Appendix D: Test Data for E-UTRA Band 2

Product Name: Smart Phone
Test Model: W55s

Environmental Conditions

Temperature:	24.8
Relative Humidity:	53.2
ATM Pressure:	100.0 kPa
Test Engineer:	Mina Xu
Supervised by:	Jayden Zhuo

D.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	22.30	21.50	PASS
		1	3	22.29	21.54	PASS
		1	5	22.45	21.36	PASS
		3	0	22.10	21.02	PASS
		3	2	22.50	21.57	PASS
		3	3	21.90	21.23	PASS
		6	0	22.45	21.74	PASS
	MCH	1	0	22.67	21.28	PASS
		1	3	22.75	21.36	PASS
		1	5	21.95	21.10	PASS
		3	0	22.64	21.57	PASS
		3	2	22.45	21.64	PASS
		3	3	22.57	21.74	PASS
		6	0	21.97	21.34	PASS
	HCH	1	0	22.66	21.57	PASS
		1	3	22.03	21.22	PASS
		1	5	21.97	21.29	PASS
		3	0	22.44	21.52	PASS
		3	2	22.57	21.57	PASS
		3	3	22.61	21.70	PASS
		6	0	22.73	21.50	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.99	21.27	PASS
		1	7	22.44	21.49	PASS
		1	14	22.05	21.28	PASS
		8	0	22.63	21.58	PASS
		8	4	22.19	21.31	PASS
		8	7	22.08	21.34	PASS
		15	0	22.61	21.71	PASS
	MCH	1	0	22.17	21.37	PASS
		1	7	22.52	21.65	PASS
		1	14	22.03	21.21	PASS
		8	0	21.95	21.13	PASS
		8	4	22.50	21.68	PASS
		8	7	22.62	21.84	PASS
		15	0	22.34	21.38	PASS
	HCH	1	0	22.01	21.29	PASS
		1	7	22.13	21.39	PASS
		1	14	22.56	21.82	PASS
		8	0	22.50	21.59	PASS
		8	4	22.27	21.55	PASS
		8	7	22.08	21.54	PASS
		15	0	22.68	21.78	PASS

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	22.70	21.82	PASS
		1	12	22.73	21.61	PASS
		1	24	21.88	21.25	PASS
		12	0	22.44	21.29	PASS
		12	6	22.19	21.41	PASS
		12	13	22.12	21.36	PASS
		25	0	22.02	21.20	PASS
	MCH	1	0	22.31	21.50	PASS
		1	12	22.59	21.46	PASS
		1	24	22.37	21.84	PASS
		12	0	22.46	21.60	PASS
		12	6	22.05	21.31	PASS
		12	13	22.54	21.81	PASS
		25	0	22.51	21.81	PASS
	HCH	1	0	22.64	21.52	PASS
		1	12	22.53	21.42	PASS
		1	24	22.65	21.81	PASS
		12	0	22.38	21.74	PASS
		12	6	22.00	21.55	PASS
		12	13	22.46	21.69	PASS
		25	0	21.94	21.33	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	22.13	21.33	PASS
		1	24	22.42	21.91	PASS
		1	49	22.13	21.49	PASS
		25	0	22.12	21.45	PASS
		25	12	22.20	21.27	PASS
		25	25	22.00	21.62	PASS
		50	0	22.05	21.31	PASS
	MCH	1	0	22.65	21.80	PASS
		1	24	22.64	21.99	PASS
		1	49	22.21	21.65	PASS
		25	0	22.32	21.47	PASS
		25	12	22.65	21.81	PASS
		25	25	22.69	21.90	PASS
		50	0	22.38	21.72	PASS
	HCH	1	0	22.43	21.23	PASS
		1	24	22.54	21.76	PASS
		1	49	22.02	21.54	PASS
		25	0	21.96	21.43	PASS
		25	12	21.94	21.36	PASS
		25	25	22.56	21.41	PASS
		50	0	22.63	21.27	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	22.65	21.98	PASS
		1	37	22.34	21.82	PASS
		1	74	22.57	21.38	PASS
		37	0	22.31	21.19	PASS
		37	18	22.16	21.37	PASS
		37	38	22.36	21.28	PASS
		75	0	22.30	21.54	PASS
	MCH	1	0	22.58	21.89	PASS
		1	37	22.23	21.47	PASS
		1	74	22.68	21.90	PASS
		37	0	22.59	21.92	PASS
		37	18	22.32	21.58	PASS
		37	38	22.44	21.59	PASS
		75	0	22.59	21.71	PASS
	HCH	1	0	22.06	21.22	PASS
		1	37	22.40	21.69	PASS
		1	74	22.12	21.46	PASS
		37	0	22.02	21.32	PASS
		37	18	21.90	21.22	PASS
		37	38	22.07	21.37	PASS
		75	0	22.13	21.42	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	22.33	21.76	PASS
		1	49	22.84	22.02	PASS
		1	99	22.70	21.98	PASS
		50	0	22.77	22.10	PASS
		50	25	22.35	21.91	PASS
		50	50	22.21	21.78	PASS
		100	0	22.46	21.88	PASS
	MCH	1	0	22.54	21.77	PASS
		1	49	22.62	21.88	PASS
		1	99	22.48	21.83	PASS
		50	0	22.32	21.75	PASS
		50	25	22.75	21.87	PASS
		50	50	22.87	21.80	PASS
		100	0	22.88	21.87	PASS
	HCH	1	0	22.50	21.80	PASS
		1	49	22.45	21.68	PASS
		1	99	22.17	21.63	PASS
		50	0	22.78	21.76	PASS
		50	25	22.66	21.87	PASS
		50	50	22.48	21.86	PASS
		100	0	22.31	21.78	PASS

D.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	6.01	<13	PASS
	MCH	5.7	<13	PASS
	HCH	5.64	<13	PASS
16QAM	LCH	6.96	<13	PASS
	MCH	6.63	<13	PASS
	HCH	6.57	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.94	<13	PASS
	MCH	5.72	<13	PASS
	HCH	5.79	<13	PASS
16QAM	LCH	6.95	<13	PASS
	MCH	6.62	<13	PASS
	HCH	6.55	<13	PASS

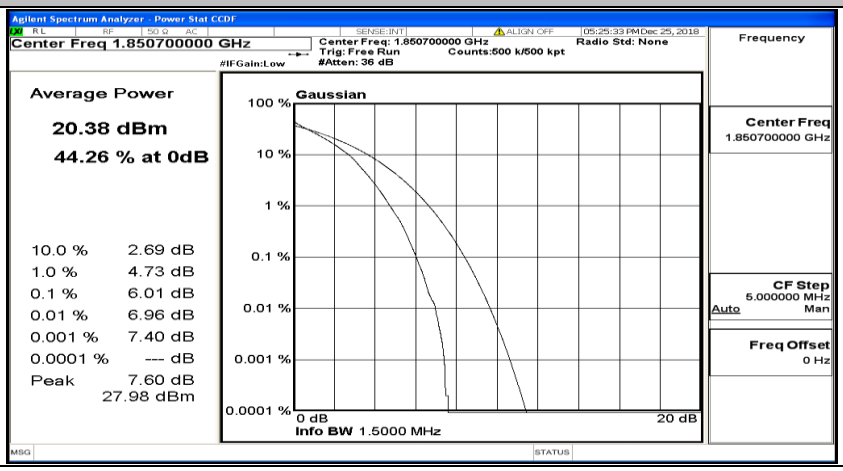
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	6.1	<13	PASS
	MCH	5.75	<13	PASS
	HCH	5.75	<13	PASS
16QAM	LCH	6.88	<13	PASS
	MCH	6.5	<13	PASS
	HCH	6.51	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	6.03	<13	PASS
	MCH	5.65	<13	PASS
	HCH	5.7	<13	PASS
16QAM	LCH	6.74	<13	PASS
	MCH	6.42	<13	PASS
	HCH	6.46	<13	PASS

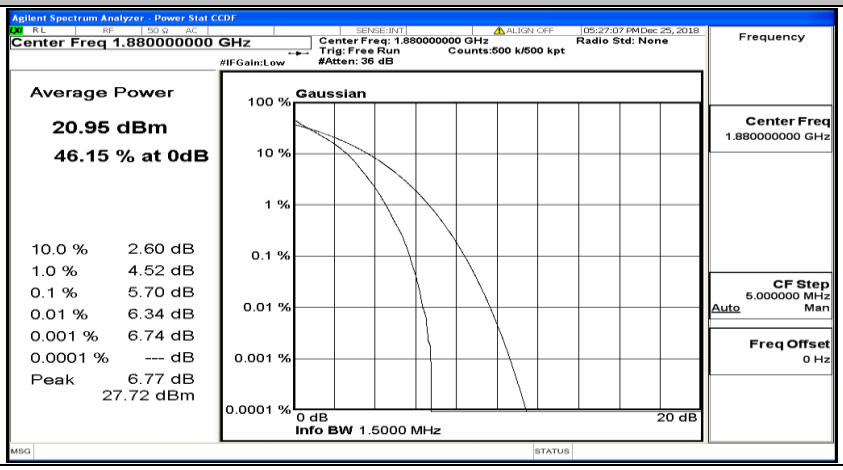
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.12	<13	PASS
	MCH	4.94	<13	PASS
	HCH	4.91	<13	PASS
16QAM	LCH	6.47	<13	PASS
	MCH	6.27	<13	PASS
	HCH	6.26	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.73	<13	PASS
	MCH	5.72	<13	PASS
	HCH	5.7	<13	PASS
16QAM	LCH	6.84	<13	PASS
	MCH	6.84	<13	PASS
	HCH	6.76	<13	PASS

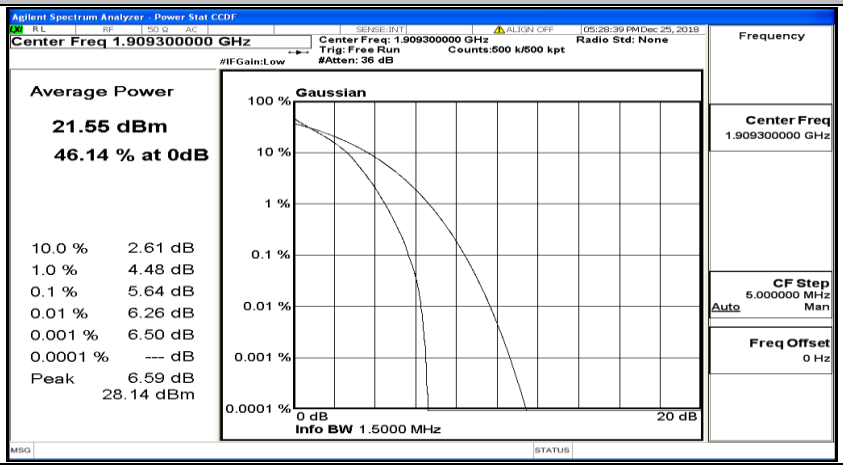
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



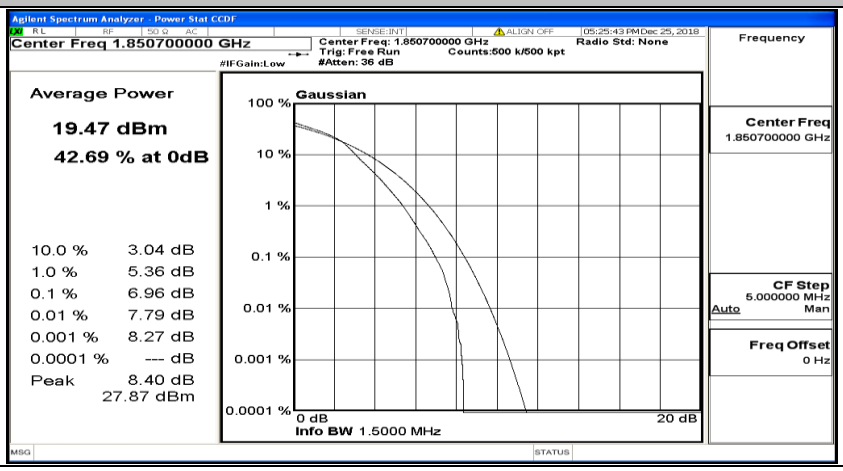
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



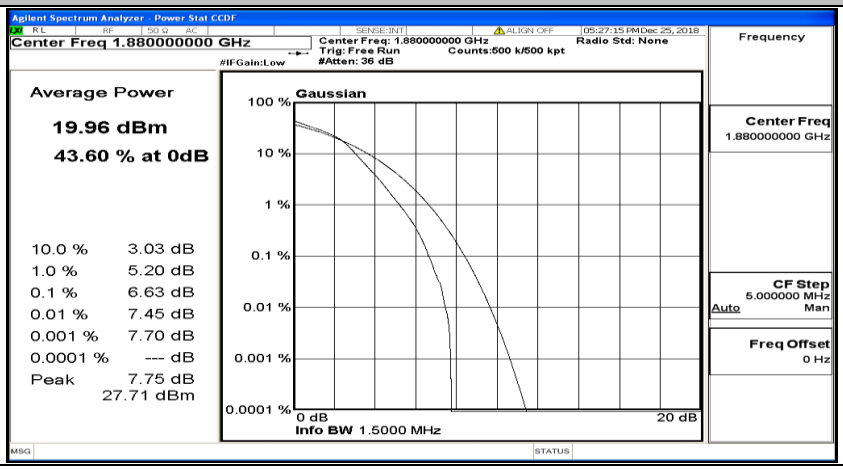
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



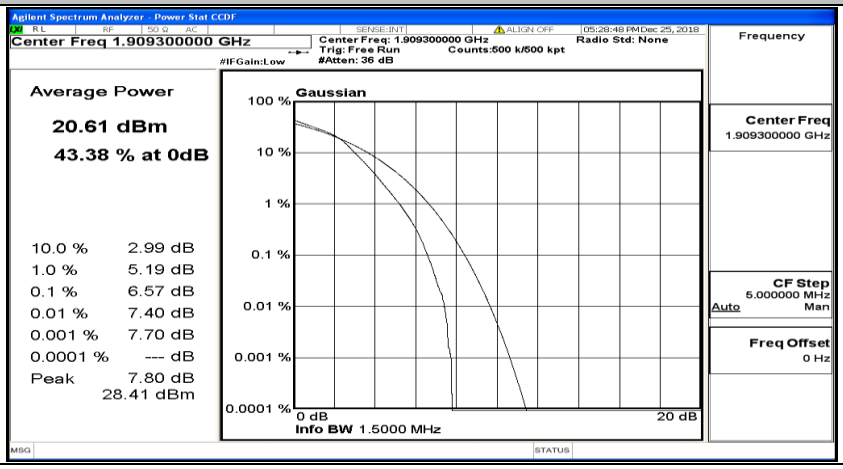
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



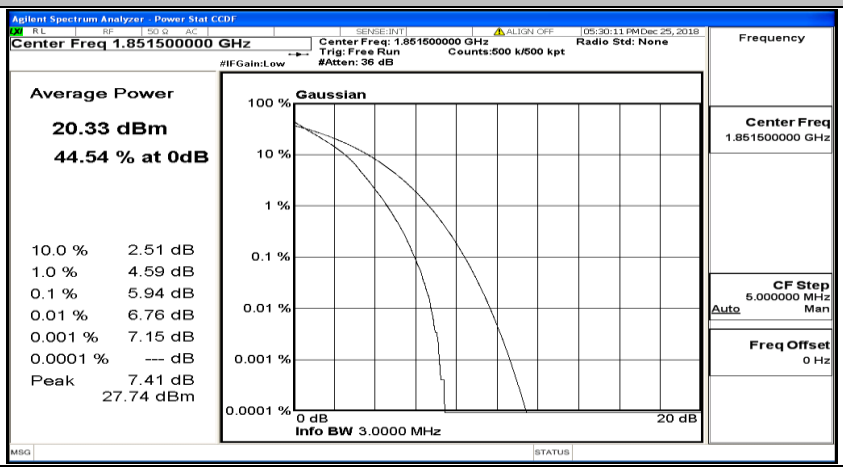
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



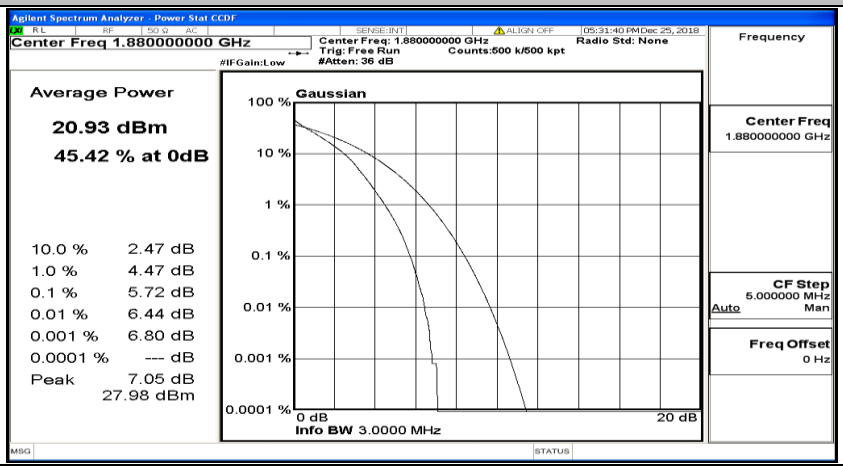
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



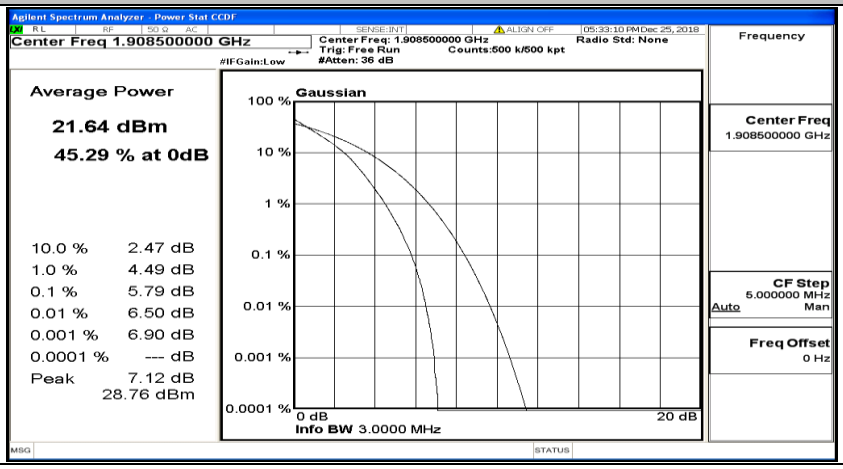
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



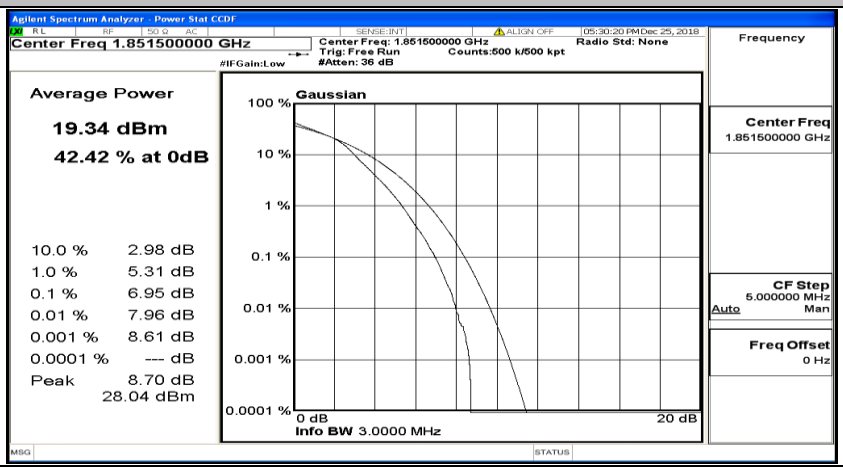
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



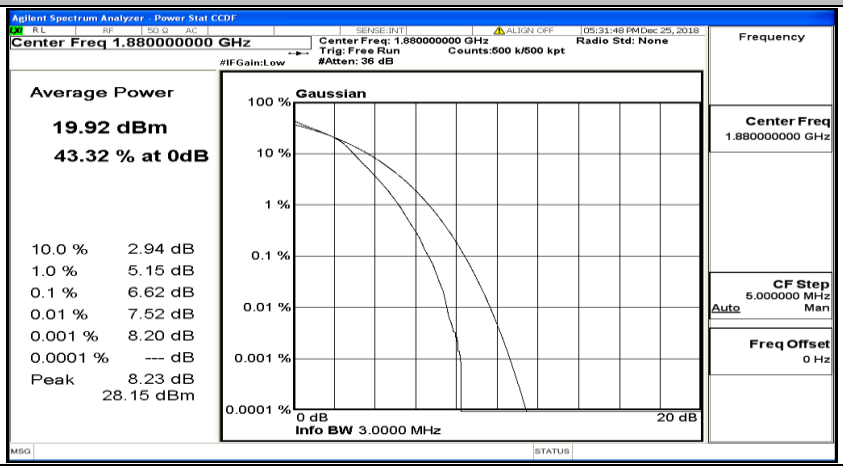
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



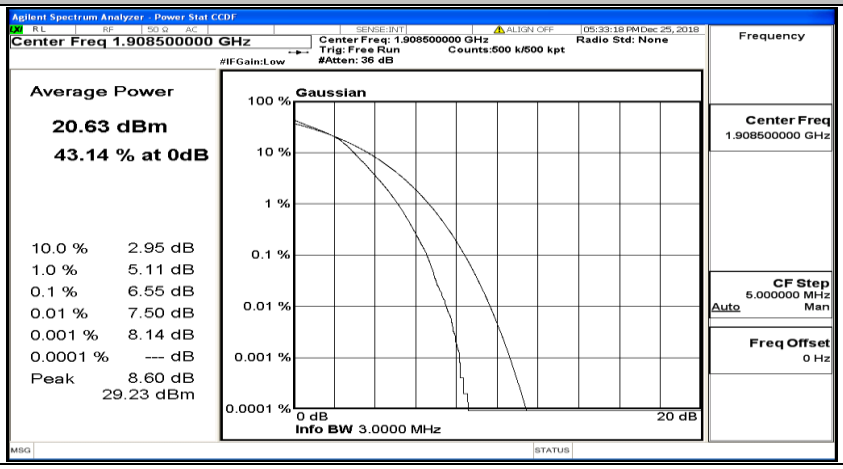
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



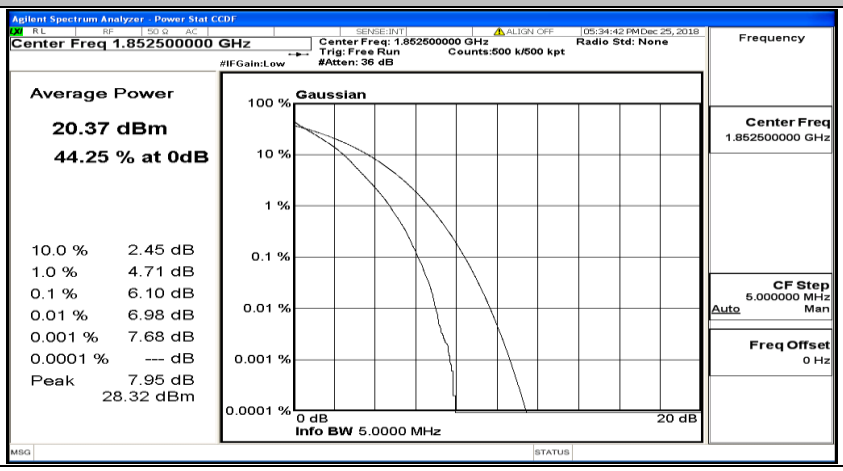
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



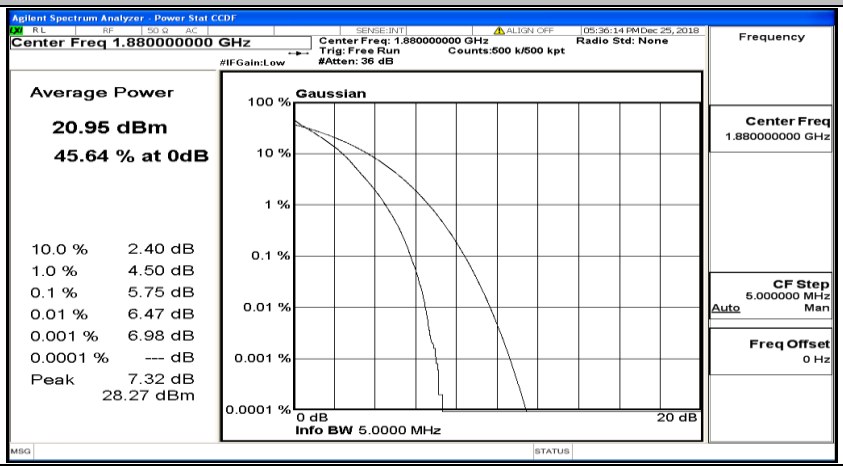
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



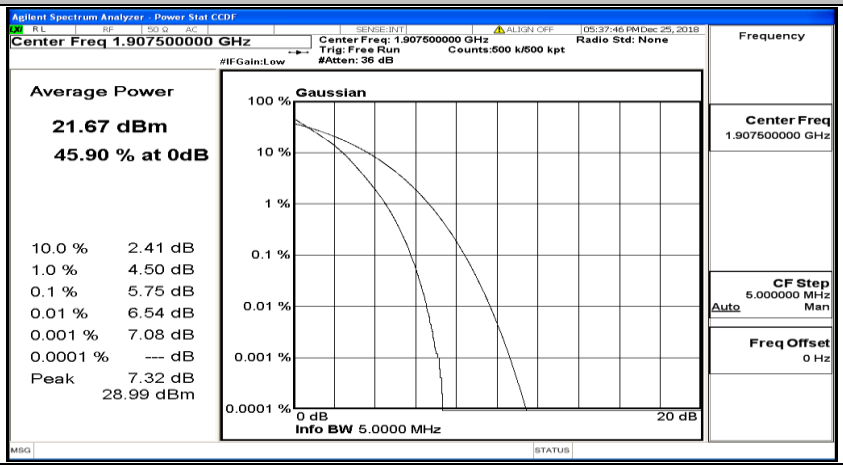
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



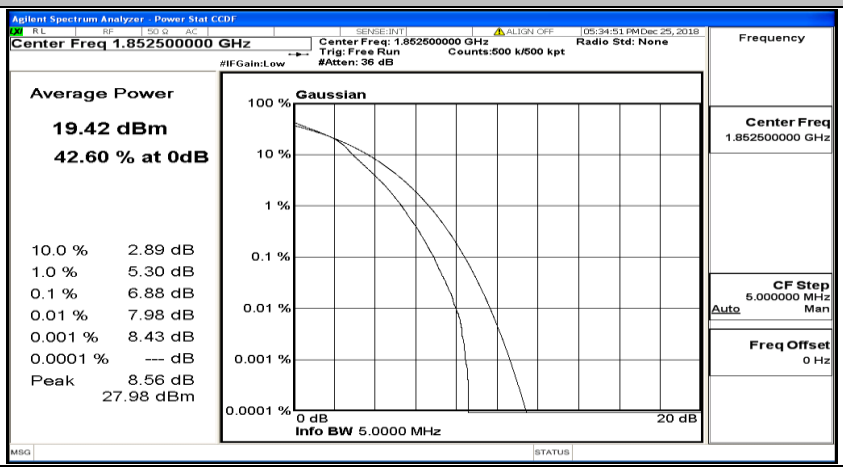
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



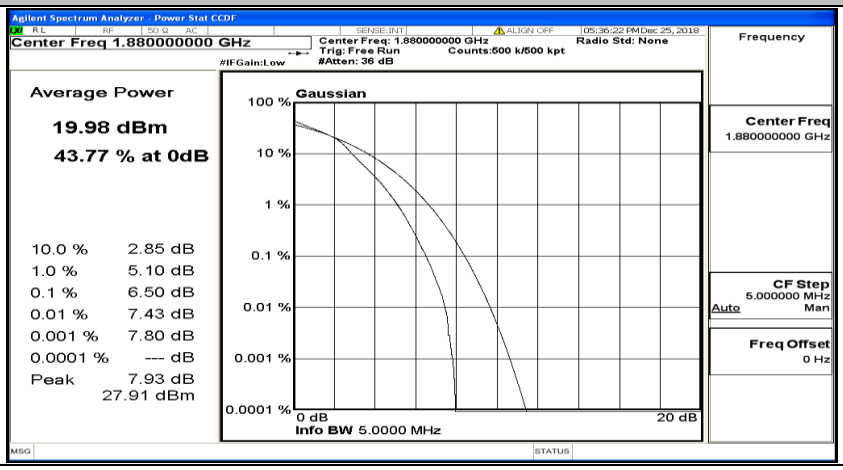
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



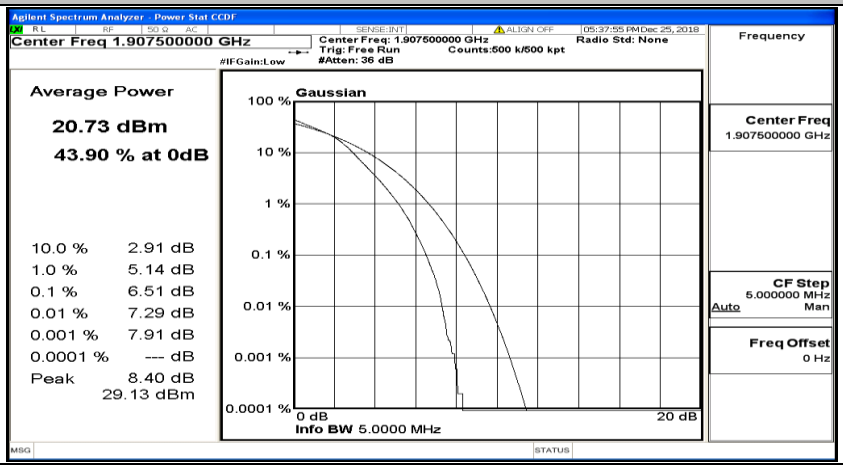
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



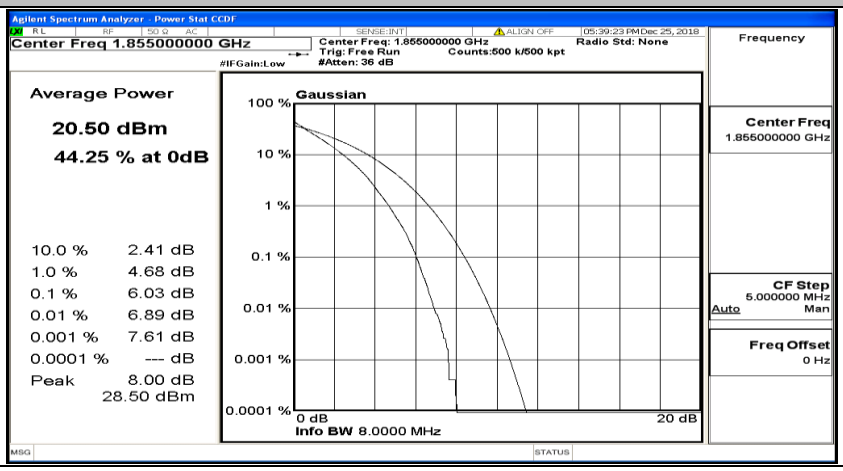
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



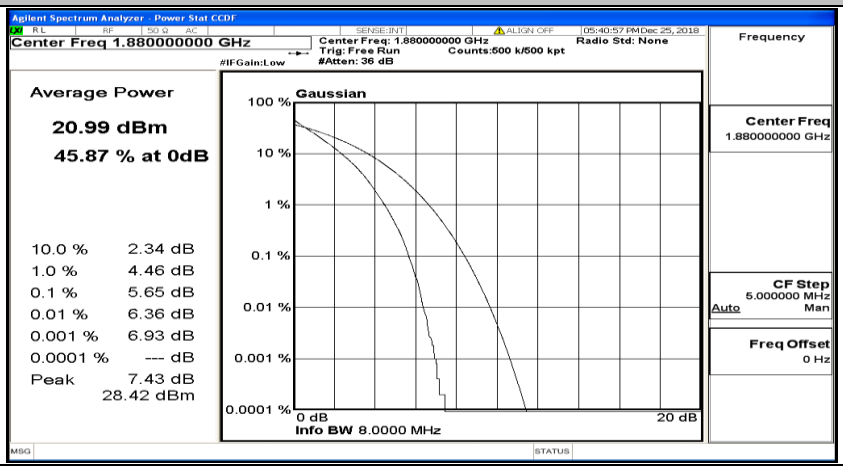
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



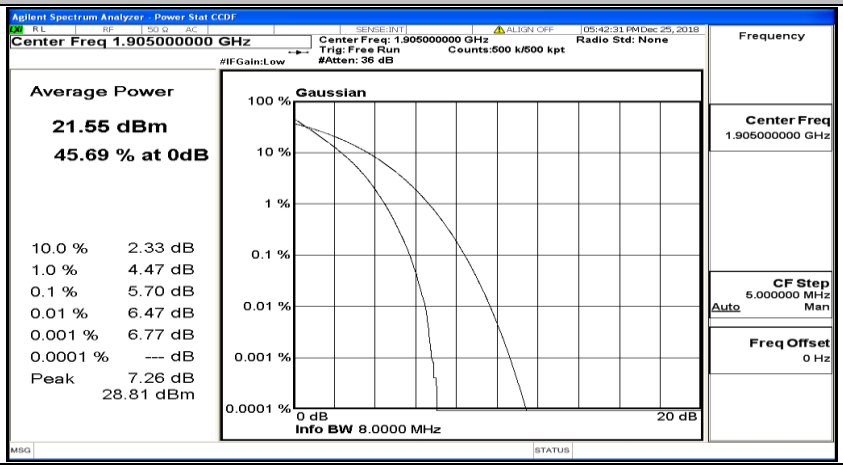
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



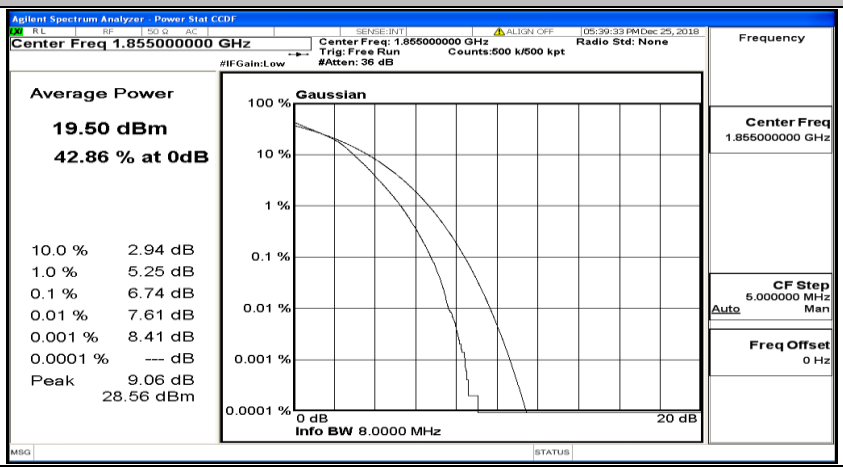
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



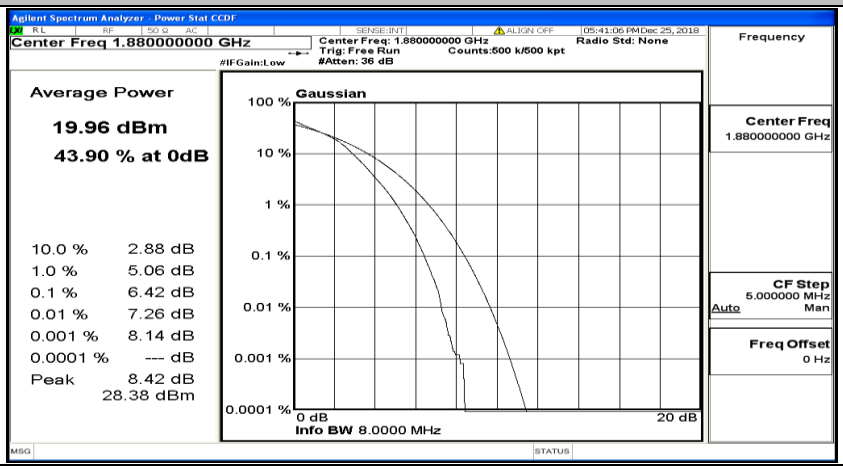
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



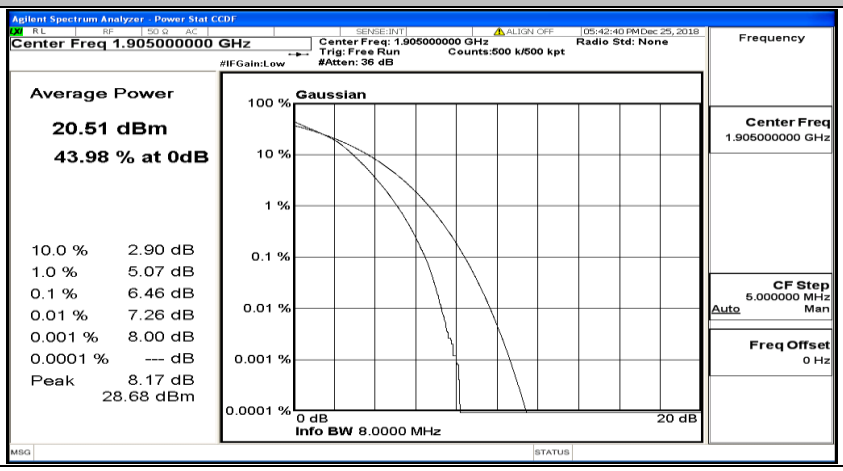
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



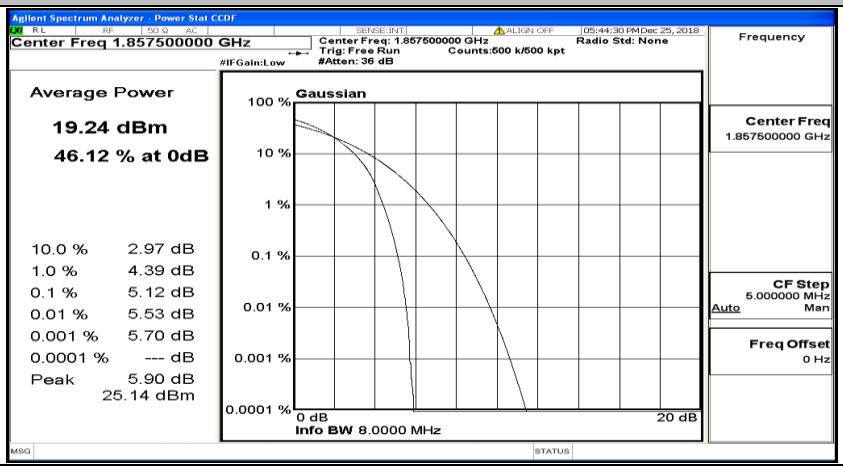
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



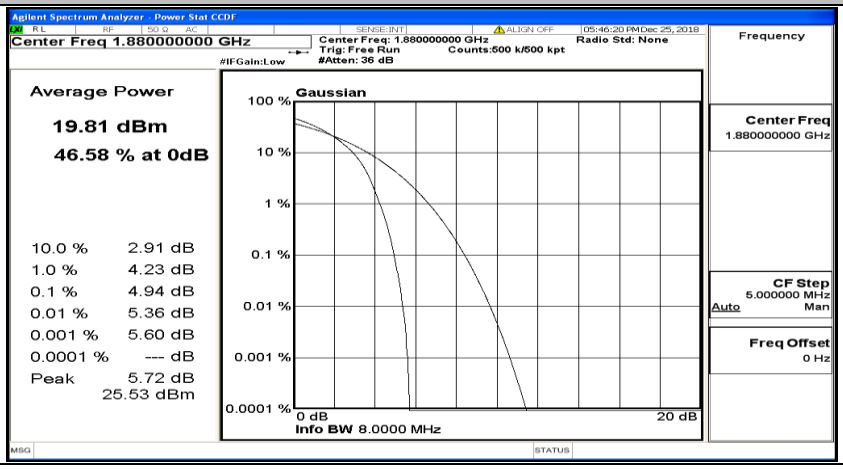
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



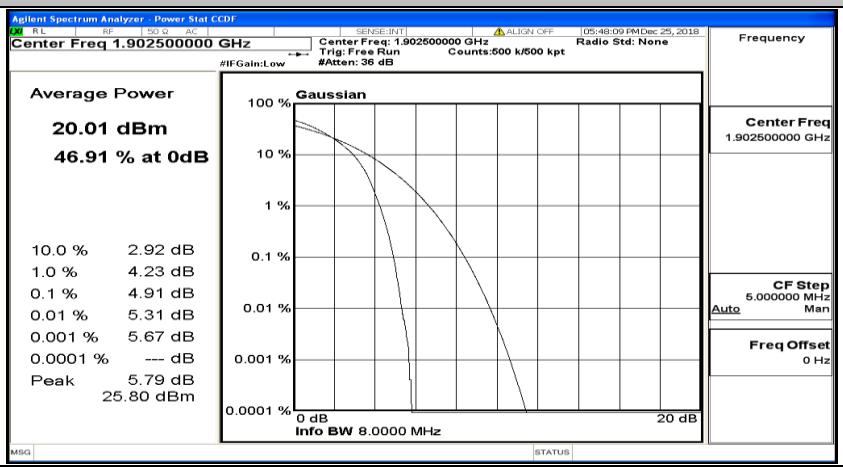
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



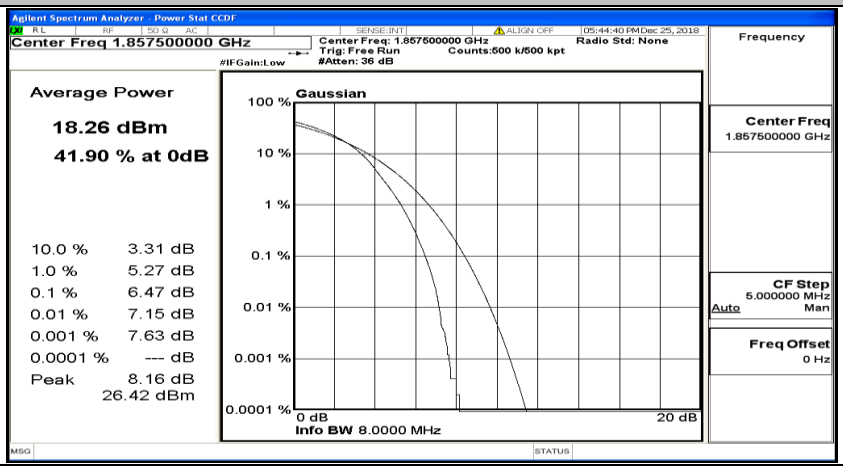
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



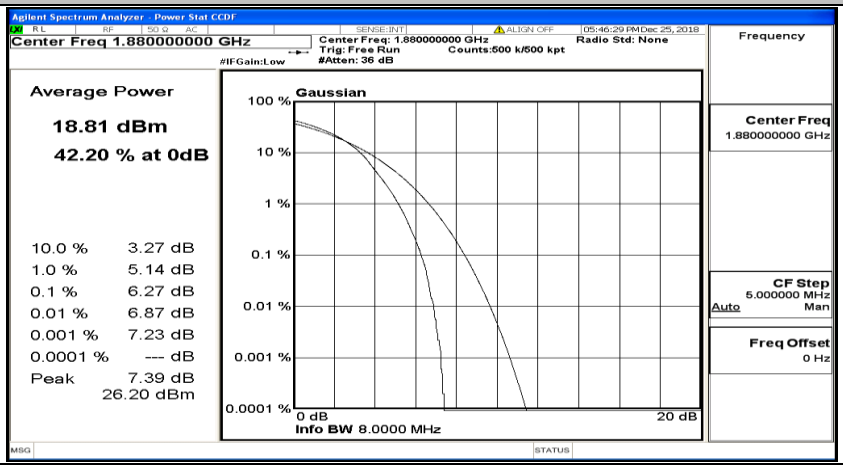
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



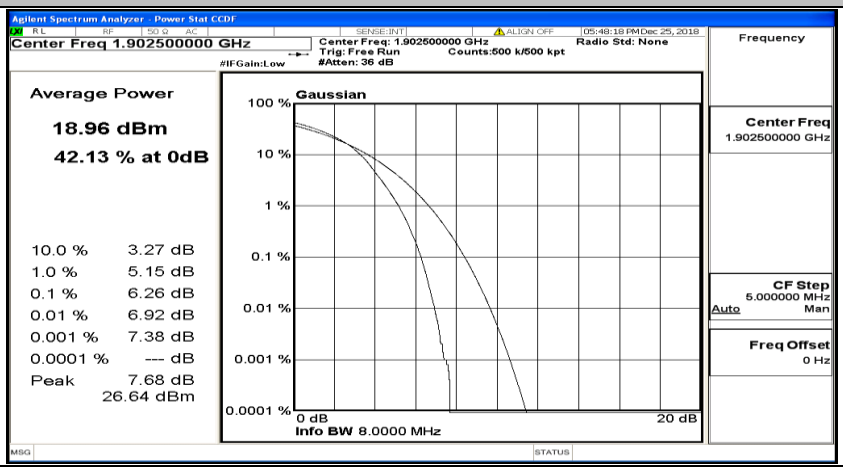
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



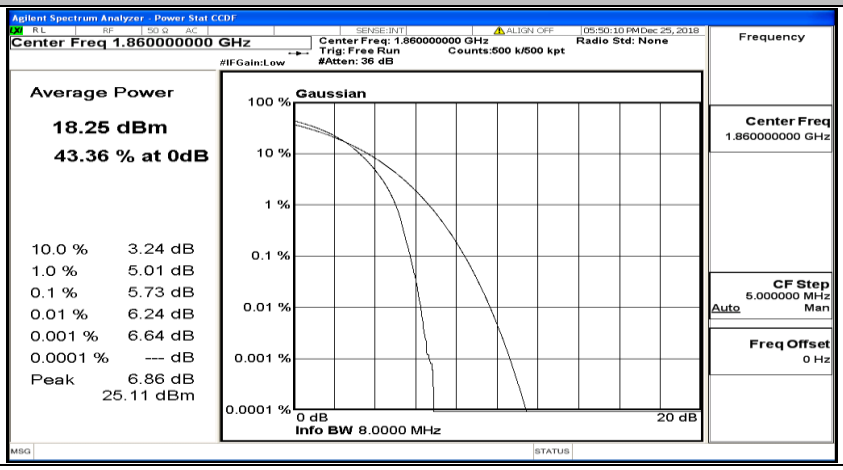
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



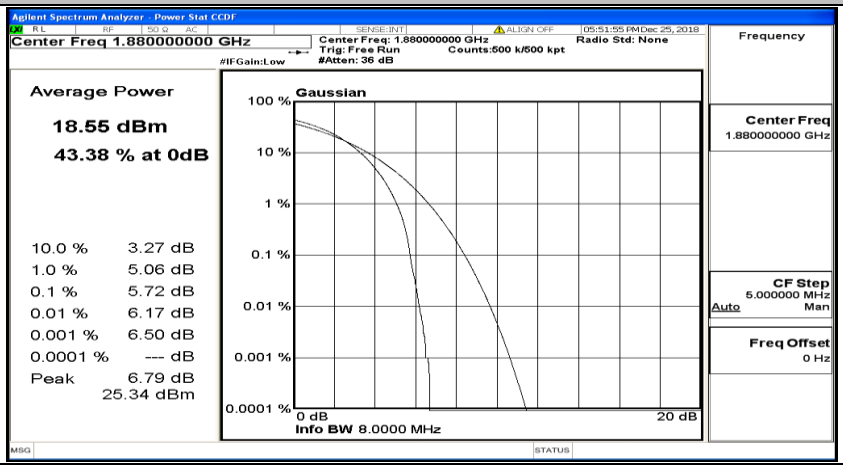
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



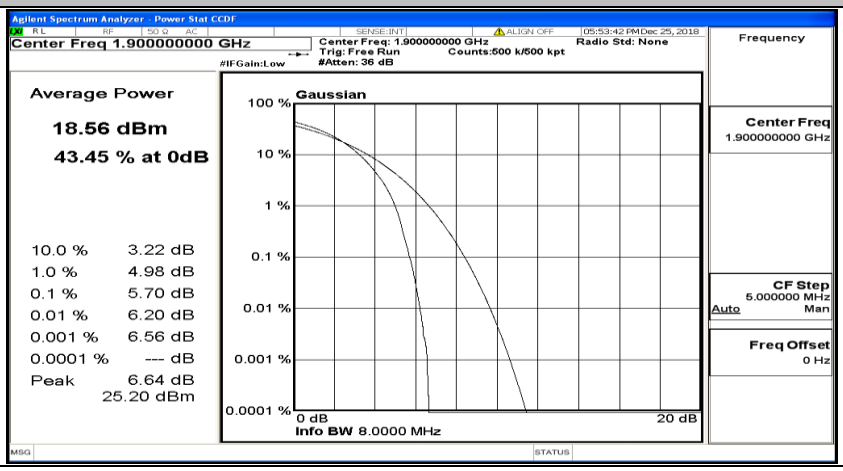
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



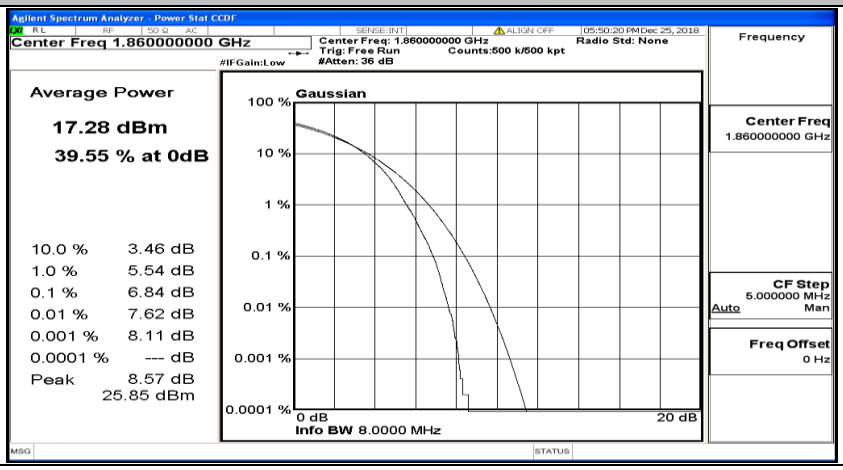
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



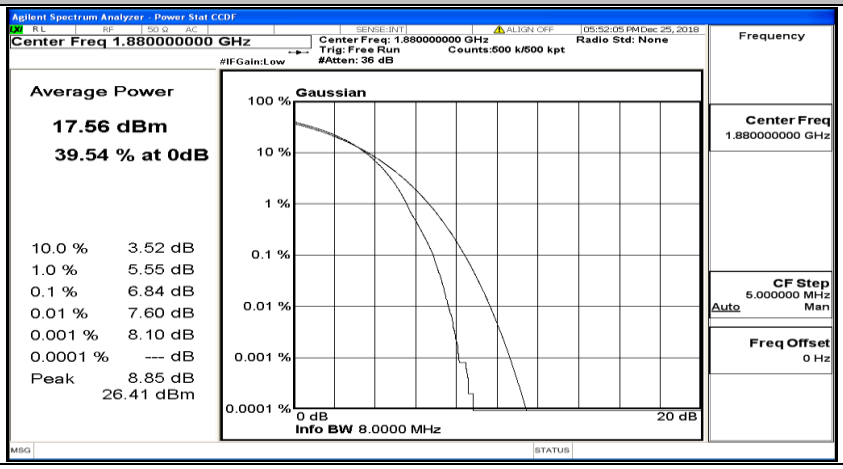
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



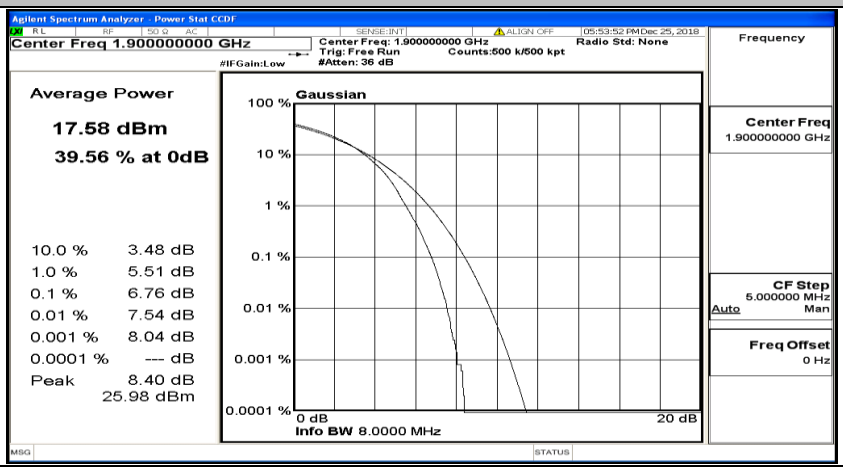
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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



D.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	1.0773	1.230	PASS
	MCH	1.0721	1.230	PASS
	HCH	1.0761	1.234	PASS
16QAM	LCH	1.0753	1.228	PASS
	MCH	1.0780	1.231	PASS
	HCH	1.0769	1.229	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6853	2.830	PASS
	MCH	2.6750	2.833	PASS
	HCH	2.6778	2.835	PASS
16QAM	LCH	2.6751	2.827	PASS
	MCH	2.6805	2.841	PASS
	HCH	2.6778	2.833	PASS

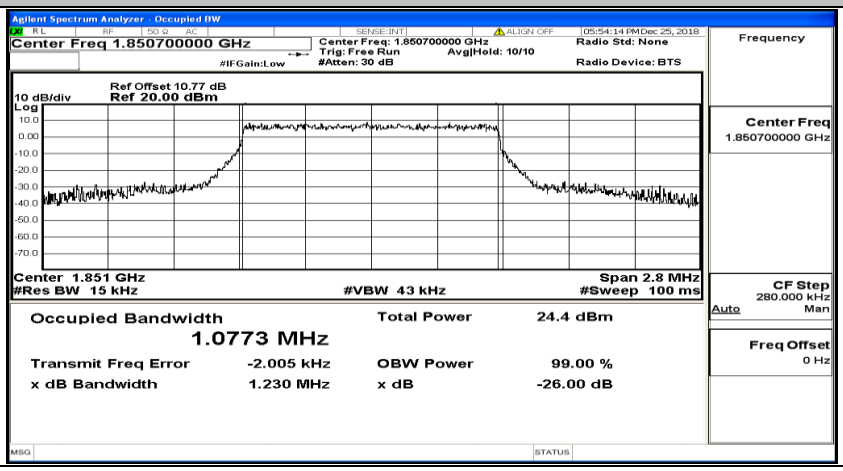
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4828	4.827	PASS
	MCH	4.4723	4.853	PASS
	HCH	4.4667	4.875	PASS
16QAM	LCH	4.4790	4.891	PASS
	MCH	4.4690	4.865	PASS
	HCH	4.4797	4.923	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9462	9.549	PASS
	MCH	8.9360	9.523	PASS
	HCH	8.9387	9.477	PASS
16QAM	LCH	8.9512	9.505	PASS
	MCH	8.9377	9.526	PASS
	HCH	8.9344	9.504	PASS

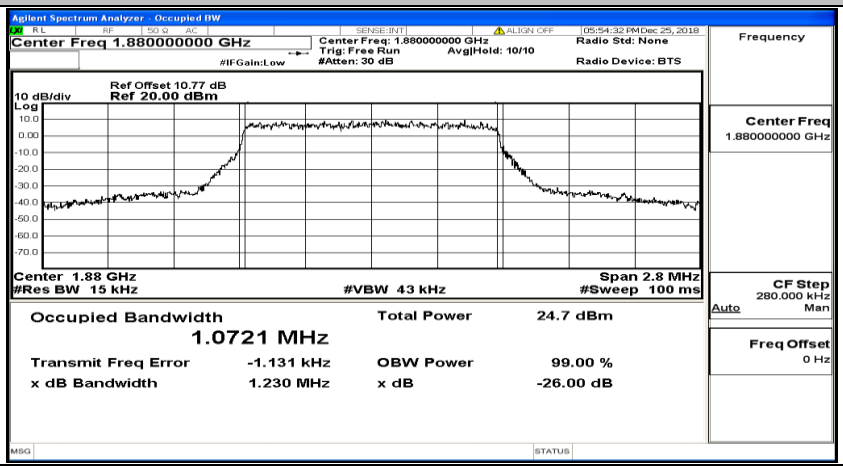
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.415	14.37	PASS
	MCH	13.377	14.05	PASS
	HCH	13.361	14.01	PASS
16QAM	LCH	13.410	14.07	PASS
	MCH	13.397	14.06	PASS
	HCH	13.355	14.02	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.861	18.64	PASS
	MCH	17.825	18.55	PASS
	HCH	17.812	18.60	PASS
16QAM	LCH	17.858	18.59	PASS
	MCH	17.837	18.61	PASS
	HCH	17.806	18.57	PASS

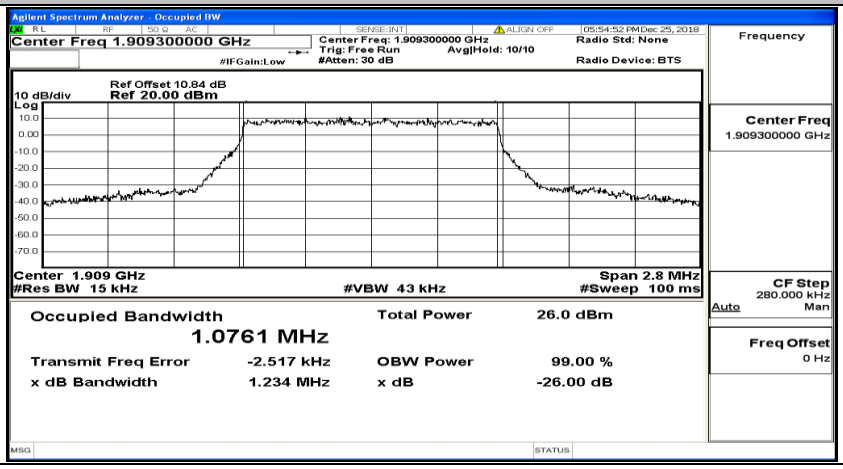
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



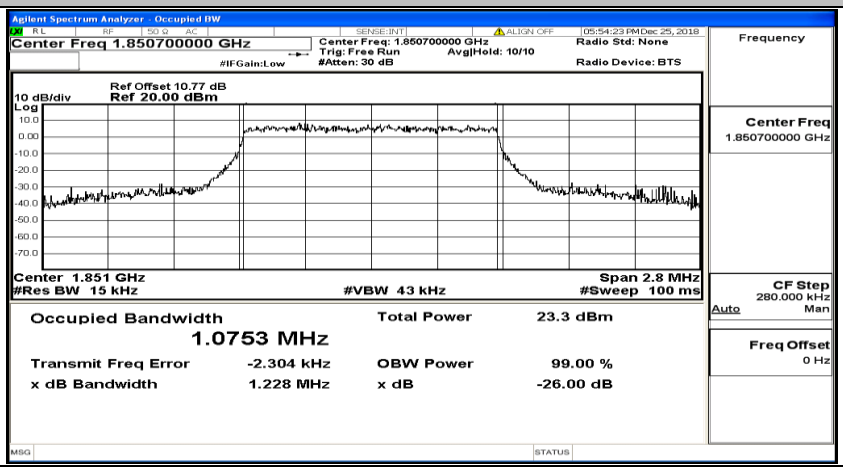
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



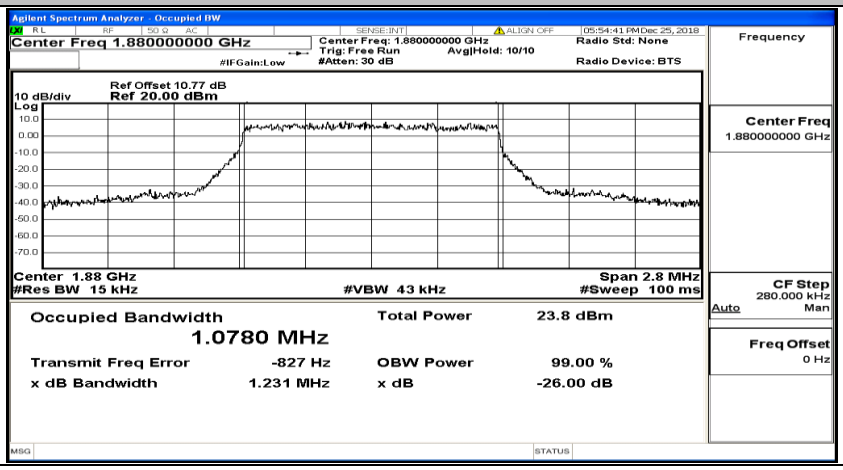
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



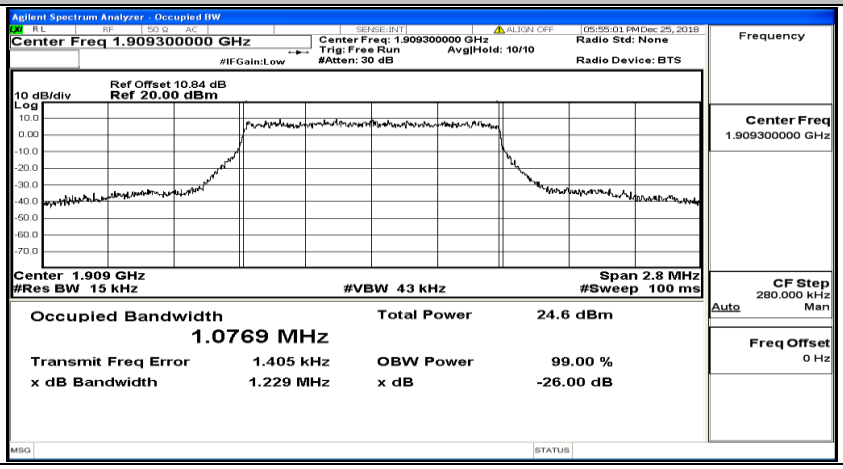
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



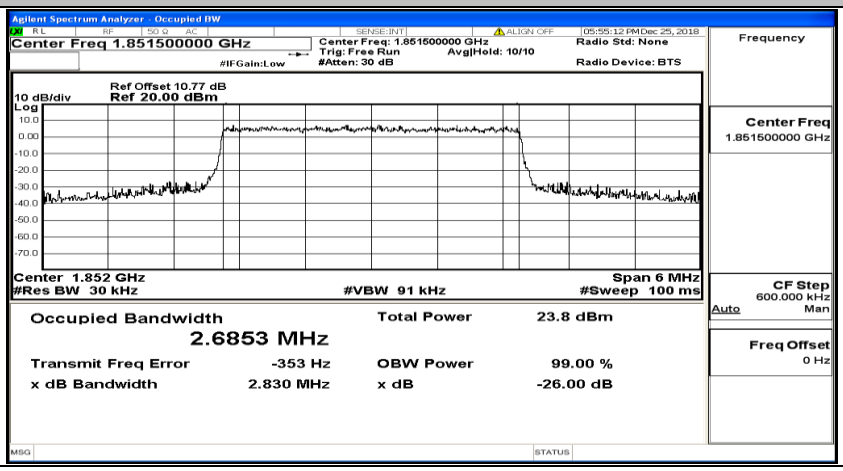
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



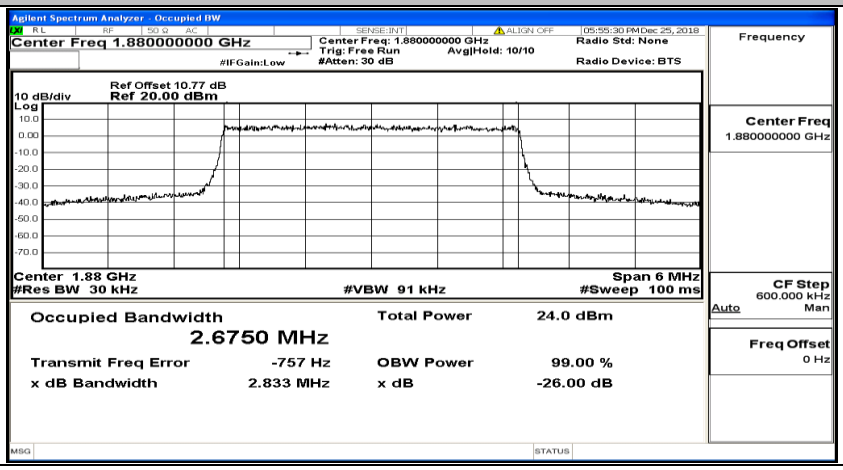
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



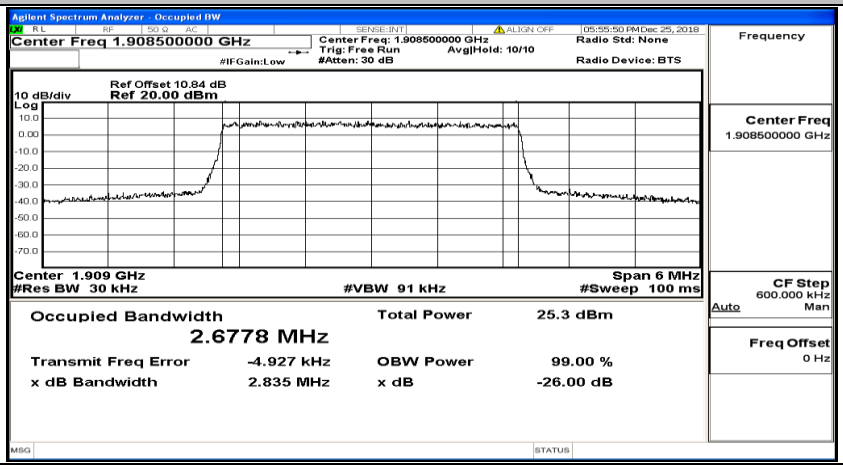
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



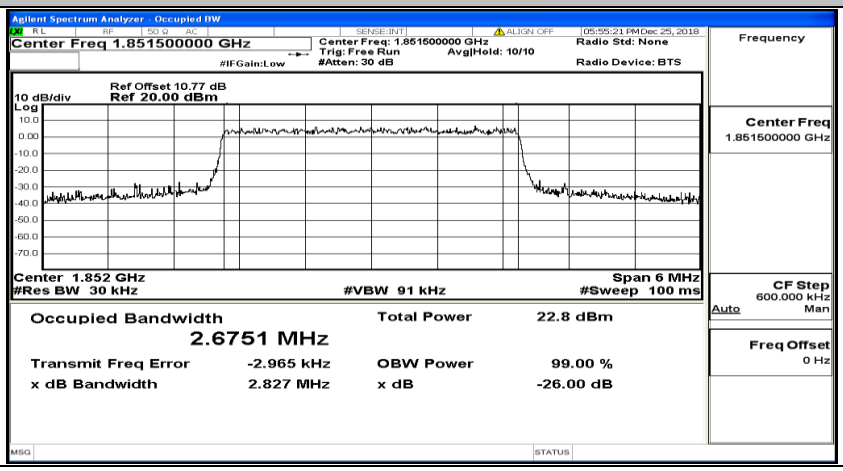
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



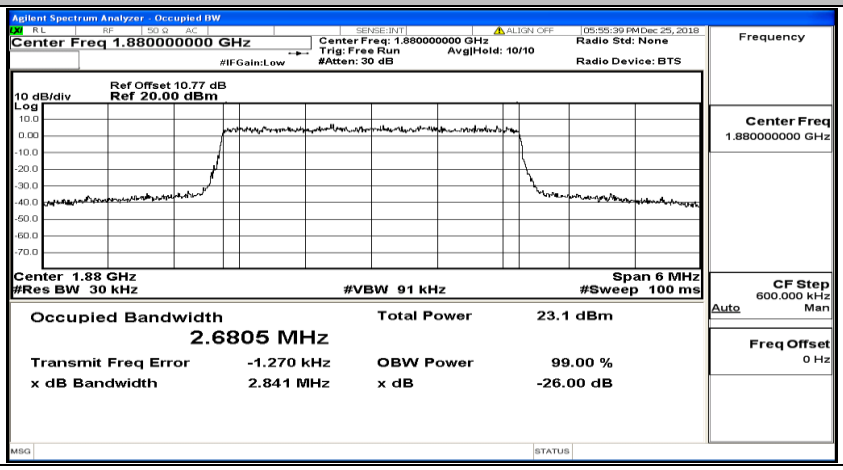
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



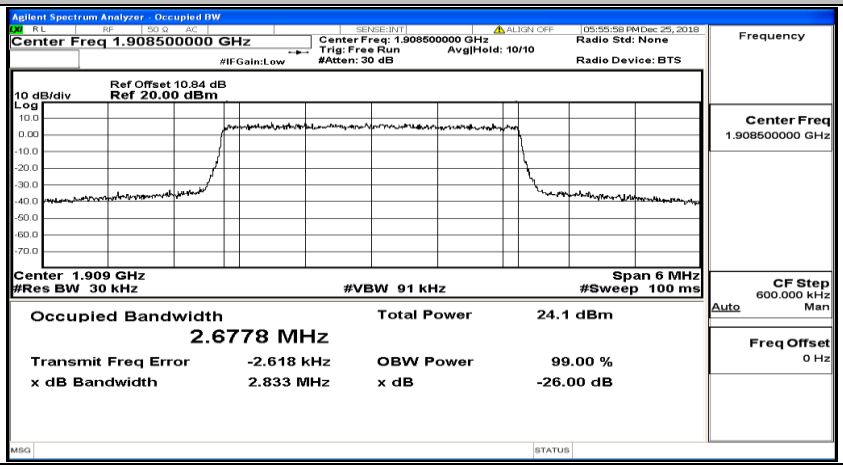
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



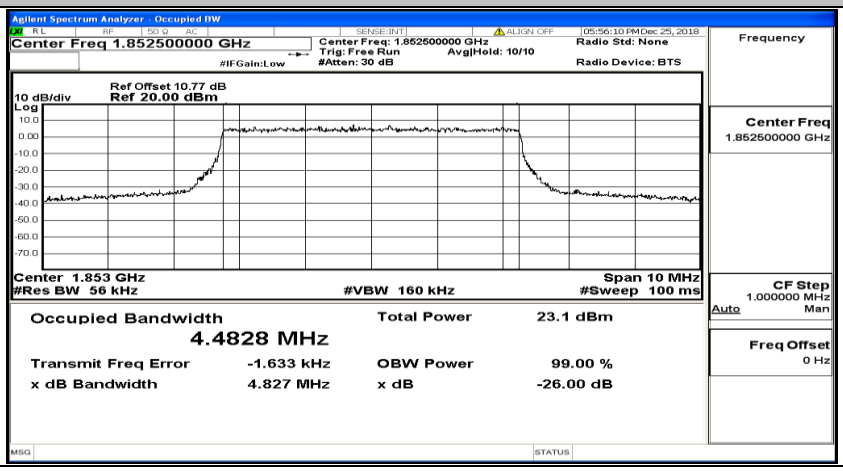
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



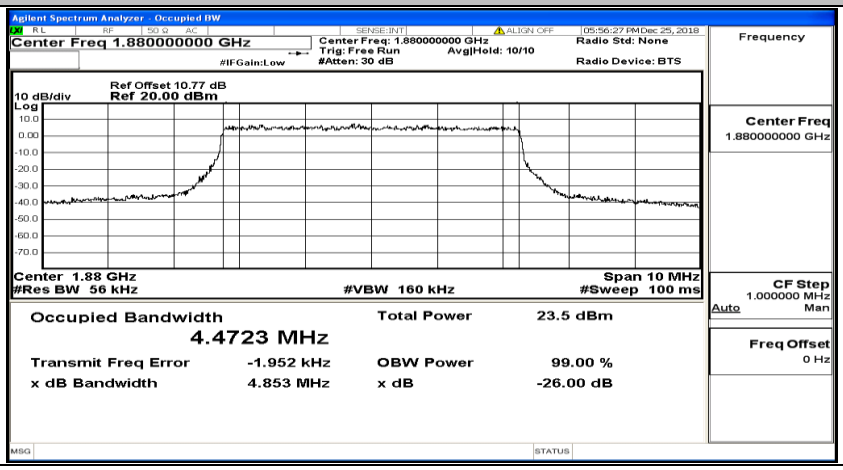
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



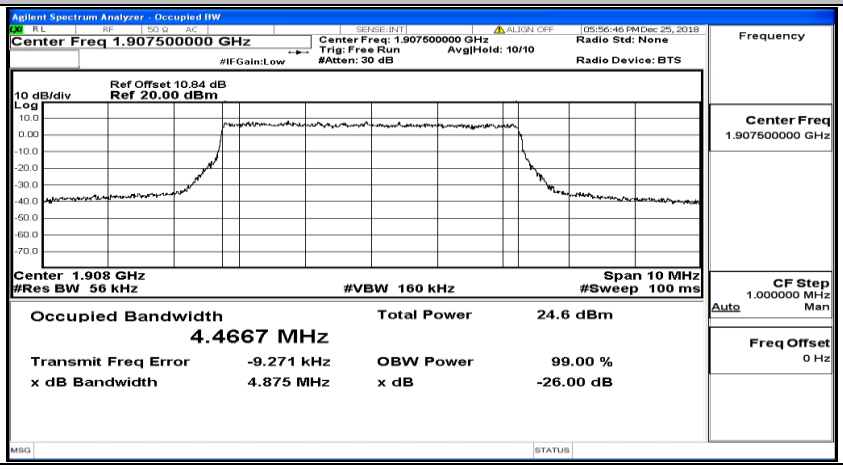
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



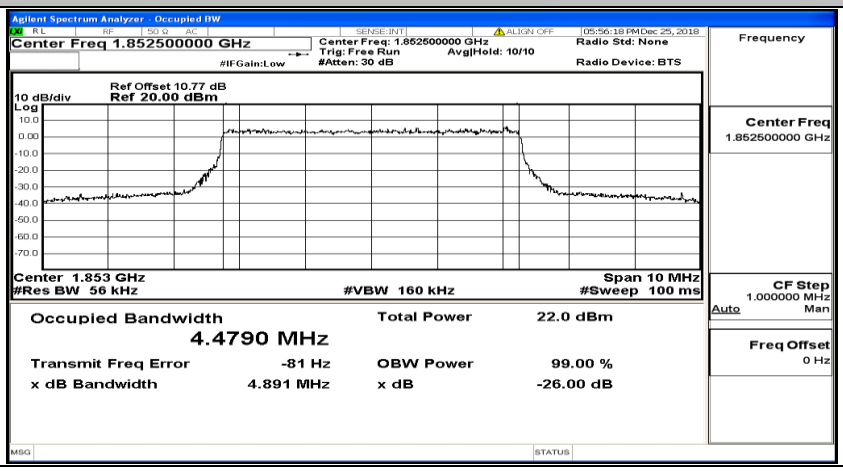
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



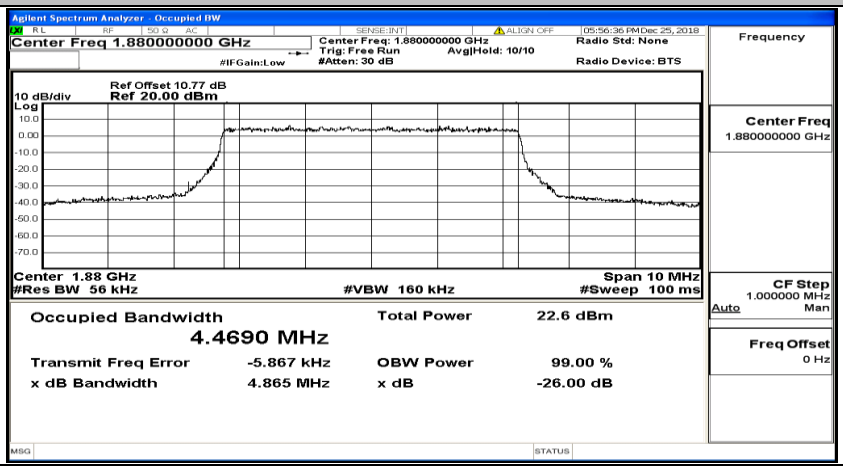
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



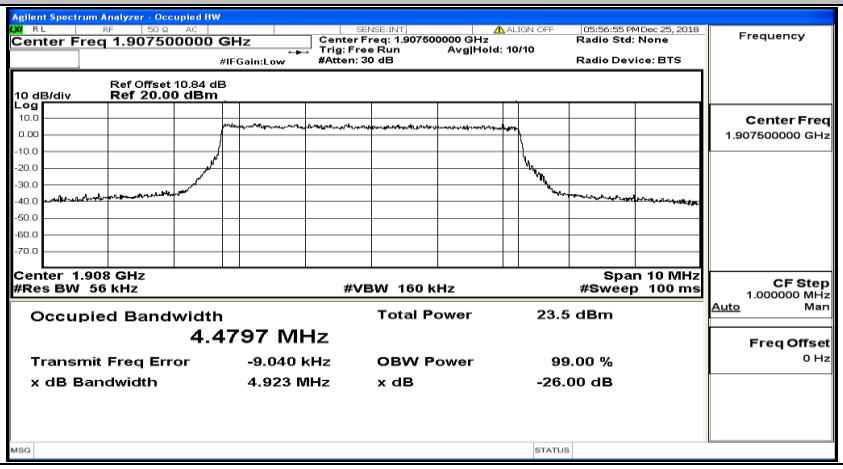
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



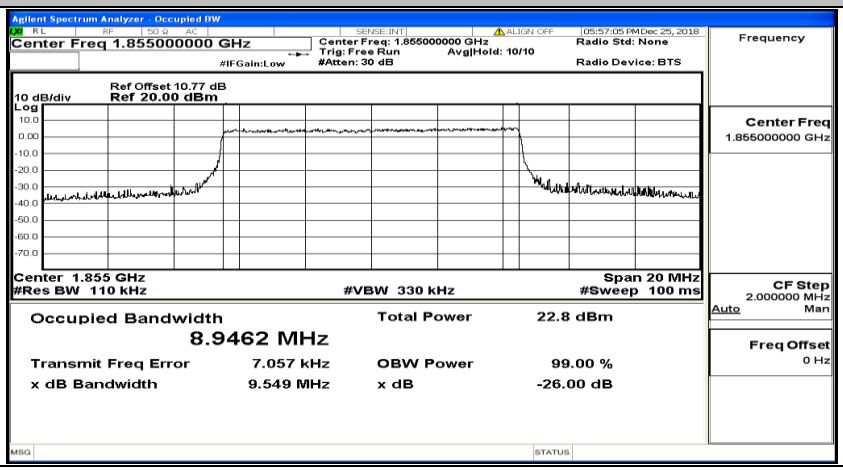
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



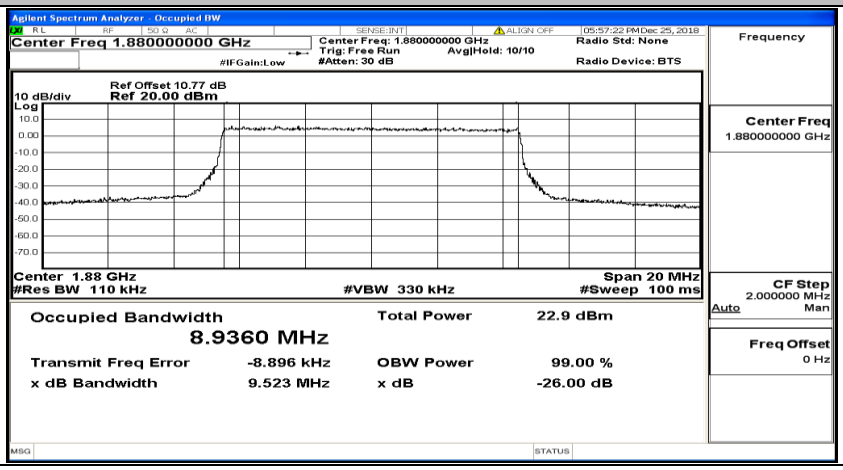
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



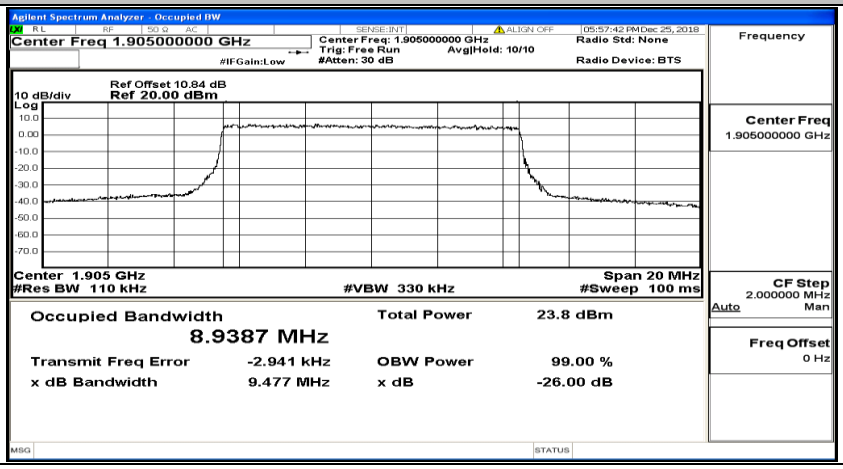
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



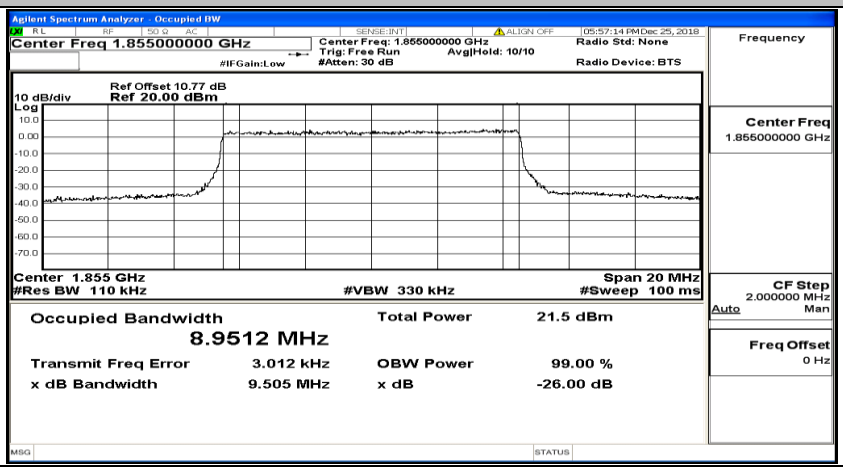
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



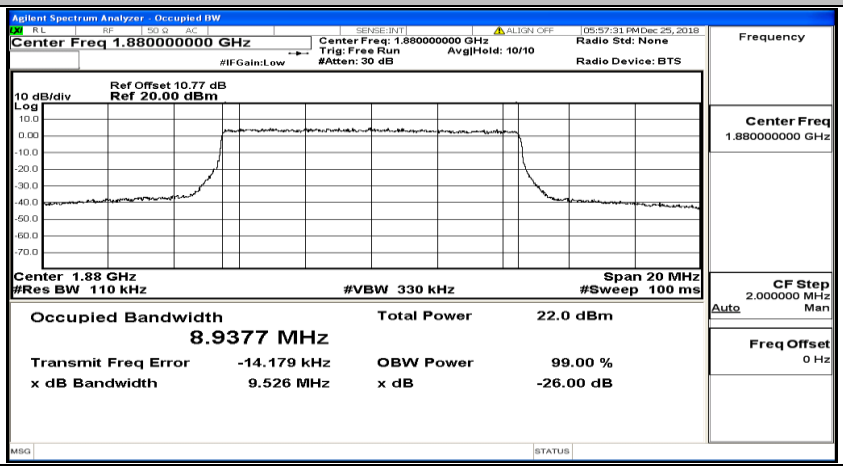
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



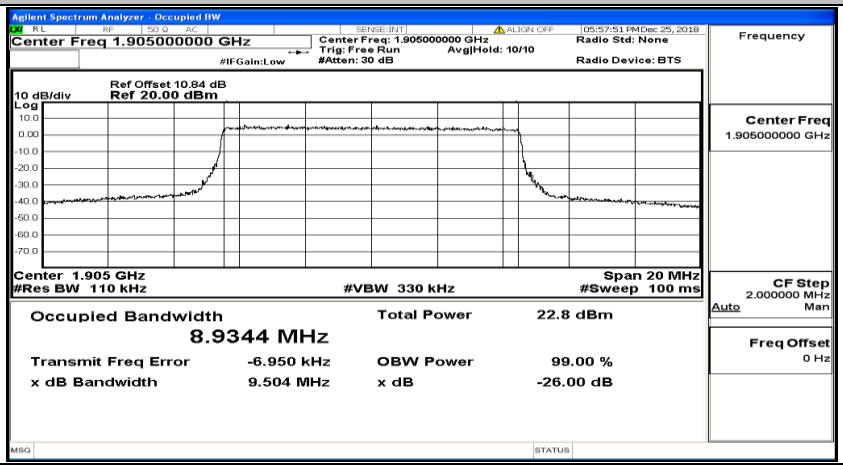
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



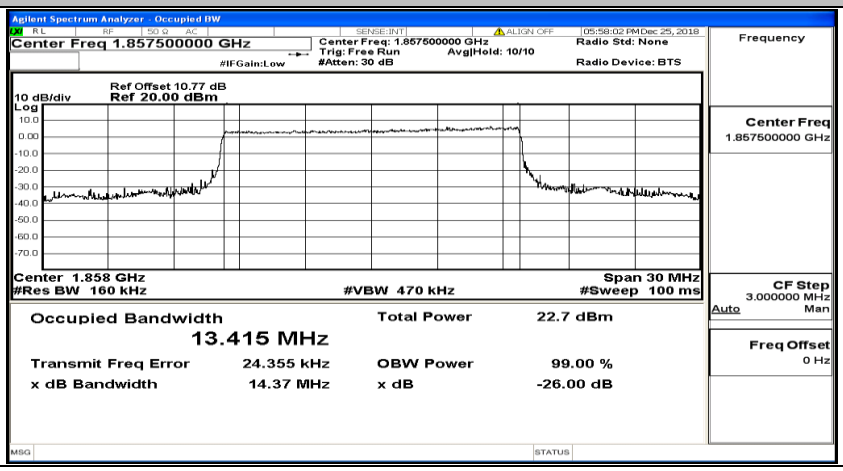
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



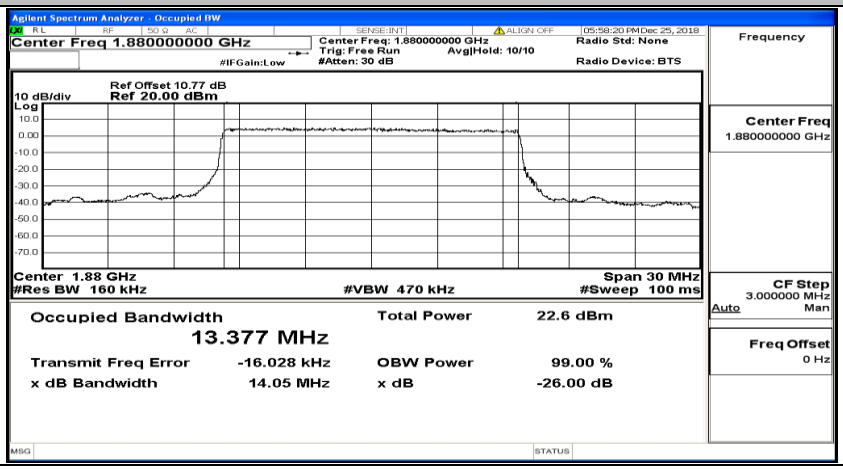
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



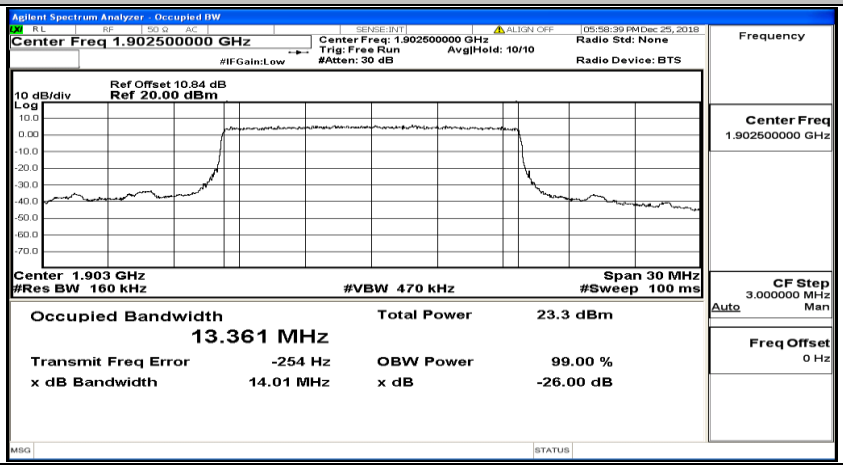
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



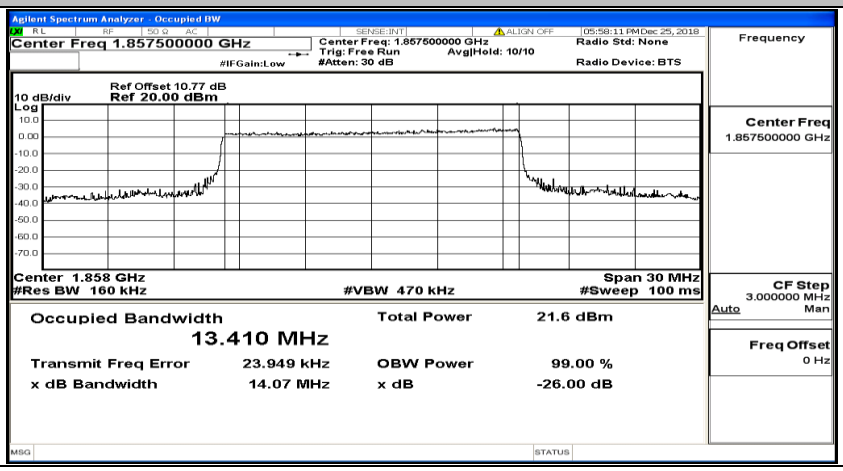
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



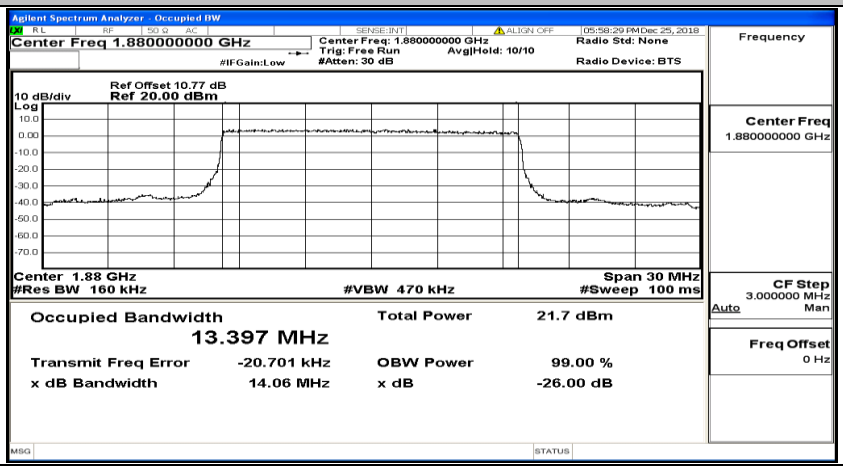
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



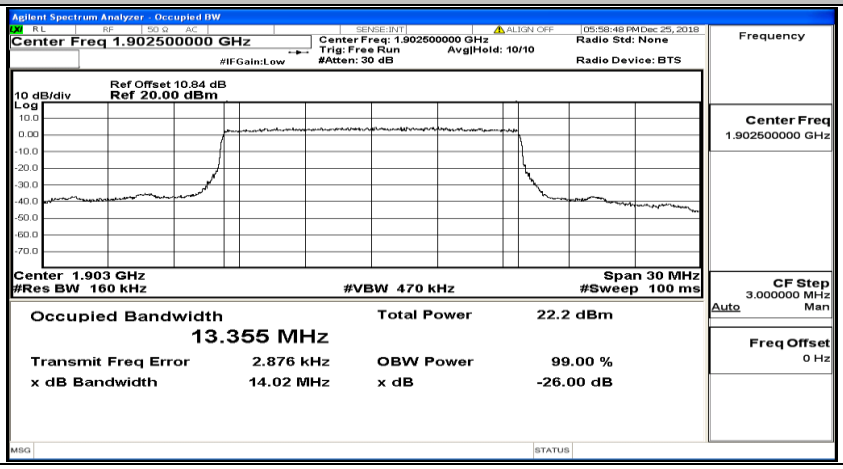
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



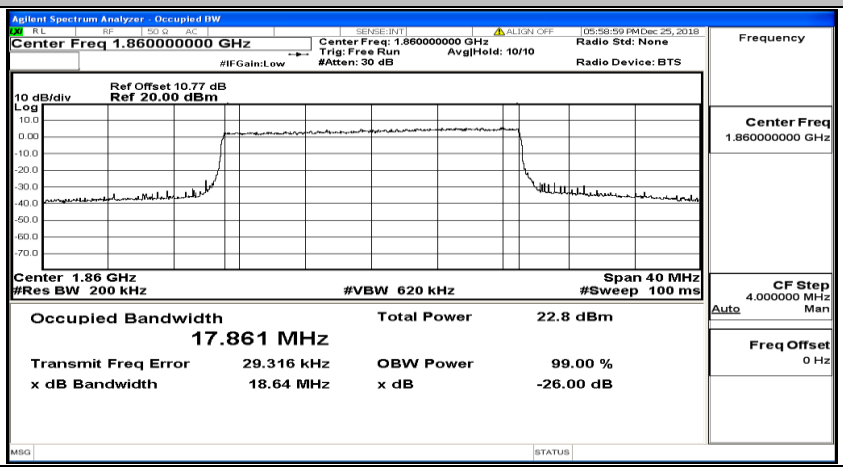
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



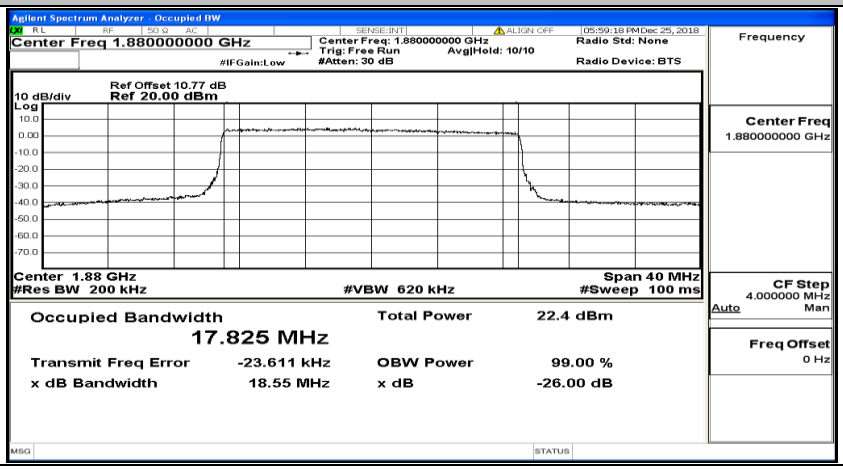
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



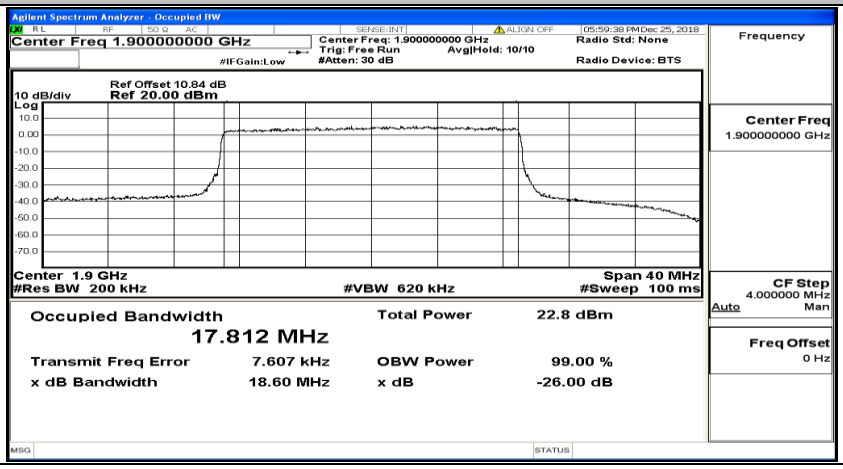
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



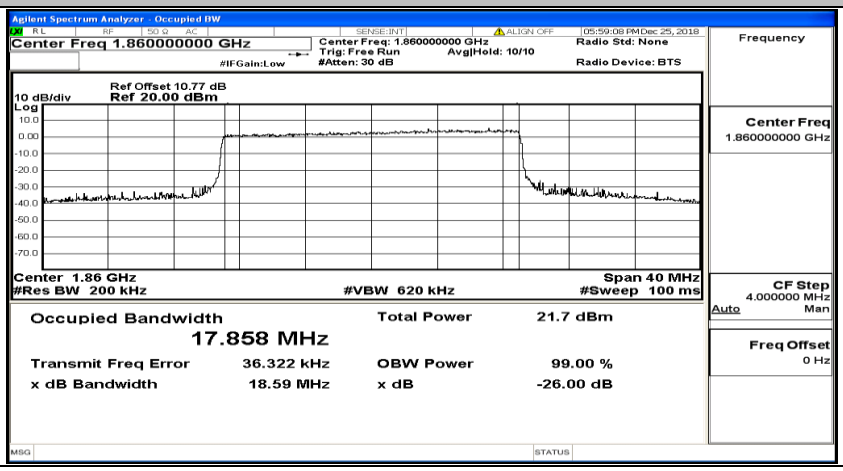
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



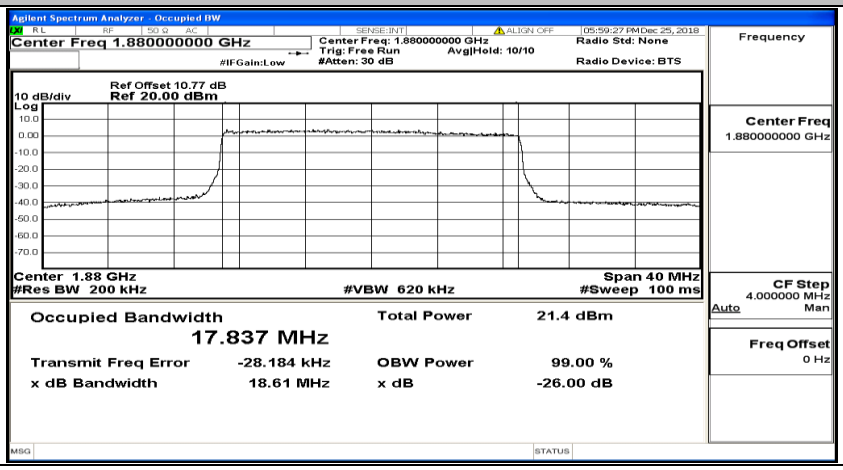
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



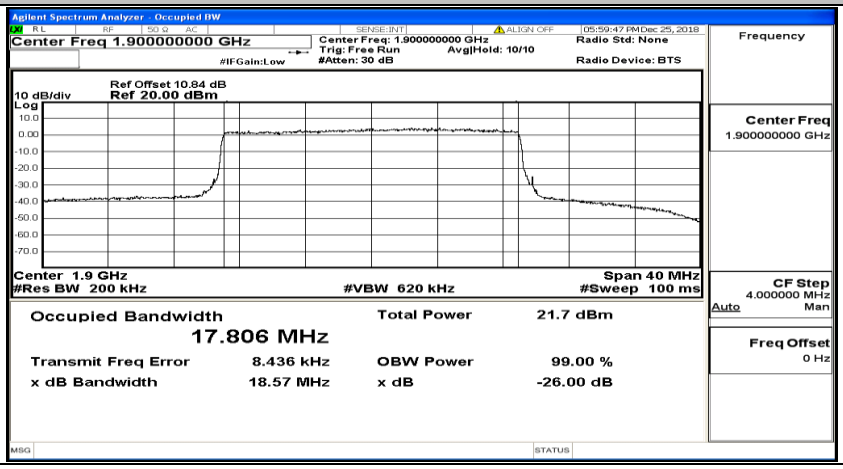
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

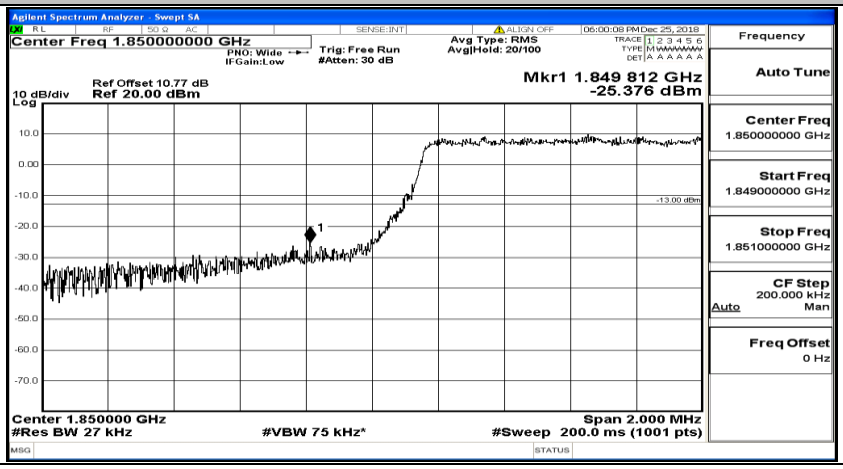


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

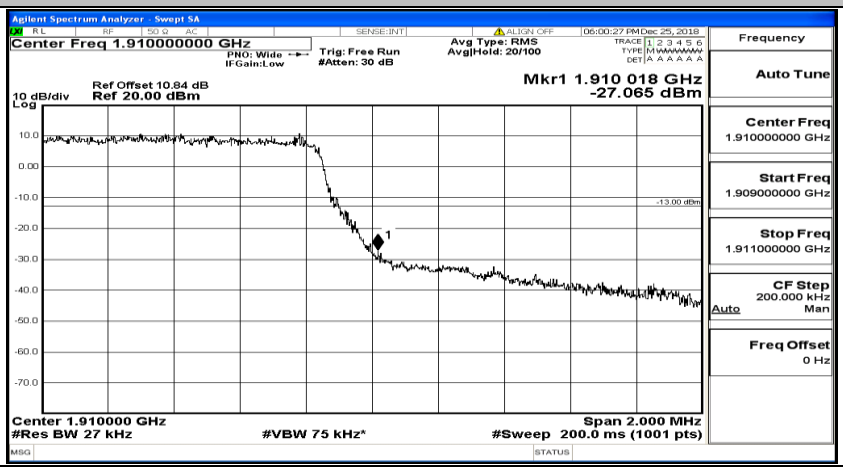


D.4 Band Edge

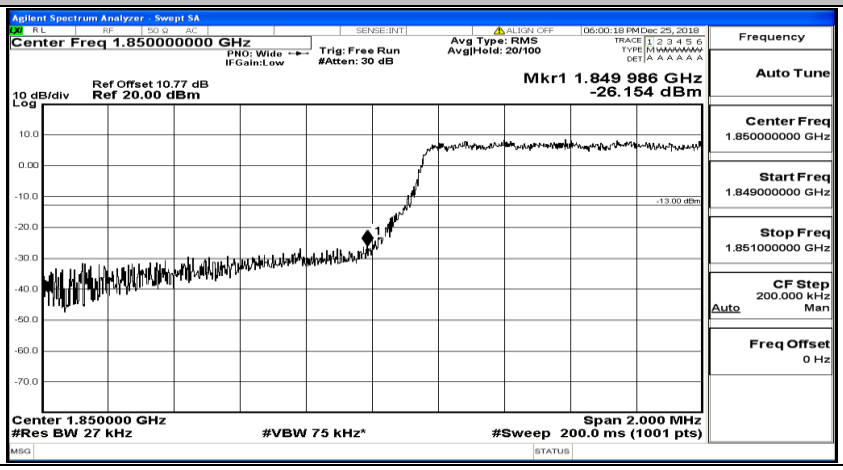
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



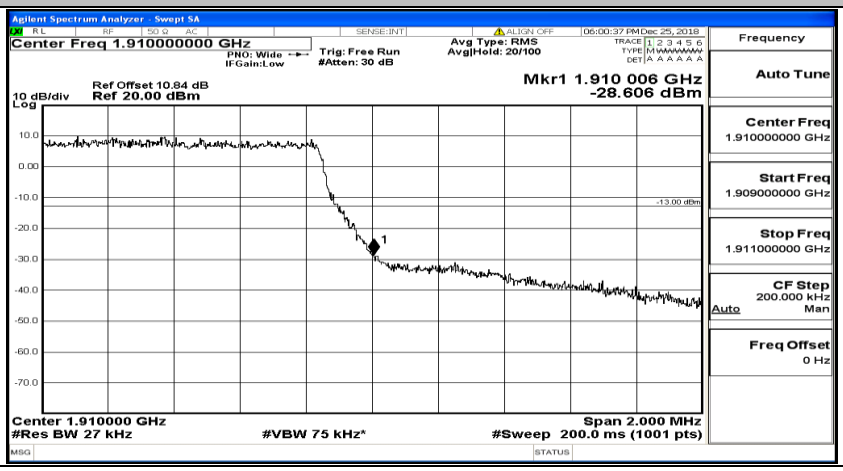
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



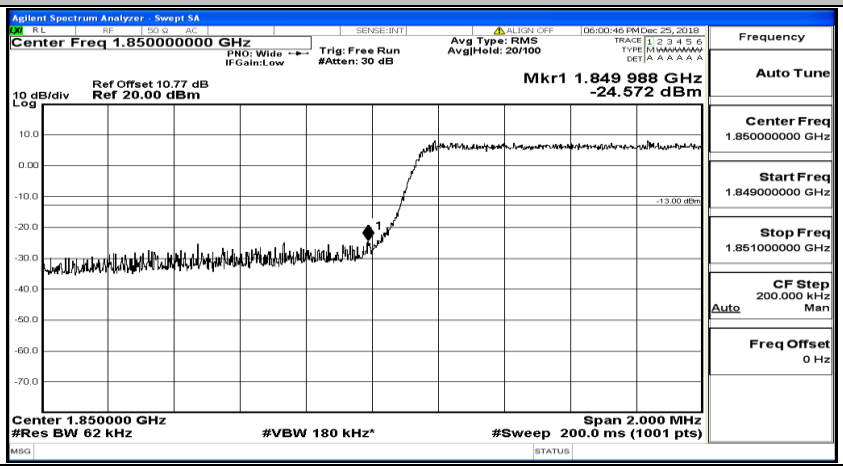
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



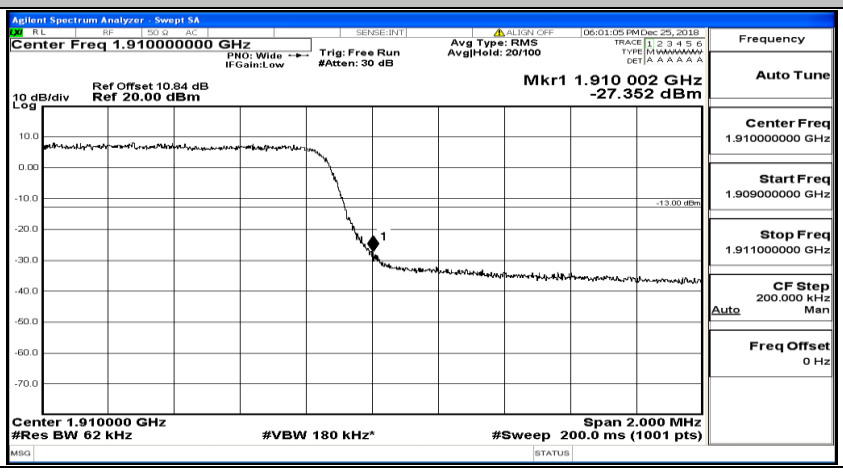
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



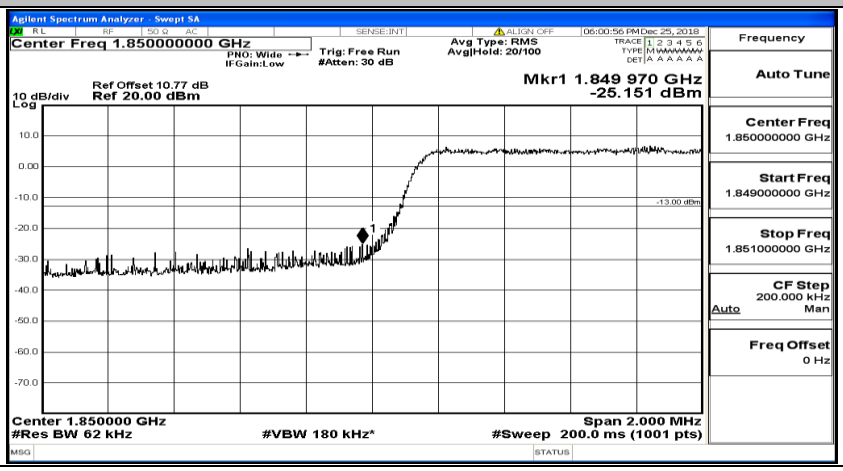
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



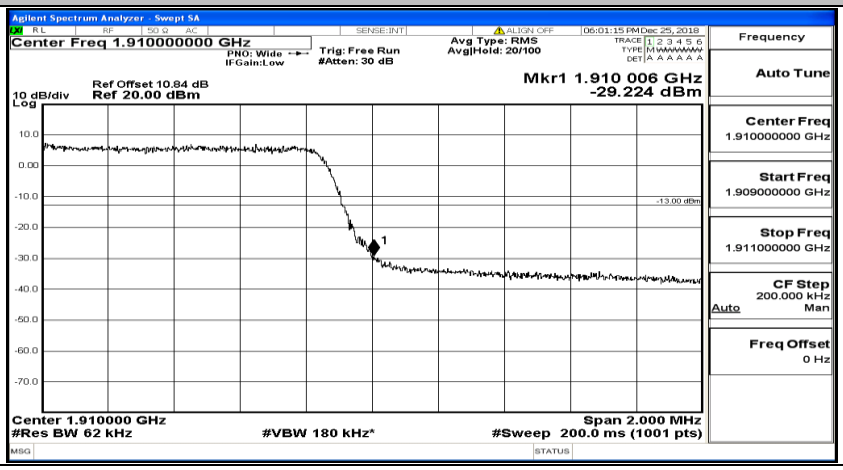
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



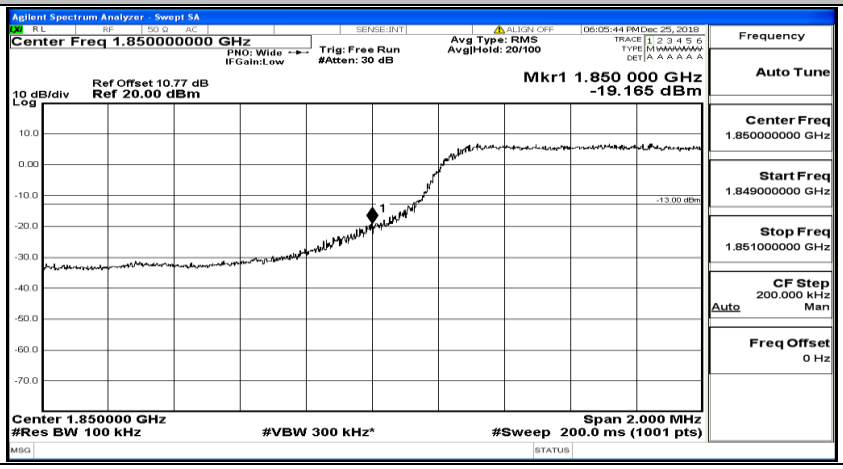
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



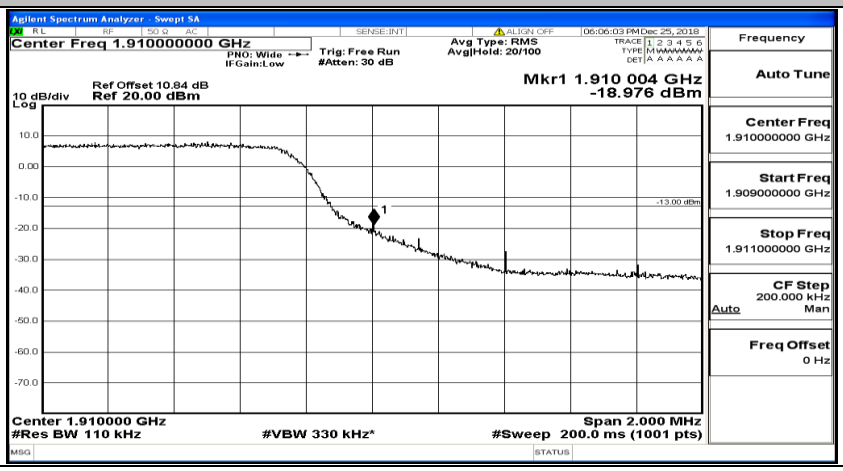
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



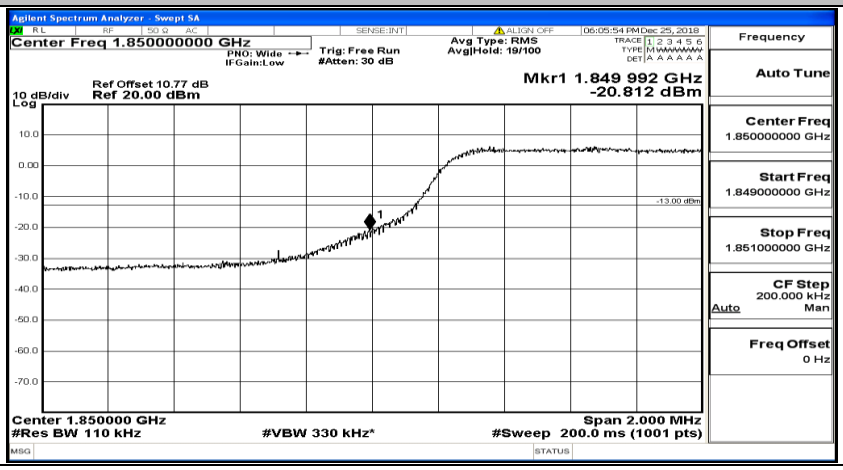
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



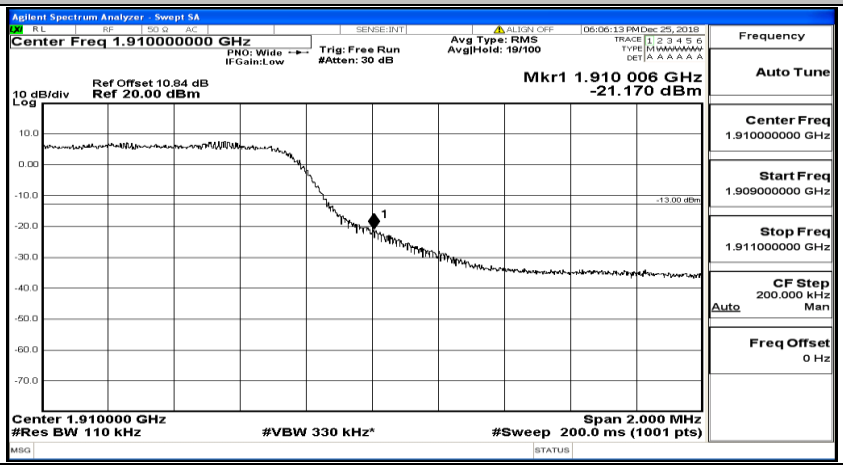
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



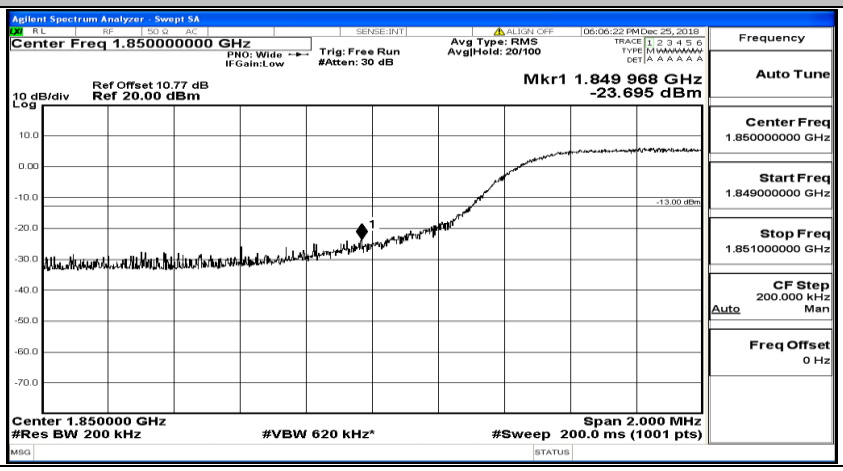
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



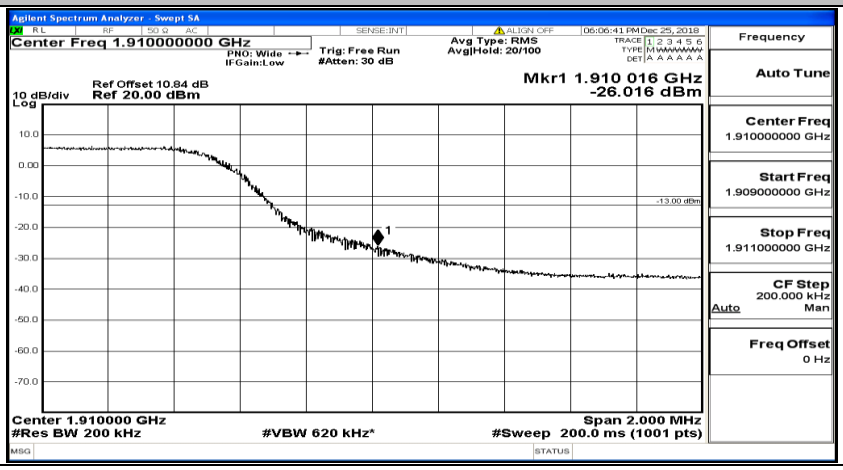
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



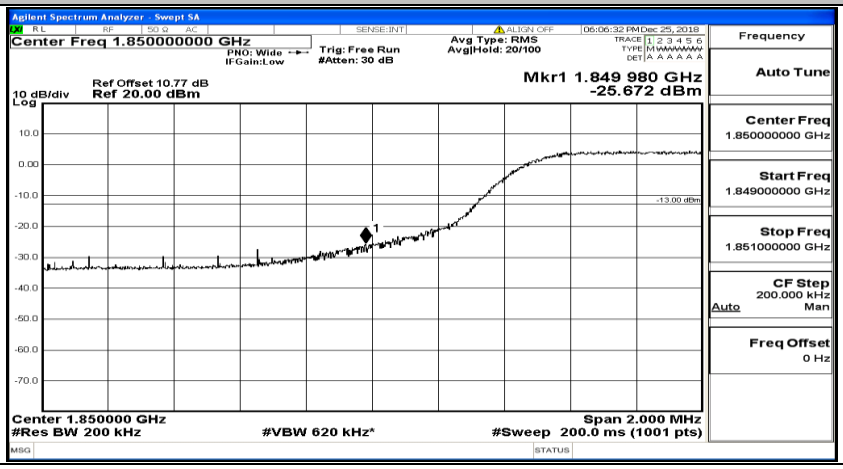
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



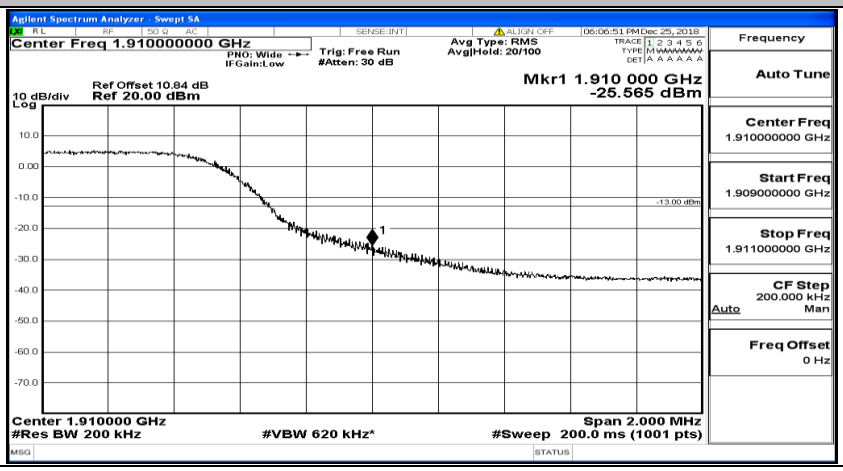
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



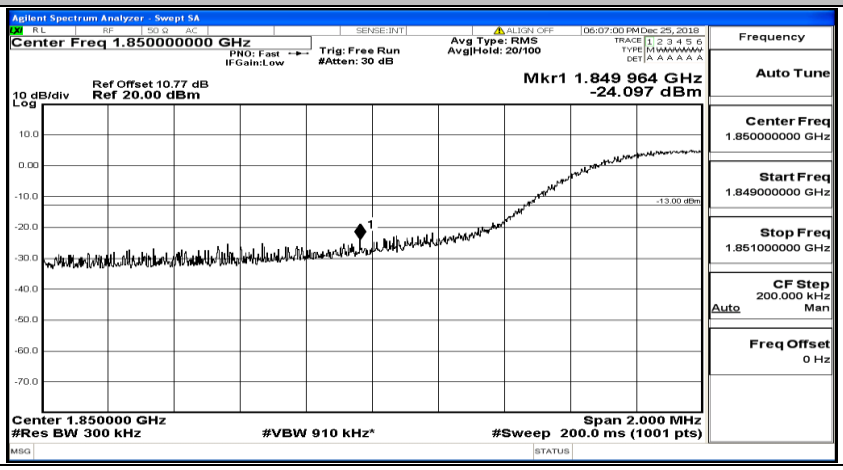
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



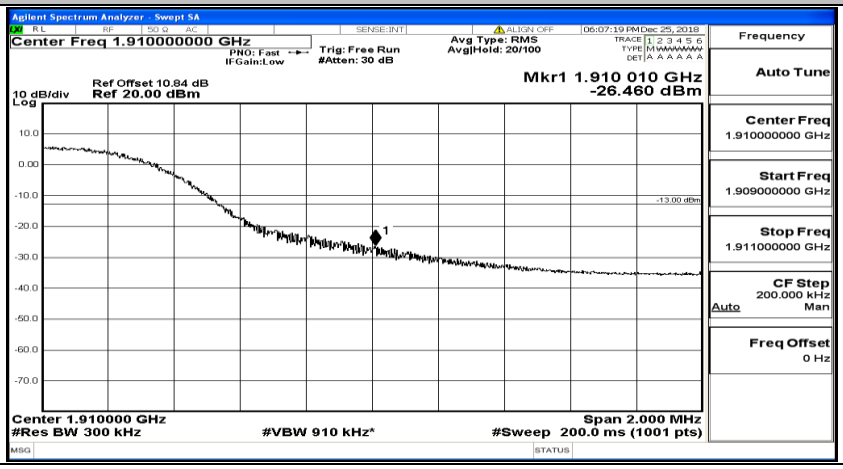
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



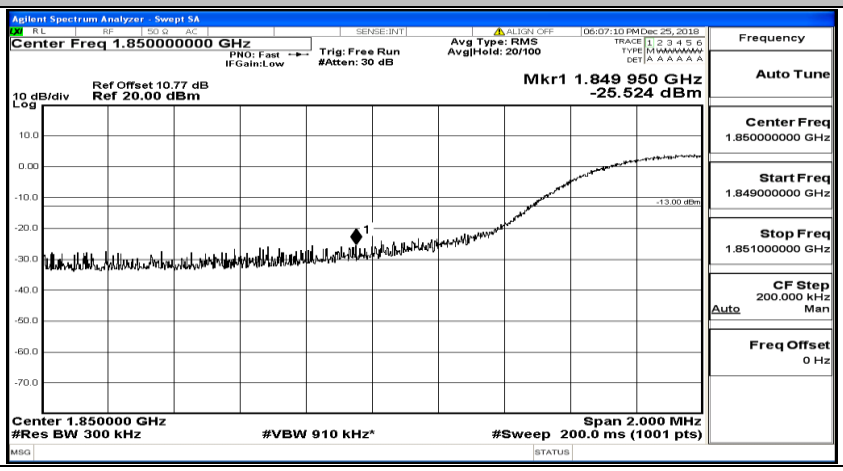
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



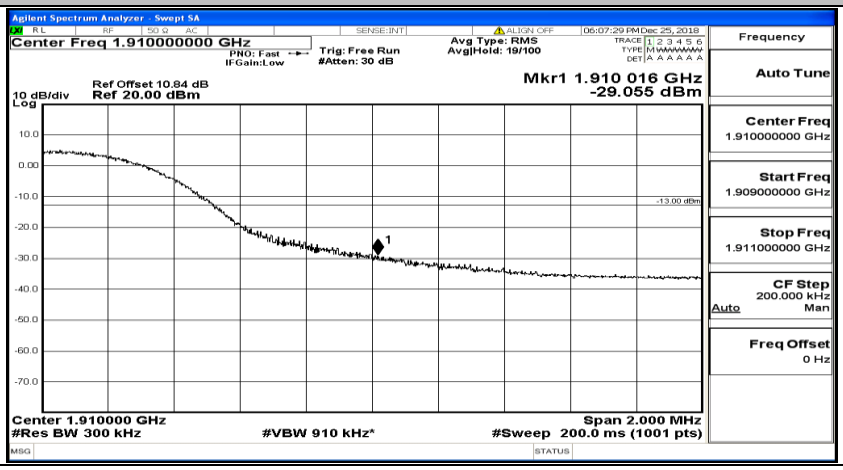
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



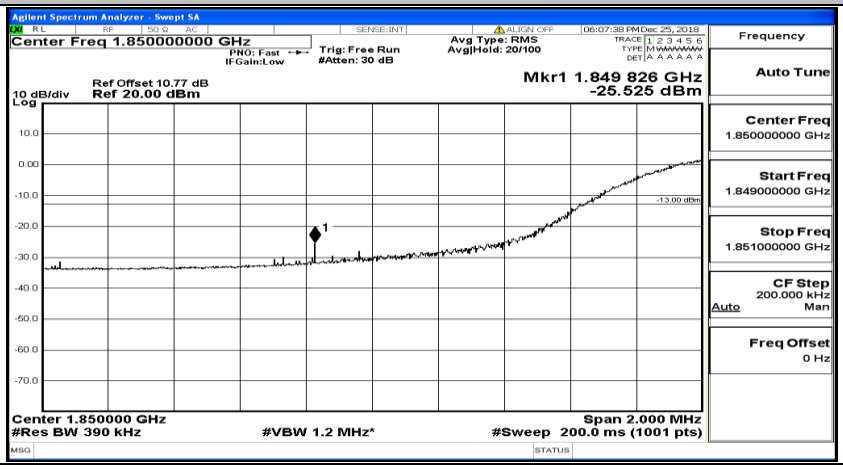
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



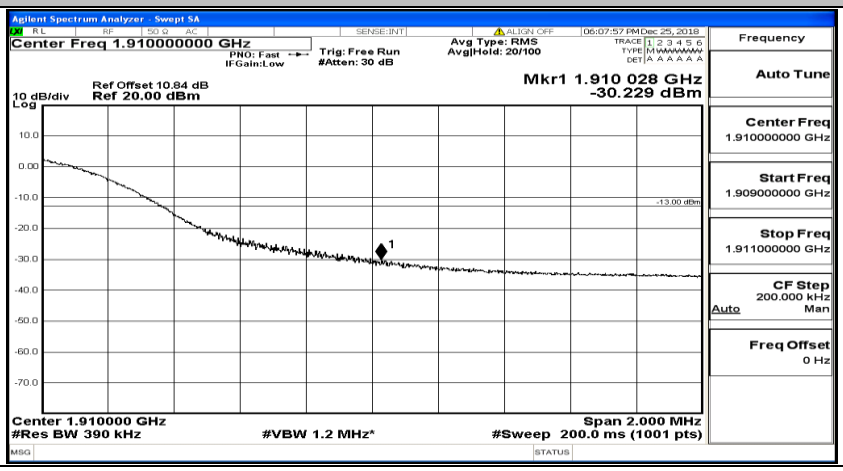
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



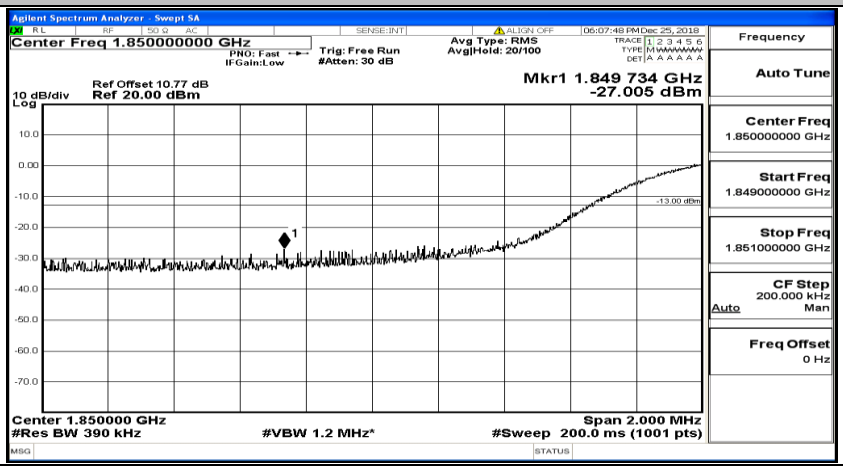
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



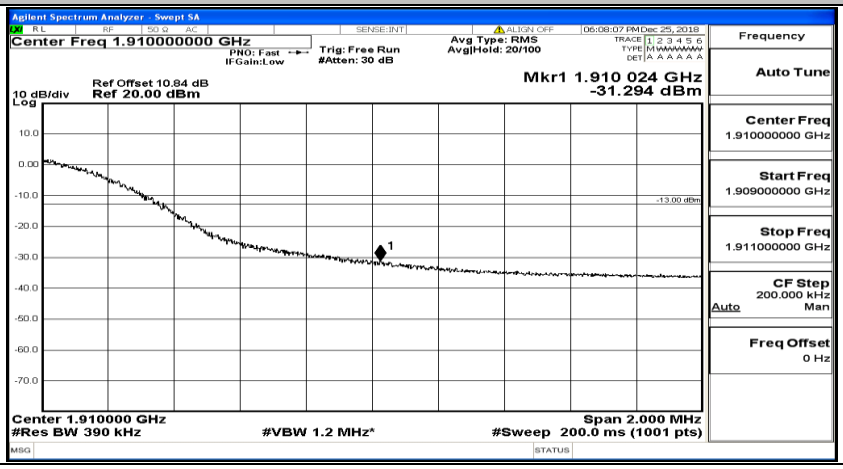
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



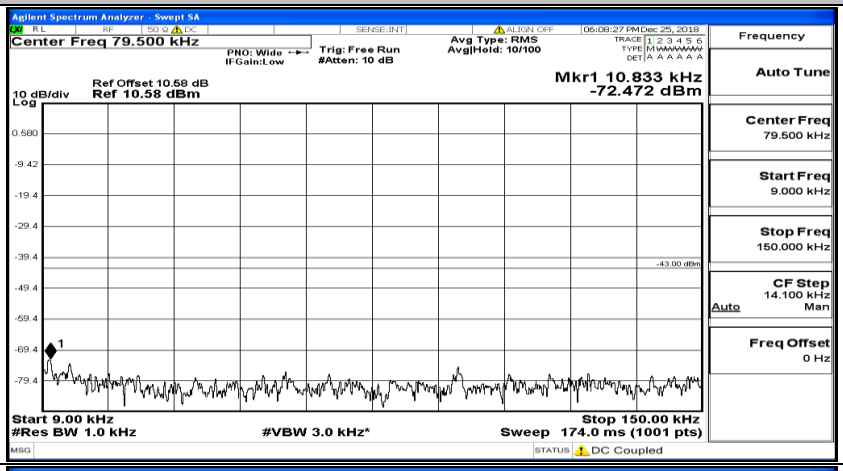
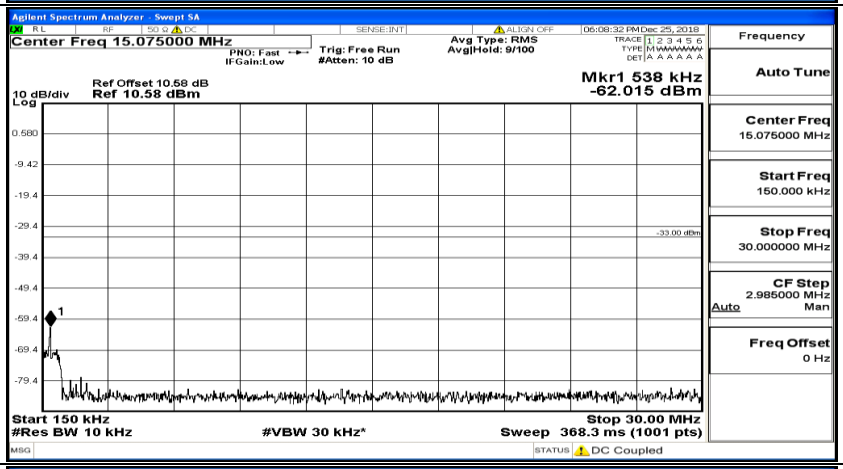
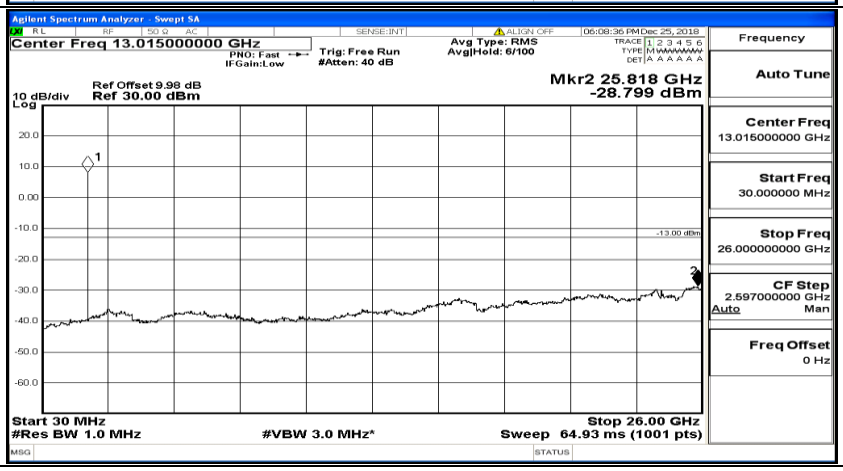
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



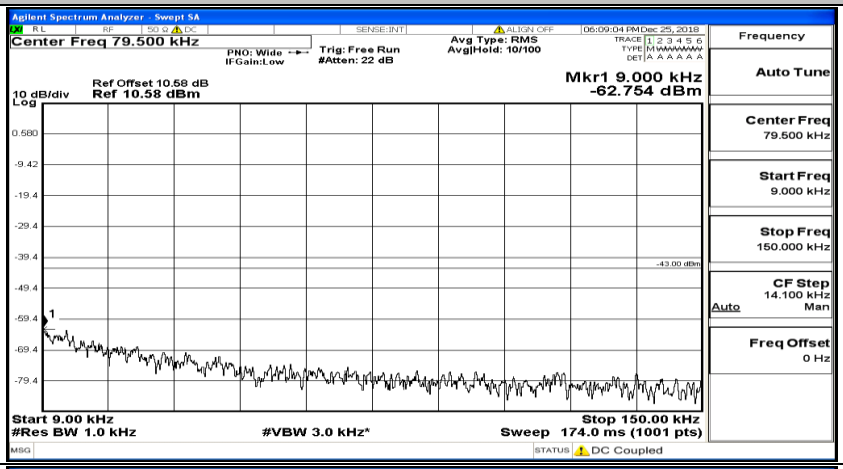
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

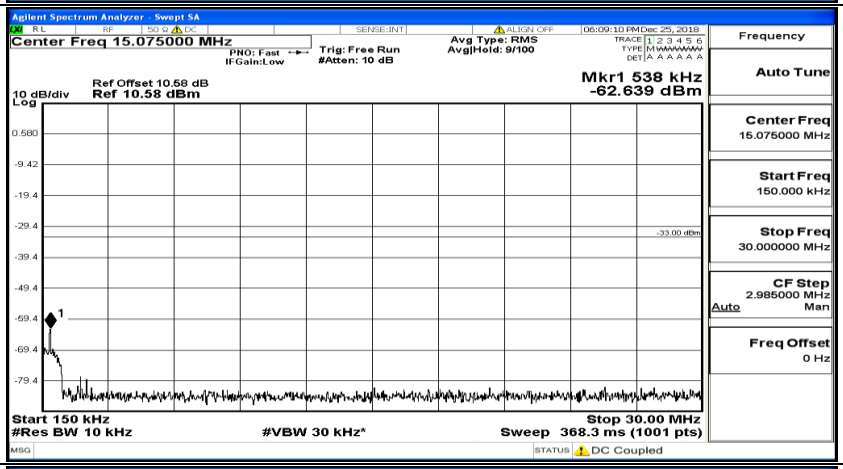


D.5 Conducted Spurious Emission

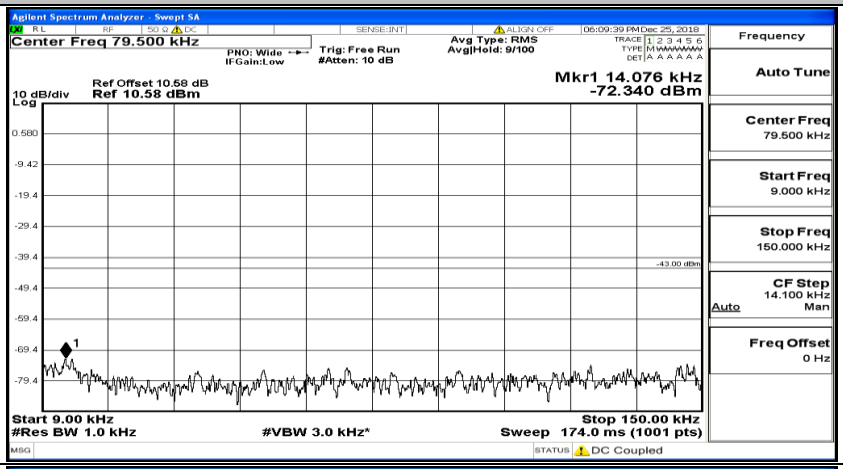
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK




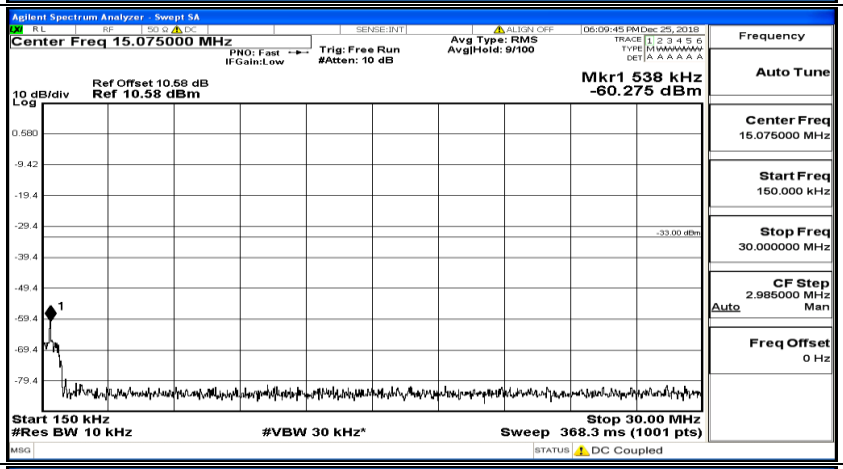
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK

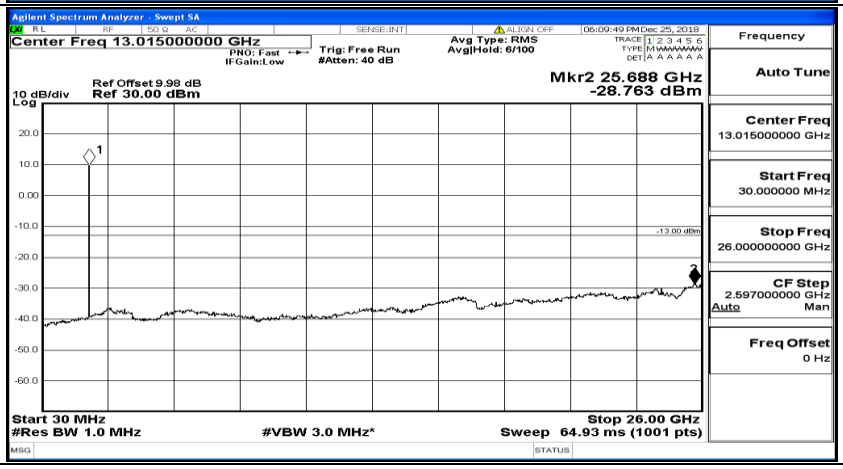




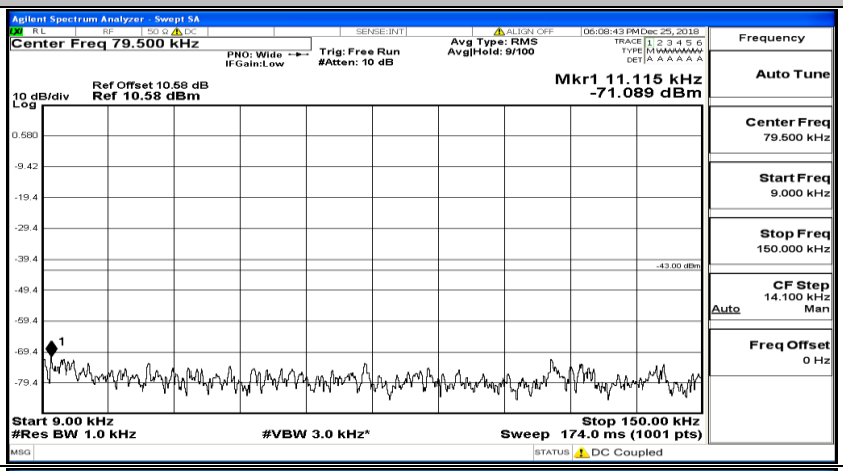
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK

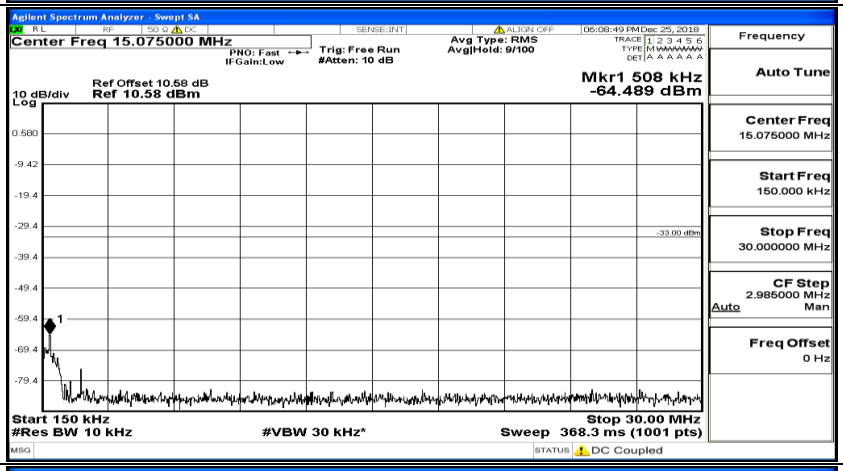




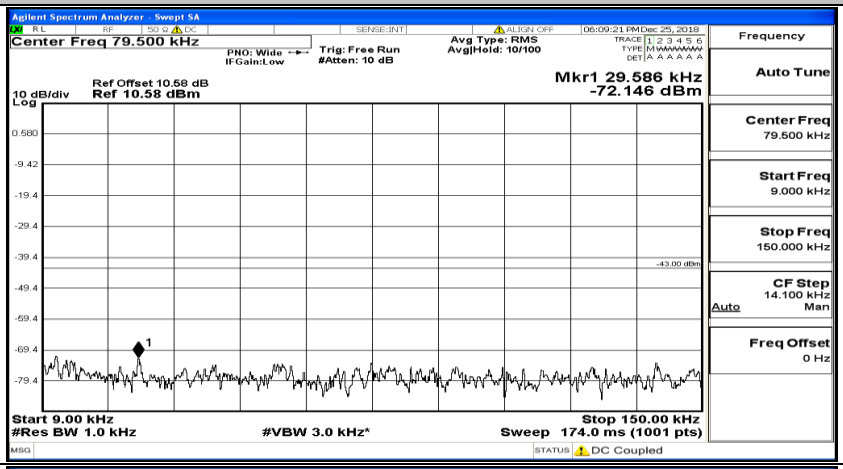


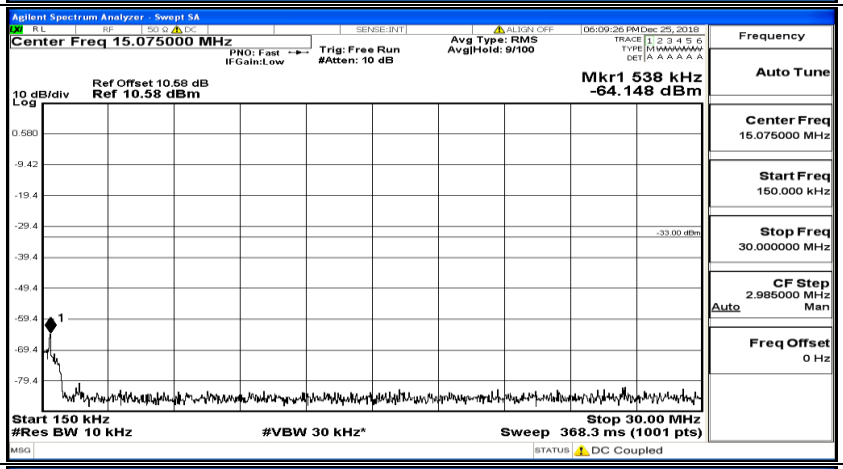
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



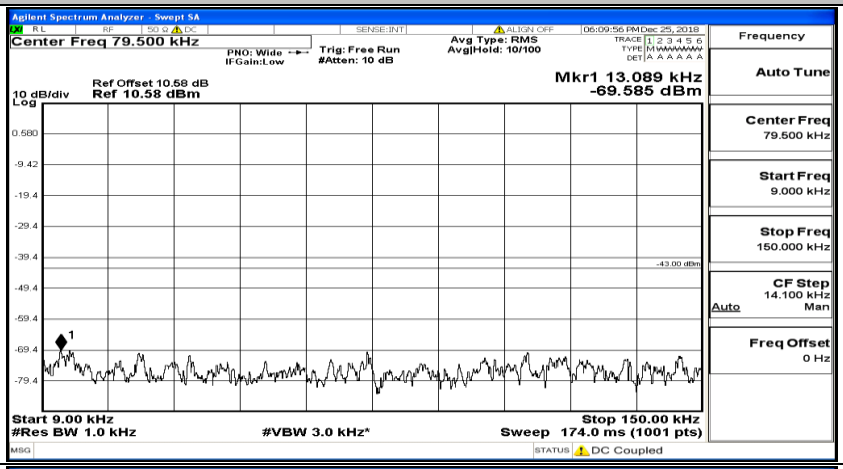


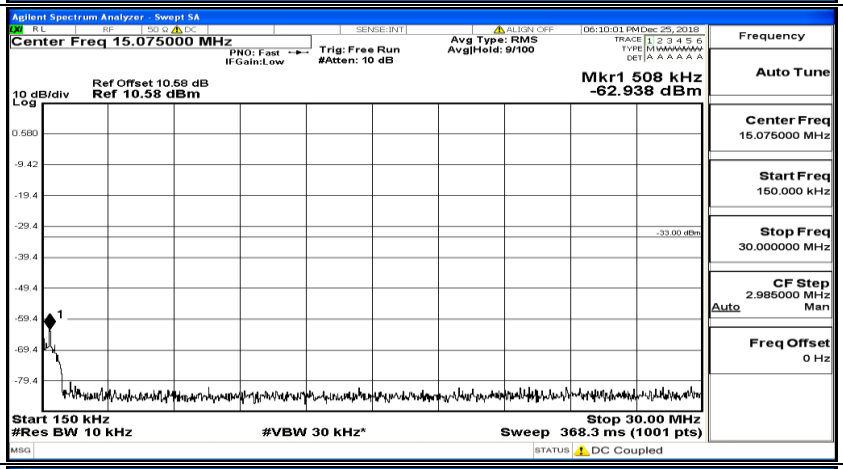
CSE Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM





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





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