

## Appendix G: Test Data for E-UTRA Band 7

**Product Name: 4G Smartphone**  
**Trade Mark: Hello Smart Phones**  
**Test Model: Hello AN6 pro**

### Environmental Conditions

Temperature:	24.3
Relative Humidity:	52.7
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Jayden Zhuo

### 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	22.85	22.12	PASS
		1	12	22.66	22.01	PASS
		1	24	22.51	21.80	PASS
		12	0	22.54	21.73	PASS
		12	6	22.73	22.03	PASS
		12	13	22.60	21.65	PASS
		25	0	22.99	21.86	PASS
	MCH	1	0	22.76	21.68	PASS
		1	12	22.94	21.94	PASS
		1	24	22.55	21.90	PASS
		12	0	22.46	21.80	PASS
		12	6	22.25	21.76	PASS
		12	13	22.75	21.86	PASS
		25	0	22.73	21.83	PASS
	HCH	1	0	22.55	21.78	PASS
		1	12	22.36	21.58	PASS
		1	24	22.19	21.51	PASS
		12	0	22.23	21.58	PASS
		12	6	22.52	21.65	PASS
		12	13	22.31	21.60	PASS
		25	0	22.79	21.70	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	23.25	22.40	PASS
		1	24	22.66	21.82	PASS
		1	49	23.14	22.44	PASS
		25	0	22.93	21.90	PASS
		25	12	23.09	22.05	PASS
		25	25	22.58	21.86	PASS
		50	0	23.05	22.10	PASS
	MCH	1	0	23.01	21.90	PASS
		1	24	22.95	22.21	PASS
		1	49	23.19	22.38	PASS
		25	0	22.88	21.95	PASS
		25	12	23.03	22.23	PASS
		25	25	22.77	21.94	PASS
		50	0	23.16	22.48	PASS
	HCH	1	0	23.12	22.49	PASS
		1	24	22.92	22.06	PASS
		1	49	22.98	22.18	PASS
		25	0	22.85	21.95	PASS
		25	12	22.94	22.02	PASS
		25	25	23.13	22.62	PASS
		50	0	22.56	21.88	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	22.21	21.49	PASS
		1	37	22.69	21.60	PASS
		1	74	22.72	21.73	PASS
		37	0	22.29	21.49	PASS
		37	18	22.44	21.63	PASS
		37	38	22.61	21.72	PASS
		75	0	22.69	21.89	PASS
	MCH	1	0	22.76	21.96	PASS
		1	37	22.47	21.71	PASS
		1	74	22.04	21.37	PASS
		37	0	22.60	21.62	PASS
		37	18	22.34	21.57	PASS
		37	38	22.22	21.53	PASS
		75	0	22.32	21.54	PASS
	HCH	1	0	22.69	21.71	PASS
		1	37	22.40	21.62	PASS
		1	74	22.12	21.48	PASS
		37	0	22.09	21.47	PASS
		37	18	22.84	21.72	PASS
		37	38	22.24	21.51	PASS
		75	0	21.98	21.36	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	22.72	21.78	PASS
		1	49	22.77	21.72	PASS
		1	99	22.62	21.64	PASS
		50	0	22.92	21.73	PASS
		50	25	22.81	21.86	PASS
		50	50	22.20	21.55	PASS
		100	0	22.33	21.55	PASS
	MCH	1	0	22.67	21.65	PASS
		1	49	22.70	21.70	PASS
		1	99	22.81	21.95	PASS
		50	0	22.33	21.55	PASS
		50	25	22.26	21.55	PASS
		50	50	22.83	21.66	PASS
		100	0	22.73	22.00	PASS
	HCH	1	0	22.93	22.14	PASS
		1	49	22.68	21.74	PASS
		1	99	22.68	21.71	PASS
		50	0	22.67	21.66	PASS
		50	25	22.66	20.81	PASS
		50	50	22.17	21.60	PASS
		100	0	22.35	21.67	PASS

**G.2 Peak-to-Average Ratio**

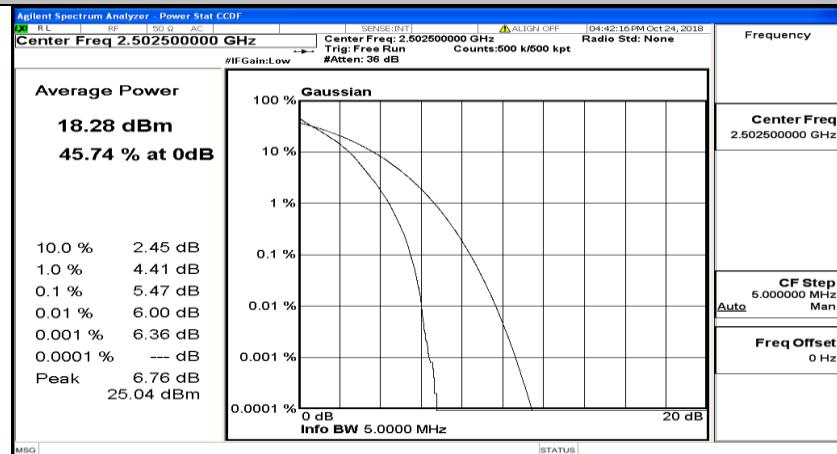
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.47	<13	PASS
	MCH	5.38	<13	PASS
	HCH	5.31	<13	PASS
16QAM	LCH	6.3	<13	PASS
	MCH	6.19	<13	PASS
	HCH	6.11	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.46	<13	PASS
	MCH	5.32	<13	PASS
	HCH	5.27	<13	PASS
16QAM	LCH	6.24	<13	PASS
	MCH	6.1	<13	PASS
	HCH	6.05	<13	PASS

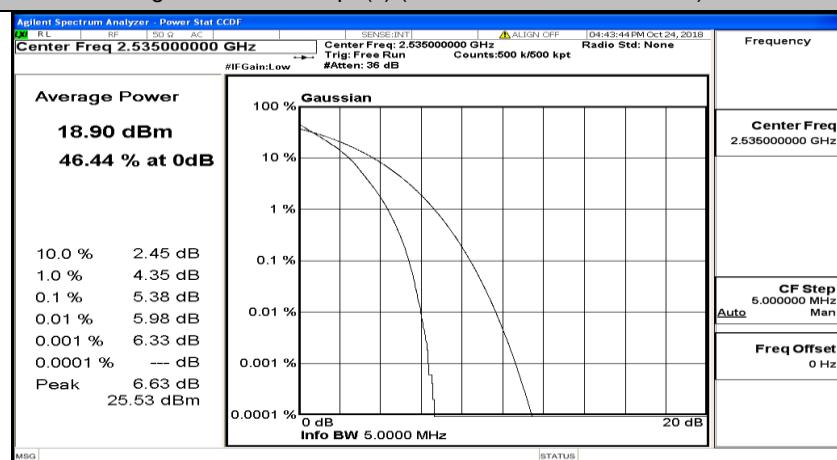
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.96	<13	PASS
	MCH	4.99	<13	PASS
	HCH	4.95	<13	PASS
16QAM	LCH	6.28	<13	PASS
	MCH	6.2	<13	PASS
	HCH	6.14	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.73	<13	PASS
	MCH	5.71	<13	PASS
	HCH	5.75	<13	PASS
16QAM	LCH	6.77	<13	PASS
	MCH	6.73	<13	PASS
	HCH	6.69	<13	PASS

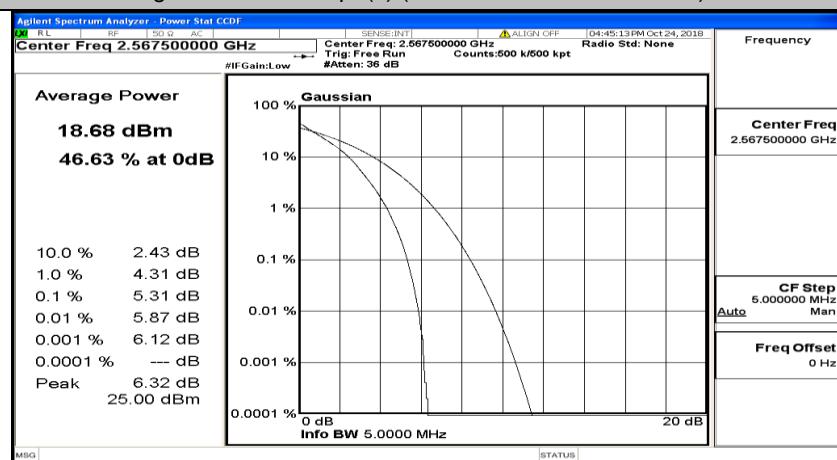
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_QPSK



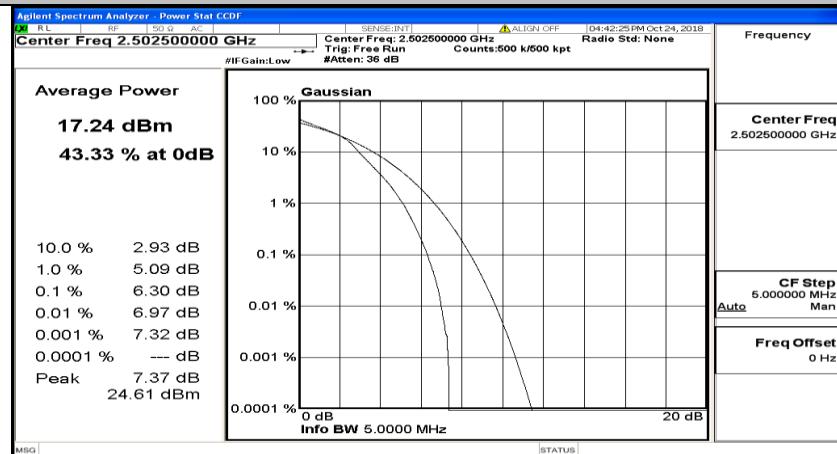
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



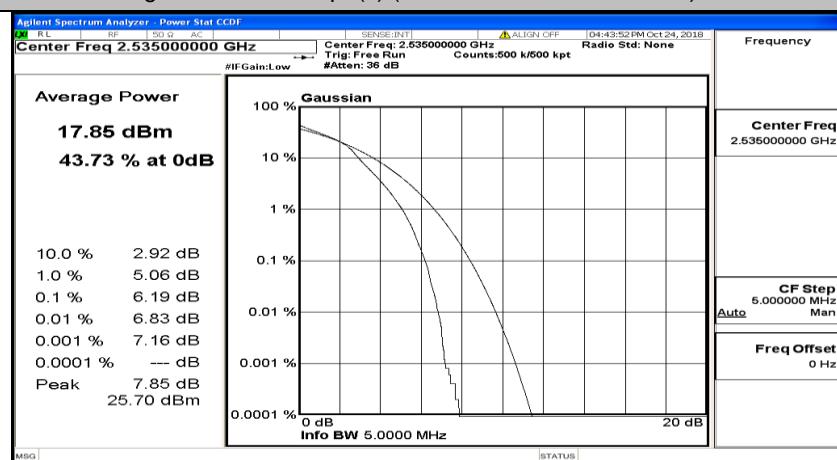
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



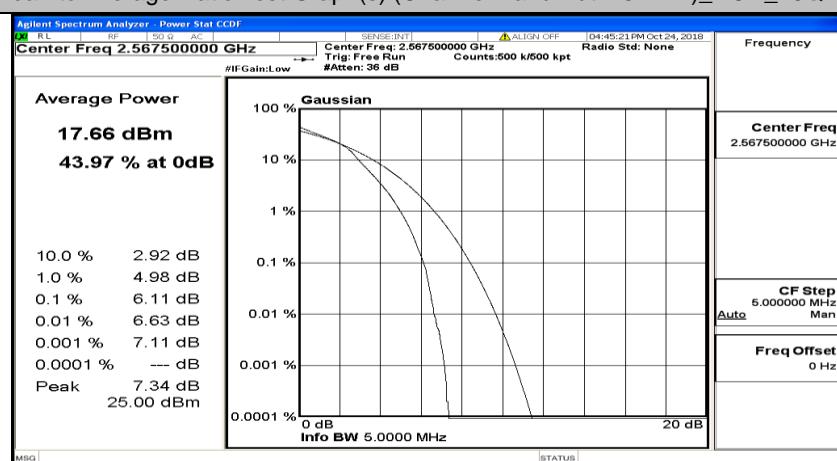
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



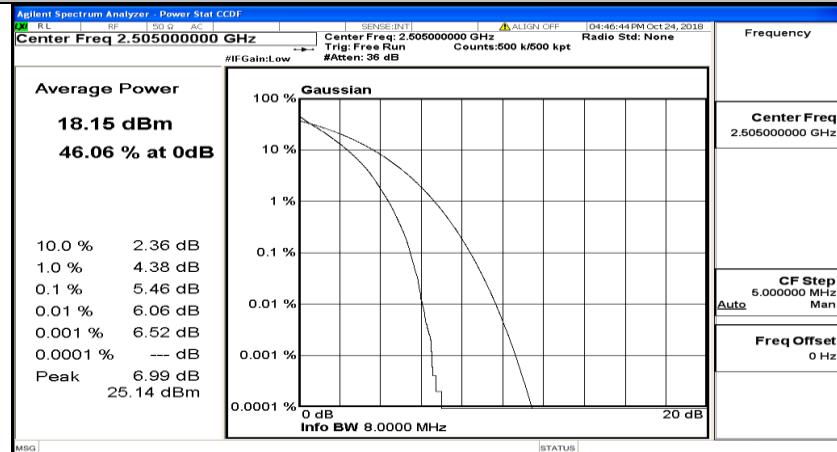
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



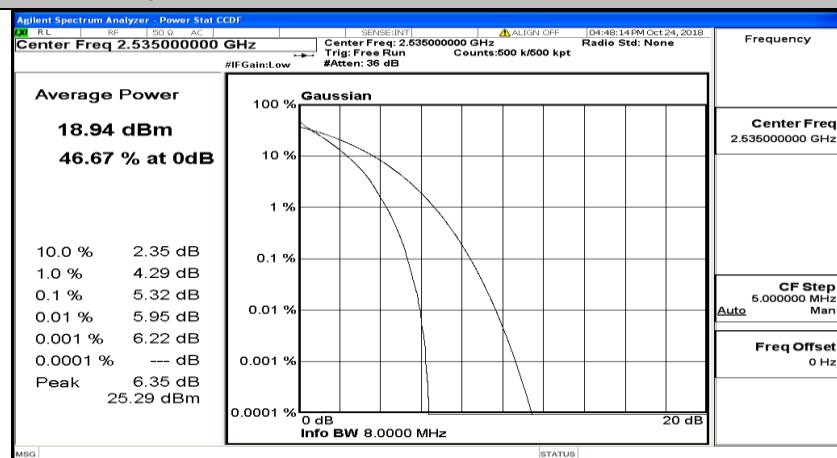
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



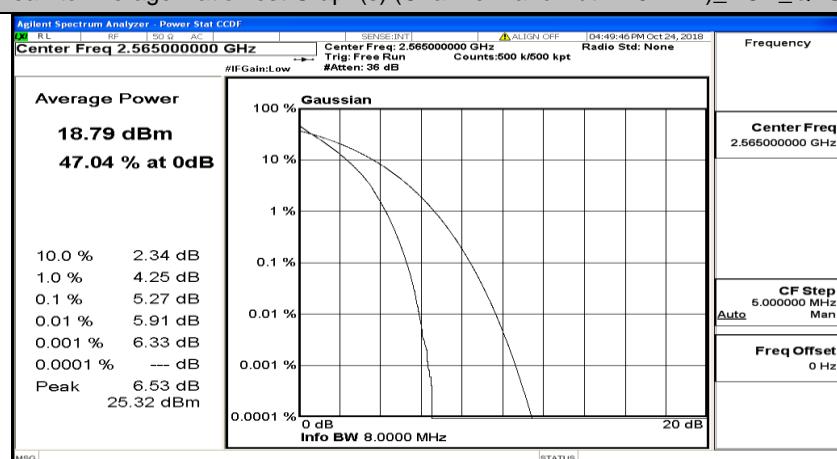
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



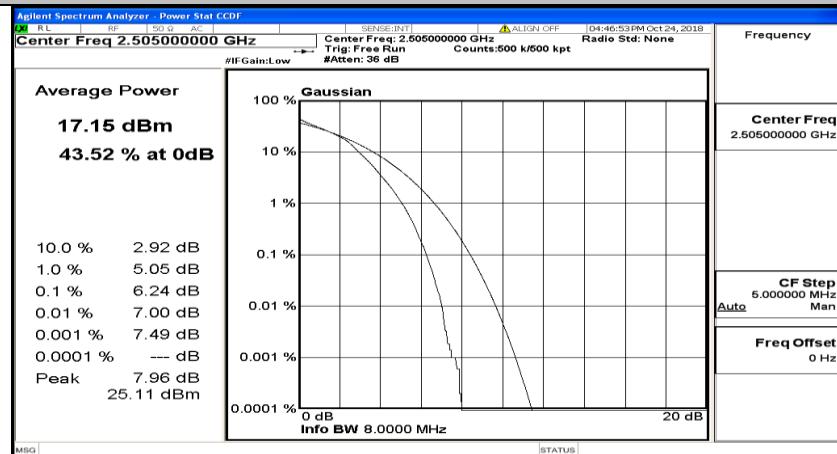
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



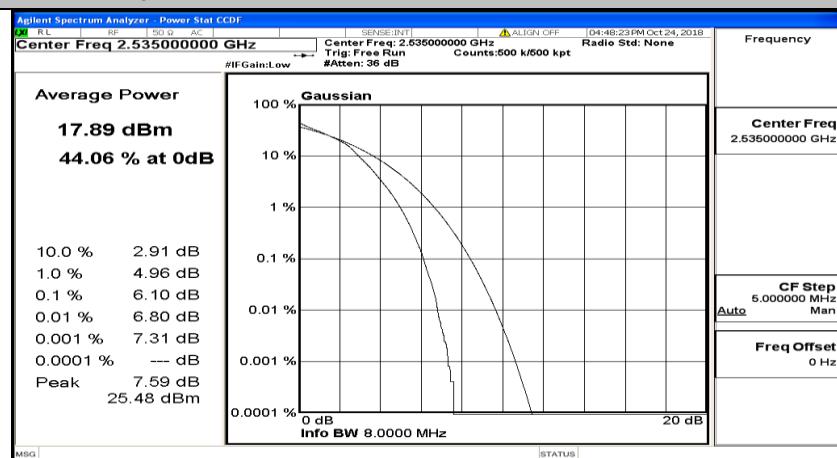
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



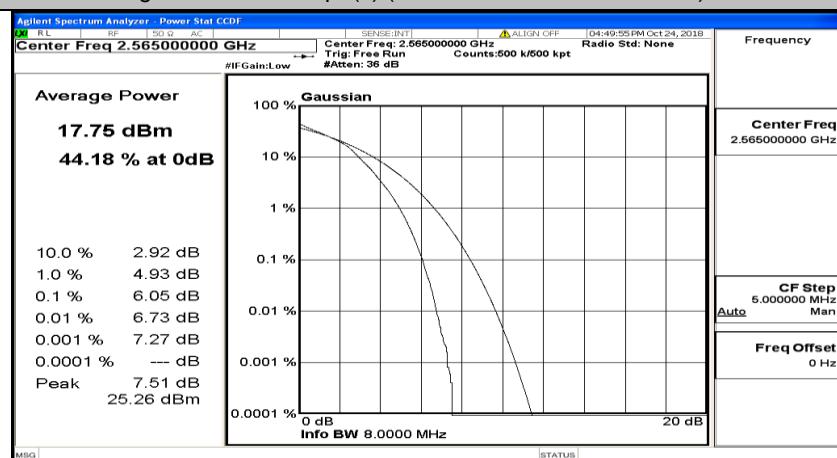
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



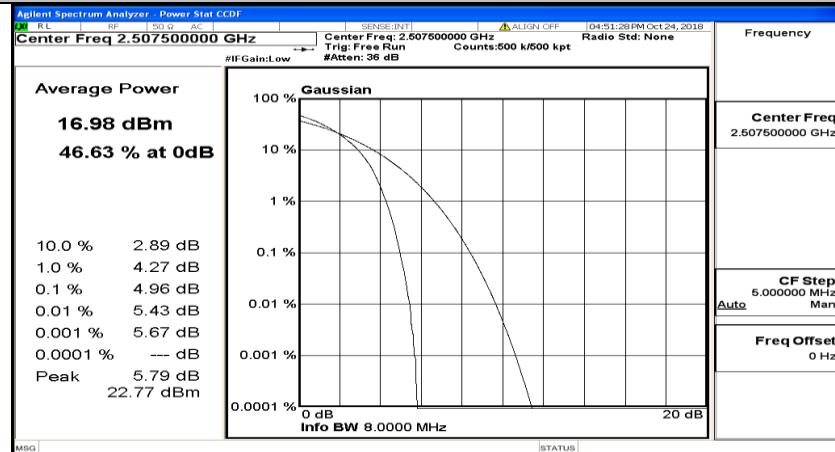
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



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



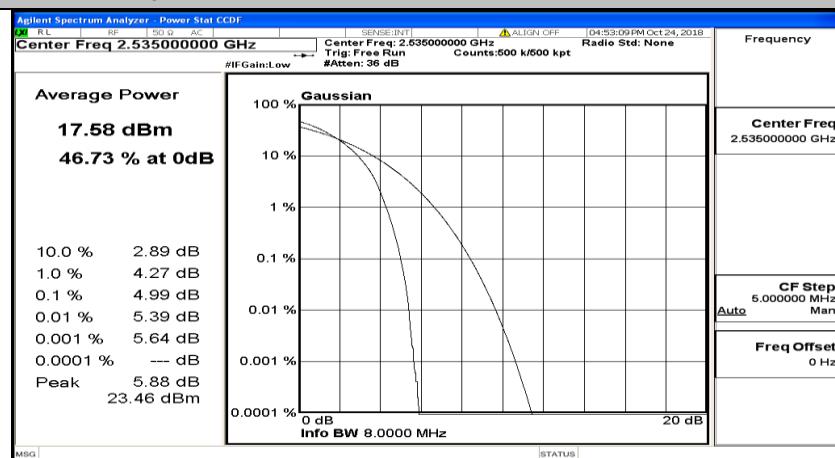
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



Frequency

Center Freq  
2.507500000 GHzCF Step  
5.000000 MHz  
AutoFreq Offset  
0 Hz

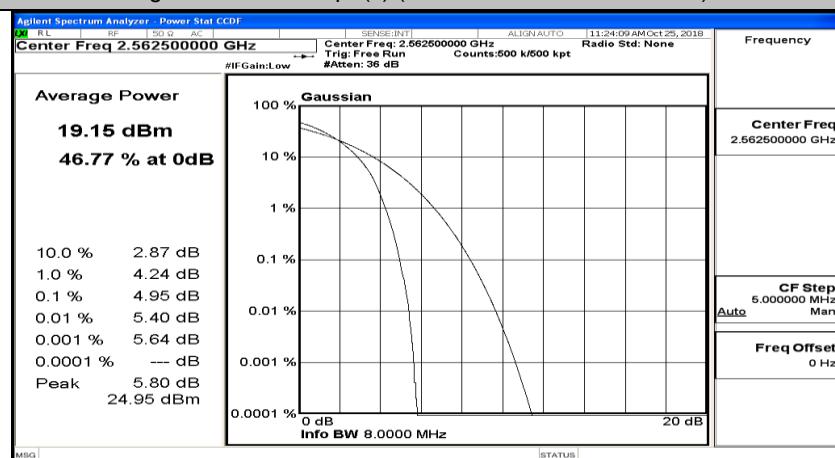
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



Frequency

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2.535000000 GHzCF Step  
5.000000 MHz  
AutoFreq Offset  
0 Hz

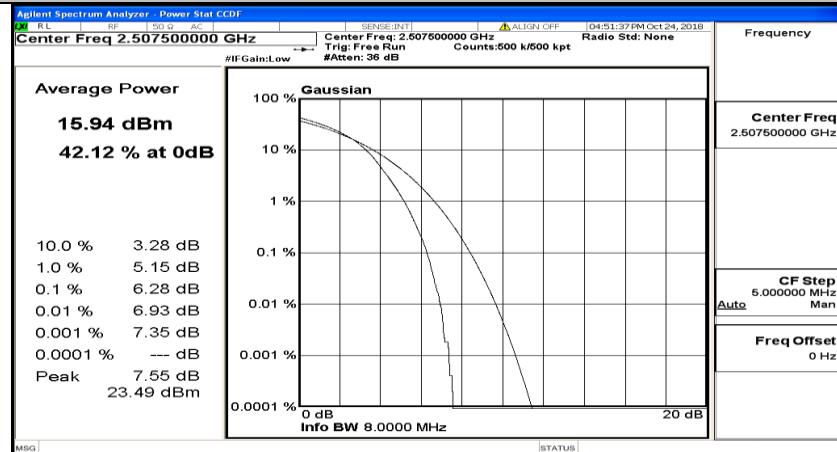
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



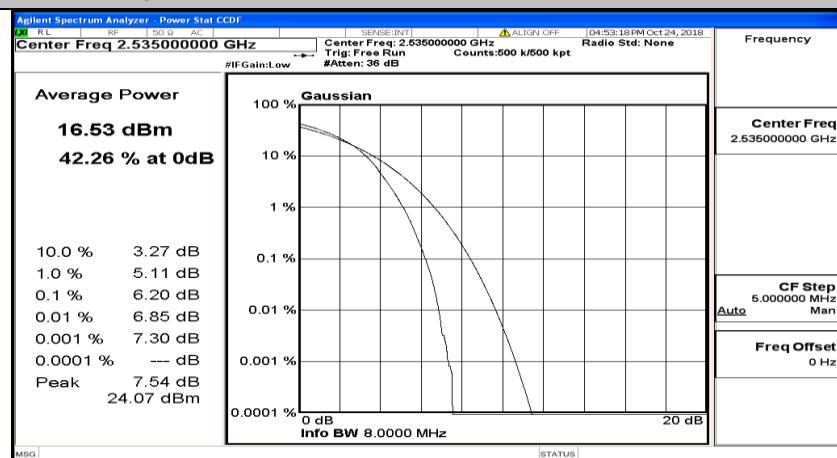
Frequency

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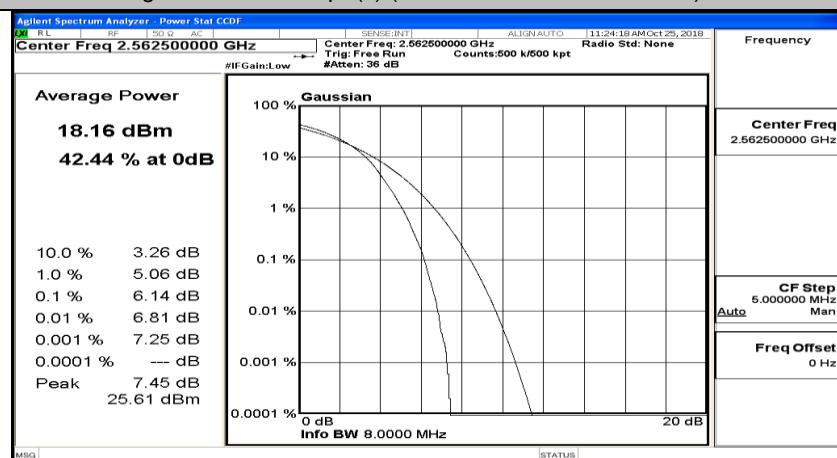
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



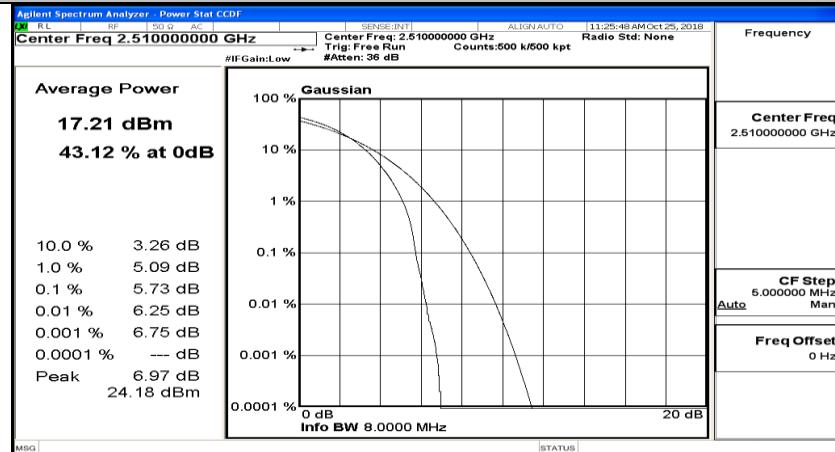
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



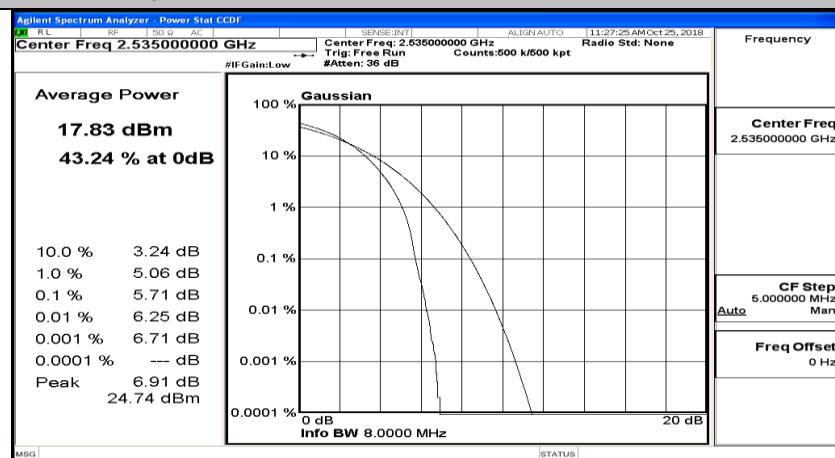
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



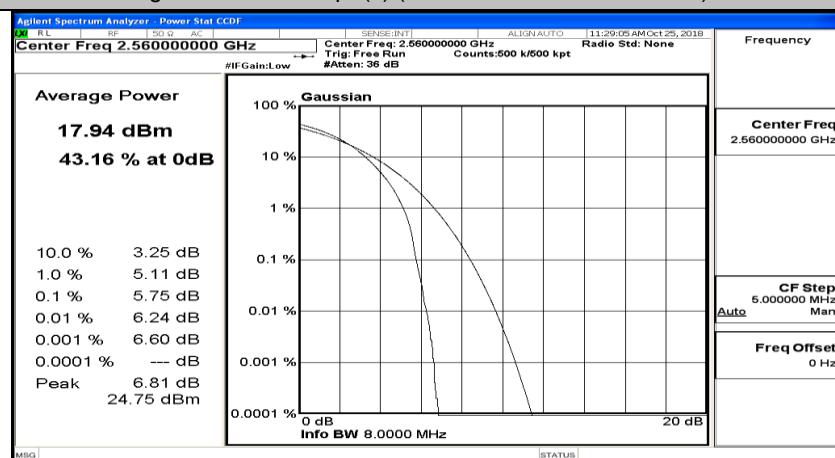
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



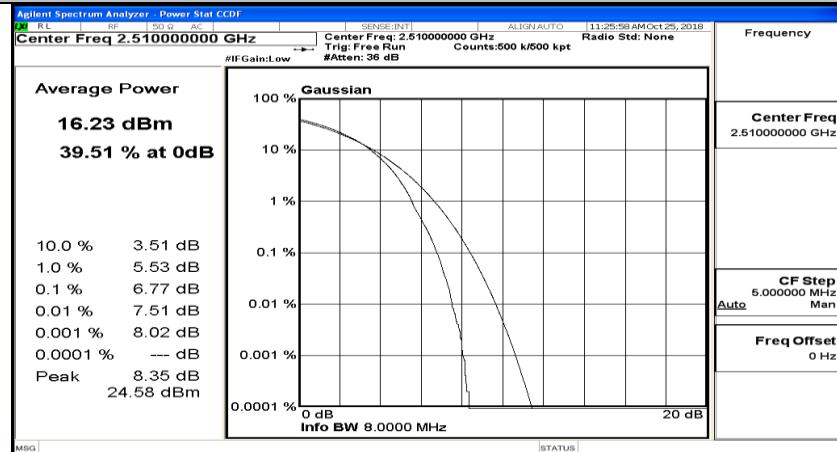
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



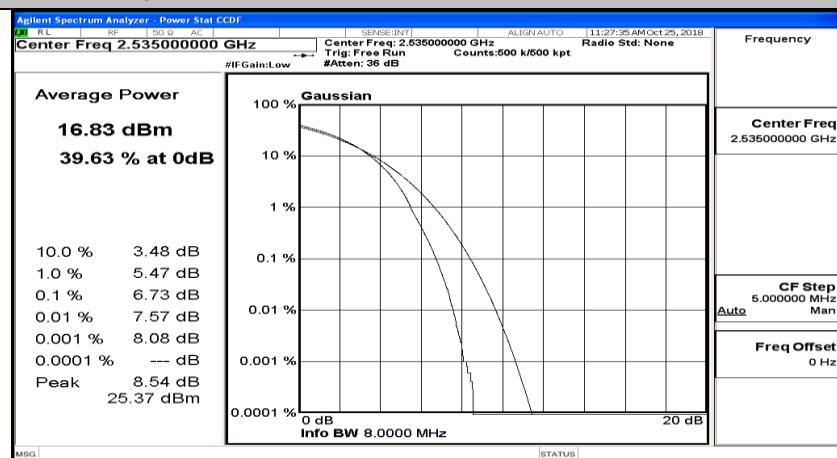
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



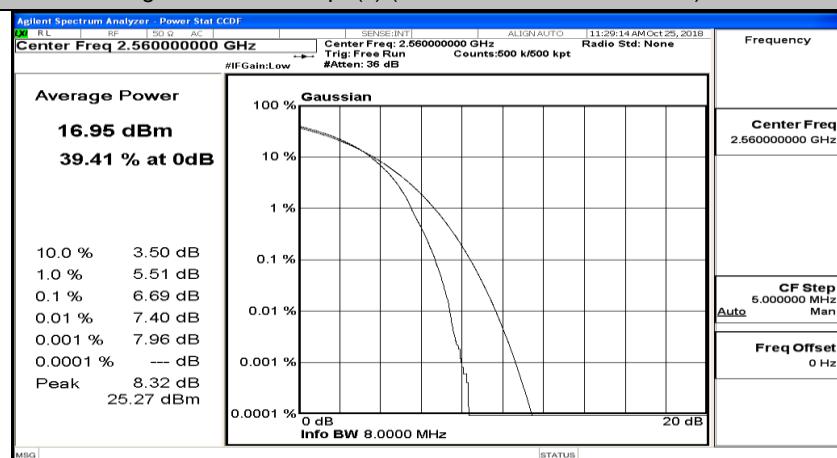
## Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



## 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



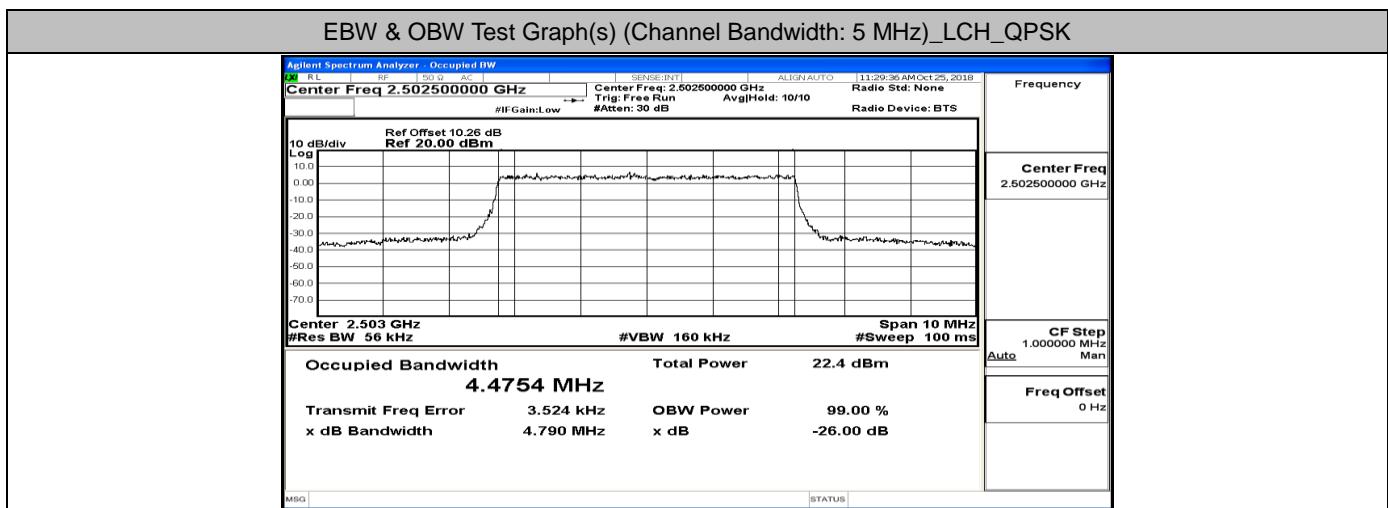
**G.3 26dB Bandwidth and Occupied Bandwidth**

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4754	4.790	PASS
	MCH	4.4823	4.799	PASS
	HCH	4.4920	4.838	PASS
16QAM	LCH	4.4810	4.832	PASS
	MCH	4.4898	4.872	PASS
	HCH	4.4852	4.864	PASS

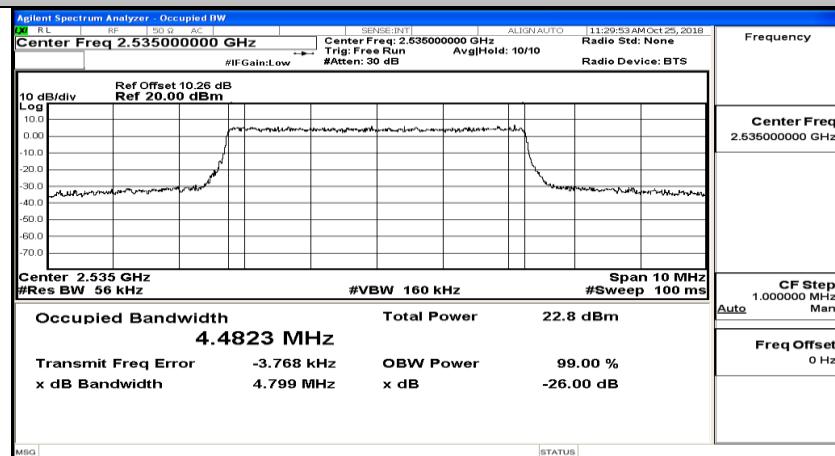
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9341	9.448	PASS
	MCH	8.9440	9.455	PASS
	HCH	8.9355	9.468	PASS
16QAM	LCH	8.9289	9.511	PASS
	MCH	8.9324	9.412	PASS
	HCH	8.9337	9.371	PASS

EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.403	14.14	PASS
	MCH	13.413	14.13	PASS
	HCH	13.409	14.04	PASS
16QAM	LCH	13.399	14.06	PASS
	MCH	13.407	14.04	PASS
	HCH	13.406	14.10	PASS

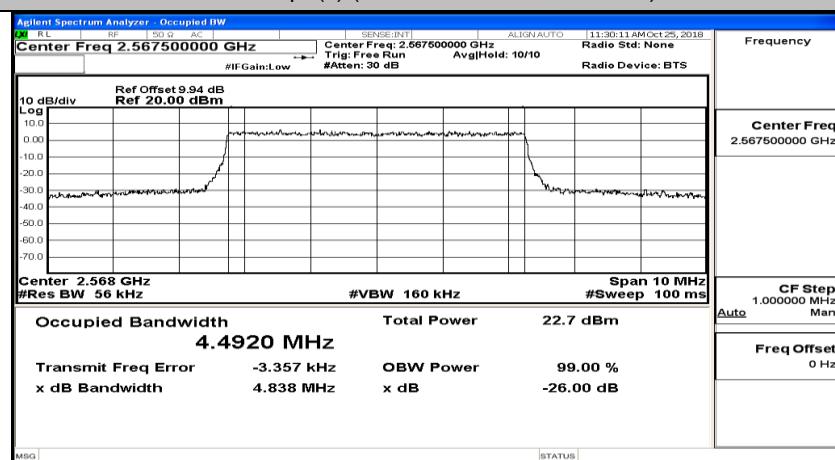
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.862	18.60	PASS
	MCH	17.878	18.68	PASS
	HCH	17.857	18.70	PASS
16QAM	LCH	17.884	18.61	PASS
	MCH	17.863	18.62	PASS
	HCH	17.862	18.55	PASS



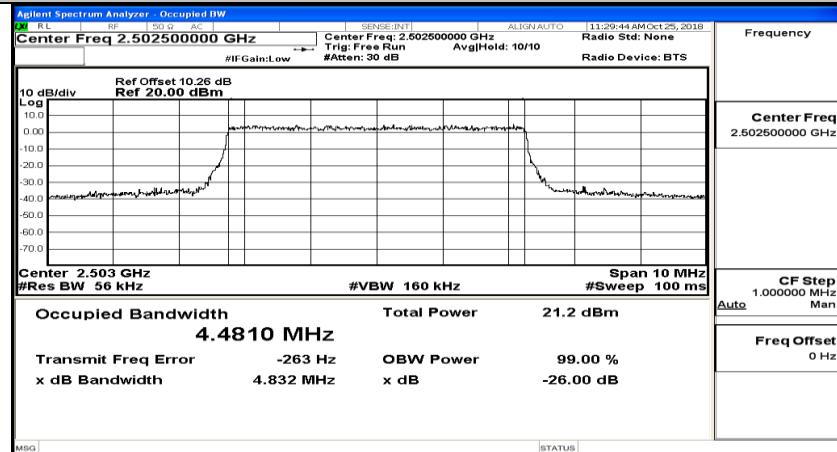
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_QPSK



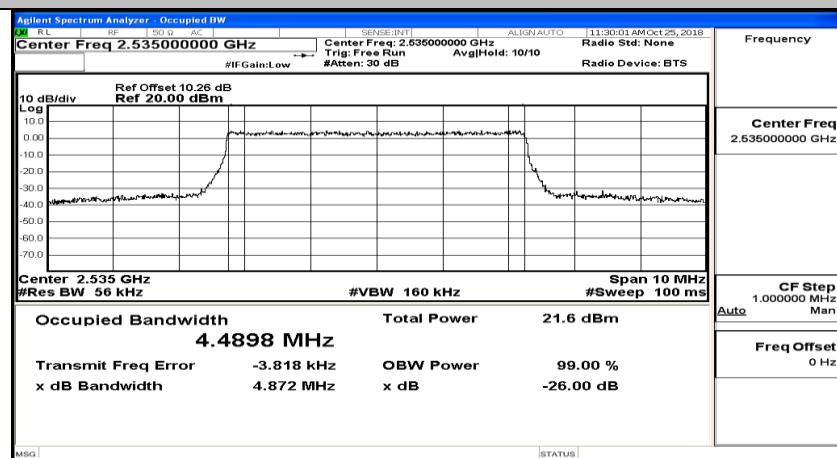
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_QPSK



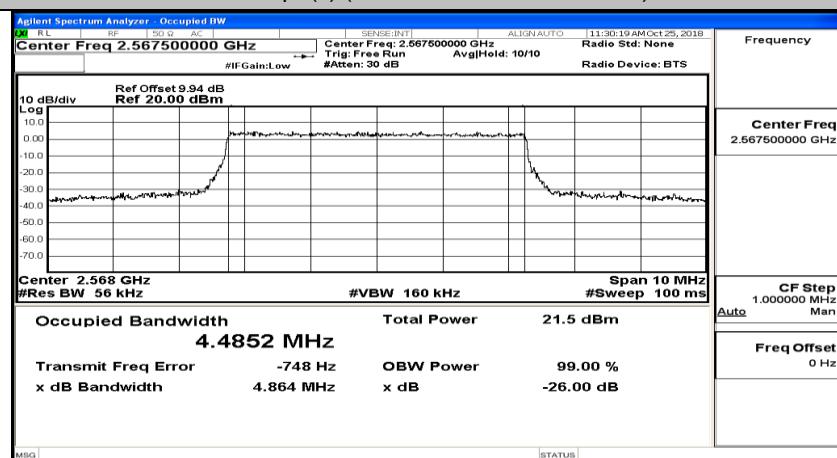
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_LCH\_16QAM



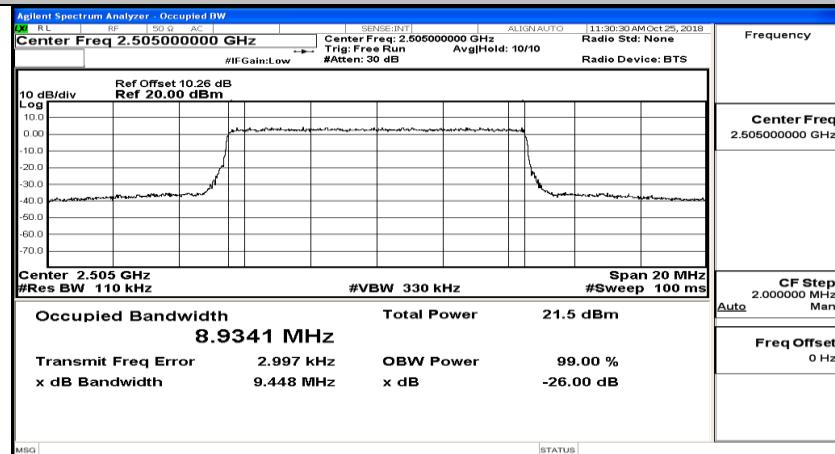
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_MCH\_16QAM



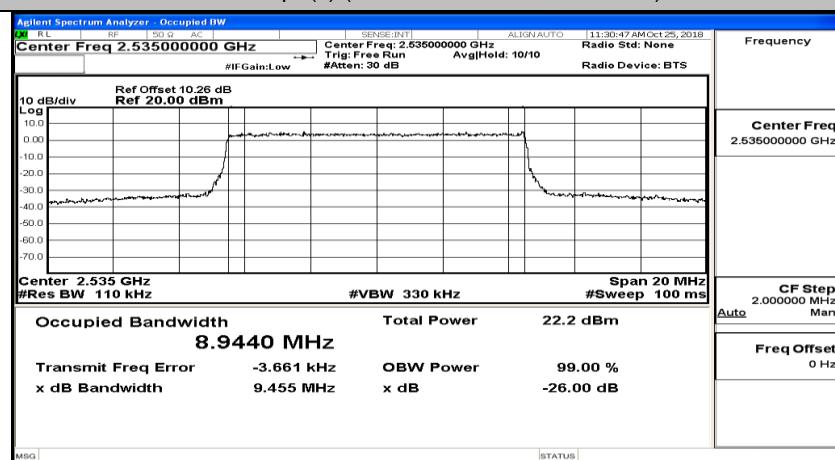
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



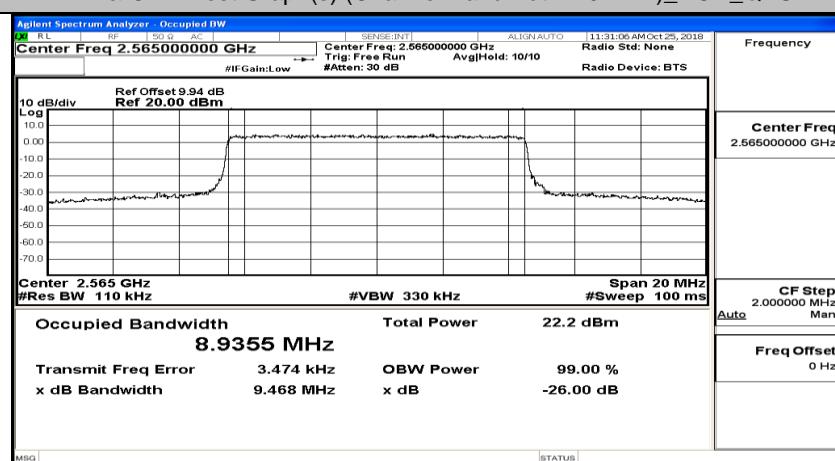
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



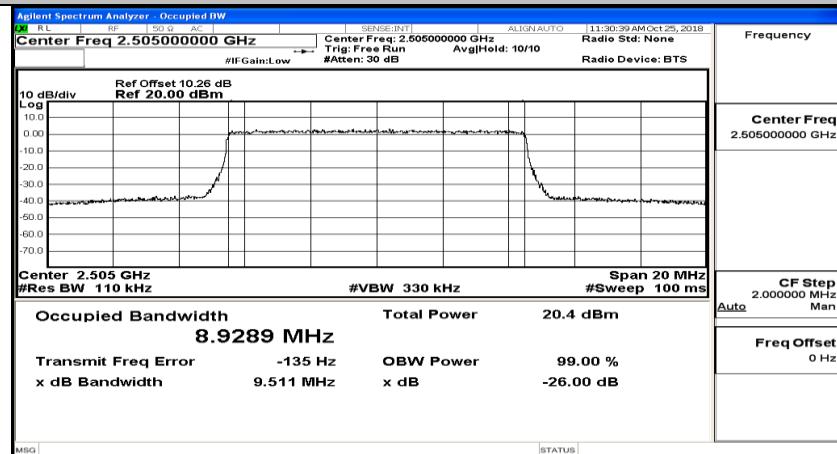
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



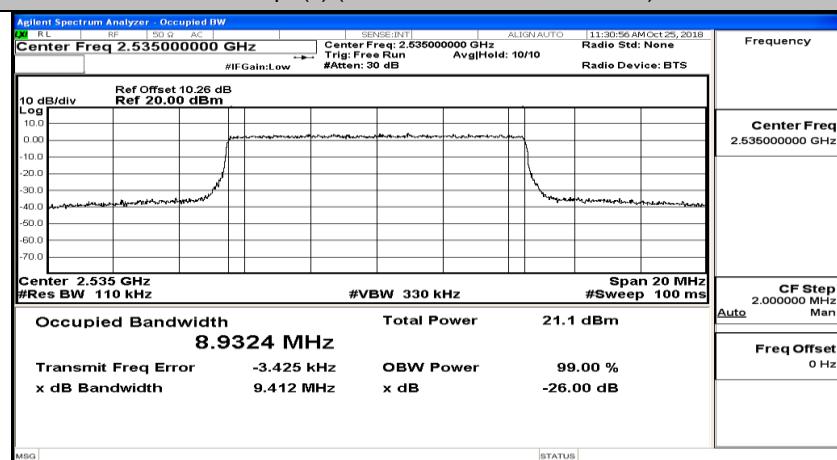
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



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



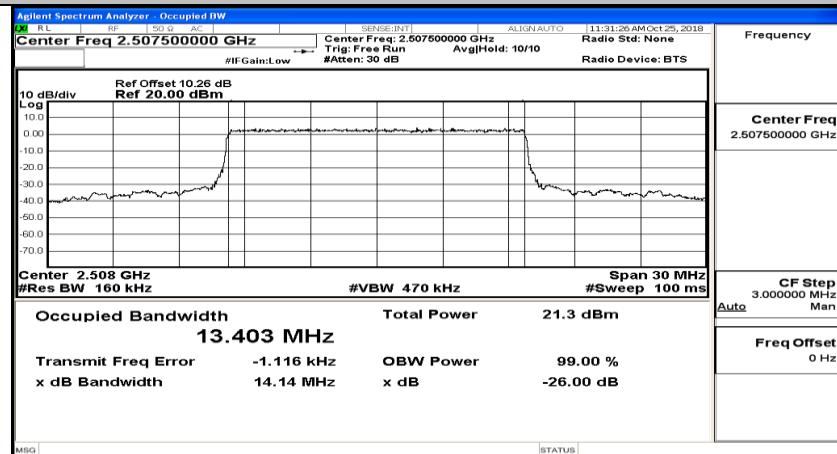
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



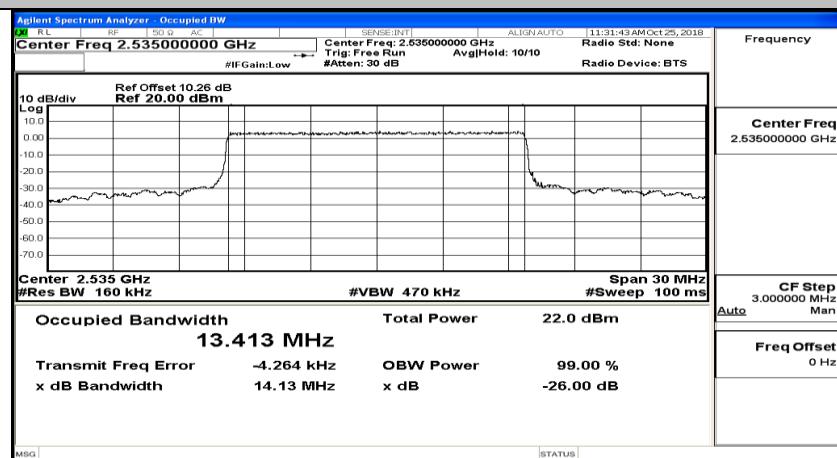
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



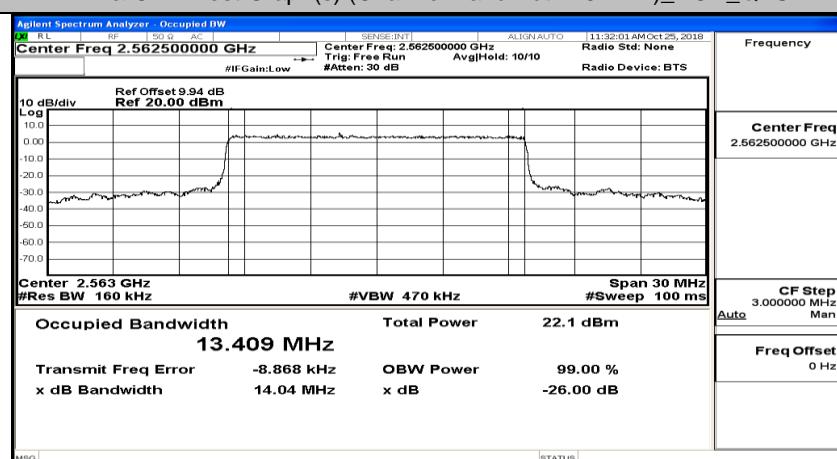
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



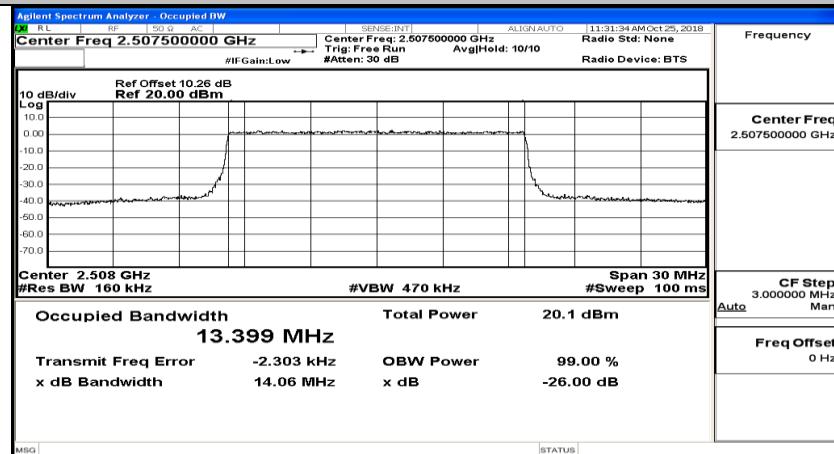
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK



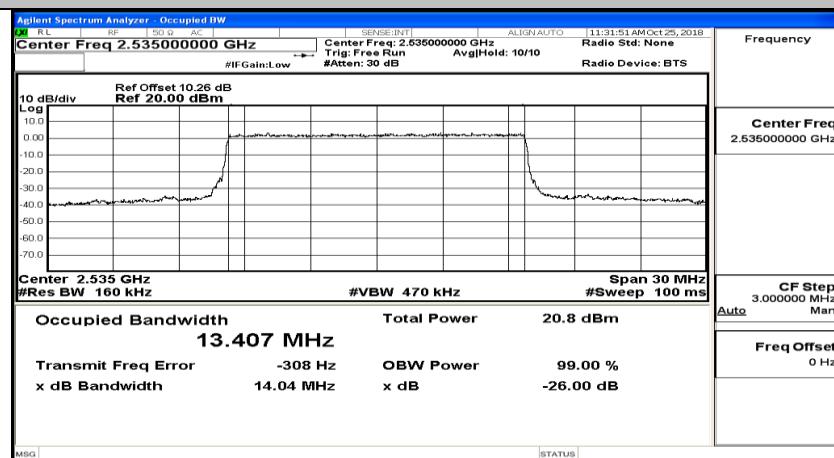
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



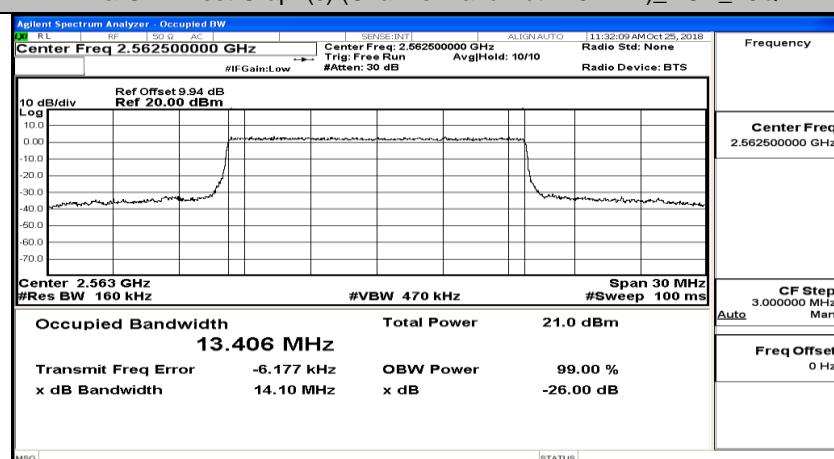
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



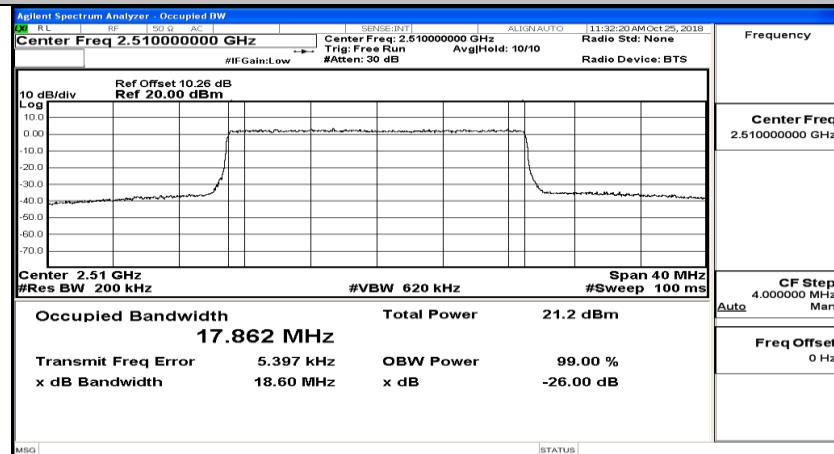
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



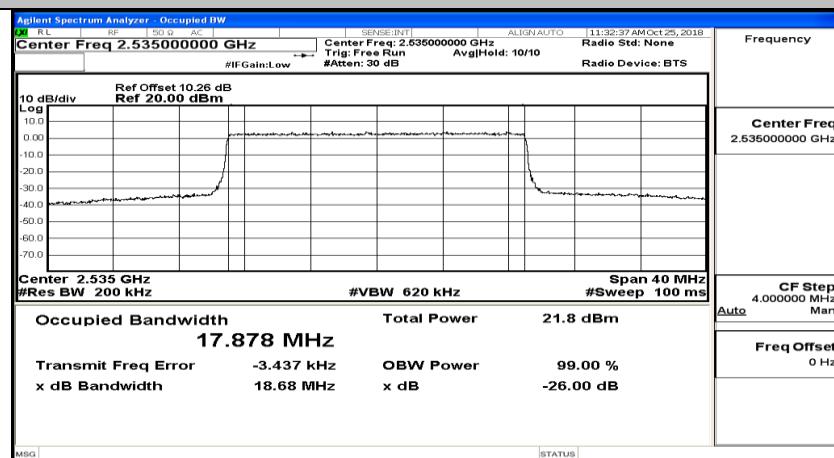
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



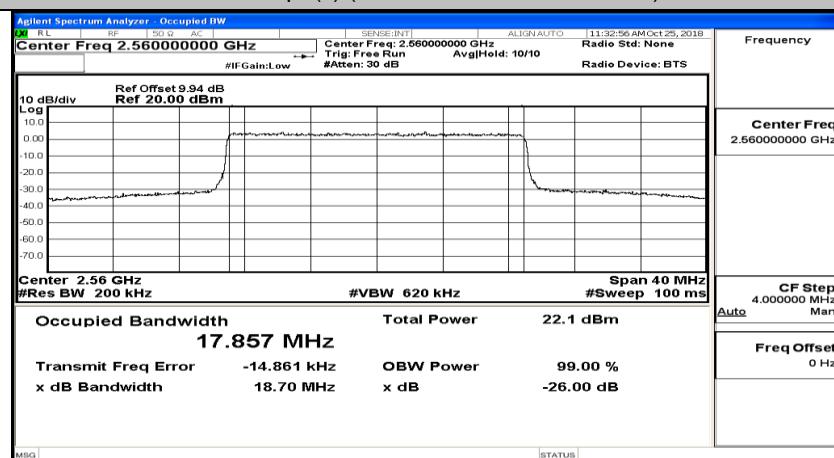
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



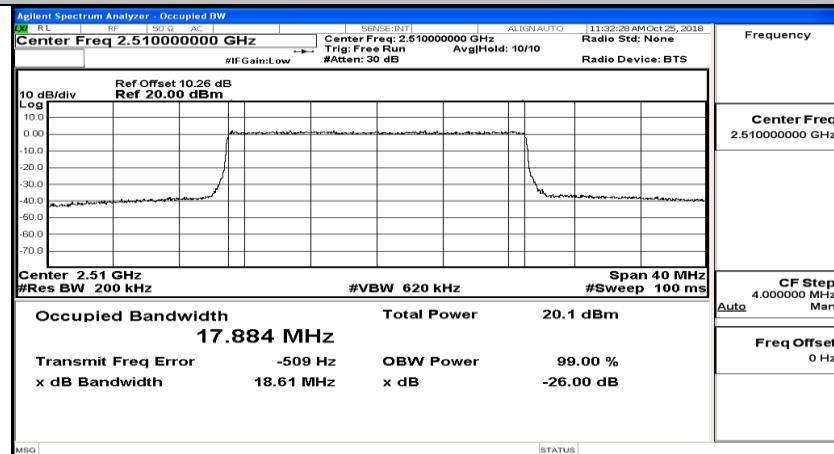
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



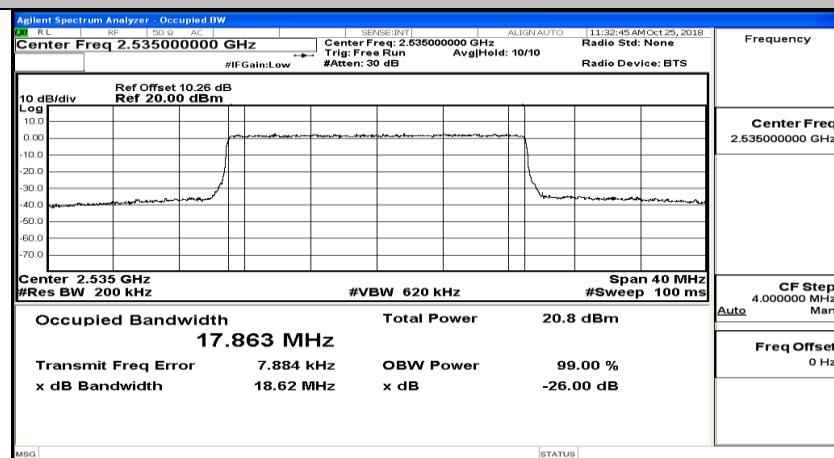
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



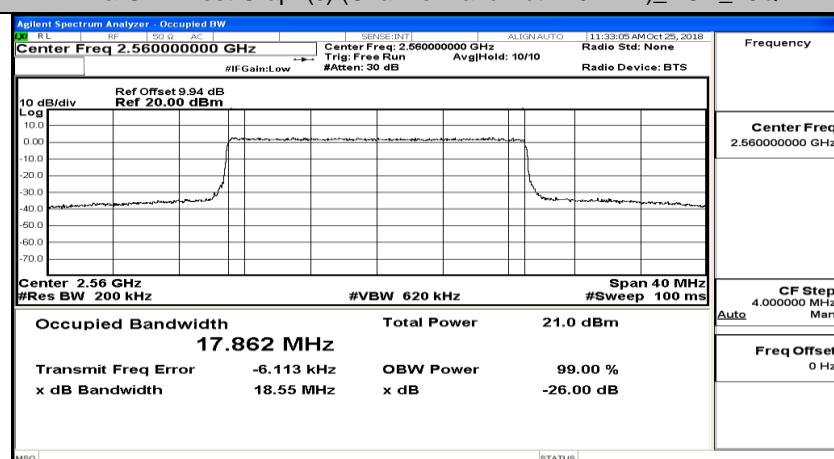
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



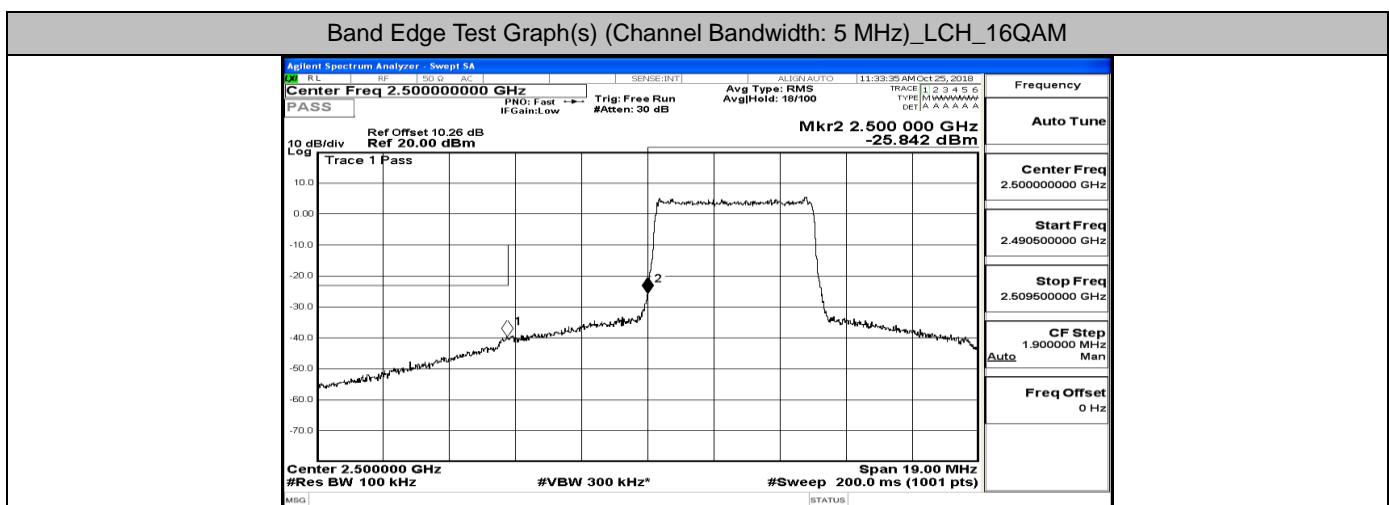
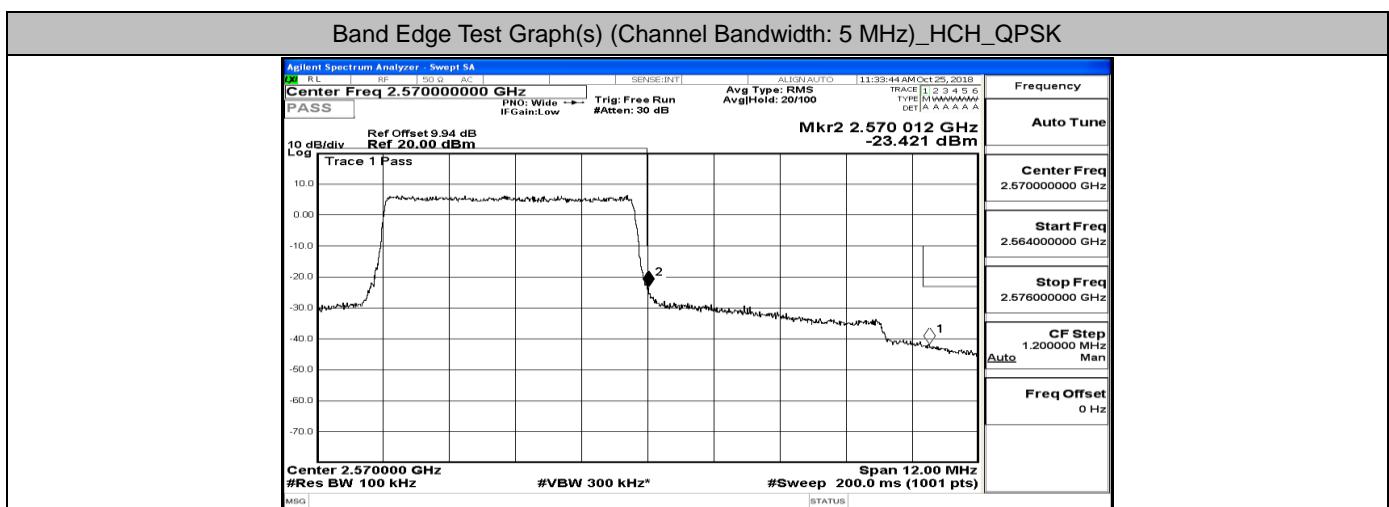
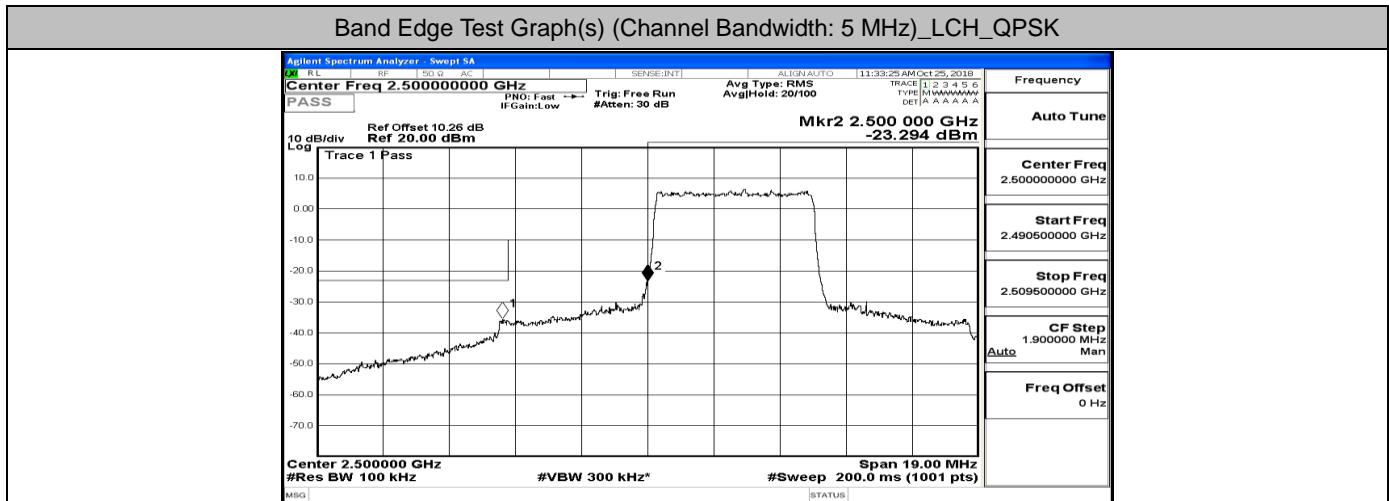
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_16QAM



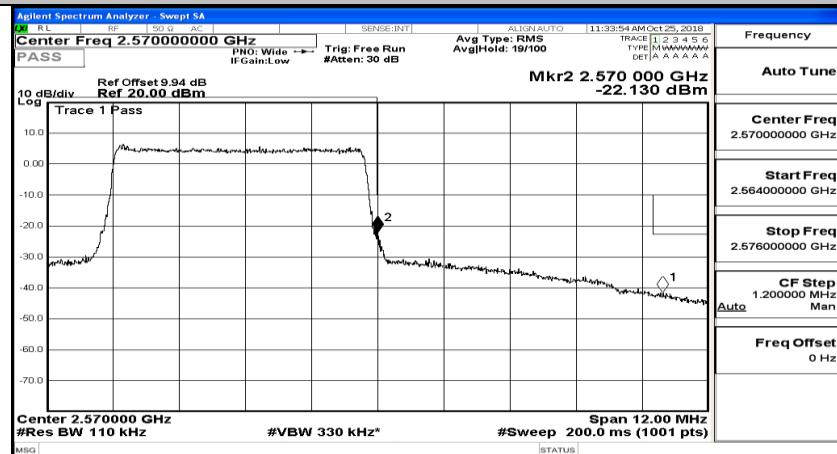
## EBW &amp; OBW Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_16QAM



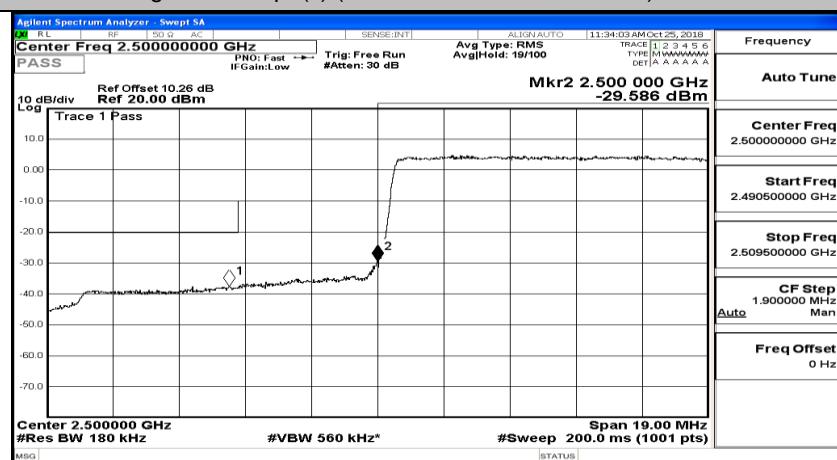
## G.4 Band Edge



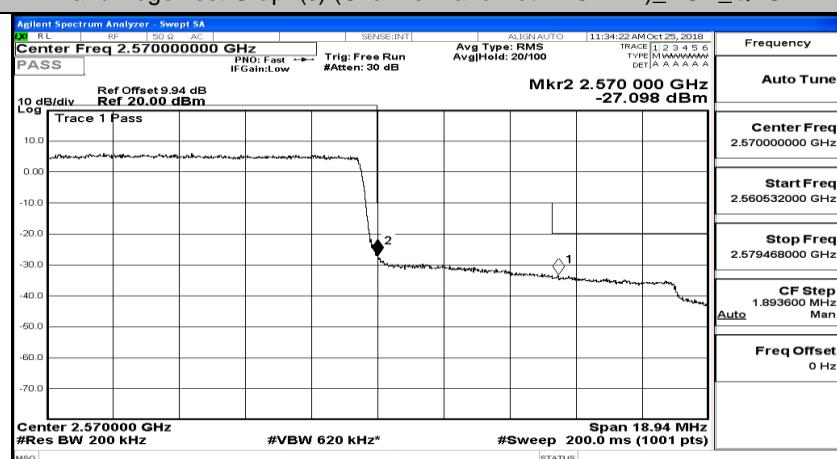
## Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)\_HCH\_16QAM



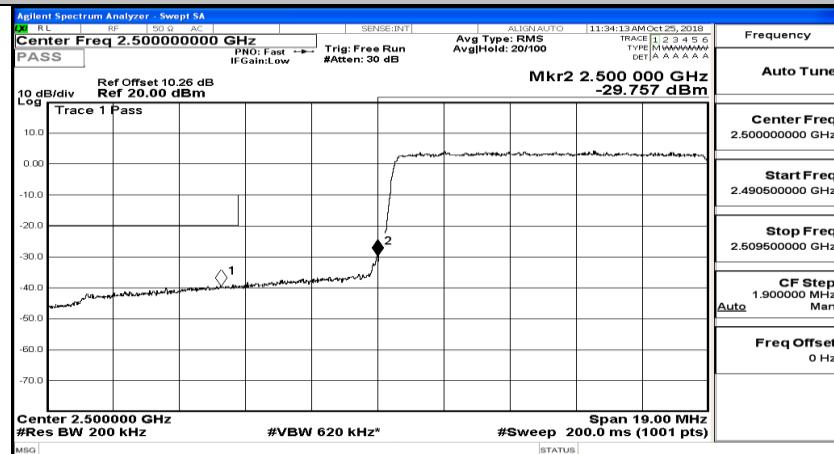
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_QPSK



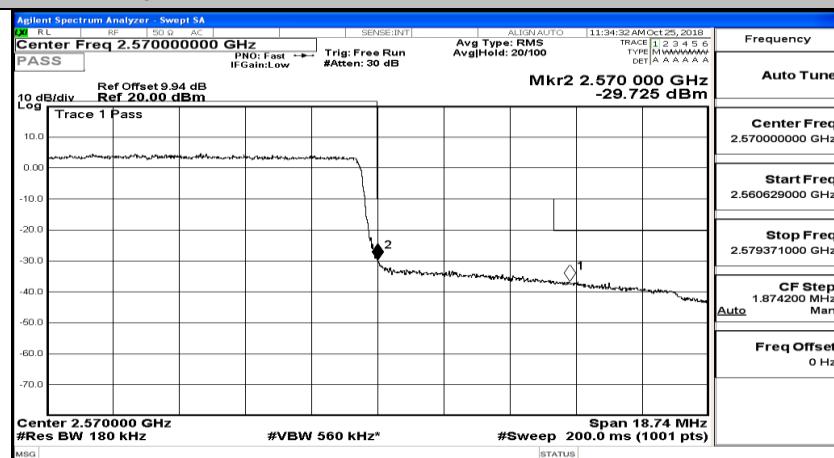
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



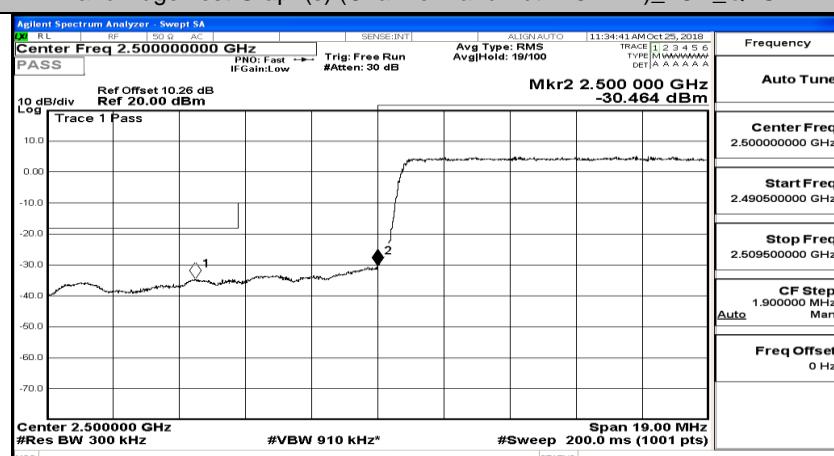
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



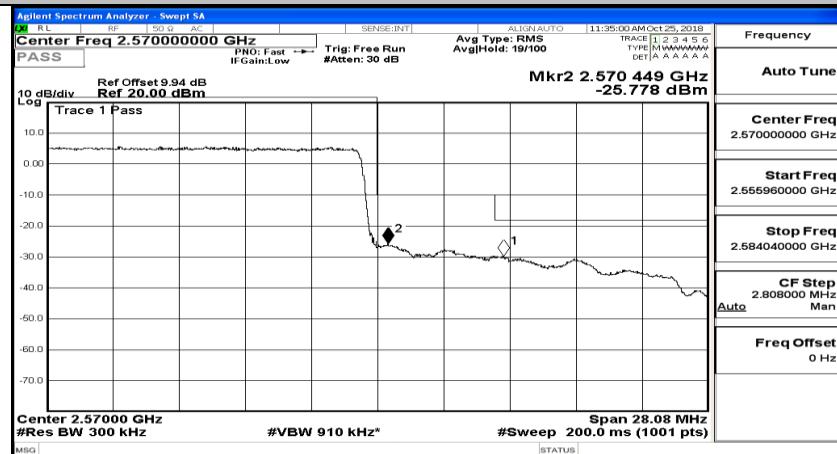
## Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



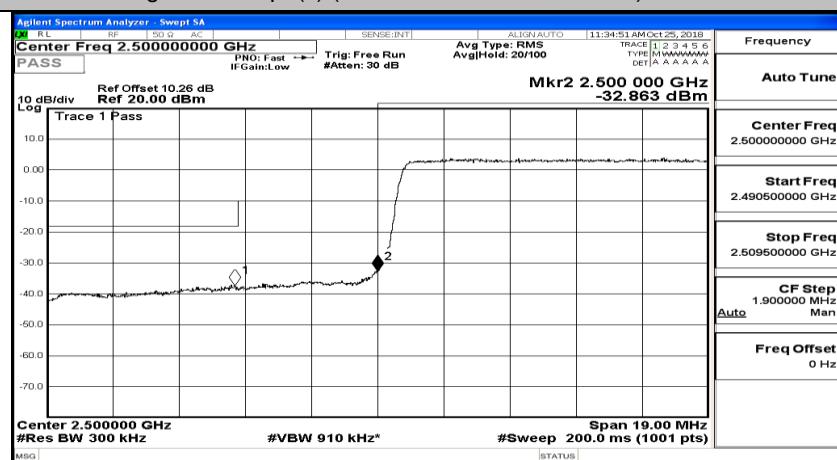
## Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK



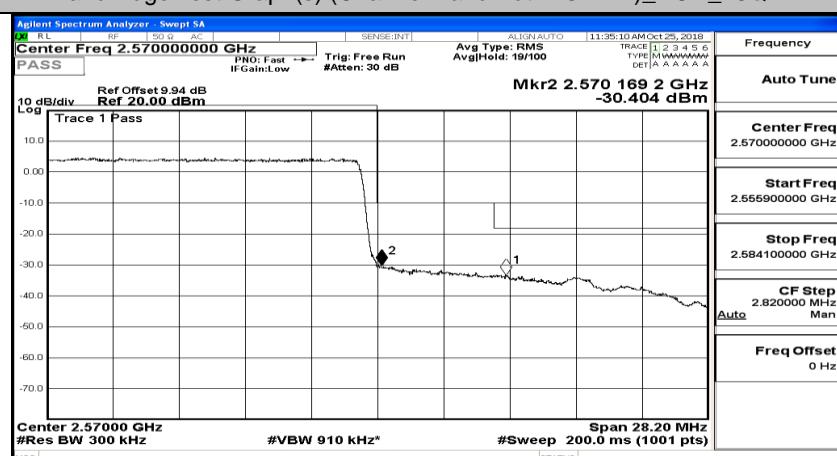
## Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK



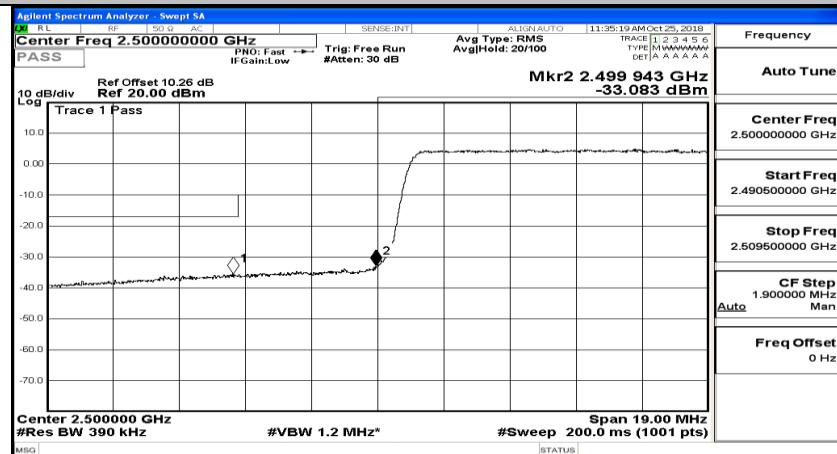
## Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_16QAM



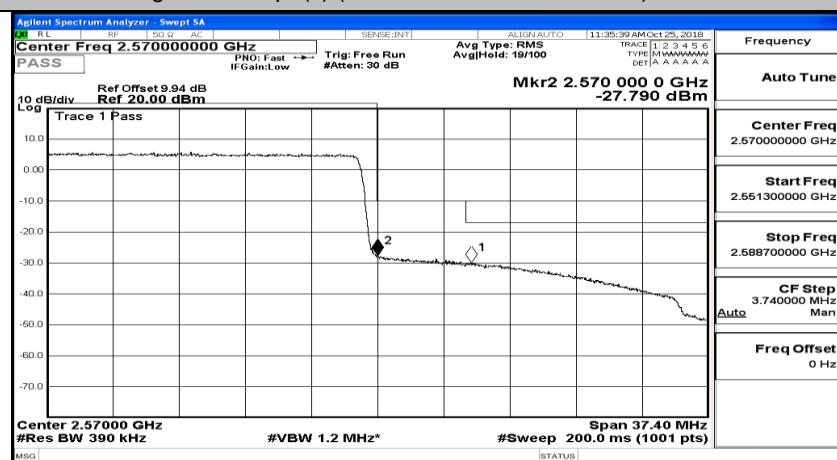
## Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



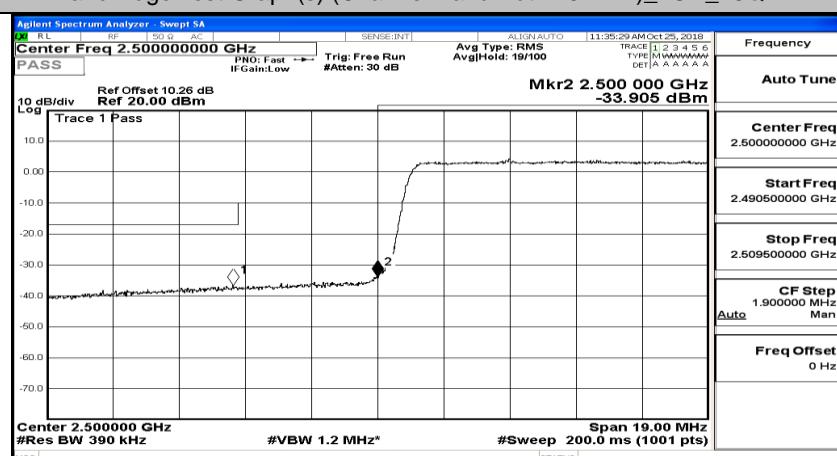
## Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK

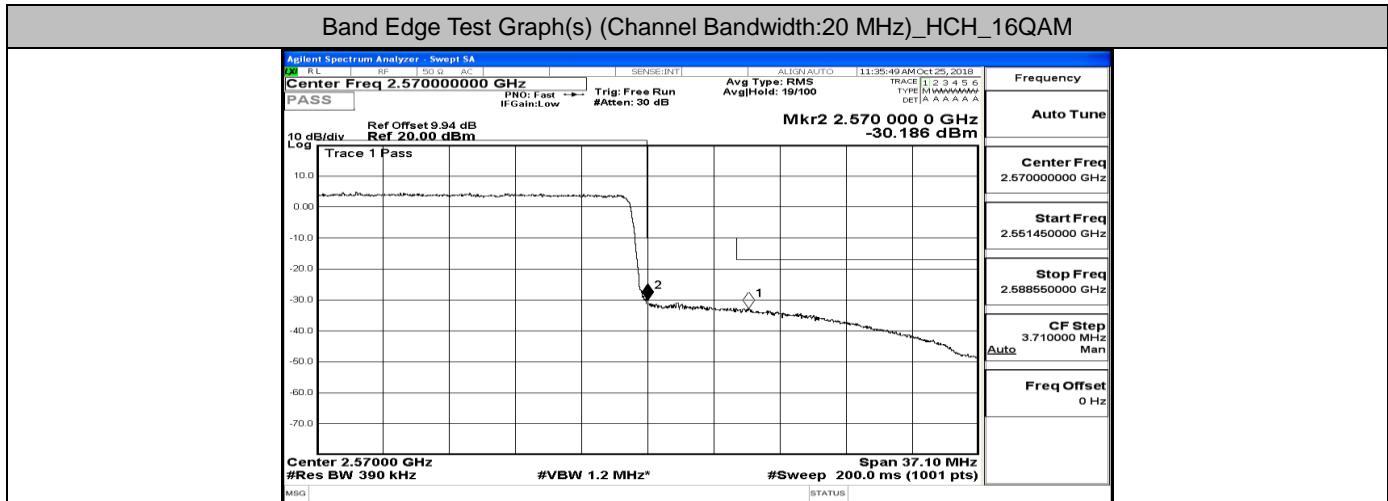


## Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK

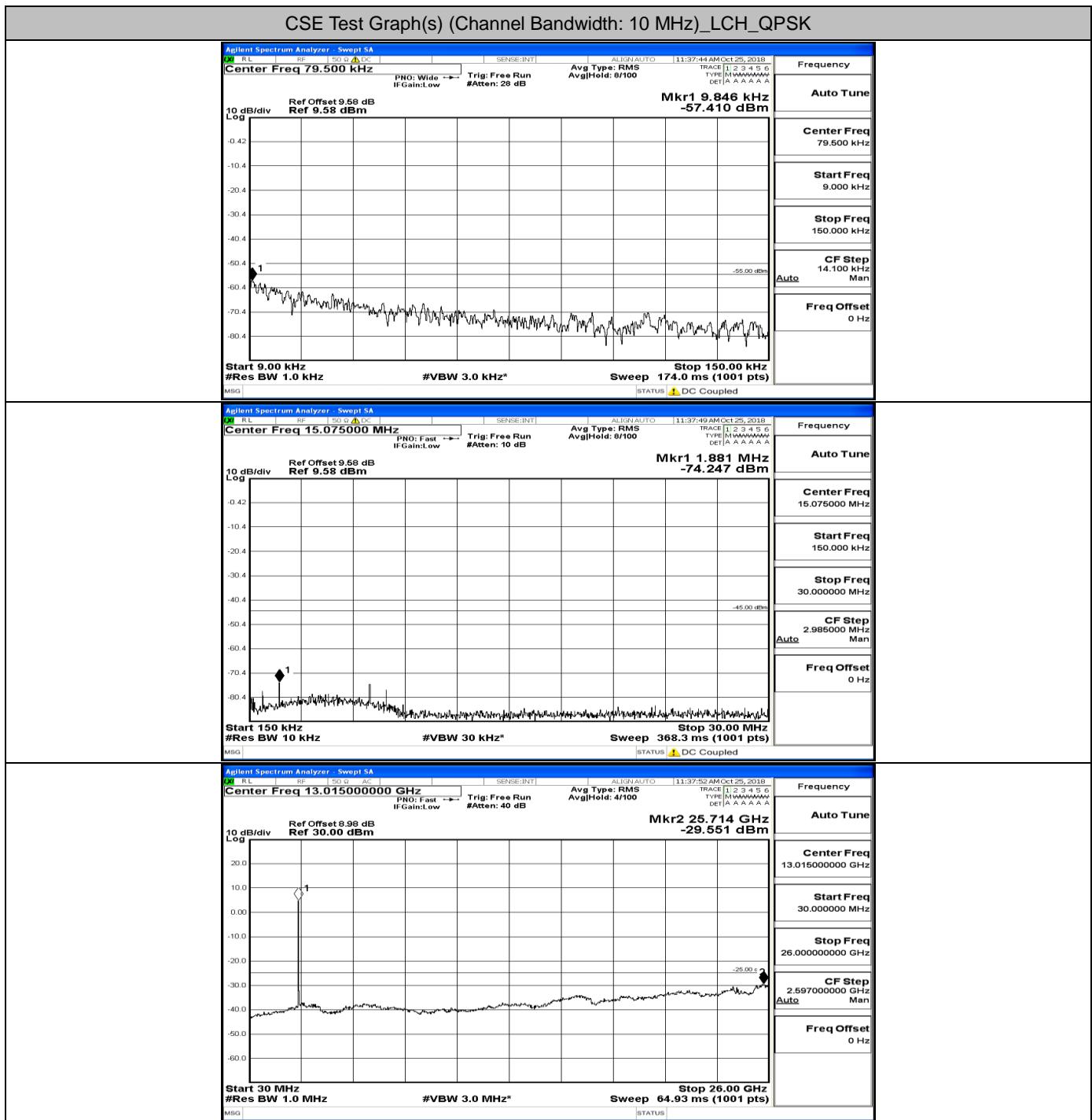


## Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM

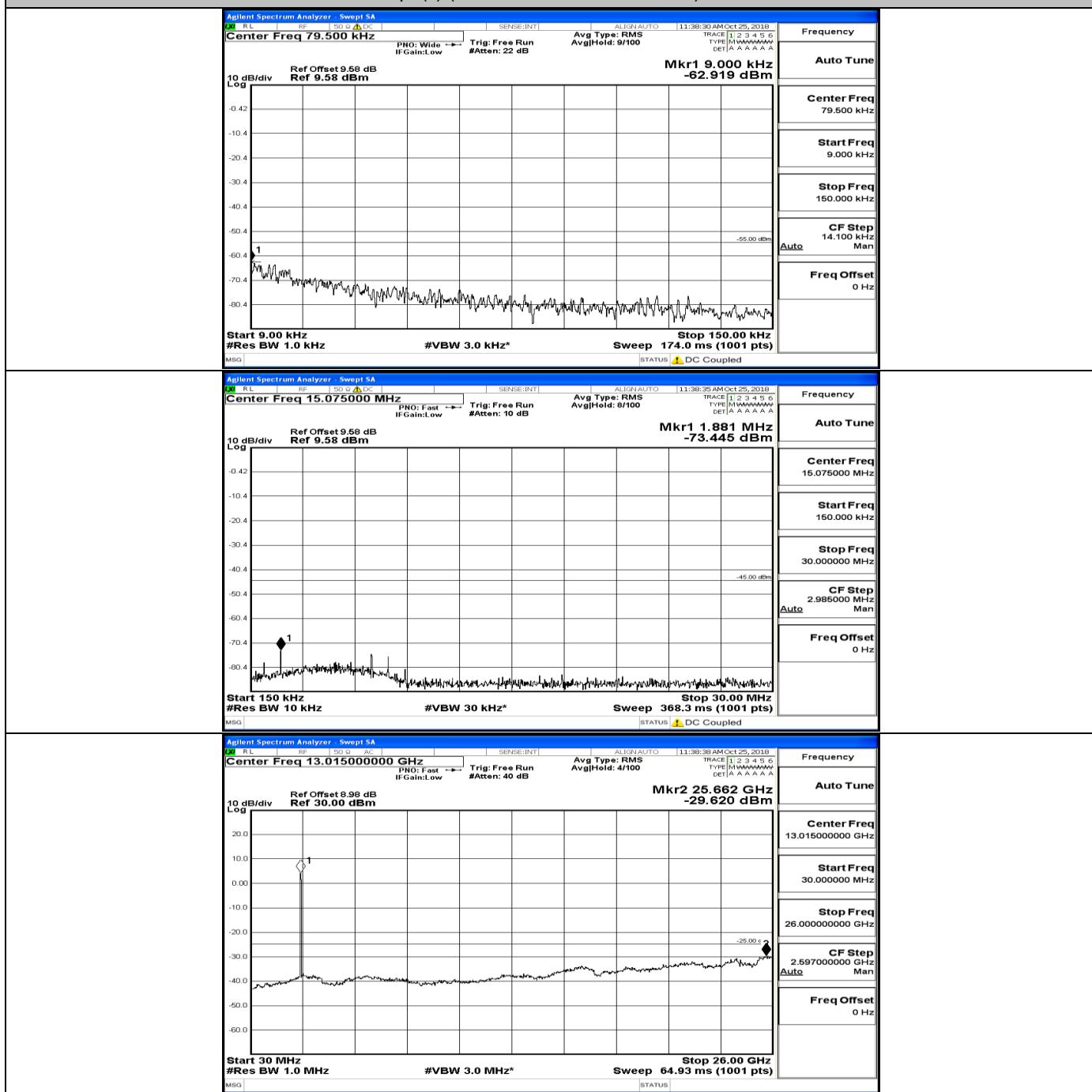




## G.5 Conducted Spurious Emission



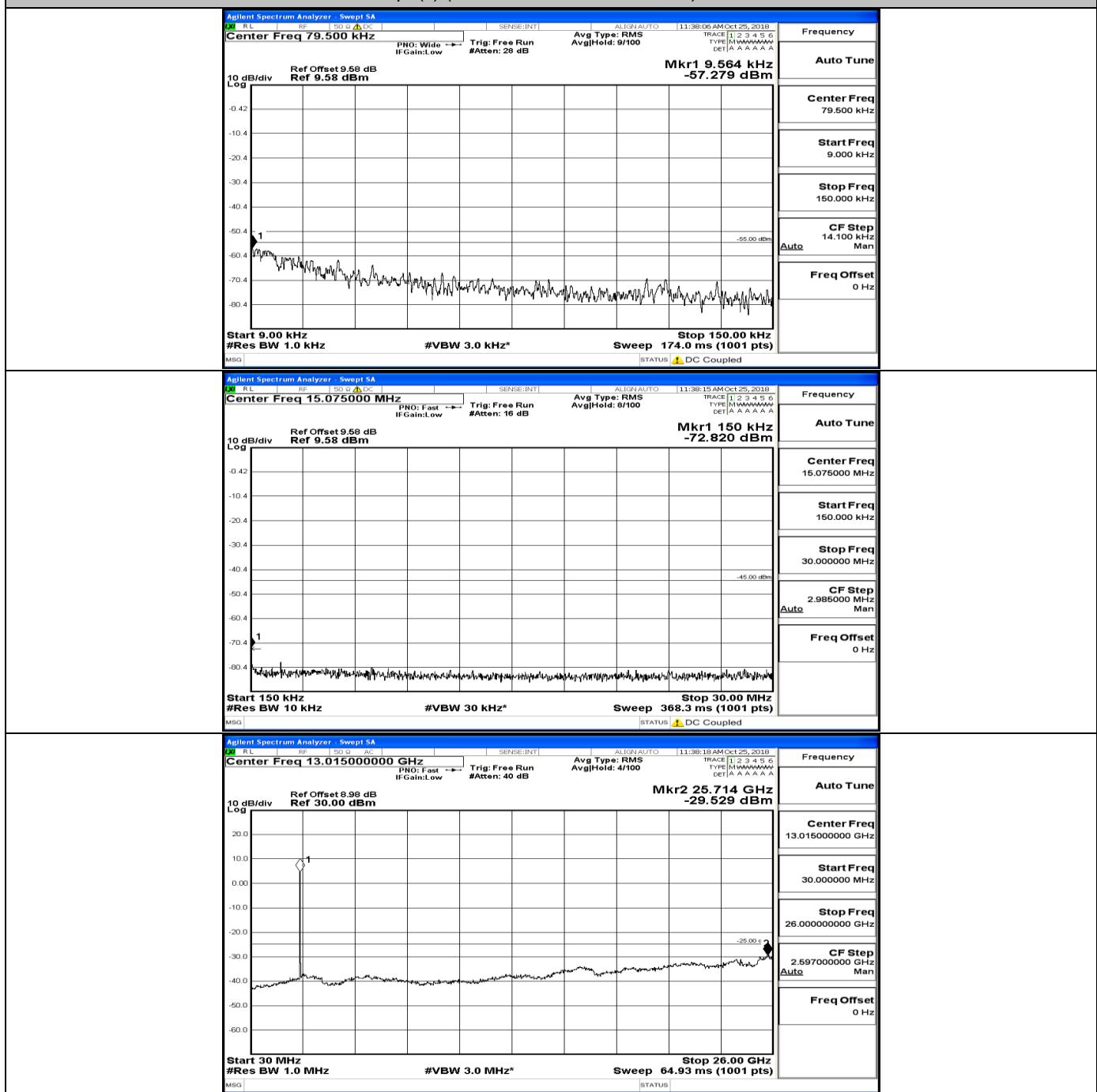
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_QPSK



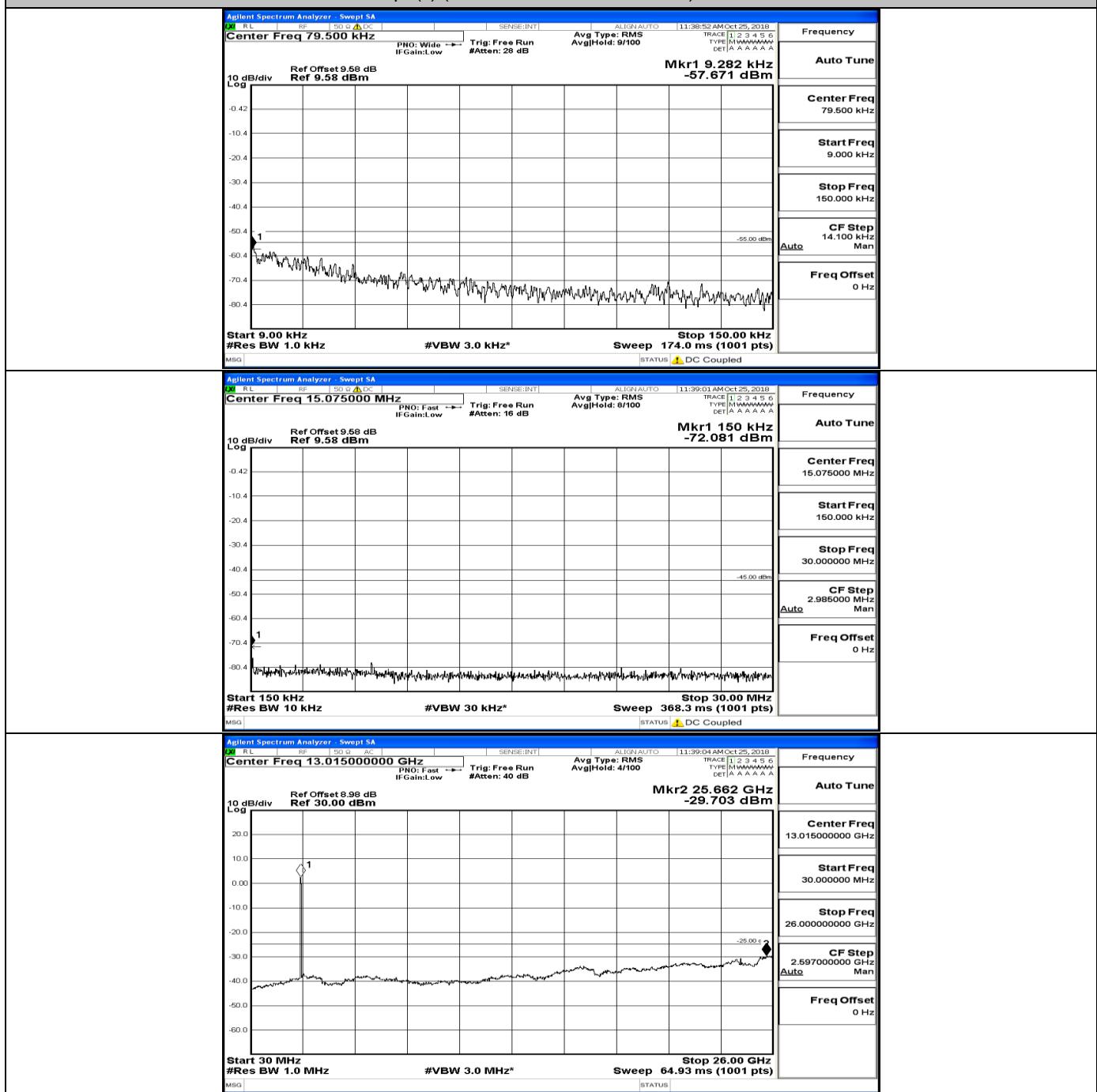
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_QPSK



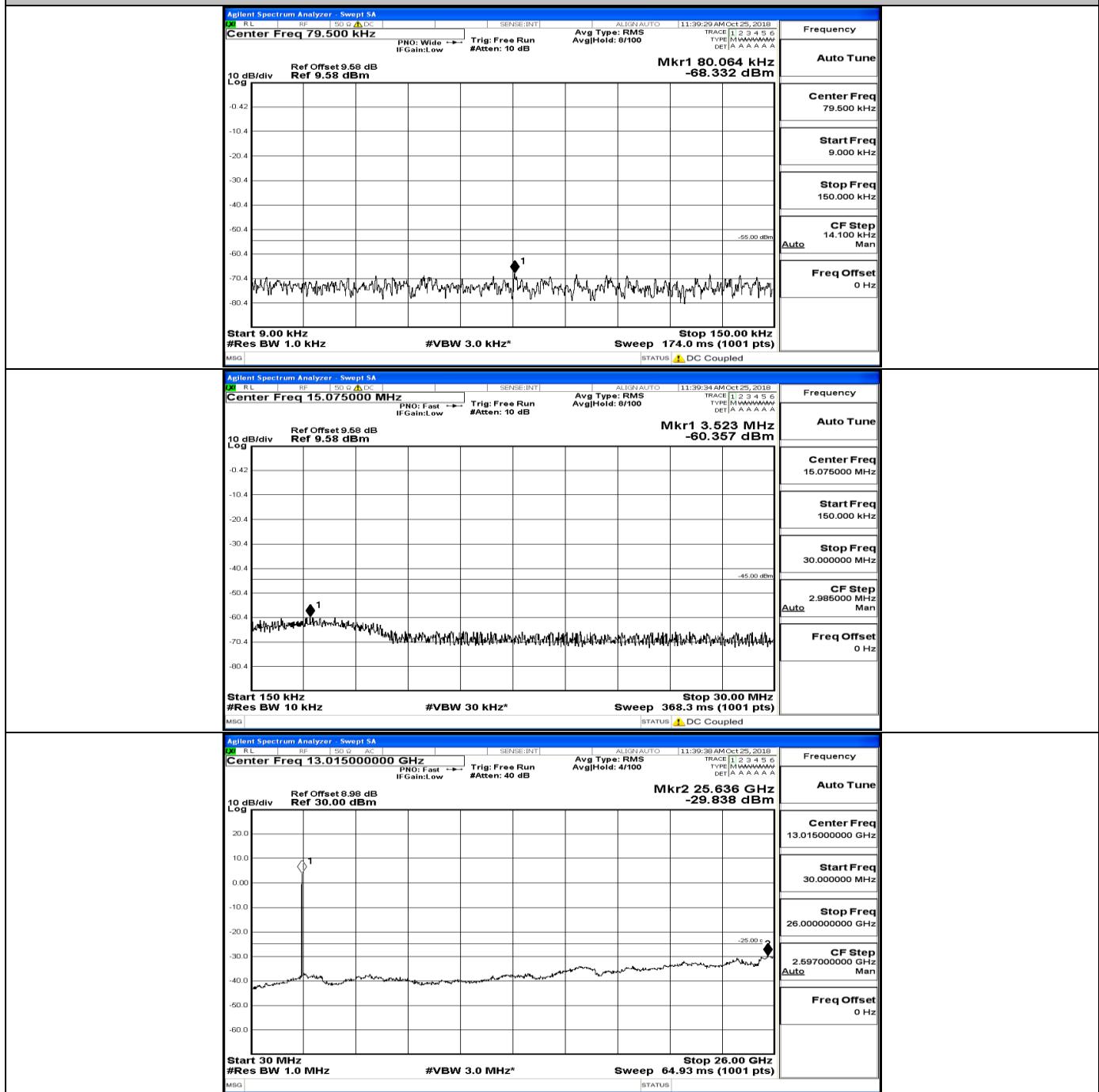
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_LCH\_16QAM



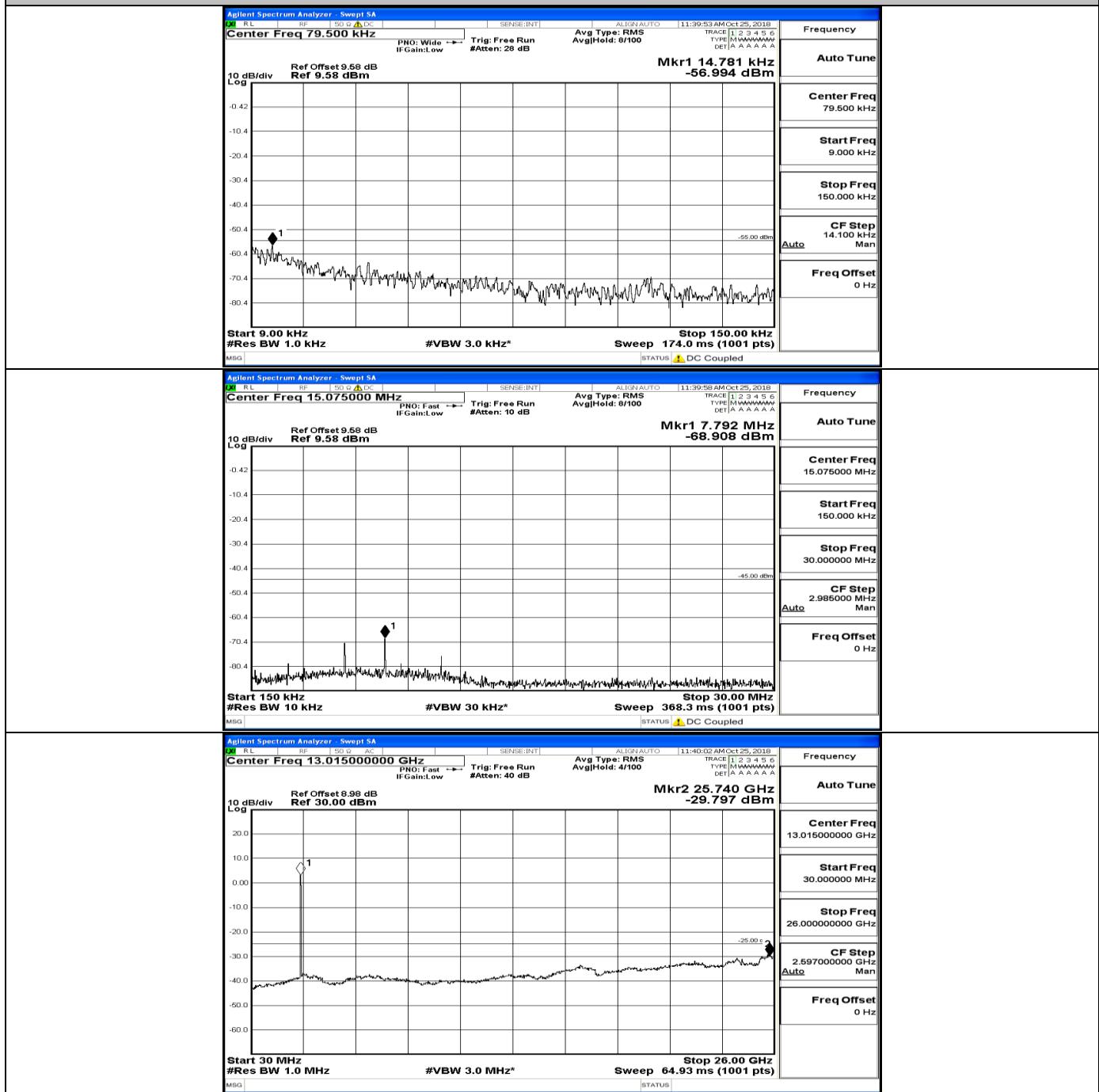
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_MCH\_16QAM



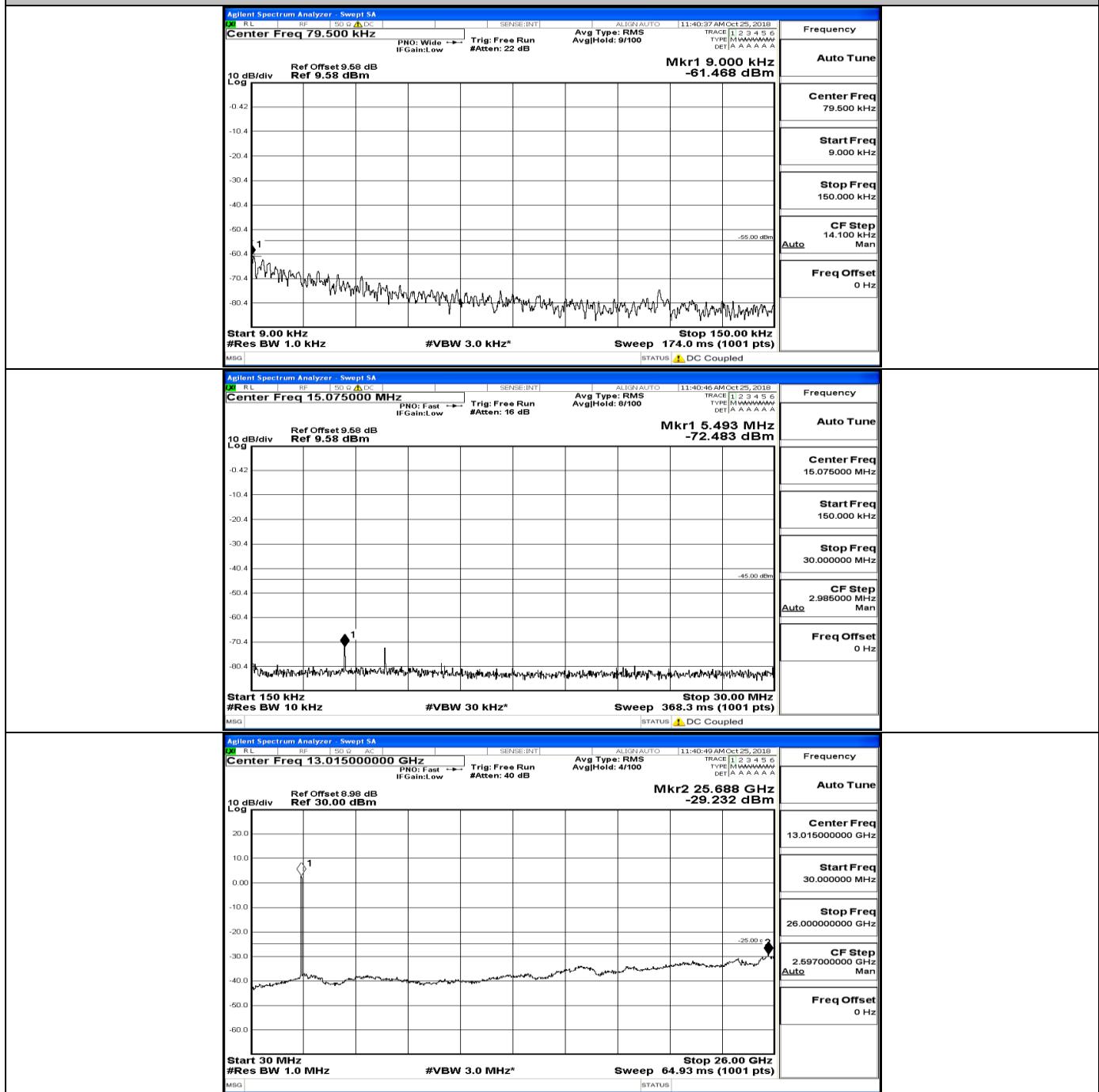
## CSE Test Graph(s) (Channel Bandwidth: 10 MHz)\_HCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_LCH\_QPSK

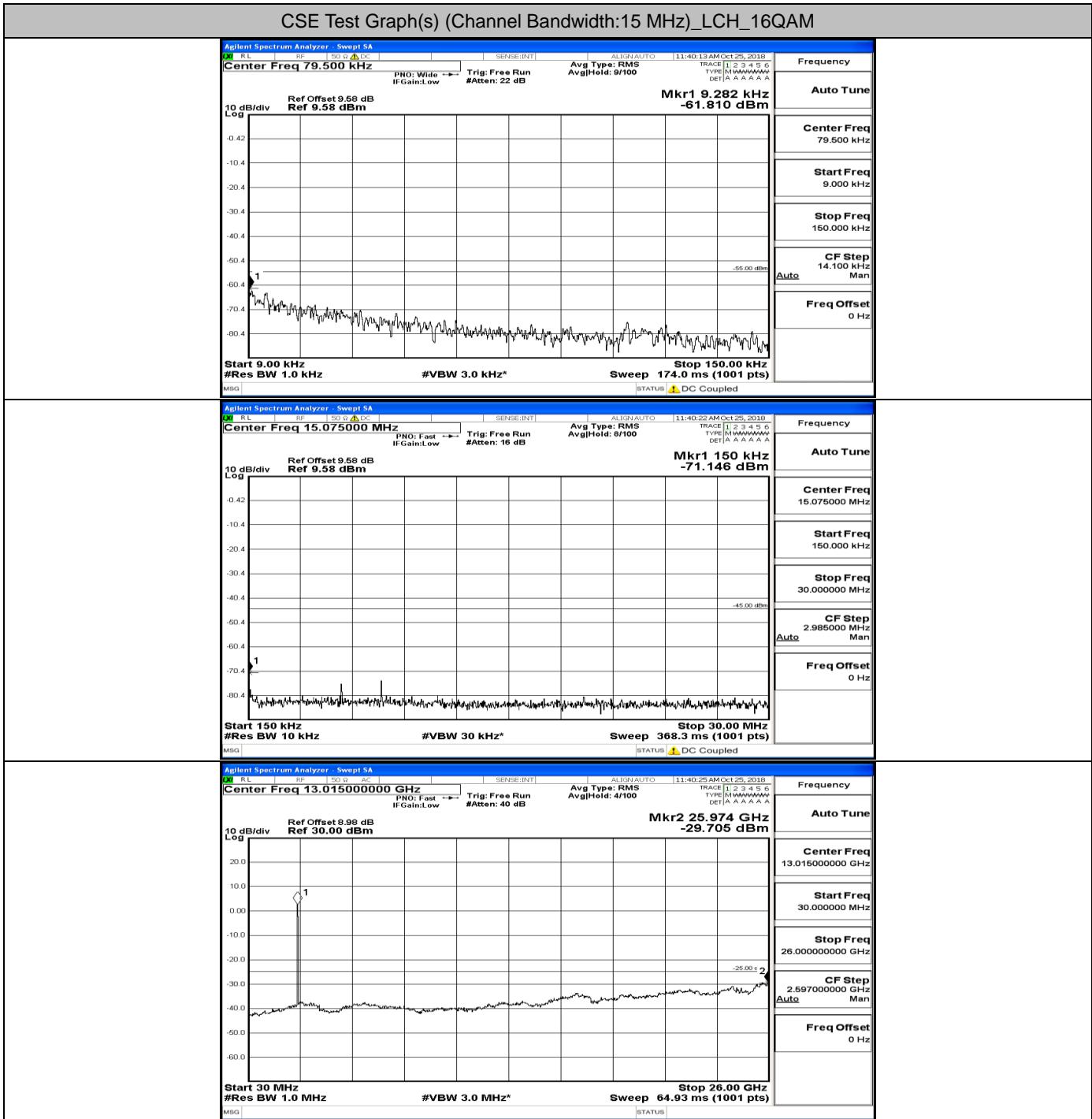


## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_QPSK

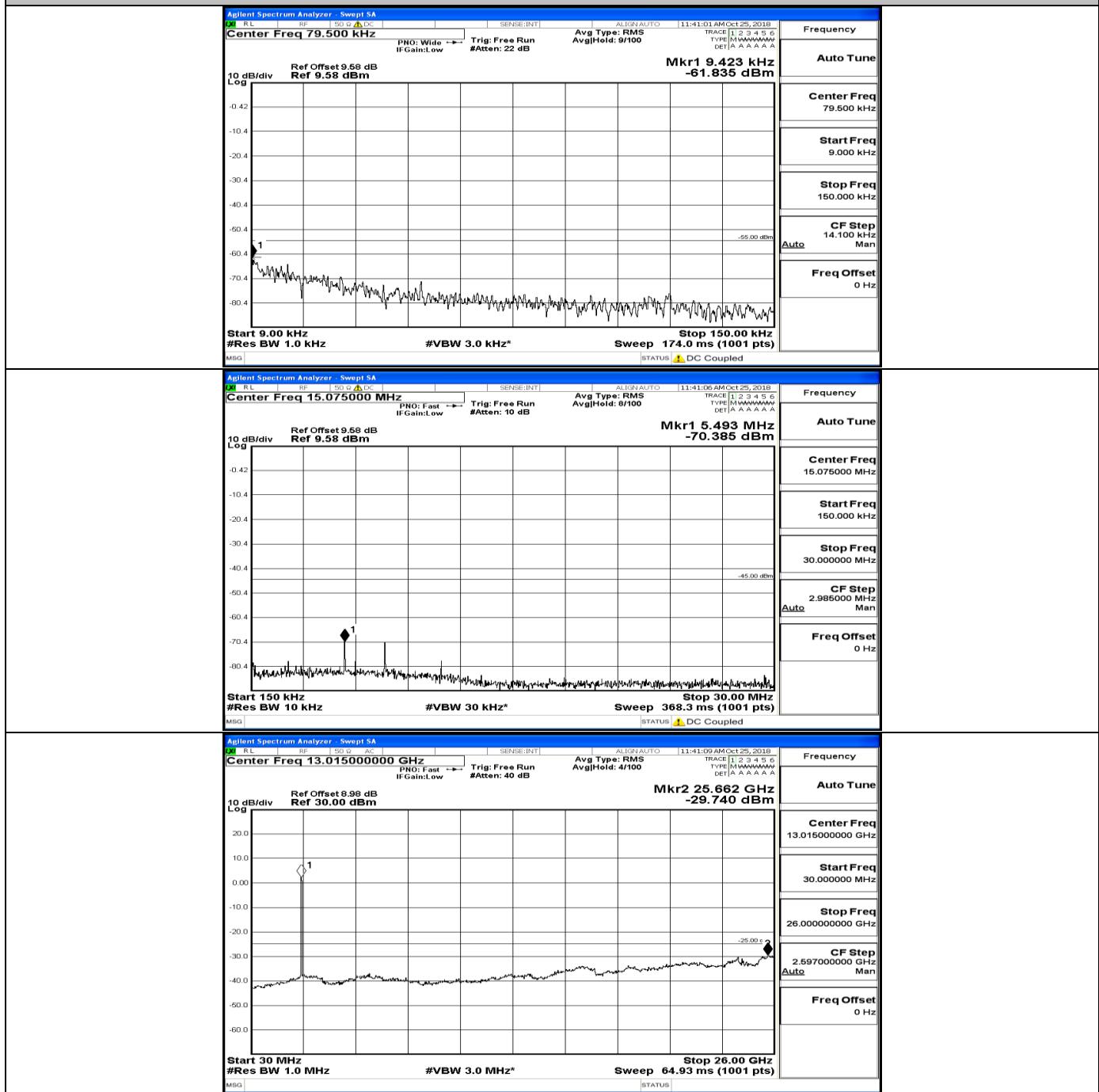


## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_QPSK





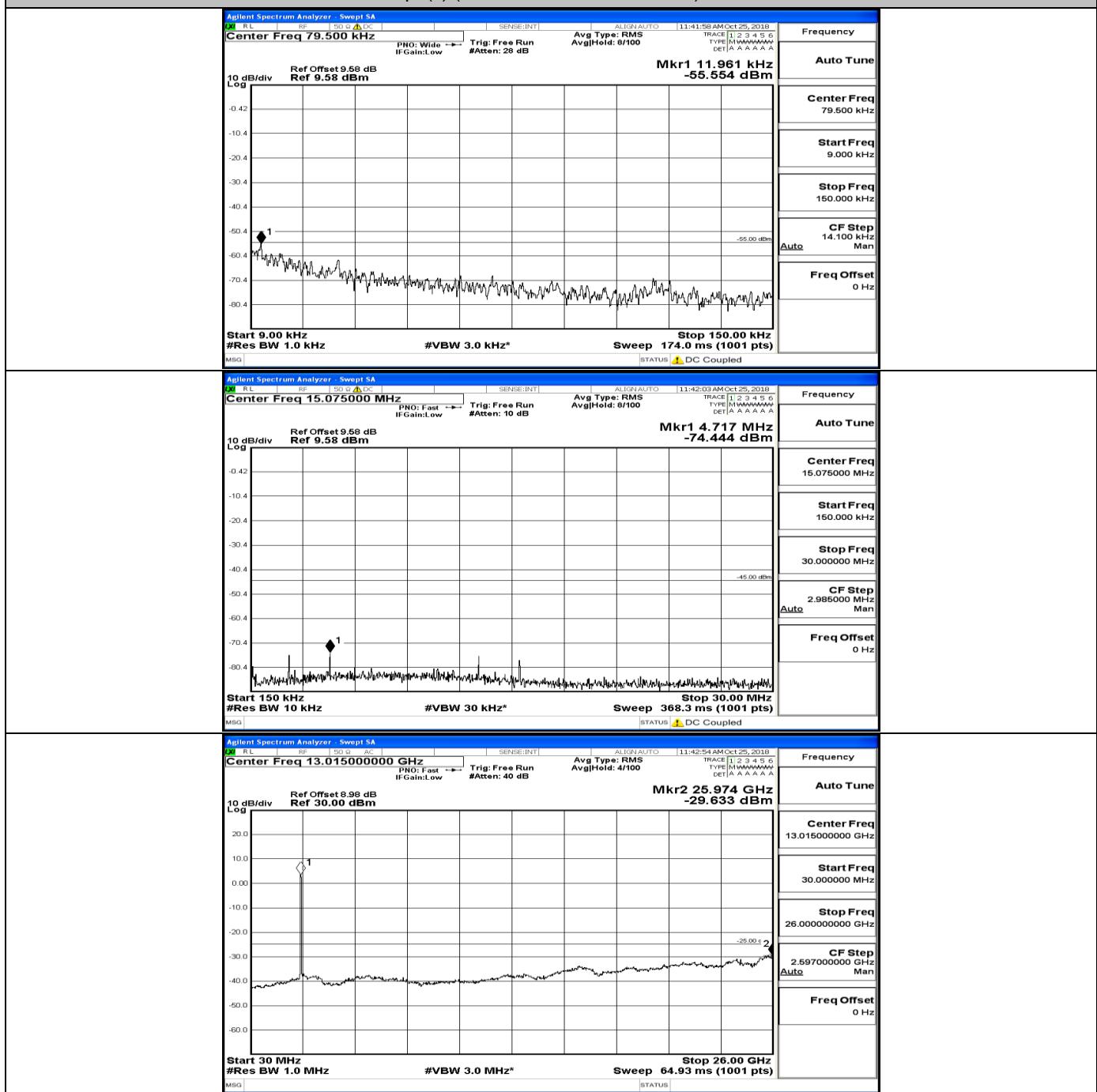
## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_MCH\_16QAM



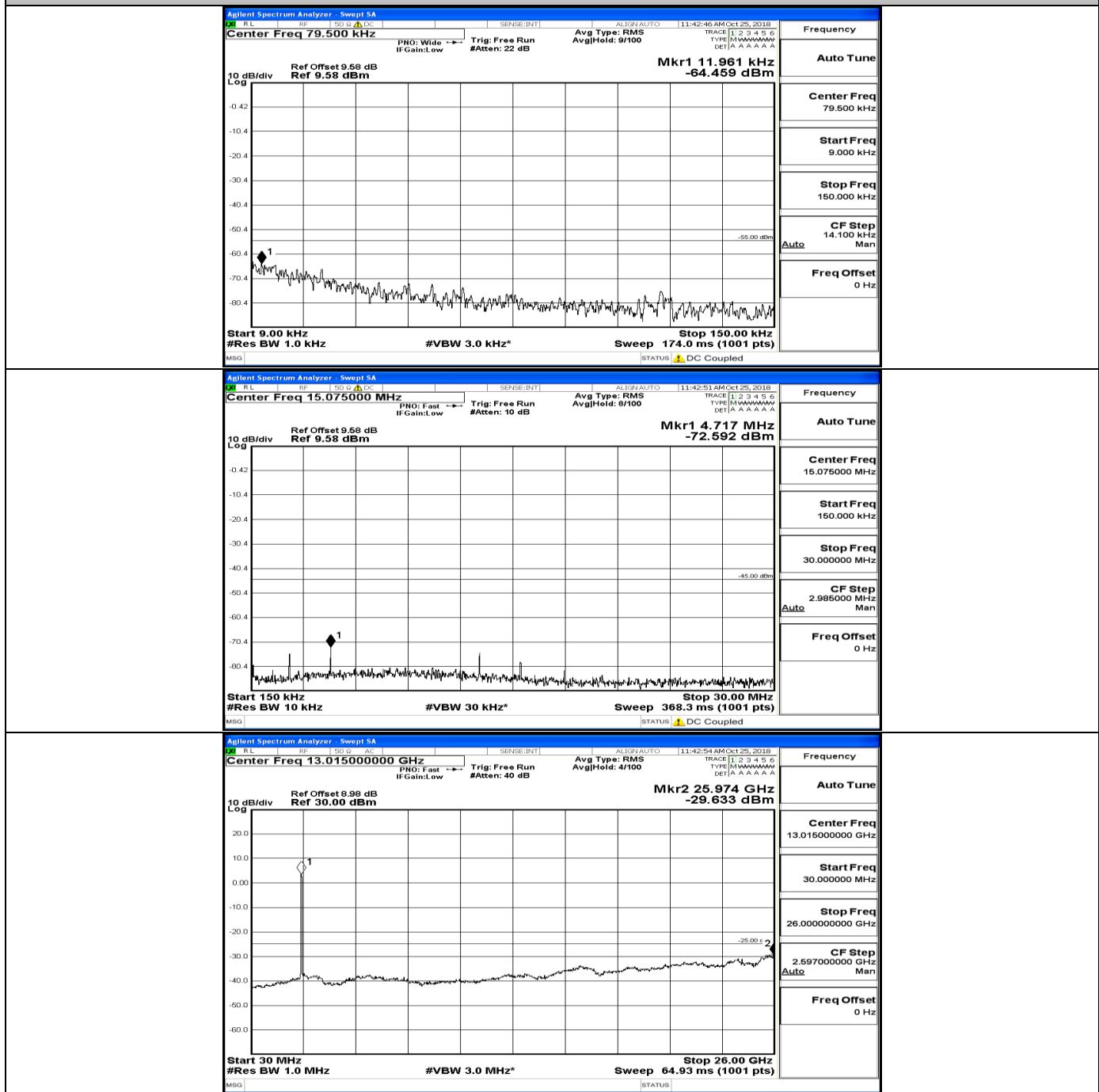
## CSE Test Graph(s) (Channel Bandwidth:15 MHz)\_HCH\_16QAM



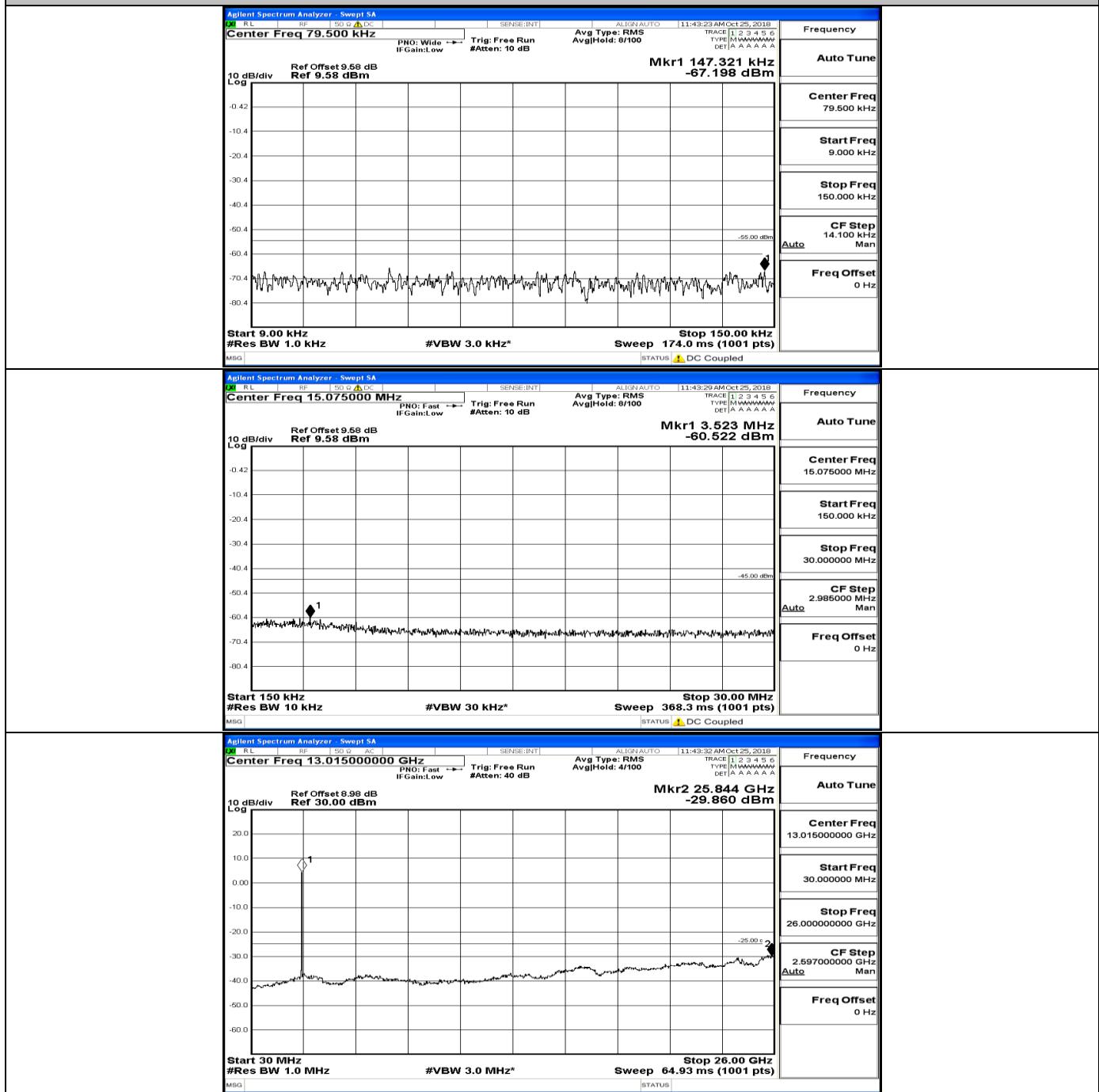
## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_QPSK



## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_QPSK



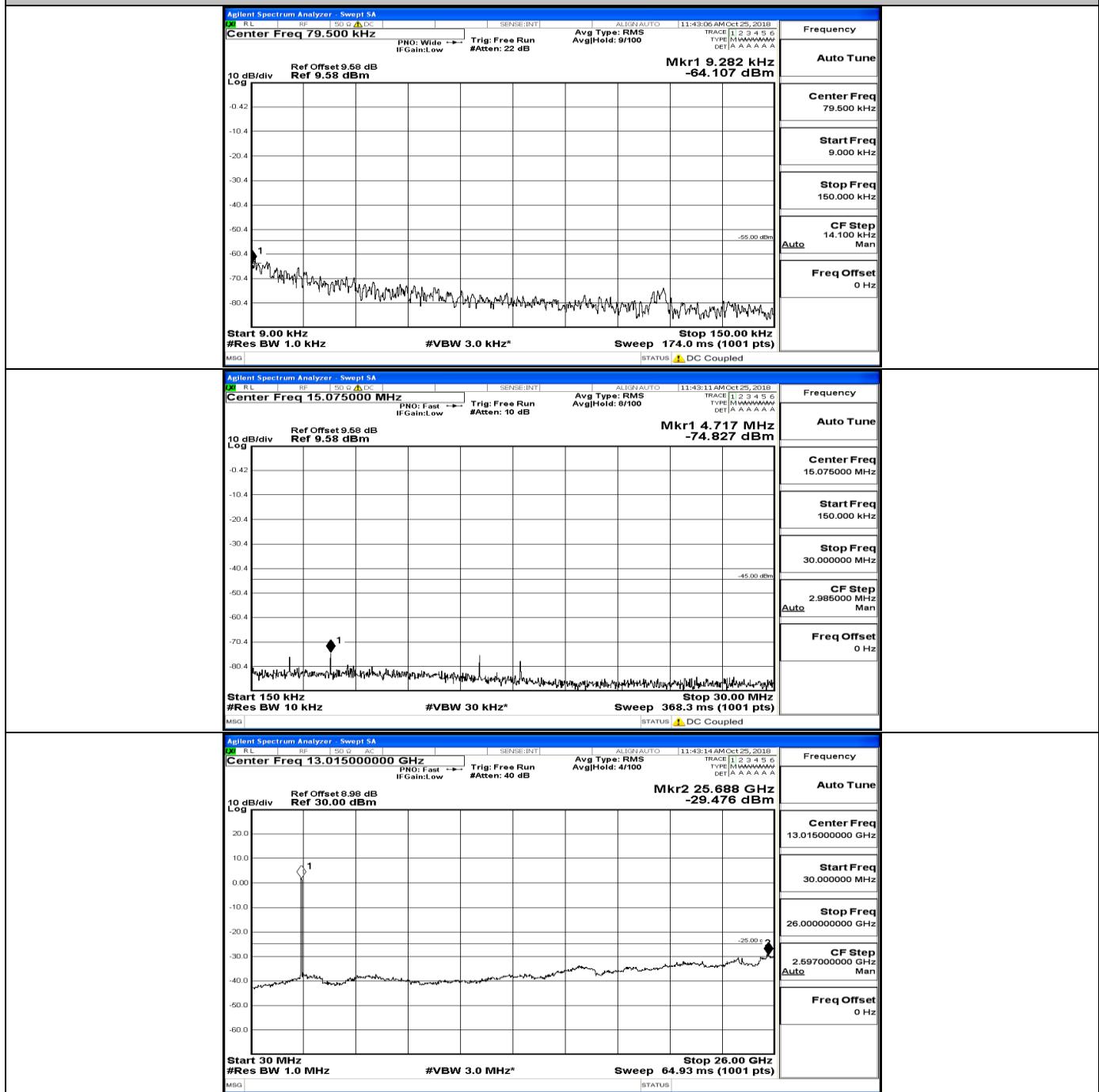
## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_QPSK



## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_LCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_MCH\_16QAM



## CSE Test Graph(s) (Channel Bandwidth:20 MHz)\_HCH\_16QAM

