Appendix D: Test Data for E-UTRA Band 5

Product Name: Brama L

Trade Mark: N/A

Test Model: ID

Environmental Conditions

Temperature:	22.9° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

D.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.60	21.74	PASS
		1	3	22.72	21.96	PASS
		1	5	22.63	21.88	PASS
		3	0	22.69	21.64	PASS
		3	2	22.70	21.63	PASS
		3	3	22.73	21.64	PASS
		6	0	21.70	20.74	PASS
	MCH	1	0	22.86	22.05	PASS
		1	3	22.98	22.19	PASS
		1	5	22.84	22.03	PASS
		3	0	22.93	21.87	PASS
		3	2	22.91	21.88	PASS
		3	3	23.00	21.89	PASS
		6	0	21.96	20.82	PASS
	HCH	1	0	22.51	21.47	PASS
		1	3	22.63	21.60	PASS
		1	5	22.50	21.48	PASS
		3	0	22.57	21.44	PASS
		3	2	22.57	21.43	PASS
		3	3	22.62	21.42	PASS
		6	0	21.57	20.62	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	22.64	21.91	PASS
		1	7	22.68	21.89	PASS
		1	14	22.75	21.94	PASS
		8	0	21.69	20.74	PASS
		8	4	21.66	20.67	PASS
		8	7	21.77	20.81	PASS
		15	0	21.67	20.76	PASS
	MCH	1	0	22.87	22.11	PASS
		1	7	22.85	22.06	PASS
		1	14	22.85	22.04	PASS
		8	0	21.89	20.88	PASS
		8	4	21.88	20.87	PASS
		8	7	21.89	20.90	PASS
		15	0	21.86	20.85	PASS
	HCH	1	0	22.57	21.72	PASS
		1	7	22.47	21.70	PASS
		1	14	22.52	21.72	PASS
		8	0	21.56	20.60	PASS
		8	4	21.57	20.65	PASS
		8	7	21.57	20.57	PASS
		15	0	21.51	20.53	PASS

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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	22.62	21.67	PASS
		1	12	22.83	21.86	PASS
		1	24	22.75	21.82	PASS
		12	0	21.58	20.58	PASS
		12	6	21.61	20.59	PASS
		12	13	21.86	20.83	PASS
		25	0	21.77	20.75	PASS
	MCH	1	0	22.80	22.06	PASS
		1	12	22.94	22.22	PASS
		1	24	22.80	22.04	PASS
		12	0	21.91	20.89	PASS
		12	6	21.88	20.91	PASS
		12	13	21.88	20.89	PASS
		25	0	21.91	20.90	PASS
	HCH	1	0	22.56	21.61	PASS
		1	12	22.62	21.67	PASS
		1	24	22.52	21.54	PASS
		12	0	21.57	20.52	PASS
		12	6	21.57	20.52	PASS
		12	13	21.53	20.52	PASS
		25	0	21.55	20.57	PASS

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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	22.63	21.84	PASS
		1	24	22.91	22.12	PASS
		1	49	22.85	22.06	PASS
		25	0	21.76	20.77	PASS
		25	12	21.76	20.78	PASS
		25	25	21.99	20.98	PASS
		50	0	21.87	20.86	PASS
	MCH	1	0	22.85	22.09	PASS
		1	24	23.03	22.21	PASS
		1	49	22.81	21.99	PASS
		25	0	21.99	21.02	PASS
		25	12	21.96	21.00	PASS
		25	25	21.87	20.93	PASS
		50	0	21.88	20.91	PASS
	HCH	1	0	22.72	21.98	PASS
		1	24	22.71	21.92	PASS
		1	49	22.51	21.73	PASS
		25	0	21.81	20.83	PASS
		25	12	21.80	20.83	PASS
		25	25	21.69	20.73	PASS
		50	0	21.74	20.73	PASS

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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	5.36	<13	PASS
	MCH	5.23	<13	PASS
	HCH	5.17	<13	PASS
16QAM	LCH	6.14	<13	PASS
	MCH	6.06	<13	PASS
	HCH	5.96	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.25	<13	PASS
	MCH	5.16	<13	PASS
	HCH	5.18	<13	PASS
16QAM	LCH	6.11	<13	PASS
	MCH	6.04	<13	PASS
	HCH	5.99	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.34	<13	PASS
	MCH	5.27	<13	PASS
	HCH	5.27	<13	PASS
16QAM	LCH	6.07	<13	PASS
	MCH	6.07	<13	PASS
	HCH	6.04	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.34	<13	PASS
	MCH	5.3	<13	PASS
	HCH	5.3	<13	PASS
16QAM	LCH	6.13	<13	PASS
	MCH	6.12	<13	PASS
	HCH	6.04	<13	PASS

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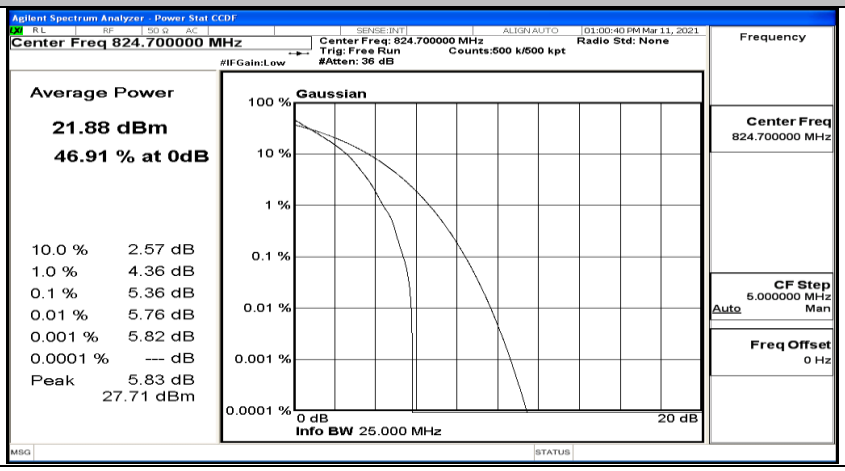
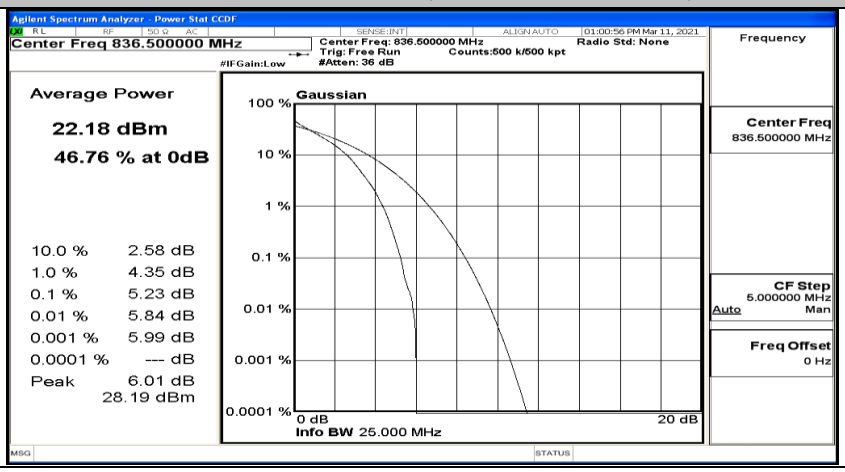
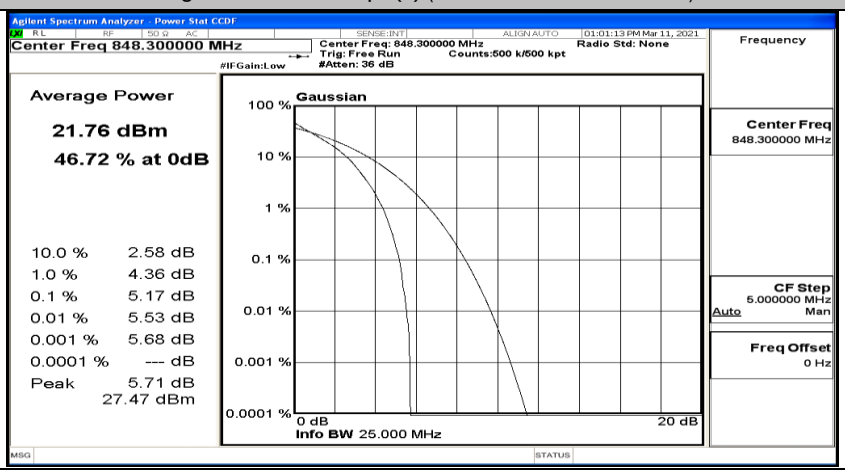
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



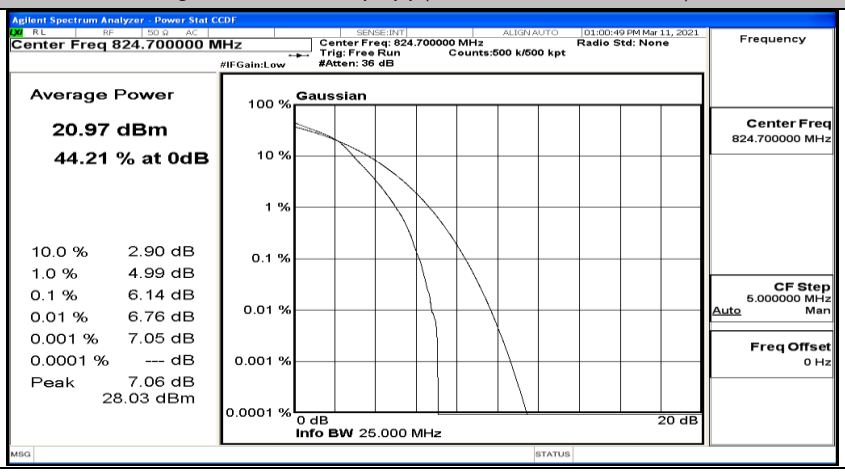
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



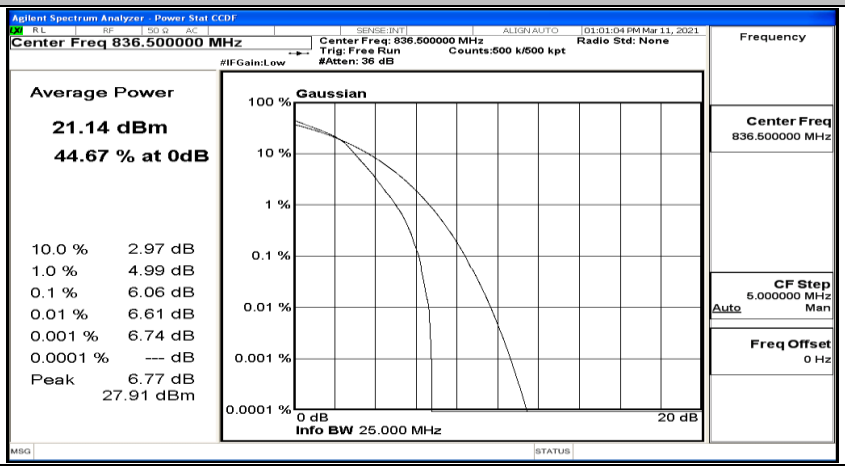
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



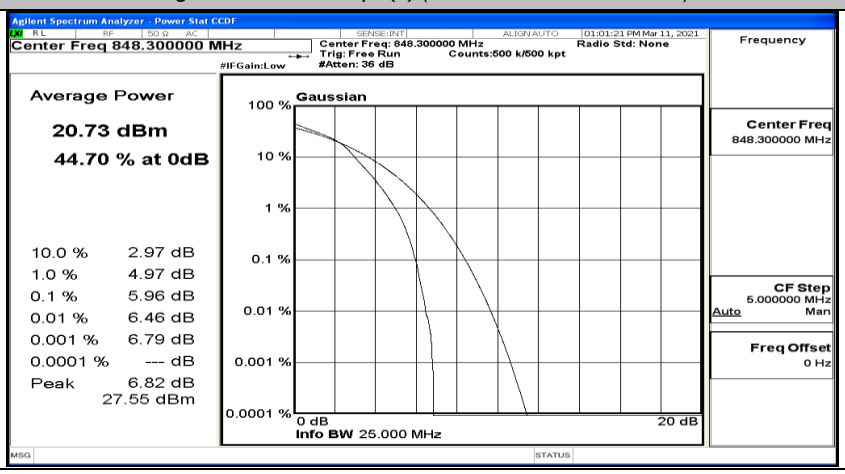
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



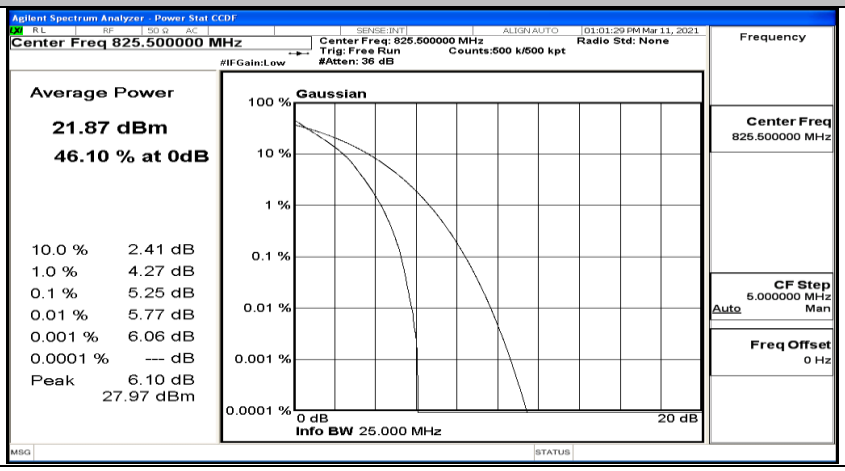
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



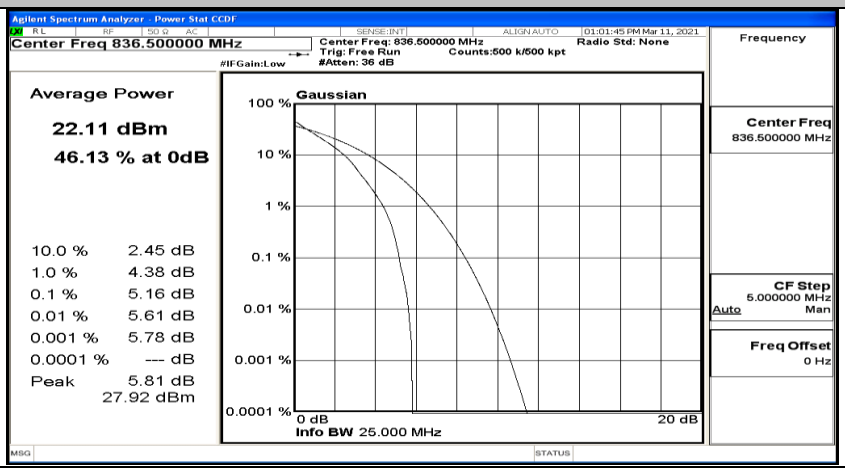
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



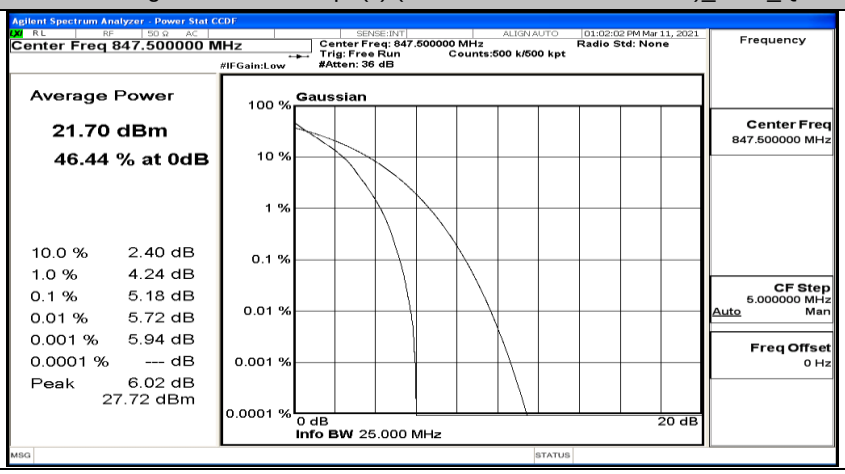
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



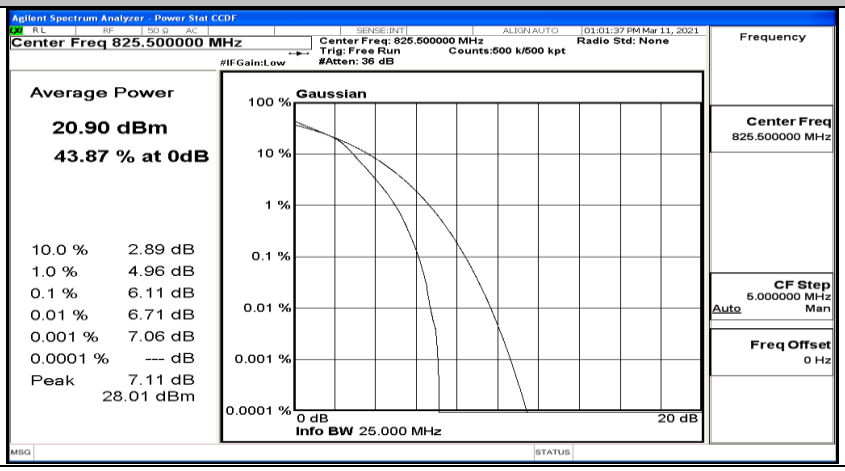
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



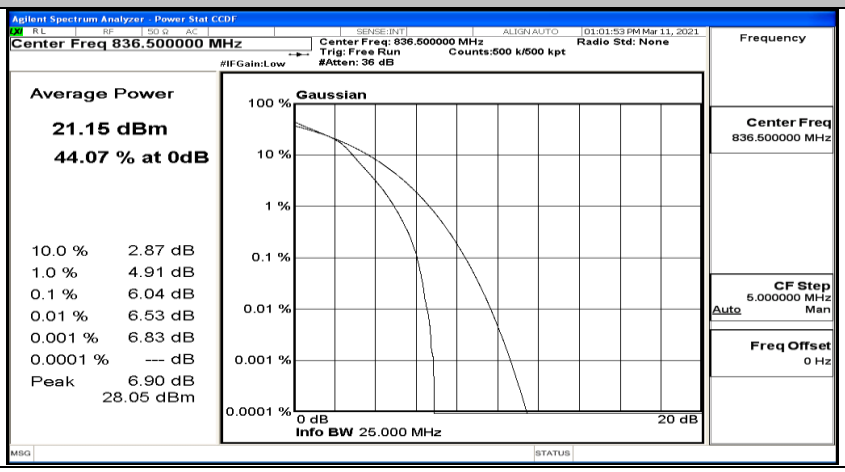
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



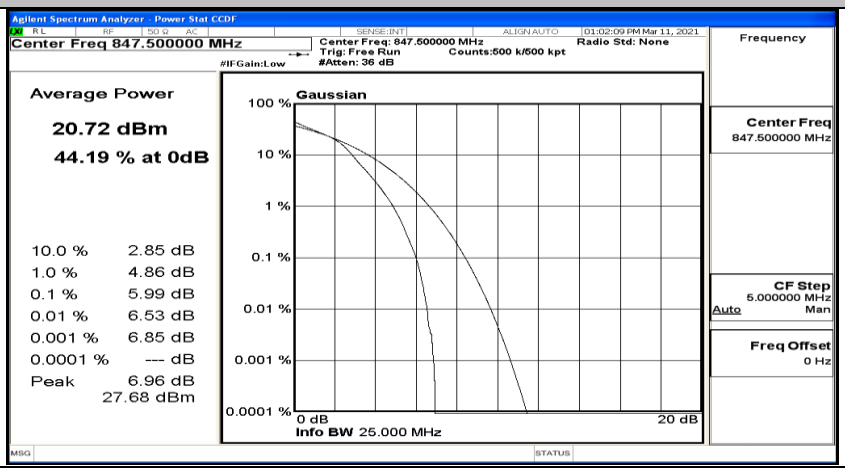
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



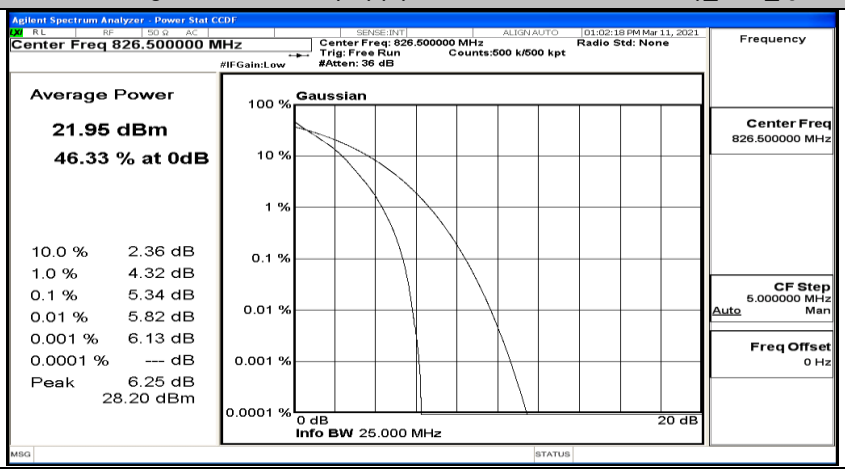
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



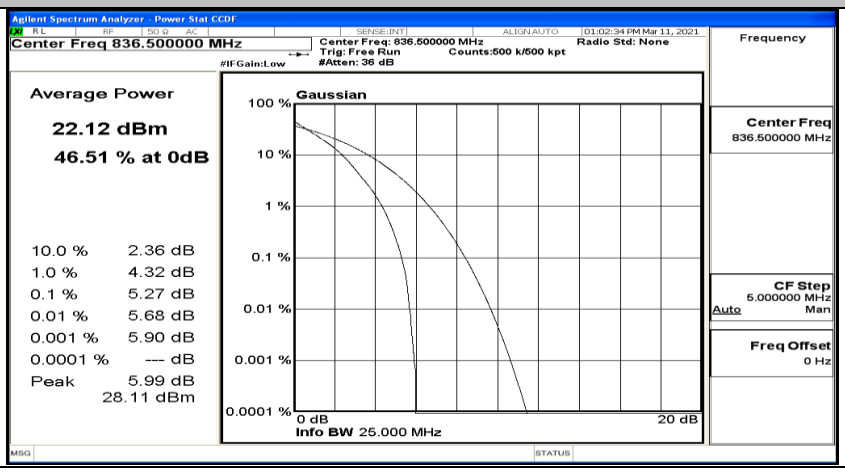
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



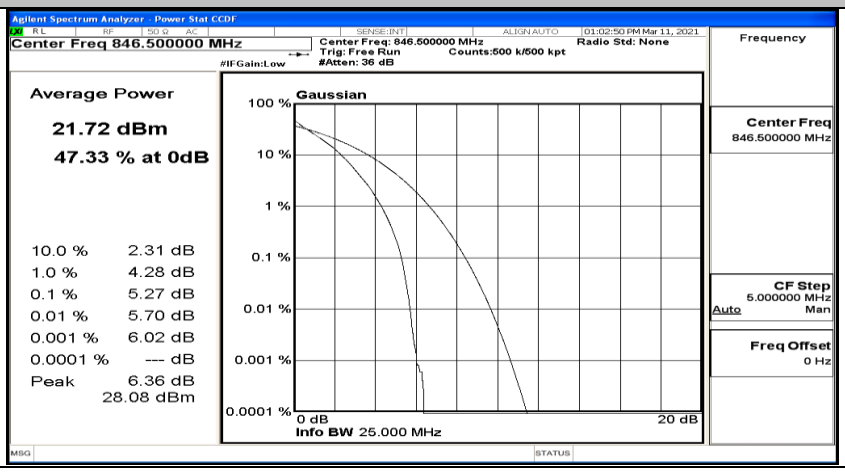
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



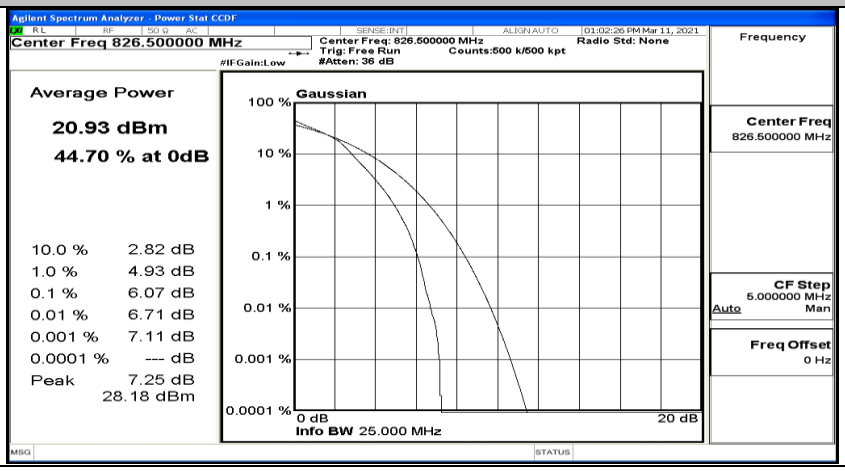
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



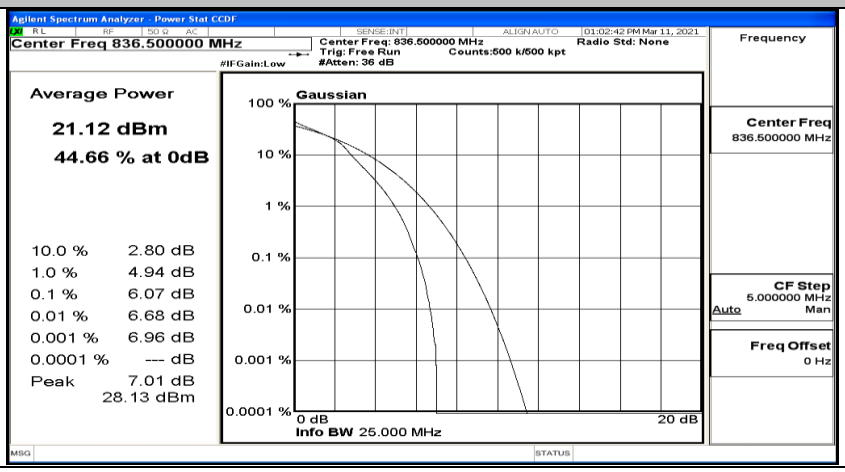
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



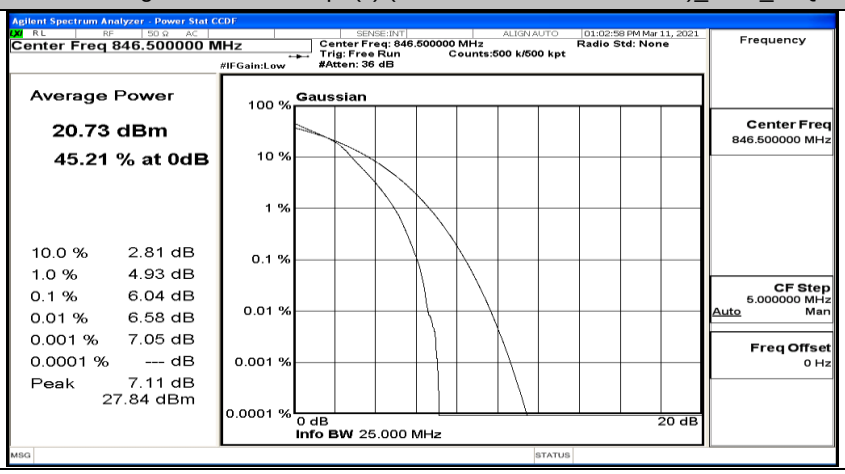
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



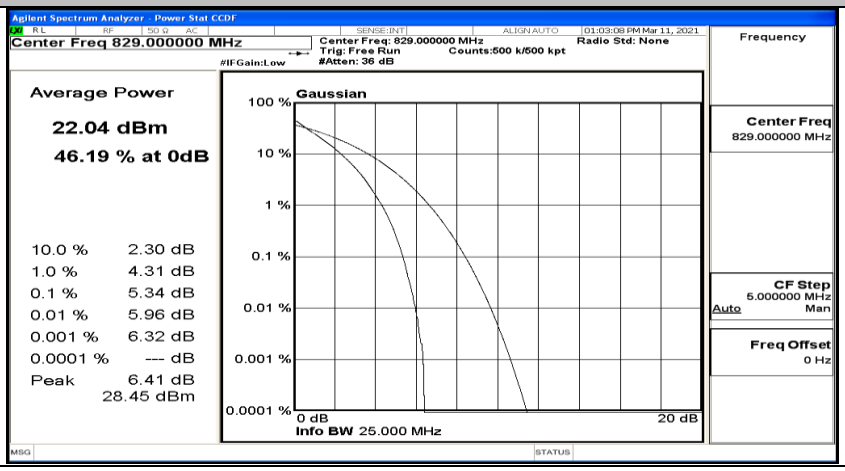
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



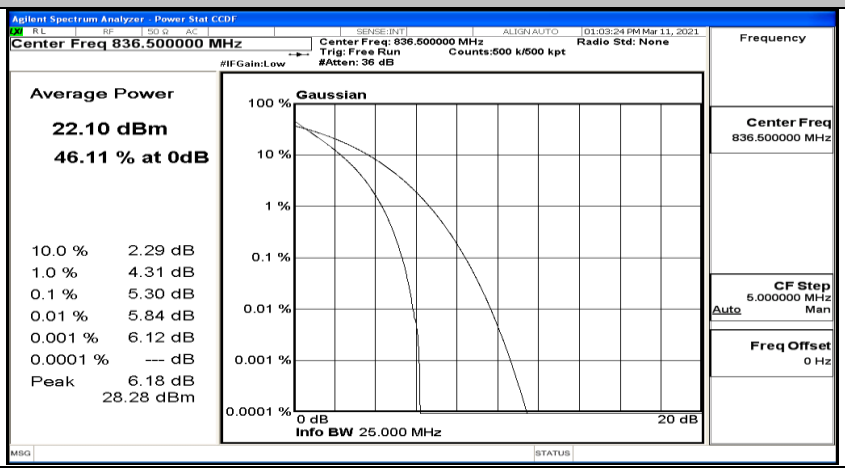
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



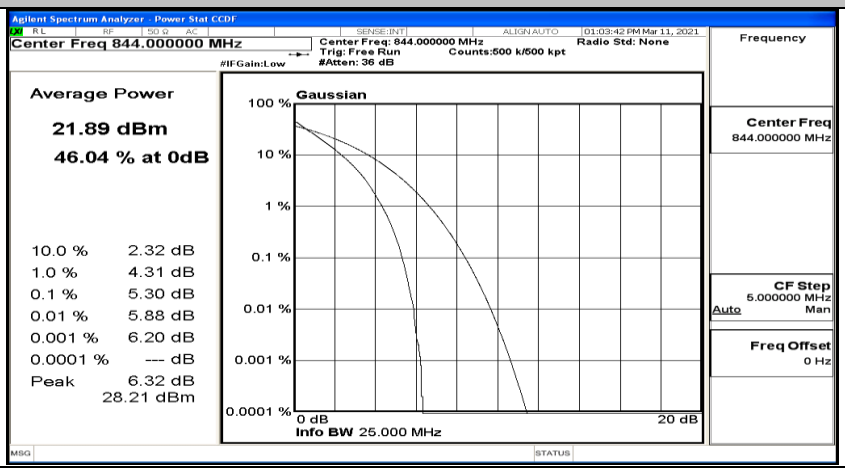
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



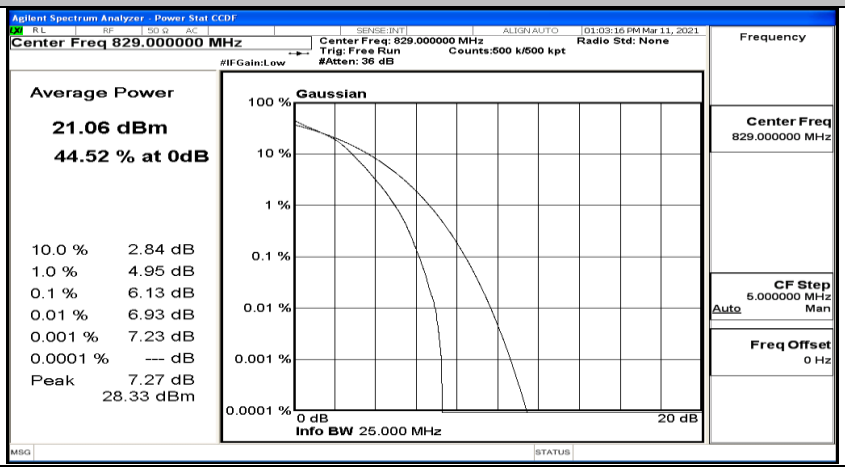
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



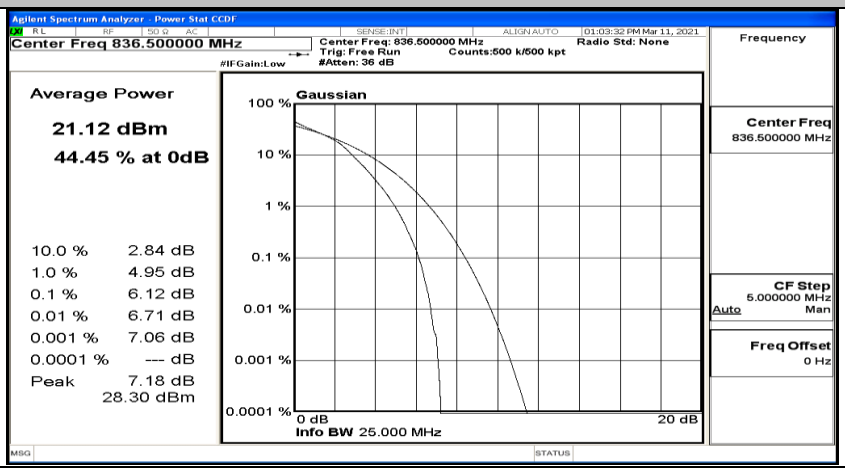
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



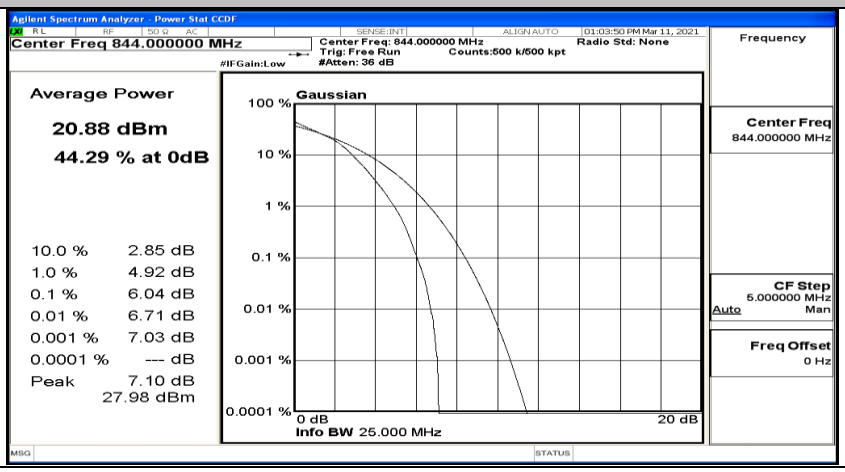
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



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	1.0780	1.212	PASS
	MCH	1.0771	1.211	PASS
	HCH	1.0813	1.226	PASS
16QAM	LCH	1.0777	1.204	PASS
	MCH	1.0759	1.218	PASS
	HCH	1.0785	1.232	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6737	2.842	PASS
	MCH	2.6811	2.836	PASS
	HCH	2.6769	2.833	PASS
16QAM	LCH	2.6779	2.823	PASS
	MCH	2.6753	2.826	PASS
	HCH	2.6789	2.832	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4639	4.770	PASS
	MCH	4.4716	4.768	PASS
	HCH	4.4637	4.731	PASS
16QAM	LCH	4.4767	4.715	PASS
	MCH	4.4718	4.768	PASS
	HCH	4.4715	4.739	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9382	9.410	PASS
	MCH	8.9364	9.337	PASS
	HCH	8.9539	9.400	PASS
16QAM	LCH	8.9249	9.343	PASS
	MCH	8.9276	9.369	PASS
	HCH	8.9296	9.358	PASS

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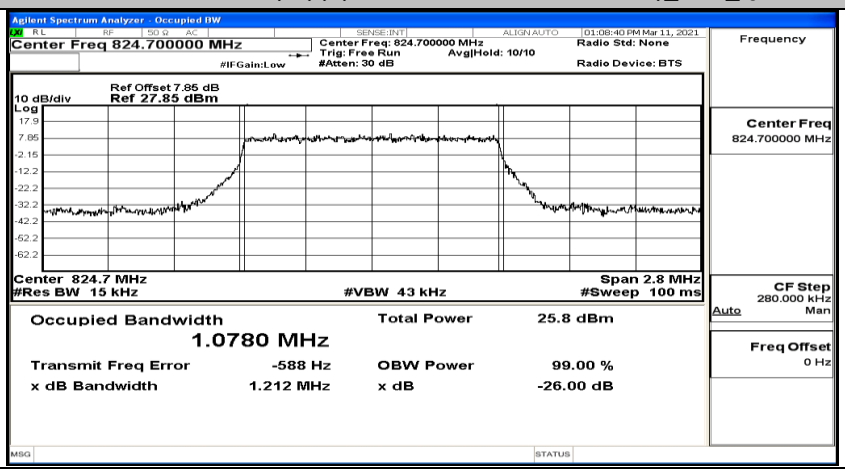
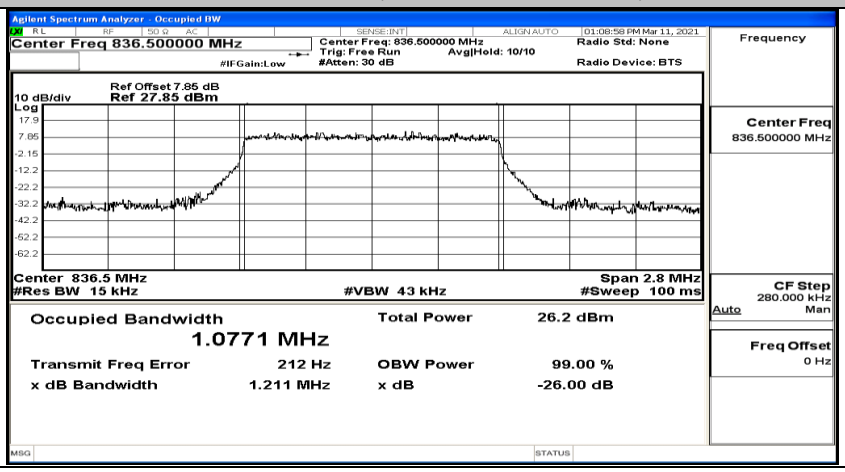
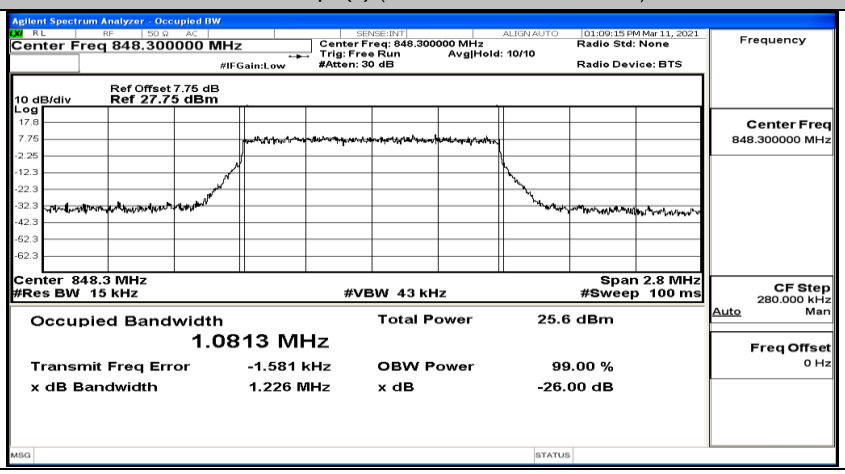
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



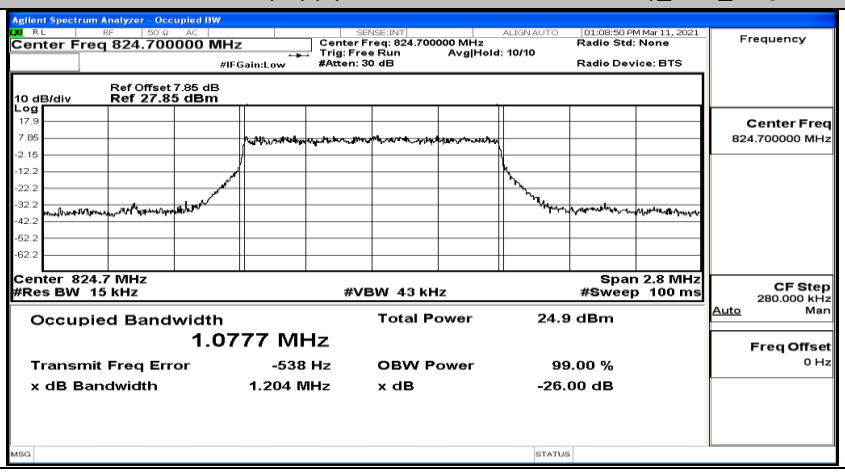
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



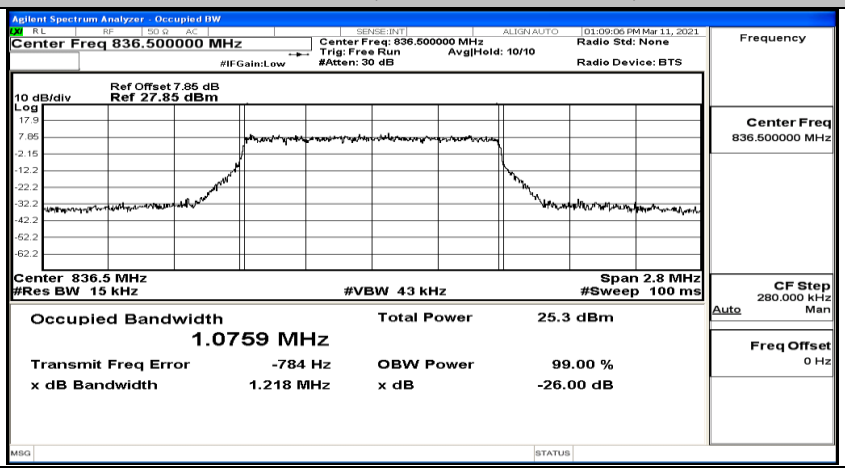
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



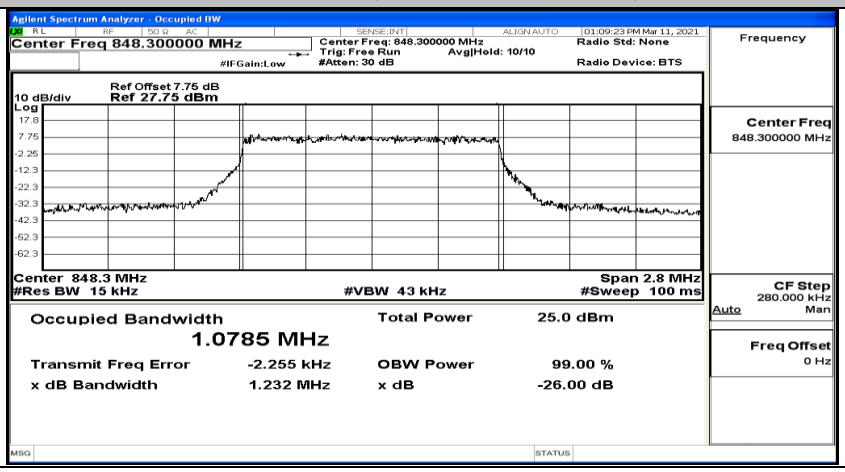
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



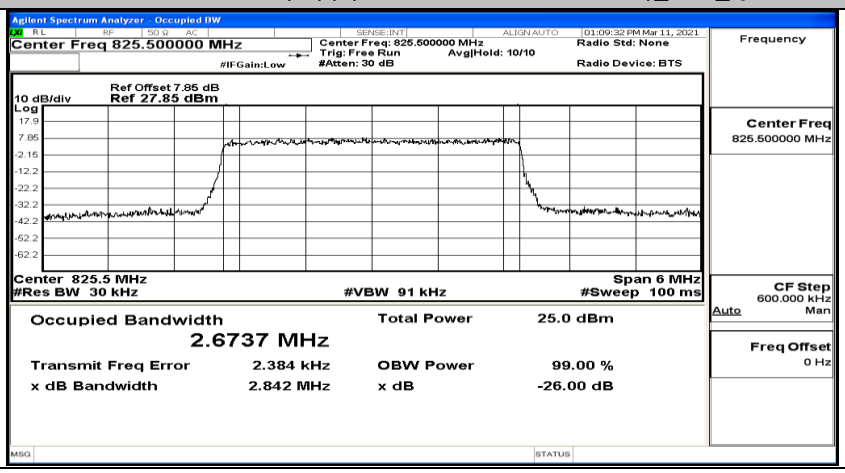
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



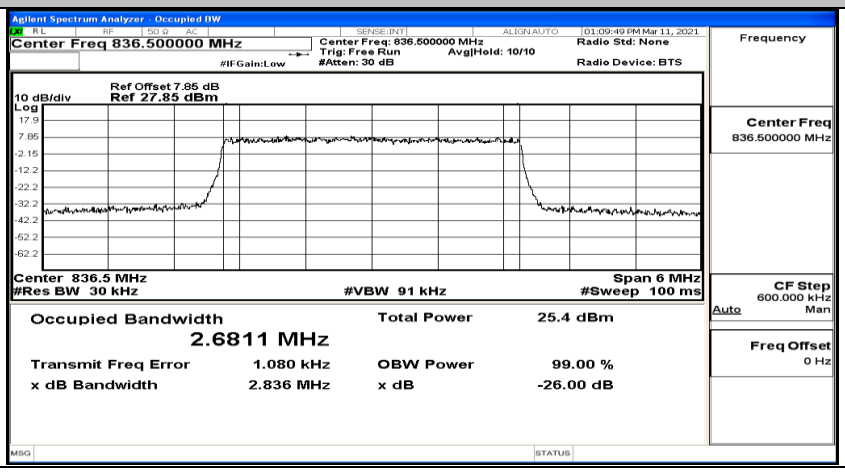
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



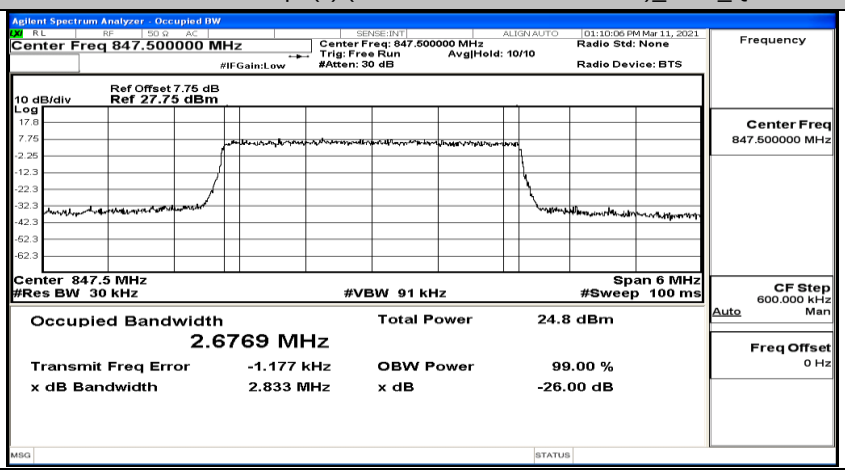
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



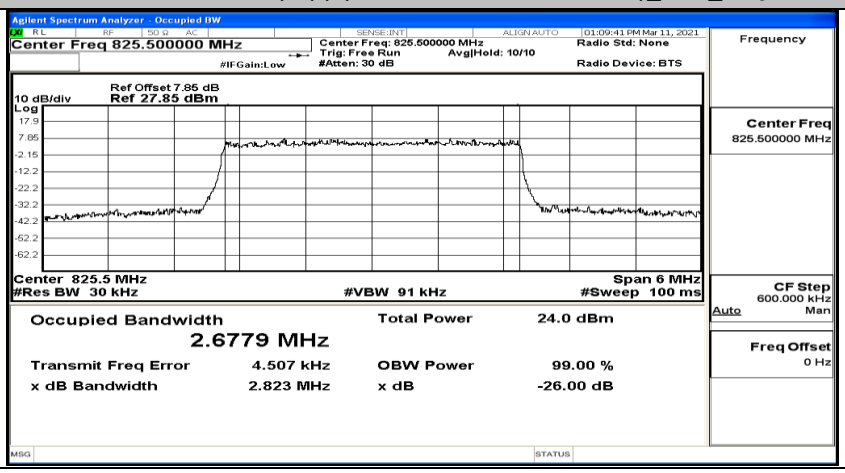
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



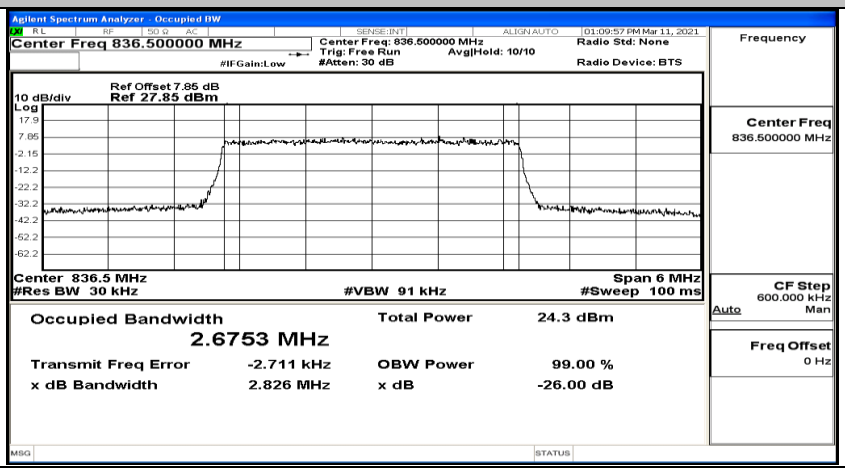
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



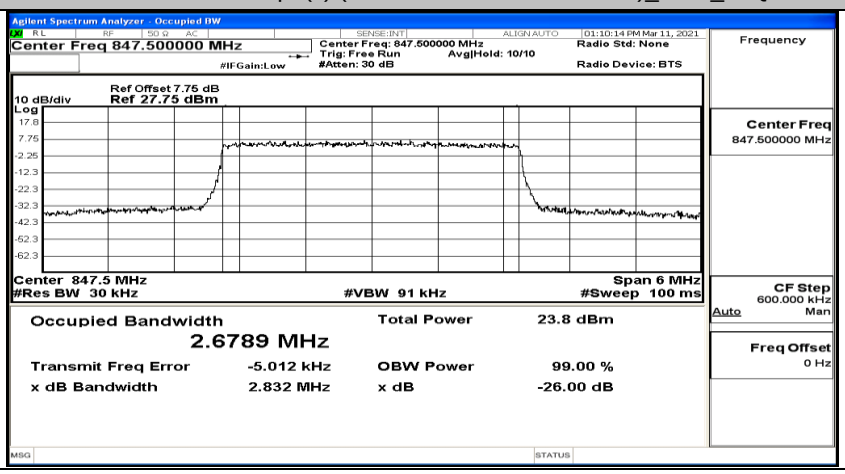
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



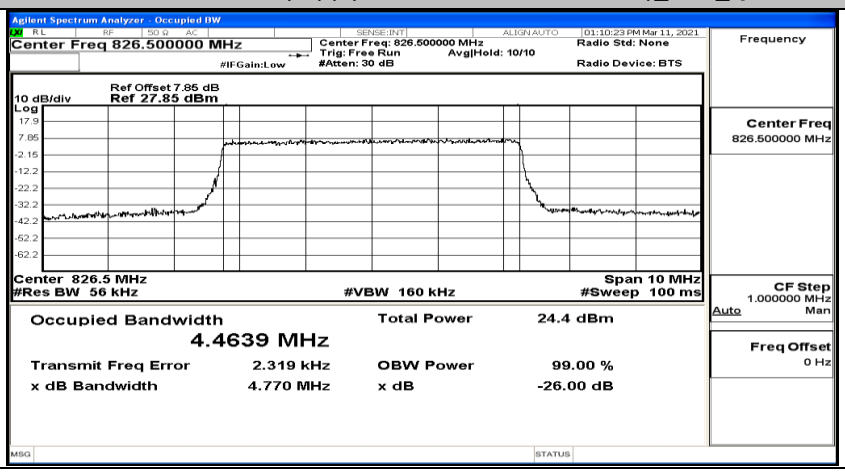
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



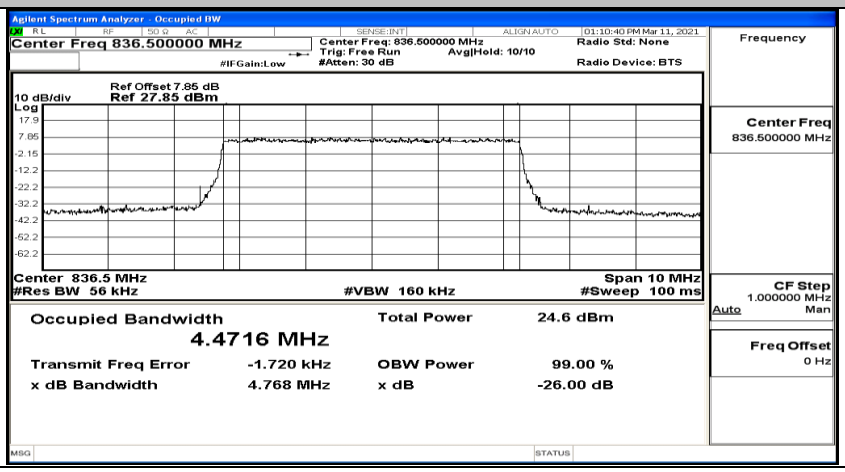
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



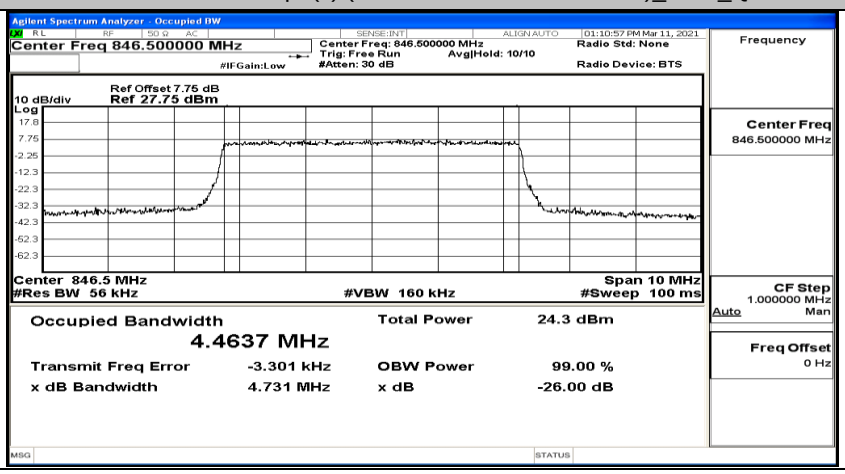
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



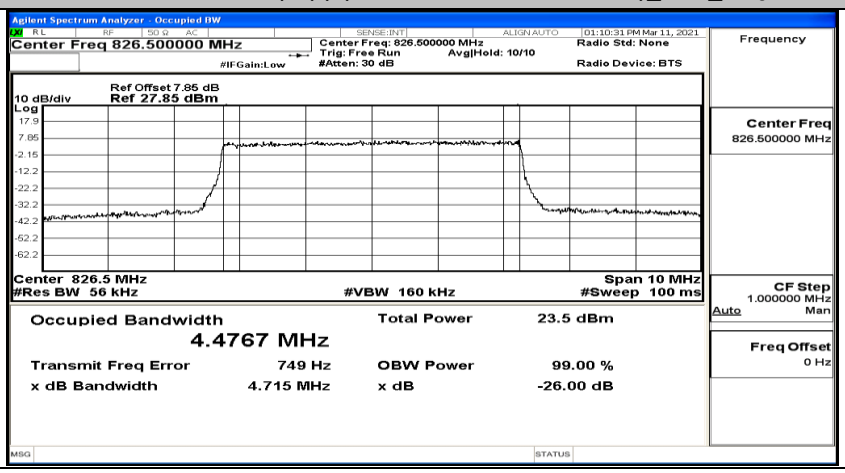
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



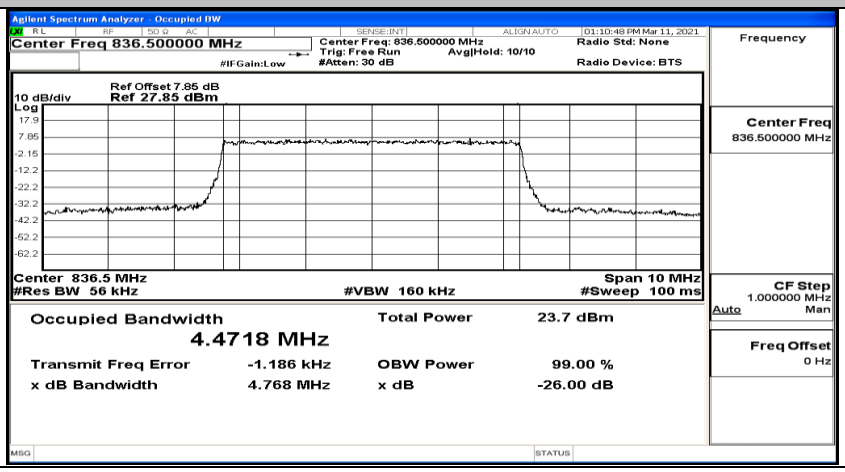
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



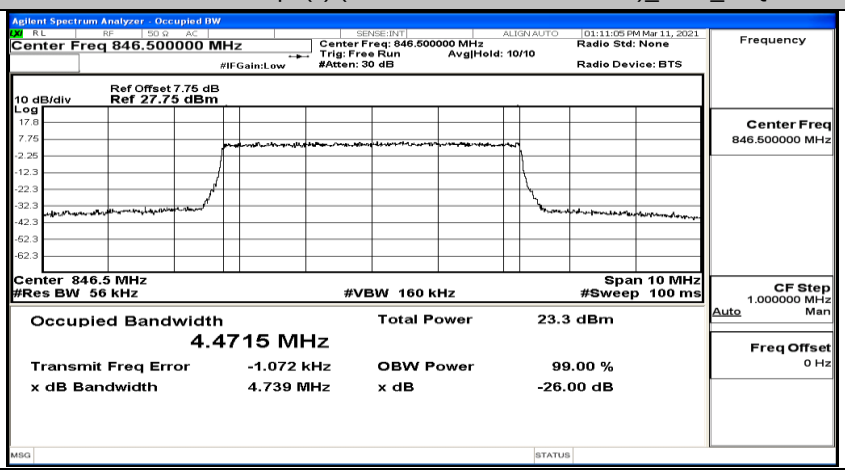
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



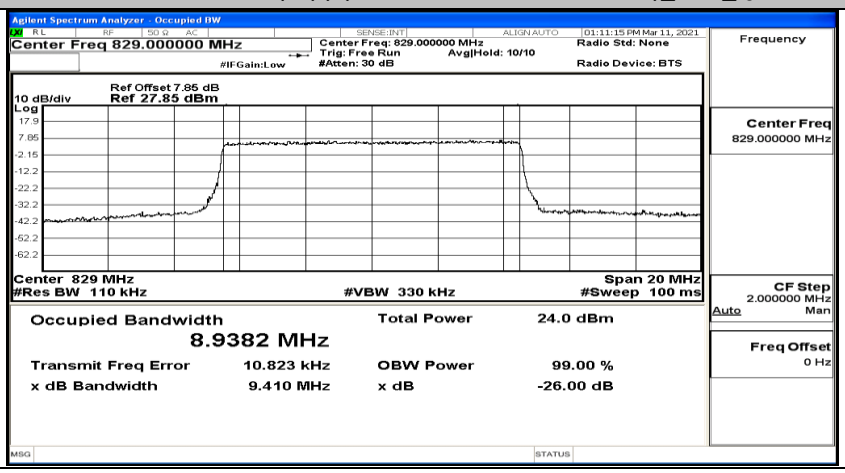
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



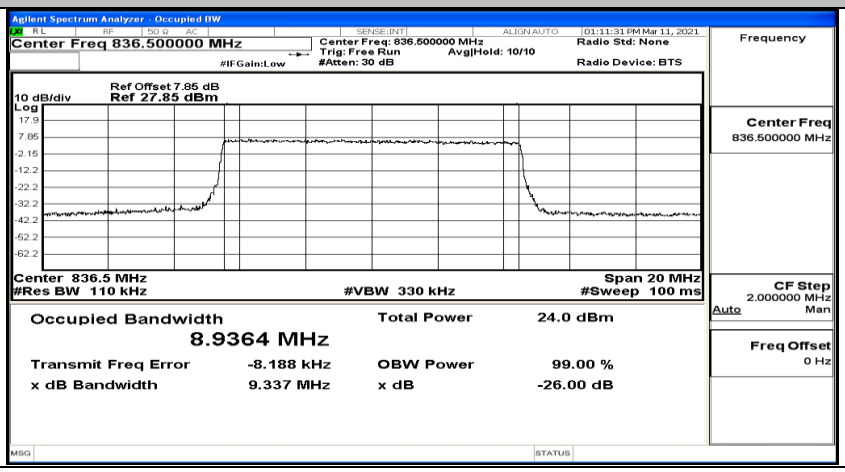
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



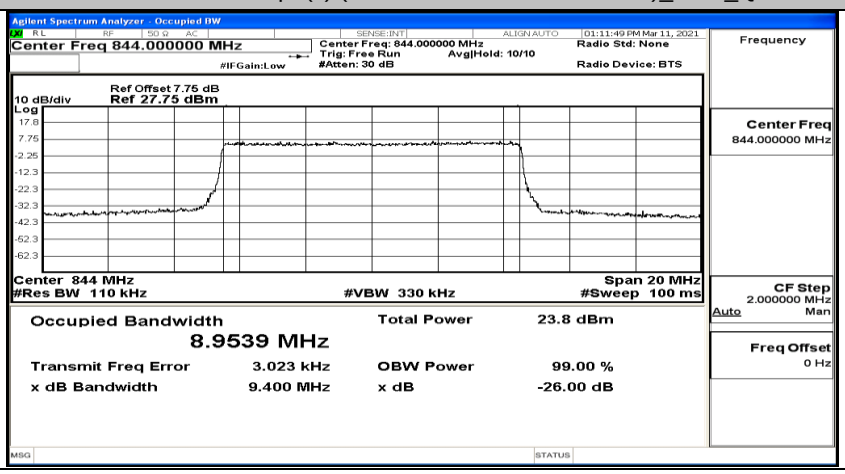
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



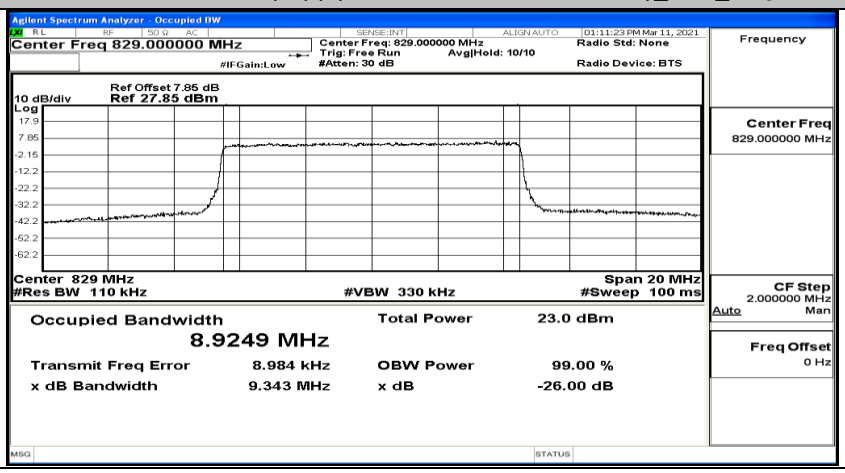
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



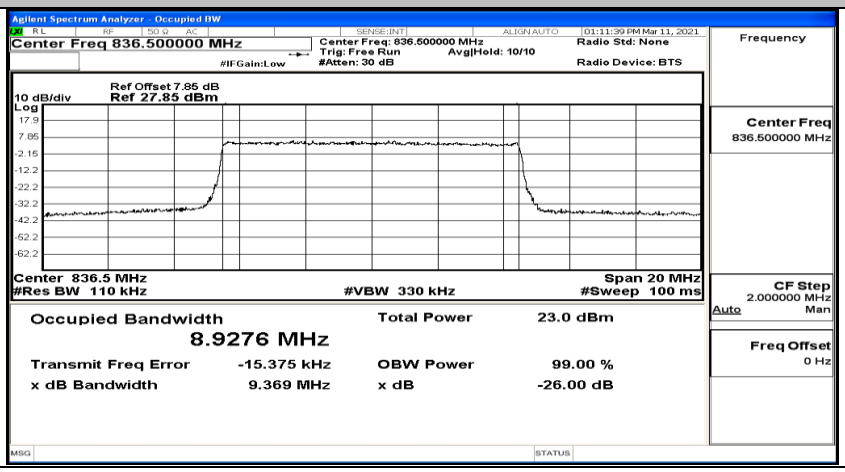
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



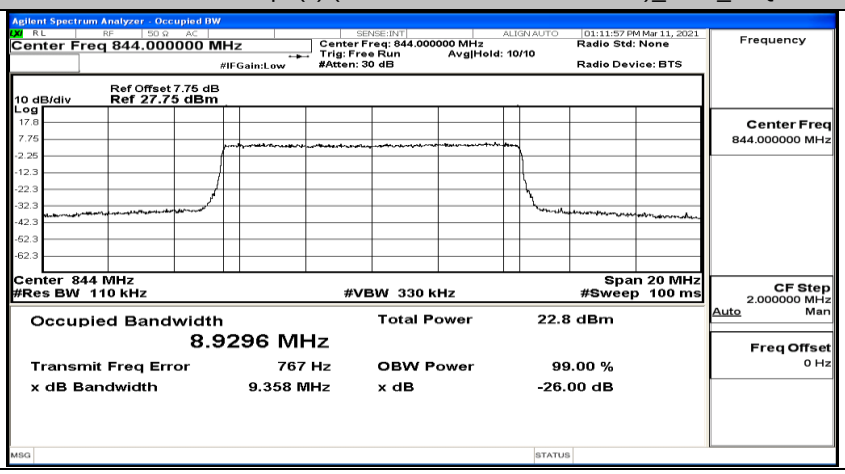
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

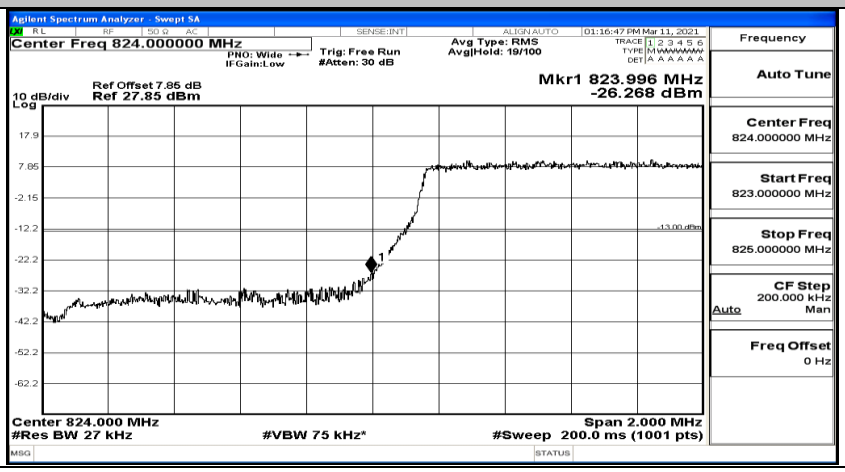


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

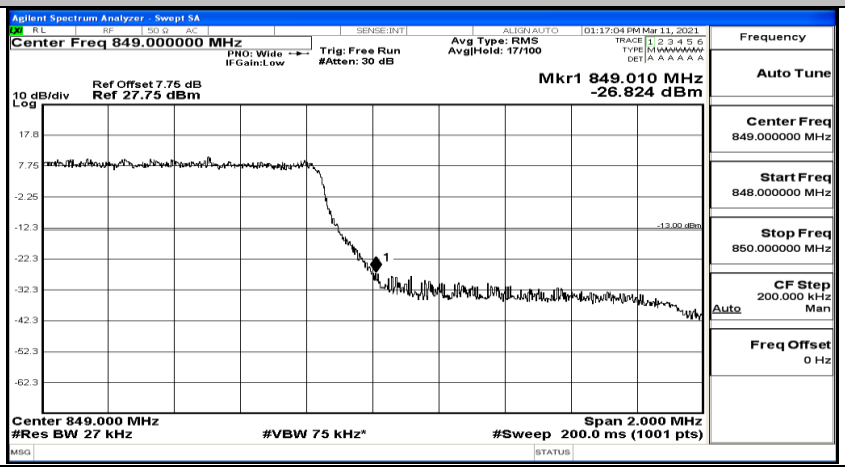


D.4 Band Edge

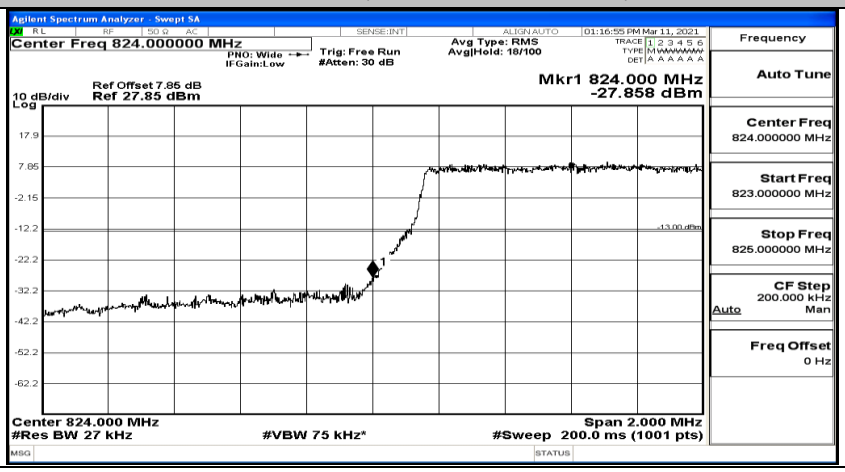
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



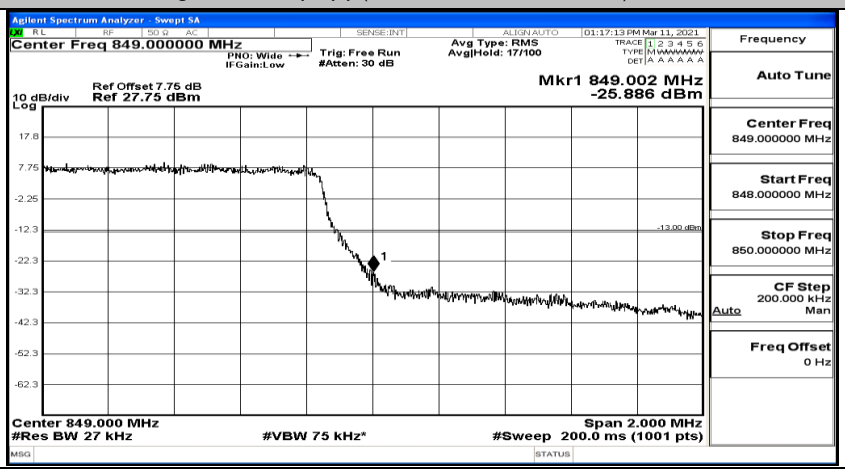
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



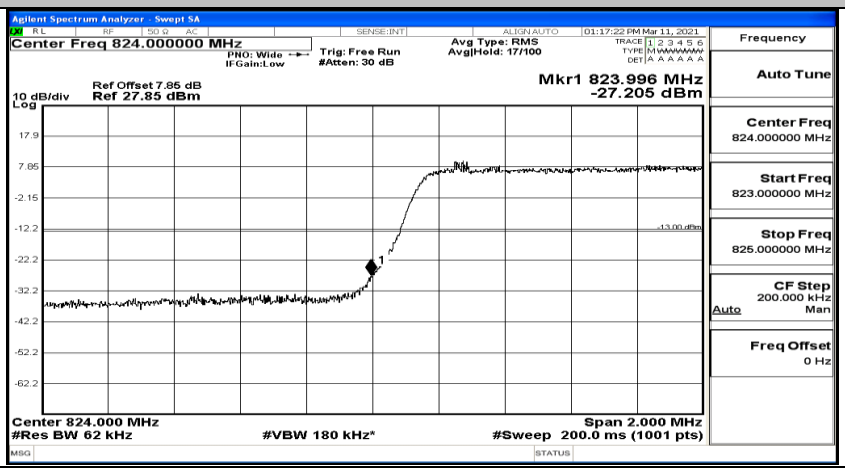
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



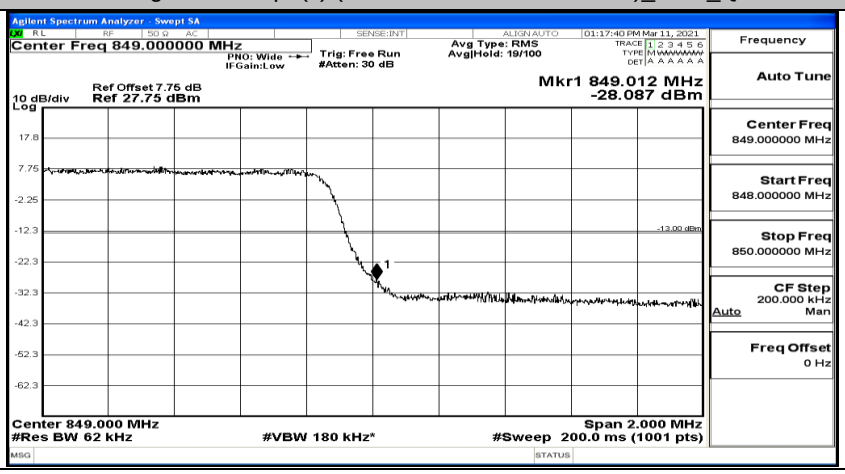
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



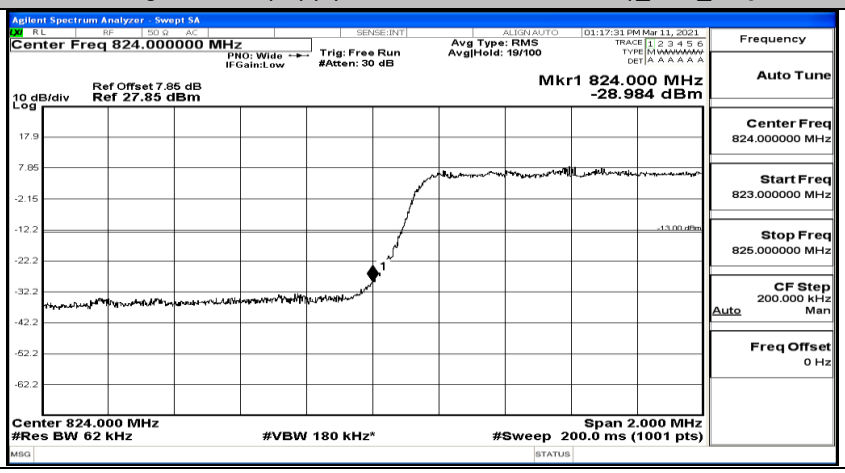
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



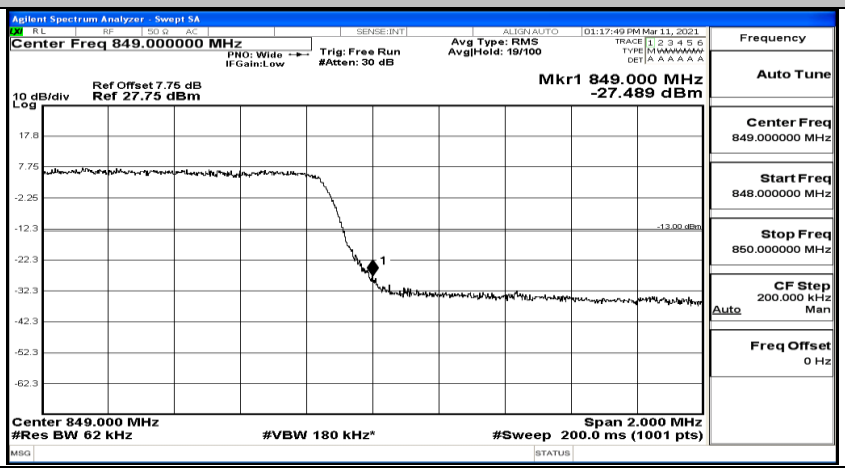
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



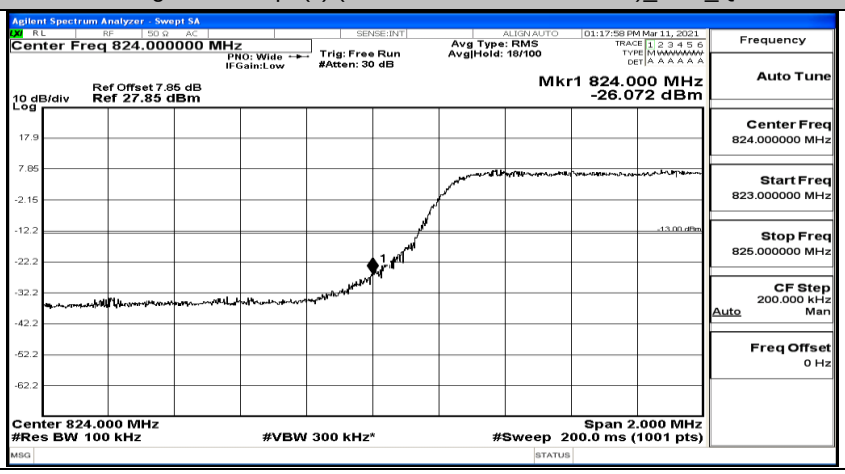
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



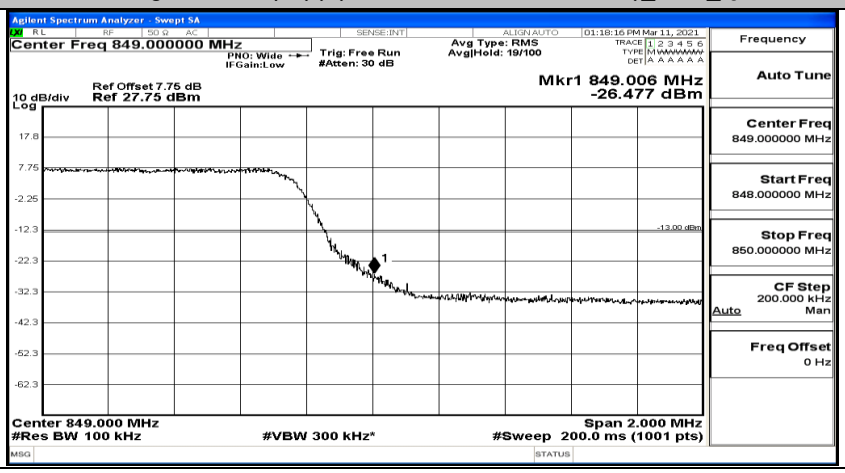
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



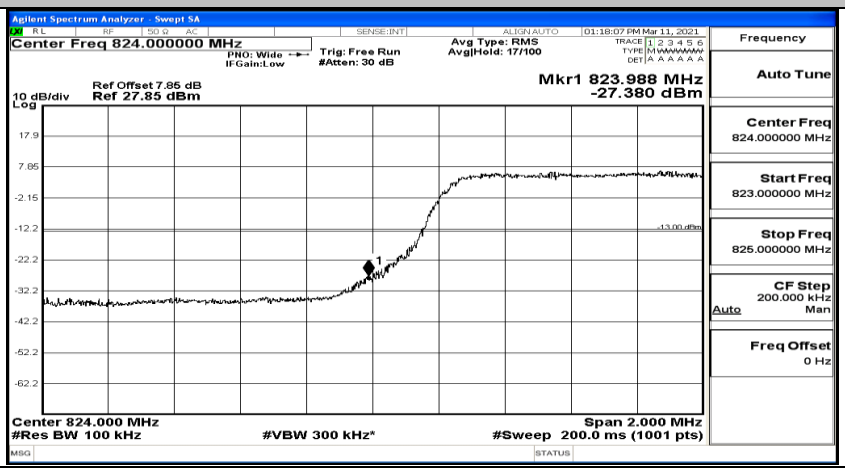
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



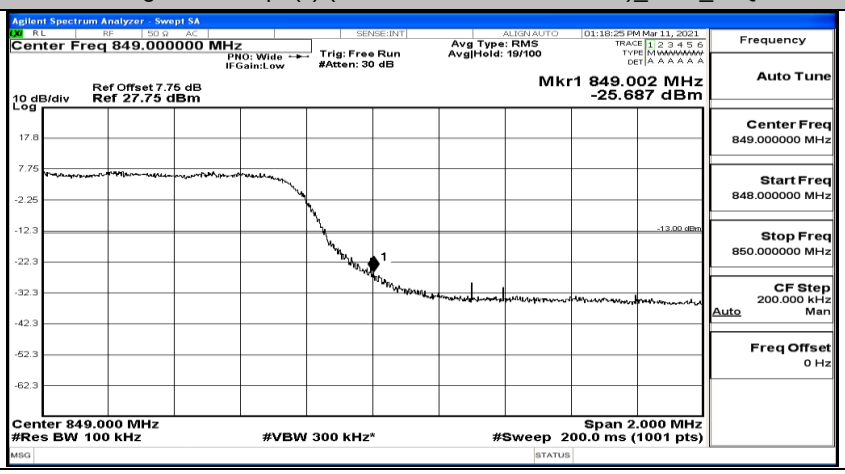
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



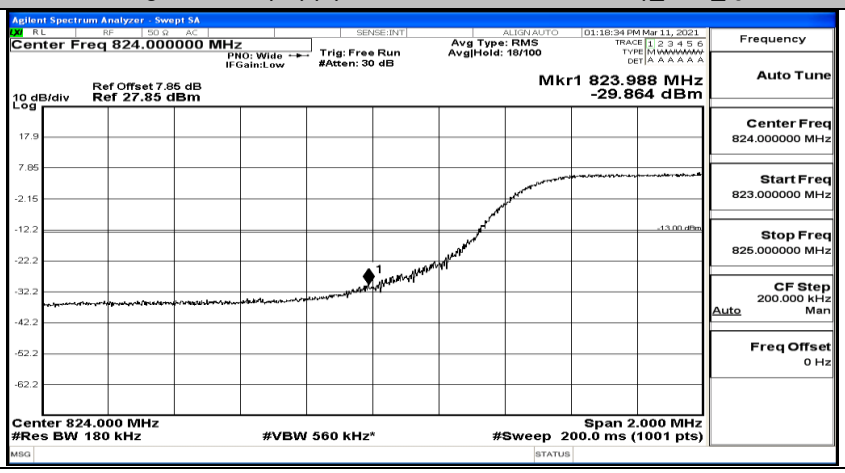
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



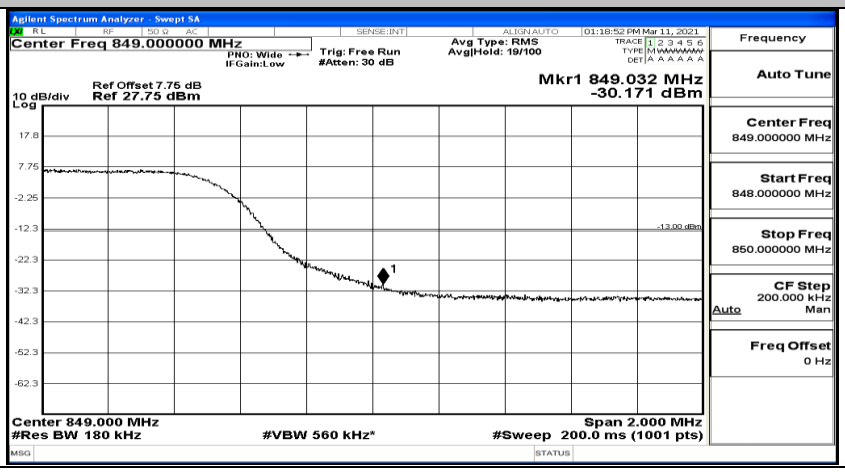
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



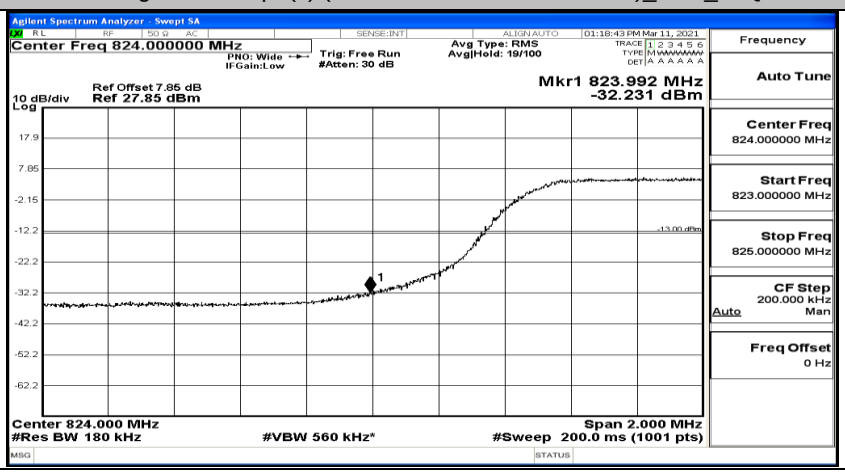
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



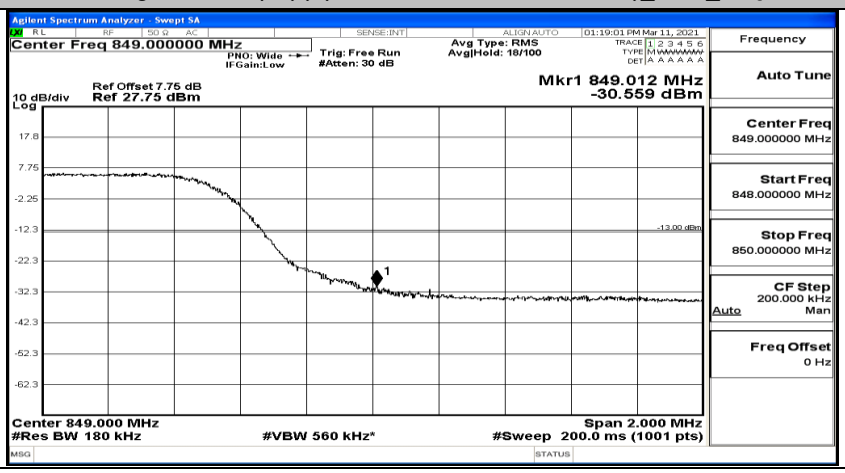
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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



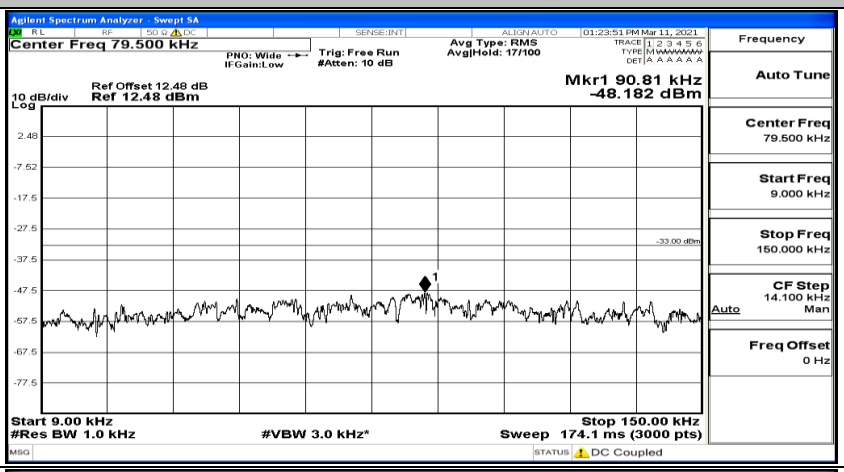
D.5 Conducted Spurious Emission

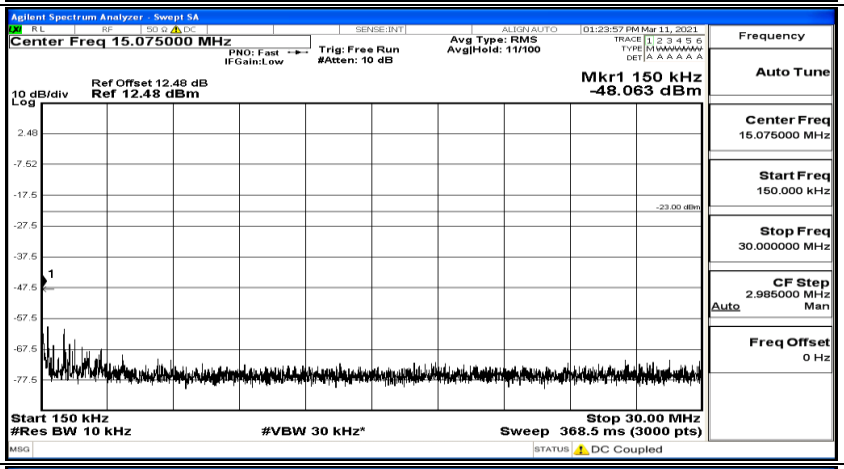
Appendix D: Conducted Spurious Emission

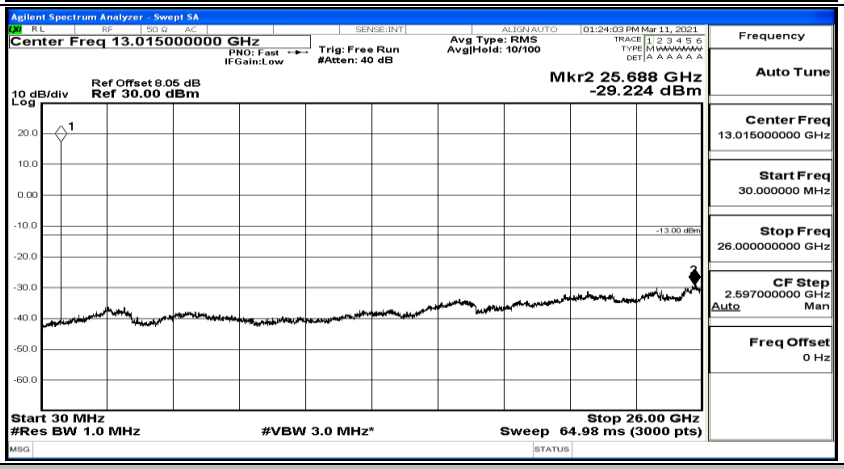
Test Graphs

Channel Bandwidth: 1.4 MHz

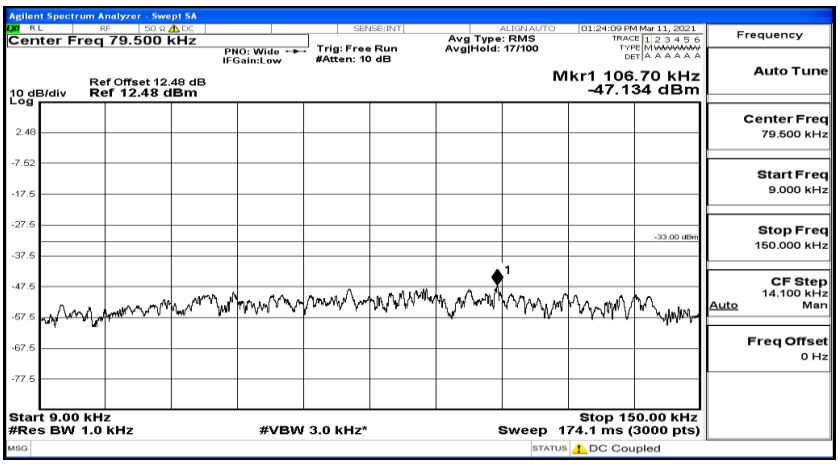
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

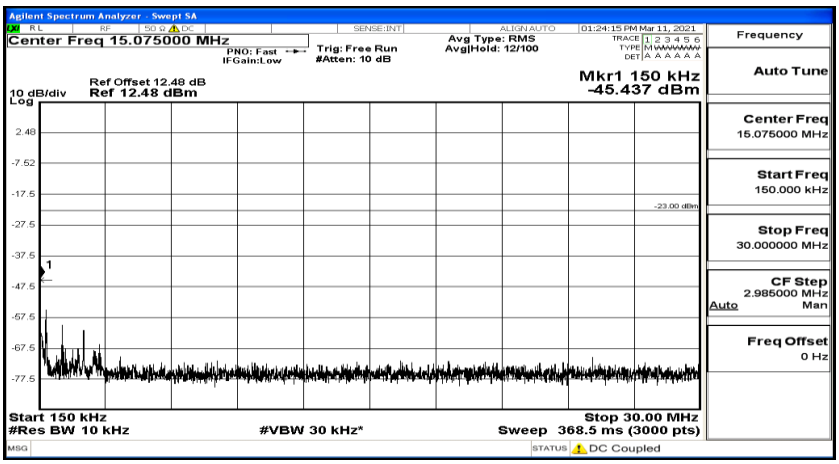




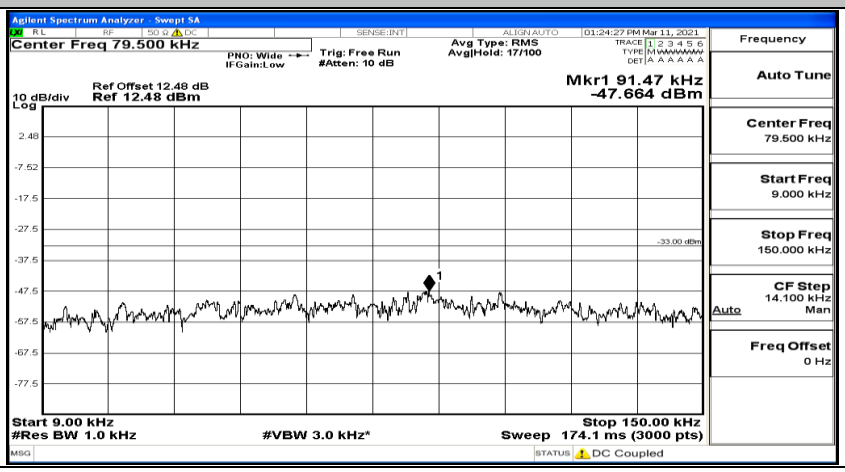


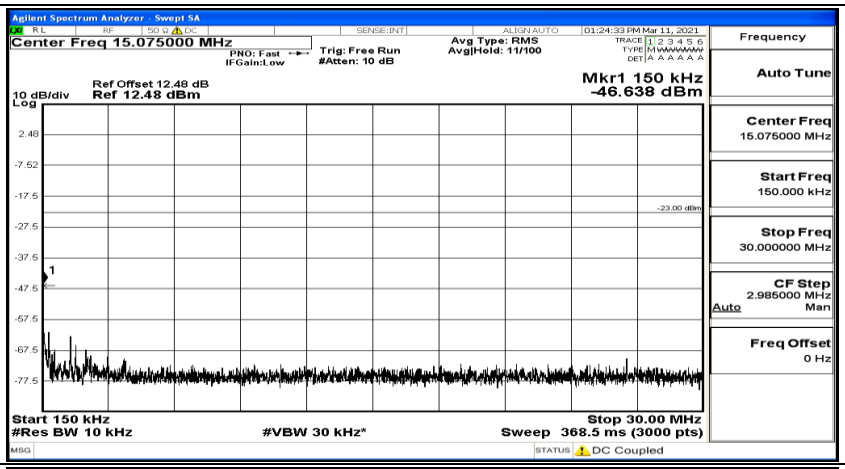
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



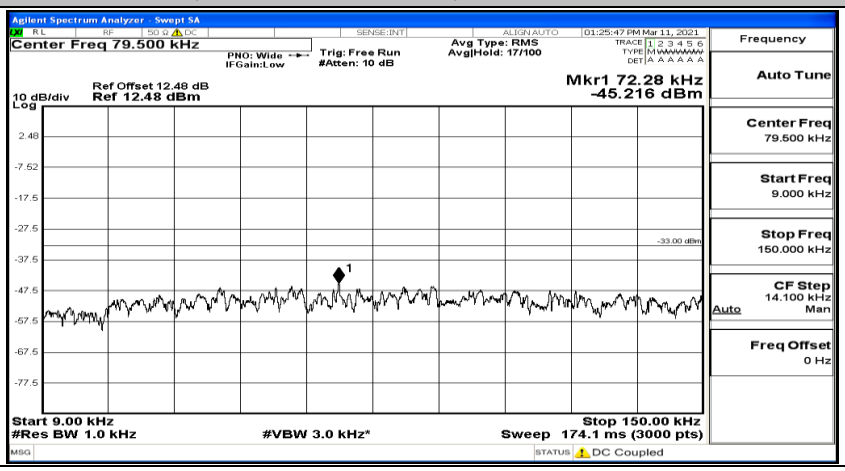


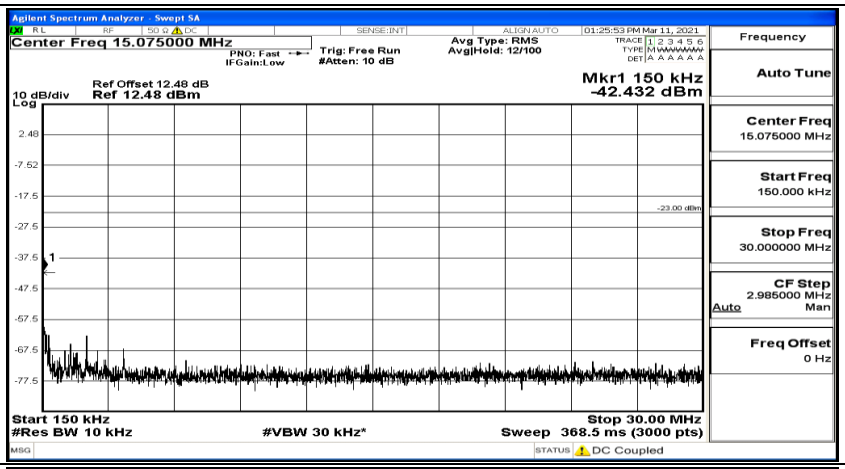
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

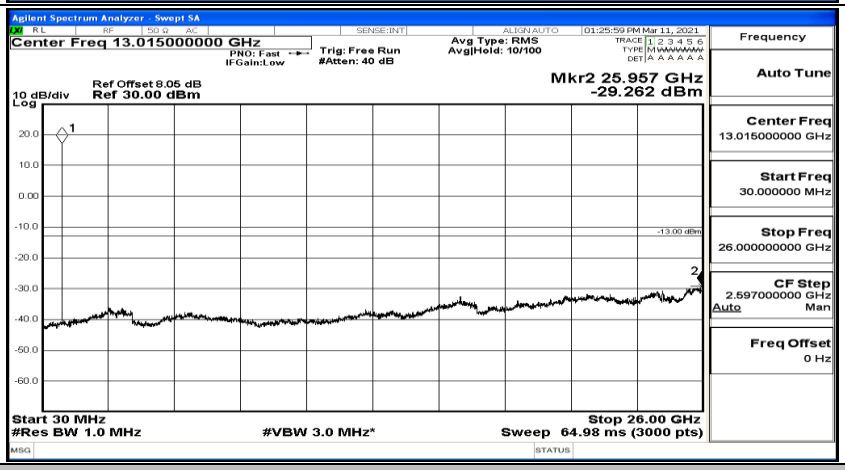




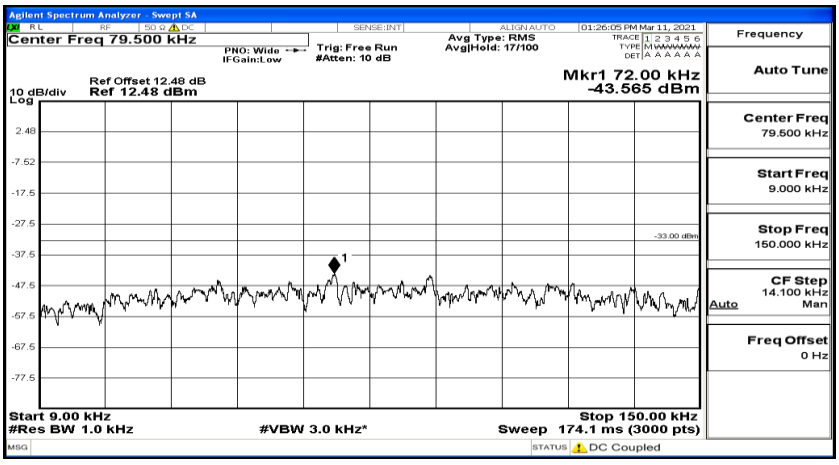
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

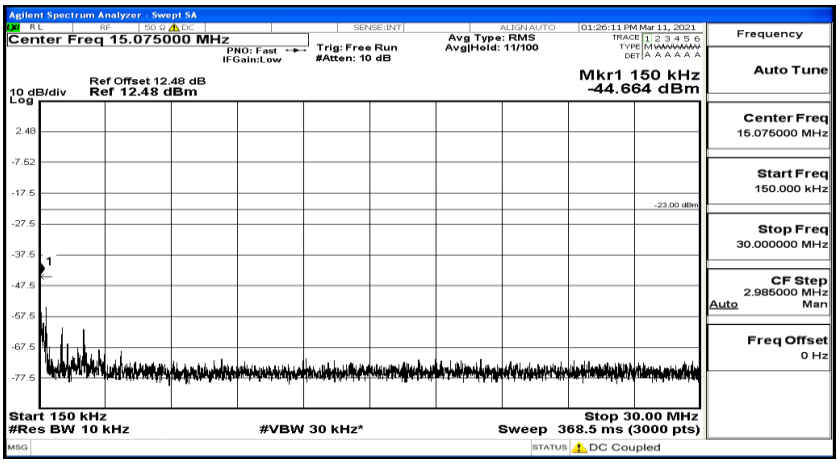




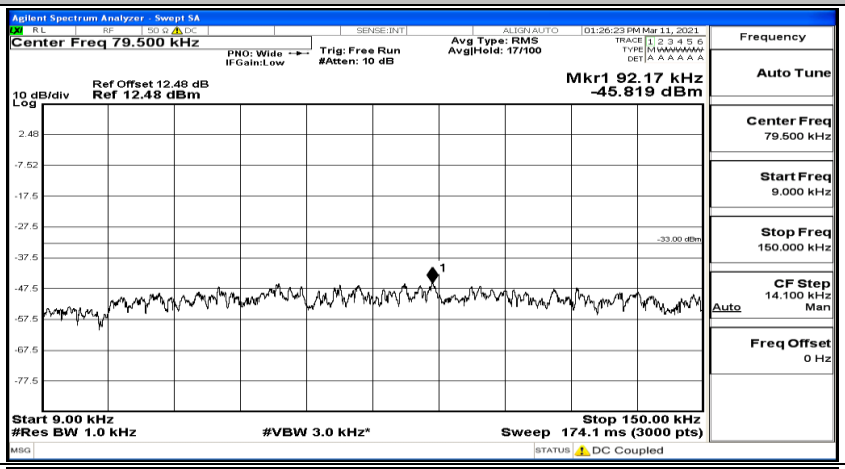


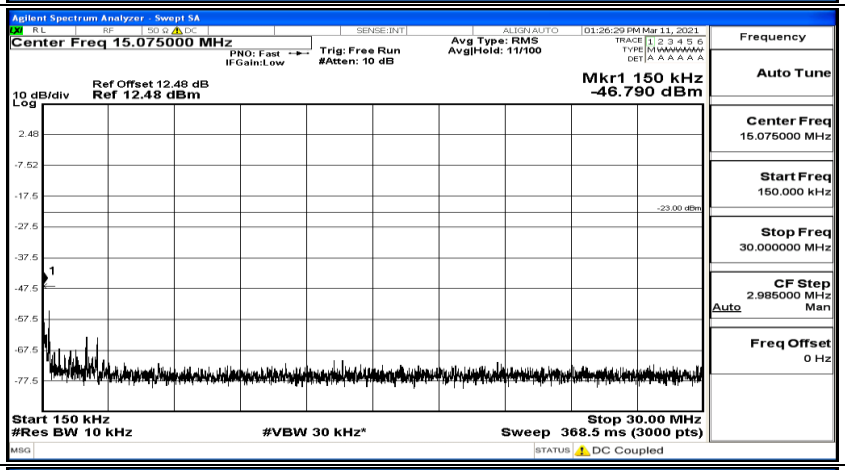
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

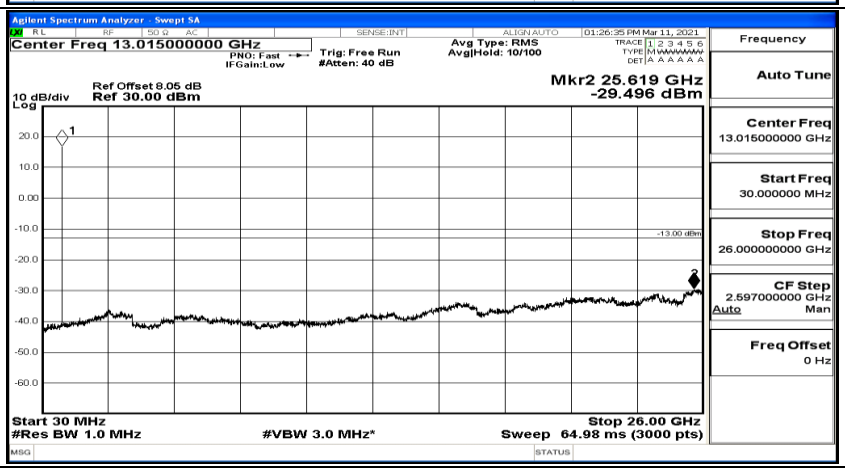




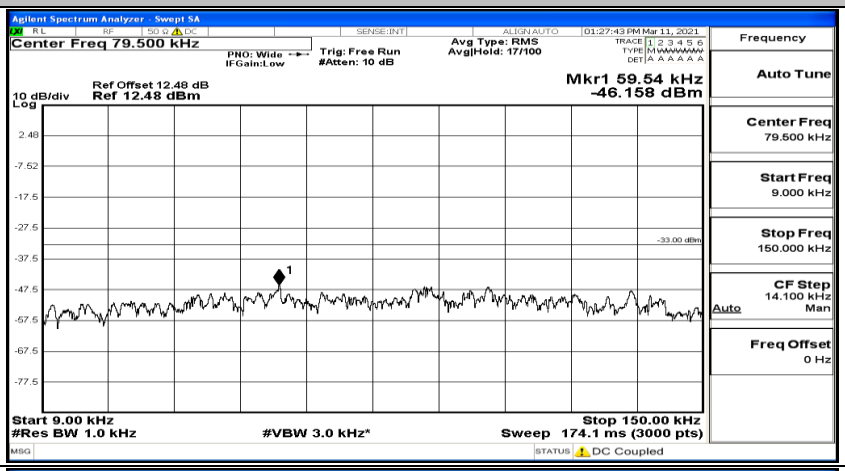
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

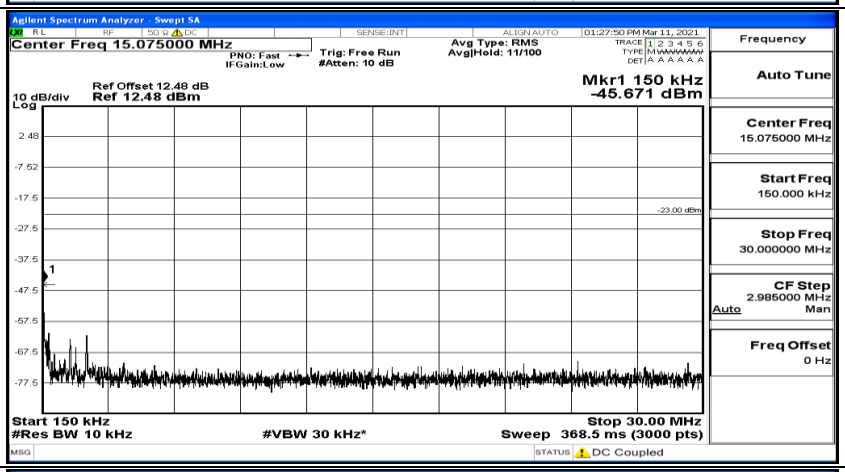


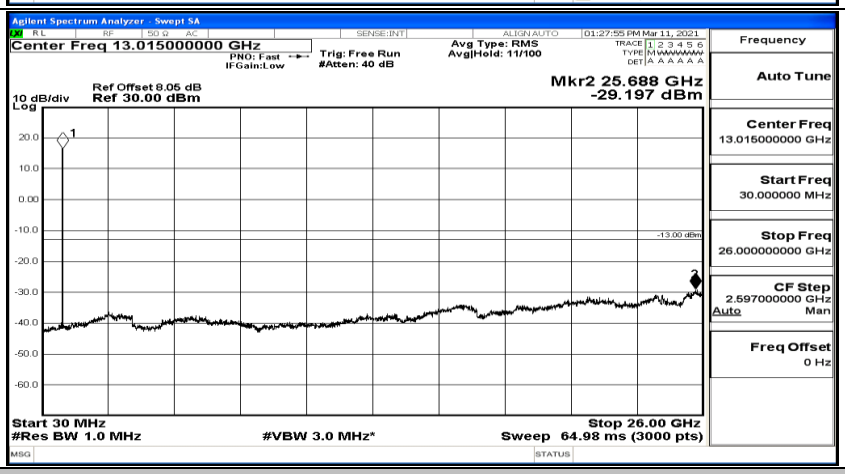




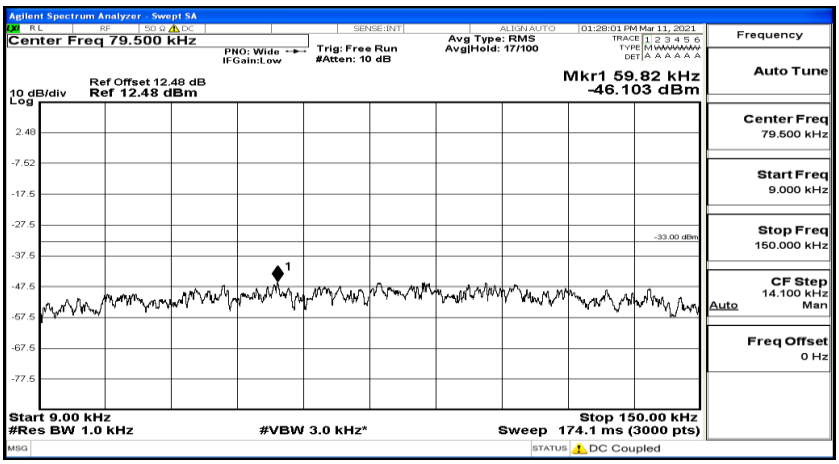
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

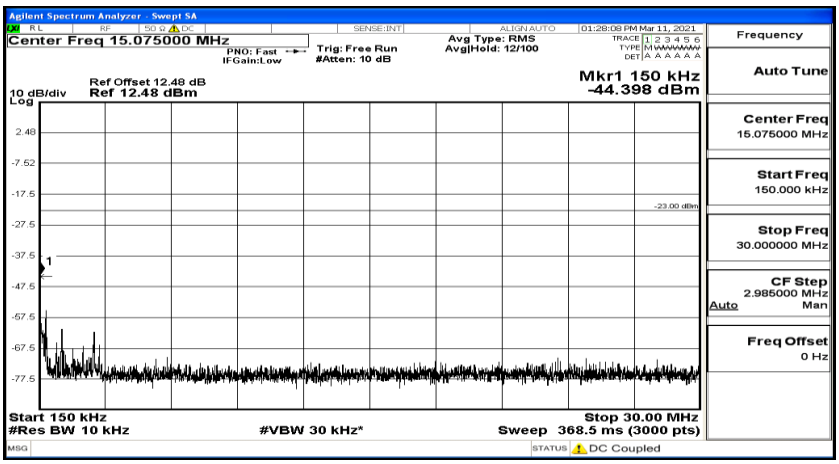




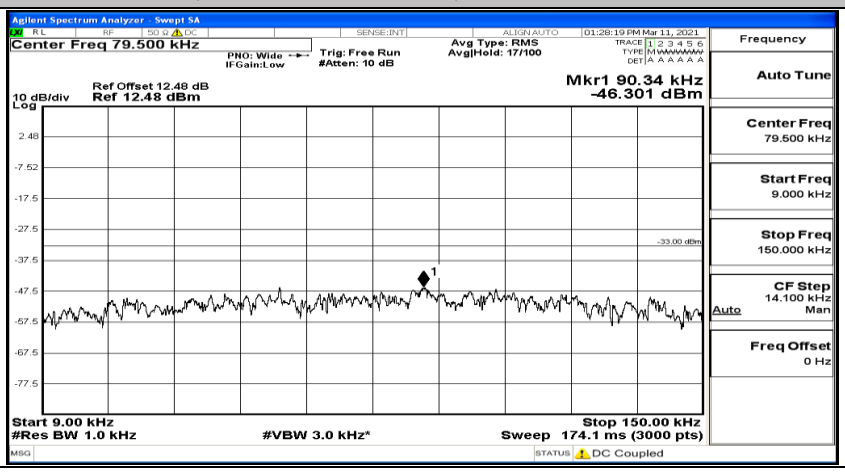


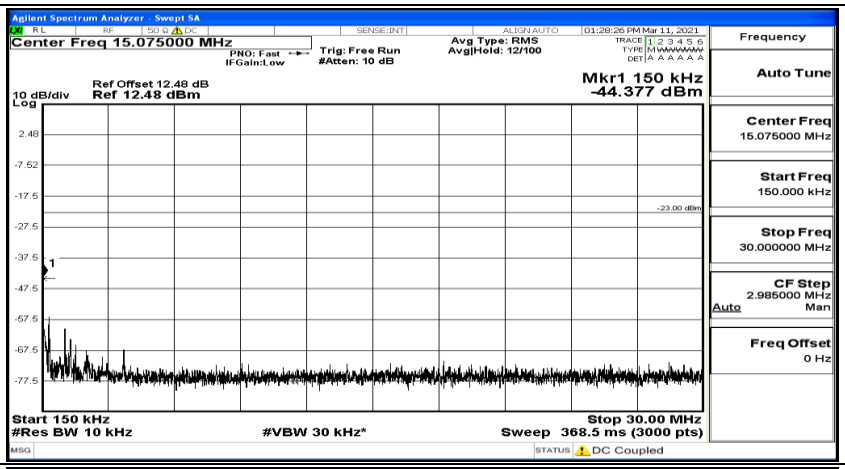
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

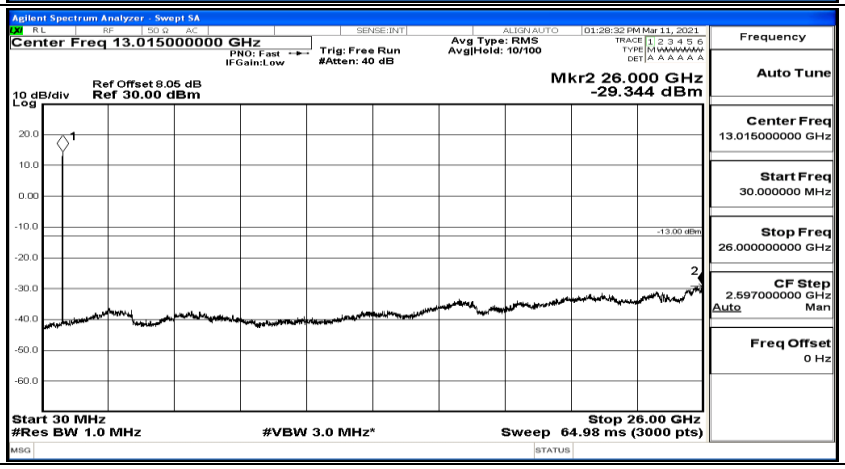




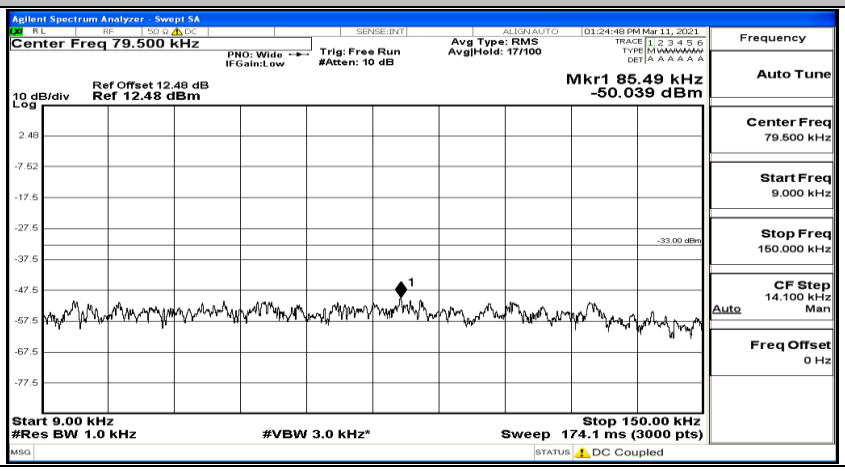
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

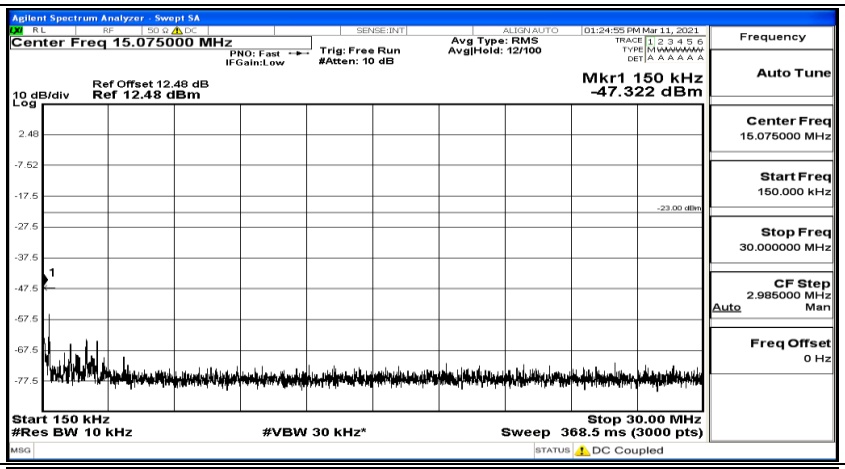


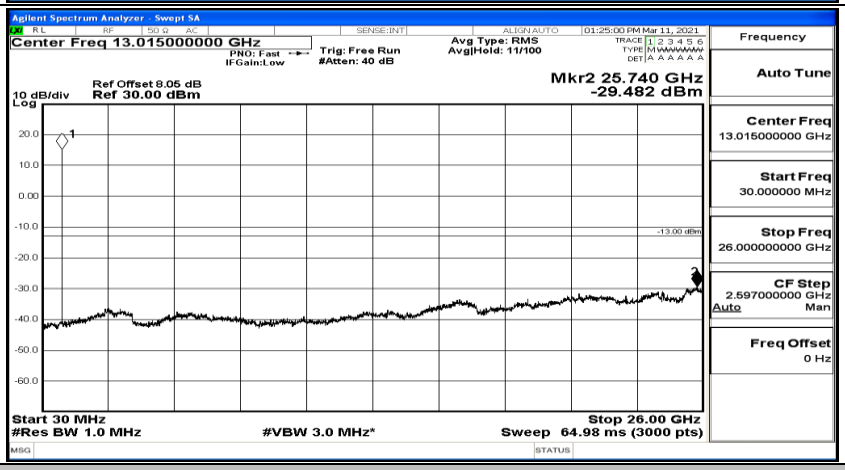




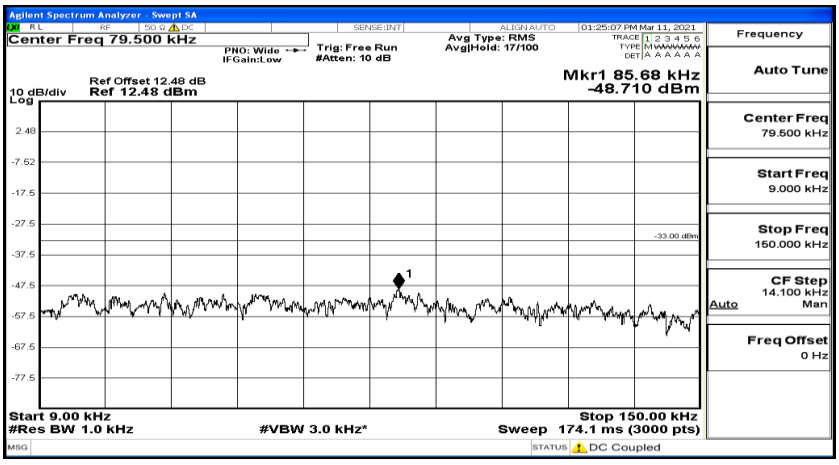
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0

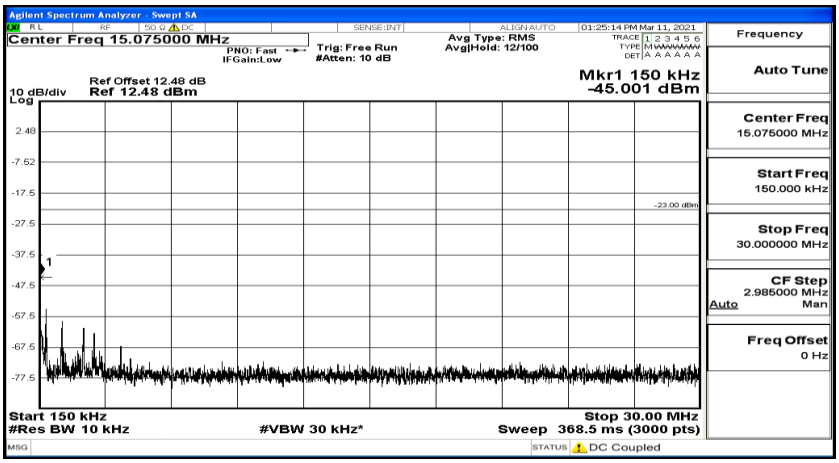




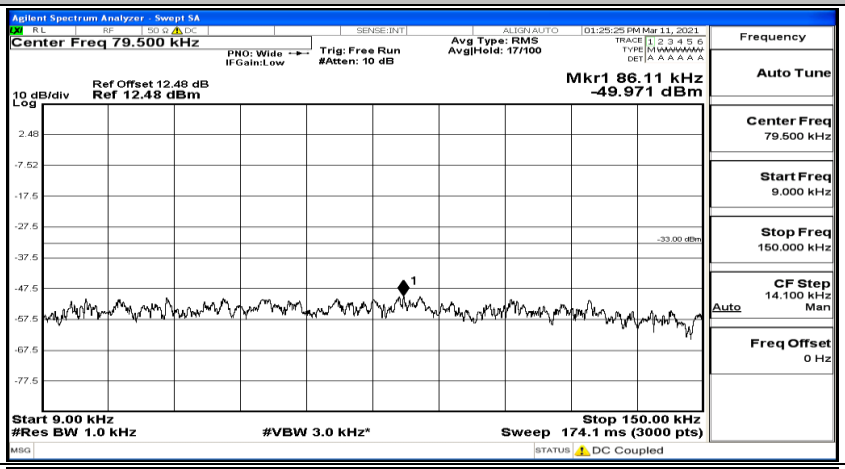


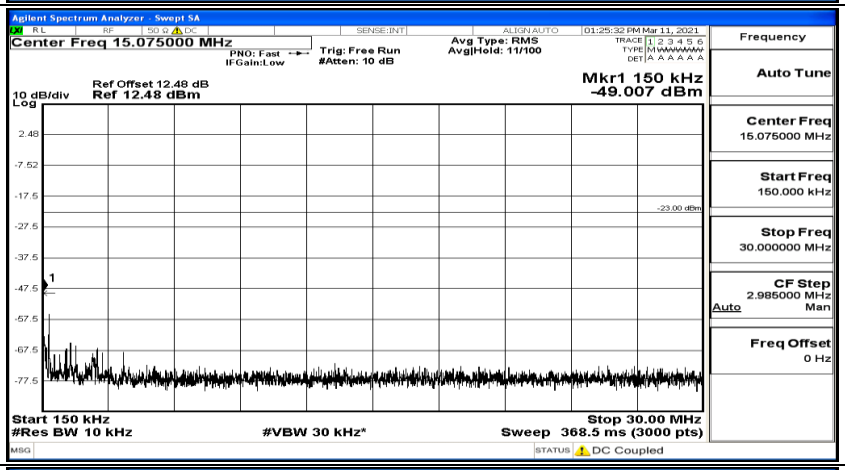
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

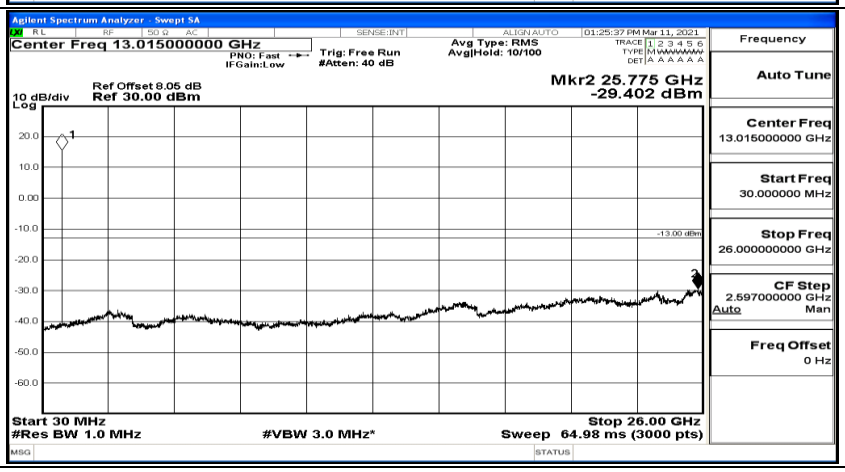




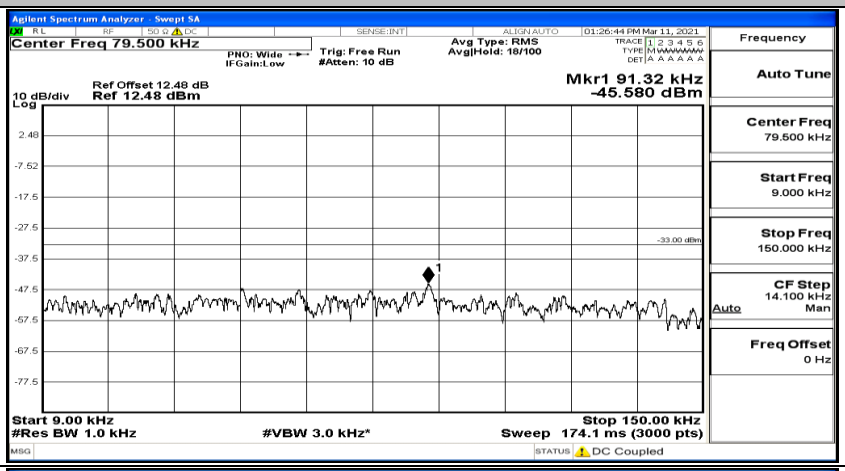
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

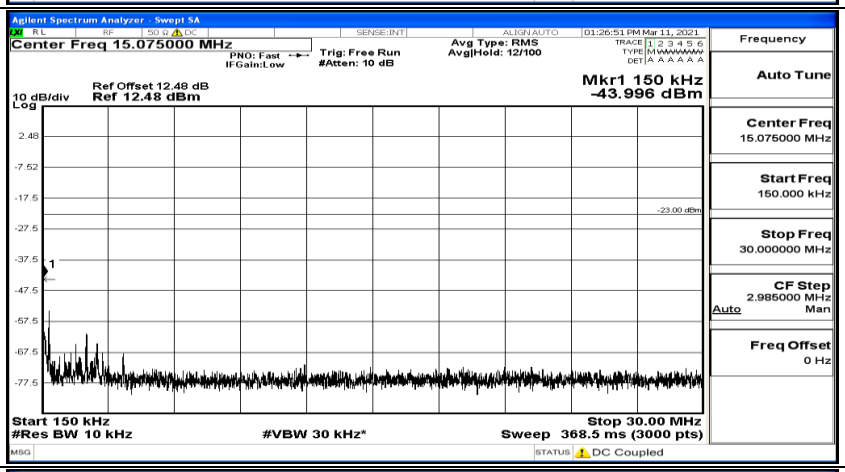


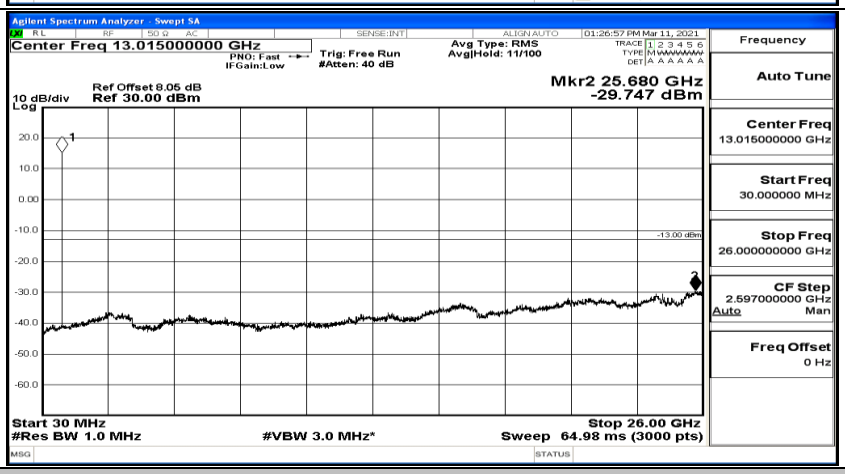




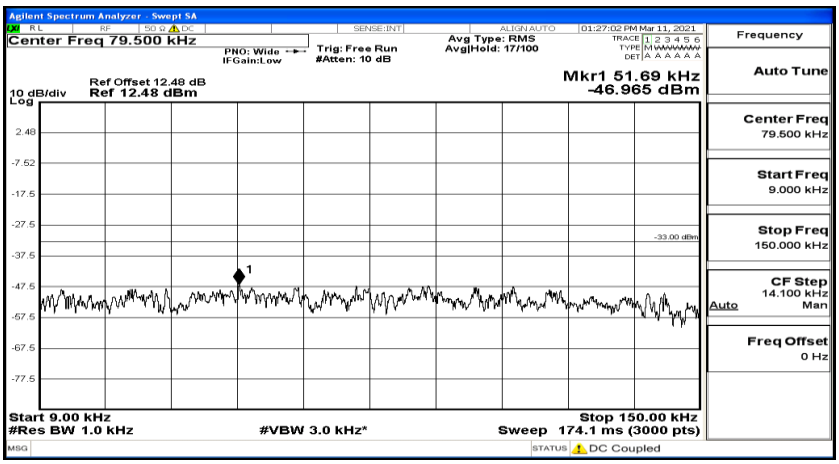
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

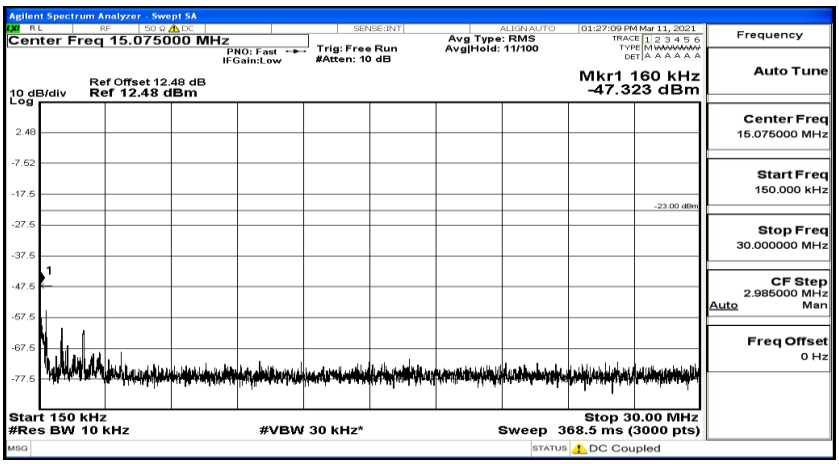


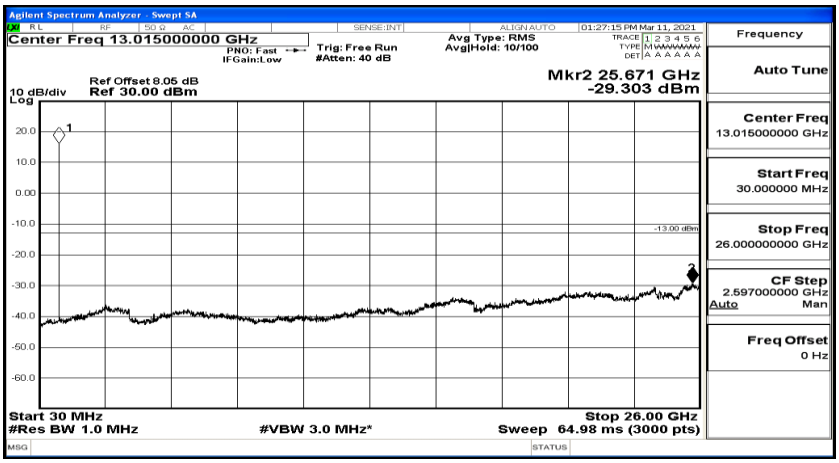




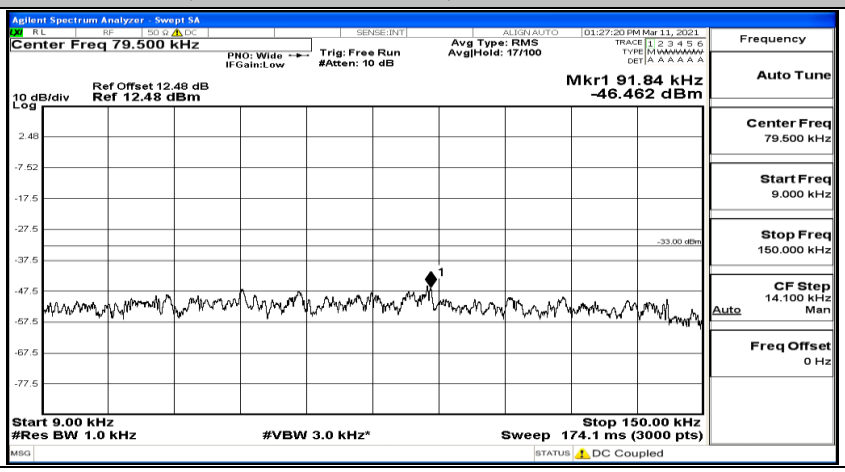
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

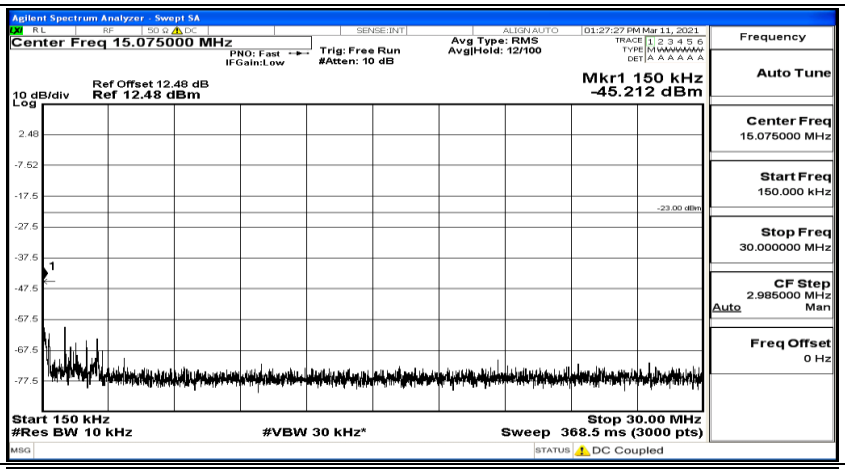
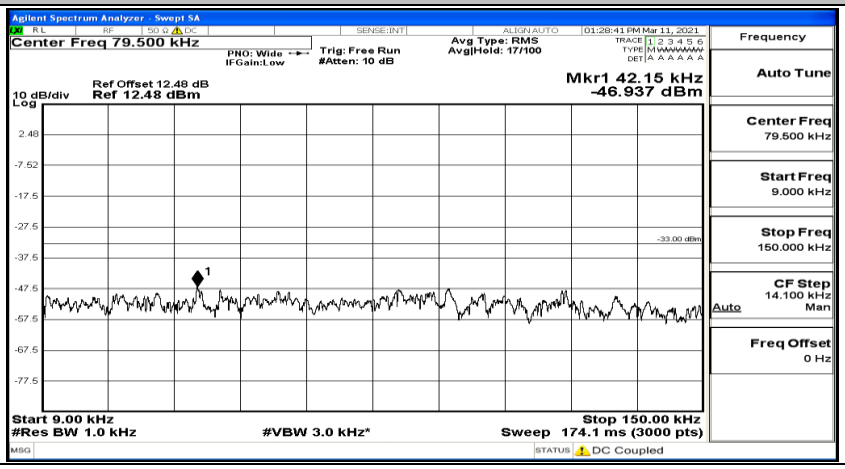






(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

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