

Appendix F: Test Data for E-UTRA Band 5

Product Name: 5 inch 4G Smart Phone

Trade Mark: LOGIC, iSWAG, UNONU

Test Model: L50T

FCC ID: 055503719

Environmental Conditions

Temperature:	22.6 ° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Wang.Chuang
Supervised by:	TOM.LIU

F.1: Effective (Isotropic) Radiated Power Output Data

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.49	21.56	PASS
		1	3	22.49	21.56	PASS
		1	5	22.45	21.52	PASS
		3	0	22.42	21.49	PASS
		3	2	22.40	21.47	PASS
		3	3	22.38	21.45	PASS
		6	0	21.92	20.99	PASS
	MCH	1	0	22.24	21.31	PASS
		1	3	22.27	21.34	PASS
		1	5	22.32	21.39	PASS
		3	0	22.20	21.27	PASS
		3	2	22.20	21.27	PASS
		3	3	22.24	21.31	PASS
		6	0	21.74	20.81	PASS
	HCH	1	0	22.35	21.42	PASS
		1	3	22.30	21.37	PASS
		1	5	22.34	21.41	PASS

		3	0	22.32	21.39	PASS
		3	2	22.40	21.47	PASS
		3	3	22.35	21.42	PASS
		6	0	21.84	20.91	PASS
16QAM	LCH	1	0	22.63	21.7	PASS
		1	3	22.58	21.65	PASS
		1	5	22.62	21.69	PASS
		3	0	21.65	20.72	PASS
		3	2	21.65	20.72	PASS
		3	3	21.60	20.67	PASS
		6	0	20.52	19.59	PASS
	MCH	1	0	21.70	20.77	PASS
		1	3	21.88	20.95	PASS
		1	5	21.82	20.89	PASS
		3	0	21.56	20.63	PASS
		3	2	21.58	20.65	PASS
		3	3	21.48	20.55	PASS
		6	0	20.05	19.12	PASS
	HCH	1	0	21.41	20.48	PASS
		1	3	21.35	20.42	PASS
		1	5	21.48	20.55	PASS
		3	0	21.30	20.37	PASS
		3	2	21.26	20.33	PASS
		3	3	21.31	20.38	PASS
		6	0	20.46	19.53	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.32	21.39	PASS
		1	7	22.31	21.38	PASS
		1	14	22.35	21.42	PASS
		8	0	21.89	20.96	PASS
		8	4	22.01	21.08	PASS
		8	7	22.10	21.17	PASS
		15	0	22.00	21.07	PASS
	MCH	1	0	22.07	21.14	PASS
		1	7	22.13	21.2	PASS
		1	14	22.11	21.18	PASS
		8	0	21.66	20.73	PASS
		8	4	21.75	20.82	PASS
		8	7	21.67	20.74	PASS

	HCH	15	0	21.83	20.9	PASS
		1	0	22.33	21.4	PASS
		1	7	22.47	21.54	PASS
		1	14	22.44	21.51	PASS
		8	0	21.86	20.93	PASS
		8	4	21.78	20.85	PASS
		8	7	21.80	20.87	PASS
		15	0	21.86	20.93	PASS
16QAM	LCH	1	0	22.28	21.35	PASS
		1	7	22.17	21.24	PASS
		1	14	22.25	21.32	PASS
		8	0	20.55	19.62	PASS
		8	4	20.47	19.54	PASS
		8	7	20.51	19.58	PASS
		15	0	20.51	19.58	PASS
	MCH	1	0	22.15	21.22	PASS
		1	7	22.24	21.31	PASS
		1	14	22.14	21.21	PASS
		8	0	20.08	19.15	PASS
		8	4	20.17	19.24	PASS
		8	7	20.17	19.24	PASS
		15	0	20.21	19.28	PASS
	HCH	1	0	22.75	21.82	PASS
		1	7	22.79	21.86	PASS
		1	14	22.89	21.96	PASS
		8	0	20.36	19.43	PASS
		8	4	20.36	19.43	PASS
		8	7	20.29	19.36	PASS
		15	0	20.28	19.35	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.49	21.56	PASS
		1	12	22.51	21.58	PASS
		1	24	22.48	21.55	PASS
		12	0	21.99	21.06	PASS
		12	6	21.95	21.02	PASS
		12	13	22.01	21.08	PASS
		25	0	22.05	21.12	PASS
	MCH	1	0	22.18	21.25	PASS
		1	12	22.20	21.27	PASS
		1	24	22.04	21.11	PASS

16QAM		12	0	21.71	20.78	PASS
		12	6	21.81	20.88	PASS
		12	13	21.81	20.88	PASS
		25	0	21.72	20.79	PASS
	HCH	1	0	22.17	21.24	PASS
		1	12	22.39	21.46	PASS
		1	24	22.37	21.44	PASS
		12	0	21.69	20.76	PASS
		12	6	21.91	20.98	PASS
		12	13	21.93	21	PASS
		25	0	21.77	20.84	PASS
	LCH	1	0	21.99	21.06	PASS
		1	12	21.97	21.04	PASS
		1	24	22.01	21.08	PASS
		12	0	20.71	19.78	PASS
		12	6	20.69	19.76	PASS
		12	13	20.55	19.62	PASS
		25	0	20.63	19.7	PASS
	MCH	1	0	22.00	21.07	PASS
		1	12	22.12	21.19	PASS
		1	24	21.91	20.98	PASS
		12	0	20.40	19.47	PASS
		12	6	20.45	19.52	PASS
		12	13	20.41	19.48	PASS
		25	0	20.37	19.44	PASS
	HCH	1	0	20.75	19.82	PASS
		1	12	20.68	19.75	PASS
		1	24	20.90	19.97	PASS
		12	0	20.29	19.36	PASS
		12	6	20.42	19.49	PASS
		12	13	20.45	19.52	PASS
		25	0	20.51	19.58	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Average Power [dBm]	E.i.r.p [dBm]	Verdict
		Size	Offset			
QPSK	LCH	1	0	22.46	21.53	PASS
		1	24	22.41	21.48	PASS
		1	49	22.25	21.32	PASS
		25	0	21.93	21	PASS
		25	12	22.07	21.14	PASS
		25	25	21.81	20.88	PASS
		50	0	21.97	21.04	PASS

	MCH	1	0	22.27	21.34	PASS
		1	24	22.26	21.33	PASS
		1	49	22.06	21.13	PASS
		25	0	21.72	20.79	PASS
		25	12	21.85	20.92	PASS
		25	25	21.66	20.73	PASS
		50	0	21.89	20.96	PASS
	HCH	1	0	22.00	21.07	PASS
		1	24	22.20	21.27	PASS
		1	49	22.32	21.39	PASS
		25	0	21.68	20.75	PASS
		25	12	21.82	20.89	PASS
		25	25	21.91	20.98	PASS
		50	0	21.78	20.85	PASS
16QAM	LCH	1	0	22.45	21.52	PASS
		1	24	22.45	21.52	PASS
		1	49	22.20	21.27	PASS
		25	0	20.54	19.61	PASS
		25	12	20.42	19.49	PASS
		25	25	20.35	19.42	PASS
		50	0	20.53	19.6	PASS
	MCH	1	0	22.20	21.27	PASS
		1	24	22.07	21.14	PASS
		1	49	21.99	21.06	PASS
		25	0	20.25	19.32	PASS
		25	12	20.38	19.45	PASS
		25	25	20.18	19.25	PASS
		50	0	20.31	19.38	PASS
	HCH	1	0	21.73	20.8	PASS
		1	24	21.77	20.84	PASS
		1	49	21.91	20.98	PASS
		25	0	20.21	19.28	PASS
		25	12	20.27	19.34	PASS
		25	25	20.39	19.46	PASS
		50	0	20.27	19.34	PASS

F.2: Peak-to-Average Ratio

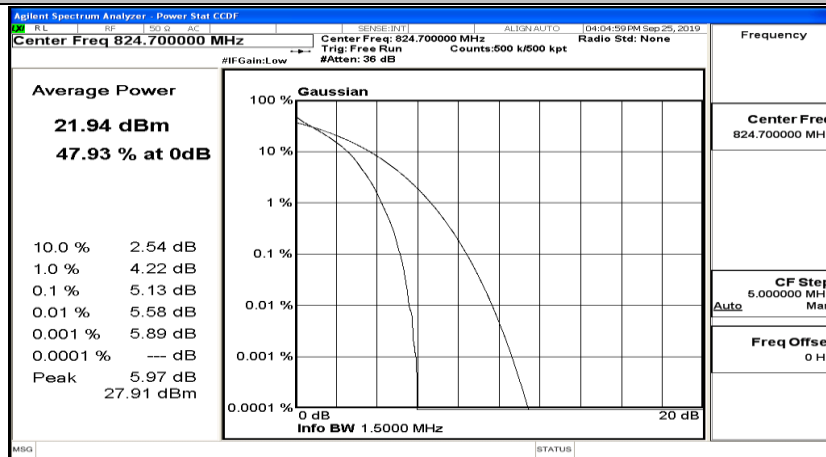
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.13	<13	PASS
	MCH	5.16	<13	PASS
	HCH	5.16	<13	PASS
16QAM	LCH	6.17	<13	PASS
	MCH	6.31	<13	PASS
	HCH	6.28	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.2	<13	PASS
	MCH	5.25	<13	PASS
	HCH	5.39	<13	PASS
16QAM	LCH	6.22	<13	PASS
	MCH	6.3	<13	PASS
	HCH	6.37	<13	PASS

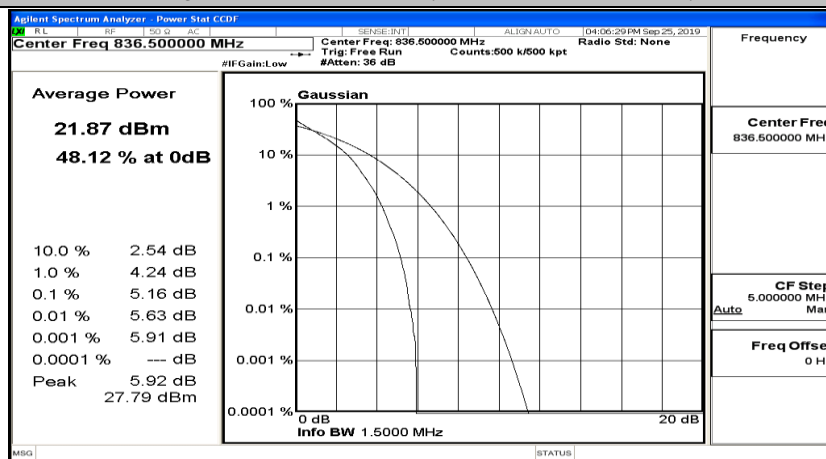
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.16	<13	PASS
	MCH	5.17	<13	PASS
	HCH	5.27	<13	PASS
16QAM	LCH	6.13	<13	PASS
	MCH	6.2	<13	PASS
	HCH	6.16	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.44	<13	PASS
	MCH	5.22	<13	PASS
	HCH	5.42	<13	PASS
16QAM	LCH	6.23	<13	PASS
	MCH	6.11	<13	PASS
	HCH	6.28	<13	PASS

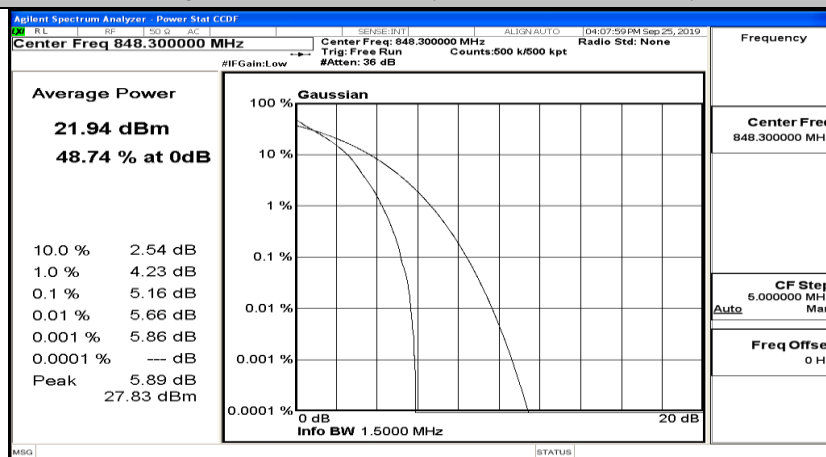
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



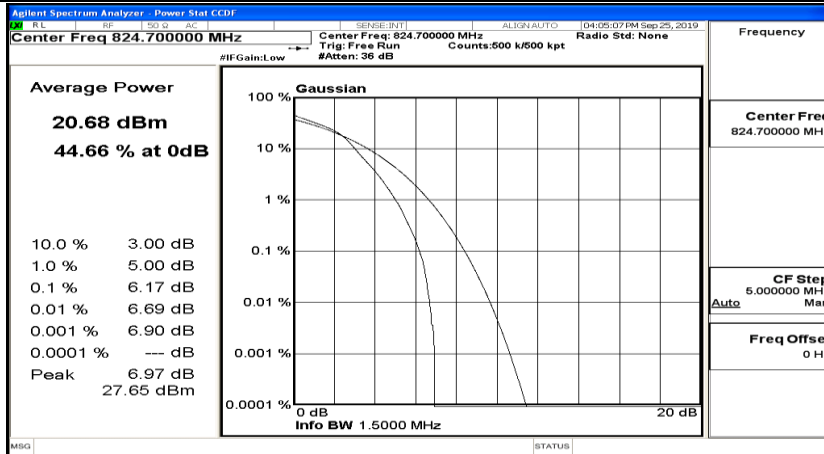
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



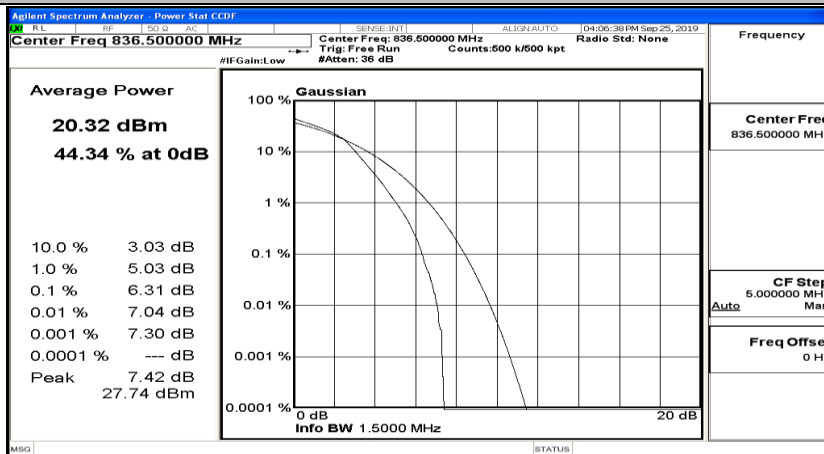
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



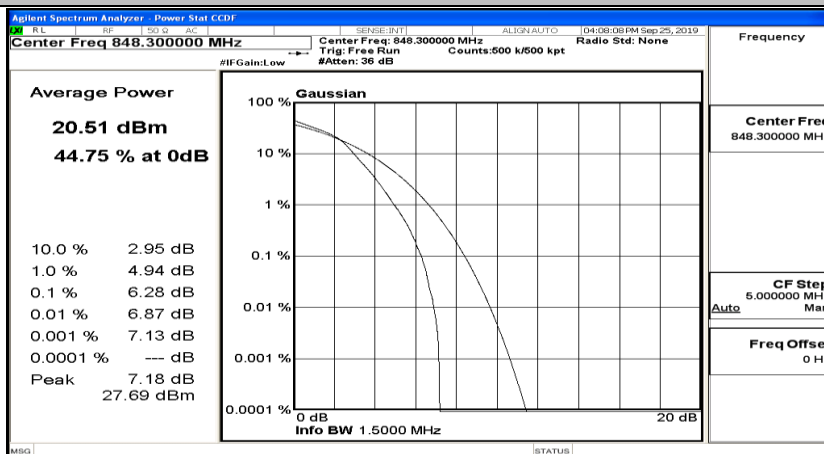
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



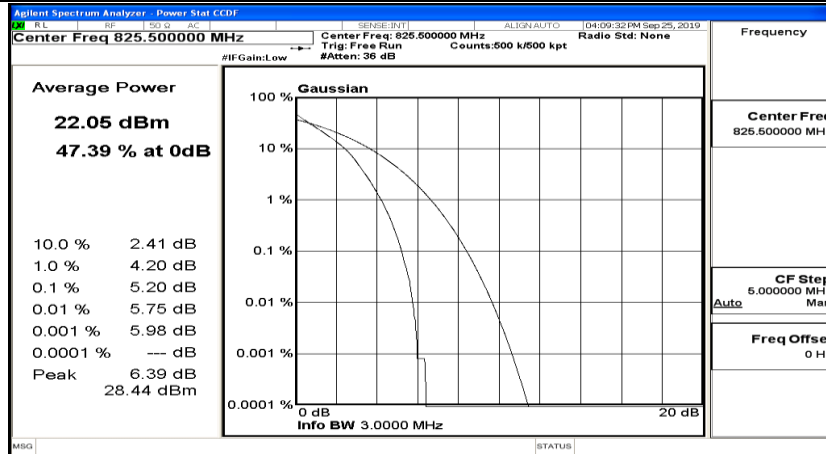
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



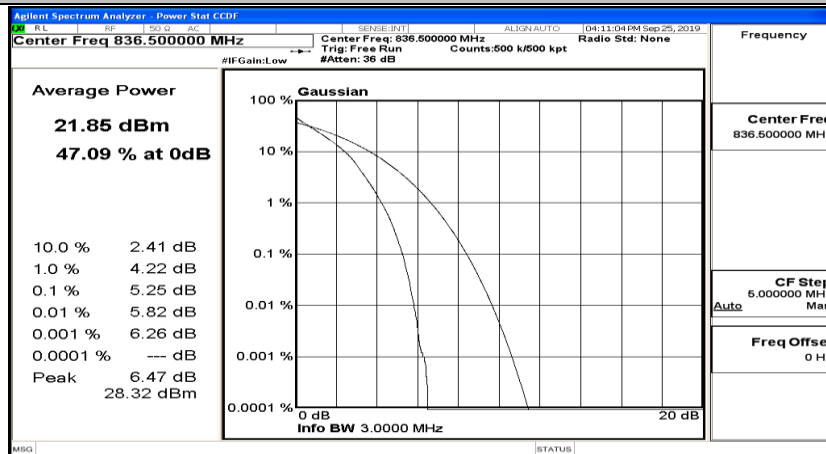
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



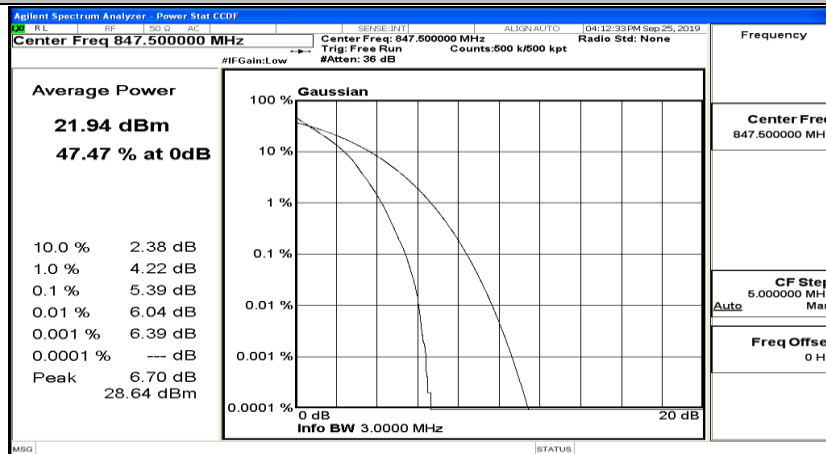
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



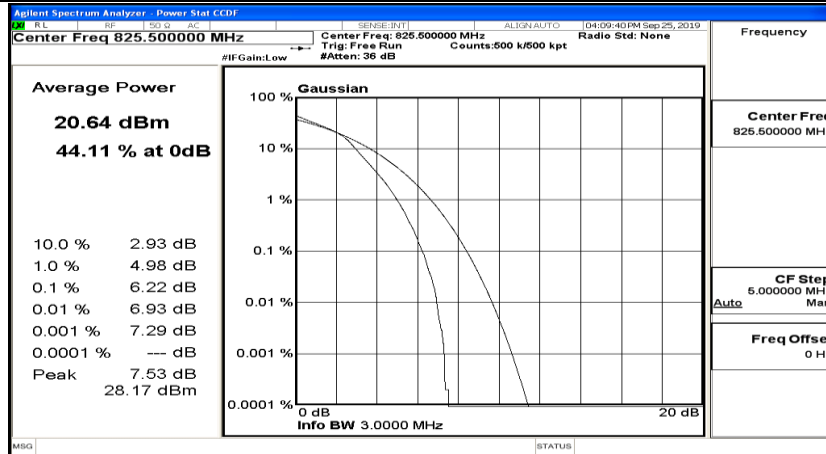
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



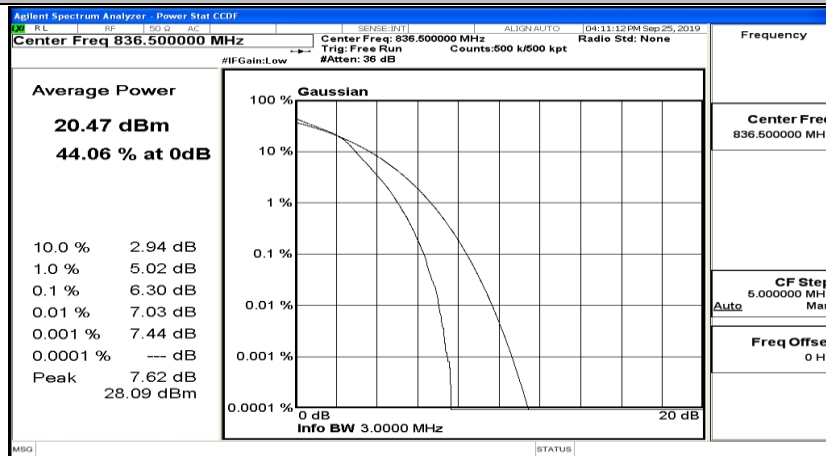
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



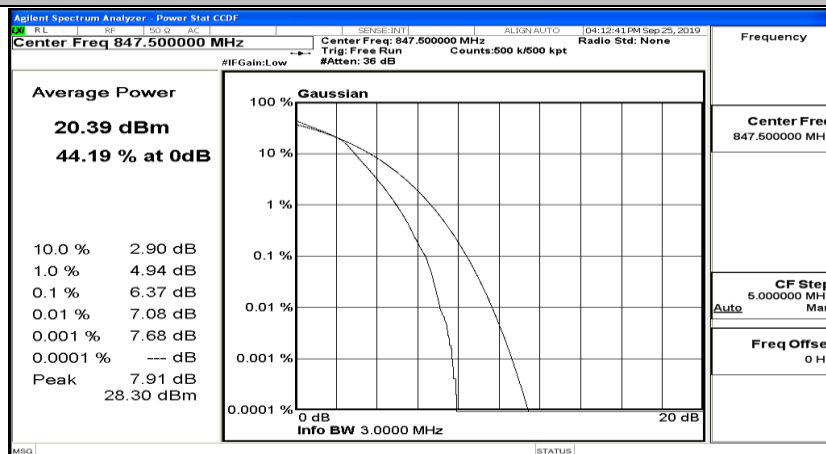
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



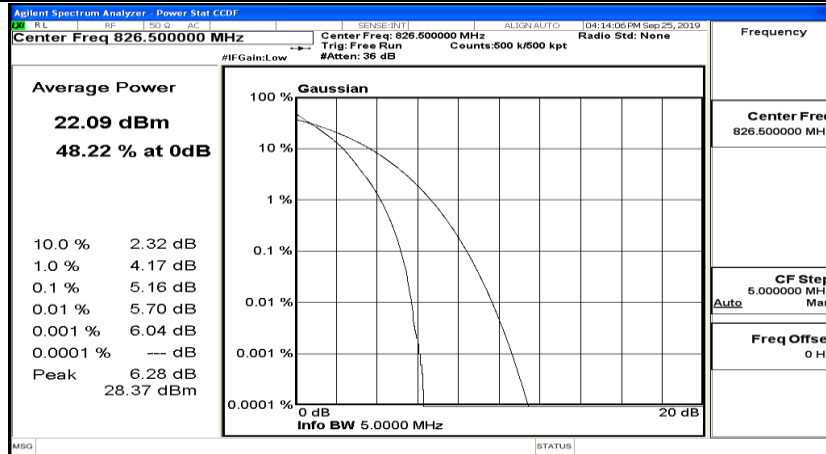
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



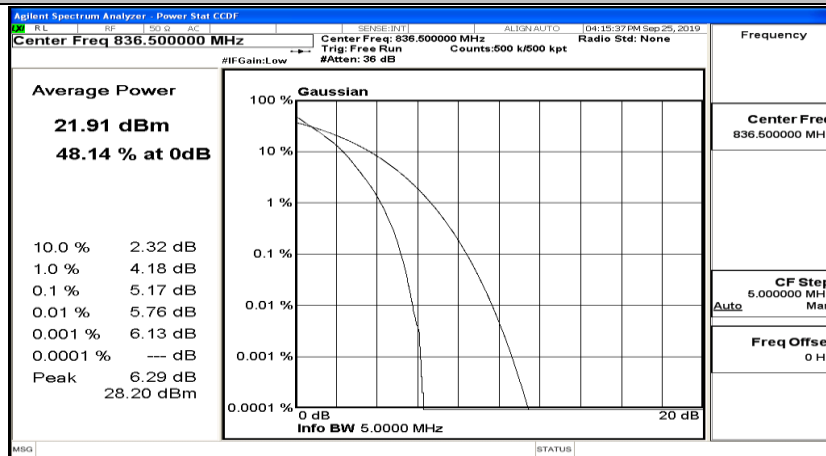
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



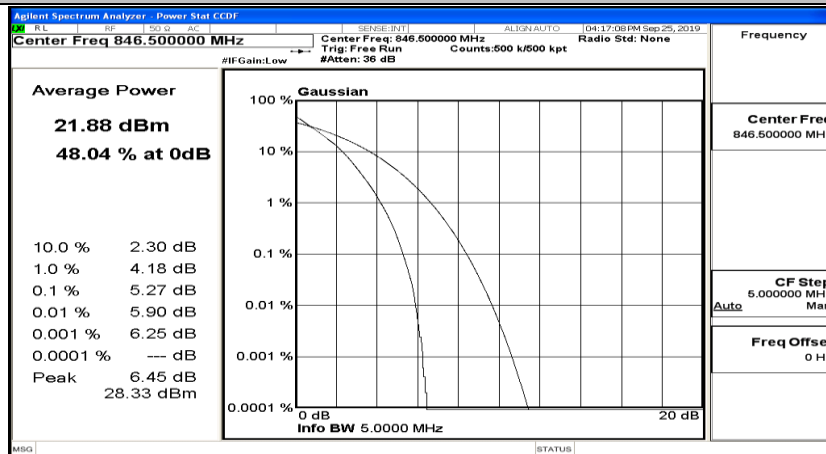
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



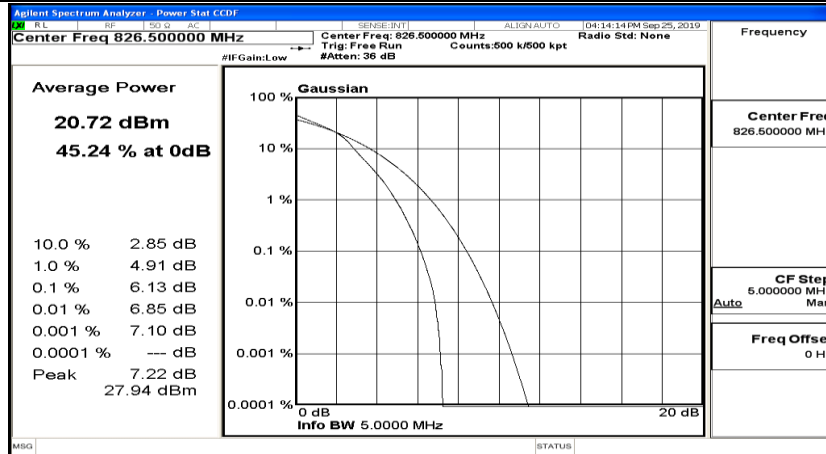
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



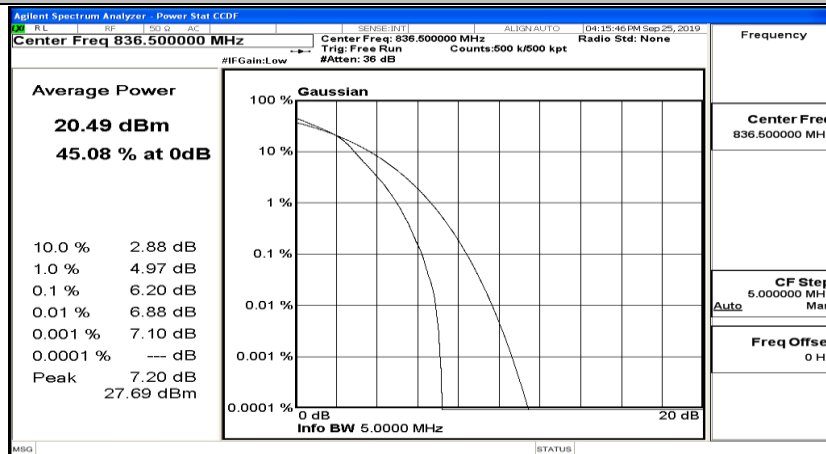
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



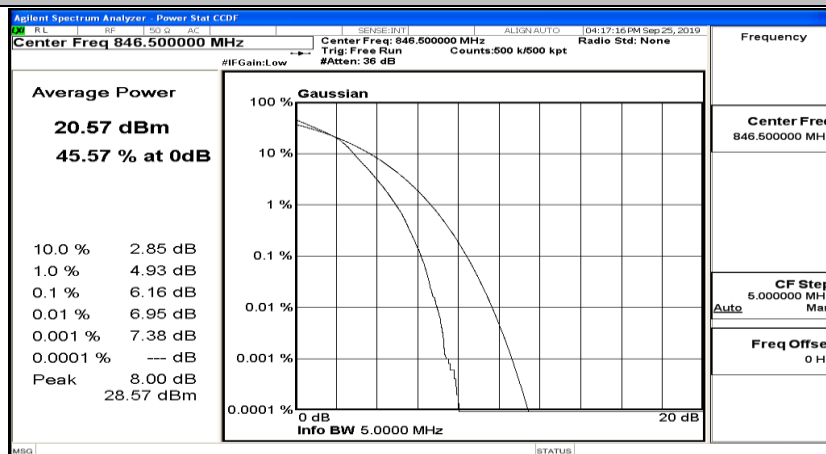
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



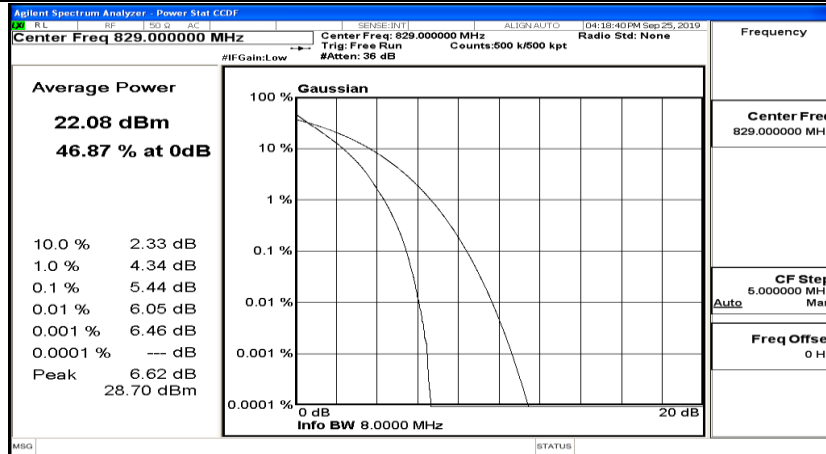
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



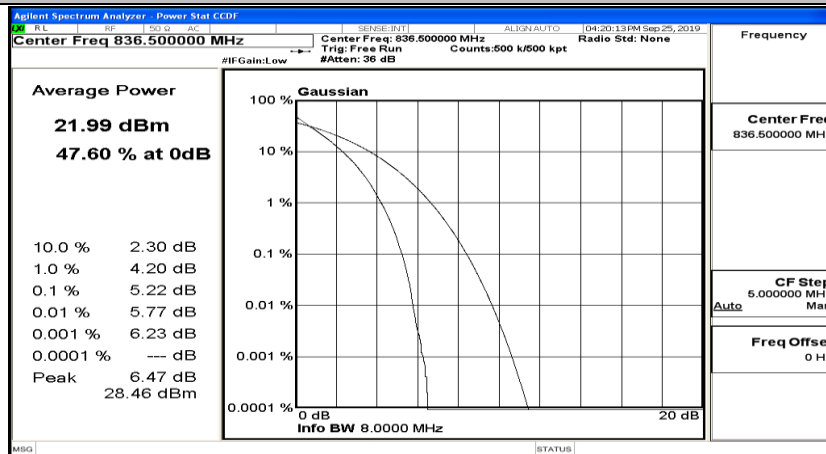
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



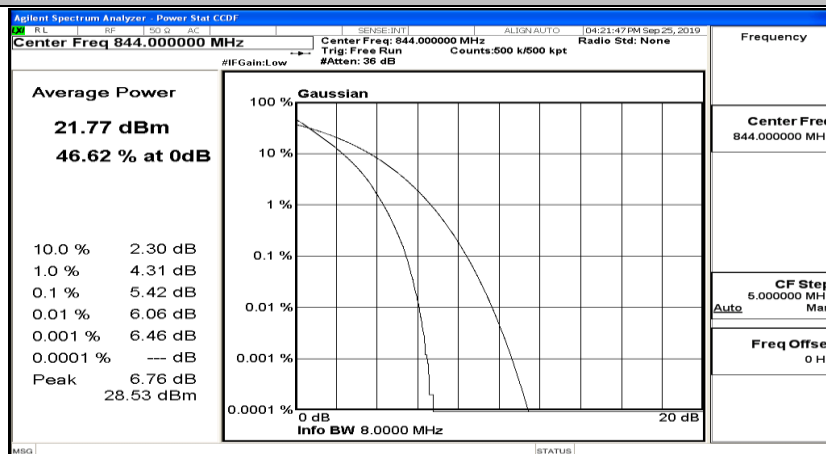
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _LCH_QPSK



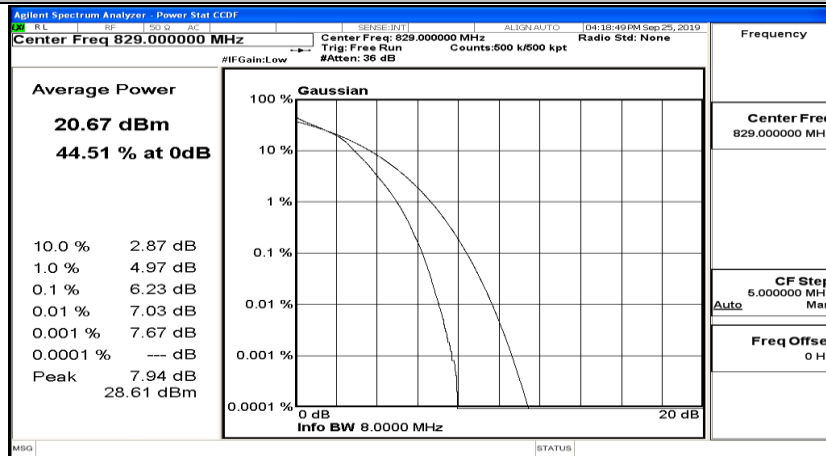
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _MCH_QPSK



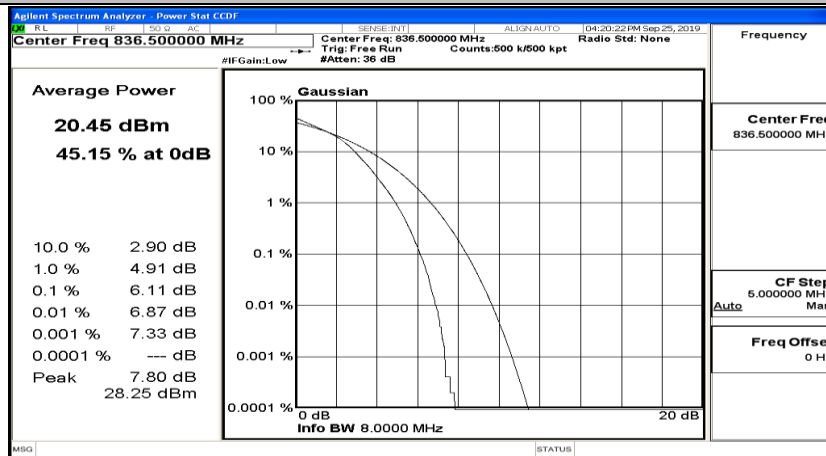
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _HCH_QPSK



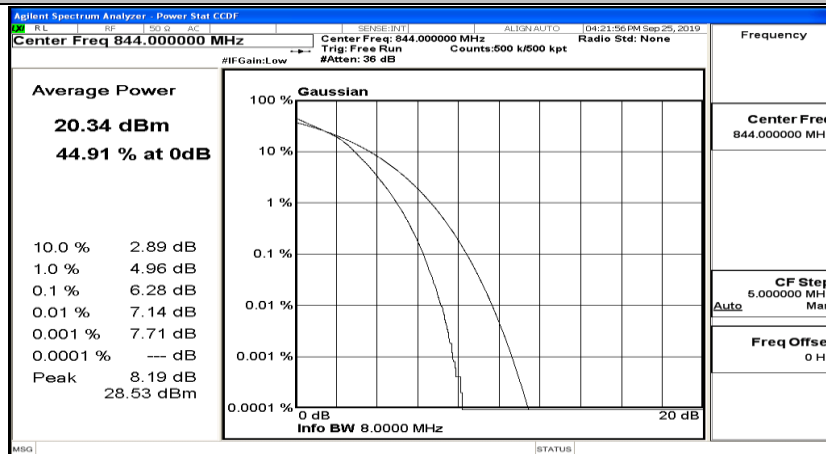
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

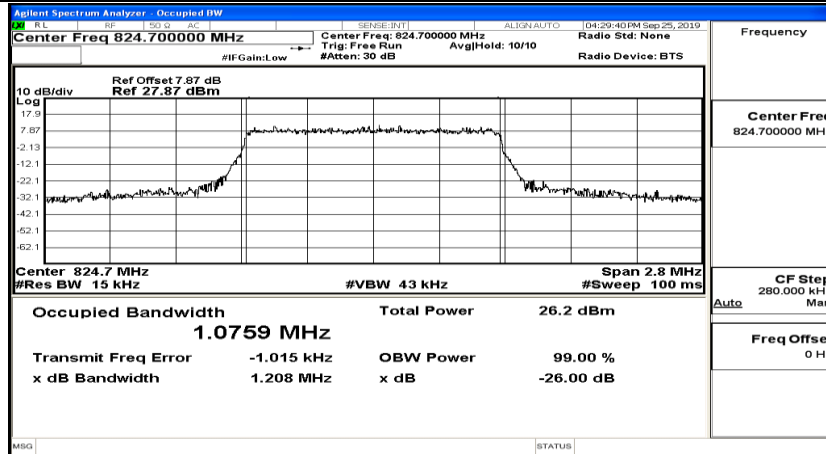
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0759	1.208	PASS
	MCH	1.0754	1.210	PASS
	HCH	1.0763	1.214	PASS
16QAM	LCH	1.0799	1.197	PASS
	MCH	1.0796	1.217	PASS
	HCH	1.0772	1.233	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6867	2.934	PASS
	MCH	2.6834	2.963	PASS
	HCH	2.6857	2.951	PASS
16QAM	LCH	2.6839	2.976	PASS
	MCH	2.6839	2.973	PASS
	HCH	2.6849	2.966	PASS

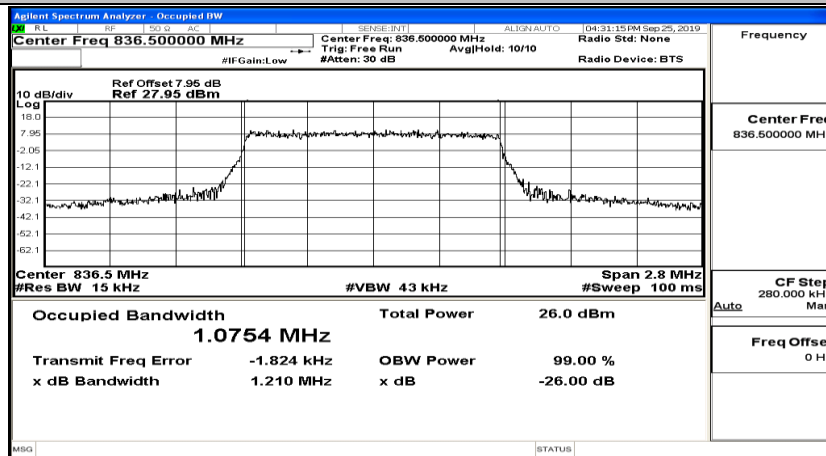
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4742	4.811	PASS
	MCH	4.4651	4.800	PASS
	HCH	4.4684	4.897	PASS
16QAM	LCH	4.4593	4.832	PASS
	MCH	4.4630	4.800	PASS
	HCH	4.4741	4.847	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9463	9.632	PASS
	MCH	8.9299	9.470	PASS
	HCH	8.9461	9.576	PASS
16QAM	LCH	8.9408	9.489	PASS
	MCH	8.9281	9.499	PASS
	HCH	8.9433	9.507	PASS

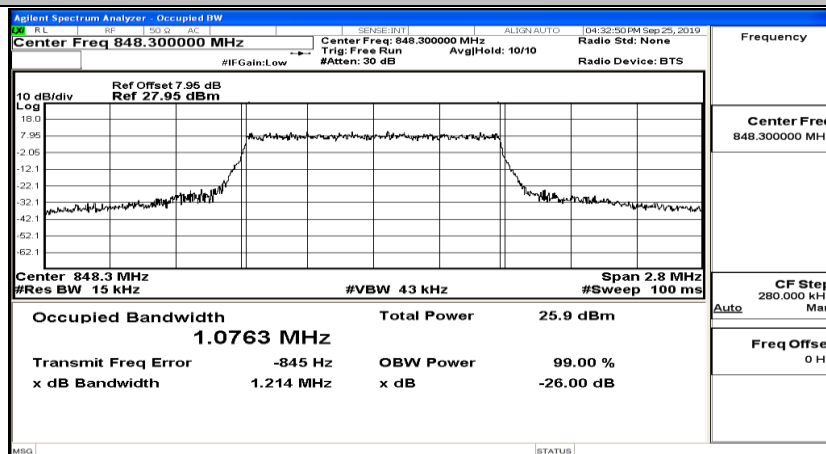
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



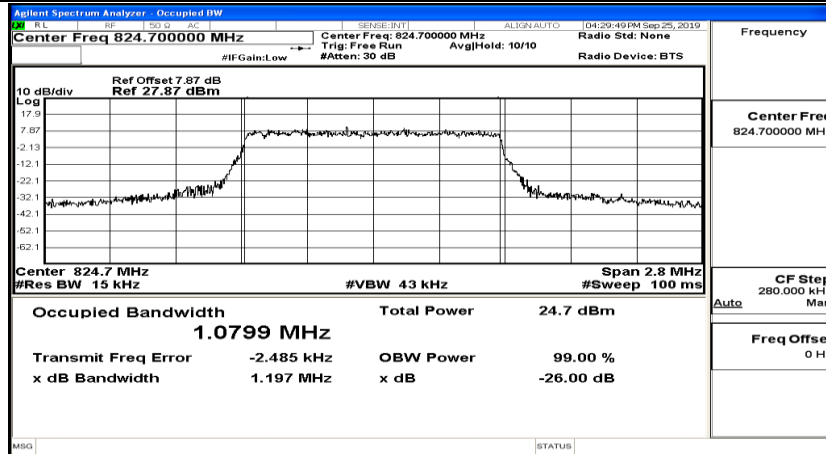
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



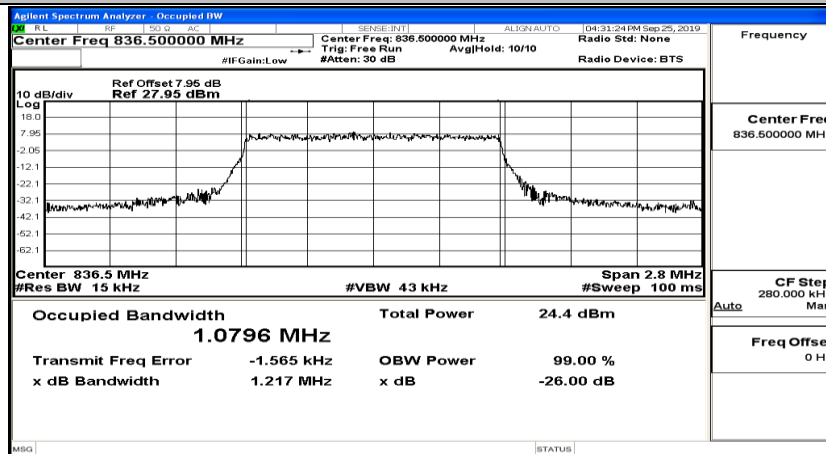
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



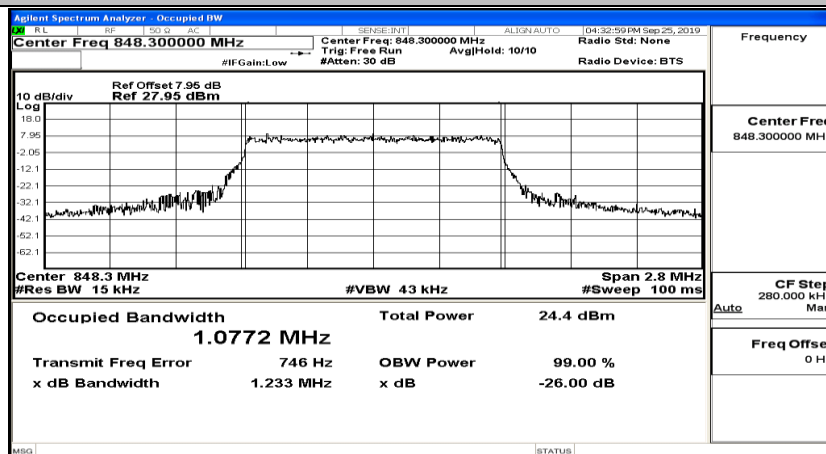
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



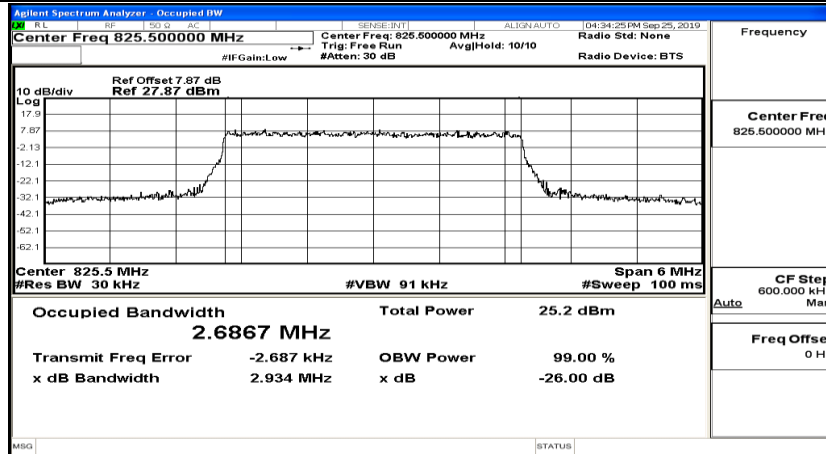
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



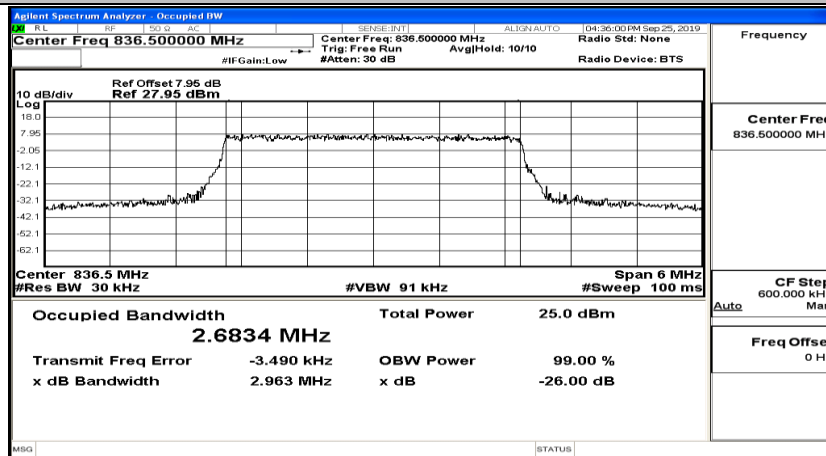
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



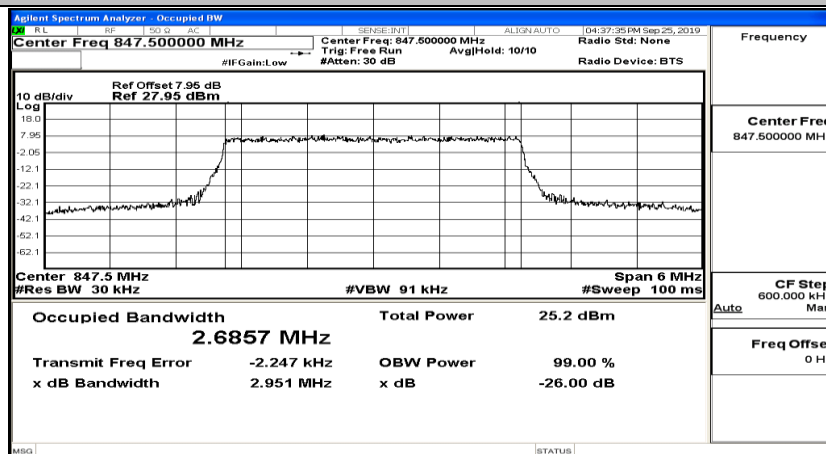
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



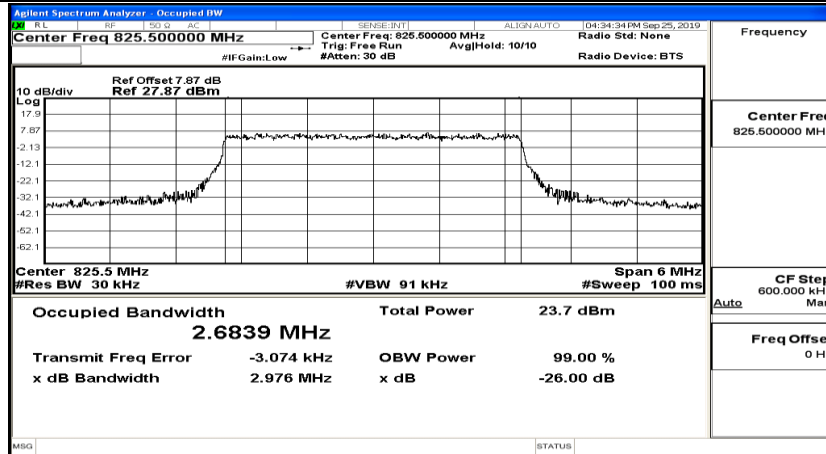
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



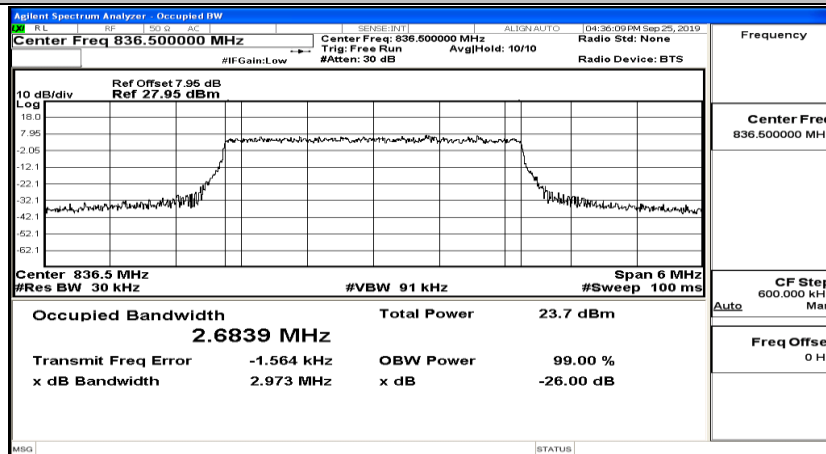
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



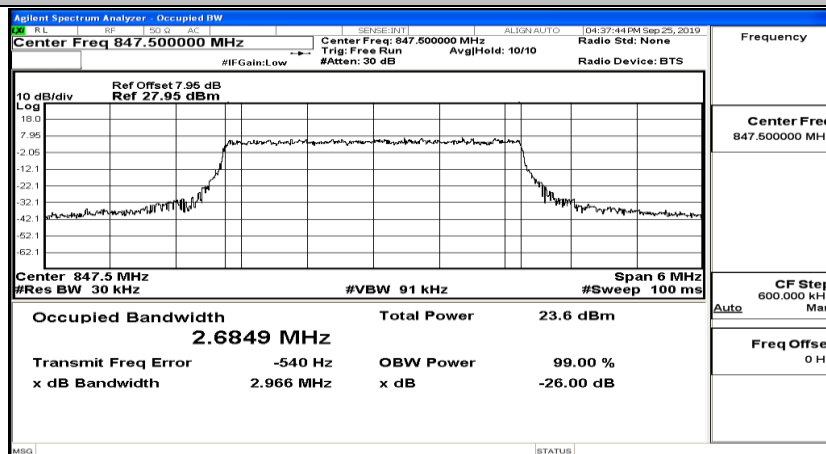
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



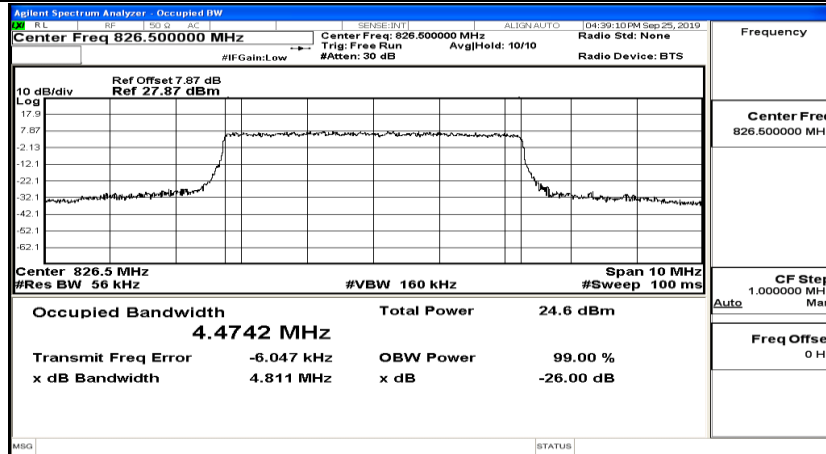
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



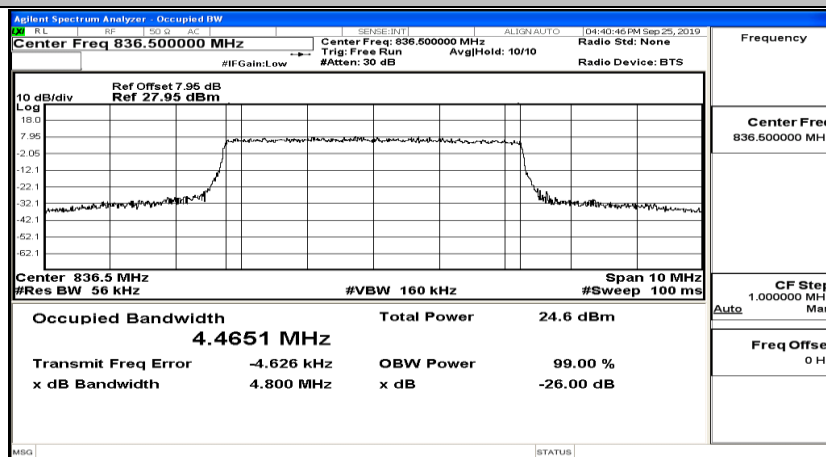
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



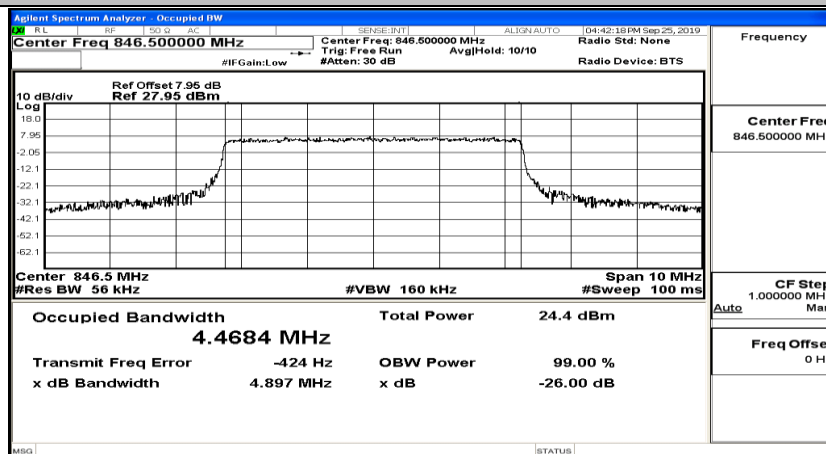
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



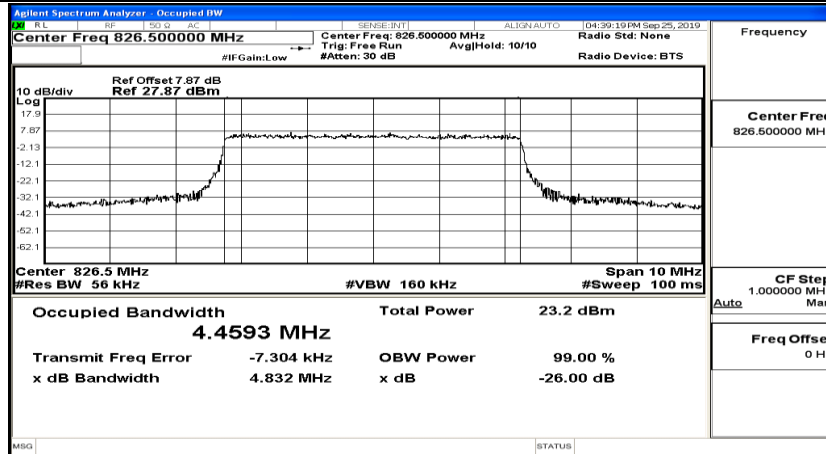
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



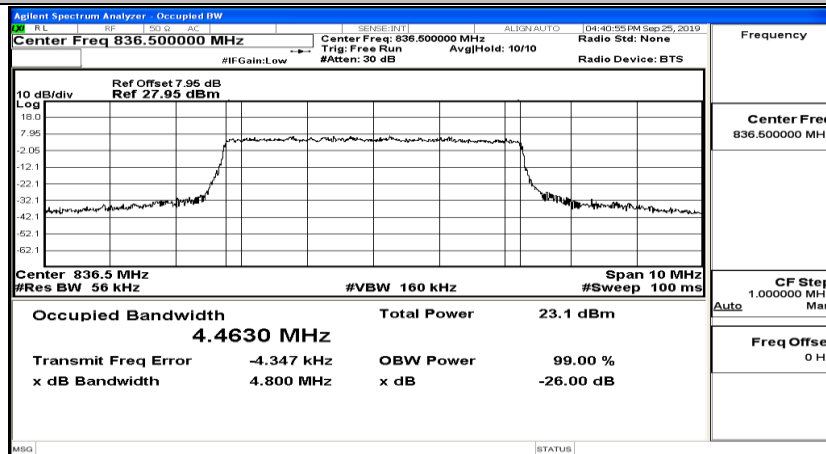
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



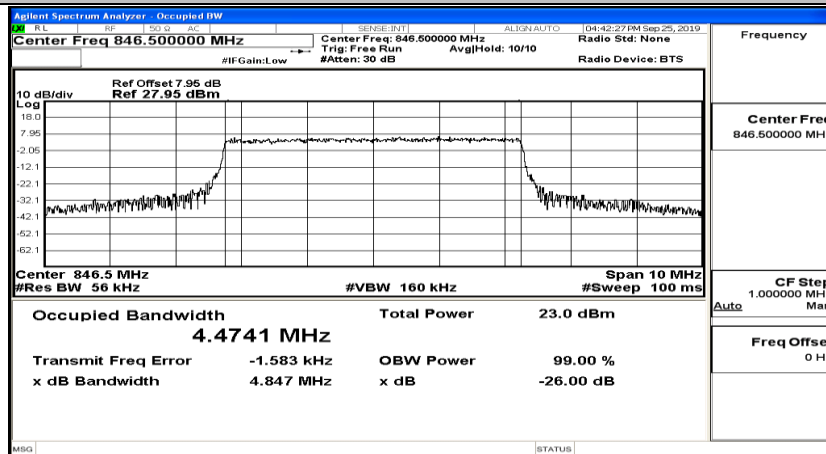
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



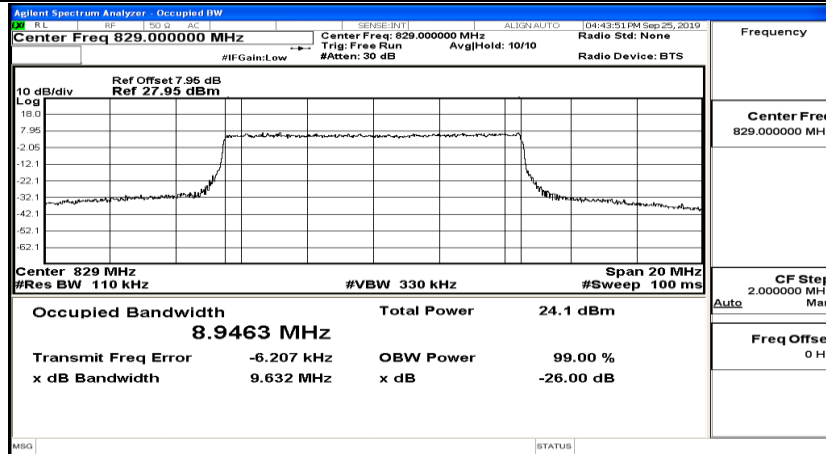
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



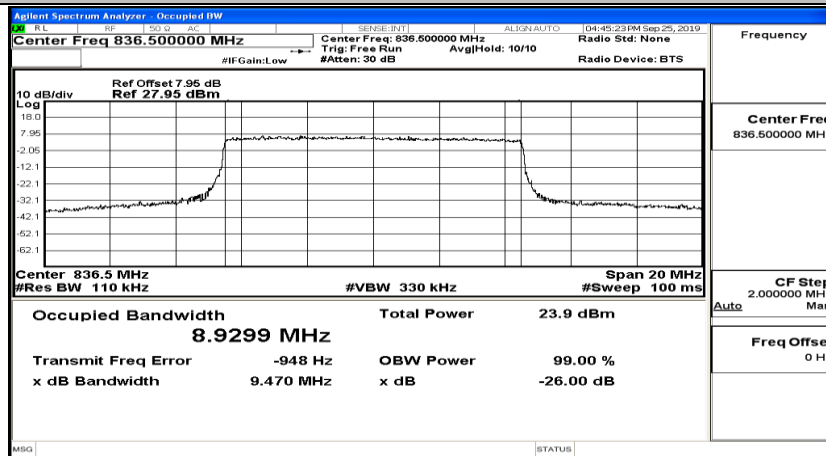
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



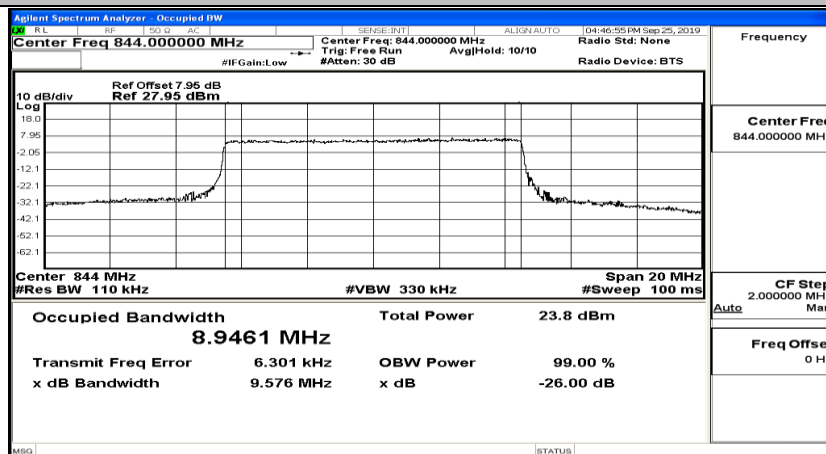
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



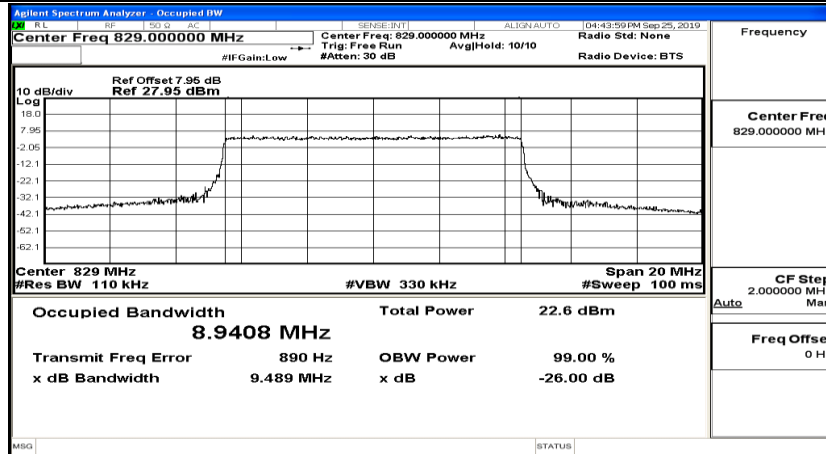
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



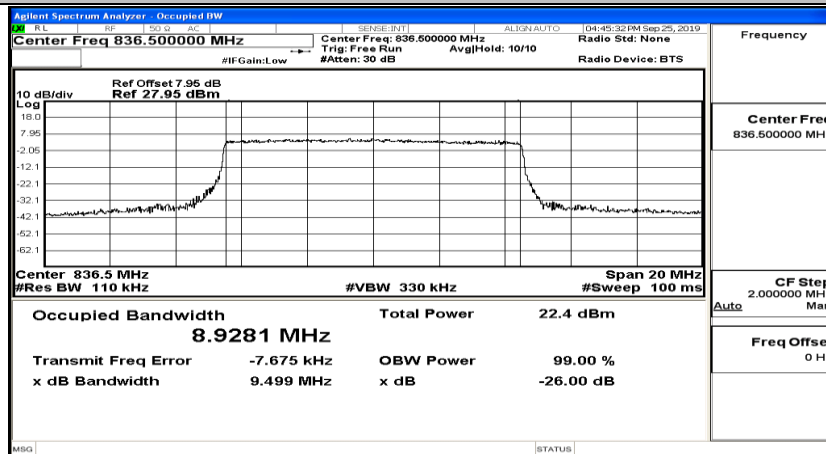
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



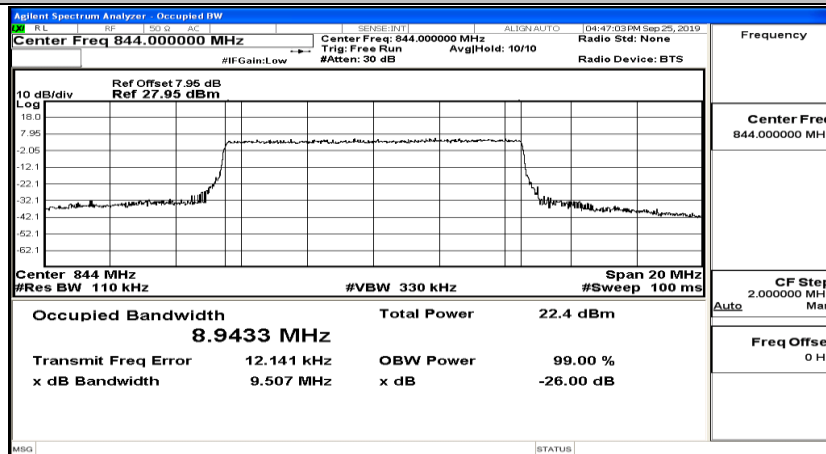
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

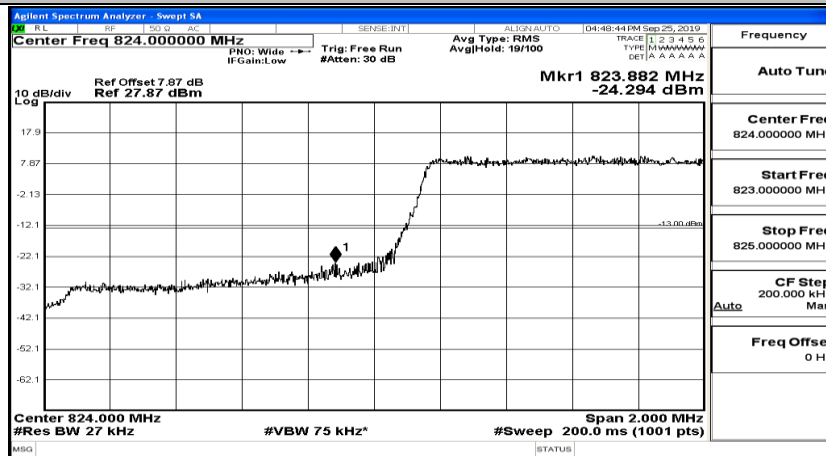


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

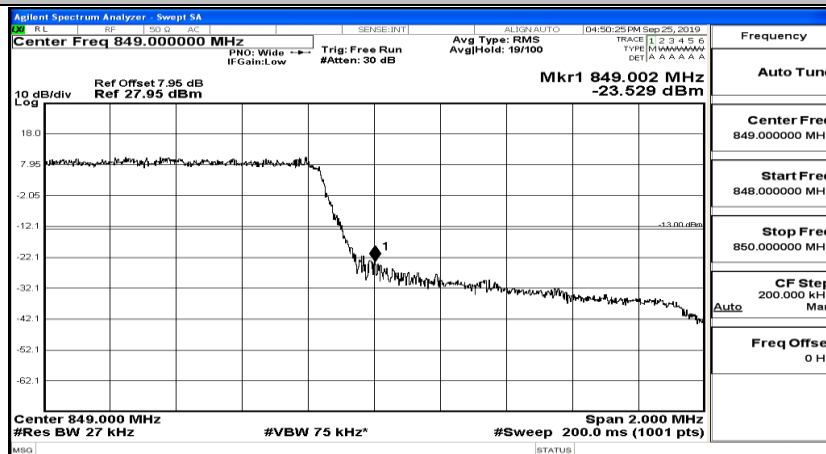


F.4: Band Edge

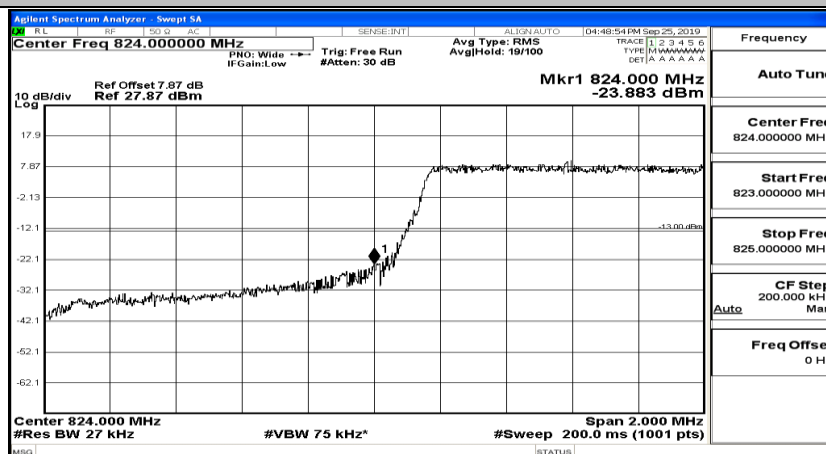
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



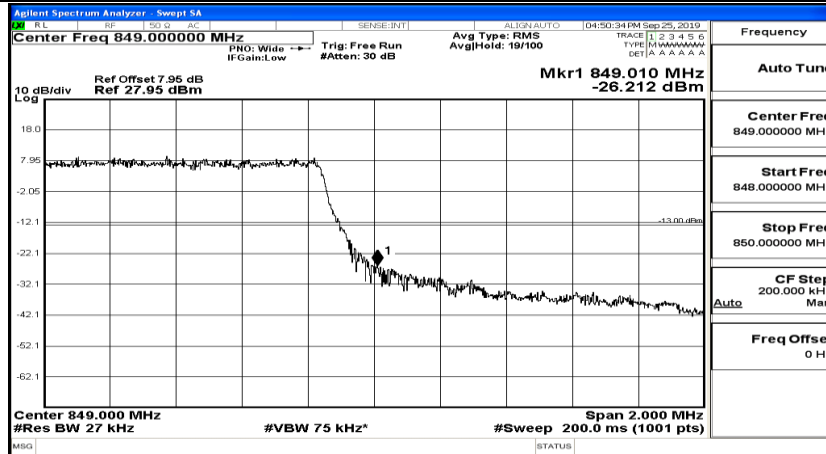
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



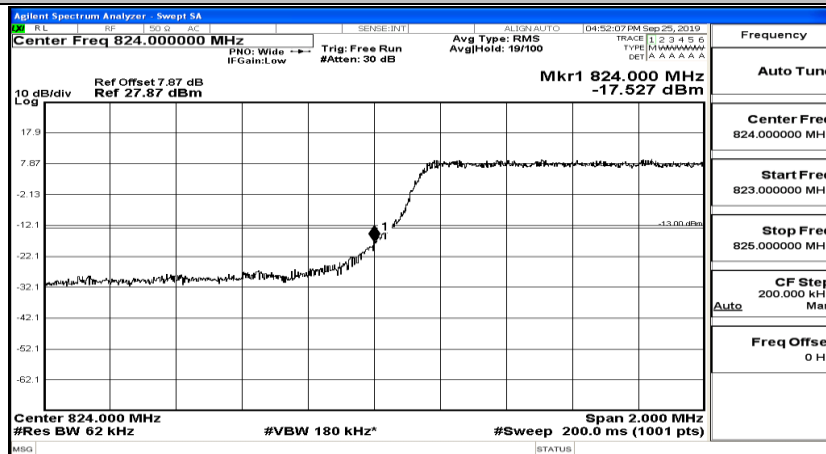
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



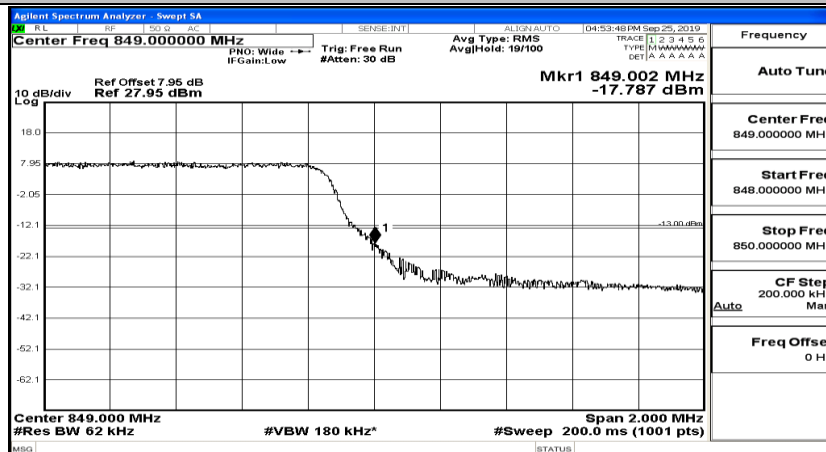
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



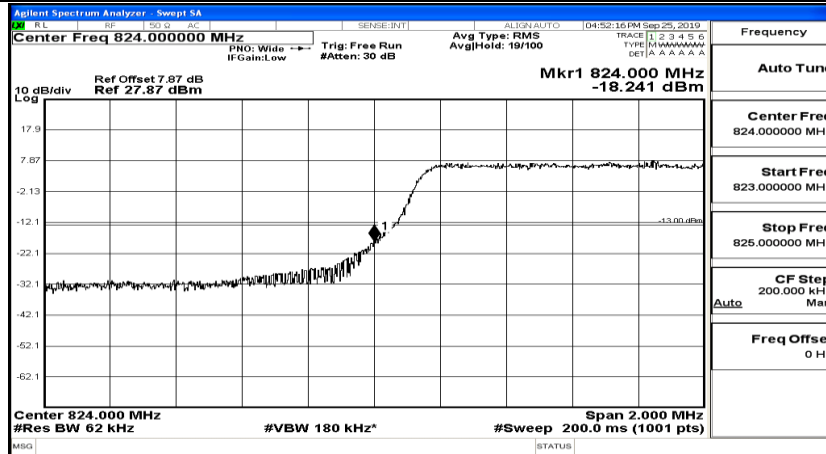
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



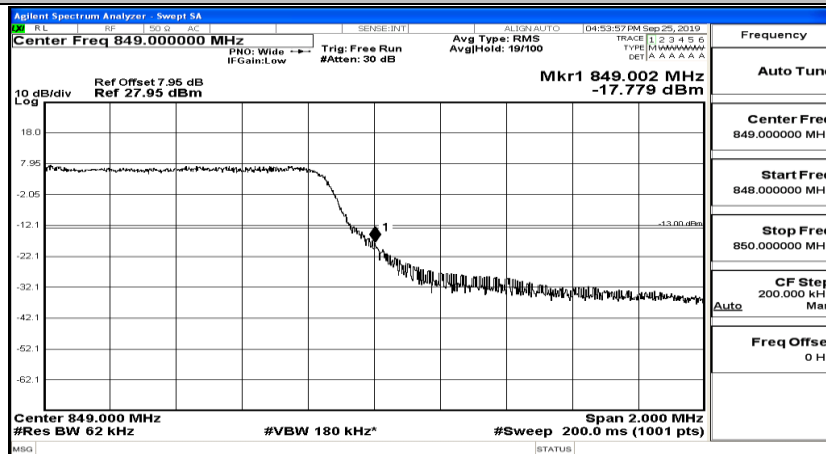
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



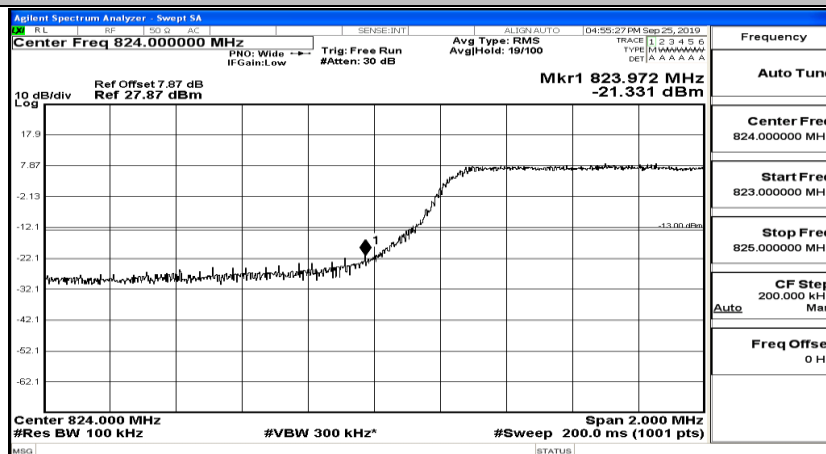
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



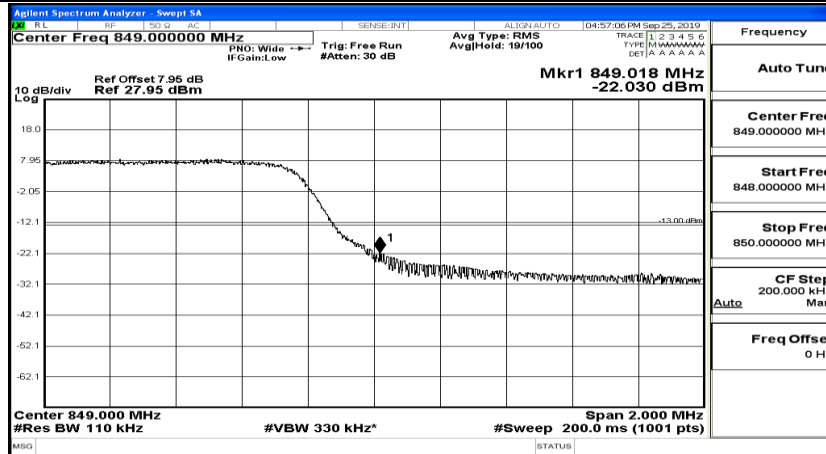
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



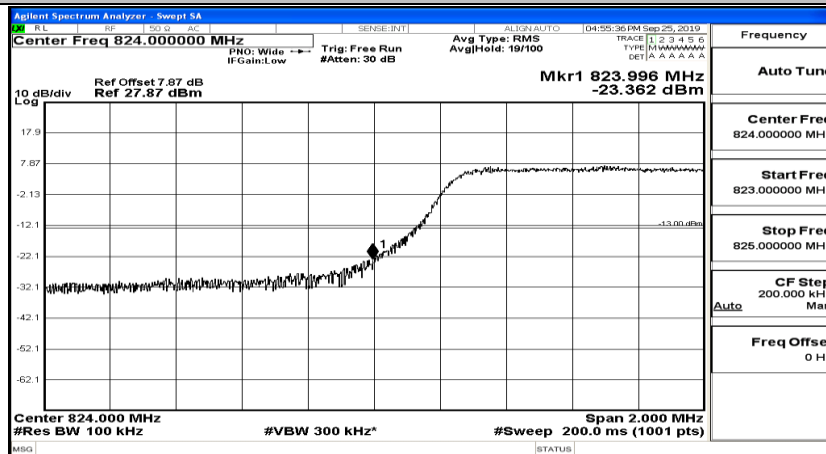
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



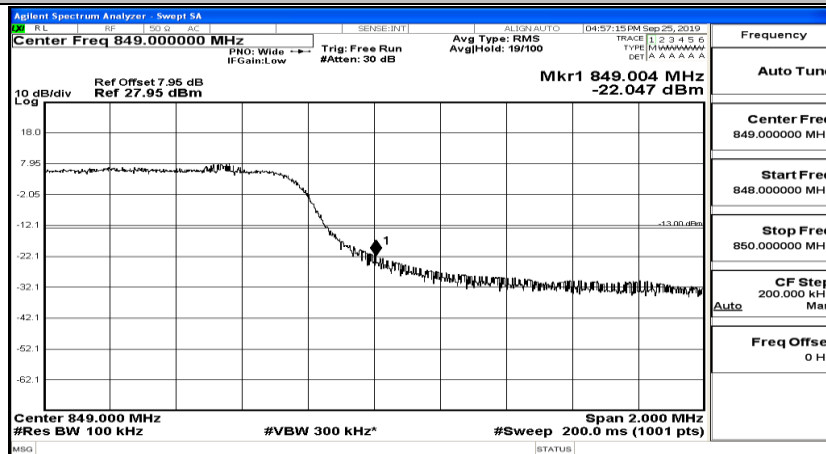
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



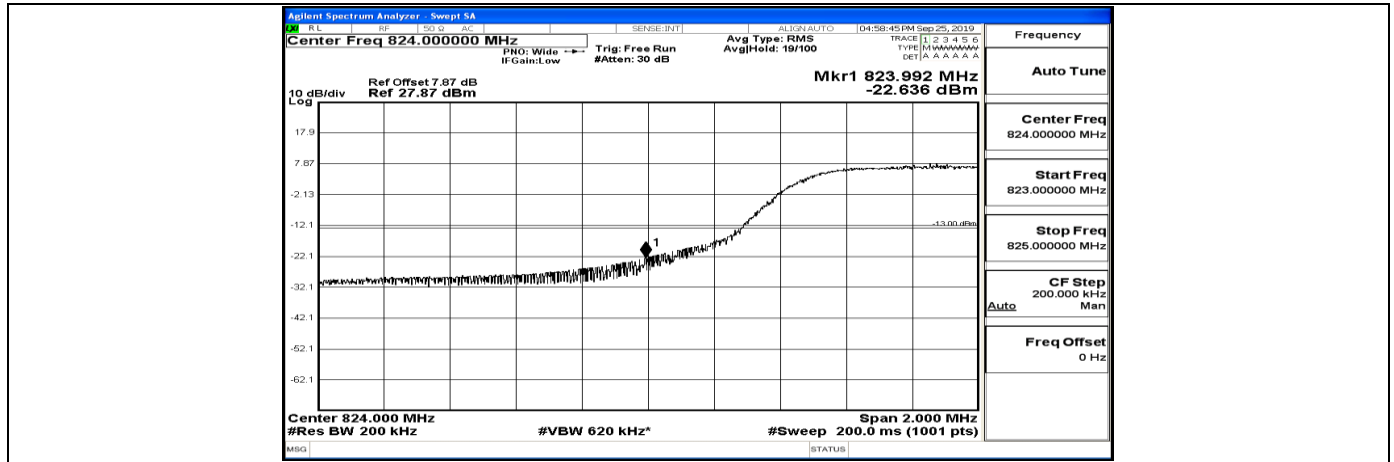
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



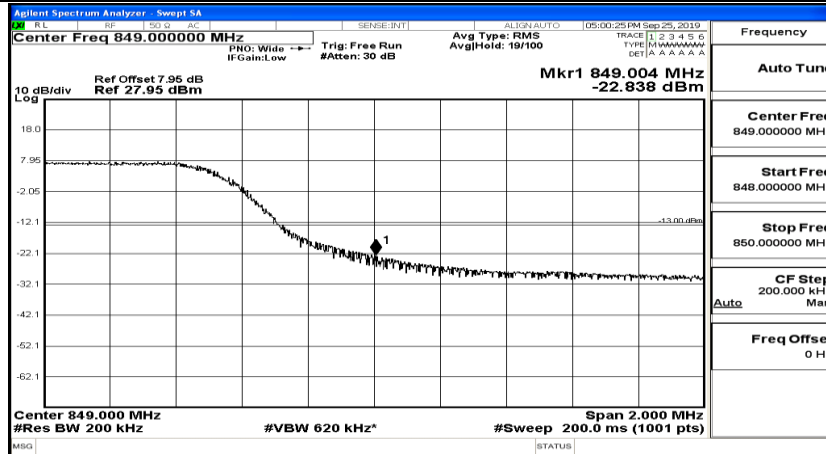
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



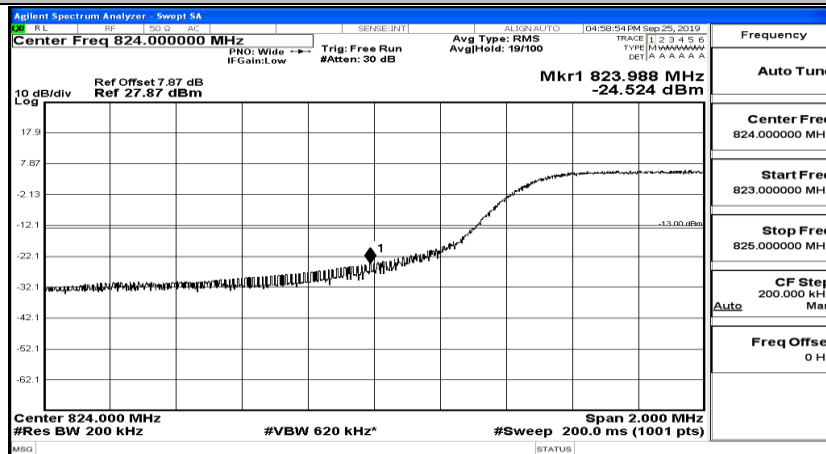
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



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

