

Appendix H: Test Data for E-UTRA Band 12

Product Name: Smart Phone

Trade Mark: DOOGEE

Test Model: S96Pro

Environmental Conditions

Temperature:	22.9° C
Relative Humidity:	53.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

H.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.05	22.09	PASS
		1	3	23.12	22.26	PASS
		1	5	23.02	22.09	PASS
		3	0	23.06	21.94	PASS
		3	2	23.08	21.94	PASS
		3	3	23.09	21.93	PASS
		6	0	22.11	21.11	PASS
	MCH	1	0	22.92	22.01	PASS
		1	3	23.00	22.13	PASS
		1	5	22.93	21.97	PASS
		3	0	22.95	21.84	PASS
		3	2	22.99	21.83	PASS
		3	3	22.96	21.82	PASS
		6	0	21.98	20.81	PASS
	HCH	1	0	22.91	21.77	PASS
		1	3	23.00	21.97	PASS
		1	5	22.97	21.83	PASS
		3	0	22.98	21.75	PASS
		3	2	22.97	21.75	PASS
		3	3	23.02	21.74	PASS
		6	0	22.05	20.98	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	23.05	22.23	PASS
		1	7	23.04	22.18	PASS
		1	14	23.05	22.16	PASS
		8	0	22.12	21.14	PASS
		8	4	22.10	21.11	PASS
		8	7	22.11	21.08	PASS
		15	0	22.06	21.04	PASS
	MCH	1	0	22.99	22.12	PASS
		1	7	22.97	22.08	PASS
		1	14	22.94	22.04	PASS
		8	0	21.97	20.93	PASS
		8	4	21.96	20.96	PASS
		8	7	21.96	20.95	PASS
		15	0	21.92	20.81	PASS
	HCH	1	0	22.98	21.86	PASS
		1	7	23.00	21.91	PASS
		1	14	23.01	21.94	PASS
		8	0	22.04	21.02	PASS
		8	4	22.04	20.99	PASS
		8	7	22.01	20.96	PASS
		15	0	21.97	20.87	PASS

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	22.99	21.96	PASS
		1	12	23.13	22.11	PASS
		1	24	22.95	21.96	PASS
		12	0	22.05	21.00	PASS
		12	6	22.09	21.02	PASS
		12	13	22.01	20.93	PASS
		25	0	21.99	21.01	PASS
	MCH	1	0	22.89	22.10	PASS
		1	12	23.07	22.23	PASS
		1	24	22.92	22.09	PASS
		12	0	21.98	20.97	PASS
		12	6	22.00	20.95	PASS
		12	13	22.01	20.98	PASS
		25	0	21.98	20.91	PASS
	HCH	1	0	22.90	21.92	PASS
		1	12	23.10	22.06	PASS
		1	24	23.00	21.95	PASS
		12	0	22.05	20.97	PASS
		12	6	22.00	20.97	PASS
		12	13	21.82	20.75	PASS
		25	0	21.91	20.88	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	22.97	22.14	PASS
		1	24	23.05	22.33	PASS
		1	49	22.89	22.03	PASS
		25	0	22.08	21.00	PASS
		25	12	22.06	21.04	PASS
		25	25	22.03	20.96	PASS
		50	0	22.01	20.95	PASS
	MCH	1	0	22.93	22.09	PASS
		1	24	23.07	22.21	PASS
		1	49	22.91	22.01	PASS
		25	0	22.08	21.08	PASS
		25	12	22.07	21.05	PASS
		25	25	22.12	21.10	PASS
		50	0	22.06	21.04	PASS
	HCH	1	0	22.94	21.83	PASS
		1	24	23.08	21.99	PASS
		1	49	22.99	21.90	PASS
		25	0	21.84	20.84	PASS
		25	12	21.83	20.83	PASS
		25	25	21.79	20.81	PASS
		50	0	21.82	20.78	PASS

H.2 Peak-to-Average Ratio

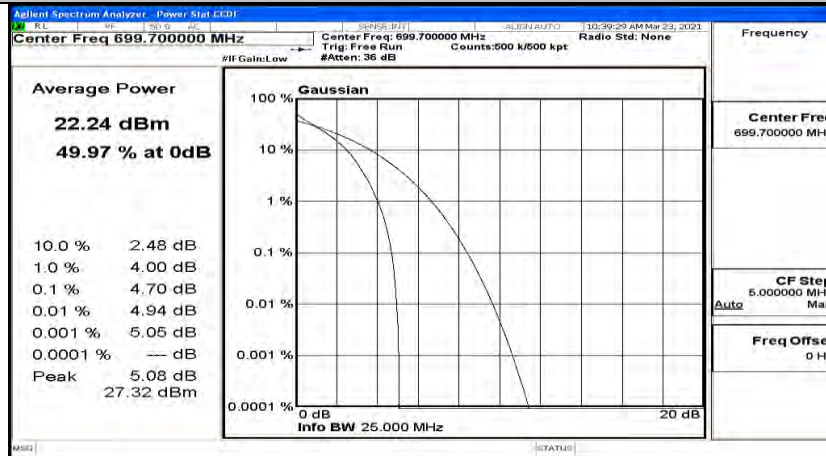
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.7	<13	PASS
	MCH	4.89	<13	PASS
	HCH	4.52	<13	PASS
16QAM	LCH	5.65	<13	PASS
	MCH	5.73	<13	PASS
	HCH	5.39	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.86	<13	PASS
	MCH	4.94	<13	PASS
	HCH	4.5	<13	PASS
16QAM	LCH	5.66	<13	PASS
	MCH	5.73	<13	PASS
	HCH	5.45	<13	PASS

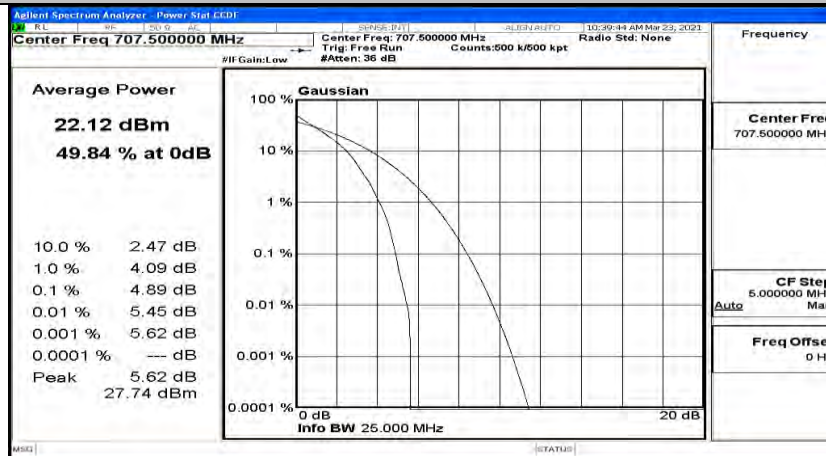
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.85	<13	PASS
	MCH	5.04	<13	PASS
	HCH	4.66	<13	PASS
16QAM	LCH	5.63	<13	PASS
	MCH	5.72	<13	PASS
	HCH	5.44	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.98	<13	PASS
	MCH	4.93	<13	PASS
	HCH	4.82	<13	PASS
16QAM	LCH	5.77	<13	PASS
	MCH	5.74	<13	PASS
	HCH	5.7	<13	PASS

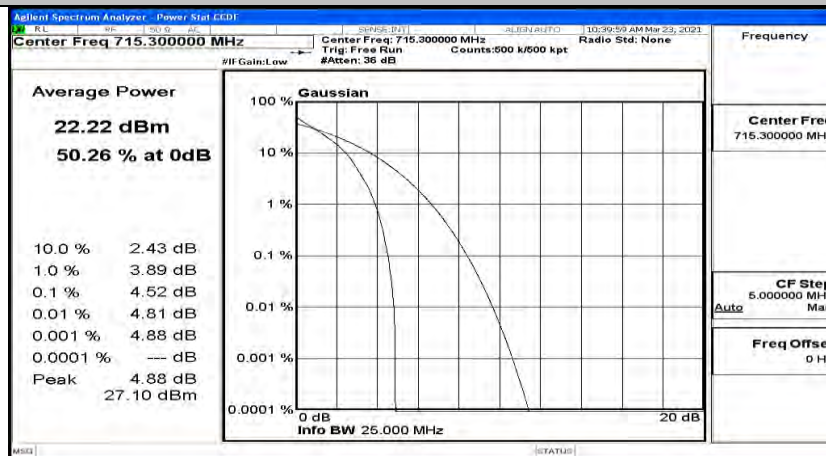
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



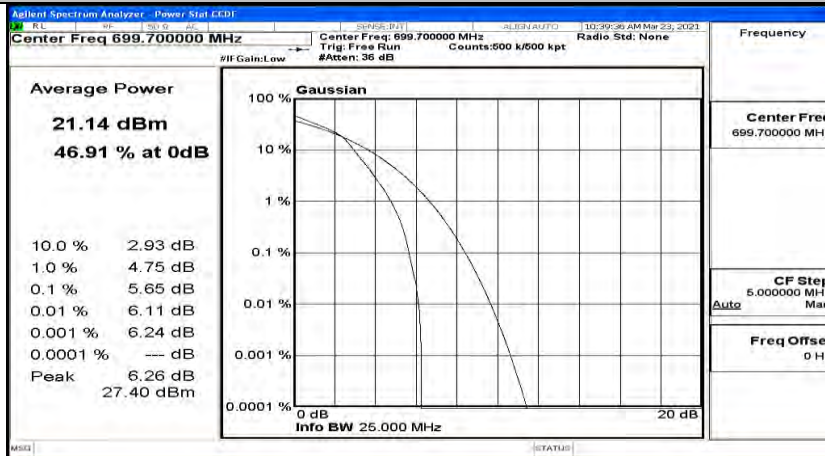
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



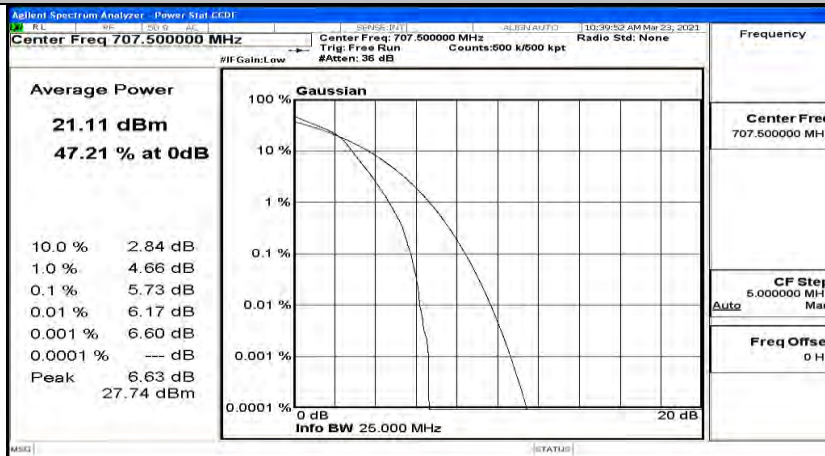
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



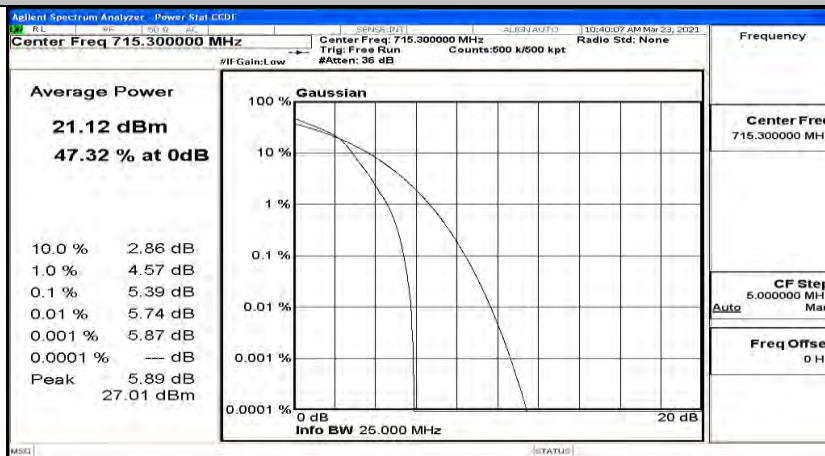
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



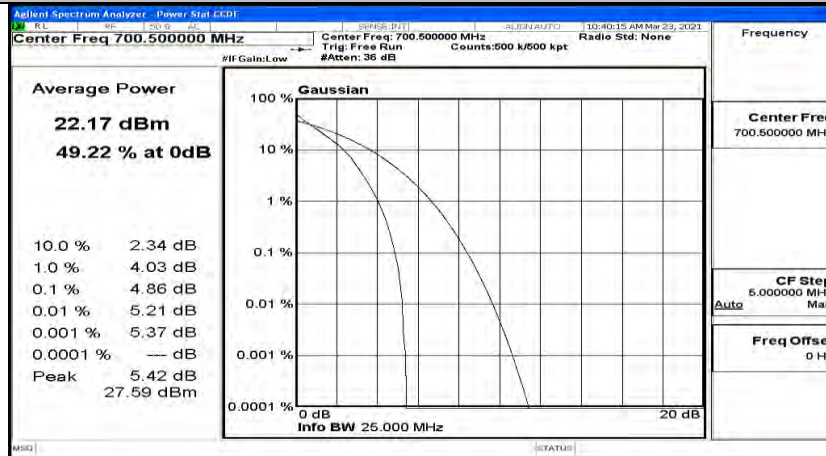
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



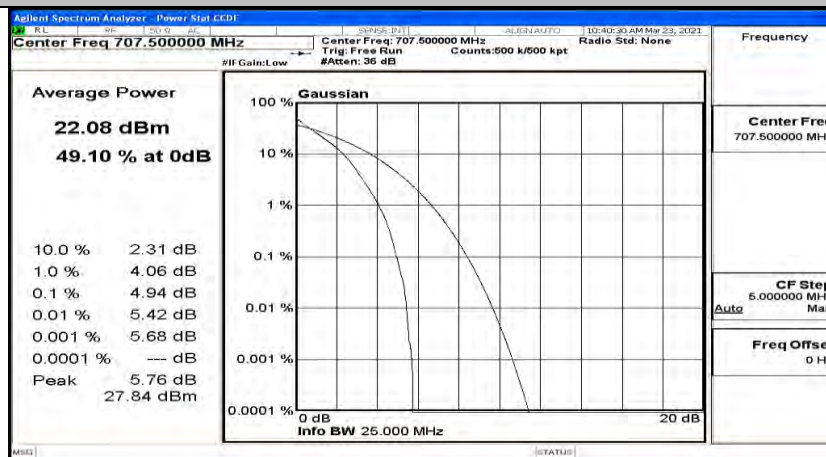
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



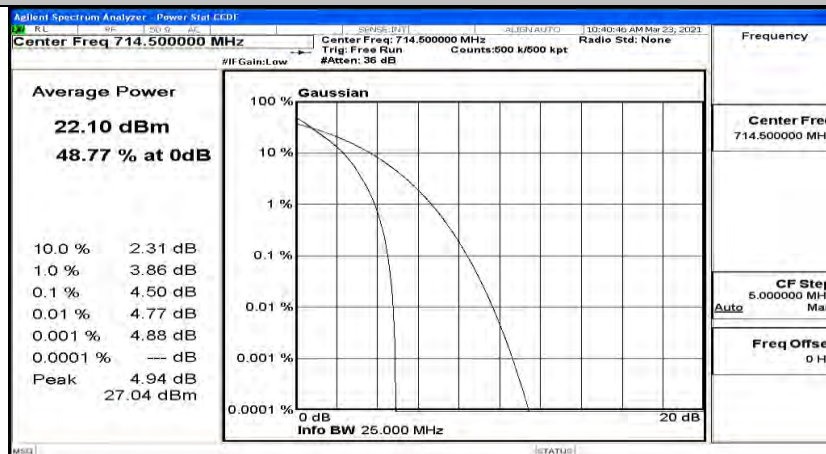
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



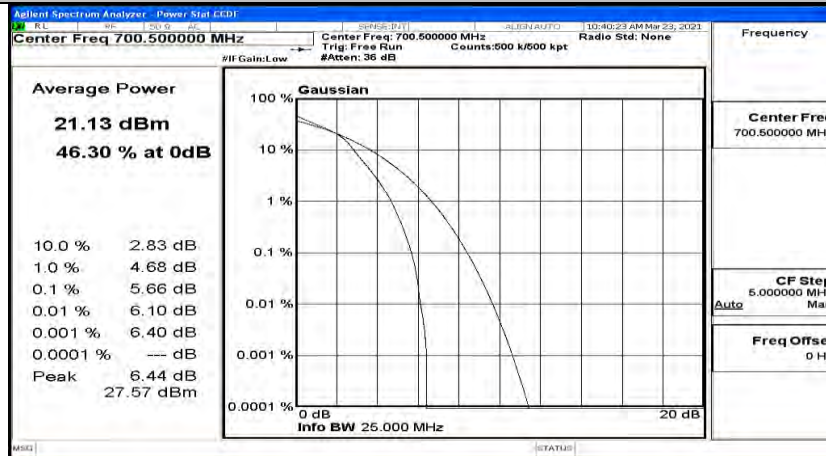
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



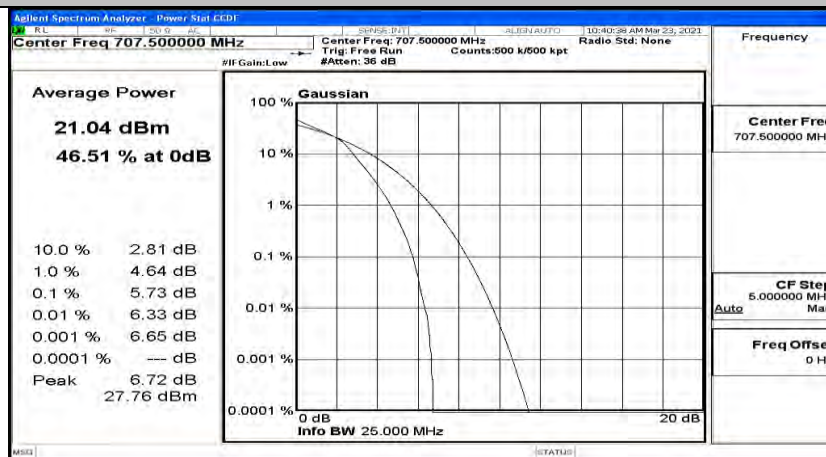
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



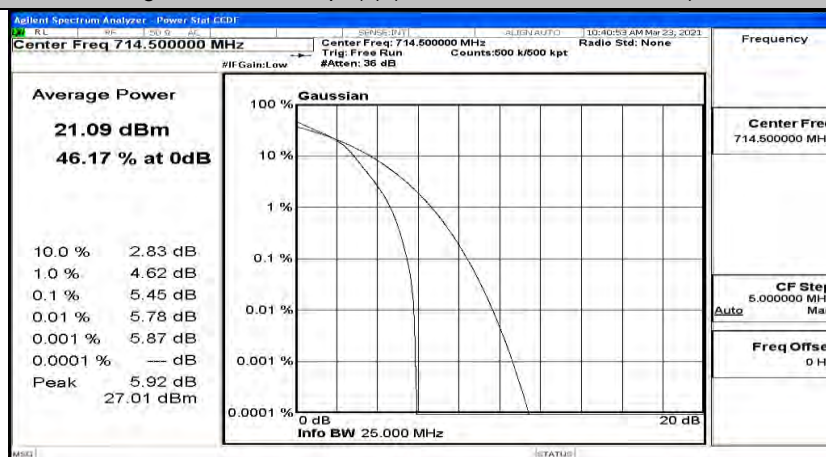
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



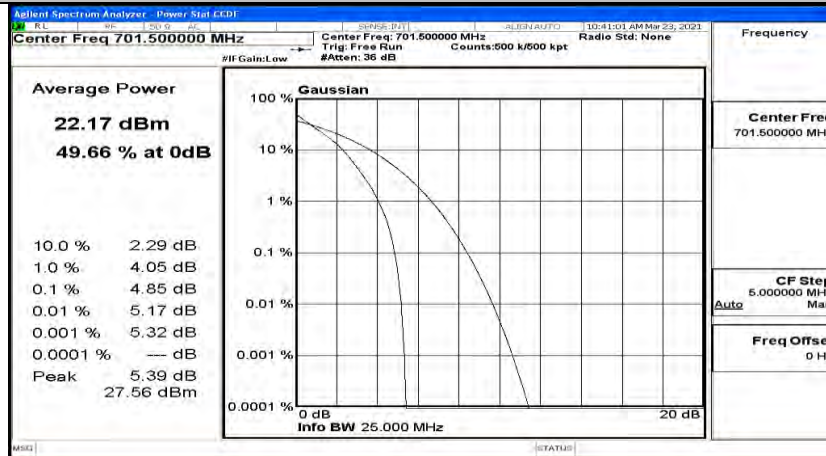
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



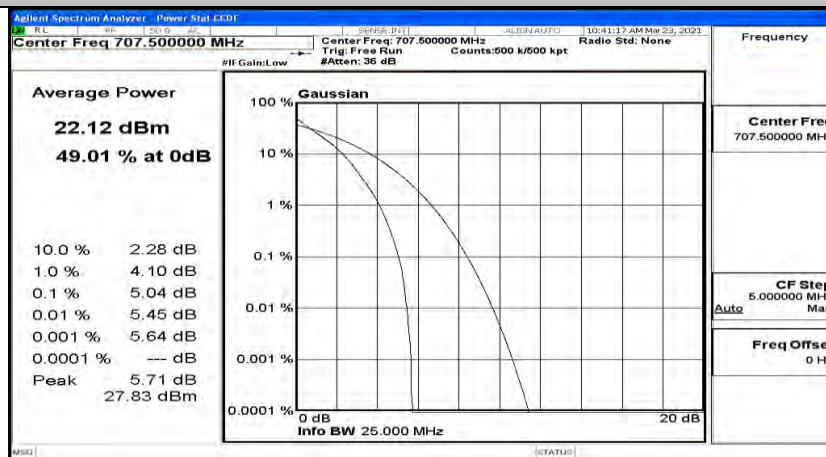
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



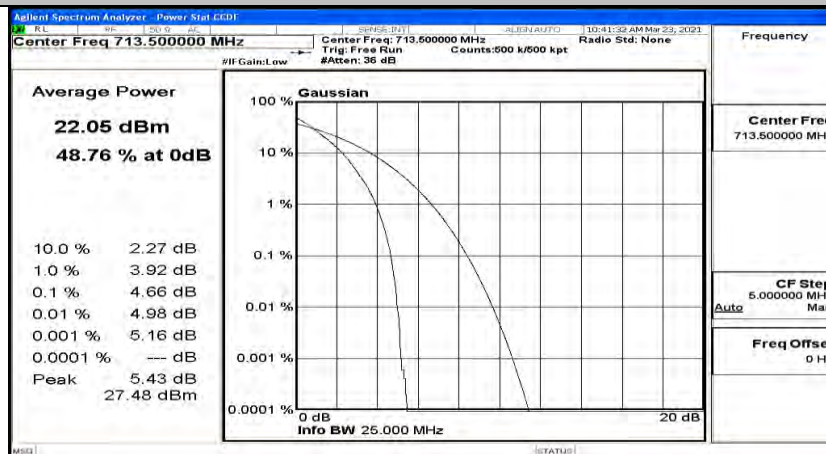
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



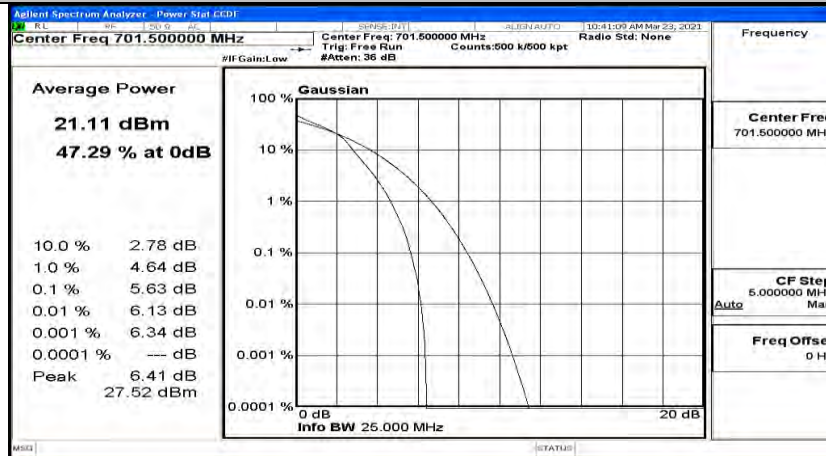
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



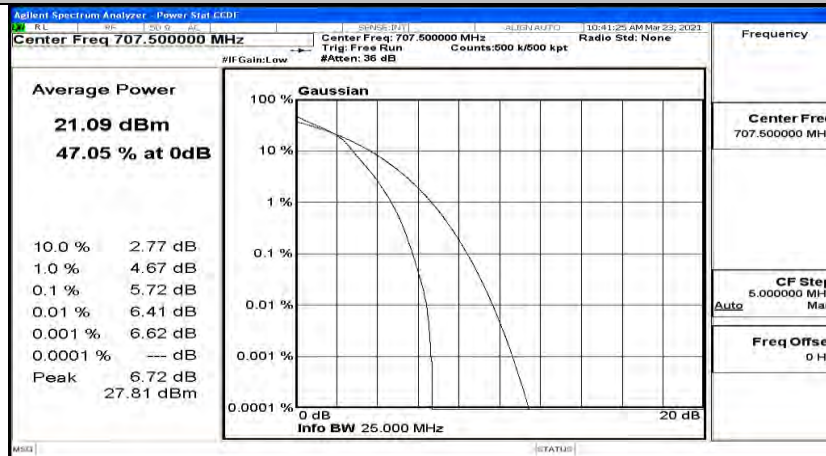
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



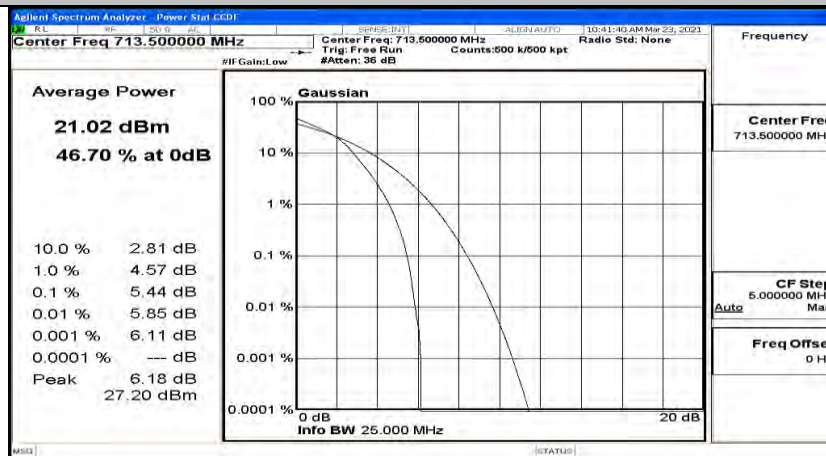
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



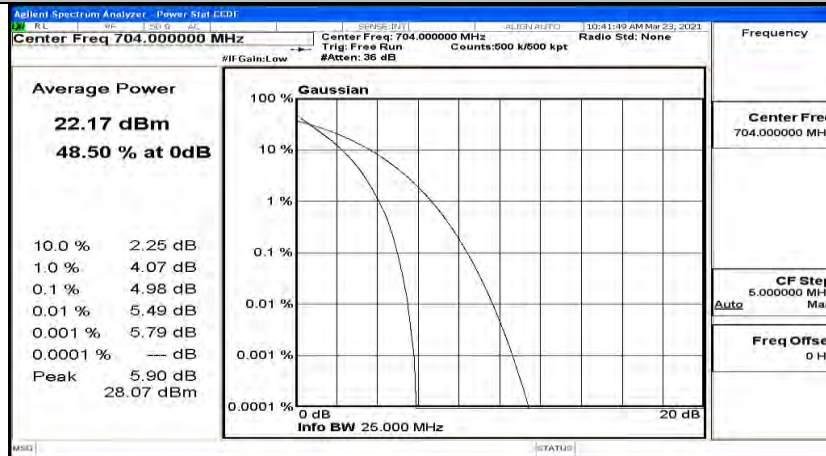
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



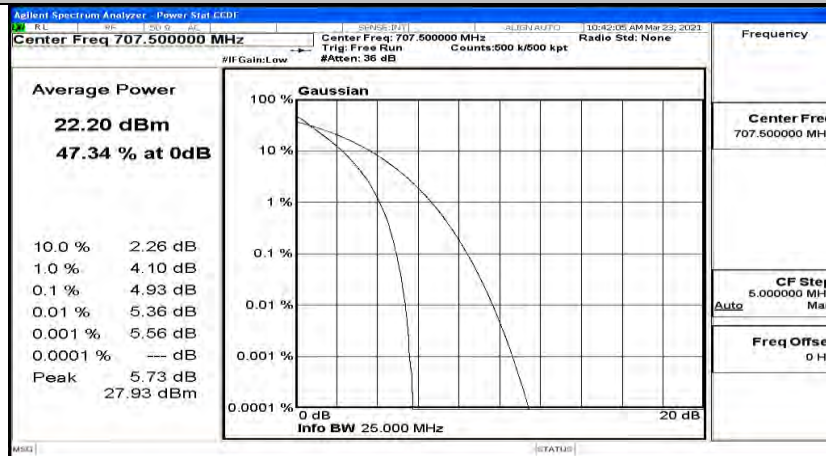
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



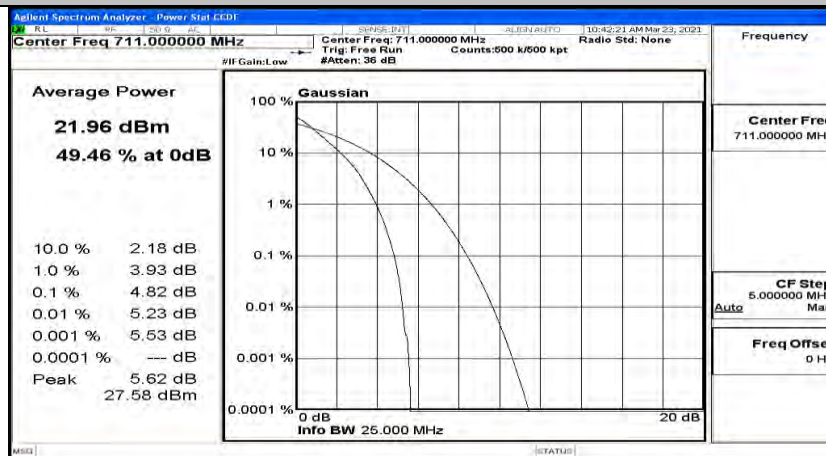
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _LCH_QPSK



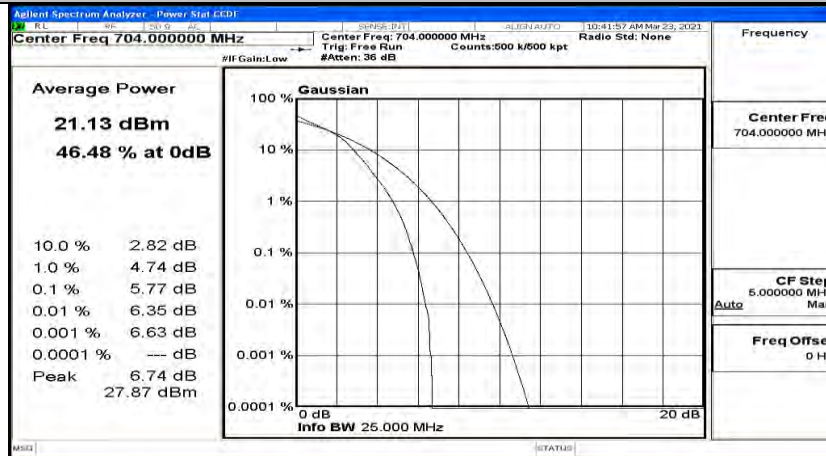
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _MCH_QPSK



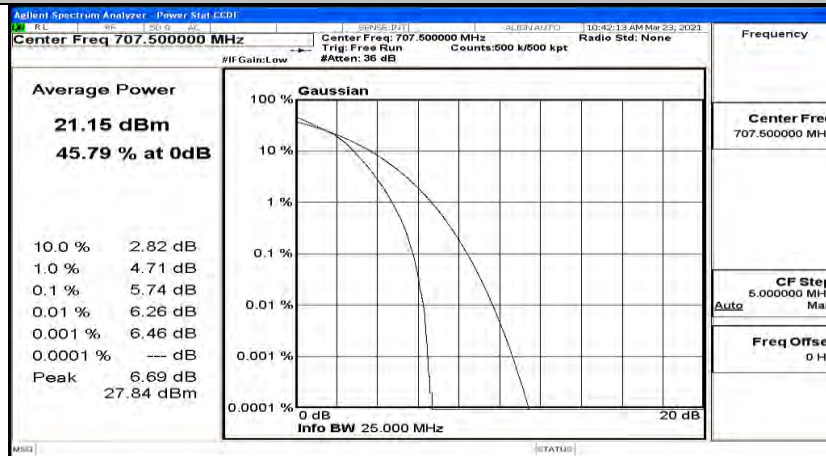
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _HCH_QPSK



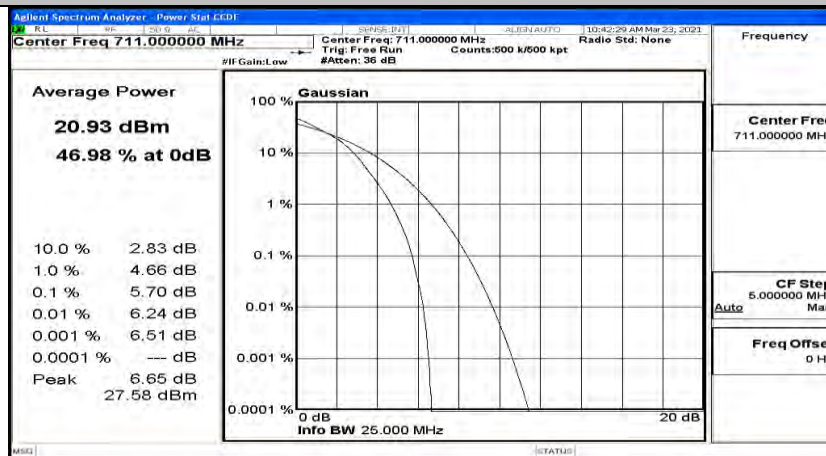
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



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	1.0772	1.240	PASS
	MCH	1.0742	1.203	PASS
	HCH	1.0797	1.244	PASS
16QAM	LCH	1.0765	1.206	PASS
	MCH	1.0766	1.249	PASS
	HCH	1.0798	1.231	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6723	2.821	PASS
	MCH	2.6824	2.832	PASS
	HCH	2.6821	2.838	PASS
16QAM	LCH	2.6801	2.827	PASS
	MCH	2.6776	2.839	PASS
	HCH	2.6763	2.834	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4748	4.851	PASS
	MCH	4.4755	4.849	PASS
	HCH	4.4689	4.876	PASS
16QAM	LCH	4.4725	4.889	PASS
	MCH	4.4851	4.916	PASS
	HCH	4.4812	4.869	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9477	9.578	PASS
	MCH	8.9553	9.475	PASS
	HCH	8.9253	9.383	PASS
16QAM	LCH	8.9449	9.550	PASS
	MCH	8.9540	9.550	PASS
	HCH	8.9142	9.451	PASS

Agilent Spectrum Analyzer - Occupied BW

Center Freq 699.700000 MHz

Ref Offset 5 dB
Ref 29.00 dBm

10 dB/div
Log

Center 699.7 MHz
#Res BW 15 kHz

#VBW 43 kHz

Span 2.8 MHz
#Sweep 100 ms

Occupied Bandwidth 1.0765 MHz

Transmit Freq Error -1.763 kHz

x dB Bandwidth 1.206 MHz

Total Power 24.5 dBm

OBW Power 99.00 %

x dB -26.00 dB

Frequency 699.700000 MHz

CF Stop 280.000 kHz

Freq Offset 0 Hz

MSO STATUS

Agilent Spectrum Analyzer - Occupied BW

Center Freq 707.500000 MHz

Span 100.000000 MHz

Res BW 15 kHz

Occupied BW 1.0766 MHz

Transmit Freq Error -2.211 kHz

x dB Bandwidth 1.249 MHz

Total Power 24.5 dBm

OBW Power x dB

99.00 %

-26.00 dB

Agilent Spectrum Analyzer, Occupied BW

Center Freq 715.300000 MHz

Ref Offset 8 dB
Ref 28.00 dBm

10 dB/div
Log

Center 715.3 MHz
#Res BW 15 kHz

#VBW 43 kHz

Span 2.8 MHz
#Sweep 100 ms

Occupied Bandwidth	Total Power
1.0798 MHz	25.2 dBm

Transmit Freq Error	OBW Power
-2.499 kHz	99.00 %

x dB Bandwidth	x dB
1.231 MHz	-26.00 dB

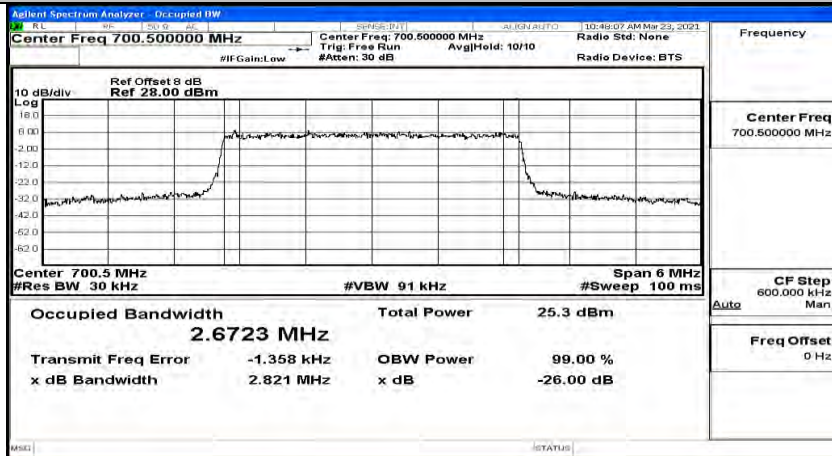
Frequency

Center Freq 715.300000 MHz

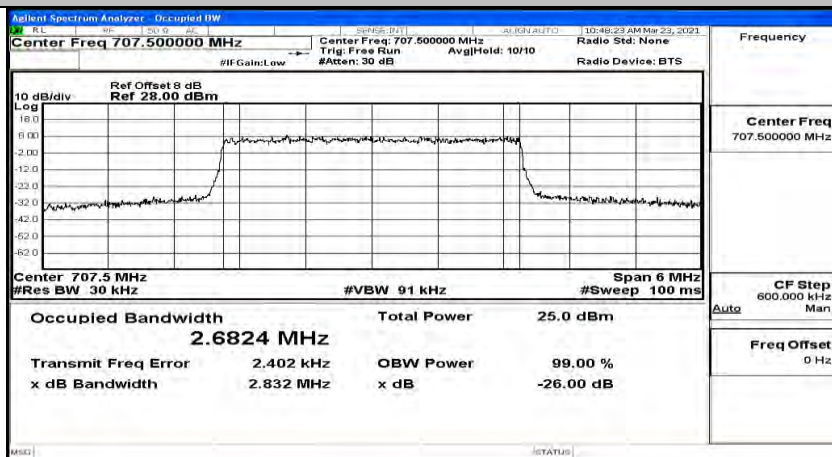
CF Stop 280.000 kHz

Freq Offset 0 Hz

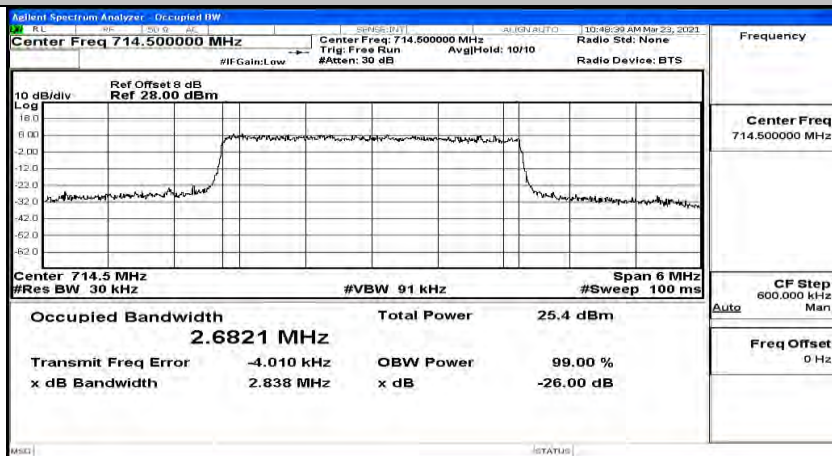
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



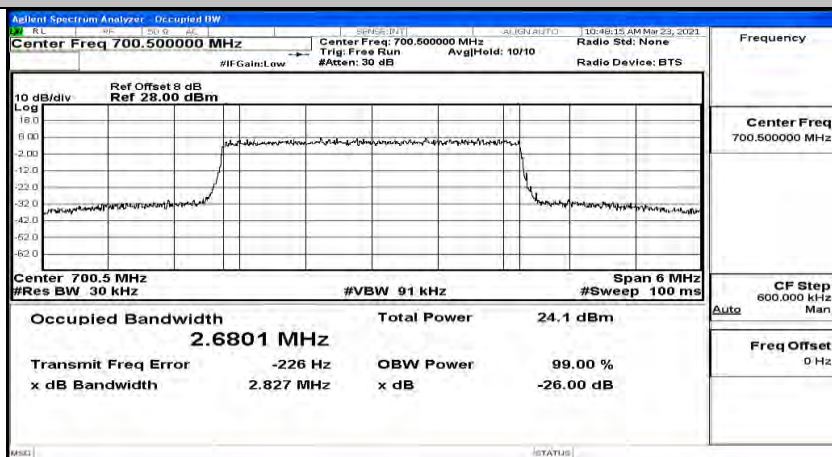
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



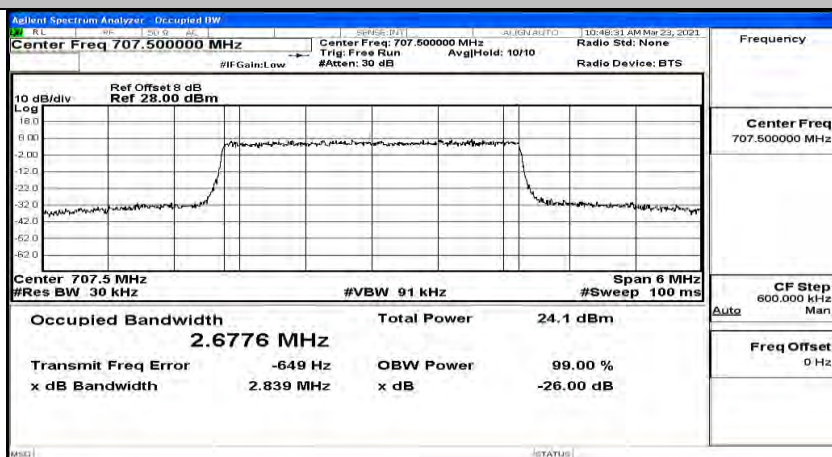
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



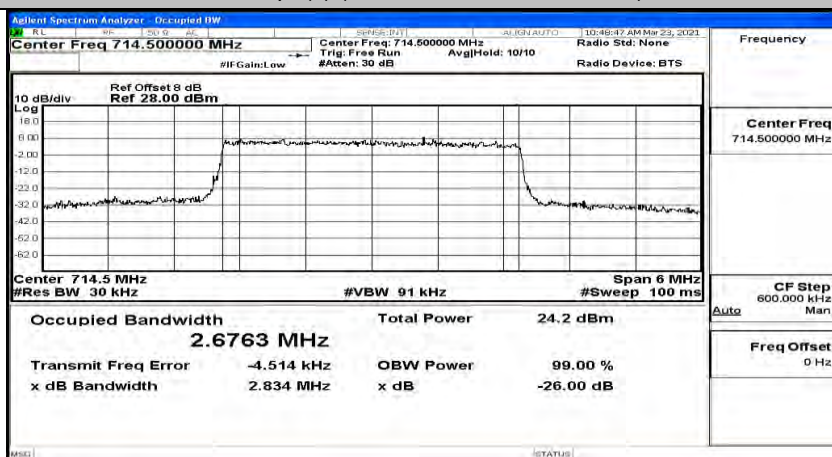
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



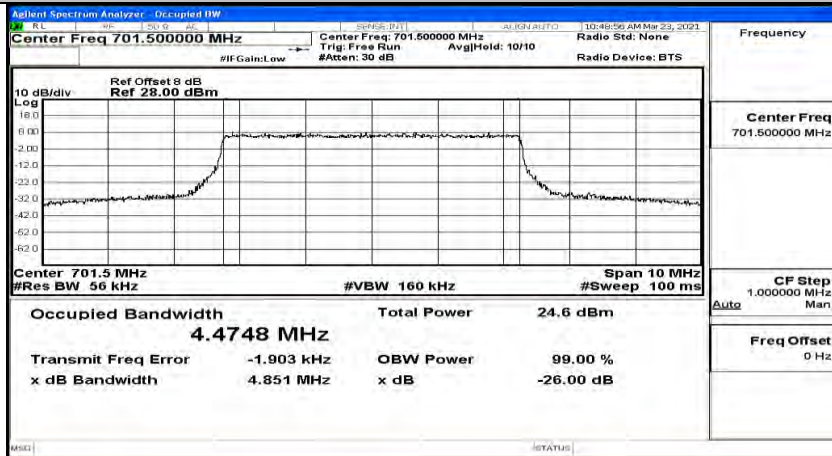
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



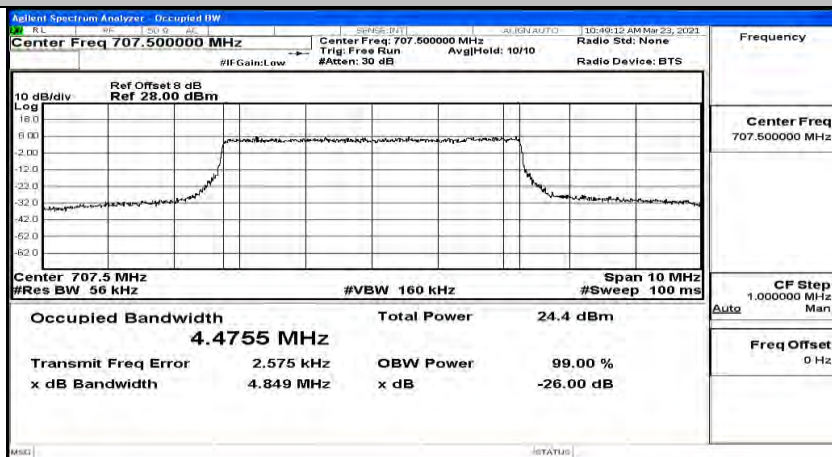
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



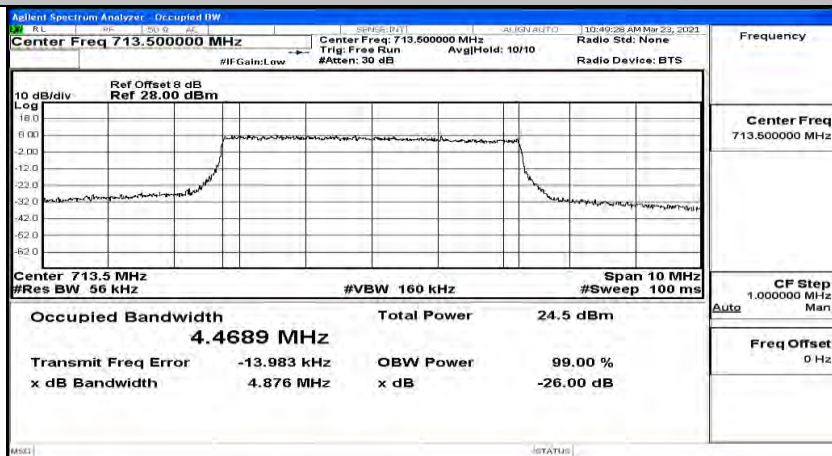
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



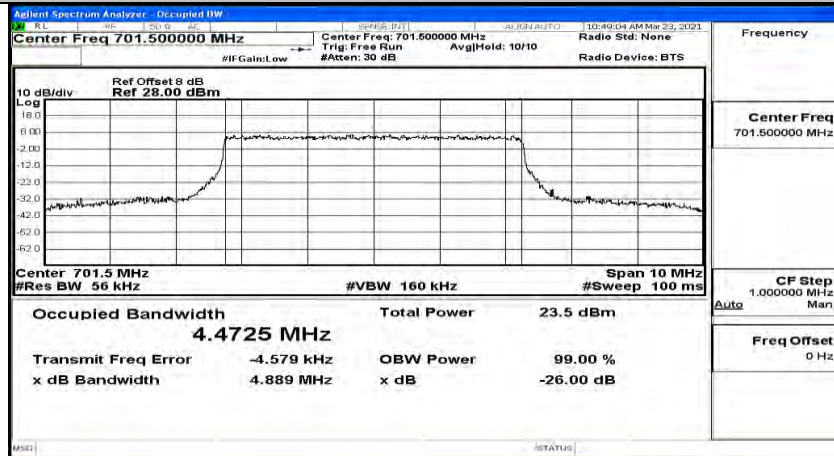
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



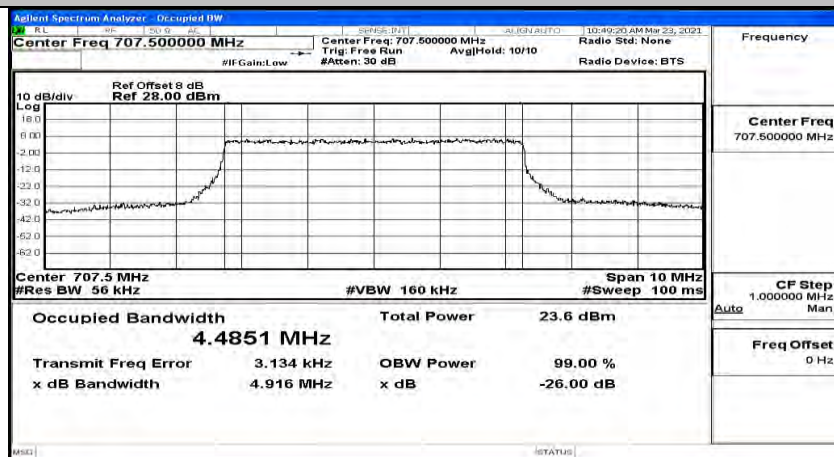
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



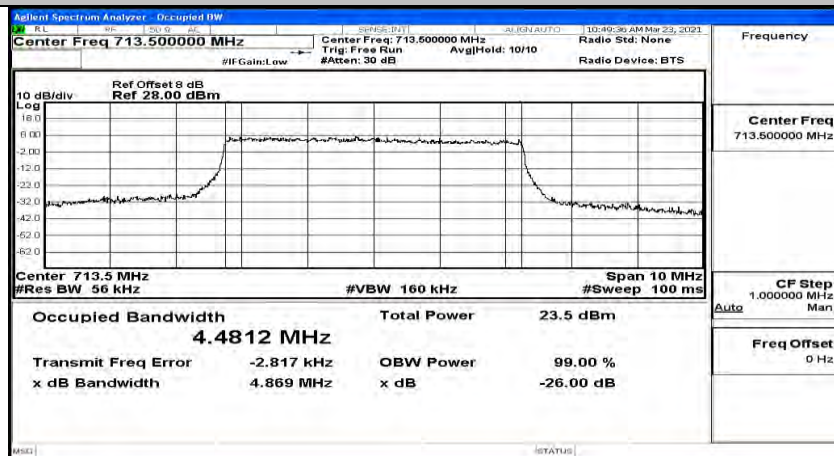
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



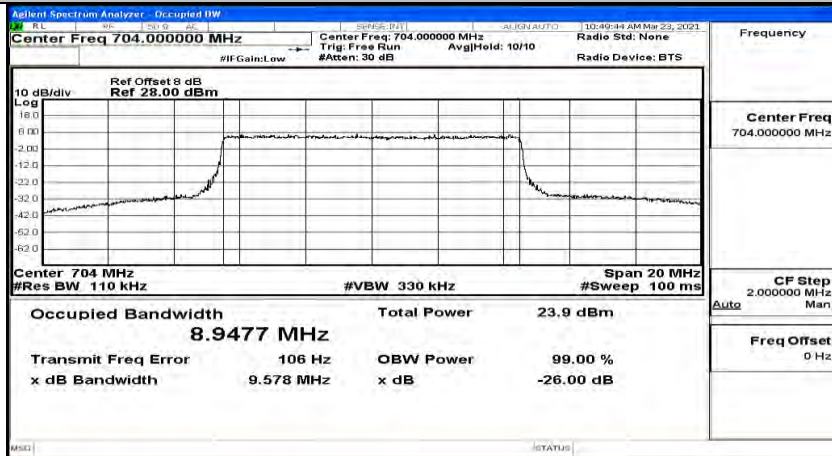
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



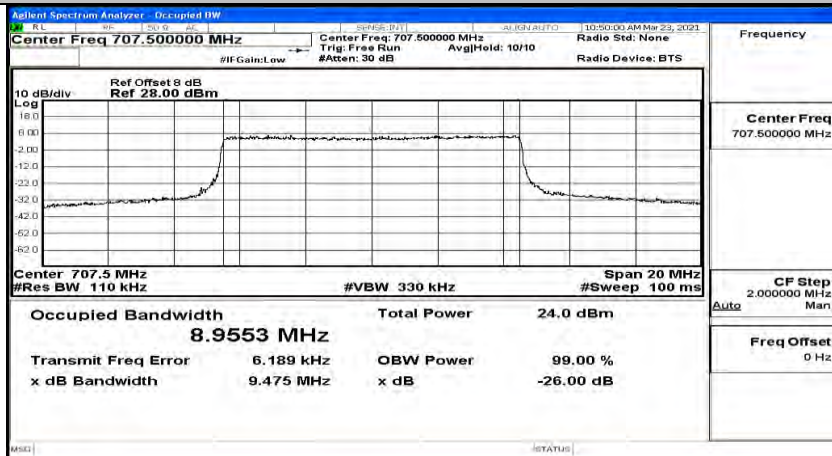
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



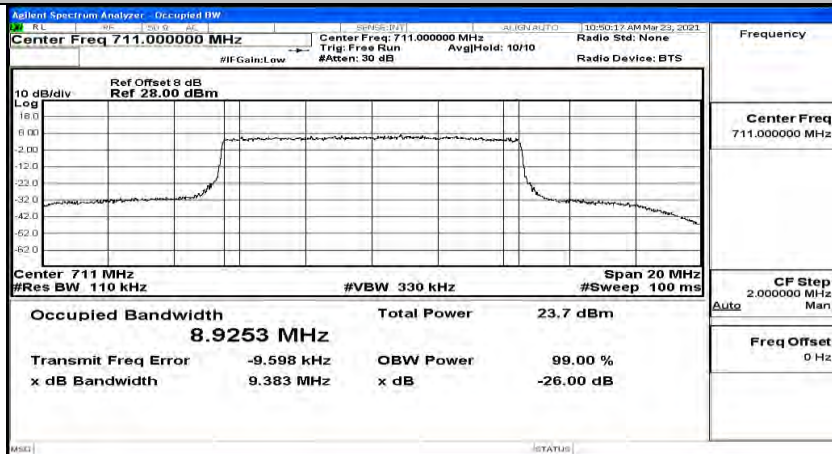
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



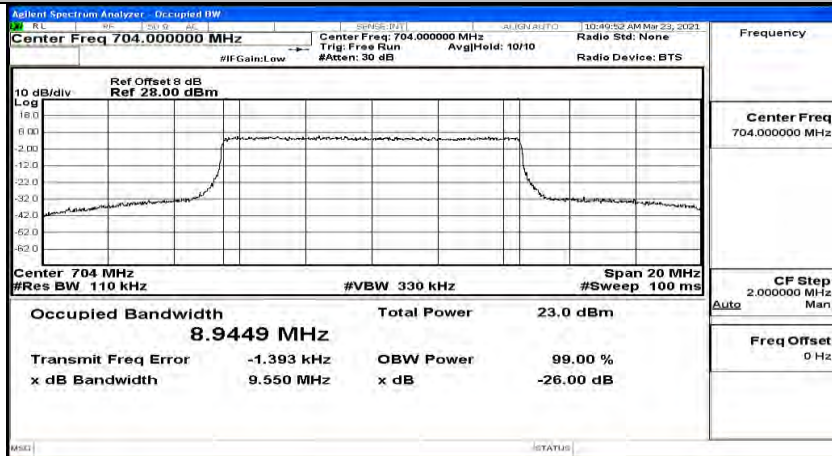
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



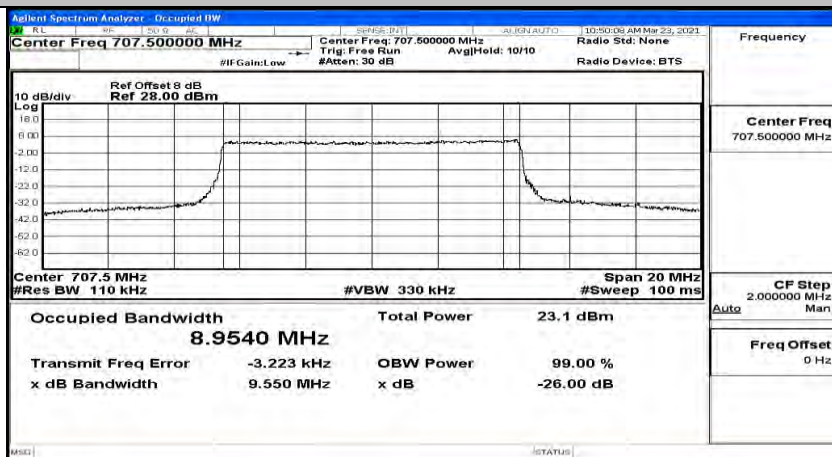
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



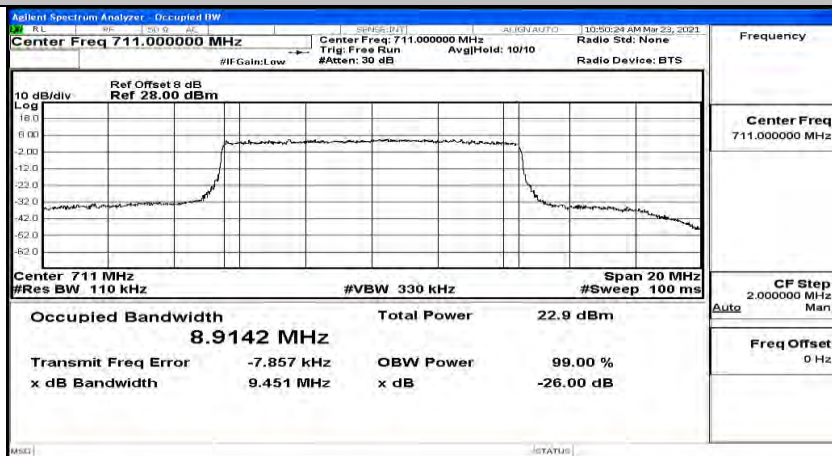
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

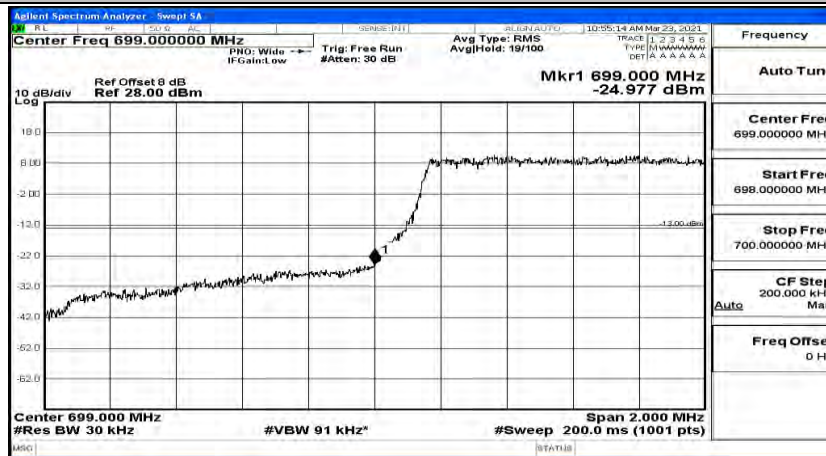


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

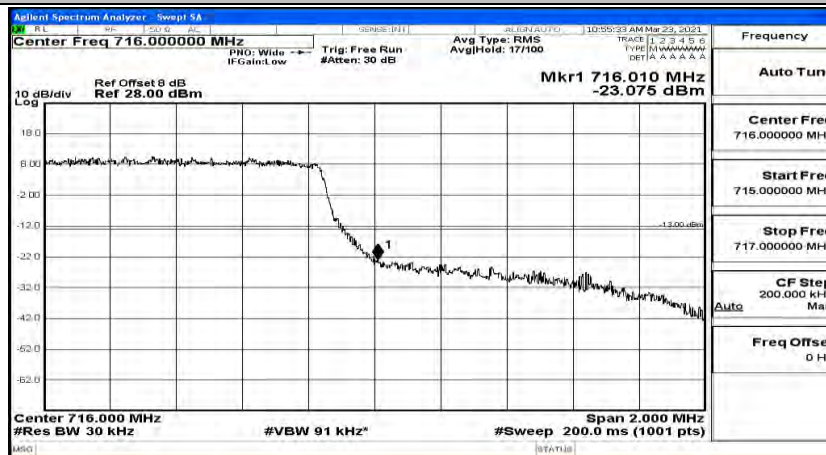


H.4 Band Edge

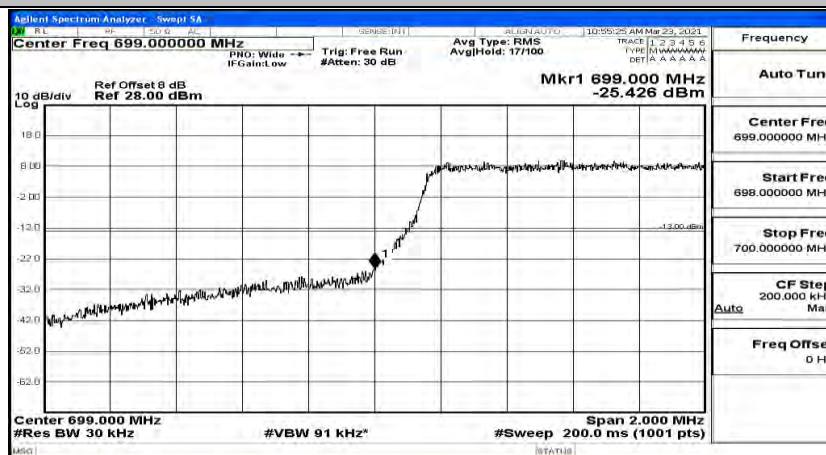
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



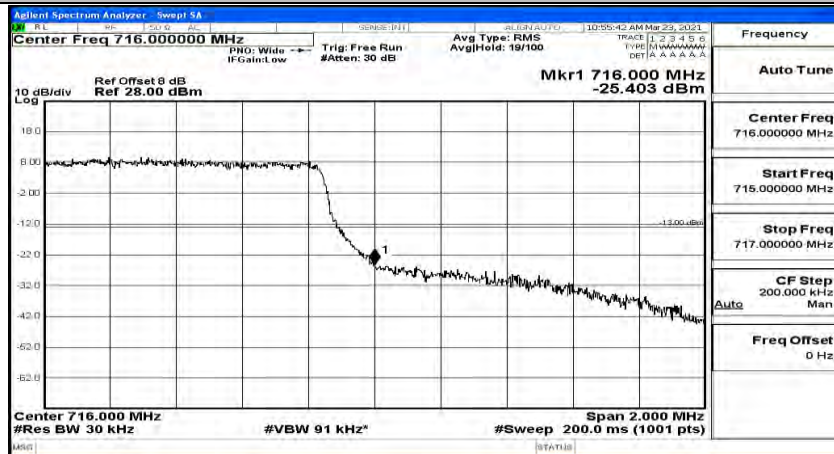
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



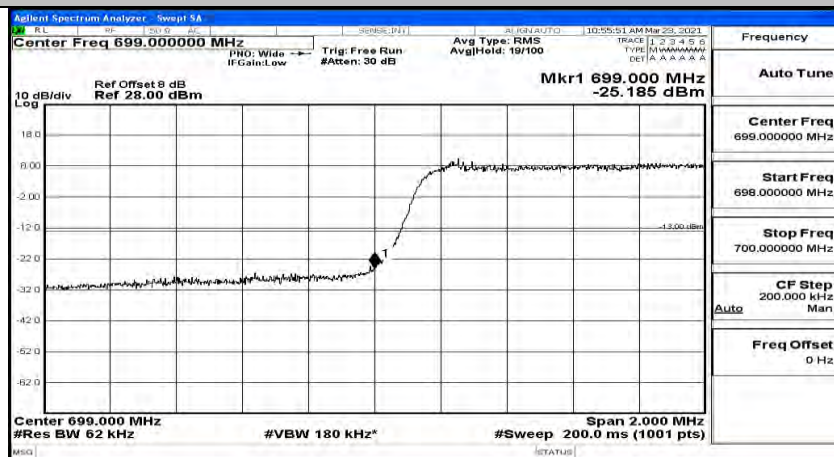
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



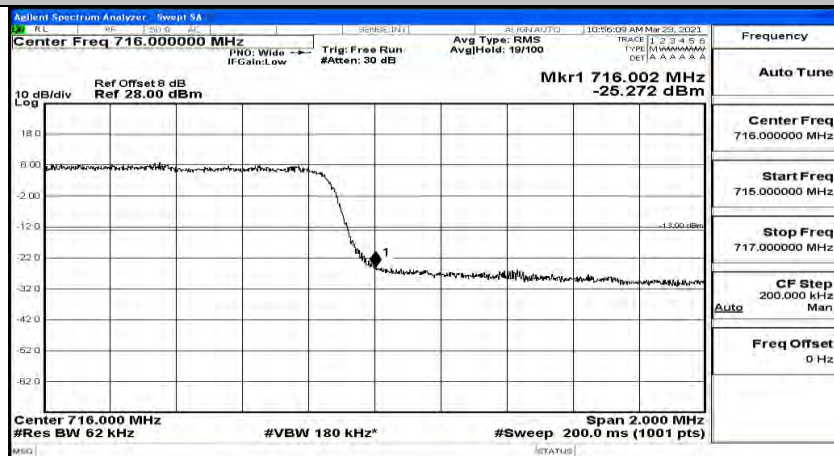
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



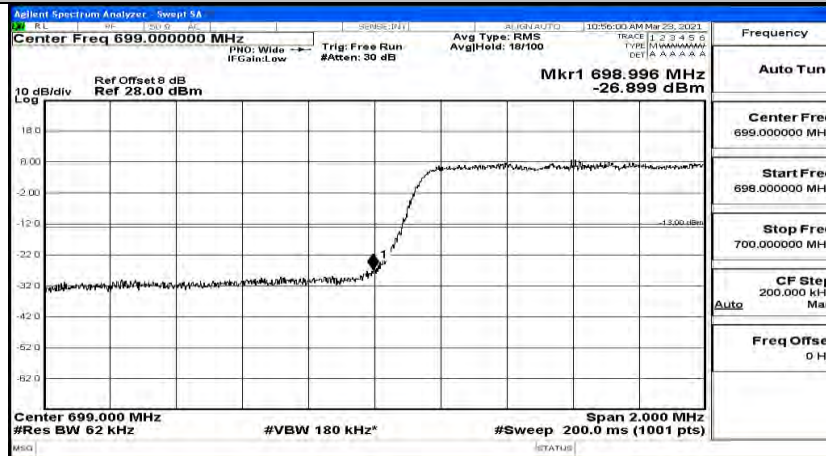
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



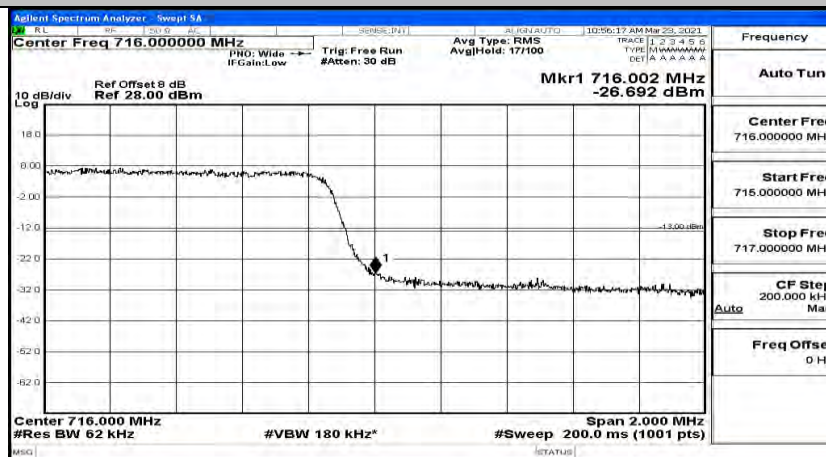
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



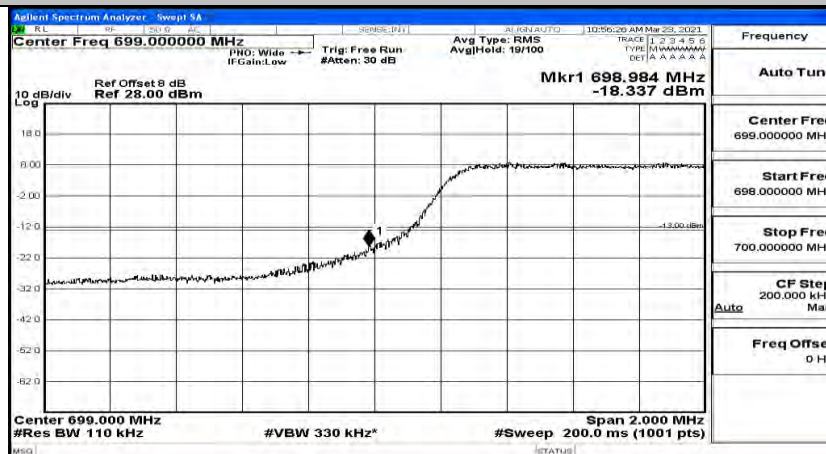
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



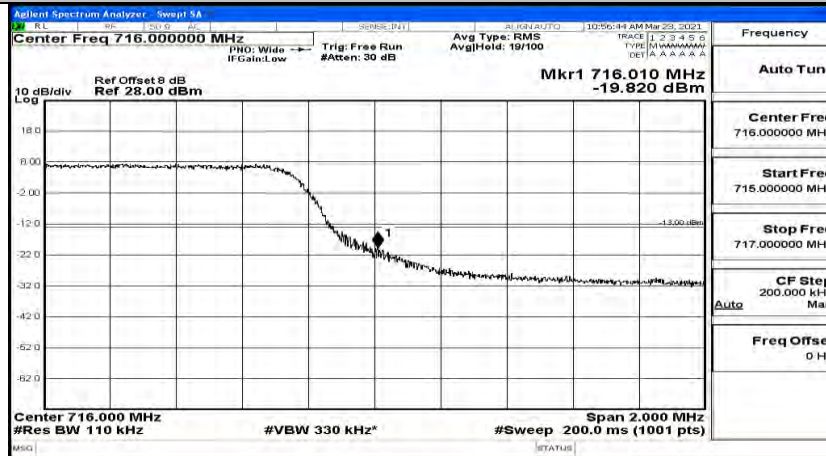
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



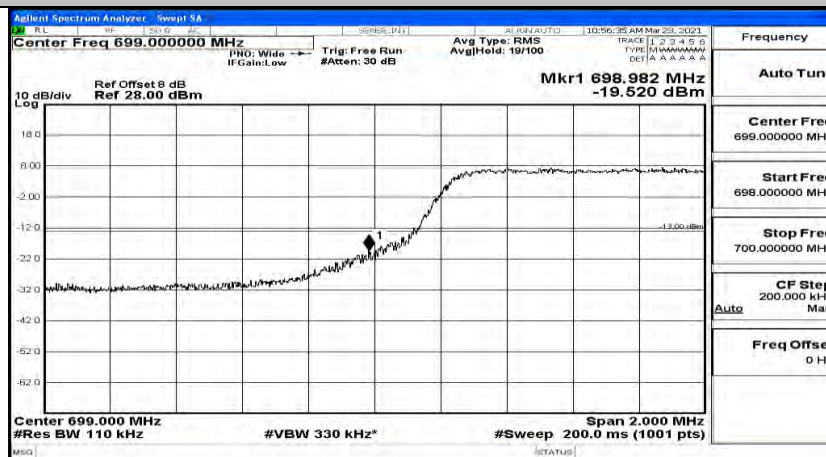
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



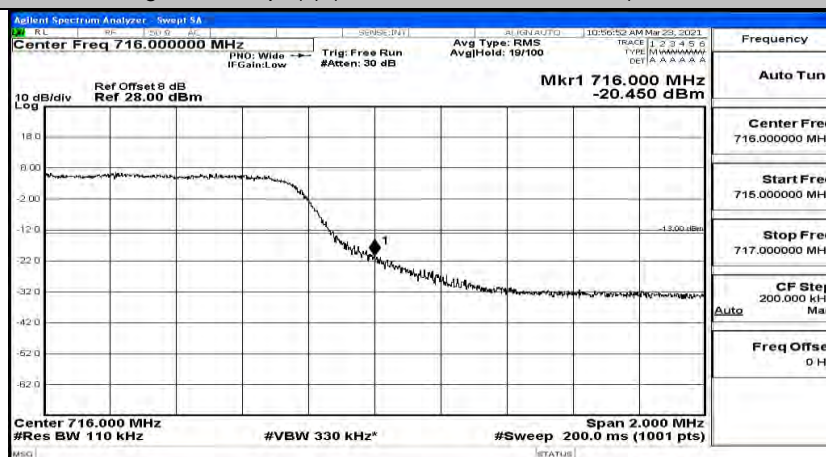
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



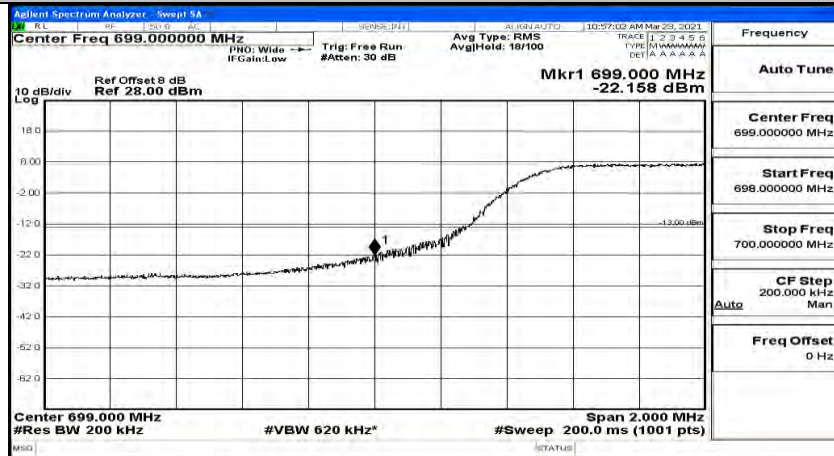
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



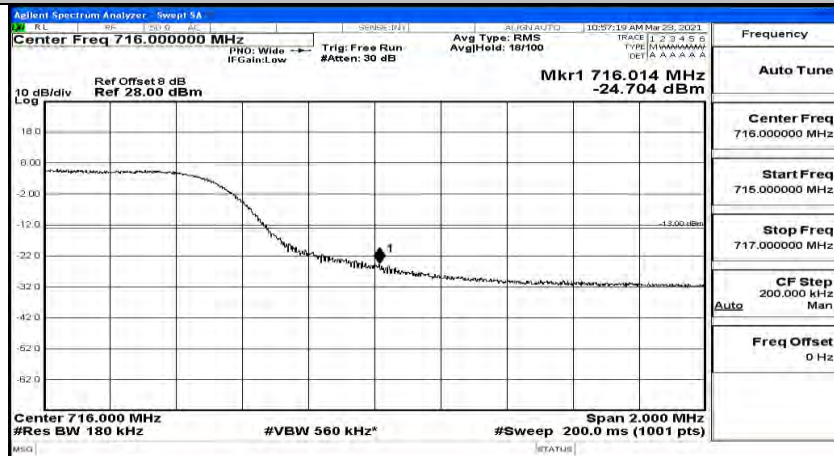
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



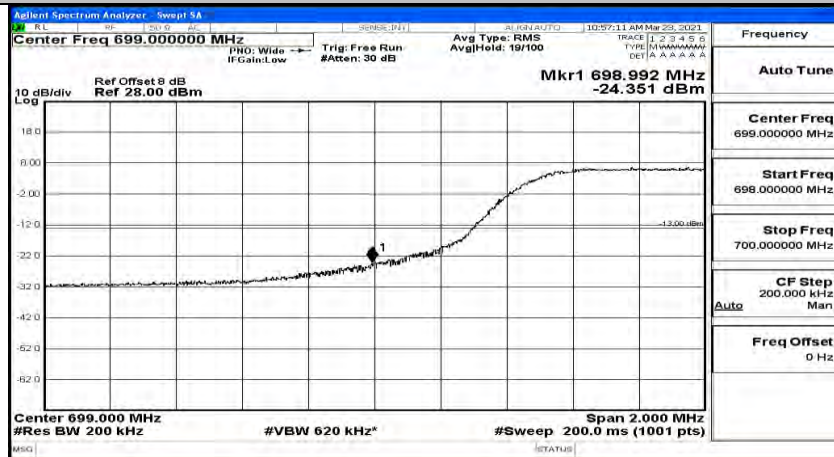
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



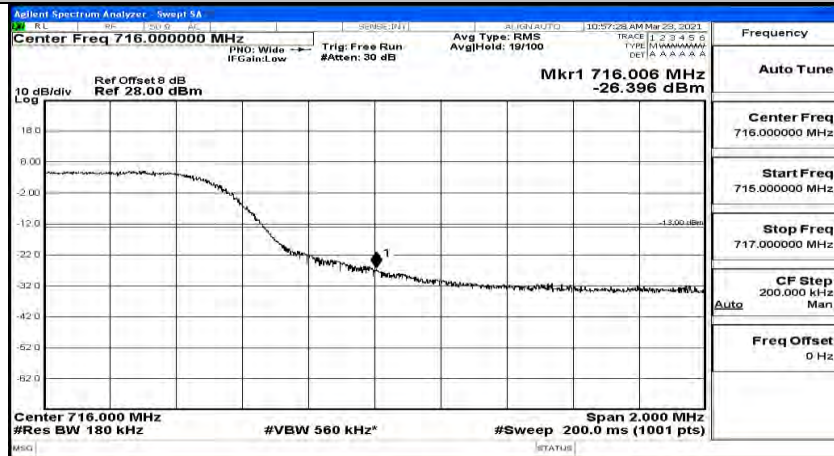
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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

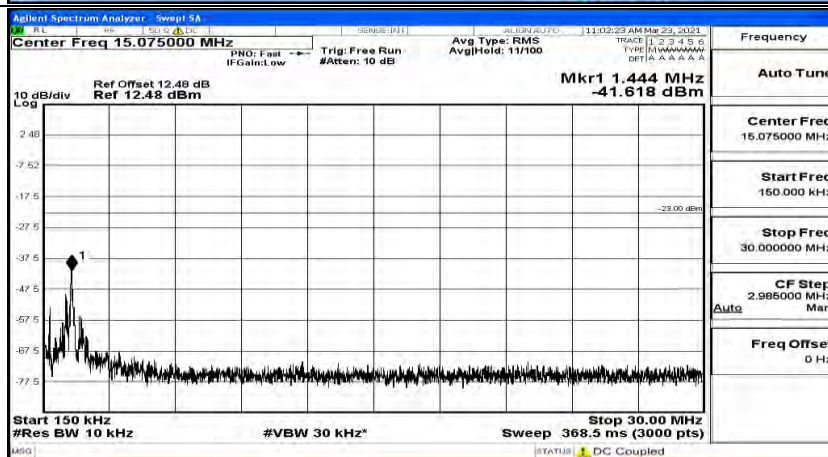
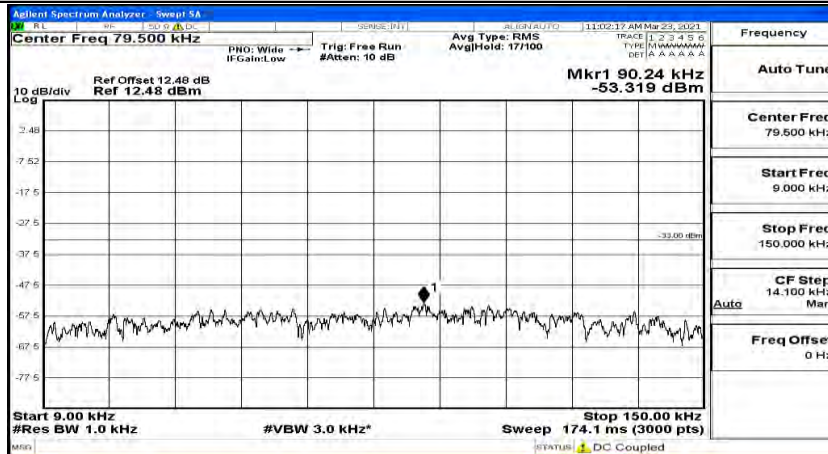


H.5 Conducted Spurious Emission

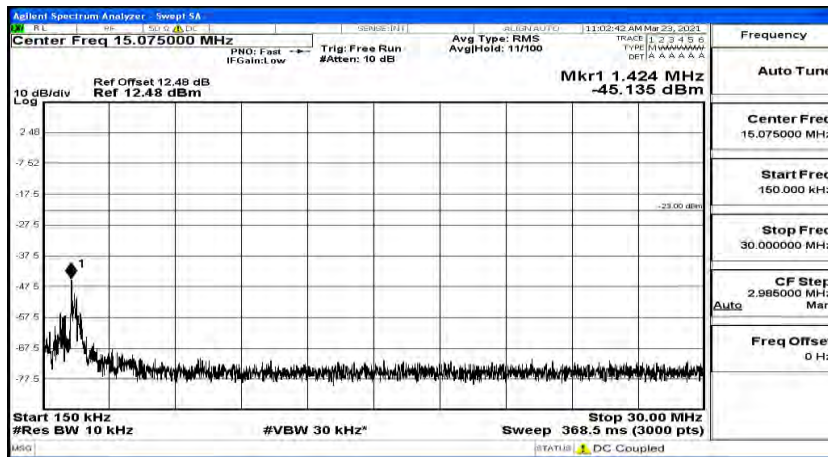
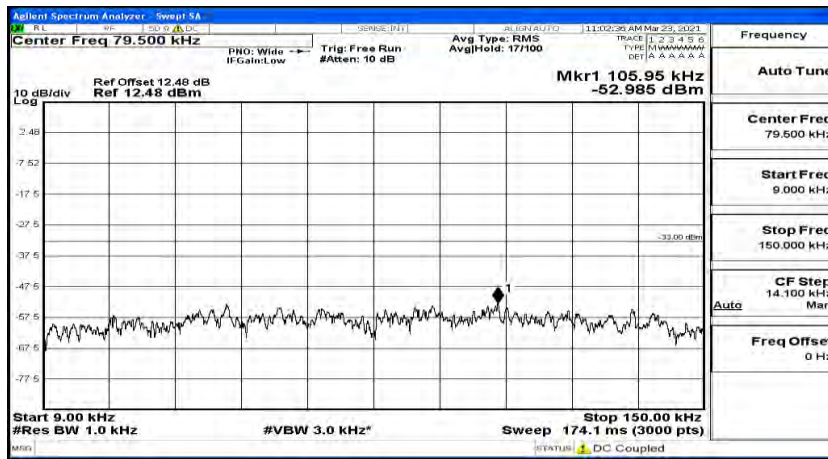
Test Graphs

Channel Bandwidth: 1.4 MHz

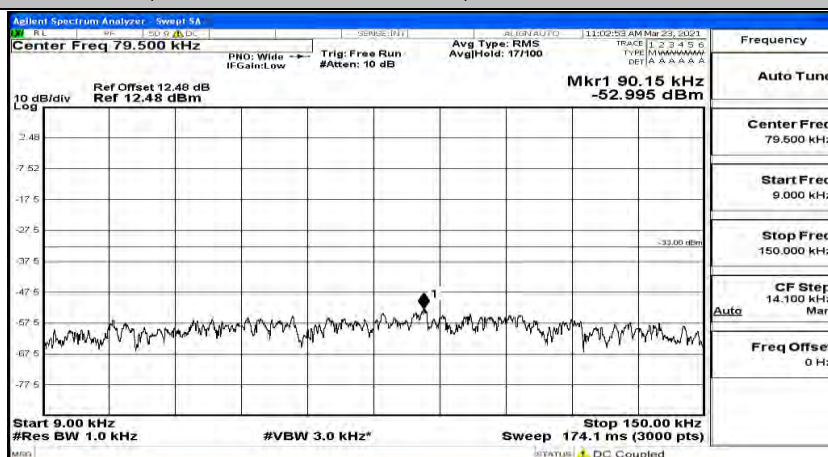
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

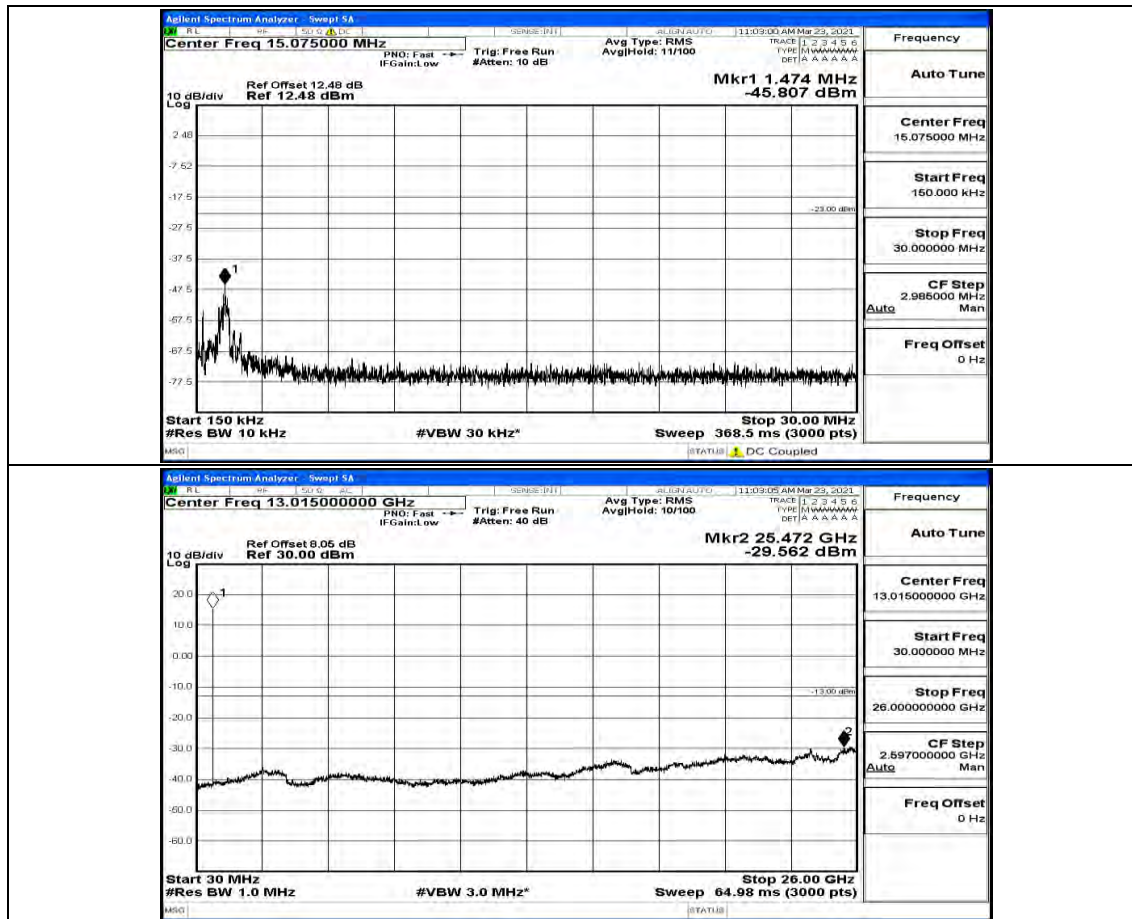


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

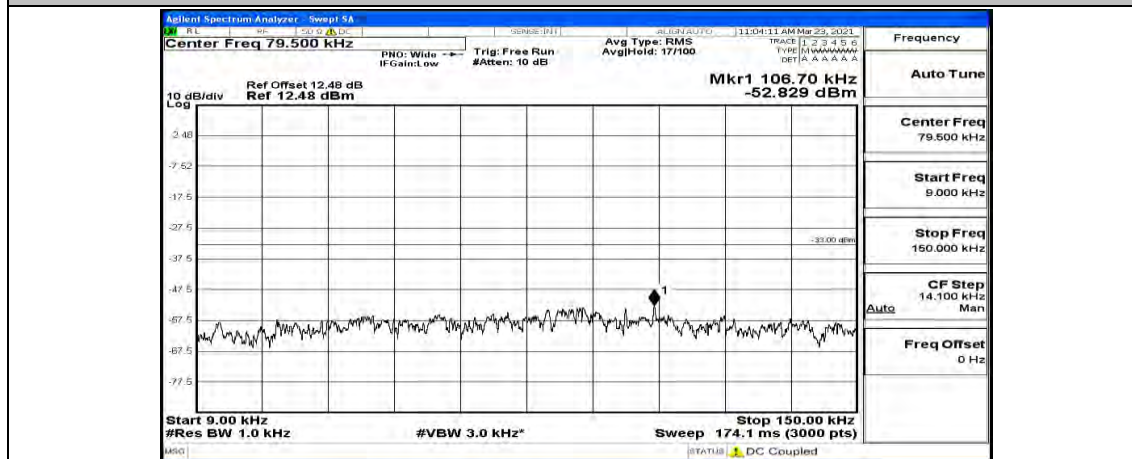


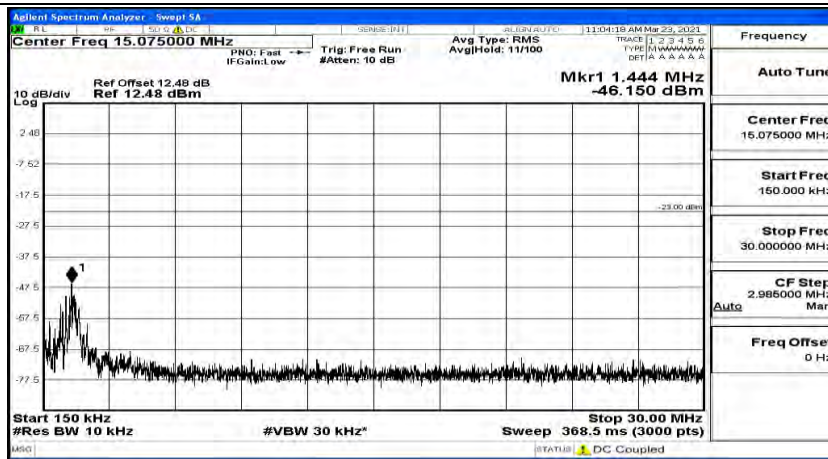
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



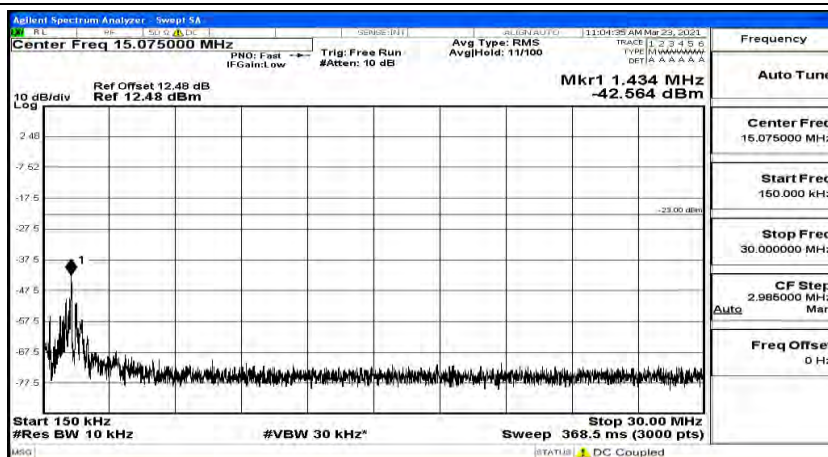
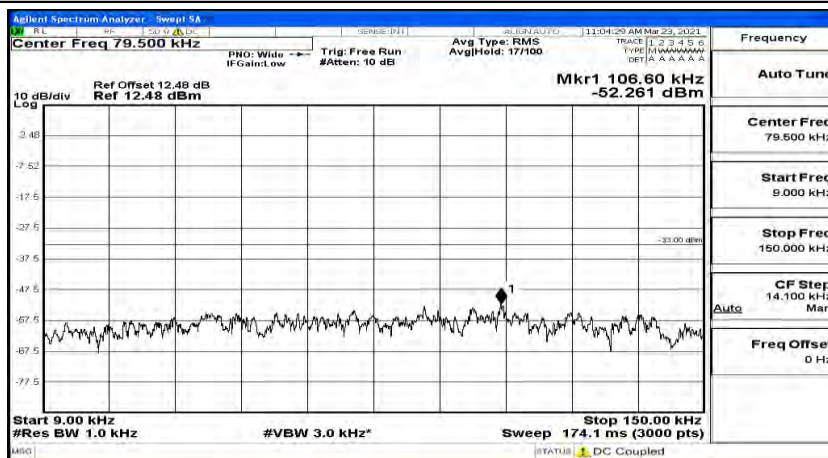


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



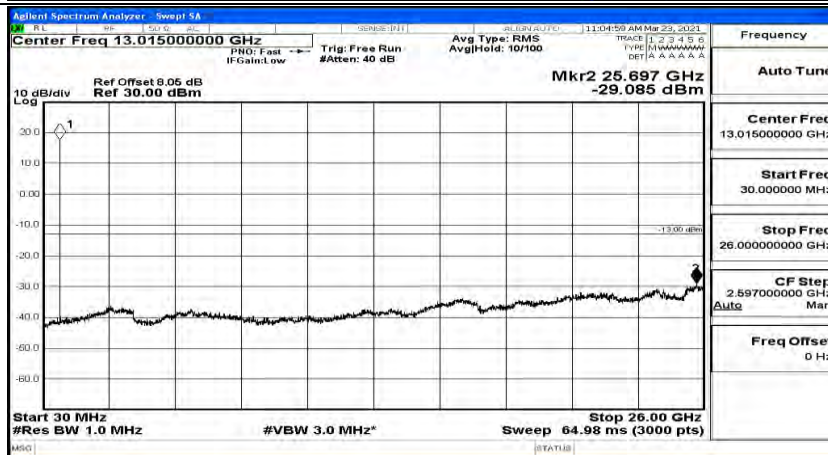
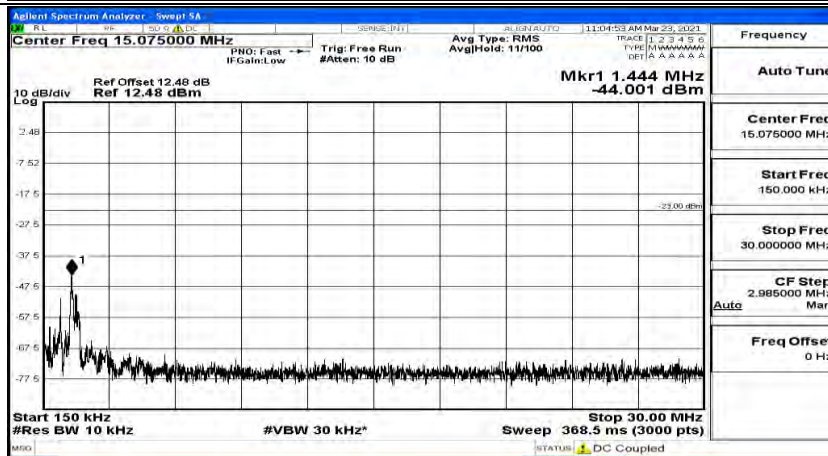
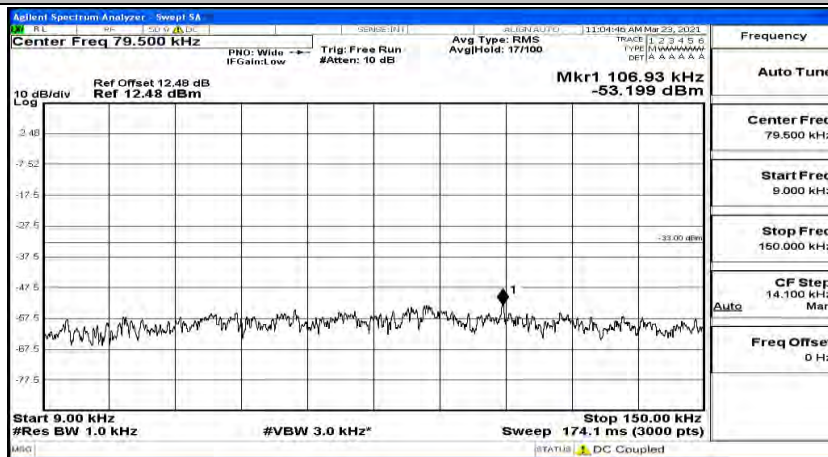


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

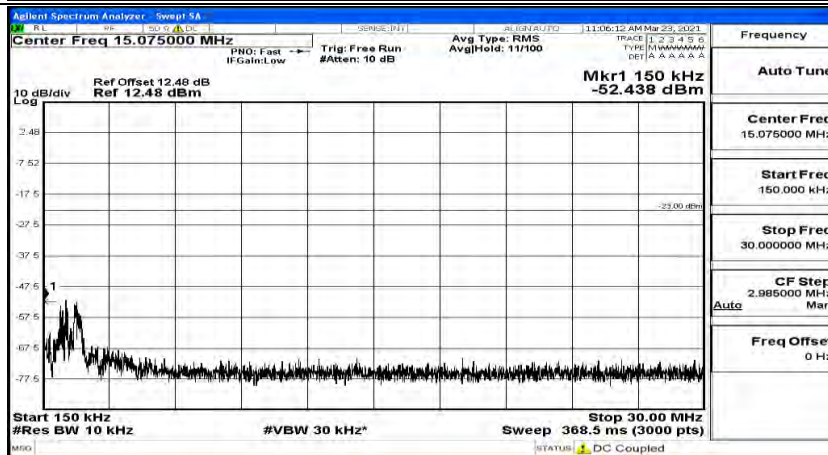
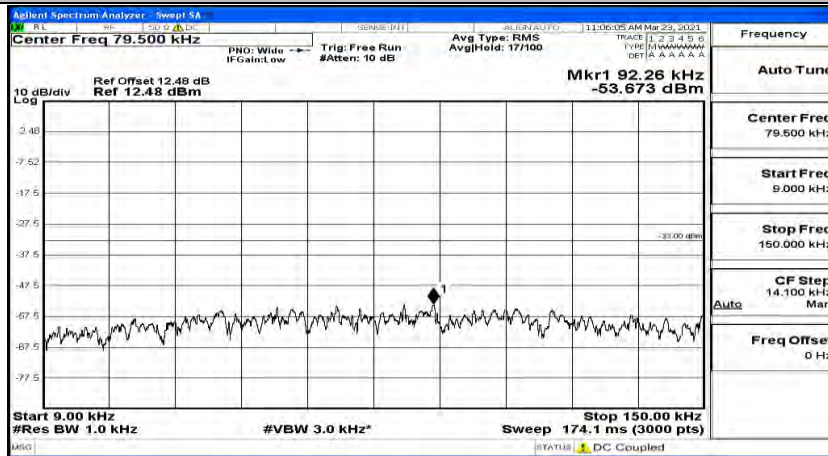




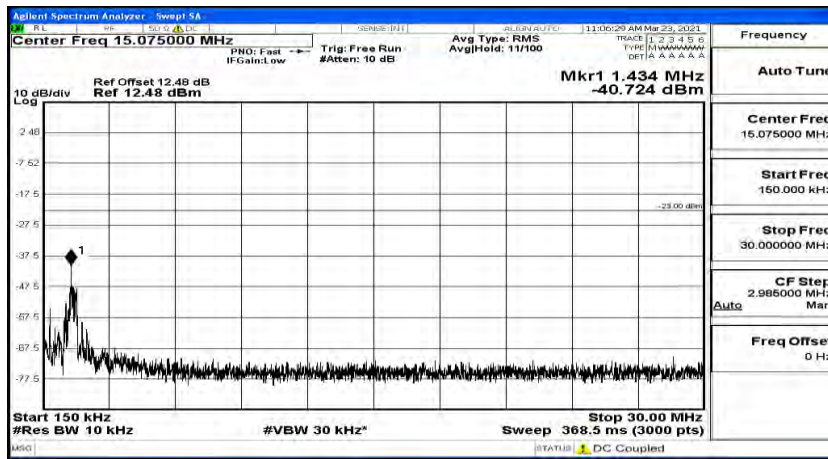
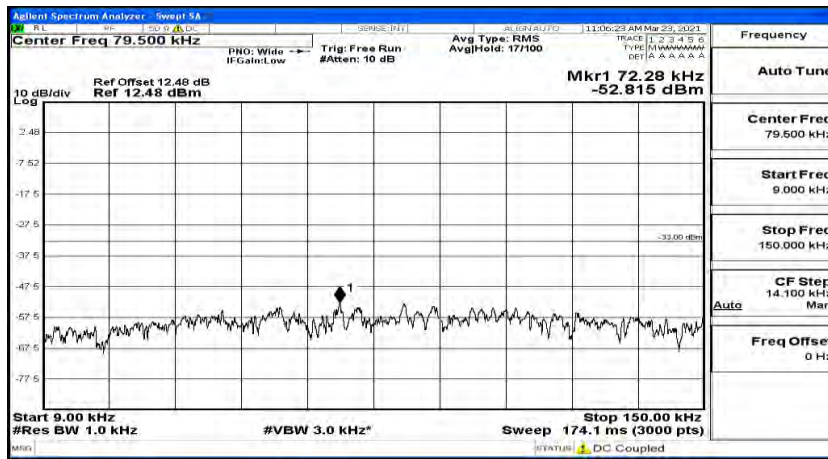
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



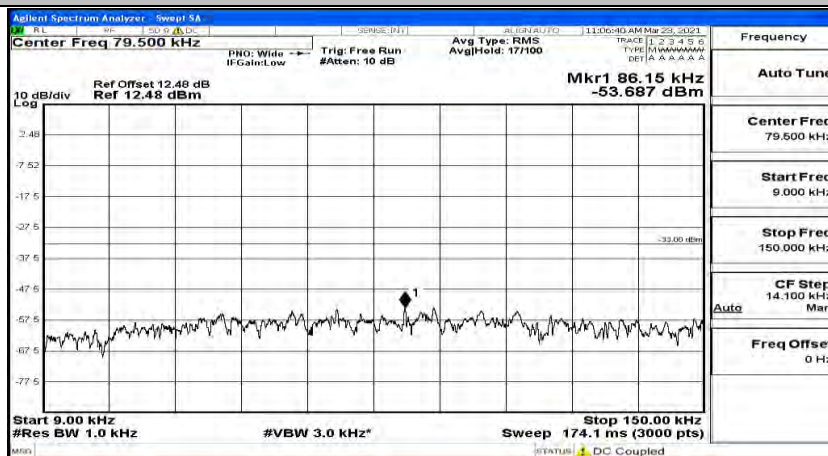
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

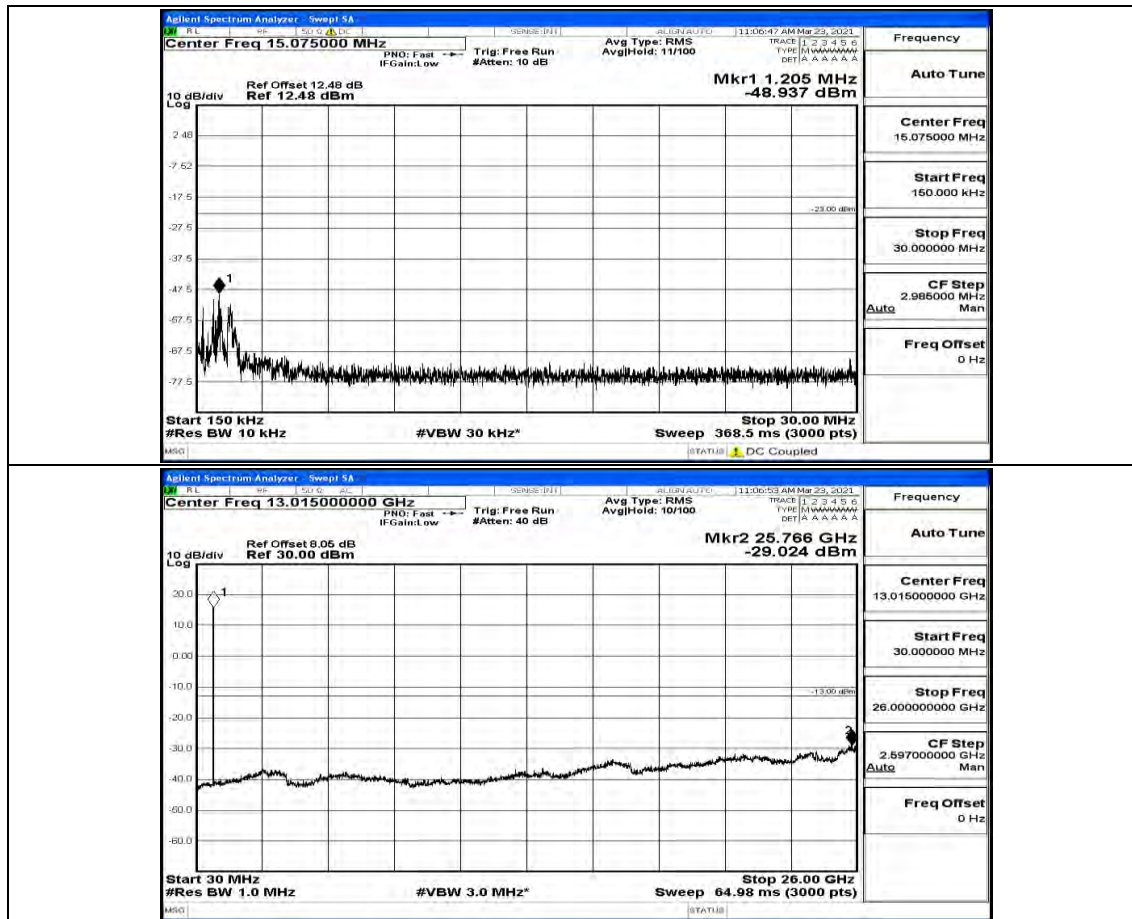


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

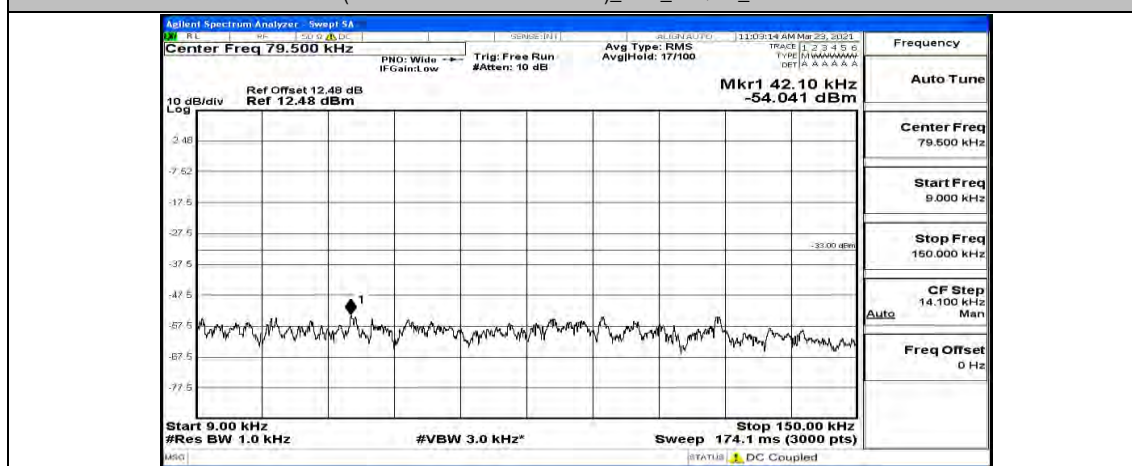


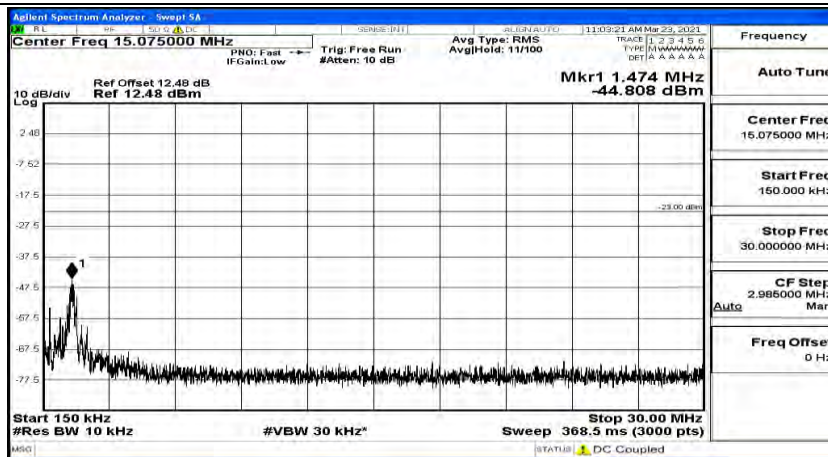
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



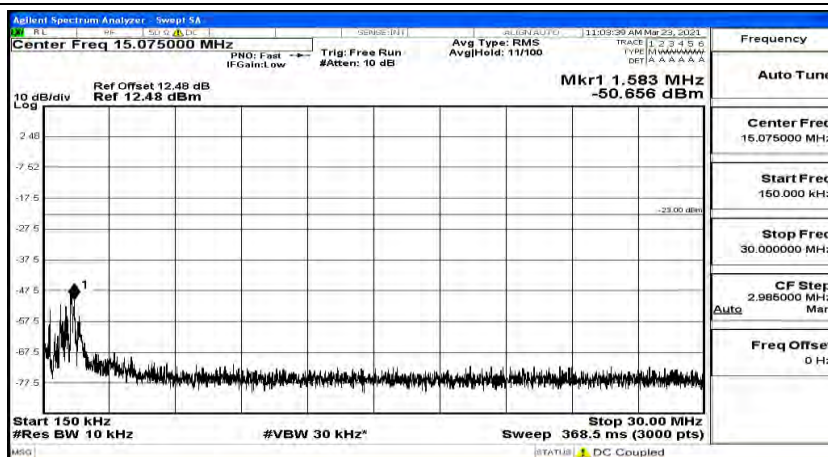
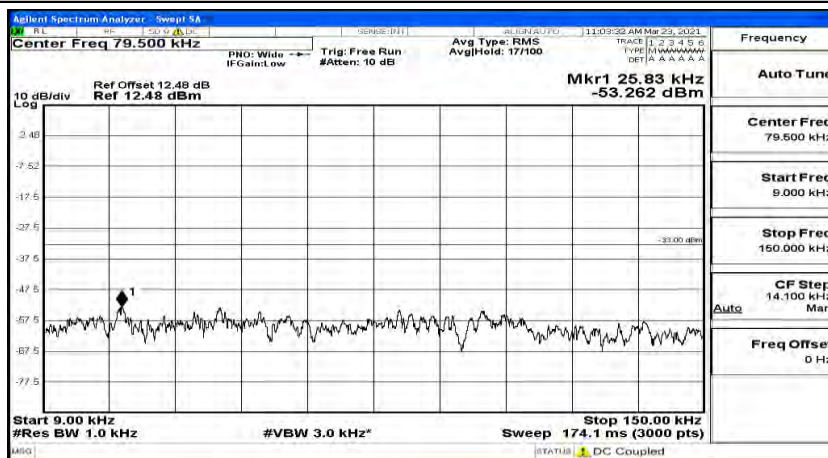


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



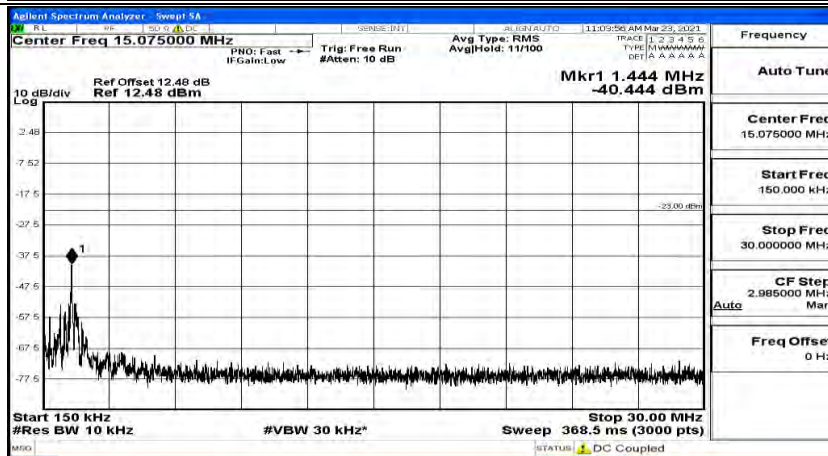
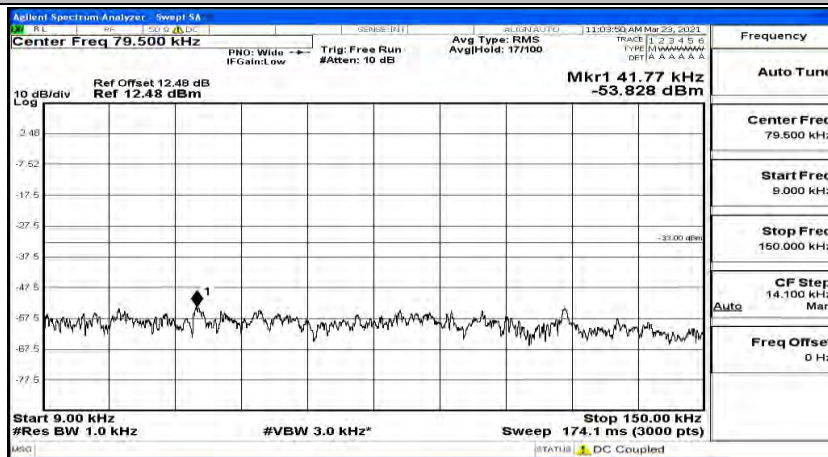


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

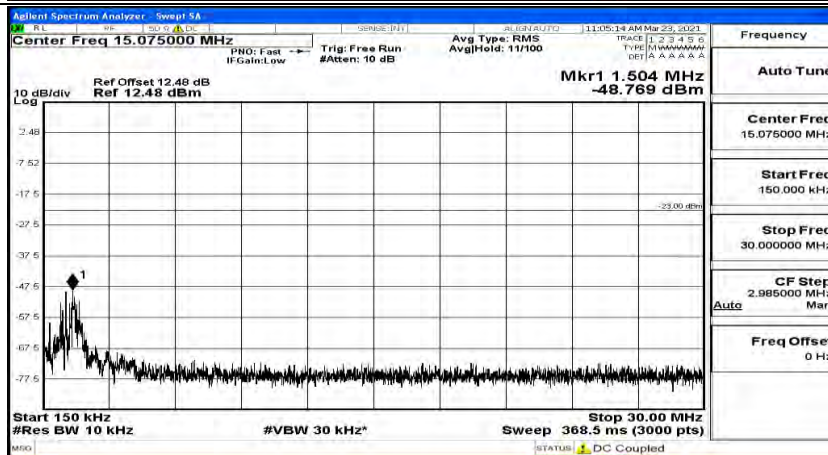
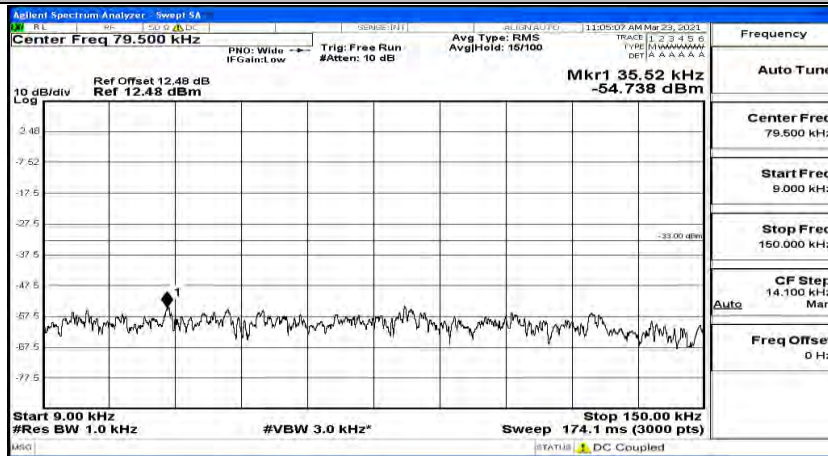




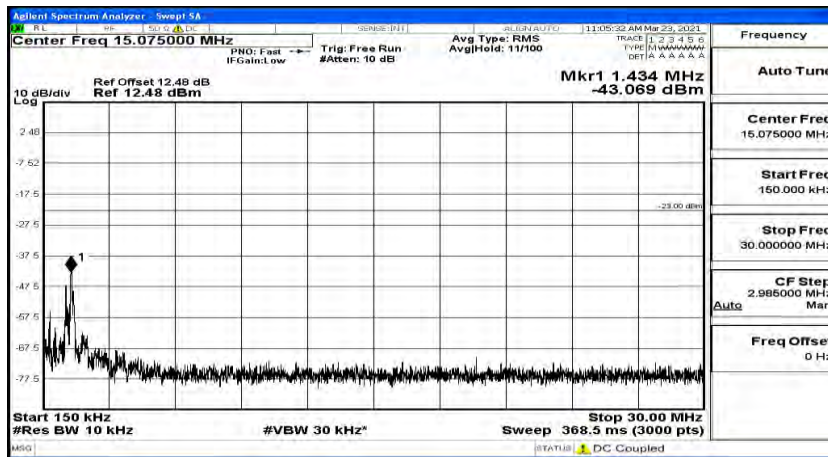
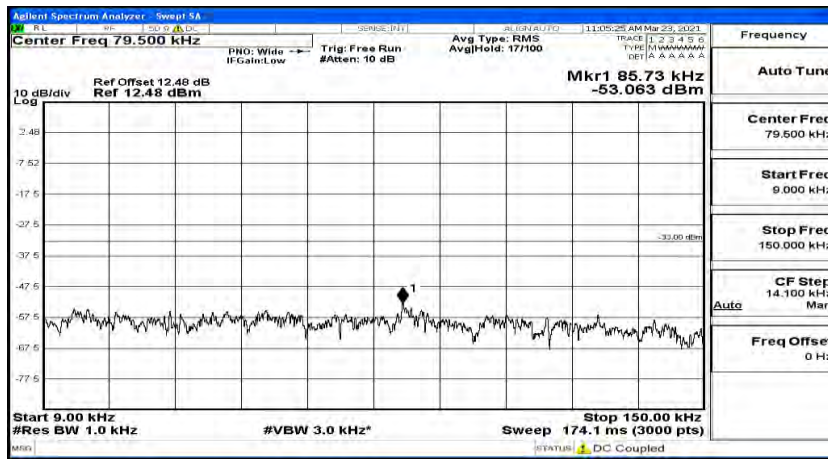
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



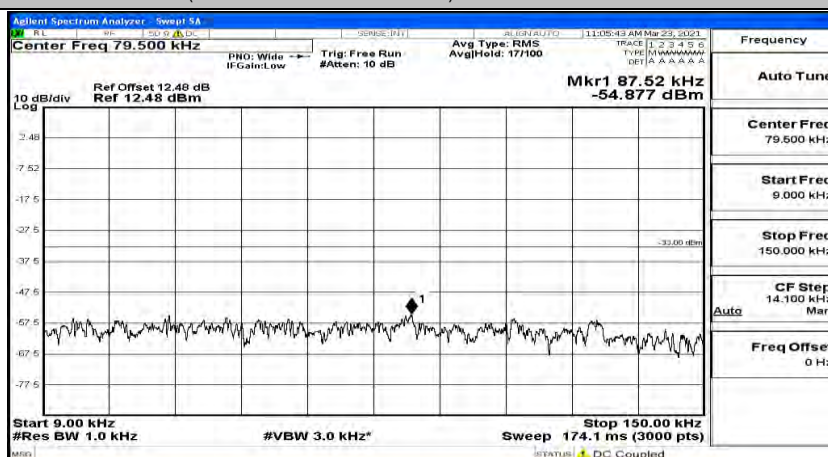
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

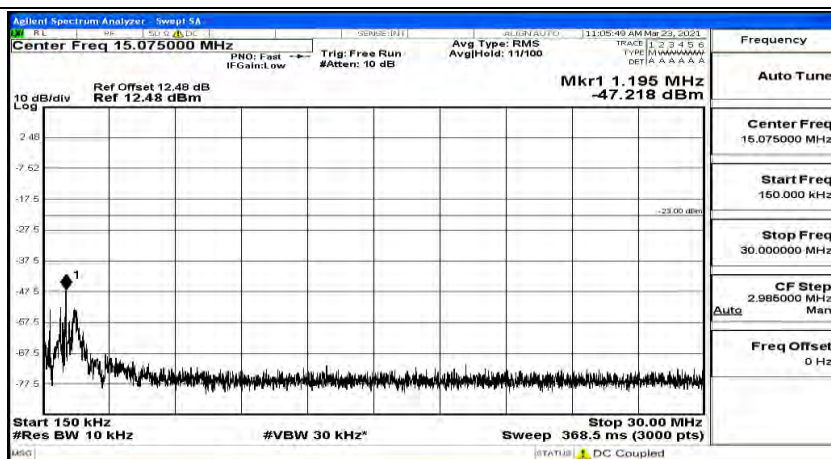


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

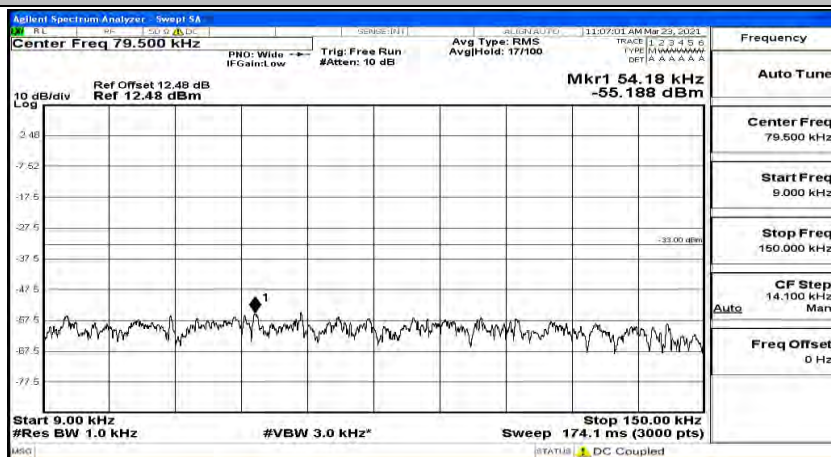


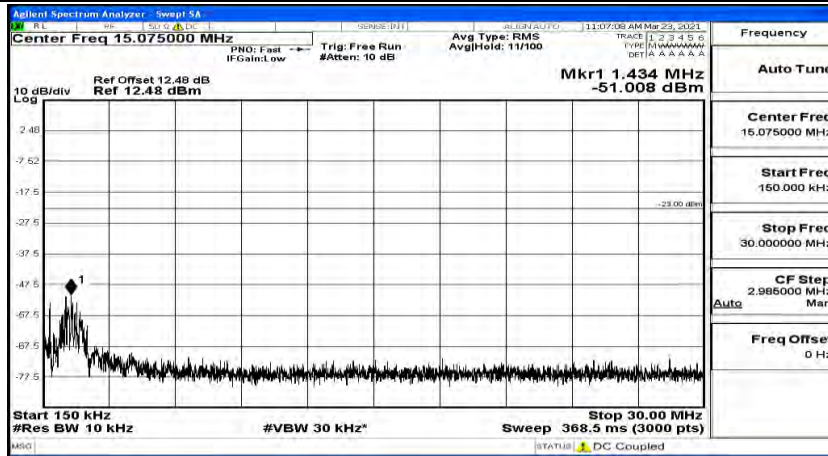
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



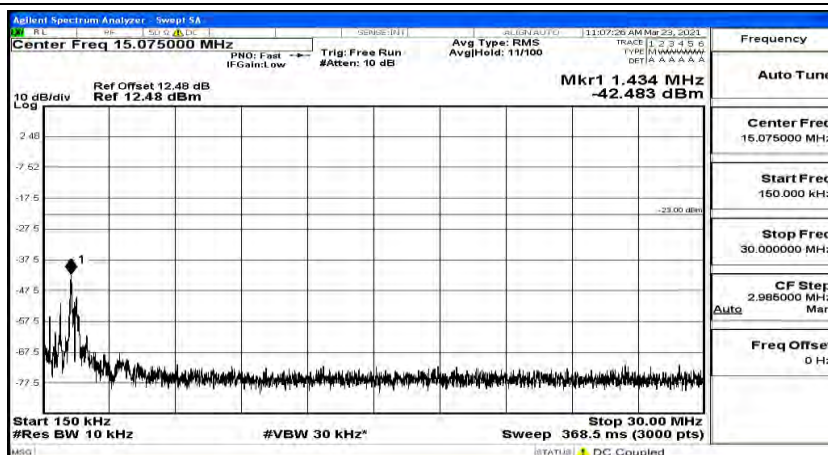
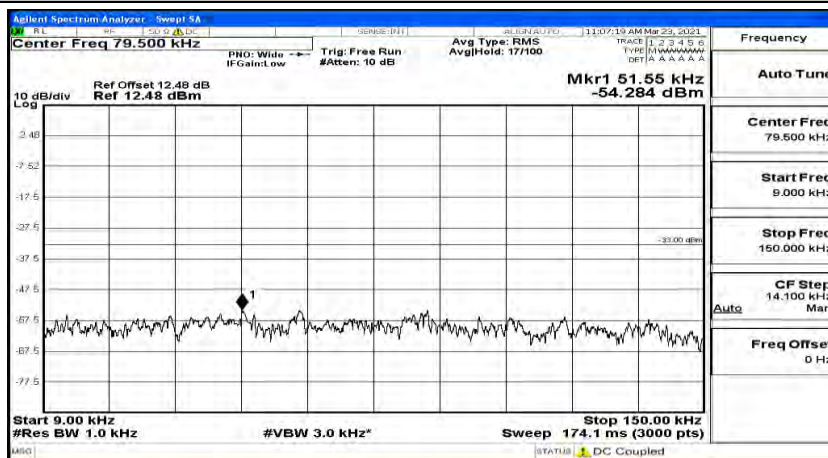


(Channel Bandwidth: 1.4 MHz) HCH 16QAM 1RB#0



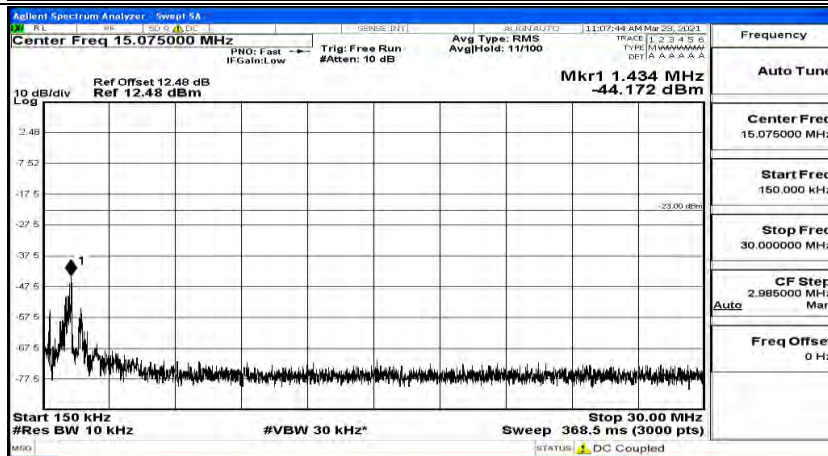
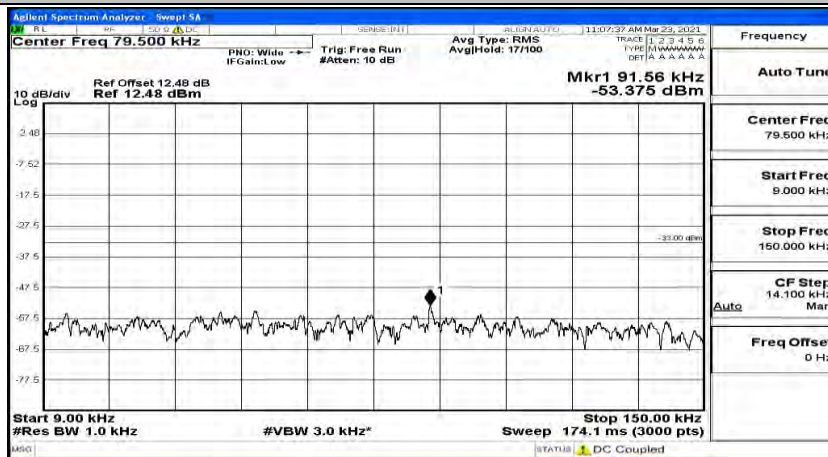


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



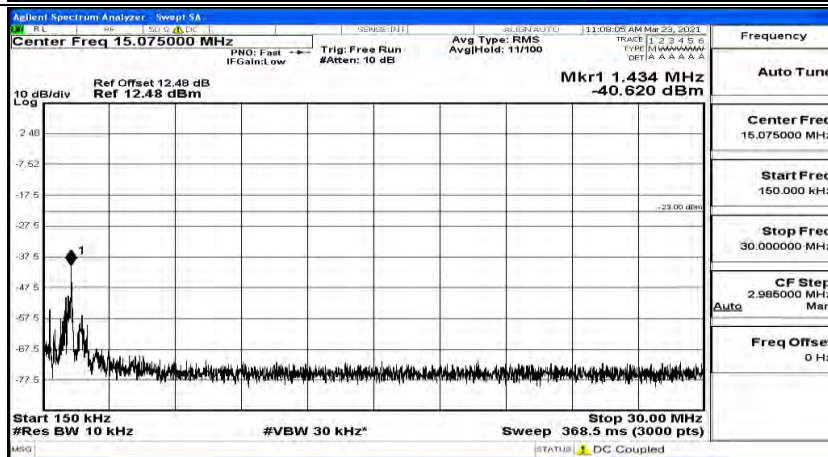
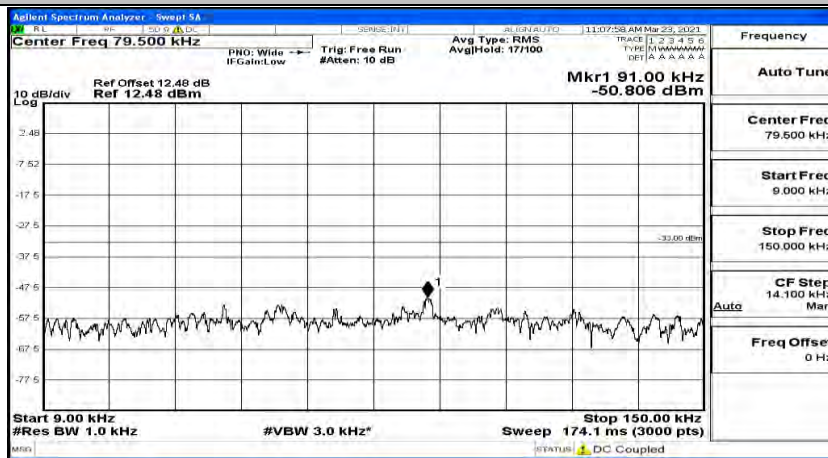


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

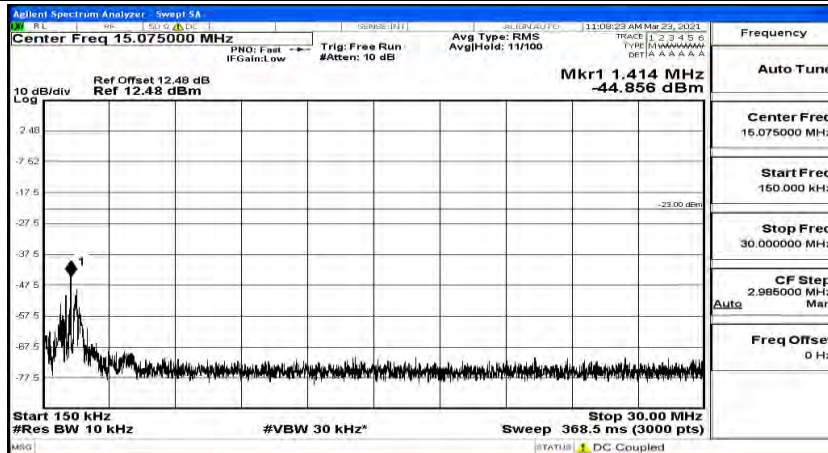
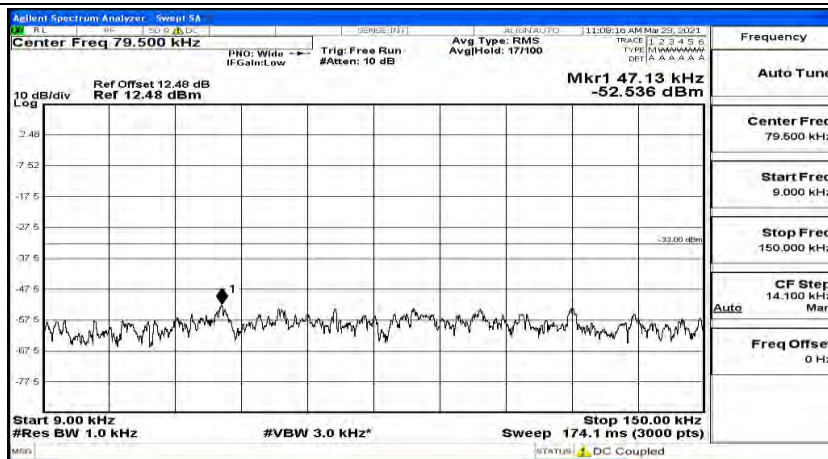


Channel Bandwidth: 3 MHz

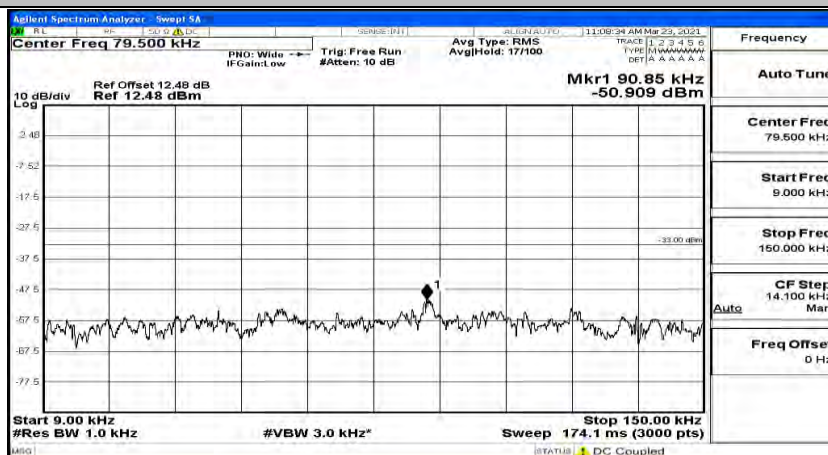
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0

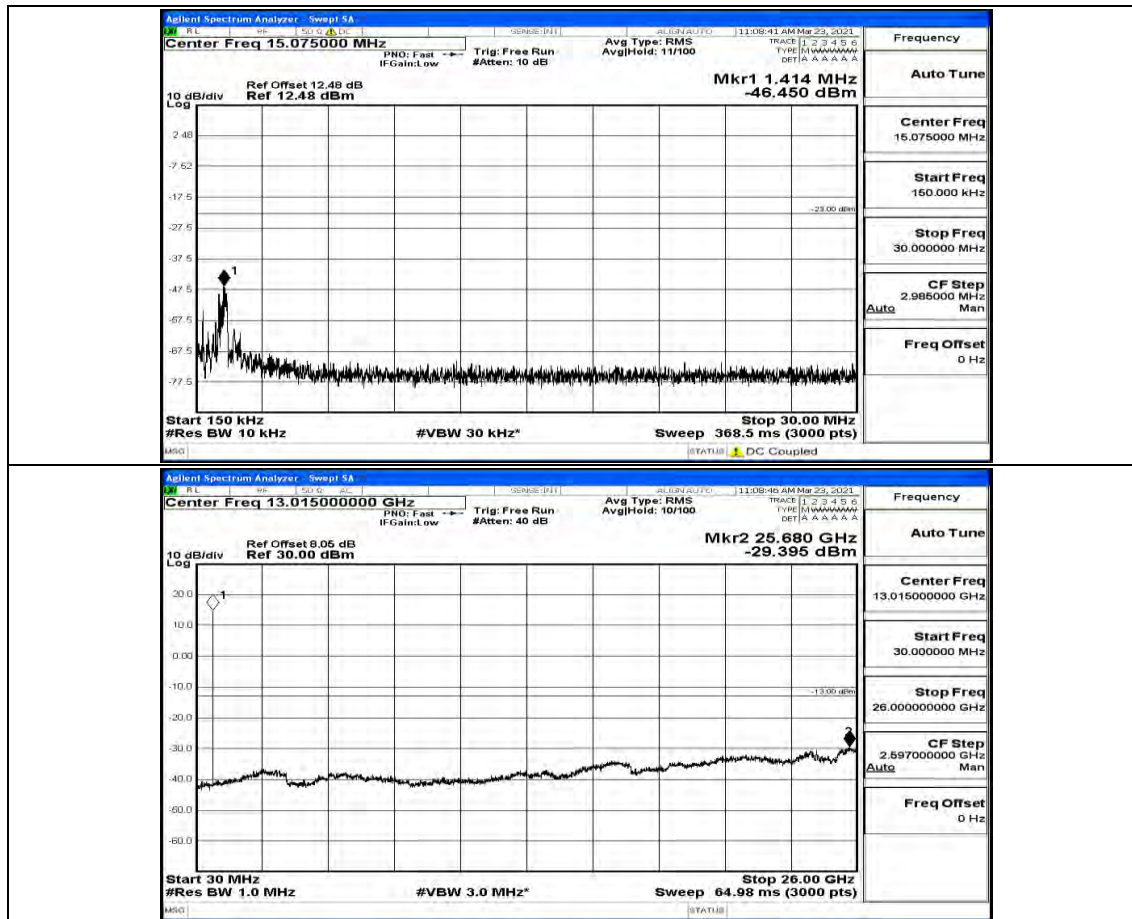


(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

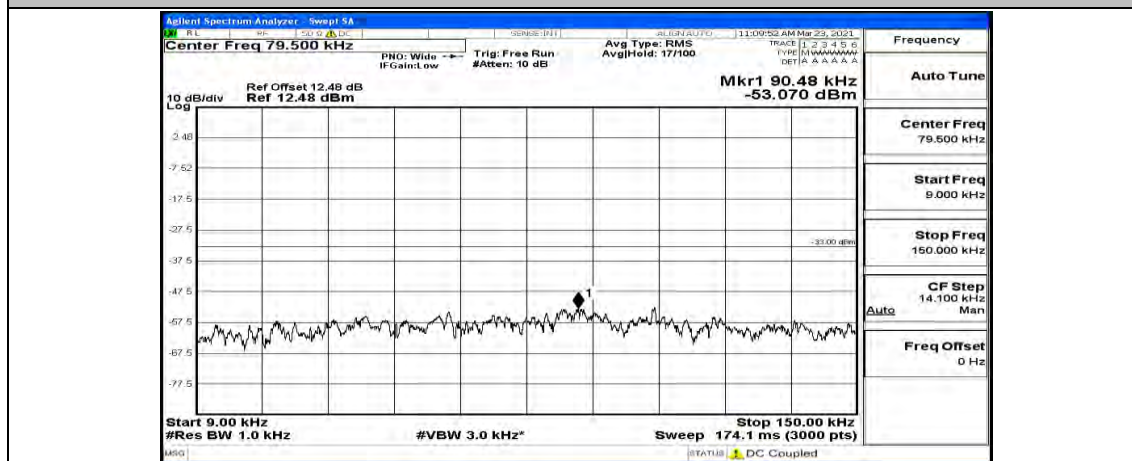


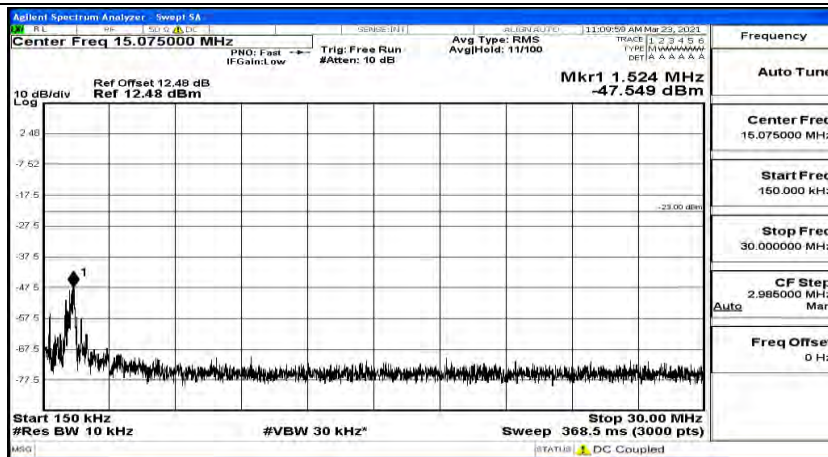
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14



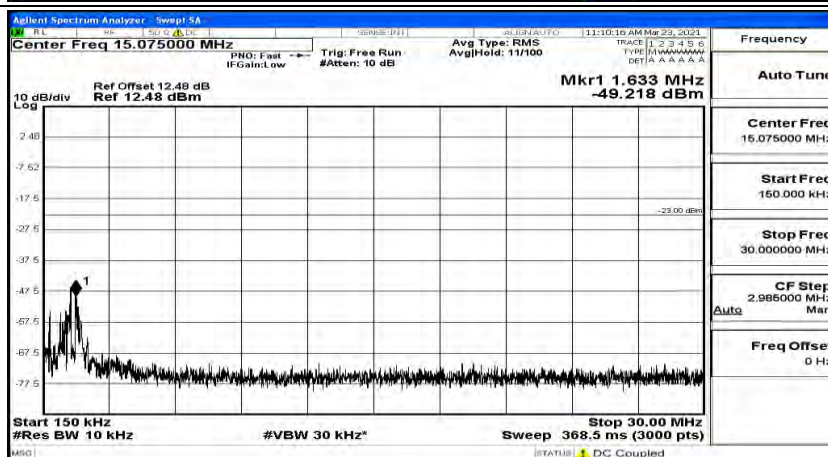
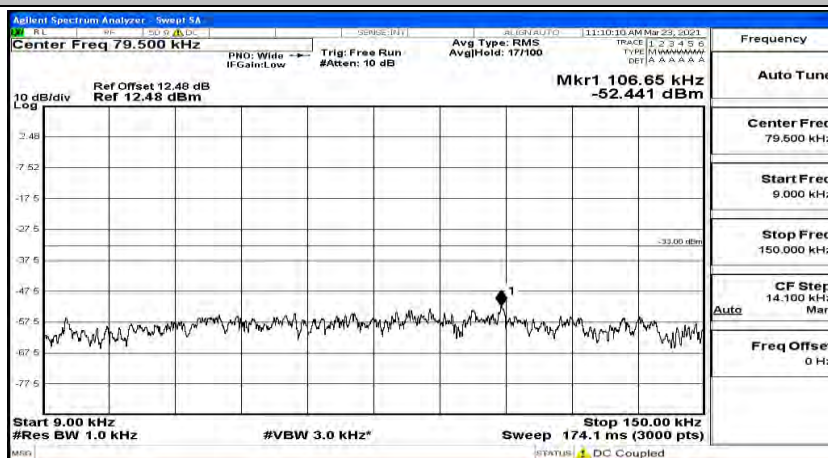


(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



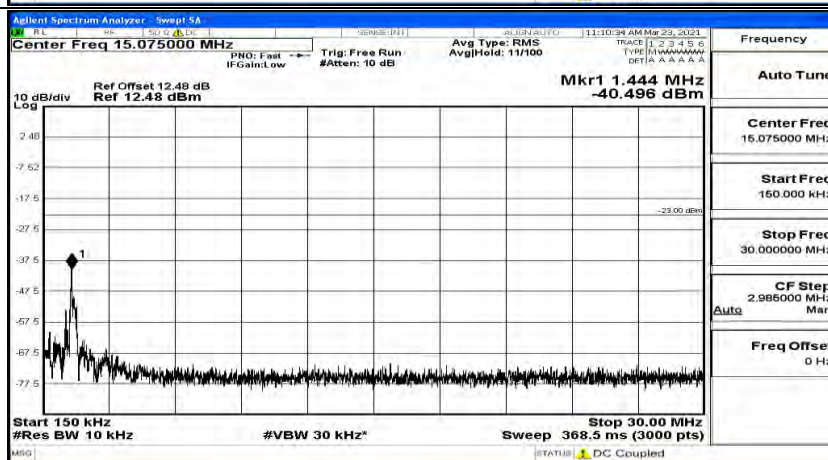
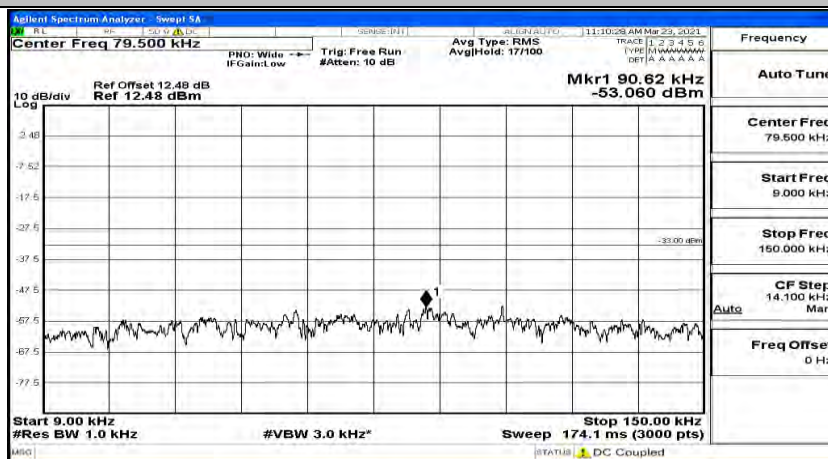


(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7

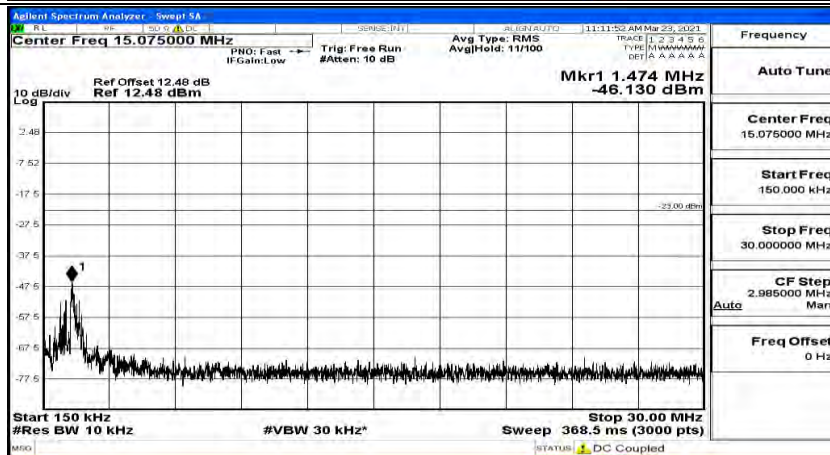
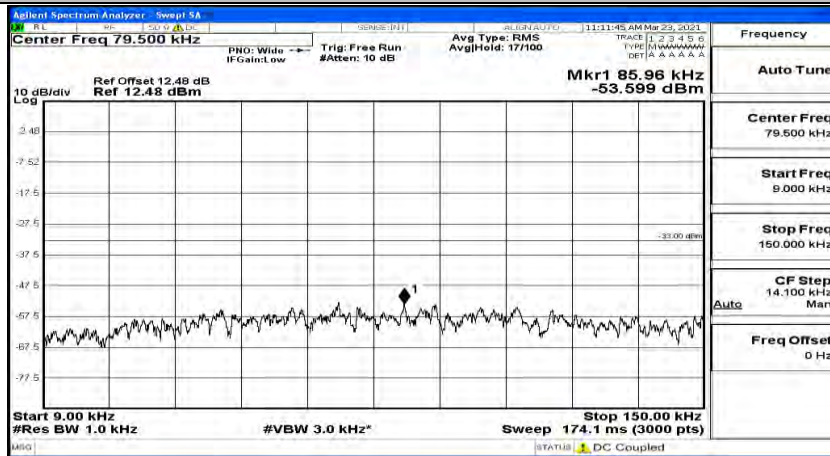




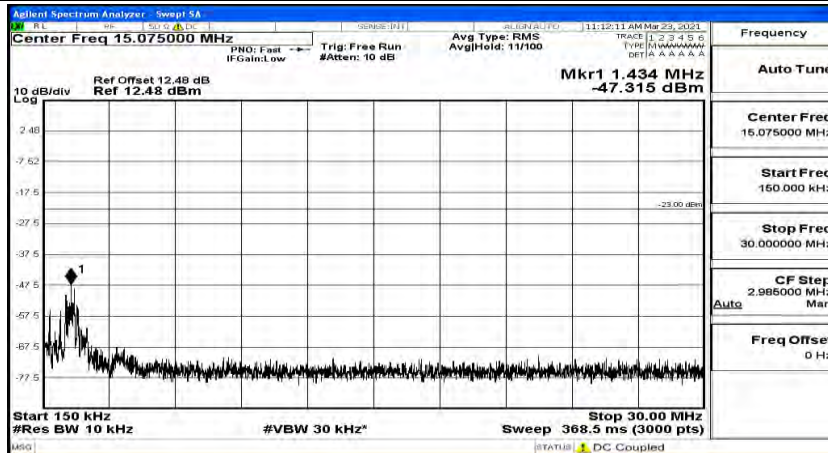
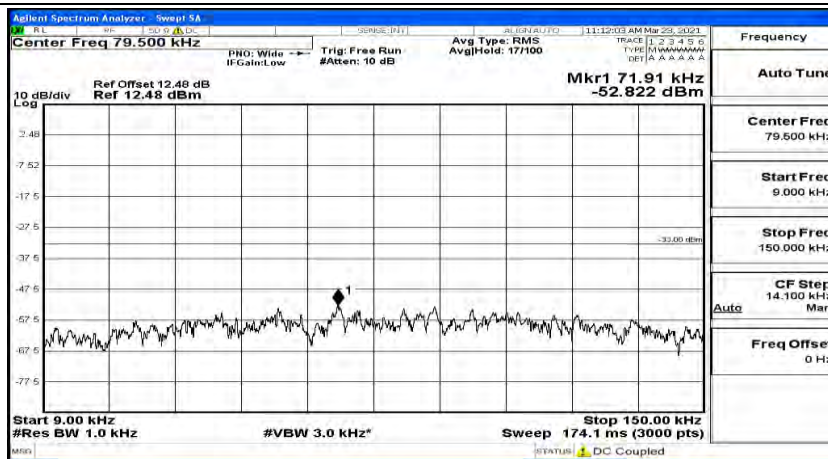
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14

