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	22.68	PASS
		1	2	22.75	PASS
		1	5	22.68	PASS
		3	0	22.54	PASS
		3	1	22.59	PASS
		3	3	22.61	PASS
		6	0	21.59	PASS
	MCH	1	0	22.70	PASS
		1	2	22.83	PASS
		1	5	22.72	PASS
		3	0	22.78	PASS
		3	1	22.79	PASS
		3	3	22.80	PASS
		6	0	21.62	PASS
	HCH	1	0	22.61	PASS
		1	2	22.74	PASS
		1	5	22.58	PASS
		3	0	22.51	PASS
		3	1	22.45	PASS
		3	3	22.22	PASS
		6	0	21.64	PASS
16QAM	LCH	1	0	22.02	PASS
		1	2	22.08	PASS
		1	5	22.00	PASS
		3	0	21.58	PASS
		3	1	21.66	PASS
		3	3	21.64	PASS
		6	0	20.54	PASS
	MCH	1	0	21.93	PASS
		1	2	22.07	PASS
		1	5	22.06	PASS

		3	0	21.66	PASS
		3	1	21.68	PASS
		3	3	21.70	PASS
		6	0	20.54	PASS
	HCH	1	0	21.92	PASS
		1	2	21.95	PASS
		1	5	21.98	PASS
		3	0	21.56	PASS
		3	1	21.53	PASS
		3	3	21.31	PASS
		6	0	20.56	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.62	PASS
		1	7	22.73	PASS
		1	14	22.53	PASS
		8	0	21.66	PASS
		8	3	21.73	PASS
		8	7	21.68	PASS
		15	0	21.71	PASS
	MCH	1	0	22.67	PASS
		1	7	22.76	PASS
		1	14	22.66	PASS
		8	0	21.71	PASS
		8	3	21.75	PASS
		8	7	21.64	PASS
		15	0	21.80	PASS
	HCH	1	0	22.50	PASS
		1	7	22.60	PASS
		1	14	22.58	PASS
		8	0	21.72	PASS
		8	3	21.75	PASS
		8	7	21.72	PASS
		15	0	21.69	PASS
16QAM	LCH	1	0	21.87	PASS

		1	7	21.89	PASS
		1	14	21.79	PASS
		8	0	20.62	PASS
		8	3	20.63	PASS
		8	7	20.61	PASS
		15	0	20.55	PASS
	MCH	1	0	21.84	PASS
		1	7	21.92	PASS
		1	14	21.84	PASS
		8	0	20.58	PASS
		8	3	20.60	PASS
		8	7	20.53	PASS
		15	0	20.50	PASS
	HCH	1	0	21.79	PASS
		1	7	21.91	PASS
		1	14	21.88	PASS
		8	0	20.61	PASS
		8	3	20.63	PASS
		8	7	20.65	PASS
		15	0	20.56	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.77	PASS
		1	12	22.65	PASS
		1	24	22.72	PASS
		12	0	21.73	PASS
		12	6	21.75	PASS
		12	13	21.74	PASS
		25	0	21.76	PASS
	MCH	1	0	22.88	PASS
		1	12	22.72	PASS
		1	24	22.76	PASS
		12	0	21.90	PASS
		12	6	21.84	PASS
		12	13	21.75	PASS
		25	0	21.84	PASS

	HCH	1	0	22.86	PASS
		1	12	22.62	PASS
		1	24	22.68	PASS
		12	0	21.78	PASS
		12	6	21.73	PASS
		12	13	21.70	PASS
		25	0	21.66	PASS
16QAM	LCH	1	0	22.05	PASS
		1	12	21.80	PASS
		1	24	21.93	PASS
		12	0	20.64	PASS
		12	6	20.69	PASS
		12	13	20.66	PASS
		25	0	20.65	PASS
	MCH	1	0	22.07	PASS
		1	12	21.87	PASS
		1	24	21.89	PASS
		12	0	20.78	PASS
		12	6	20.71	PASS
		12	13	20.61	PASS
		25	0	20.66	PASS
	HCH	1	0	22.10	PASS
		1	12	21.77	PASS
		1	24	21.95	PASS
		12	0	20.72	PASS
		12	6	20.63	PASS
		12	13	20.62	PASS
		25	0	20.56	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.85	PASS
		1	24	22.80	PASS
		1	49	22.83	PASS
		25	0	22.05	PASS
		25	12	21.97	PASS
		25	25	21.92	PASS

		50	0	21.96	PASS
	MCH	1	0	22.86	PASS
		1	24	22.78	PASS
		1	49	22.85	PASS
		25	0	22.03	PASS
		25	12	21.82	PASS
		25	25	21.82	PASS
		50	0	21.97	PASS
	HCH	1	0	22.85	PASS
		1	24	22.50	PASS
		1	49	22.60	PASS
		25	0	21.91	PASS
		25	12	21.72	PASS
		25	25	21.67	PASS
		50	0	21.72	PASS
16QAM	LCH	1	0	22.04	PASS
		1	24	21.98	PASS
		1	49	22.09	PASS
		25	0	20.94	PASS
		25	12	20.85	PASS
		25	25	20.77	PASS
		50	0	20.79	PASS
	MCH	1	0	22.12	PASS
		1	24	21.92	PASS
		1	49	22.05	PASS
		25	0	20.84	PASS
		25	12	20.66	PASS
		25	25	20.63	PASS
		50	0	20.79	PASS
	HCH	1	0	22.01	PASS
		1	24	21.76	PASS
		1	49	21.86	PASS
		25	0	20.73	PASS
		25	12	20.55	PASS
		25	25	20.55	PASS
		50	0	20.57	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.70	PASS
		1	37	22.47	PASS
		1	74	22.79	PASS
		36	0	21.73	PASS
		36	19	21.79	PASS
		36	39	21.84	PASS
		75	0	21.76	PASS
	MCH	1	0	22.84	PASS
		1	37	22.43	PASS
		1	74	22.78	PASS
		36	0	21.84	PASS
		36	19	21.85	PASS
		36	39	21.84	PASS
		75	0	21.89	PASS
	HCH	1	0	22.81	PASS
		1	37	22.34	PASS
		1	74	22.73	PASS
		36	0	21.82	PASS
		36	19	21.80	PASS
		36	39	21.78	PASS
		75	0	21.78	PASS
16QAM	LCH	1	0	21.96	PASS
		1	37	21.94	PASS
		1	74	21.95	PASS
		36	0	20.58	PASS
		36	19	20.63	PASS
		36	39	20.66	PASS
		75	0	20.67	PASS
	MCH	1	0	21.98	PASS
		1	37	22.01	PASS
		1	74	22.06	PASS
		36	0	20.64	PASS
		36	19	20.69	PASS
		36	39	20.69	PASS
		75	0	20.71	PASS
	HCH	1	0	22.27	PASS
		1	37	21.92	PASS
		1	74	22.05	PASS

		36	0	20.66	PASS
		36	19	20.59	PASS
		36	39	20.61	PASS
		75	0	20.74	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz					
Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.68	PASS
		1	49	22.60	PASS
		1	99	22.72	PASS
		50	0	21.90	PASS
		50	25	21.81	PASS
		50	50	21.92	PASS
		100	0	21.93	PASS
	MCH	1	0	22.77	PASS
		1	49	22.70	PASS
		1	99	22.85	PASS
		50	0	21.90	PASS
		50	25	21.83	PASS
		50	50	21.90	PASS
		100	0	21.99	PASS
	HCH	1	0	22.79	PASS
		1	49	22.58	PASS
		1	99	22.67	PASS
		50	0	21.75	PASS
		50	25	21.68	PASS
		50	50	21.79	PASS
		100	0	21.79	PASS
16QAM	LCH	1	0	22.06	PASS
		1	49	21.86	PASS
		1	99	22.07	PASS
		50	0	20.70	PASS
		50	25	20.67	PASS
		50	50	20.69	PASS
		100	0	20.80	PASS
	MCH	1	0	22.02	PASS
		1	49	21.88	PASS

		1	99	22.26	PASS
		50	0	20.72	PASS
		50	25	20.71	PASS
		50	50	20.74	PASS
		100	0	20.76	PASS
	HCH	1	0	22.09	PASS
		1	49	21.80	PASS
		1	99	22.17	PASS
		50	0	20.58	PASS
		50	25	20.56	PASS
		50	50	20.59	PASS
		100	0	20.67	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	4.38	<13	PASS
16QAM	MCH	1	0	5.23	<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	4.2	<13	PASS
16QAM	MCH	1	0	5.01	<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	4.21	<13	PASS
16QAM	MCH	1	0	4.99	<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	4.21	<13	PASS
16QAM	MCH	1	0	4.98	<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	4.13	<13	PASS
16QAM	MCH	1	0	5.01	<13	PASS

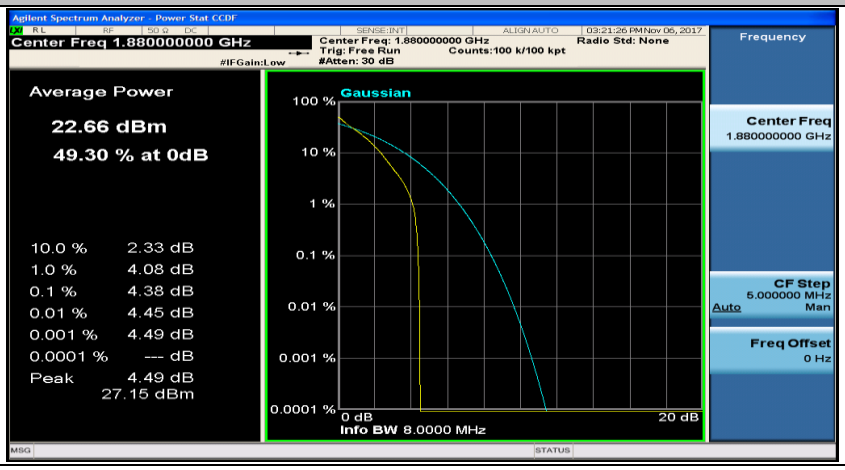
Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	4.14	<13	PASS
16QAM	MCH	1	0	4.97	<13	PASS

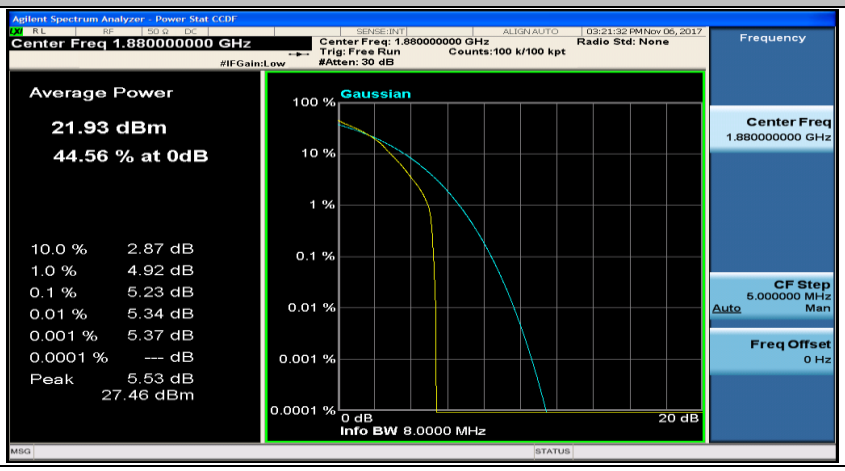
Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

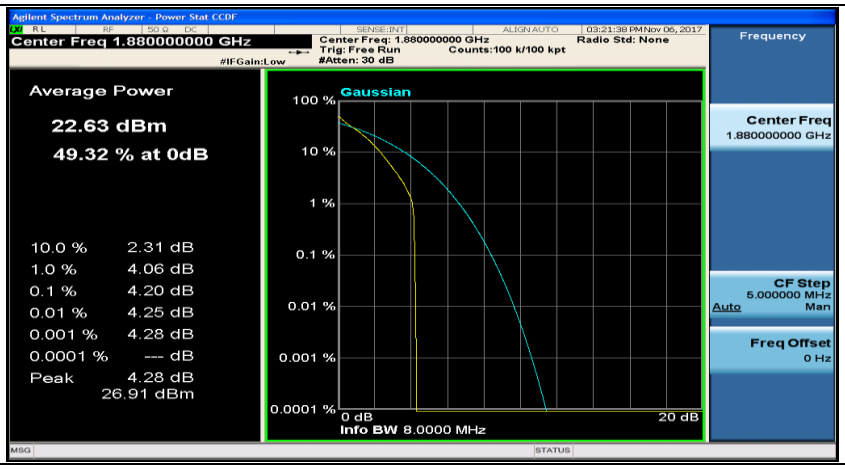


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

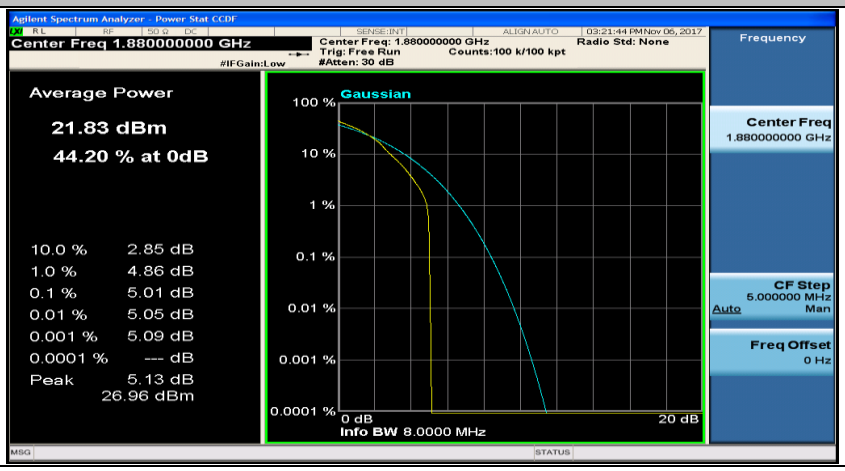


Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

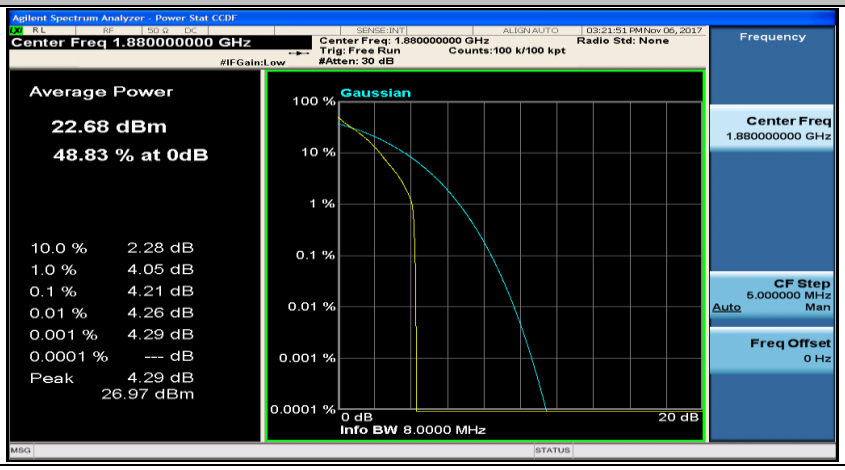


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0

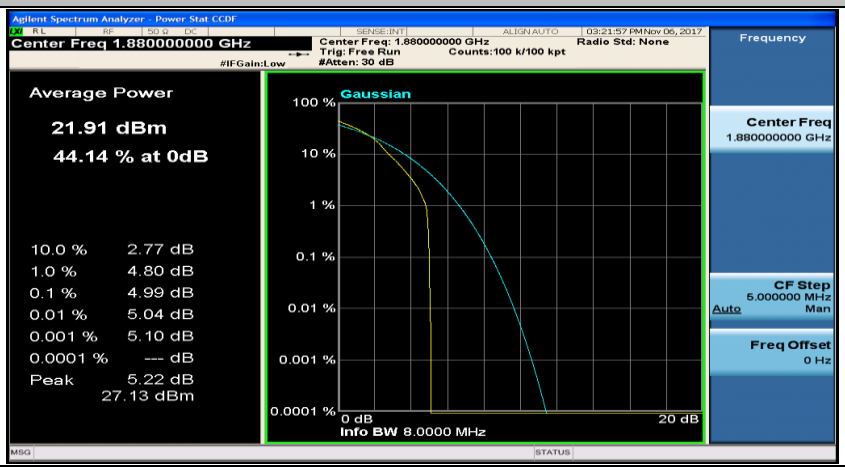


Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

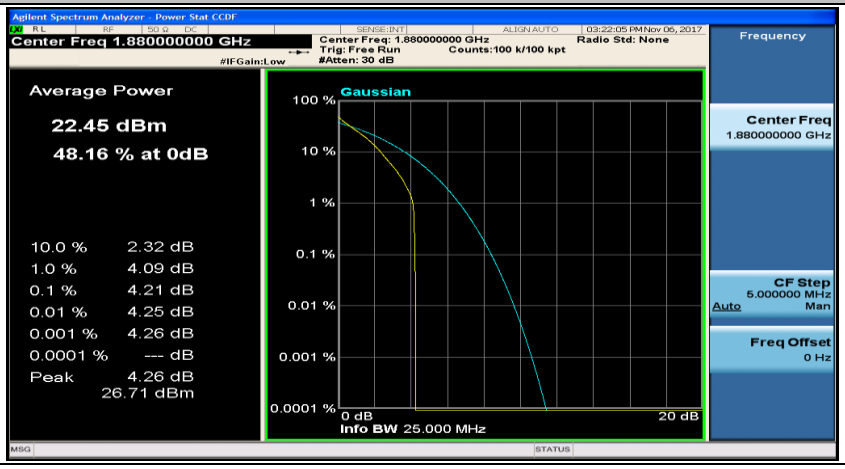


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

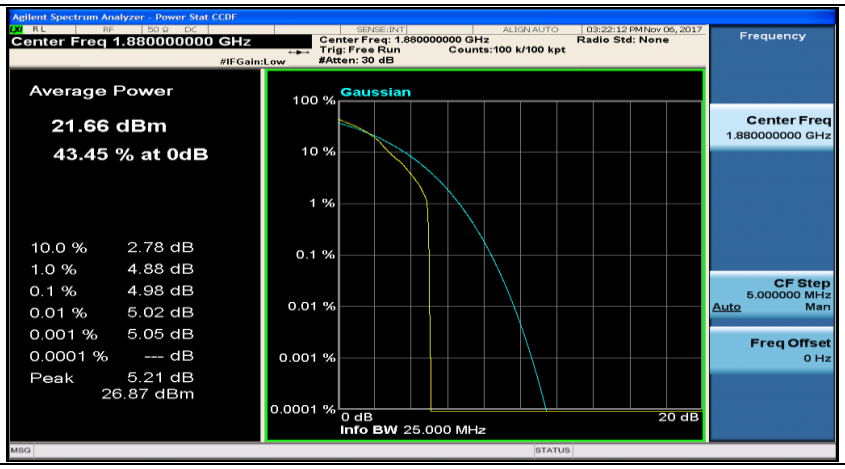


Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

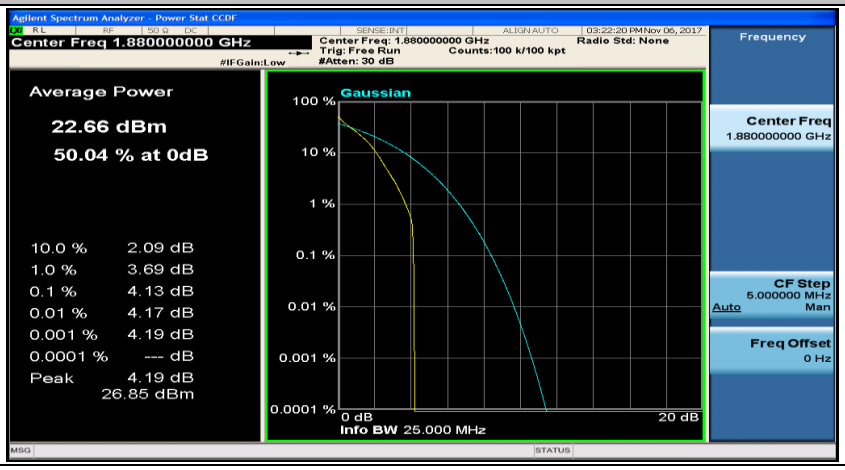


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

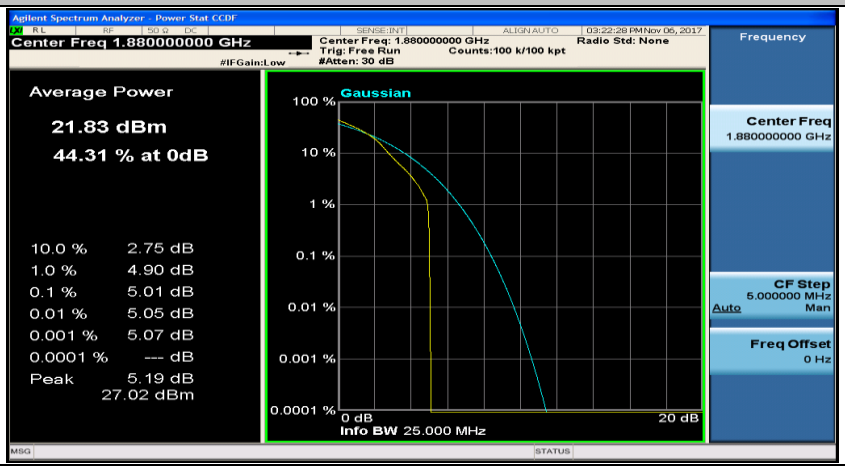


Channel Bandwidth: 15 MHz

(Channel Bandwidth:15 MHz)_MCH_QPSK_1RB#0

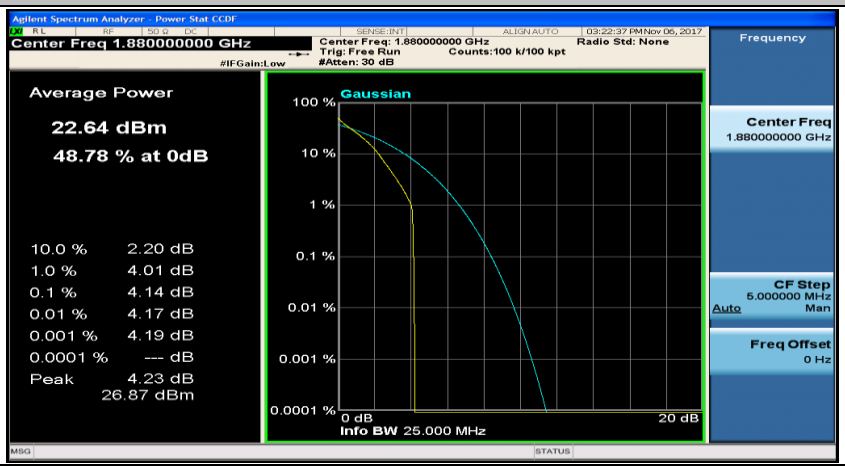


(Channel Bandwidth:15 MHz)_MCH_16QAM_1RB#0

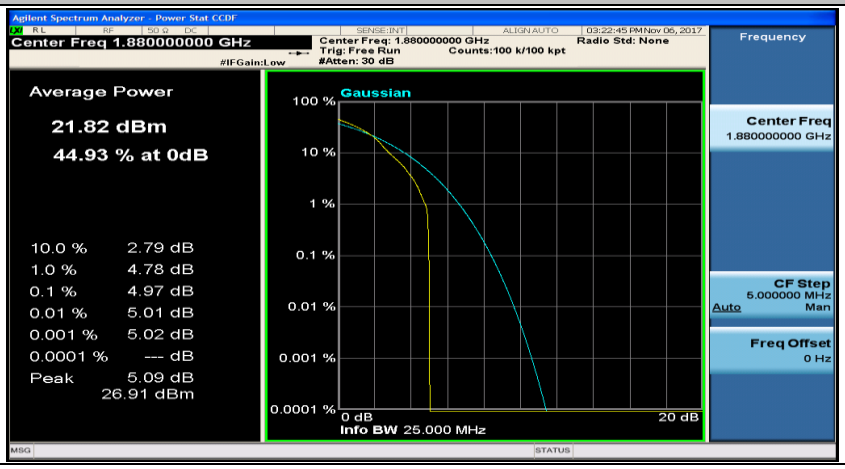


Channel Bandwidth: 20 MHz

(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	1.0772	1.215	PASS
	MCH	6	0	1.0759	1.190	PASS
	HCH	6	0	1.0773	1.202	PASS
16QAM	LCH	6	0	1.0763	1.214	PASS
	MCH	6	0	1.0768	1.211	PASS
	HCH	6	0	1.0771	1.201	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	2.6837	2.921	PASS
	MCH	15	0	2.6894	2.913	PASS
	HCH	15	0	2.6862	2.914	PASS
16QAM	LCH	15	0	2.6813	2.897	PASS
	MCH	15	0	2.6818	2.898	PASS
	HCH	15	0	2.6804	2.897	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	4.4738	4.810	PASS

	MCH	25	0	4.4740	4.808	PASS
	HCH	25	0	4.4707	4.802	PASS
16QAM	LCH	25	0	4.4831	4.852	PASS
	MCH	25	0	4.4805	4.827	PASS
	HCH	25	0	4.4856	4.836	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	8.9314	9.421	PASS
	MCH	50	0	8.9323	9.459	PASS
	HCH	50	0	8.9271	9.411	PASS
16QAM	LCH	50	0	8.9424	9.504	PASS
	MCH	50	0	8.9440	9.454	PASS
	HCH	50	0	8.9298	9.471	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	13.421	14.07	PASS
	MCH	75	0	13.411	14.02	PASS
	HCH	75	0	13.405	14.06	PASS
16QAM	LCH	75	0	13.407	14.03	PASS
	MCH	75	0	13.407	14.06	PASS
	HCH	75	0	13.390	13.98	PASS

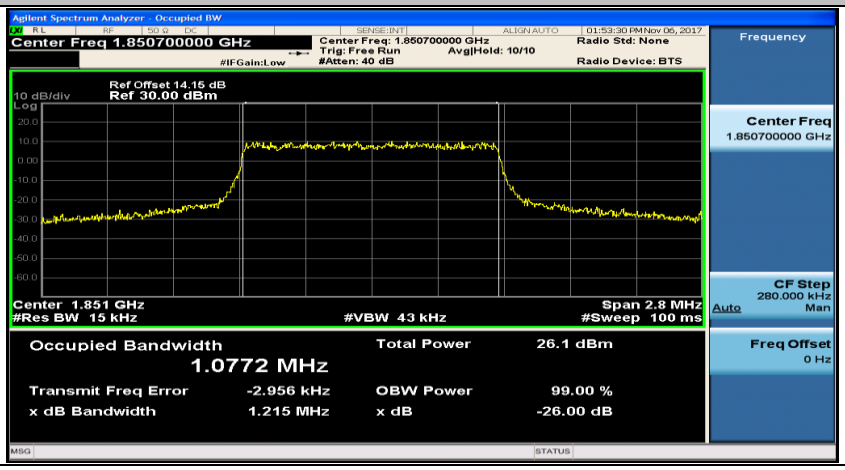
Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	100	0	17.851	18.64	PASS
	MCH	100	0	17.838	18.69	PASS
	HCH	100	0	17.839	18.63	PASS
16QAM	LCH	100	0	17.856	18.70	PASS
	MCH	100	0	17.858	18.70	PASS
	HCH	100	0	17.848	18.68	PASS

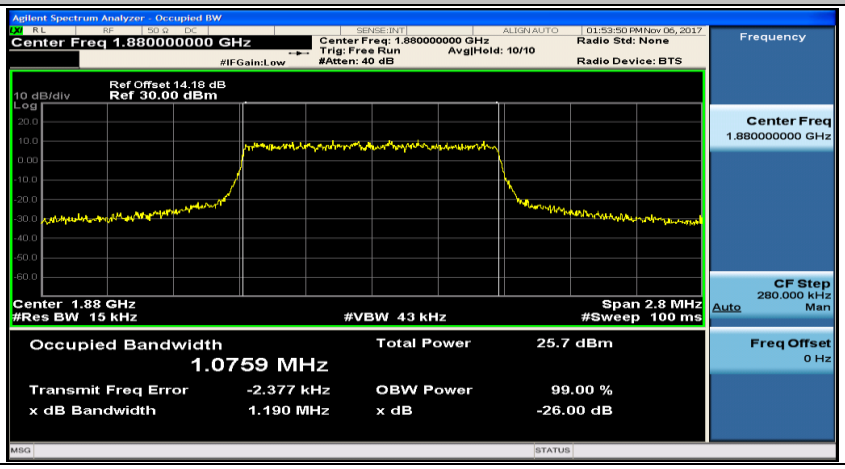
Test Graphs

Channel Bandwidth: 1.4 MHz

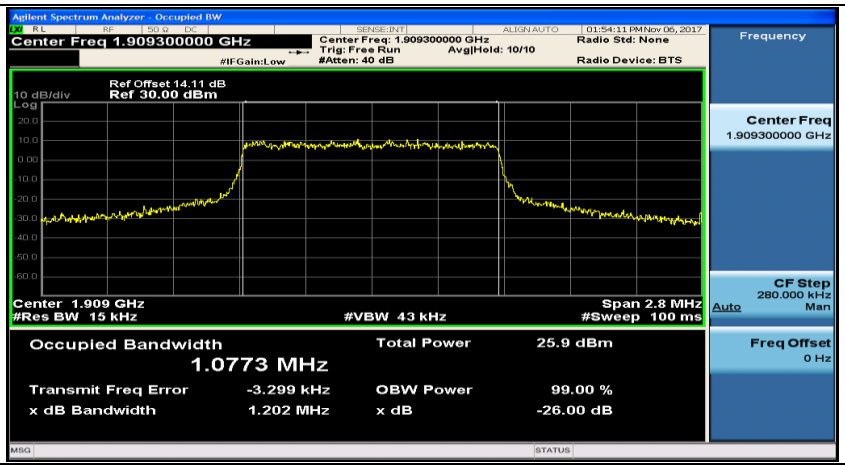
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_6RB#0



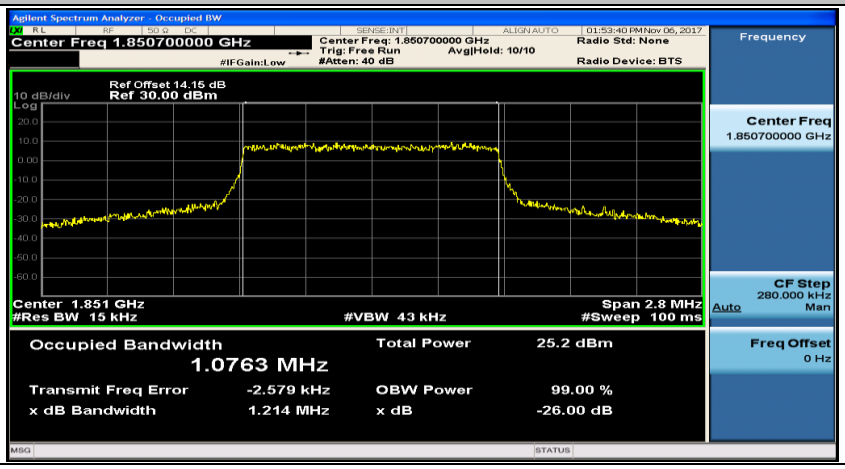
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_6RB#0



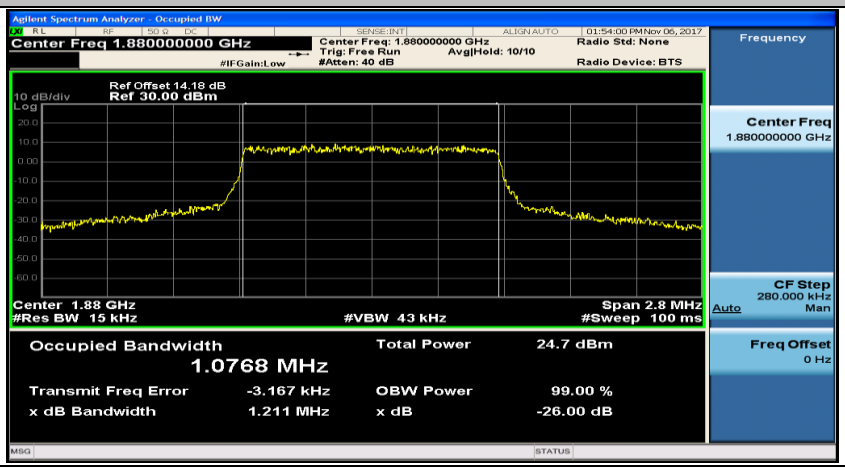
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0


Agilent Spectrum Analyzer - Occupied BW
Center Freq 1.909300000 GHz
Center Freq: 1.909300000 GHz
Trig: Free Run
Avg|Hold: 10/10
#Atten: 40 dB
#IFGain:Low
Radio Std: None
Radio Device: BTS
01:54:11 PM Nov 06, 2017
Frequency
Ref Offset 14.11 dB
10 dB/div
Ref 30.00 dBm
Log
Center Freq
1.909300000 GHz
Center 1.909 GHz
#Res BW 15 kHz
#VBW 43 kHz
Span 2.8 MHz
#Sweep 100 ms
CF Step
280.000 kHz
Auto
Man
Occupied Bandwidth
1.0773 MHz
Total Power
25.9 dBm
Freq Offset
0 Hz
Transmit Freq Error
-3.299 kHz
OBW Power
99.00 %
x dB Bandwidth
1.202 MHz
x dB
-26.00 dB
MSG
STATUS

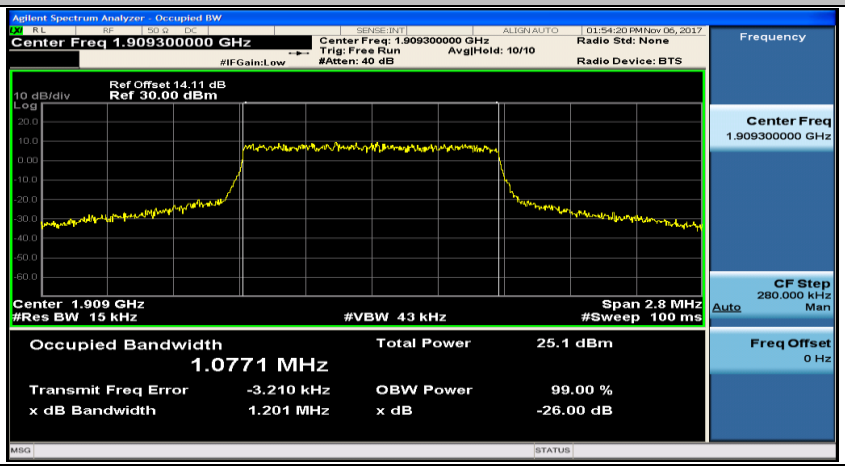
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_6RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0

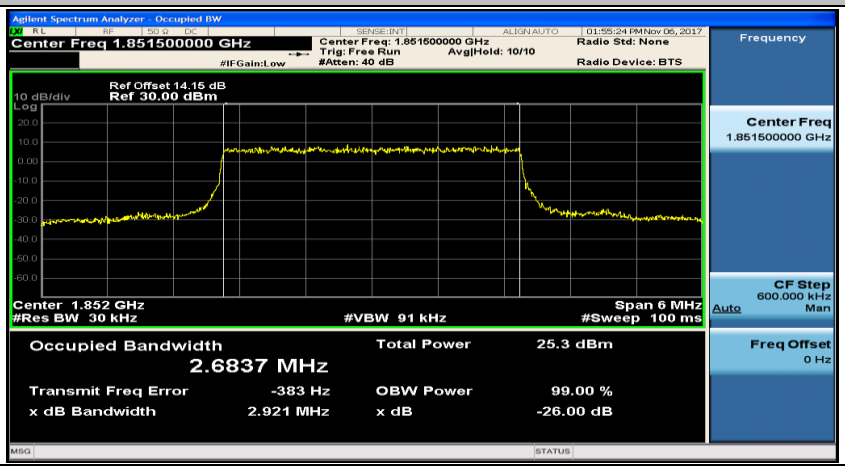


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0

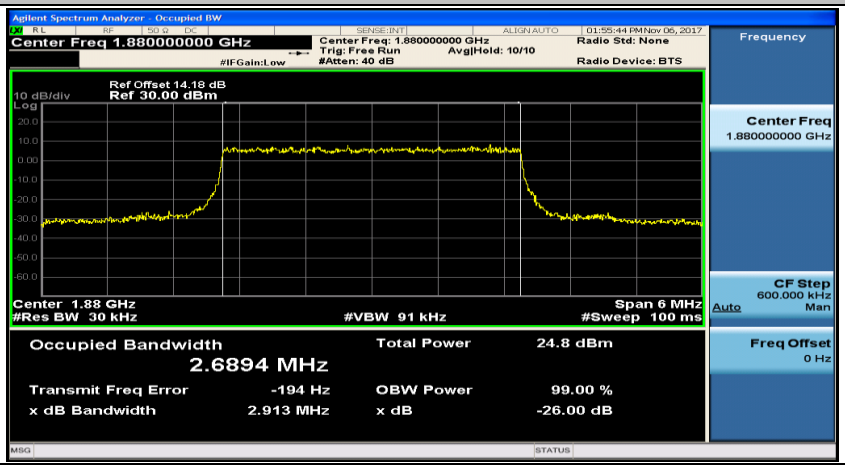


Channel Bandwidth: 3 MHz

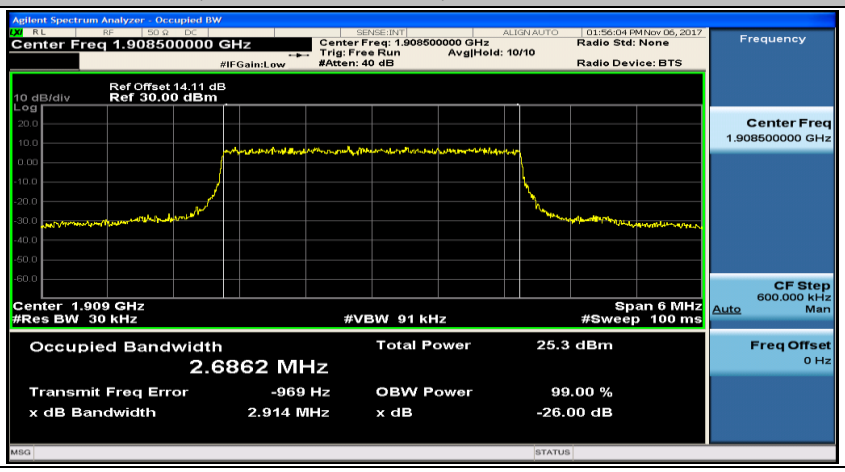
(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0



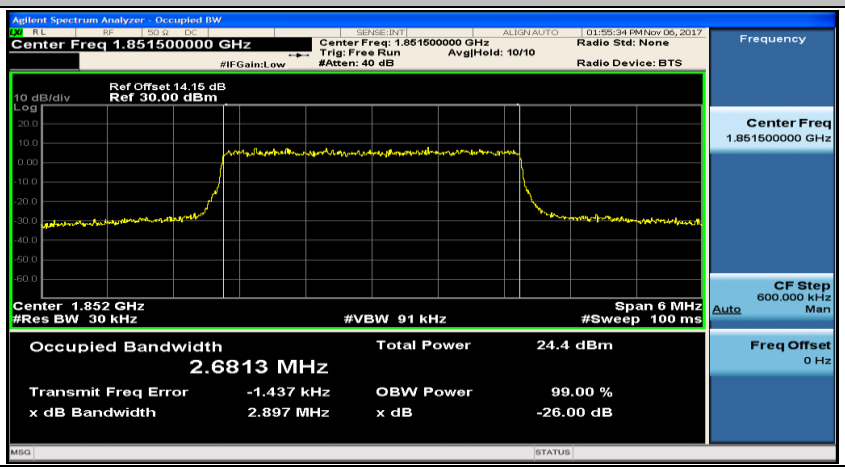
(Channel Bandwidth: 3 MHz)_MCH_QPSK_15RB#0



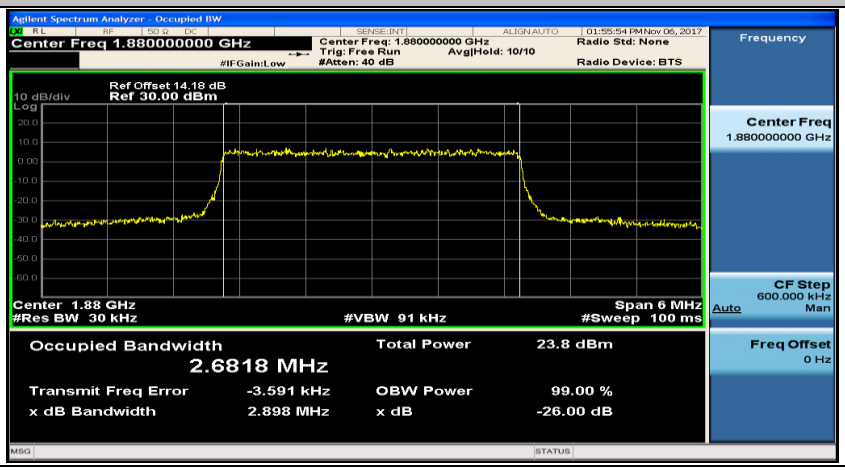
(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0



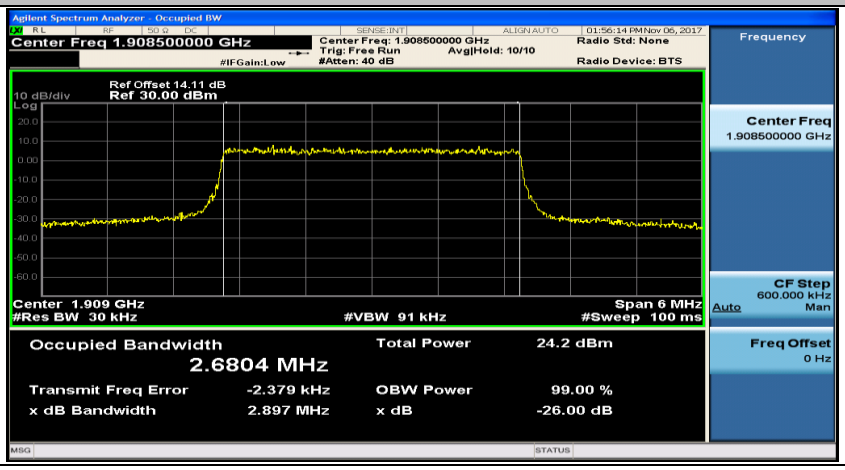
(Channel Bandwidth: 3 MHz)_LCH_16QAM_15RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0

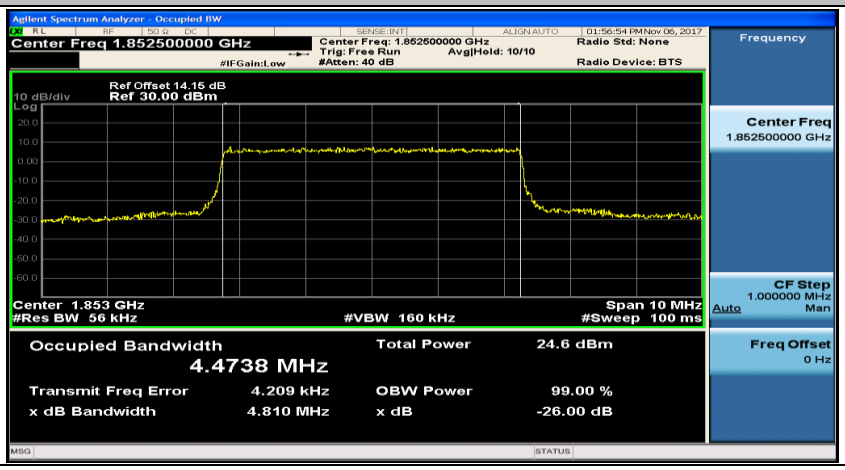


(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0

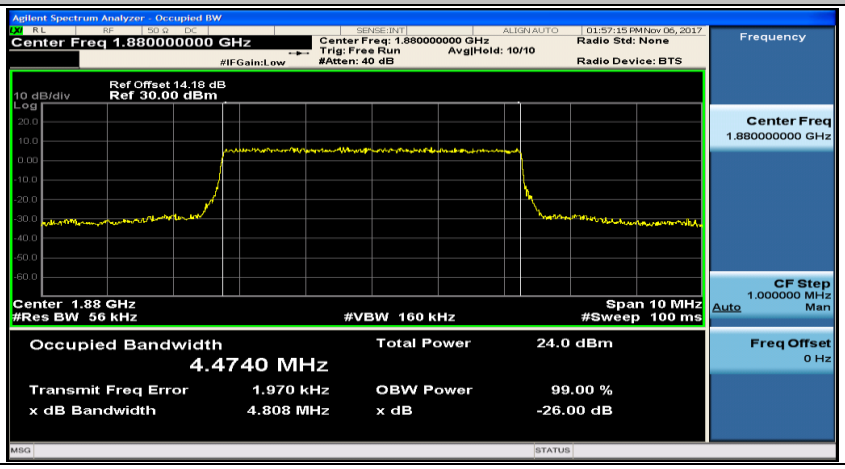


Channel Bandwidth: 5 MHz

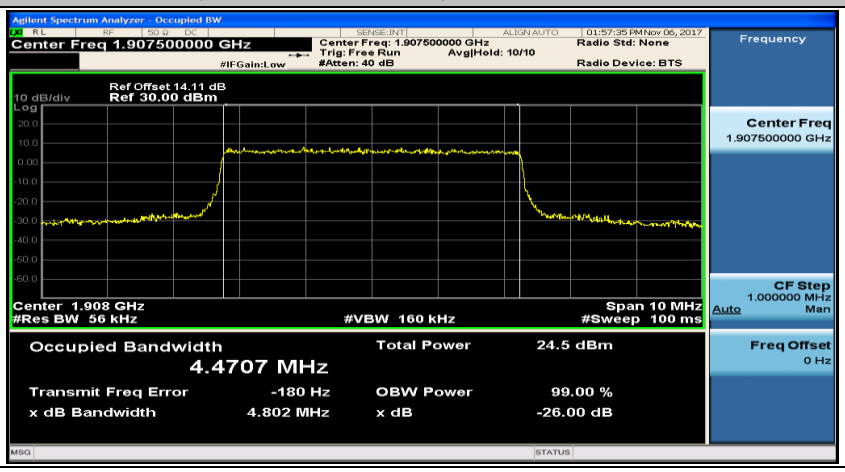
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



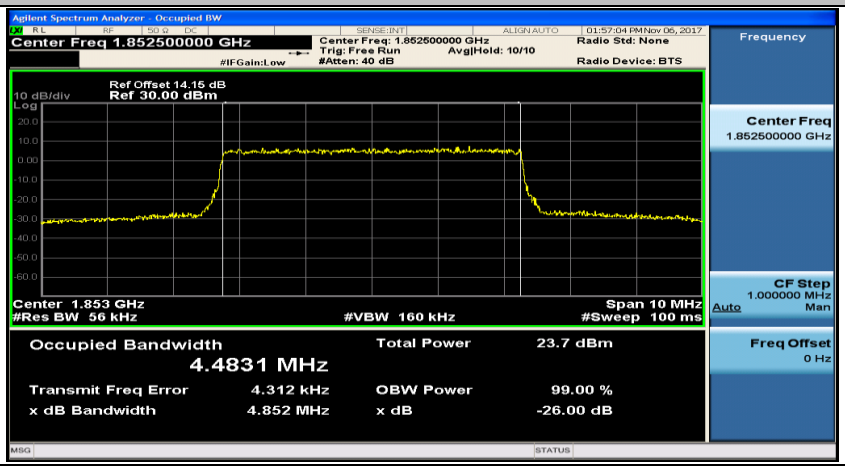
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



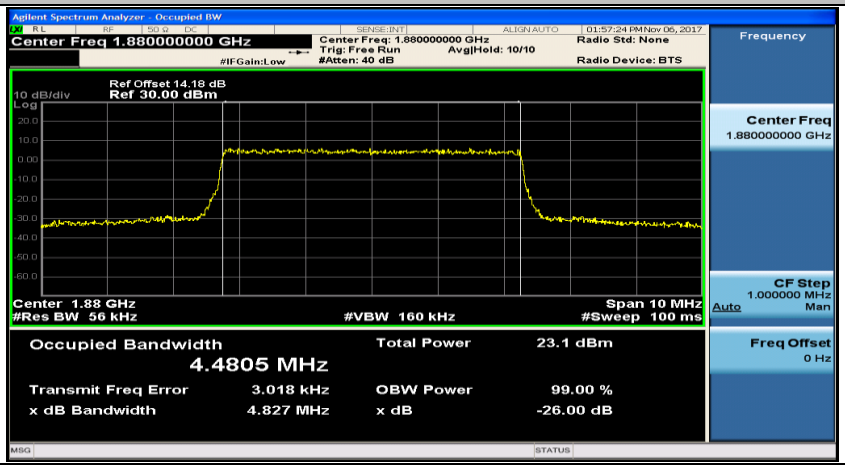
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



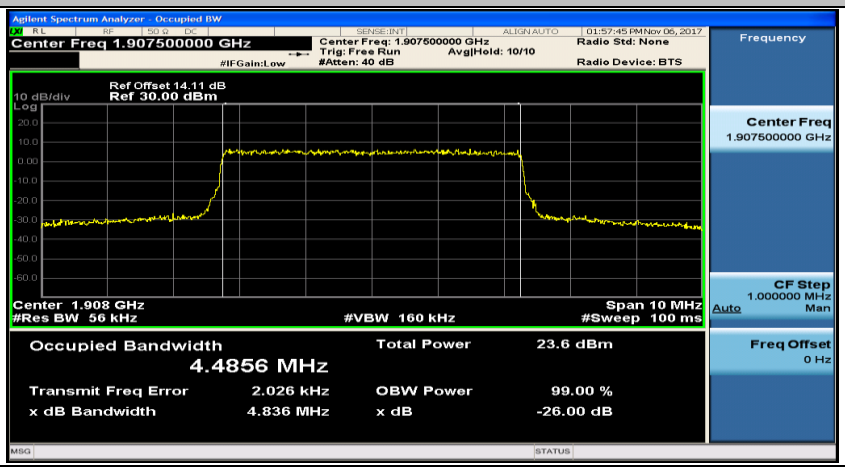
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

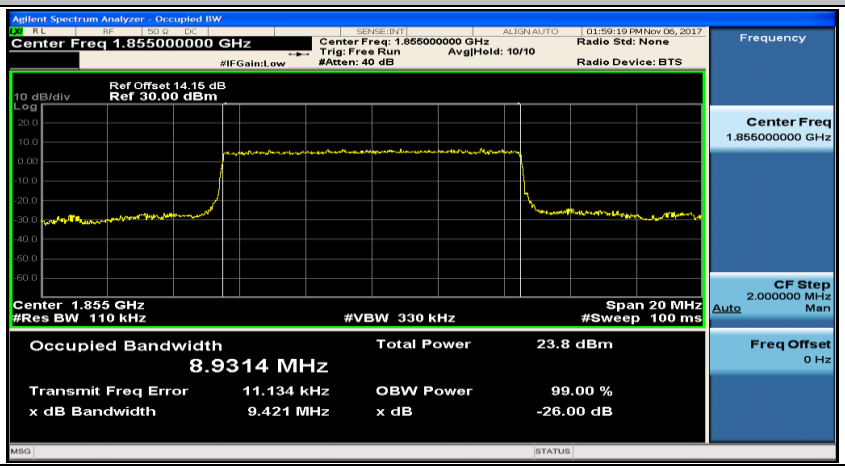


(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0

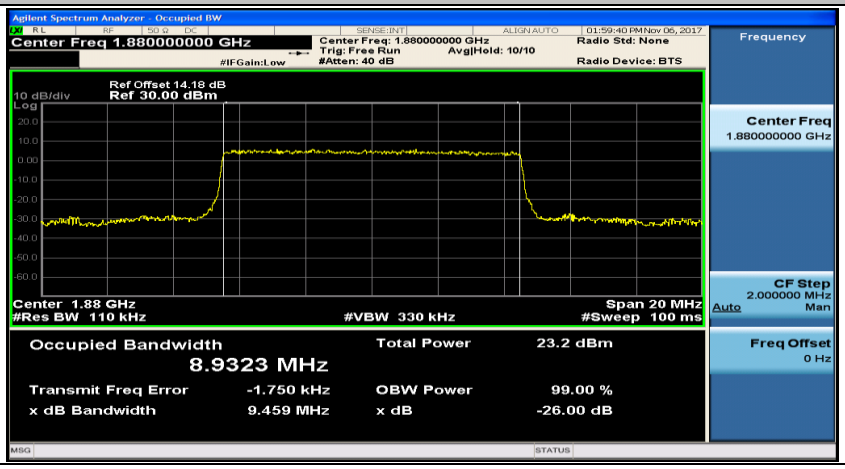


Channel Bandwidth: 10 MHz

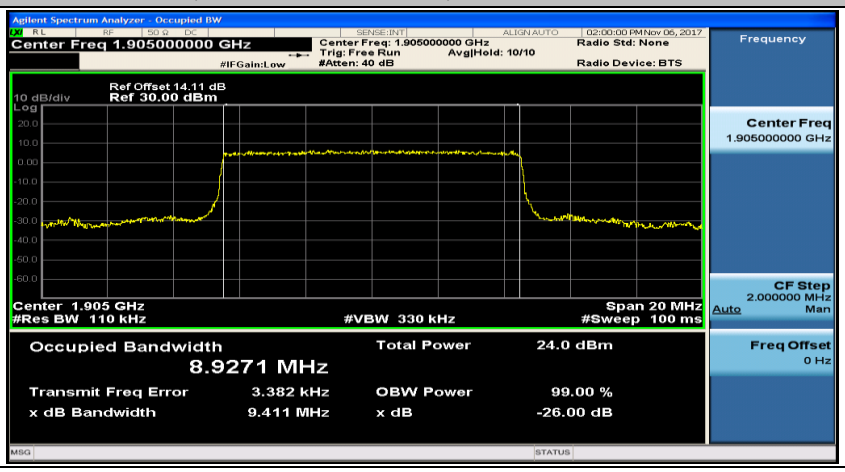
(Channel Bandwidth: 10 MHz)_LCH_QPSK_50RB#0



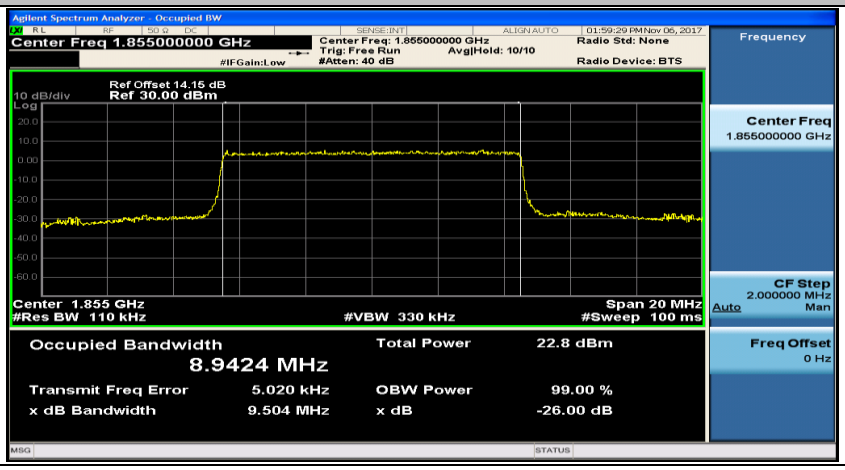
(Channel Bandwidth: 10 MHz)_MCH_QPSK_50RB#0



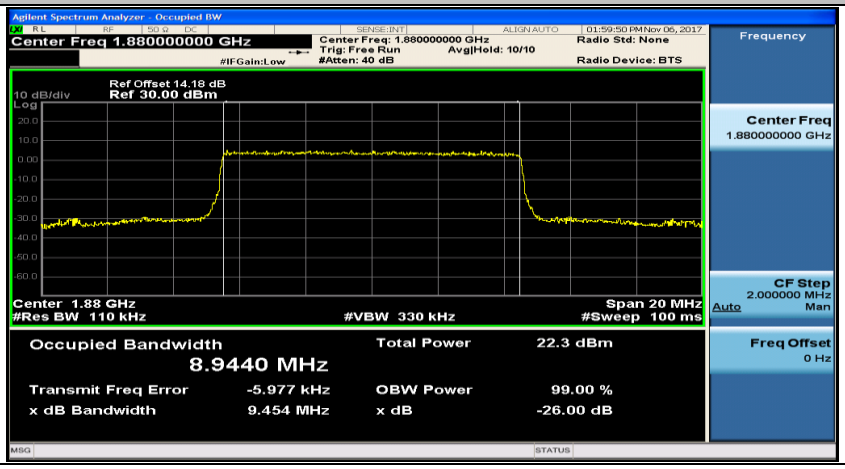
(Channel Bandwidth: 10 MHz)_HCH_QPSK_50RB#0



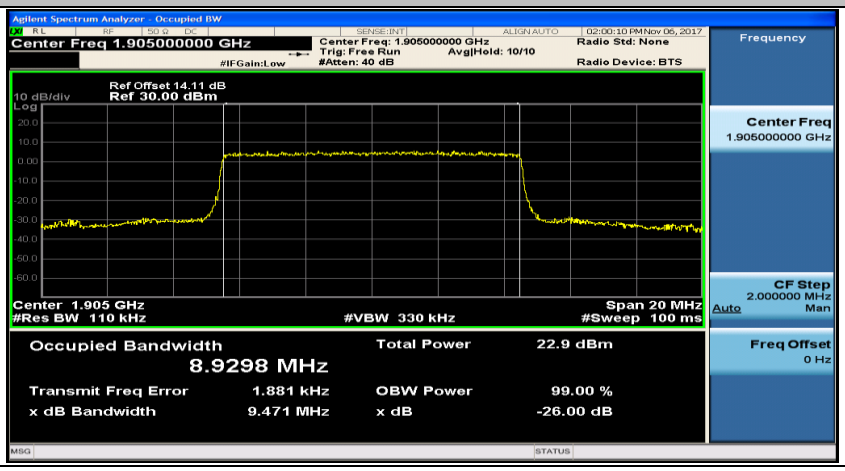
(Channel Bandwidth: 10 MHz)_LCH_16QAM_50RB#0



(Channel Bandwidth: 10 MHz)_MCH_16QAM_50RB#0

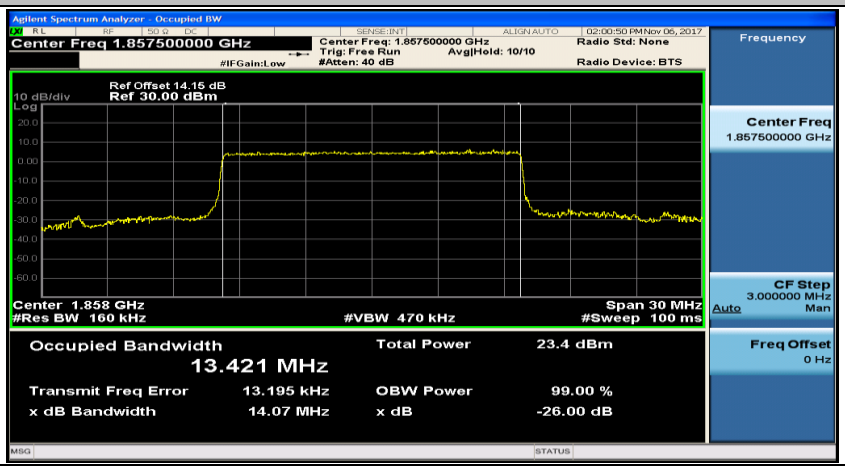


(Channel Bandwidth: 10 MHz)_HCH_16QAM_50RB#0

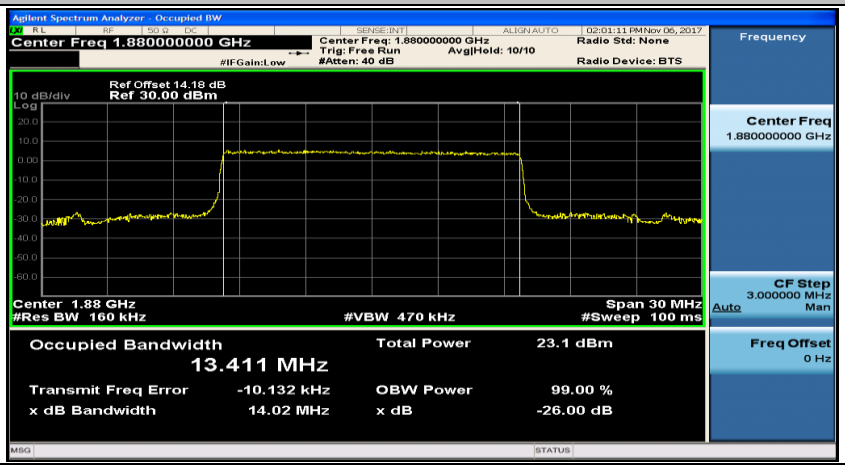


Channel Bandwidth: 15 MHz

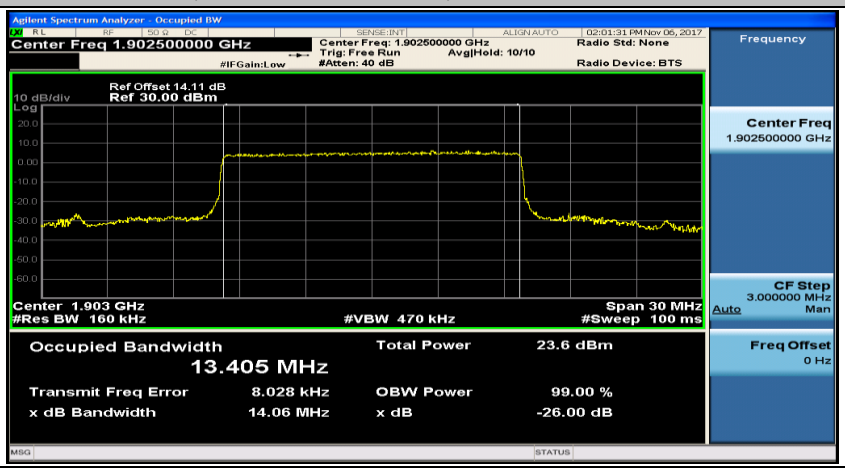
(Channel Bandwidth: 15 MHz)_LCH_QPSK_75RB#0



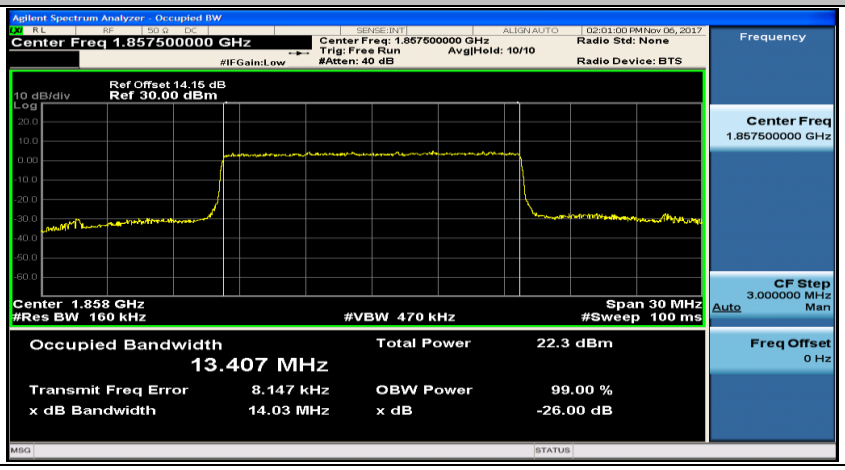
(Channel Bandwidth: 15 MHz)_MCH_QPSK_75RB#0



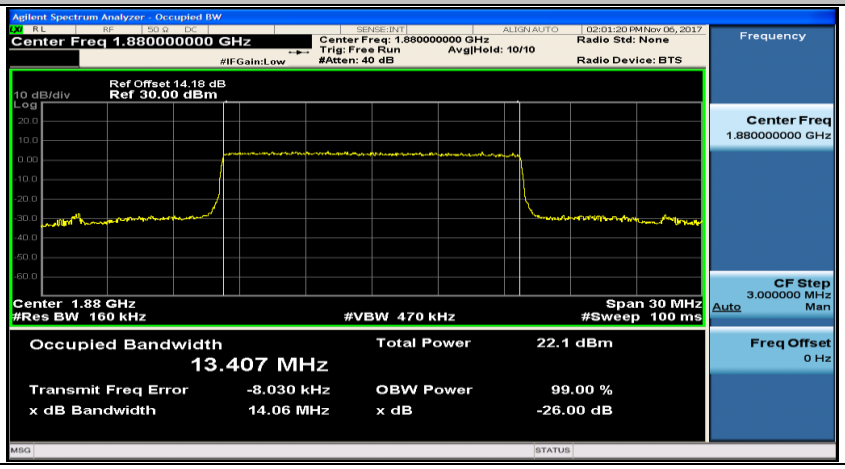
(Channel Bandwidth: 15 MHz)_HCH_QPSK_75RB#0



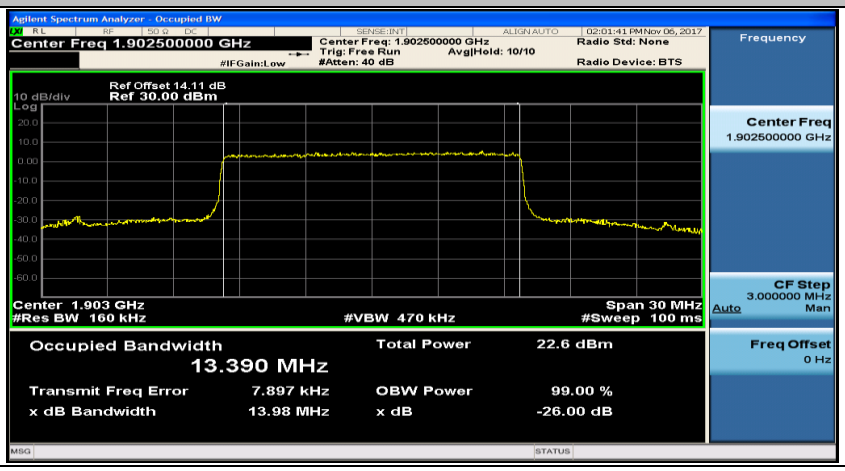
(Channel Bandwidth: 15 MHz)_LCH_16QAM_75RB#0



(Channel Bandwidth: 15 MHz)_MCH_16QAM_75RB#0

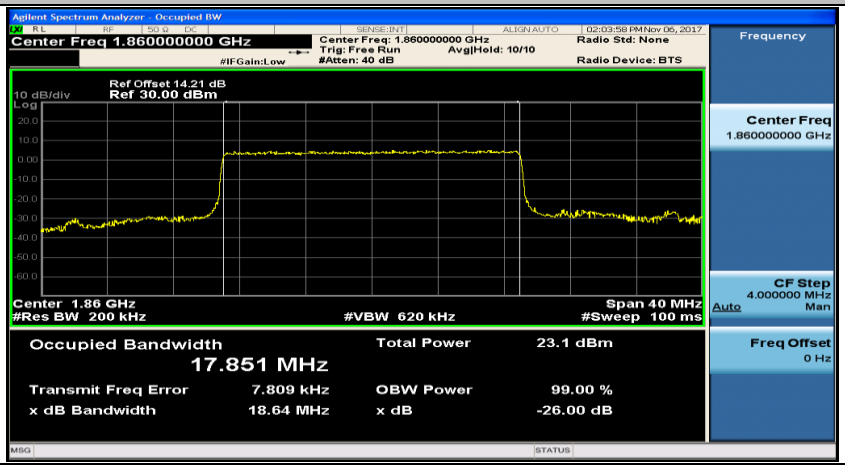


(Channel Bandwidth: 15 MHz)_HCH_16QAM_75RB#0

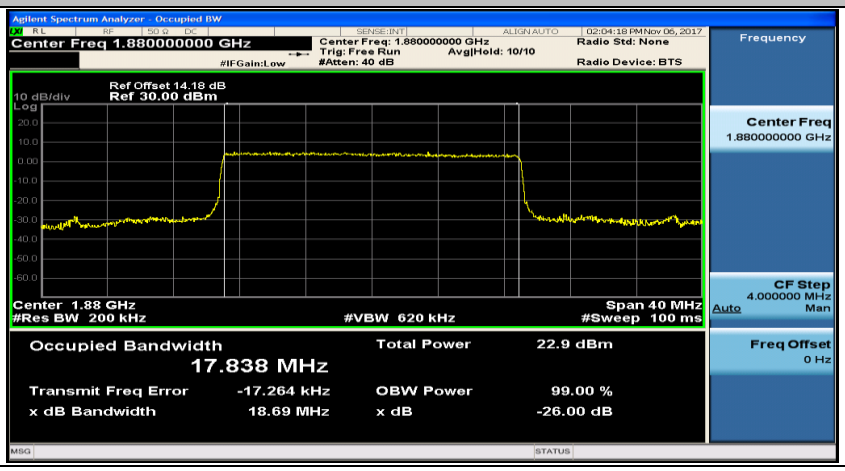
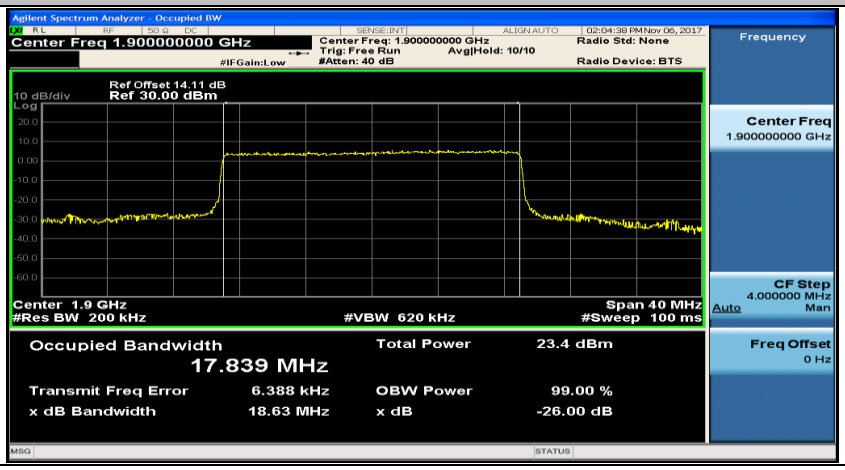


Channel Bandwidth: 20 MHz

(Channel Bandwidth: 20 MHz)_LCH_QPSK_100RB#0



(Channel Bandwidth: 20 MHz)_MCH_QPSK_100RB#0



(Channel Bandwidth: 20 MHz)_HCH_QPSK_100RB#0