

Appendix D: Test Data for E-UTRA Band 7

Product Name: LTE GSM/WCDMA Smartphone

Trade Mark: DOOGEE

Test Model: S70

Environmental Conditions

Temperature:	
Relative Humidity:	
ATM Pressure:	100.0 kPa
Test Engineer:	
Supervised by:	Jayden Zhuo

D.1 Conducted Output Power

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	21.02	20.49	PASS
		1	12	21.40	20.71	PASS
		1	24	20.98	20.44	PASS
		12	0	20.06	19.35	PASS
		12	6	20.20	19.38	PASS
		12	13	20.13	19.34	PASS
		25	0	20.18	19.23	PASS
	MCH	1	0	20.96	20.05	PASS
		1	12	21.23	20.28	PASS
		1	24	20.95	20.05	PASS
		12	0	20.04	19.10	PASS
		12	6	20.11	19.16	PASS
		12	13	20.07	19.11	PASS
		25	0	20.11	19.10	PASS
	HCH	1	0	20.53	19.82	PASS
		1	12	20.80	20.18	PASS
		1	24	20.53	19.81	PASS
		12	0	19.75	18.84	PASS
		12	6	19.80	18.90	PASS
		12	13	19.71	18.82	PASS
		25	0	19.81	18.89	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.10	20.46	PASS
		1	24	21.29	20.63	PASS
		1	49	21.03	20.36	PASS
		25	0	20.20	19.21	PASS
		25	12	20.21	19.21	PASS
		25	25	20.29	19.27	PASS
		50	0	20.22	19.21	PASS
	MCH	1	0	20.98	20.37	PASS
		1	24	21.20	20.56	PASS
		1	49	21.00	20.37	PASS
		25	0	20.19	19.21	PASS
		25	12	20.17	19.14	PASS
		25	25	20.17	19.16	PASS
		50	0	20.16	19.16	PASS
	HCH	1	0	20.65	20.14	PASS
		1	24	20.81	20.34	PASS
		1	49	20.68	20.12	PASS
		25	0	19.89	18.95	PASS
		25	12	19.77	18.84	PASS
		25	25	19.74	18.76	PASS
		50	0	19.85	18.83	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)

Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.06	20.33	PASS
		1	37	21.20	20.62	PASS
		1	74	20.94	20.23	PASS
		37	0	20.12	19.11	PASS
		37	18	20.24	19.21	PASS
		37	38	20.17	19.11	PASS
		75	0	20.21	19.15	PASS
	MCH	1	0	20.94	20.28	PASS
		1	37	21.16	20.58	PASS
		1	74	20.96	20.27	PASS
		37	0	20.14	19.07	PASS
		37	18	20.10	19.11	PASS
		37	38	20.03	19.14	PASS
		75	0	20.14	19.13	PASS
	HCH	1	0	20.67	20.03	PASS
		1	37	20.86	20.28	PASS
		1	74	20.60	19.99	PASS
		37	0	19.84	18.87	PASS
		37	18	19.79	18.82	PASS
		37	38	19.70	18.76	PASS
		75	0	19.79	18.81	PASS

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.12	20.35	PASS
		1	49	21.39	20.57	PASS
		1	99	20.96	20.15	PASS
		50	0	20.06	19.04	PASS
		50	25	20.15	19.14	PASS
		50	50	20.14	19.06	PASS
		100	0	20.04	19.02	PASS
	MCH	1	0	21.02	20.24	PASS
		1	49	21.33	20.56	PASS
		1	99	21.02	20.23	PASS
		50	0	20.12	19.09	PASS
		50	25	20.12	19.15	PASS
		50	50	20.12	19.12	PASS
		100	0	20.11	19.08	PASS
	HCH	1	0	20.73	20.13	PASS
		1	49	20.95	20.34	PASS
		1	99	20.58	20.05	PASS
		50	0	19.86	18.90	PASS
		50	25	19.84	18.83	PASS
		50	50	19.57	18.62	PASS
		100	0	19.71	18.68	PASS

D.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	5.66	<13	PASS
	MCH	5.8	<13	PASS
	HCH	5.77	<13	PASS
16QAM	LCH	6.47	<13	PASS
	MCH	6.61	<13	PASS
	HCH	6.55	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.65	<13	PASS
	MCH	5.83	<13	PASS
	HCH	5.76	<13	PASS
16QAM	LCH	6.38	<13	PASS
	MCH	6.5	<13	PASS
	HCH	6.49	<13	PASS

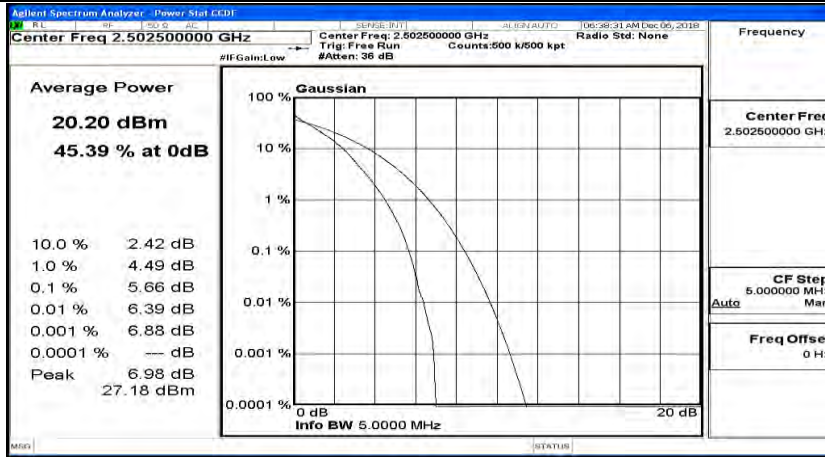
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.01	<13	PASS
	MCH	5.01	<13	PASS
	HCH	4.97	<13	PASS
16QAM	LCH	6.28	<13	PASS
	MCH	6.3	<13	PASS
	HCH	6.24	<13	PASS

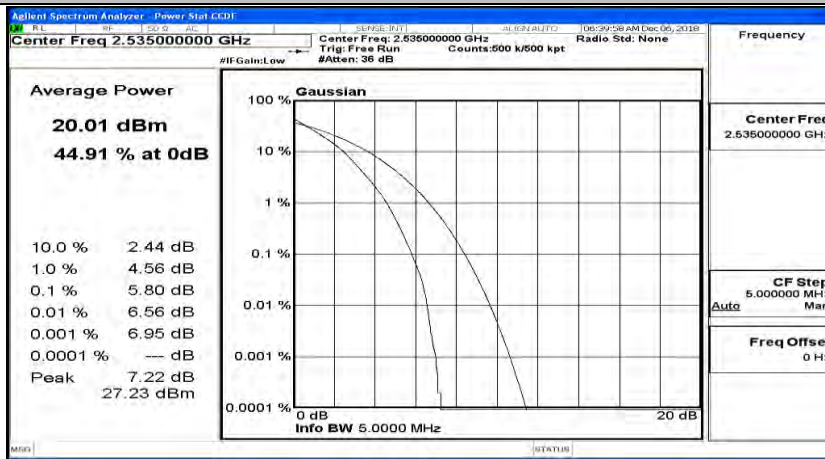
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.69	<13	PASS
	MCH	5.7	<13	PASS
	HCH	5.68	<13	PASS
16QAM	LCH	6.77	<13	PASS
	MCH	6.78	<13	PASS
	HCH	6.74	<13	PASS

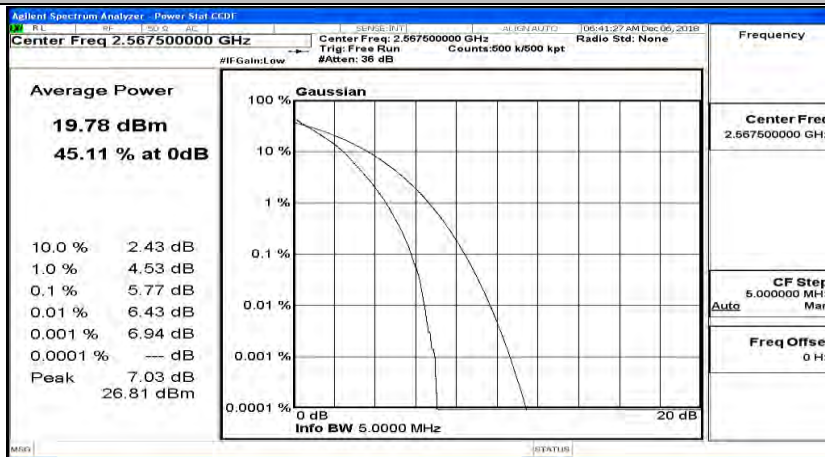
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



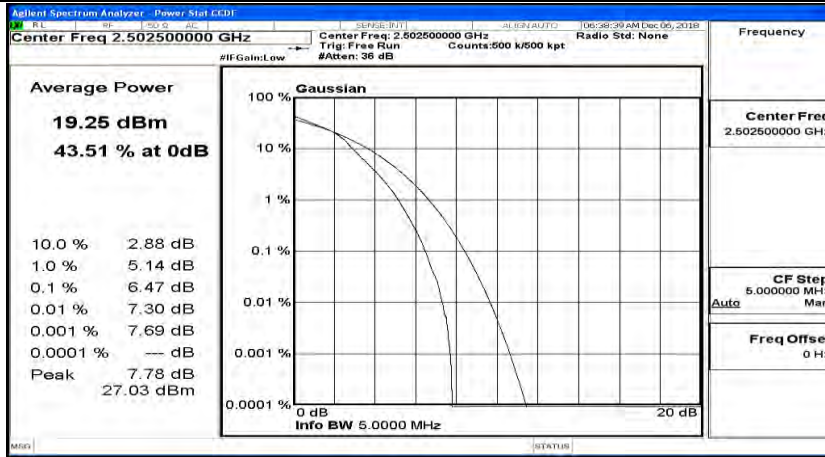
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



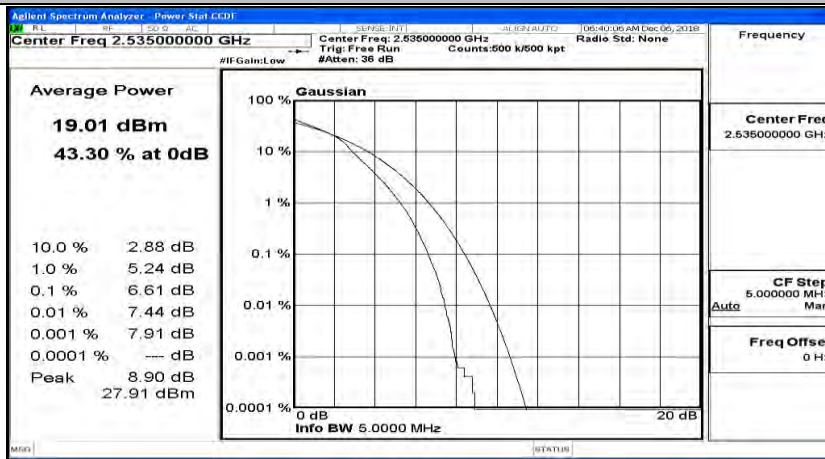
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



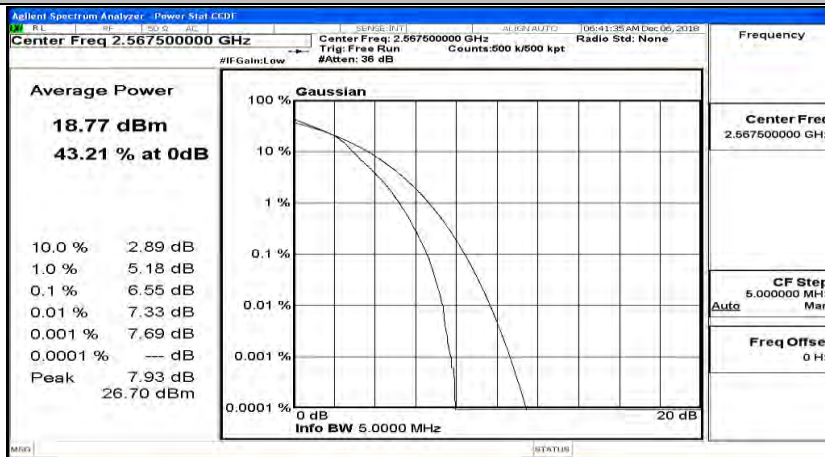
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



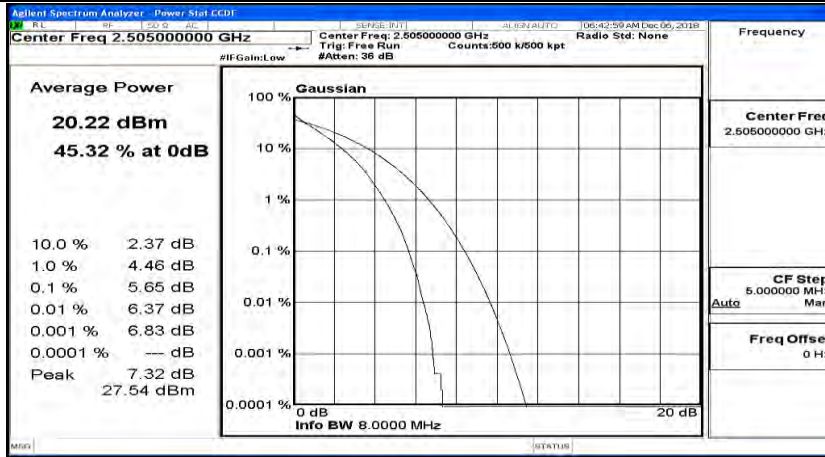
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



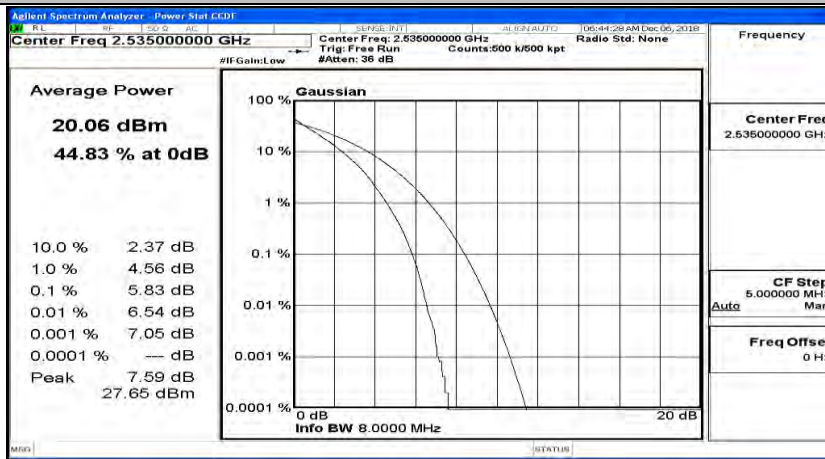
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



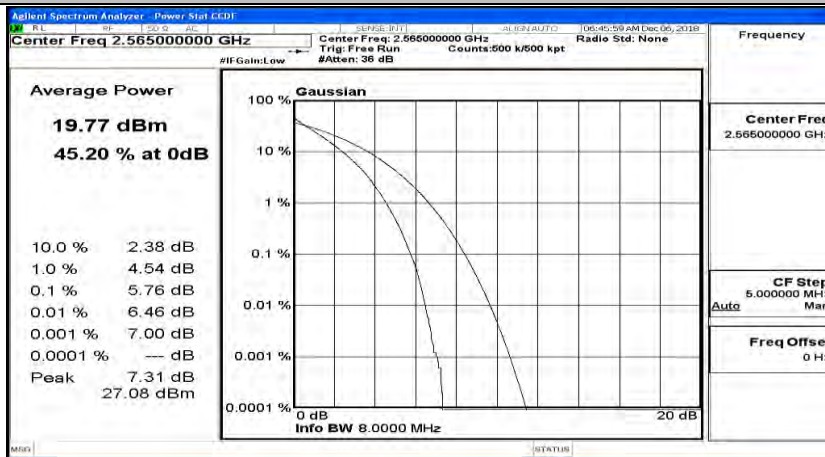
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _LCH_QPSK



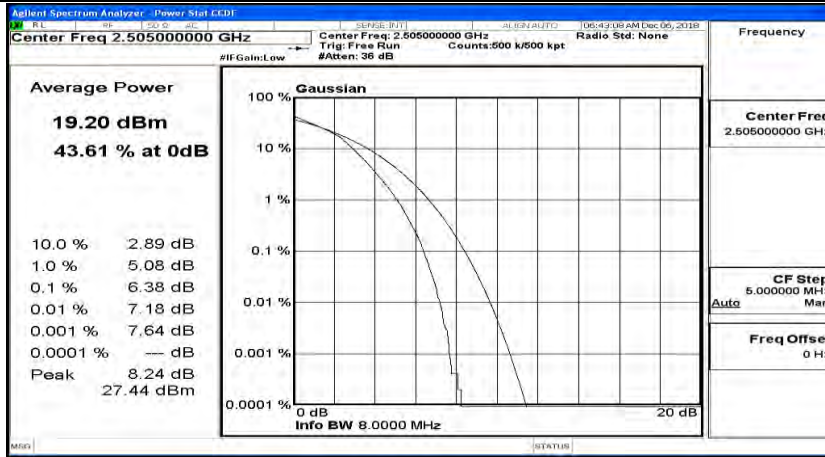
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _MCH_QPSK



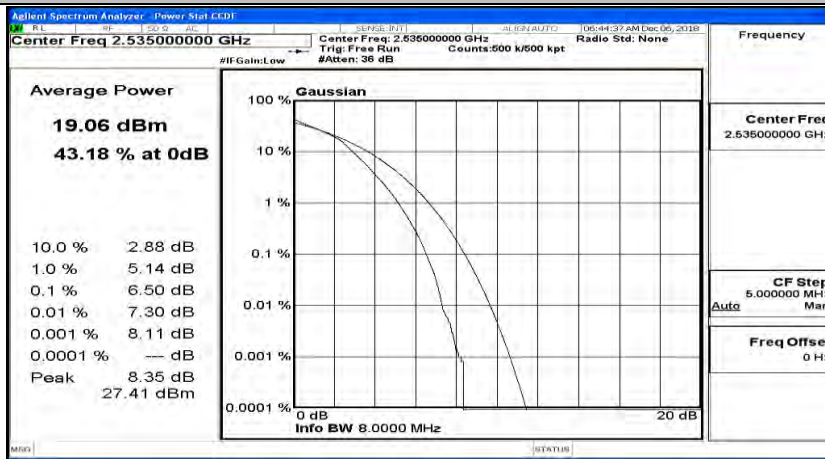
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _HCH_QPSK



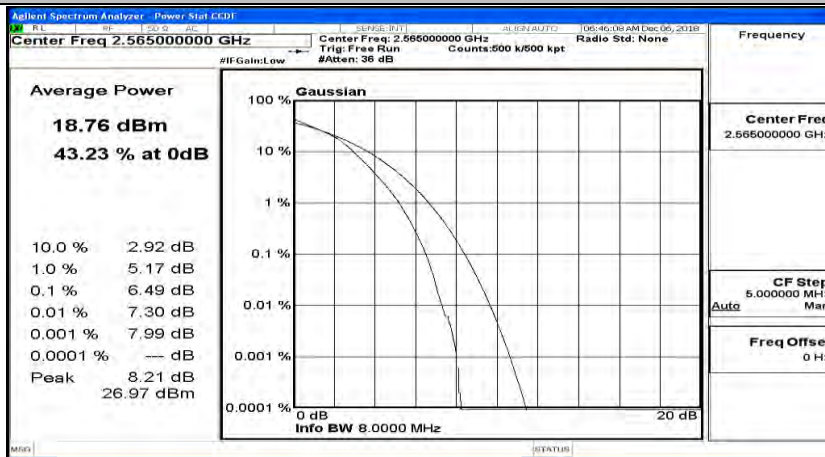
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



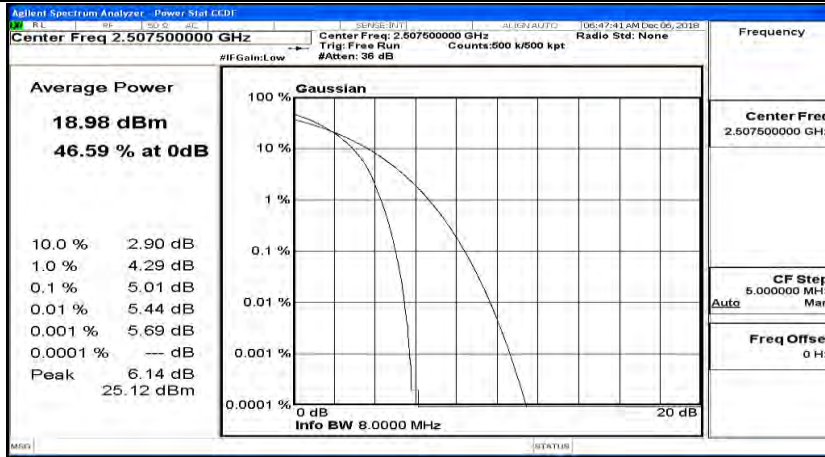
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



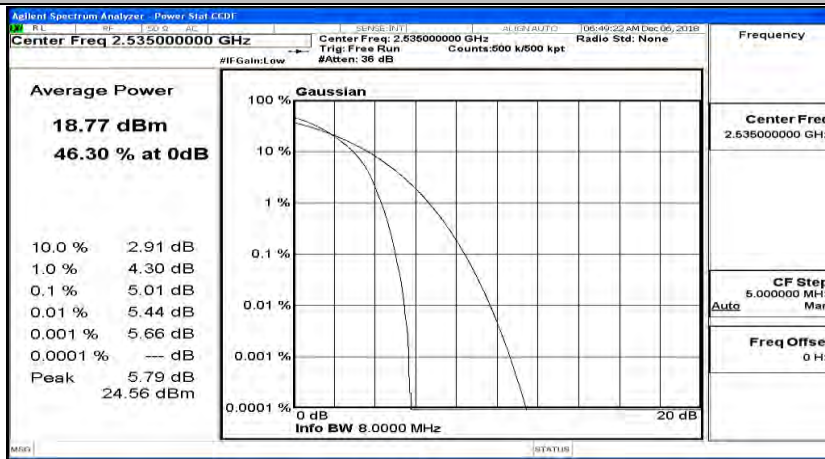
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



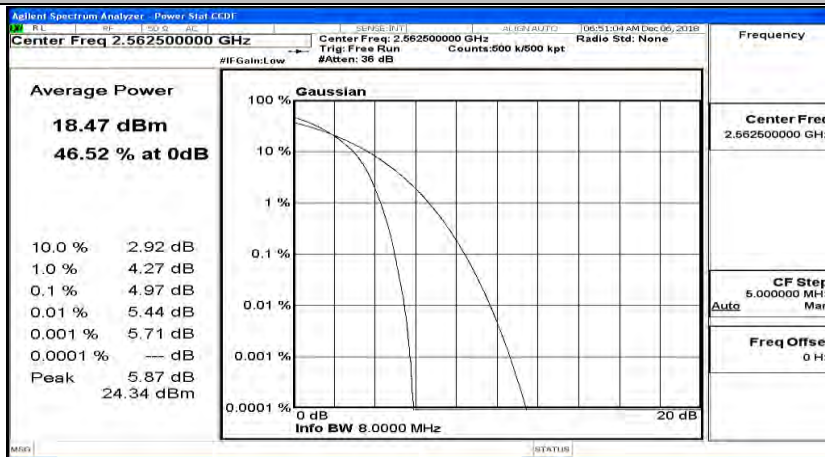
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz) LCH_QPSK



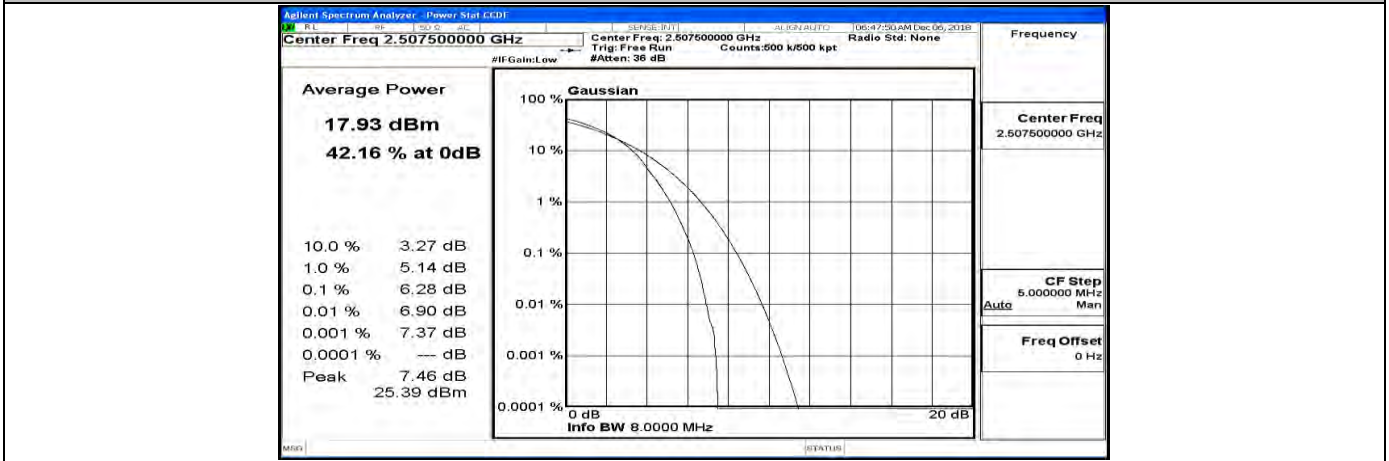
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz) MCH_QPSK



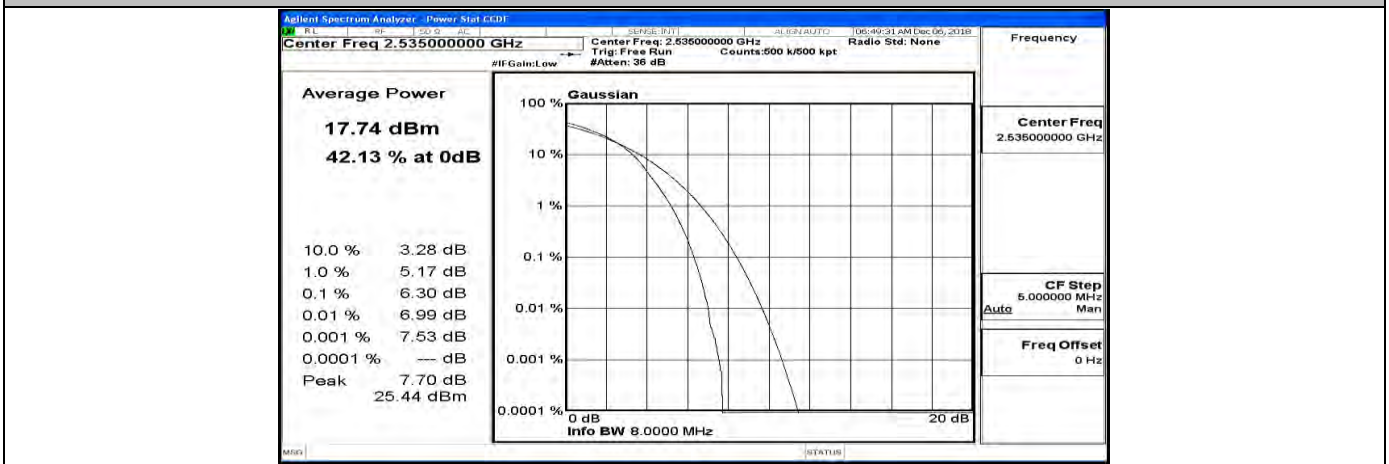
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz) HCH_QPSK



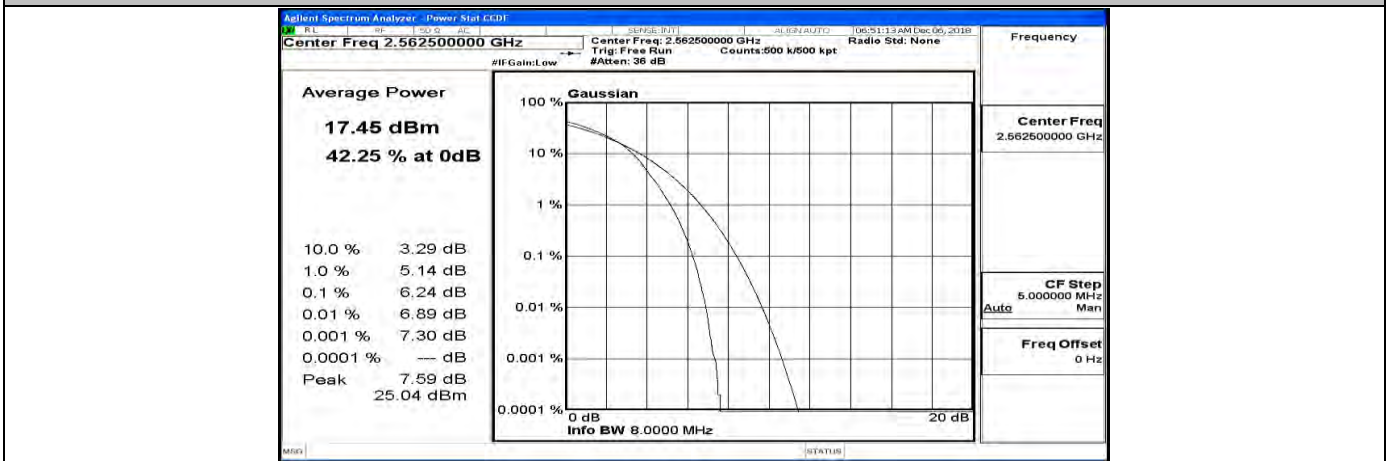
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



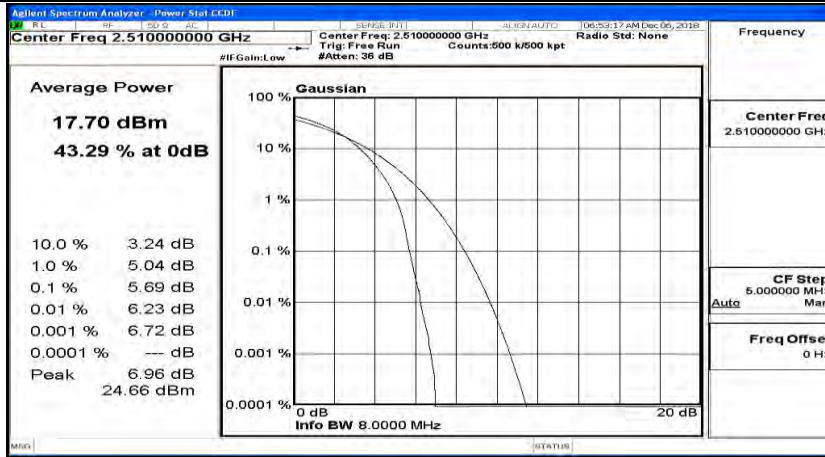
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



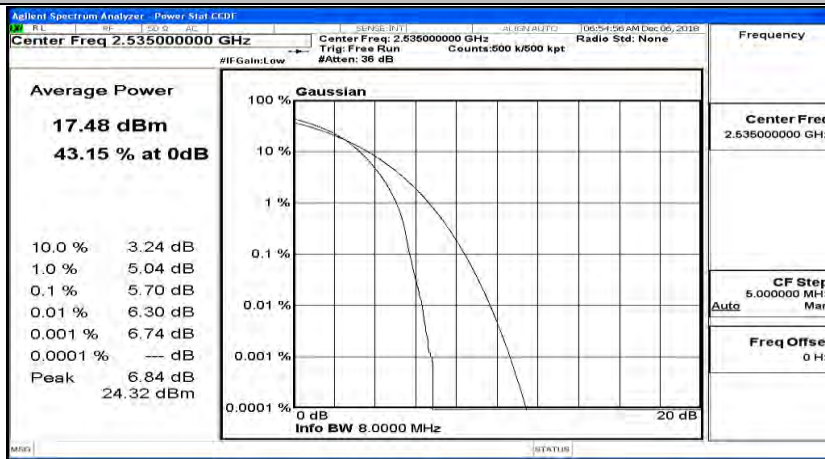
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



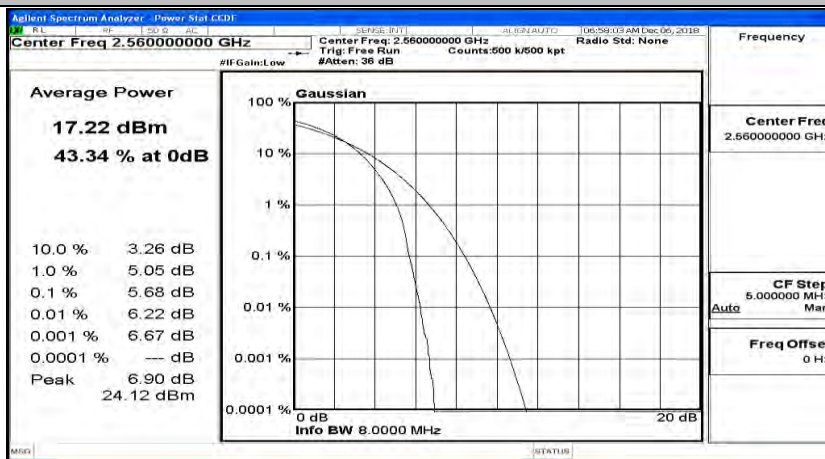
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz) LCH_QPSK



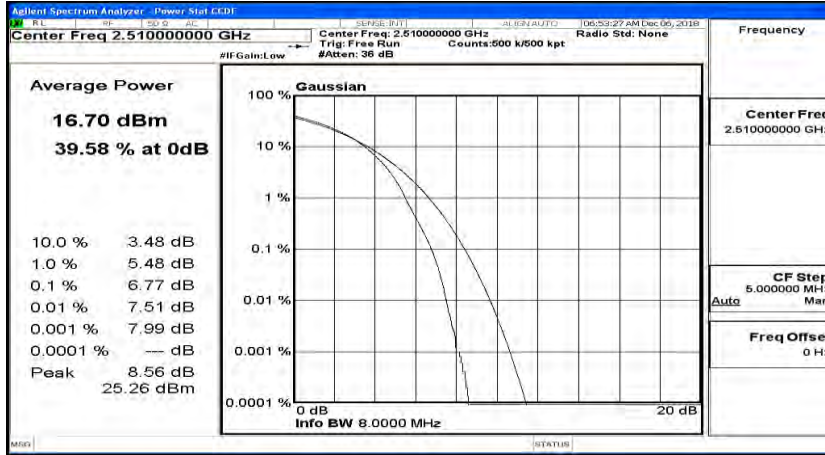
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz) MCH_QPSK



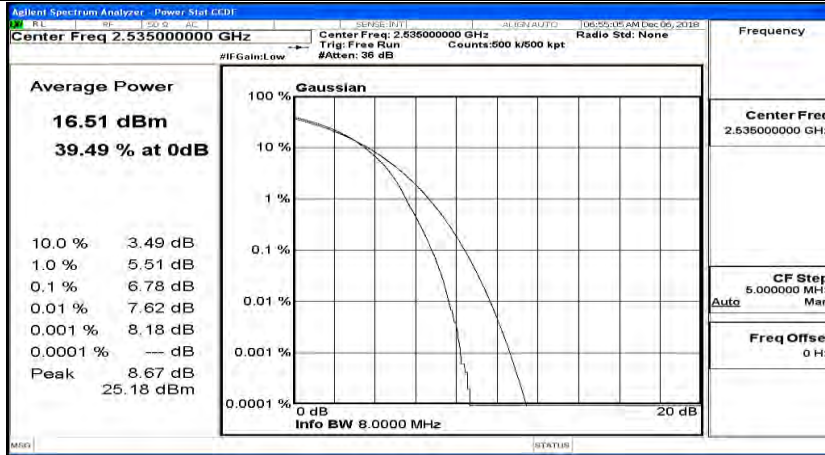
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz) HCH_QPSK



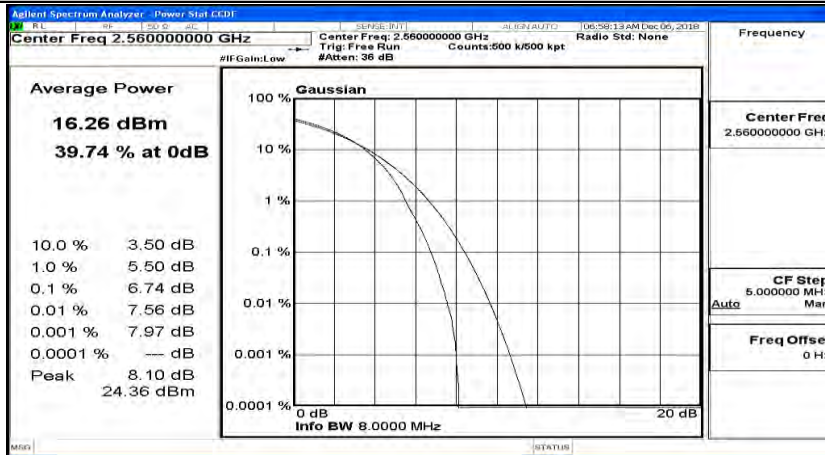
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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



D.3 26dB Bandwidth and Occupied Bandwidth

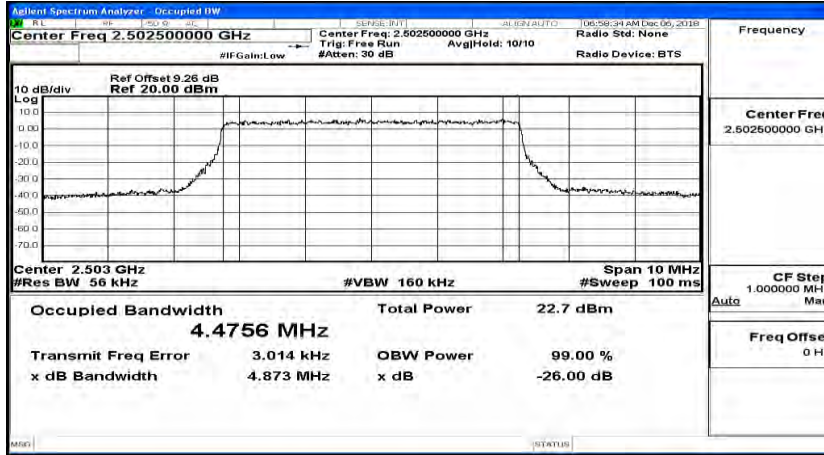
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4756	4.873	PASS
	MCH	4.4757	4.840	PASS
	HCH	4.4886	4.868	PASS
16QAM	LCH	4.4803	4.782	PASS
	MCH	4.4794	4.938	PASS
	HCH	4.4823	4.920	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9437	9.594	PASS
	MCH	8.9486	9.550	PASS
	HCH	8.9421	9.434	PASS
16QAM	LCH	8.9355	9.651	PASS
	MCH	8.9462	9.476	PASS
	HCH	8.9484	9.448	PASS

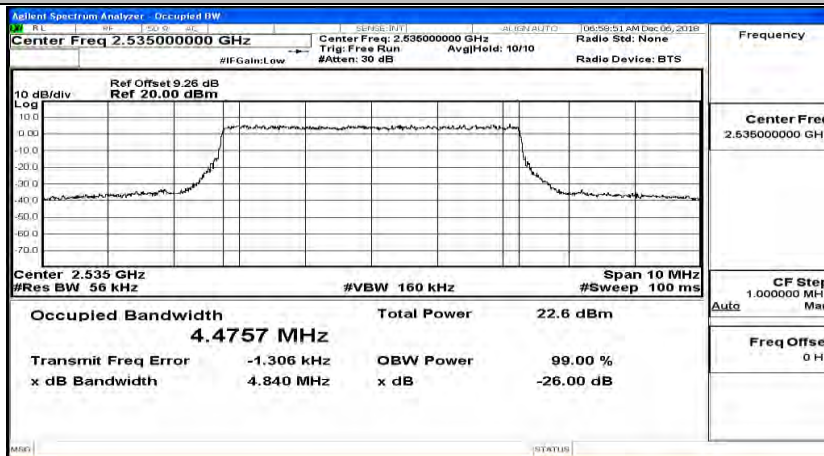
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.394	14.15	PASS
	MCH	13.434	14.03	PASS
	HCH	13.417	14.15	PASS
16QAM	LCH	13.393	14.01	PASS
	MCH	13.426	14.11	PASS
	HCH	13.411	14.09	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.838	18.69	PASS
	MCH	17.879	18.64	PASS
	HCH	17.841	18.62	PASS
16QAM	LCH	17.853	18.62	PASS
	MCH	17.875	18.67	PASS
	HCH	17.832	18.65	PASS

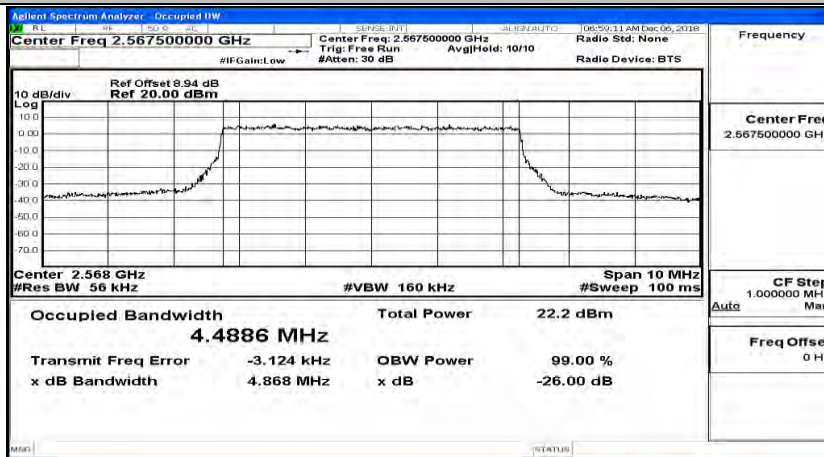
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



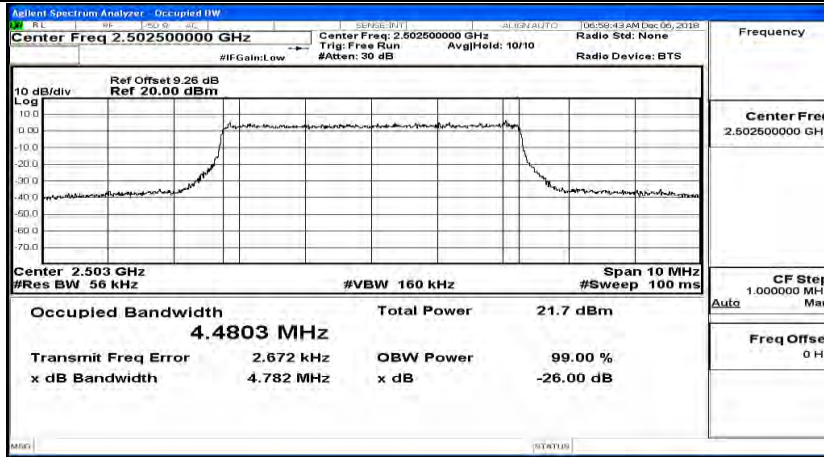
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



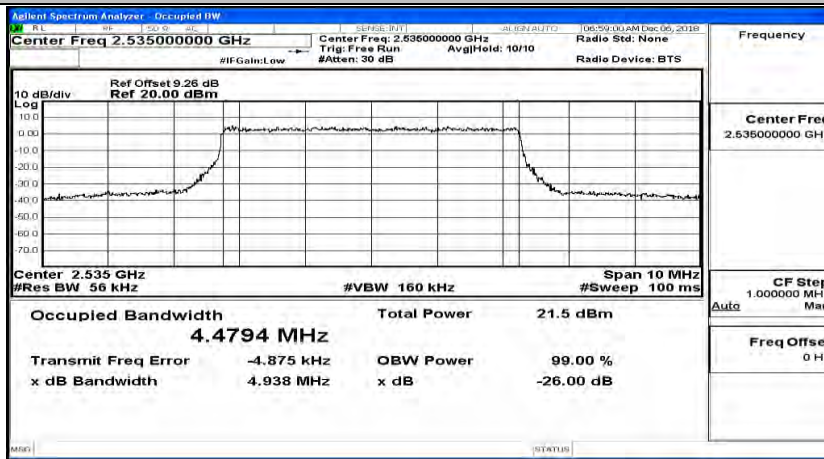
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



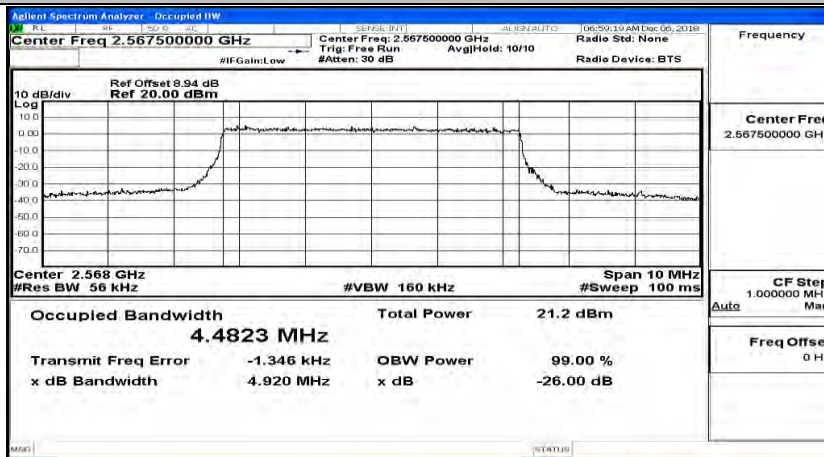
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



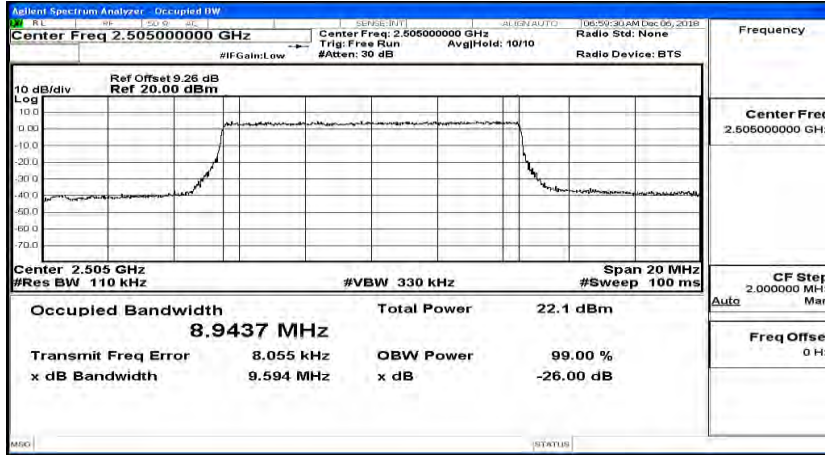
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



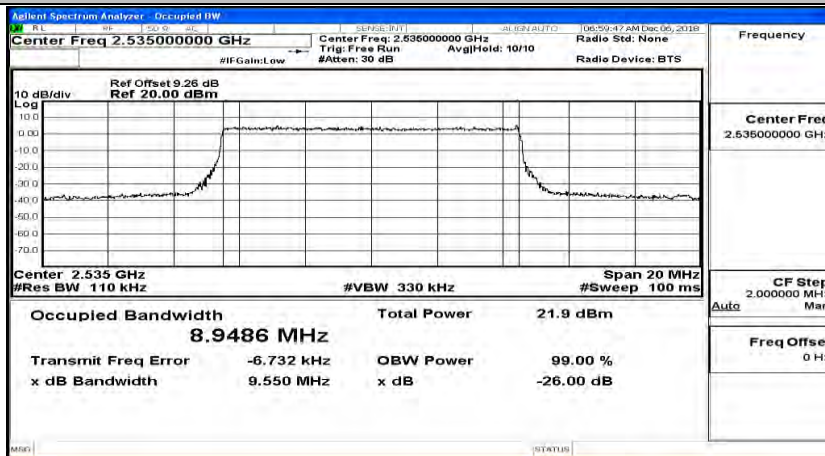
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



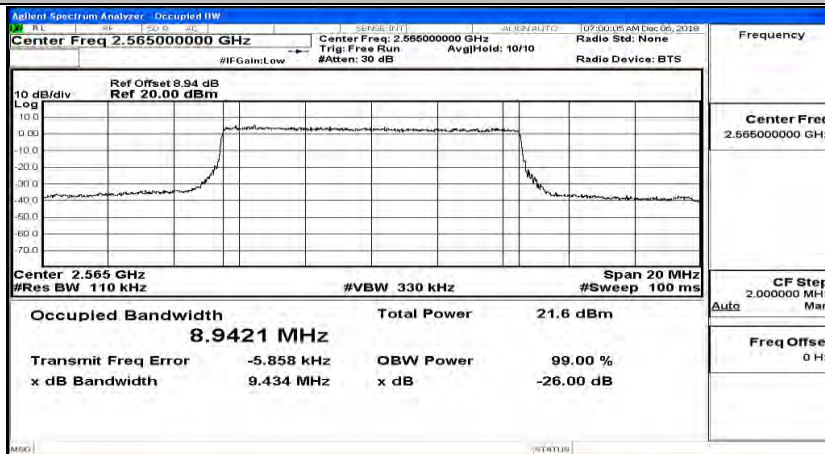
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



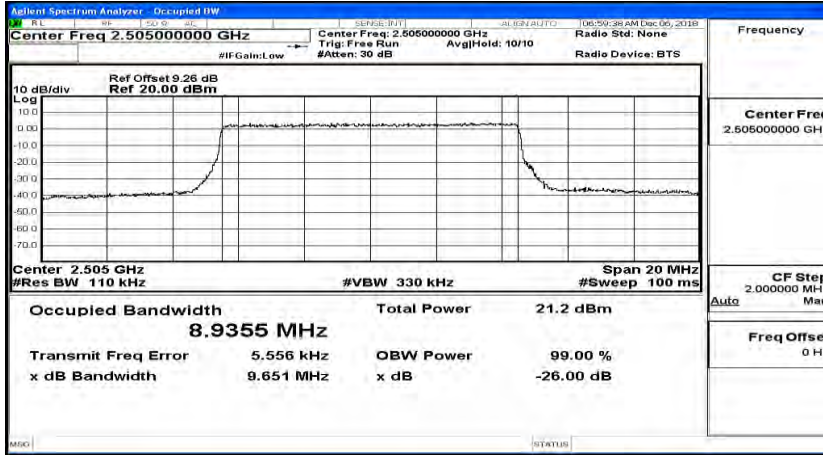
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



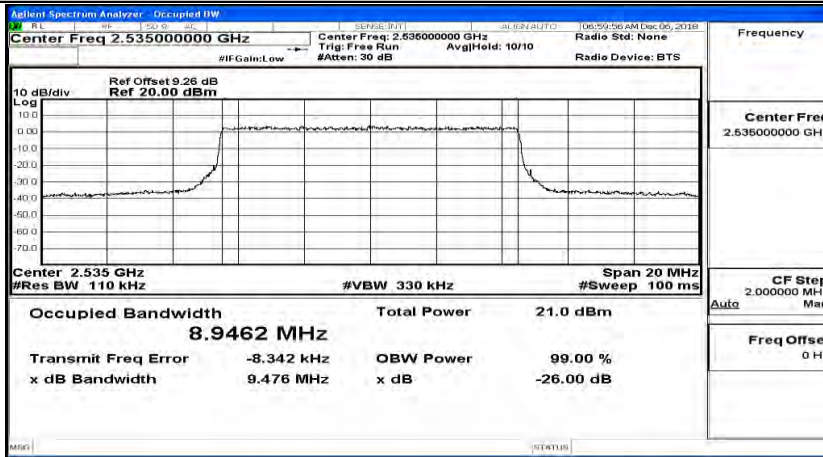
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



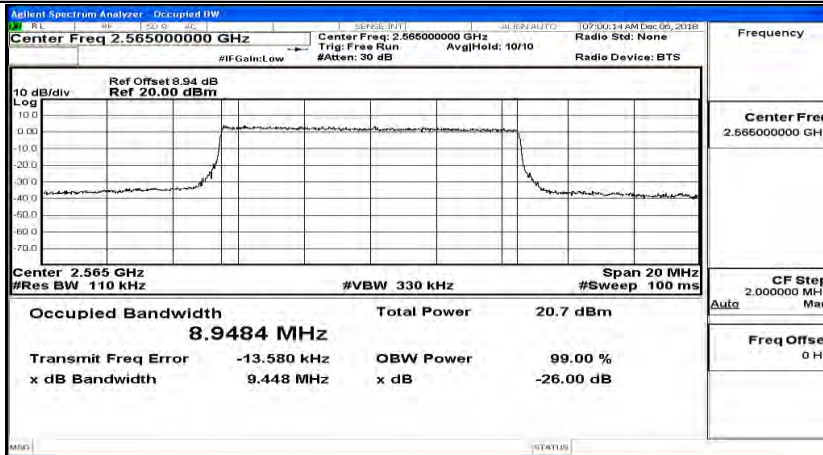
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



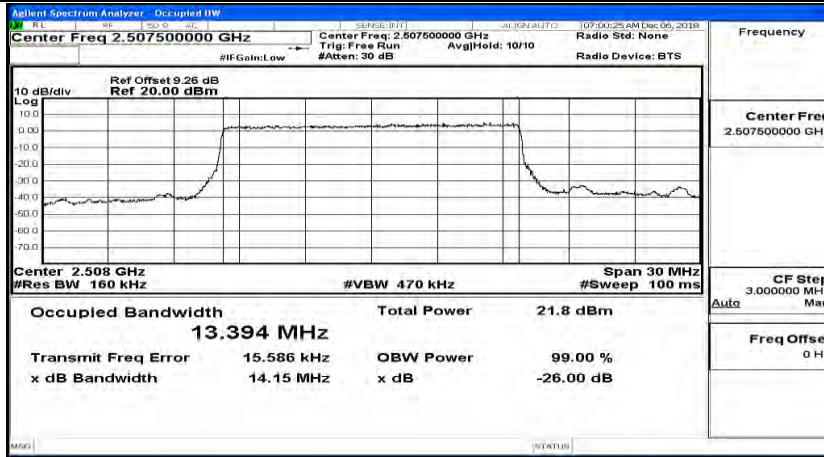
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



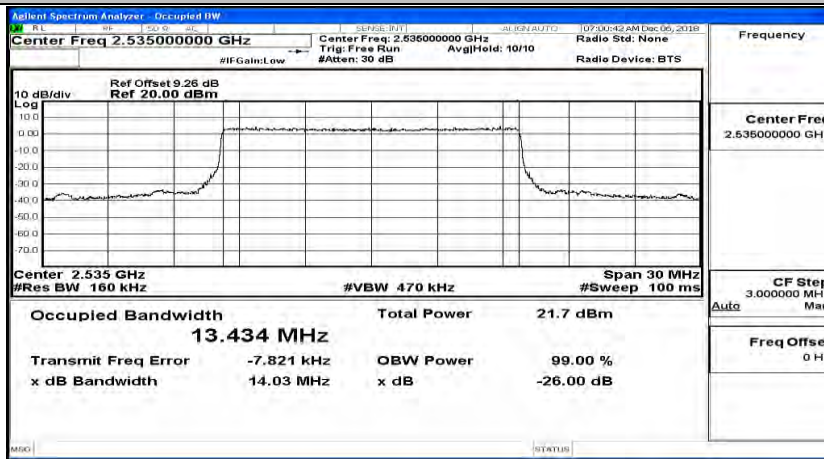
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



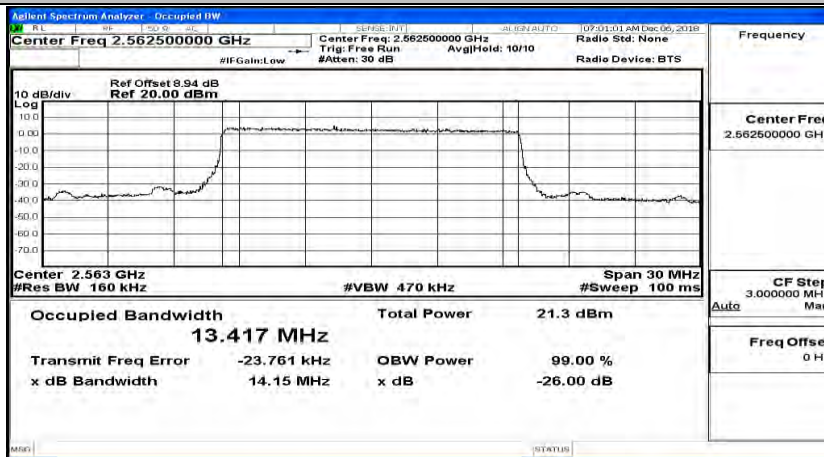
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



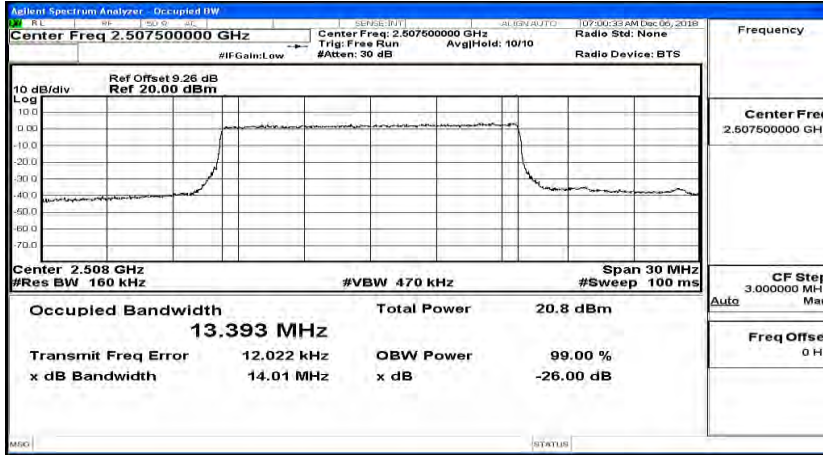
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



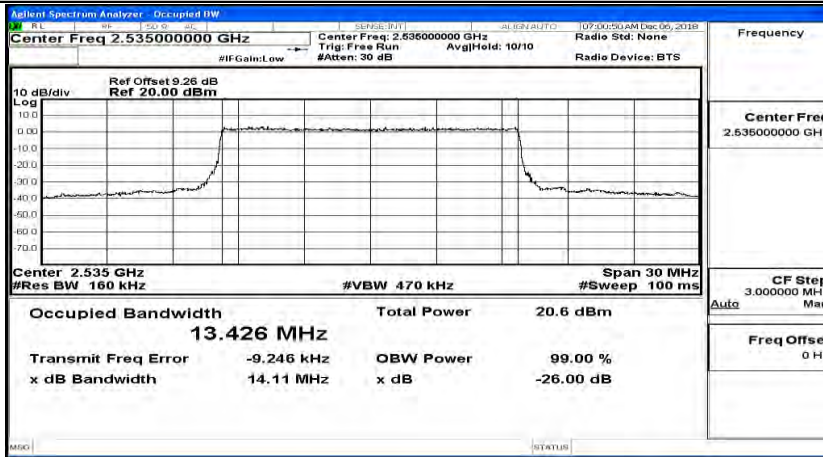
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



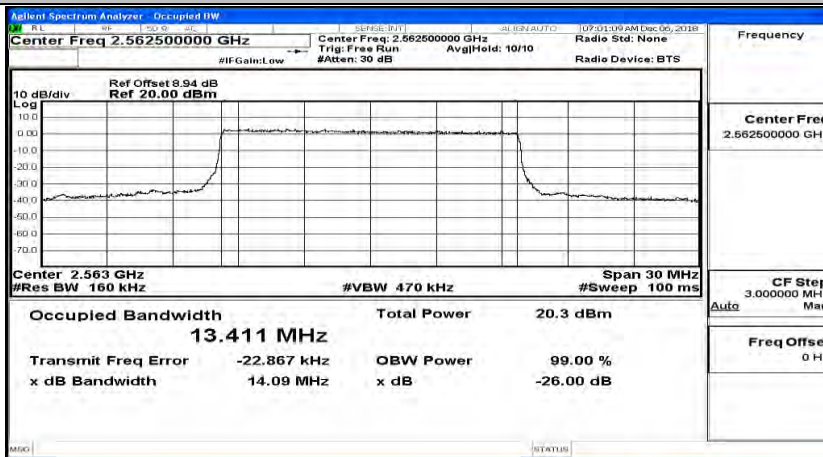
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



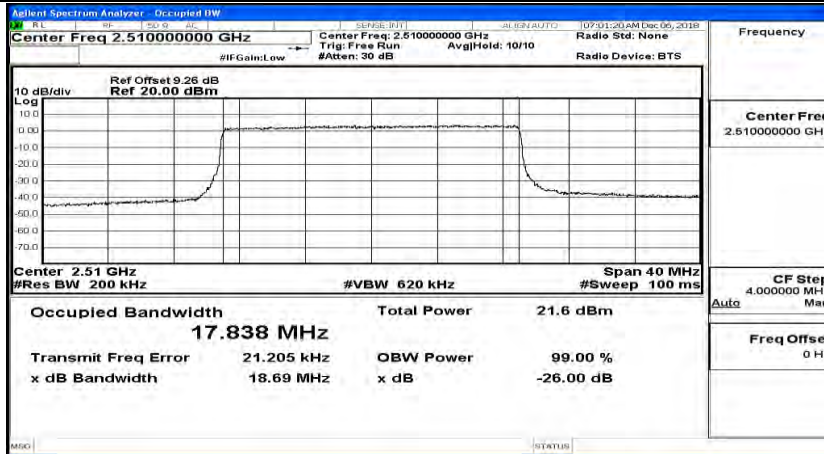
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



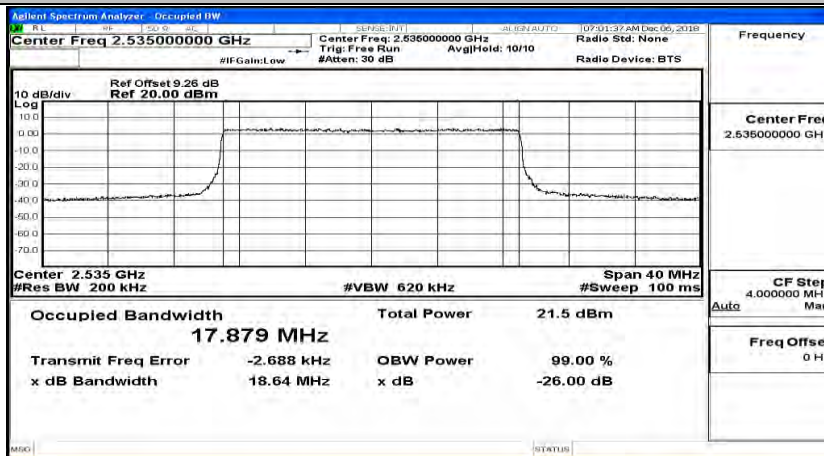
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



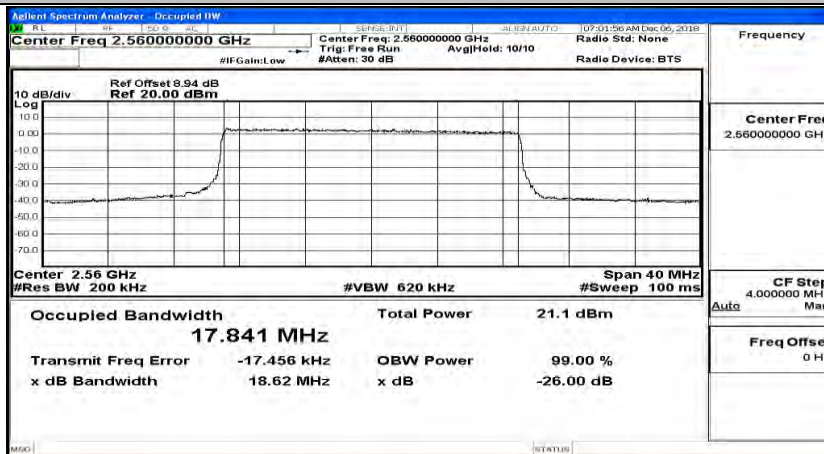
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



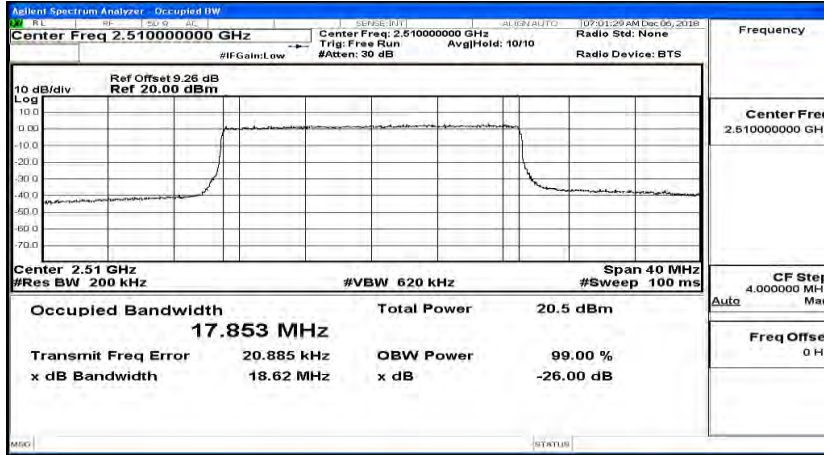
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



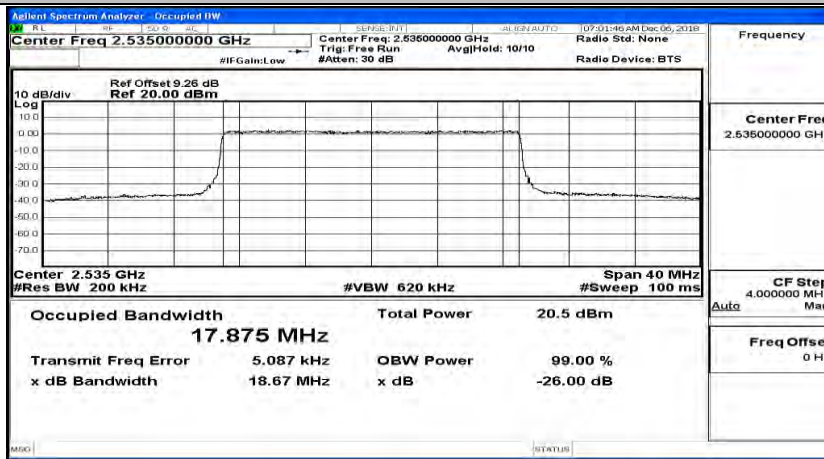
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



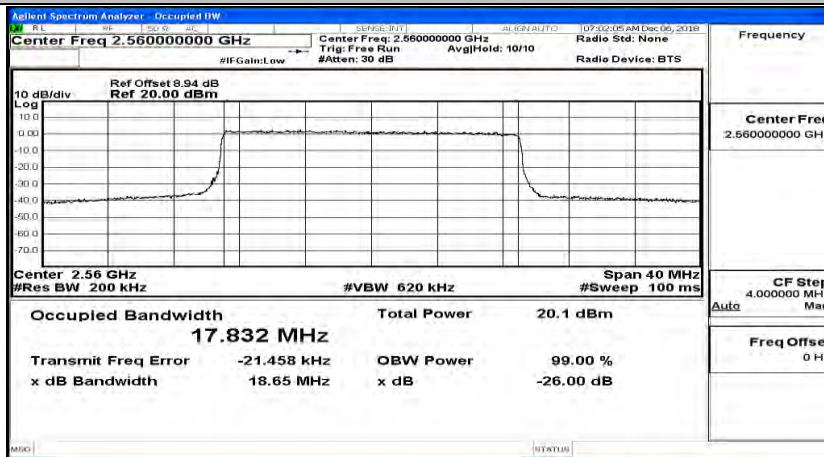
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM

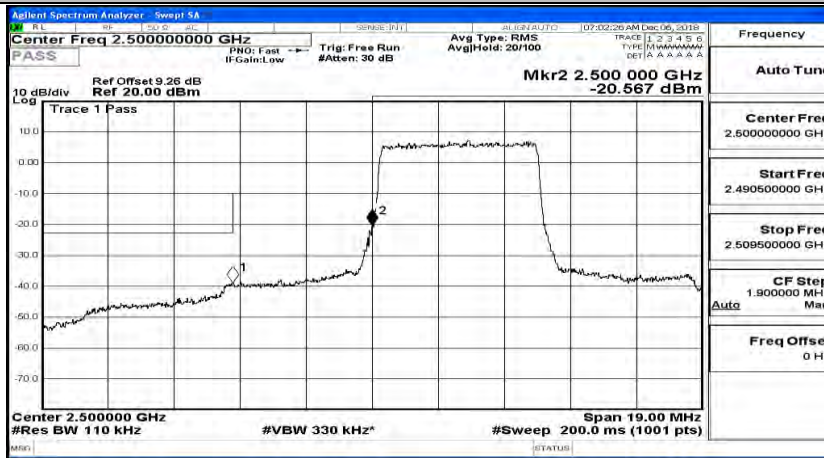


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

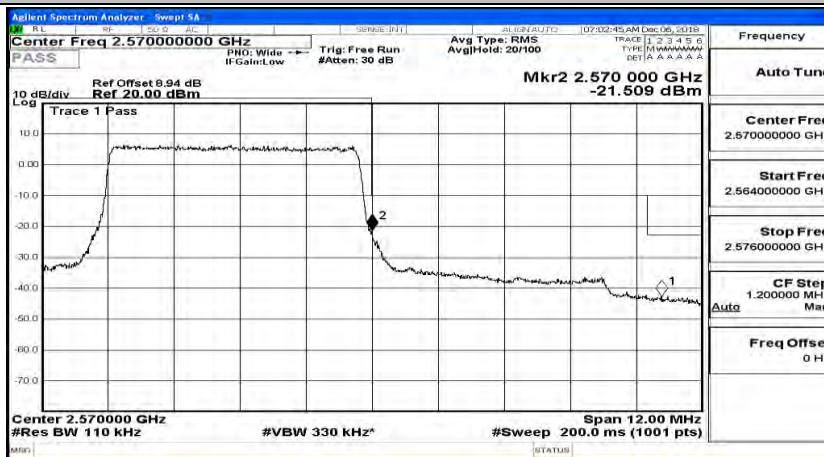


D.4 Band Edge

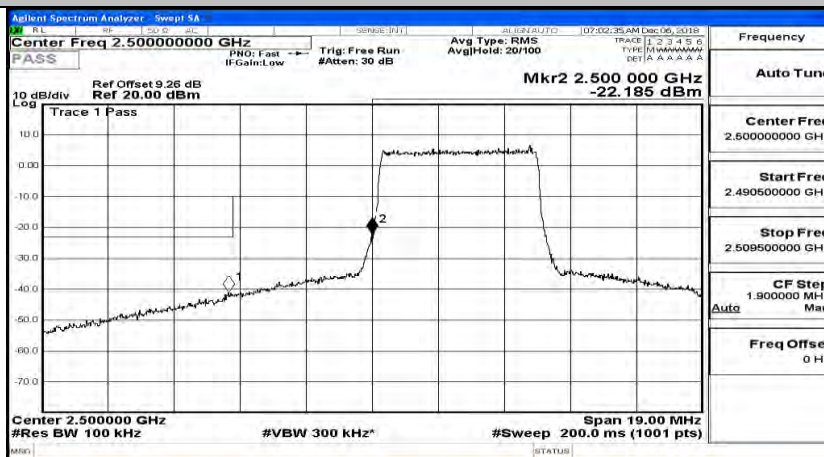
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



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



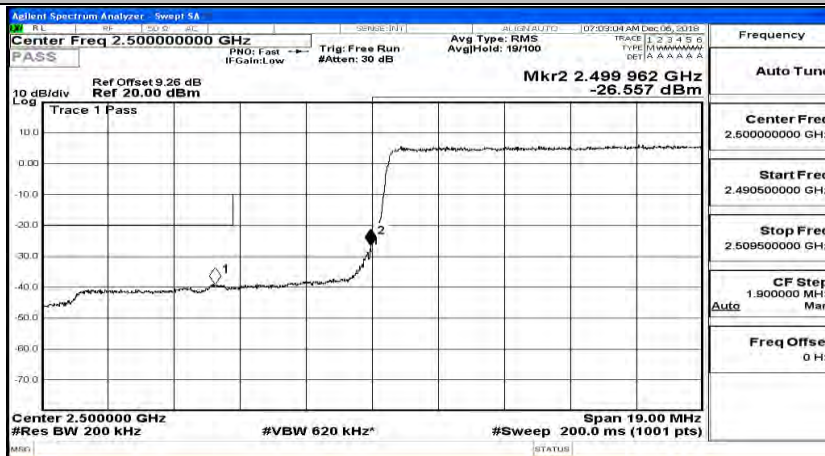
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



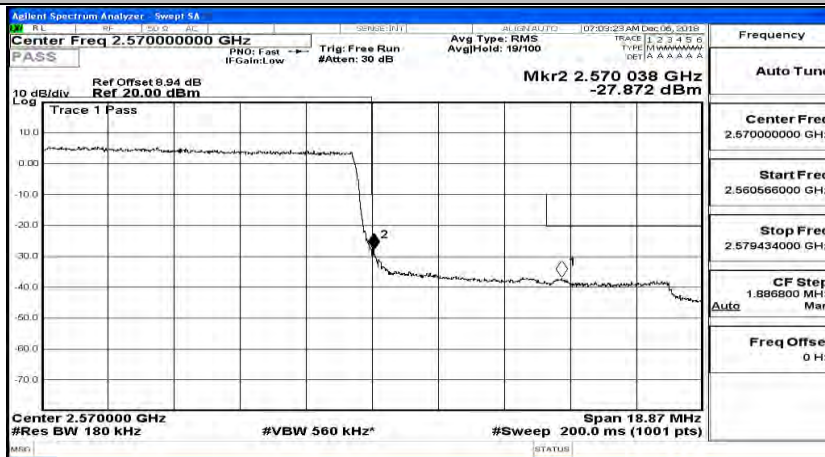
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



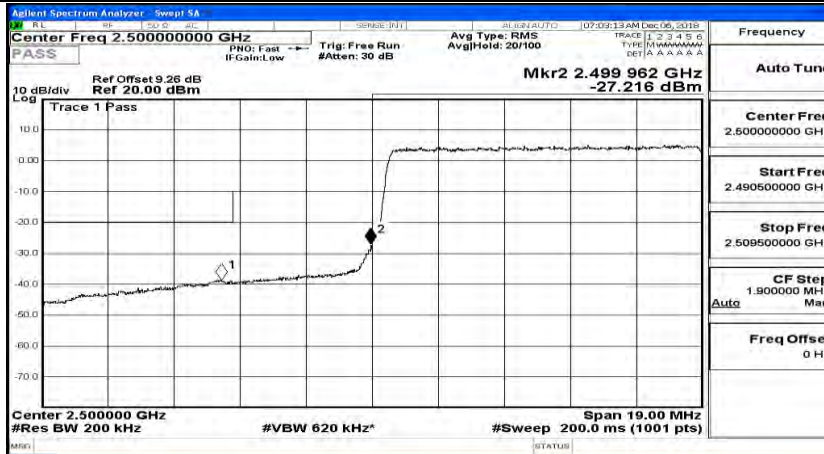
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



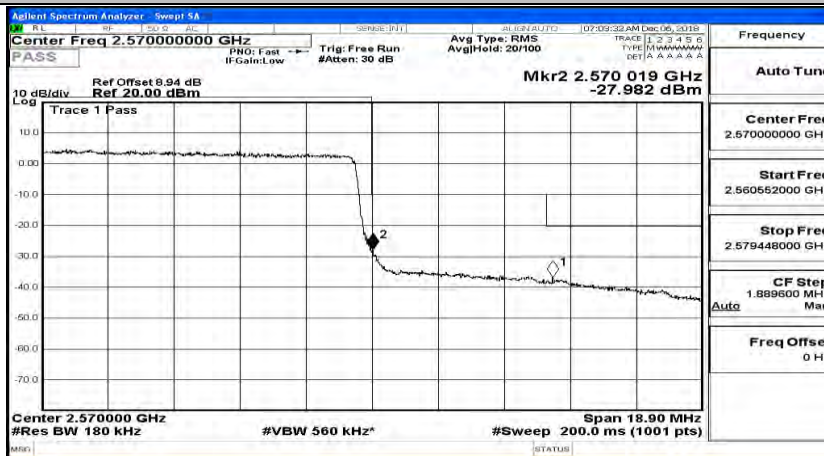
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



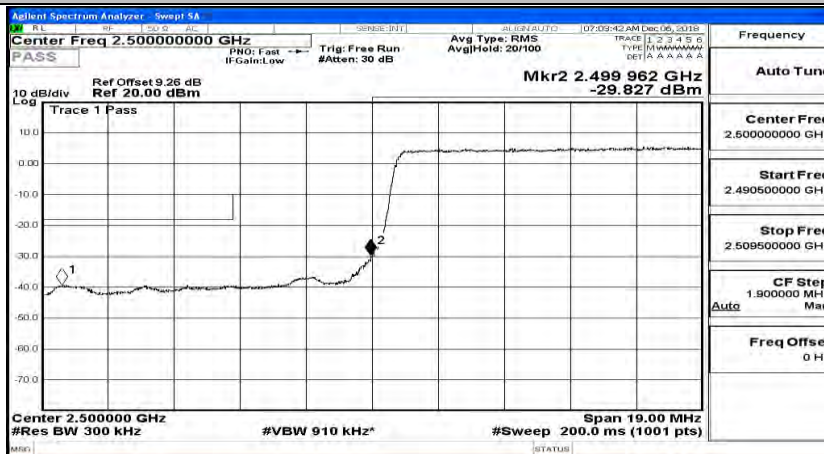
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz) LCH_16QAM



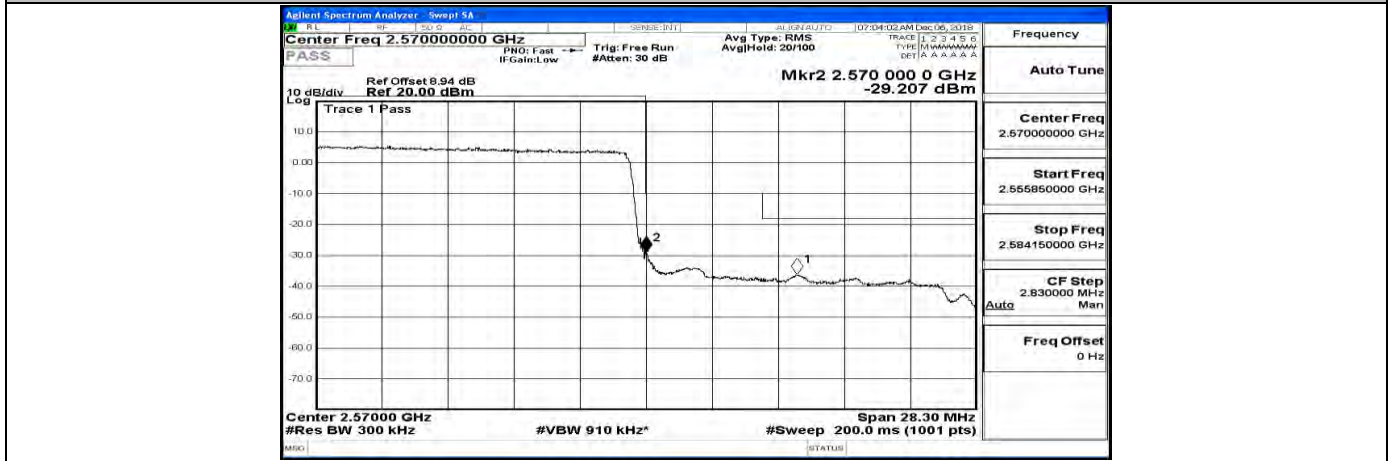
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



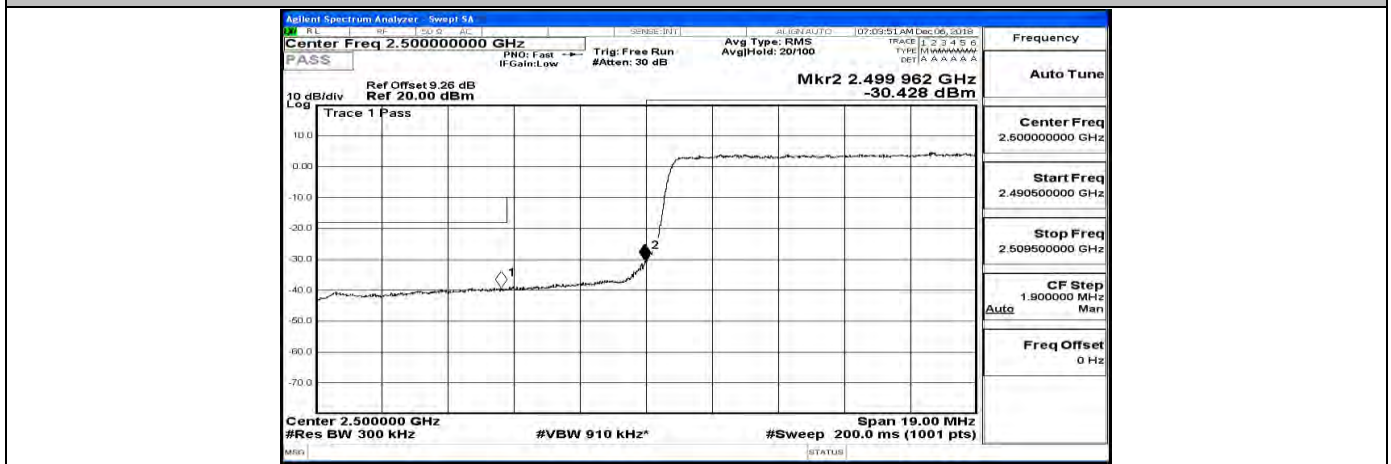
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz) LCH_QPSK



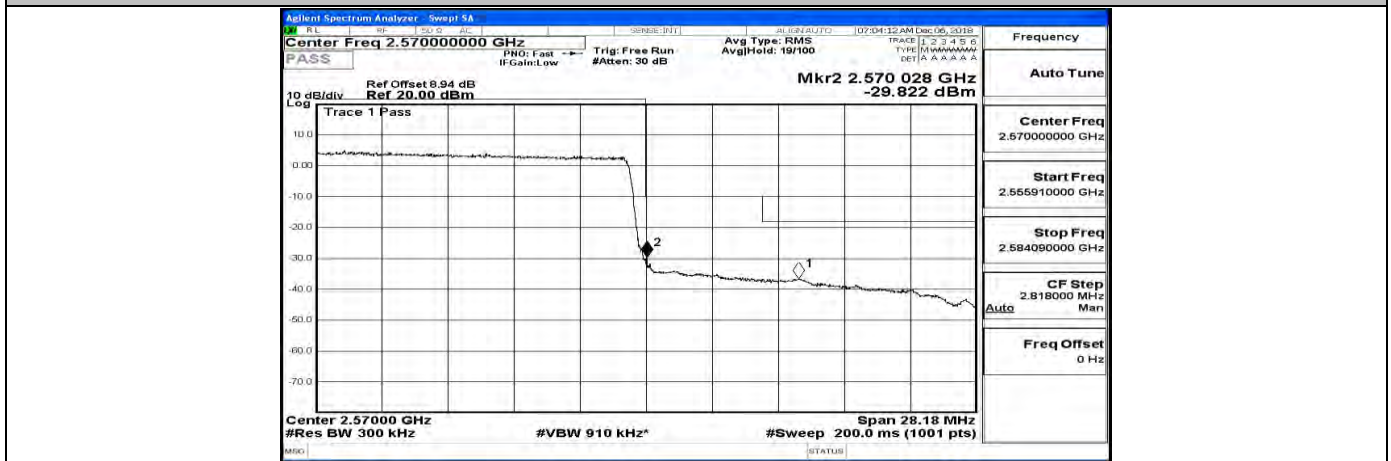
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



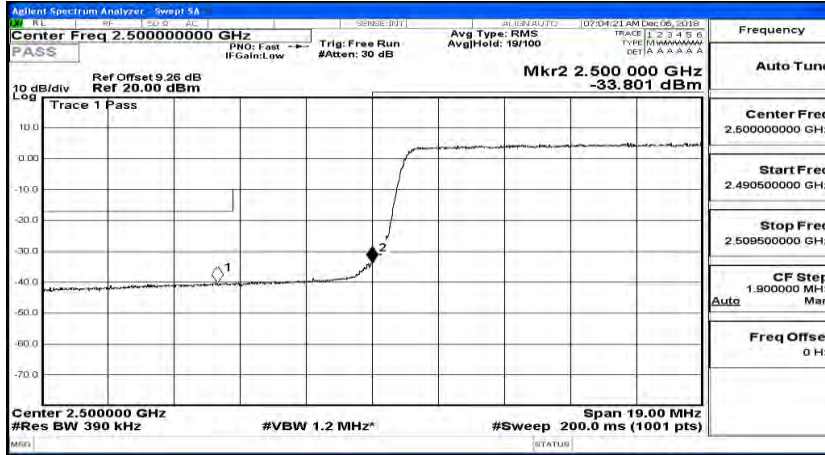
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



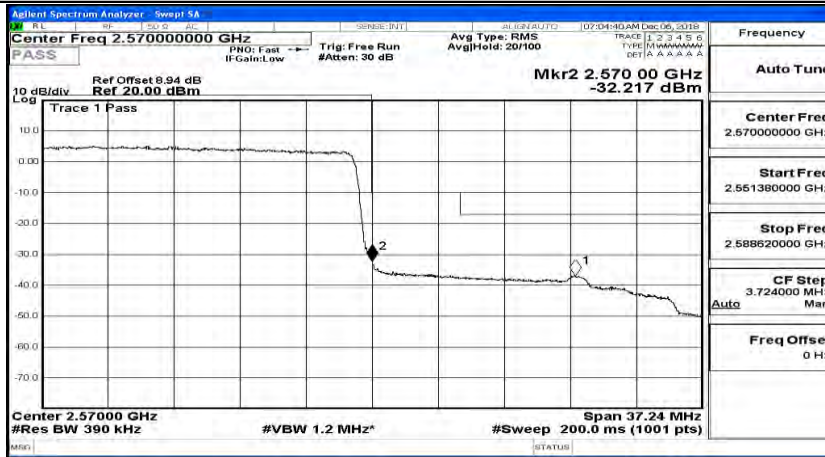
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



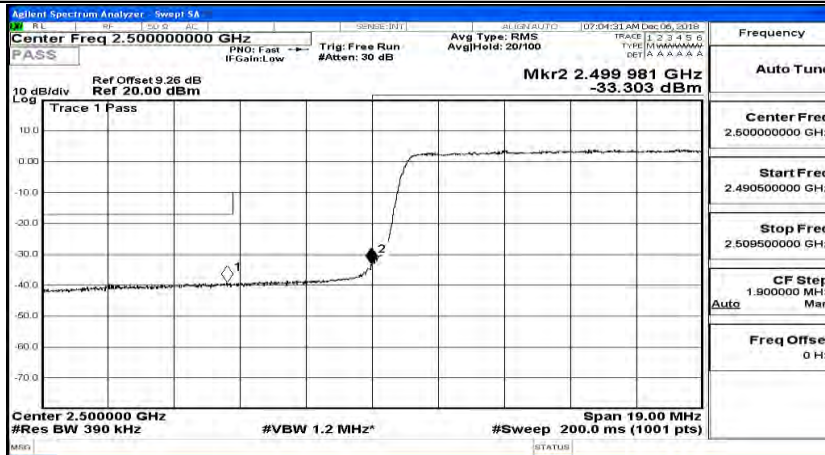
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz) LCH_QPSK



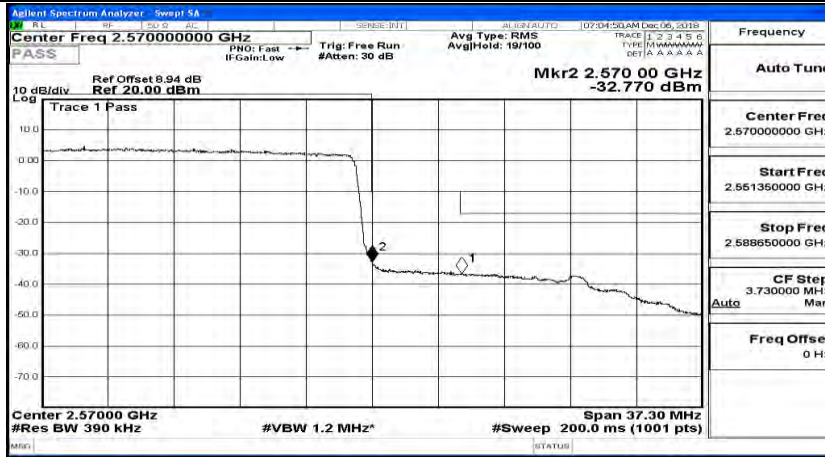
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz) HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz) LCH_16QAM

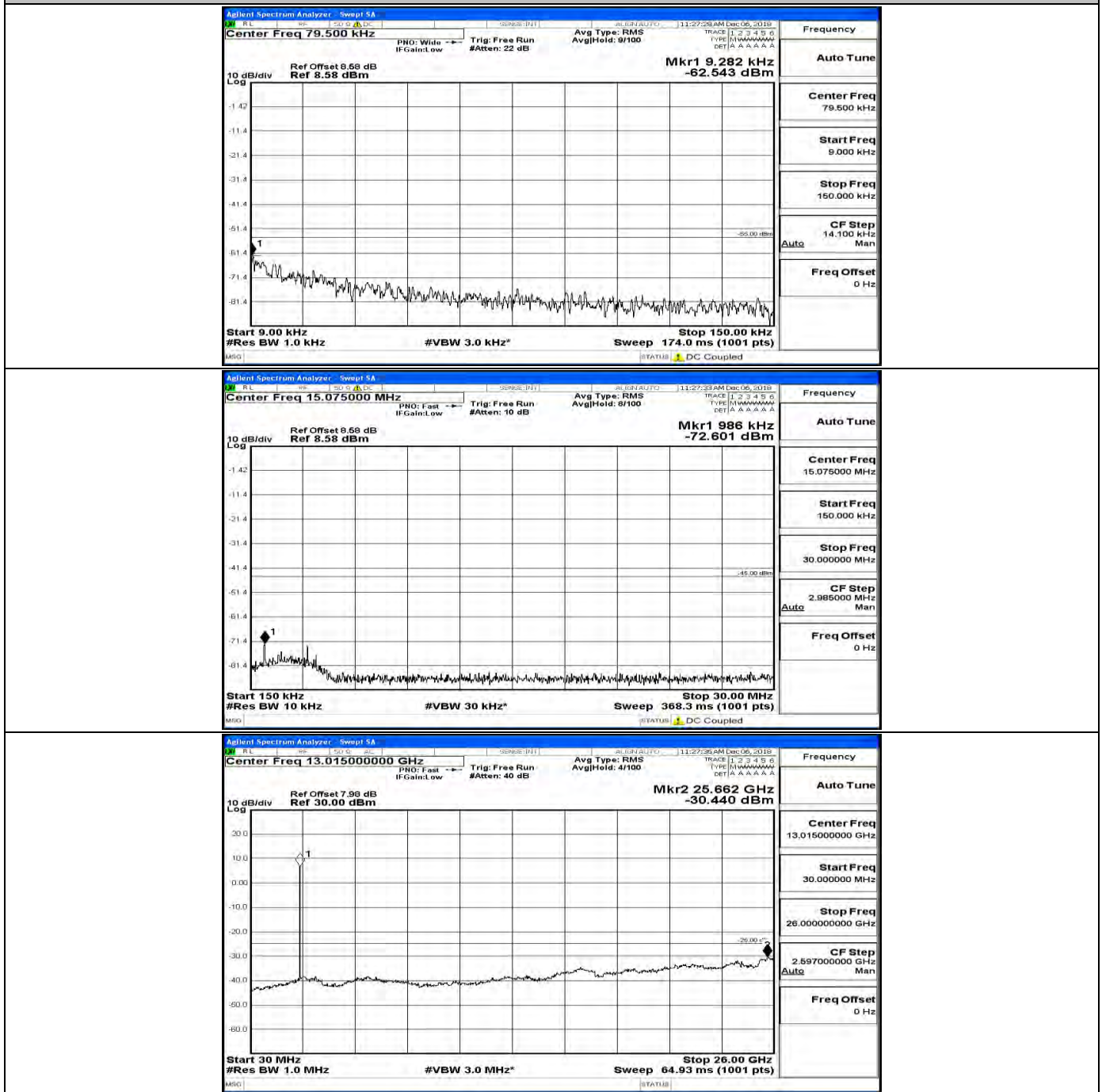


Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

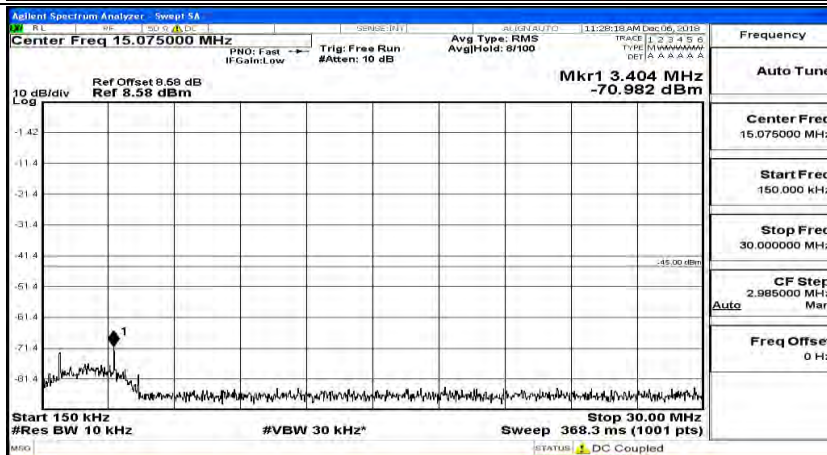
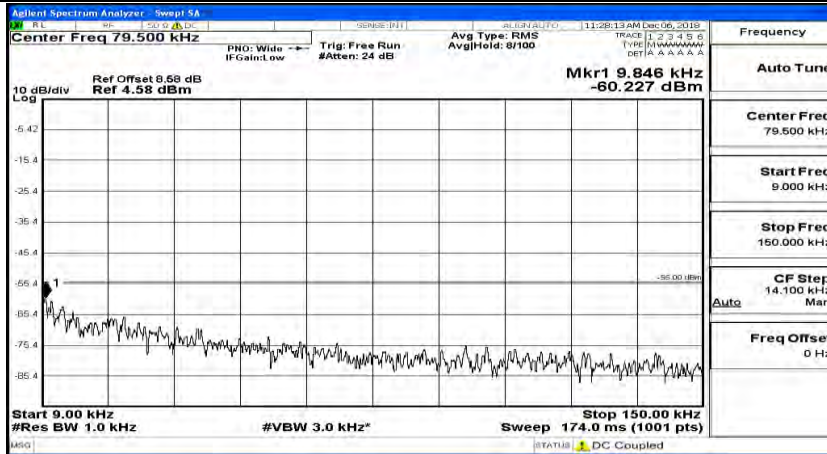


D.5 Conducted Spurious Emission

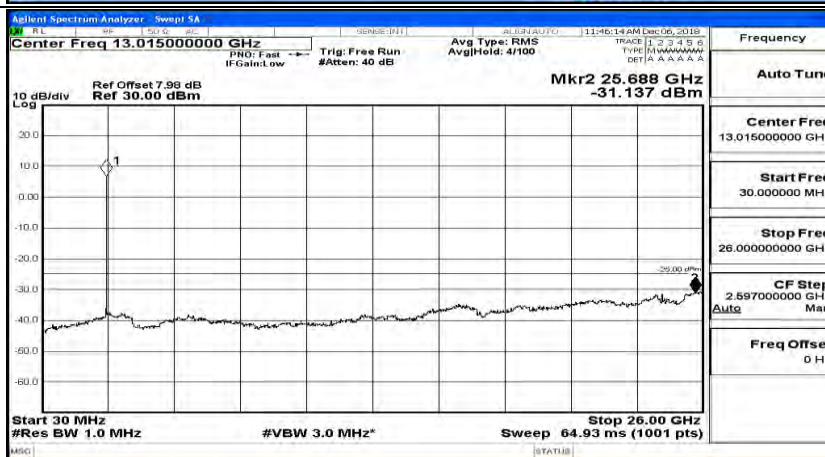
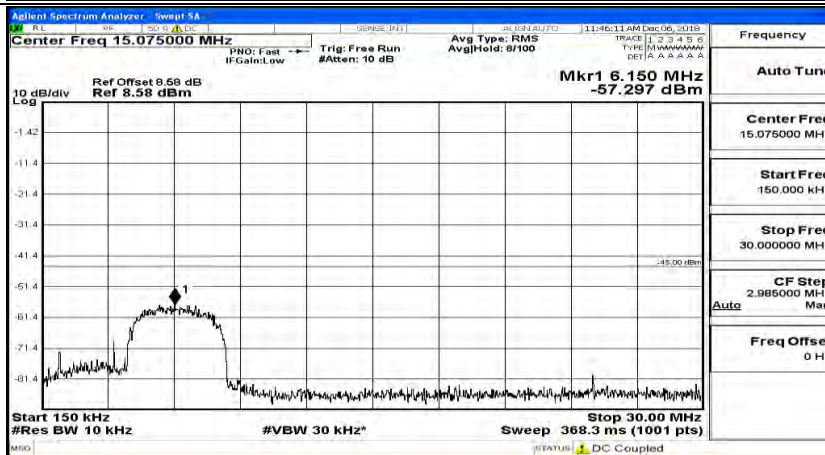
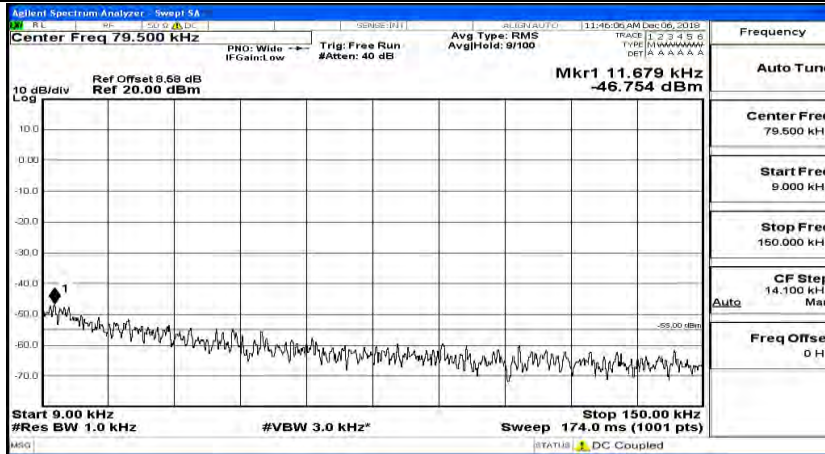
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



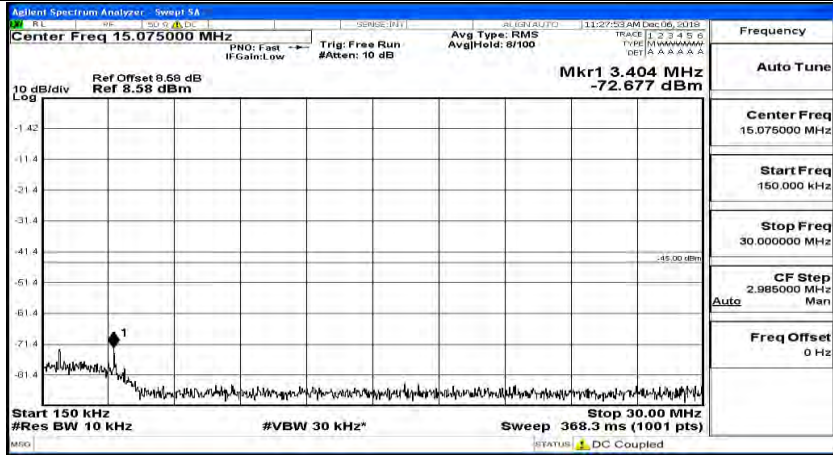
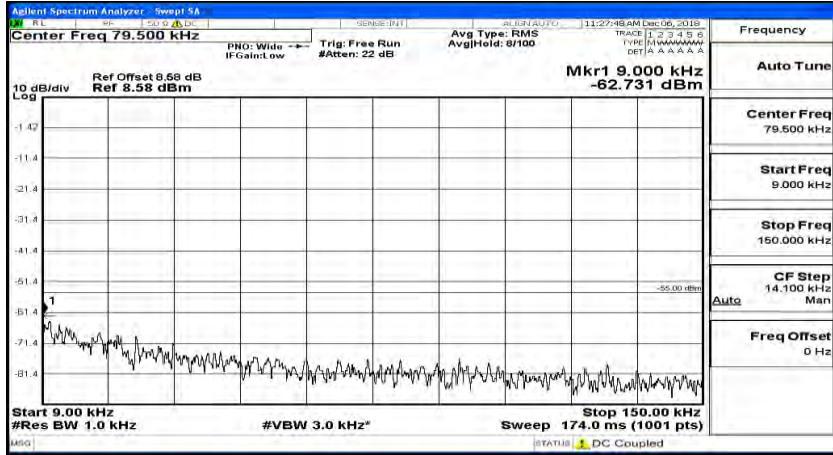
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



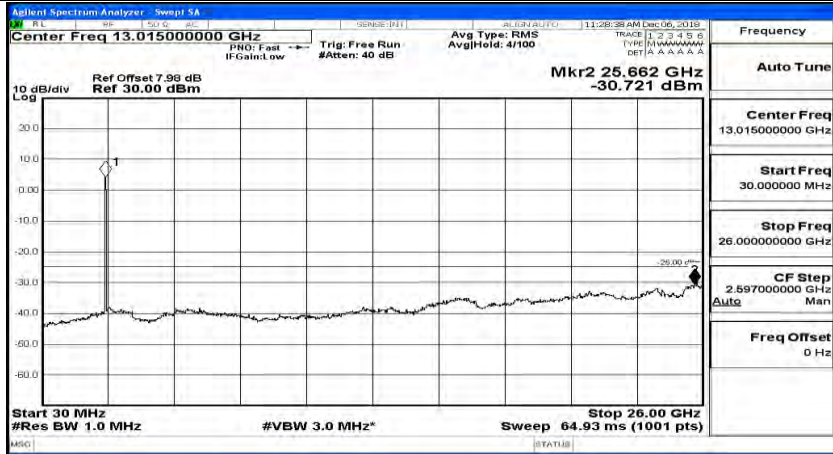
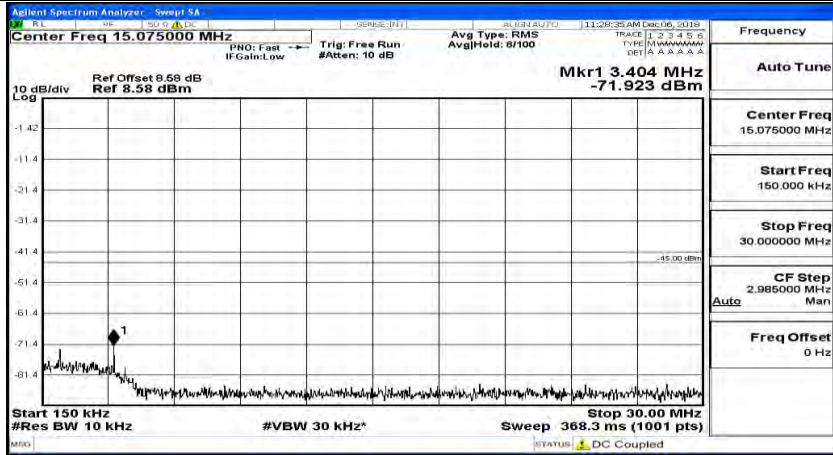
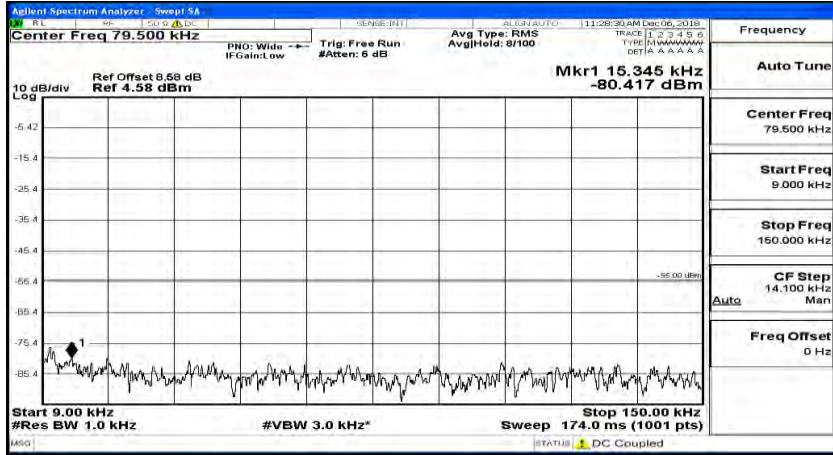
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



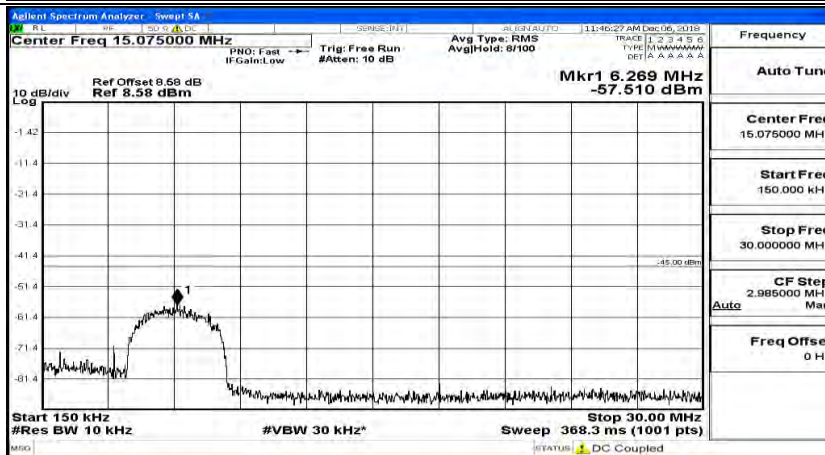
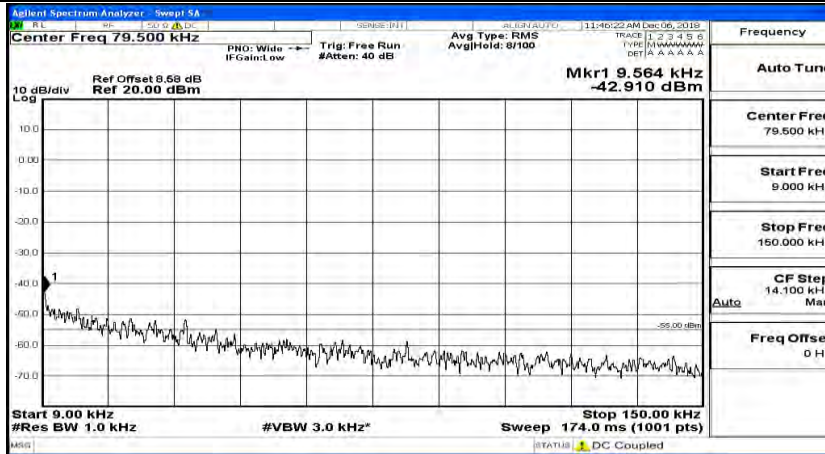
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



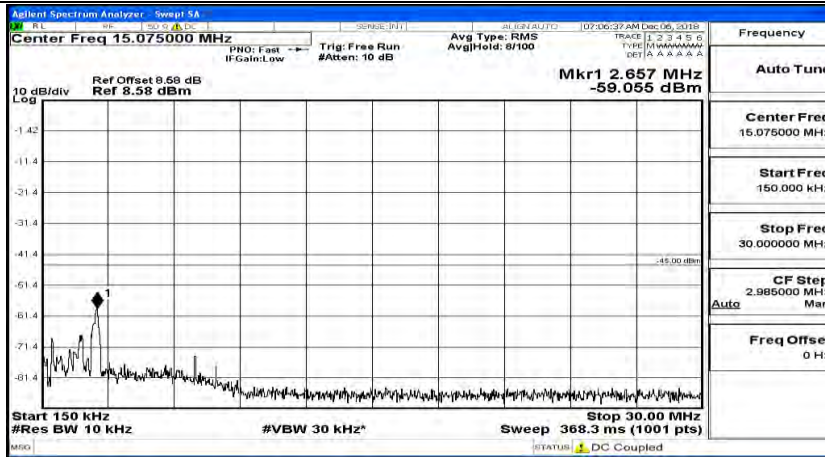
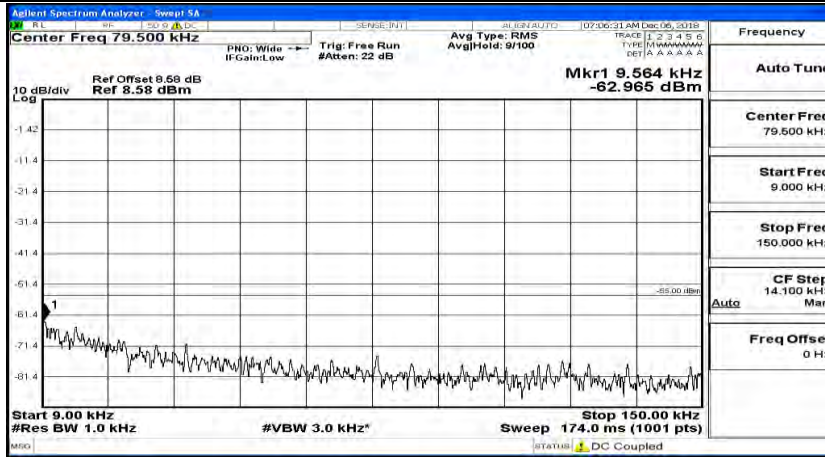
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



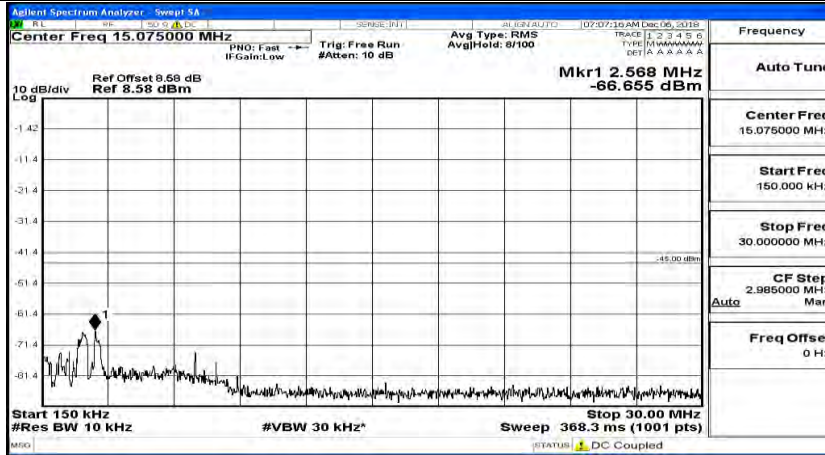
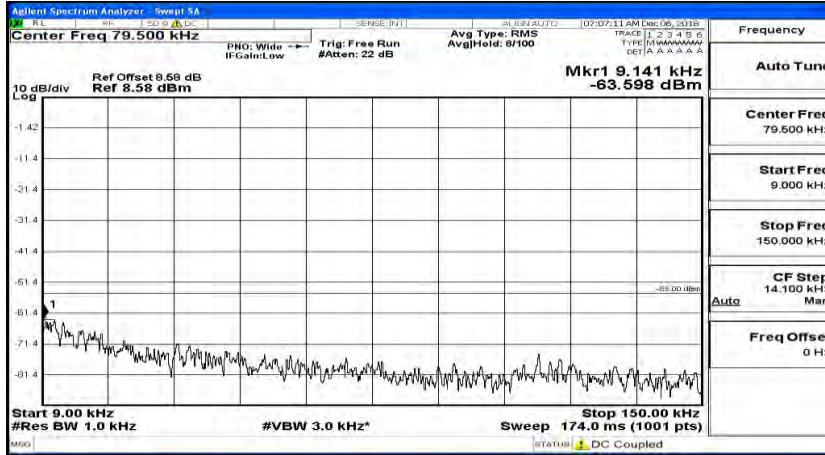
CSE Test Graph(s) (Channel Bandwidth: 5 MHz) _HCH_16QAM



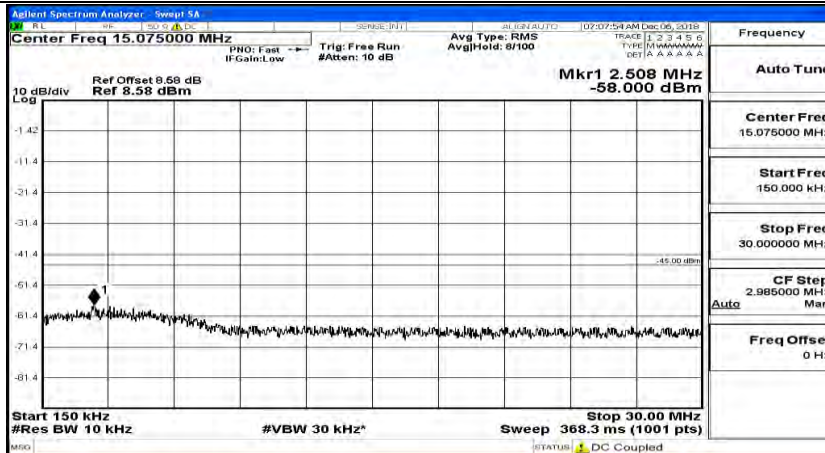
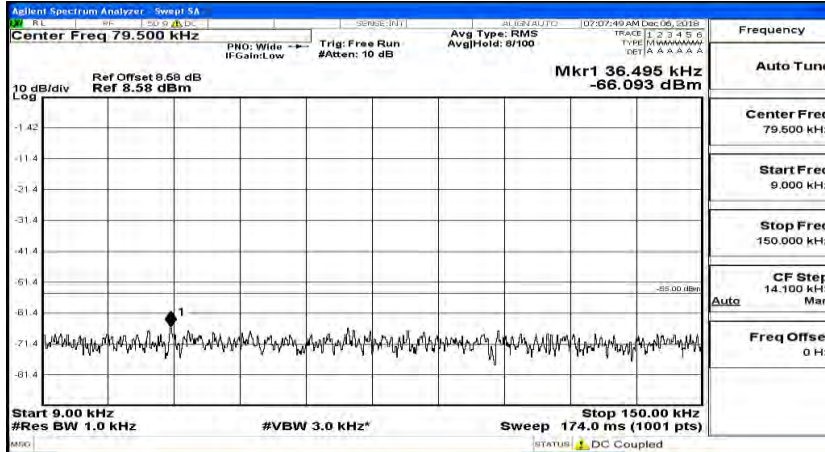
CSE Test Graph(s) (Channel Bandwidth: 10 MHz) LCH_QPSK



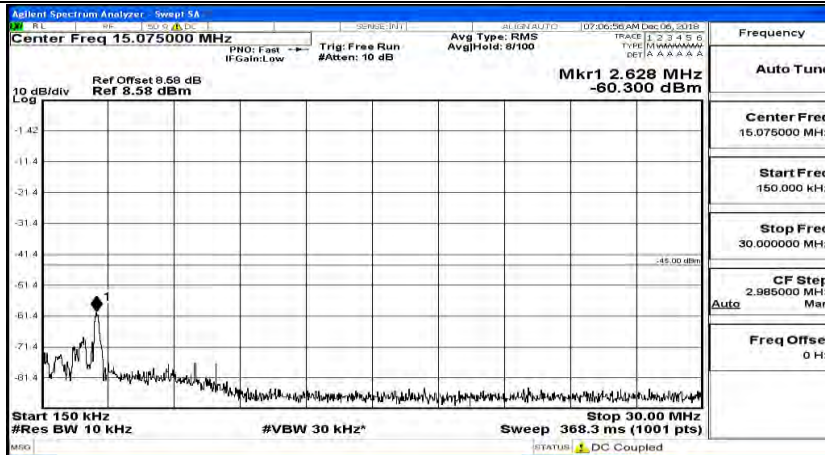
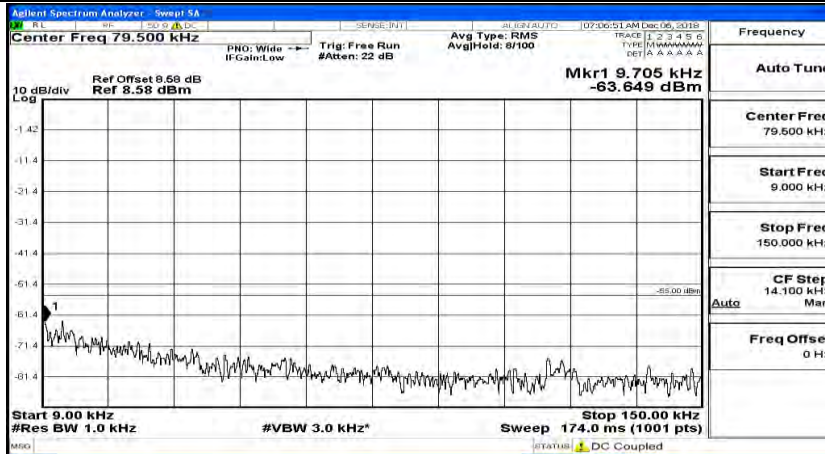
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



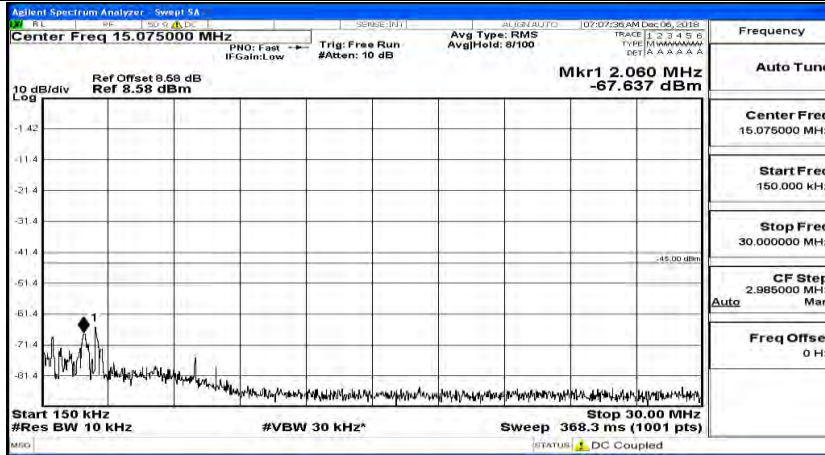
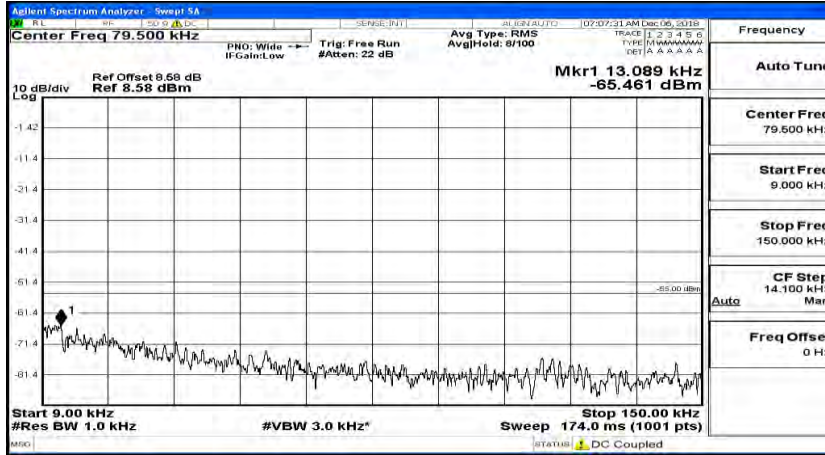
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



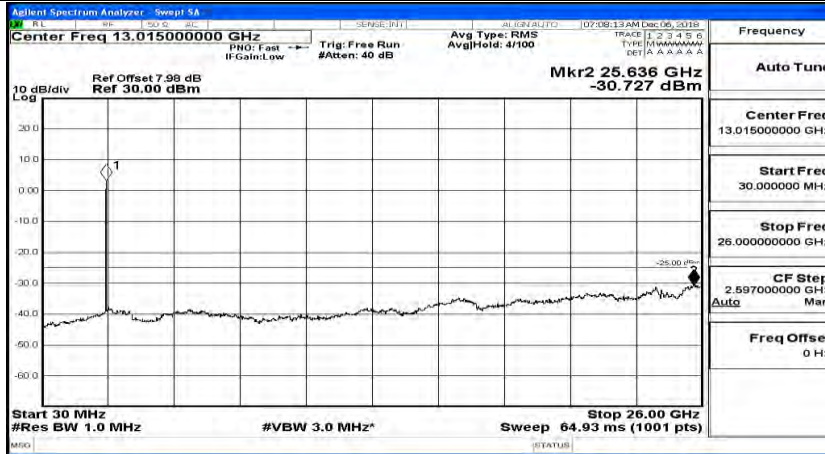
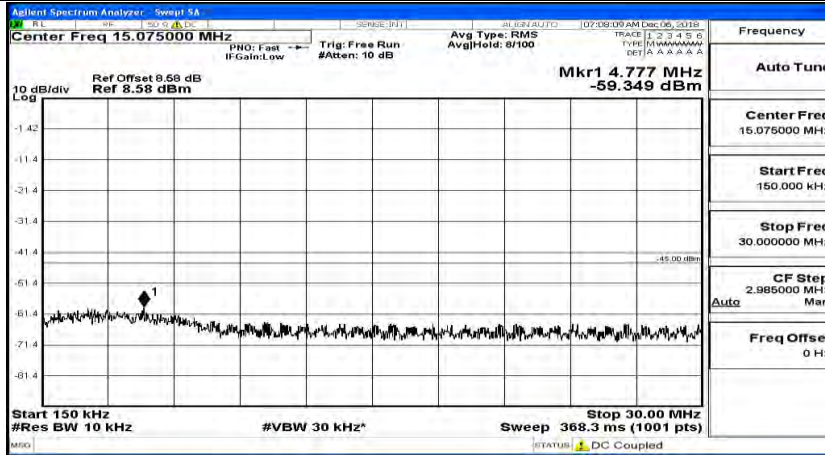
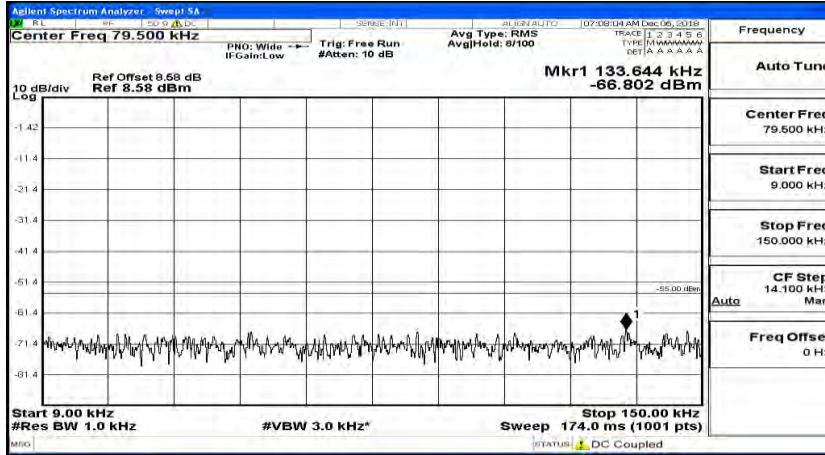
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



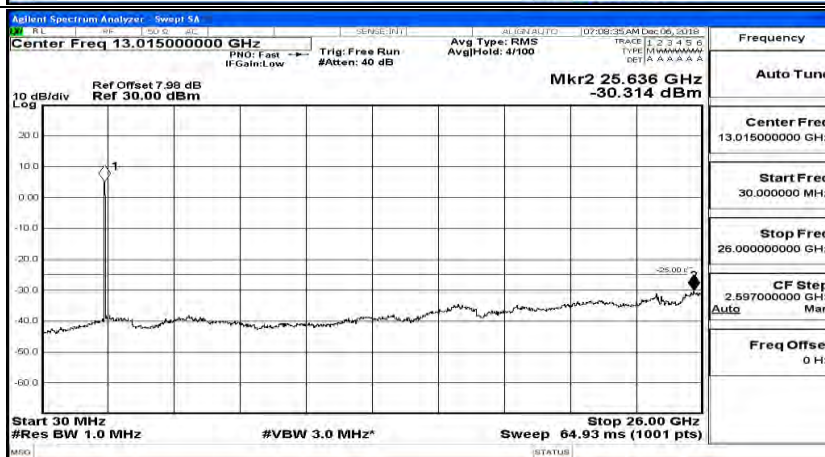
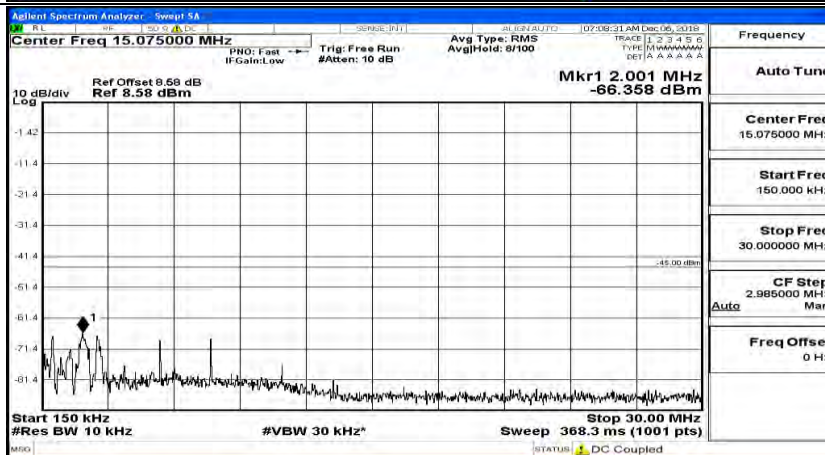
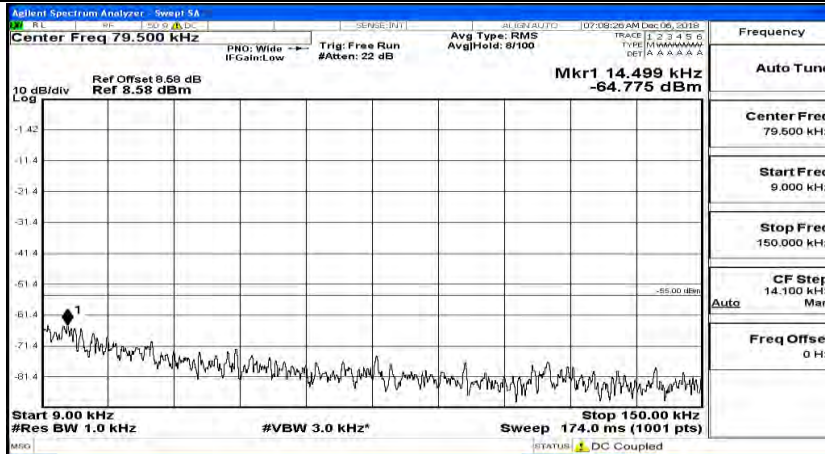
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



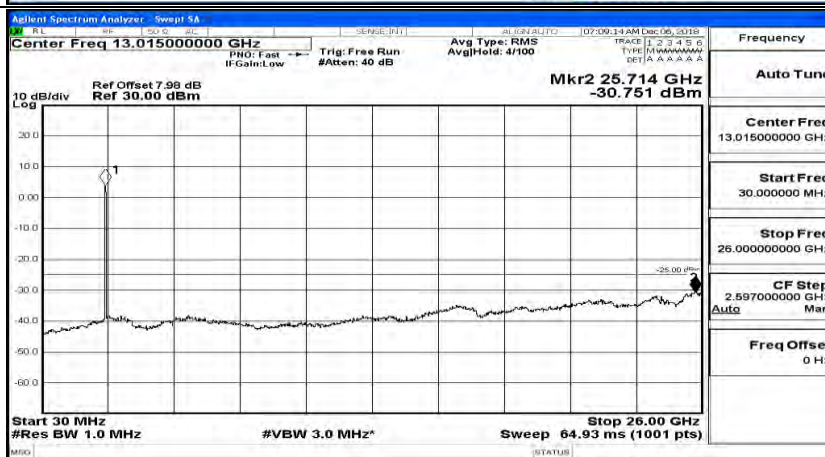
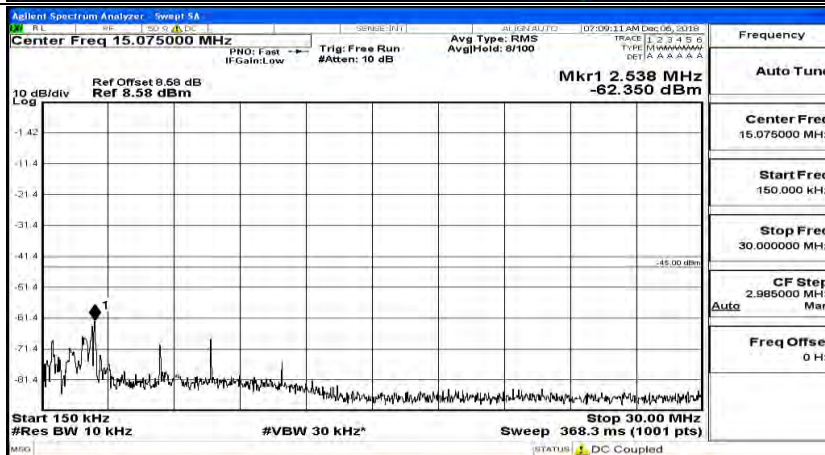
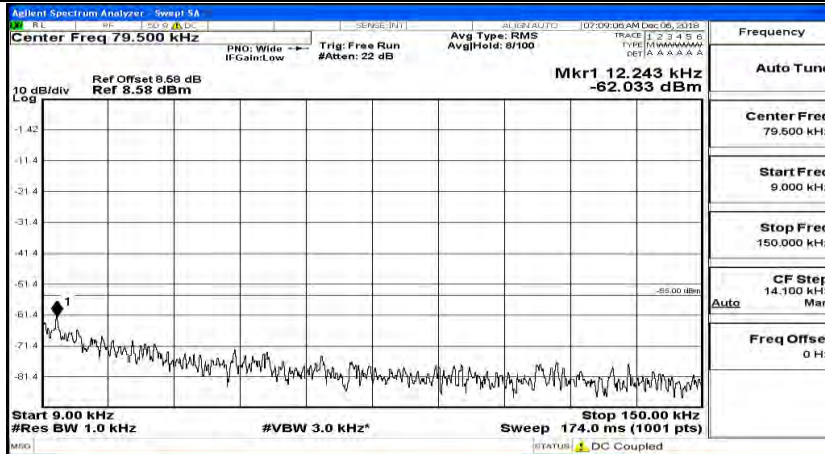
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



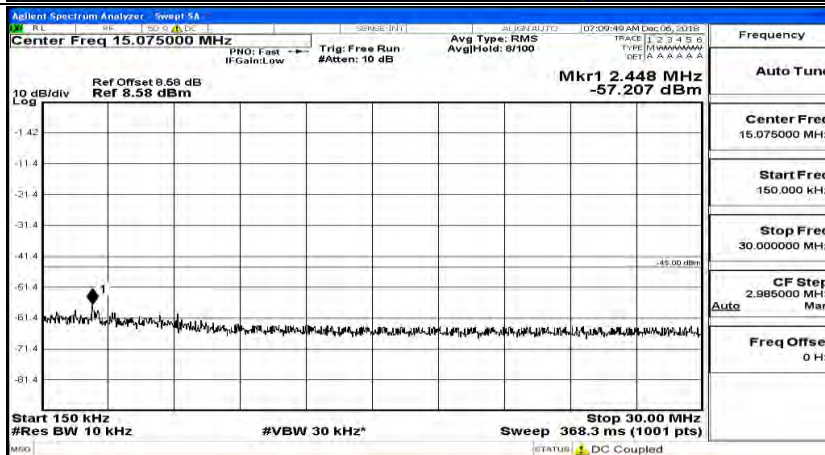
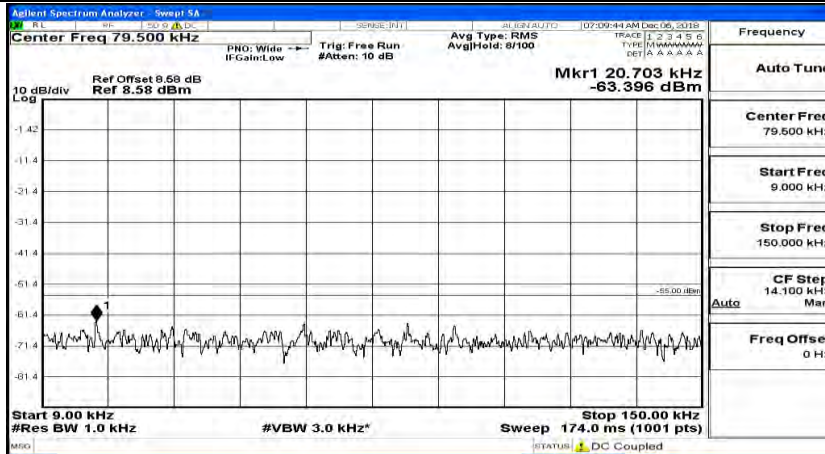
CSE Test Graph(s) (Channel Bandwidth:15 MHz) LCH_QPSK



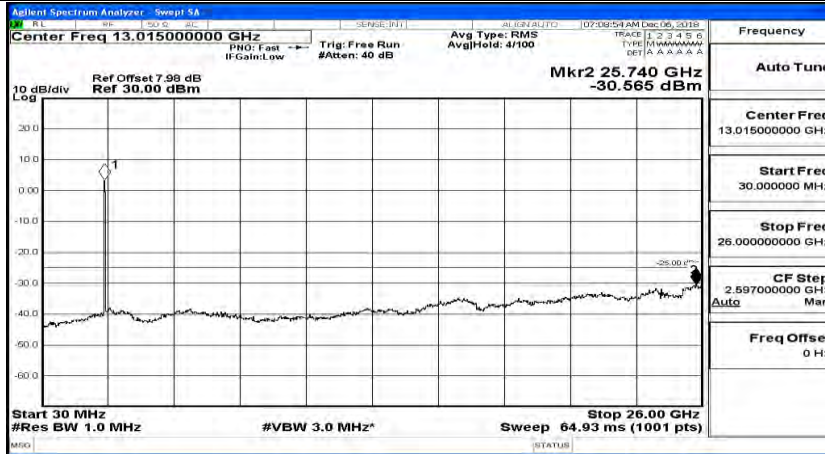
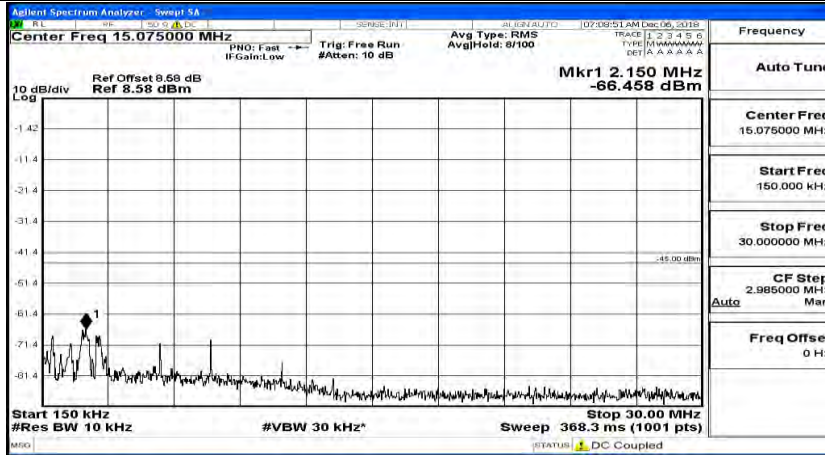
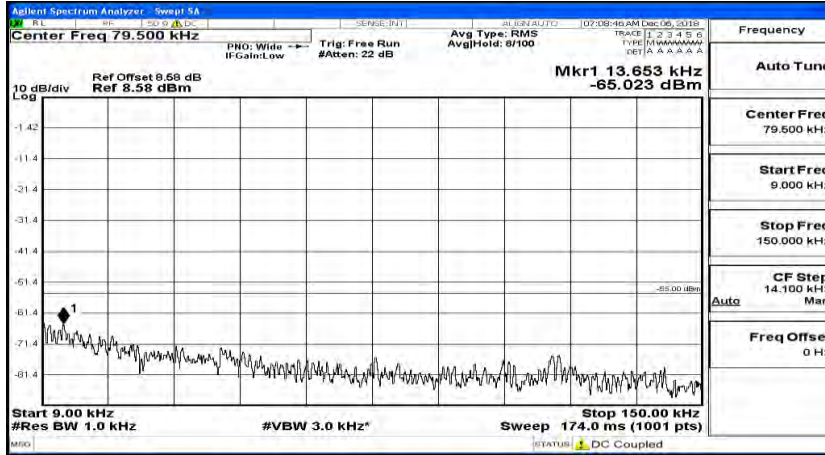
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



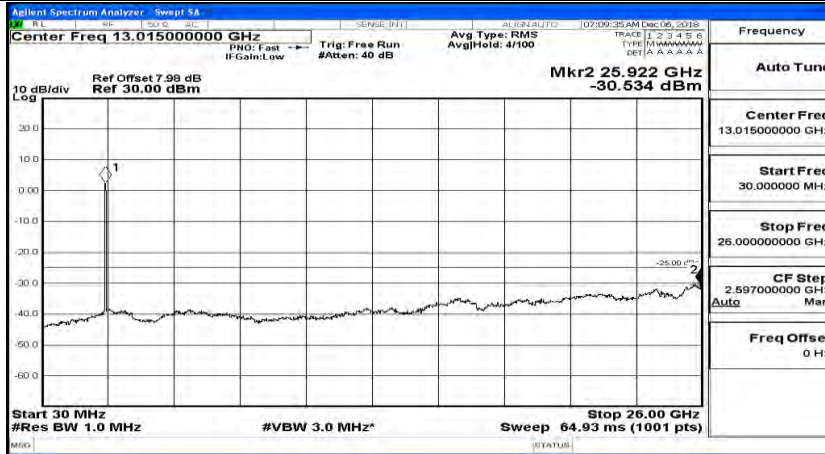
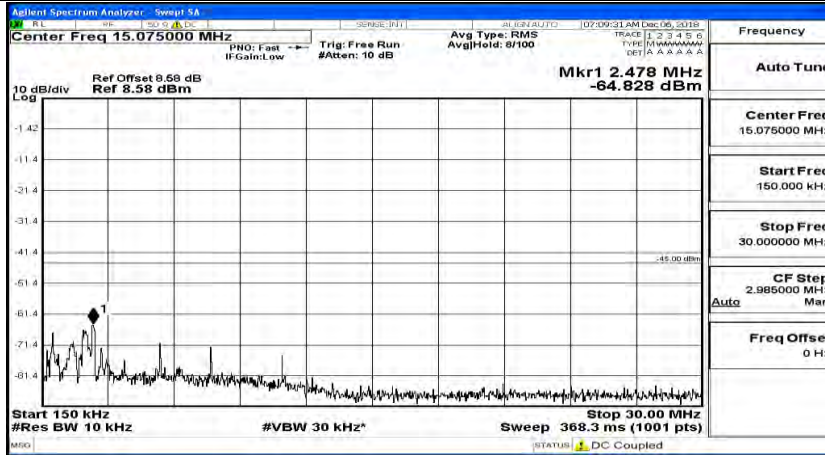
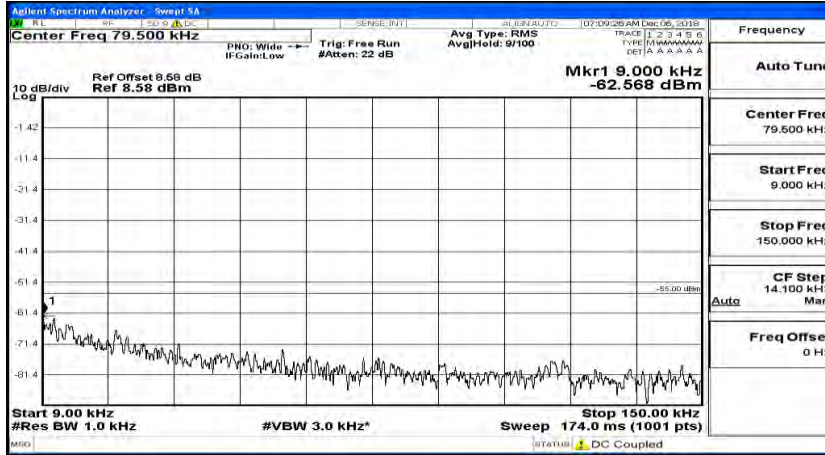
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



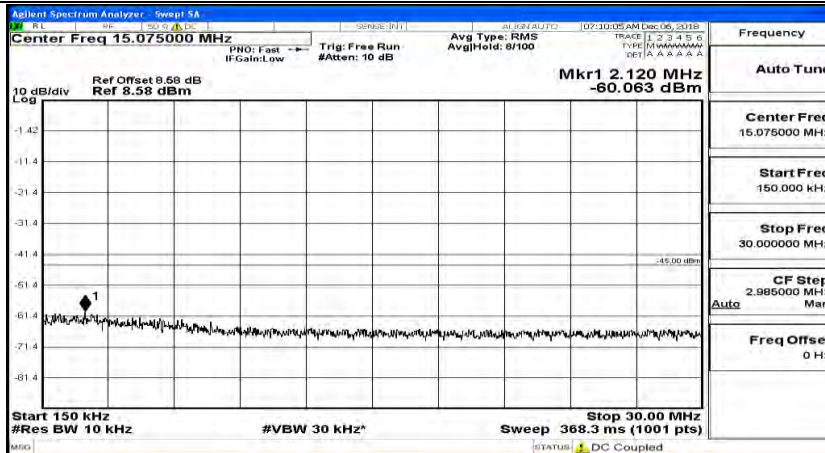
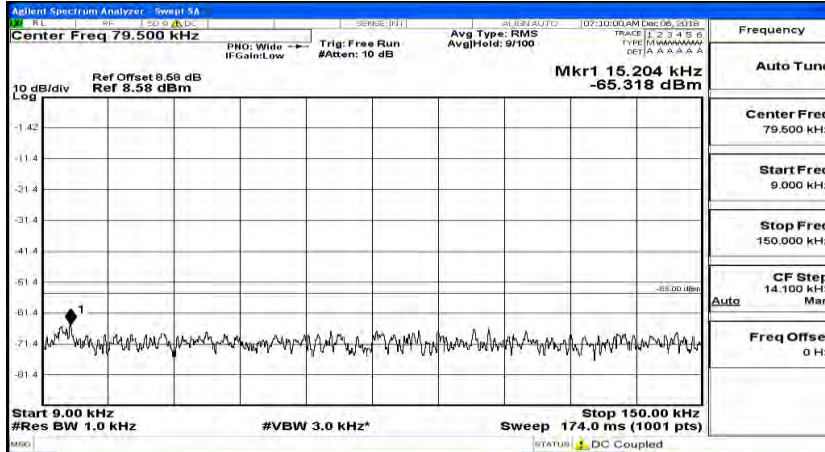
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



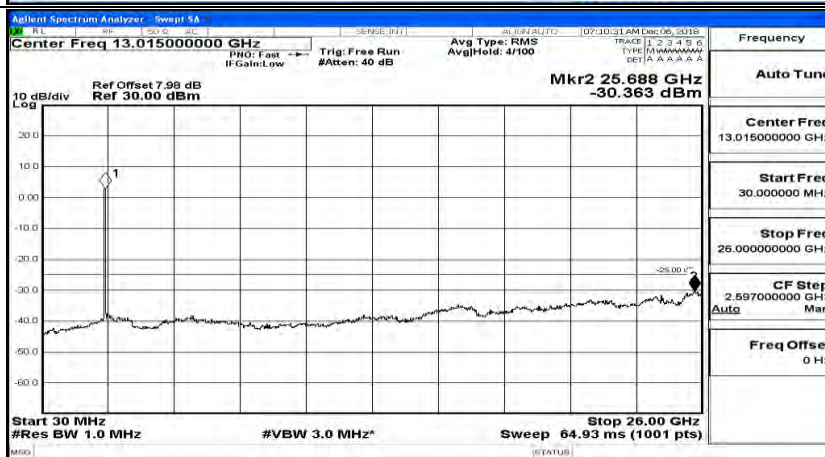
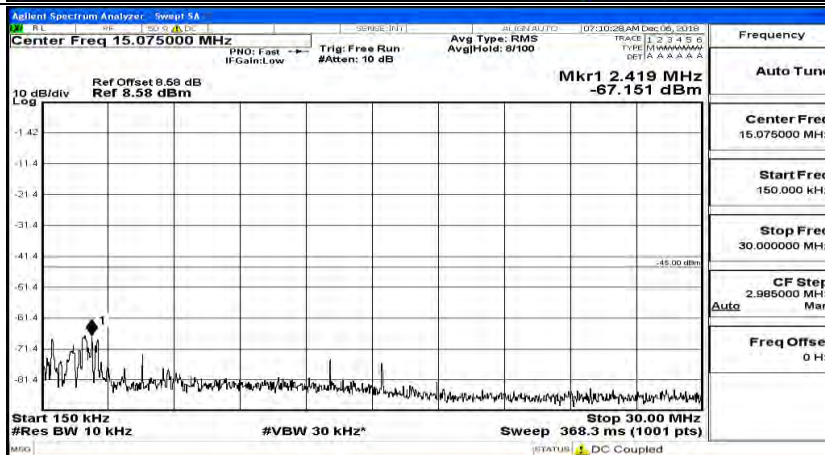
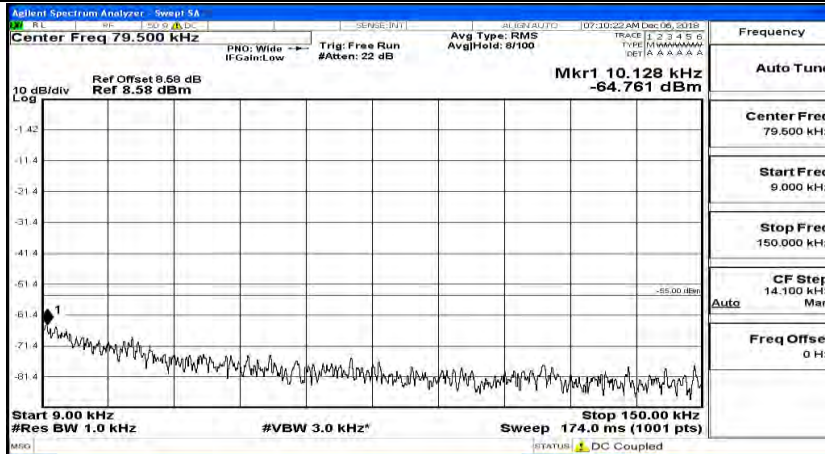
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



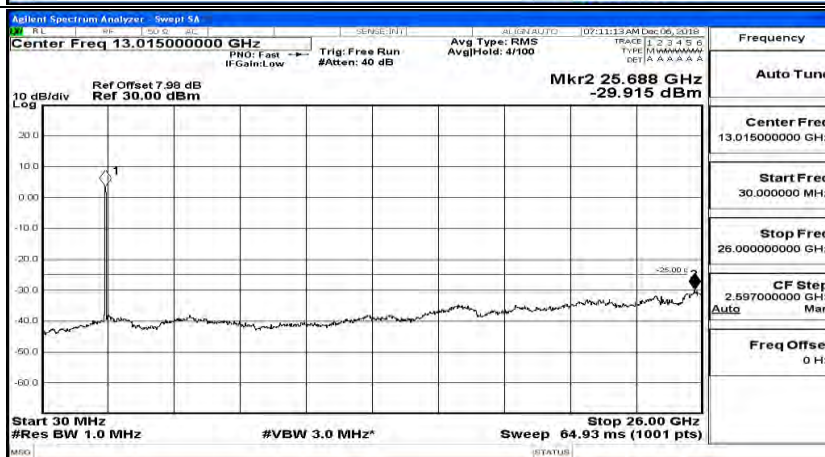
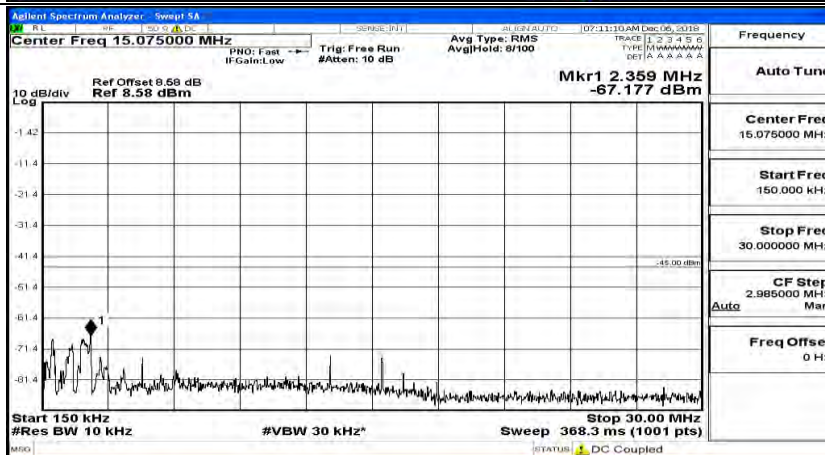
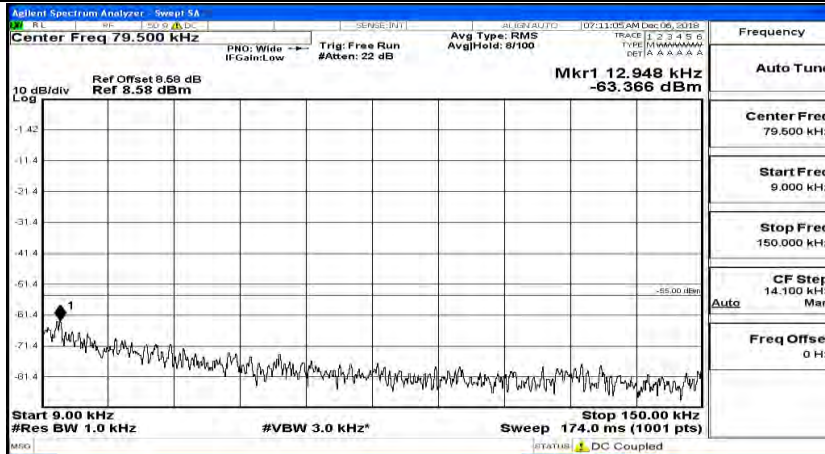
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



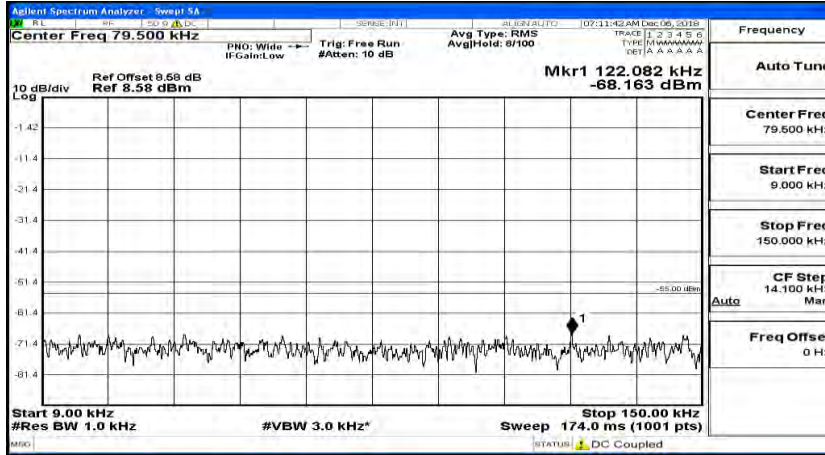
CSE Test Graph(s) (Channel Bandwidth:20 MHz) LCH_QPSK



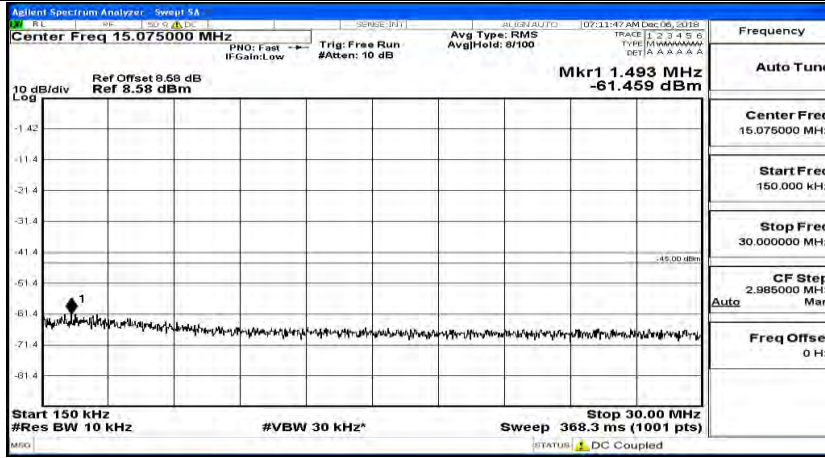
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



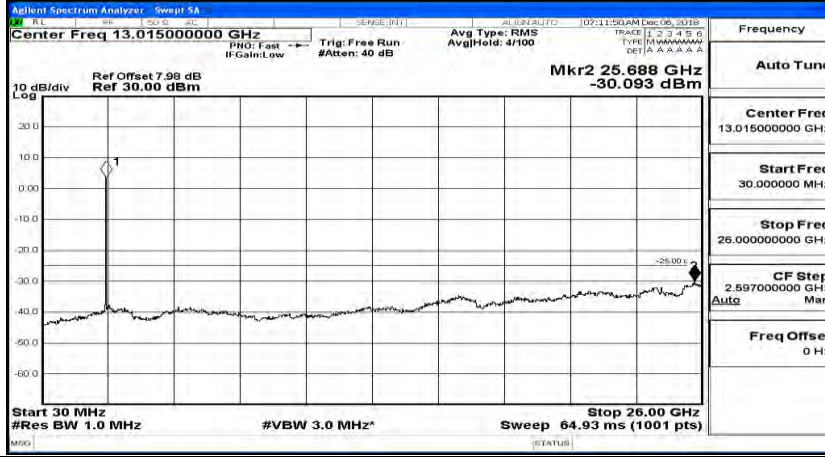
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Man
Auto
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Man
Auto
Freq Offset 0 Hz

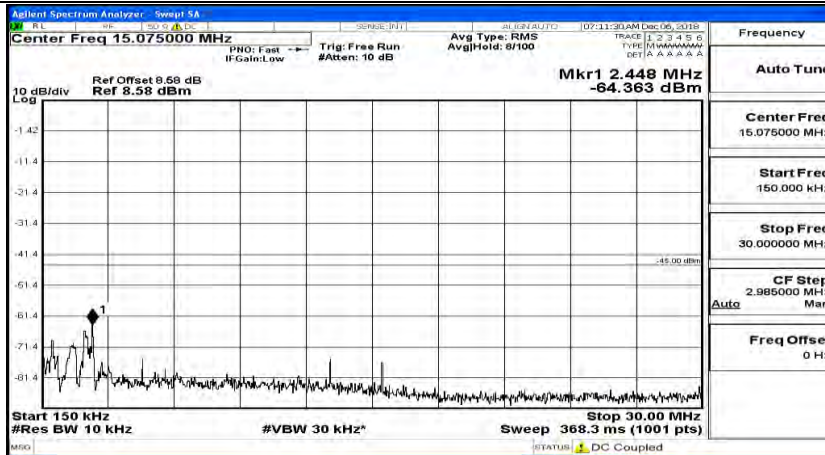
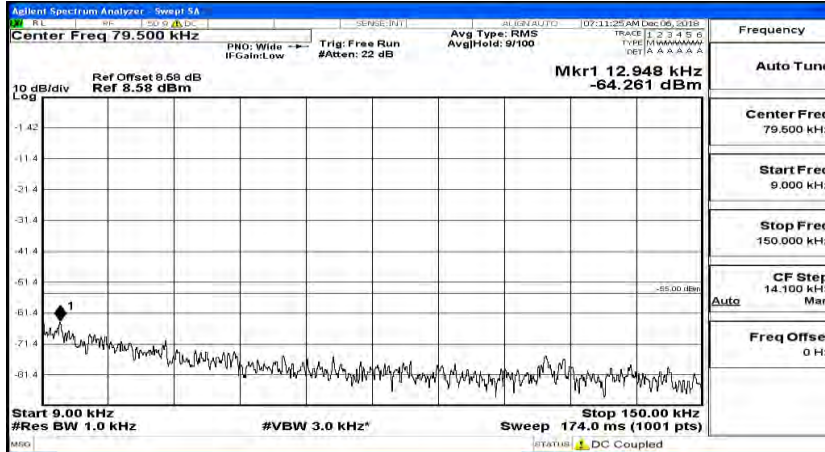


Frequency
Auto Tune
Center Freq 13.01500000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.00000000 GHz
CF Step 2.597000000 GHz Man
Auto
Freq Offset 0 Hz

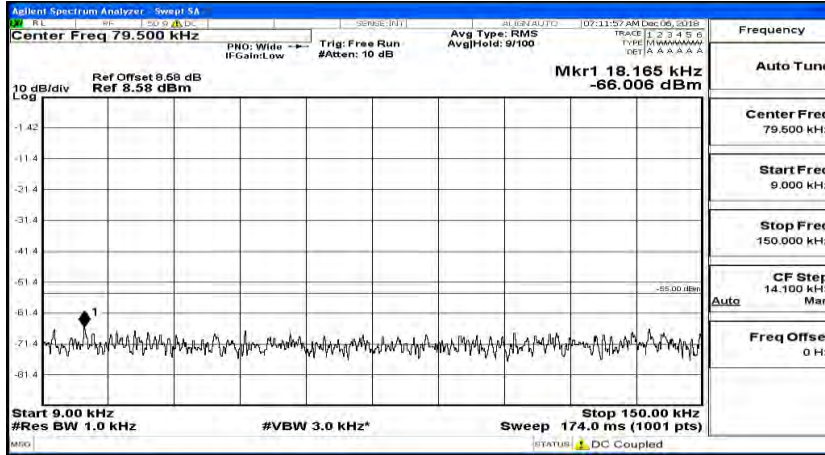
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



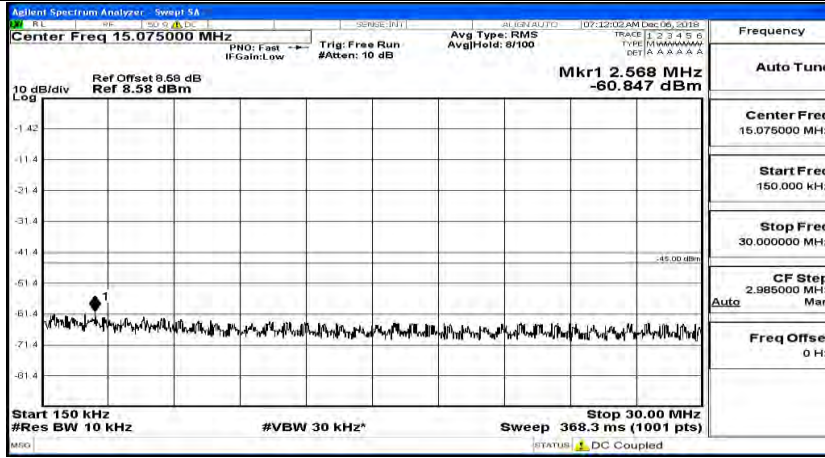
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM



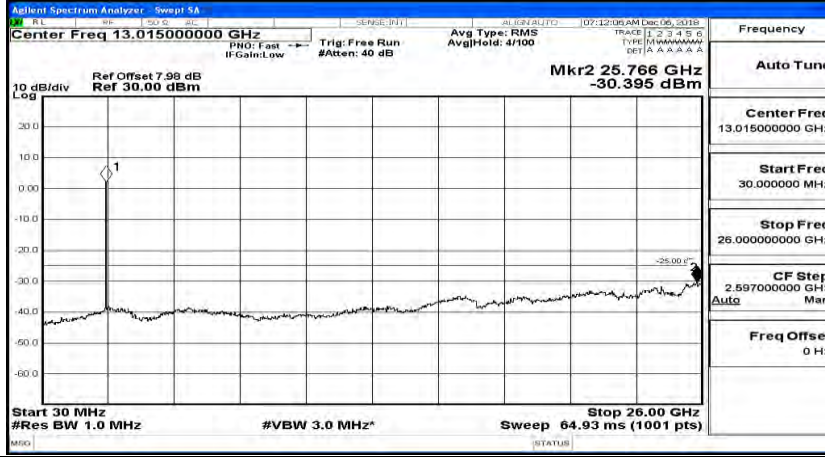
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM



Frequency
Auto Tune
Center Freq 79.500 kHz
Start Freq 9.000 kHz
Stop Freq 150.000 kHz
CF Step 14.100 kHz Man
Auto
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 15.075000 MHz
Start Freq 150.000 kHz
Stop Freq 30.000000 MHz
CF Step 2.985000 MHz Man
Auto
Freq Offset 0 Hz



Frequency
Auto Tune
Center Freq 13.015000000 GHz
Start Freq 30.000000 MHz
Stop Freq 26.000000000 GHz
CF Step 2.597000000 GHz Man
Auto
Freq Offset 0 Hz