

Appendix F: Test Data for E-UTRA Band 5

Product Name: 4G PHONE

Test Model: BSCUS01

Environmental Conditions

Temperature:	24.9 ° C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Wang Chuang

F.1 Conducted Output Power

<SIM1>

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	23.52	22.74	PASS
		1	3	23.54	22.79	PASS
		1	5	23.38	22.70	PASS
		3	0	23.46	22.74	PASS
		3	2	23.52	22.80	PASS
		3	3	23.42	22.77	PASS
		6	0	23.50	22.35	PASS
	MCH	1	0	23.50	22.78	PASS
		1	3	23.42	22.88	PASS
		1	5	23.32	22.83	PASS
		3	0	23.50	22.87	PASS
		3	2	23.54	22.63	PASS
		3	3	23.43	22.69	PASS
		6	0	23.46	22.30	PASS
	HCH	1	0	23.35	22.77	PASS
		1	3	23.31	22.87	PASS
		1	5	23.32	22.70	PASS
		3	0	23.23	22.12	PASS
		3	2	23.24	21.93	PASS
		3	3	23.21	21.99	PASS
		6	0	23.22	22.05	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.38	22.31	PASS
		1	7	23.41	22.32	PASS
		1	14	23.47	22.18	PASS
		8	0	23.49	22.32	PASS
		8	4	23.48	22.32	PASS
		8	7	23.37	22.41	PASS
		15	0	23.46	22.39	PASS
	MCH	1	0	23.51	22.48	PASS
		1	7	23.32	22.51	PASS
		1	14	23.35	22.49	PASS
		8	0	23.43	22.09	PASS
		8	4	23.55	22.32	PASS
		8	7	23.44	22.34	PASS
		15	0	23.51	22.50	PASS
	HCH	1	0	23.32	22.55	PASS
		1	7	23.40	22.53	PASS
		1	14	23.36	22.47	PASS
		8	0	23.33	22.17	PASS
		8	4	23.31	22.16	PASS
		8	7	23.26	22.20	PASS
		15	0	23.26	22.24	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.49	22.48	PASS
		1	12	23.46	22.47	PASS
		1	24	23.51	22.49	PASS
		12	0	23.53	22.47	PASS
		12	6	23.40	22.53	PASS
		12	13	23.52	22.51	PASS
		25	0	23.54	22.51	PASS
	MCH	1	0	23.56	22.43	PASS
		1	12	23.46	22.50	PASS
		1	24	23.42	22.29	PASS
		12	0	23.52	22.49	PASS
		12	6	23.60	22.66	PASS
		12	13	23.57	22.69	PASS
		25	0	23.56	22.62	PASS
	HCH	1	0	23.23	22.79	PASS
		1	12	23.26	22.70	PASS
		1	24	23.22	22.57	PASS
		12	0	23.38	22.00	PASS
		12	6	23.32	22.38	PASS
		12	13	23.26	22.27	PASS
		25	0	23.30	22.45	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.48	22.40	PASS
		1	24	23.50	22.40	PASS
		1	49	23.51	22.43	PASS
		25	0	23.50	22.50	PASS
		25	12	23.56	22.43	PASS
		25	25	23.31	22.23	PASS
		50	0	23.58	22.49	PASS
	MCH	1	0	23.55	22.07	PASS
		1	24	23.39	22.41	PASS
		1	49	23.29	21.93	PASS
		25	0	23.60	22.26	PASS
		25	12	23.61	22.45	PASS
		25	25	23.44	22.18	PASS
		50	0	23.61	22.52	PASS
	HCH	1	0	23.43	22.96	PASS
		1	24	23.19	22.80	PASS
		1	49	23.16	22.70	PASS
		25	0	23.14	22.14	PASS
		25	12	23.27	22.11	PASS
		25	25	23.42	22.38	PASS
		50	0	23.29	22.19	PASS

<SIM2>

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	23.35	22.63	PASS
		1	3	23.37	22.71	PASS
		1	5	23.21	22.59	PASS
		3	0	23.37	22.57	PASS
		3	2	23.44	22.63	PASS
		3	3	23.26	22.69	PASS
		6	0	23.37	22.18	PASS
	MCH	1	0	23.39	22.71	PASS
		1	3	23.30	22.76	PASS
		1	5	23.18	22.67	PASS
		3	0	23.37	22.72	PASS
		3	2	23.37	22.52	PASS
		3	3	23.30	22.56	PASS
		6	0	23.33	22.17	PASS
	HCH	1	0	23.27	22.65	PASS
		1	3	23.17	22.77	PASS
		1	5	23.20	22.57	PASS
		3	0	23.13	22.01	PASS
		3	2	23.09	21.78	PASS
		3	3	23.09	21.89	PASS
		6	0	23.08	21.89	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.26	22.14	PASS
		1	7	23.28	22.19	PASS
		1	14	23.31	22.11	PASS
		8	0	23.39	22.16	PASS
		8	4	23.32	22.16	PASS
		8	7	23.27	22.26	PASS
		15	0	23.36	22.22	PASS
	MCH	1	0	23.43	22.39	PASS
		1	7	23.20	22.38	PASS
		1	14	23.20	22.37	PASS
		8	0	23.27	21.95	PASS
		8	4	23.41	22.18	PASS
		8	7	23.34	22.24	PASS
		15	0	23.39	22.41	PASS
	HCH	1	0	23.19	22.43	PASS
		1	7	23.26	22.45	PASS
		1	14	23.29	22.34	PASS
		8	0	23.26	22.01	PASS
		8	4	23.23	22.00	PASS
		8	7	23.11	22.07	PASS
		15	0	23.16	22.13	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.42	22.32	PASS
		1	12	23.37	22.38	PASS
		1	24	23.44	22.34	PASS
		12	0	23.46	22.38	PASS
		12	6	23.30	22.38	PASS
		12	13	23.40	22.39	PASS
		25	0	23.45	22.39	PASS
	MCH	1	0	23.49	22.32	PASS
		1	12	23.30	22.37	PASS
		1	24	23.32	22.16	PASS
		12	0	23.38	22.36	PASS
		12	6	23.51	22.49	PASS
		12	13	23.44	22.61	PASS
		25	0	23.43	22.50	PASS
	HCH	1	0	23.07	22.71	PASS
		1	12	23.10	22.60	PASS
		1	24	23.12	22.46	PASS
		12	0	23.29	21.89	PASS
		12	6	23.21	22.29	PASS
		12	13	23.10	22.11	PASS
		25	0	23.18	22.34	PASS

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.36	22.28	PASS
		1	24	23.39	22.32	PASS
		1	49	23.43	22.28	PASS
		25	0	23.39	22.40	PASS
		25	12	23.45	22.29	PASS
		25	25	23.22	22.14	PASS
		50	0	23.45	22.35	PASS
	MCH	1	0	23.40	21.95	PASS
		1	24	23.22	22.28	PASS
		1	49	23.19	21.77	PASS
		25	0	23.46	22.19	PASS
		25	12	23.48	22.35	PASS
		25	25	23.29	22.02	PASS
		50	0	23.51	22.45	PASS
	HCH	1	0	23.32	22.83	PASS
		1	24	23.04	22.64	PASS
		1	49	23.07	22.56	PASS
		25	0	22.97	22.04	PASS
		25	12	23.12	21.99	PASS
		25	25	23.34	22.23	PASS
		50	0	23.20	22.11	PASS

F.2 Peak-to-Average Ratio

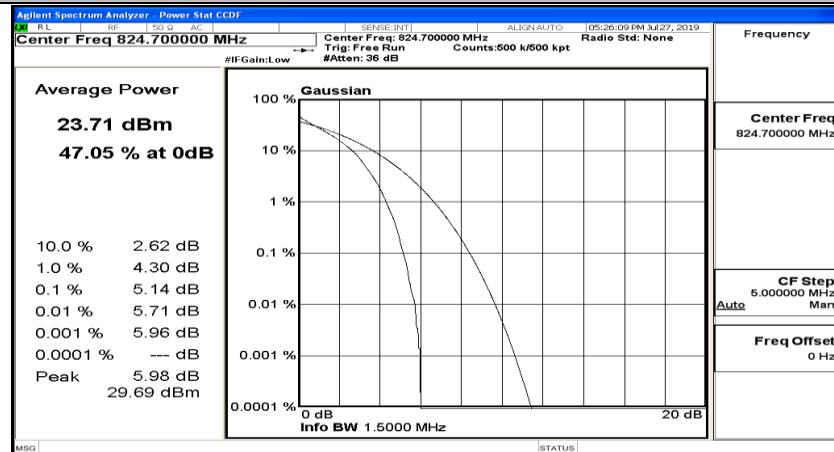
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.14	<13	PASS
	MCH	5.53	<13	PASS
	HCH	5.05	<13	PASS
16QAM	LCH	6.07	<13	PASS
	MCH	6.49	<13	PASS
	HCH	6.07	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.28	<13	PASS
	MCH	5.57	<13	PASS
	HCH	5.28	<13	PASS
16QAM	LCH	6.24	<13	PASS
	MCH	6.64	<13	PASS
	HCH	6.13	<13	PASS

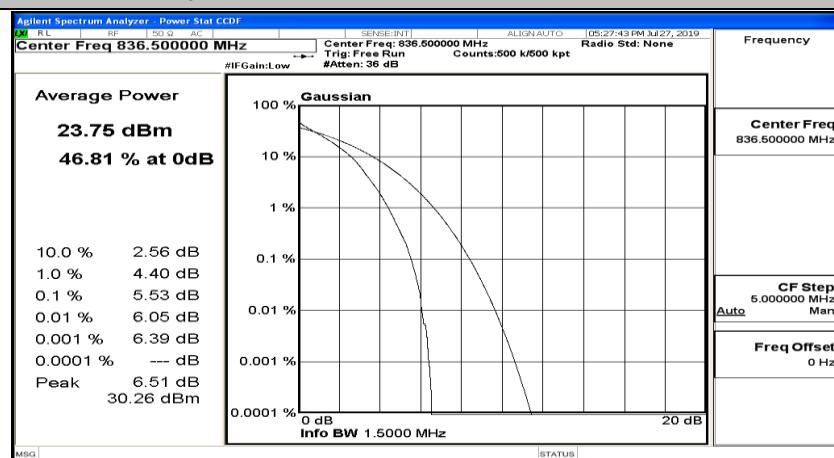
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.26	<13	PASS
	MCH	5.53	<13	PASS
	HCH	5.23	<13	PASS
16QAM	LCH	6.17	<13	PASS
	MCH	6.35	<13	PASS
	HCH	6.05	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.53	<13	PASS
	MCH	5.54	<13	PASS
	HCH	5.49	<13	PASS
16QAM	LCH	6.24	<13	PASS
	MCH	6.3	<13	PASS
	HCH	6.31	<13	PASS

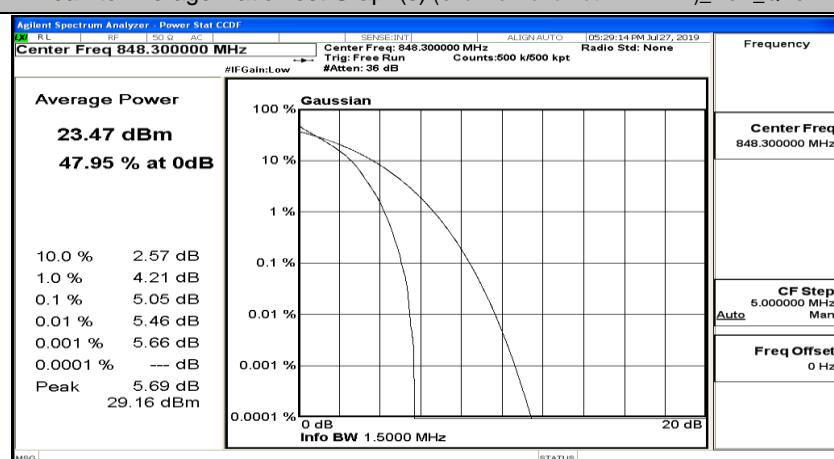
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



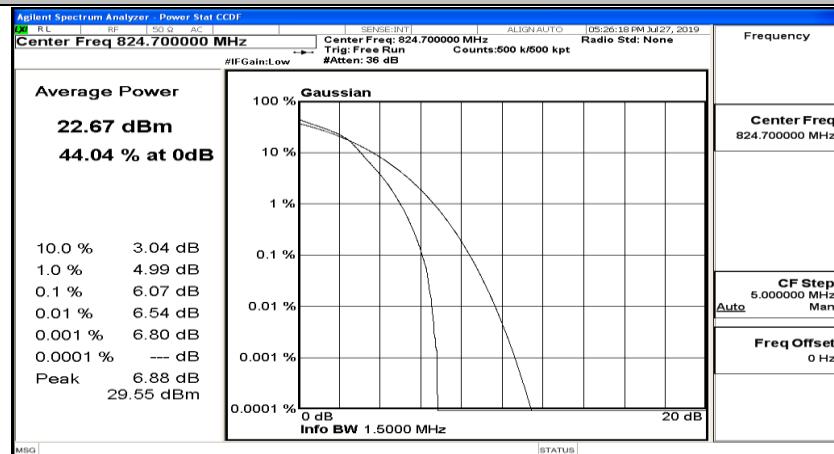
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



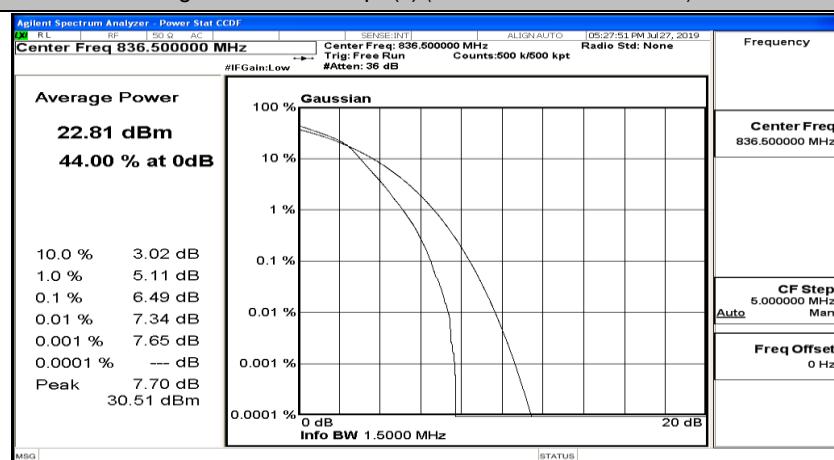
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



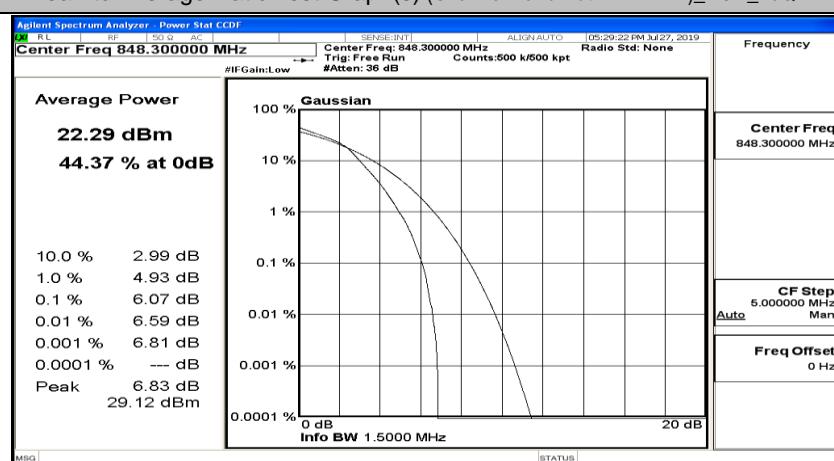
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



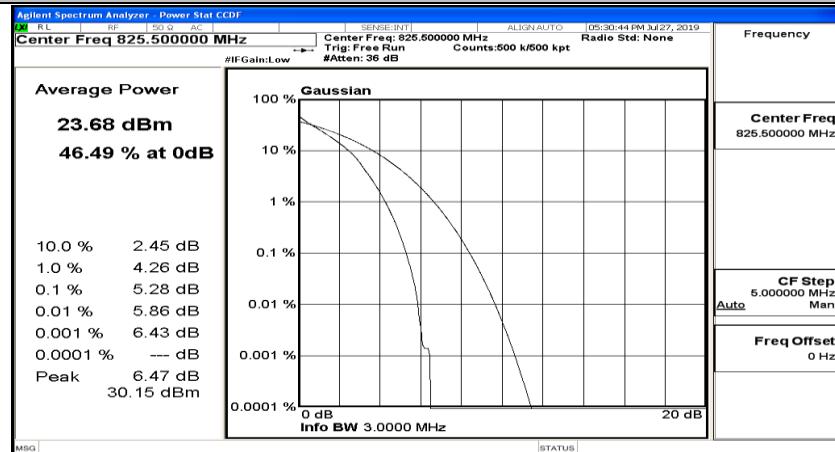
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



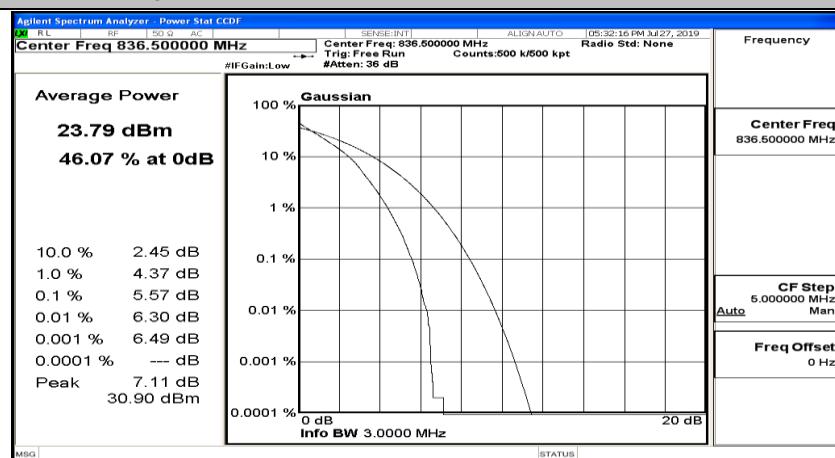
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



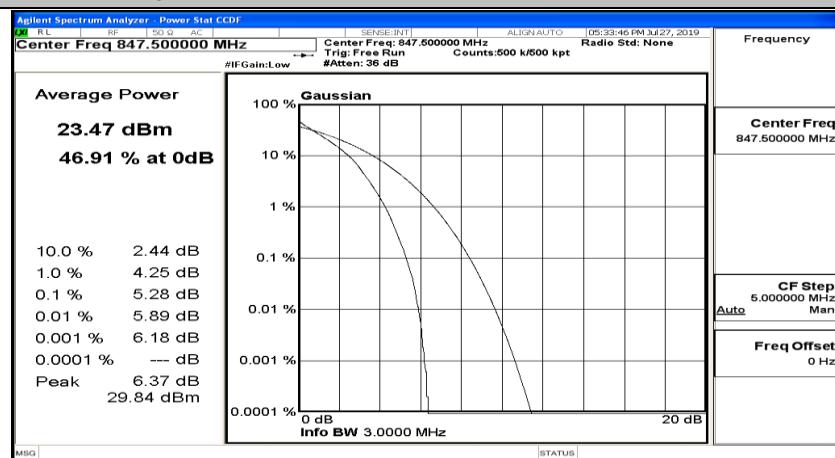
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



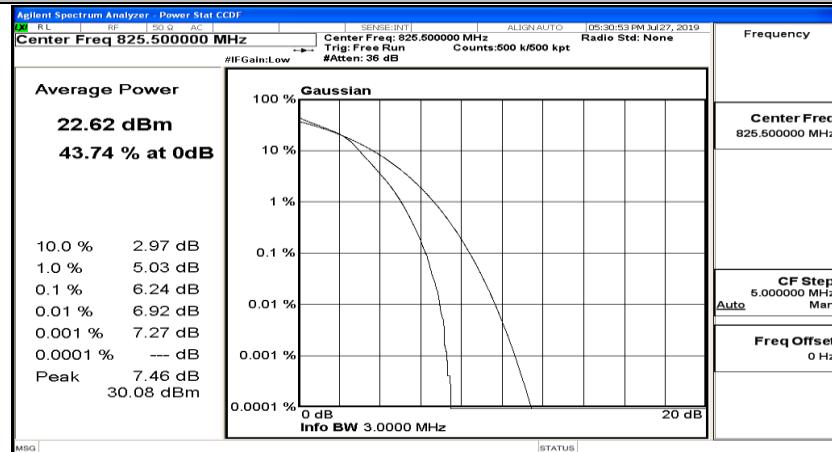
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



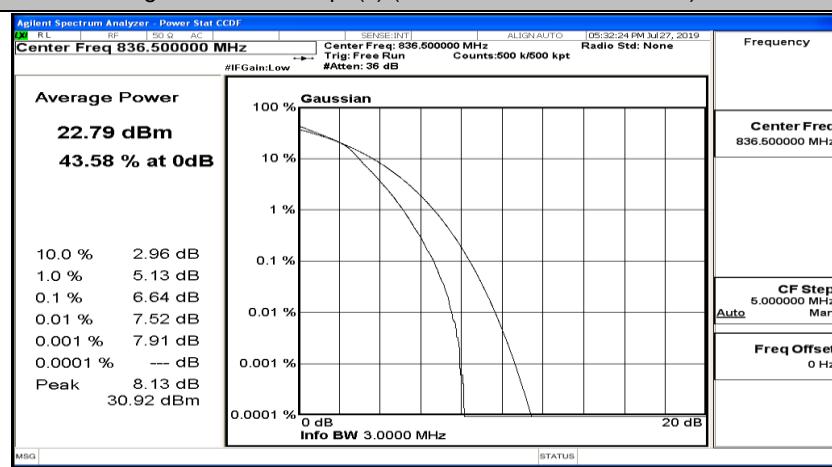
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



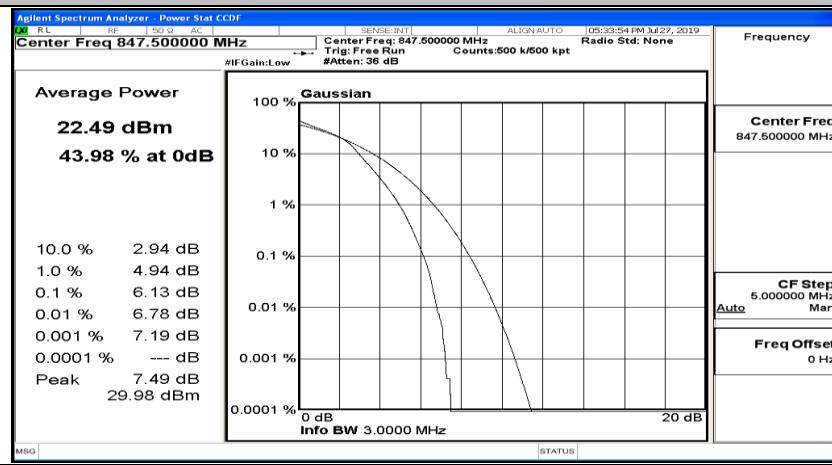
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



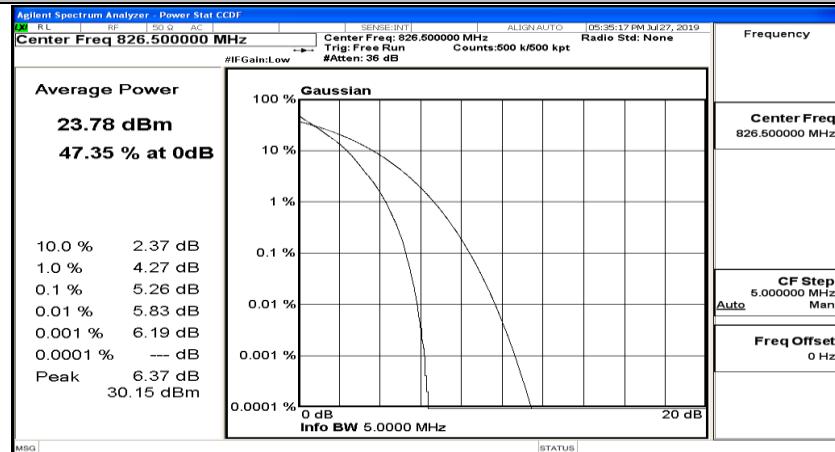
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



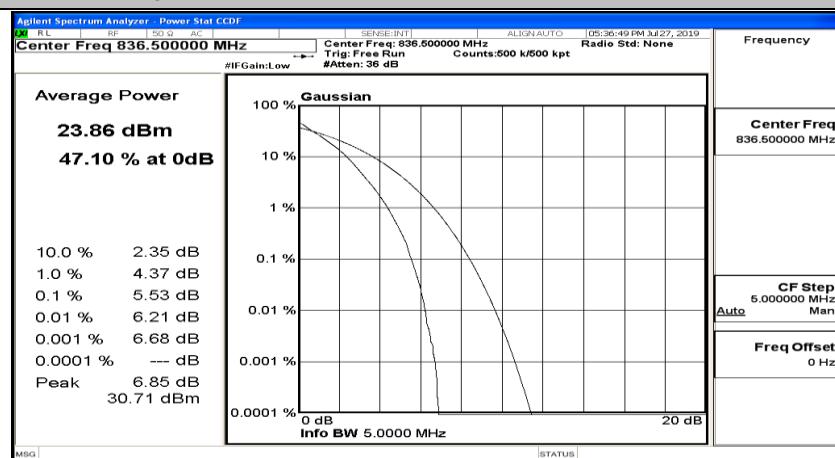
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



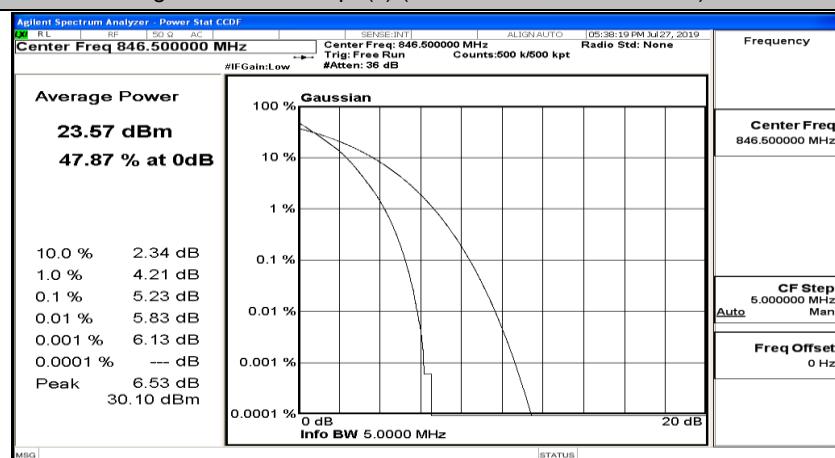
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



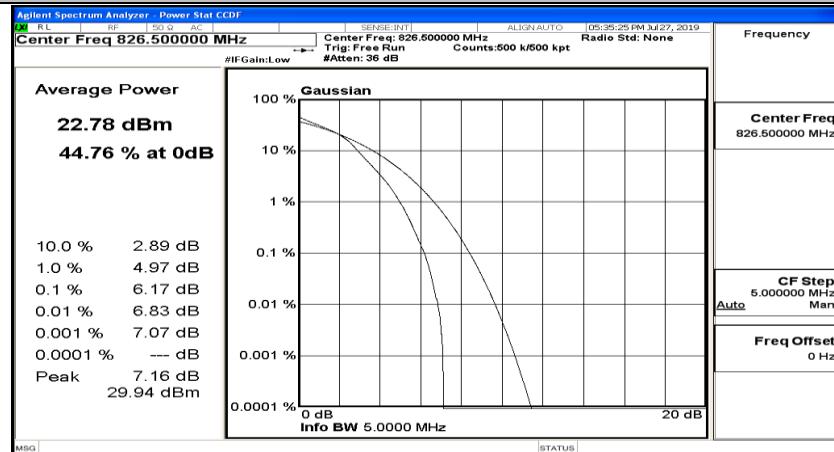
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



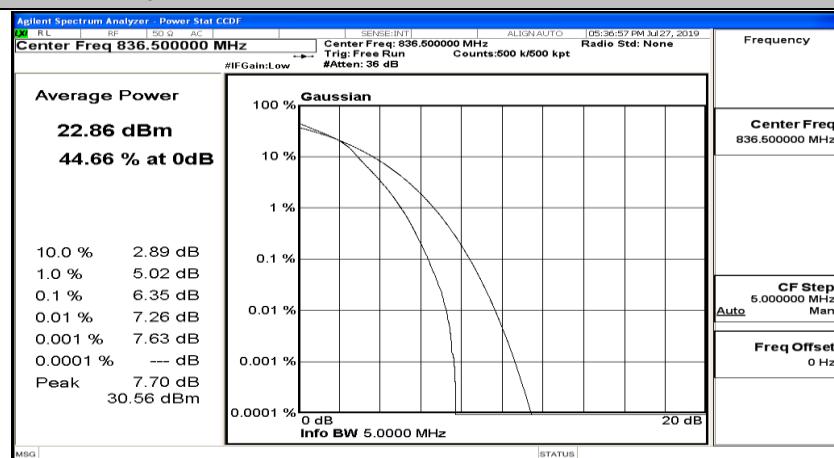
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



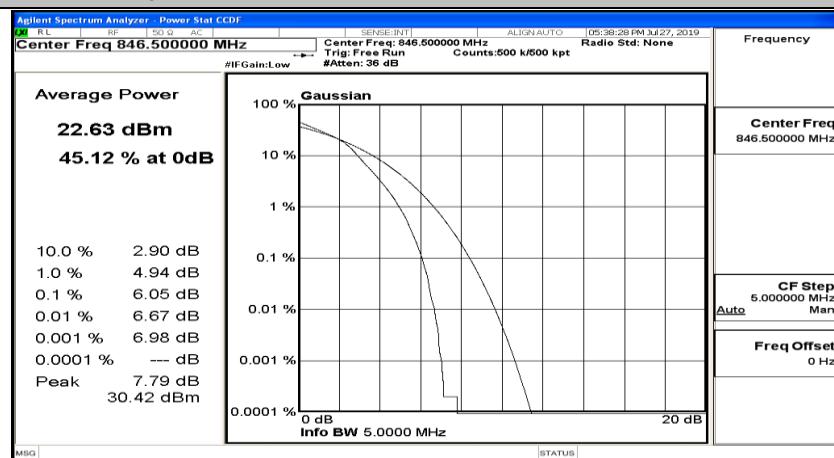
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



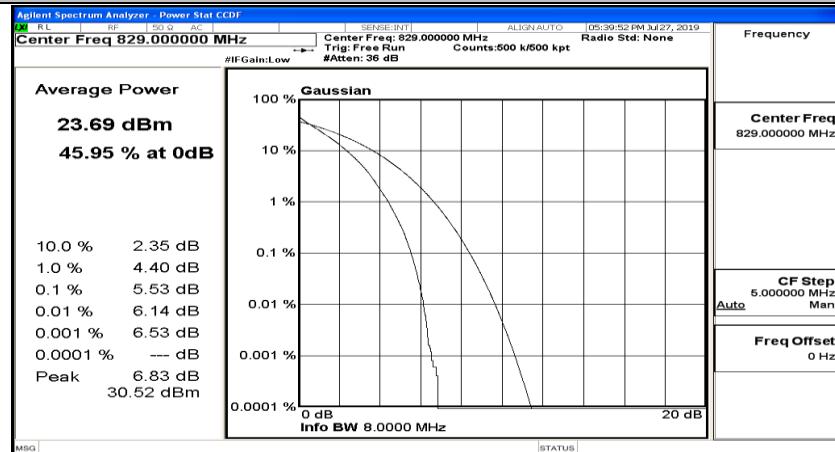
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



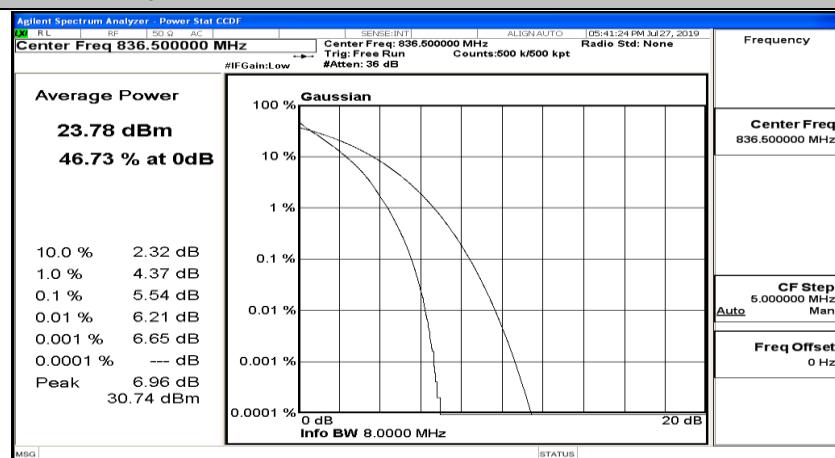
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



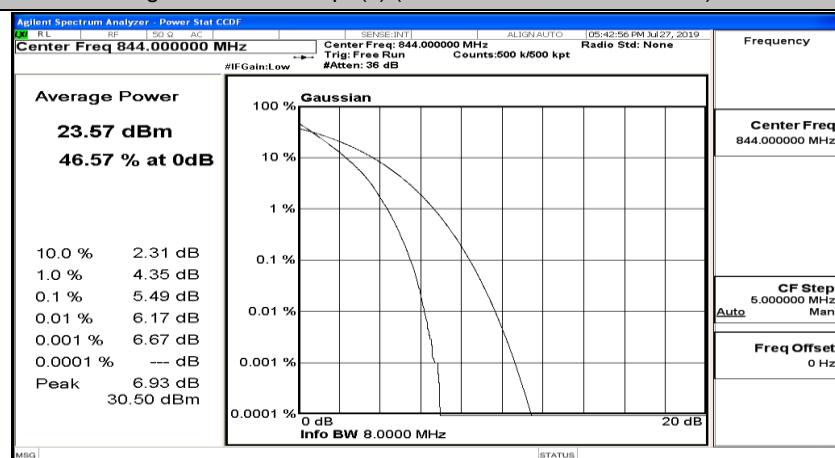
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



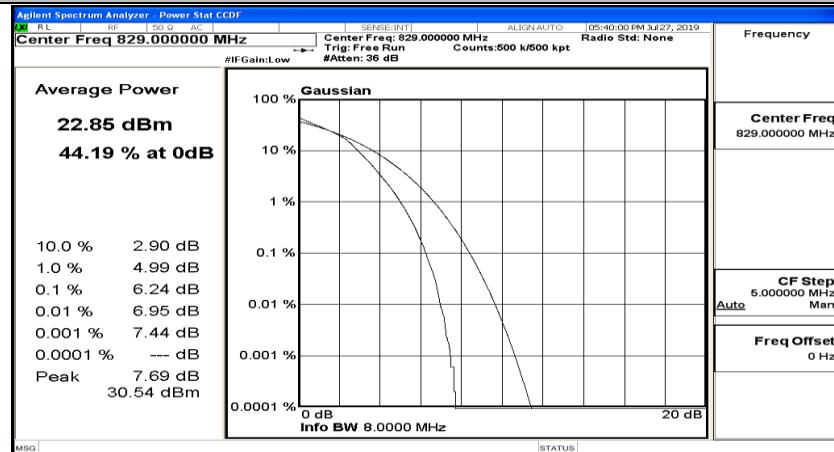
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



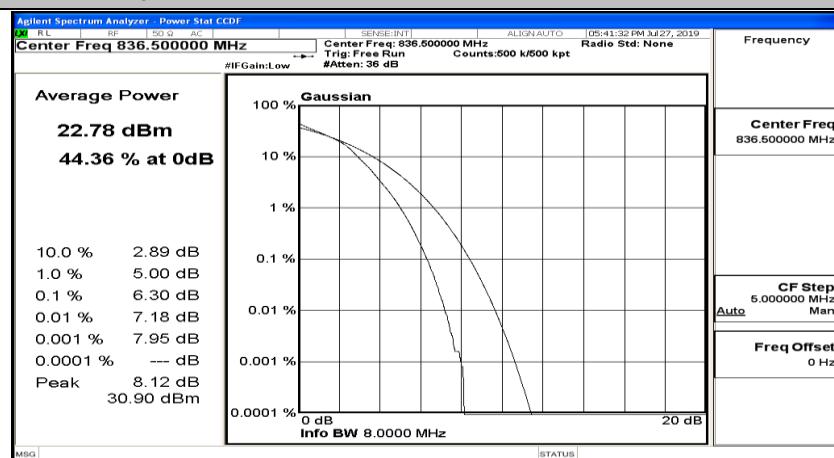
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



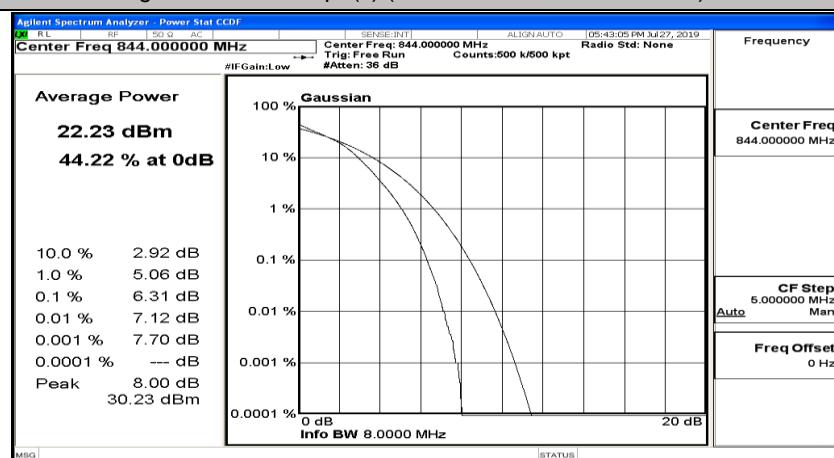
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



F.3 26dB Bandwidth and Occupied Bandwidth

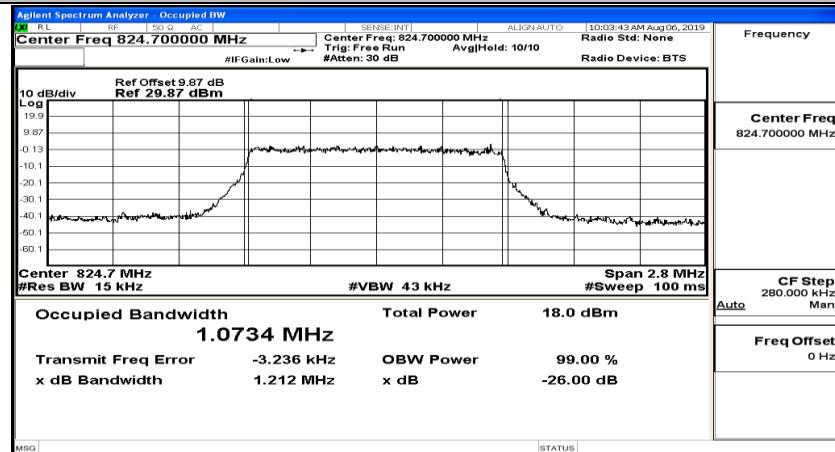
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0734	1.212	PASS
	MCH	1.0776	1.231	PASS
	HCH	1.0765	1.239	PASS
16QAM	LCH	1.0768	1.230	PASS
	MCH	1.0766	1.236	PASS
	HCH	1.0808	1.241	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6753	2.825	PASS
	MCH	2.6802	2.815	PASS
	HCH	2.6802	2.841	PASS
16QAM	LCH	2.6809	2.816	PASS
	MCH	2.6795	2.832	PASS
	HCH	2.6822	2.850	PASS

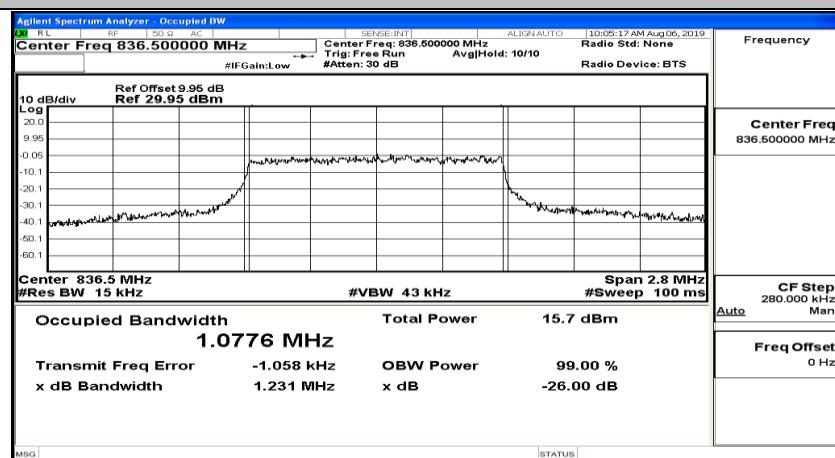
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4817	4.876	PASS
	MCH	4.4686	4.820	PASS
	HCH	4.4774	4.881	PASS
16QAM	LCH	4.4749	4.870	PASS
	MCH	4.4629	4.870	PASS
	HCH	4.4913	4.873	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9672	9.535	PASS
	MCH	8.9232	9.465	PASS
	HCH	8.9582	9.488	PASS
16QAM	LCH	8.9622	9.563	PASS
	MCH	8.9086	9.396	PASS
	HCH	8.9478	9.516	PASS

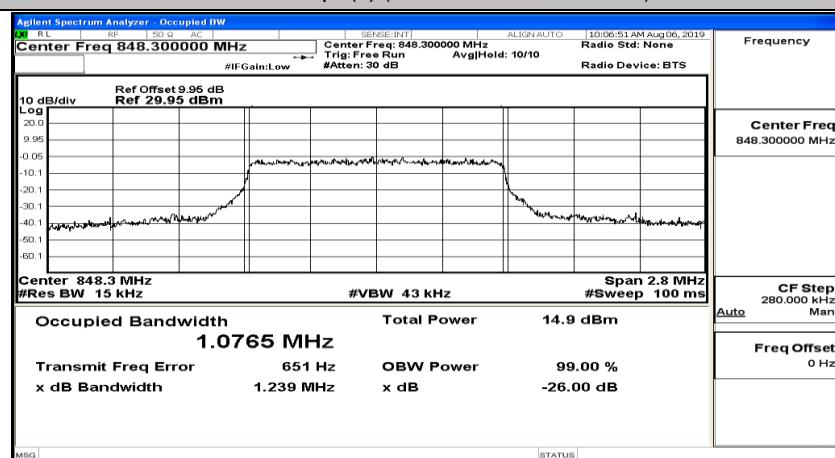
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



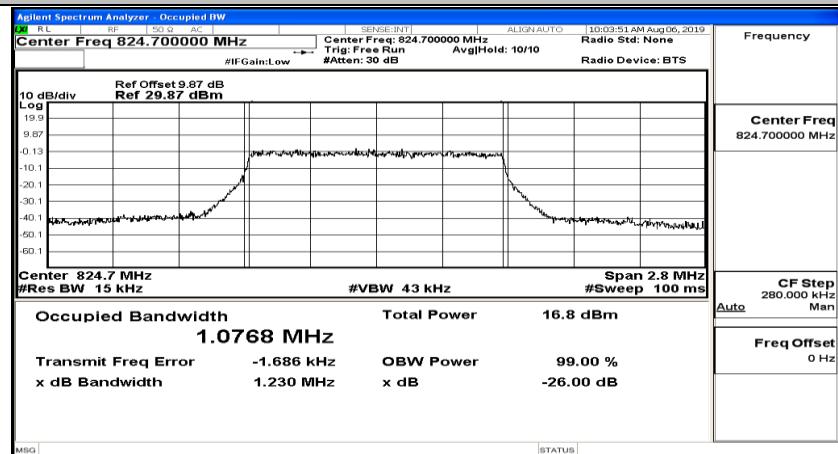
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



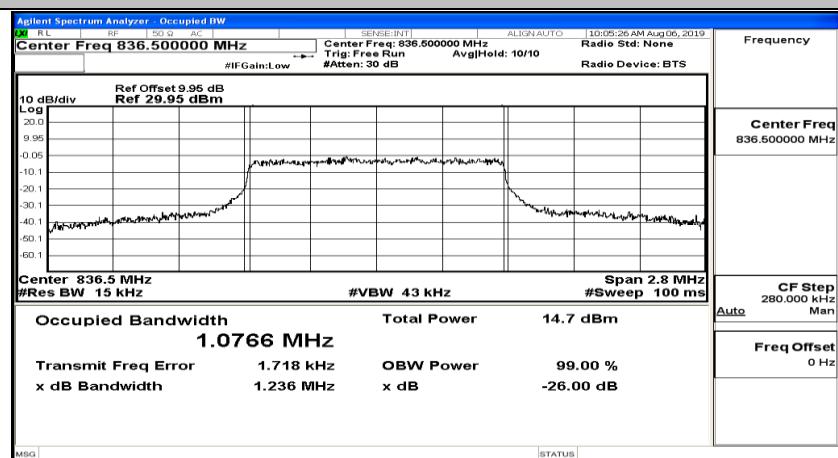
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



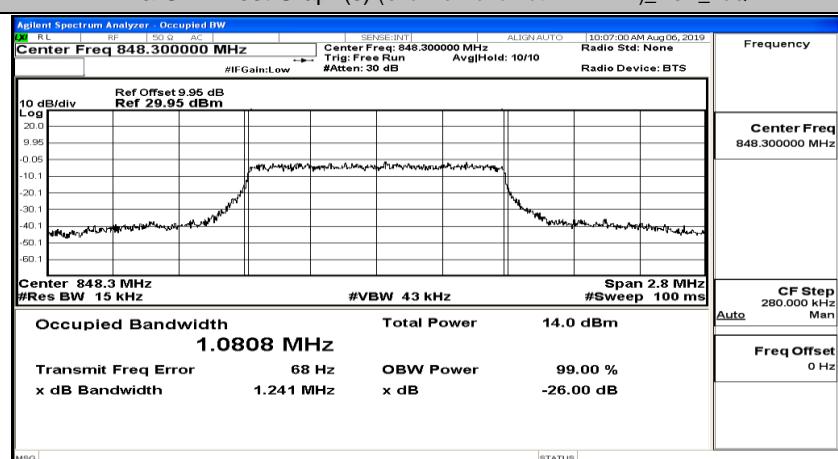
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



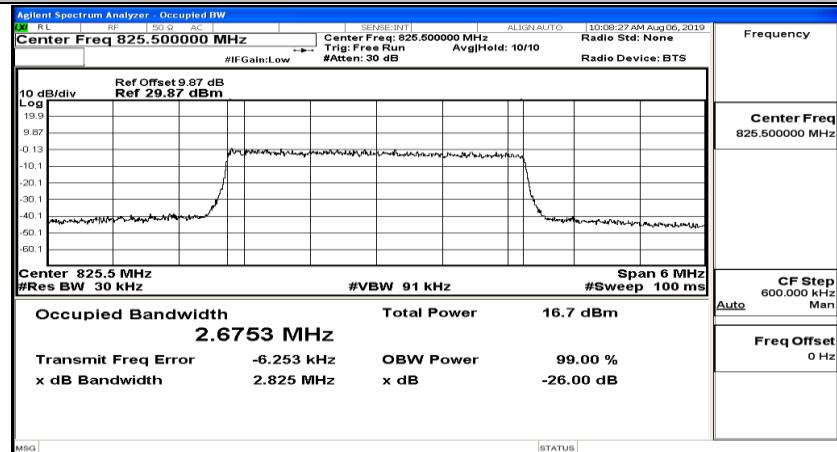
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



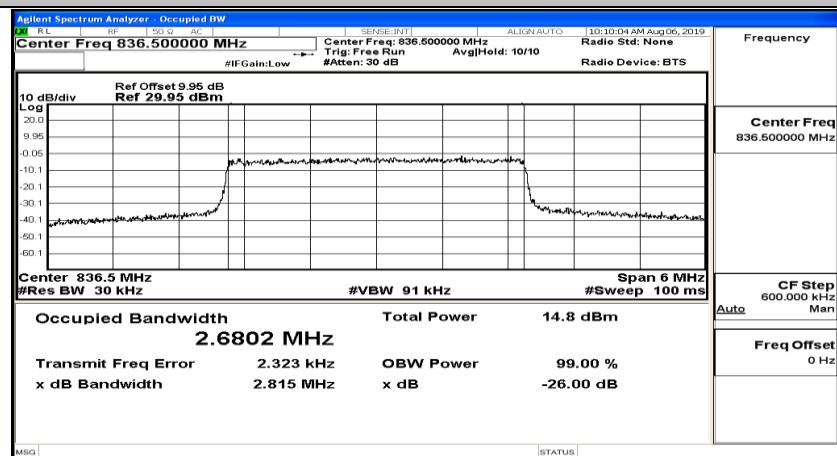
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



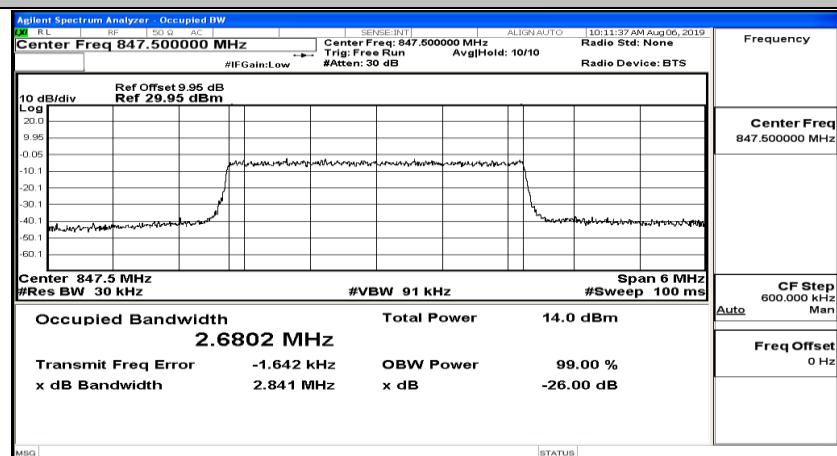
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



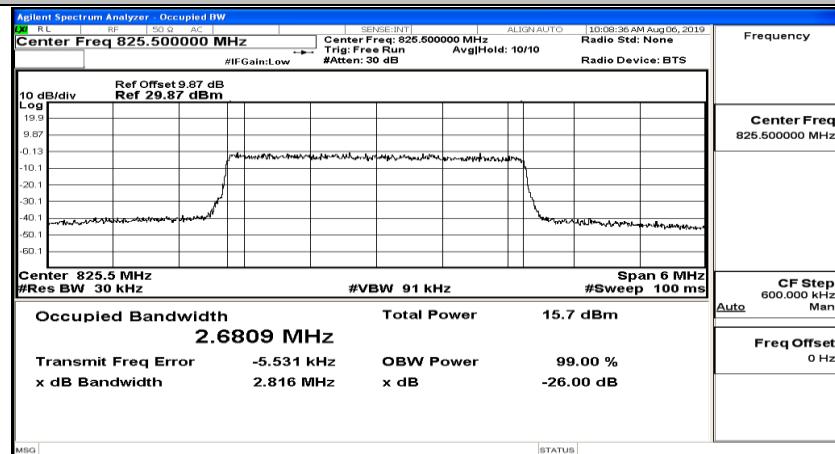
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



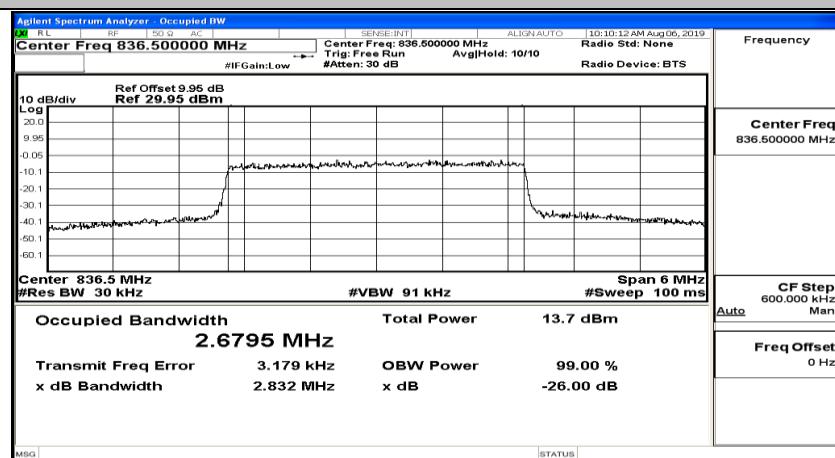
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



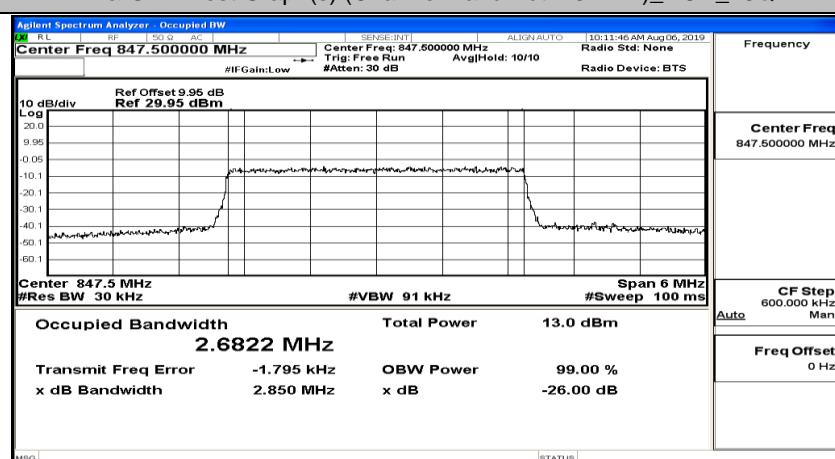
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



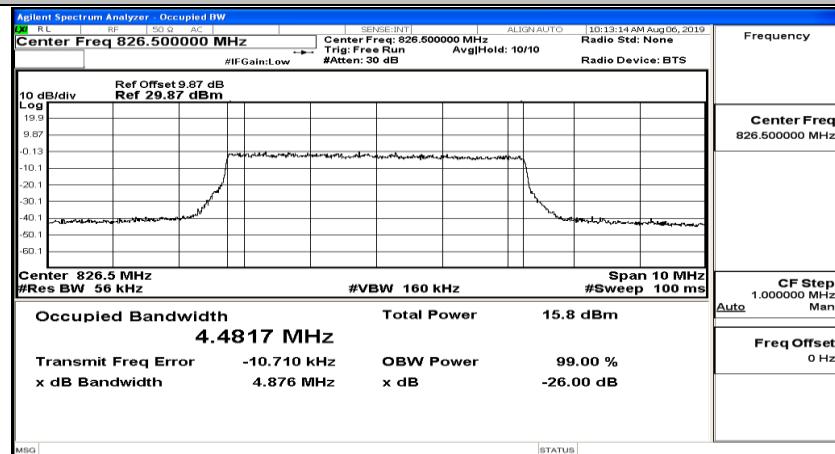
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



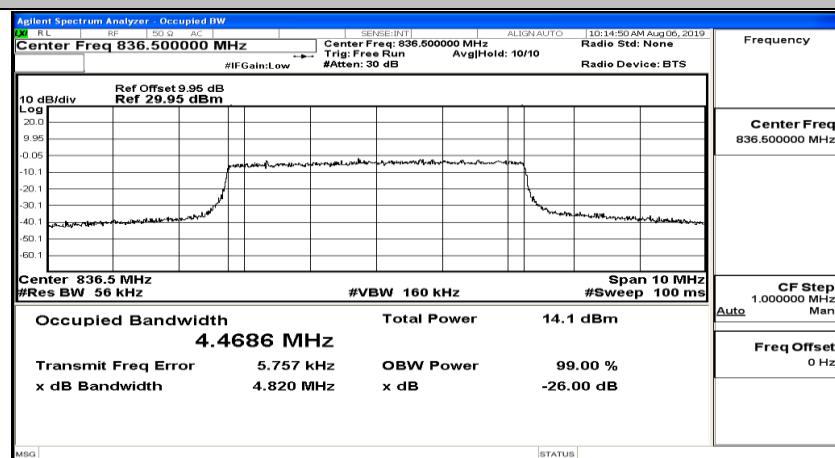
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



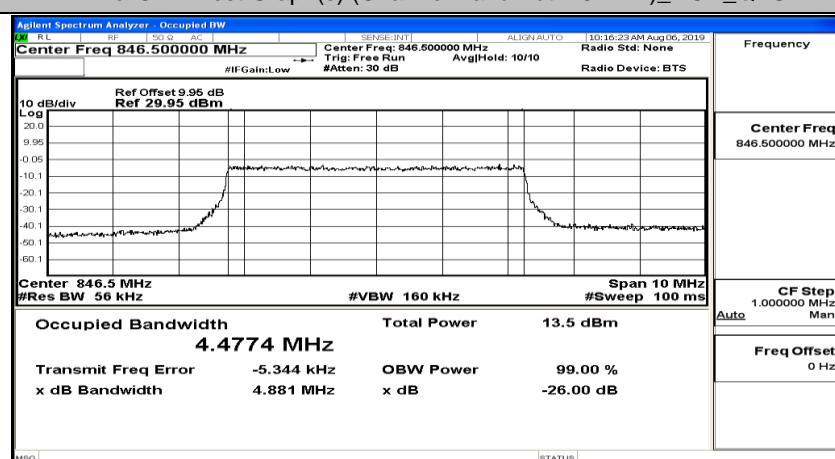
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



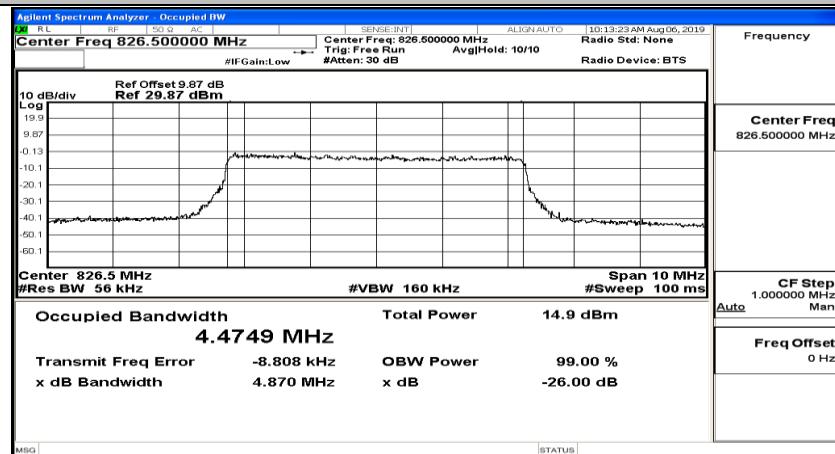
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



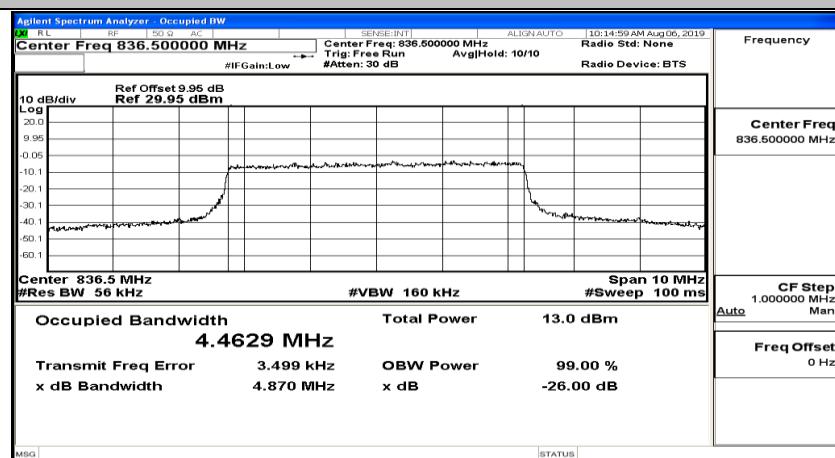
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



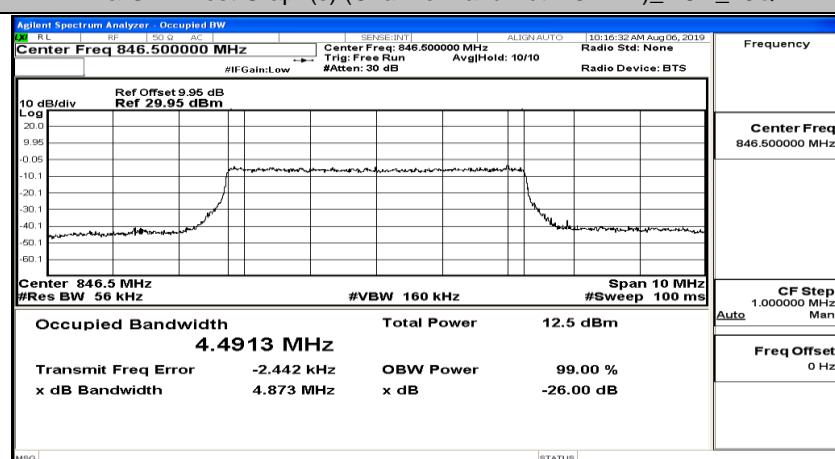
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



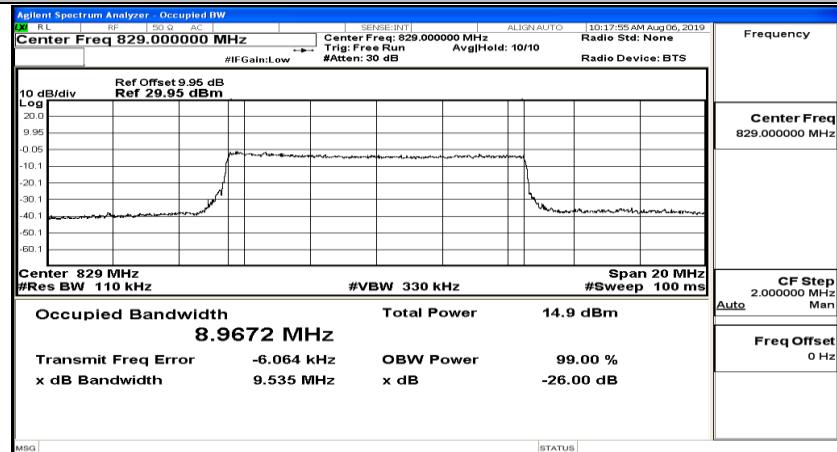
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



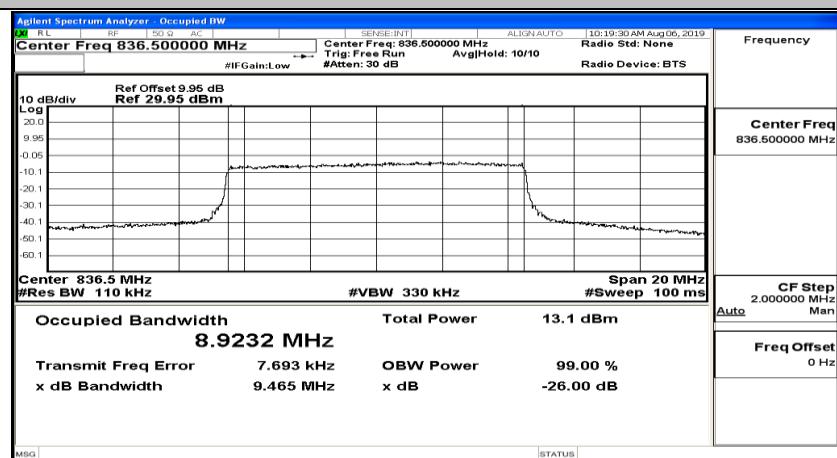
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



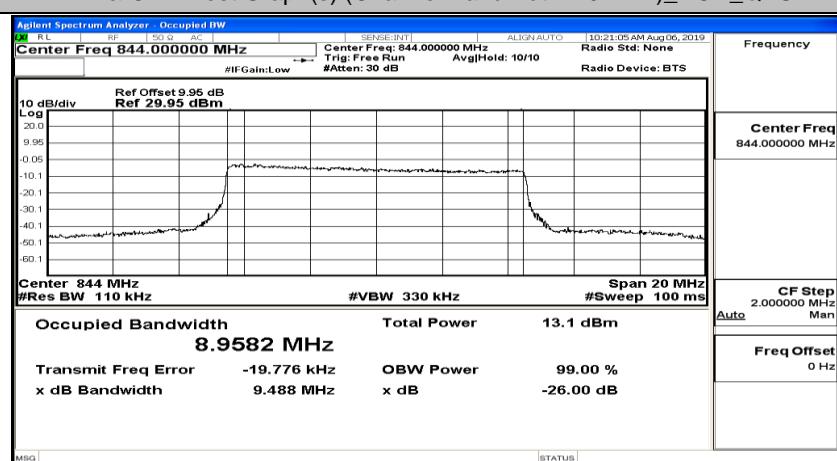
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



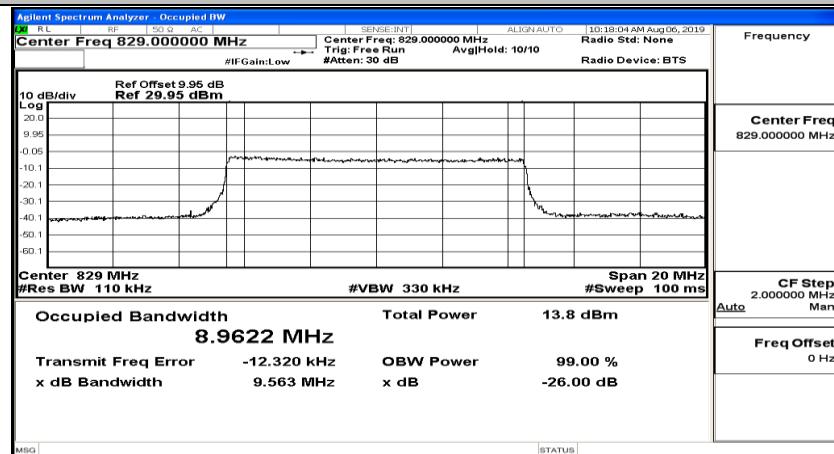
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



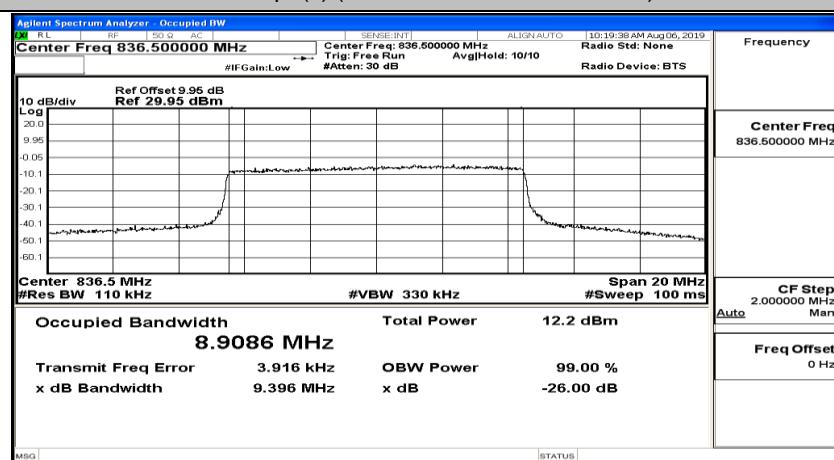
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



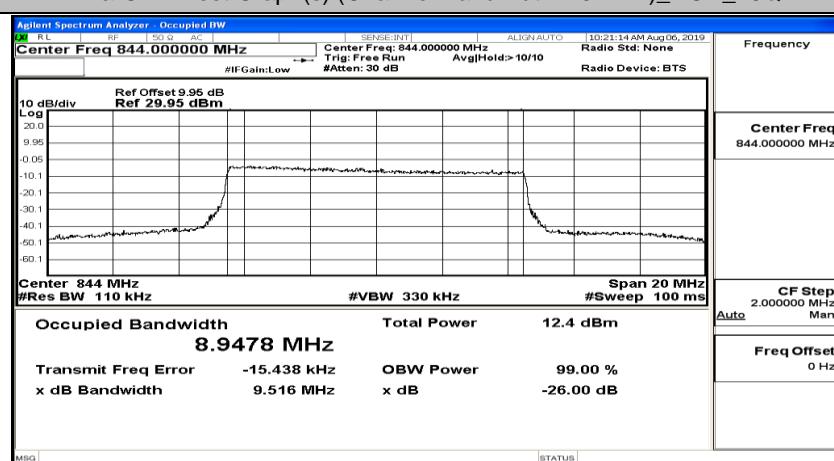
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

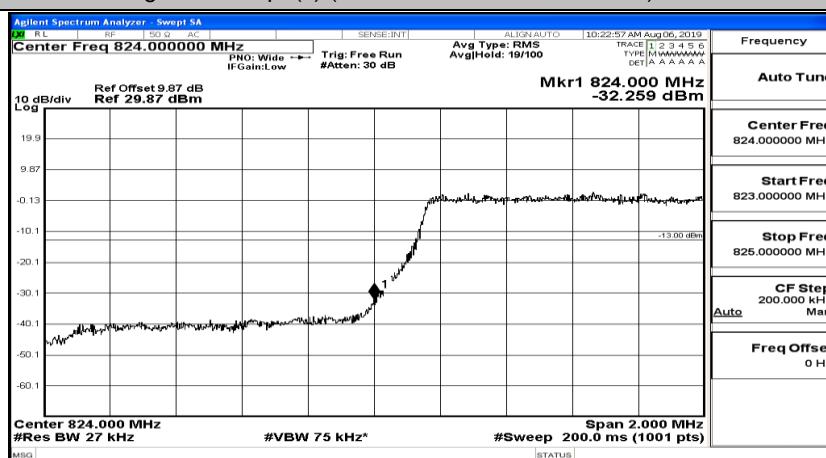


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

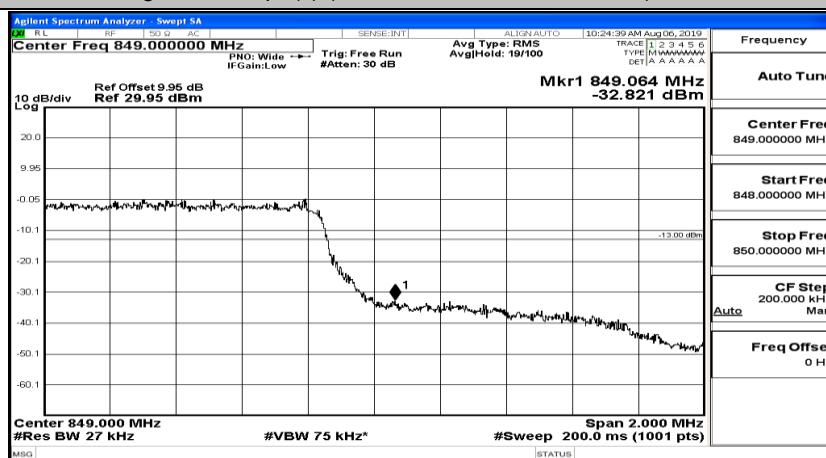


F.4 Band Edge

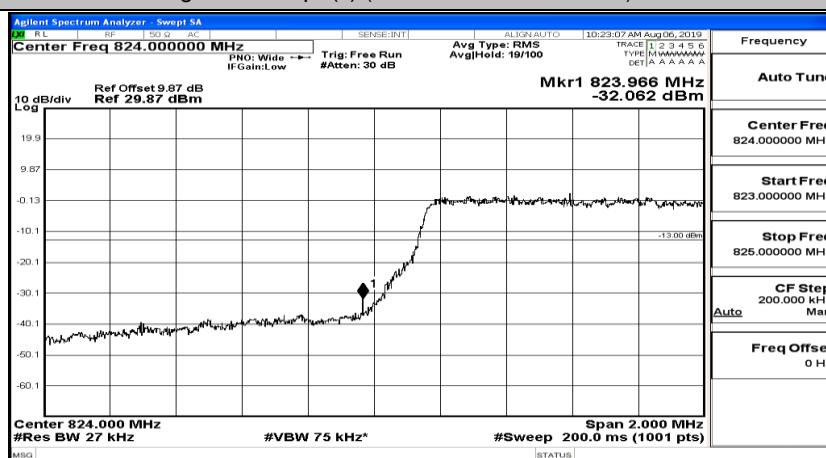
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



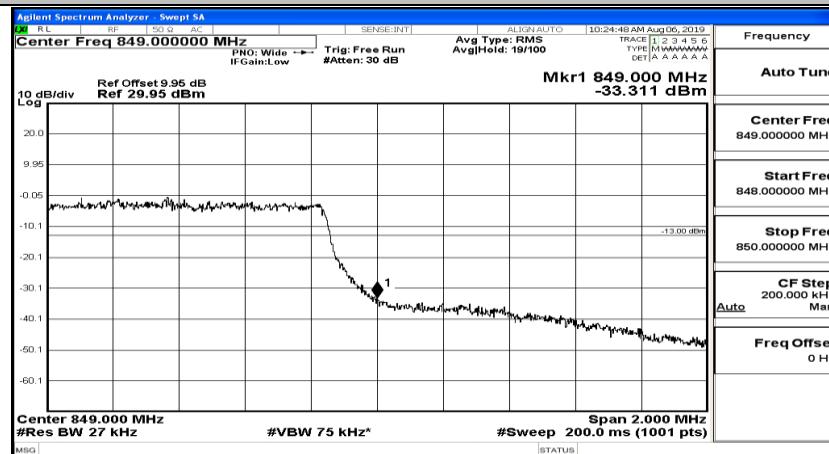
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



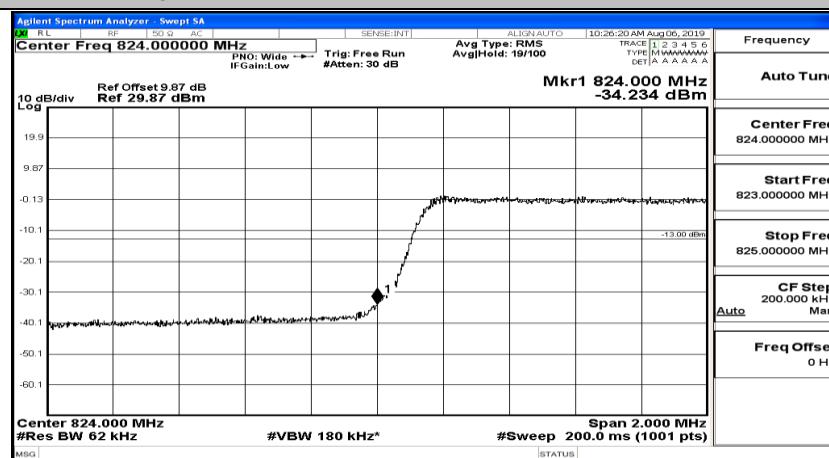
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



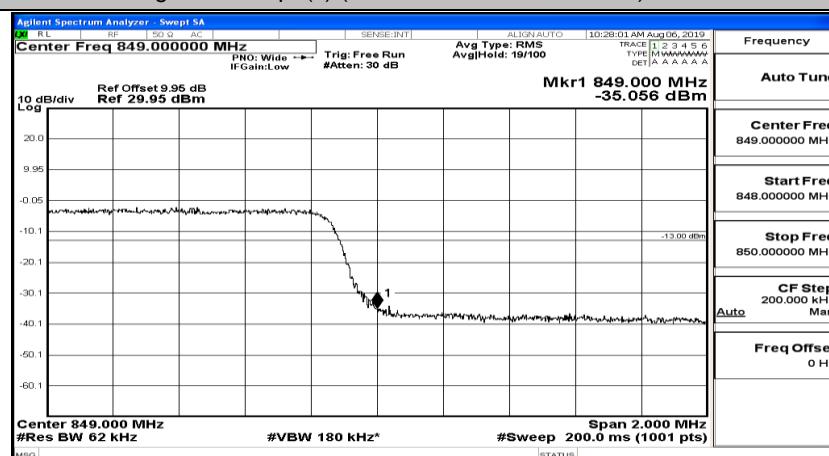
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



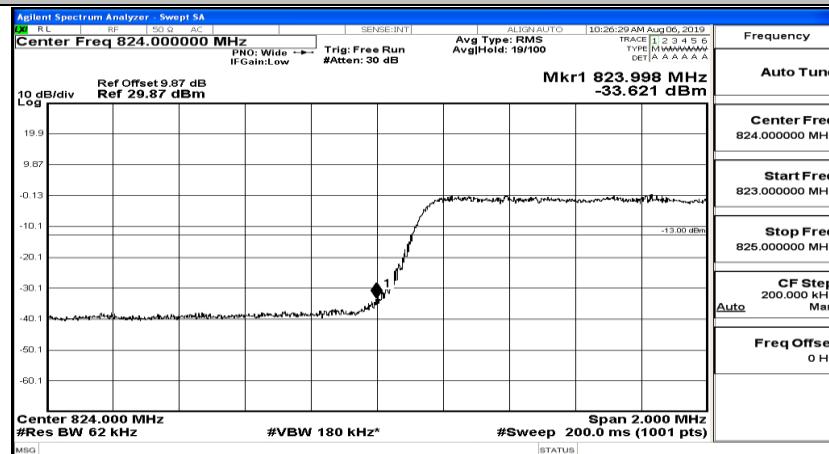
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



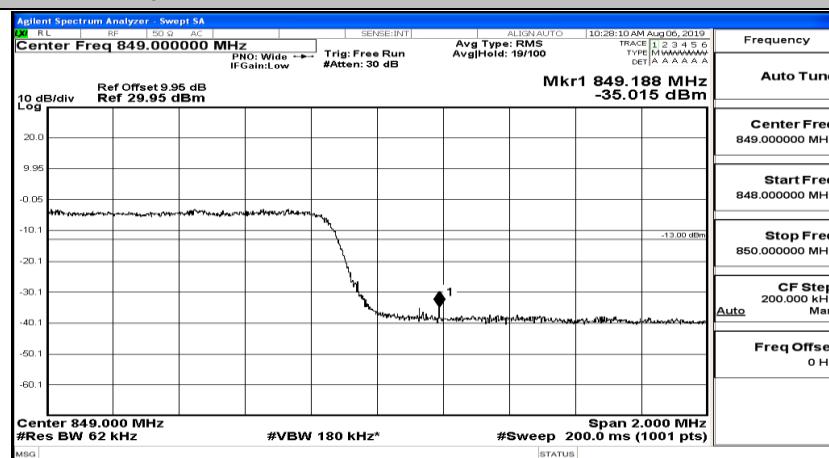
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



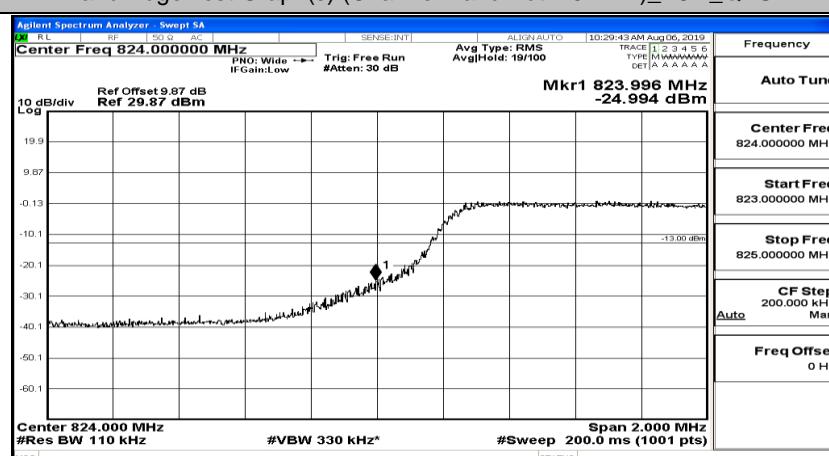
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



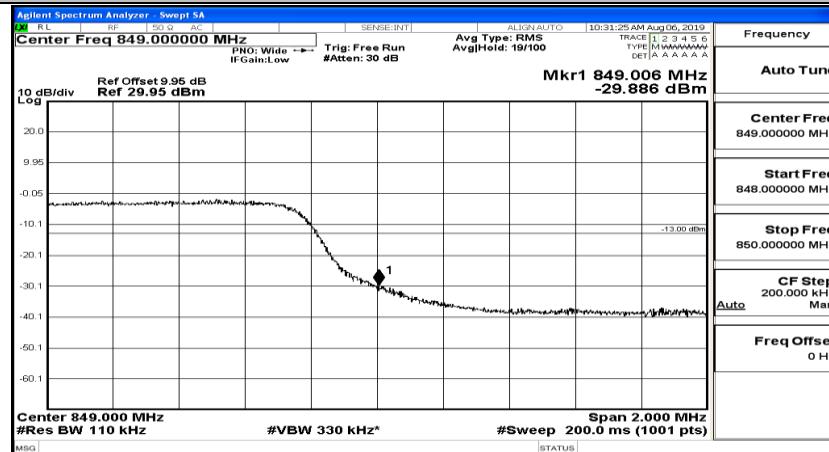
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



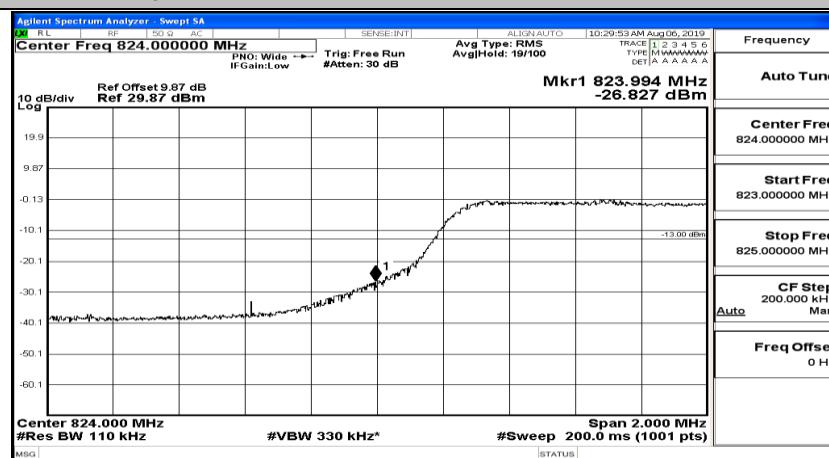
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



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

