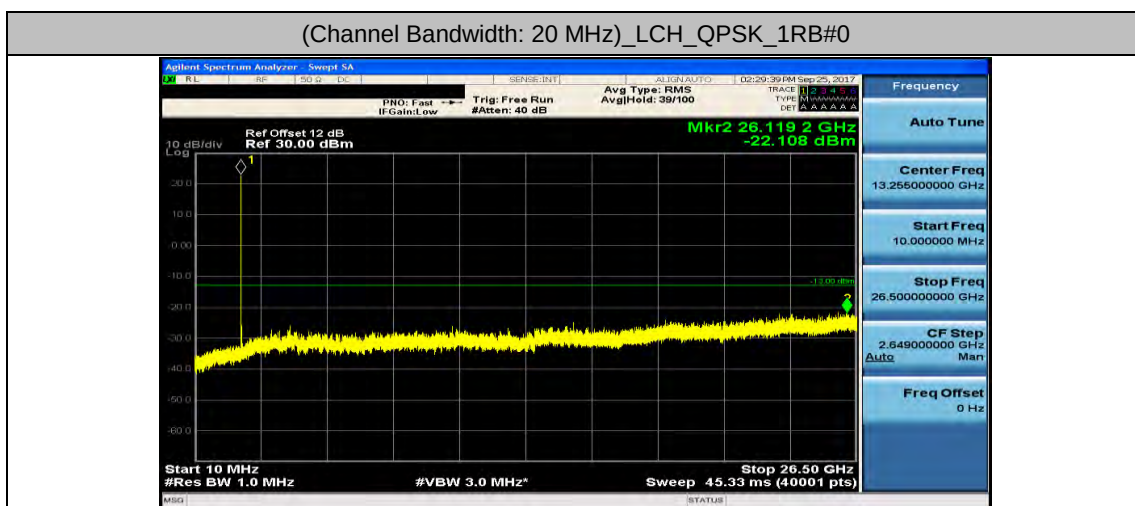


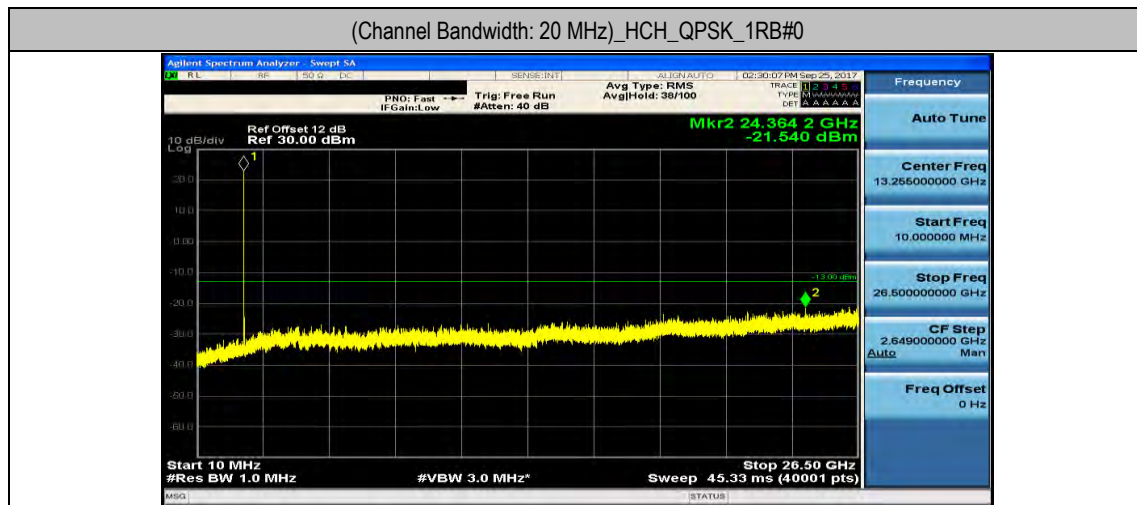
Channel Bandwidth: 15 MHz





Channel Bandwidth: 20 MHz





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	-2.26	-0.001221	± 2.5	PASS
		VN	TN	-2.85	-0.001538	± 2.5	PASS
		VH	TN	-3.29	-0.001778	± 2.5	PASS
	MCH	VL	TN	-4.05	-0.002153	± 2.5	PASS
		VN	TN	-0.64	-0.000342	± 2.5	PASS
		VH	TN	-2.76	-0.001469	± 2.5	PASS
	HCH	VL	TN	-0.49	-0.000255	± 2.5	PASS
		VN	TN	1.34	0.000704	± 2.5	PASS
		VH	TN	-1.43	-0.000749	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-2.29	-0.001237	± 2.5	PASS
		VN	-20	-2.13	-0.001152	± 2.5	PASS
		VN	-10	-1.46	-0.000788	± 2.5	PASS
		VN	0	-2.52	-0.001360	± 2.5	PASS
		VN	10	-2.95	-0.001592	± 2.5	PASS
		VN	20	-2.25	-0.001214	± 2.5	PASS
		VN	30	-1.90	-0.001028	± 2.5	PASS
		VN	40	-1.09	-0.000587	± 2.5	PASS
		VN	50	-2.86	-0.001546	± 2.5	PASS



	MCH	VN	-30	-4.69	-0.002496	± 2.5	PASS
		VN	-20	-3.12	-0.001659	± 2.5	PASS
		VN	-10	-2.07	-0.001103	± 2.5	PASS
		VN	0	-2.78	-0.001476	± 2.5	PASS
		VN	10	-2.63	-0.001400	± 2.5	PASS
		VN	20	-4.69	-0.002496	± 2.5	PASS
		VN	30	-4.63	-0.002465	± 2.5	PASS
		VN	40	-5.15	-0.002739	± 2.5	PASS
		VN	50	-5.22	-0.002777	± 2.5	PASS
	HCH	VN	-30	0.99	0.000517	± 2.5	PASS
		VN	-20	-0.46	-0.000240	± 2.5	PASS
		VN	-10	-0.76	-0.000397	± 2.5	PASS
		VN	0	-0.93	-0.000487	± 2.5	PASS
		VN	10	0.26	0.000135	± 2.5	PASS
		VN	20	-1.97	-0.001034	± 2.5	PASS
		VN	30	0.34	0.000180	± 2.5	PASS
		VN	40	-0.20	-0.000105	± 2.5	PASS
		VN	50	-0.82	-0.000427	± 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	-3.69	-0.001993	± 2.5	PASS
		VN	TN	-3.76	-0.002032	± 2.5	PASS
		VH	TN	-2.75	-0.001483	± 2.5	PASS
	MCH	VL	TN	-5.58	-0.002968	± 2.5	PASS
		VN	TN	-3.36	-0.001788	± 2.5	PASS
		VH	TN	-4.88	-0.002595	± 2.5	PASS
	HCH	VL	TN	2.05	0.001072	± 2.5	PASS
		VN	TN	0.19	0.000097	± 2.5	PASS
		VH	TN	1.39	0.000727	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-2.30	-0.001244	± 2.5	PASS
		VN	-20	-2.45	-0.001321	± 2.5	PASS
		VN	-10	-2.62	-0.001414	± 2.5	PASS
		VN	0	-2.23	-0.001205	± 2.5	PASS
		VN	10	-3.45	-0.001862	± 2.5	PASS
		VN	20	-4.86	-0.002627	± 2.5	PASS
		VN	30	-3.30	-0.001785	± 2.5	PASS
		VN	40	-4.32	-0.002333	± 2.5	PASS
		VN	50	-3.30	-0.001785	± 2.5	PASS

	MCH	VN	-30	-5.28	-0.002808	± 2.5	PASS
		VN	-20	-2.46	-0.001309	± 2.5	PASS
		VN	-10	-4.62	-0.002458	± 2.5	PASS
		VN	0	-5.38	-0.002861	± 2.5	PASS
		VN	10	-4.66	-0.002481	± 2.5	PASS
		VN	20	-3.53	-0.001879	± 2.5	PASS
		VN	30	-3.30	-0.001758	± 2.5	PASS
		VN	40	-3.99	-0.002123	± 2.5	PASS
		VN	50	-3.30	-0.001758	± 2.5	PASS
	HCH	VN	-30	2.19	0.001147	± 2.5	PASS
		VN	-20	-0.44	-0.000232	± 2.5	PASS
		VN	-10	-0.36	-0.000187	± 2.5	PASS
		VN	0	-0.89	-0.000465	± 2.5	PASS
		VN	10	-0.23	-0.000120	± 2.5	PASS
		VN	20	-0.74	-0.000390	± 2.5	PASS
		VN	30	1.75	0.000914	± 2.5	PASS
		VN	40	1.43	0.000750	± 2.5	PASS
		VN	50	1.75	0.000914	± 2.5	PASS

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	-1.39	-0.000749	± 2.5	PASS
		VN	TN	-1.79	-0.000965	± 2.5	PASS
		VH	TN	-2.59	-0.001398	± 2.5	PASS
	MCH	VL	TN	-4.26	-0.002268	± 2.5	PASS
		VN	TN	-4.99	-0.002656	± 2.5	PASS
		VH	TN	-4.51	-0.002397	± 2.5	PASS
	HCH	VL	TN	0.33	0.000172	± 2.5	PASS
		VN	TN	2.45	0.001282	± 2.5	PASS
		VH	TN	1.76	0.000922	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-3.03	-0.001637	± 2.5	PASS
		VN	-20	-1.09	-0.000587	± 2.5	PASS
		VN	-10	-0.76	-0.000409	± 2.5	PASS
		VN	0	-1.06	-0.000571	± 2.5	PASS
		VN	10	-2.09	-0.001127	± 2.5	PASS
		VN	20	-2.59	-0.001398	± 2.5	PASS
		VN	30	-2.98	-0.001606	± 2.5	PASS
		VN	40	-2.43	-0.001313	± 2.5	PASS
		VN	50	-2.92	-0.001575	± 2.5	PASS

	MCH	VN	-30	-3.38	-0.001796	± 2.5	PASS
		VN	-20	-2.68	-0.001423	± 2.5	PASS
		VN	-10	-2.59	-0.001377	± 2.5	PASS
		VN	0	-5.21	-0.002770	± 2.5	PASS
		VN	10	-3.92	-0.002085	± 2.5	PASS
		VN	20	-4.08	-0.002169	± 2.5	PASS
		VN	30	-5.24	-0.002785	± 2.5	PASS
		VN	40	-3.42	-0.001819	± 2.5	PASS
		VN	50	-3.68	-0.001956	± 2.5	PASS
	HCH	VN	-30	0.56	0.000292	± 2.5	PASS
		VN	-20	2.57	0.001350	± 2.5	PASS
		VN	-10	-1.14	-0.000600	± 2.5	PASS
		VN	0	1.56	0.000817	± 2.5	PASS
		VN	10	0.70	0.000367	± 2.5	PASS
		VN	20	-0.30	-0.000157	± 2.5	PASS
		VN	30	1.50	0.000787	± 2.5	PASS
		VN	40	1.67	0.000877	± 2.5	PASS
		VN	50	0.47	0.000247	± 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	-3.33	-0.001797	± 2.5	PASS
		VN	TN	-1.62	-0.000871	± 2.5	PASS
		VH	TN	-1.75	-0.000941	± 2.5	PASS
	MCH	VL	TN	-4.43	-0.002359	± 2.5	PASS
		VN	TN	-3.93	-0.002093	± 2.5	PASS
		VH	TN	-0.94	-0.000502	± 2.5	PASS
	HCH	VL	TN	0.24	0.000128	± 2.5	PASS
		VN	TN	-0.37	-0.000195	± 2.5	PASS
		VH	TN	0.11	0.000060	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-1.95	-0.001049	± 2.5	PASS
		VN	-20	-2.17	-0.001172	± 2.5	PASS
		VN	-10	-3.58	-0.001928	± 2.5	PASS
		VN	0	-3.29	-0.001774	± 2.5	PASS
		VN	10	-3.96	-0.002136	± 2.5	PASS
		VN	20	-3.88	-0.002090	± 2.5	PASS
		VN	30	-2.00	-0.001080	± 2.5	PASS
		VN	40	-3.23	-0.001743	± 2.5	PASS
		VN	50	-2.57	-0.001388	± 2.5	PASS

	MCH	VN	-30	-2.20	-0.001172	± 2.5	PASS
		VN	-20	-3.76	-0.002001	± 2.5	PASS
		VN	-10	-1.92	-0.001020	± 2.5	PASS
		VN	0	-3.06	-0.001628	± 2.5	PASS
		VN	10	-1.87	-0.000997	± 2.5	PASS
		VN	20	-1.65	-0.000875	± 2.5	PASS
		VN	30	-2.27	-0.001210	± 2.5	PASS
		VN	40	-4.16	-0.002214	± 2.5	PASS
		VN	50	-4.52	-0.002404	± 2.5	PASS
	HCH	VN	-30	1.77	0.000931	± 2.5	PASS
		VN	-20	0.06	0.000030	± 2.5	PASS
		VN	-10	0.23	0.000120	± 2.5	PASS
		VN	0	1.26	0.000661	± 2.5	PASS
		VN	10	2.79	0.001464	± 2.5	PASS
		VN	20	1.39	0.000728	± 2.5	PASS
		VN	30	3.05	0.001599	± 2.5	PASS
		VN	40	0.50	0.000263	± 2.5	PASS
		VN	50	0.54	0.000285	± 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	-3.92	-0.002110	± 2.5	PASS
		VN	TN	-2.55	-0.001371	± 2.5	PASS
		VH	TN	-3.68	-0.001979	± 2.5	PASS
	MCH	VL	TN	-4.88	-0.002595	± 2.5	PASS
		VN	TN	-4.33	-0.002306	± 2.5	PASS
		VH	TN	-3.40	-0.001811	± 2.5	PASS
	HCH	VL	TN	-2.95	-0.001549	± 2.5	PASS
		VN	TN	-4.85	-0.002549	± 2.5	PASS
		VH	TN	-3.15	-0.001654	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-3.38	-0.001818	± 2.5	PASS
		VN	-20	-3.65	-0.001964	± 2.5	PASS
		VN	-10	-3.99	-0.002149	± 2.5	PASS
		VN	0	-4.13	-0.002226	± 2.5	PASS
		VN	10	-3.52	-0.001895	± 2.5	PASS
		VN	20	-4.48	-0.002410	± 2.5	PASS
		VN	30	-2.62	-0.001409	± 2.5	PASS
		VN	40	-3.58	-0.001925	± 2.5	PASS
		VN	50	-4.18	-0.002249	± 2.5	PASS

	MCH	VN	-30	-2.25	-0.001195	± 2.5	PASS
		VN	-20	-3.49	-0.001857	± 2.5	PASS
		VN	-10	-3.81	-0.002024	± 2.5	PASS
		VN	0	-2.05	-0.001088	± 2.5	PASS
		VN	10	-2.19	-0.001164	± 2.5	PASS
		VN	20	-4.16	-0.002214	± 2.5	PASS
		VN	30	-3.32	-0.001765	± 2.5	PASS
		VN	40	-3.79	-0.002016	± 2.5	PASS
		VN	50	-2.78	-0.001476	± 2.5	PASS
	HCH	VN	-30	-3.71	-0.001947	± 2.5	PASS
		VN	-20	-5.25	-0.002760	± 2.5	PASS
		VN	-10	-3.73	-0.001962	± 2.5	PASS
		VN	0	-3.73	-0.001962	± 2.5	PASS
		VN	10	-3.20	-0.001684	± 2.5	PASS
		VN	20	-2.19	-0.001150	± 2.5	PASS
		VN	30	-4.59	-0.002414	± 2.5	PASS
		VN	40	-1.14	-0.000602	± 2.5	PASS
		VN	50	-3.82	-0.002008	± 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	0.00	0.000000	± 2.5	PASS
		VN	TN	-0.04	-0.000023	± 2.5	PASS
		VH	TN	1.46	0.000784	± 2.5	PASS
	MCH	VL	TN	-3.53	-0.001879	± 2.5	PASS
		VN	TN	-3.75	-0.001994	± 2.5	PASS
		VH	TN	-3.65	-0.001940	± 2.5	PASS
	HCH	VL	TN	-1.73	-0.000911	± 2.5	PASS
		VN	TN	-3.19	-0.001679	± 2.5	PASS
		VH	TN	-2.16	-0.001137	± 2.5	PASS
Temperature							
Modulation	Channel	Voltage [Vdc]	Temperature (°C)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
QPSK	LCH	VN	-30	-0.57	-0.000308	± 2.5	PASS
		VN	-20	1.20	0.000646	± 2.5	PASS
		VN	-10	0.21	0.000115	± 2.5	PASS
		VN	0	0.79	0.000423	± 2.5	PASS
		VN	10	0.03	0.000015	± 2.5	PASS
		VN	20	1.36	0.000731	± 2.5	PASS
		VN	30	0.79	0.000423	± 2.5	PASS
		VN	40	2.00	0.001077	± 2.5	PASS
		VN	50	0.43	0.000231	± 2.5	PASS



	MCH	VN	-30	-4.52	-0.002404	± 2.5	PASS
		VN	-20	-4.92	-0.002618	± 2.5	PASS
		VN	-10	-2.17	-0.001157	± 2.5	PASS
		VN	0	-4.39	-0.002336	± 2.5	PASS
		VN	10	-1.56	-0.000829	± 2.5	PASS
		VN	20	-4.51	-0.002397	± 2.5	PASS
		VN	30	-3.89	-0.002070	± 2.5	PASS
		VN	40	-3.42	-0.001819	± 2.5	PASS
		VN	50	-4.09	-0.002176	± 2.5	PASS
	HCH	VN	-30	-1.76	-0.000926	± 2.5	PASS
		VN	-20	-2.26	-0.001190	± 2.5	PASS
		VN	-10	-1.29	-0.000678	± 2.5	PASS
		VN	0	-1.66	-0.000873	± 2.5	PASS
		VN	10	-3.03	-0.001596	± 2.5	PASS
		VN	20	-4.19	-0.002206	± 2.5	PASS
		VN	30	-1.72	-0.000903	± 2.5	PASS
		VN	40	-2.49	-0.001310	± 2.5	PASS
		VN	50	-1.76	-0.000926	± 2.5	PASS