

Appendix E: Test Data for E-UTRA Band 5

Product Name: Biometric access system

Trade Mark: N/A

Test Model: Access One

Environmental Conditions

Temperature:	24.5°C
Relative Humidity:	54.4%
ATM Pressure:	100.0 kPa
Test Engineer:	JK ZHOU
Supervised by:	Wang.Chuang

E.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)

Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.42	21.68	PASS
		1	3	22.51	21.79	PASS
		1	5	22.36	21.67	PASS
		3	0	22.54	21.65	PASS
		3	2	22.52	21.58	PASS
		3	3	22.46	21.65	PASS
		6	0	21.47	20.40	PASS
	MCH	1	0	22.34	21.75	PASS
		1	3	22.42	21.97	PASS
		1	5	22.36	21.80	PASS
		3	0	22.45	21.48	PASS
		3	2	22.44	21.54	PASS
		3	3	22.43	21.54	PASS
		6	0	21.44	20.39	PASS
	HCH	1	0	22.42	21.69	PASS
		1	3	22.51	21.89	PASS
		1	5	22.36	21.71	PASS
		3	0	22.48	21.60	PASS
		3	2	22.52	21.64	PASS
		3	3	22.48	21.65	PASS
		6	0	21.54	20.59	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	22.43	21.68	PASS
		1	7	22.56	21.95	PASS
		1	14	22.33	21.62	PASS
		8	0	21.37	20.44	PASS
		8	4	21.45	20.50	PASS
		8	7	21.40	20.43	PASS
		15	0	21.41	20.34	PASS
	MCH	1	0	22.27	21.68	PASS
		1	7	22.52	21.80	PASS
		1	14	22.29	21.68	PASS
		8	0	21.42	20.45	PASS
		8	4	21.41	20.52	PASS
		8	7	21.42	20.44	PASS
		15	0	21.36	20.32	PASS
	HCH	1	0	22.39	21.87	PASS
		1	7	22.63	22.14	PASS
		1	14	22.38	21.86	PASS
		8	0	21.48	20.48	PASS
		8	4	21.52	20.50	PASS
		8	7	21.46	20.46	PASS
		15	0	21.43	20.43	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	22.34	21.74	PASS
		1	12	22.55	21.96	PASS
		1	24	22.22	21.64	PASS
		12	0	21.29	20.45	PASS
		12	6	21.42	20.57	PASS
		12	13	21.35	20.49	PASS
		25	0	21.39	20.39	PASS
	MCH	1	0	22.23	21.73	PASS
		1	12	22.47	22.03	PASS
		1	24	22.21	21.72	PASS
		12	0	21.41	20.57	PASS
		12	6	21.46	20.63	PASS
		12	13	21.48	20.64	PASS
		25	0	21.45	20.49	PASS
	HCH	1	0	22.32	21.42	PASS
		1	12	22.68	21.60	PASS
		1	24	22.28	21.42	PASS
		12	0	21.47	20.52	PASS
		12	6	21.49	20.55	PASS
		12	13	21.34	20.43	PASS
		25	0	21.49	20.47	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	22.45	21.71	PASS
		1	24	22.56	21.81	PASS
		1	49	22.31	21.58	PASS
		25	0	21.37	20.42	PASS
		25	12	21.40	20.46	PASS
		25	25	21.23	20.27	PASS
		50	0	21.36	20.31	PASS
	MCH	1	0	22.33	21.63	PASS
		1	24	22.51	21.87	PASS
		1	49	22.34	21.67	PASS
		25	0	21.55	20.54	PASS
		25	12	21.45	20.47	PASS
		25	25	21.63	20.60	PASS
		50	0	21.59	20.54	PASS
	HCH	1	0	22.35	21.70	PASS
		1	24	22.57	21.91	PASS
		1	49	22.32	21.68	PASS
		25	0	21.51	20.52	PASS
		25	12	21.56	20.51	PASS
		25	25	21.45	20.47	PASS
		50	0	21.45	20.42	PASS

E.2 Peak-to-Average Ratio

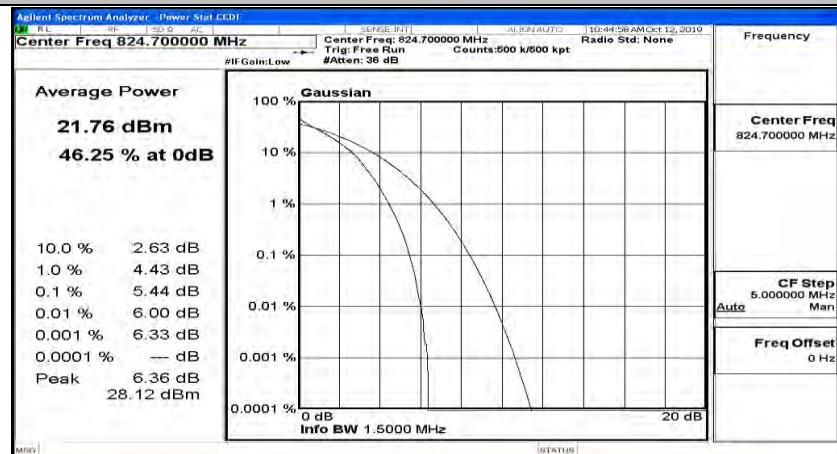
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.44	<13	PASS
	MCH	5.52	<13	PASS
	HCH	5.27	<13	PASS
16QAM	LCH	6.35	<13	PASS
	MCH	6.45	<13	PASS
	HCH	6.19	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.41	<13	PASS
	MCH	5.59	<13	PASS
	HCH	5.47	<13	PASS
16QAM	LCH	6.39	<13	PASS
	MCH	6.52	<13	PASS
	HCH	6.21	<13	PASS

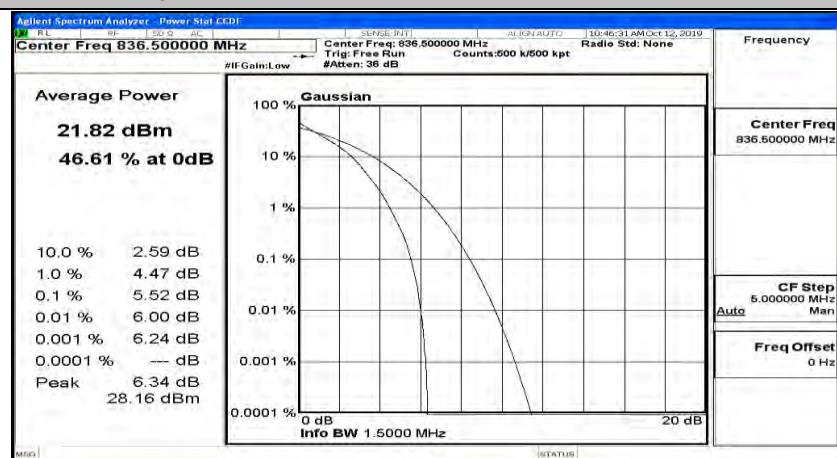
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.41	<13	PASS
	MCH	5.6	<13	PASS
	HCH	5.42	<13	PASS
16QAM	LCH	6.23	<13	PASS
	MCH	6.4	<13	PASS
	HCH	6.22	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.39	<13	PASS
	MCH	5.61	<13	PASS
	HCH	5.49	<13	PASS
16QAM	LCH	6.18	<13	PASS
	MCH	6.3	<13	PASS
	HCH	6.23	<13	PASS

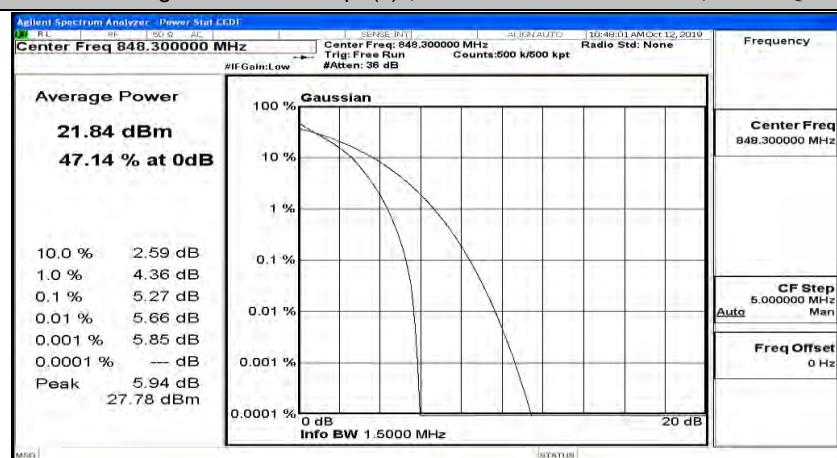
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



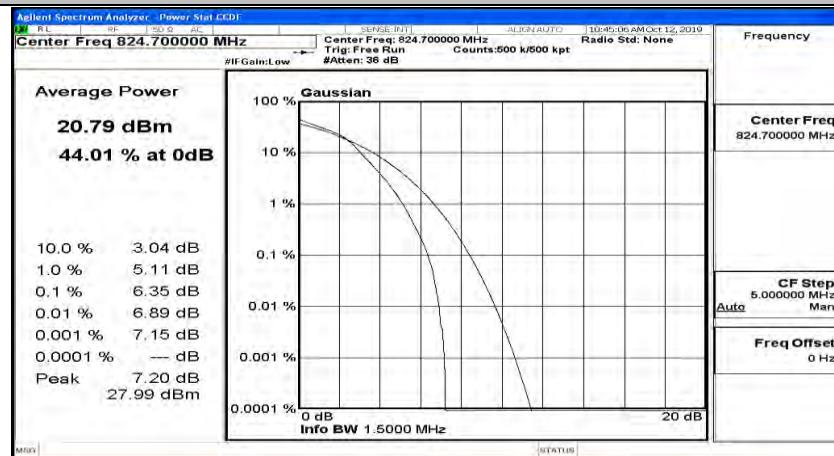
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



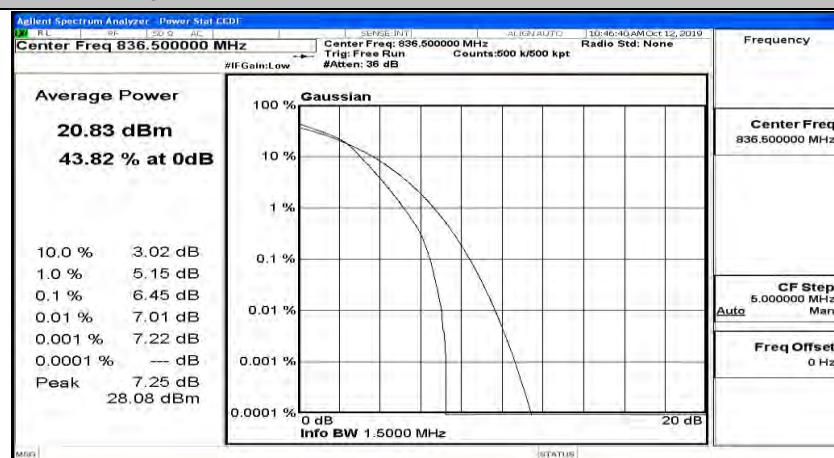
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



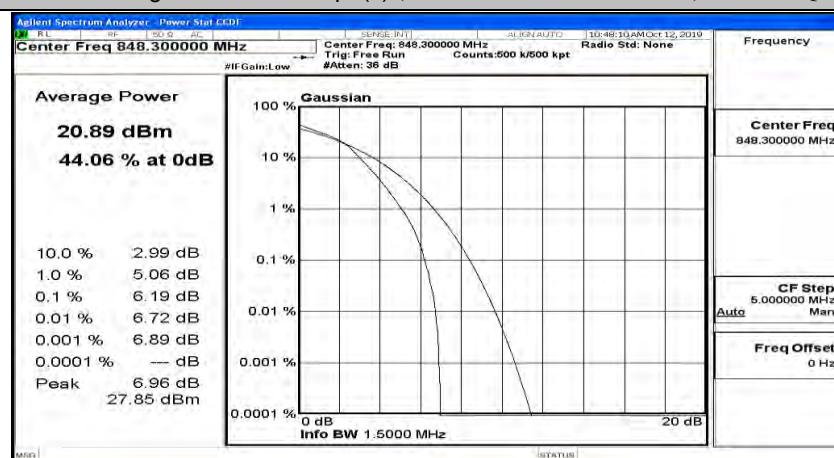
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



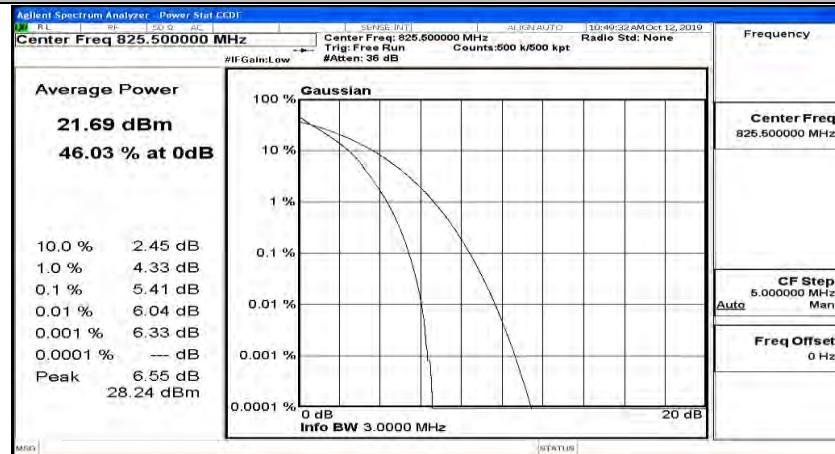
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



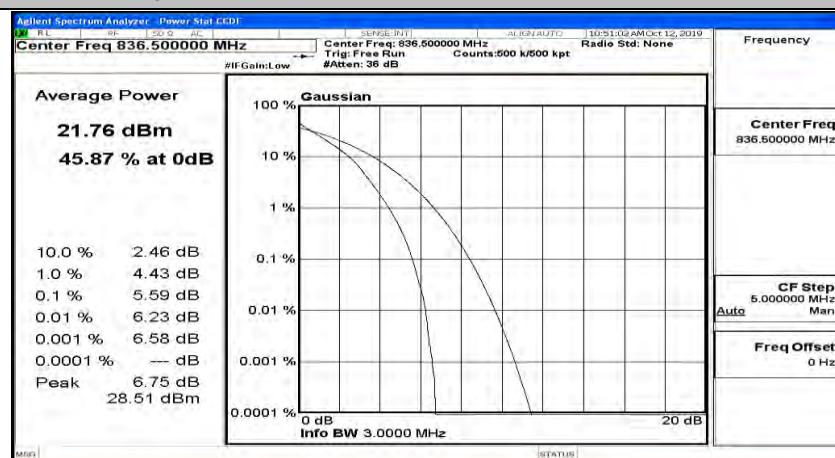
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



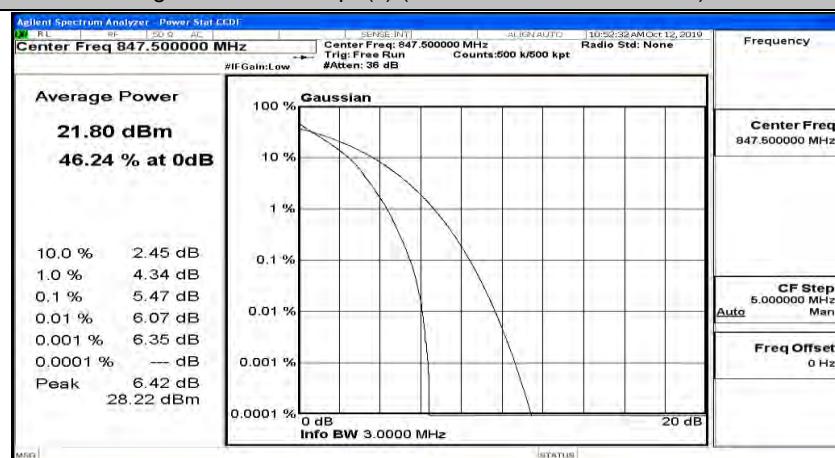
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



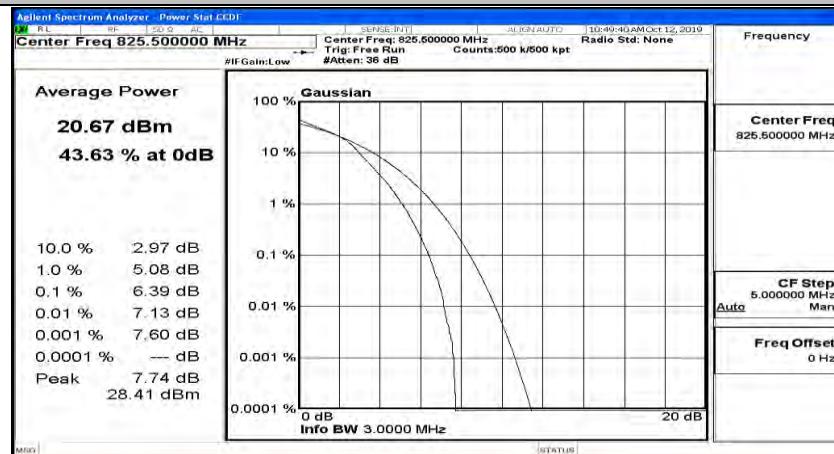
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



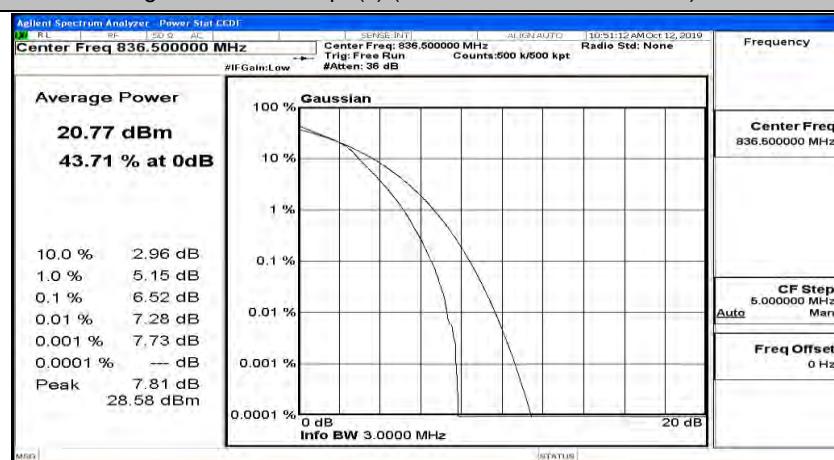
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz) HCH_QPSK



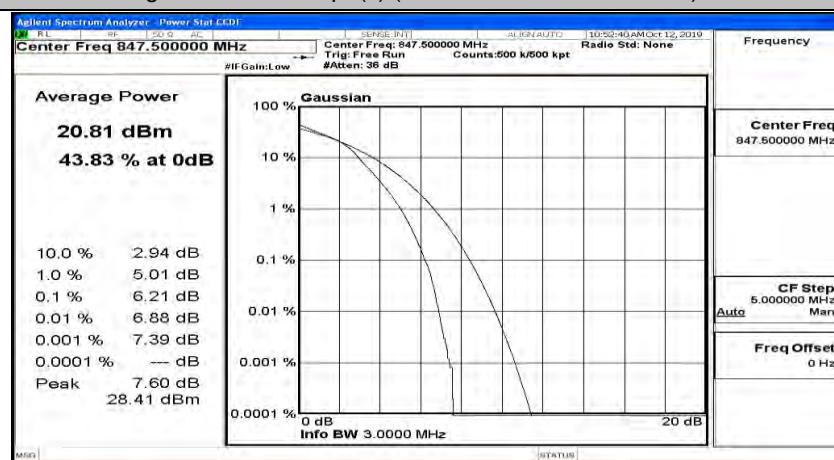
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



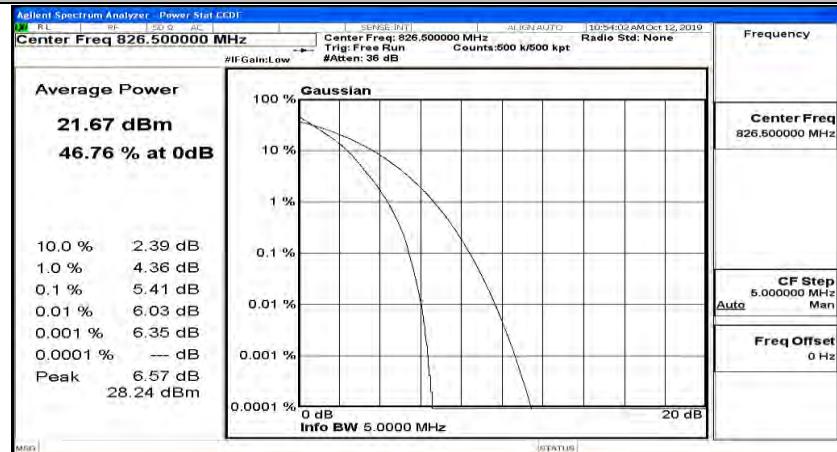
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



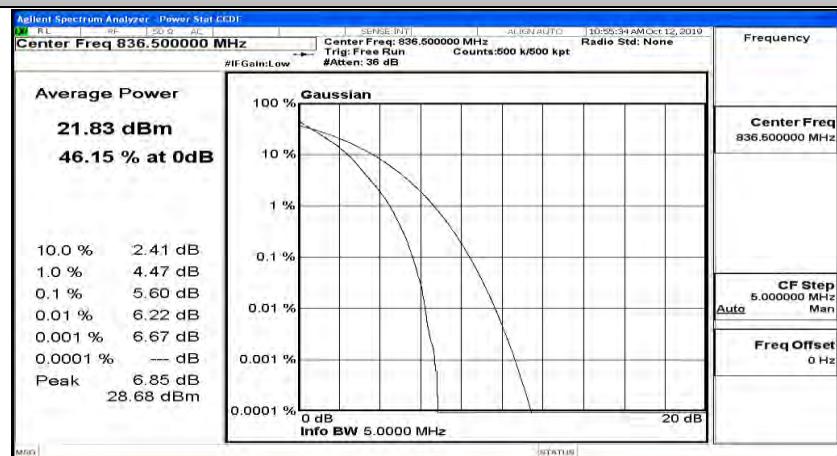
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



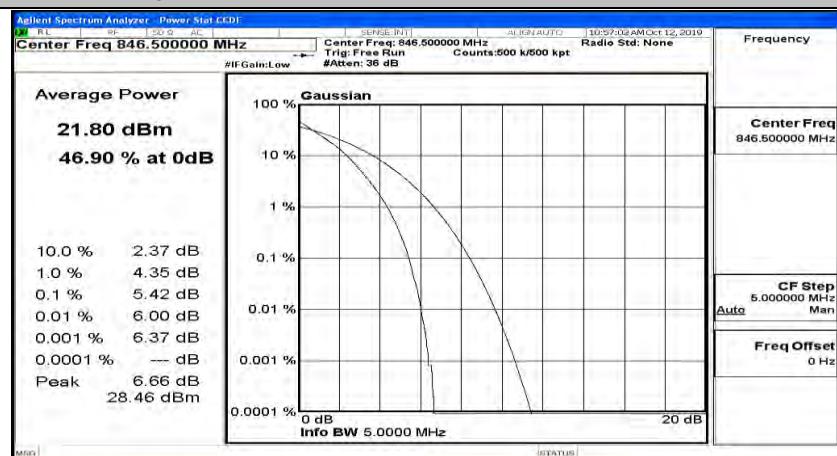
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



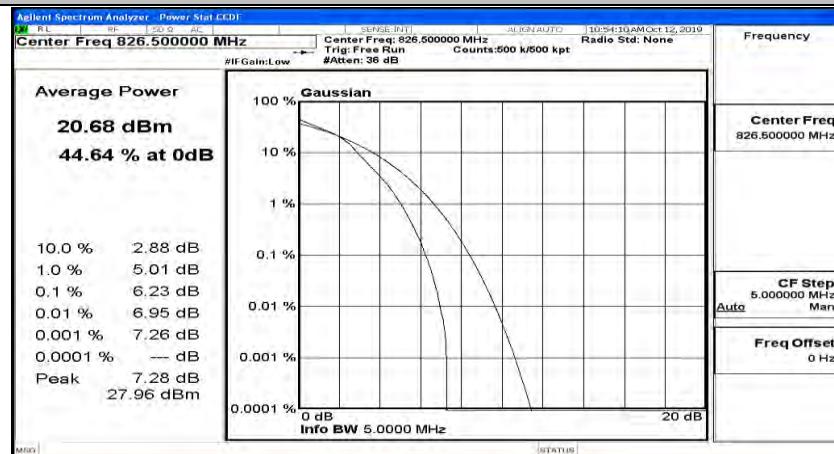
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



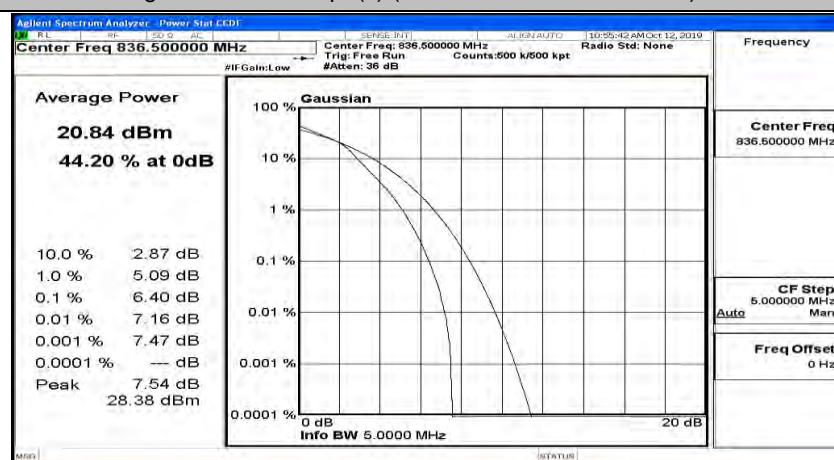
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



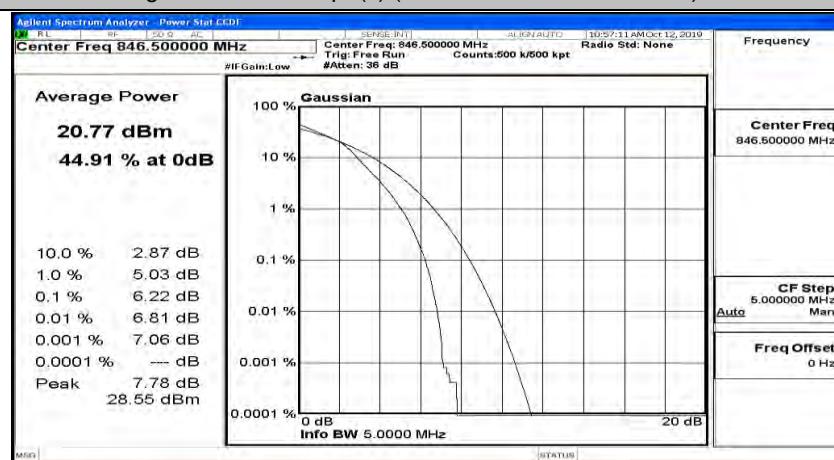
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



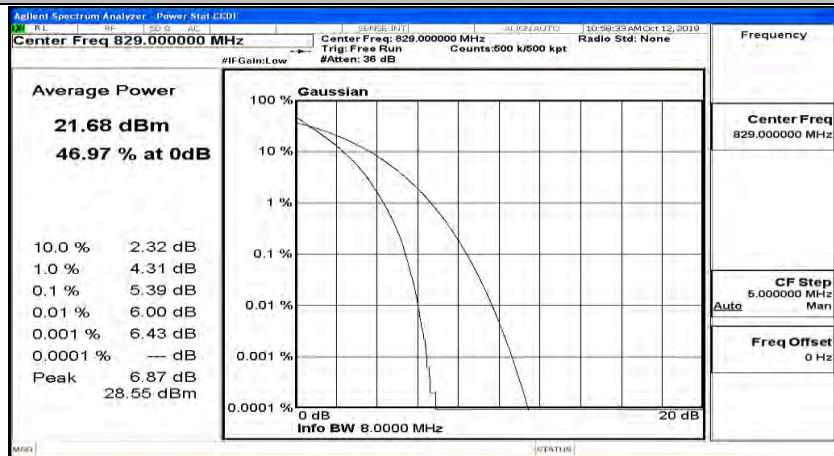
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



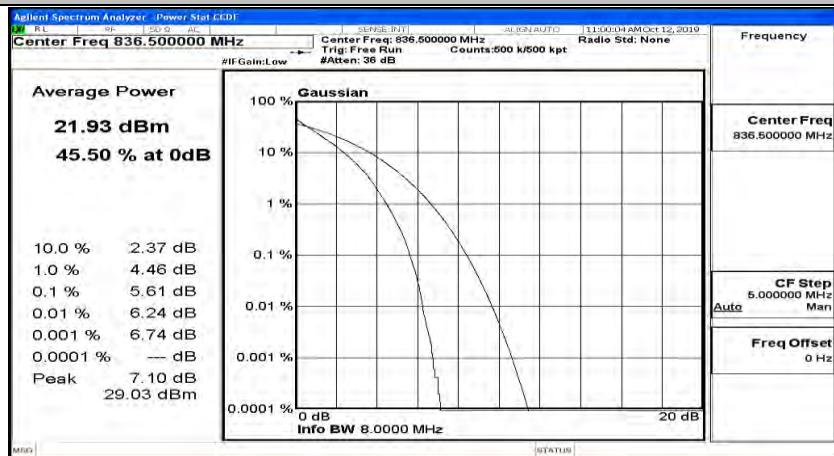
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



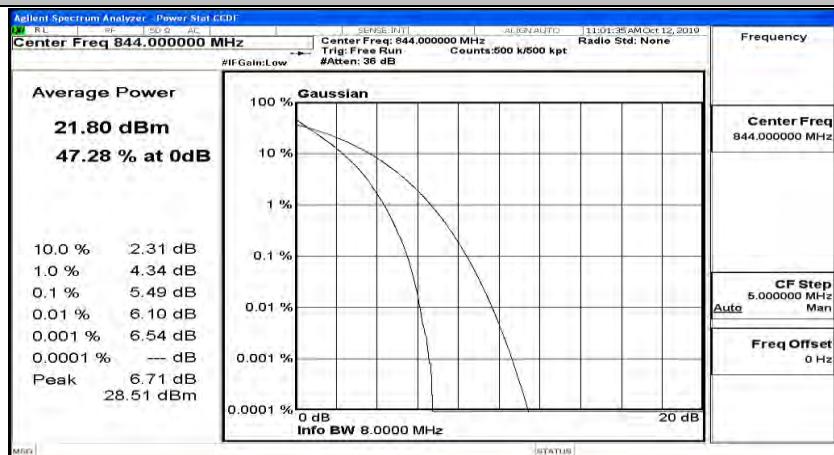
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



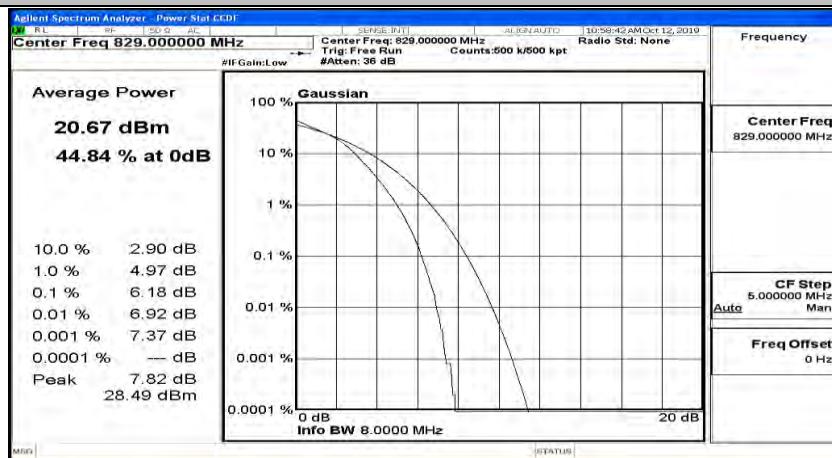
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



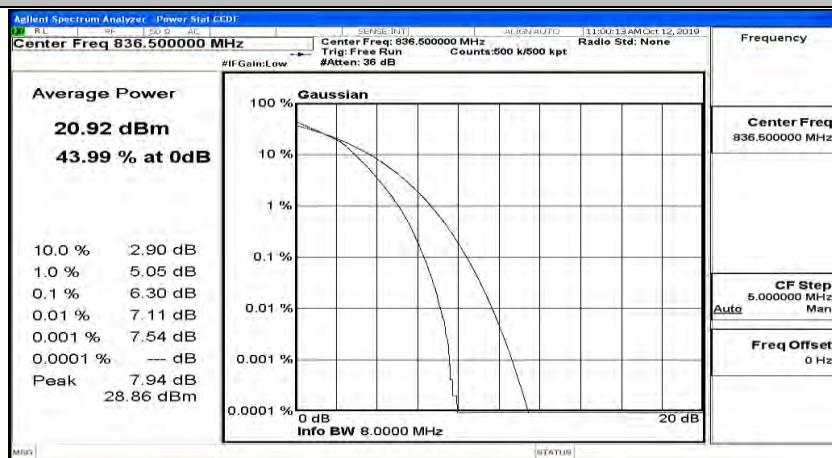
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



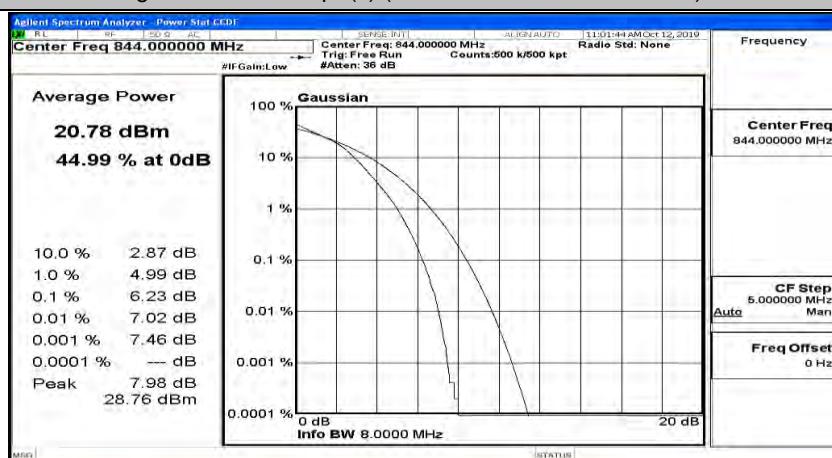
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



E.3 26dB Bandwidth and Occupied Bandwidth

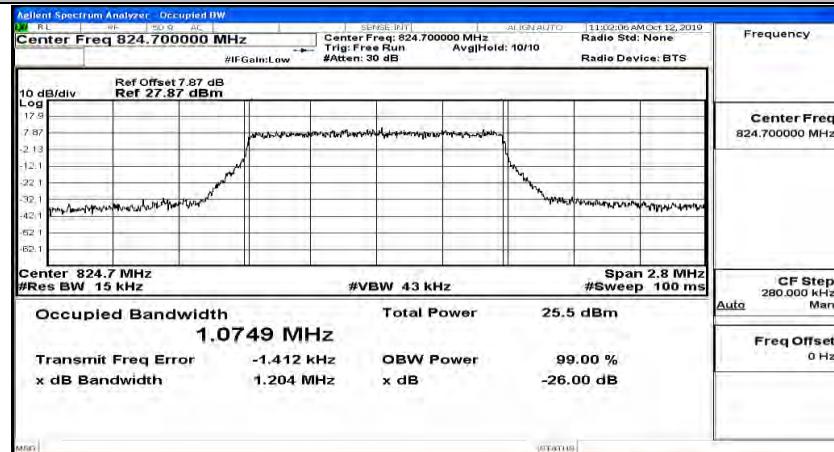
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0749	1.204	PASS
	MCH	1.0751	1.209	PASS
	HCH	1.0770	1.217	PASS
16QAM	LCH	1.0788	1.219	PASS
	MCH	1.0771	1.239	PASS
	HCH	1.0765	1.239	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6782	2.828	PASS
	MCH	2.6768	2.828	PASS
	HCH	2.6779	2.828	PASS
16QAM	LCH	2.6765	2.843	PASS
	MCH	2.6812	2.824	PASS
	HCH	2.6825	2.827	PASS

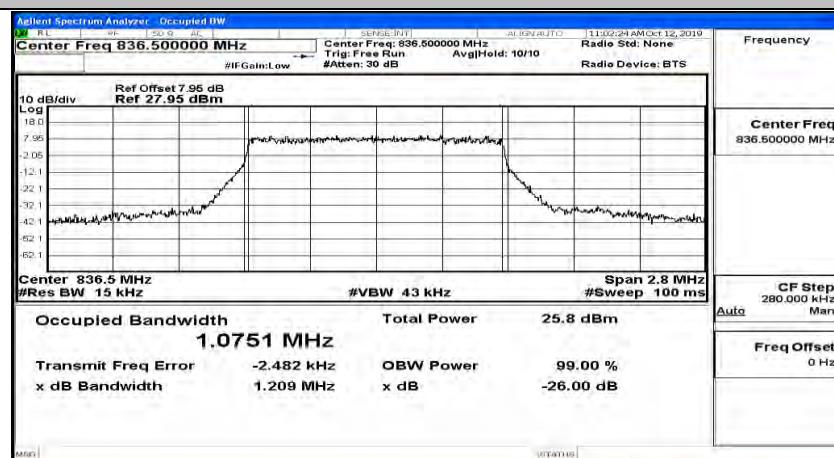
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4645	4.821	PASS
	MCH	4.4739	4.838	PASS
	HCH	4.4712	4.834	PASS
16QAM	LCH	4.4790	4.842	PASS
	MCH	4.4847	4.832	PASS
	HCH	4.4787	4.876	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9199	9.500	PASS
	MCH	8.9543	9.546	PASS
	HCH	8.9234	9.514	PASS
16QAM	LCH	8.9160	9.498	PASS
	MCH	8.9588	9.592	PASS
	HCH	8.9407	9.477	PASS

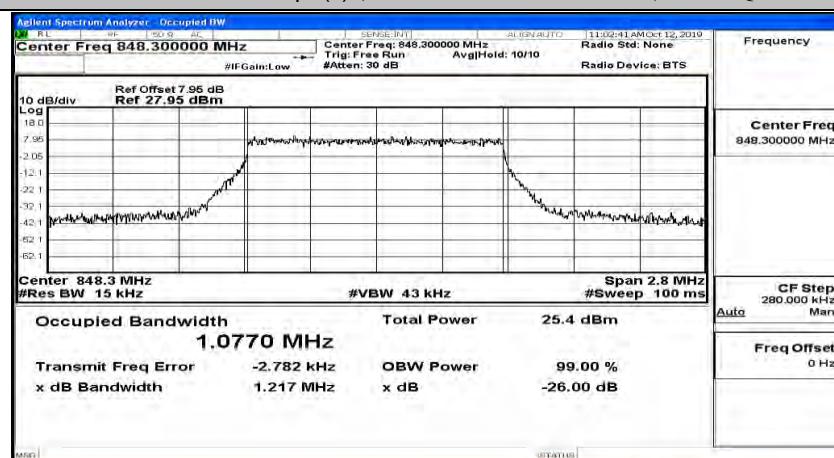
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



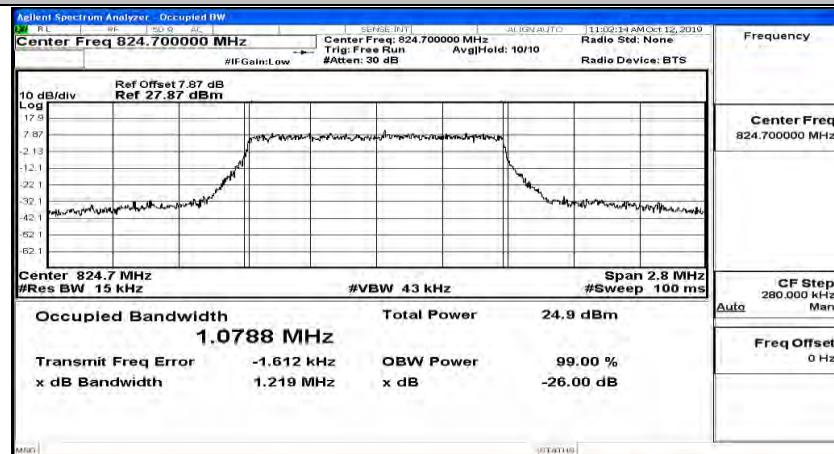
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



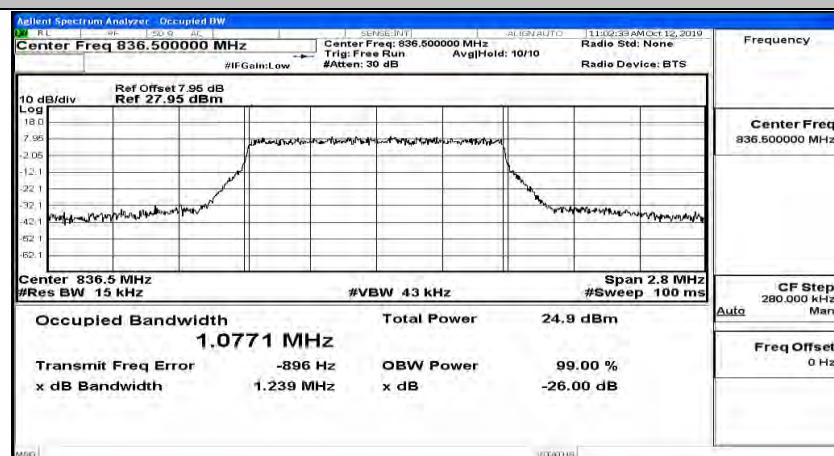
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



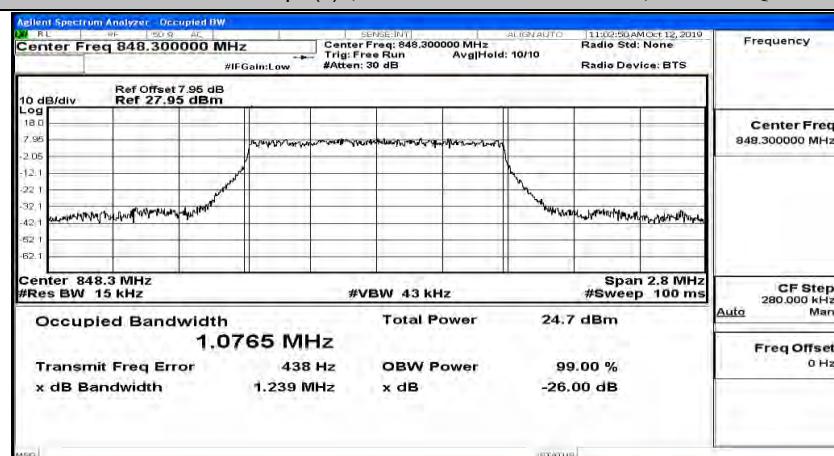
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



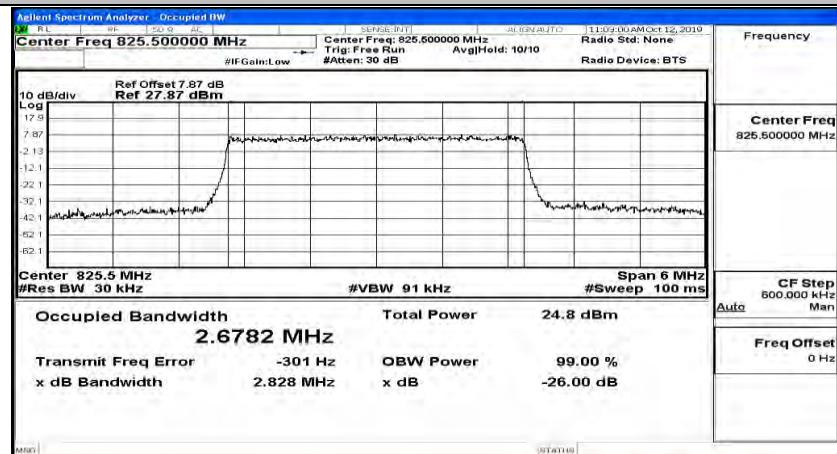
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



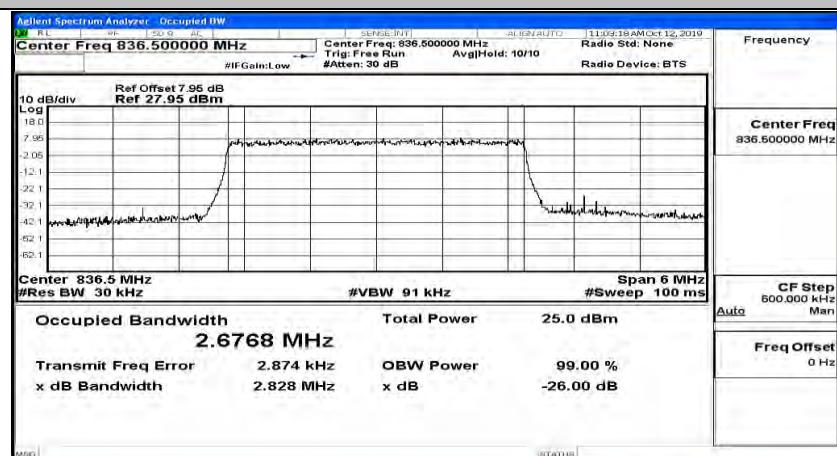
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



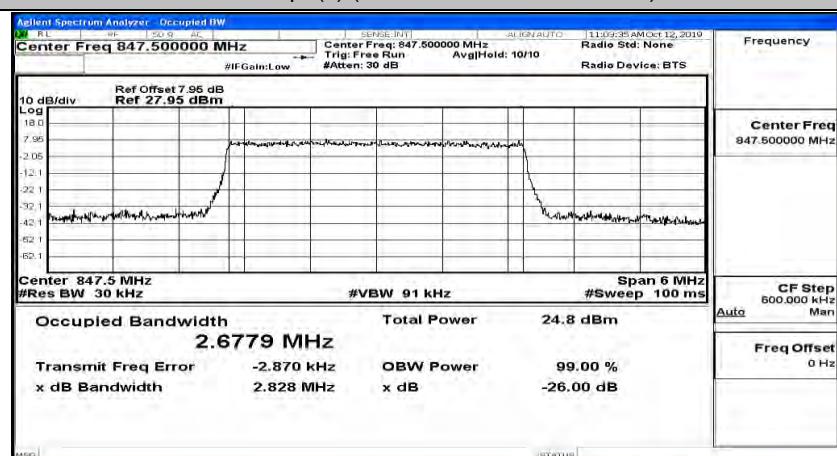
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



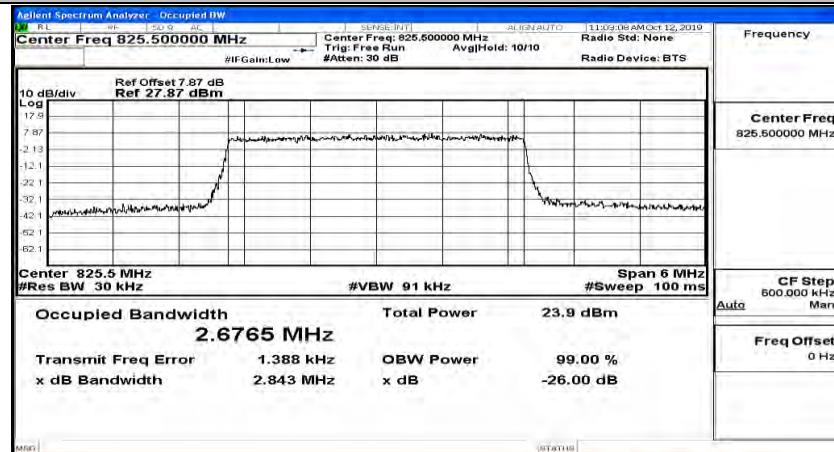
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



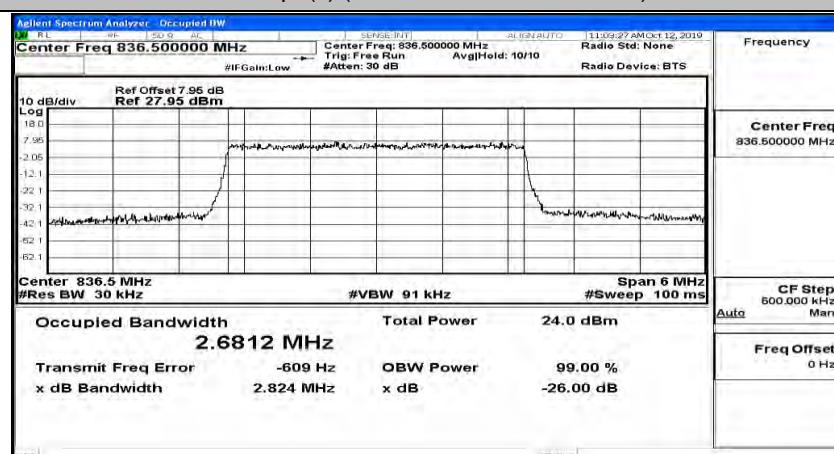
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



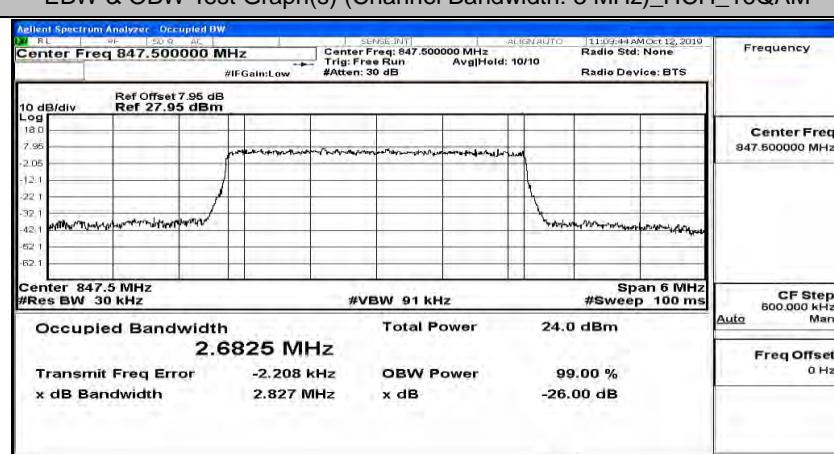
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



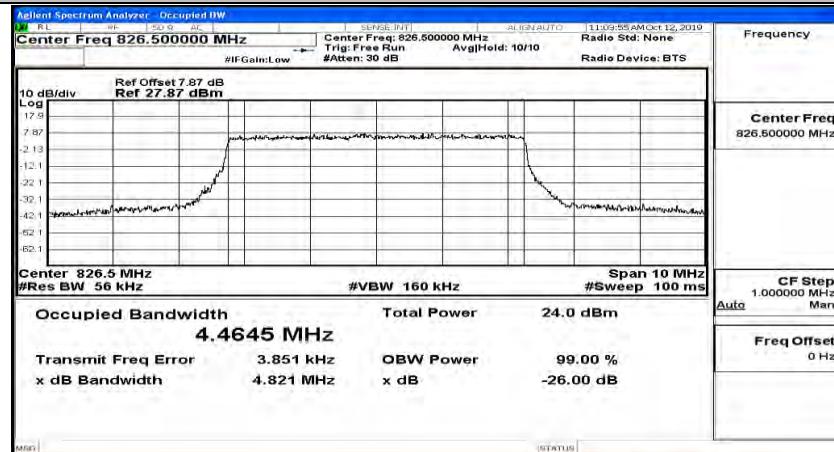
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



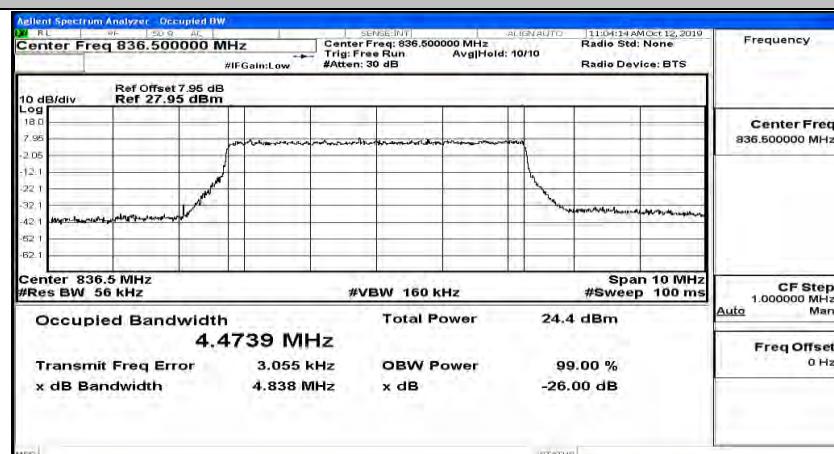
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



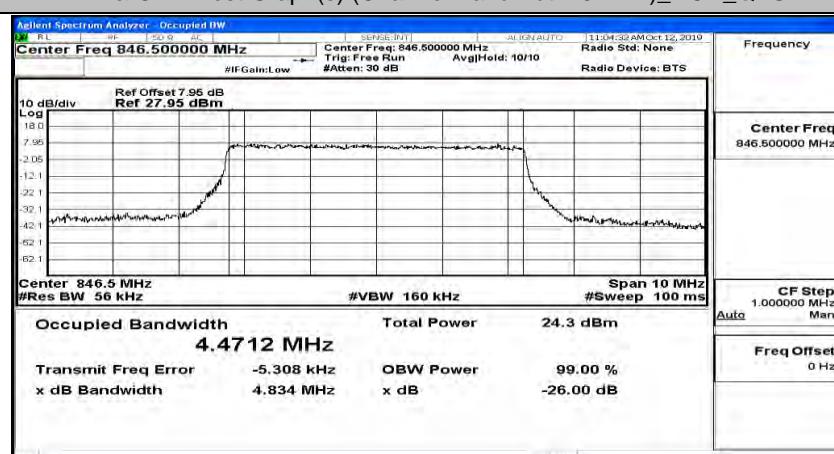
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



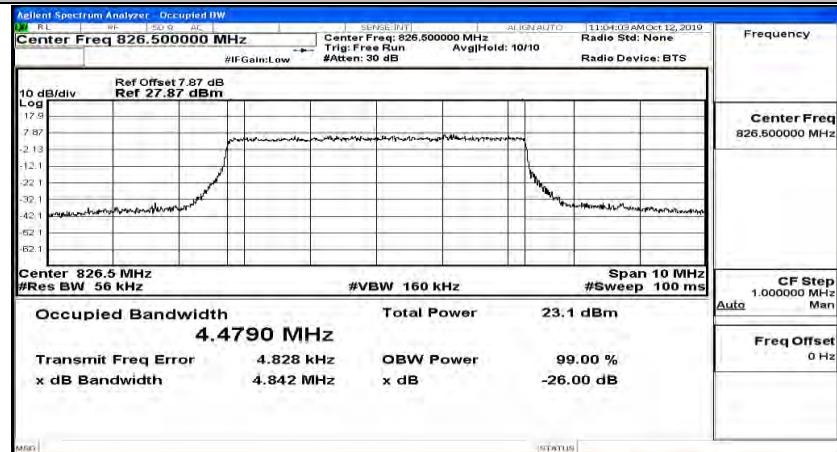
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



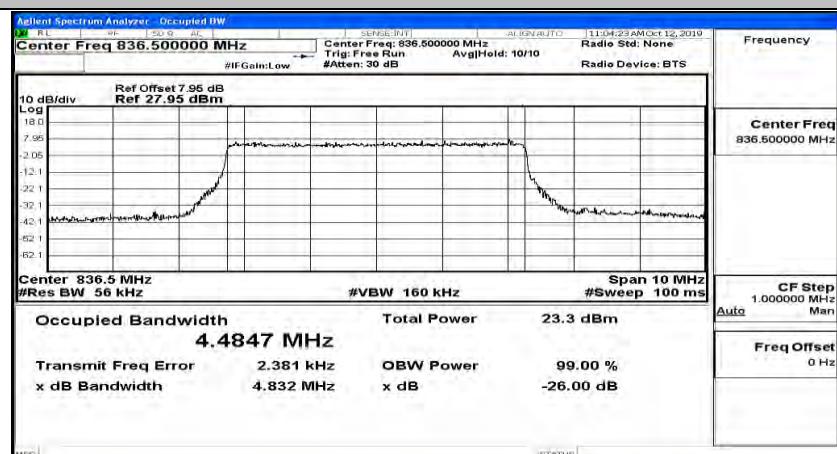
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



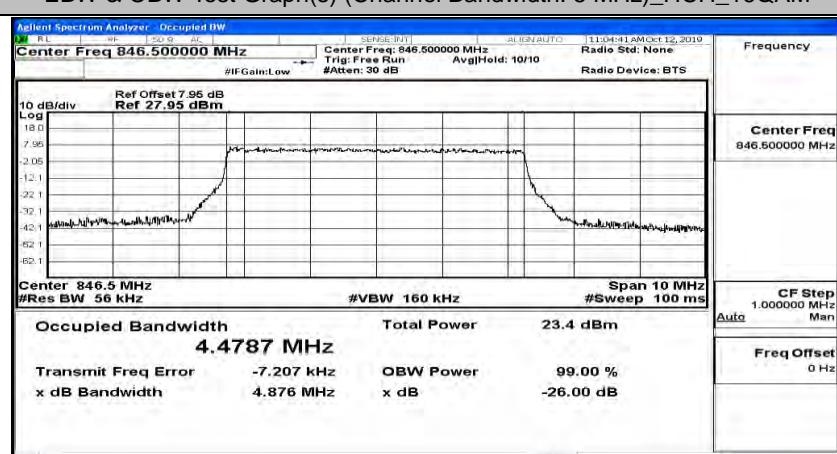
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



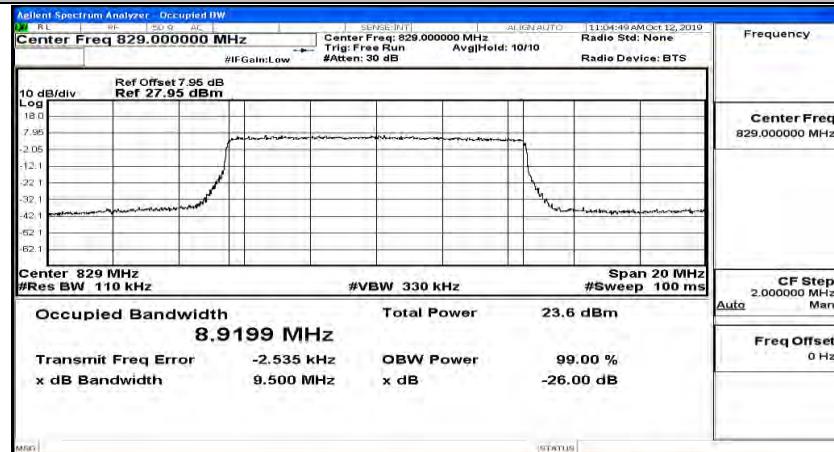
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



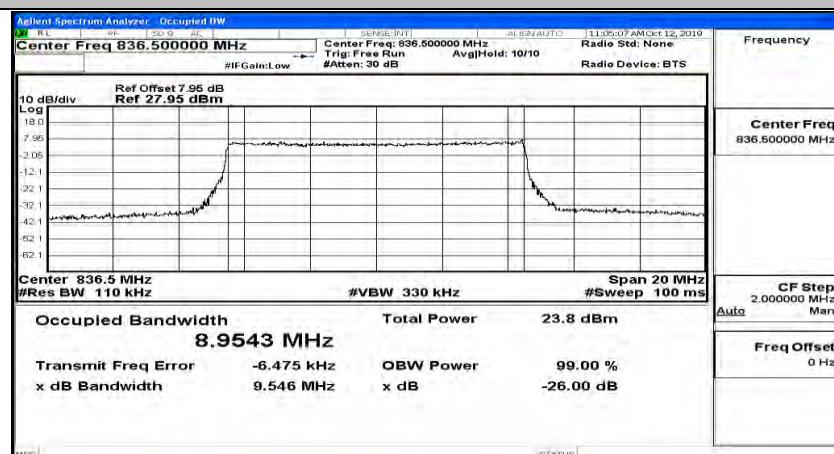
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



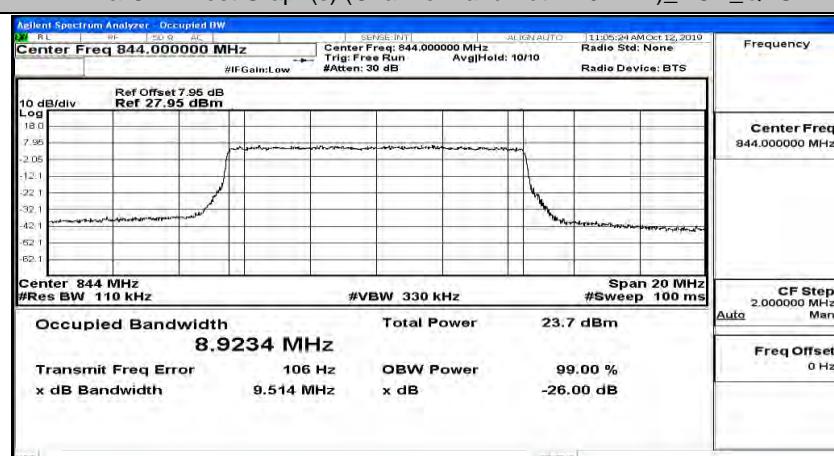
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



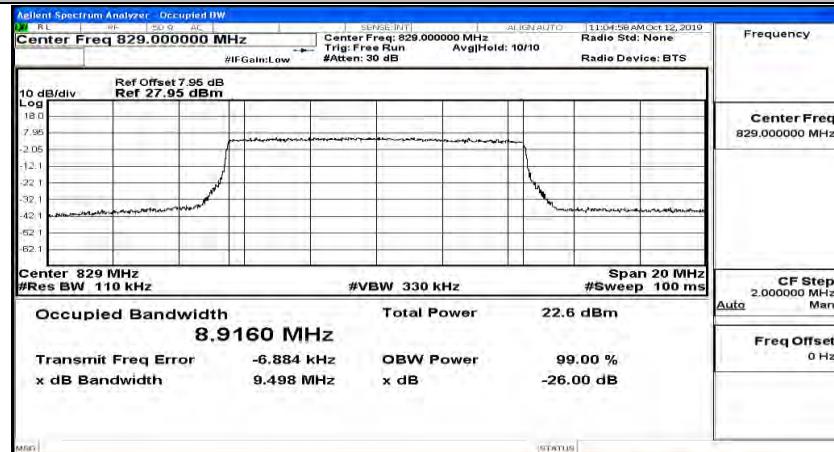
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



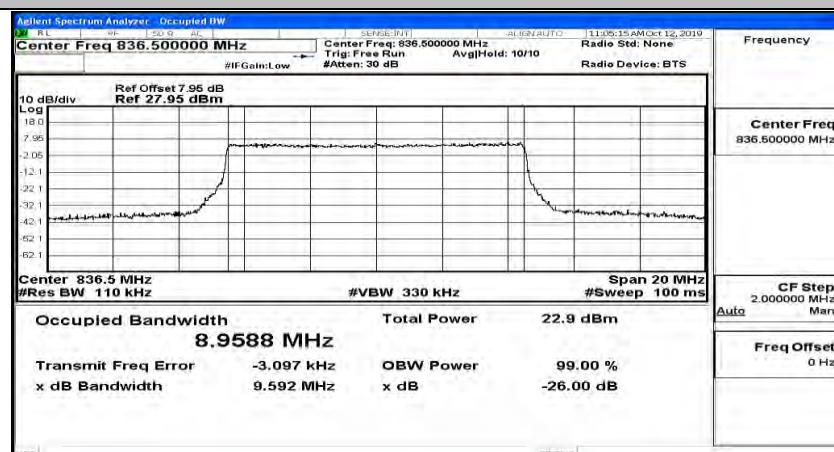
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



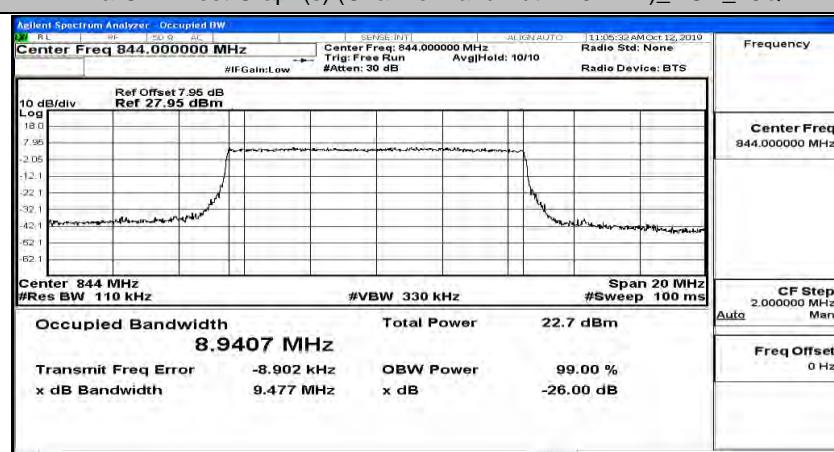
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

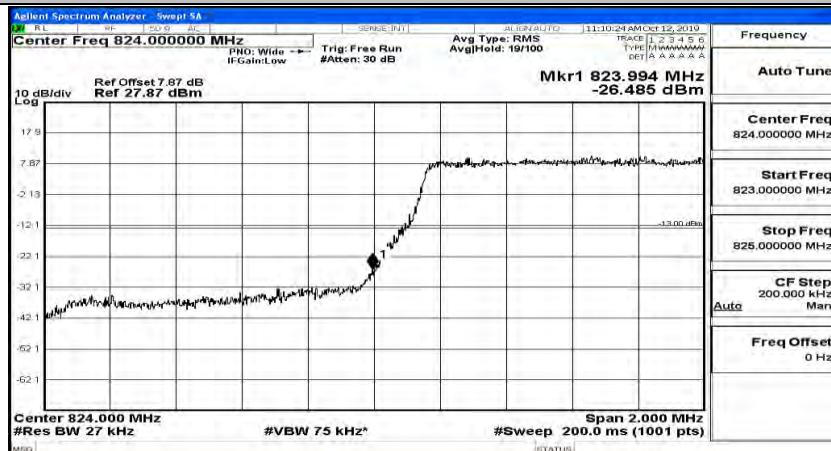


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

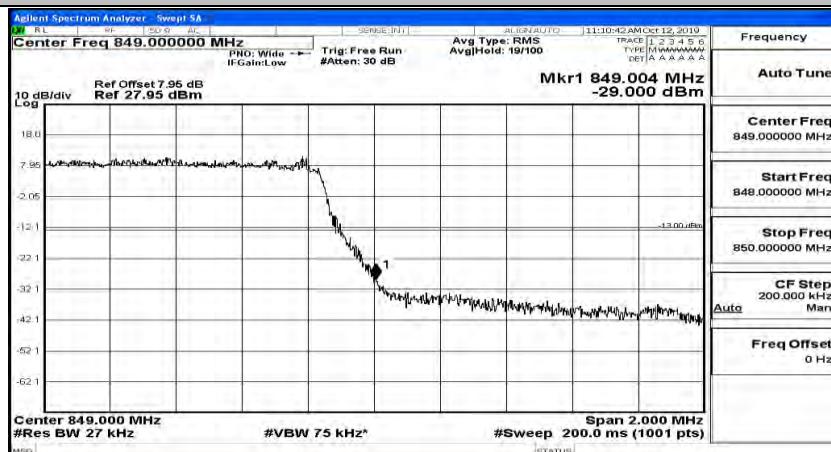


D.4 Band Edge

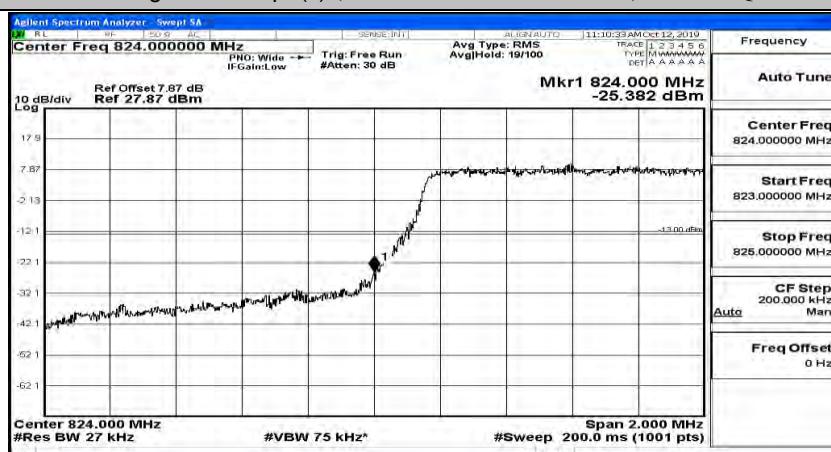
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



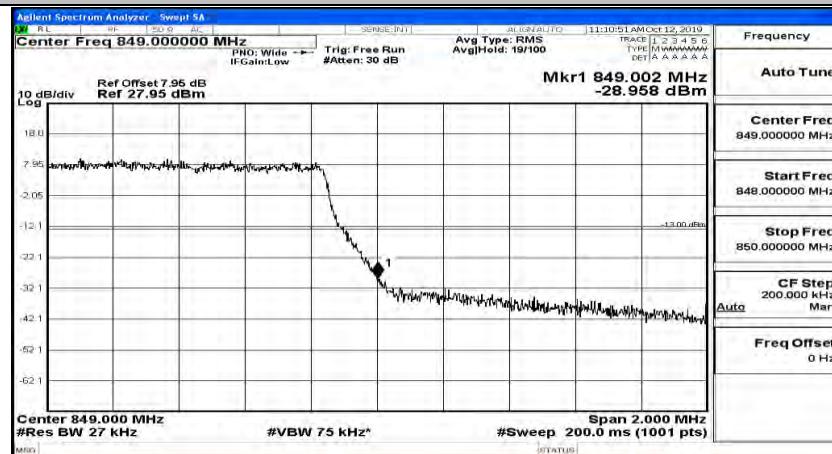
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



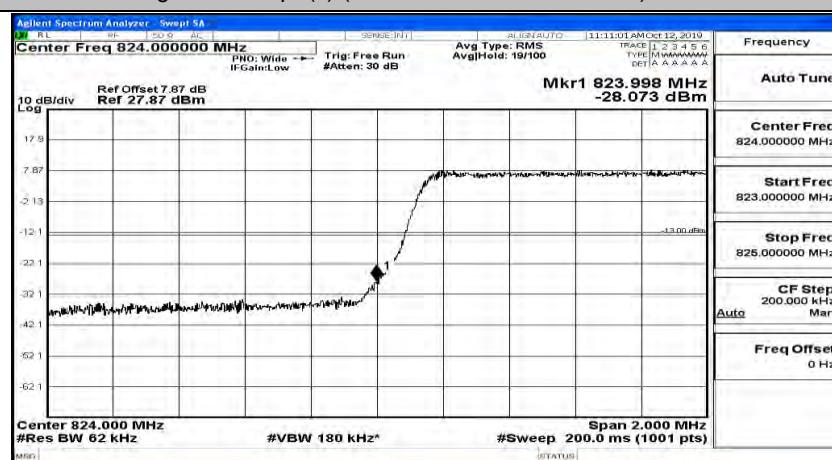
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



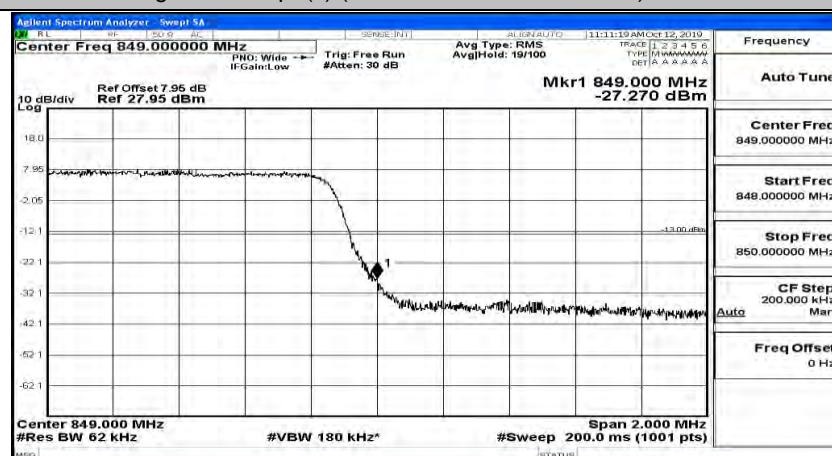
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



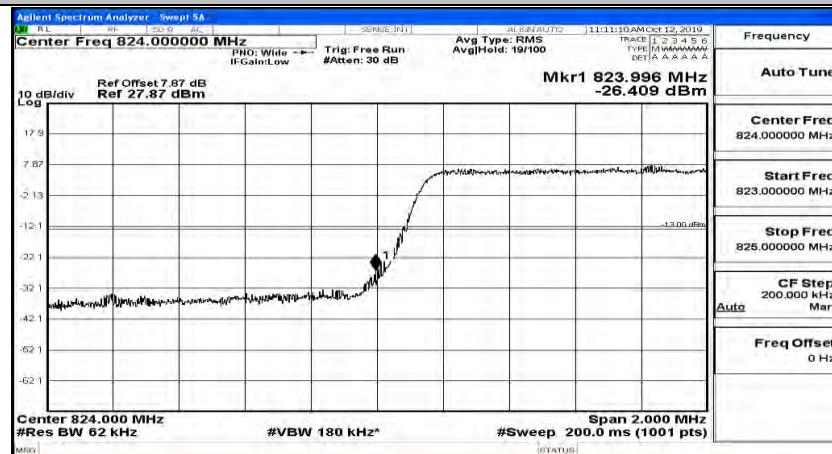
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



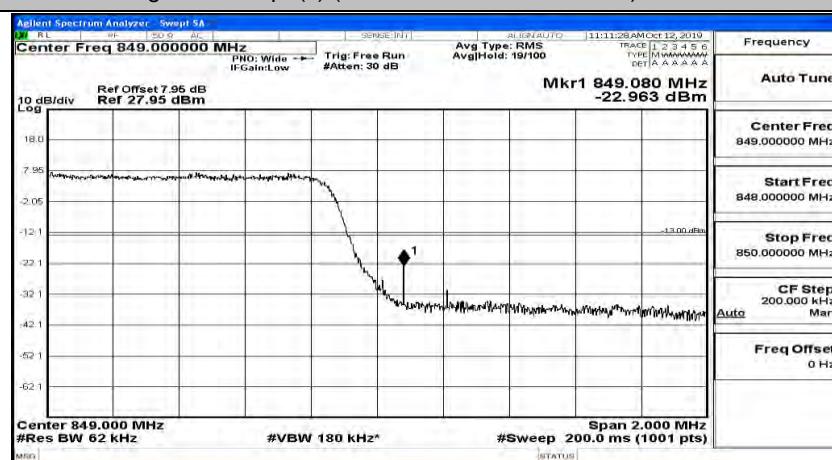
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



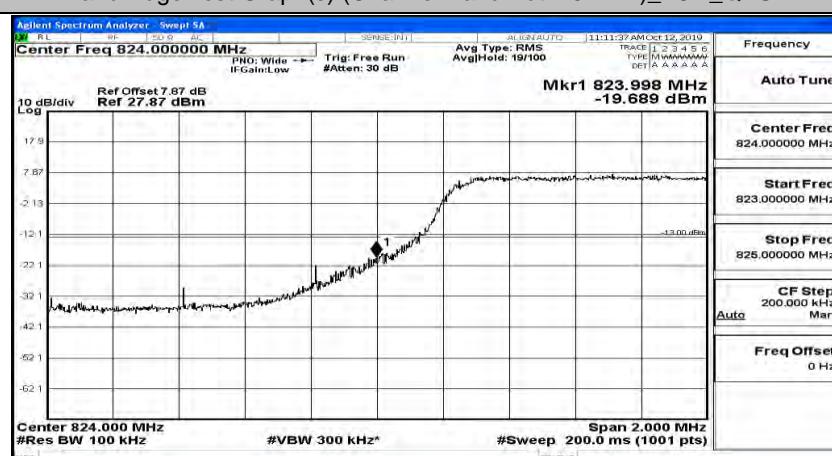
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



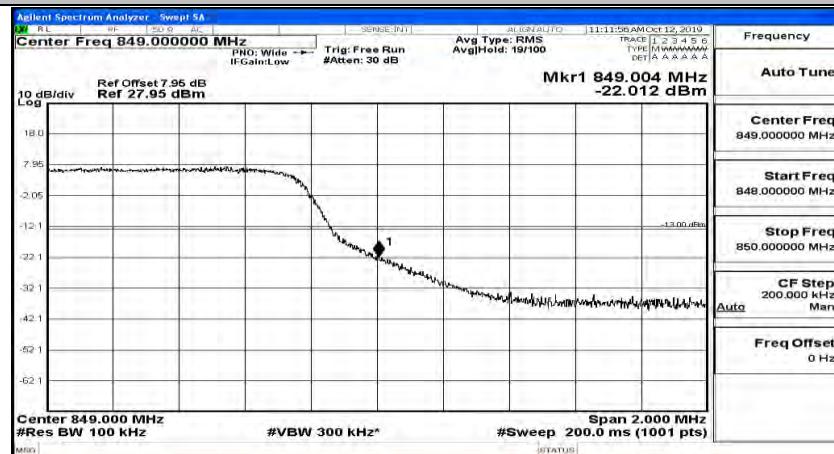
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



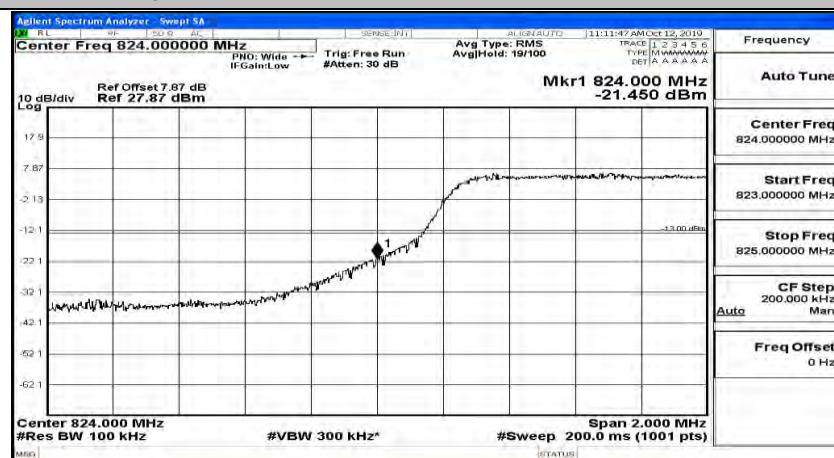
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



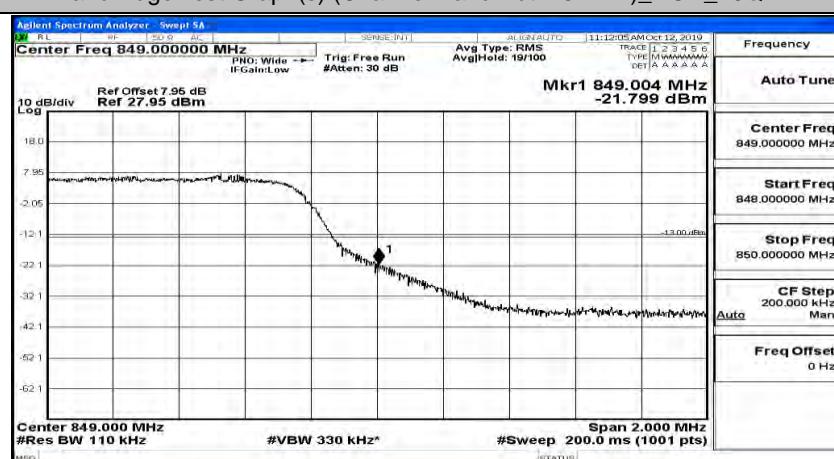
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



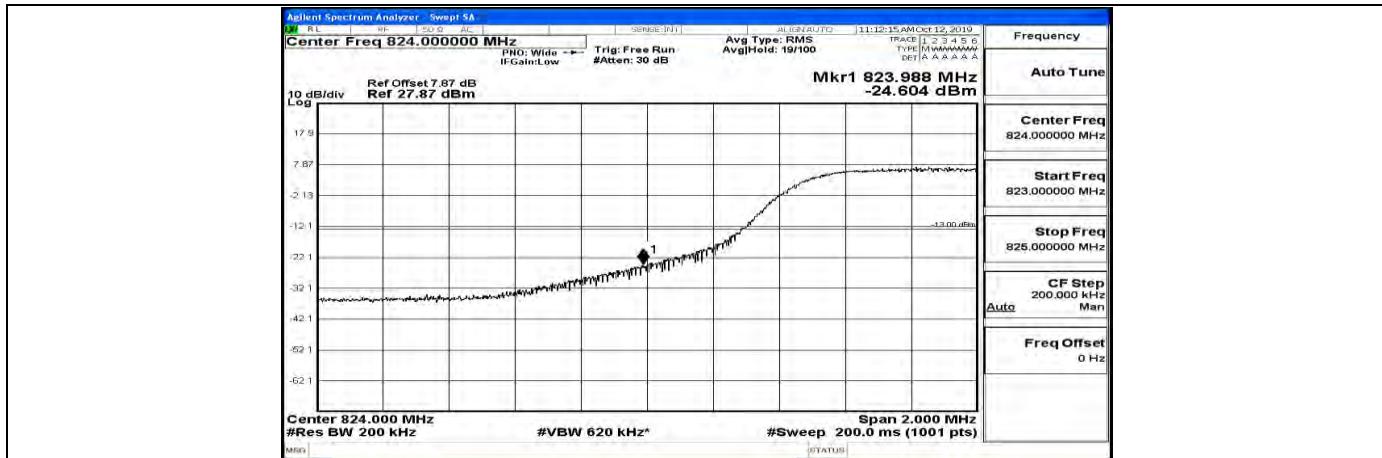
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



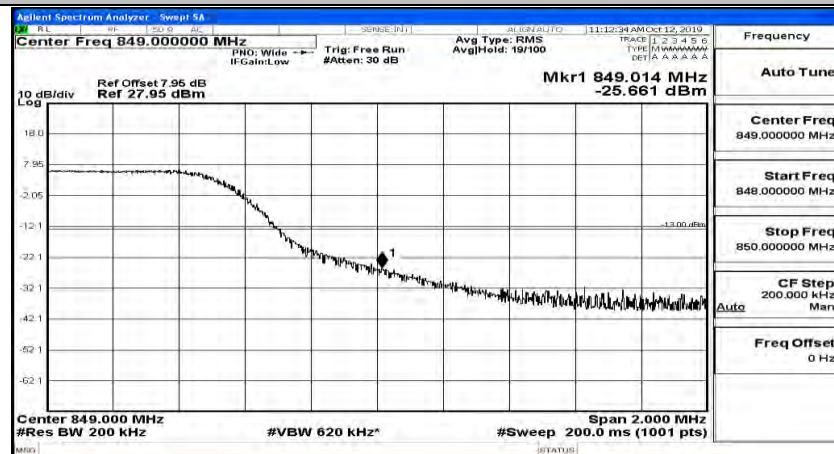
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



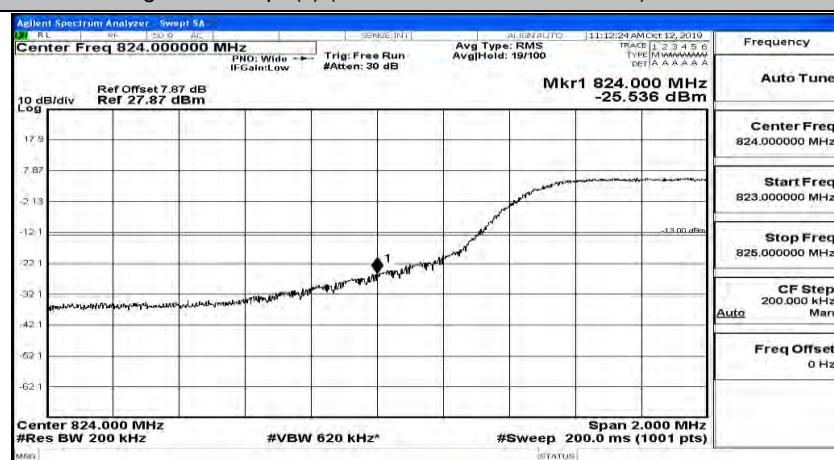
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



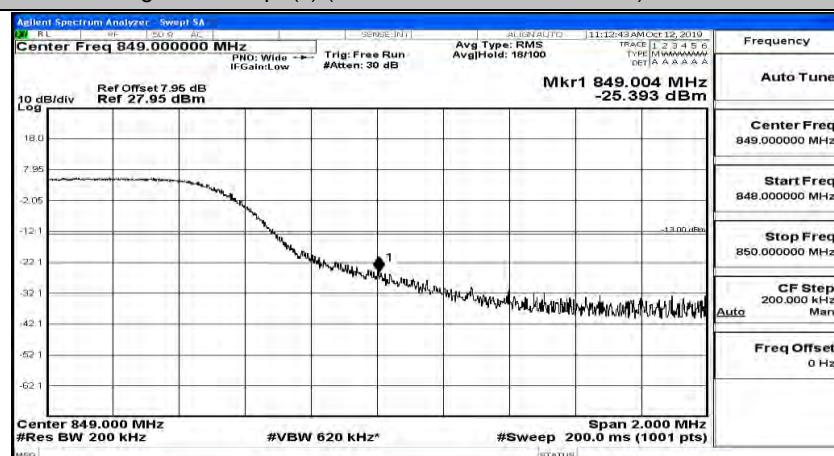
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

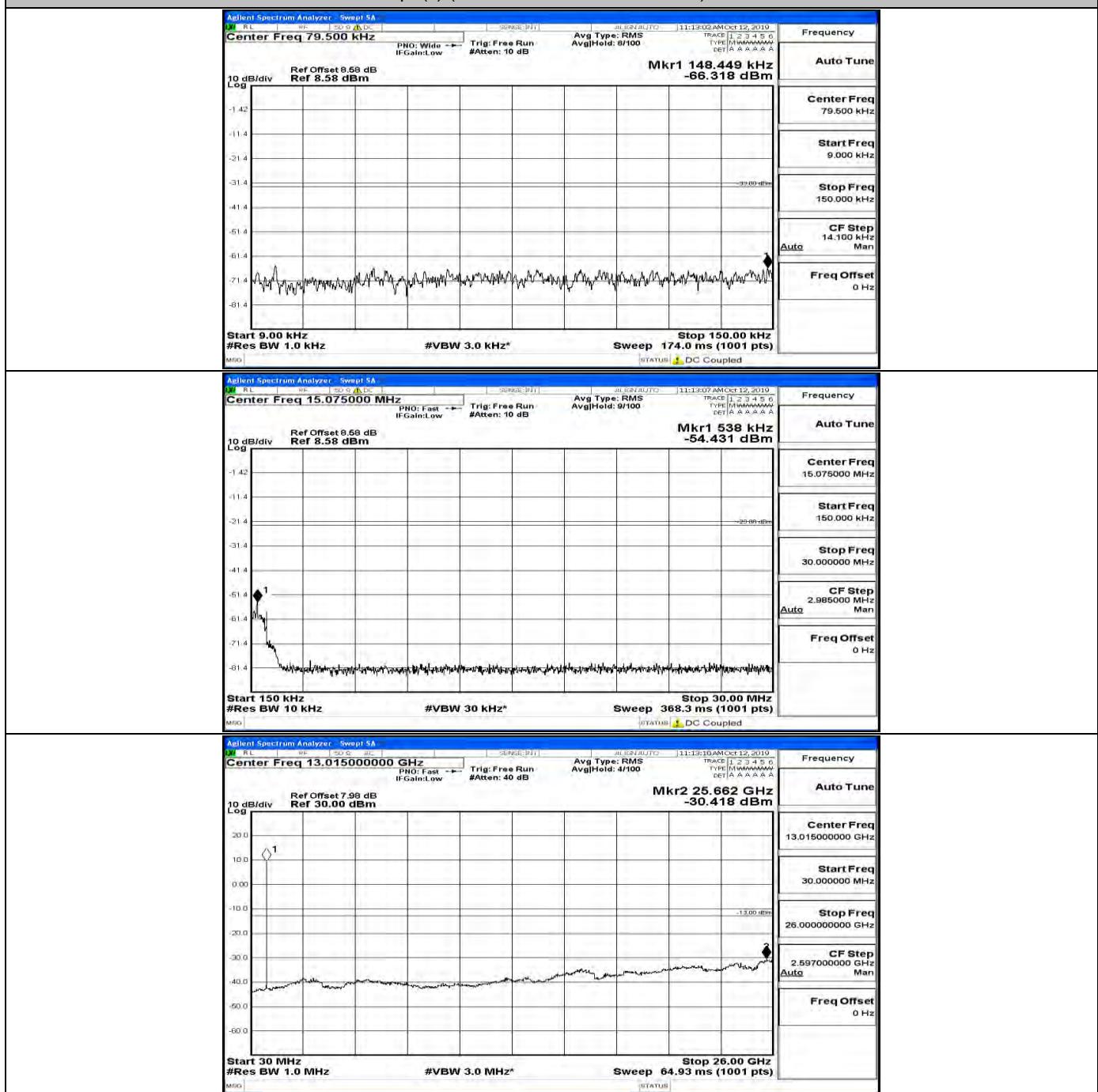


Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

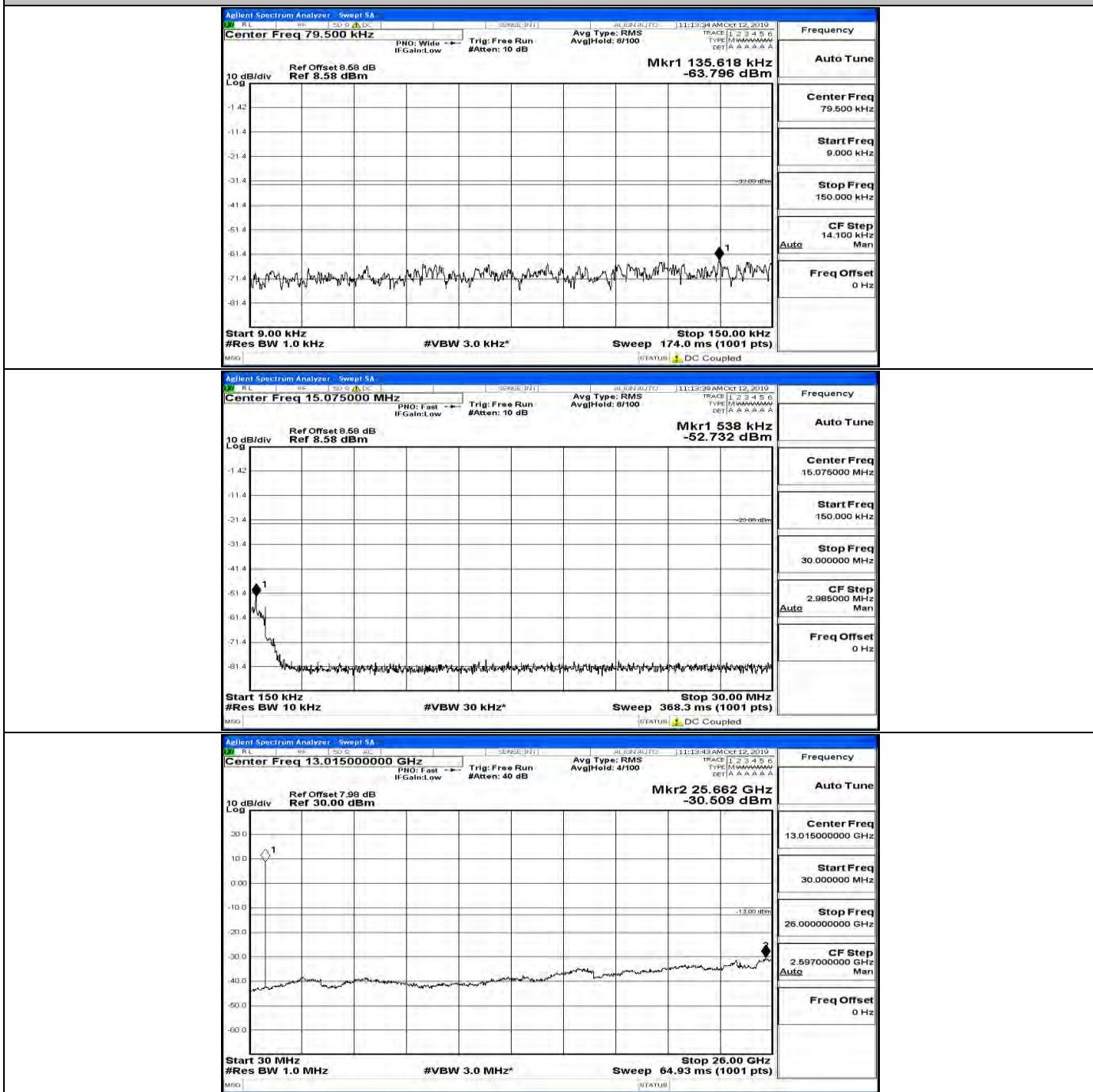


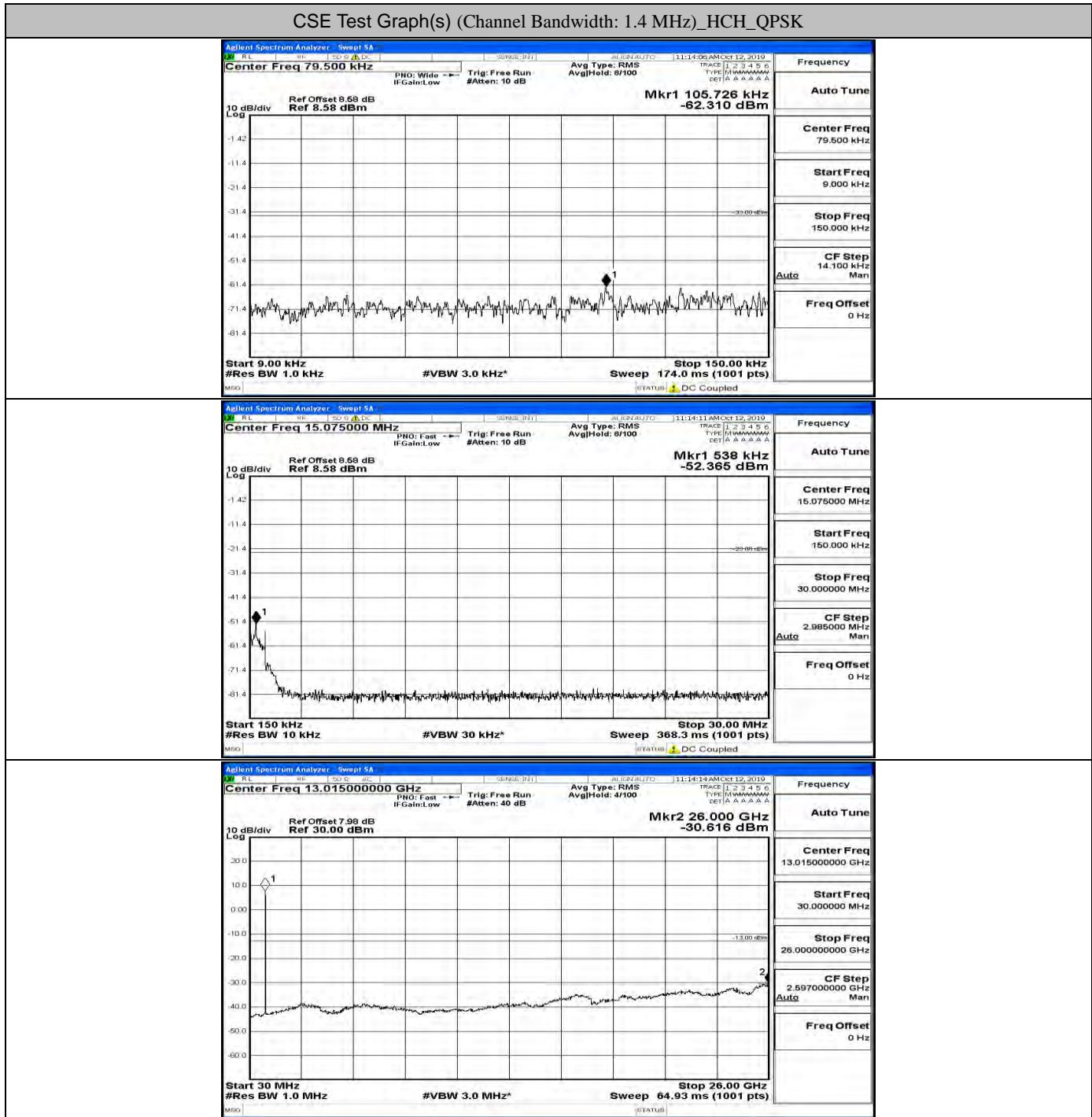
E.5 Conducted Spurious Emission

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

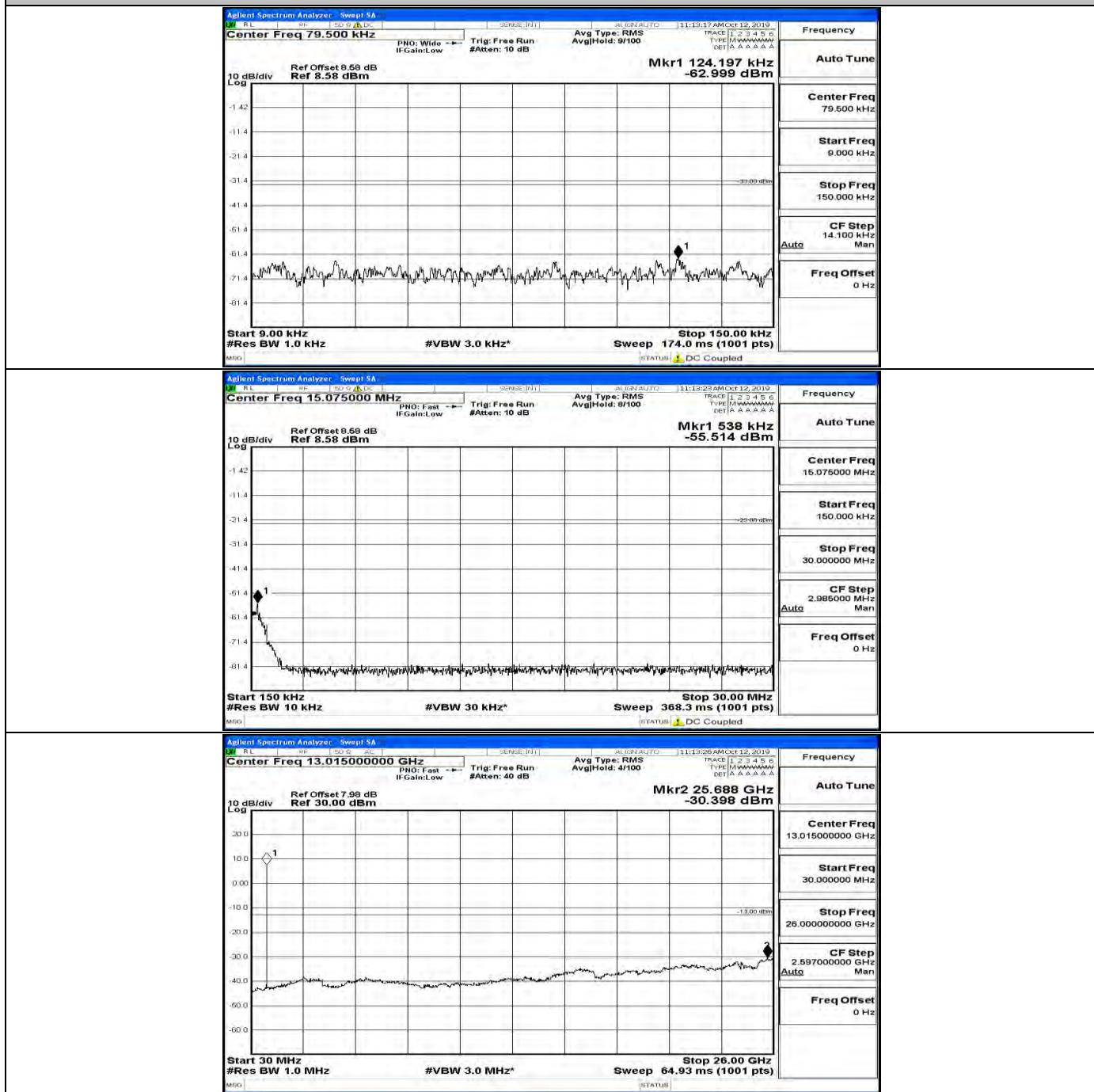


CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK

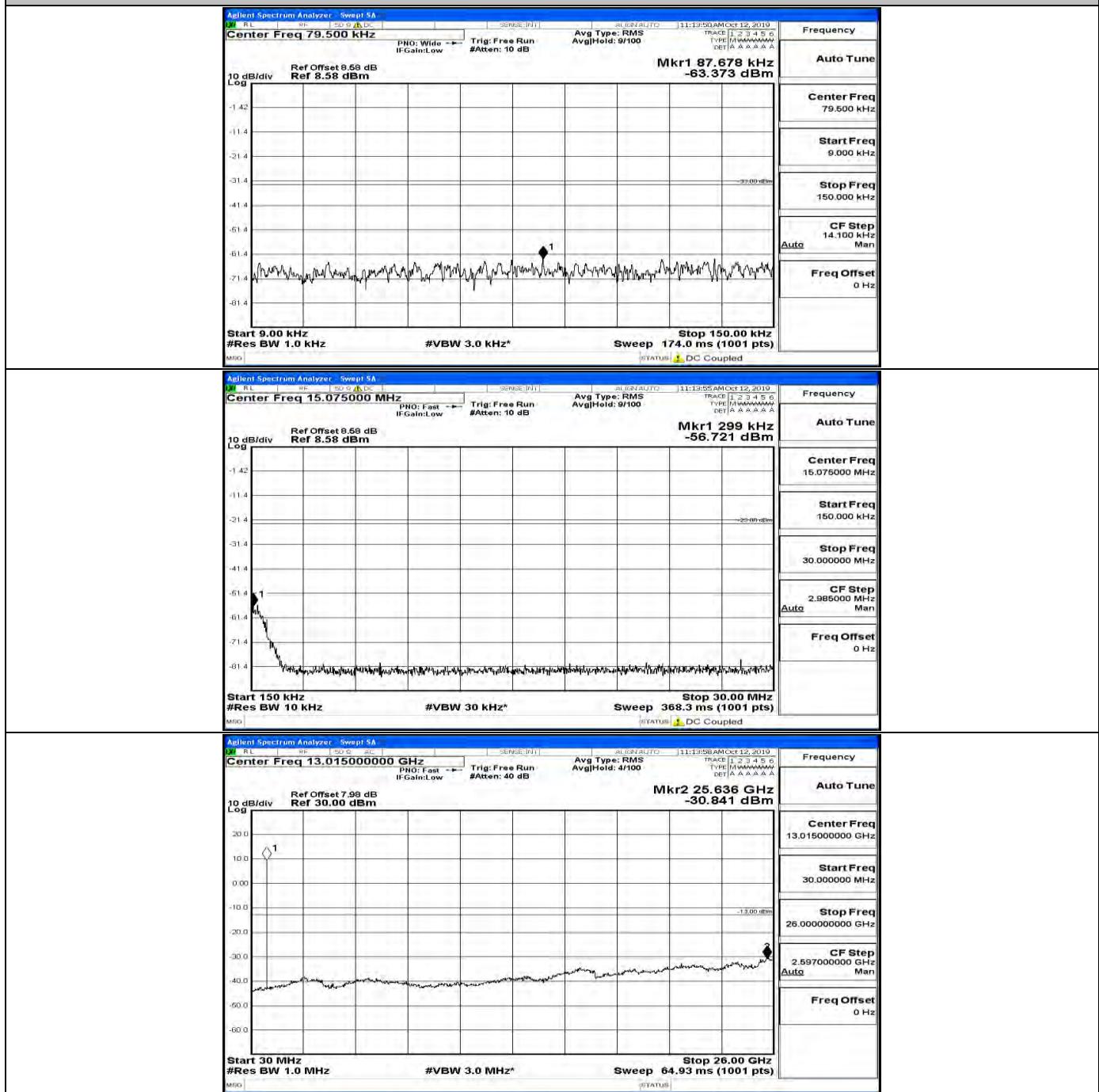




CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



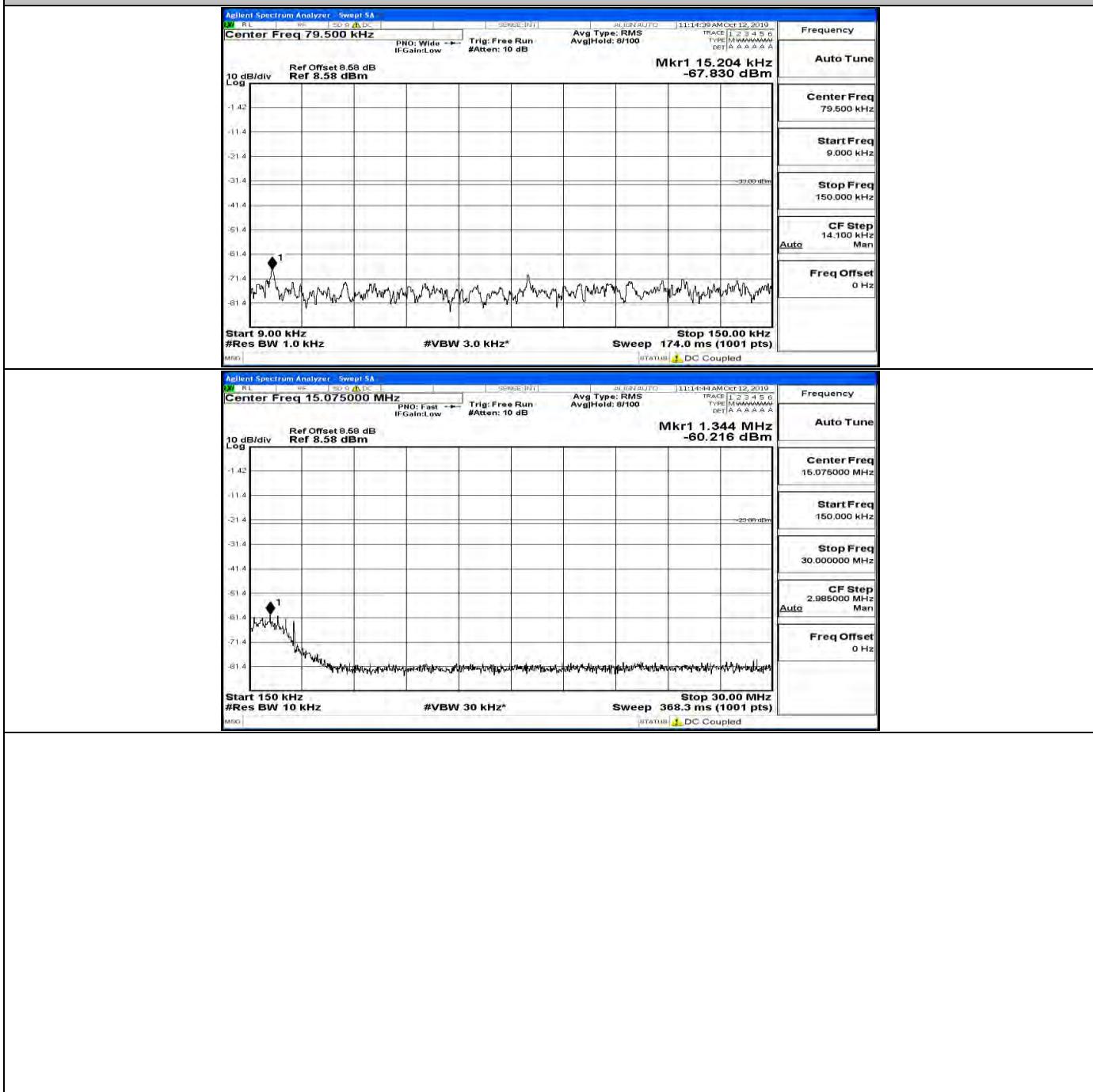
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



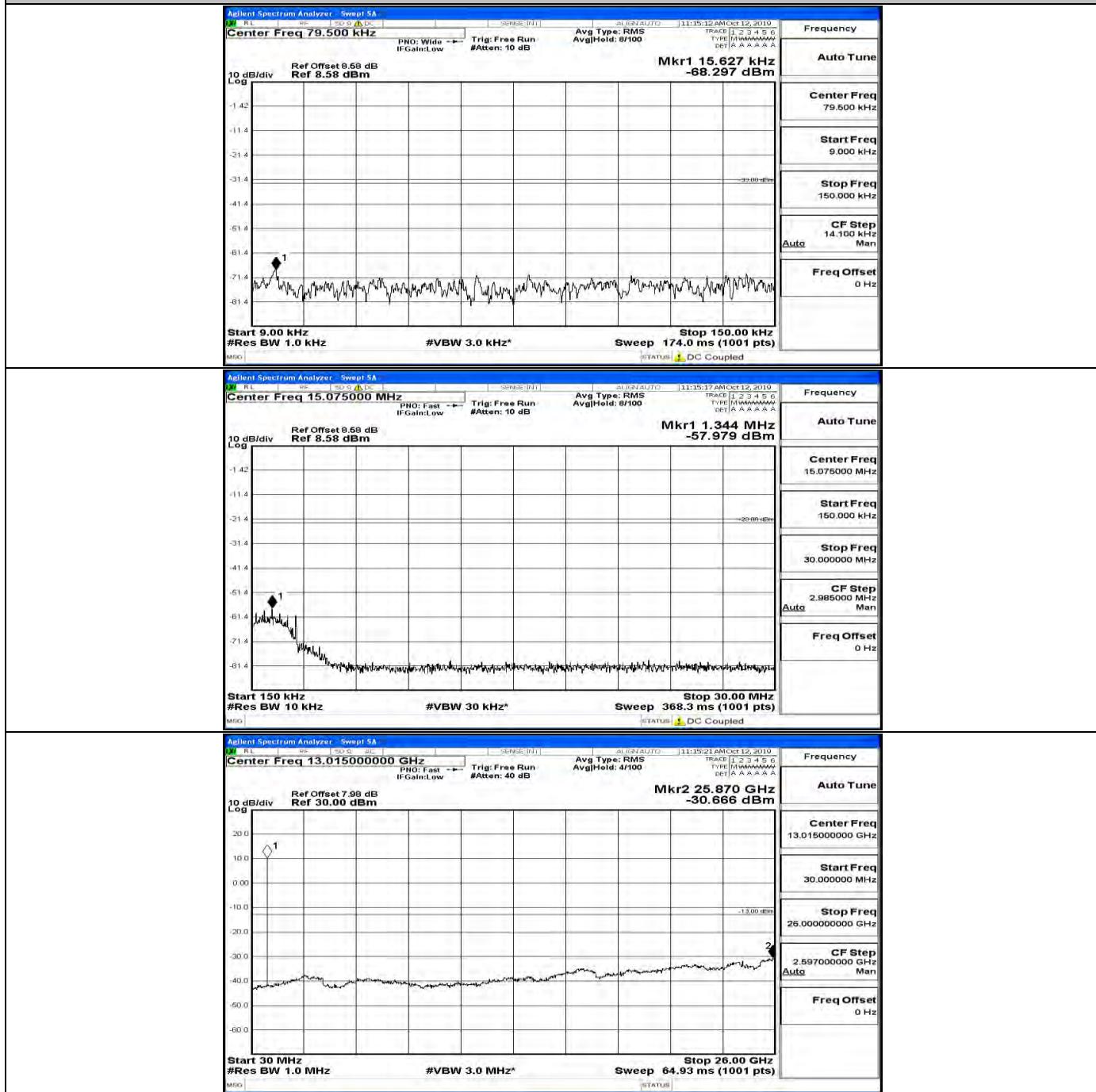
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



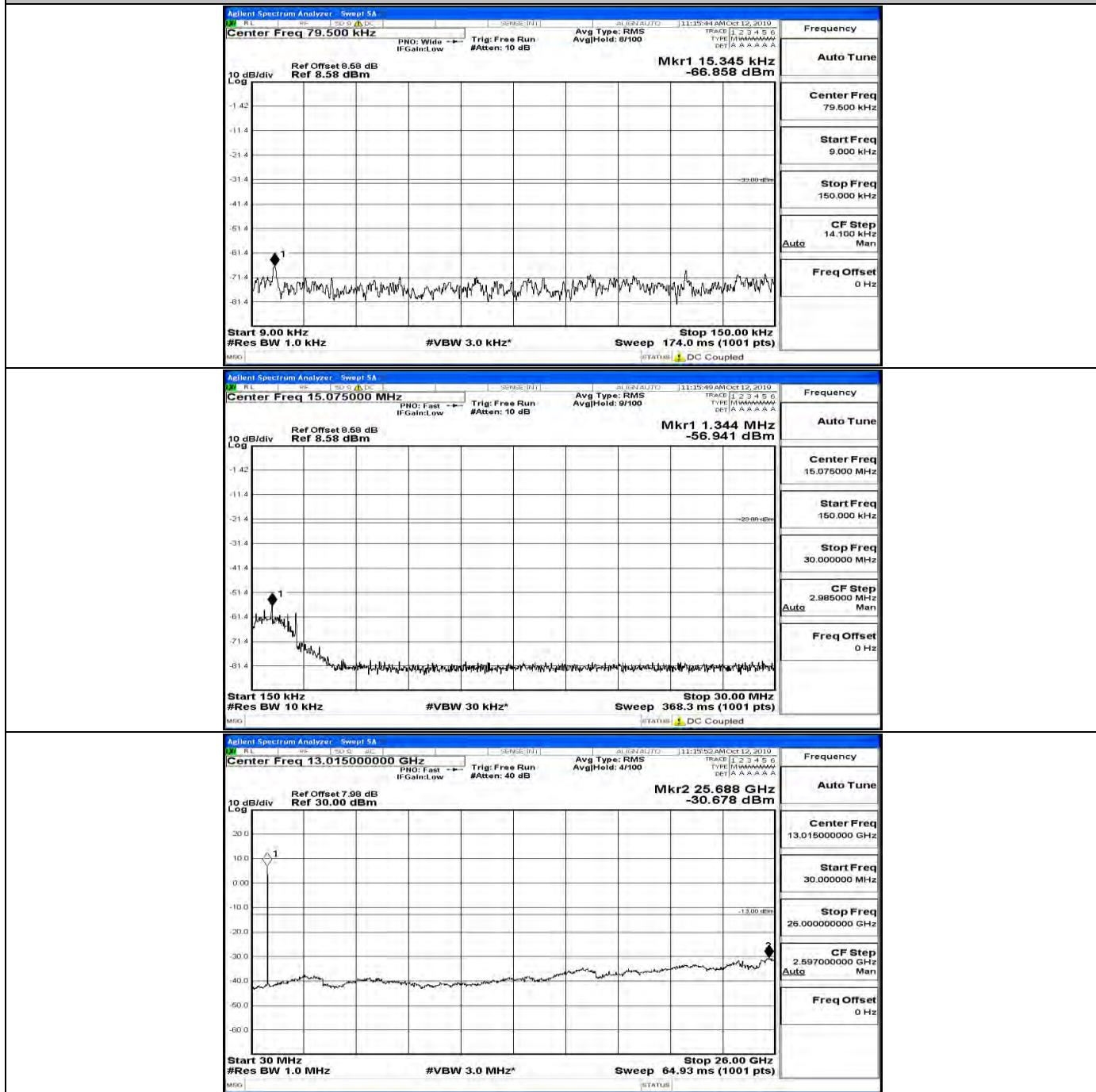
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



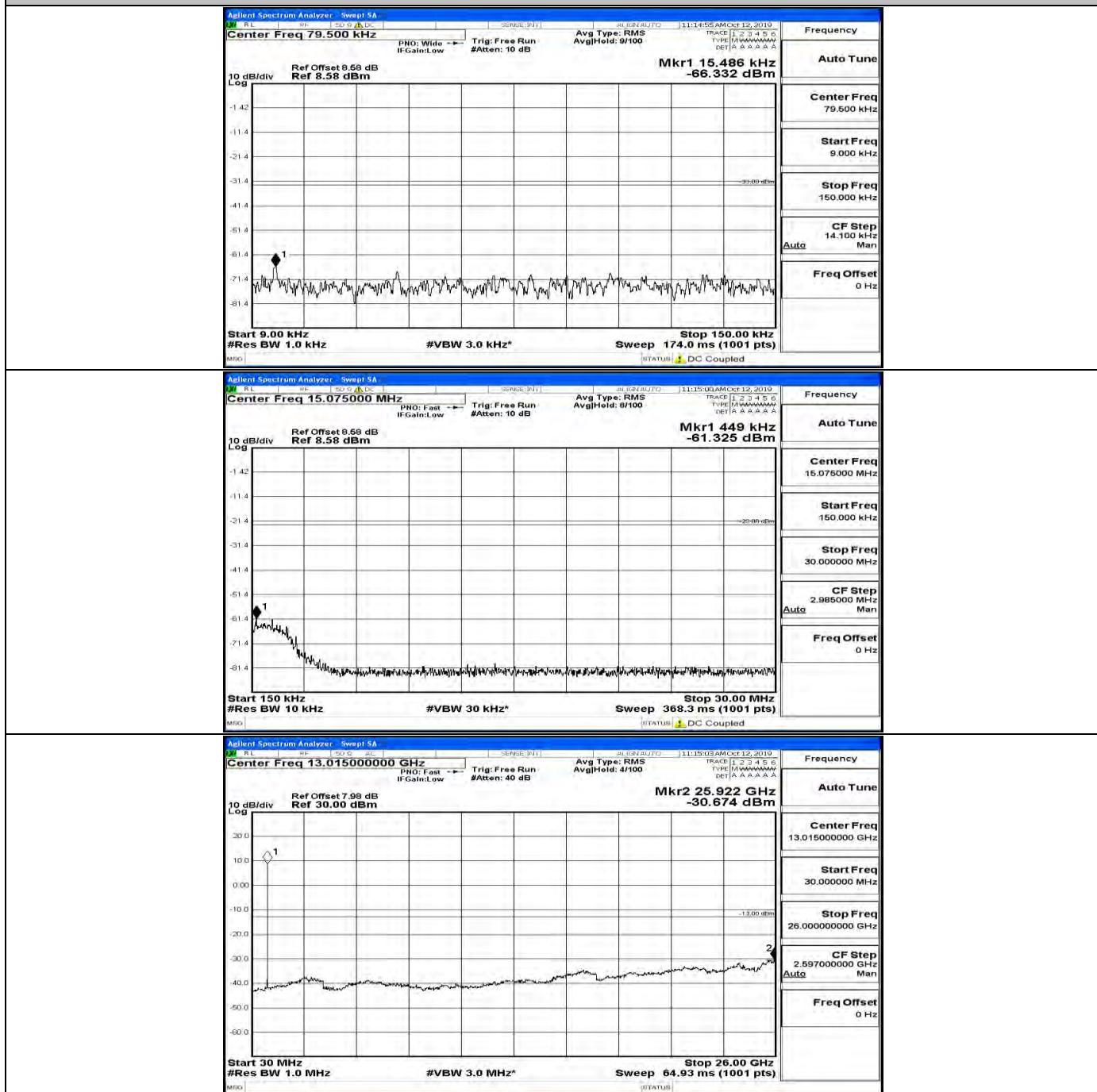
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



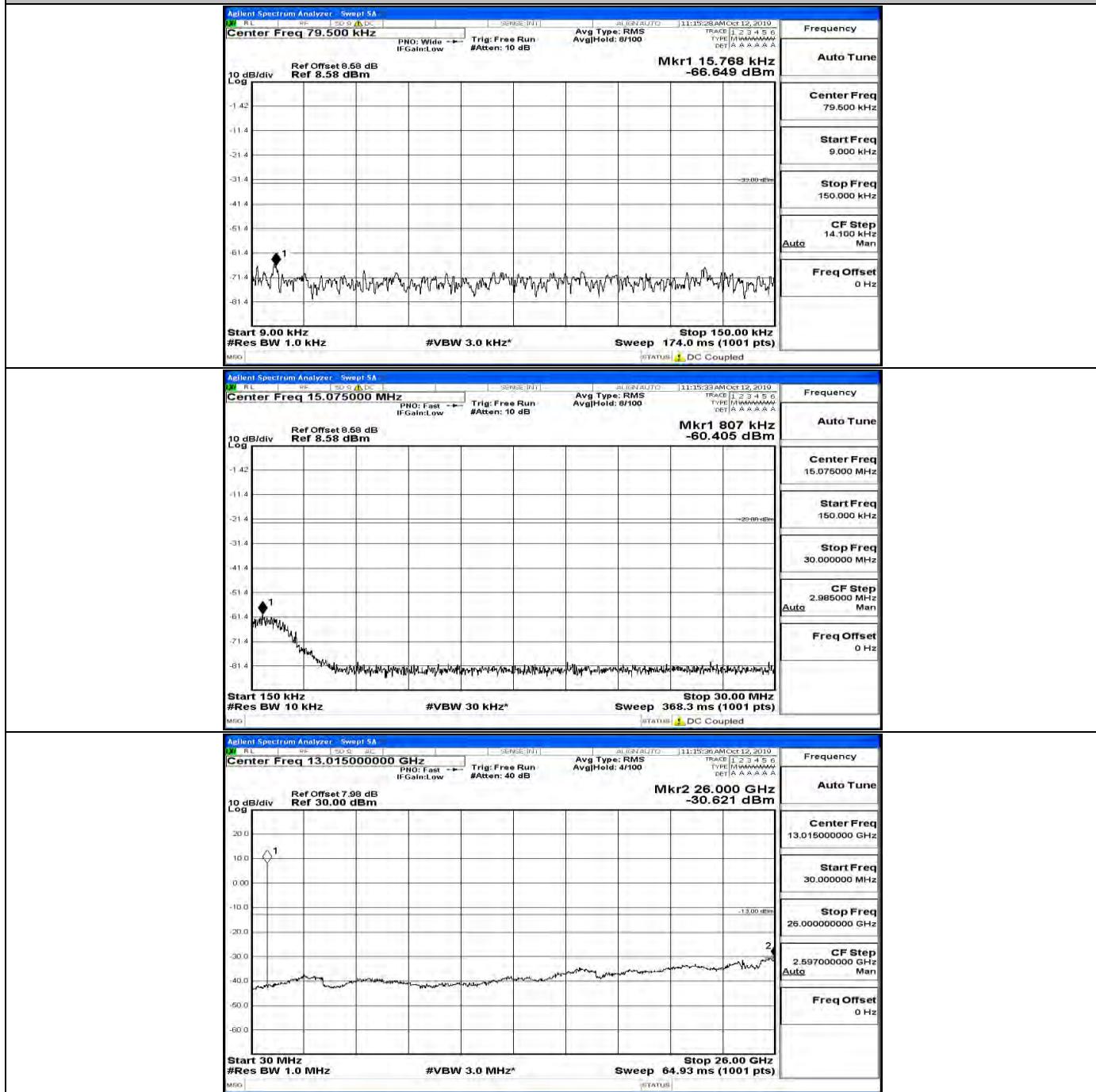
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



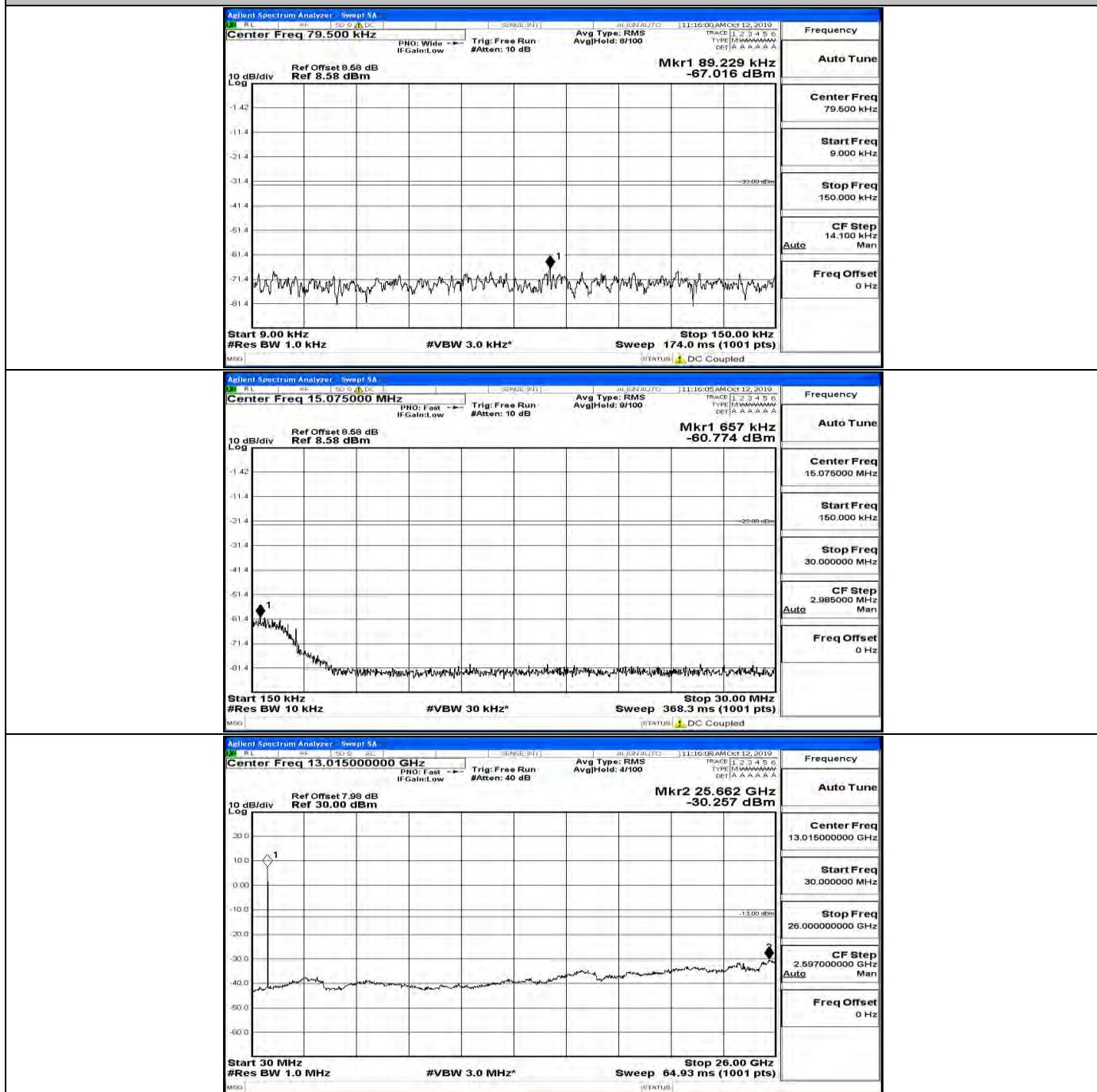
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



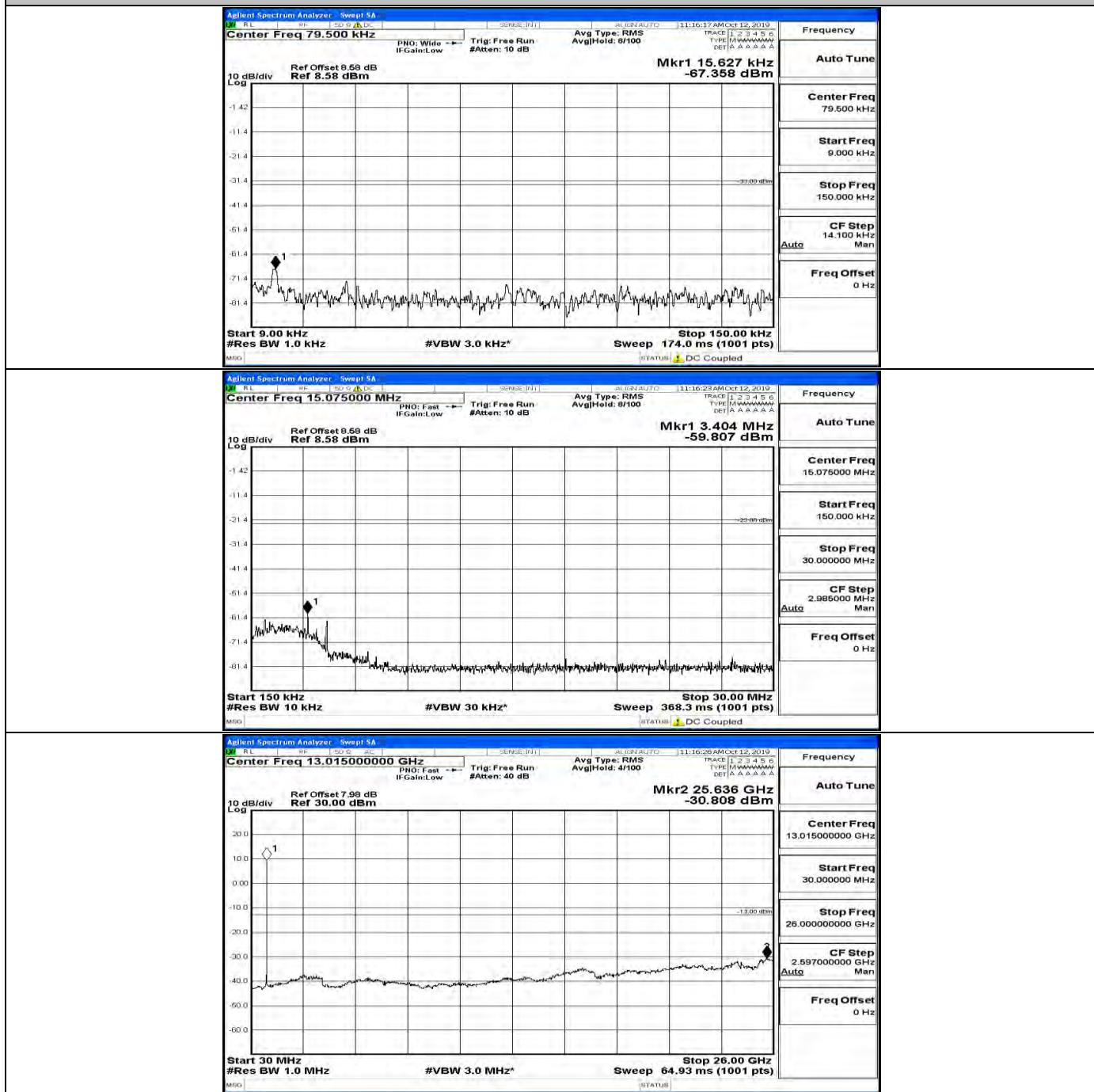
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



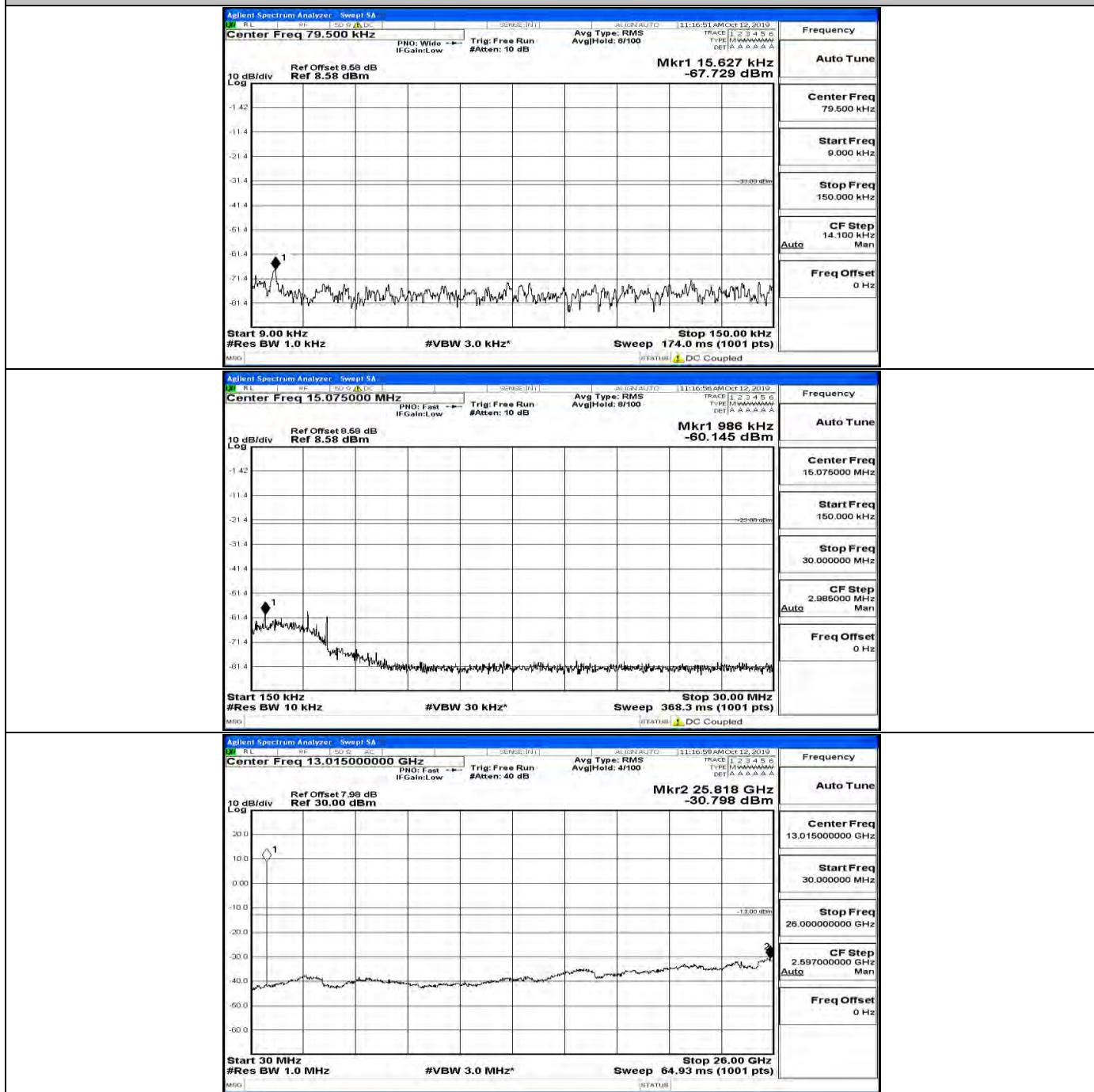
CSE Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



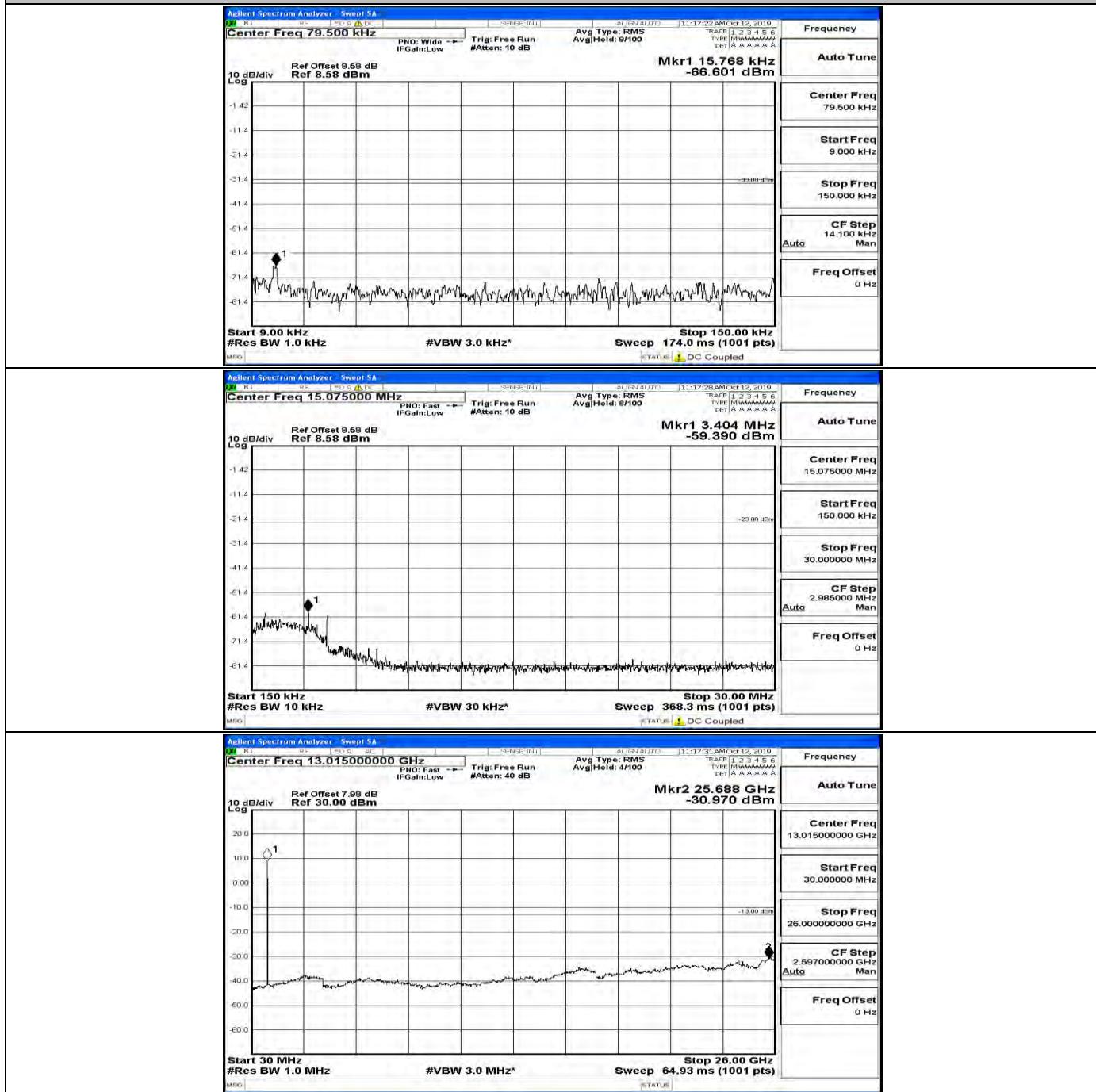
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



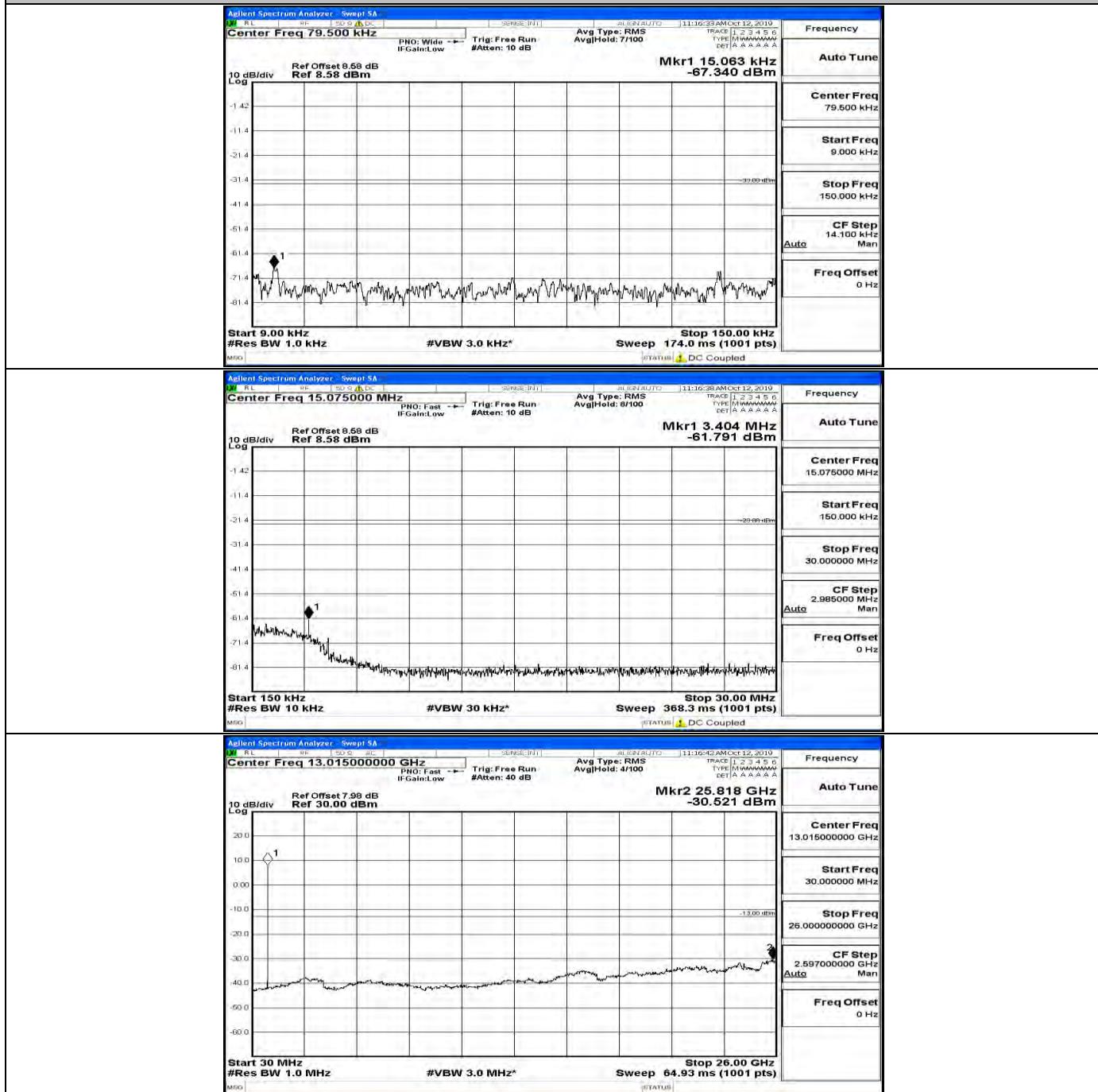
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



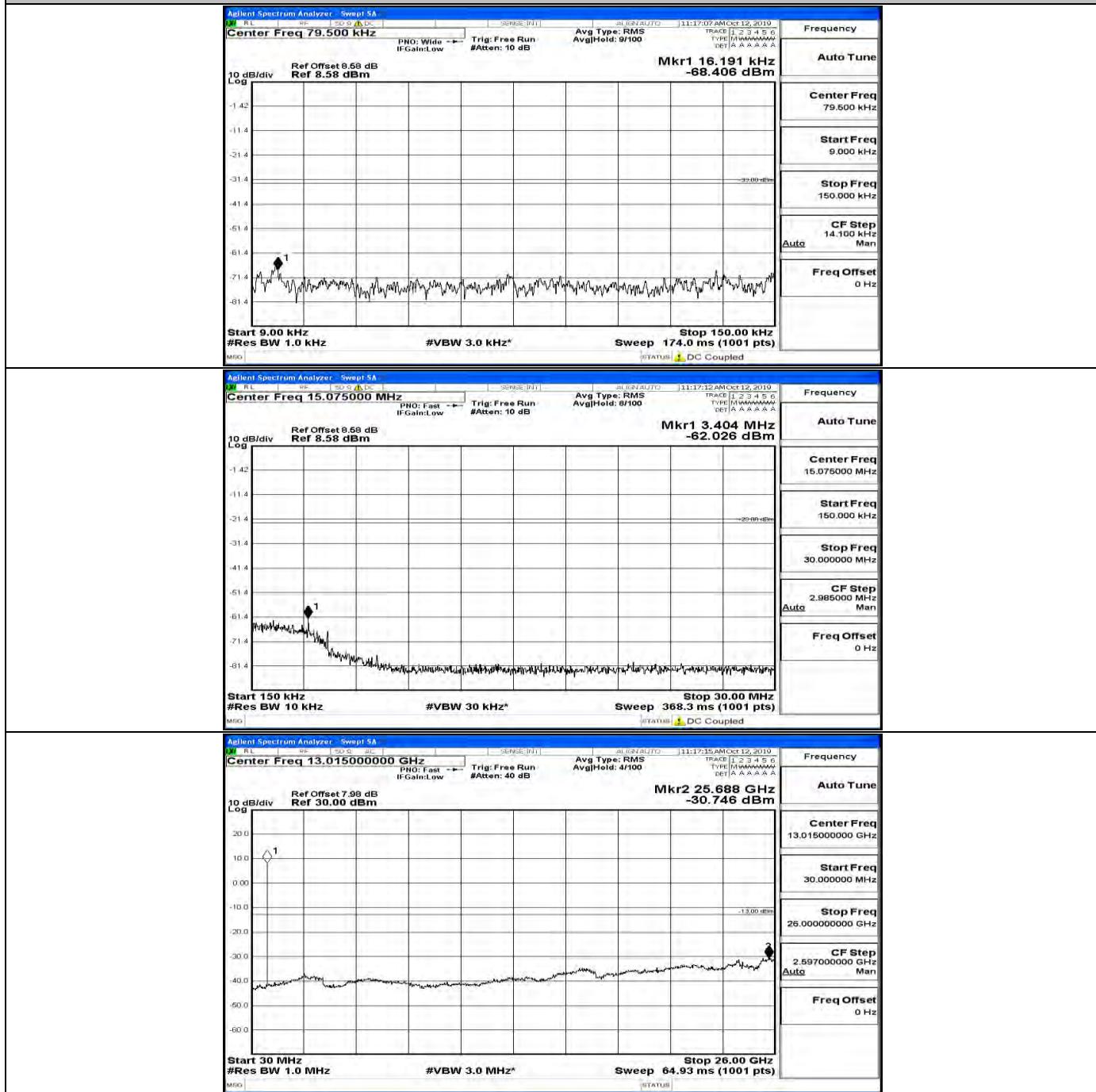
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



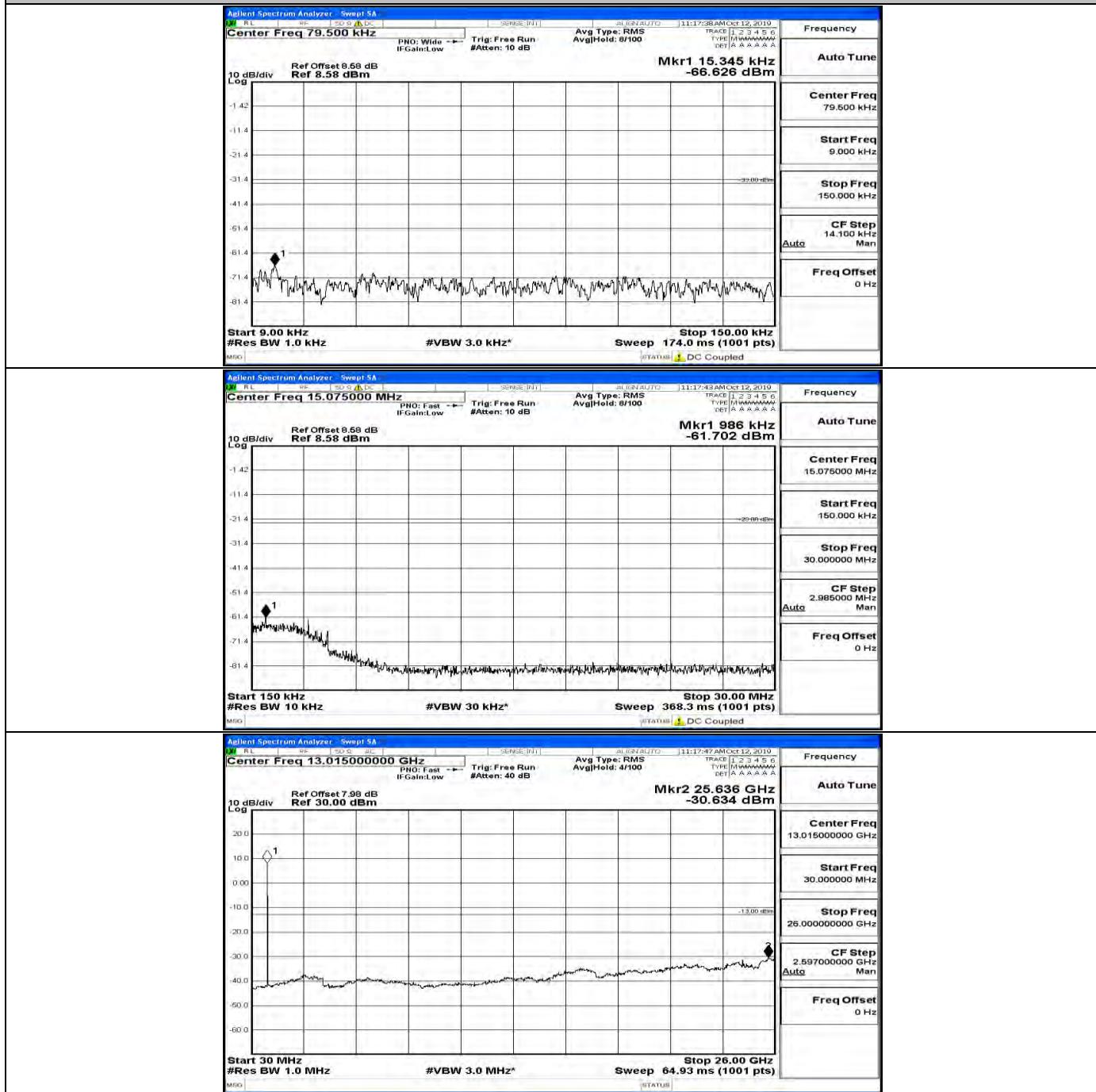
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



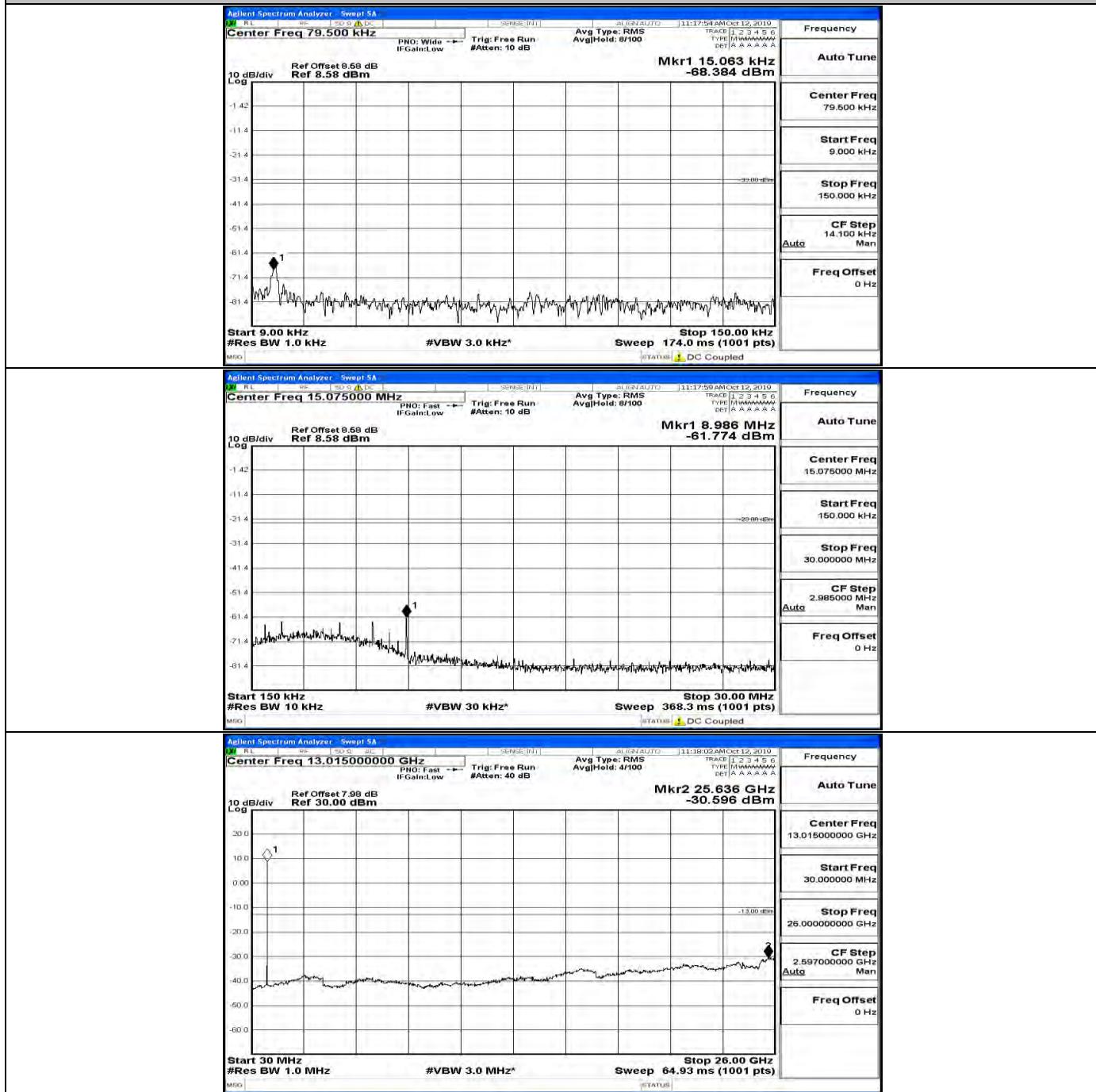
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



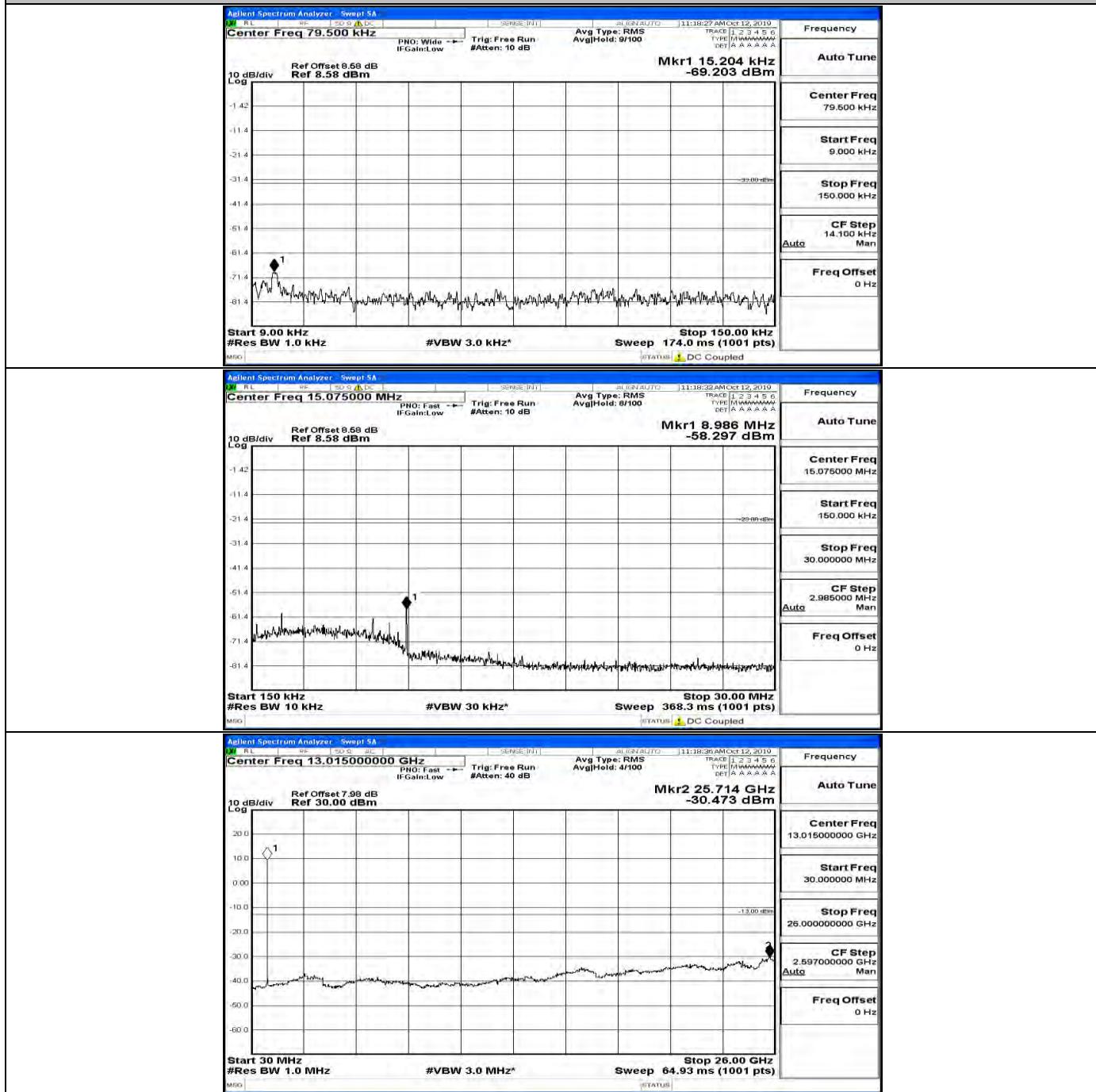
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



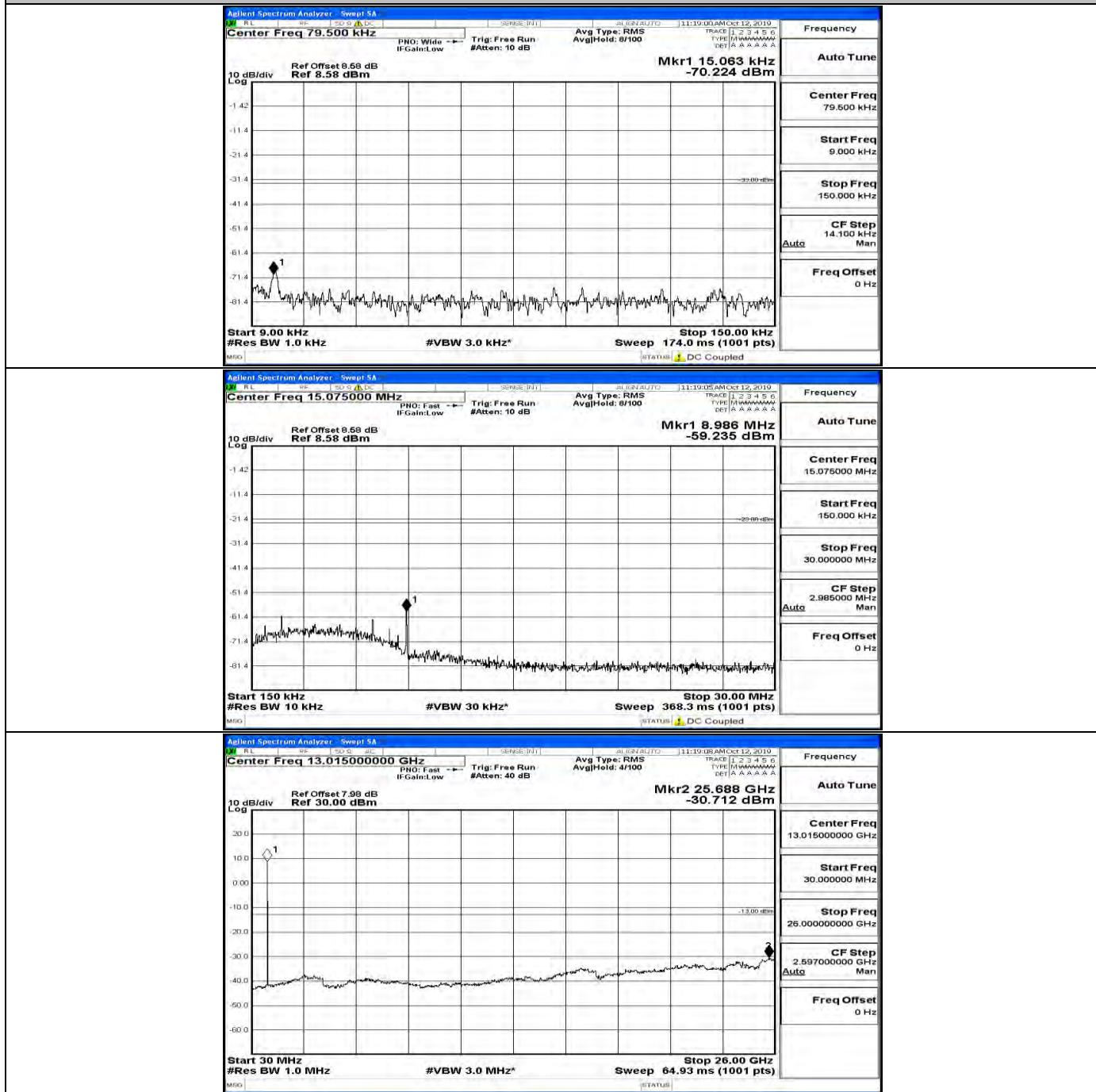
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



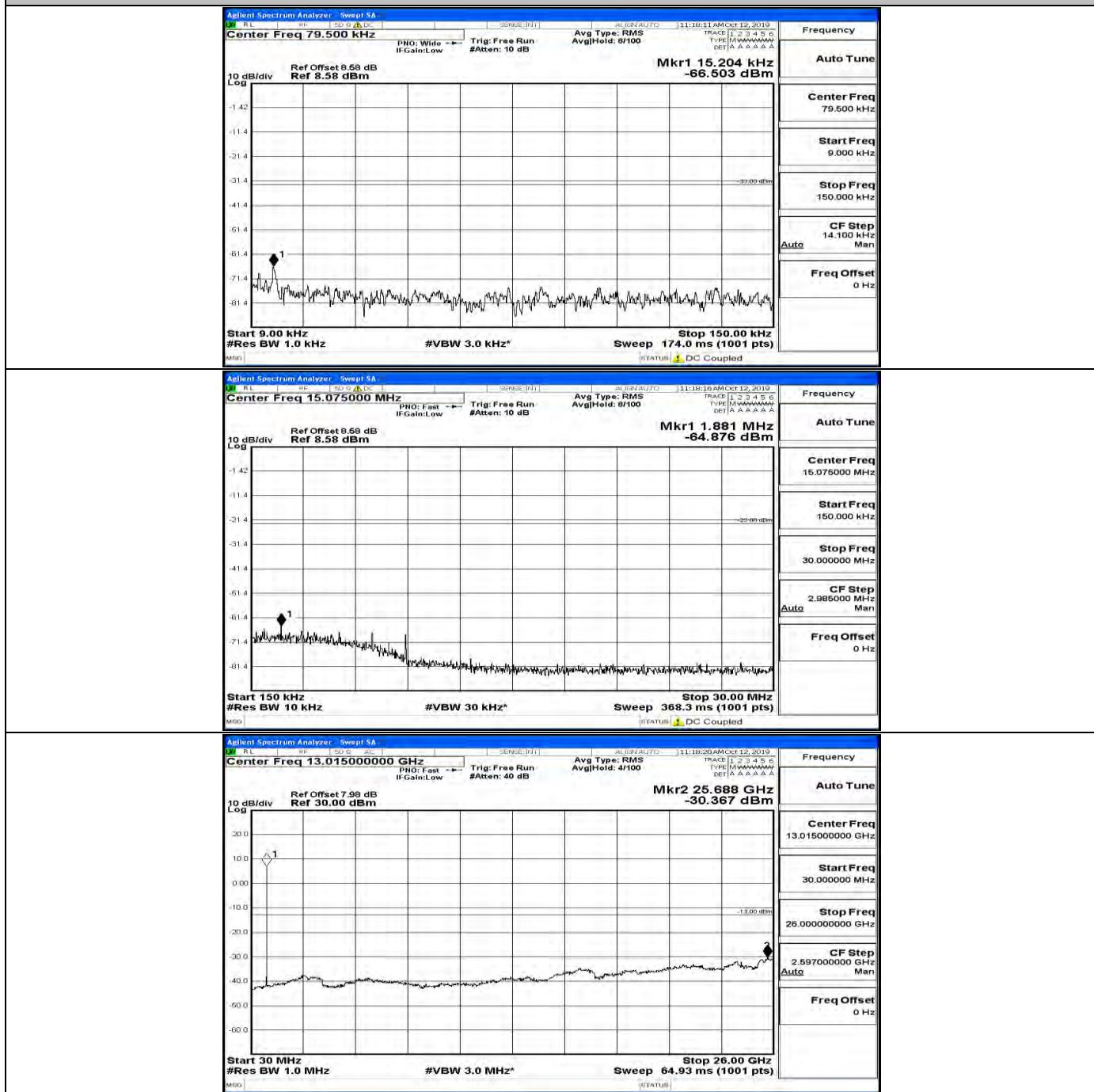
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



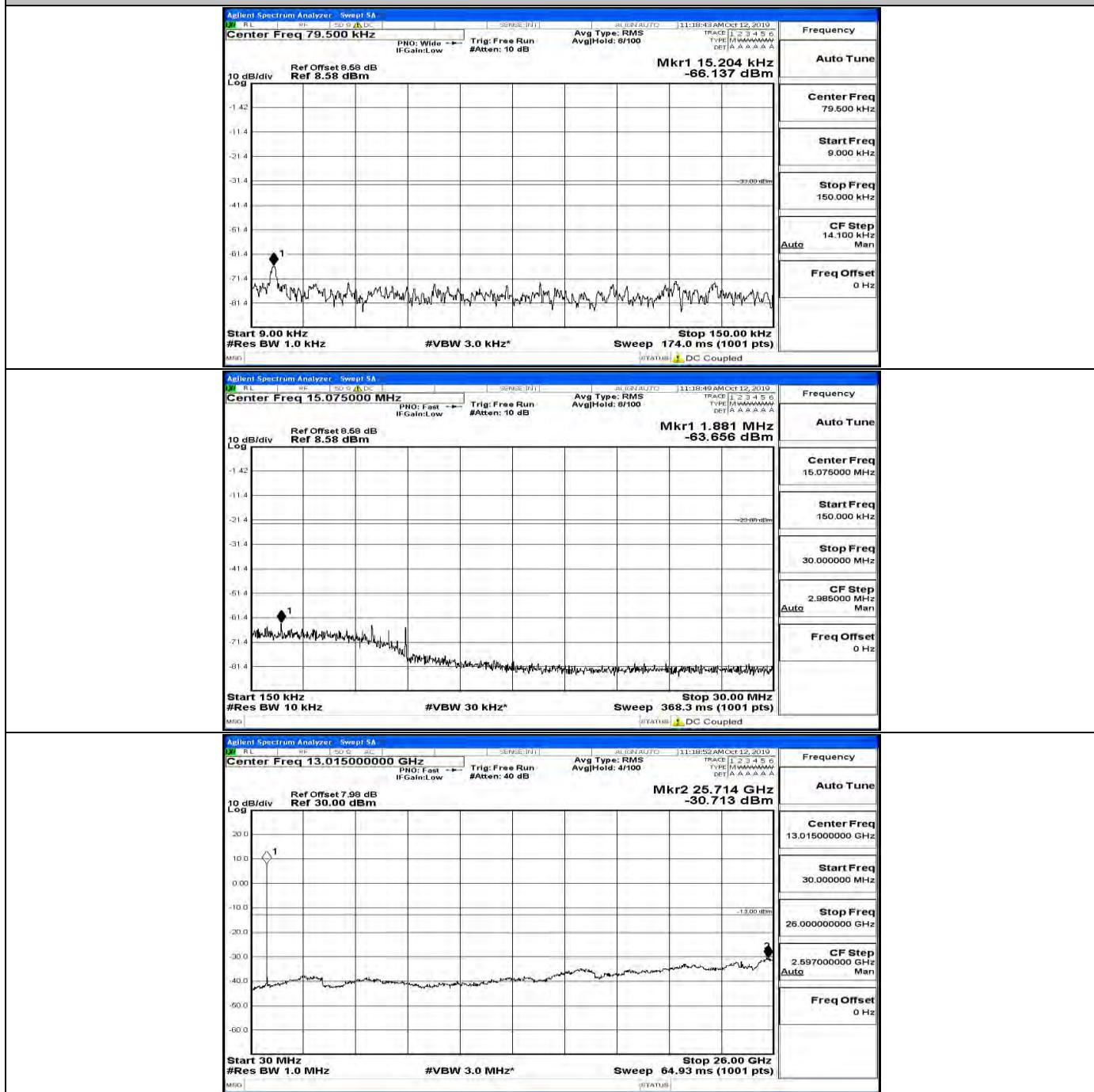
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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

