

Appendix D: Test Data for E-UTRA Band 5

Product Name: TD-LTE/LTE FDD/WLAN terminal

Trade Mark: N/A

Test Model: Mini11

Environmental Conditions

Temperature:	22.7° 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]		Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.26	21.40	PASS
		1	3	22.15	21.57	PASS
		1	5	21.99	21.43	PASS
		3	0	22.07	21.06	PASS
		3	2	22.15	21.19	PASS
		3	3	22.14	21.19	PASS
		6	0	21.12	19.81	PASS
	MCH	1	0	23.02	22.49	PASS
		1	3	23.16	22.58	PASS
		1	5	23.12	22.40	PASS
		3	0	23.14	22.32	PASS
		3	2	23.31	22.43	PASS
		3	3	23.12	22.38	PASS
		6	0	22.08	21.21	PASS
	HCH	1	0	22.51	21.55	PASS
		1	3	22.62	21.42	PASS
		1	5	22.57	21.49	PASS
		3	0	22.46	21.68	PASS
		3	2	22.31	21.50	PASS
		3	3	22.22	21.50	PASS
		6	0	21.33	20.44	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.81	21.07	PASS
		1	7	21.84	21.57	PASS
		1	14	22.26	21.77	PASS
		8	0	21.05	20.10	PASS
		8	4	20.98	19.83	PASS
		8	7	21.19	19.79	PASS
		15	0	21.14	20.29	PASS
	MCH	1	0	22.85	22.14	PASS
		1	7	23.15	22.60	PASS
		1	14	23.21	22.62	PASS
		8	0	22.01	20.61	PASS
		8	4	22.10	20.73	PASS
		8	7	22.09	21.20	PASS
		15	0	22.00	21.10	PASS
	HCH	1	0	22.53	22.36	PASS
		1	7	22.29	21.83	PASS
		1	14	22.17	21.47	PASS
		8	0	21.55	20.88	PASS
		8	4	21.40	20.76	PASS
		8	7	21.26	20.34	PASS
		15	0	21.48	20.53	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	21.75	20.22	PASS
		1	12	22.37	20.30	PASS
		1	24	22.23	21.05	PASS
		12	0	20.98	19.73	PASS
		12	6	21.02	19.97	PASS
		12	13	21.31	20.15	PASS
		25	0	21.07	20.23	PASS
	MCH	1	0	22.87	21.88	PASS
		1	12	23.28	21.75	PASS
		1	24	23.32	22.03	PASS
		12	0	21.87	20.79	PASS
		12	6	22.05	21.21	PASS
		12	13	22.06	20.98	PASS
		25	0	21.89	21.05	PASS
	HCH	1	0	22.78	21.20	PASS
		1	12	22.75	20.97	PASS
		1	24	22.02	20.85	PASS
		12	0	21.73	20.83	PASS
		12	6	21.57	20.51	PASS
		12	13	21.62	20.67	PASS
		25	0	21.70	20.77	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	21.78	21.10	PASS
		1	24	22.67	22.10	PASS
		1	49	22.66	22.07	PASS
		25	0	21.19	20.23	PASS
		25	12	21.37	20.31	PASS
		25	25	21.76	20.56	PASS
		50	0	21.37	20.37	PASS
	MCH	1	0	22.70	22.07	PASS
		1	24	23.20	22.60	PASS
		1	49	22.98	22.84	PASS
		25	0	21.90	20.91	PASS
		25	12	22.00	21.07	PASS
		25	25	22.24	21.36	PASS
		50	0	22.20	20.80	PASS
	HCH	1	0	23.09	21.99	PASS
		1	24	23.17	21.68	PASS
		1	49	22.12	20.74	PASS
		25	0	22.36	21.34	PASS
		25	12	22.02	21.07	PASS
		25	25	21.77	20.90	PASS
		50	0	21.90	21.00	PASS

D.2 Peak-to-Average Ratio

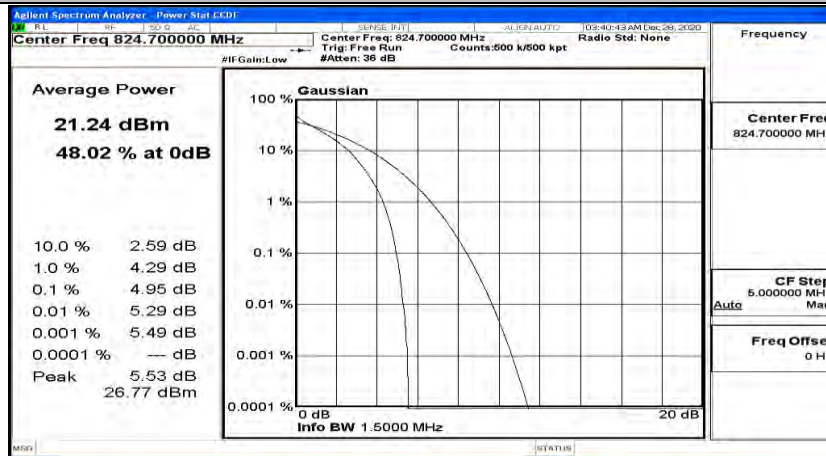
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.95	<13	PASS
	MCH	4.2	<13	PASS
	HCH	3.58	<13	PASS
16QAM	LCH	5.82	<13	PASS
	MCH	5.15	<13	PASS
	HCH	4.3	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.16	<13	PASS
	MCH	4.5	<13	PASS
	HCH	4.12	<13	PASS
16QAM	LCH	5.88	<13	PASS
	MCH	5.28	<13	PASS
	HCH	4.95	<13	PASS

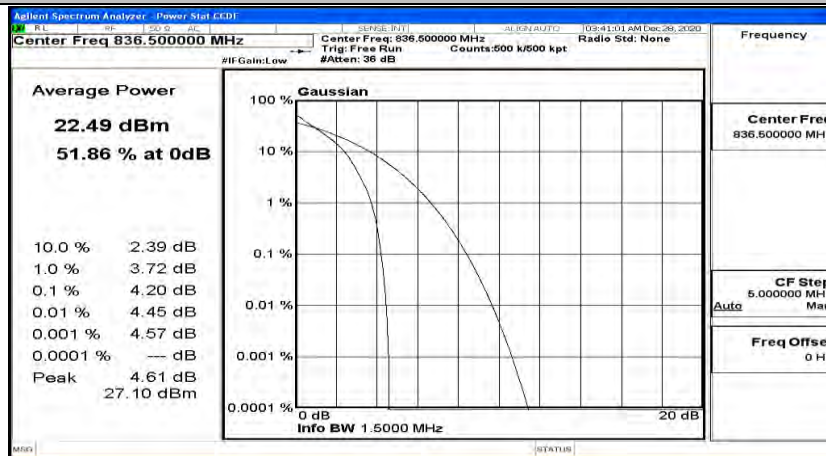
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.03	<13	PASS
	MCH	4.45	<13	PASS
	HCH	4.36	<13	PASS
16QAM	LCH	5.78	<13	PASS
	MCH	5.29	<13	PASS
	HCH	5.22	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.89	<13	PASS
	MCH	4.59	<13	PASS
	HCH	4.71	<13	PASS
16QAM	LCH	5.74	<13	PASS
	MCH	5.32	<13	PASS
	HCH	5.57	<13	PASS

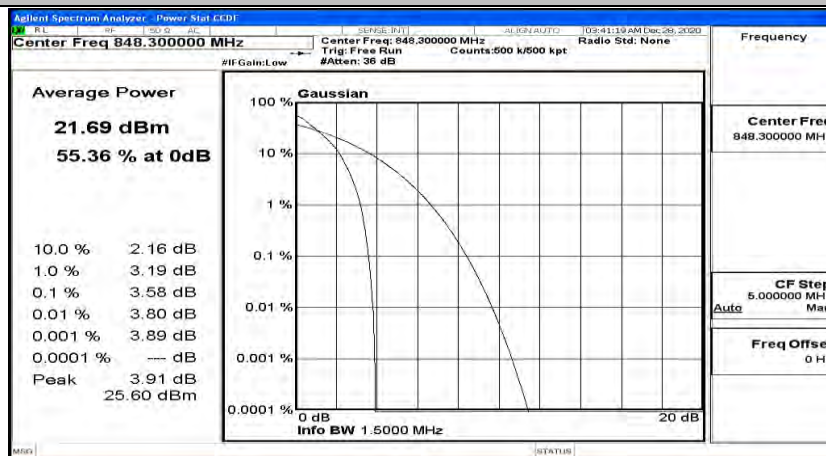
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



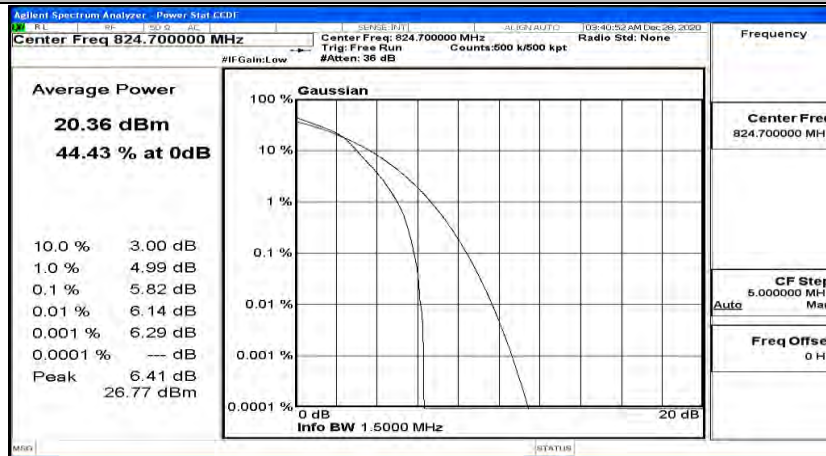
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



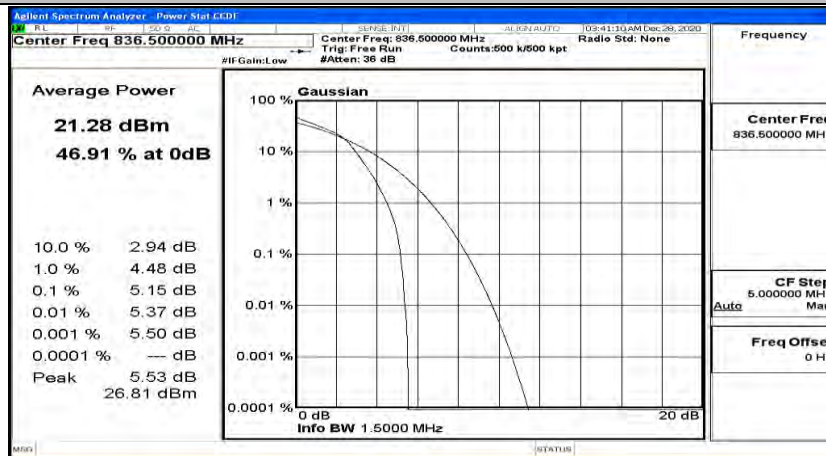
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



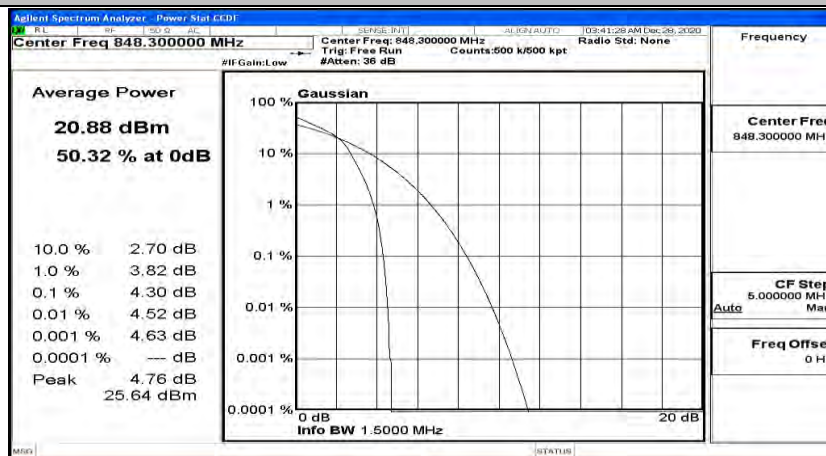
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



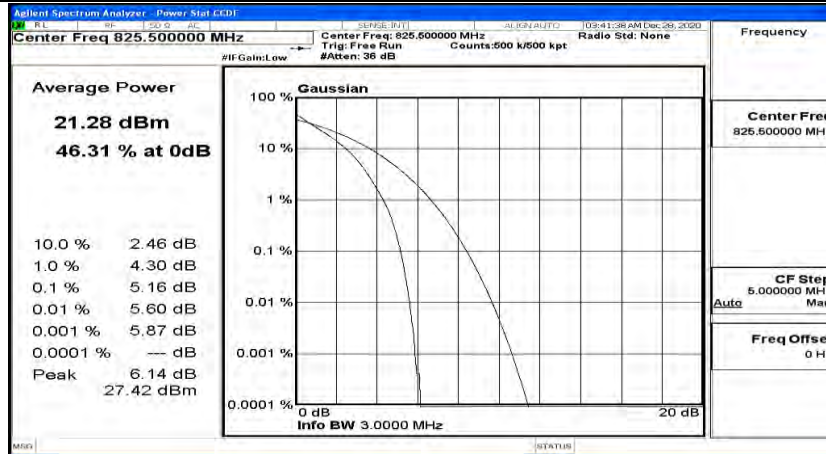
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



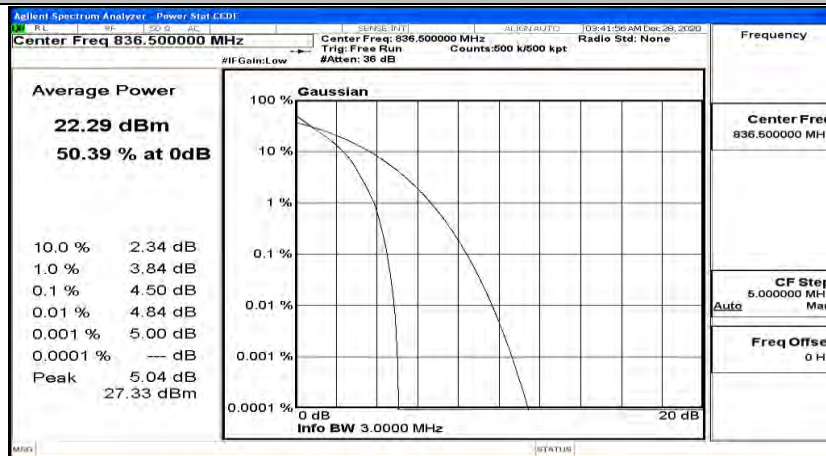
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



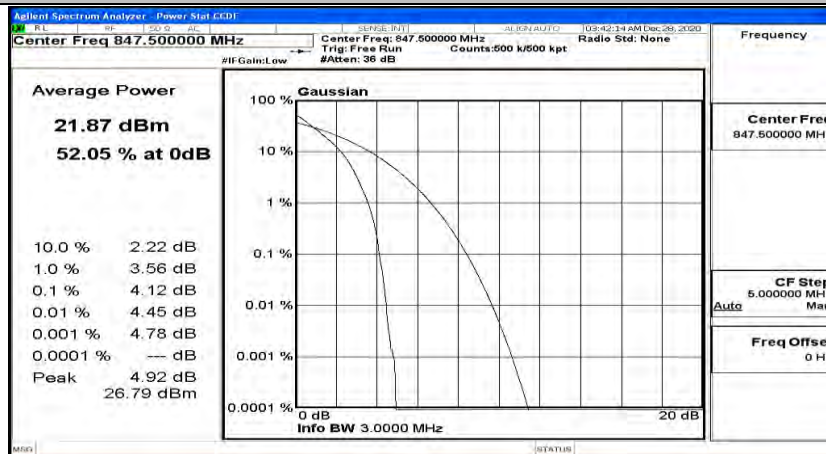
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



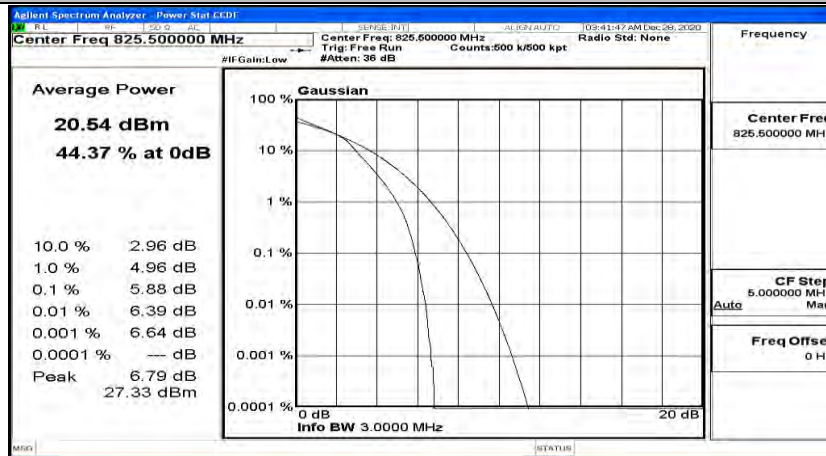
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



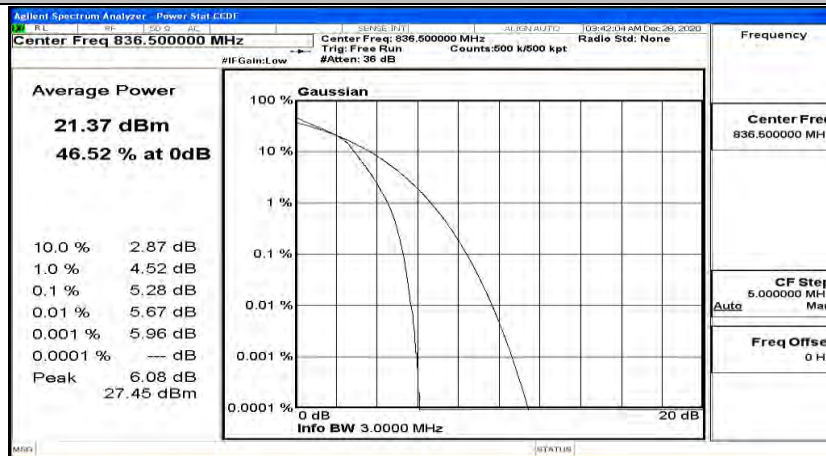
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



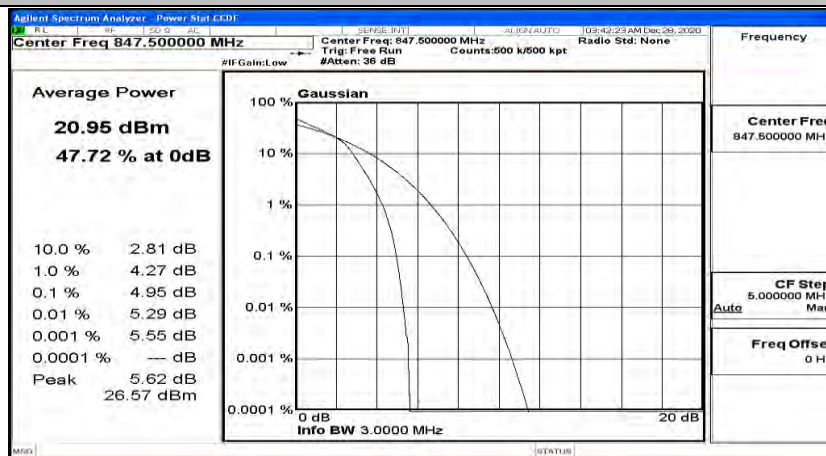
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



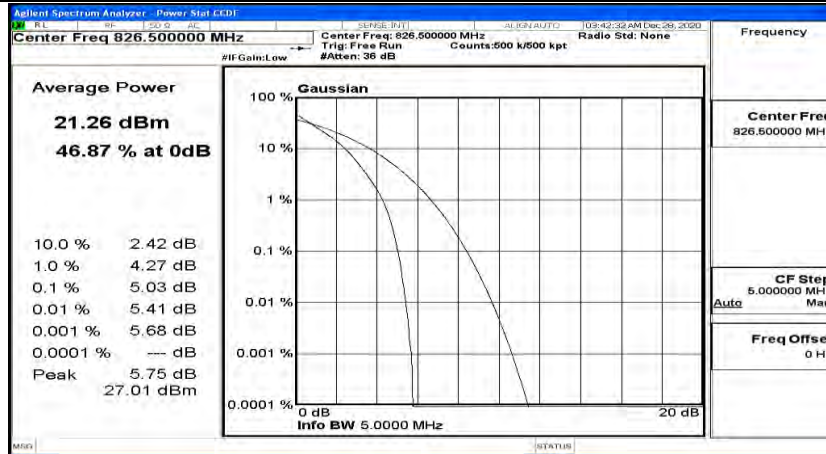
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



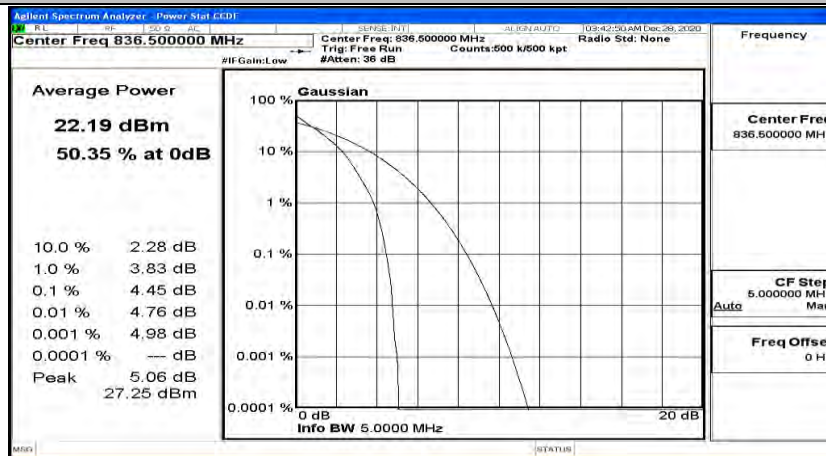
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



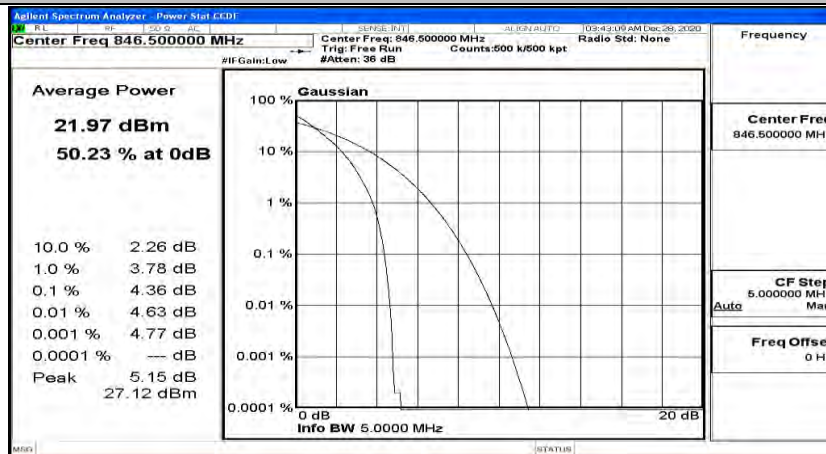
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



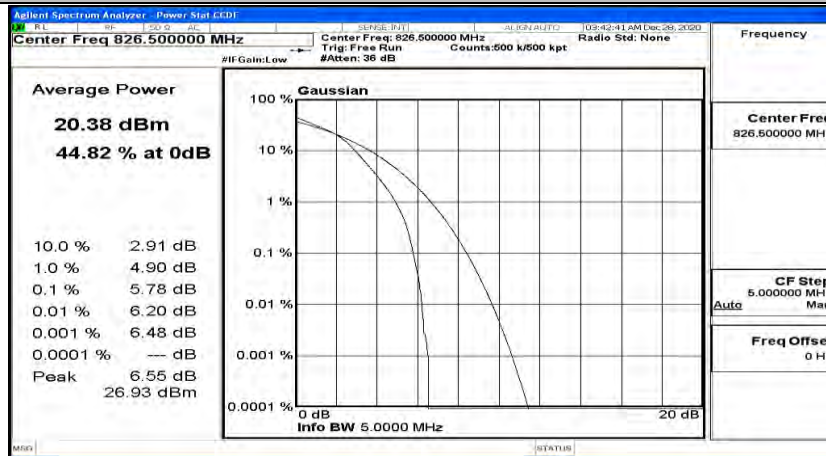
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



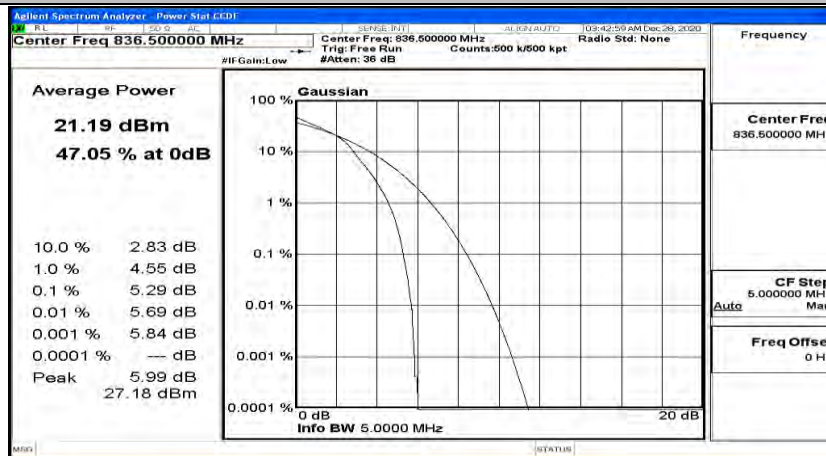
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



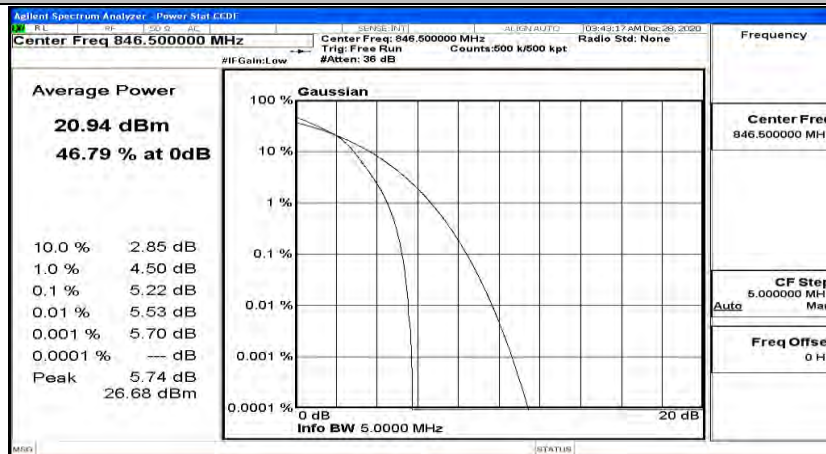
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



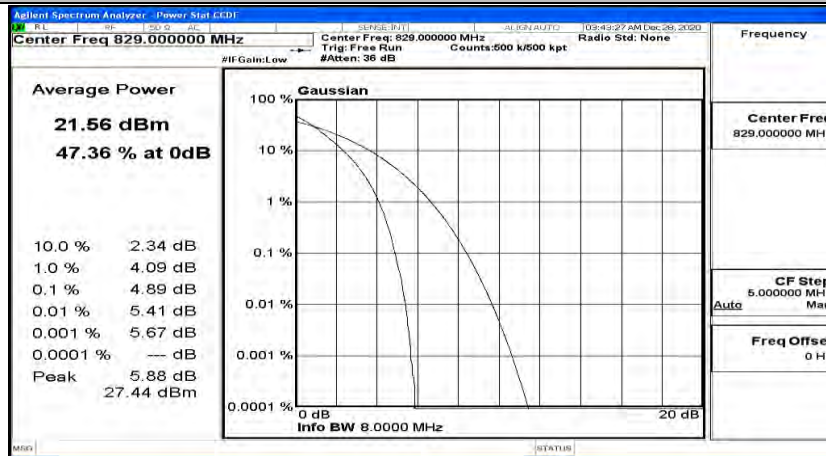
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



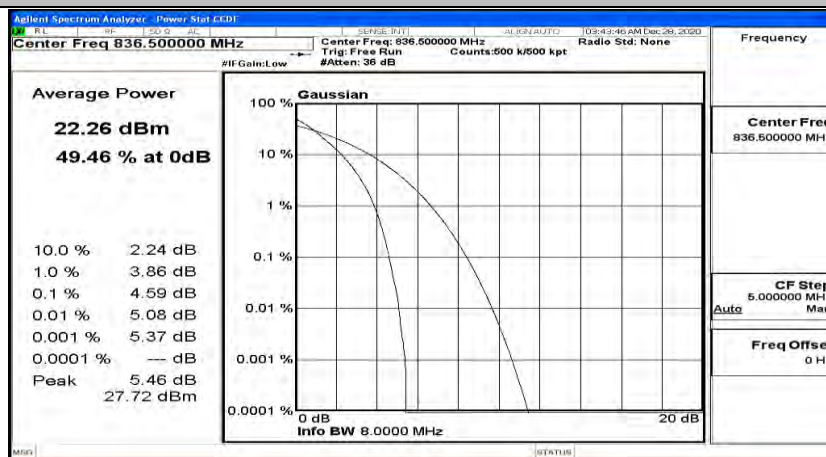
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



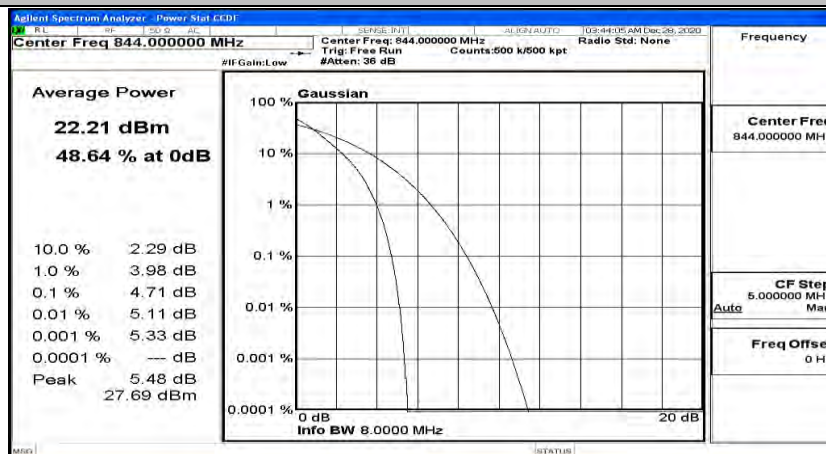
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _LCH_QPSK



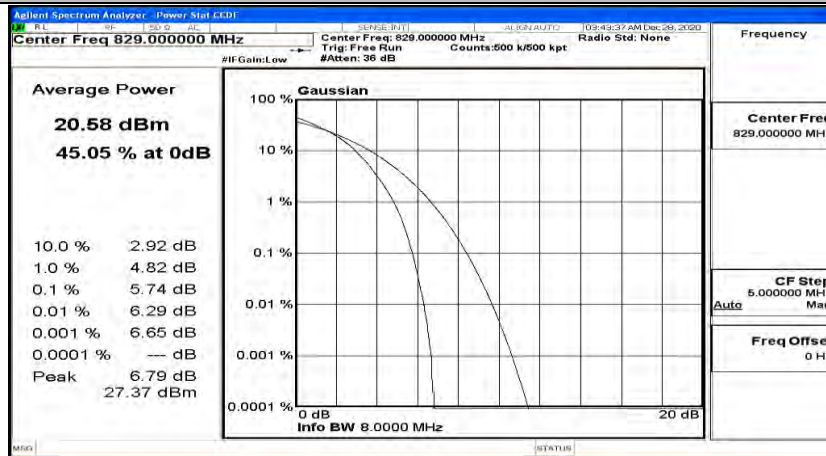
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _MCH_QPSK



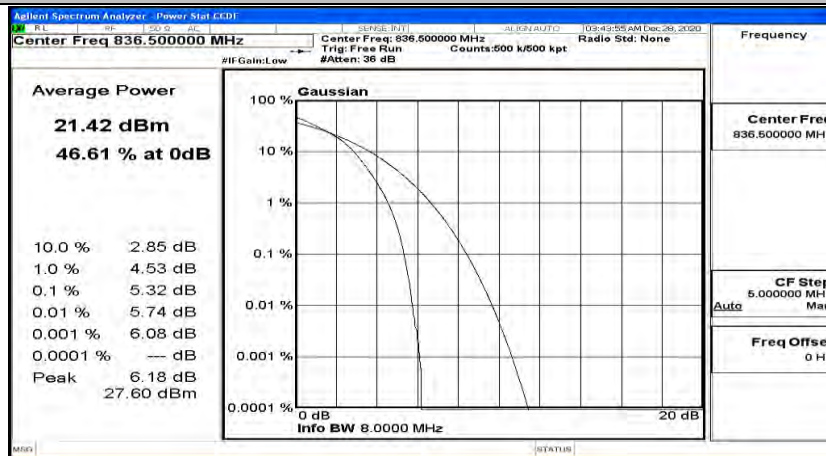
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _HCH_QPSK



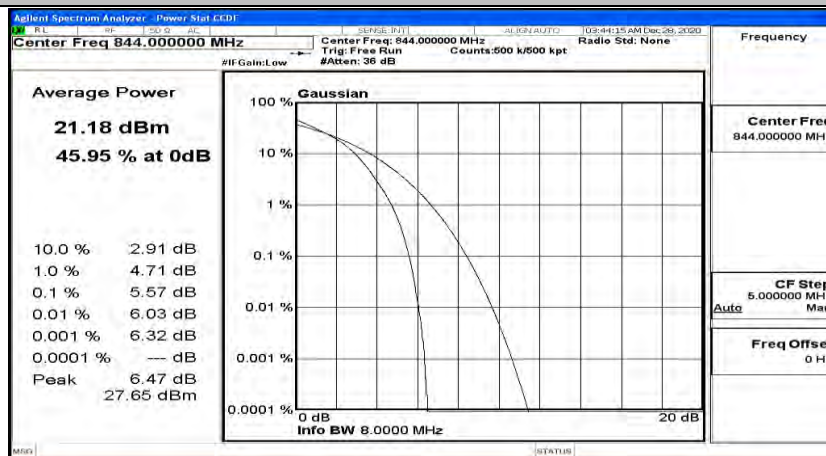
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



D.3 26dB Bandwidth and Occupied Bandwidth

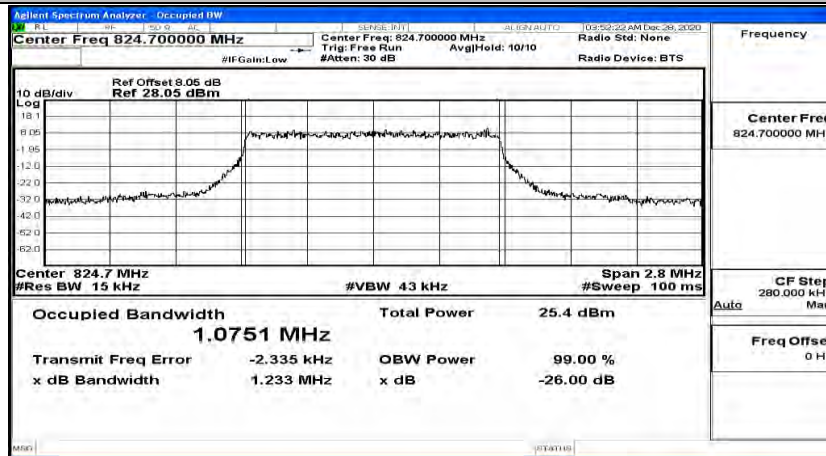
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0751	1.233	PASS
	MCH	1.0788	1.236	PASS
	HCH	1.0819	1.356	PASS
16QAM	LCH	1.0795	1.246	PASS
	MCH	1.0790	1.246	PASS
	HCH	1.0813	1.370	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6806	2.897	PASS
	MCH	2.6836	2.904	PASS
	HCH	2.6850	2.892	PASS
16QAM	LCH	2.6851	2.908	PASS
	MCH	2.6861	2.902	PASS
	HCH	2.6808	2.899	PASS

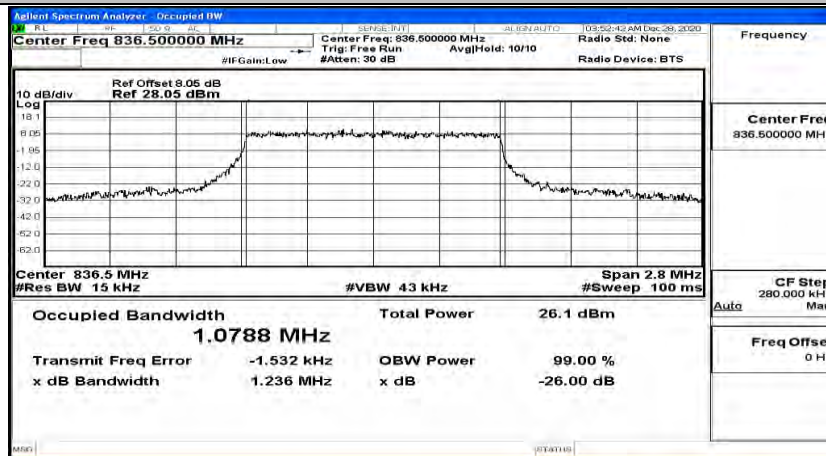
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4725	4.818	PASS
	MCH	4.4643	4.824	PASS
	HCH	4.4715	4.772	PASS
16QAM	LCH	4.4786	4.824	PASS
	MCH	4.4671	4.745	PASS
	HCH	4.4660	4.835	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9162	9.404	PASS
	MCH	8.9045	9.392	PASS
	HCH	8.9320	9.525	PASS
16QAM	LCH	8.9274	9.477	PASS
	MCH	8.9233	9.345	PASS
	HCH	8.9234	9.421	PASS

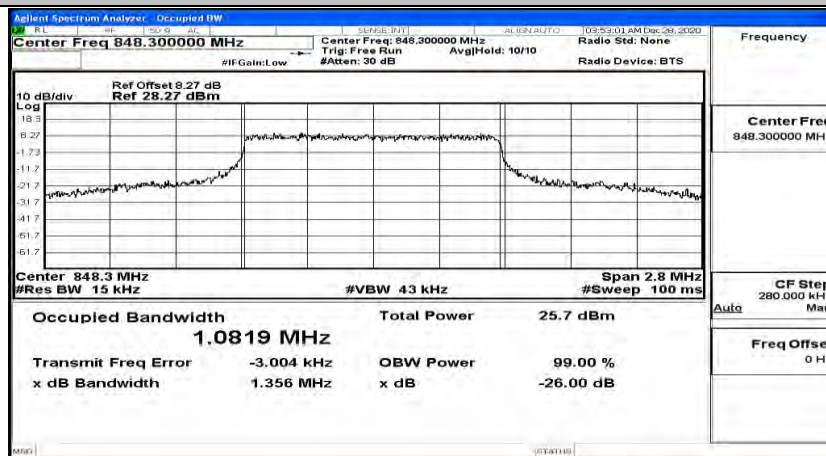
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



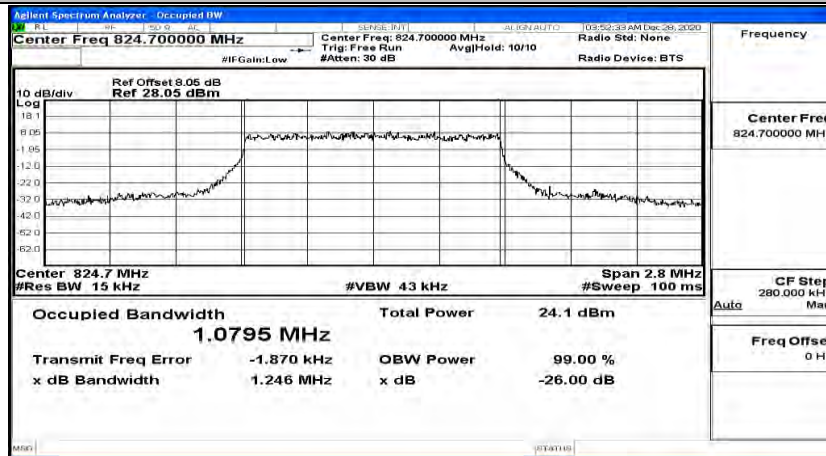
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



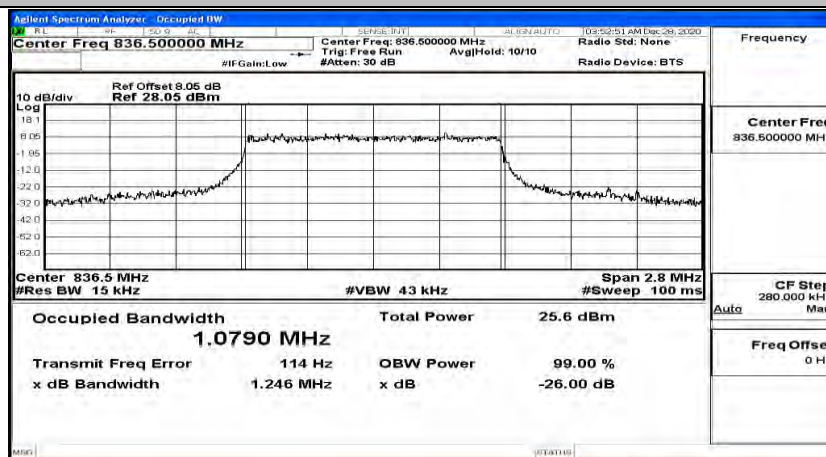
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



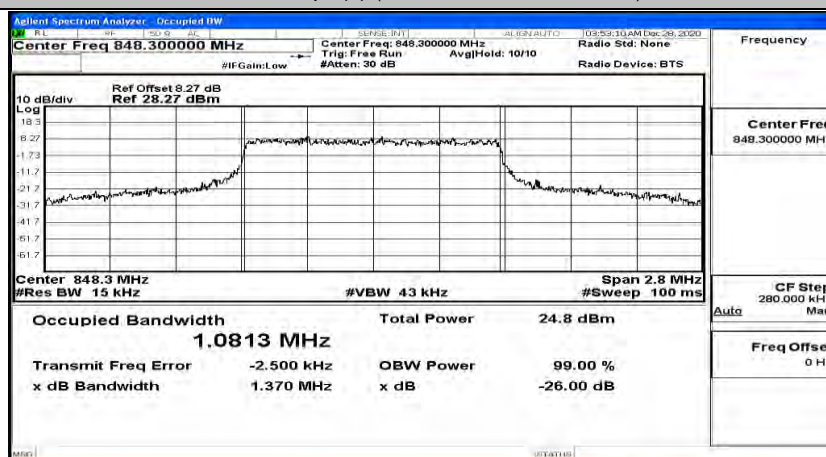
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



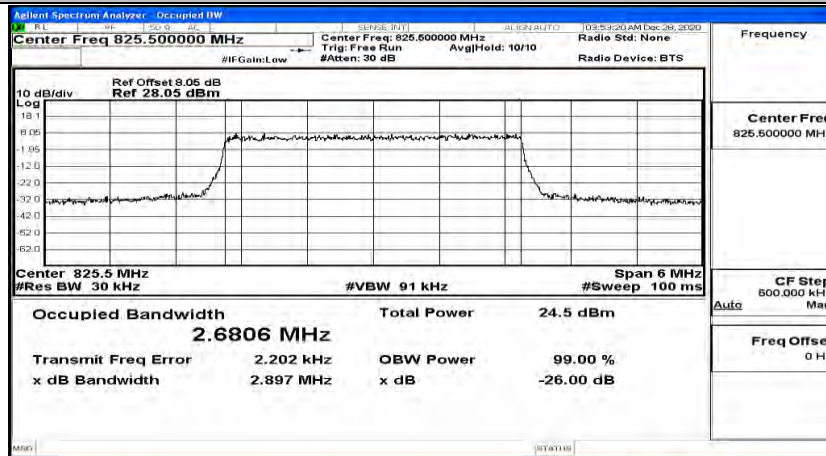
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



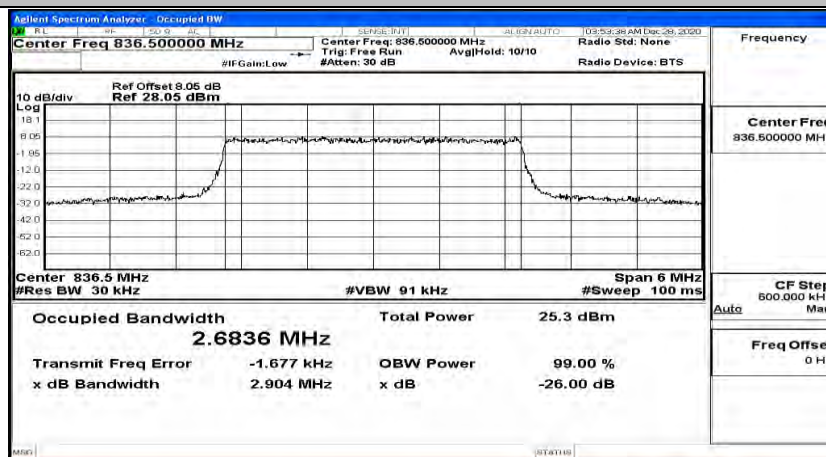
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



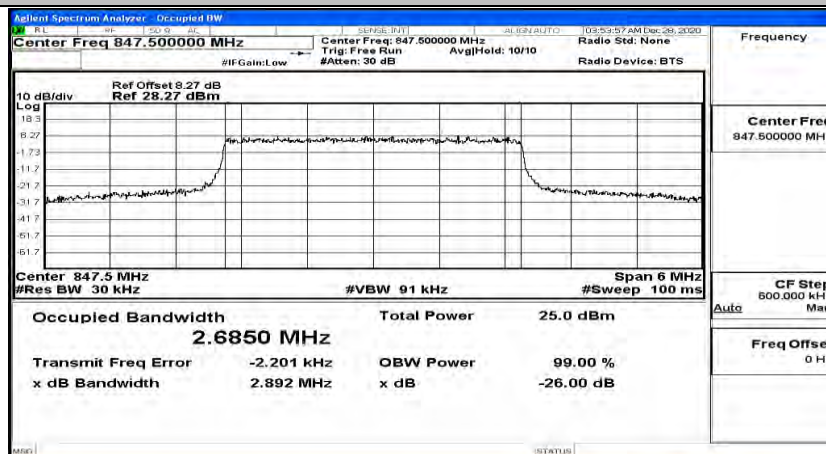
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



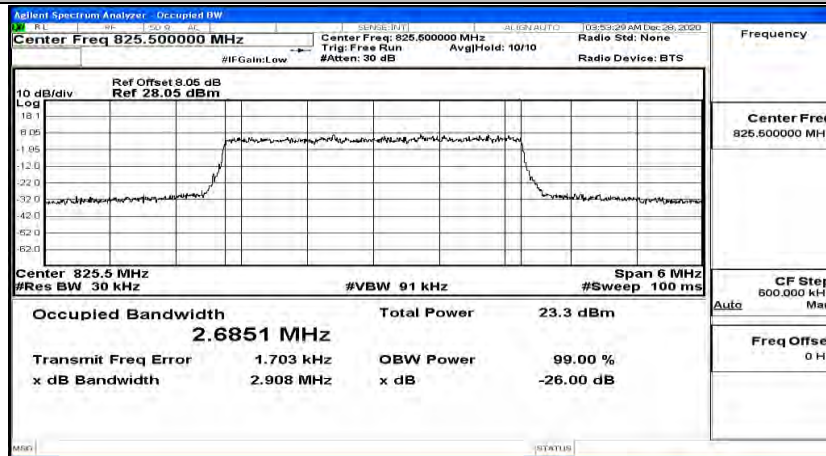
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



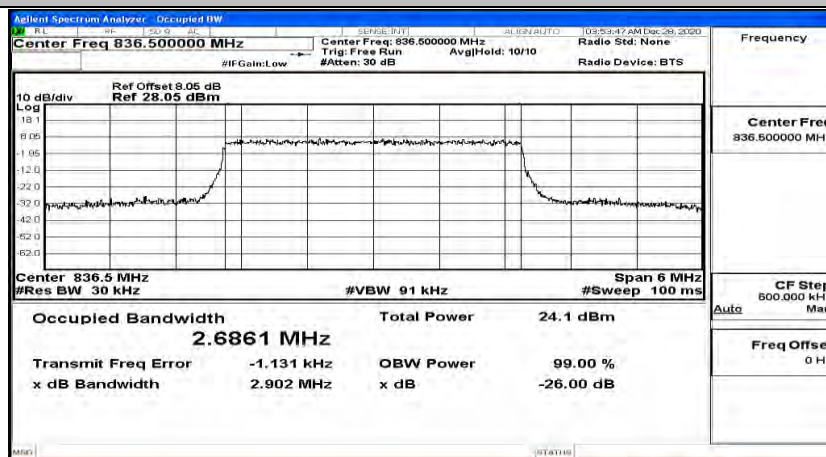
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



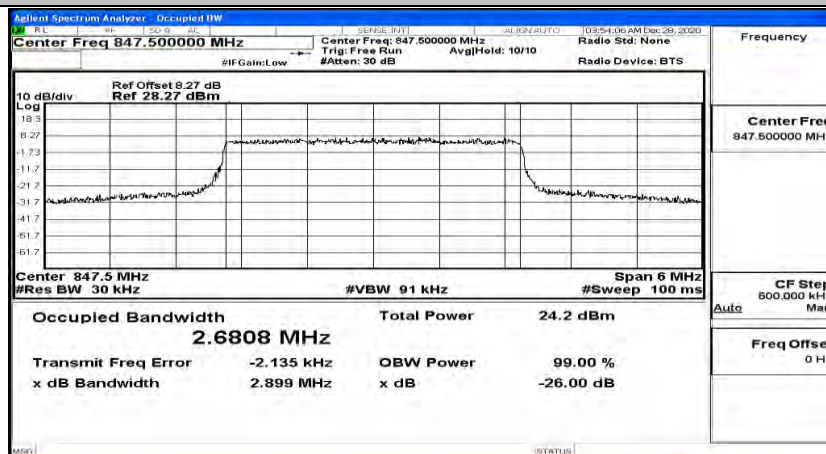
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



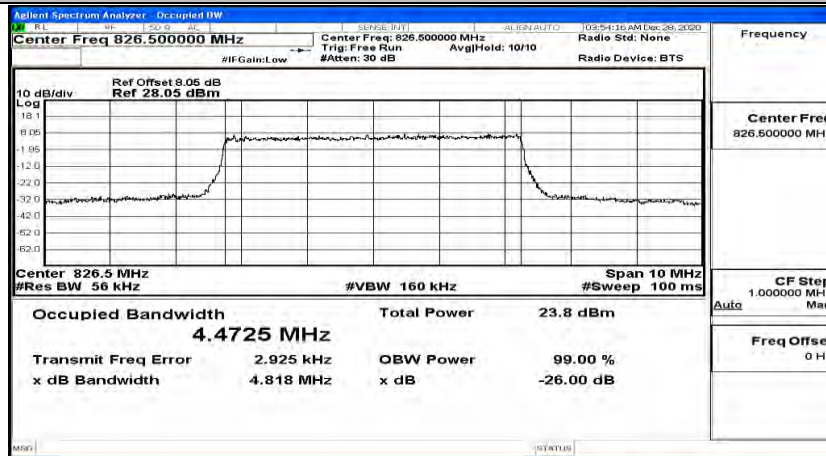
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



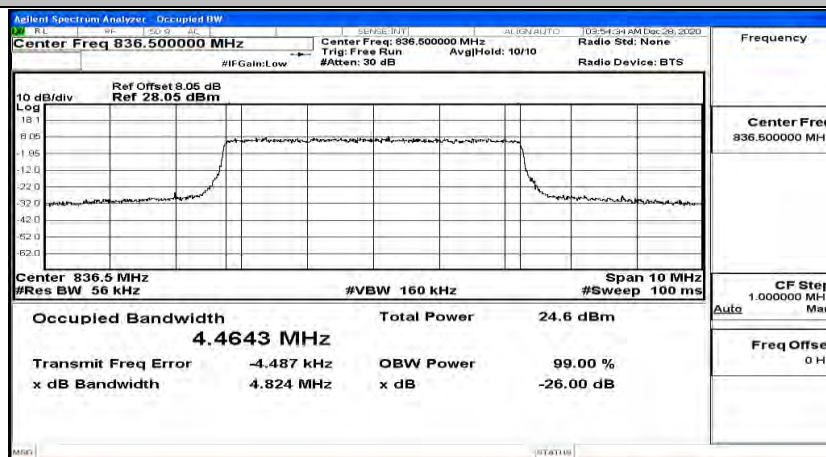
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



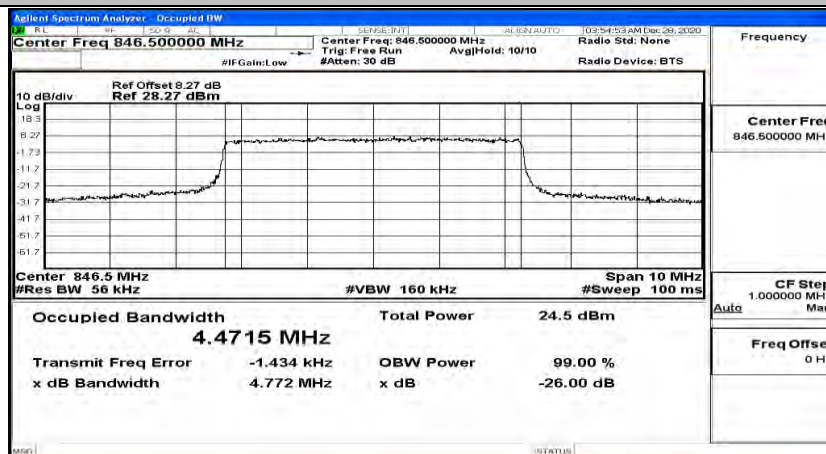
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



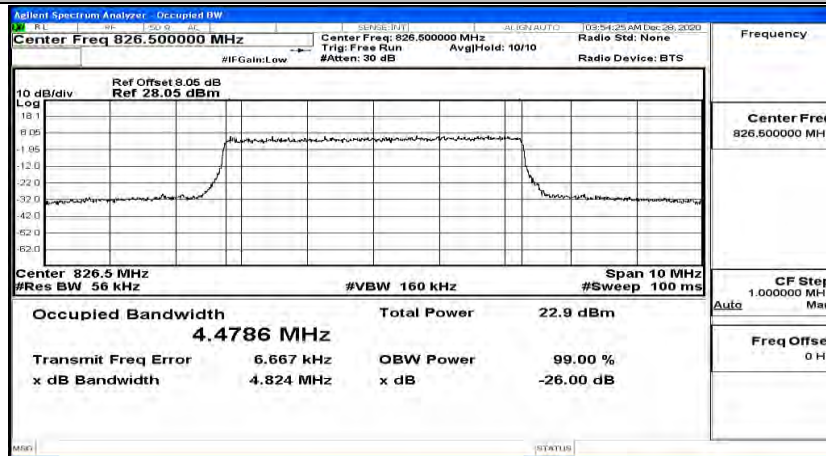
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



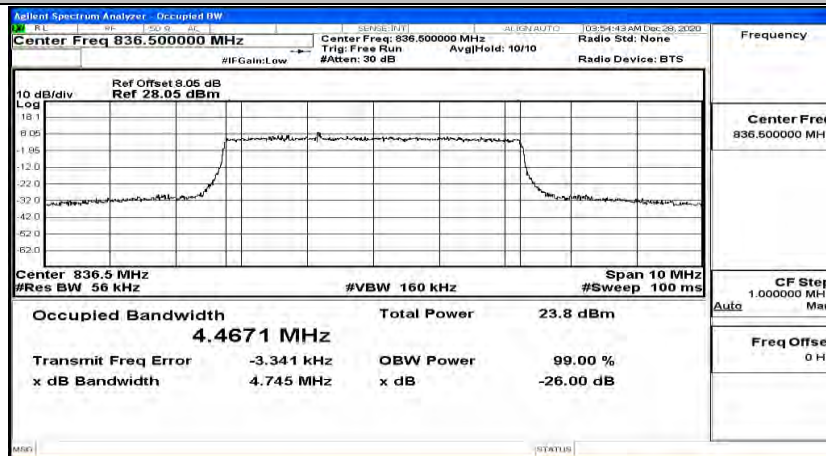
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



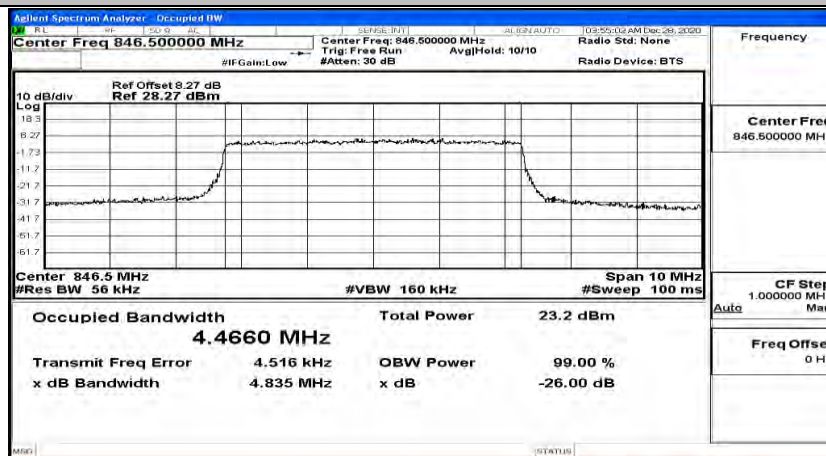
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



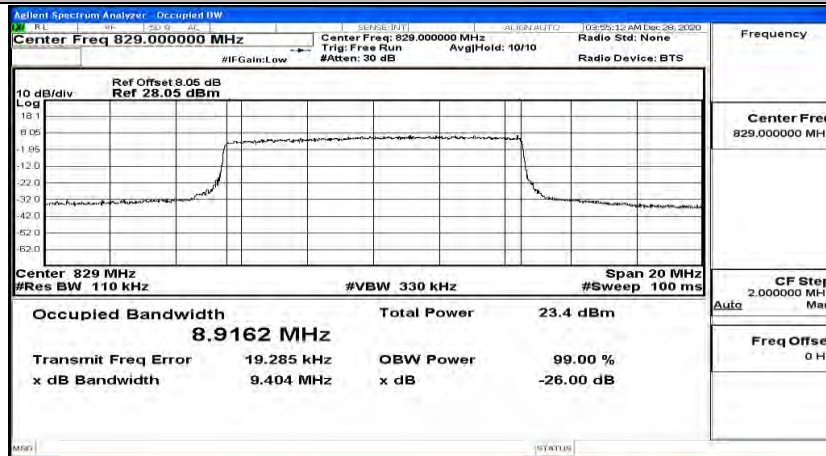
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



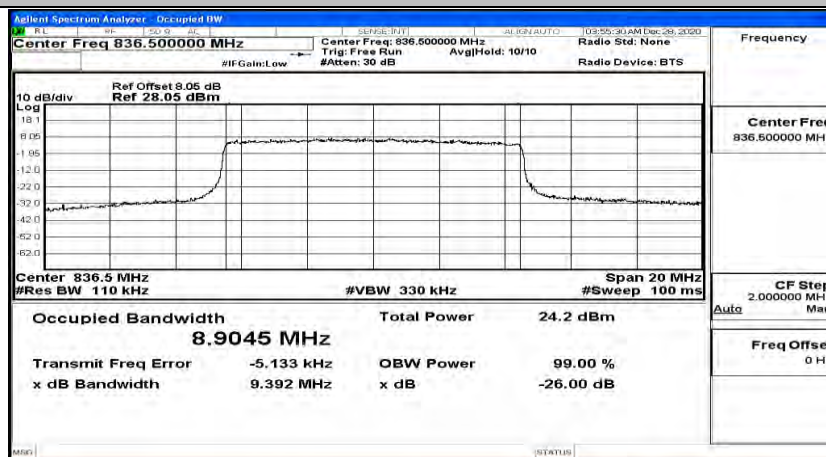
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



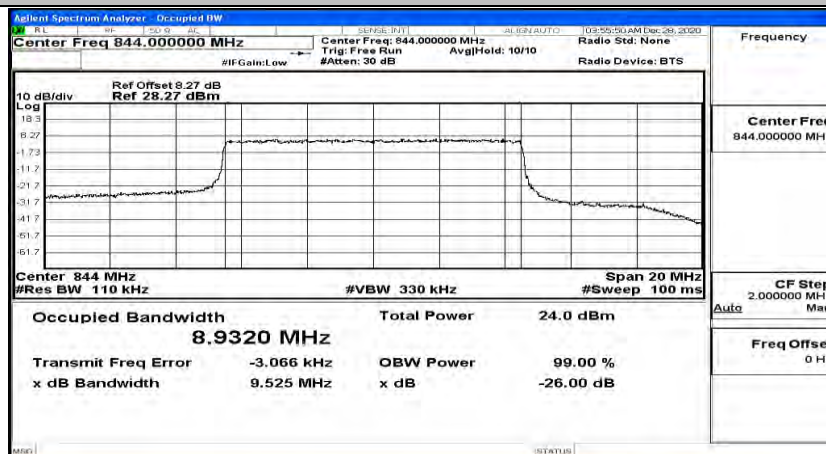
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



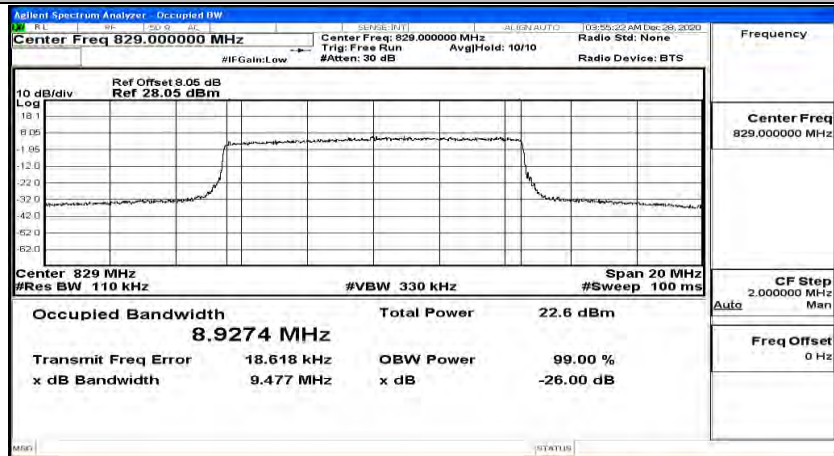
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



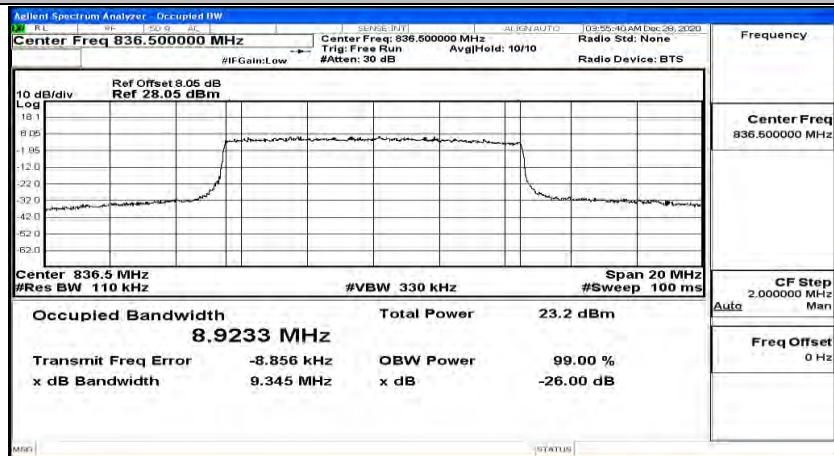
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



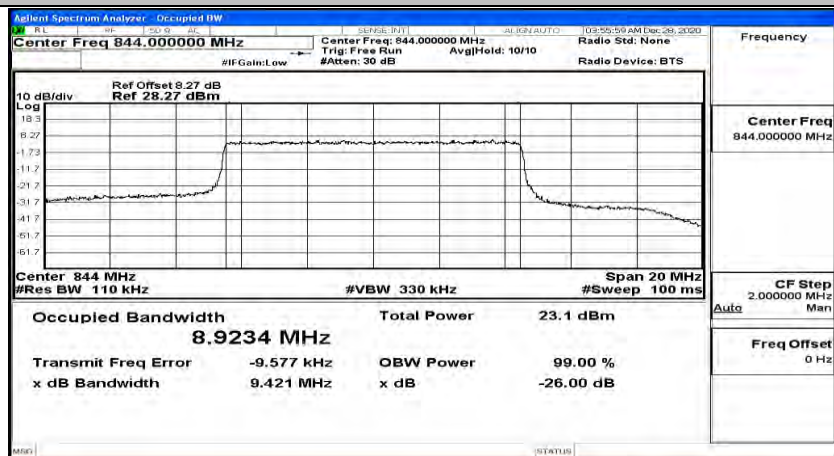
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

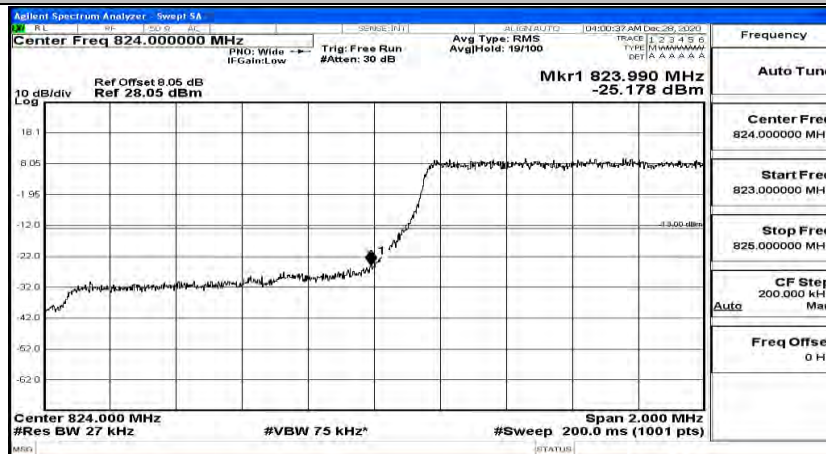


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

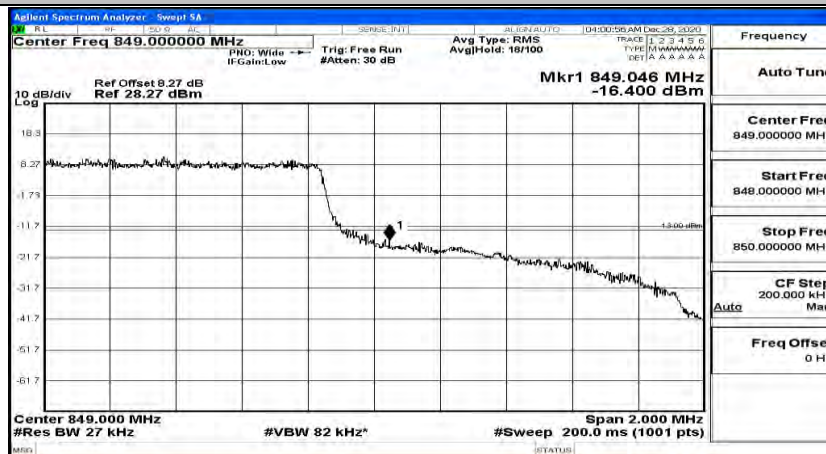


D.4 Band Edge

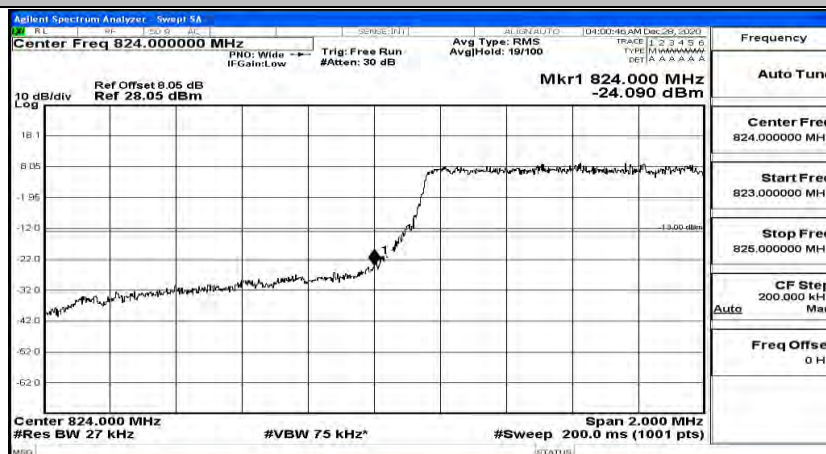
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



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



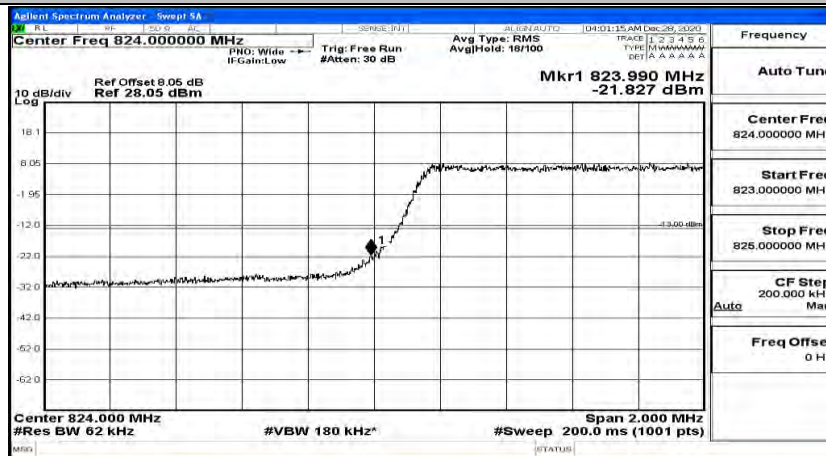
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



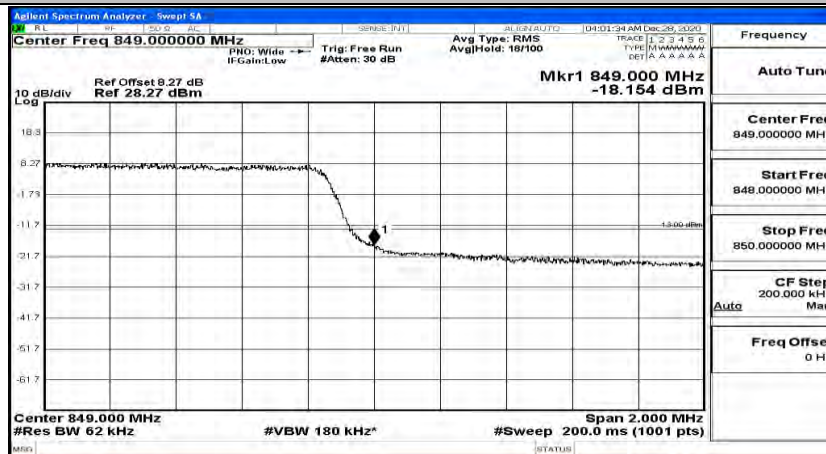
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



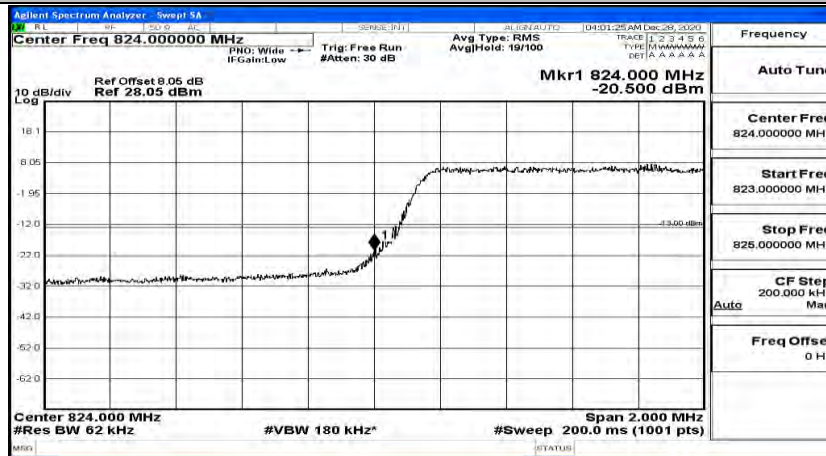
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



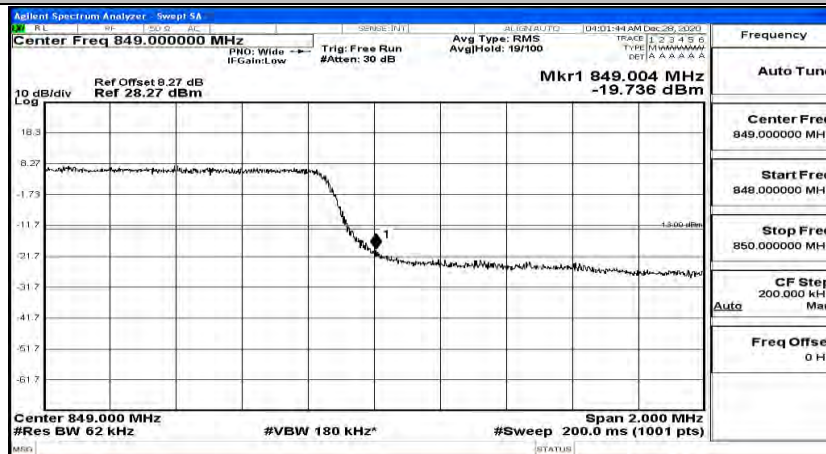
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



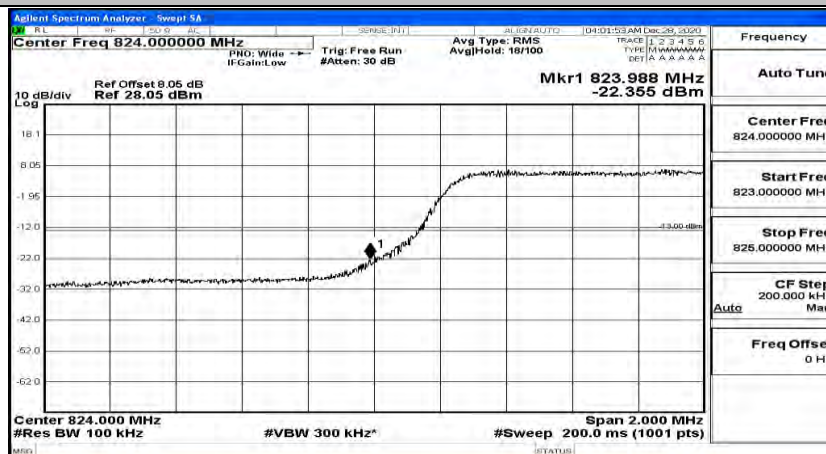
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



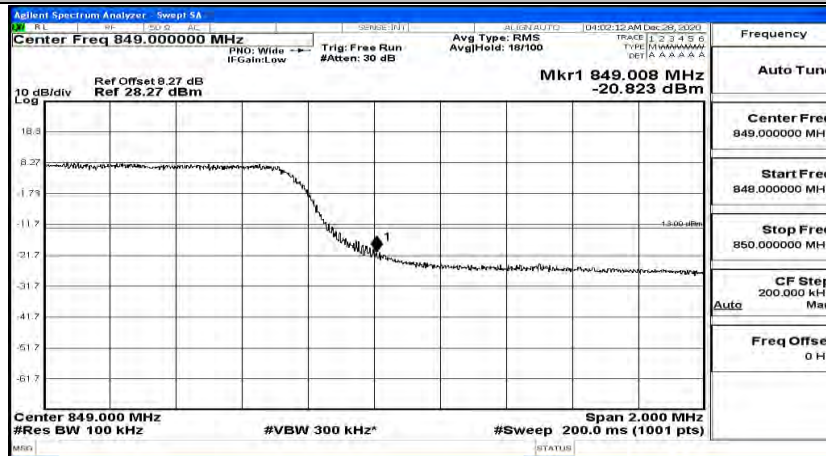
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



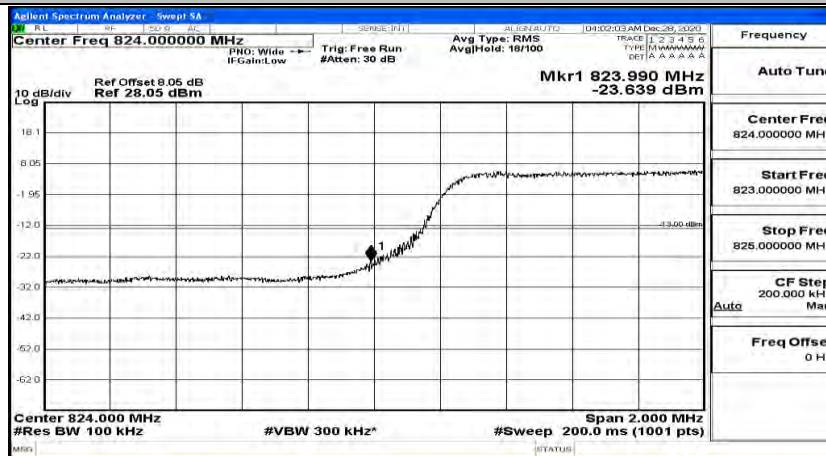
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



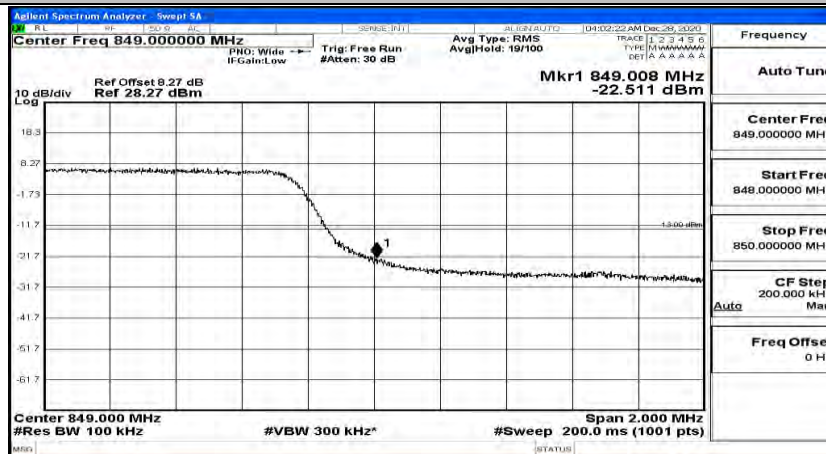
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



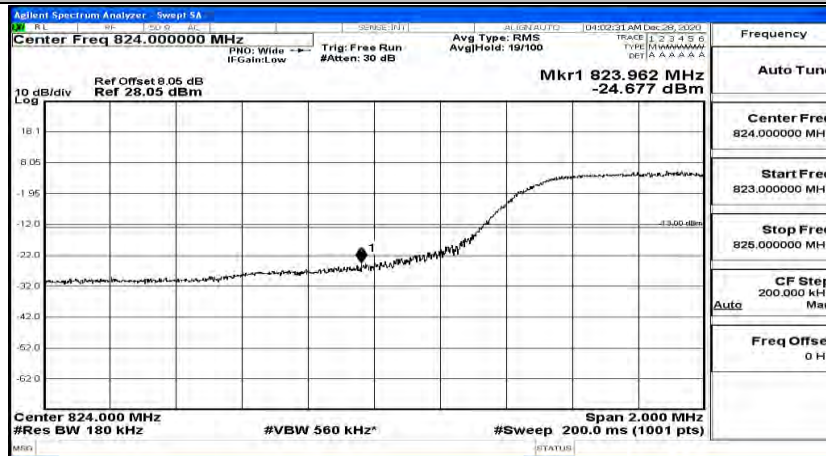
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



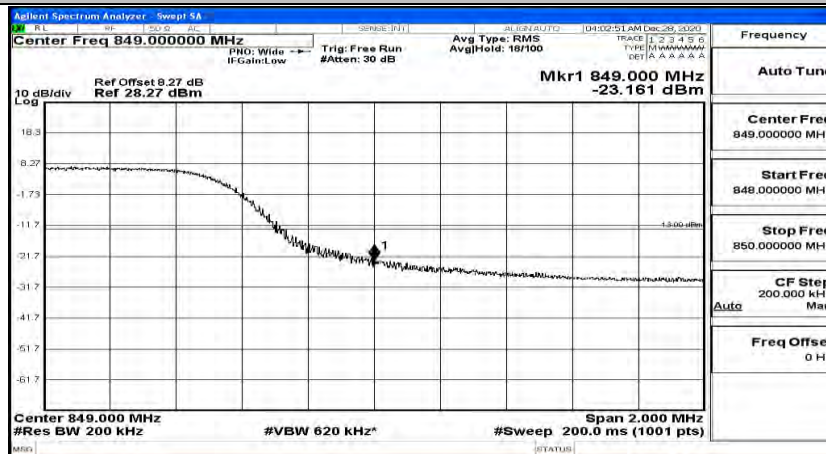
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



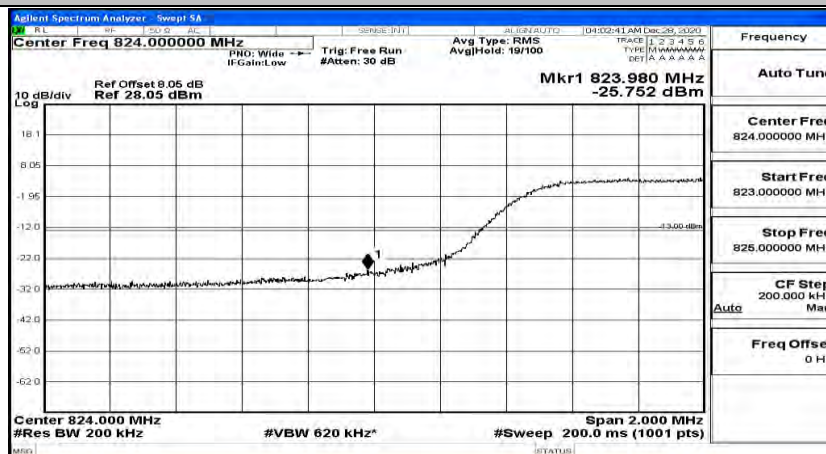
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



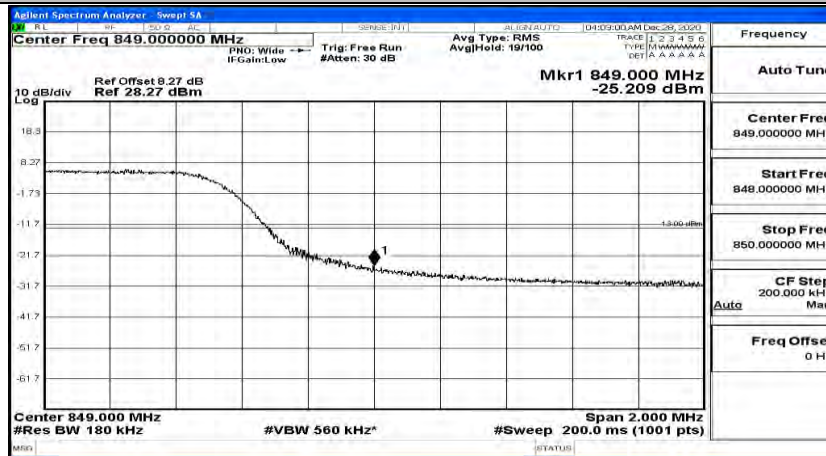
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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

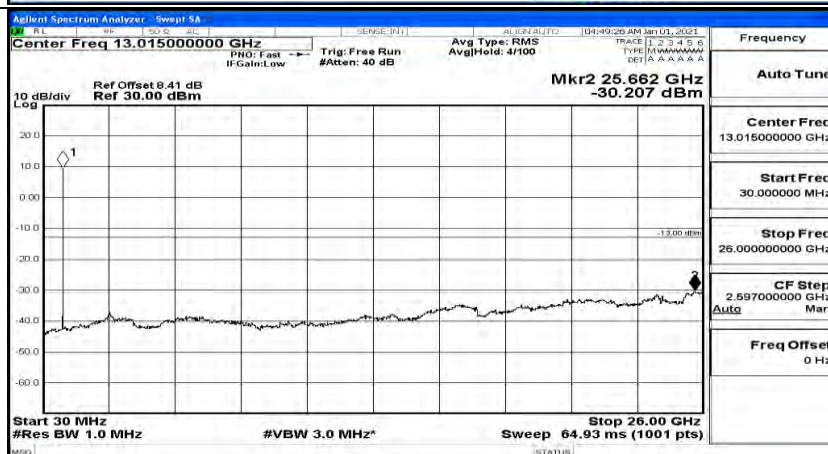
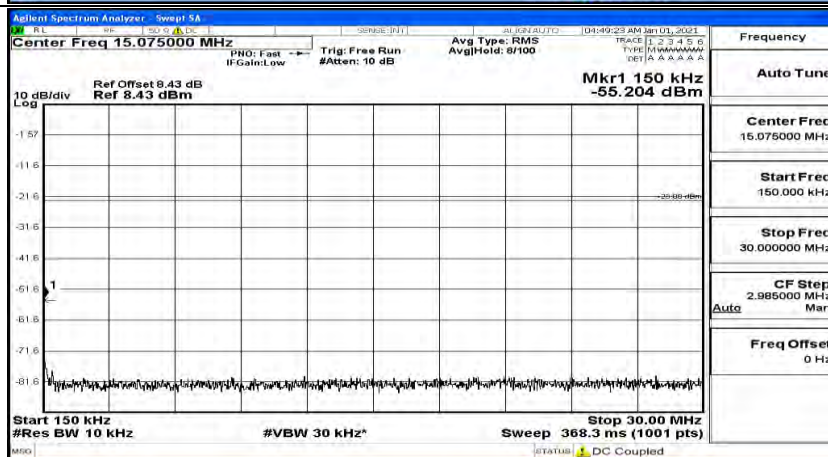
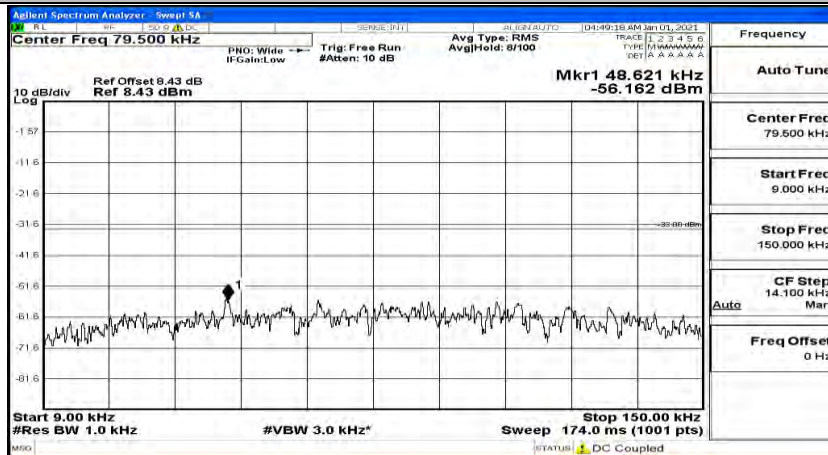


D. 5: Conducted Spurious Emission

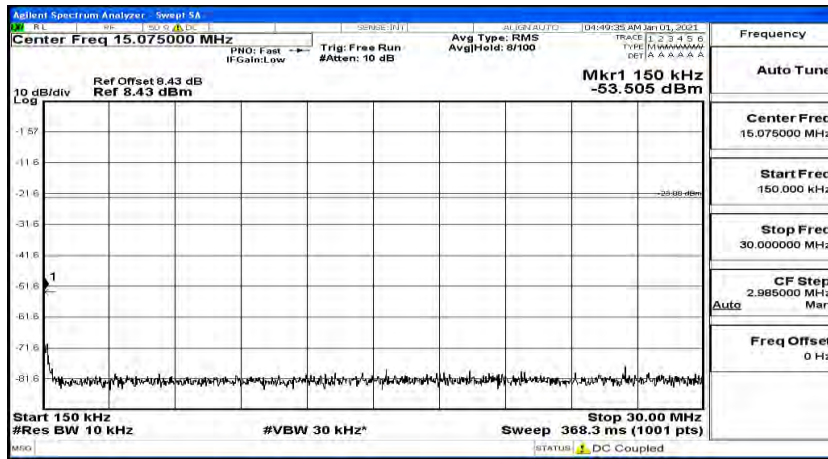
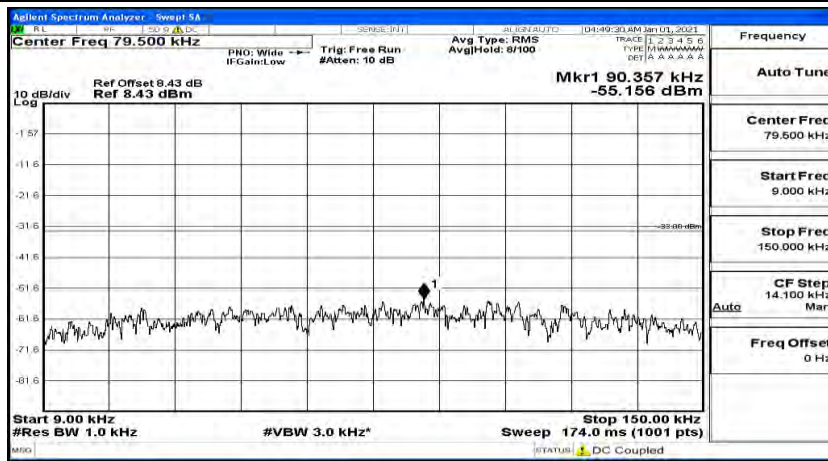
Test Graphs

Channel Bandwidth: 1.4 MHz

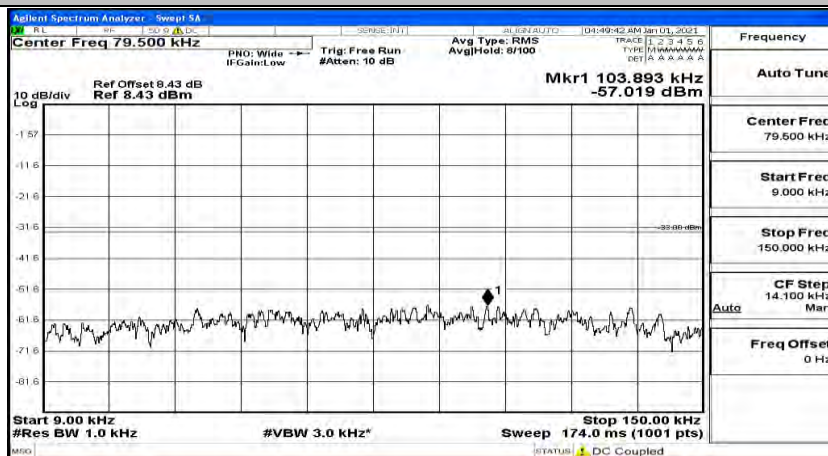
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

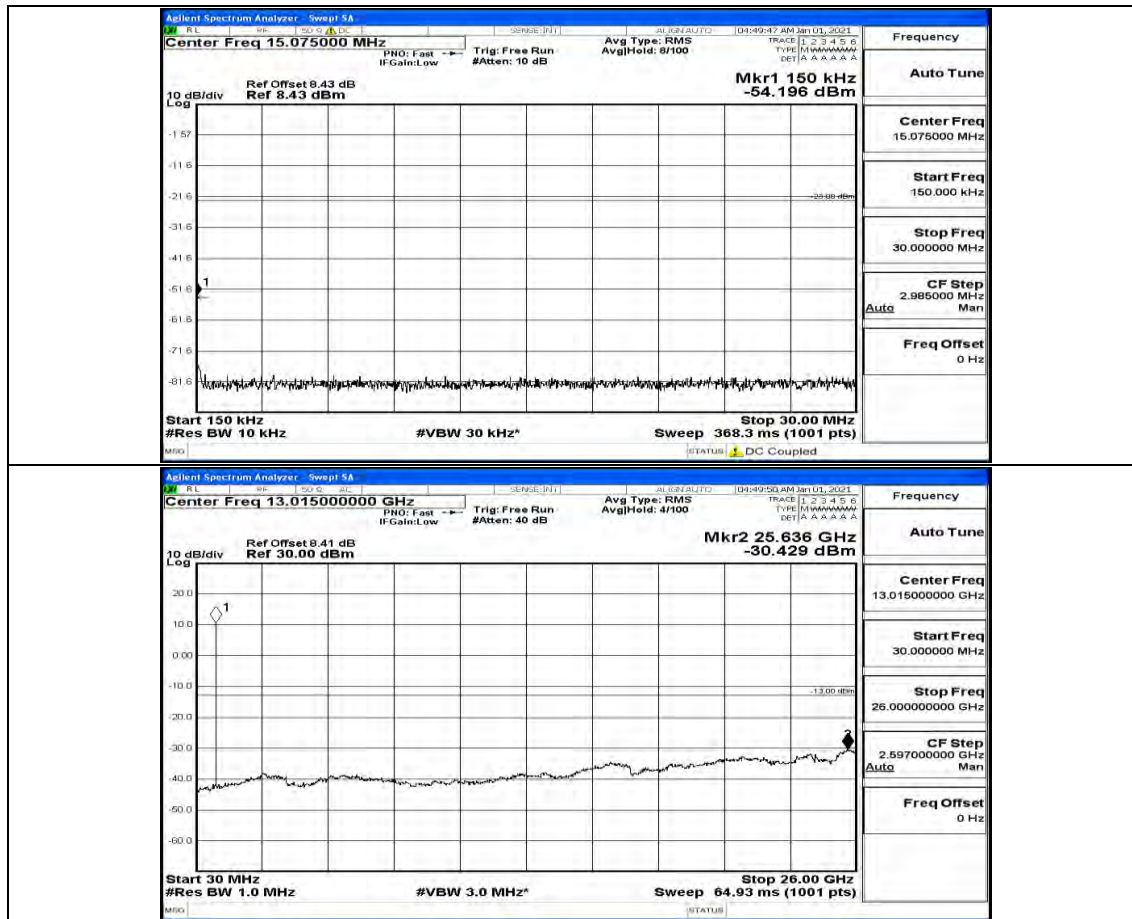


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

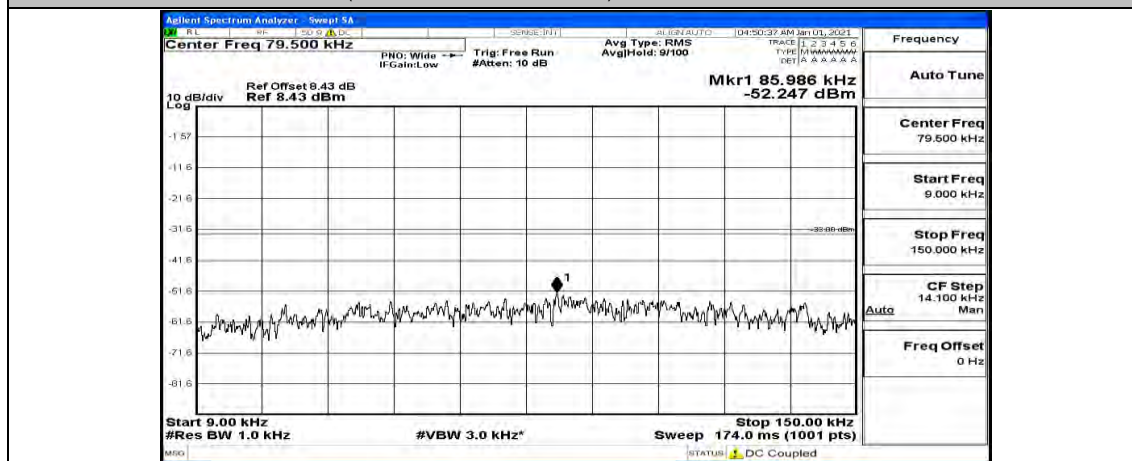


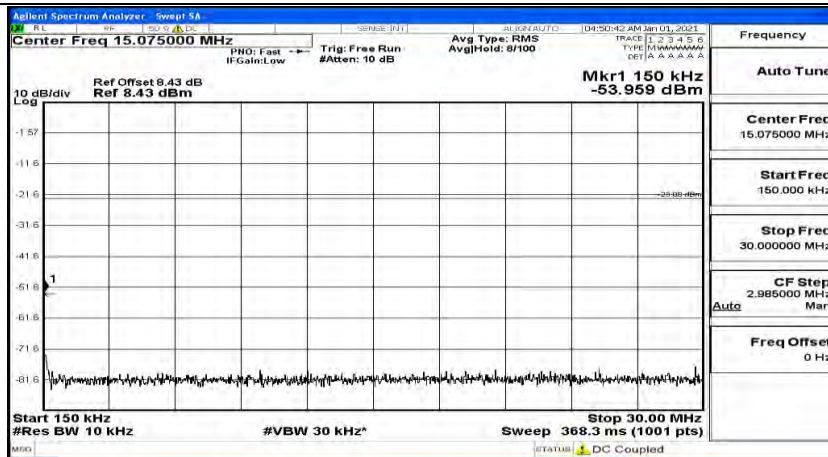
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



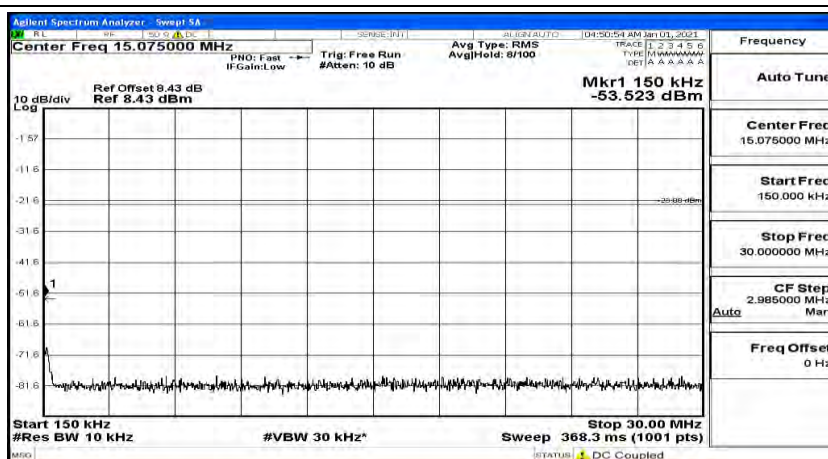
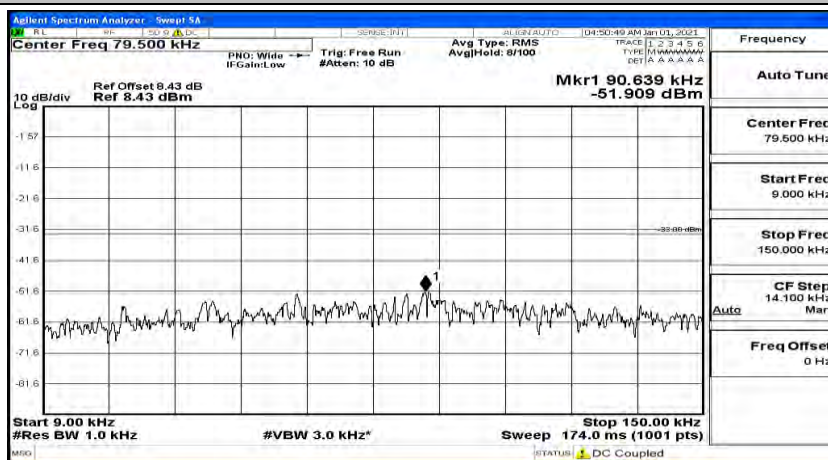


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



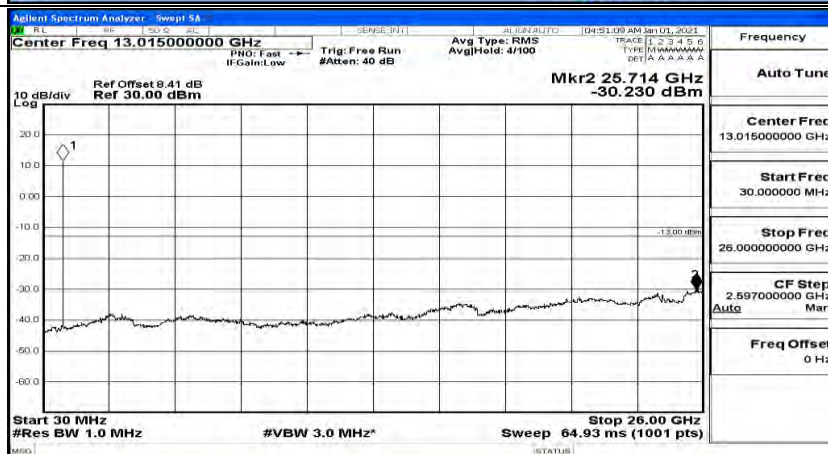
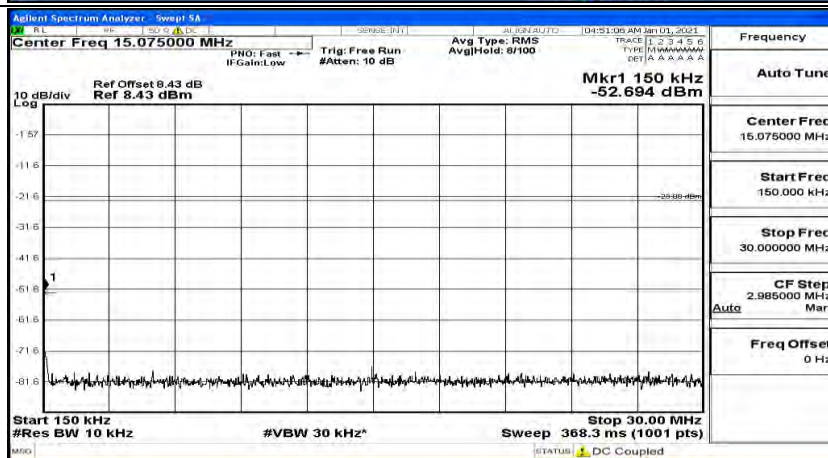
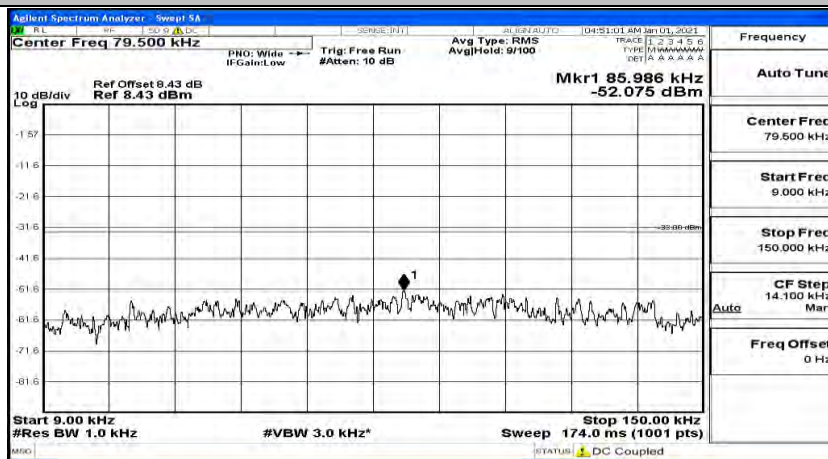


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

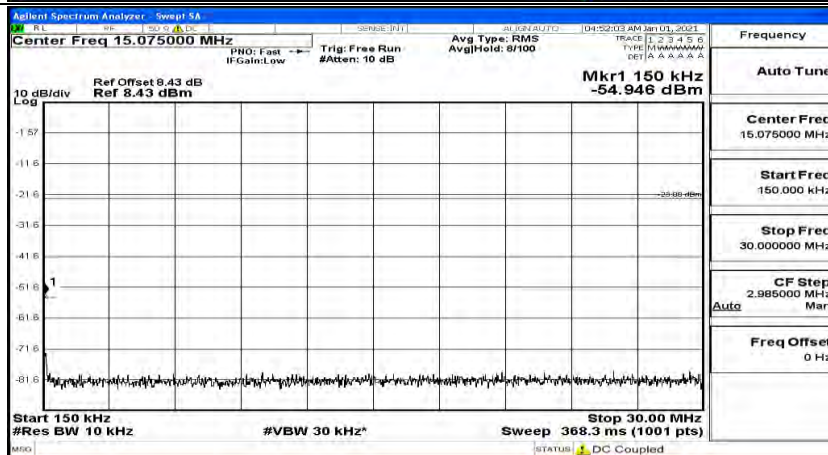
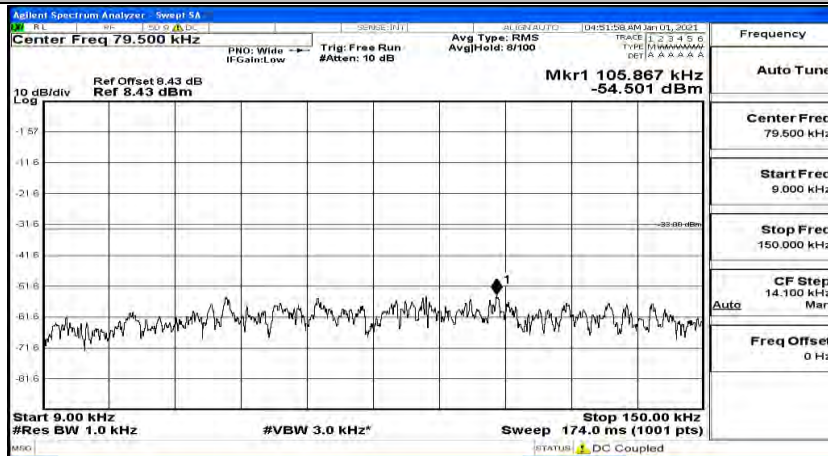




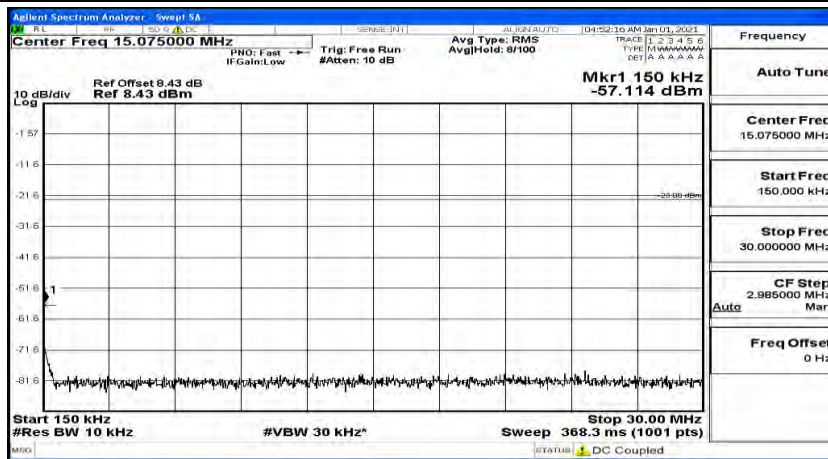
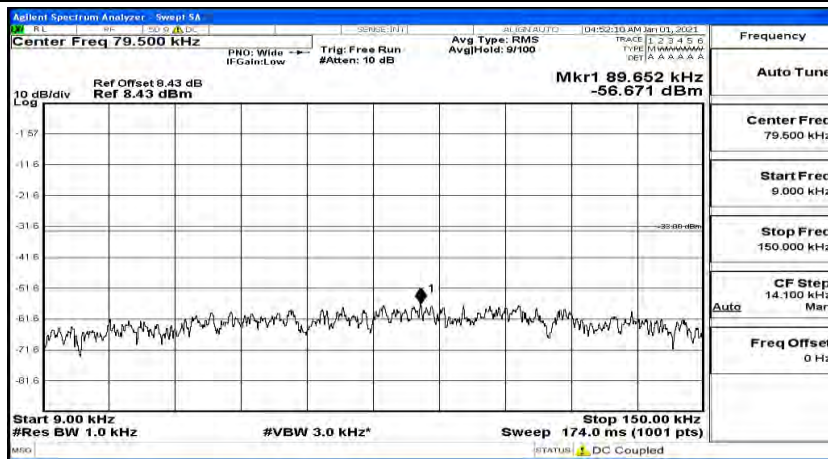
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



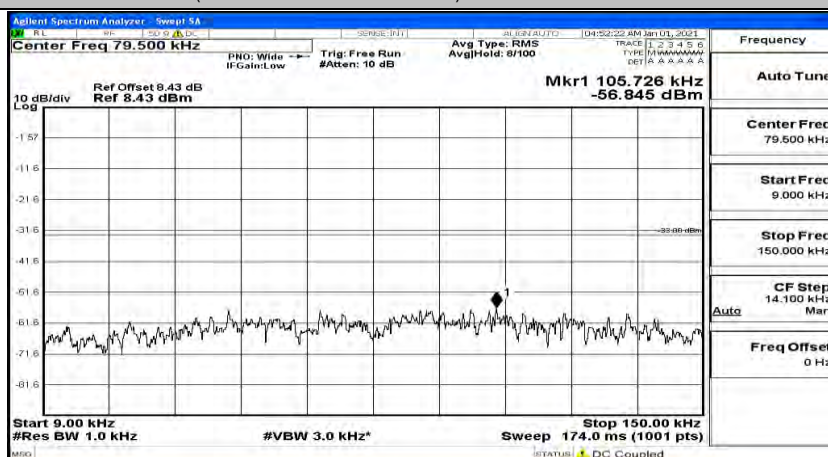
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

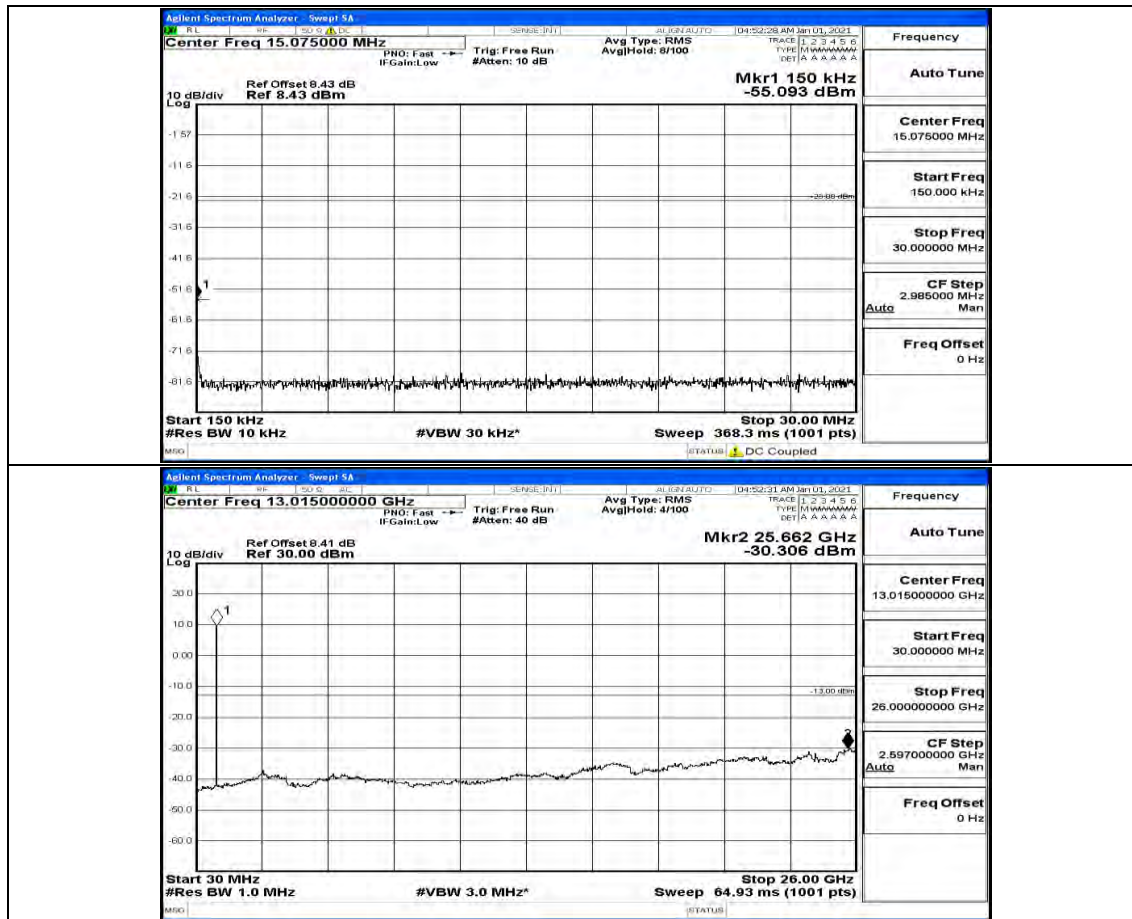


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

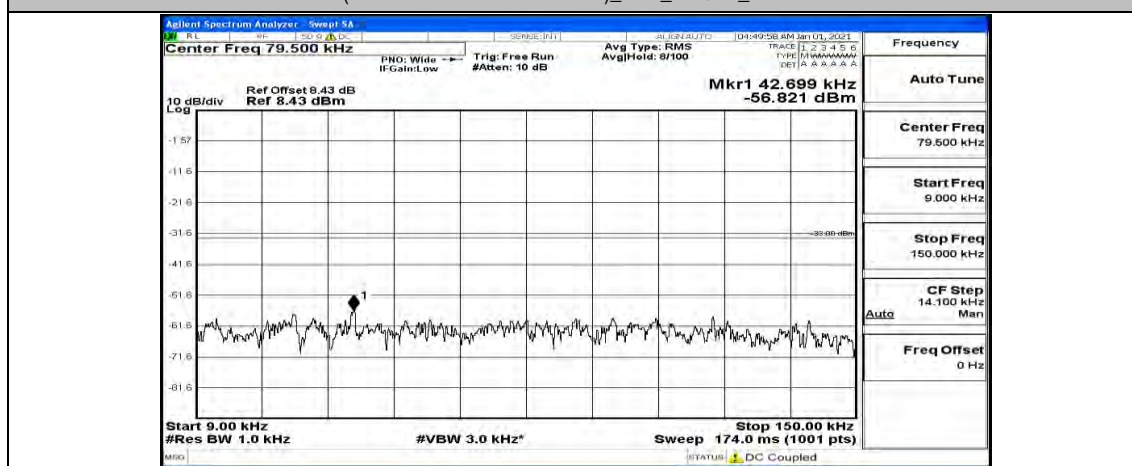


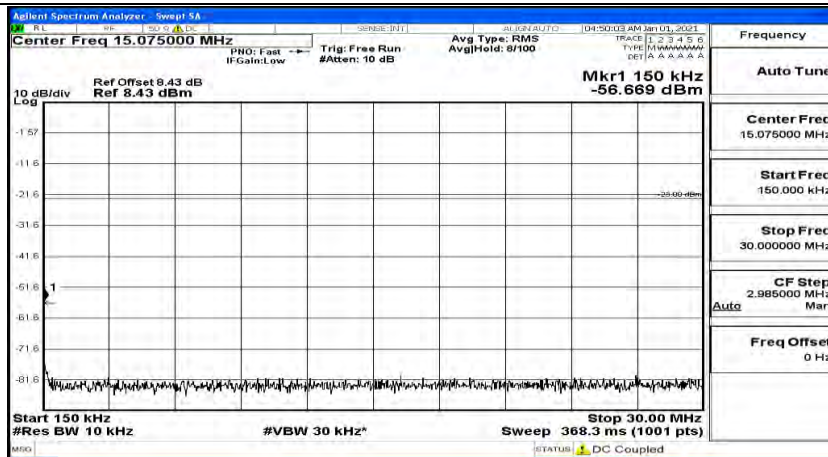
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



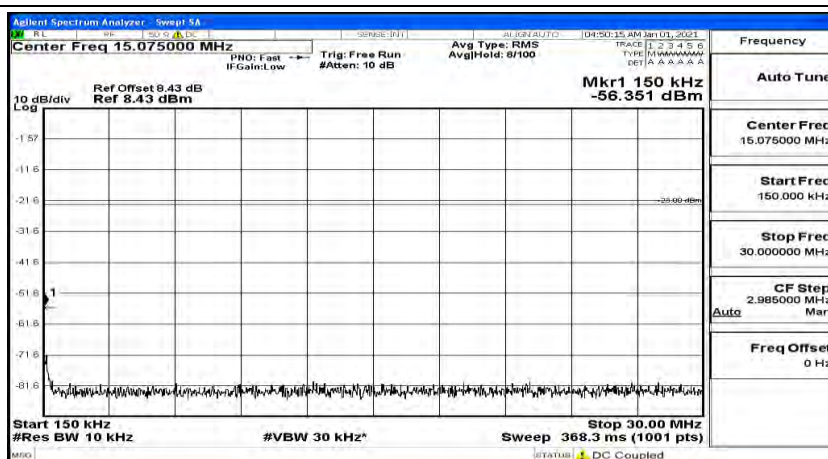
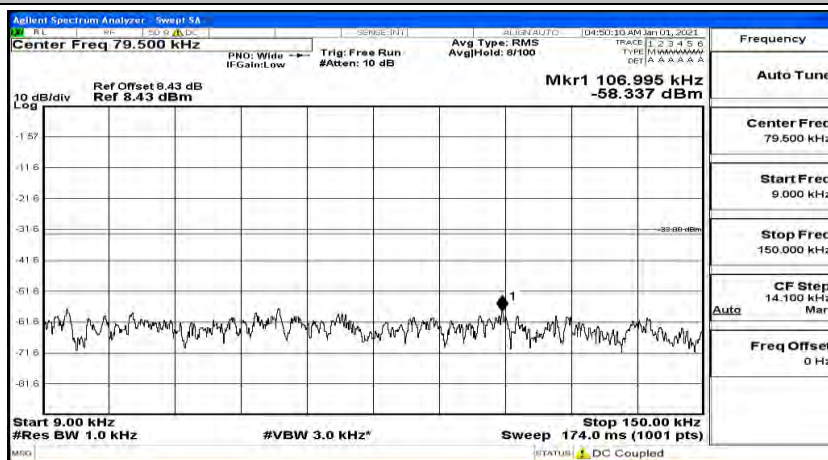


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



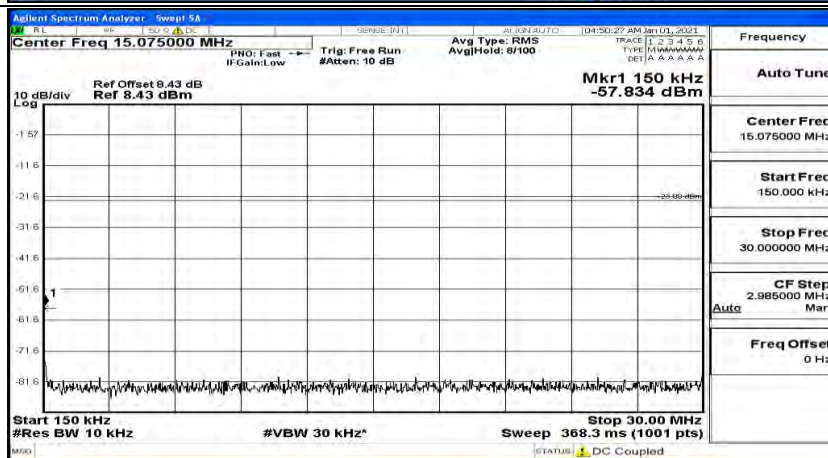
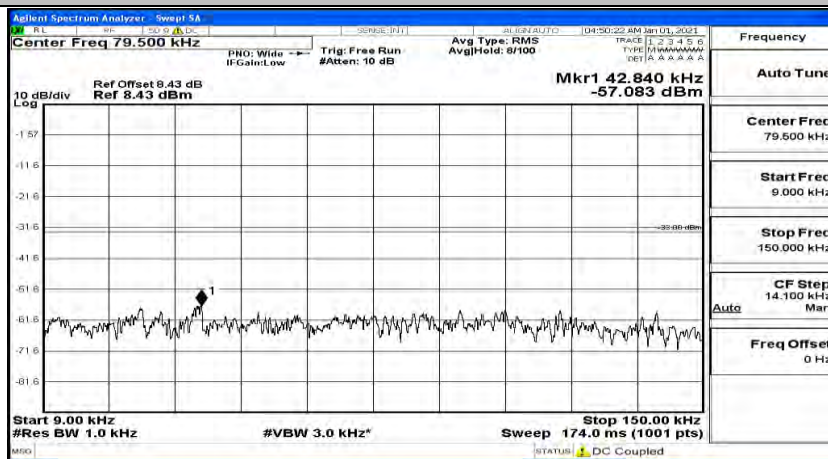


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

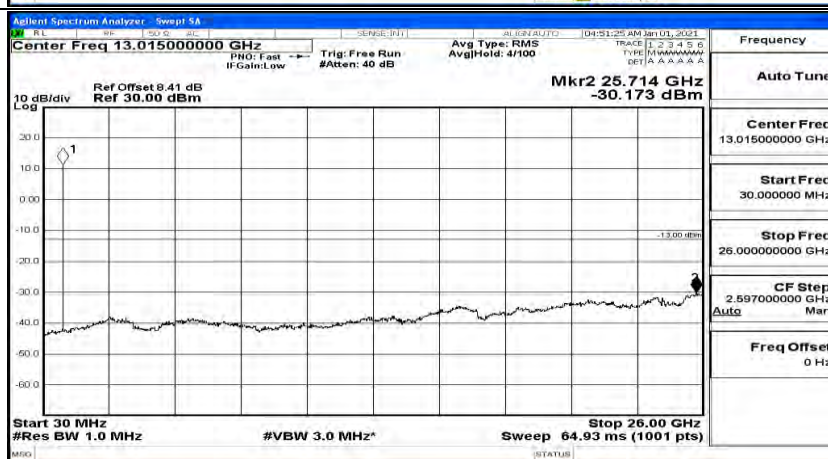
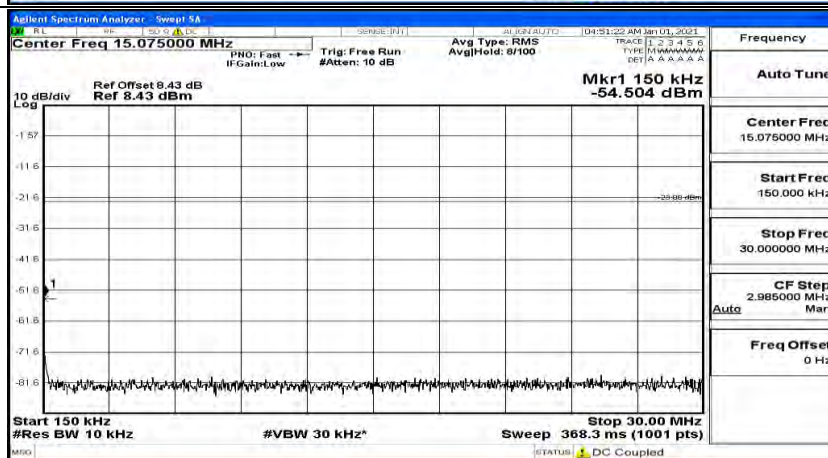
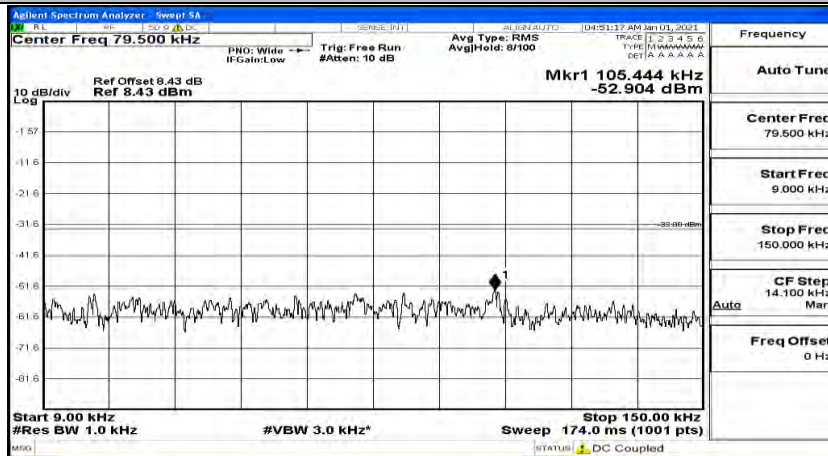




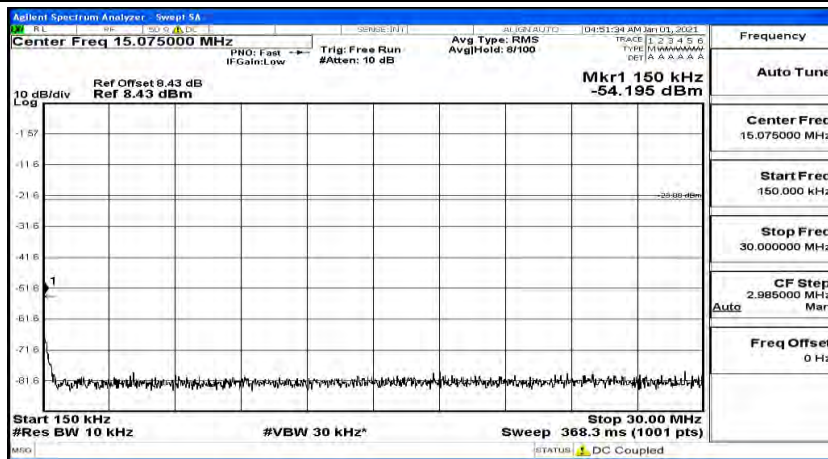
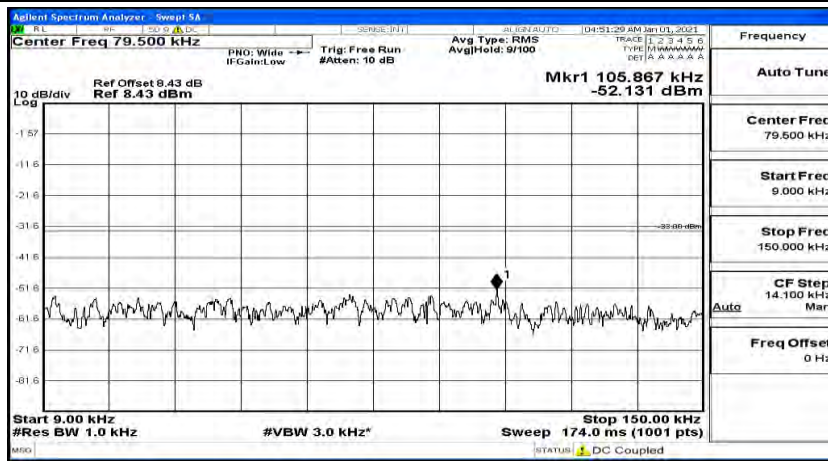
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



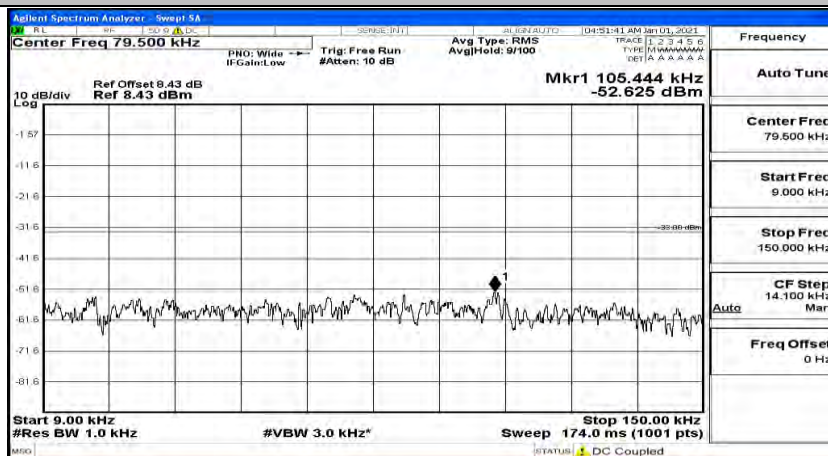
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

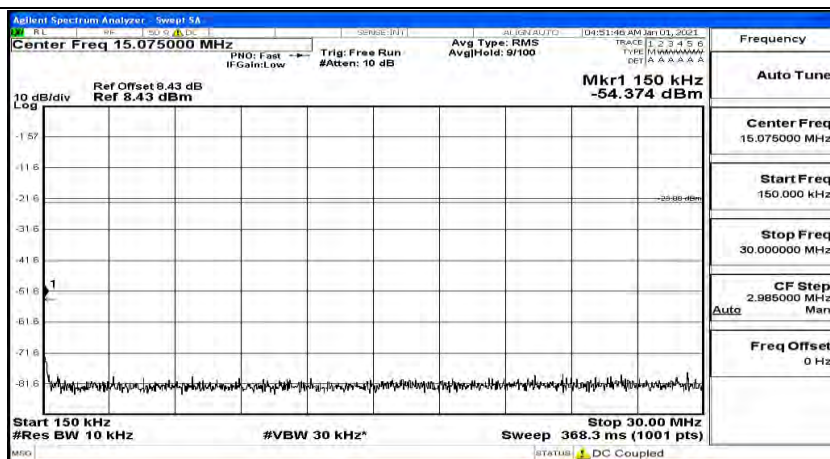


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

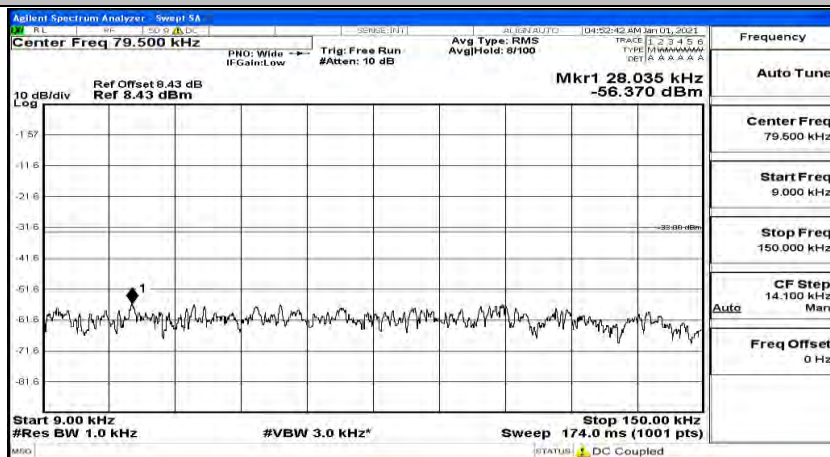


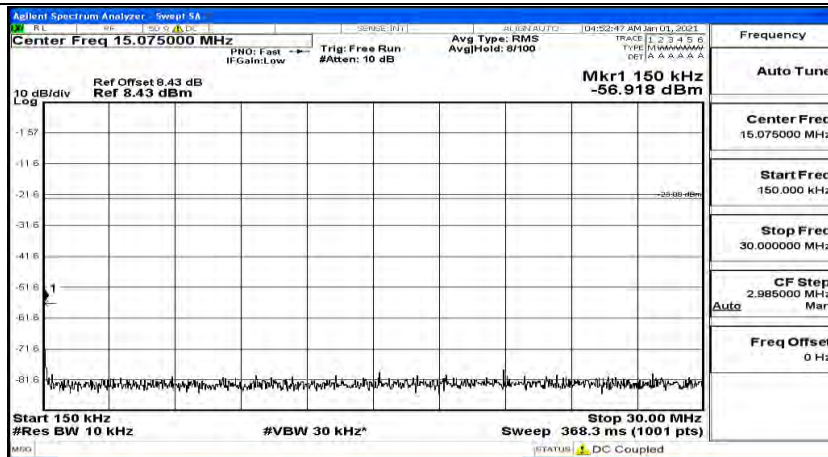
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



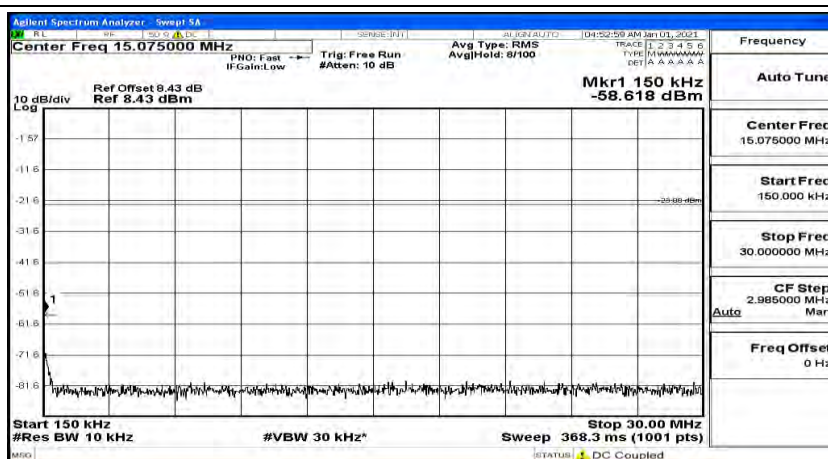
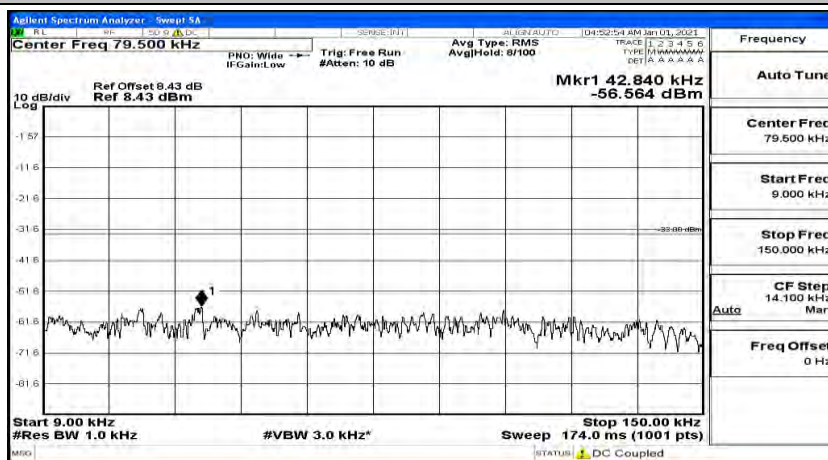


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



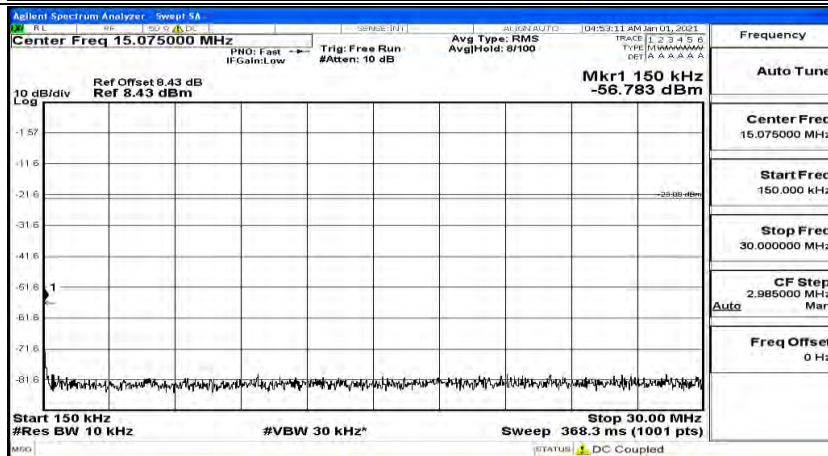
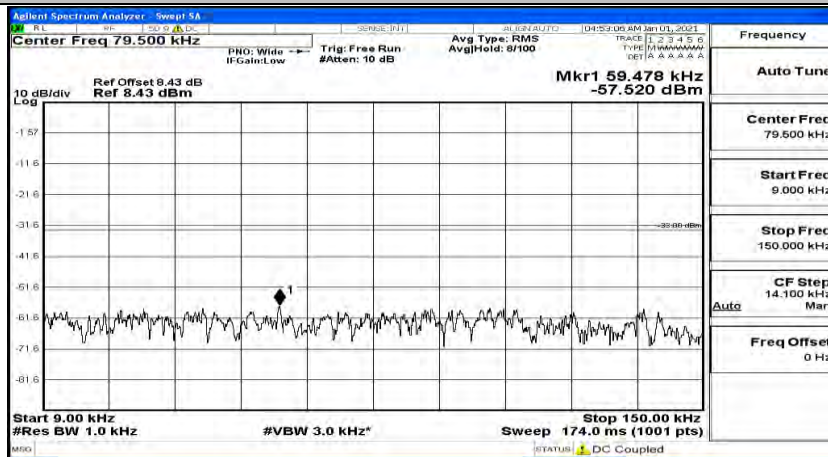


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



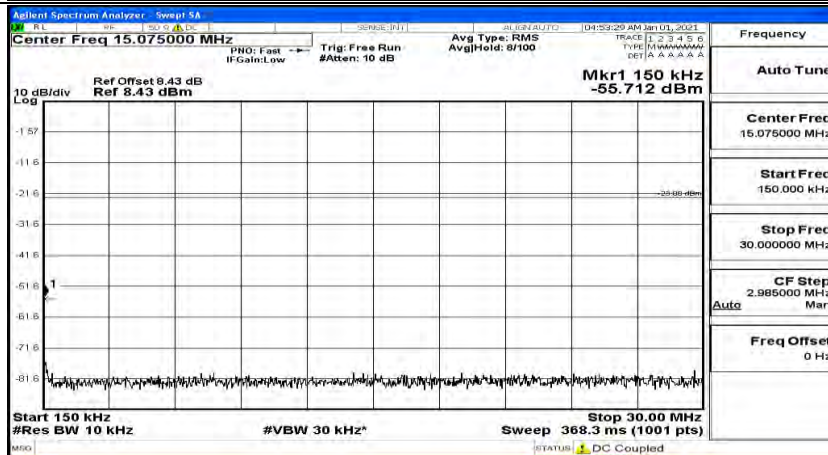
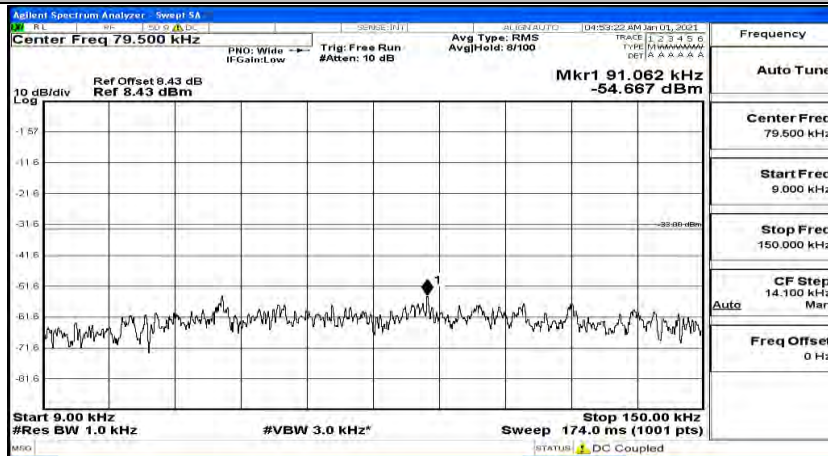


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

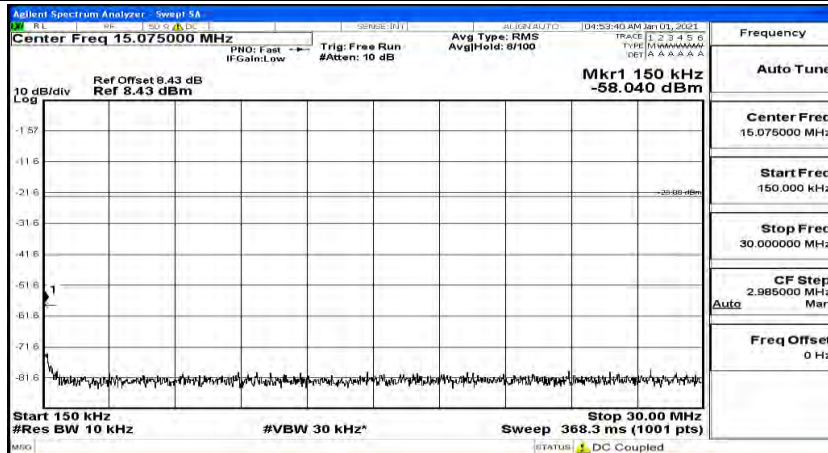
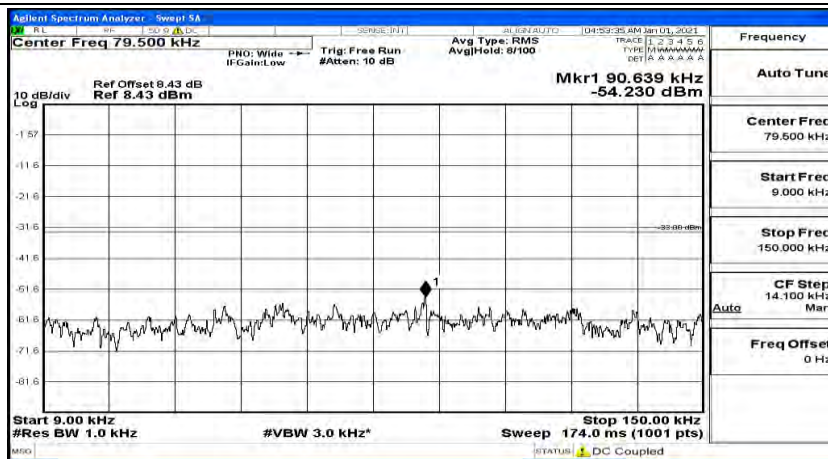


Channel Bandwidth: 3 MHz

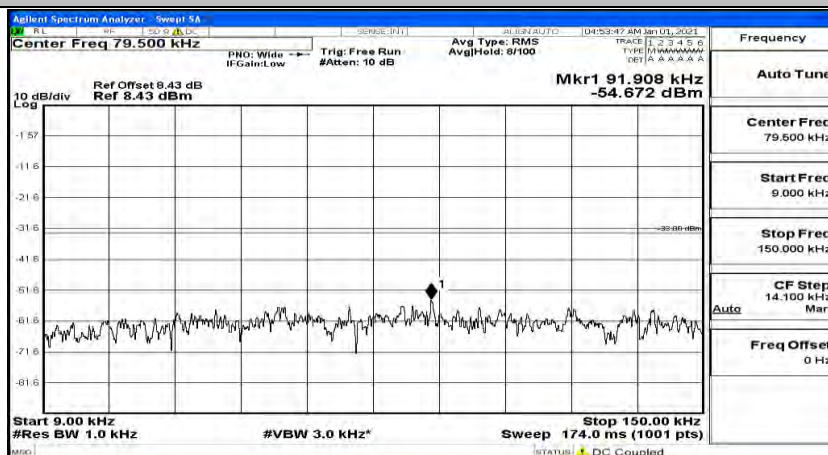
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0

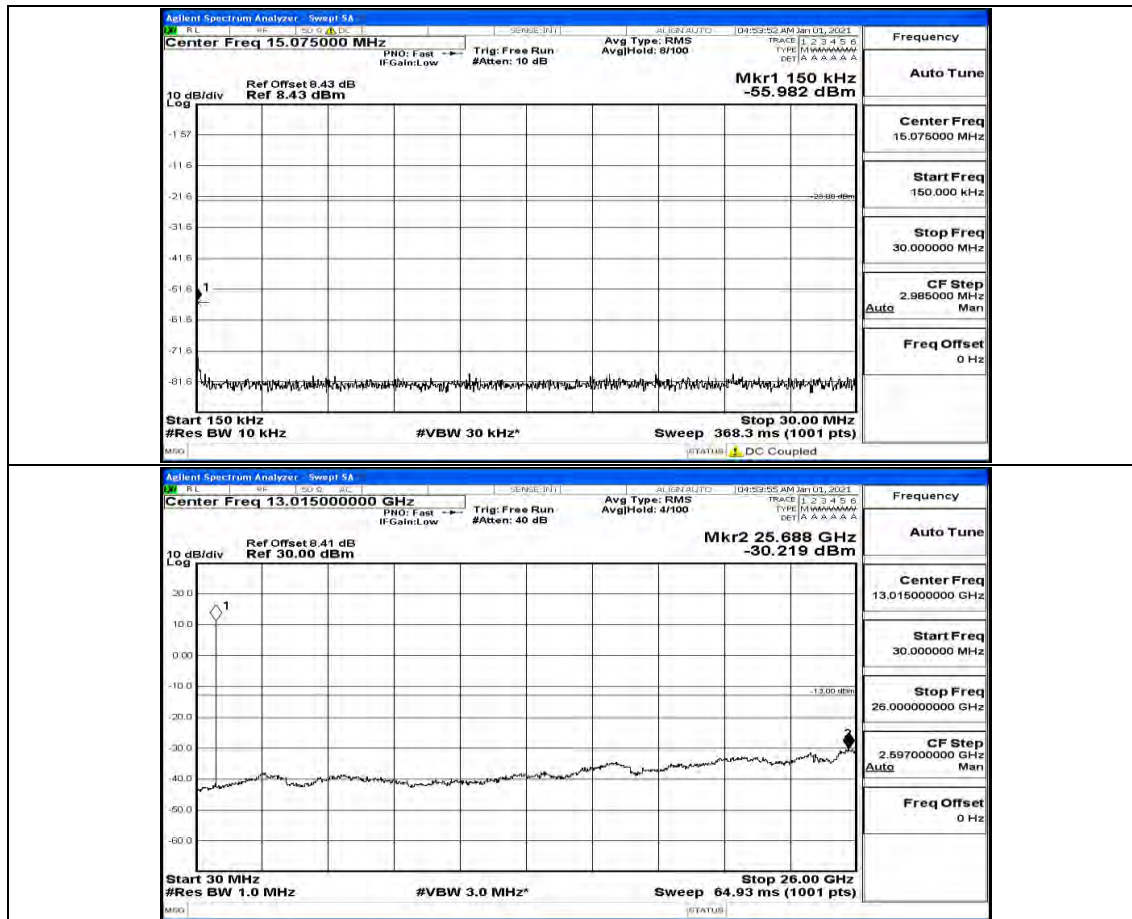


(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

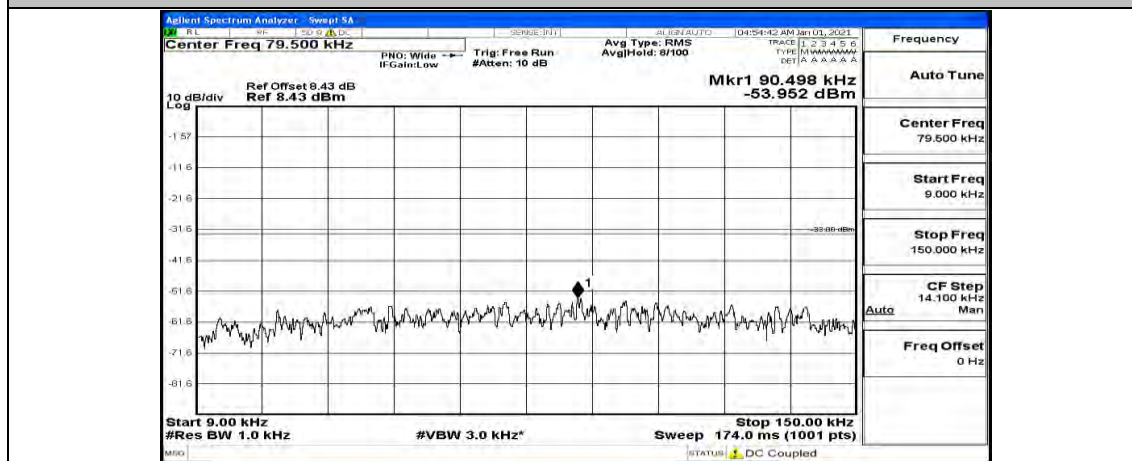


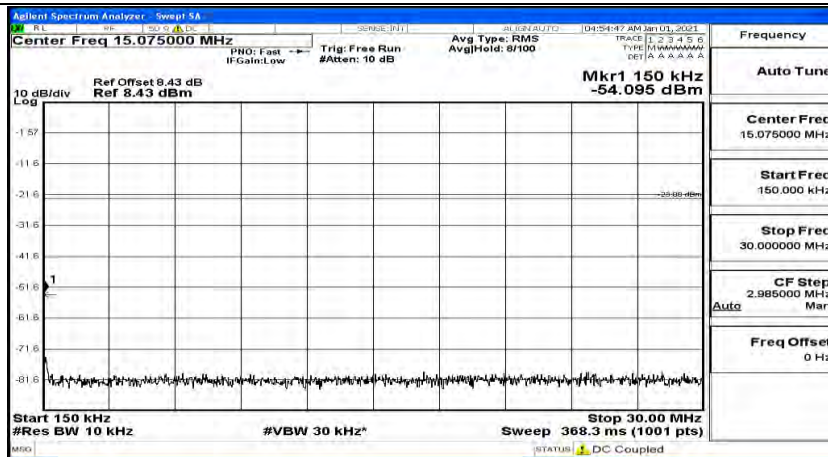
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14



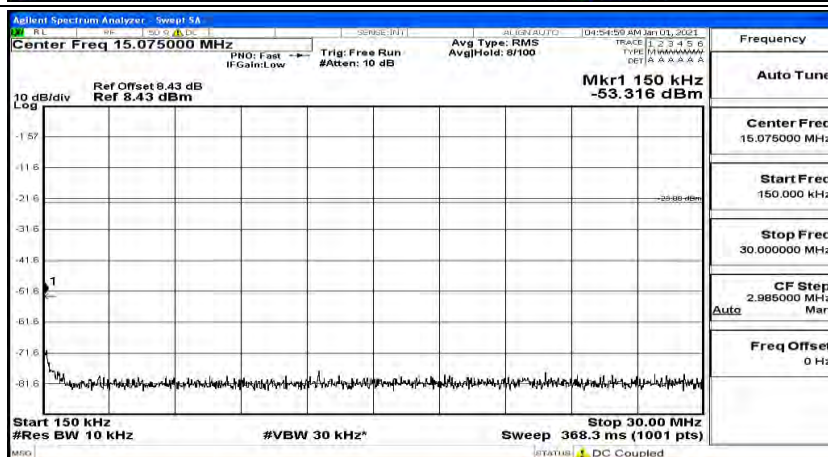
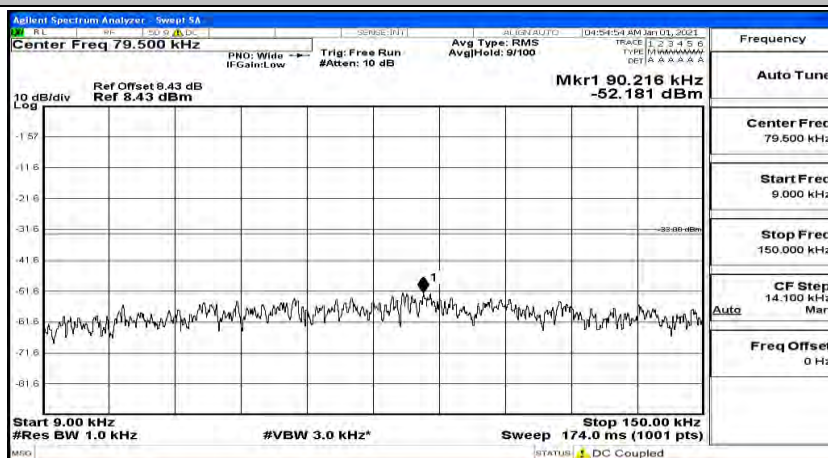


(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



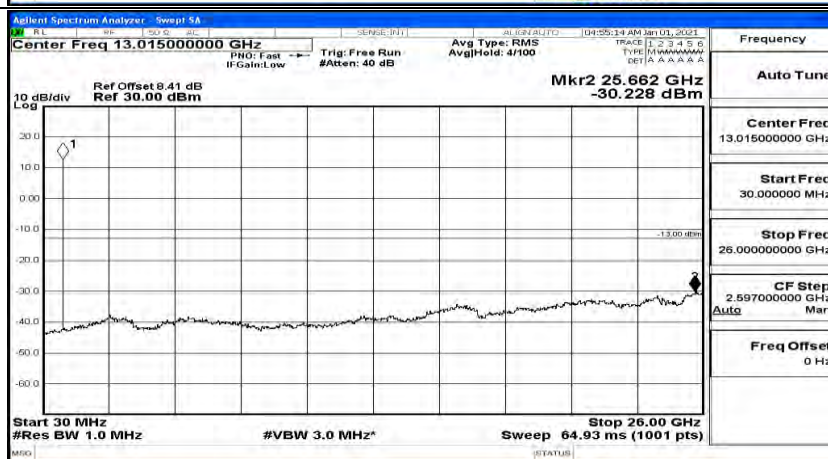
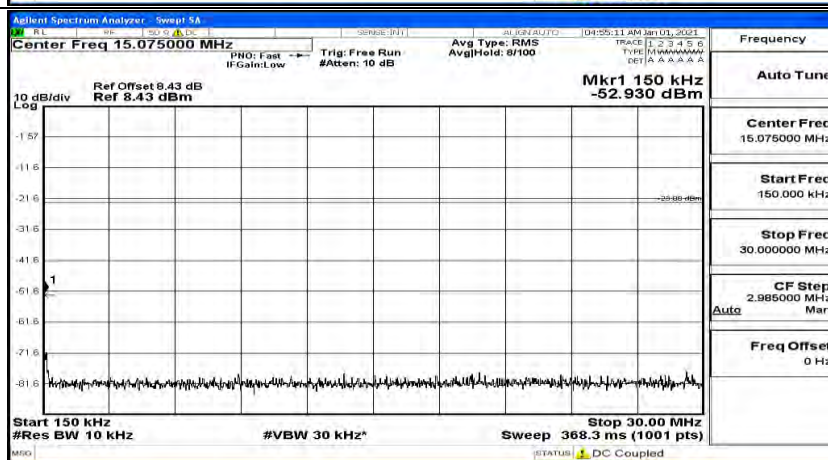
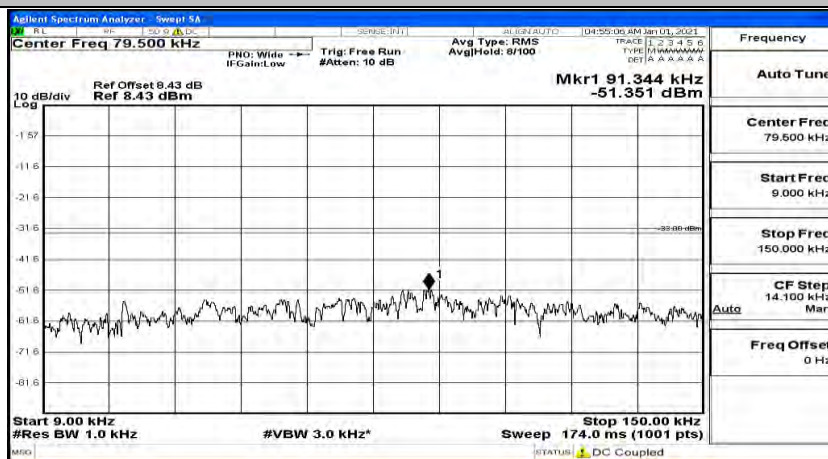


(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7

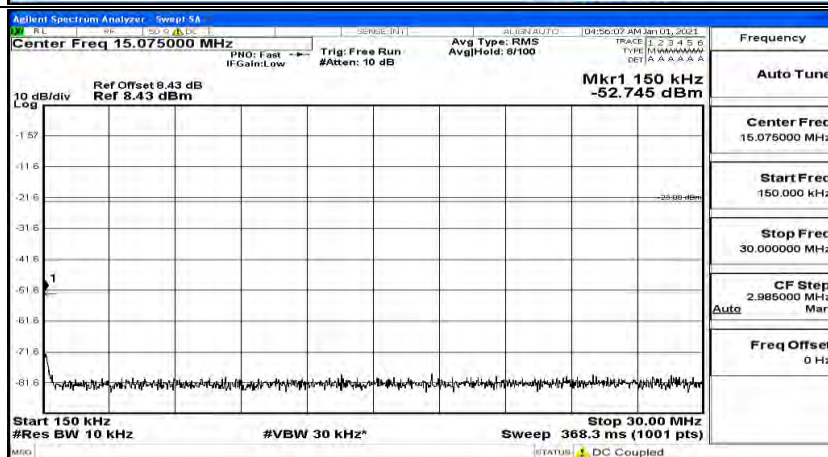
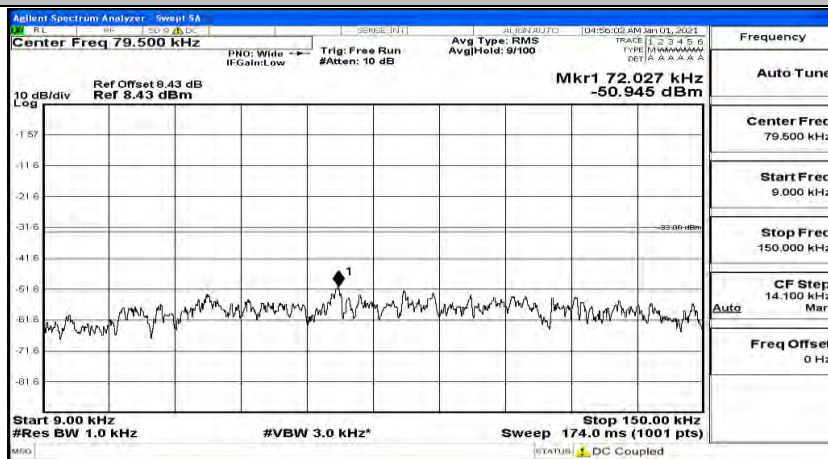




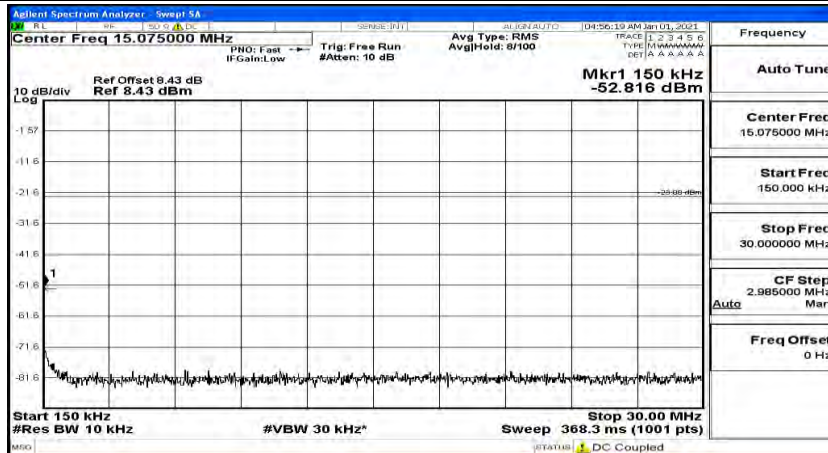
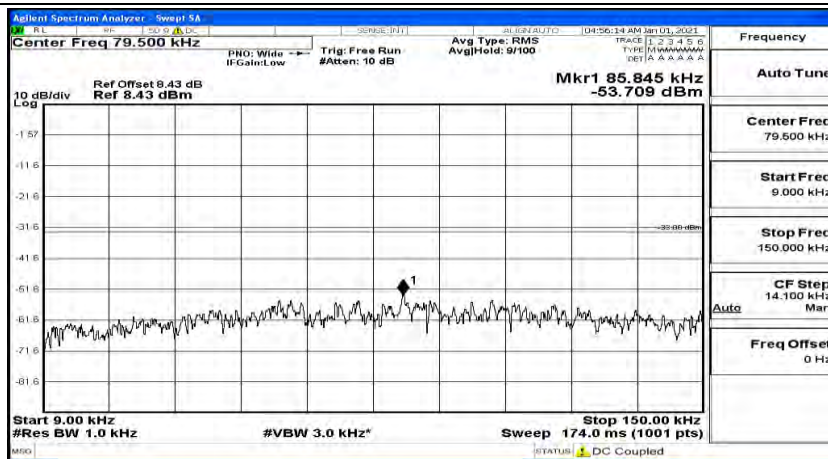
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14

