Appendix G: Test Data for E-UTRA Band 7

Product Name: 4G Smart Phone
Trade Mark: Smooth
Test Model: Smooth 6.26

Environmental Conditions

Temperature:	24.6° C
Relative Humidity:	54.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

G.1 Conducted Output Power

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	22.50	21.44	PASS
		1	12	22.71	21.65	PASS
		1	24	22.41	21.59	PASS
		12	0	21.99	20.88	PASS
		12	6	21.95	20.84	PASS
		12	13	21.85	20.76	PASS
		25	0	21.89	21.17	PASS
	MCH	1	0	23.75	22.42	PASS
		1	12	24.23	22.25	PASS
		1	24	23.86	22.07	PASS
		12	0	22.92	22.00	PASS
		12	6	23.02	22.03	PASS
		12	13	22.99	21.78	PASS
		25	0	22.97	22.21	PASS
	HCH	1	0	23.51	22.65	PASS
		1	12	24.12	23.07	PASS
		1	24	24.05	22.84	PASS
		12	0	22.87	22.01	PASS
		12	6	22.98	22.05	PASS
		12	13	23.03	22.02	PASS
		25	0	22.96	22.15	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	23.29	22.60	PASS
		1	24	23.35	23.12	PASS
		1	49	22.94	22.27	PASS
		25	0	22.33	21.36	PASS
		25	12	22.36	21.48	PASS
		25	25	22.16	21.13	PASS
		50	0	22.21	21.24	PASS
	MCH	1	0	23.75	23.01	PASS
		1	24	24.13	23.94	PASS
		1	49	23.80	23.19	PASS
		25	0	23.09	22.09	PASS
		25	12	23.05	22.07	PASS
		25	25	23.03	22.07	PASS
		50	0	23.05	22.10	PASS
	HCH	1	0	23.49	22.93	PASS
		1	24	24.27	23.72	PASS
		1	49	23.38	22.84	PASS
		25	0	22.92	21.93	PASS
		25	12	23.17	22.35	PASS
		25	25	23.19	22.28	PASS
		50	0	23.16	22.18	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.50	22.90	PASS
		1	37	23.51	23.38	PASS
		1	74	23.32	22.90	PASS
		37	0	22.30	21.27	PASS
		37	18	22.33	21.39	PASS
		37	38	22.26	21.29	PASS
		75	0	22.29	21.36	PASS
	MCH	1	0	24.00	23.44	PASS
		1	37	24.47	23.90	PASS
		1	74	24.24	23.46	PASS
		37	0	23.35	22.38	PASS
		37	18	23.37	22.43	PASS
		37	38	23.21	22.27	PASS
		75	0	23.31	22.29	PASS
	HCH	1	0	22.78	22.10	PASS
		1	37	23.80	23.16	PASS
		1	74	23.00	22.42	PASS
		37	0	22.96	22.03	PASS
		37	18	23.18	22.20	PASS
		37	38	23.29	22.22	PASS
		75	0	23.08	22.17	PASS

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Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.35	22.56	PASS
		1	49	24.21	22.93	PASS
		1	99	23.50	22.15	PASS
		50	0	22.55	21.50	PASS
		50	25	22.61	21.46	PASS
		50	50	22.73	21.66	PASS
		100	0	22.56	21.54	PASS
	MCH	1	0	24.09	23.15	PASS
		1	49	24.44	23.33	PASS
		1	99	23.86	23.06	PASS
		50	0	23.40	22.41	PASS
		50	25	23.55	22.56	PASS
		50	50	23.45	22.42	PASS
		100	0	23.41	22.40	PASS
	HCH	1	0	22.76	22.07	PASS
		1	49	23.73	23.10	PASS
		1	99	22.61	21.99	PASS
		50	0	23.12	22.02	PASS
		50	25	23.22	22.23	PASS
		50	50	23.27	22.32	PASS
		100	0	23.18	22.28	PASS

G.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.12	<13	PASS
	MCH	5.05	<13	PASS
	HCH	4.41	<13	PASS
16QAM	LCH	5.87	<13	PASS
	MCH	5.87	<13	PASS
	HCH	5.15	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.01	<13	PASS
	MCH	5.11	<13	PASS
	HCH	4.65	<13	PASS
16QAM	LCH	5.83	<13	PASS
	MCH	5.88	<13	PASS
	HCH	5.51	<13	PASS

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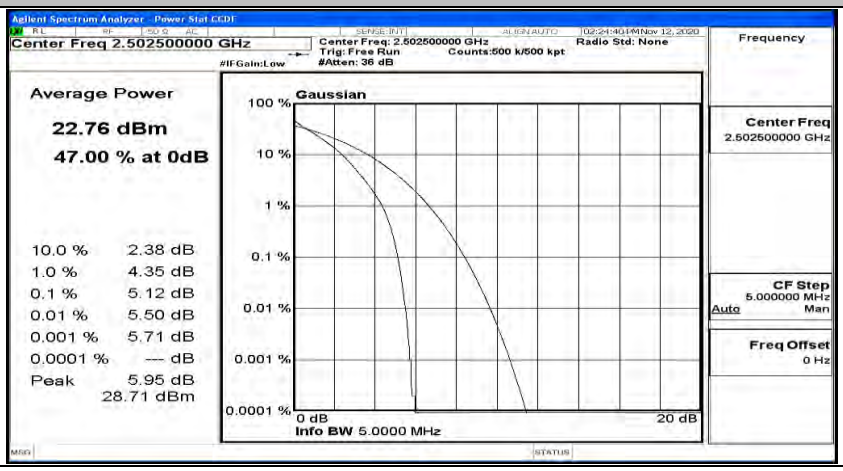
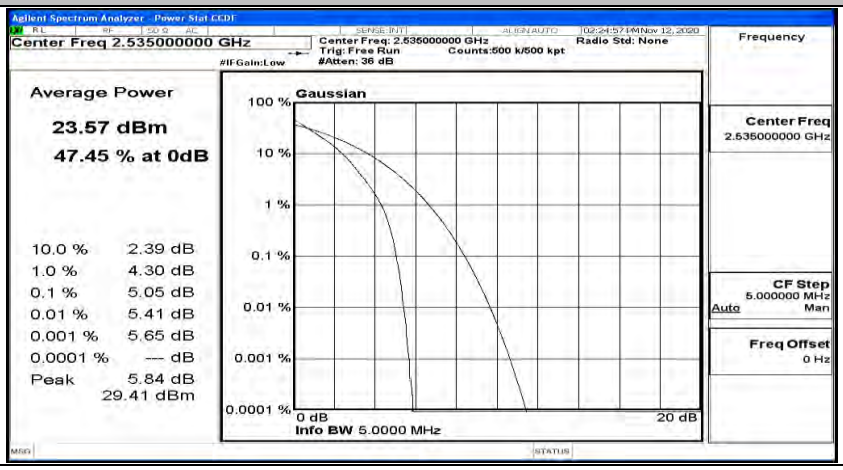
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.89	<13	PASS
	MCH	4.99	<13	PASS
	HCH	4.97	<13	PASS
16QAM	LCH	6.07	<13	PASS
	MCH	6.15	<13	PASS
	HCH	6.12	<13	PASS

Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.71	<13	PASS
	MCH	5.76	<13	PASS
	HCH	5.73	<13	PASS
16QAM	LCH	6.64	<13	PASS
	MCH	6.67	<13	PASS
	HCH	6.69	<13	PASS

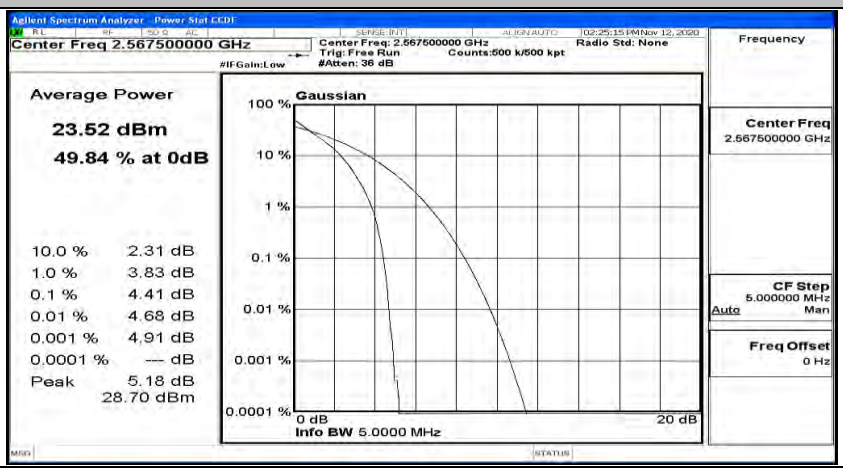
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



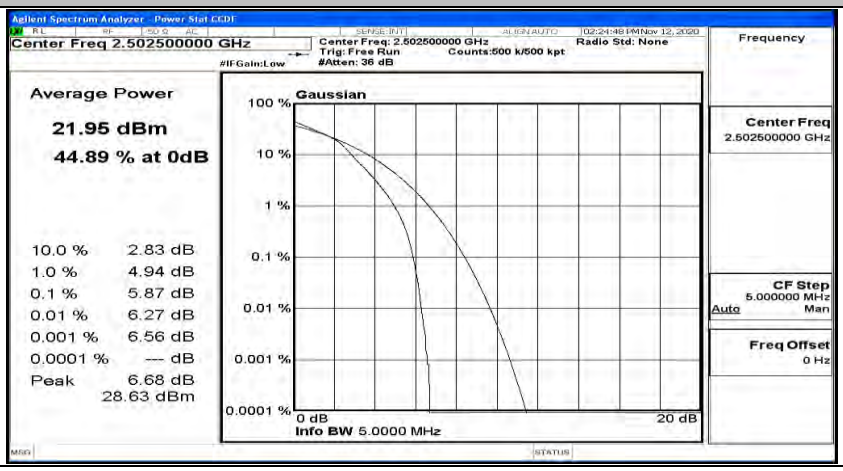
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



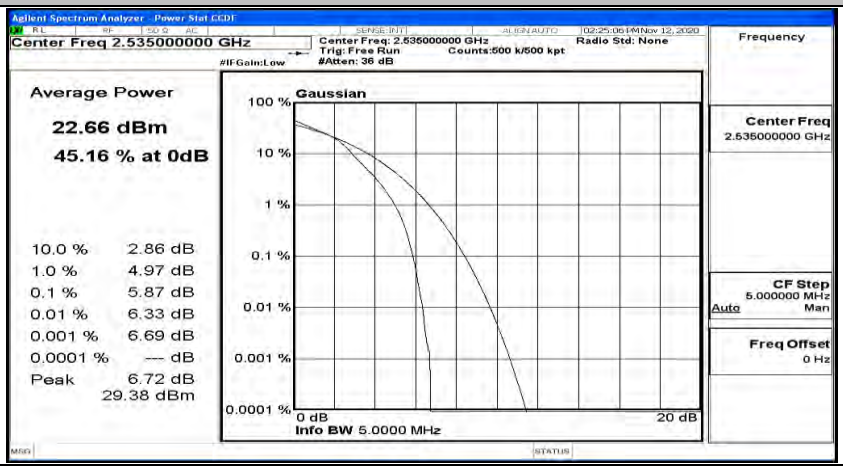
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



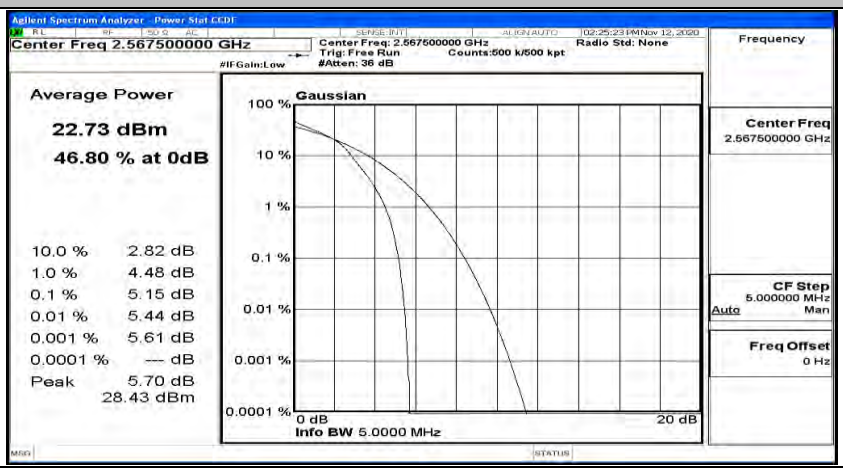
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



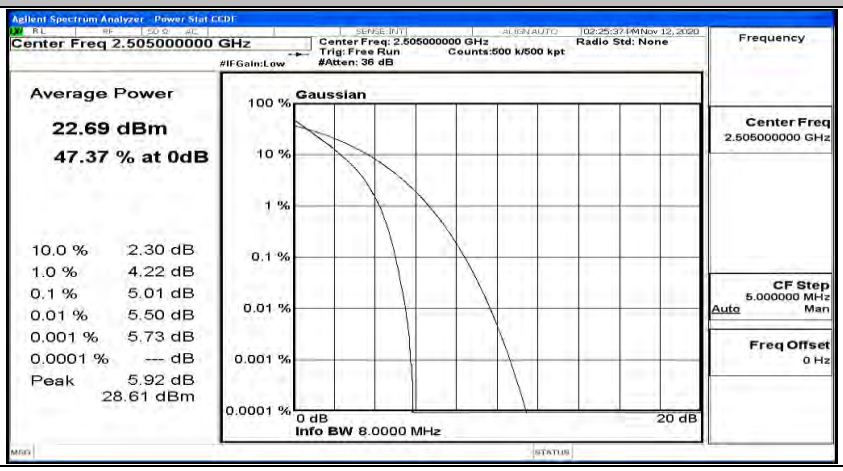
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



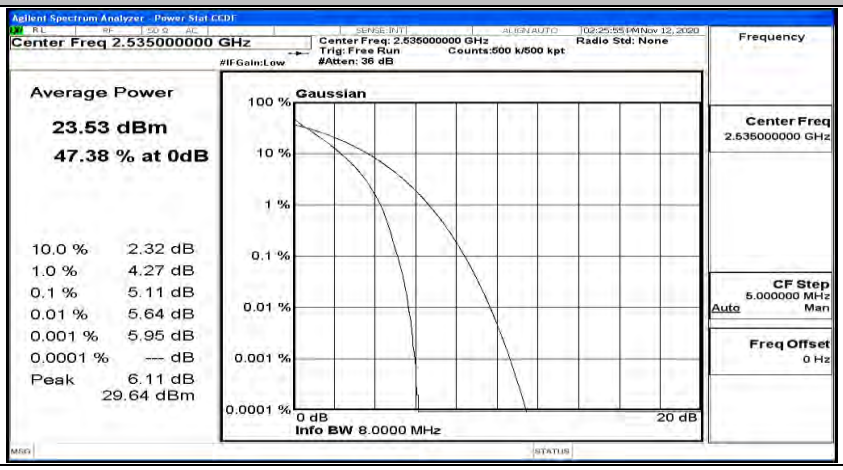
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



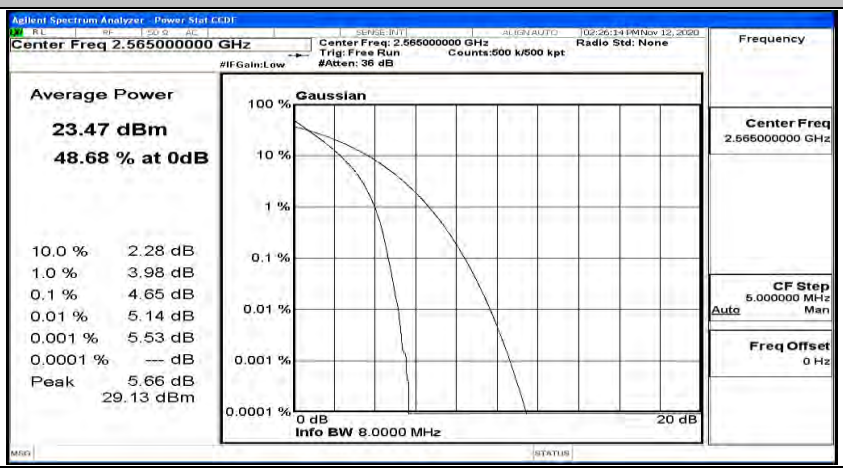
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



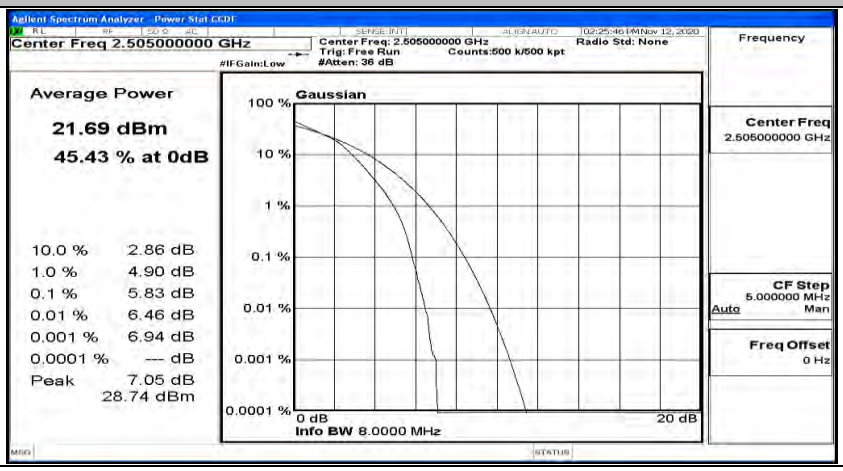
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



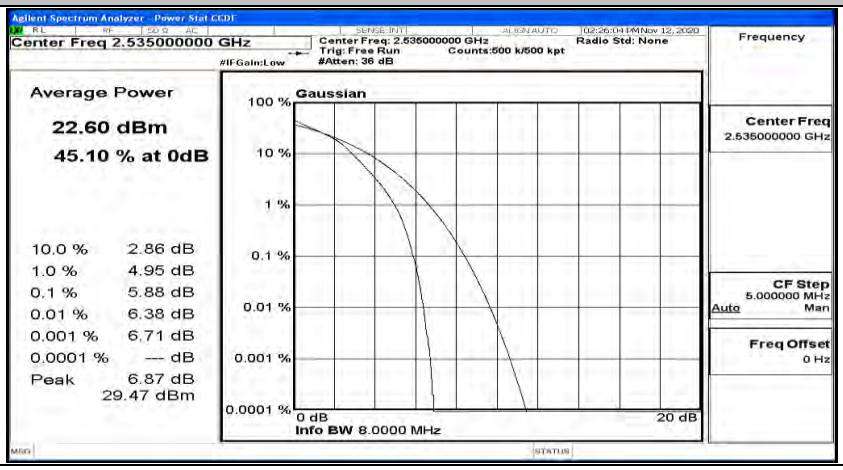
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



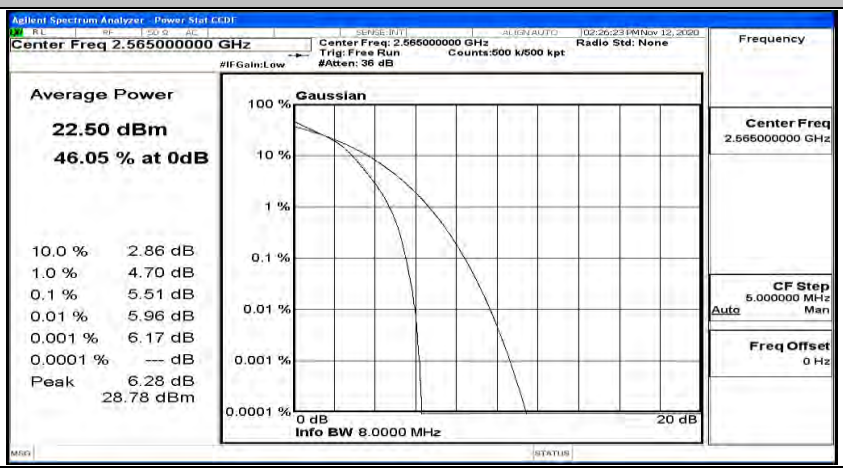
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



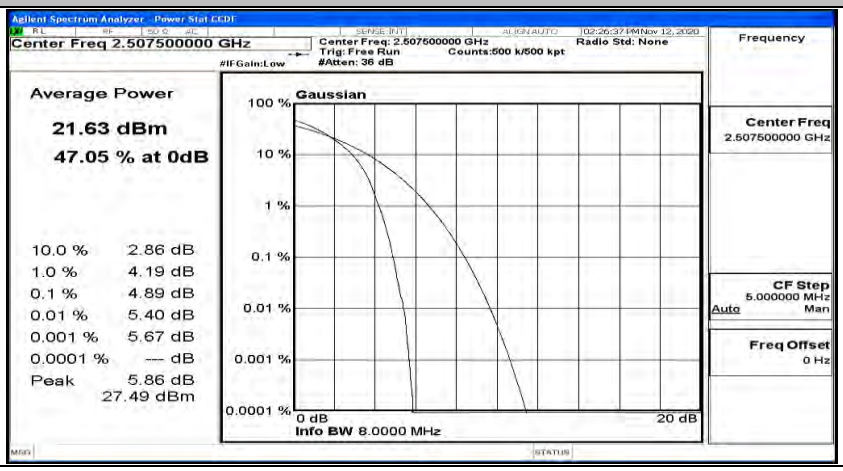
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



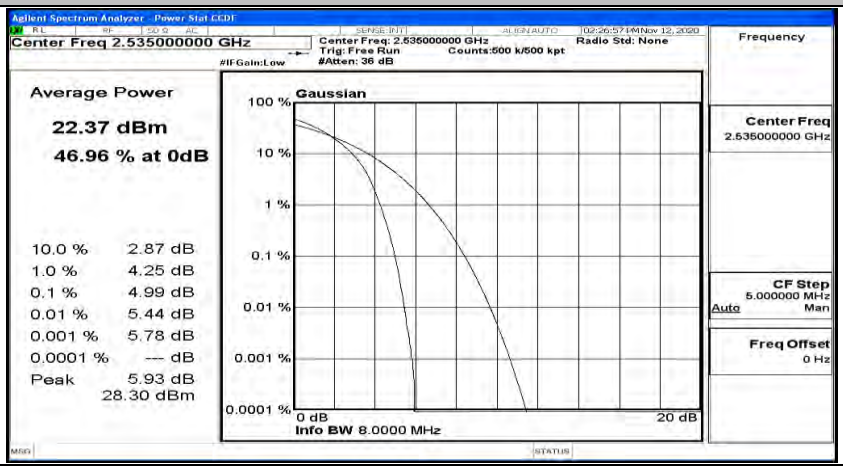
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



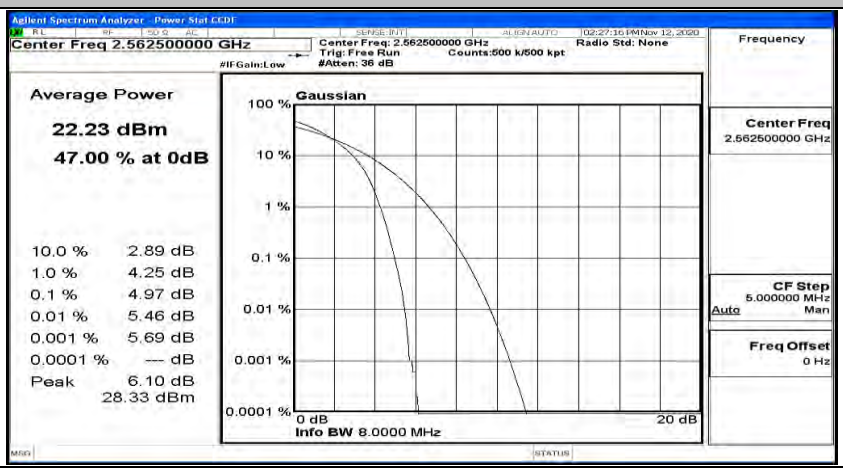
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



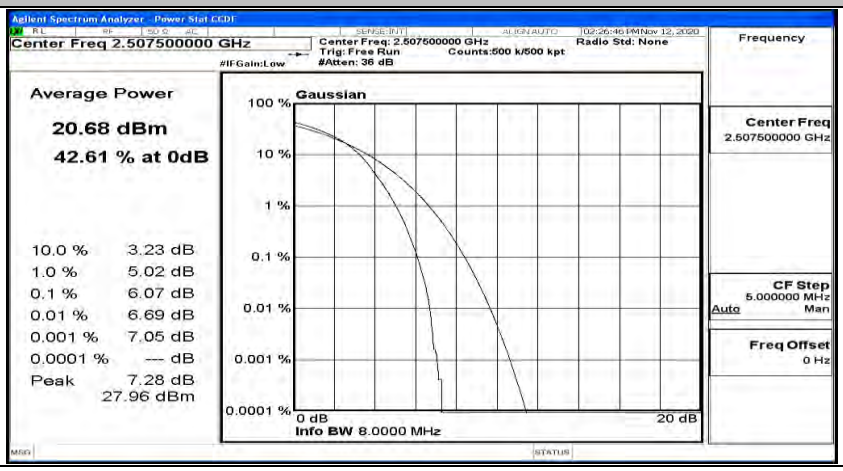
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



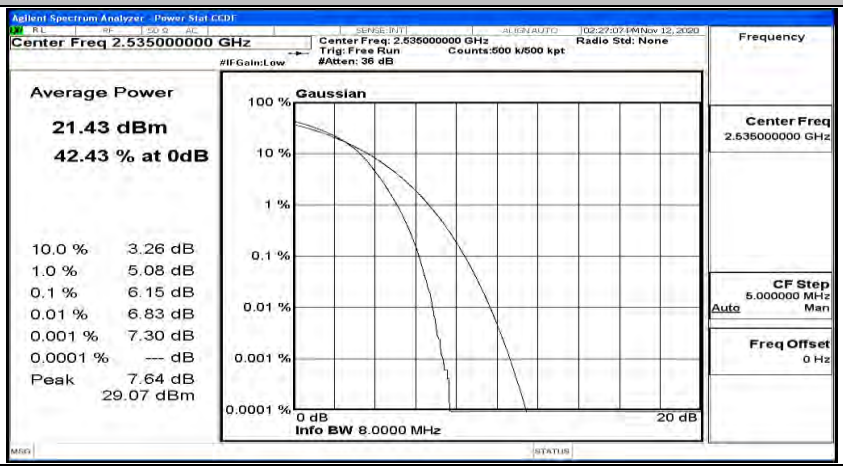
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



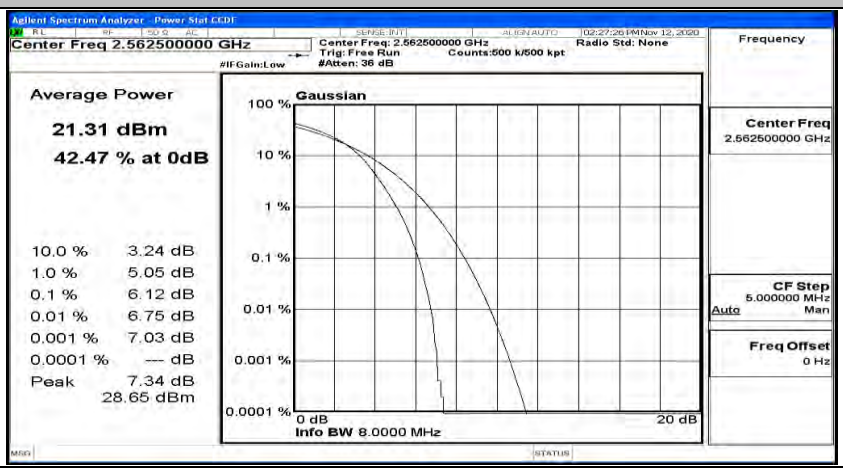
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



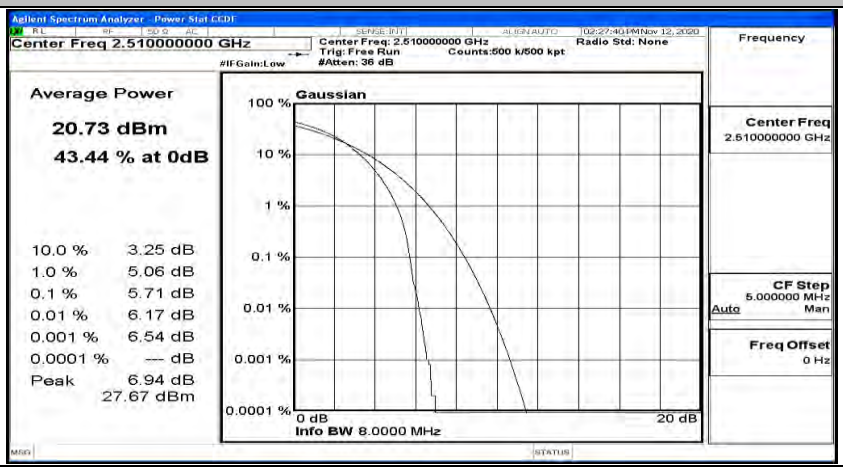
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



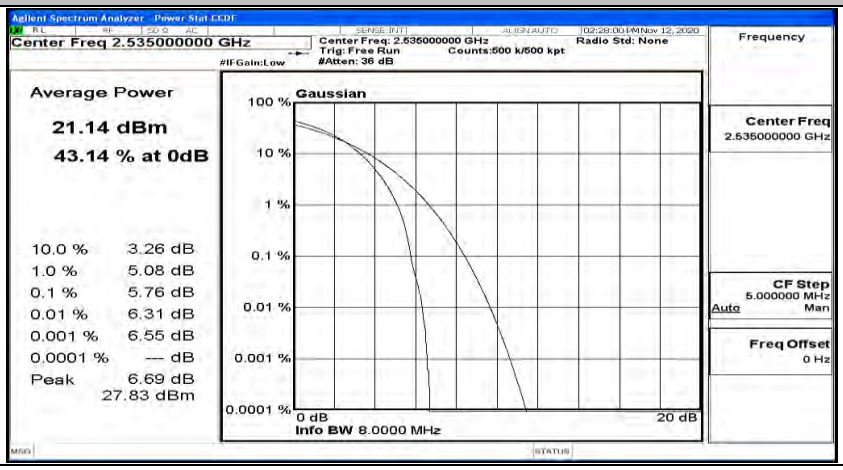
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



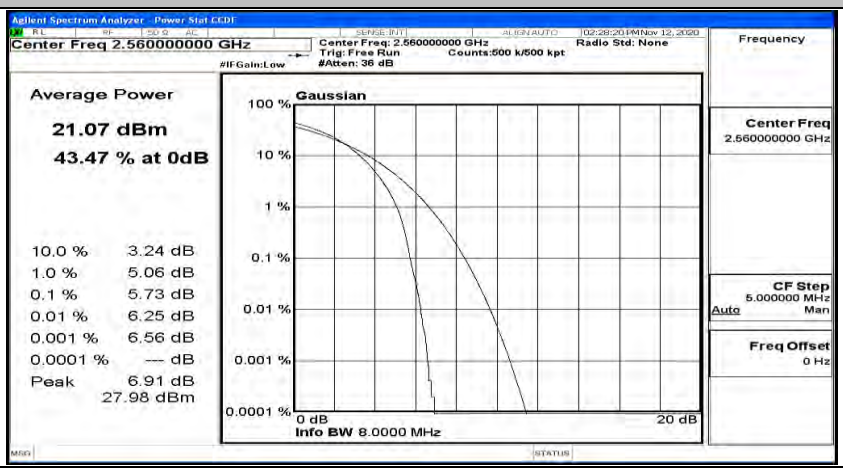
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



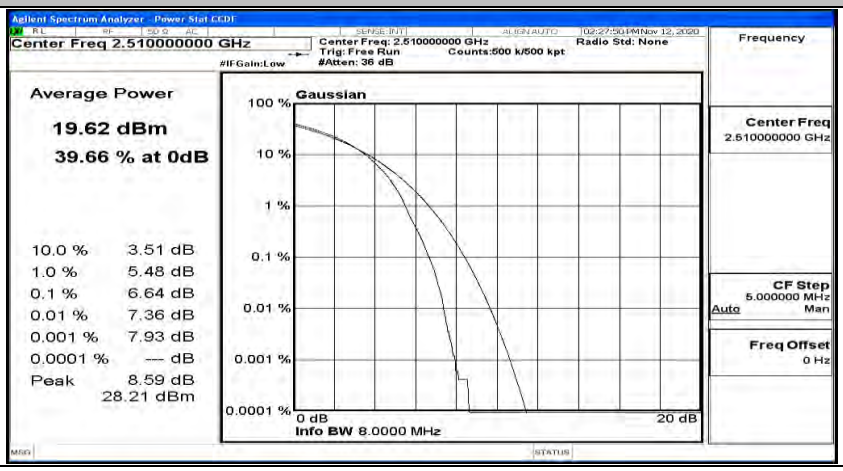
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



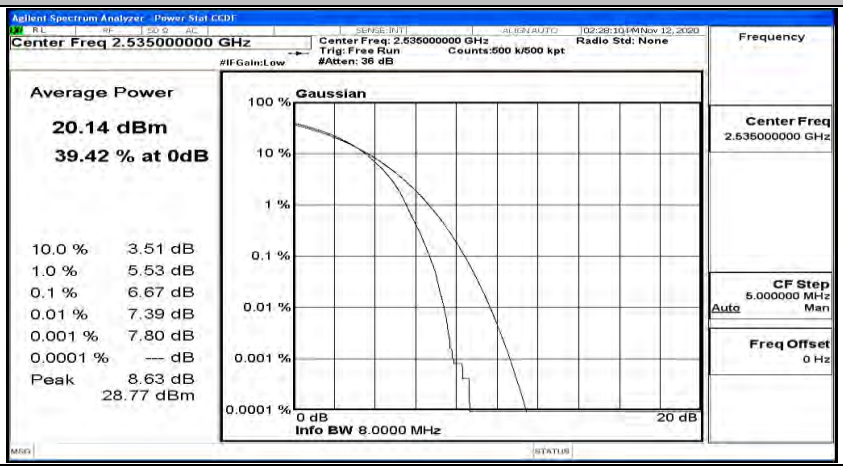
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



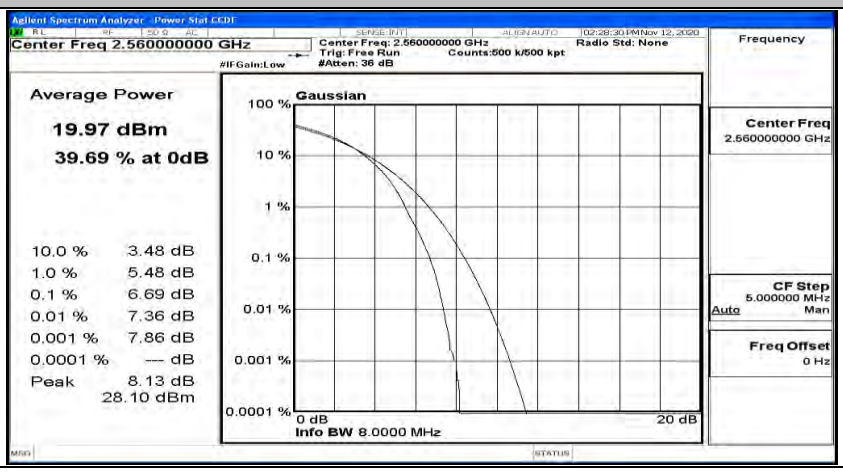
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM



Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM



G.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4681	4.780	PASS
	MCH	4.4680	4.790	PASS
	HCH	4.4986	4.708	PASS
16QAM	LCH	4.4750	4.775	PASS
	MCH	4.4631	4.807	PASS
	HCH	4.4766	4.793	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9102	9.481	PASS
	MCH	8.9341	9.423	PASS
	HCH	8.9226	9.395	PASS
16QAM	LCH	8.9156	9.400	PASS
	MCH	8.9187	9.436	PASS
	HCH	8.9024	9.427	PASS

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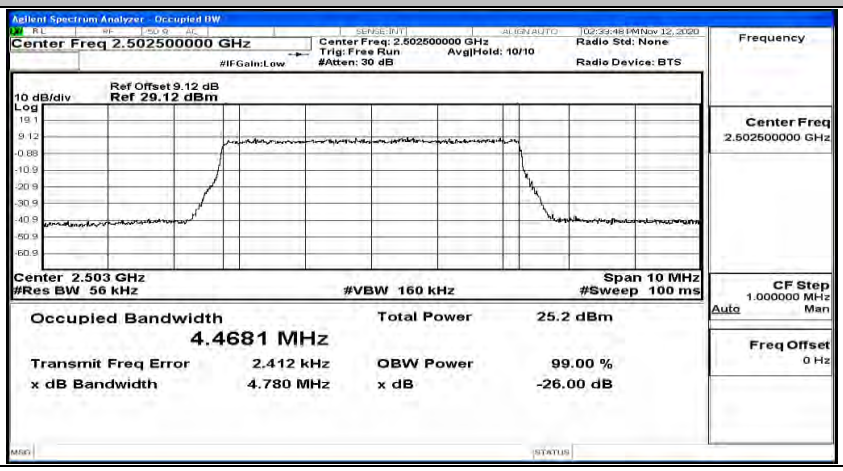
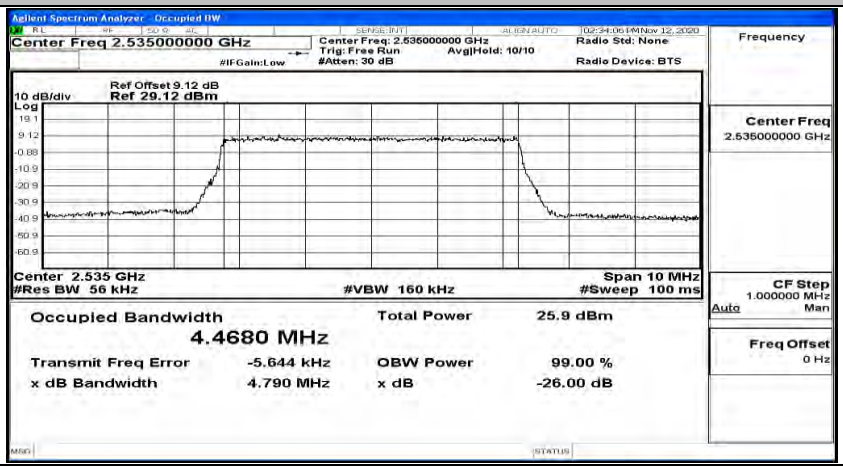
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.373	14.04	PASS
	MCH	13.393	14.00	PASS
	HCH	13.371	14.02	PASS
16QAM	LCH	13.364	13.96	PASS
	MCH	13.384	14.09	PASS
	HCH	13.371	14.06	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.812	18.62	PASS
	MCH	17.826	18.58	PASS
	HCH	17.836	18.59	PASS
16QAM	LCH	17.803	18.60	PASS
	MCH	17.832	18.60	PASS
	HCH	17.826	18.57	PASS

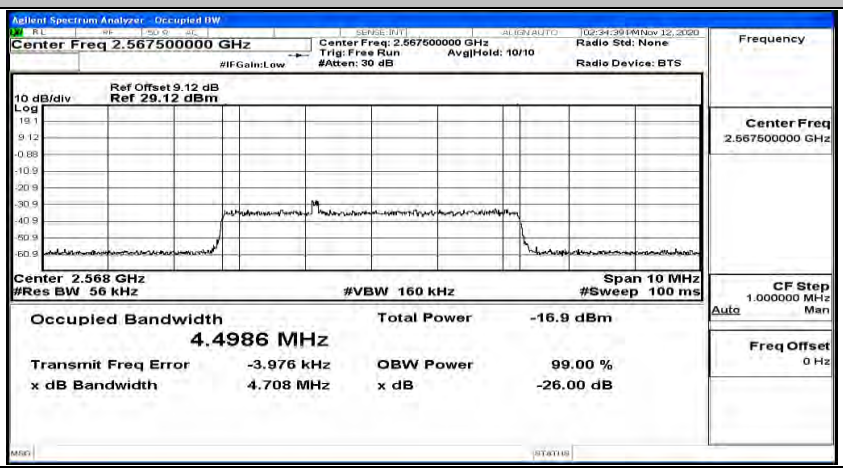
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



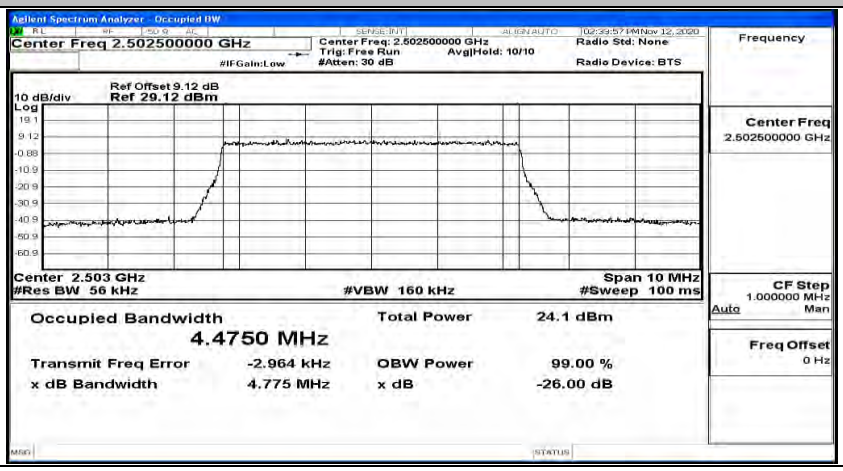
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



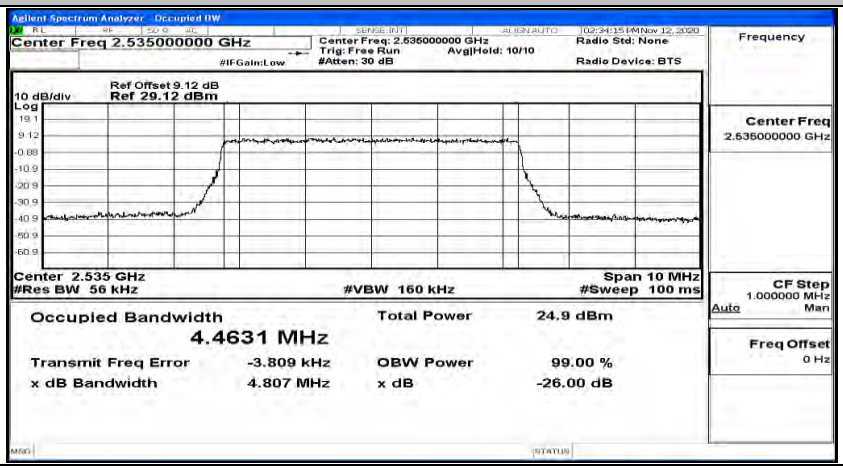
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



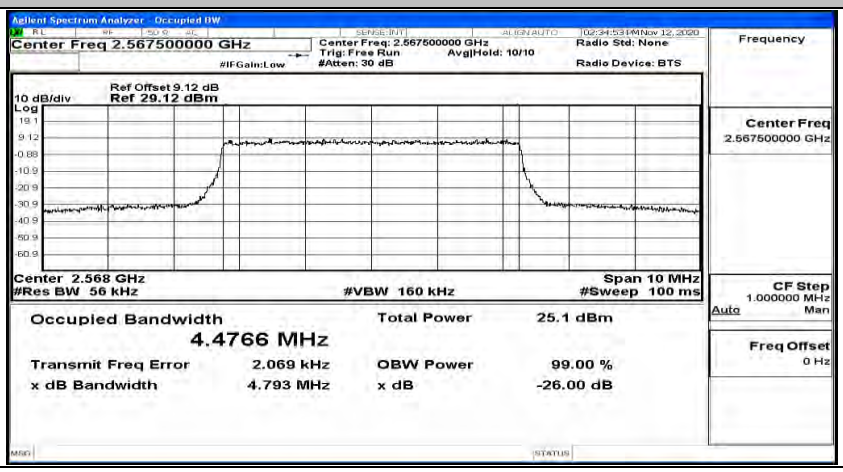
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



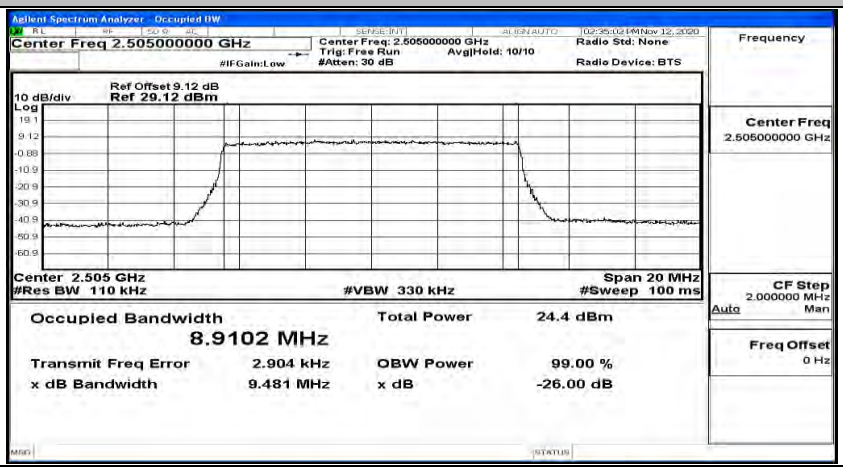
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



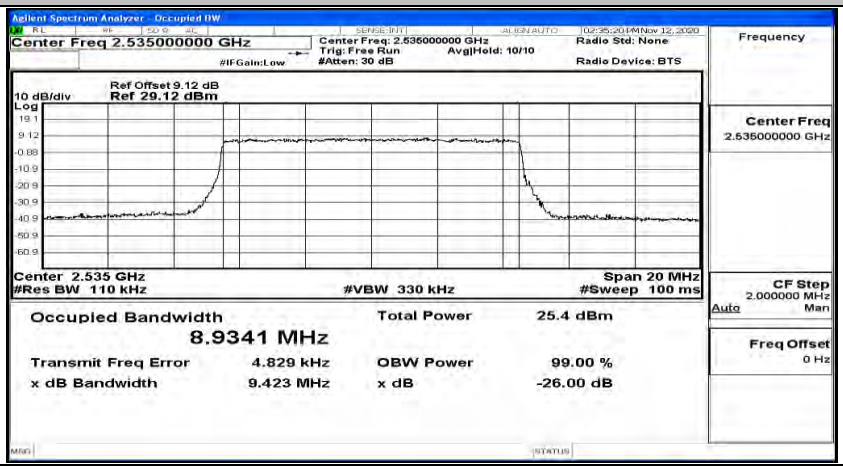
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



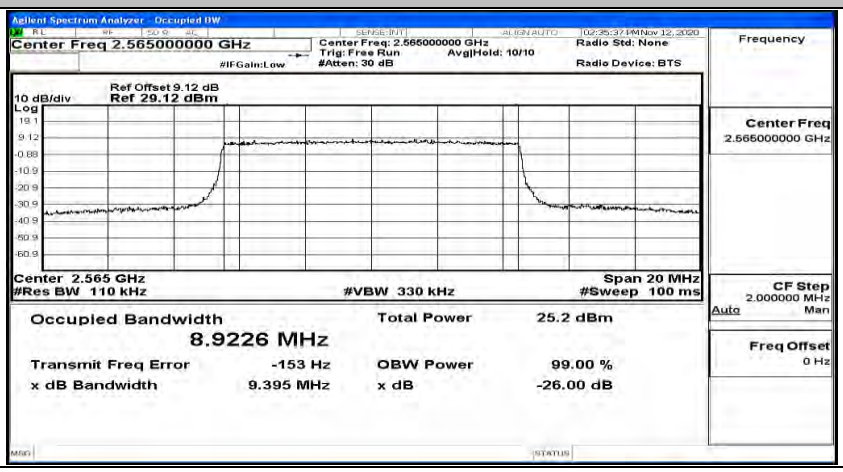
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



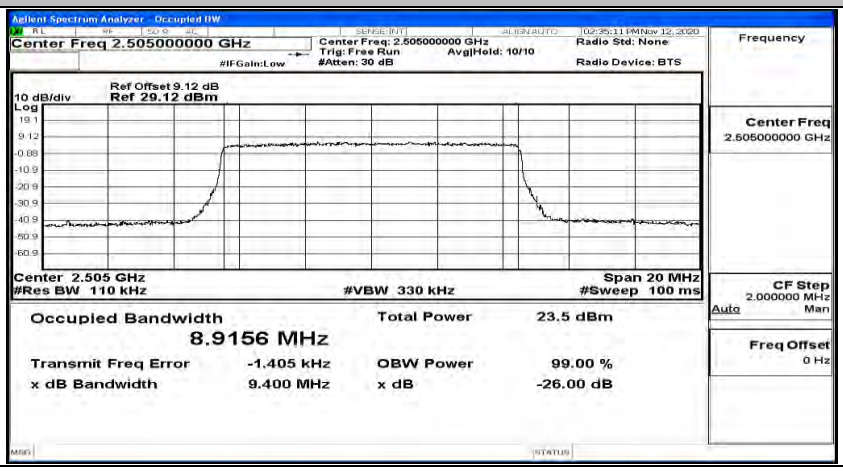
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



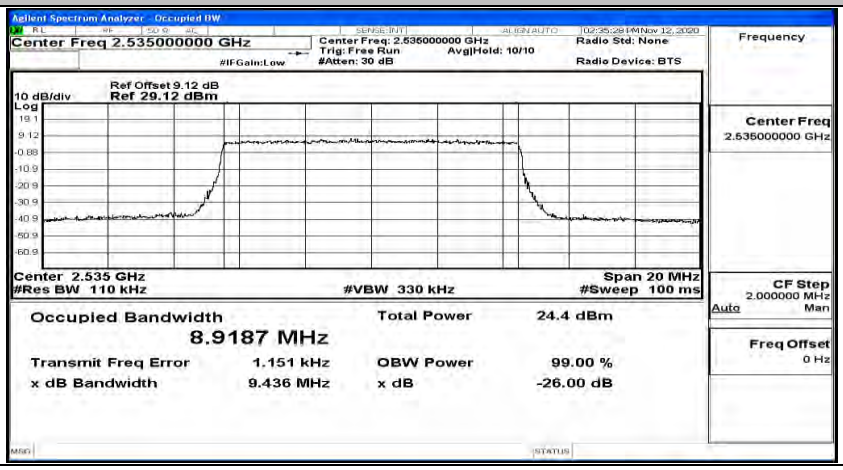
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



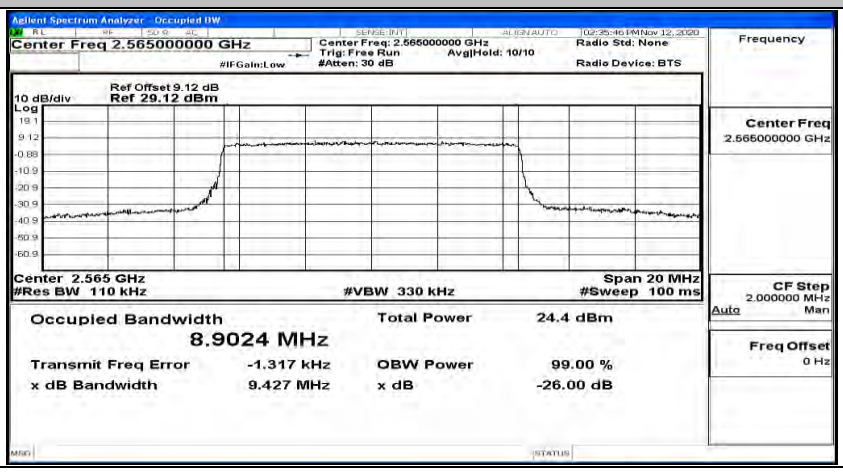
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



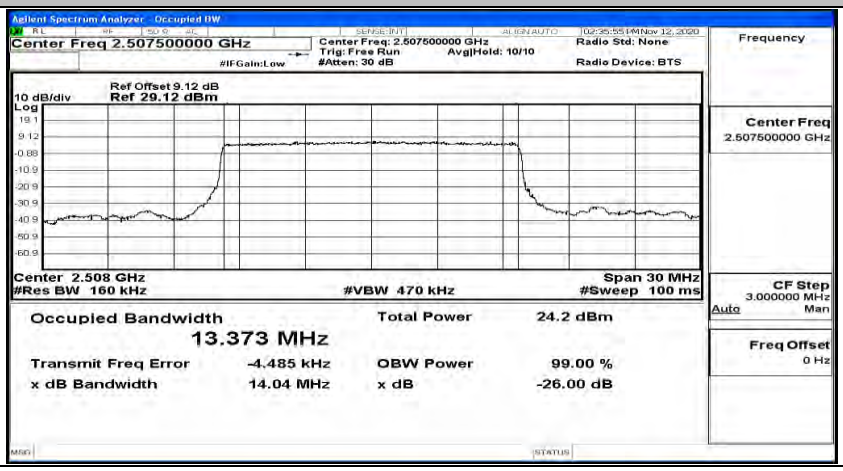
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



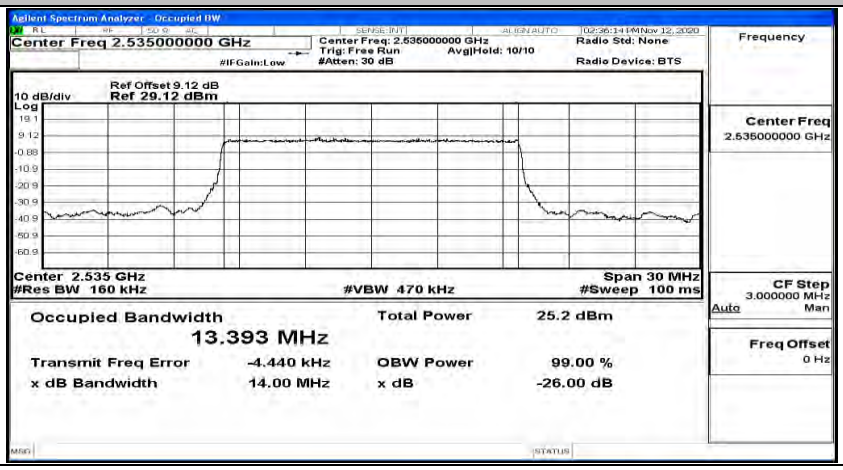
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



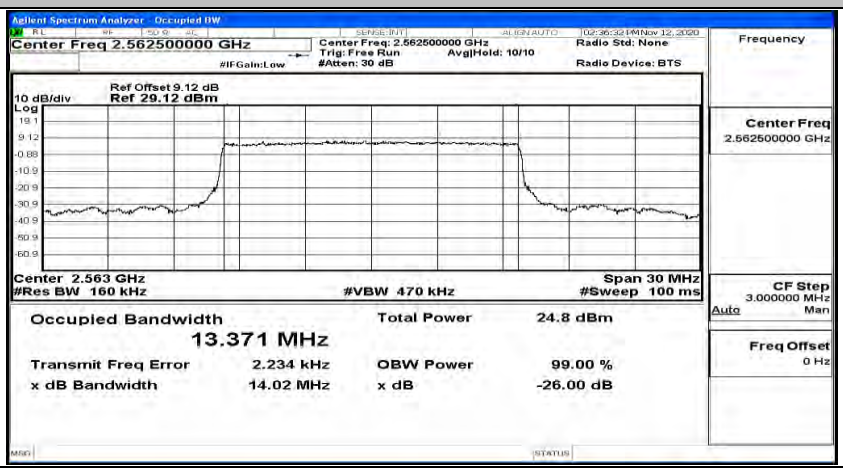
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



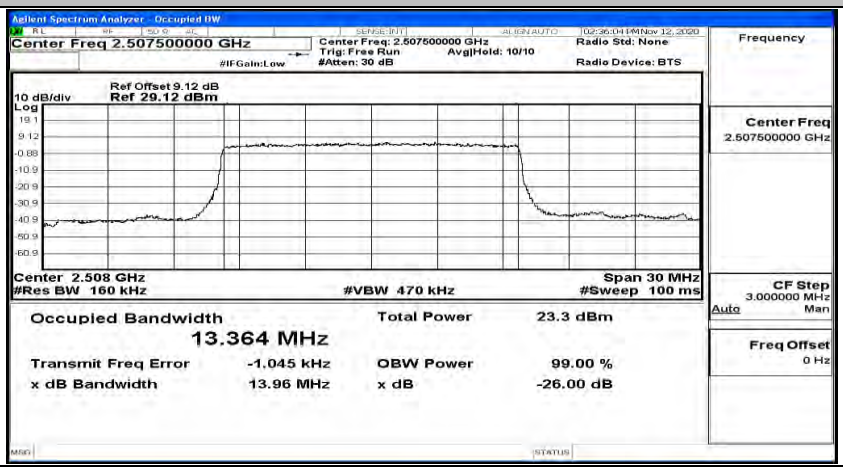
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



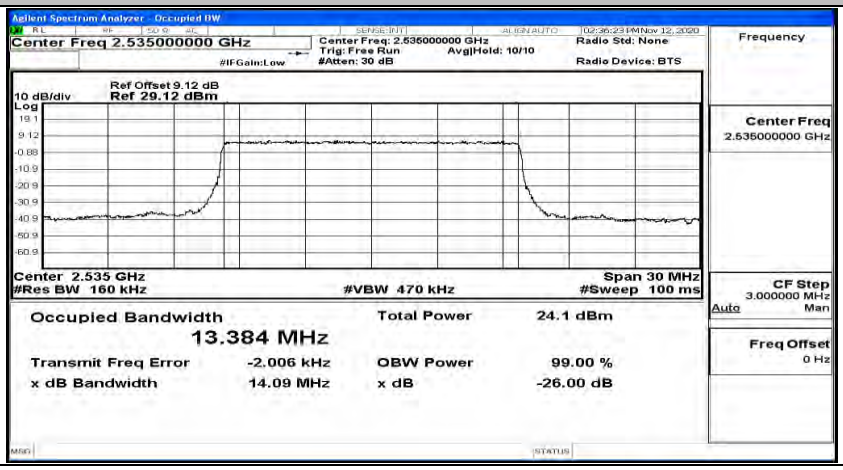
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



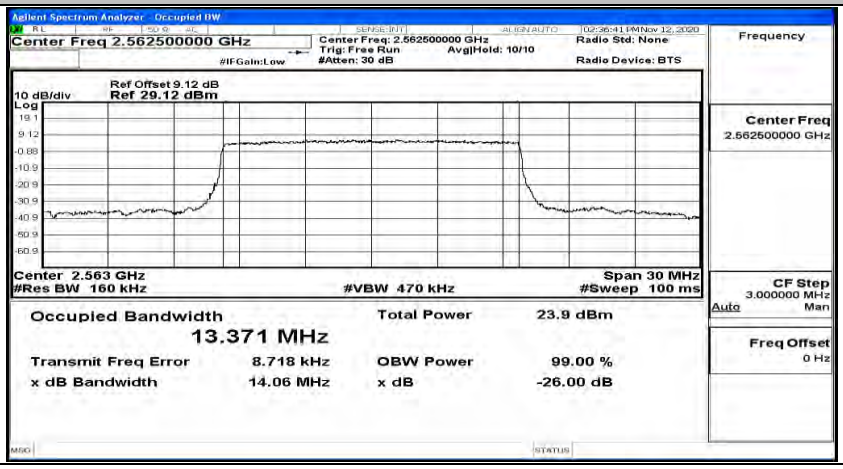
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



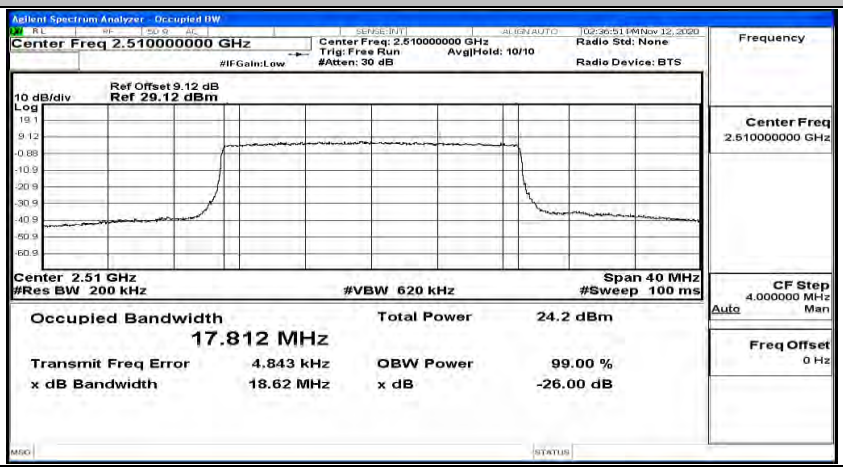
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



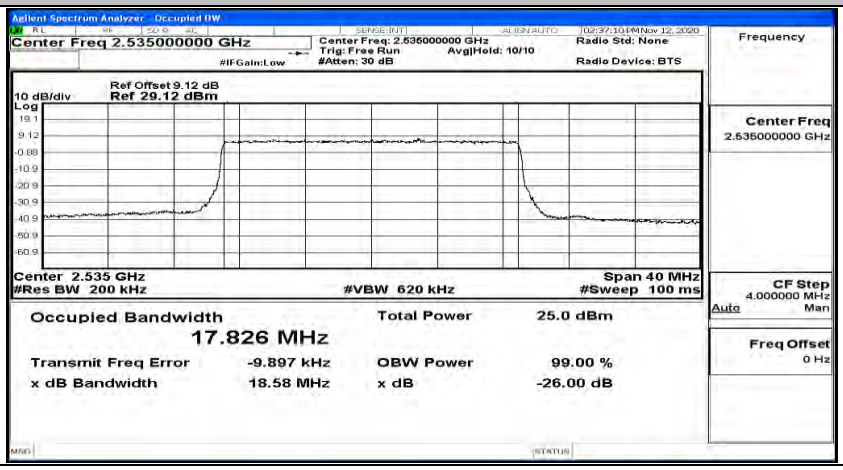
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



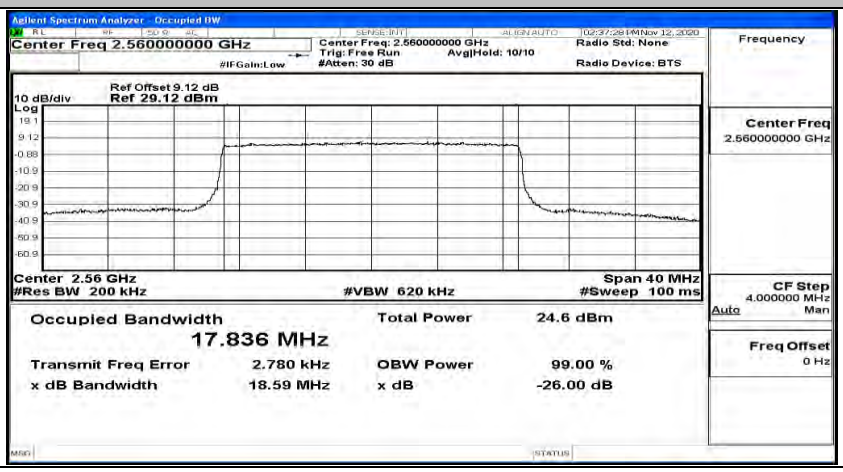
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



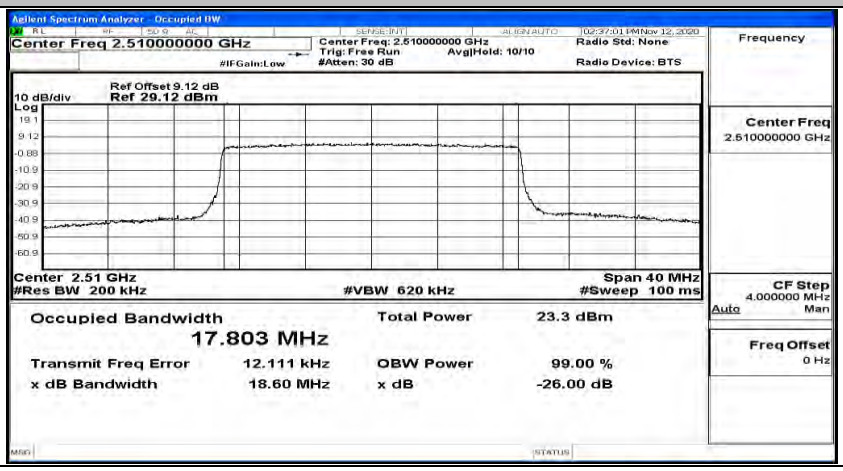
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



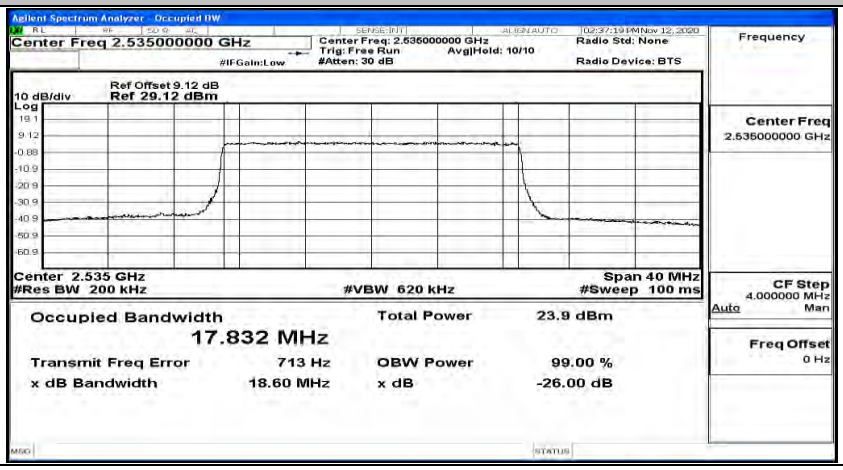
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



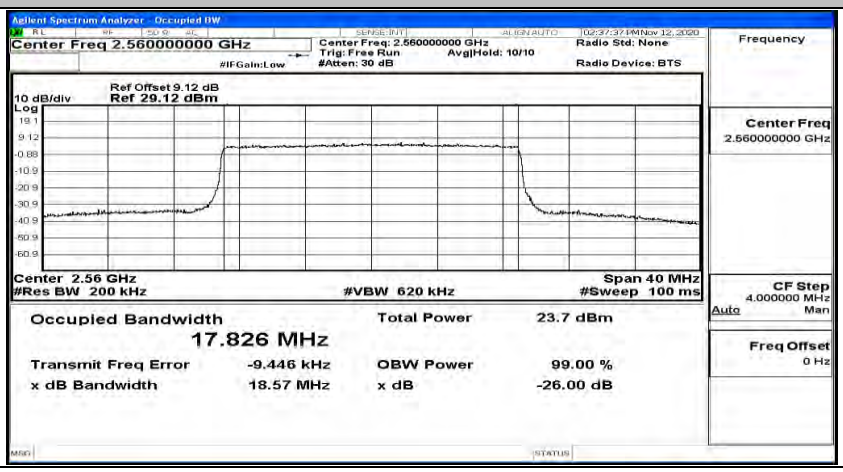
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_16QAM

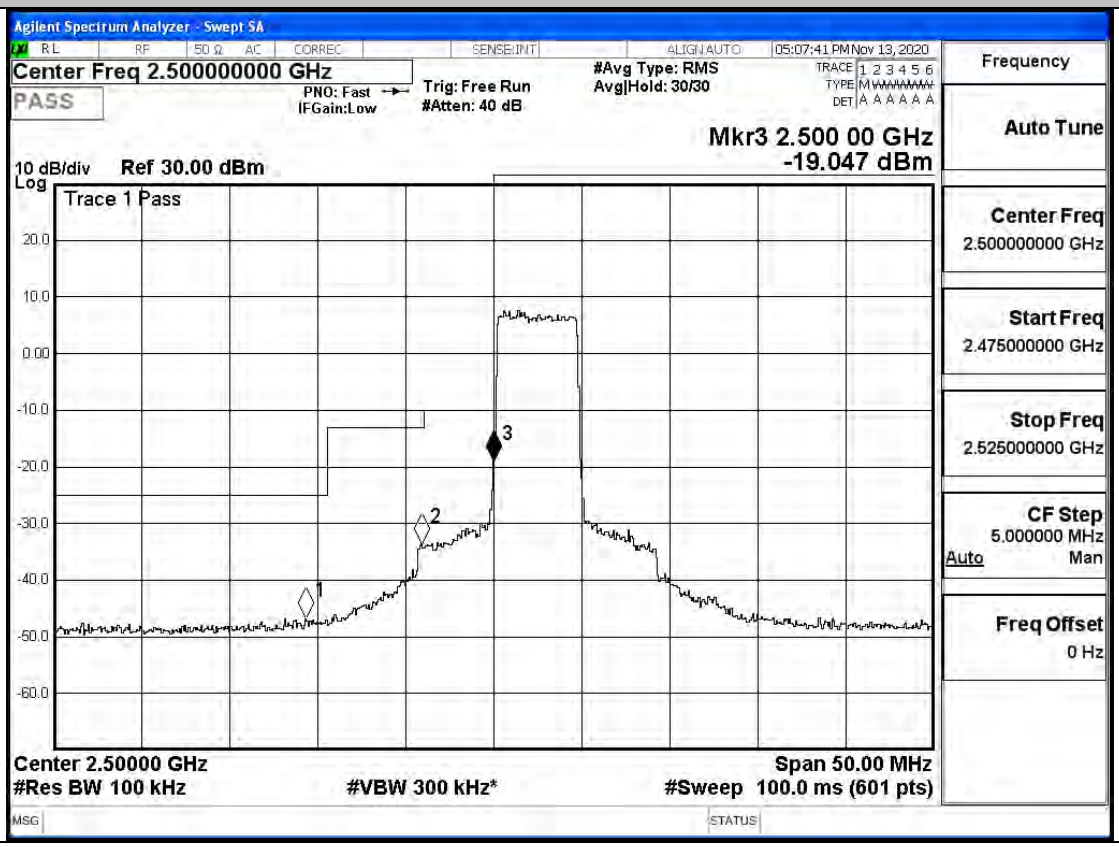


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

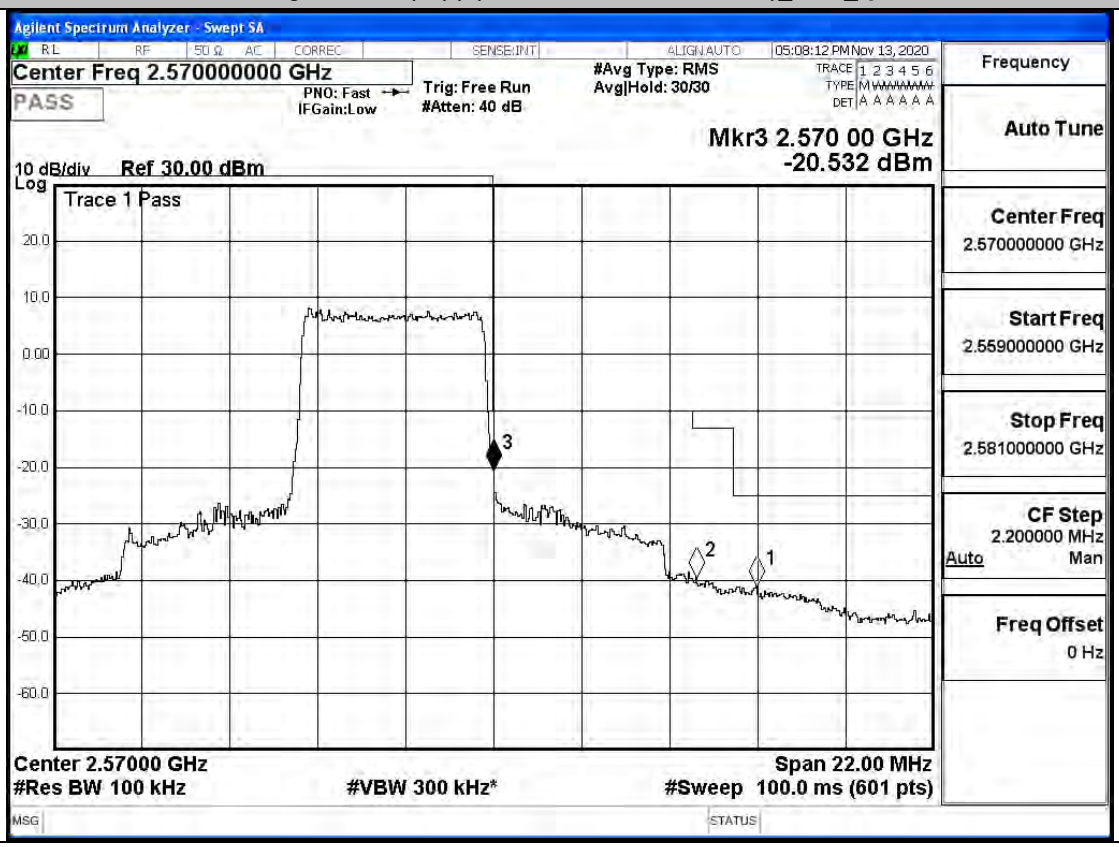


G.4 Band Edge

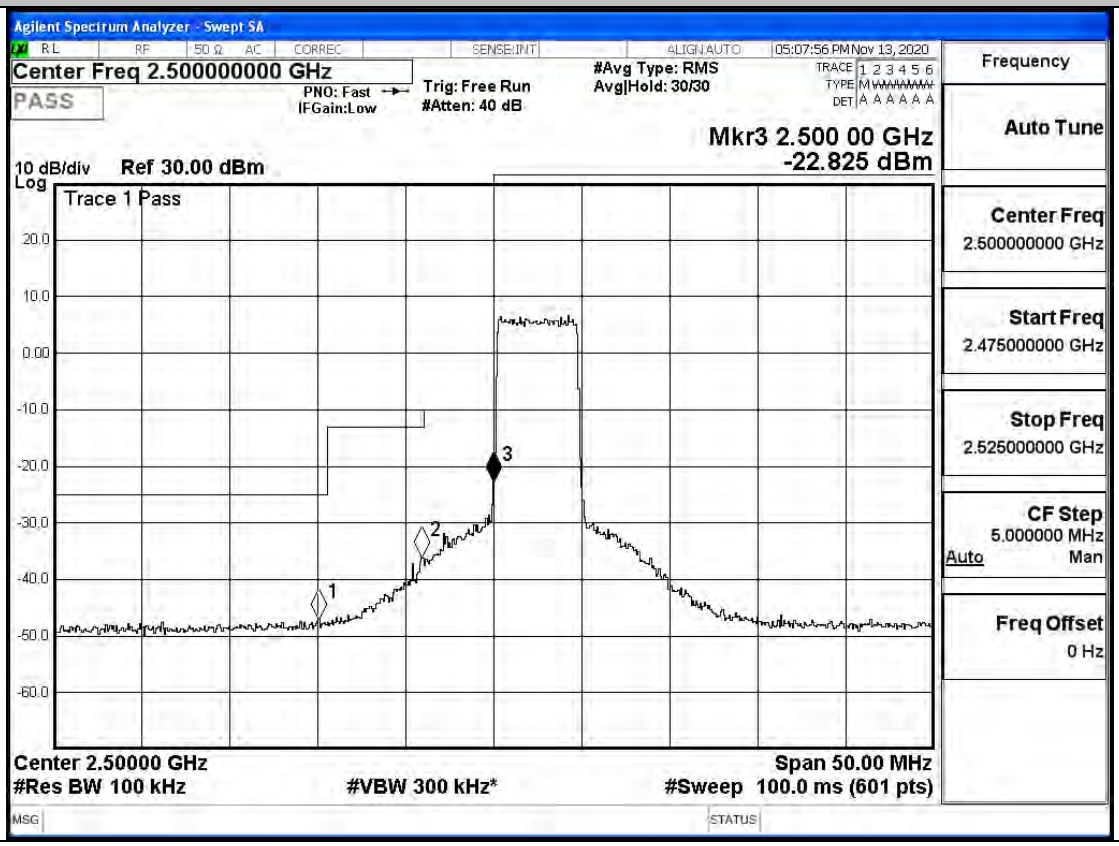
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



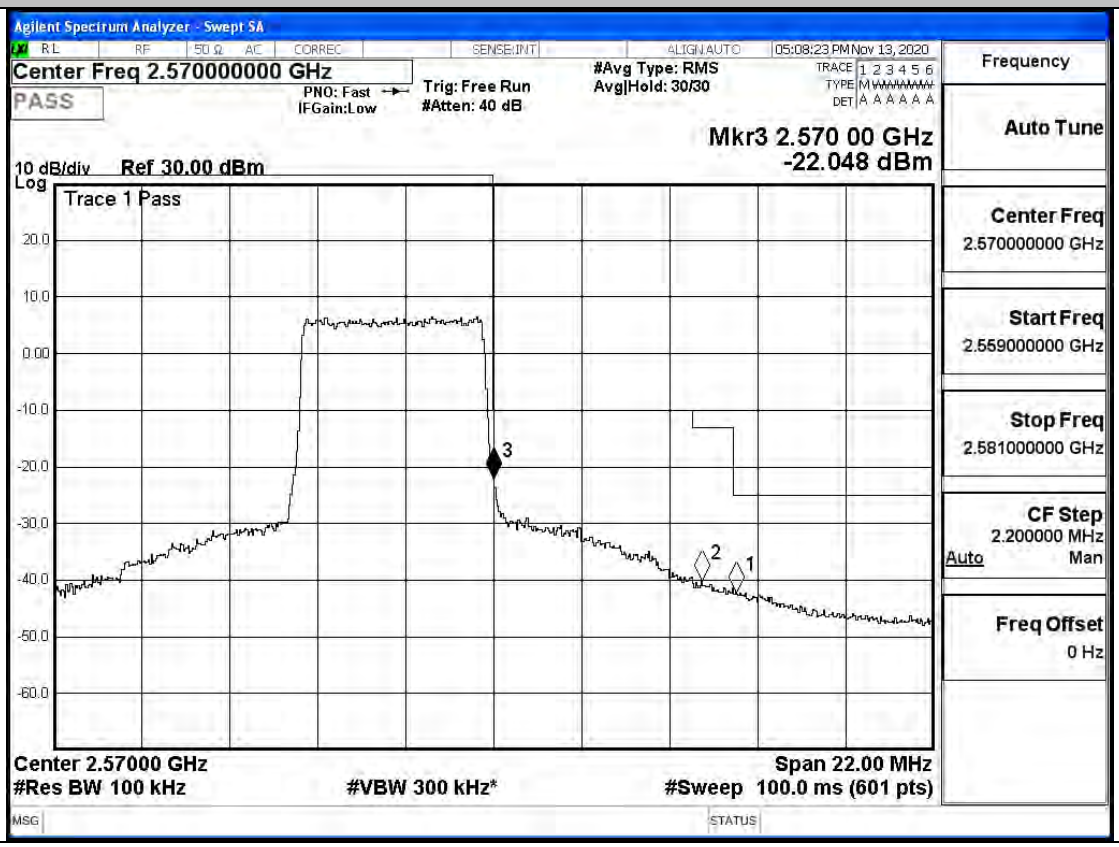
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



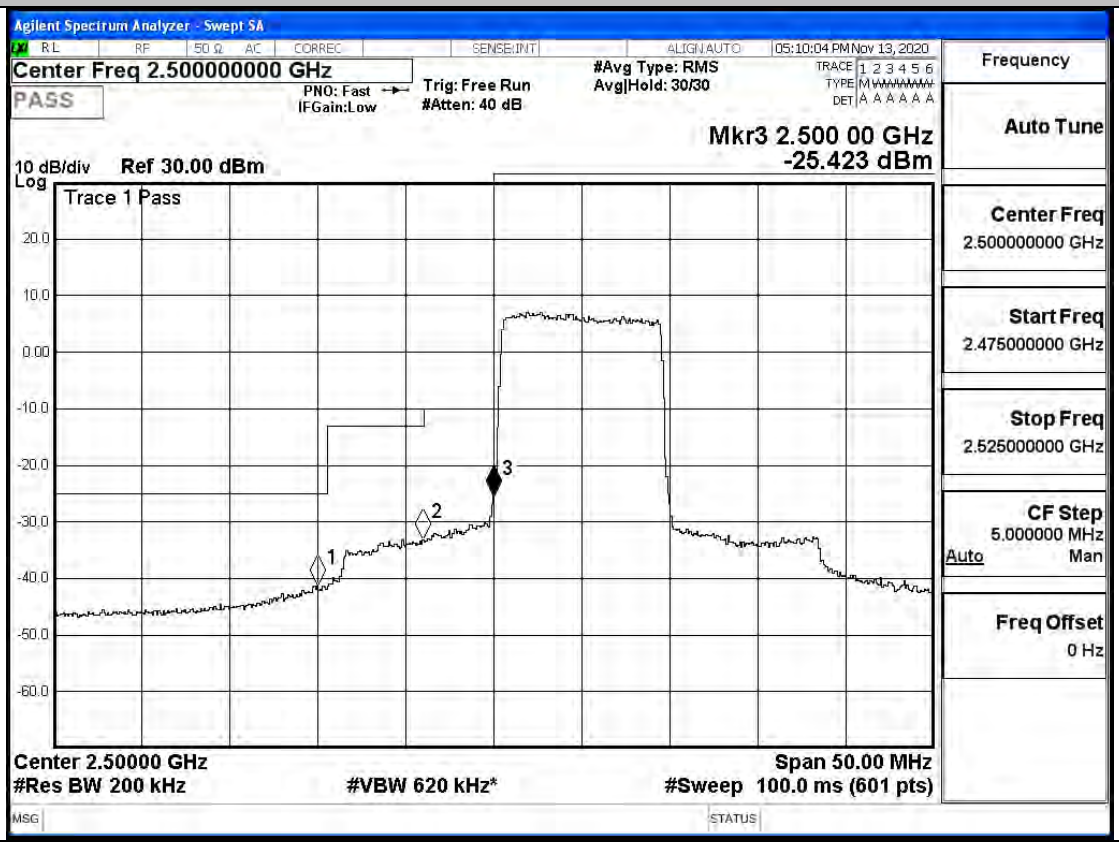
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



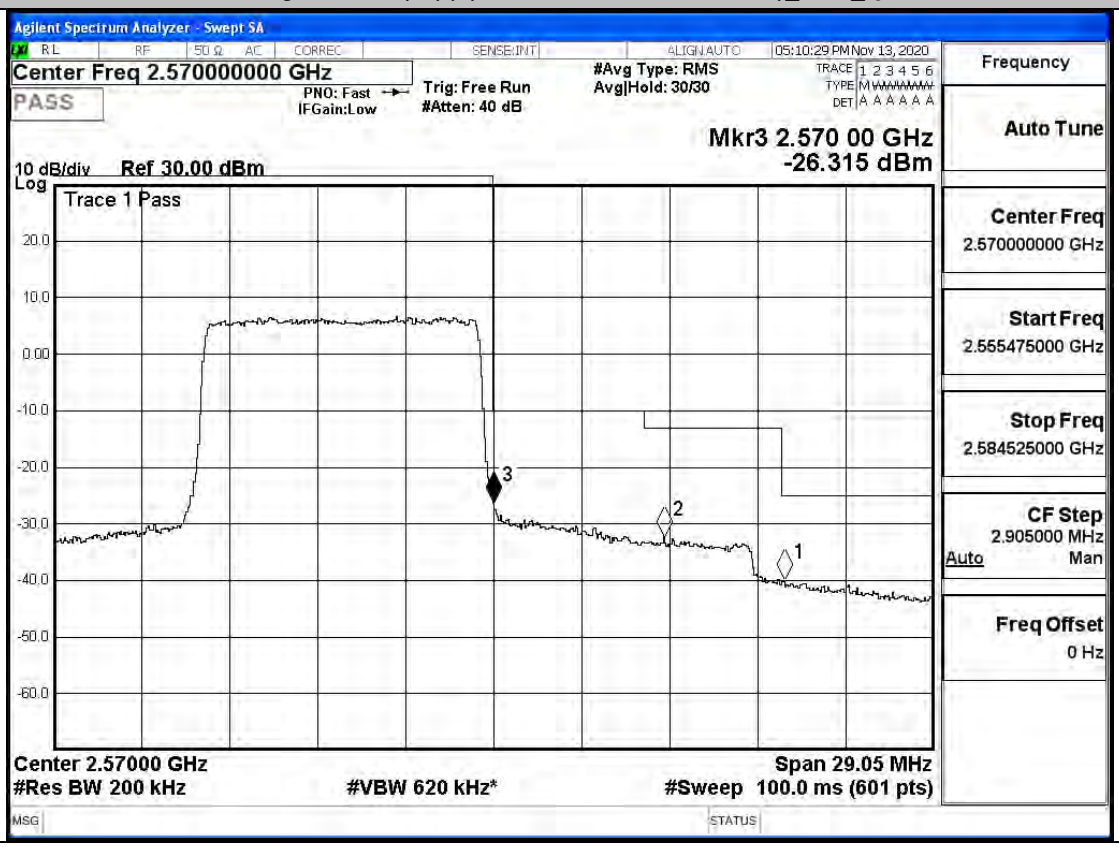
Band Edge Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



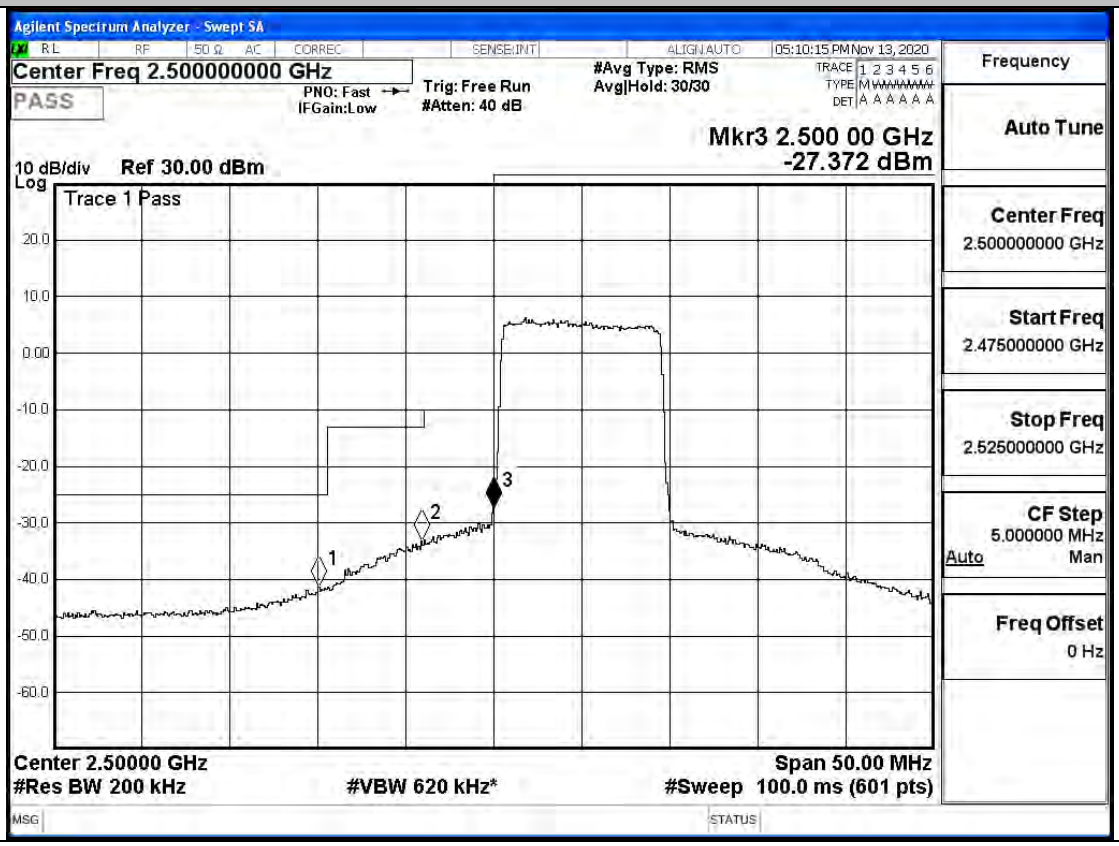
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



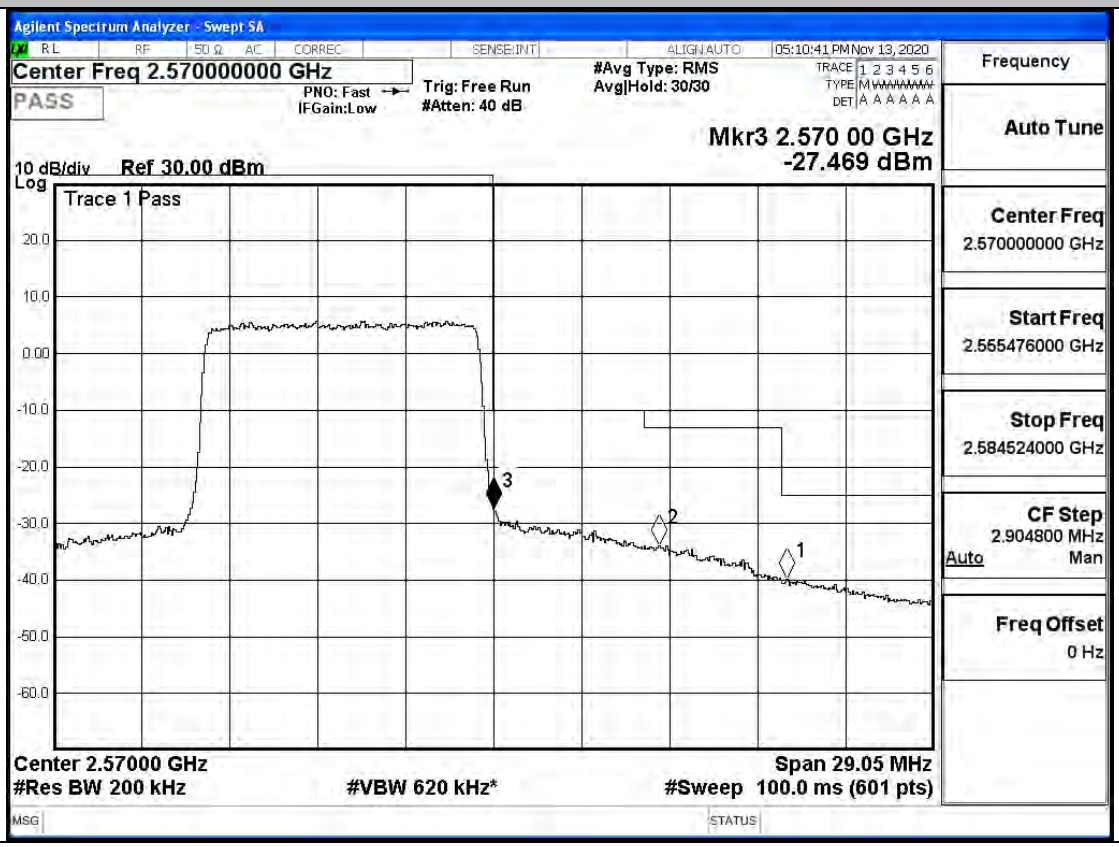
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



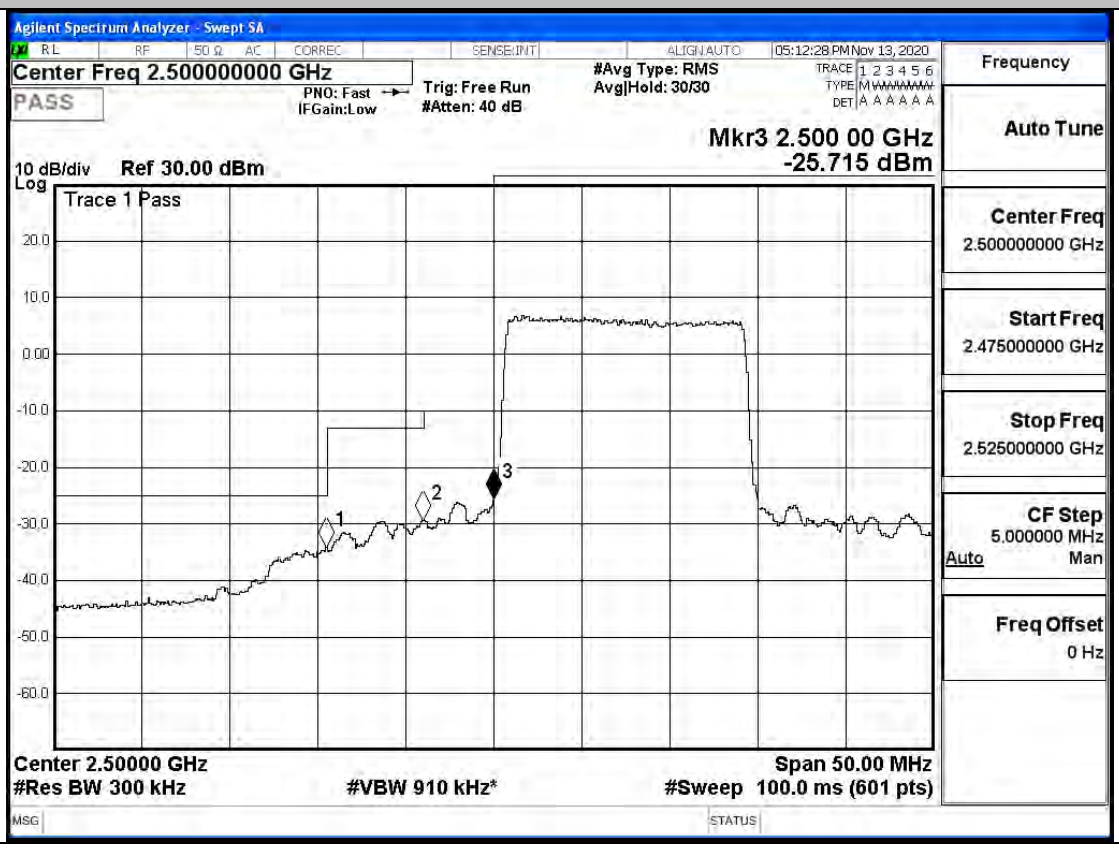
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



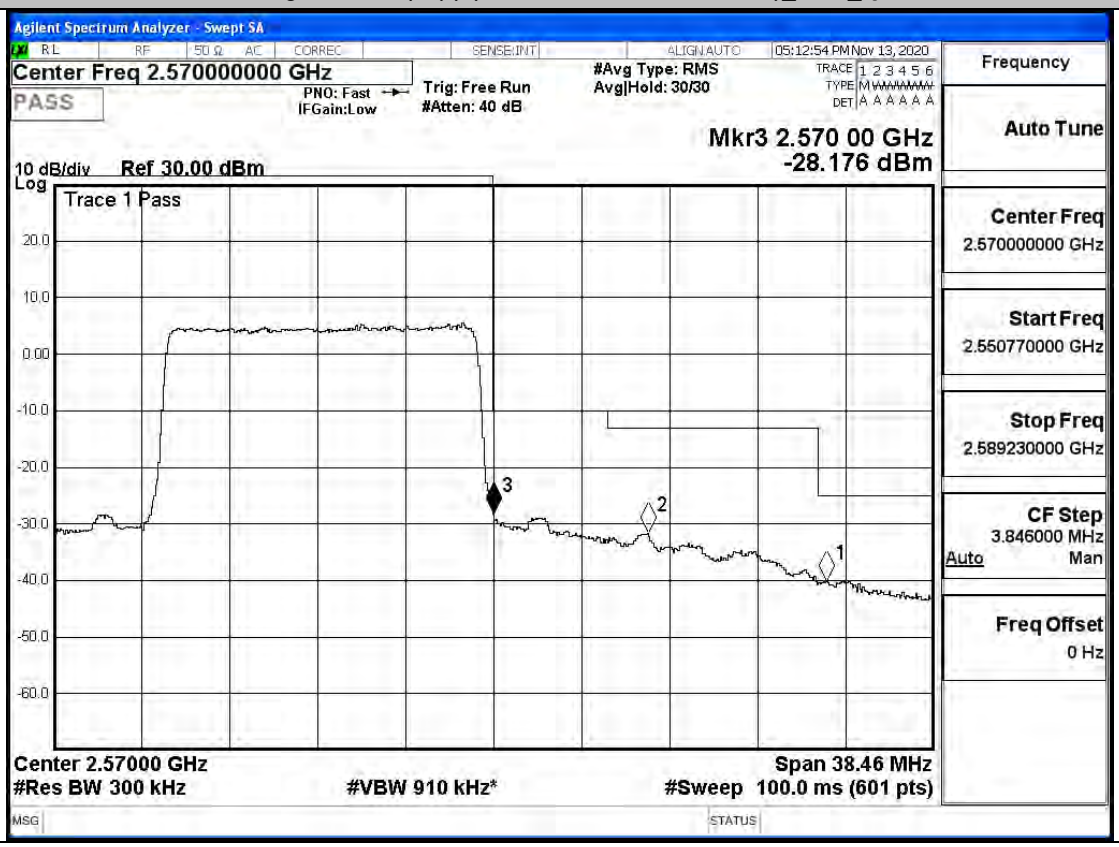
Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



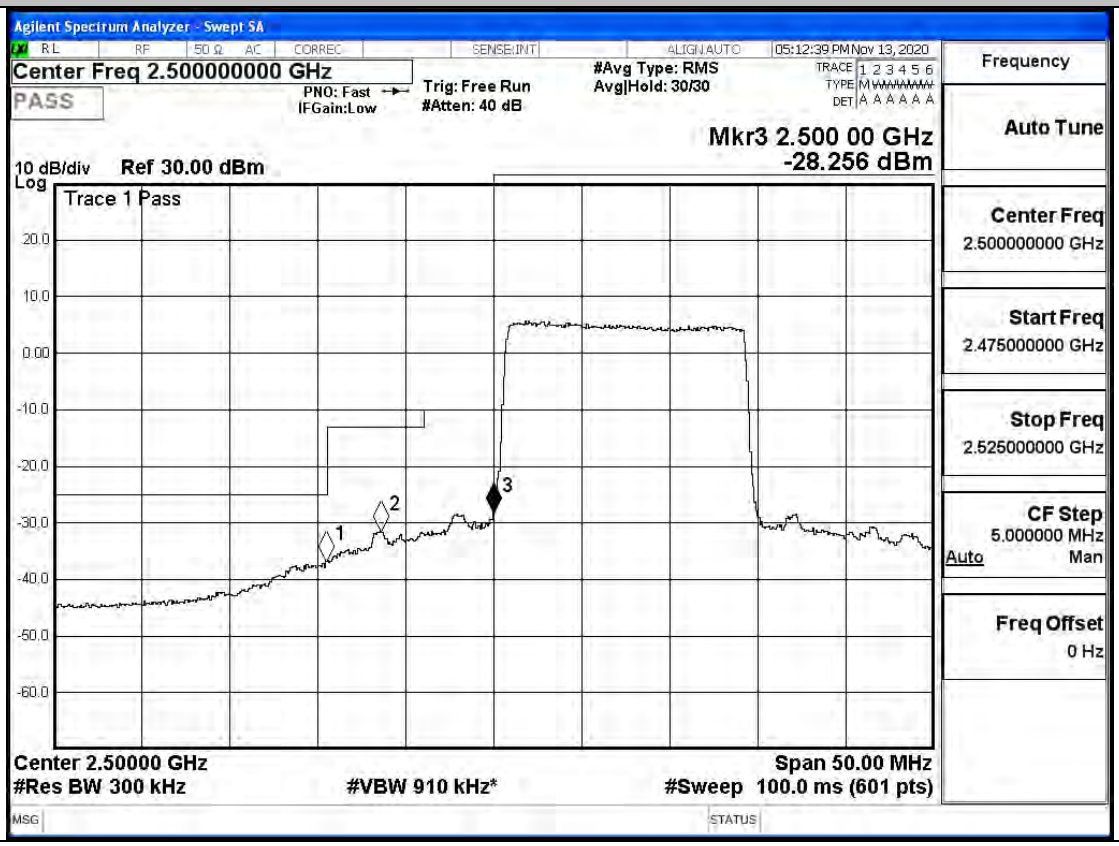
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



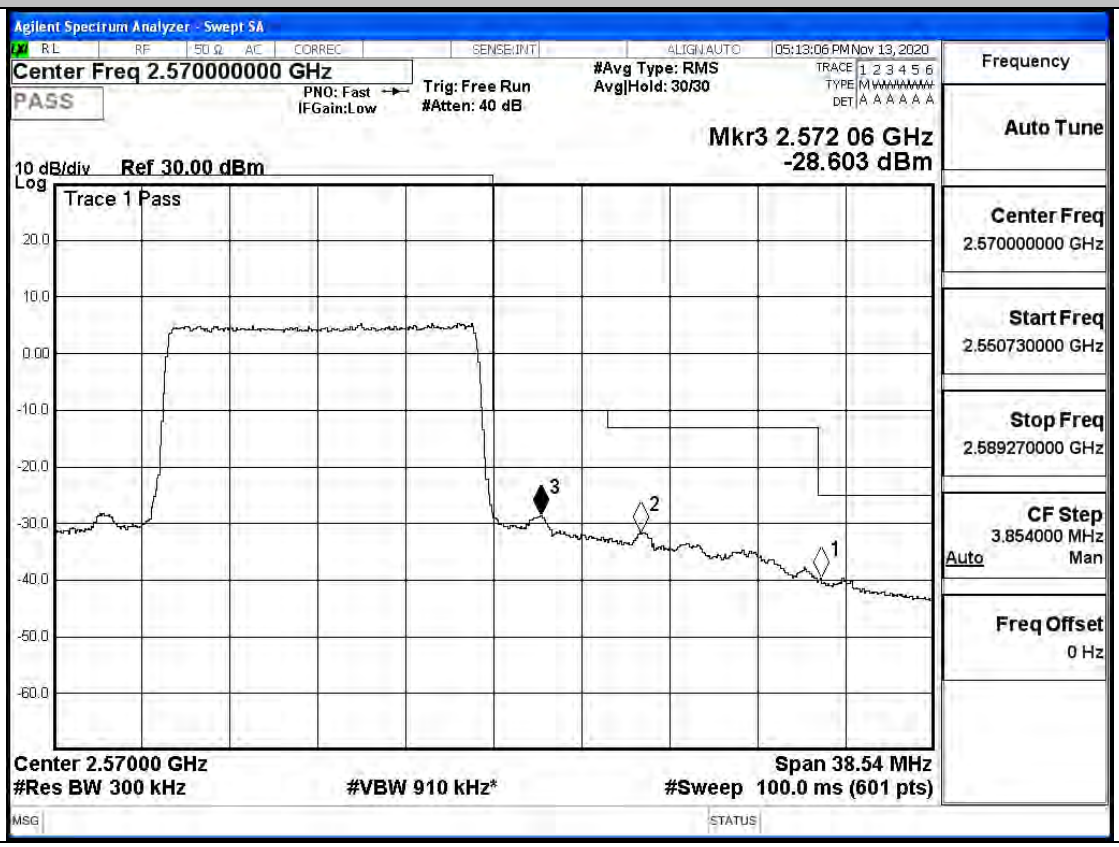
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



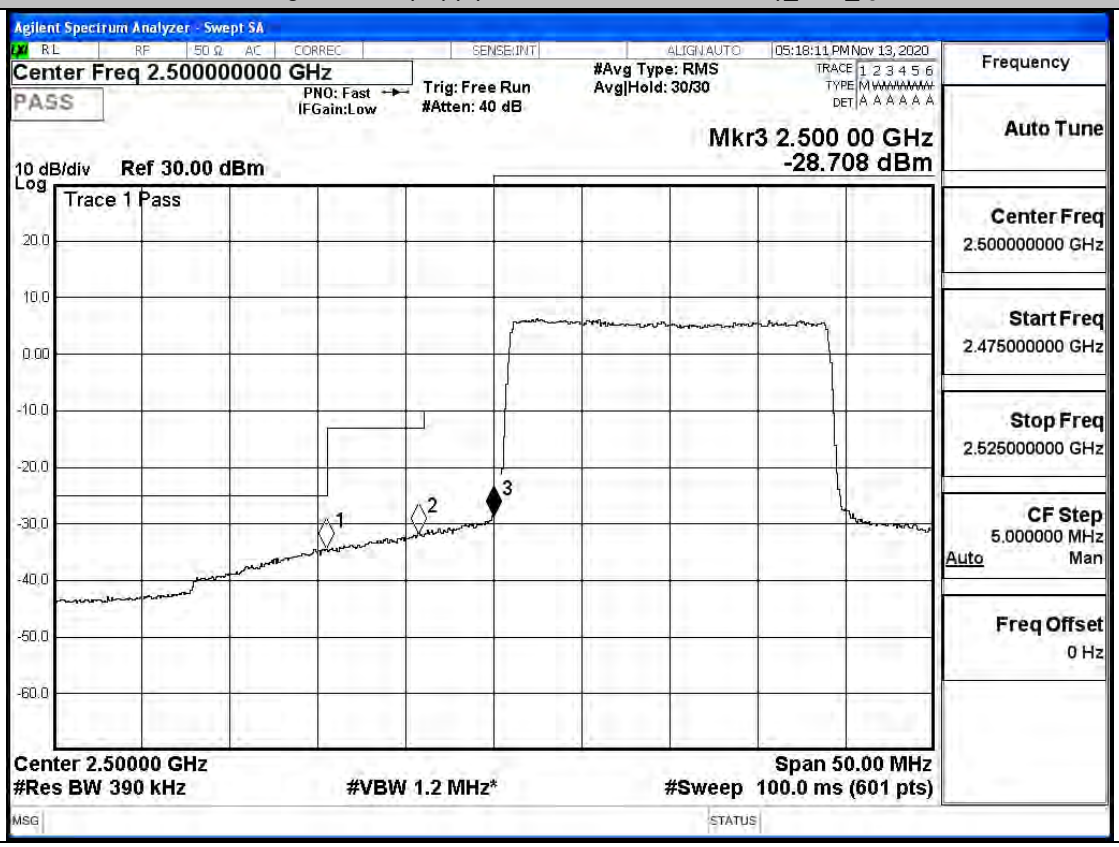
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



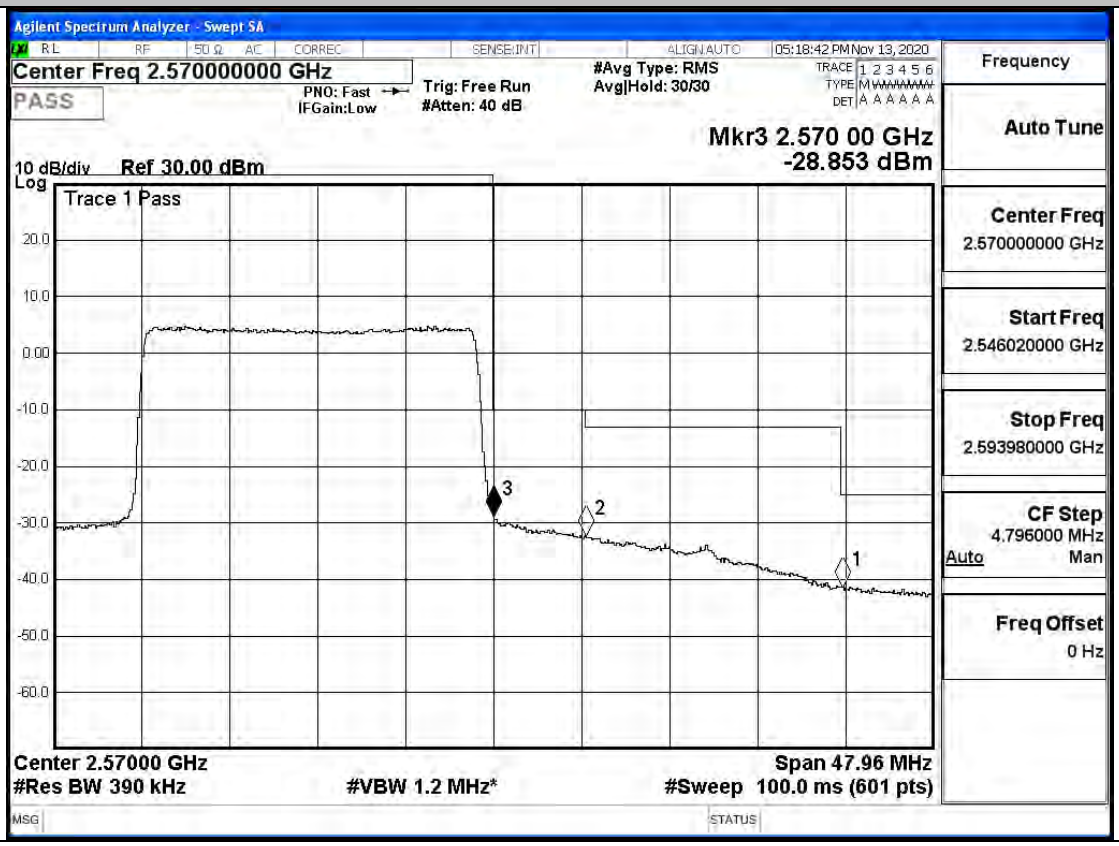
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



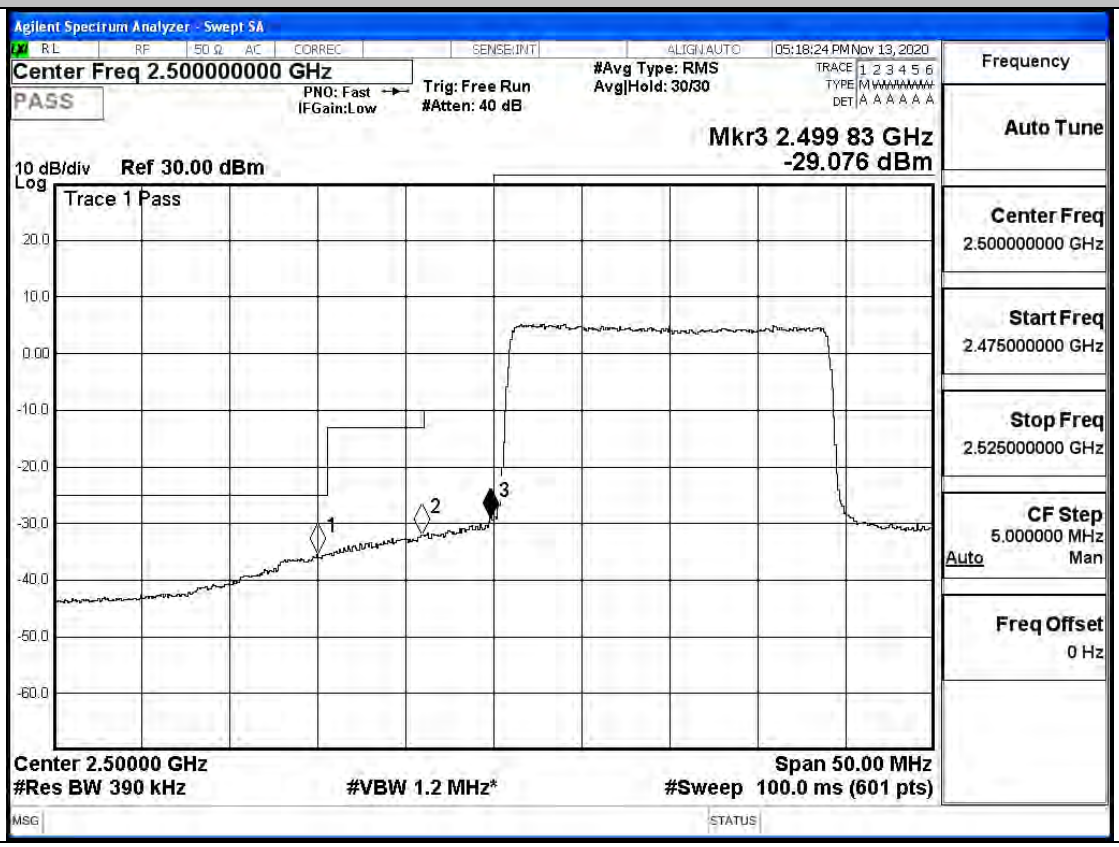
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



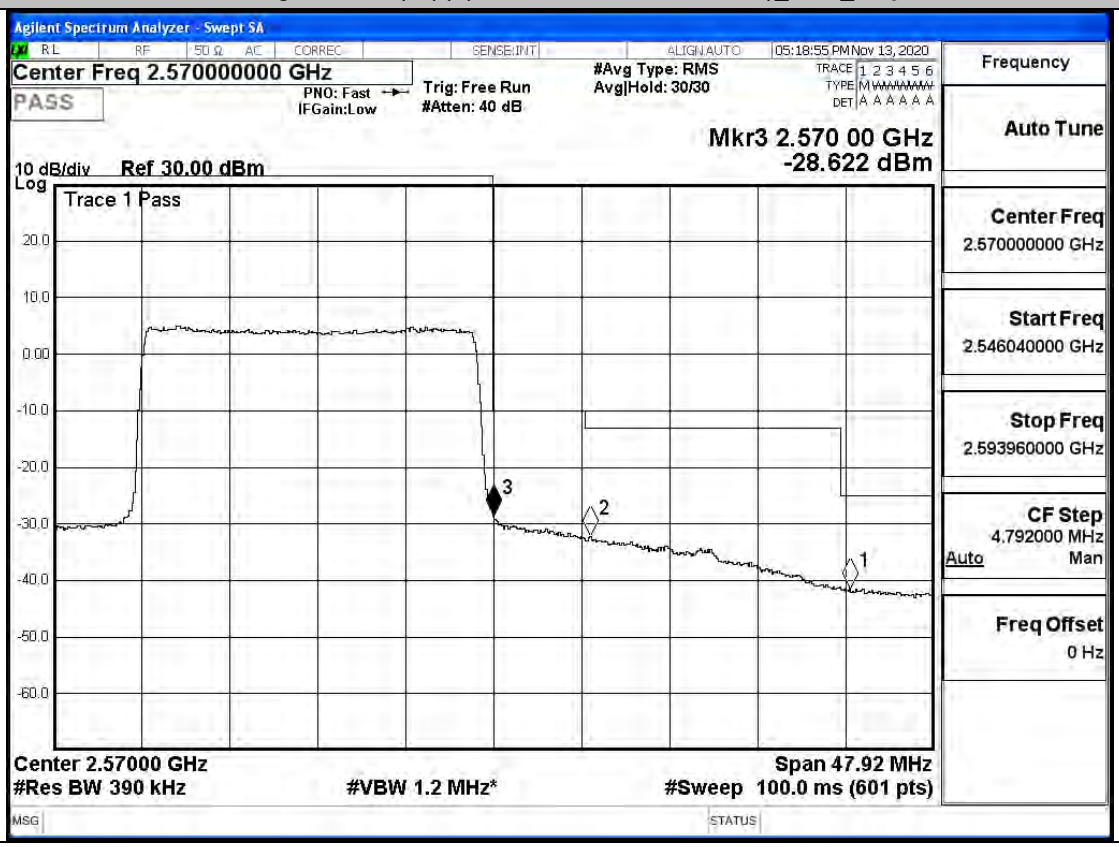
Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



Band Edge Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

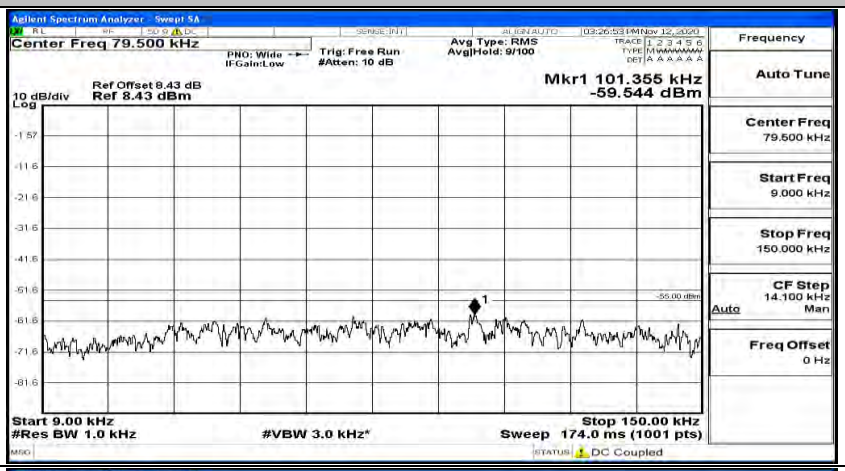


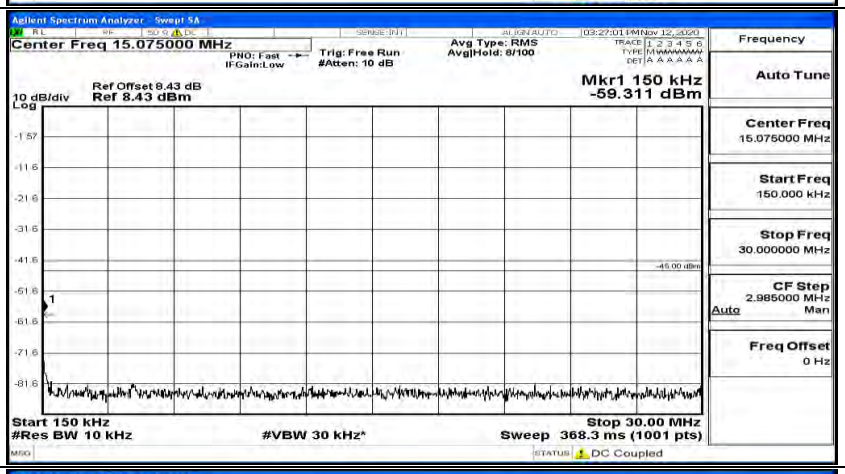
G.5 Conducted Spurious Emission

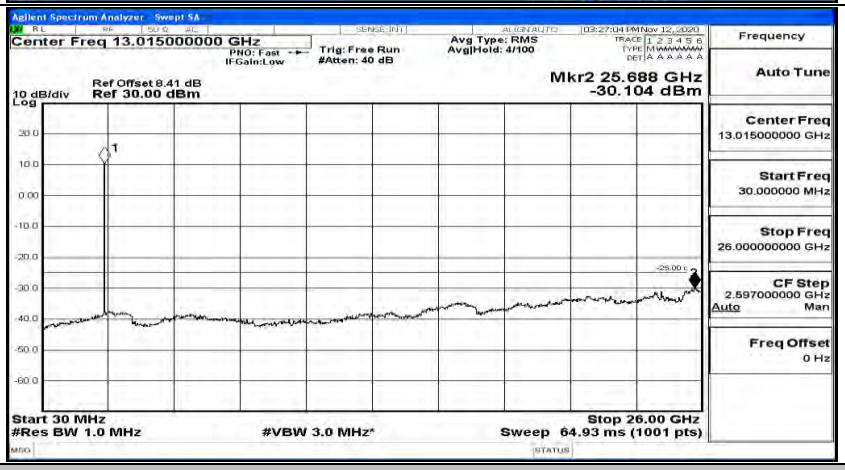
Test Graphs

Channel Bandwidth: 5 MHz

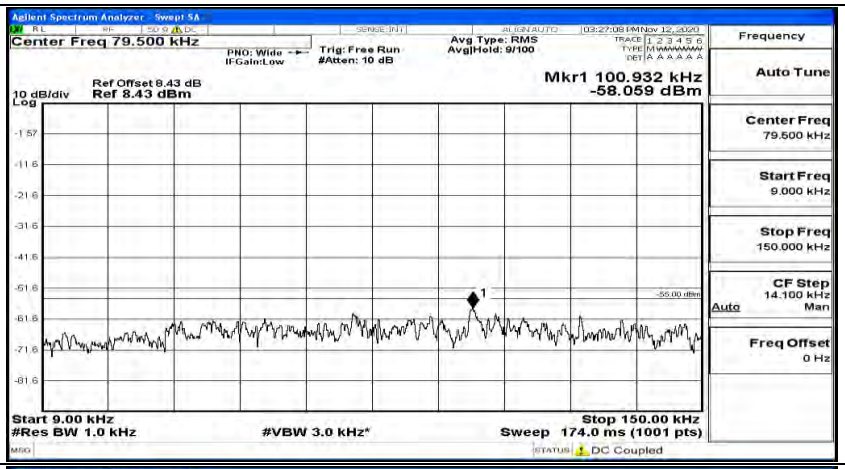
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

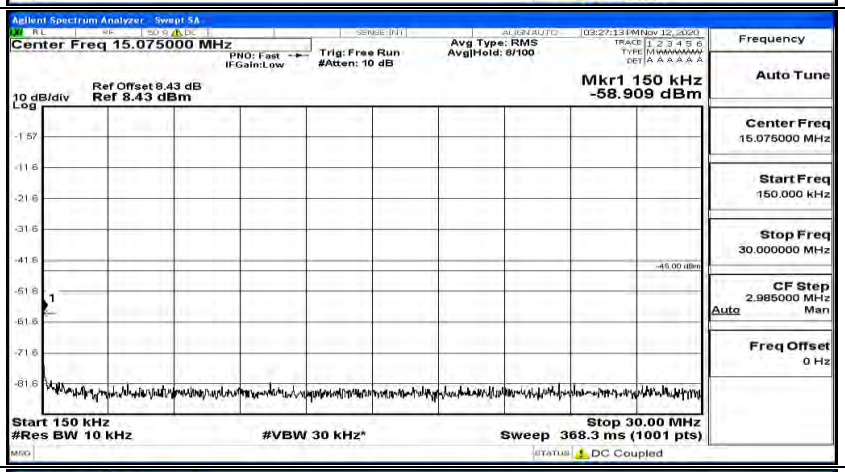


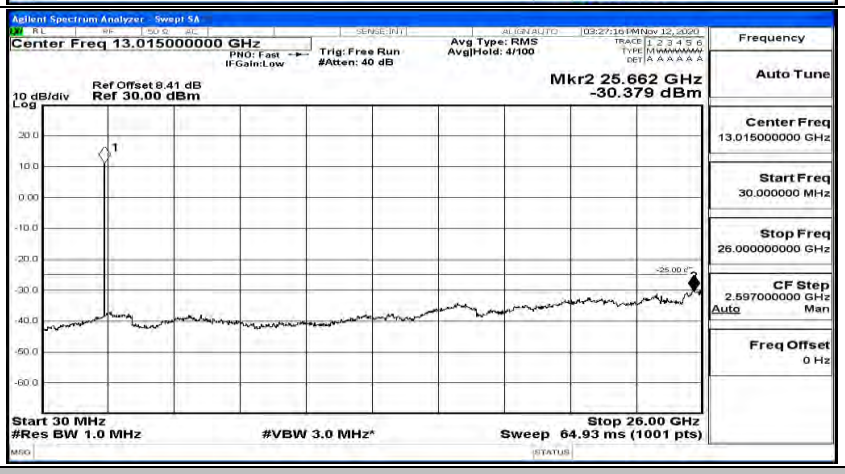




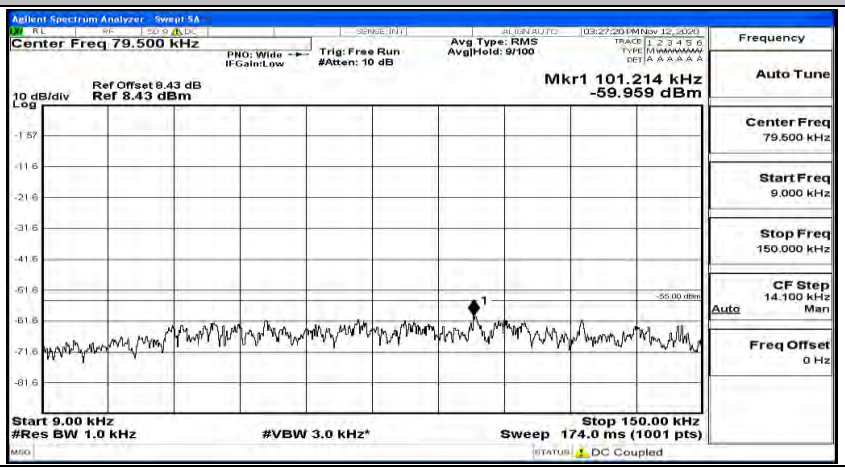
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

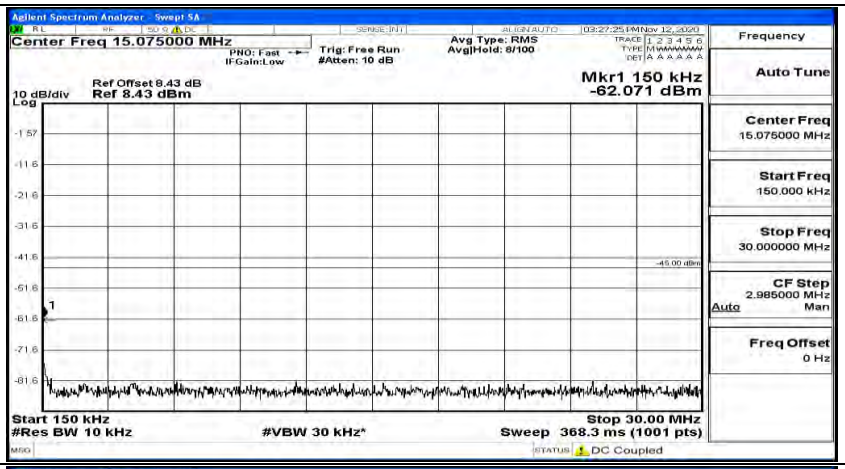


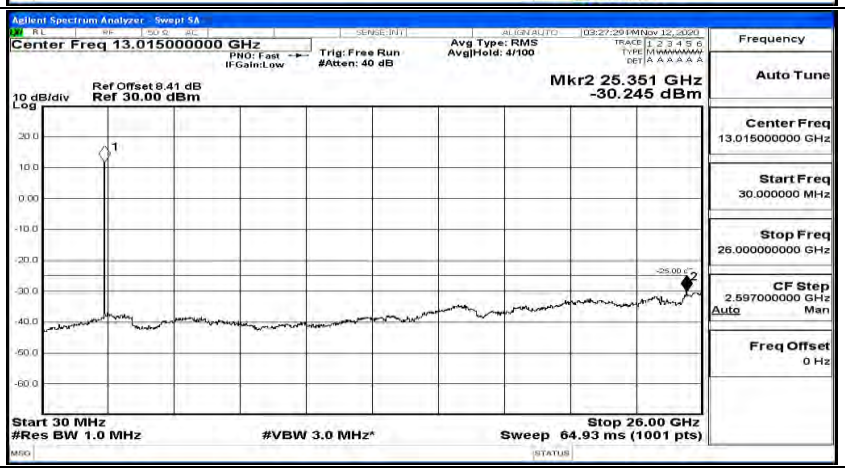




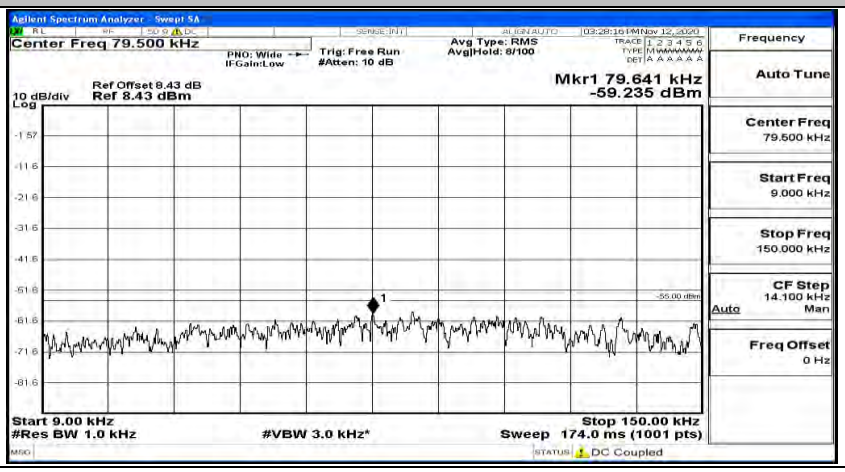
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

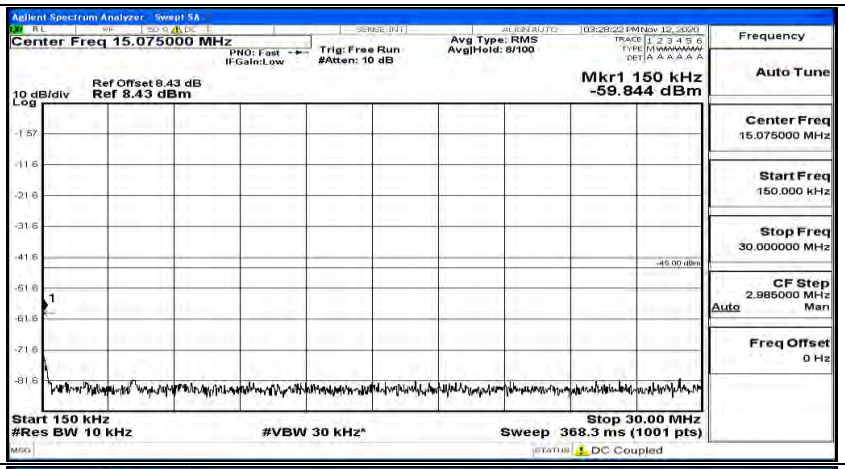


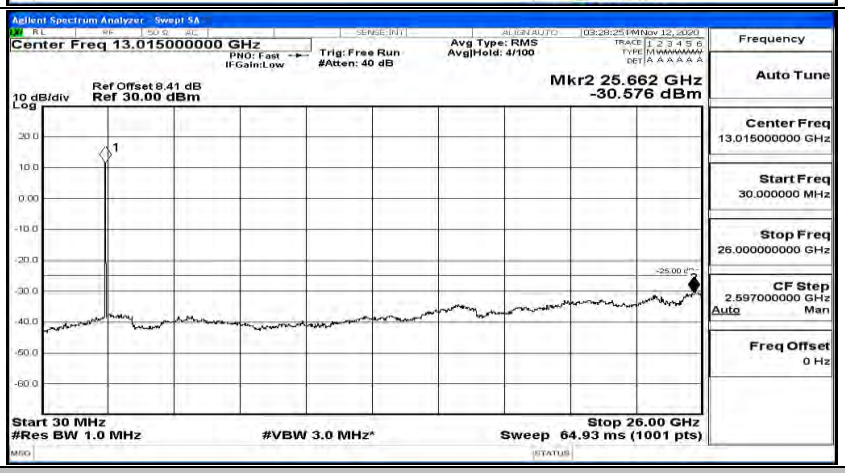




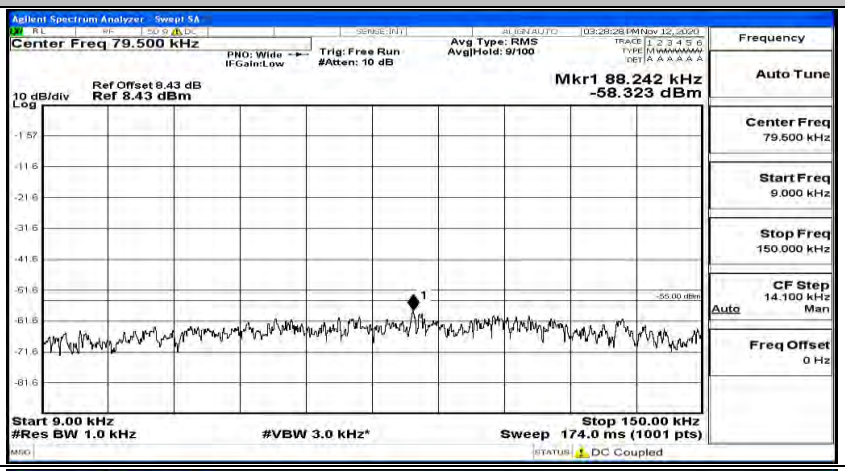
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

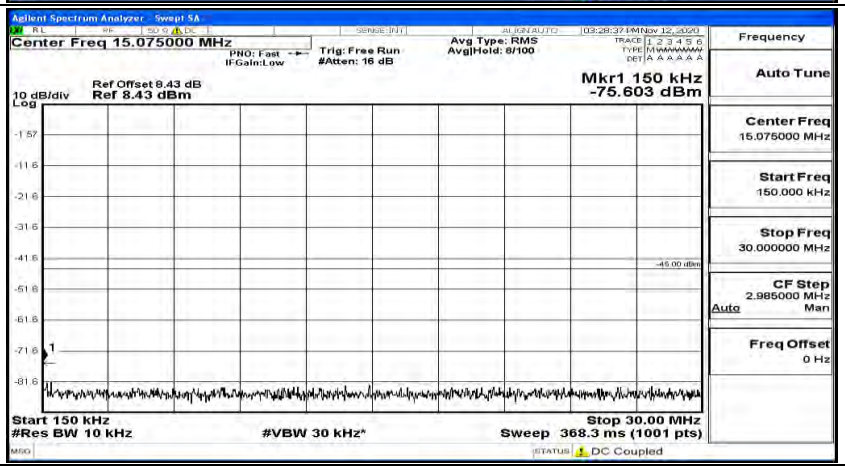




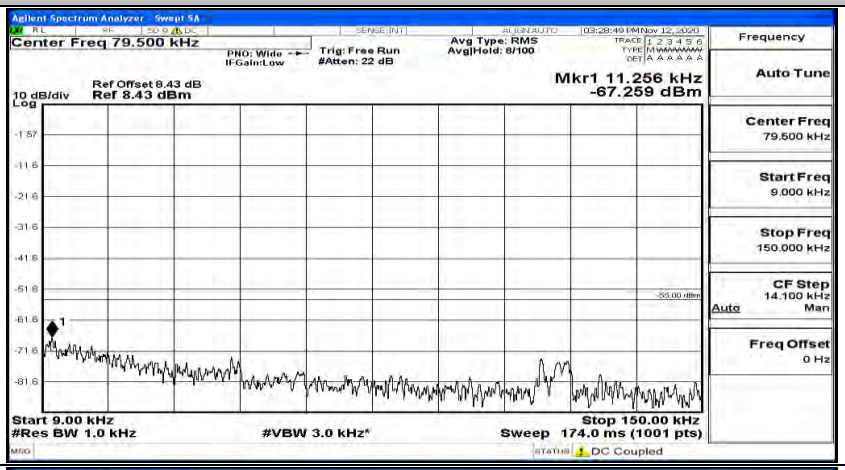


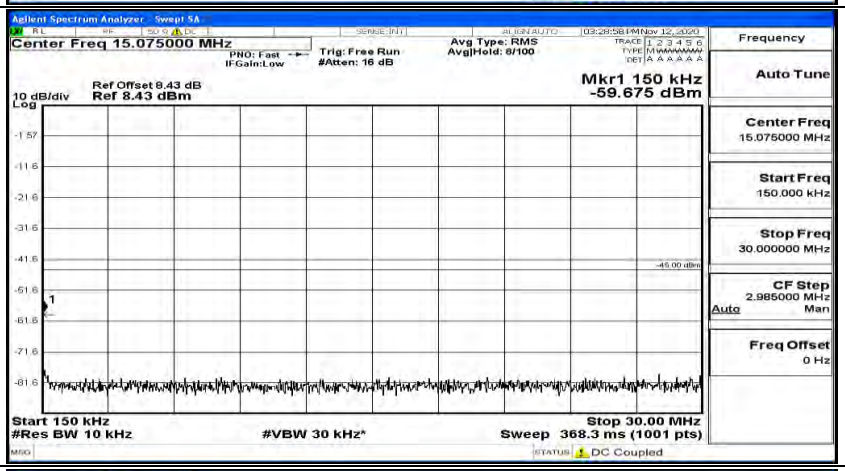
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

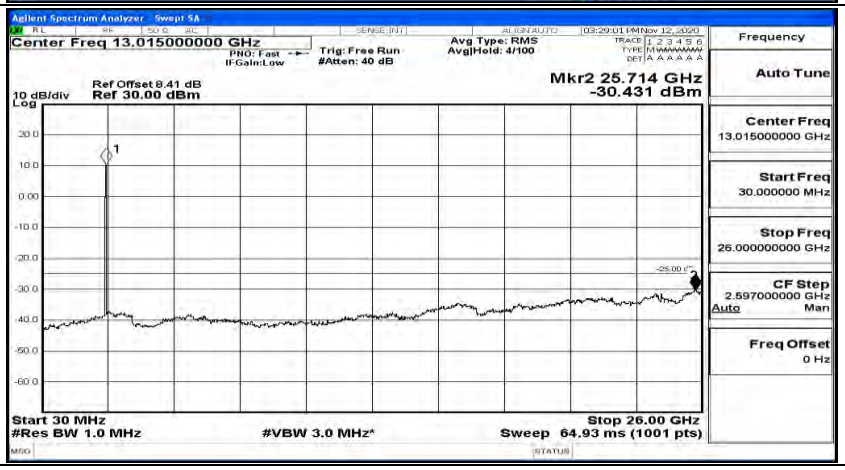




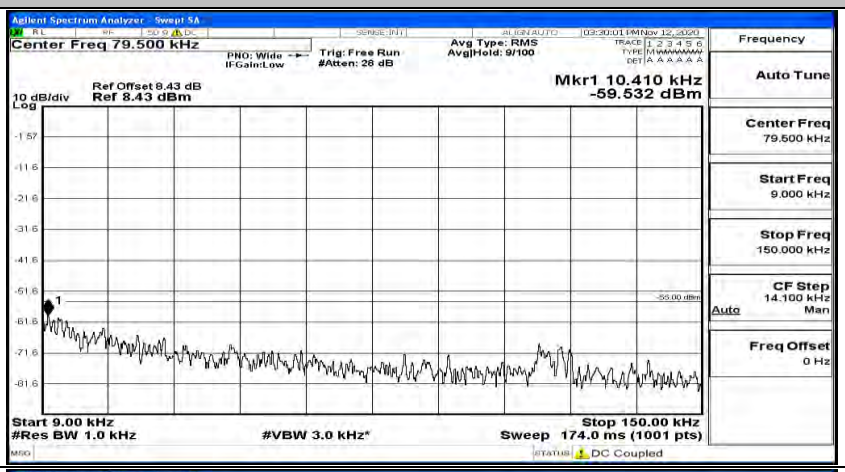
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

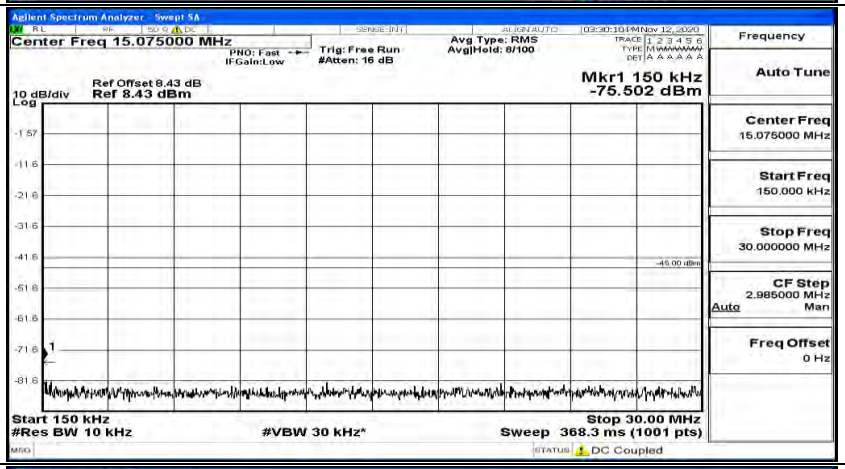


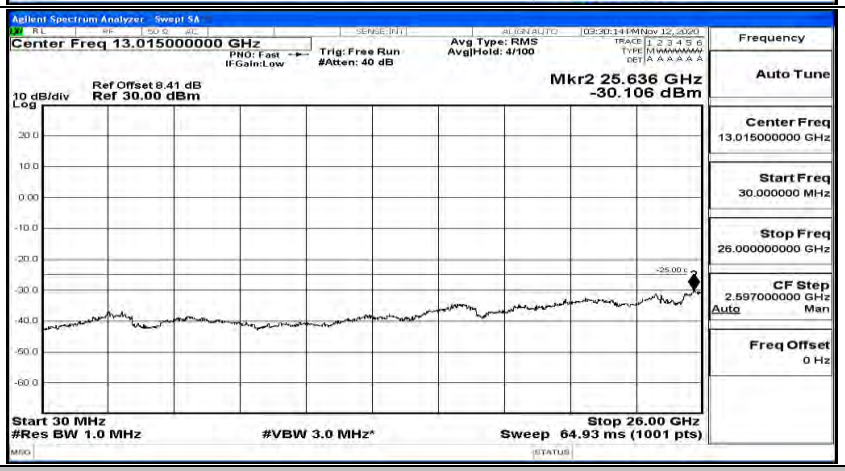




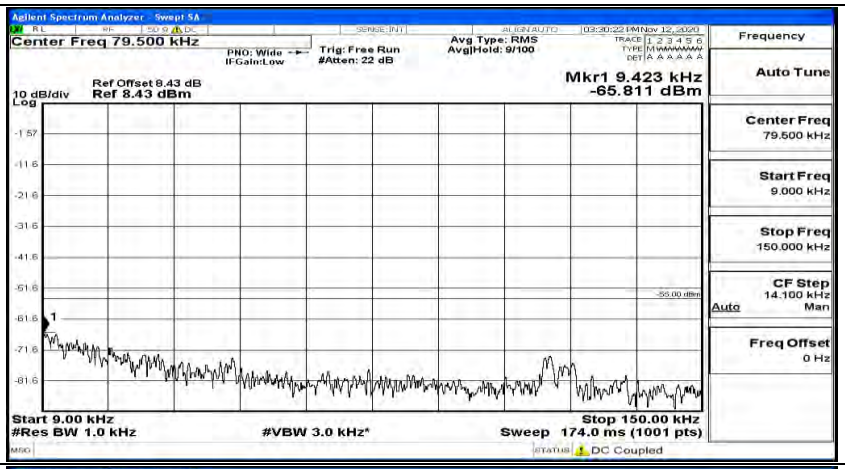
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

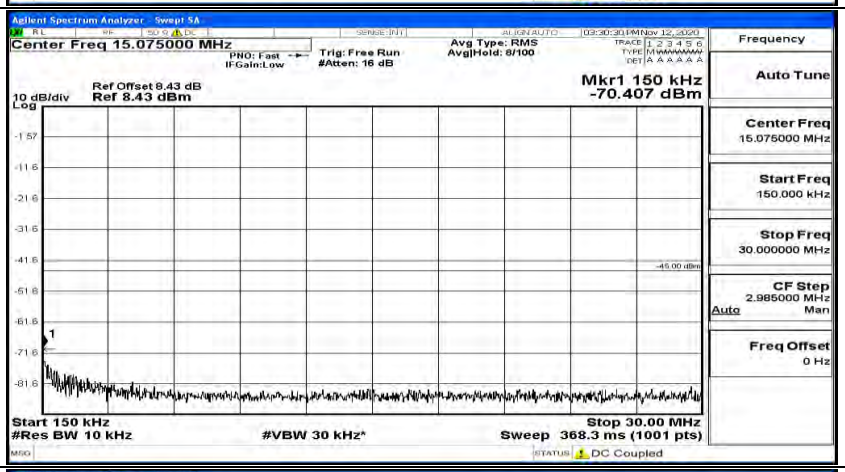


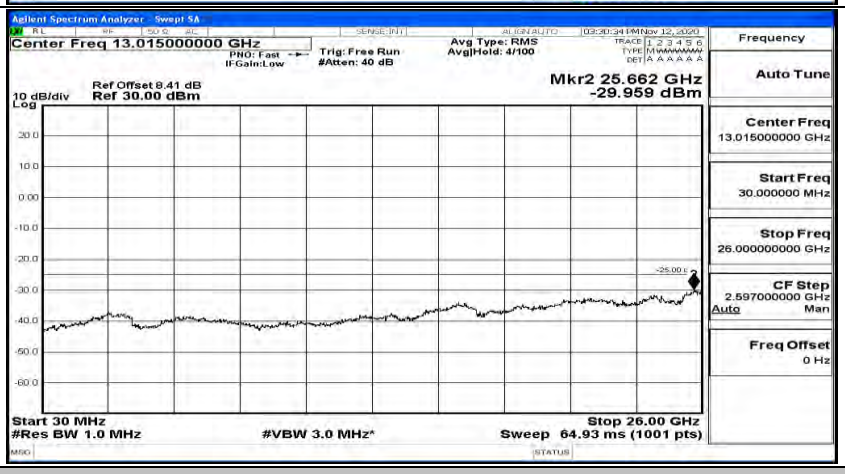




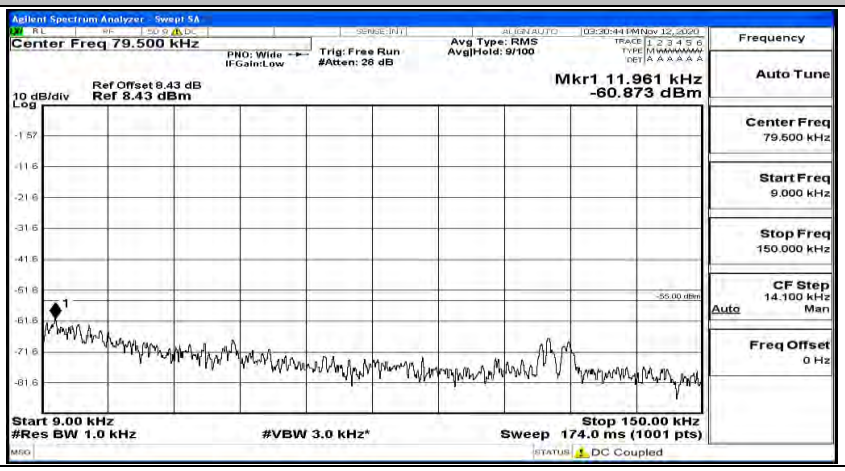
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

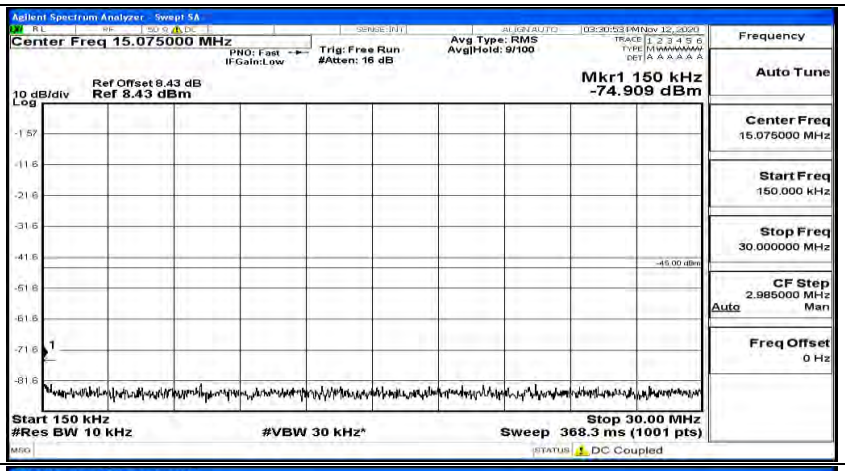




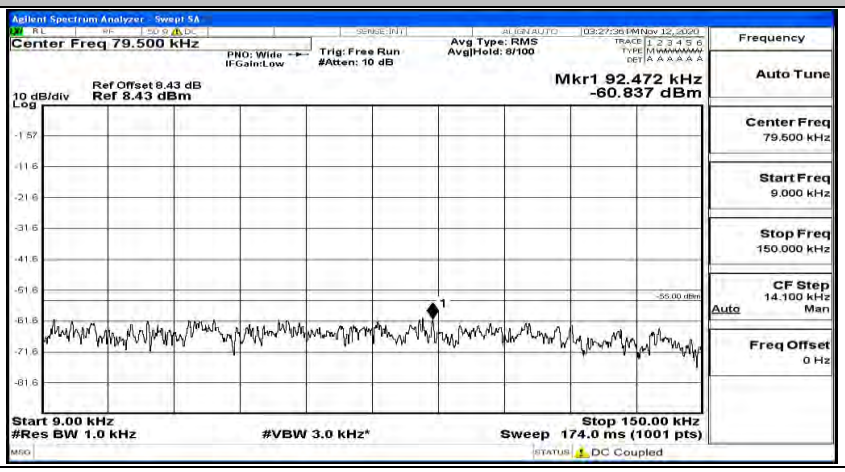


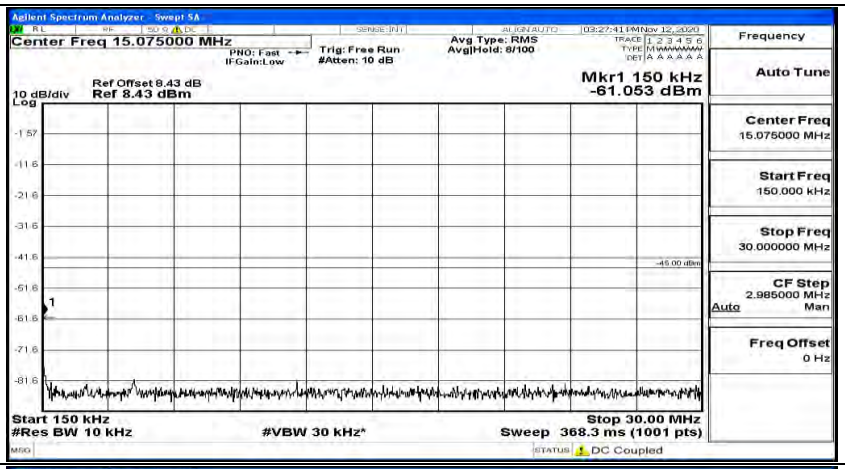
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

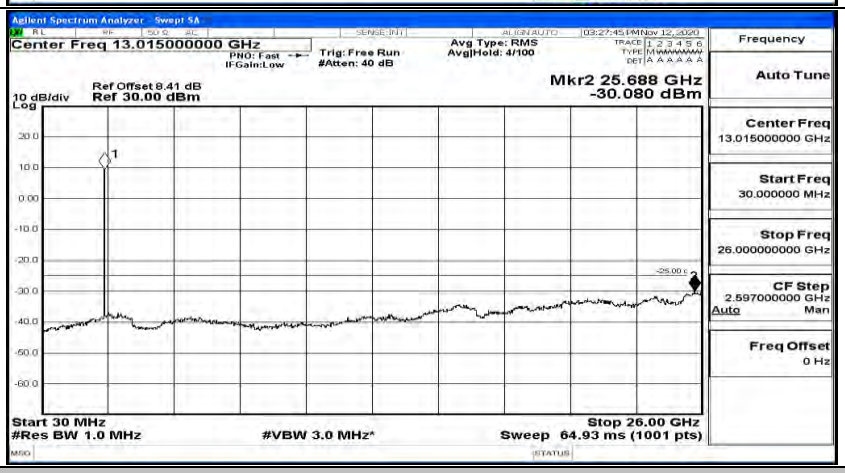




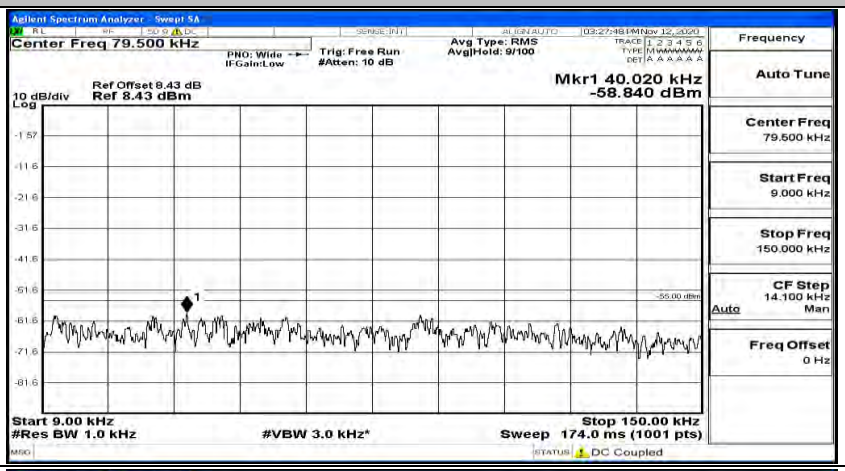
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

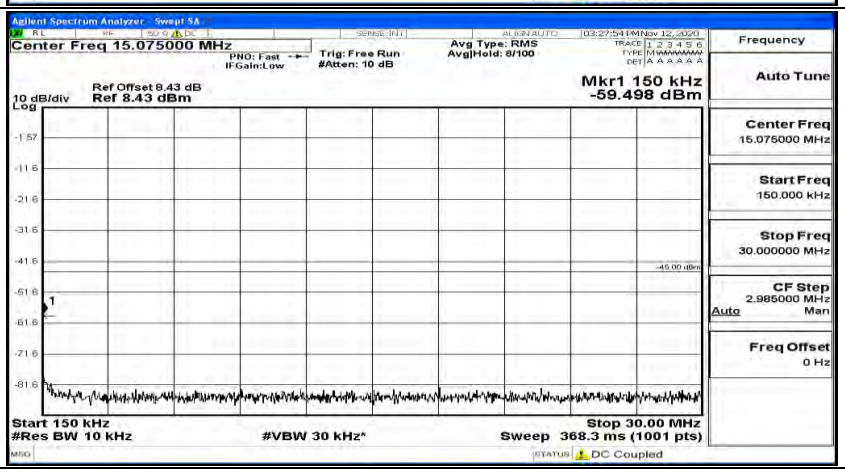




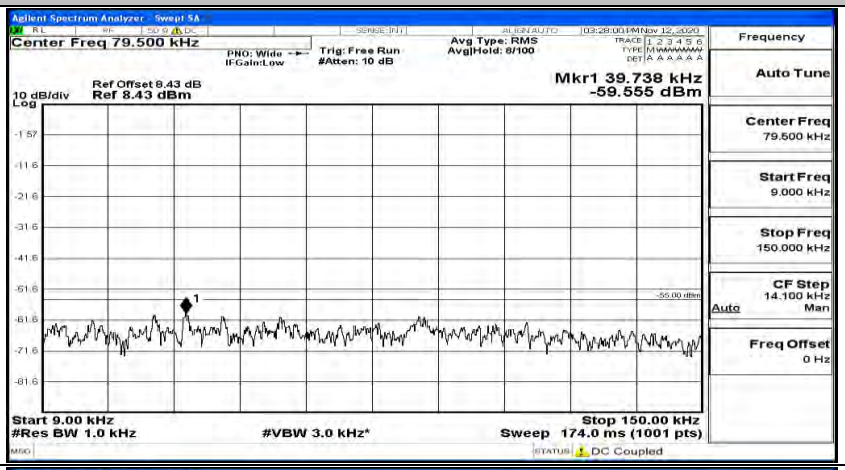


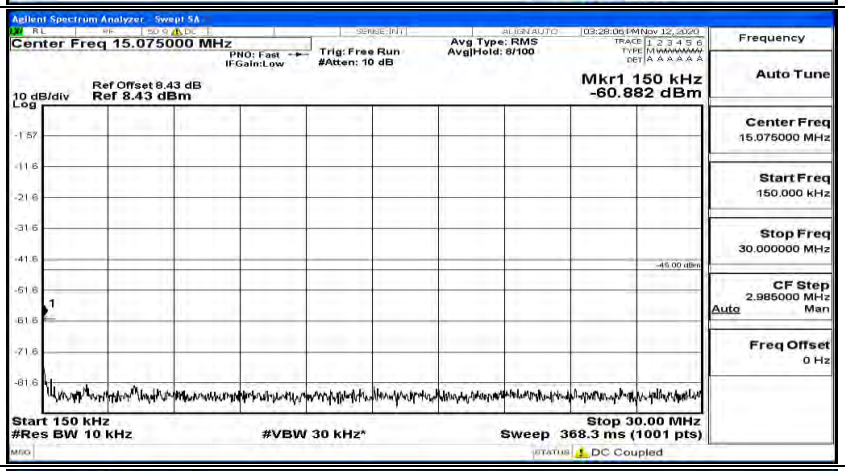
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

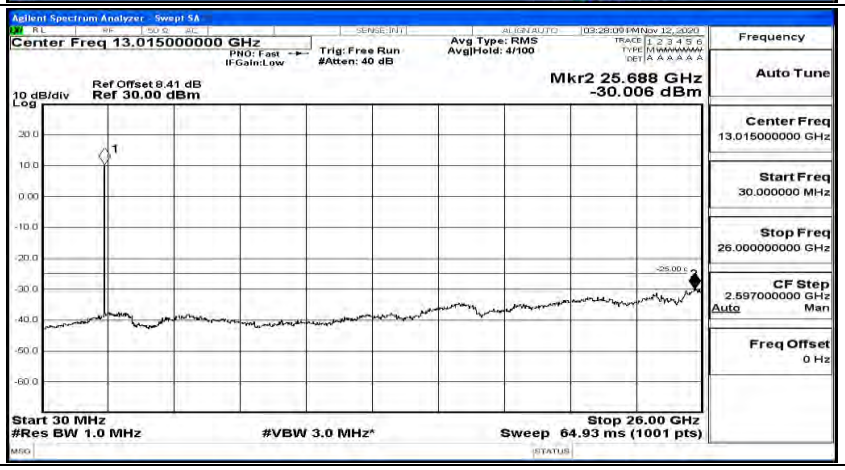




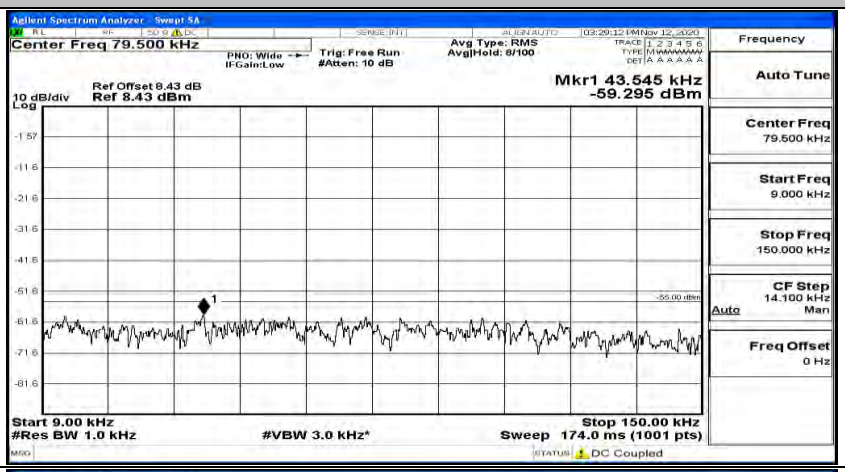
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

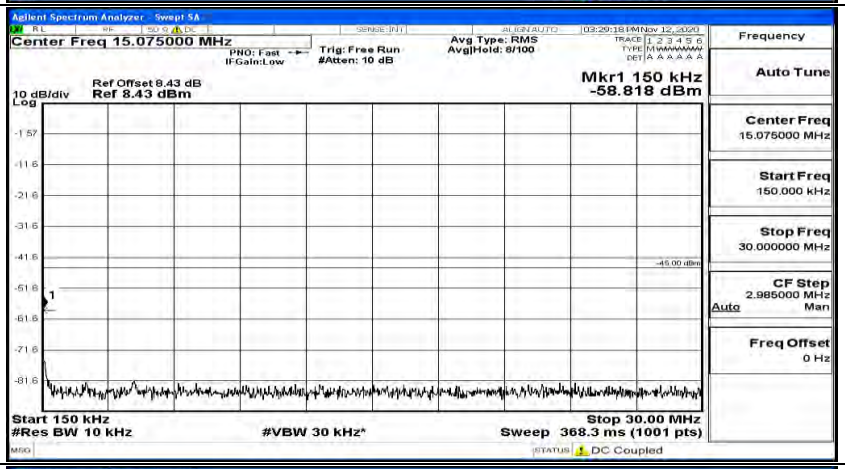


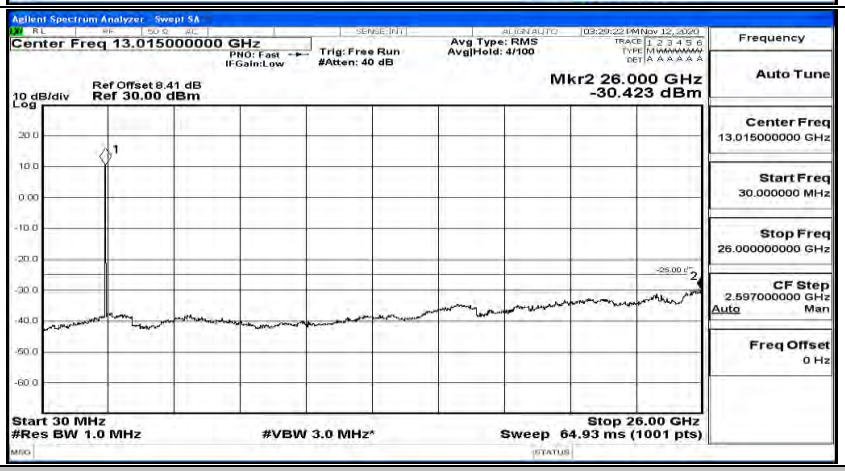




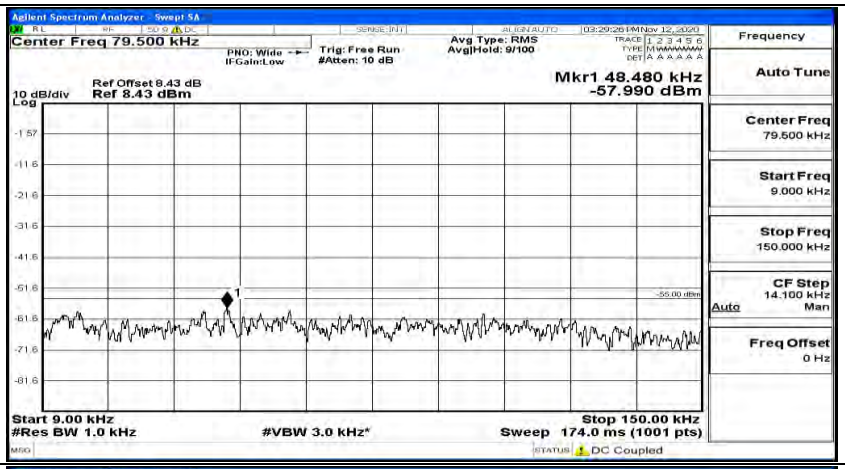
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

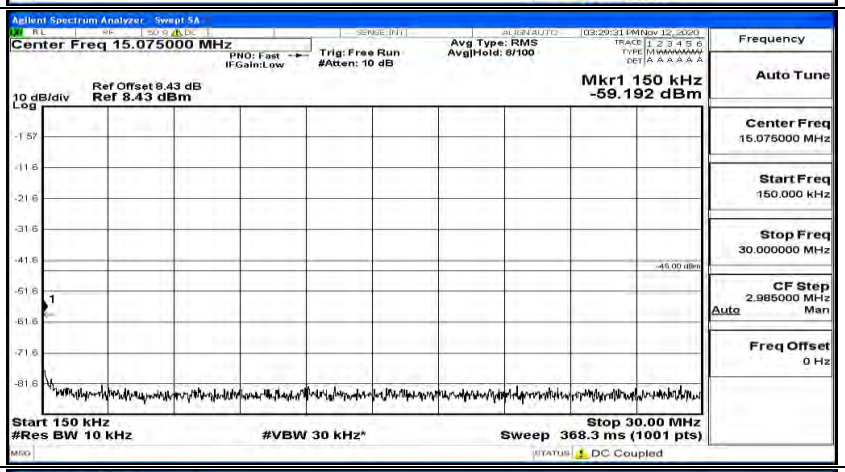


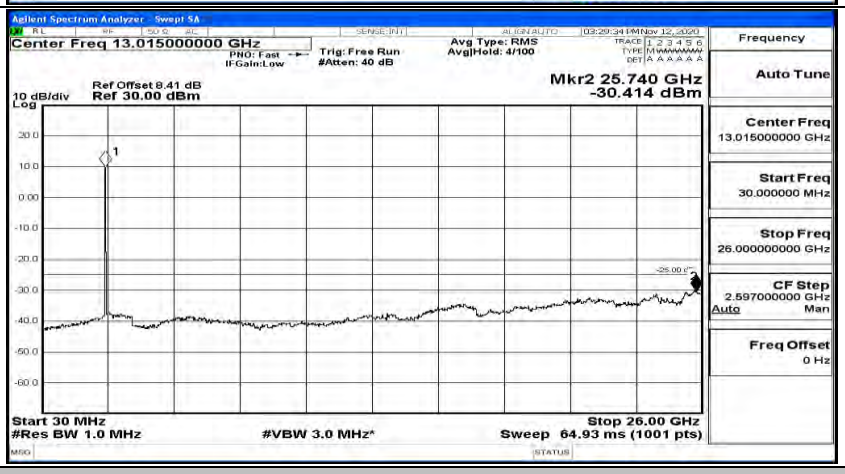




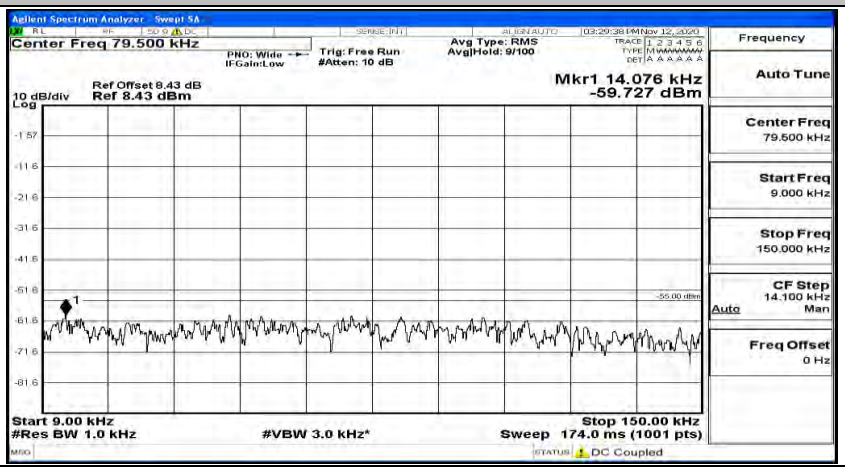
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

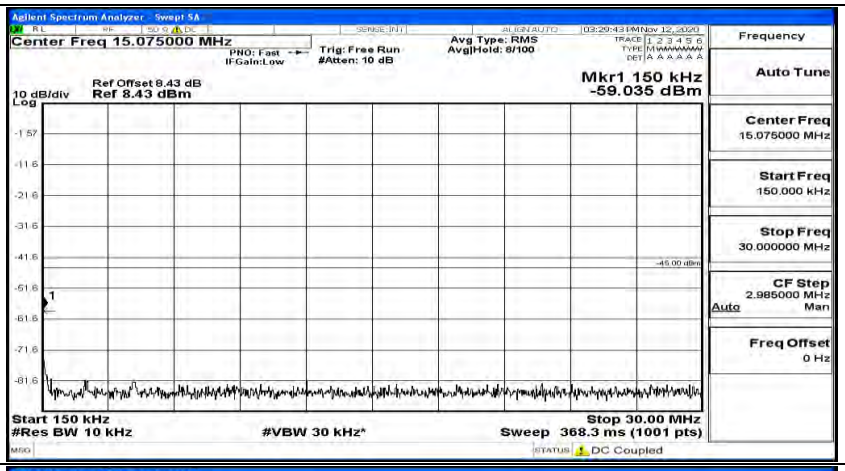


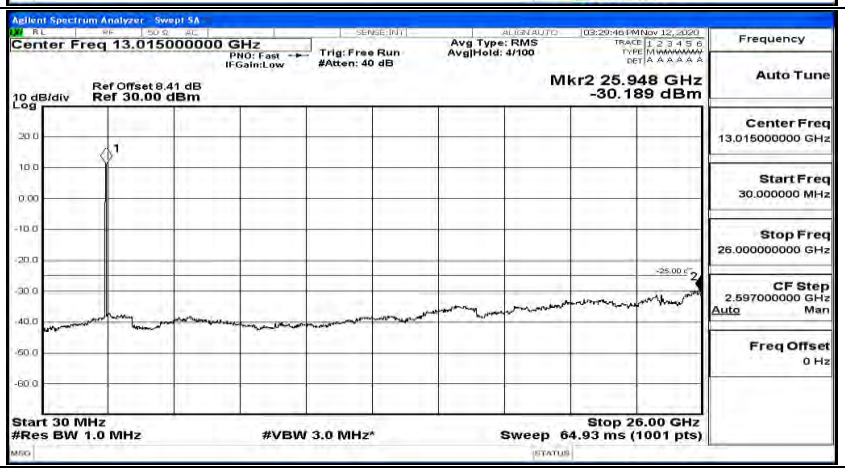




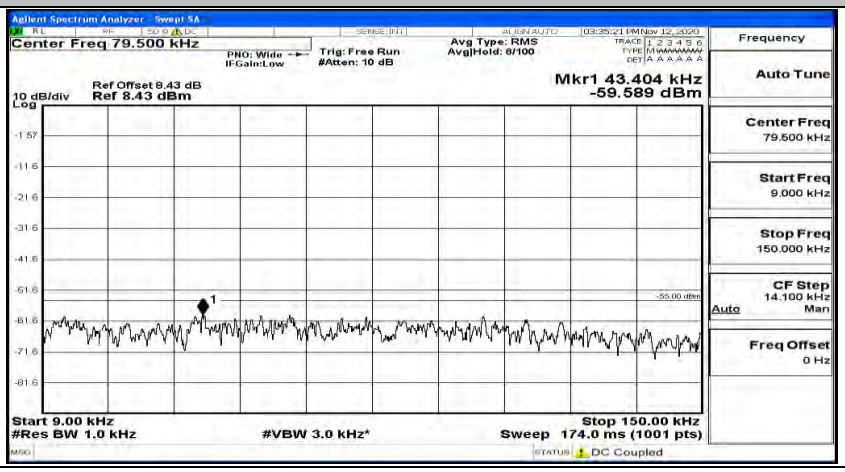
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

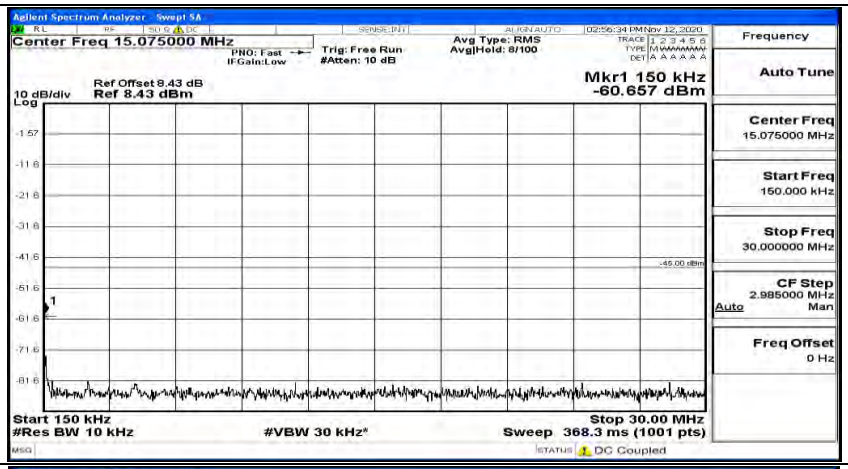


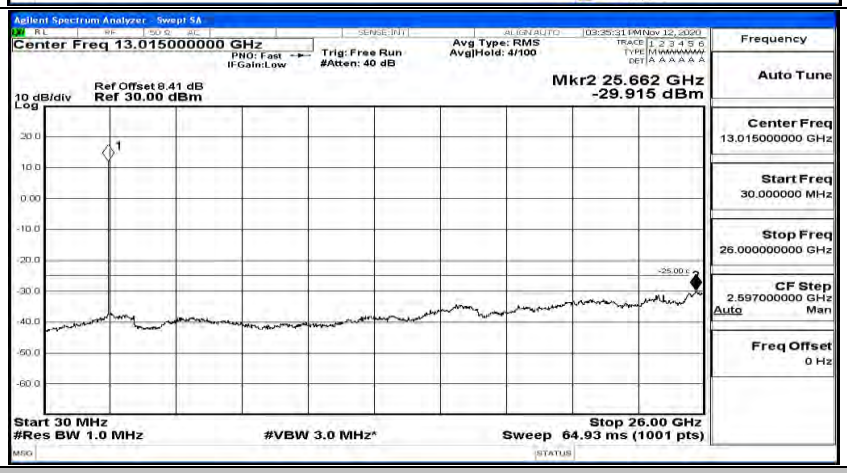




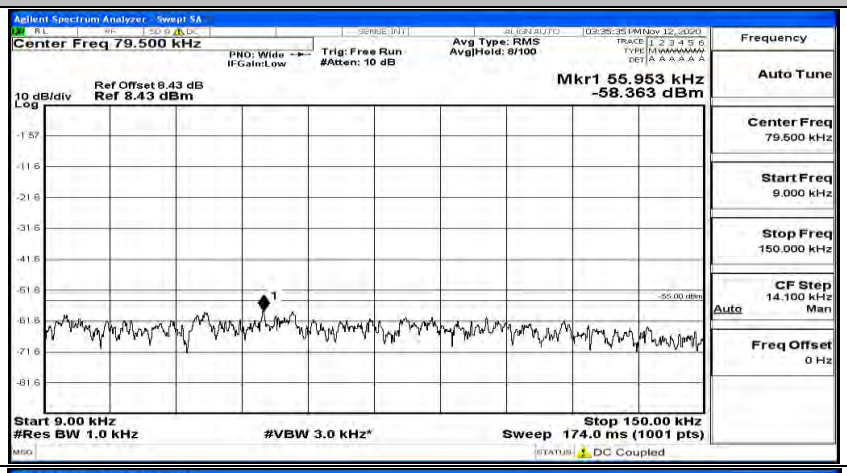
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

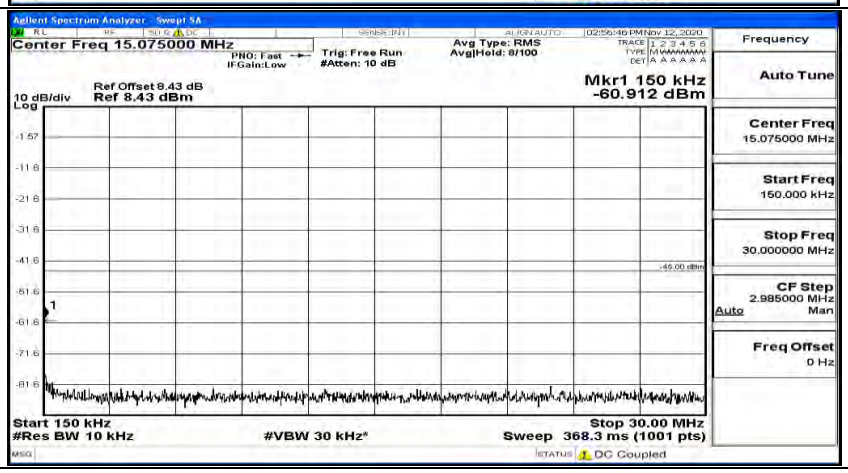


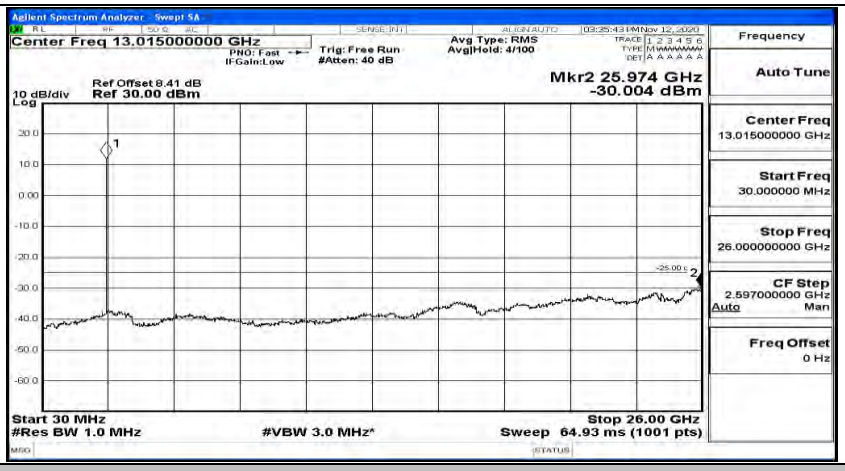




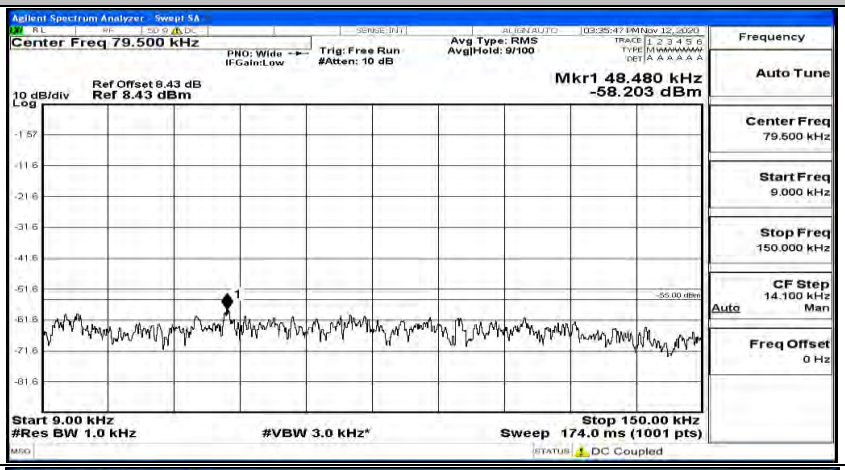
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

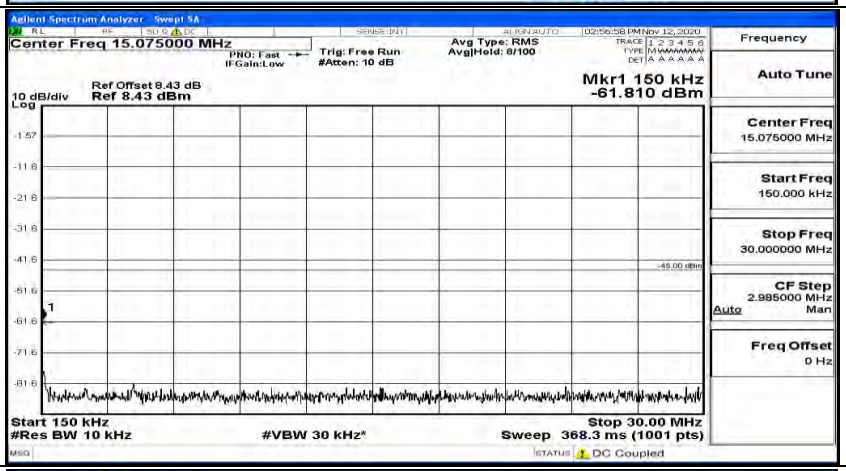


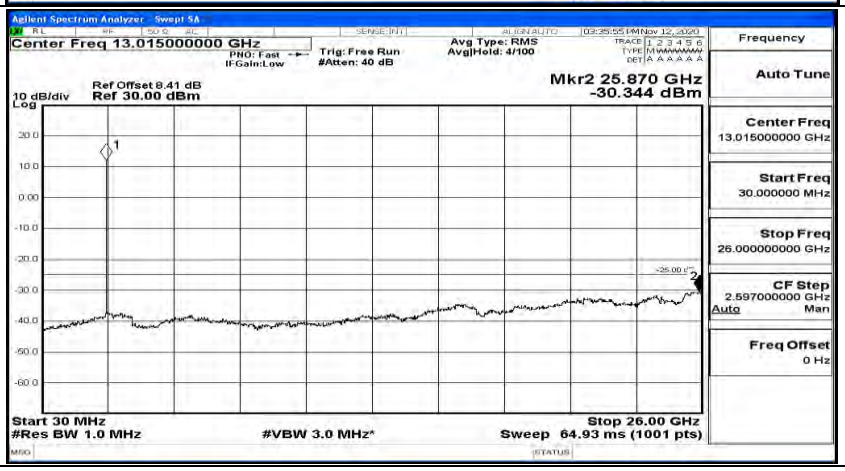




(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24

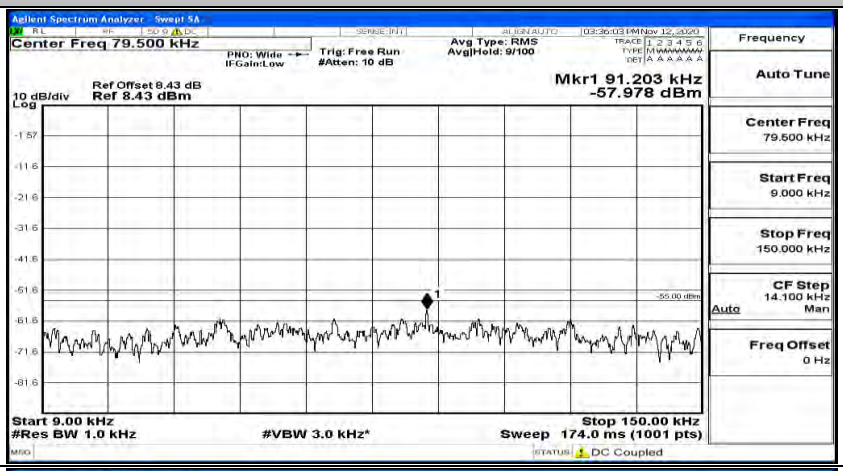


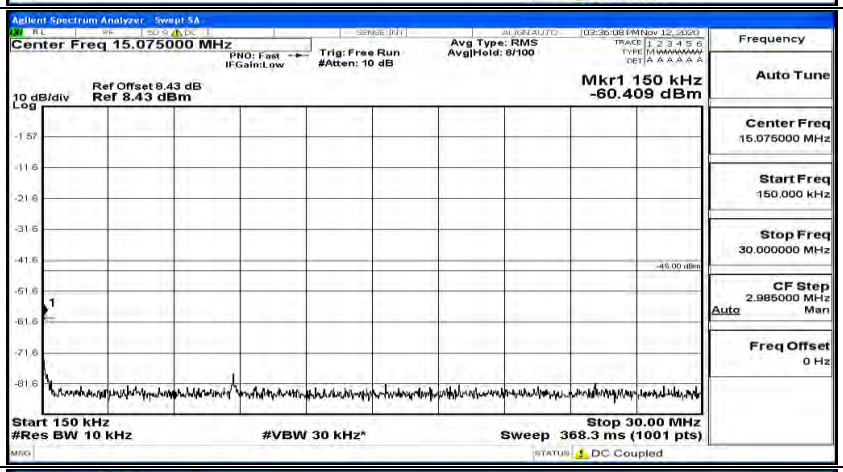




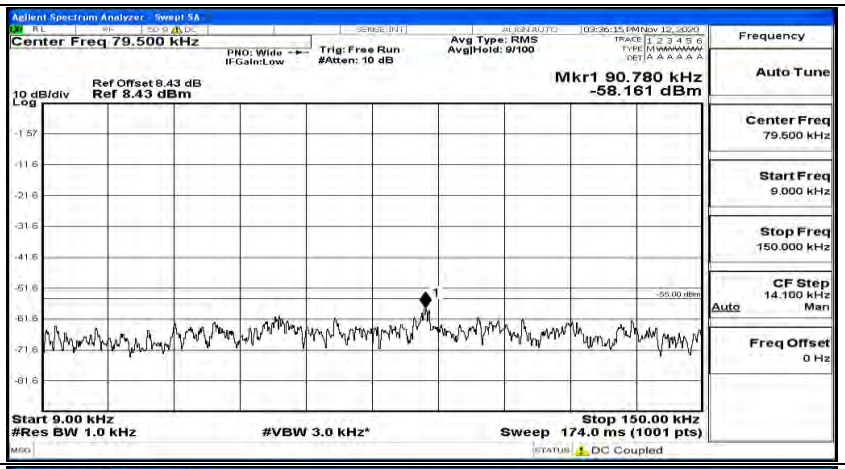
Channel Bandwidth: 10 MHz

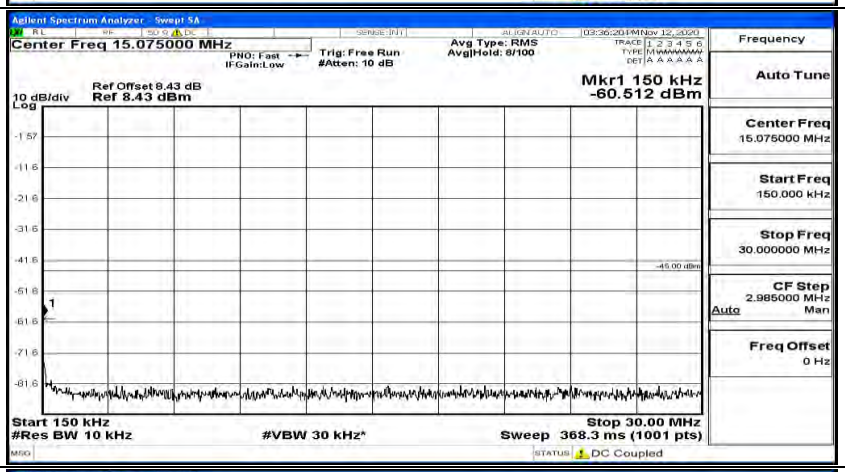
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#0

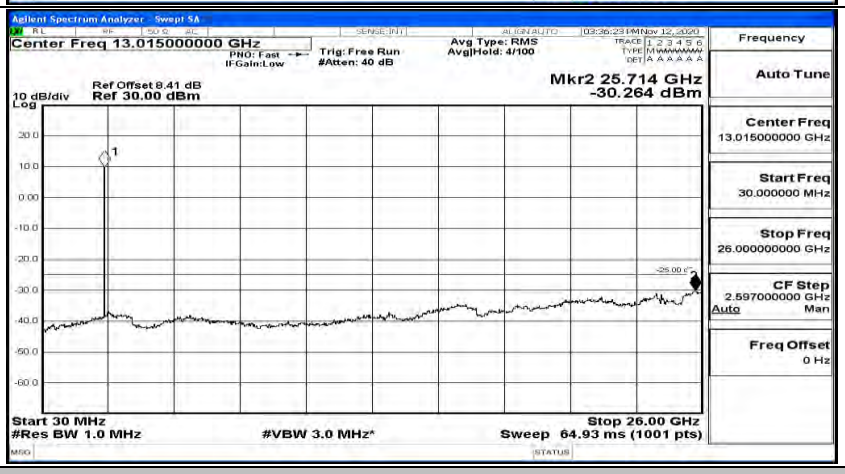




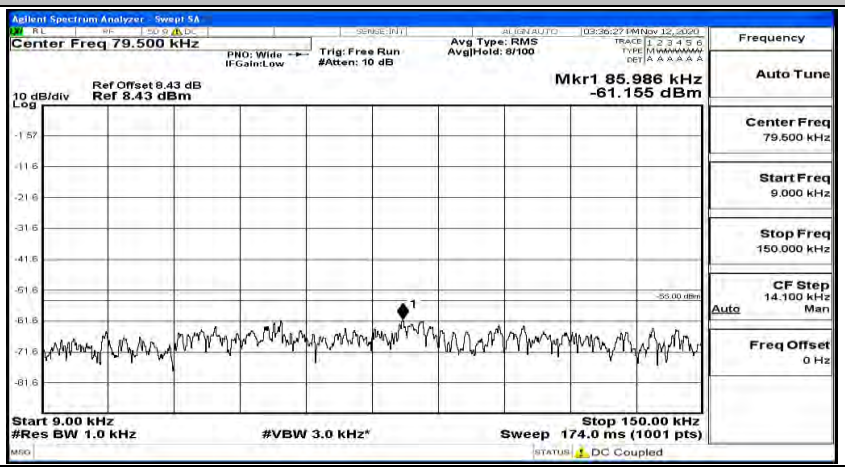
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#24

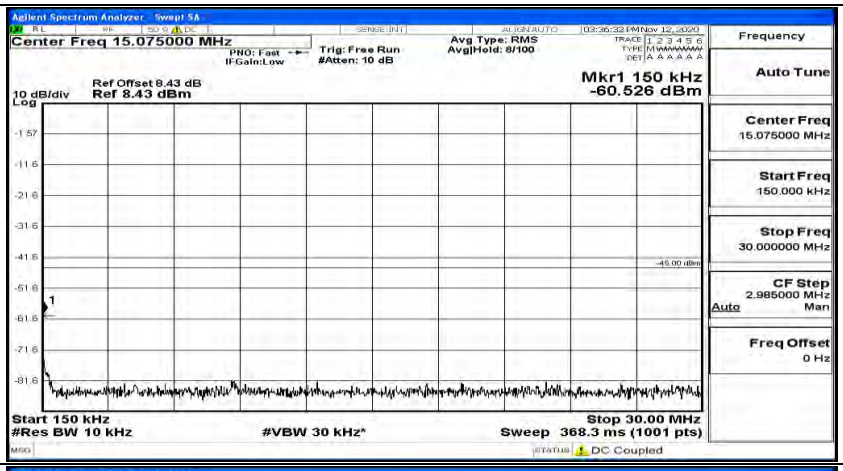




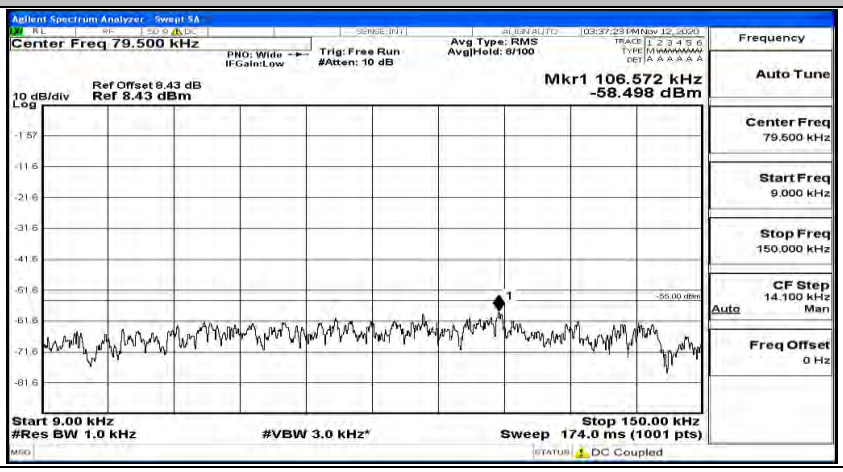


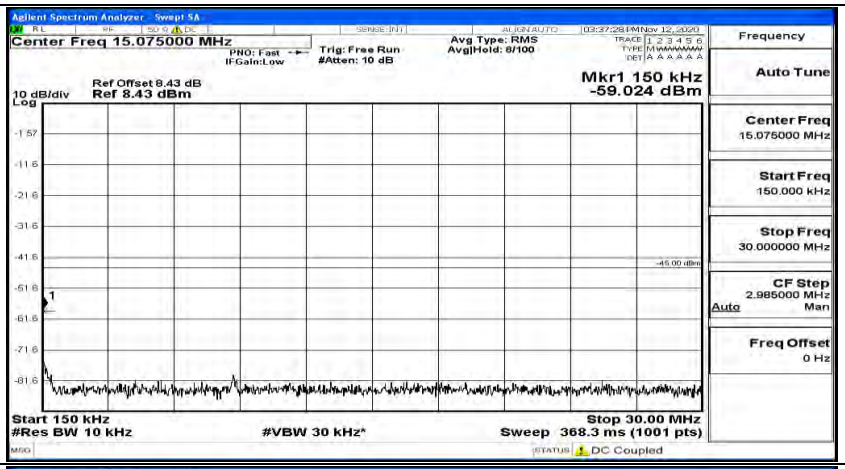
Channel Bandwidth: 10 MHz_LCH_QPSK_1RB#49

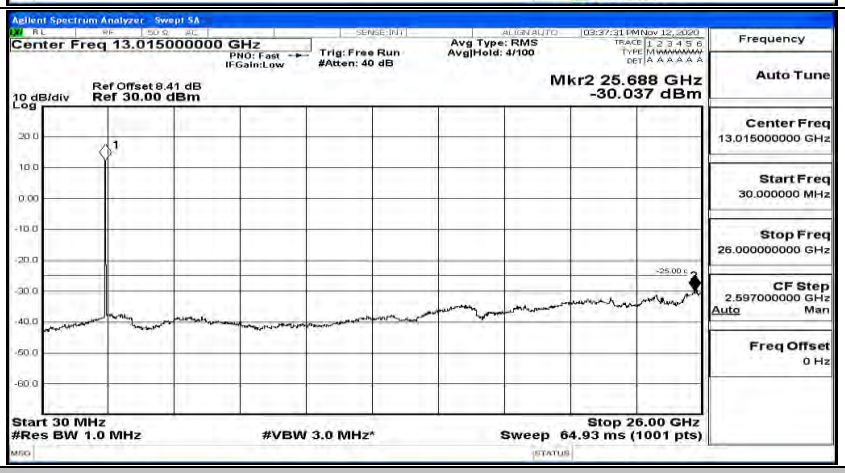




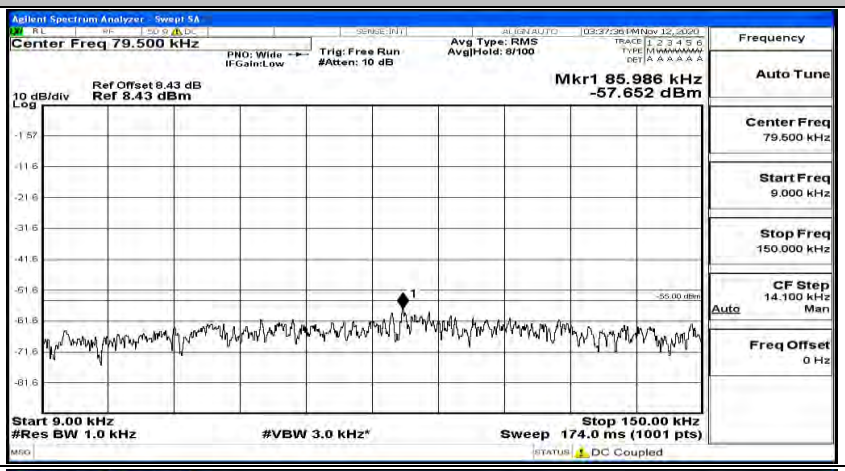
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

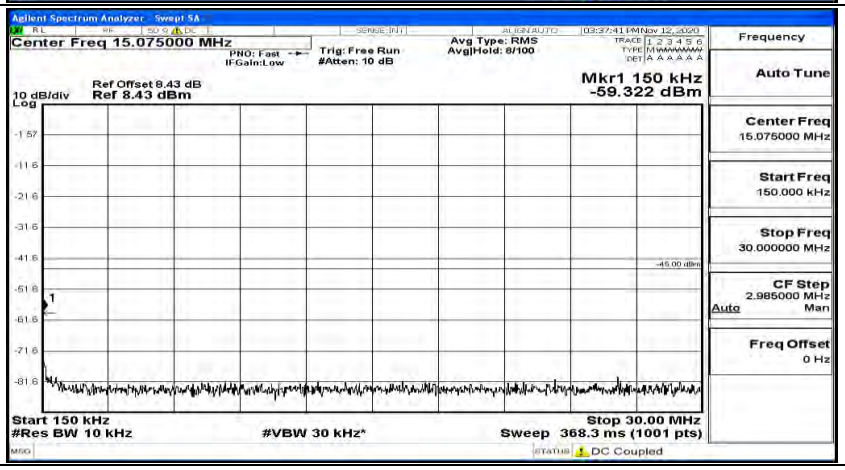


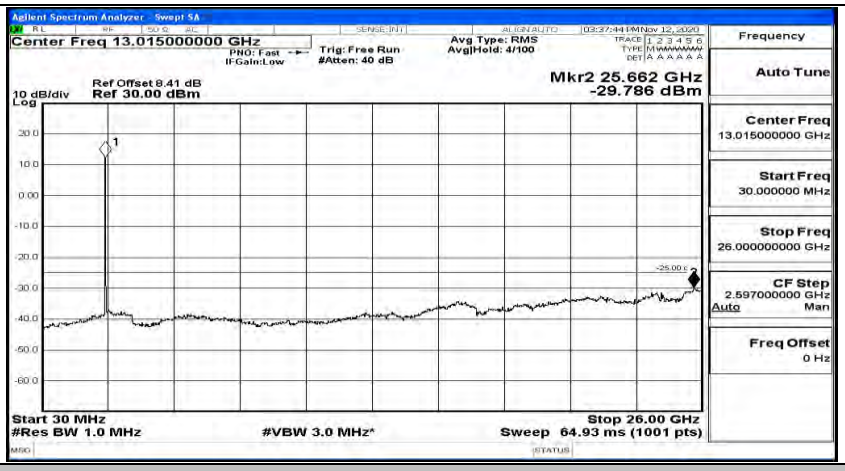




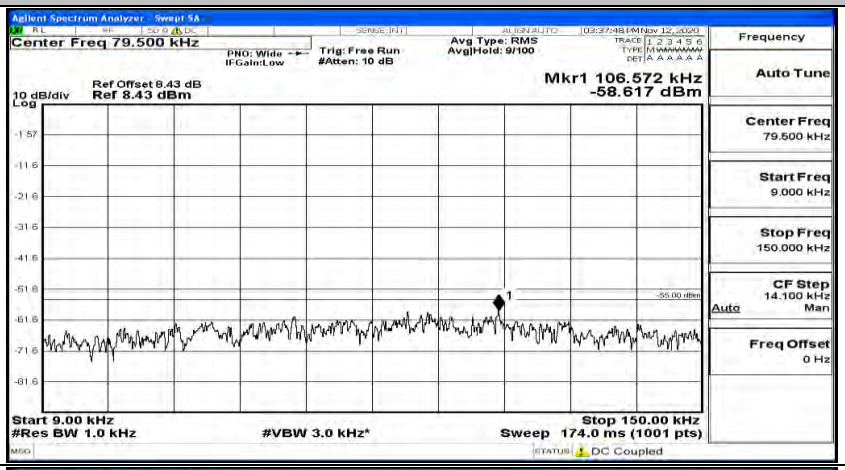
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

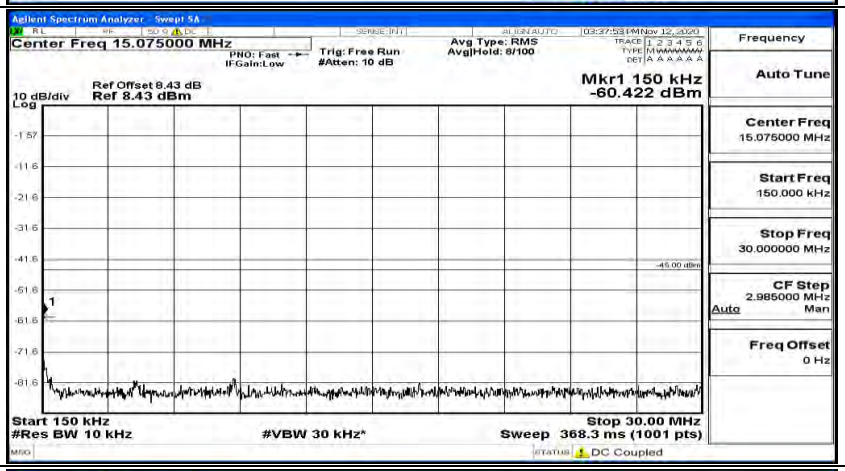




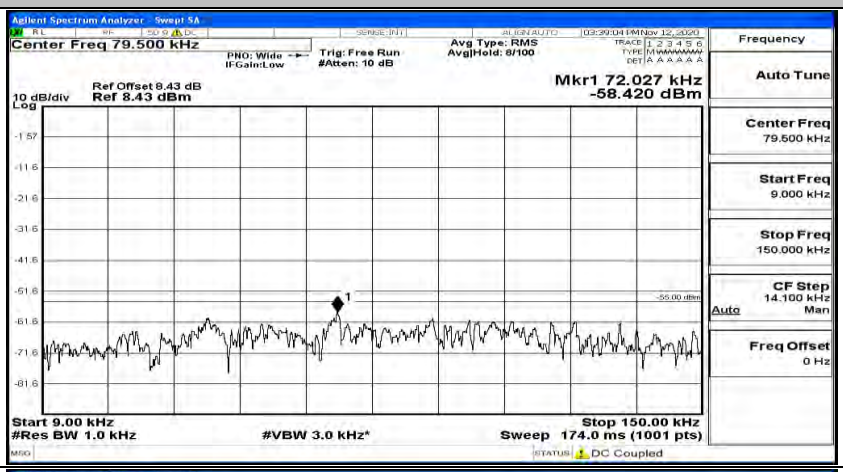


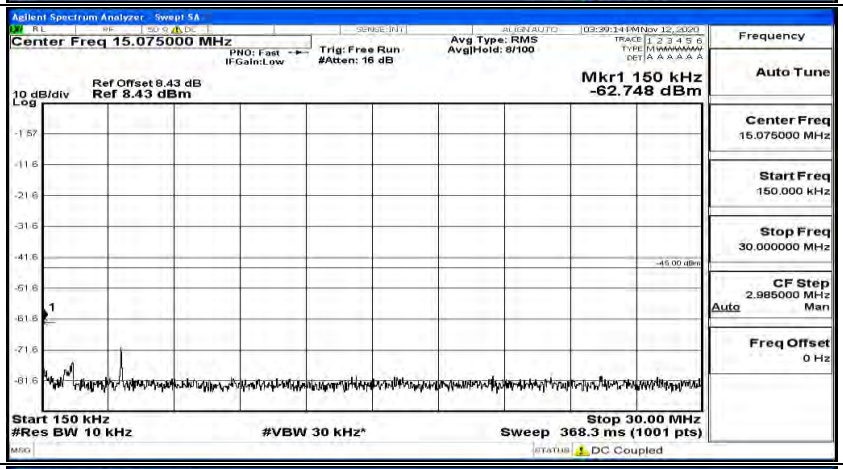
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

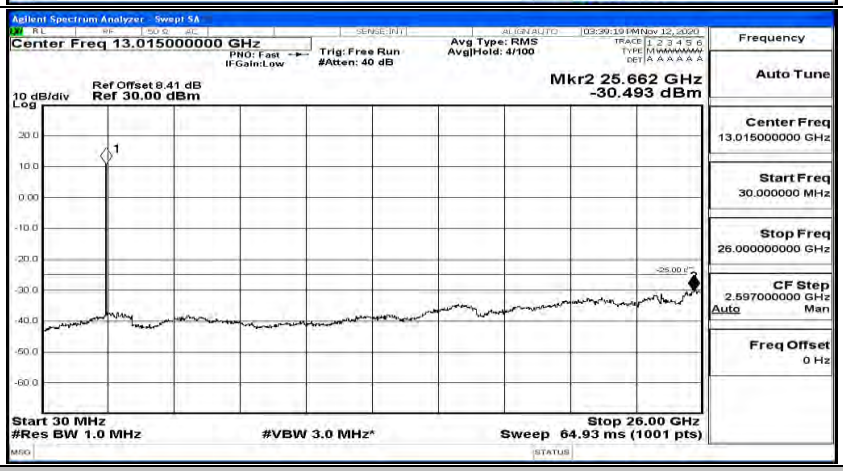




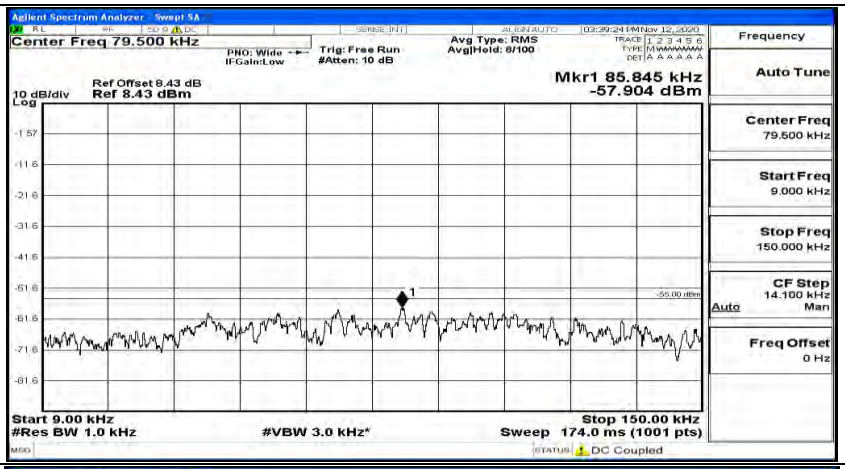
Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0

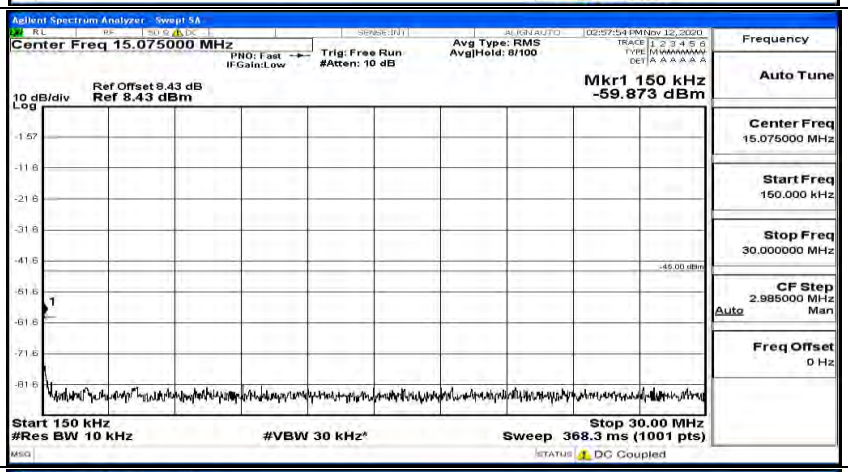






Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24





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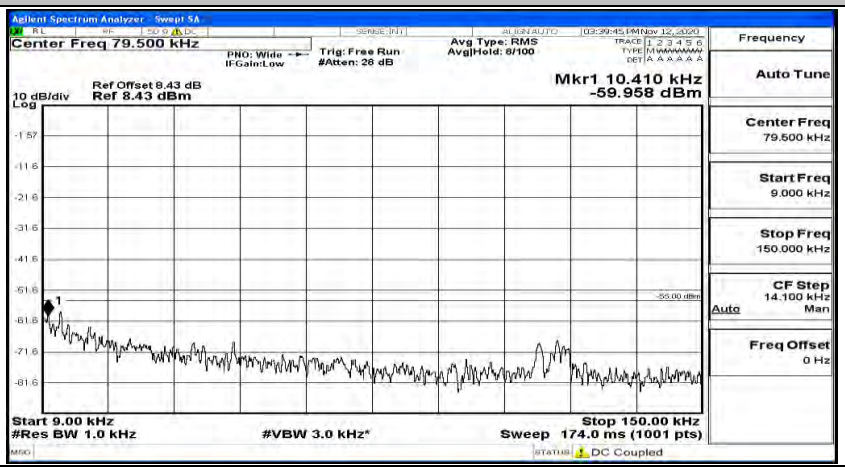

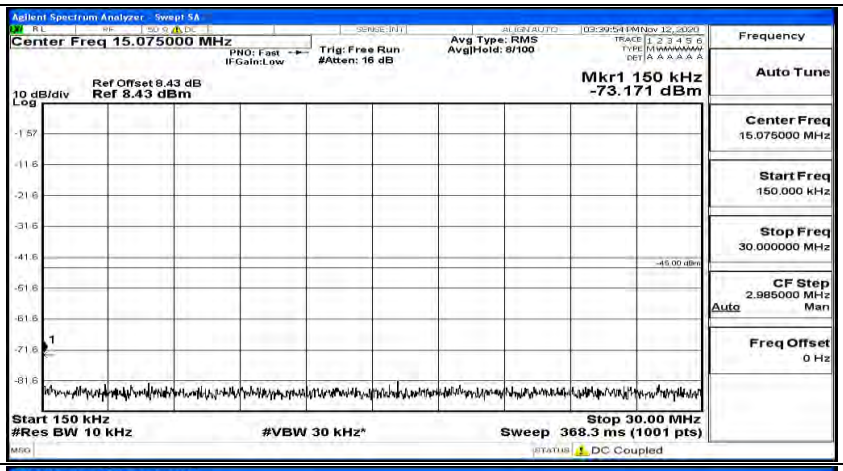
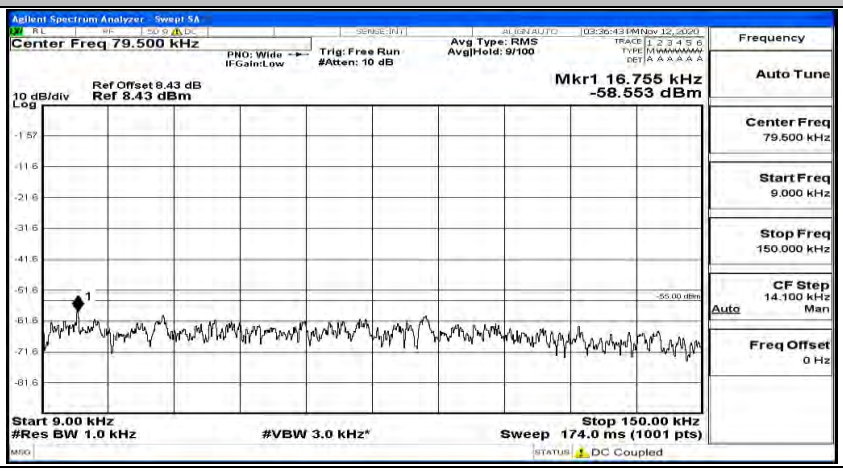
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0