

## Appendix G: Test Data for E-UTRA Band 41

**Product Name: TD-LTE/LTE FDD/WLAN terminal**

**Trade Mark: N/A**

**Test Model: Mini11**

### Environmental Conditions

Temperature:	22.7° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

## G.1 Conducted Output Power

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	23.40	22.46	PASS
		1	12	23.16	22.04	PASS
		1	24	22.52	21.46	PASS
		12	0	22.42	21.53	PASS
		12	6	22.22	21.25	PASS
		12	13	21.89	21.02	PASS
		25	0	22.05	21.24	PASS
	MCH	1	0	22.73	21.34	PASS
		1	12	22.72	21.52	PASS
		1	24	22.59	21.11	PASS
		12	0	21.94	20.82	PASS
		12	6	21.95	20.71	PASS
		12	13	21.83	20.60	PASS
		25	0	21.80	20.83	PASS
	HCH	1	0	23.93	22.36	PASS
		1	12	24.19	22.44	PASS
		1	24	23.75	22.22	PASS
		12	0	23.18	22.19	PASS
		12	6	23.24	22.14	PASS
		12	13	22.93	21.95	PASS
		25	0	23.05	22.13	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.17	22.43	PASS
		1	24	23.39	22.59	PASS
		1	49	22.59	21.91	PASS
		25	0	22.11	21.14	PASS
		25	12	22.17	21.29	PASS
		25	25	21.82	20.88	PASS
		50	0	21.98	21.02	PASS
	MCH	1	0	23.14	23.09	PASS
		1	24	23.11	23.04	PASS
		1	49	22.43	22.46	PASS
		25	0	22.08	21.04	PASS
		25	12	22.10	21.06	PASS
		25	25	21.82	20.92	PASS
		50	0	21.89	20.83	PASS
	HCH	1	0	24.05	23.94	PASS
		1	24	24.27	24.17	PASS
		1	49	23.57	23.26	PASS
		25	0	23.22	22.19	PASS
		25	12	23.32	22.12	PASS
		25	25	23.01	22.03	PASS
		50	0	23.13	22.36	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.08	22.57	PASS
		1	37	22.97	22.50	PASS
		1	74	22.65	22.02	PASS
		37	0	22.03	20.86	PASS
		37	18	21.99	20.93	PASS
		37	38	21.72	20.58	PASS
		75	0	21.90	20.85	PASS
	MCH	1	0	23.39	22.75	PASS
		1	37	23.18	22.61	PASS
		1	74	22.49	22.03	PASS
		37	0	22.29	21.13	PASS
		37	18	22.20	21.03	PASS
		37	38	21.89	20.76	PASS
		75	0	22.14	21.09	PASS
	HCH	1	0	24.20	23.56	PASS
		1	37	24.28	23.67	PASS
		1	74	23.57	22.87	PASS
		37	0	23.28	22.23	PASS
		37	18	23.28	22.25	PASS
		37	38	23.09	22.09	PASS
		75	0	23.27	22.45	PASS

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.94	21.86	PASS
		1	49	22.78	21.81	PASS
		1	99	22.57	21.45	PASS
		50	0	21.97	20.99	PASS
		50	25	21.97	20.95	PASS
		50	50	21.79	20.81	PASS
		100	0	21.99	21.02	PASS
	MCH	1	0	23.78	22.85	PASS
		1	49	23.55	22.51	PASS
		1	99	22.75	21.74	PASS
		50	0	22.36	21.45	PASS
		50	25	22.17	21.16	PASS
		50	50	21.88	20.89	PASS
		100	0	22.18	21.14	PASS
	HCH	1	0	24.17	22.23	PASS
		1	49	24.43	22.52	PASS
		1	99	23.21	21.72	PASS
		50	0	23.28	22.34	PASS
		50	25	23.22	22.30	PASS
		50	50	23.11	22.30	PASS
		100	0	23.32	22.40	PASS

## G.2 Peak-to-Average Ratio

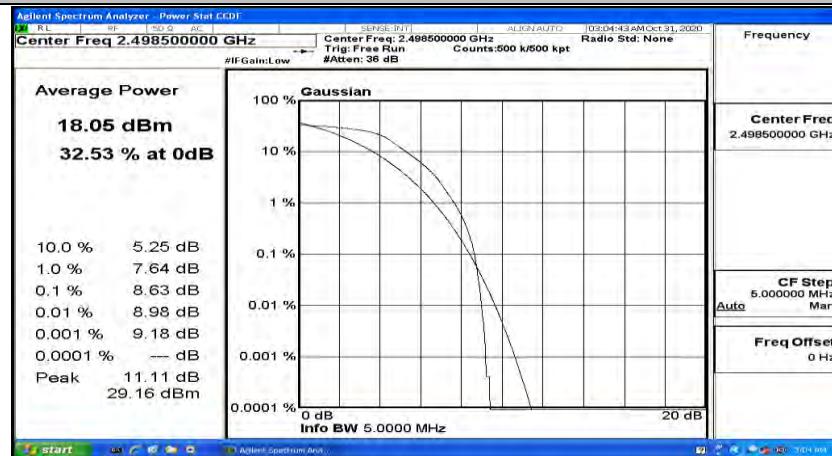
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	8.63	<13	PASS
	MCH	8.32	<13	PASS
	HCH	7.65	<13	PASS
16QAM	LCH	11.32	<13	PASS
	MCH	10.46	<13	PASS
	HCH	8.24	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	8.31	<13	PASS
	MCH	8.54	<13	PASS
	HCH	8.1	<13	PASS
16QAM	LCH	12.34	<13	PASS
	MCH	9.92	<13	PASS
	HCH	8.88	<13	PASS

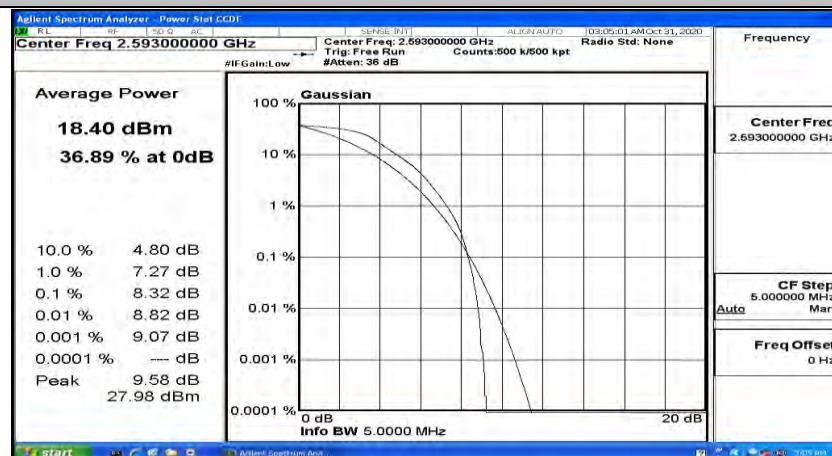
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	7.51	<13	PASS
	MCH	9.91	<13	PASS
	HCH	8.31	<13	PASS
16QAM	LCH	9.62	<13	PASS
	MCH	8.63	<13	PASS
	HCH	8.66	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	8.7	<13	PASS
	MCH	9.76	<13	PASS
	HCH	8.45	<13	PASS
16QAM	LCH	9.85	<13	PASS
	MCH	8.93	<13	PASS
	HCH	9.2	<13	PASS

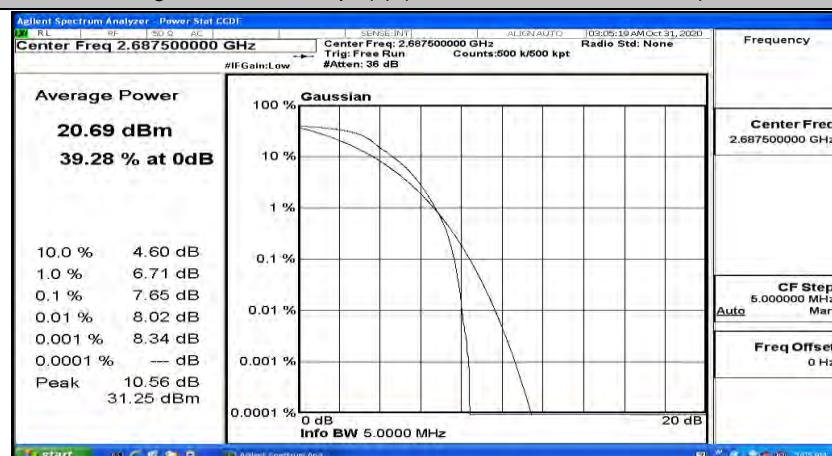
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



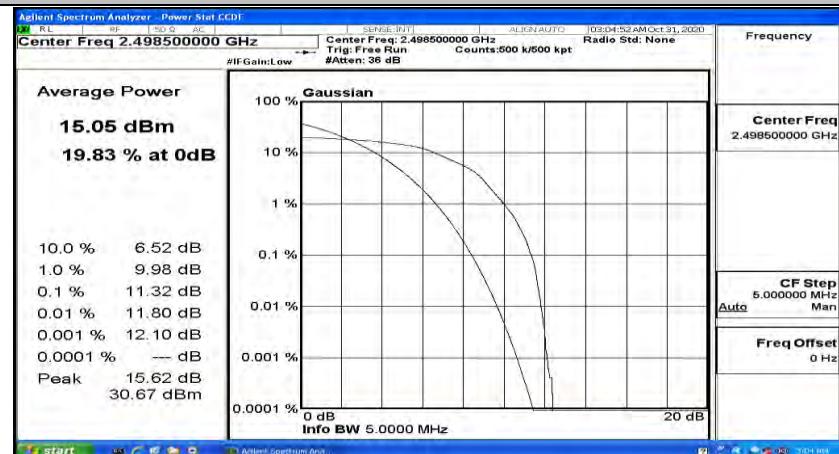
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



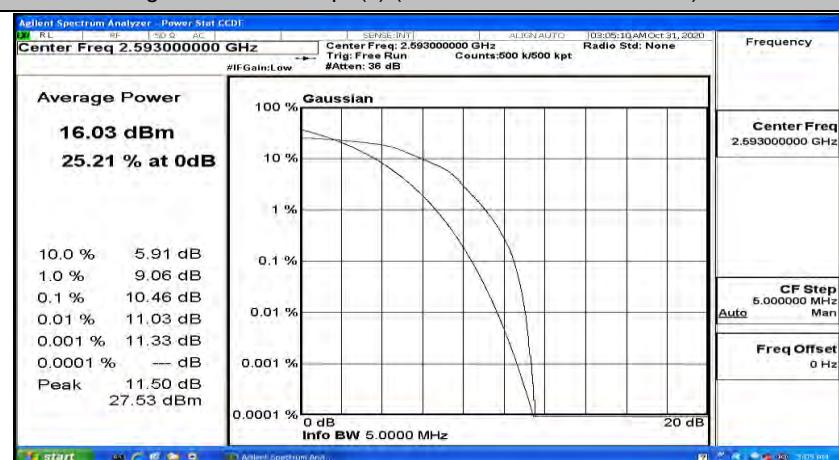
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



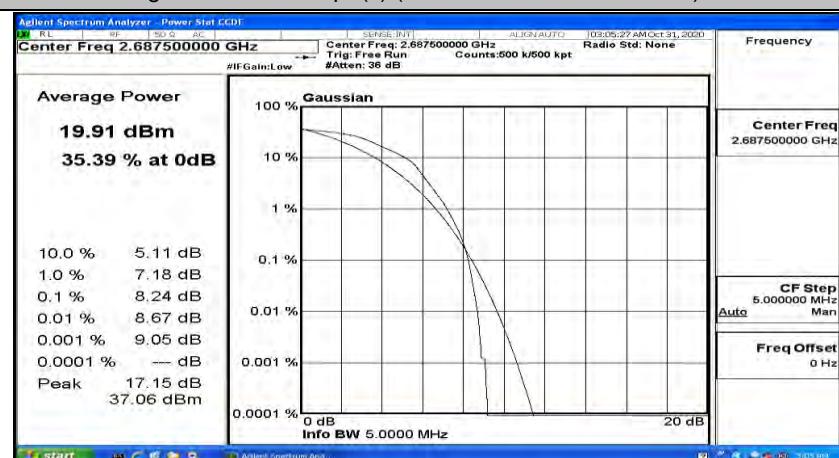
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



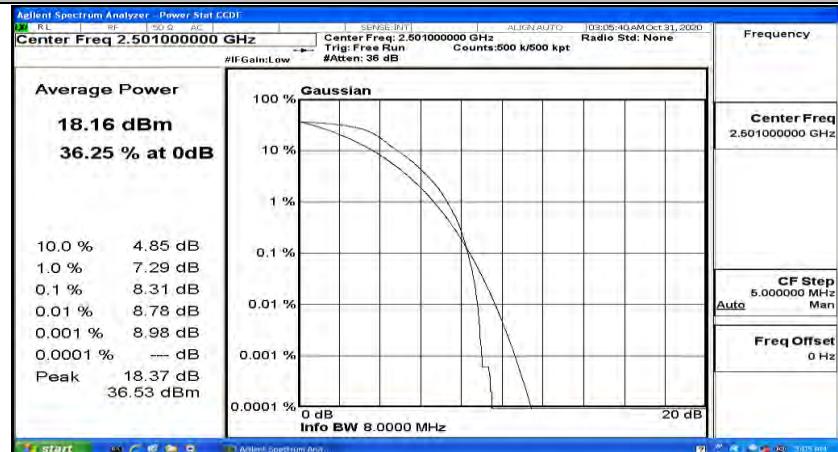
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



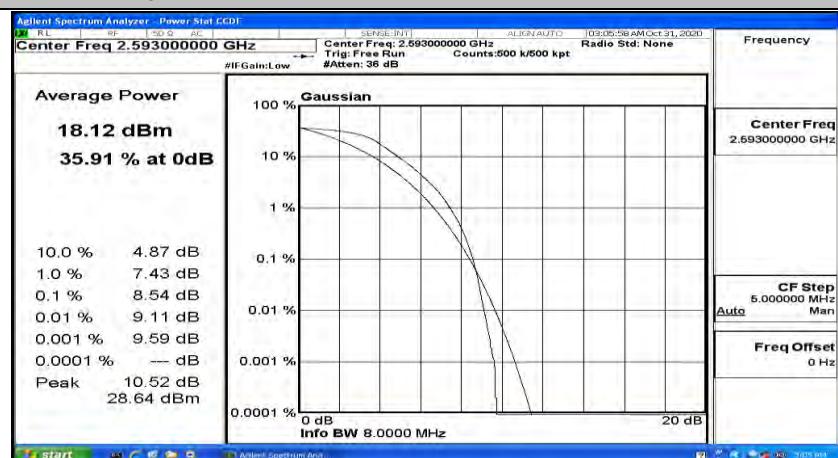
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



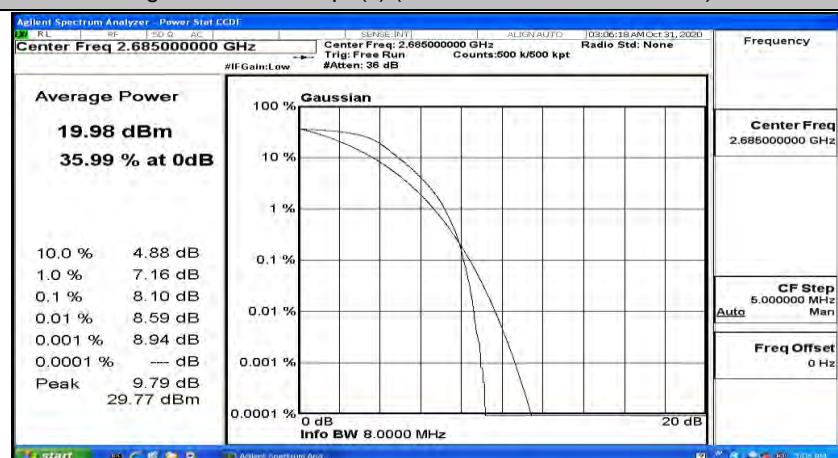
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



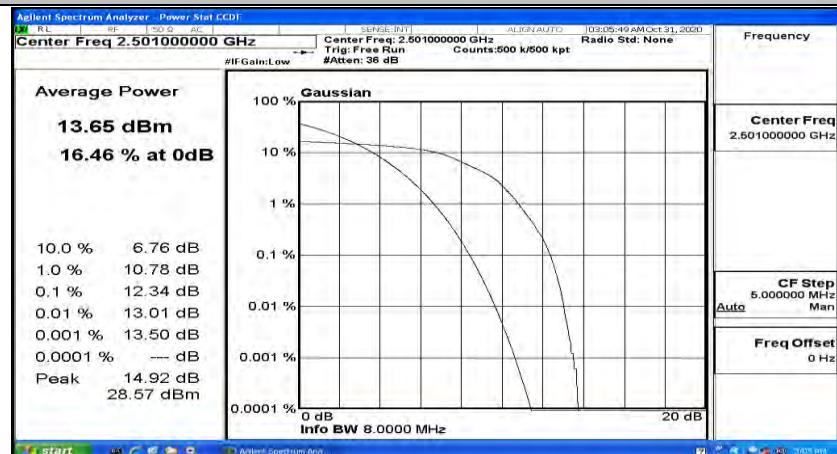
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



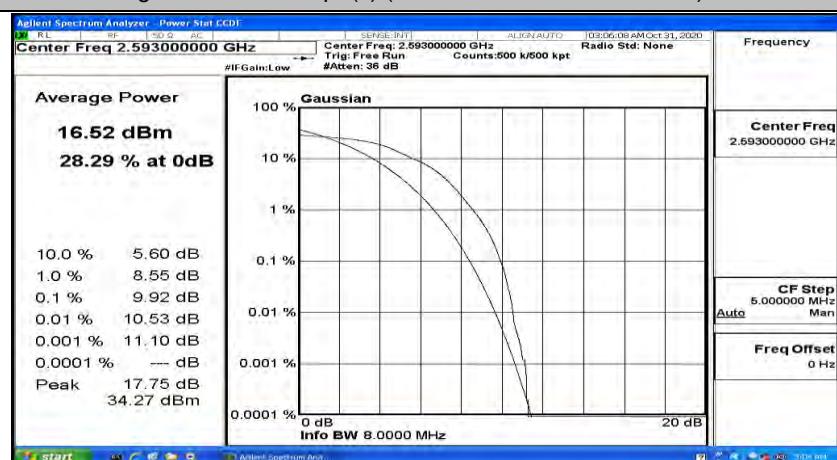
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



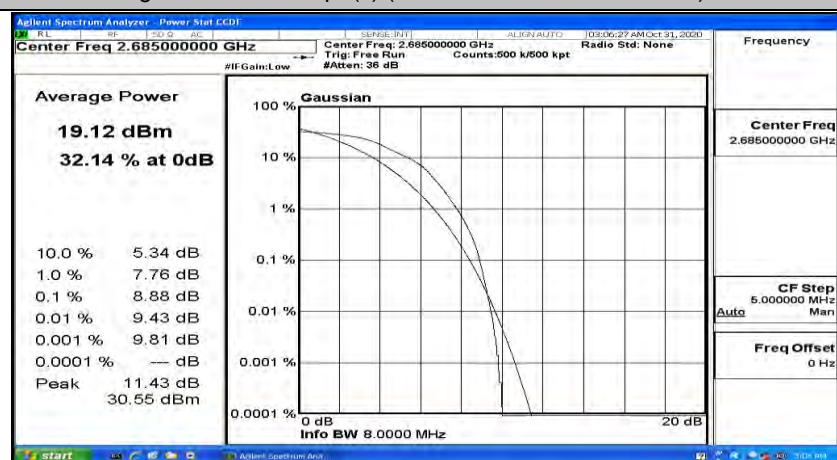
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



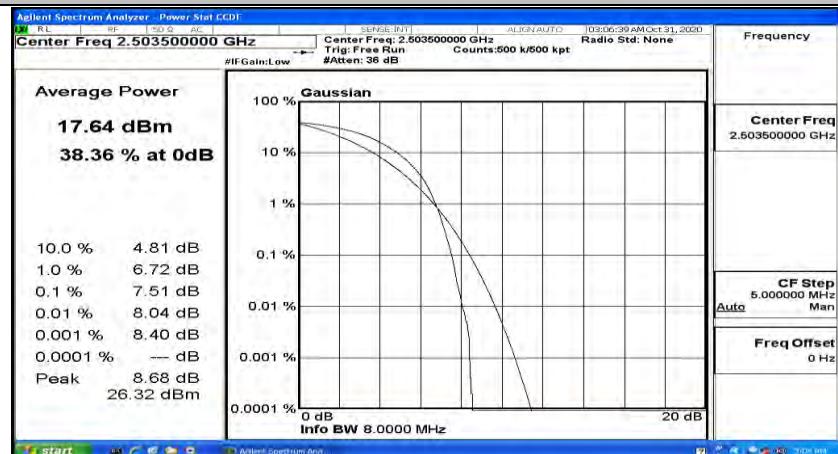
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



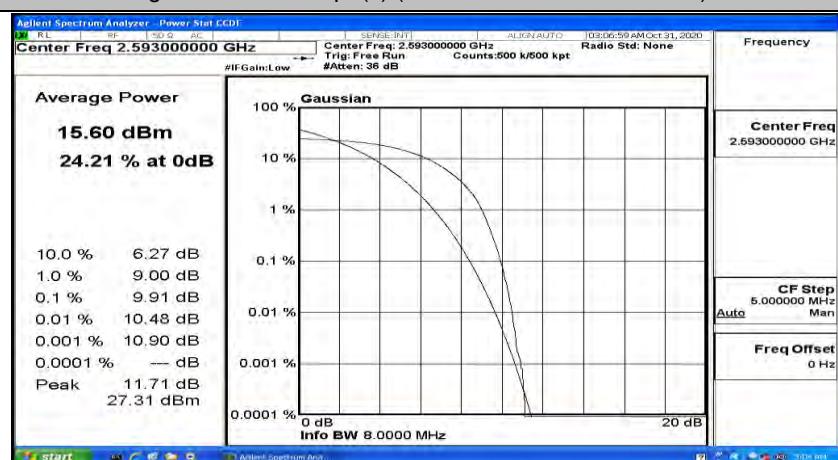
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



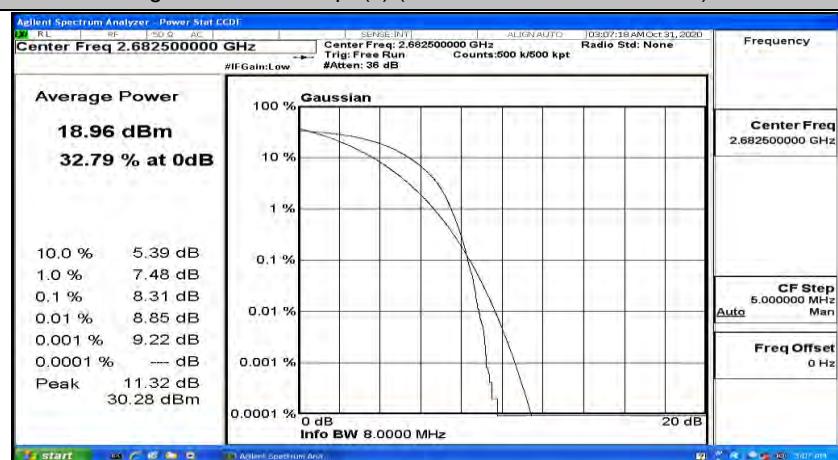
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



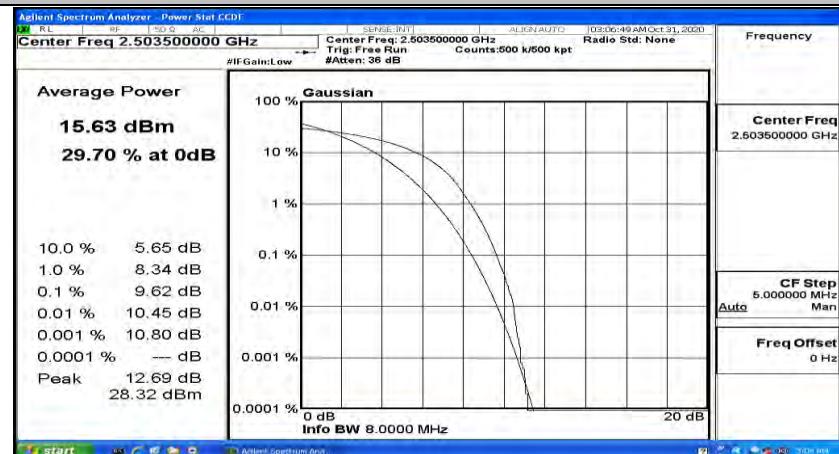
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



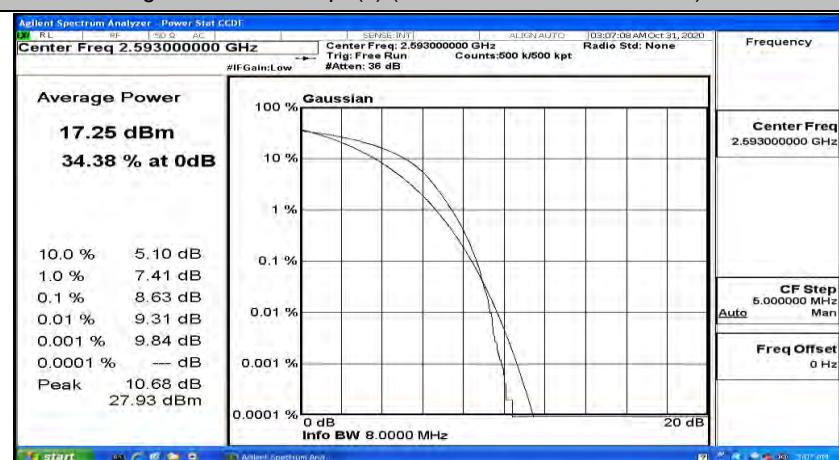
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



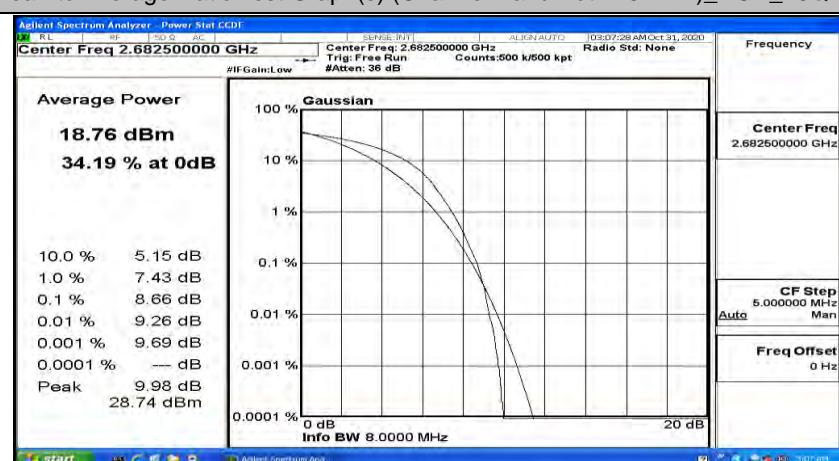
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



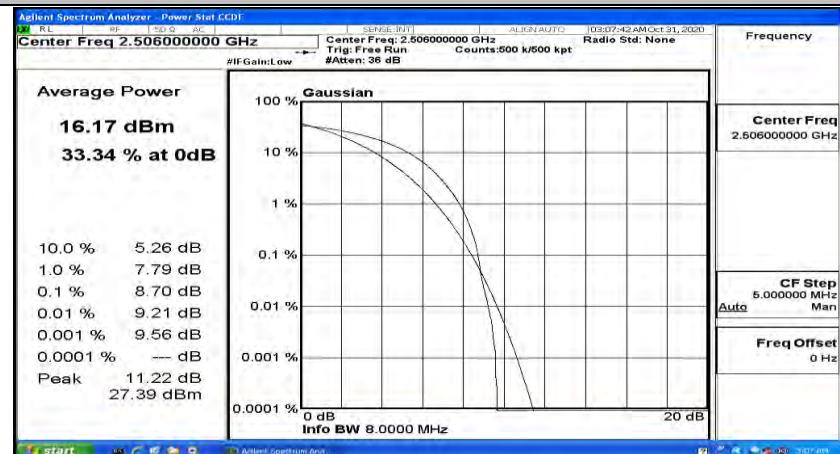
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



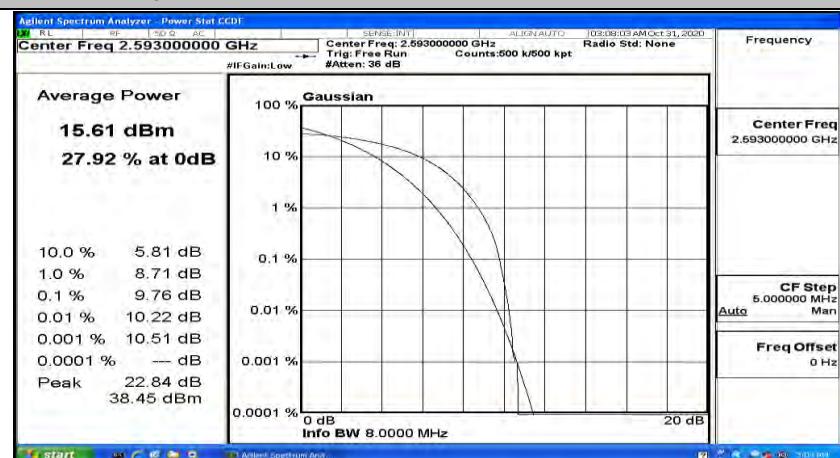
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



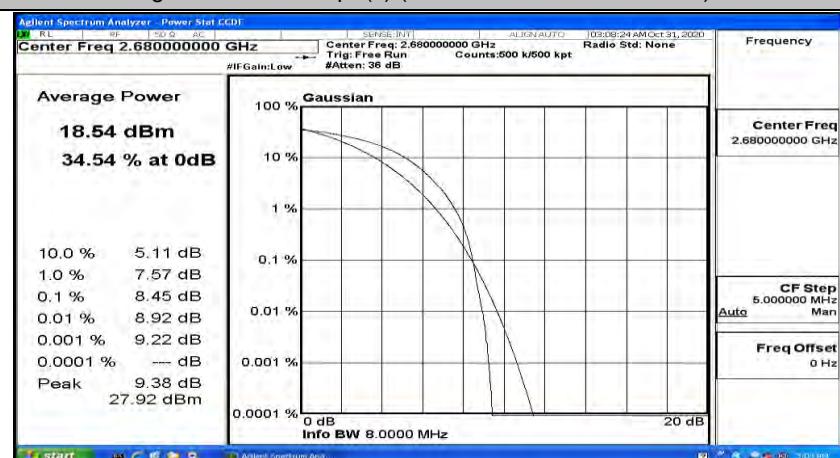
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



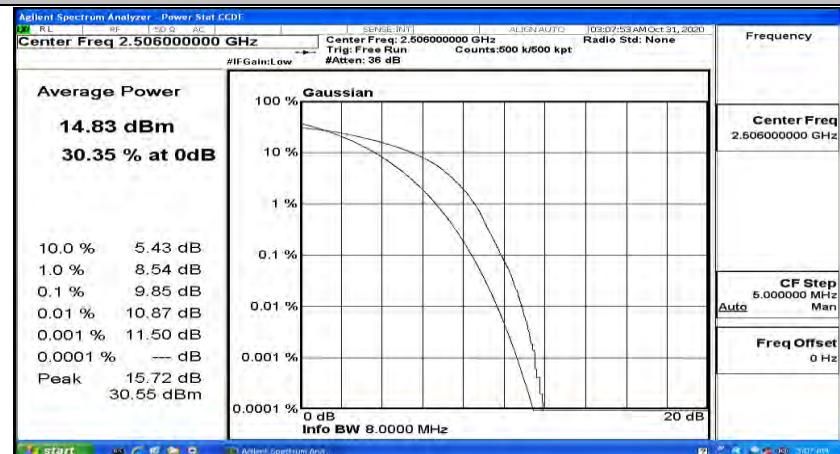
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



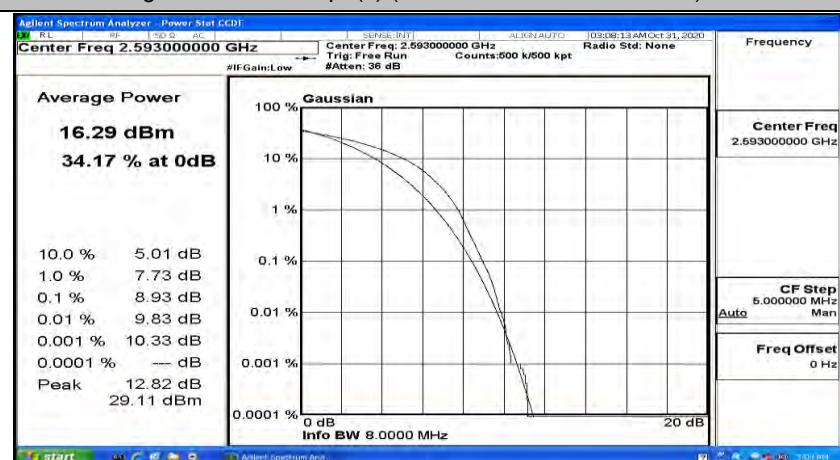
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



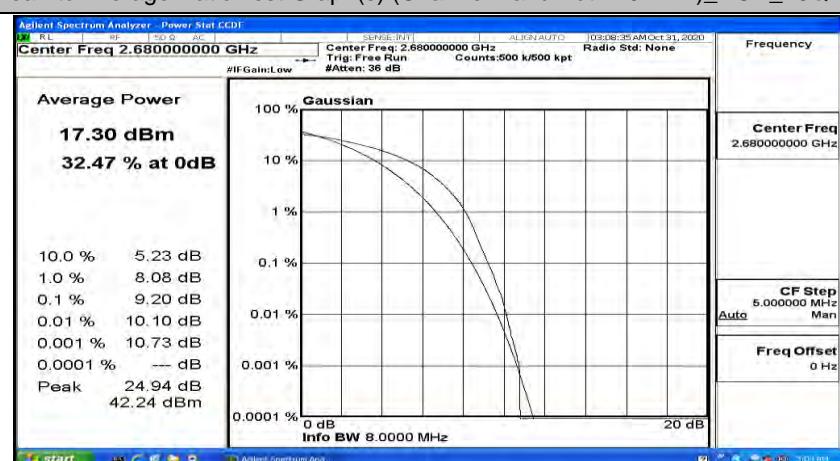
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_16QAM



## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_16QAM



**G.3 26dB Bandwidth and Occupied Bandwidth**

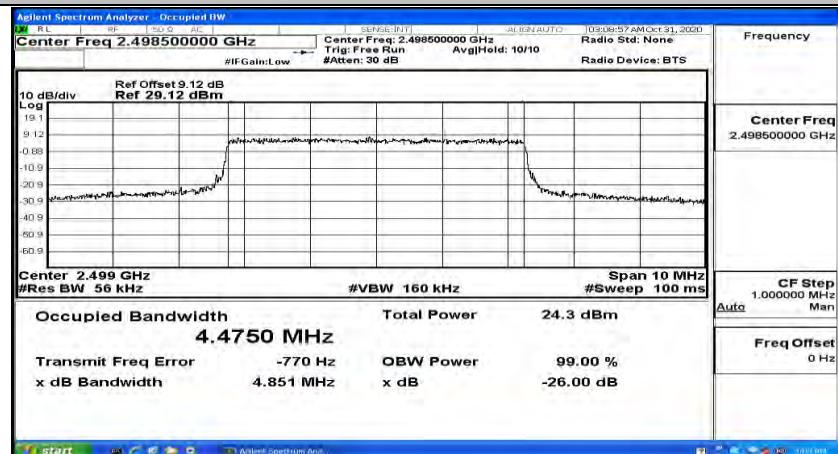
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4750	4.851	PASS
	MCH	4.4801	4.743	PASS
	HCH	4.4765	4.829	PASS
16QAM	LCH	4.4589	4.755	PASS
	MCH	4.4745	4.761	PASS
	HCH	4.4616	4.759	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9137	9.392	PASS
	MCH	8.8794	9.353	PASS
	HCH	8.9287	9.416	PASS
16QAM	LCH	8.9140	9.460	PASS
	MCH	8.9222	9.404	PASS
	HCH	8.8896	9.345	PASS

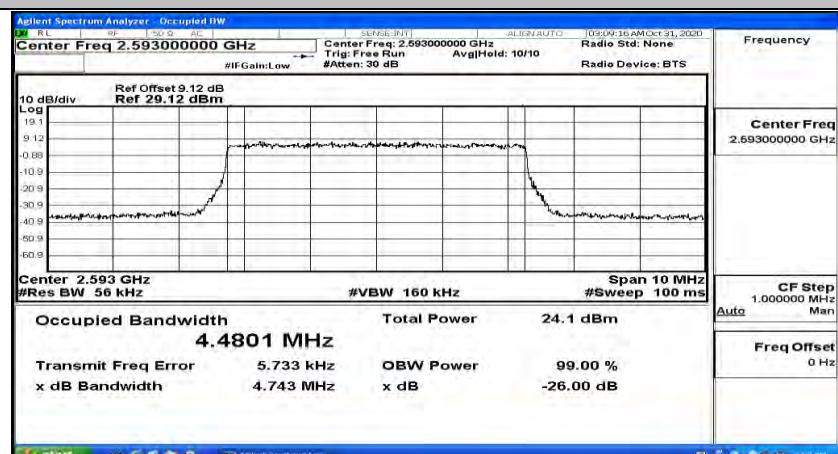
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.417	14.14	PASS
	MCH	13.371	13.97	PASS
	HCH	13.361	14.01	PASS
16QAM	LCH	13.402	14.11	PASS
	MCH	13.357	13.96	PASS
	HCH	13.366	13.99	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.855	18.59	PASS
	MCH	17.813	18.54	PASS
	HCH	17.810	18.59	PASS
16QAM	LCH	17.859	18.66	PASS
	MCH	17.796	18.53	PASS
	HCH	17.810	18.49	PASS

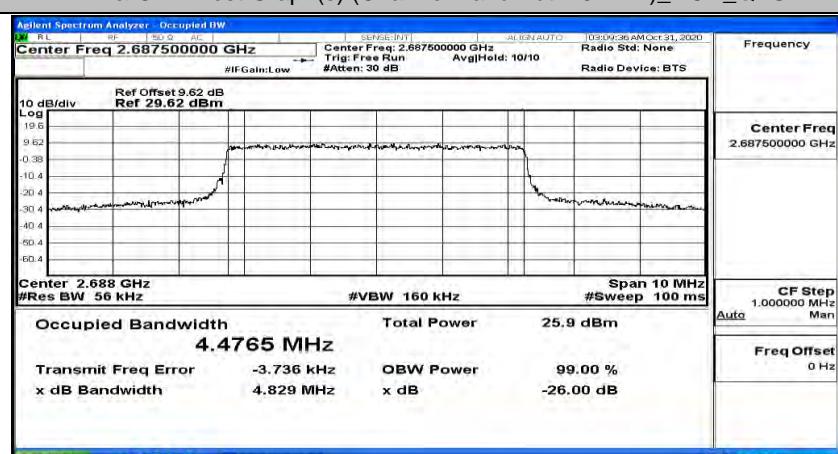
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



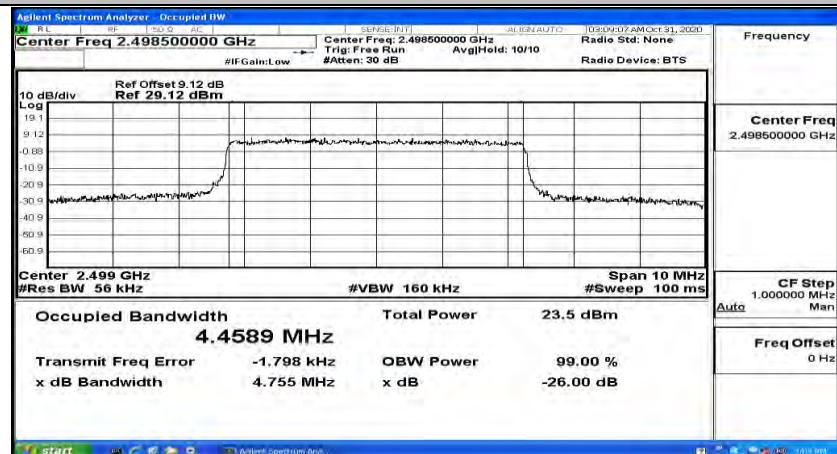
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



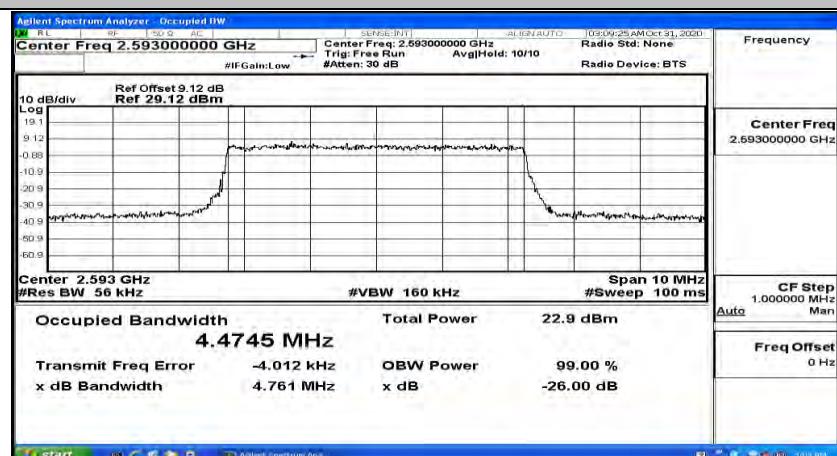
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



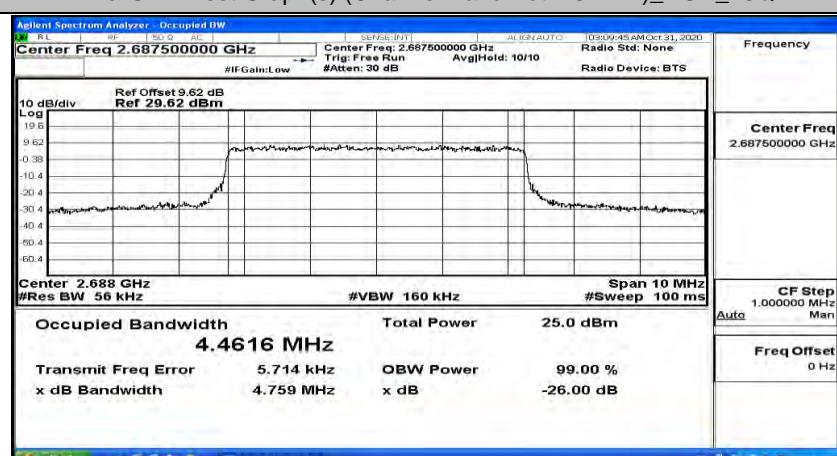
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



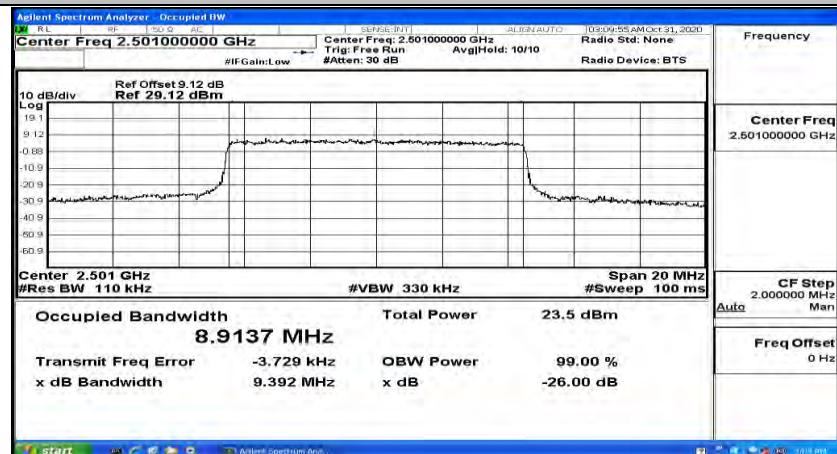
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



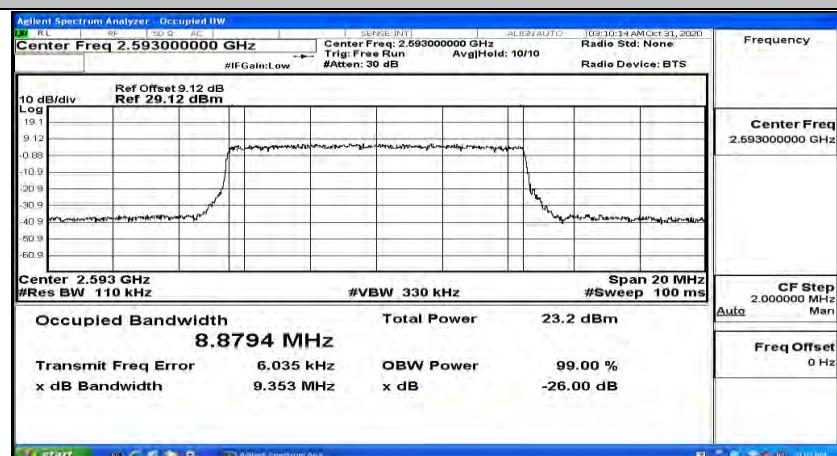
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



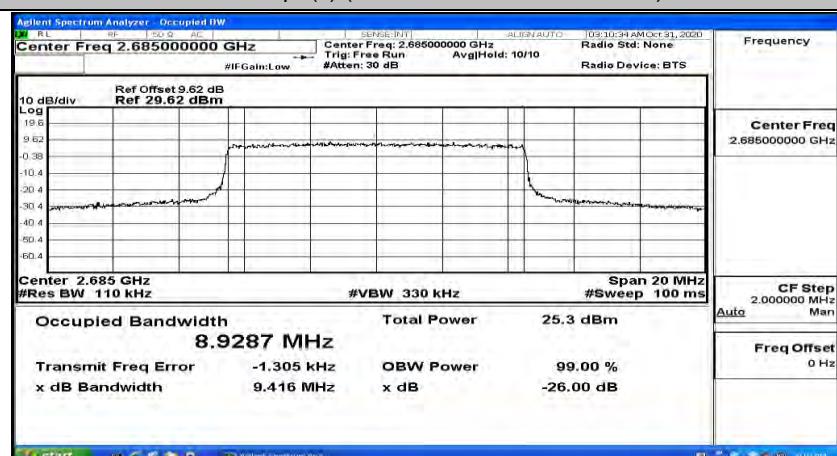
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



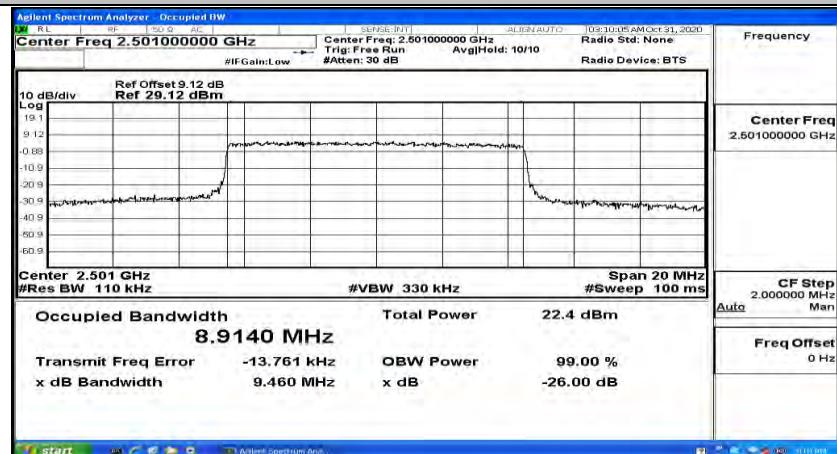
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



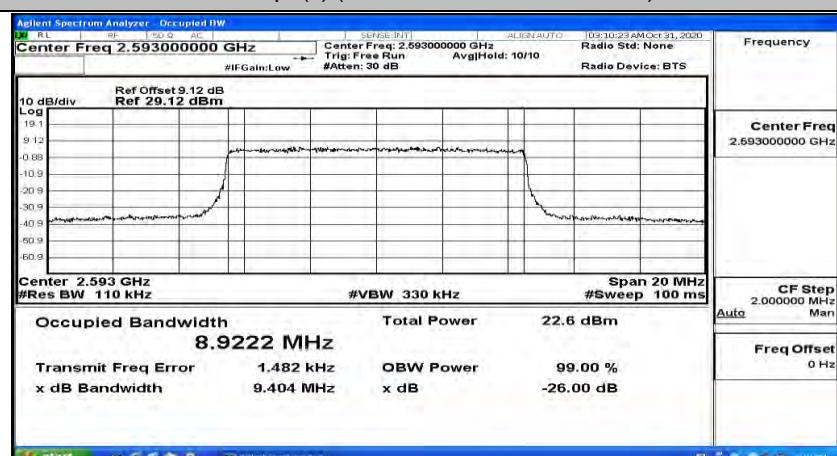
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



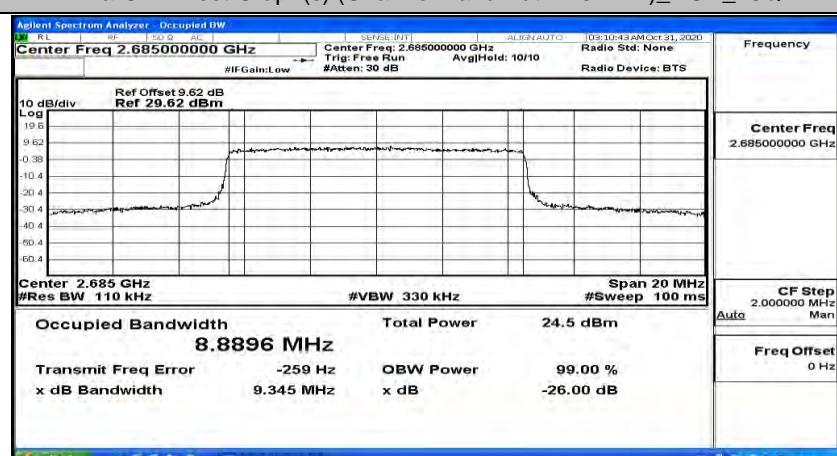
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM

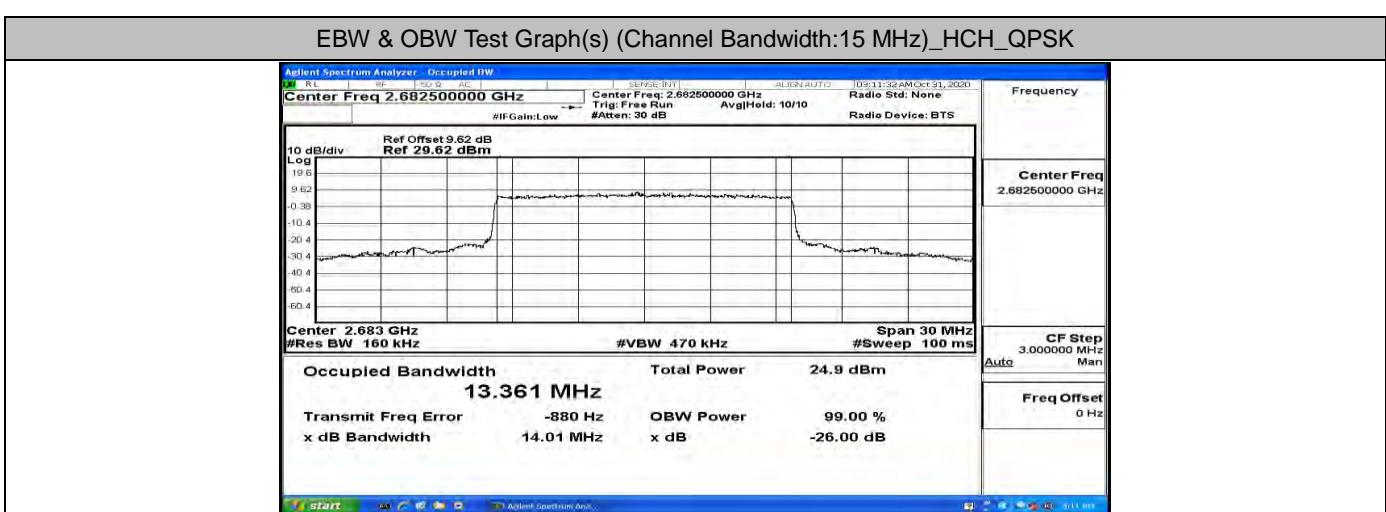
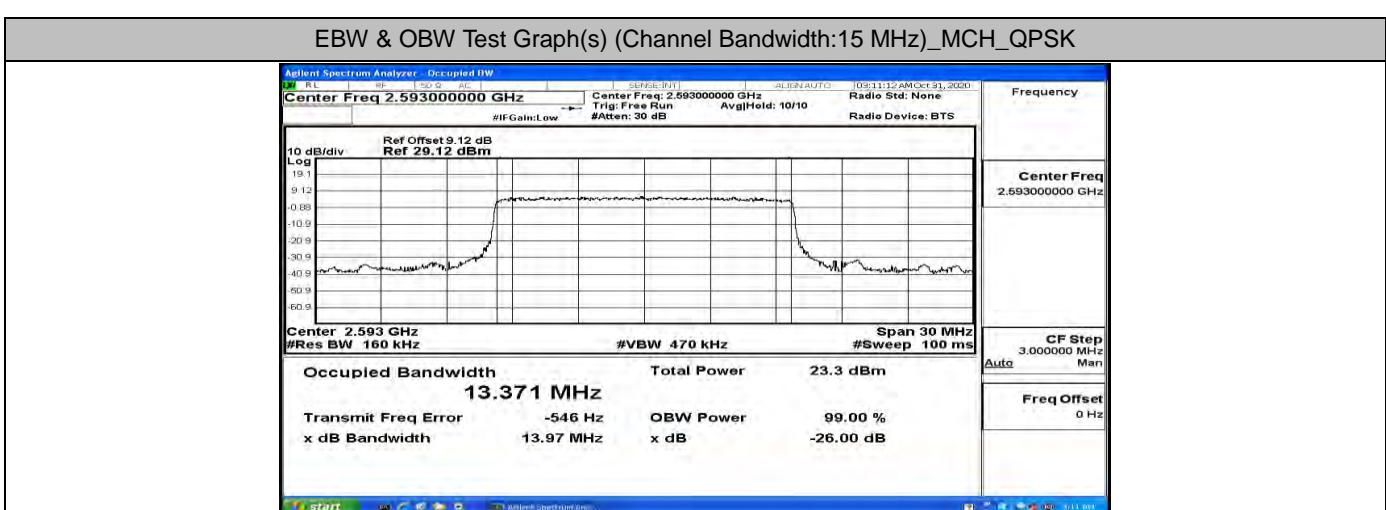
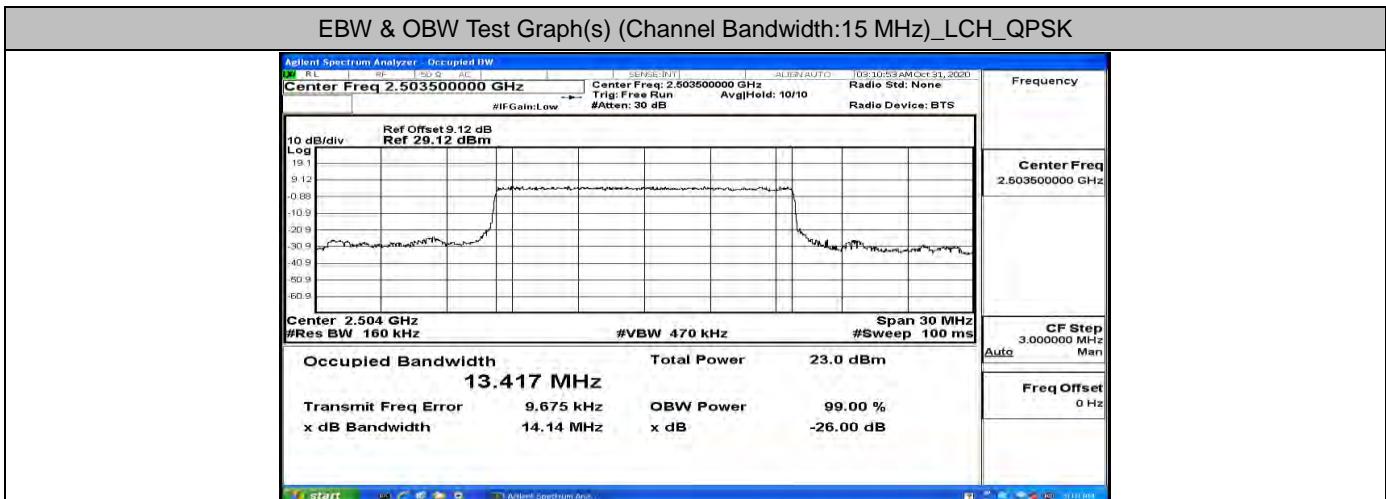


## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM

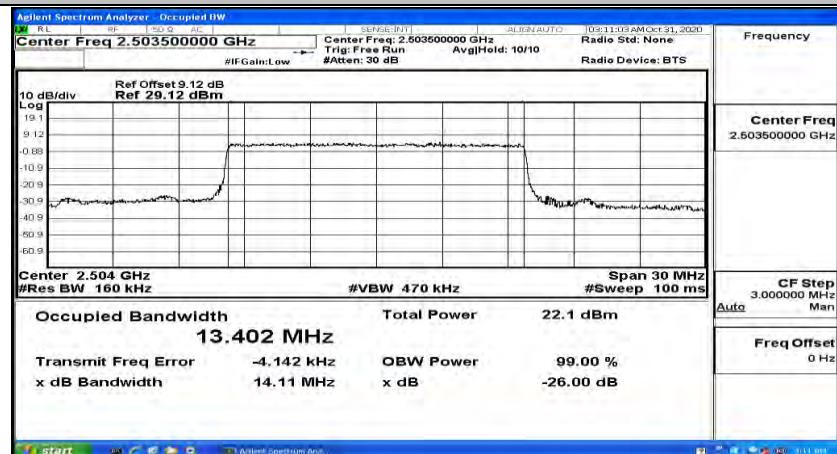


## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM

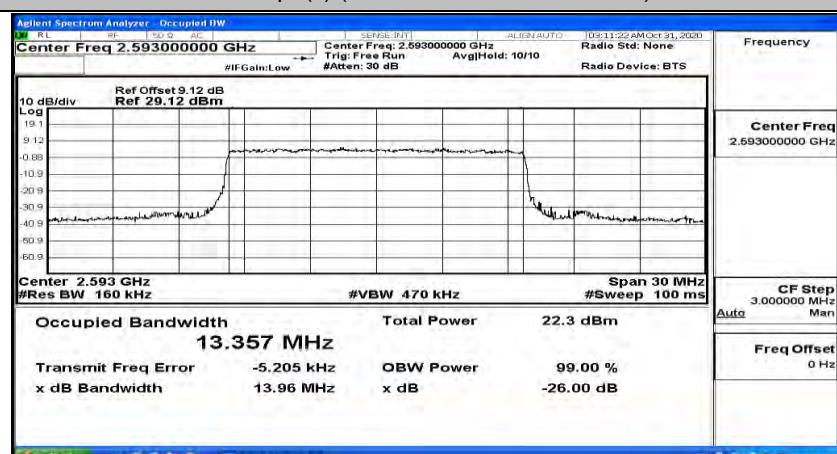




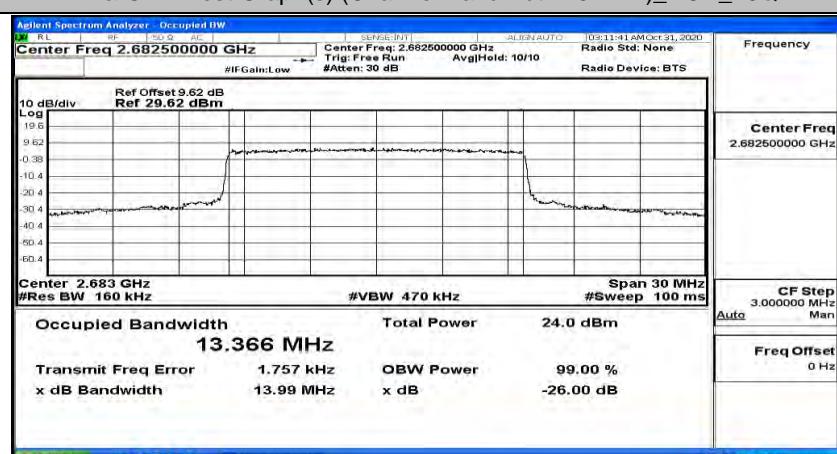
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



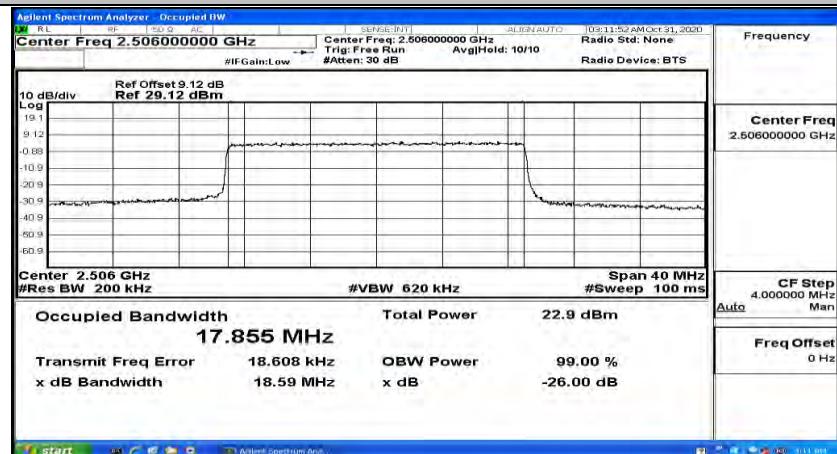
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



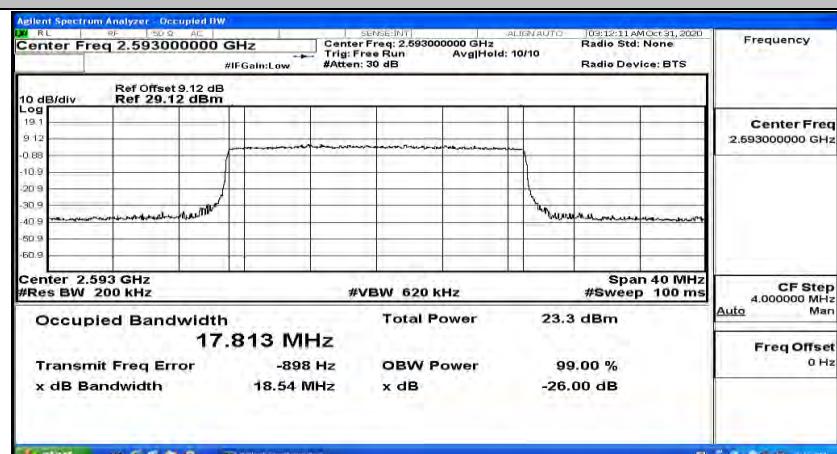
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



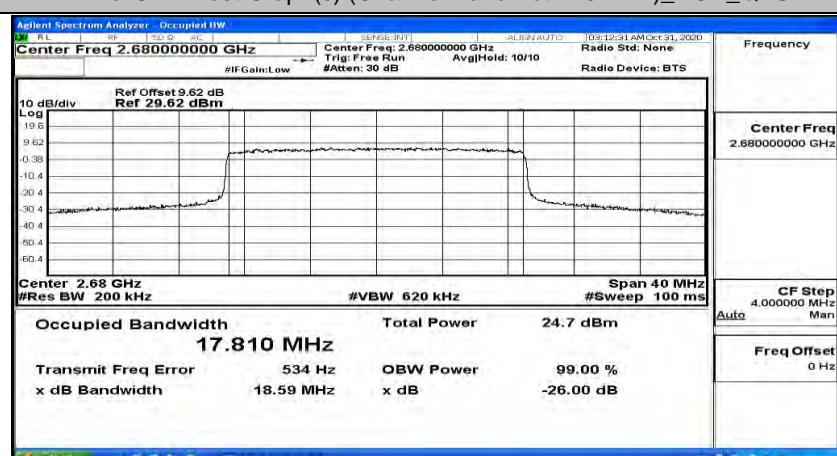
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



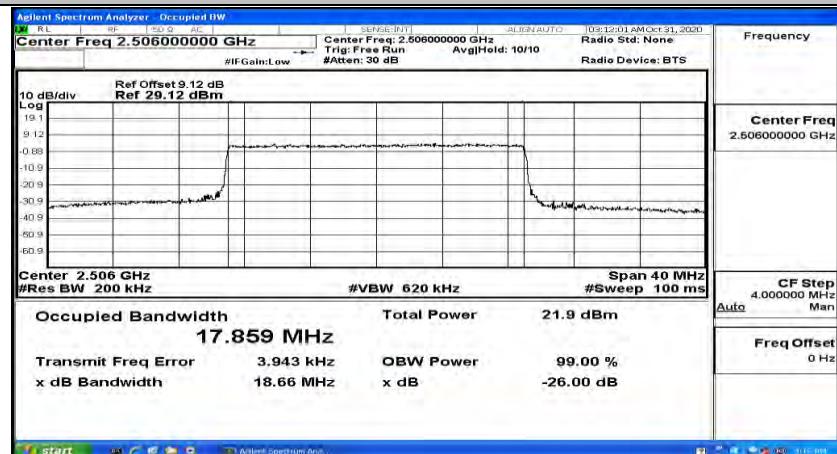
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



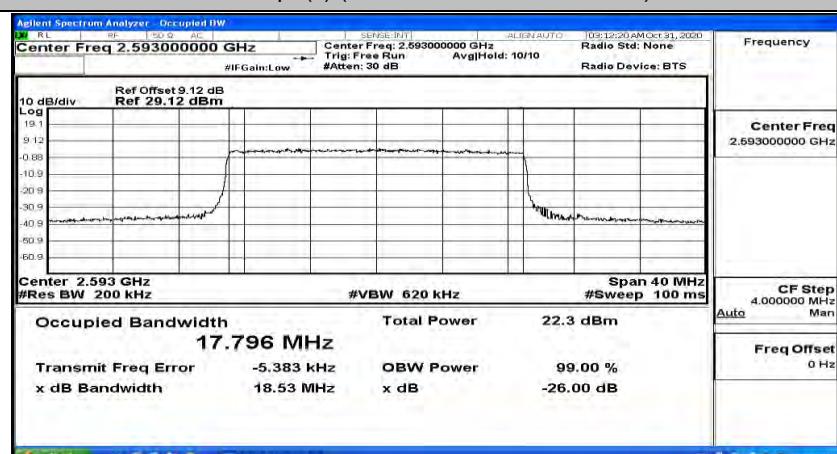
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



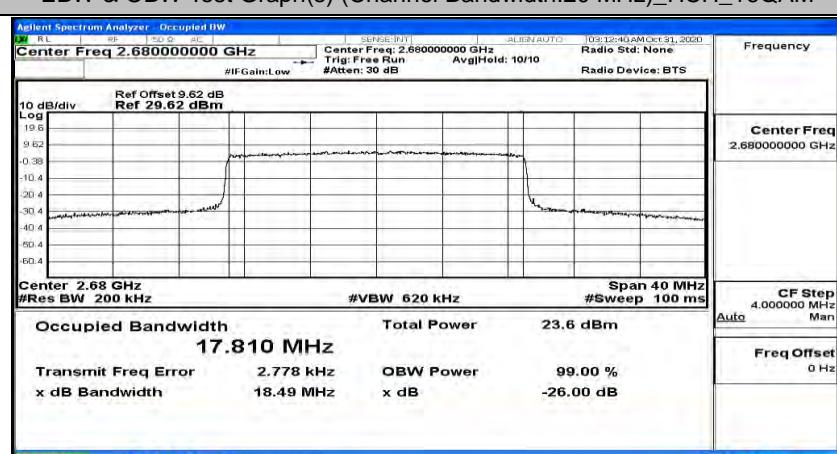
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



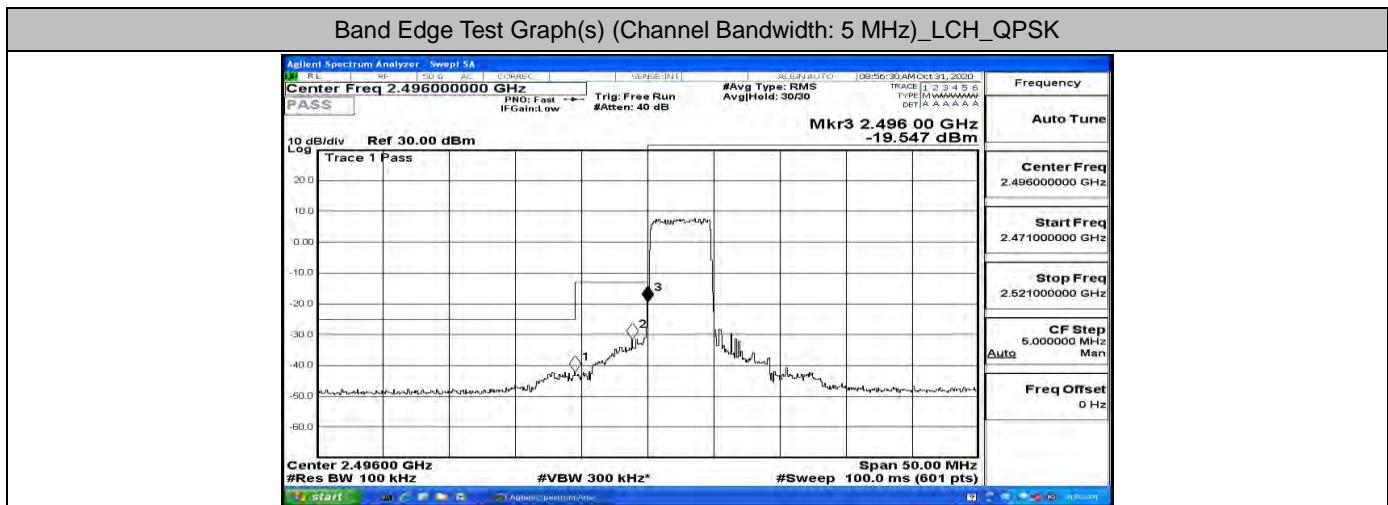
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_16QAM



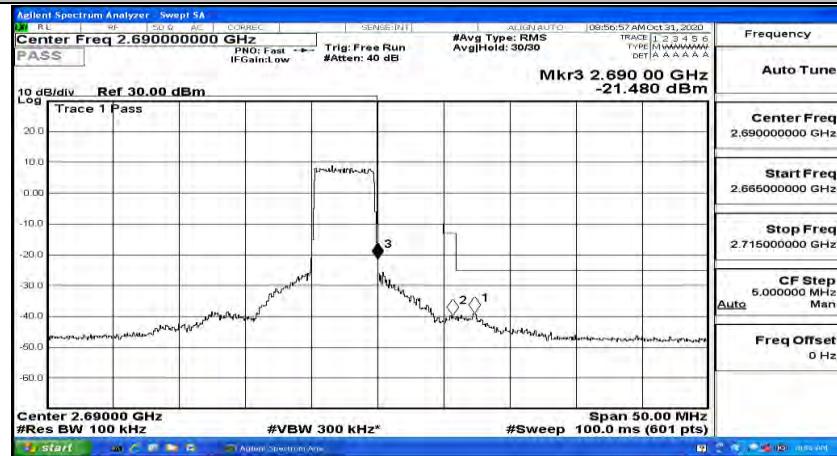
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_16QAM



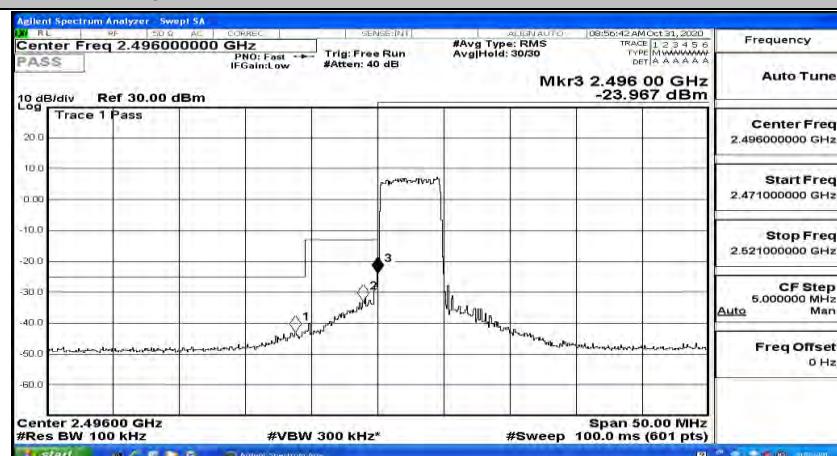
## G.4 Band Edge



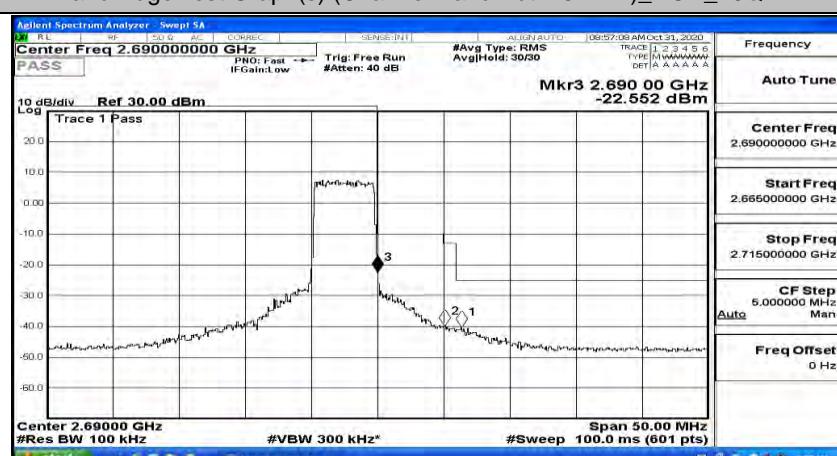
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



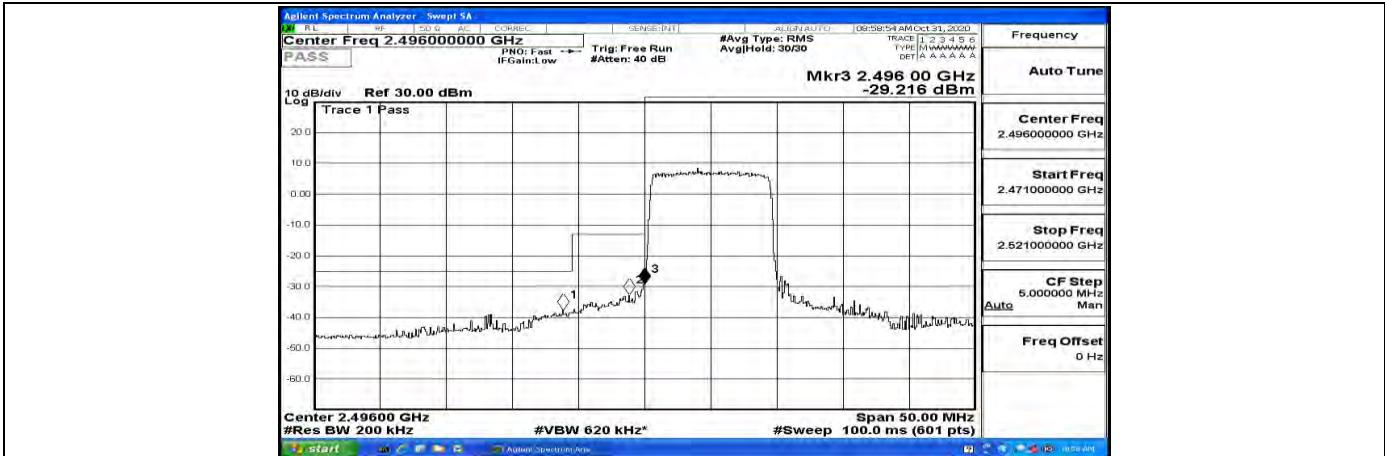
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



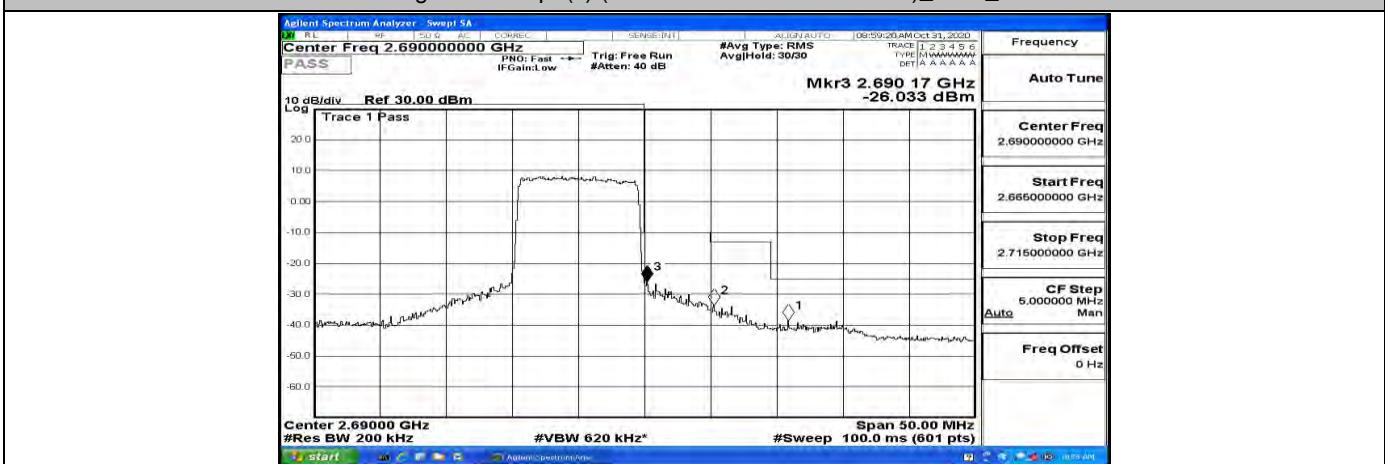
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



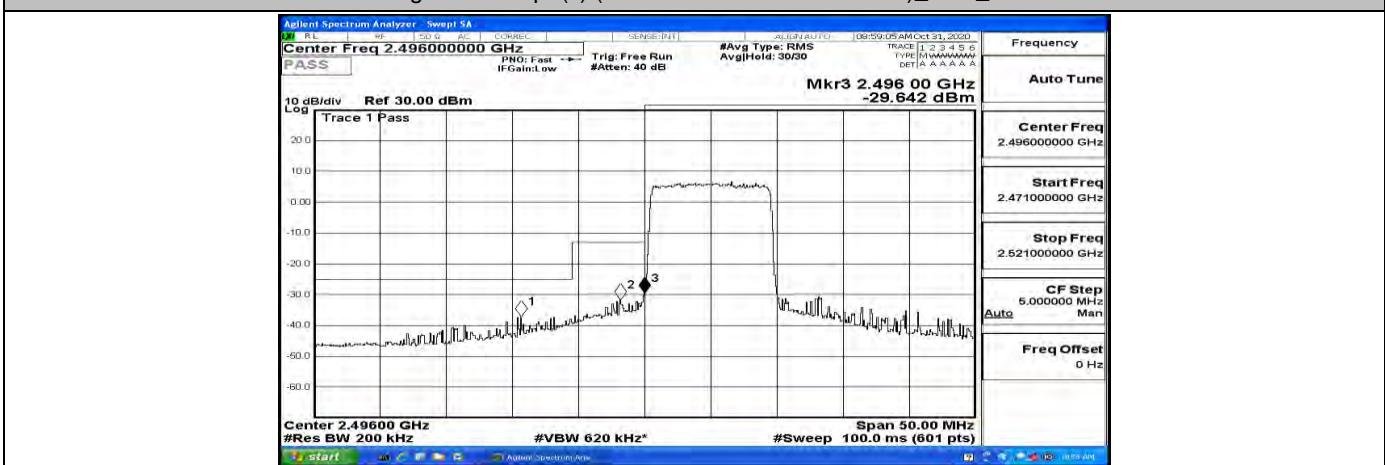
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



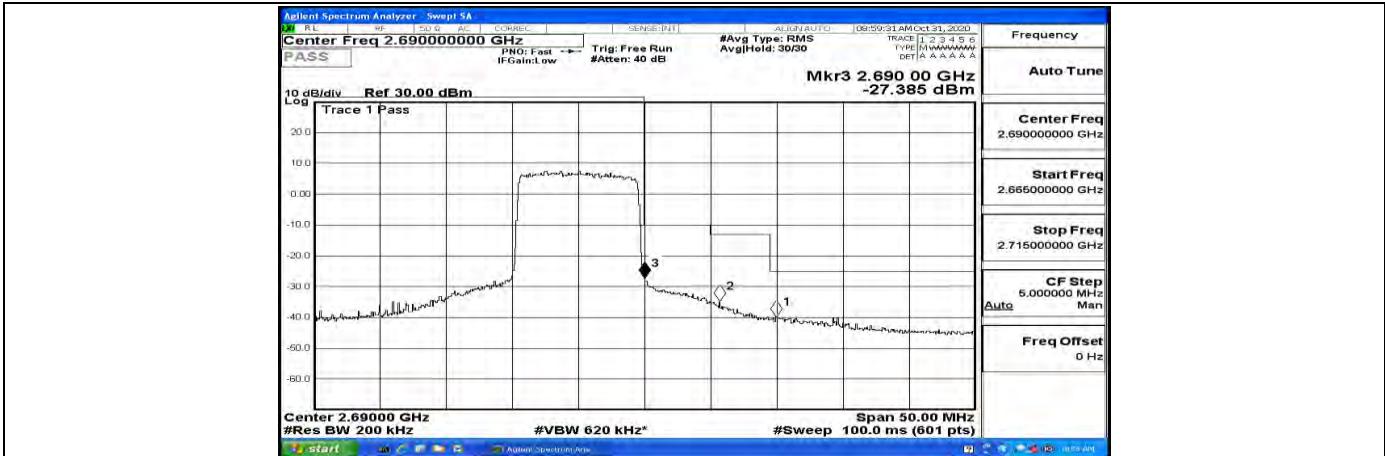
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



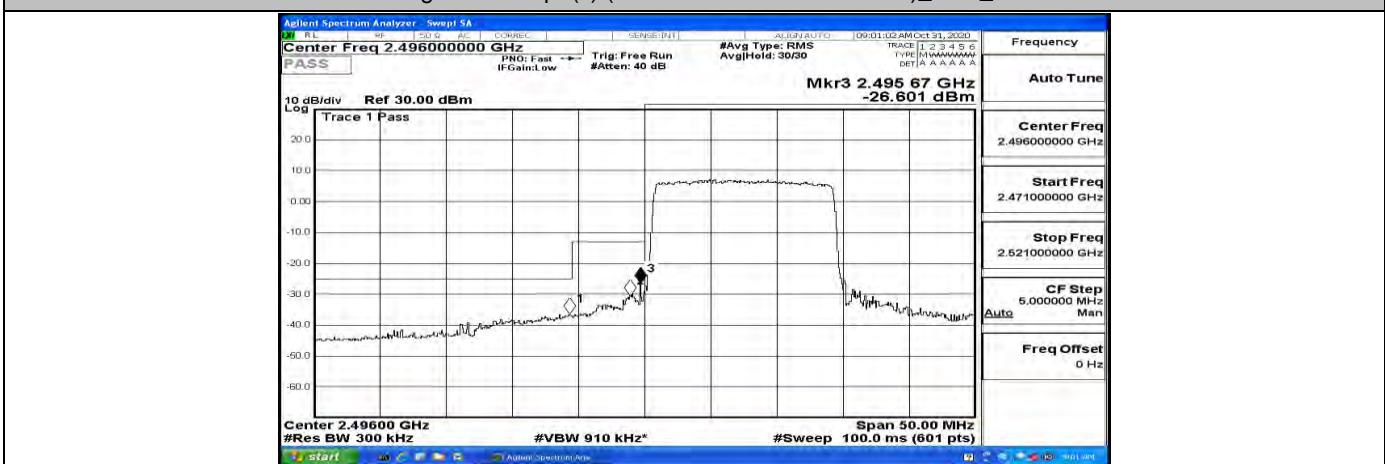
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



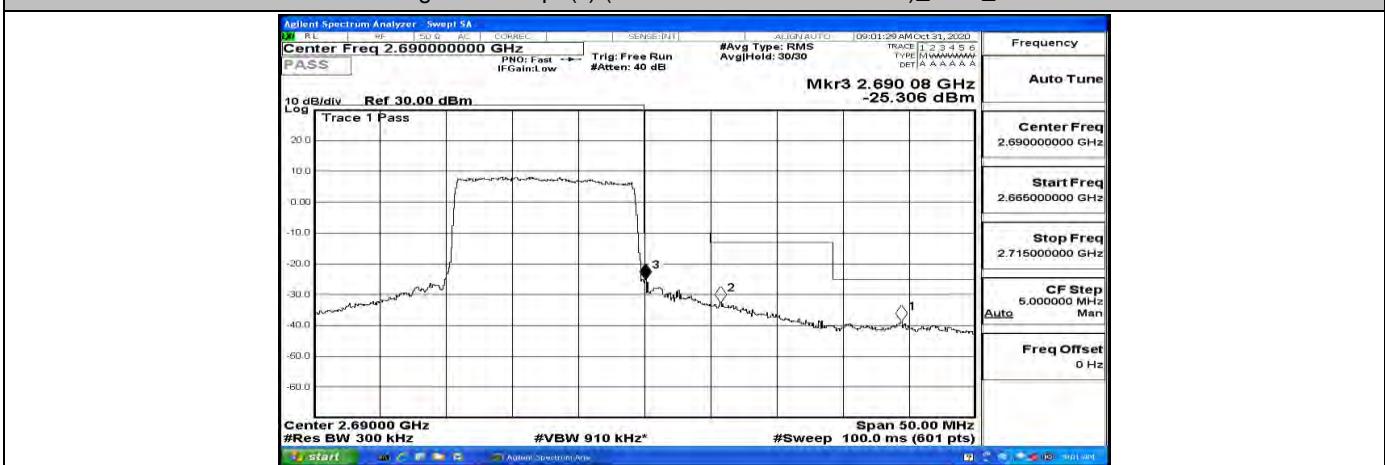
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



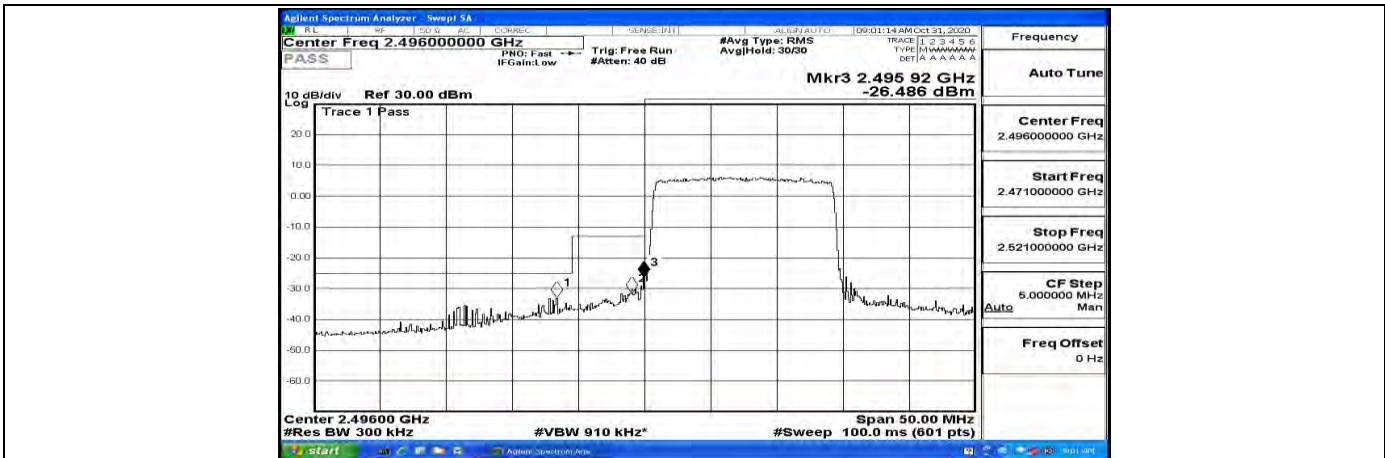
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



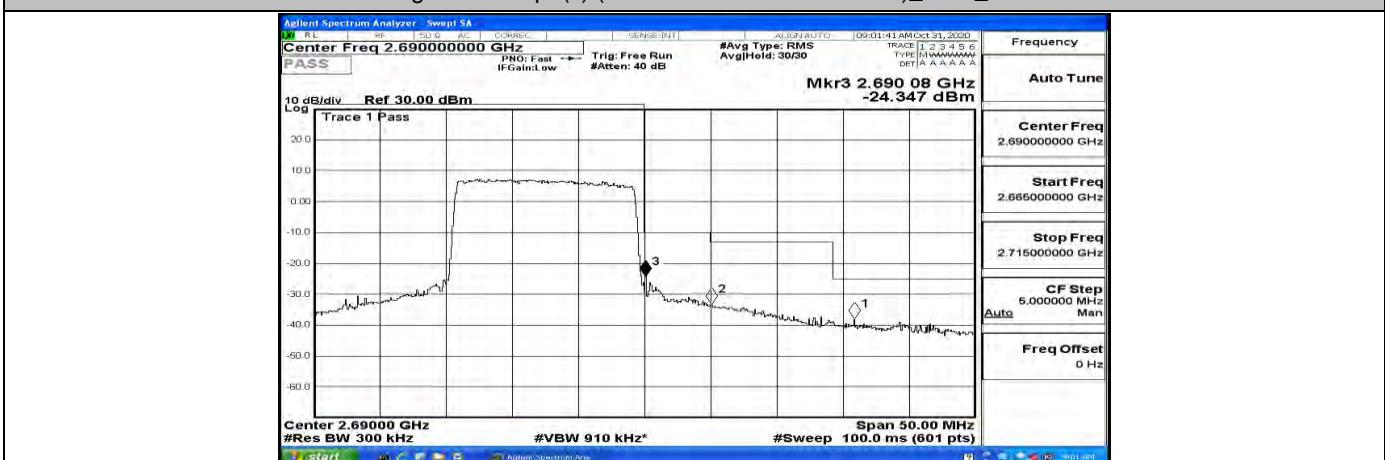
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



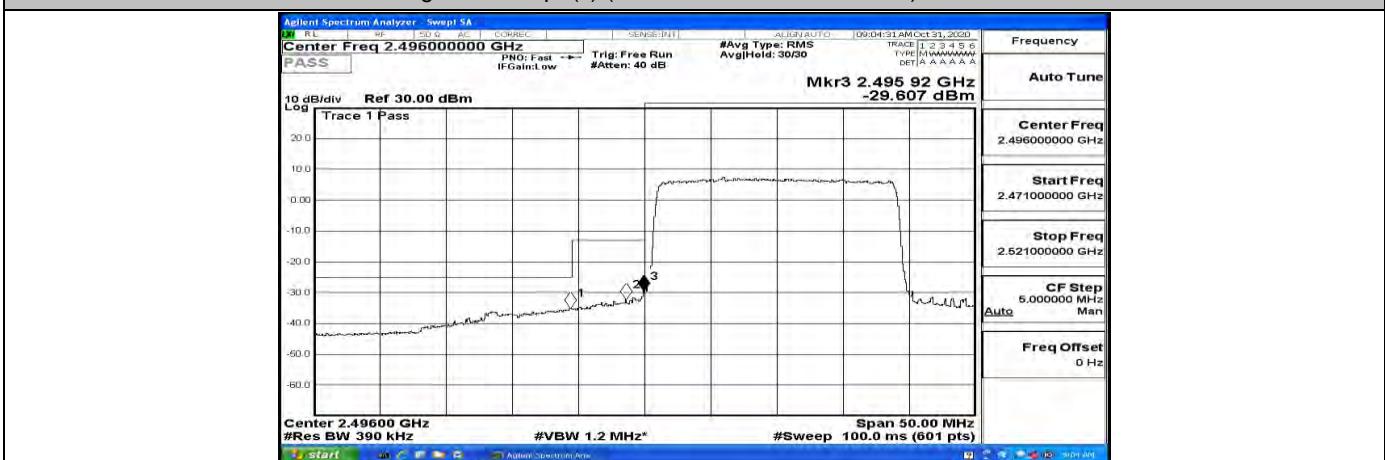
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



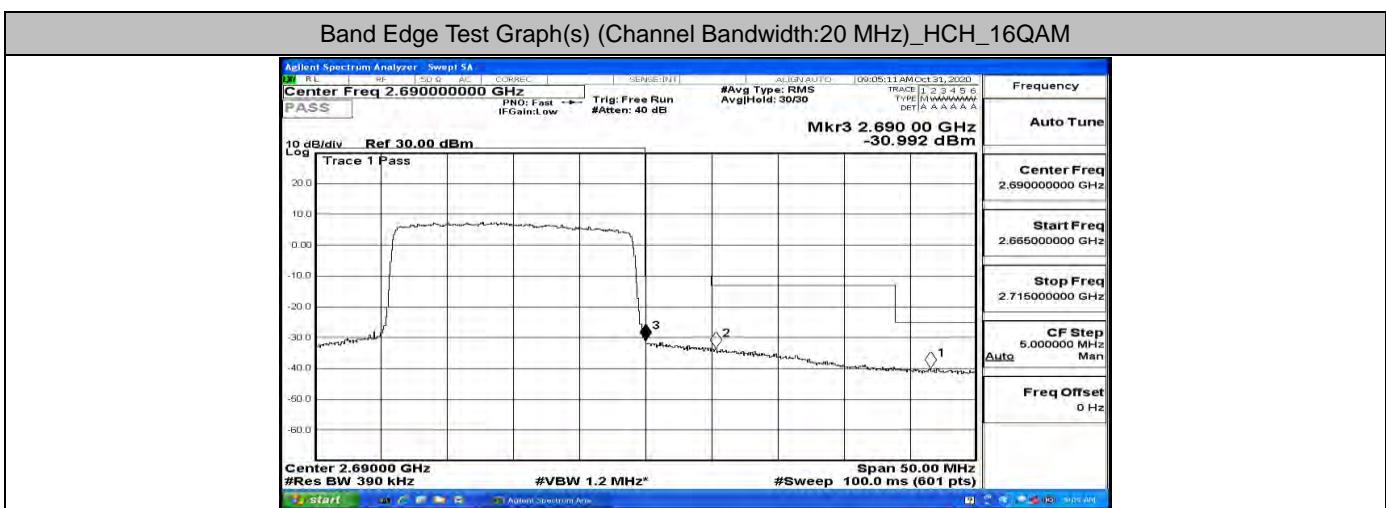
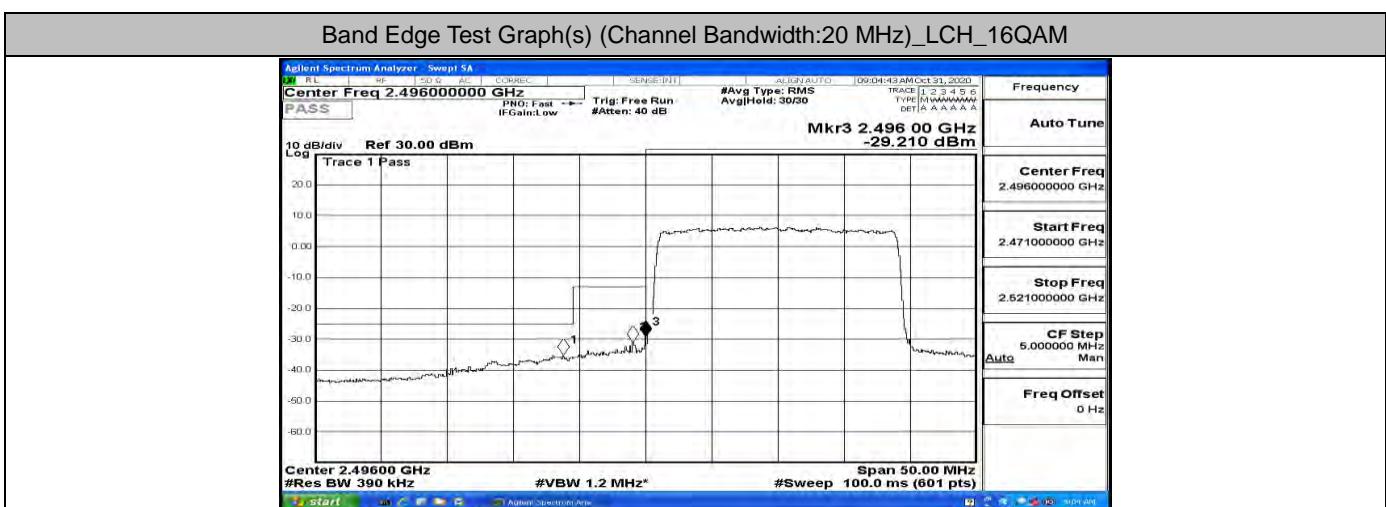
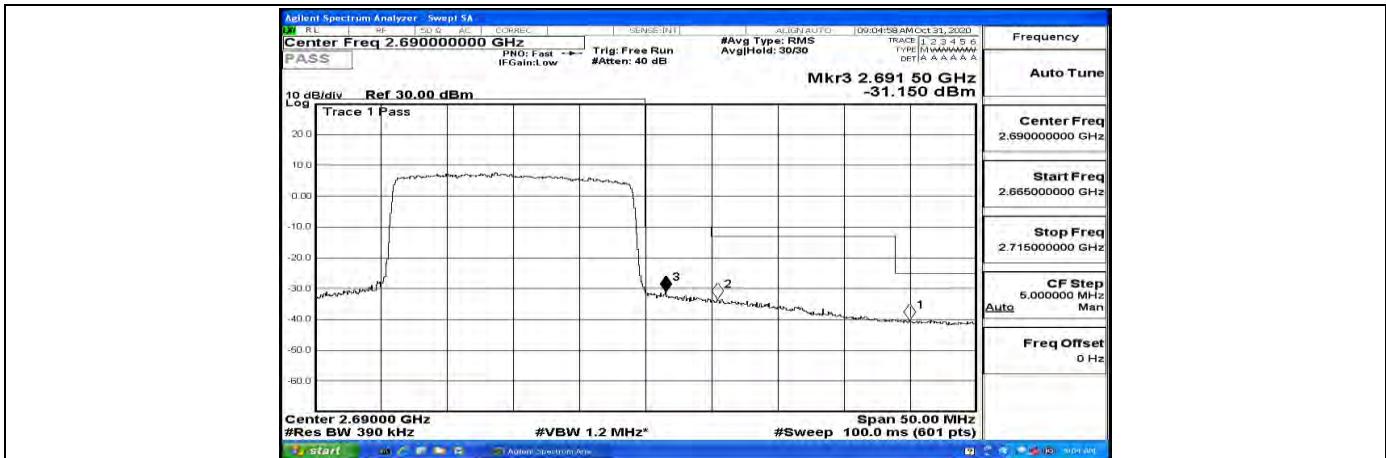
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



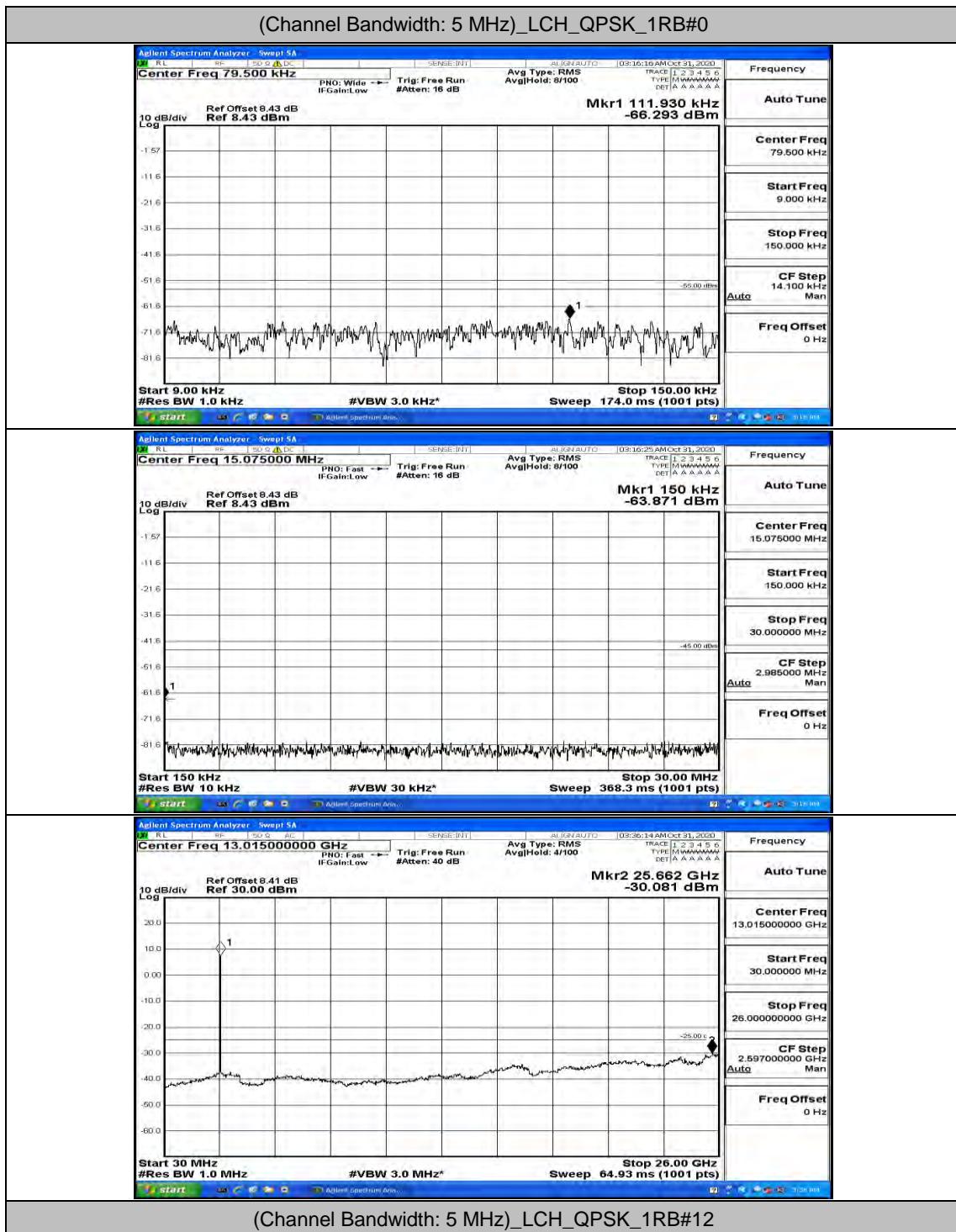
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK

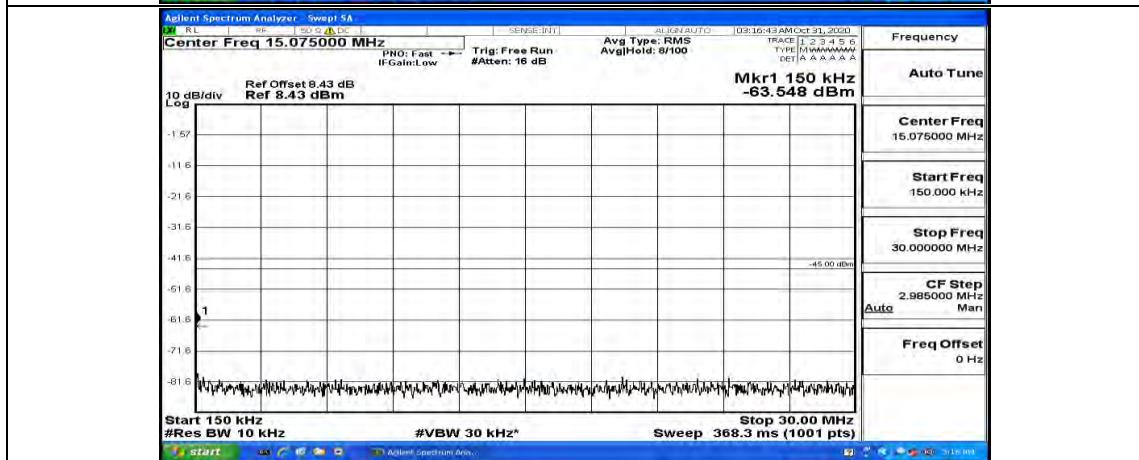
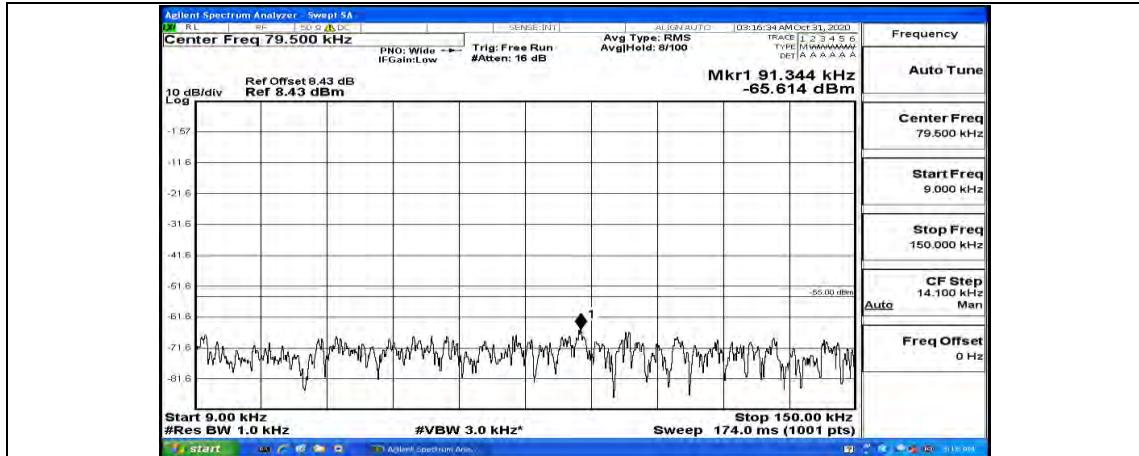


## G.5: Conducted Spurious Emission

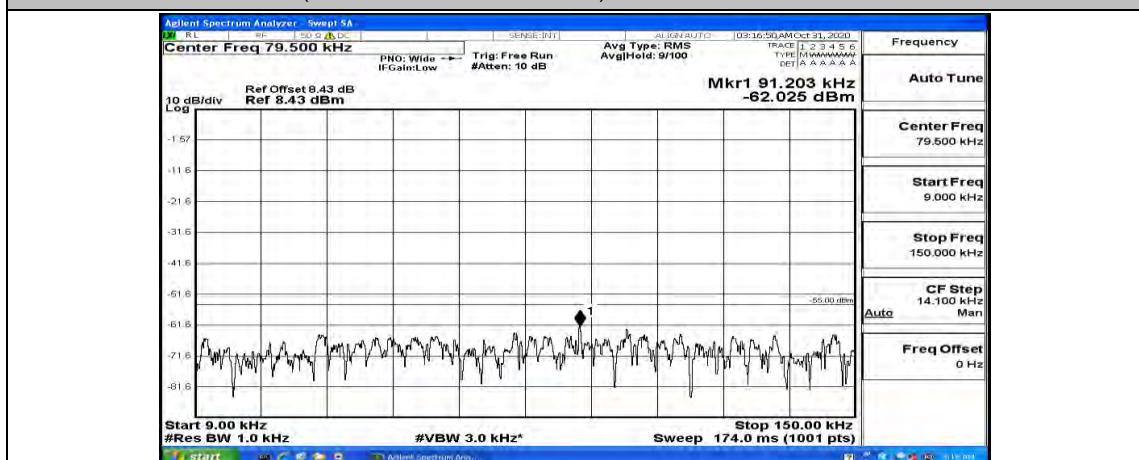
### Test Graphs

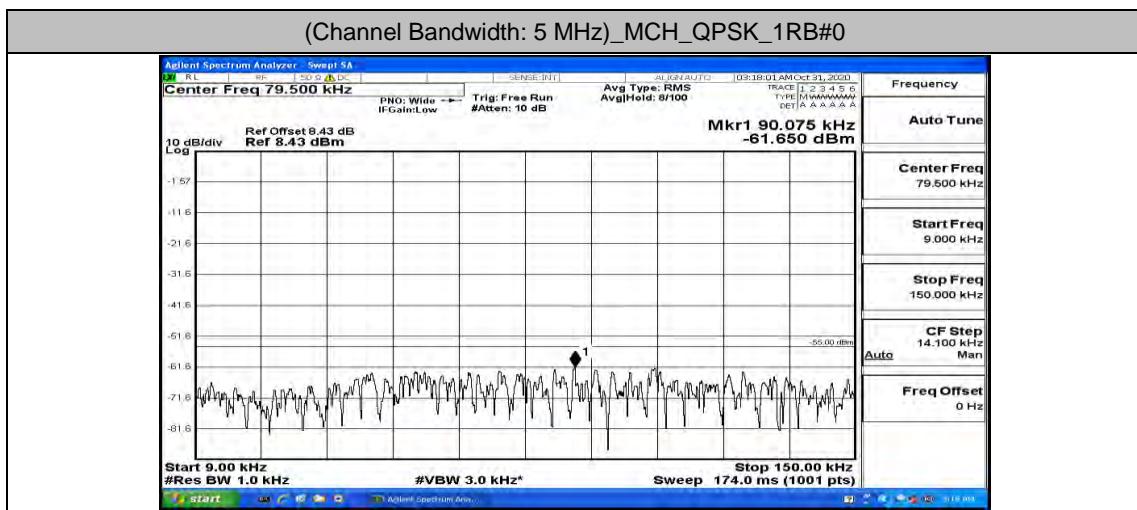
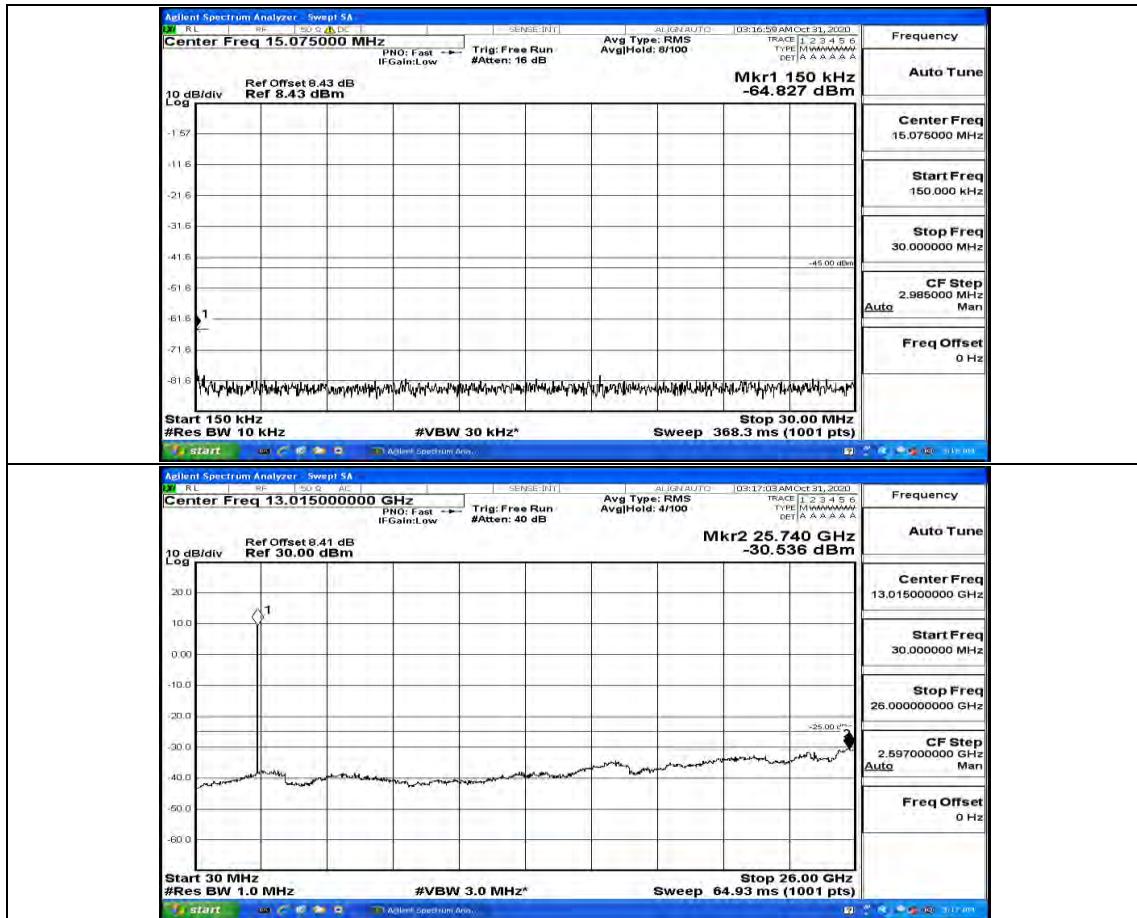
#### Channel Bandwidth: 5 MHz

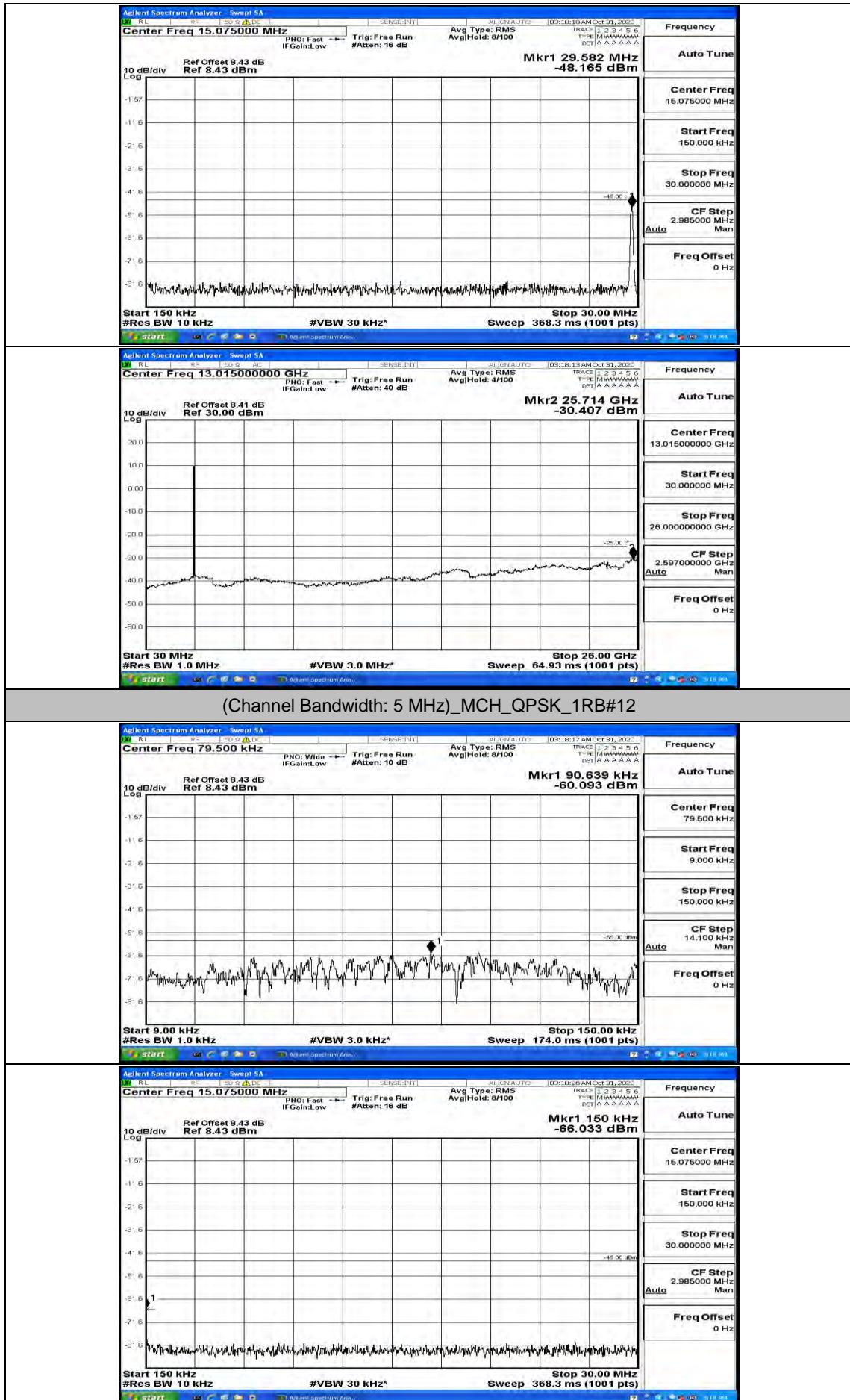


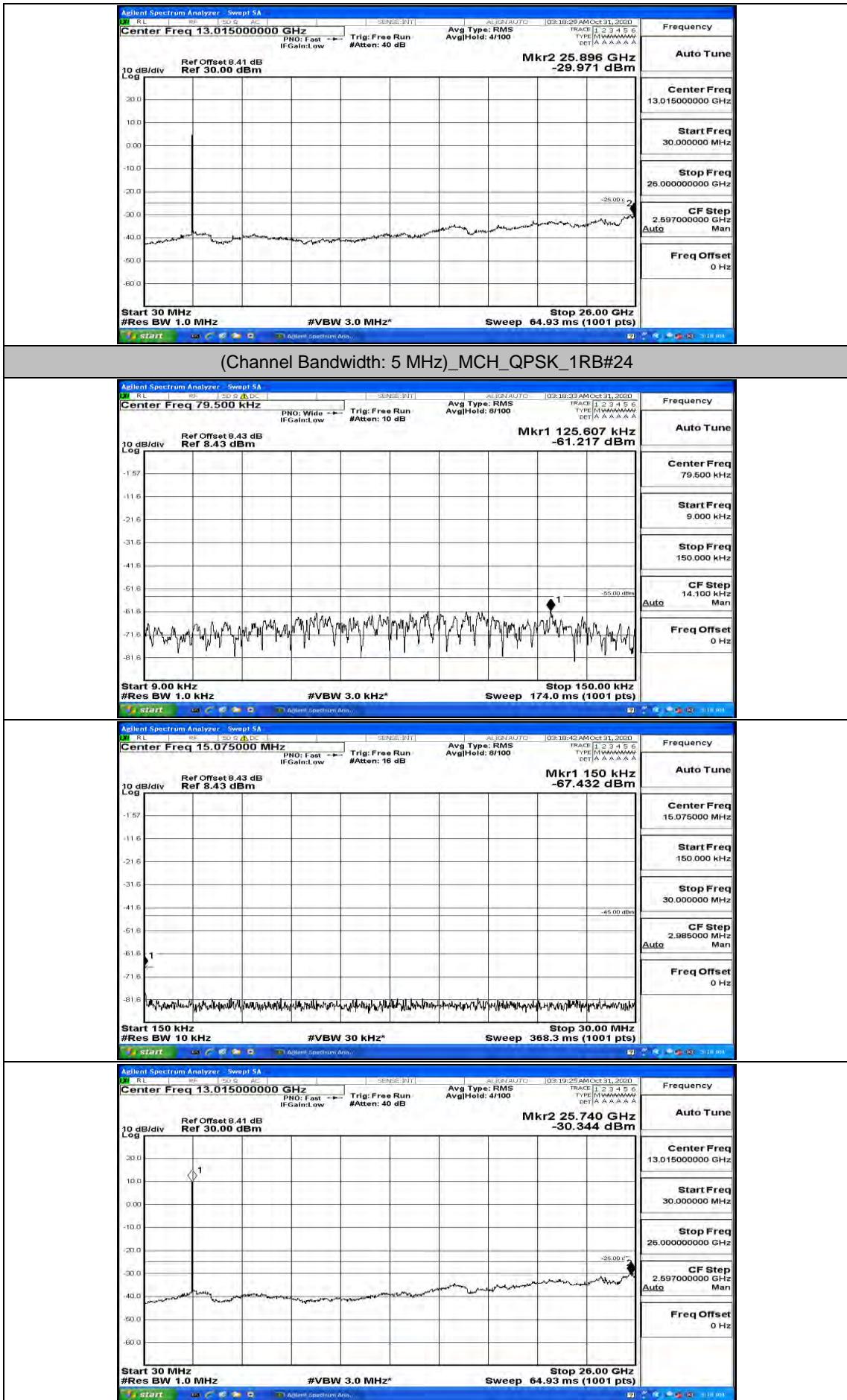


(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_1RB#24

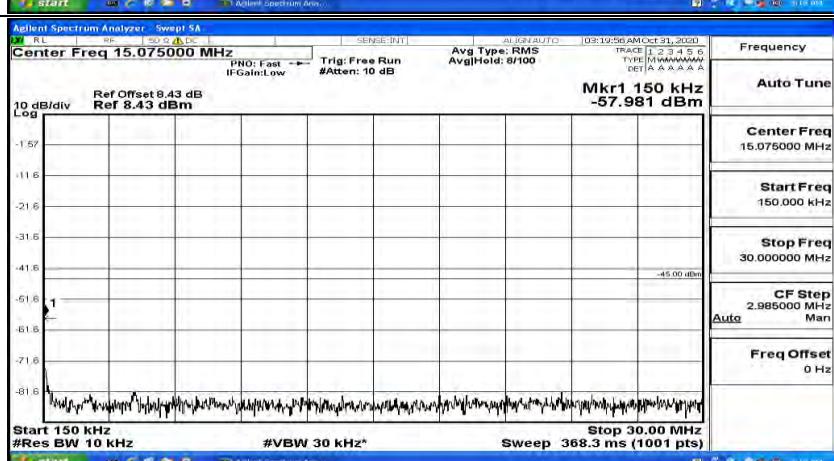
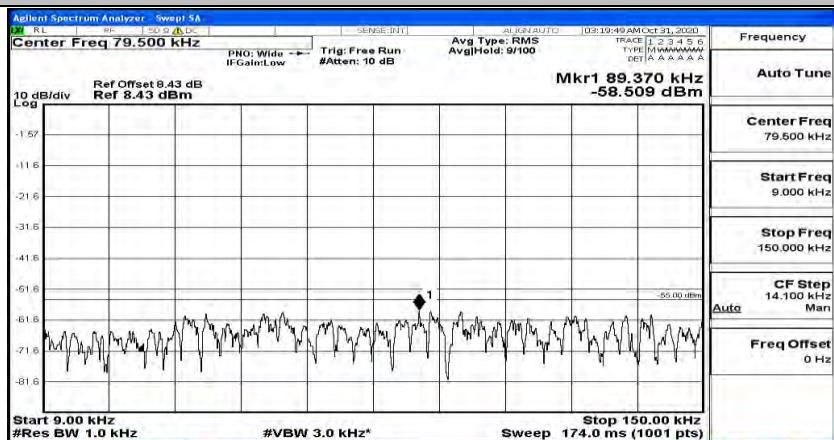




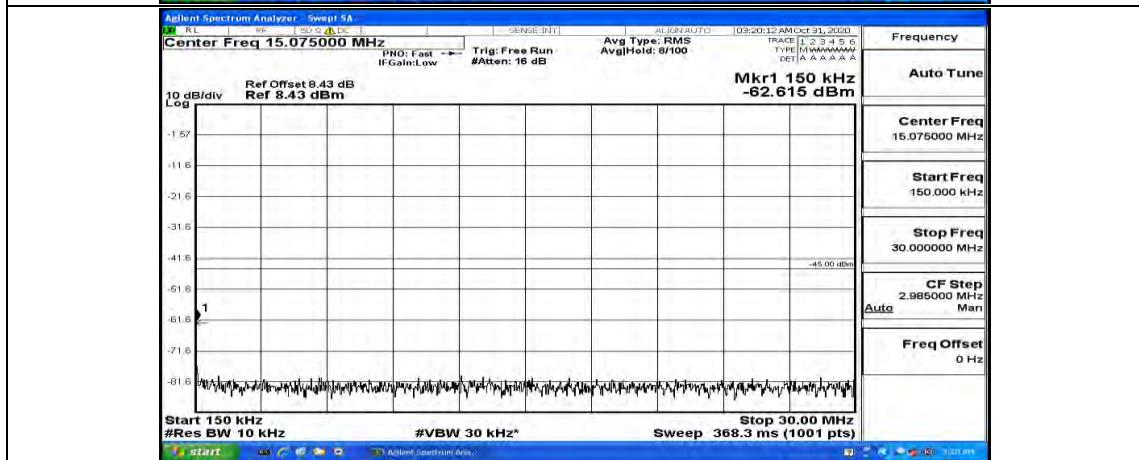
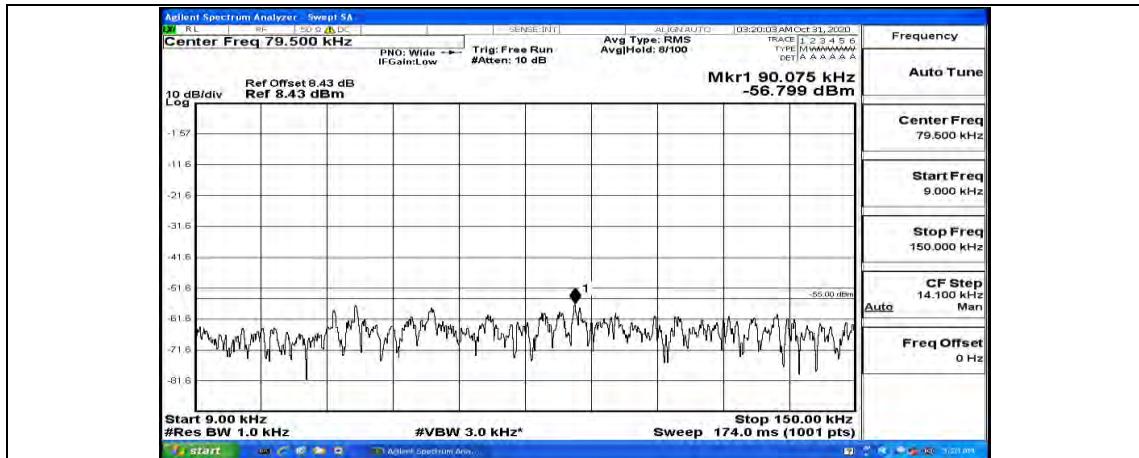




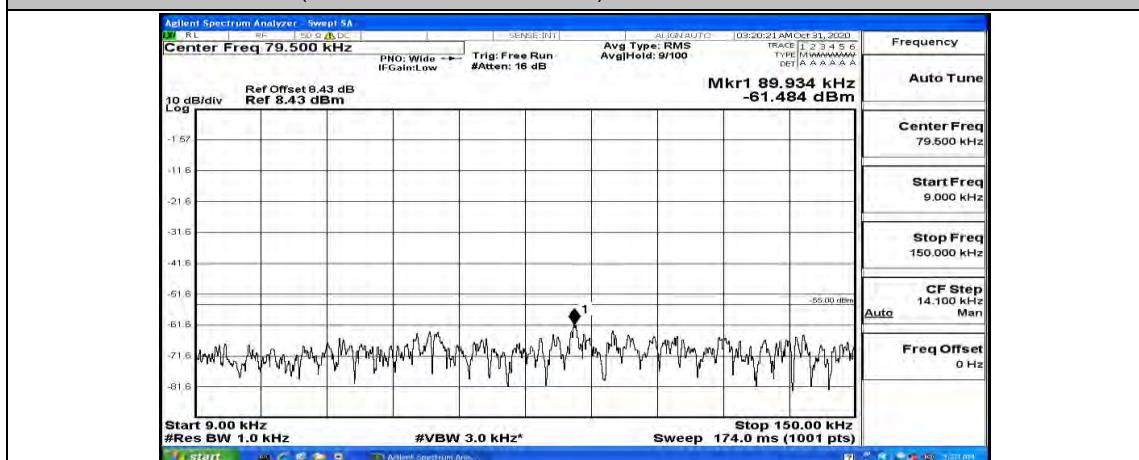
## (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#0

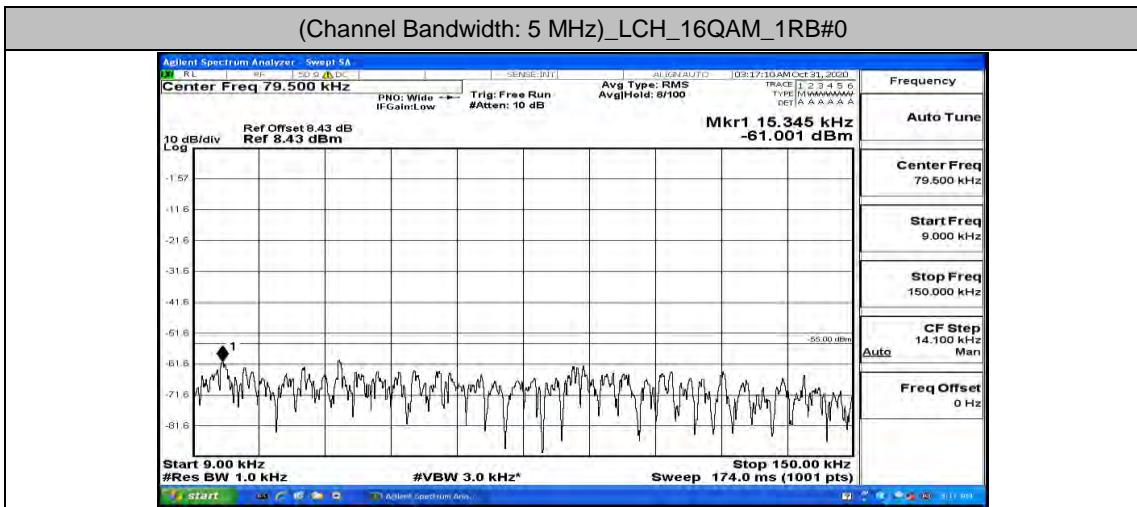
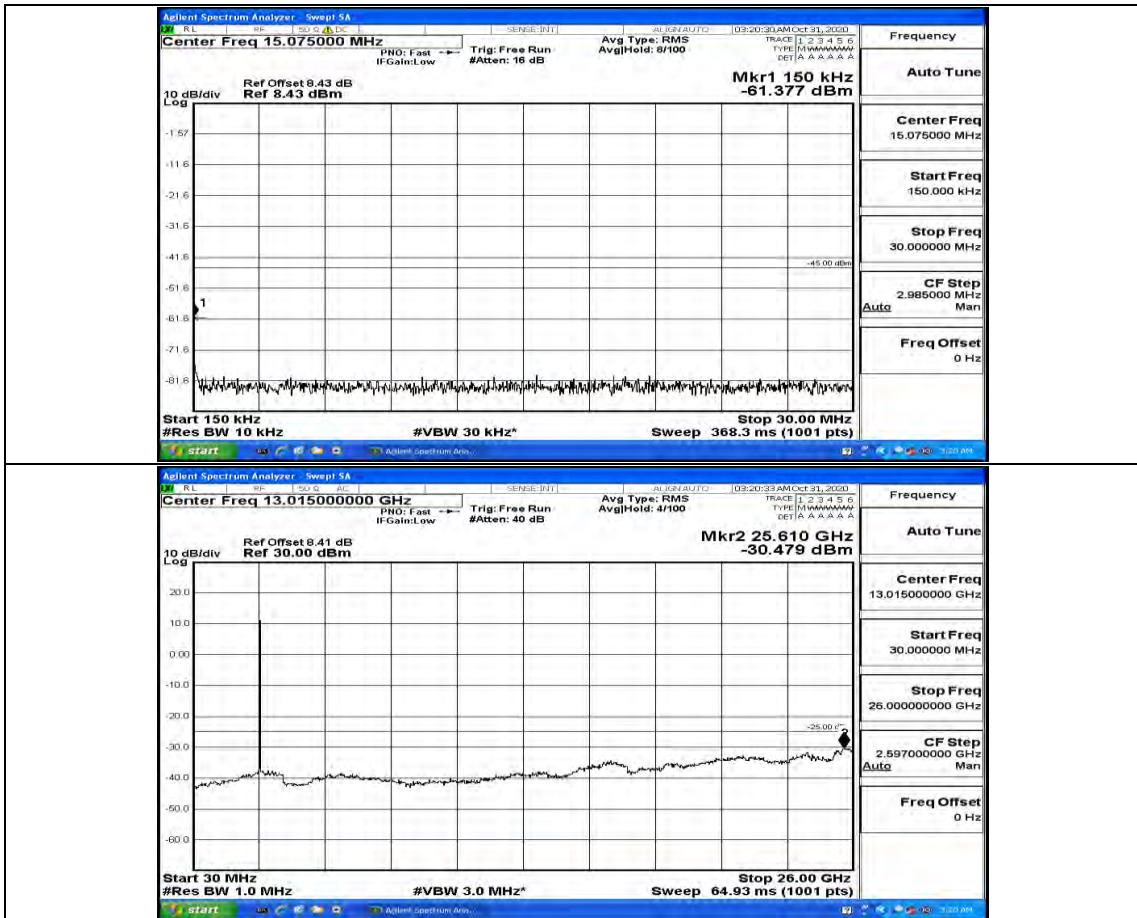


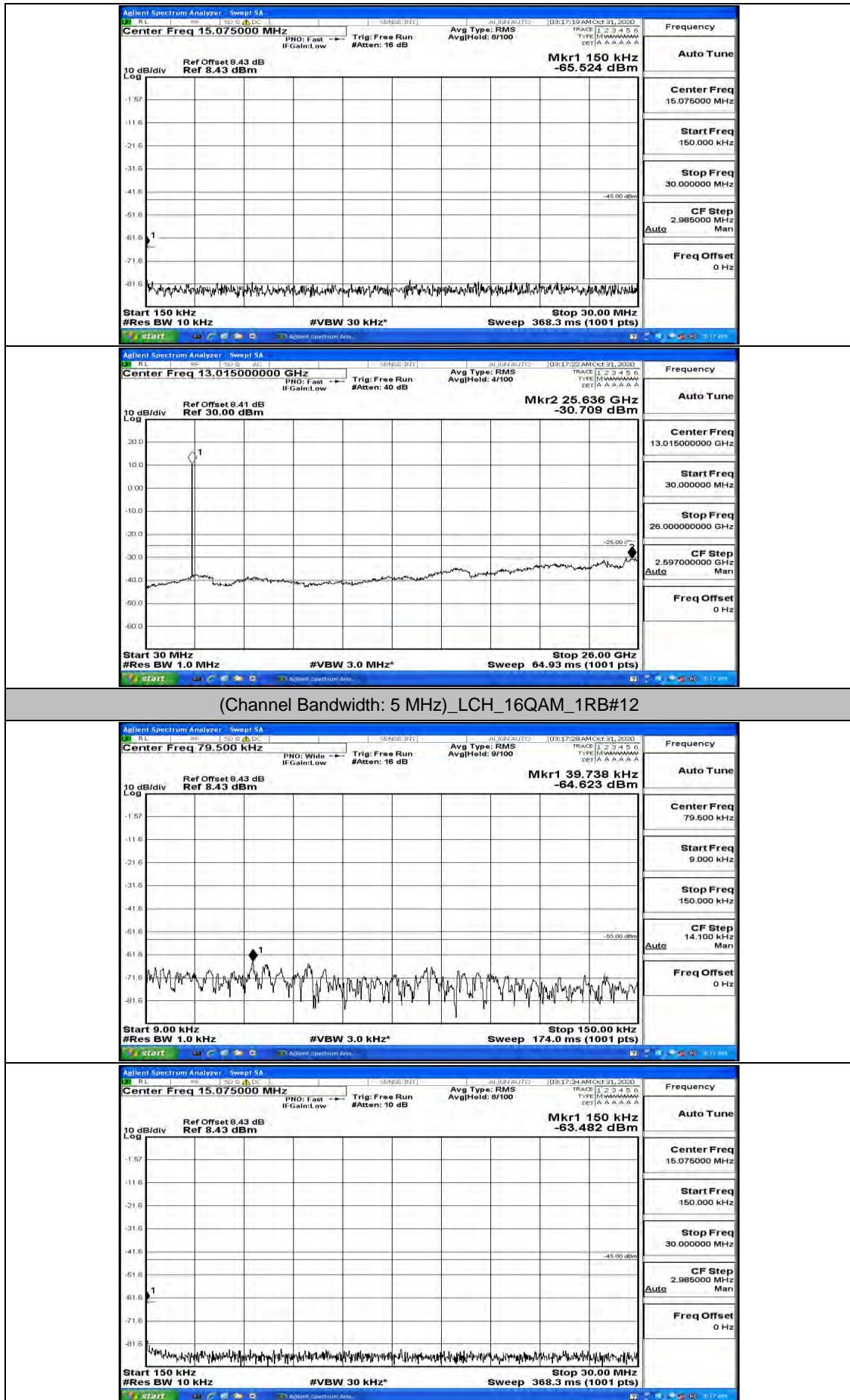
## (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#12

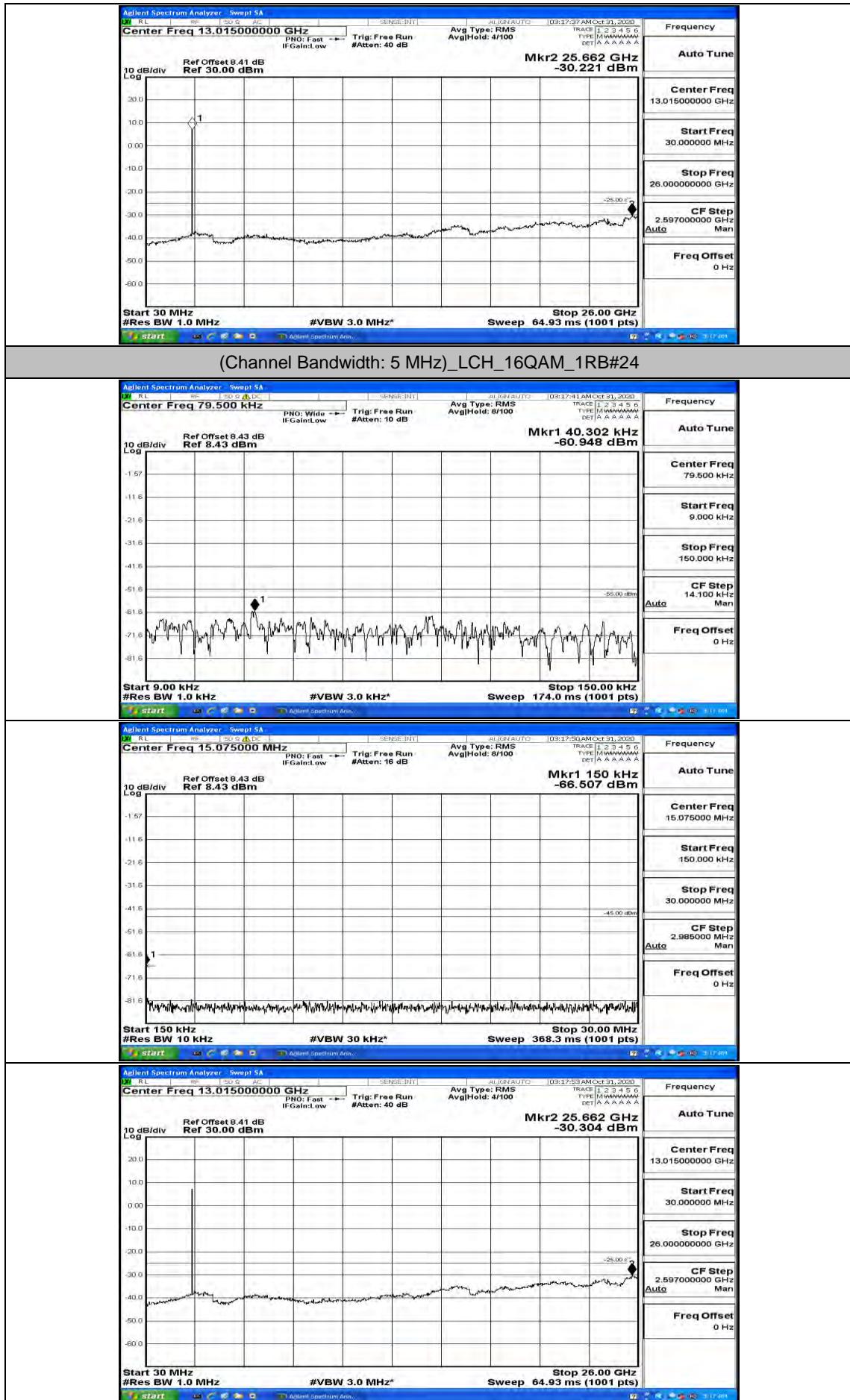


(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#24

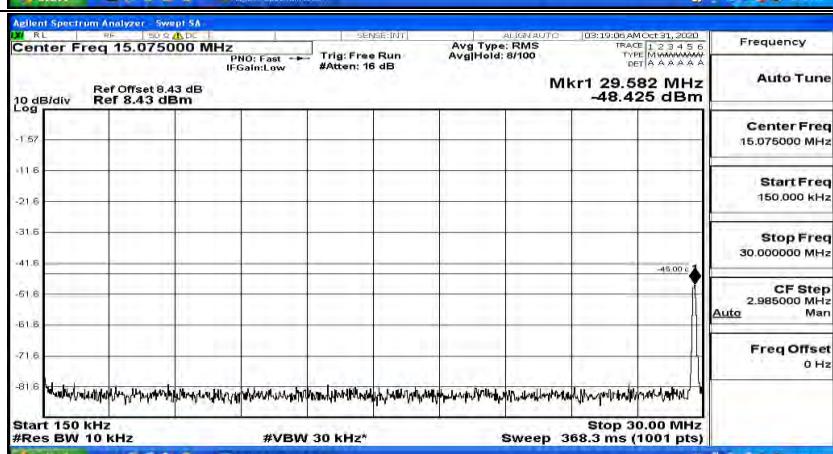
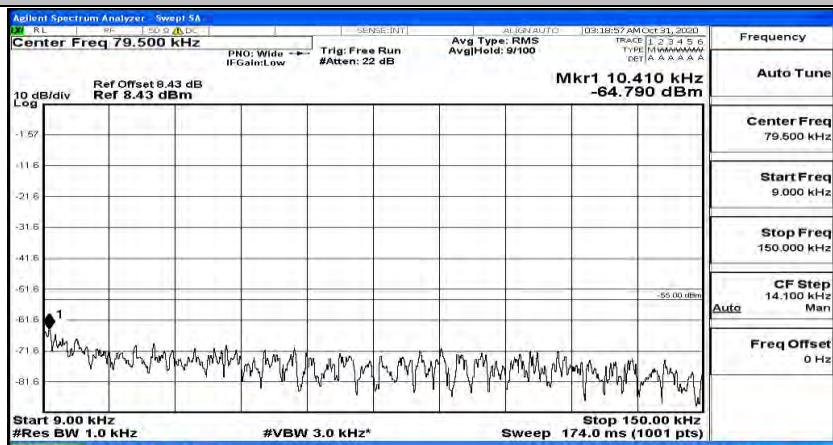




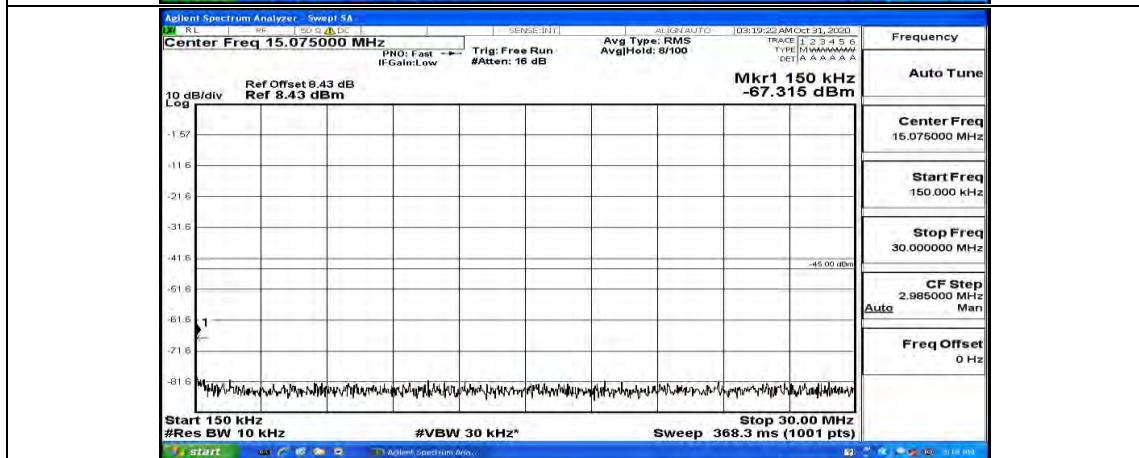
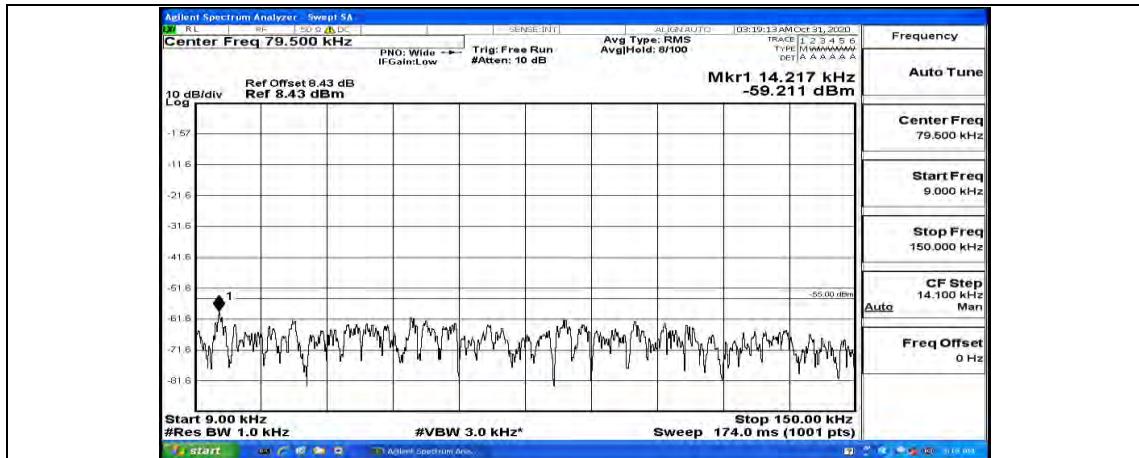




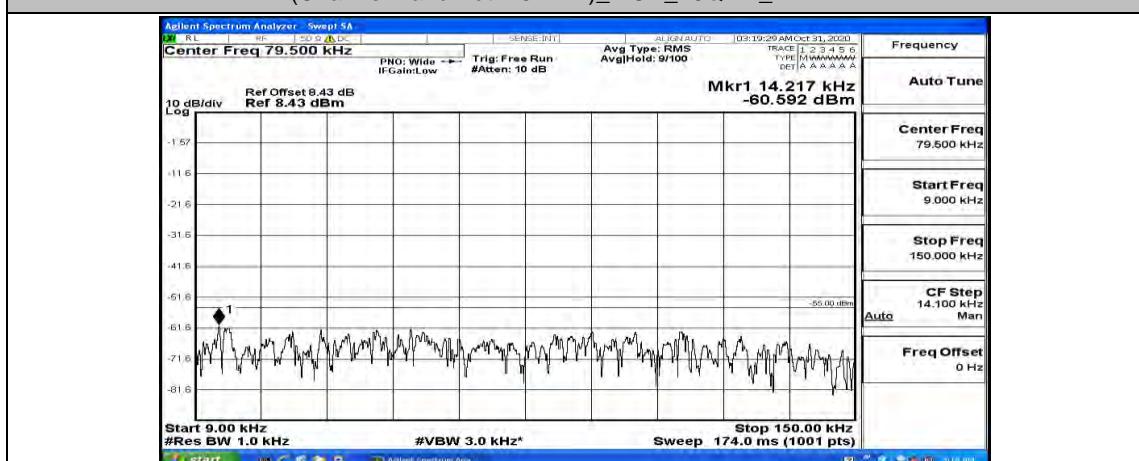
## (Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#0

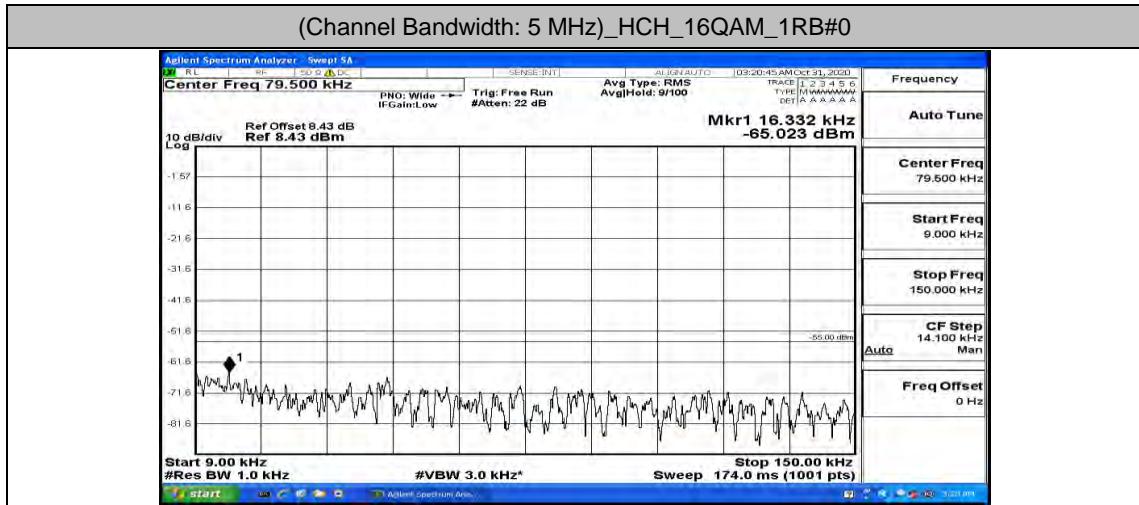
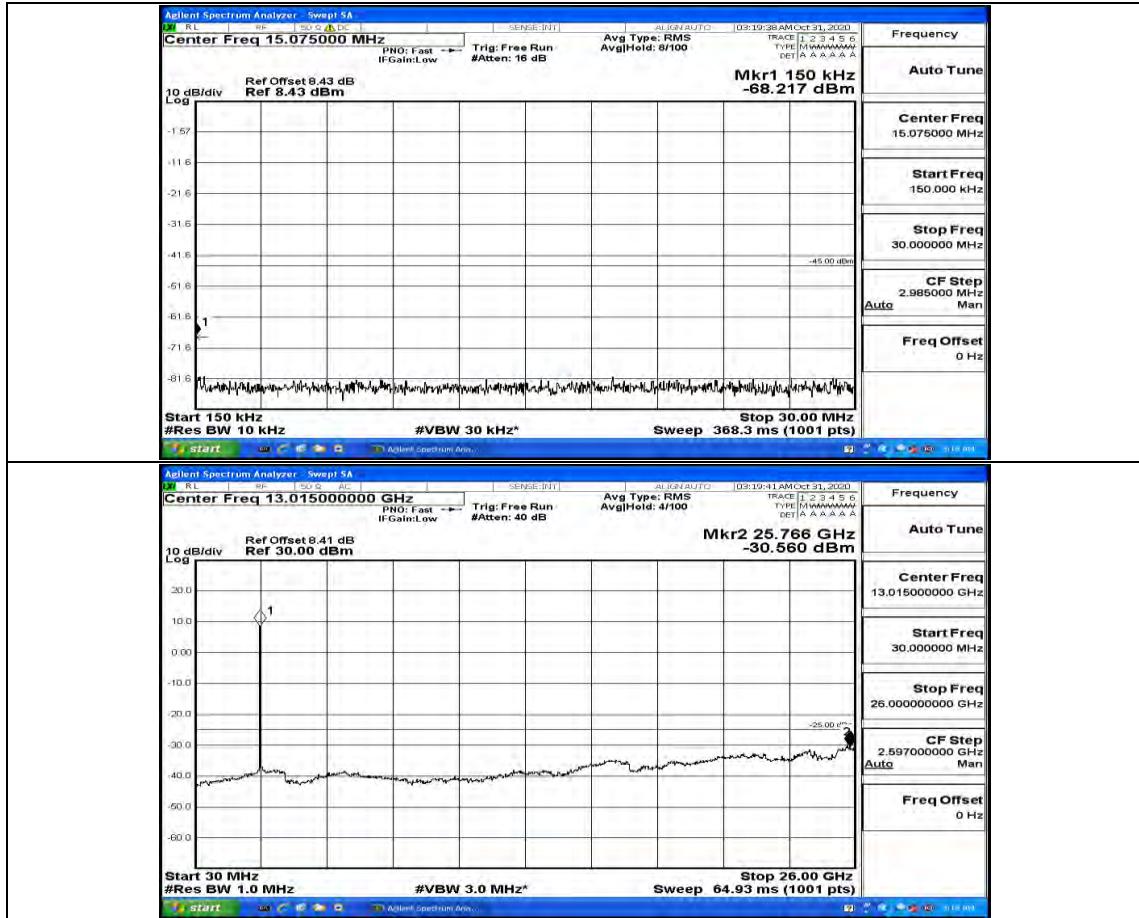


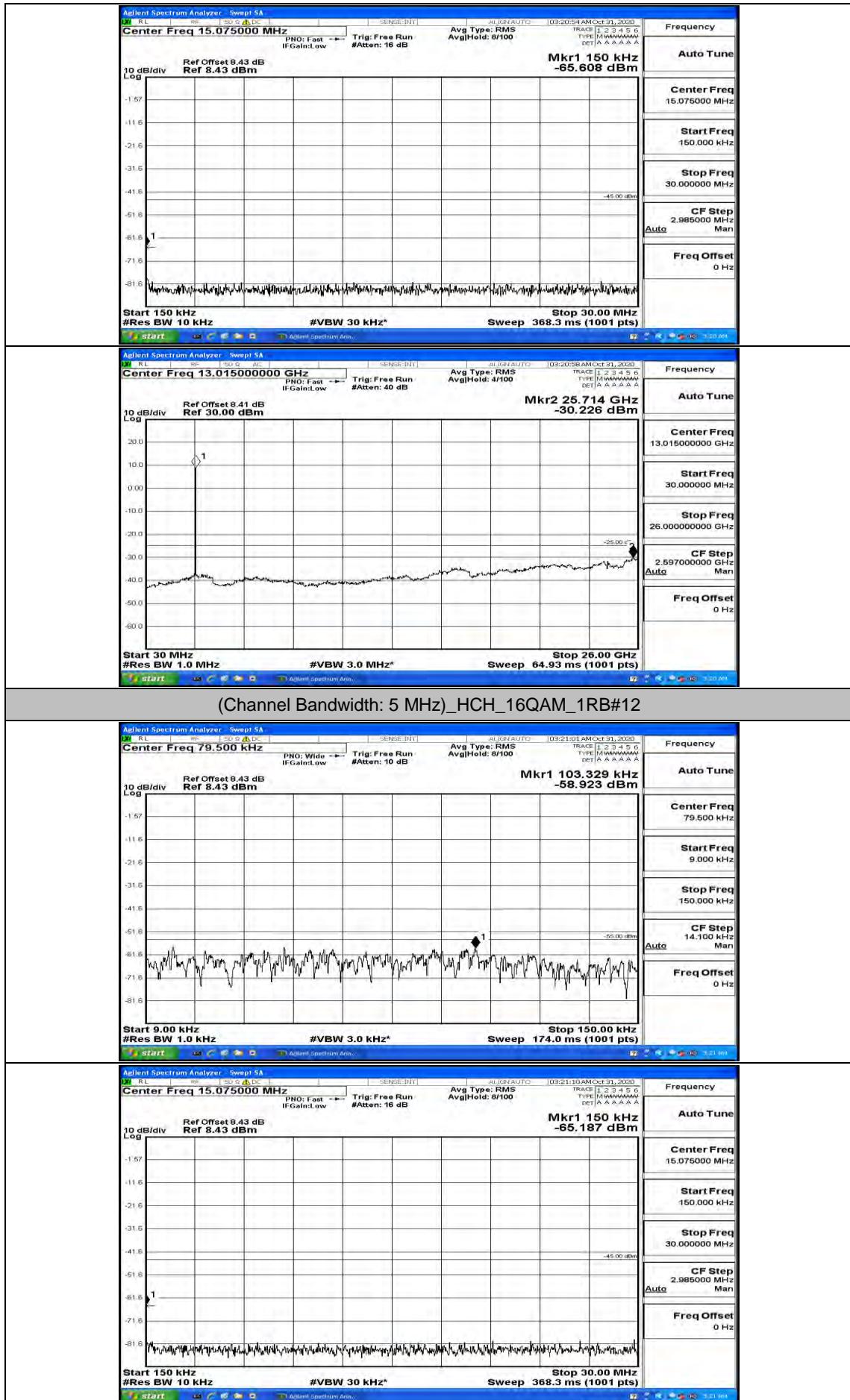
## (Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#12

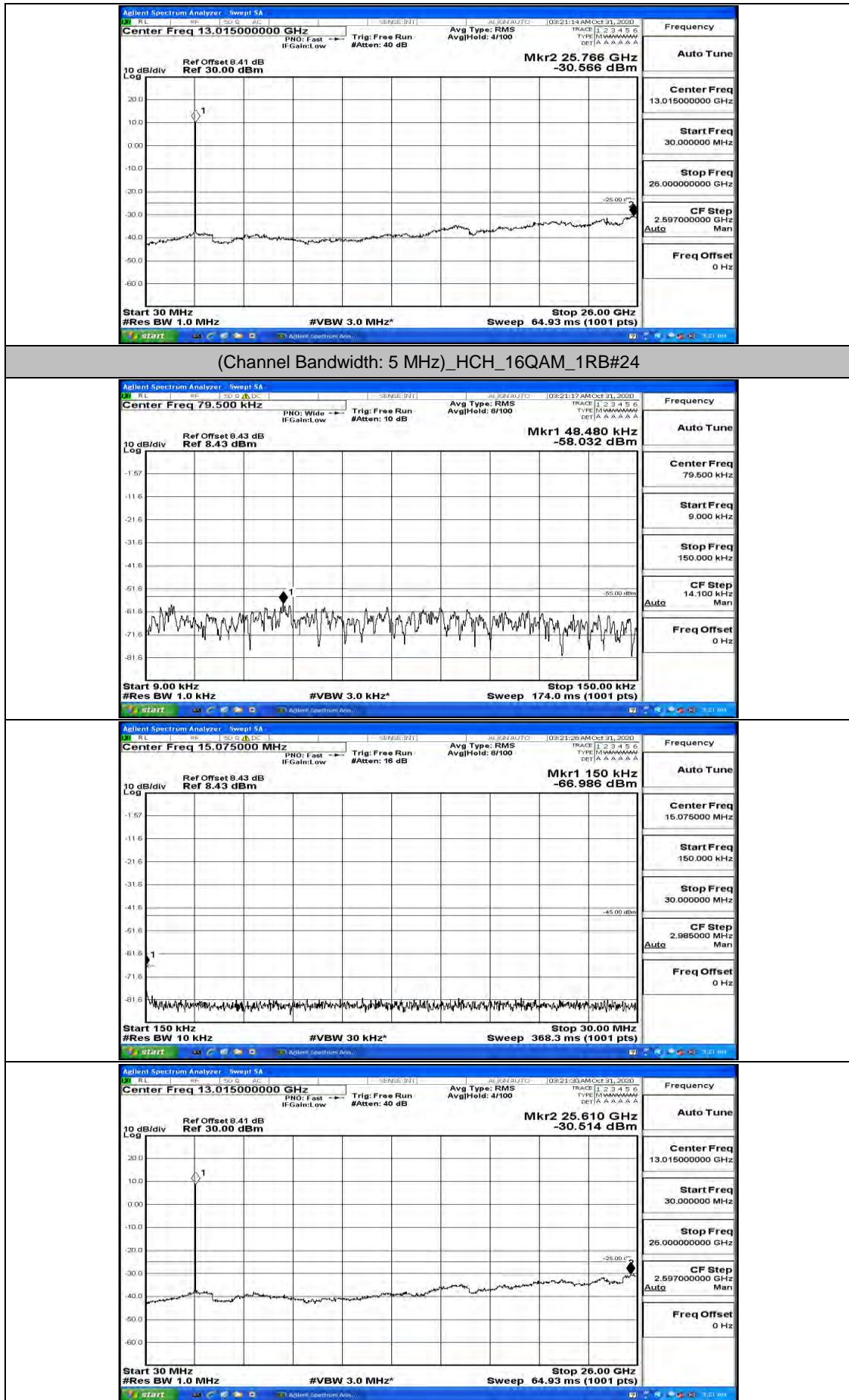


(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#24









## Channel Bandwidth: 10 MHz

