

## Appendix F: Test Data for E-UTRA Band 13

**Product Name: 4G Router/4G LTE/Wireless Router**

**Trade Mark: TODAAIR**

**Test Model: TD954G2**

### Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	52.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Tom.Liu

### F.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.78	23.26	PASS
		1	12	23.99	23.43	PASS
		1	24	24.44	23.51	PASS
		12	0	23.23	22.17	PASS
		12	6	23.03	22.21	PASS
		12	13	23.12	22.33	PASS
		25	0	23.10	22.17	PASS
	MCH	1	0	24.21	22.30	PASS
		1	12	24.91	22.71	PASS
		1	24	24.41	22.53	PASS
		12	0	23.10	22.07	PASS
		12	6	23.43	22.52	PASS
		12	13	23.44	22.41	PASS
		25	0	23.27	22.50	PASS
	HCH	1	0	24.32	22.69	PASS
		1	12	25.03	23.21	PASS
		1	24	24.40	22.77	PASS
		12	0	23.34	22.31	PASS
		12	6	23.58	22.48	PASS
		12	13	23.27	22.36	PASS

		25	0	23.32	22.39	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	MCH	1	0	23.93	23.30	PASS
		1	24	24.59	24.20	PASS
		1	49	24.15	24.22	PASS
		25	0	23.16	22.02	PASS
		25	12	23.31	22.32	PASS
		25	25	23.38	22.42	PASS
		50	0	23.29	22.25	PASS

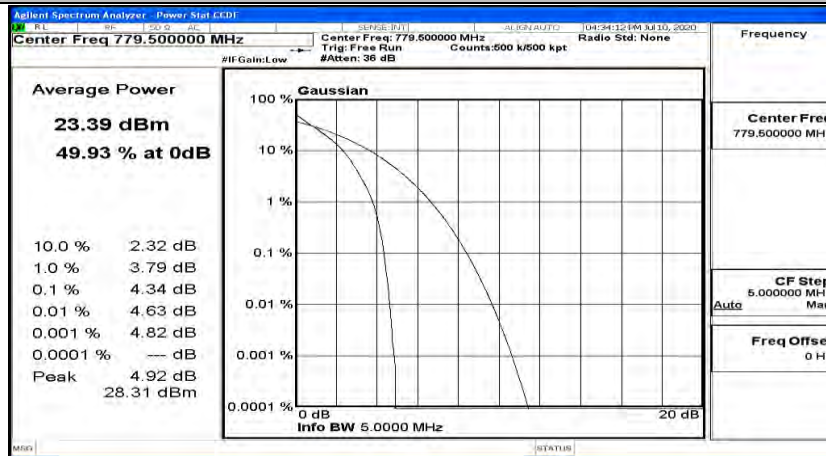
**F.2 Peak-to-Average Ratio****Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)**

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.34	<13	PASS
	MCH	4.74	<13	PASS
	HCH	4.69	<13	PASS
16QAM	LCH	5.14	<13	PASS
	MCH	5.55	<13	PASS
	HCH	5.58	<13	PASS

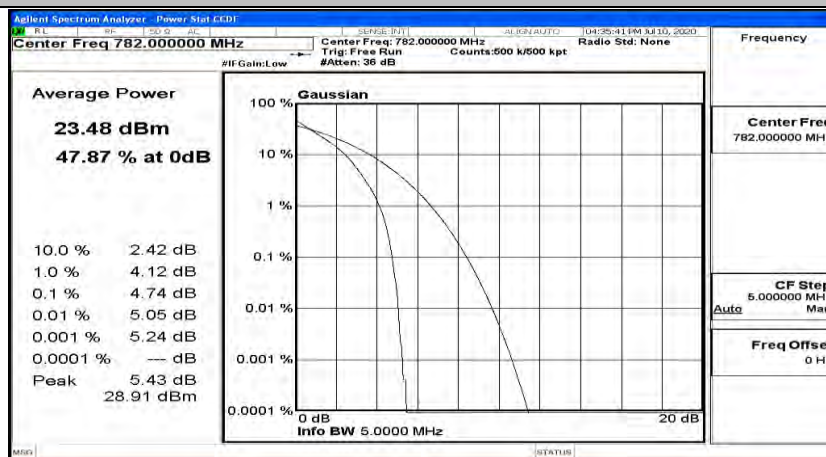
**Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)**

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	MCH	4.64	<13	PASS
16QAM	MCH	5.47	<13	PASS

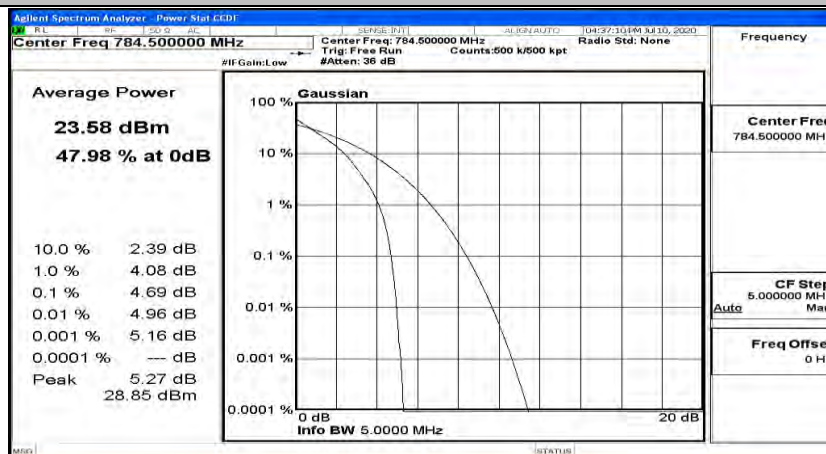
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



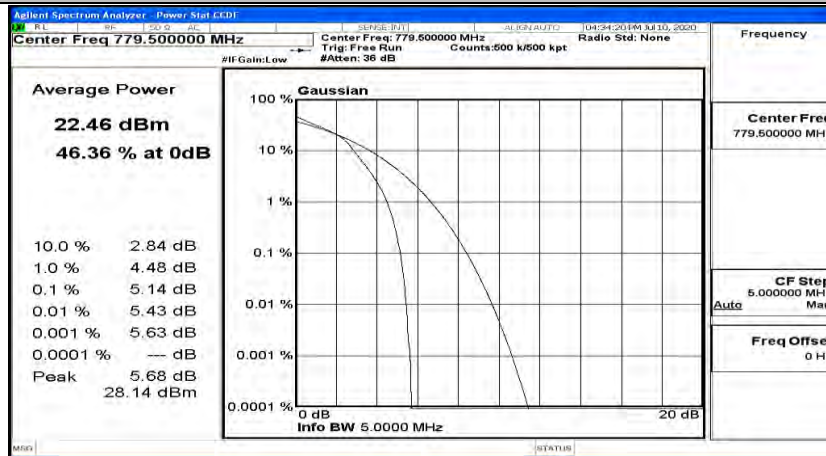
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



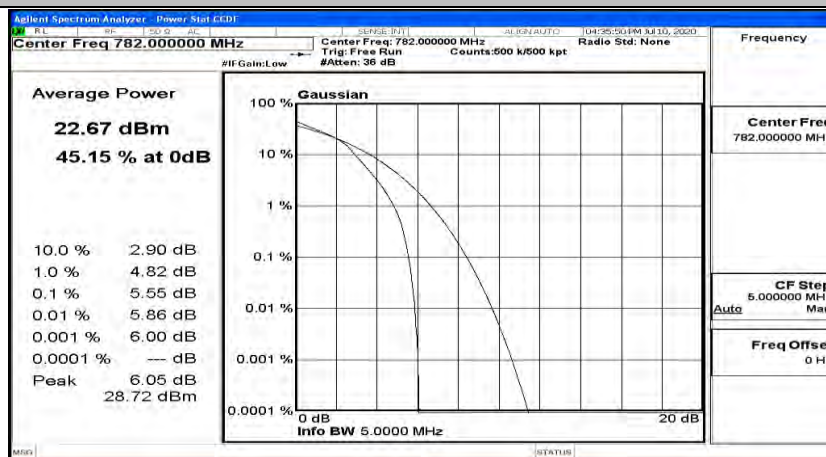
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



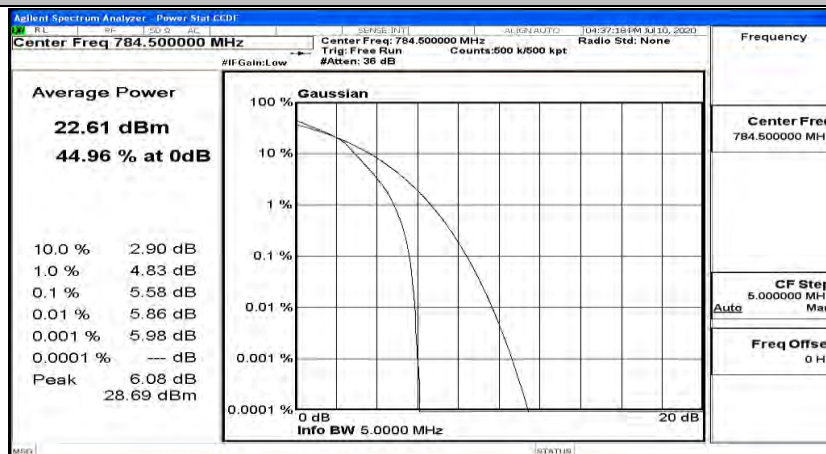
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



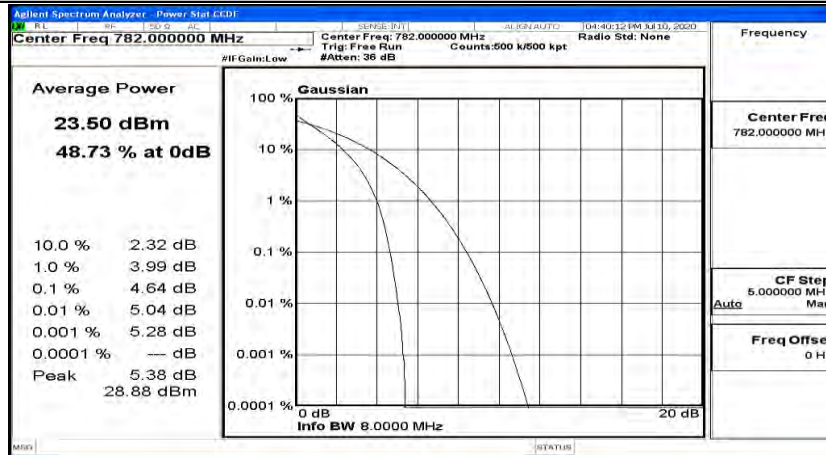
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



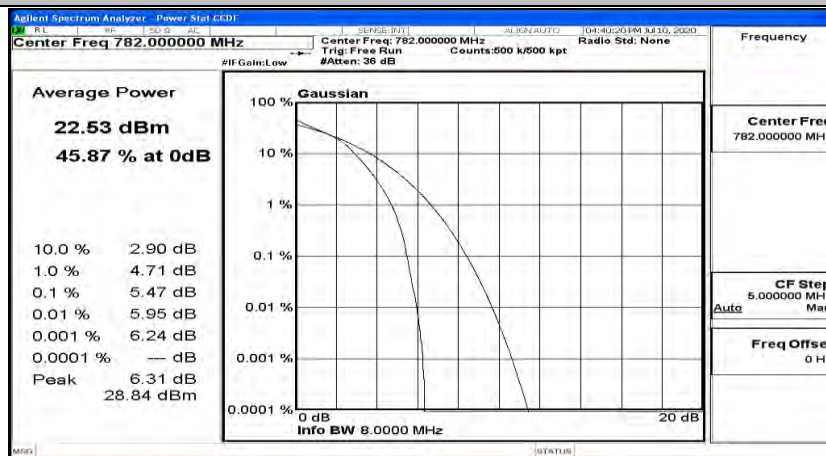
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



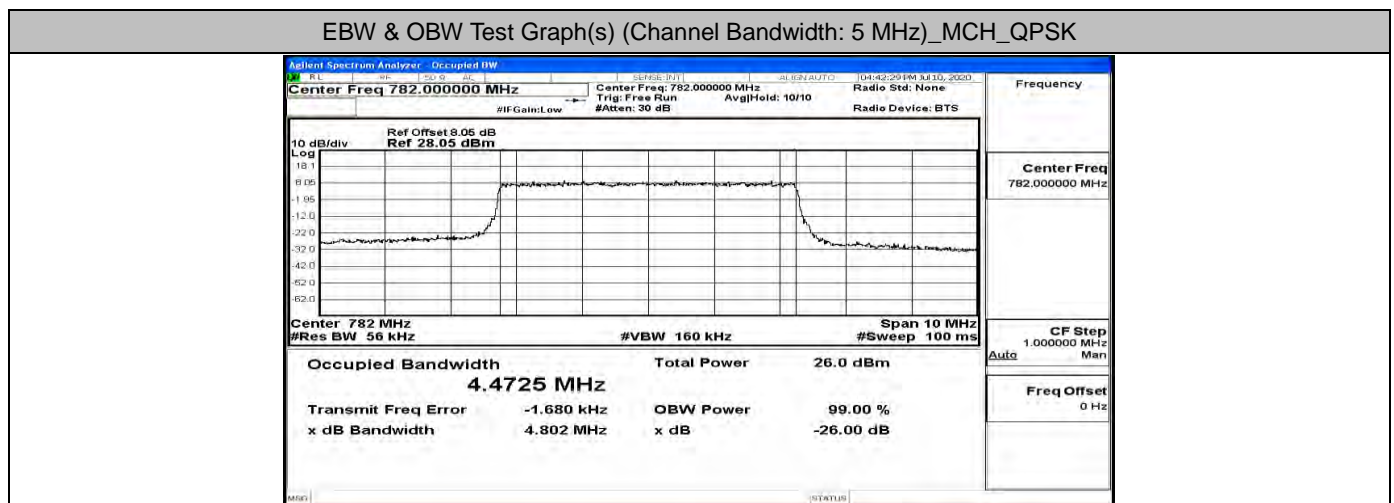
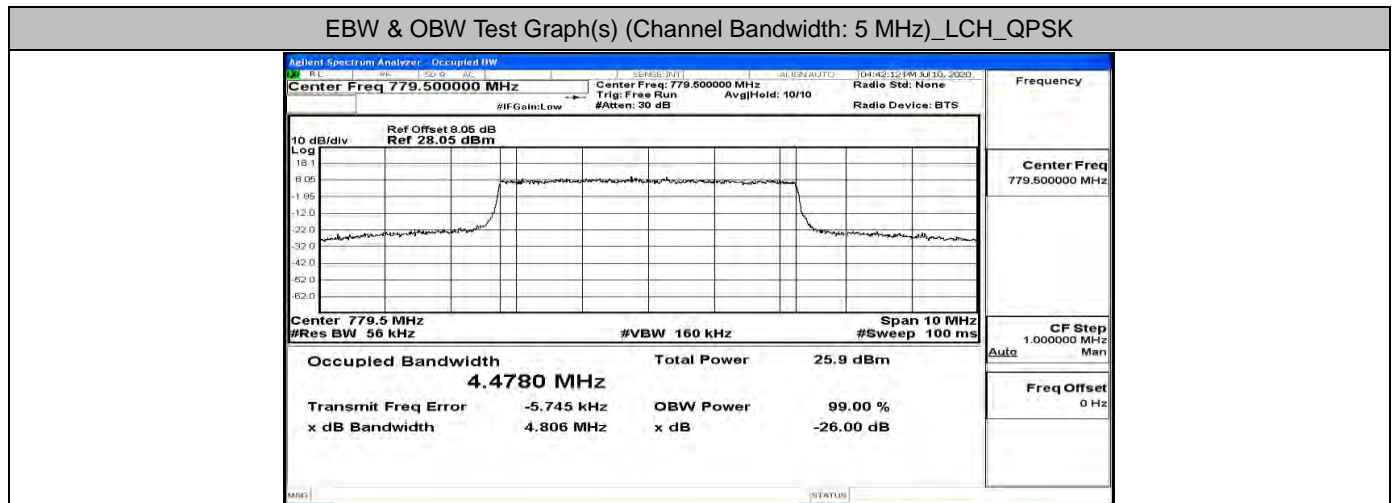
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



### F.3 26dB Bandwidth and Occupied Bandwidth

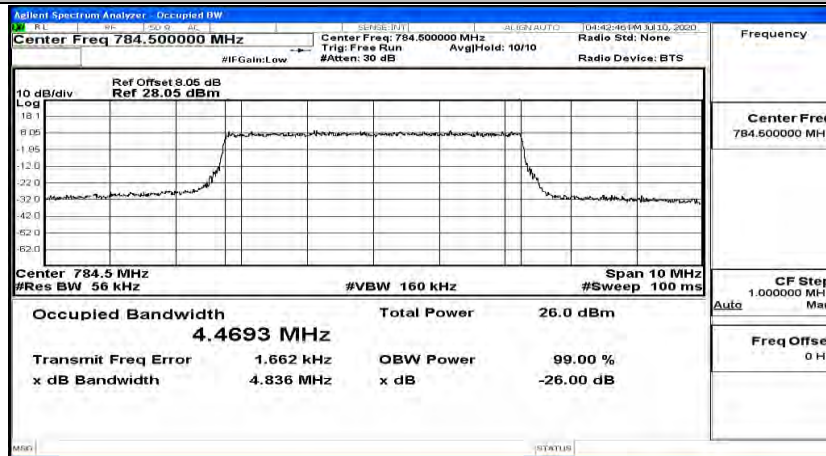
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4780	4.806	PASS
	MCH	4.4725	4.802	PASS
	HCH	4.4693	4.836	PASS
16QAM	LCH	4.4634	4.869	PASS
	MCH	4.4786	4.837	PASS
	HCH	4.4777	4.774	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	MCH	8.9310	9.548	PASS
16QAM	MCH	8.9258	9.431	PASS

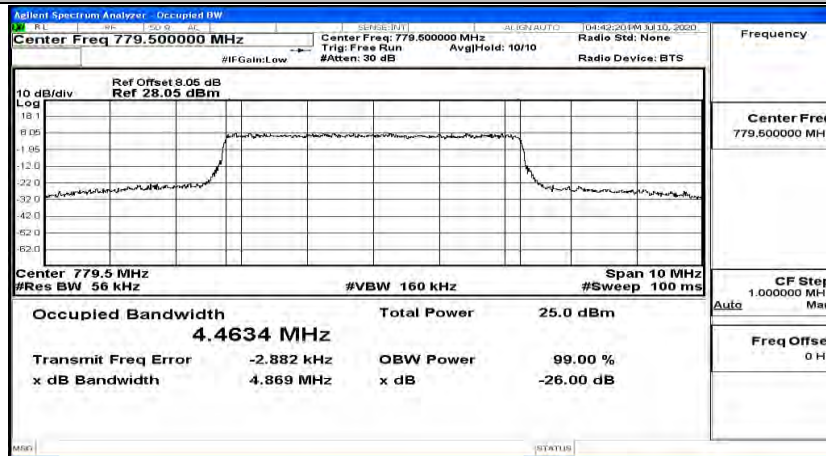




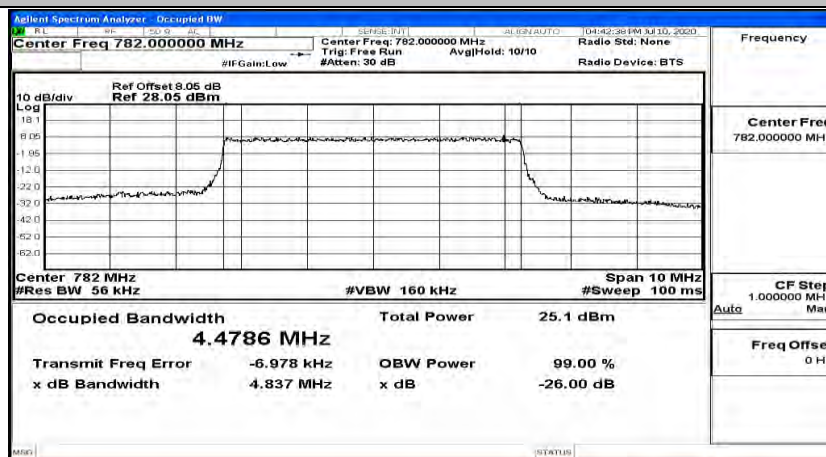
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



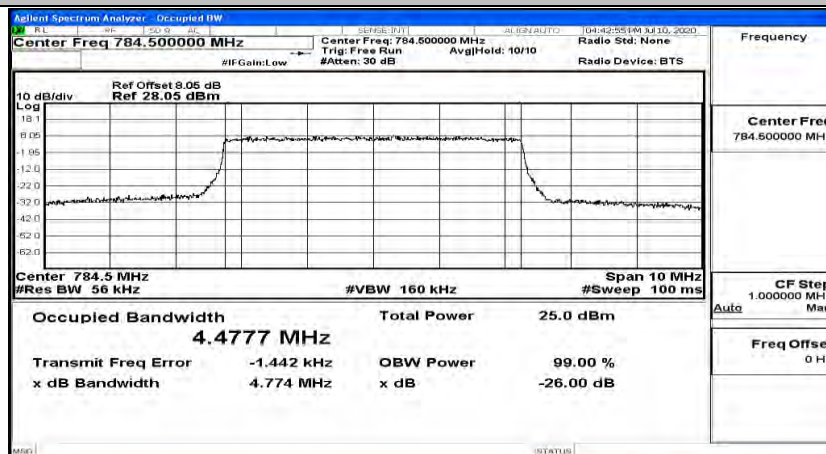
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM

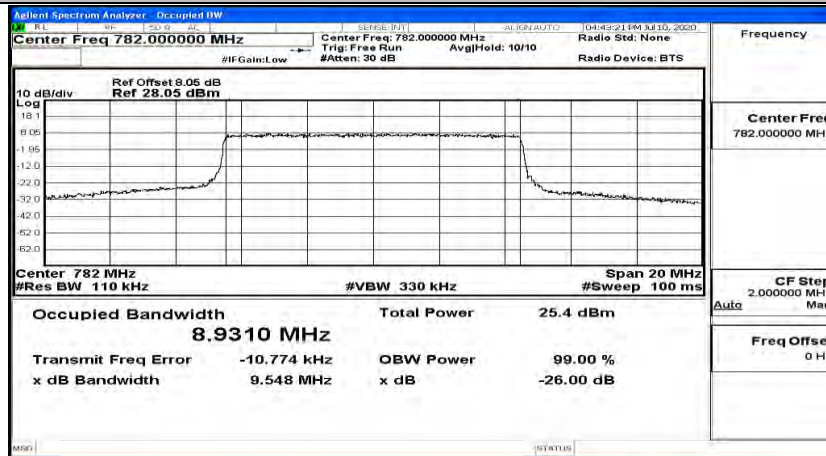


## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM

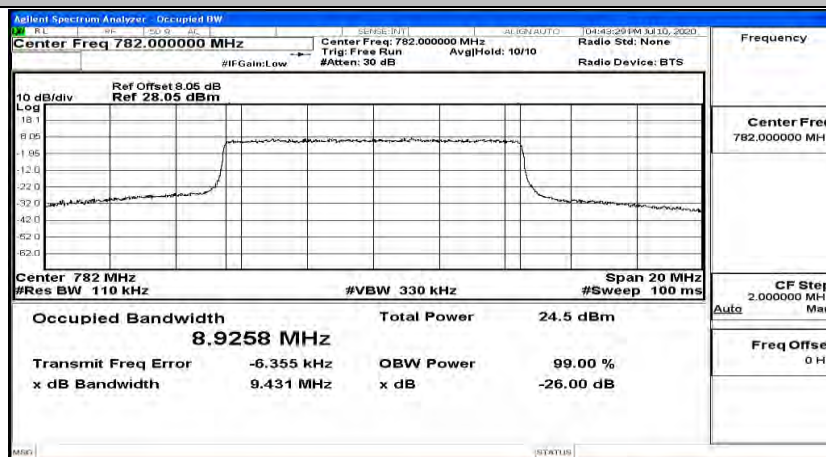




## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK

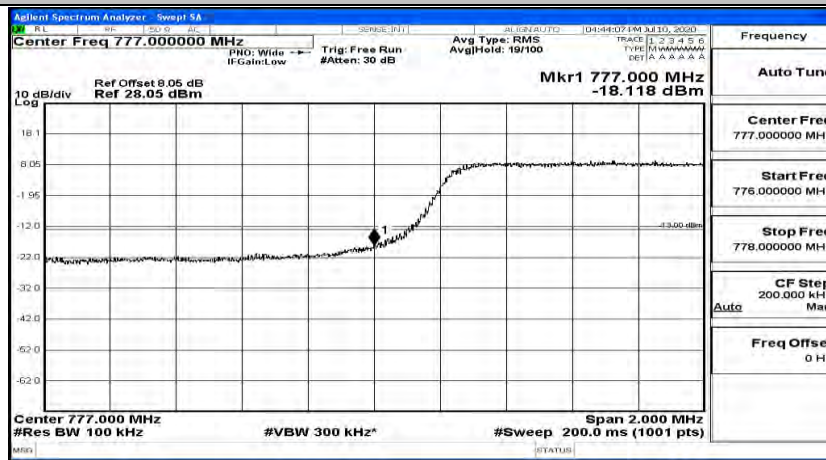


## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM

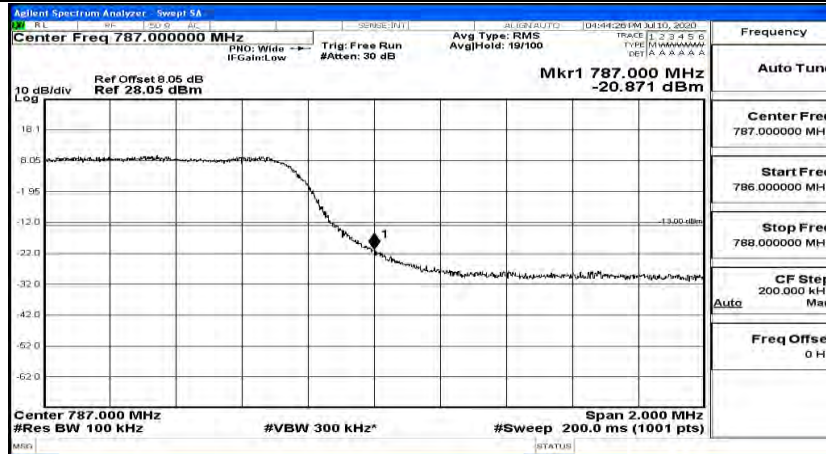


## F.4 Band Edge

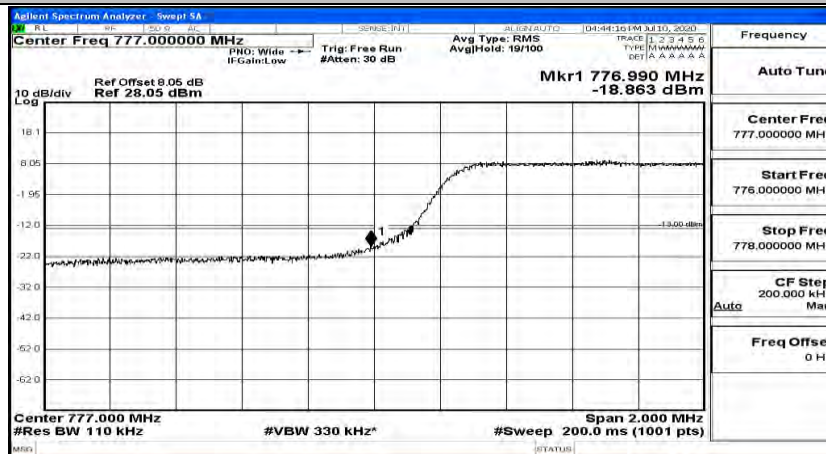
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



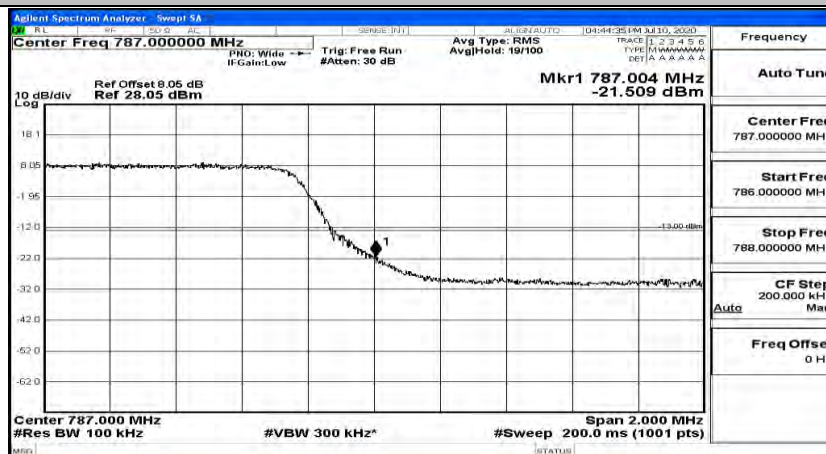
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



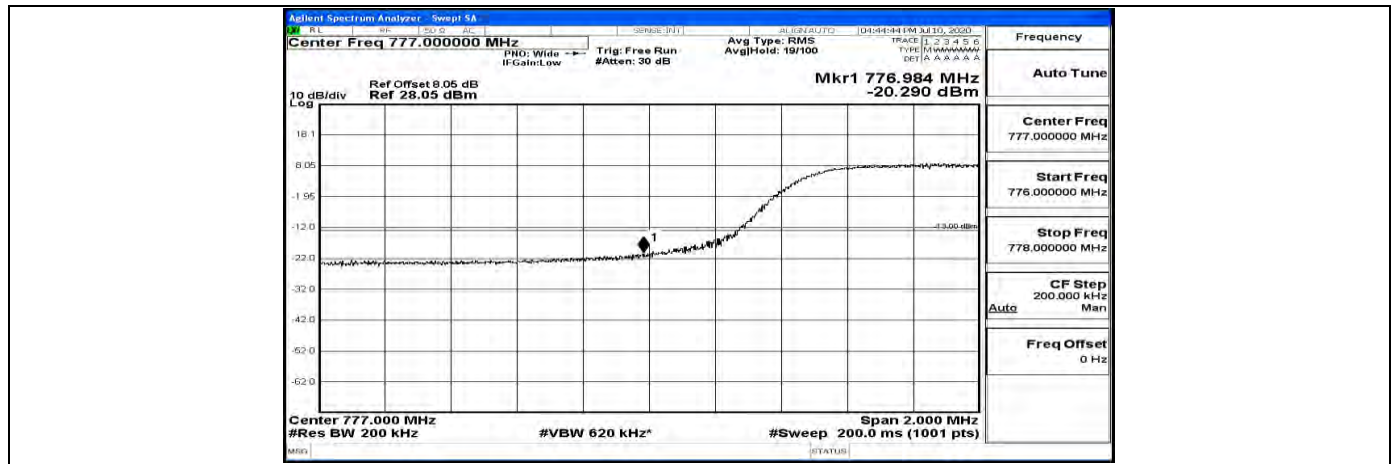
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



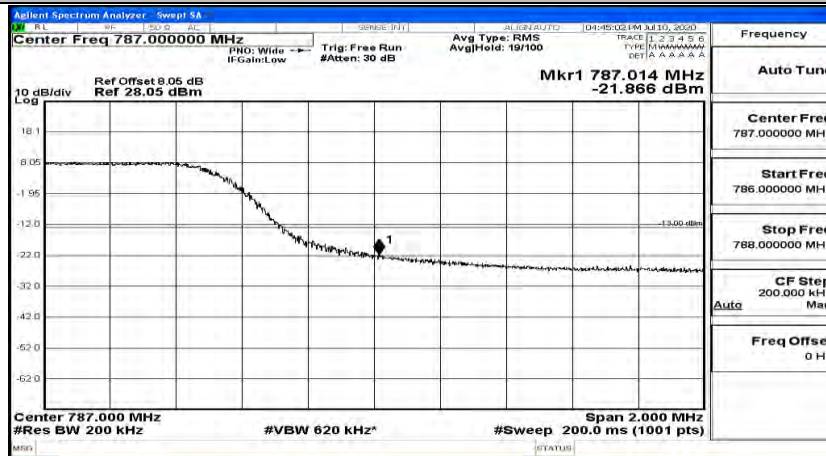
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



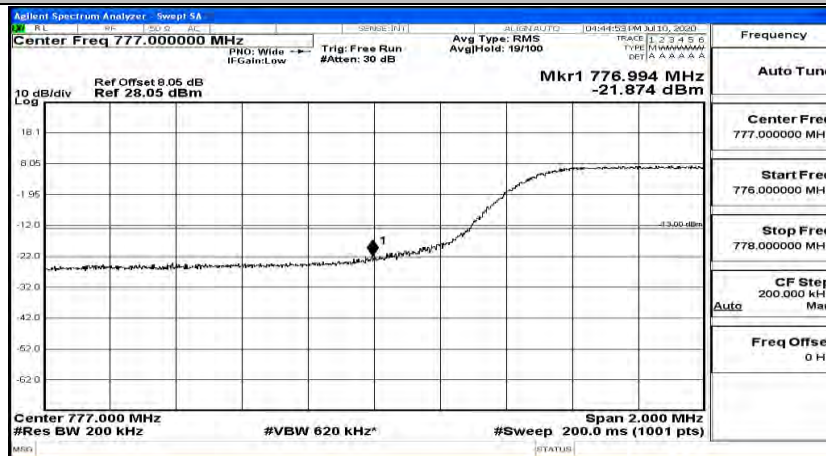
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



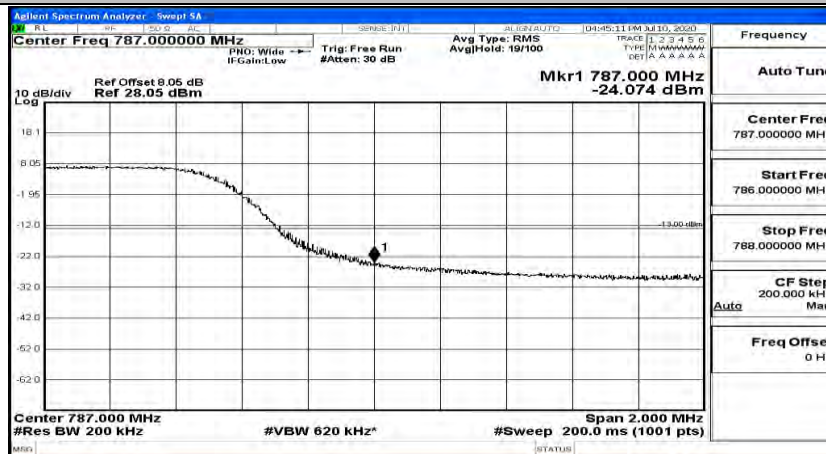
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM

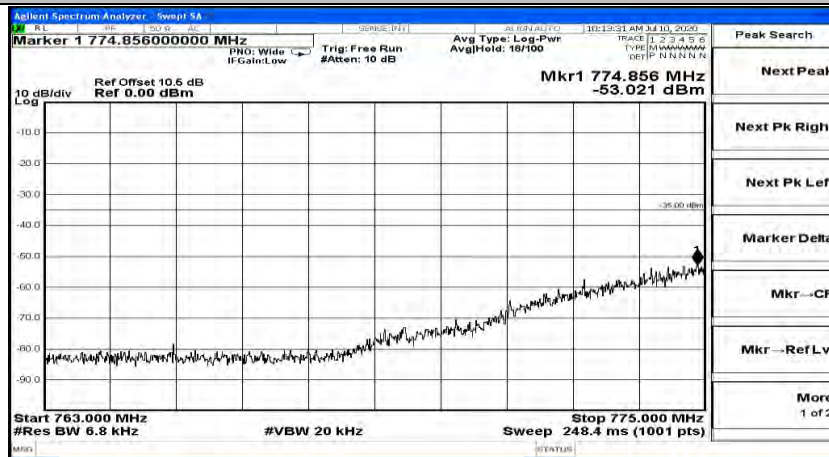


## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM

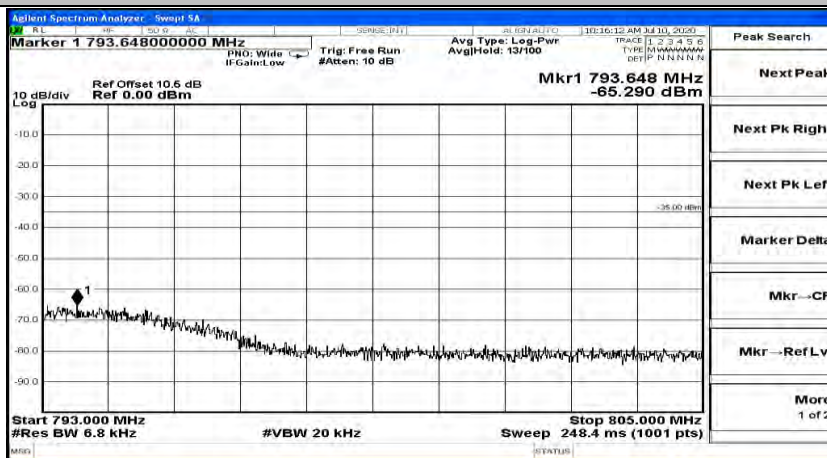




## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK

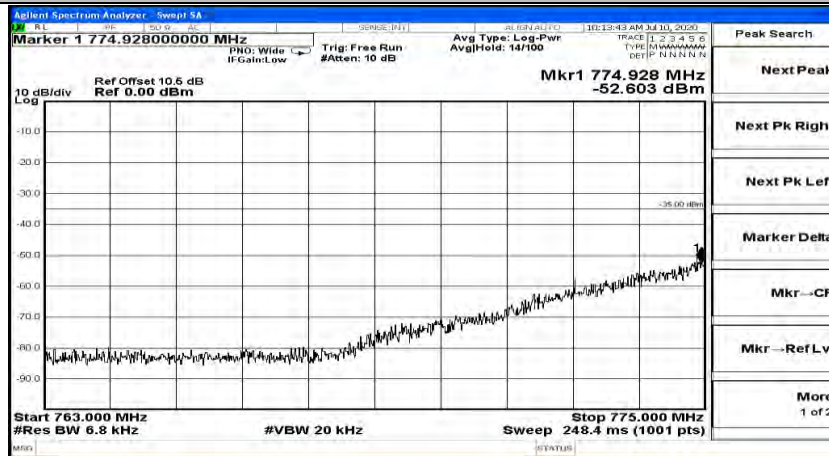


## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK

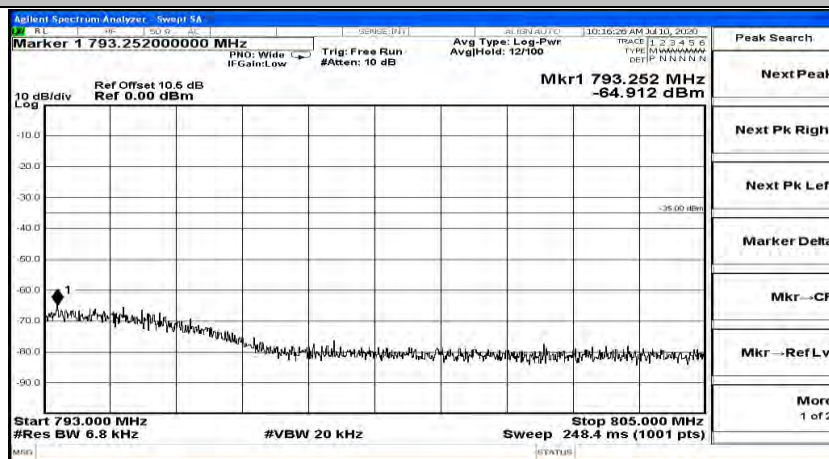




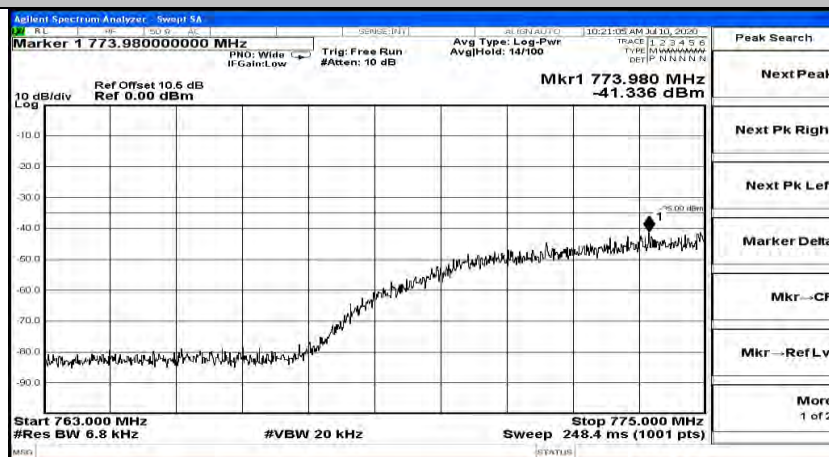
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



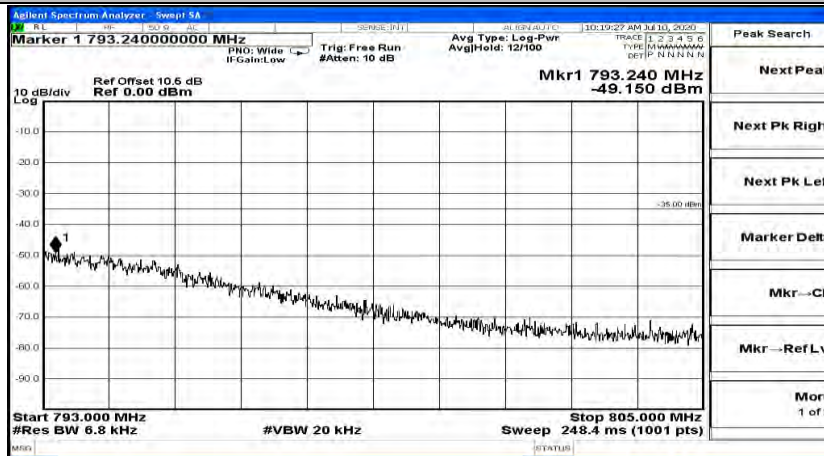
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



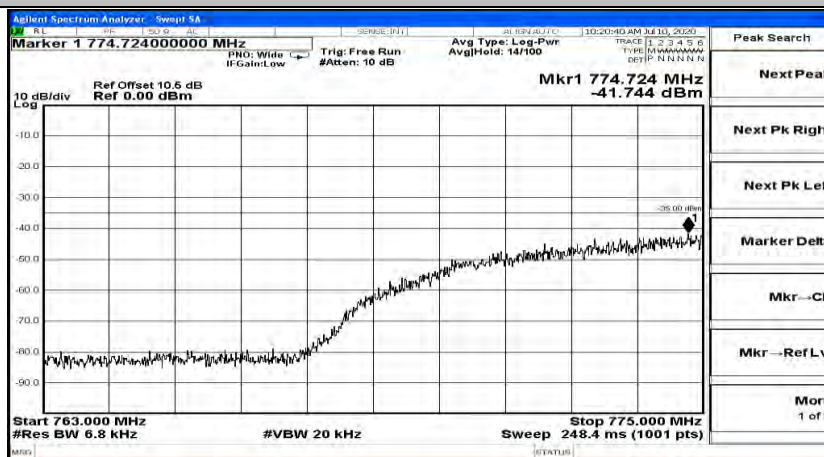
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_L\_QPSK



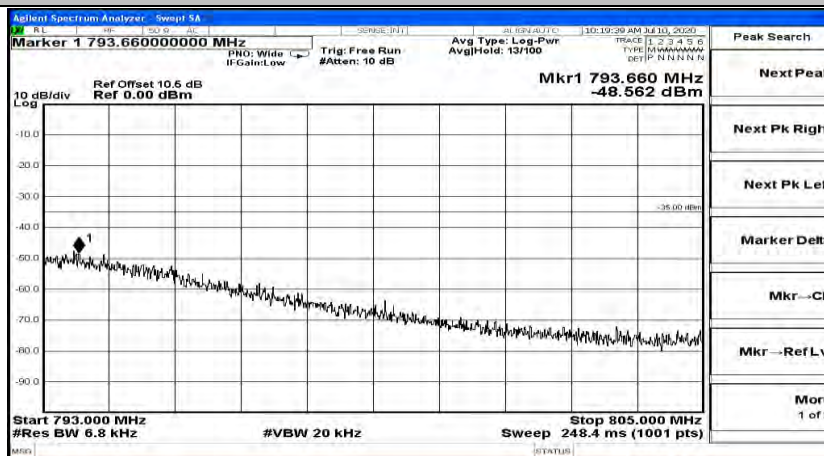
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_H\_QPSK



## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_L\_16QAM

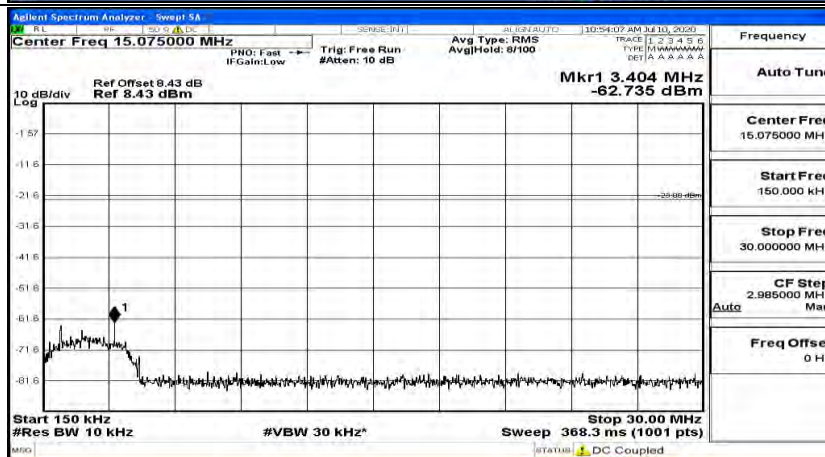
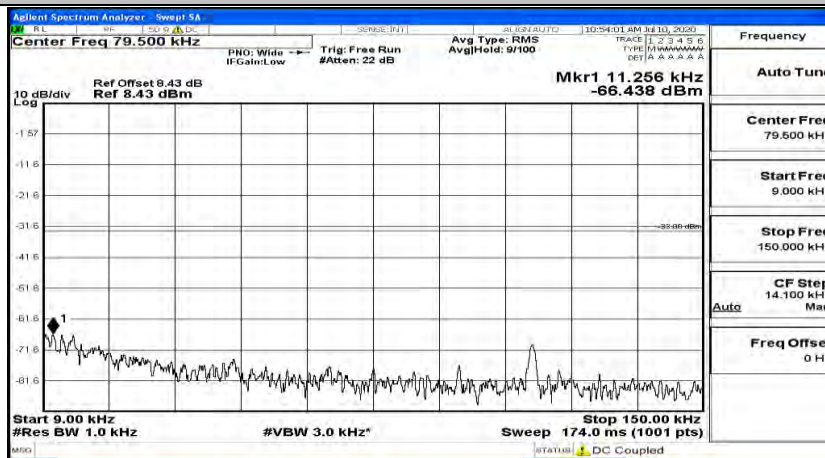


## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_H\_16QAM



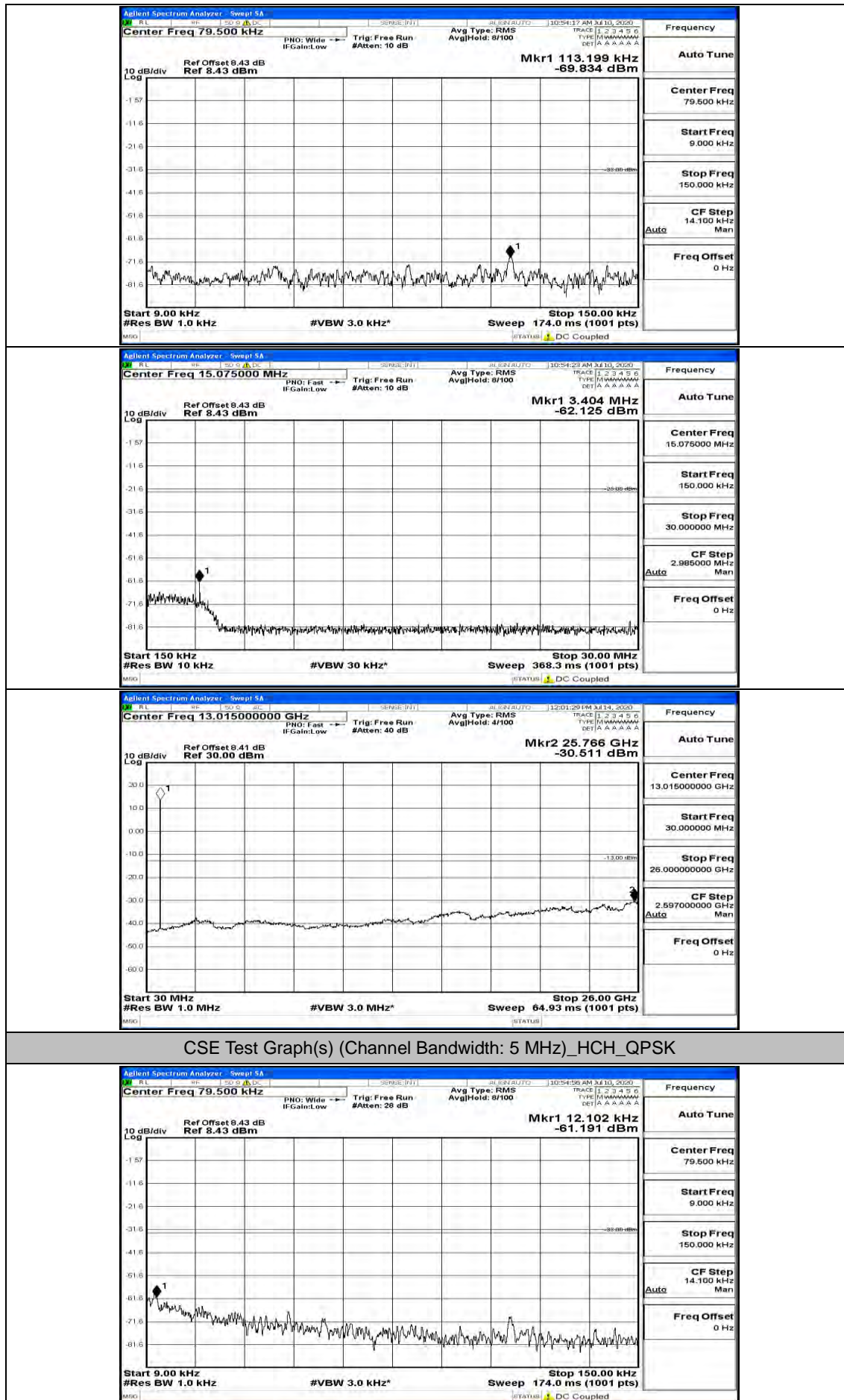
## F.5 Conducted Spurious Emission

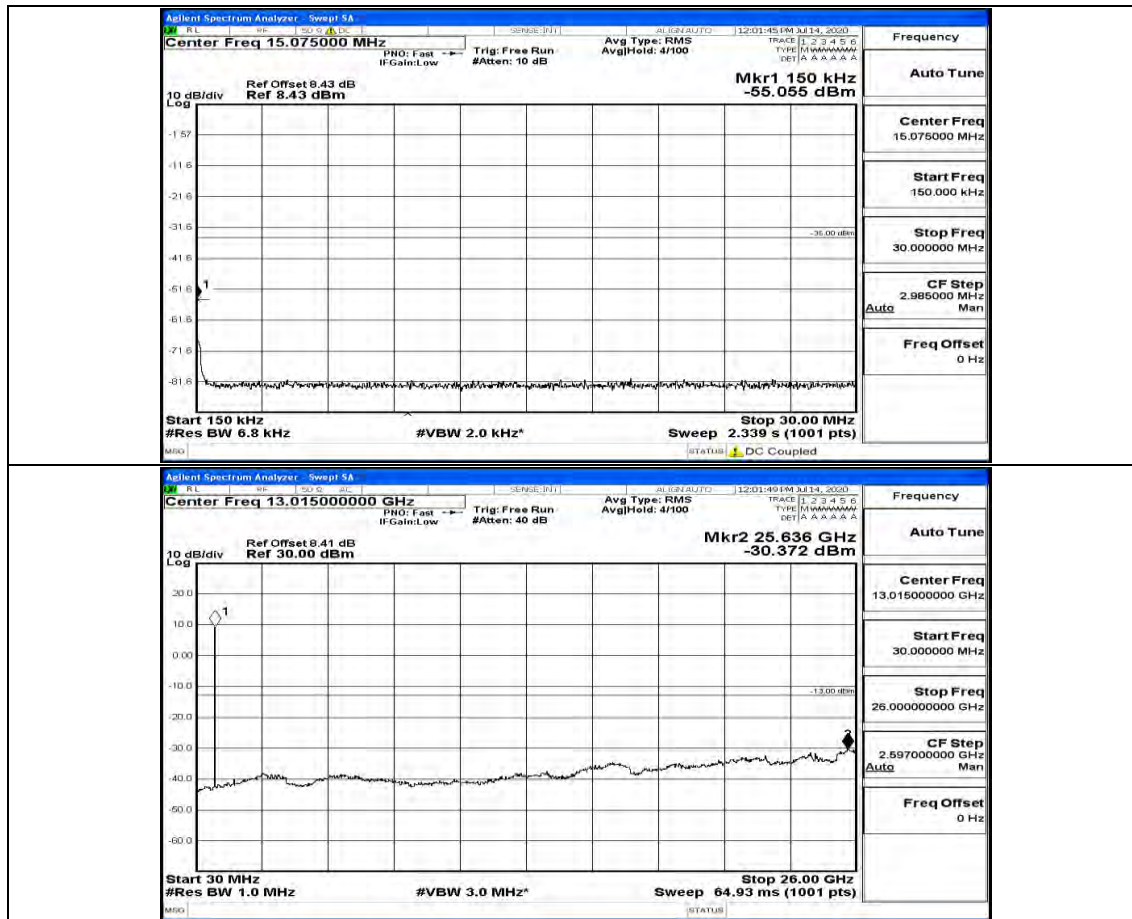
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



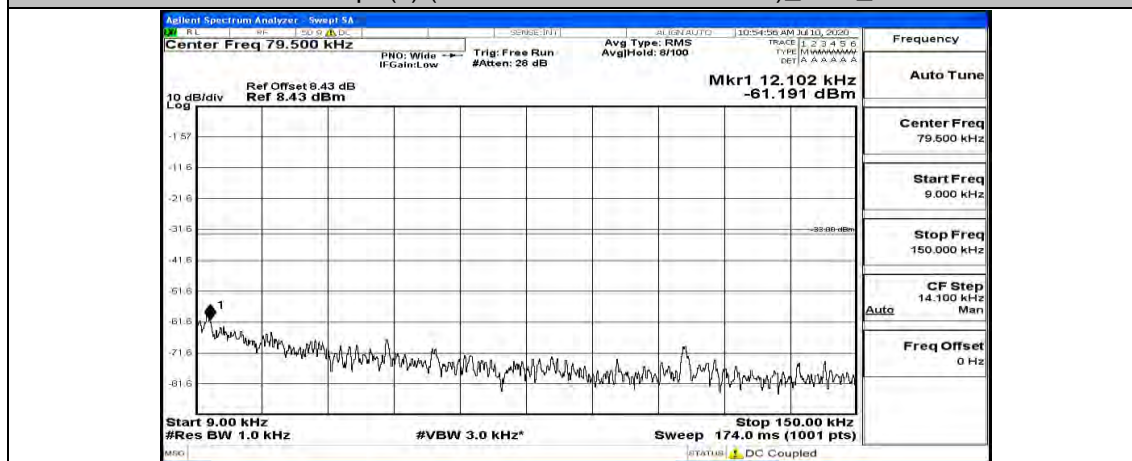
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK

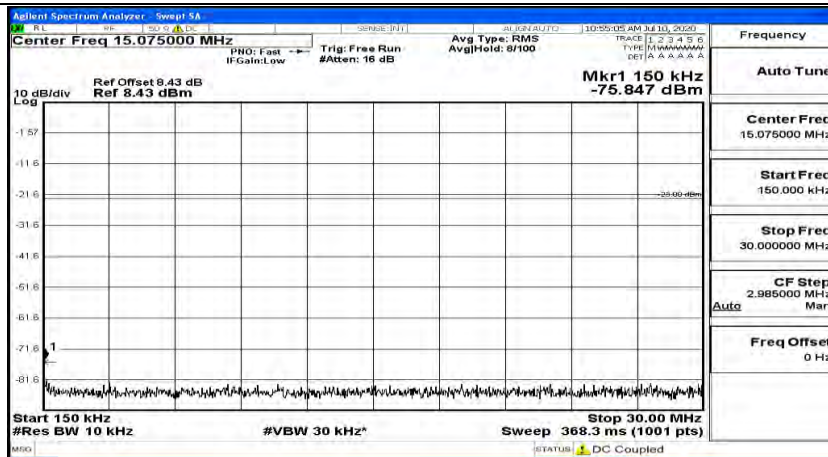




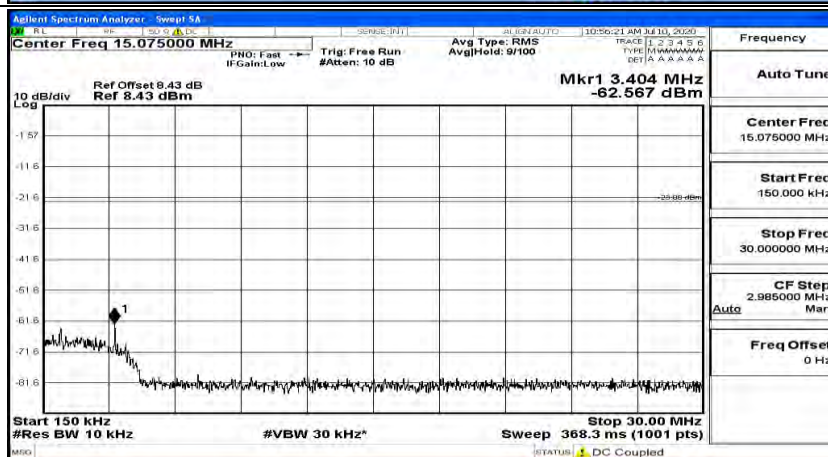
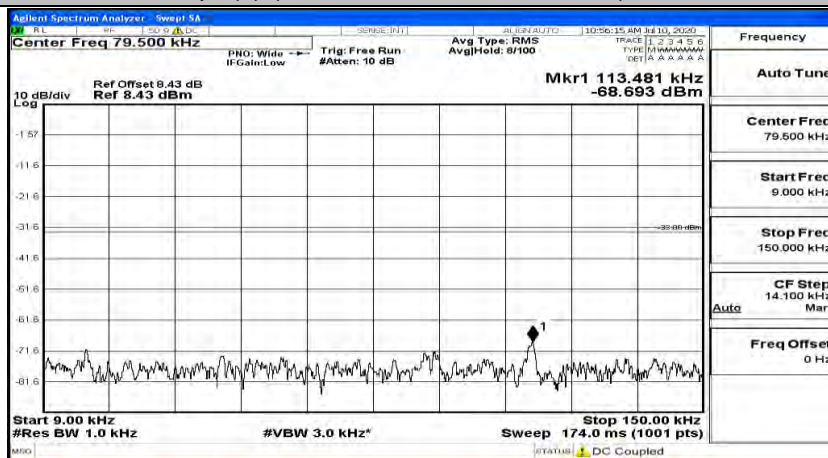


## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM





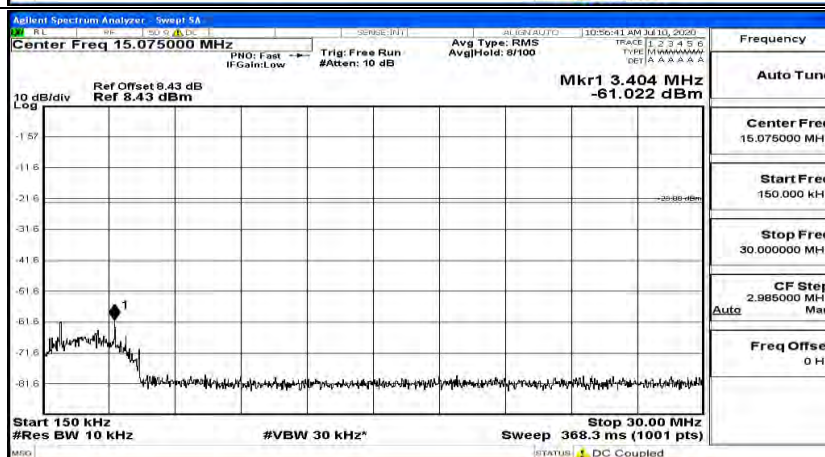
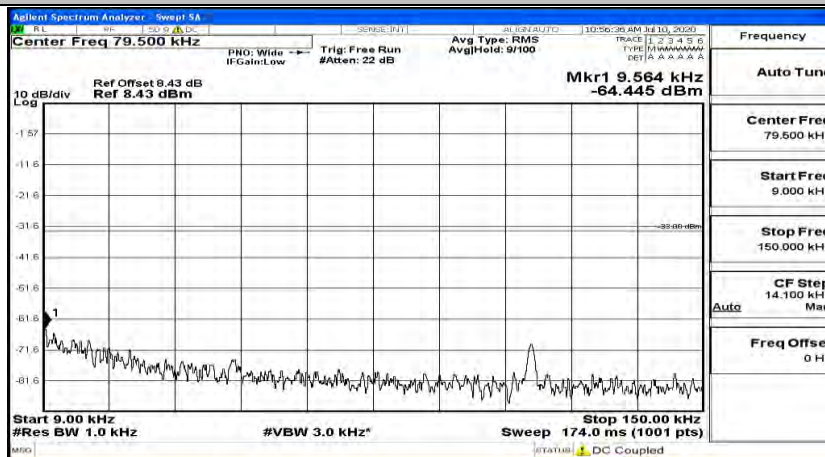
## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



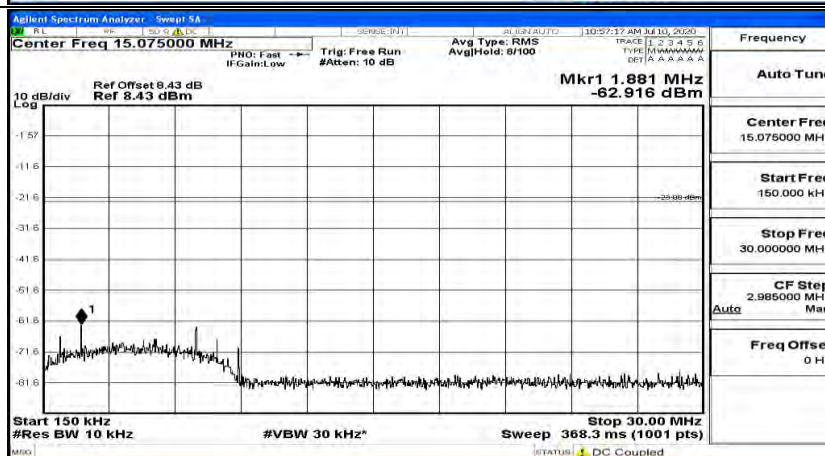
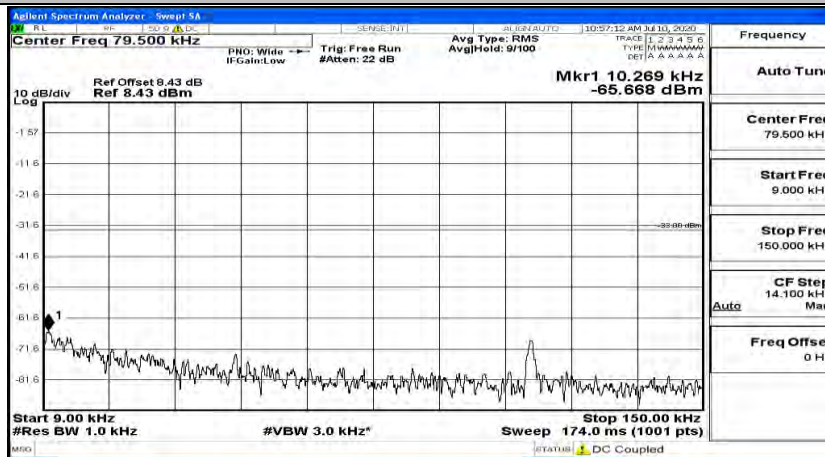




## CSE Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM

