Appendix F: Test Data for E-UTRA Band 5

Product Name: MOBILE PHONE
Trade Mark: CELLUTION
Test Model: PADUA

Environmental Conditions

Temperature:	23.1° C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	LI HUAN

F.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	24.18	23.56	PASS
		1	3	24.49	23.72	PASS
		1	5	24.08	23.56	PASS
		3	0	24.10	23.54	PASS
		3	2	24.26	23.56	PASS
		3	3	24.09	23.52	PASS
		6	0	23.41	22.37	PASS
	MCH	1	0	23.80	23.17	PASS
		1	3	23.91	23.36	PASS
		1	5	23.81	23.19	PASS
		3	0	23.86	22.86	PASS
		3	2	23.86	22.92	PASS
		3	3	23.83	22.93	PASS
		6	0	22.93	21.84	PASS
	HCH	1	0	24.45	23.79	PASS
		1	3	24.39	23.96	PASS
		1	5	24.06	23.79	PASS
		3	0	24.10	23.76	PASS
		3	2	24.10	23.82	PASS
		3	3	23.95	23.77	PASS
		6	0	23.80	22.69	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	23.89	23.61	PASS
		1	7	24.33	23.83	PASS
		1	14	24.02	23.56	PASS
		8	0	23.37	22.38	PASS
		8	4	23.40	22.40	PASS
		8	7	23.32	22.37	PASS
		15	0	23.34	22.26	PASS
	MCH	1	0	23.79	23.24	PASS
		1	7	24.09	23.57	PASS
		1	14	23.81	23.24	PASS
		8	0	22.95	21.91	PASS
		8	4	22.97	21.89	PASS
		8	7	22.92	21.85	PASS
		15	0	22.87	21.81	PASS
	HCH	1	0	24.53	23.77	PASS
		1	7	24.88	24.08	PASS
		1	14	24.01	23.84	PASS
		8	0	23.70	22.56	PASS
		8	4	23.71	22.66	PASS
		8	7	23.67	22.59	PASS
		15	0	23.71	22.66	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	24.16	23.58	PASS
		1	12	24.38	23.79	PASS
		1	24	24.52	23.40	PASS
		12	0	23.33	22.34	PASS
		12	6	23.35	22.38	PASS
		12	13	23.26	22.30	PASS
		25	0	23.31	22.26	PASS
	MCH	1	0	23.81	23.06	PASS
		1	12	24.04	23.34	PASS
		1	24	23.84	23.12	PASS
		12	0	22.82	21.89	PASS
		12	6	22.94	22.07	PASS
		12	13	22.87	21.93	PASS
		25	0	22.87	21.86	PASS
	HCH	1	0	24.32	23.58	PASS
		1	12	24.88	24.04	PASS
		1	24	24.28	23.81	PASS
		12	0	23.47	22.44	PASS
		12	6	23.67	22.66	PASS
		12	13	23.43	22.44	PASS
		25	0	23.45	22.41	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	24.25	23.60	PASS
		1	24	24.55	23.59	PASS
		1	49	23.87	23.14	PASS
		25	0	23.29	22.31	PASS
		25	12	23.24	22.23	PASS
		25	25	23.21	22.20	PASS
		50	0	23.24	22.23	PASS
	MCH	1	0	23.93	23.34	PASS
		1	24	23.98	23.40	PASS
		1	49	24.03	23.45	PASS
		25	0	22.91	21.90	PASS
		25	12	23.00	21.96	PASS
		25	25	22.87	21.89	PASS
		50	0	22.89	21.89	PASS
	HCH	1	0	24.07	23.40	PASS
		1	24	24.49	23.80	PASS
		1	49	24.23	23.88	PASS
		25	0	23.46	22.49	PASS
		25	12	23.51	22.48	PASS
		25	25	23.42	22.46	PASS
		50	0	23.46	22.44	PASS

F.2 Peak-to-Average Ratio

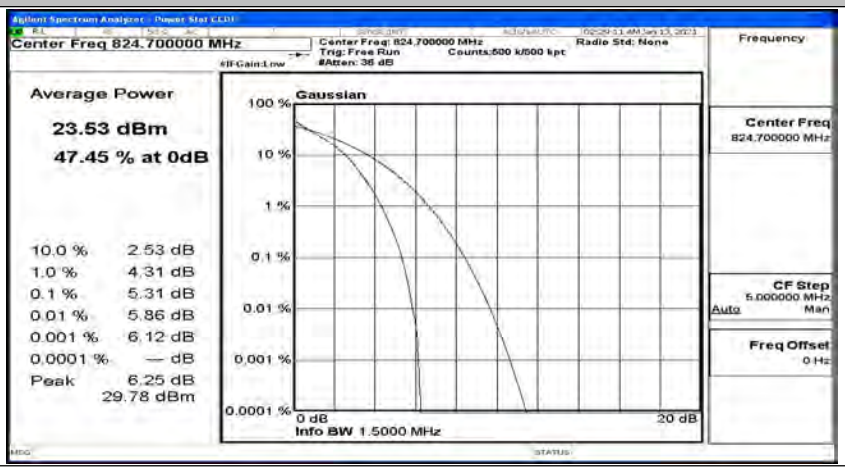
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.31	<13	PASS
	MCH	4.99	<13	PASS
	HCH	4.69	<13	PASS
16QAM	LCH	6.20	<13	PASS
	MCH	5.87	<13	PASS
	HCH	5.67	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.41	<13	PASS
	MCH	5.24	<13	PASS
	HCH	4.92	<13	PASS
16QAM	LCH	6.32	<13	PASS
	MCH	5.97	<13	PASS
	HCH	5.81	<13	PASS

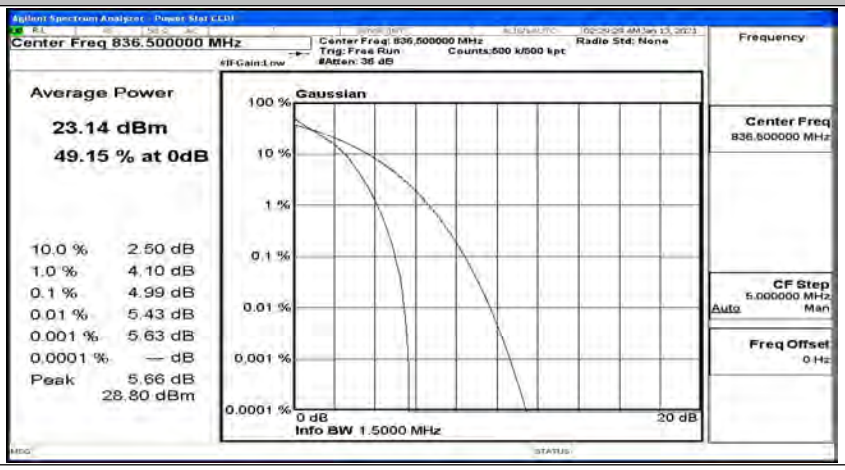
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.45	<13	PASS
	MCH	5.16	<13	PASS
	HCH	4.87	<13	PASS
16QAM	LCH	6.10	<13	PASS
	MCH	5.93	<13	PASS
	HCH	5.67	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.38	<13	PASS
	MCH	5.31	<13	PASS
	HCH	5.27	<13	PASS
16QAM	LCH	6.14	<13	PASS
	MCH	6.06	<13	PASS
	HCH	5.99	<13	PASS

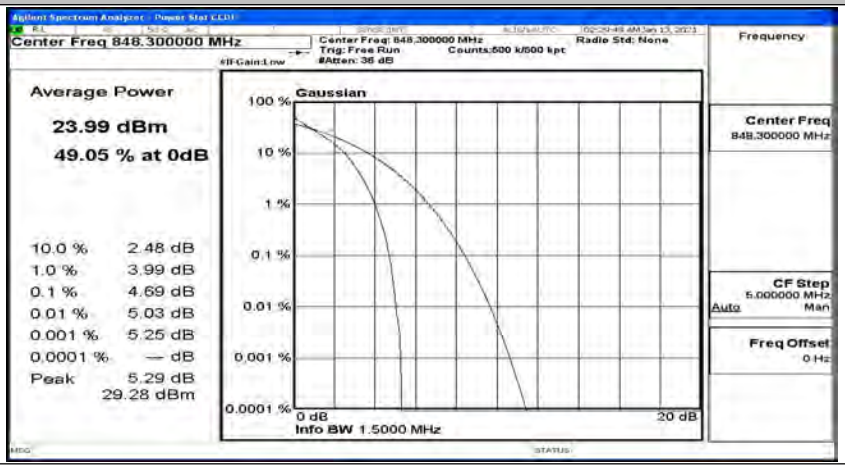
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



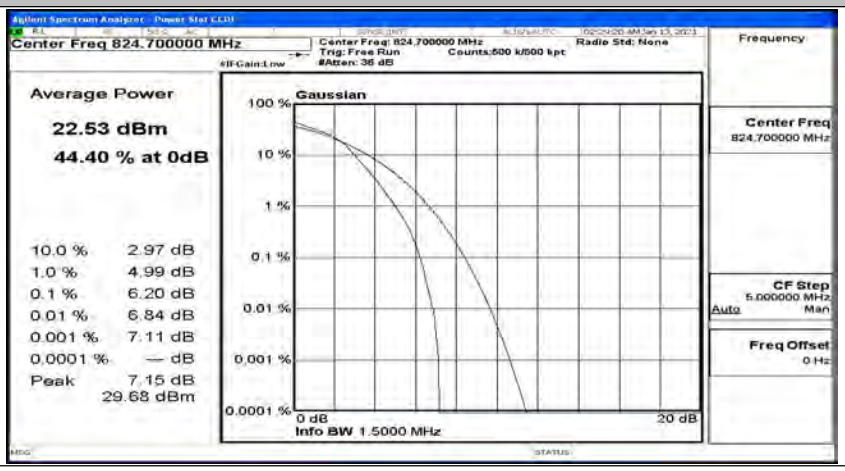
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



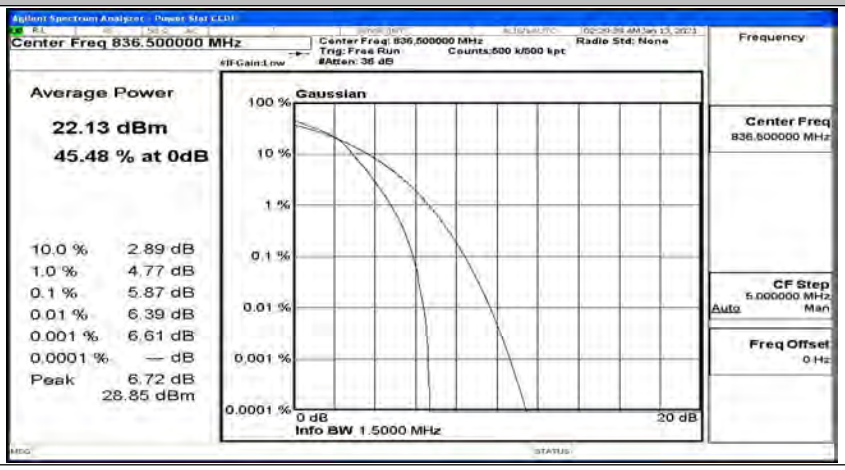
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



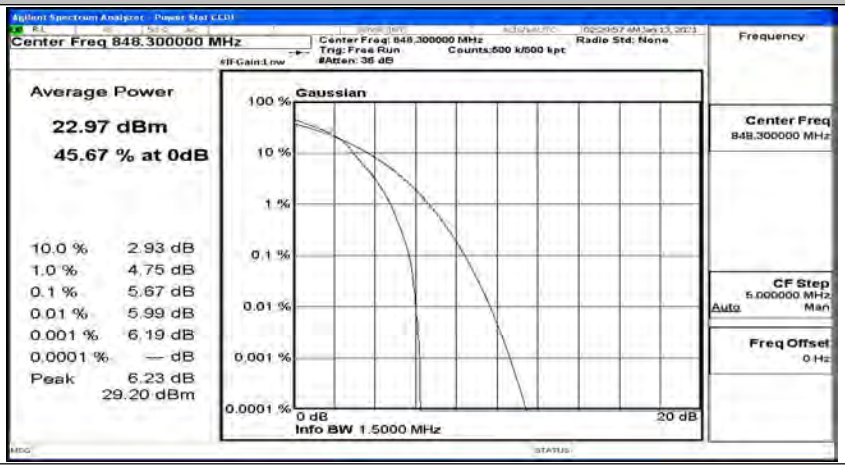
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



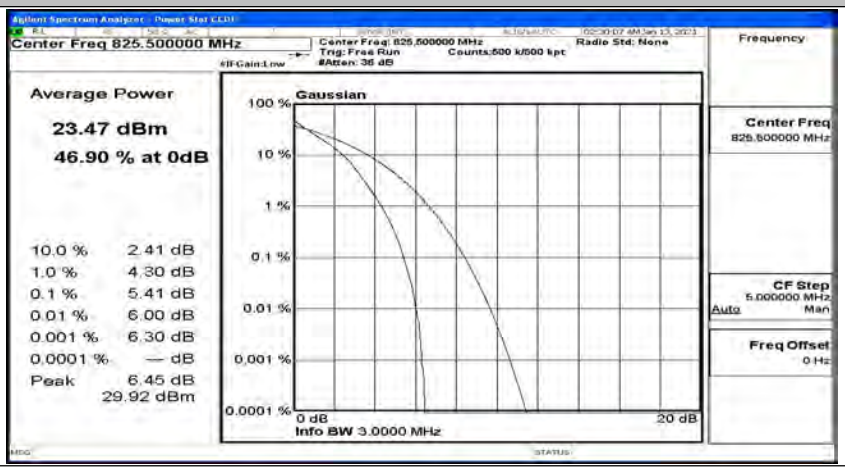
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



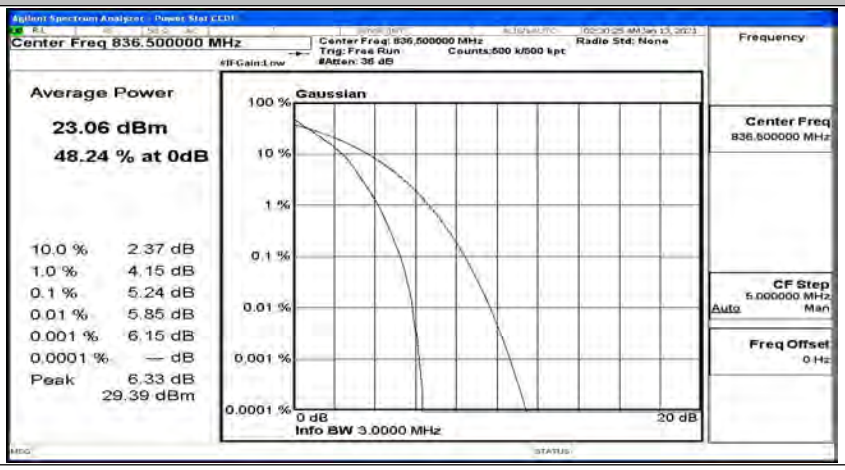
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



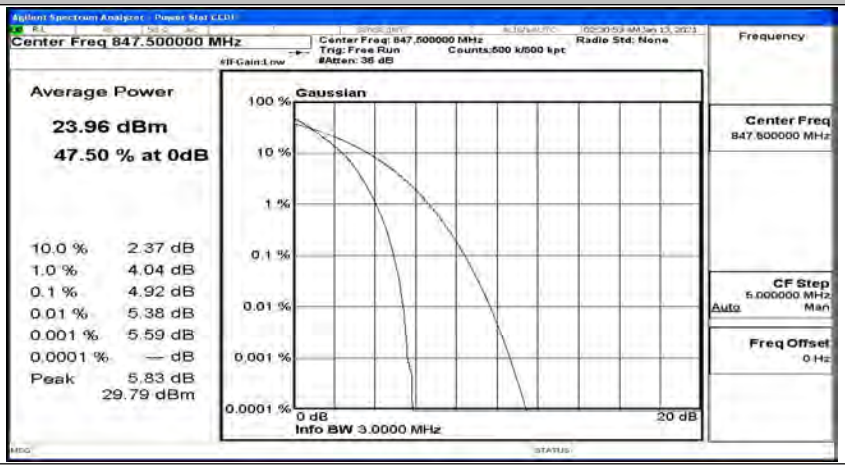
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



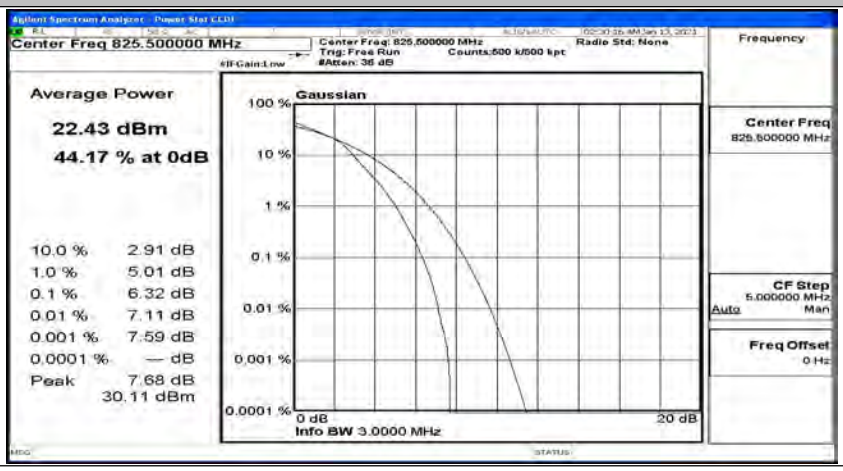
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



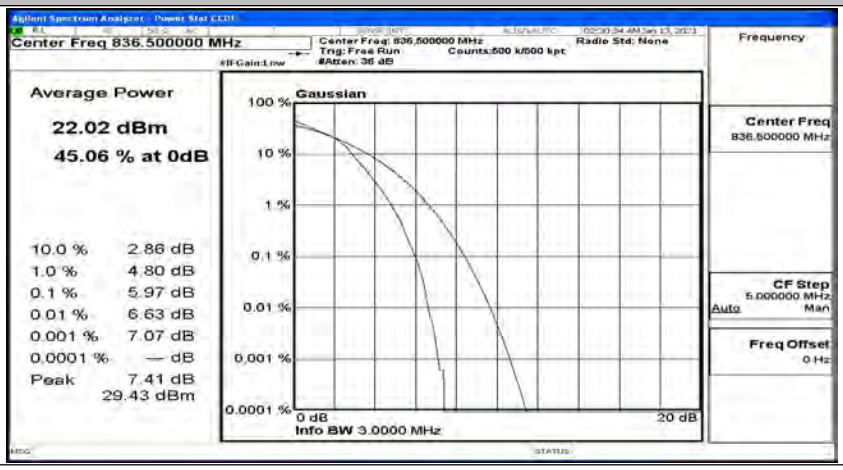
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



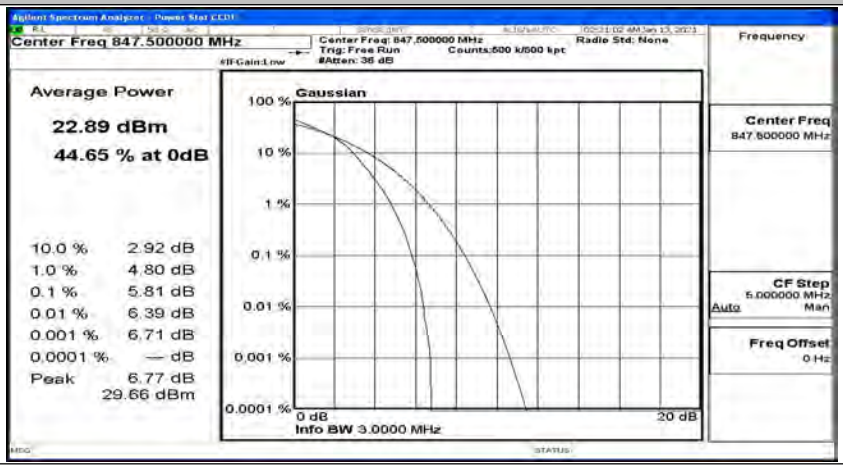
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



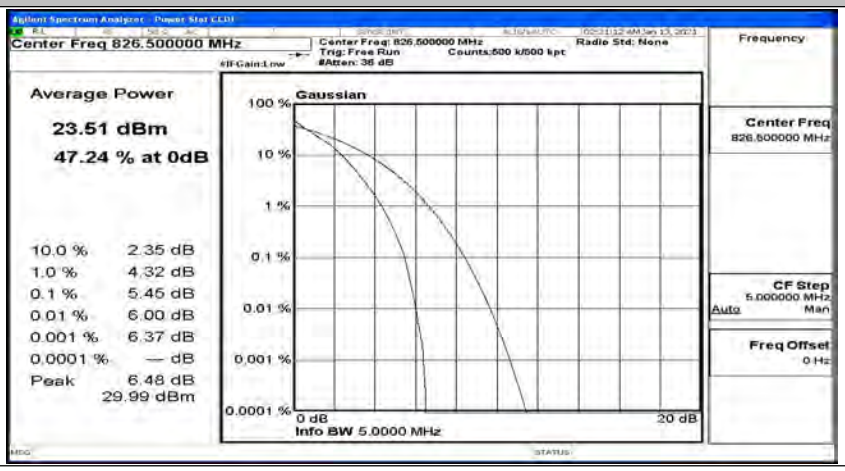
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



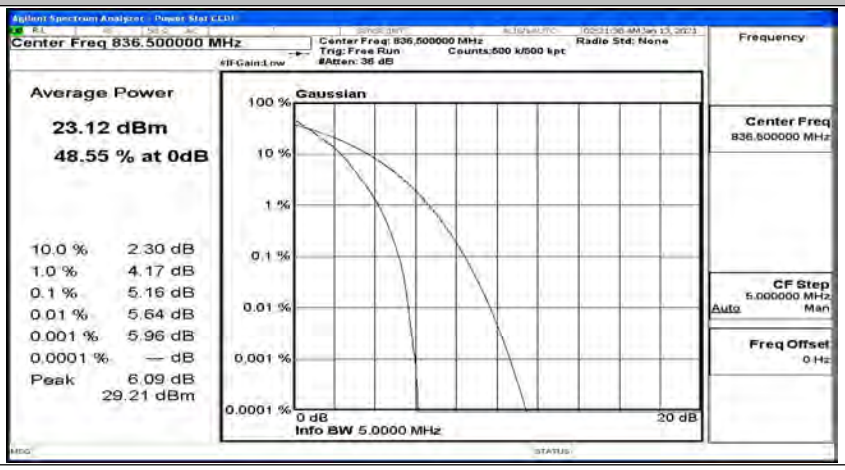
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



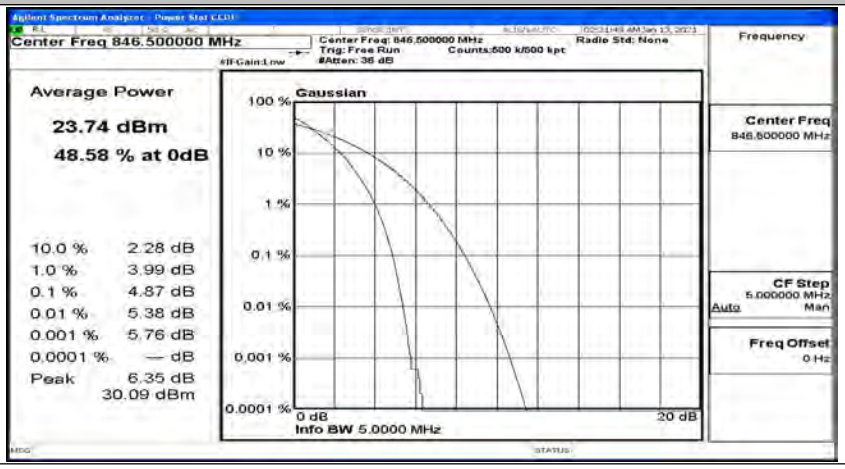
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



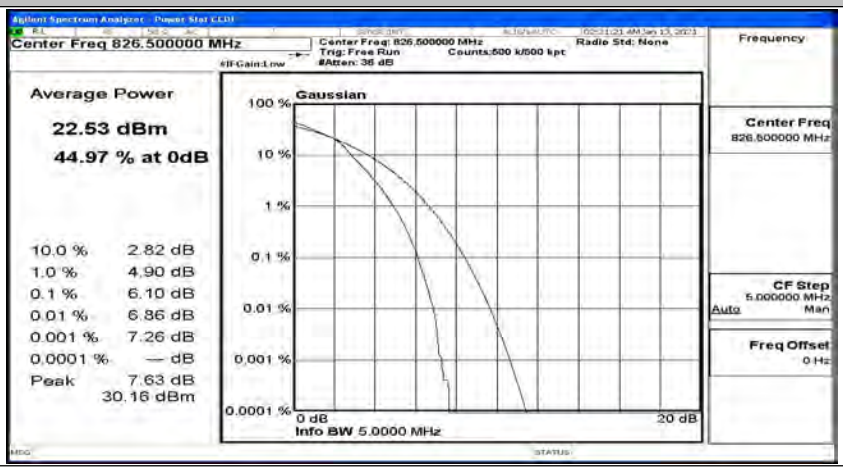
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



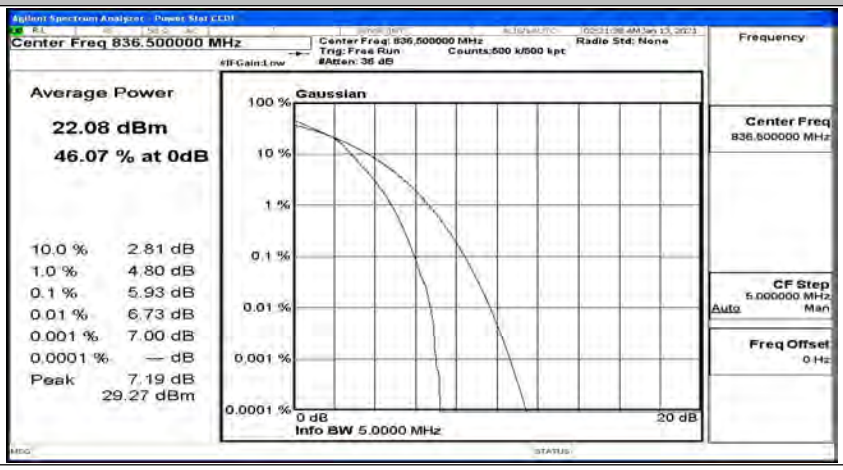
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



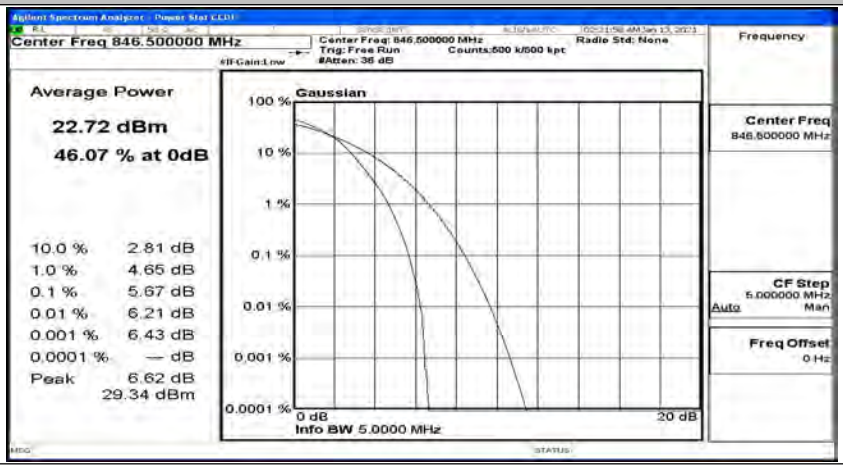
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



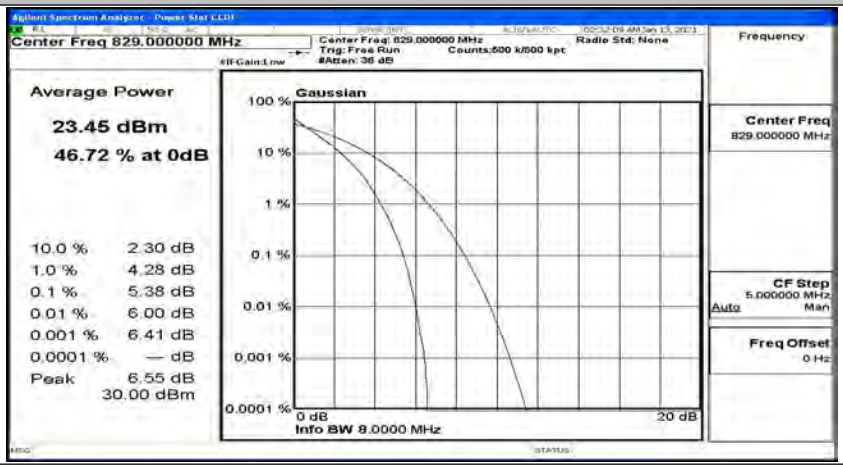
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



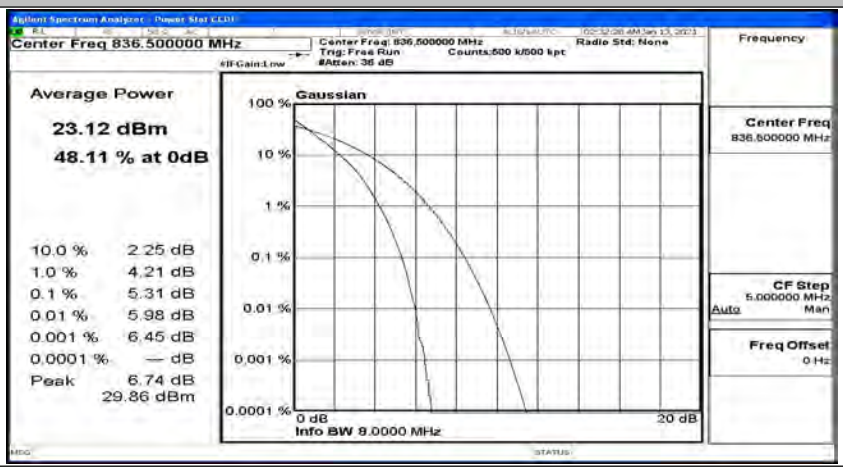
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



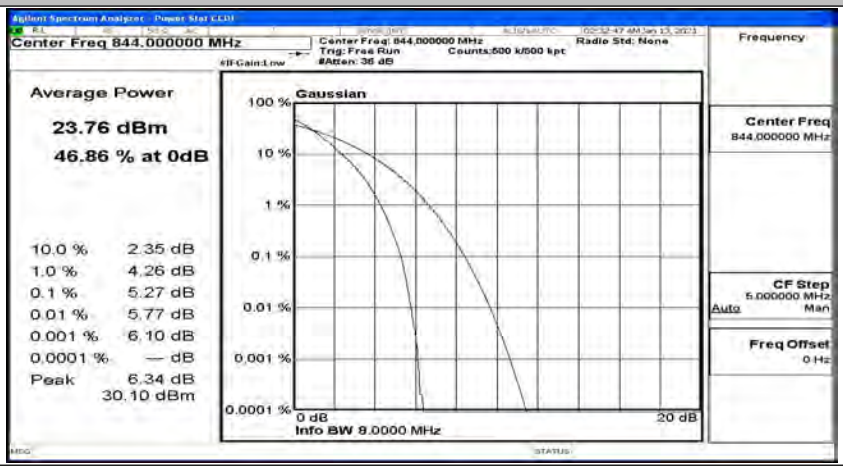
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



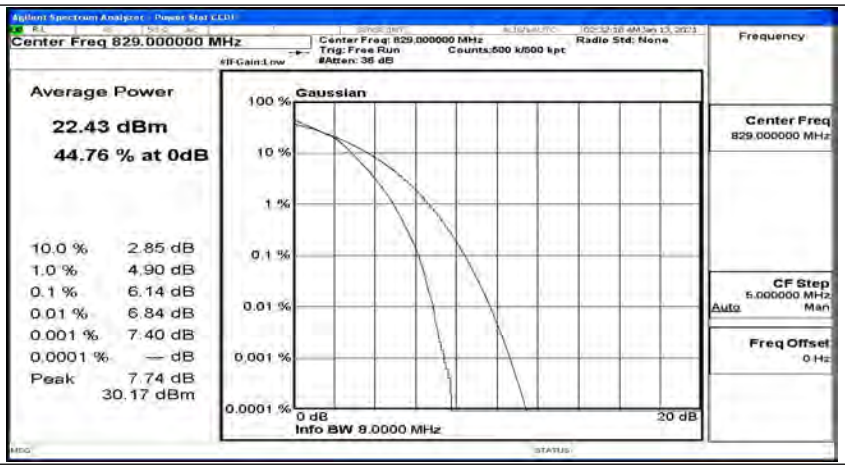
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



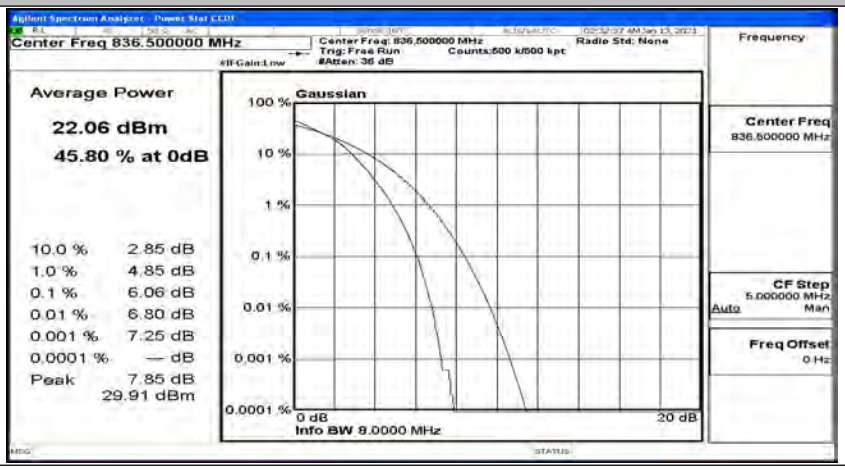
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



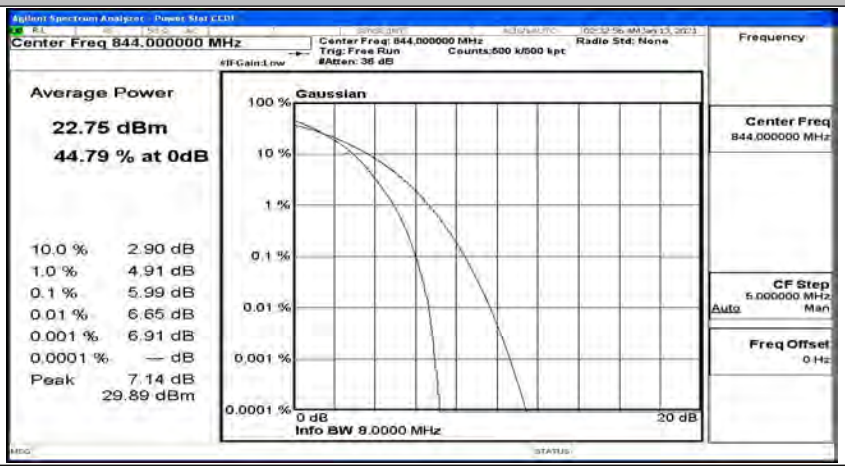
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

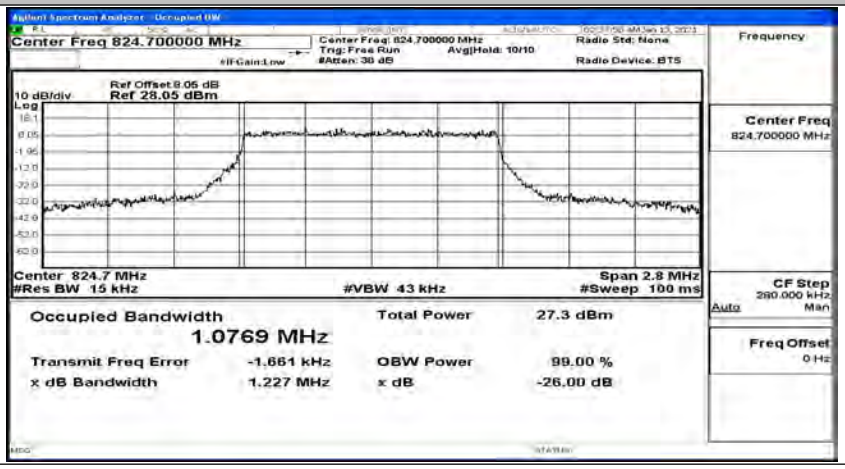
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0769	1.227	PASS
	MCH	1.0761	1.216	PASS
	HCH	1.0752	1.216	PASS
16QAM	LCH	1.0757	1.244	PASS
	MCH	1.0769	1.213	PASS
	HCH	1.0782	1.237	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6757	2.810	PASS
	MCH	2.6774	2.838	PASS
	HCH	2.6771	2.801	PASS
16QAM	LCH	2.6784	2.821	PASS
	MCH	2.6844	2.828	PASS
	HCH	2.6738	2.817	PASS

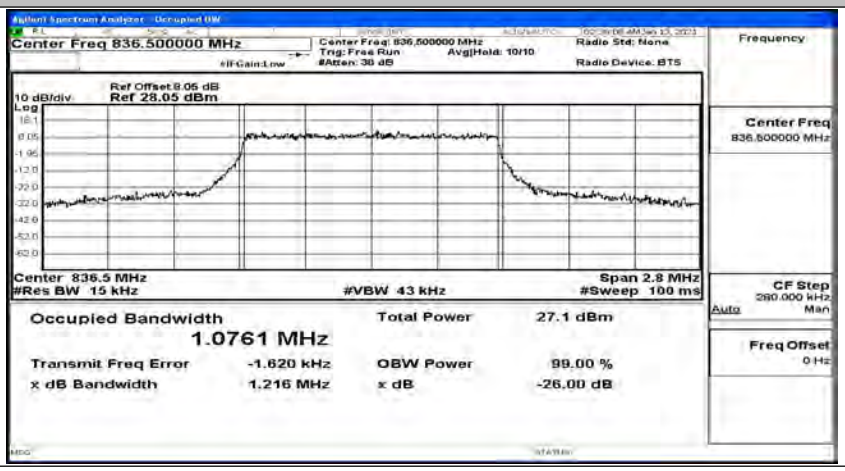
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4835	4.884	PASS
	MCH	4.4685	4.853	PASS
	HCH	4.4739	4.810	PASS
16QAM	LCH	4.4750	4.852	PASS
	MCH	4.4743	4.788	PASS
	HCH	4.4552	4.807	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9420	9.546	PASS
	MCH	8.9251	9.440	PASS
	HCH	8.9443	9.497	PASS
16QAM	LCH	8.9394	9.560	PASS
	MCH	8.9282	9.481	PASS
	HCH	8.9223	9.457	PASS

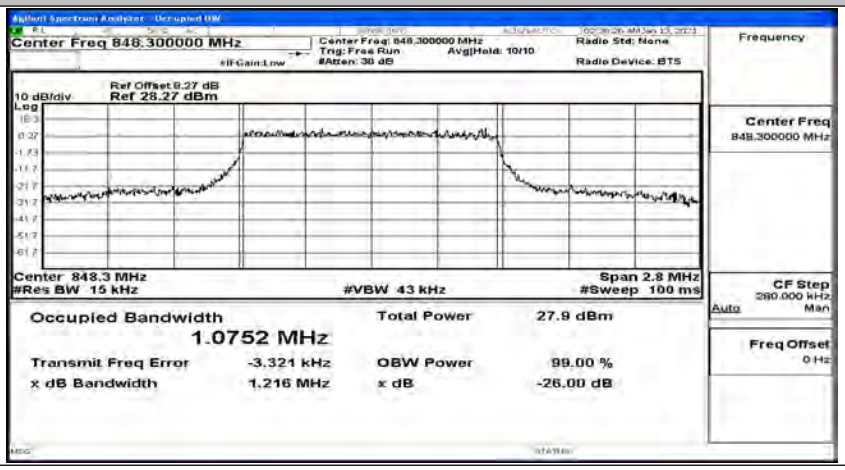
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



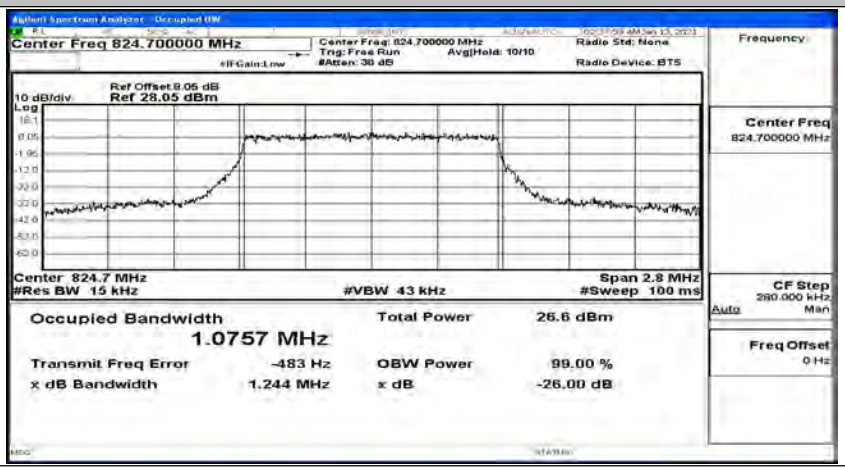
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



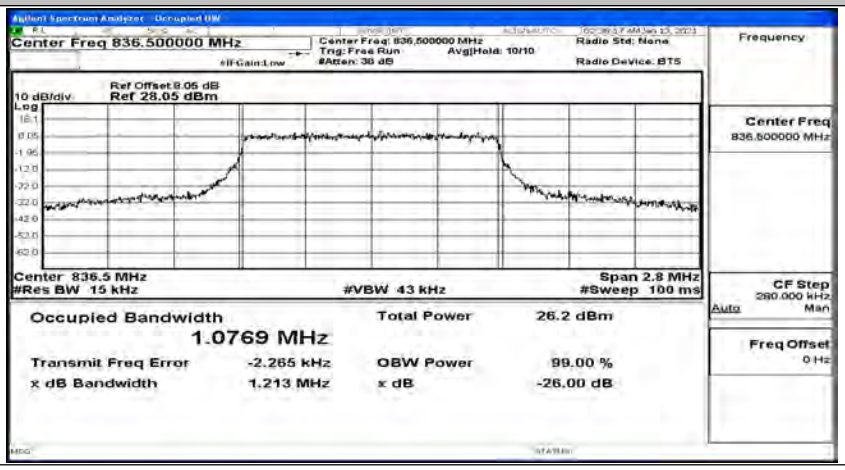
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



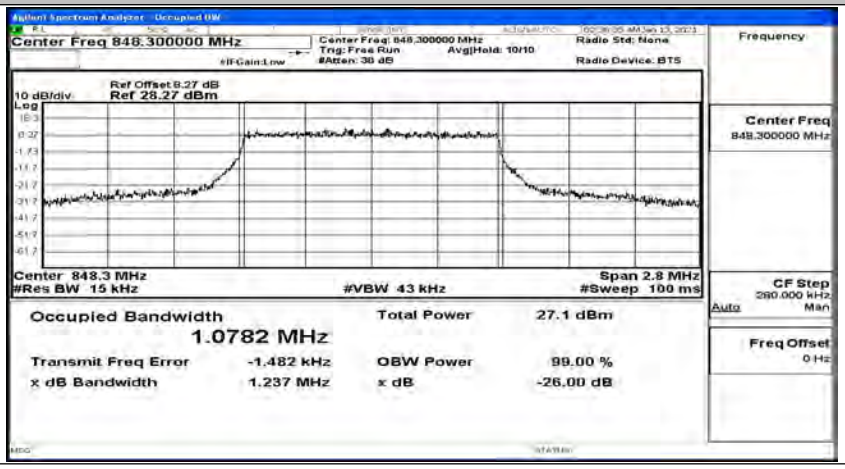
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



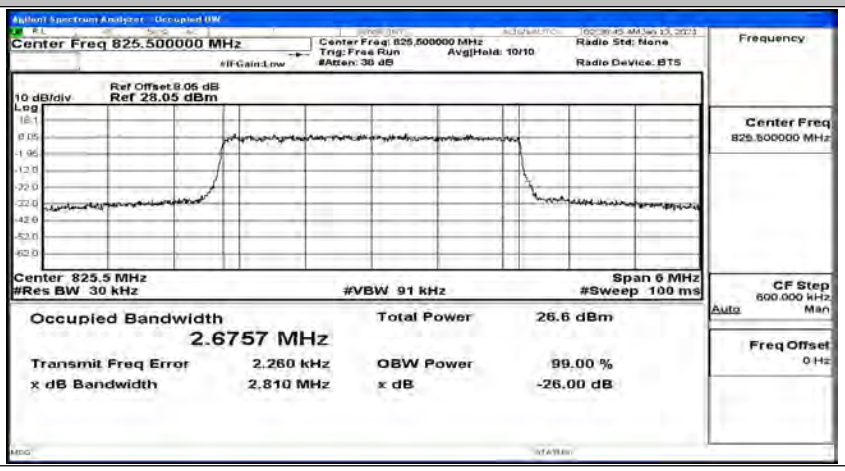
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



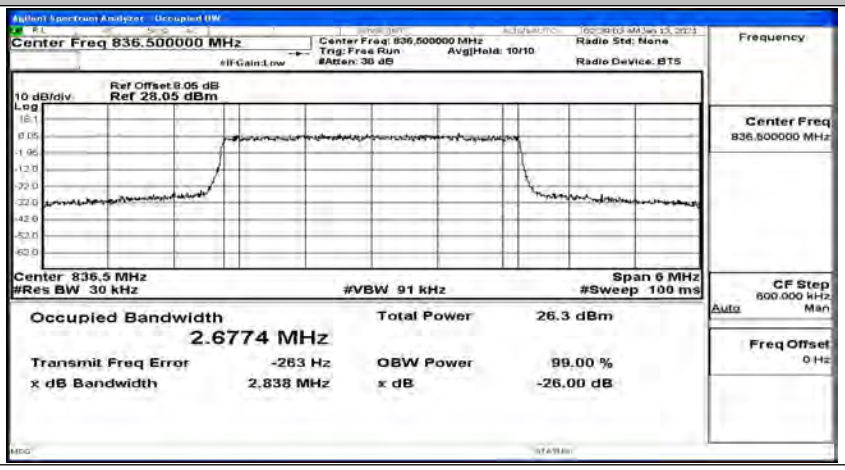
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



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

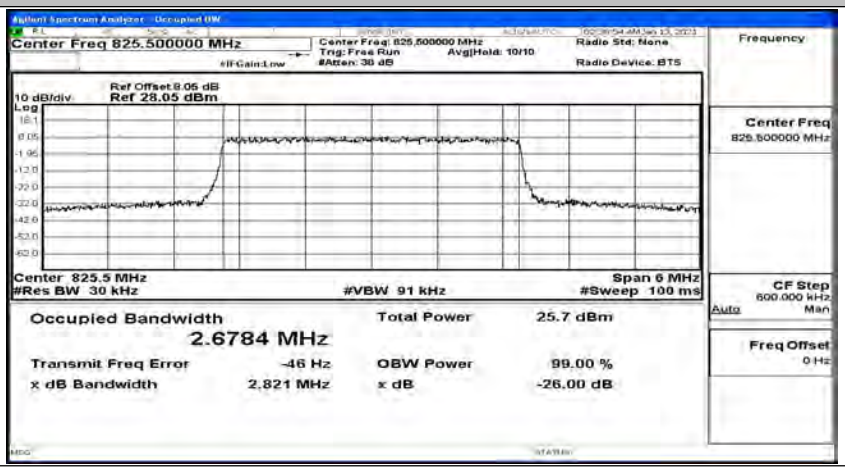


EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK

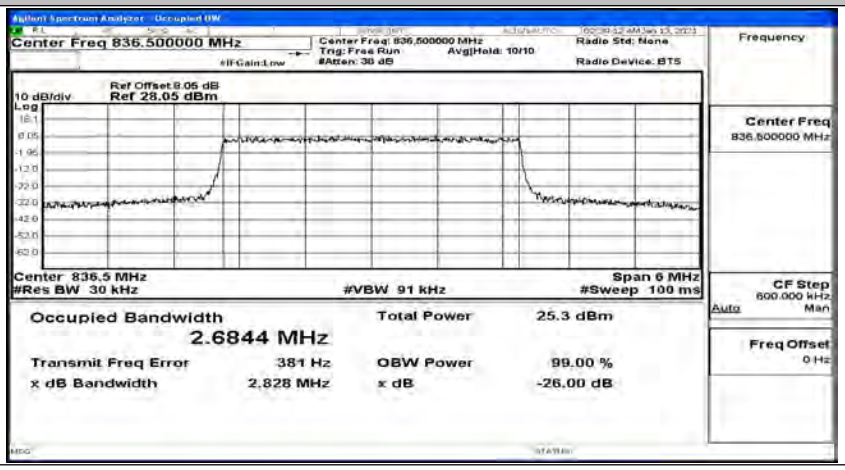


EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK

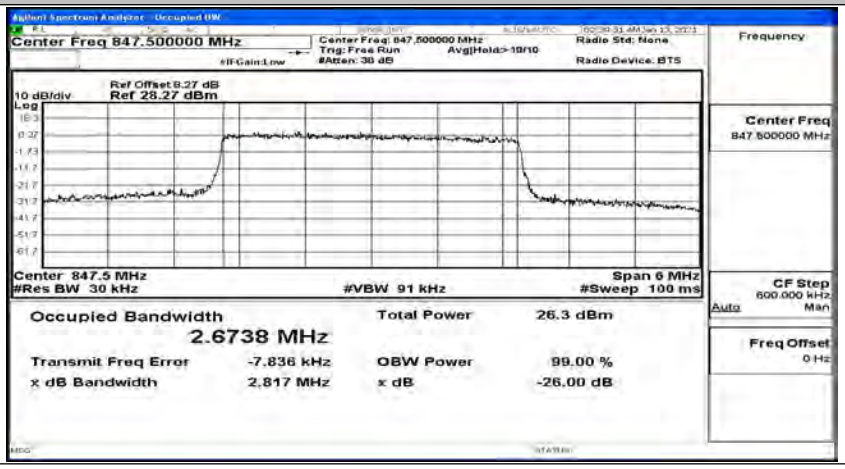
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



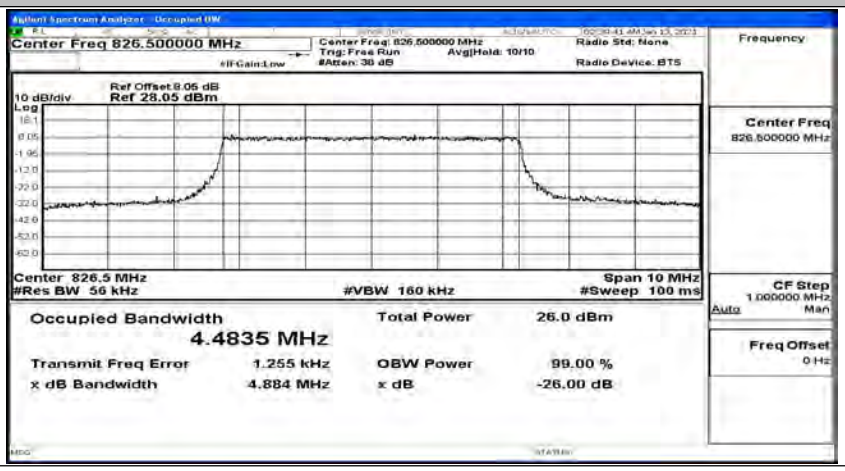
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



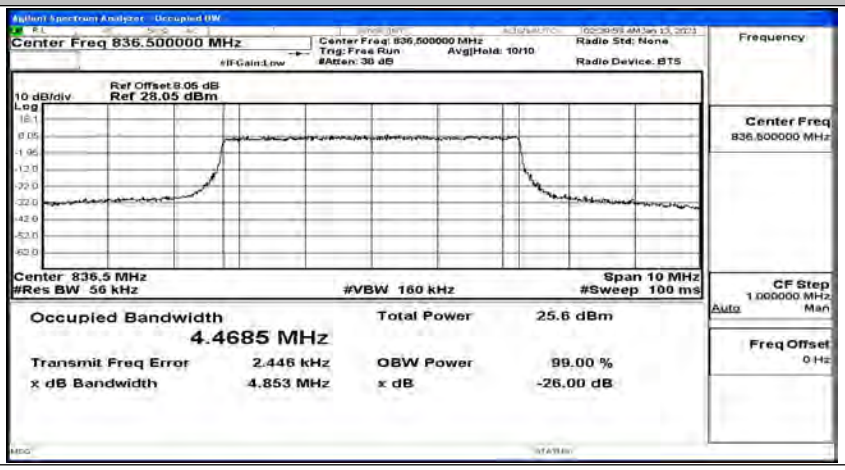
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



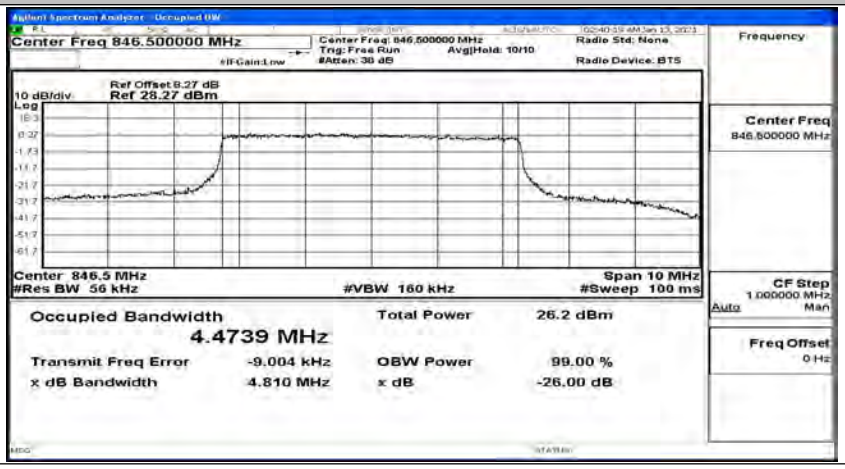
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



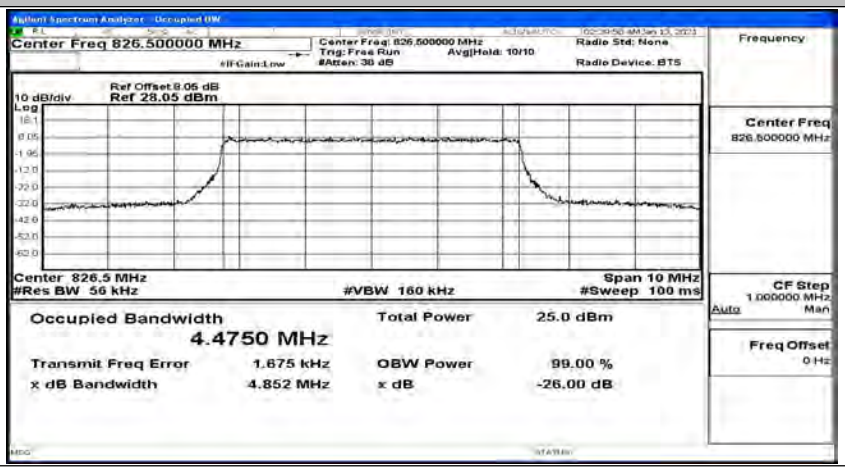
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



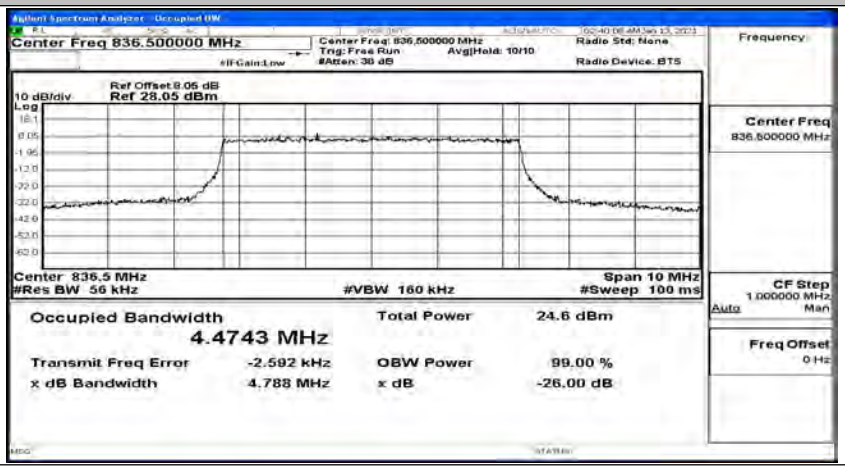
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



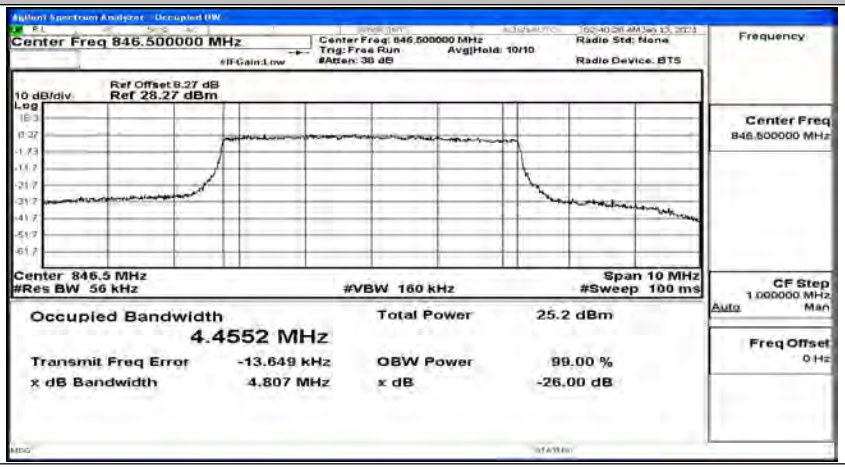
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



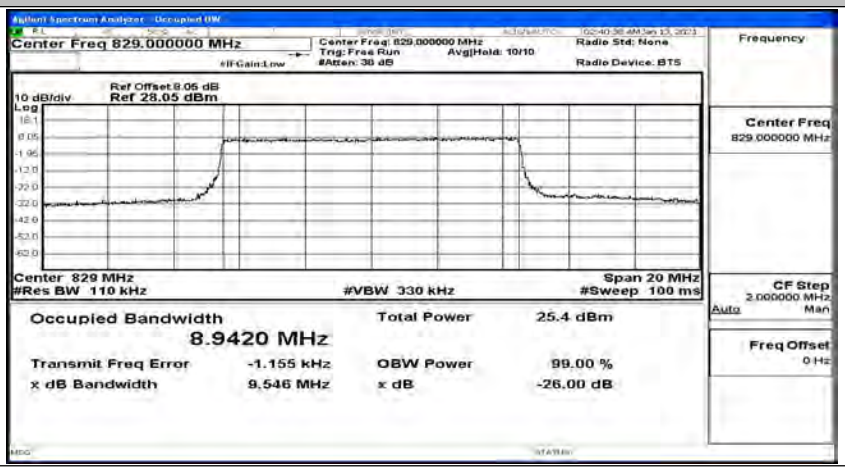
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



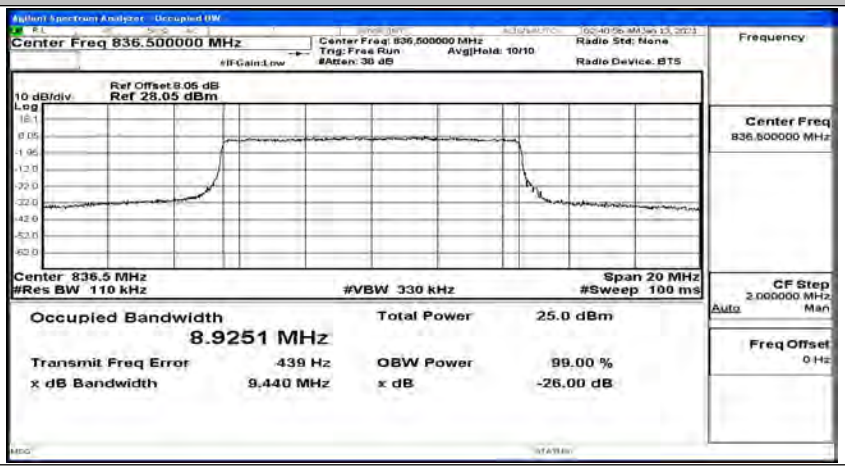
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



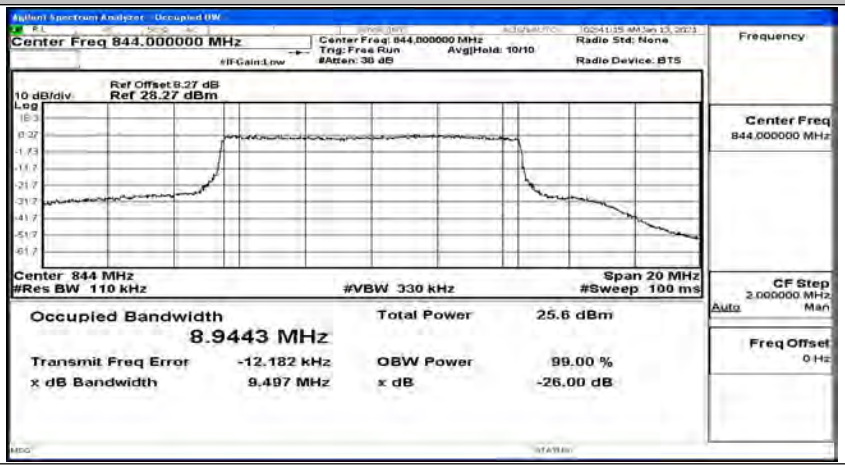
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



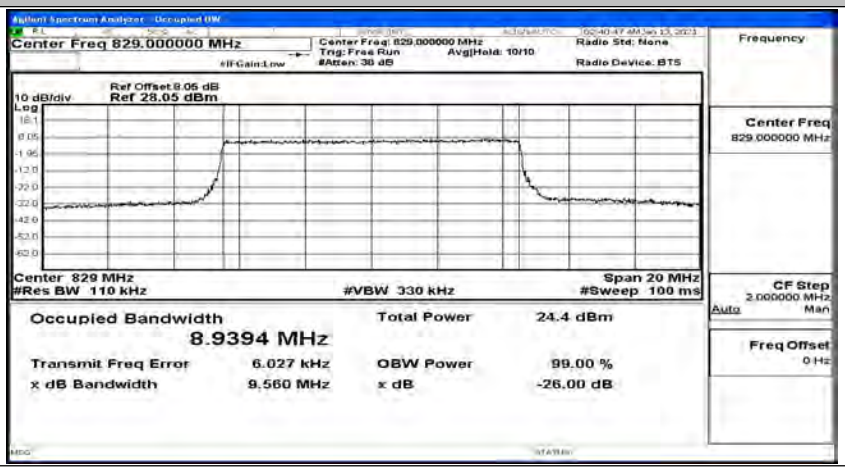
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



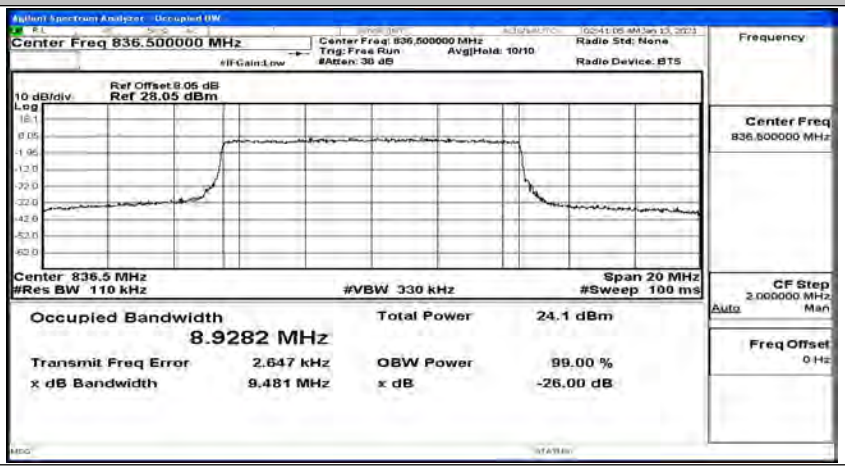
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



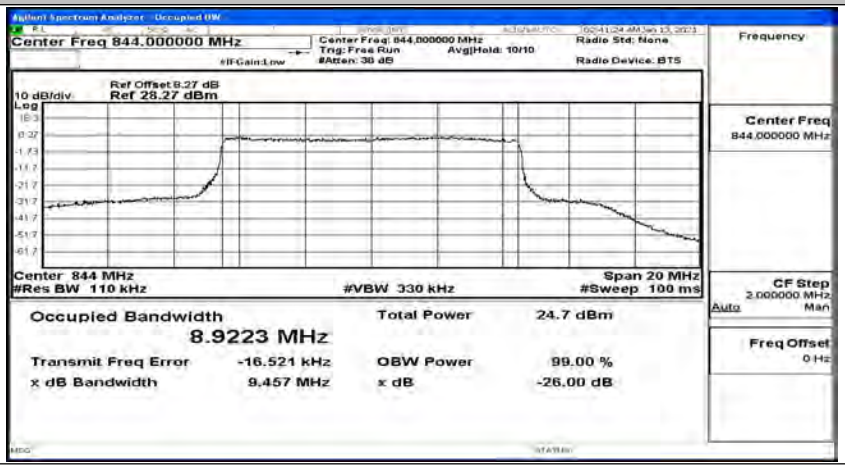
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



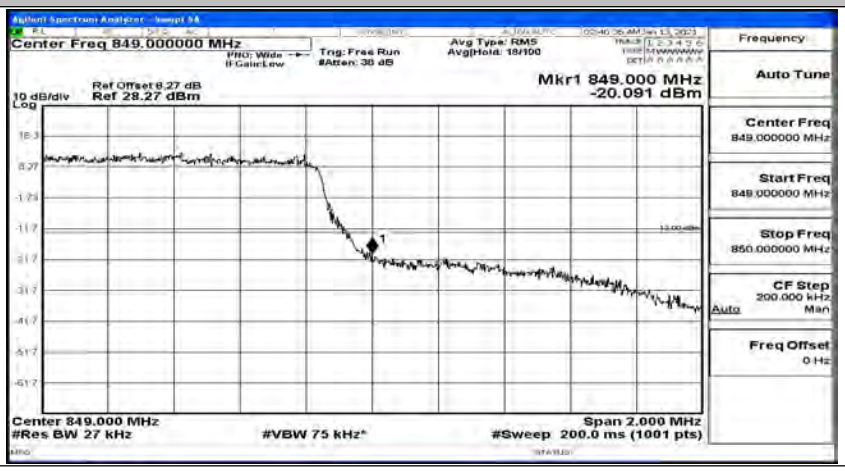
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



F.4 Band Edge

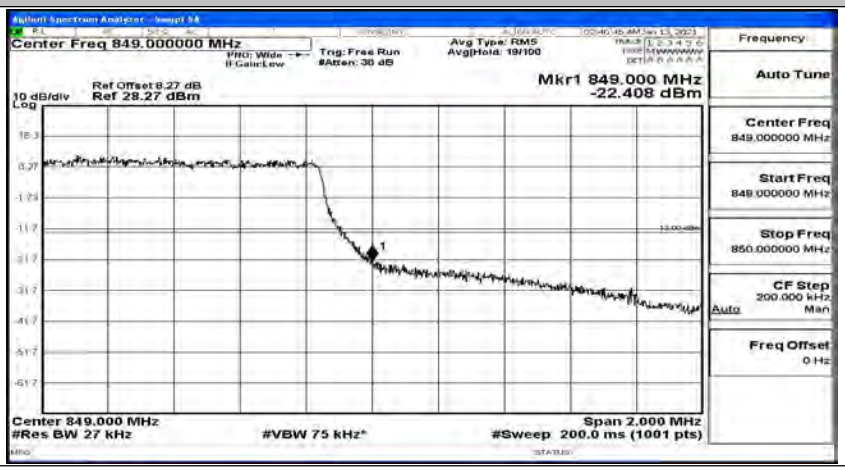
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK

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

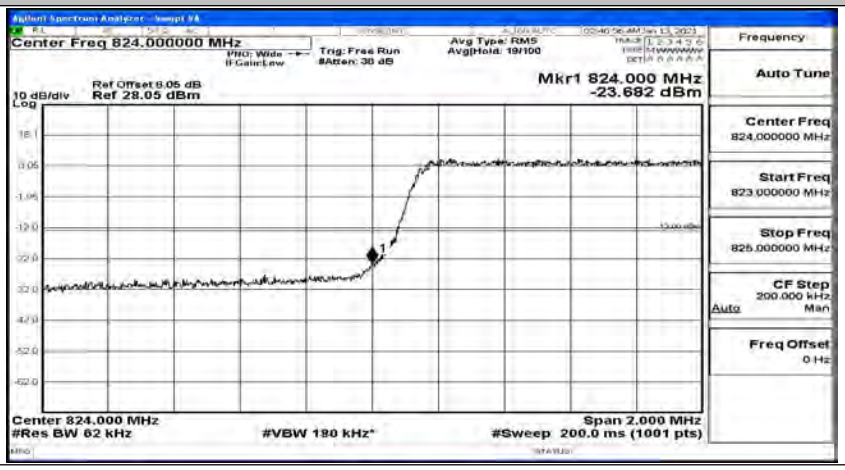


Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM

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

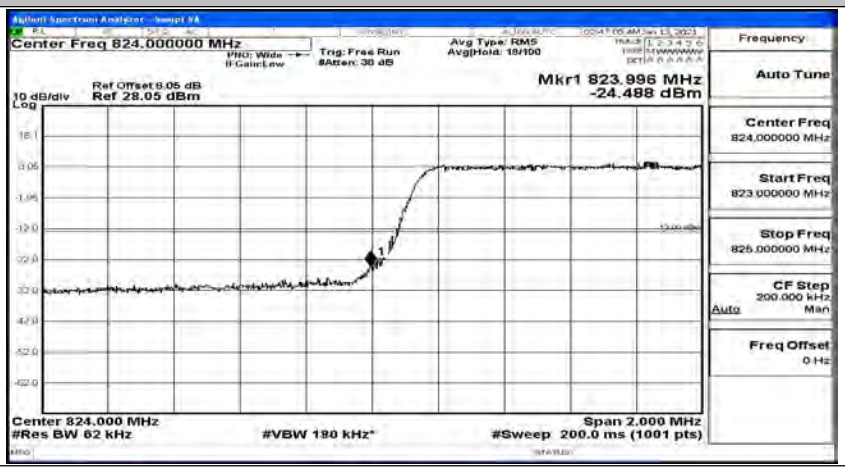


Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK

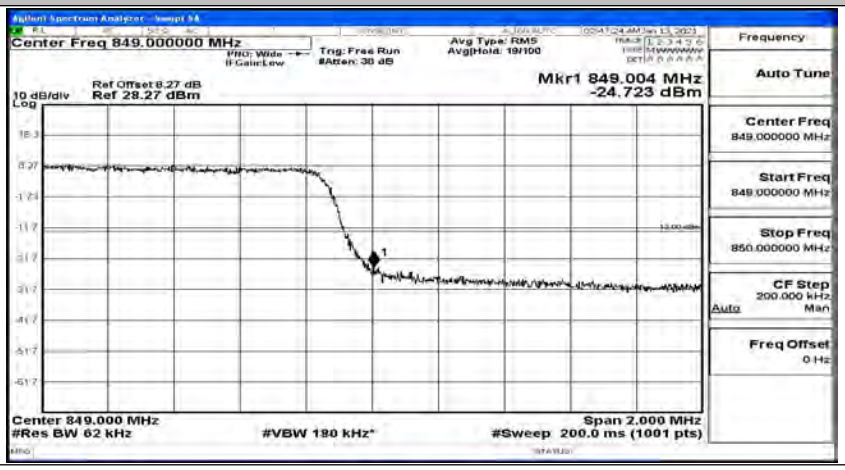


Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK

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

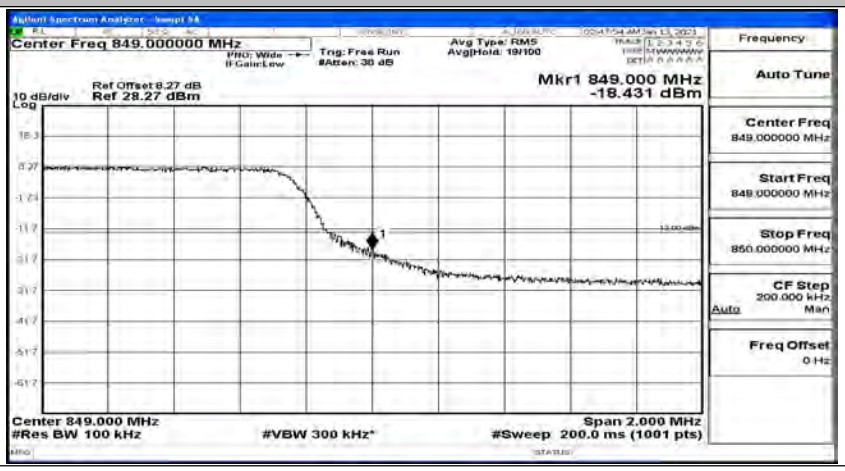


Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



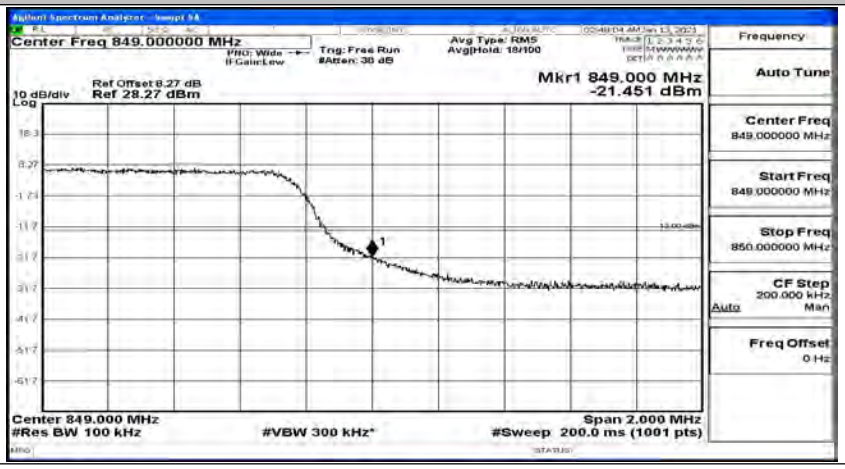
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK

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



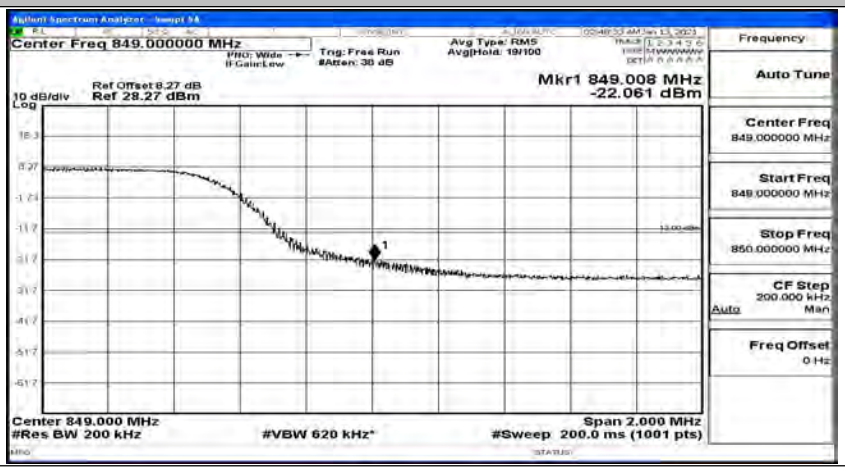
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM

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



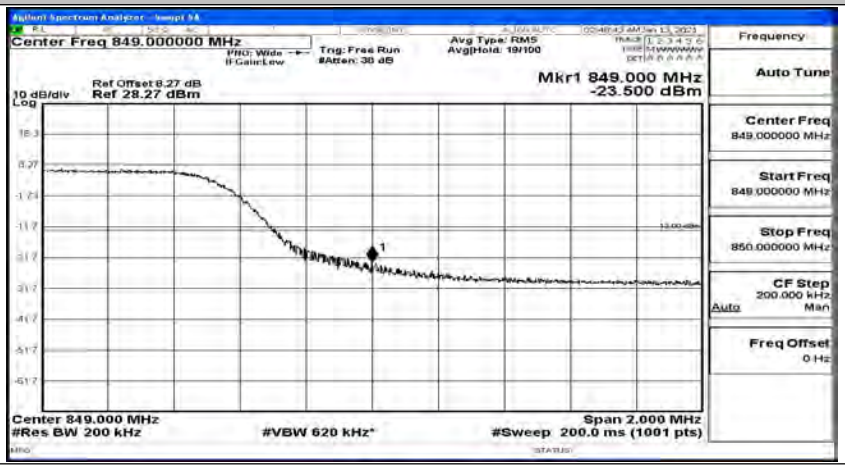
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK

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



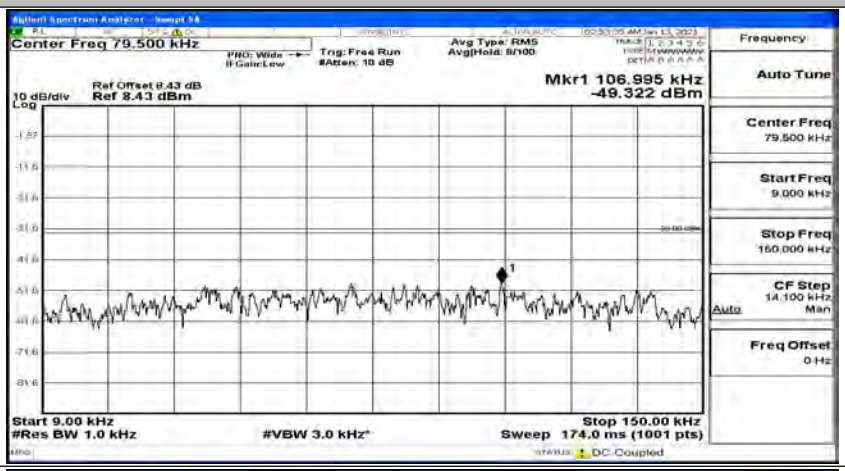
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM

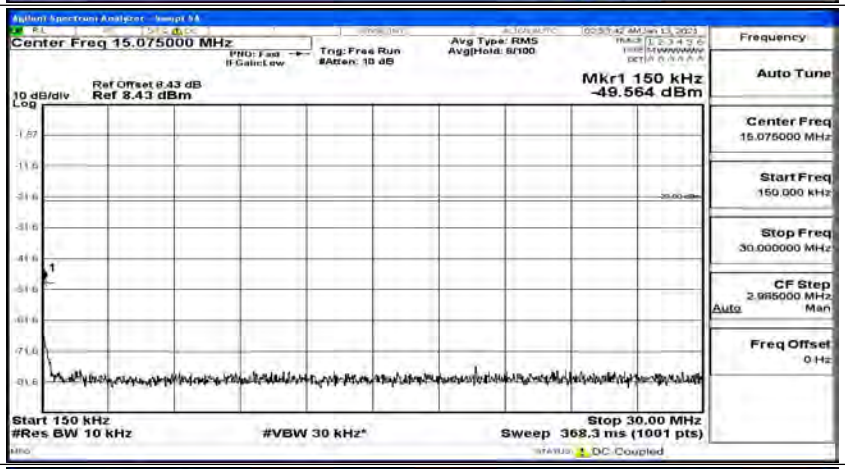
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



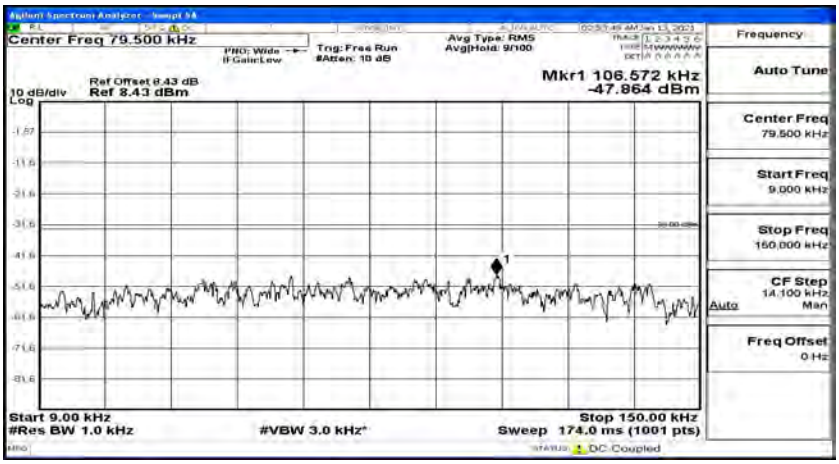
E.5 Conducted Spurious Emission
Test Graphs
Channel Bandwidth: 1.4 MHz

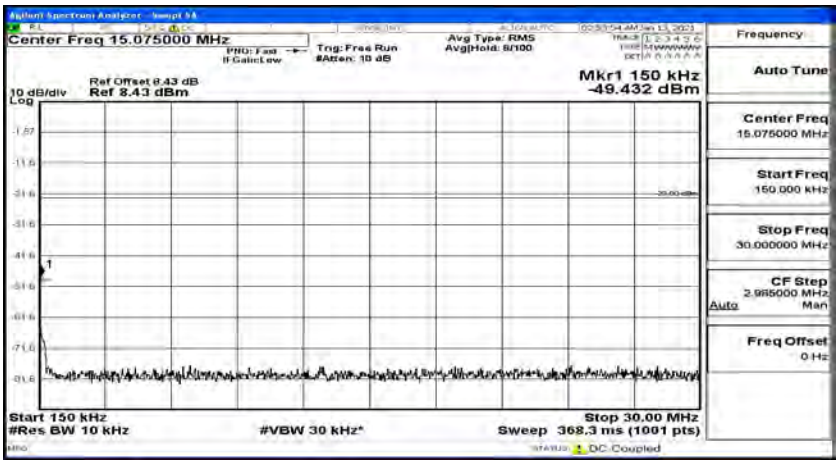
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



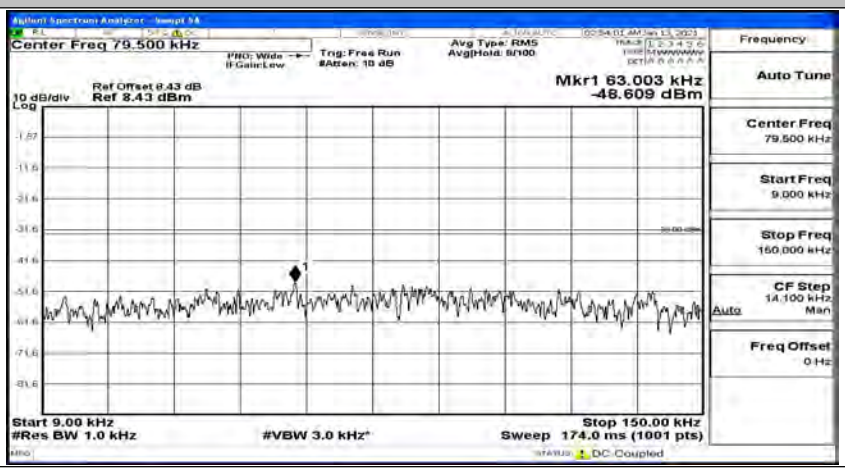


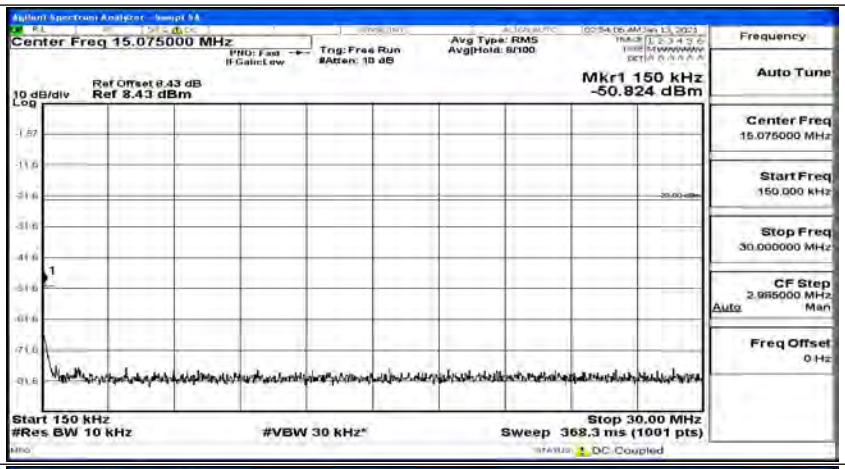
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



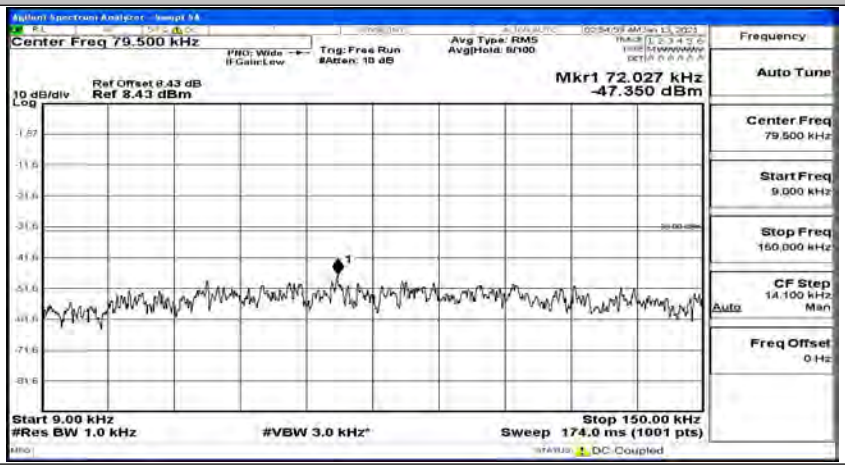


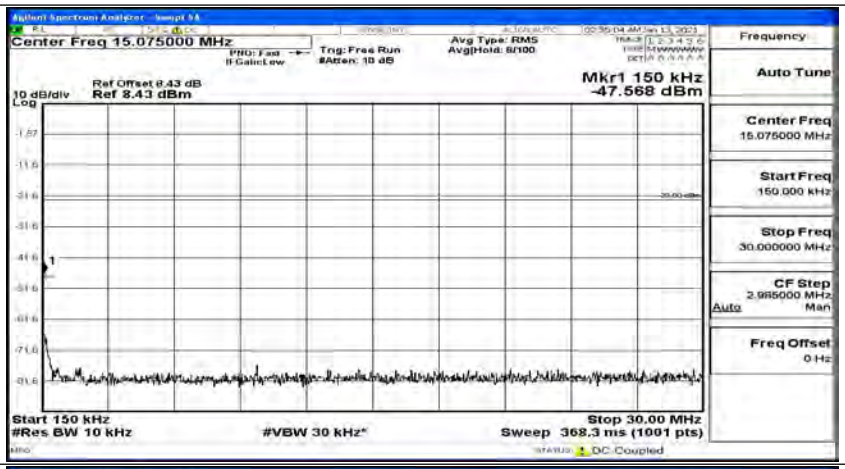
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



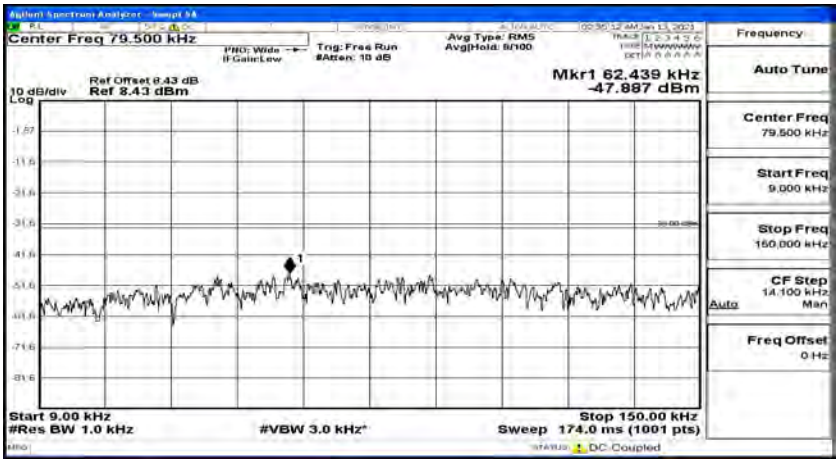


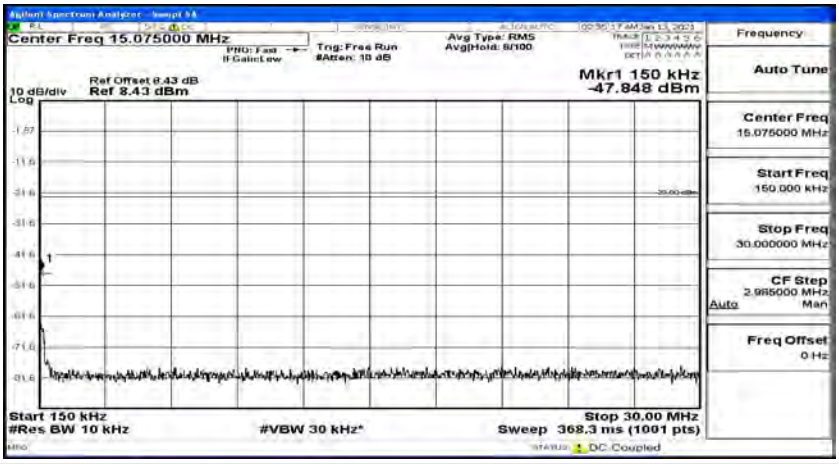
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



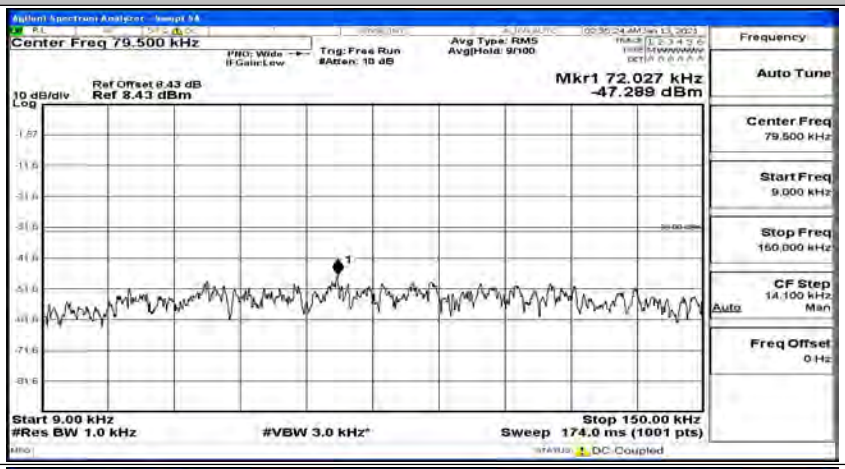


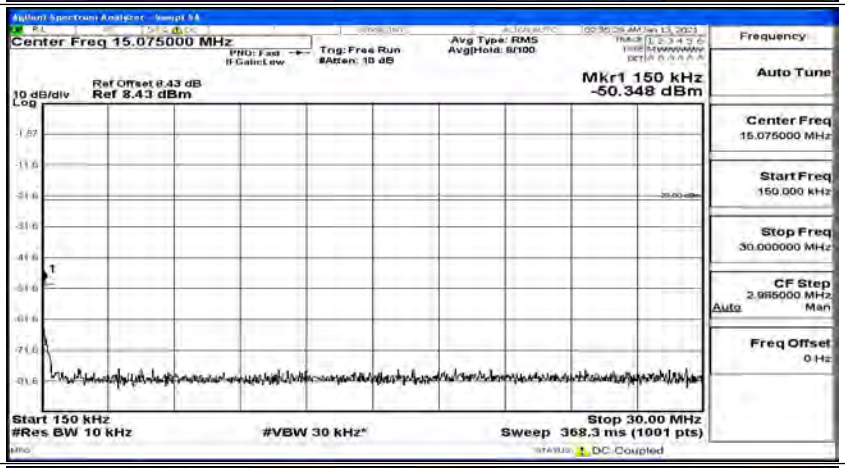
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3



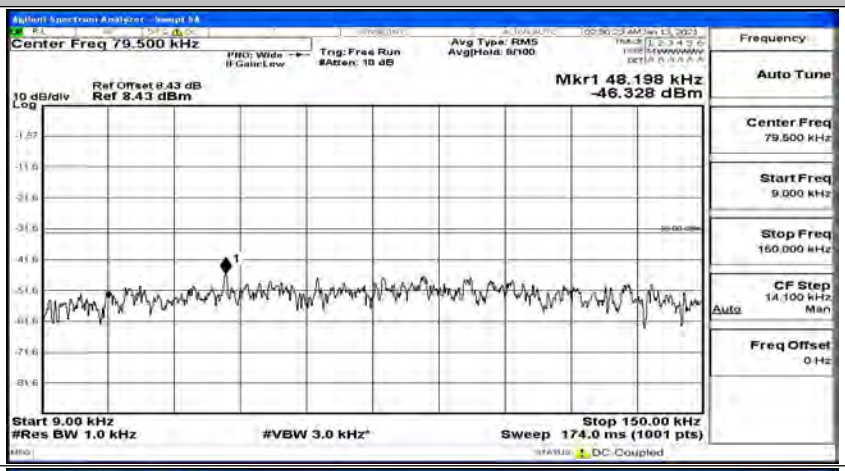


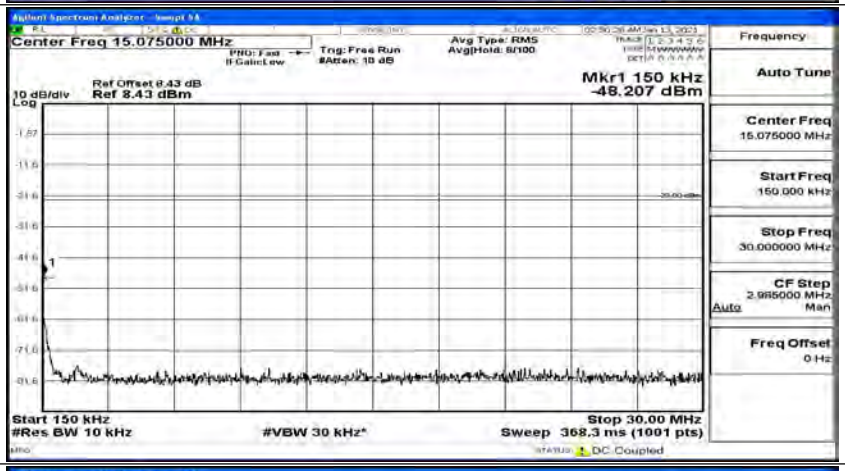
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



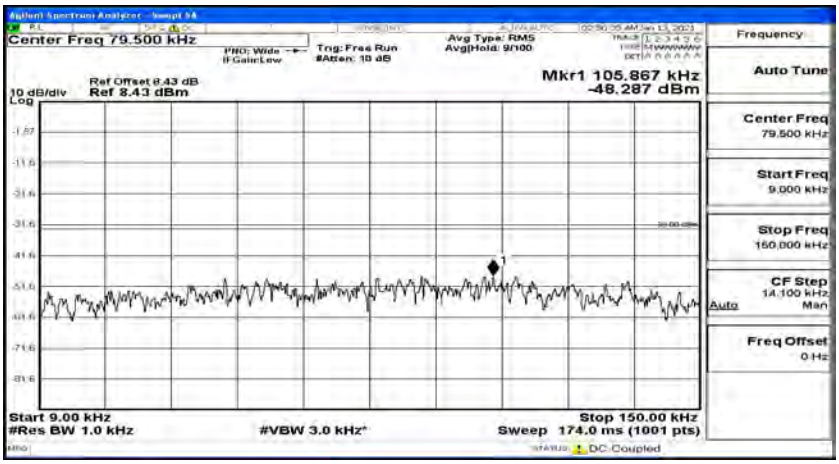


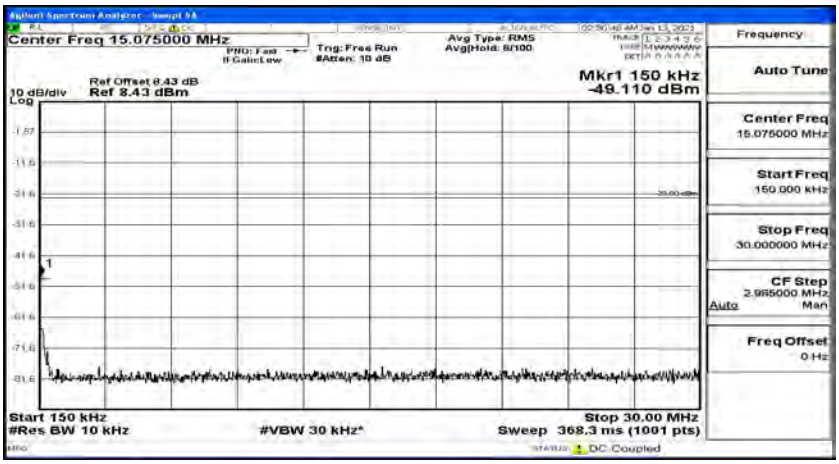
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0



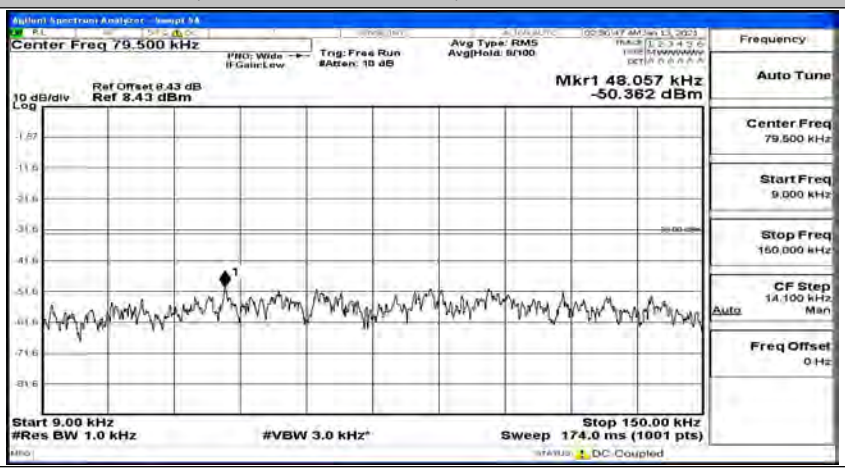


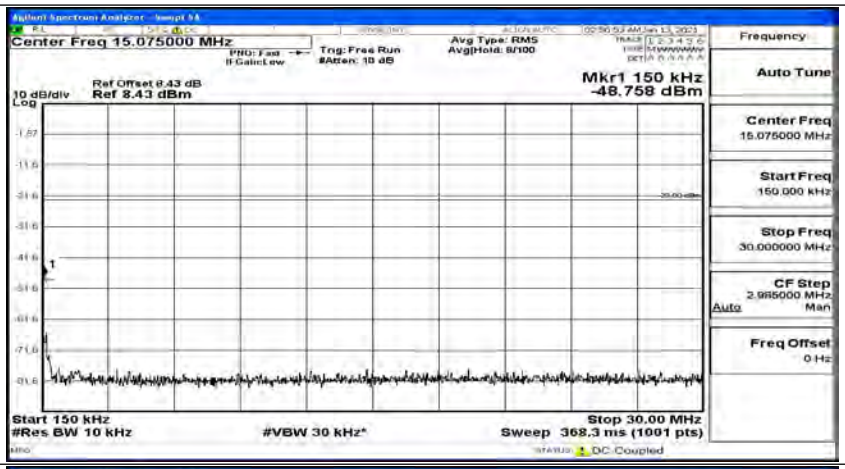
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



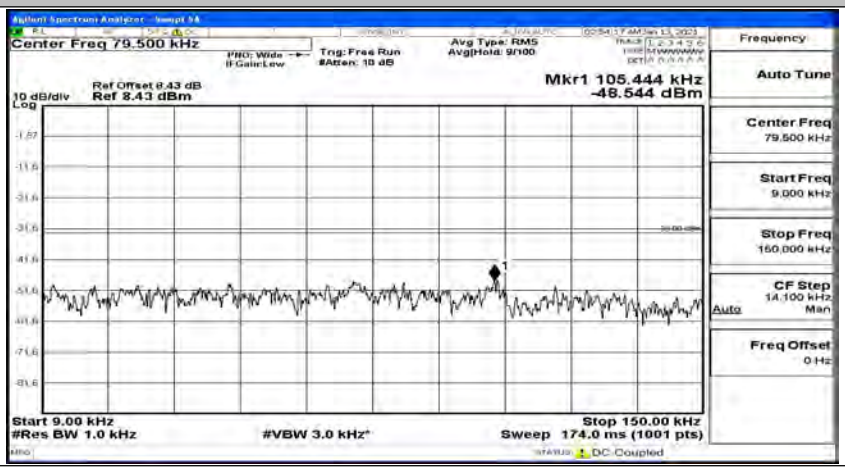


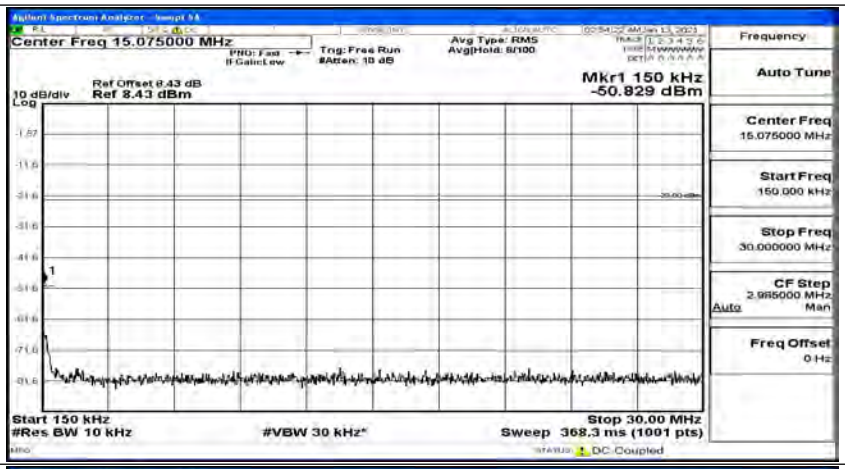
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



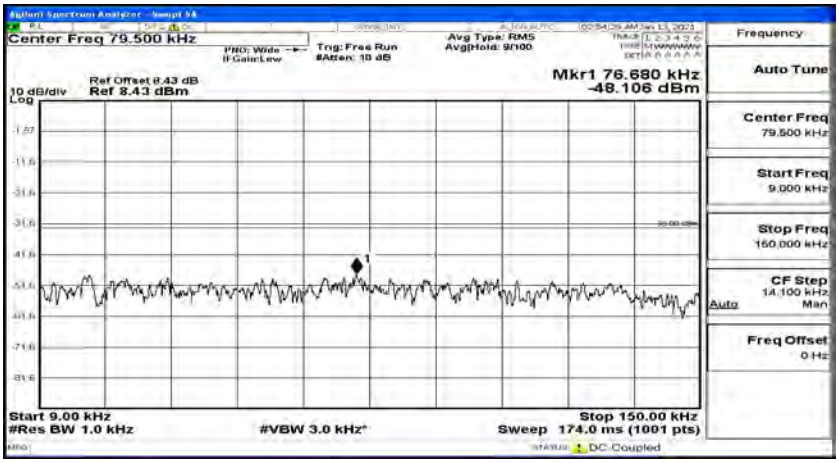


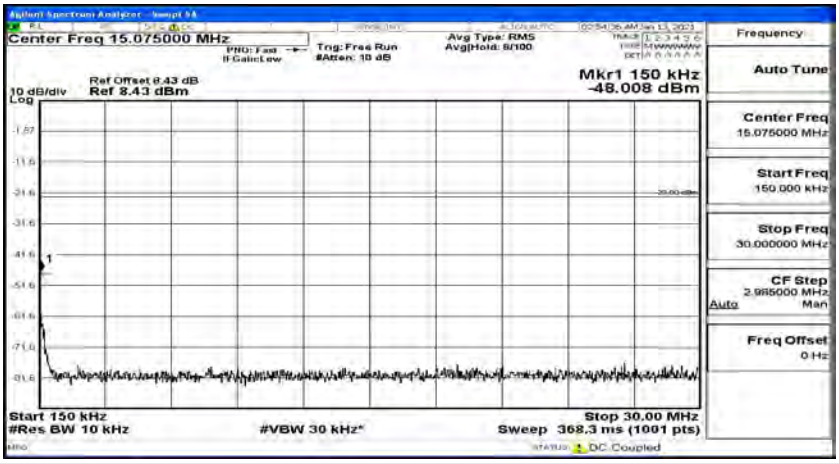
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



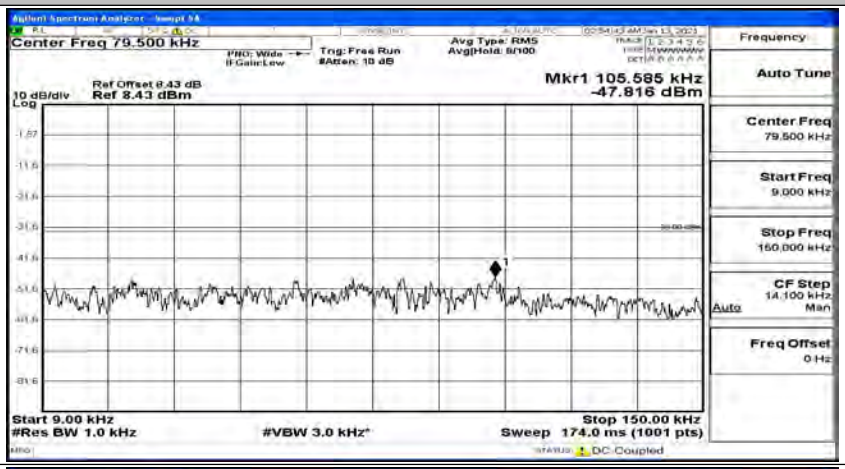


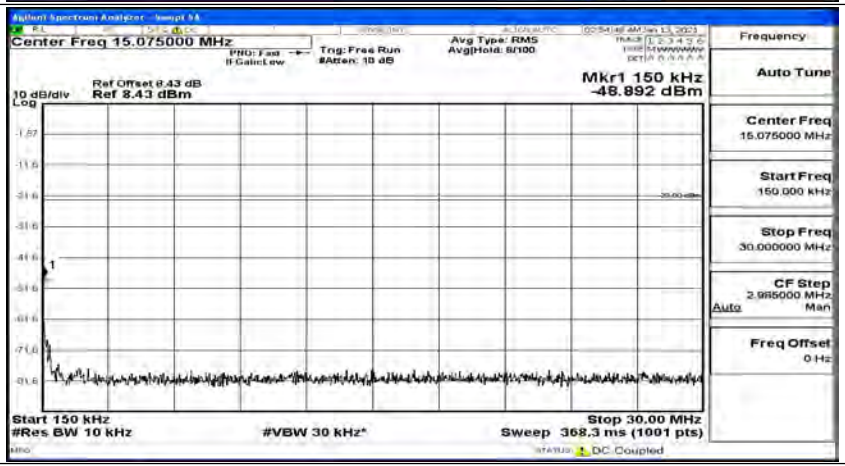
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3



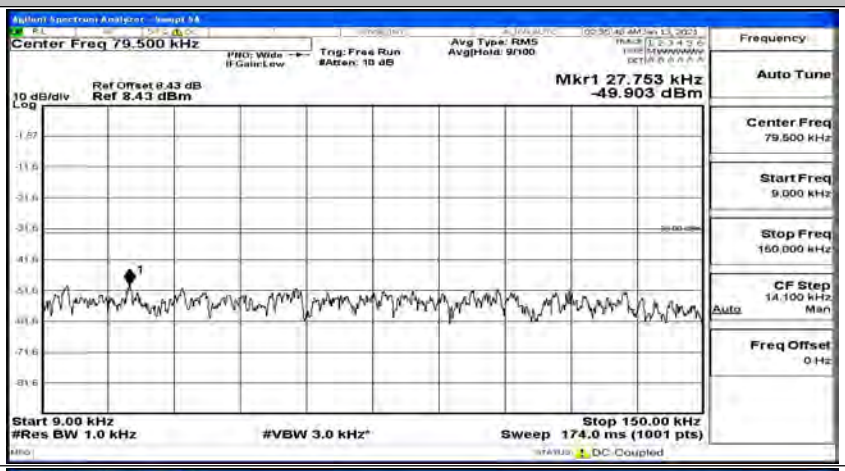


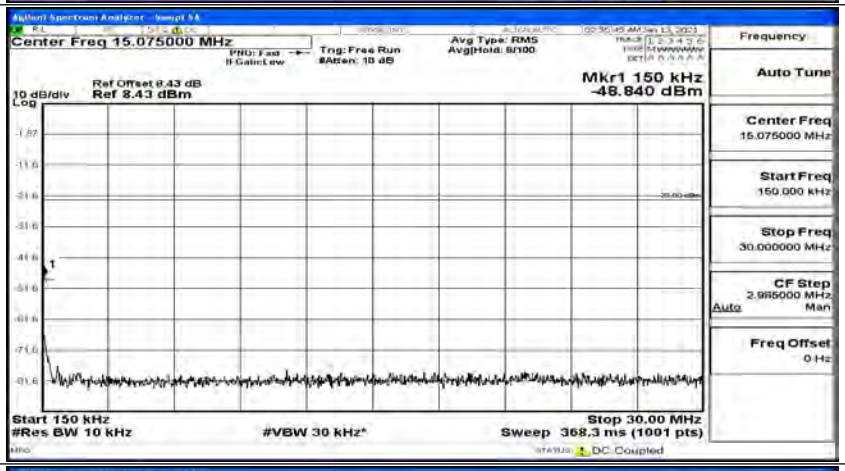
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



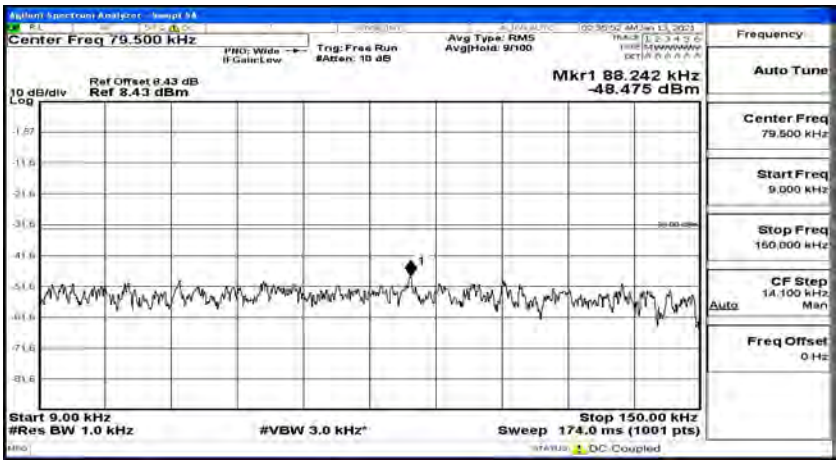


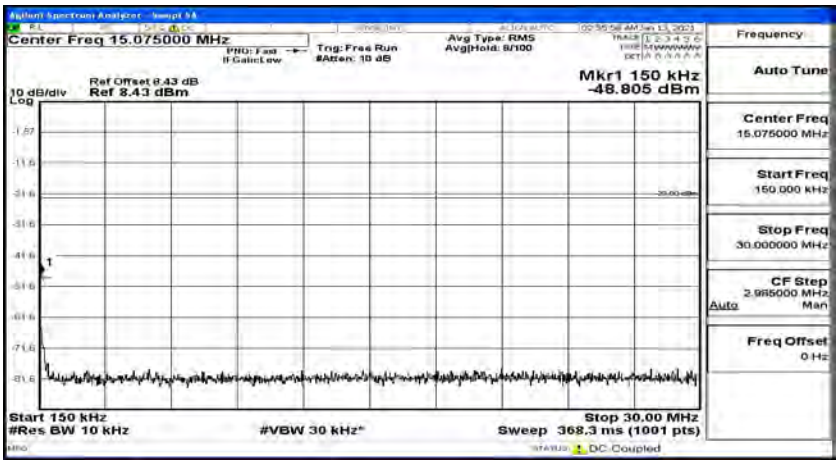
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



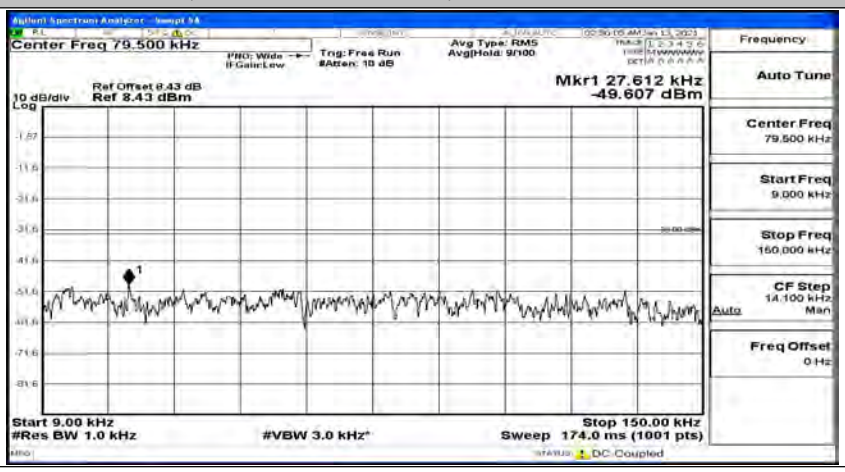


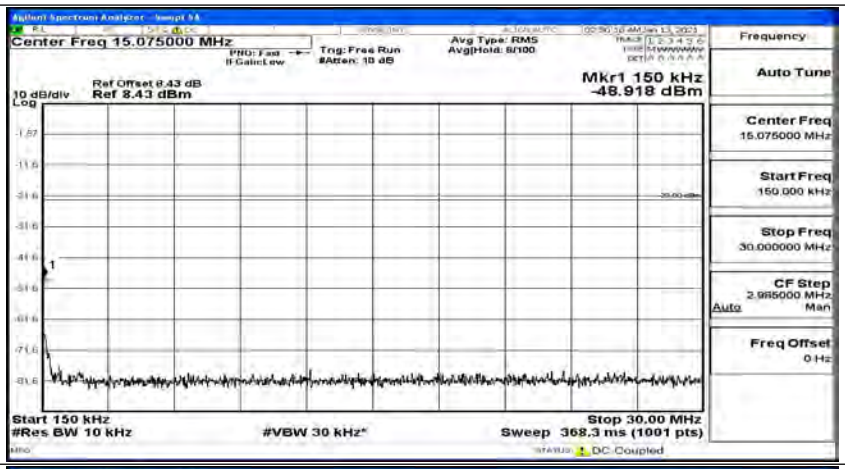
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3



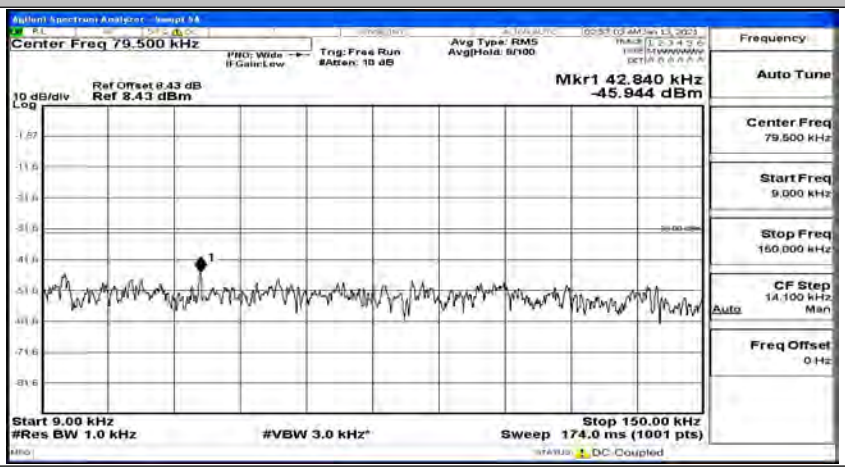


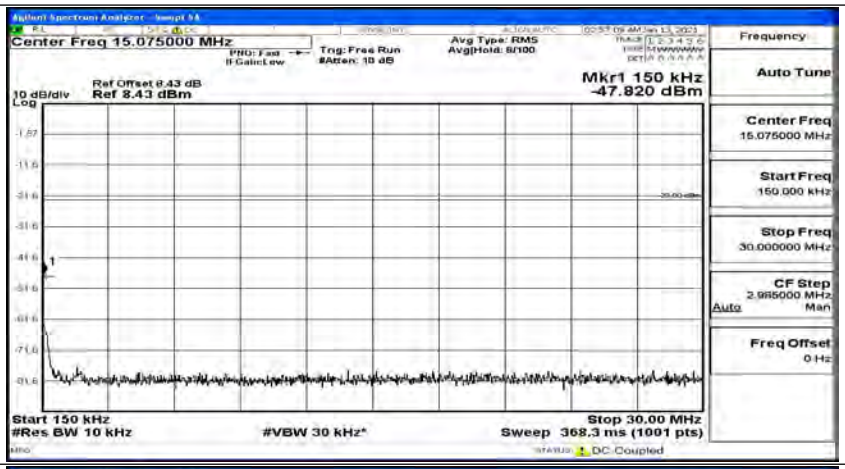
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



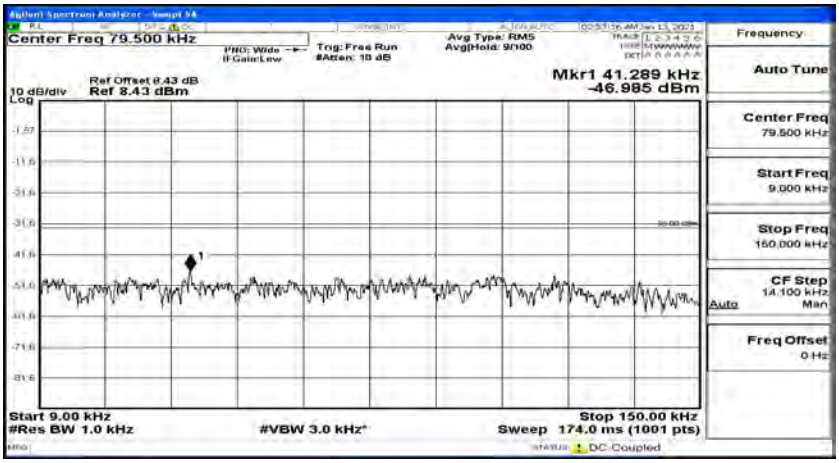


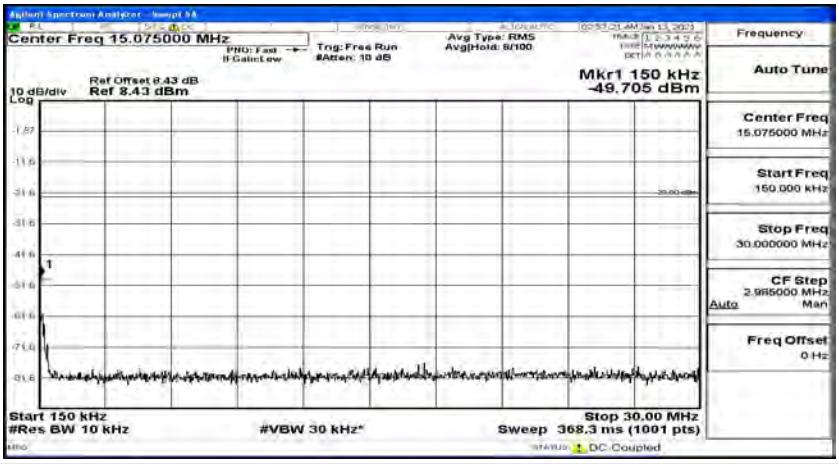
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



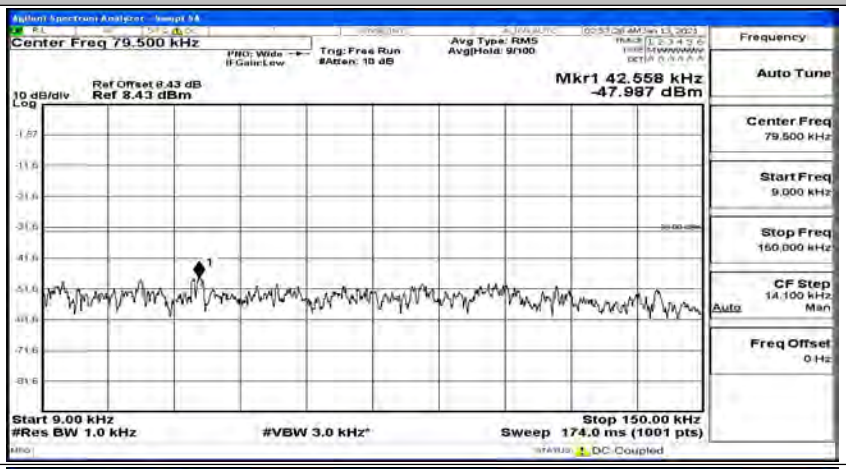


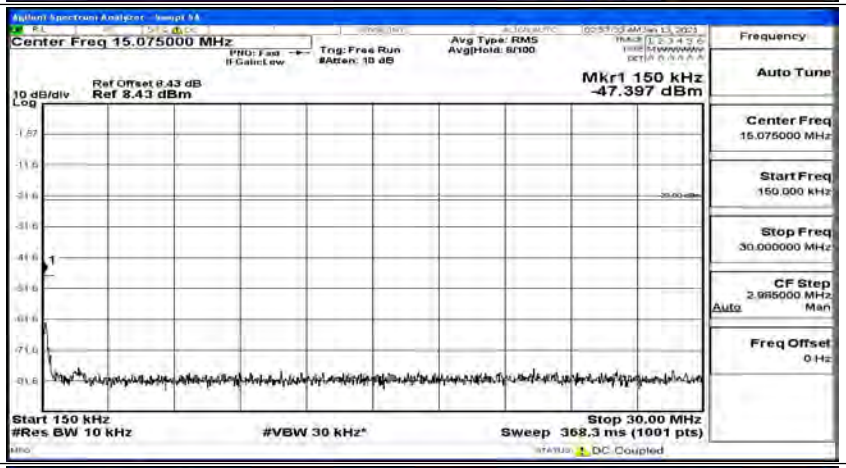
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3





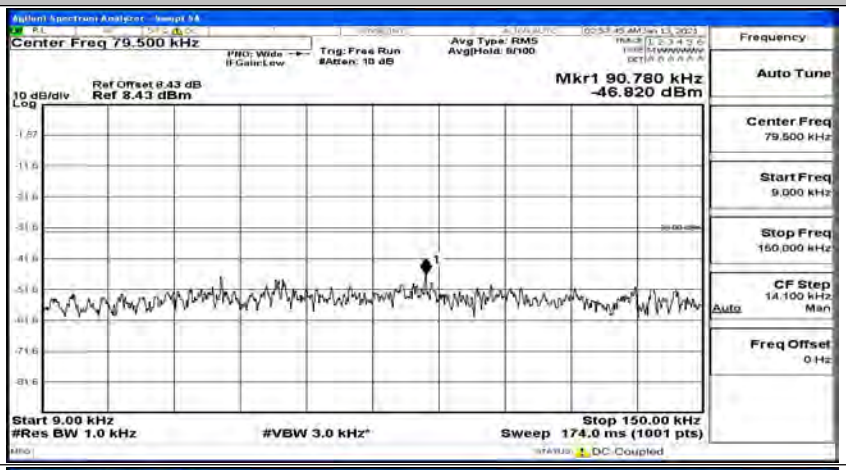
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

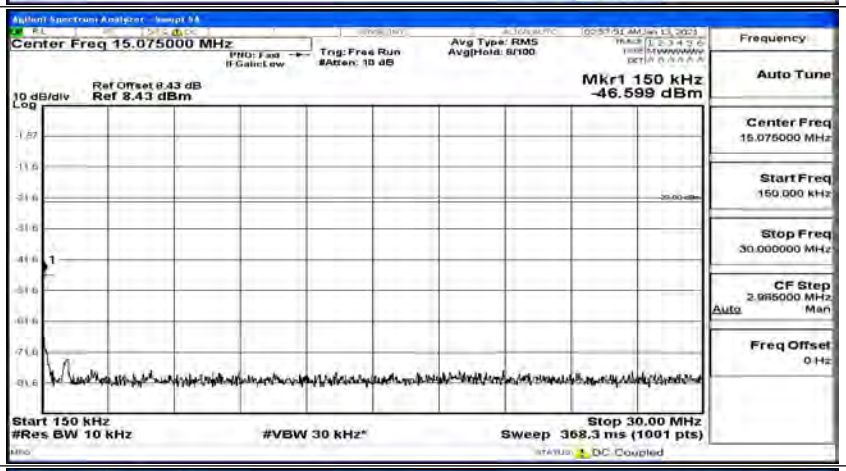




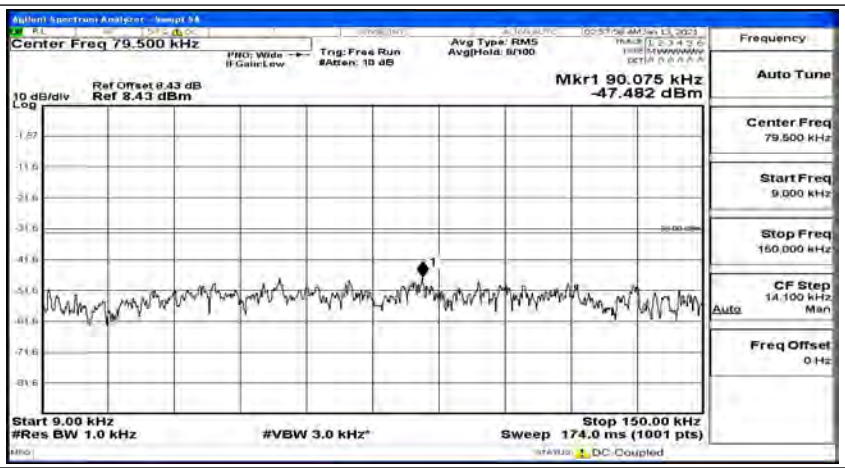
Channel Bandwidth: 3 MHz

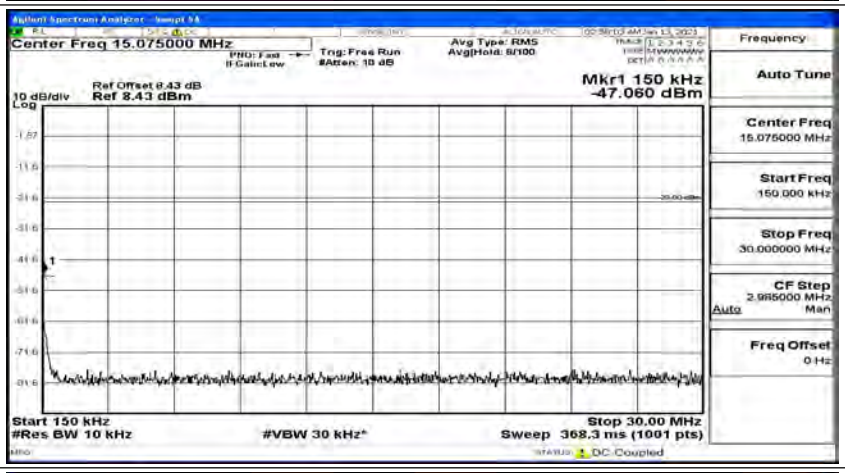
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



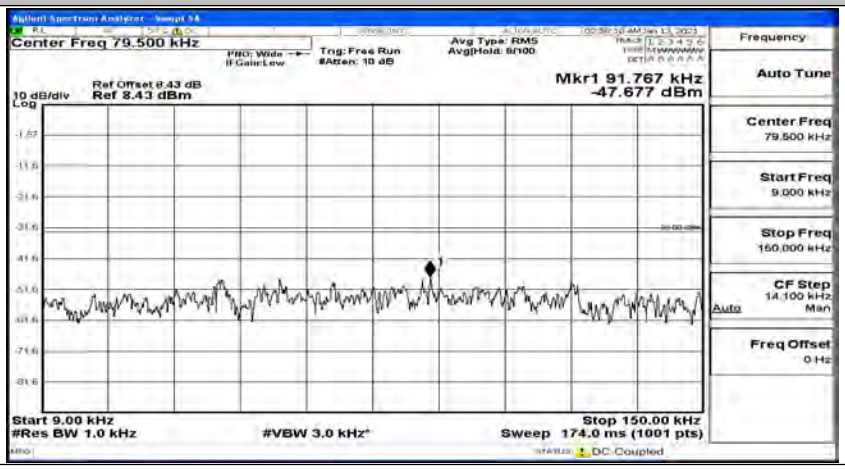


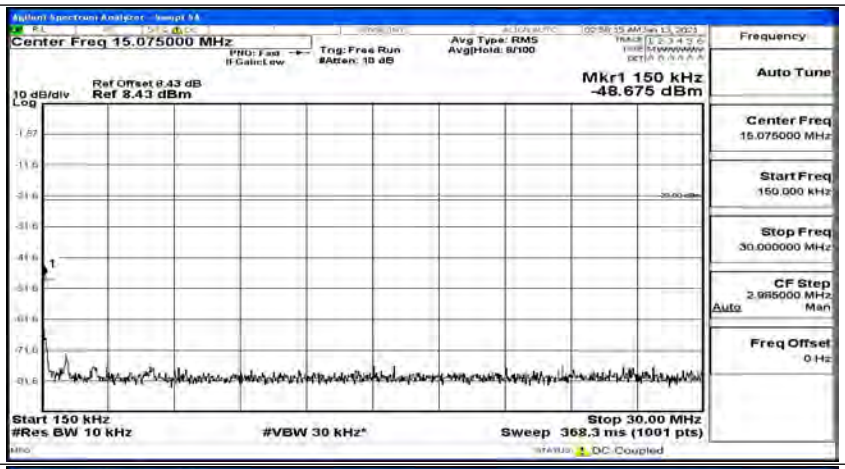
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



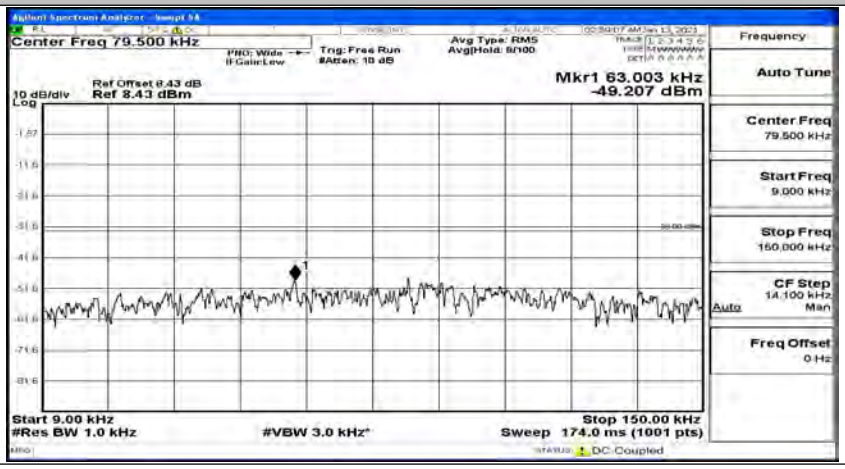


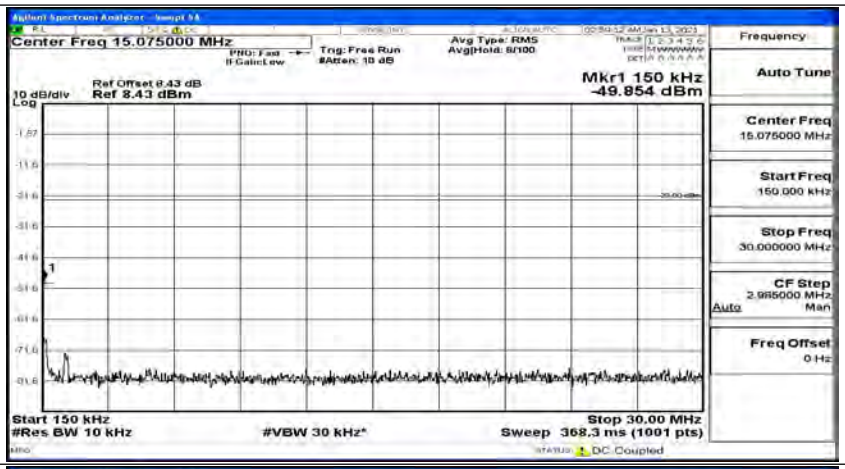
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14



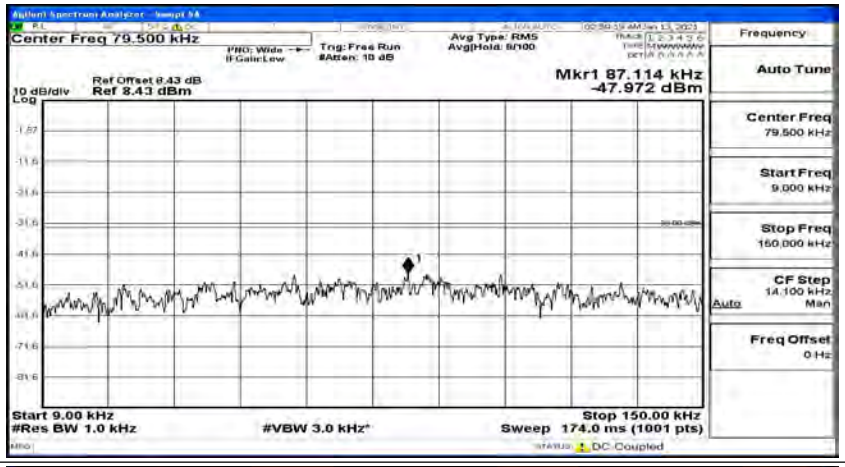


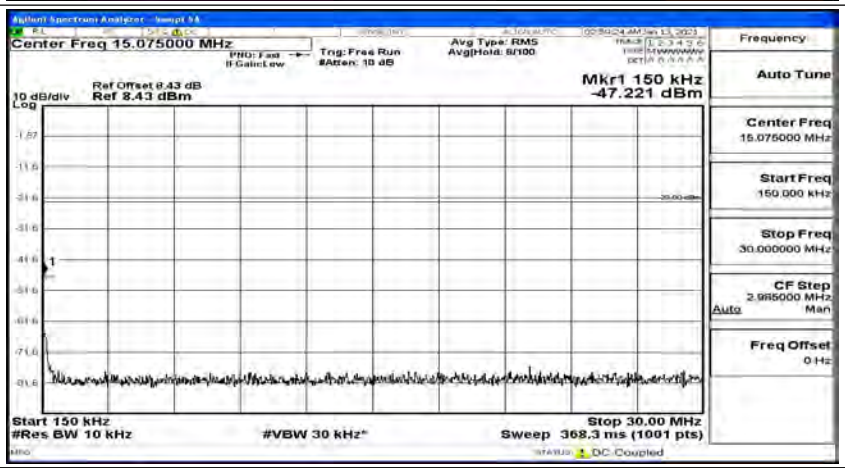
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



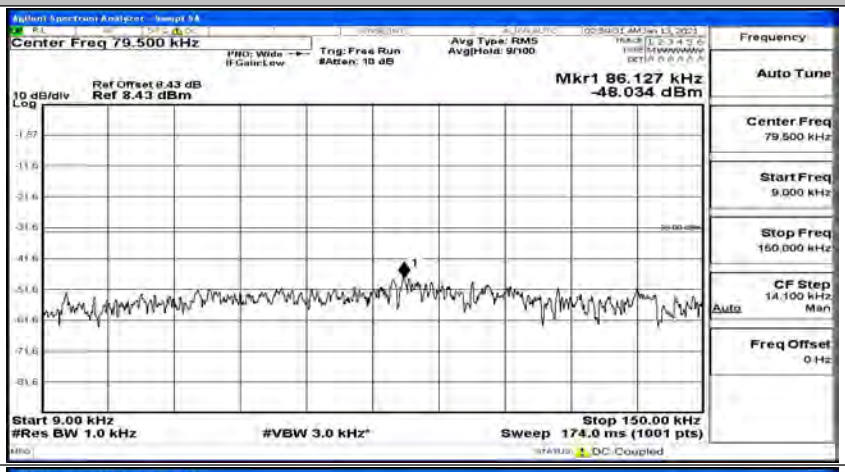


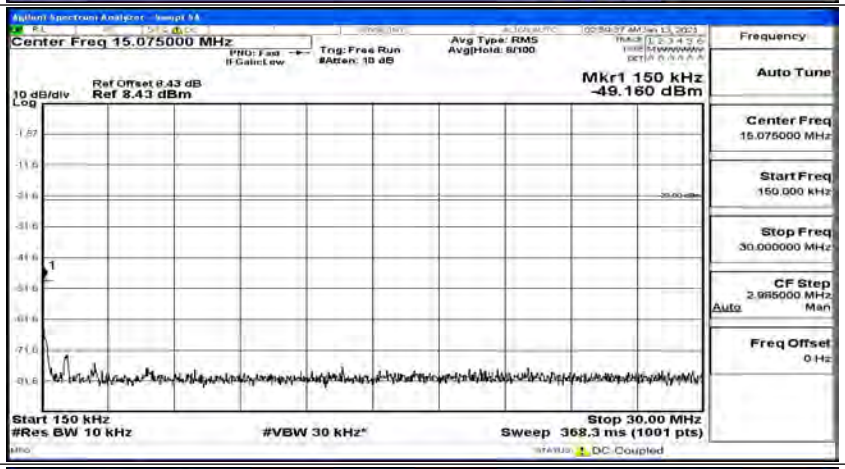
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



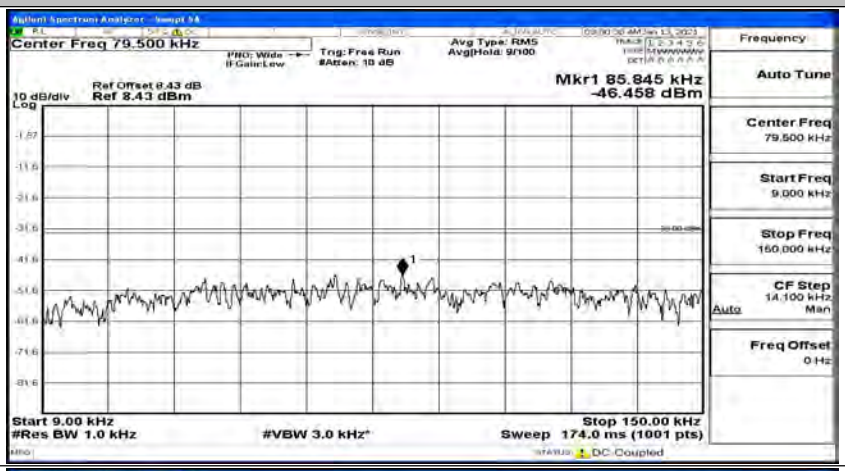


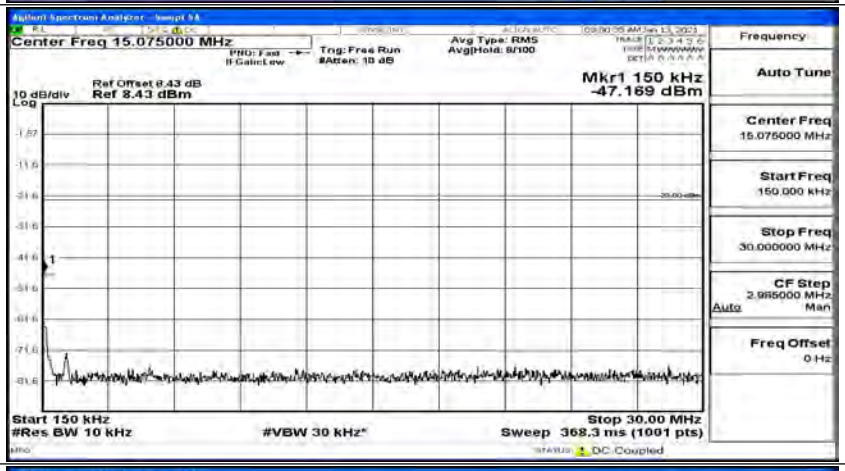
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



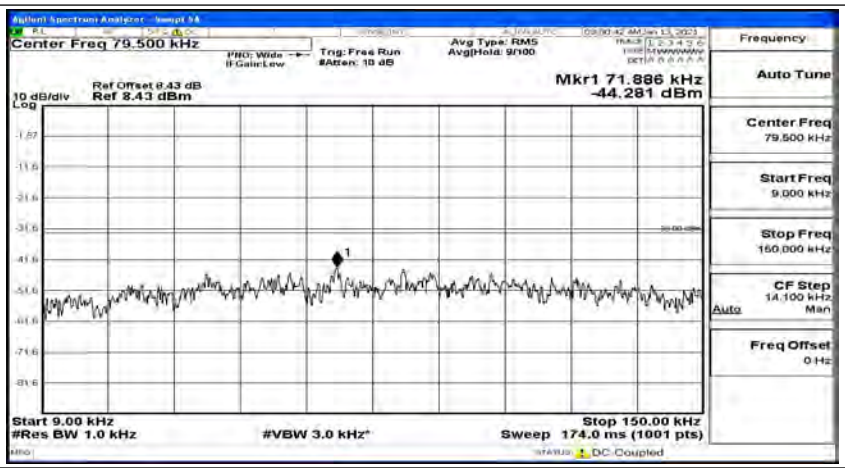


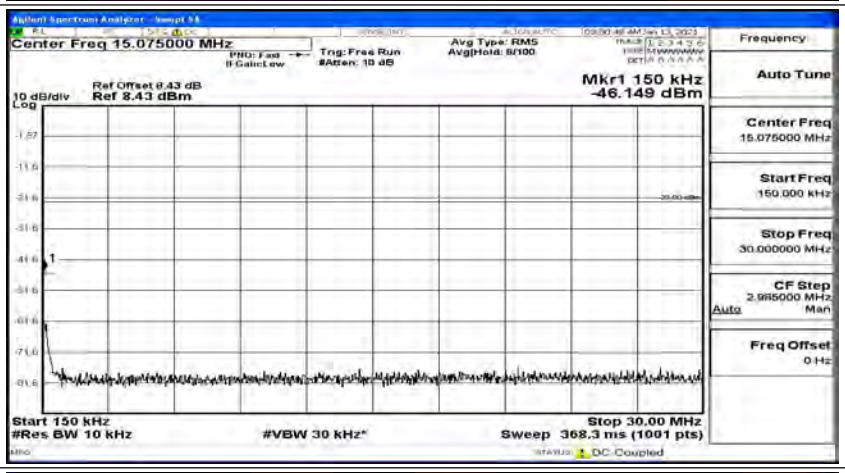
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



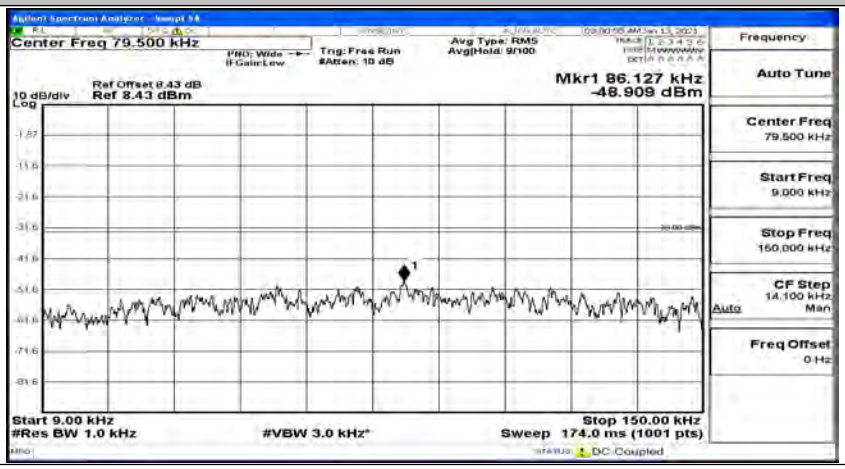


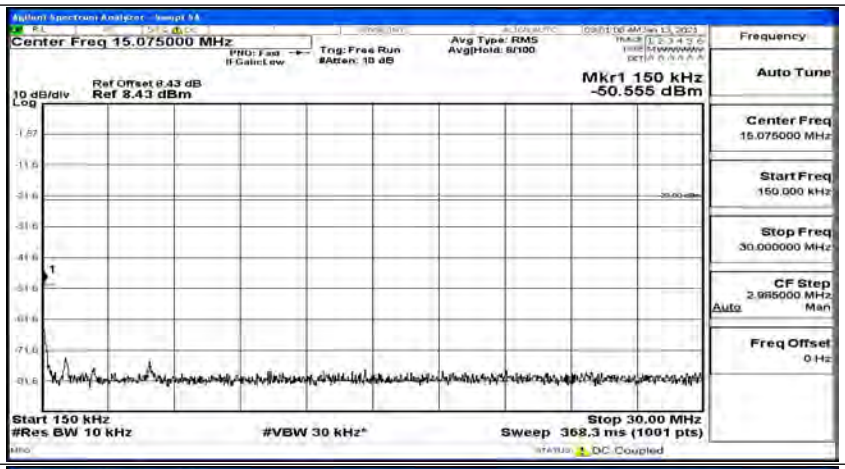
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



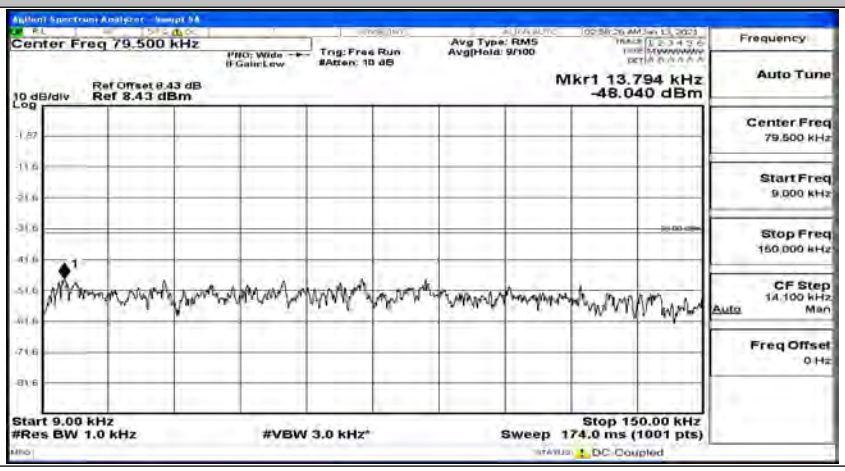


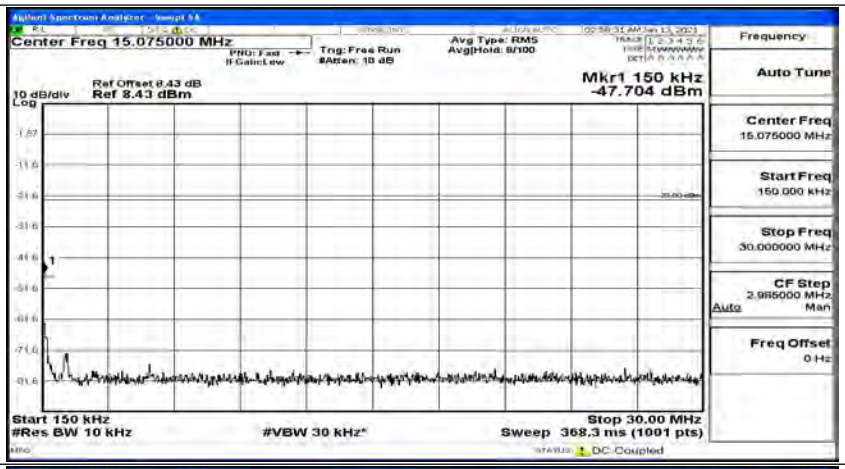
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14



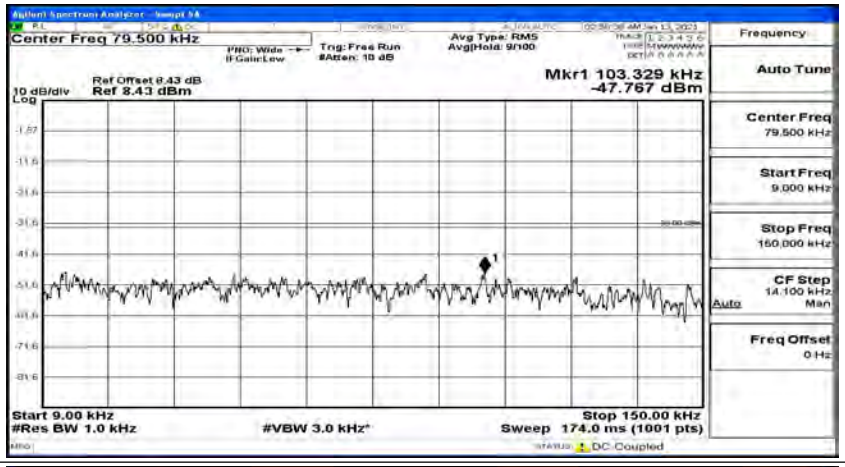


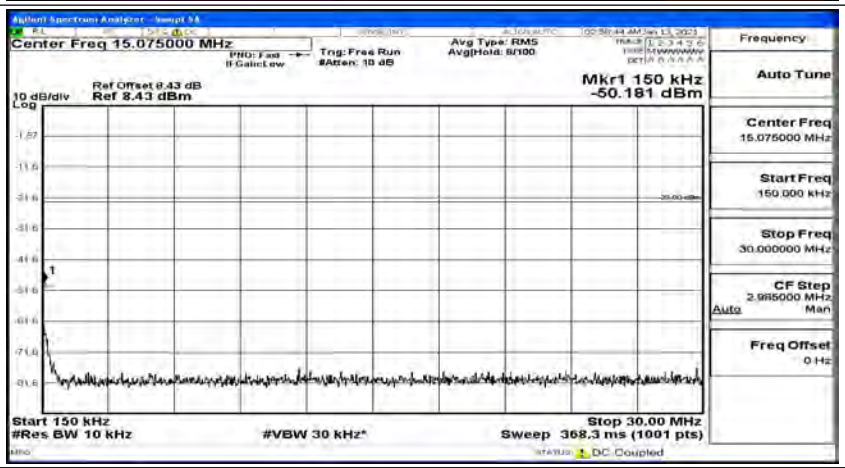
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



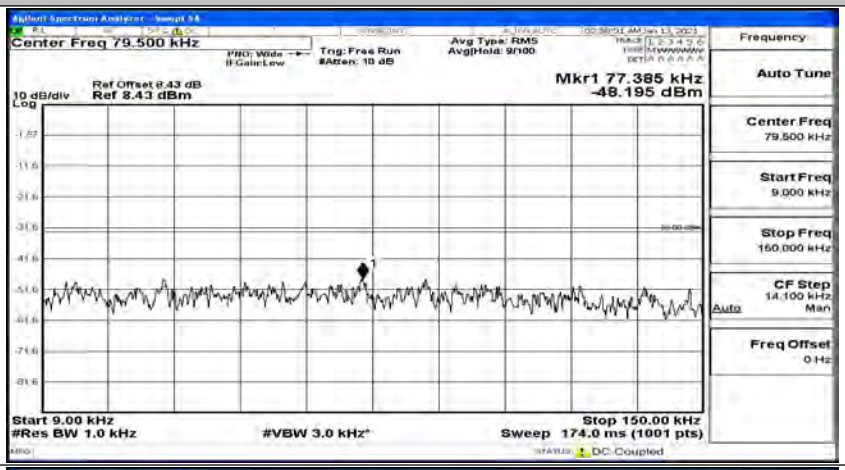


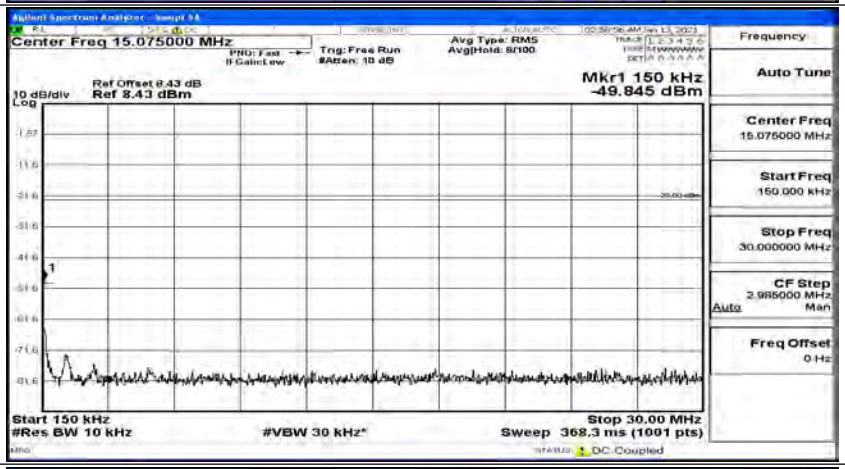
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7



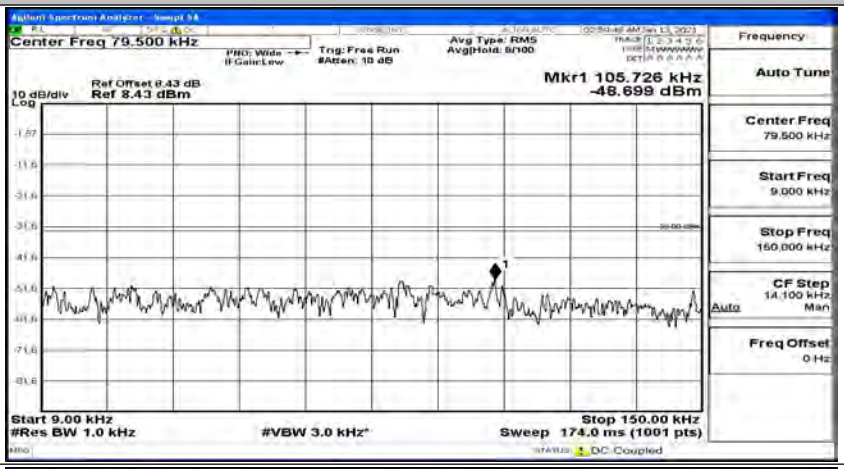


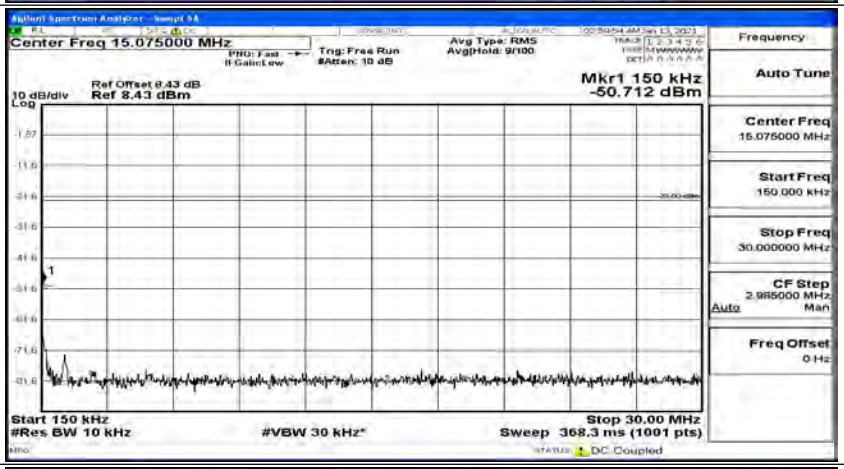
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14



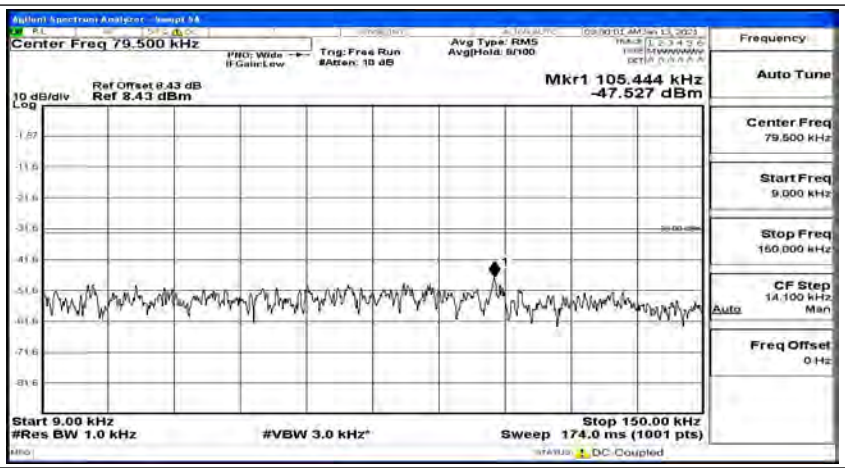


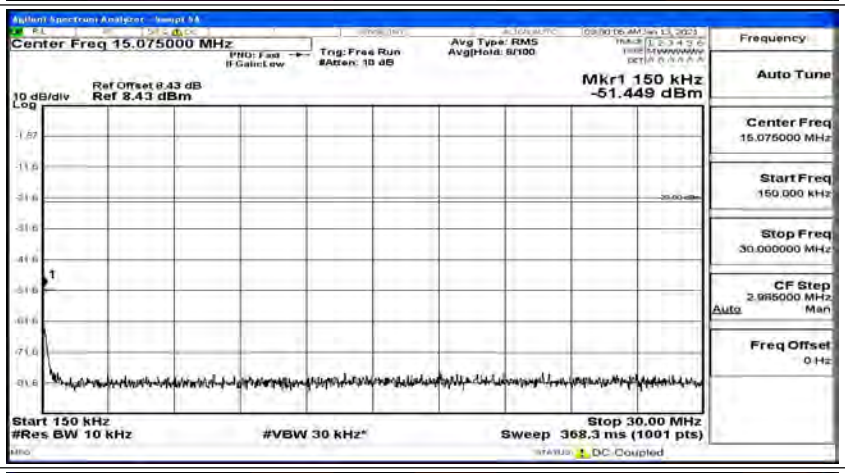
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



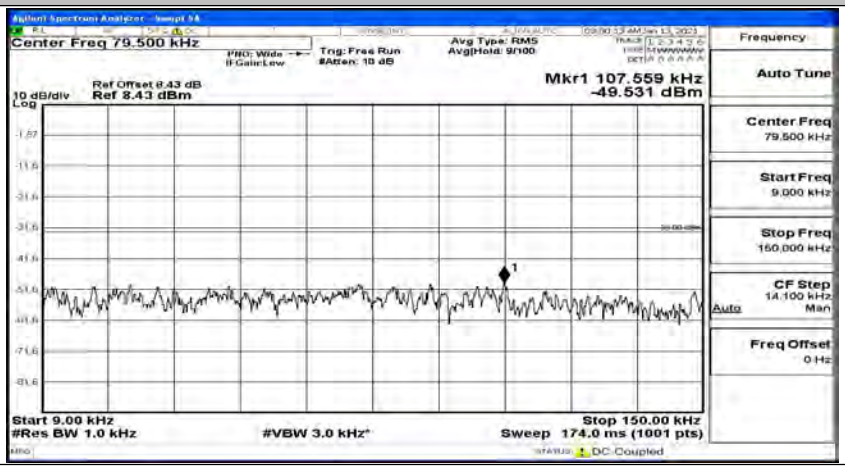


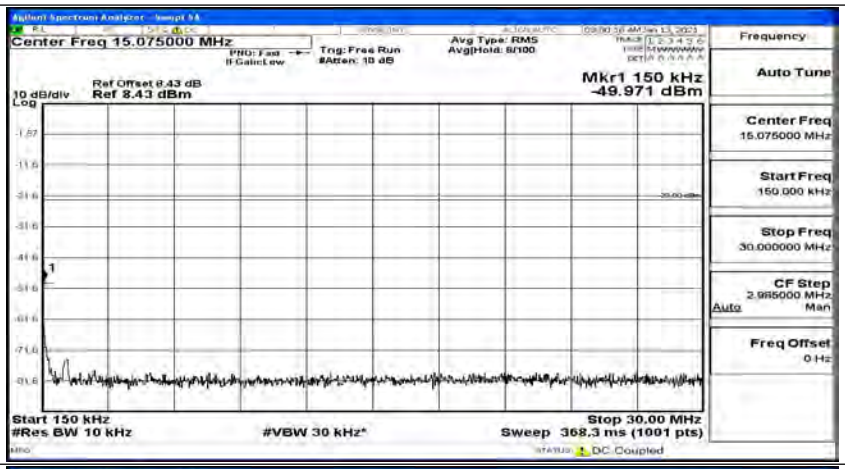
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



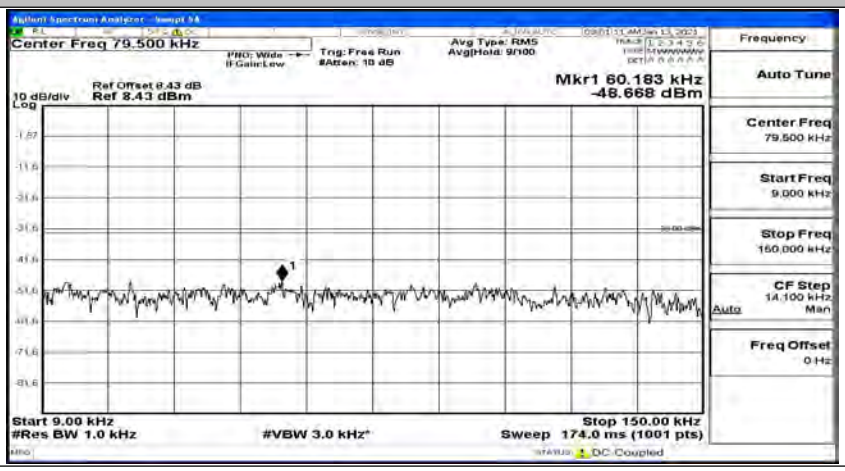


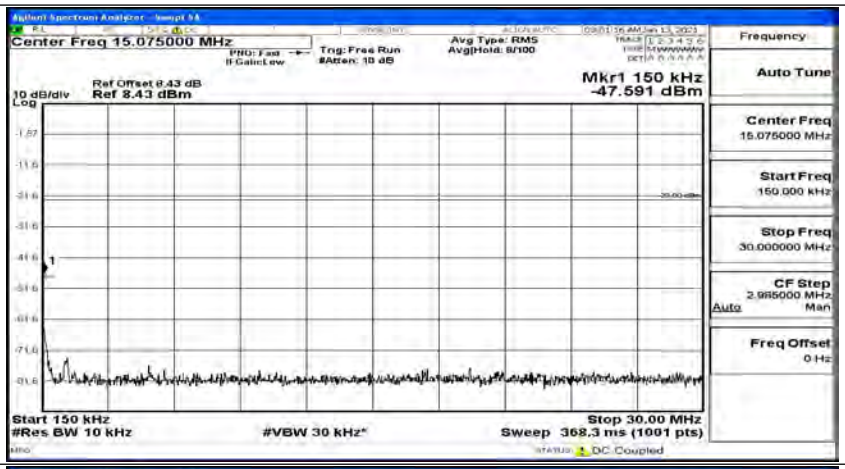
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14



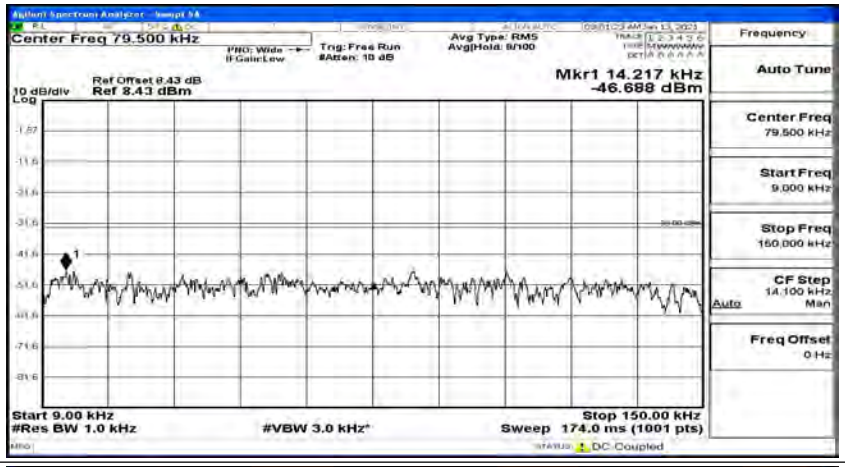


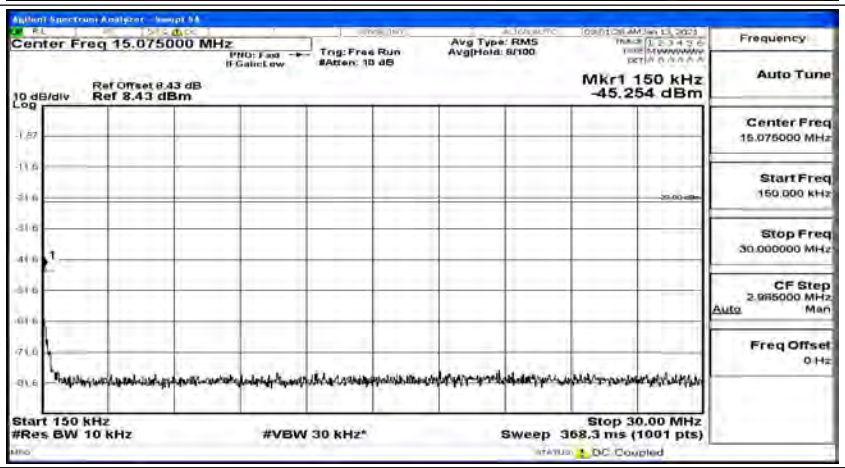
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0



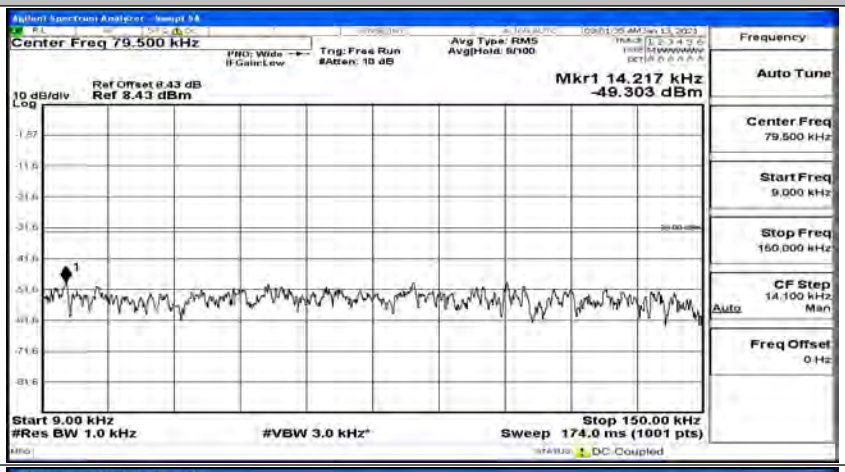


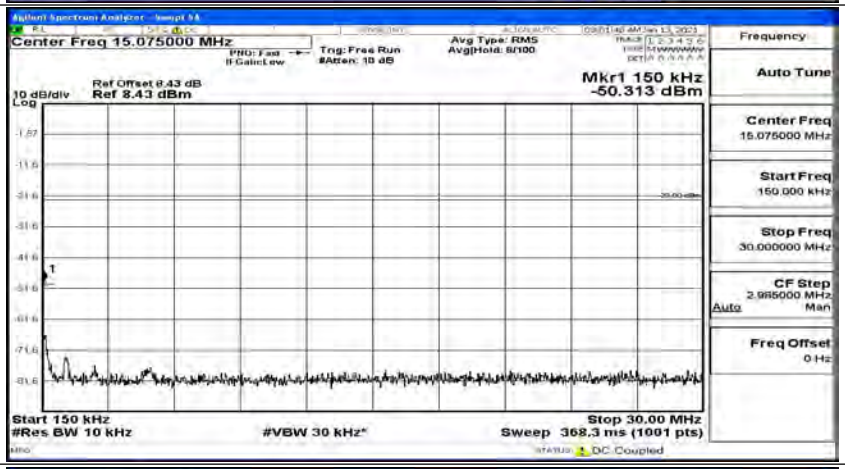
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7





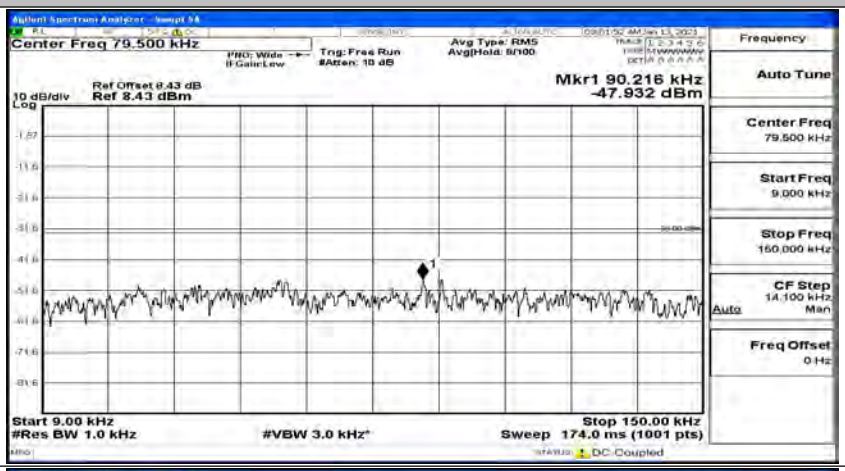
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#14

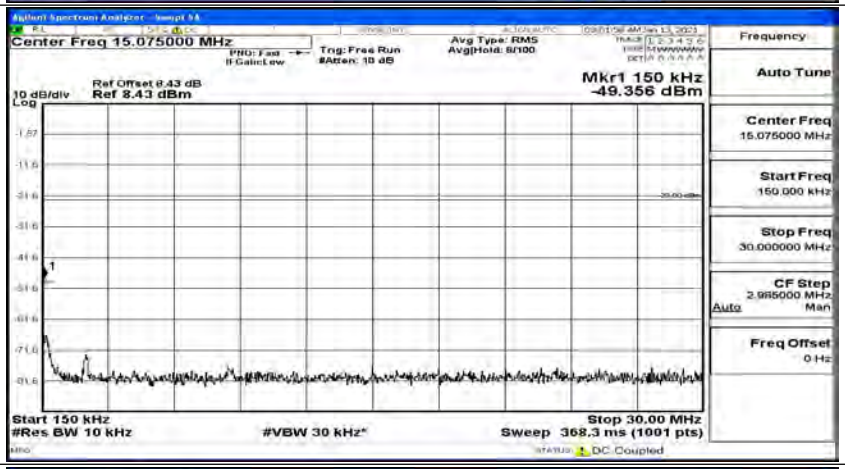




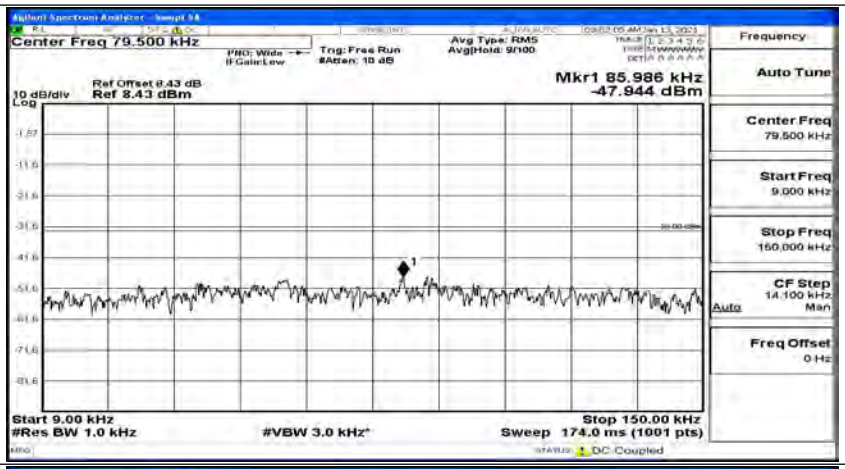
Channel Bandwidth: 5 MHz

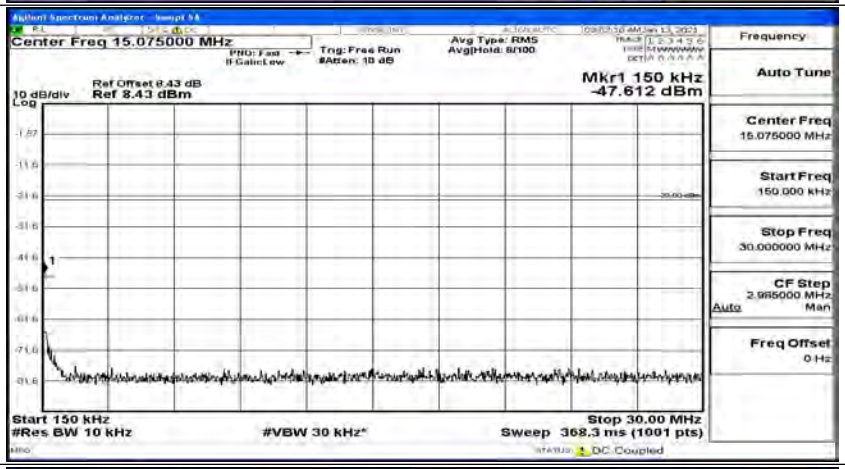
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



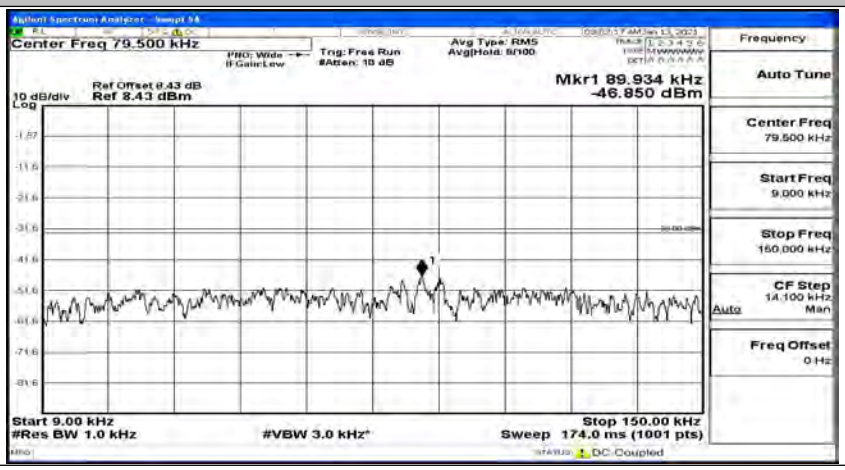


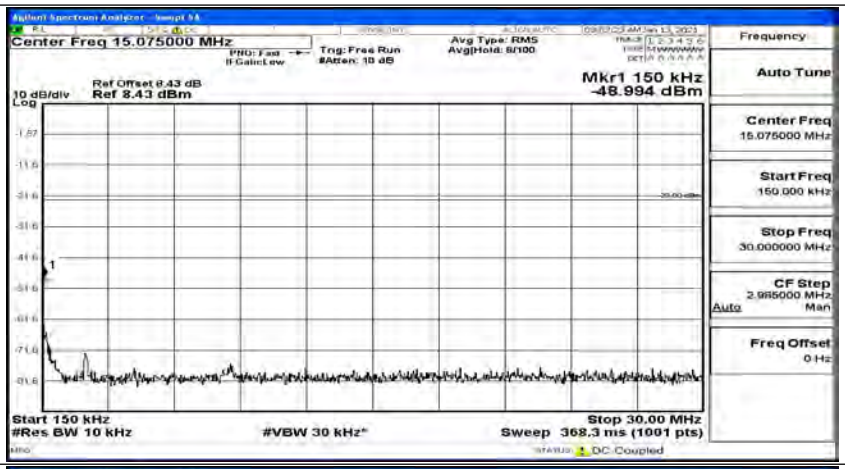
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



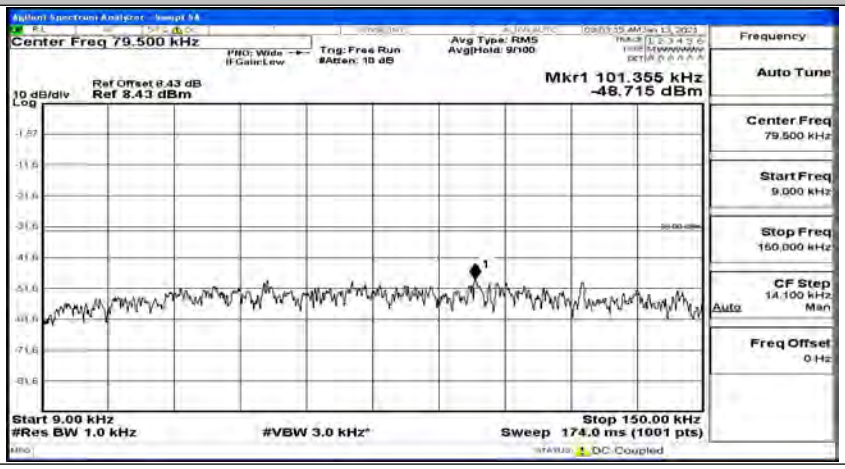


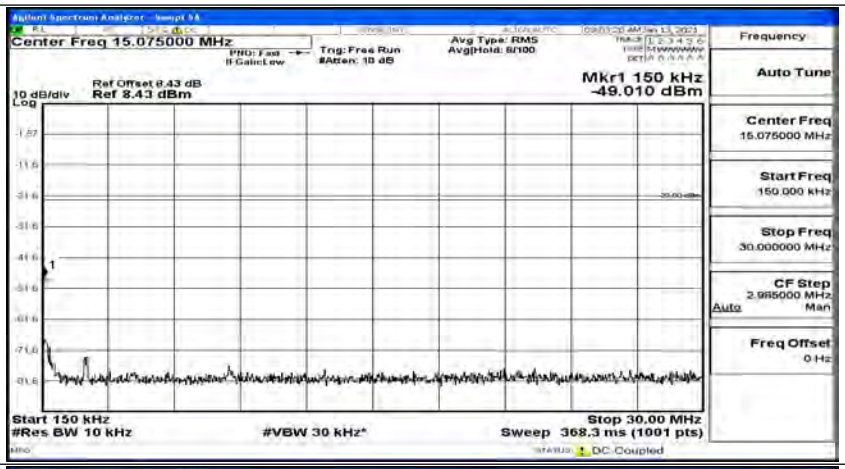
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24



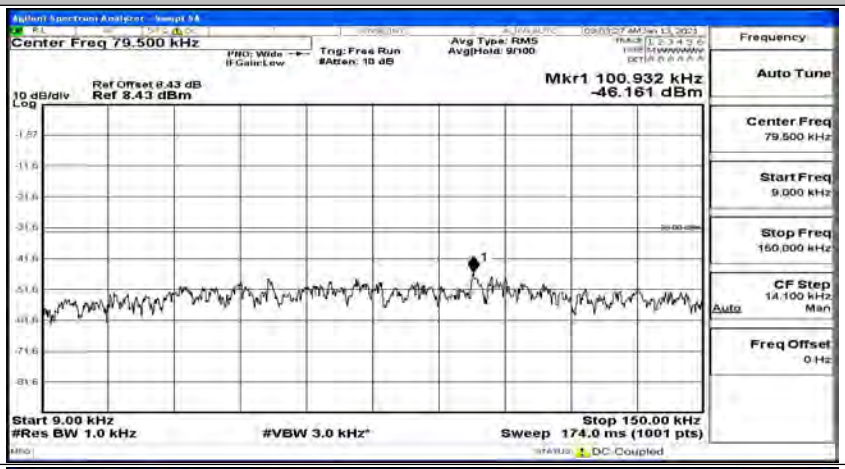


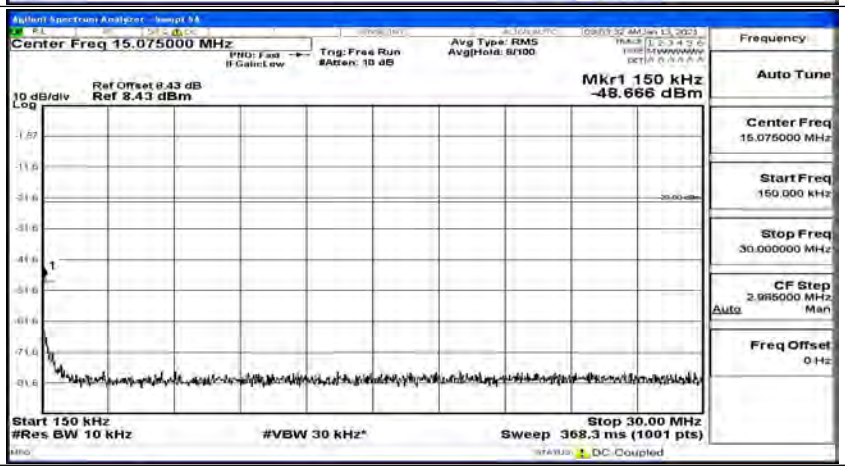
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



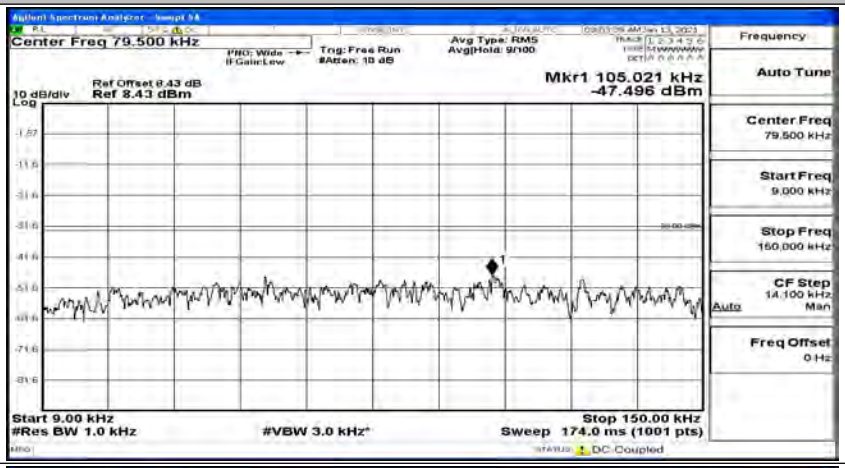


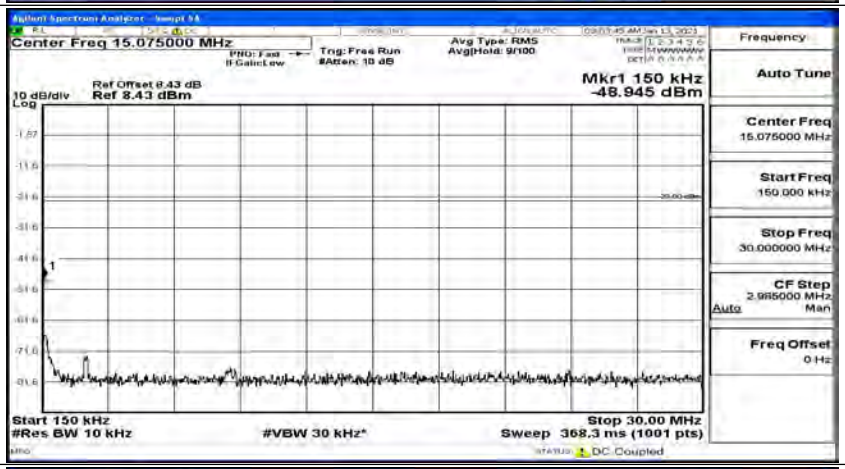
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12



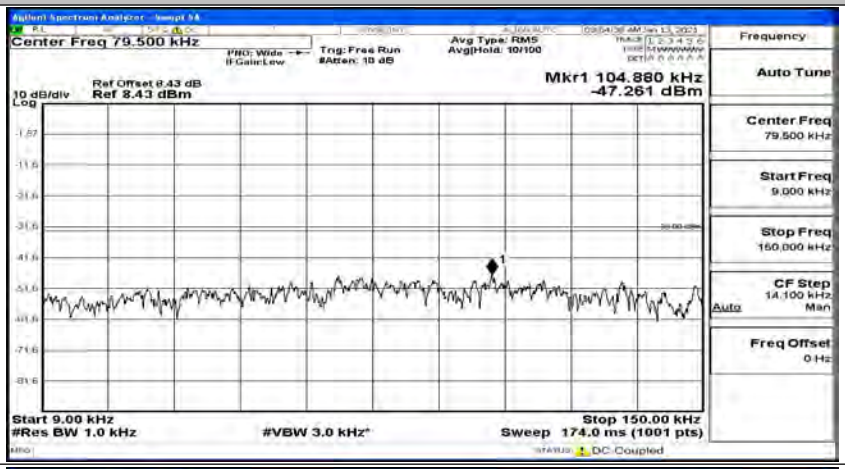


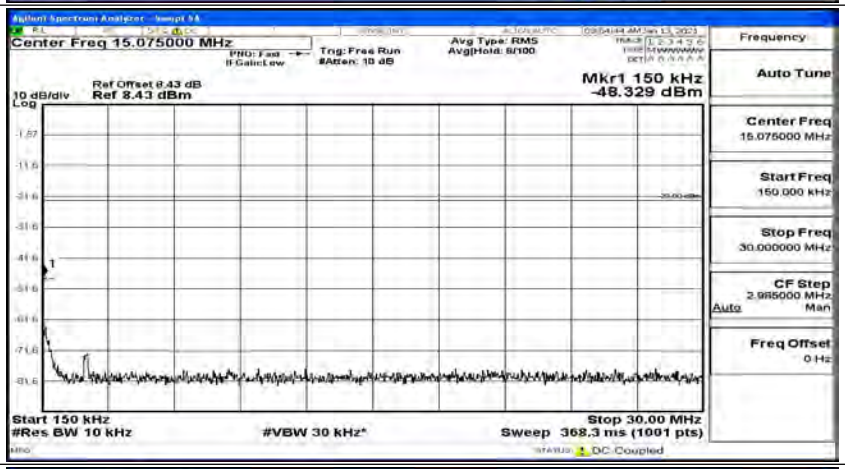
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24



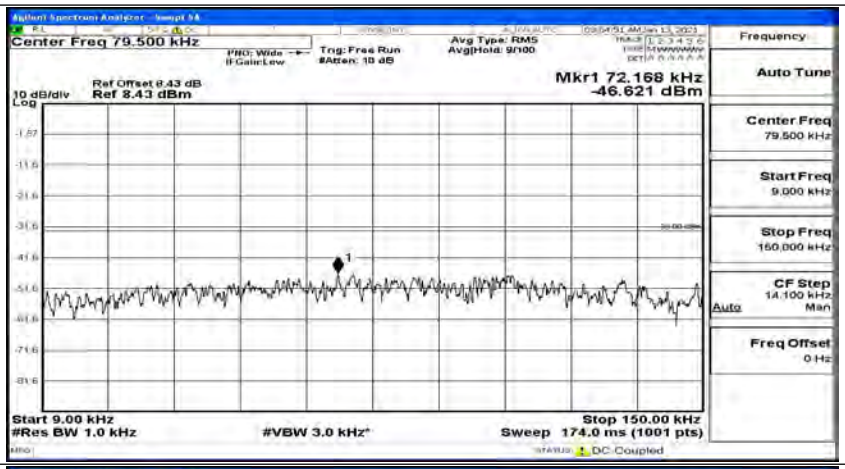


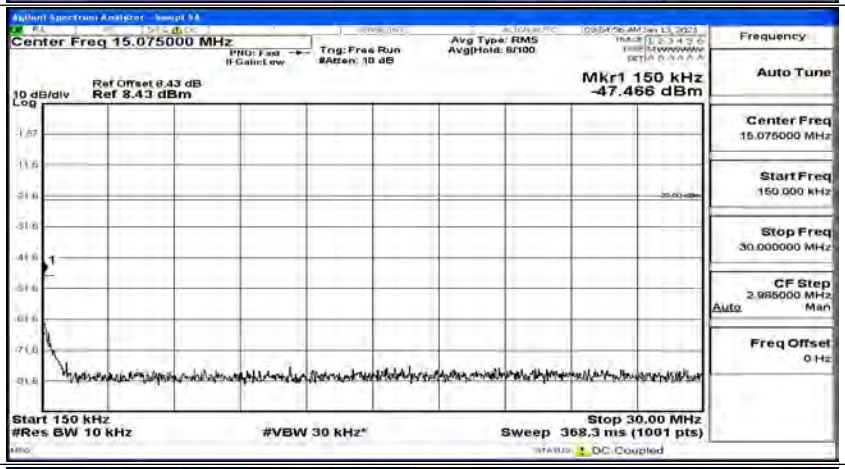
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



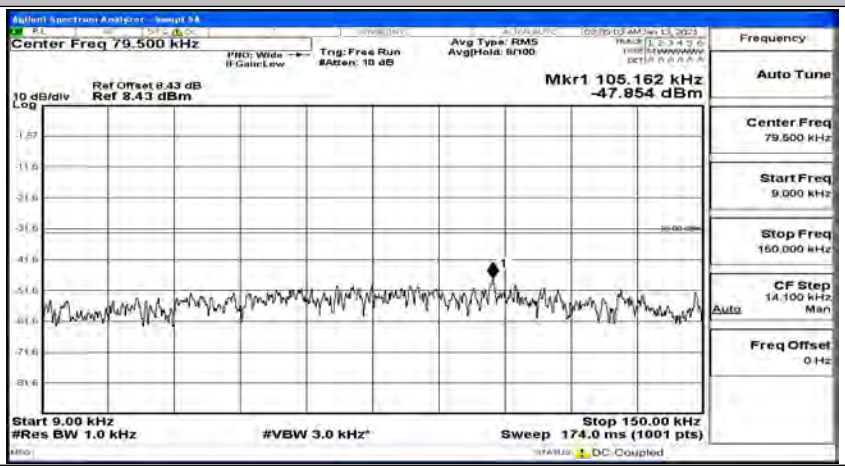


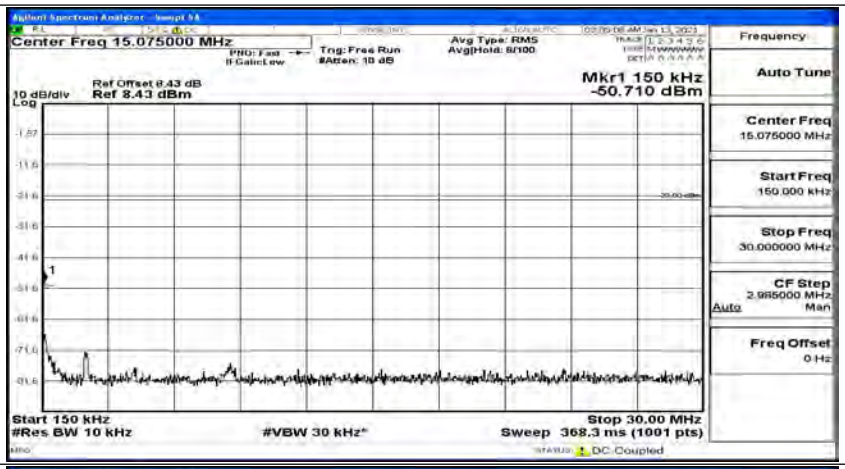
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



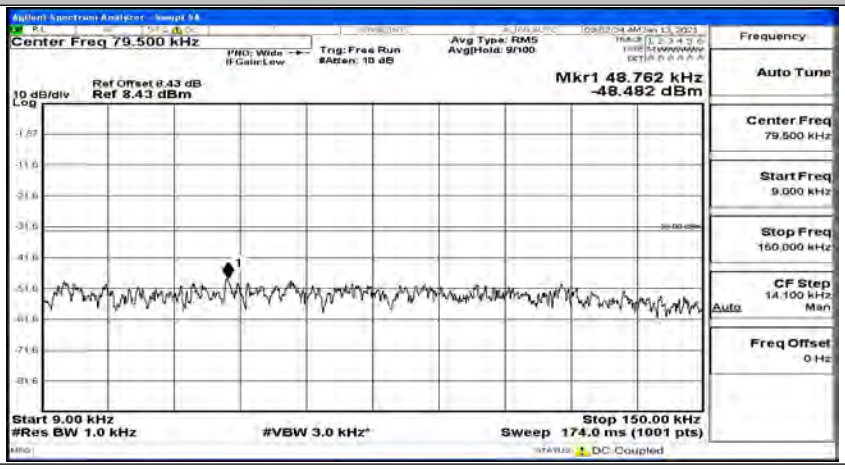


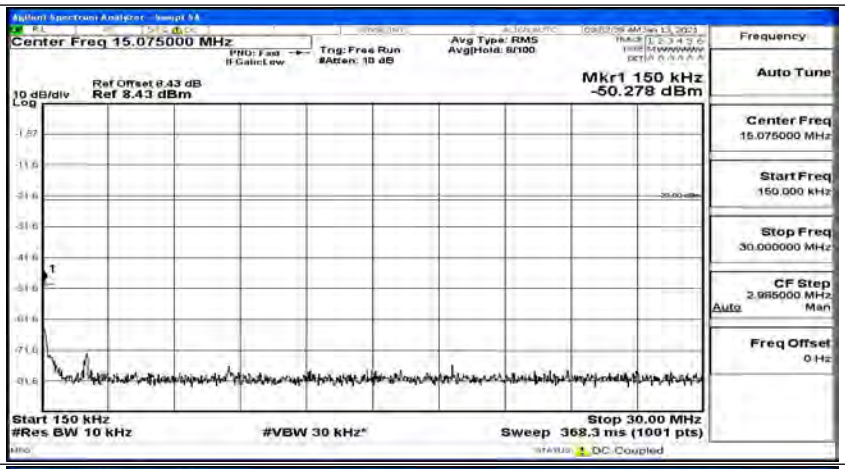
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24



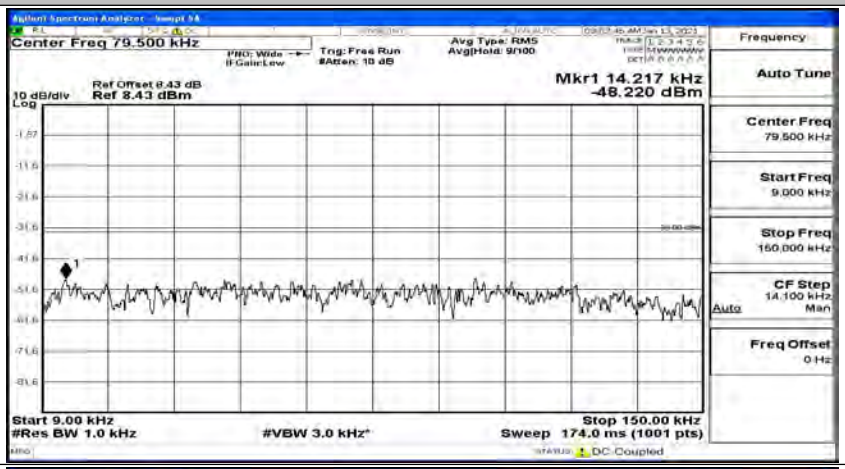


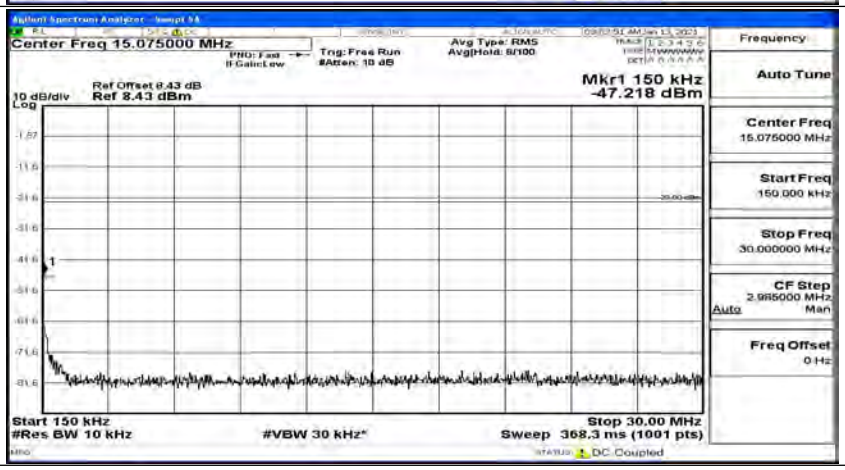
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



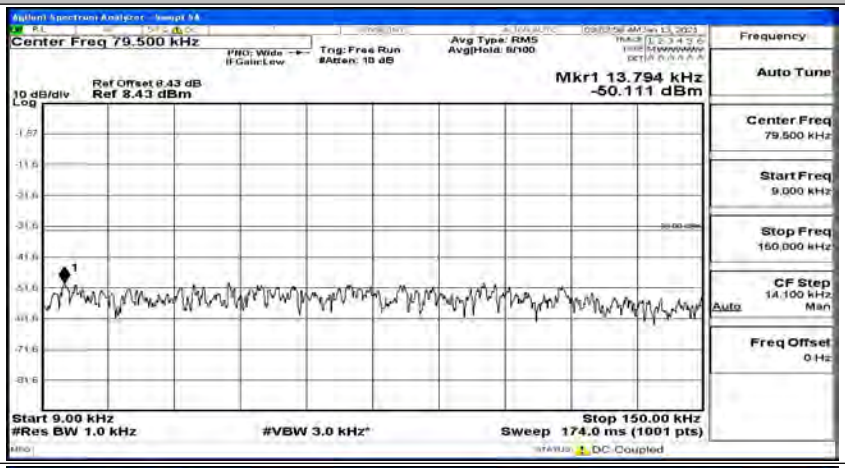


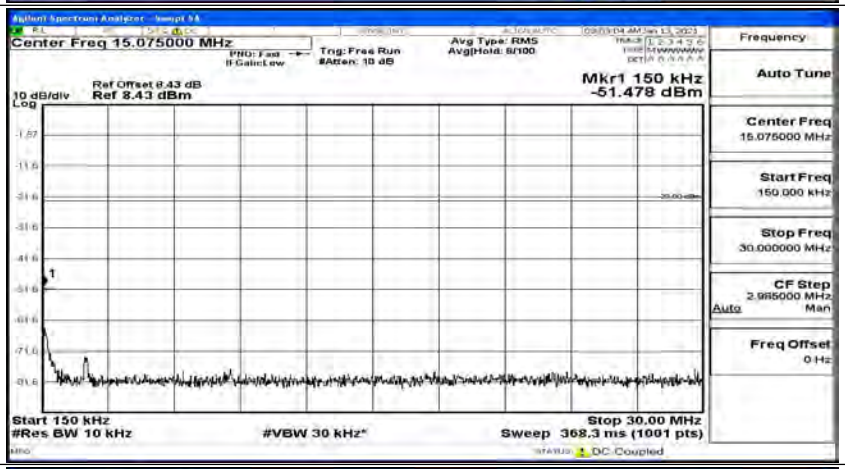
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

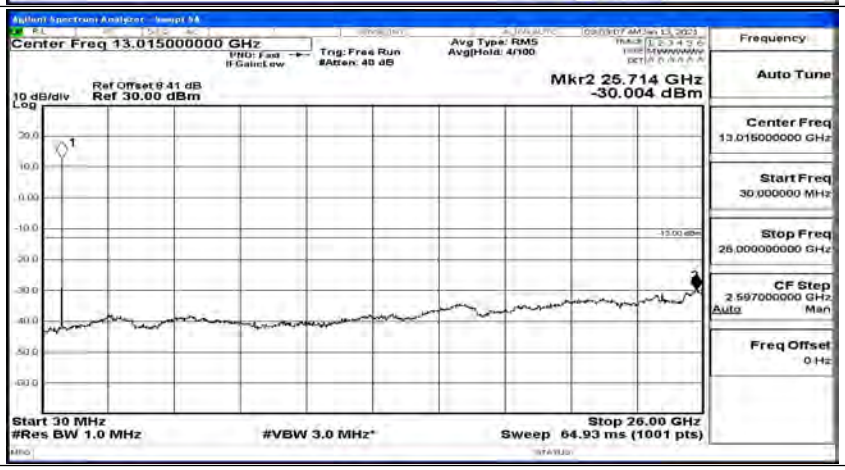




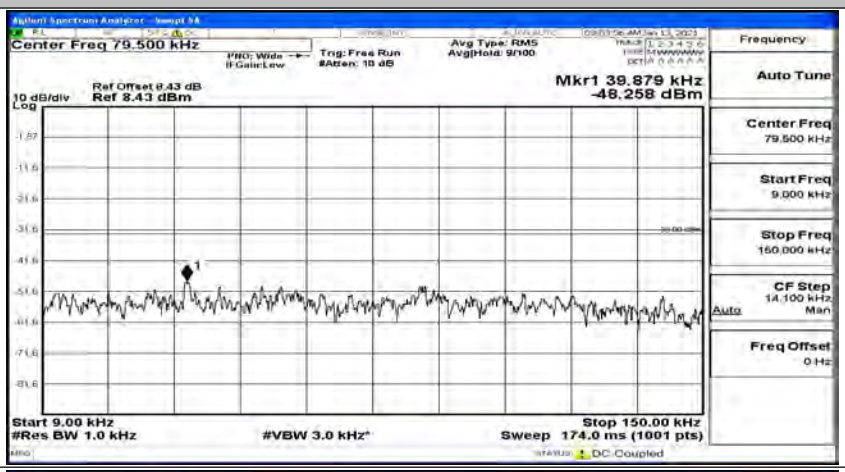
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

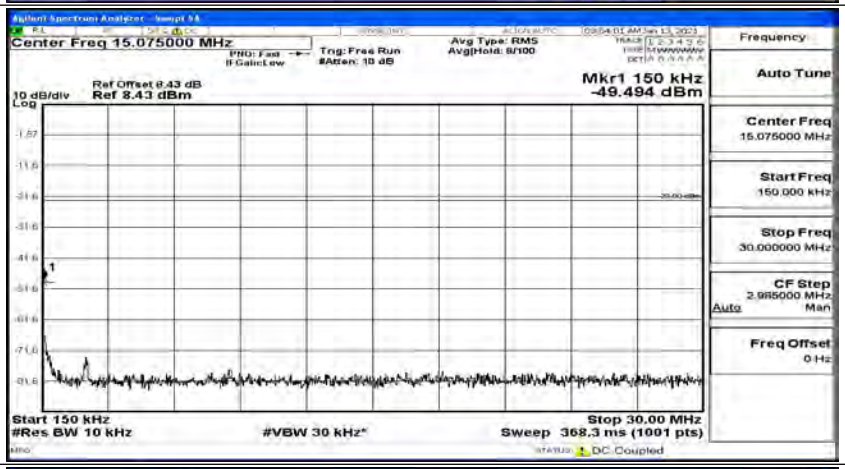




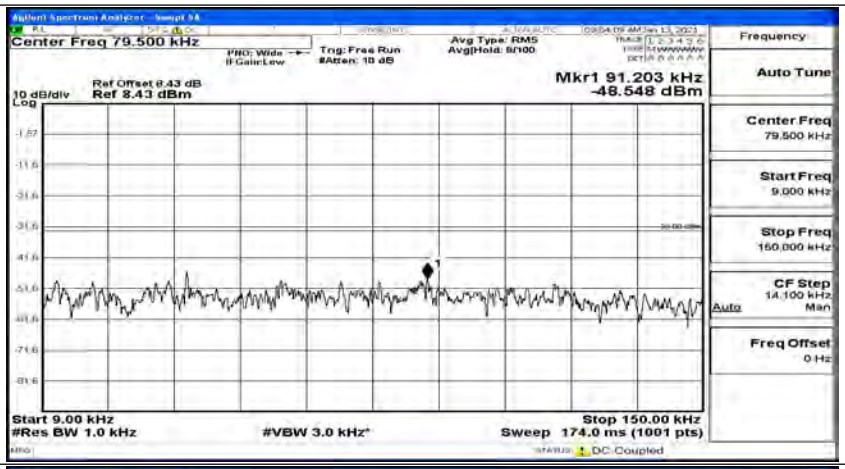


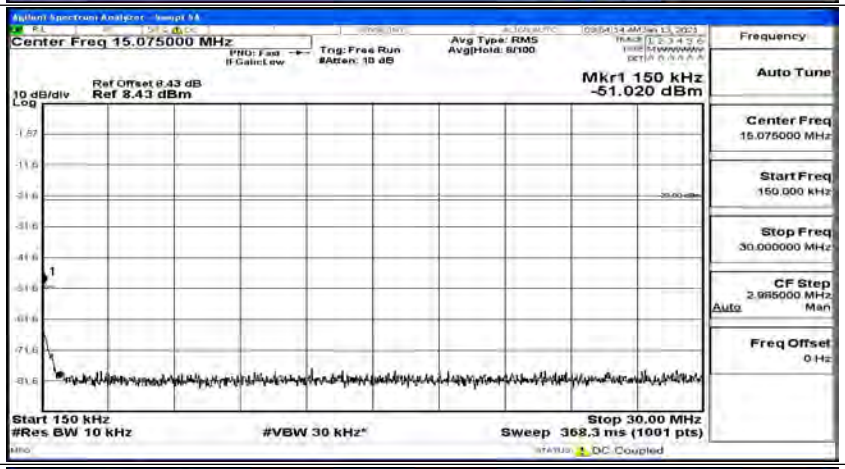
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



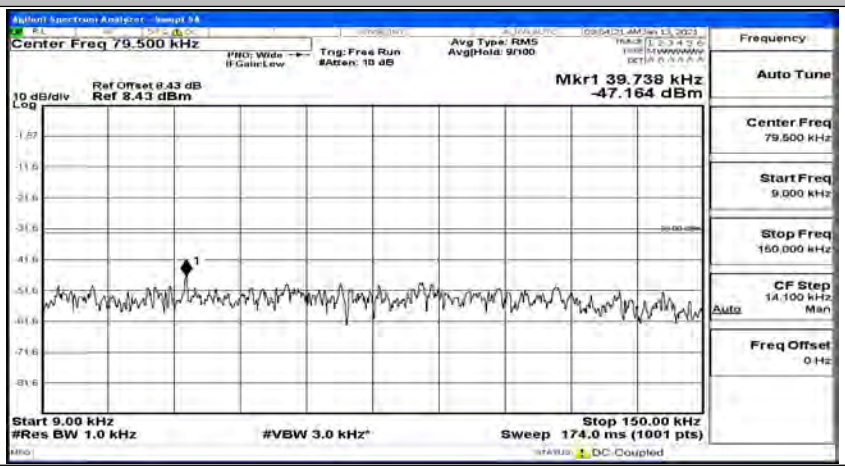


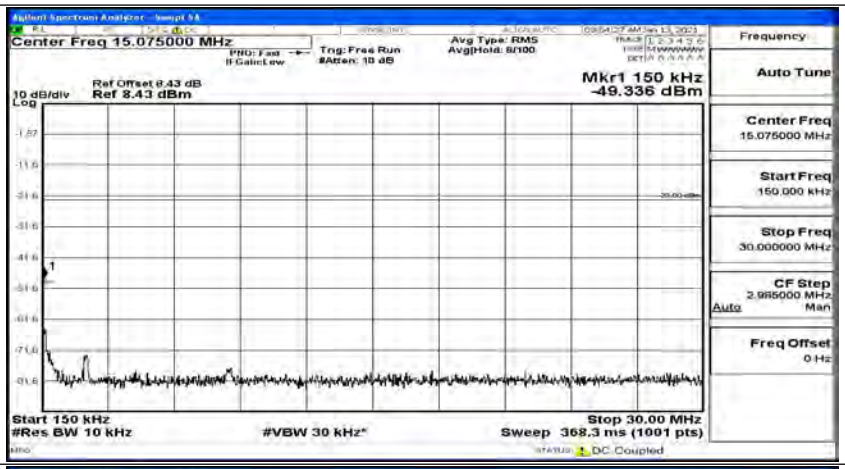
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



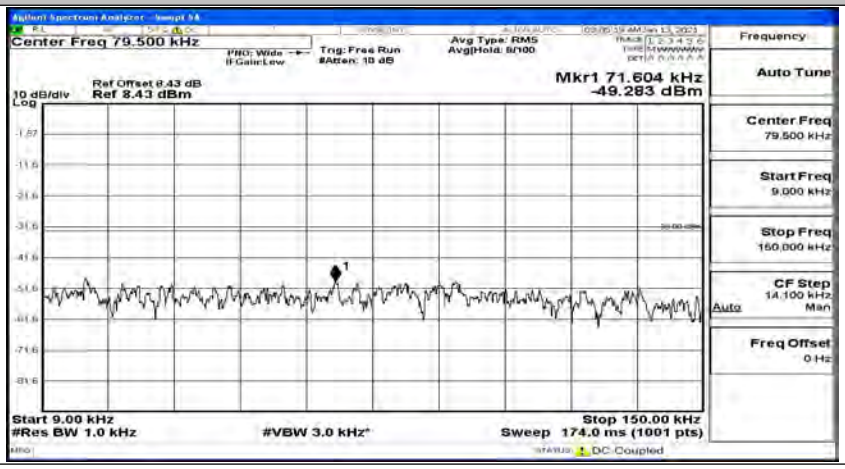


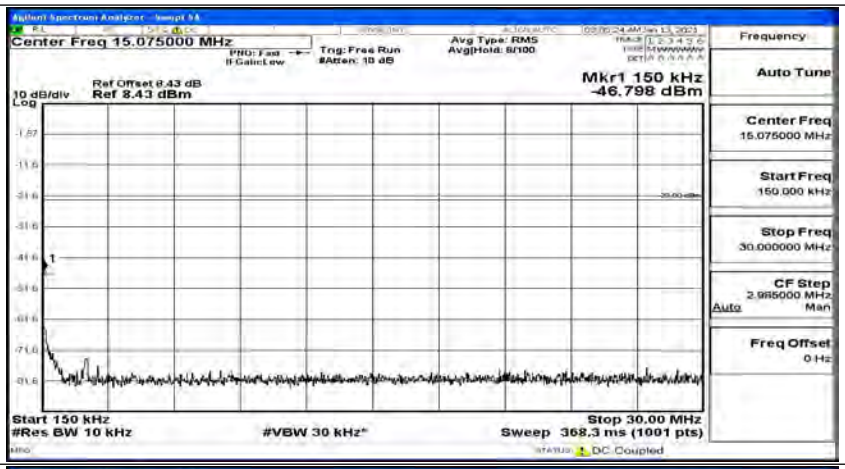
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



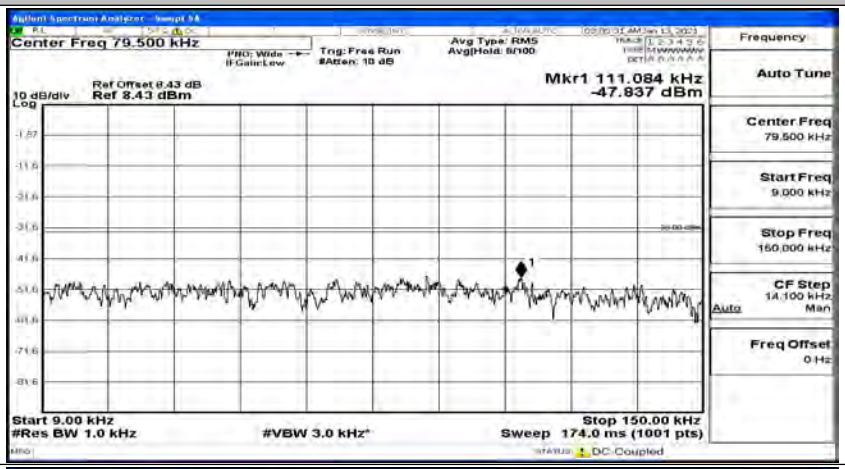


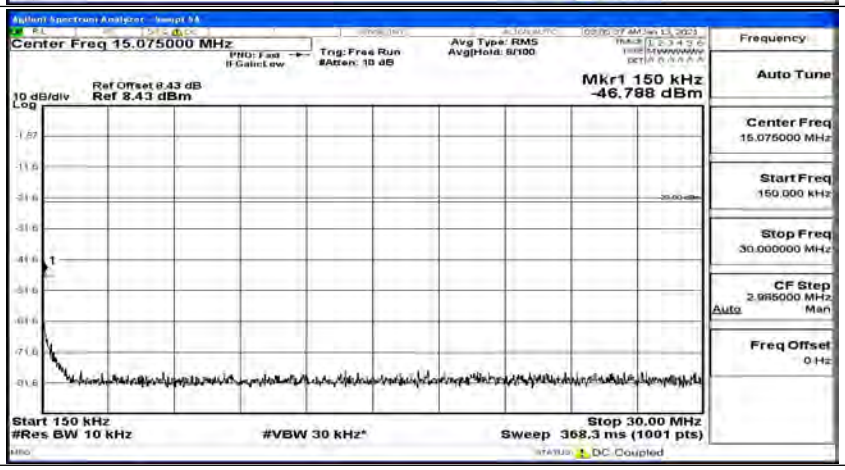
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



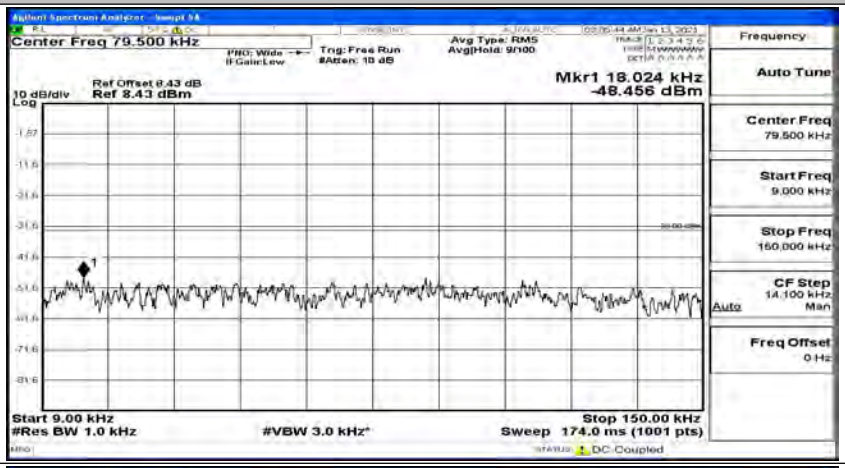


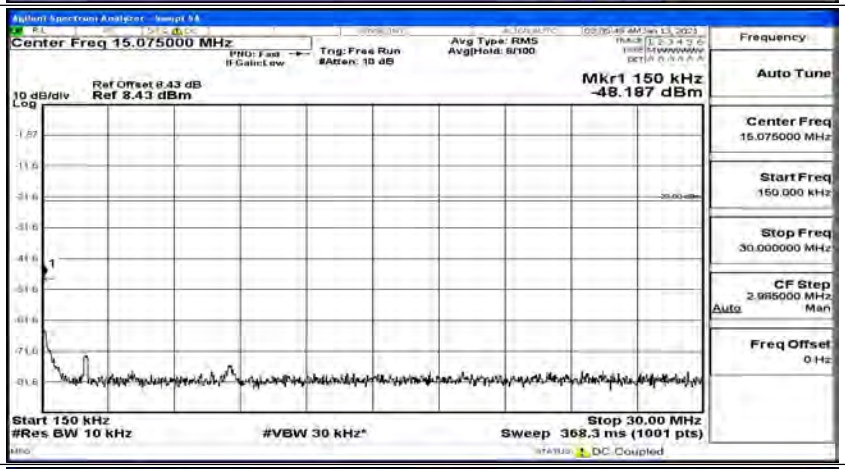
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



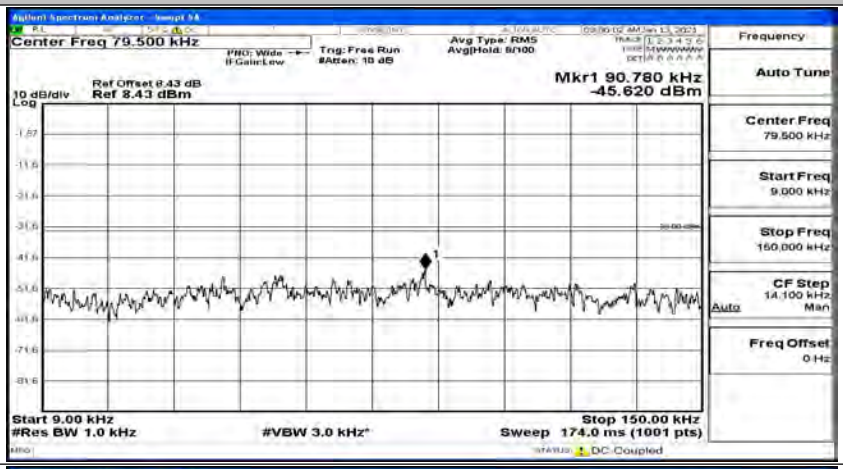
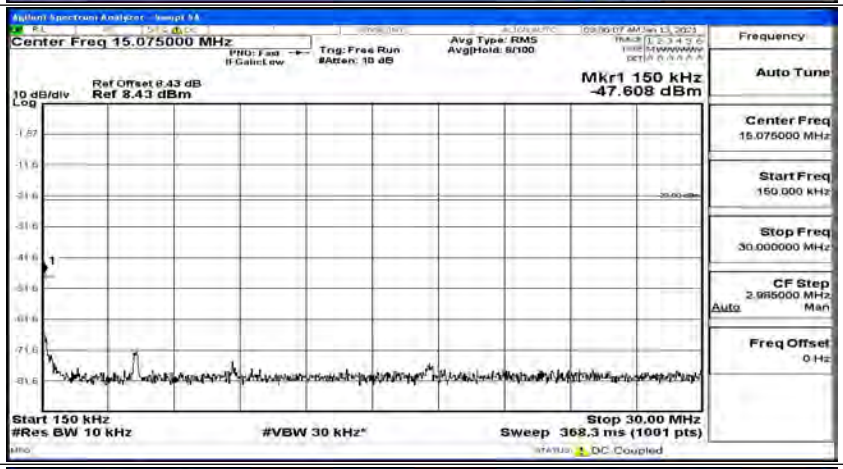


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

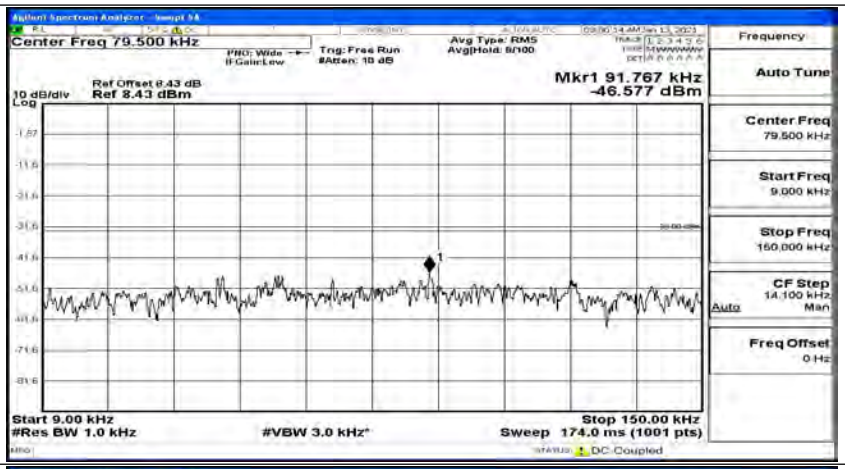


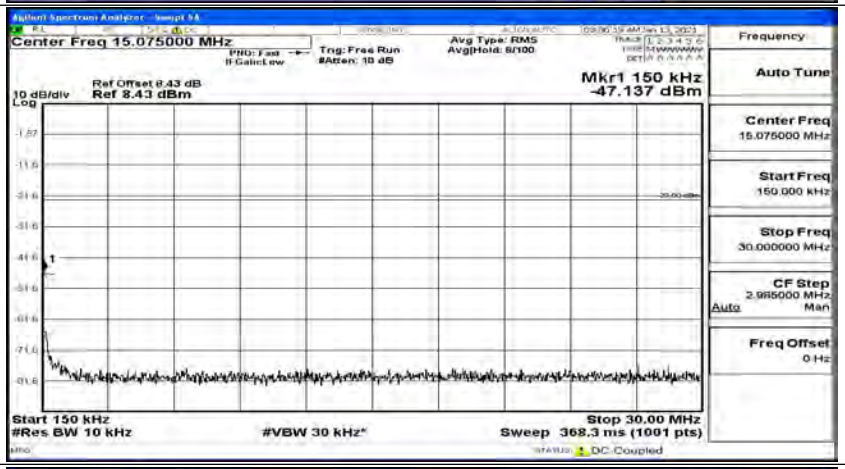


Channel Bandwidth: 10 MHz

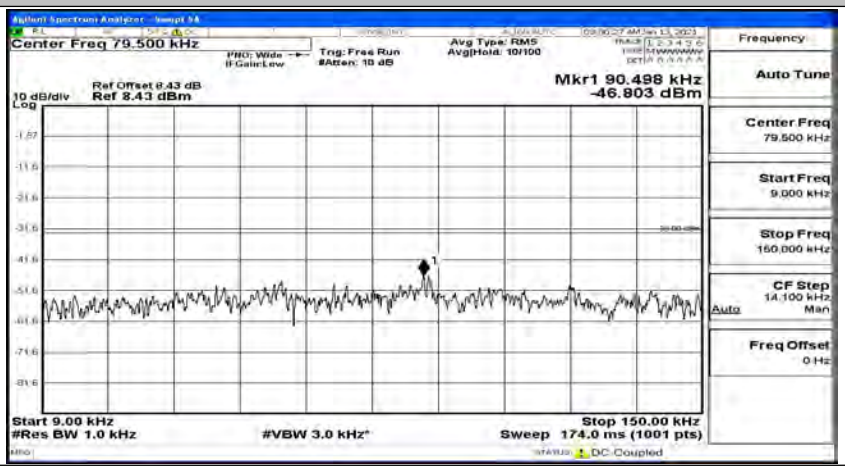
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0



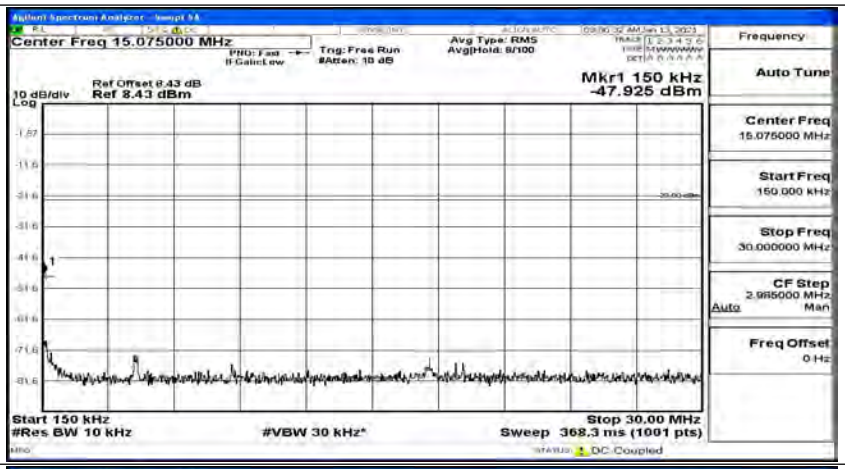
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24



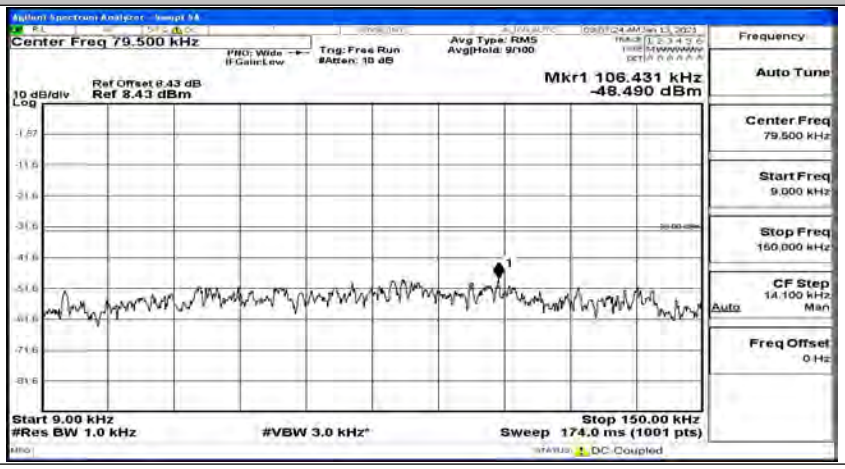


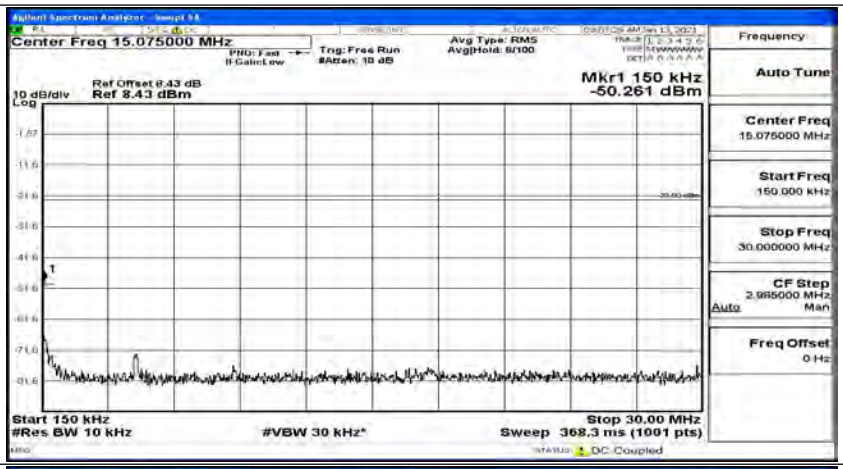
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49



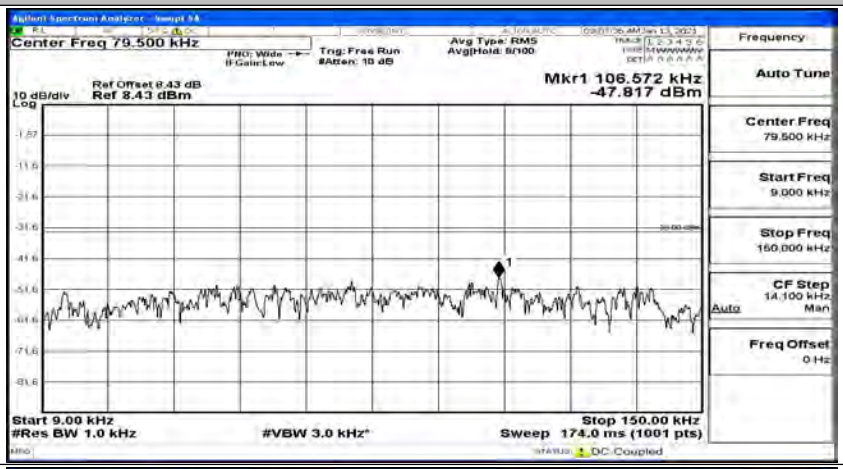


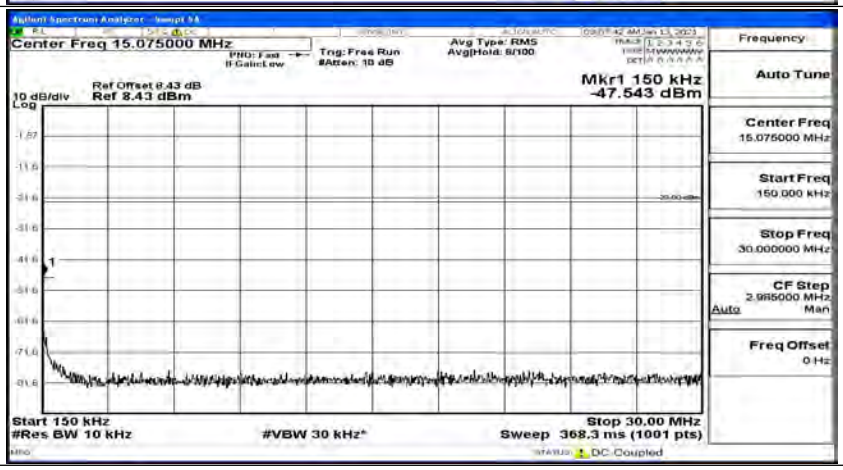
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



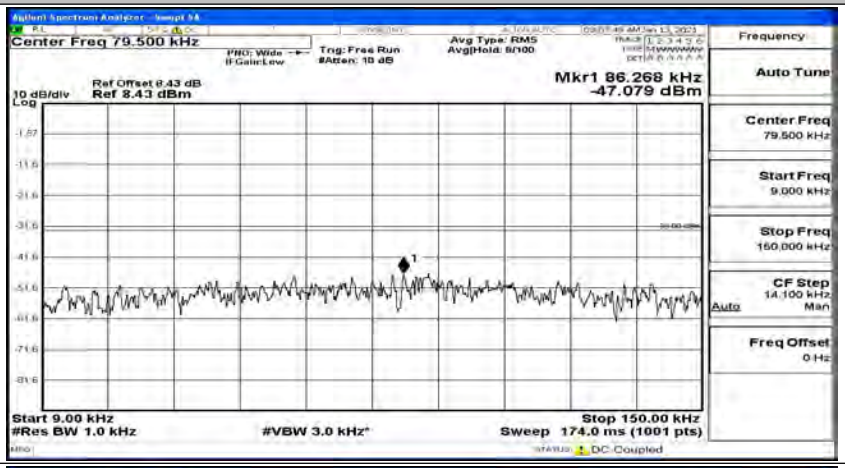


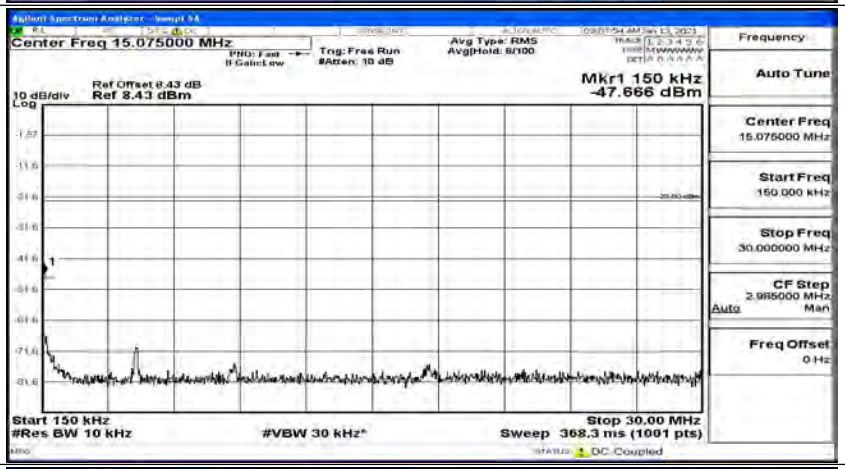
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

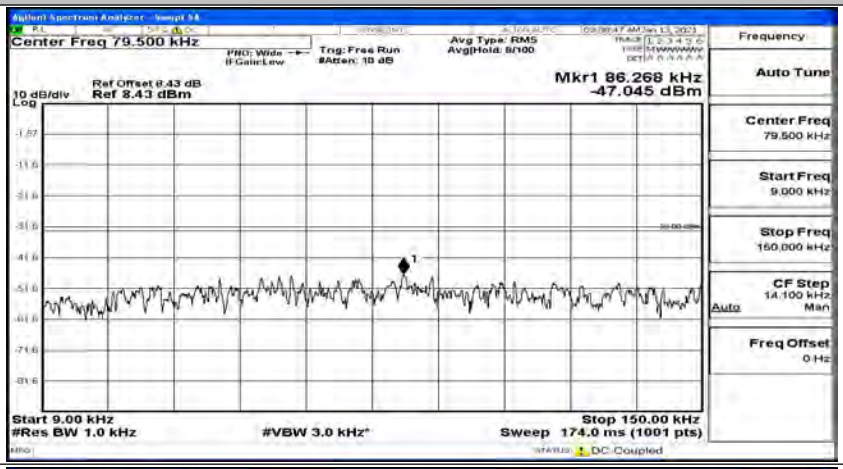
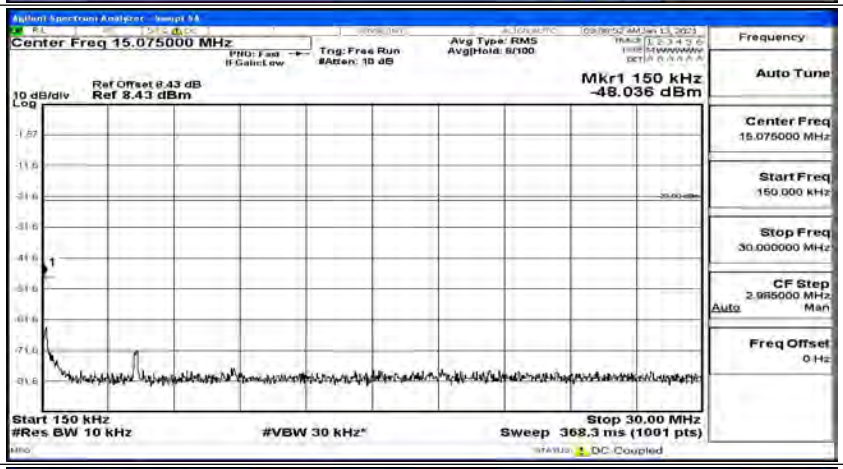




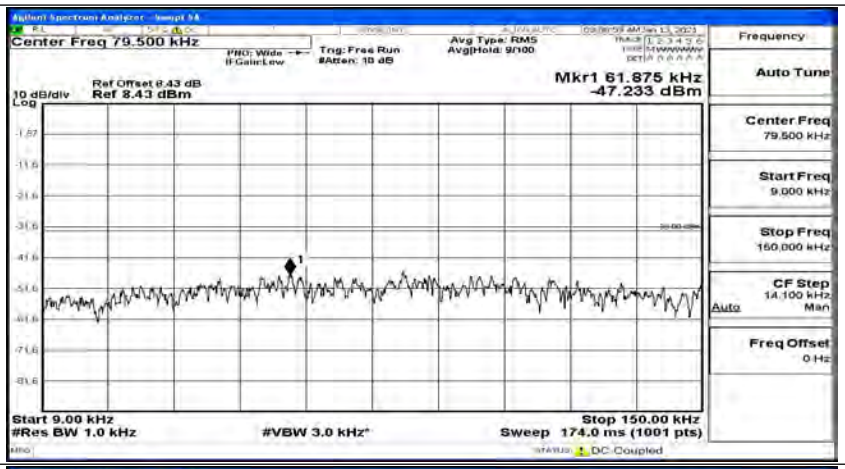
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

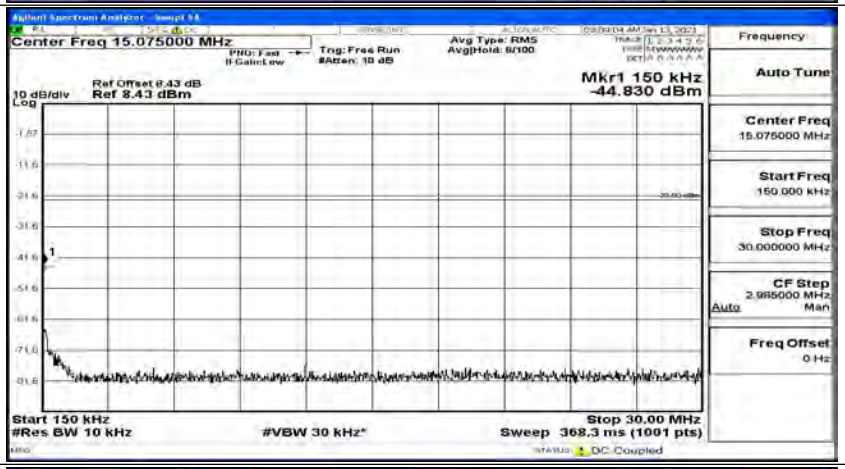




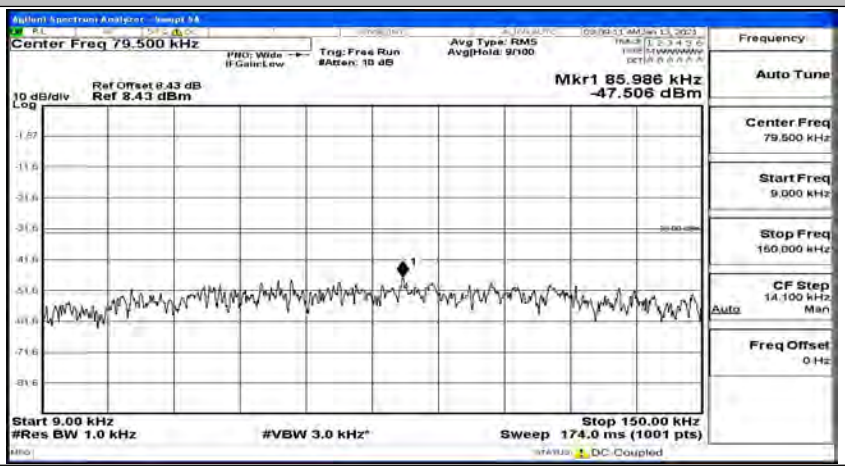
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



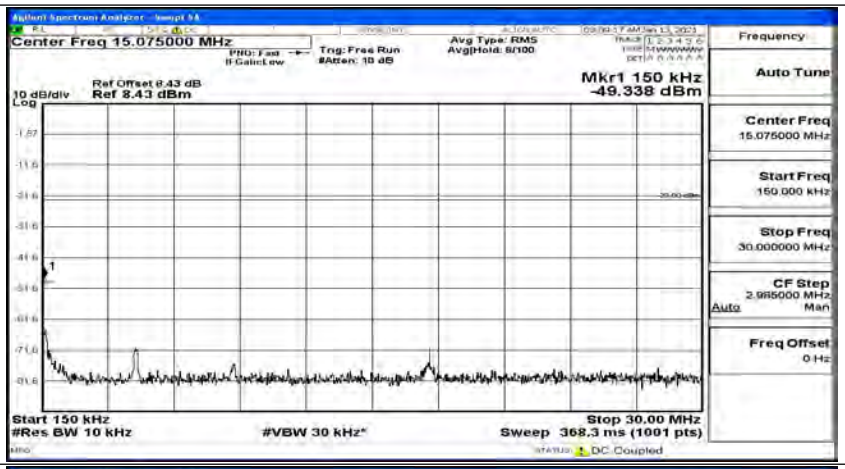
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24



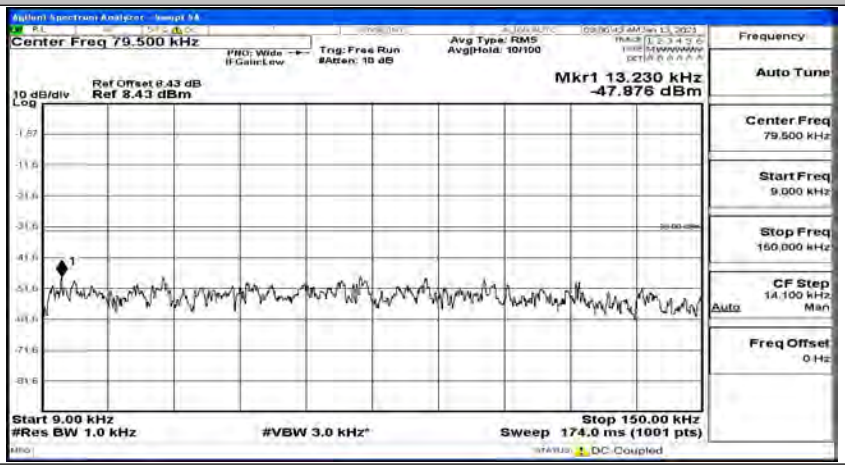


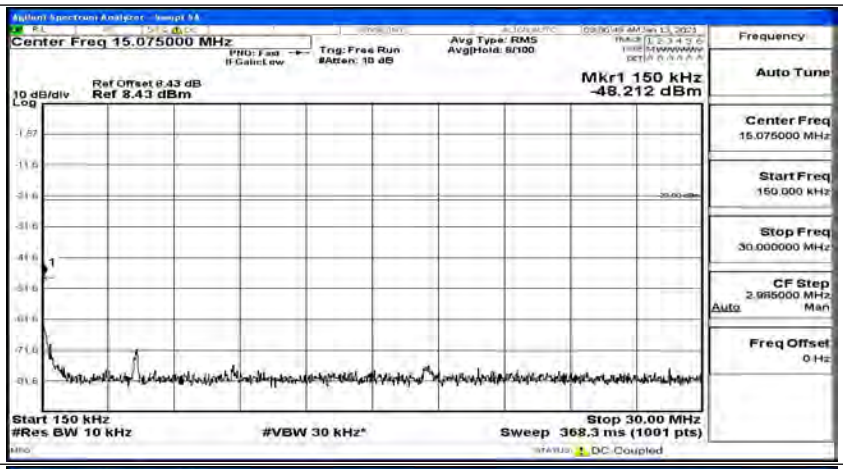
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#49



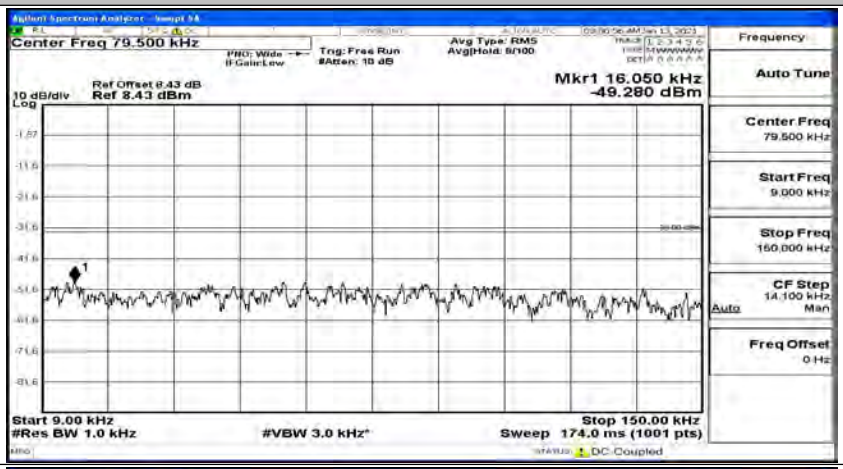


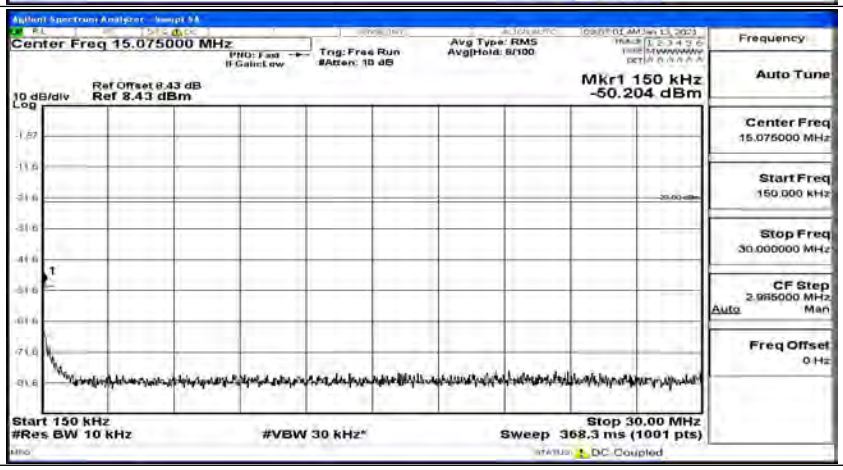
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



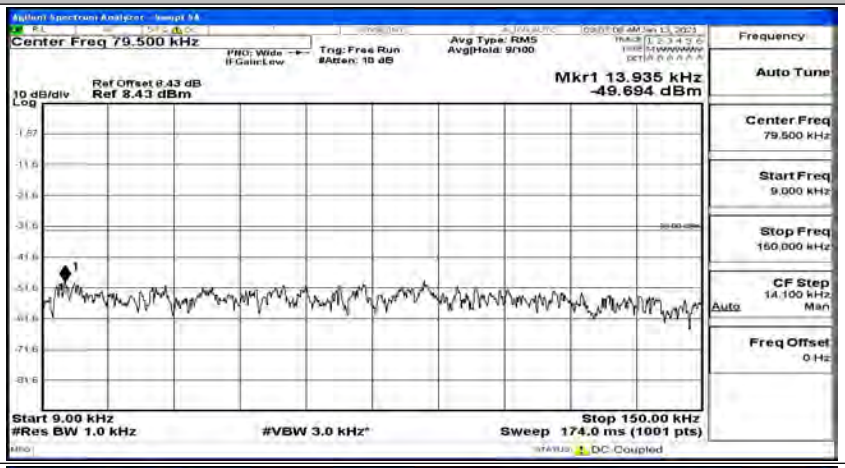


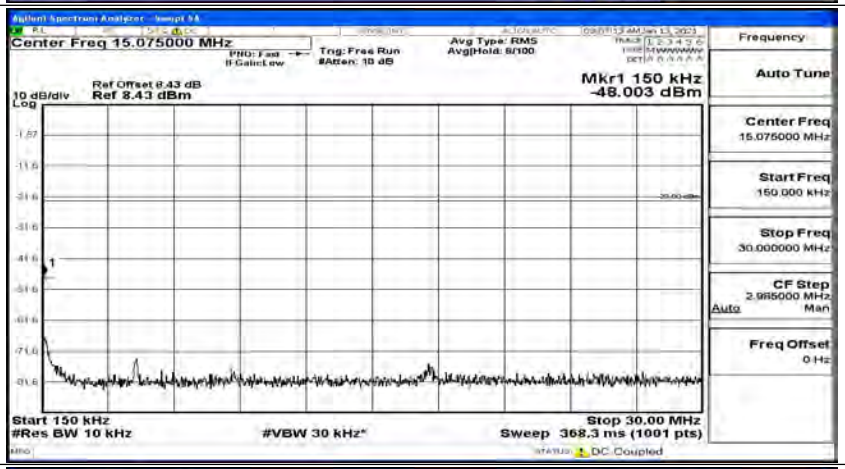
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

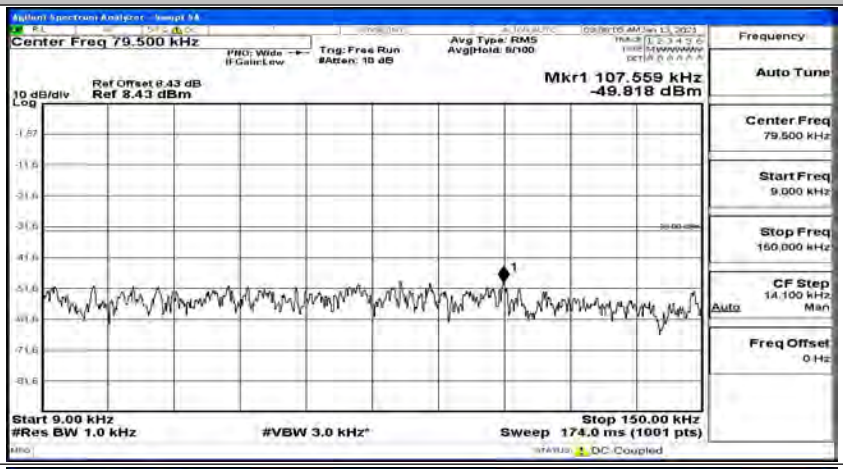
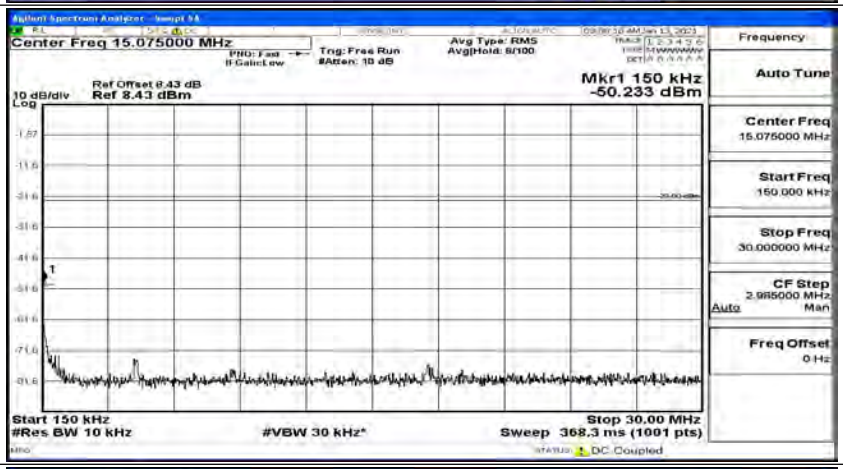




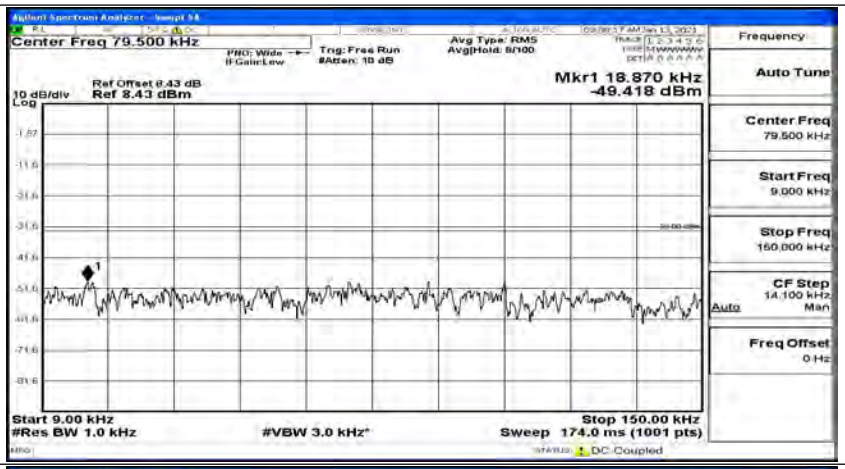
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

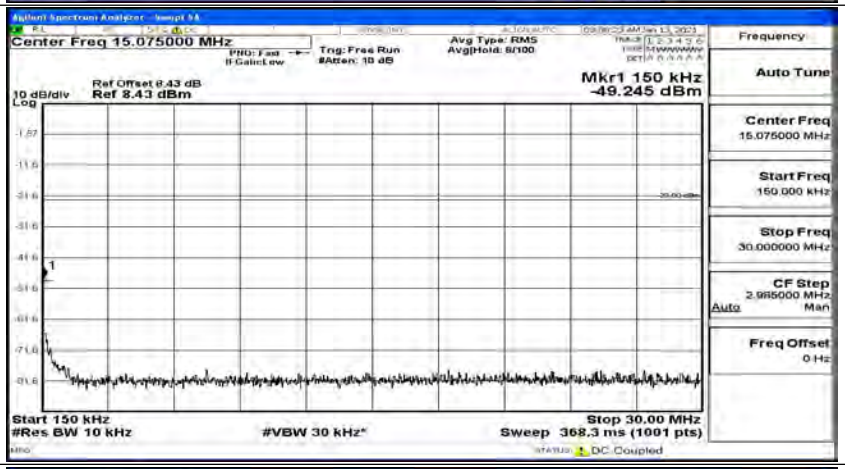




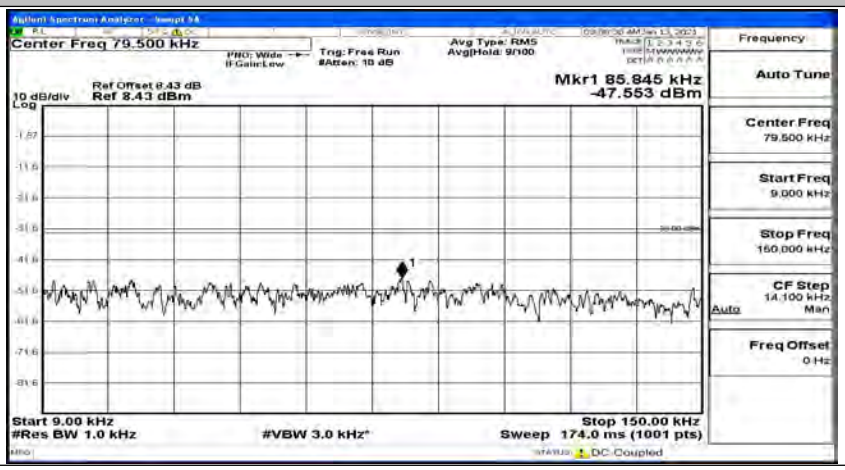
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



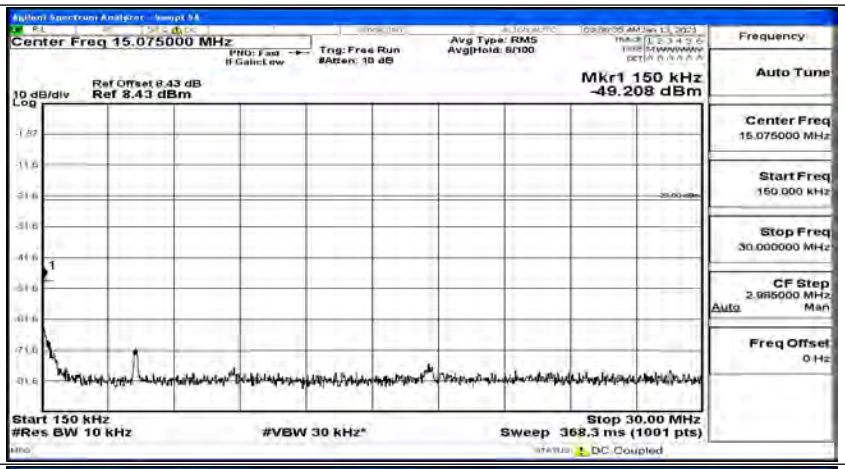
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



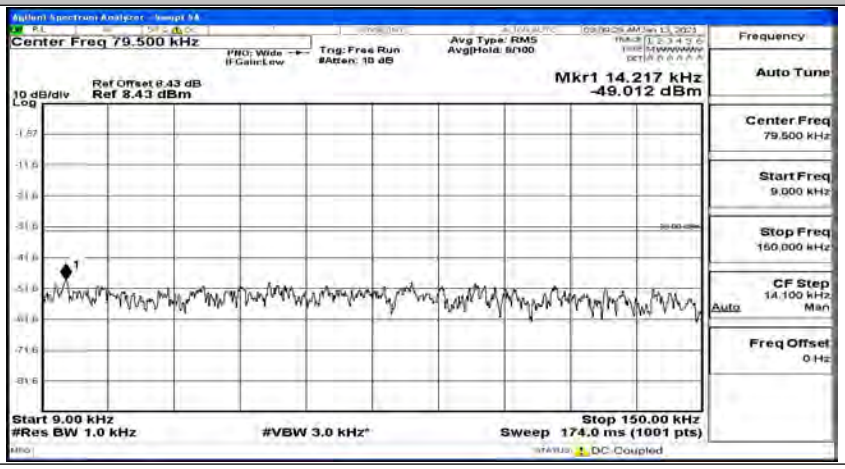


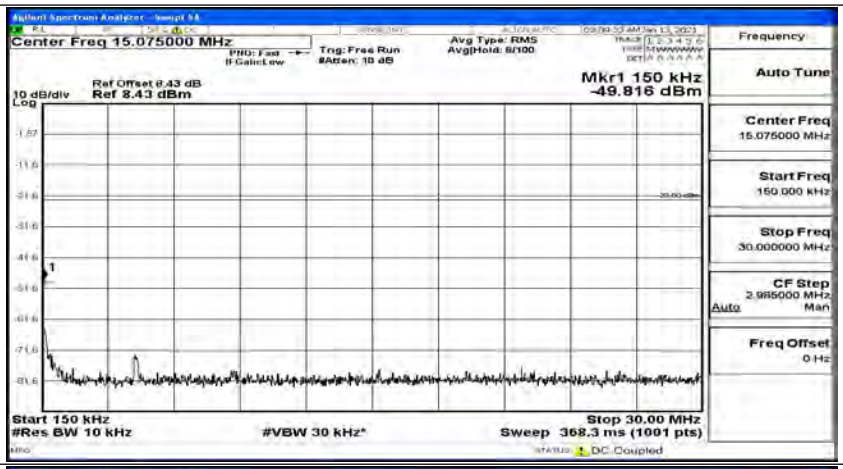
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49



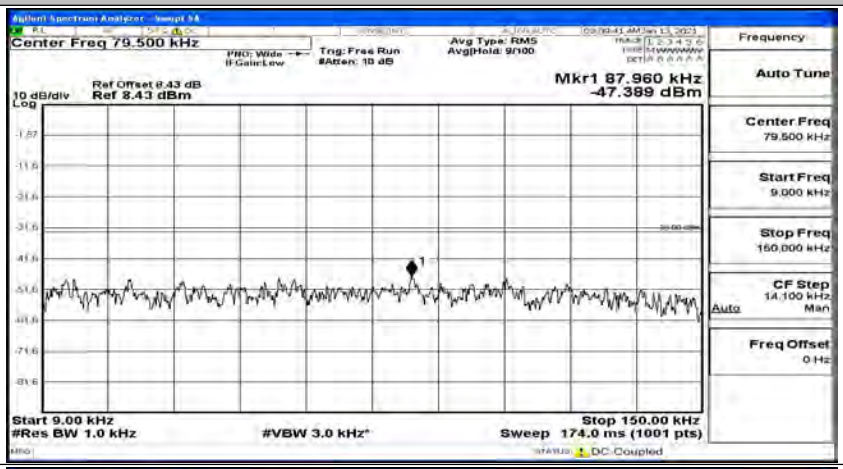


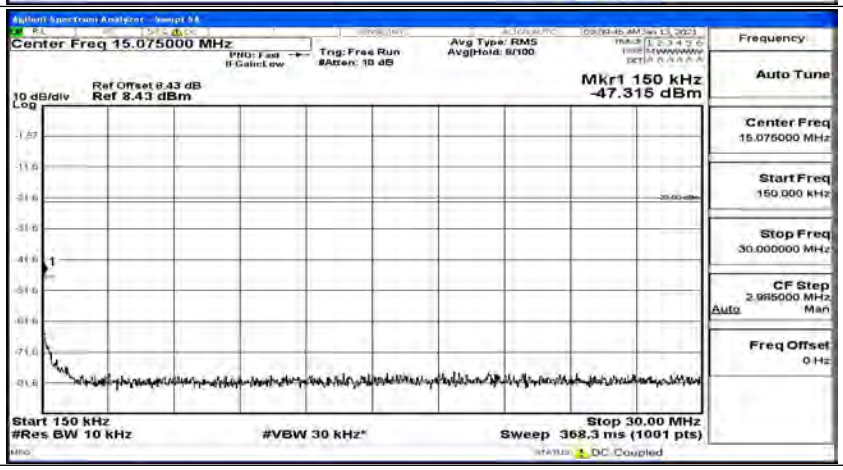
Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#0





Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#24





Channel Bandwidth: 10 MHz_HCH_16QAM_1RB#49