

Appendix E: Test Data for E-UTRA Band 7

Product Name: Rugged Phone

Trade Mark: SNOPOW

Test Model: M10

Environmental Conditions

Temperature:	22.3 ° C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Jayden Zhuo
Supervised by:	Dick Su

E.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	21.70	21.85	PASS
		1	12	22.22	21.33	PASS
		1	24	22.03	21.25	PASS
		12	0	21.67	21.12	PASS
		12	6	21.89	21.14	PASS
		12	13	21.78	21.60	PASS
		25	0	22.06	21.89	PASS
	MCH	1	0	22.17	21.85	PASS
		1	12	21.79	21.81	PASS
		1	24	22.12	21.19	PASS
		12	0	21.98	21.39	PASS
		12	6	22.21	21.89	PASS
		12	13	22.09	21.77	PASS
		25	0	22.00	21.51	PASS
	HCH	1	0	21.82	21.32	PASS
		1	12	22.04	21.24	PASS
		1	24	21.77	21.70	PASS
		12	0	22.31	21.39	PASS
		12	6	21.70	21.81	PASS
		12	13	22.26	21.56	PASS
		25	0	22.15	21.38	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	21.68	21.57	PASS
		1	24	22.01	21.14	PASS
		1	49	21.82	21.53	PASS
		25	0	22.22	21.36	PASS
		25	12	22.05	21.79	PASS
		25	25	22.07	21.72	PASS
		50	0	22.05	21.54	PASS
	MCH	1	0	21.72	21.47	PASS
		1	24	22.32	21.60	PASS
		1	49	21.84	21.82	PASS
		25	0	21.84	21.45	PASS
		25	12	22.20	21.23	PASS
		25	25	21.83	21.88	PASS
		50	0	21.83	21.44	PASS
	HCH	1	0	22.25	21.43	PASS
		1	24	21.73	21.46	PASS
		1	49	22.33	21.82	PASS
		25	0	21.65	21.63	PASS
		25	12	21.82	21.24	PASS
		25	25	22.07	21.59	PASS
		50	0	22.05	21.44	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.33	21.52	PASS
		1	37	22.06	22.08	PASS
		1	74	21.75	21.91	PASS
		37	0	22.47	21.54	PASS
		37	18	22.32	21.94	PASS
		37	38	21.96	21.81	PASS
		75	0	22.23	21.86	PASS
	MCH	1	0	21.93	22.03	PASS
		1	37	21.79	21.89	PASS
		1	74	22.05	21.71	PASS
		37	0	22.44	21.45	PASS
		37	18	22.00	21.39	PASS
		37	38	21.90	21.50	PASS
		75	0	21.75	21.51	PASS
	HCH	1	0	22.25	21.93	PASS
		1	37	21.95	21.40	PASS
		1	74	22.47	21.36	PASS
		37	0	21.79	21.36	PASS
		37	18	21.84	21.42	PASS
		37	38	22.09	22.07	PASS
		75	0	22.32	21.80	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	22.59	21.58	PASS
		1	49	22.37	22.00	PASS
		1	99	21.98	21.86	PASS
		50	0	21.99	21.87	PASS
		50	25	22.63	21.33	PASS
		50	50	22.48	22.08	PASS
		100	0	21.99	21.80	PASS
	MCH	1	0	22.06	21.97	PASS
		1	49	22.54	21.31	PASS
		1	99	22.67	21.56	PASS
		50	0	21.99	21.69	PASS
		50	25	22.15	22.10	PASS
		50	50	22.68	21.56	PASS
		100	0	22.67	21.62	PASS
	HCH	1	0	22.44	22.08	PASS
		1	49	22.59	21.75	PASS
		1	99	22.08	21.69	PASS
		50	0	22.65	21.96	PASS
		50	25	22.13	21.38	PASS
		50	50	22.34	21.41	PASS
		100	0	22.13	21.52	PASS

E.2 Peak-to-Average Ratio

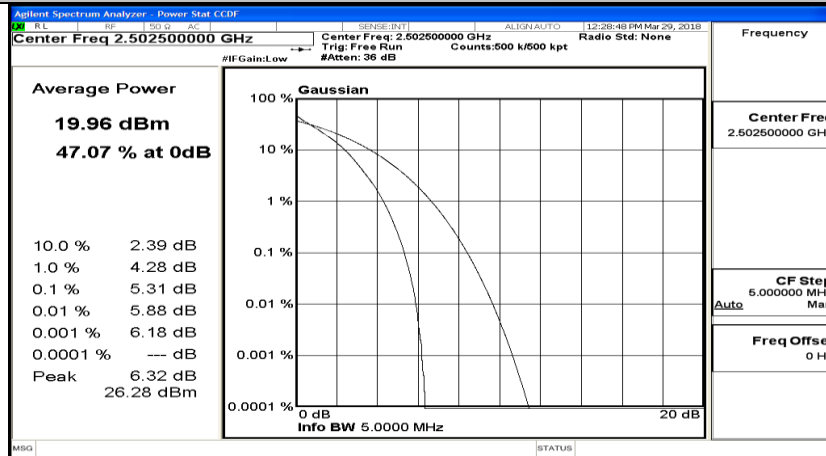
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.31	<13	PASS
	MCH	4.90	<13	PASS
	HCH	4.47	<13	PASS
16QAM	LCH	6.10	<13	PASS
	MCH	5.77	<13	PASS
	HCH	5.32	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.56	<13	PASS
	MCH	5.08	<13	PASS
	HCH	4.78	<13	PASS
16QAM	LCH	6.36	<13	PASS
	MCH	5.85	<13	PASS
	HCH	5.55	<13	PASS

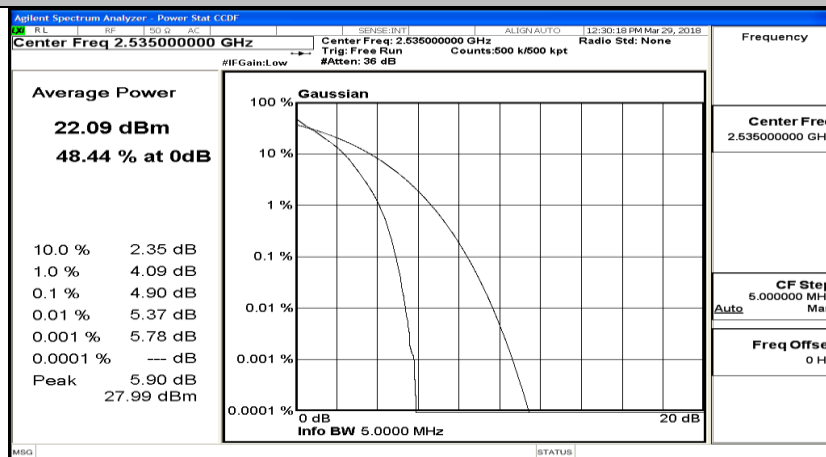
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.97	<13	PASS
	MCH	4.91	<13	PASS
	HCH	4.74	<13	PASS
16QAM	LCH	6.18	<13	PASS
	MCH	6.02	<13	PASS
	HCH	5.92	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.67	<13	PASS
	MCH	5.73	<13	PASS
	HCH	5.60	<13	PASS
16QAM	LCH	6.76	<13	PASS
	MCH	6.66	<13	PASS
	HCH	6.48	<13	PASS

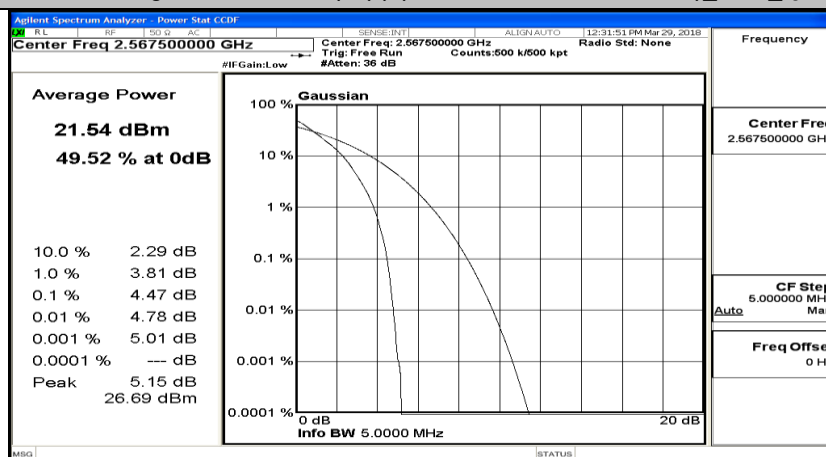
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



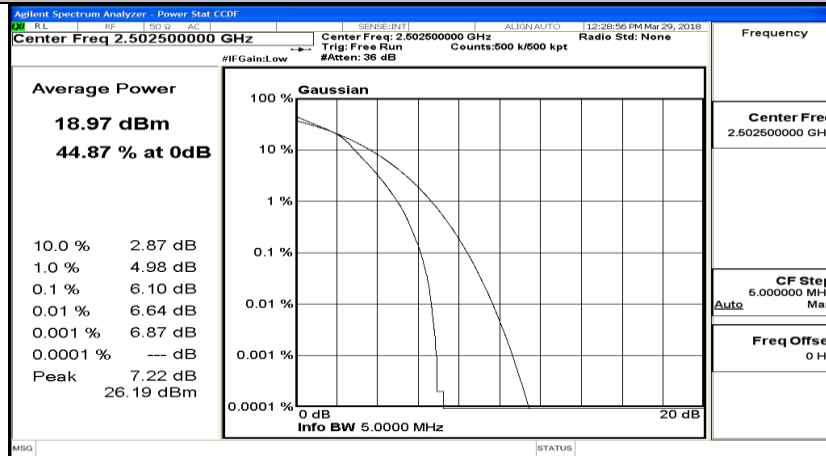
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



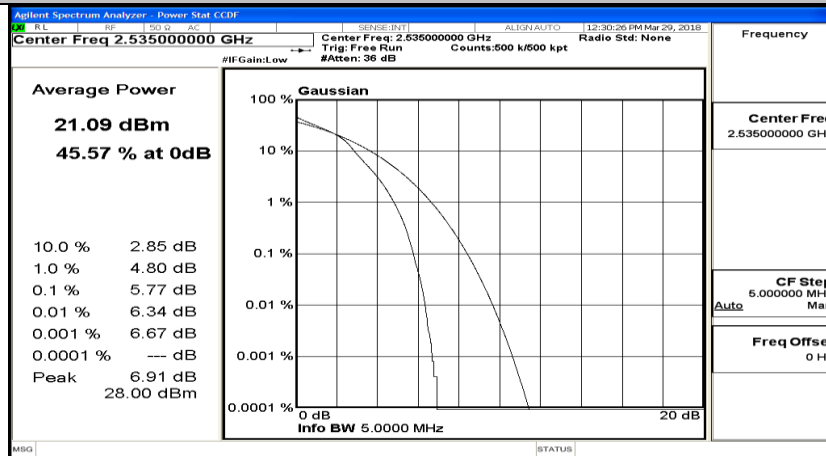
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



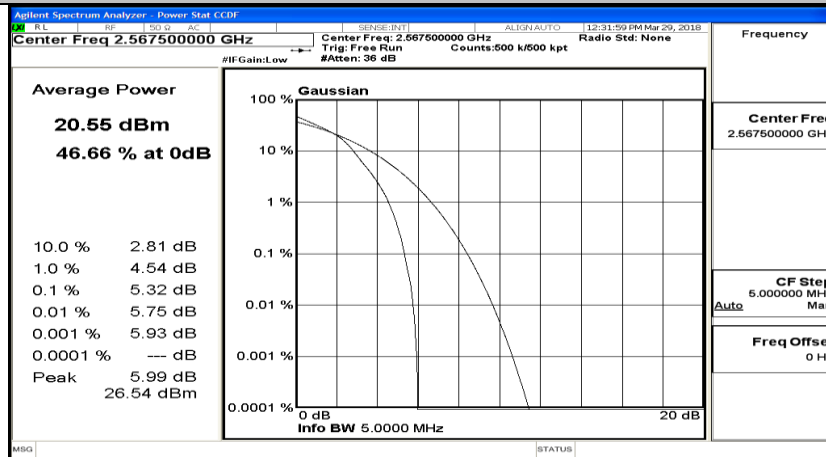
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



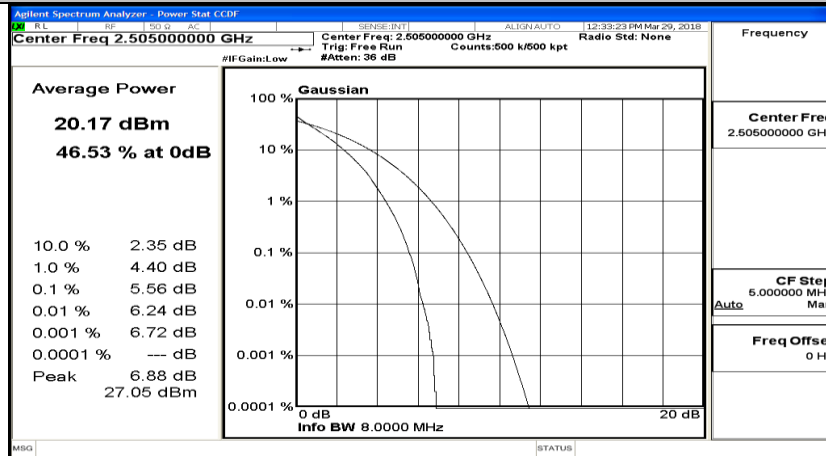
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



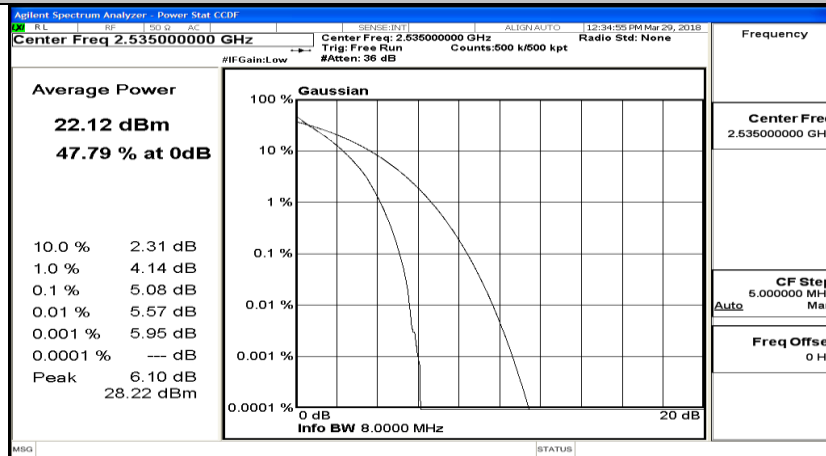
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



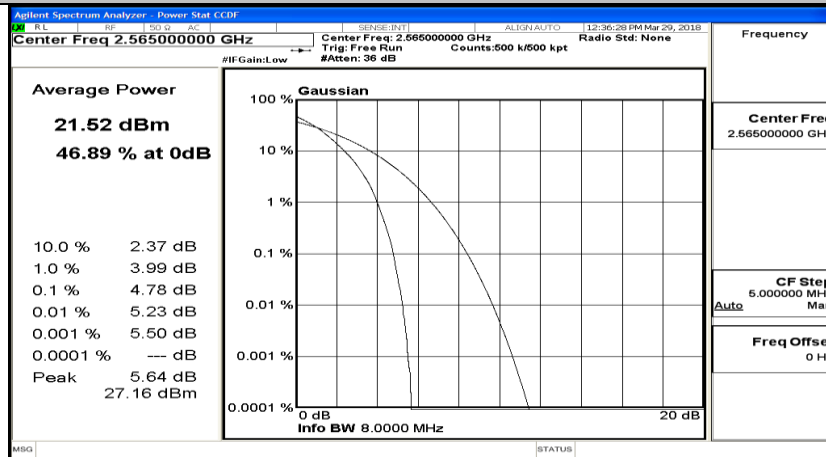
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



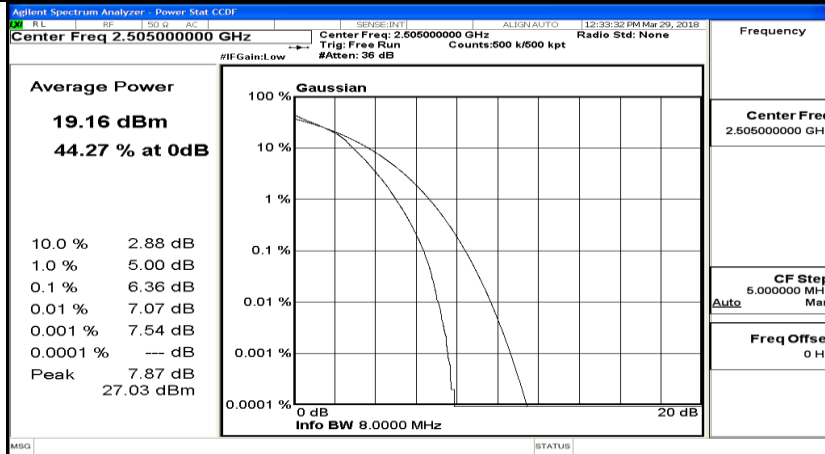
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



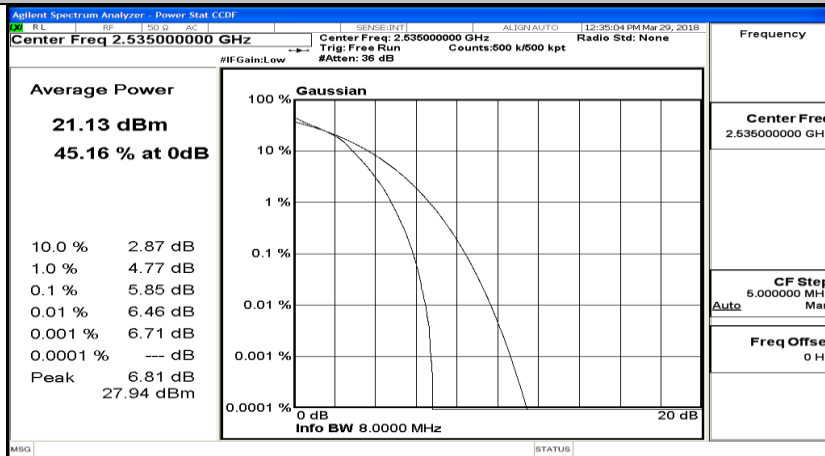
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



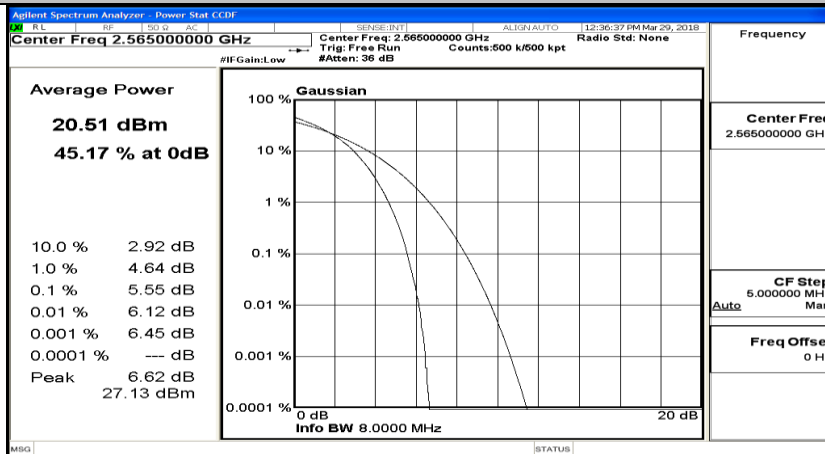
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



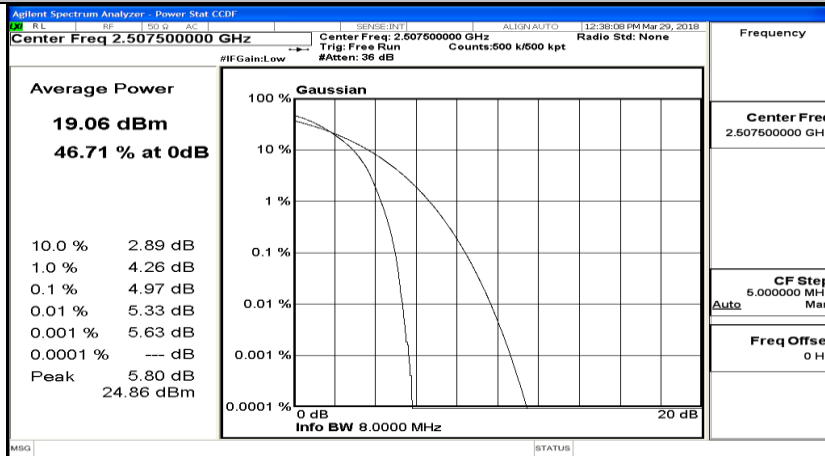
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



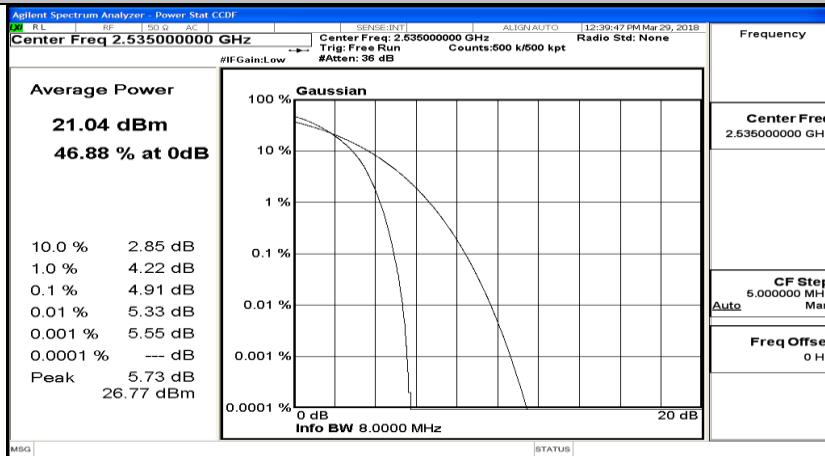
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



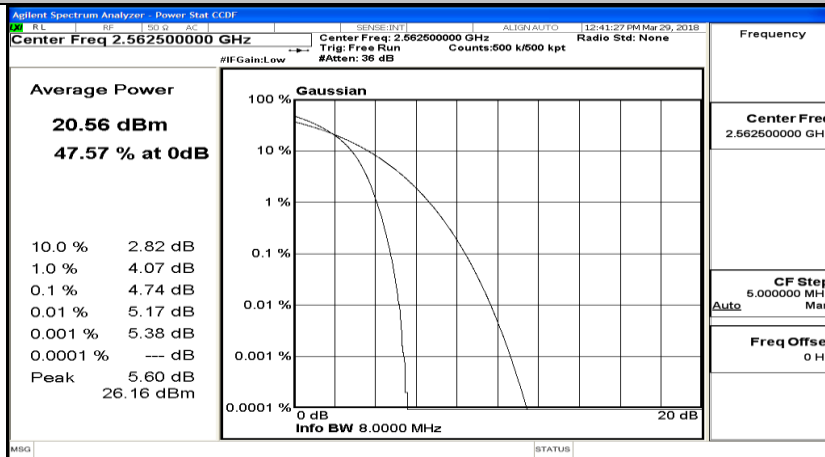
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



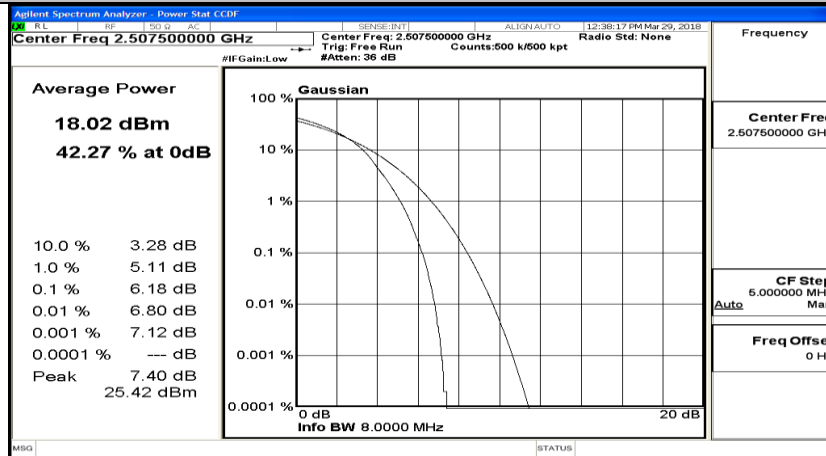
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



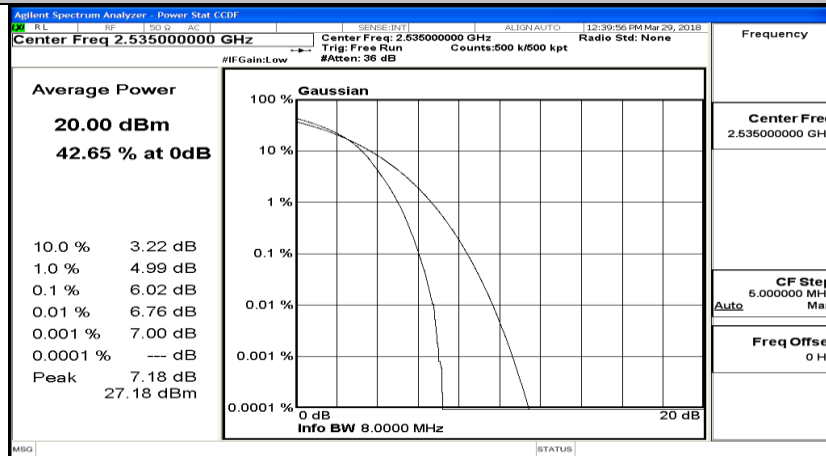
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



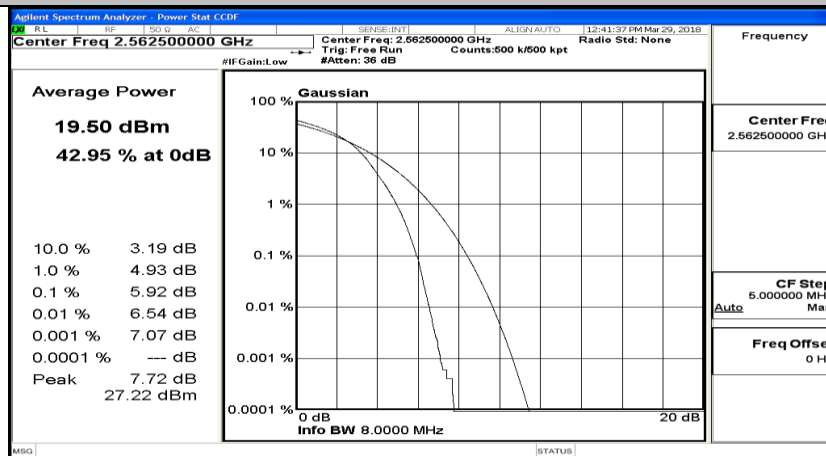
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



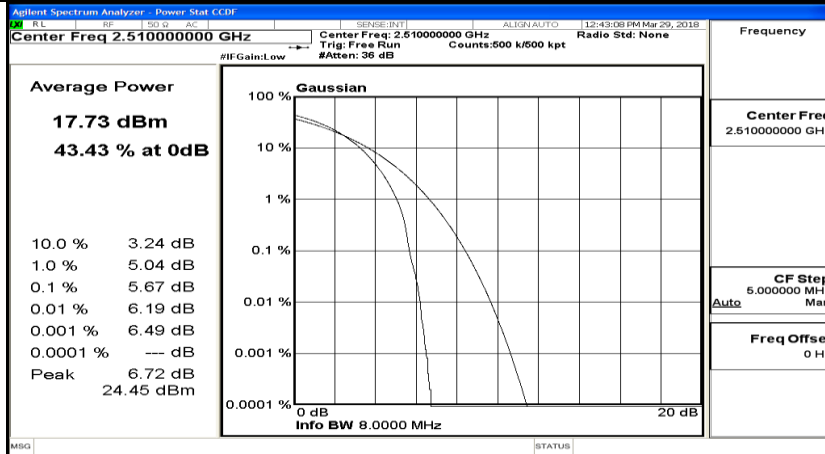
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



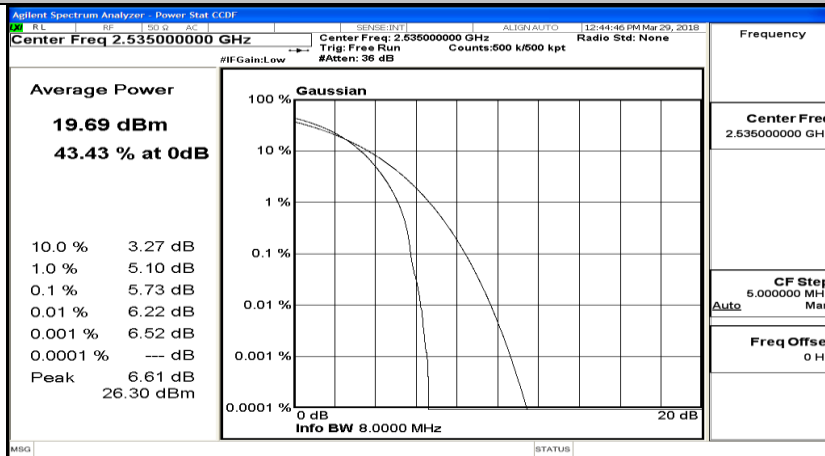
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



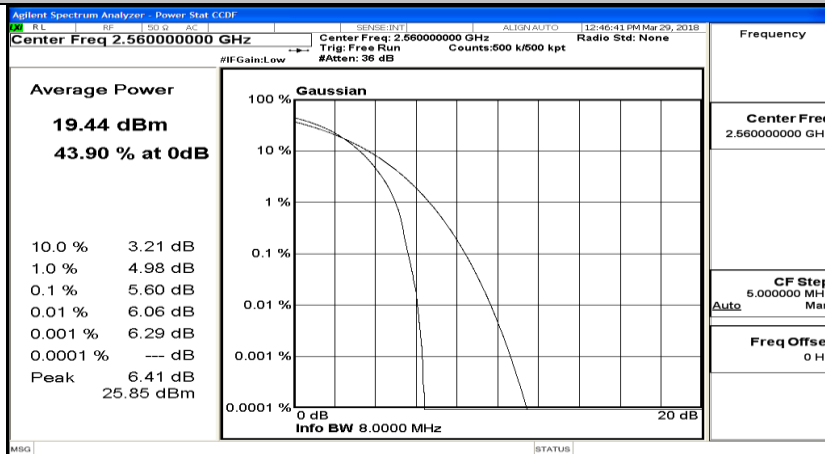
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



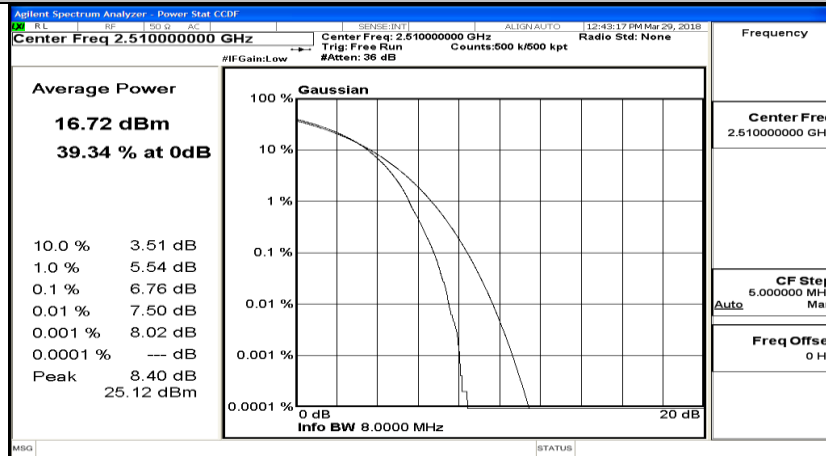
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



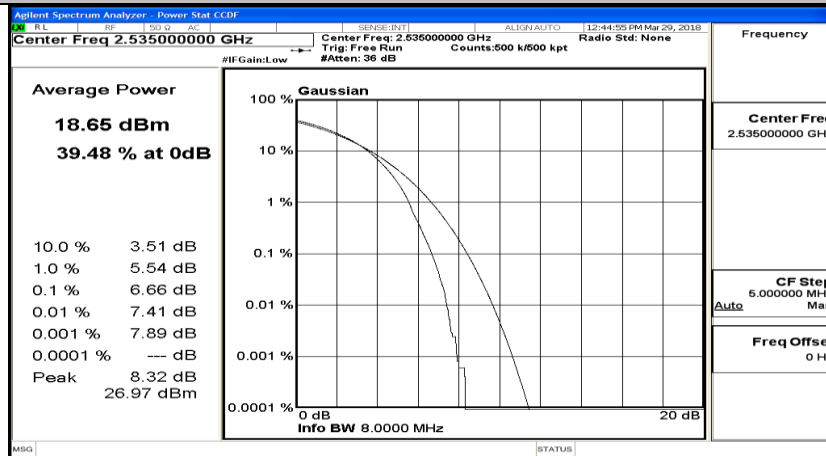
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



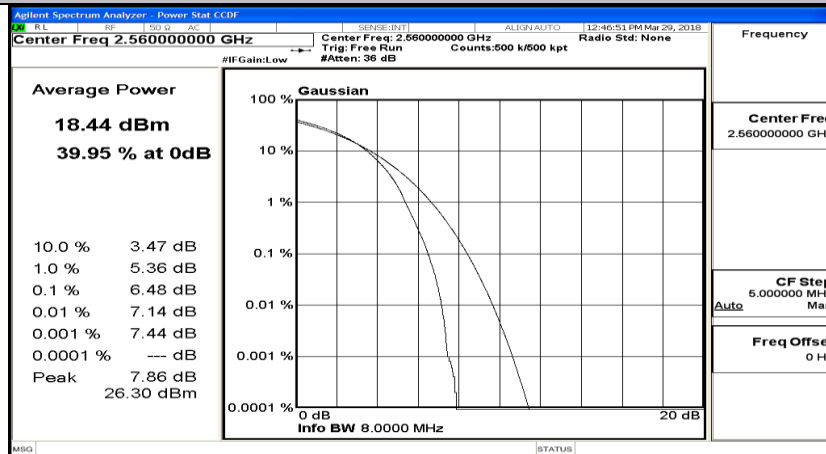
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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



E.3 26dB Bandwidth and Occupied Bandwidth

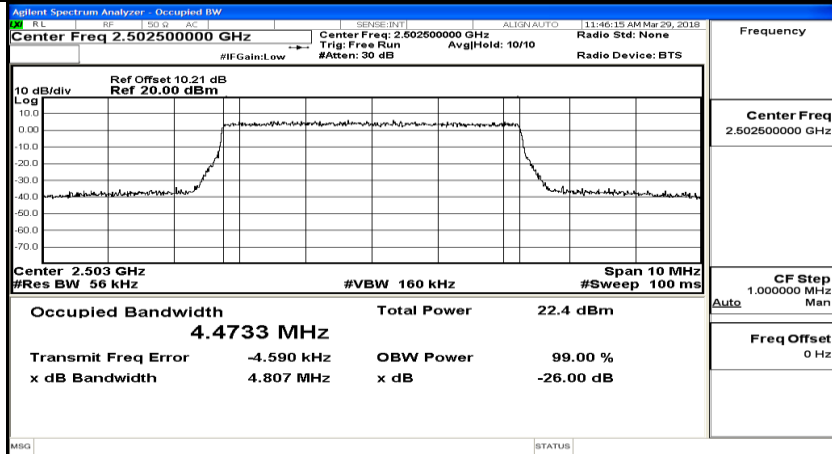
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4733	4.807	PASS
	MCH	4.4722	4.828	PASS
	HCH	4.4720	4.797	PASS
16QAM	LCH	4.4763	4.808	PASS
	MCH	4.4741	4.793	PASS
	HCH	4.4749	4.785	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9492	9.492	PASS
	MCH	8.9478	9.534	PASS
	HCH	8.9214	9.432	PASS
16QAM	LCH	8.9444	9.477	PASS
	MCH	8.9431	9.481	PASS
	HCH	8.9143	9.472	PASS

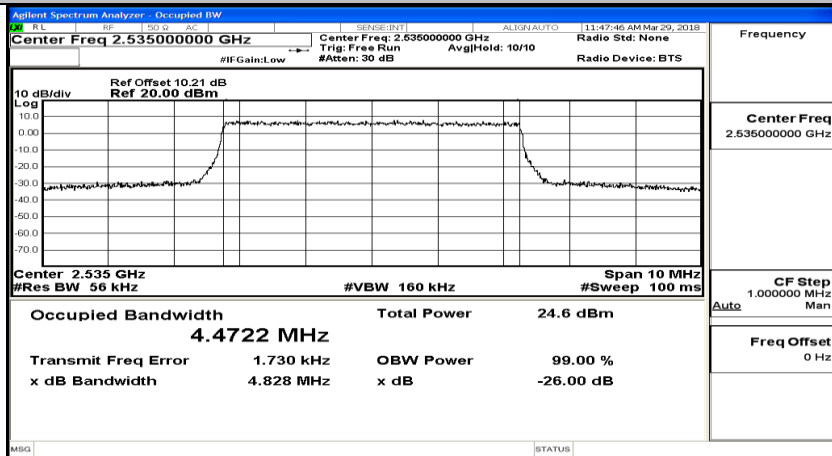
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.415	14.08	PASS
	MCH	13.418	14.07	PASS
	HCH	13.369	13.99	PASS
16QAM	LCH	13.409	14.09	PASS
	MCH	13.395	14.10	PASS
	HCH	13.352	14.00	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.896	18.64	PASS
	MCH	17.864	18.59	PASS
	HCH	17.781	18.57	PASS
16QAM	LCH	17.892	18.64	PASS
	MCH	17.849	18.67	PASS
	HCH	17.808	18.55	PASS

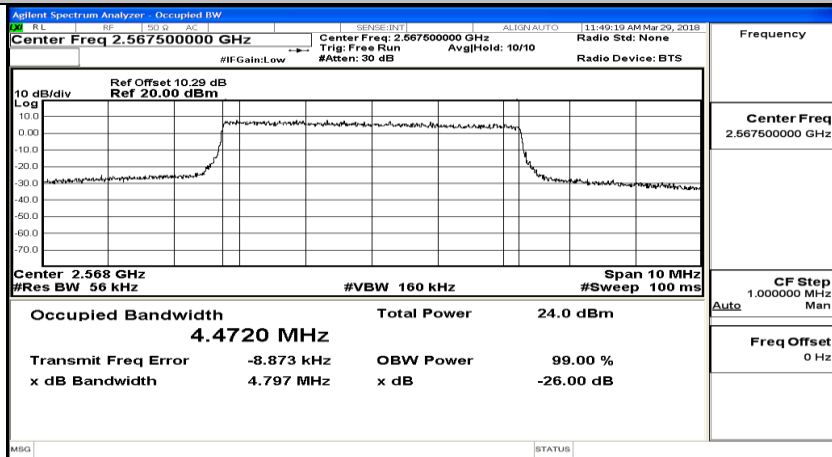
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



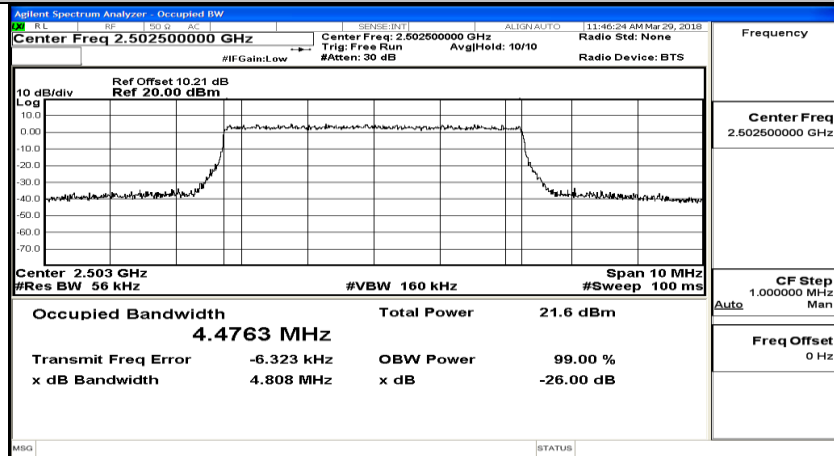
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



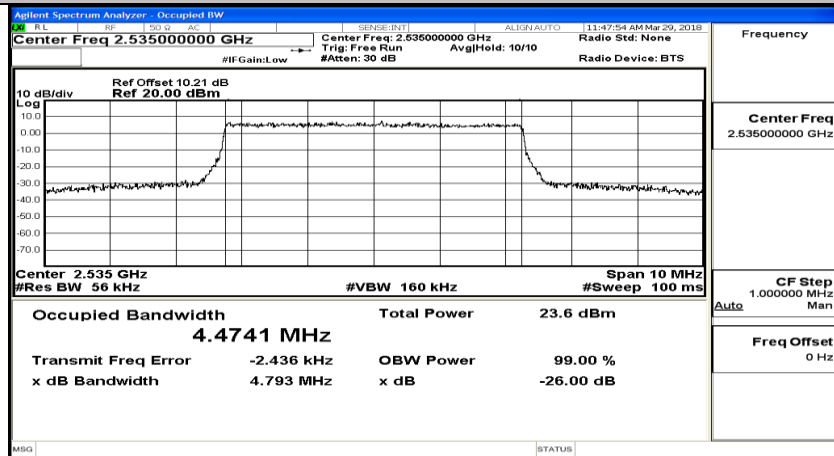
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



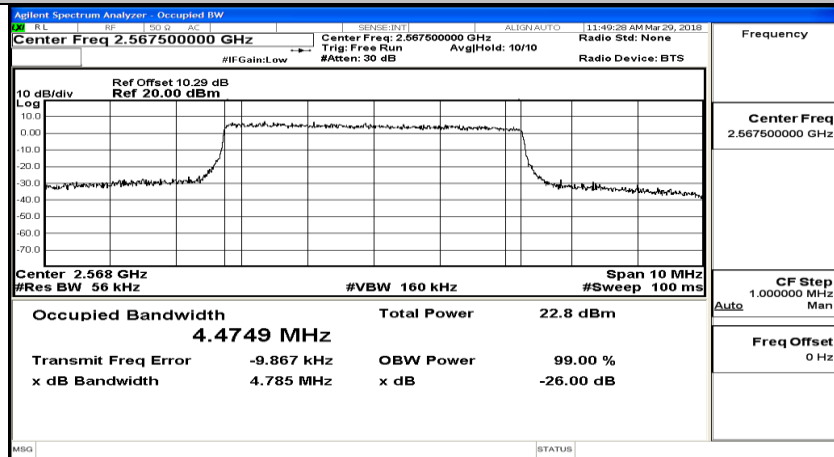
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



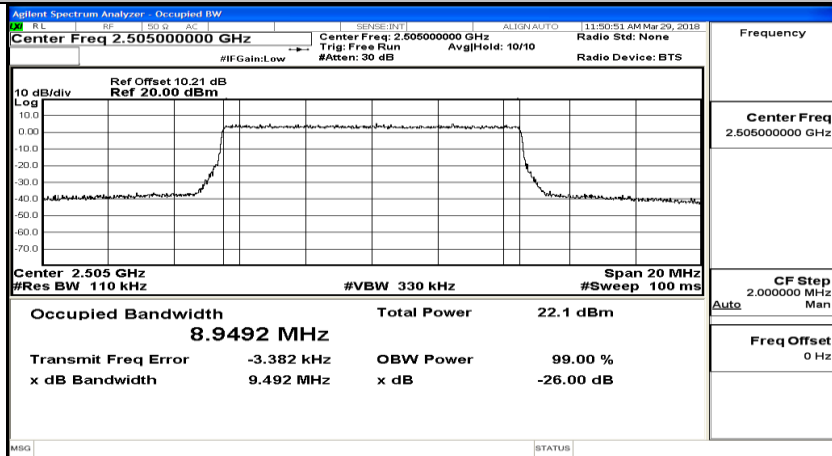
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



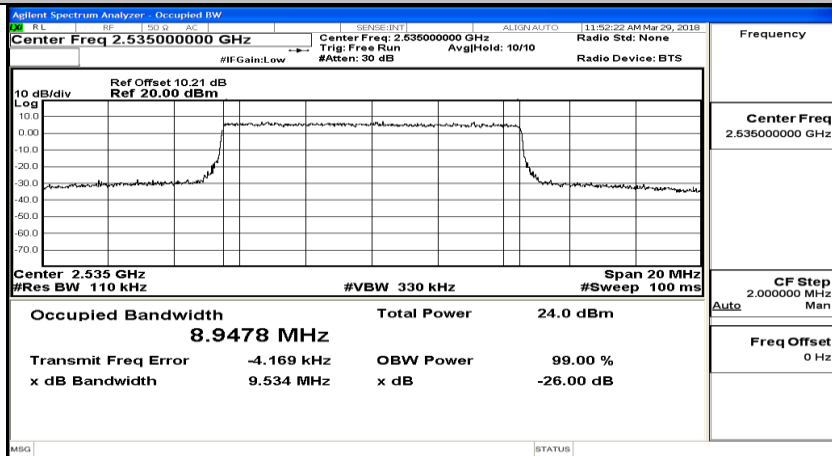
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



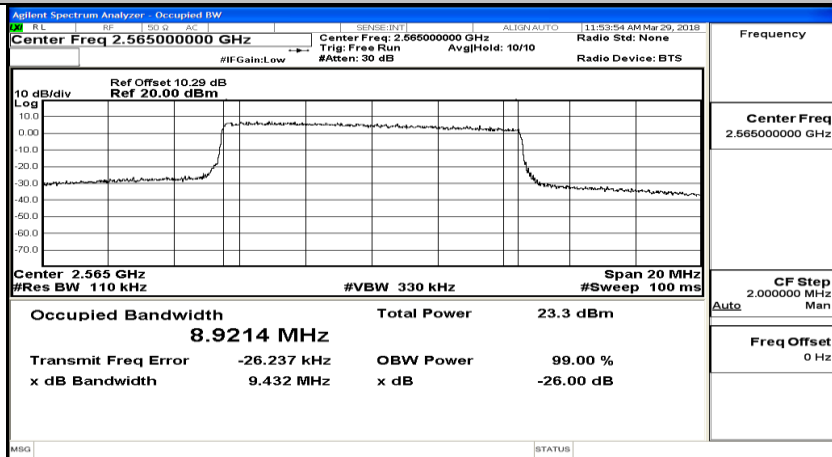
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



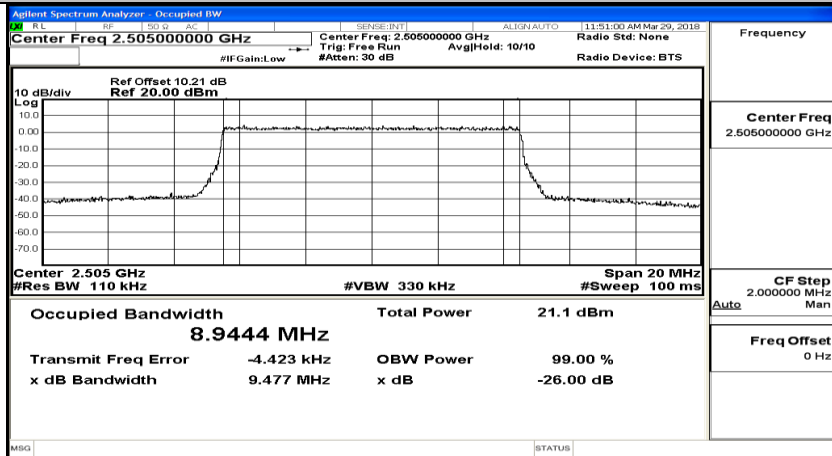
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



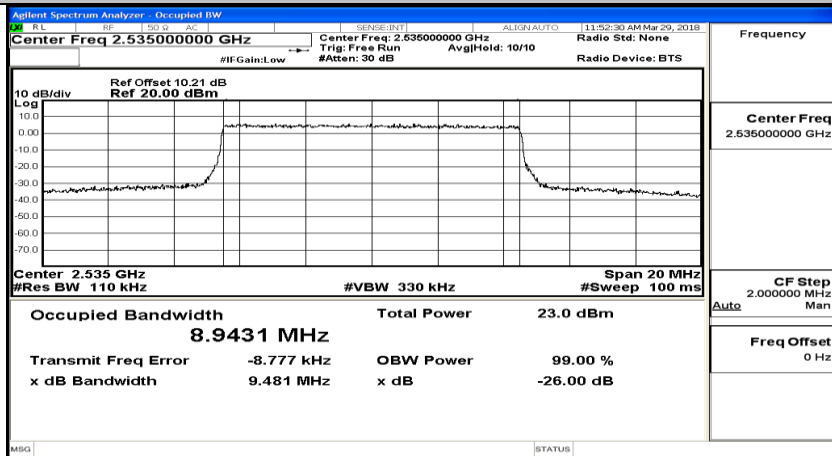
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



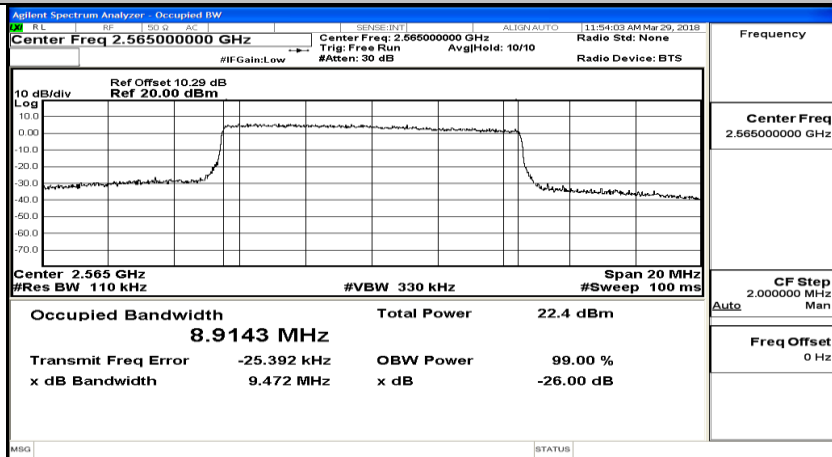
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



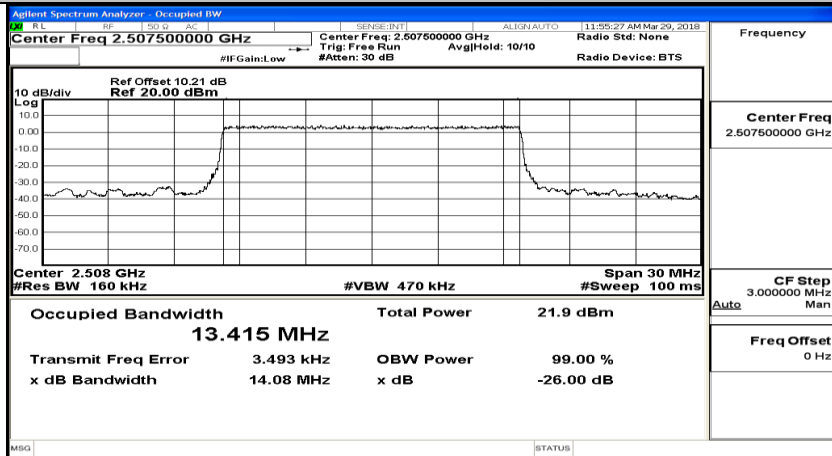
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



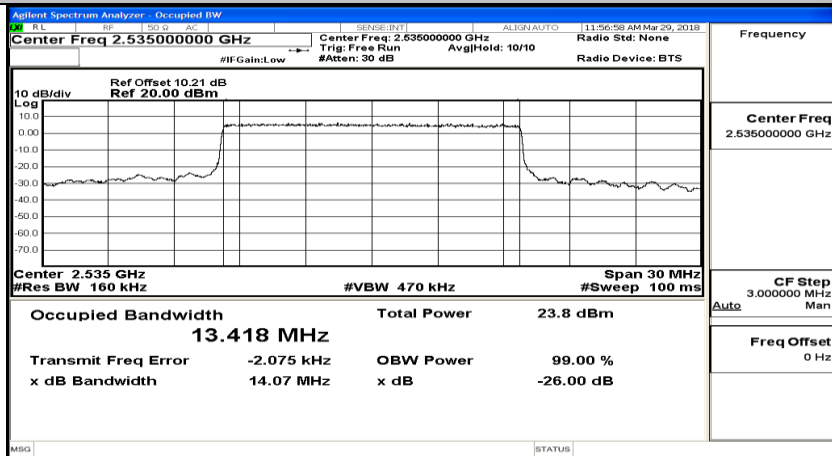
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



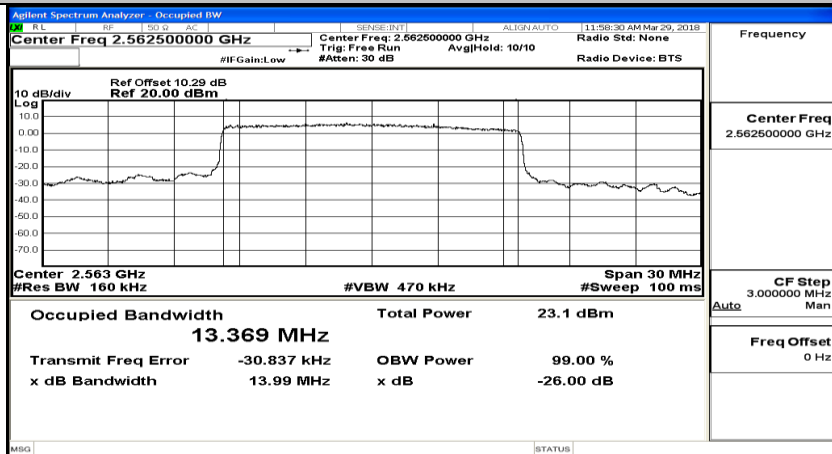
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



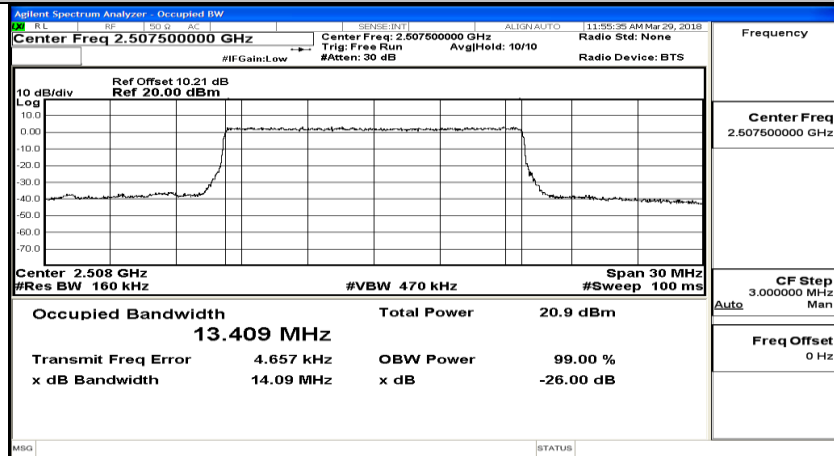
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



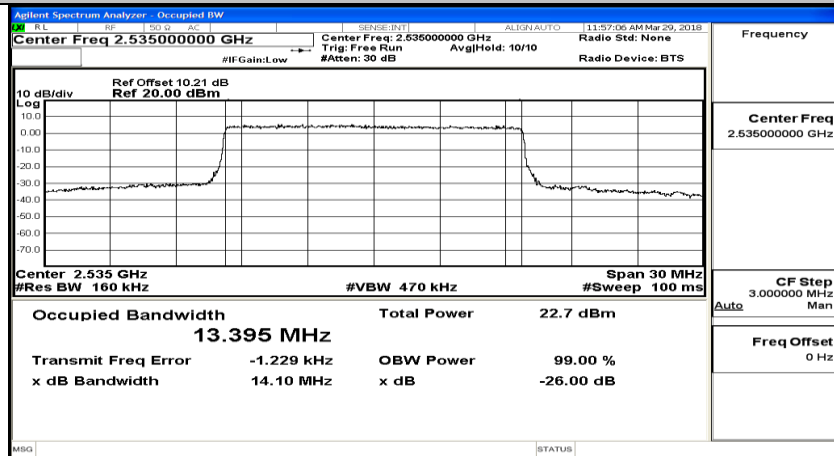
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



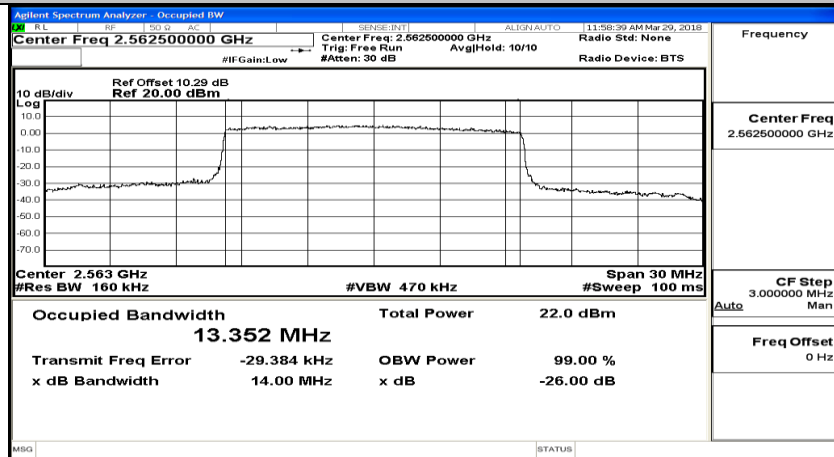
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



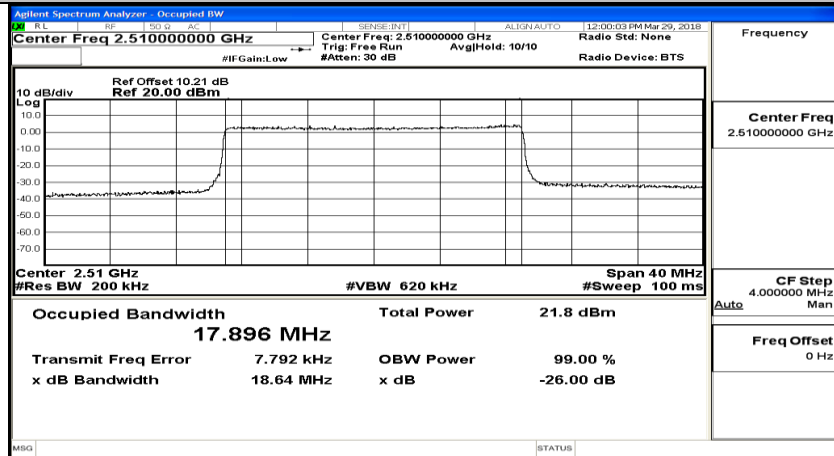
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



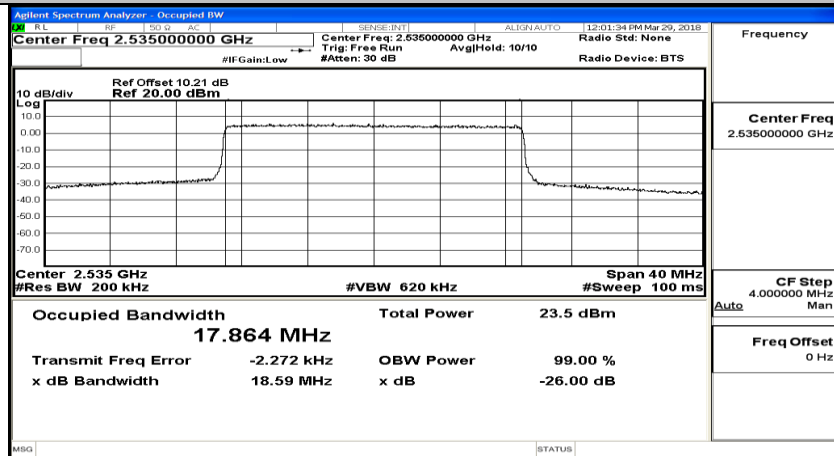
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



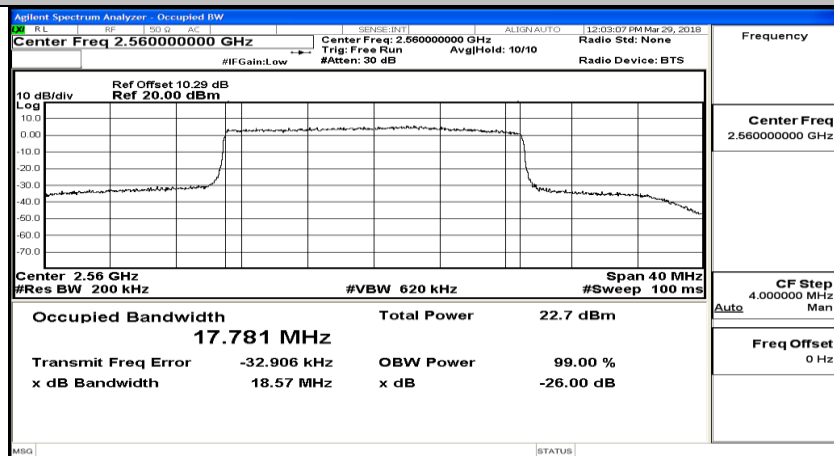
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



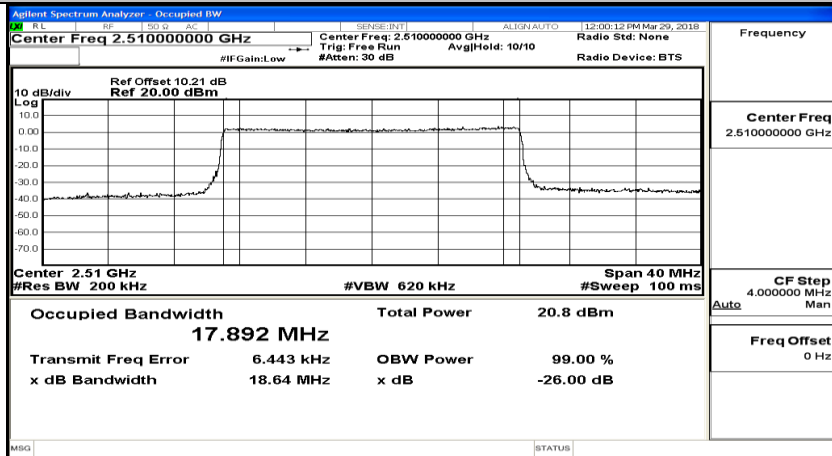
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



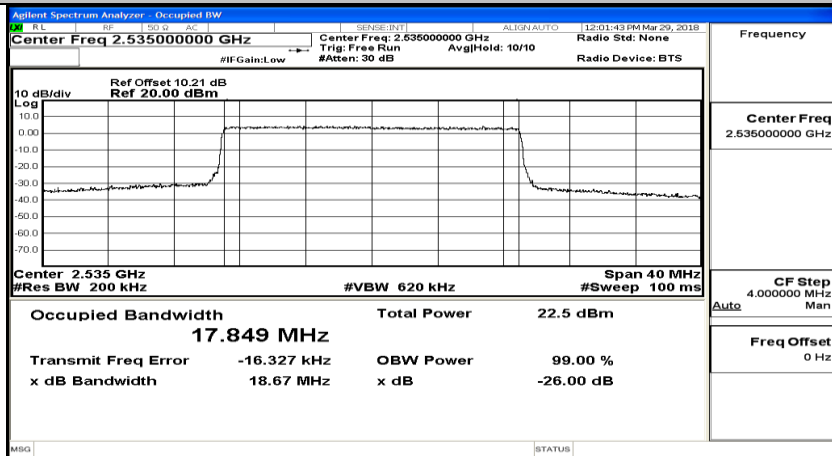
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



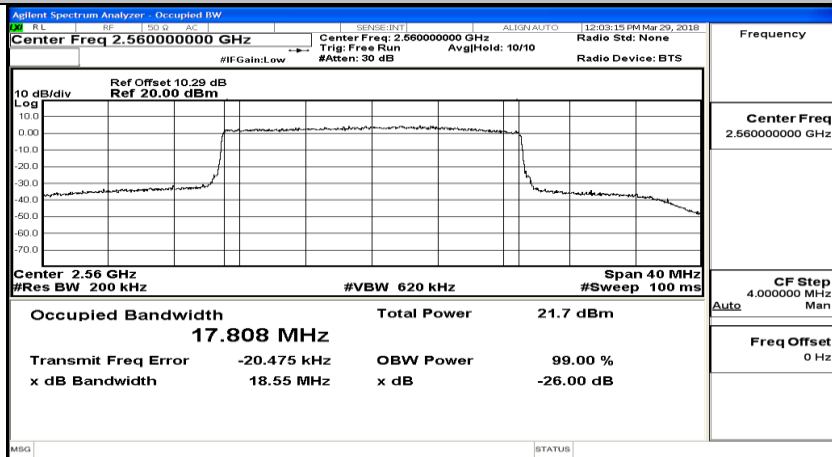
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

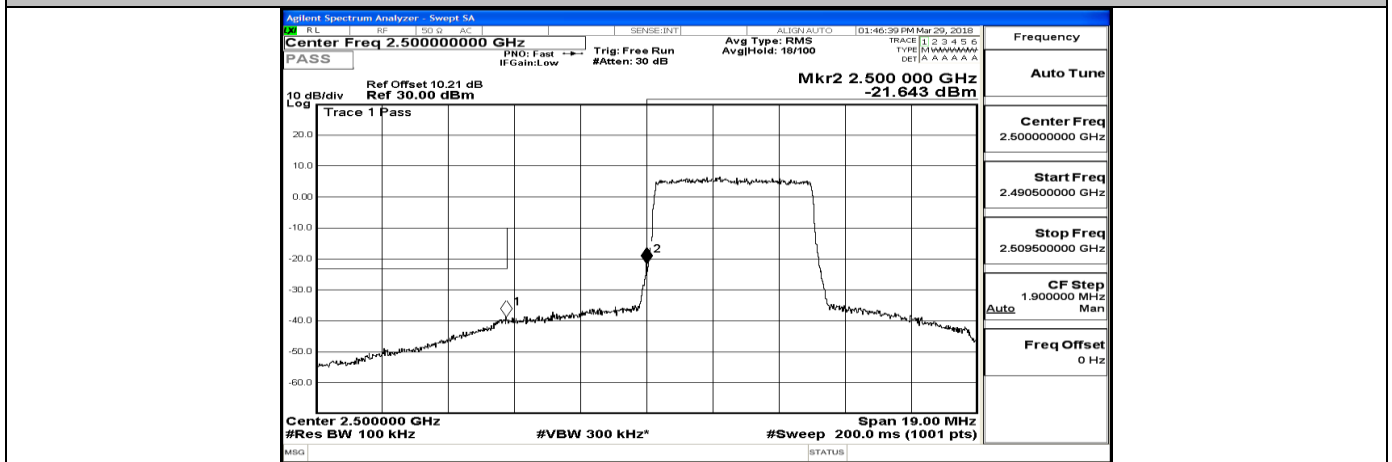


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

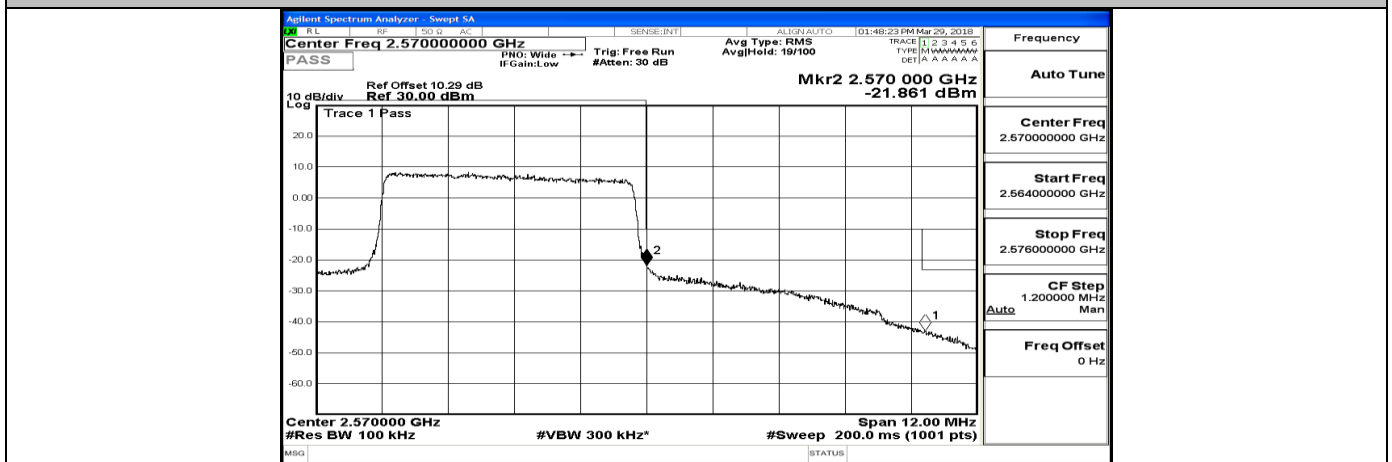


E.4 Band Edge

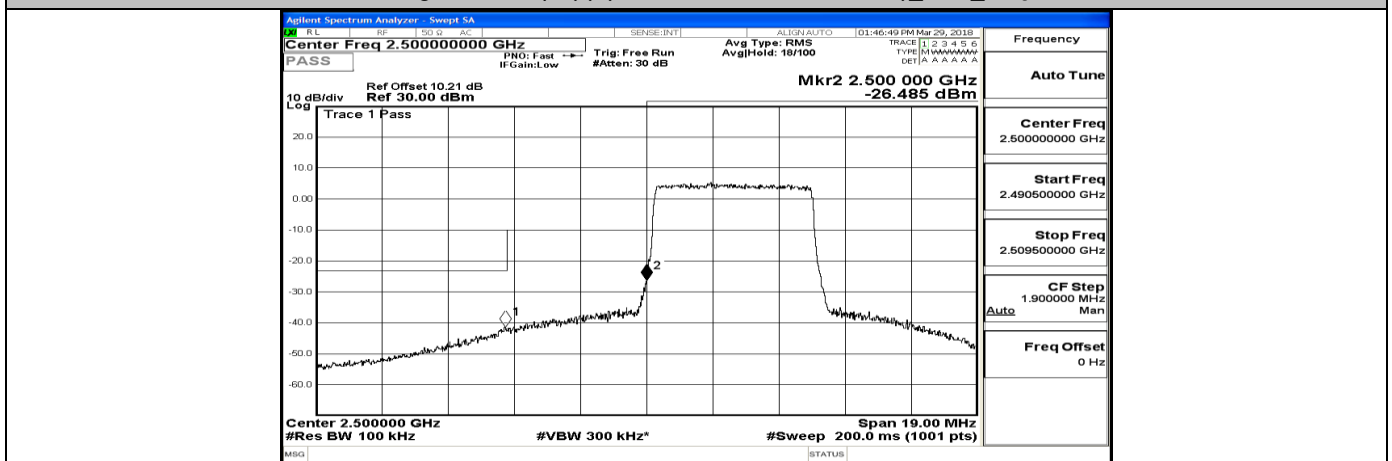
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



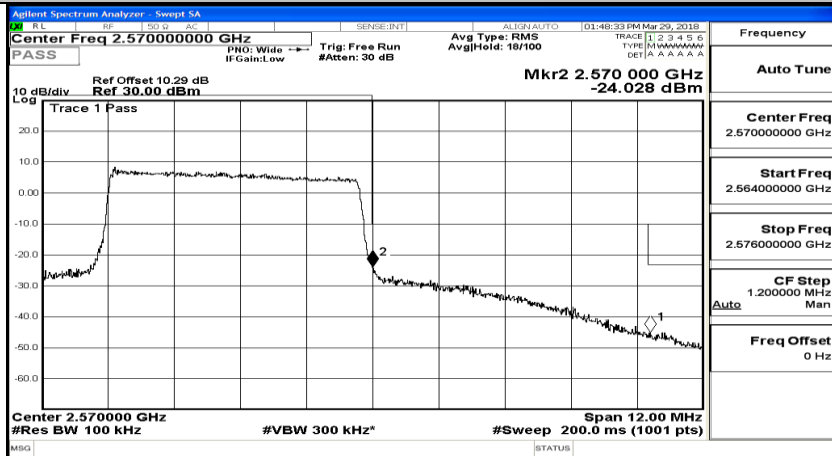
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



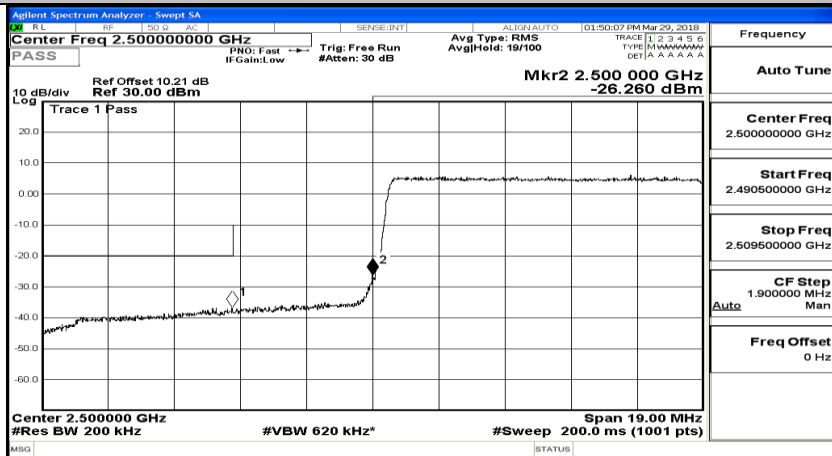
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



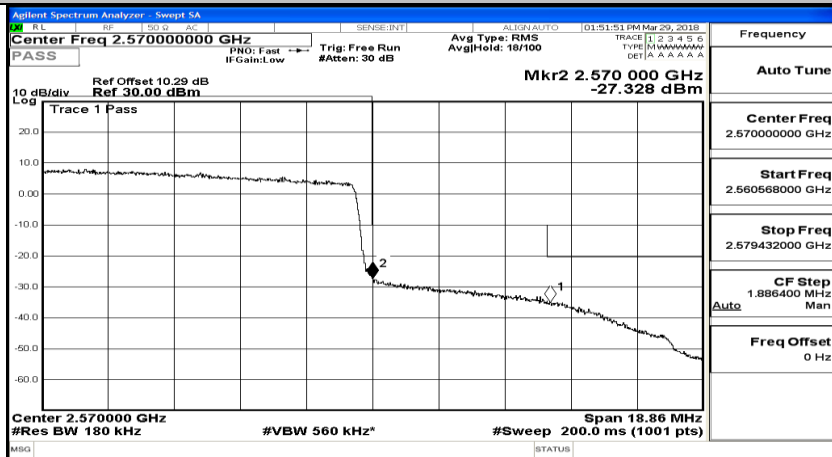
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



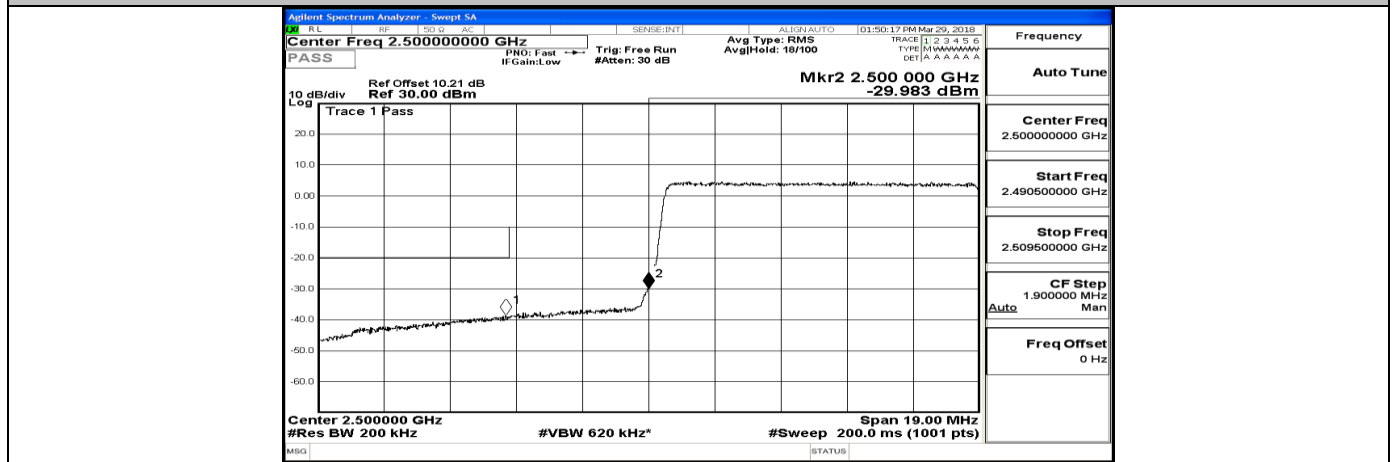
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



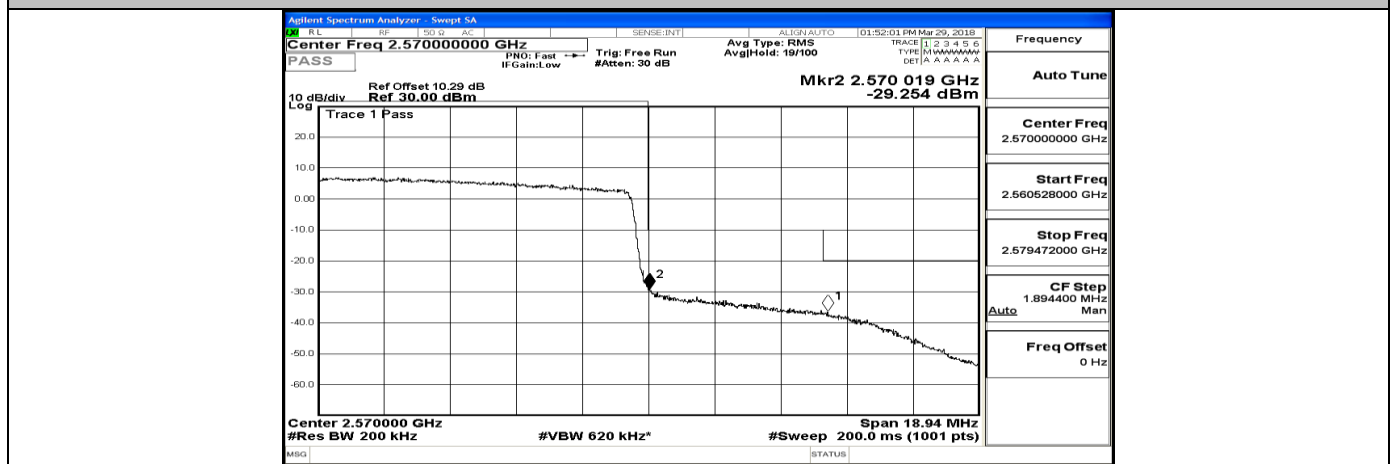
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



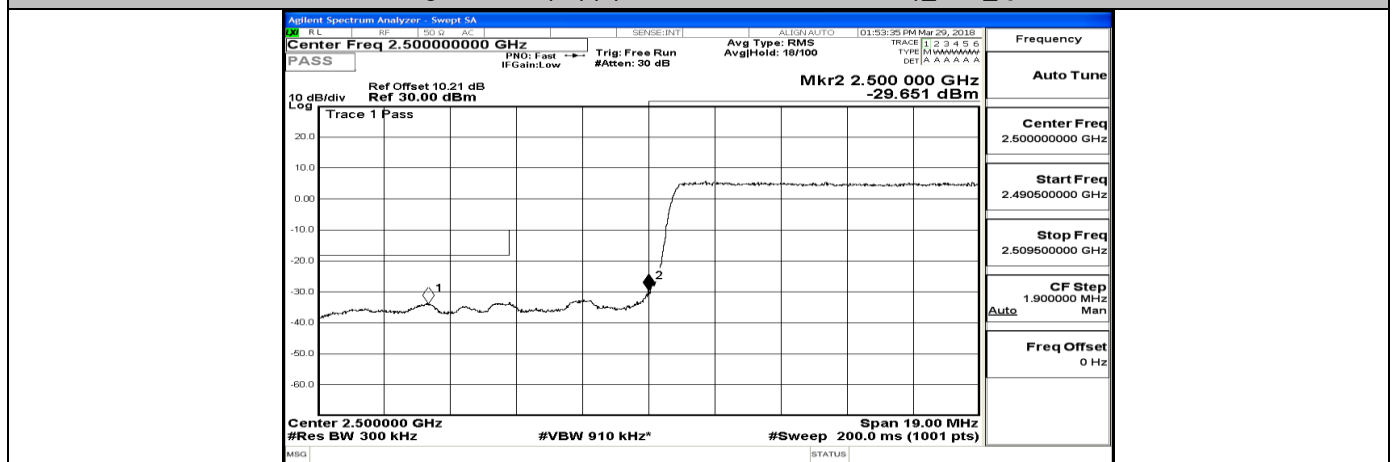
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



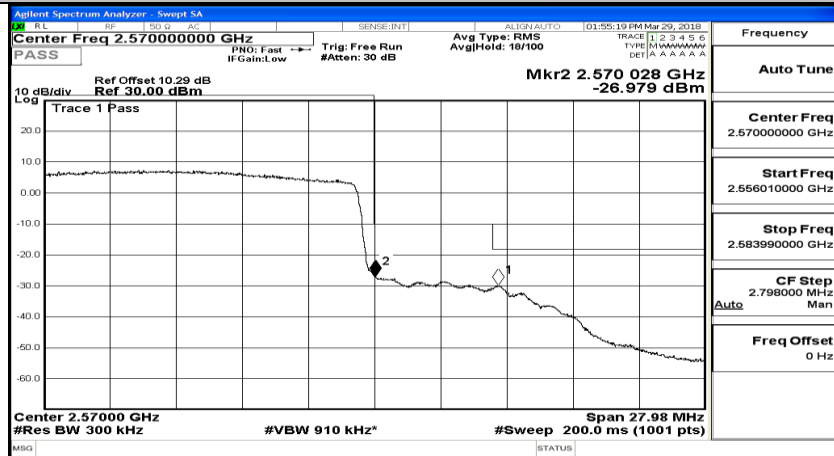
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



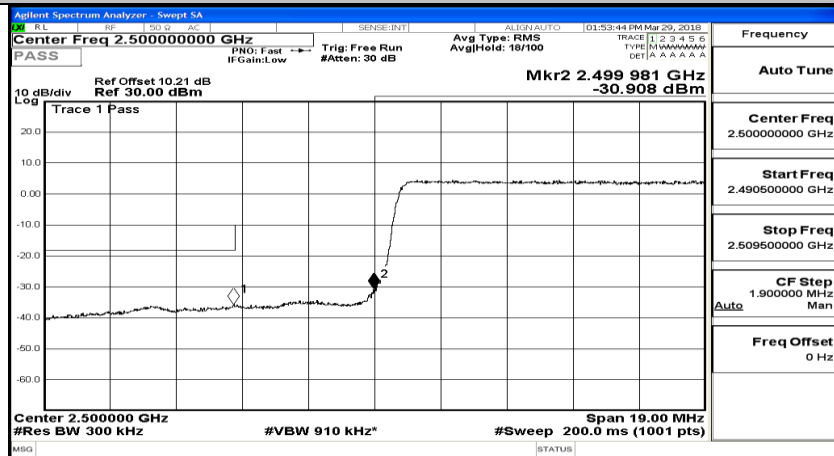
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



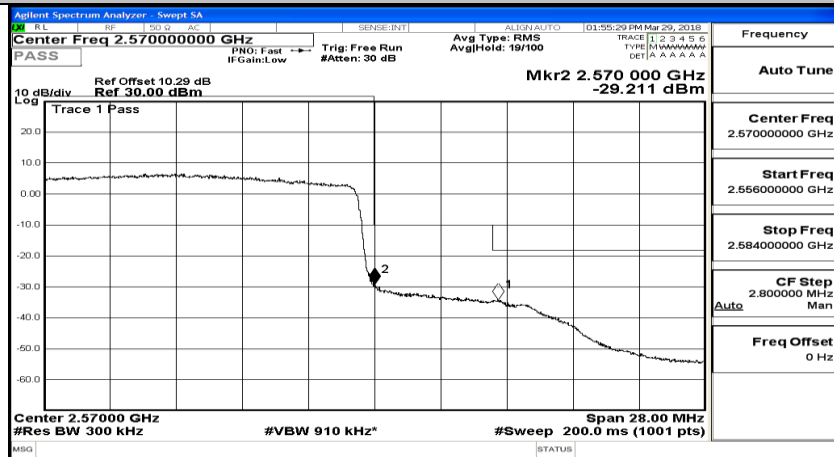
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



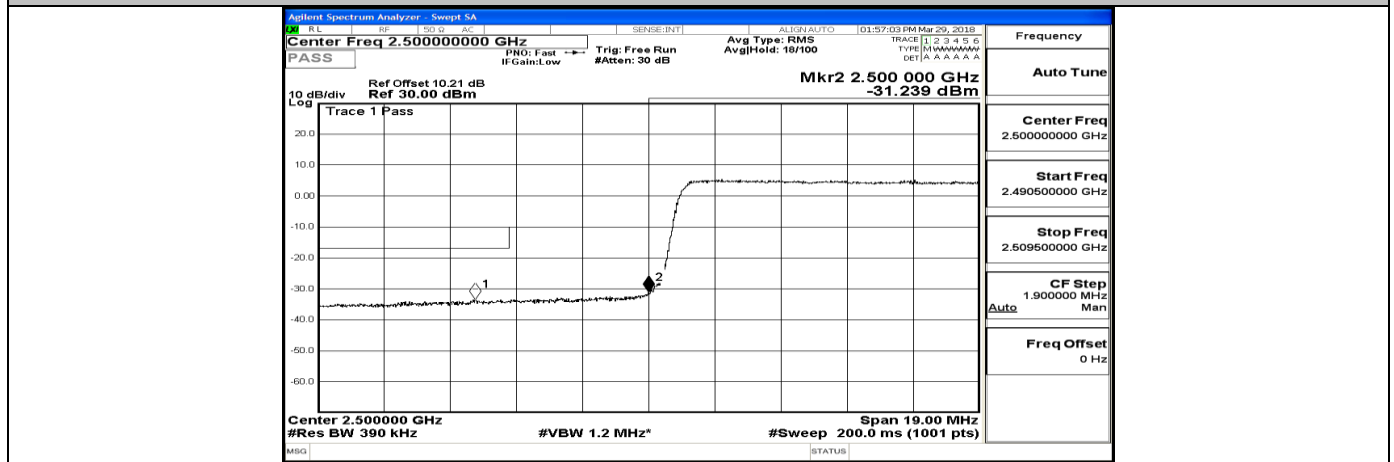
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



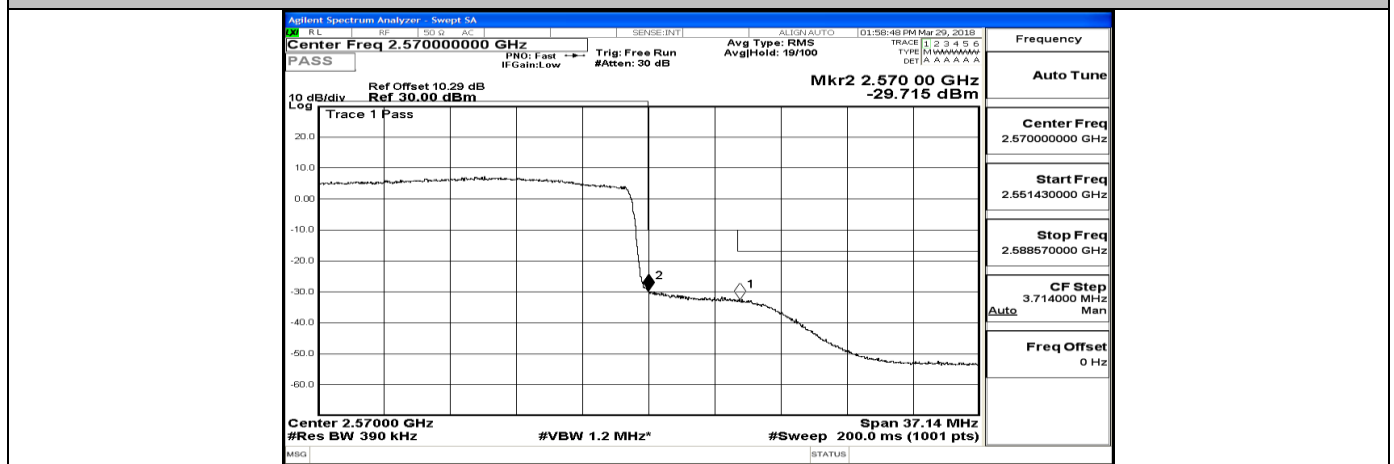
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



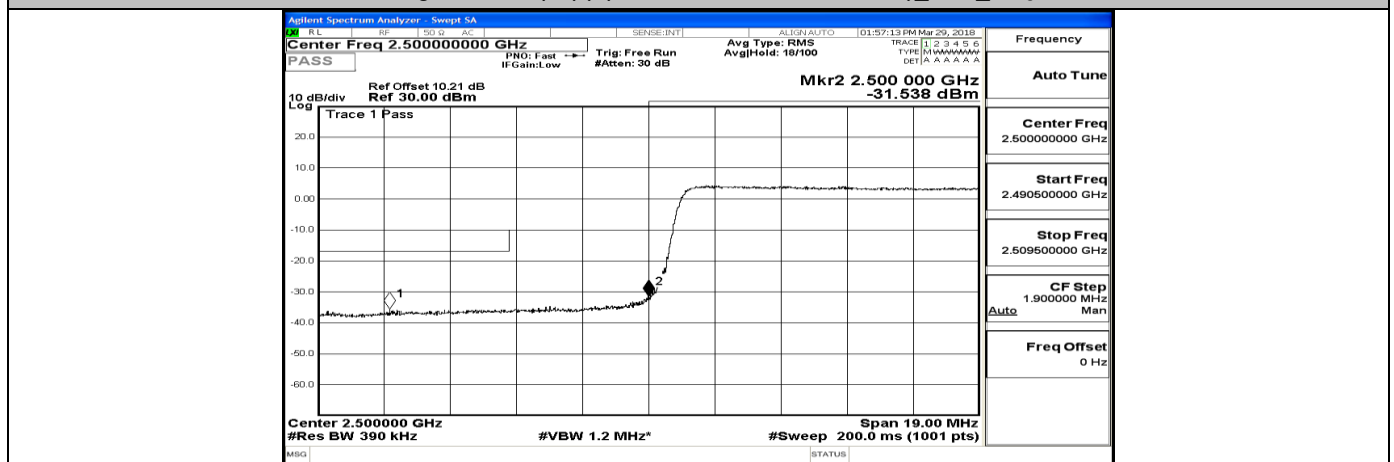
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



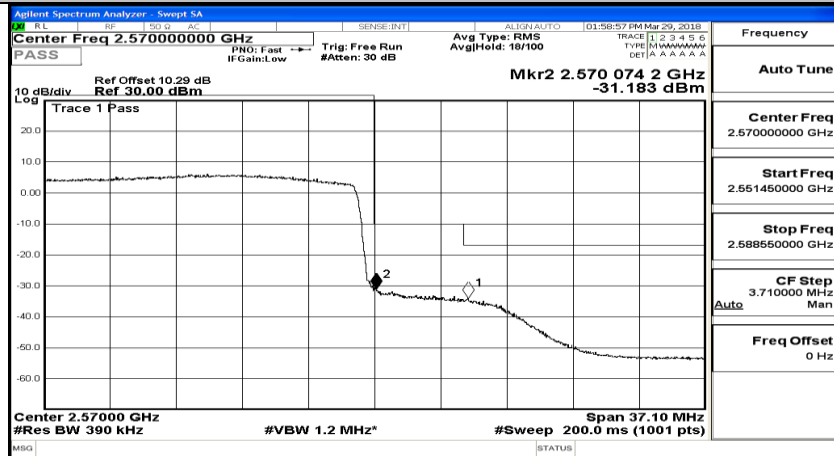
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM

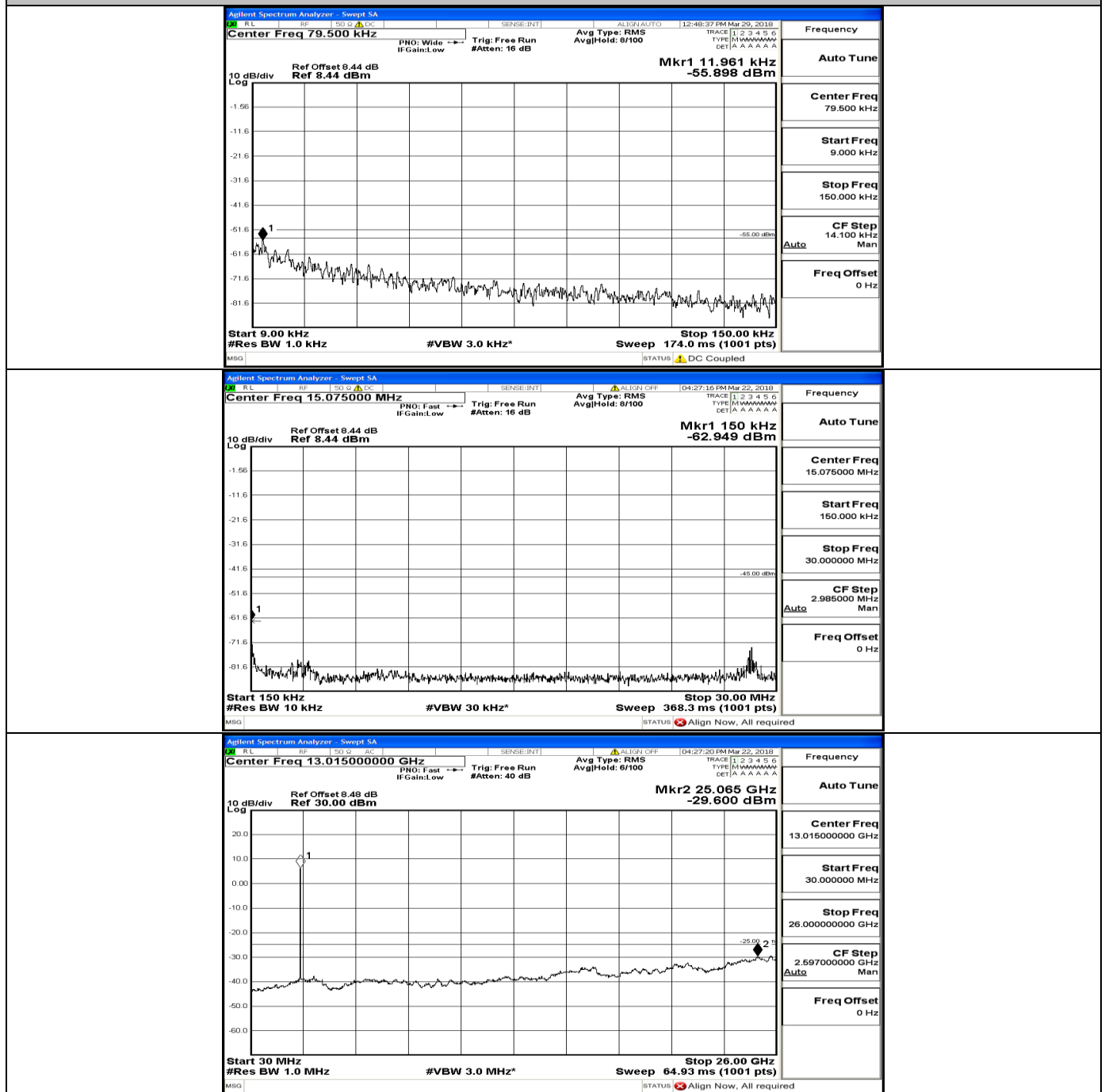


Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

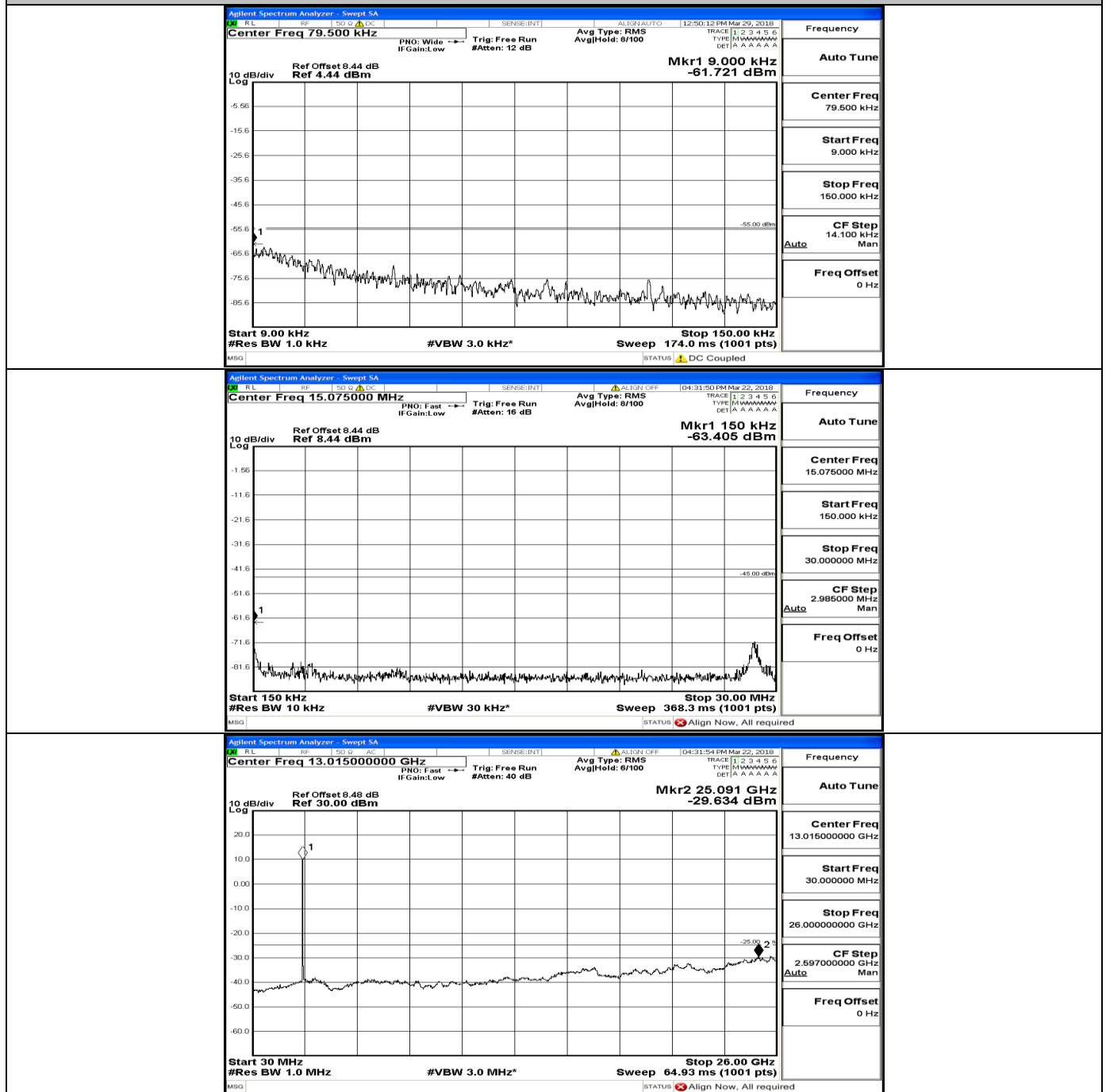


E.5 Conducted Spurious Emission

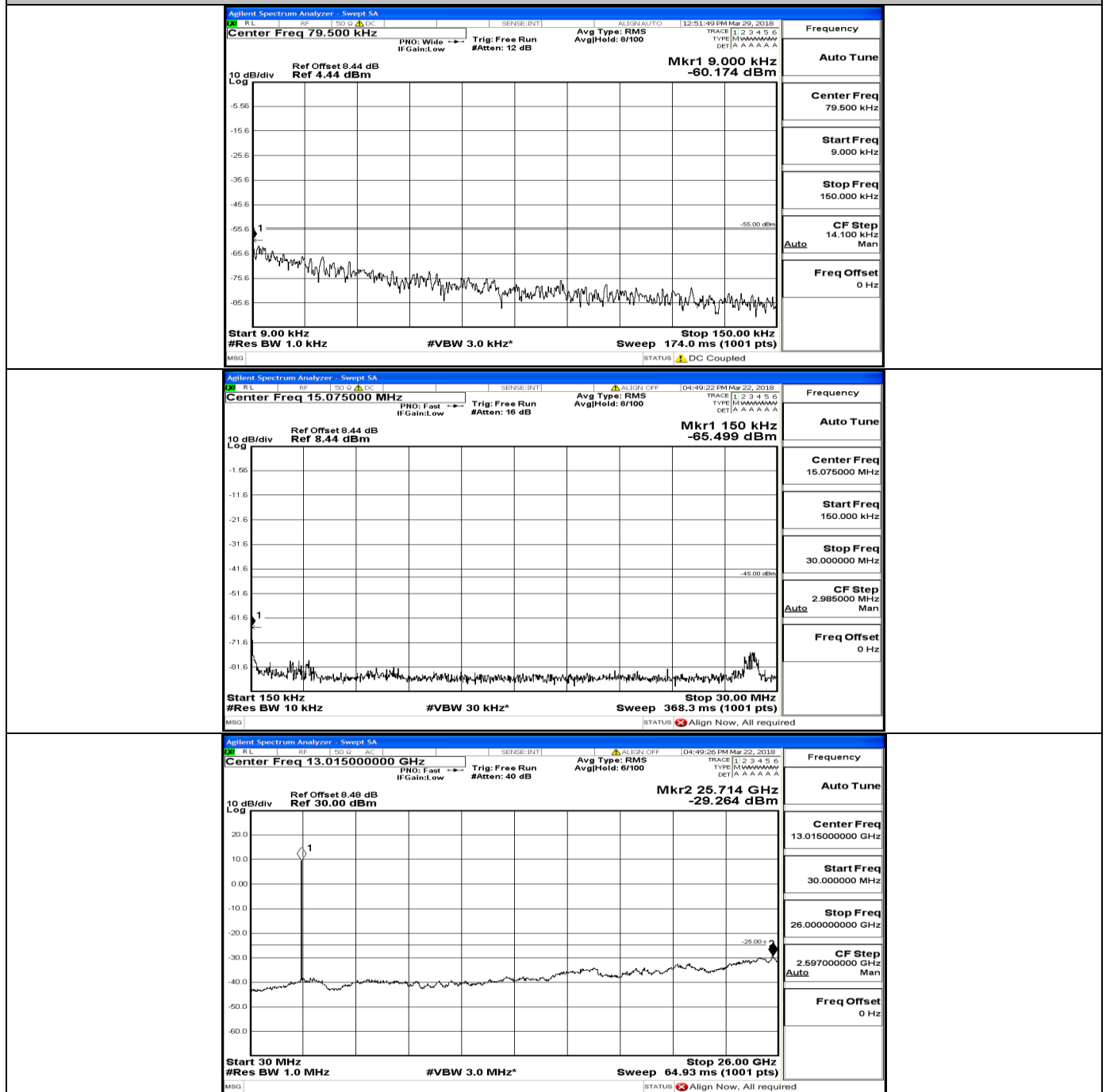
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



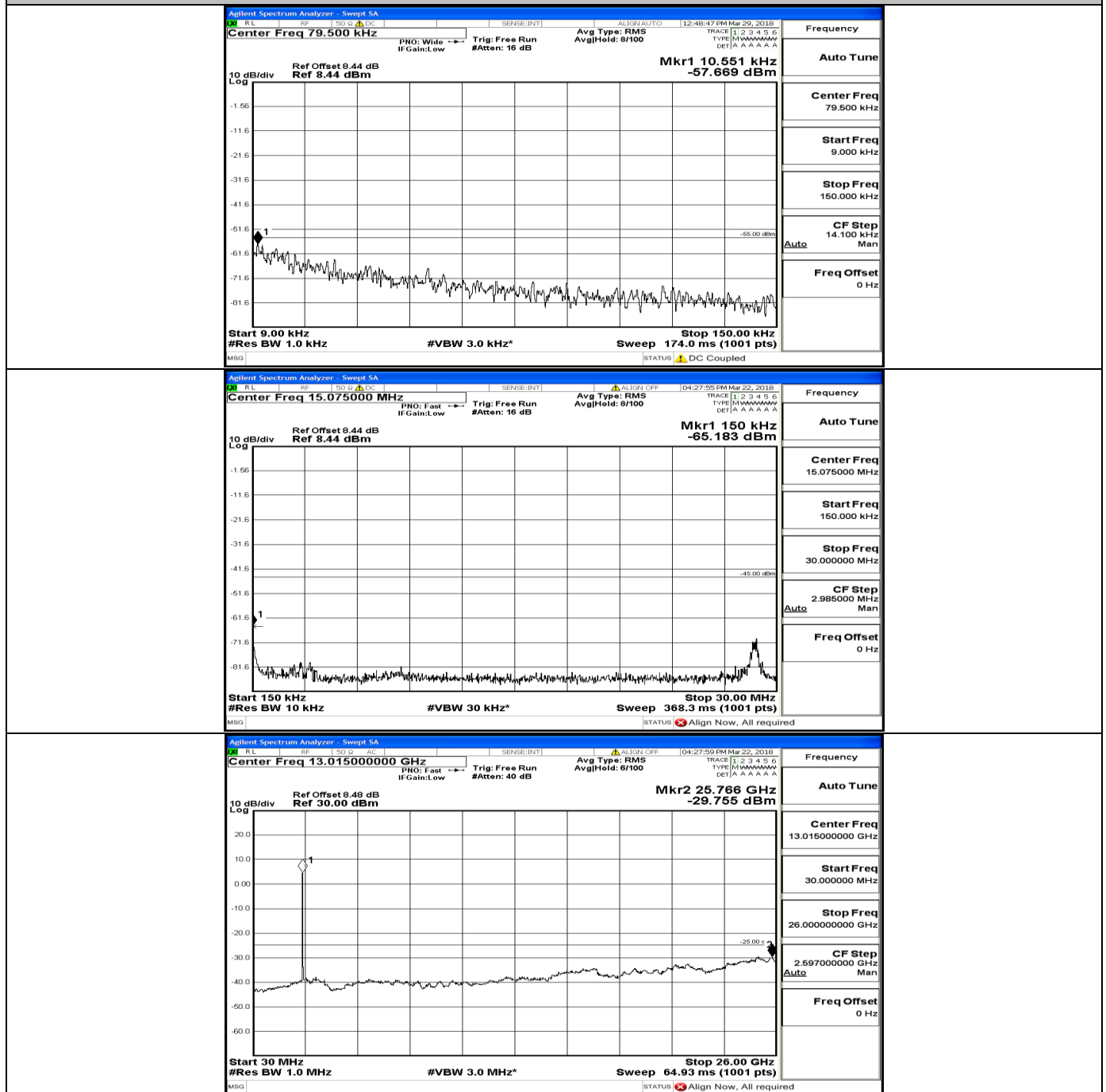
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



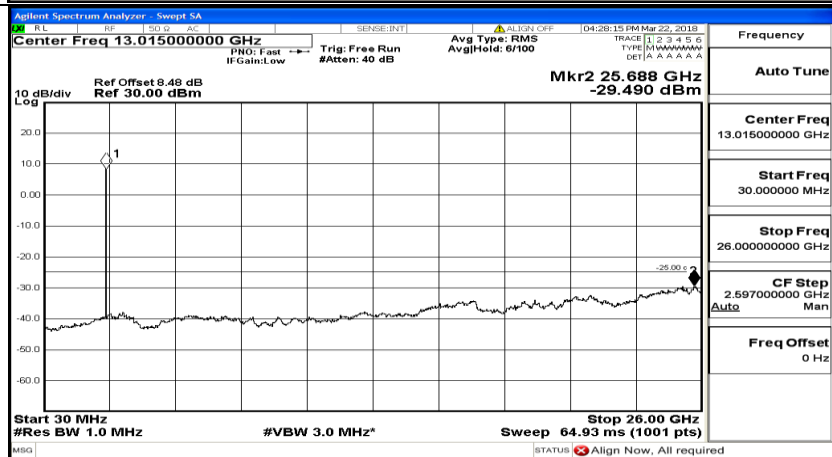
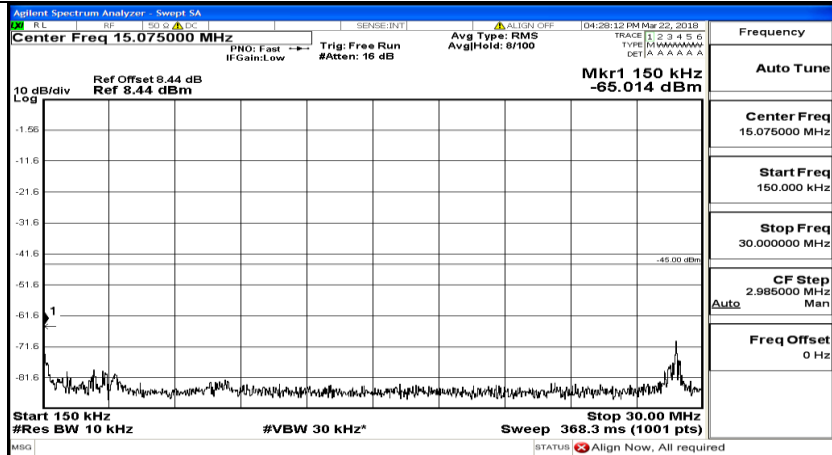
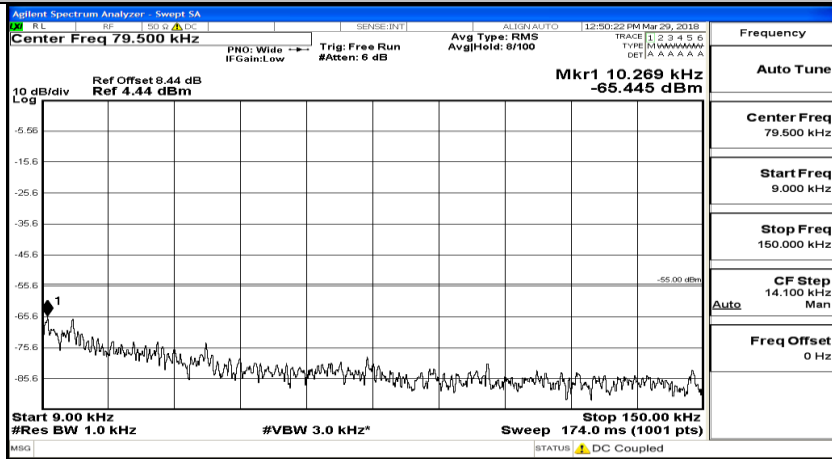
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



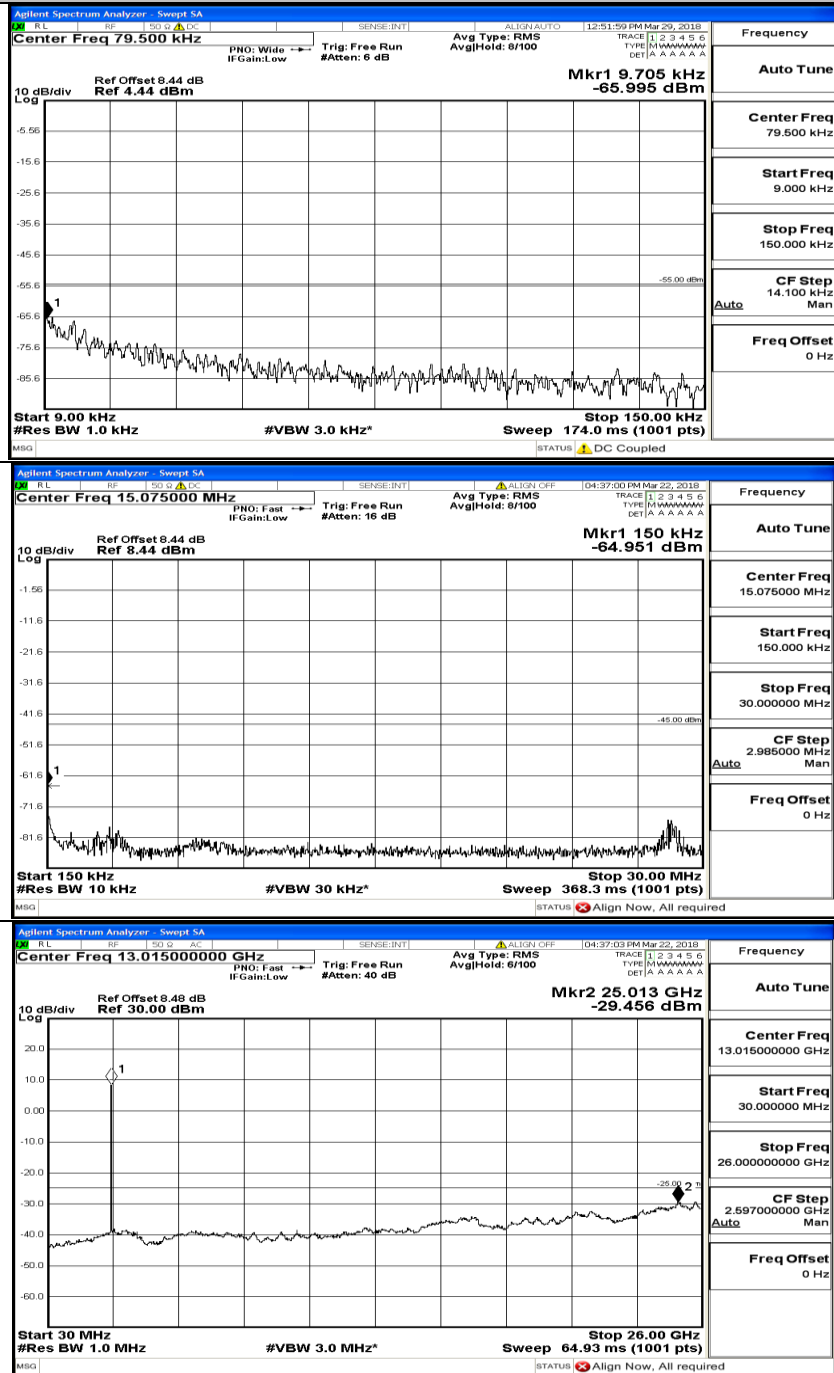
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



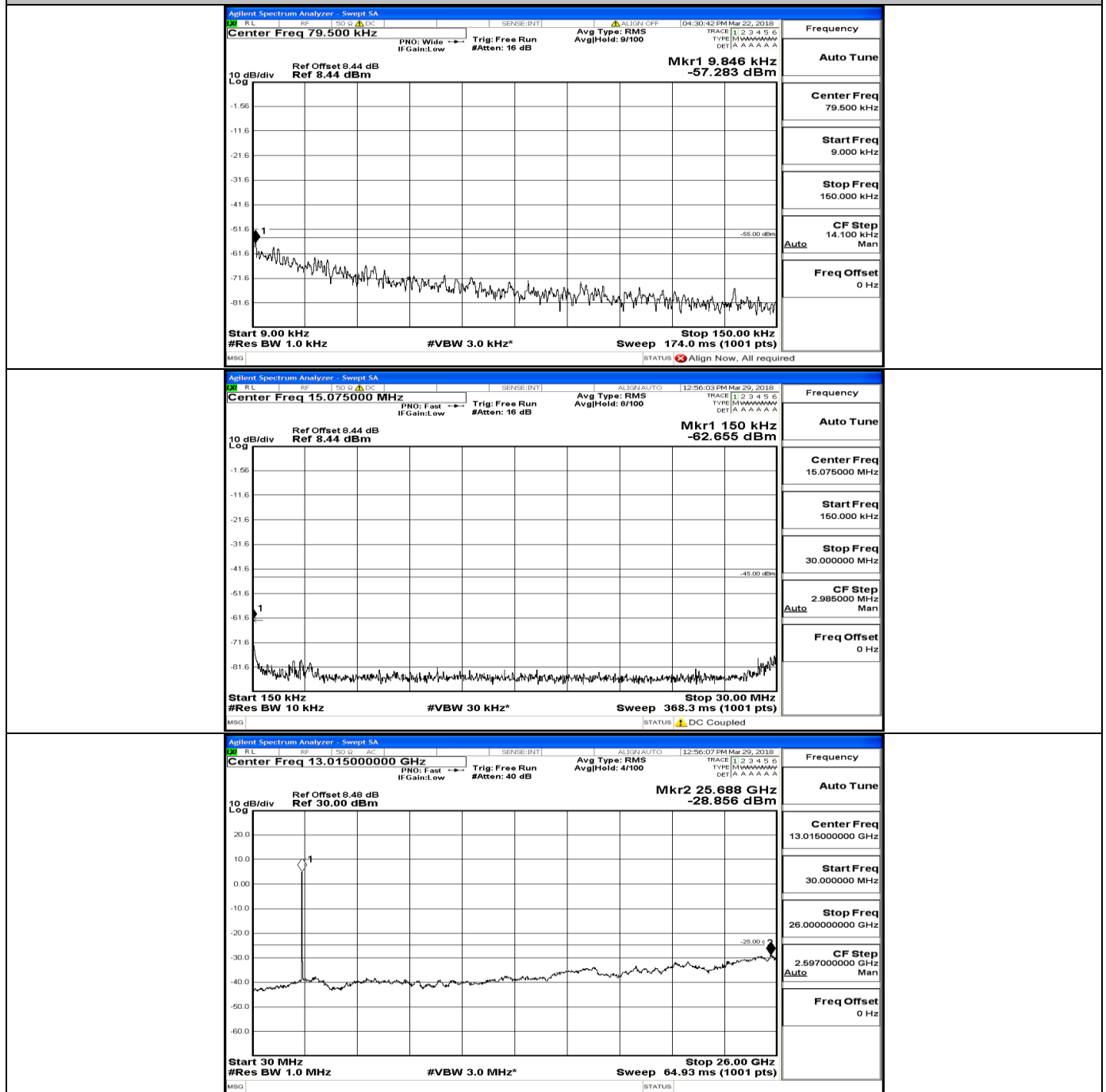
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



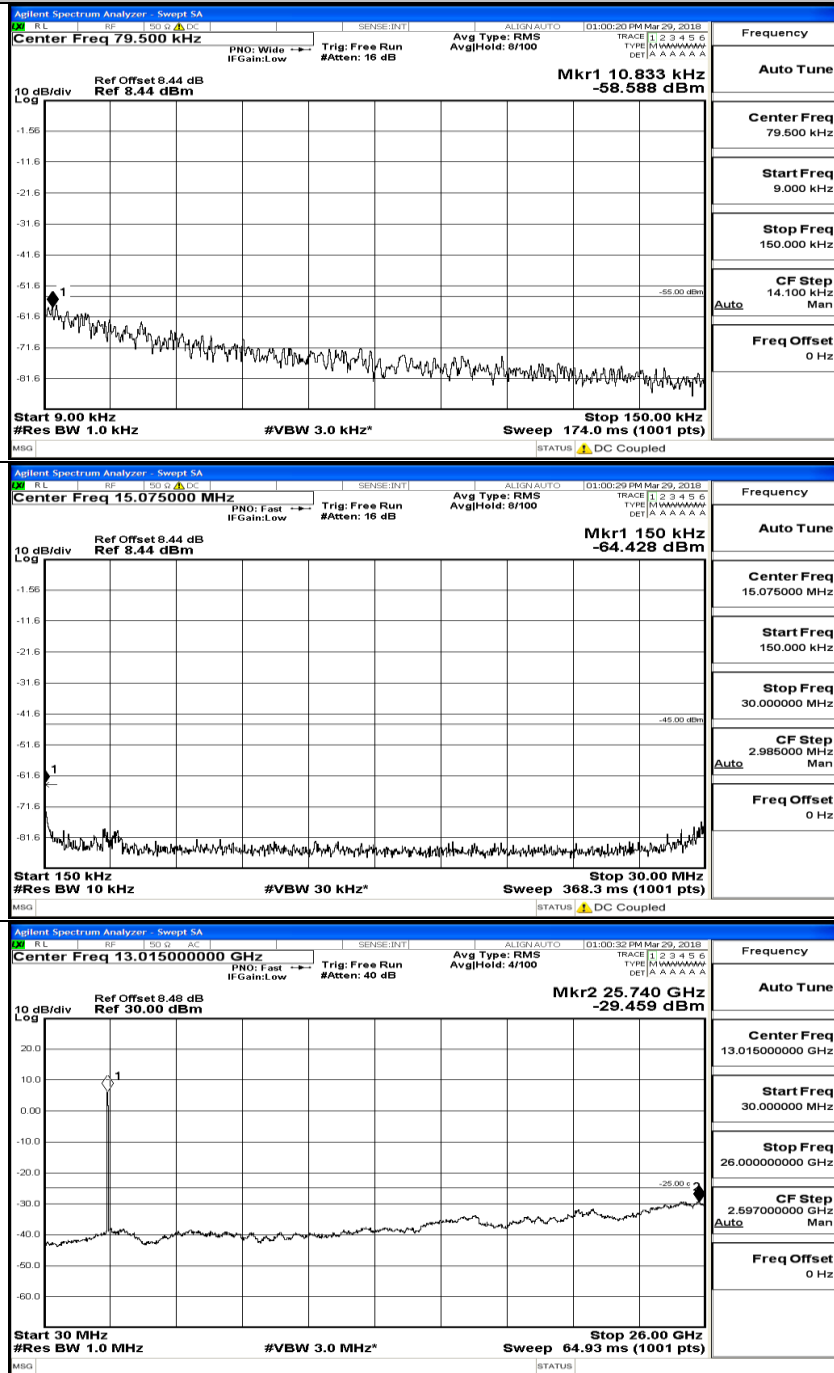
CSE Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



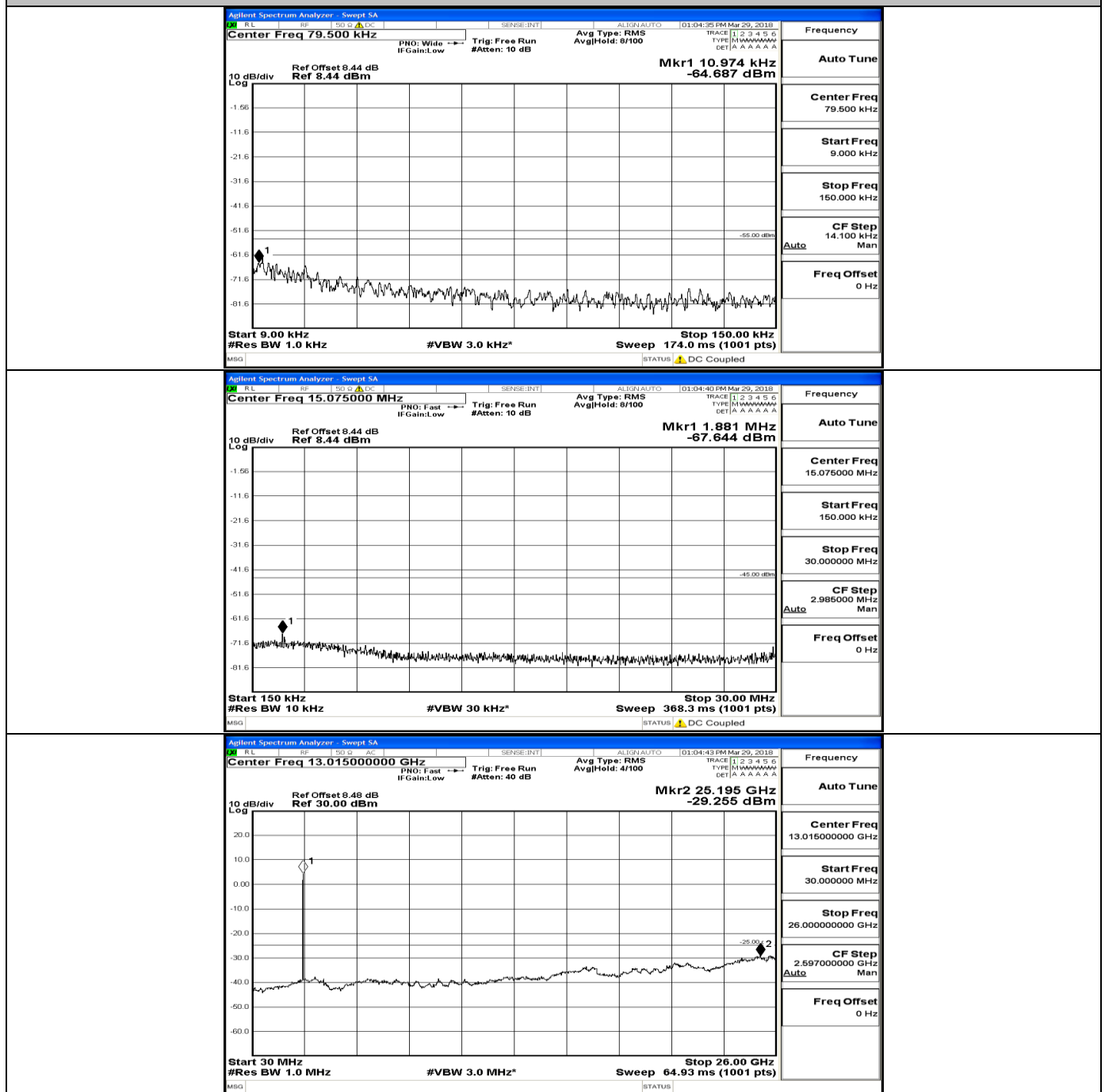
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



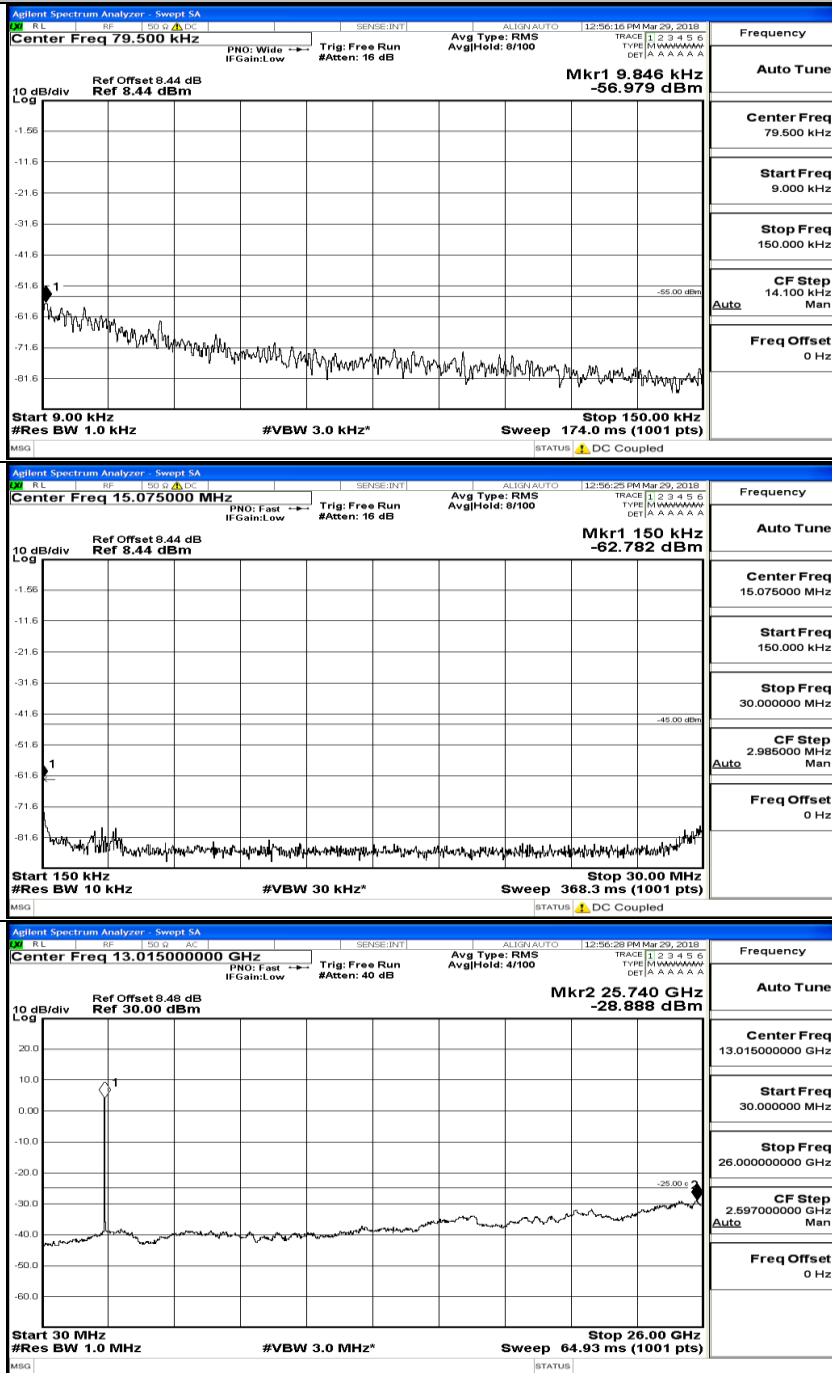
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



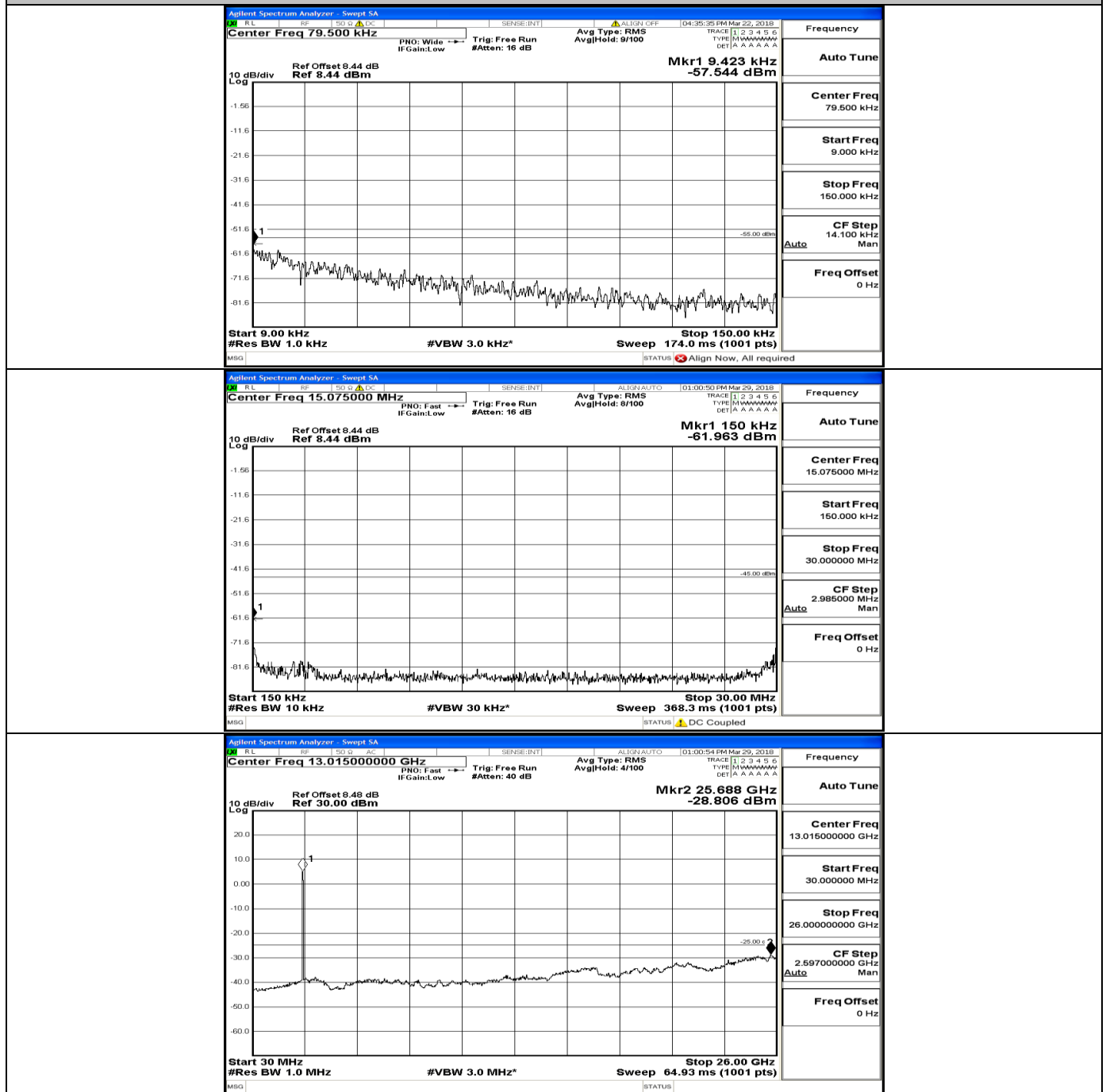
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



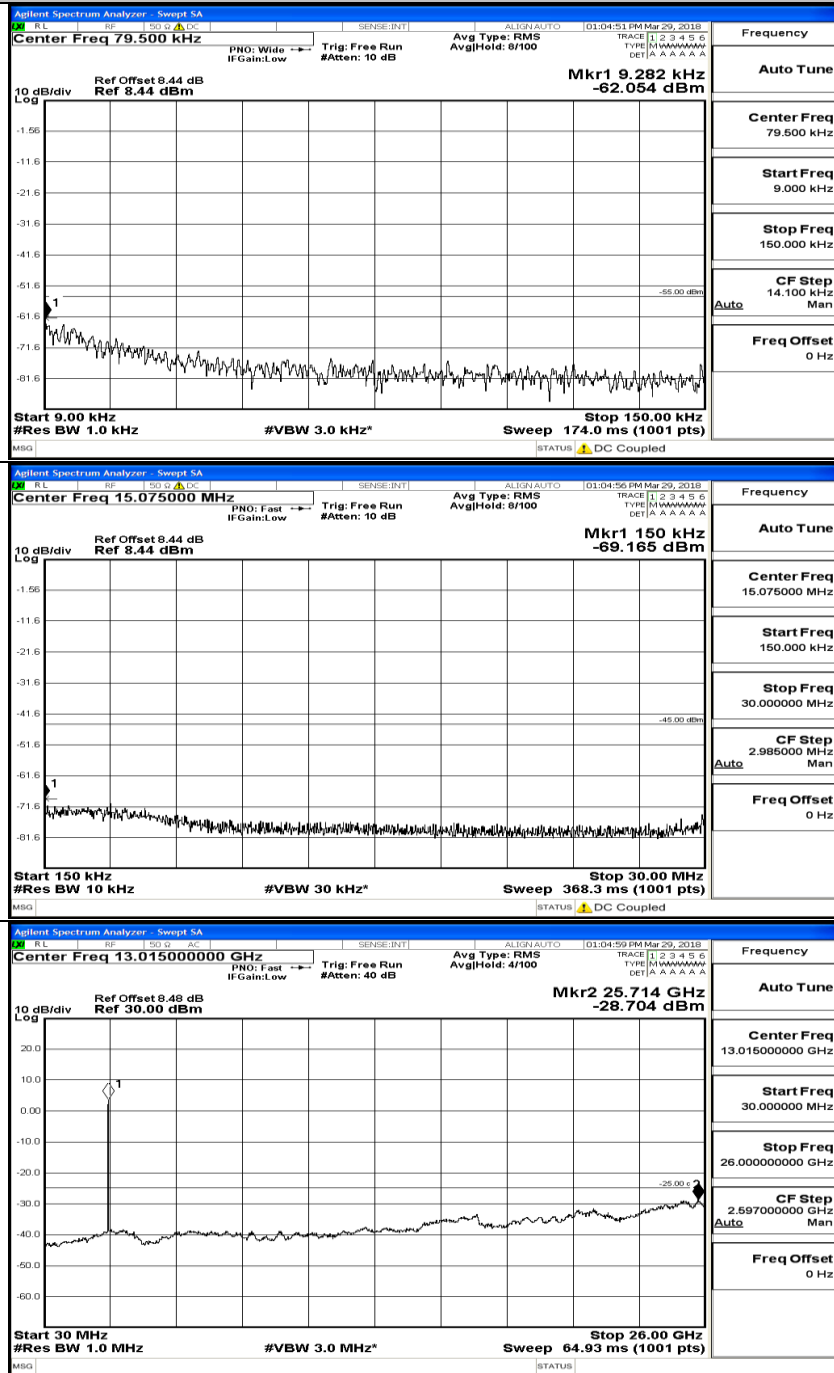
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



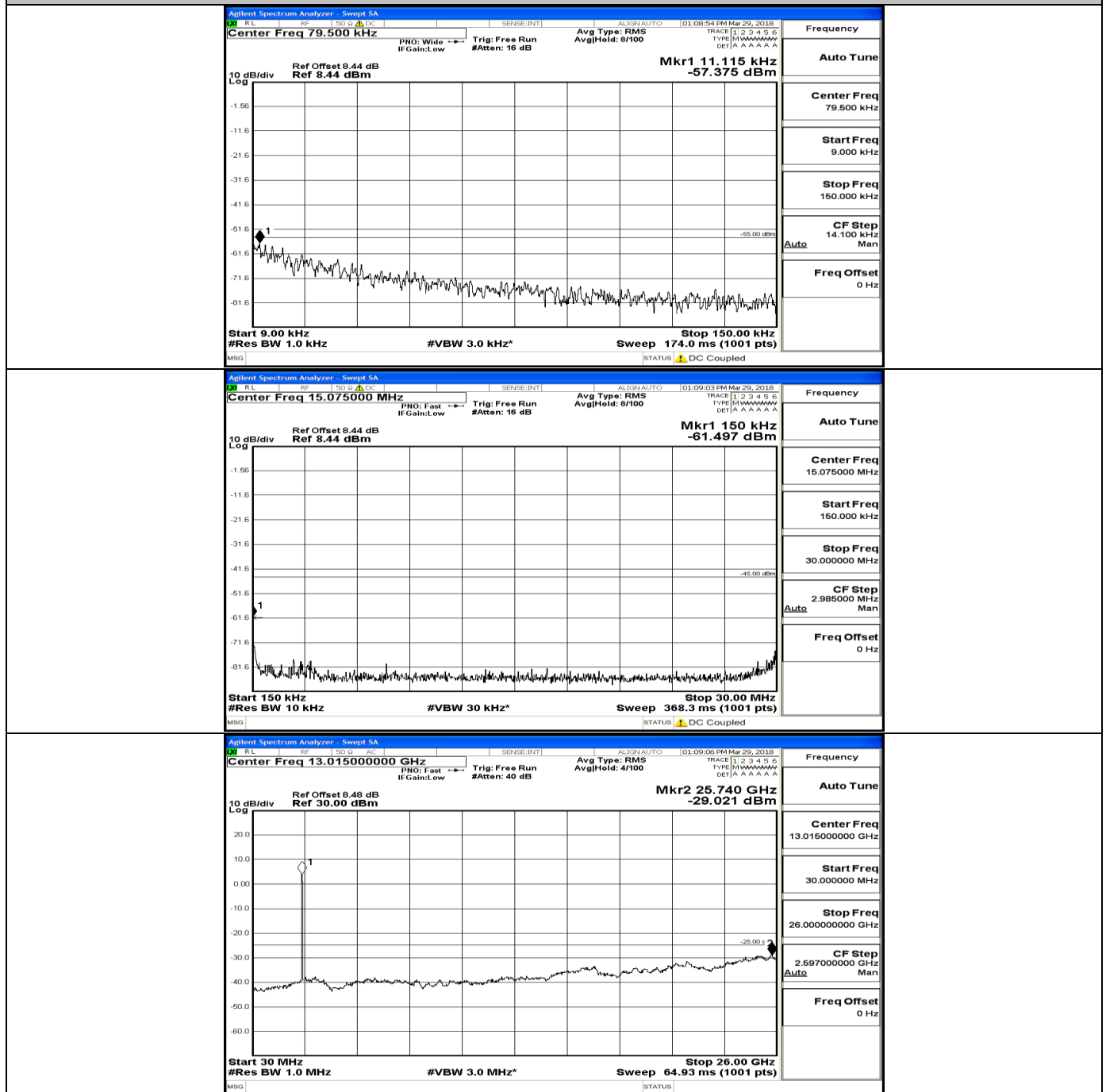
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



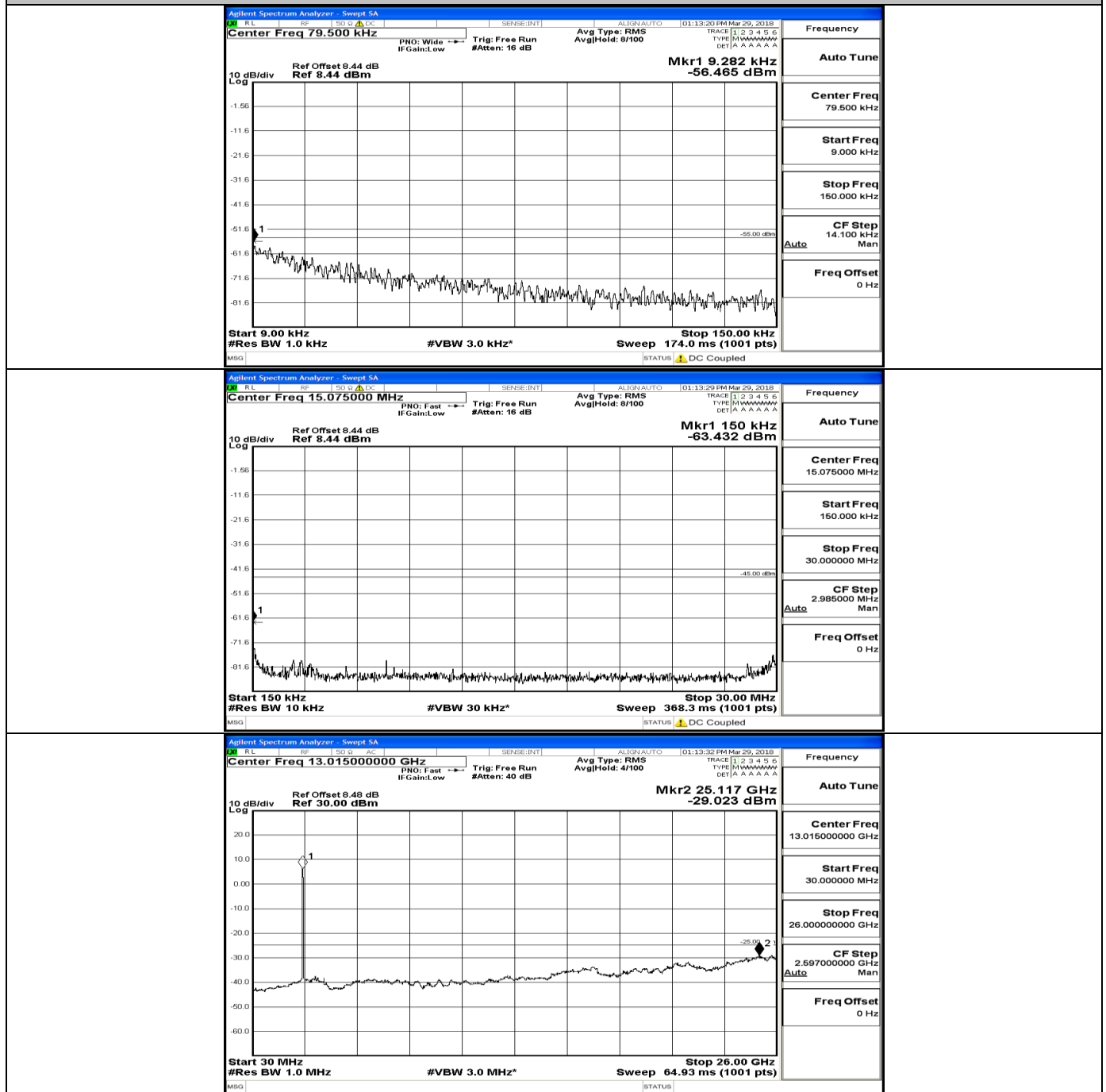
CSE Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



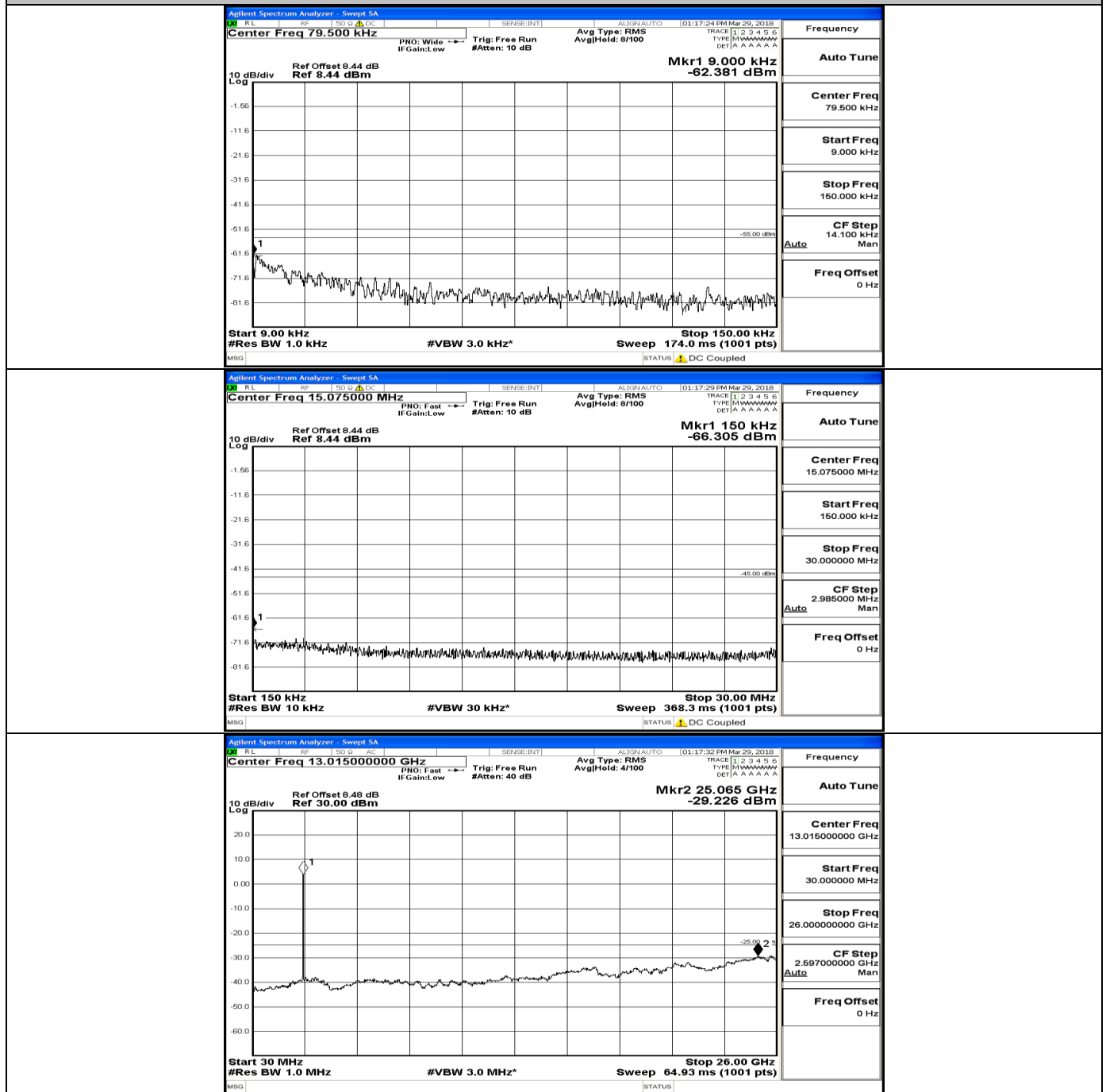
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



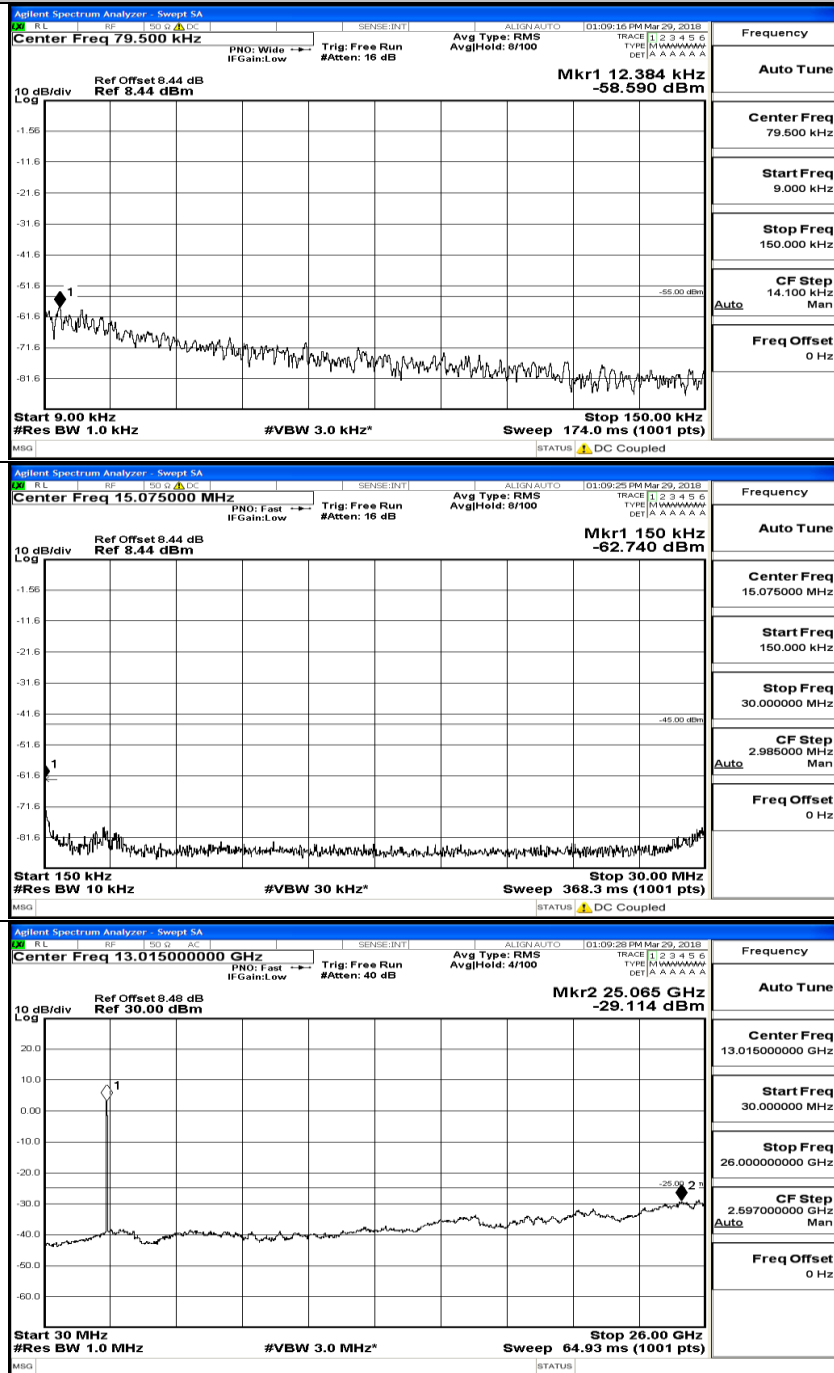
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



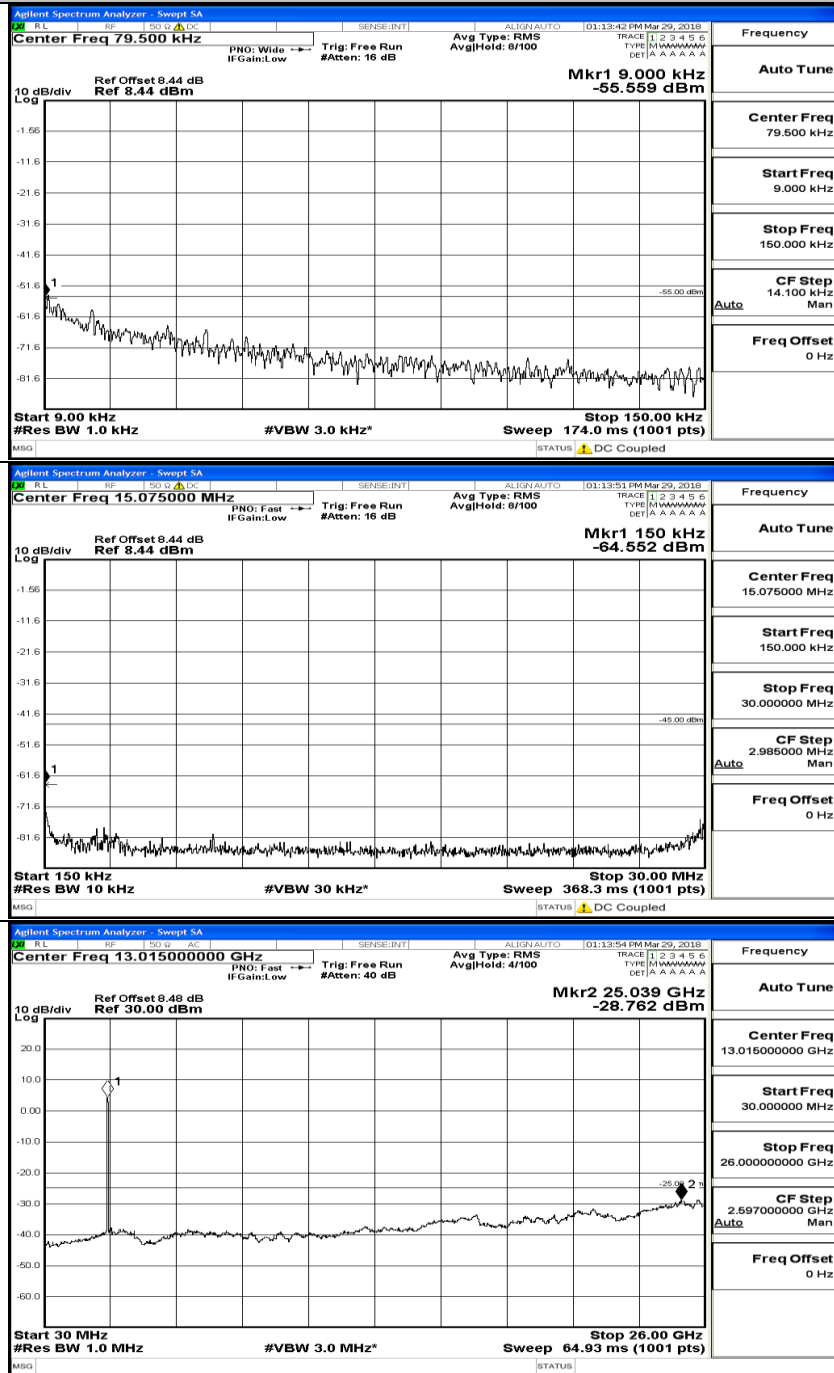
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



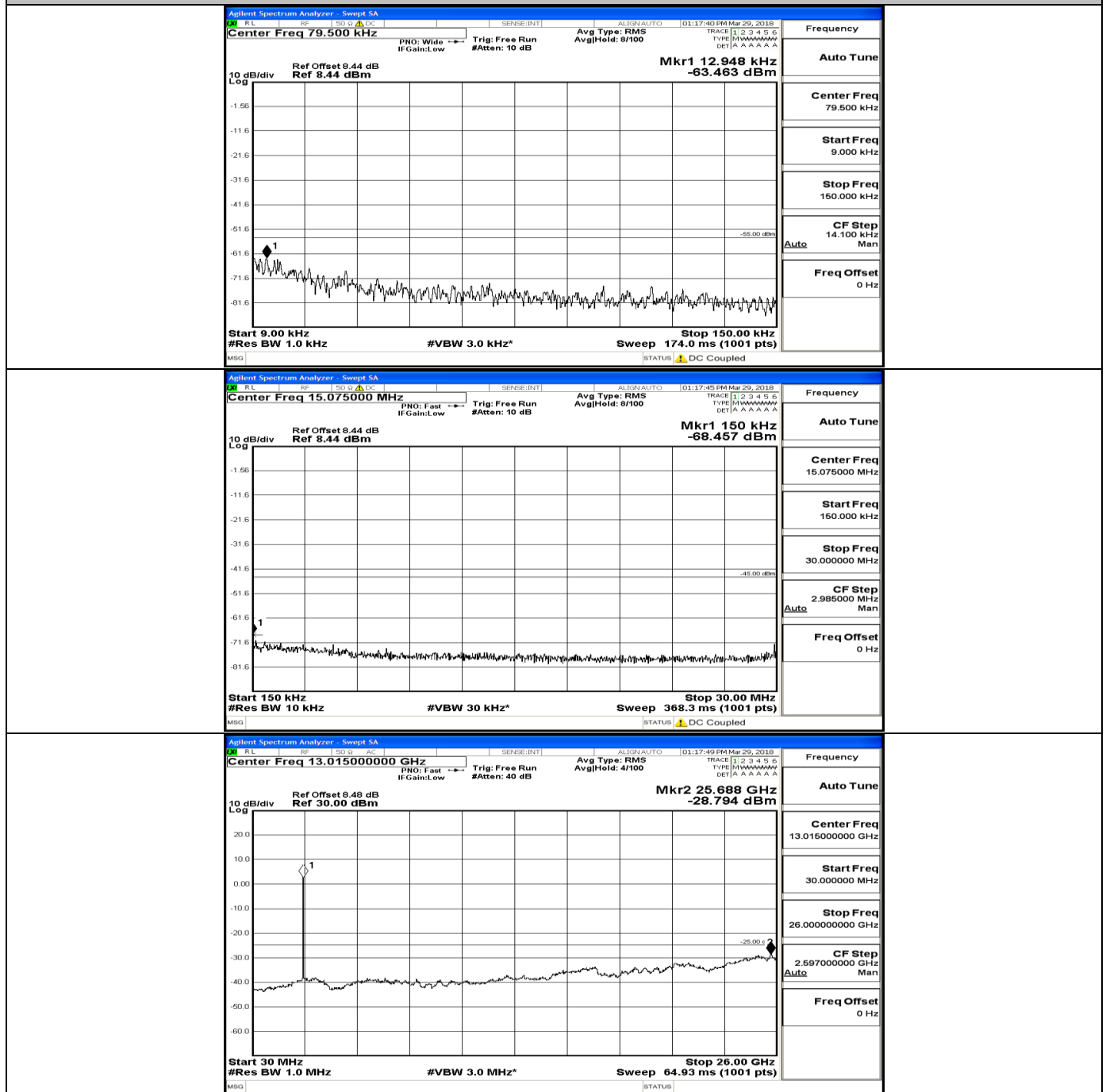
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



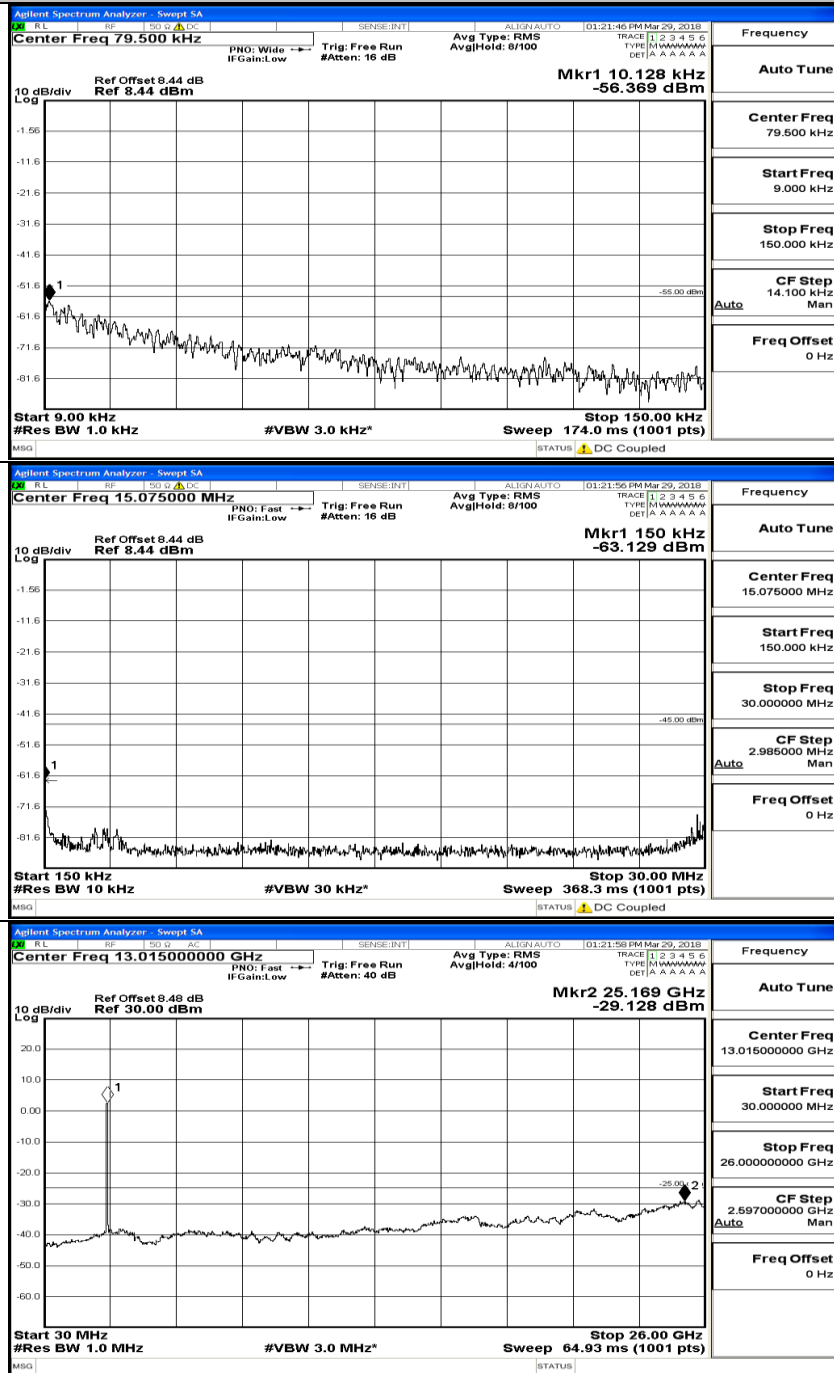
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



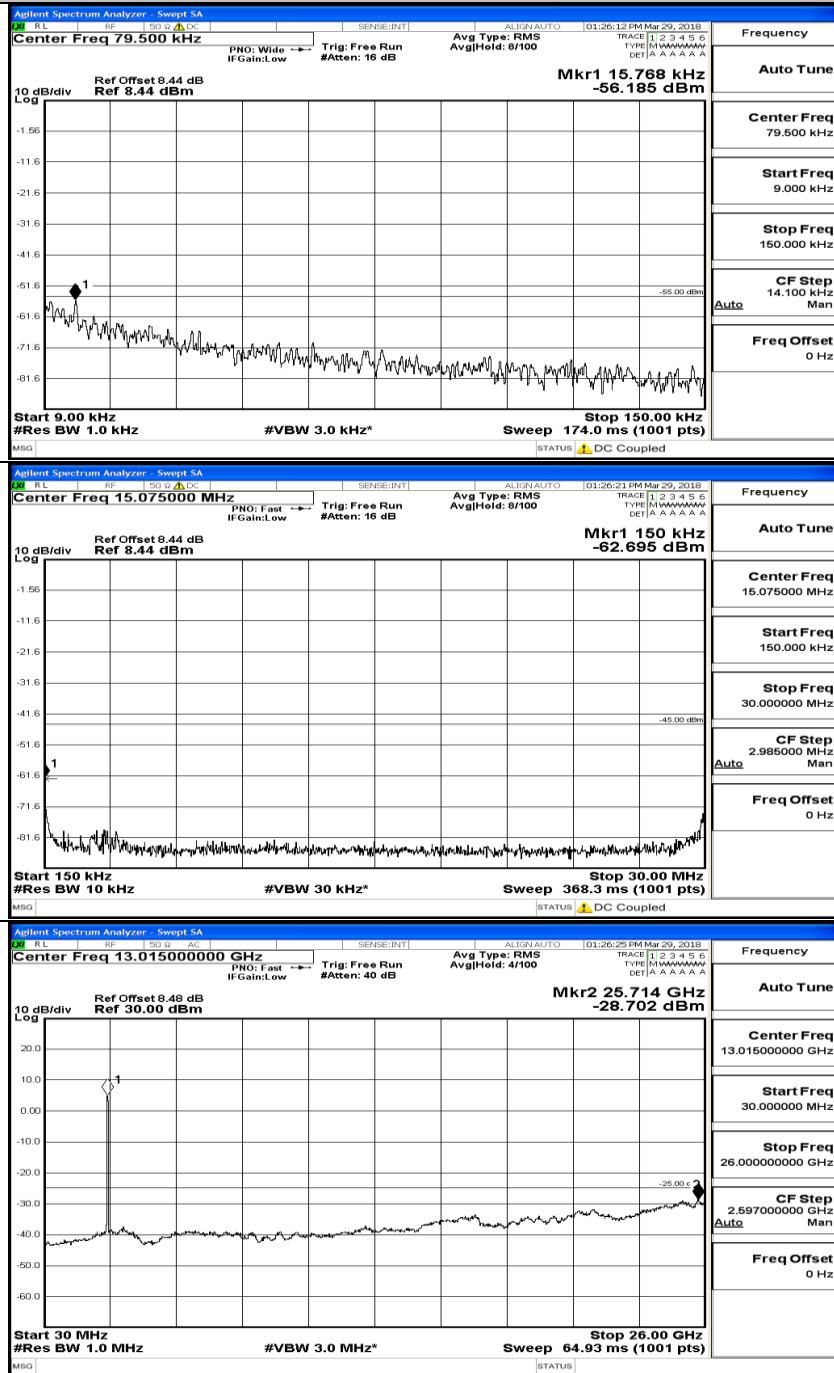
CSE Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



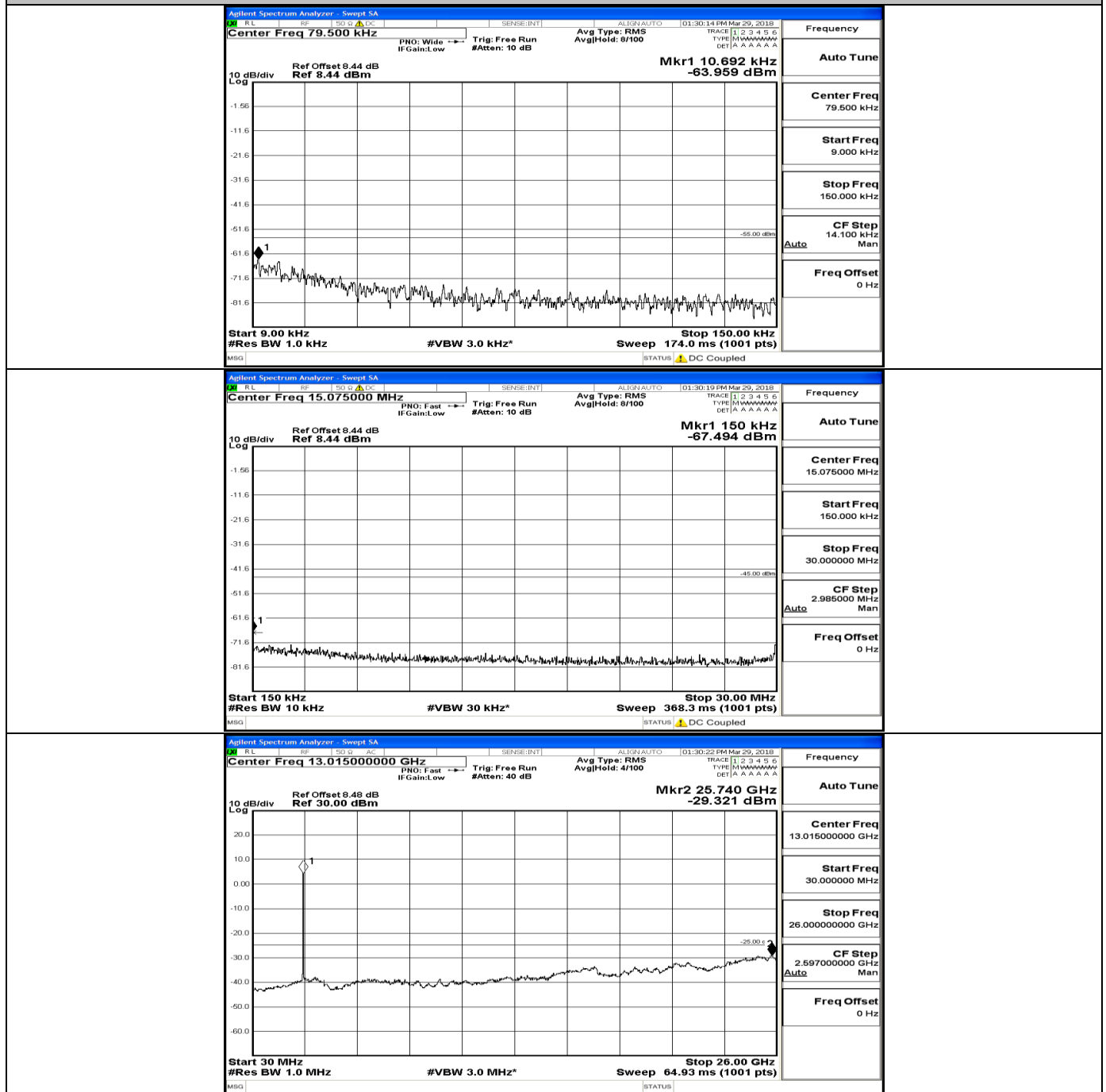
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



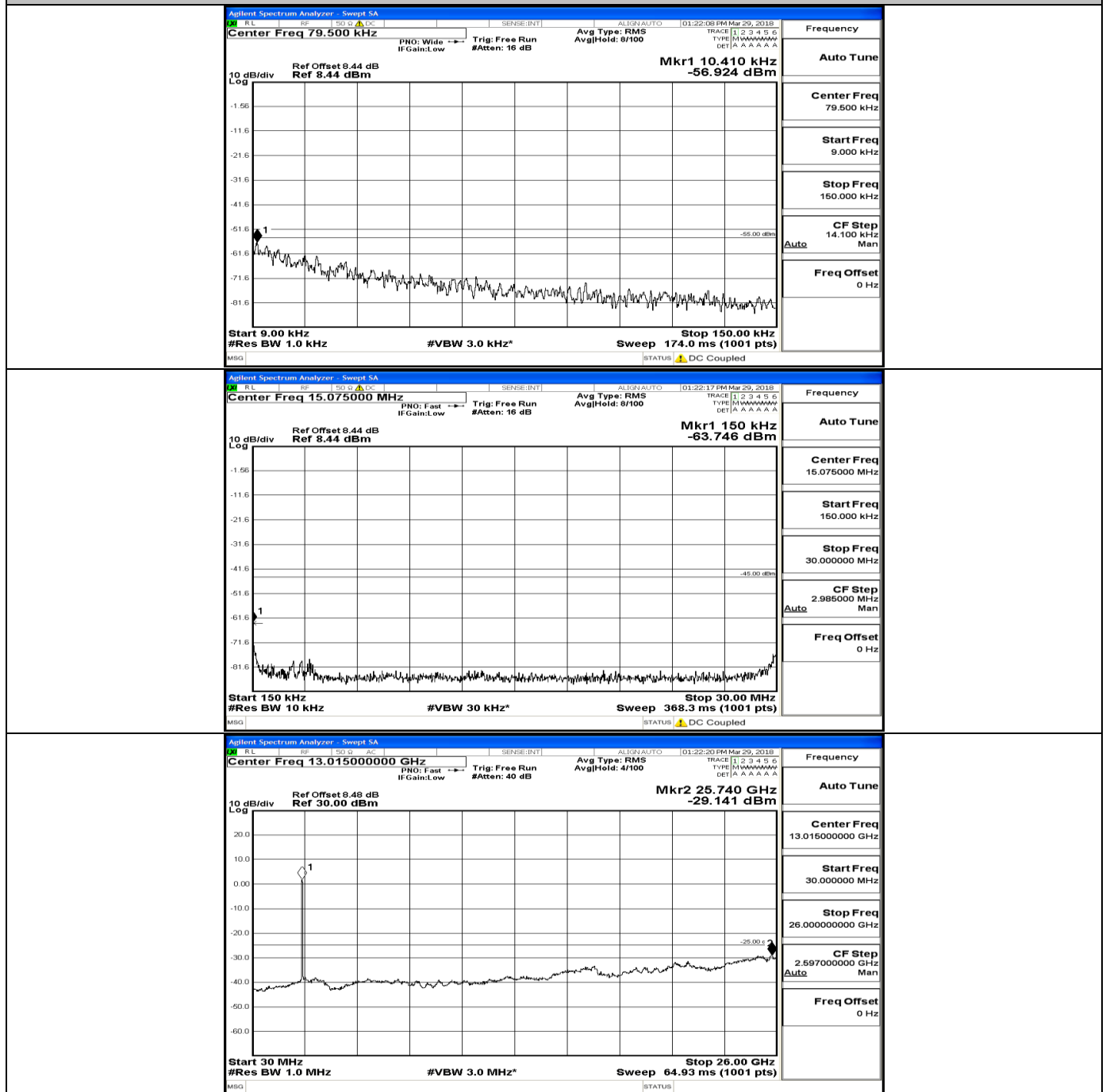
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



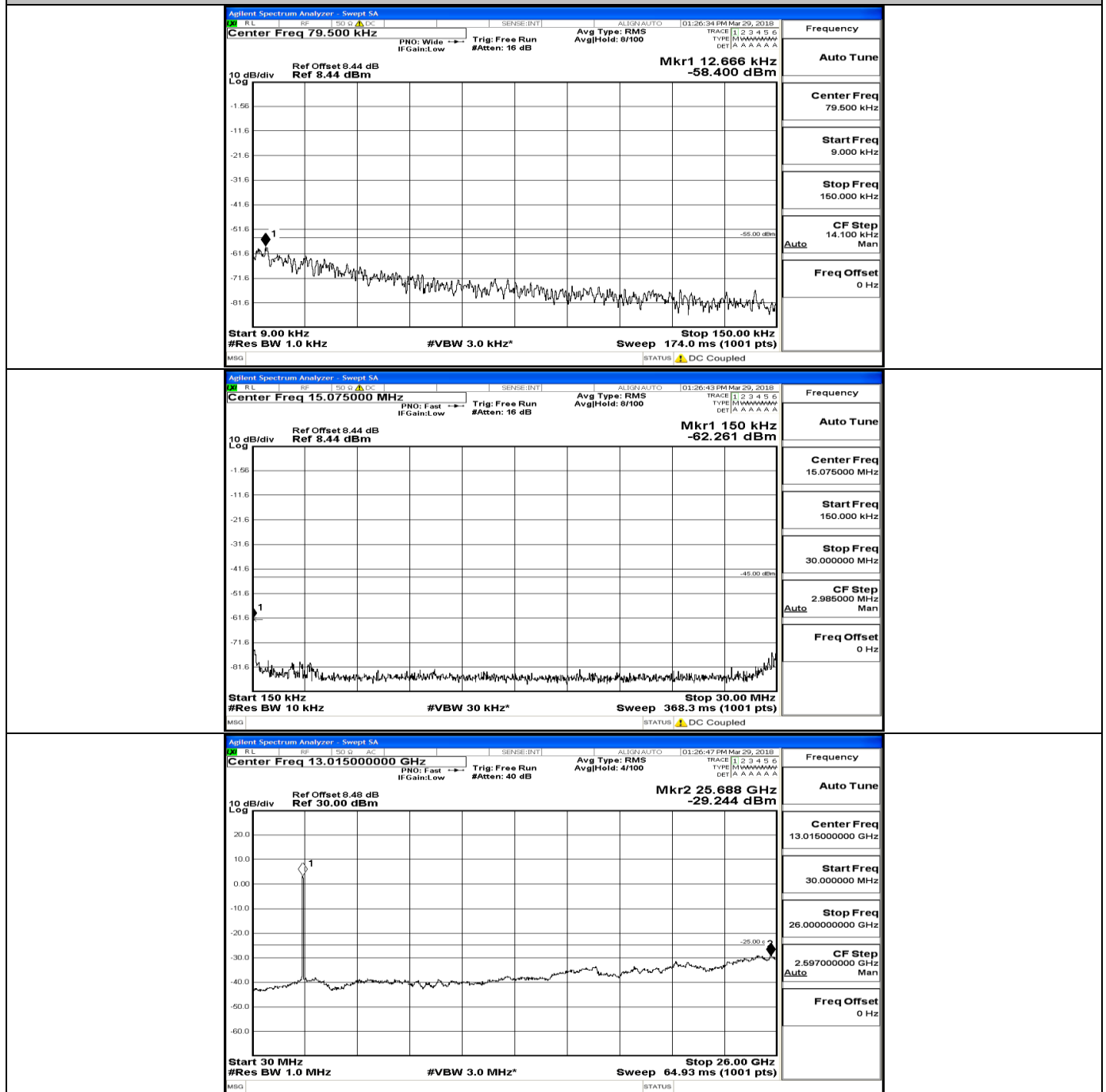
CSE Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



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

