

Appendix D: Test Data for E-UTRA Band 12

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: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.39	22.78	PASS
		1	3	23.39	22.79	PASS
		1	5	23.43	22.66	PASS
		3	0	23.31	22.67	PASS
		3	2	23.60	22.73	PASS
		3	3	23.42	22.59	PASS
		6	0	22.49	21.59	PASS
	MCH	1	0	23.42	22.88	PASS
		1	3	23.51	23.05	PASS
		1	5	23.52	22.91	PASS
		3	0	23.42	22.41	PASS
		3	2	23.49	22.58	PASS
		3	3	23.43	22.58	PASS
		6	0	22.50	21.40	PASS
	HCH	1	0	23.79	22.96	PASS
		1	3	24.06	23.09	PASS
		1	5	24.04	23.65	PASS
		3	0	23.86	22.87	PASS
		3	2	23.88	22.95	PASS
		3	3	23.90	22.90	PASS
		6	0	22.82	21.97	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)

Modulation	Channel	RB Configuration		Average Power [dBm]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.48	22.78	PASS
		1	7	23.38	22.85	PASS
		1	14	23.25	22.57	PASS
		8	0	22.60	21.59	PASS
		8	4	22.39	21.53	PASS
		8	7	22.37	21.41	PASS
		15	0	22.53	21.36	PASS
	MCH	1	0	23.45	22.78	PASS
		1	7	23.57	22.79	PASS
		1	14	23.54	22.94	PASS
		8	0	22.43	21.45	PASS
		8	4	22.42	21.57	PASS
		8	7	22.50	21.56	PASS
		15	0	22.52	21.47	PASS
	HCH	1	0	23.74	22.97	PASS
		1	7	23.67	22.91	PASS
		1	14	23.97	23.20	PASS
		8	0	22.69	21.69	PASS
		8	4	22.72	21.78	PASS
		8	7	22.89	21.79	PASS
		15	0	22.77	21.83	PASS

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	23.54	22.96	PASS
		1	12	23.31	22.63	PASS
		1	24	22.79	22.05	PASS
		12	0	22.54	21.72	PASS
		12	6	22.44	21.55	PASS
		12	13	22.39	21.56	PASS
		25	0	22.46	21.46	PASS
	MCH	1	0	23.47	22.88	PASS
		1	12	23.45	22.86	PASS
		1	24	23.66	22.98	PASS
		12	0	22.54	21.66	PASS
		12	6	22.42	21.63	PASS
		12	13	22.60	21.69	PASS
		25	0	22.49	21.50	PASS
	HCH	1	0	23.80	22.86	PASS
		1	12	23.59	22.58	PASS
		1	24	23.78	22.80	PASS
		12	0	22.71	21.74	PASS
		12	6	22.73	21.67	PASS
		12	13	22.83	21.89	PASS
		25	0	22.83	21.79	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	23.77	23.08	PASS
		1	24	23.26	22.24	PASS
		1	49	23.60	22.79	PASS
		25	0	22.44	21.43	PASS
		25	12	22.38	21.38	PASS
		25	25	22.43	21.49	PASS
		50	0	22.52	21.53	PASS
	MCH	1	0	23.52	23.00	PASS
		1	24	23.48	22.81	PASS
		1	49	23.81	23.02	PASS
		25	0	22.47	21.52	PASS
		25	12	22.51	21.50	PASS
		25	25	22.68	21.60	PASS
		50	0	22.47	21.51	PASS
	HCH	1	0	23.65	23.06	PASS
		1	24	24.26	23.57	PASS
		1	49	23.12	22.67	PASS
		25	0	22.60	21.61	PASS
		25	12	22.70	21.81	PASS
		25	25	22.65	21.71	PASS
		50	0	22.76	21.70	PASS

A.2 Peak-to-Average Ratio

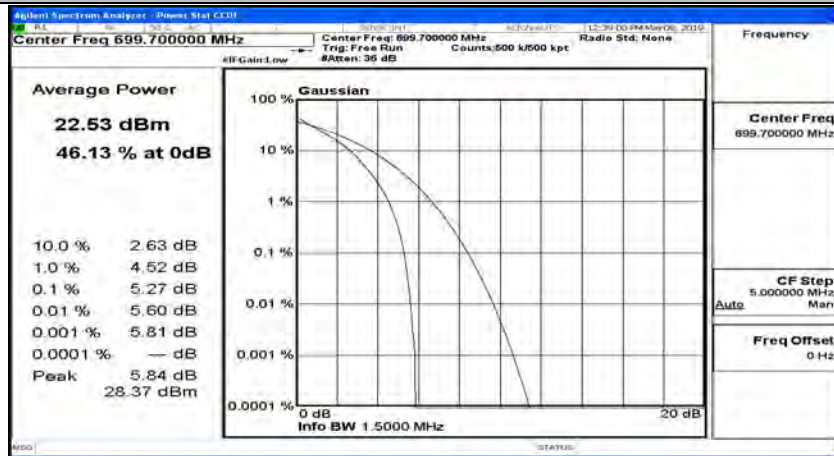
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.27	<13	PASS
	MCH	5.38	<13	PASS
	HCH	4.77	<13	PASS
16QAM	LCH	6.16	<13	PASS
	MCH	6.28	<13	PASS
	HCH	5.57	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.08	<13	PASS
	MCH	5.45	<13	PASS
	HCH	4.8	<13	PASS
16QAM	LCH	5.99	<13	PASS
	MCH	6.32	<13	PASS
	HCH	5.56	<13	PASS

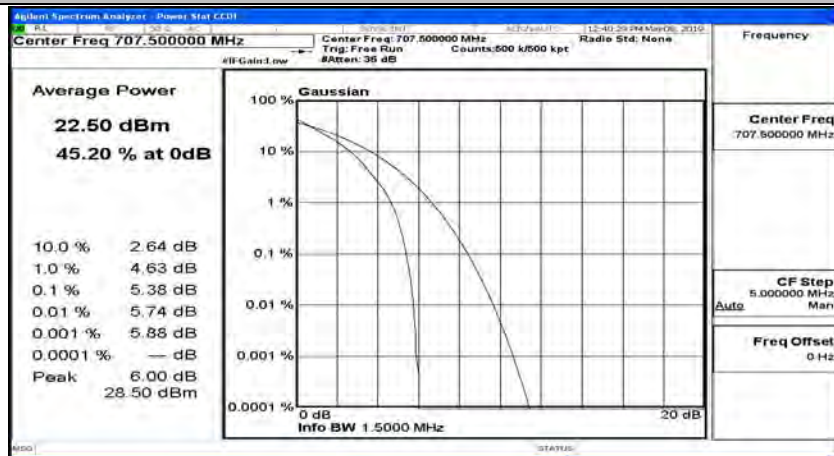
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.83	<13	PASS
	MCH	5.36	<13	PASS
	HCH	4.77	<13	PASS
16QAM	LCH	5.68	<13	PASS
	MCH	6.15	<13	PASS
	HCH	5.63	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.11	<13	PASS
	MCH	5.33	<13	PASS
	HCH	4.93	<13	PASS
16QAM	LCH	5.84	<13	PASS
	MCH	6.04	<13	PASS
	HCH	5.79	<13	PASS

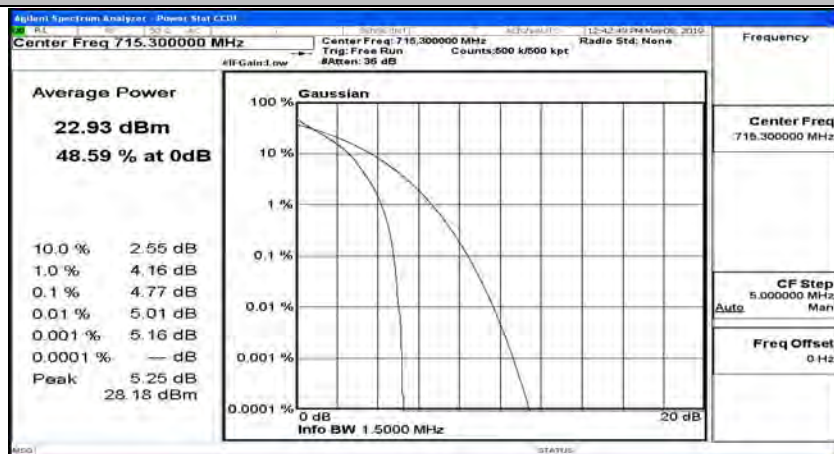
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



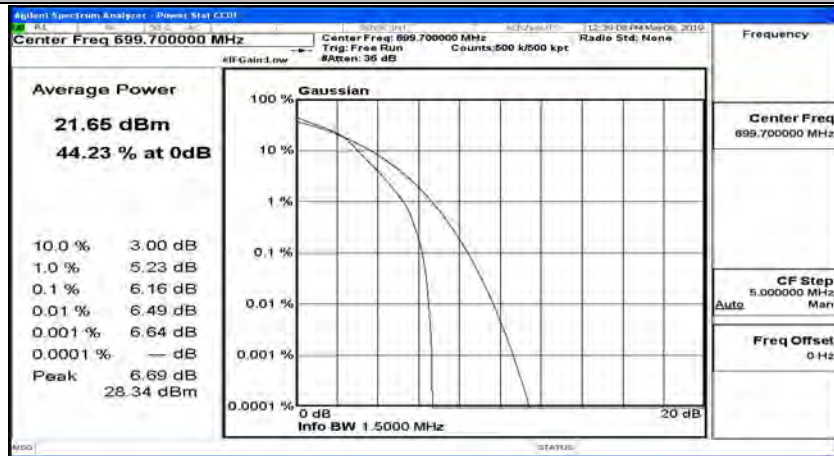
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



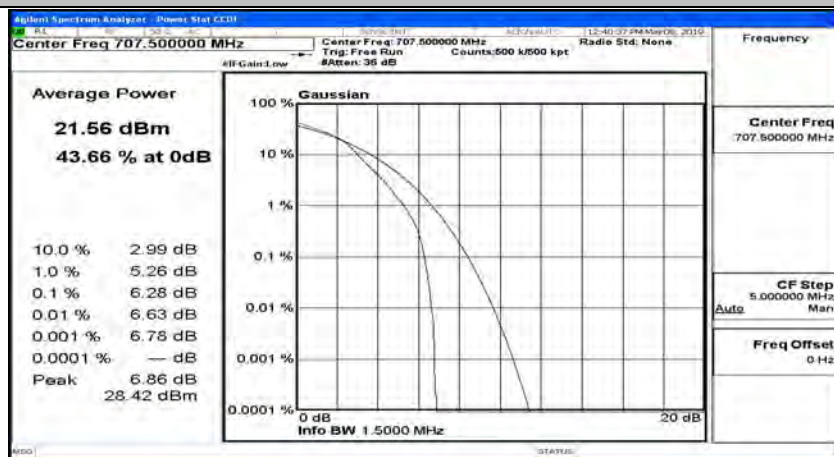
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



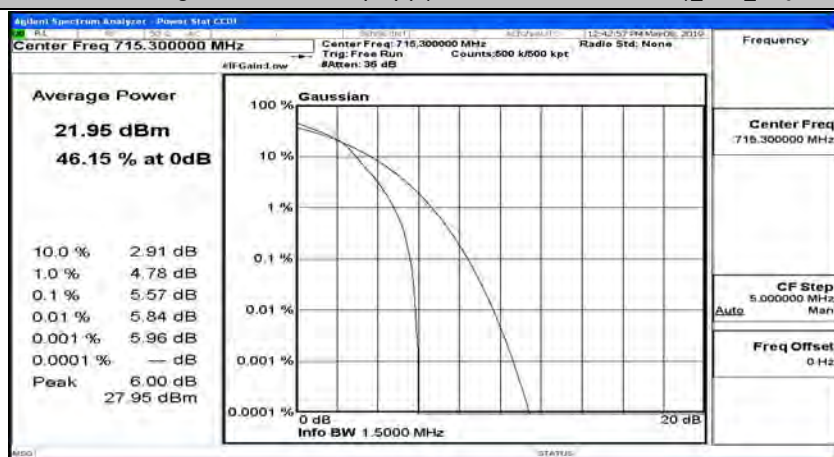
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



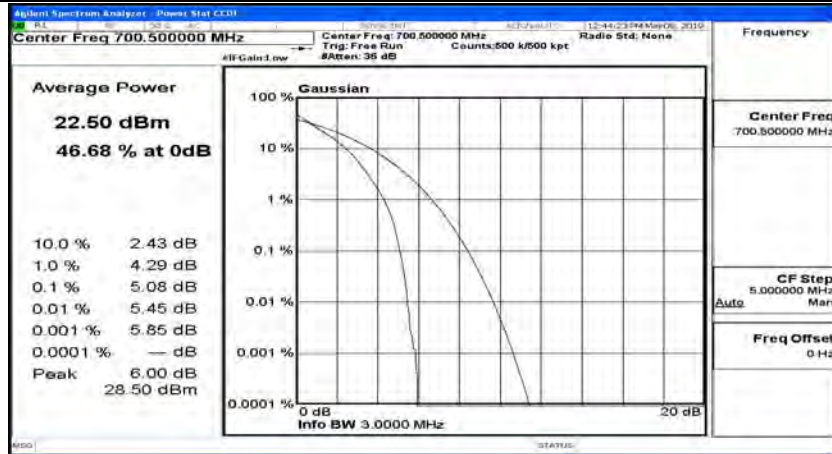
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



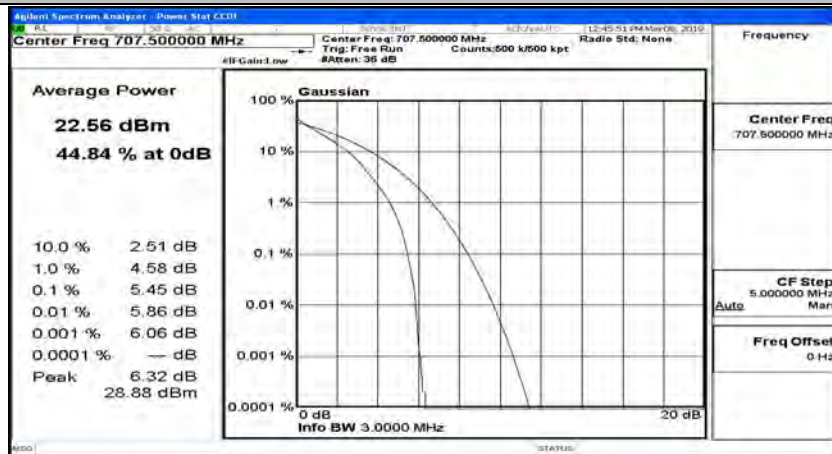
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



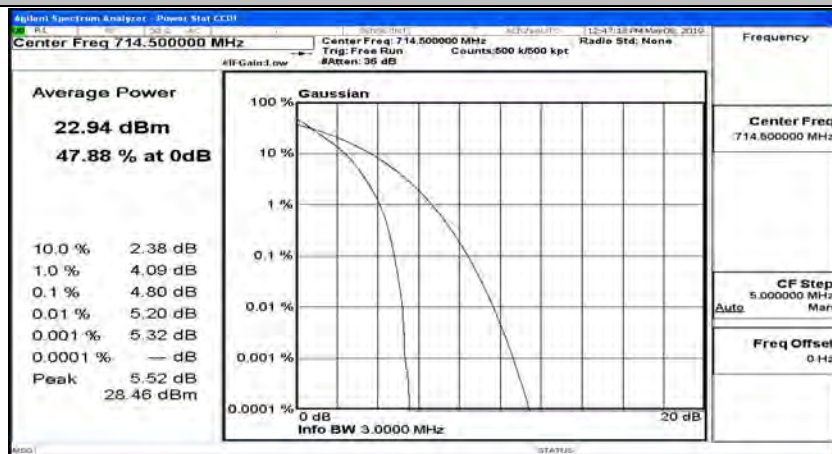
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



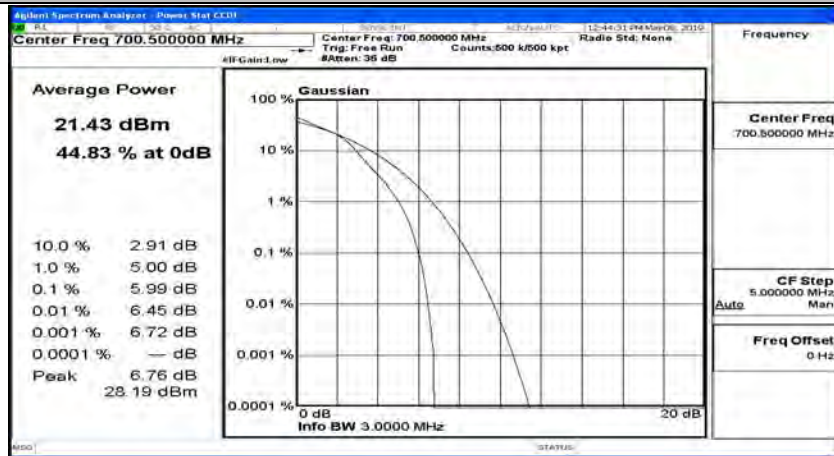
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



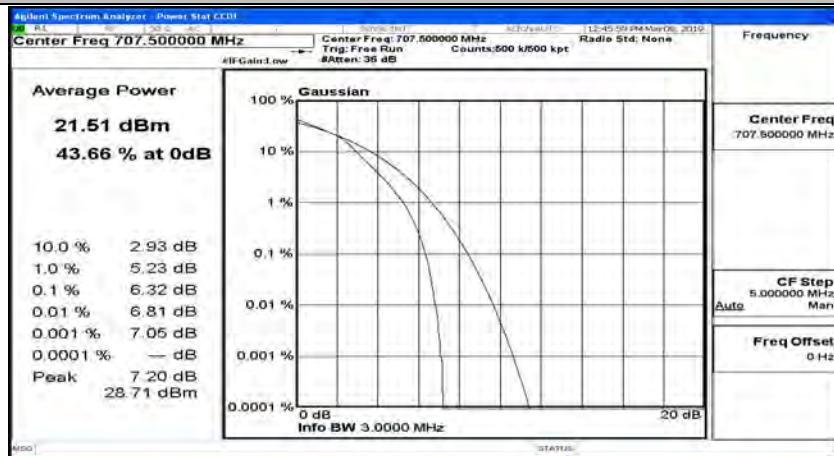
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



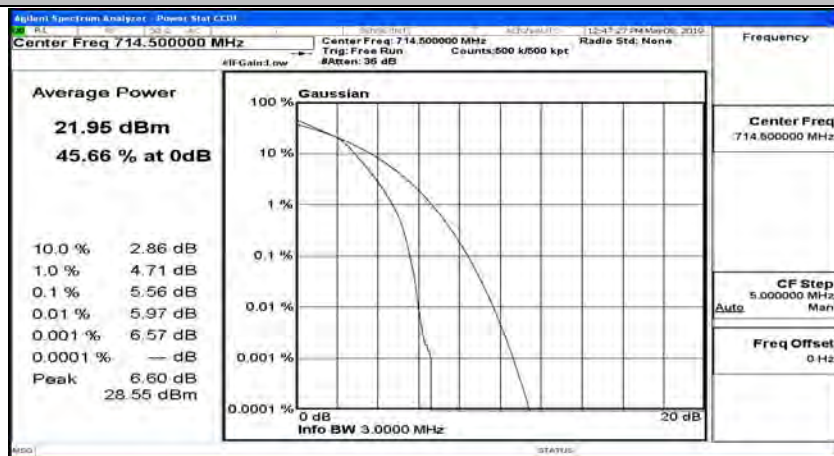
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



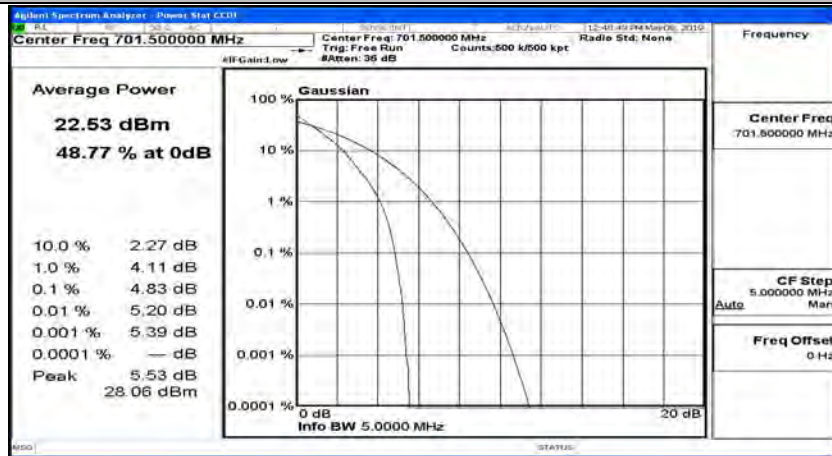
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



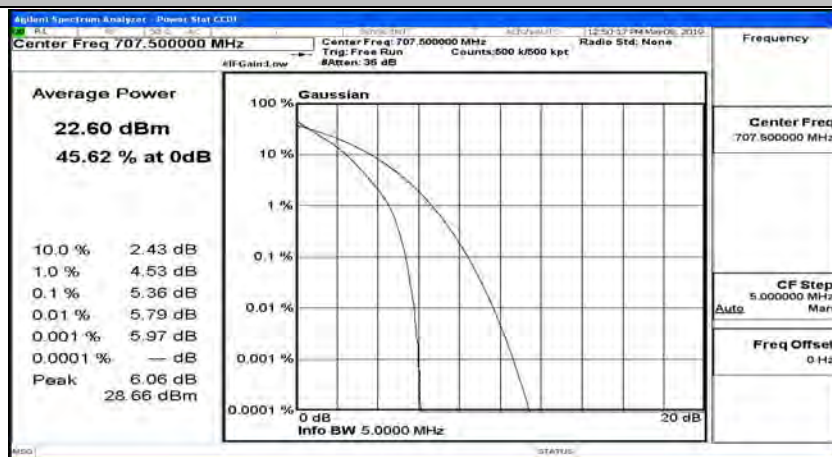
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



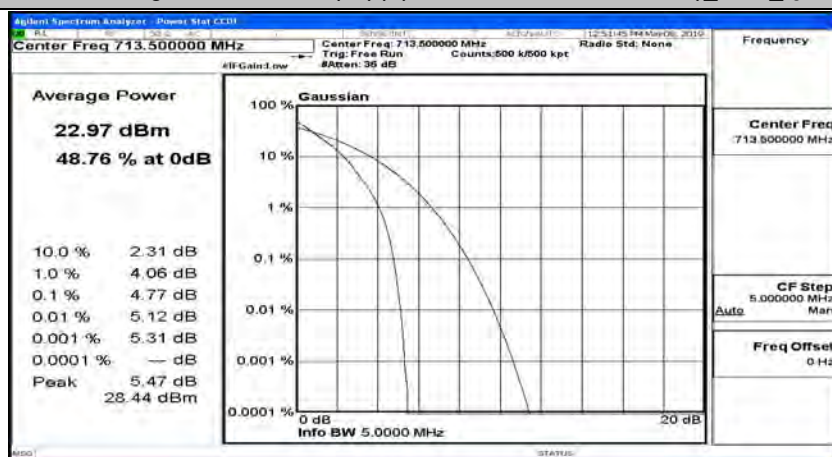
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



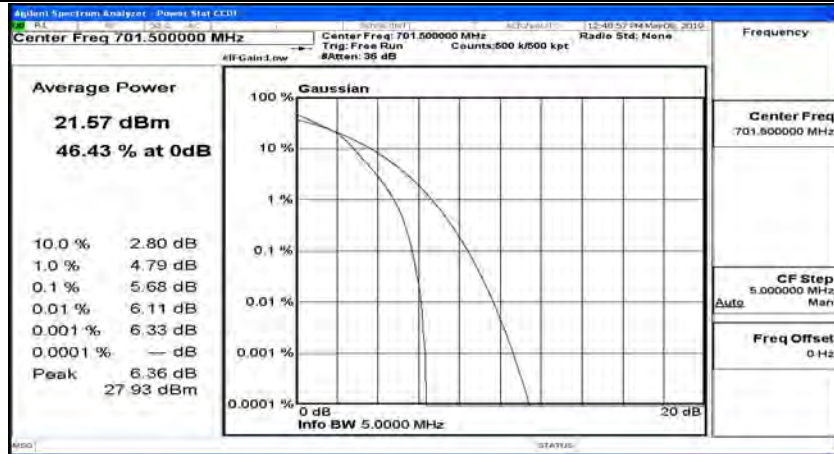
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



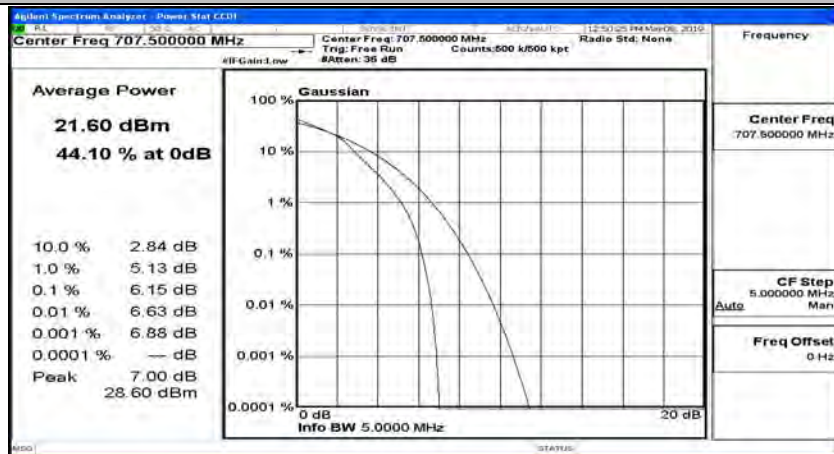
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



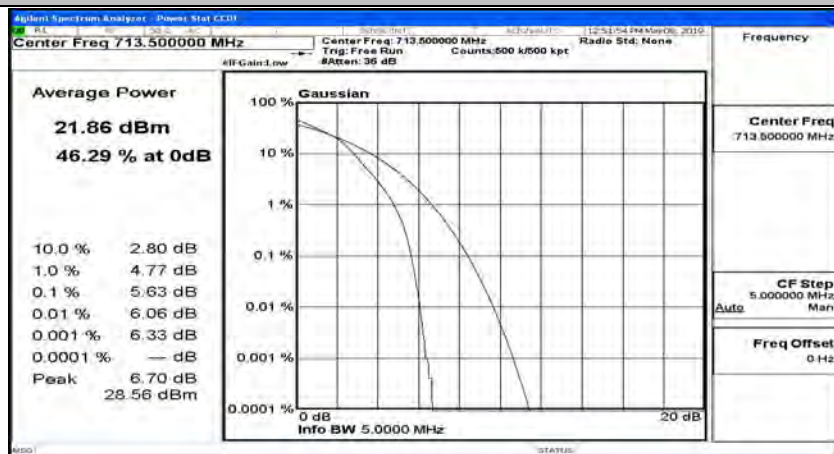
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



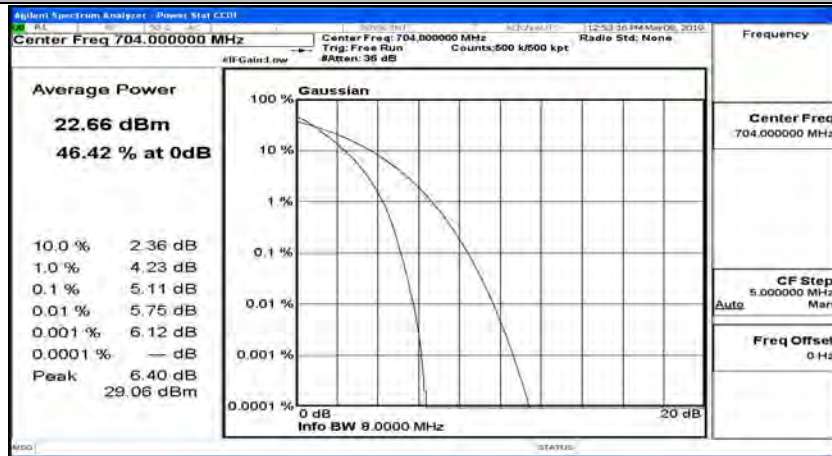
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



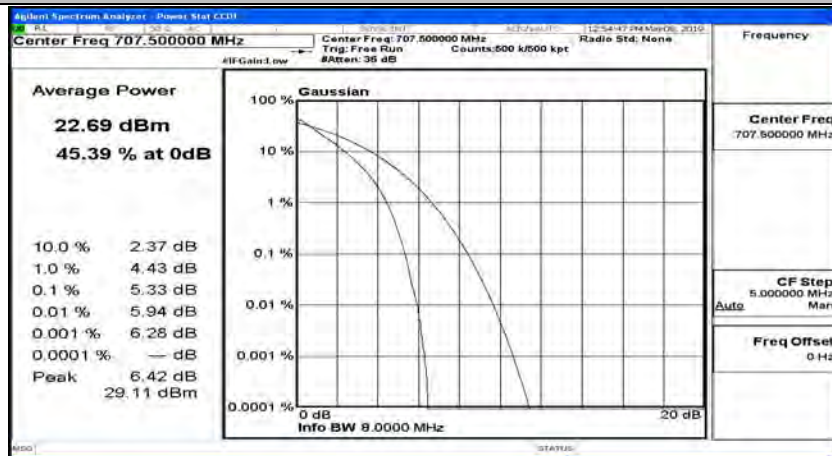
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



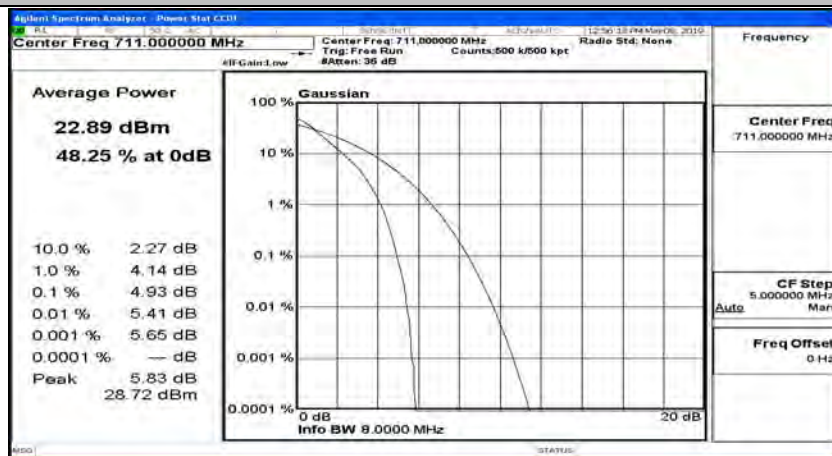
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



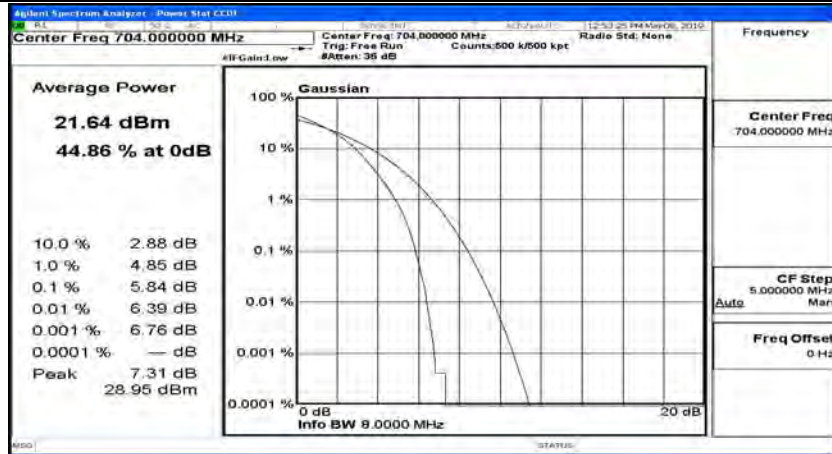
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



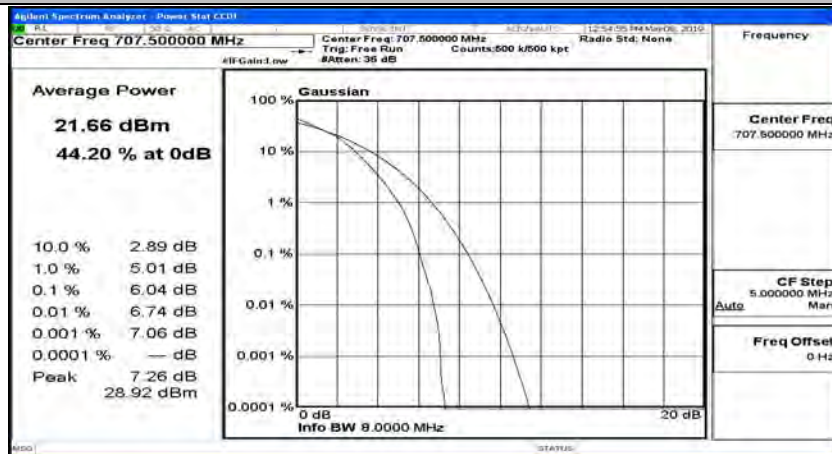
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



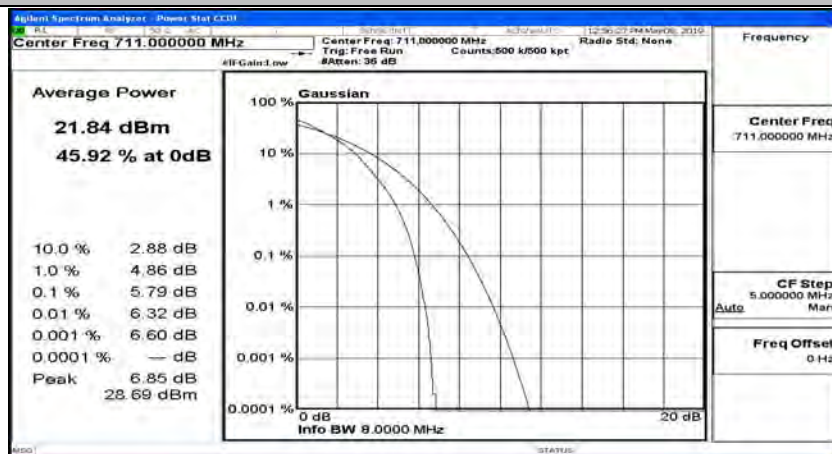
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

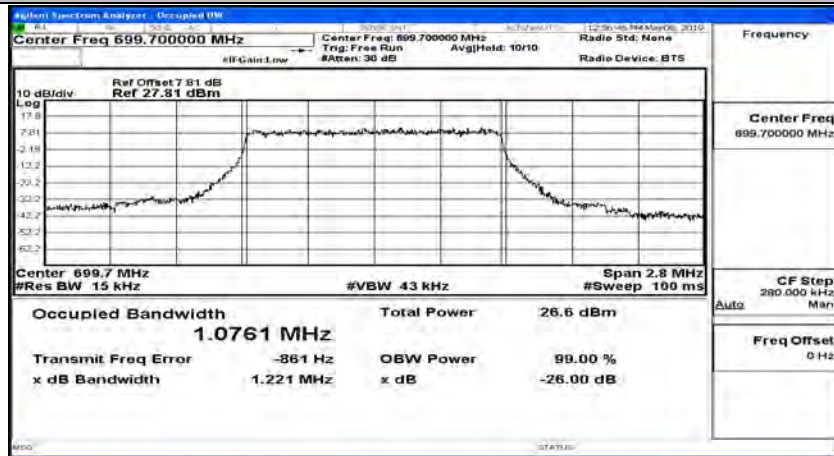
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0761	1.221	PASS
	MCH	1.0769	1.223	PASS
	HCH	1.0792	1.222	PASS
16QAM	LCH	1.0800	1.238	PASS
	MCH	1.0776	1.232	PASS
	HCH	1.0758	1.237	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6763	2.890	PASS
	MCH	2.6870	2.896	PASS
	HCH	2.6846	2.899	PASS
16QAM	LCH	2.6812	2.876	PASS
	MCH	2.6861	2.918	PASS
	HCH	2.6886	2.894	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4727	4.744	PASS
	MCH	4.4756	4.806	PASS
	HCH	4.4668	4.761	PASS
16QAM	LCH	4.4537	4.798	PASS
	MCH	4.4822	4.814	PASS
	HCH	4.4652	4.777	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9174	9.401	PASS
	MCH	8.9623	9.572	PASS
	HCH	8.9179	9.412	PASS
16QAM	LCH	8.9263	9.435	PASS
	MCH	8.9555	9.539	PASS
	HCH	8.9212	9.416	PASS

EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



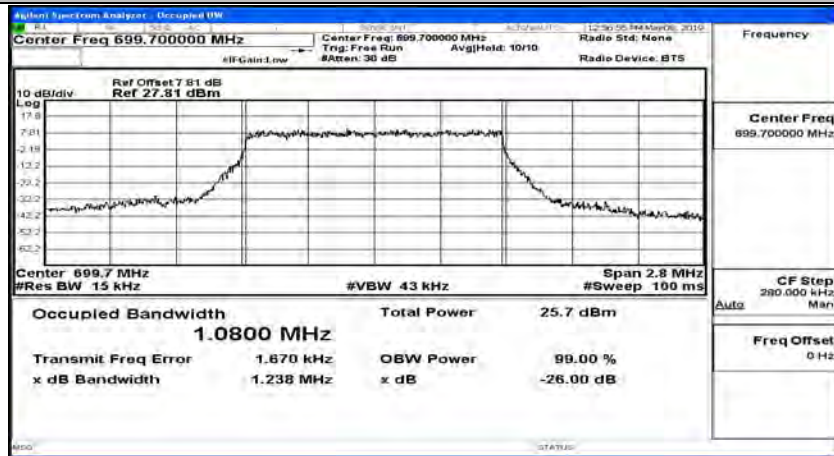
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



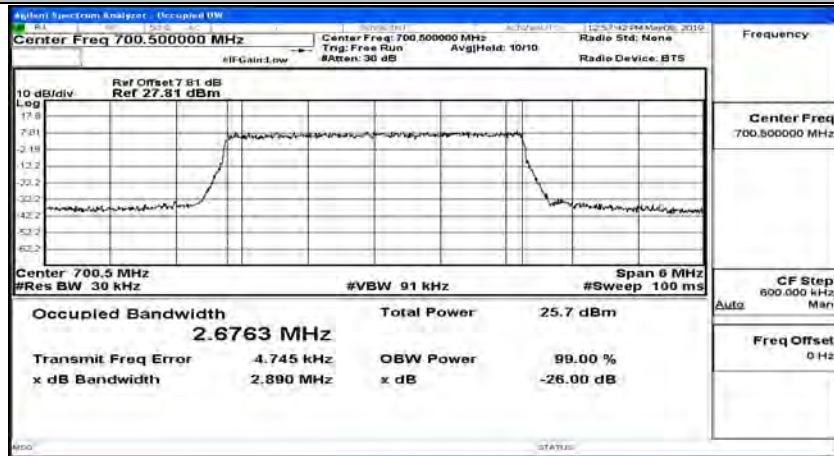
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



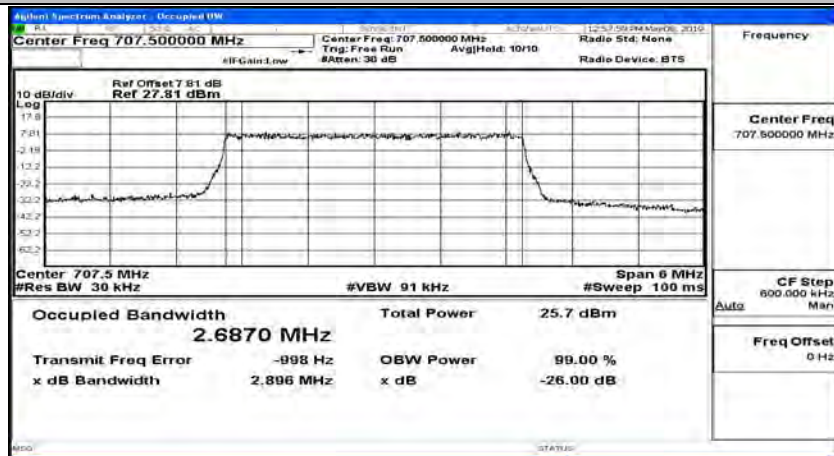
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



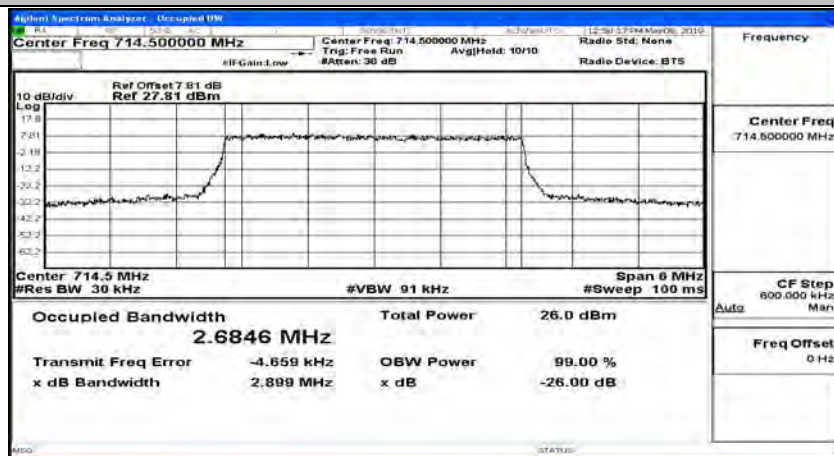
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



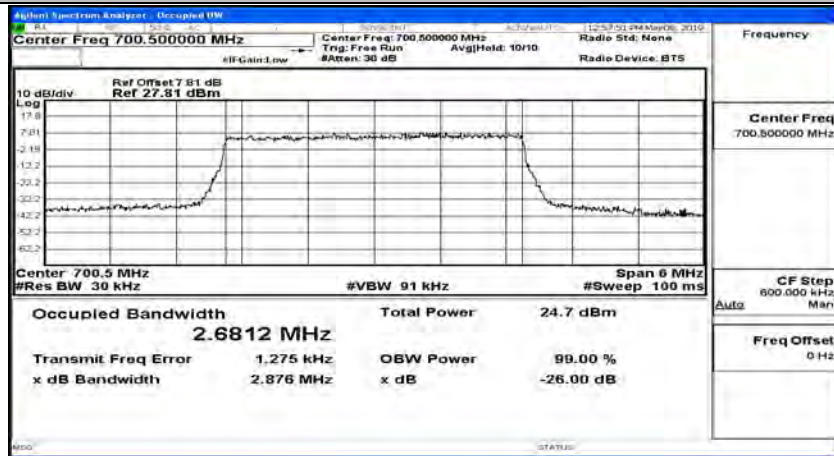
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



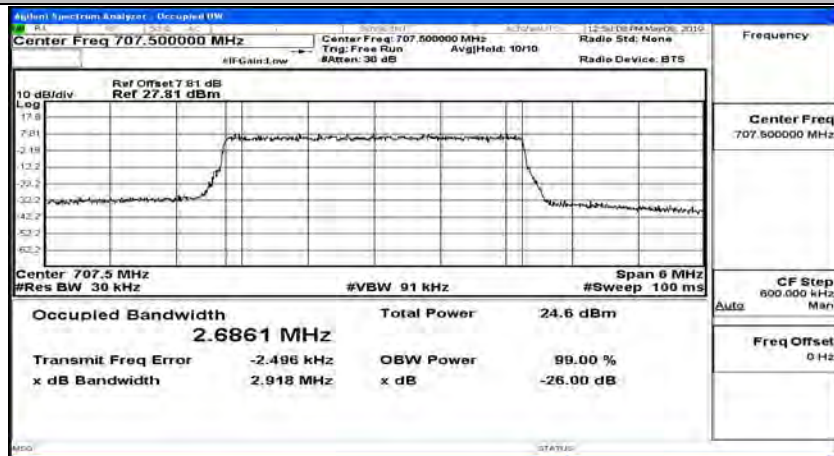
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



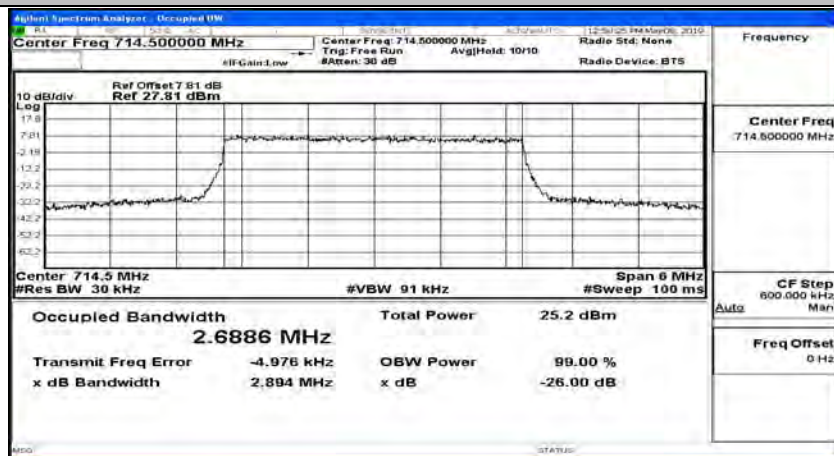
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



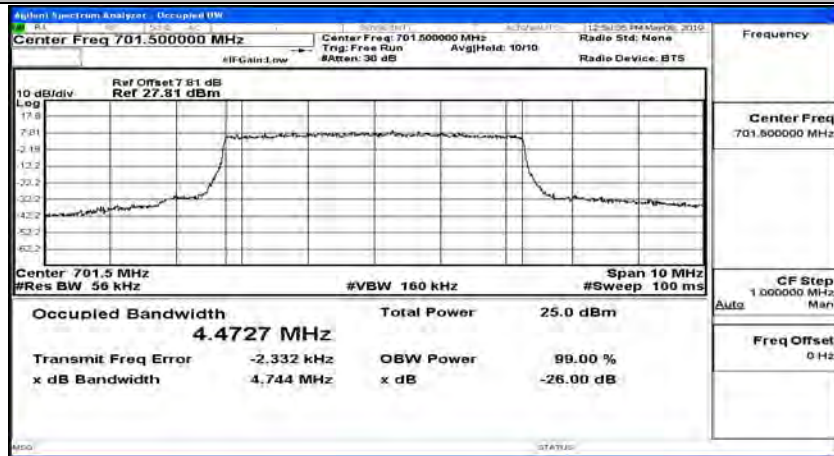
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



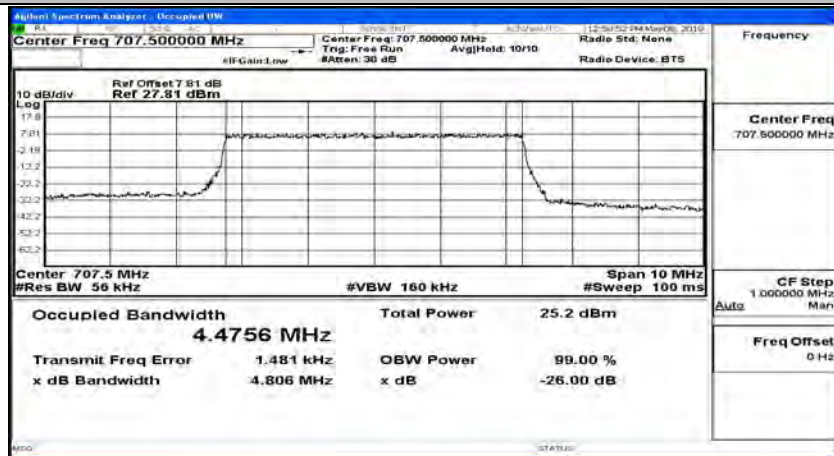
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



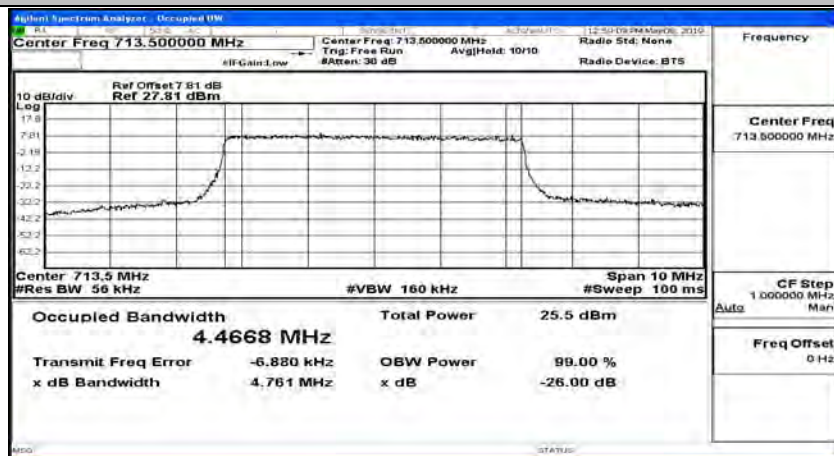
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



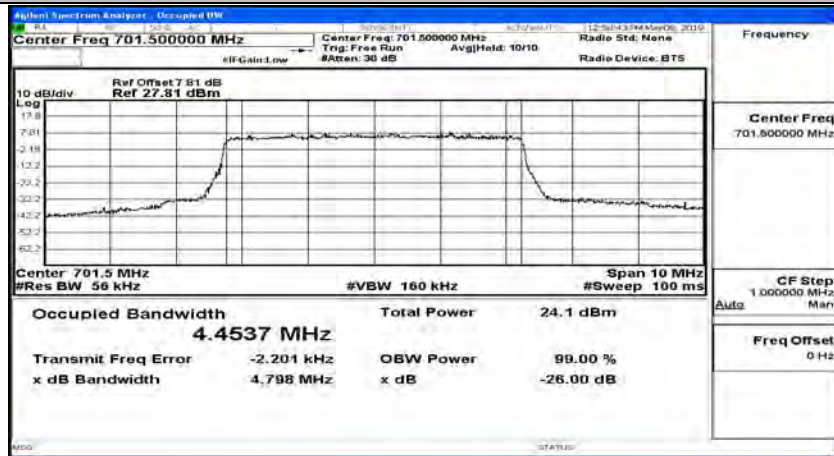
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



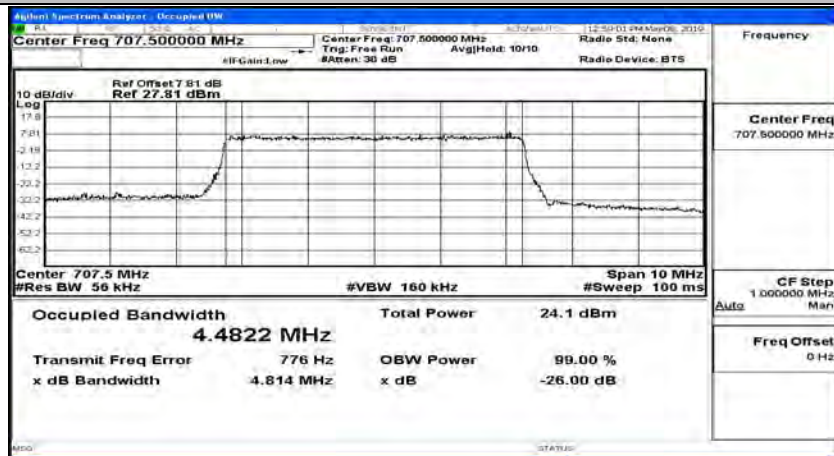
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



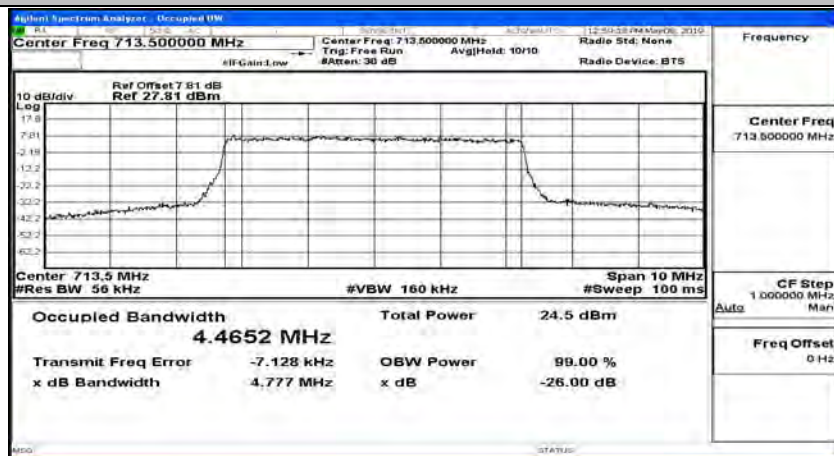
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



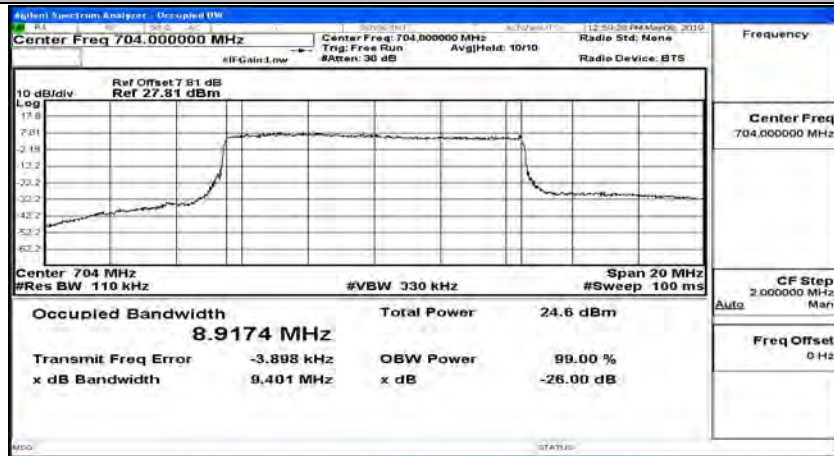
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



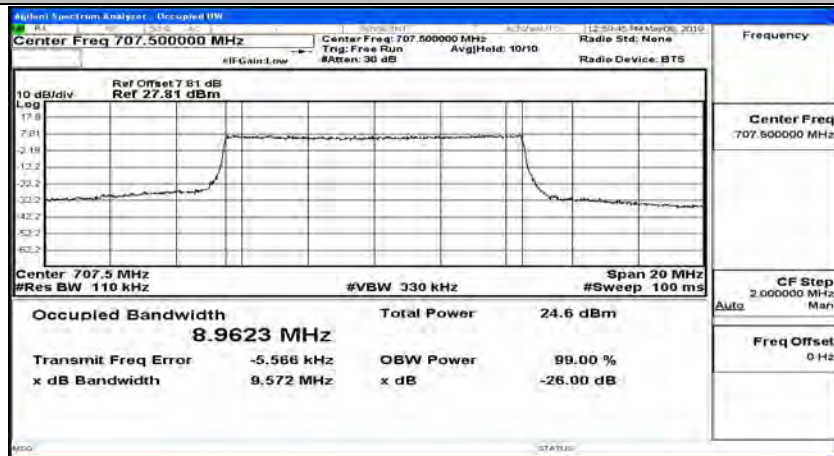
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



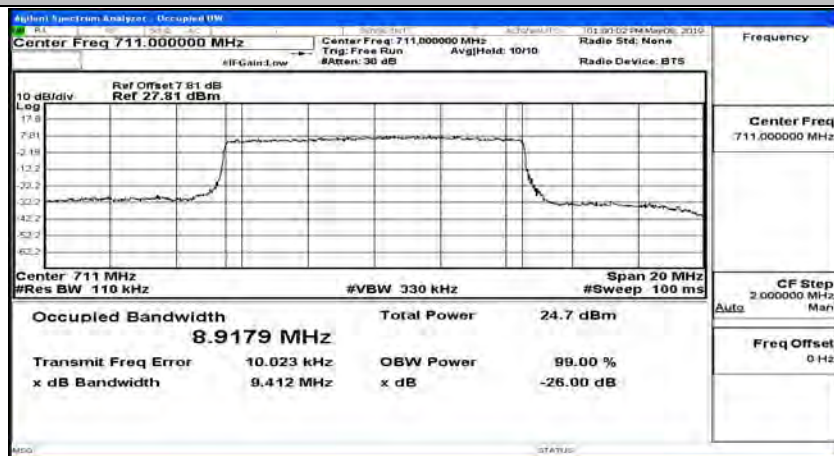
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



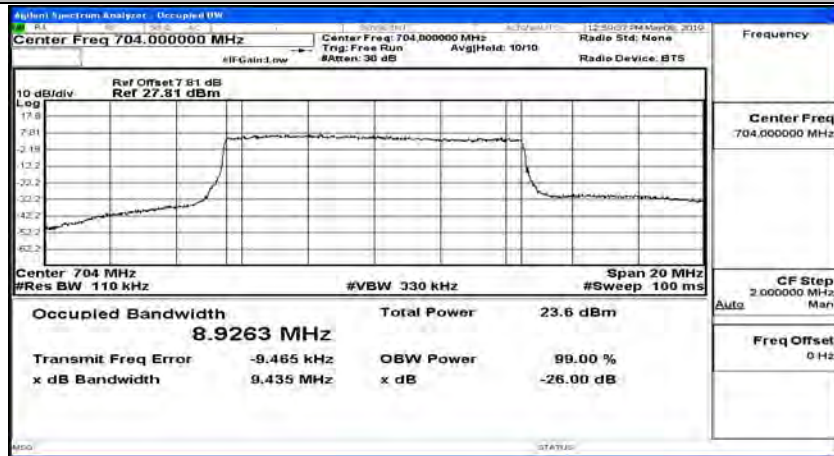
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



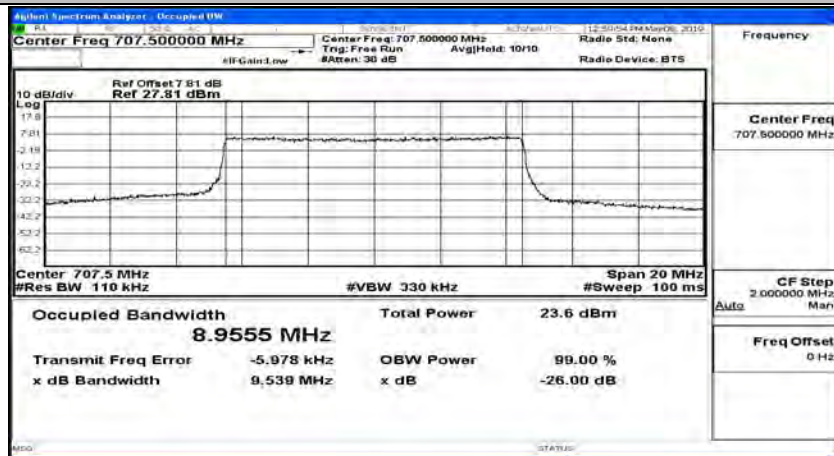
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



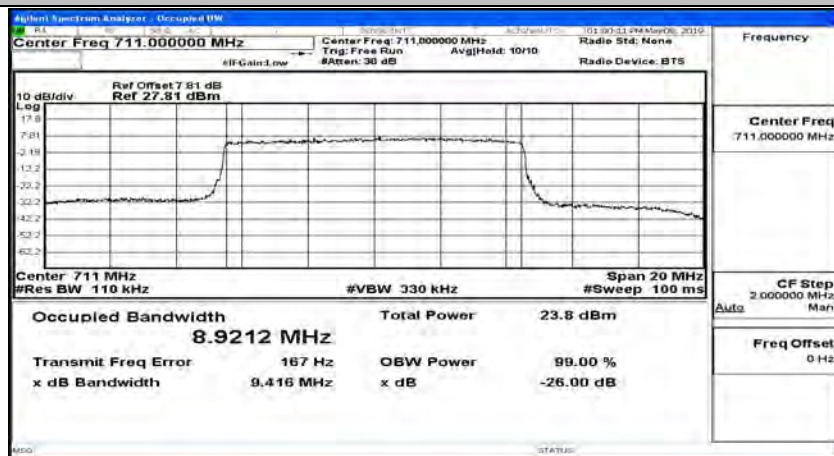
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

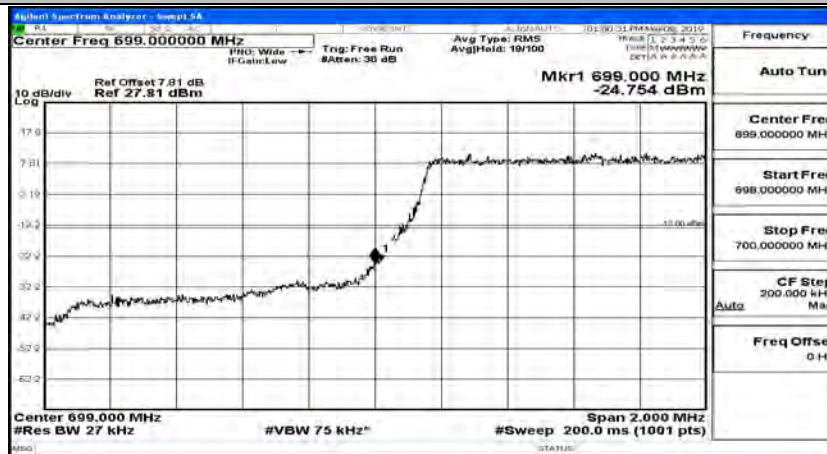


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



A.4 Band Edge

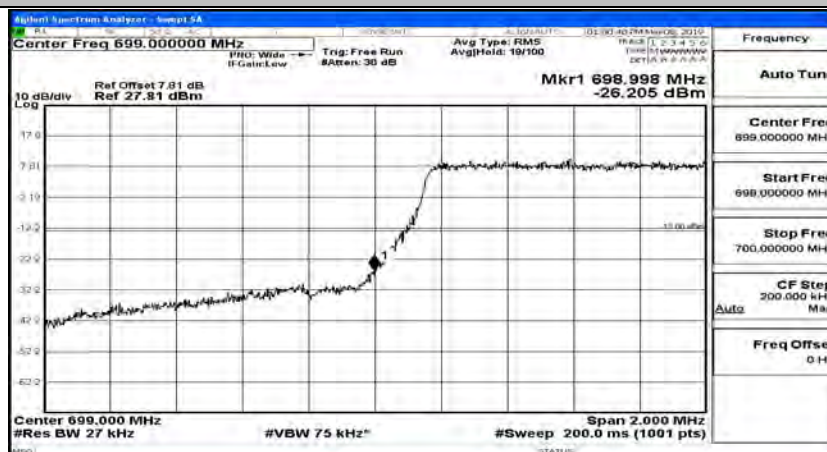
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



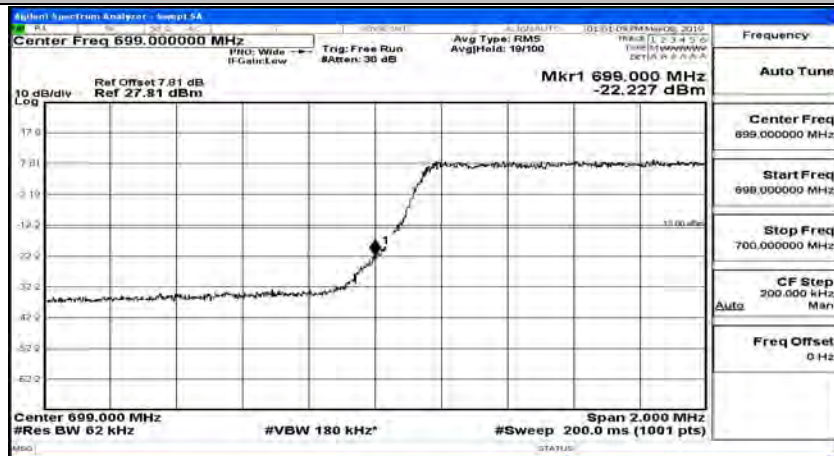
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



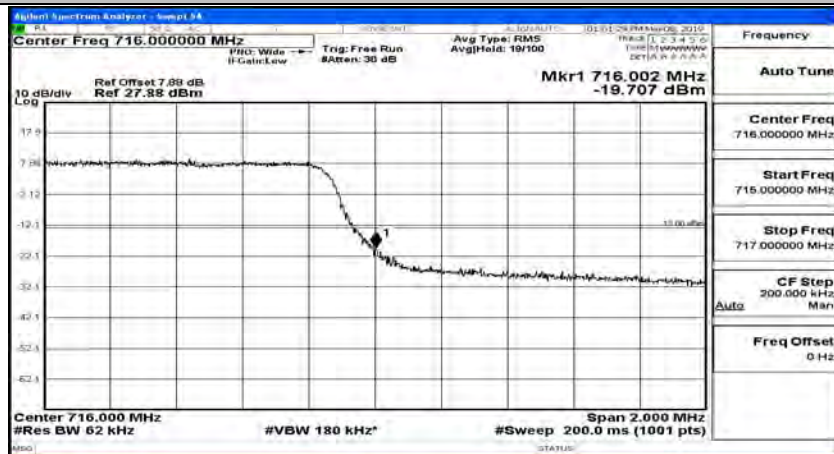
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



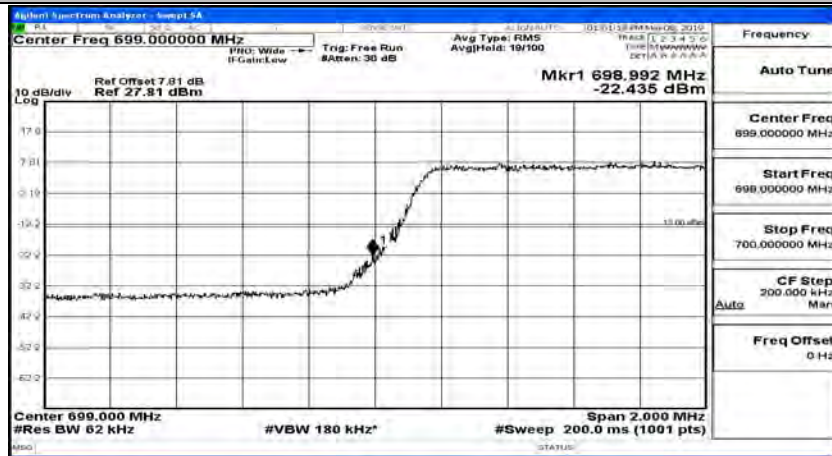
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



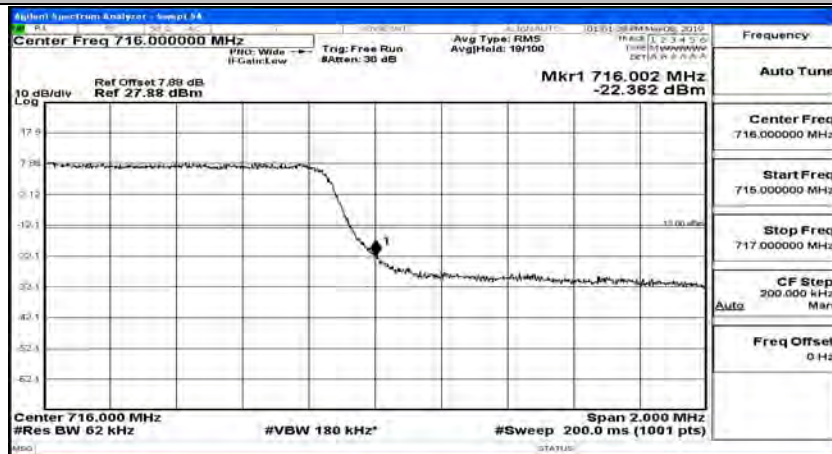
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



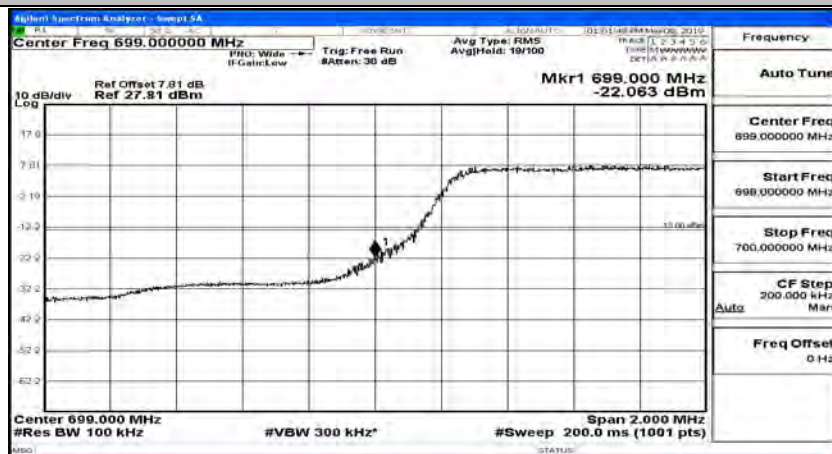
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



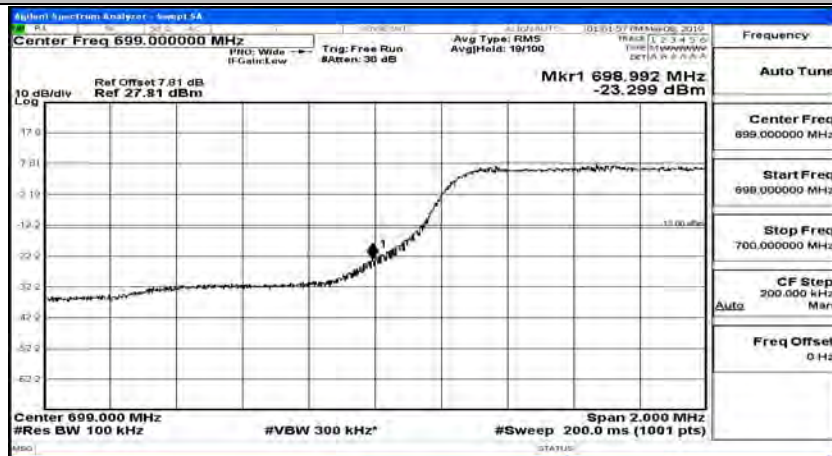
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



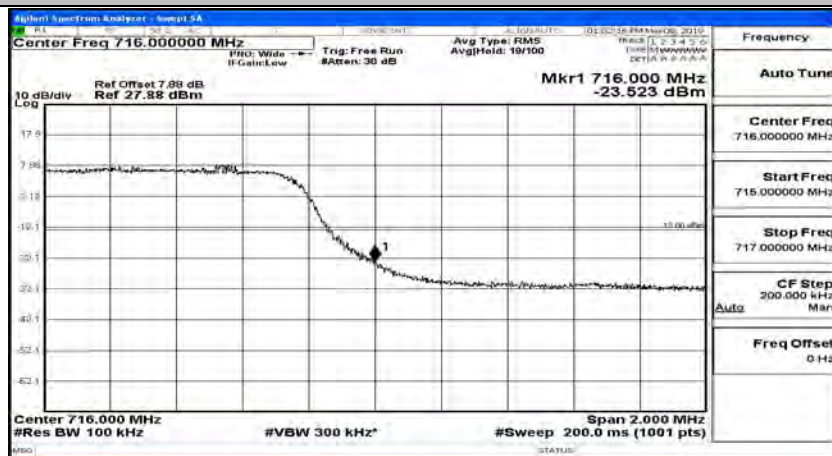
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



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



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



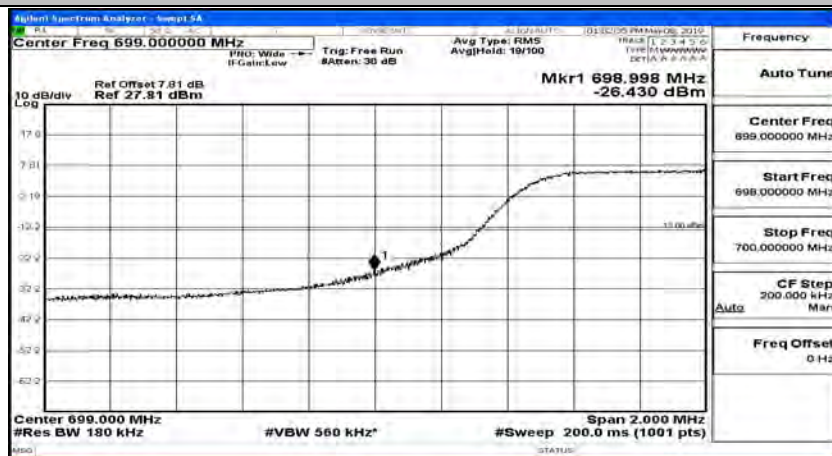
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



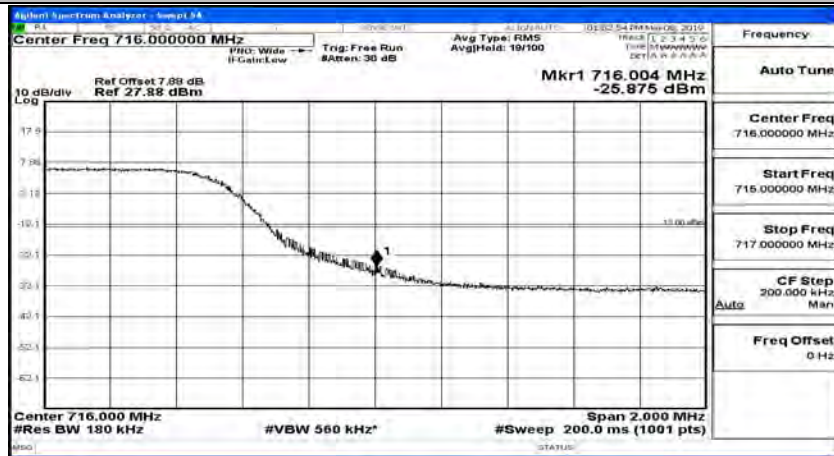
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

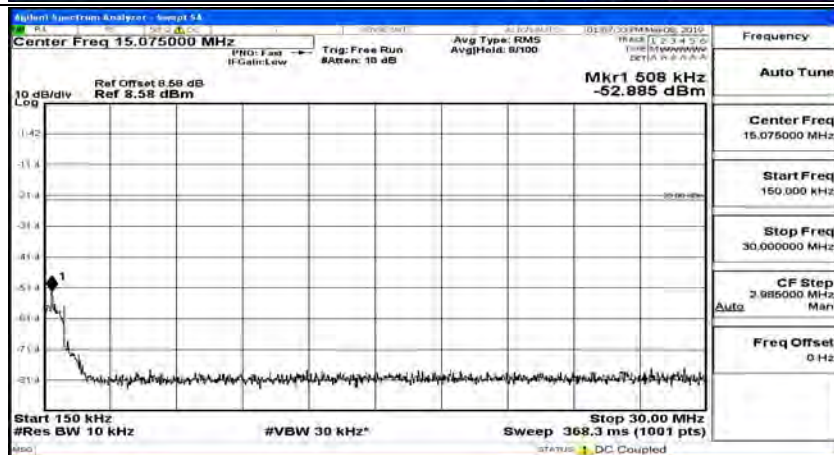
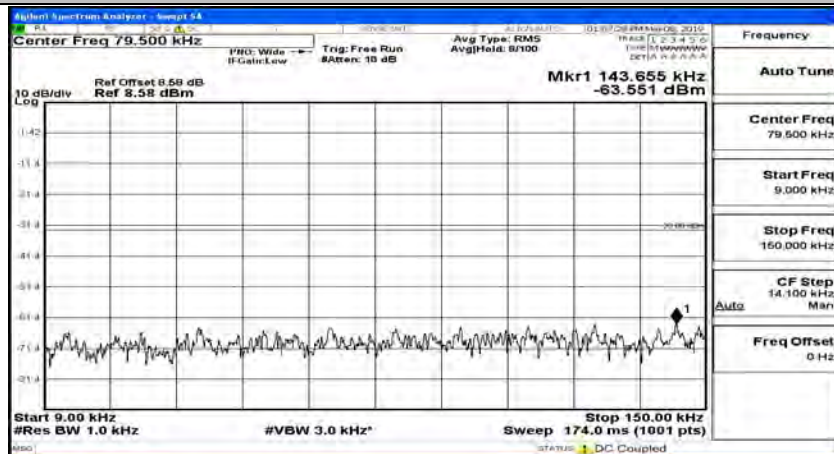


Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

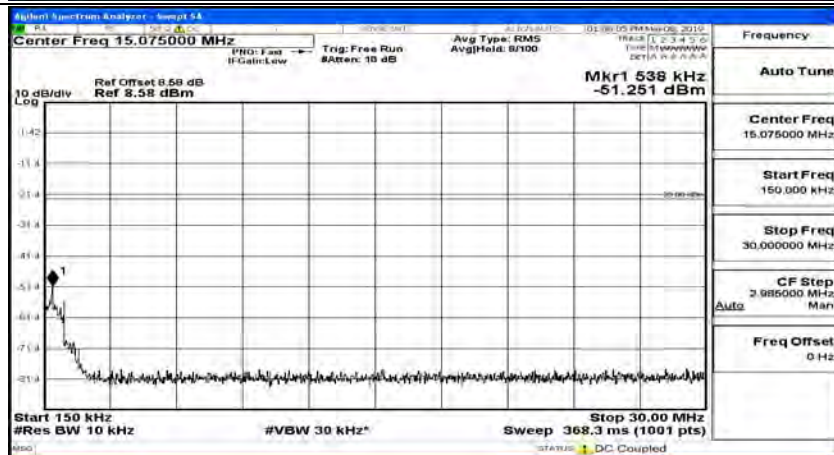
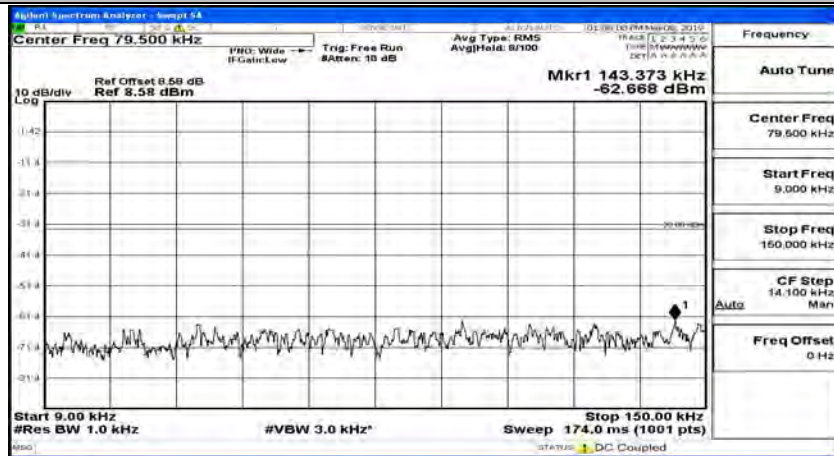


A.5 Conducted Spurious Emission

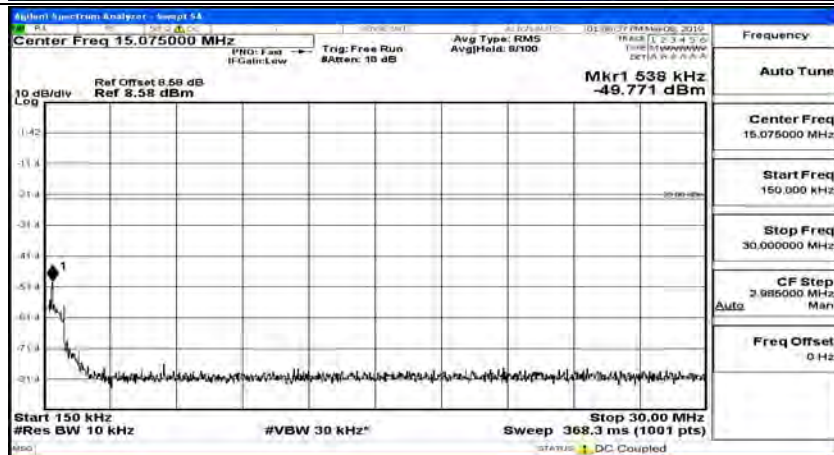
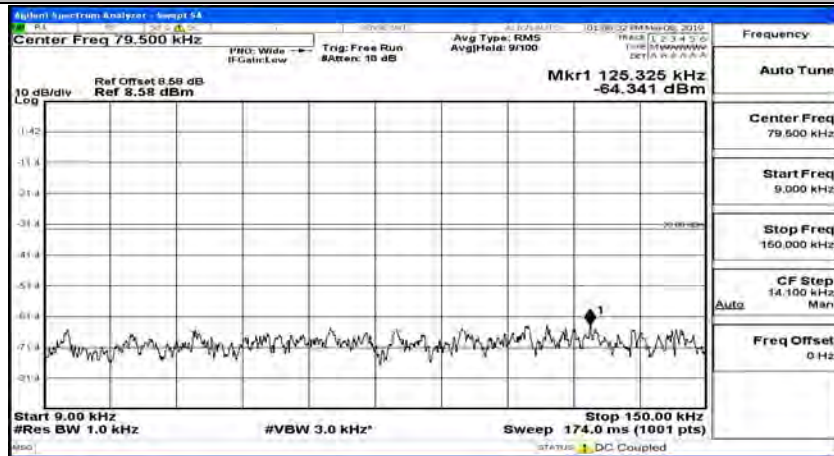
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



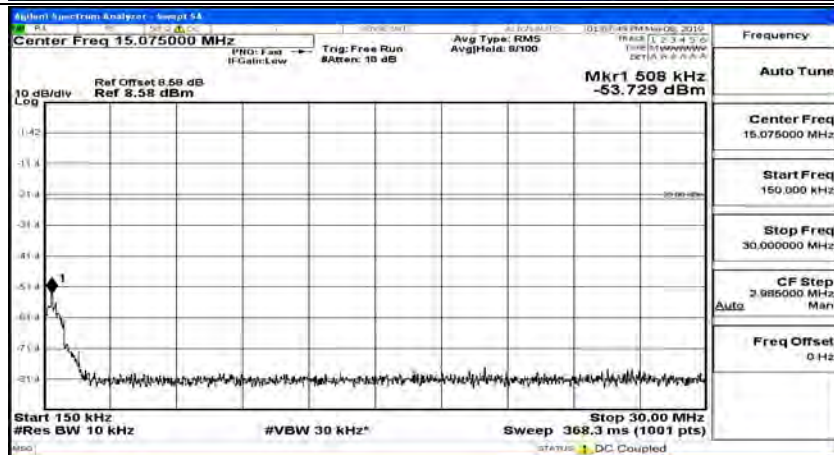
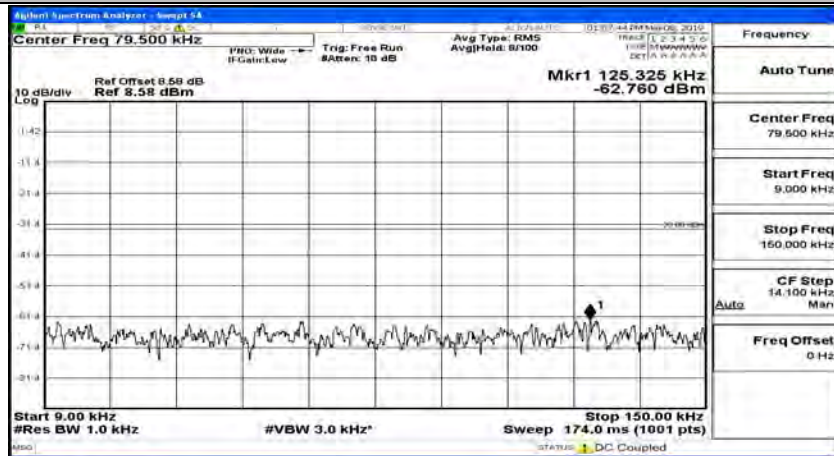
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



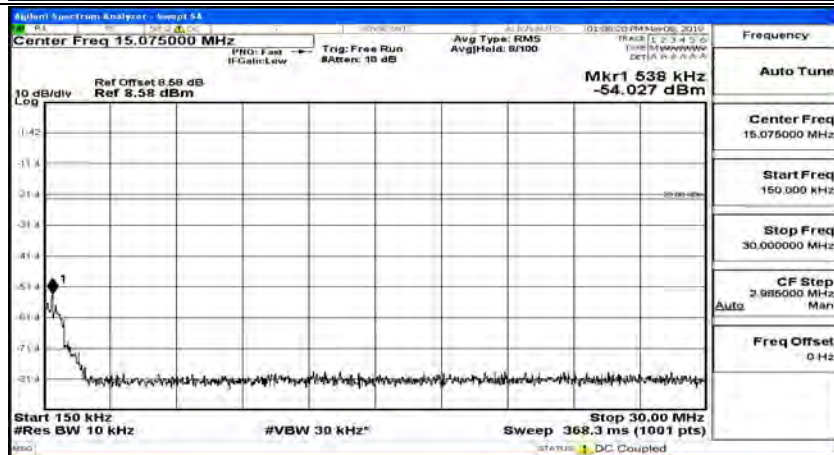
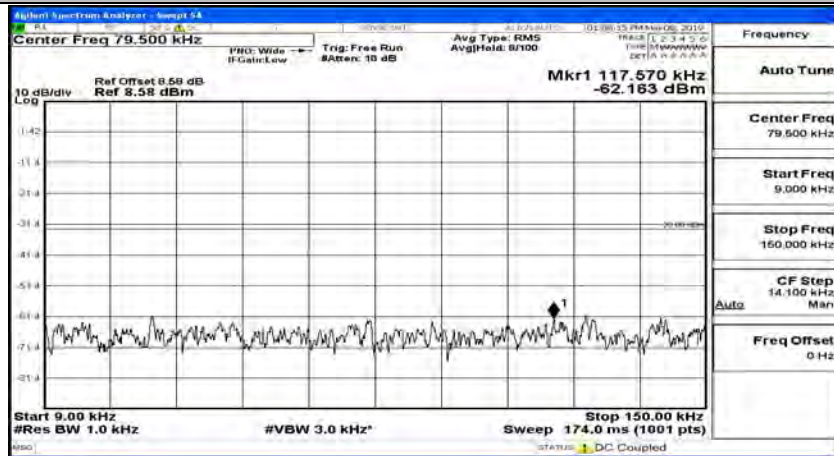
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



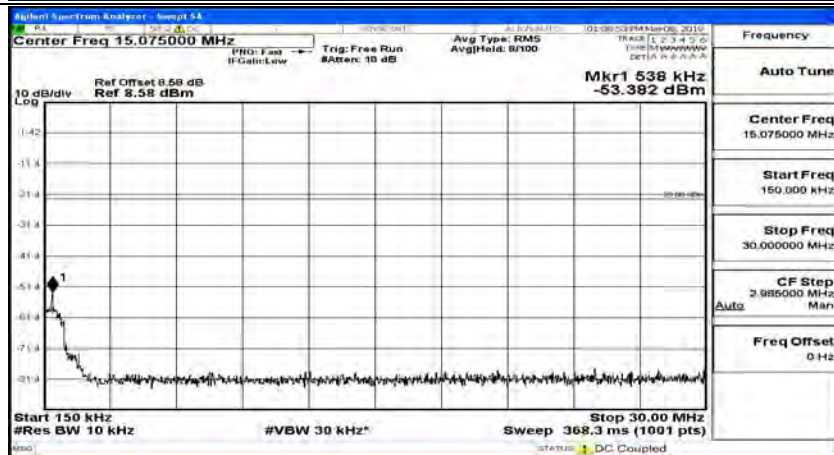
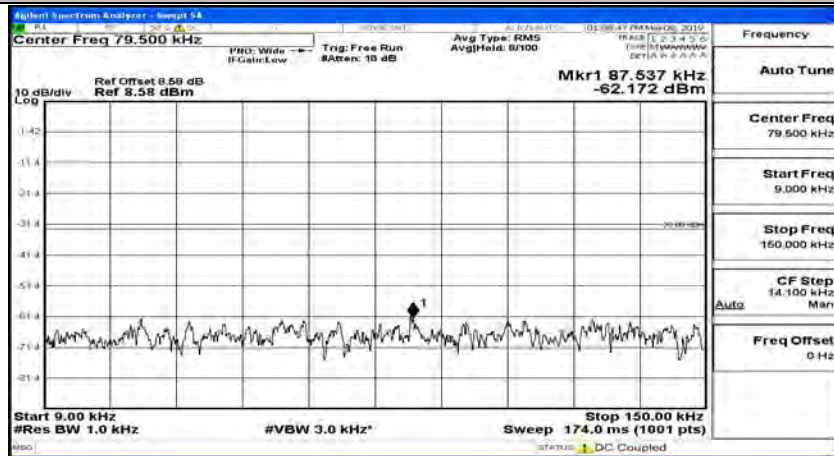
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



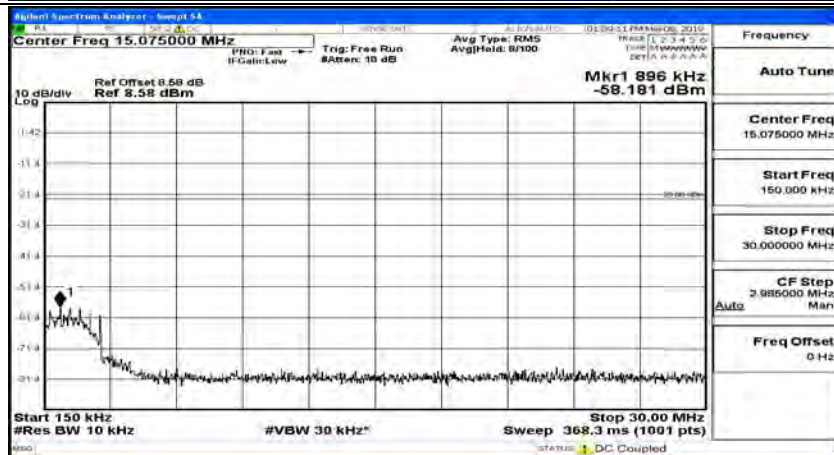
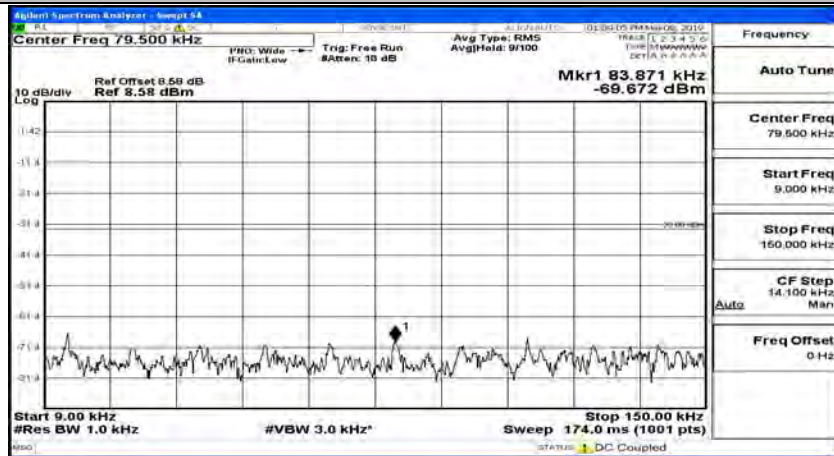
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



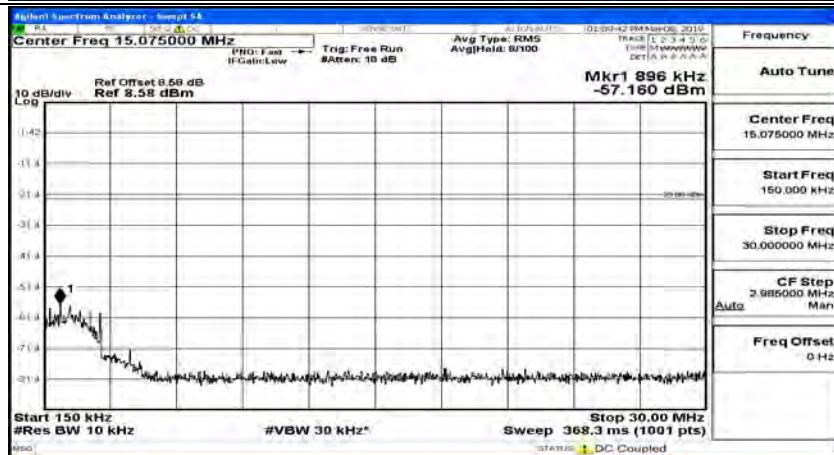
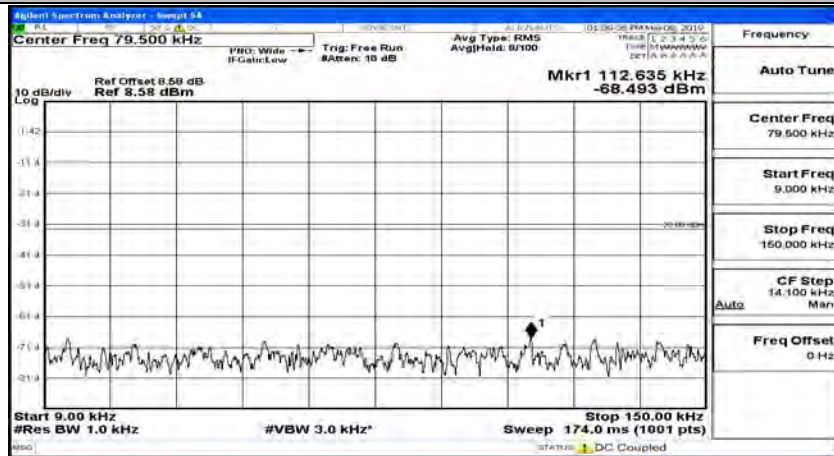
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



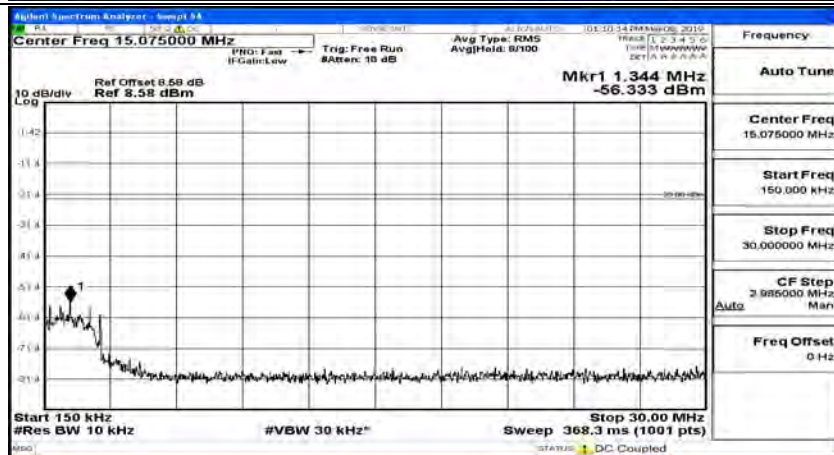
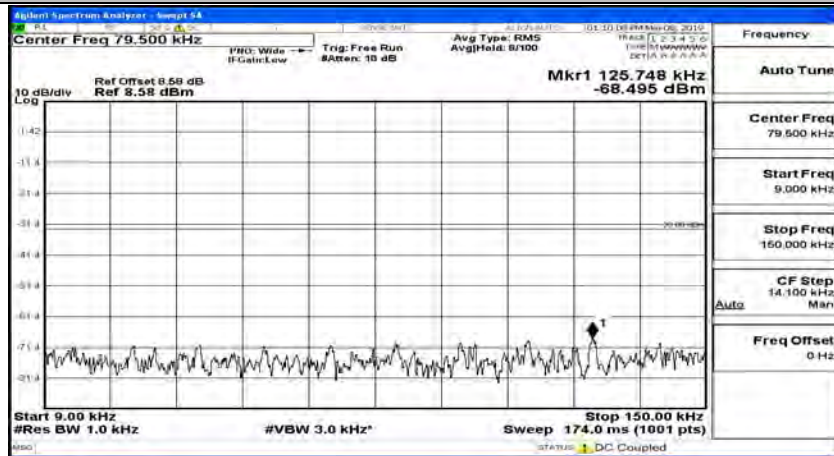
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



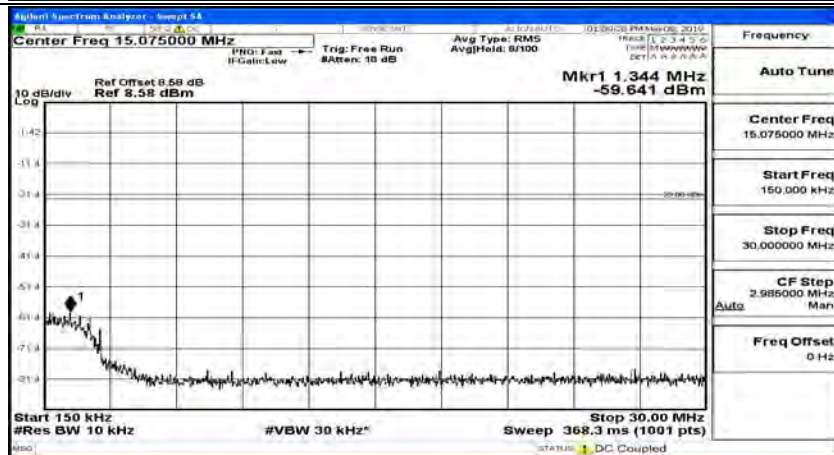
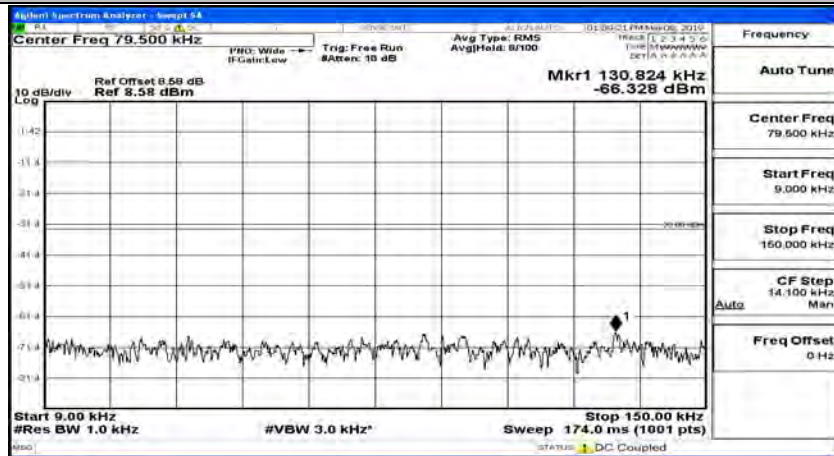
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



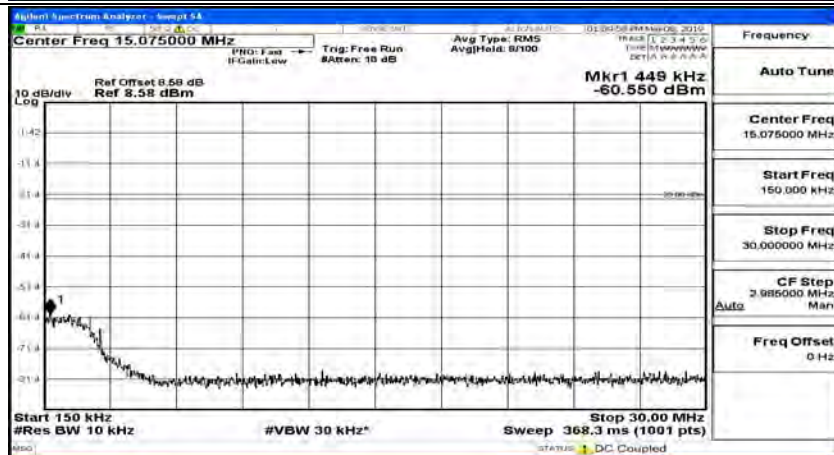
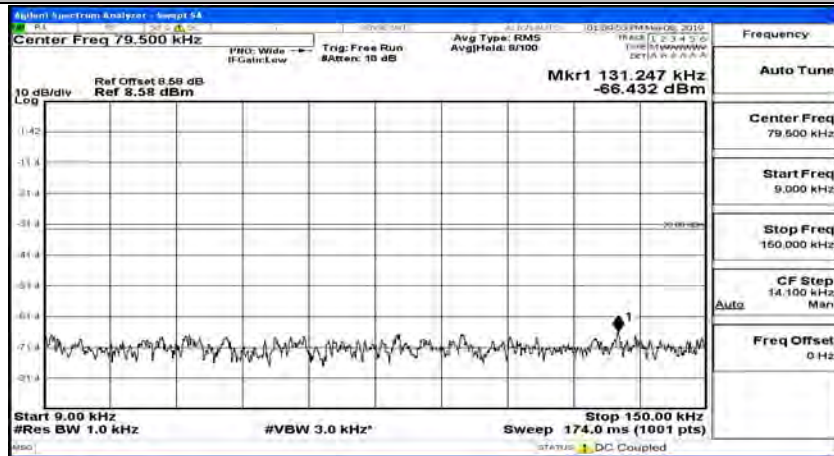
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



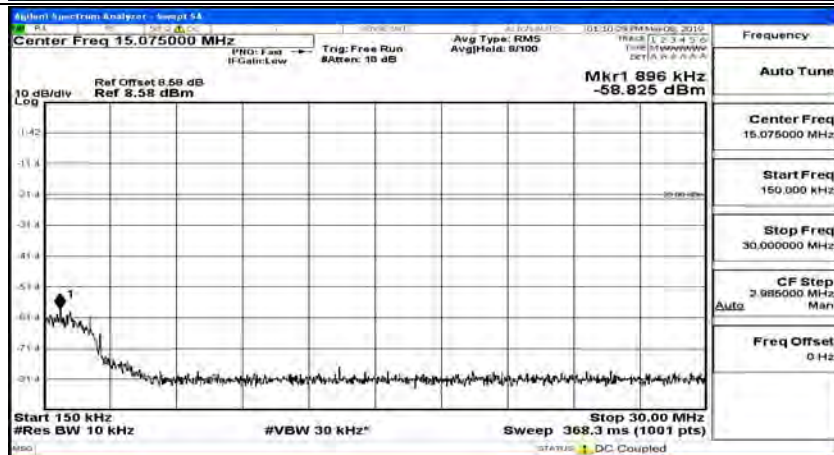
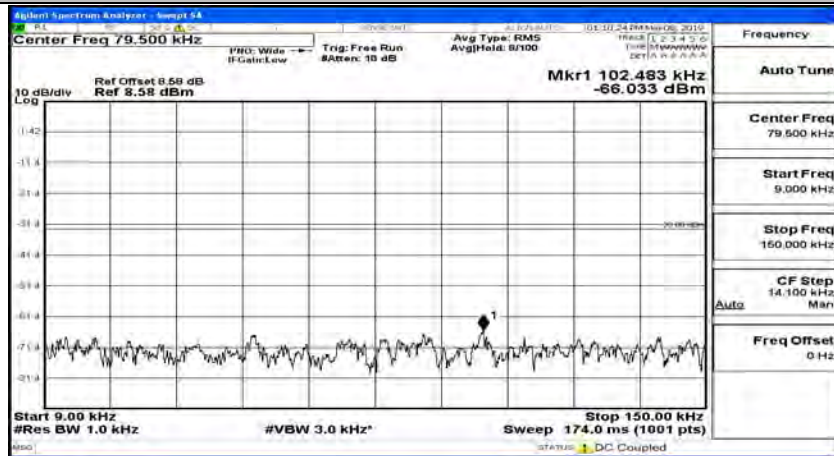
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



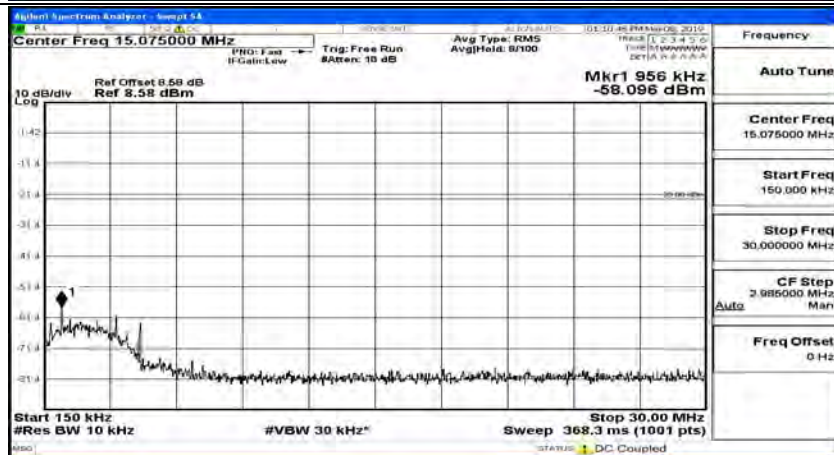
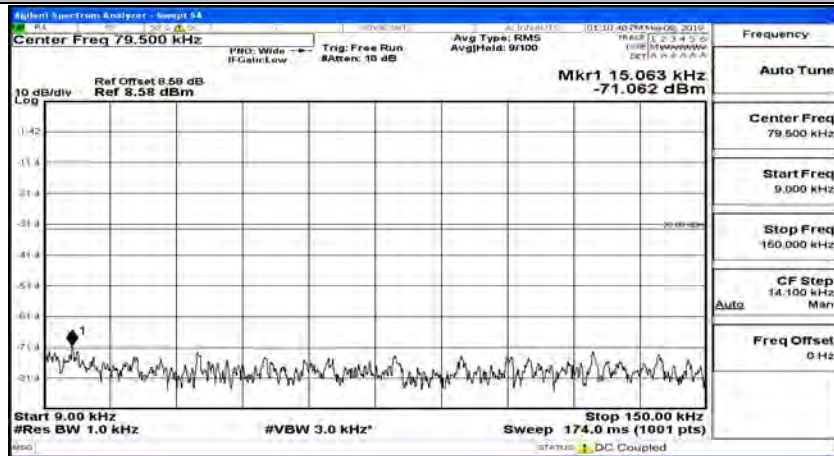
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



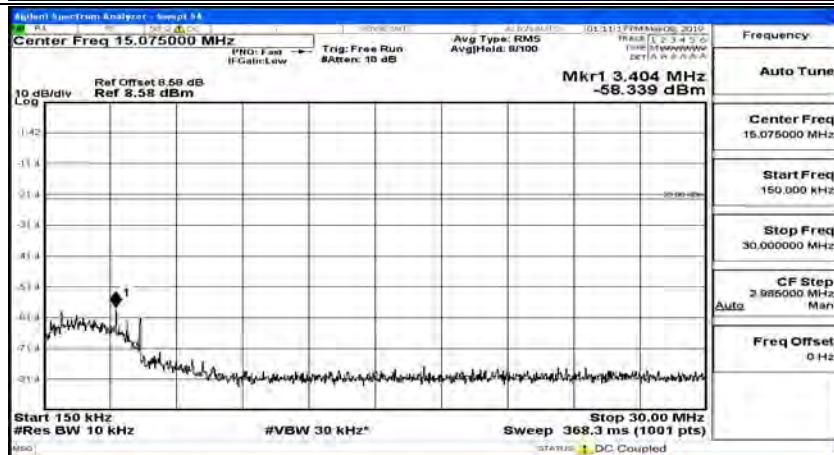
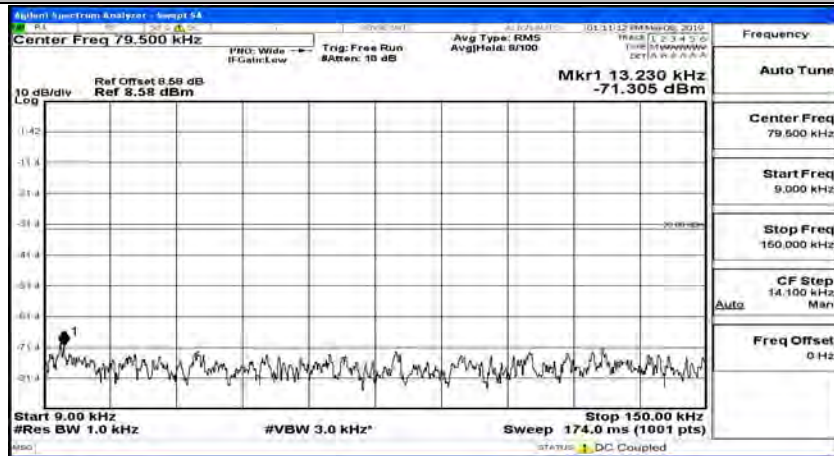
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



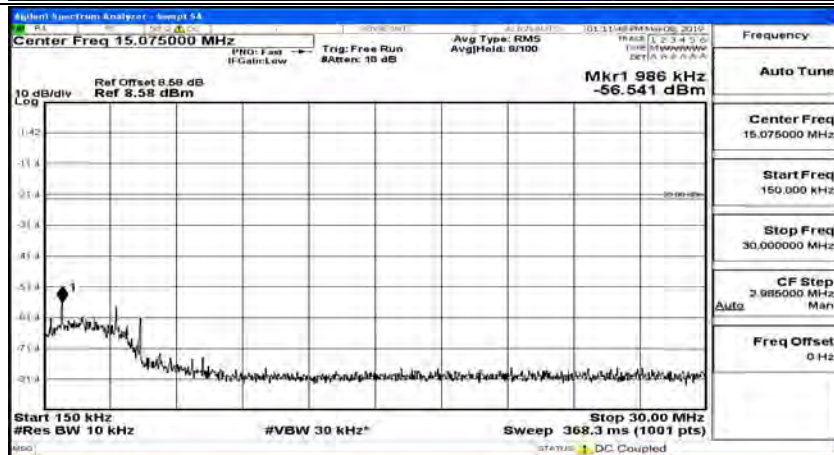
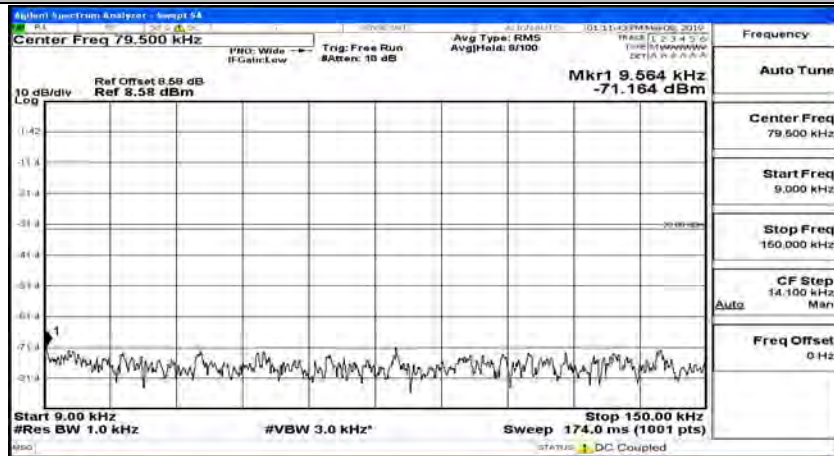
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



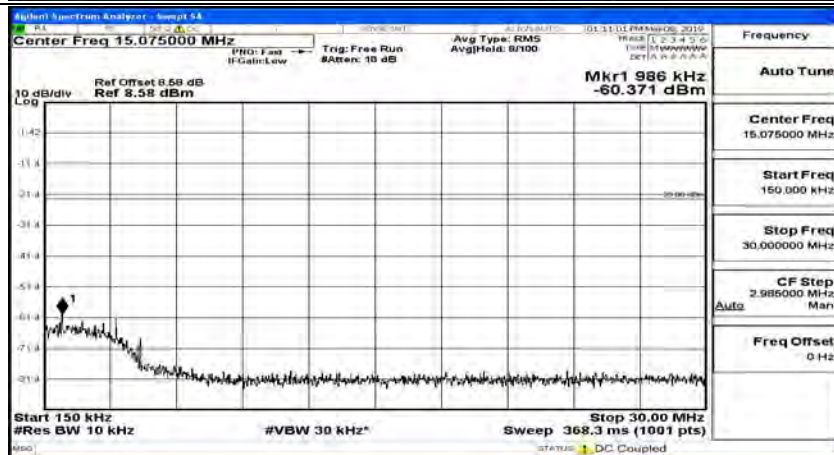
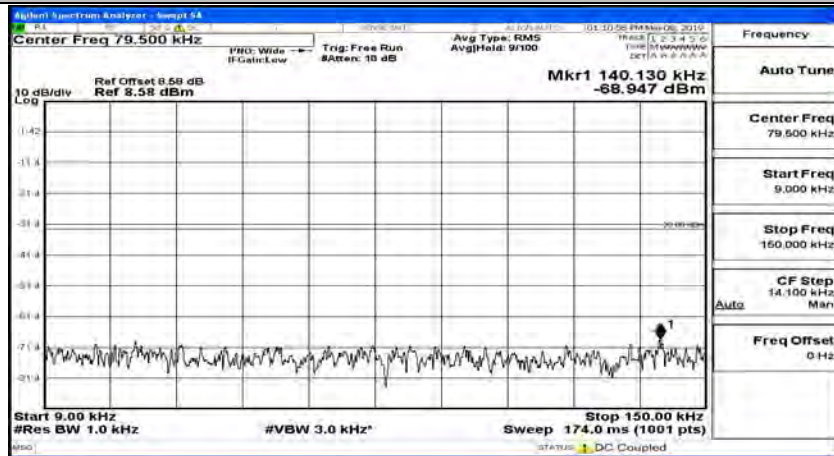
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



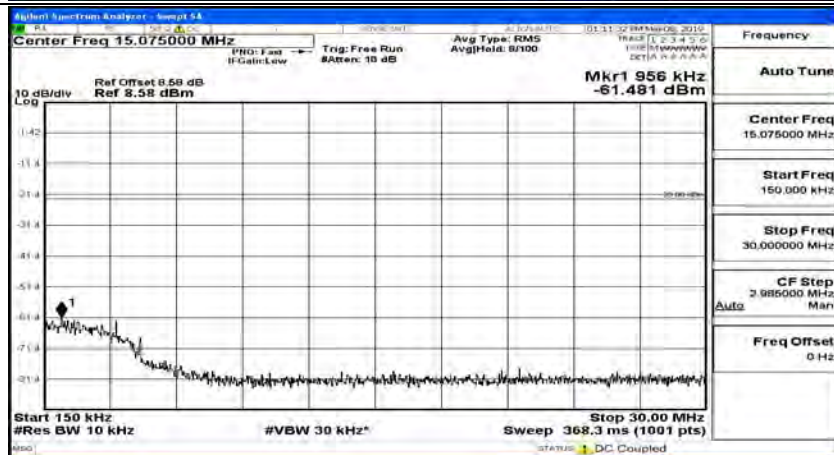
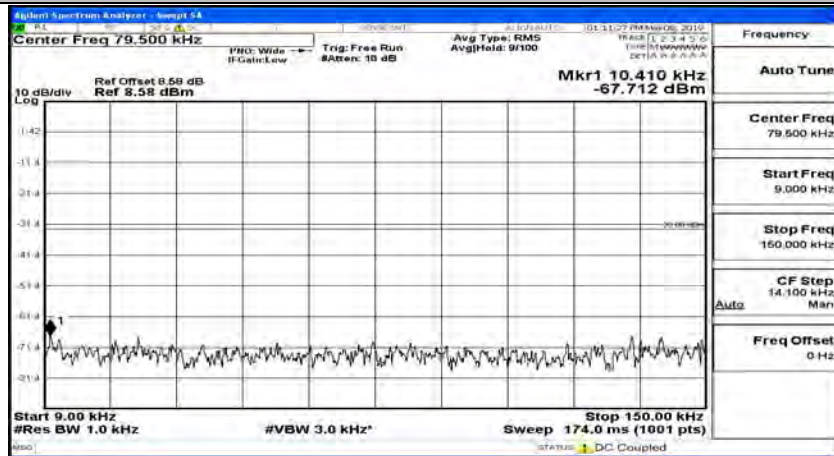
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



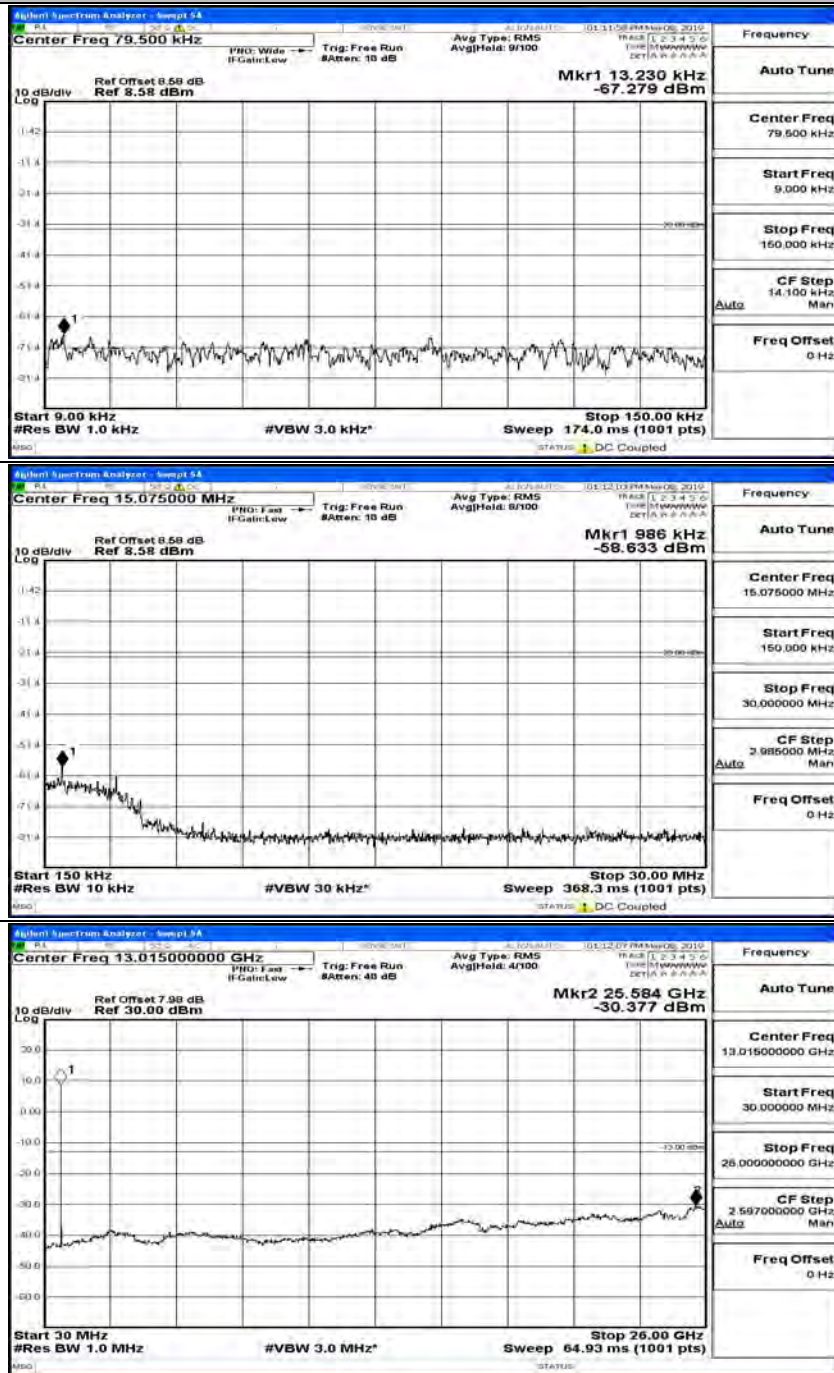
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



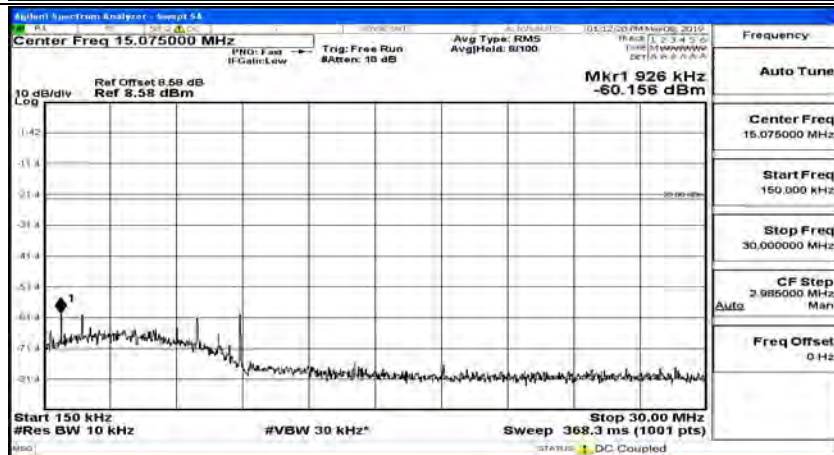
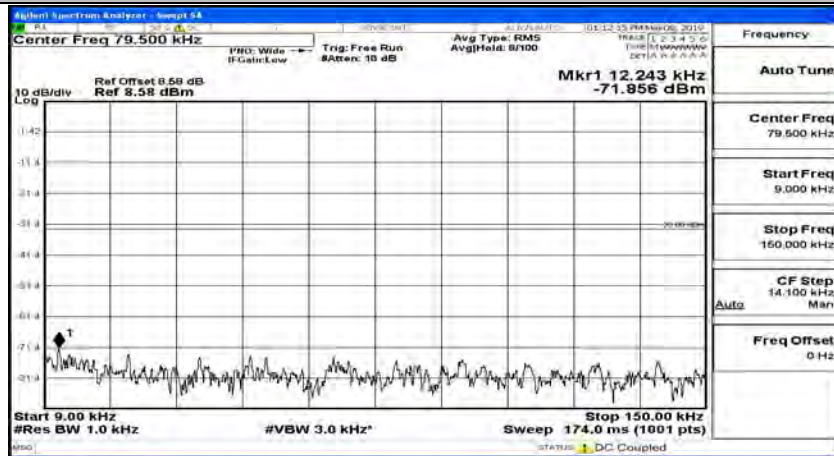
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



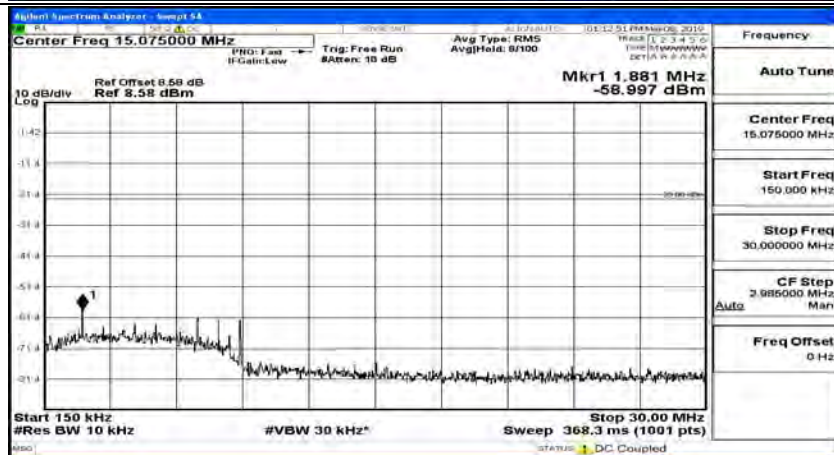
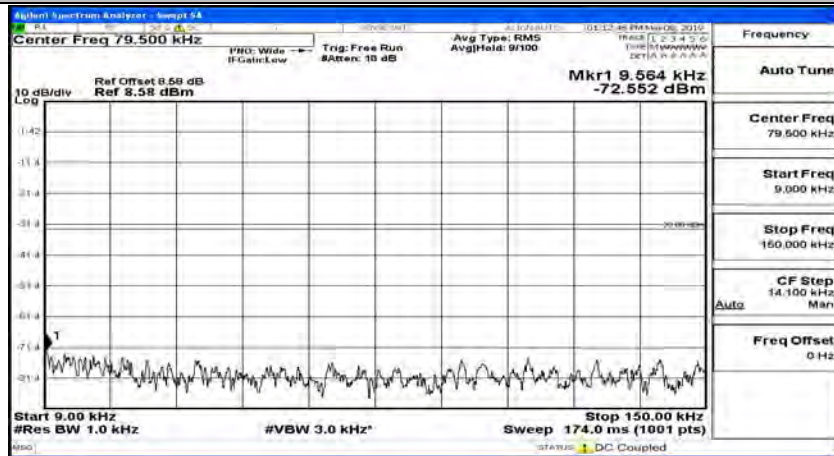
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



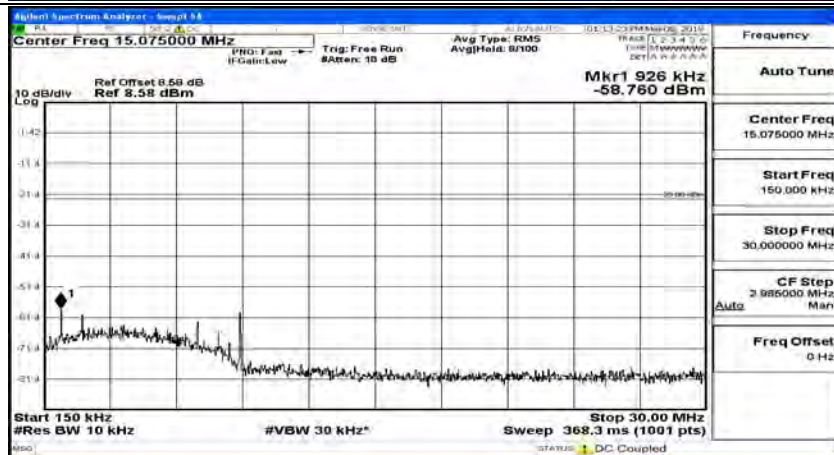
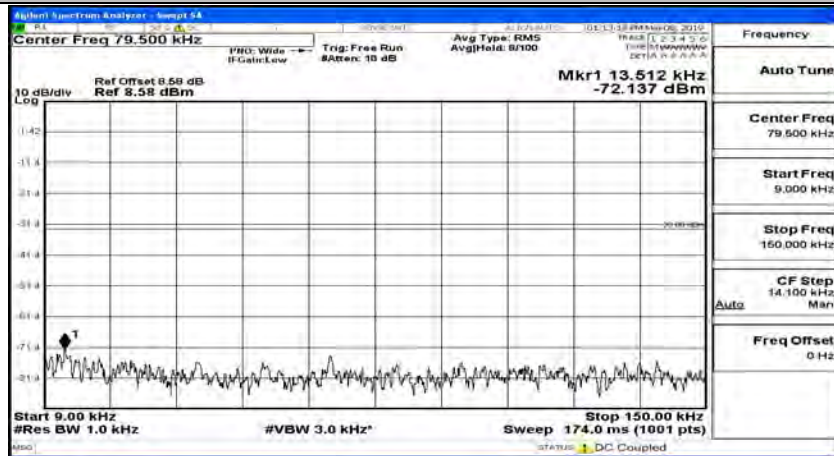
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



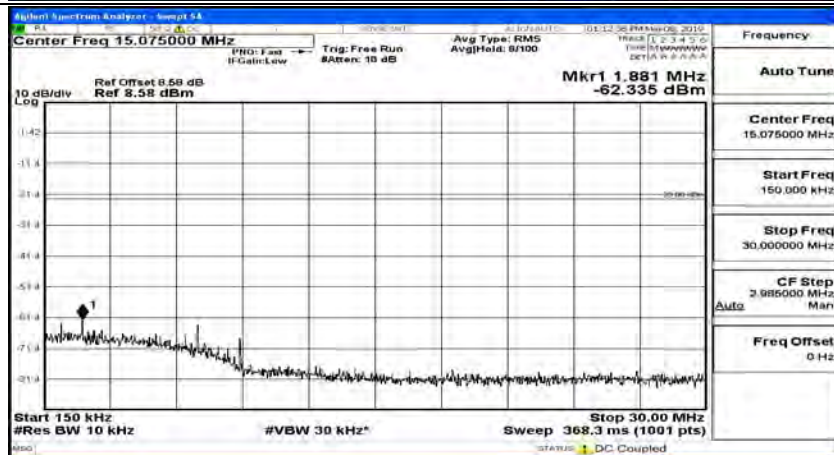
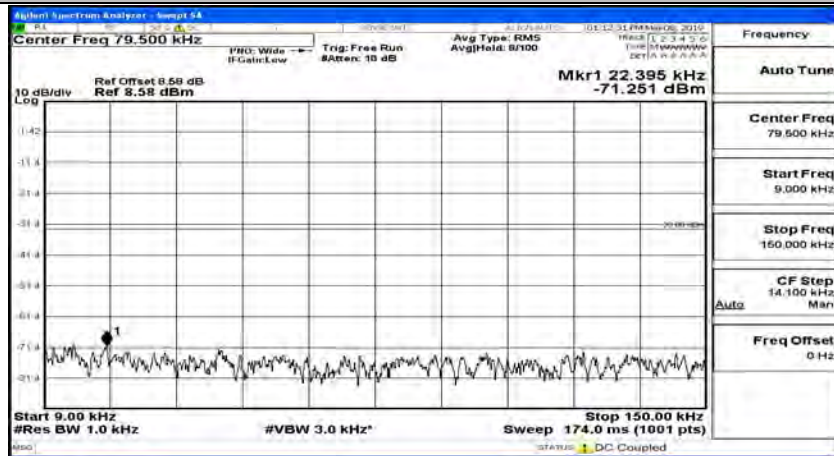
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



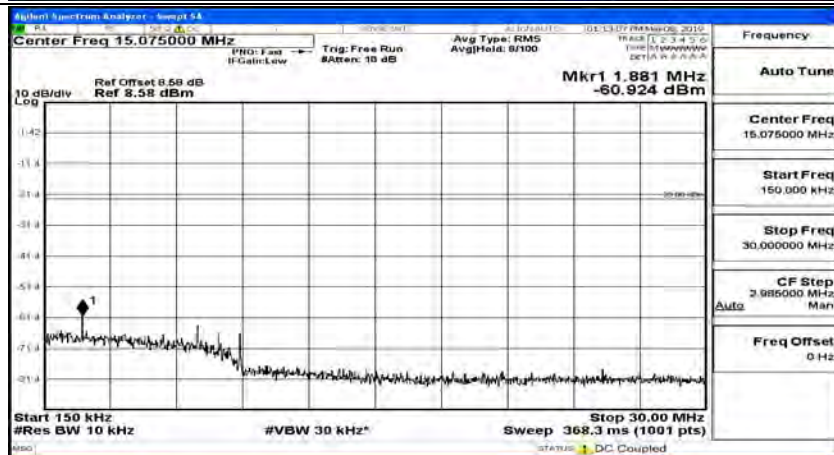
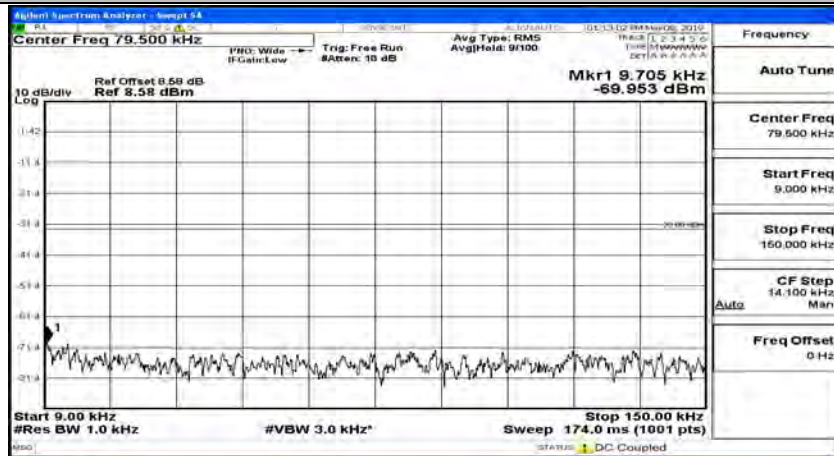
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

