

Appendix E: Test Data for E-UTRA Band 13

Product Name: Portable Data Collector

Trade Mark: Newland

Test Model: NLS-NFT10

Environmental Conditions

Temperature:	24.5 ° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	WANGCHUANG
Supervised by:	TOM.LIU

A.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	23.60	22.96	PASS
		1	12	23.27	22.61	PASS
		1	24	23.74	23.15	PASS
		12	0	22.79	21.98	PASS
		12	6	22.76	21.88	PASS
		12	13	22.79	21.98	PASS
		25	0	22.95	21.93	PASS
	MCH	1	0	23.72	22.72	PASS
		1	12	23.67	22.68	PASS
		1	24	23.26	22.37	PASS
		12	0	22.73	21.78	PASS
		12	6	22.63	21.63	PASS
		12	13	22.61	21.61	PASS
		25	0	22.80	21.74	PASS
	HCH	1	0	23.97	22.77	PASS
		1	12	23.00	22.62	PASS
		1	24	23.64	22.90	PASS
		12	0	22.73	21.79	PASS
		12	6	22.66	21.74	PASS
		12	13	22.70	21.85	PASS
		25	0	22.65	21.74	PASS

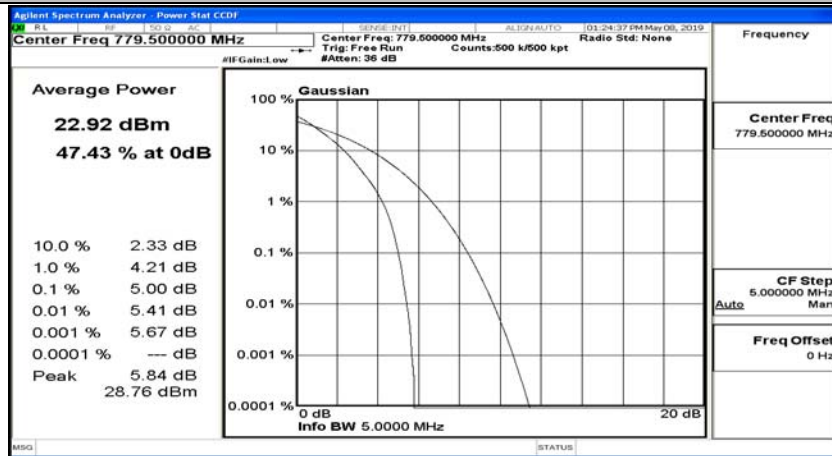
Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.73	23.00	PASS
		1	24	23.63	23.01	PASS
		1	49	22.92	22.05	PASS
		25	0	22.74	21.80	PASS
		25	12	22.64	21.75	PASS
		25	25	22.69	21.68	PASS
		50	0	22.88	21.89	PASS
	MCH	1	0	23.72	23.07	PASS
		1	24	23.53	22.95	PASS
		1	49	22.76	22.40	PASS
		25	0	22.72	21.61	PASS
		25	12	22.65	21.70	PASS
		25	25	22.69	21.73	PASS
		50	0	22.88	21.81	PASS
	HCH	1	0	23.70	23.06	PASS
		1	24	23.66	23.16	PASS
		1	49	22.75	21.71	PASS
		25	0	22.77	21.74	PASS
		25	12	22.66	21.81	PASS
		25	25	22.71	21.78	PASS
		50	0	22.94	21.89	PASS

A.2 Peak-to-Average Ratio

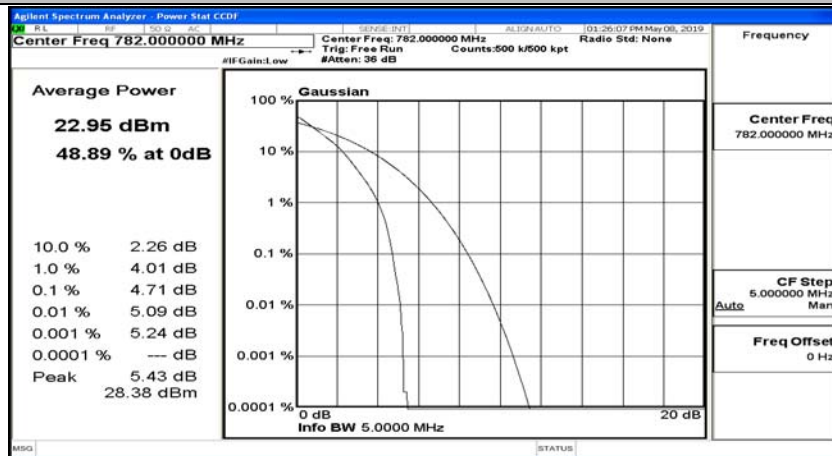
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5	<13	PASS
	MCH	4.71	<13	PASS
	HCH	4.97	<13	PASS
16QAM	LCH	5.69	<13	PASS
	MCH	5.55	<13	PASS
	HCH	5.75	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.98	<13	PASS
	MCH	5.06	<13	PASS
	HCH	5.05	<13	PASS
16QAM	LCH	5.77	<13	PASS
	MCH	5.77	<13	PASS
	HCH	5.78	<13	PASS

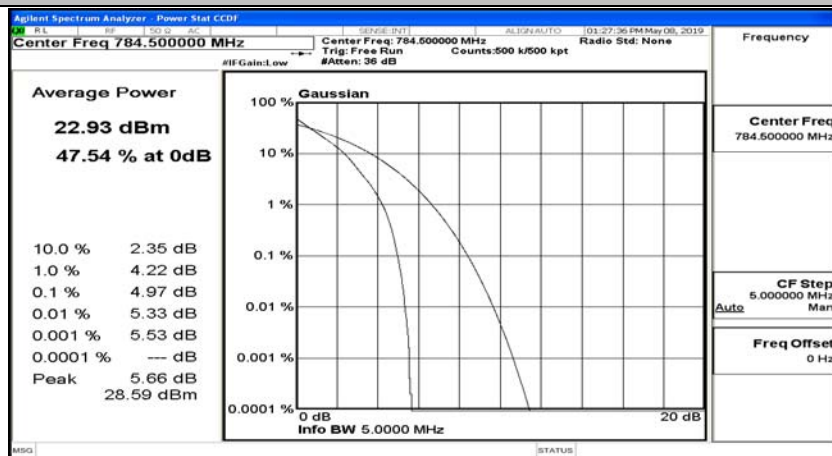
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



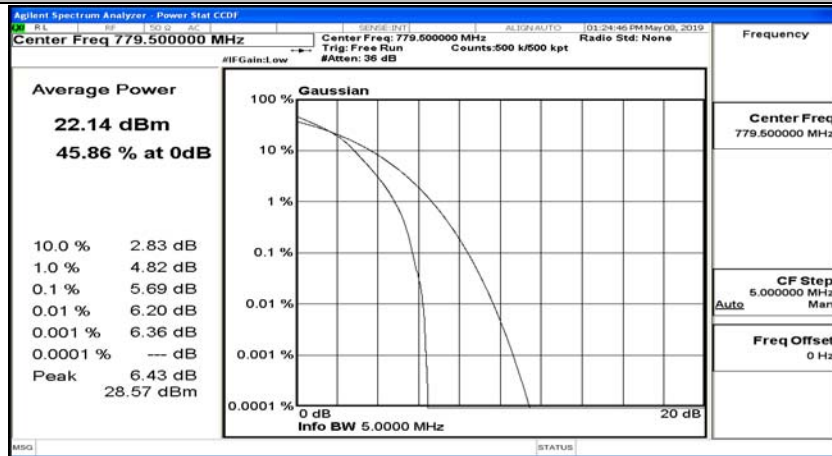
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



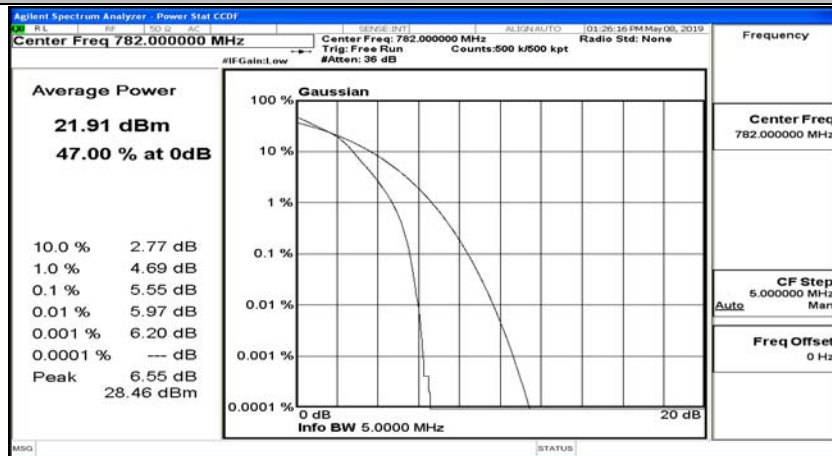
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



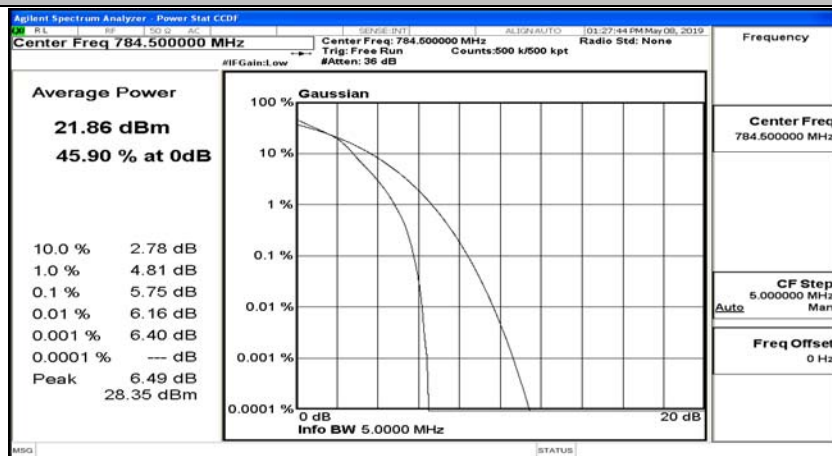
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



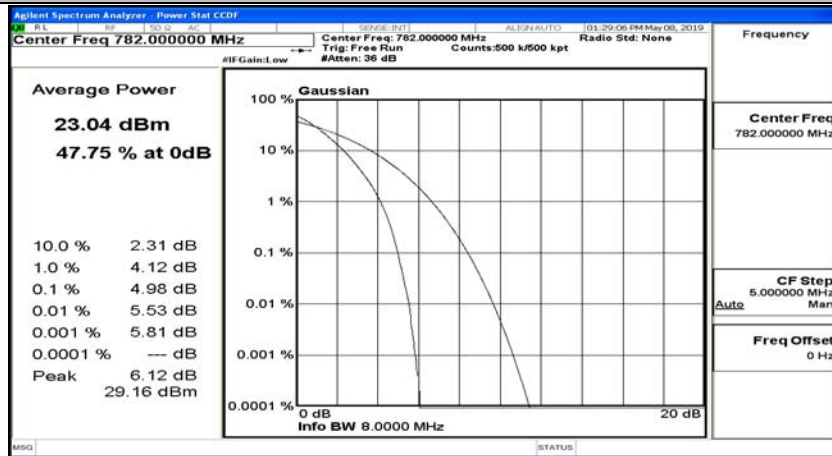
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



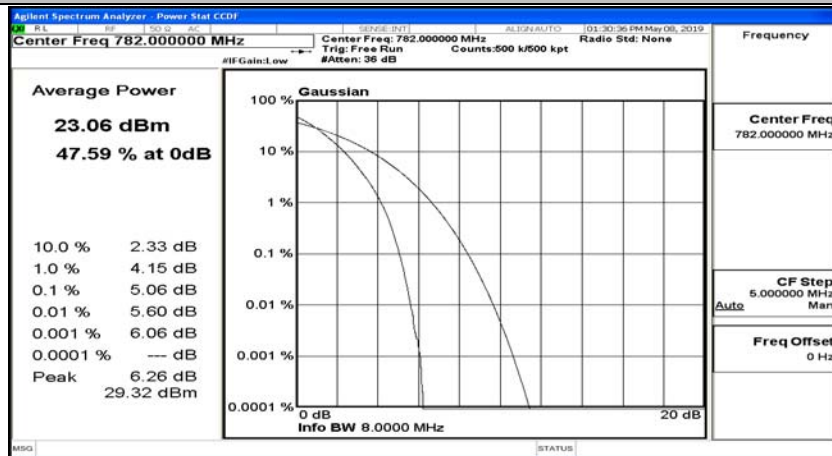
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



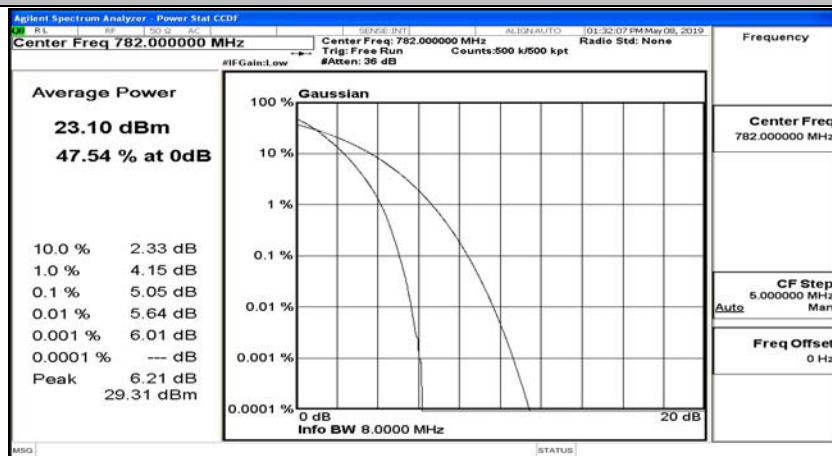
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



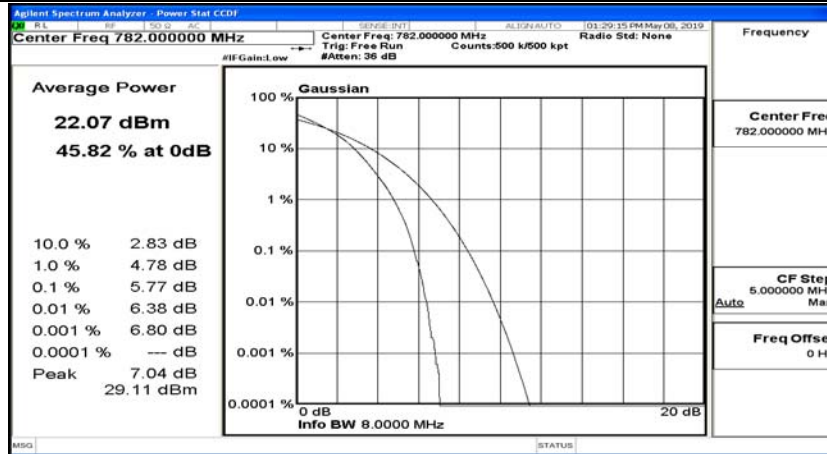
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



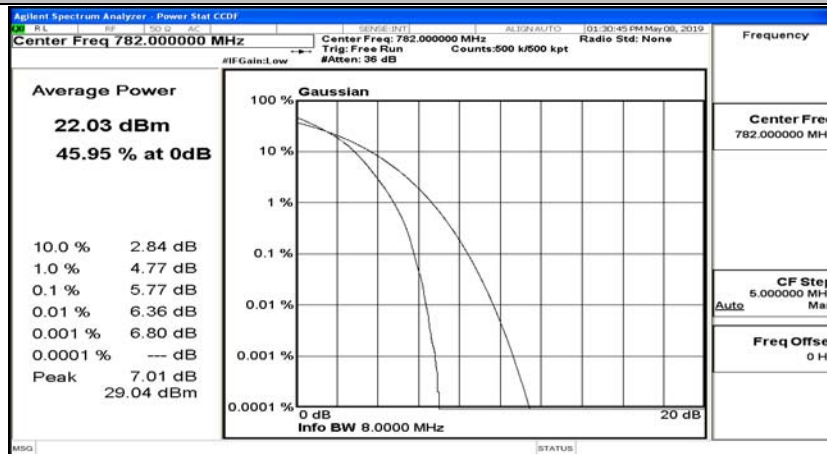
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



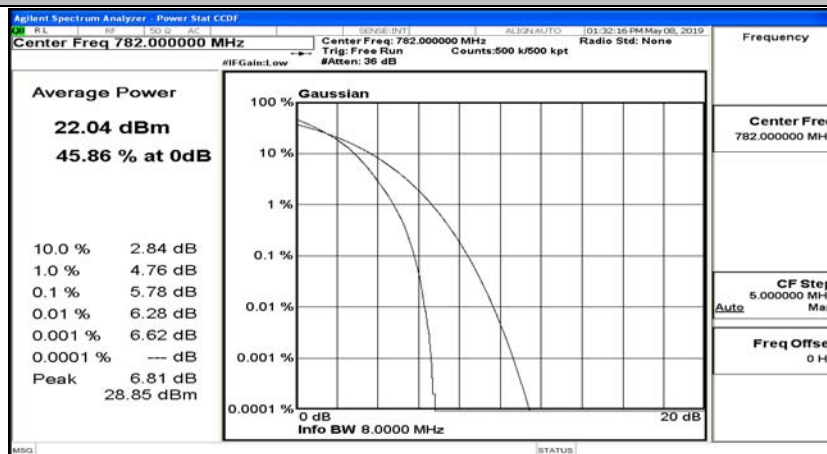
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

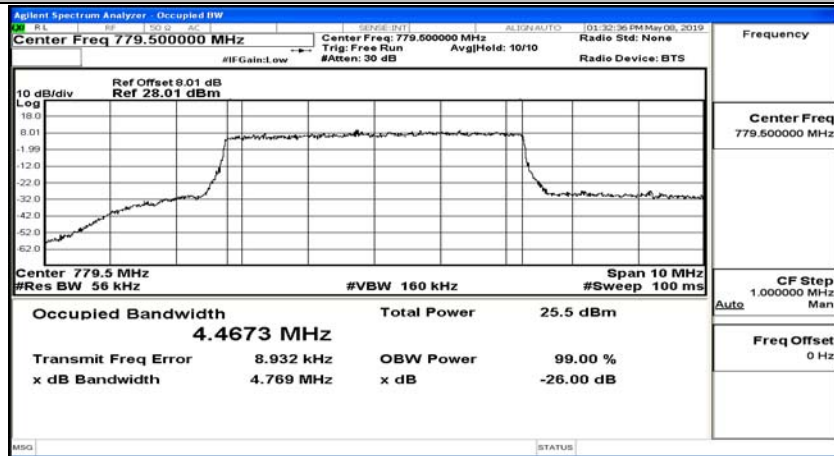


A.3 26dB Bandwidth and Occupied Bandwidth

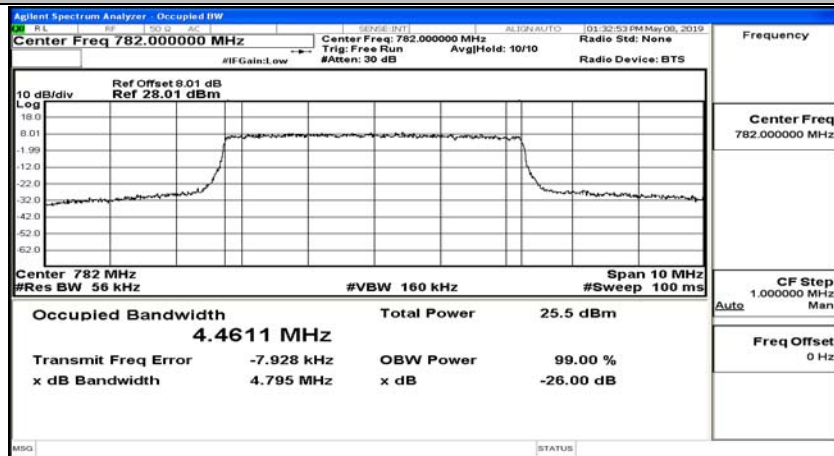
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4673	4.769	PASS
	MCH	4.4611	4.795	PASS
	HCH	4.4872	4.807	PASS
16QAM	LCH	4.4703	4.775	PASS
	MCH	4.4742	4.806	PASS
	HCH	4.4778	4.829	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.8954	9.416	PASS
	MCH	8.9144	9.362	PASS
	HCH	8.9010	9.414	PASS
16QAM	LCH	8.8948	9.395	PASS
	MCH	8.9166	9.362	PASS
	HCH	8.9008	9.442	PASS

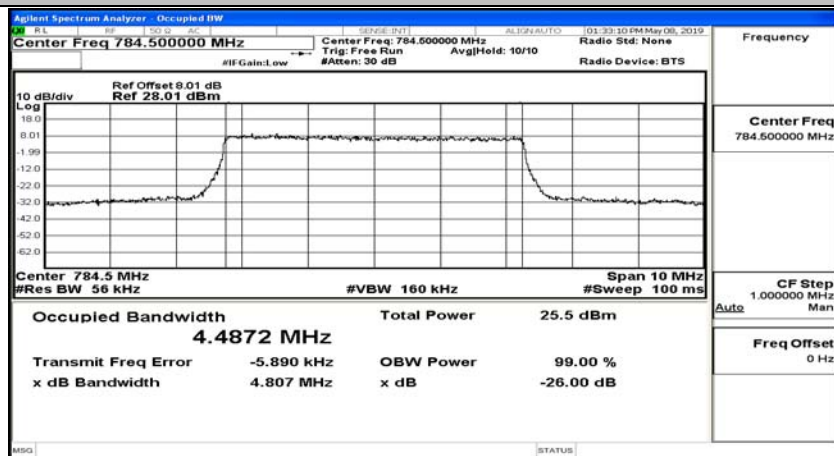
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



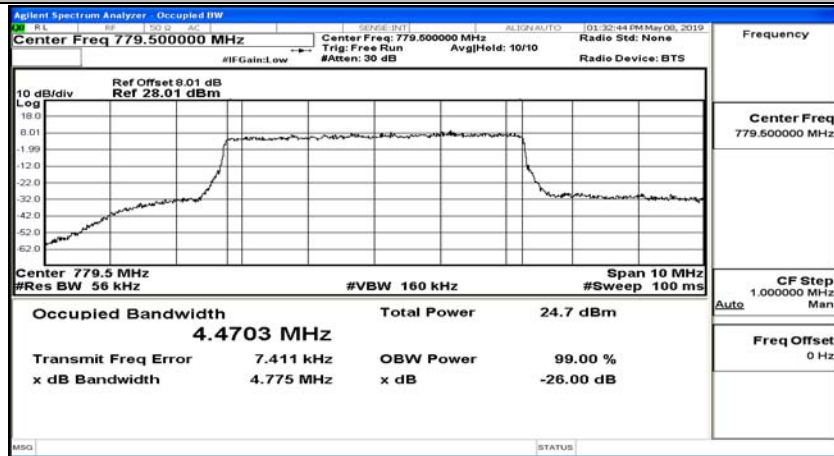
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



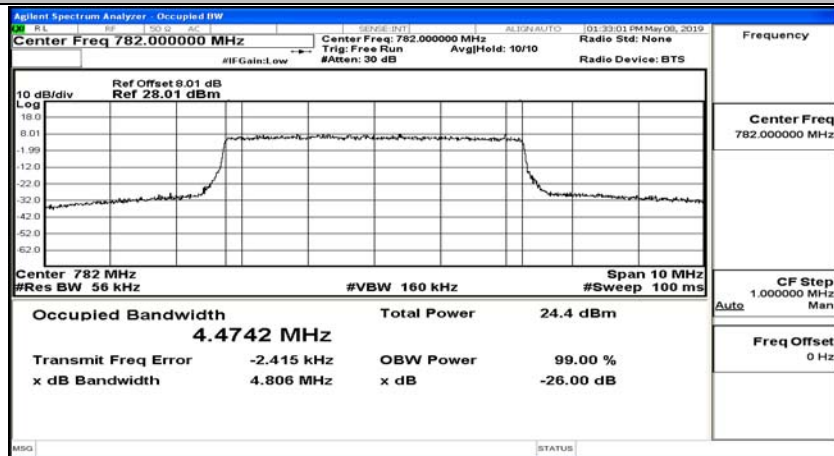
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



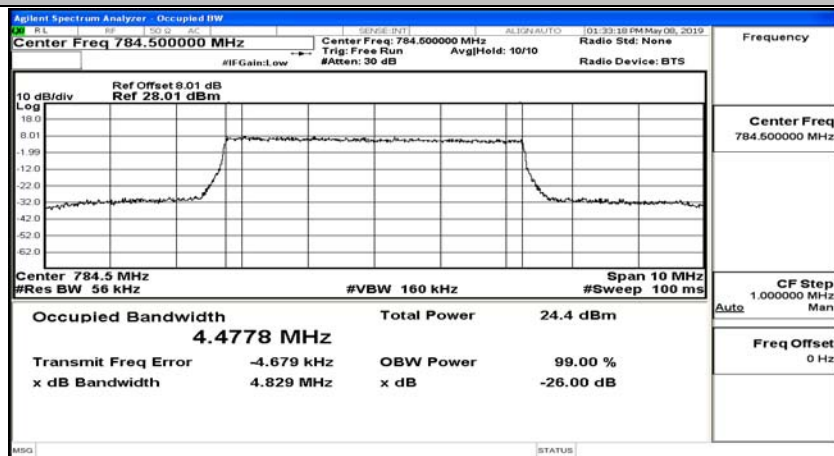
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



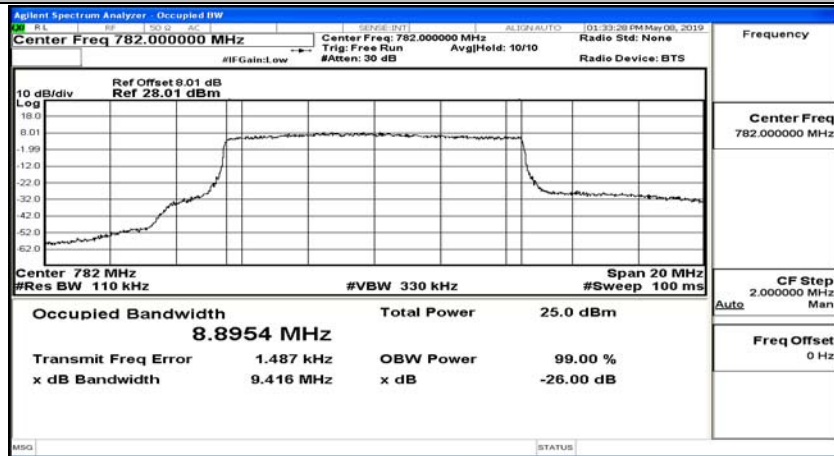
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



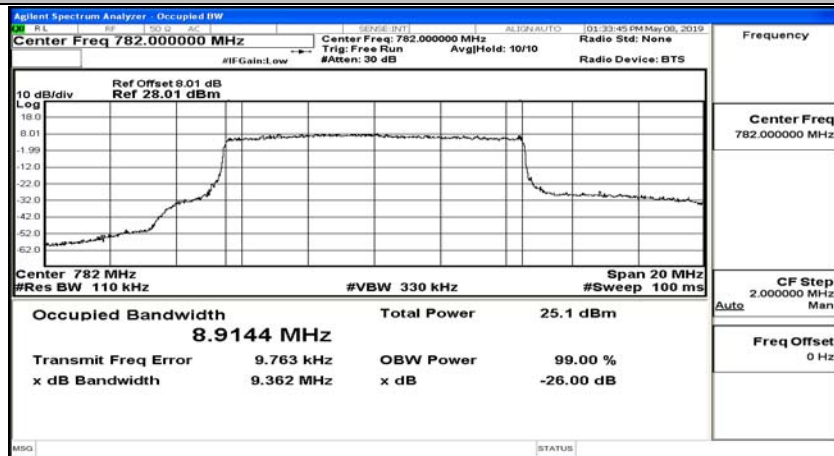
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



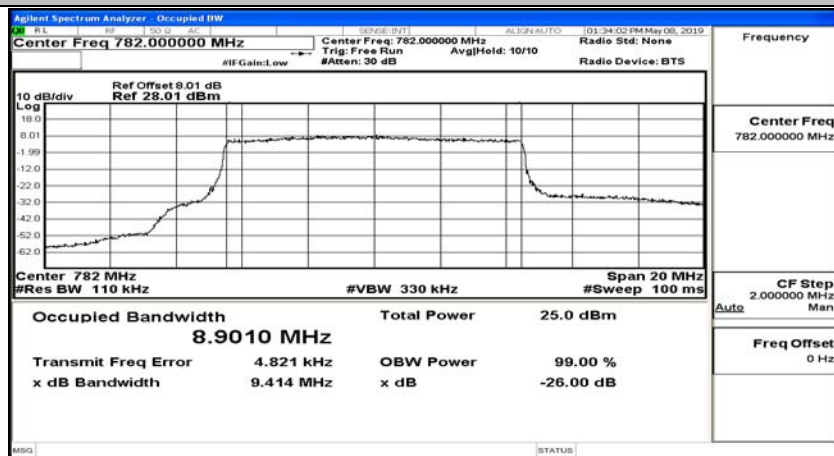
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



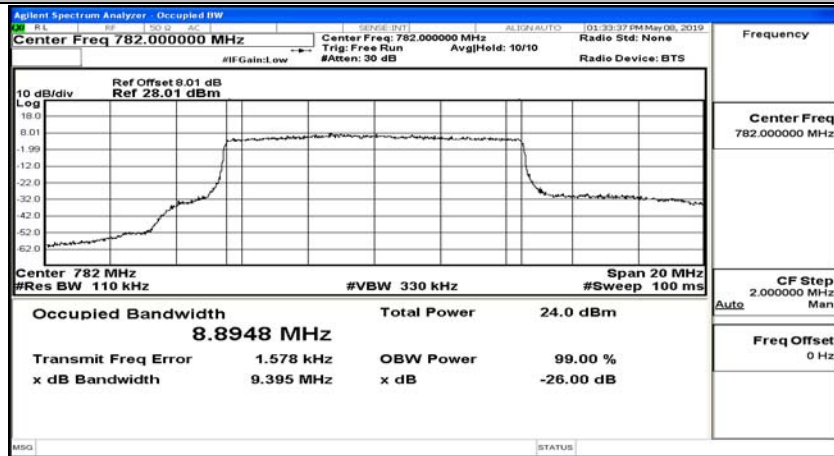
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



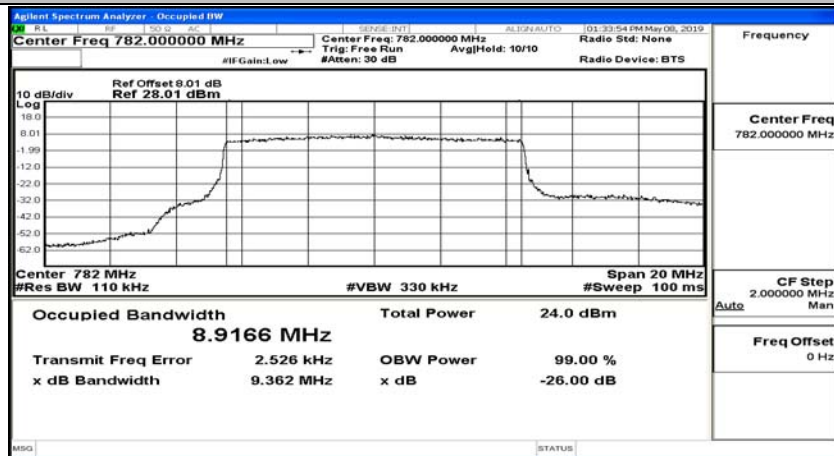
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



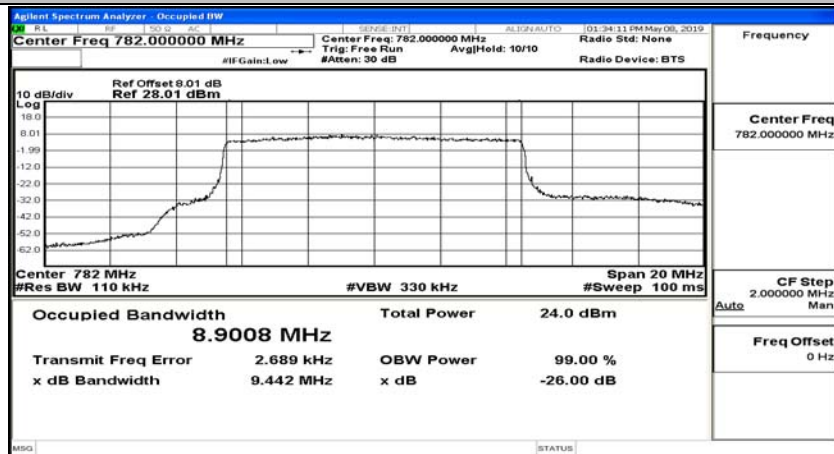
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

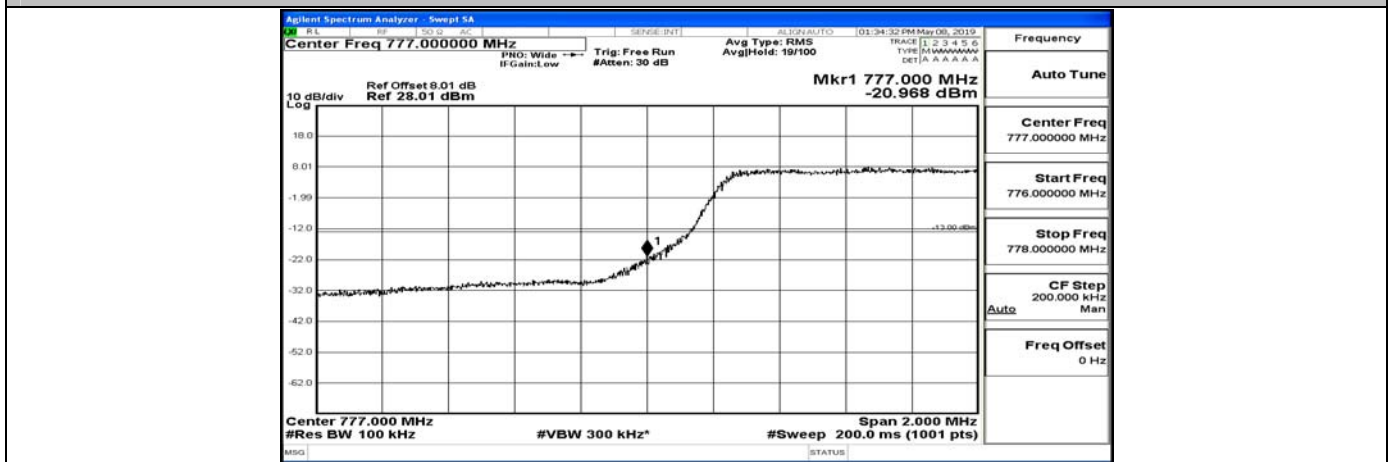


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

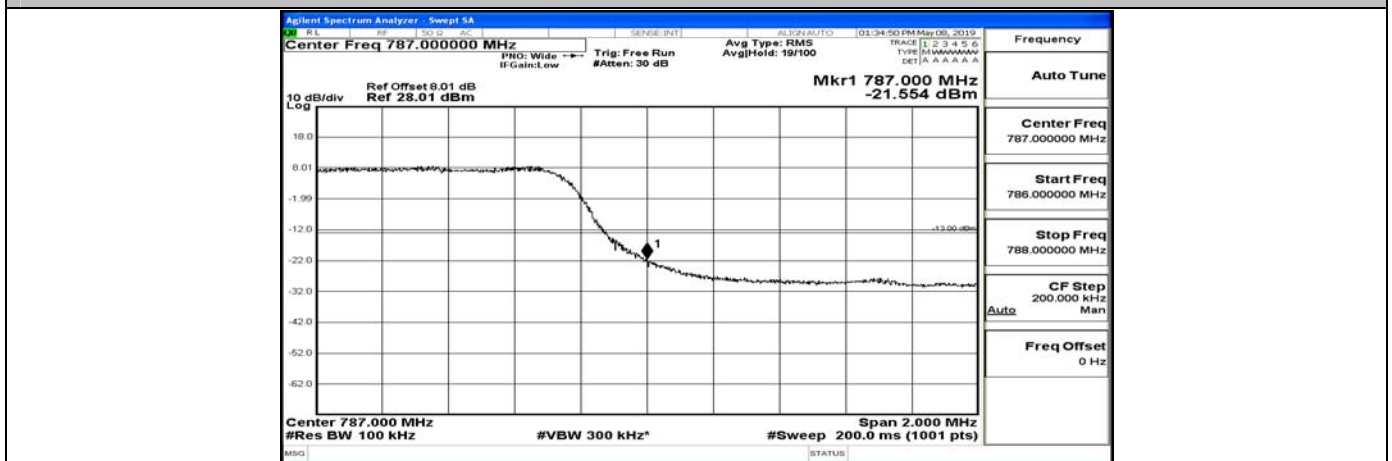


A.4 Band Edge

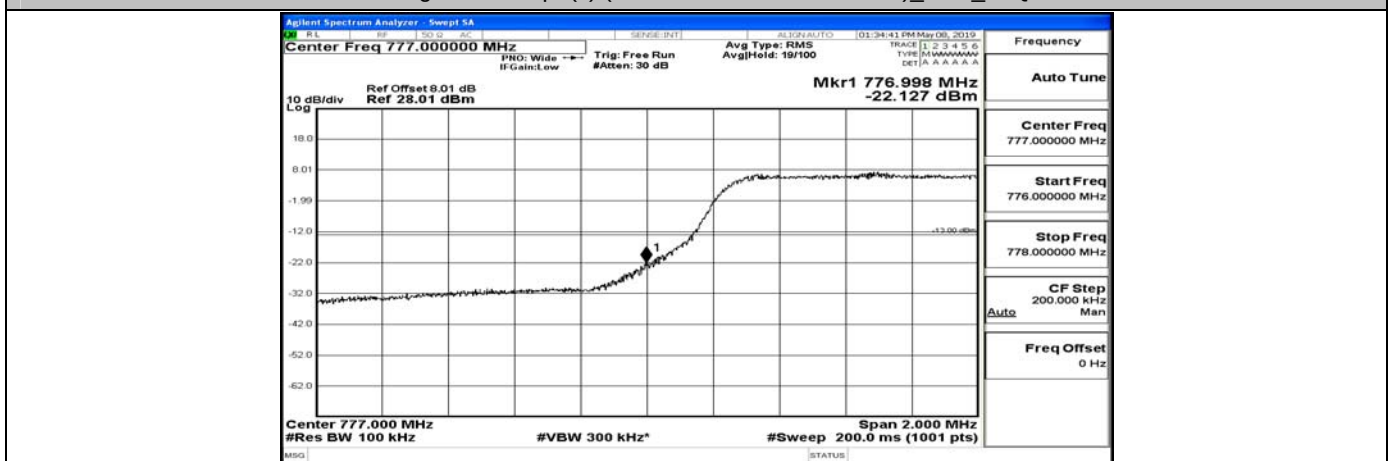
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



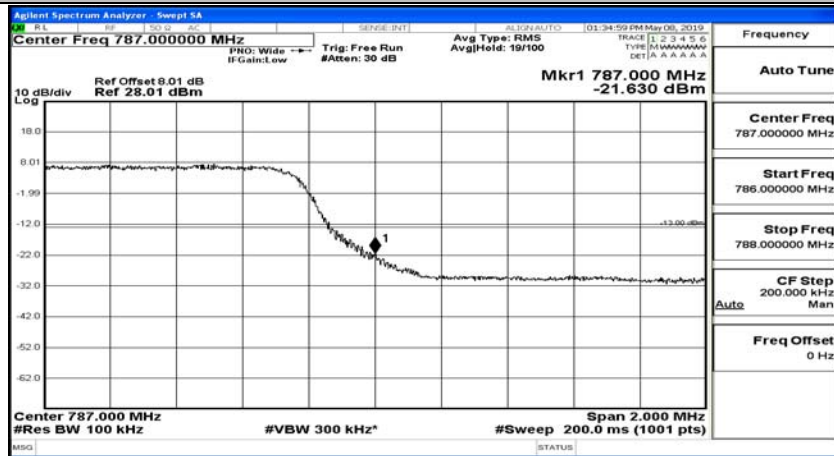
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



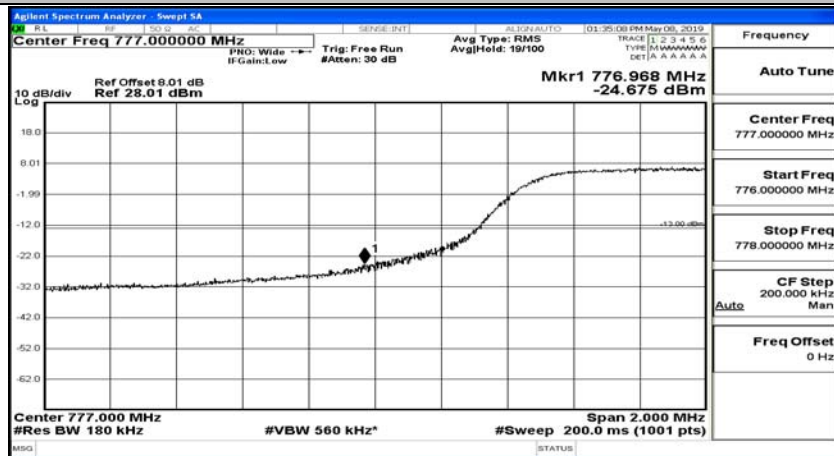
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



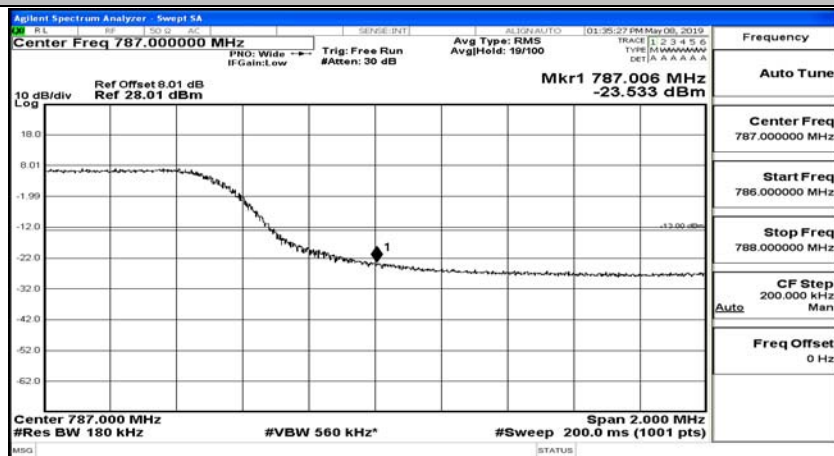
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



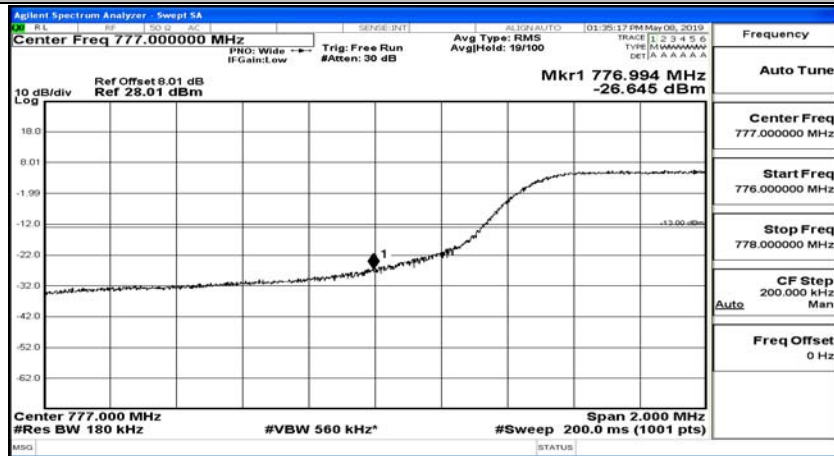
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



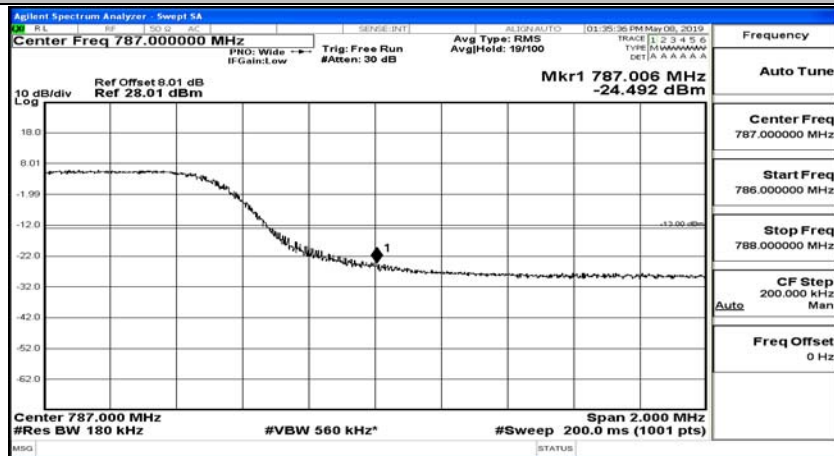
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

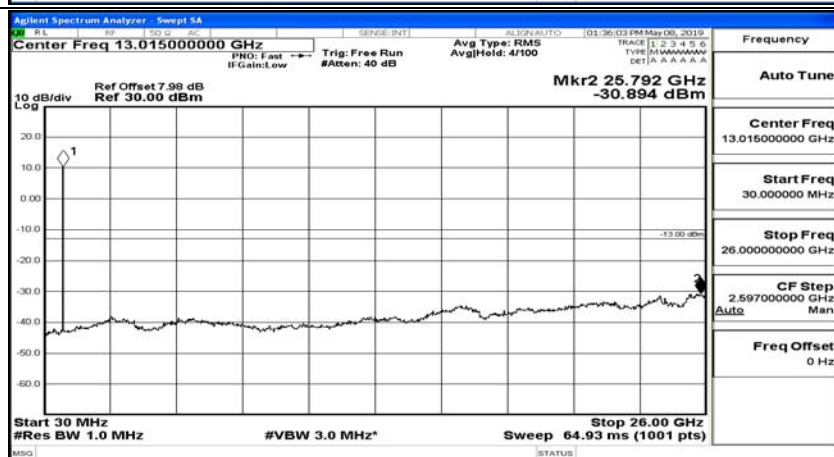
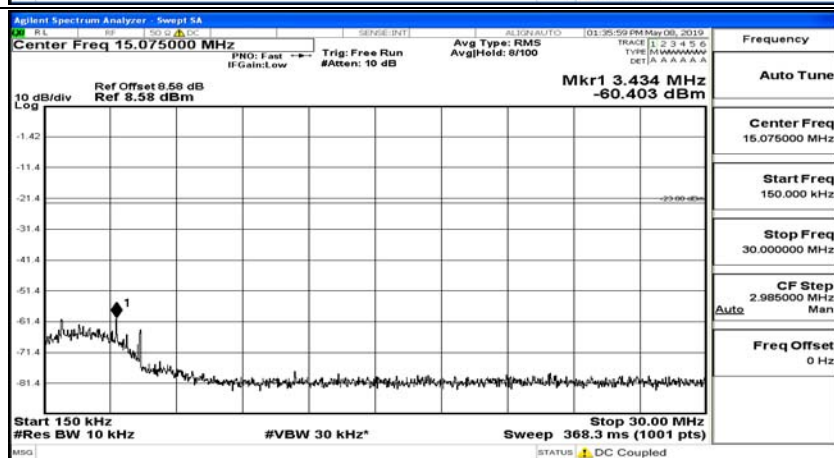
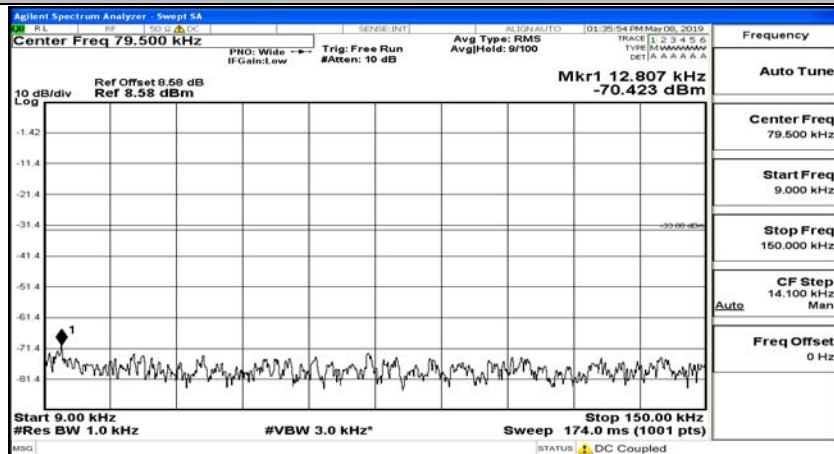


Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

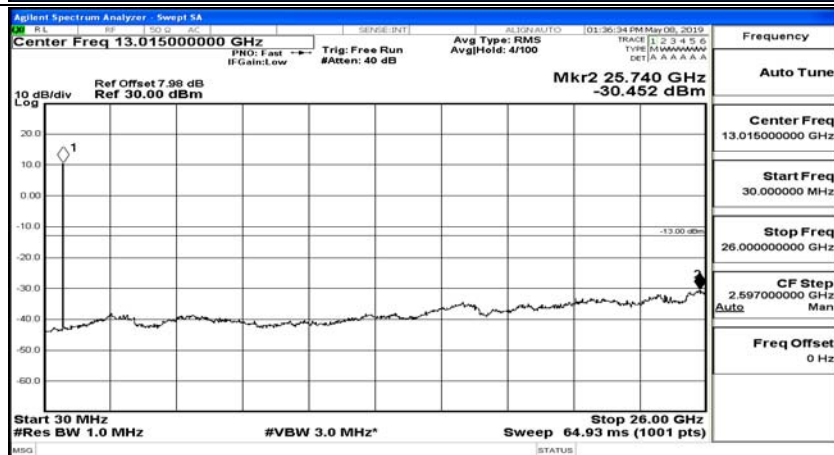
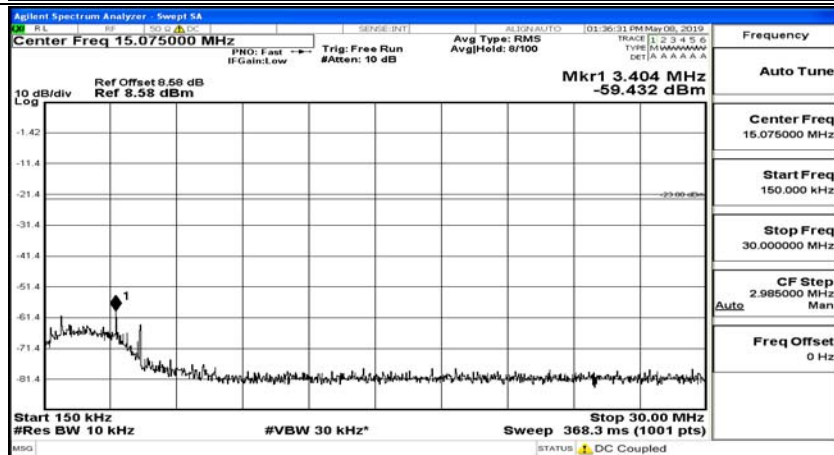
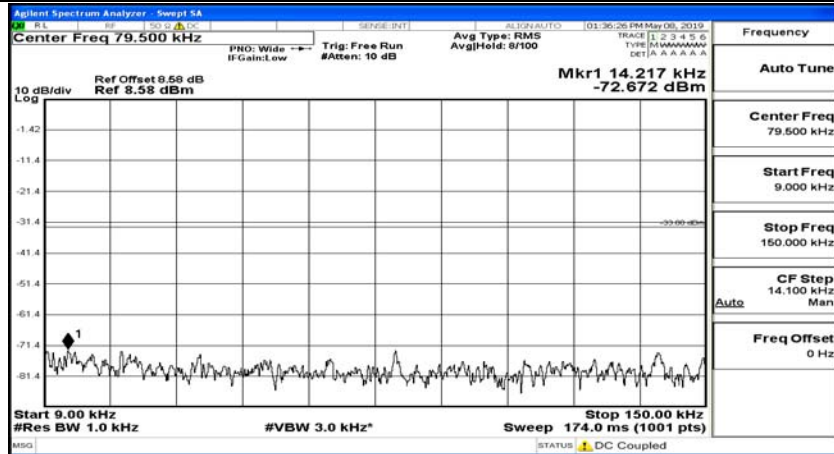


A.5 Conducted Spurious Emission

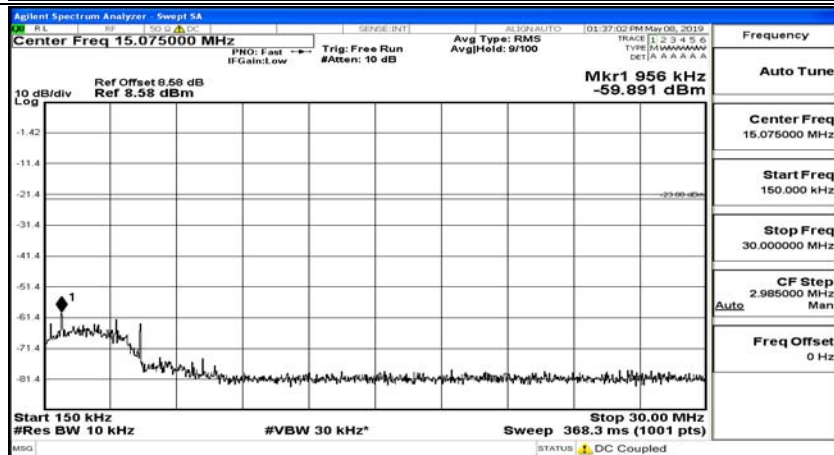
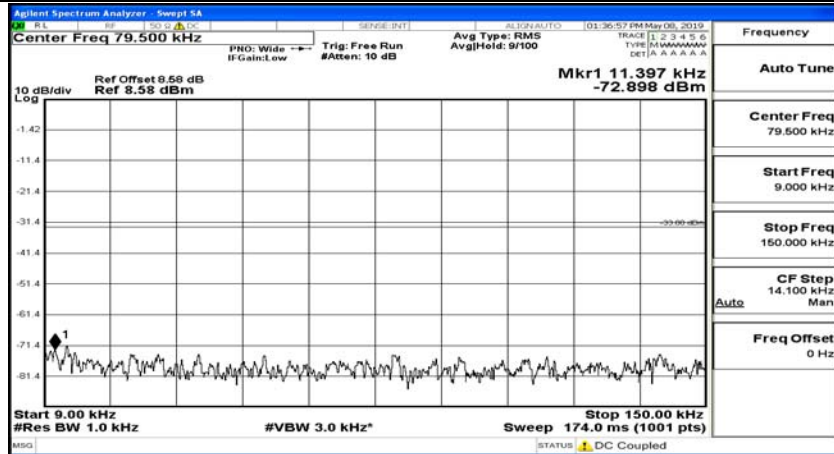
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



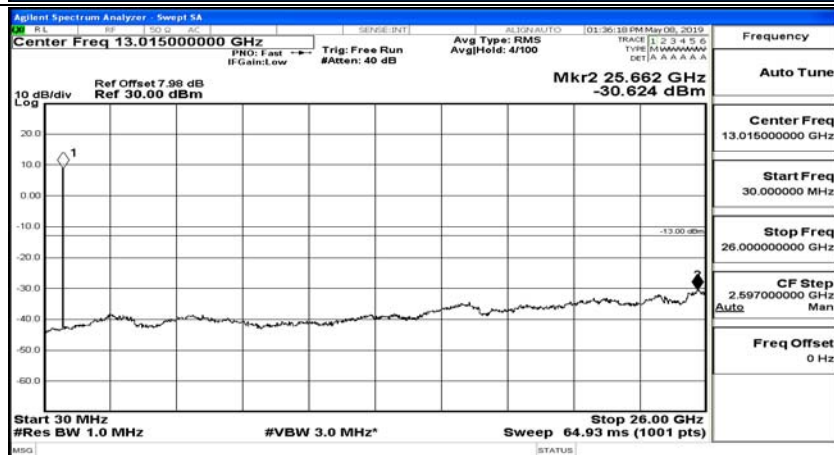
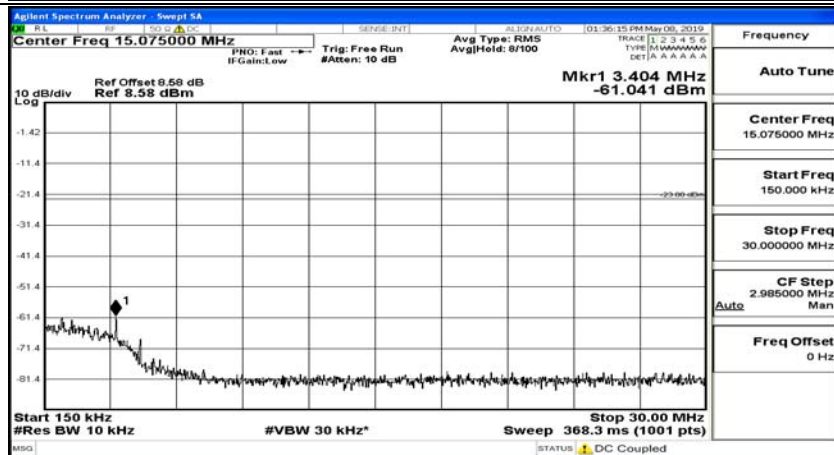
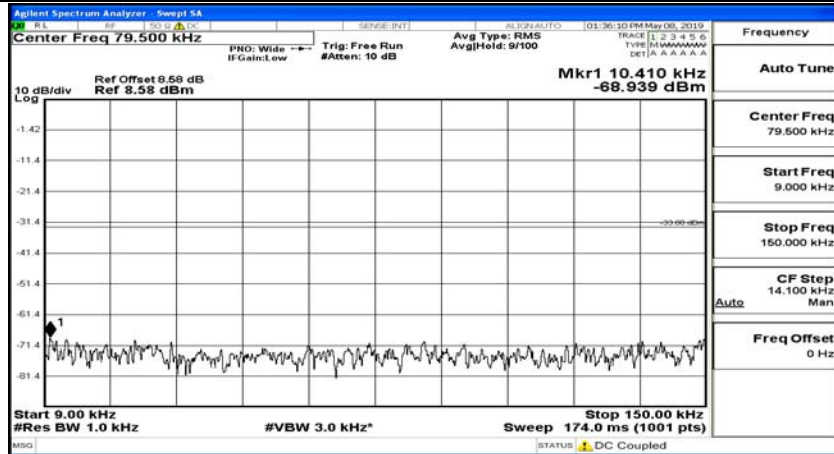
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



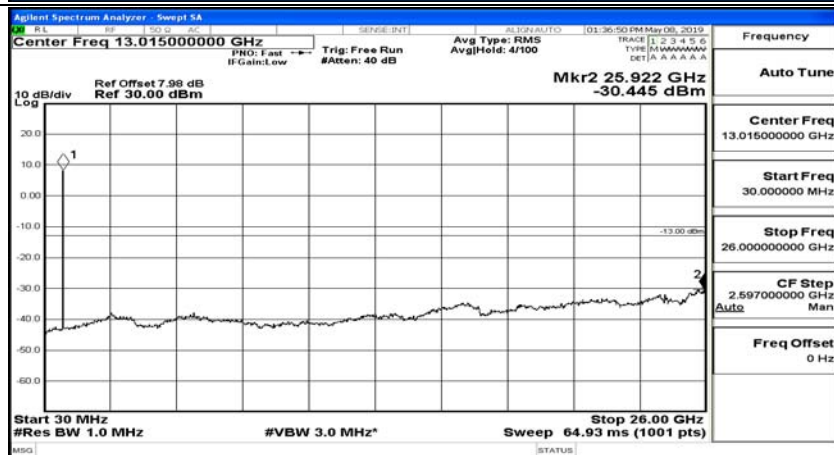
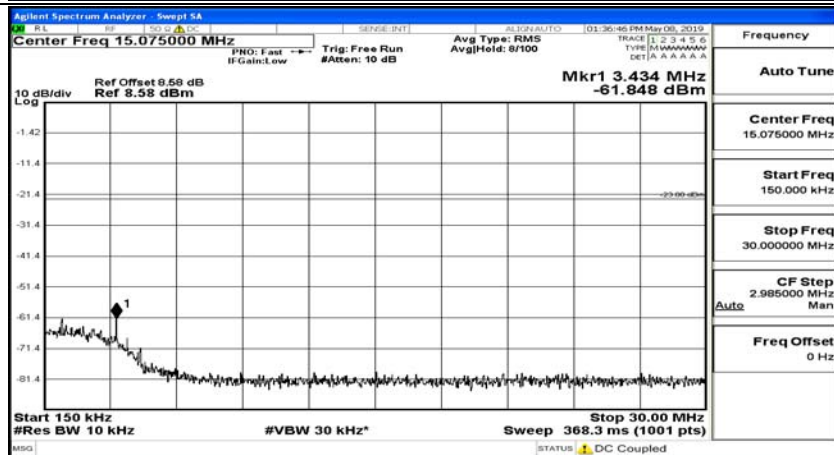
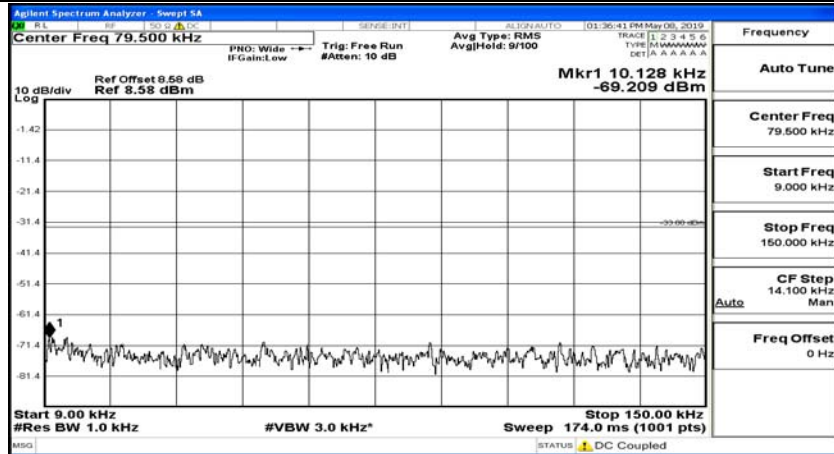
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



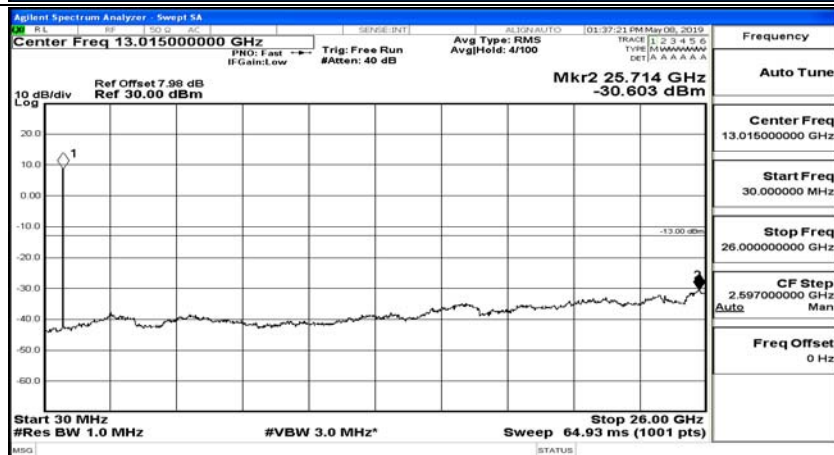
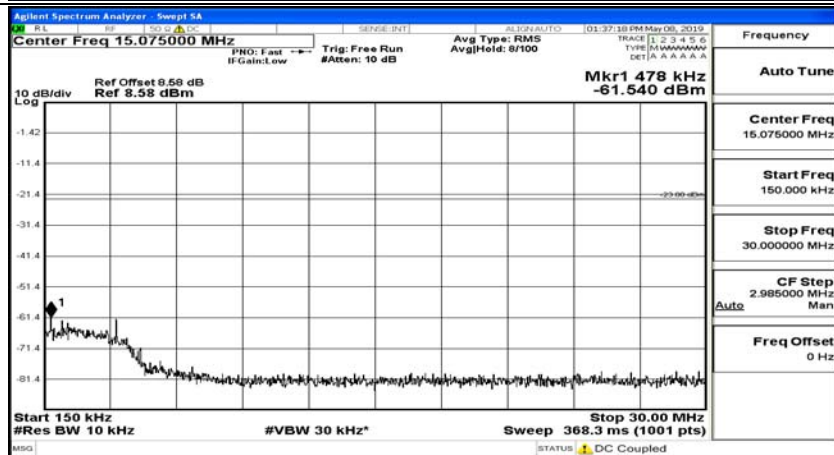
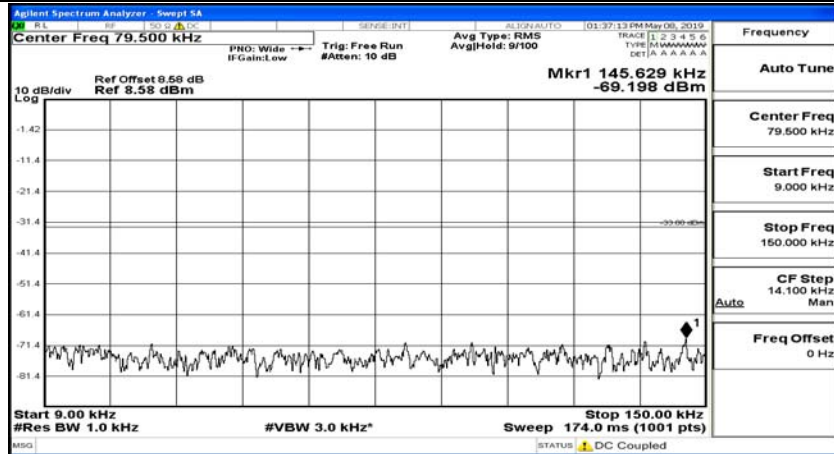
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



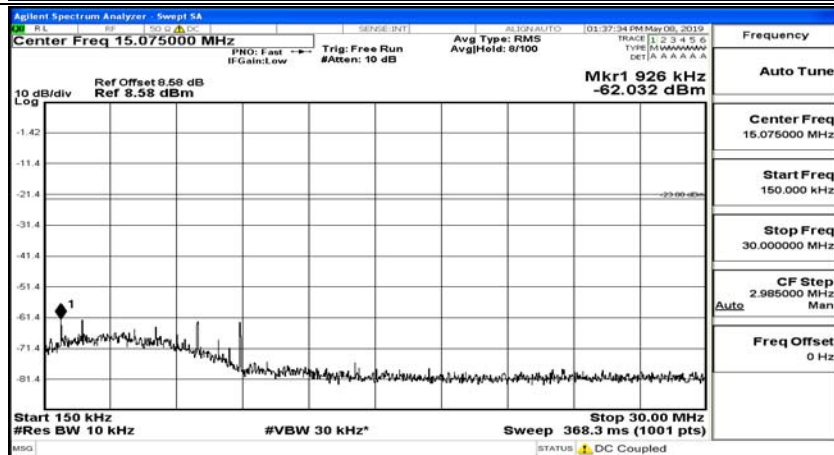
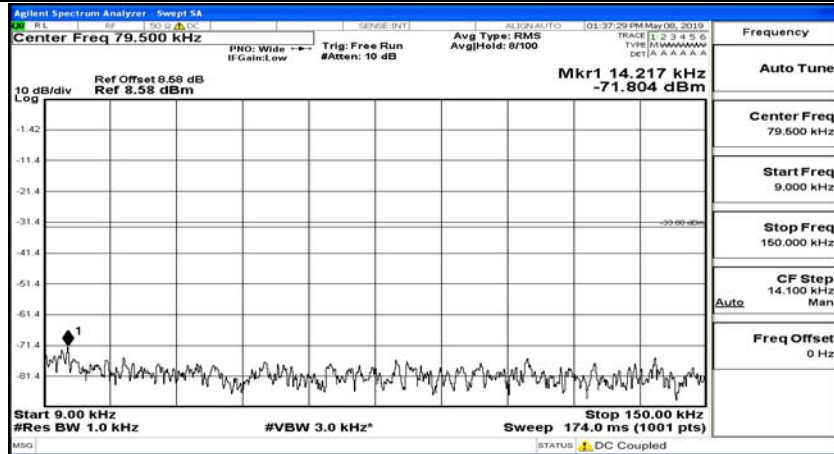
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



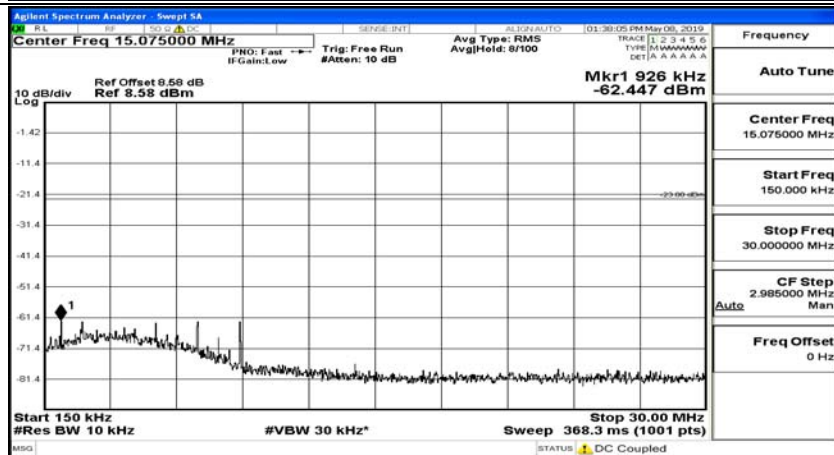
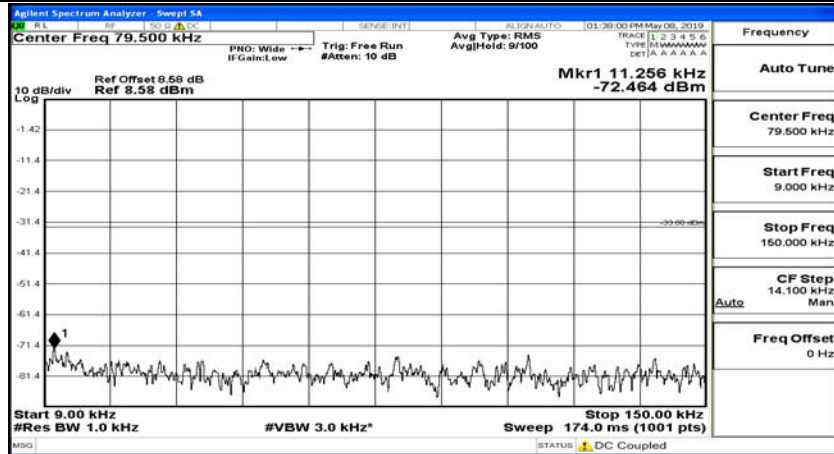
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



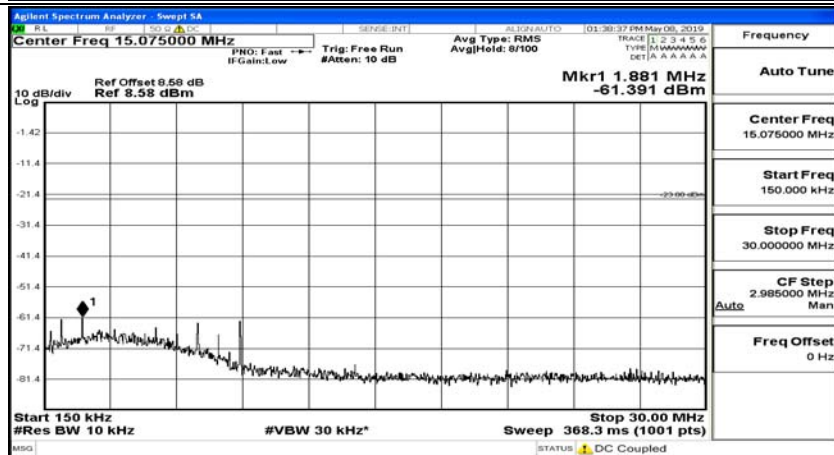
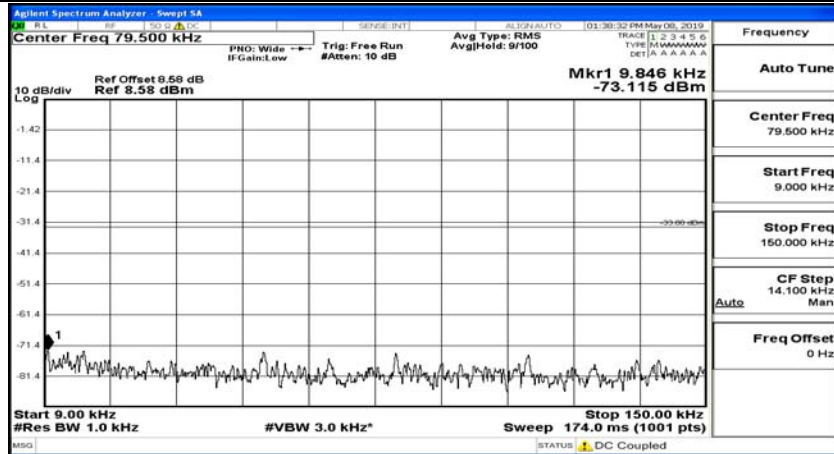
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



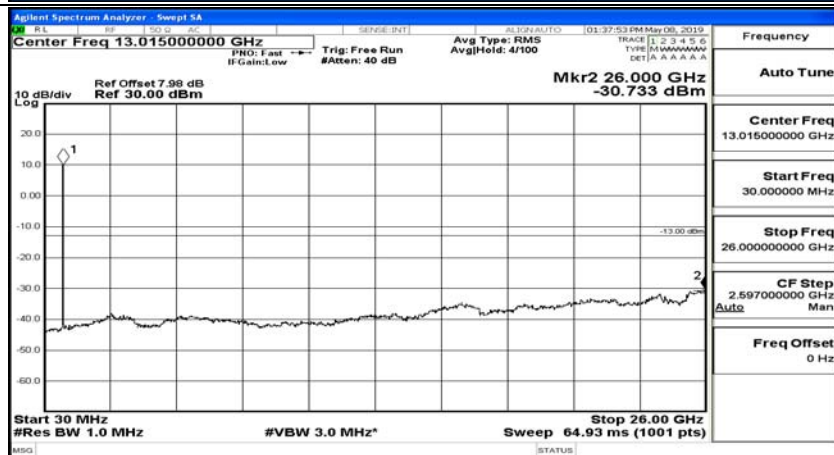
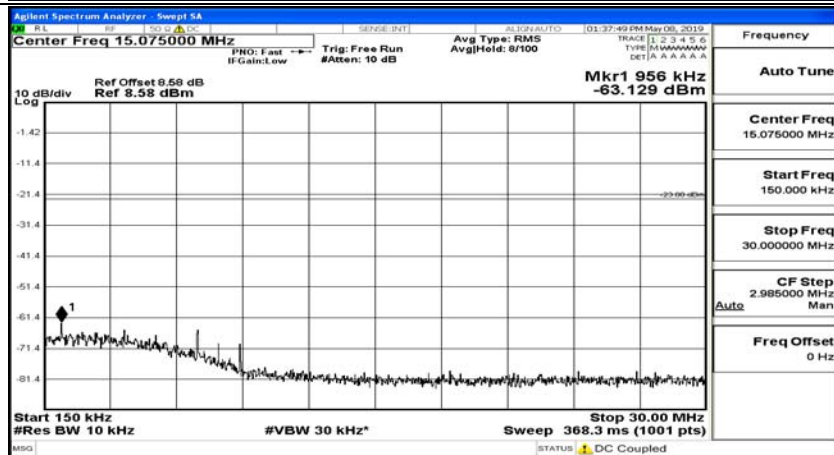
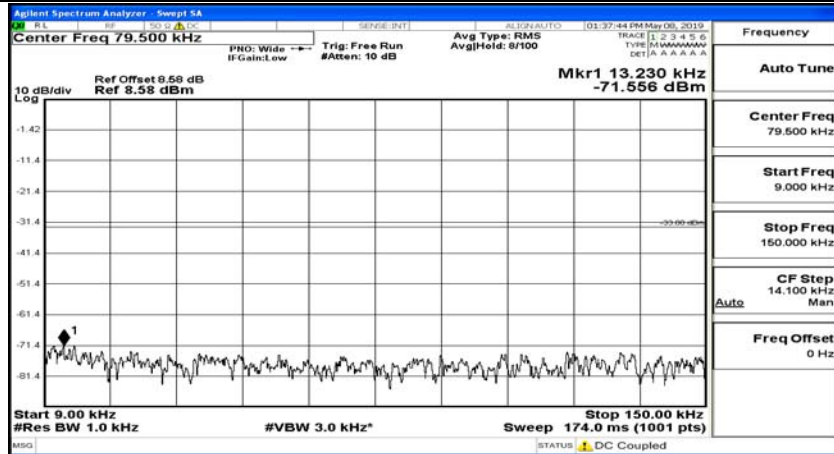
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



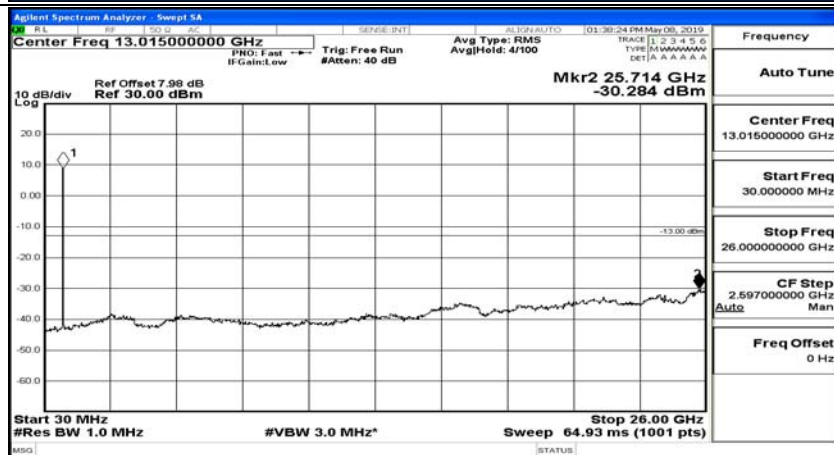
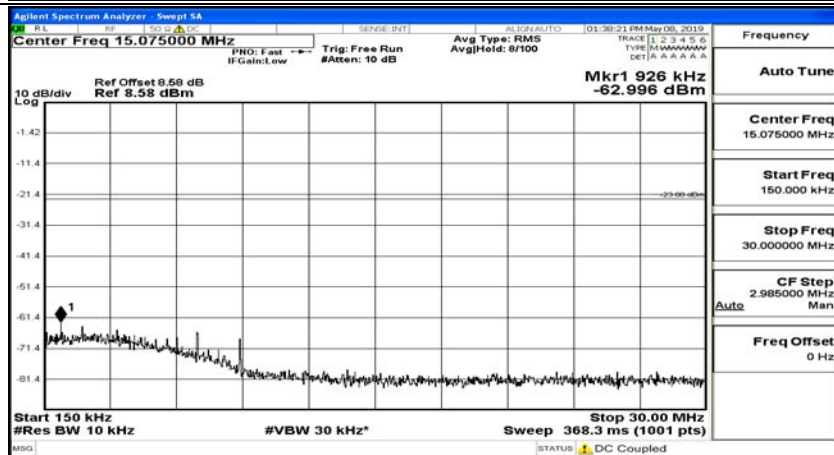
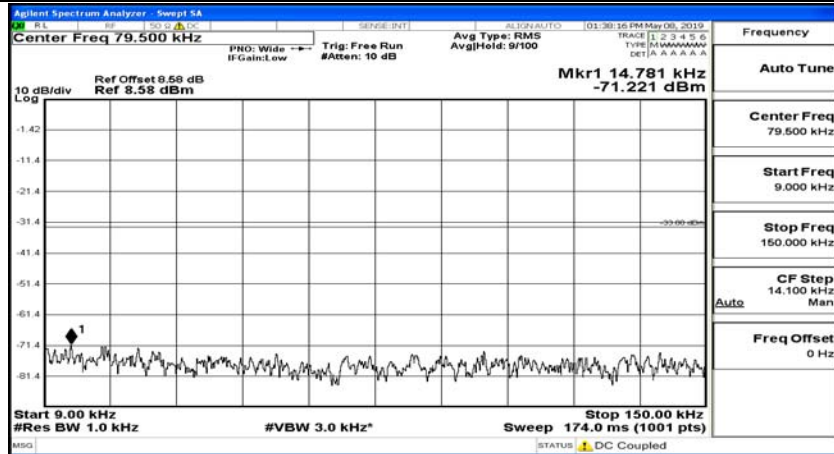
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

