

Appendix F Test Data for E-UTRA Band 12

Product Name: BluePad-55 v2

Trade Mark: N/A

Test Model: BluePad-55 v2

Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

F.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	22.10	21.60	PASS
		1	3	22.08	21.54	PASS
		1	5	21.90	21.32	PASS
		3	0	22.18	21.39	PASS
		3	2	22.18	21.37	PASS
		3	3	22.08	21.28	PASS
		6	0	22.15	21.19	PASS
	MCH	1	0	23.83	23.23	PASS
		1	3	23.98	23.43	PASS
		1	5	24.00	23.40	PASS
		3	0	23.81	22.84	PASS
		3	2	23.92	23.00	PASS
		3	3	23.90	22.87	PASS
		6	0	23.25	22.13	PASS
	HCH	1	0	24.80	23.72	PASS
		1	3	24.68	23.78	PASS
		1	5	24.47	23.79	PASS
		3	0	24.81	23.93	PASS
		3	2	24.72	23.86	PASS
		3	3	24.59	23.75	PASS
		6	0	23.94	23.24	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	22.35	21.62	PASS
		1	7	22.17	21.52	PASS
		1	14	21.87	21.15	PASS
		8	0	22.25	21.36	PASS
		8	4	22.11	21.25	PASS
		8	7	21.93	21.04	PASS
		15	0	22.09	21.11	PASS
	MCH	1	0	23.37	22.64	PASS
		1	7	24.04	23.34	PASS
		1	14	23.90	23.20	PASS
		8	0	23.31	22.00	PASS
		8	4	23.38	22.29	PASS
		8	7	23.35	22.47	PASS
		15	0	23.24	22.25	PASS
	HCH	1	0	24.52	23.76	PASS
		1	7	24.98	24.15	PASS
		1	14	24.41	23.86	PASS
		8	0	24.03	23.09	PASS
		8	4	24.06	23.08	PASS
		8	7	23.90	22.84	PASS
		15	0	23.97	22.86	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.26	21.65	PASS
		1	12	22.07	21.51	PASS
		1	24	21.94	21.38	PASS
		12	0	22.11	21.27	PASS
		12	6	21.92	21.11	PASS
		12	13	21.76	20.93	PASS
		25	0	21.91	20.98	PASS
	MCH	1	0	22.83	22.25	PASS
		1	12	24.03	23.47	PASS
		1	24	23.63	23.06	PASS
		12	0	23.13	22.40	PASS
		12	6	23.41	22.55	PASS
		12	13	23.37	22.45	PASS
		25	0	23.28	22.22	PASS
	HCH	1	0	23.53	22.57	PASS
		1	12	24.76	23.78	PASS
		1	24	24.39	23.31	PASS
		12	0	23.71	22.65	PASS
		12	6	23.90	22.96	PASS
		12	13	23.90	22.85	PASS
		25	0	23.80	23.05	PASS

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	21.64	20.93	PASS
		1	24	22.40	21.69	PASS
		1	49	23.29	22.58	PASS
		25	0	21.74	20.75	PASS
		25	12	22.41	21.40	PASS
		25	25	23.17	22.19	PASS
		50	0	22.45	21.51	PASS
	MCH	1	0	21.01	20.30	PASS
		1	24	24.03	23.36	PASS
		1	49	23.08	22.40	PASS
		25	0	22.76	21.75	PASS
		25	12	23.73	22.75	PASS
		25	25	23.35	22.40	PASS
		50	0	23.16	22.20	PASS
	HCH	1	0	22.86	22.30	PASS
		1	24	23.83	23.29	PASS
		1	49	23.94	23.42	PASS
		25	0	23.46	22.63	PASS
		25	12	23.60	22.68	PASS
		25	25	23.76	22.87	PASS
		50	0	23.58	22.56	PASS

F.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	5.54	<13	PASS
	MCH	5.33	<13	PASS
	HCH	4.48	<13	PASS
16QAM	LCH	6.15	<13	PASS
	MCH	6.28	<13	PASS
	HCH	5.29	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.56	<13	PASS
	MCH	5.35	<13	PASS
	HCH	4.8	<13	PASS
16QAM	LCH	6.34	<13	PASS
	MCH	6.31	<13	PASS
	HCH	5.58	<13	PASS

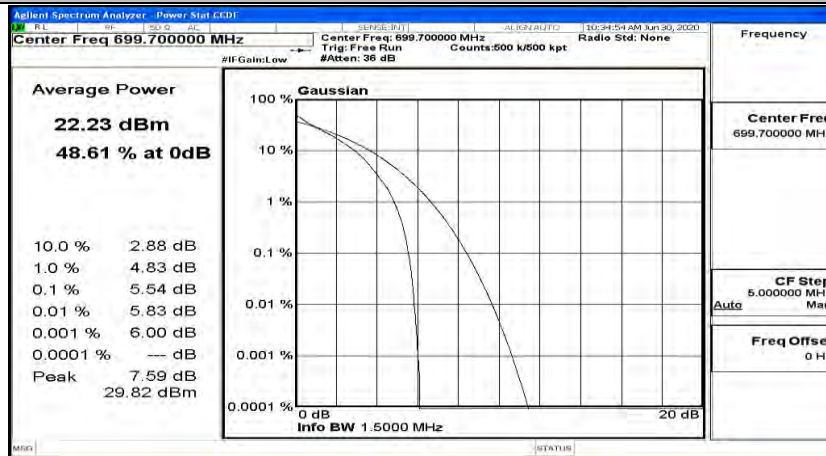
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.95	<13	PASS
	MCH	5.34	<13	PASS
	HCH	4.98	<13	PASS
16QAM	LCH	6.52	<13	PASS
	MCH	6.22	<13	PASS
	HCH	5.83	<13	PASS

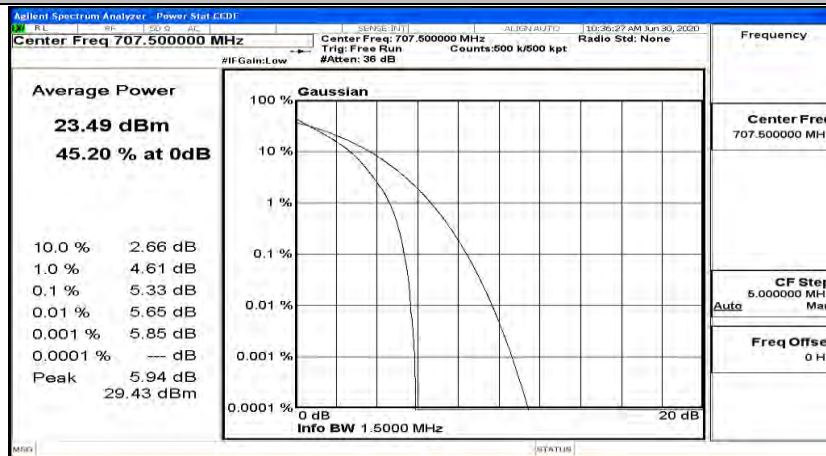
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.72	<13	PASS
	MCH	5.48	<13	PASS
	HCH	5.3	<13	PASS
16QAM	LCH	6.67	<13	PASS
	MCH	6.13	<13	PASS
	HCH	6.15	<13	PASS

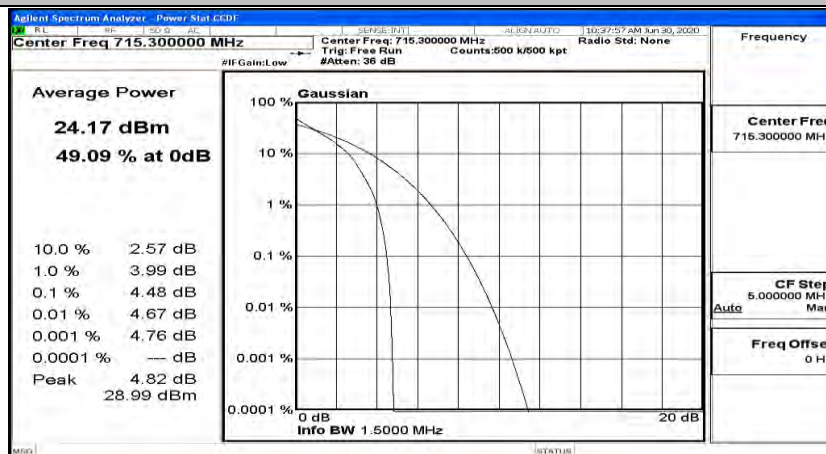
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



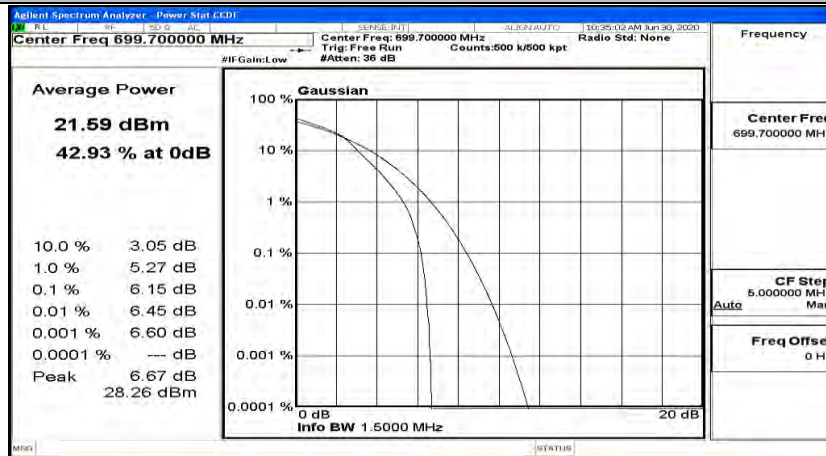
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



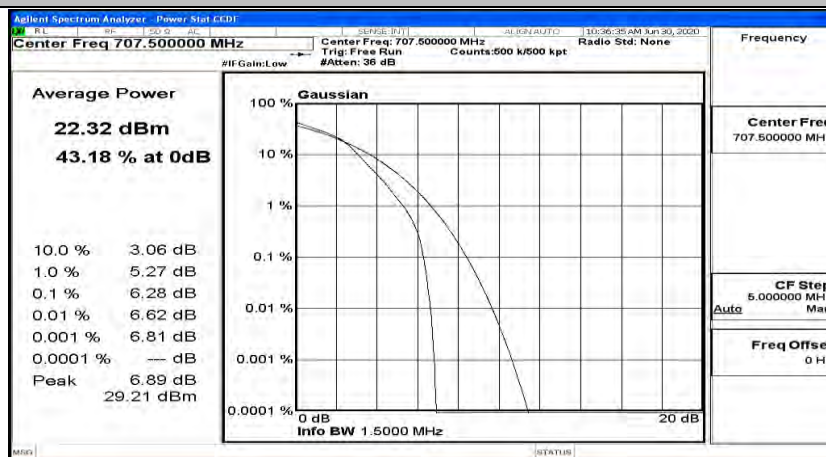
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



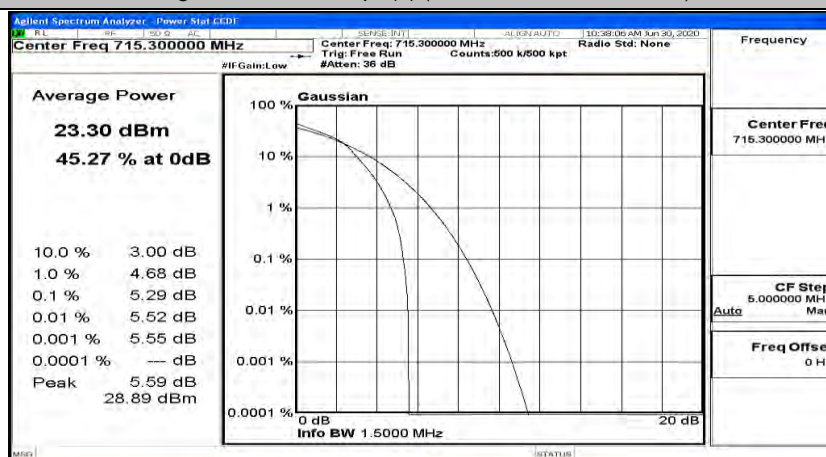
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



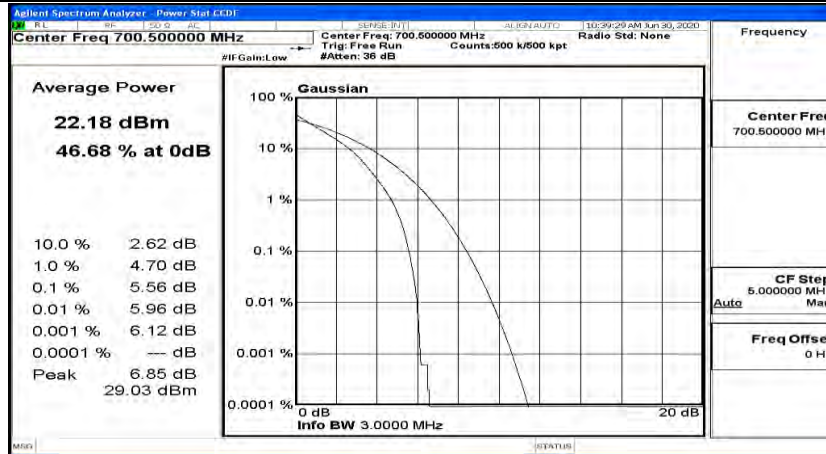
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



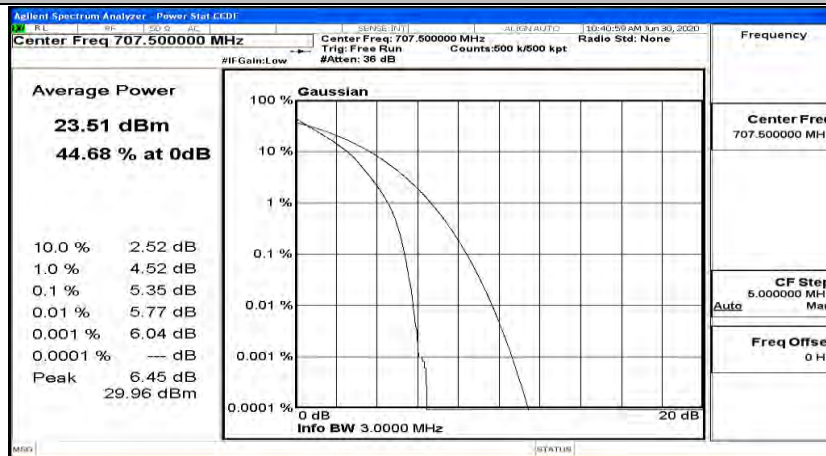
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



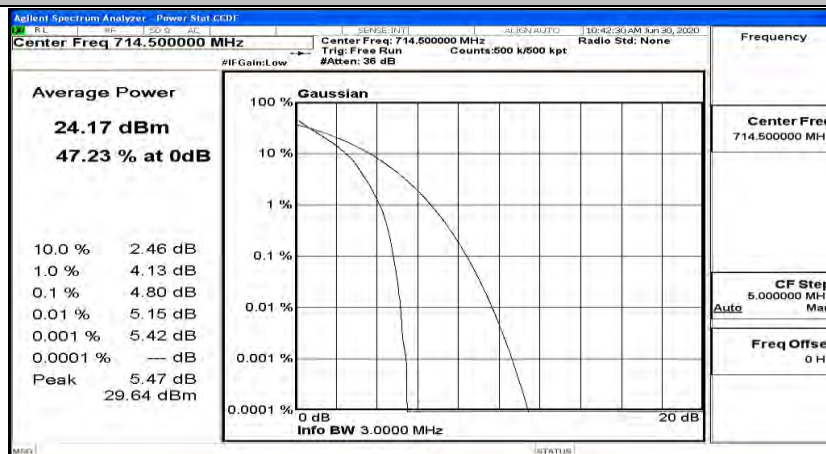
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



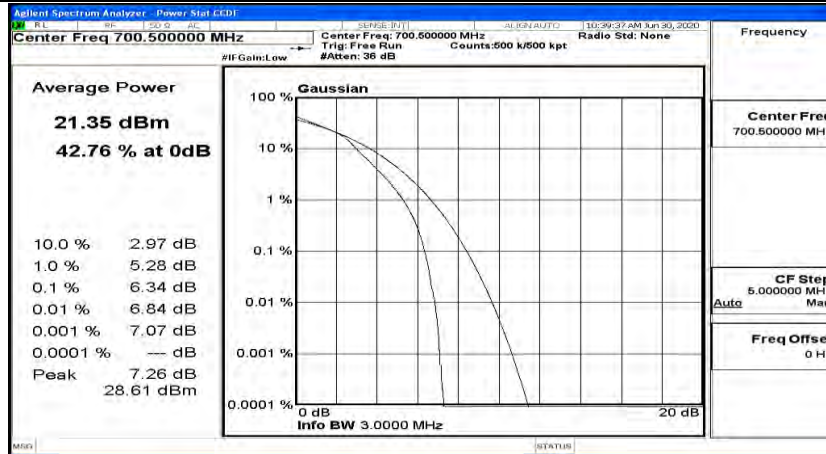
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



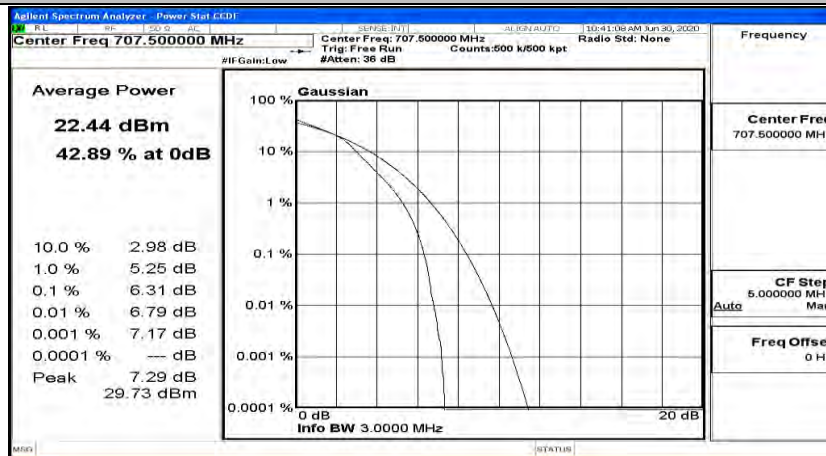
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



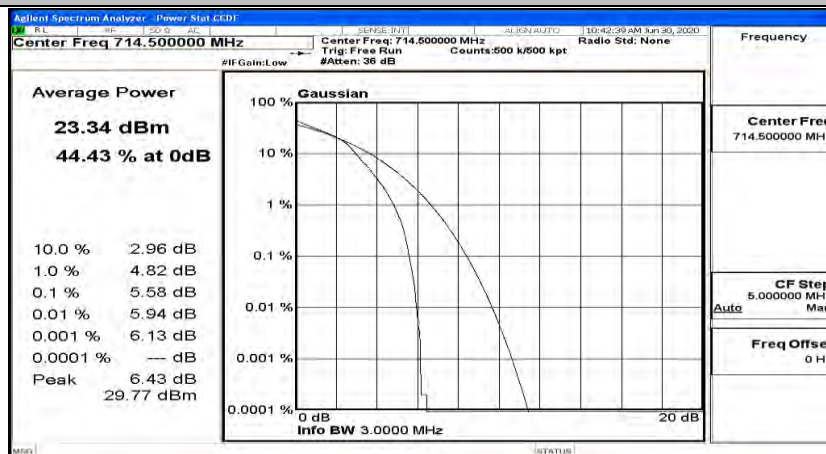
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



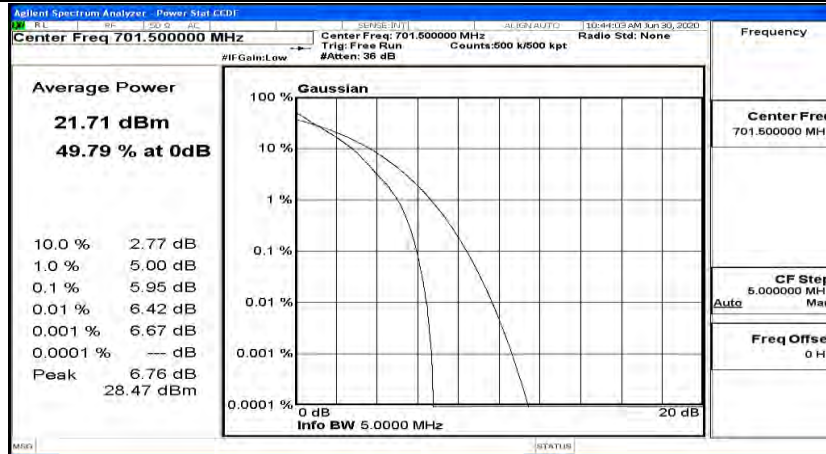
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



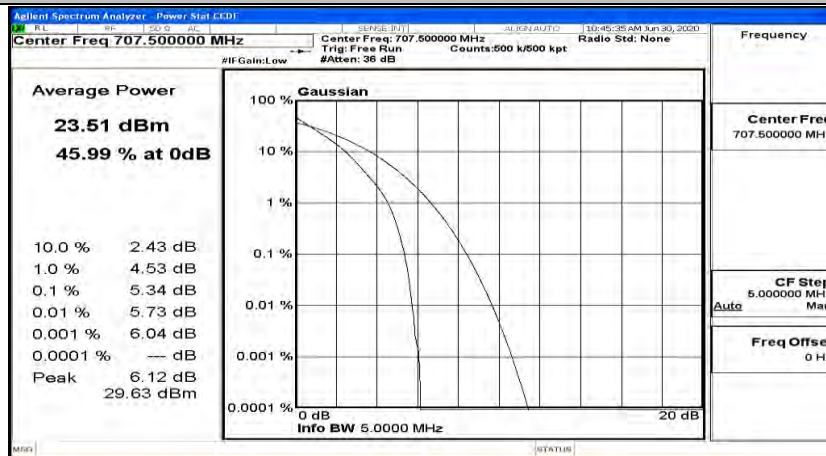
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



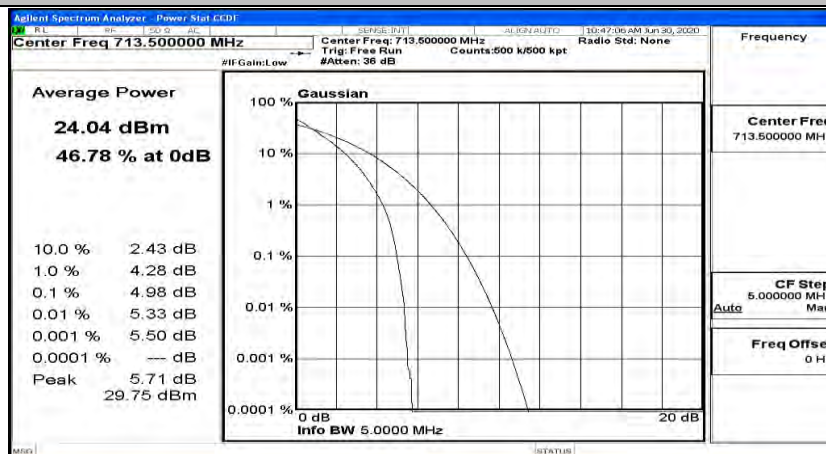
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



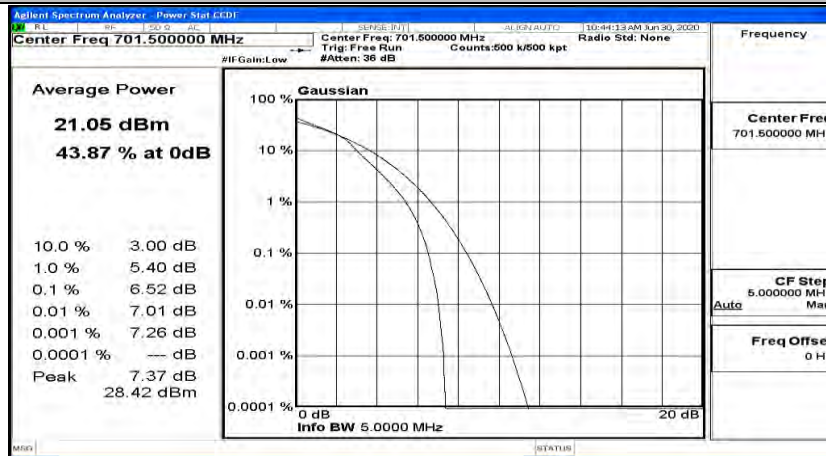
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



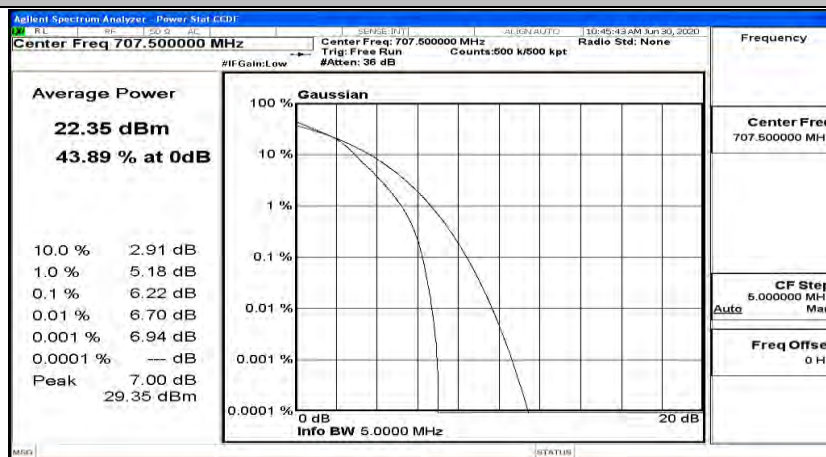
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



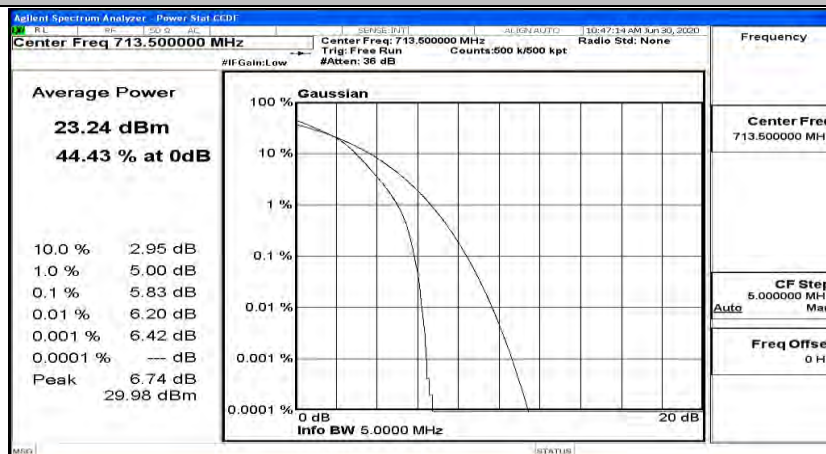
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



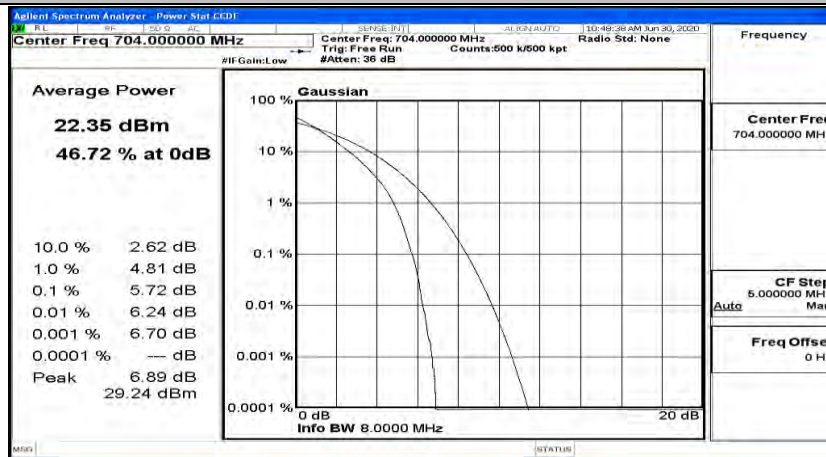
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



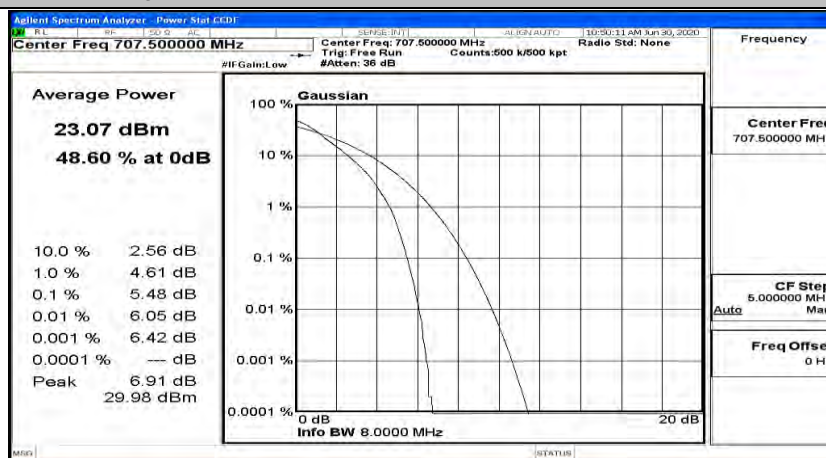
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



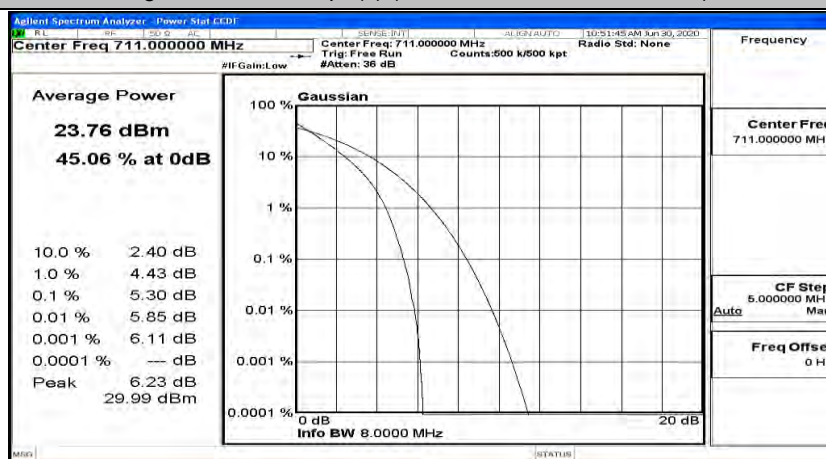
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



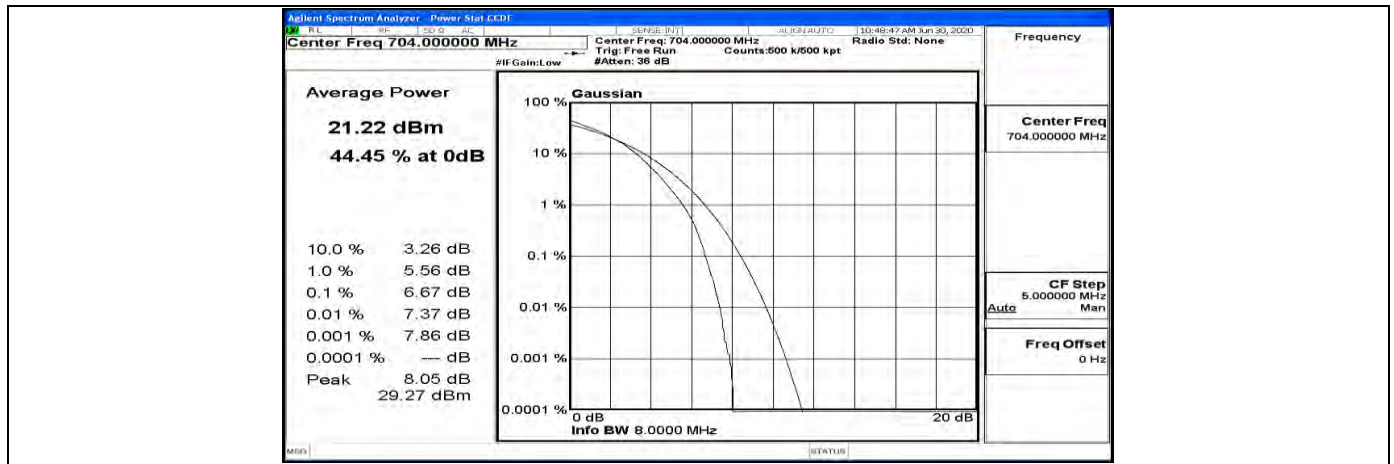
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



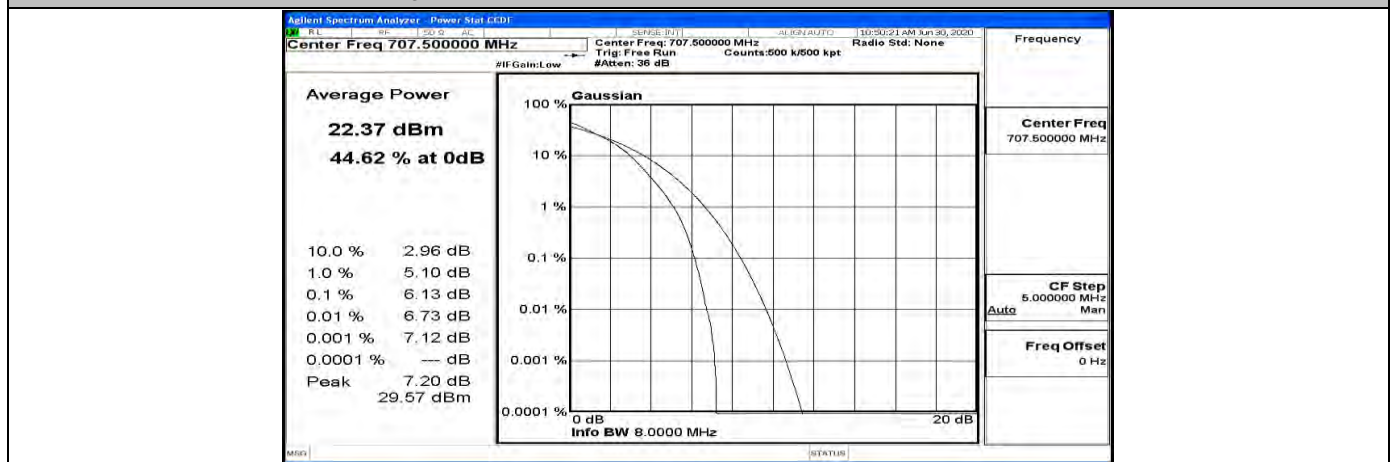
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



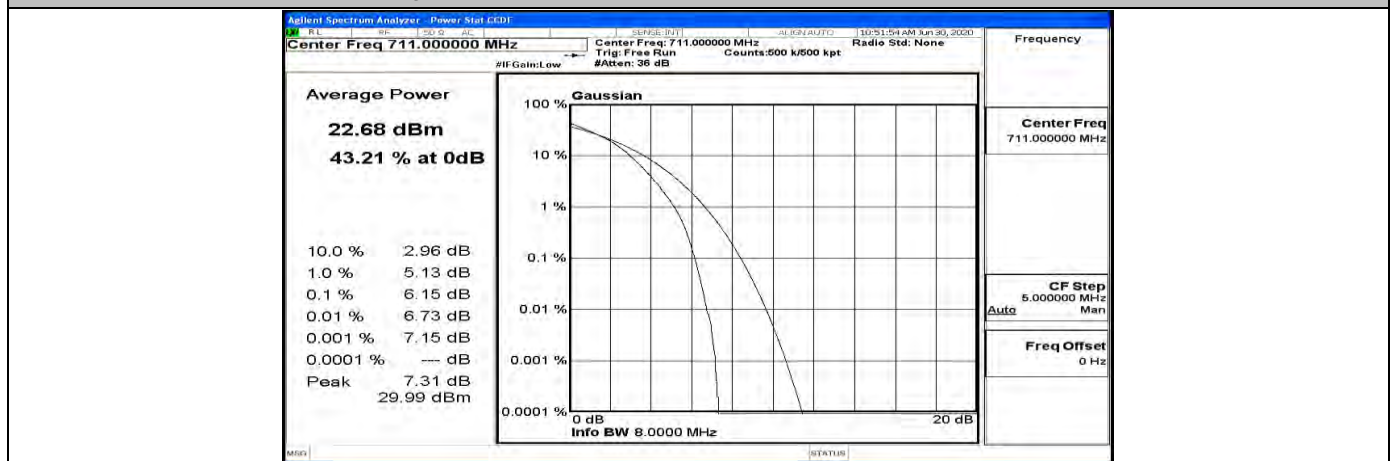
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



F.3 26dB Bandwidth and Occupied Bandwidth

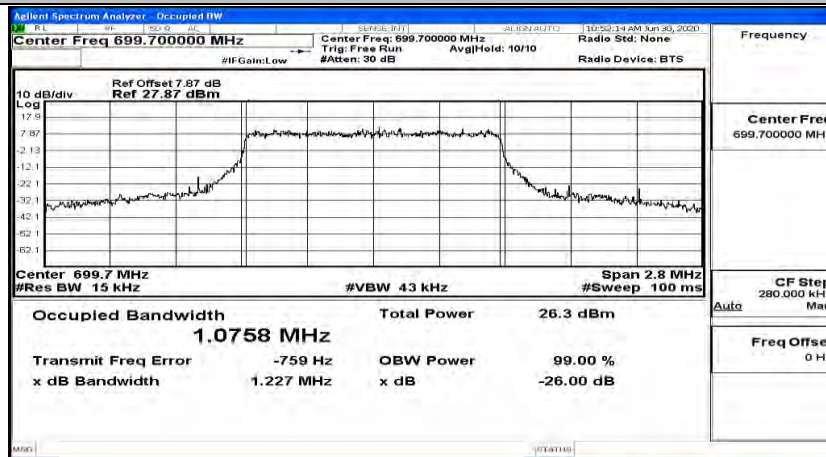
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0758	1.227	PASS
	MCH	1.0762	1.198	PASS
	HCH	1.0785	1.239	PASS
16QAM	LCH	1.0826	1.260	PASS
	MCH	1.0781	1.241	PASS
	HCH	1.0776	1.230	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6855	2.901	PASS
	MCH	2.6754	2.876	PASS
	HCH	2.6812	2.888	PASS
16QAM	LCH	2.6838	2.899	PASS
	MCH	2.6787	2.876	PASS
	HCH	2.6860	2.888	PASS

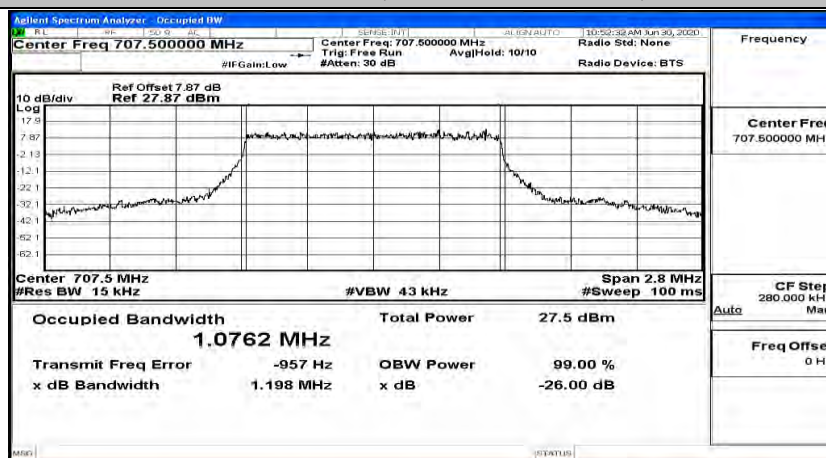
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4788	4.803	PASS
	MCH	4.4640	4.755	PASS
	HCH	4.4633	4.808	PASS
16QAM	LCH	4.4770	4.811	PASS
	MCH	4.4609	4.786	PASS
	HCH	4.4748	4.776	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9365	9.470	PASS
	MCH	8.9036	9.446	PASS
	HCH	8.9167	9.404	PASS
16QAM	LCH	8.9368	9.368	PASS
	MCH	8.9018	9.420	PASS
	HCH	8.9307	9.393	PASS

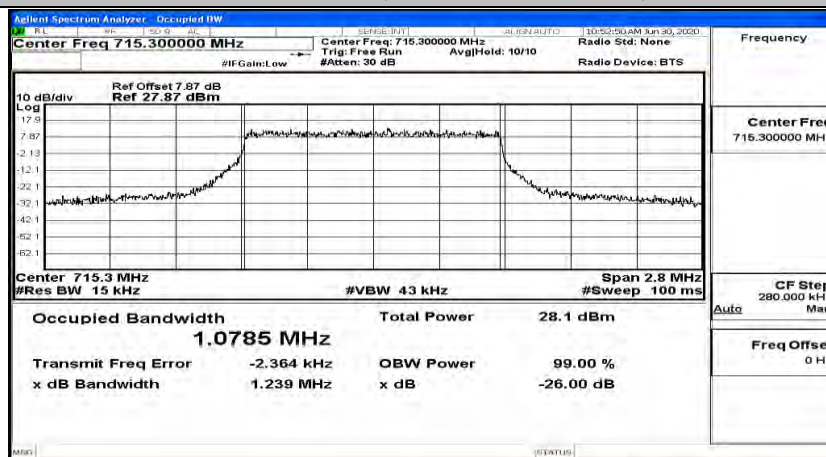
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



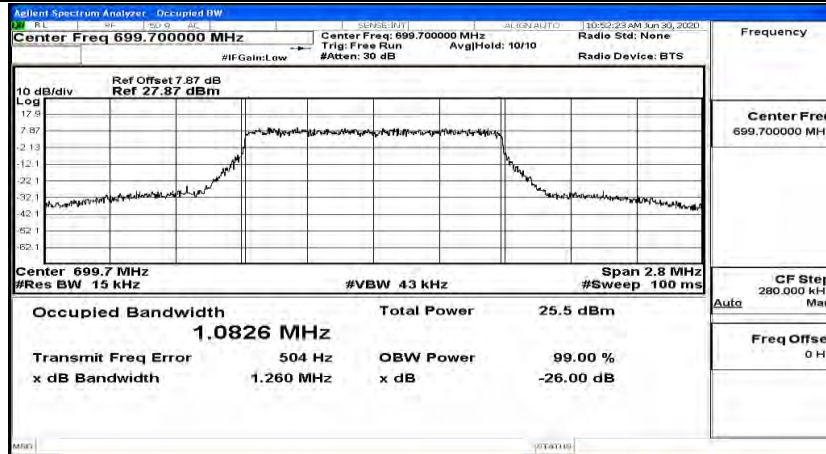
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



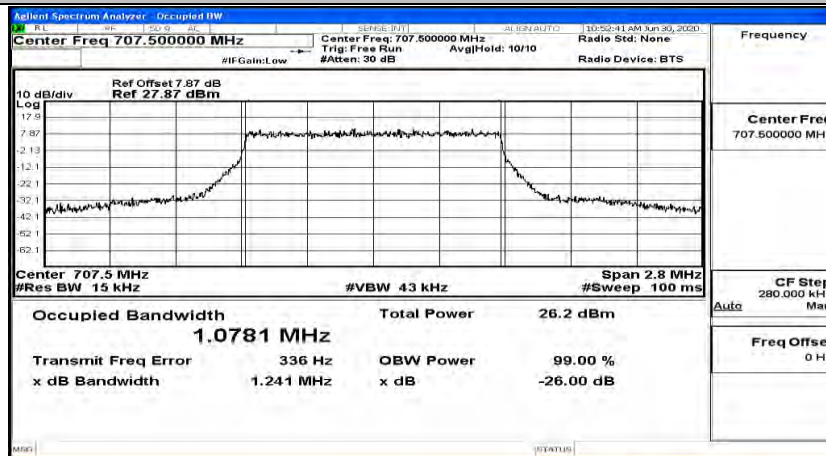
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



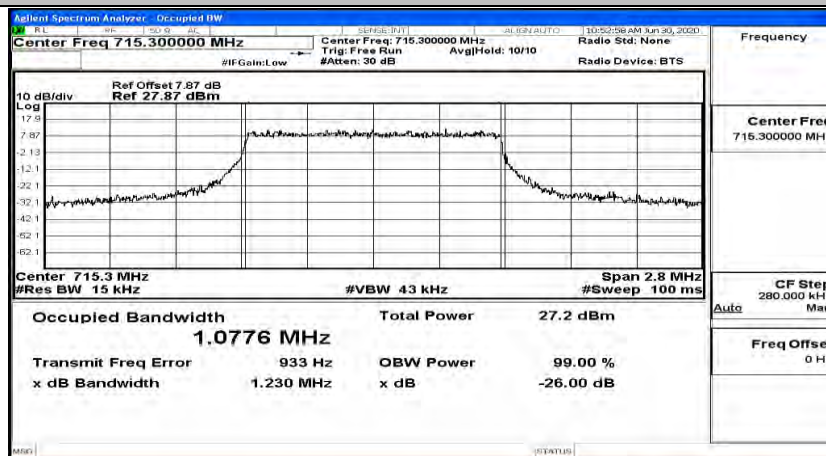
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



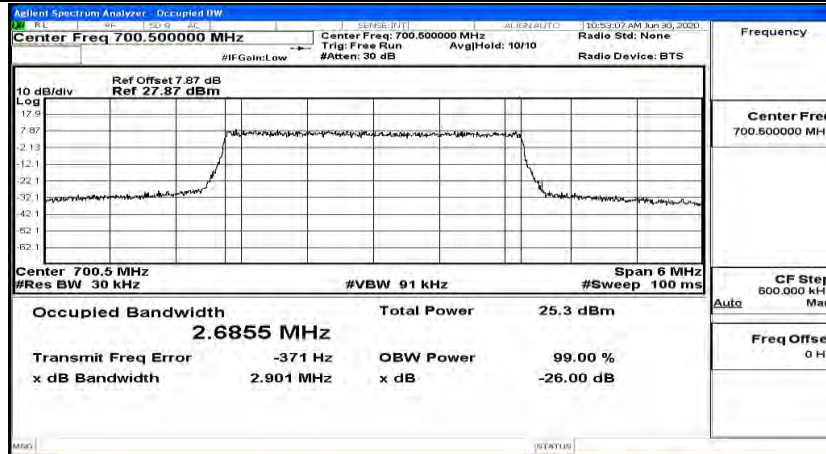
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



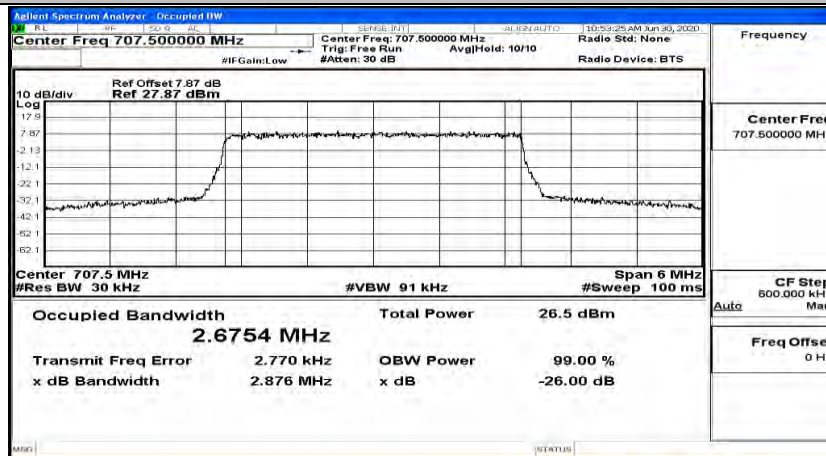
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



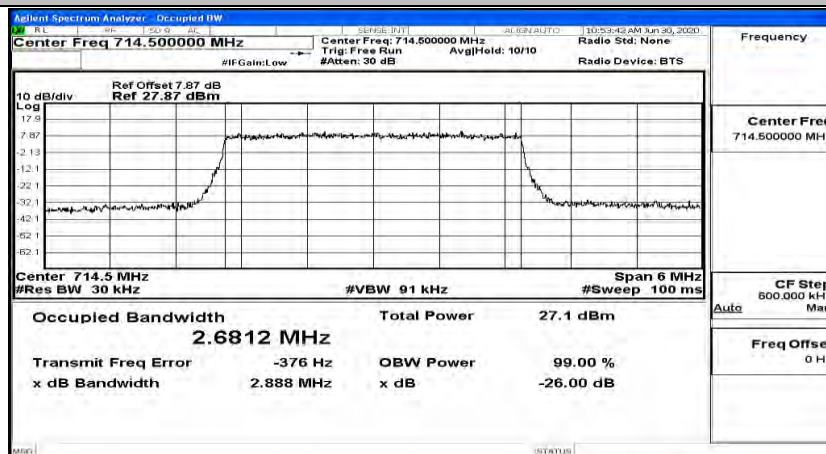
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



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



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



Agilent Spectrum Analyzer - Occupied BW

Center Freq 700.500000 MHz

Ref Offset 7.87 dB

Ref 27.87 dBm

10 dB/div

Log

Center 700.5 MHz

#Res BW 30 kHz

#VBW 91 kHz

Span 6 MHz

#Sweep 100 ms

Occupied Bandwidth

2.6838 MHz

Transmit Freq Error

-3.276 kHz

OBW Power

99.00 %

x dB Bandwidth

2.899 MHz

x dB

-26.00 dB

Frequency

Center Freq 700.500000 MHz

CF Step 500.000 kHz

Freq Offset 0 Hz

Agilent Spectrum Analyzer - Occupied BW

R.L. 12/28/2006 10:23:43 AM 10:23:43 AM Jan 29, 2008
 Center Freq 707.500000 MHz Span 6 MHz
 #IFGain: Low Trig: Free Run AvgHld: 10/10 Radio Std: None
 Ref Offset 7.87 dB Ref 27.87 dBm

10 dB/div
 Log
 7.87
 -2.13
 -12.1
 -22.1
 -32.1
 -42.1
 -52.1
 -62.1

Center 707.5 MHz Span 6 MHz
 #Res BW 30 kHz #VBW 91 kHz #Sweep 100 ms

Occupied Bandwidth 2.6787 MHz
 Total Power 25.6 dBm
 Transmit Freq Error 834 Hz
 OBW Power 99.00 %
 x dB Bandwidth 2.876 MHz x dB -26.00 dB

Frequency
 Center Freq 707.500000 MHz
 CF Stop 500.000 kHz
 Auto
 Freq Offset 0 Hz

Agilent Spectrum Analyzer - Occupied BW

Center Freq 714.500000 MHz

Ref Freq 7.87 dB

Ref 27.87 dBm

Center Freq: 714.500000 MHz

Trig: Free Run

Avg/Hold: 10/10

Radio Std: None

Frequency

Radio Device: BTS

10 dB/div

Log

7.87

2.13

12.1

22.1

32.1

42.1

52.1

62.1

Center 714.5 MHz

#Res BW 30 kHz

#VBW 91 kHz

Span 6 MHz

#Sweep 100 ms

Occupied Bandwidth

2.6860 MHz

Total Power

26.1 dBm

Transmit Freq Error

415 Hz

OBW Power

99.00 %

x dB Bandwidth

2.888 MHz

x dB

-26.00 dB

CF Stop

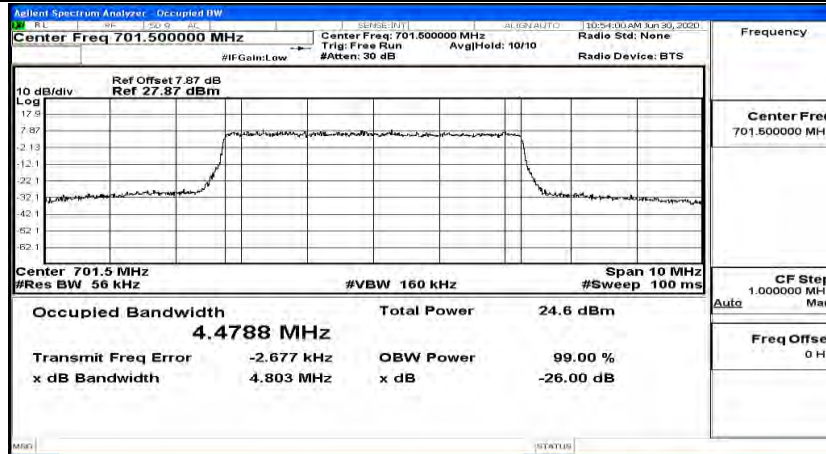
500.000 kHz

Auto

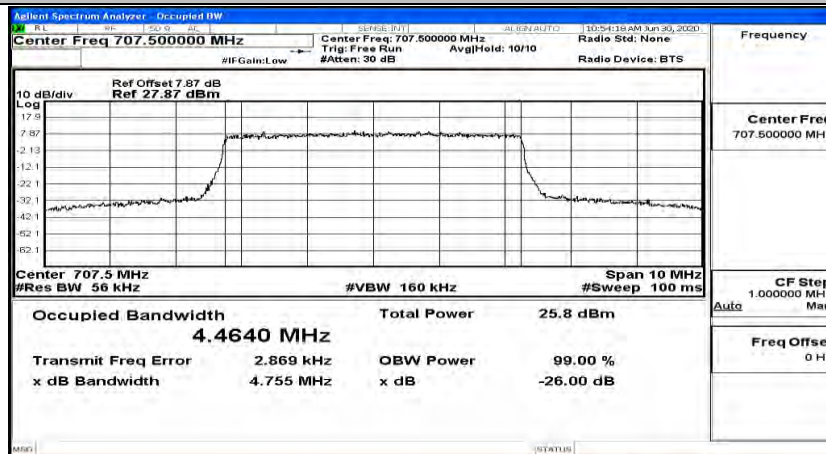
Freq Offset

0 Hz

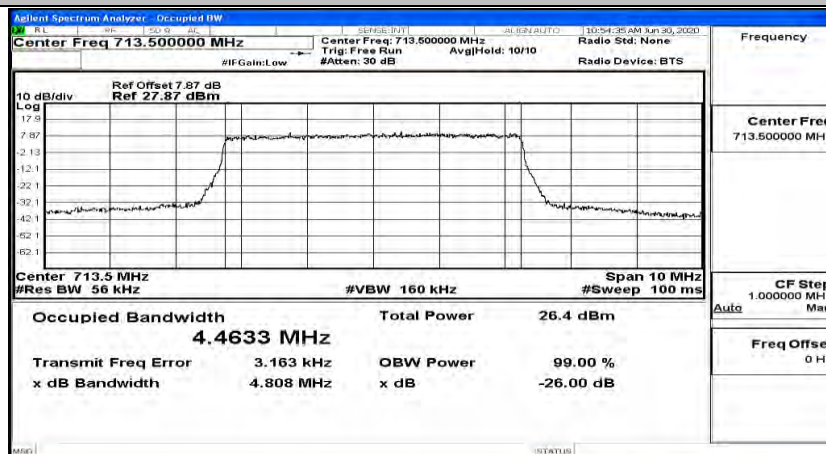
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



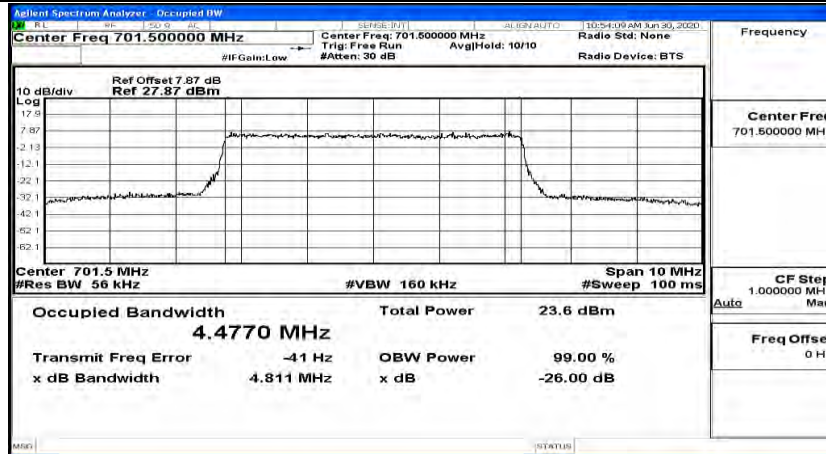
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



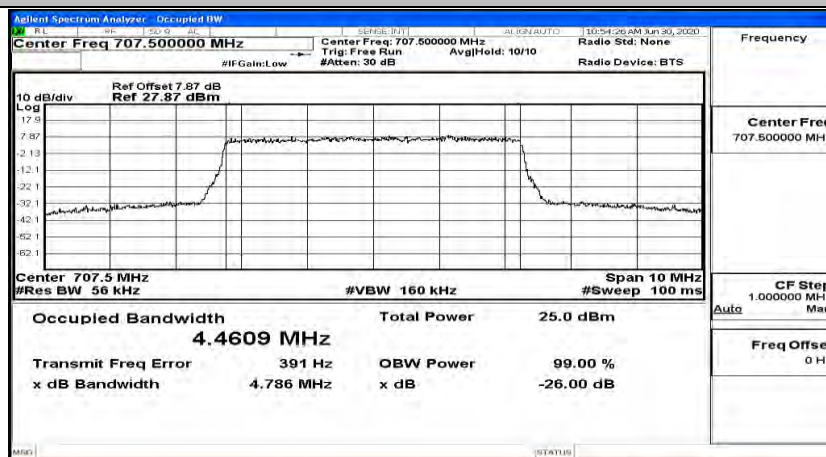
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



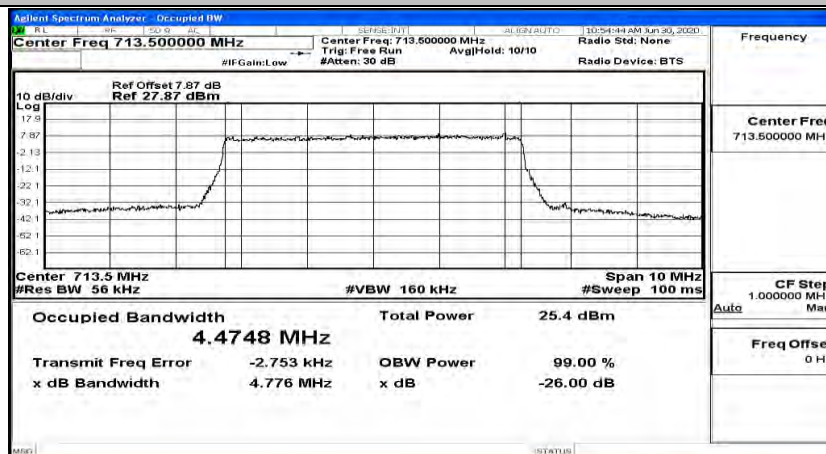
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



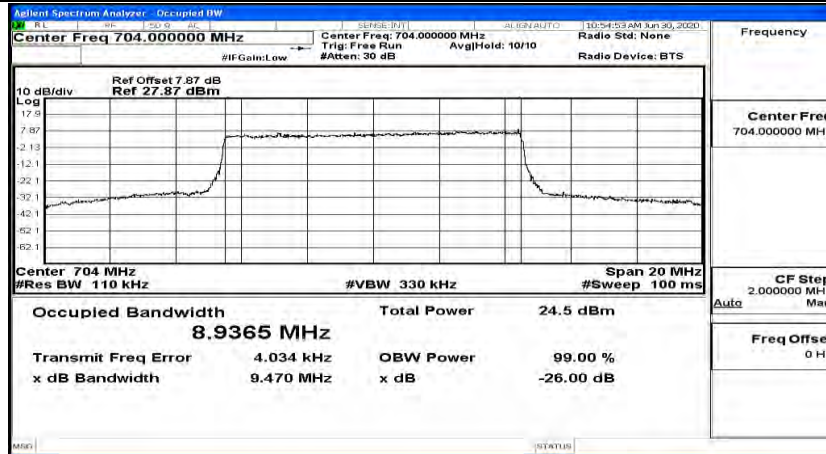
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



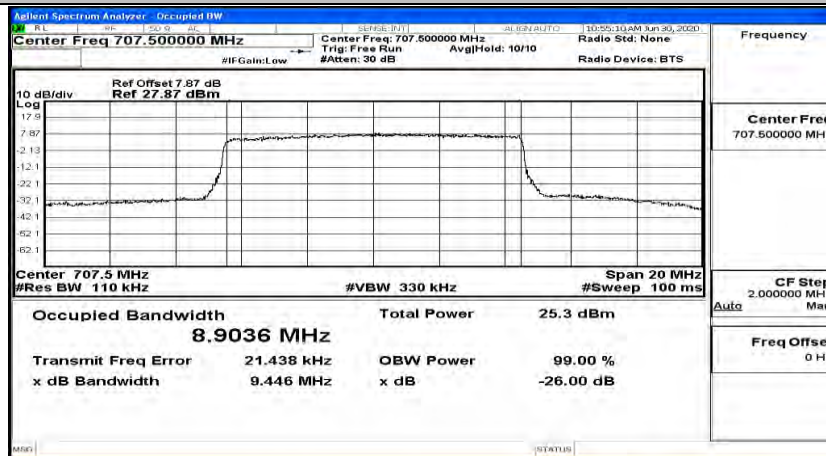
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



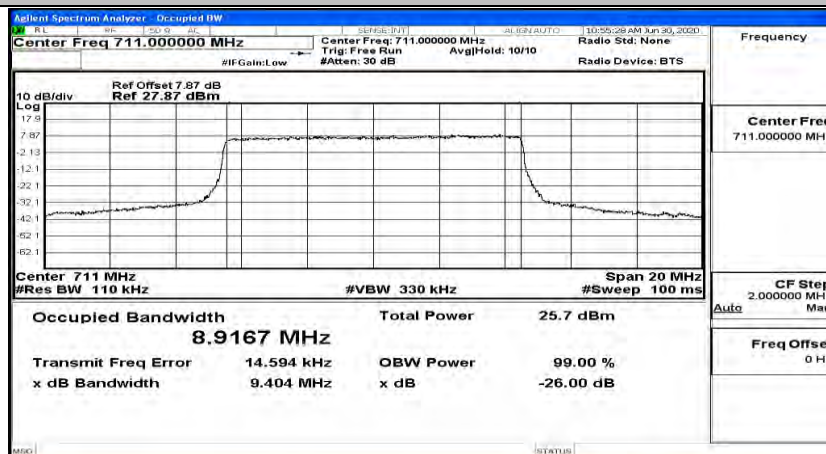
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



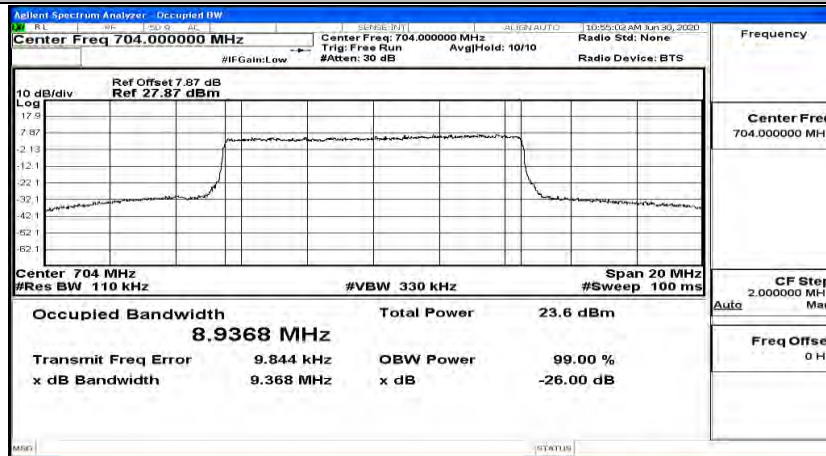
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



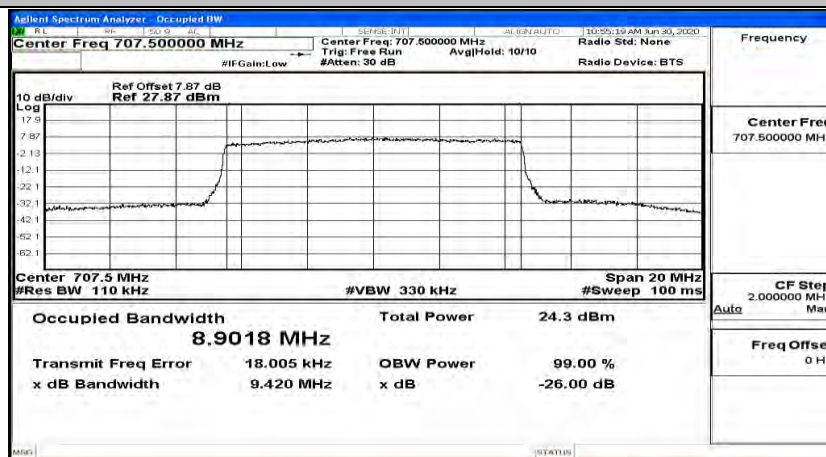
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



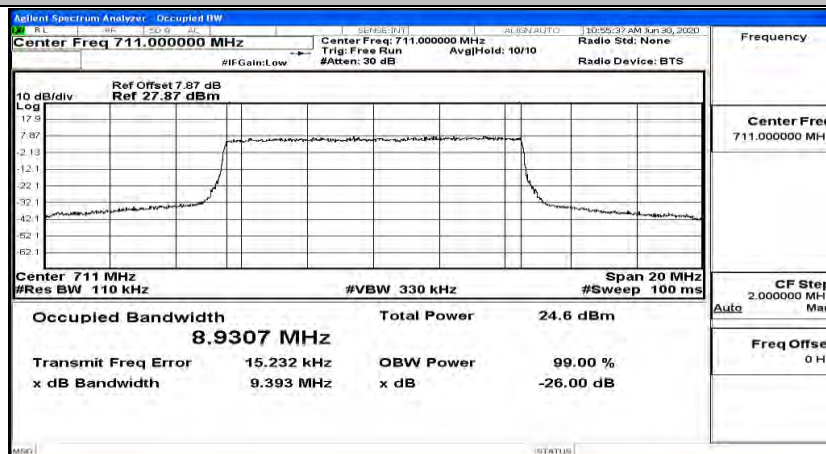
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

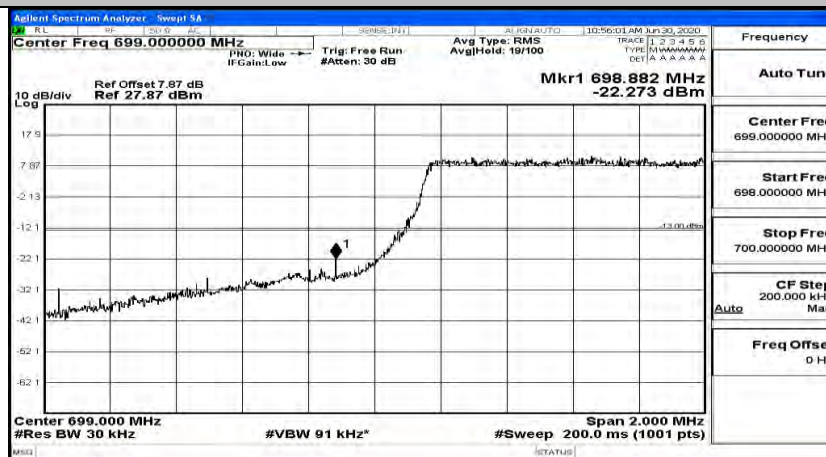


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

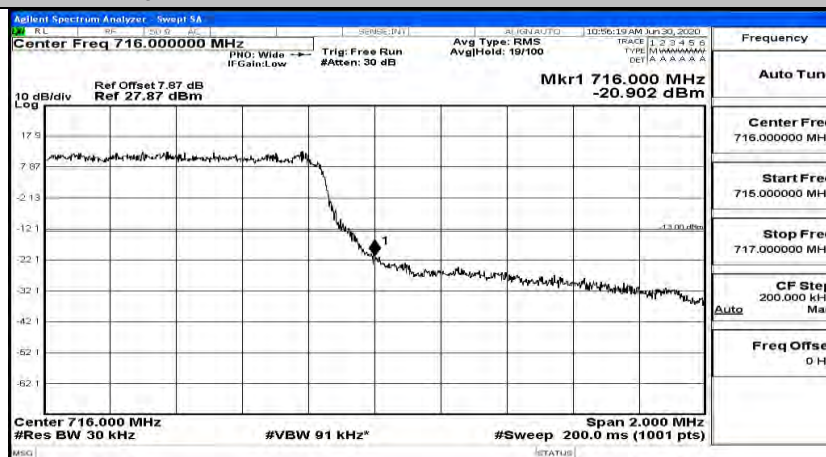


F.4 Band Edge

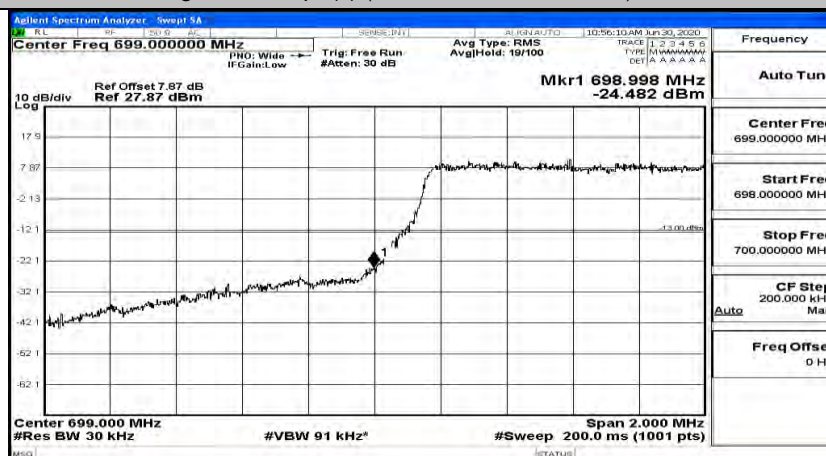
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



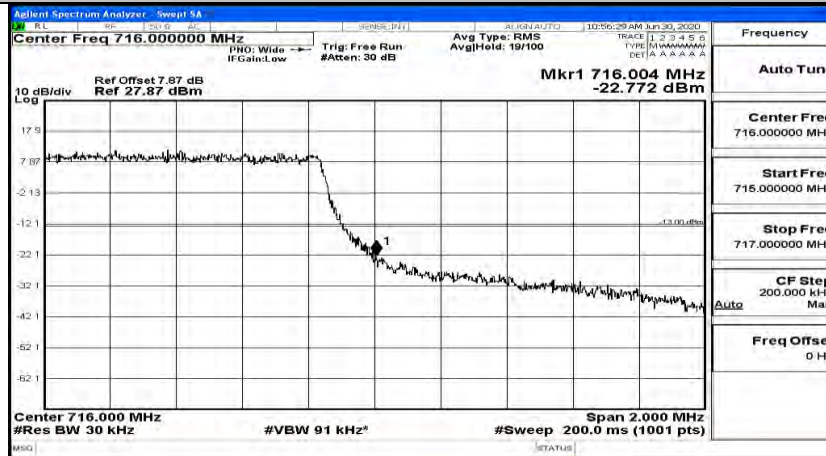
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



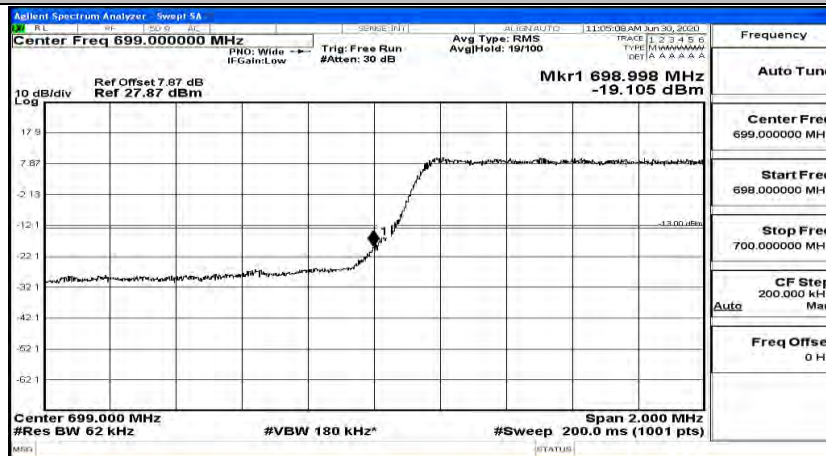
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



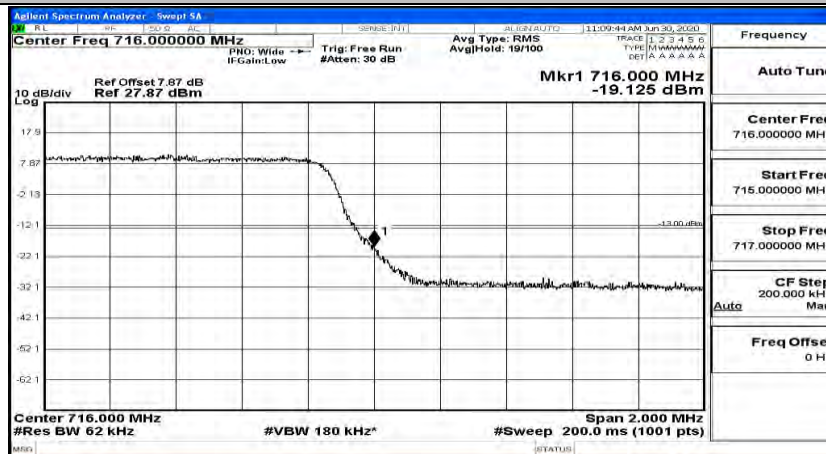
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



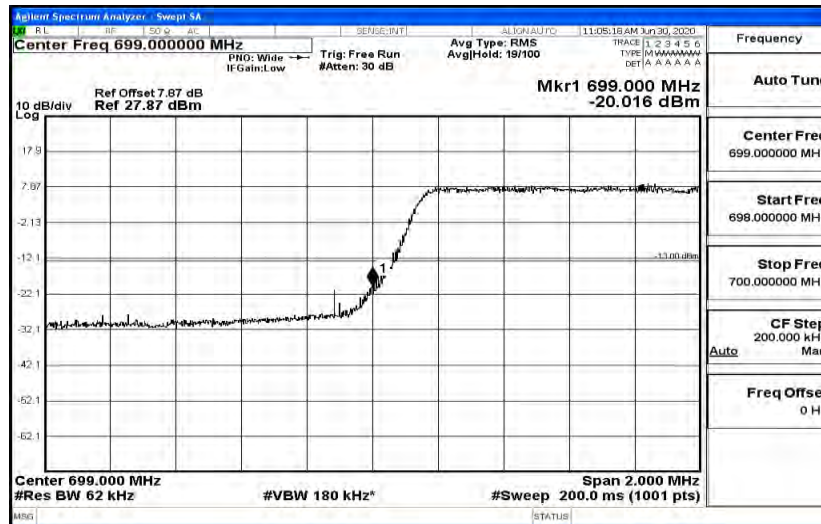
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



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



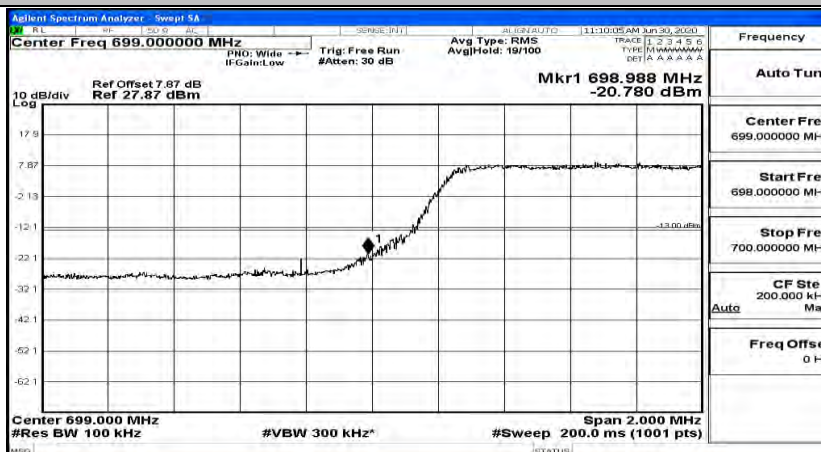
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



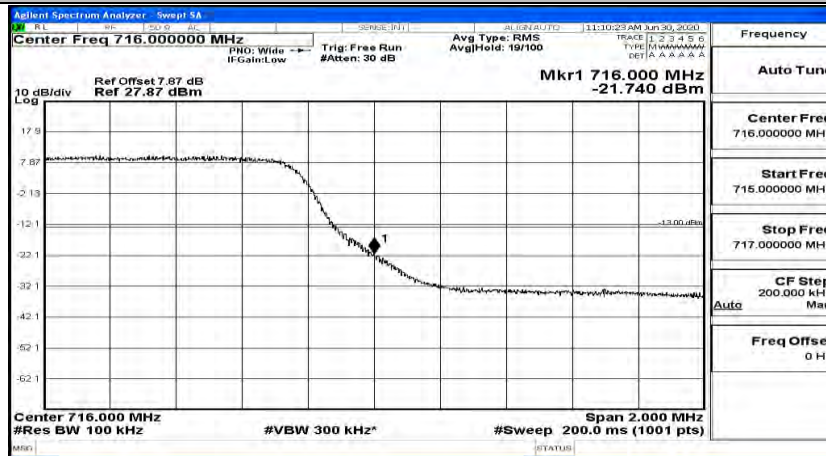
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



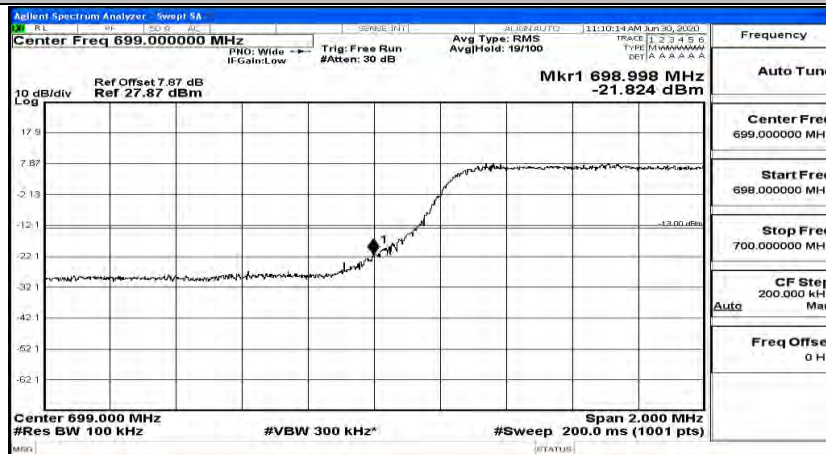
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



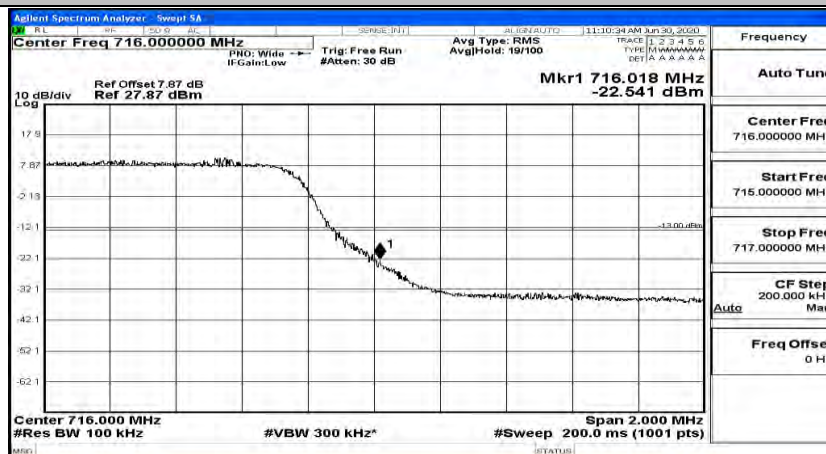
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



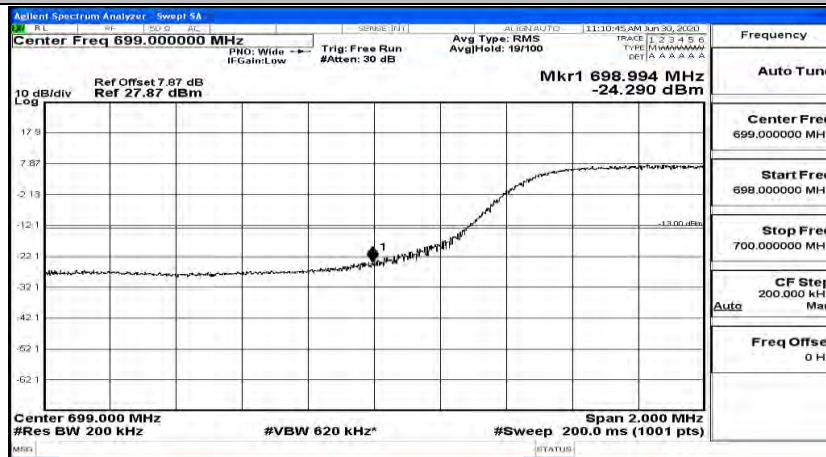
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



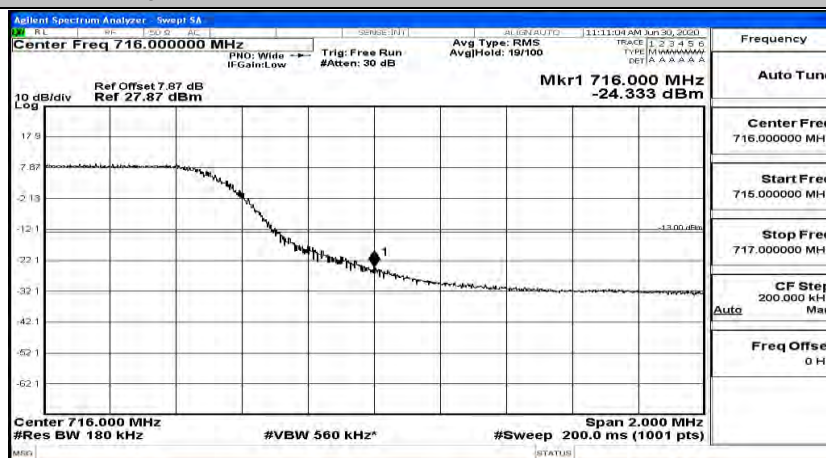
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



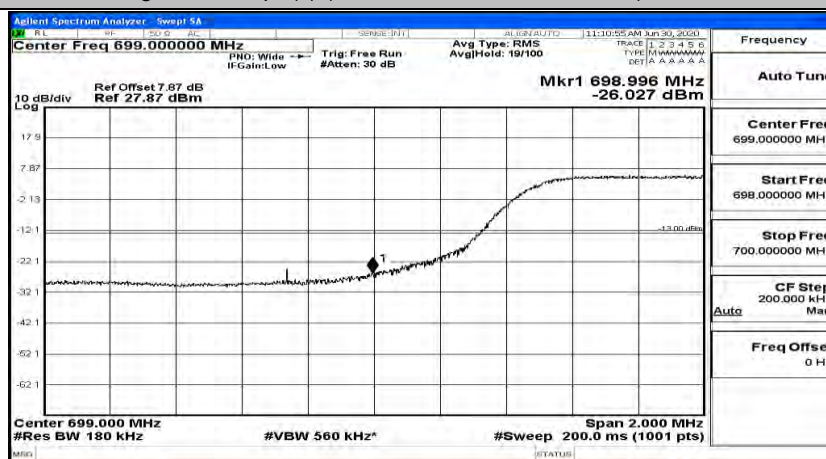
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



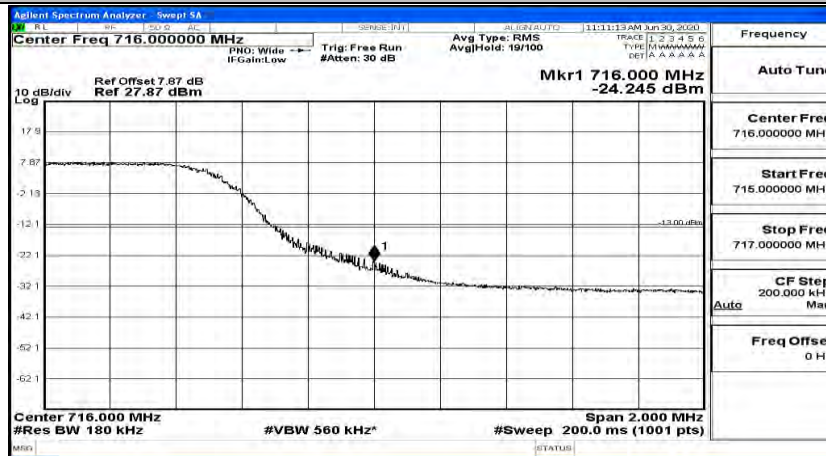
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



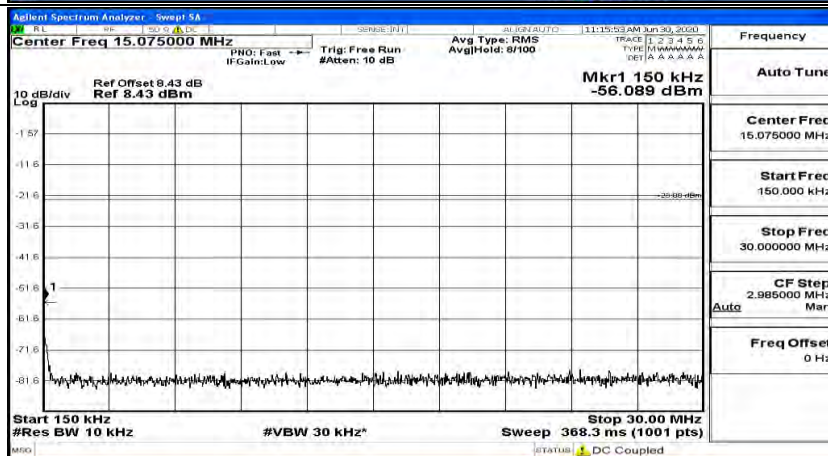
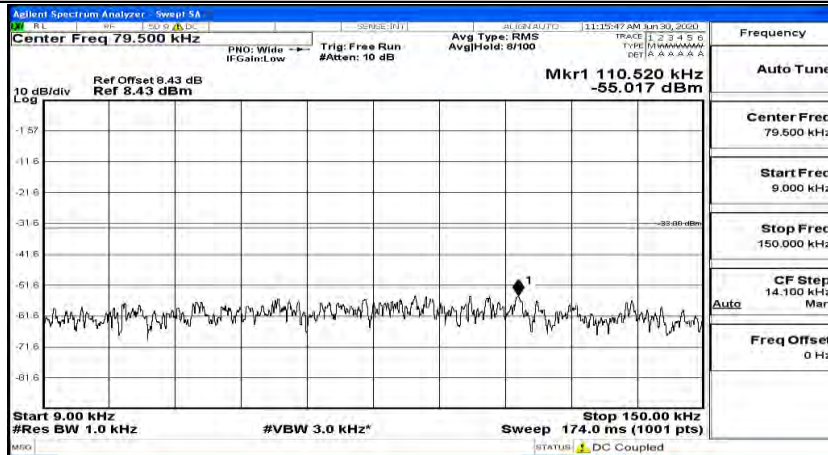
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



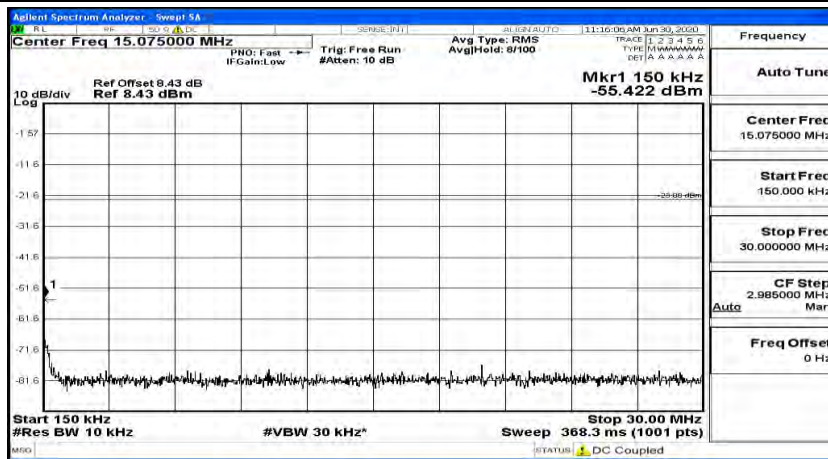
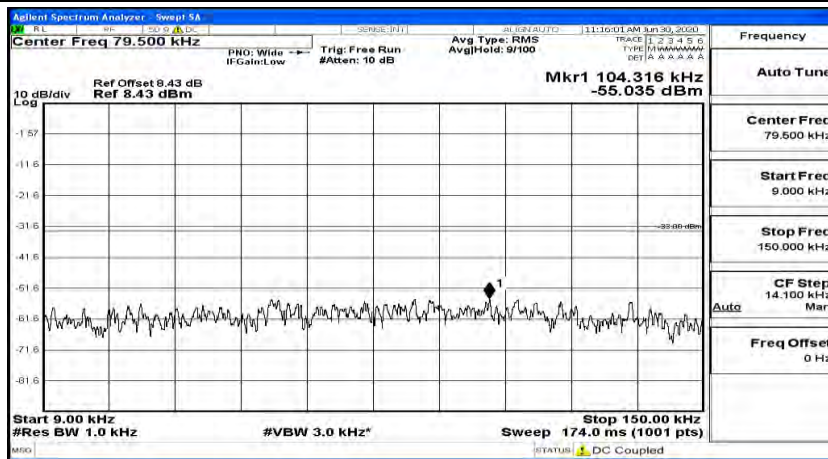
F.5 Conducted Spurious Emission

Channel Bandwidth: 1.4 MHz

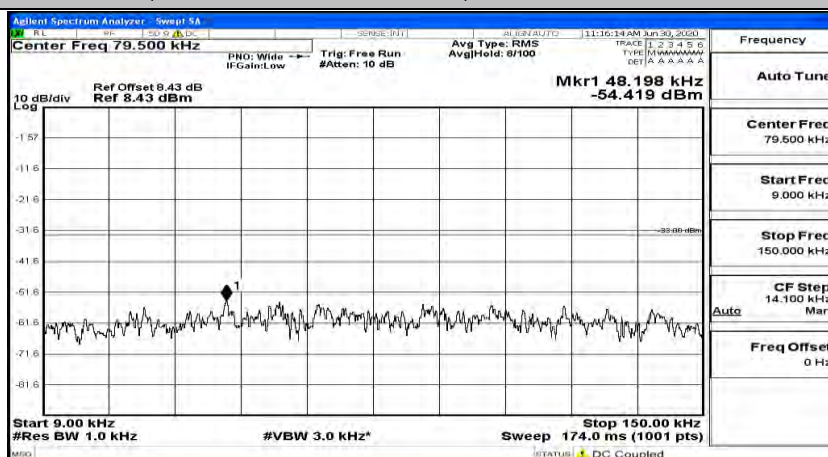
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

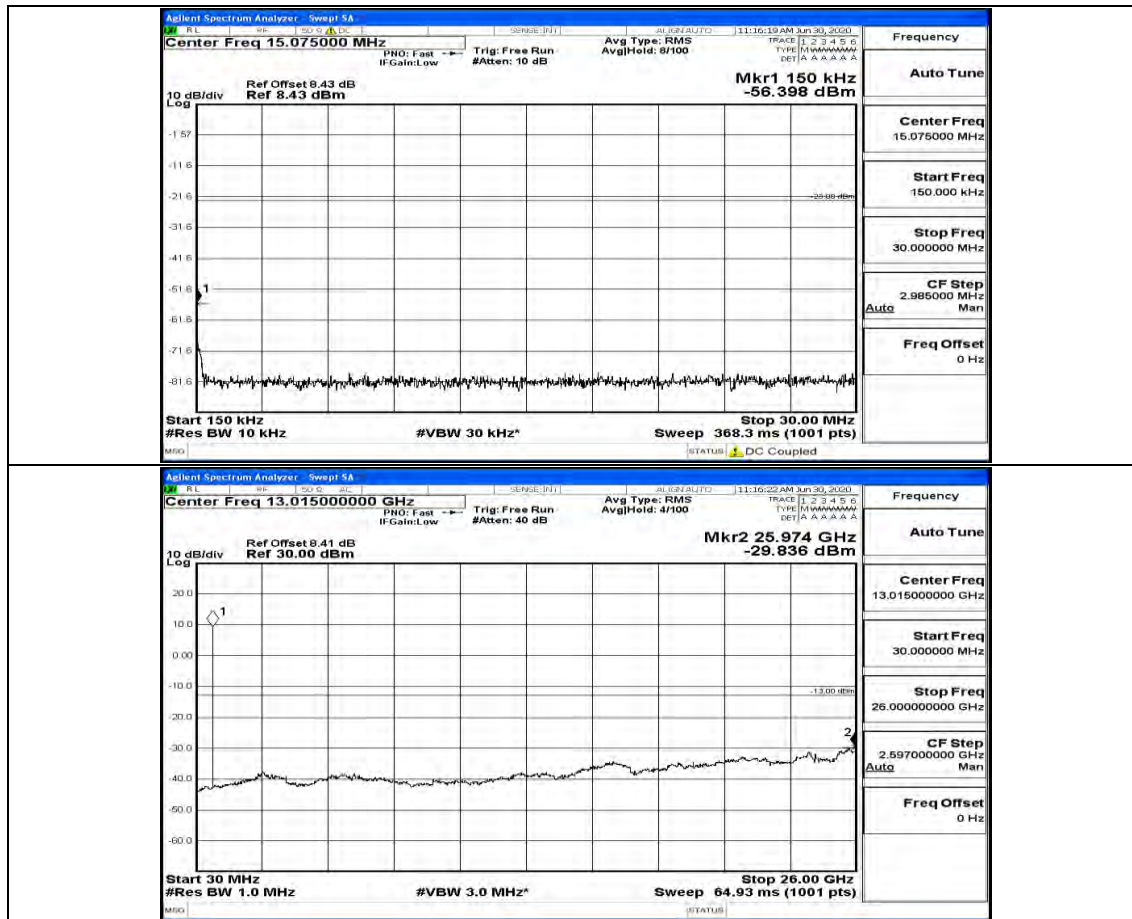


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

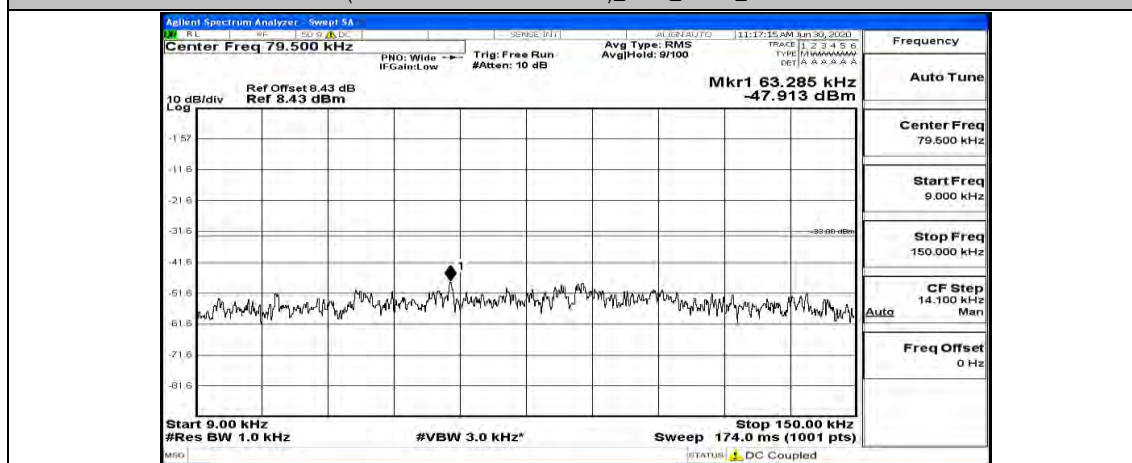


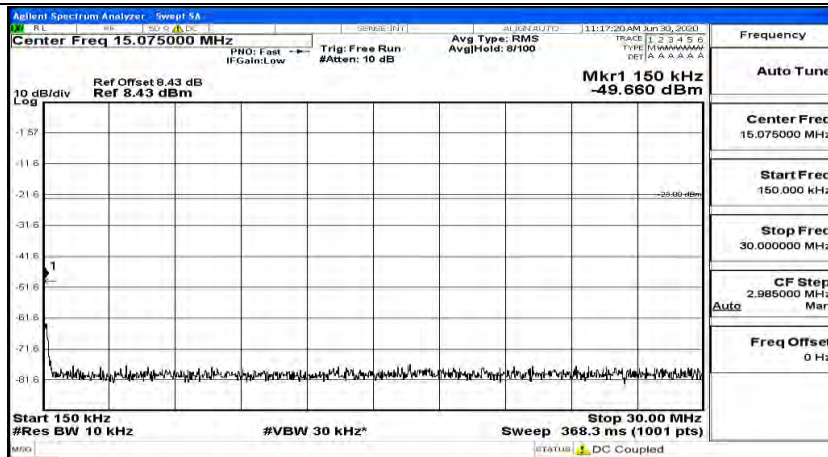
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



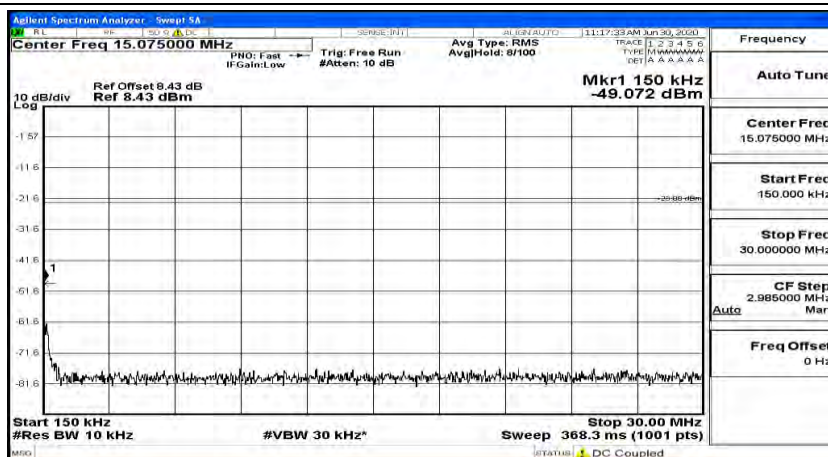
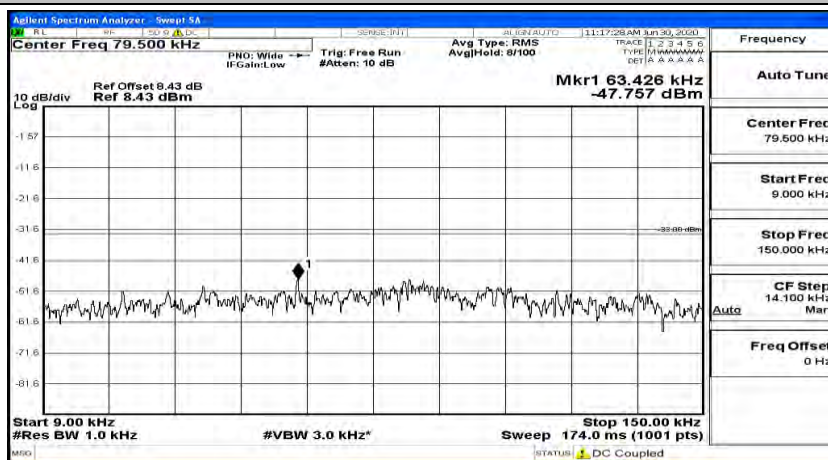


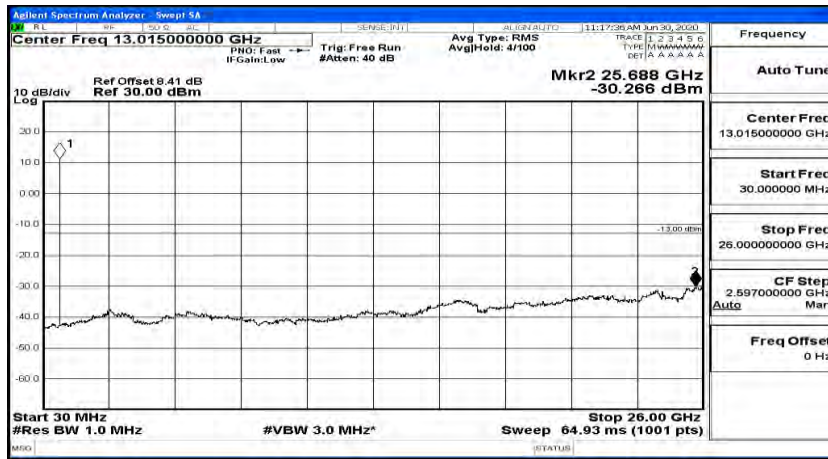
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



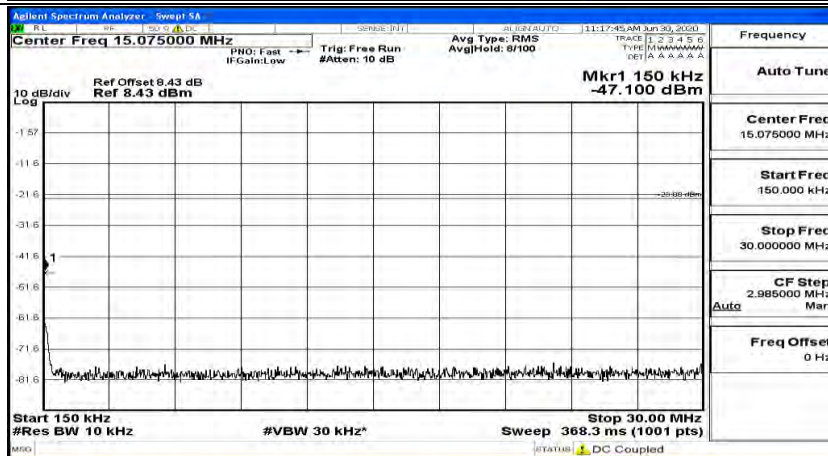
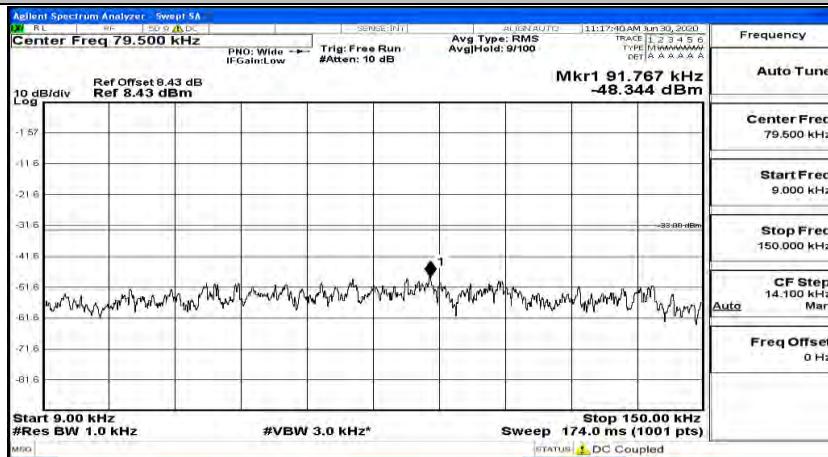


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

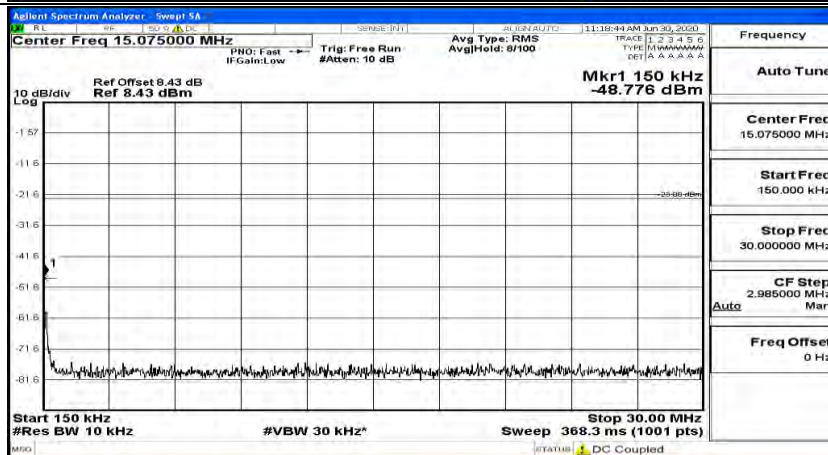
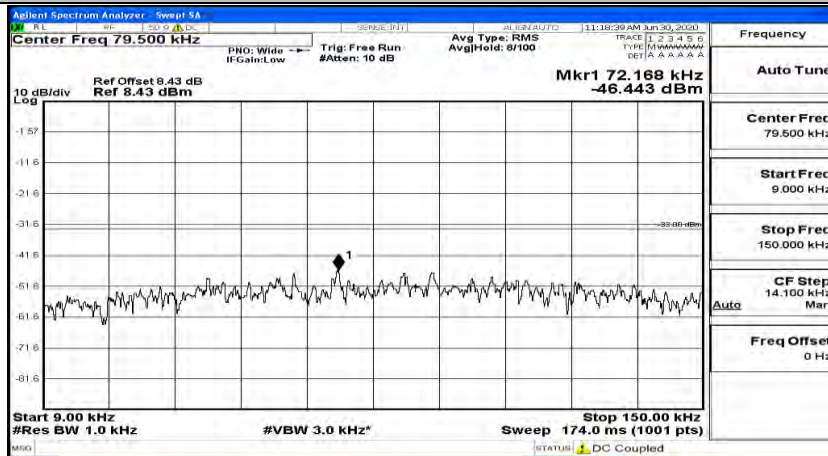




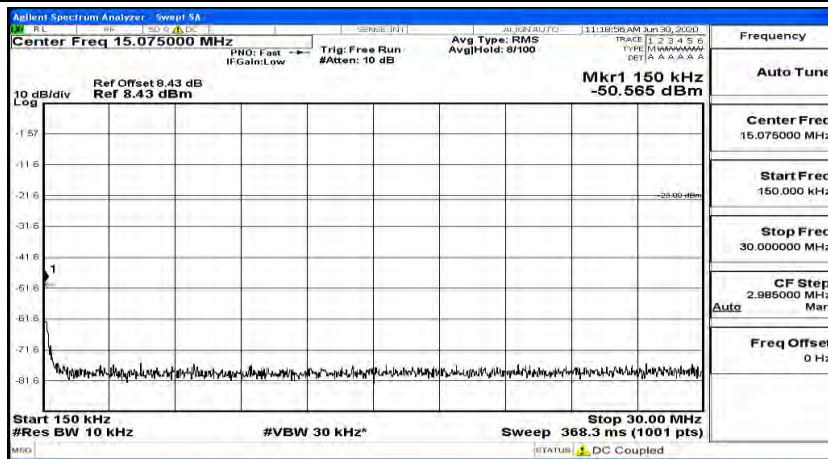
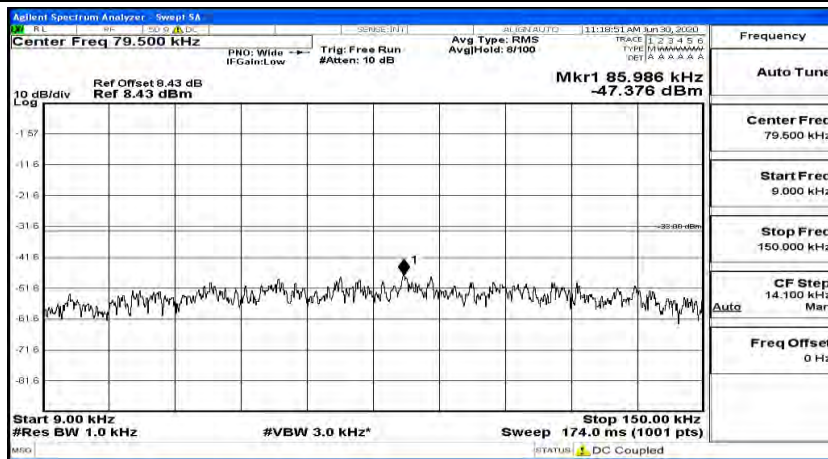
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



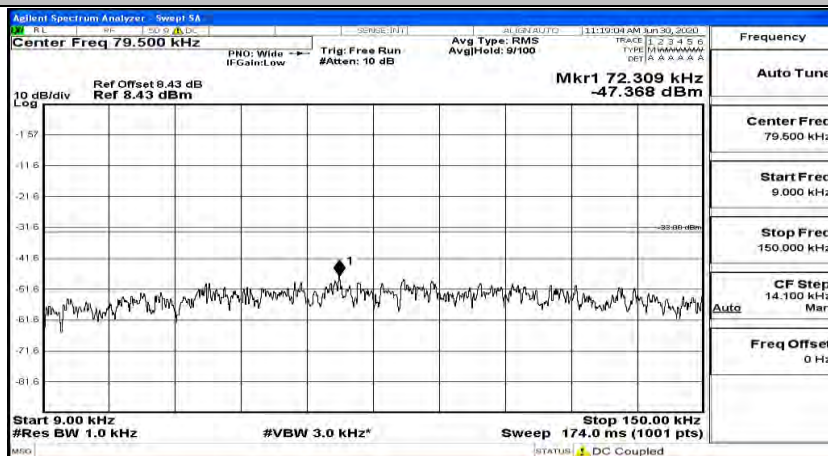
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

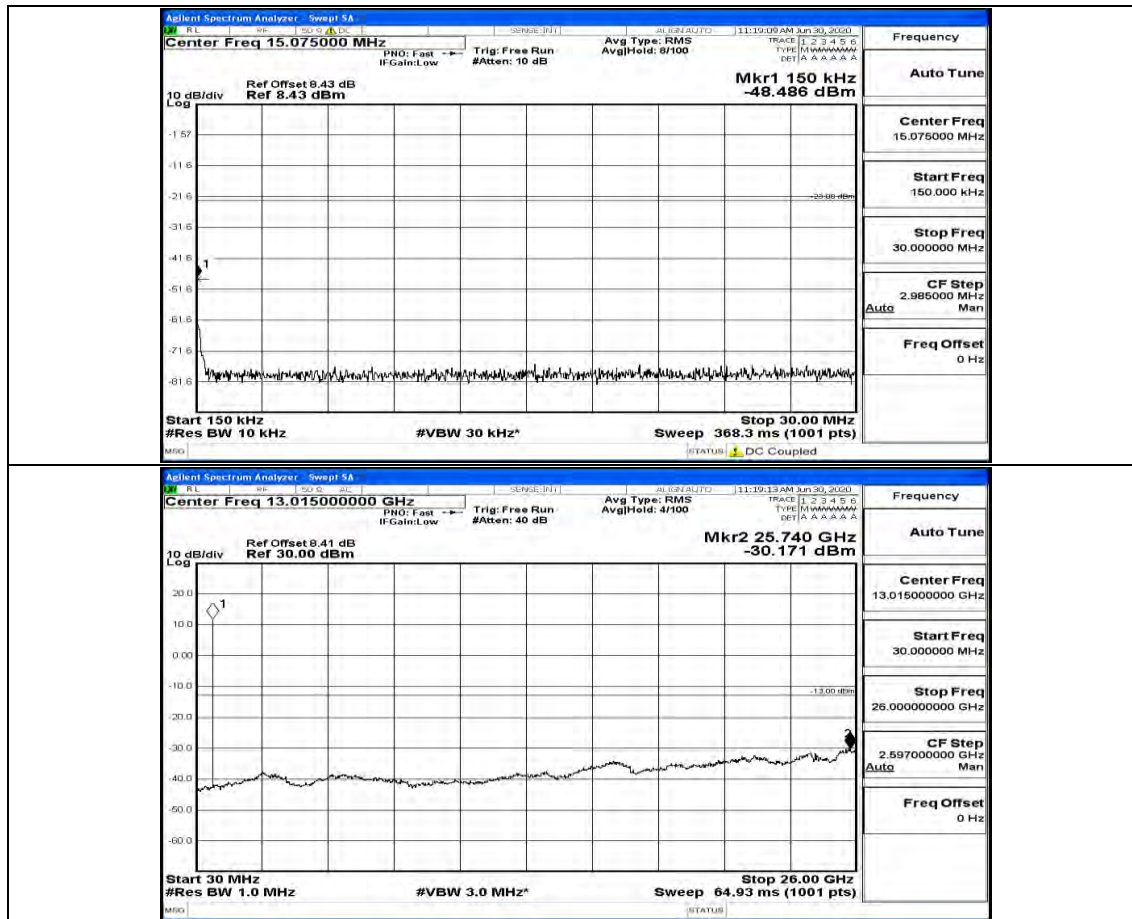


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

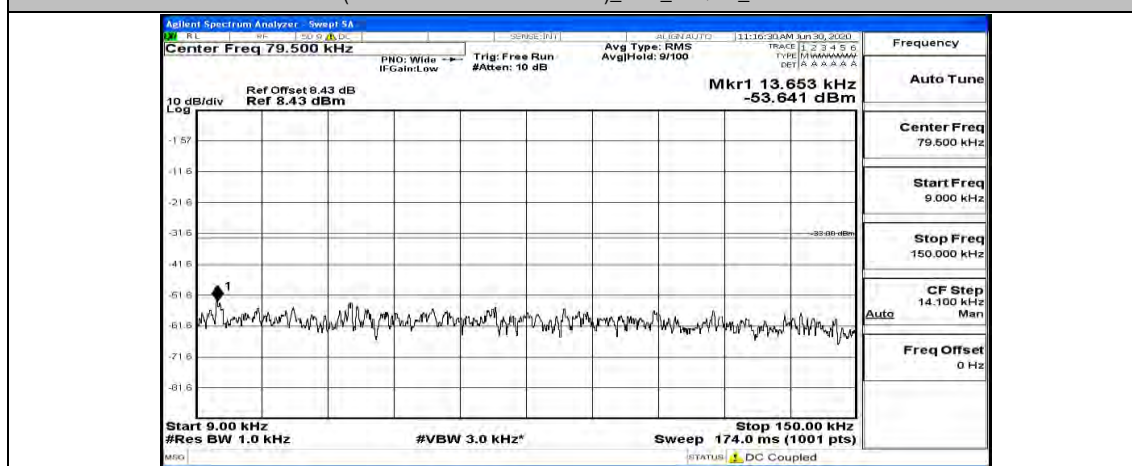


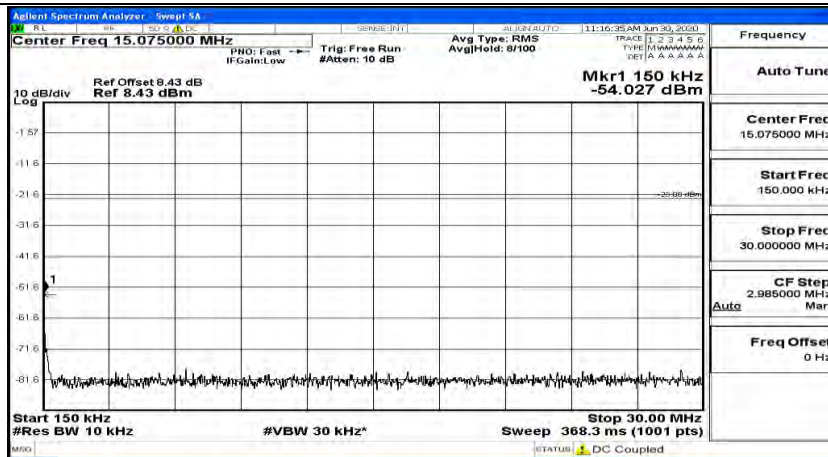
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



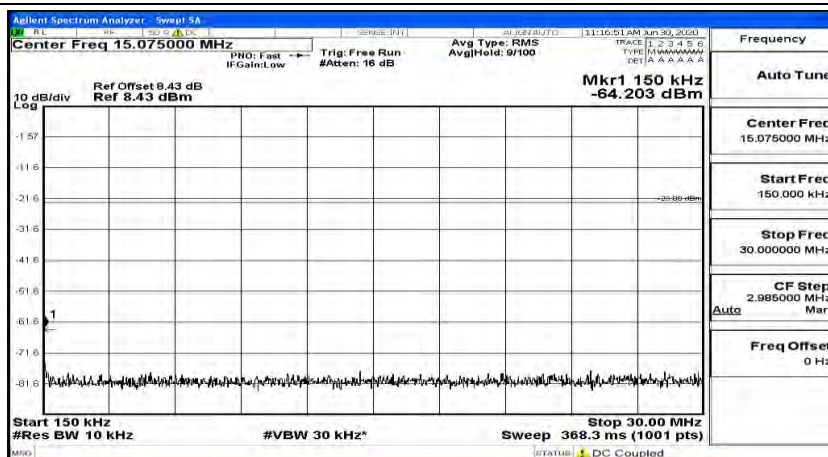
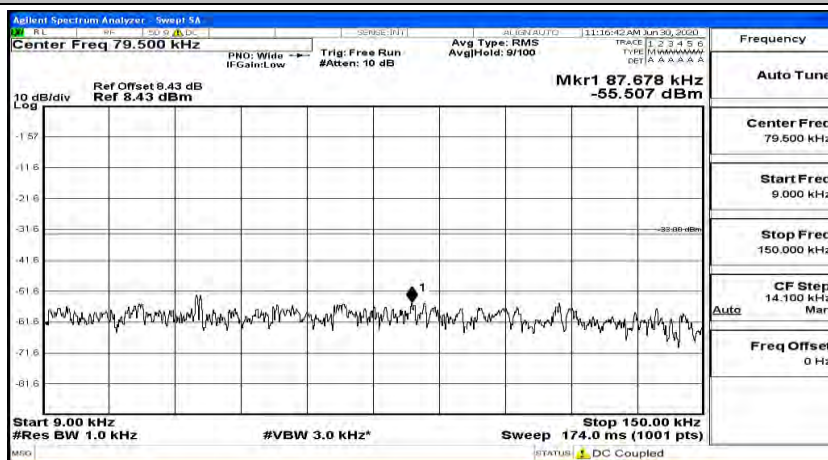


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



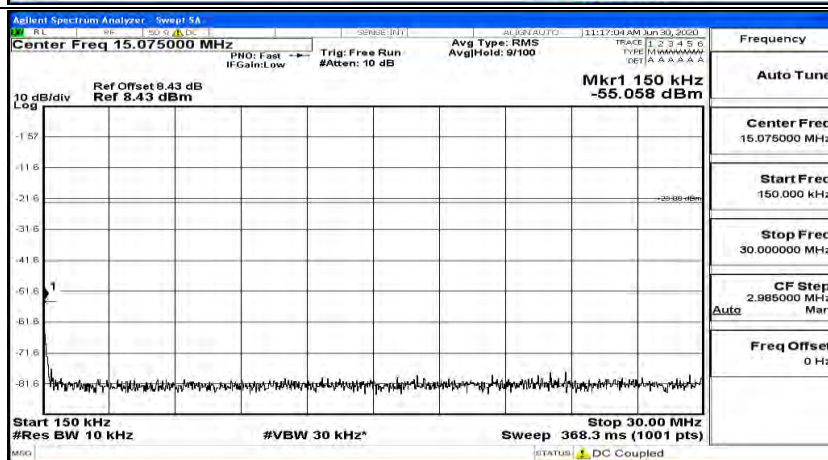
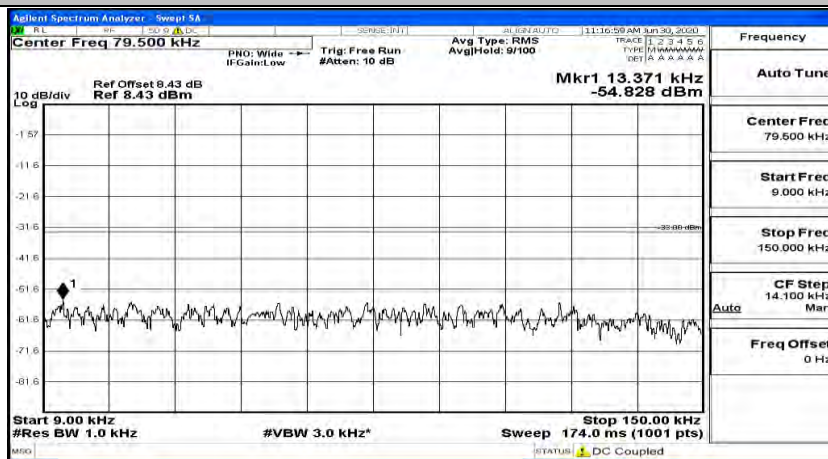


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

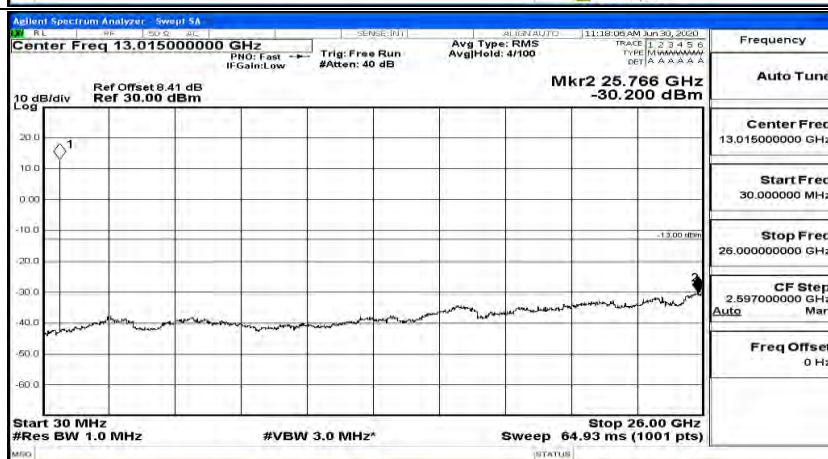
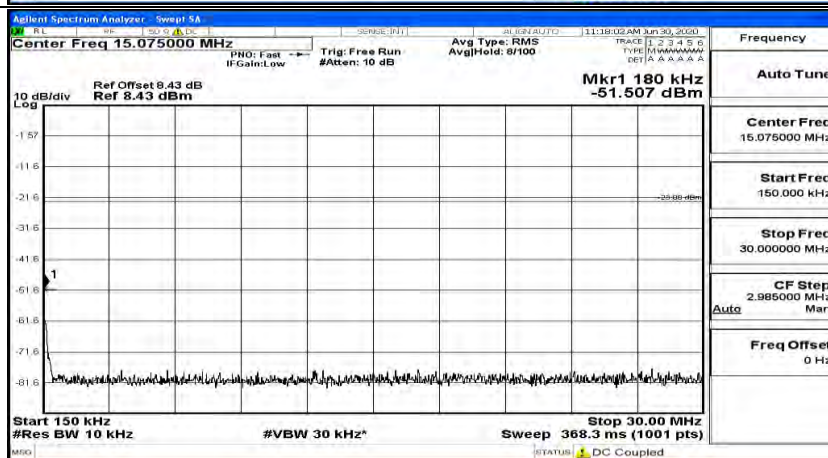
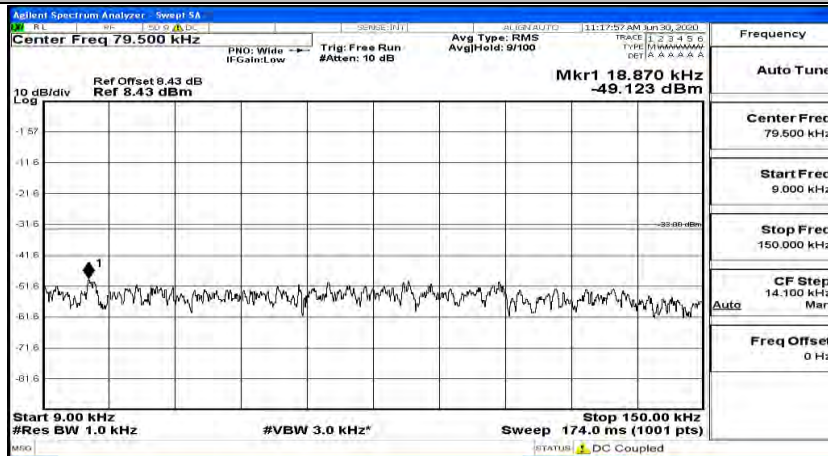




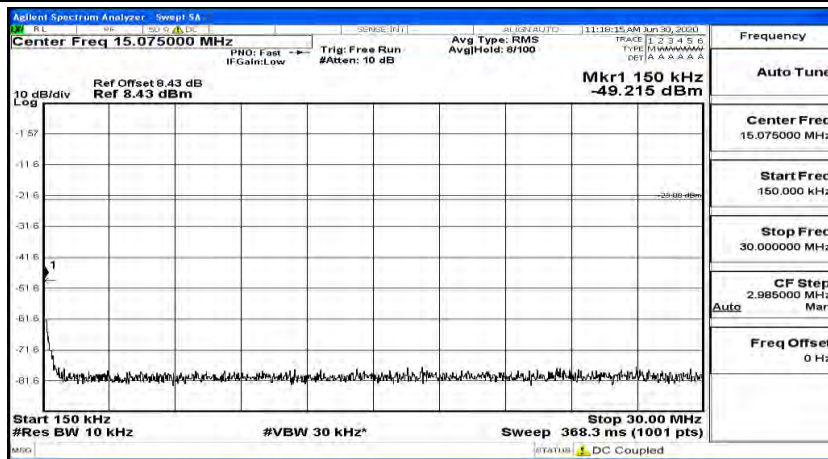
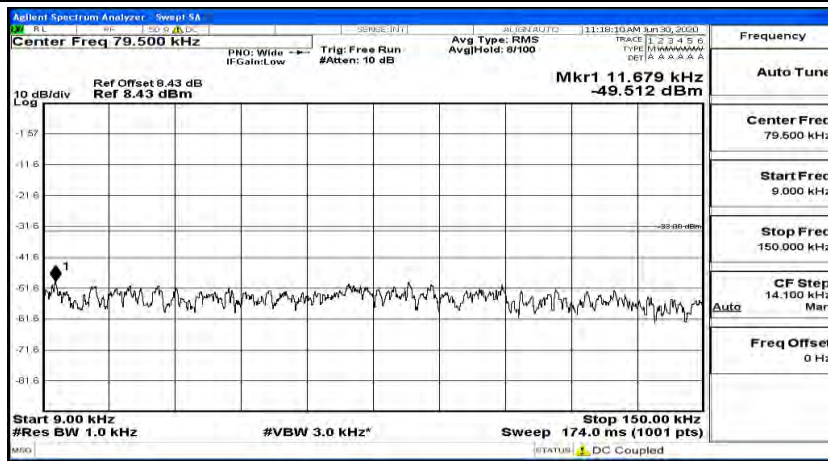
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



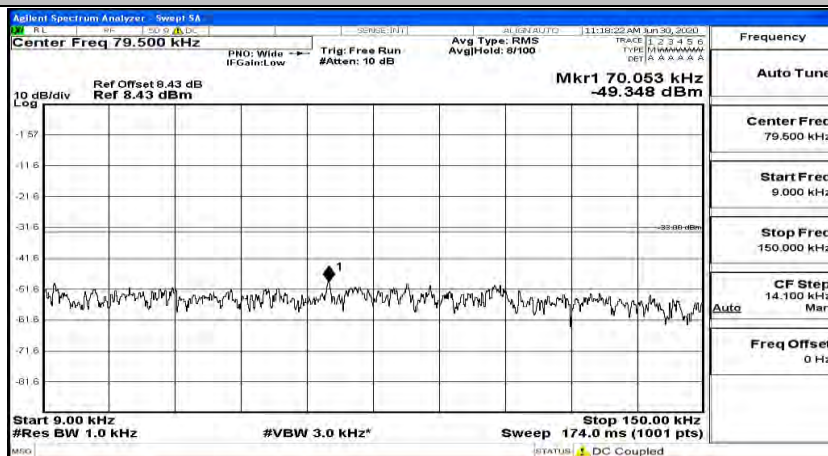
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5





Agilent Spectrum Analyzer - Sweep SA

Center Freq 79,500 kHz

Frequency

Auto Tune

Center Freq 79,500 kHz

Start Freq 9,000 kHz

Stop Freq 150,000 kHz

CF Step 14,100 kHz

Auto

Freq Offset 0 Hz

Mkr1 88,101 kHz

-48.881 dBm

10 dBdiv

Ref Offset 8.43 dB

Ref 8.43 dBm

Start 9.00 kHz

#Res BW 1.0 kHz

#VBW 3.0 kHz*

Stop 150.00 kHz

Sweep 174.0 ms (1001 pts)

Trig: Free Run

#Atten: 10 dB

Avg Type: RMS

Avg/Hold: 8/100

11:19:23 AM Jun 30, 2000

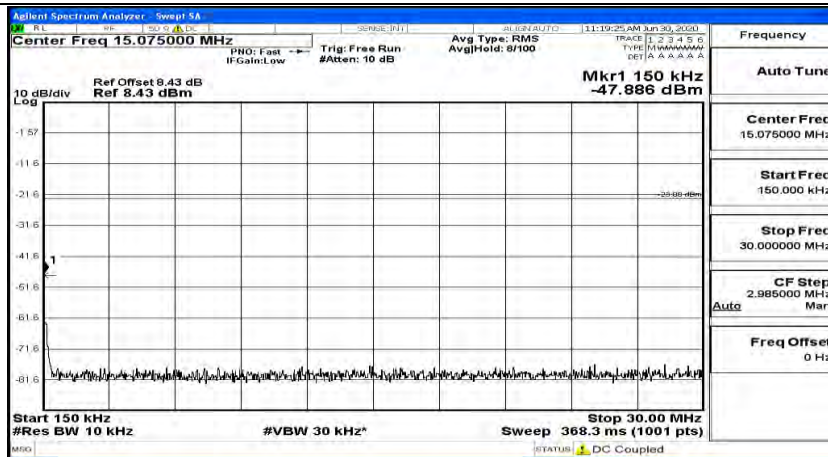
TRACE 1 2 3 4 5 6

TYPE 1 2 3 4 5 6

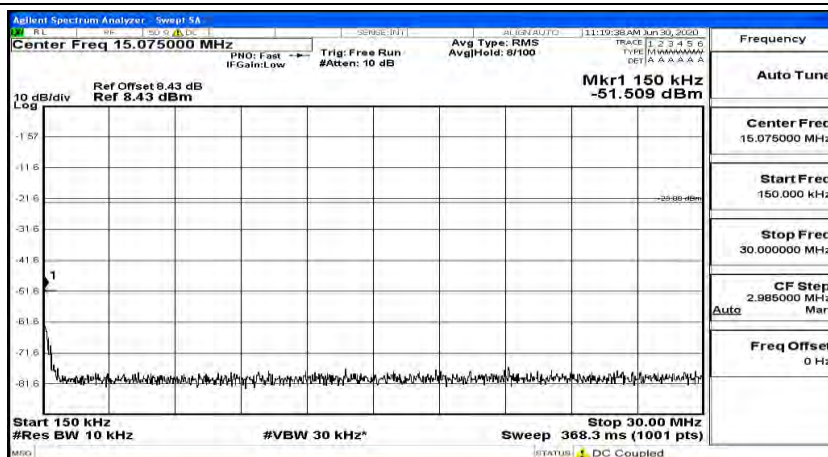
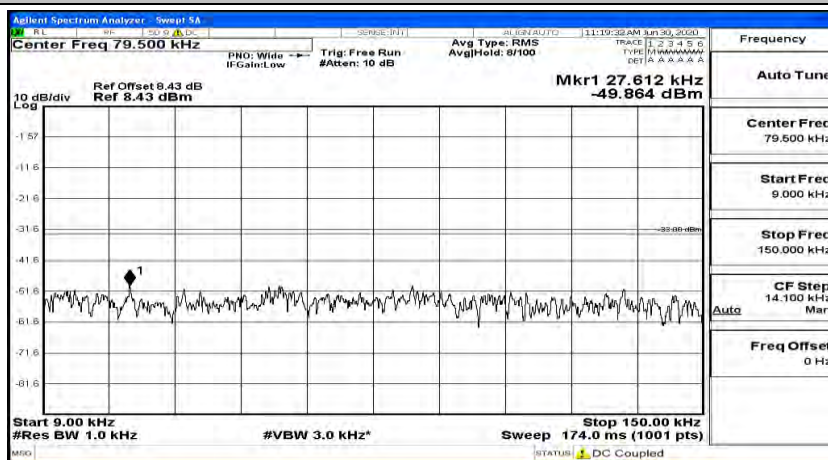
DET 1 2 3 4 5 6

30 dB

STATUS: DC Coupled

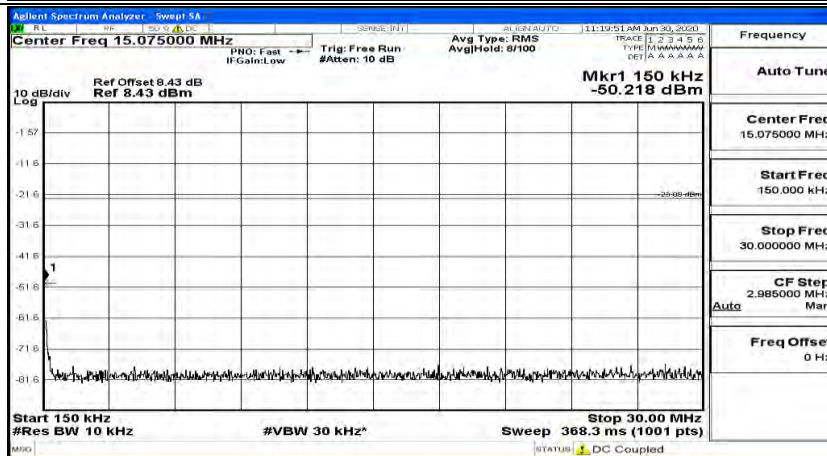
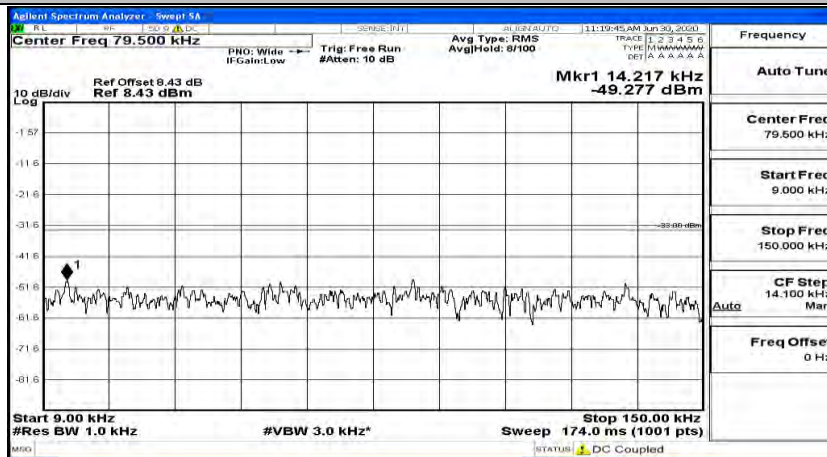


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



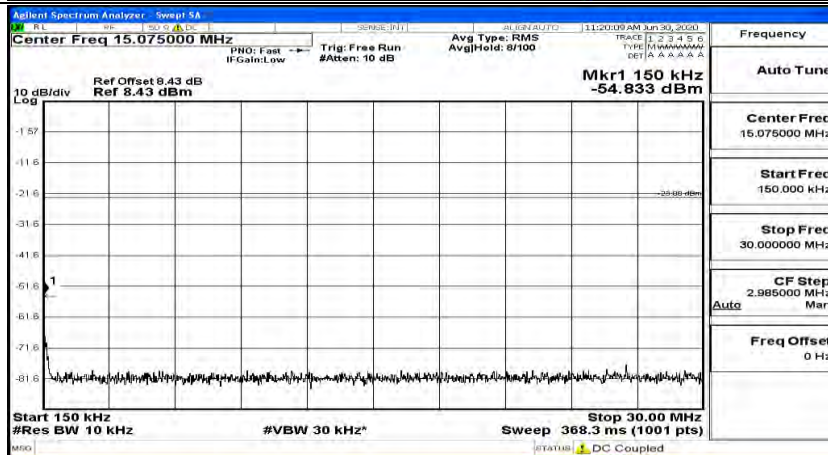
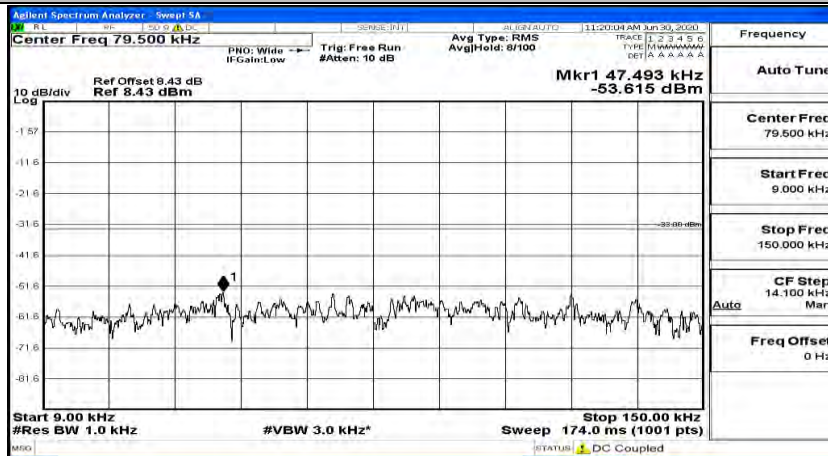


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

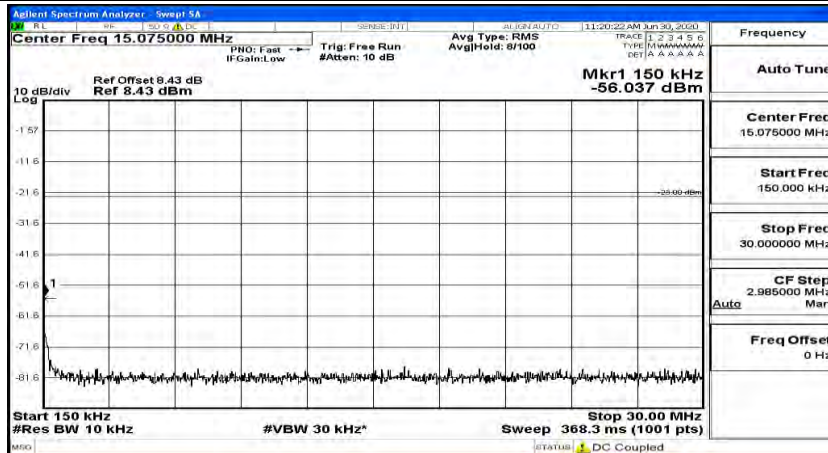
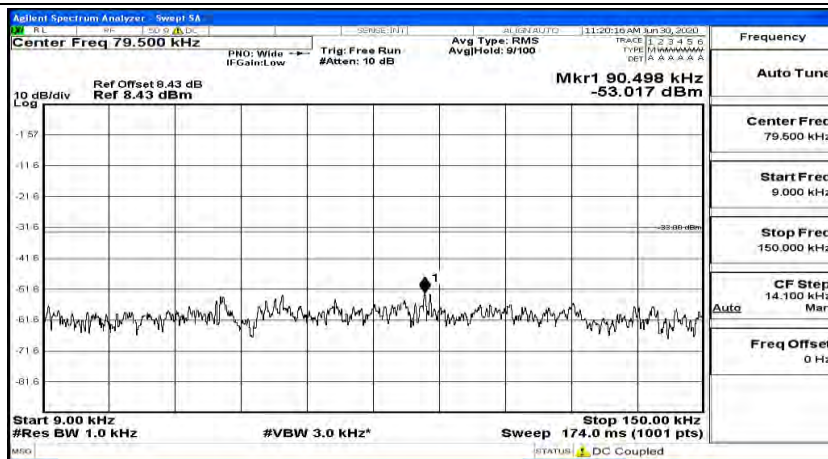


Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14

