Appendix F: Test Data for E-UTRA Band 12

Product Name: Brama L

Trade Mark: N/A

Test Model: ID

Environmental Conditions

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

F.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.08	22.12	PASS
		1	3	23.13	22.27	PASS
		1	5	23.05	22.10	PASS
		3	0	23.11	21.97	PASS
		3	2	23.11	21.97	PASS
		3	3	23.13	21.95	PASS
		6	0	22.17	21.12	PASS
	MCH	1	0	22.94	22.04	PASS
		1	3	23.01	22.21	PASS
		1	5	22.94	21.99	PASS
		3	0	22.99	21.86	PASS
		3	2	22.99	21.87	PASS
		3	3	22.98	21.85	PASS
		6	0	22.02	20.84	PASS
	HCH	1	0	22.93	21.80	PASS
		1	3	23.06	21.94	PASS
		1	5	22.97	21.83	PASS
		3	0	22.96	21.75	PASS
		3	2	22.98	21.77	PASS
		3	3	23.01	21.75	PASS
		6	0	22.04	20.99	PASS

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.10	22.25	PASS
		1	7	23.11	22.25	PASS
		1	14	23.09	22.19	PASS
		8	0	22.15	21.16	PASS
		8	4	22.13	21.18	PASS
		8	7	22.16	21.14	PASS
		15	0	22.11	21.11	PASS
	MCH	1	0	23.02	22.14	PASS
		1	7	23.02	22.12	PASS
		1	14	22.97	22.01	PASS
		8	0	22.03	21.00	PASS
		8	4	22.04	20.99	PASS
		8	7	22.00	20.97	PASS
		15	0	21.98	20.84	PASS
	HCH	1	0	22.97	21.85	PASS
		1	7	23.01	21.91	PASS
		1	14	23.01	21.92	PASS
		8	0	22.03	21.01	PASS
		8	4	22.07	21.02	PASS
		8	7	21.99	20.97	PASS
		15	0	21.96	20.87	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.04	22.01	PASS
		1	12	23.19	22.14	PASS
		1	24	22.99	21.95	PASS
		12	0	22.09	21.04	PASS
		12	6	22.10	21.06	PASS
		12	13	22.05	21.00	PASS
		25	0	22.08	21.07	PASS
	MCH	1	0	22.97	22.12	PASS
		1	12	23.09	22.25	PASS
		1	24	22.91	22.10	PASS
		12	0	22.00	20.98	PASS
		12	6	22.03	20.99	PASS
		12	13	22.04	20.99	PASS
		25	0	22.00	20.93	PASS
	HCH	1	0	22.90	21.87	PASS
		1	12	23.07	22.07	PASS
		1	24	22.98	21.95	PASS
		12	0	21.99	20.97	PASS
		12	6	22.03	20.97	PASS
		12	13	21.78	20.77	PASS
		25	0	21.91	20.87	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.03	22.20	PASS
		1	24	23.11	22.31	PASS
		1	49	22.92	22.08	PASS
		25	0	22.12	21.08	PASS
		25	12	22.12	21.05	PASS
		25	25	22.04	21.00	PASS
		50	0	22.07	21.00	PASS
	MCH	1	0	22.99	22.14	PASS
		1	24	23.06	22.19	PASS
		1	49	22.91	22.01	PASS
		25	0	22.07	21.11	PASS
		25	12	22.09	21.09	PASS
		25	25	22.17	21.13	PASS
		50	0	22.05	21.06	PASS
	HCH	1	0	22.97	21.82	PASS
		1	24	23.08	21.98	PASS
		1	49	22.97	21.88	PASS
		25	0	21.84	20.83	PASS
		25	12	21.84	20.82	PASS
		25	25	21.77	20.78	PASS
		50	0	21.78	20.74	PASS

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F.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.76	<13	PASS
	MCH	5.01	<13	PASS
	HCH	4.46	<13	PASS
16QAM	LCH	5.66	<13	PASS
	MCH	5.8	<13	PASS
	HCH	5.34	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.86	<13	PASS
	MCH	4.98	<13	PASS
	HCH	4.53	<13	PASS
16QAM	LCH	5.7	<13	PASS
	MCH	5.79	<13	PASS
	HCH	5.43	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.89	<13	PASS
	MCH	5.01	<13	PASS
	HCH	4.67	<13	PASS
16QAM	LCH	5.66	<13	PASS
	MCH	5.79	<13	PASS
	HCH	5.53	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.99	<13	PASS
	MCH	4.98	<13	PASS
	HCH	4.82	<13	PASS
16QAM	LCH	5.76	<13	PASS
	MCH	5.76	<13	PASS
	HCH	5.72	<13	PASS

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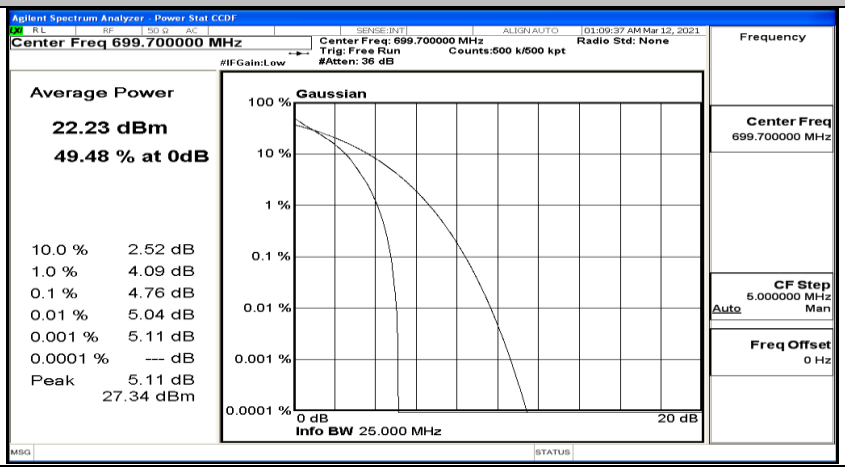
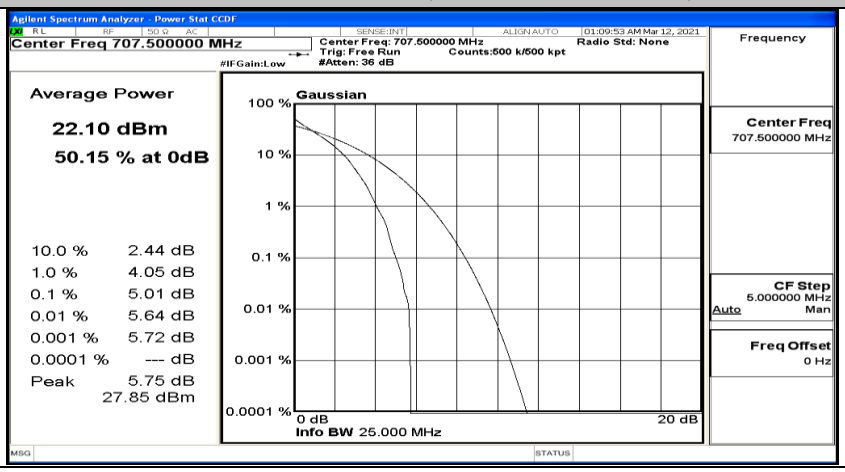
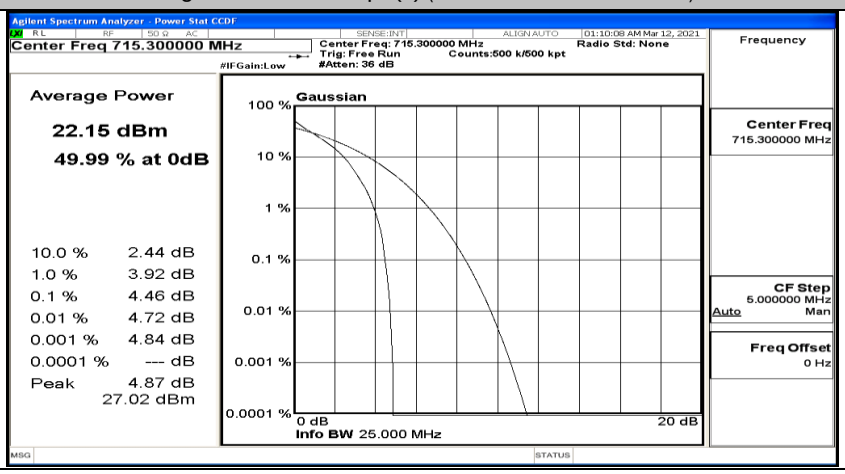
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



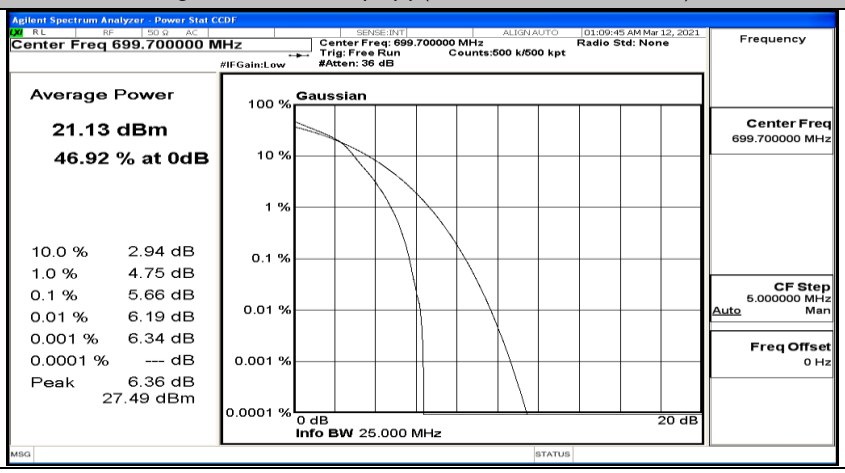
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



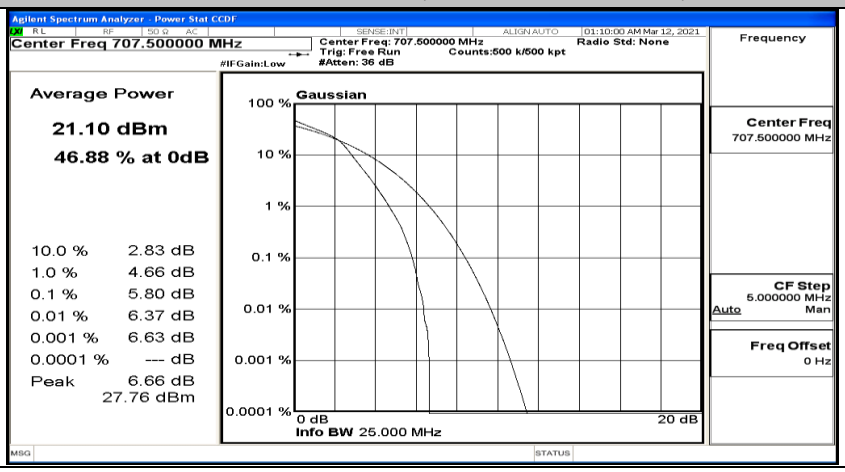
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



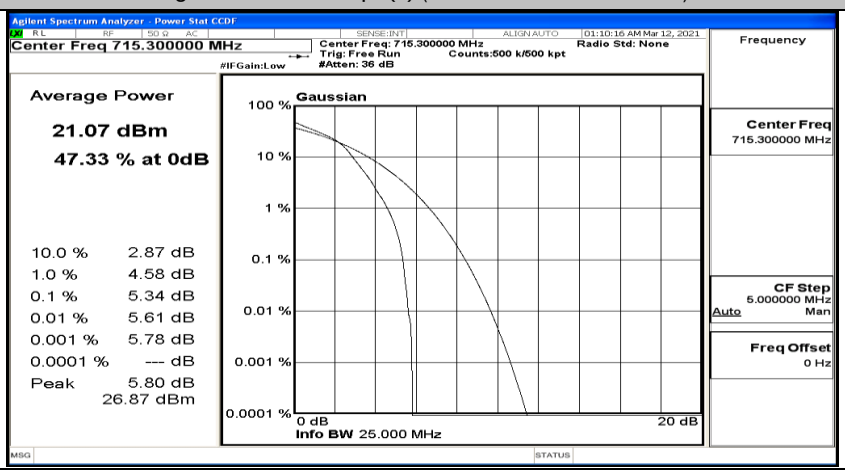
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



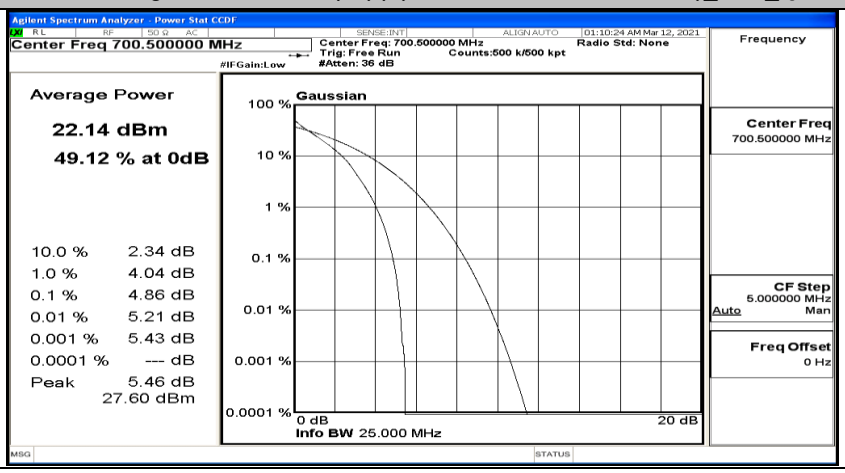
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



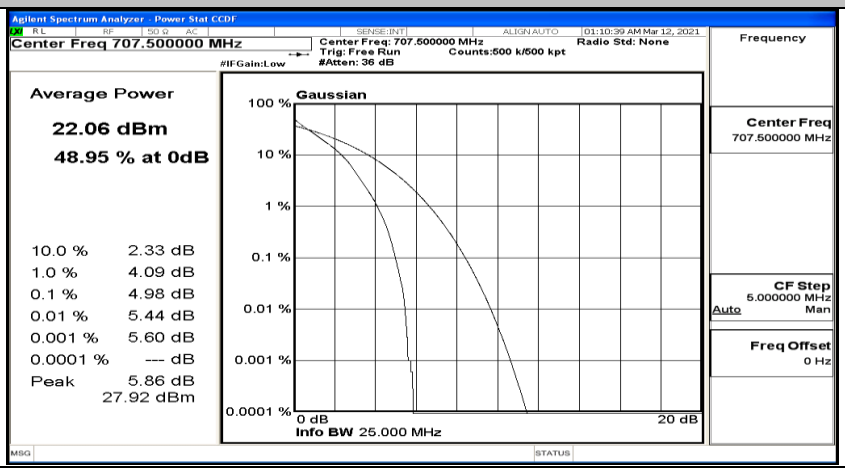
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



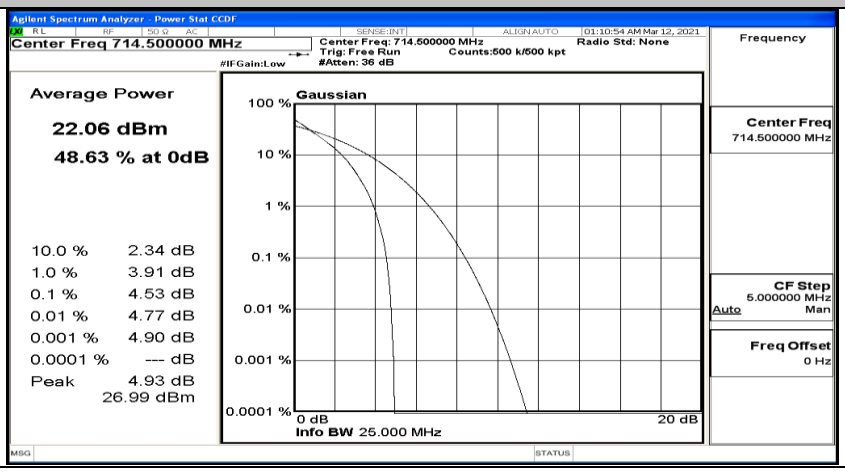
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



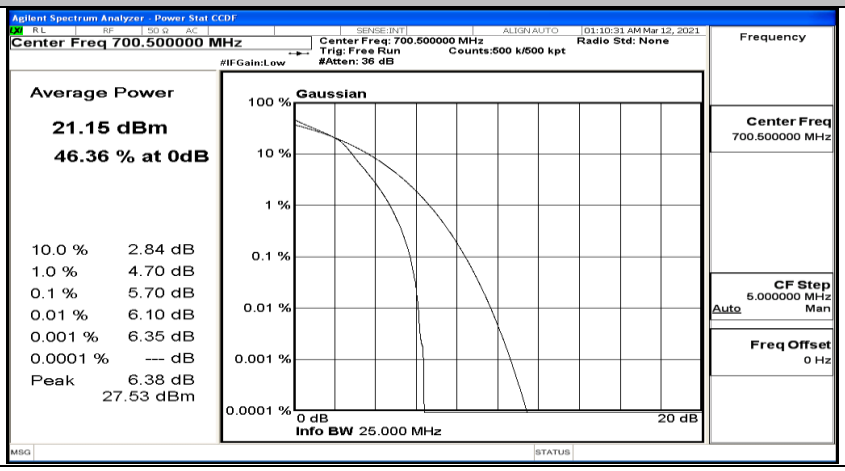
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



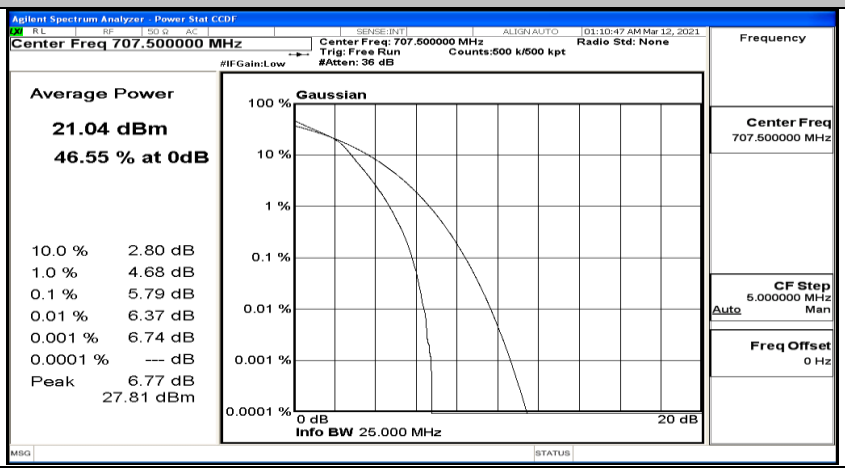
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



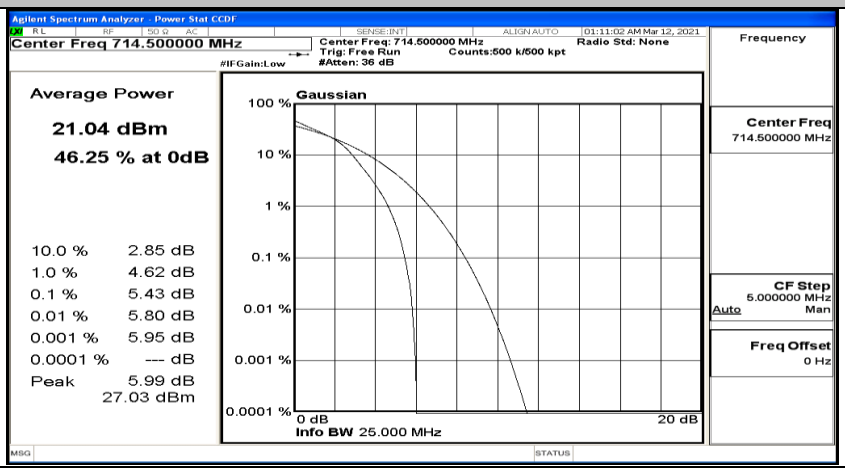
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



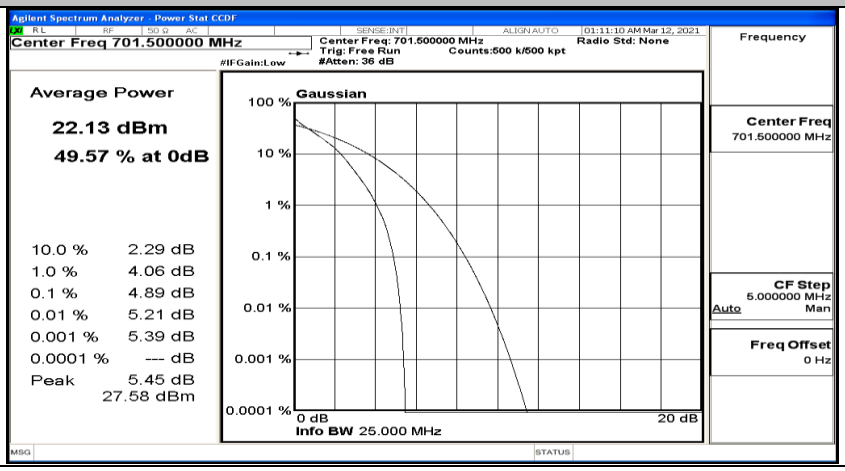
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



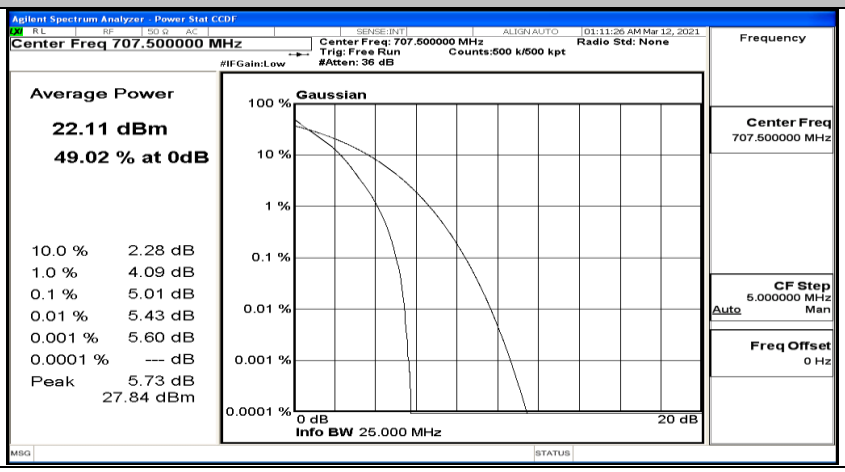
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



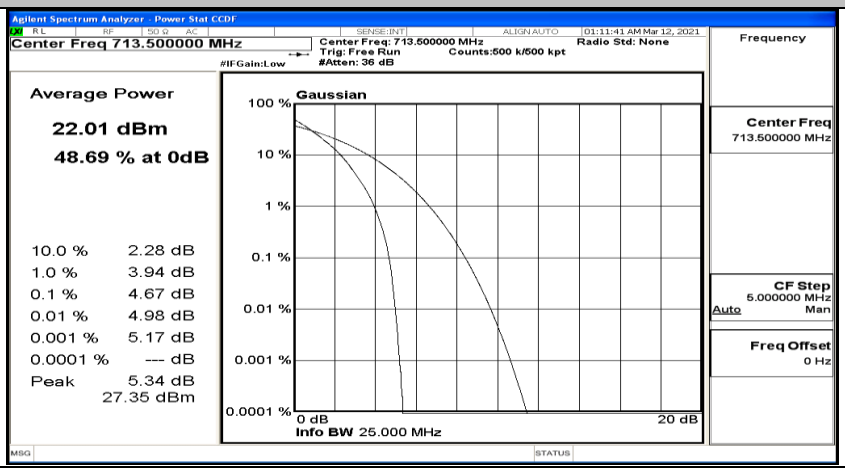
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



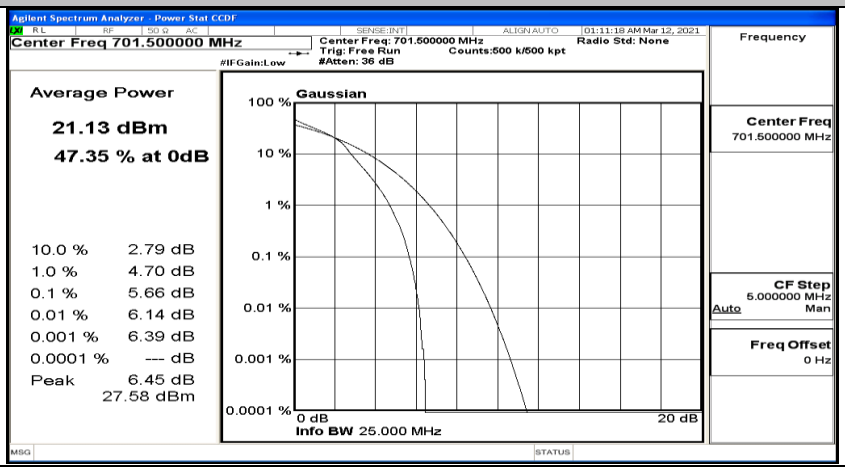
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



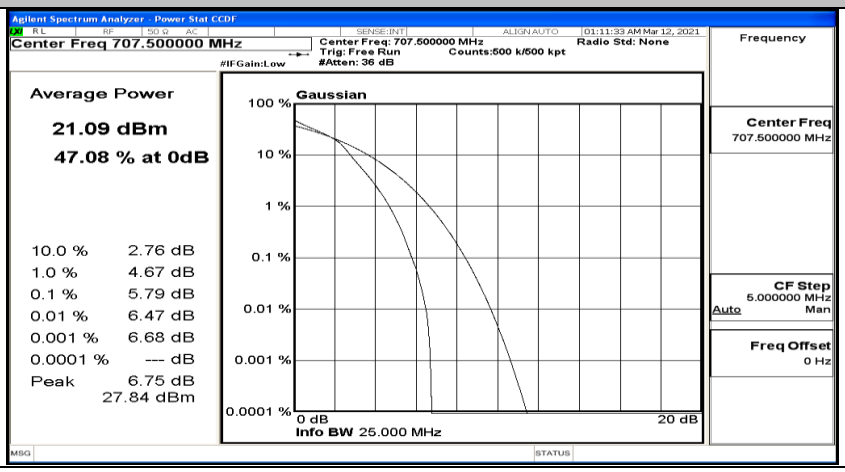
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



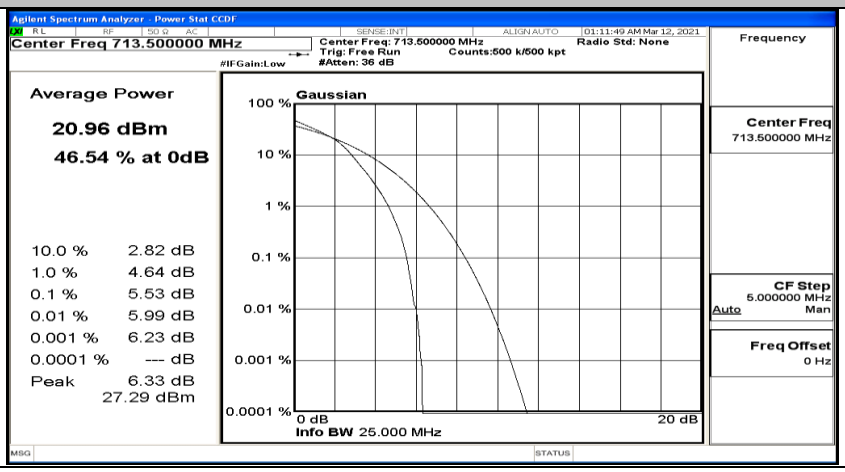
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



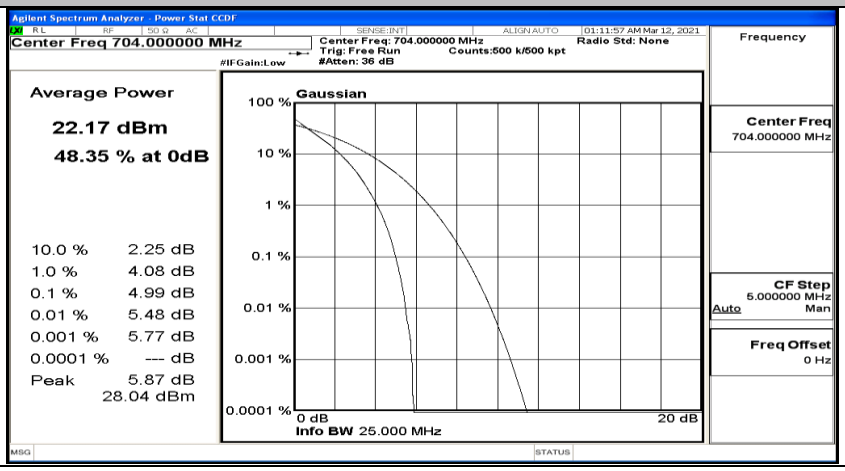
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



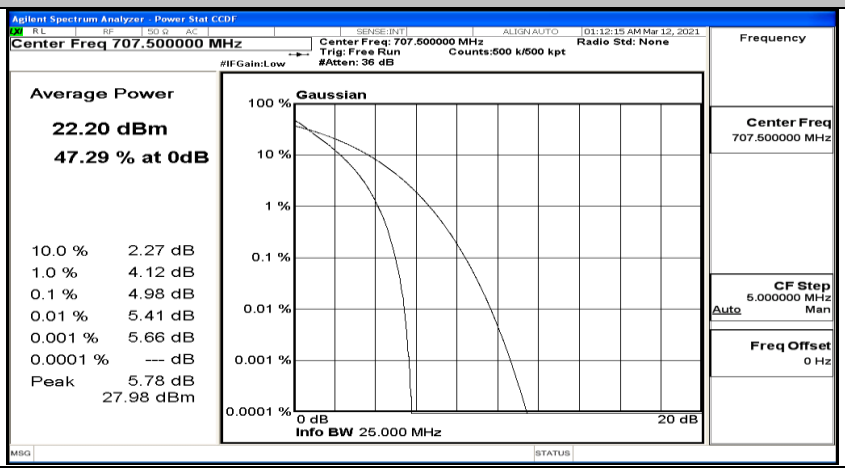
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



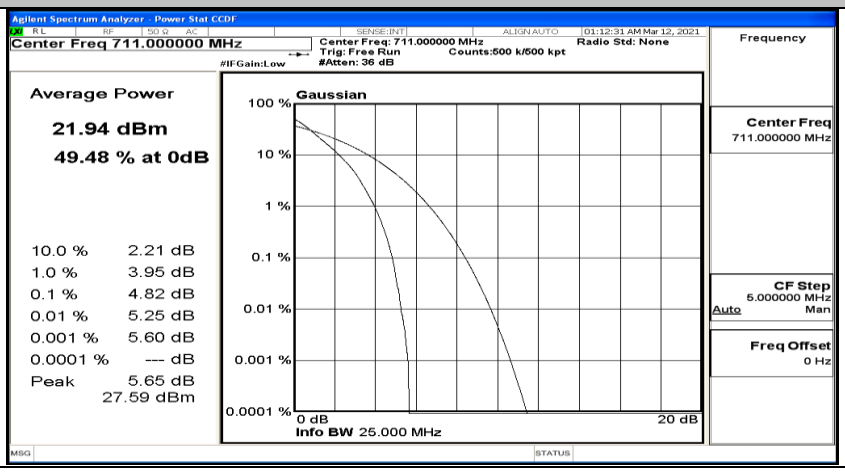
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



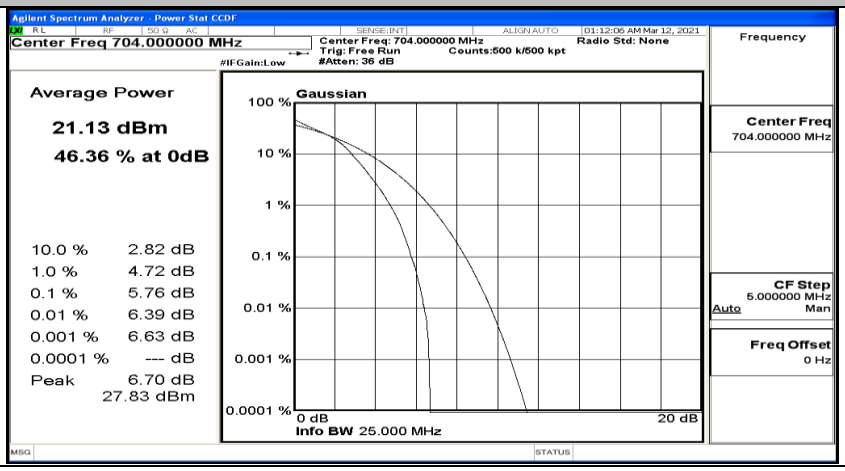
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



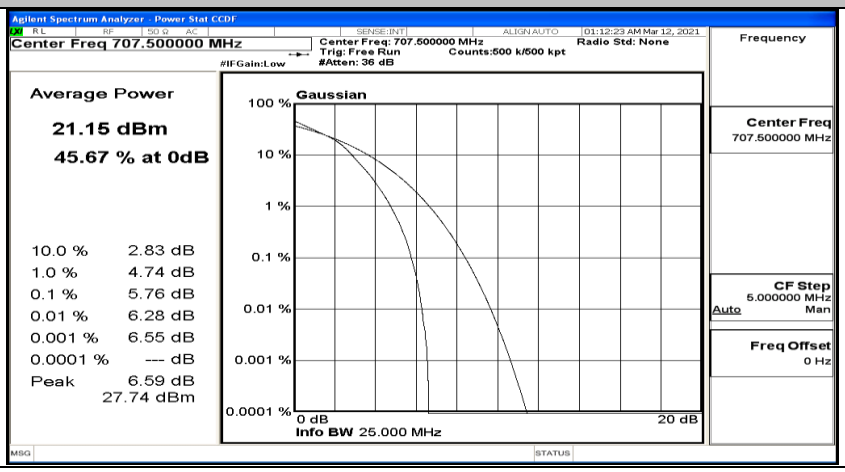
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



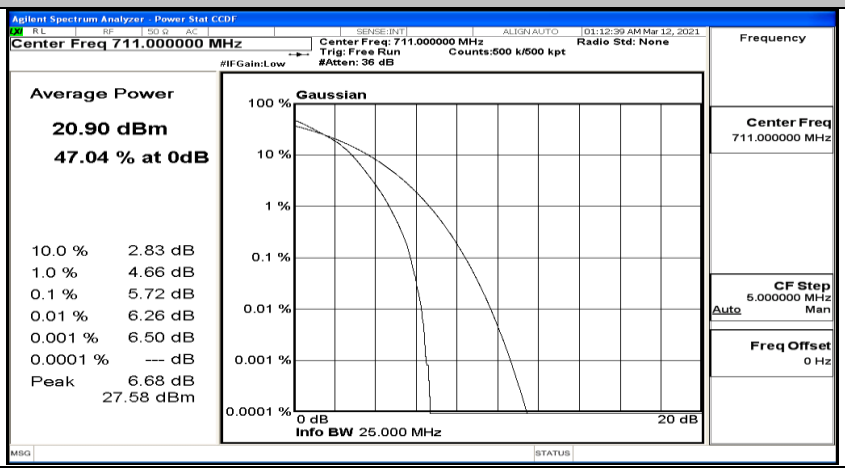
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



F.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	1.0767	1.226	PASS
	MCH	1.0795	1.207	PASS
	HCH	1.0832	1.237	PASS
16QAM	LCH	1.0763	1.189	PASS
	MCH	1.0758	1.237	PASS
	HCH	1.0773	1.234	PASS

EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6722	2.828	PASS
	MCH	2.6822	2.839	PASS
	HCH	2.6808	2.831	PASS
16QAM	LCH	2.6813	2.852	PASS
	MCH	2.6774	2.838	PASS
	HCH	2.6828	2.813	PASS

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4775	4.899	PASS
	MCH	4.4793	4.876	PASS
	HCH	4.4683	4.825	PASS
16QAM	LCH	4.4739	4.860	PASS
	MCH	4.4861	4.897	PASS
	HCH	4.4783	4.836	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9524	9.559	PASS
	MCH	8.9629	9.518	PASS
	HCH	8.9351	9.381	PASS
16QAM	LCH	8.9428	9.494	PASS
	MCH	8.9483	9.560	PASS
	HCH	8.9107	9.455	PASS

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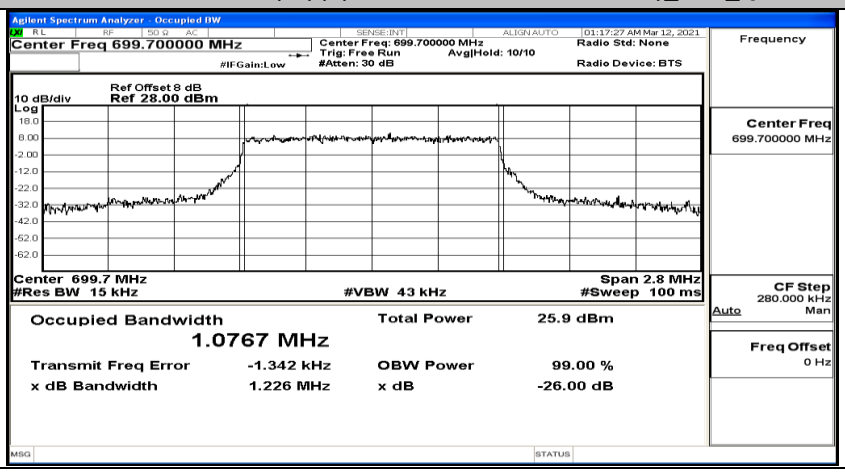
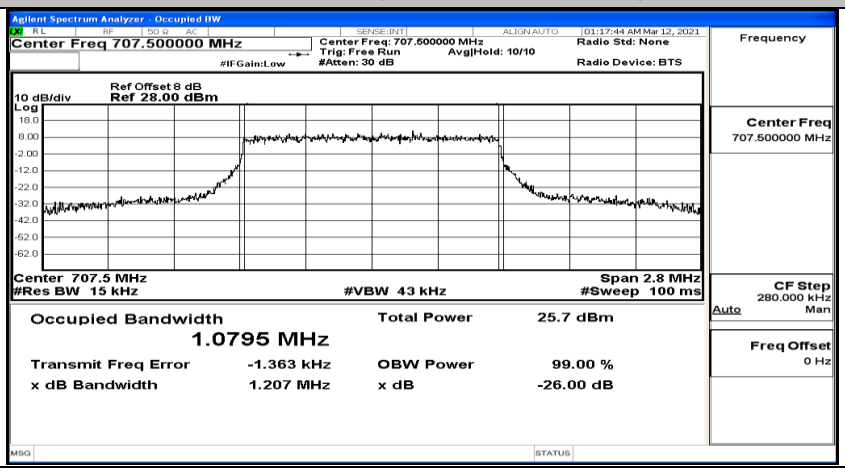
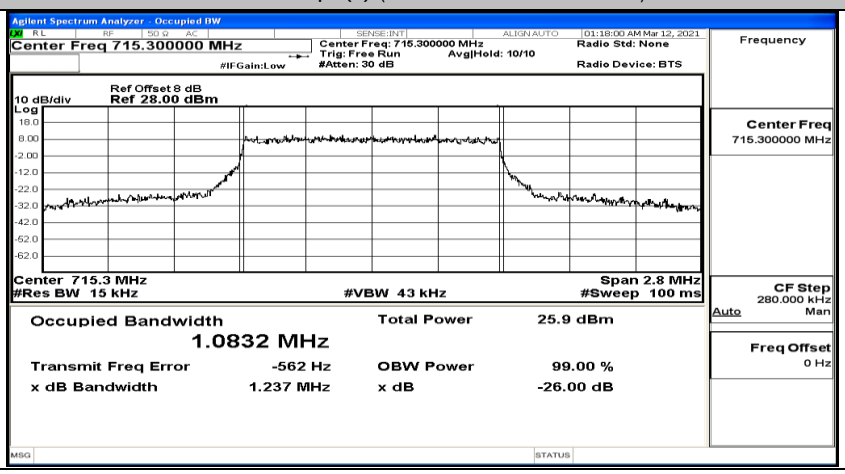
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



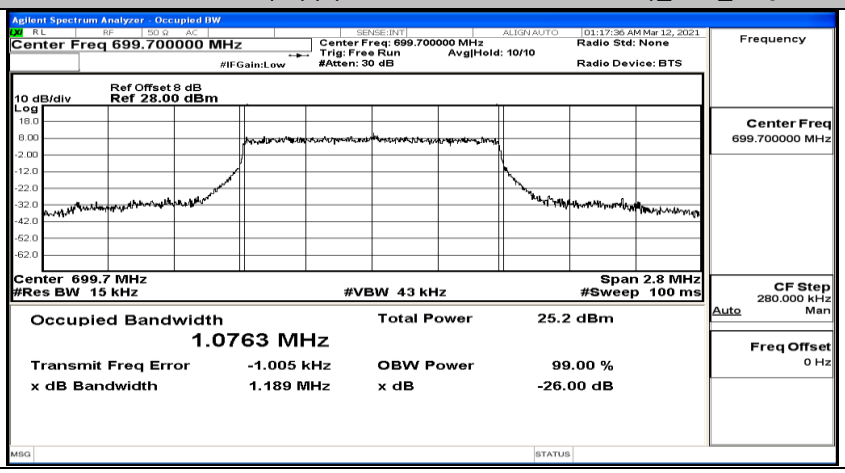
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_QPSK



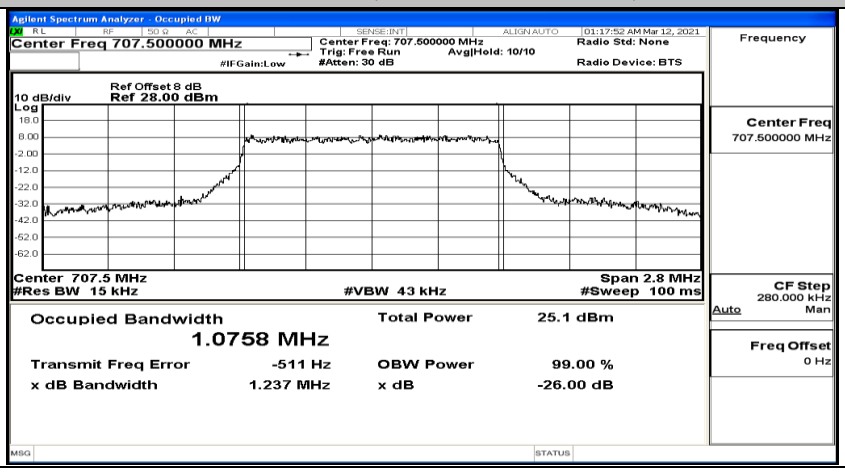
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



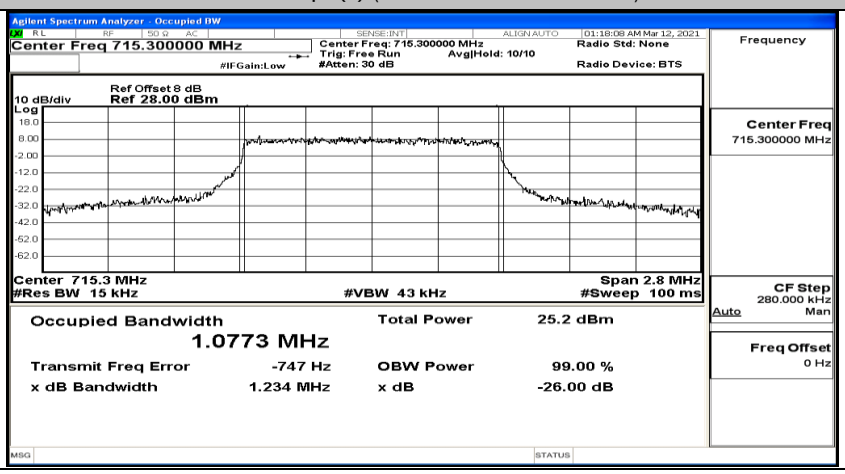
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



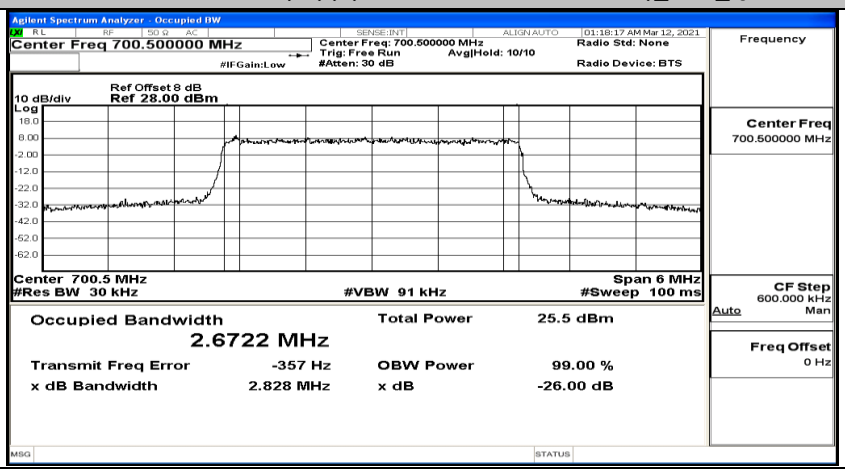
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_MCH_16QAM



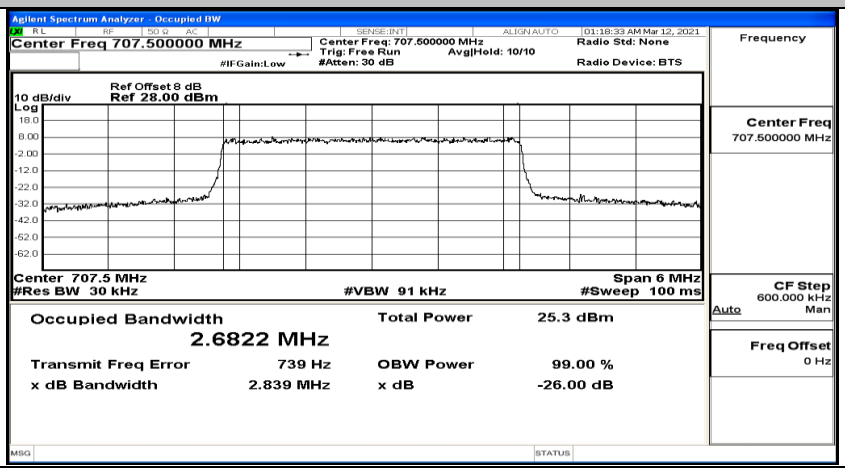
EBW & OBW Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



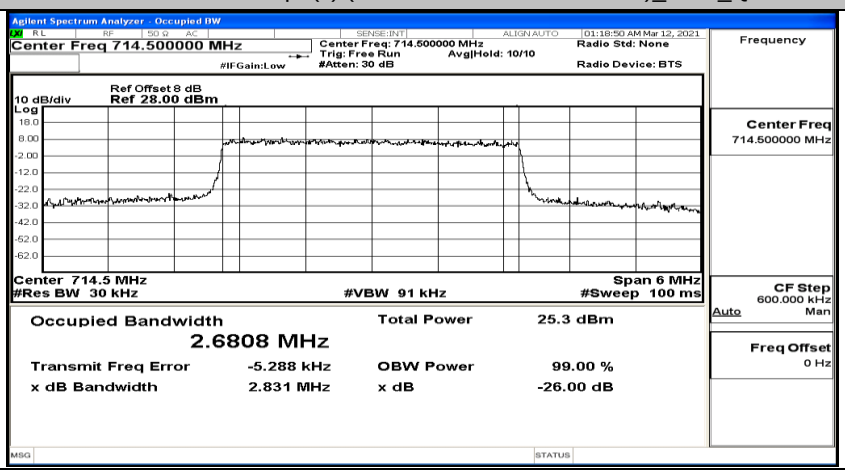
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



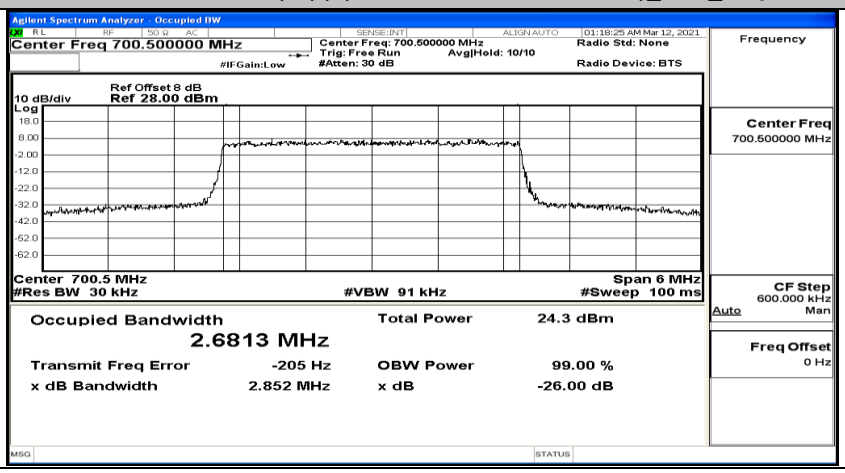
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_QPSK



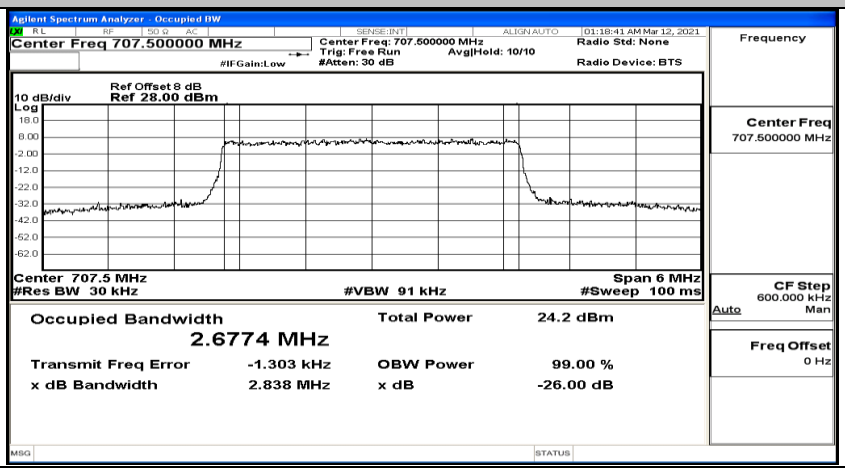
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



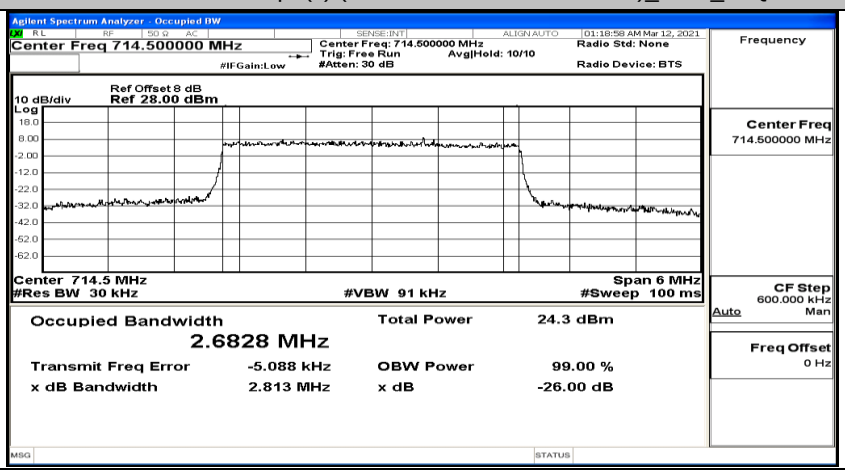
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



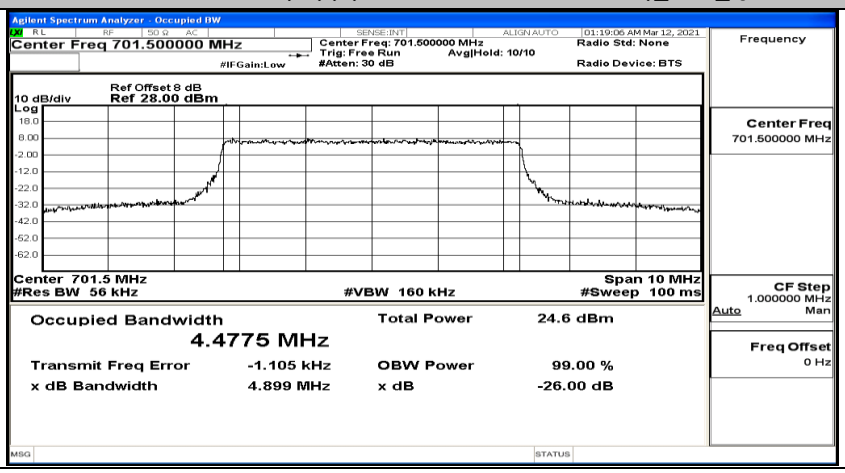
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_MCH_16QAM



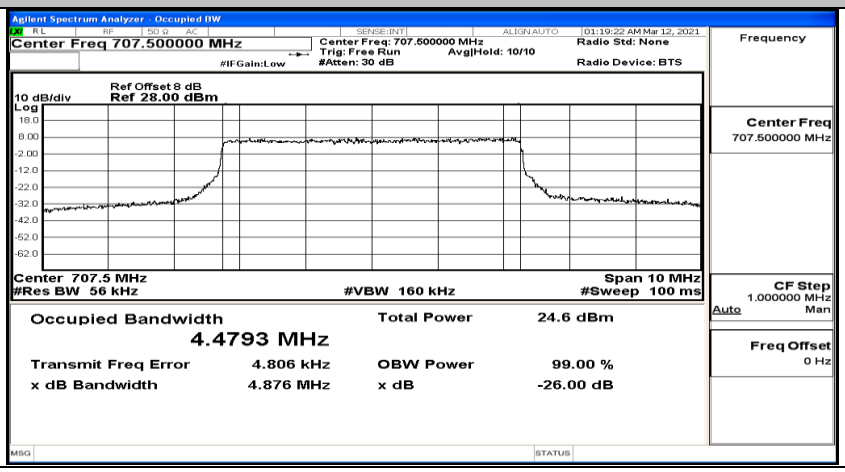
EBW & OBW Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



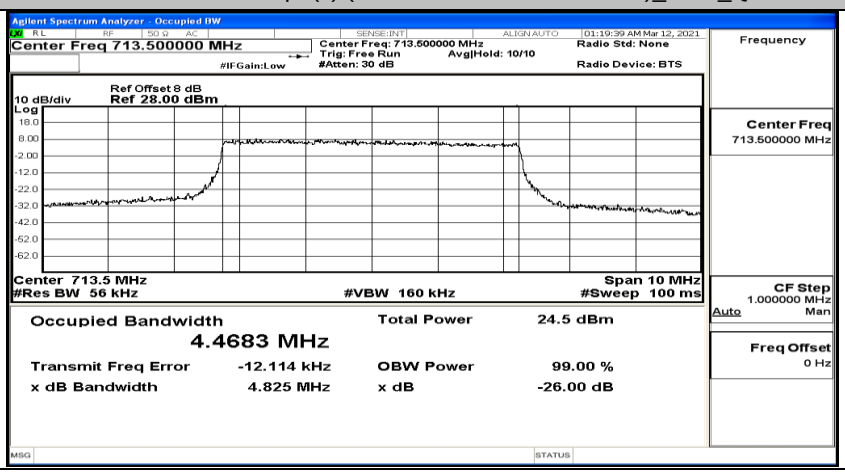
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



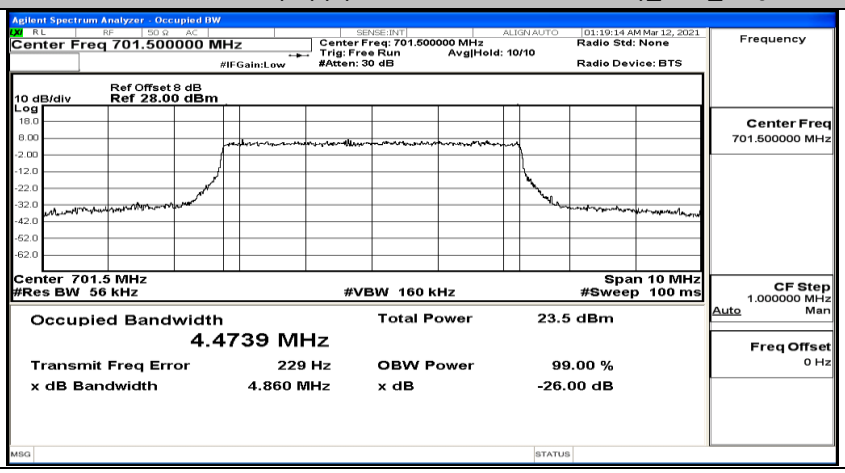
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



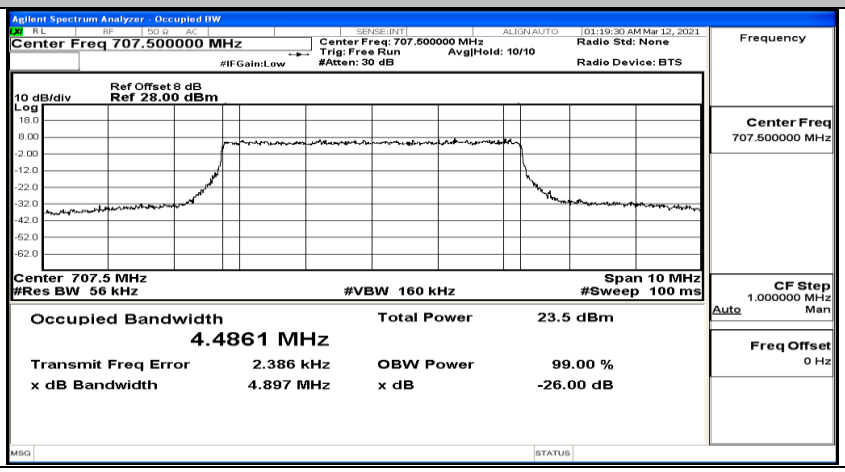
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



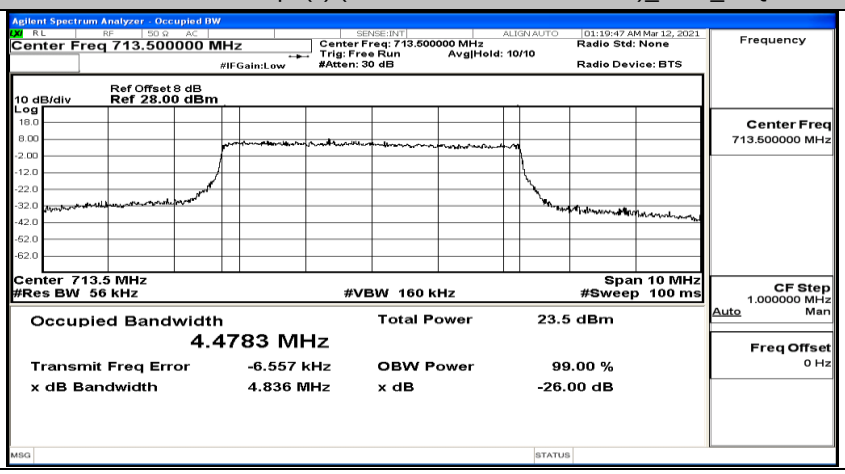
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



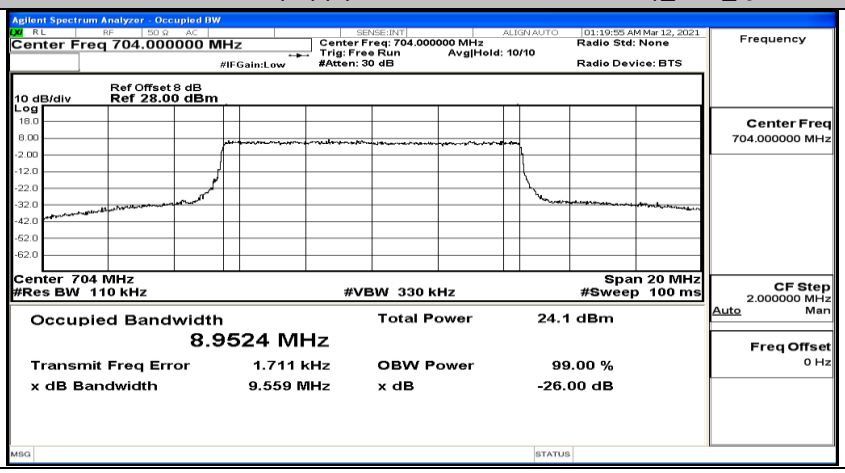
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



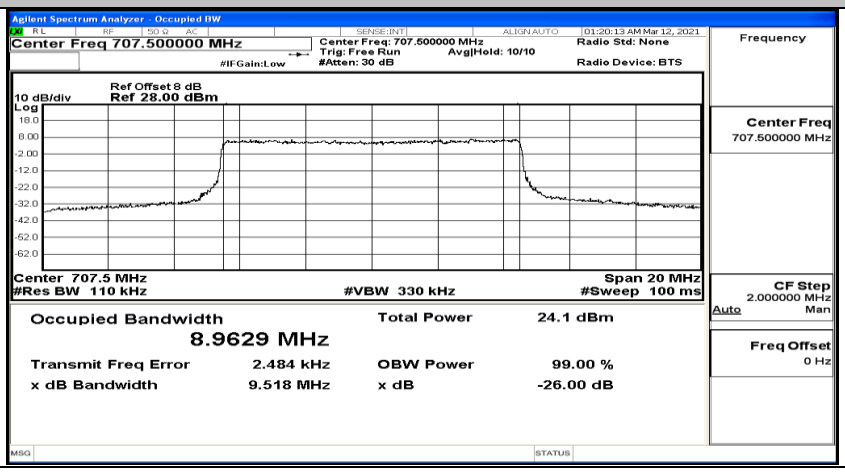
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



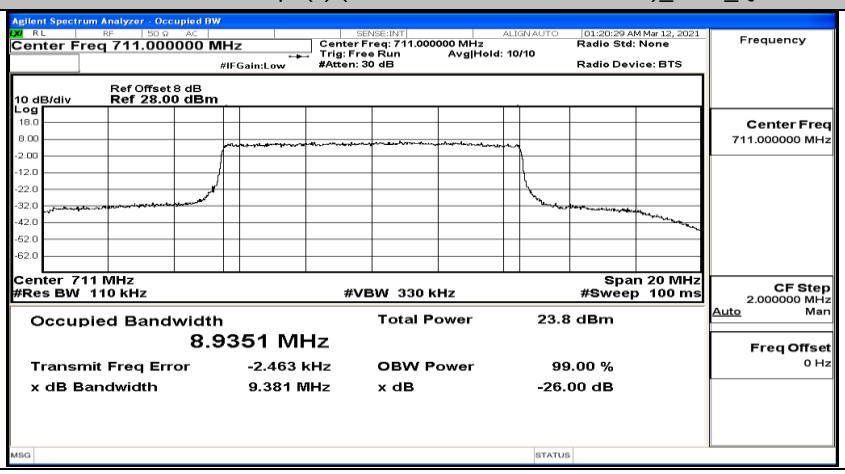
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



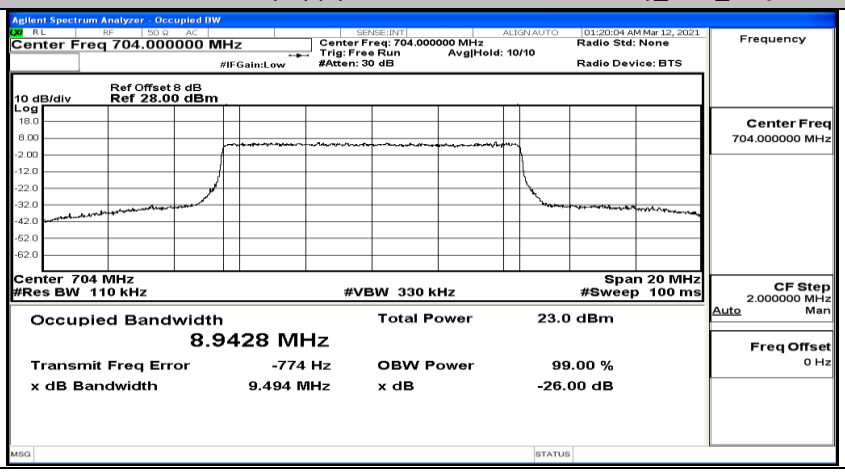
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



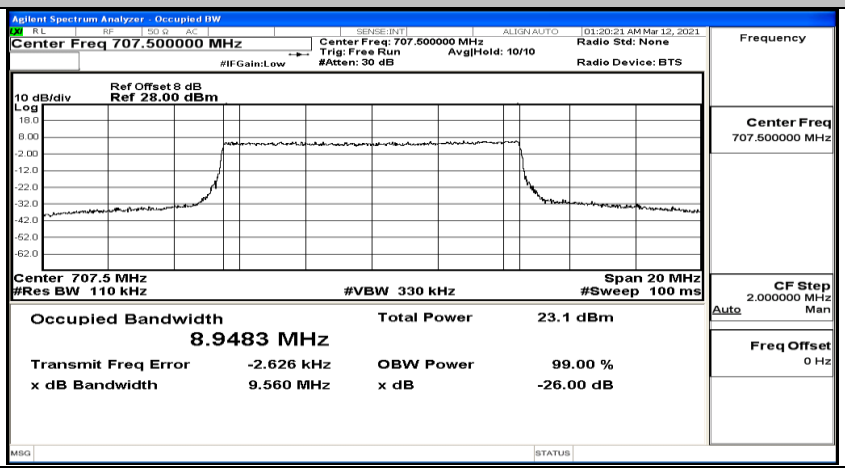
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



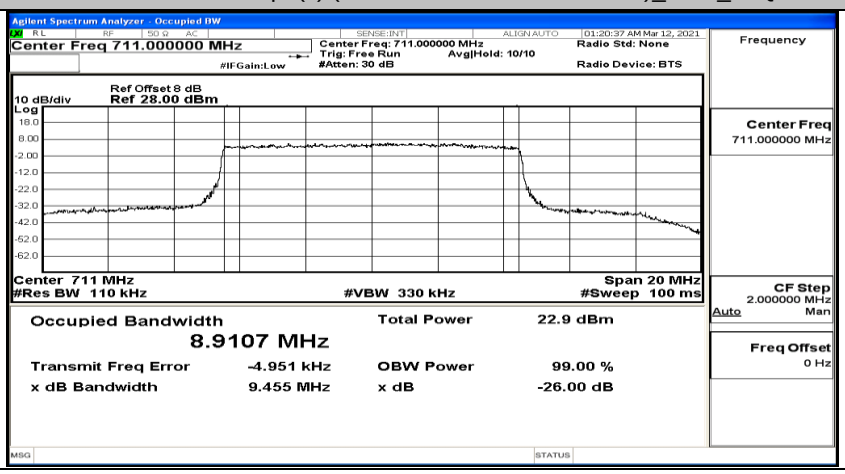
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



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

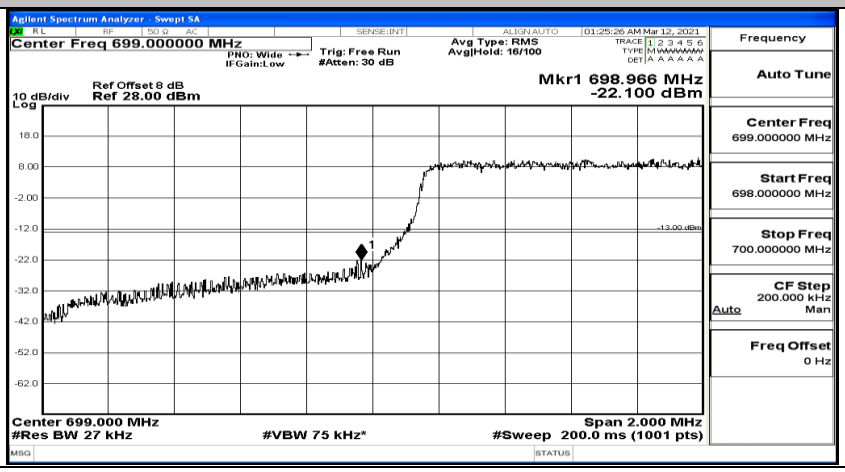


EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

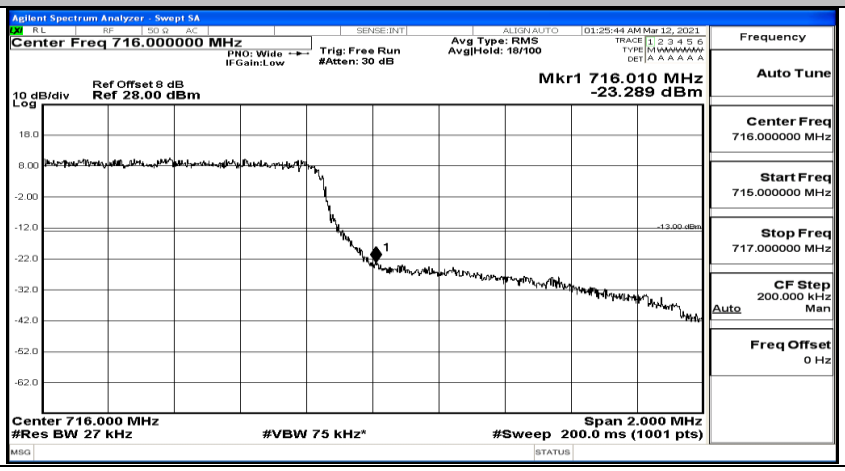


F.4 Band Edge

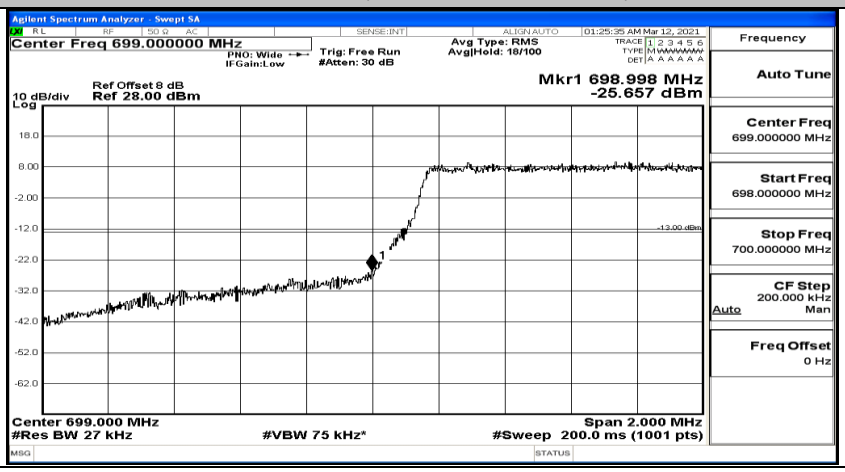
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_QPSK



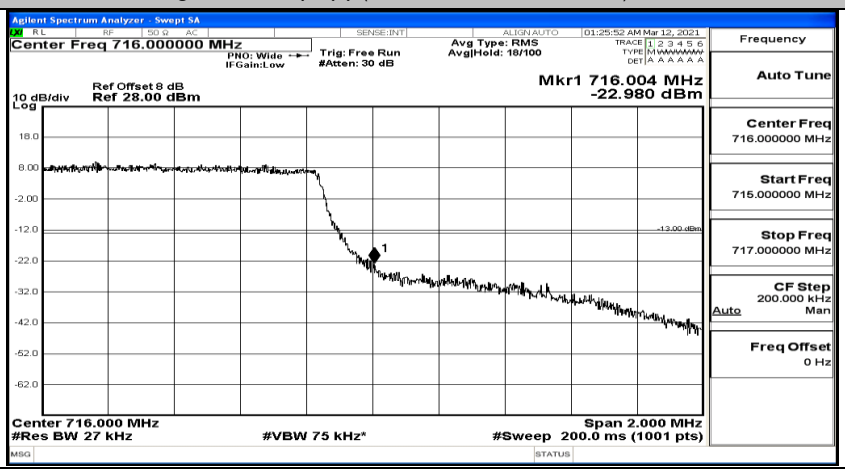
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_QPSK



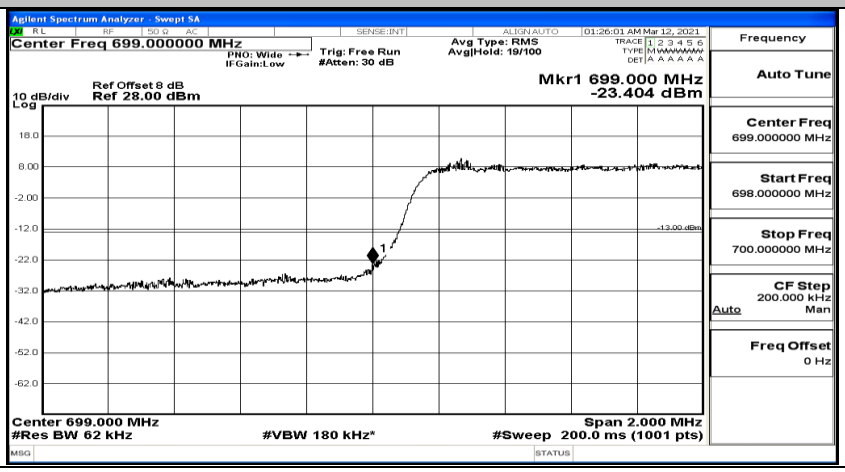
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_LCH_16QAM



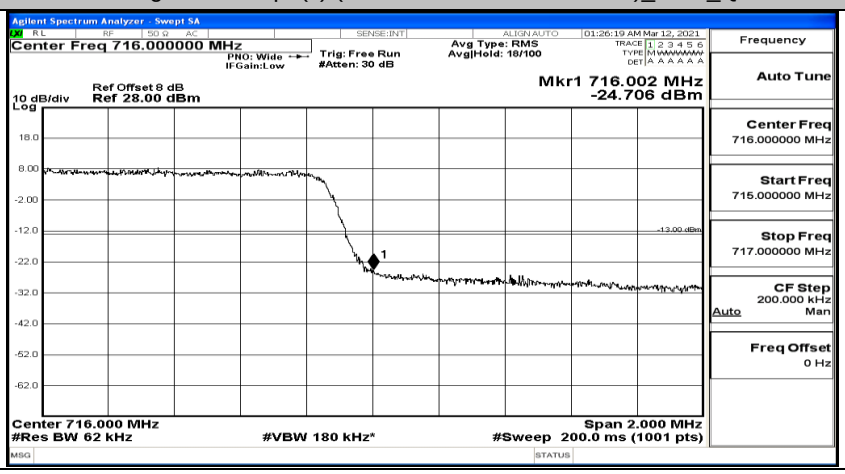
Band Edge Test Graph(s) (Channel Bandwidth: 1.4 MHz)_HCH_16QAM



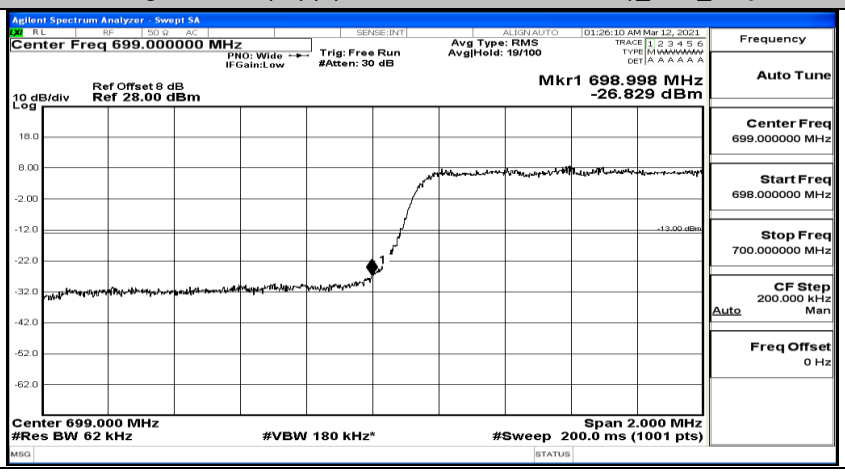
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_QPSK



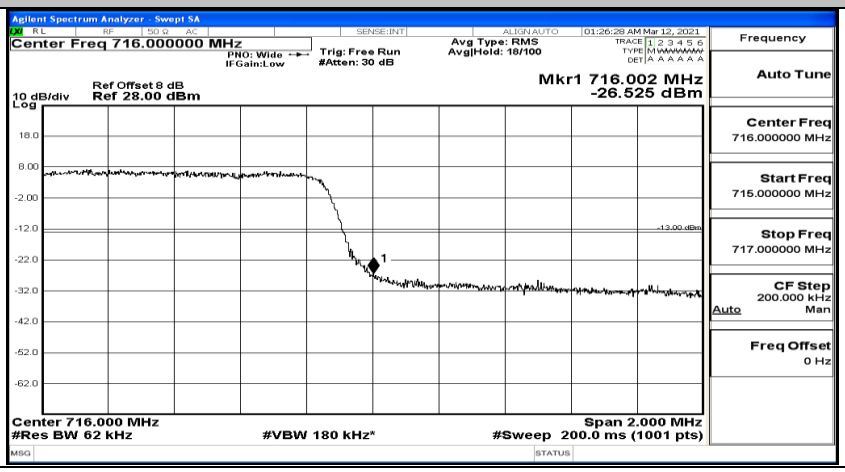
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_QPSK



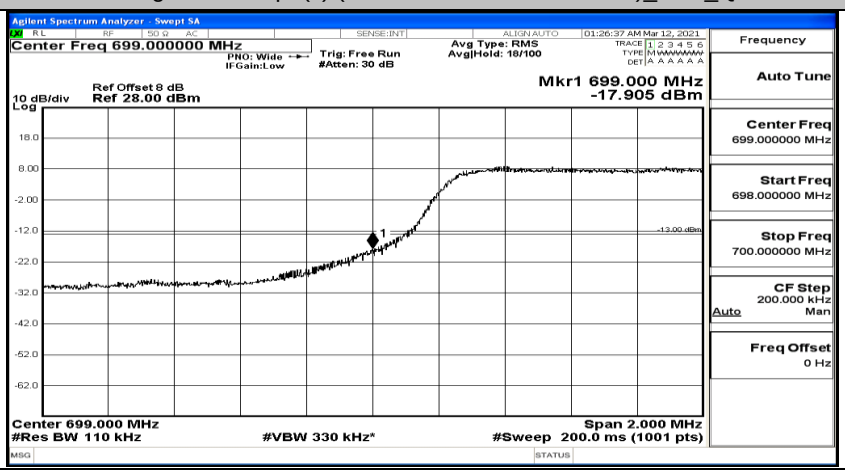
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_LCH_16QAM



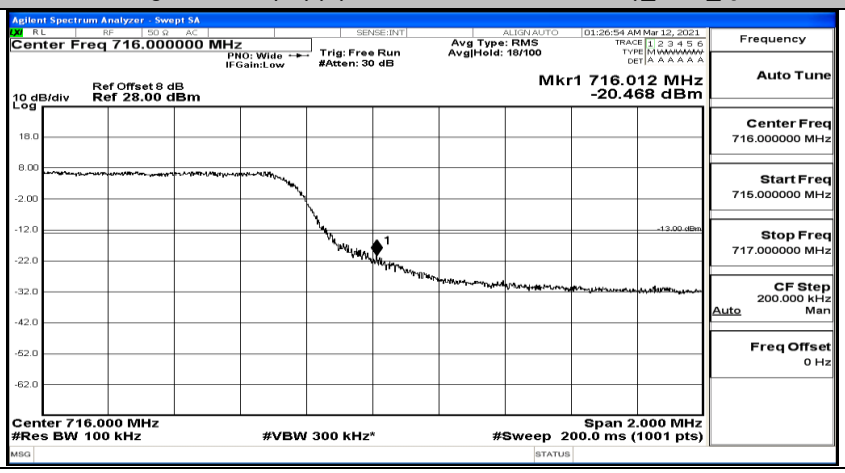
Band Edge Test Graph(s) (Channel Bandwidth: 3 MHz)_HCH_16QAM



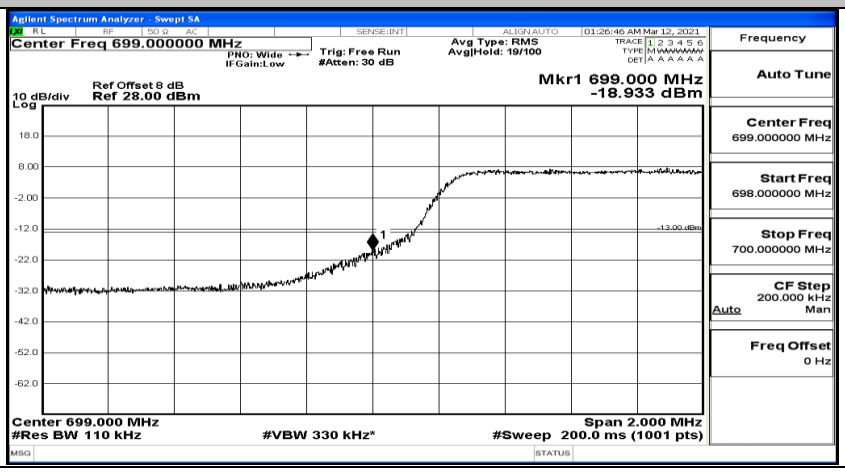
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



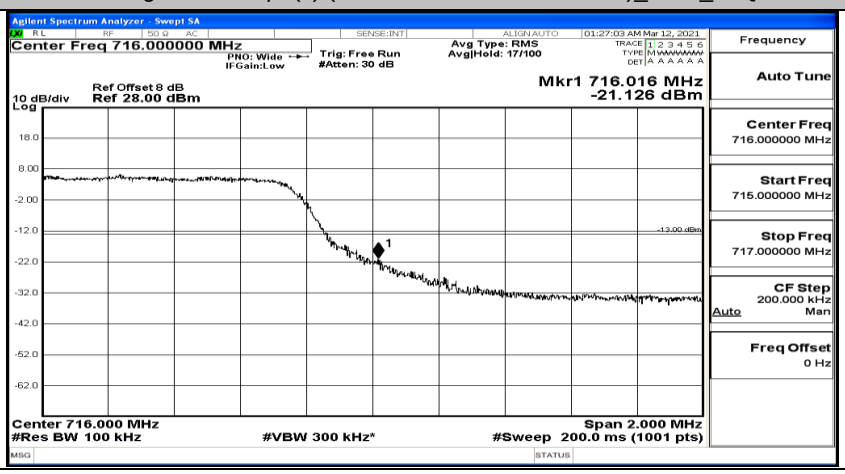
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



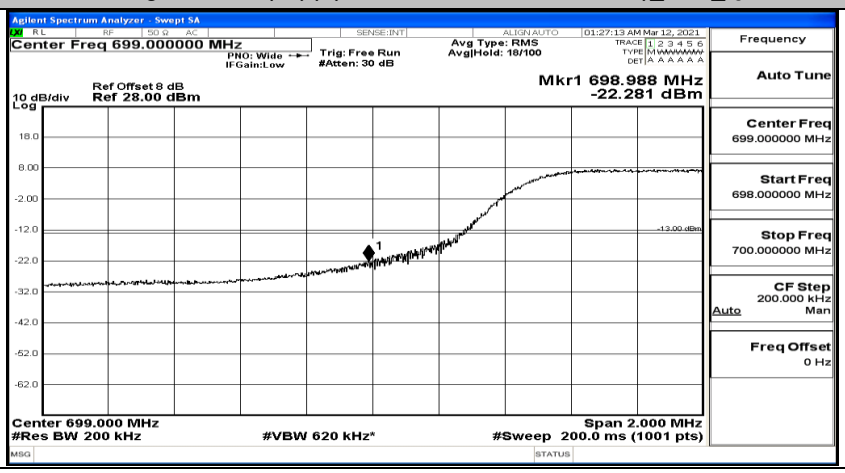
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



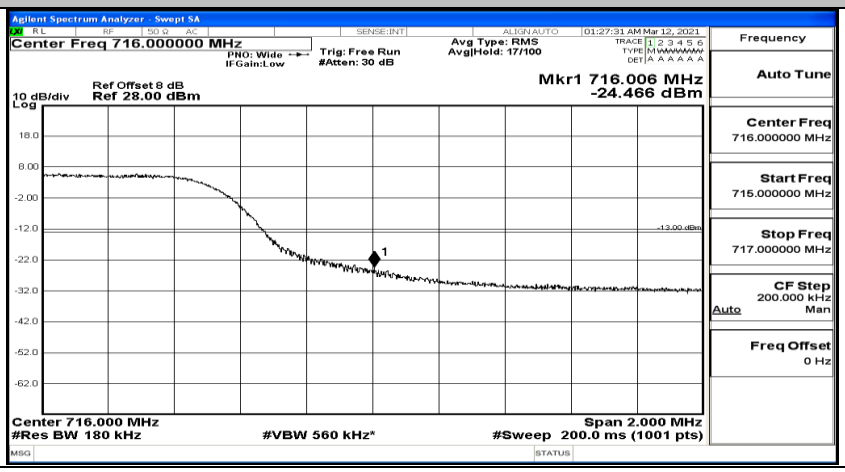
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



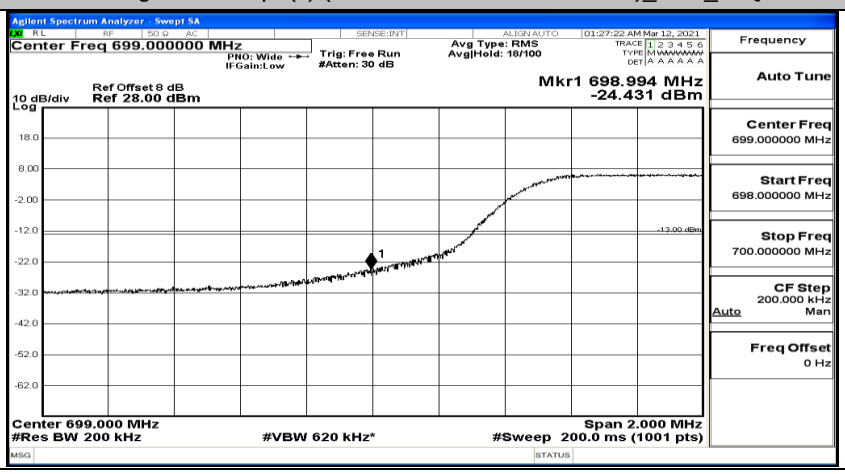
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



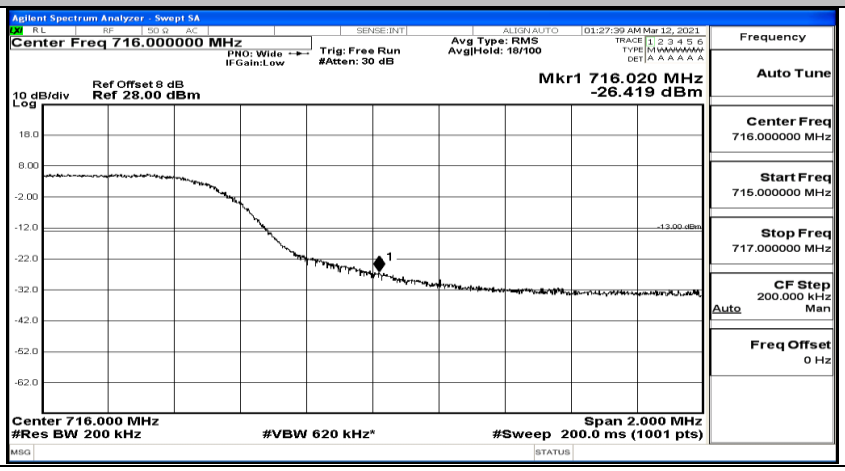
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



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



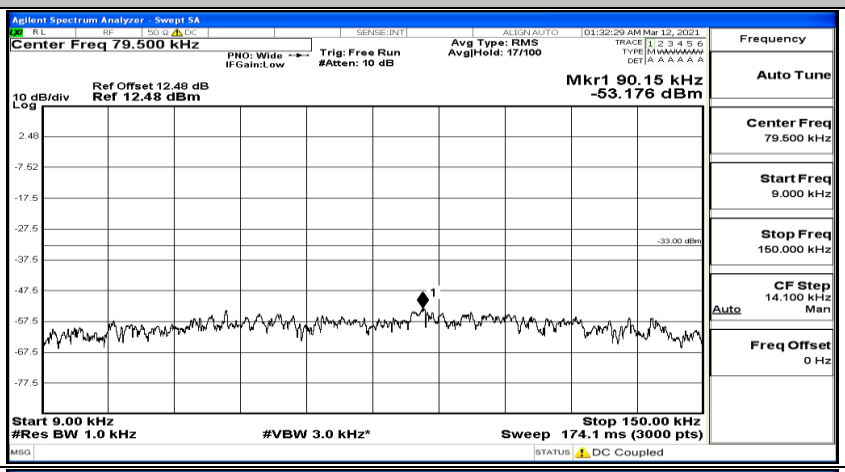
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM

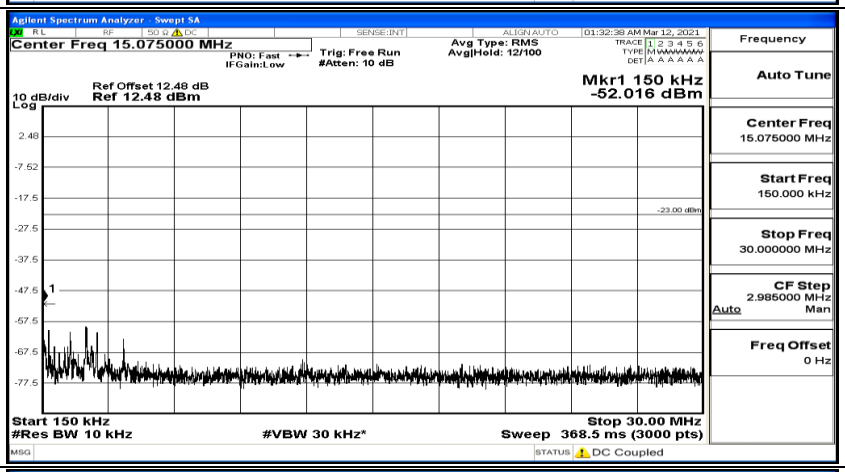


F.5 Conducted Spurious Emission

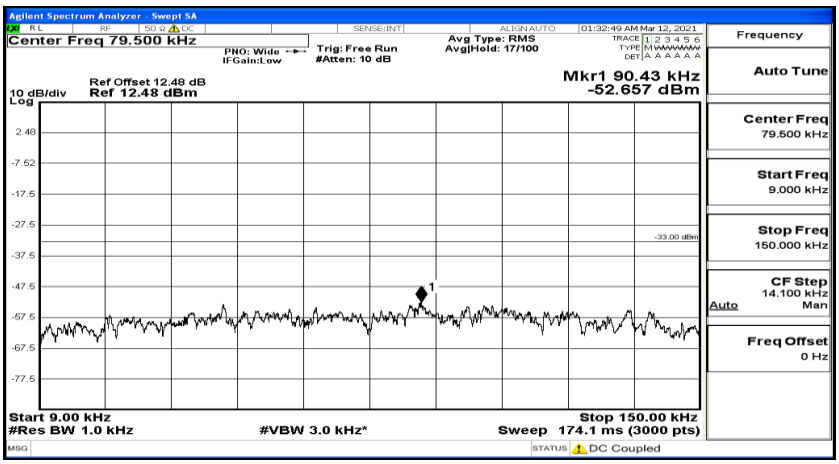
Channel Bandwidth: 1.4 MHz

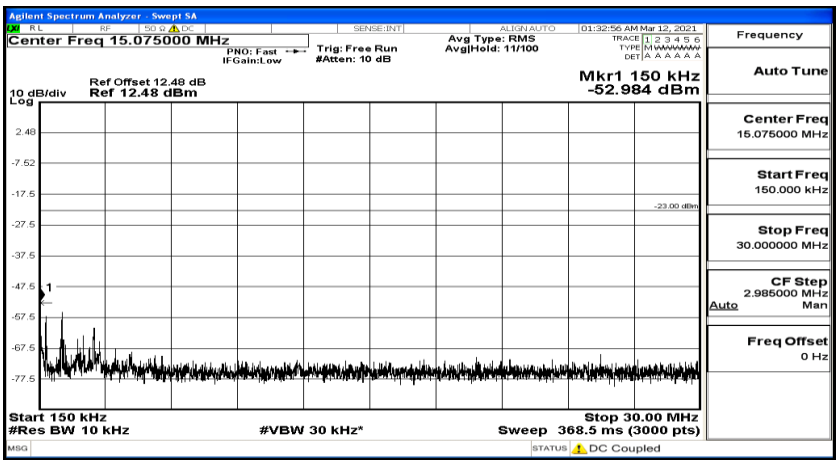
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



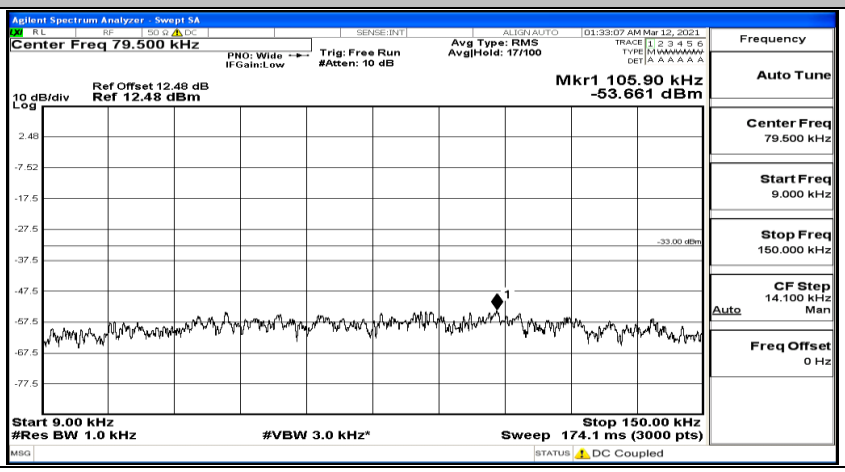


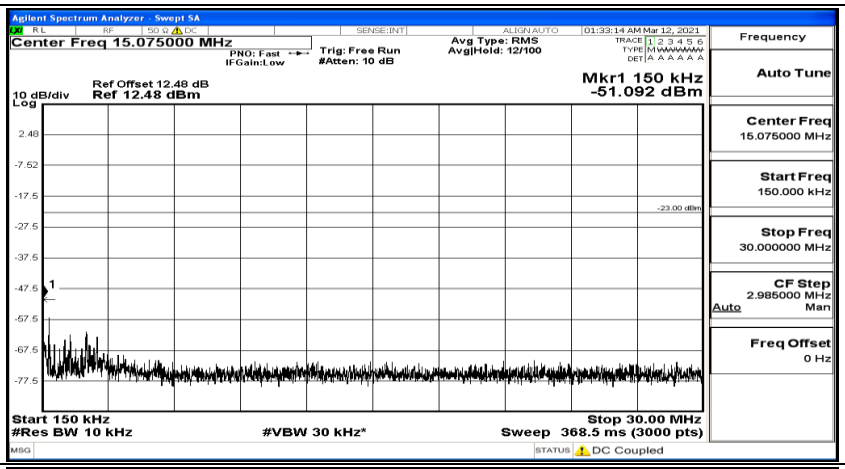
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

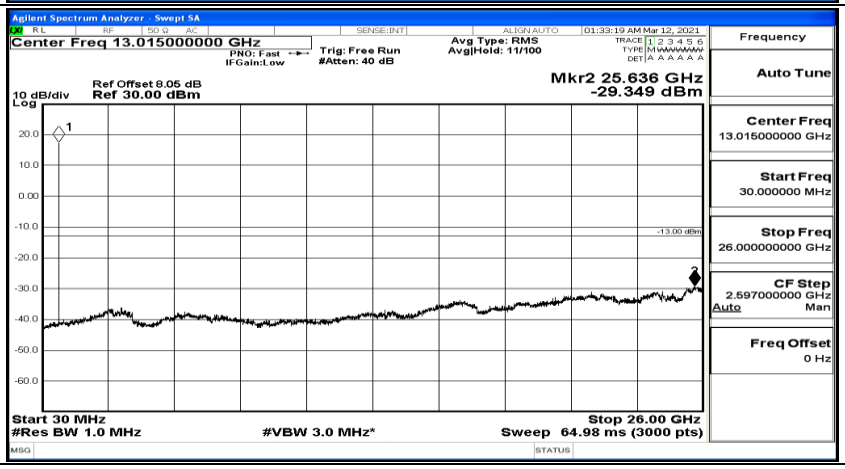




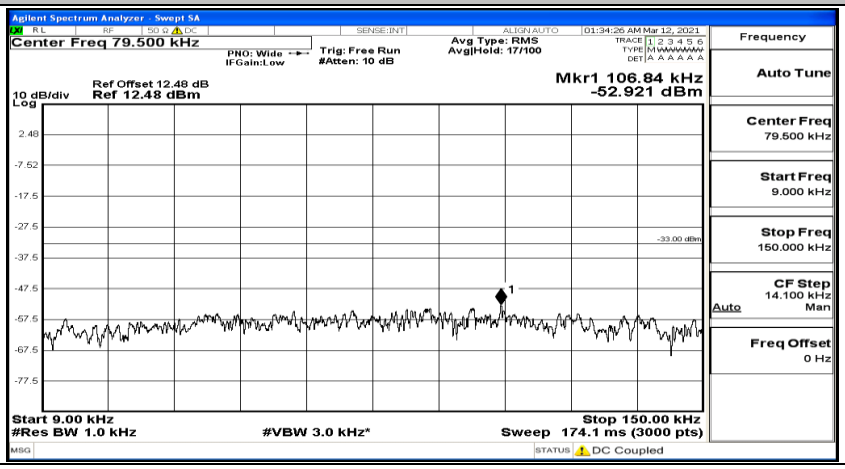
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

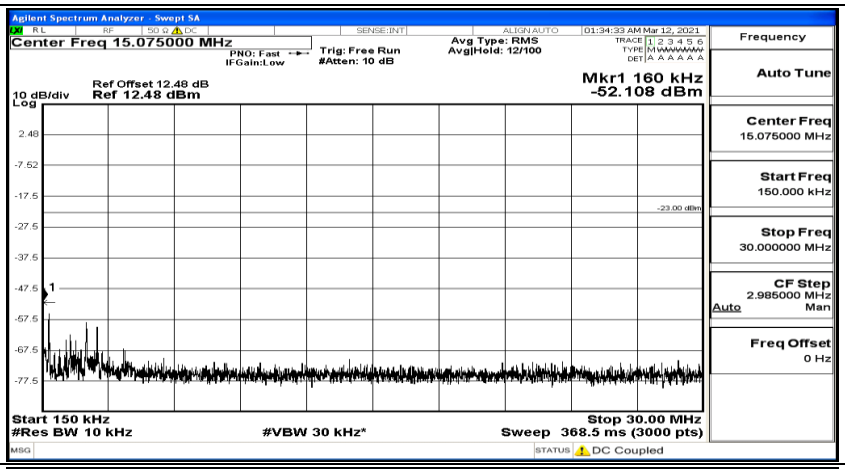


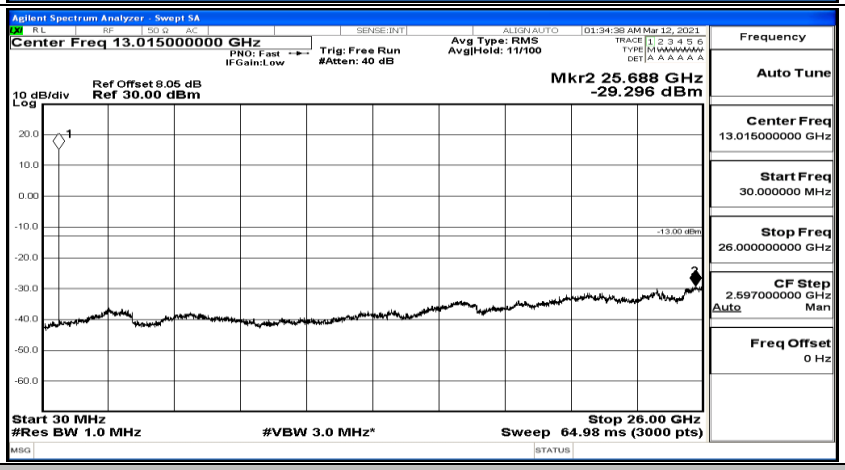




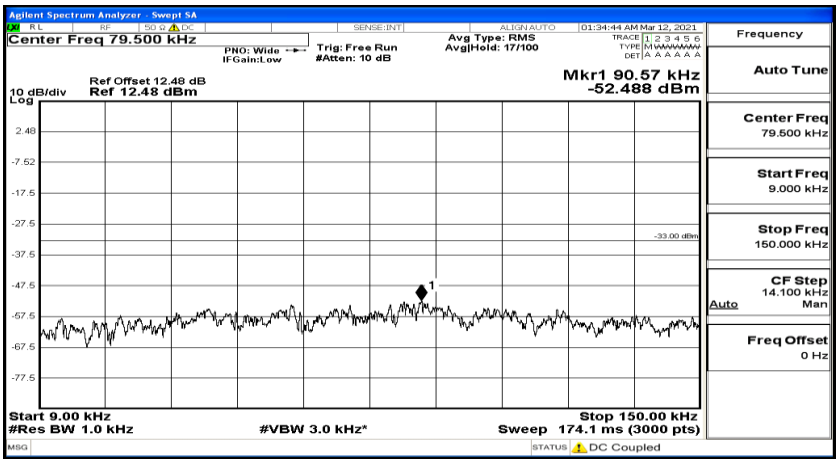
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

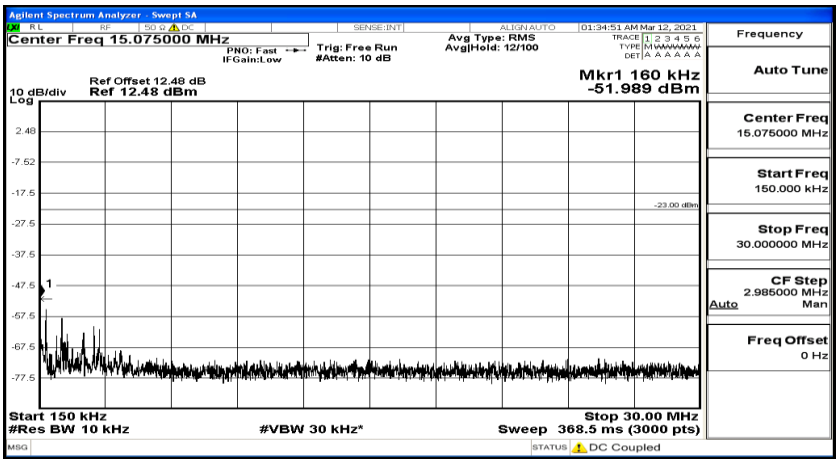




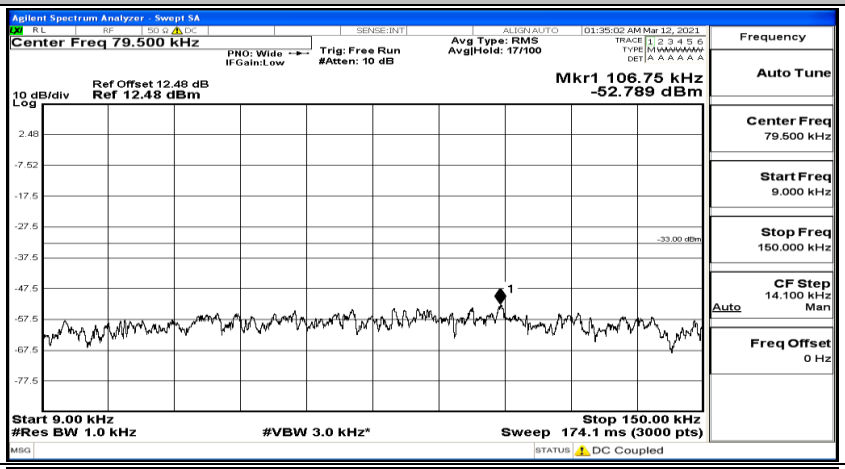


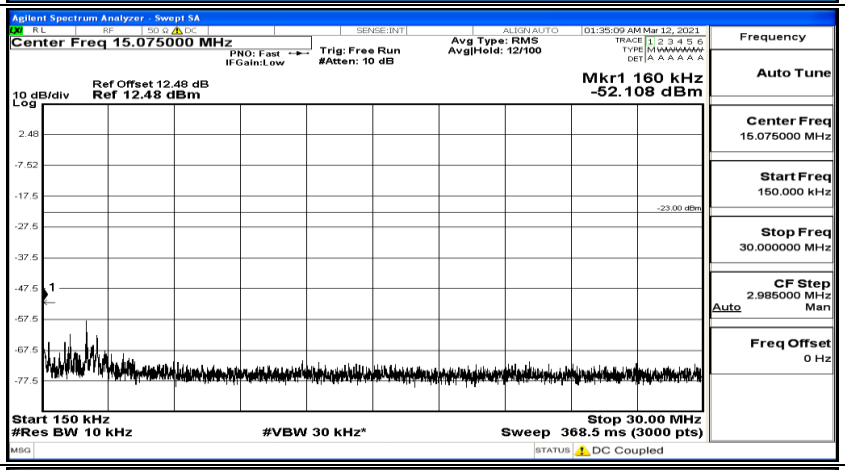
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

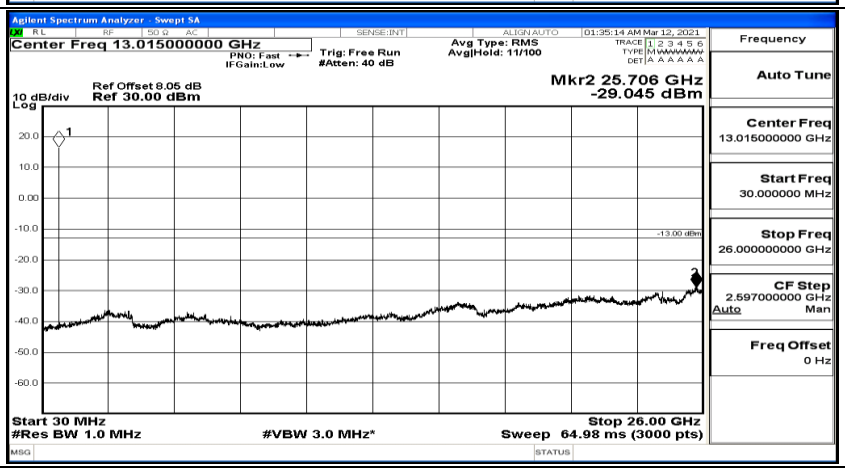




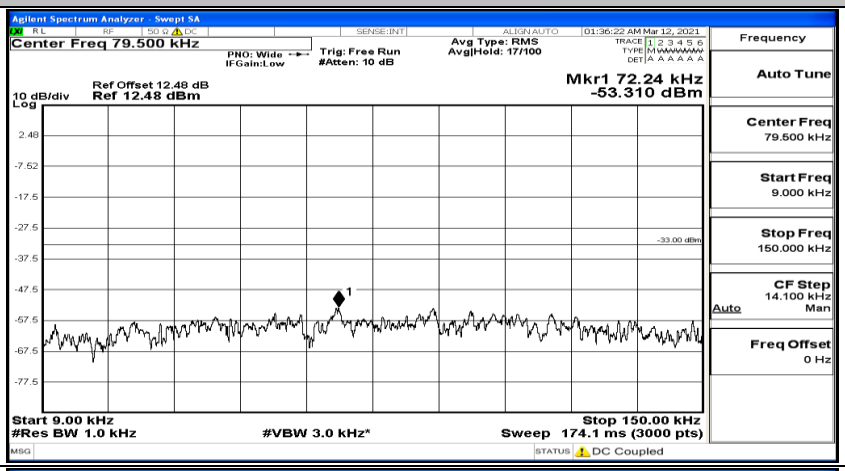
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

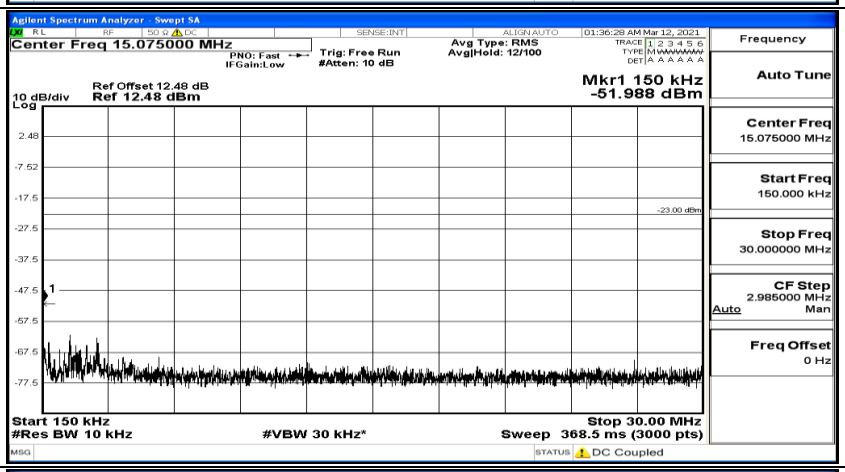


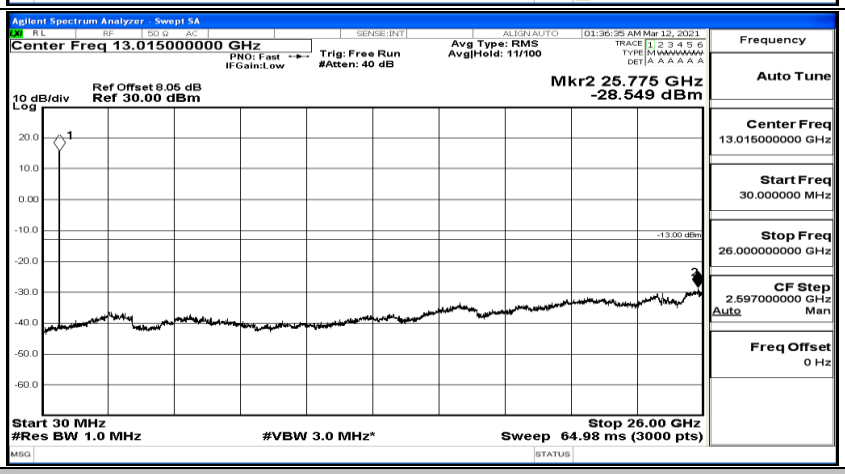




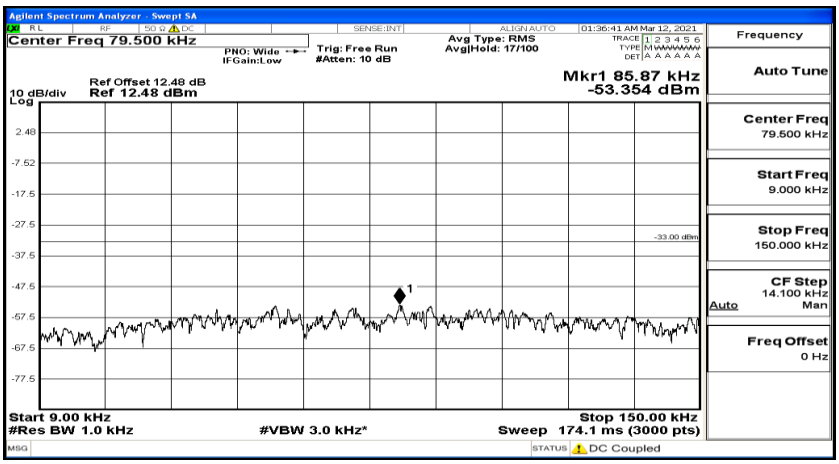
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

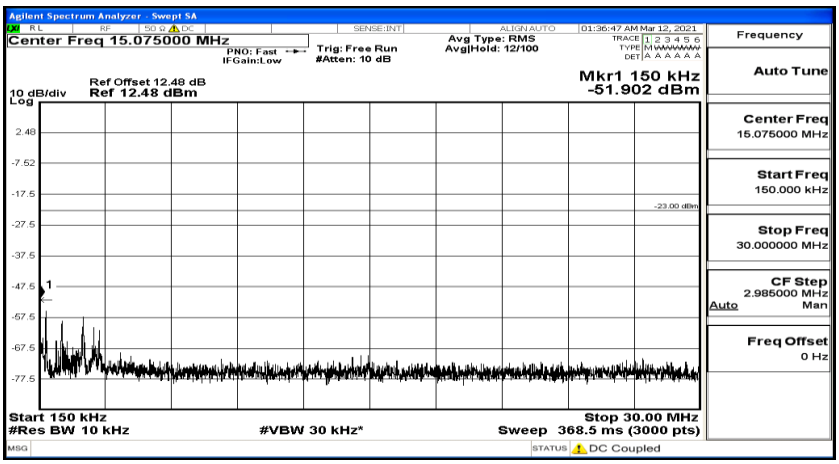




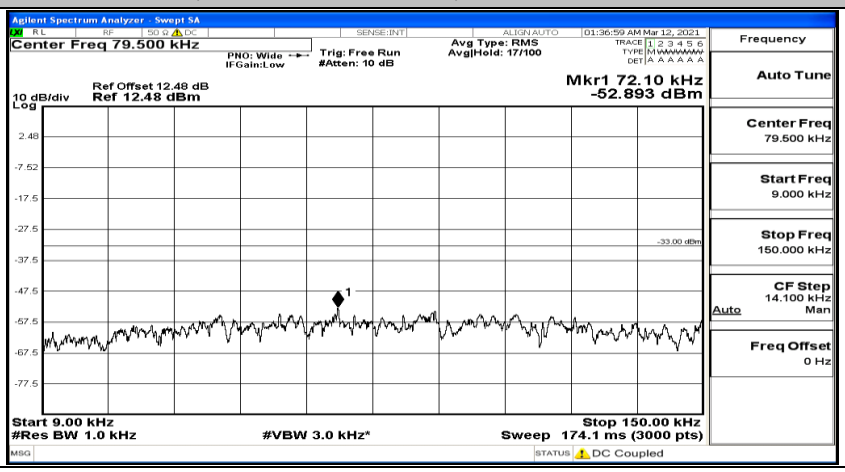


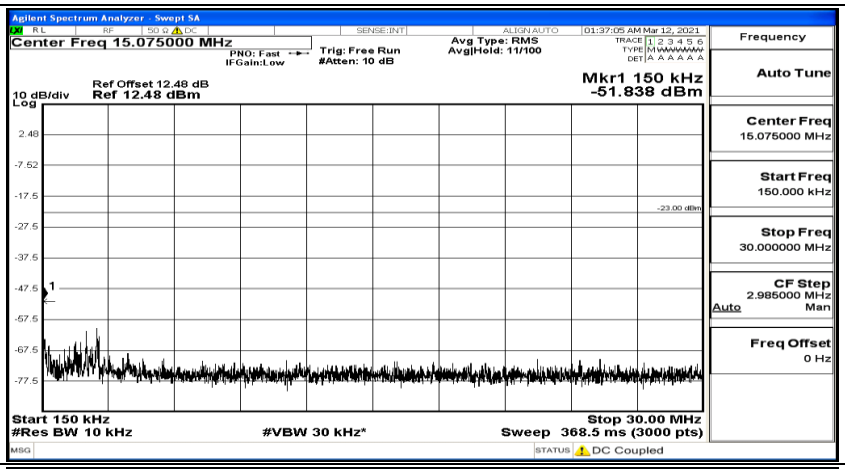
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



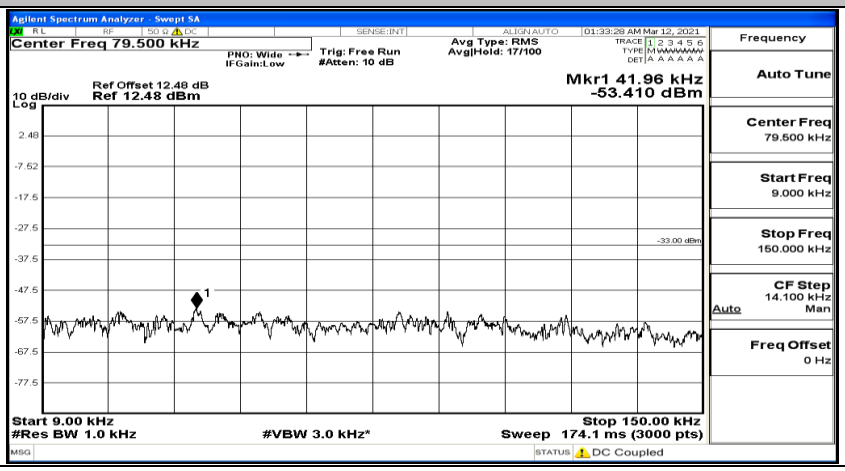


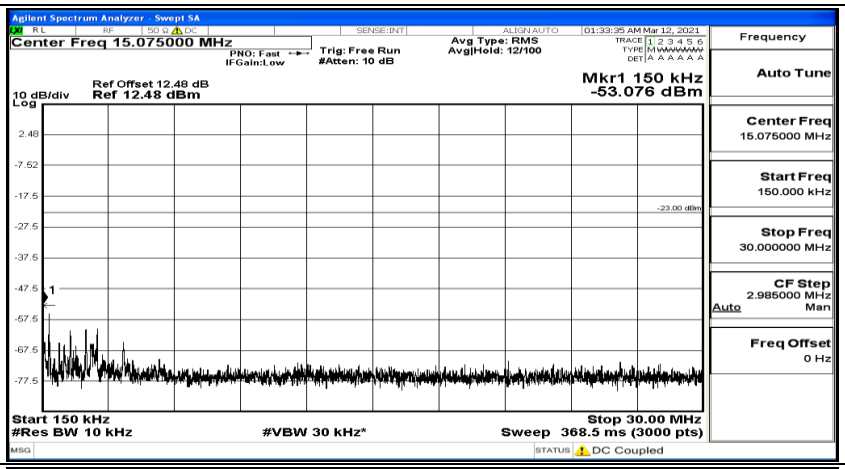
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5

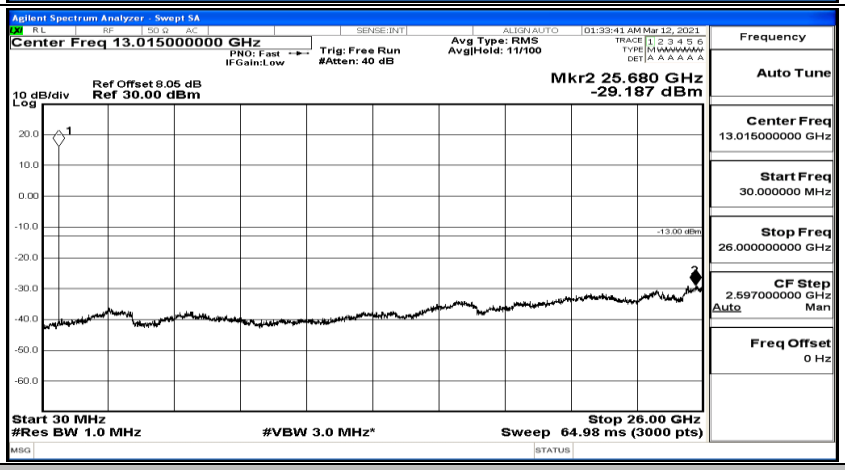




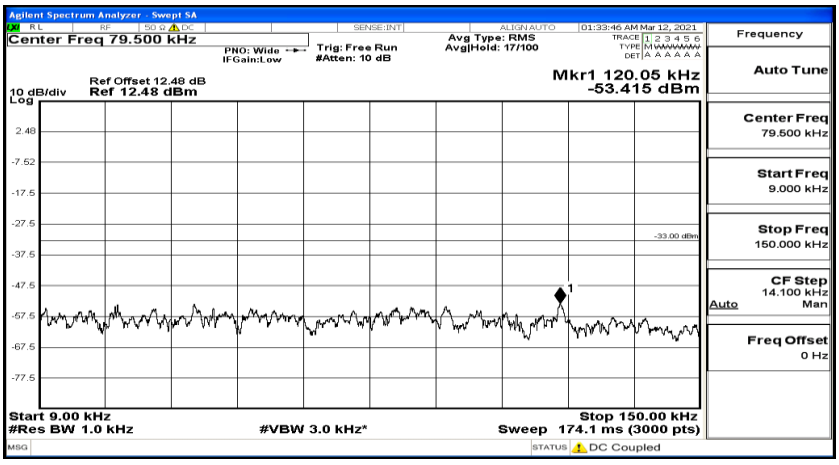
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0

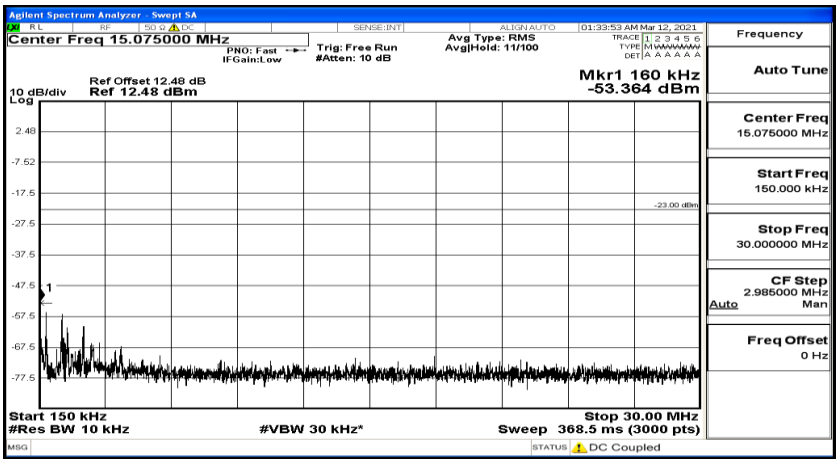




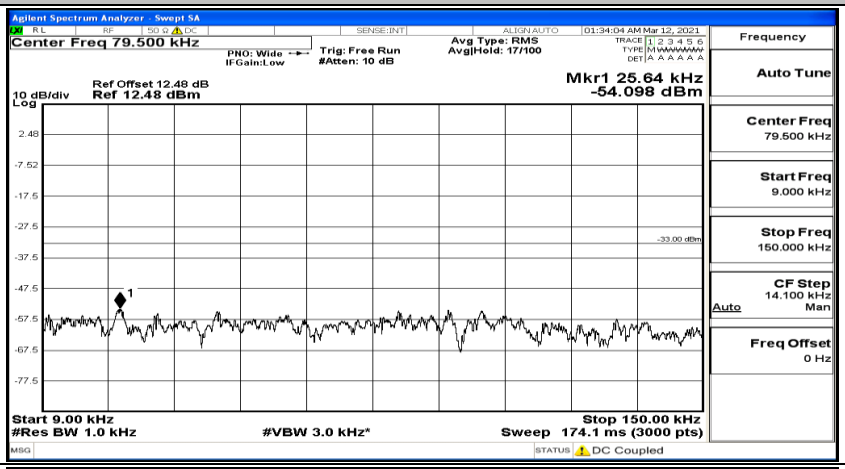


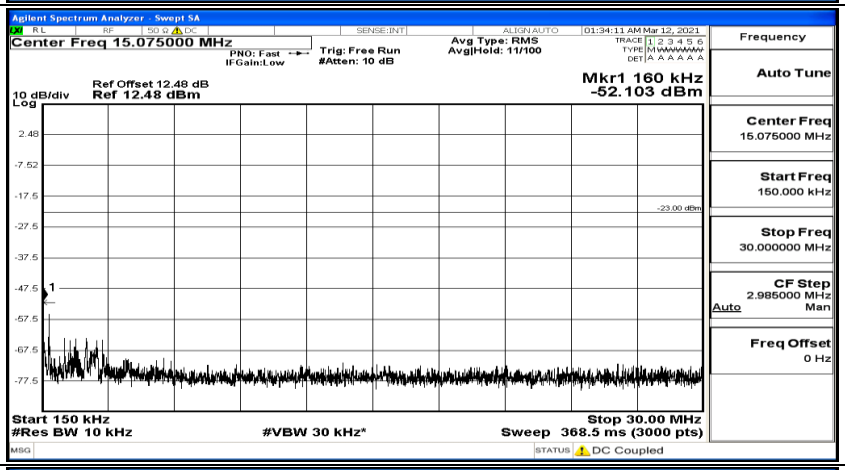
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

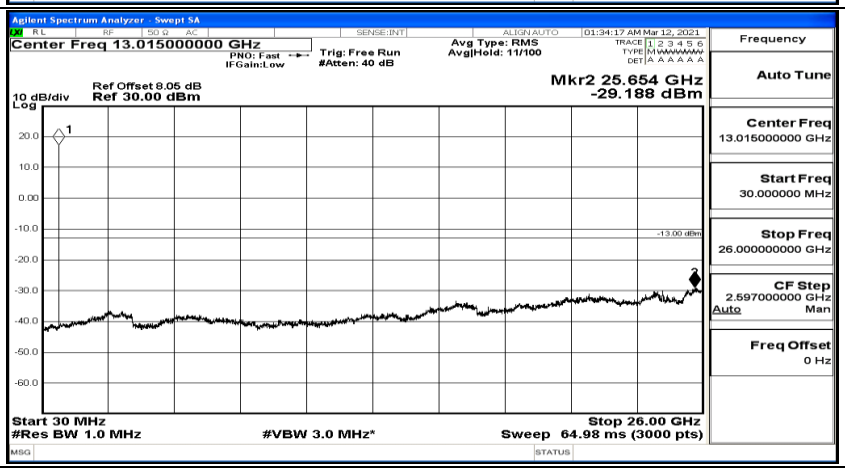




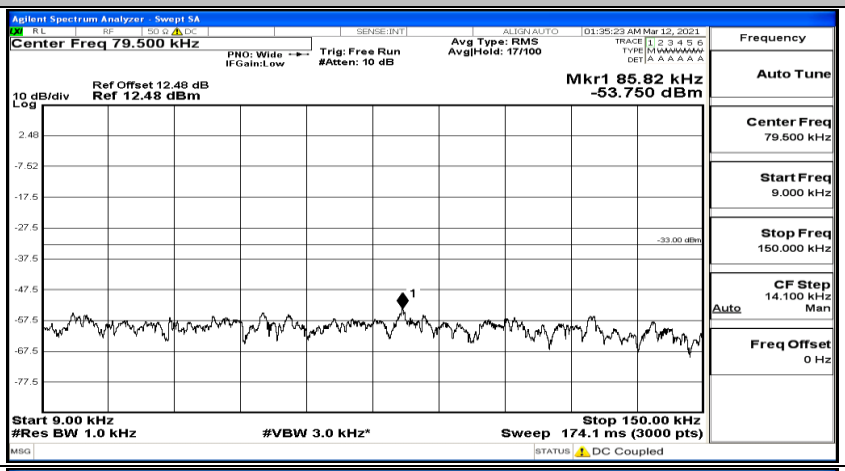
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

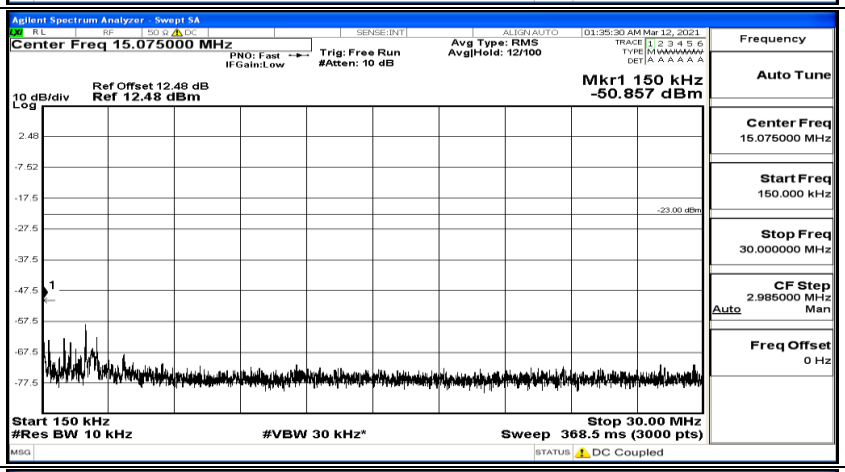


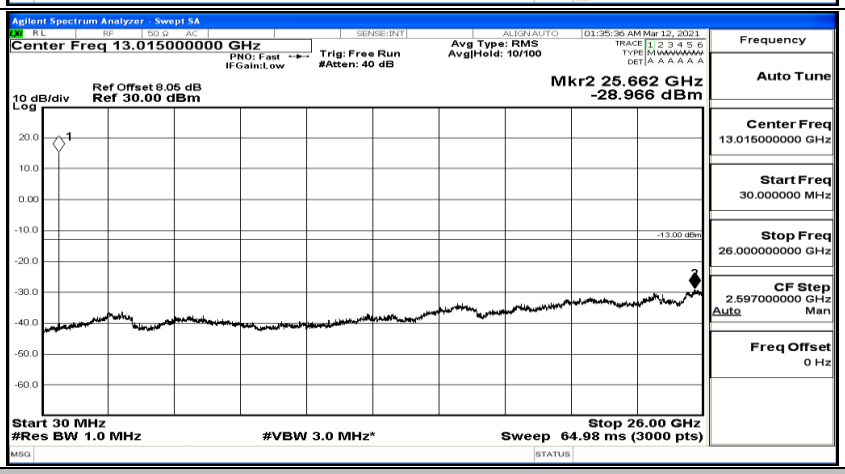




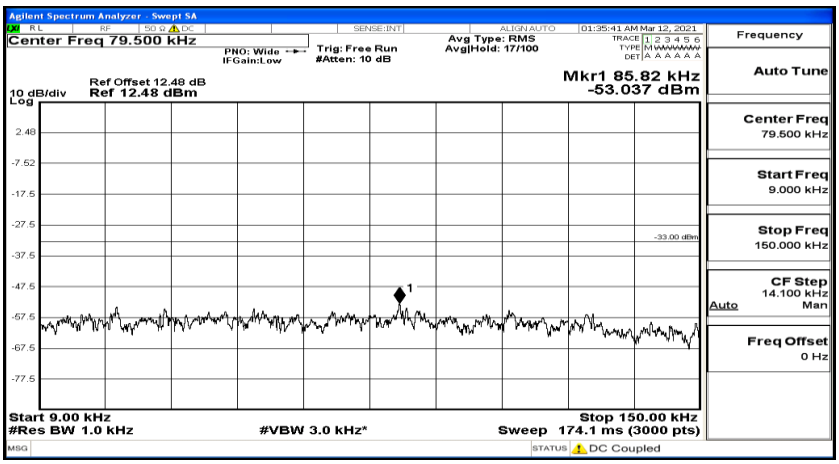
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

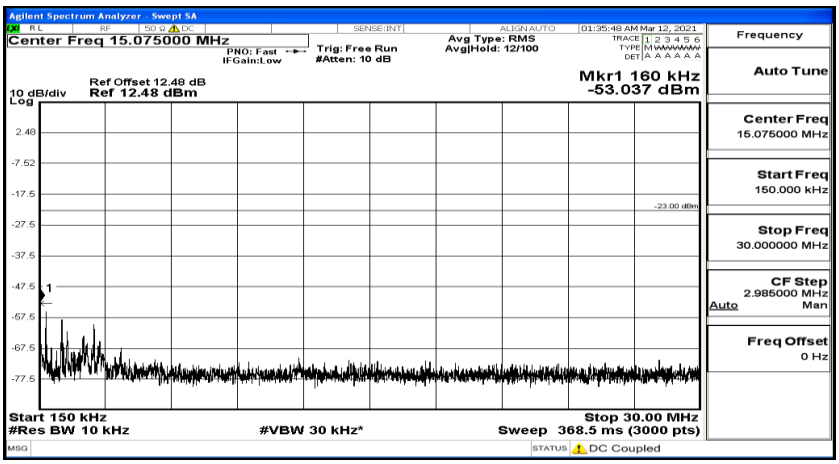




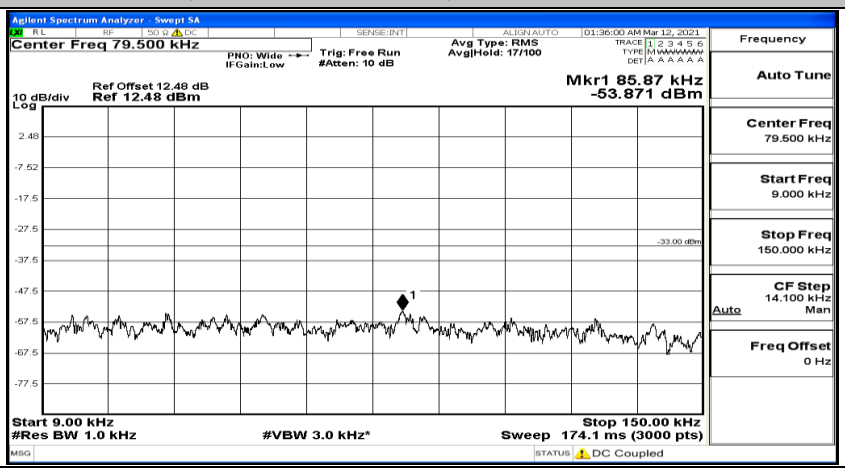


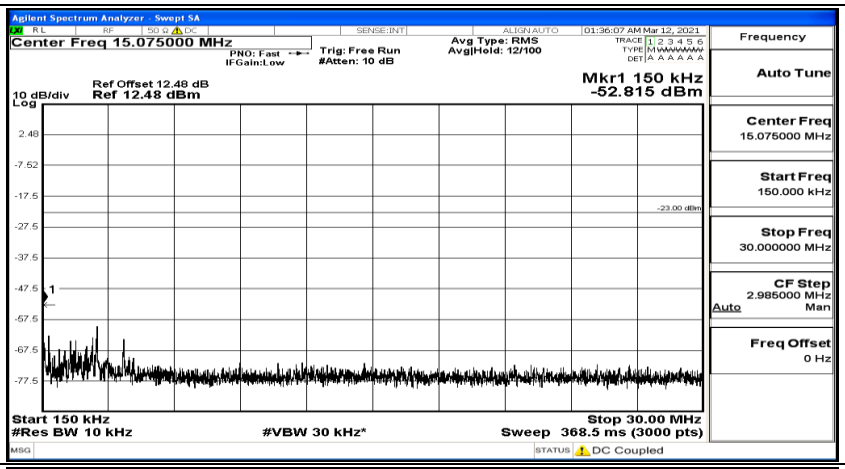
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

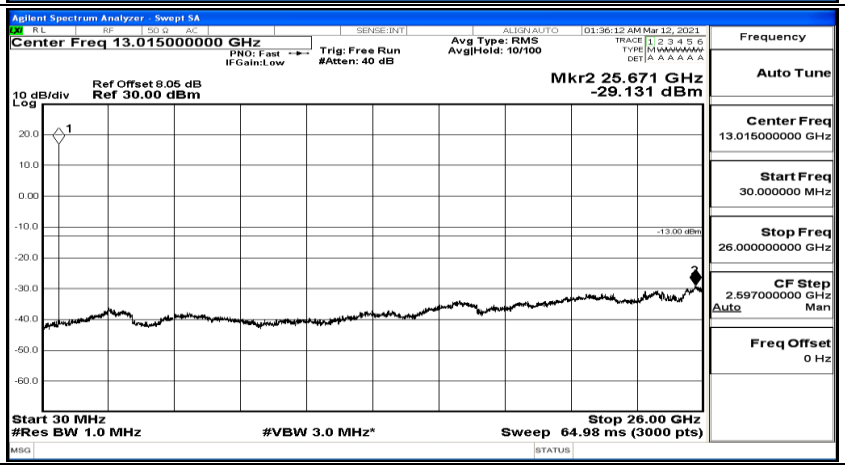
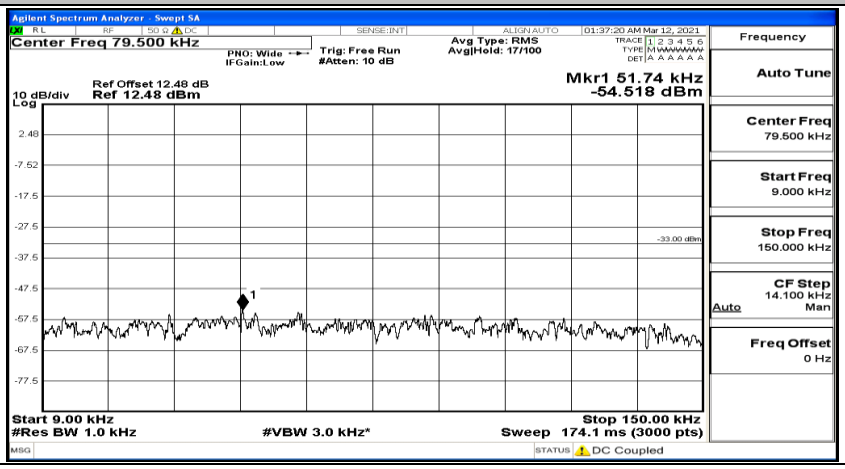




(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5



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