Appendix F: Test Data for E-UTRA Band 2

Product Name: KIDS WATCH
Test Model: BUBBLE

Environmental Conditions

Temperature:	23.7 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Wang Chuang

F.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	O11set			
QPSK / 16QAM	LCH	1	0	23.50	22.22	PASS
		1	3	23.62	22.26	PASS
		1	5	23.38	22.06	PASS
		3	0	22.97	22.07	PASS
		3	2	22.95	22.02	PASS
		3	3	22.92	22.02	PASS
		6	0	23.50	22.22	PASS
	MCH	1	0	23.24	22.57	PASS
		1	3	23.34	22.67	PASS
		1	5	23.17	22.49	PASS
		3	0	23.31	22.27	PASS
		3	2	23.25	22.26	PASS
		3	3	23.24	22.25	PASS
		6	0	23.24	22.57	PASS
	HCH	1	0	23.68	22.71	PASS
		1	3	23.73	22.83	PASS
		1	5	23.60	22.69	PASS
		3	0	23.62	22.62	PASS
		3	2	23.65	22.61	PASS
		3	3	23.60	22.60	PASS
		6	0	23.68	22.71	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	O11set	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.90	22.11	PASS
		1	7	22.95	22.29	PASS
		1	14	22.74	22.01	PASS
		8	0	22.91	21.95	PASS
		8	4	22.88	21.95	PASS
		8	7	22.82	21.84	PASS
		15	0	22.90	22.11	PASS
	MCH	1	0	23.23	22.49	PASS
		1	7	23.14	22.62	PASS
		1	14	23.07	22.27	PASS
		8	0	22.26	21.31	PASS
		8	4	22.26	21.28	PASS
		8	7	22.17	21.18	PASS
		15	0	23.23	22.49	PASS
	HCH	1	0	23.47	22.73	PASS
		1	7	23.53	22.83	PASS
		1	14	23.14	22.79	PASS
		8	0	22.73	21.67	PASS
		8	4	22.76	21.65	PASS
		8	7	22.68	21.59	PASS
		15	0	23.67	22.83	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	O11set	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.82	22.13	PASS
		1	12	22.96	22.35	PASS
		1	24	22.62	21.93	PASS
		12	0	22.83	21.98	PASS
		12	6	22.83	22.00	PASS
		12	13	22.74	21.86	PASS
		25	0	22.82	22.13	PASS
	MCH	1	0	23.27	22.54	PASS
		1	12	23.48	22.71	PASS
		1	24	22.90	22.20	PASS
		12	0	22.25	21.42	PASS
		12	6	22.25	21.38	PASS
		12	13	22.07	21.23	PASS
		25	0	23.27	22.54	PASS
	HCH	1	0	23.70	22.48	PASS
		1	12	23.43	22.80	PASS
		1	24	23.08	22.39	PASS
		12	0	22.71	21.67	PASS
		12	6	22.69	21.69	PASS
		12	13	22.58	21.60	PASS
		25	0	23.70	22.48	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	O11set	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.10	22.35	PASS
		1	24	22.41	22.86	PASS
		1	49	22.01	22.75	PASS
		25	0	22.69	22.02	PASS
		25	12	22.55	21.98	PASS
		25	25	22.53	21.87	PASS
		50	0	22.99	22.06	PASS
	MCH	1	0	22.36	22.48	PASS
		1	24	22.56	22.04	PASS
		1	49	22.10	22.39	PASS
		25	0	22.58	21.73	PASS
		25	12	22.05	21.46	PASS
		25	25	22.37	21.61	PASS
		50	0	22.06	22.19	PASS
	HCH	1	0	22.92	22.35	PASS
		1	24	23.08	22.85	PASS
		1	49	22.25	21.60	PASS
		25	0	22.39	21.18	PASS
		25	12	22.71	22.07	PASS
		25	25	22.52	21.93	PASS
		50	0	22.76	22.14	PASS

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	O11set	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.81	22.14	PASS
		1	37	22.96	22.25	PASS
		1	74	22.72	21.93	PASS
		37	0	22.13	21.88	PASS
		37	18	22.13	21.10	PASS
		37	38	23.04	21.96	PASS
		75	0	22.83	21.15	PASS
	MCH	1	0	22.28	21.64	PASS
		1	37	22.52	21.91	PASS
		1	74	22.93	21.24	PASS
		37	0	22.25	21.42	PASS
		37	18	22.26	21.48	PASS
		37	38	23.07	22.25	PASS
		75	0	22.37	21.74	PASS
	HCH	1	0	23.72	22.28	PASS
		1	37	23.13	22.89	PASS
		1	74	22.48	22.09	PASS
		37	0	23.71	22.97	PASS
		37	18	23.55	22.79	PASS
		37	38	22.28	21.63	PASS
		75	0	23.50	21.98	PASS

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Con1iguration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	O11set	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.82	22.13	PASS
		1	49	22.96	22.21	PASS
		1	99	22.62	21.93	PASS
		50	0	22.84	22.18	PASS
		50	25	22.83	22.15	PASS
		50	50	22.74	21.96	PASS
		100	0	23.82	22.13	PASS
	MCH	1	0	22.37	21.44	PASS
		1	49	22.58	21.72	PASS
		1	99	23.90	22.30	PASS
		50	0	23.25	22.43	PASS
		50	25	22.75	21.98	PASS
		50	50	23.07	22.63	PASS
		100	0	22.37	21.14	PASS
	HCH	1	0	23.10	21.08	PASS
		1	49	23.21	22.87	PASS
		1	99	22.18	22.29	PASS
		50	0	22.71	21.61	PASS
		50	25	22.69	21.52	PASS
		50	50	22.52	22.61	PASS
		100	0	22.73	22.28	PASS

F.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	4.17	<13	PASS
	MCH	3.97	<13	PASS
	HCH	2.88	<13	PASS
16QAM	LCH	5.35	<13	PASS
	MCH	5	<13	PASS
	HCH	3.86	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.09	<13	PASS
	MCH	3.88	<13	PASS
	HCH	2.74	<13	PASS
16QAM	LCH	5.01	<13	PASS
	MCH	4.74	<13	PASS
	HCH	3.78	<13	PASS

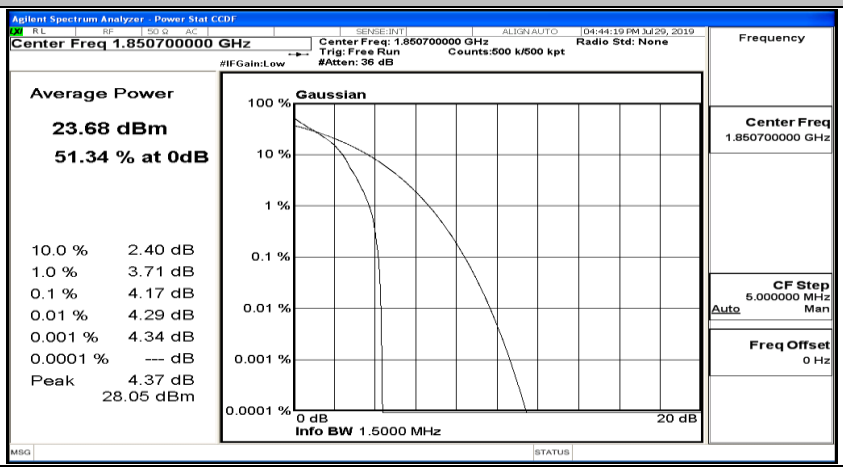
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.03	<13	PASS
	MCH	3.77	<13	PASS
	HCH	3.04	<13	PASS
16QAM	LCH	5.01	<13	PASS
	MCH	4.75	<13	PASS
	HCH	3.89	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.12	<13	PASS
	MCH	3.72	<13	PASS
	HCH	3.1	<13	PASS
16QAM	LCH	5.04	<13	PASS
	MCH	4.68	<13	PASS
	HCH	4.07	<13	PASS

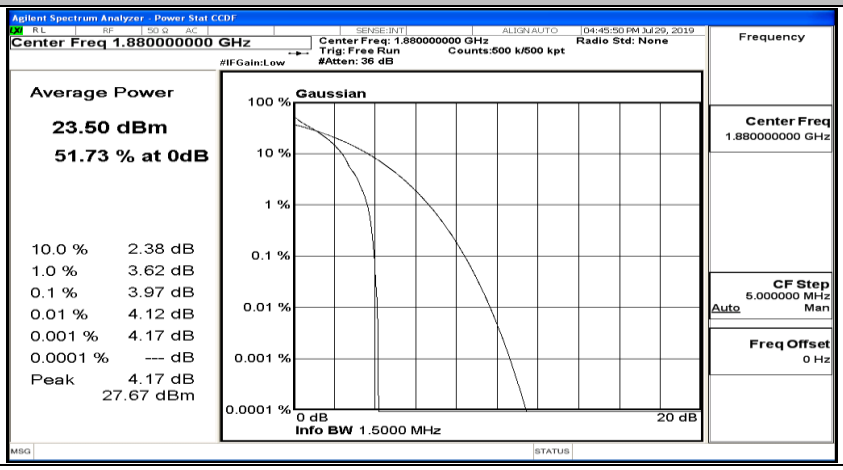
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	3.61	<13	PASS
	MCH	3.47	<13	PASS
	HCH	2.69	<13	PASS
16QAM	LCH	4.46	<13	PASS
	MCH	4.33	<13	PASS
	HCH	3.66	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	3.57	<13	PASS
	MCH	4.23	<13	PASS
	HCH	2.78	<13	PASS
16QAM	LCH	4.31	<13	PASS
	MCH	4.24	<13	PASS
	HCH	3.63	<13	PASS

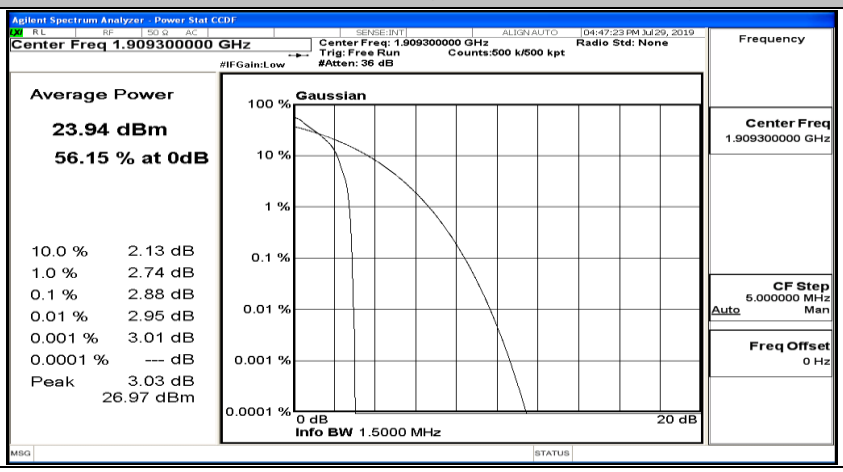
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



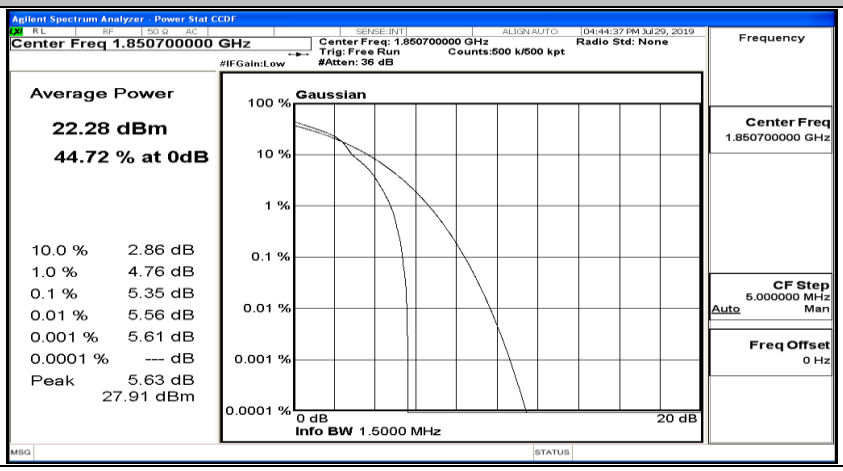
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



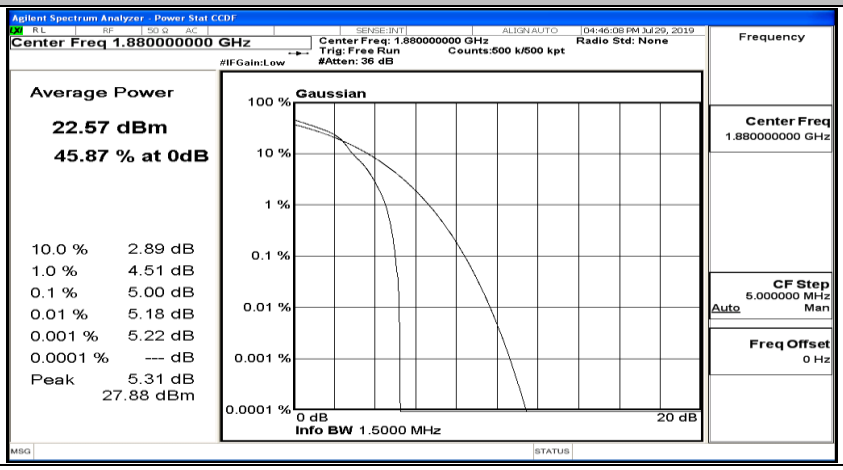
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



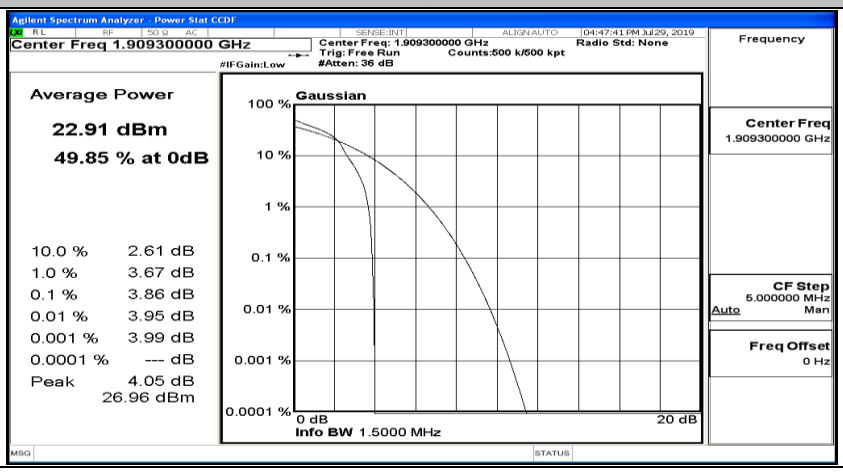
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



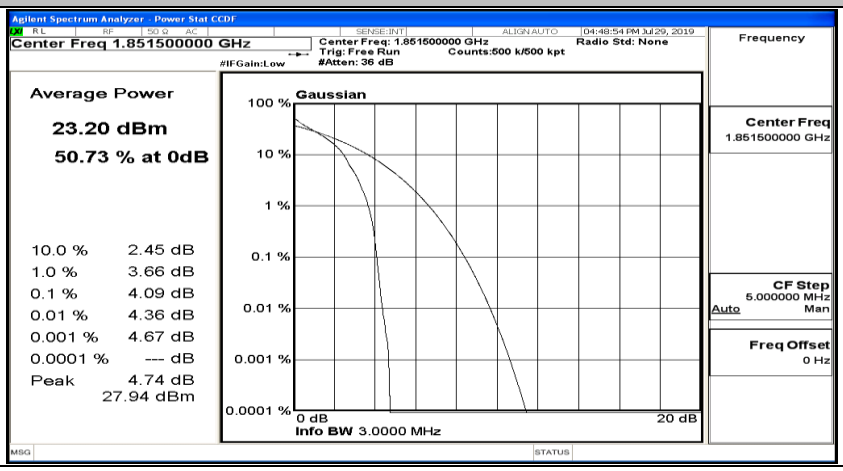
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



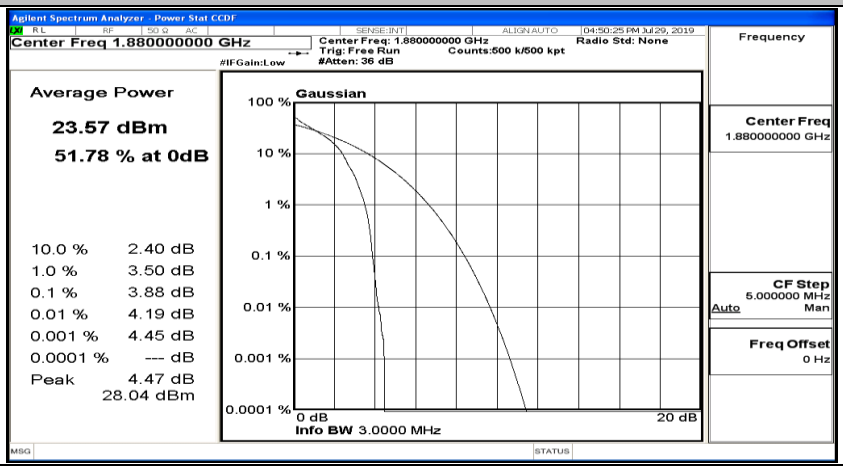
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



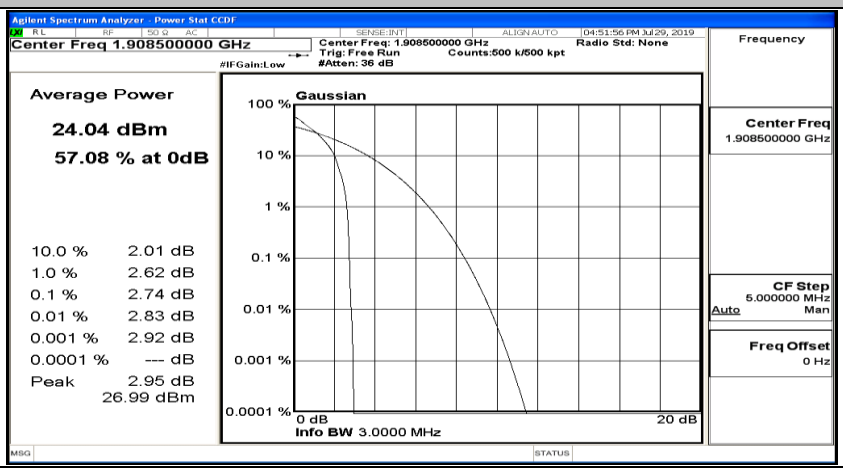
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



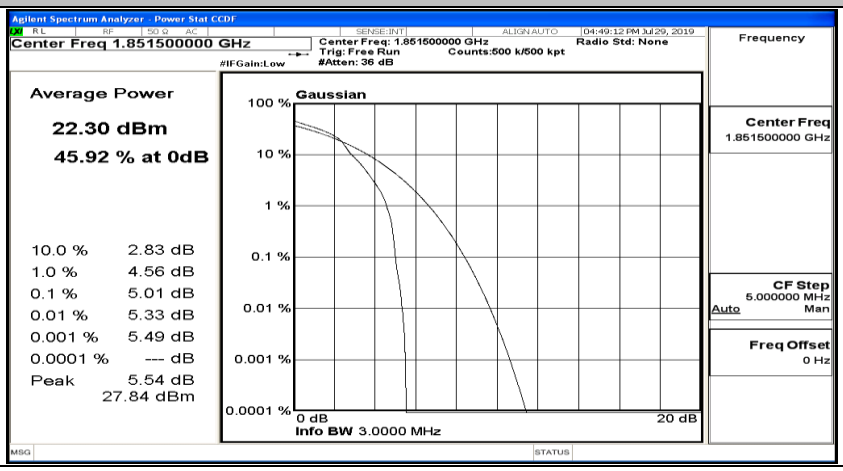
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



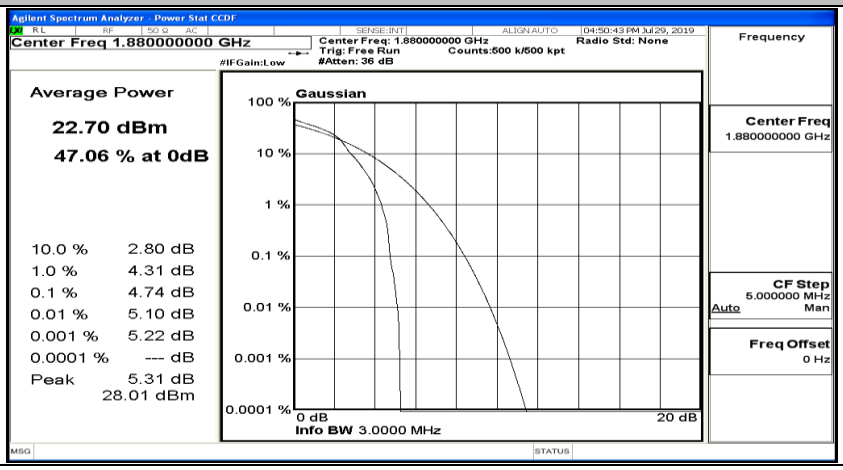
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



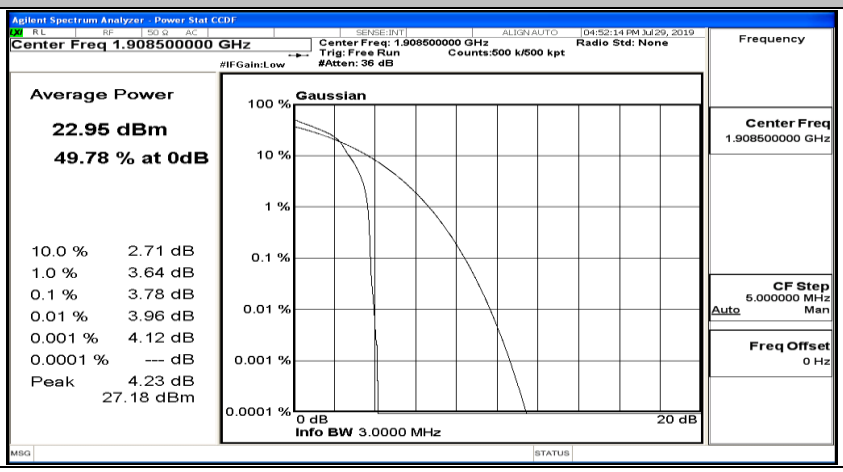
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



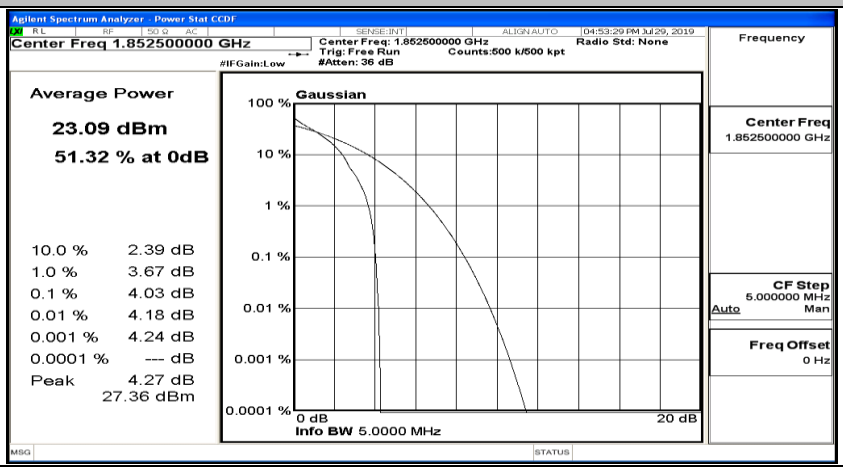
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



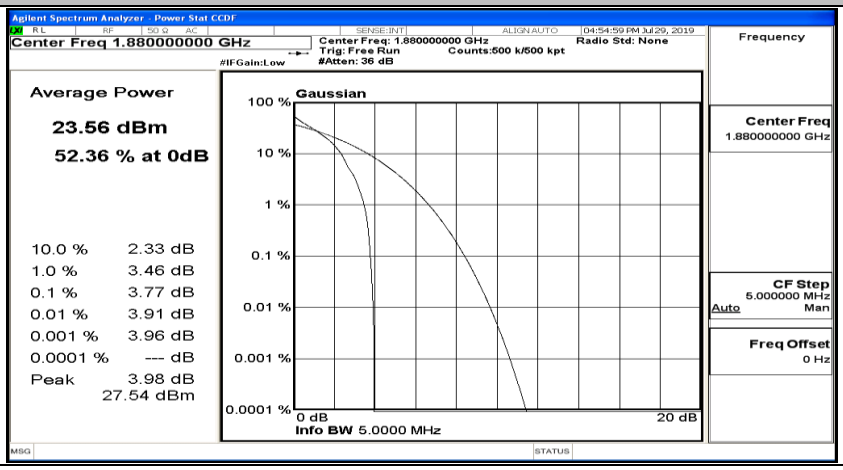
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



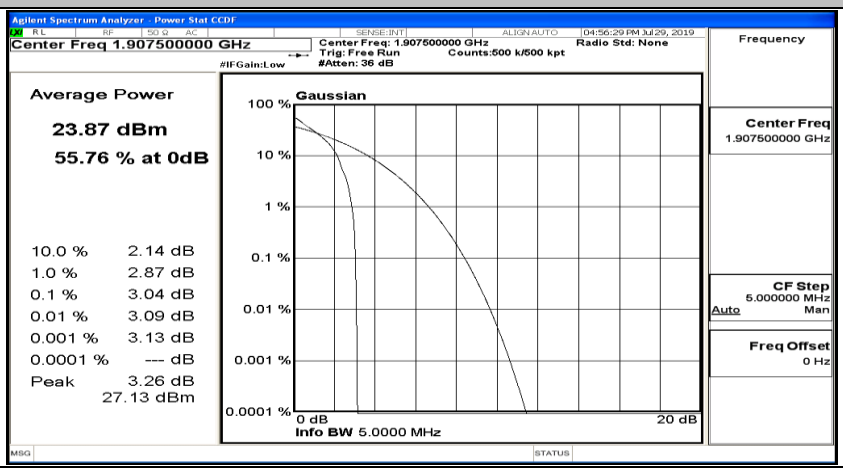
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



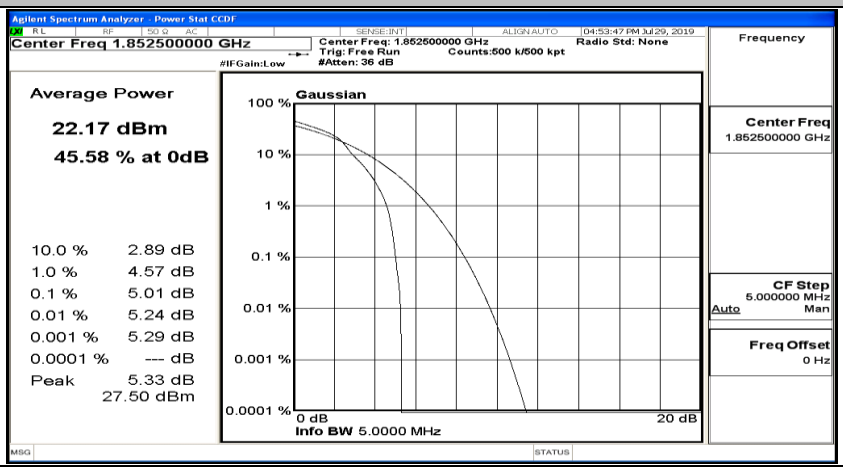
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



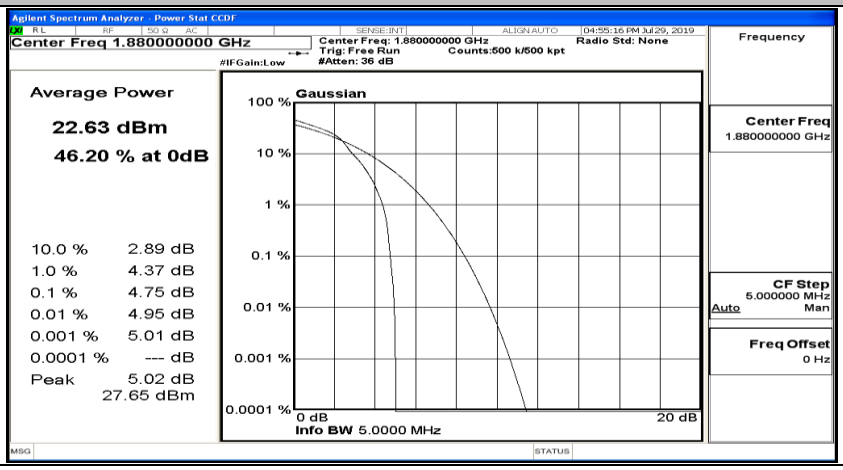
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



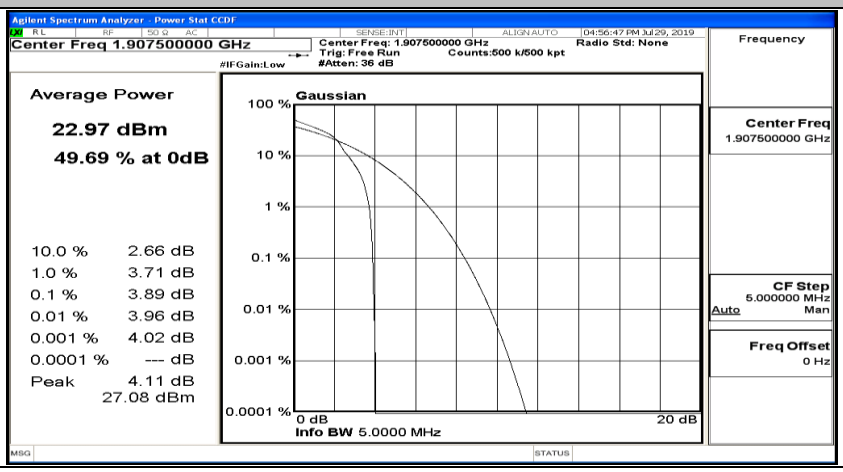
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



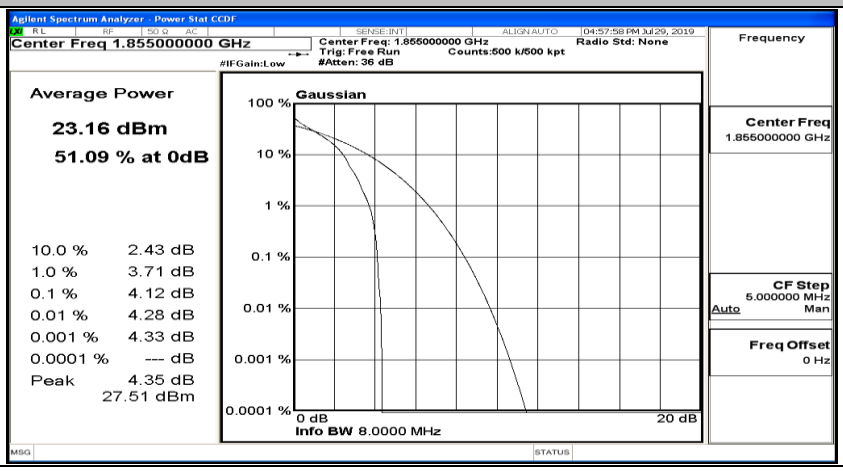
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



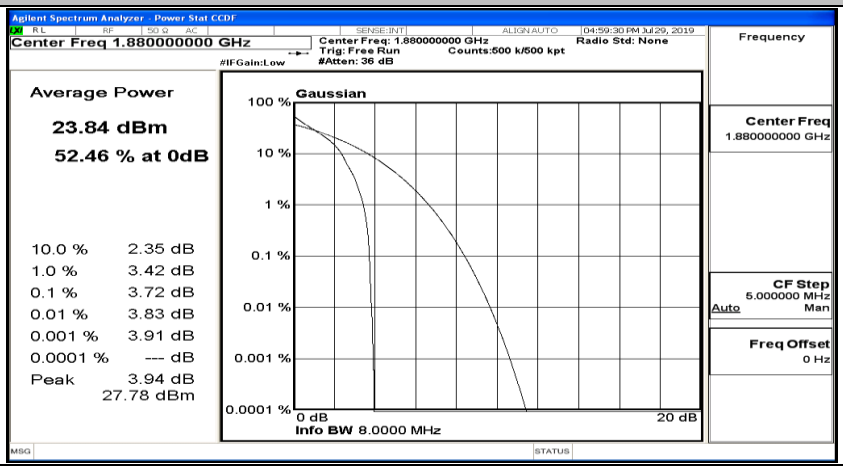
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



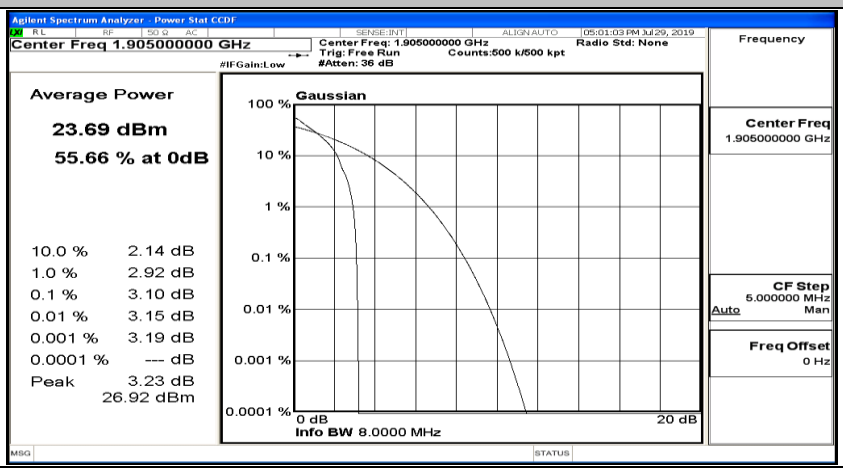
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



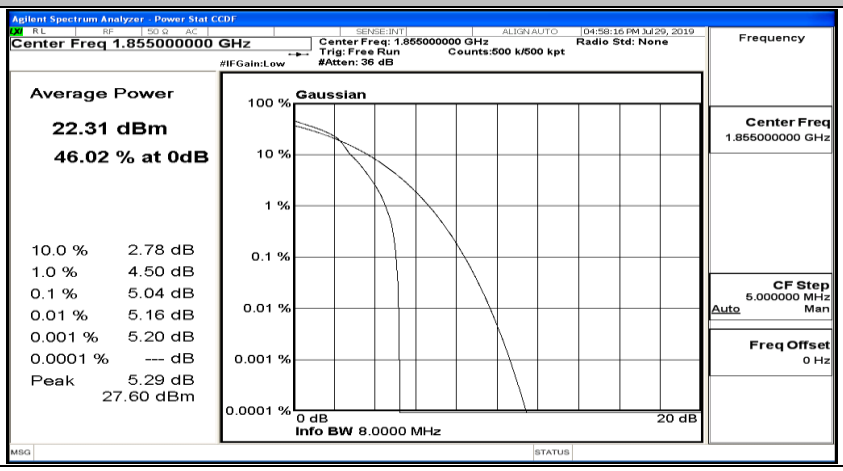
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



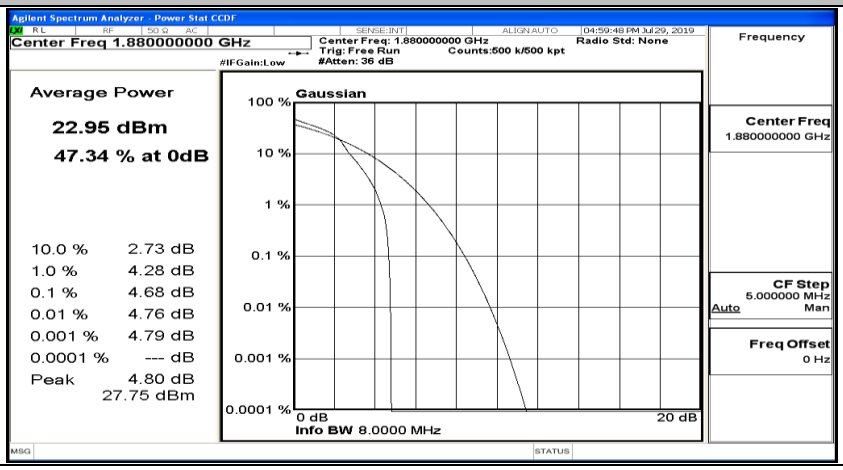
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



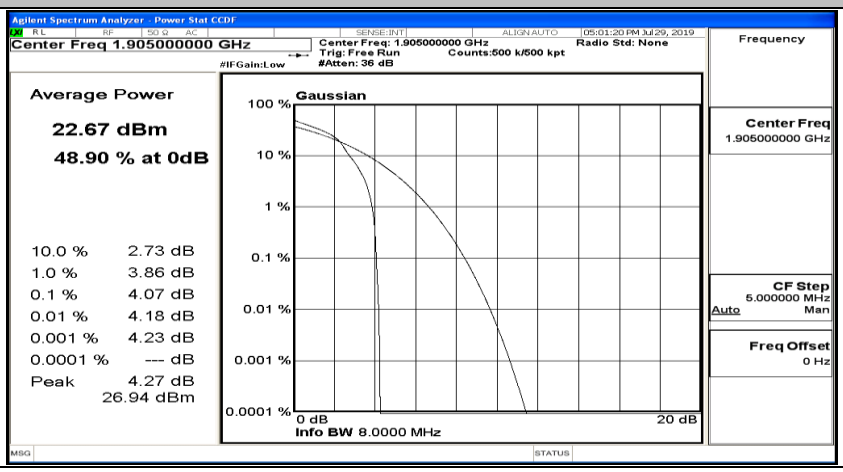
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



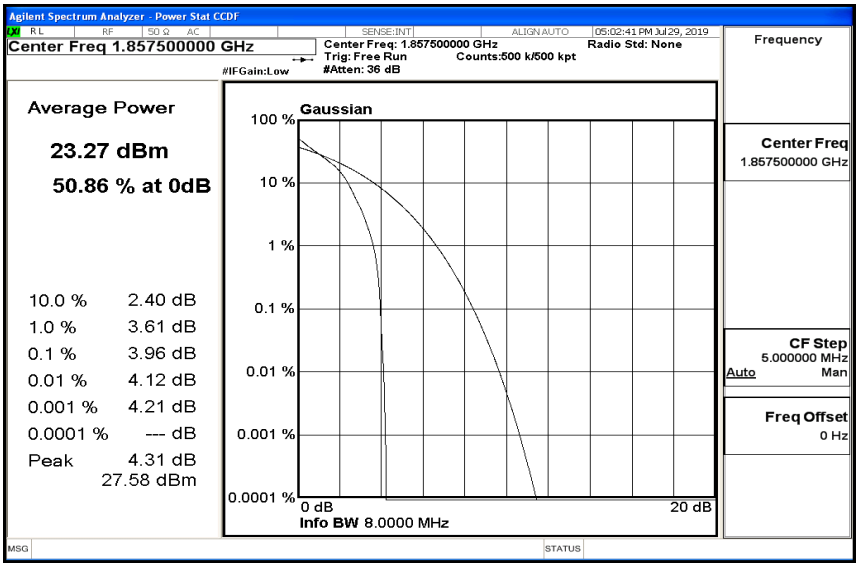
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



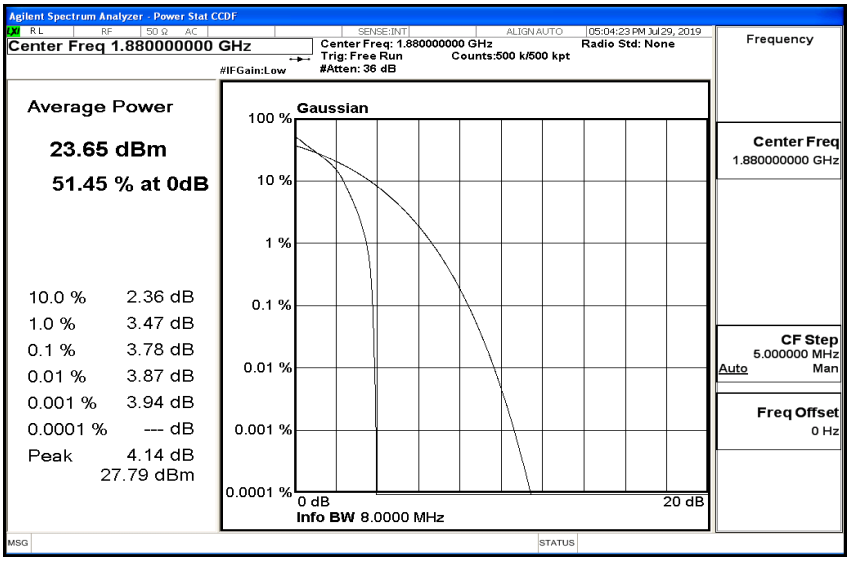
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



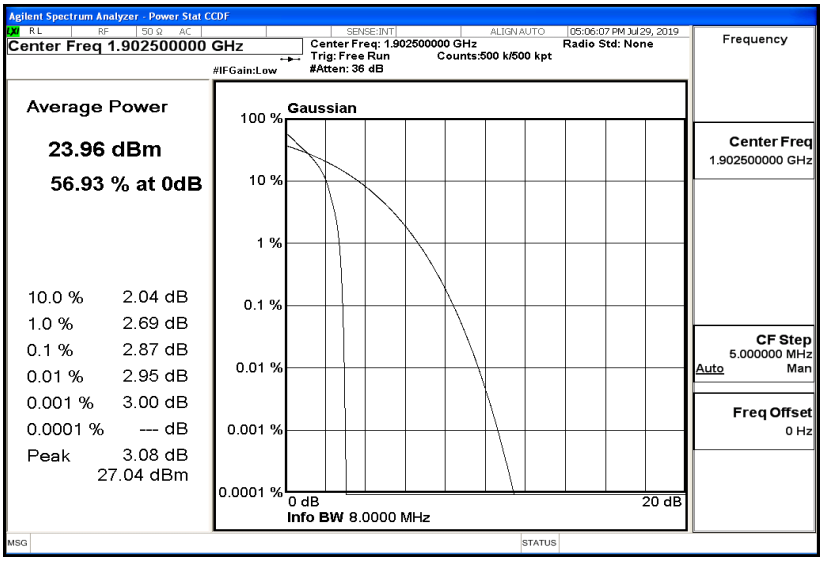
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



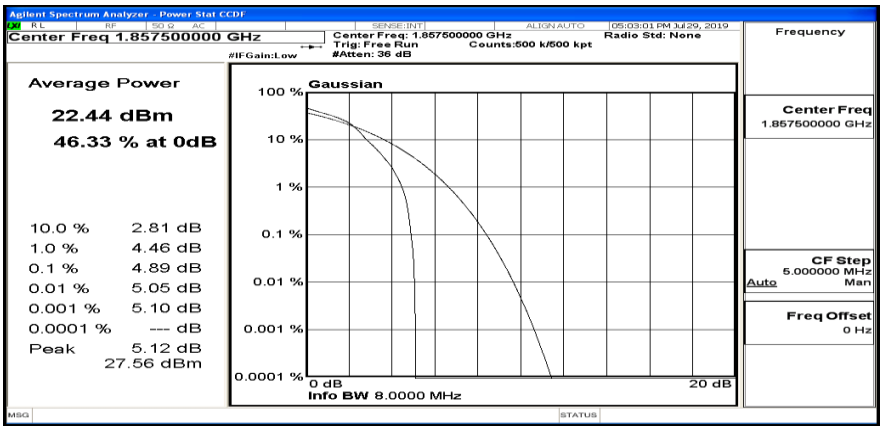
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



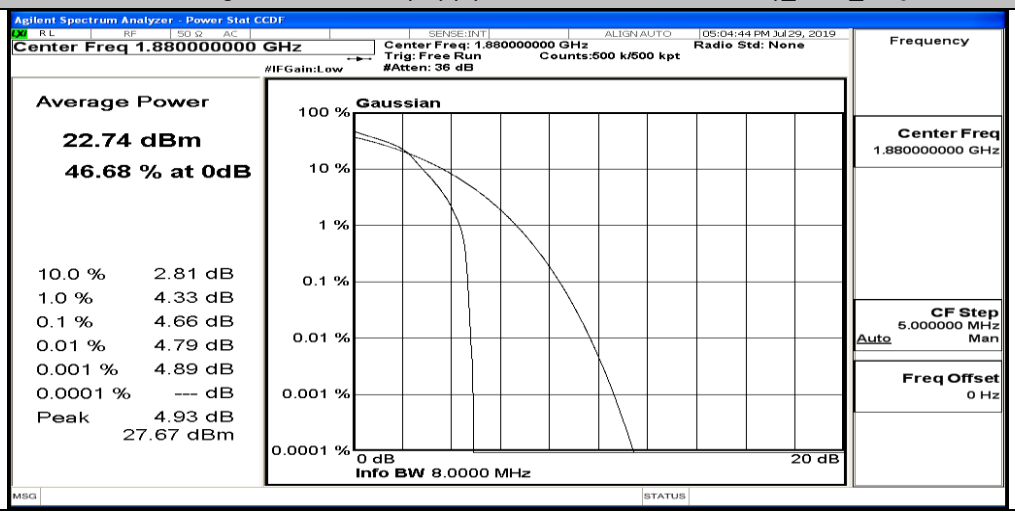
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



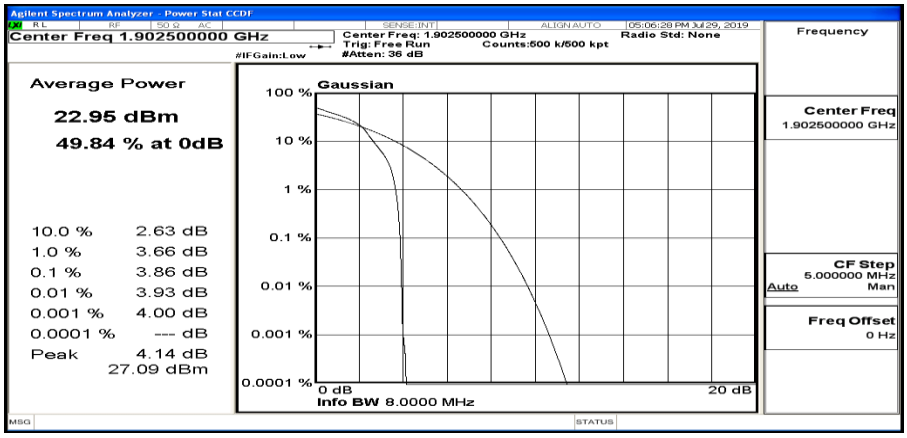
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



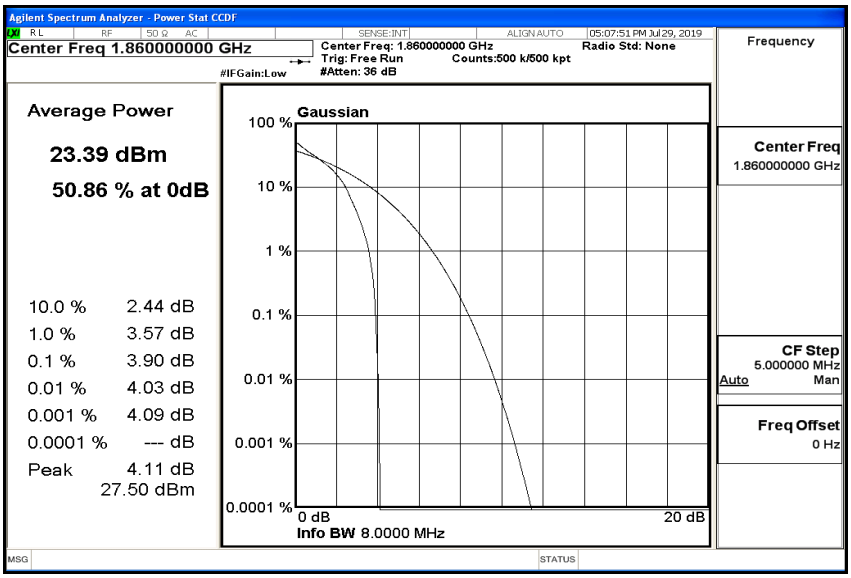
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



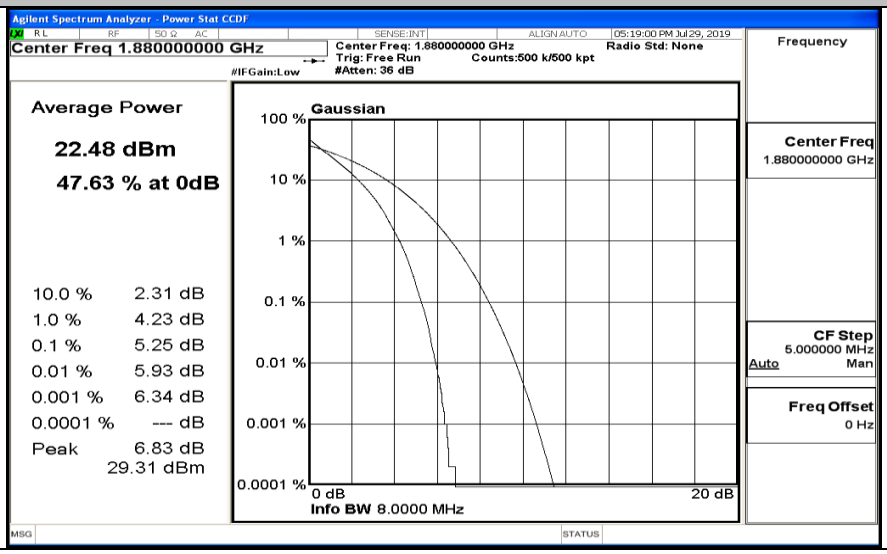
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



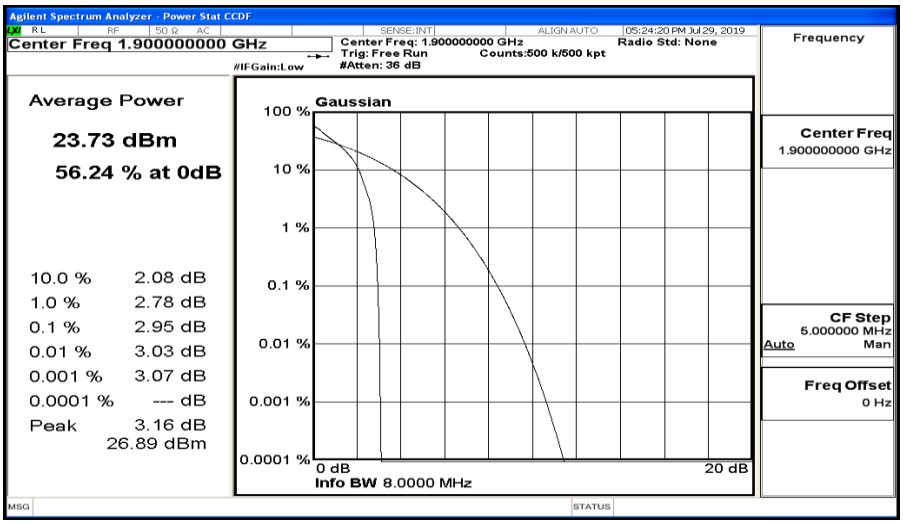
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



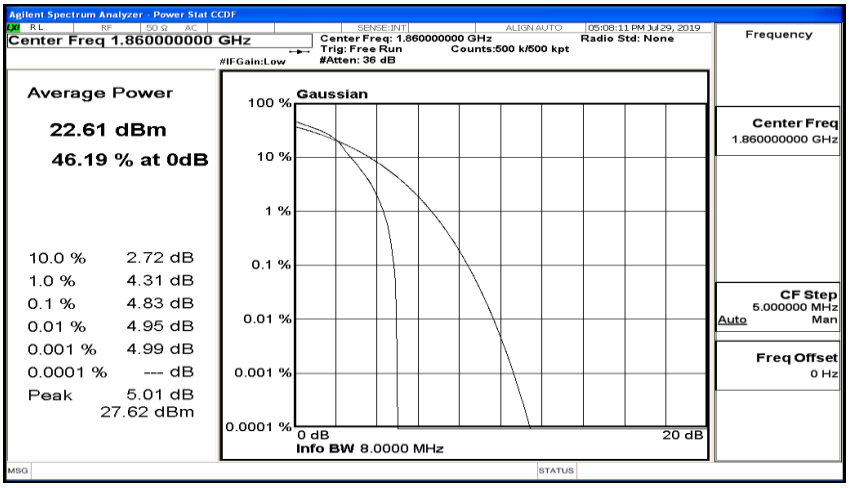
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



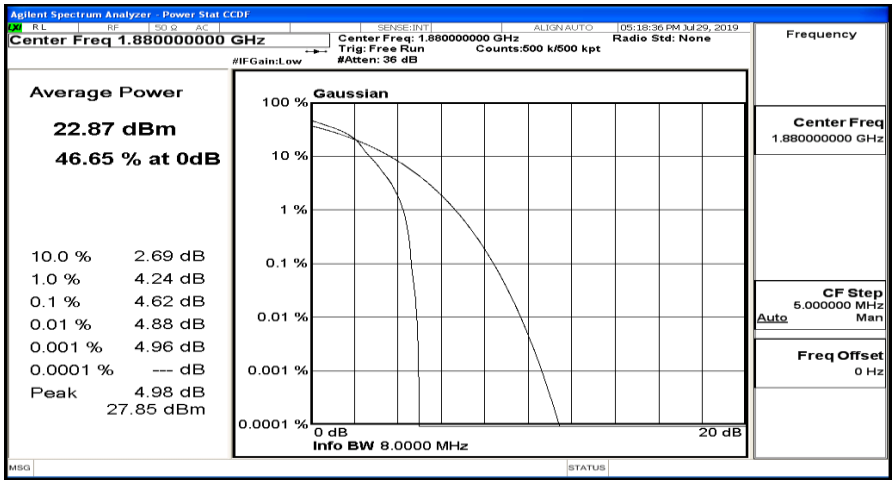
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



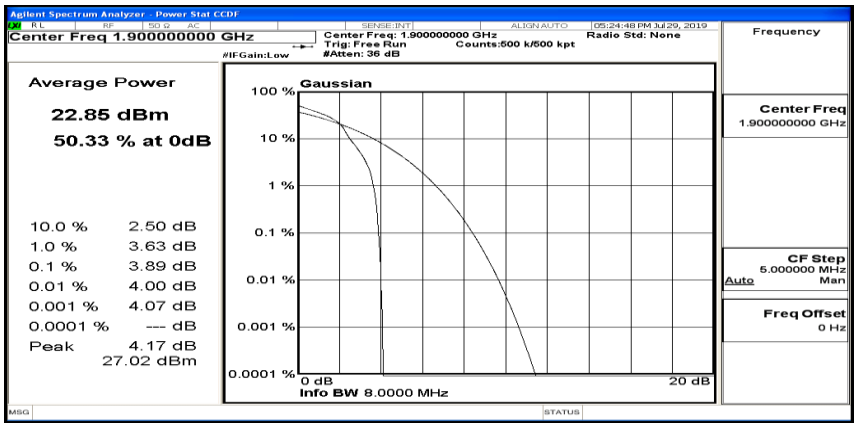
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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



F.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	1.0737	1.228	PASS
	MCH	1.0749	1.241	PASS
	HCH	1.0789	1.230	PASS
16QAM	LCH	1.0785	1.239	PASS
	MCH	1.0769	1.226	PASS
	HCH	1.0782	1.218	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6806	2.827	PASS
	MCH	2.6799	2.831	PASS
	HCH	2.6802	2.841	PASS
16QAM	LCH	2.6791	2.816	PASS
	MCH	2.6792	2.835	PASS
	HCH	2.6839	2.829	PASS

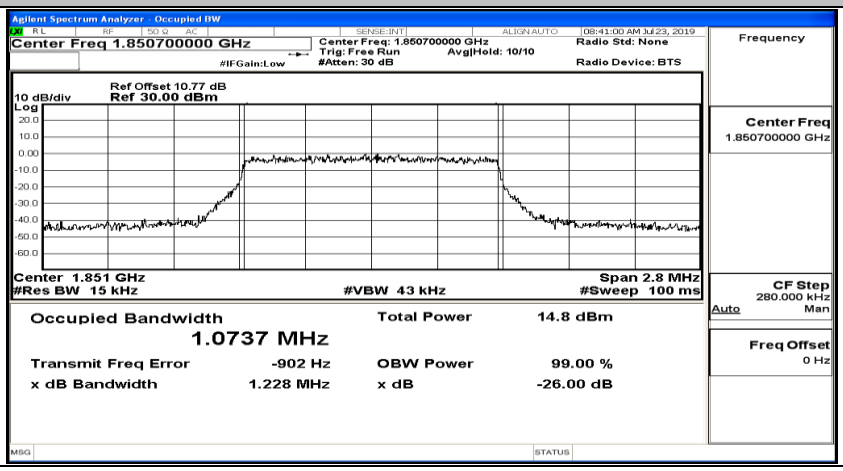
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4840	4.832	PASS
	MCH	4.4761	4.806	PASS
	HCH	4.4719	4.915	PASS
16QAM	LCH	4.4703	4.883	PASS
	MCH	4.4747	4.848	PASS
	HCH	4.4822	4.874	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9397	9.511	PASS
	MCH	8.9483	9.431	PASS
	HCH	8.9391	9.610	PASS
16QAM	LCH	8.9427	9.612	PASS
	MCH	8.9393	9.468	PASS
	HCH	8.9569	9.501	PASS

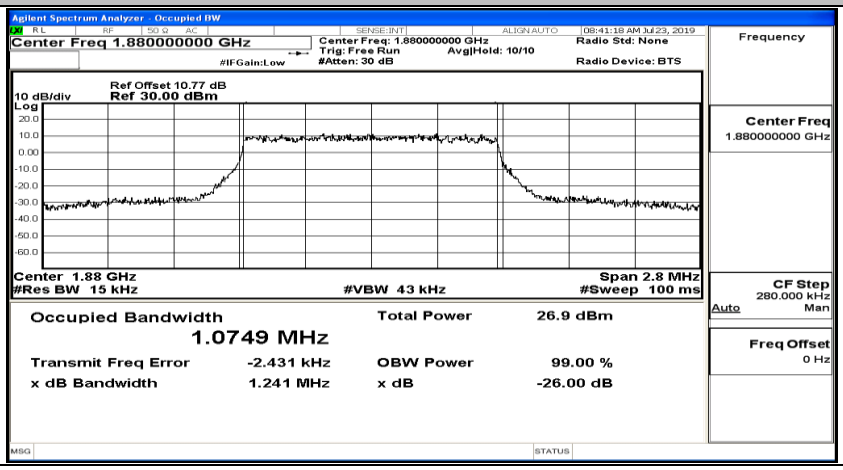
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.407	14.21	PASS
	MCH	13.402	14.18	PASS
	HCH	13.389	14.17	PASS
16QAM	LCH	13.405	14.07	PASS
	MCH	13.389	14.11	PASS
	HCH	13.398	14.10	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.859	18.60	PASS
	MCH	17.828	18.64	PASS
	HCH	17.847	18.71	PASS
16QAM	LCH	17.872	18.58	PASS
	MCH	17.831	18.62	PASS
	HCH	17.850	18.75	PASS

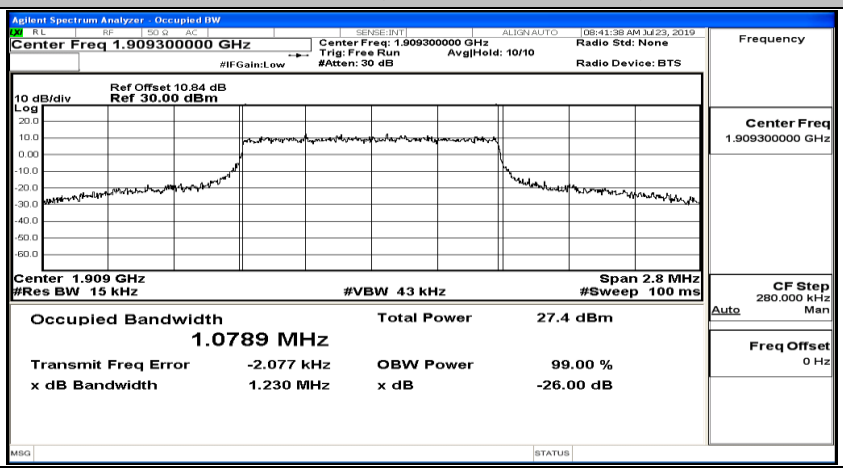
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



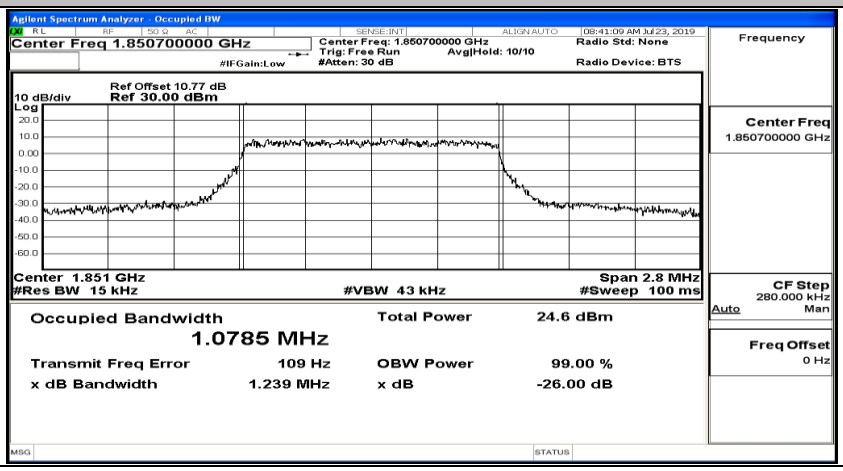
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



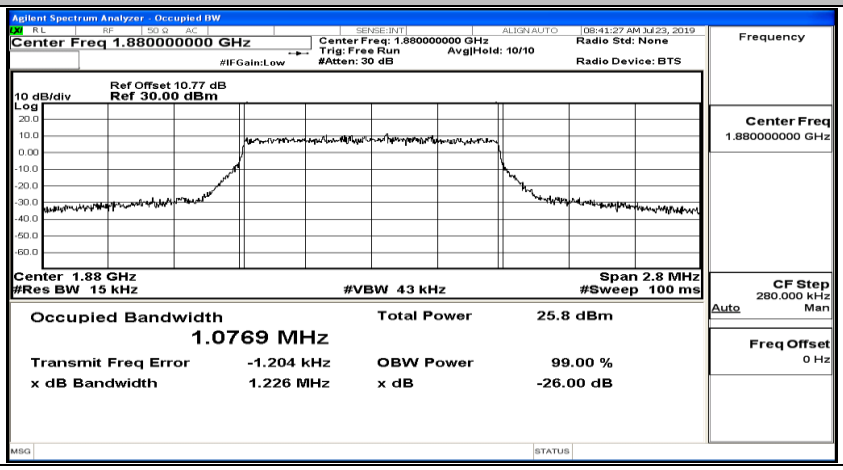
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



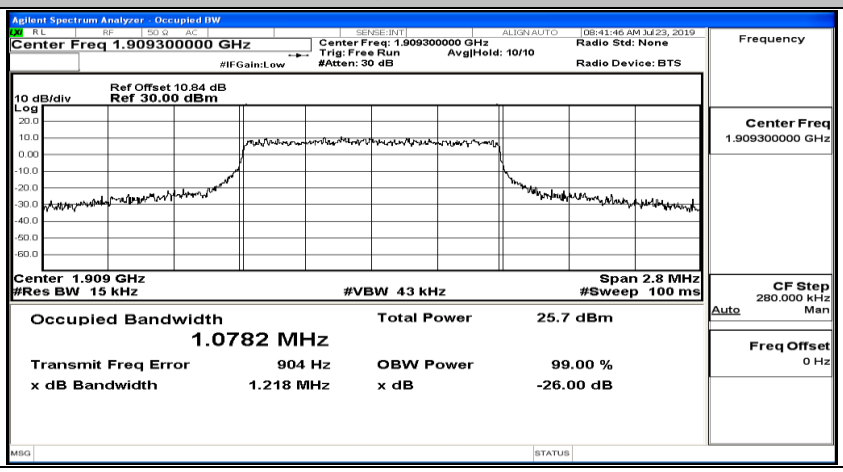
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



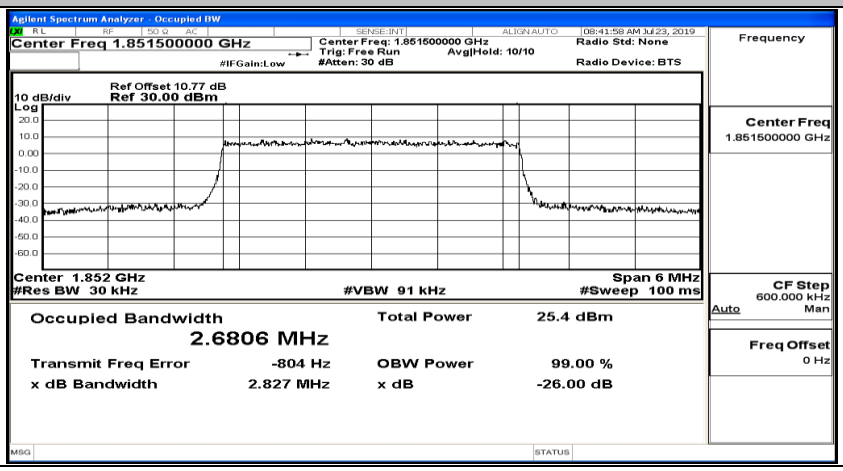
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



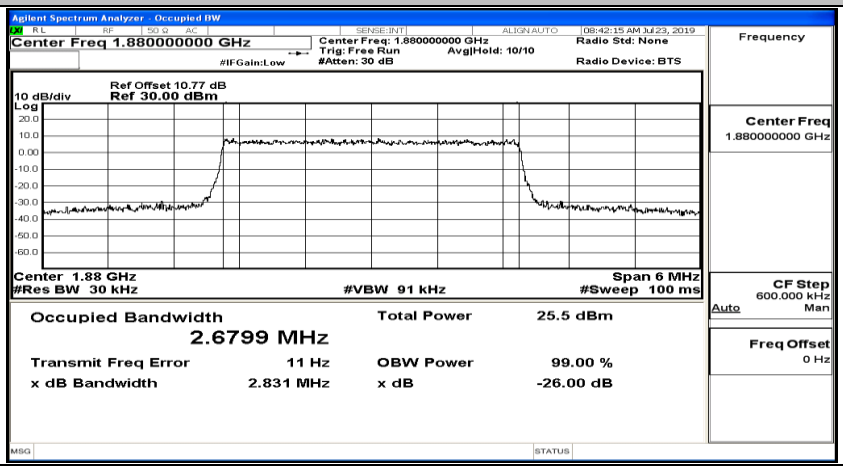
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



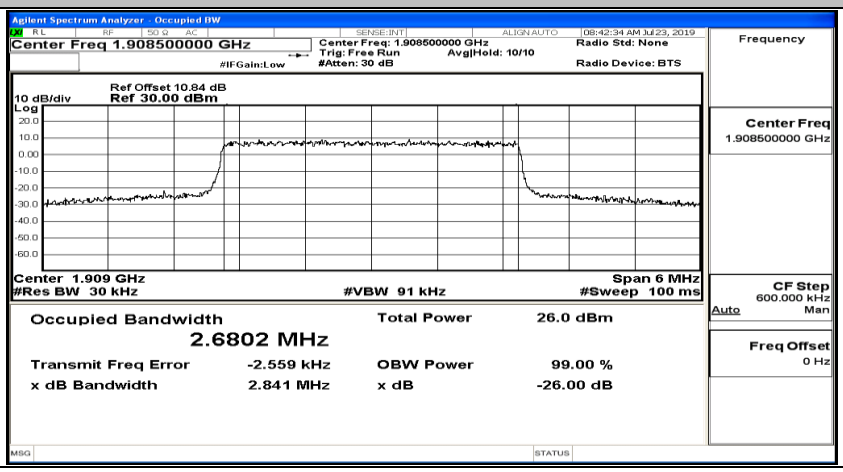
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



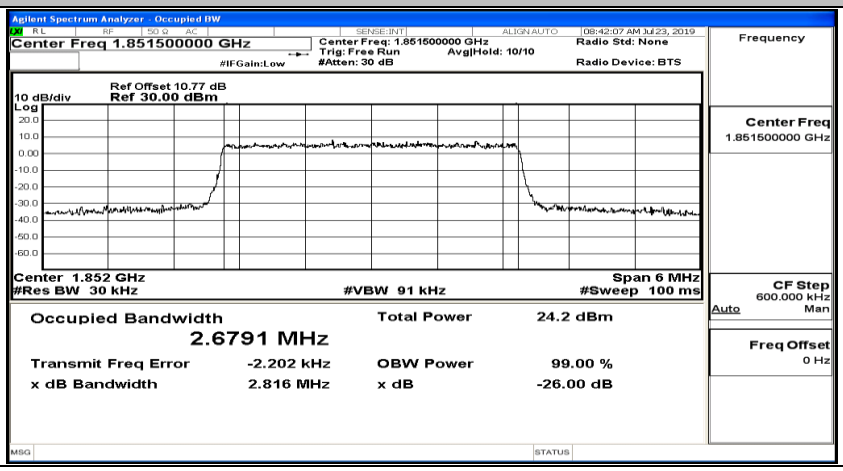
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



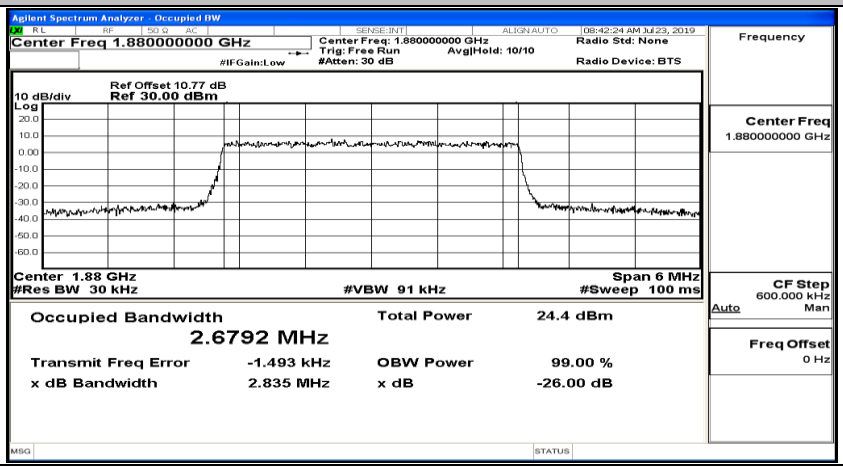
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



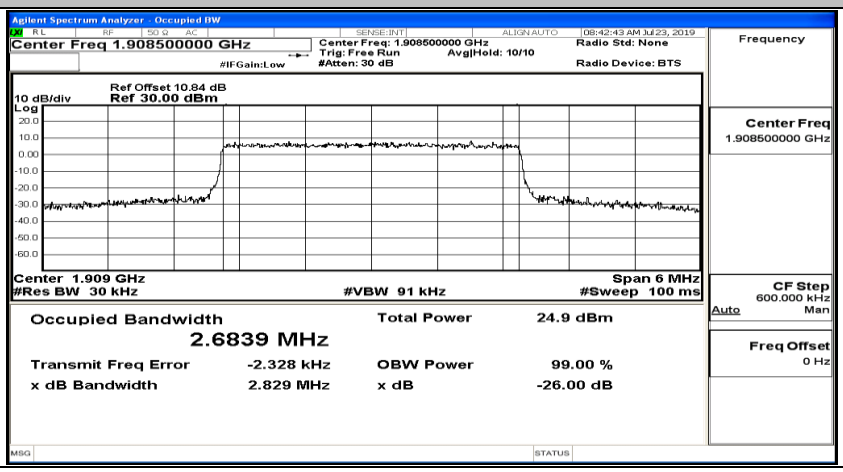
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



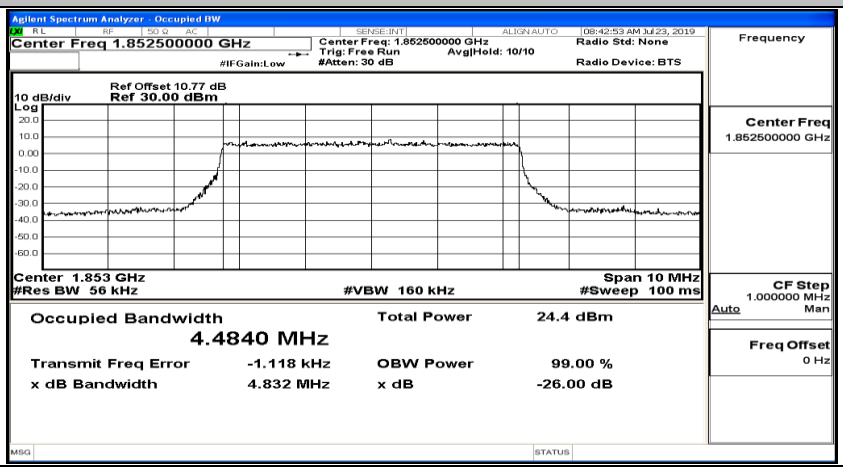
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



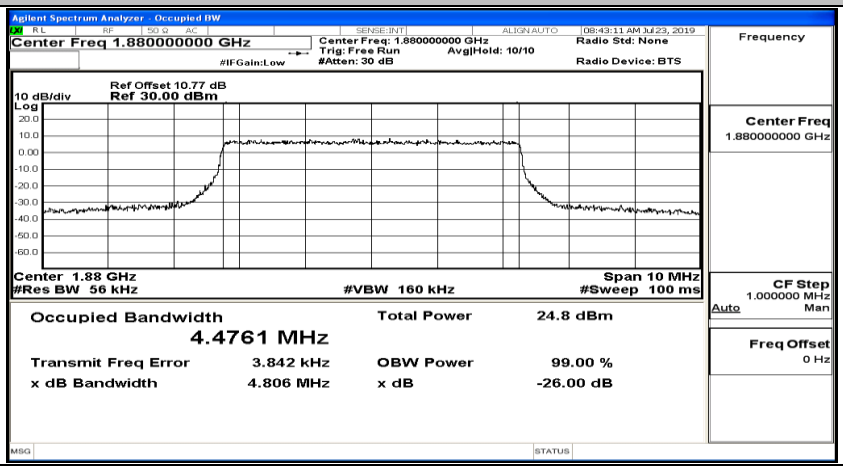
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



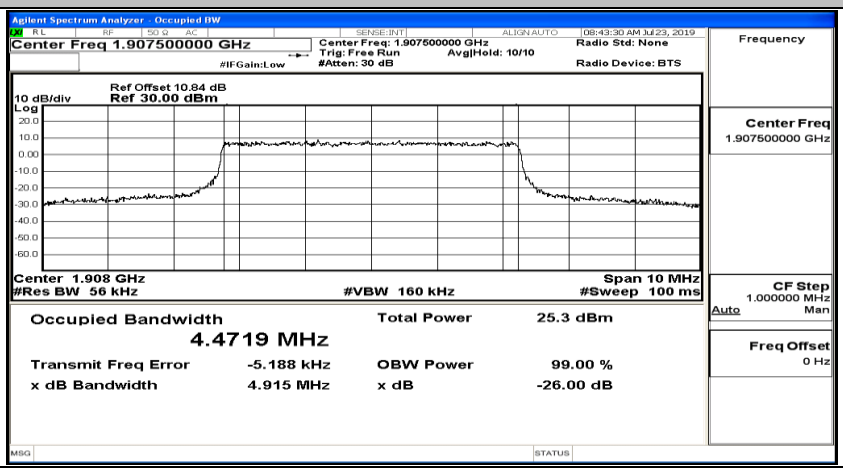
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



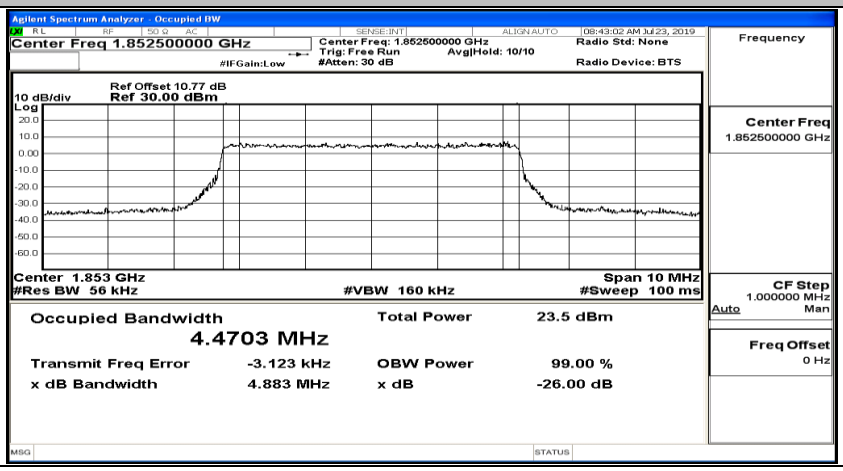
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



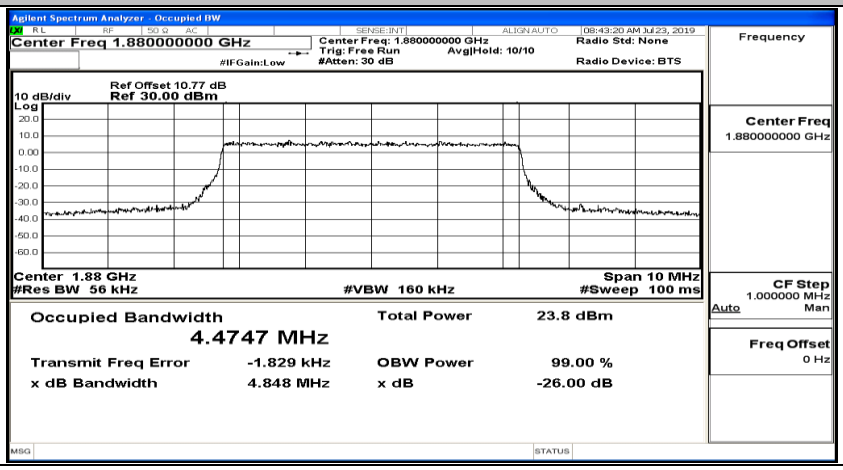
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



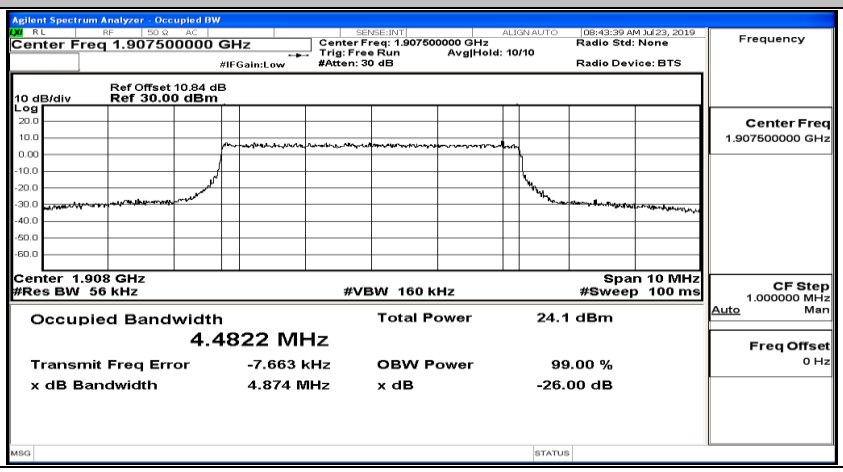
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



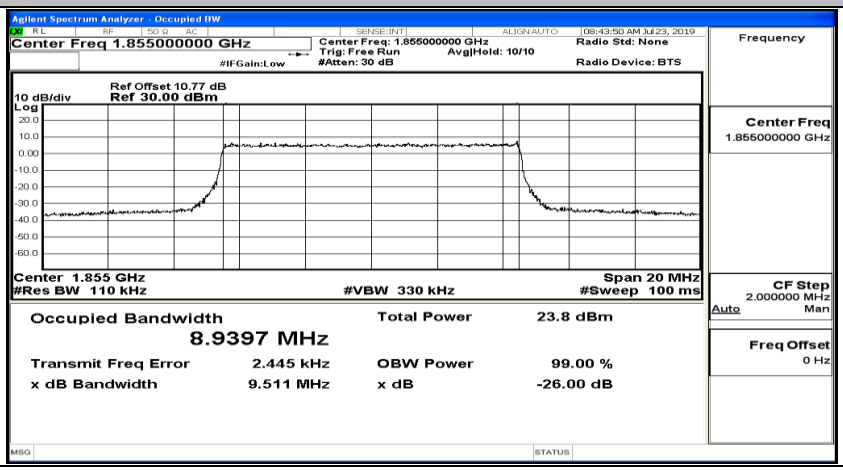
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



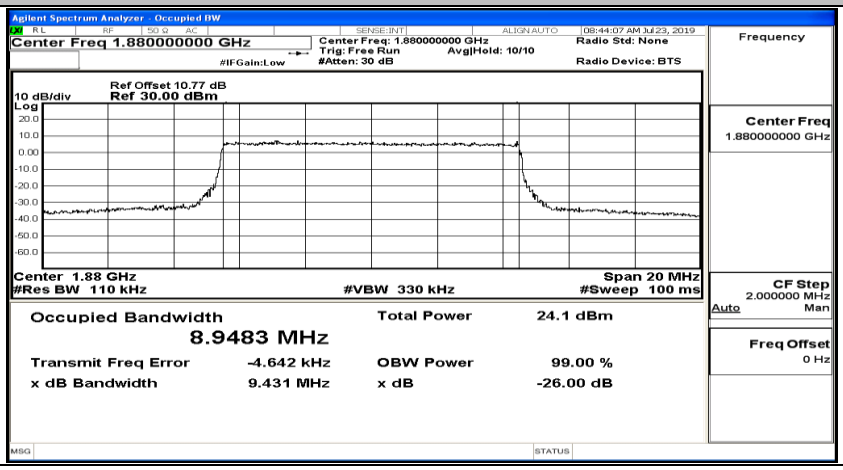
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



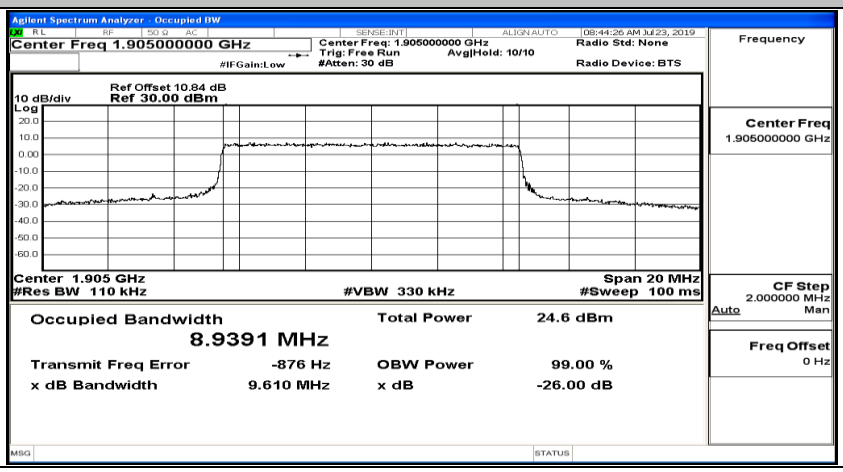
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



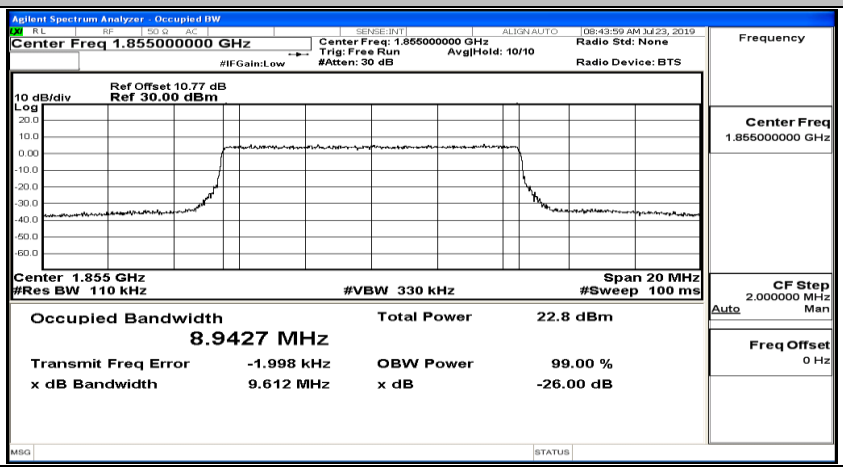
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



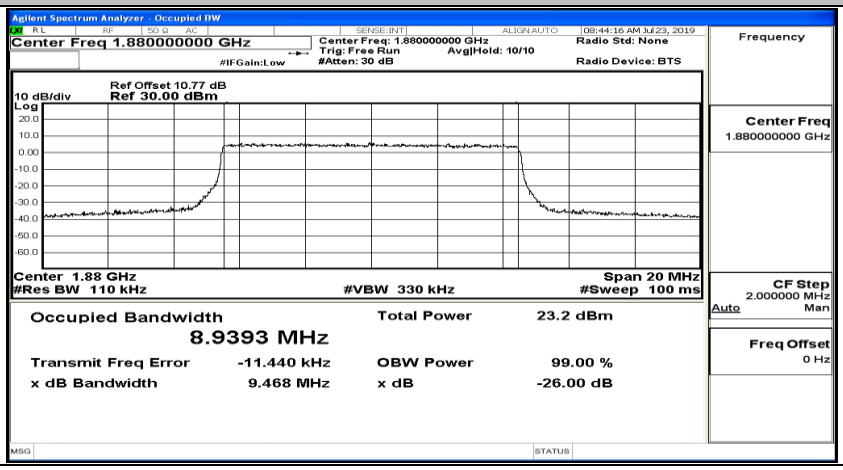
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



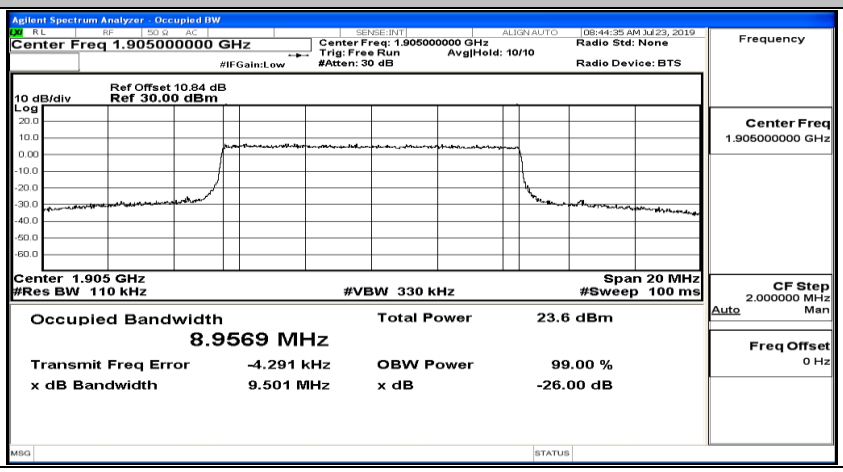
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



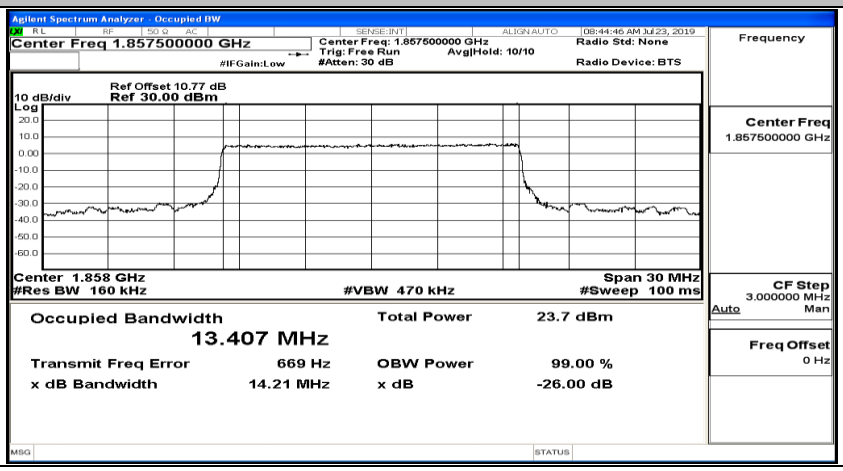
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



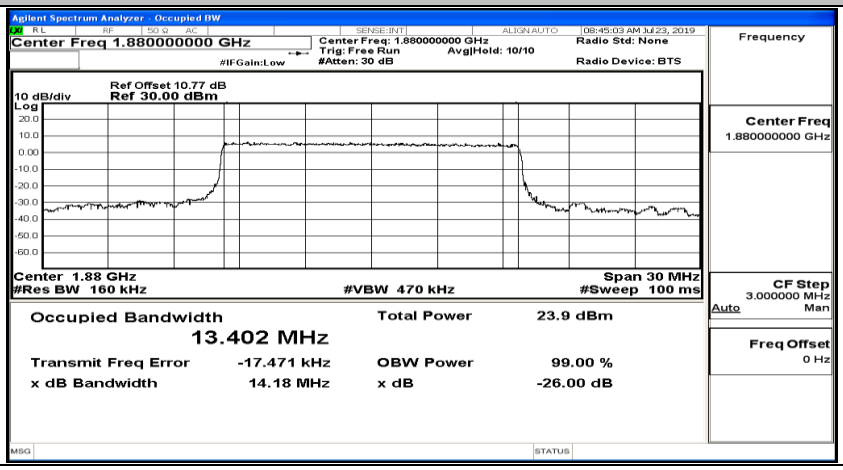
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



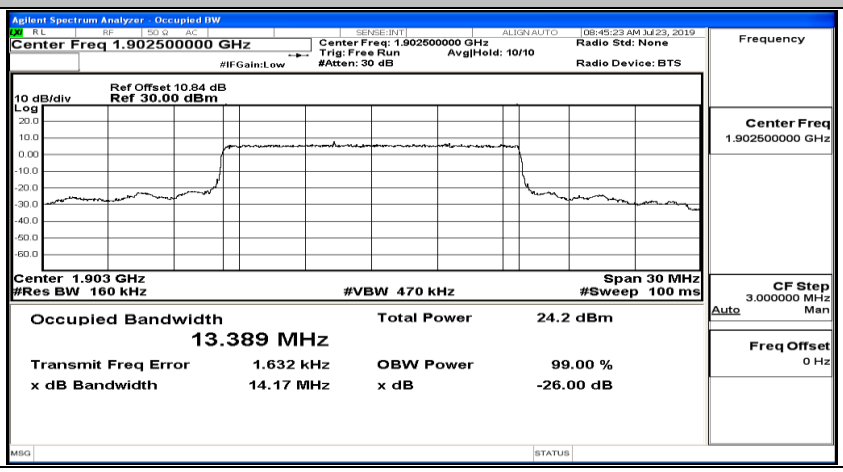
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



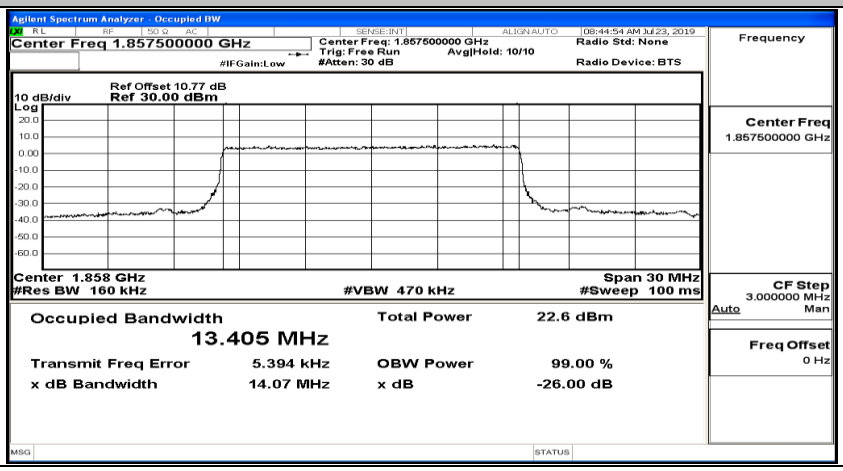
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



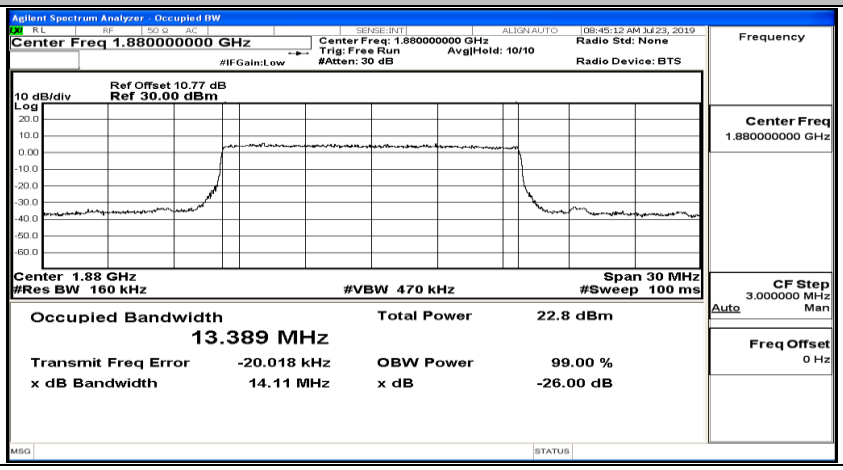
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



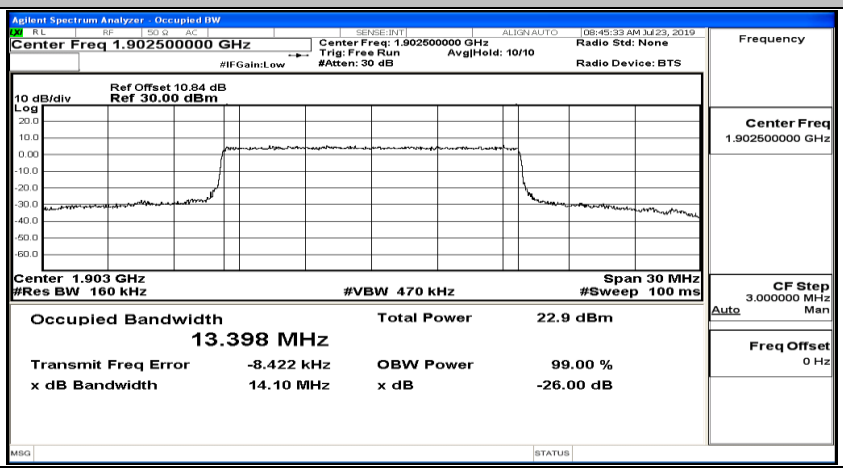
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



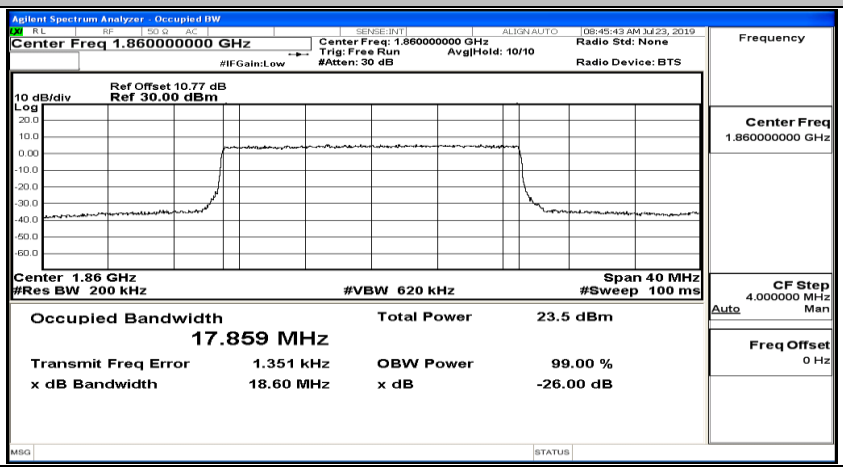
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



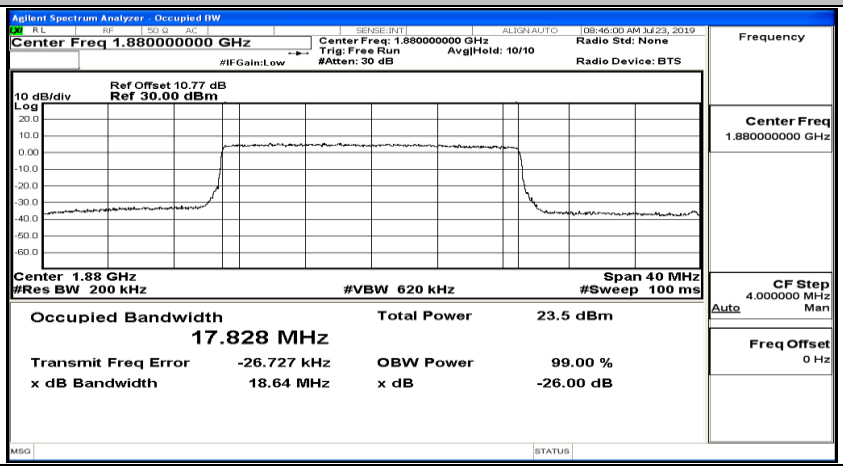
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



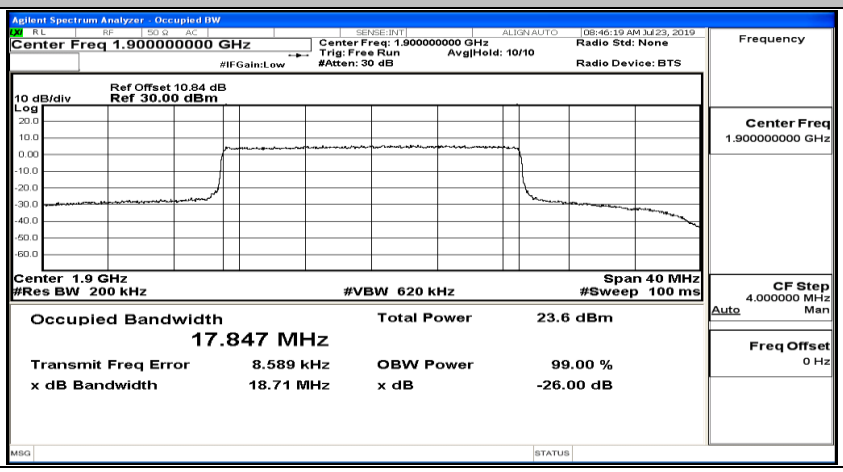
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



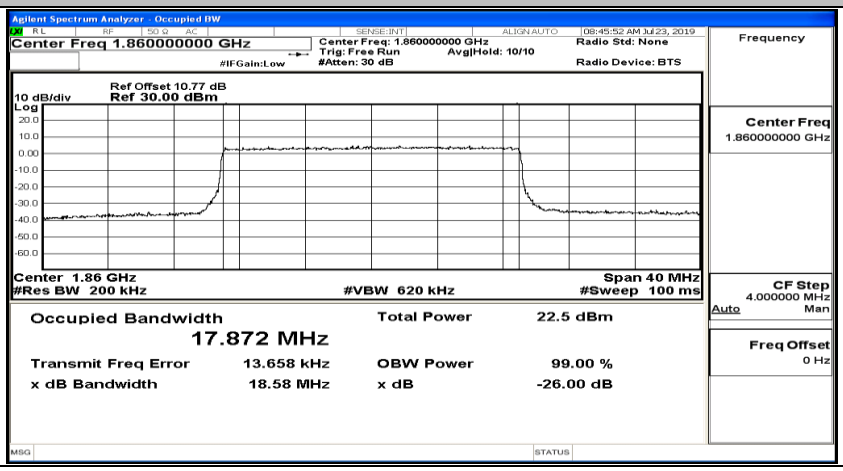
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



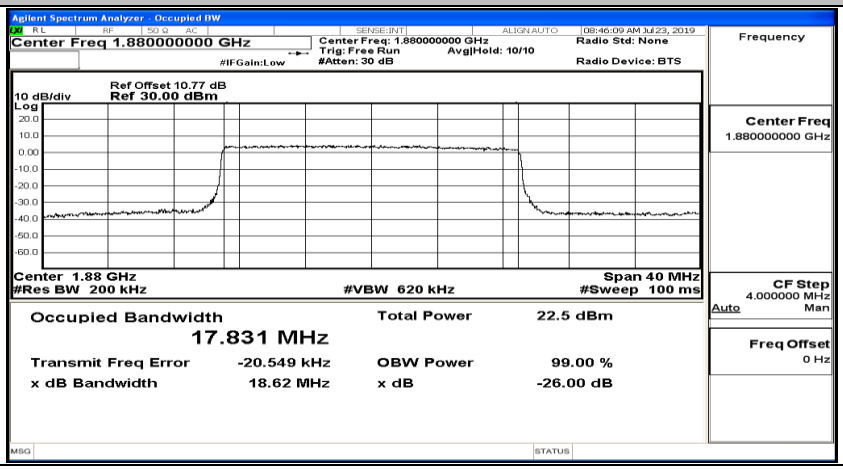
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



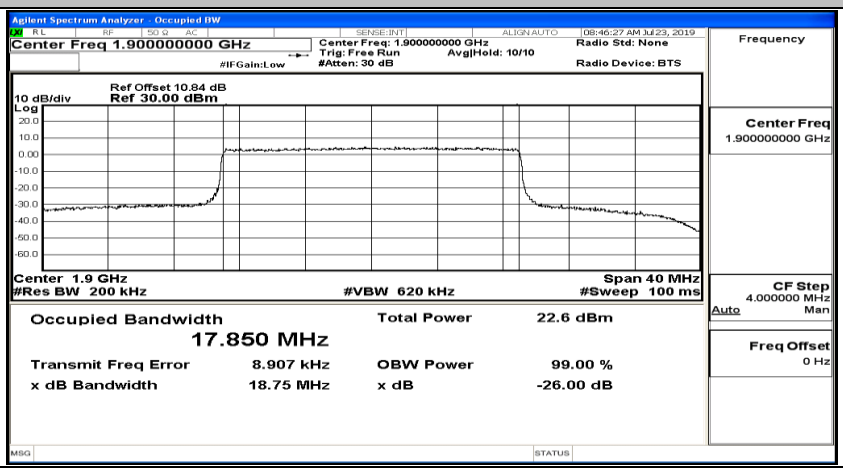
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

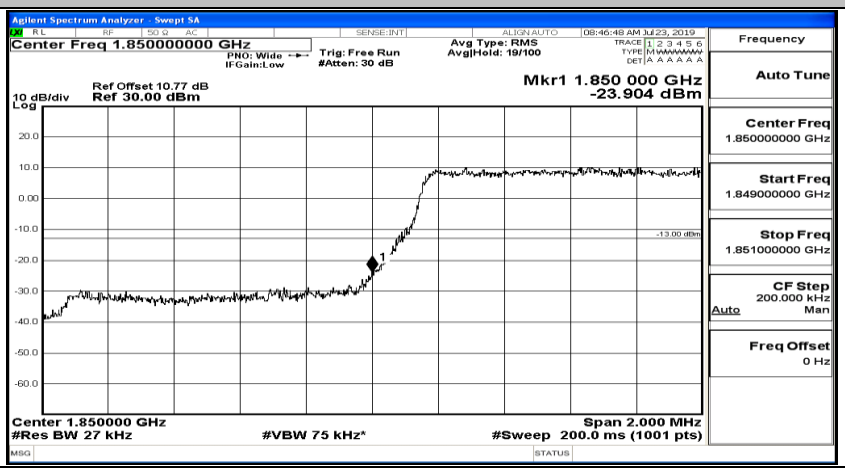


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

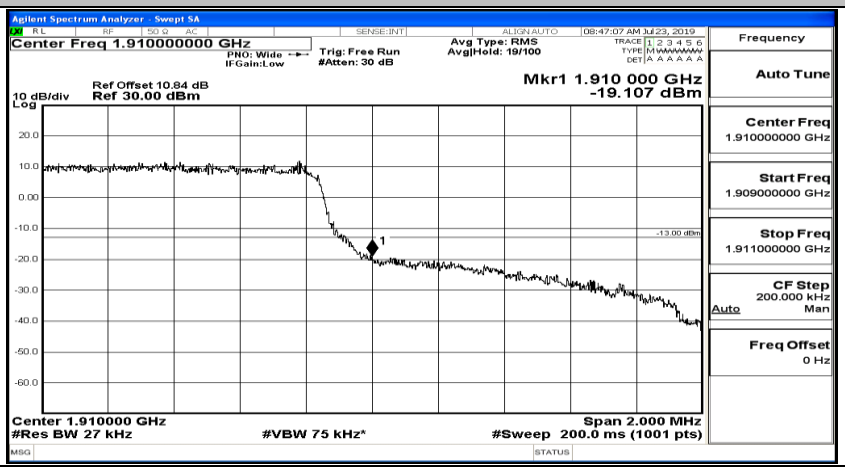


F.4 Band Edge

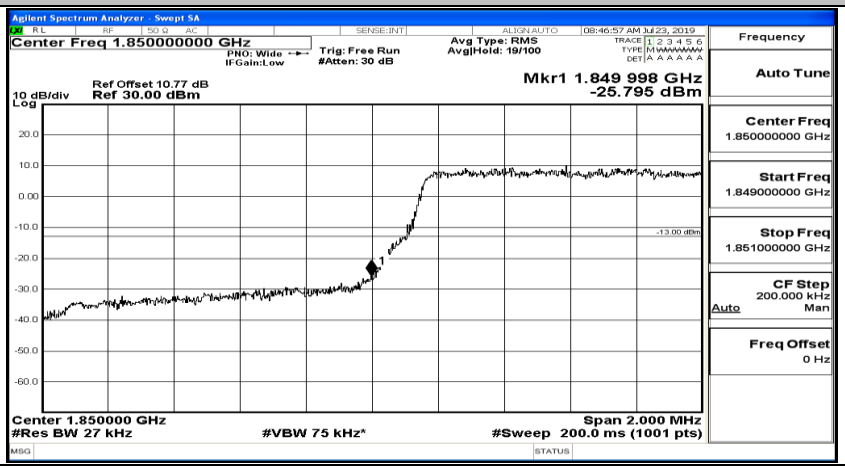
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



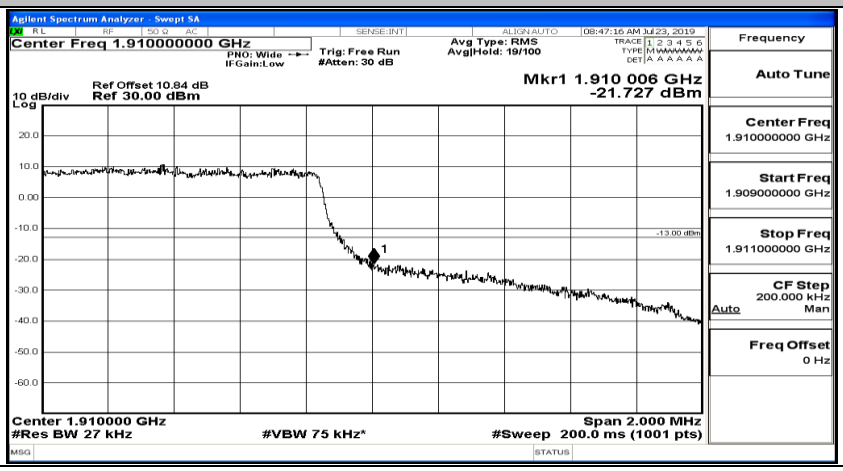
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



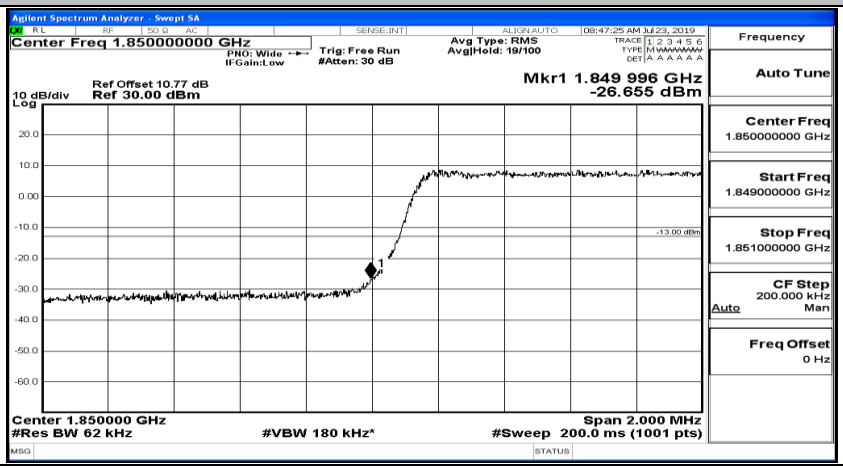
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



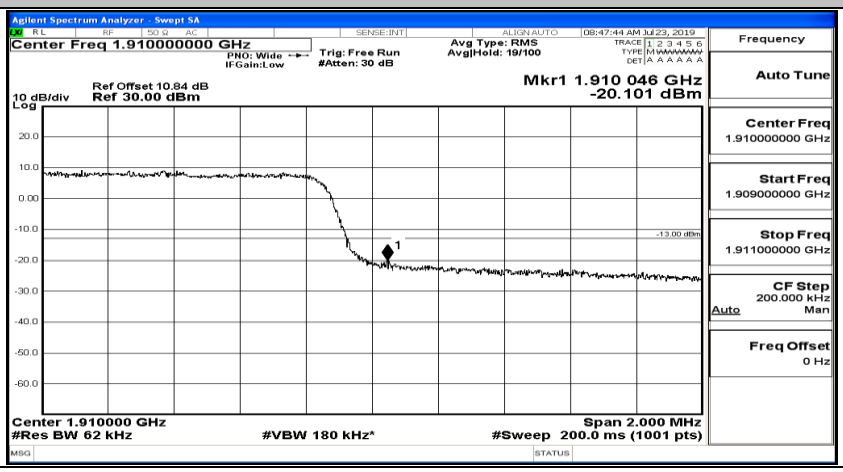
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



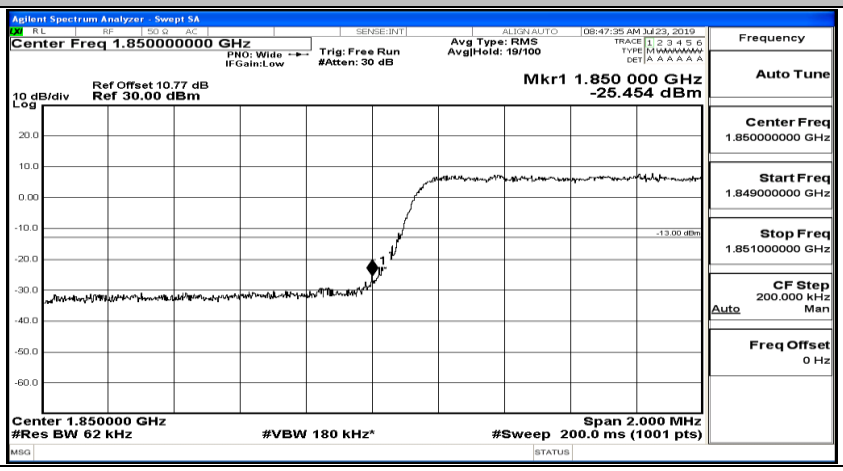
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



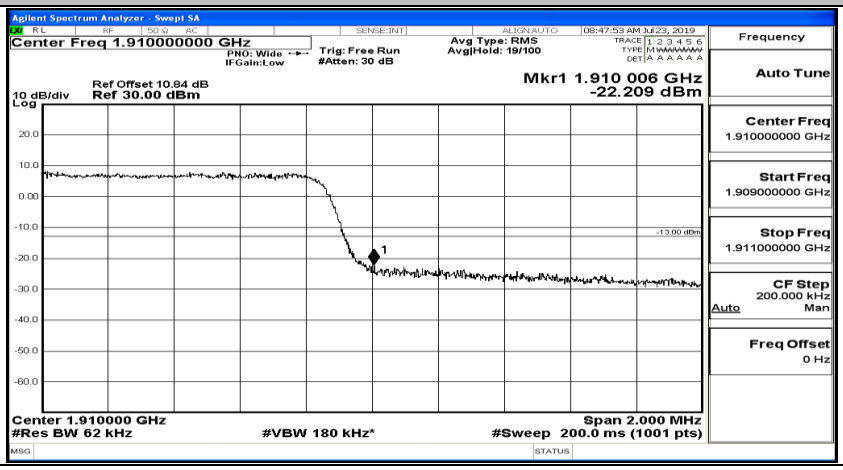
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



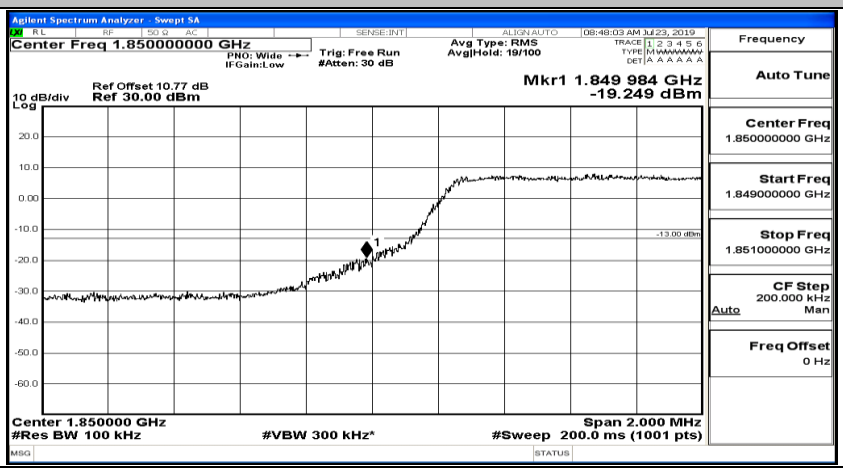
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



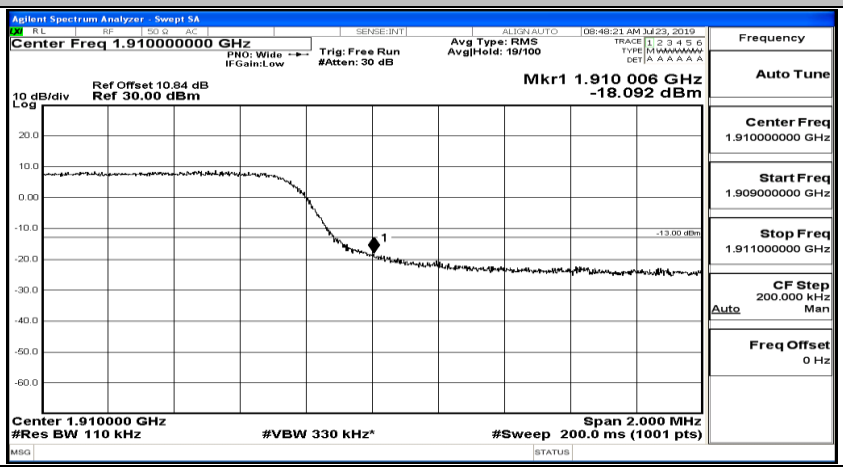
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



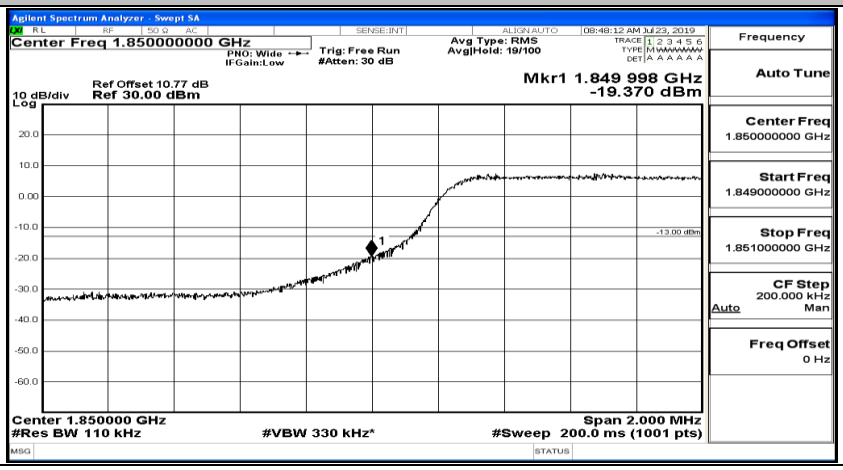
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



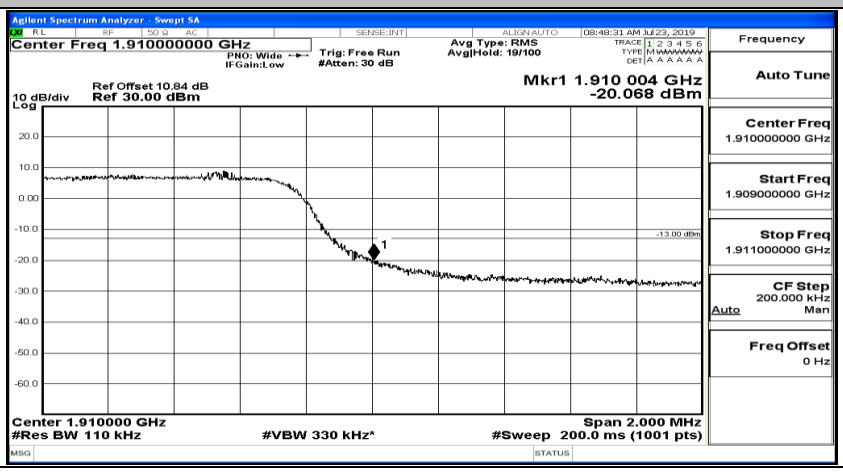
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



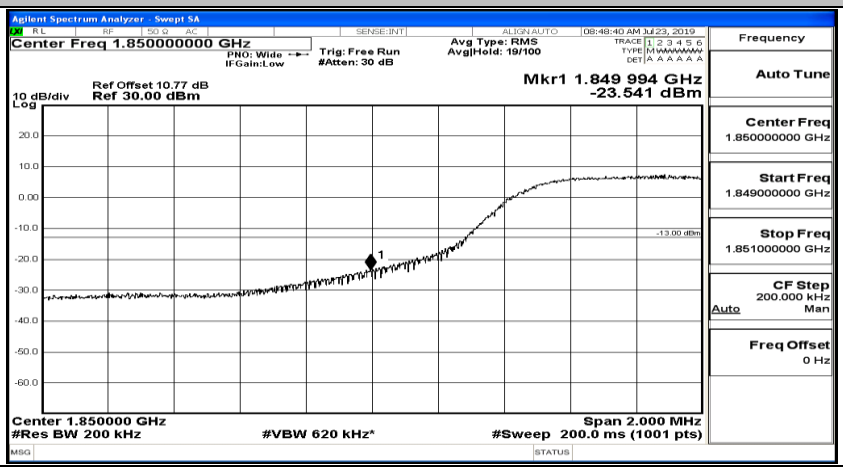
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



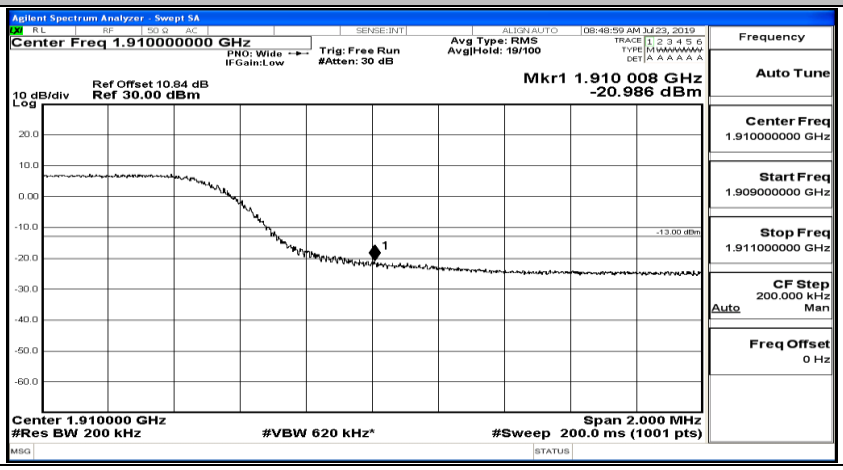
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



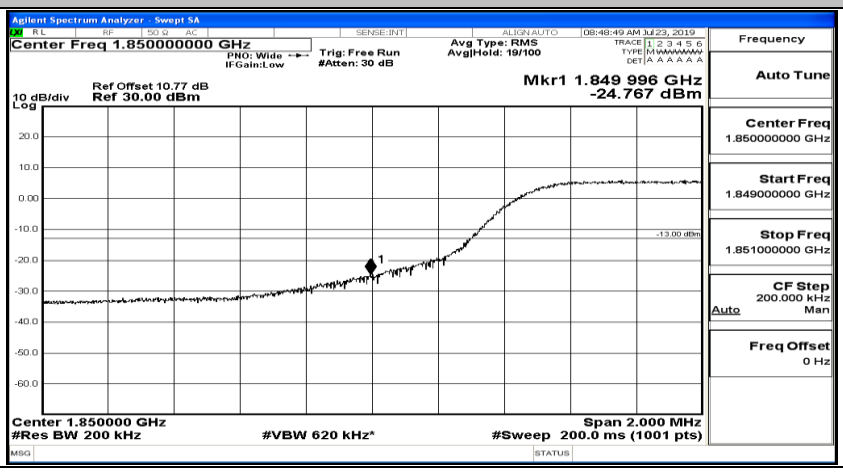
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



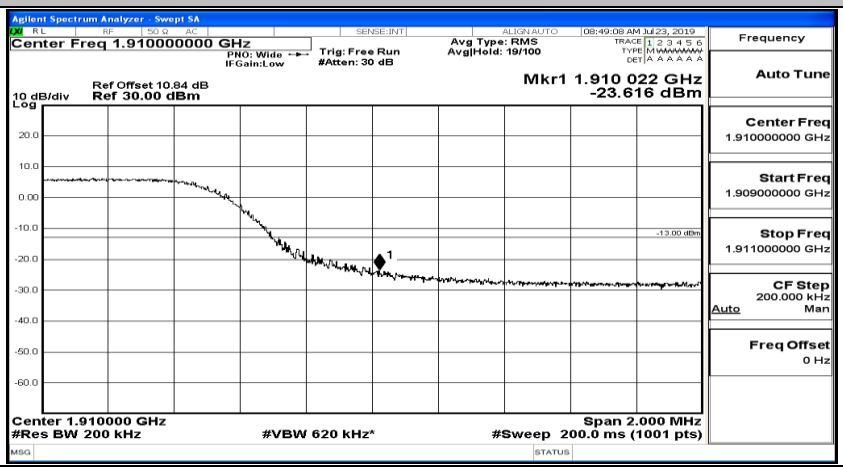
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



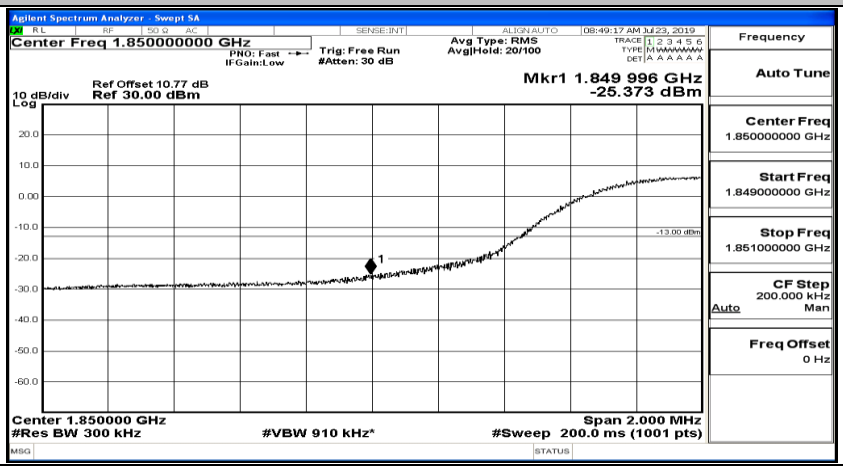
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



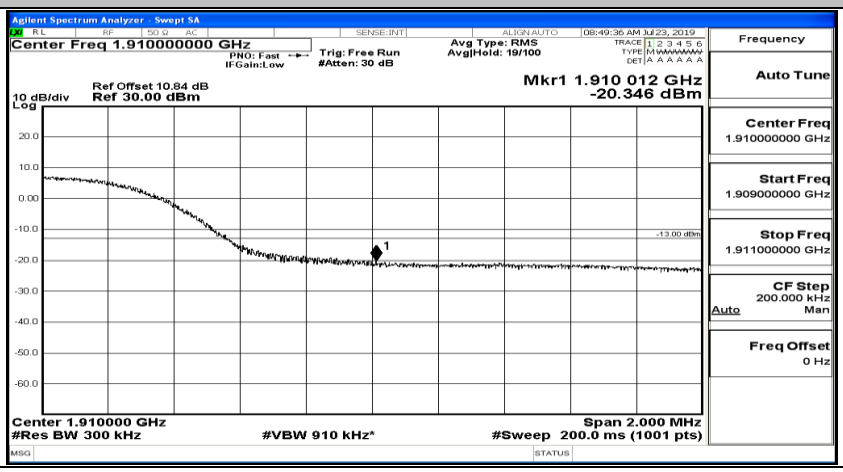
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



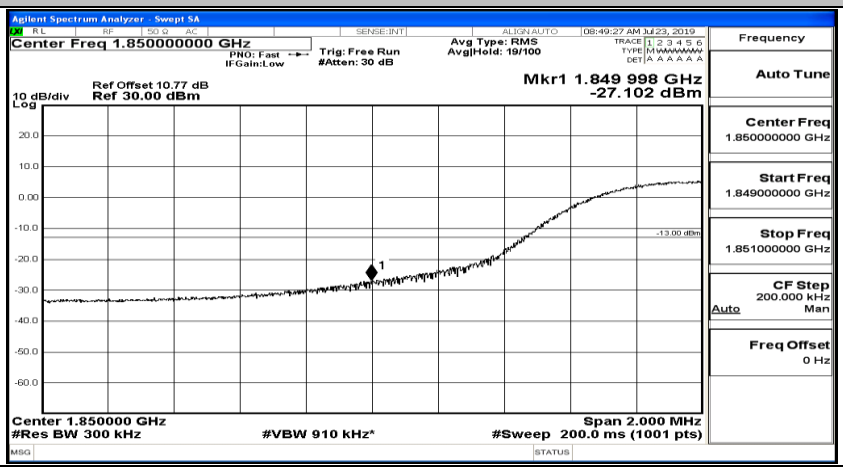
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



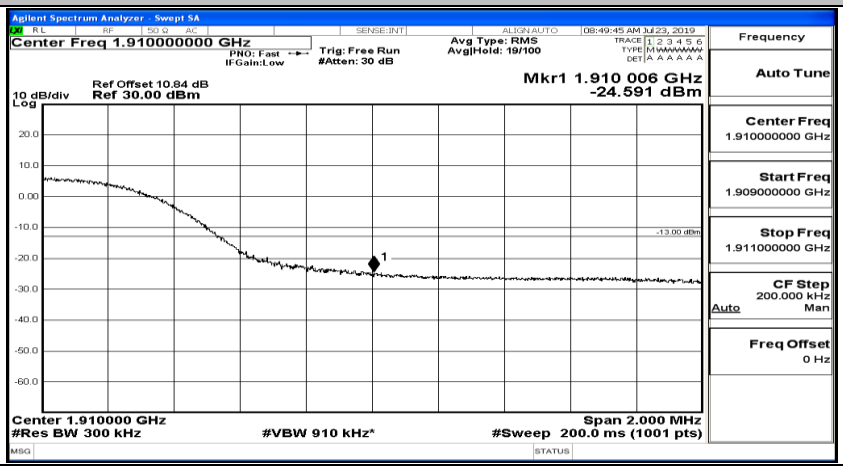
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



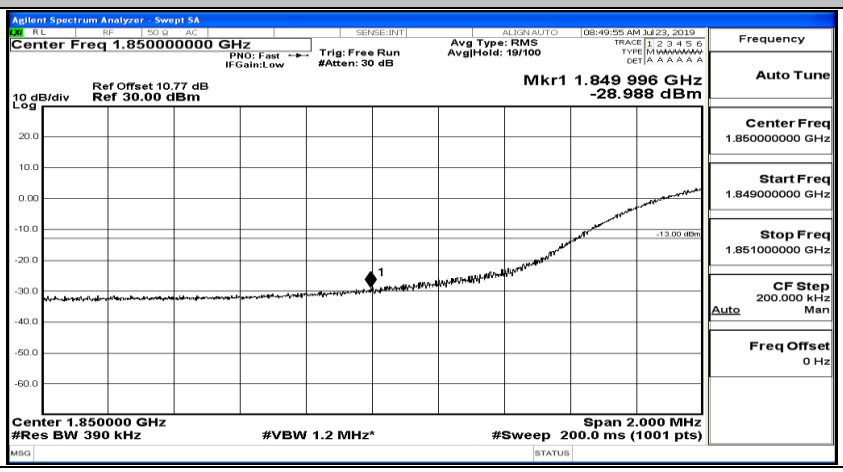
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



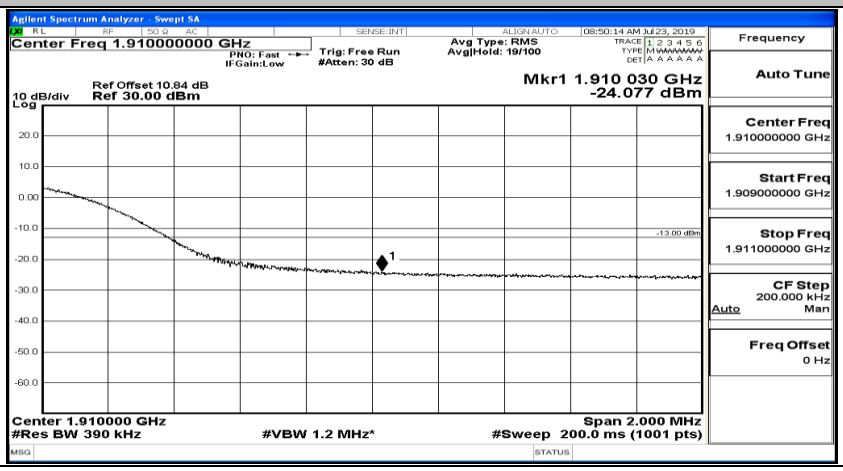
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



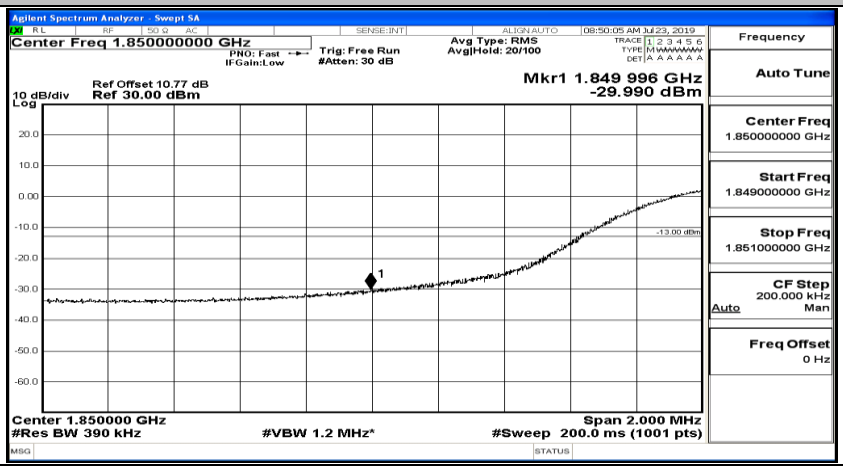
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



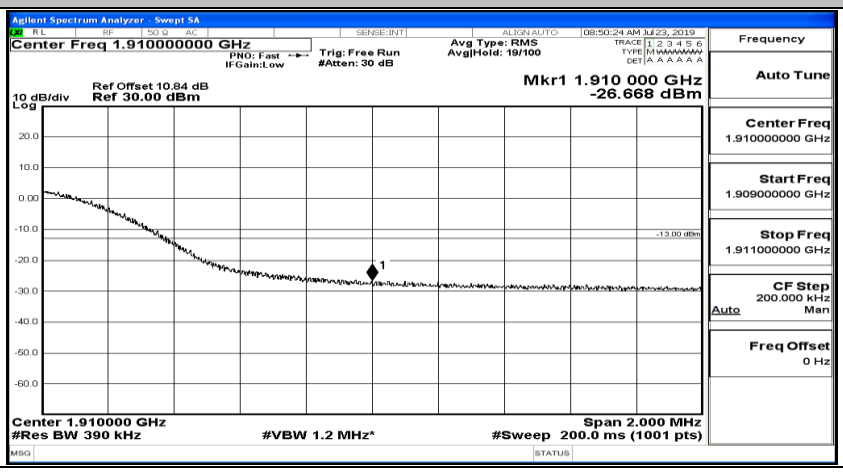
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



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

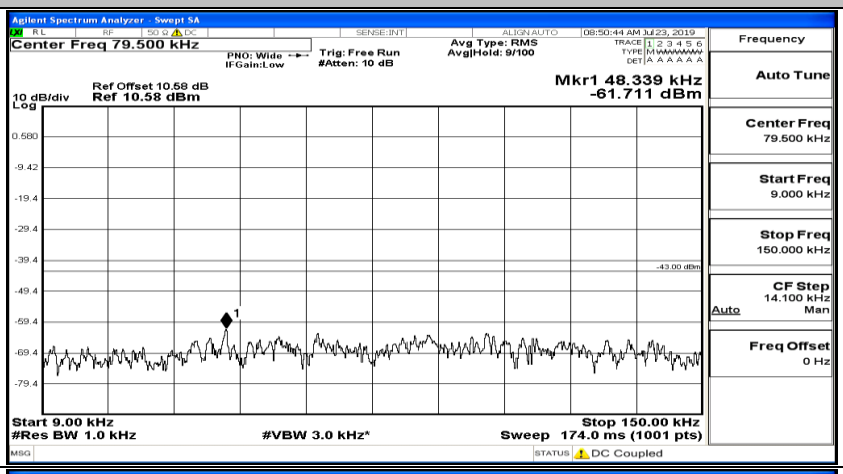


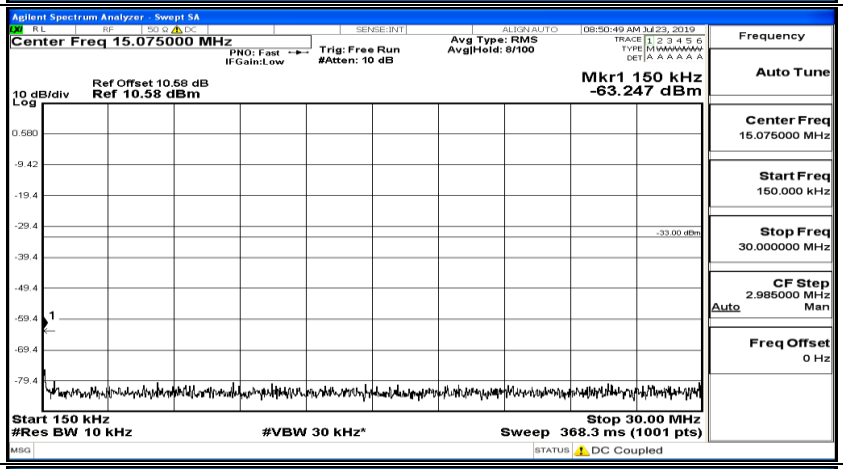
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

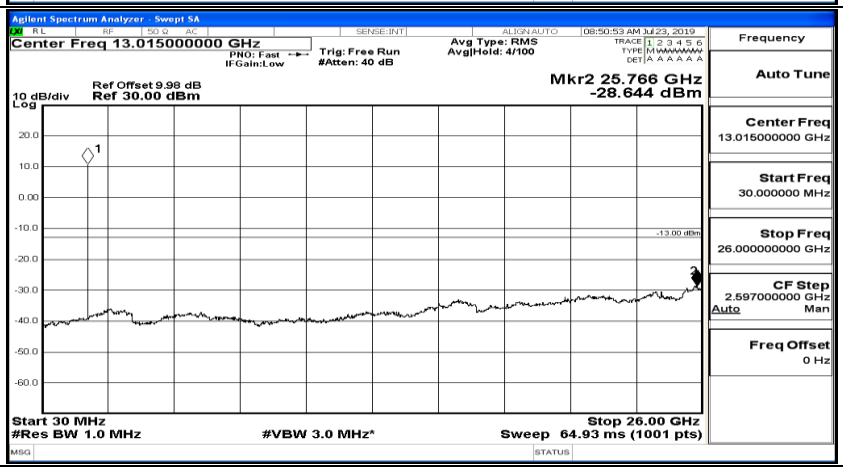


F.5 Conducted Spurious Emission

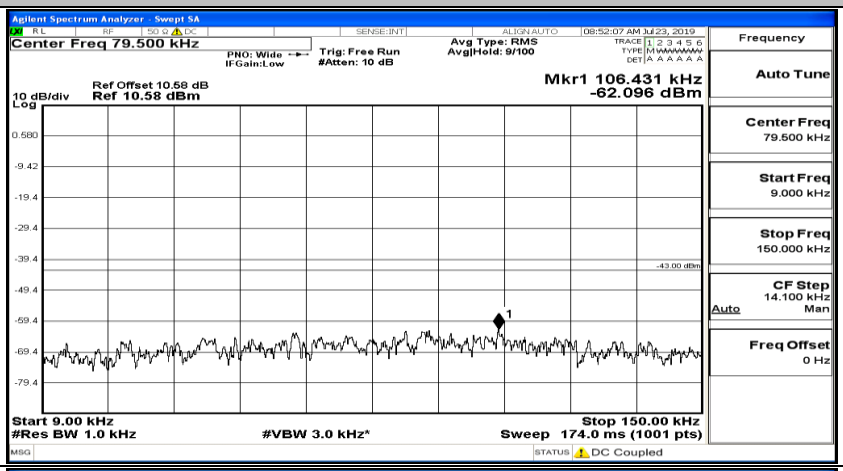
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK

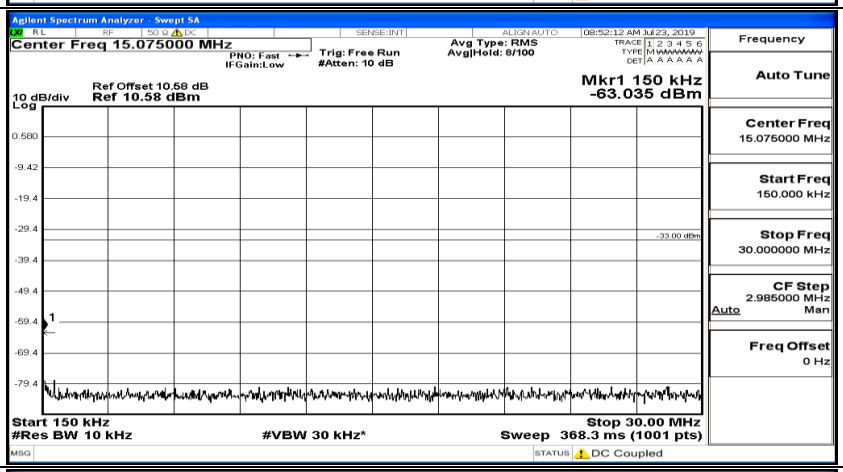


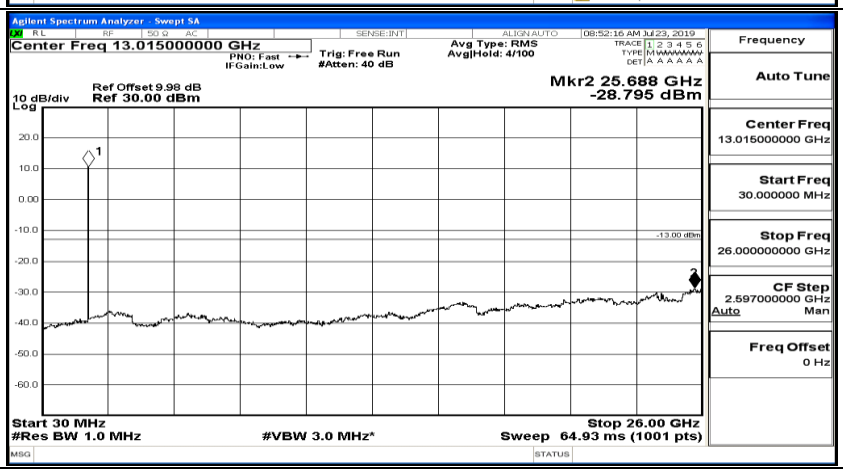




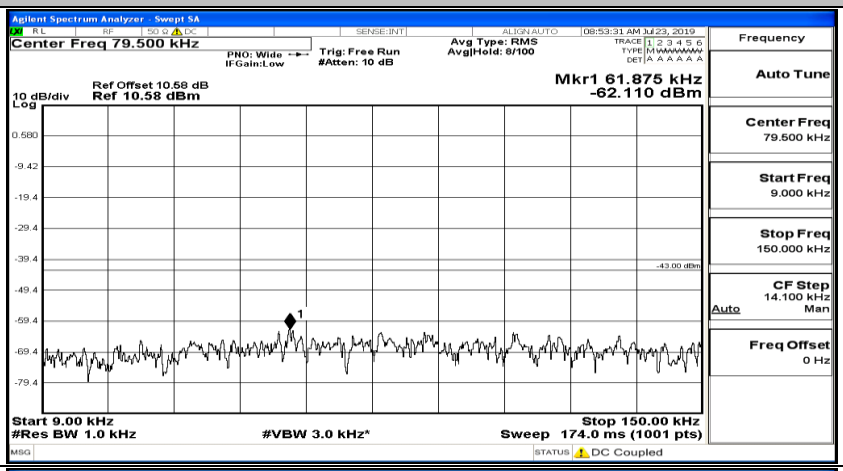
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK

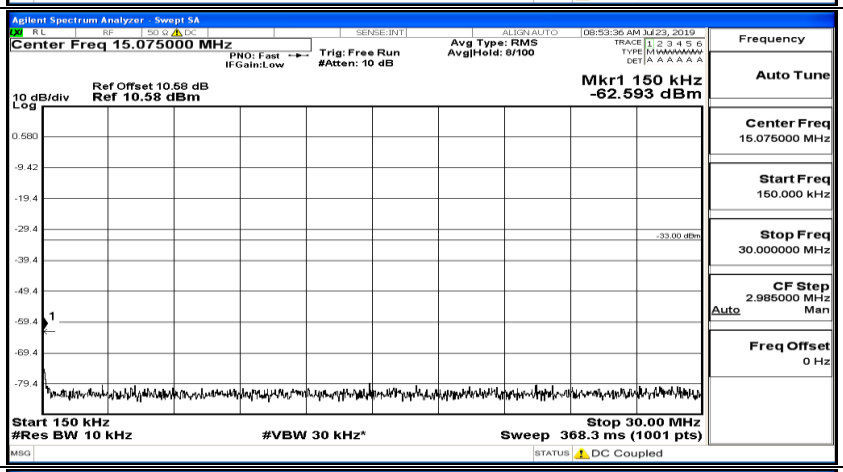


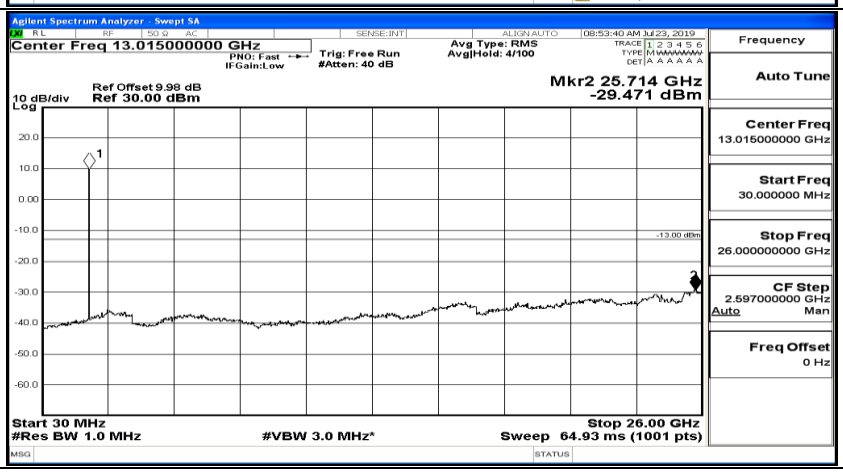




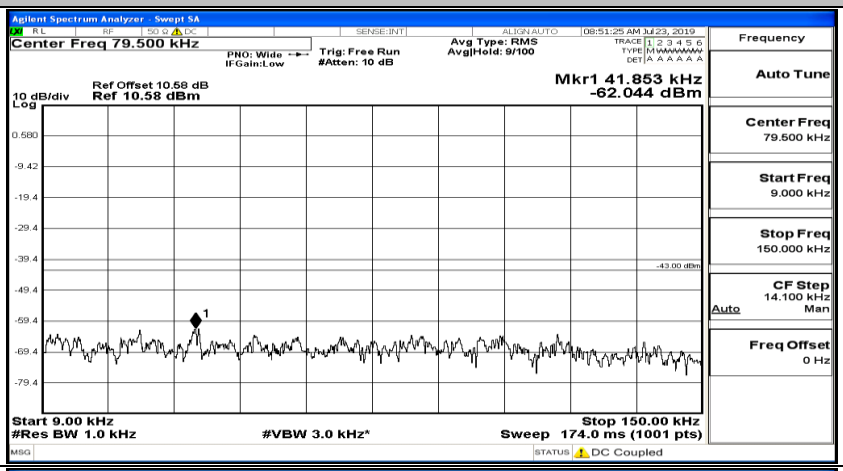
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK

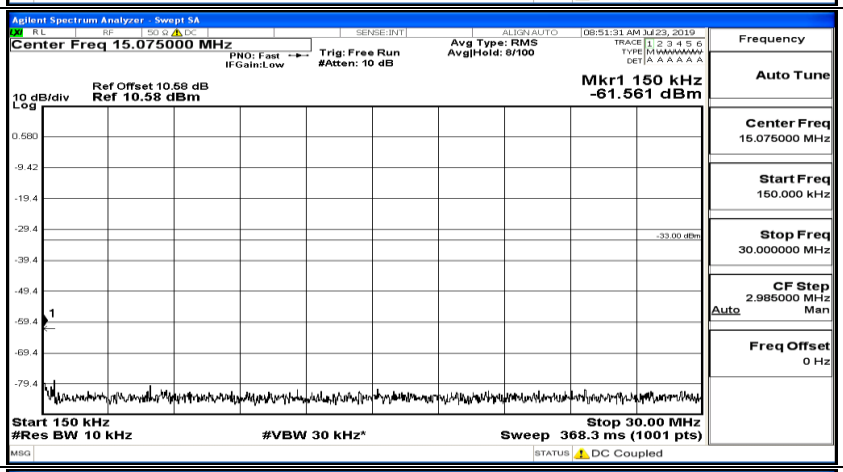


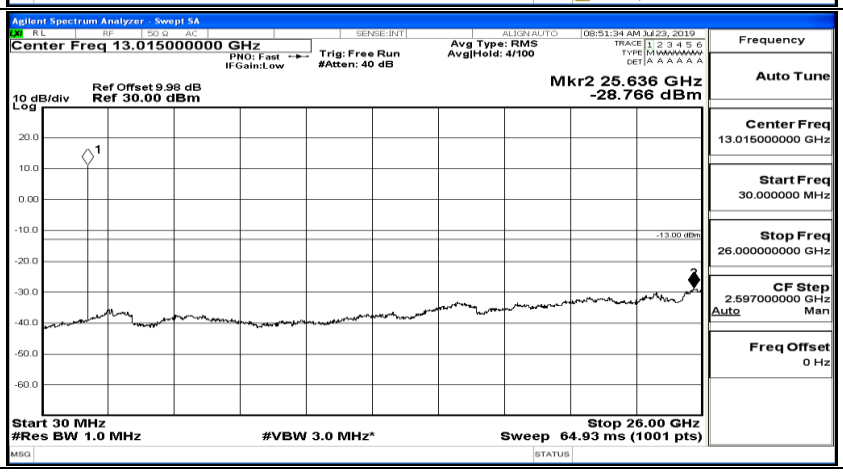




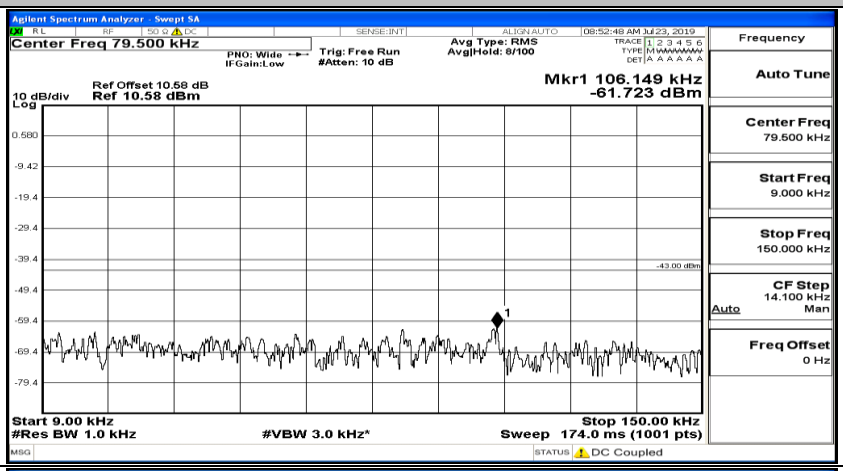
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM

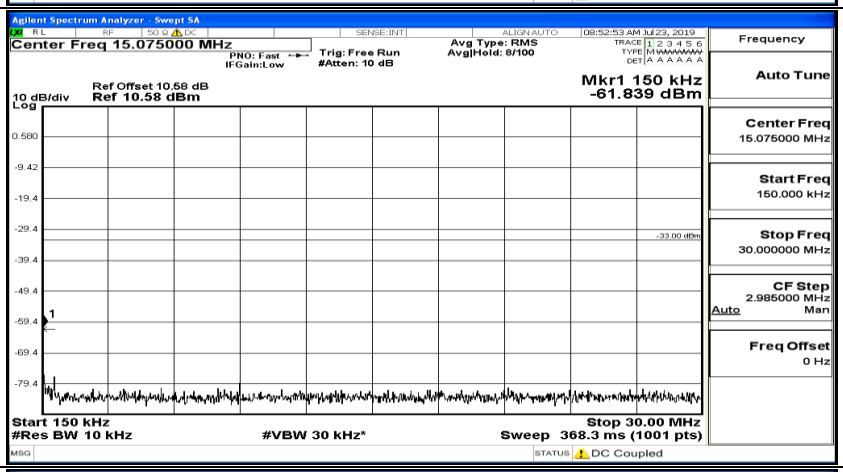


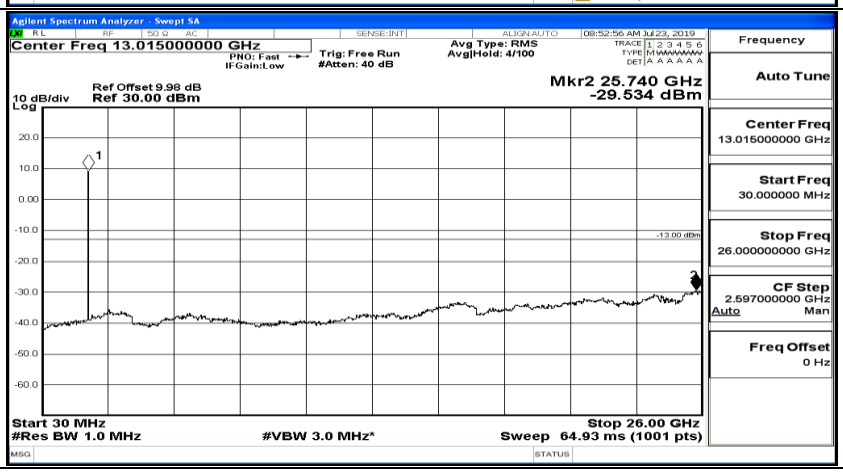




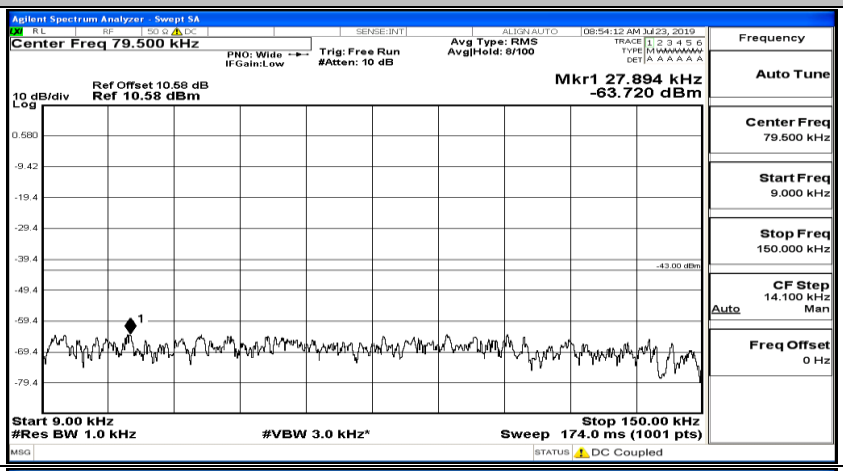
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM

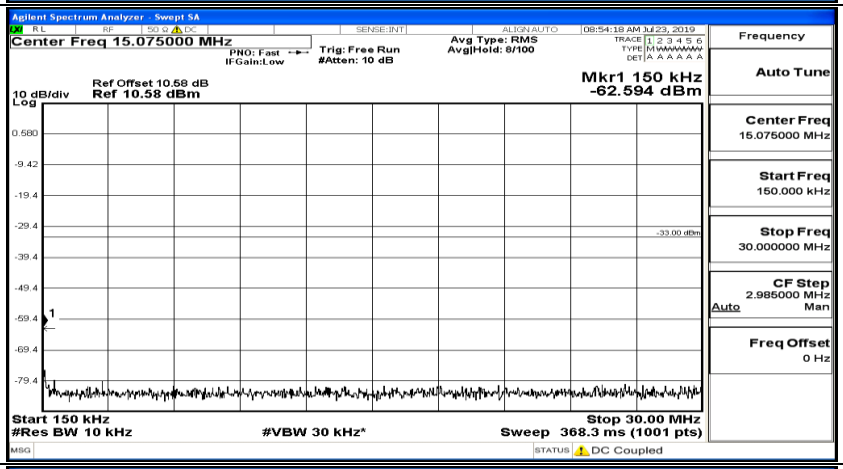
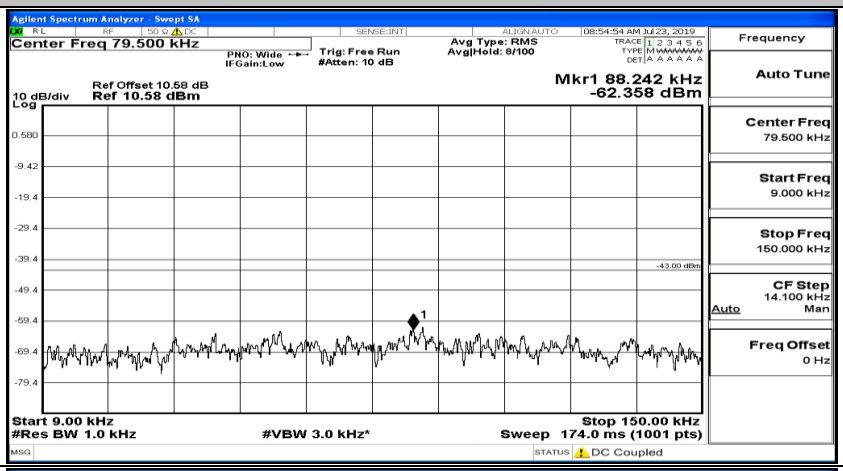
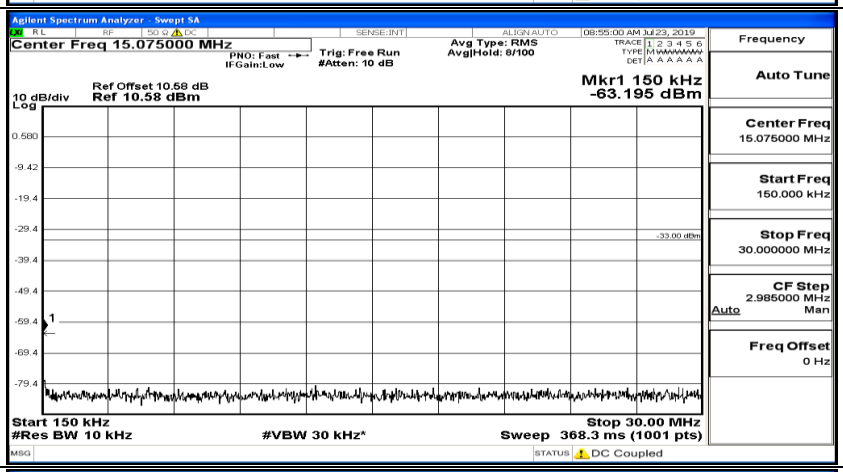
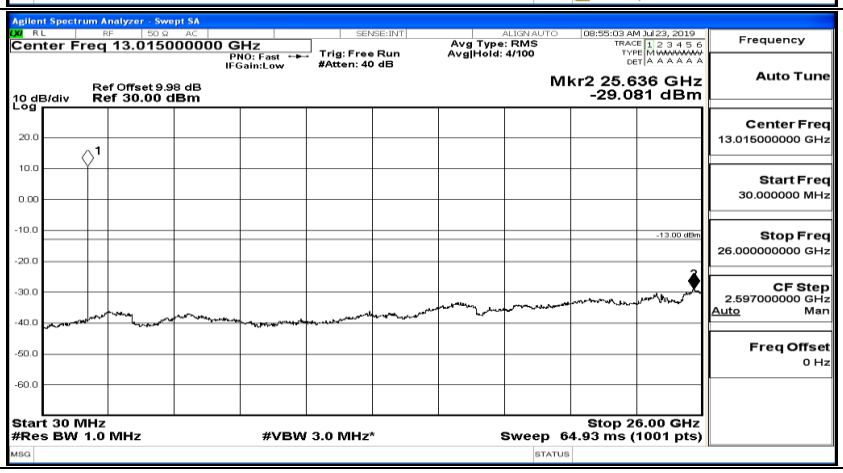






CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM





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