

Appendix D: Test Data for E-UTRA Band 5

Product Name: Vehicle intelligent terminal

Trade Mark: TENSORTEC

Test Model: MV03

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	LI HUAN

D.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	22.18	21.12	PASS
		1	3	22.27	21.25	PASS
		1	5	22.49	20.91	PASS
		3	0	22.06	21.25	PASS
		3	2	22.15	21.32	PASS
		3	3	22.10	21.28	PASS
		6	0	22.06	21.99	PASS
	MCH	1	0	23.12	22.61	PASS
		1	3	23.14	22.48	PASS
		1	5	23.23	22.37	PASS
		3	0	23.21	22.44	PASS
		3	2	23.26	22.45	PASS
		3	3	23.22	22.41	PASS
		6	0	22.16	21.03	PASS
	HCH	1	0	22.68	21.87	PASS
		1	3	22.89	21.89	PASS
		1	5	22.77	21.56	PASS
		3	0	22.69	21.85	PASS
		3	2	22.59	21.84	PASS
		3	3	22.46	21.71	PASS
		6	0	21.54	20.62	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)

Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	21.98	21.21	PASS
		1	7	22.07	21.35	PASS
		1	14	22.40	21.92	PASS
		8	0	21.08	20.14	PASS
		8	4	21.26	20.40	PASS
		8	7	21.33	20.27	PASS
		15	0	21.19	20.10	PASS
	MCH	1	0	22.93	22.36	PASS
		1	7	23.09	22.46	PASS
		1	14	23.55	22.81	PASS
		8	0	22.17	21.18	PASS
		8	4	22.07	21.16	PASS
		8	7	22.10	21.10	PASS
		15	0	22.08	21.17	PASS
	HCH	1	0	22.96	22.03	PASS
		1	7	22.51	21.96	PASS
		1	14	22.36	21.73	PASS
		8	0	21.96	20.68	PASS
		8	4	21.67	20.59	PASS
		8	7	21.56	20.33	PASS
		15	0	21.73	20.78	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	22.18	20.31	PASS
		1	12	22.48	20.53	PASS
		1	24	22.43	20.99	PASS
		12	0	21.12	20.05	PASS
		12	6	21.21	20.05	PASS
		12	13	21.20	20.33	PASS
		25	0	21.31	20.38	PASS
	MCH	1	0	23.20	22.00	PASS
		1	12	23.31	21.76	PASS
		1	24	23.45	22.05	PASS
		12	0	21.97	20.92	PASS
		12	6	22.02	21.06	PASS
		12	13	22.19	21.28	PASS
		25	0	22.19	21.27	PASS
	HCH	1	0	23.20	21.73	PASS
		1	12	23.21	21.40	PASS
		1	24	22.43	20.87	PASS
		12	0	22.09	20.72	PASS
		12	6	21.59	20.66	PASS
		12	13	21.71	20.61	PASS
		25	0	21.71	20.80	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	22.25	21.90	PASS
		1	24	22.43	22.43	PASS
		1	49	22.85	22.20	PASS
		25	0	21.42	20.47	PASS
		25	12	21.50	20.39	PASS
		25	25	21.83	20.88	PASS
		50	0	21.54	20.62	PASS
	MCH	1	0	22.76	22.22	PASS
		1	24	23.05	22.62	PASS
		1	49	23.45	22.59	PASS
		25	0	22.05	21.14	PASS
		25	12	22.10	20.97	PASS
		25	25	22.28	21.36	PASS
		50	0	22.16	21.06	PASS
	HCH	1	0	23.13	22.09	PASS
		1	24	23.51	22.00	PASS
		1	49	22.42	21.38	PASS
		25	0	22.38	21.42	PASS
		25	12	22.12	21.17	PASS
		25	25	21.85	20.91	PASS
		50	0	22.03	21.21	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	4.99	<13	PASS
	MCH	4.33	<13	PASS
	HCH	3.9	<13	PASS
16QAM	LCH	5.85	<13	PASS
	MCH	5.22	<13	PASS
	HCH	4.68	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.08	<13	PASS
	MCH	4.57	<13	PASS
	HCH	4.35	<13	PASS
16QAM	LCH	5.96	<13	PASS
	MCH	5.32	<13	PASS
	HCH	5.20	<13	PASS

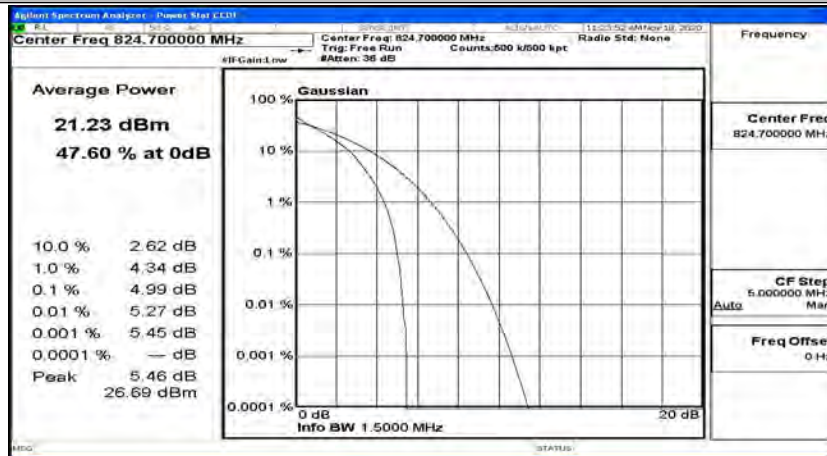
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.09	<13	PASS
	MCH	4.45	<13	PASS
	HCH	4.56	<13	PASS
16QAM	LCH	5.77	<13	PASS
	MCH	5.25	<13	PASS
	HCH	5.41	<13	PASS

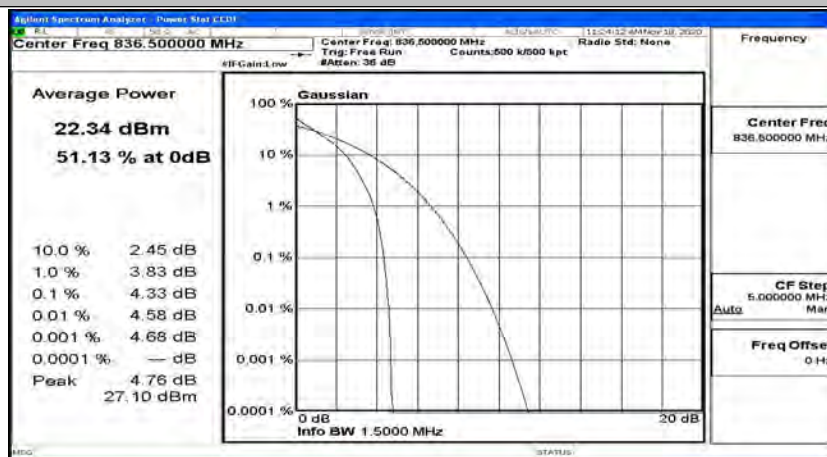
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.85	<13	PASS
	MCH	4.59	<13	PASS
	HCH	4.82	<13	PASS
16QAM	LCH	5.68	<13	PASS
	MCH	5.40	<13	PASS
	HCH	5.60	<13	PASS

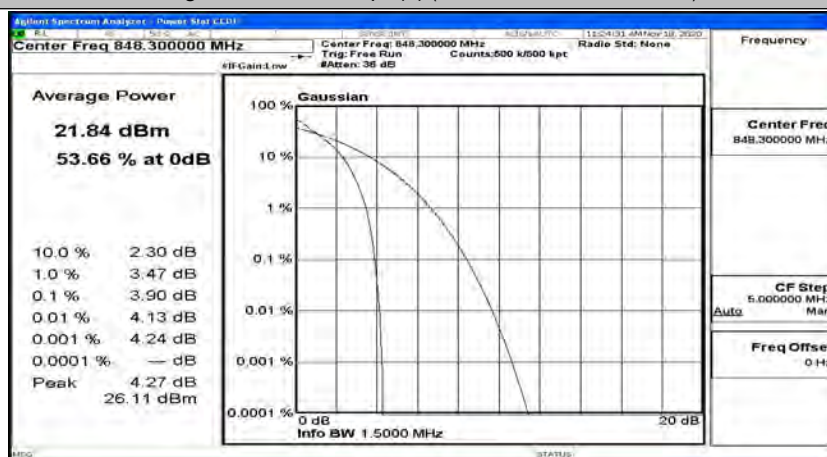
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



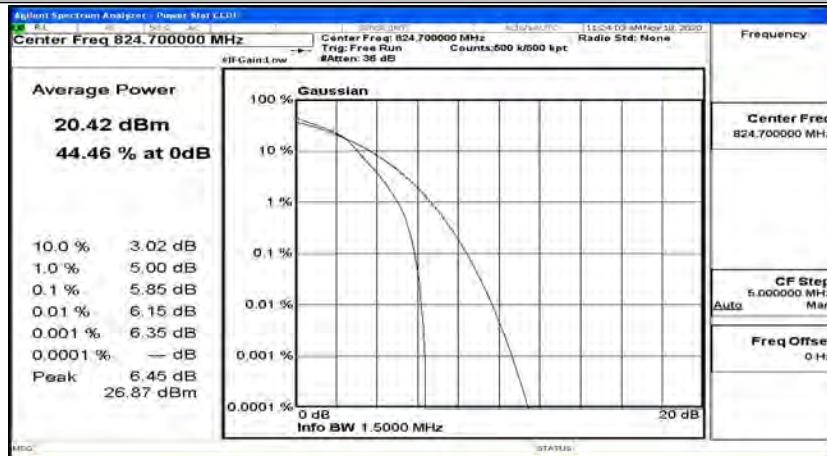
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



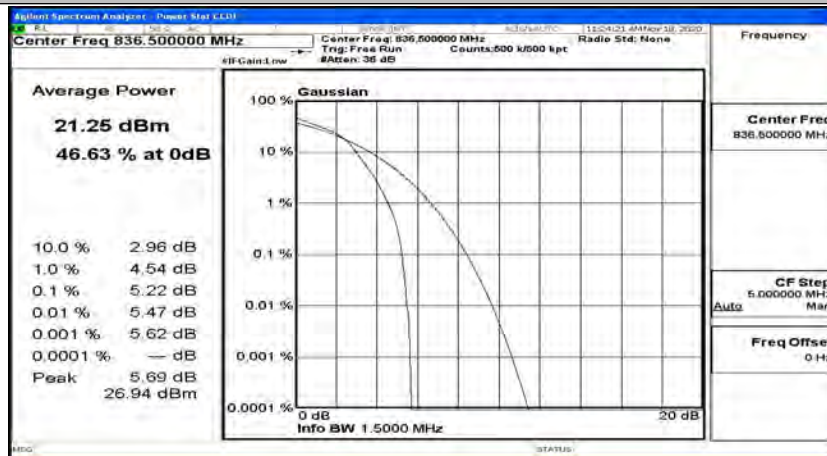
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



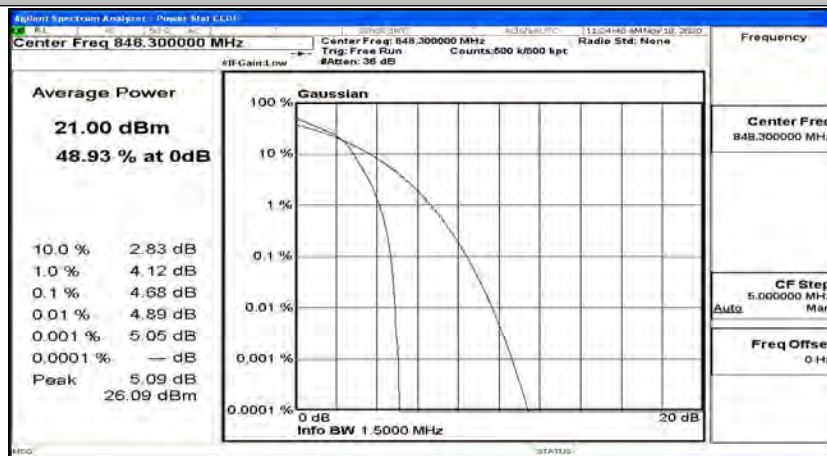
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



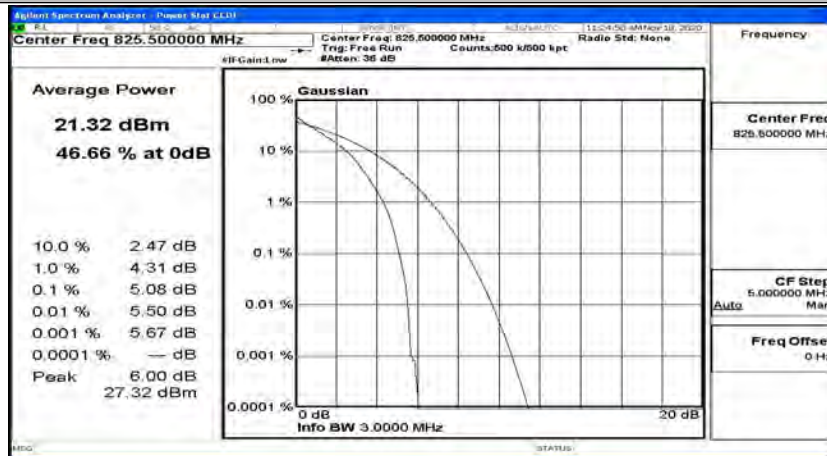
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



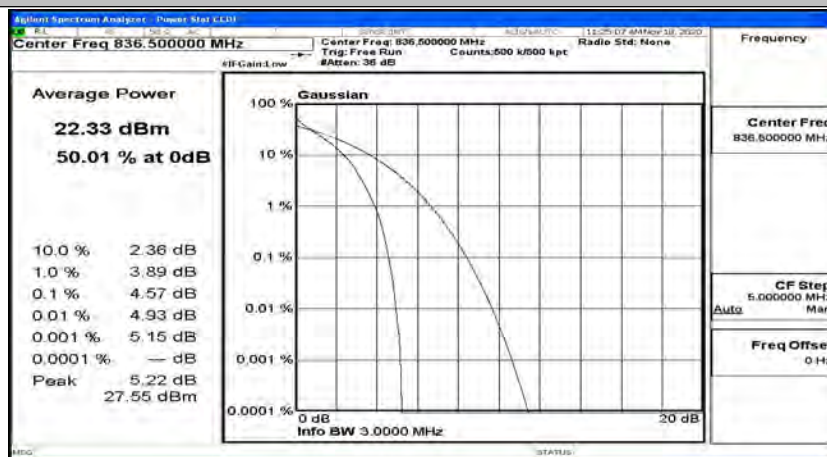
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



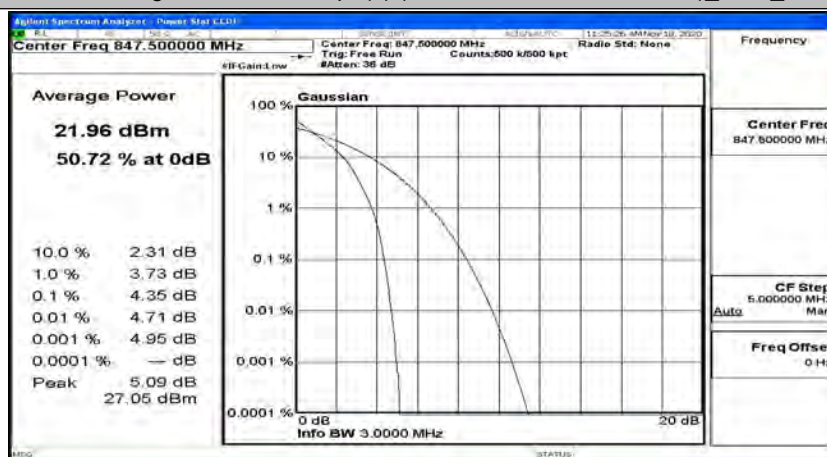
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



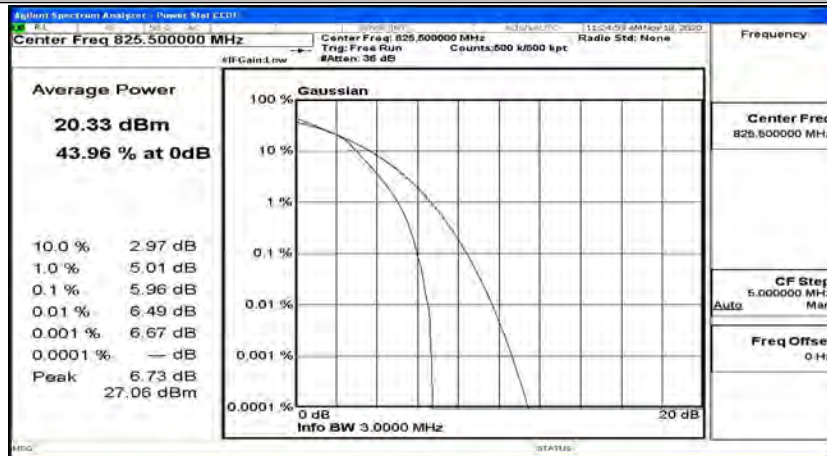
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



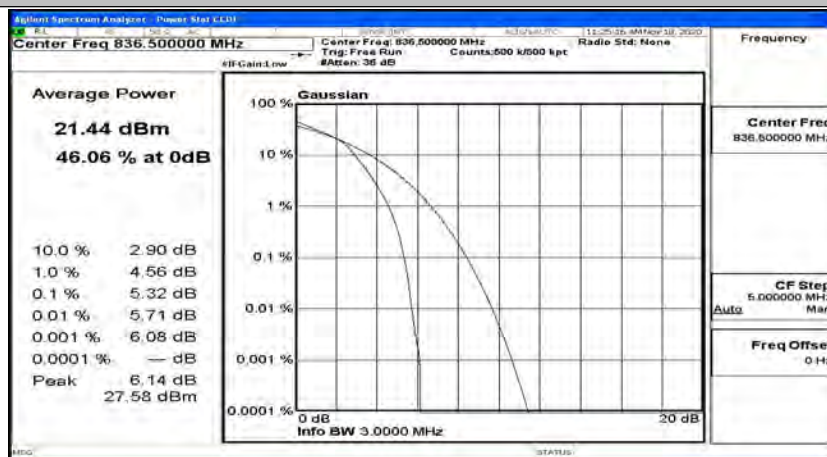
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



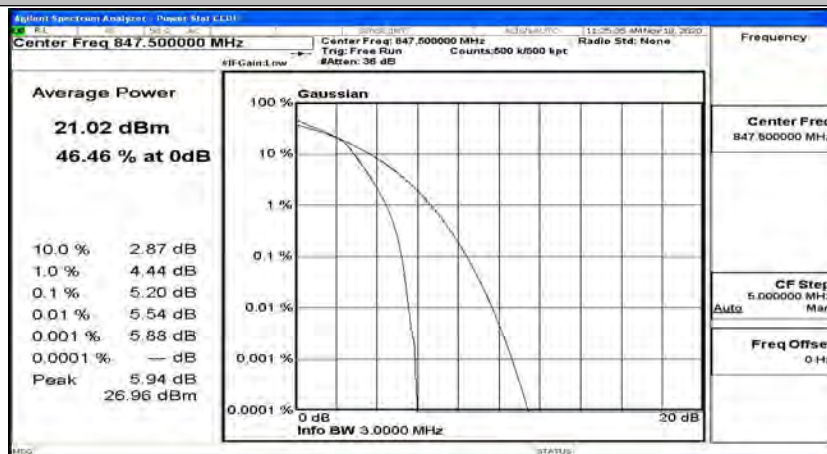
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



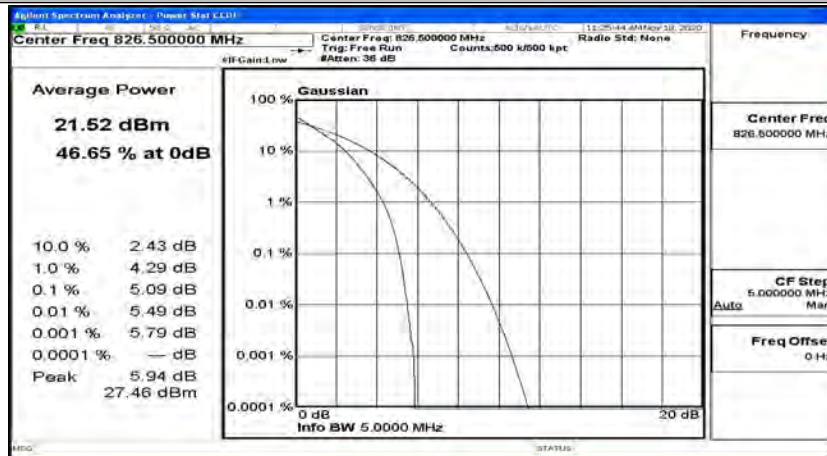
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



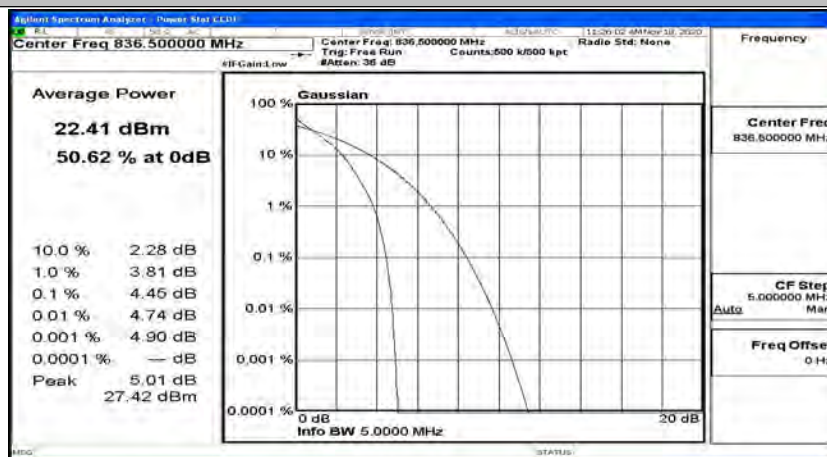
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



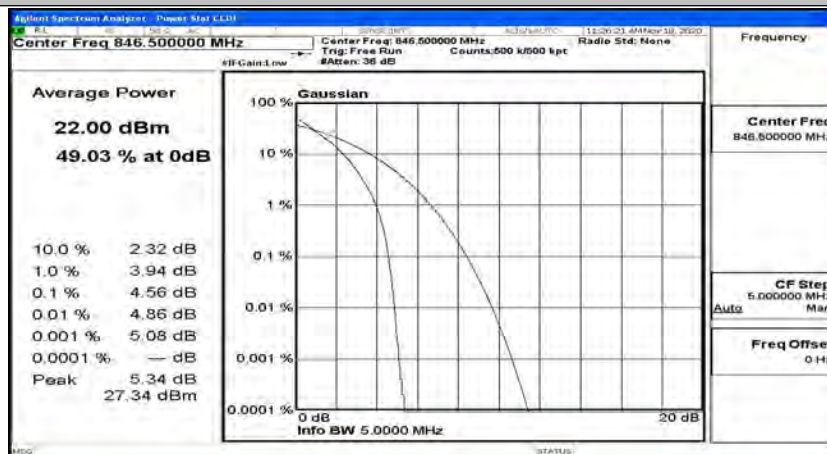
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



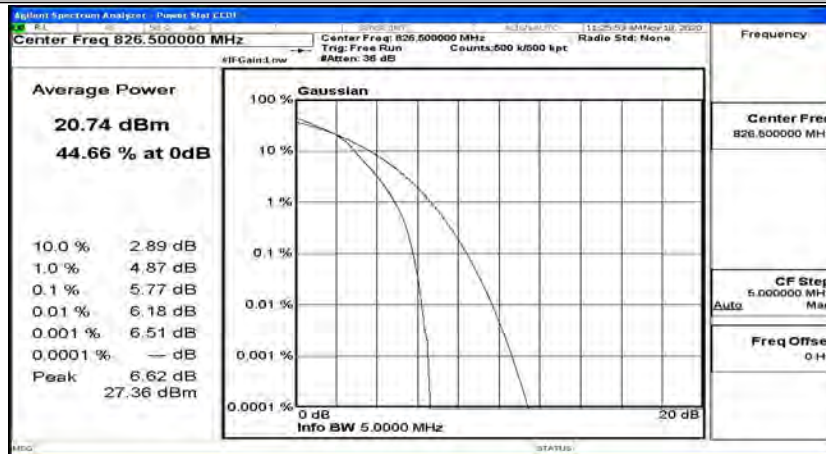
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



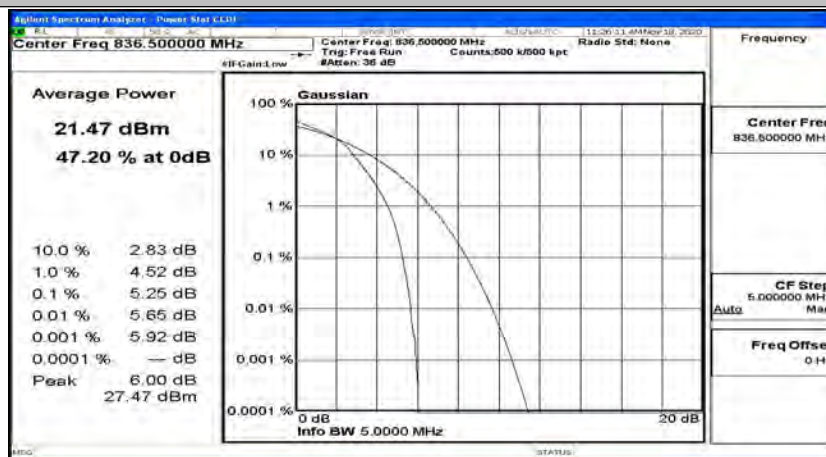
Peak-to-Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



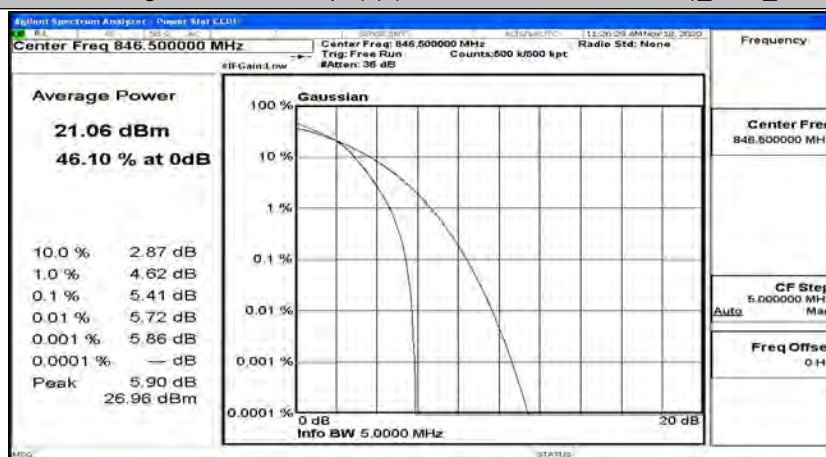
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



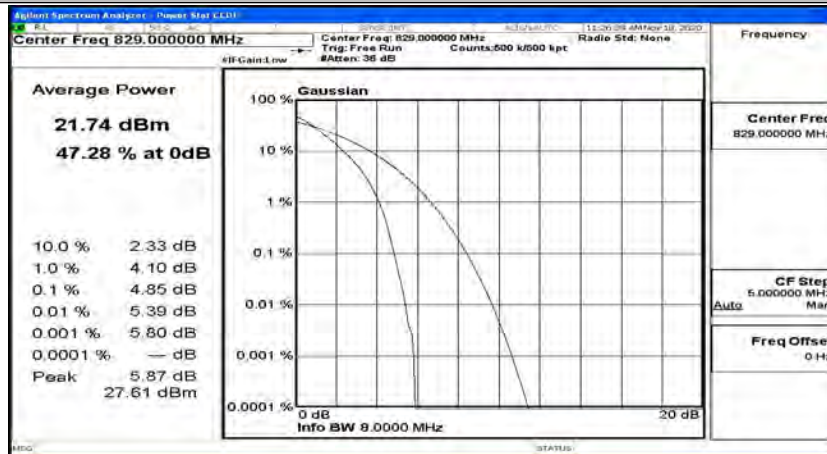
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



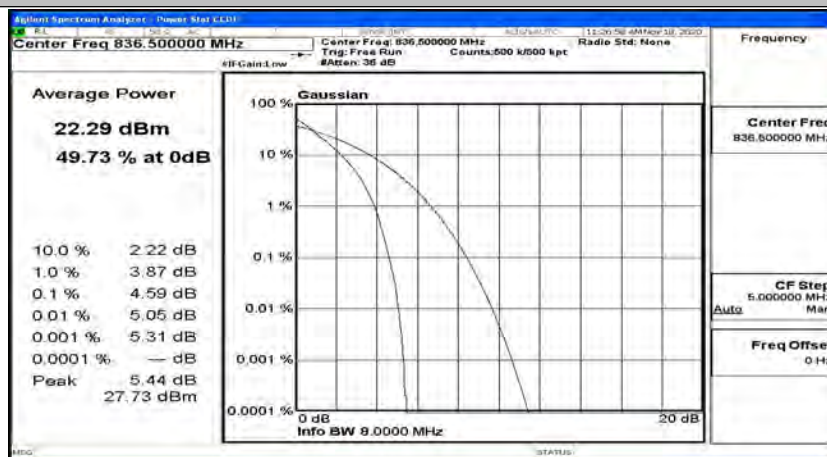
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



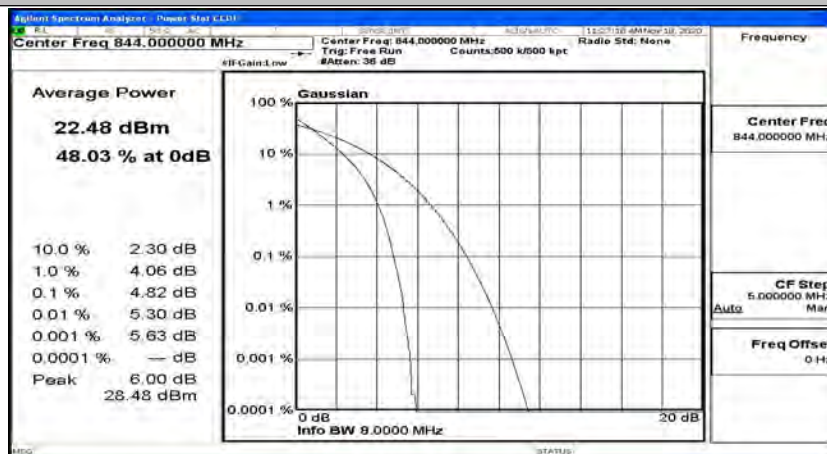
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



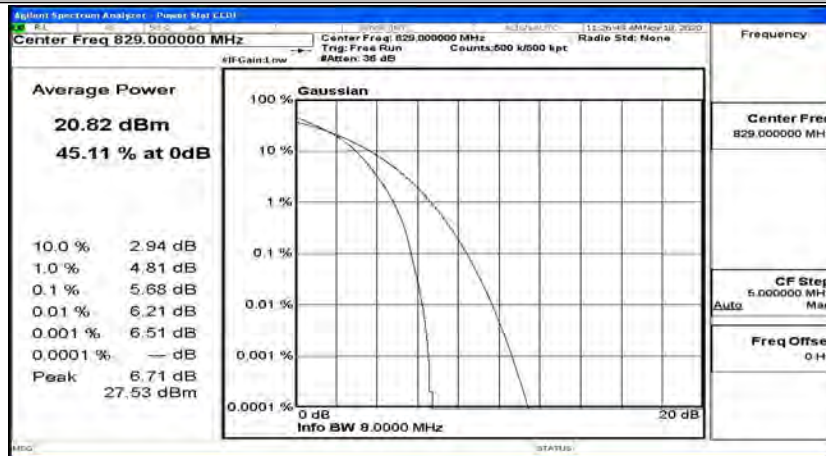
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



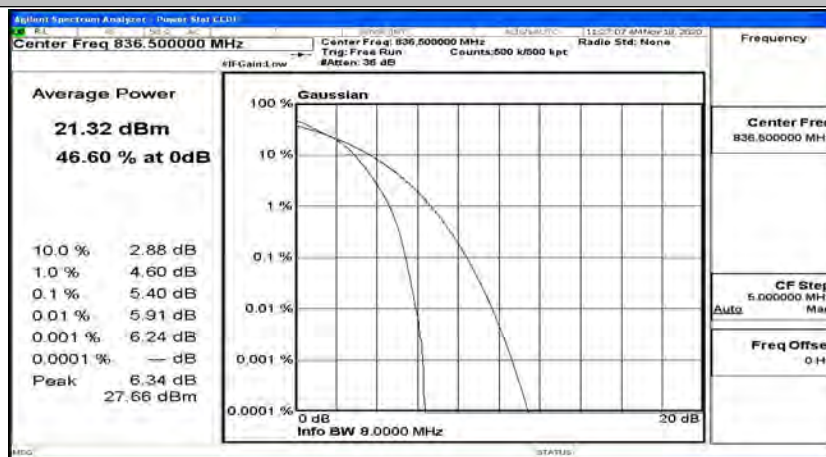
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



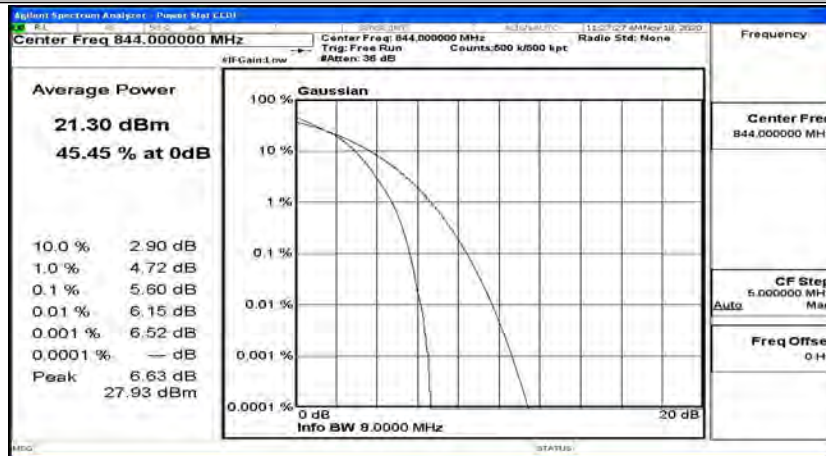
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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	1.0787	1.229	PASS
	MCH	1.0765	1.250	PASS
	HCH	1.0794	1.262	PASS
16QAM	LCH	1.0825	1.237	PASS
	MCH	1.0783	1.239	PASS
	HCH	1.0793	1.242	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)

Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6852	2.884	PASS
	MCH	2.6880	2.931	PASS
	HCH	2.6791	2.902	PASS
16QAM	LCH	2.6822	2.916	PASS
	MCH	2.6861	2.906	PASS
	HCH	2.6847	2.883	PASS

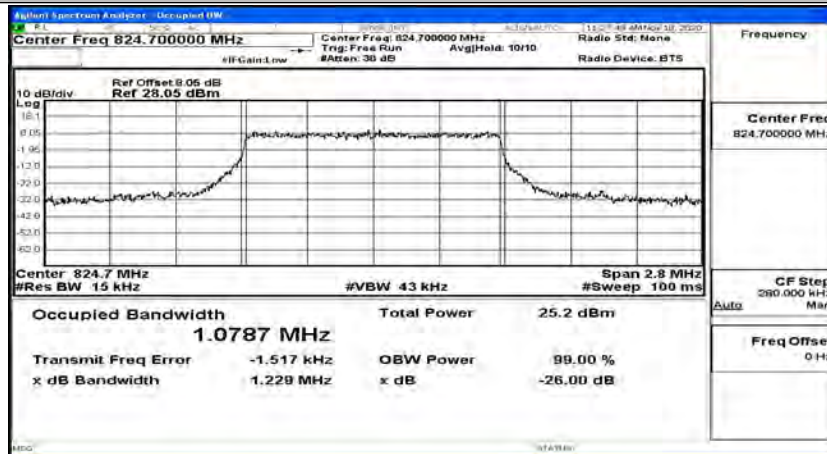
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)

Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4723	4.869	PASS
	MCH	4.4676	4.808	PASS
	HCH	4.4740	4.795	PASS
16QAM	LCH	4.4800	4.827	PASS
	MCH	4.4736	4.777	PASS

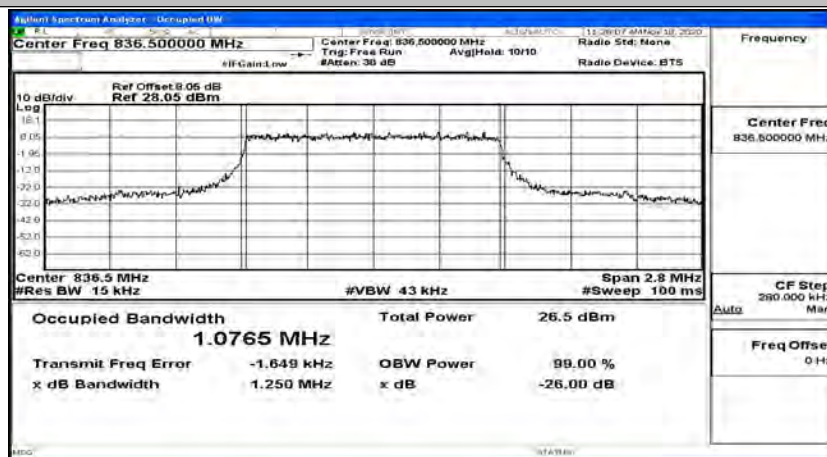
	HCH	4.4657	4.782	PASS
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EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9198	9.466	PASS
	MCH	8.9098	9.417	PASS
	HCH	8.9488	9.519	PASS
16QAM	LCH	8.9152	9.344	PASS
	MCH	8.9085	9.461	PASS
	HCH	8.9333	9.444	PASS

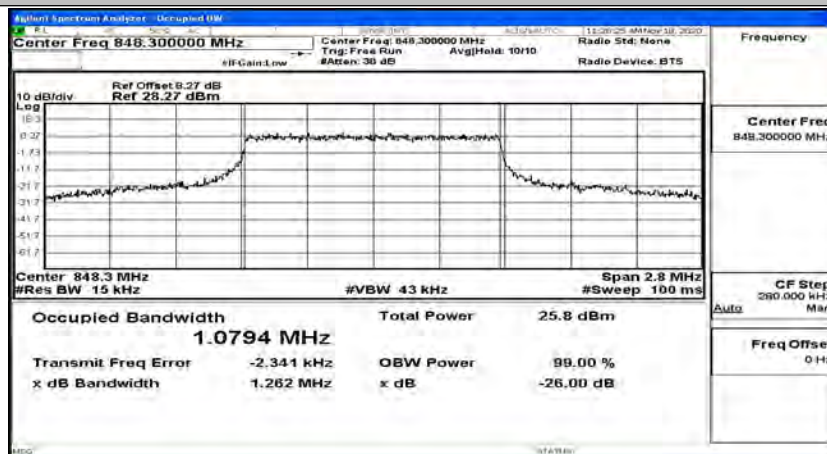
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



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



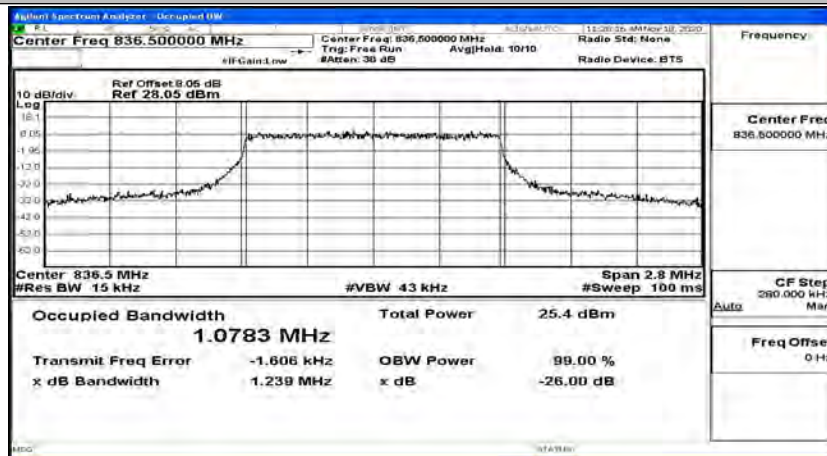
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



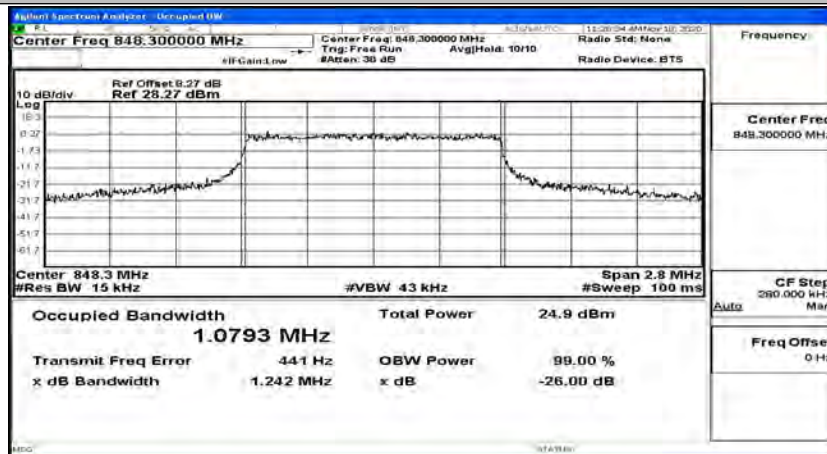
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



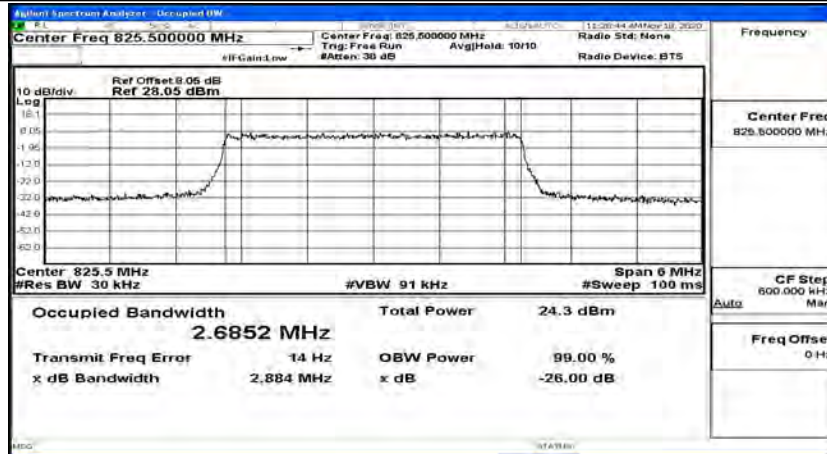
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



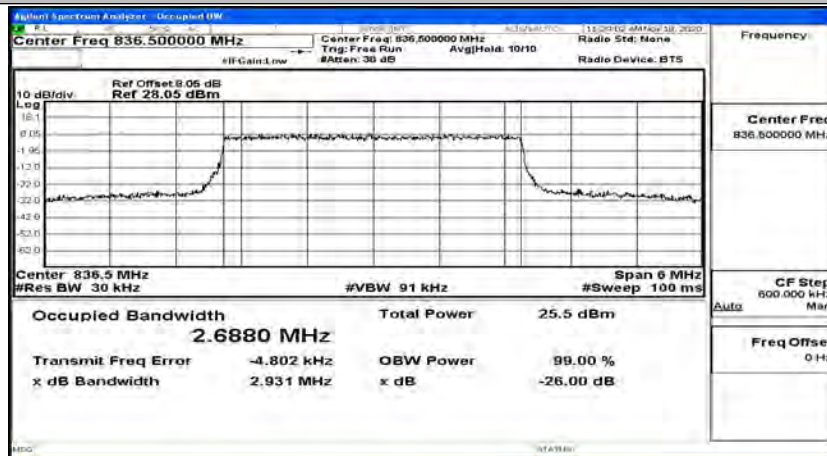
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



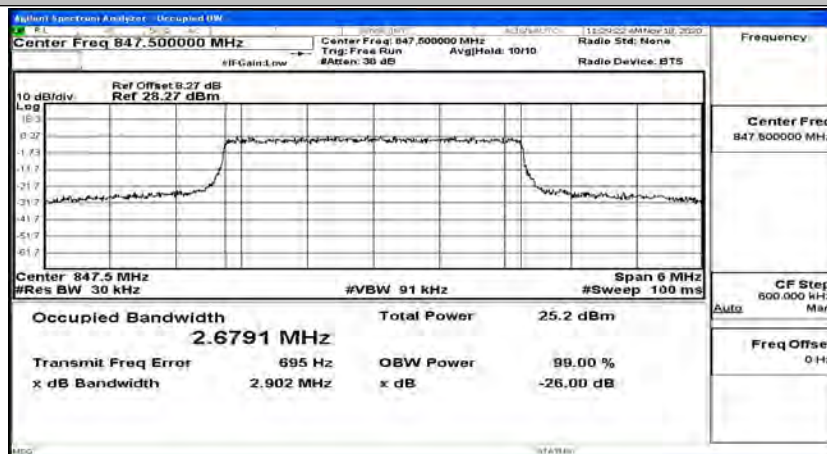
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



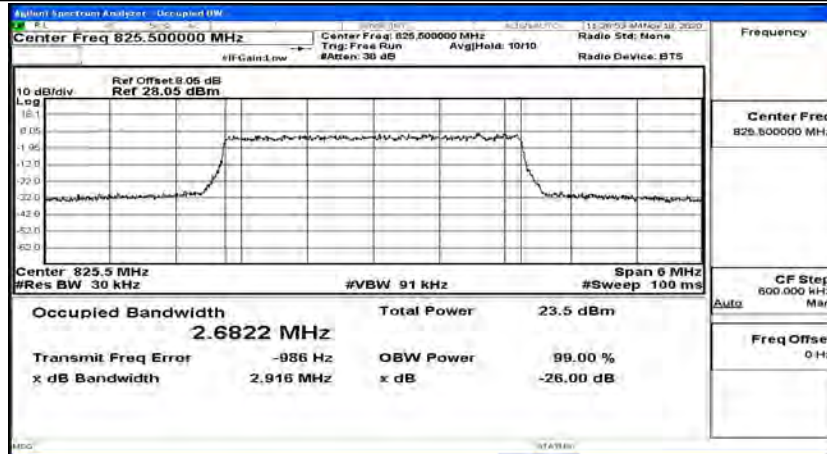
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



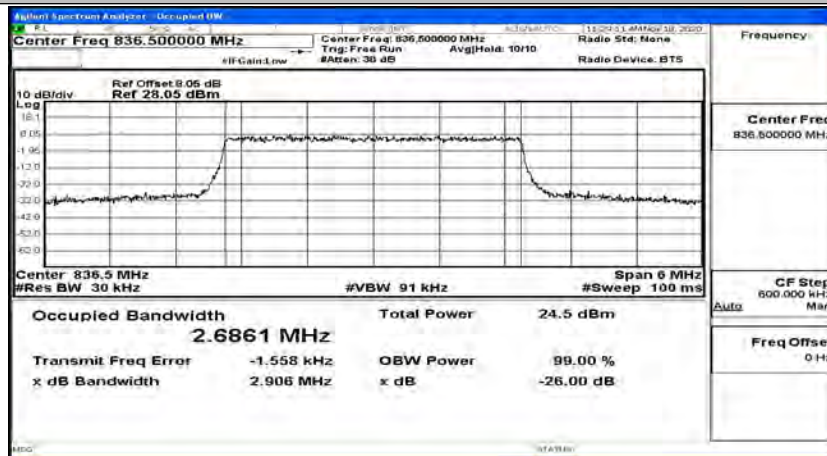
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



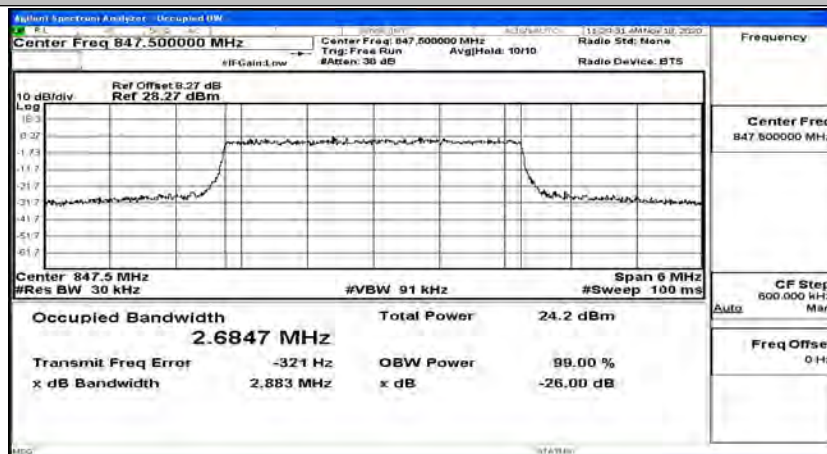
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



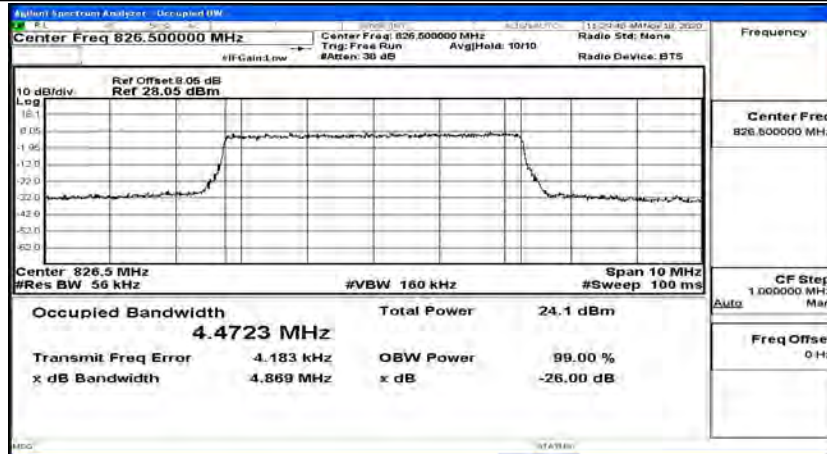
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



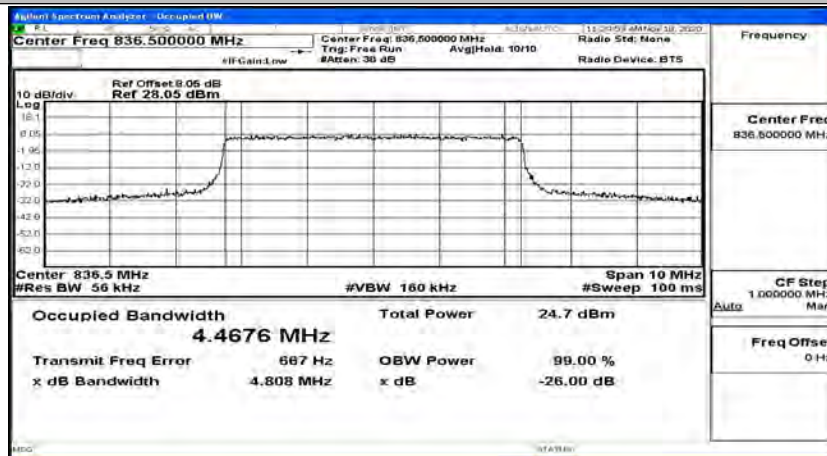
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



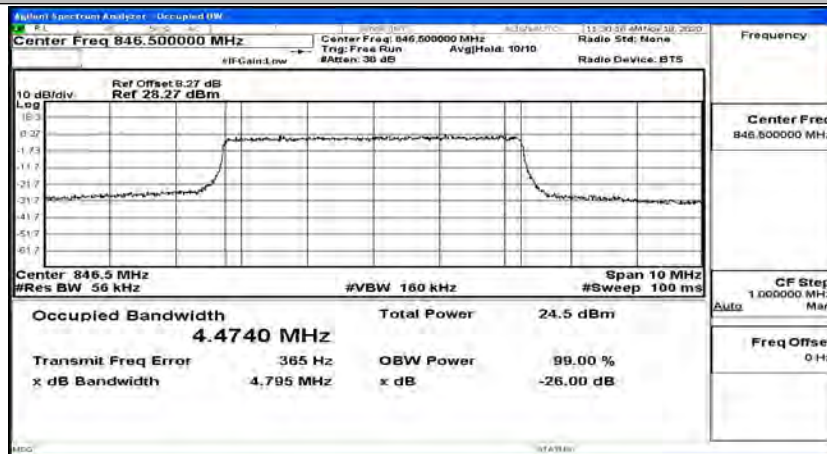
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



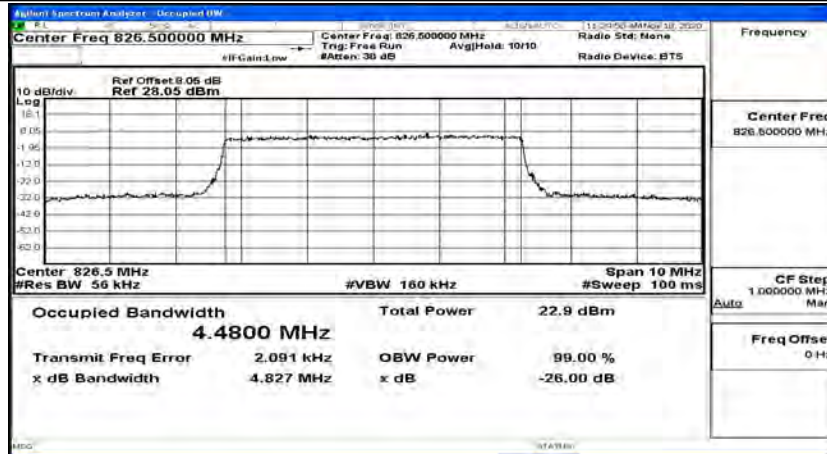
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



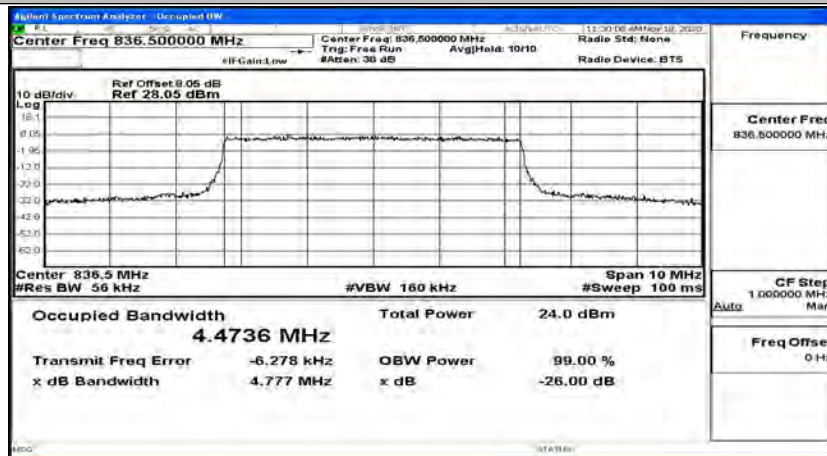
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



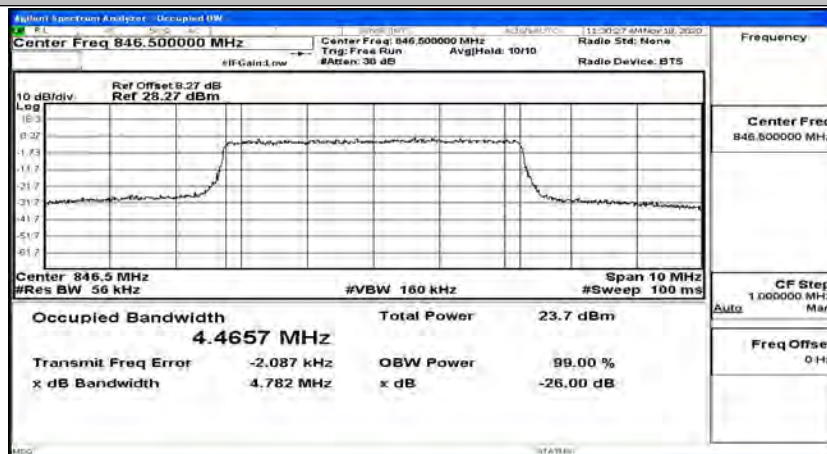
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



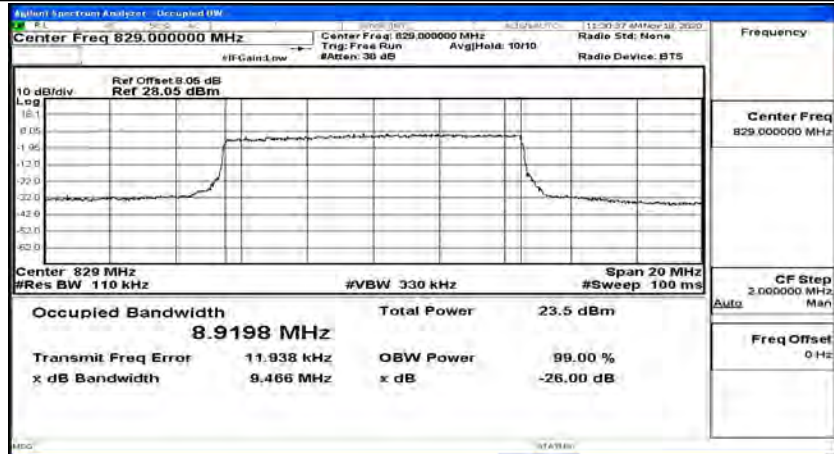
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



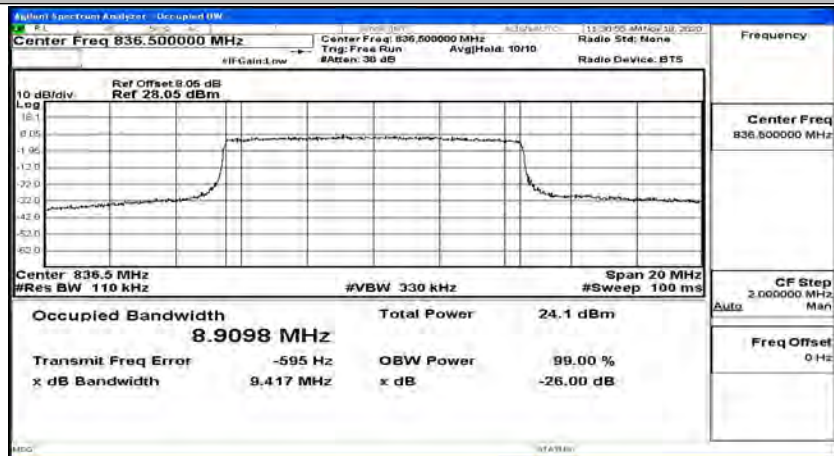
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



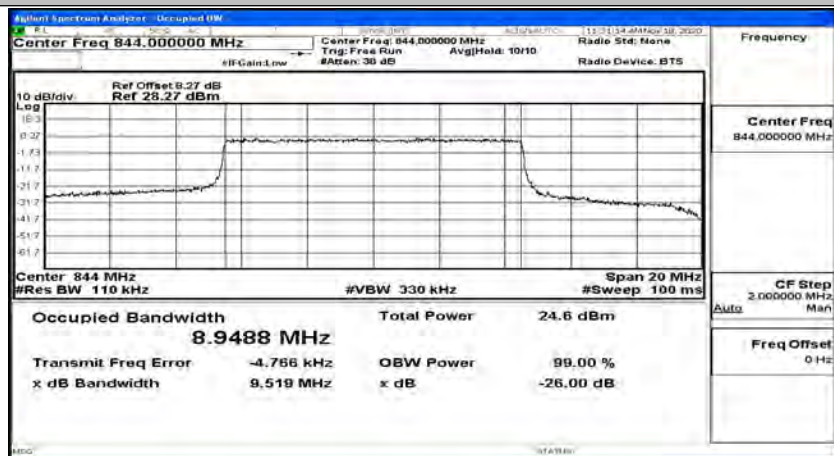
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



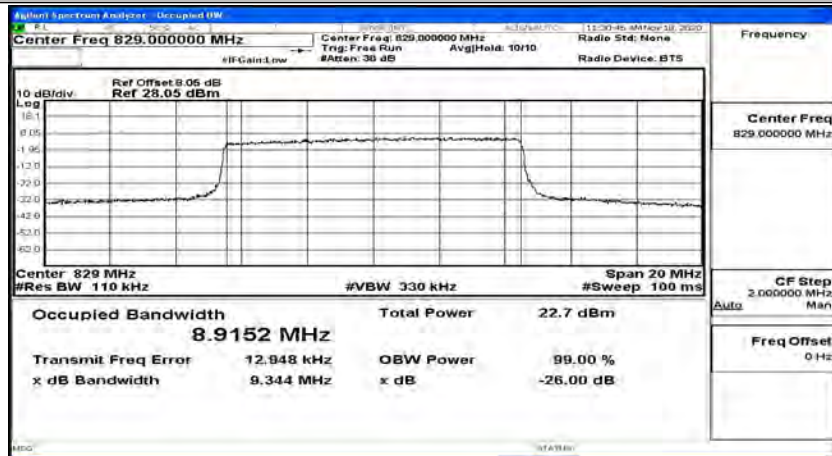
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



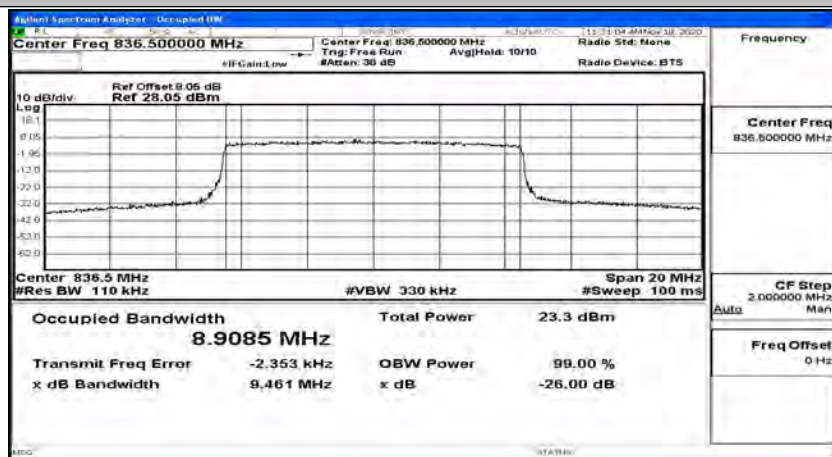
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



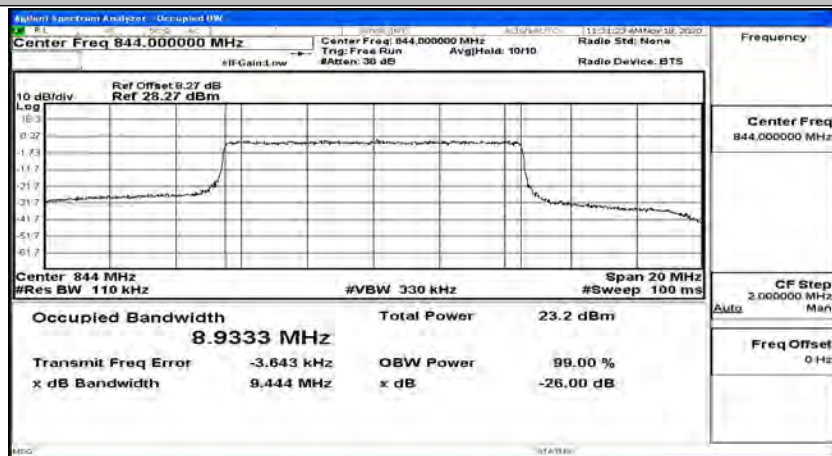
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



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

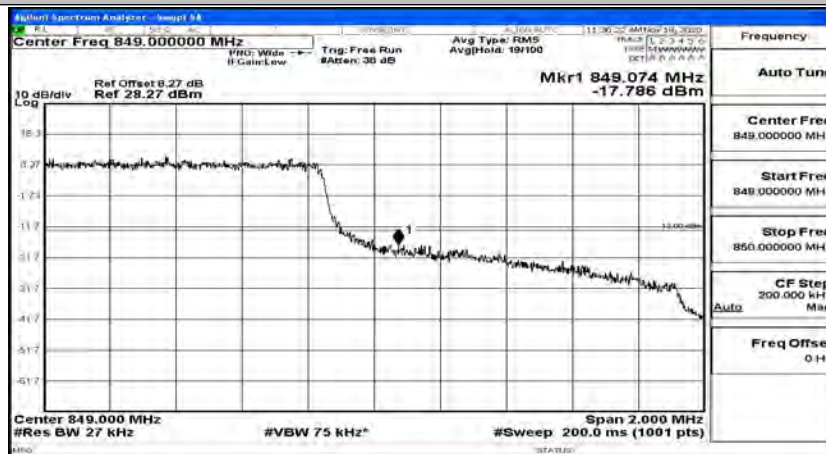


D.4 Band Edge

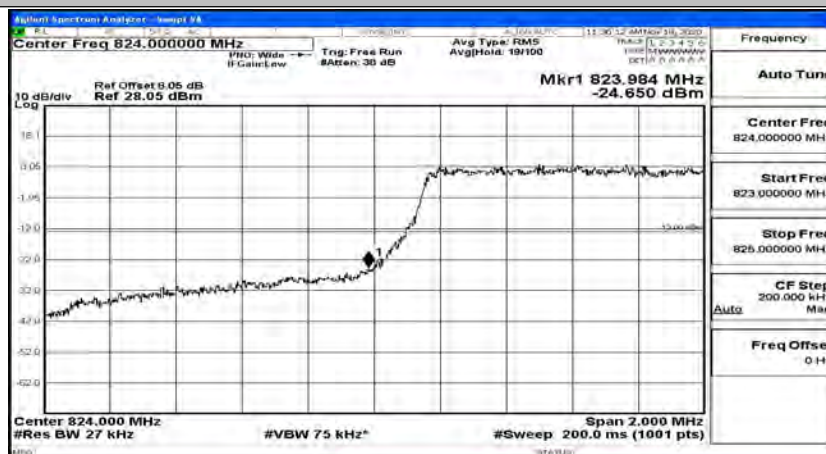
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



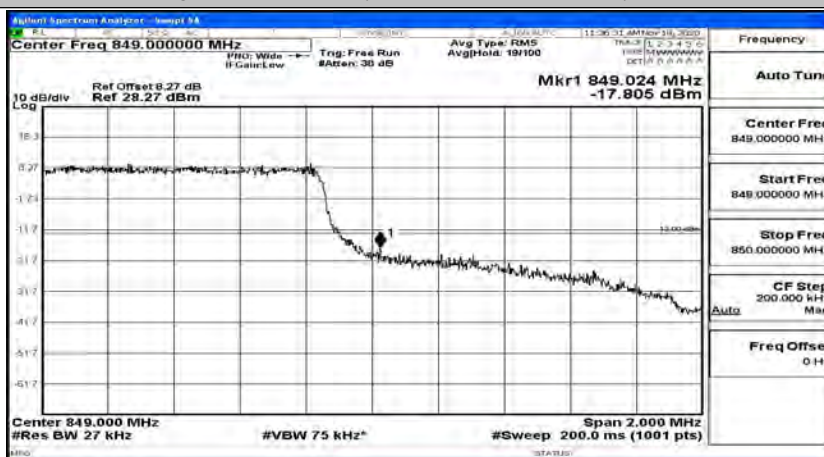
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



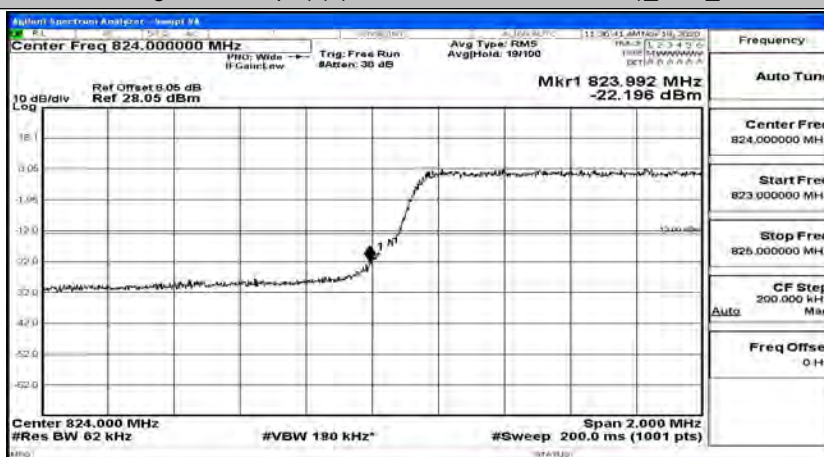
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



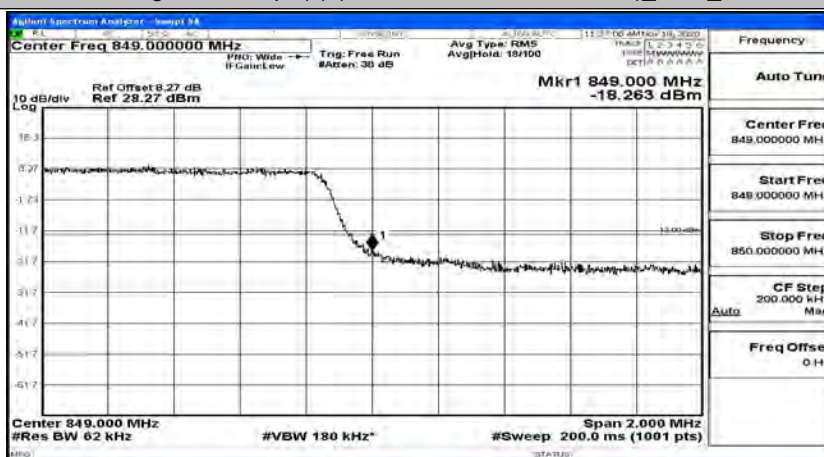
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



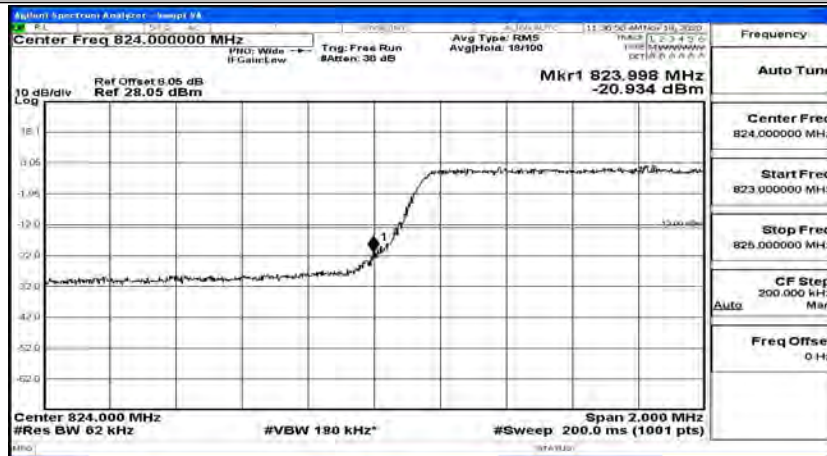
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz) LCH QPSK



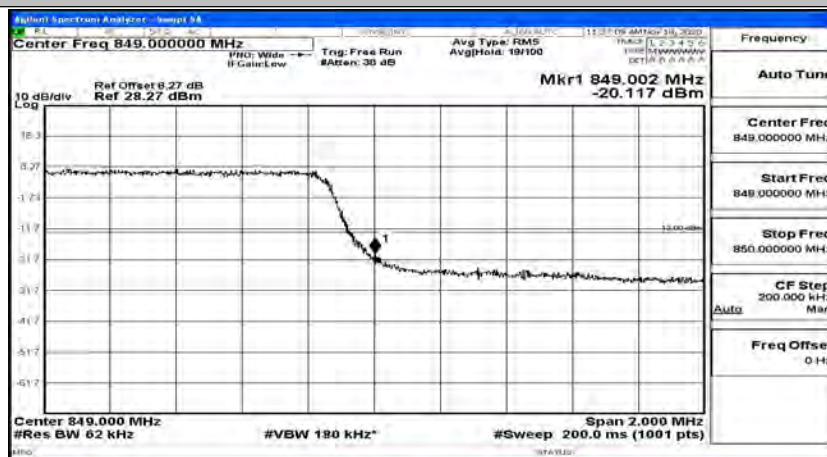
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz) HCH QPSK



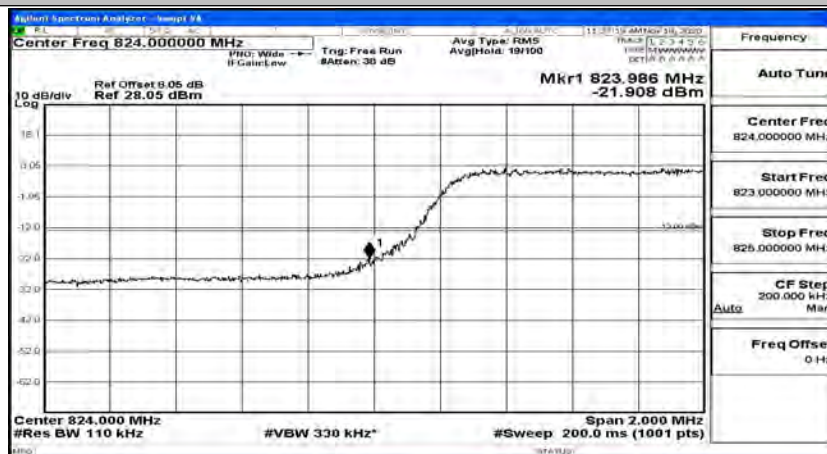
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



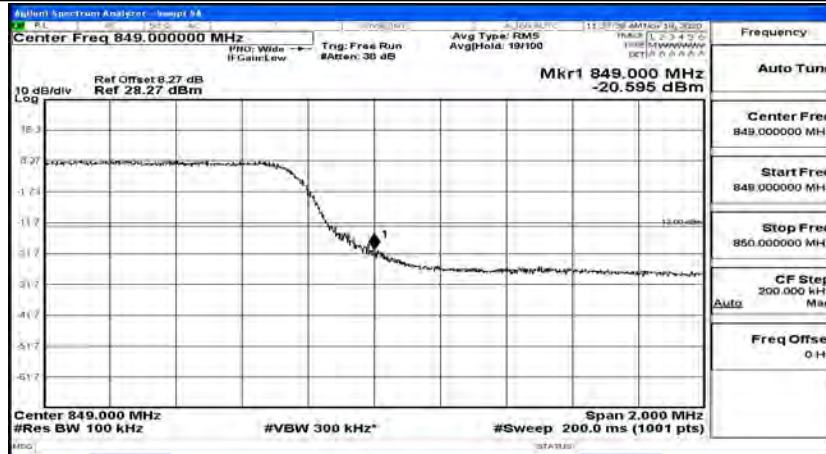
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM

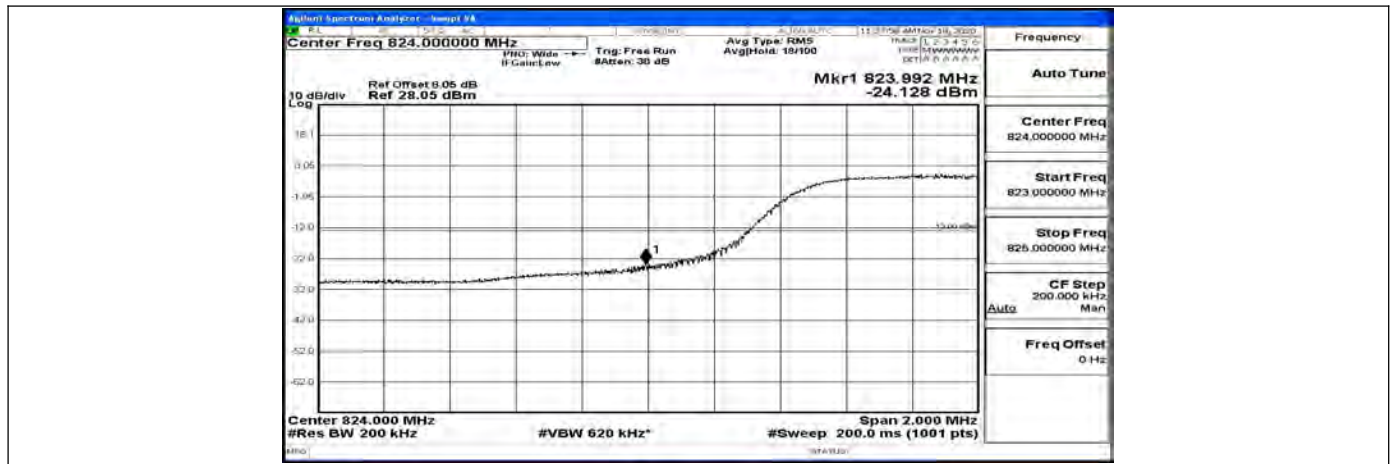


Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK

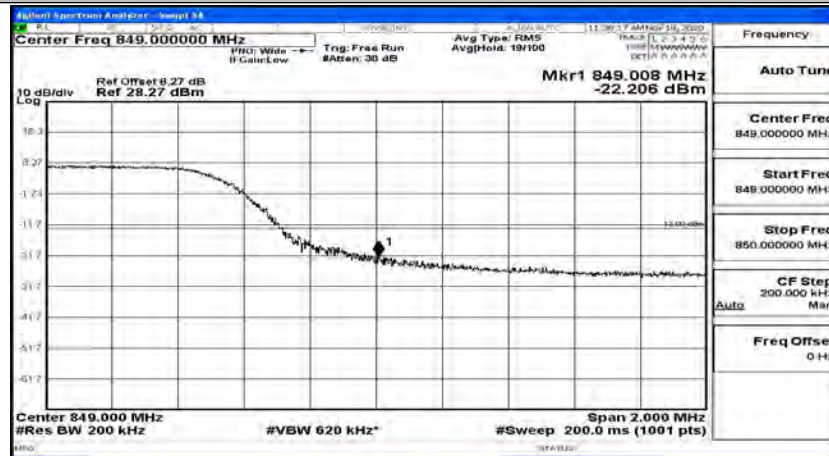


Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK

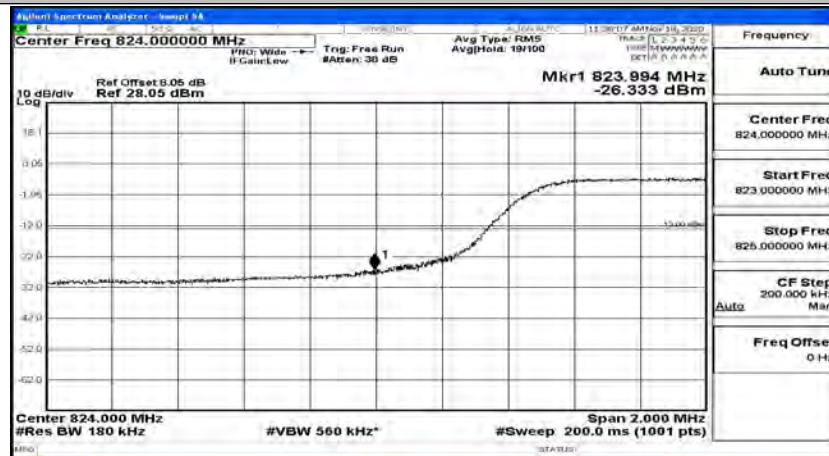




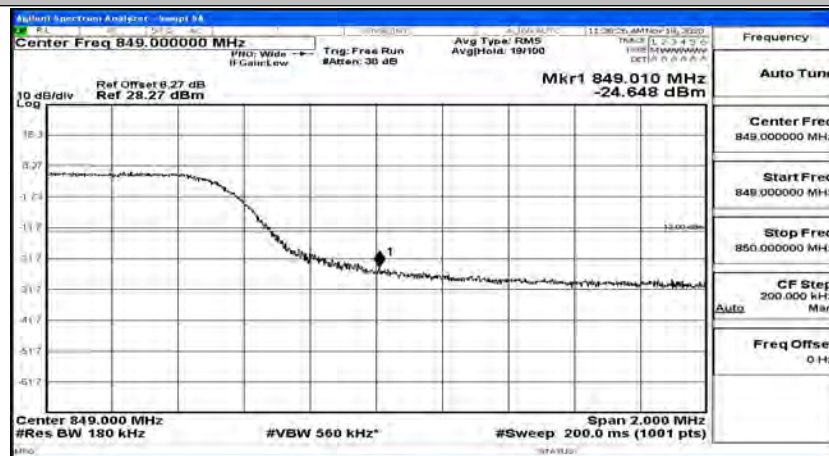
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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

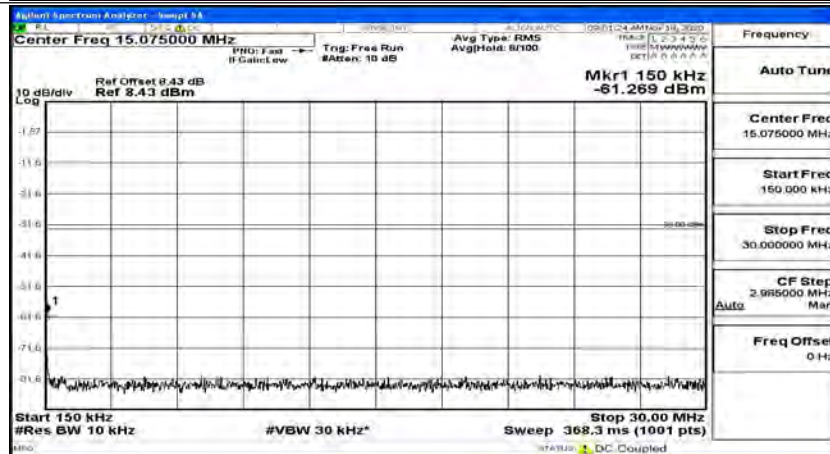
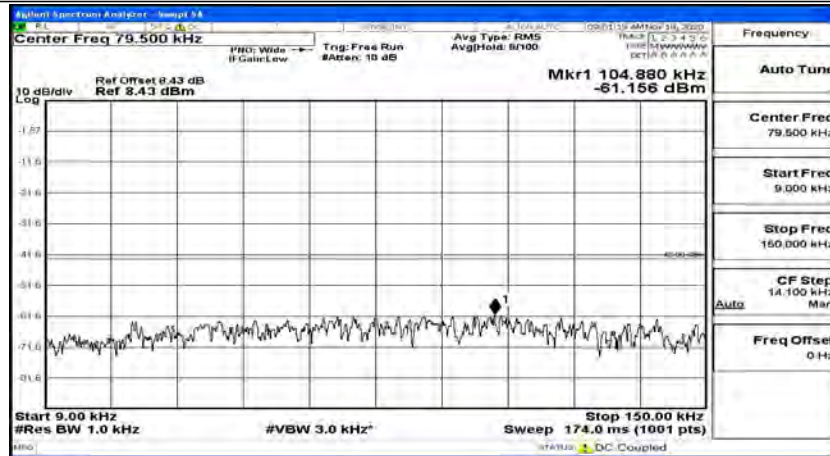


D.5 Conducted Spurious Emission

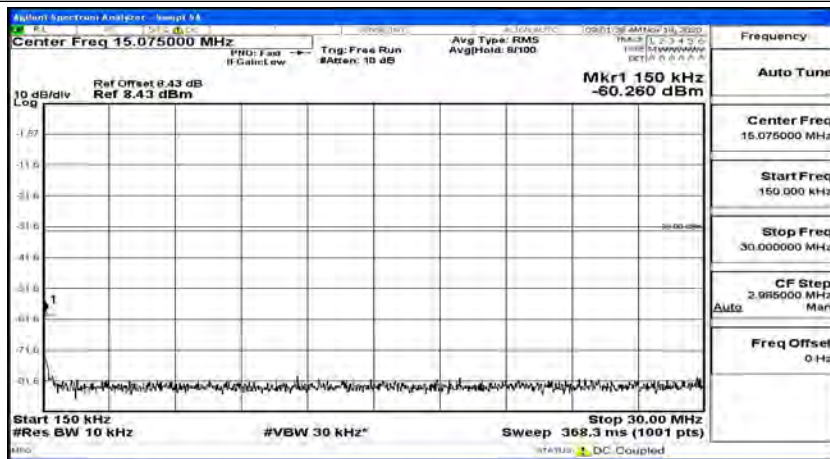
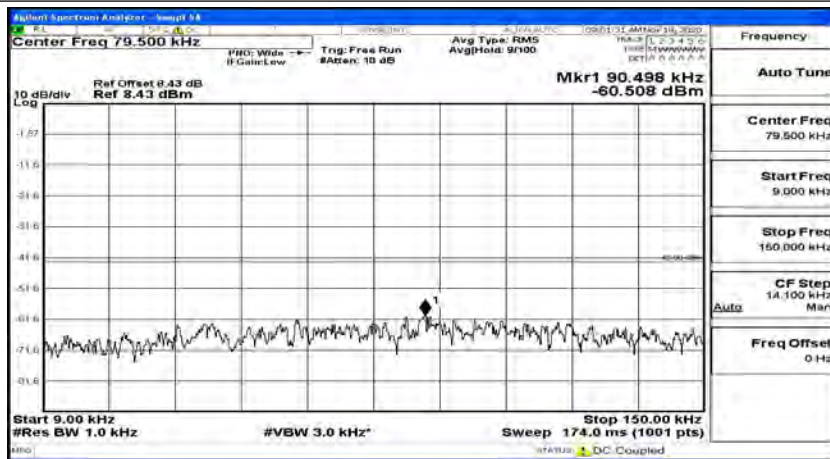
Test Graphs

Channel Bandwidth: 1.4 MHz

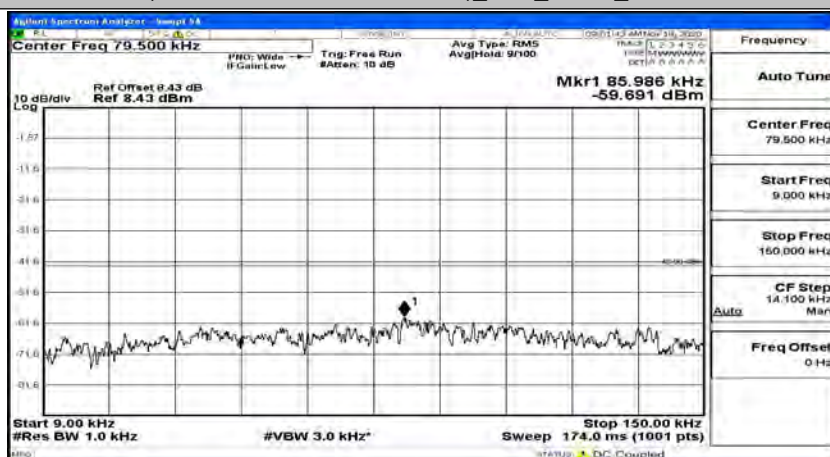
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0

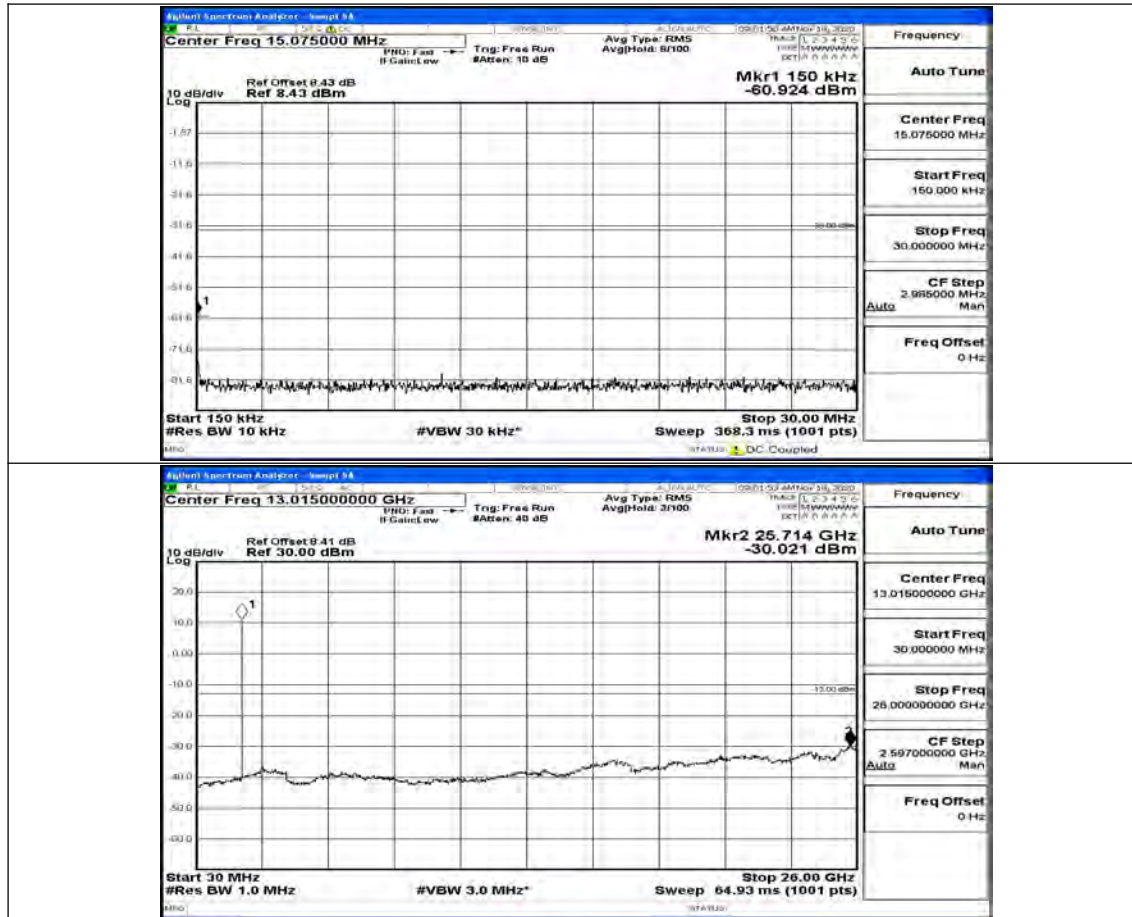


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

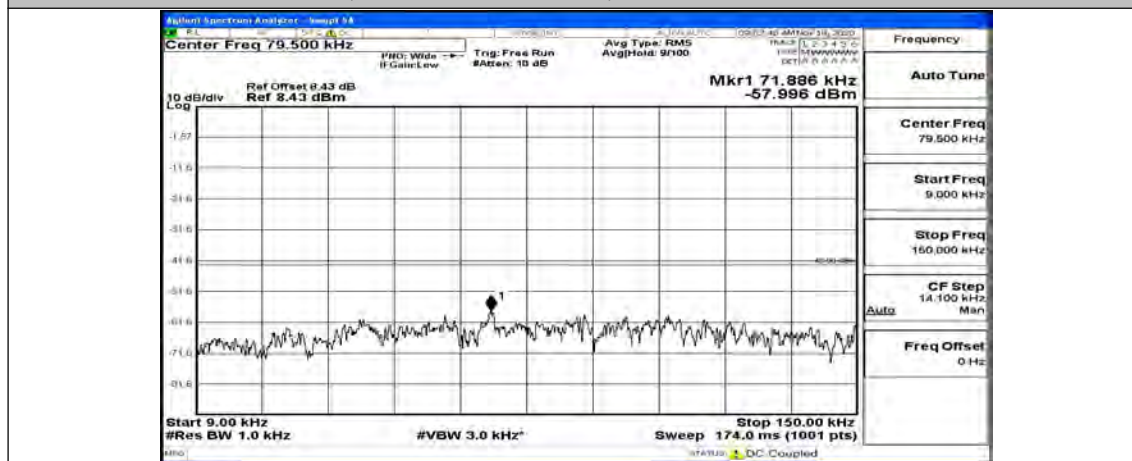


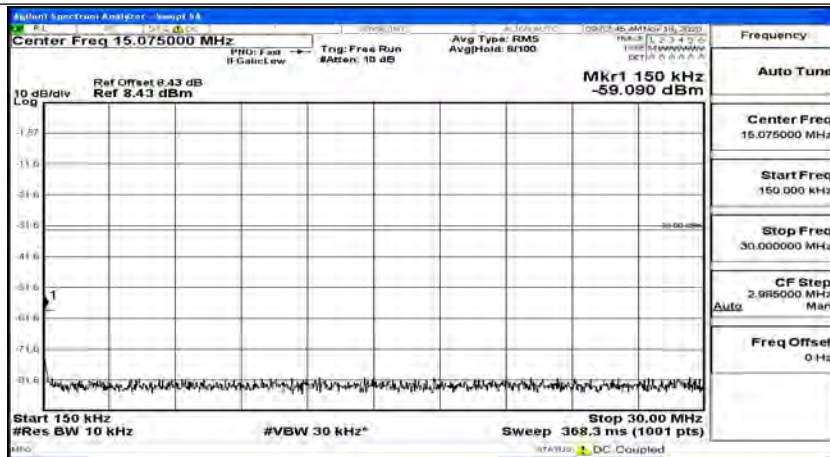
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



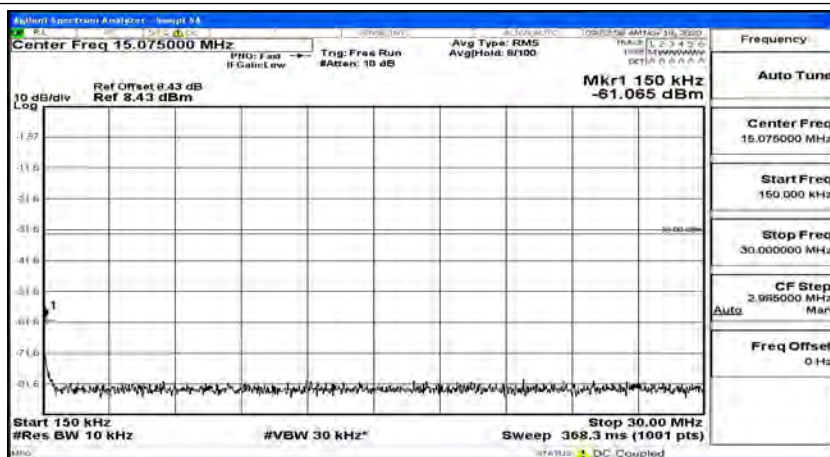
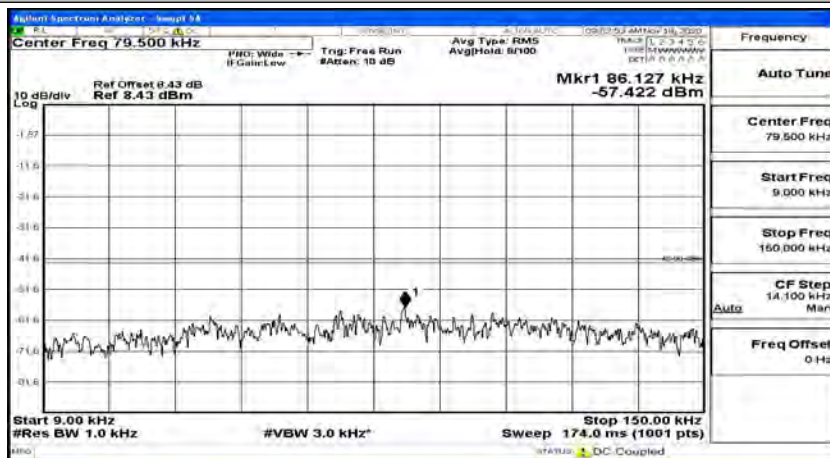


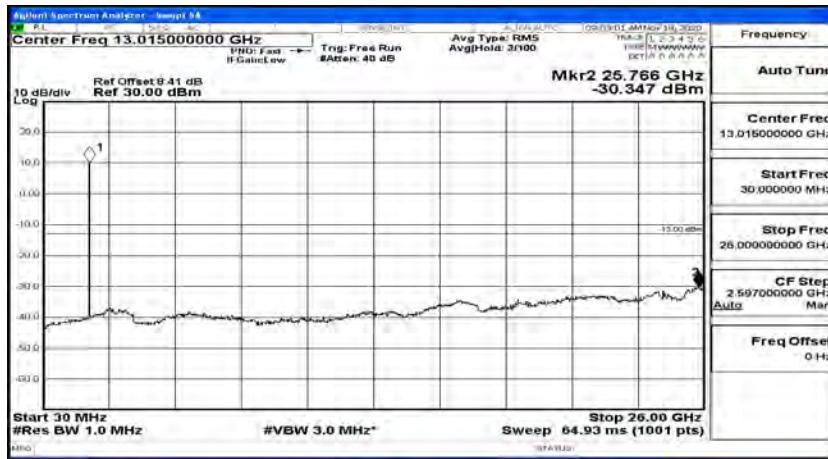
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



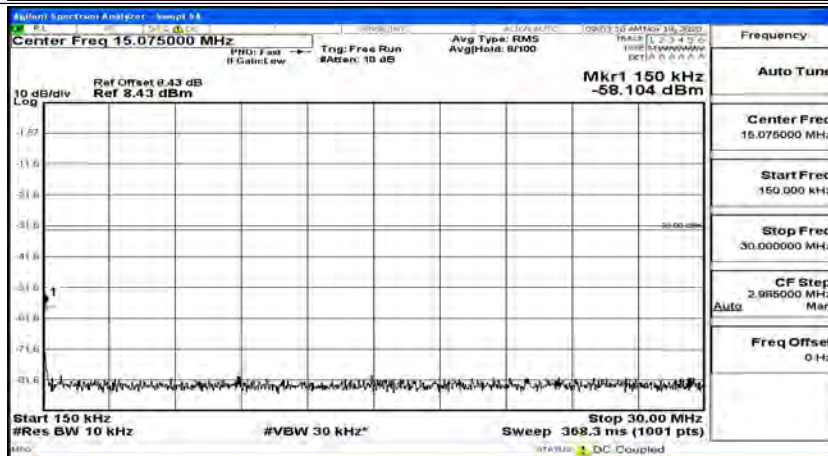
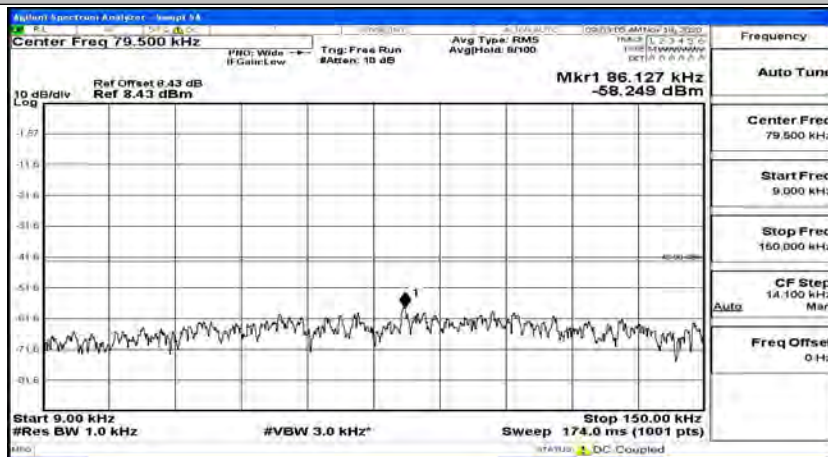


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

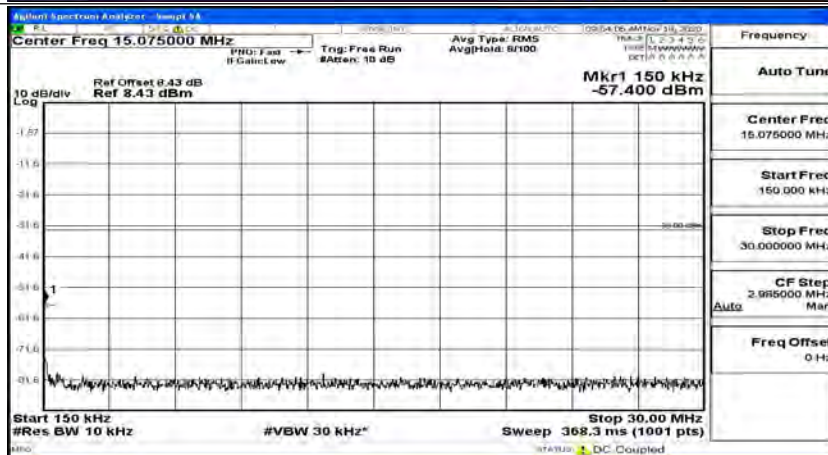
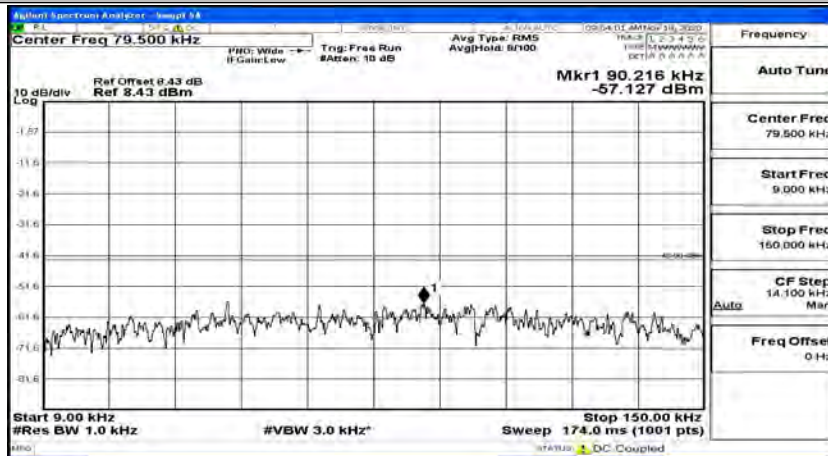




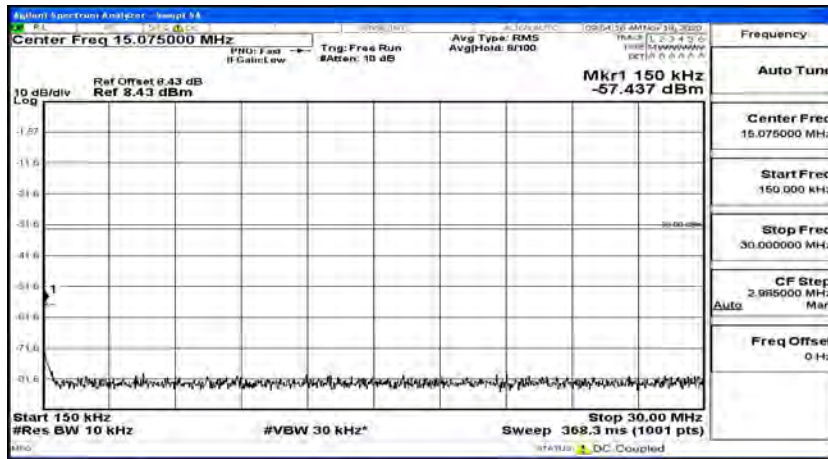
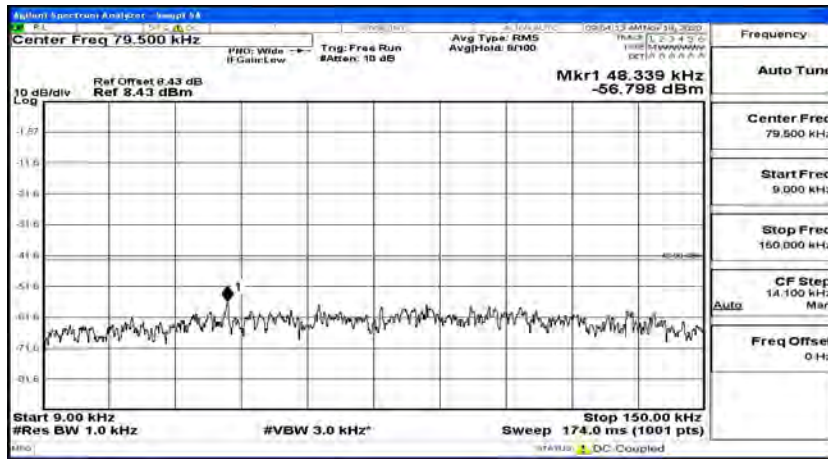
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



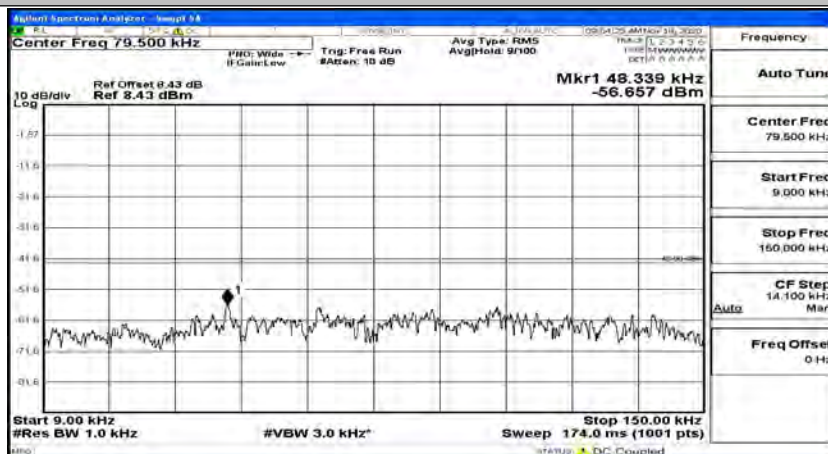
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

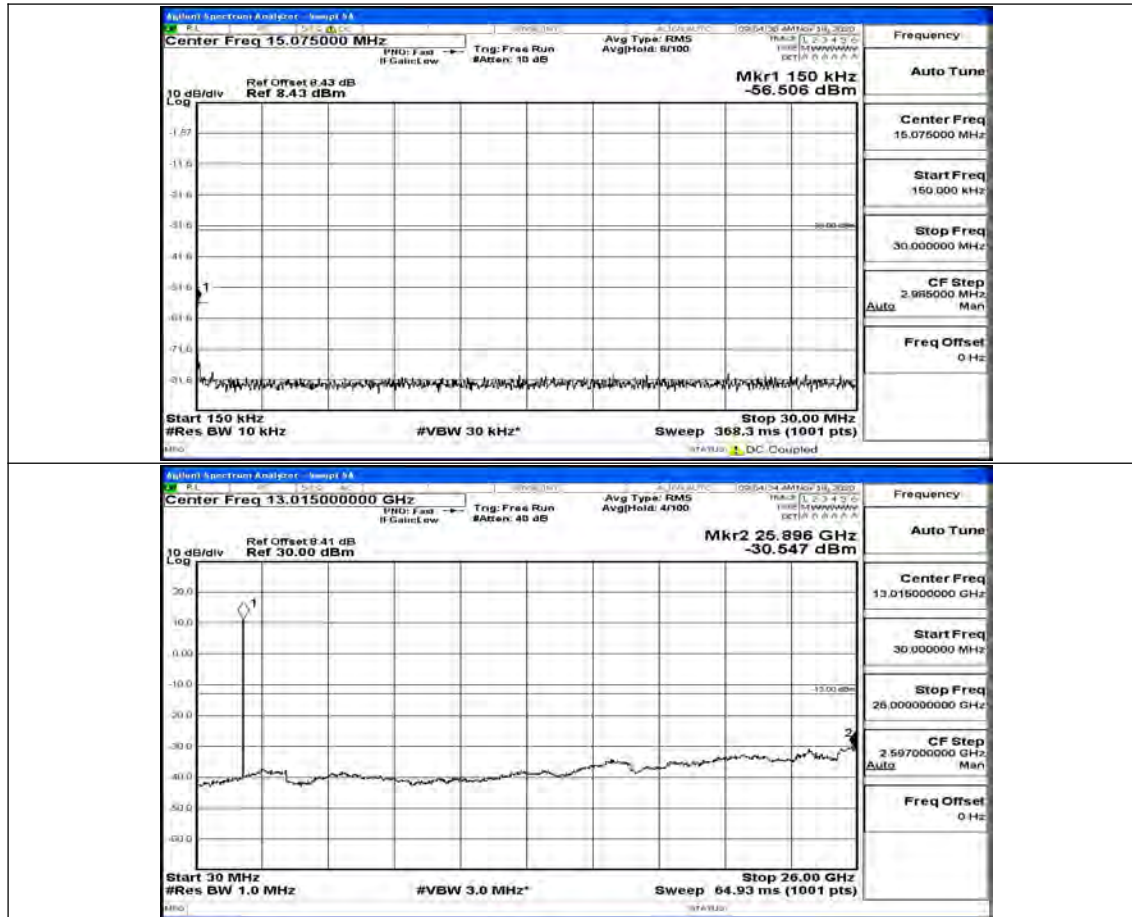


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

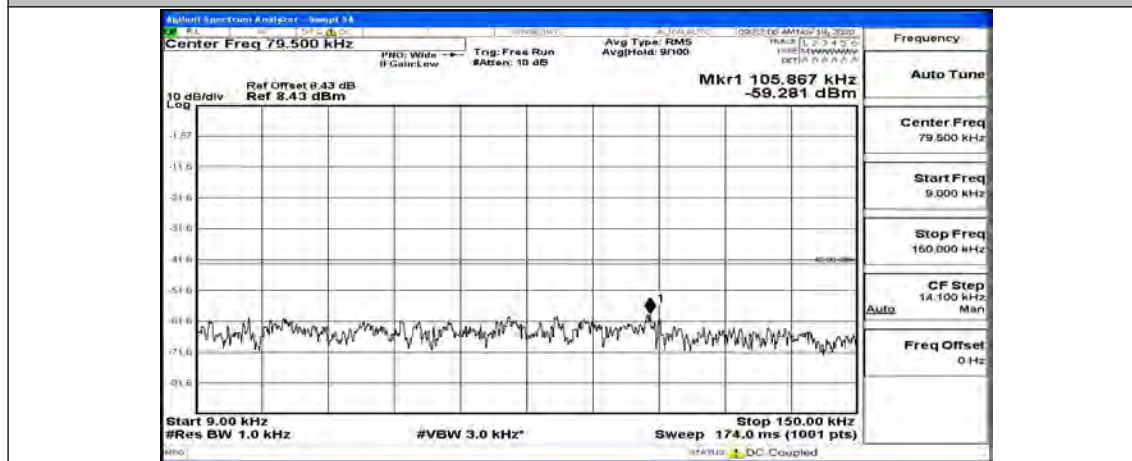


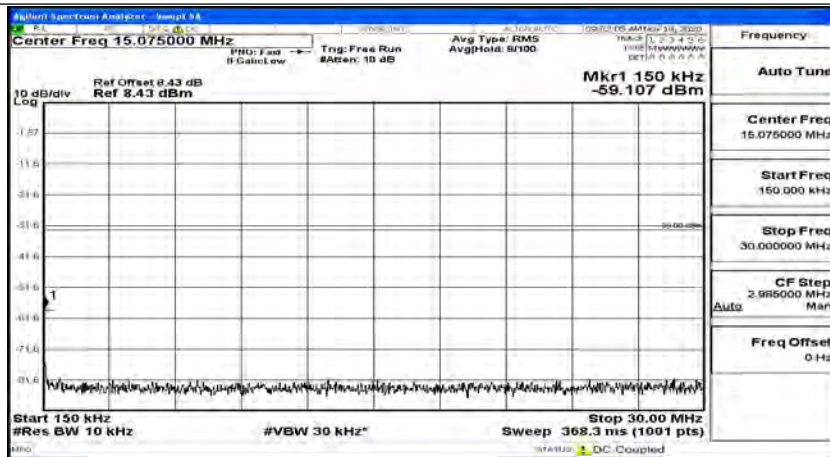
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



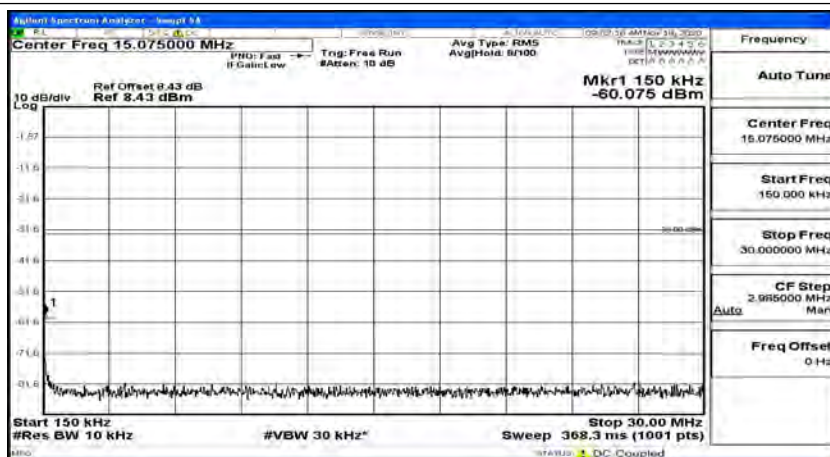
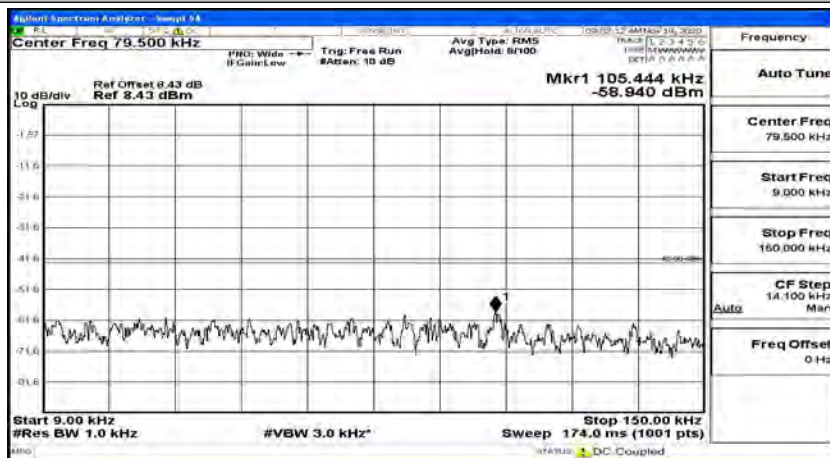


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



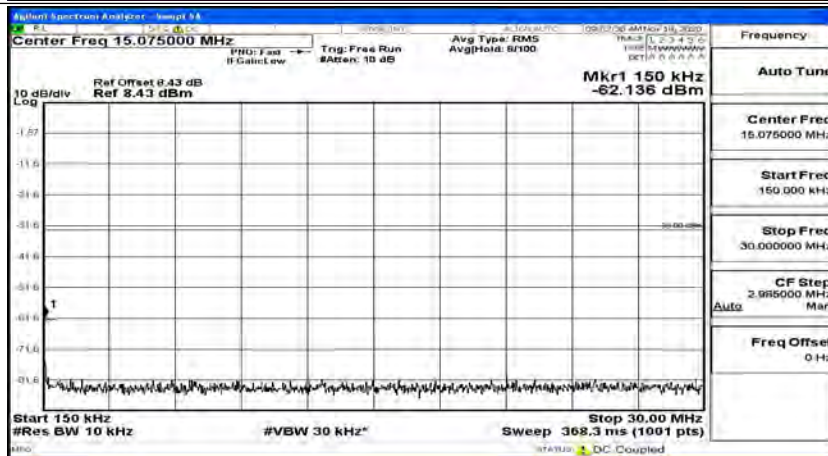
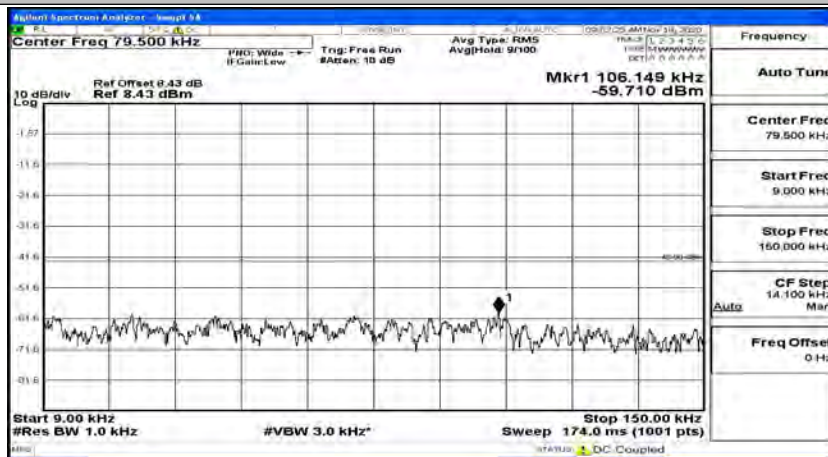


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

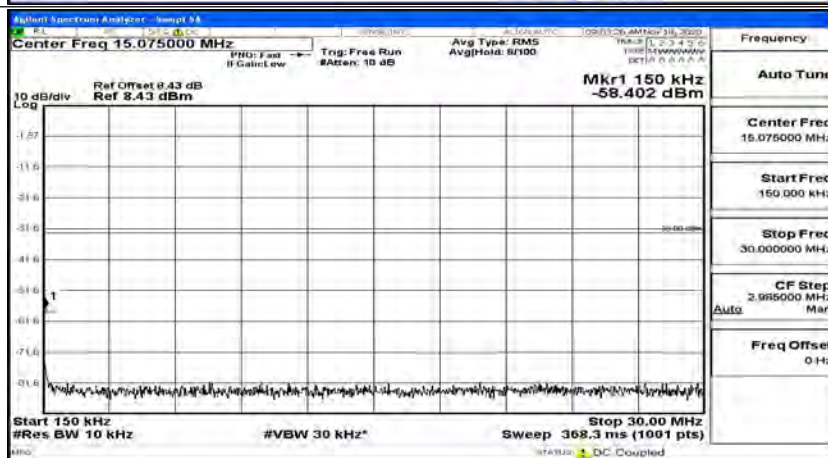
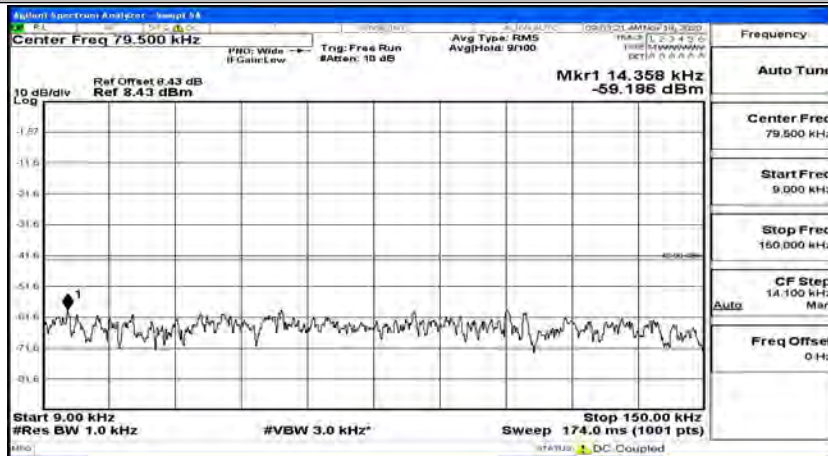




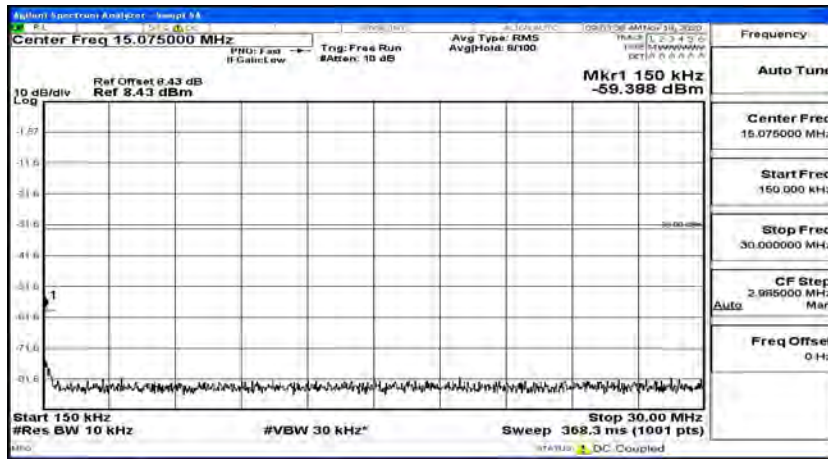
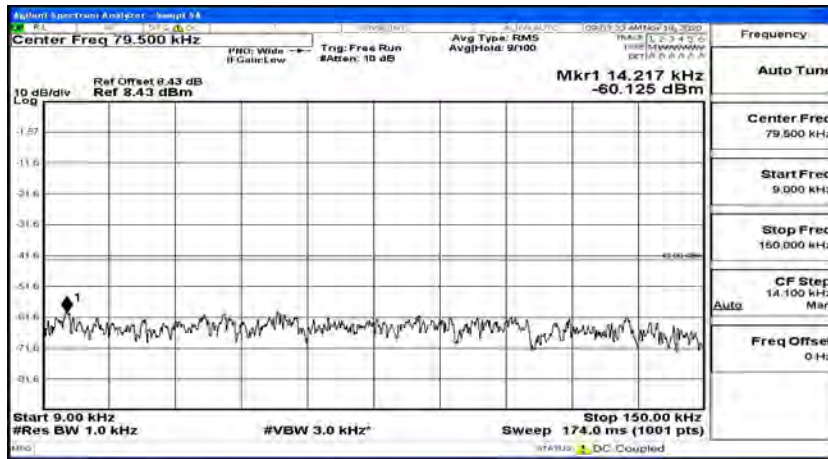
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



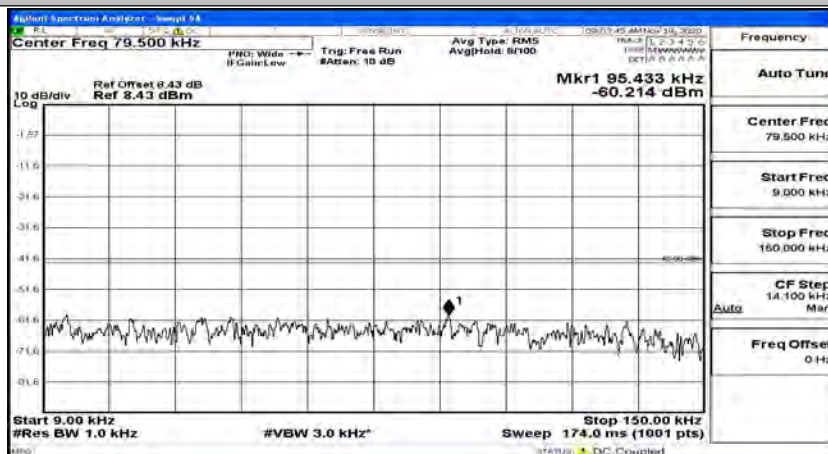
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

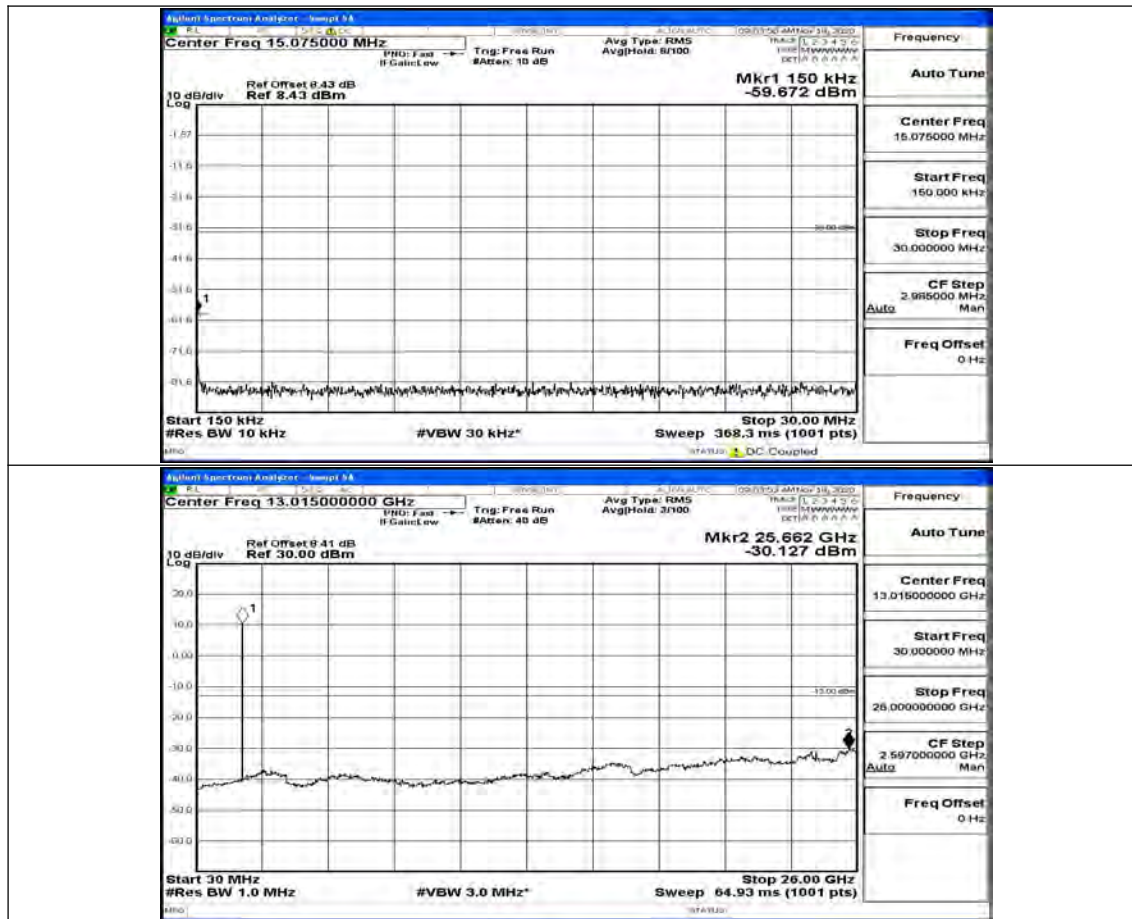


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

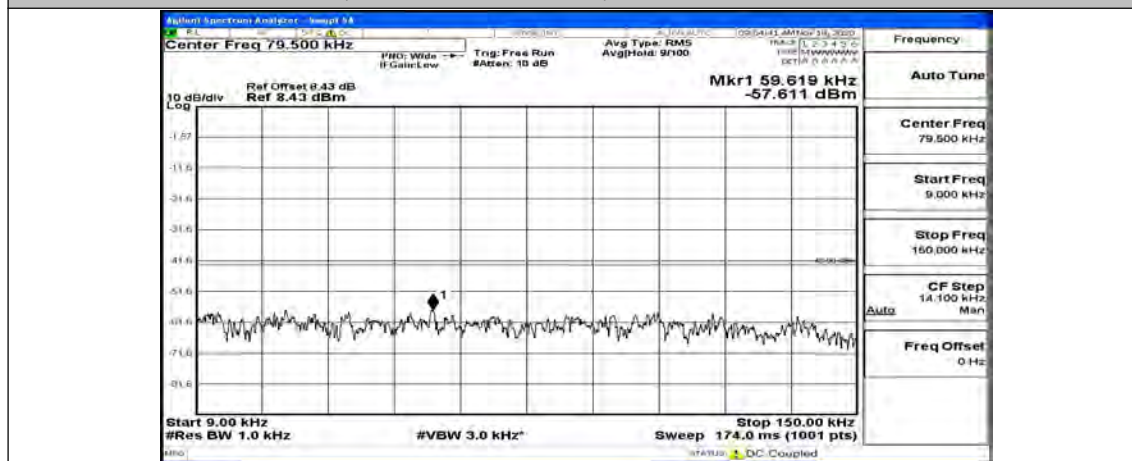


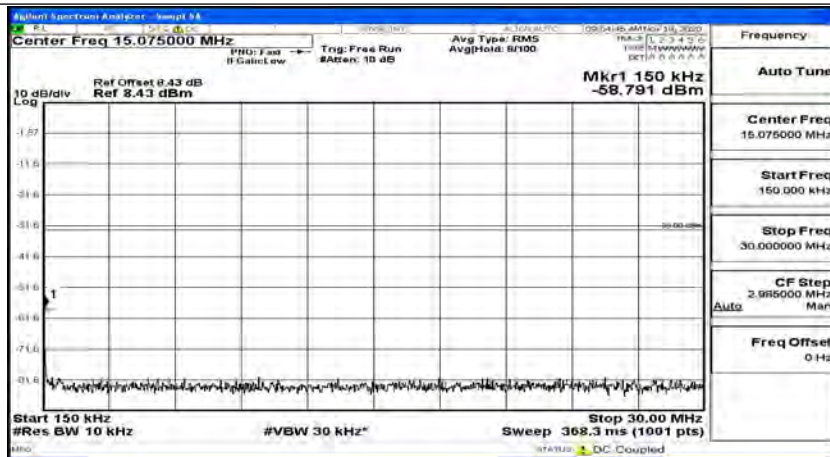
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



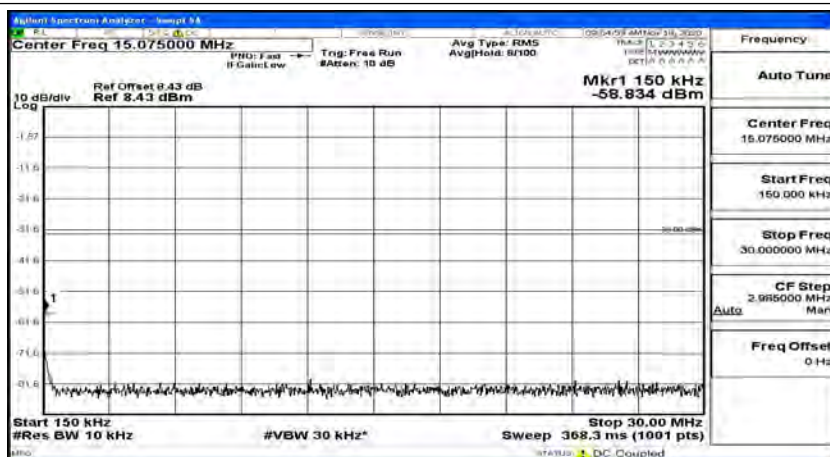
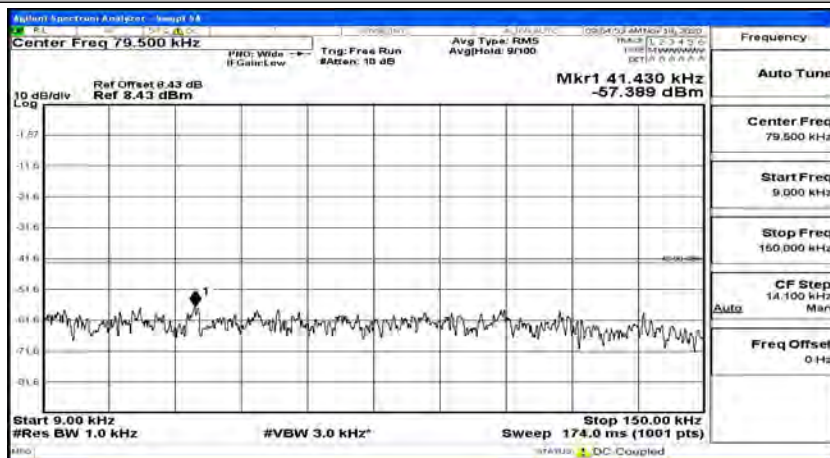


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



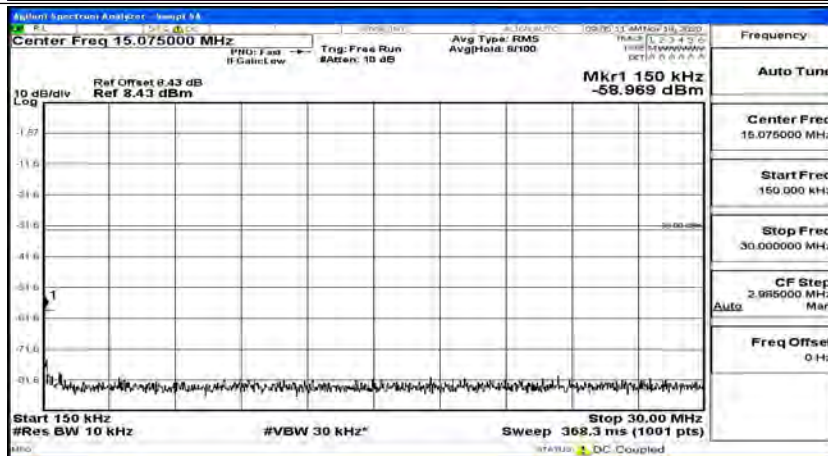
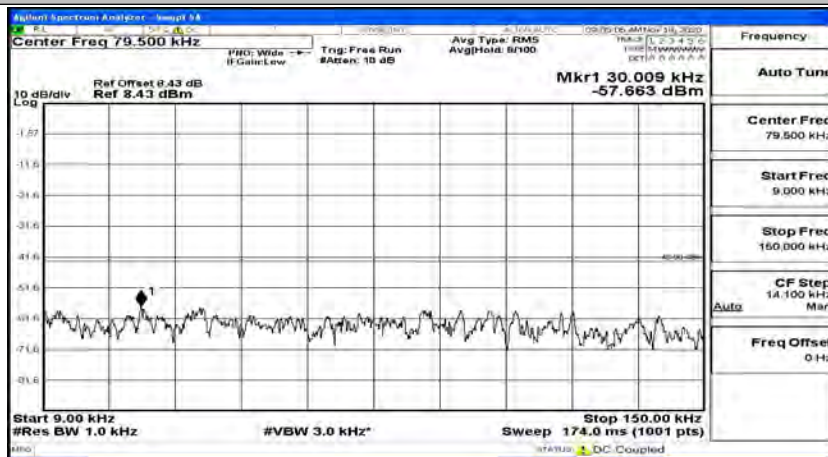


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



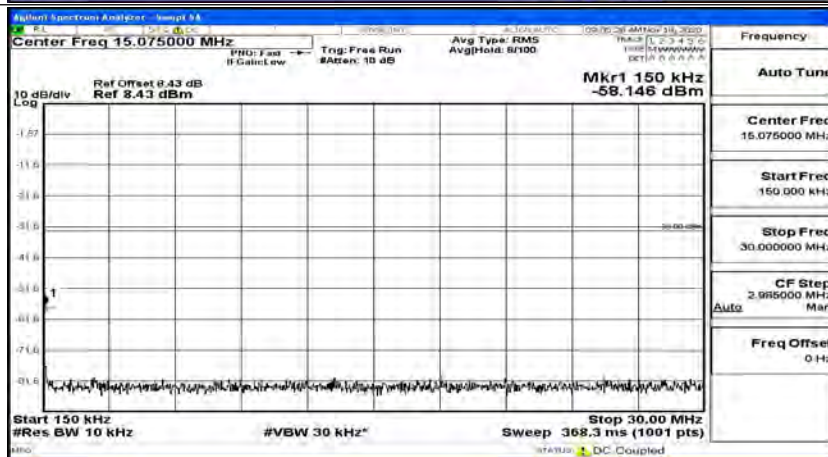
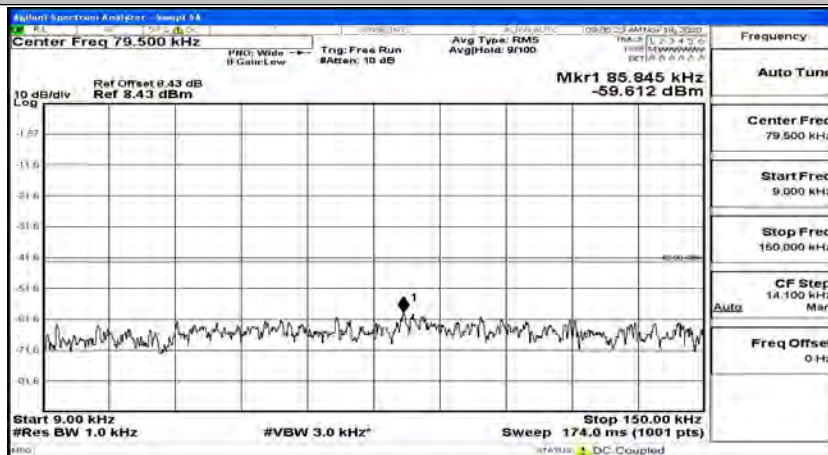


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

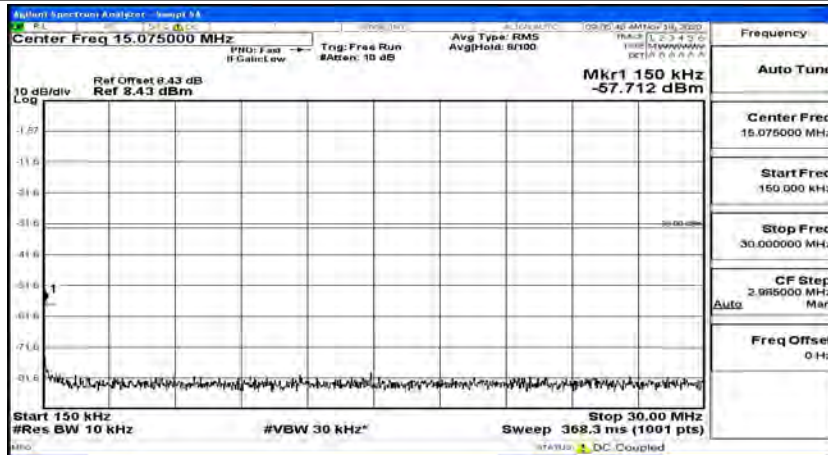
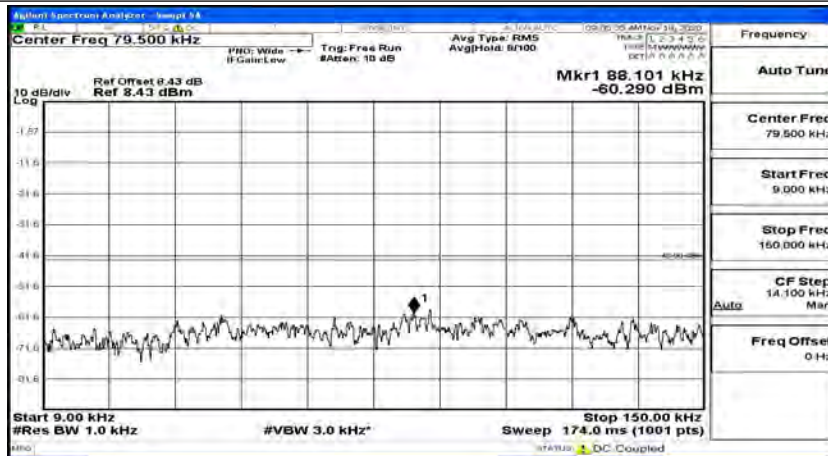


Channel Bandwidth: 3 MHz

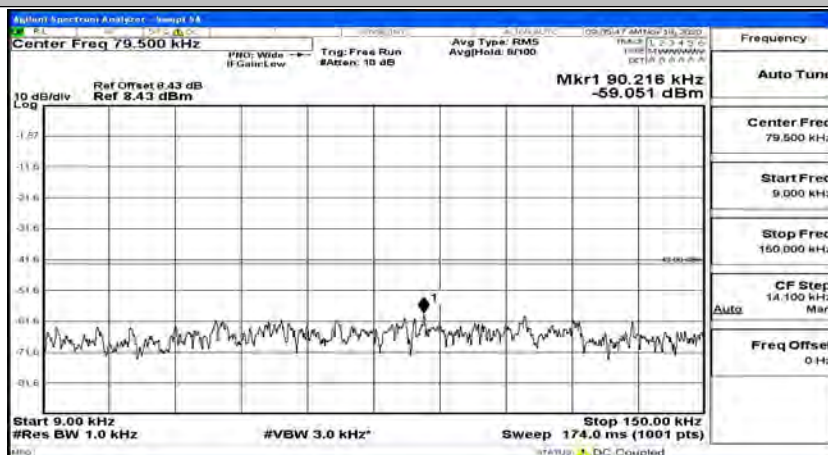
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0

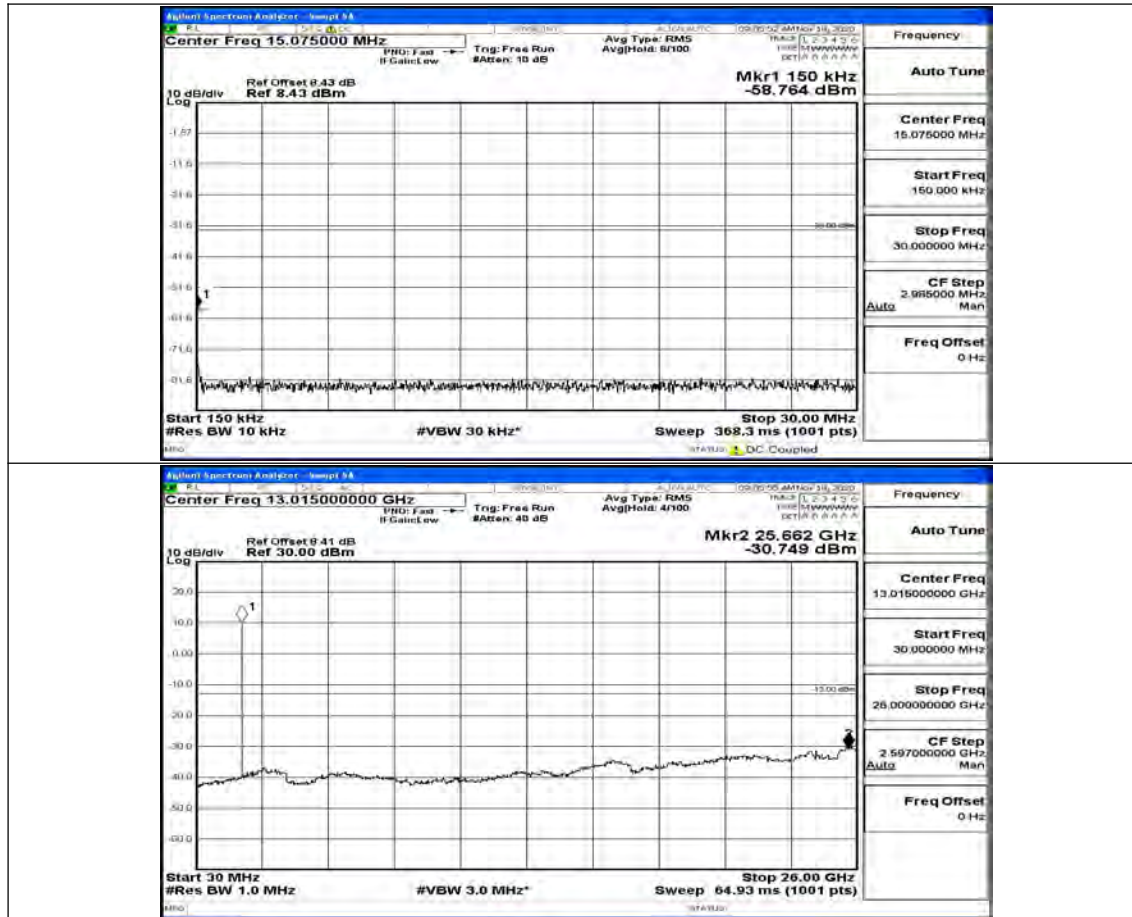


(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

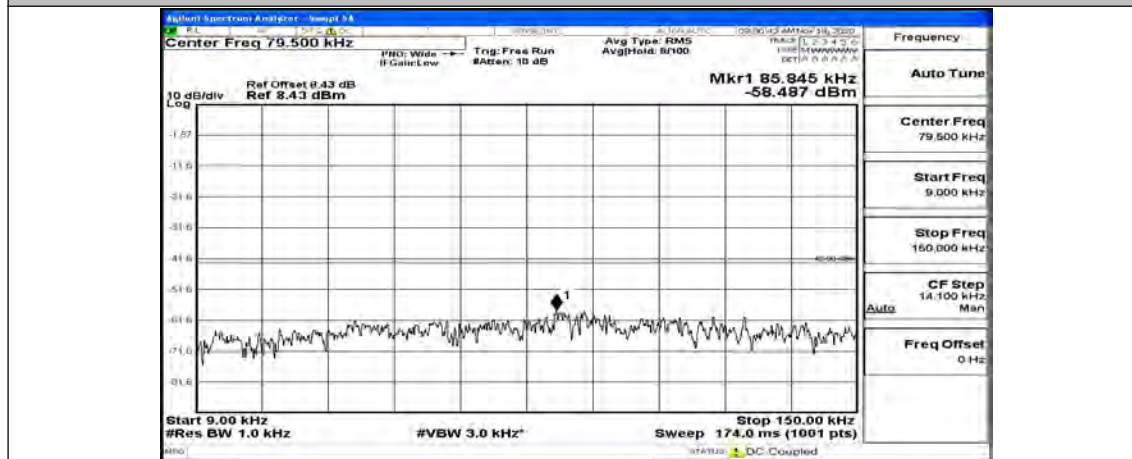


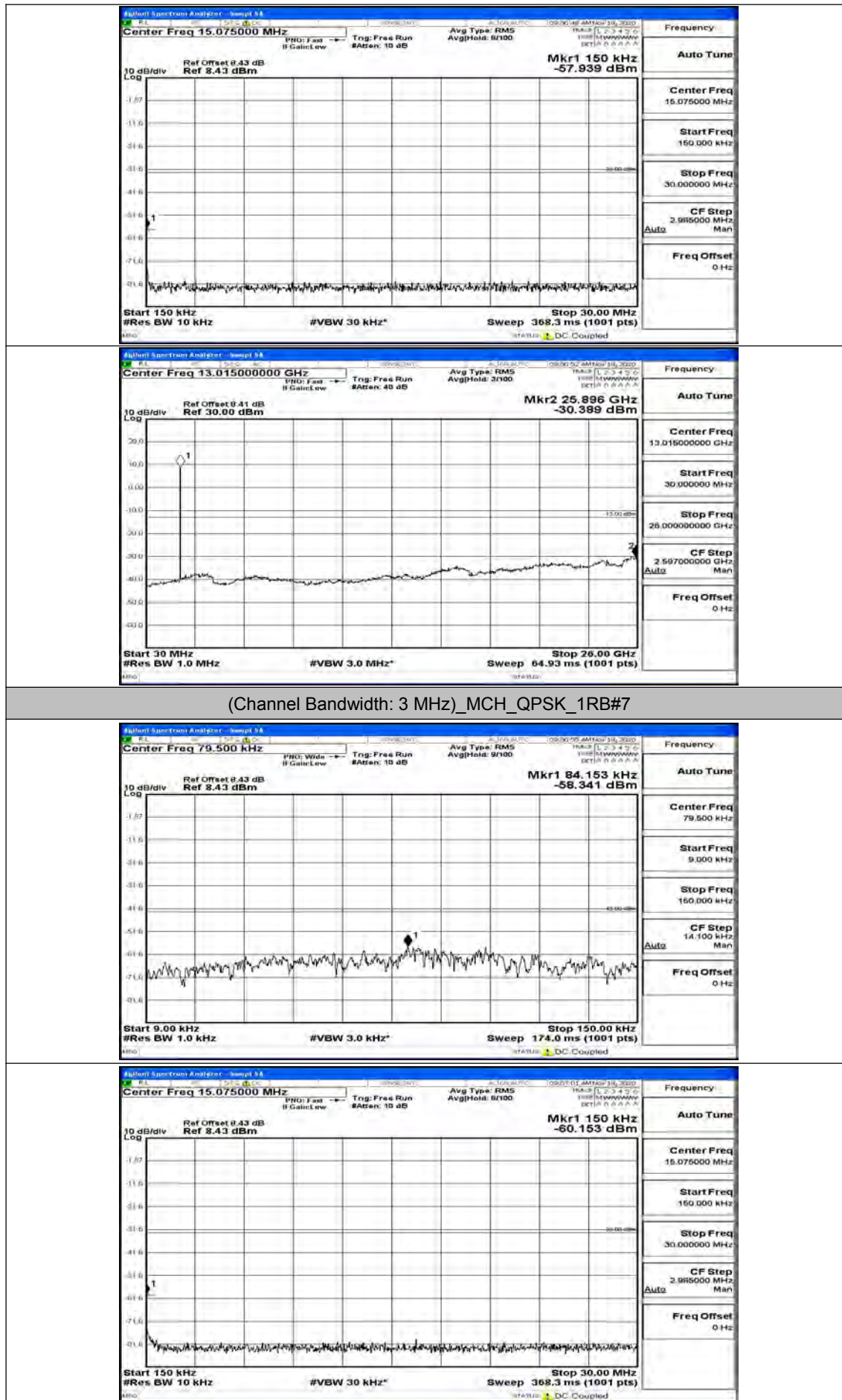
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14





(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

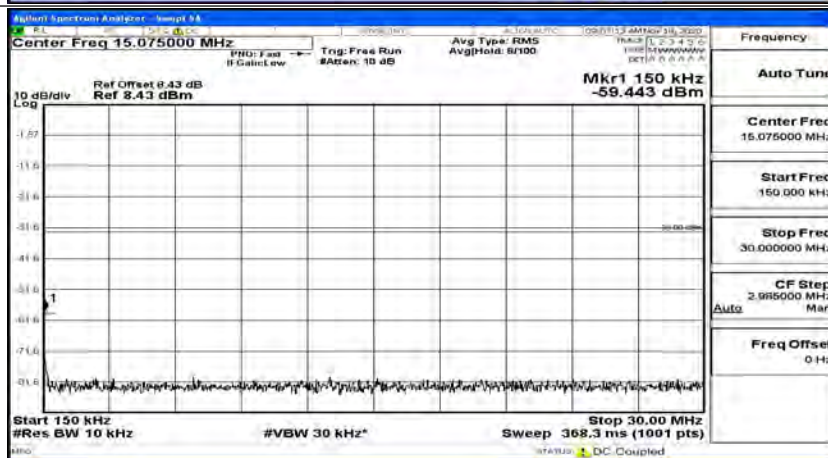
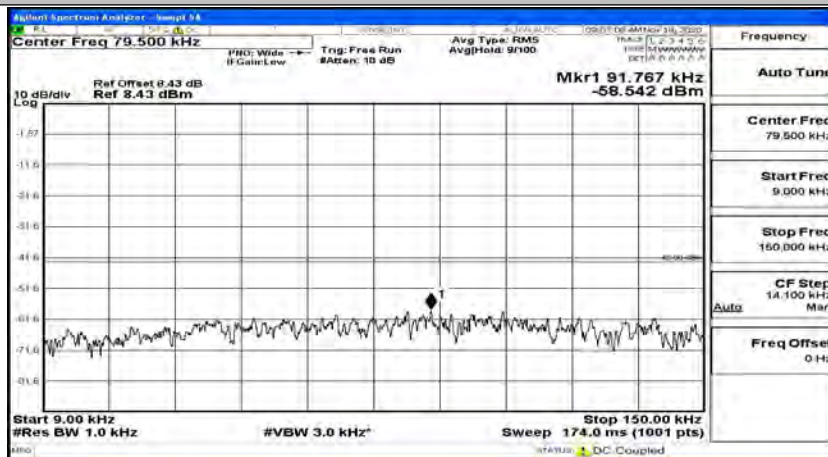




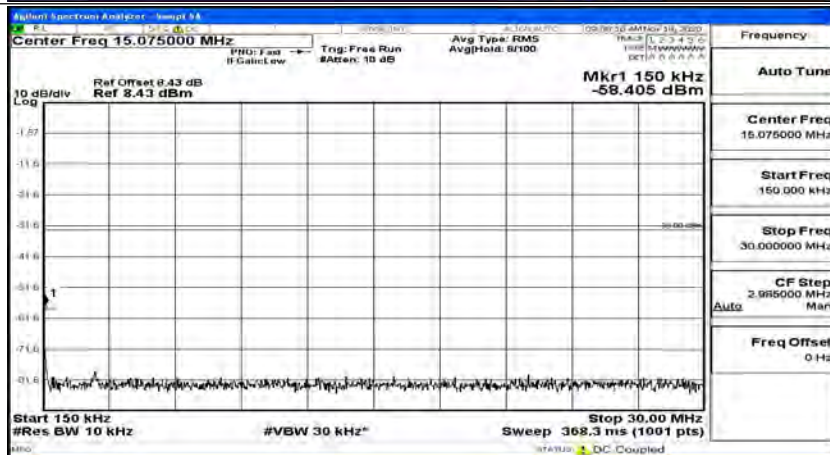
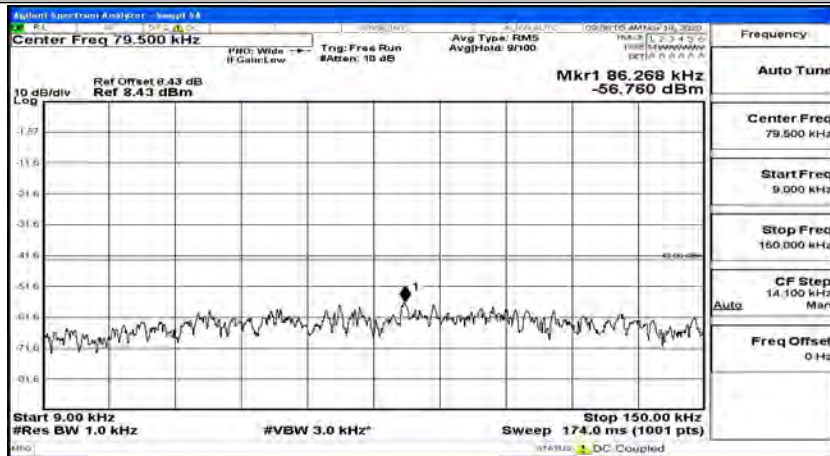
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



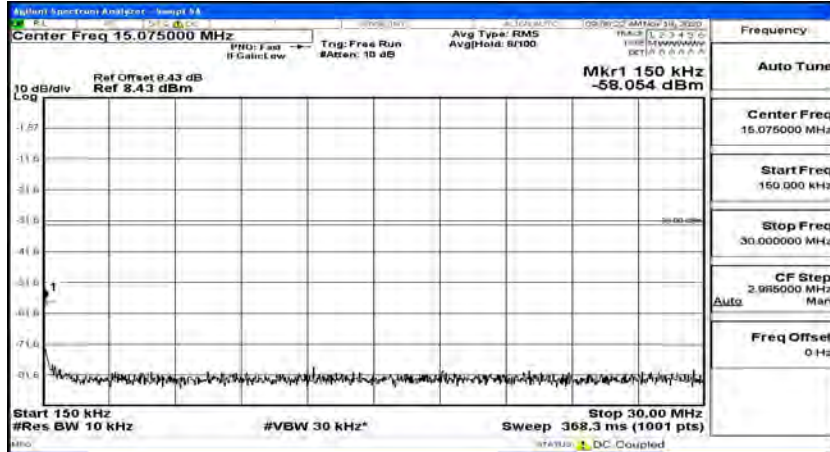
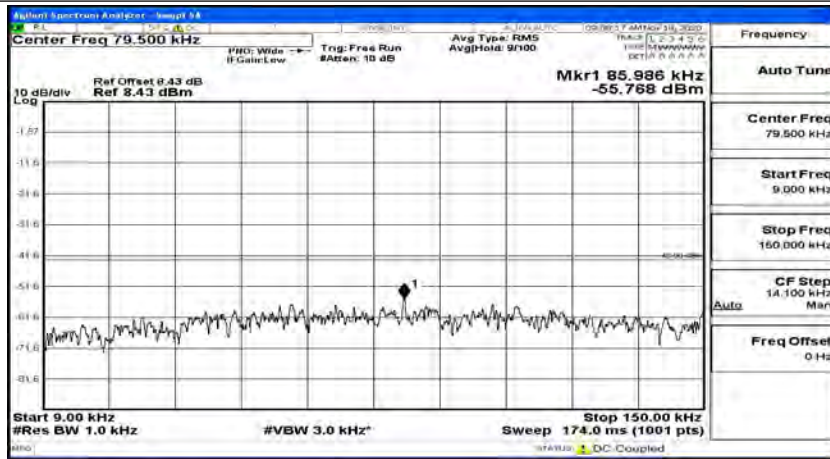
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



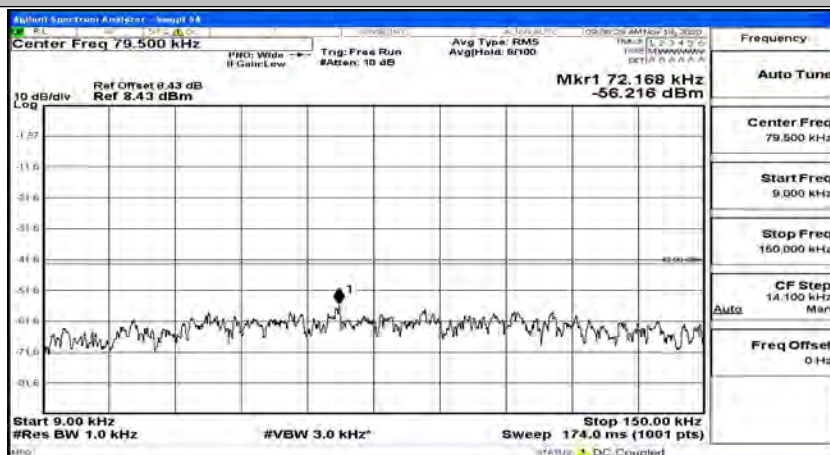
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

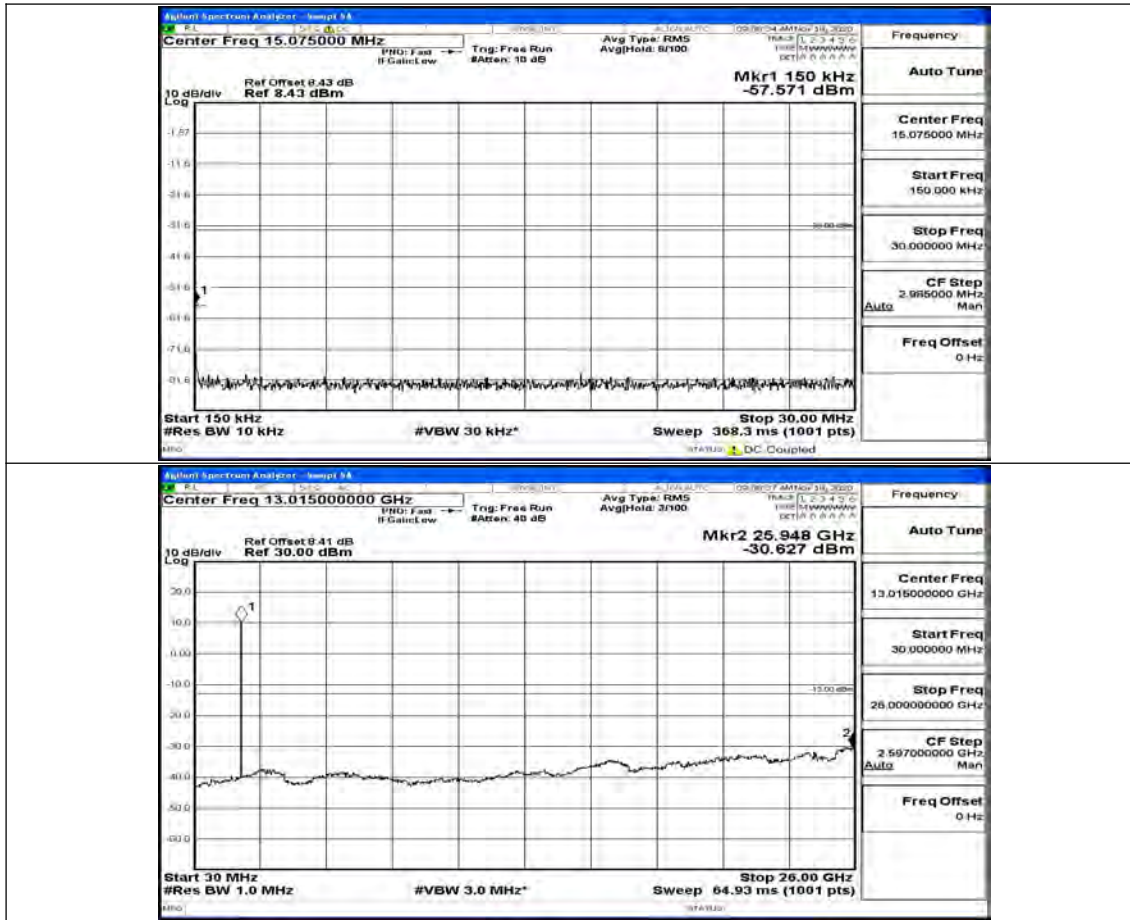


(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7

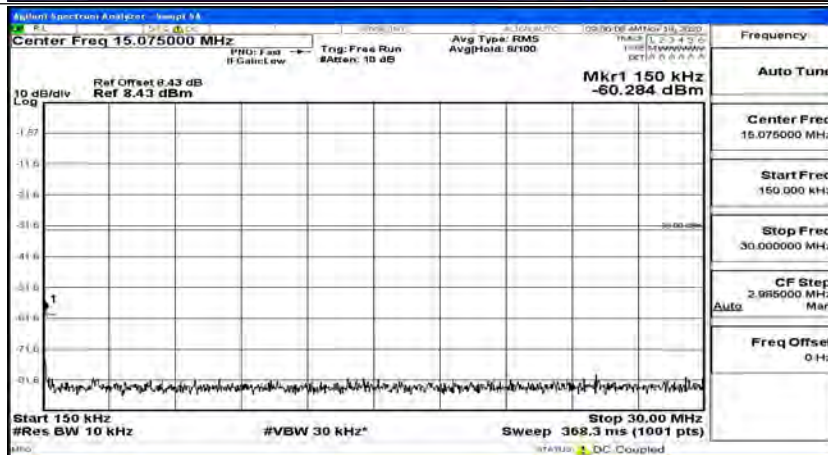
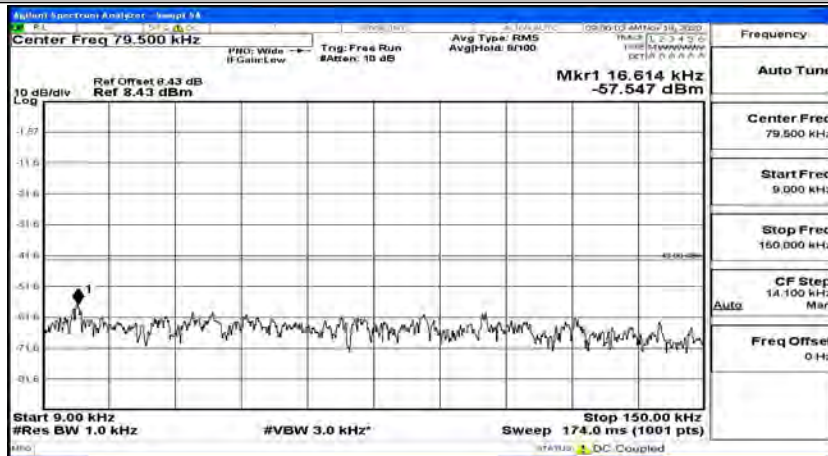


(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14

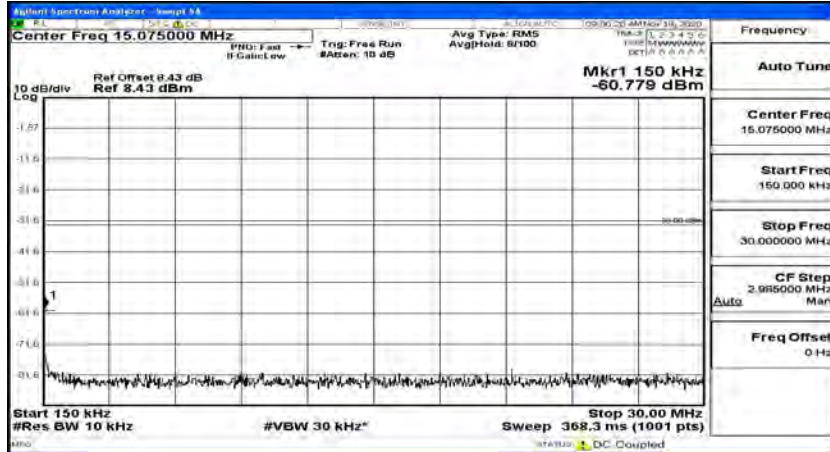
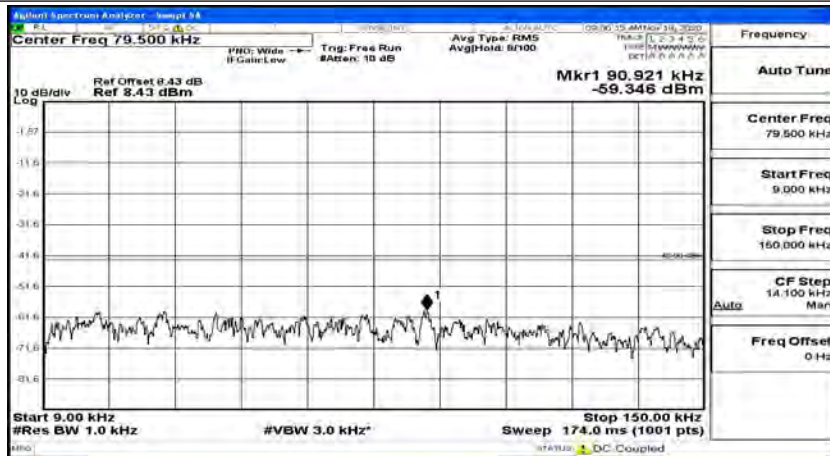




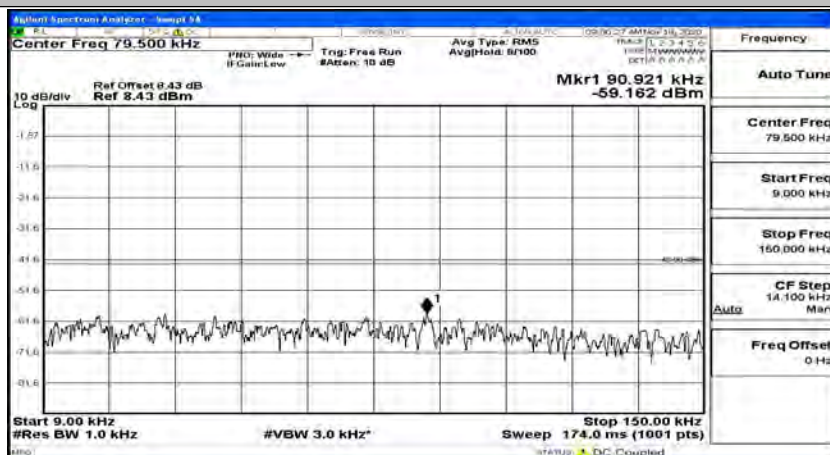
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0

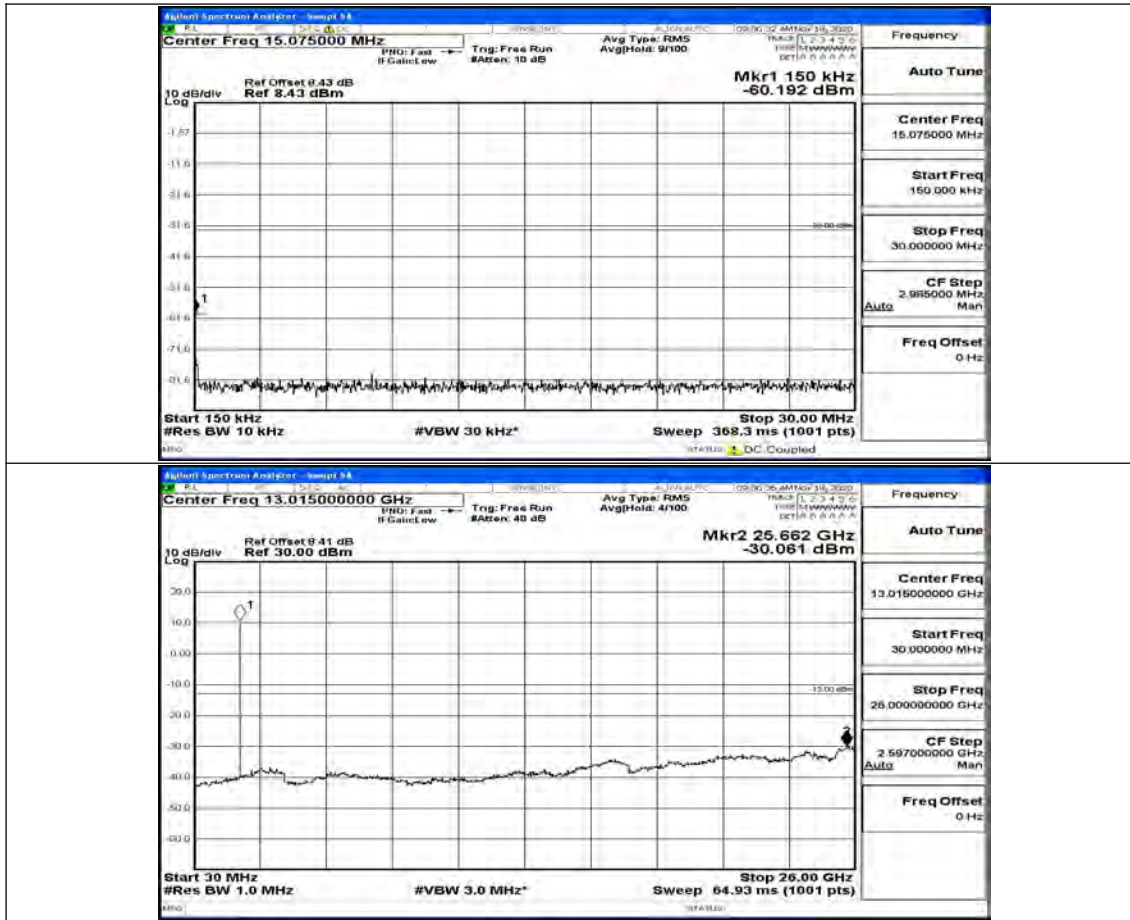


(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7

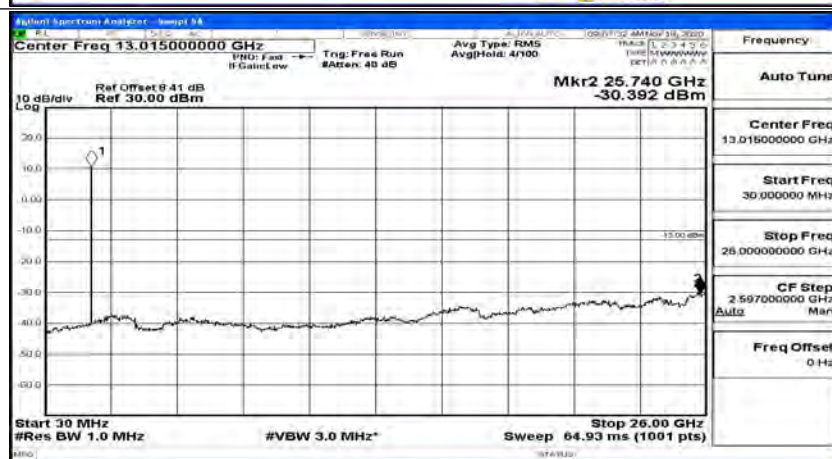
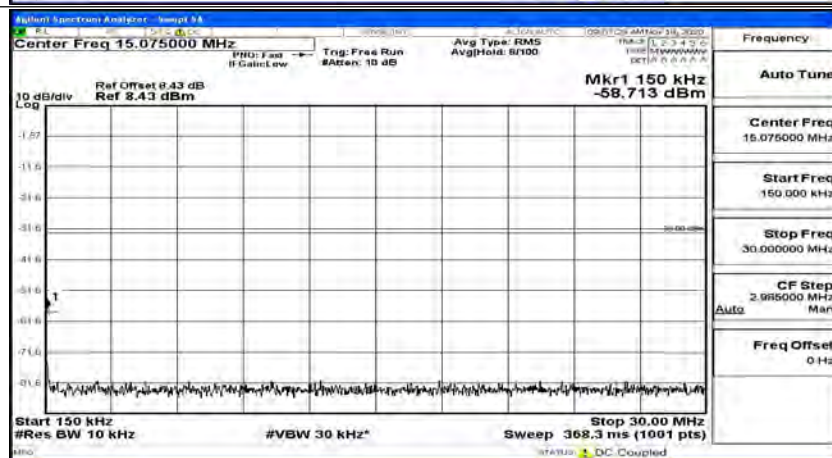
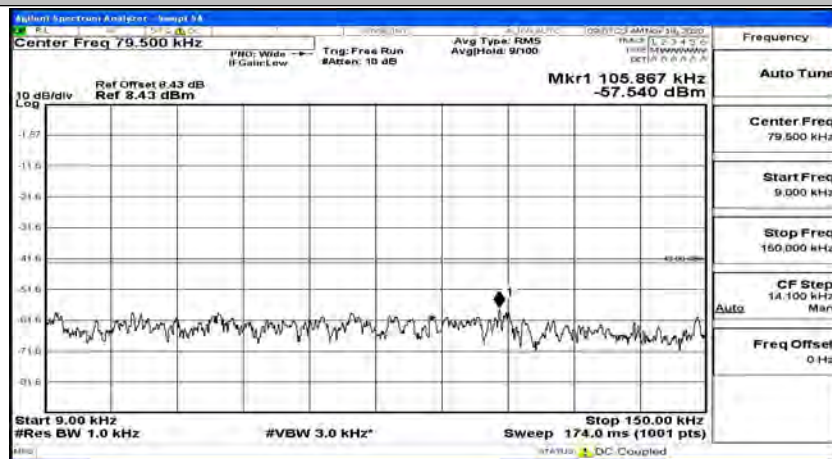


(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14

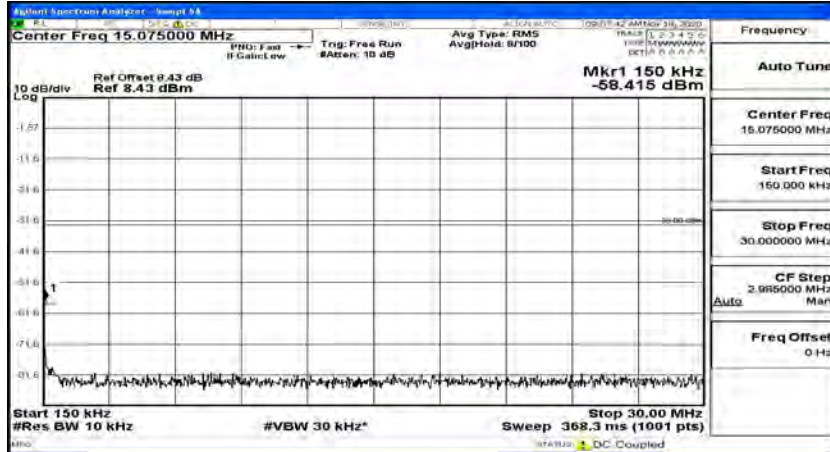
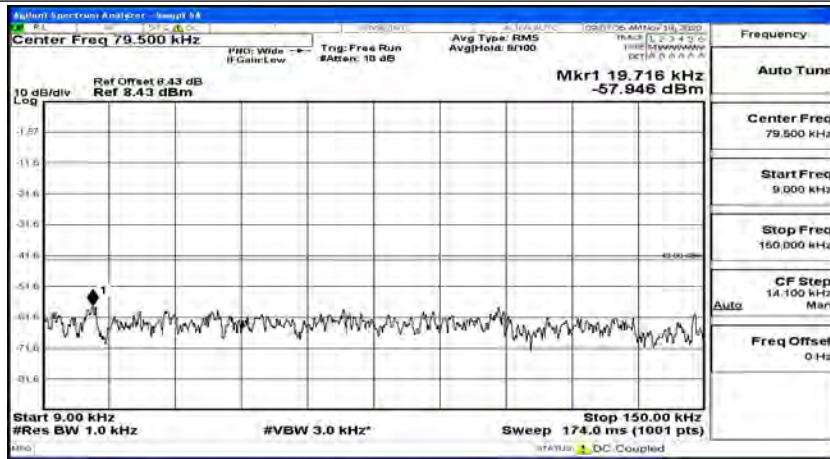




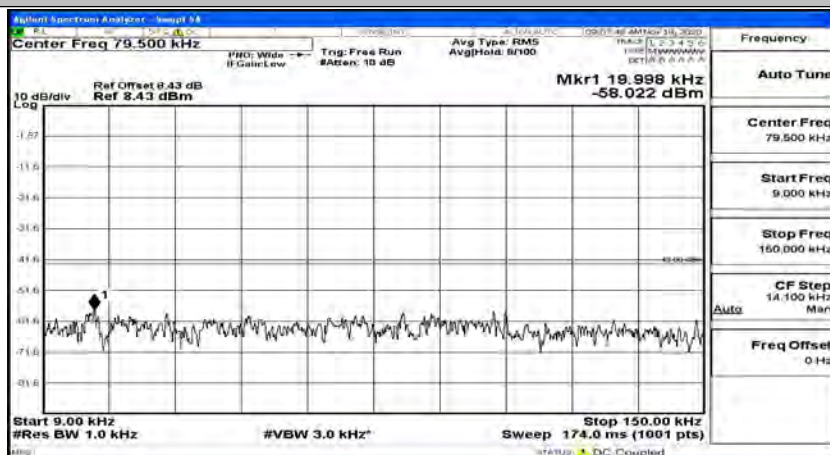
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0

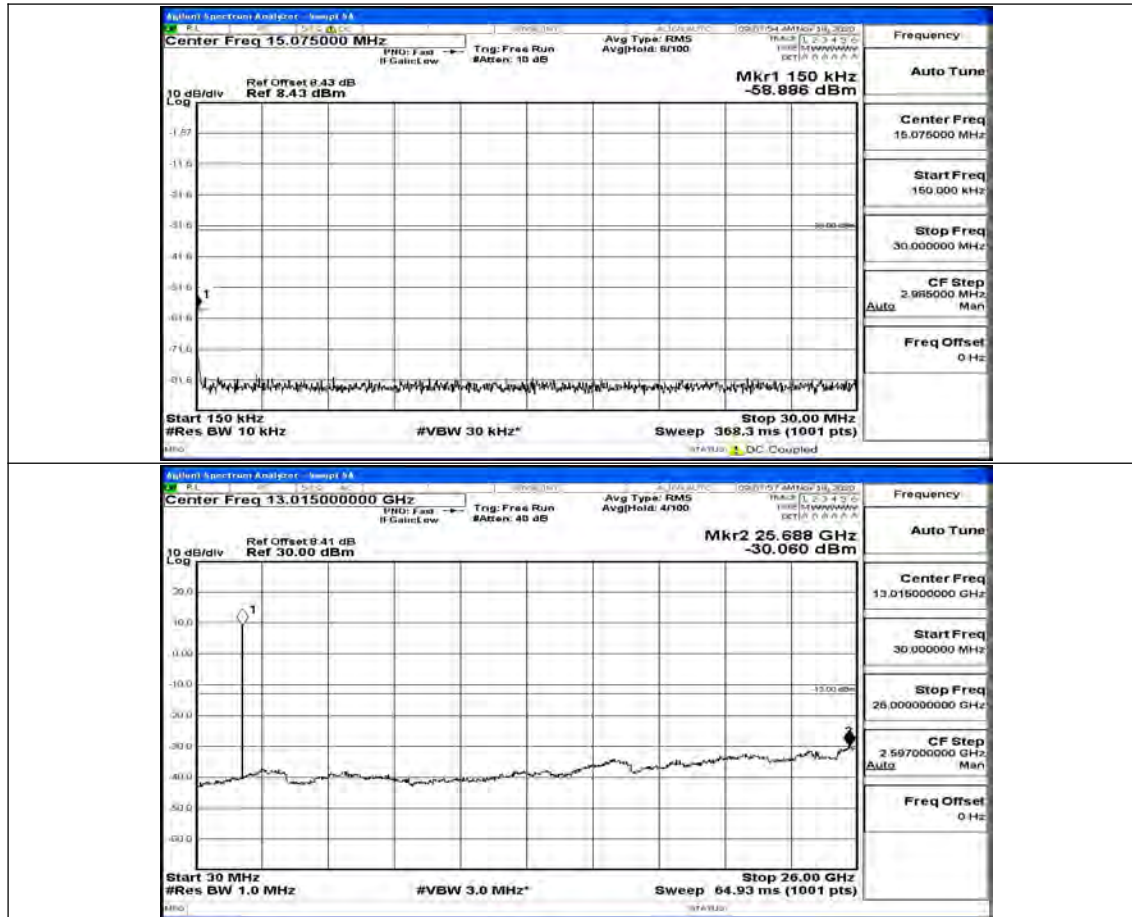


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

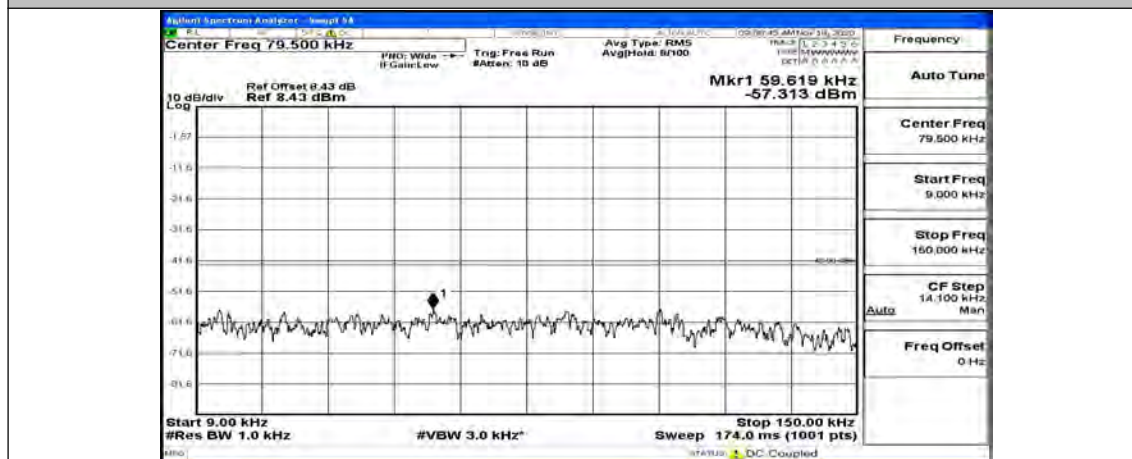


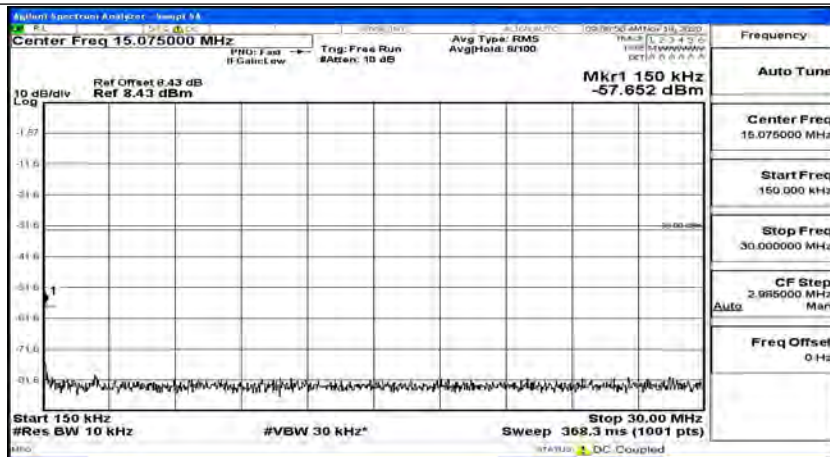
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14



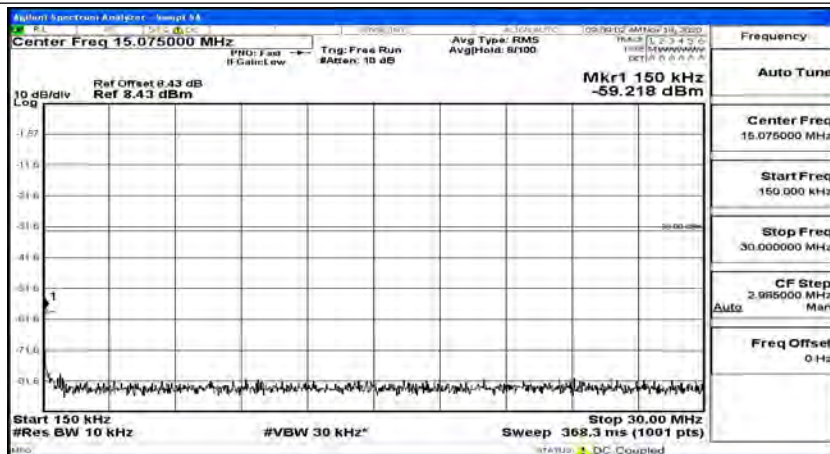
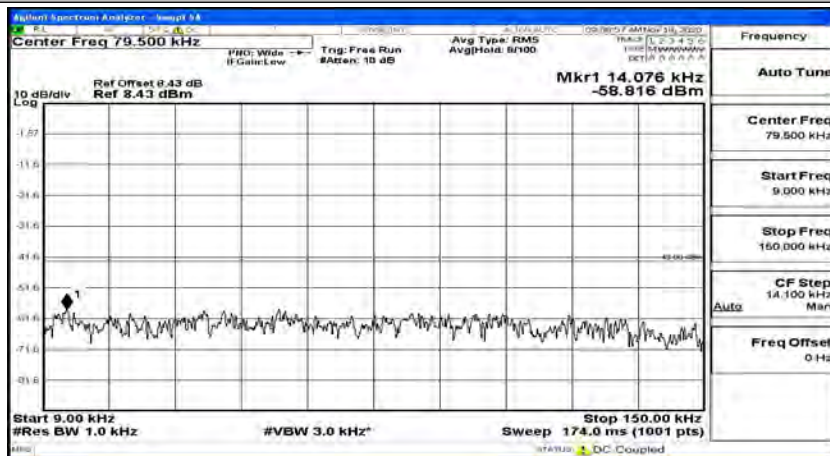


(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0





(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7





(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#14

