Appendix J: Test Data for E-UTRA Band 12

Product Name: Zettle Terminal
Trade Mark: Zettle Terminal
Test Model: Zettle Terminal

Environmental Conditions

Temperature:	22.3° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

J.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	23.29	22.45	PASS
		1	3	23.37	22.47	PASS
		1	5	23.30	22.47	PASS
		3	0	23.20	22.14	PASS
		3	2	23.19	22.15	PASS
		3	3	23.23	22.13	PASS
		6	0	22.22	21.19	PASS
	MCH	1	0	22.93	21.90	PASS
		1	3	23.06	22.09	PASS
		1	5	22.96	21.88	PASS
		3	0	22.90	21.92	PASS
		3	2	22.91	21.91	PASS
		3	3	22.91	21.84	PASS
		6	0	22.01	21.01	PASS
	HCH	1	0	22.84	22.14	PASS
		1	3	22.94	22.22	PASS
		1	5	22.92	22.13	PASS
		3	0	22.82	21.68	PASS
		3	2	22.79	21.68	PASS
		3	3	22.83	21.74	PASS
		6	0	22.02	20.99	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.23	22.47	PASS
		1	7	23.12	22.39	PASS
		1	14	22.93	22.22	PASS
		8	0	22.36	21.35	PASS
		8	4	22.36	21.36	PASS
		8	7	22.21	21.25	PASS
		15	0	22.32	21.38	PASS
	MCH	1	0	23.03	22.16	PASS
		1	7	23.17	22.44	PASS
		1	14	23.11	22.19	PASS
		8	0	22.05	20.94	PASS
		8	4	22.04	20.99	PASS
		8	7	21.88	20.84	PASS
		15	0	22.01	20.87	PASS
	HCH	1	0	22.86	21.86	PASS
		1	7	22.48	21.55	PASS
		1	14	22.92	22.21	PASS
		8	0	21.95	20.97	PASS
		8	4	21.97	20.99	PASS
		8	7	21.99	20.97	PASS
		15	0	21.98	20.86	PASS

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict
		Size	Offset			
QPSK / 16QAM	LCH	1	0	23.40	22.35	PASS
		1	12	23.21	22.20	PASS
		1	24	22.74	21.76	PASS
		12	0	22.38	21.38	PASS
		12	6	22.39	21.39	PASS
		12	13	22.26	21.27	PASS
		25	0	22.29	21.22	PASS
	MCH	1	0	23.16	22.14	PASS
		1	12	23.26	22.36	PASS
		1	24	23.48	22.37	PASS
		12	0	21.97	20.96	PASS
		12	6	21.97	20.99	PASS
		12	13	21.96	20.91	PASS
		25	0	22.11	21.02	PASS
	HCH	1	0	23.10	22.11	PASS
		1	12	22.44	21.44	PASS
		1	24	22.81	21.65	PASS
		12	0	22.06	21.06	PASS
		12	6	22.04	21.07	PASS
		12	13	21.94	20.86	PASS
		25	0	22.15	21.09	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	23.58	22.86	PASS
		1	24	22.84	22.02	PASS
		1	49	22.91	22.07	PASS
		25	0	22.34	21.38	PASS
		25	12	22.34	21.39	PASS
		25	25	21.96	21.03	PASS
		50	0	22.30	21.22	PASS
	MCH	1	0	23.48	22.76	PASS
		1	24	23.09	22.38	PASS
		1	49	23.20	22.49	PASS
		25	0	22.13	21.16	PASS
		25	12	22.13	21.16	PASS
		25	25	22.05	21.10	PASS
		50	0	21.99	21.07	PASS
	HCH	1	0	23.13	22.26	PASS
		1	24	24.62	23.77	PASS
		1	49	21.09	20.28	PASS
		25	0	21.99	21.27	PASS
		25	12	22.00	21.29	PASS
		25	25	22.05	20.90	PASS
		50	0	21.93	20.97	PASS

J.2 Peak-to-Average Ratio

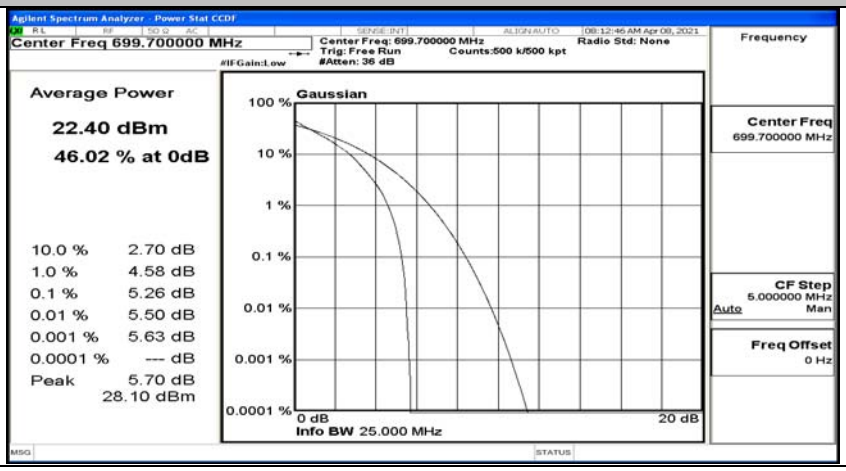
Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.26	<13	PASS
	MCH	5.86	<13	PASS
	HCH	5.76	<13	PASS
16QAM	LCH	6.16	<13	PASS
	MCH	6.78	<13	PASS
	HCH	6.6	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.39	<13	PASS
	MCH	6.02	<13	PASS
	HCH	5.81	<13	PASS
16QAM	LCH	6.22	<13	PASS
	MCH	6.86	<13	PASS
	HCH	6.63	<13	PASS

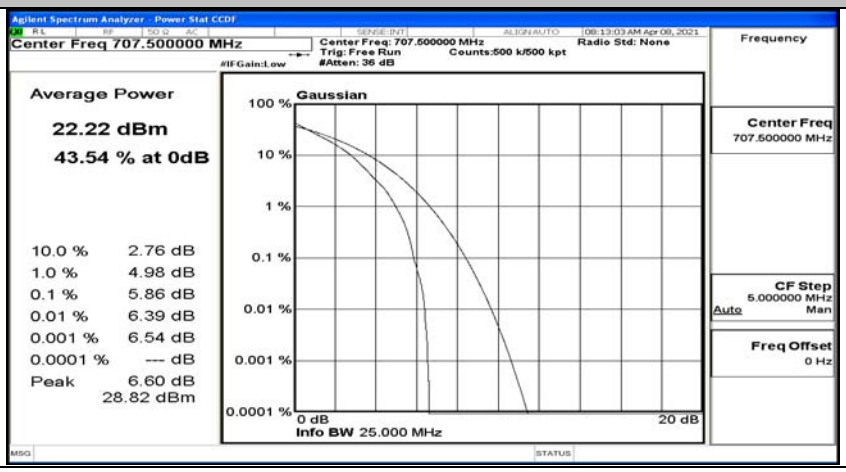
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.41	<13	PASS
	MCH	5.9	<13	PASS
	HCH	5.52	<13	PASS
16QAM	LCH	6.22	<13	PASS
	MCH	6.72	<13	PASS
	HCH	6.31	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.65	<13	PASS
	MCH	5.7	<13	PASS
	HCH	5.35	<13	PASS
16QAM	LCH	6.45	<13	PASS
	MCH	6.53	<13	PASS
	HCH	6.24	<13	PASS

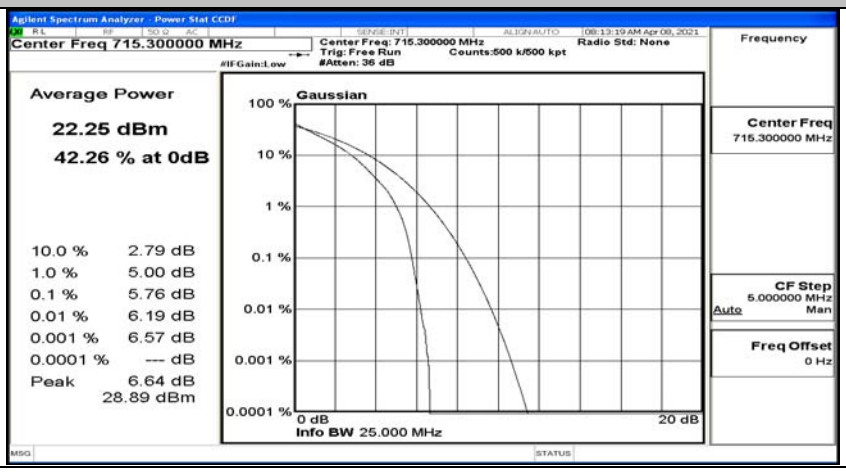
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



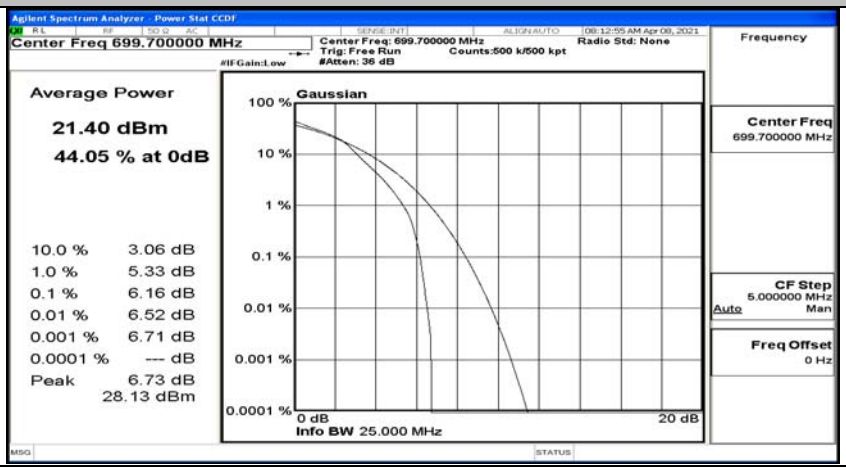
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



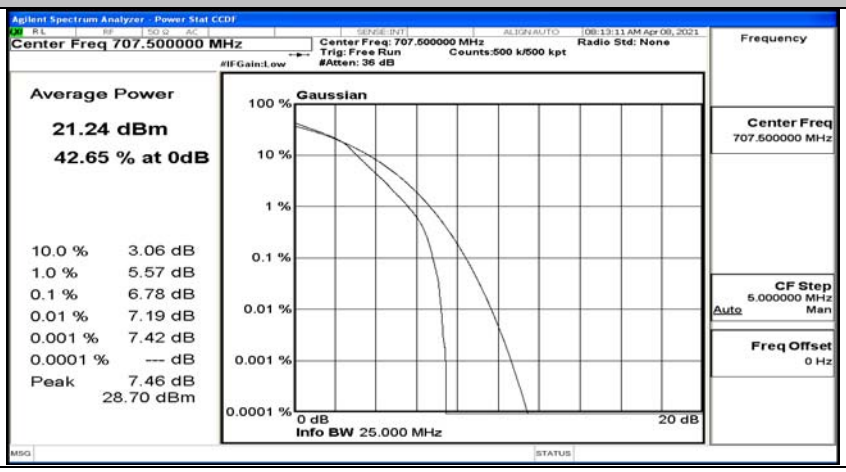
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



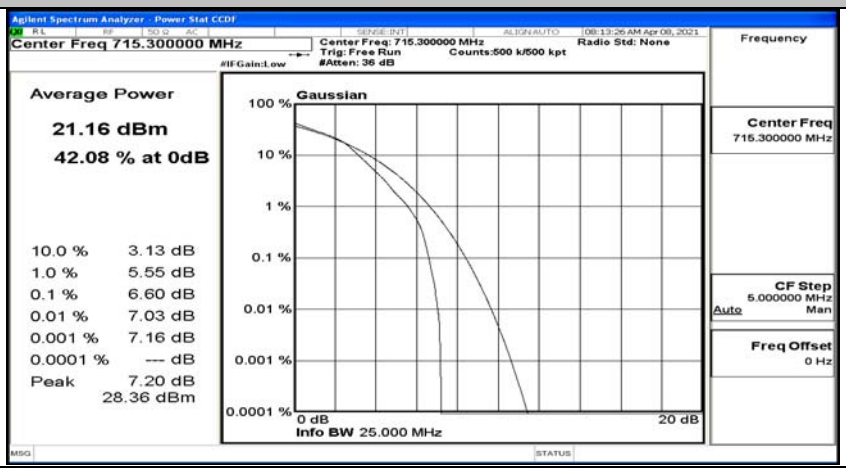
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



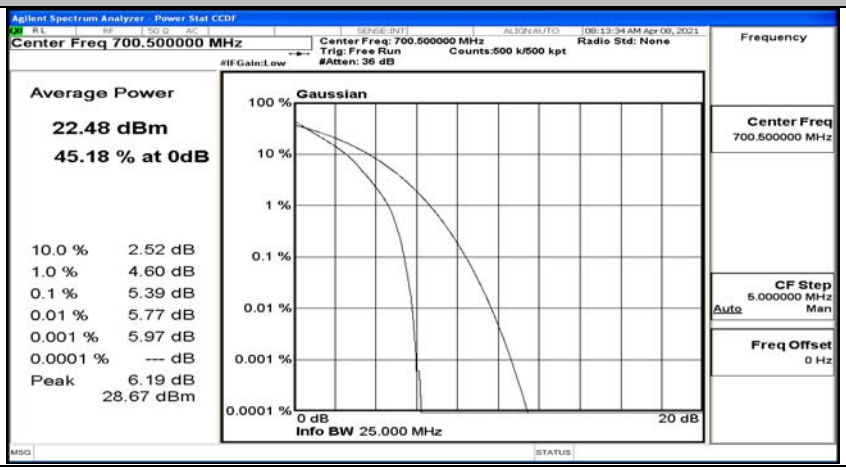
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



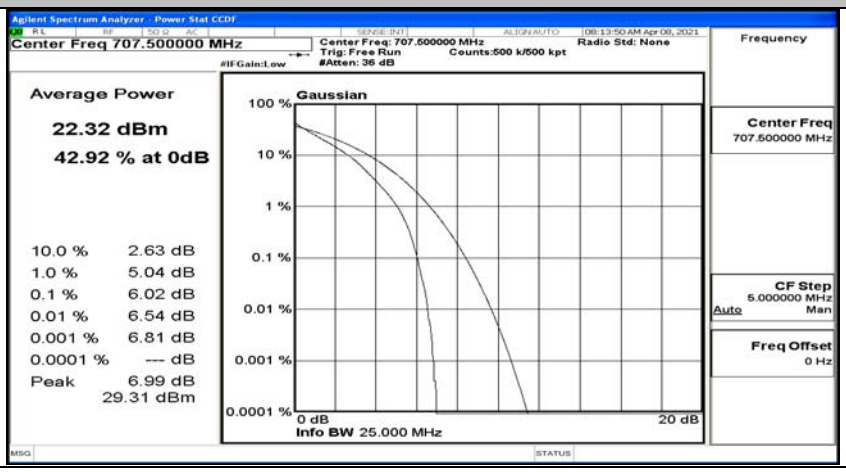
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



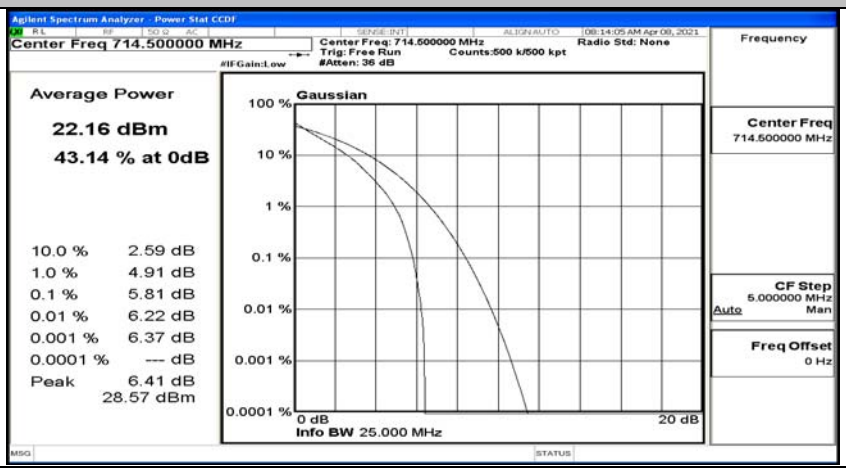
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



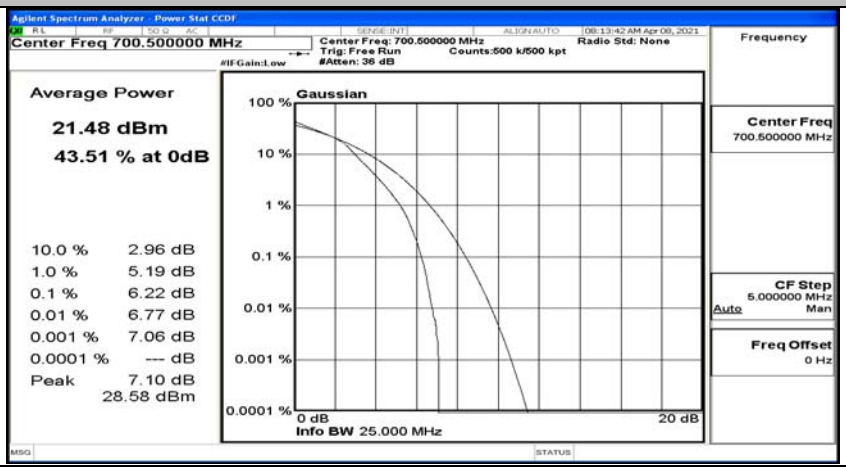
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



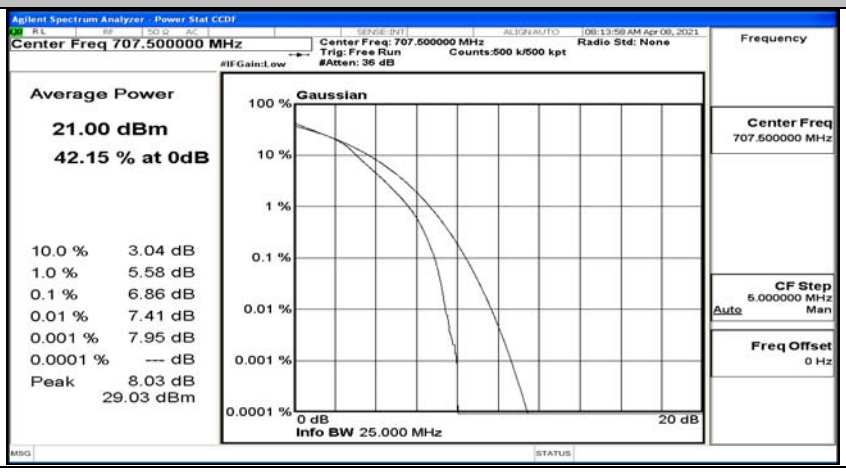
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



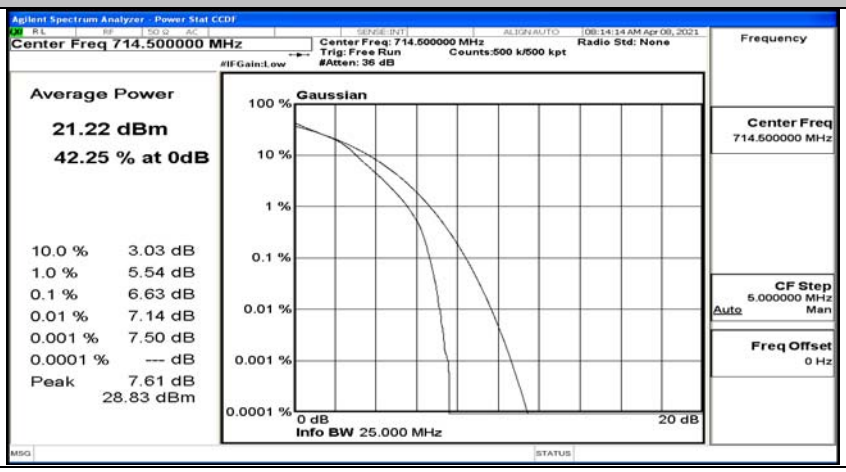
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



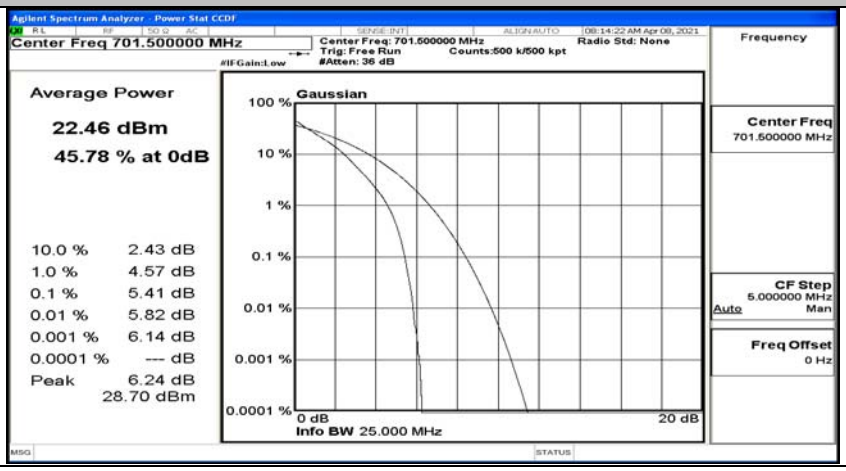
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



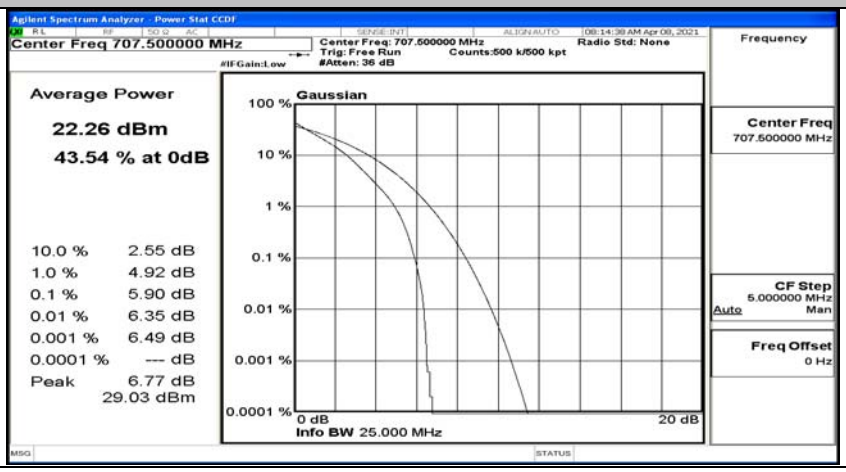
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



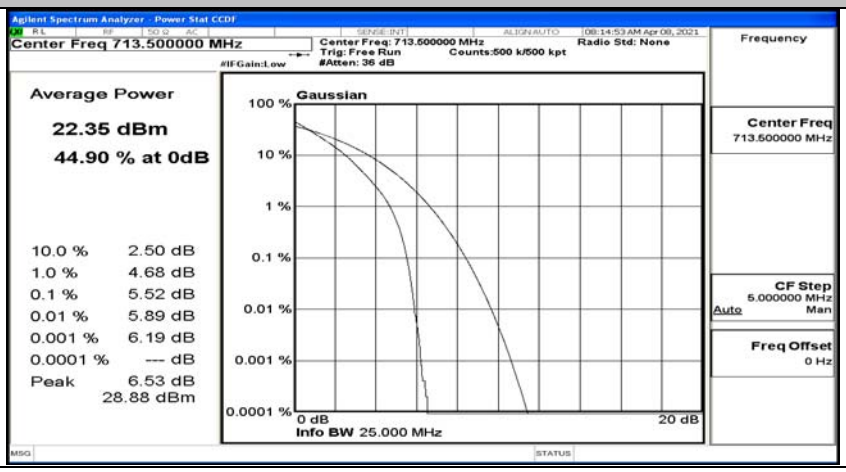
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



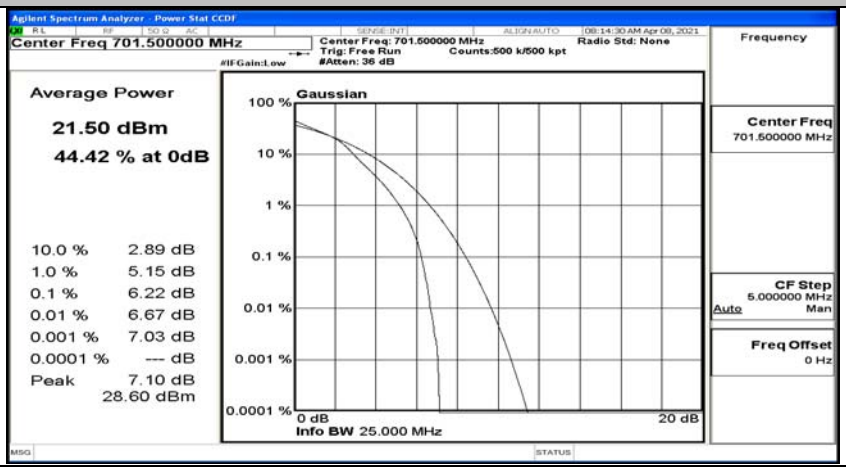
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



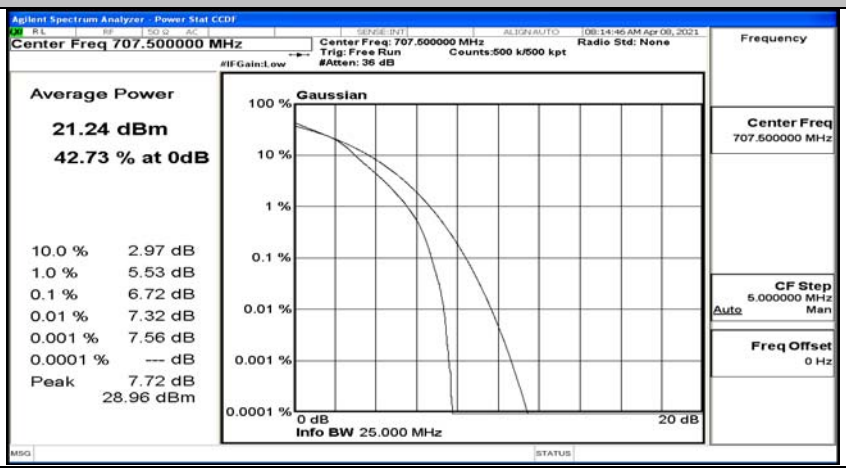
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



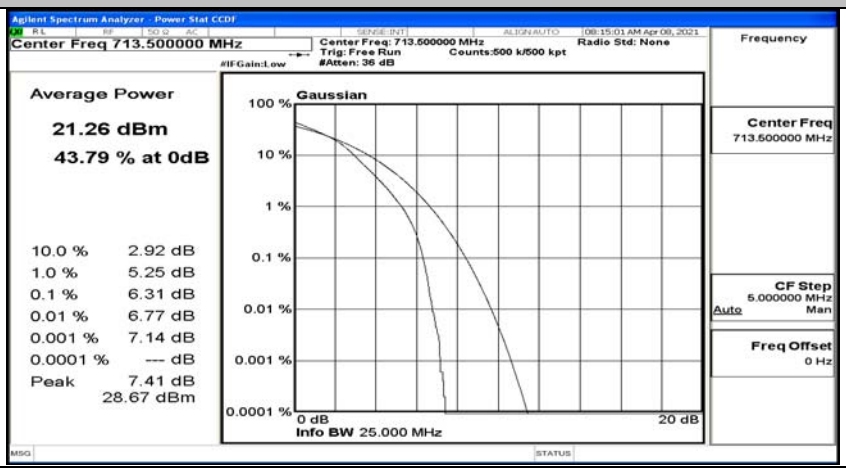
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



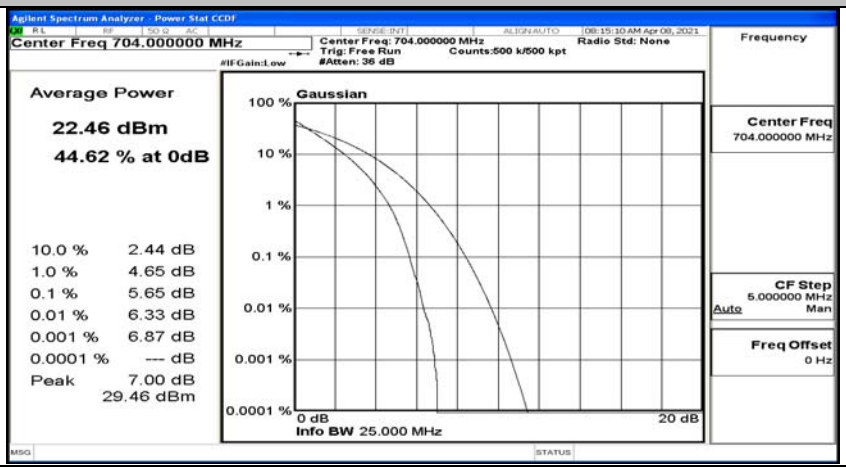
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



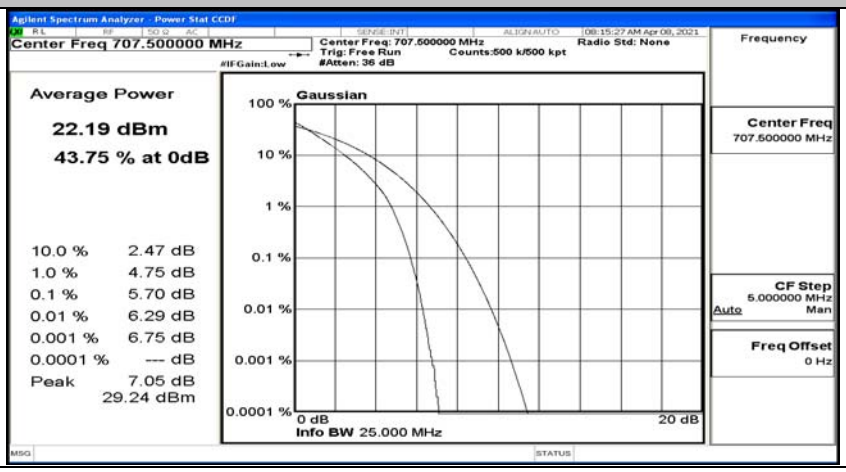
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



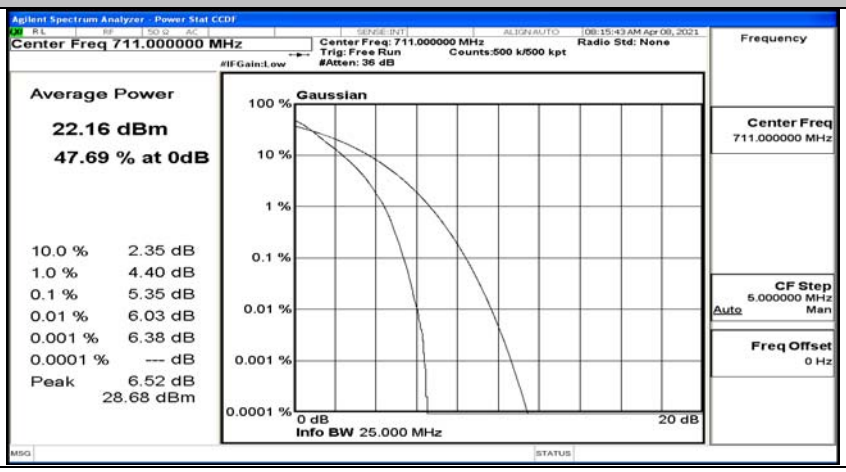
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



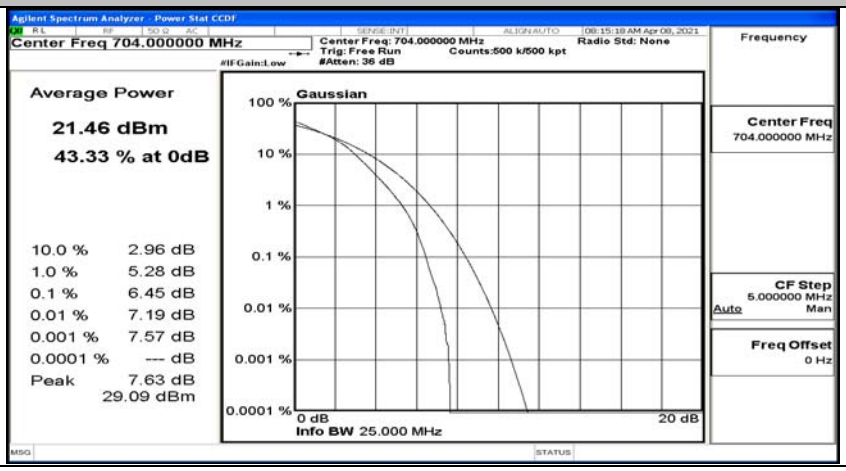
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



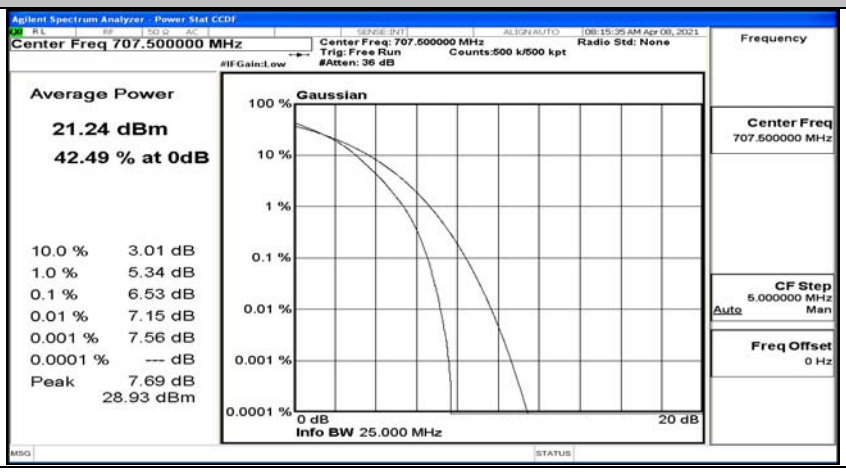
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



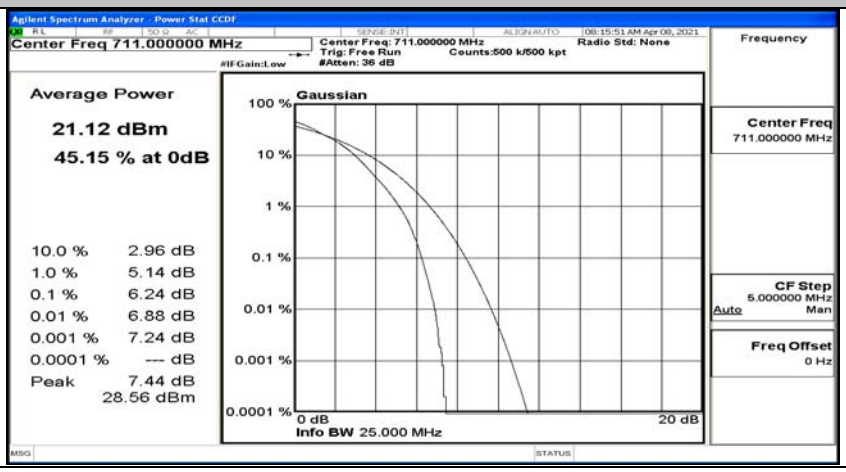
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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



J.3 26dB Bandwidth and Occupied Bandwidth

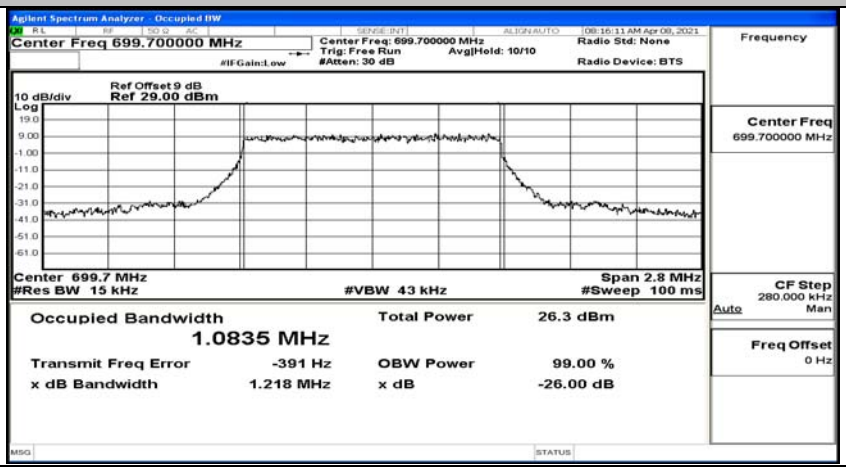
EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0835	1.218	PASS
	MCH	1.0800	1.229	PASS
	HCH	1.0810	1.224	PASS
16QAM	LCH	1.0763	1.235	PASS
	MCH	1.0790	1.198	PASS
	HCH	1.0781	1.239	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6835	2.873	PASS
	MCH	2.6908	2.914	PASS
	HCH	2.6864	2.892	PASS
16QAM	LCH	2.6815	2.897	PASS
	MCH	2.6874	2.892	PASS
	HCH	2.6890	2.900	PASS

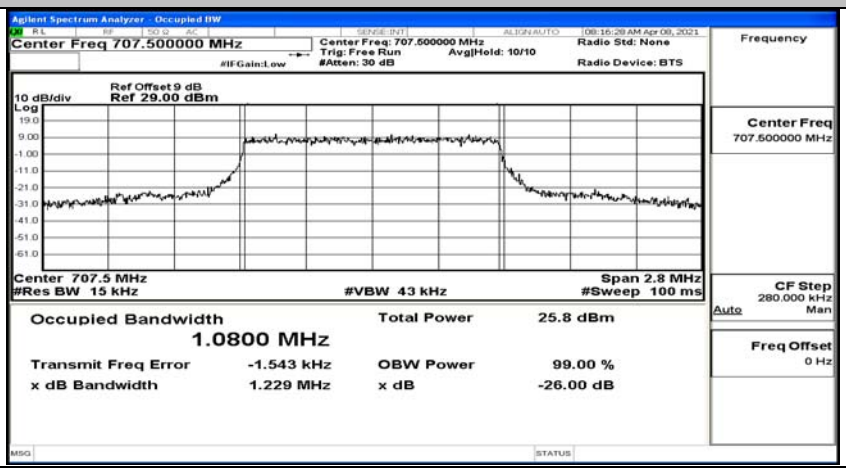
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4624	4.824	PASS
	MCH	4.4804	4.844	PASS
	HCH	4.4889	4.760	PASS
16QAM	LCH	4.4676	4.795	PASS
	MCH	4.4772	4.851	PASS
	HCH	4.4710	4.821	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9481	9.472	PASS
	MCH	8.9564	9.479	PASS
	HCH	8.8915	9.315	PASS
16QAM	LCH	8.9326	9.427	PASS
	MCH	8.9543	9.469	PASS
	HCH	8.9017	9.335	PASS

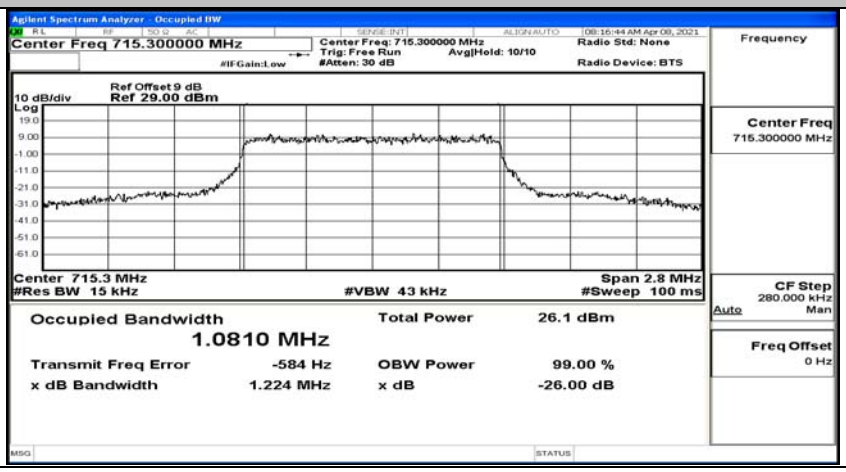
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



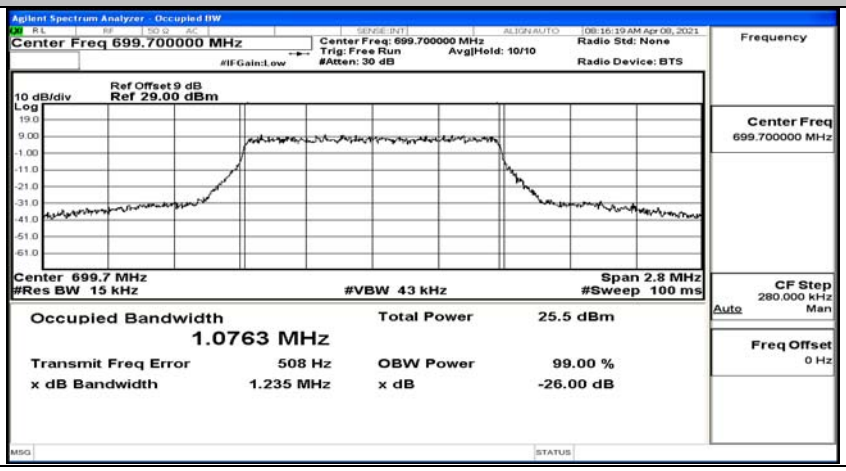
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



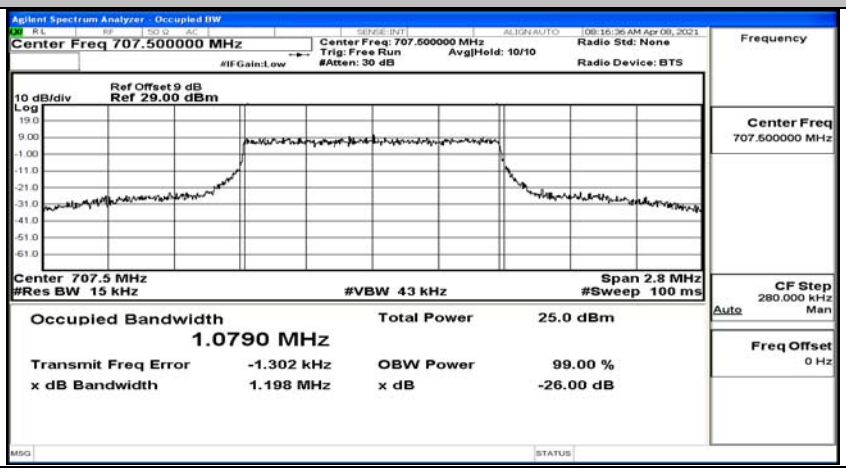
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



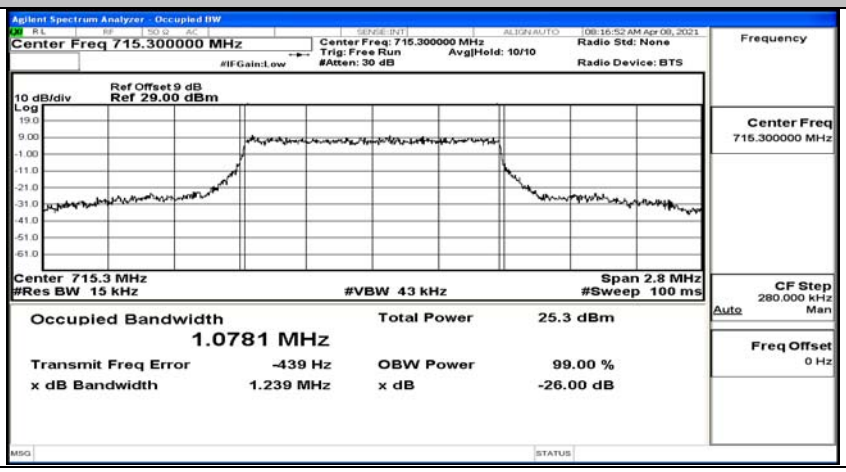
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



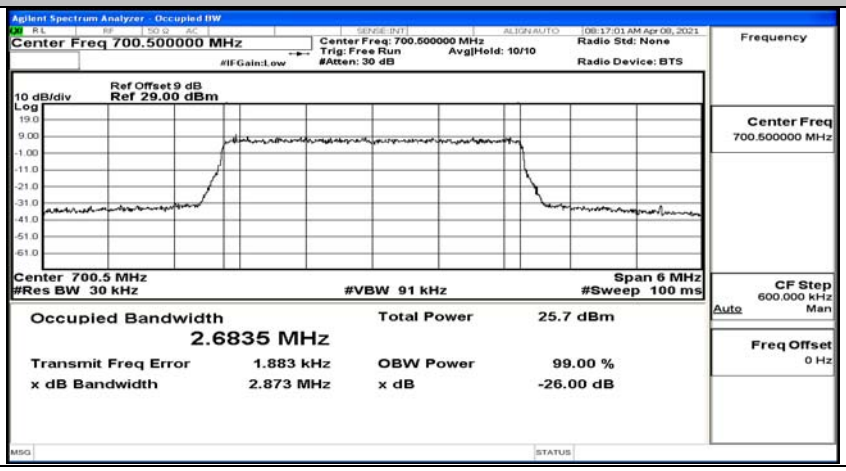
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



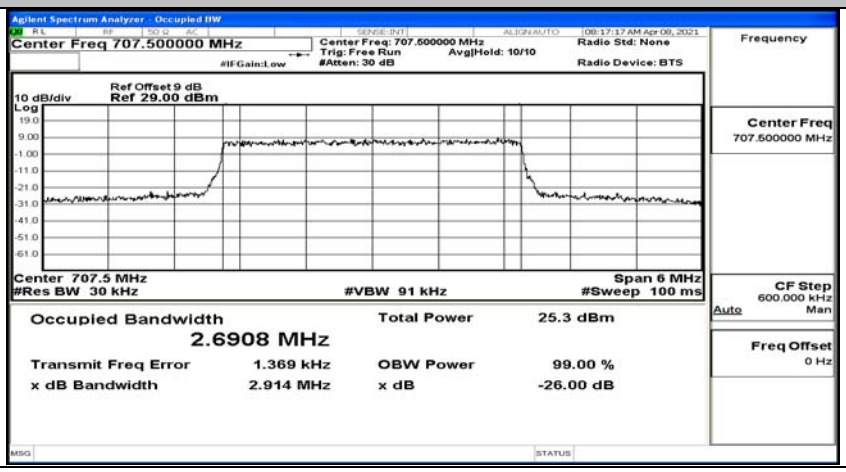
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



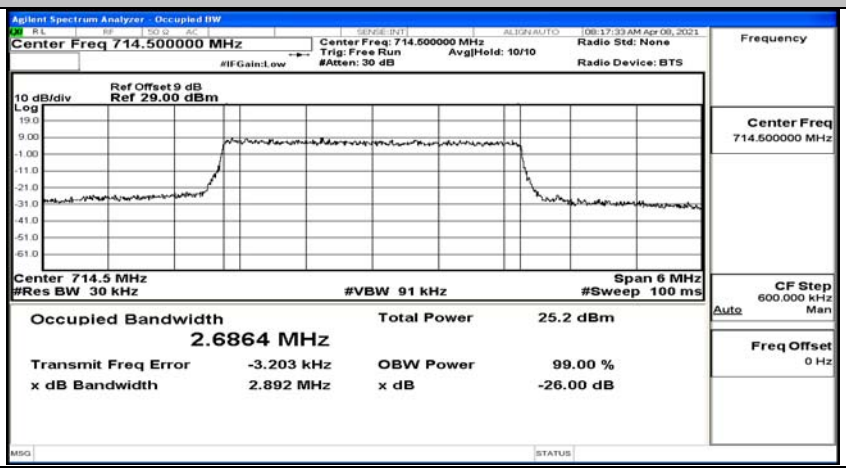
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



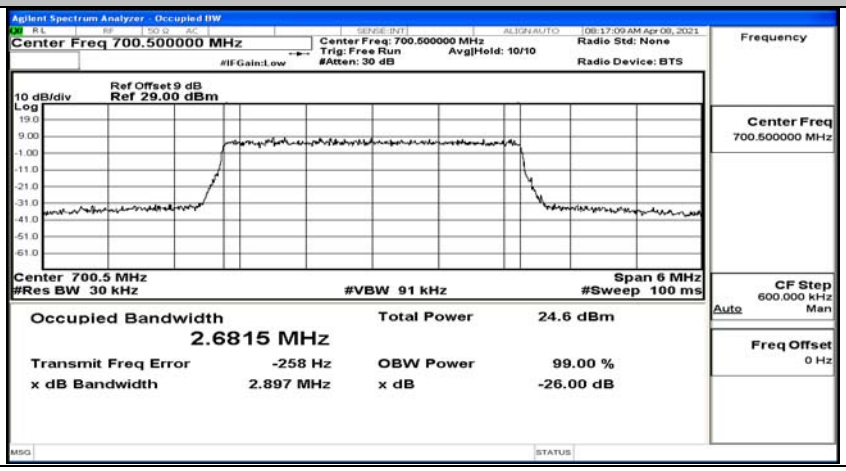
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



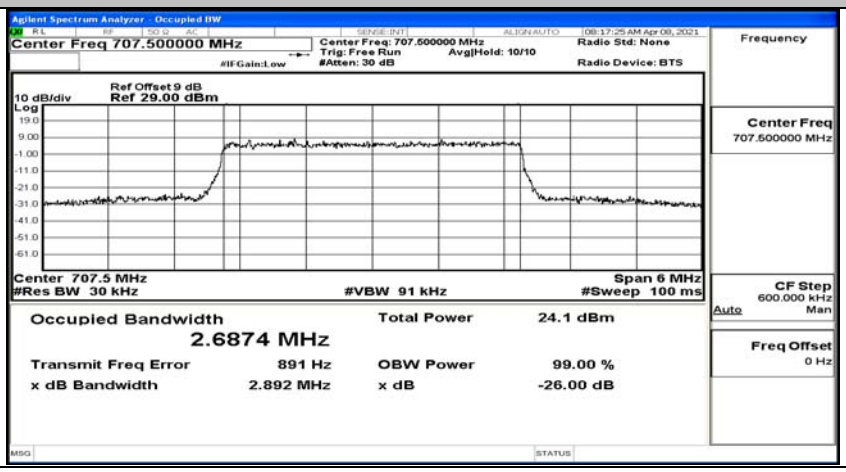
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



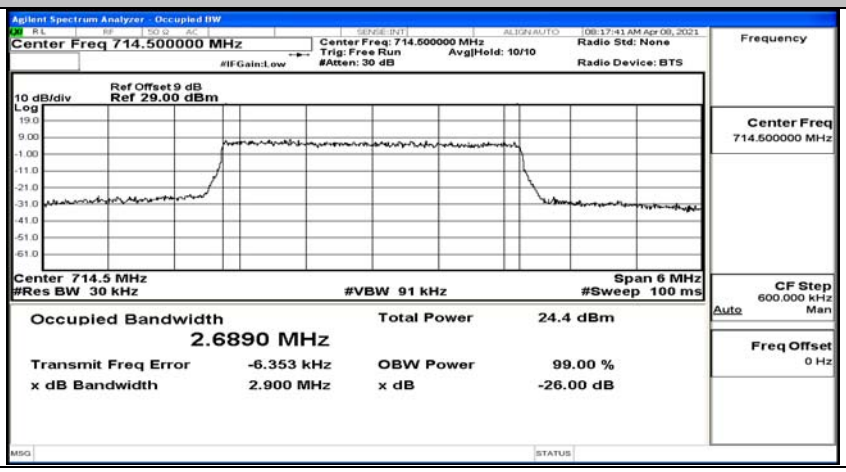
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



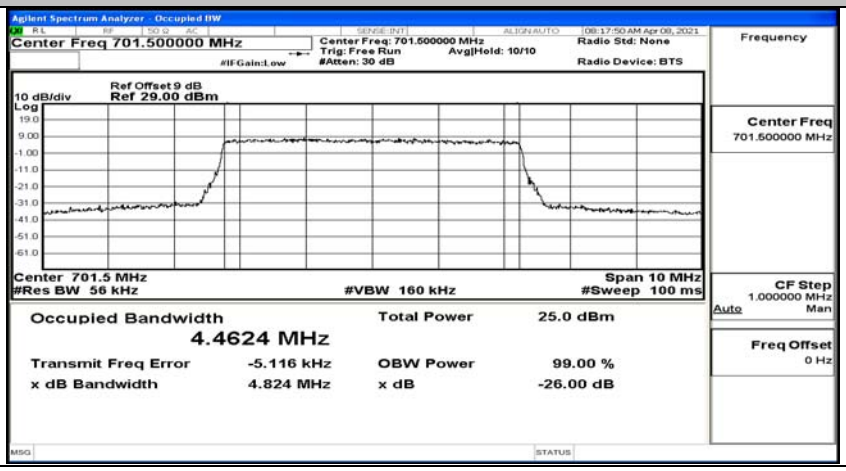
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



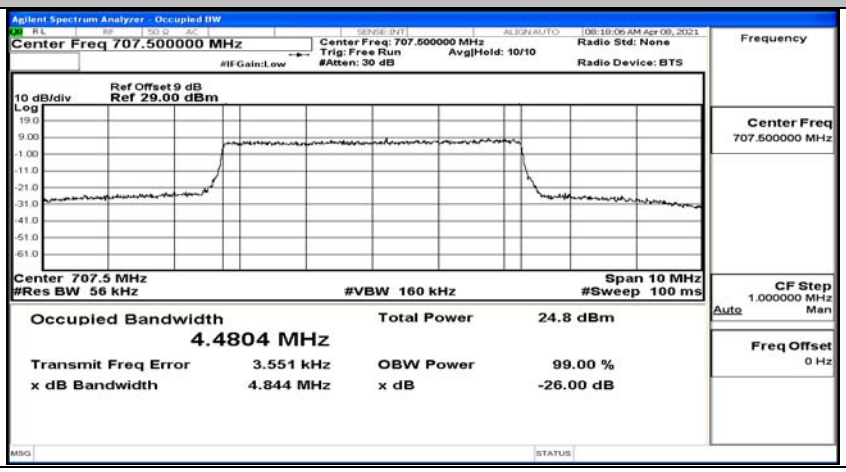
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



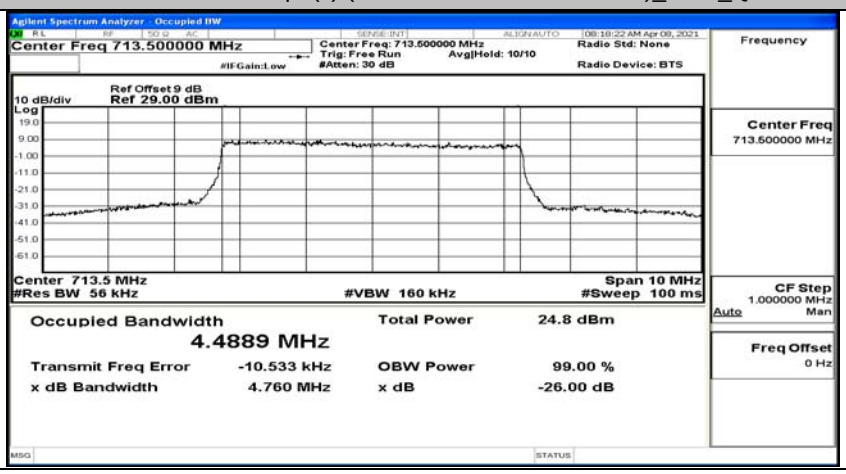
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



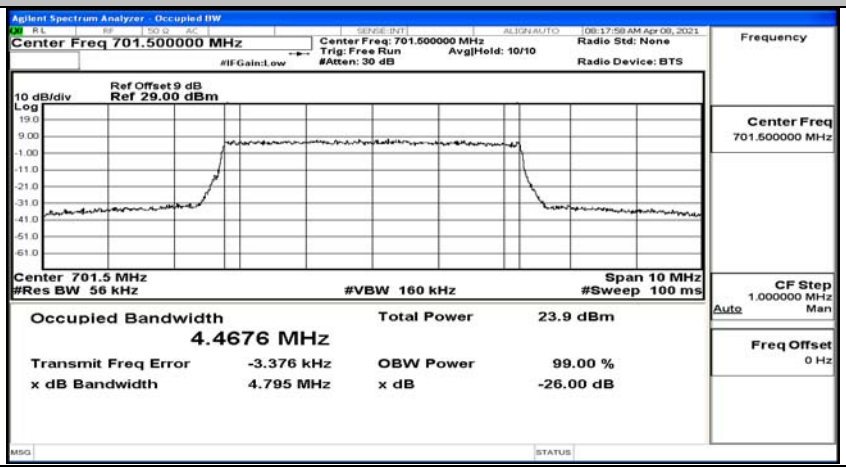
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



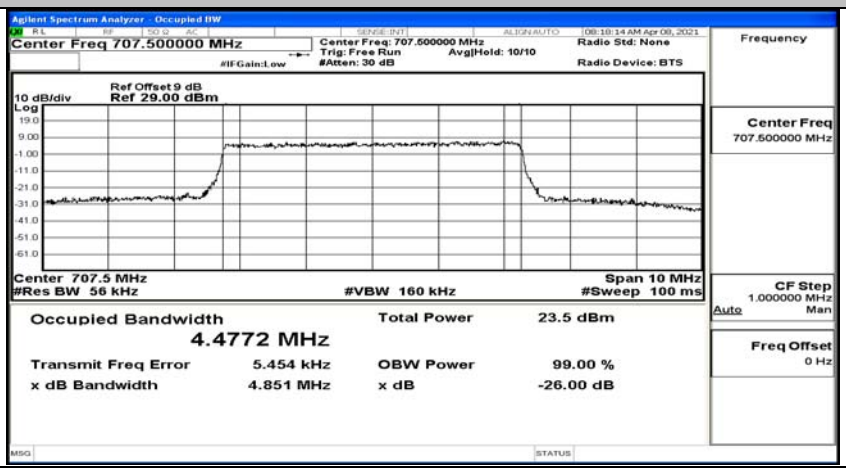
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



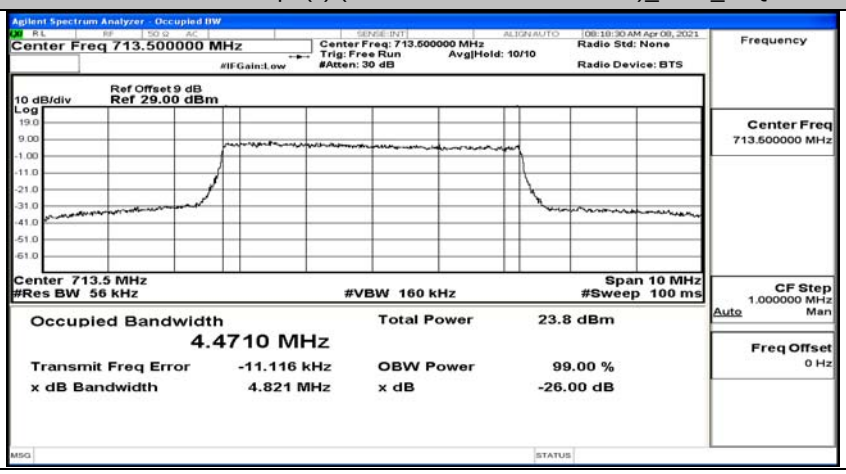
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



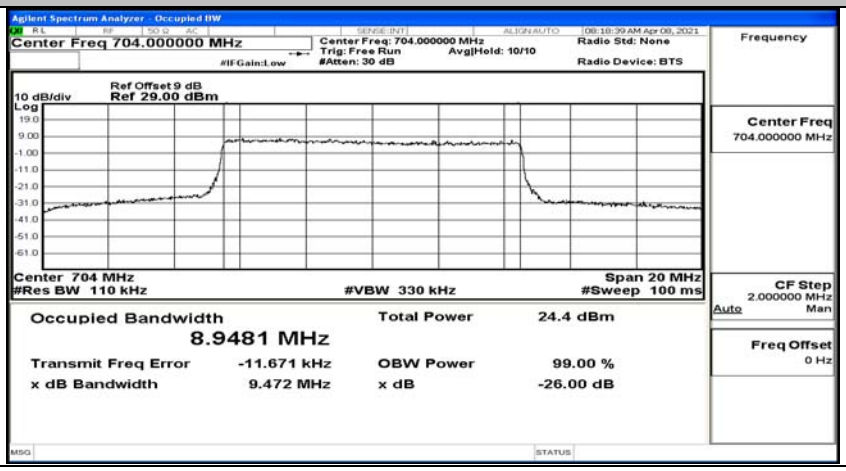
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



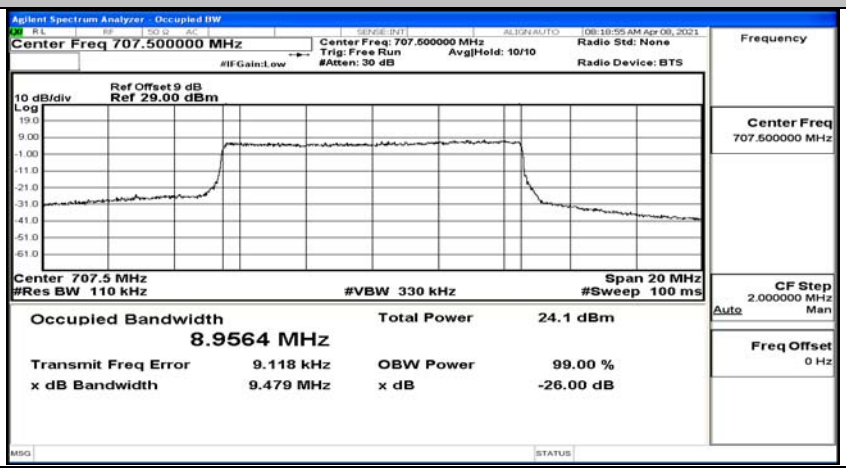
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



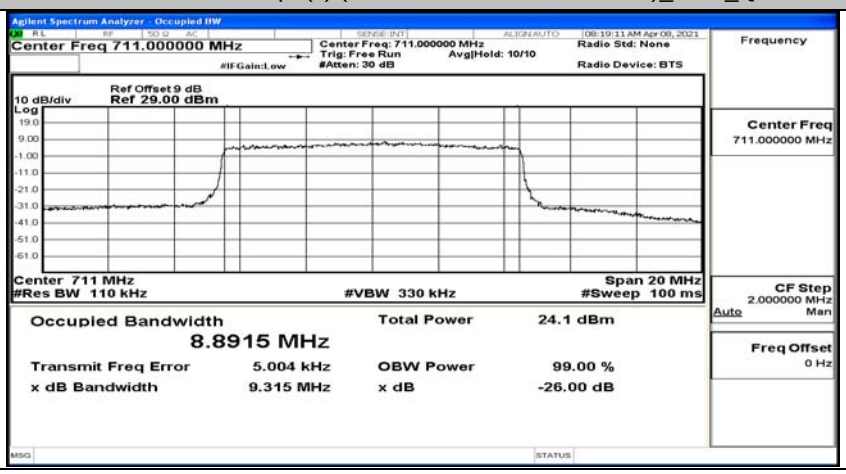
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



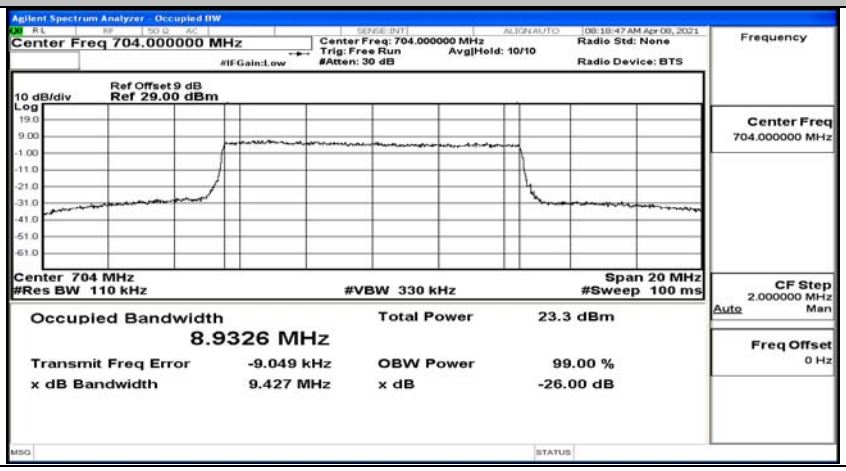
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



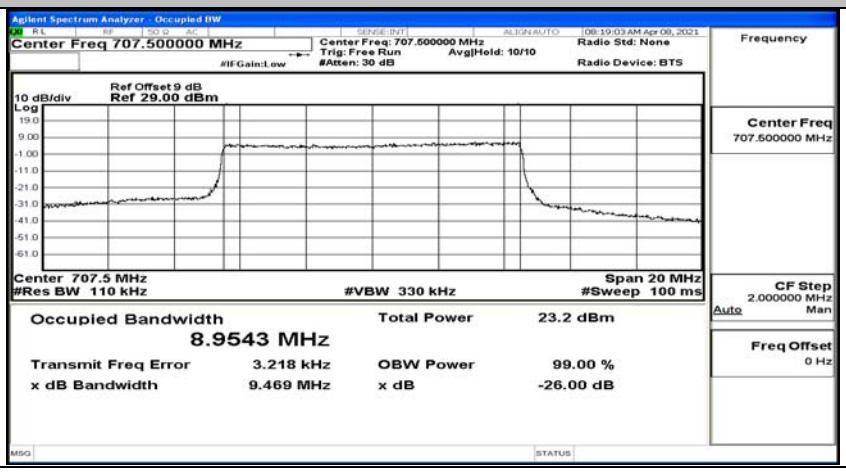
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



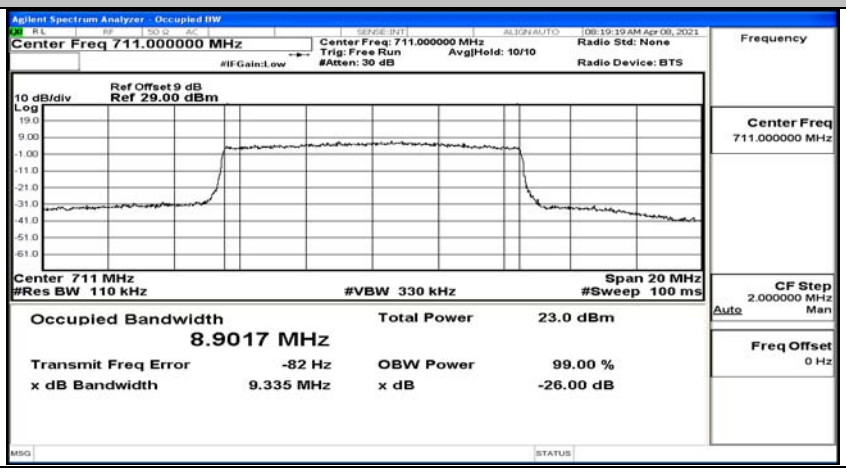
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

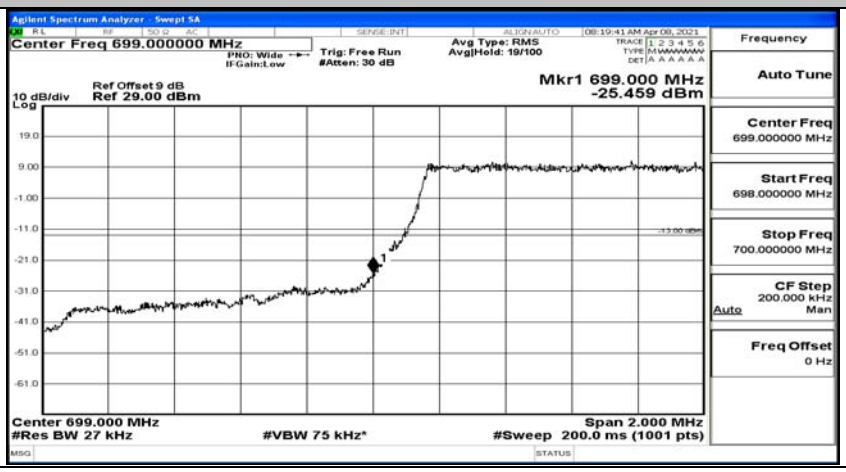


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

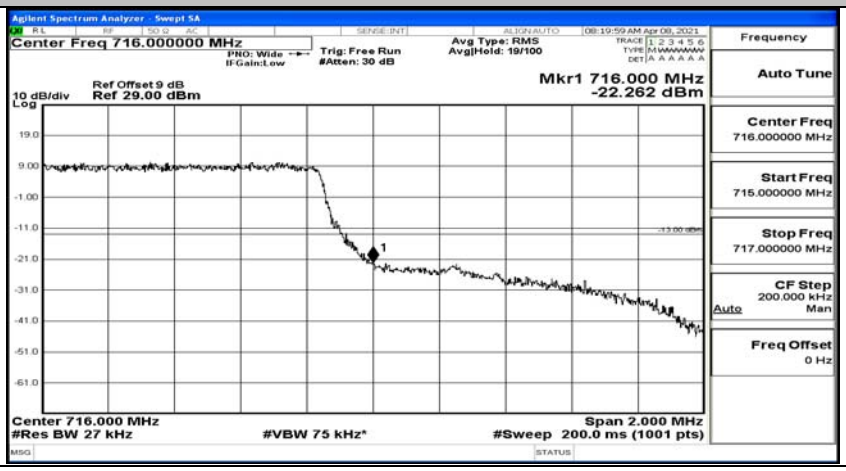


J.4 Band Edge

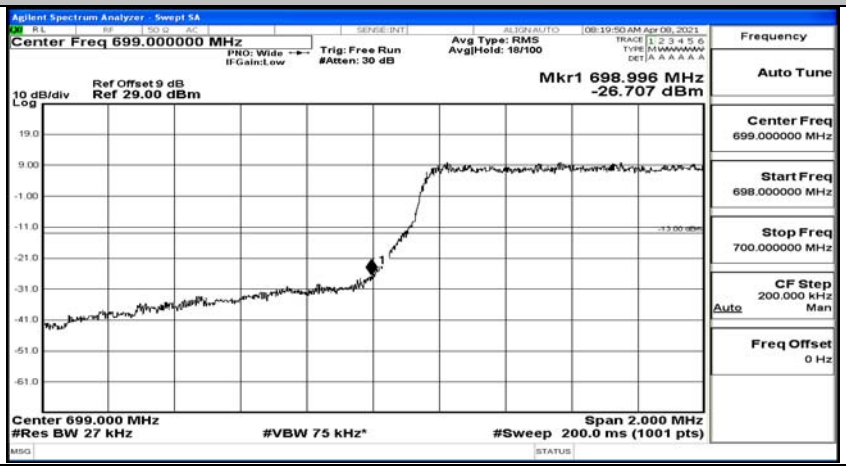
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



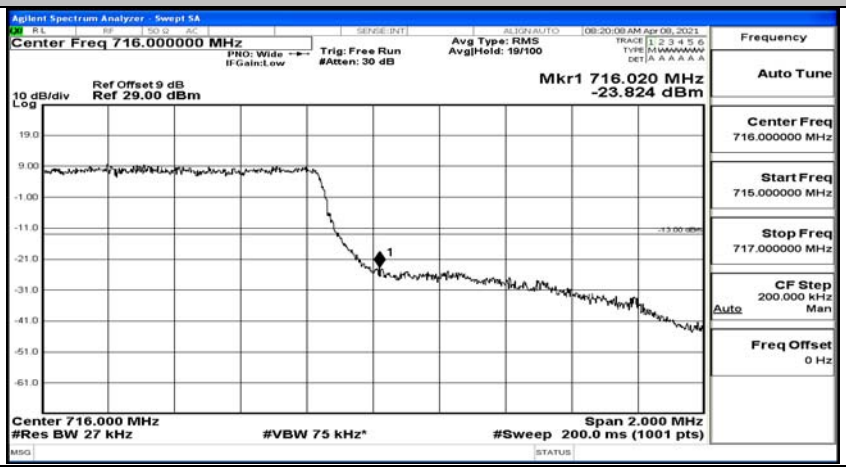
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



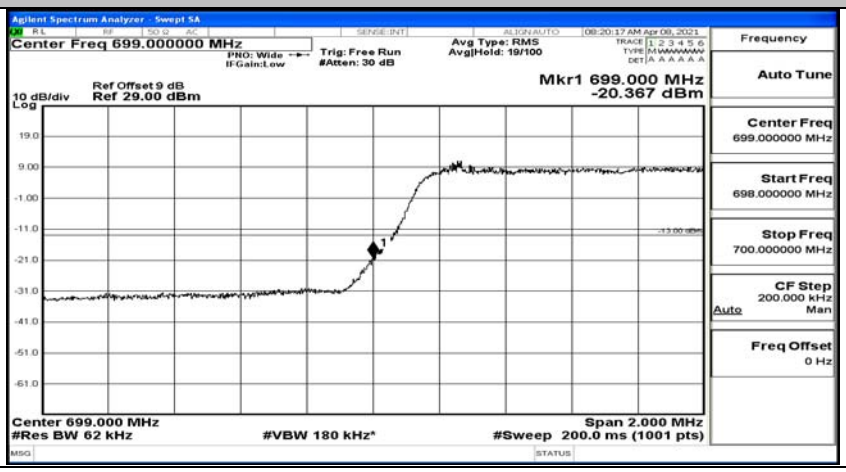
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



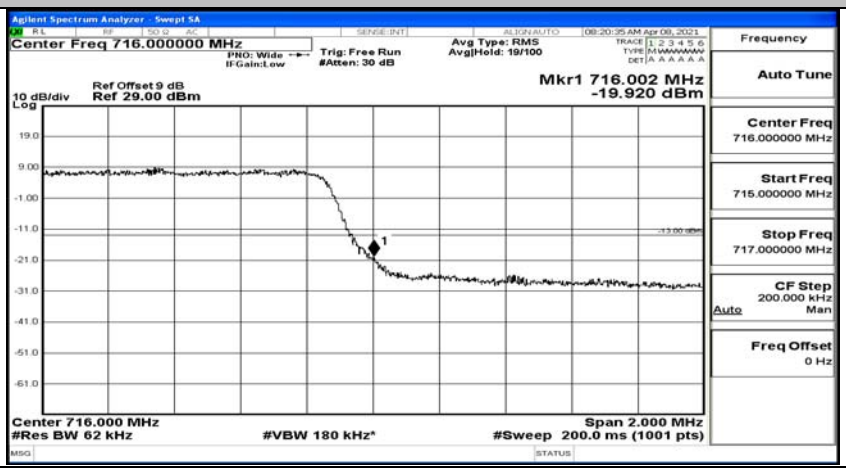
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



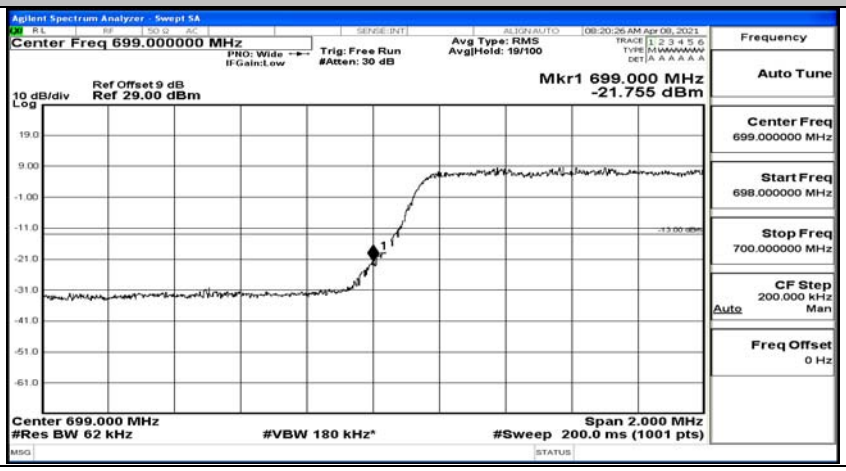
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



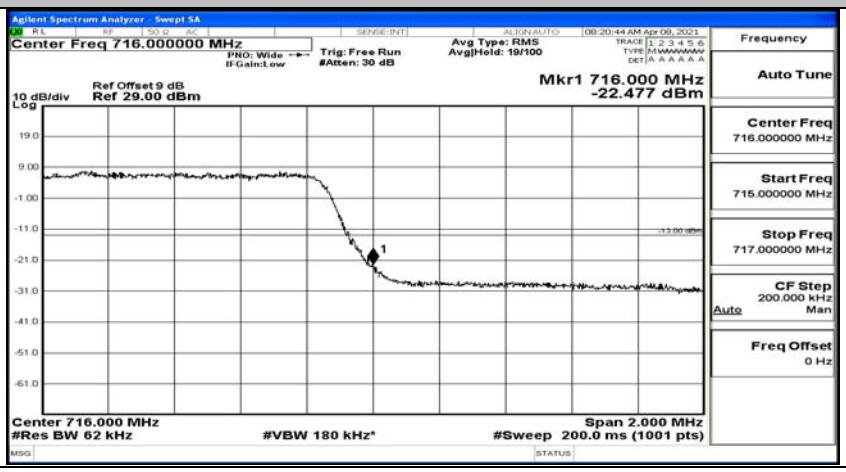
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



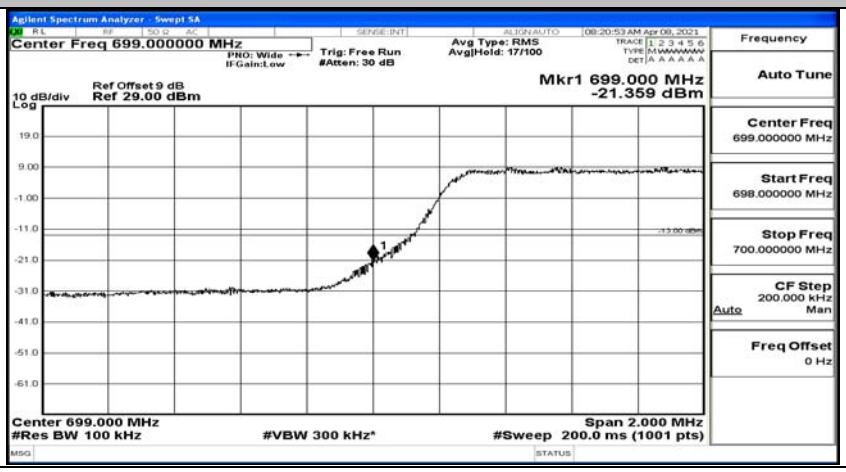
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



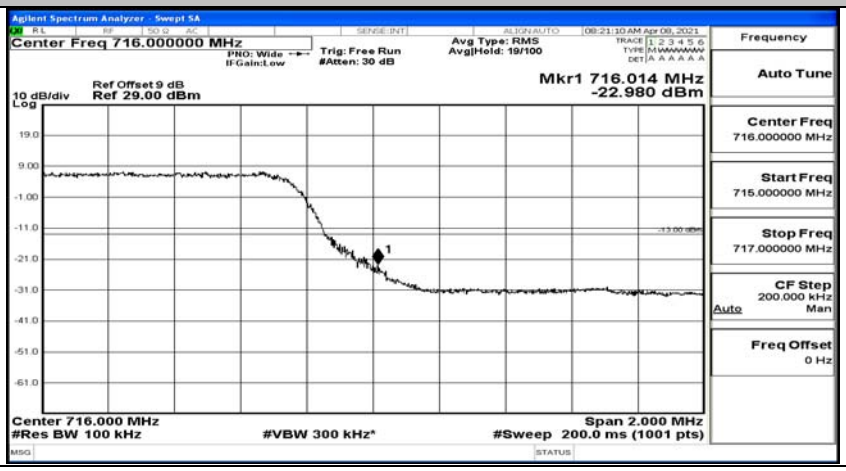
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



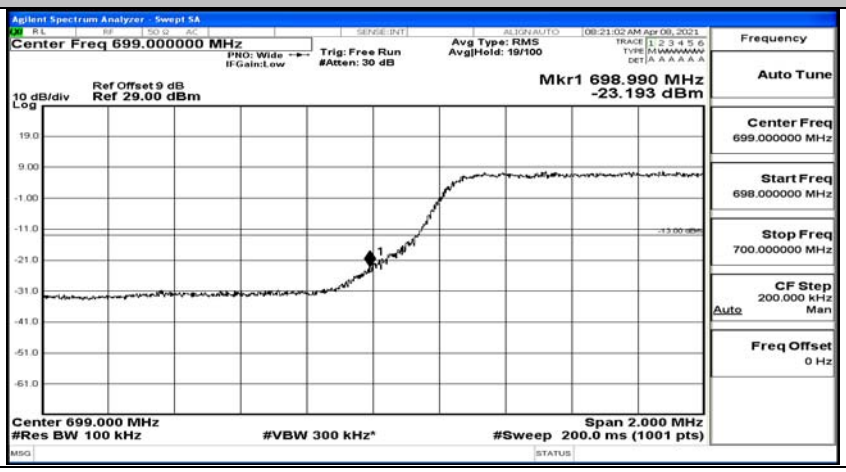
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



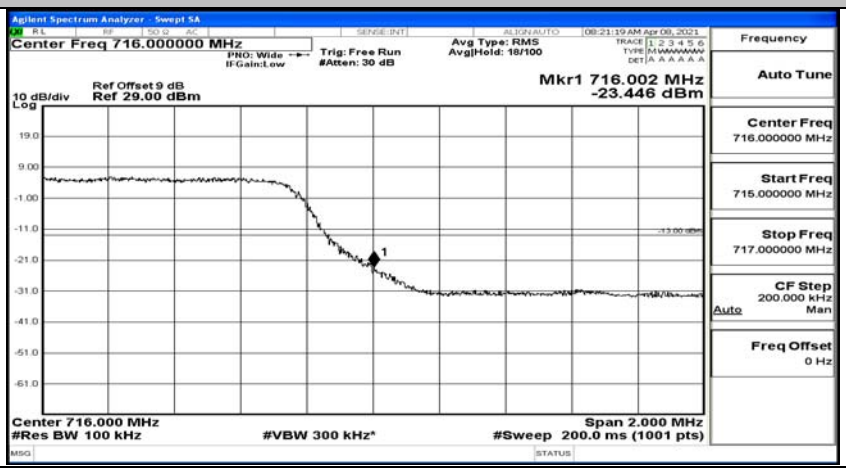
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



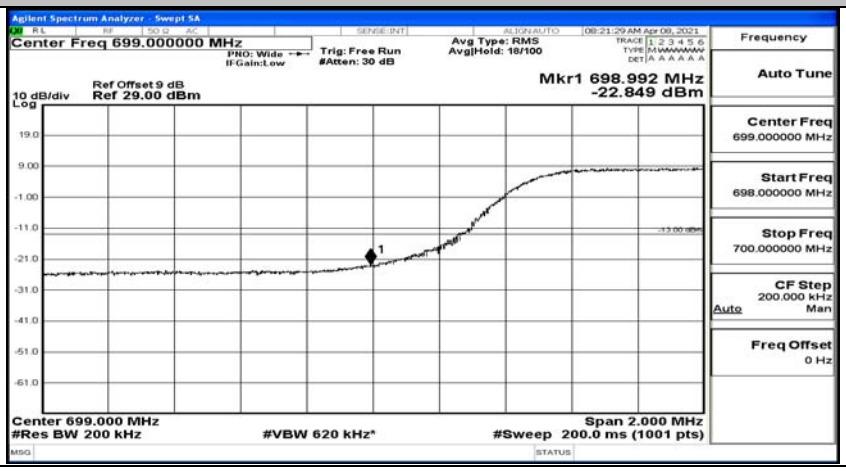
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



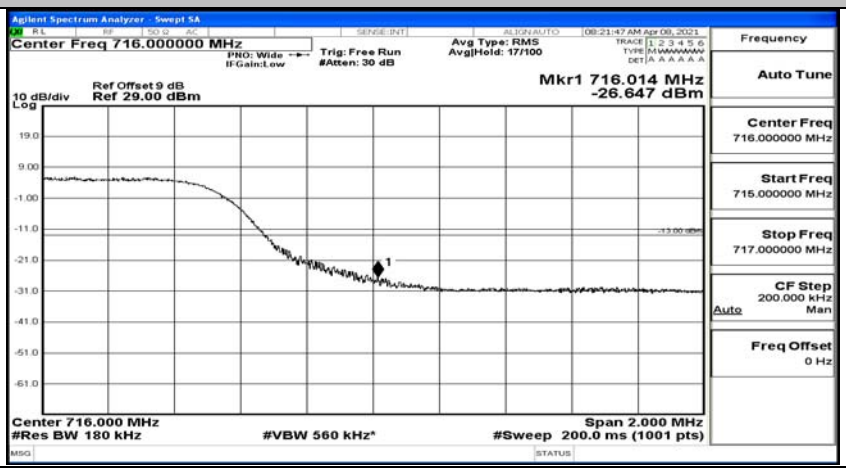
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



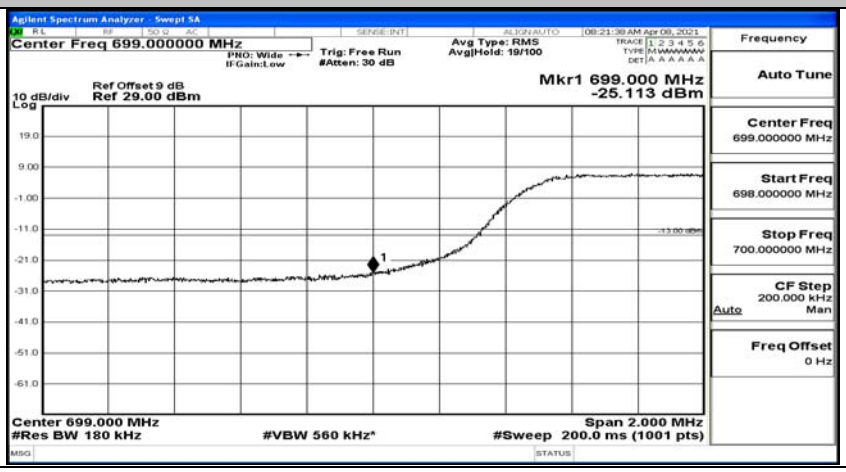
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



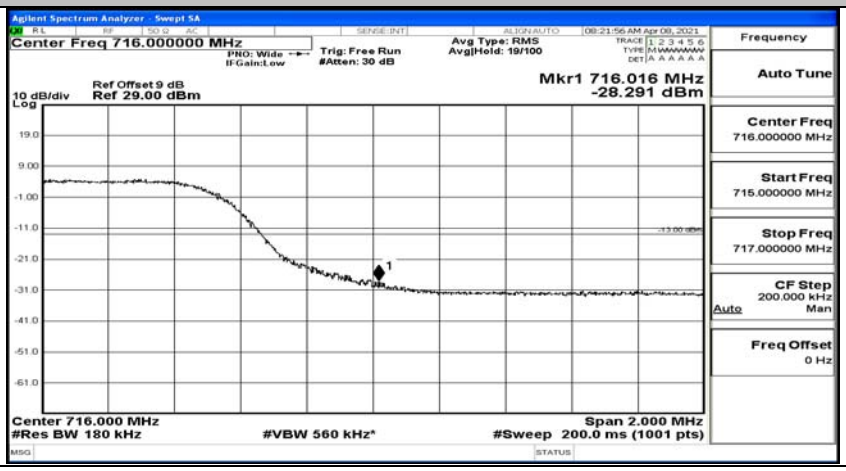
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



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

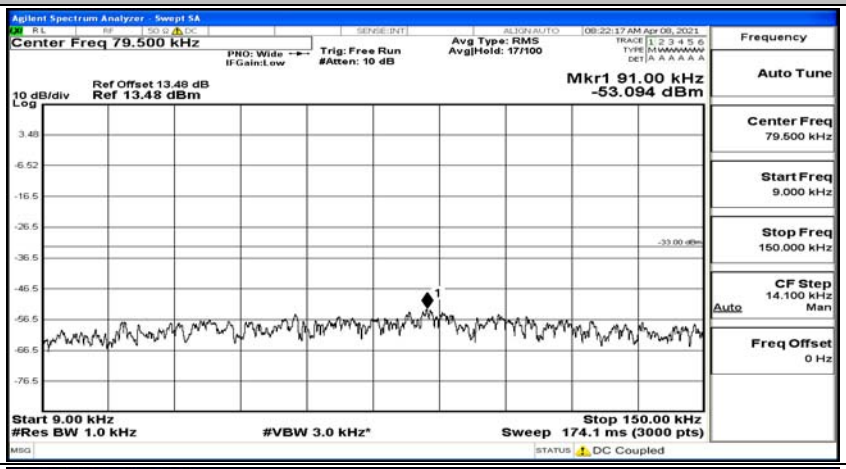


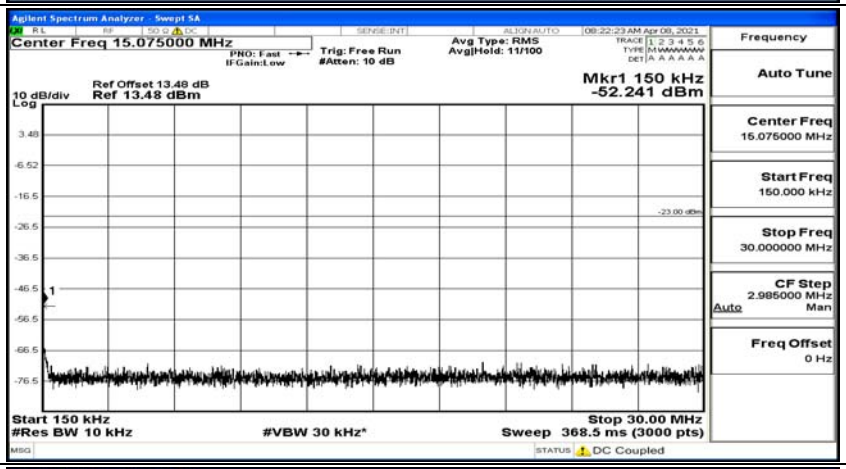
J.5 Conducted Spurious Emission

Test Graphs

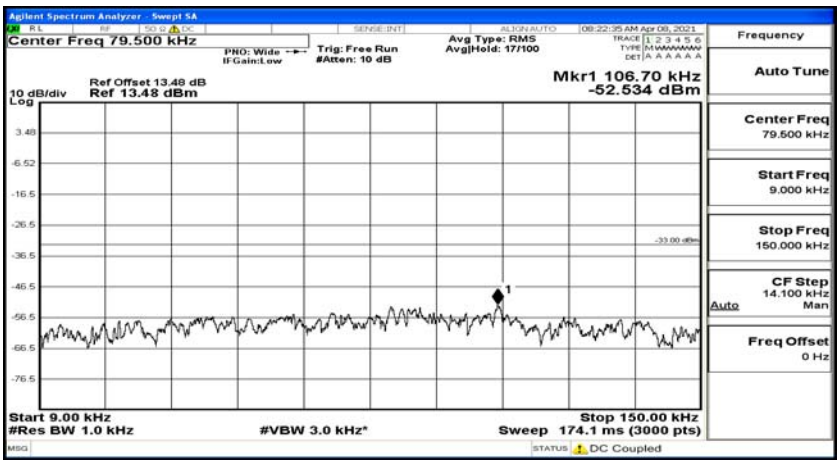
Channel Bandwidth: 1.4 MHz

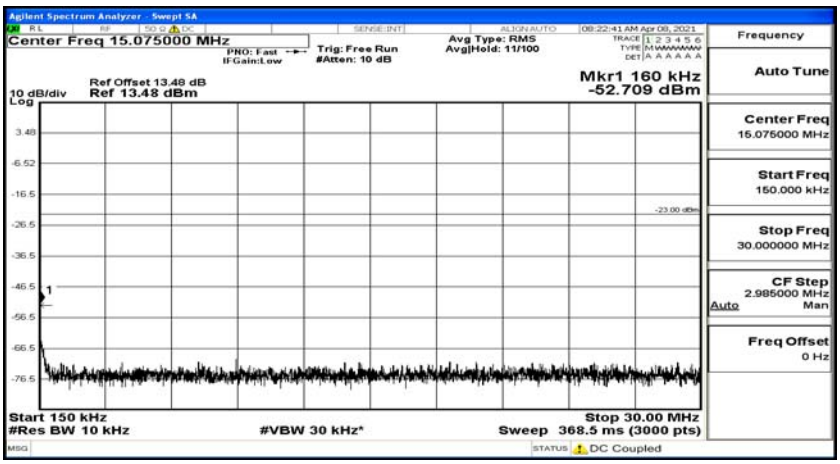
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



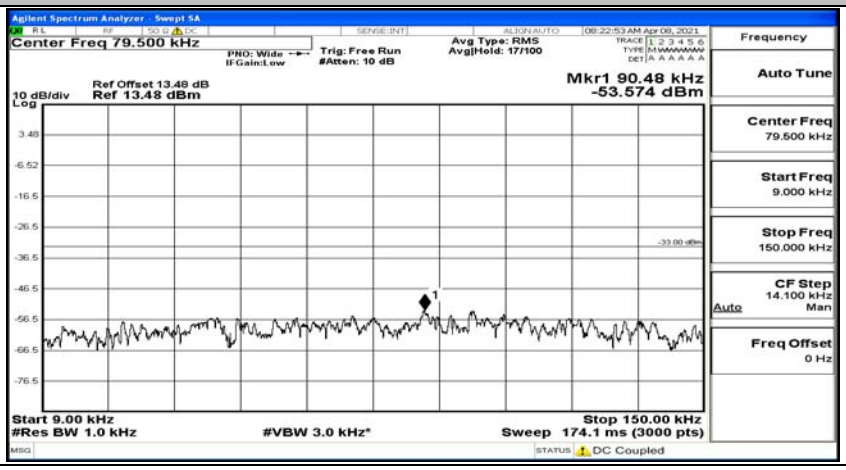


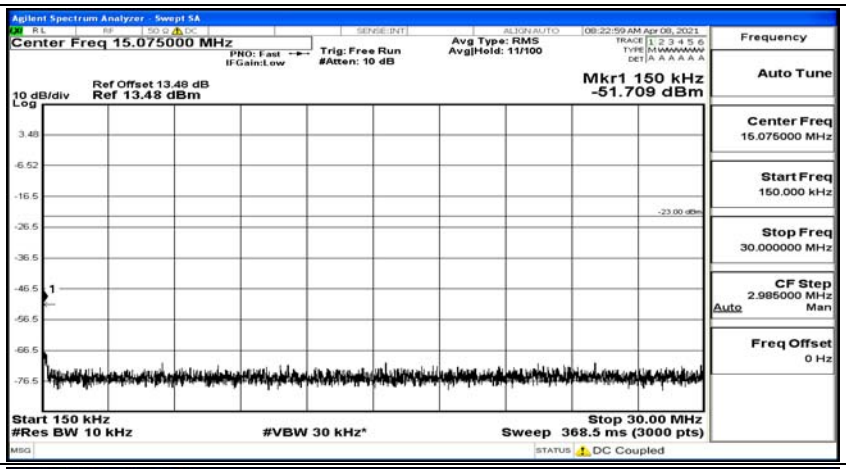
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



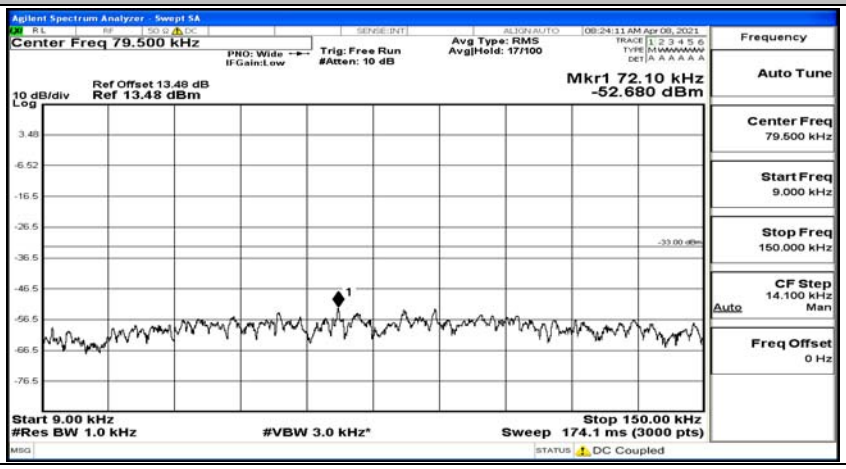


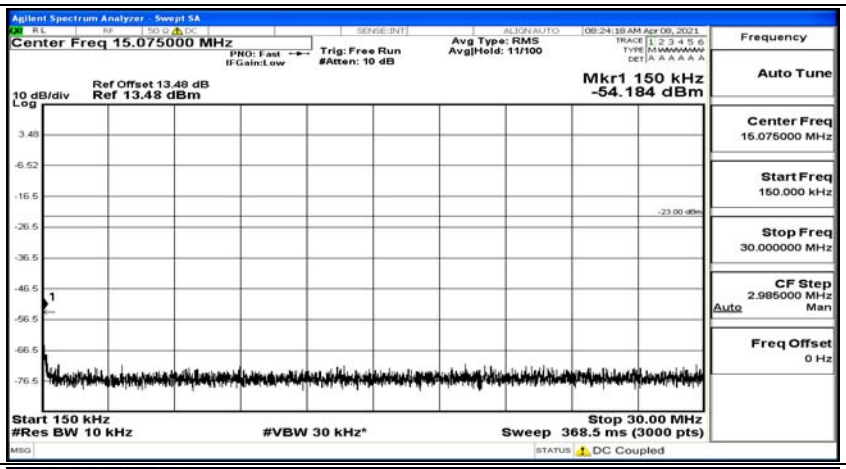
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5



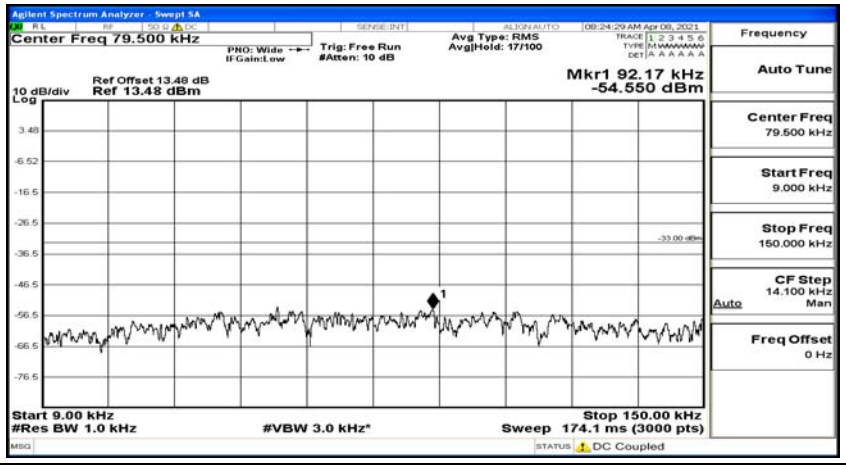


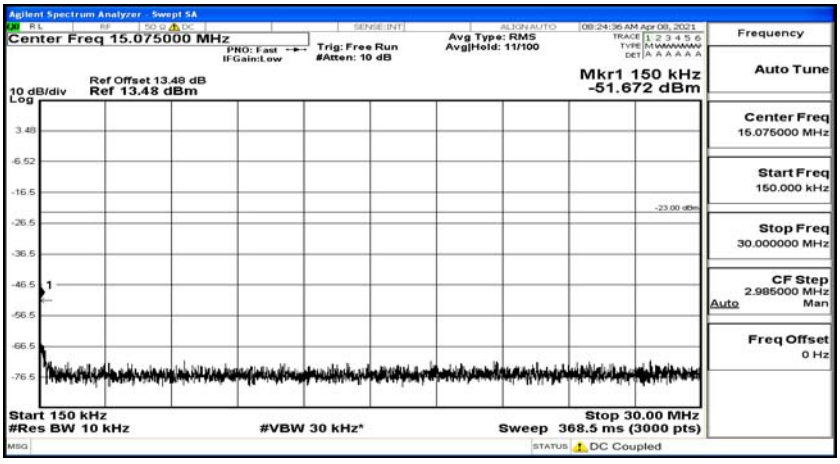
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



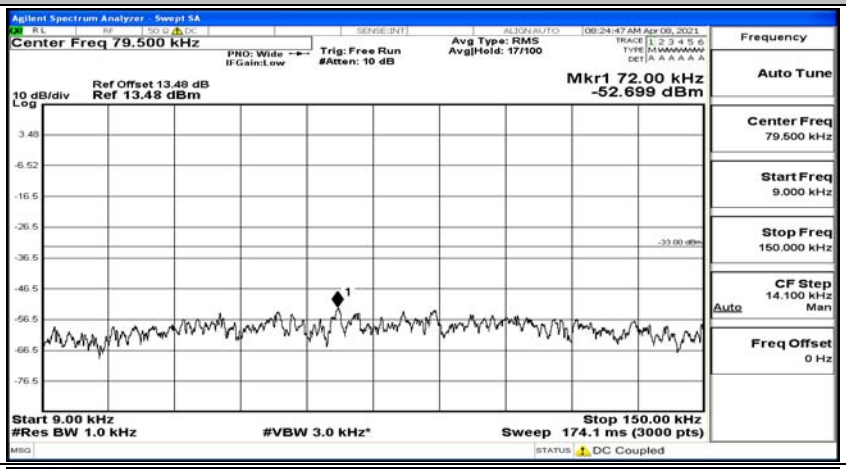


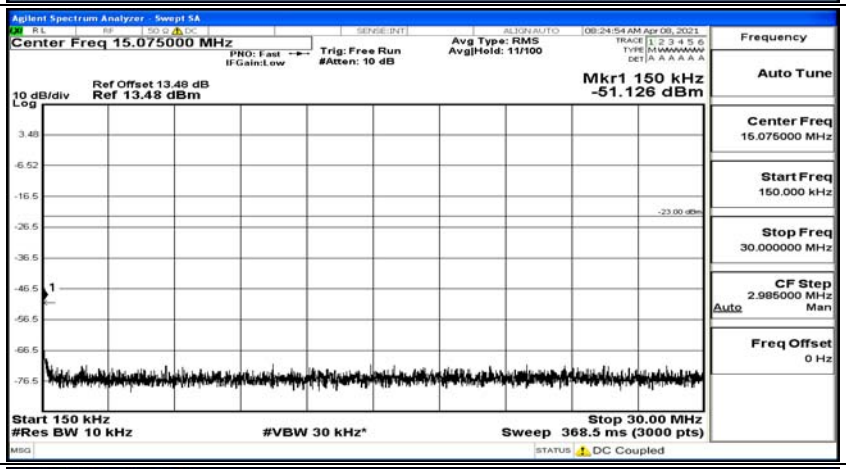
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3



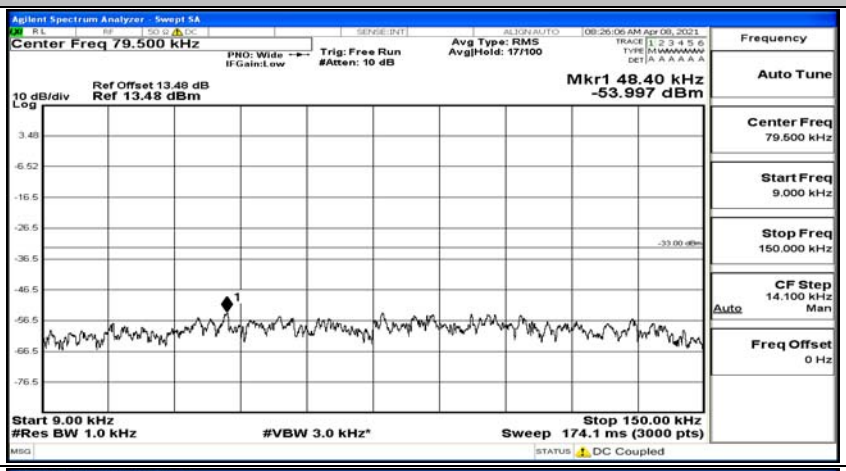


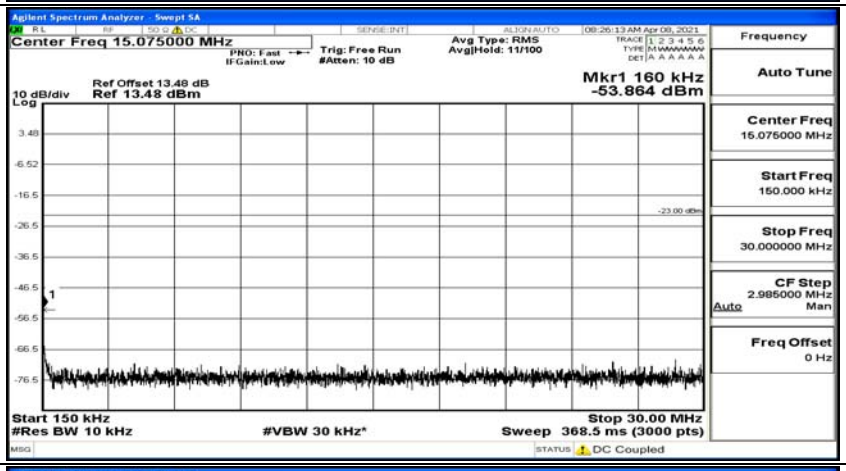
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5



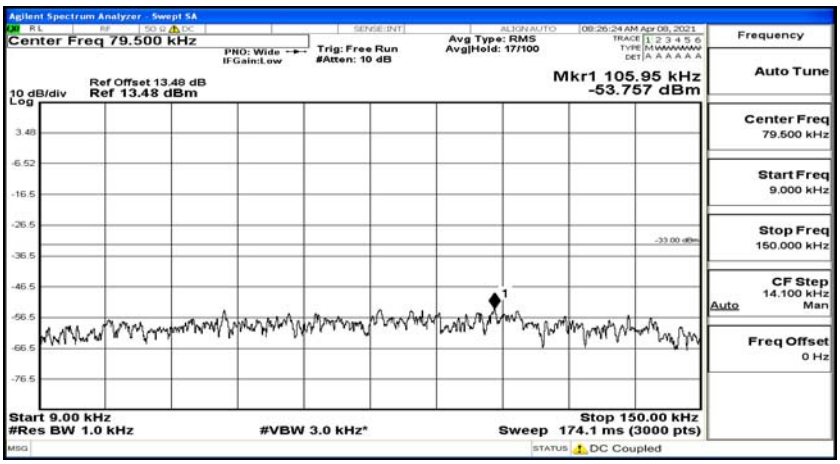


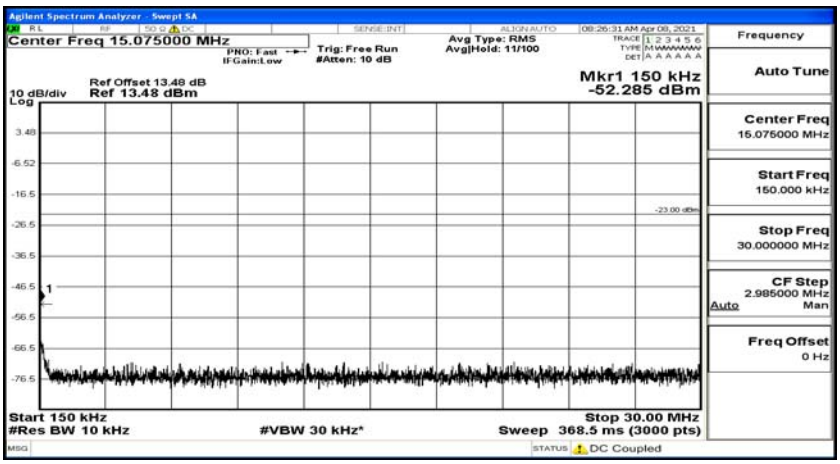
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0



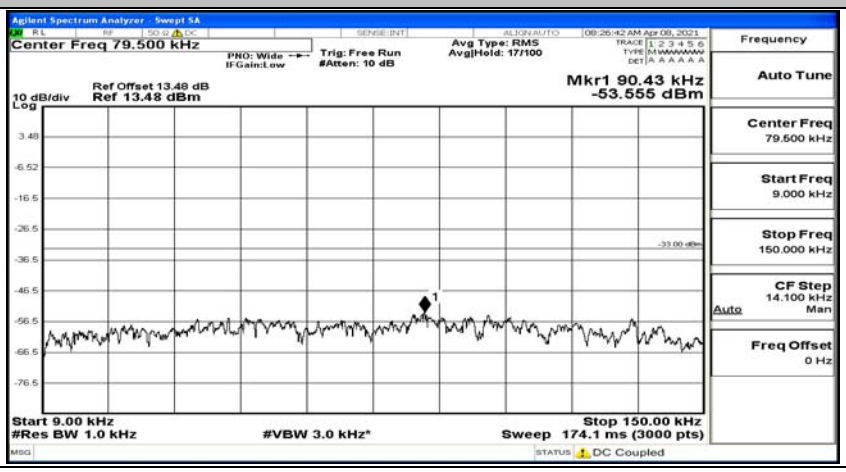


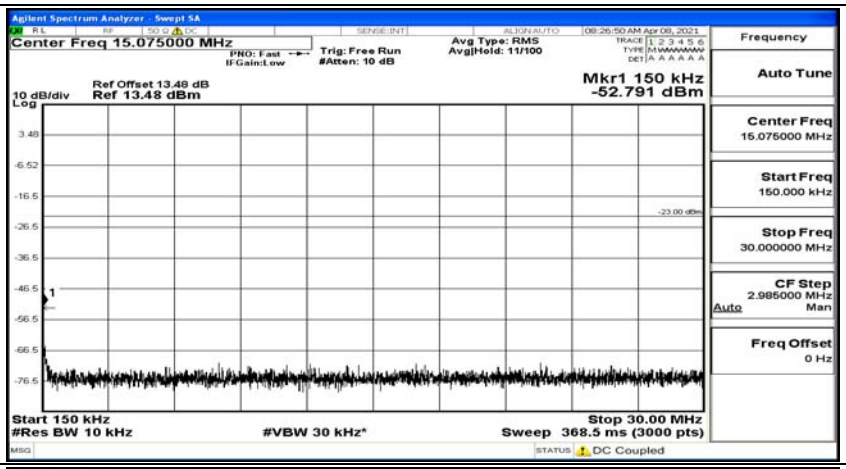
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



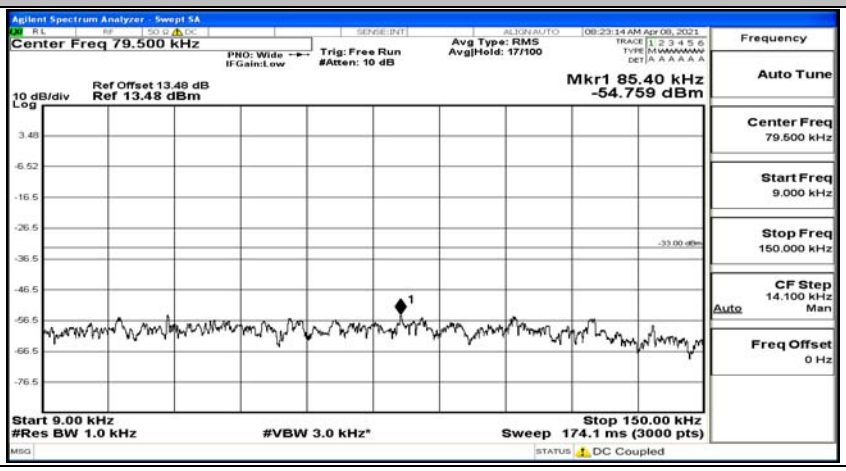


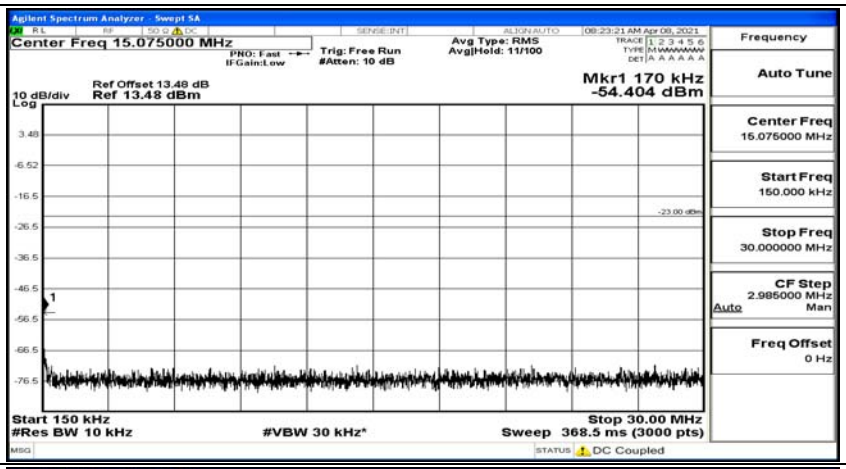
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



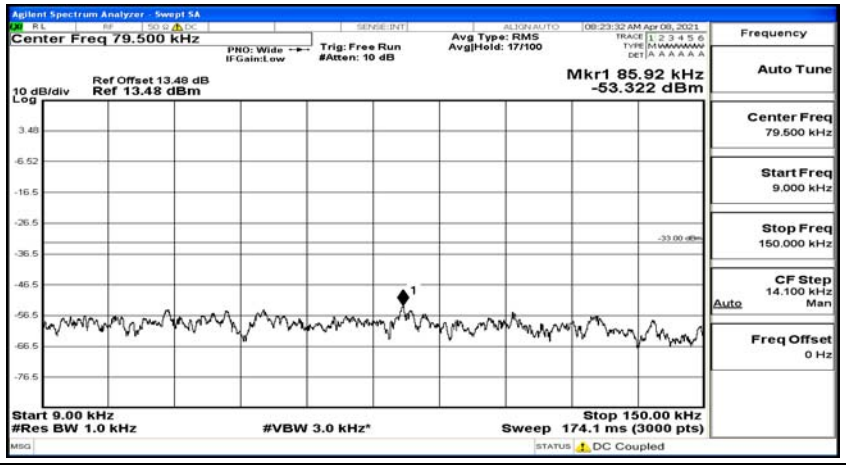


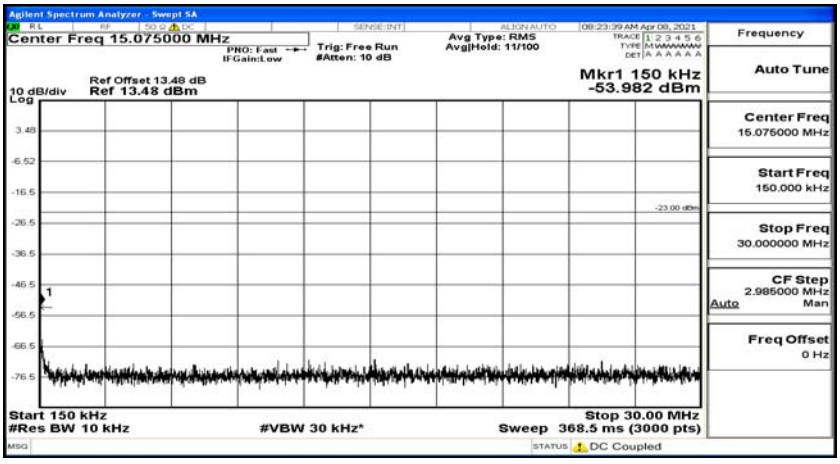
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



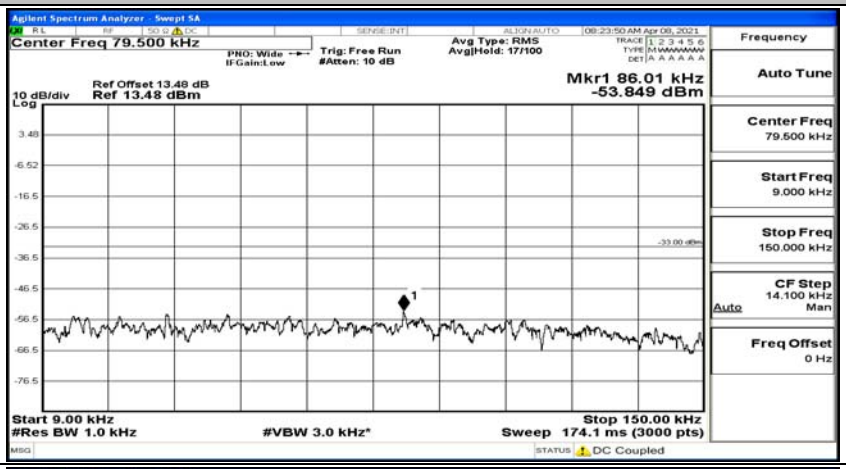


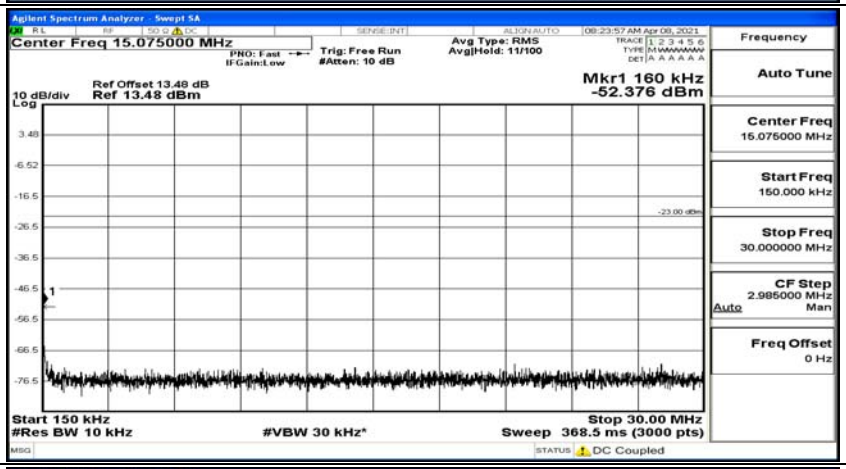
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3



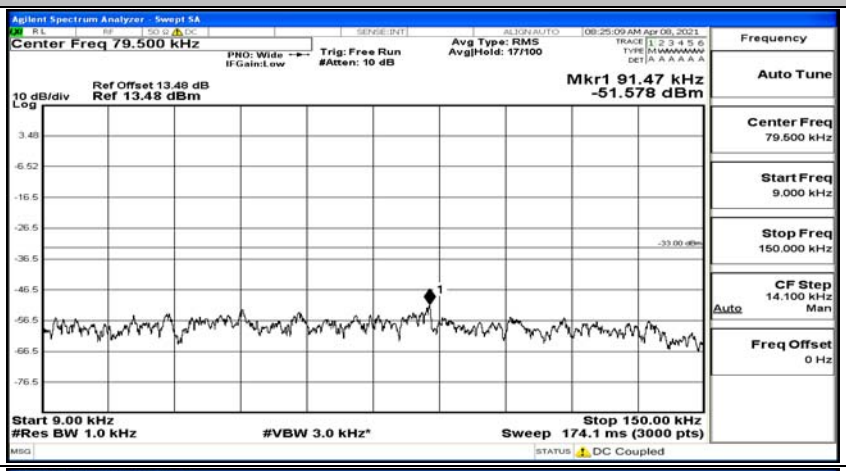


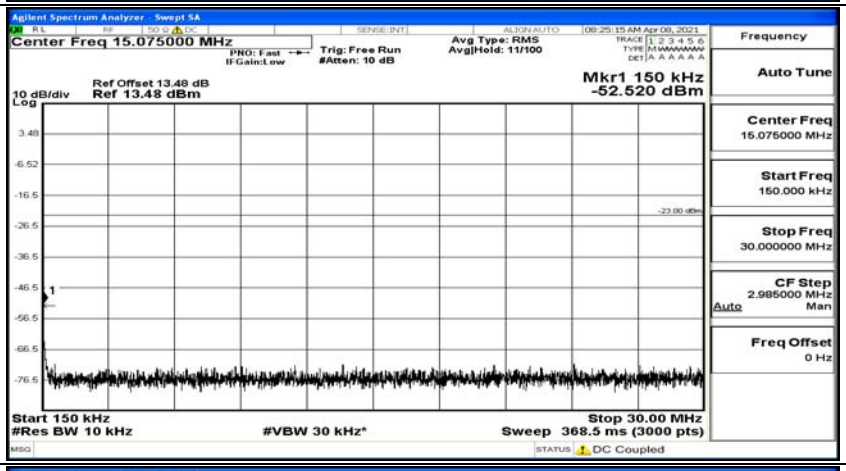
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



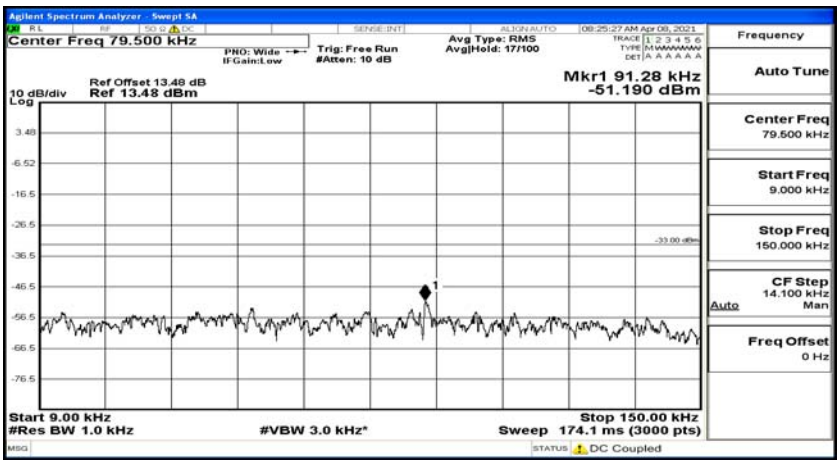


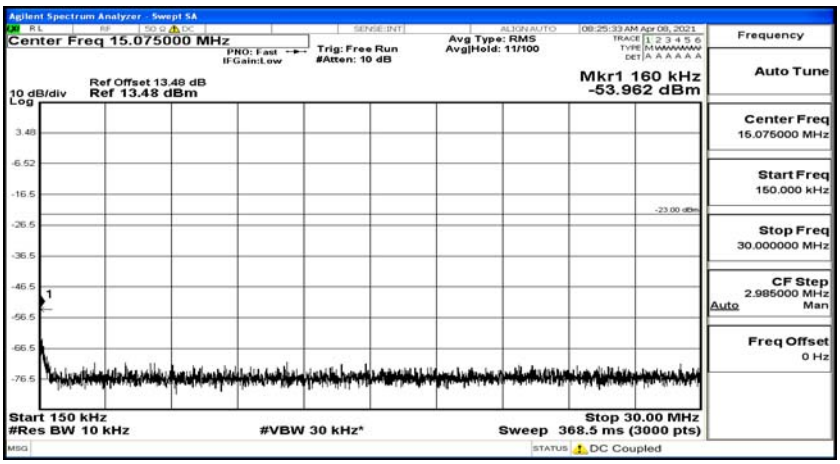
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



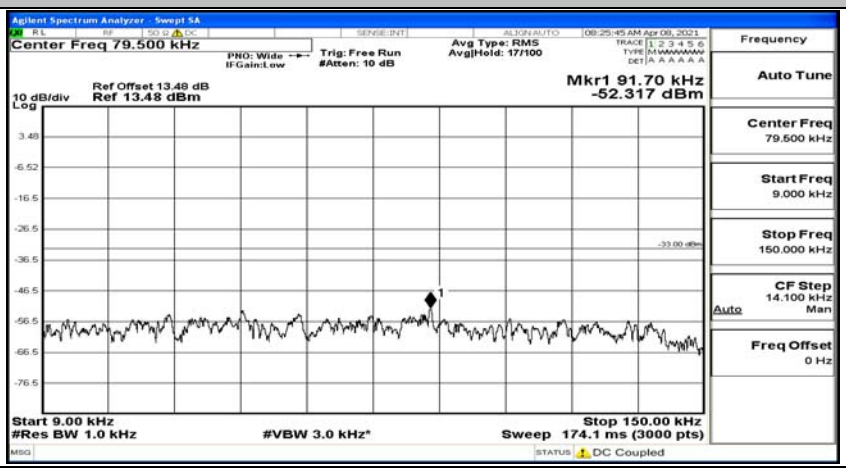


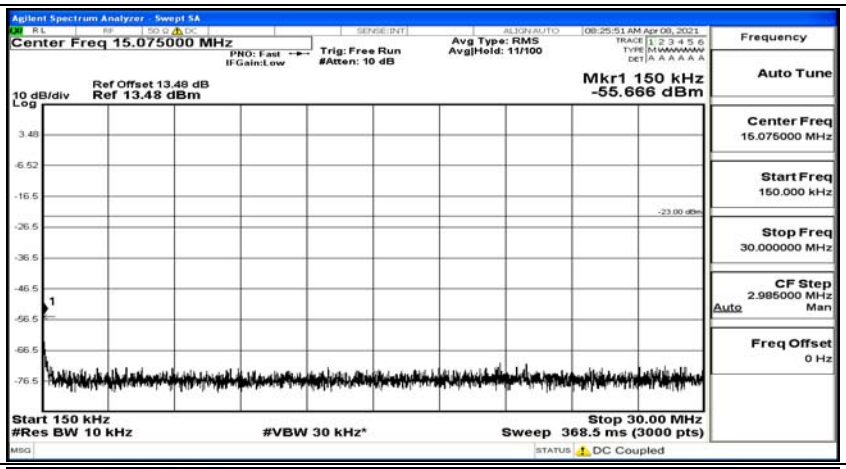
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3



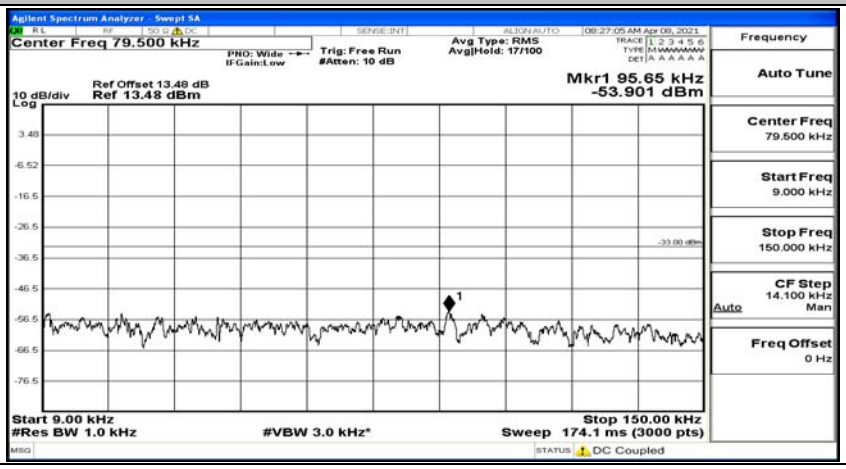


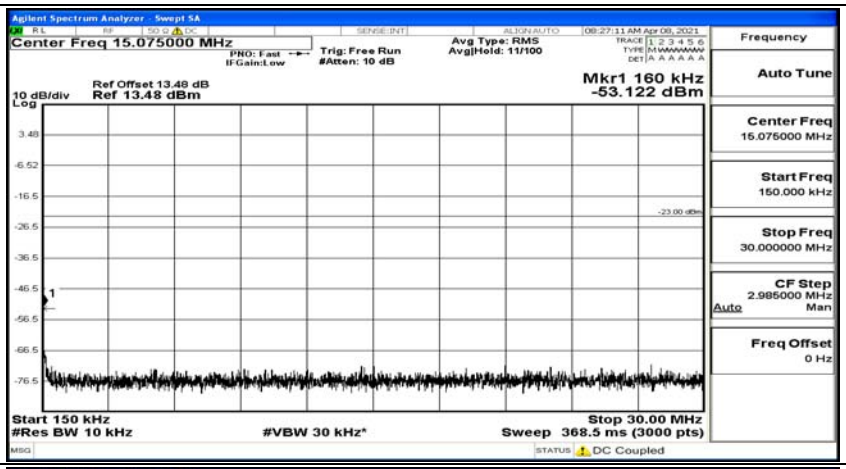
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



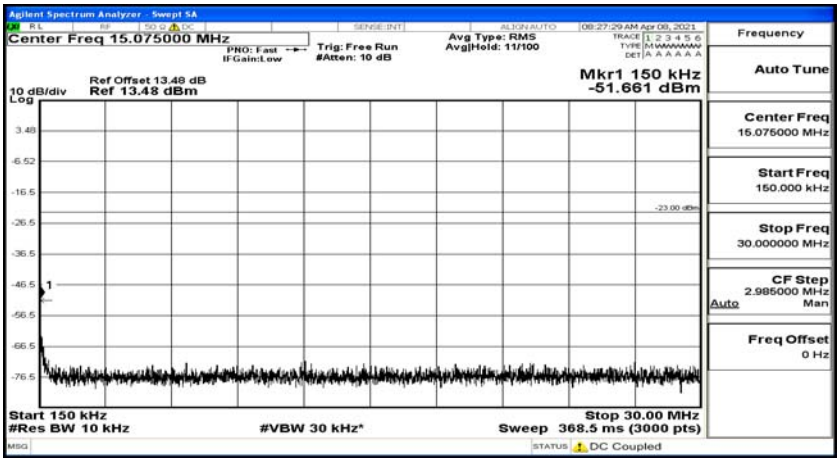


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0

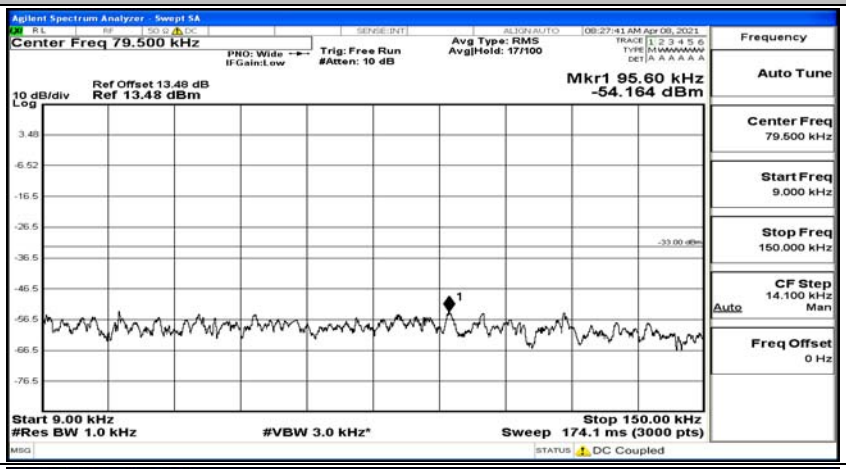


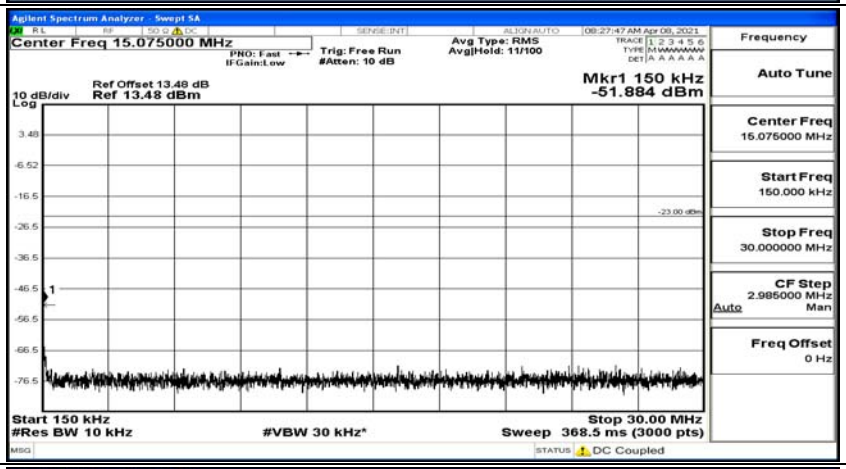


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



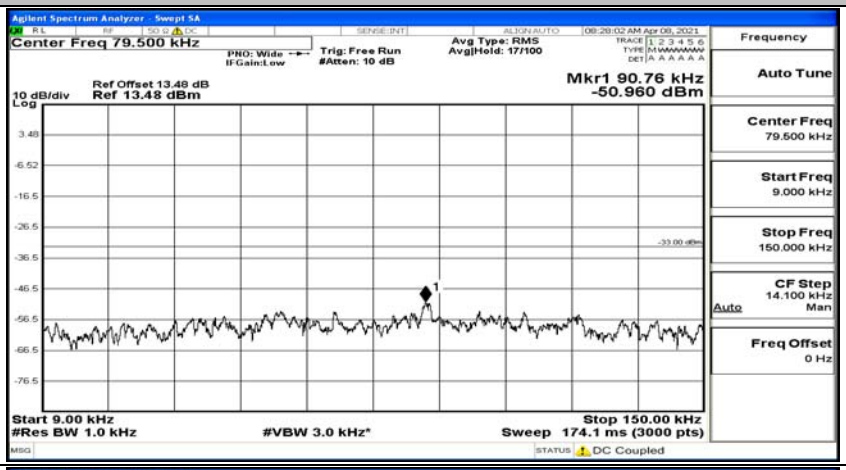
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5

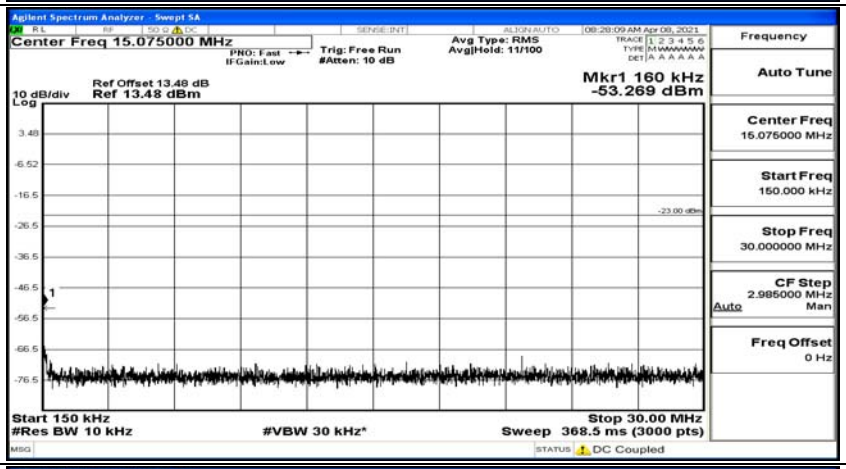




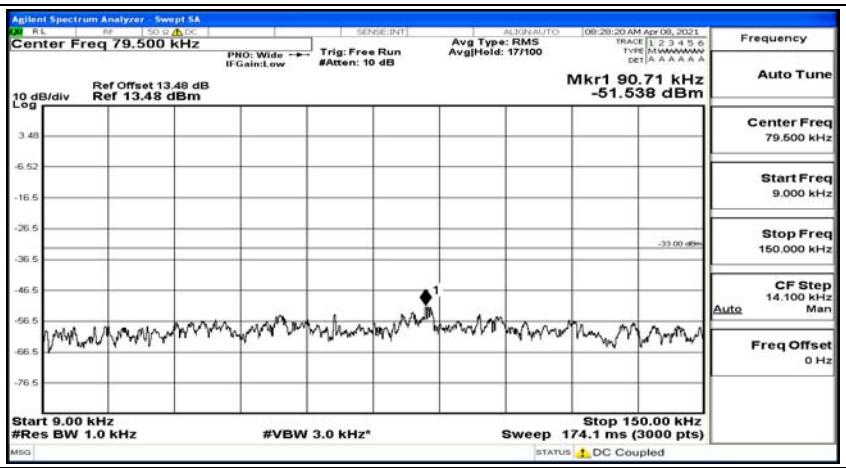
Channel Bandwidth: 3 MHz

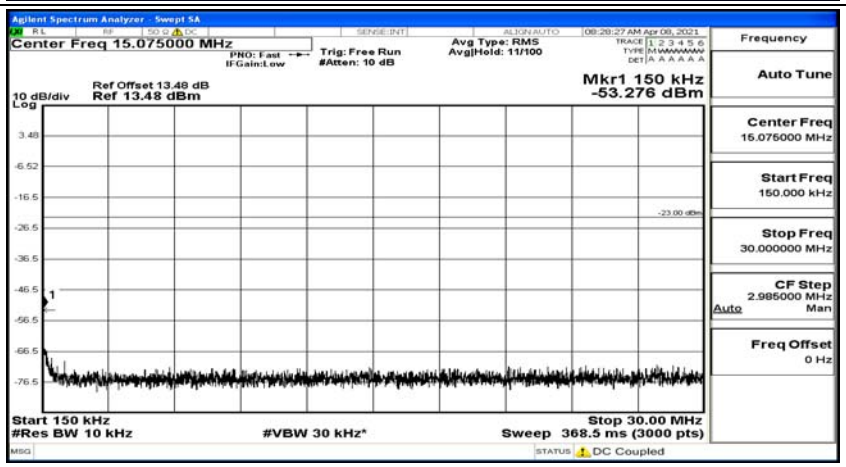
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



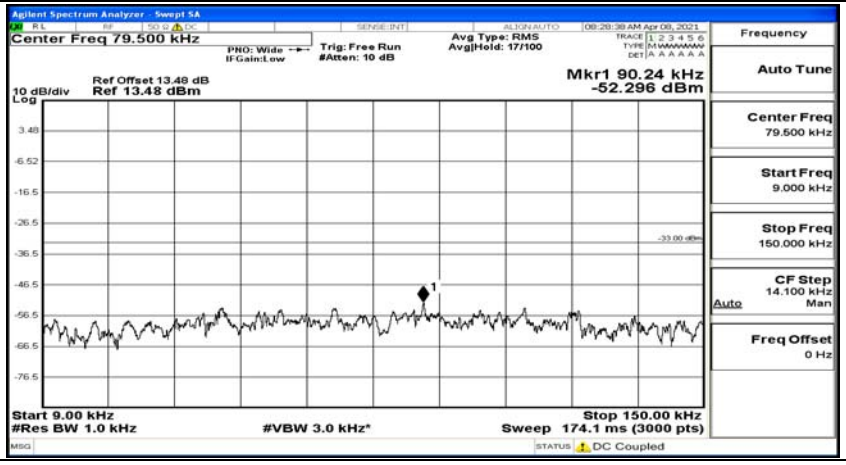


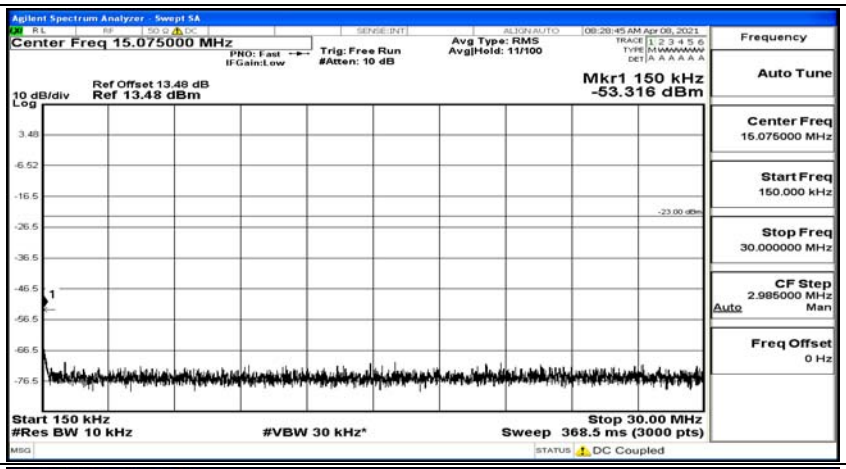
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7



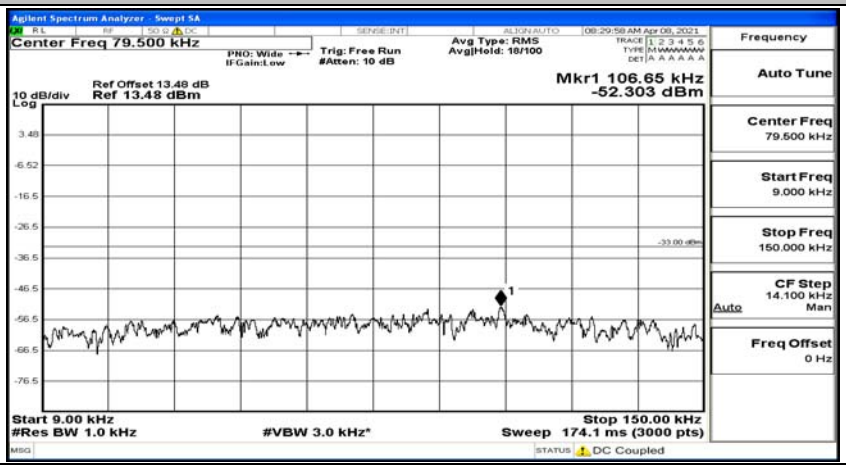


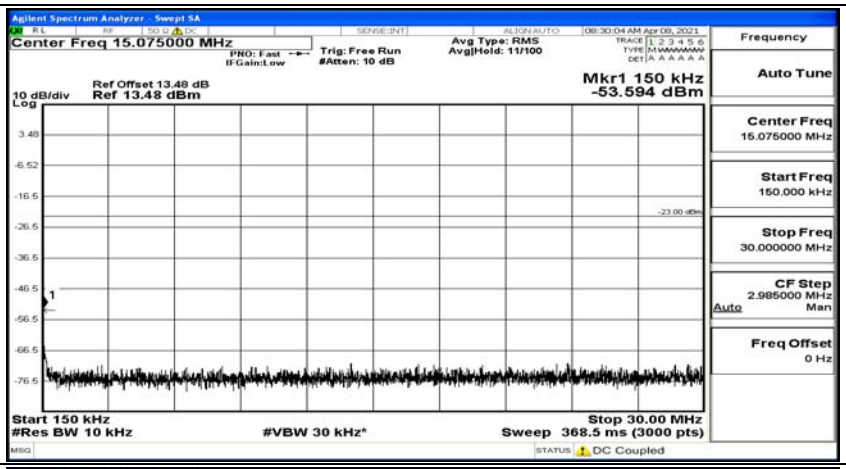
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14



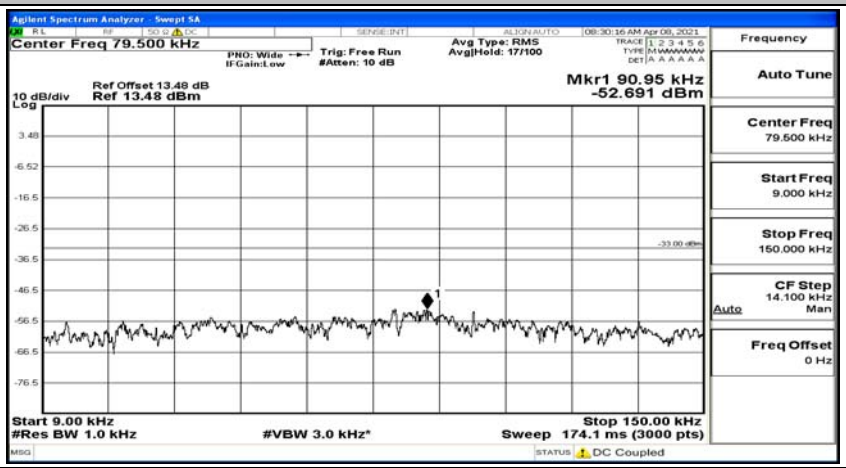


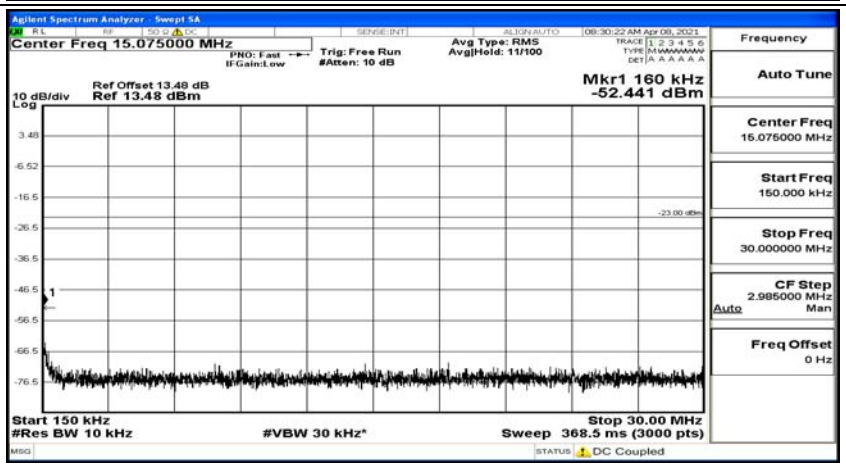
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0





(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7





(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14