Appendix H: Test Data for E-UTRA Band 5

Product Name: Tablet PC
Trade Mark: Bright Life
Test Model: TL21

Environmental Conditions

Temperature:	24.1° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Tom.Liu

H.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.78	23.30	PASS
		1	3	23.49	22.85	PASS
		1	5	23.42	22.69	PASS
		3	0	23.25	22.80	PASS
		3	2	22.97	22.34	PASS
		3	3	23.07	22.08	PASS
		6	0	23.00	21.76	PASS
	MCH	1	0	23.94	22.50	PASS
		1	3	23.85	22.53	PASS
		1	5	23.99	22.27	PASS
		3	0	23.75	22.83	PASS
		3	2	23.83	22.72	PASS
		3	3	23.92	22.58	PASS
		6	0	22.82	22.02	PASS
	HCH	1	0	24.04	22.36	PASS
		1	3	24.05	23.38	PASS
		1	5	23.95	23.24	PASS
		3	0	23.96	23.16	PASS
		3	2	23.98	23.16	PASS
		3	3	23.89	23.09	PASS
		6	0	23.37	22.18	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.42	22.62	PASS
		1	7	23.54	22.79	PASS
		1	14	23.67	22.93	PASS
		8	0	22.96	21.76	PASS
		8	4	23.12	22.08	PASS
		8	7	23.08	22.20	PASS
		15	0	22.98	21.96	PASS
	MCH	1	0	23.64	22.98	PASS
		1	7	23.85	23.17	PASS
		1	14	23.82	23.15	PASS
		8	0	22.95	21.86	PASS
		8	4	22.99	21.95	PASS
		8	7	22.85	22.11	PASS
		15	0	22.84	22.00	PASS
	HCH	1	0	24.17	23.48	PASS
		1	7	23.90	23.28	PASS
		1	14	23.78	23.21	PASS
		8	0	23.39	22.28	PASS
		8	4	23.38	22.31	PASS
		8	7	23.47	22.31	PASS
		15	0	23.42	22.53	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.14	22.54	PASS
		1	12	23.52	22.91	PASS
		1	24	24.06	23.47	PASS
		12	0	22.99	22.21	PASS
		12	6	23.17	22.28	PASS
		12	13	22.91	22.05	PASS
		25	0	22.87	22.06	PASS
	MCH	1	0	23.44	22.79	PASS
		1	12	23.81	23.30	PASS
		1	24	23.89	23.26	PASS
		12	0	22.81	21.90	PASS
		12	6	22.96	21.94	PASS
		12	13	22.91	22.13	PASS
		25	0	22.82	21.72	PASS
	HCH	1	0	24.05	23.13	PASS
		1	12	24.27	22.64	PASS
		1	24	23.65	22.48	PASS
		12	0	23.25	22.30	PASS
		12	6	23.22	22.40	PASS
		12	13	23.29	22.34	PASS
		25	0	23.38	22.49	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.90	21.24	PASS
		1	24	24.46	23.85	PASS
		1	49	23.11	22.48	PASS
		25	0	23.01	22.04	PASS
		25	12	23.03	22.01	PASS
		25	25	22.72	21.69	PASS
		50	0	22.91	21.76	PASS
	MCH	1	0	23.49	22.70	PASS
		1	24	23.98	23.28	PASS
		1	49	23.65	23.02	PASS
		25	0	22.92	21.78	PASS
		25	12	22.96	21.80	PASS
		25	25	23.00	21.86	PASS
		50	0	22.85	21.71	PASS
	HCH	1	0	23.75	23.23	PASS
		1	24	24.46	23.93	PASS
		1	49	23.13	22.61	PASS
		25	0	23.25	22.22	PASS
		25	12	23.16	22.13	PASS
		25	25	23.31	22.21	PASS
		50	0	23.25	22.16	PASS

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H.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.29	<13	PASS
	MCH	5.25	<13	PASS
	HCH	4.76	<13	PASS
16QAM	LCH	6.1	<13	PASS
	MCH	6.2	<13	PASS
	HCH	5.63	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.31	<13	PASS
	MCH	5.28	<13	PASS
	HCH	4.95	<13	PASS
16QAM	LCH	6.24	<13	PASS
	MCH	6.19	<13	PASS
	HCH	5.86	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.15	<13	PASS
	MCH	5.24	<13	PASS
	HCH	4.88	<13	PASS
16QAM	LCH	6.01	<13	PASS
	MCH	6.1	<13	PASS
	HCH	5.73	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.99	<13	PASS
	MCH	5.2	<13	PASS
	HCH	4.99	<13	PASS
16QAM	LCH	5.87	<13	PASS
	MCH	5.98	<13	PASS
	HCH	5.81	<13	PASS

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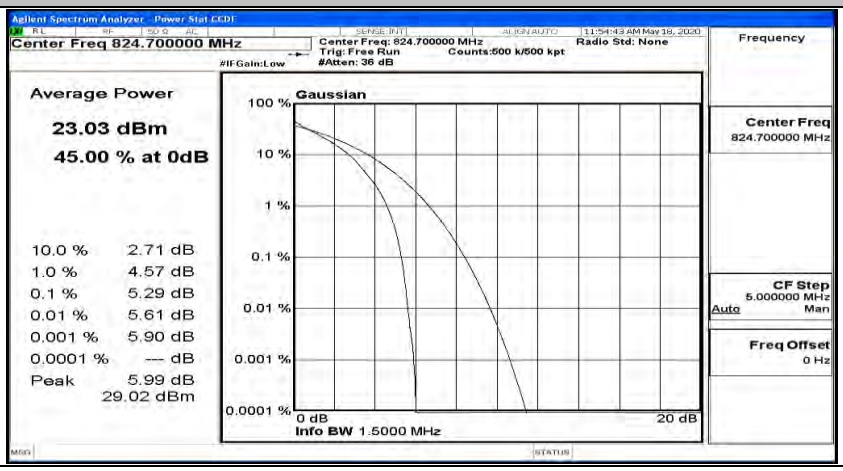
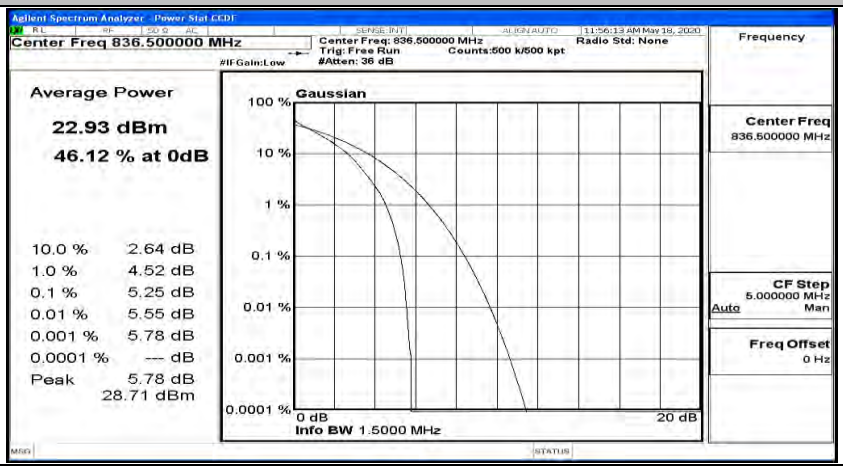
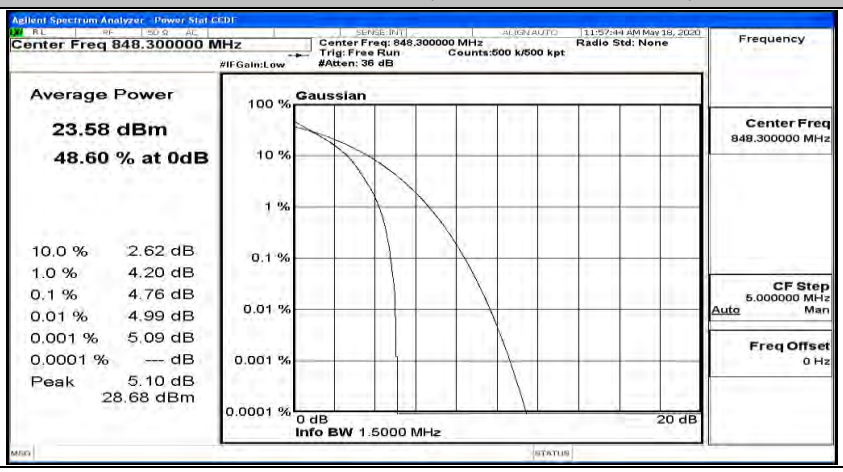
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



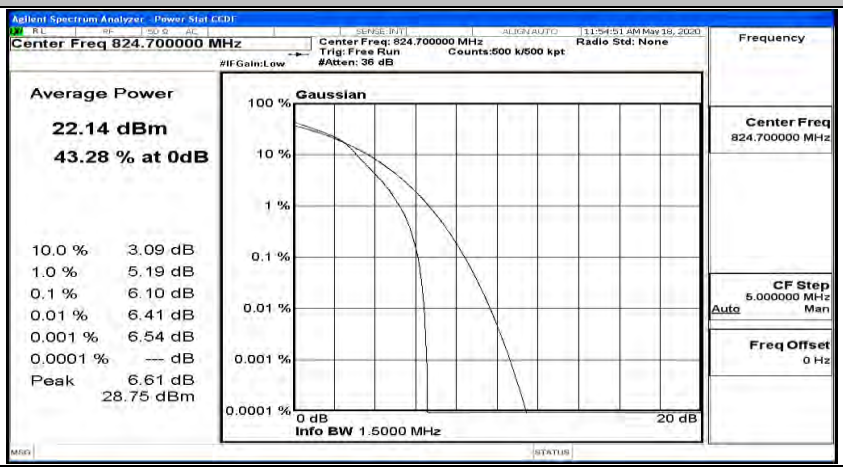
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



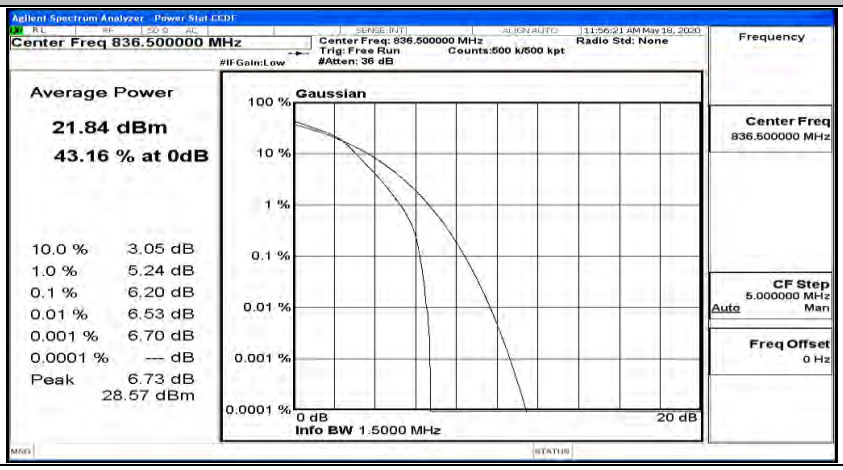
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



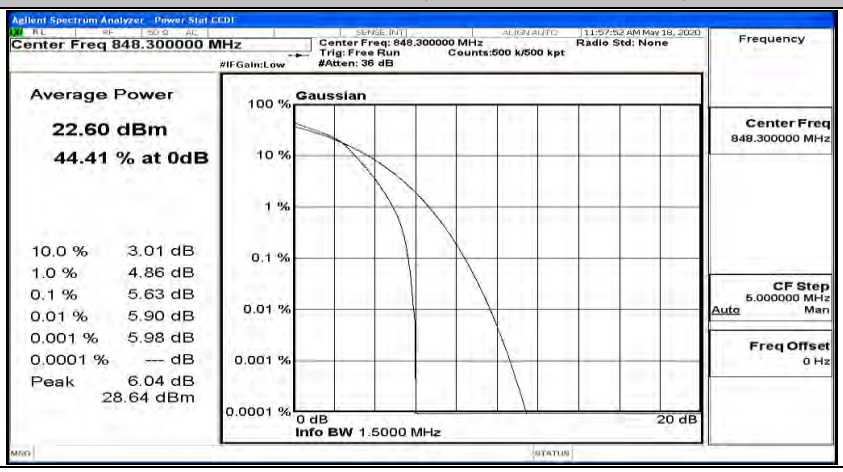
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



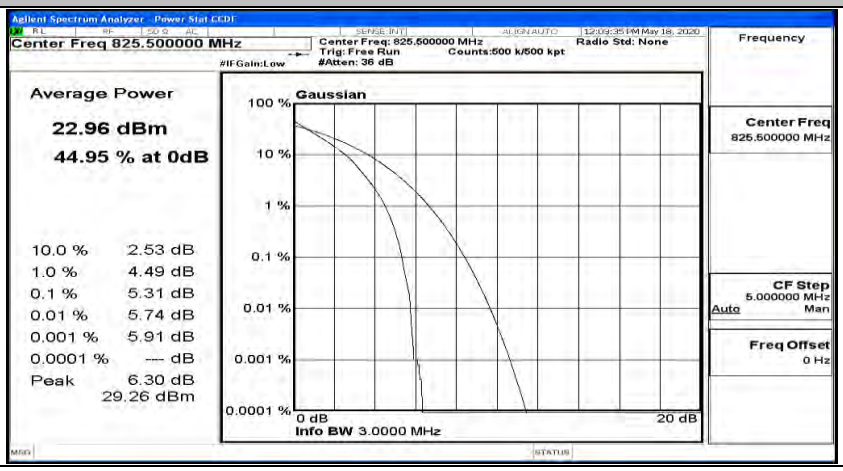
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



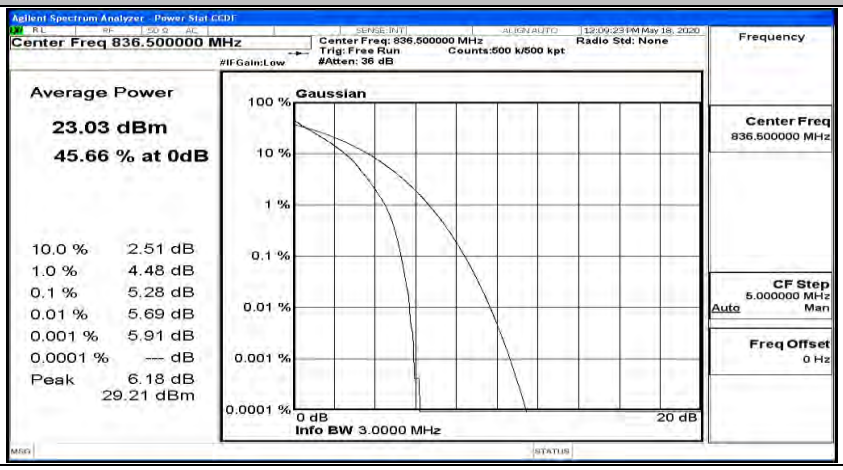
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



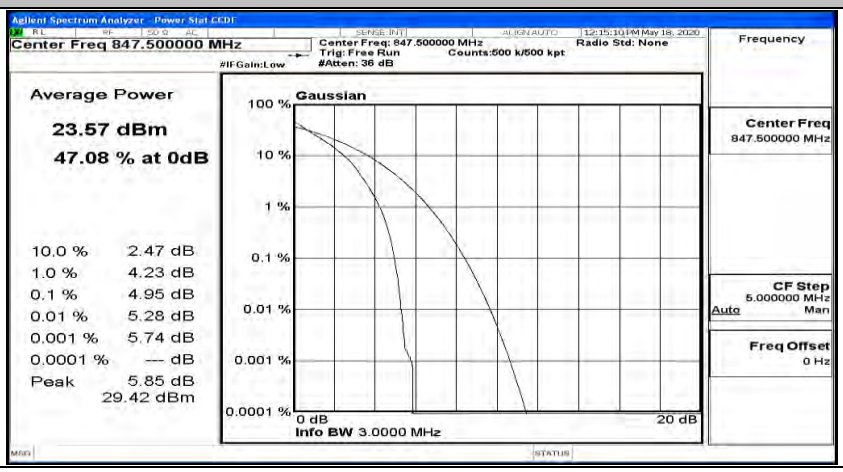
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



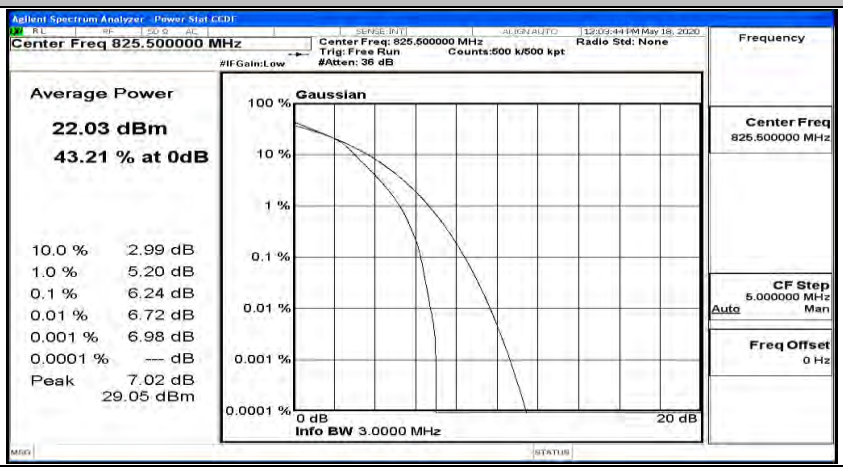
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



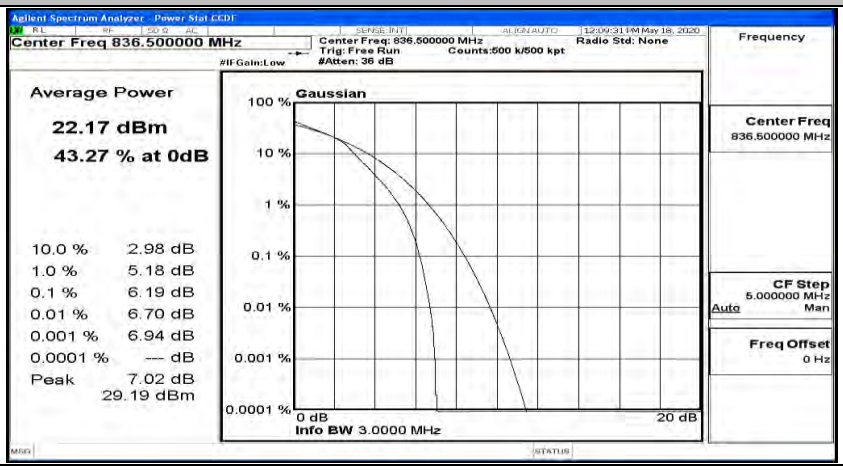
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



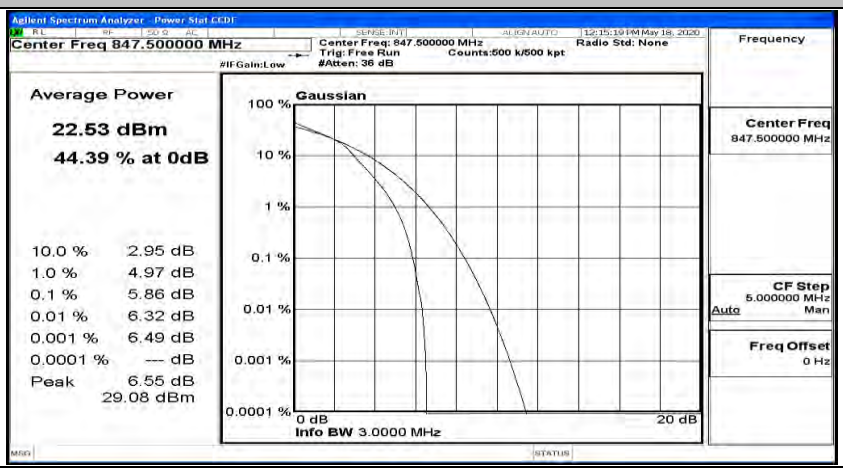
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



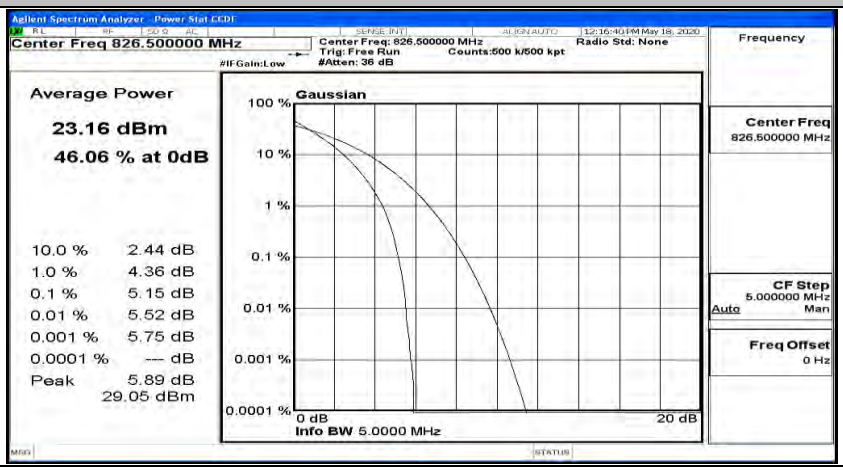
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



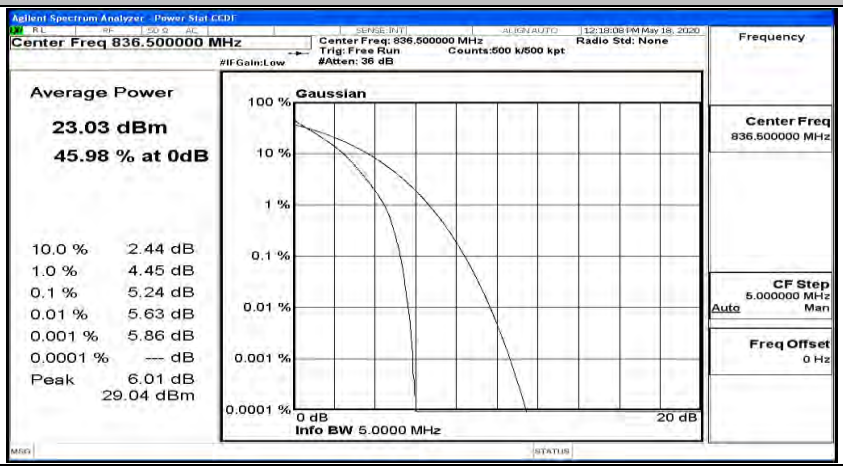
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



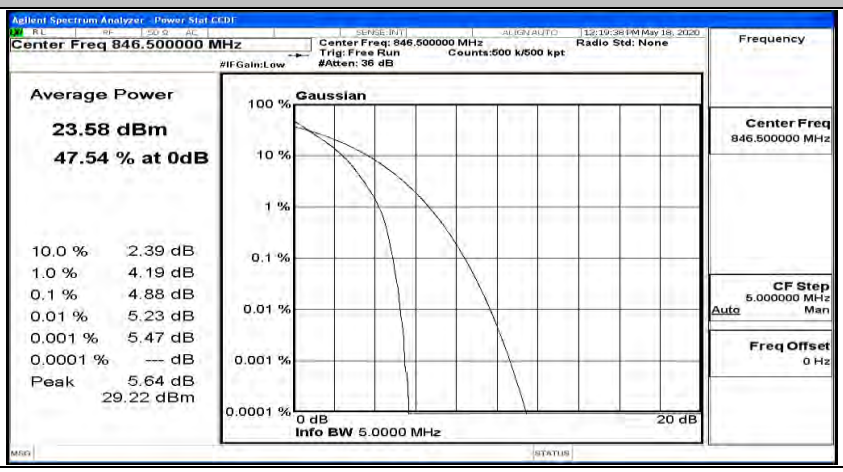
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



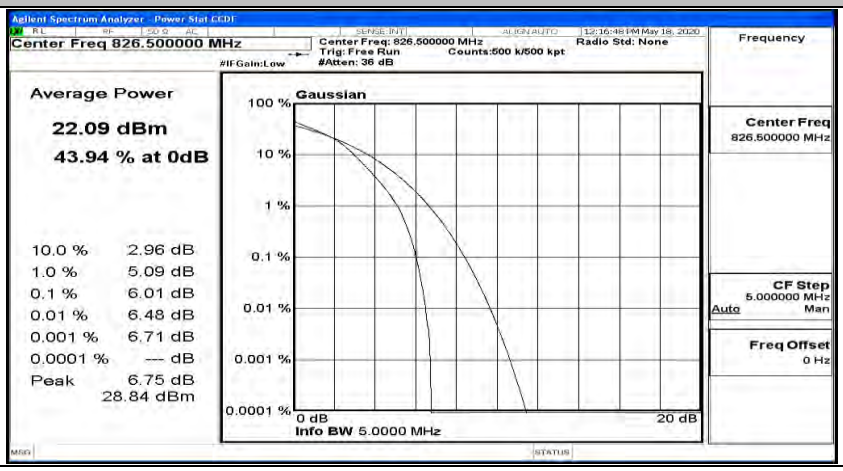
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



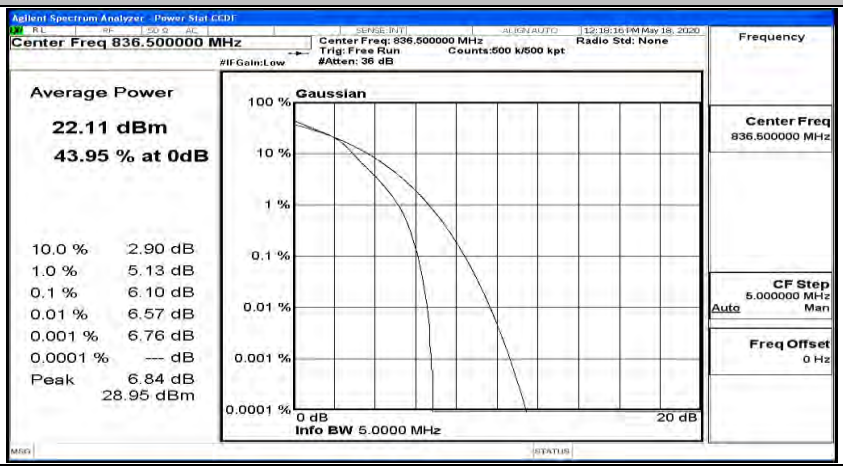
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



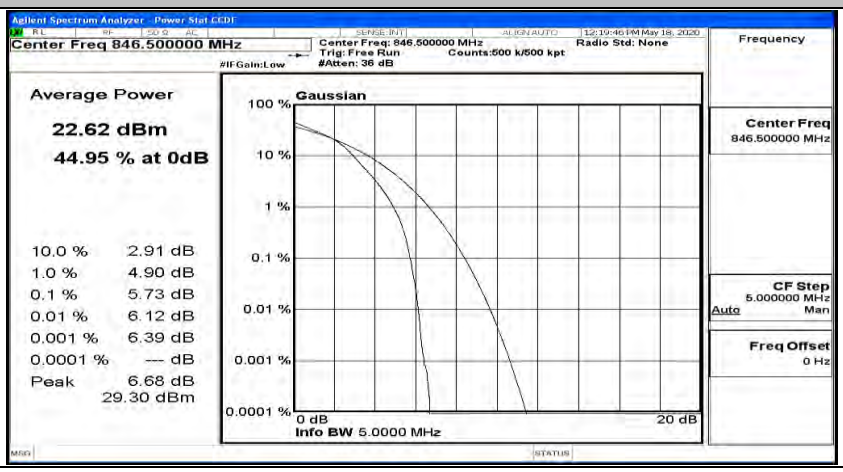
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



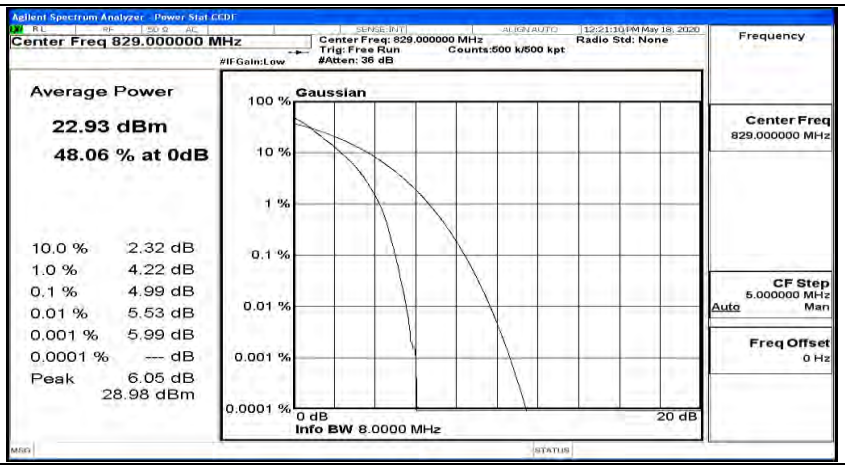
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



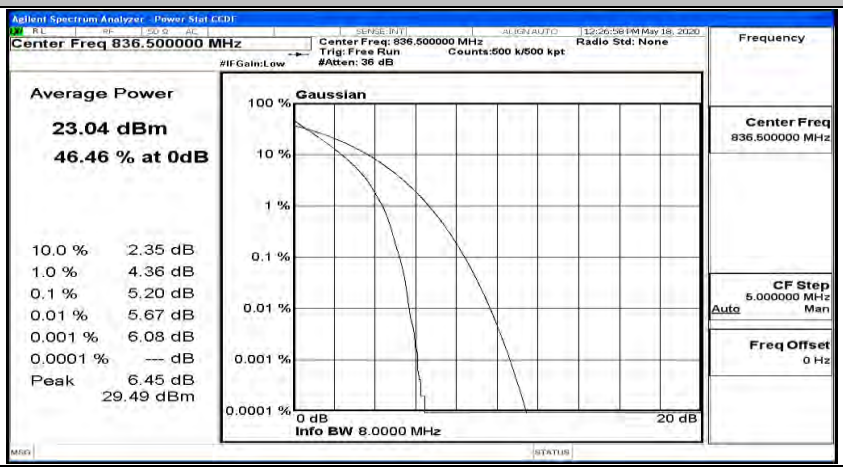
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



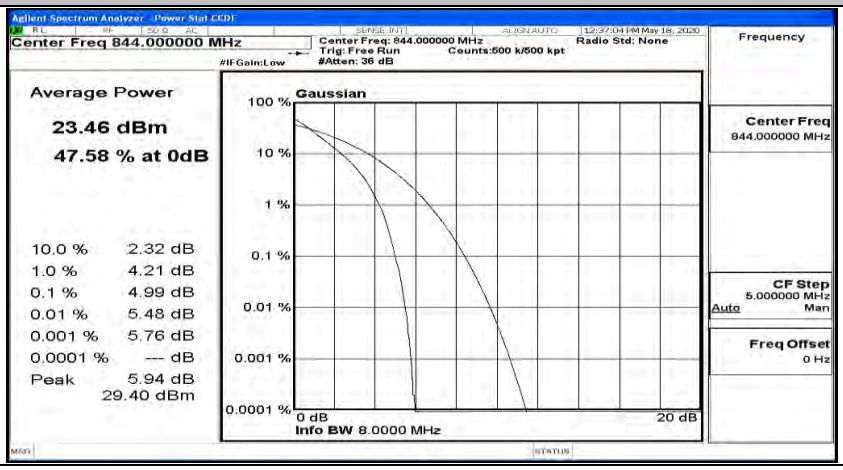
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK


Agilent Spectrum Analyzer - Power Stat CCDF
Center Freq 829.000000 MHz
Center Freq: 829.000000 MHz
Trig: Free Run
#Atten: 36 dB
Counts:500 k/500 kpt
Radio Std: None
#IFGain:Low
Frequency
Average Power
22.93 dBm
48.06 % at 0dB
10.0 % 2.32 dB
1.0 % 4.22 dB
0.1 % 4.99 dB
0.01 % 5.53 dB
0.001 % 5.99 dB
0.0001 % --- dB
Peak 6.05 dB
28.98 dBm
Gaussian
100 %
10 %
1 %
0.1 %
0.01 %
0.001 %
0.0001 %
0 dB
20 dB
Info BW 8.0000 MHz
Center Freq
829.000000 MHz
CF Step
5.000000 MHz
Auto Man
Freq Offset
0 Hz

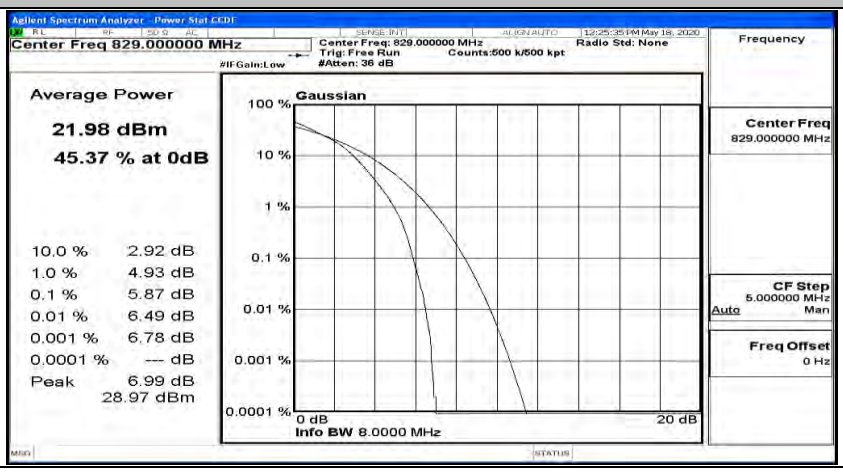
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



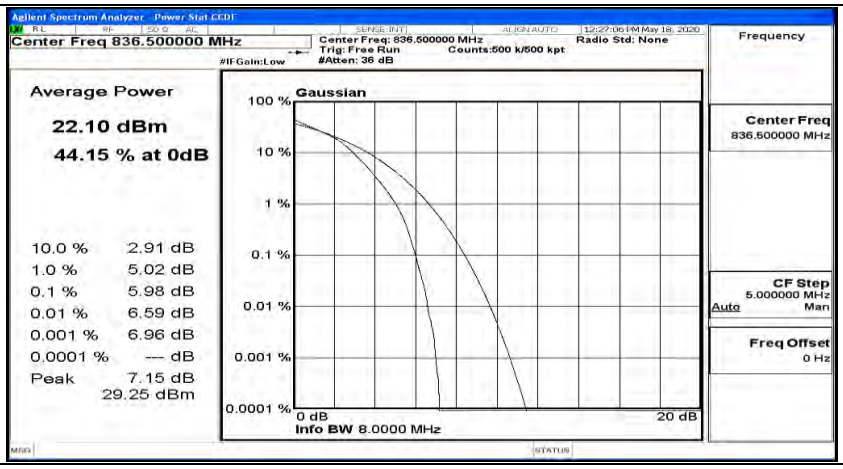
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



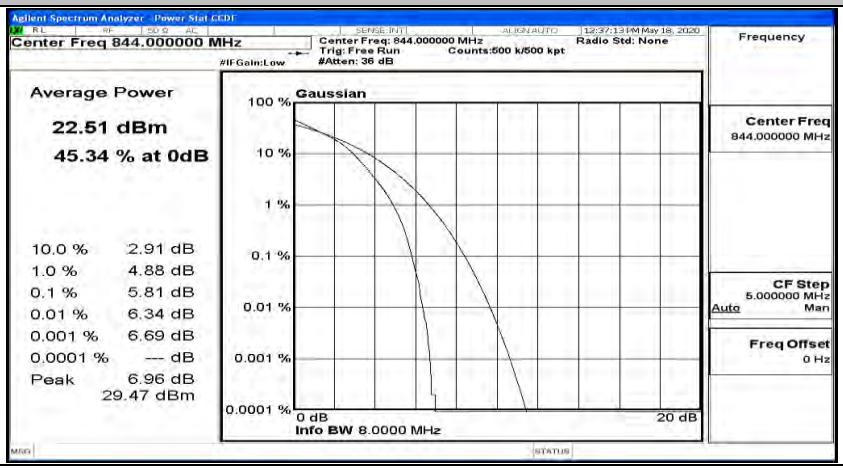
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



H.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0771	1.229	PASS
	MCH	1.0743	1.209	PASS
	HCH	1.0760	1.228	PASS
16QAM	LCH	1.0805	1.233	PASS
	MCH	1.0797	1.231	PASS
	HCH	1.0782	1.232	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6854	2.899	PASS
	MCH	2.6790	2.894	PASS
	HCH	2.6852	2.899	PASS
16QAM	LCH	2.6845	2.913	PASS
	MCH	2.6853	2.876	PASS
	HCH	2.6845	2.900	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4795	4.787	PASS
	MCH	4.4800	4.828	PASS
	HCH	4.4727	4.793	PASS
16QAM	LCH	4.4674	4.782	PASS
	MCH	4.4759	4.798	PASS
	HCH	4.4793	4.817	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.8977	9.468	PASS
	MCH	8.9479	9.544	PASS
	HCH	8.9212	9.425	PASS
16QAM	LCH	8.8955	9.359	PASS
	MCH	8.9298	9.458	PASS
	HCH	8.9351	9.403	PASS

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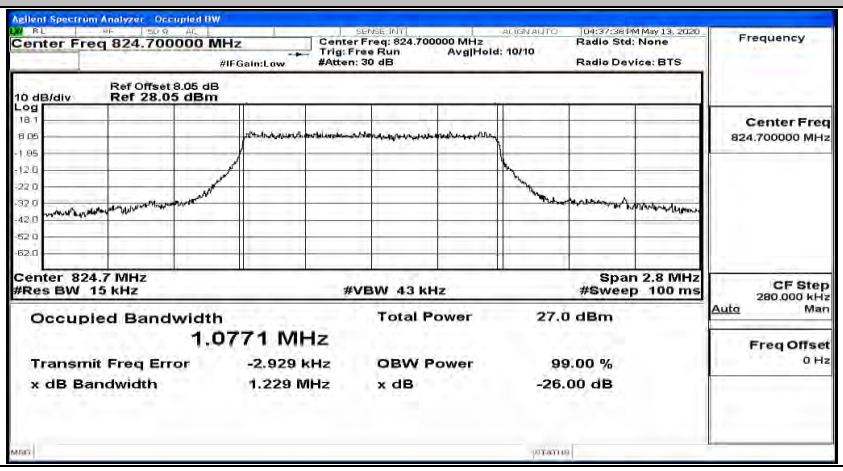
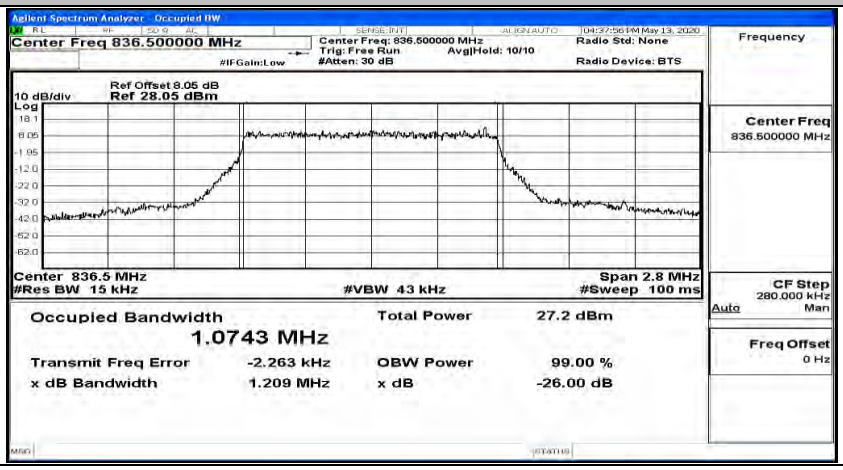
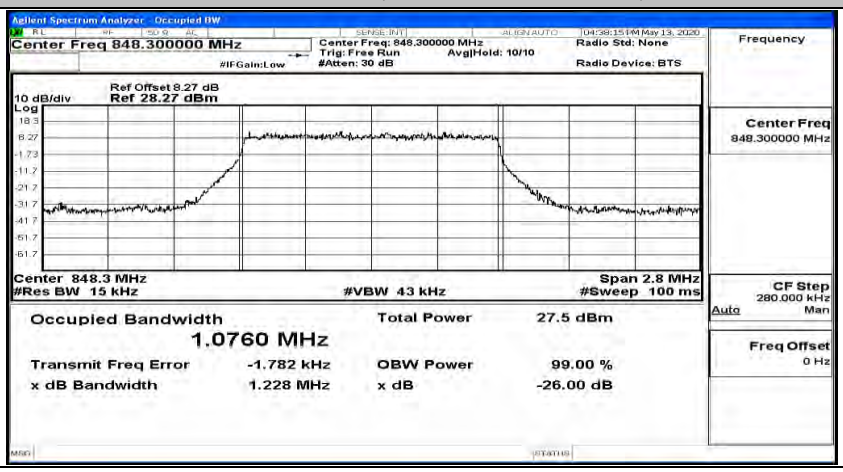
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



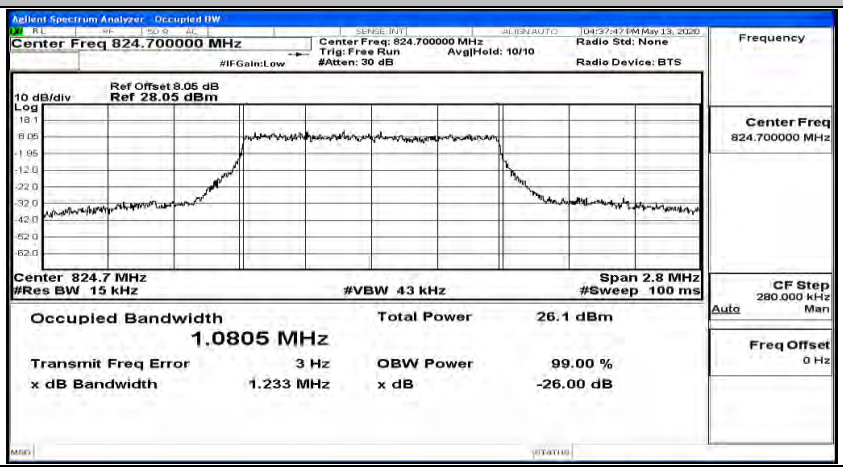
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



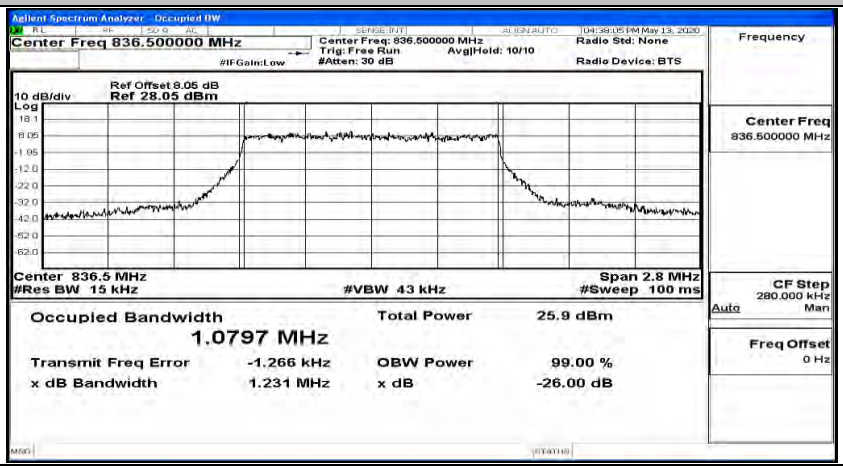
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



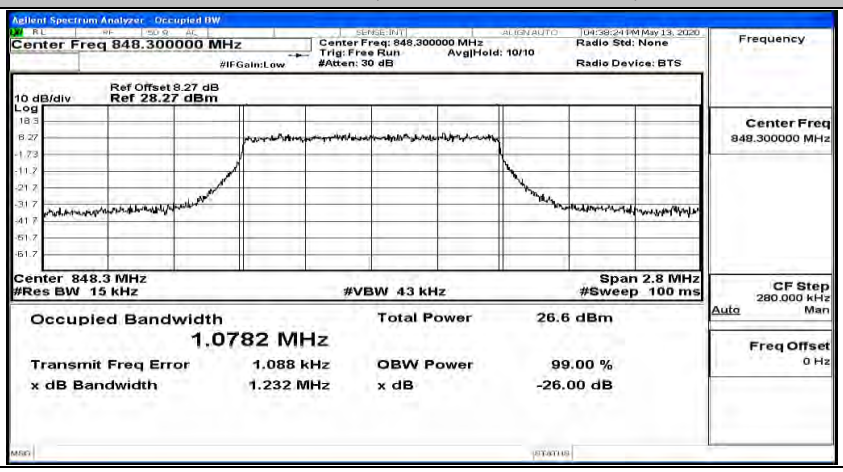
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



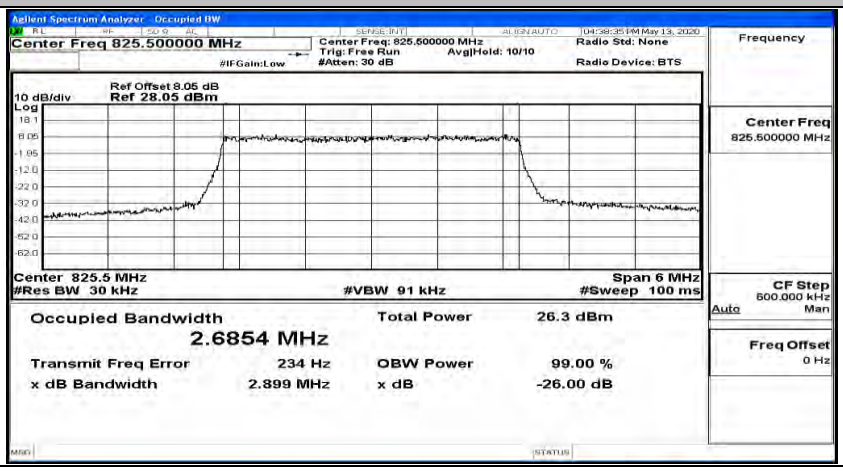
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



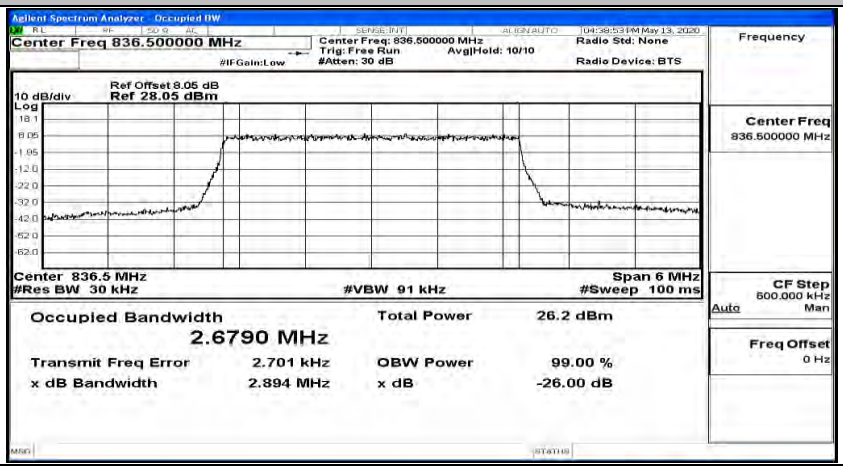
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



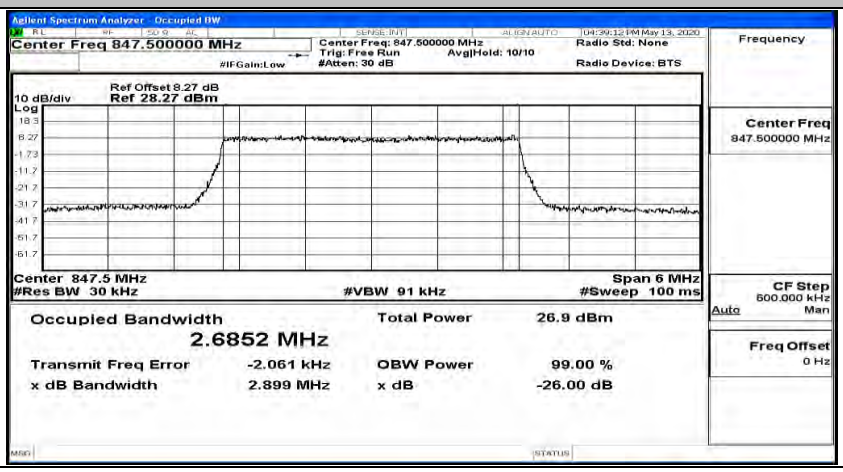
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



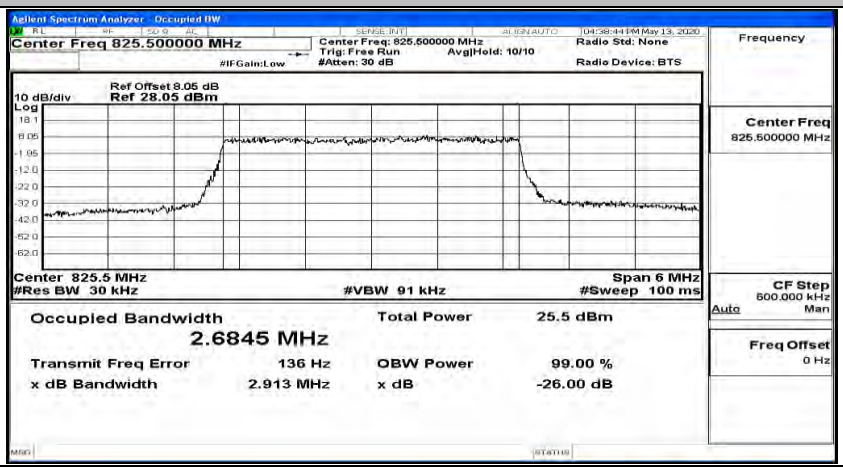
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



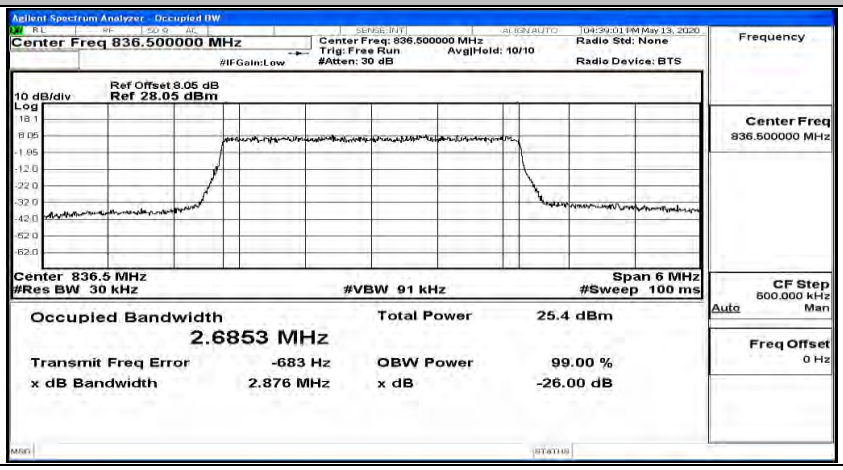
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



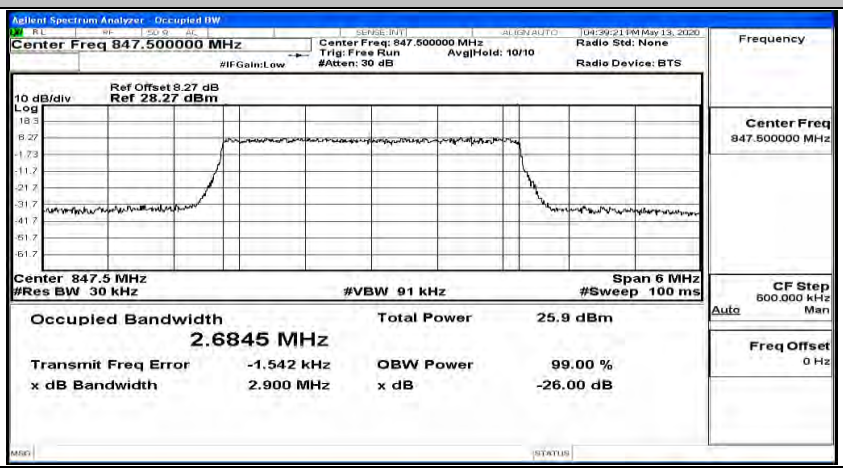
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



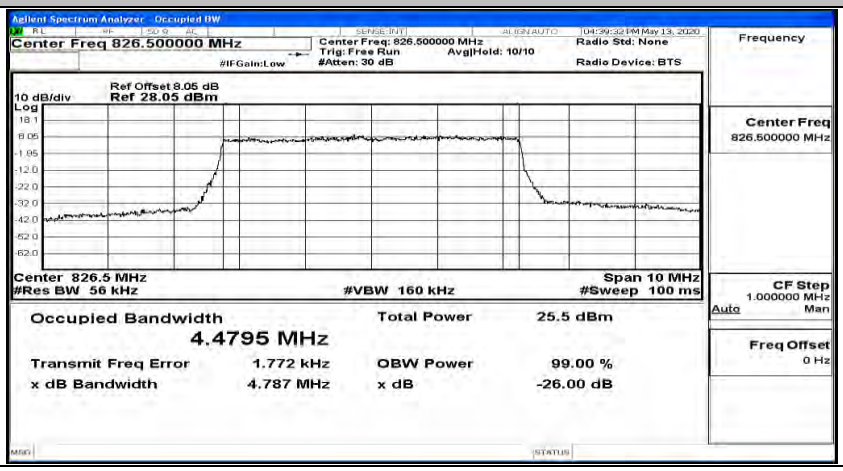
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



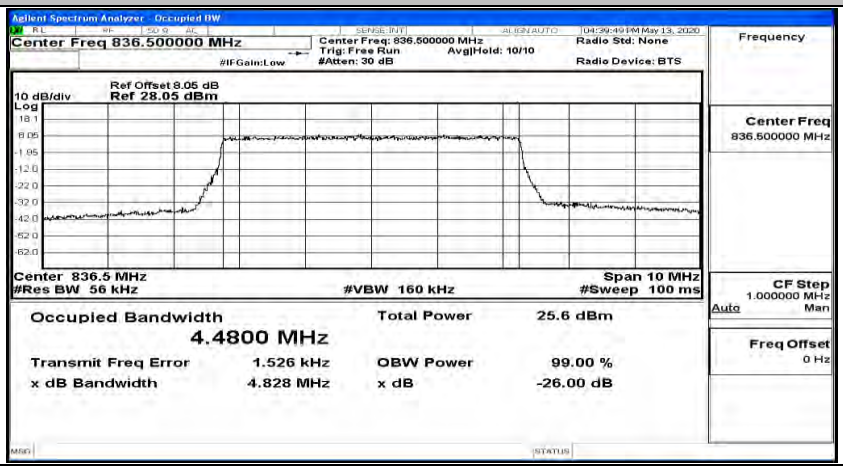
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



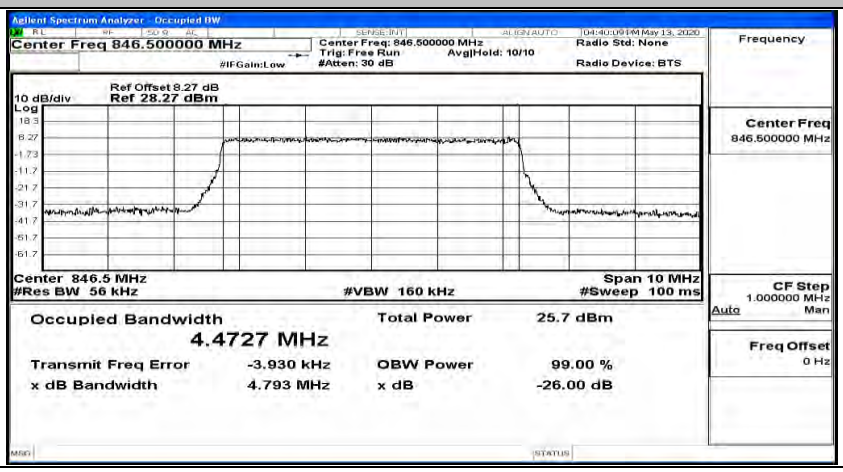
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



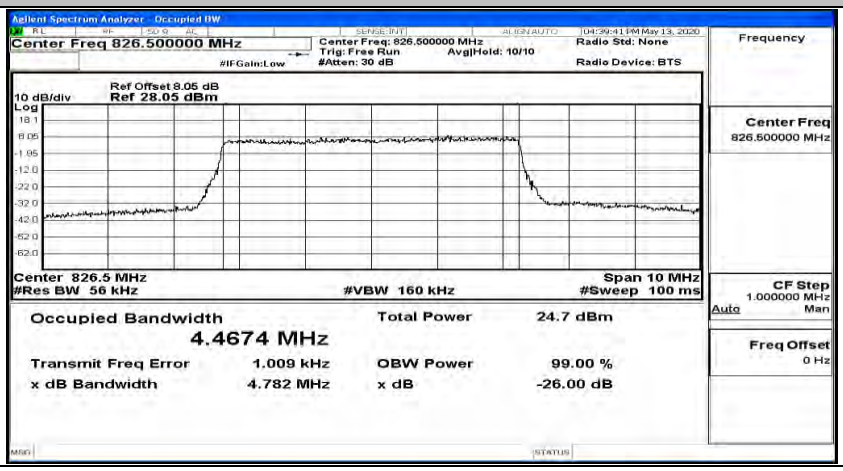
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



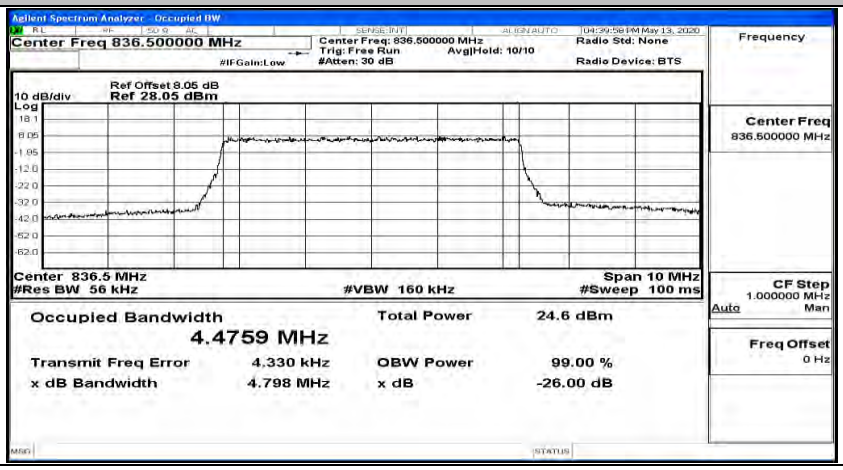
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



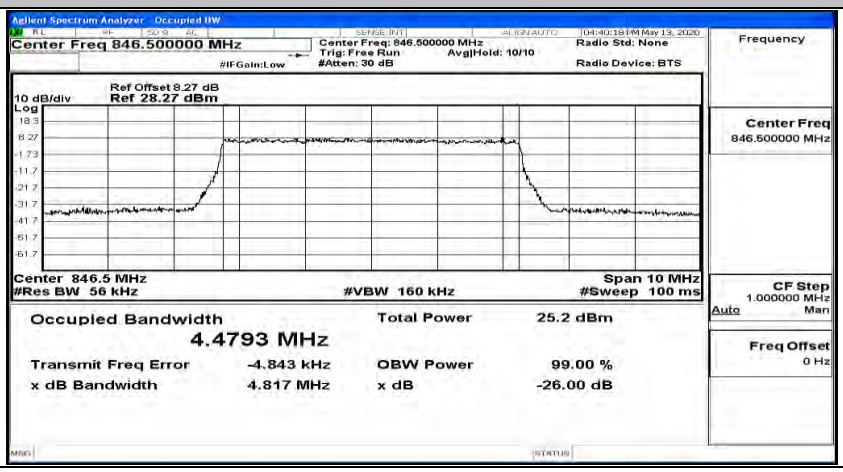
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



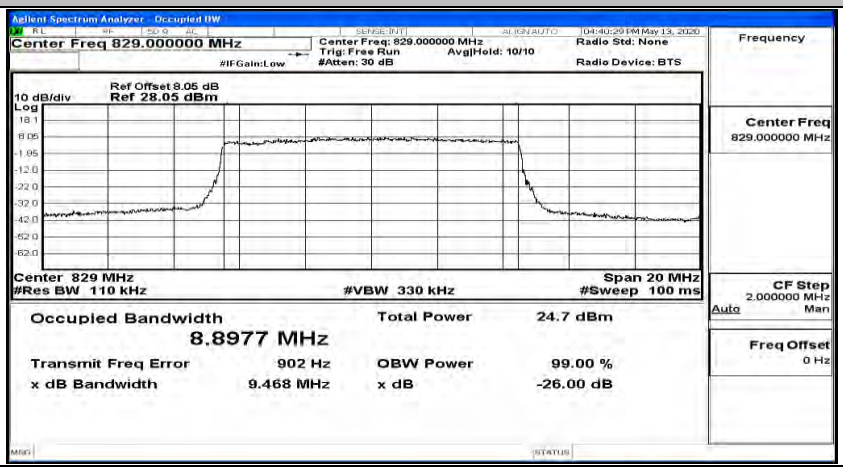
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



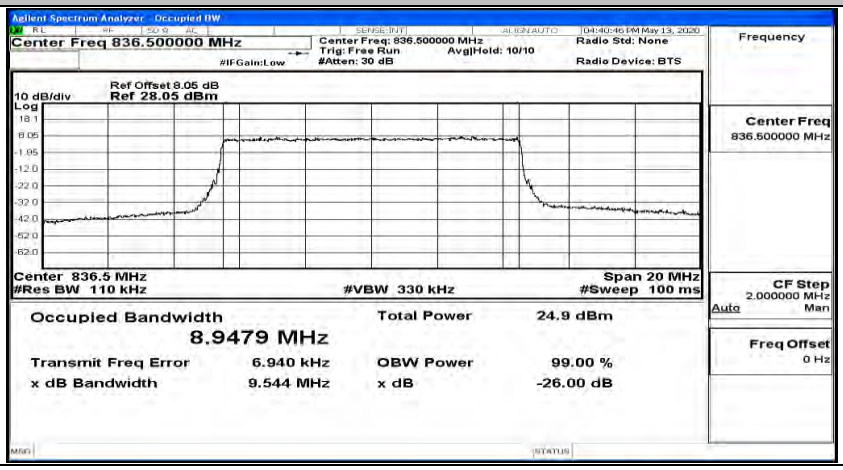
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



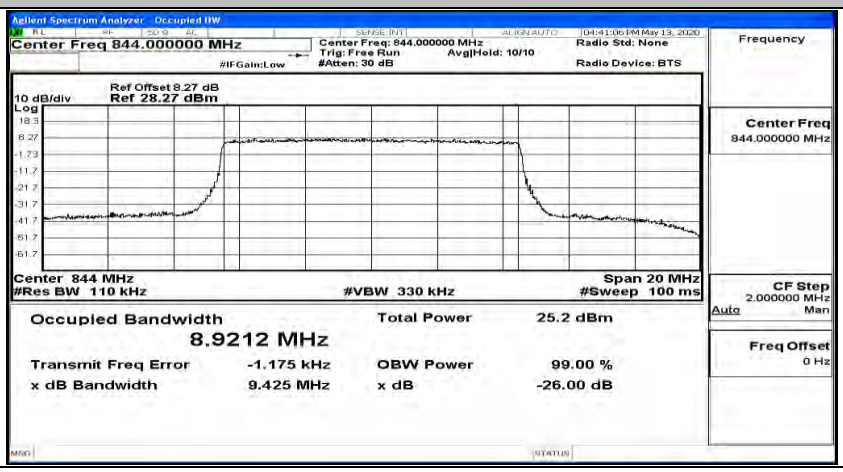
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



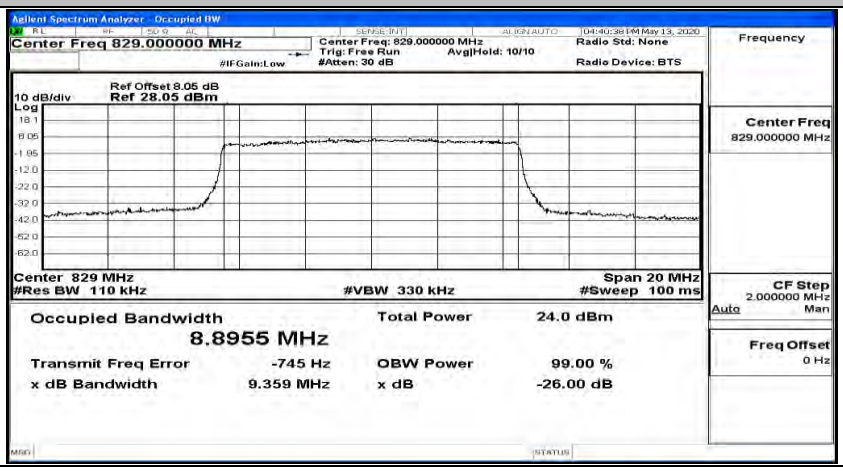
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



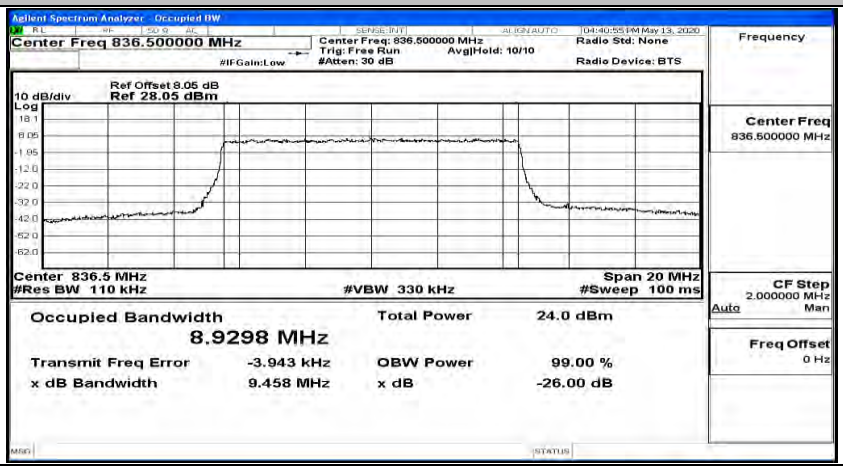
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



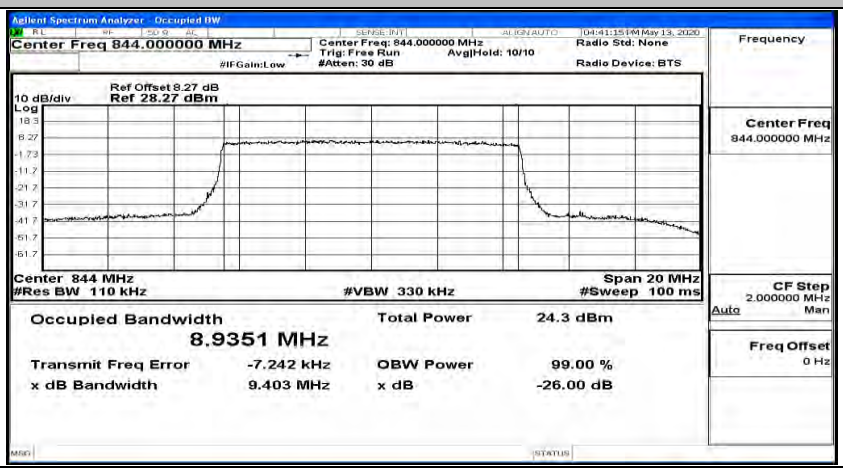
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



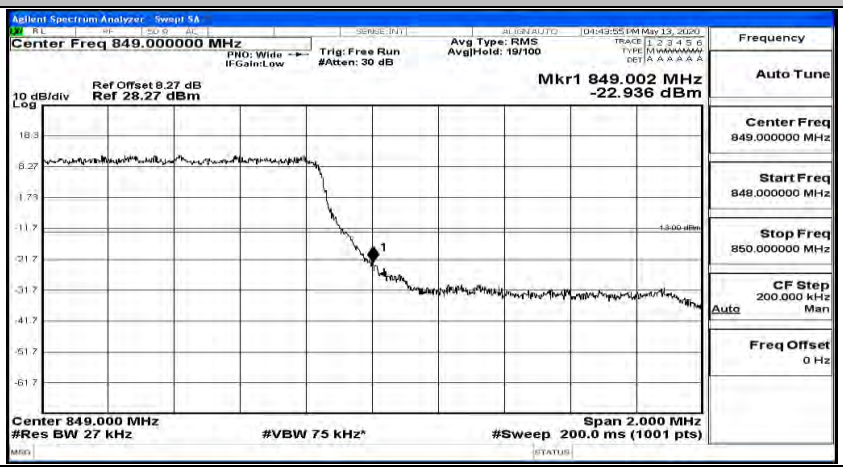
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



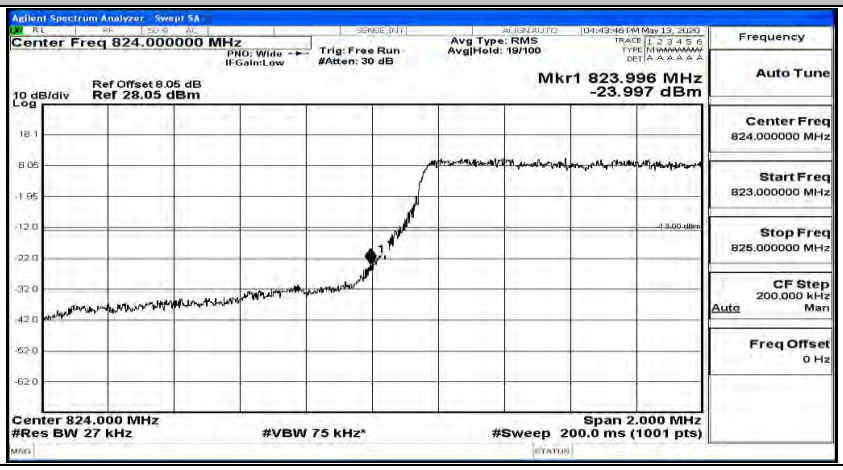
H.4 Band Edge

Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK

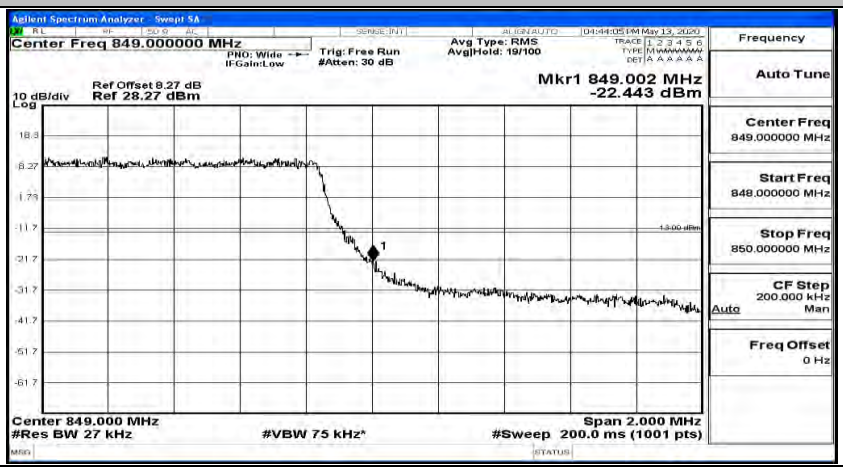
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



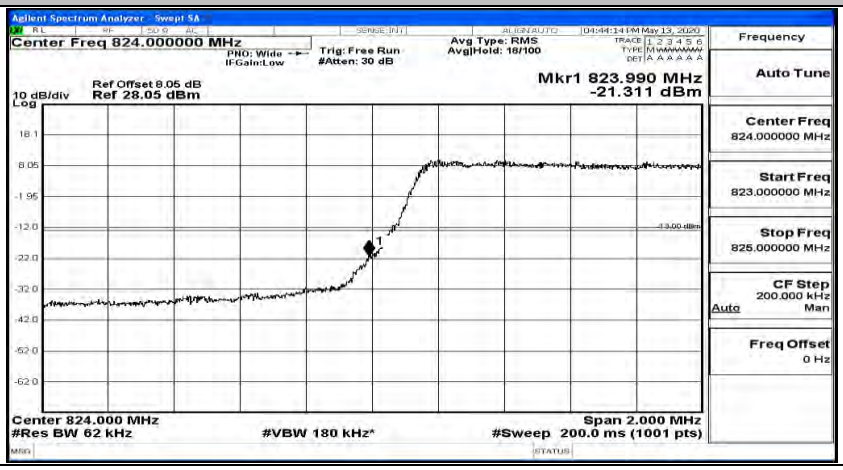
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



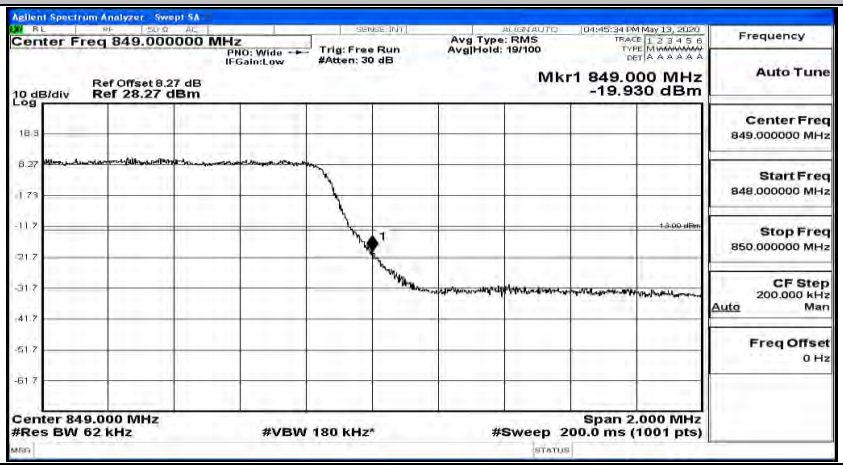
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



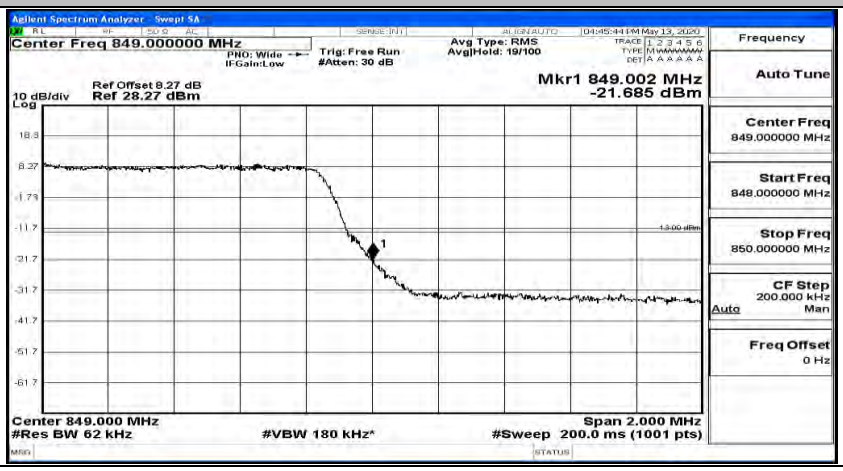
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



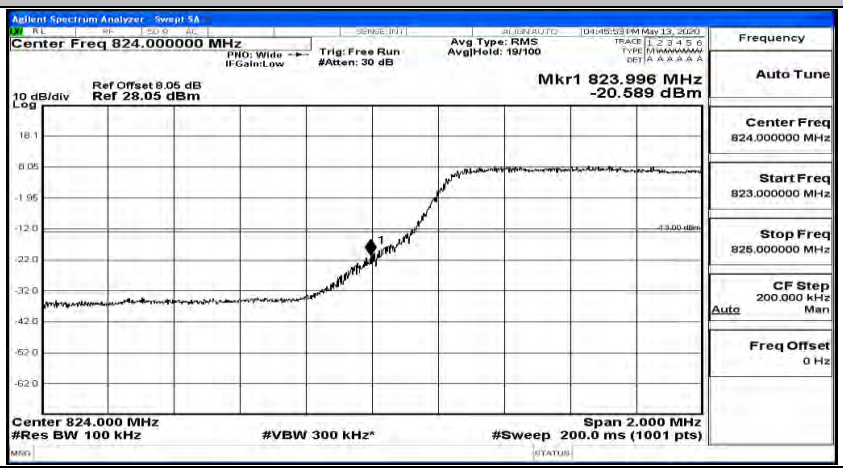
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



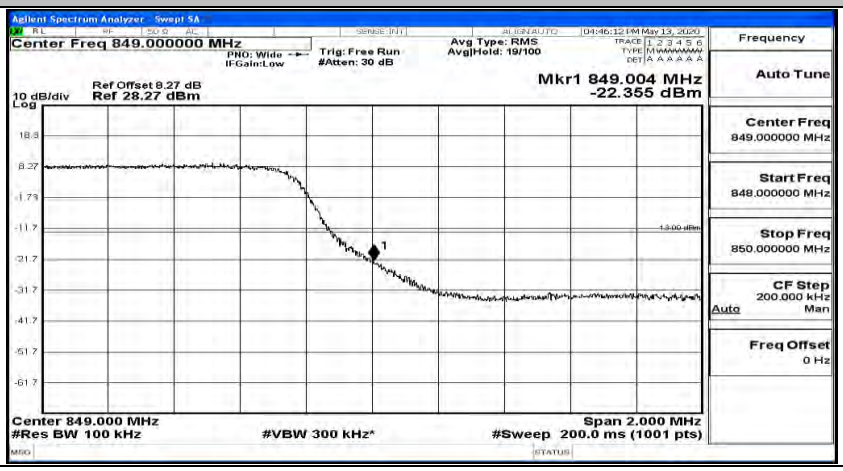
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



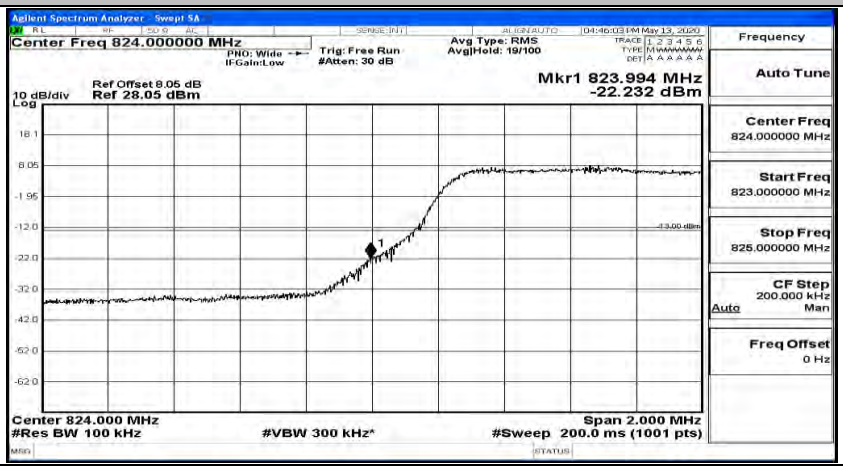
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



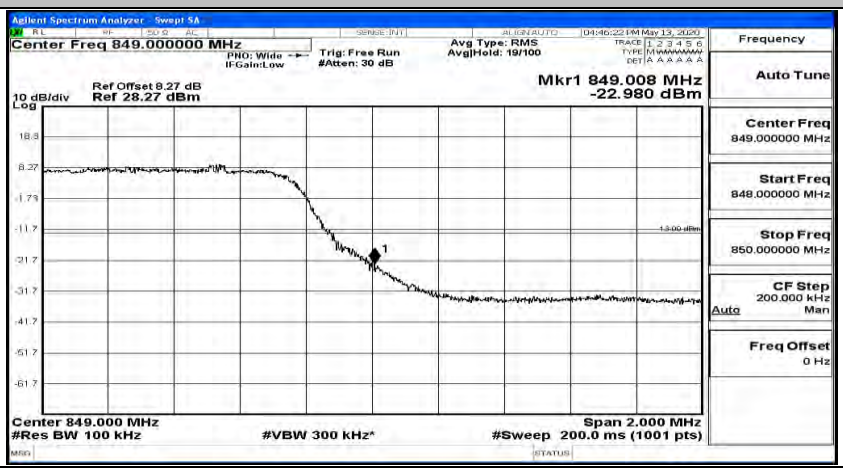
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



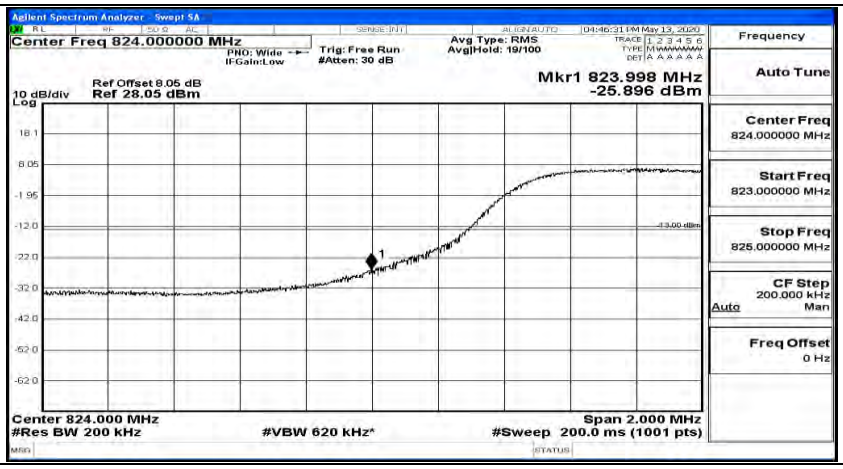
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



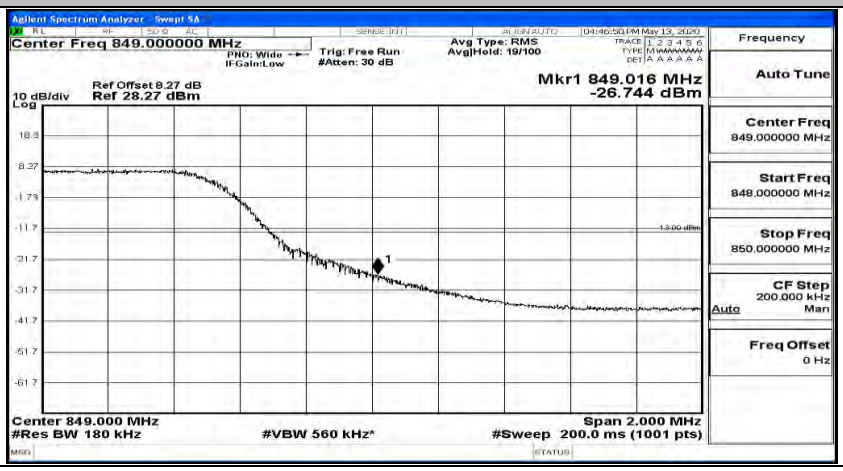
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



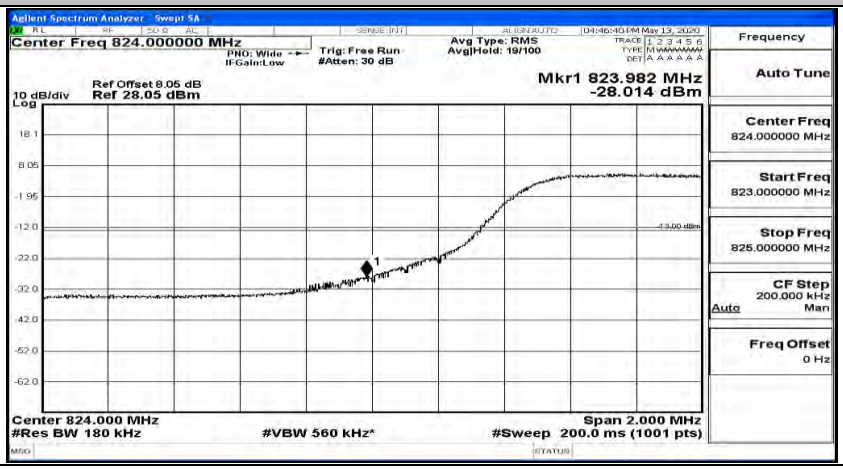
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK


Agilent Spectrum Analyzer - Swept SA
Center Freq 824.000000 MHz
PNO: Wide
IFGain:Low
Trig: Free Run
#Atten: 30 dB
Avg Type: RMS
Avg|Hold: 19/100
04:46:31 PM May 13, 2020
Ref Offset 8.05 dB
10 dB/div Ref 28.05 dBm
Log
Mkr1 823.998 MHz
-25.896 dBm
Center 824.000 MHz
#Res BW 200 kHz
#VBW 620 kHz*
Span 2.000 MHz
#Sweep 200.0 ms (1001 pts)
Frequency
Auto Tune
Center Freq
824.000000 MHz
Start Freq
823.000000 MHz
Stop Freq
825.000000 MHz
CF Step
200.000 kHz
Auto Man
Freq Offset
0 Hz

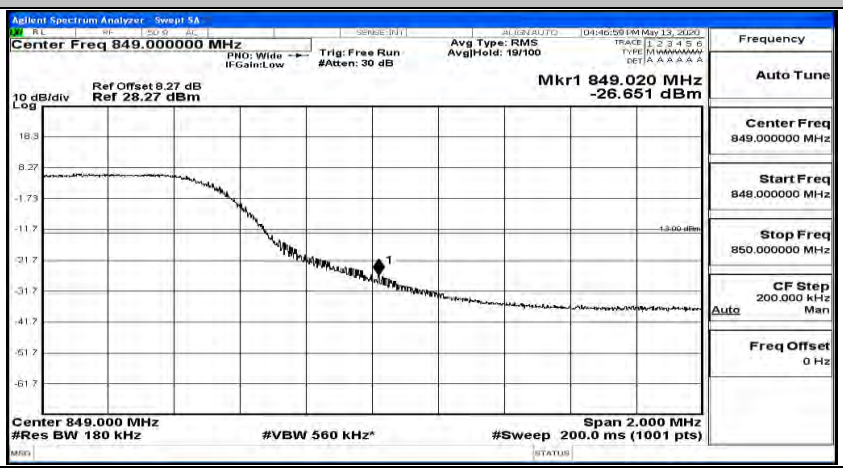
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



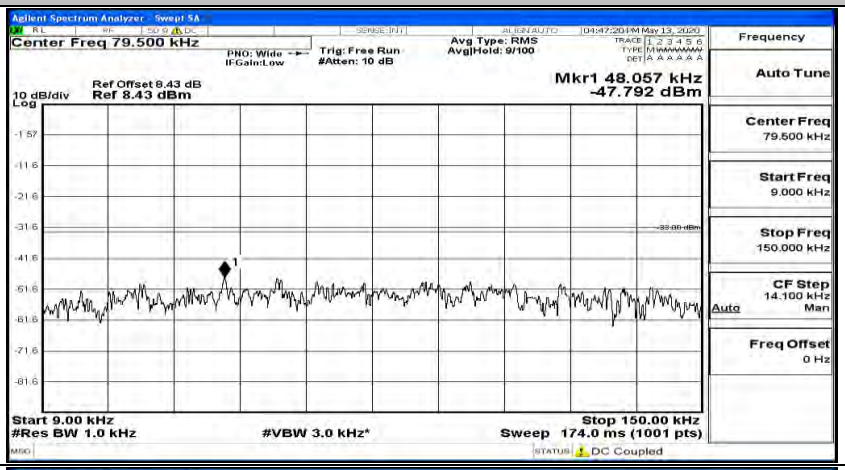
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

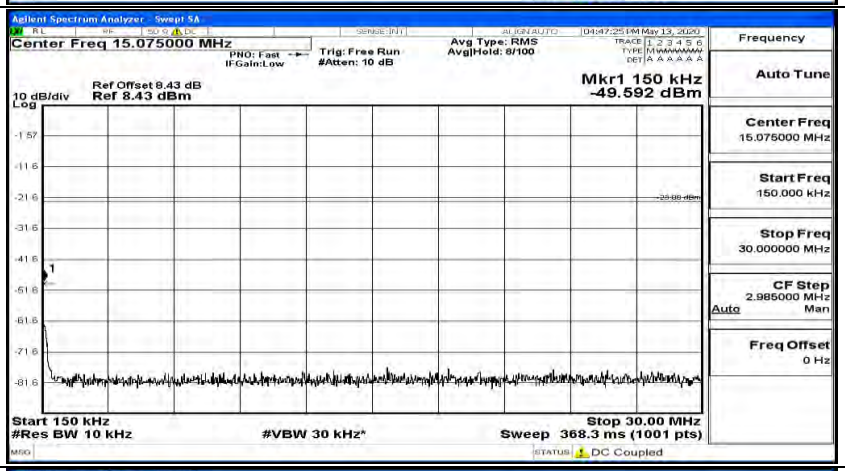


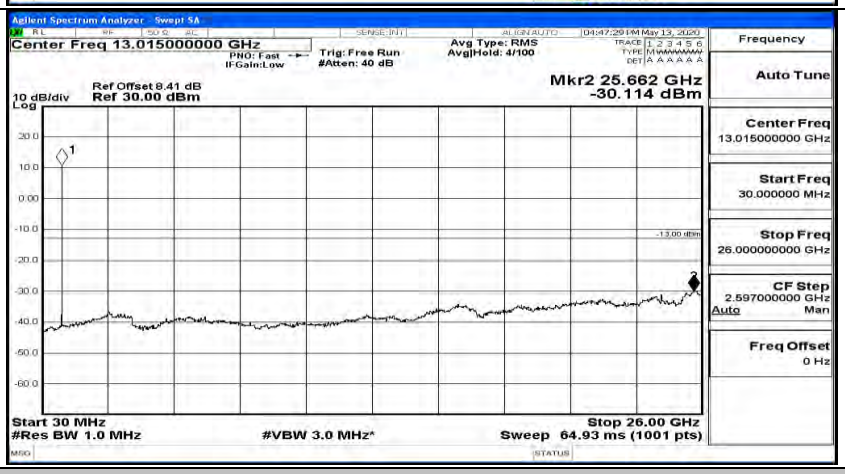
H.5 Conducted Spurious Emission

Channel Bandwidth: 1.4 MHz

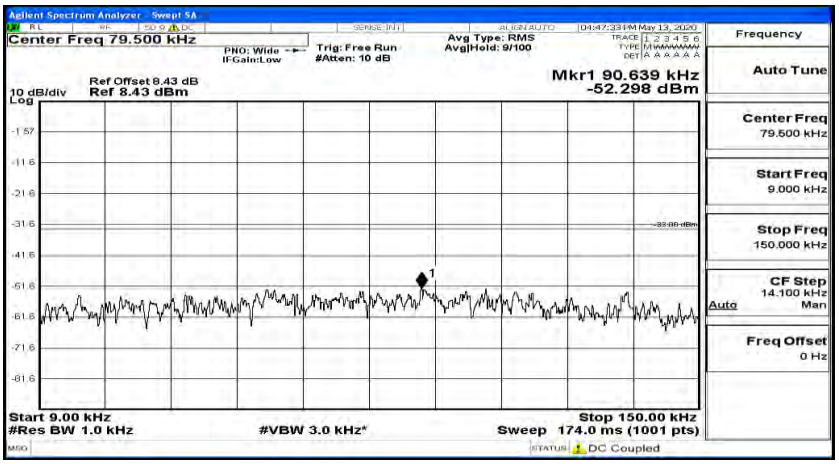
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

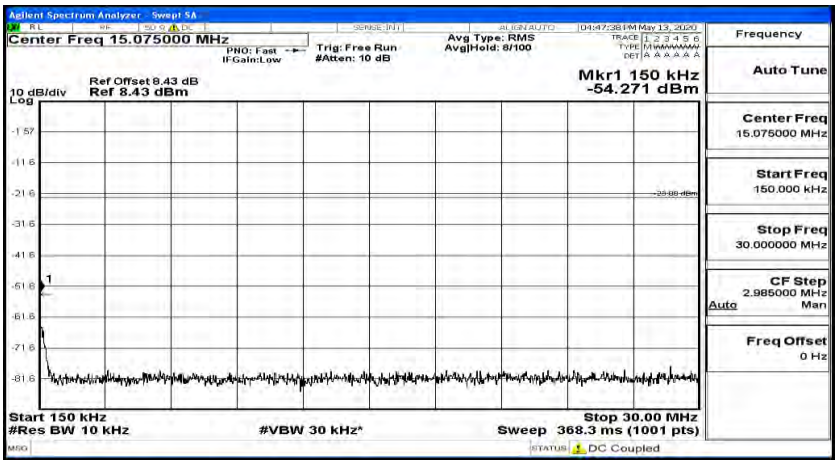




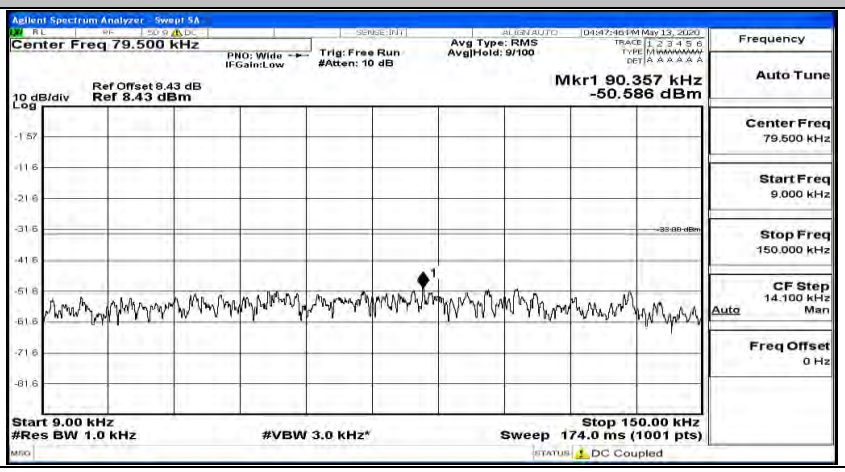


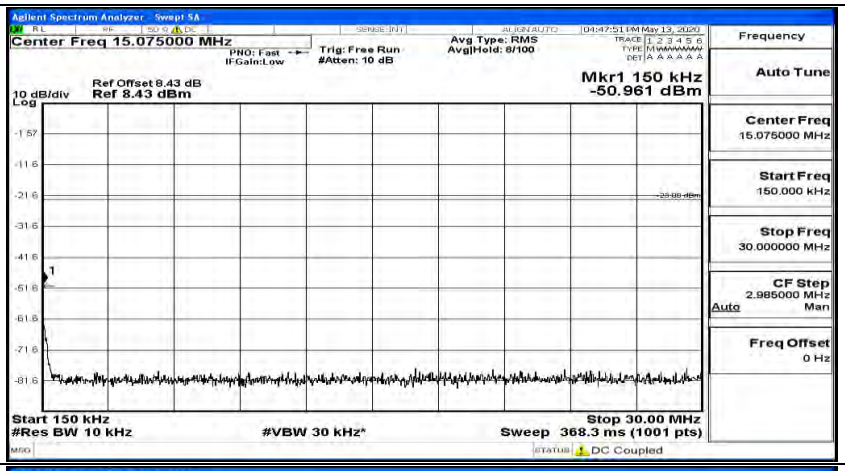
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



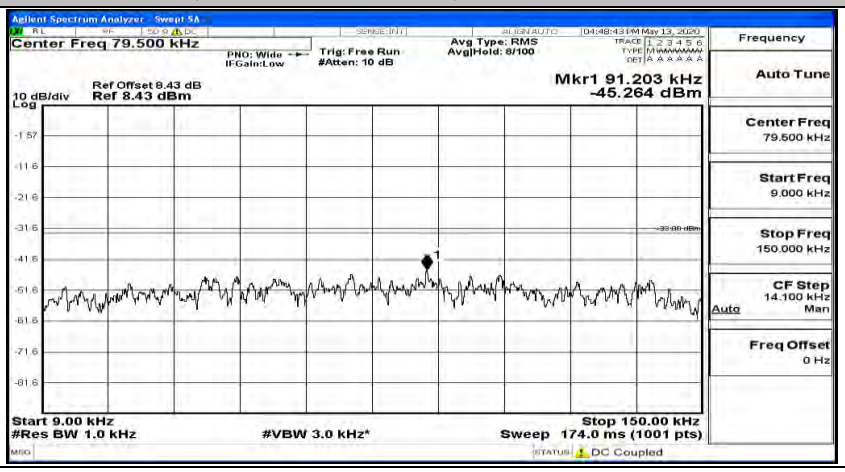


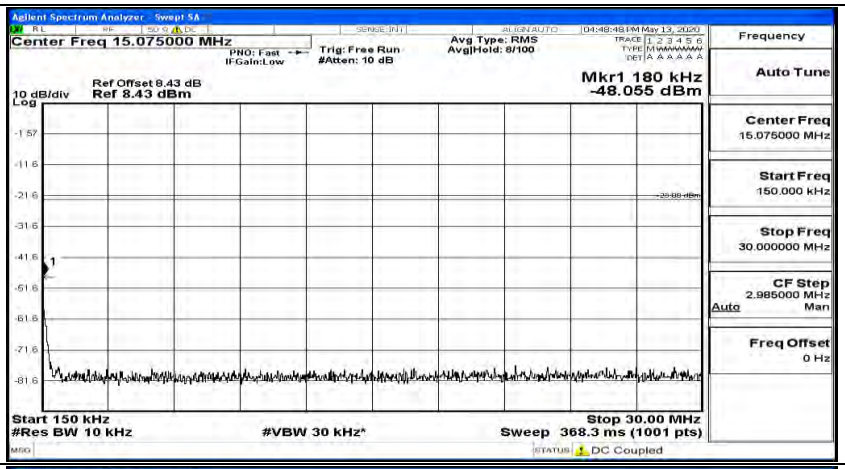
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

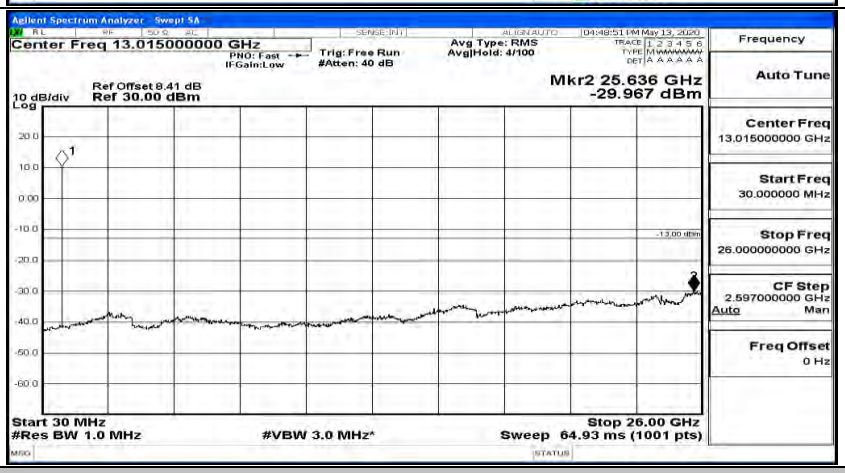




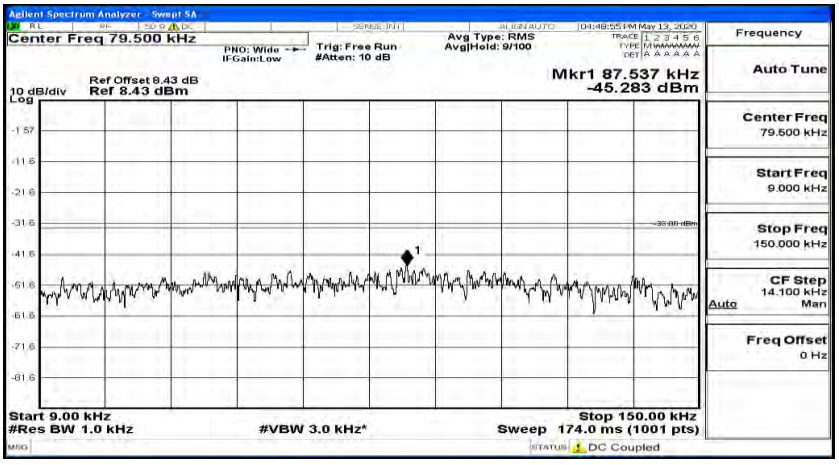
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

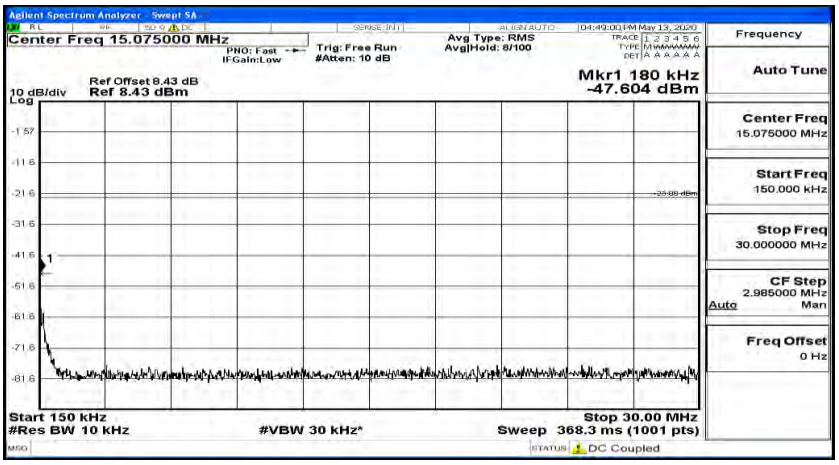




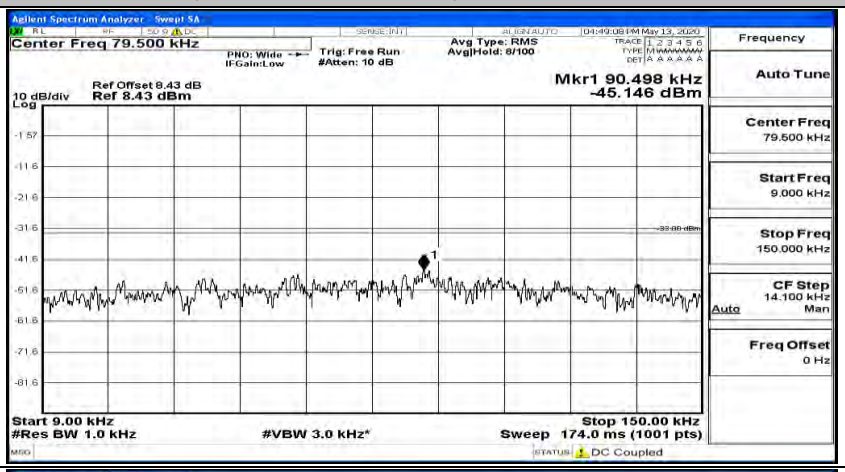


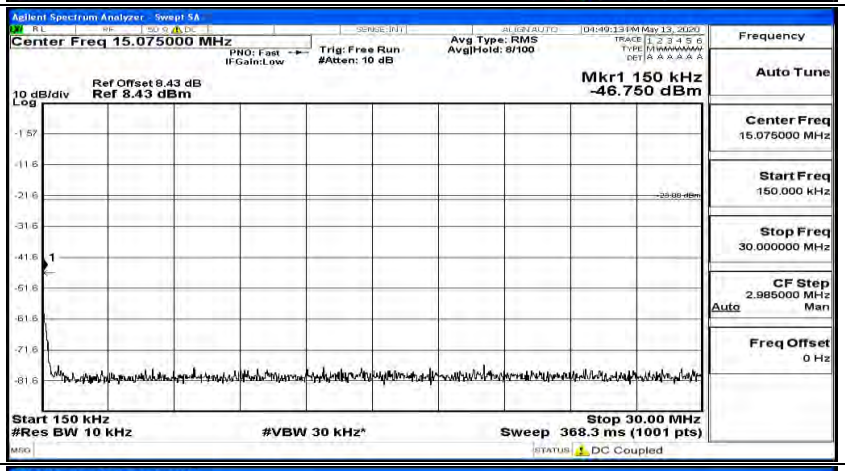
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3



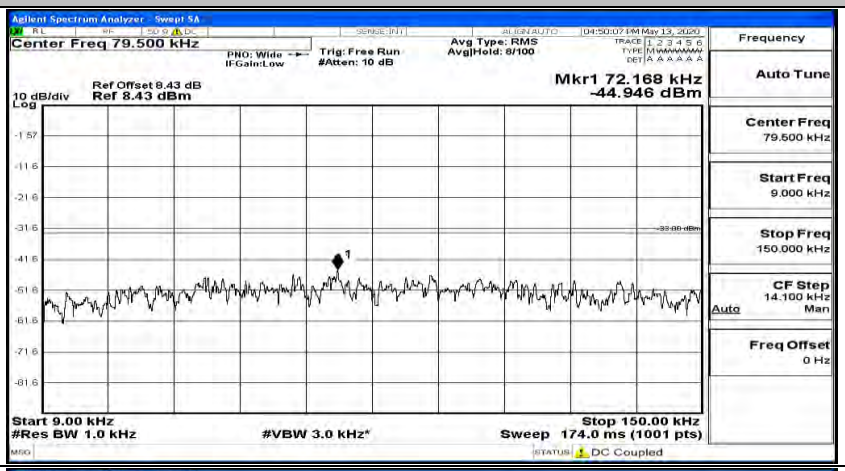


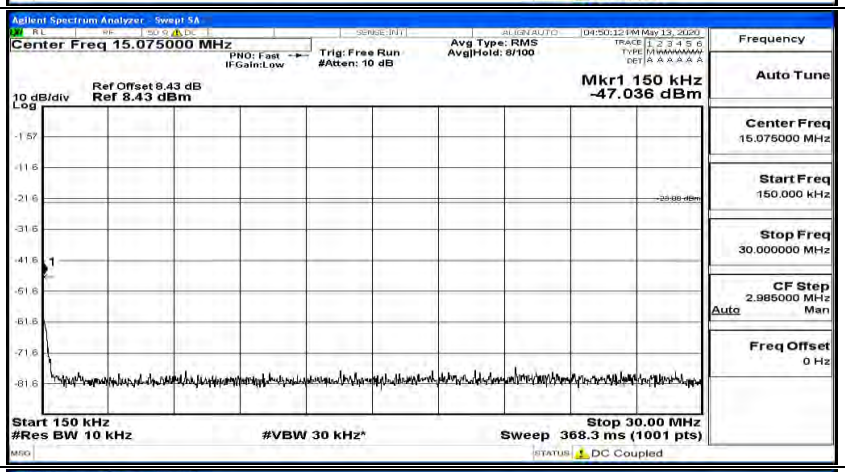
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

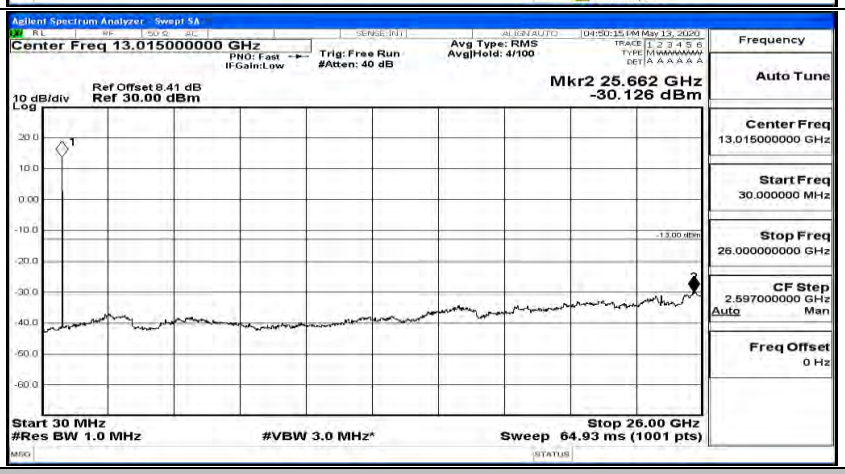




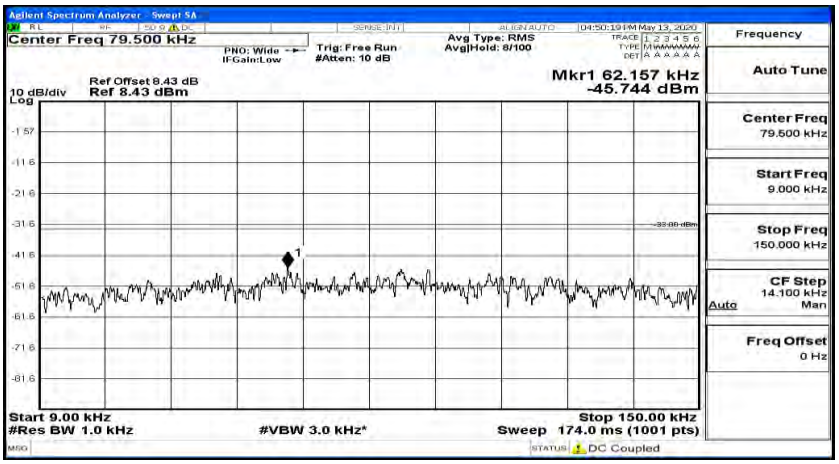
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

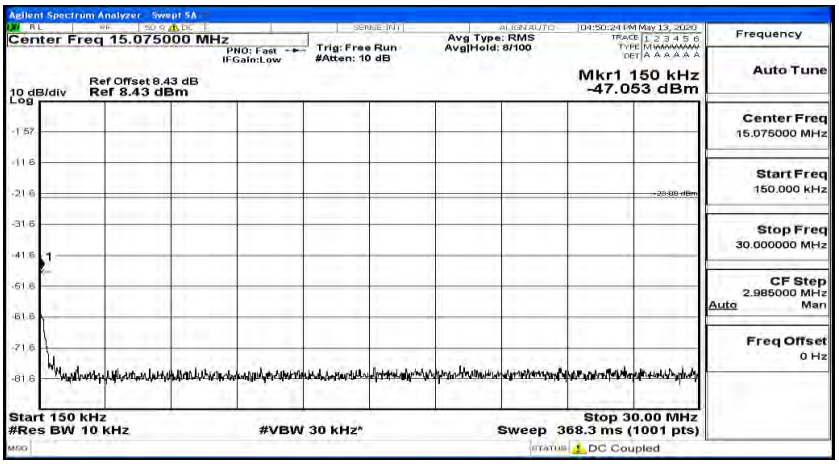




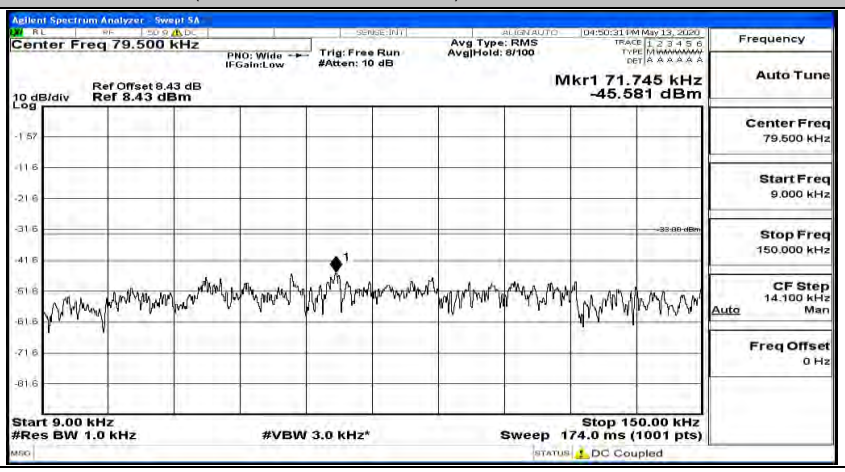


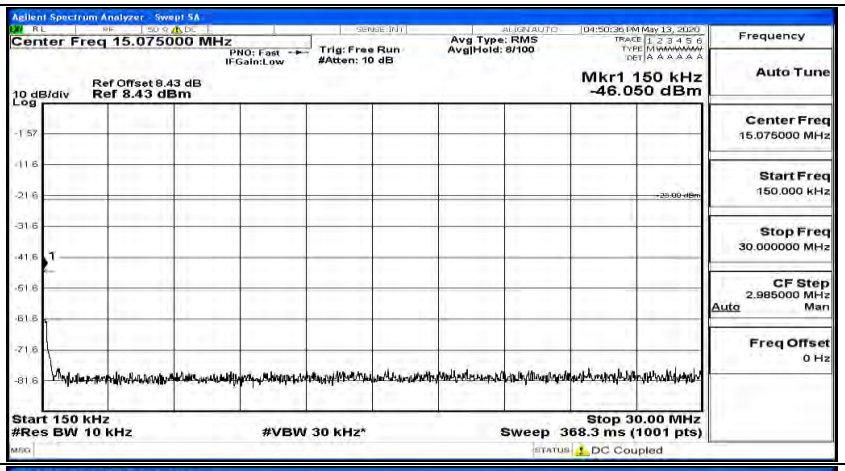
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

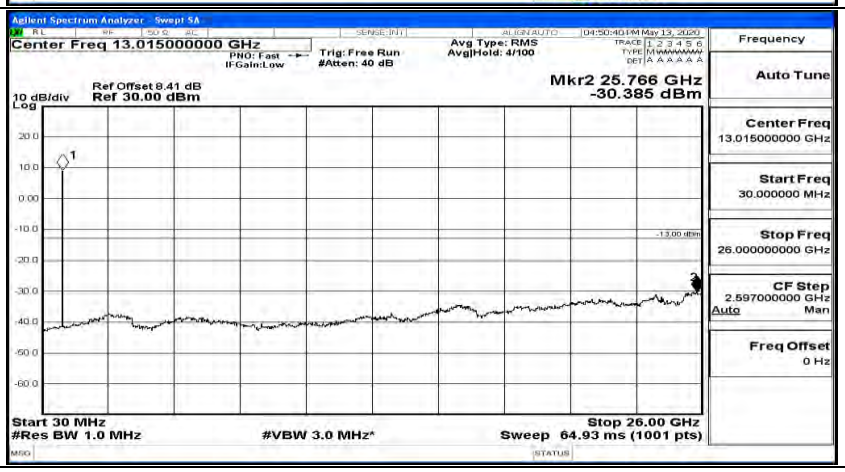




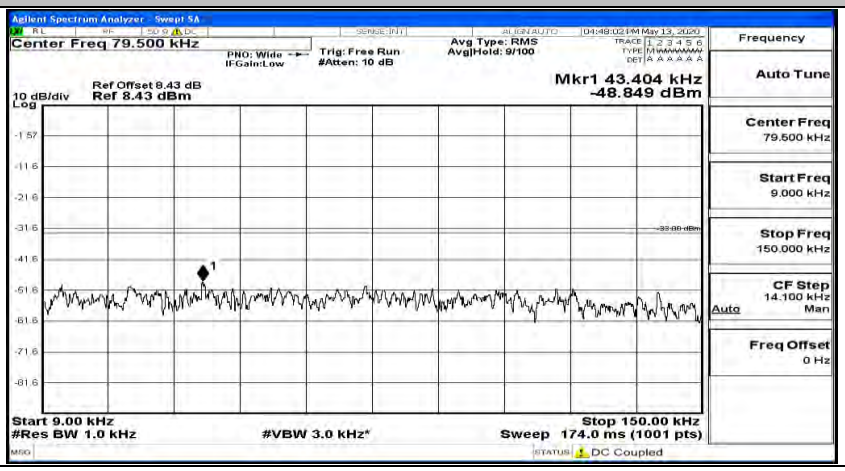
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

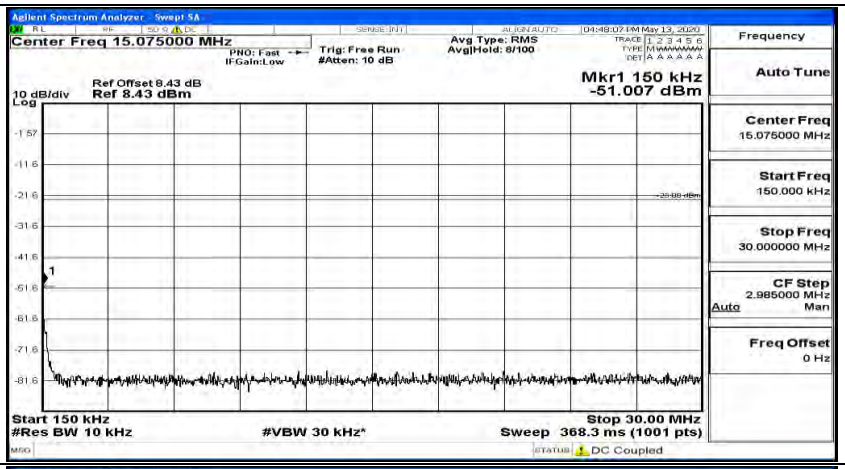


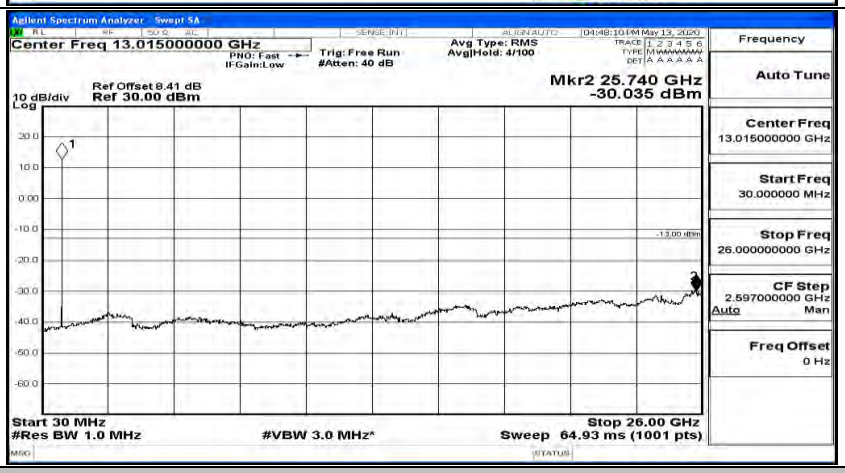




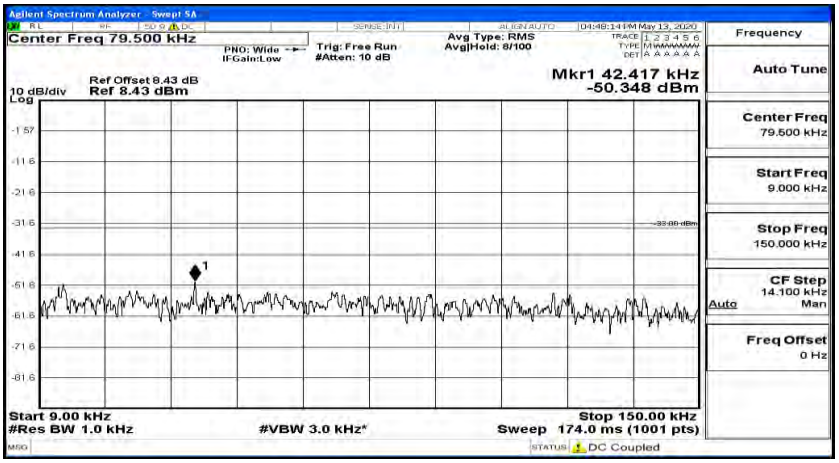
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0

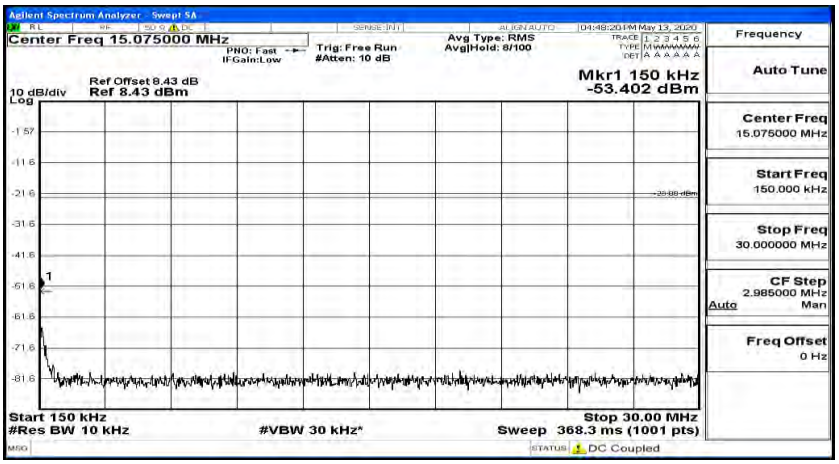




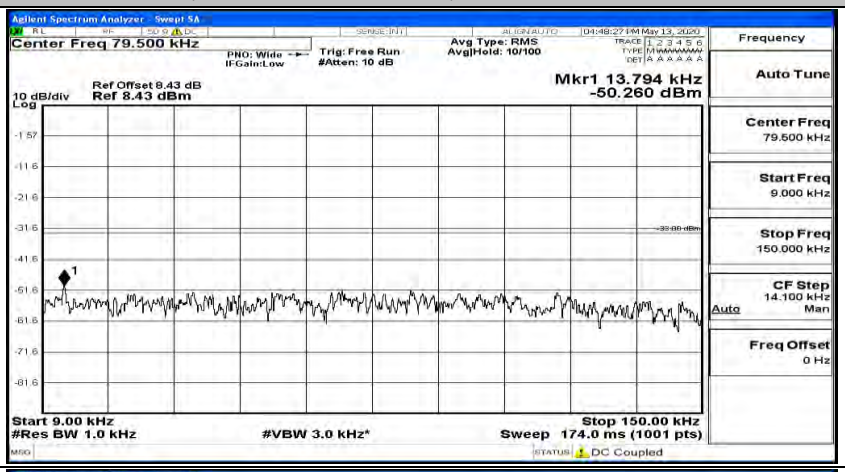


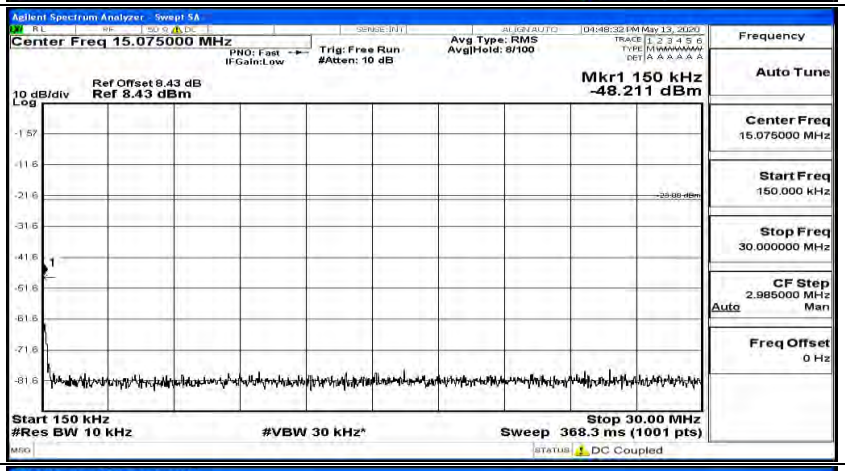
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3



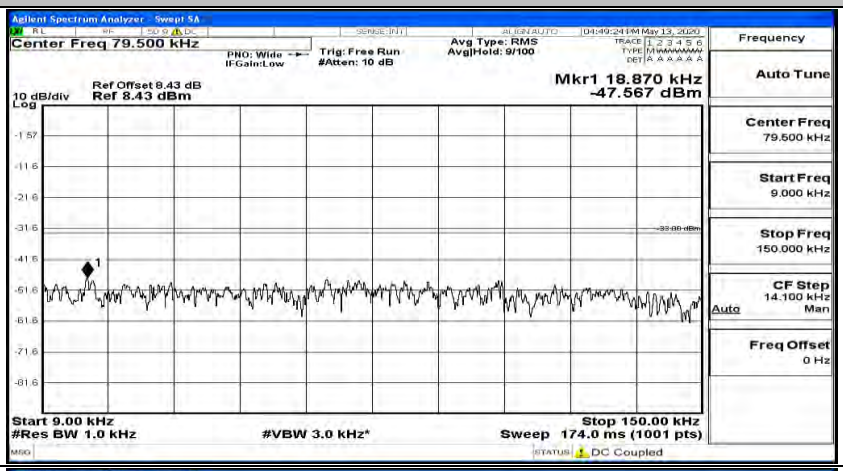


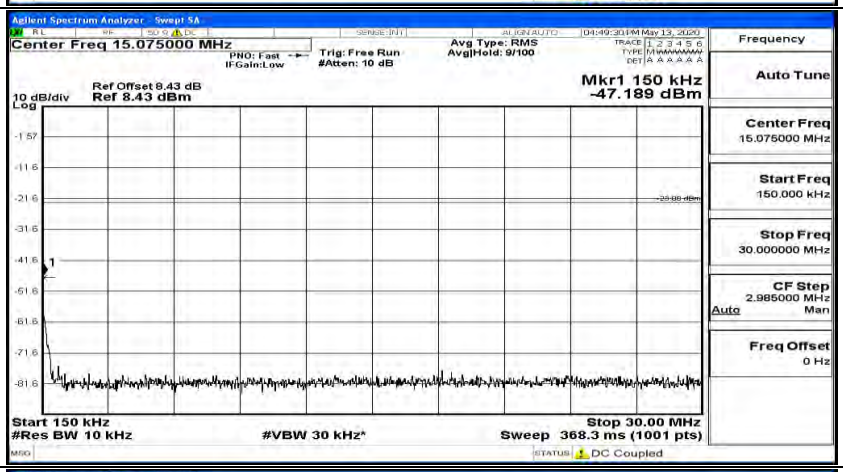
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

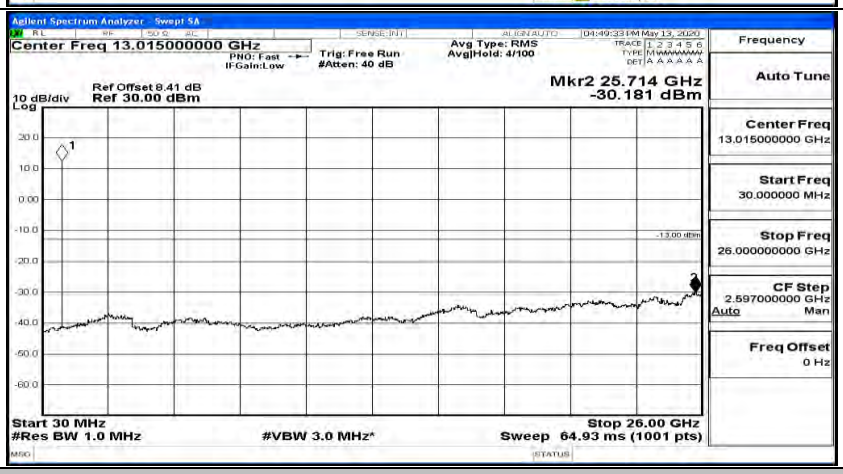




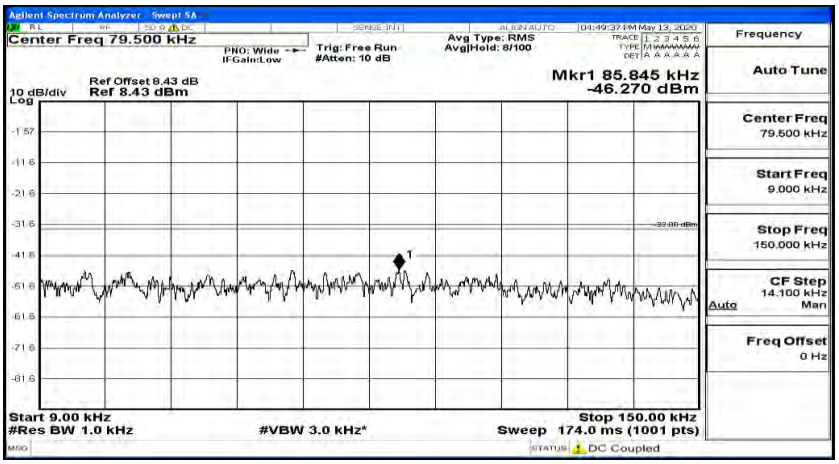
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

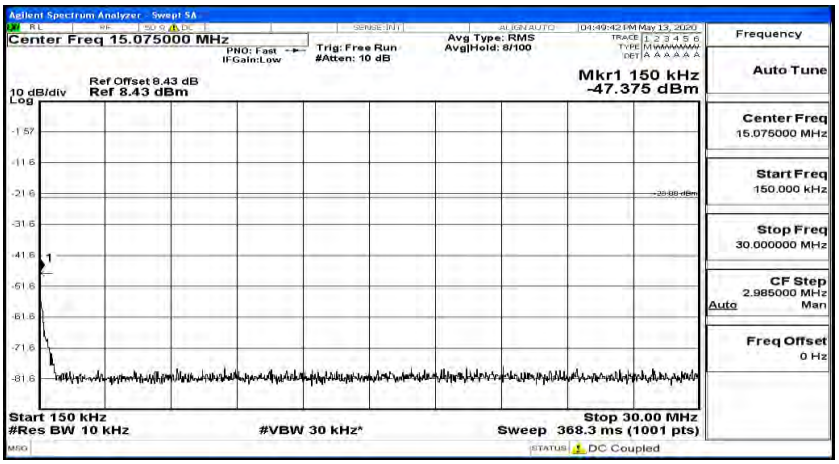




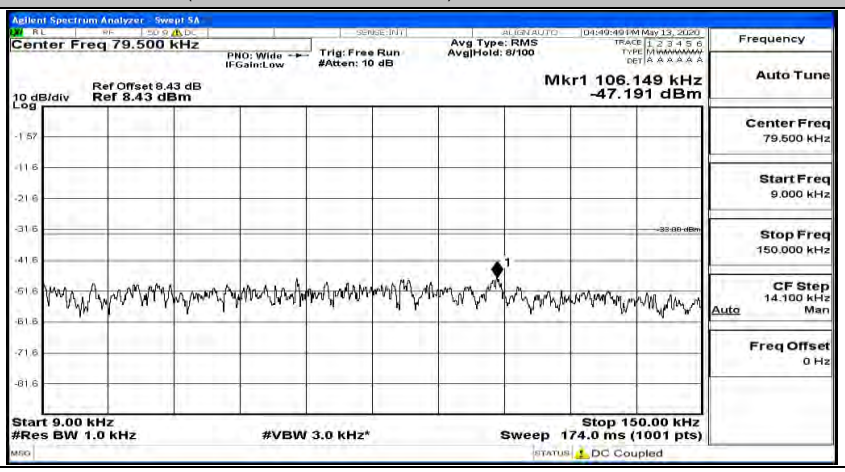


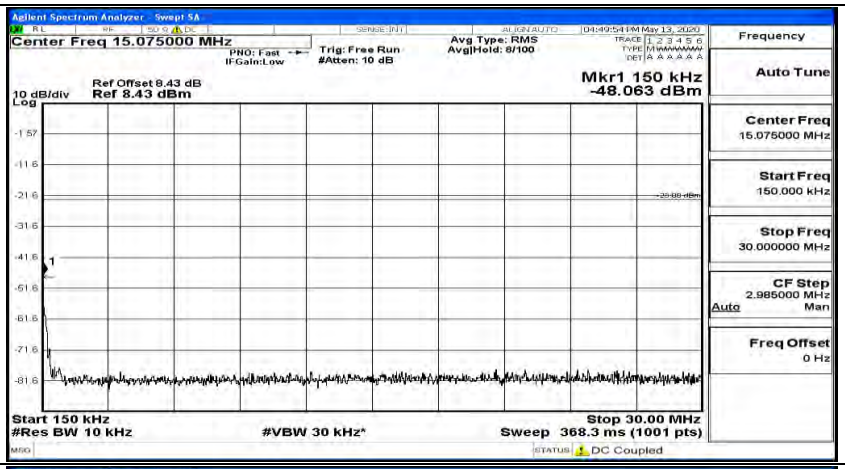
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

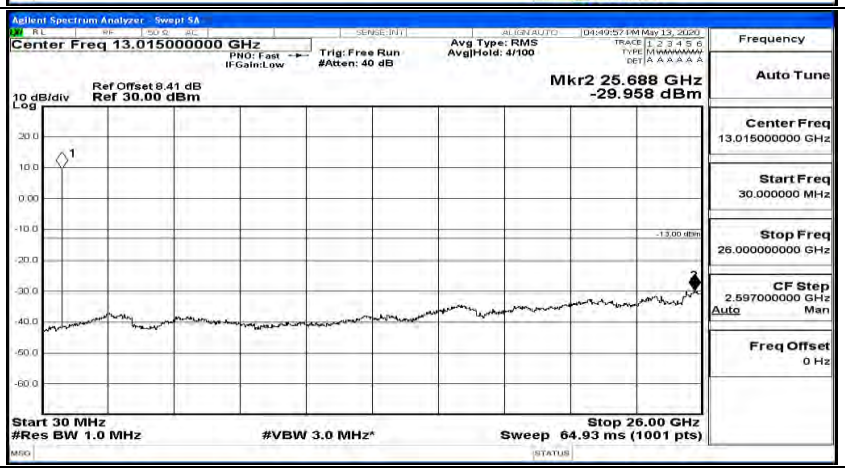




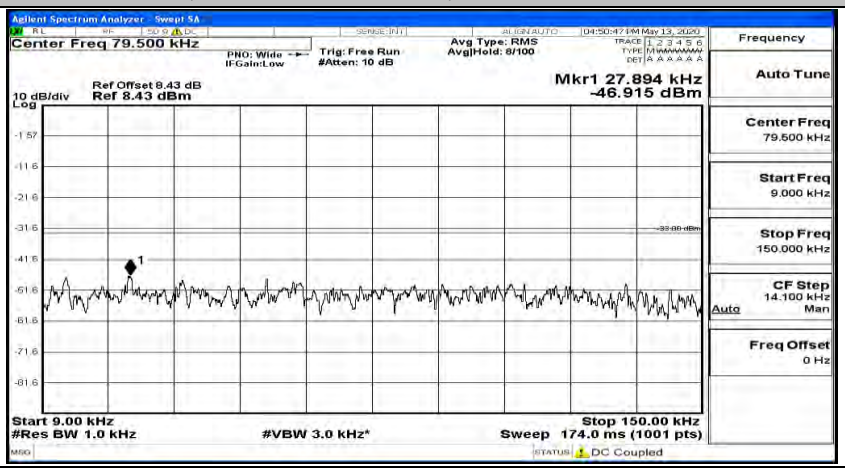
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

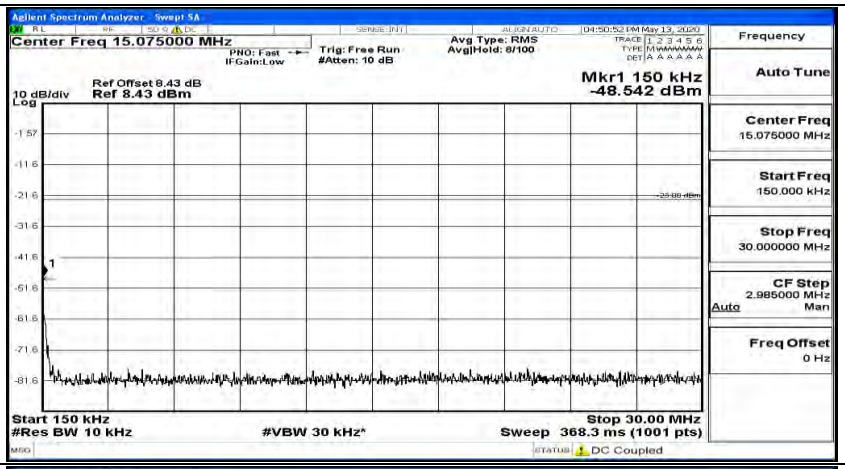


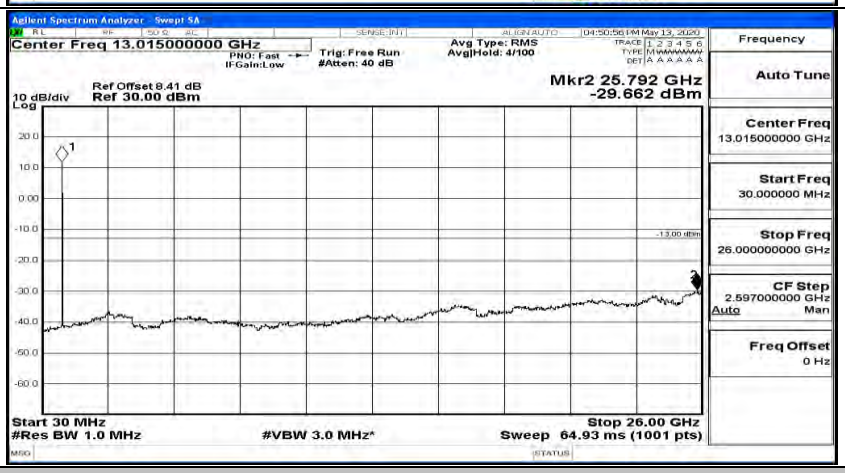




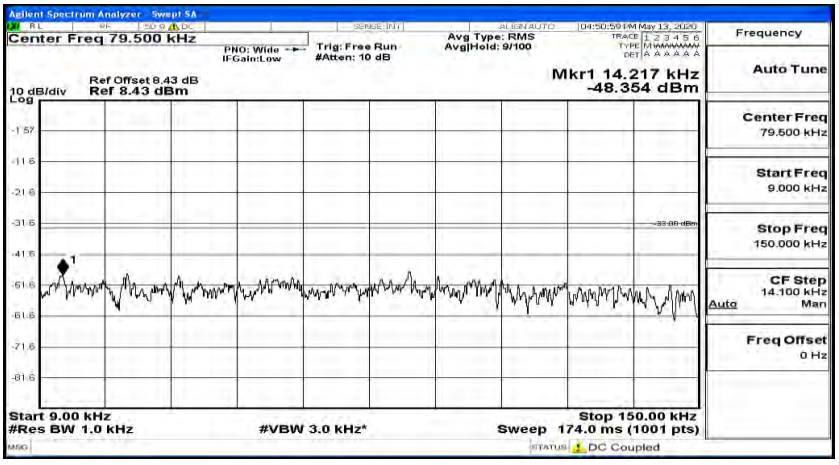
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0

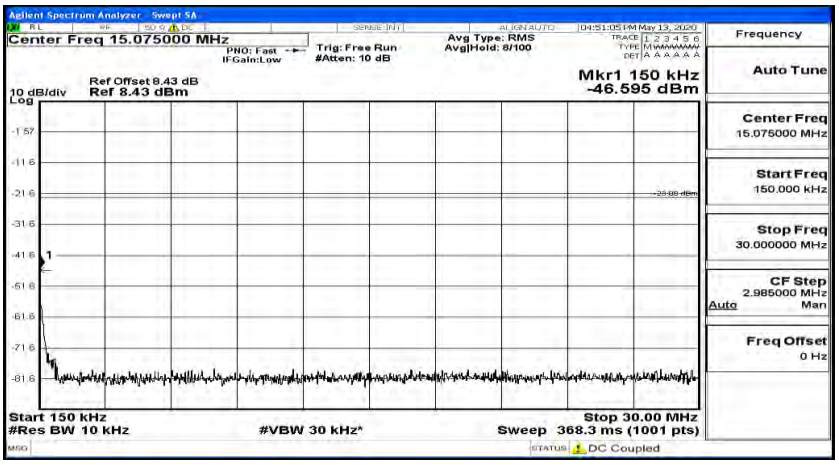




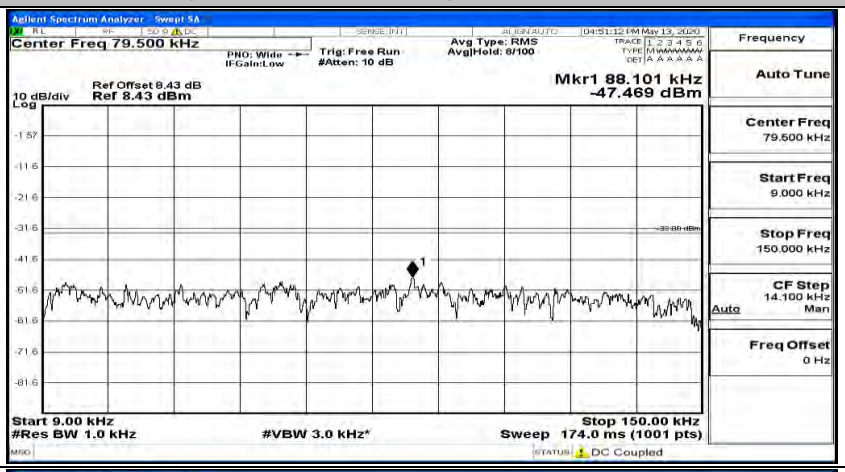


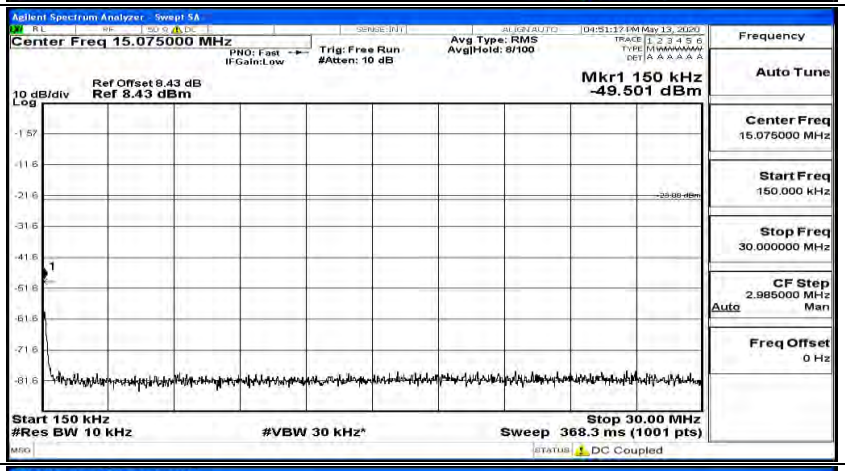
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3





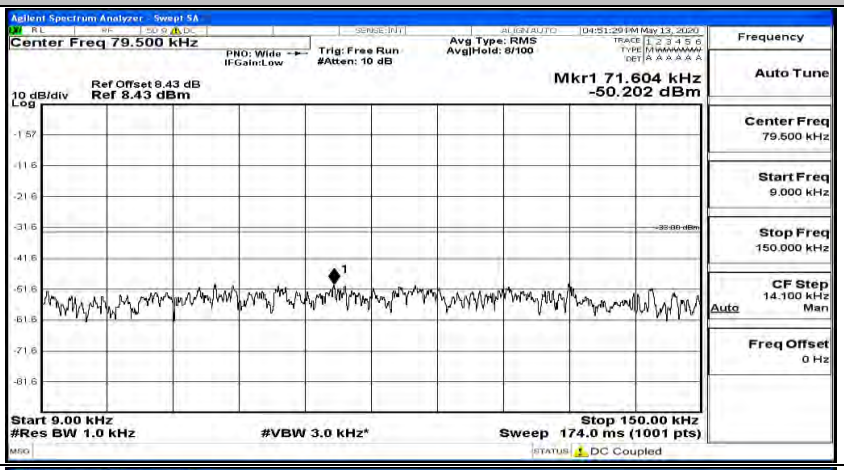
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

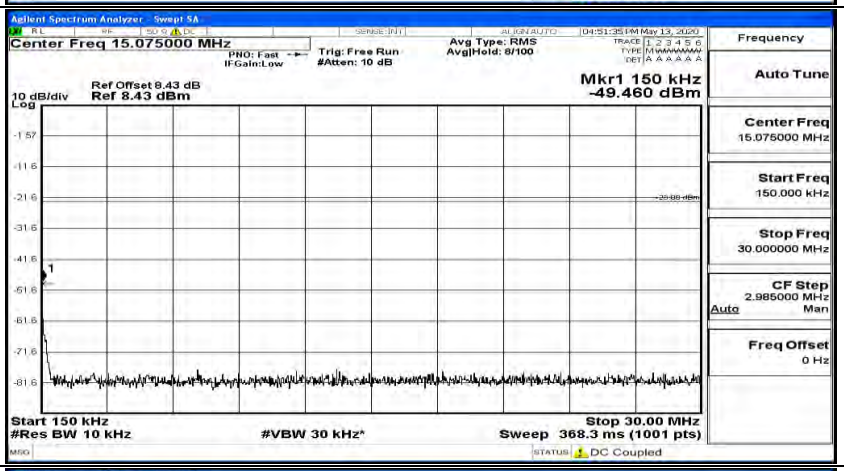


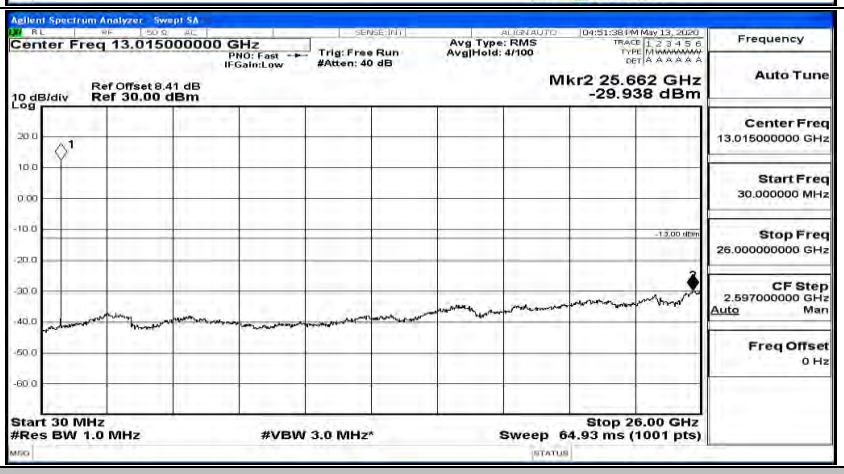


Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0







(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7