

Appendix G: Test Data for E-UTRA Band 7

Product Name: Smartphone

Trade Mark: NSPRE

Test Model: NX-20PRO1

Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	54.2%
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]	Average Power [dBm]	Verdict
		Size	Offset	QPSK	16QAM	
QPSK / 16QAM	LCH	1	0	23.31	22.07	PASS
		1	12	23.45	22.25	PASS
		1	24	23.05	21.82	PASS
		12	0	22.31	21.56	PASS
		12	6	22.30	21.46	PASS
		12	13	22.15	21.33	PASS
		25	0	22.17	21.42	PASS
	MCH	1	0	23.70	22.76	PASS
		1	12	24.08	23.06	PASS
		1	24	23.95	22.68	PASS
		12	0	22.96	22.04	PASS
		12	6	23.02	22.01	PASS
		12	13	22.87	21.97	PASS
		25	0	23.00	22.09	PASS
	HCH	1	0	23.52	22.41	PASS
		1	12	23.73	22.68	PASS
		1	24	23.33	22.61	PASS
		12	0	22.85	21.91	PASS
		12	6	22.92	21.98	PASS
		12	13	22.87	22.05	PASS
		25	0	22.91	22.09	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	23.18	22.51	PASS
		1	24	24.21	23.17	PASS
		1	49	22.91	22.38	PASS
		25	0	22.22	21.19	PASS
		25	12	22.30	21.32	PASS
		25	25	22.19	21.19	PASS
		50	0	22.31	21.21	PASS
	MCH	1	0	23.55	22.97	PASS
		1	24	24.15	23.61	PASS
		1	49	23.45	22.77	PASS
		25	0	23.14	22.07	PASS
		25	12	23.21	22.19	PASS
		25	25	23.04	22.07	PASS
		50	0	23.09	22.17	PASS
	HCH	1	0	22.89	22.25	PASS
		1	24	23.64	23.05	PASS
		1	49	22.68	22.07	PASS
		25	0	22.79	21.80	PASS
		25	12	23.01	22.13	PASS
		25	25	22.96	22.00	PASS
		50	0	22.95	22.05	PASS

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	23.24	22.57	PASS
		1	37	23.93	23.43	PASS
		1	74	23.33	22.83	PASS
		37	0	22.28	21.31	PASS
		37	18	22.31	21.25	PASS
		37	38	22.35	21.36	PASS
		75	0	22.37	21.30	PASS
	MCH	1	0	23.78	23.13	PASS
		1	37	23.96	23.34	PASS
		1	74	23.63	23.04	PASS
		37	0	23.17	22.17	PASS
		37	18	23.24	22.11	PASS
		37	38	23.09	21.99	PASS
		75	0	23.10	22.15	PASS
	HCH	1	0	22.99	22.26	PASS
		1	37	23.91	23.22	PASS
		1	74	23.07	22.39	PASS
		37	0	22.53	21.55	PASS
		37	18	22.73	21.78	PASS
		37	38	22.86	21.79	PASS
		75	0	22.68	21.74	PASS

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	23.02	22.20	PASS
		1	49	23.29	22.15	PASS
		1	99	23.35	21.93	PASS
		50	0	22.32	21.25	PASS
		50	25	22.44	21.40	PASS
		50	50	22.49	21.53	PASS
		100	0	22.34	21.32	PASS
	MCH	1	0	23.86	22.82	PASS
		1	49	24.22	23.04	PASS
		1	99	23.75	22.57	PASS
		50	0	23.01	22.01	PASS
		50	25	23.17	22.13	PASS
		50	50	23.14	22.09	PASS
		100	0	23.07	22.15	PASS
	HCH	1	0	22.70	22.02	PASS
		1	49	23.56	22.93	PASS
		1	99	22.37	21.71	PASS
		50	0	22.84	21.71	PASS
		50	25	22.89	21.98	PASS
		50	50	22.95	21.88	PASS
		100	0	22.92	21.92	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	5.31	<13	PASS
	MCH	5.15	<13	PASS
	HCH	4.75	<13	PASS
16QAM	LCH	6.16	<13	PASS
	MCH	5.94	<13	PASS
	HCH	5.48	<13	PASS

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

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.14	<13	PASS
	MCH	5.11	<13	PASS
	HCH	4.66	<13	PASS
16QAM	LCH	5.93	<13	PASS
	MCH	5.93	<13	PASS
	HCH	5.50	<13	PASS

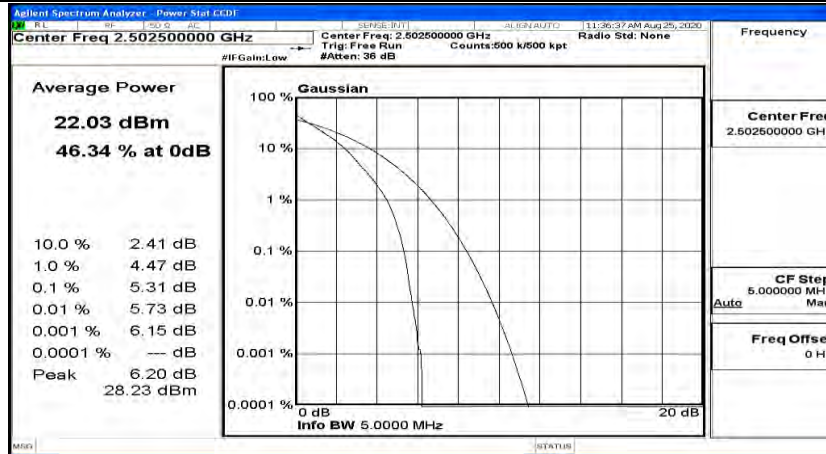
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	4.93	<13	PASS
	MCH	4.96	<13	PASS
	HCH	4.95	<13	PASS
16QAM	LCH	6.08	<13	PASS
	MCH	6.17	<13	PASS
	HCH	6.09	<13	PASS

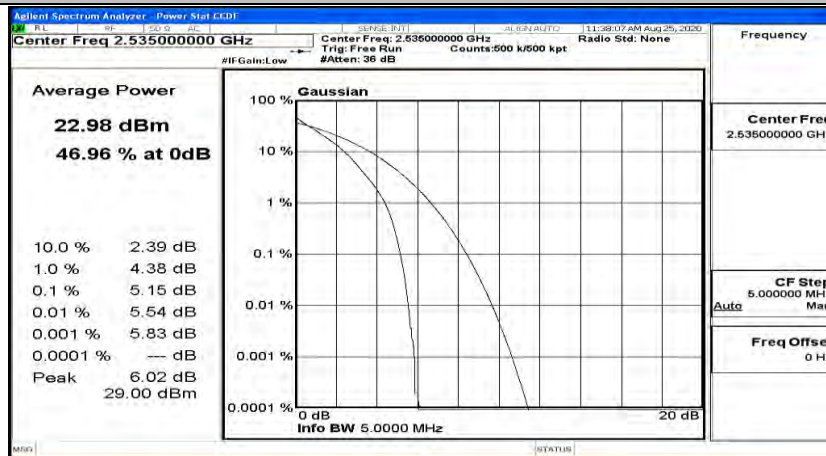
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)

Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
QPSK	LCH	5.7	<13	PASS
	MCH	5.78	<13	PASS
	HCH	5.76	<13	PASS
16QAM	LCH	6.68	<13	PASS
	MCH	6.71	<13	PASS
	HCH	6.65	<13	PASS

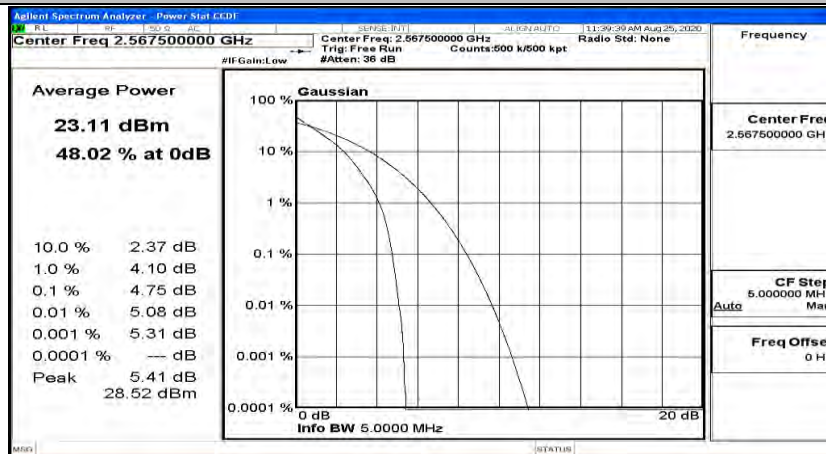
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



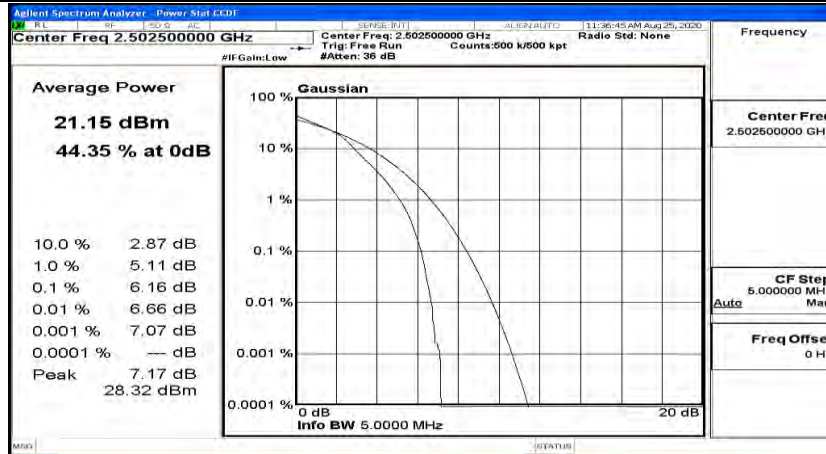
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



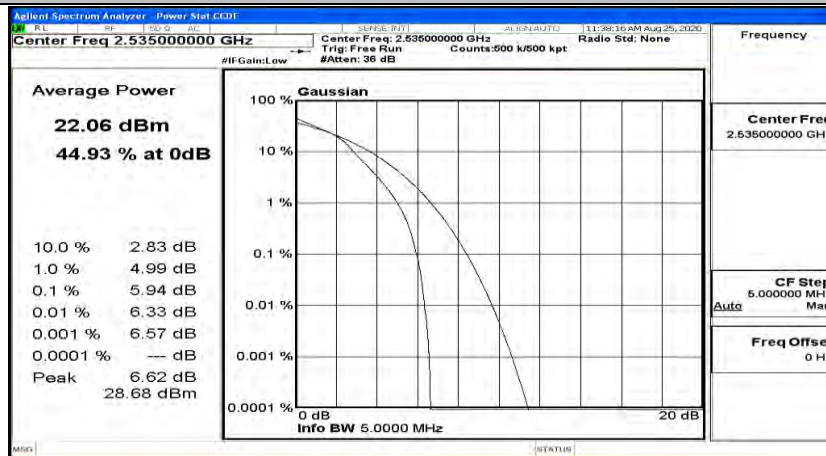
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



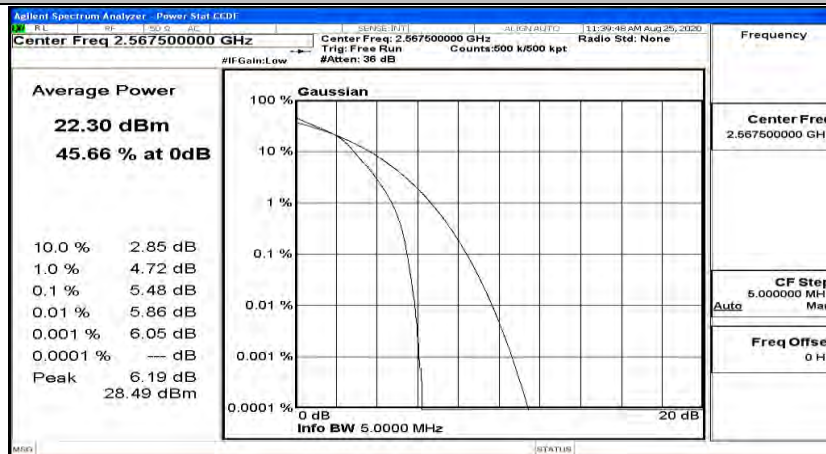
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_16QAM



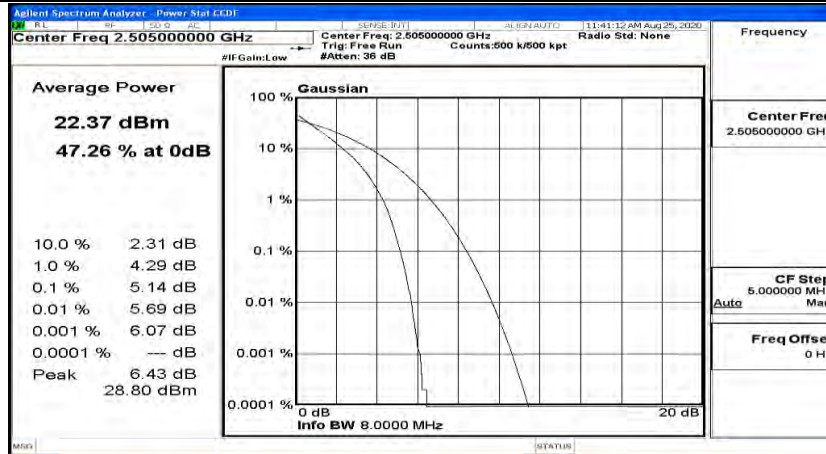
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_16QAM



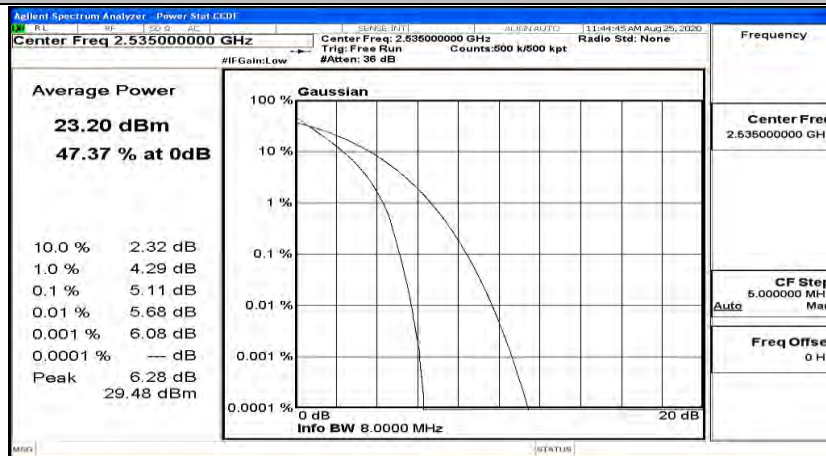
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_16QAM



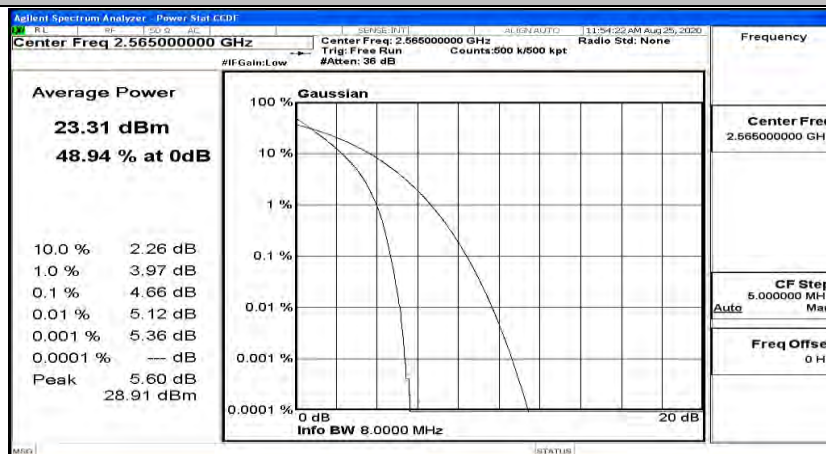
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _LCH_QPSK



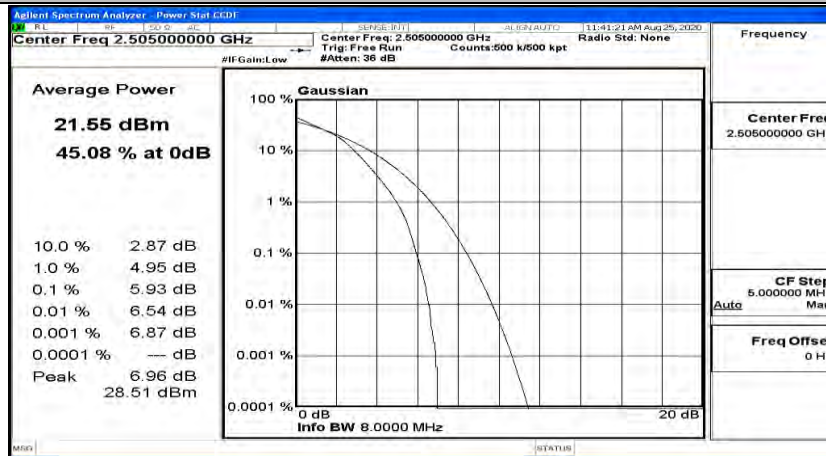
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _MCH_QPSK



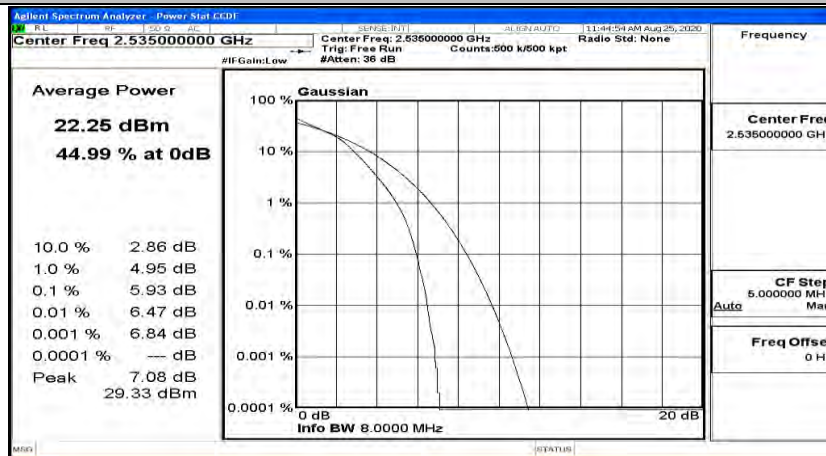
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz) _HCH_QPSK



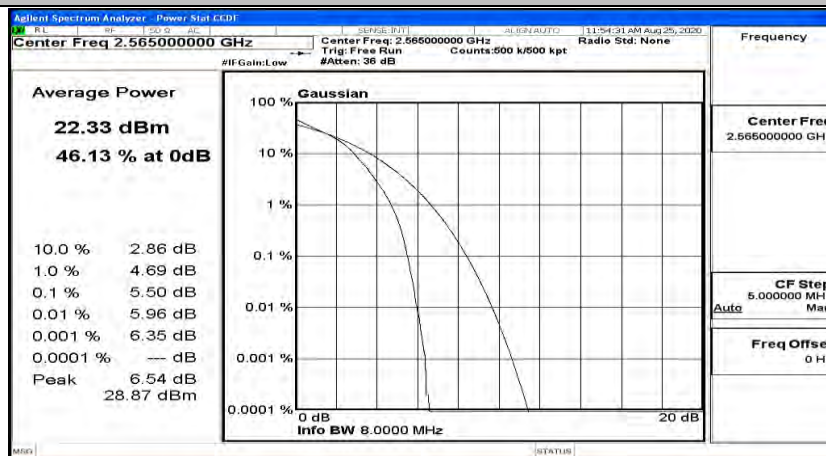
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



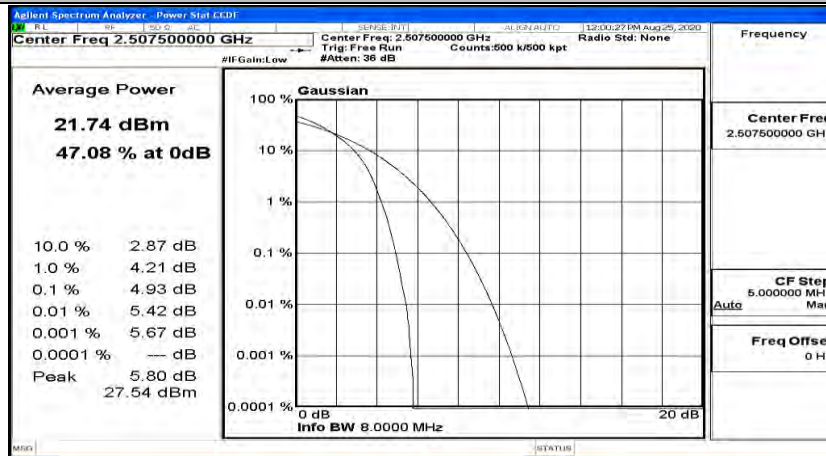
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



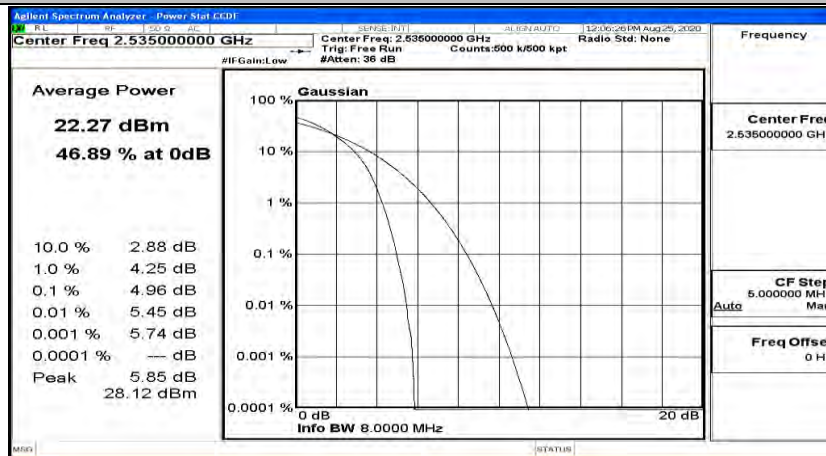
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



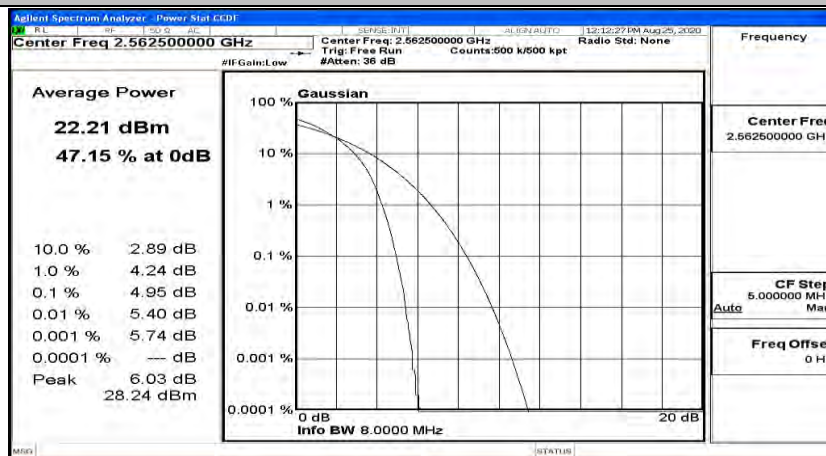
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



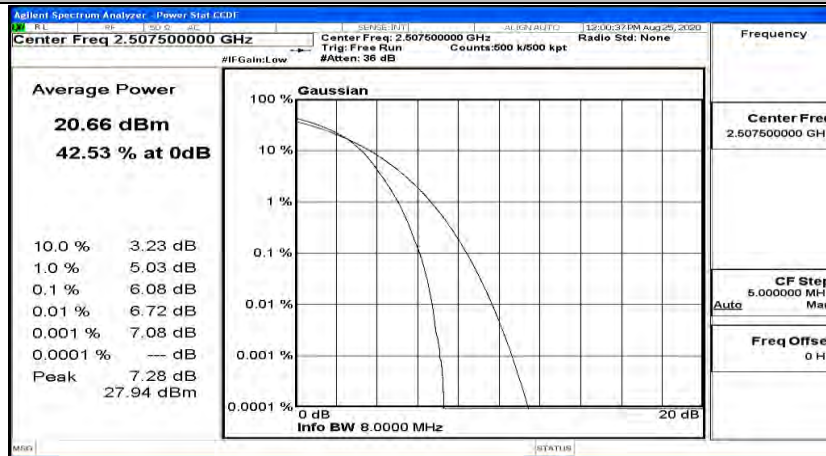
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



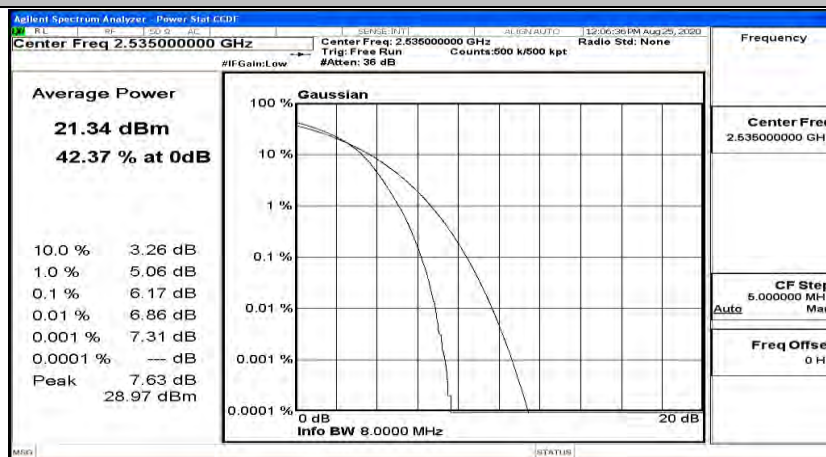
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



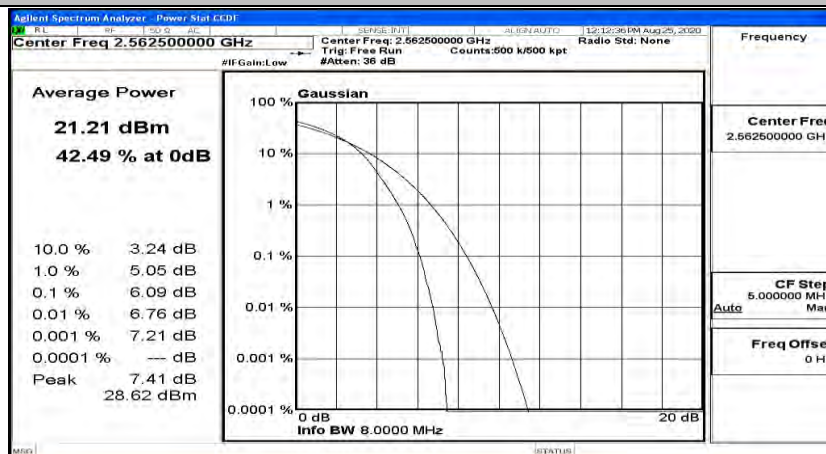
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



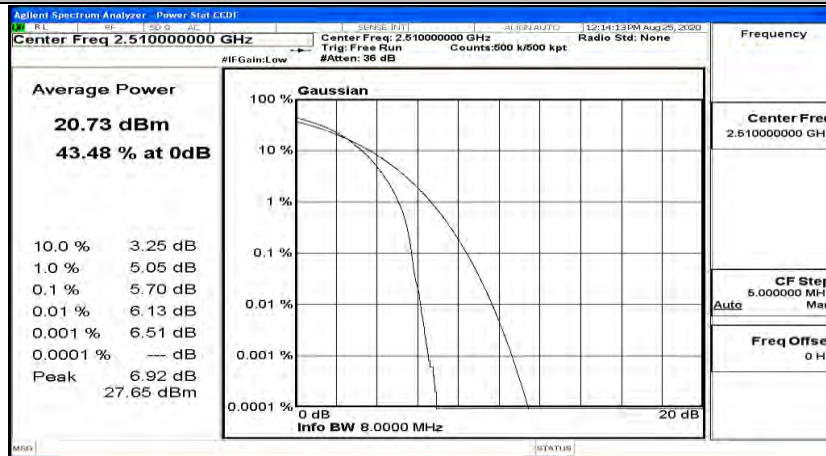
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



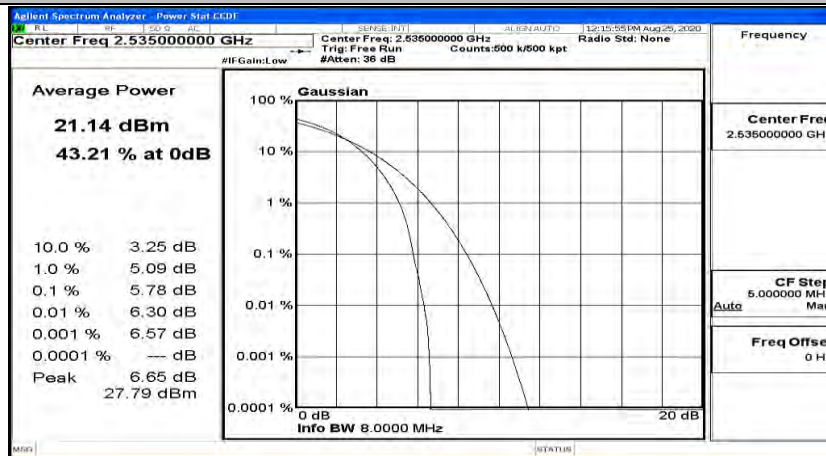
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



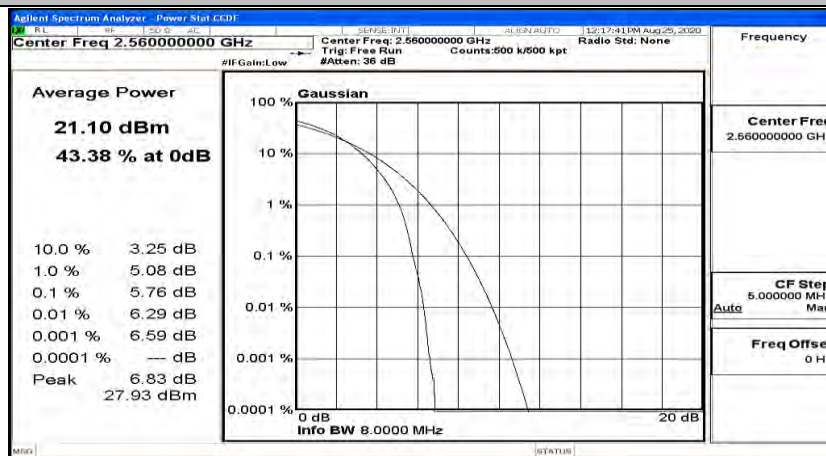
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



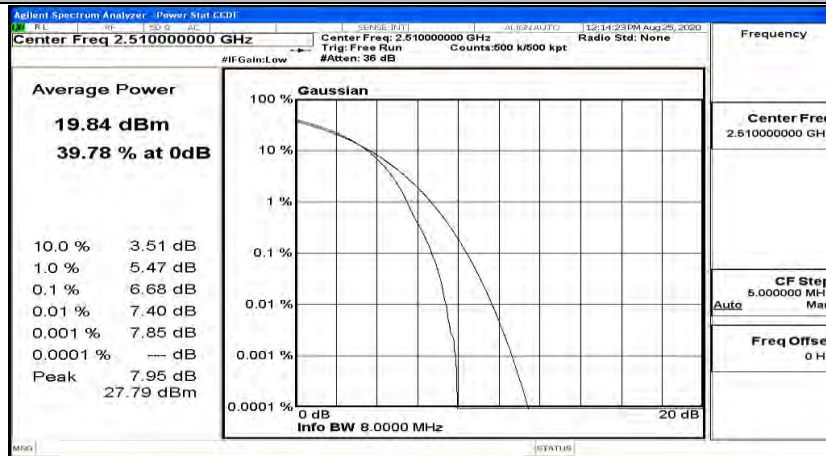
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



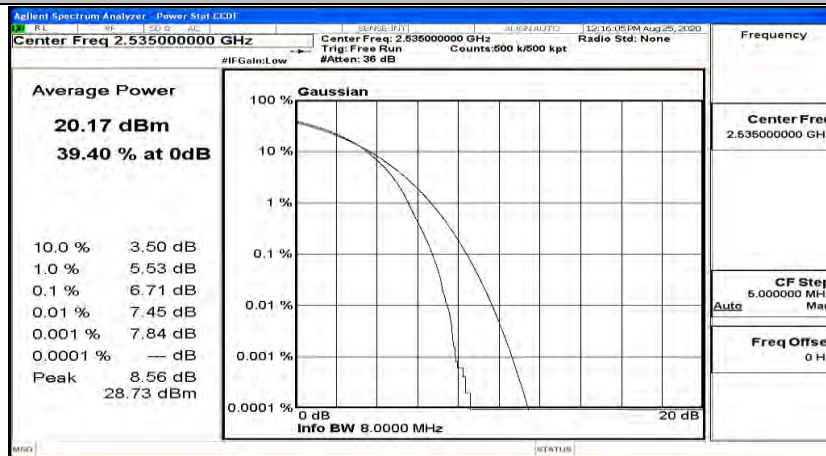
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



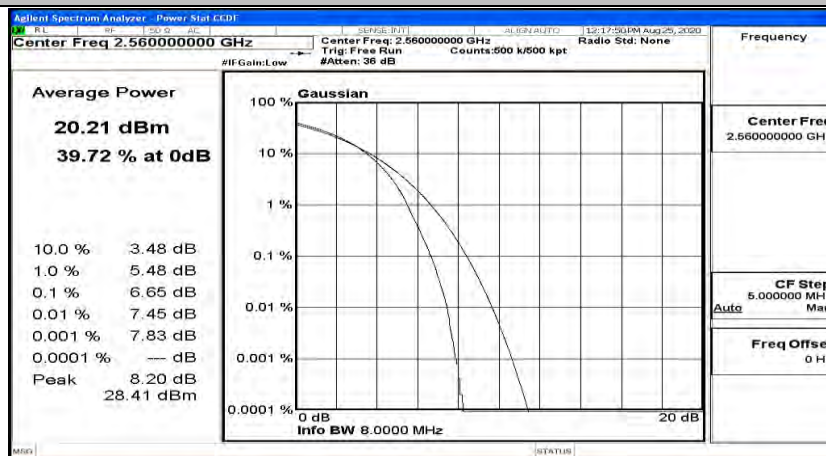
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

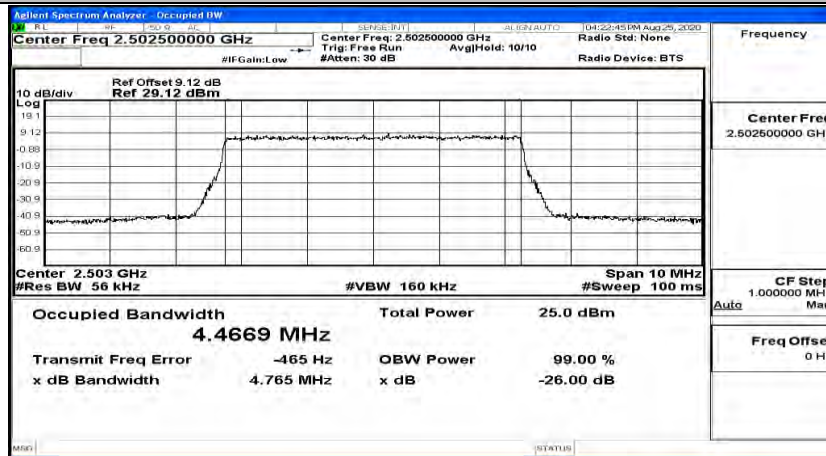
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	4.4669	4.765	PASS
	MCH	4.4799	4.773	PASS
	HCH	4.4678	4.826	PASS
16QAM	LCH	4.4699	4.756	PASS
	MCH	4.4703	4.826	PASS
	HCH	4.4788	4.842	PASS

EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	8.9194	9.489	PASS
	MCH	8.9164	9.389	PASS
	HCH	8.9402	9.464	PASS
16QAM	LCH	8.9215	9.435	PASS
	MCH	8.9337	9.391	PASS
	HCH	8.9215	9.399	PASS

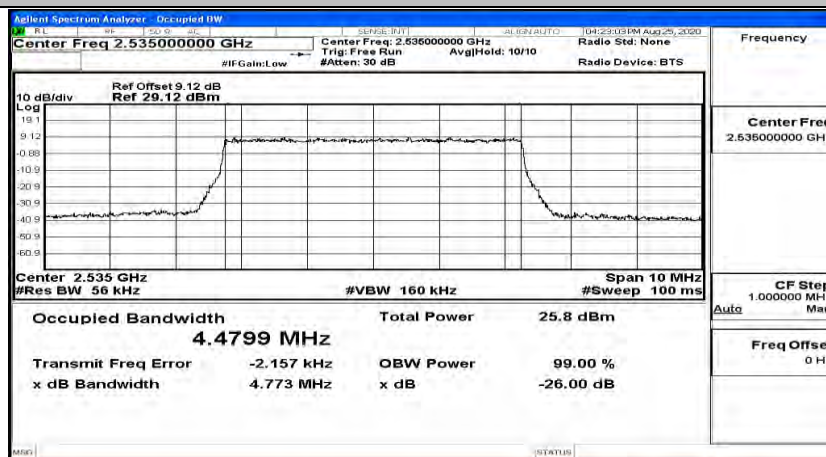
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	13.380	14.01	PASS
	MCH	13.382	14.07	PASS
	HCH	13.378	13.98	PASS
16QAM	LCH	13.367	14.06	PASS
	MCH	13.401	14.04	PASS
	HCH	13.372	14.11	PASS

EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	17.790	18.56	PASS
	MCH	17.847	18.65	PASS
	HCH	17.847	18.63	PASS
16QAM	LCH	17.808	18.54	PASS
	MCH	17.828	18.56	PASS
	HCH	17.827	18.61	PASS

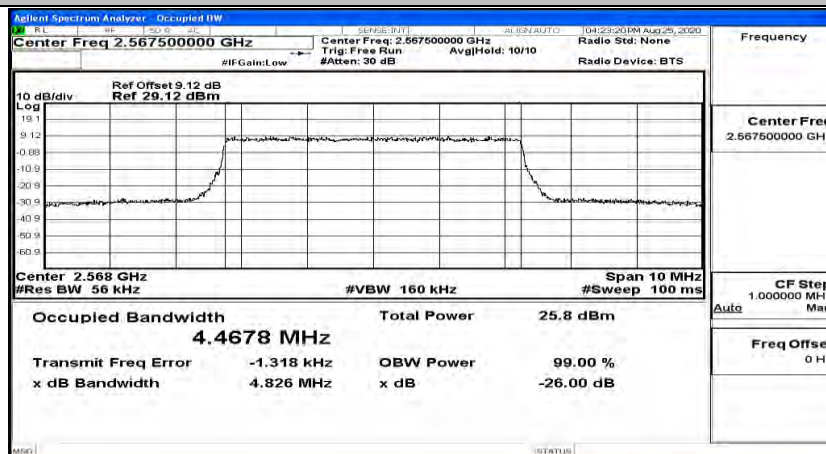
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_LCH_QPSK



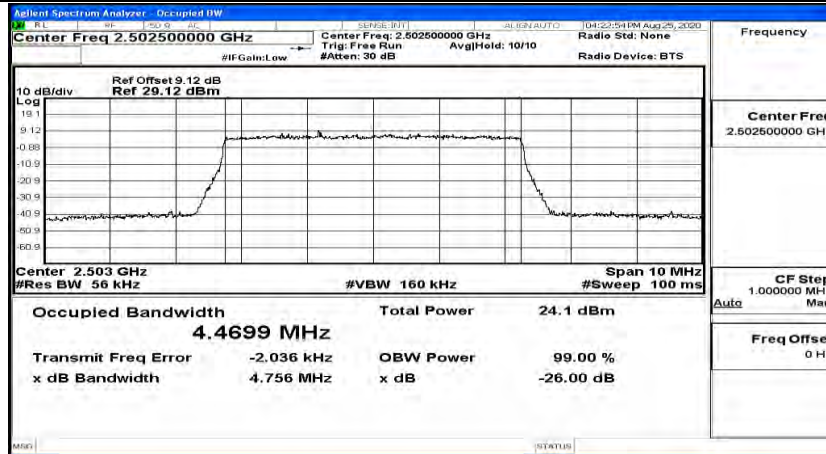
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_MCH_QPSK



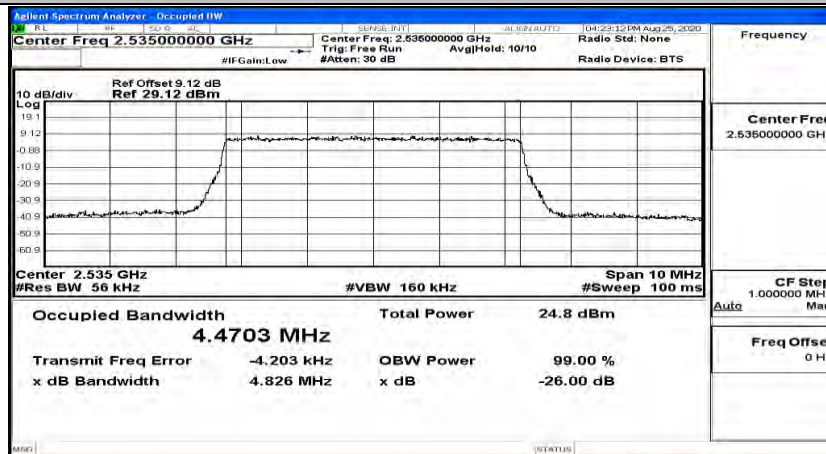
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz)_HCH_QPSK



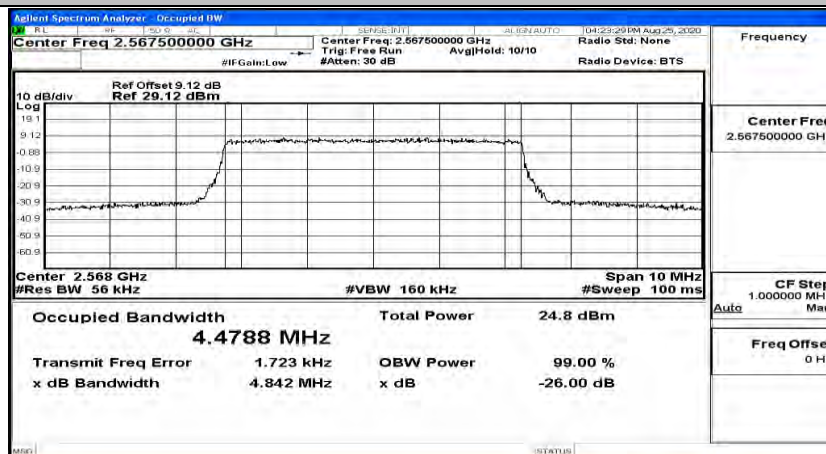
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz) _LCH_16QAM



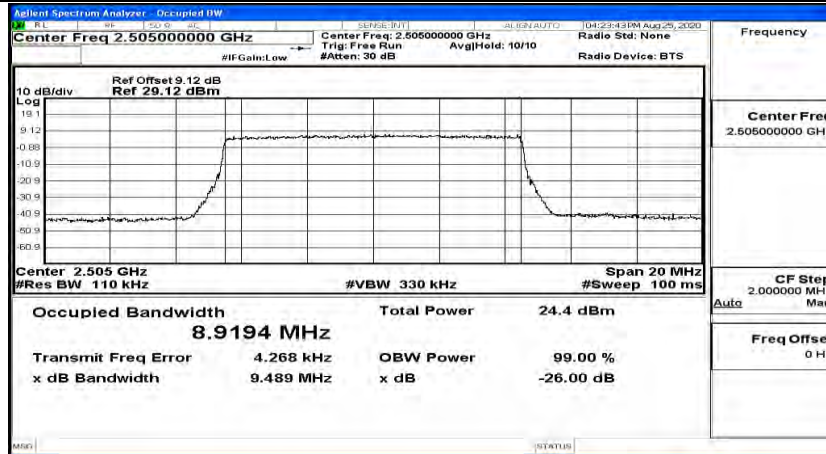
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz) _MCH_16QAM



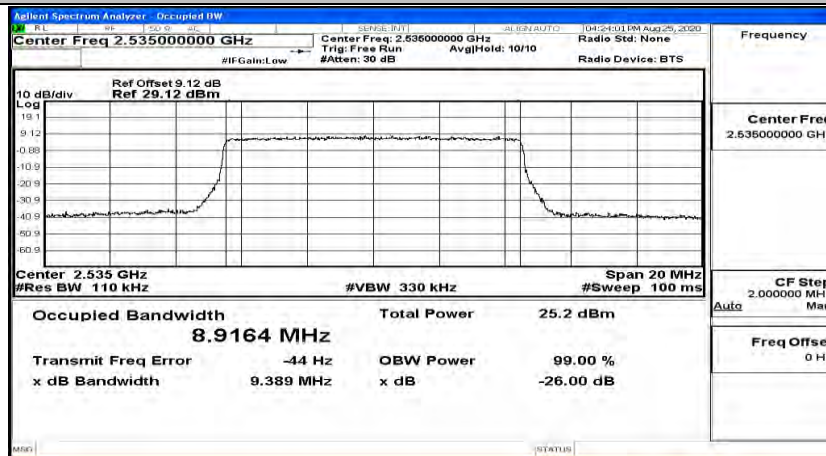
EBW & OBW Test Graph(s) (Channel Bandwidth: 5 MHz) _HCH_16QAM



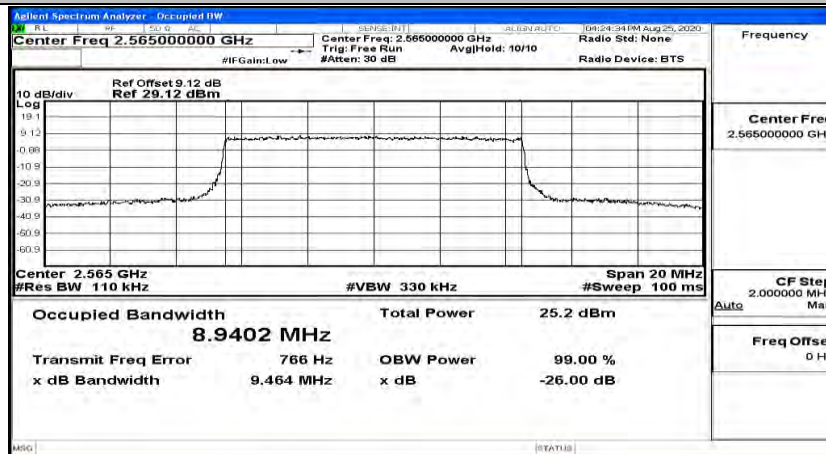
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK



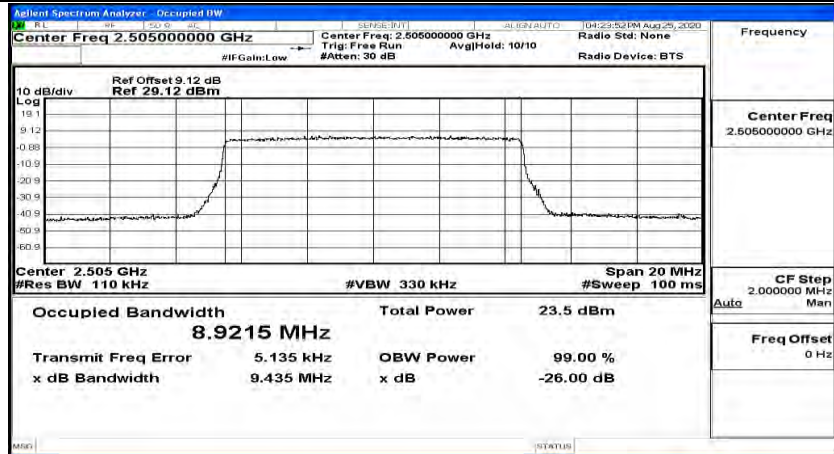
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_QPSK



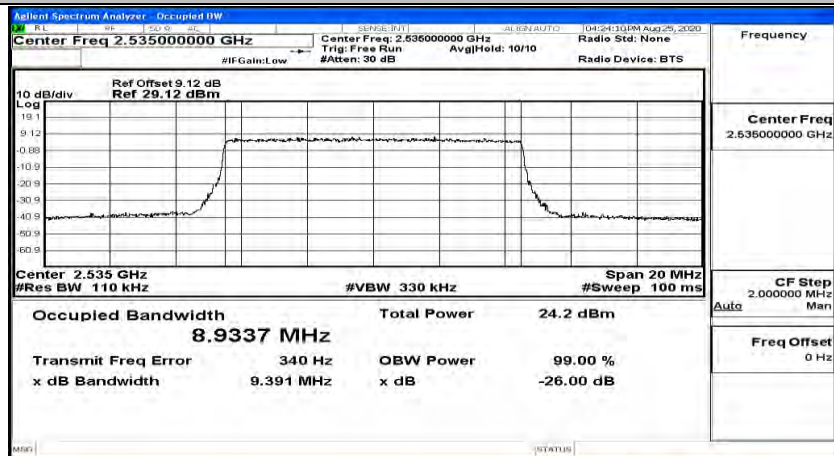
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_QPSK



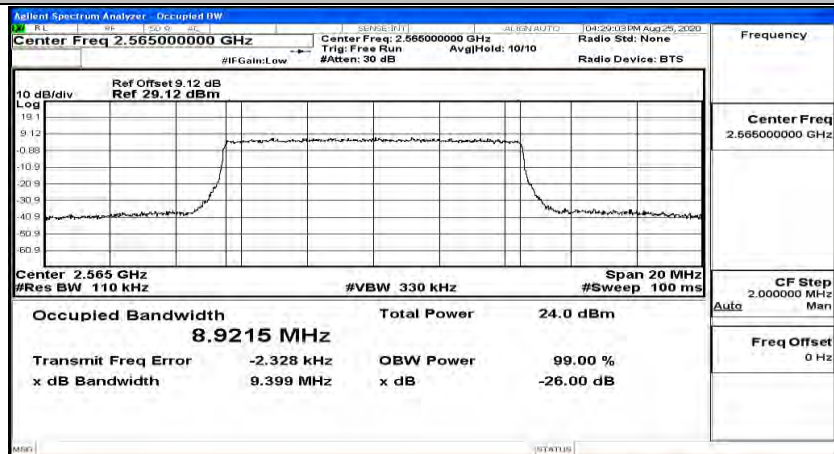
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_16QAM



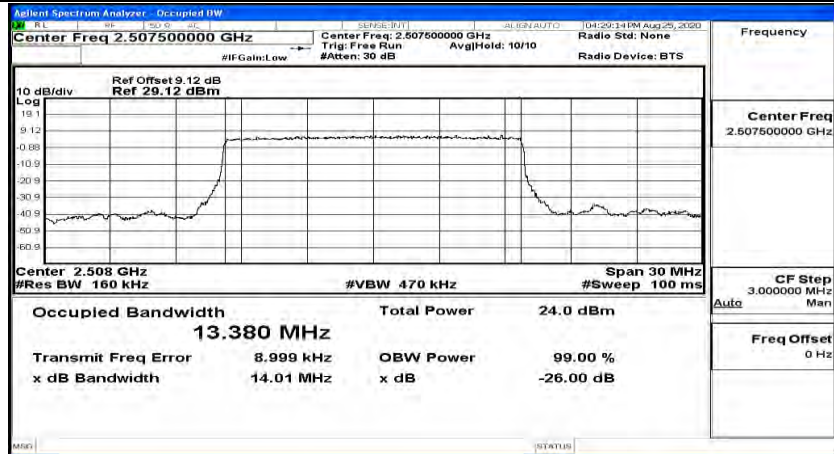
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM



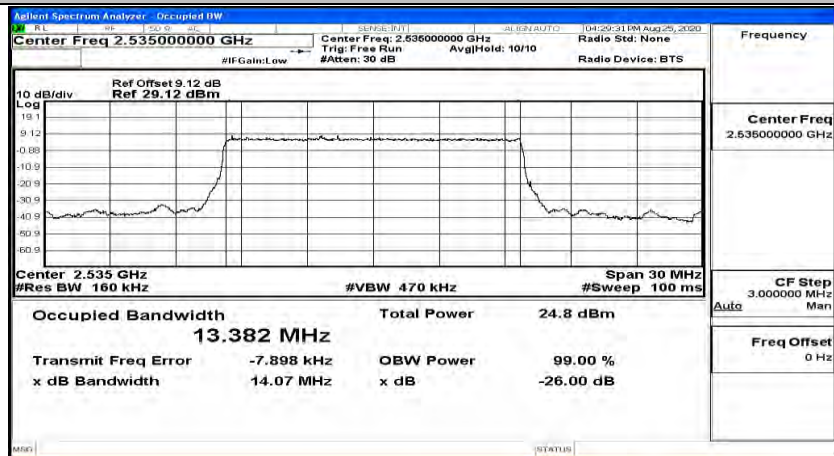
EBW & OBW Test Graph(s) (Channel Bandwidth: 10 MHz)_HCH_16QAM



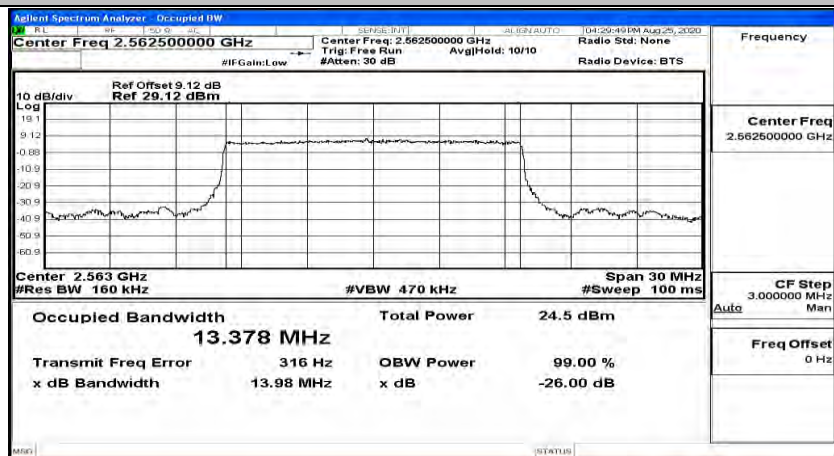
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK



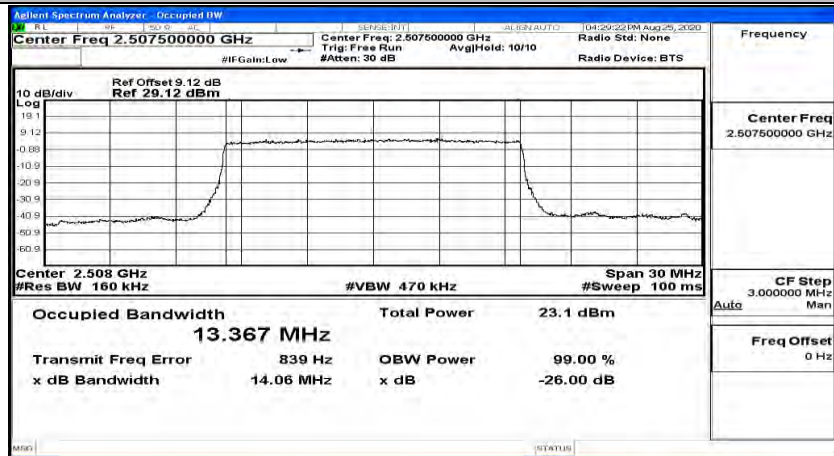
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_QPSK



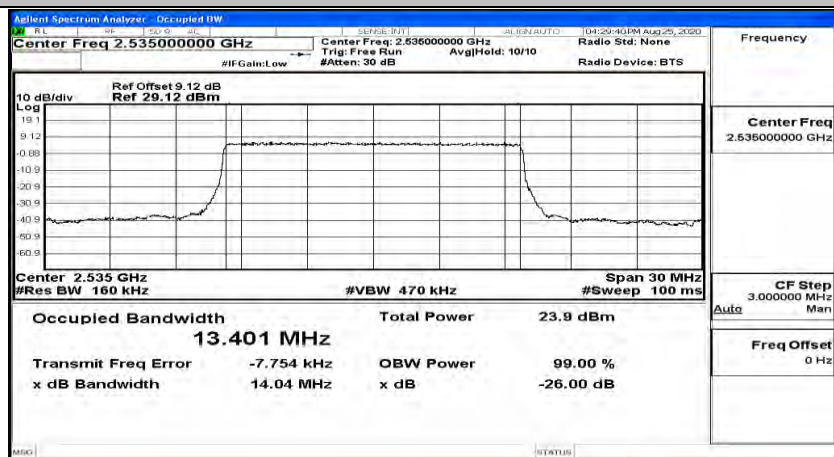
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK



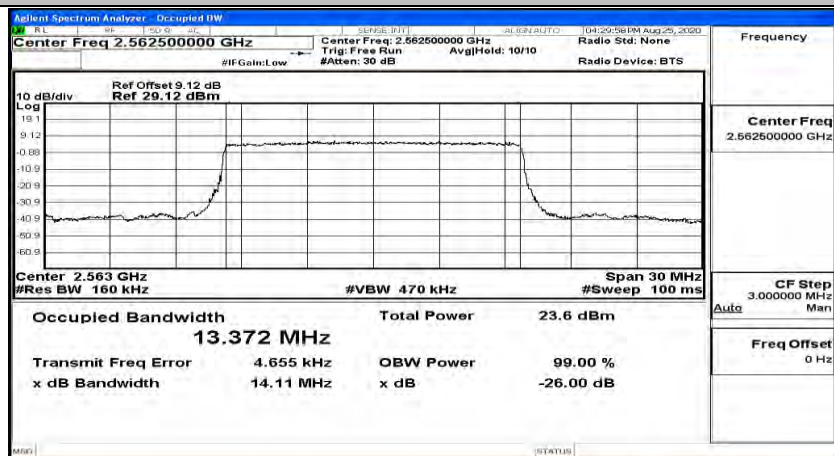
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_16QAM



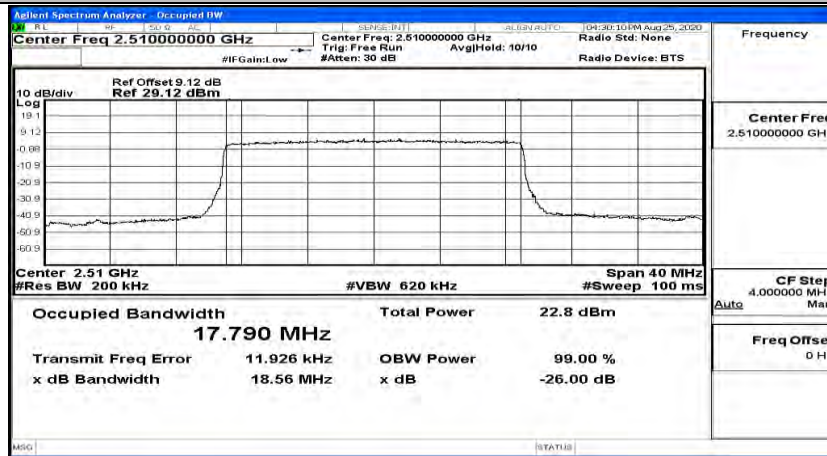
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_MCH_16QAM



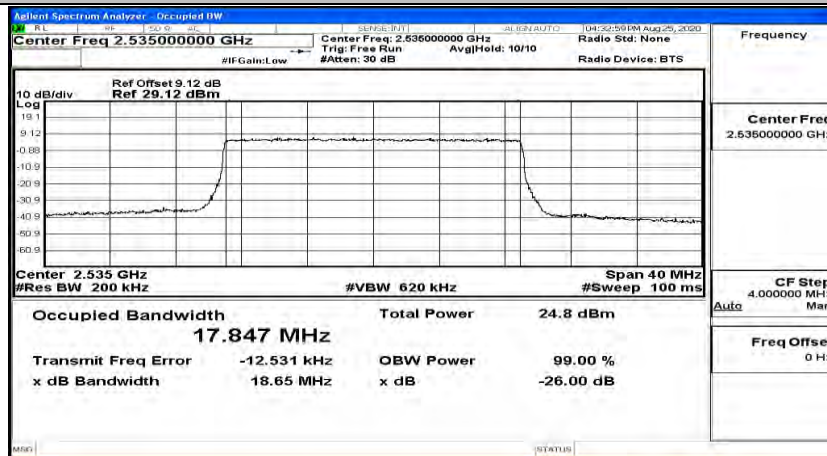
EBW & OBW Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_16QAM



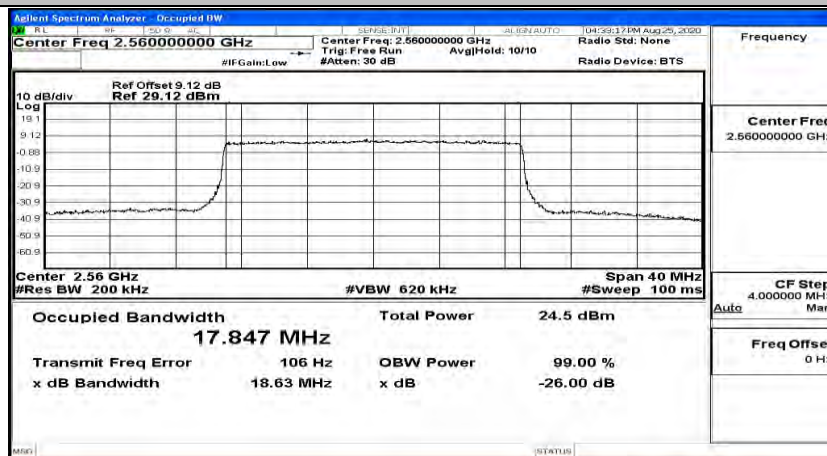
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_QPSK



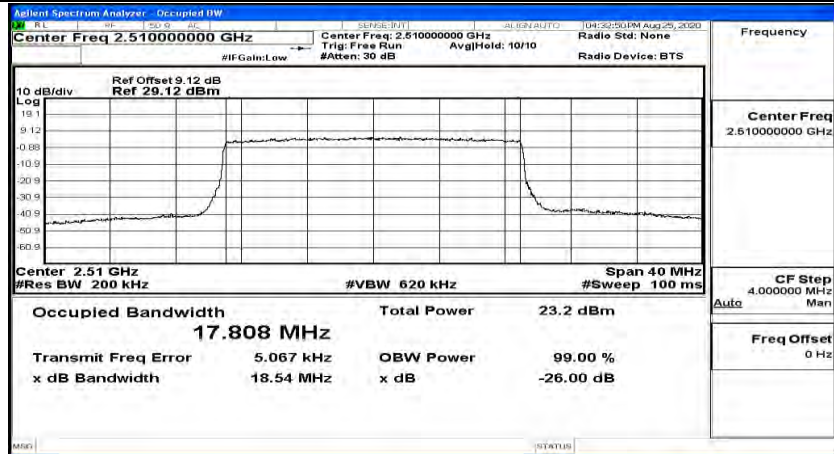
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_MCH_QPSK



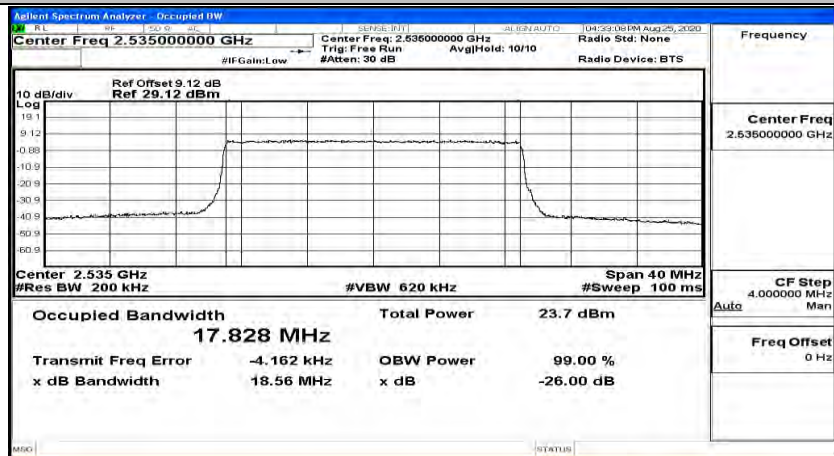
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_QPSK



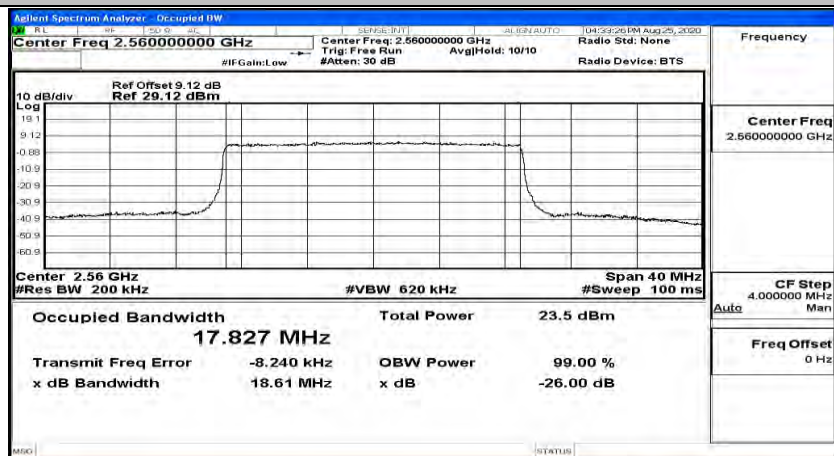
EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_LCH_16QAM



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

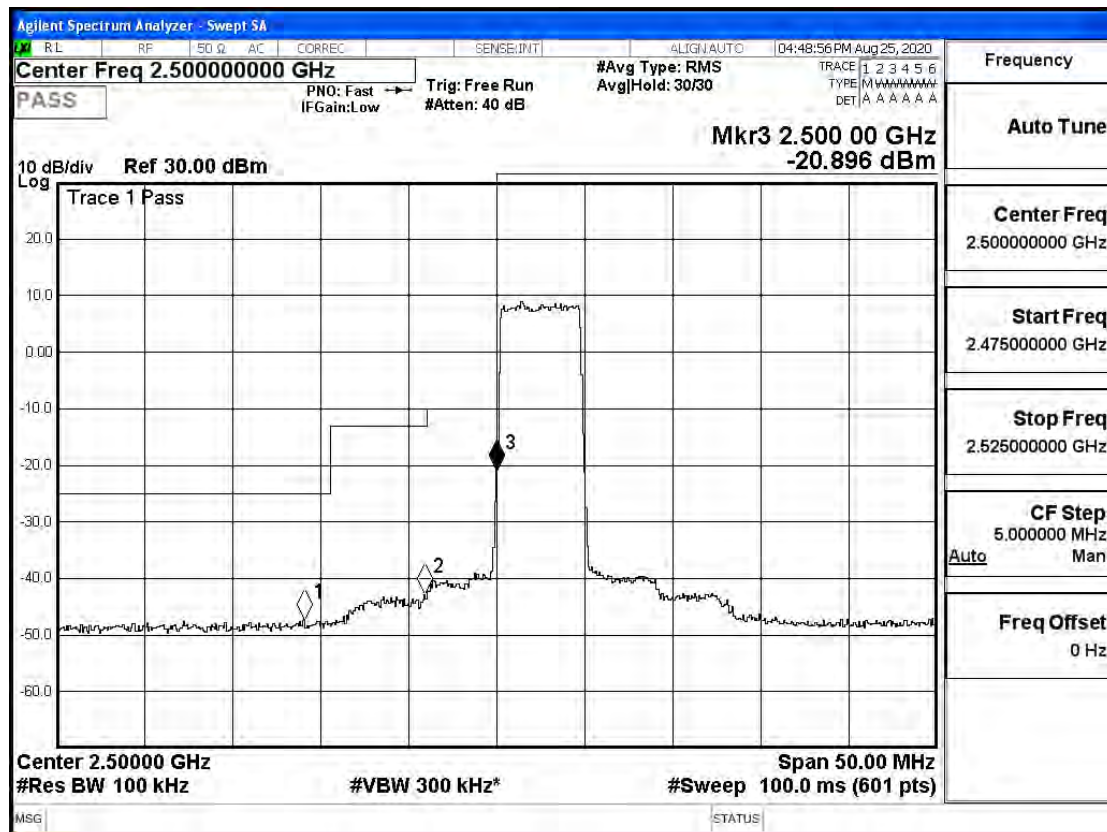


EBW & OBW Test Graph(s) (Channel Bandwidth:20 MHz)_HCH_16QAM

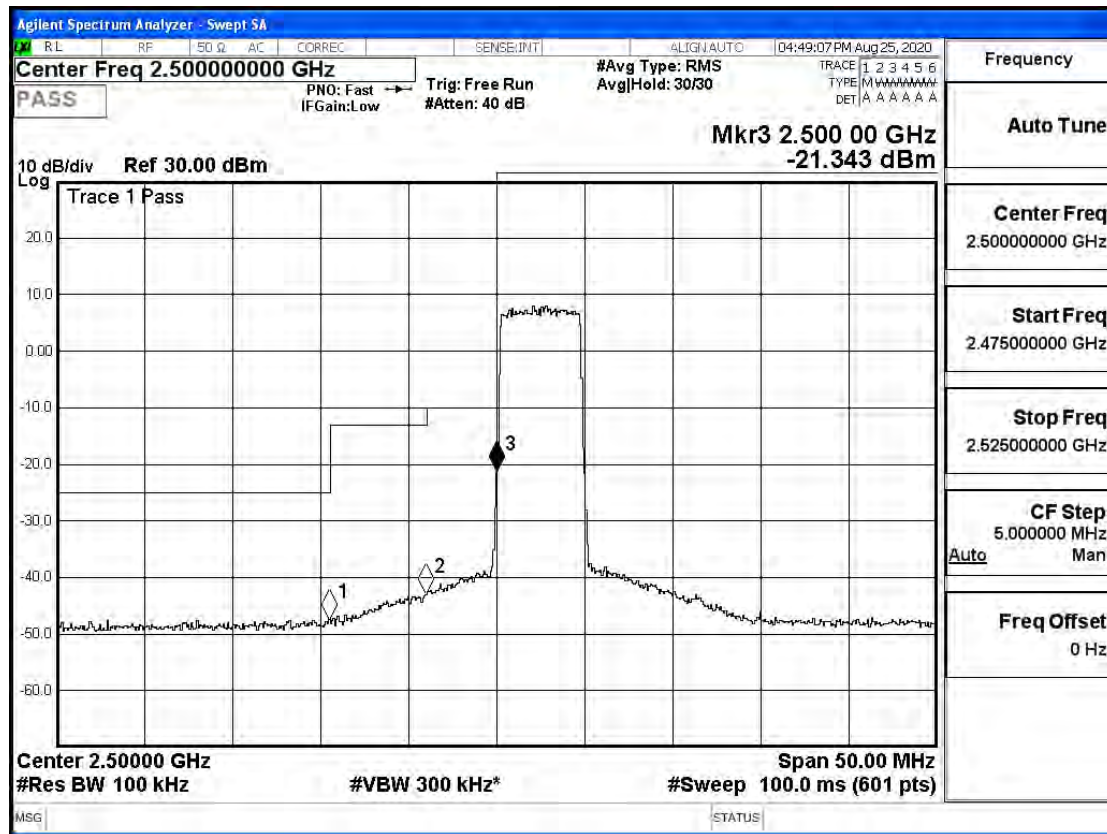


G.4 Band Edge

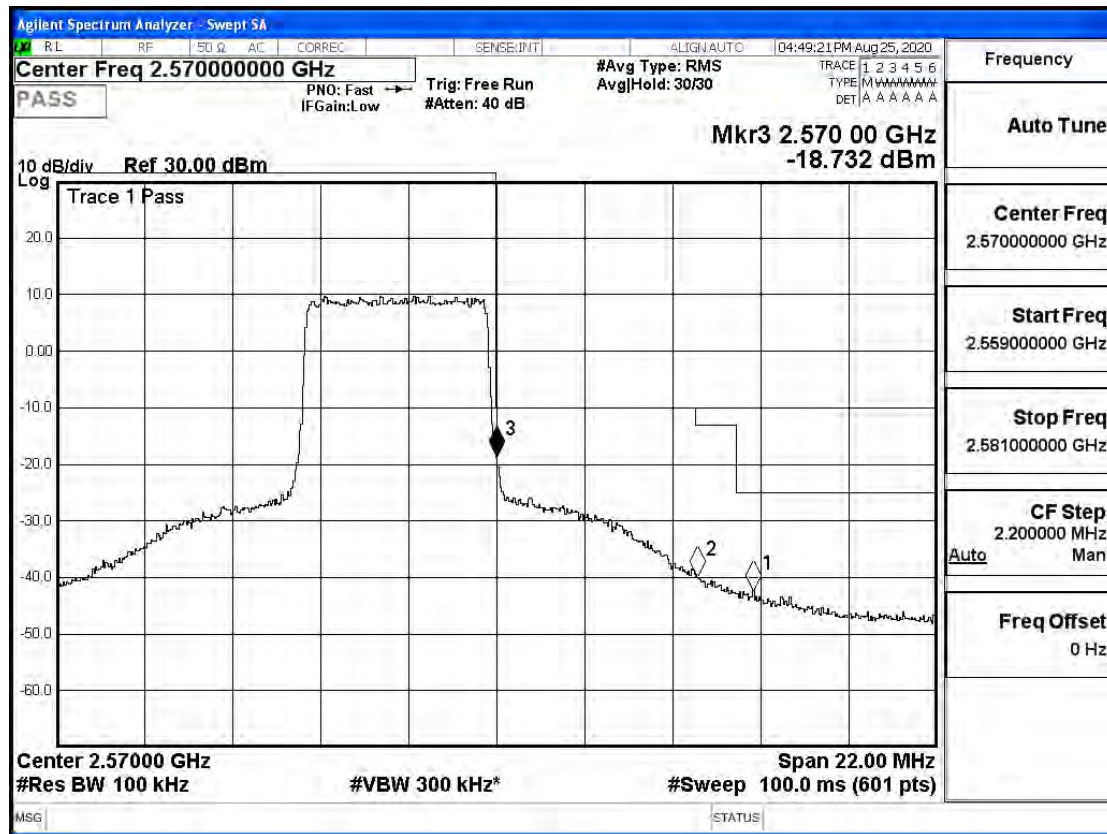
Item Name: Band edges compliance	Band: Band7
Bandwidth: 5MHz	Channel 20775
RB: 25RB#0	Modulation: QPSK
Result: -47.29,-42.86,-20.90	PASS



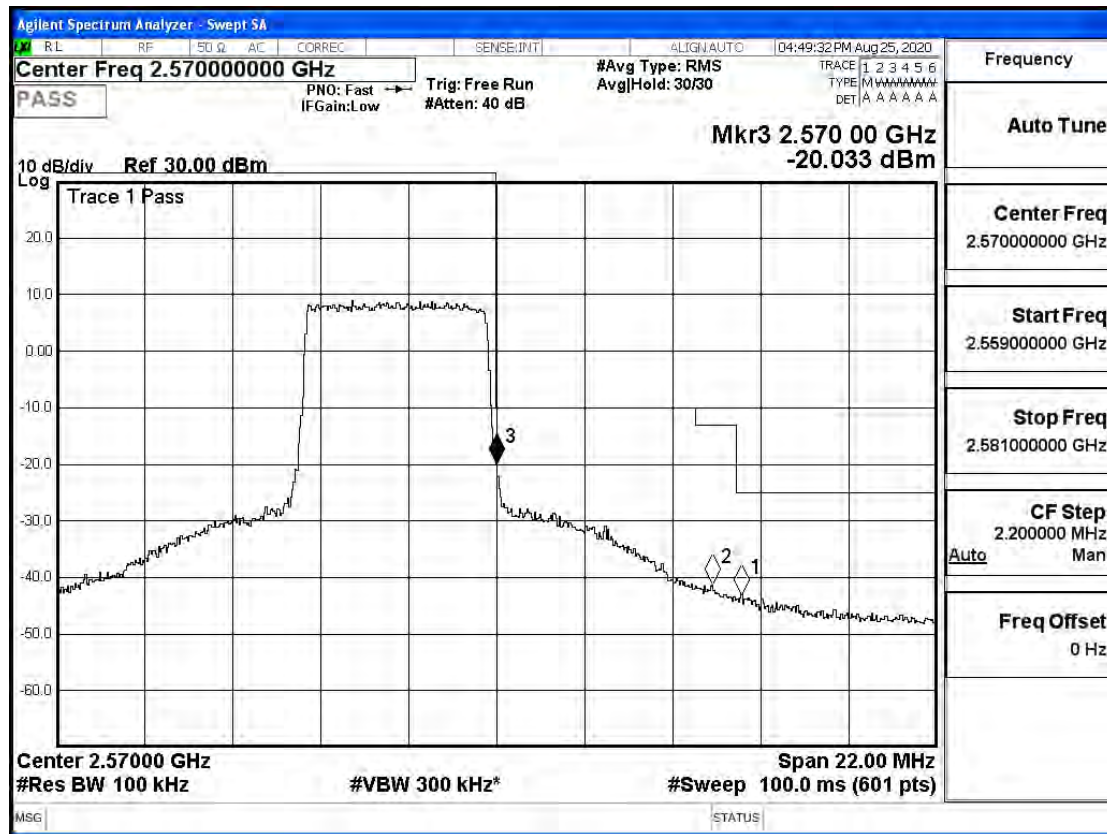
Item Name: Band edges compliance	Band: Band7
Bandwidth: 5MHz	Channel 20775
RB: 25RB#0	Modulation: 16QAM
Result: -47.49,-43.05,-21.34	PASS



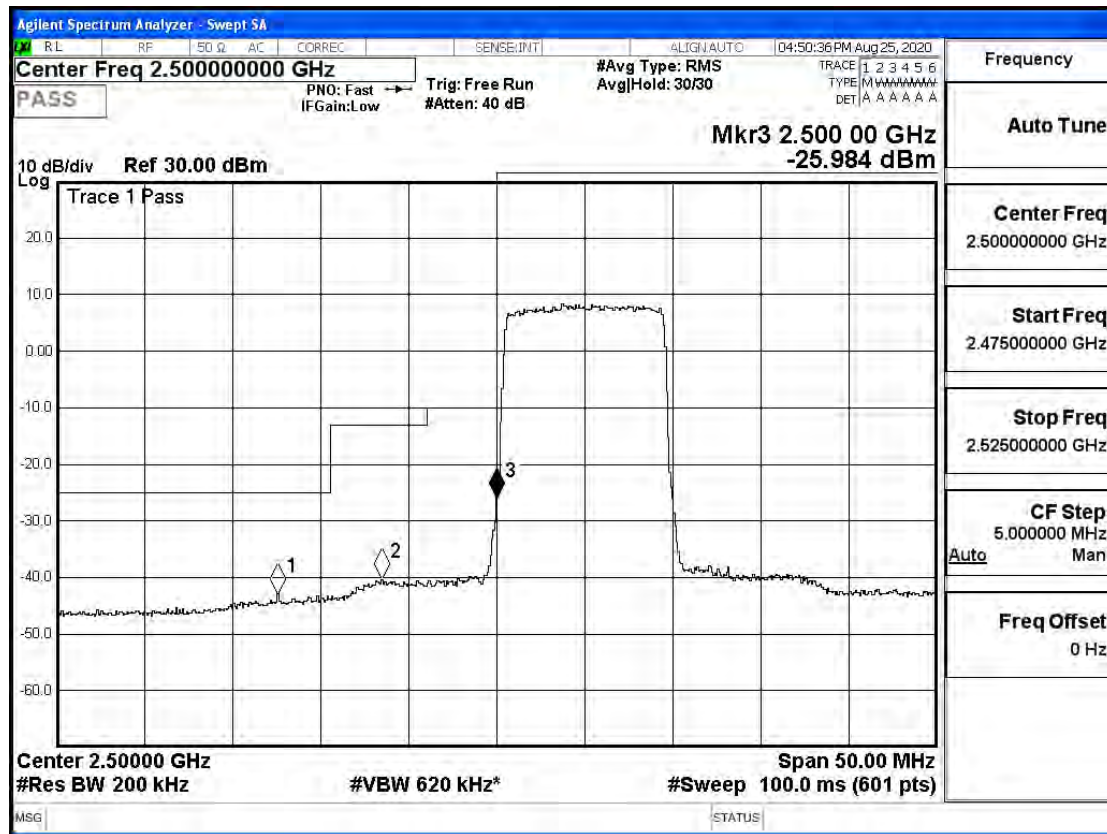
Item Name: Band edges compliance	Band: Band7
Bandwidth: 5MHz	Channel 21425
RB: 25RB#0	Modulation: QPSK
Result: -42.34,-39.96,-18.73	PASS



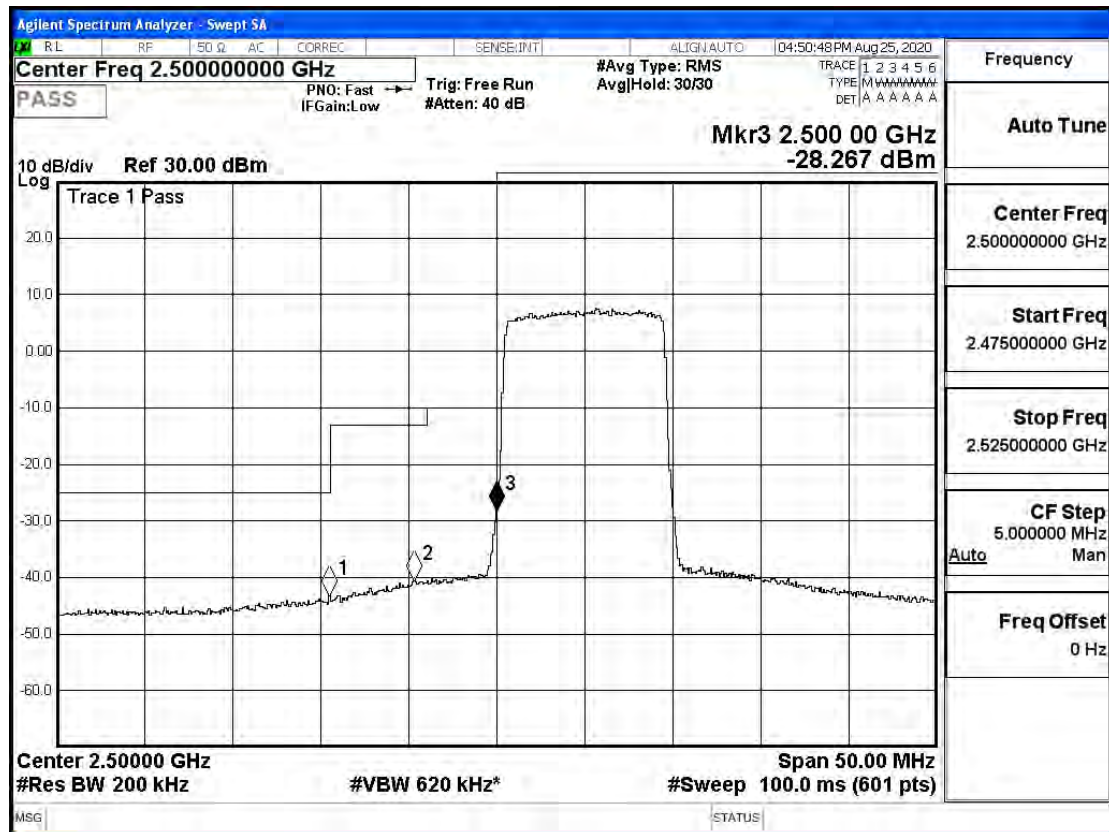
Item Name: Band edges compliance	Band: Band7
Bandwidth: 5MHz	Channel 21425
RB: 25RB#0	Modulation: 16QAM
Result: -43.06,-41.33,-20.03	PASS



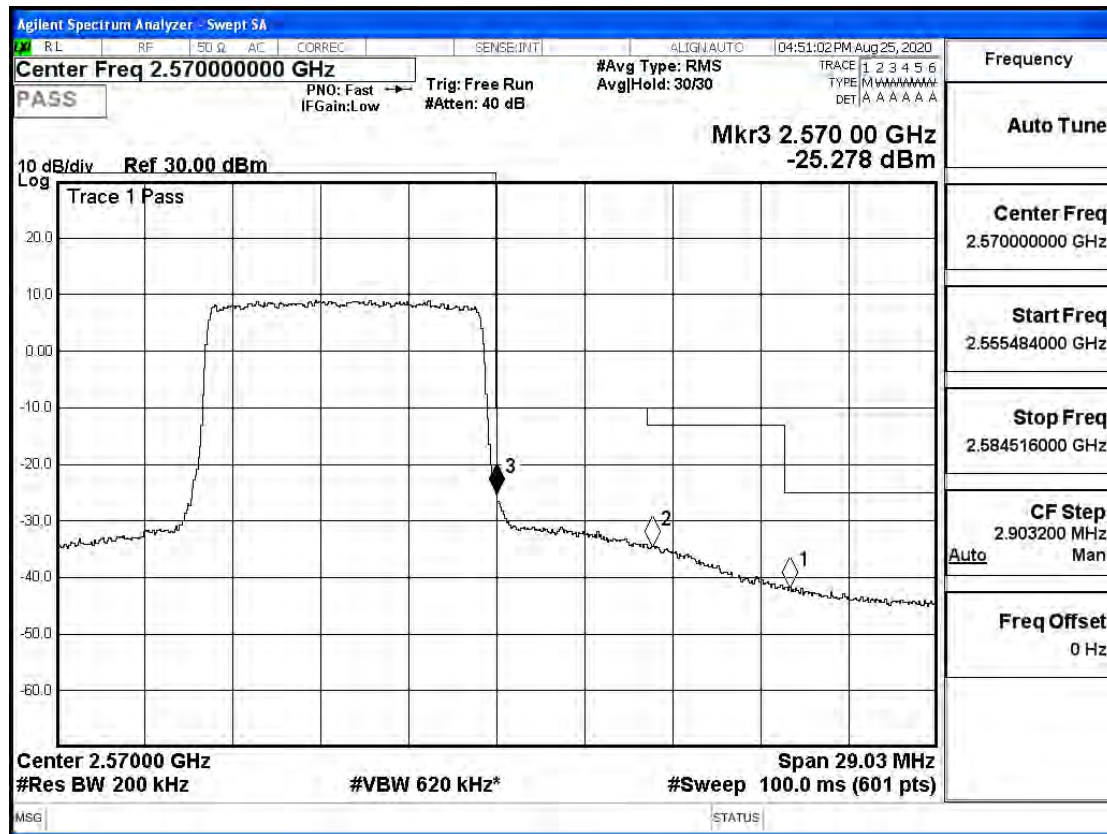
Item Name: Band edges compliance	Band: Band7
Bandwidth: 10MHz	Channel 20800
RB: 50RB#0	Modulation: QPSK
Result: -42.88,-40.34,-25.98	PASS



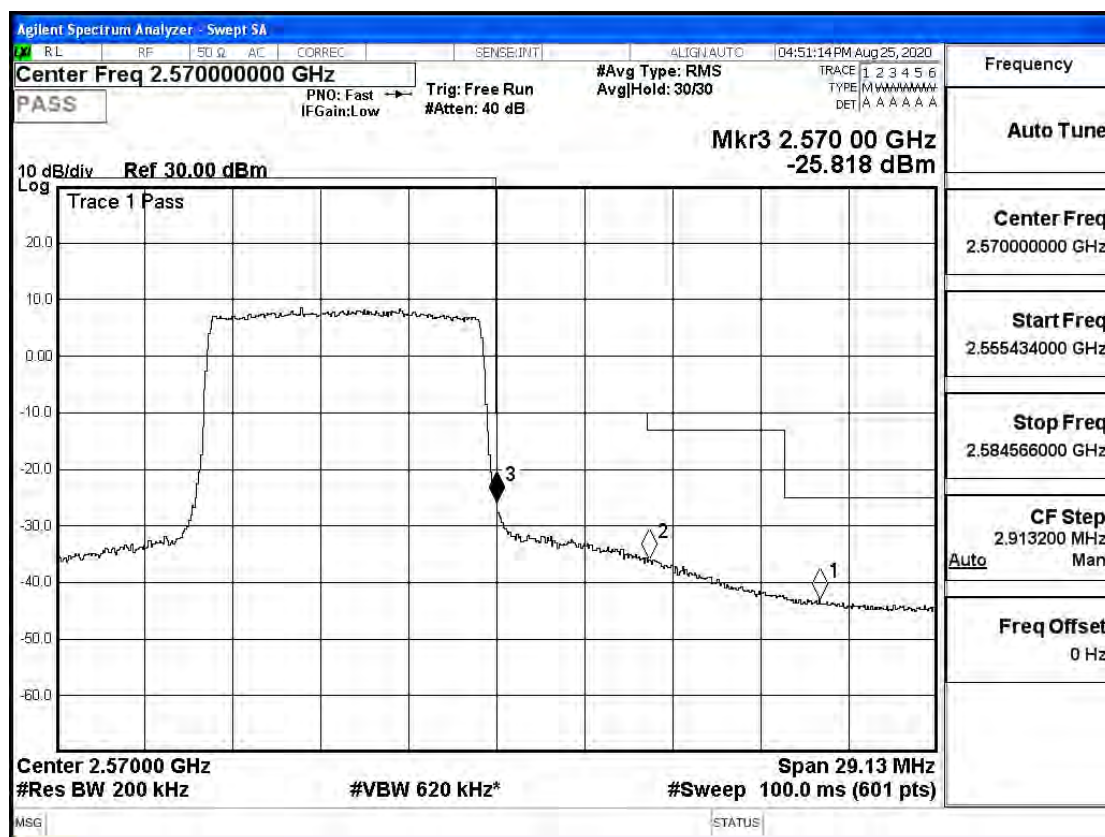
Item Name: Band edges compliance	Band: Band7
Bandwidth: 10MHz	Channel 20800
RB: 50RB#0	Modulation: 16QAM
Result: -43.34,-40.66,-28.27	PASS



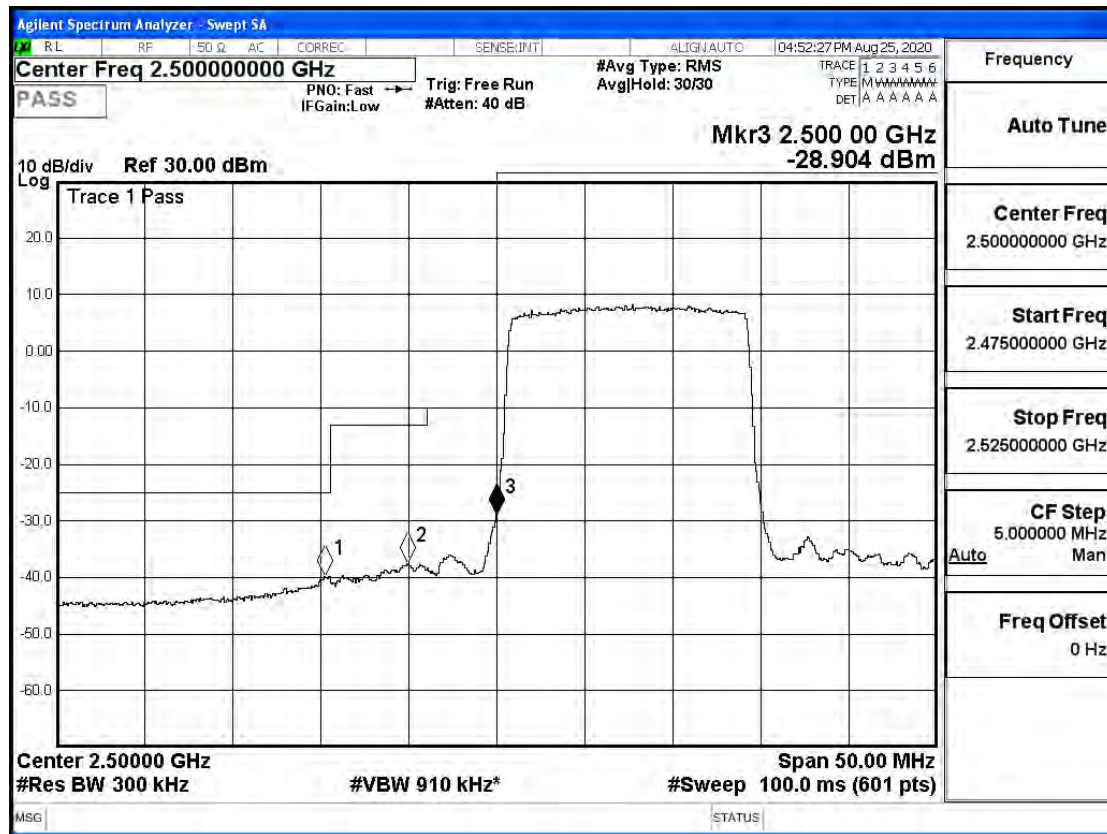
Item Name: Band edges compliance	Band: Band7
Bandwidth: 10MHz	Channel 21400
RB: 50RB#0	Modulation: QPSK
Result: -41.75,-34.55,-25.28	PASS



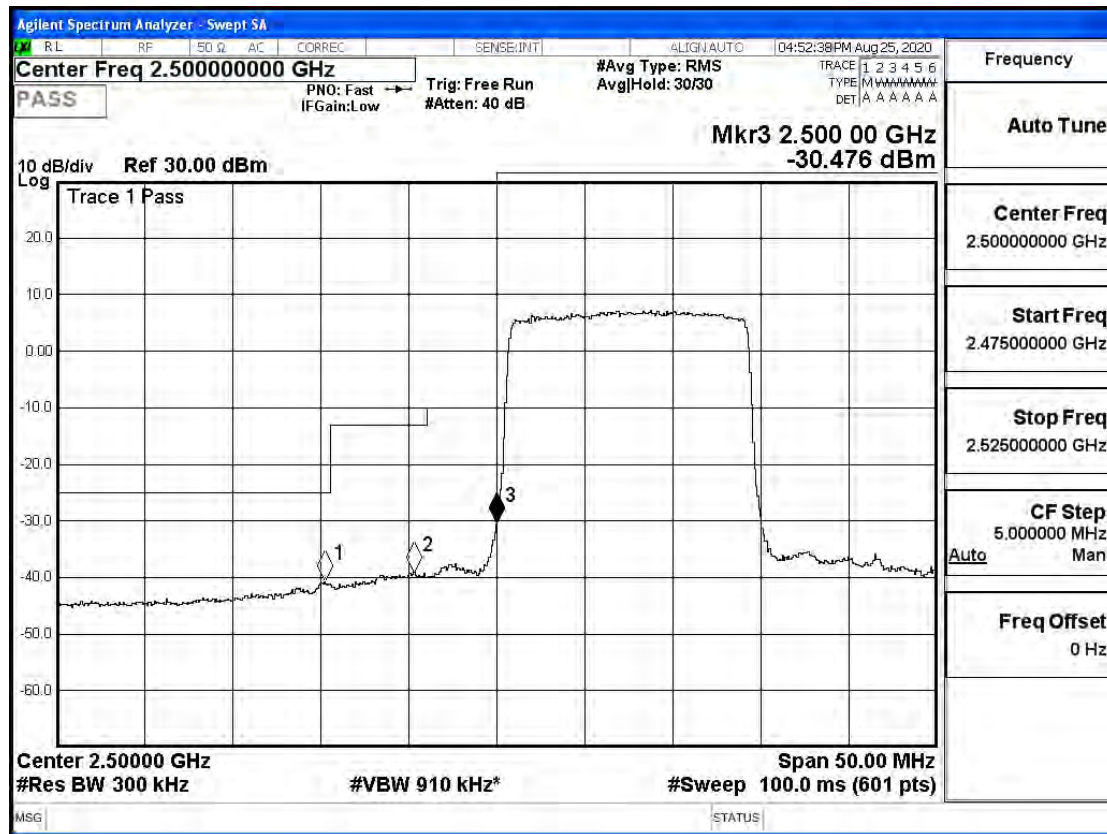
Item Name: Band edges compliance	Band: Band7
Bandwidth: 10MHz	Channel 21400
RB: 50RB#0	Modulation: 16QAM
Result: -42.92,-35.97,-25.82	PASS



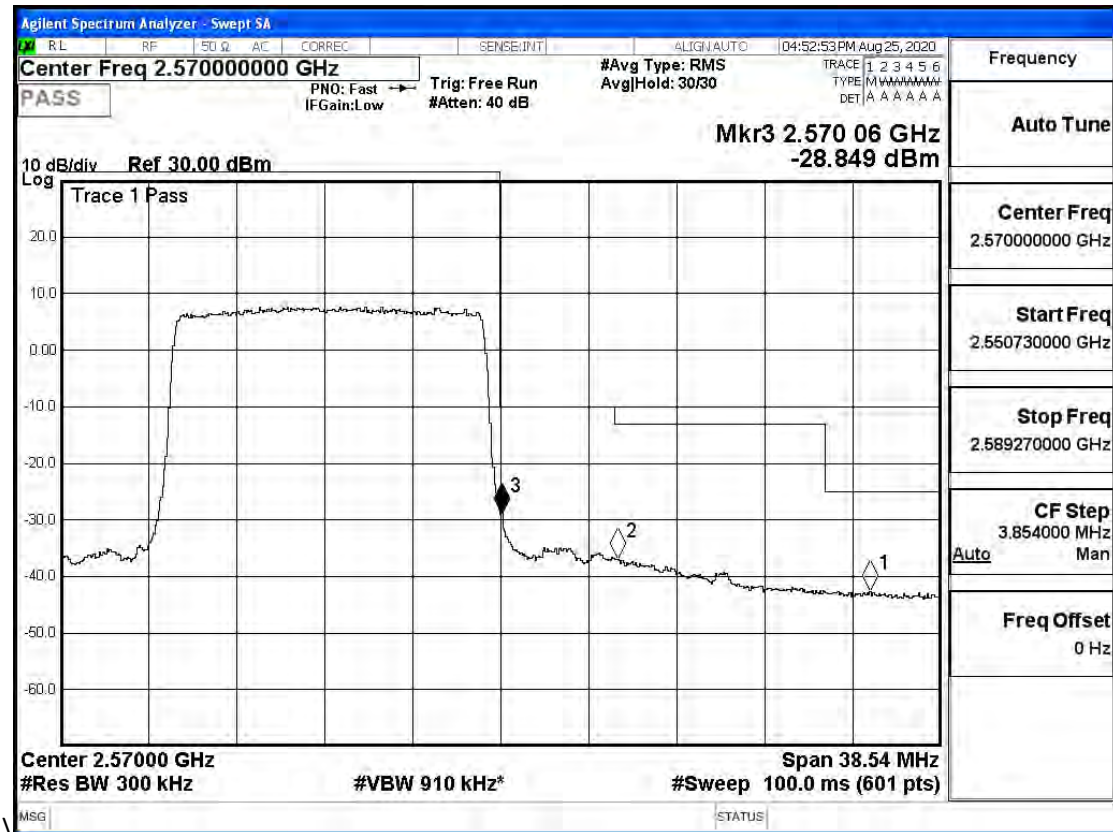
Item Name: Band edges compliance	Band: Band7
Bandwidth: 15MHz	Channel 20825
RB: 75RB#0	Modulation: QPSK
Result: -39.77,-37.50,-28.90	PASS



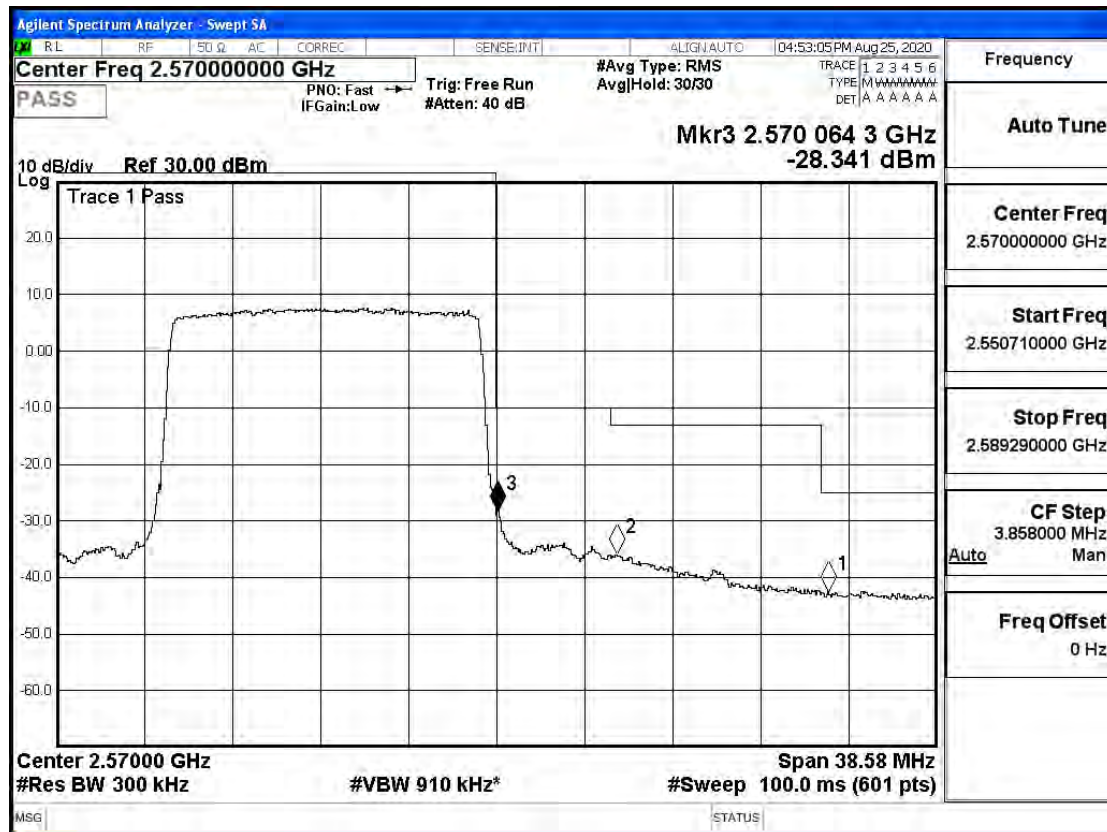
Item Name: Band edges compliance	Band: Band7
Bandwidth: 15MHz	Channel 20825
RB: 75RB#0	Modulation: 16QAM
Result: -40.73,-39.12,-30.48	PASS



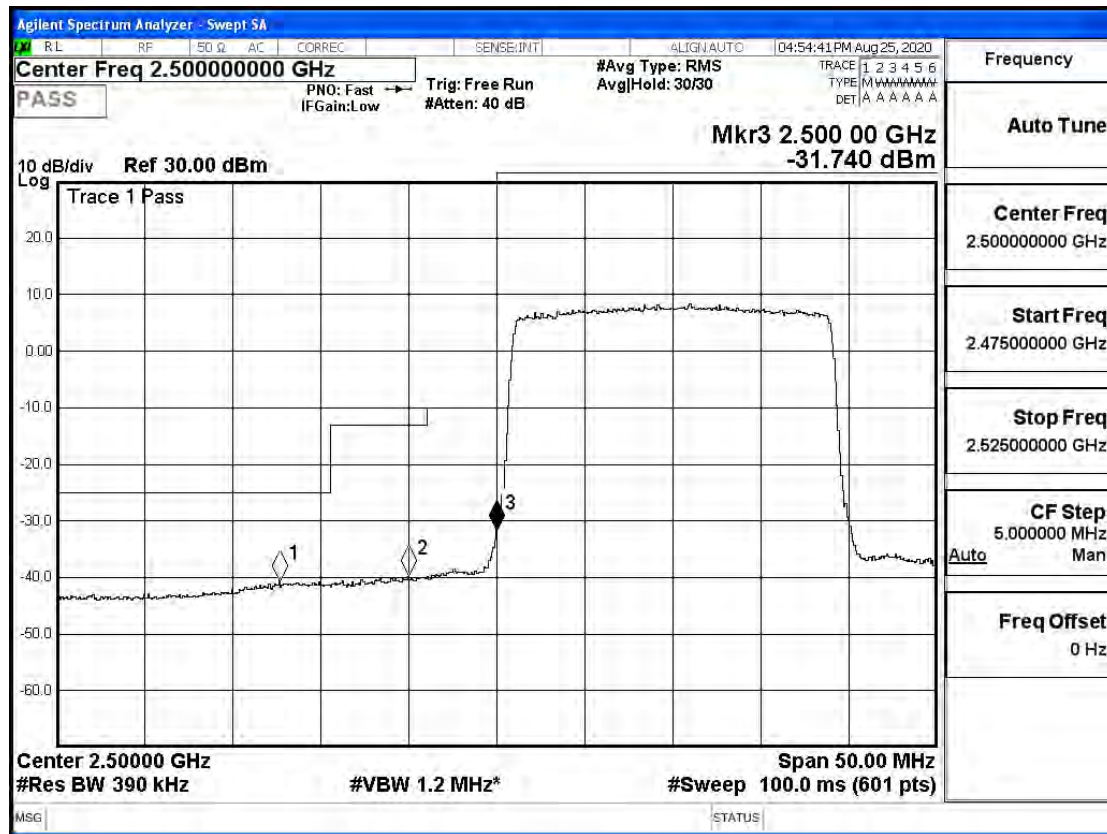
Item Name: Band edges compliance	Band: Band7
Bandwidth: 15MHz	Channel 21375
RB: 75RB#0	Modulation: QPSK
Result: -42.61,-36.90,-28.85	PASS



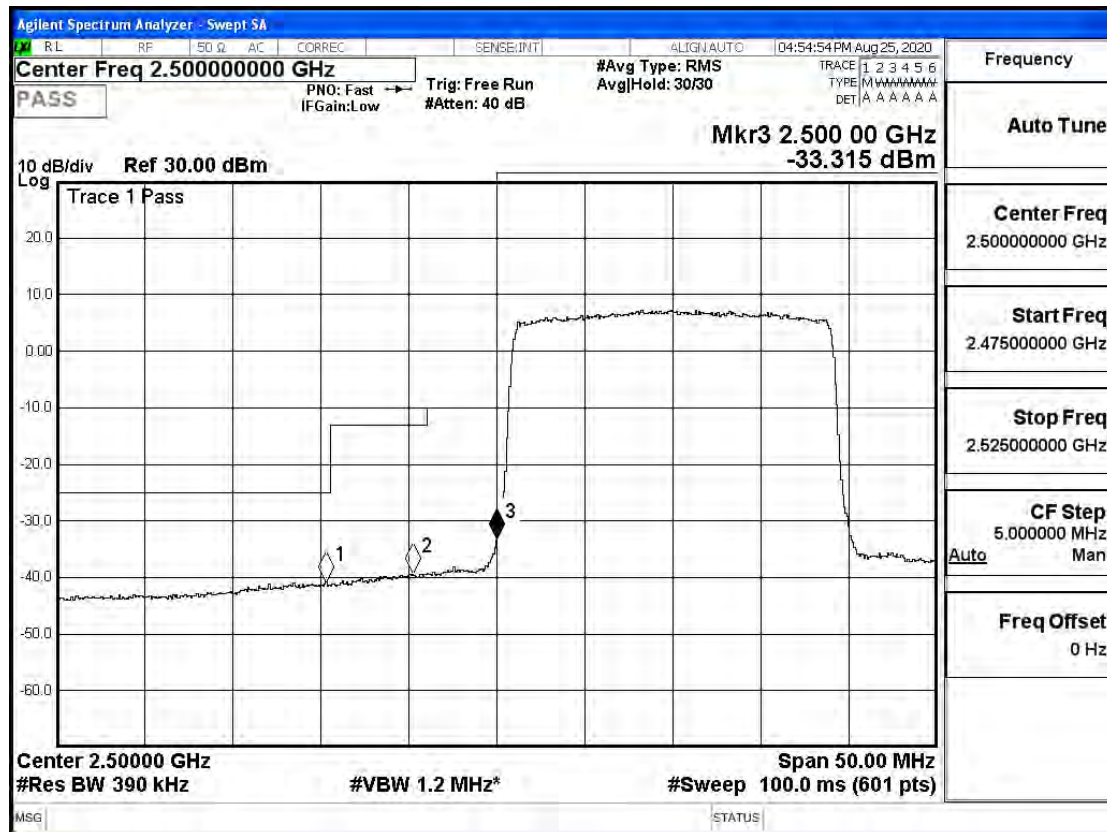
Item Name: Band edges compliance	Band: Band7
Bandwidth: 15MHz	Channel 21375
RB: 75RB#0	Modulation: 16QAM
Result: -42.52,-36.02,-28.34	PASS



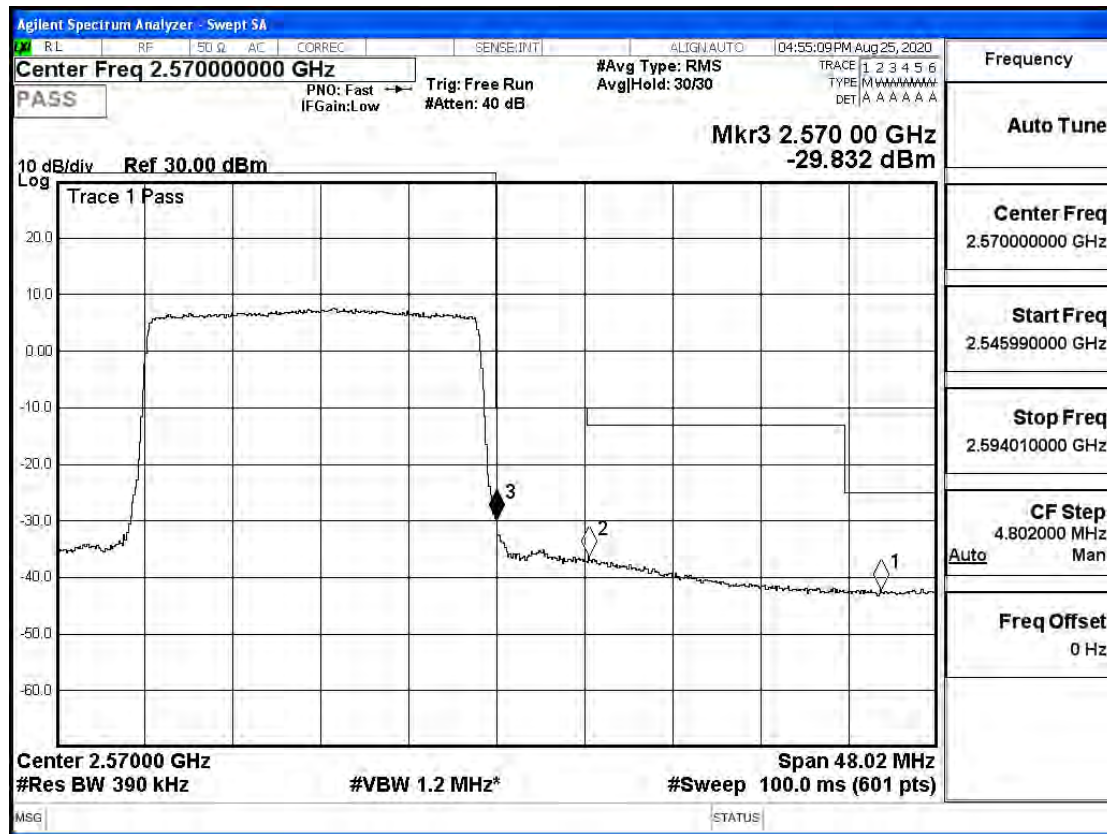
Item Name: Band edges compliance	Band: Band7
Bandwidth: 20MHz	Channel 20850
RB: 100RB#0	Modulation: QPSK
Result: -40.68,-39.79,-31.74	PASS

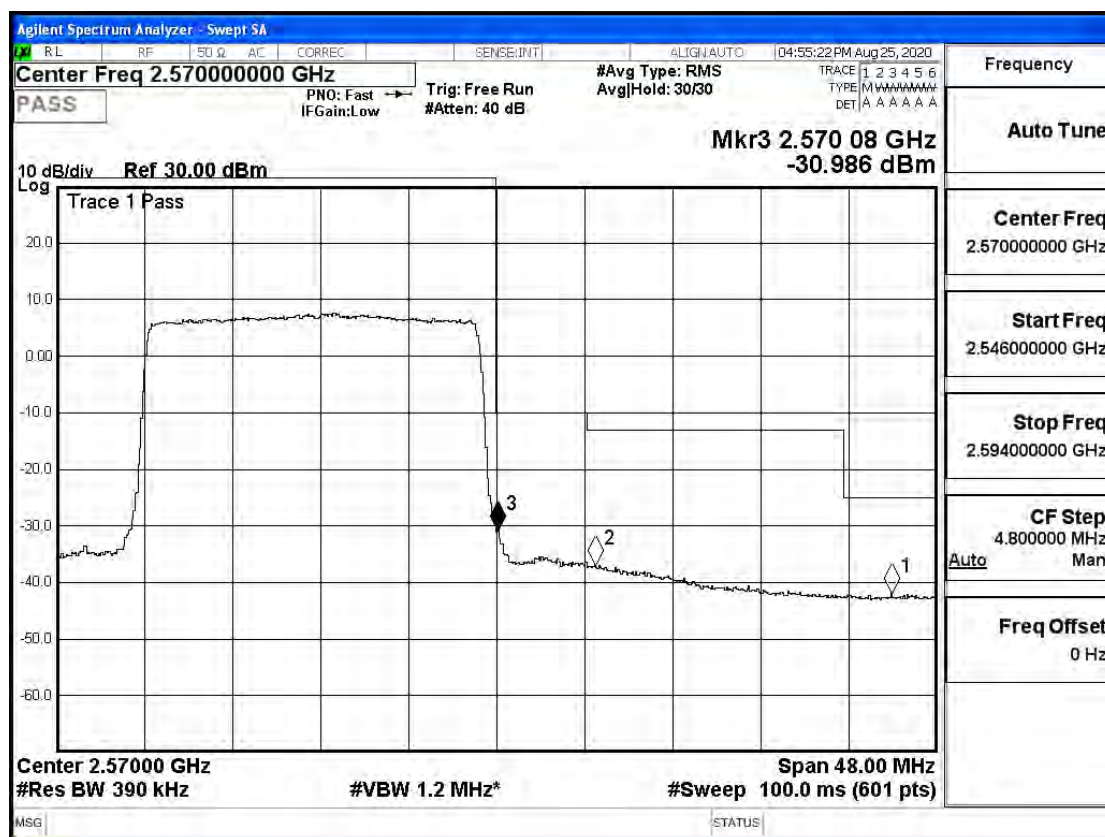


Item Name: Band edges compliance	Band: Band7
Bandwidth: 20MHz	Channel 20850
RB: 100RB#0	Modulation: 16QAM
Result: -40.82,-39.44,-33.32	PASS



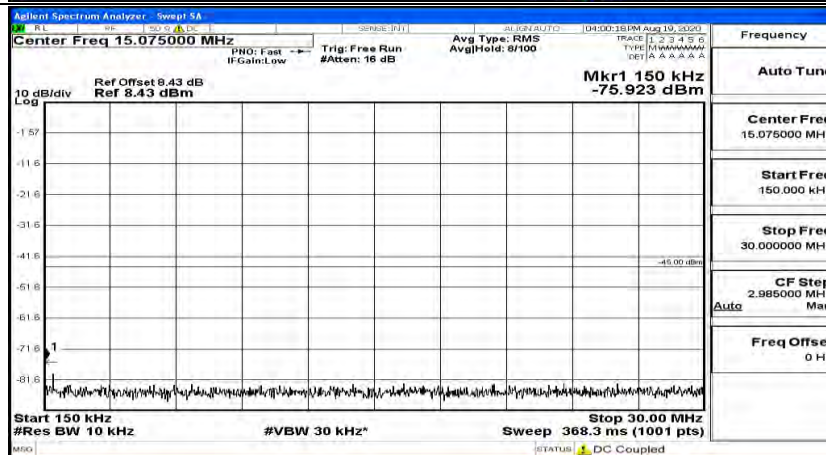
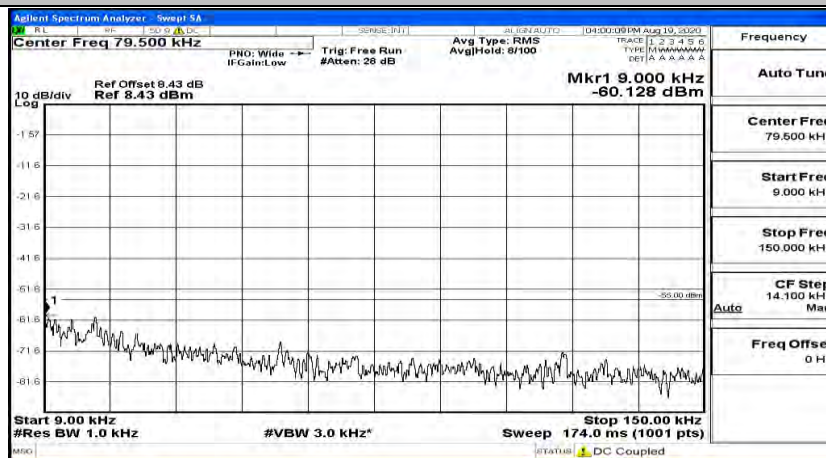
Item Name: Band edges compliance	Band: Band7
Bandwidth: 20MHz	Channel 21350
RB: 100RB#0	Modulation: QPSK
Result: -42.14,-36.31,-29.83	PASS



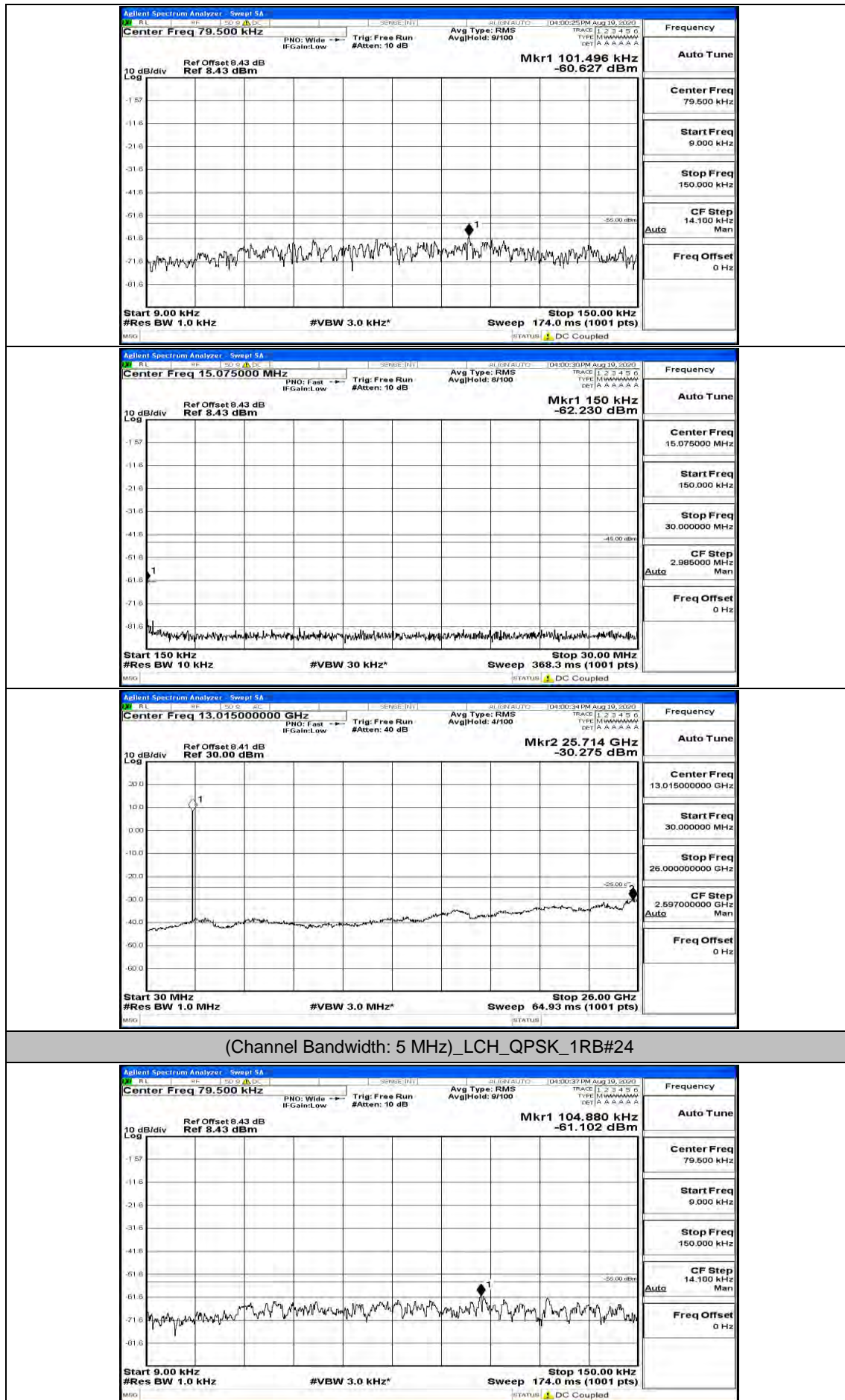


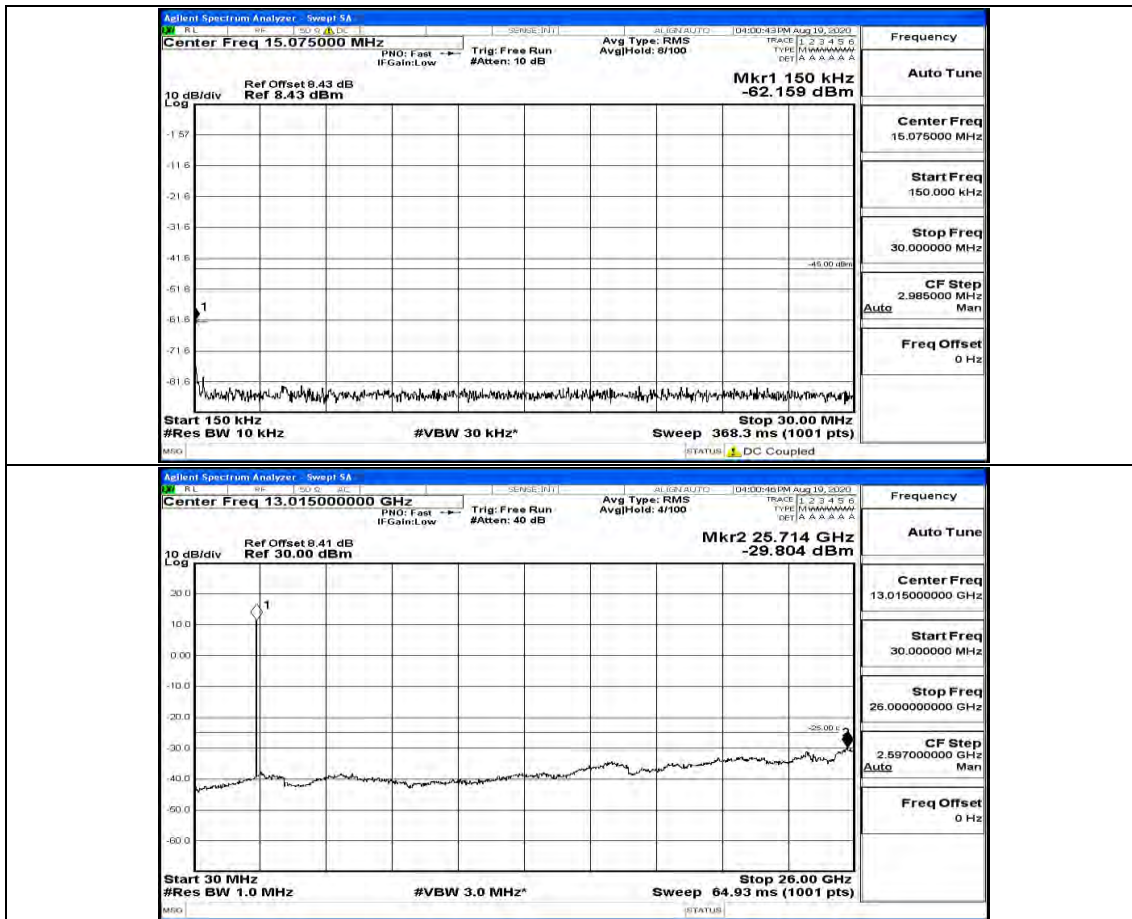
G.5 Conducted Spurious Emission**Channel Bandwidth: 5 MHz**

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0

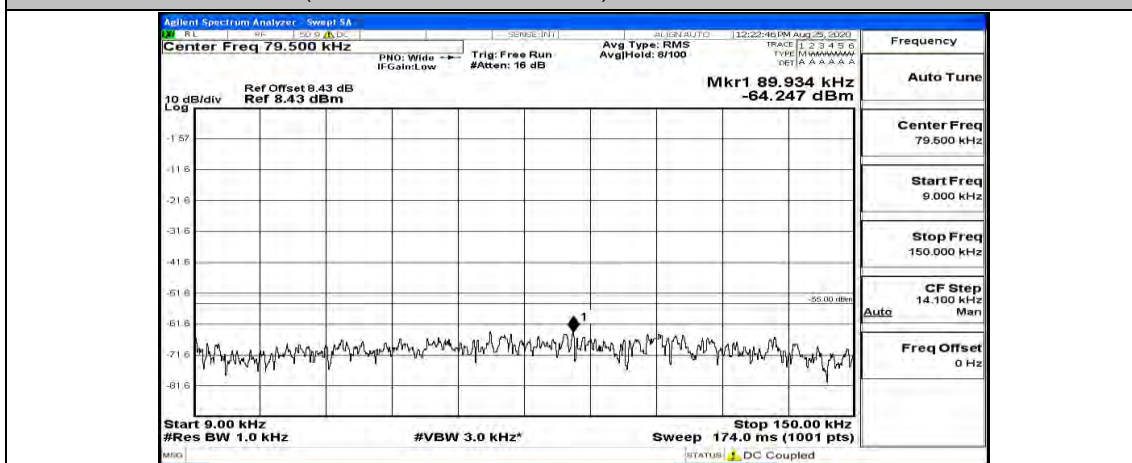


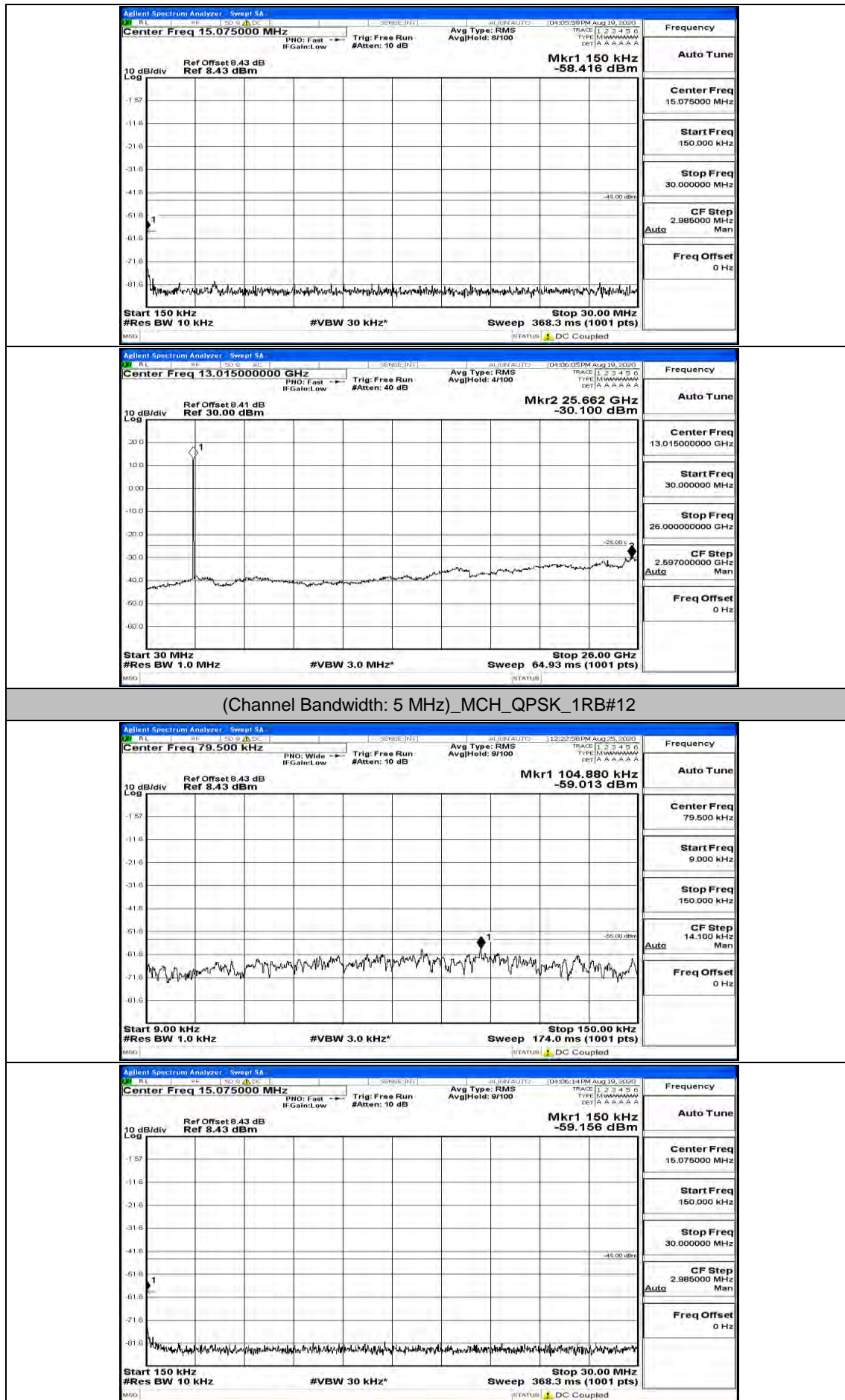
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

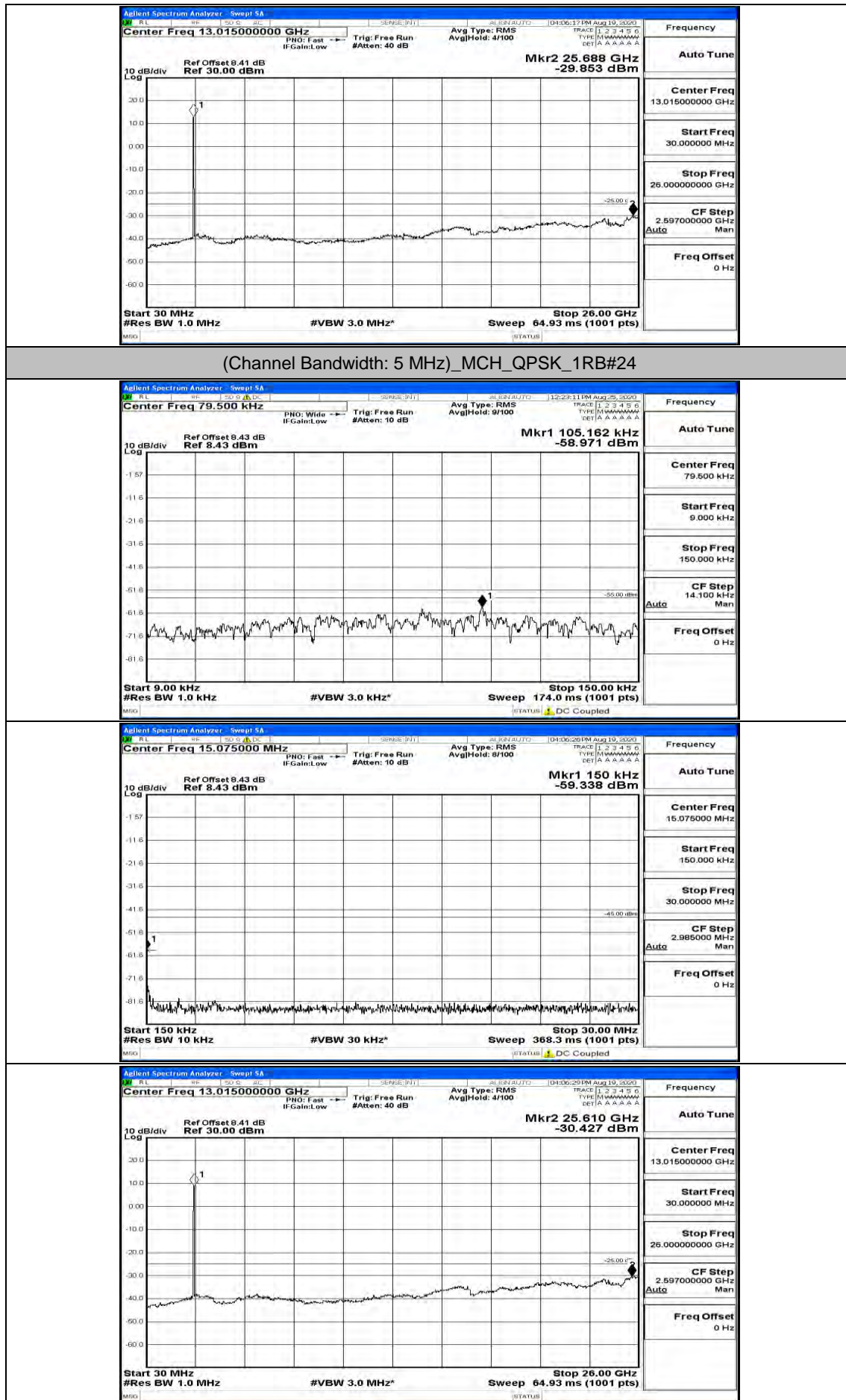




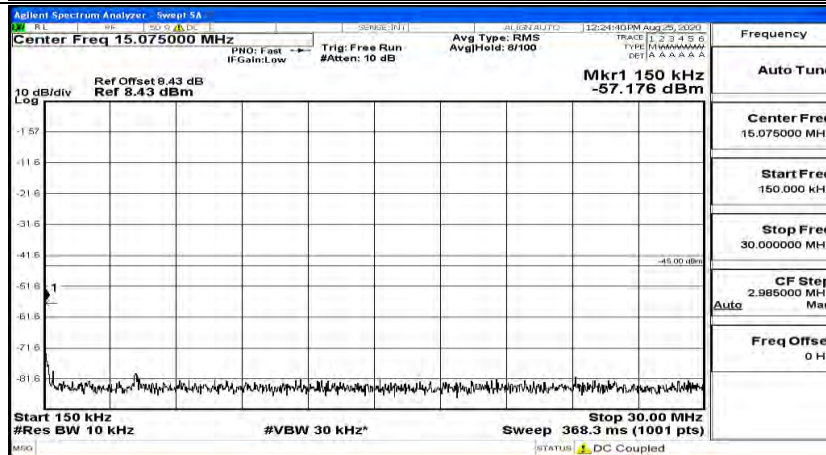
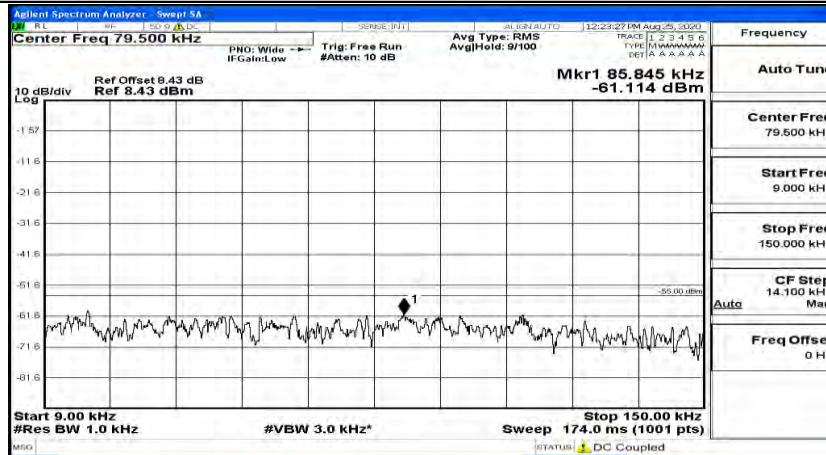
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0



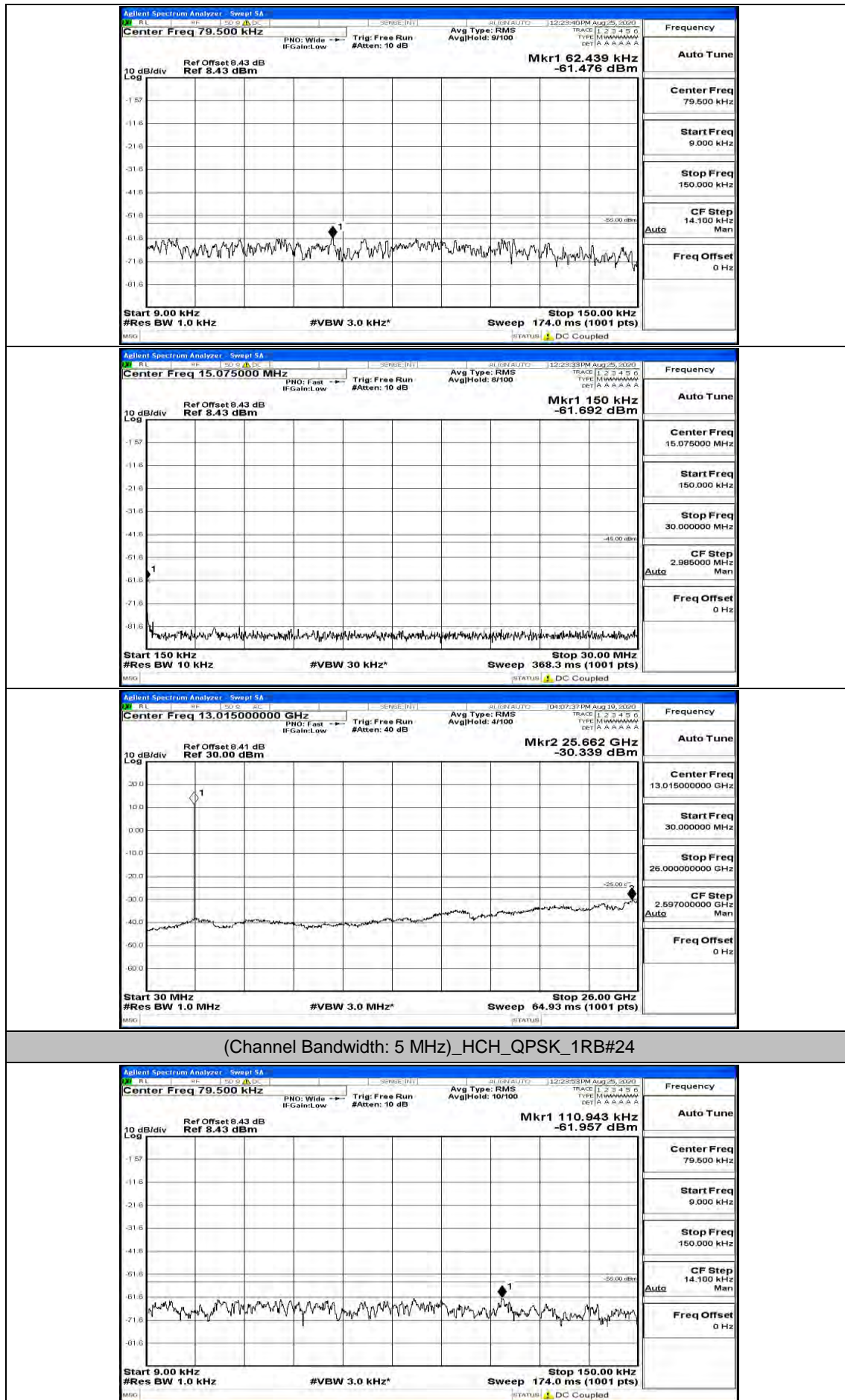


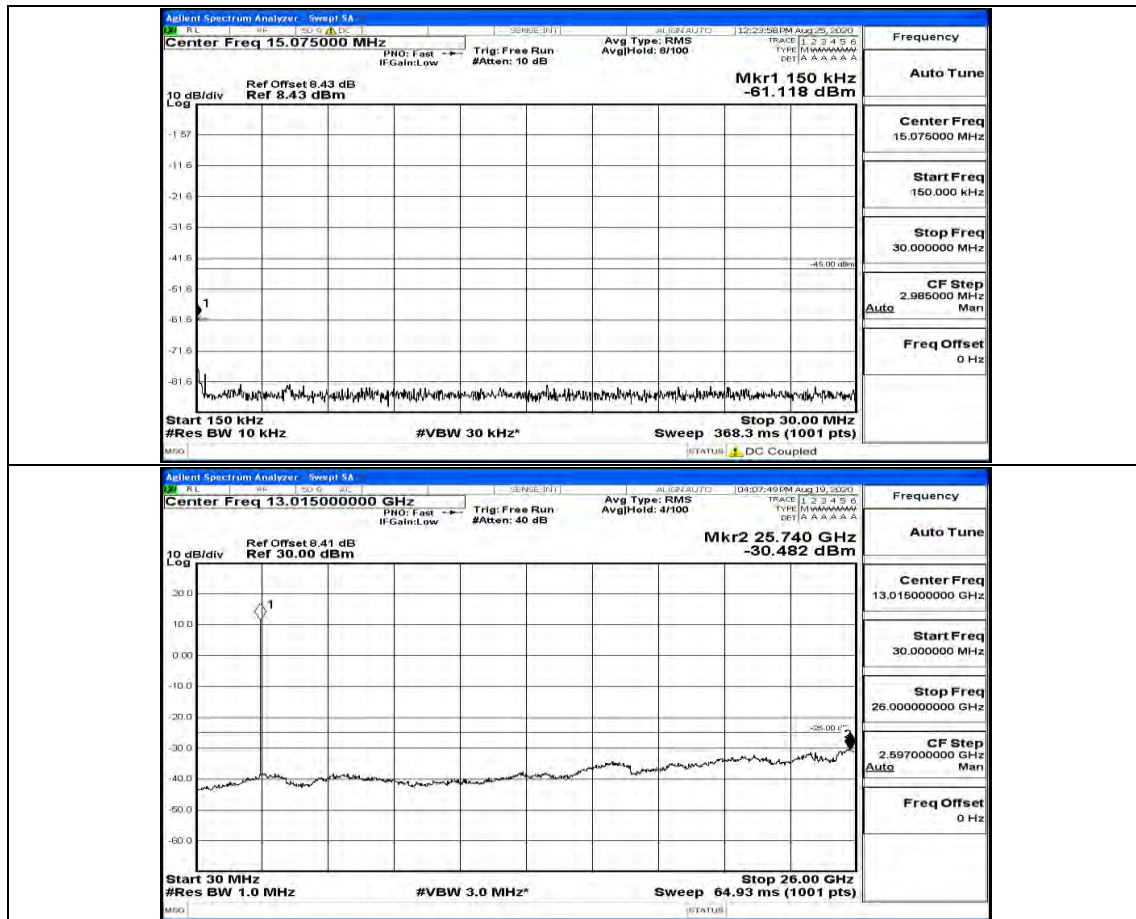


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

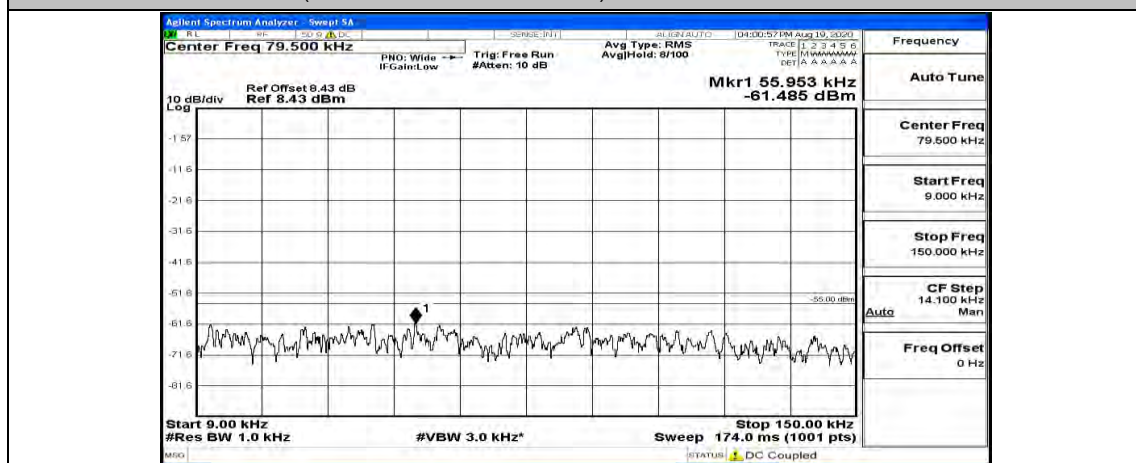


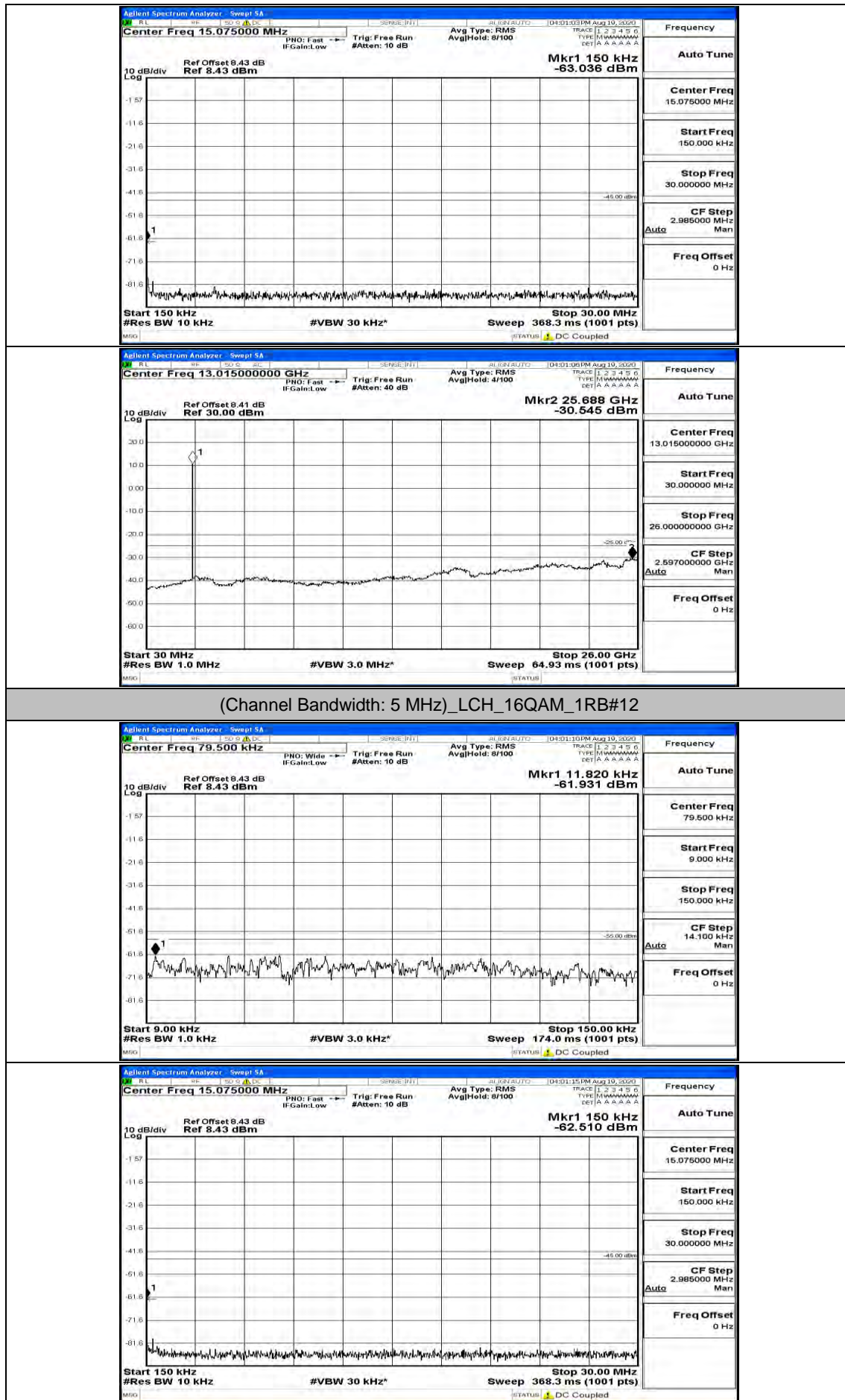
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

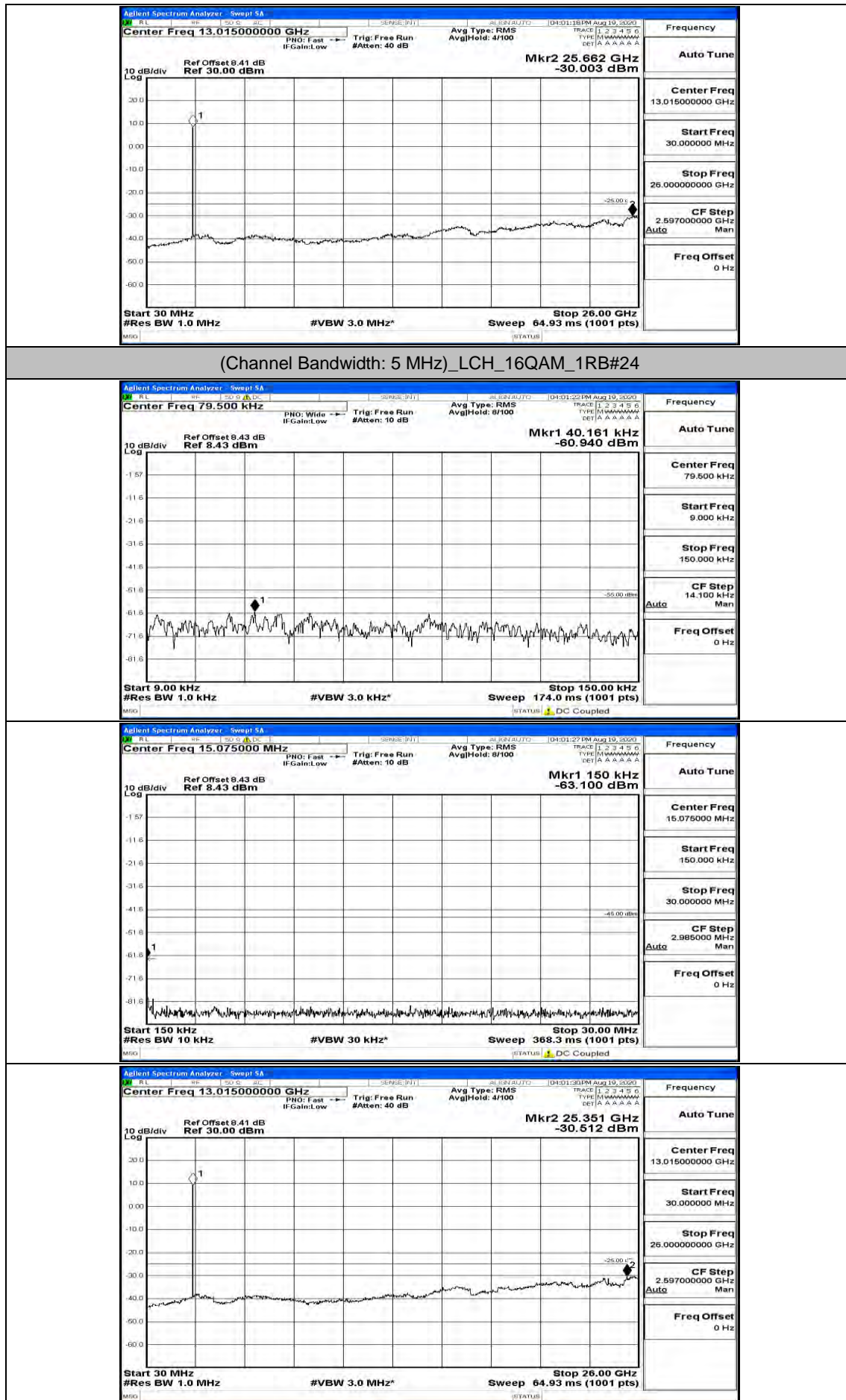




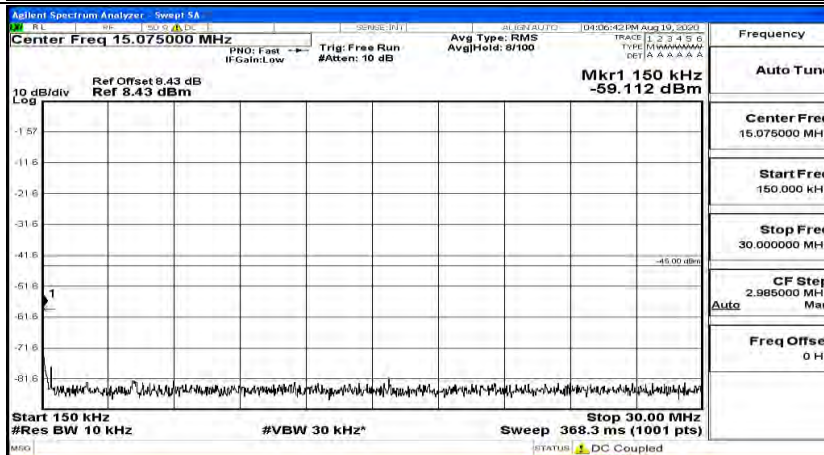
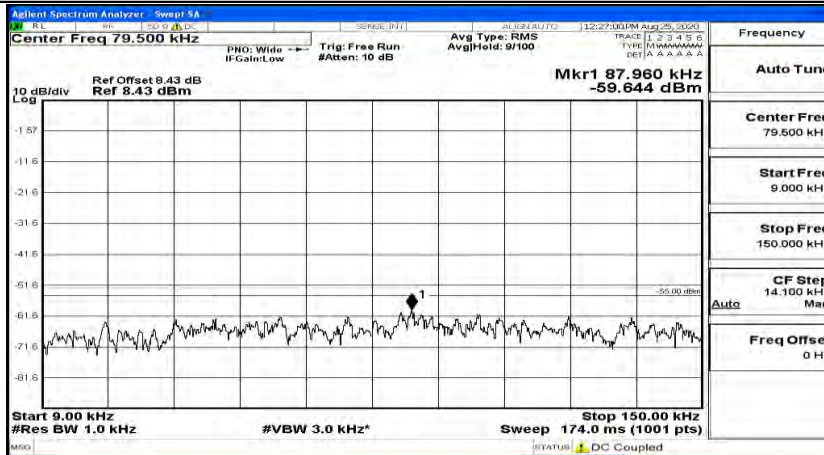
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0







(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

