Appendix G: Test Data for E-UTRA Band 2

Product Name: Smart Phone Trade Mark: HYUNDAI Test Model: Eternity P7

Environmental Conditions

Temperature:	22.5°C	
Relative Humidity:	51.8%	
ATM Pressure:	100.0 kPa	
Test Engineer:	Diamond Lu	
Supervised by:	Tom.Liu	

G.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict	
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict	
		1	0	23.33	21.89	PASS	
		1	3	23.52	22.07	PASS	
		1	5	23.36	21.94	PASS	
	LCH	3	0	22.82	21.83	PASS	
		3	2	22.90	21.89	PASS	
		3	3	22.86	21.84	PASS	
		6	0	22.01	20.87	PASS	
		1	0	22.10	21.32	PASS	
	МСН	1	3	22.22	21.47	PASS	
QPSK /		1	5	22.13	21.32	PASS	
16QAM		3	0	22.13	20.97	PASS	
TOQAW		3	2	22.12	21.01	PASS	
		3	3	22.09	20.99	PASS	
		6	0	21.25	20.10	PASS	
		1	0	22.50	21.63	PASS	
		1	3	22.34	21.73	PASS	
		1	5	22.02	21.58	PASS	
	HCH	3	0	22.42	21.34	PASS	
		3	2	22.29	21.36	PASS	
		3	3	22.14	21.27	PASS	
		6	0	22.00	20.74	PASS	

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/andiat			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.88	22.04	PASS			
		1	7	23.06	22.28	PASS			
		1	14	22.92	22.06	PASS			
	LCH	8	0	21.95	20.93	PASS			
		8	4	22.03	21.00	PASS			
		8	7	21.94	20.92	PASS			
		15	0	21.93	20.84	PASS			
		1	0	22.13	21.30	PASS			
	мсн	1	7	22.32	21.53	PASS			
QPSK /		1	14	22.13	21.27	PASS			
16QAM		8	0	21.20	20.19	PASS			
TOQAIVI		8	4	21.22	20.22	PASS			
		8	7	21.18	20.15	PASS			
		15	0	21.13	20.01	PASS			
		1	0	22.72	21.80	PASS			
		1	7	22.55	21.88	PASS			
		1	14	21.77	21.70	PASS			
	HCH	8	0	21.79	20.67	PASS			
		8	4	21.83	20.63	PASS			
		8	7	21.78	20.57	PASS			
		15	0	21.62	20.52	PASS			

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	22.83	22.03	PASS		
		1	12	23.18	22.23	PASS		
		1	24	22.75	21.91	PASS		
	LCH	12	0	21.93	20.94	PASS		
		12	6	21.98	21.03	PASS		
		12	13	21.89	20.91	PASS		
		25	0	21.89	20.85	PASS		
	мсн	1	0	22.10	21.24	PASS		
		1	12	22.44	21.64	PASS		
QPSK /		1	24	22.06	21.26	PASS		
16QAM		12	0	21.16	20.15	PASS		
TOQAM		12	6	21.21	20.23	PASS		
		12	13	21.17	20.19	PASS		
		25	0	21.14	20.08	PASS		
		1	0	22.72	21.57	PASS		
		1	12	22.82	21.83	PASS		
		1	24	21.95	21.42	PASS		
	HCH	12	0	21.70	20.62	PASS		
		12	6	21.75	20.65	PASS		
		12	13	21.54	20.45	PASS		
		25	0	21.63	20.58	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)								
Modulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/ardiat			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.92	22.05	PASS			
		1	24	22.95	22.05	PASS			
		1	49	22.39	21.46	PASS			
	LCH	25	0	21.84	20.83	PASS			
		25	12	21.80	20.72	PASS			
		25	25	21.58	20.51	PASS			
		50	0	21.66	20.64	PASS			
	MCH	1	0	22.15	21.30	PASS			
		1	24	22.25	21.42	PASS			
QPSK /		1	49	22.08	21.27	PASS			
16QAM		25	0	21.14	20.12	PASS			
TOQAM		25	12	21.15	20.10	PASS			
		25	25	21.22	20.16	PASS			
		50	0	21.13	20.10	PASS			
		1	0	22.79	21.91	PASS			
		1	24	22.88	22.07	PASS			
		1	49	22.07	21.64	PASS			
	HCH	25	0	21.83	20.76	PASS			
		25	12	21.76	20.66	PASS			
		25	25	21.64	20.57	PASS			
		50	0	21.66	20.64	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Madulation	Channal	RB Configuration		Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.79	21.98	PASS			
		1	37	22.79	21.94	PASS			
		1	74	22.01	21.05	PASS			
	LCH	37	0	21.96	20.80	PASS			
		37	18	21.82	20.61	PASS			
		37	38	21.44	20.28	PASS			
		75	0	21.74	20.58	PASS			
	МСН	1	0	22.05	21.19	PASS			
		1	37	22.32	21.50	PASS			
QPSK /		1	74	22.04	21.19	PASS			
16QAM		37	0	21.32	20.18	PASS			
TOQAW		37	18	21.31	20.15	PASS			
		37	38	21.28	20.17	PASS			
		75	0	21.32	20.20	PASS			
		1	0	22.69	21.66	PASS			
		1	37	23.06	22.10	PASS			
		1	74	22.31	21.59	PASS			
	HCH	37	0	21.98	20.81	PASS			
		37	18	21.93	20.78	PASS			
		37	38	21.81	20.67	PASS			
		75	0	21.89	20.73	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)							
Madulatian	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a.u.di.a.t		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	22.69	21.79	PASS		
		1	49	22.65	21.59	PASS		
		1	99	21.87	20.82	PASS		
	LCH	50	0	21.64	20.53	PASS		
		50	25	21.34	20.21	PASS		
		50	50	20.97	19.86	PASS		
		100	0	21.34	20.27	PASS		
	мсн	1	0	21.92	20.96	PASS		
		1	49	22.38	21.45	PASS		
QPSK /		1	99	22.06	21.12	PASS		
16QAM		50	0	21.18	20.10	PASS		
TOQAIVI		50	25	21.17	20.05	PASS		
		50	50	21.14	20.04	PASS		
		100	0	21.15	20.08	PASS		
		1	0	22.27	21.35	PASS		
		1	49	23.04	22.08	PASS		
		1	99	22.44	21.46	PASS		
	HCH	50	0	21.59	20.54	PASS		
		50	25	21.71	20.61	PASS		
		50	50	21.49	20.43	PASS		
		100	0	21.57	20.48	PASS		

G.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Griannei	[dB]	[dB]	verdict			
	LCH	4.27	<13	PASS			
QPSK	MCH	4.18	<13	PASS			
	HCH	2.21	<13	PASS			
	LCH	5.16	<13	PASS			
16QAM	MCH	5.07	<13	PASS			
	HCH	3.36	<13	PASS			

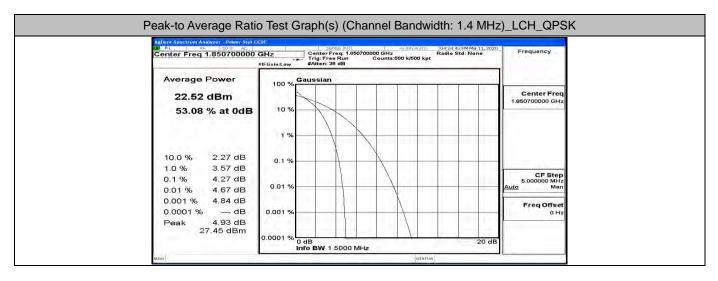
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict			
Modulation	Channel	[dB]	[dB]	Verdict			
	LCH	4.52	<13	PASS			
QPSK	MCH	4.55	<13	PASS			
	HCH	3.46	<13	PASS			
16QAM	LCH	5.44	<13	PASS			
	MCH	5.4	<13	PASS			
	HCH	4.35	<13	PASS			

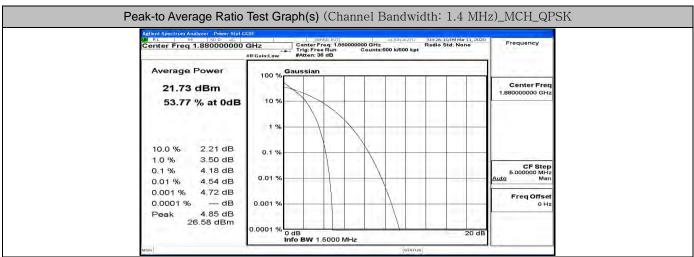
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict			
Modulation	Griannei	[dB]	[dB]	Verdict			
	LCH	4.5	<13	PASS			
QPSK	MCH	4.55	<13	PASS			
	HCH	3.83	<13	PASS			
	LCH	5.29	<13	PASS			
16QAM	MCH	5.32	<13	PASS			
	HCH	4.68	<13	PASS			

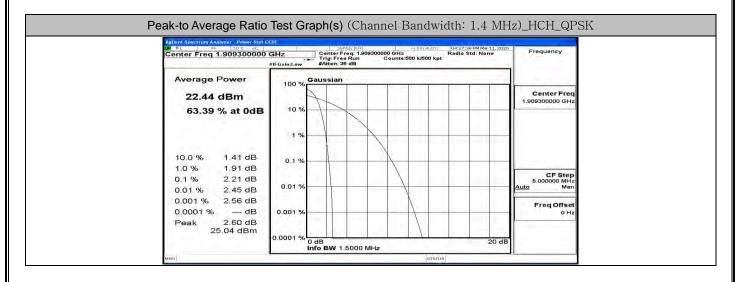
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
iviodulation	Griannei	[dB]	[dB]	verdict			
	LCH	4.58	<13	PASS			
QPSK	MCH	4.8	<13	PASS			
	HCH	4.48	<13	PASS			
	LCH	5.33	<13	PASS			
16QAM	MCH	5.46	<13	PASS			
	HCH	5.2	<13	PASS			

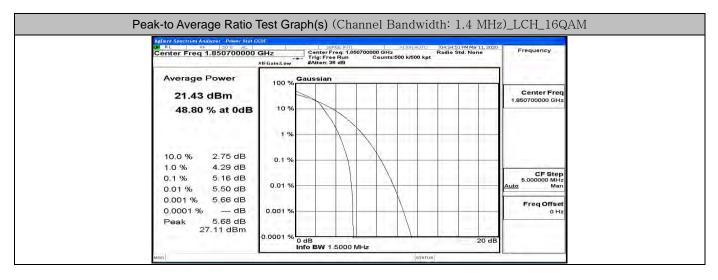
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
iviodulation	Channel	[dB]	[dB]	verdict			
	LCH	4.92	<13	PASS			
QPSK	MCH	4.95	<13	PASS			
	HCH	4.96	<13	PASS			
	LCH	5.82	<13	PASS			
16QAM	MCH	5.95	<13	PASS			
	HCH	5.83	<13	PASS			

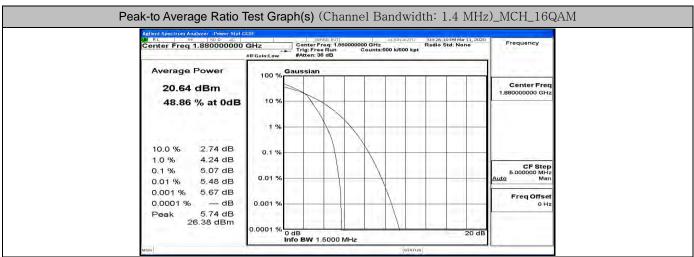
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)					
Mandada Gara	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation		[dB]	[dB]	verdict	
QPSK	LCH	5.85	<13	PASS	
	MCH	5.76	<13	PASS	
	HCH	5.81	<13	PASS	
16QAM	LCH	6.48	<13	PASS	
	MCH	6.6	<13	PASS	
	HCH	6.42	<13	PASS	

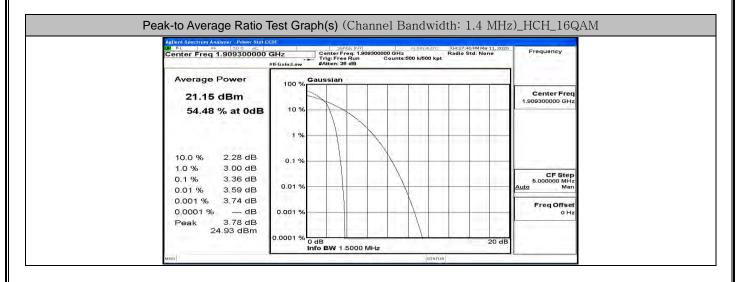


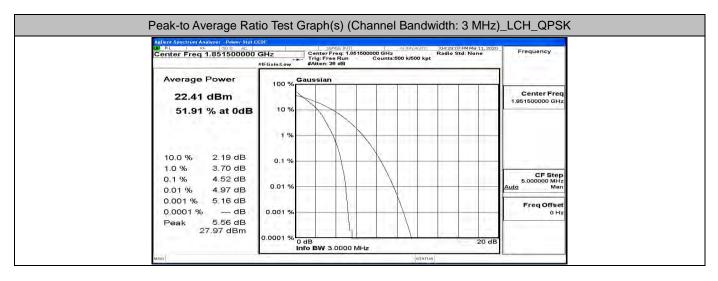


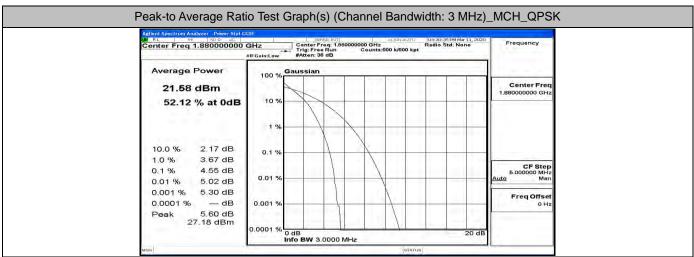


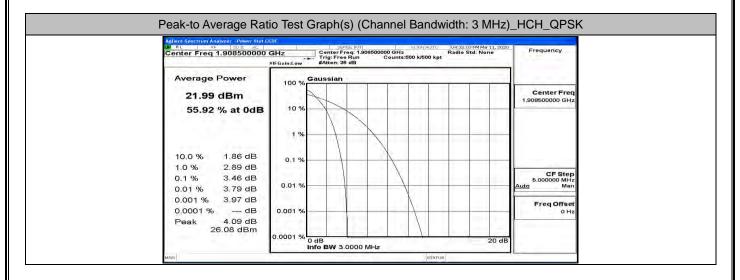


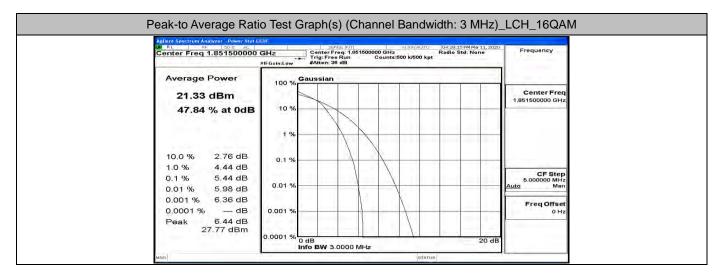


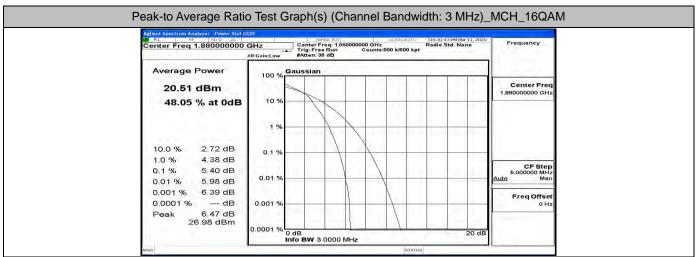


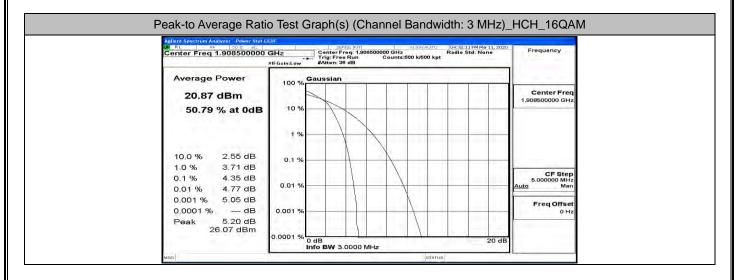


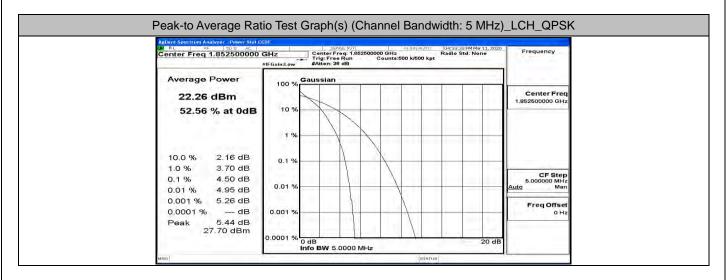


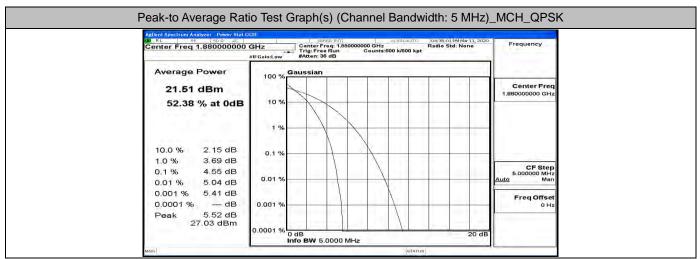


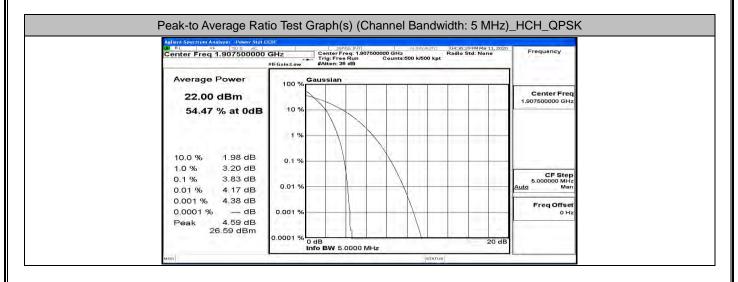


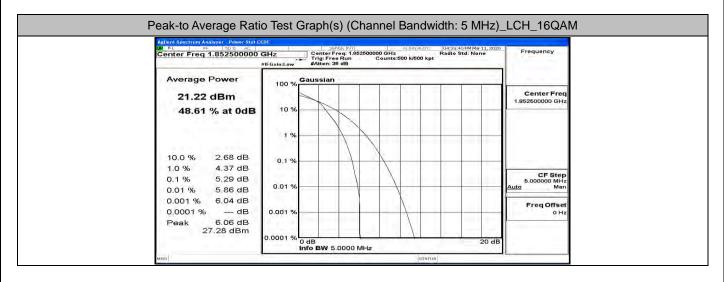


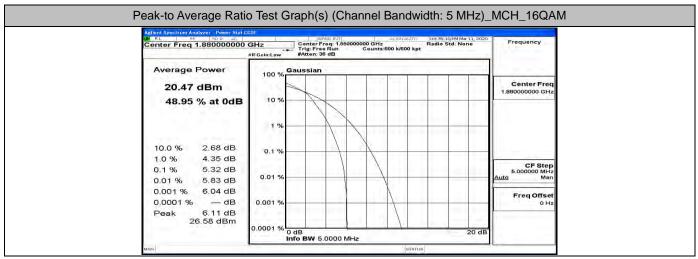


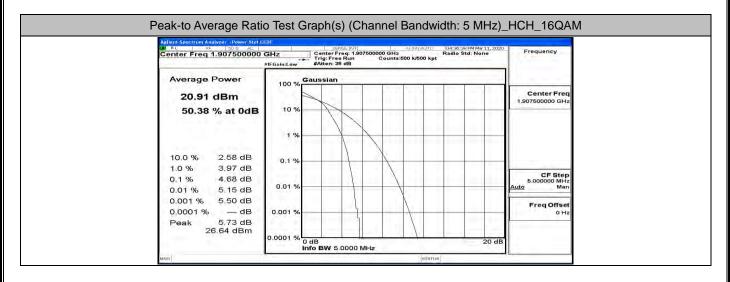


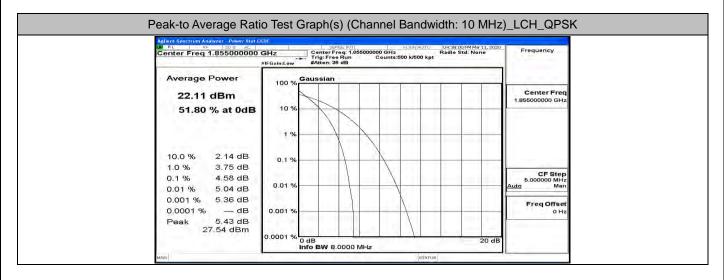


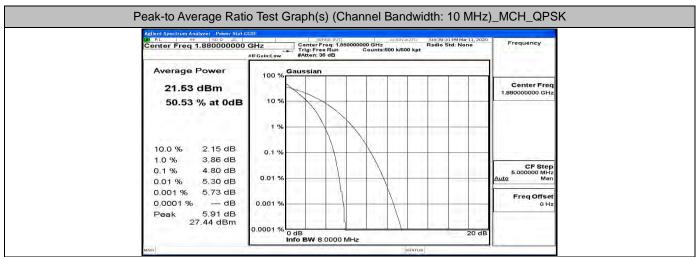


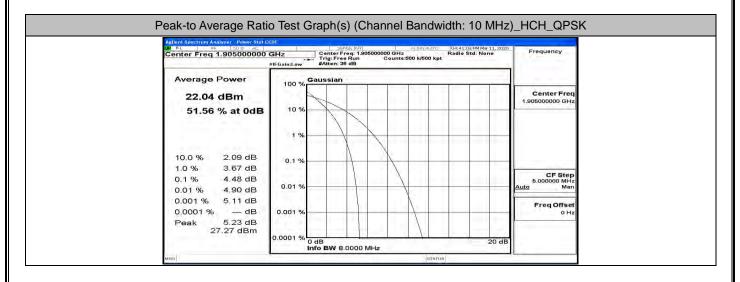


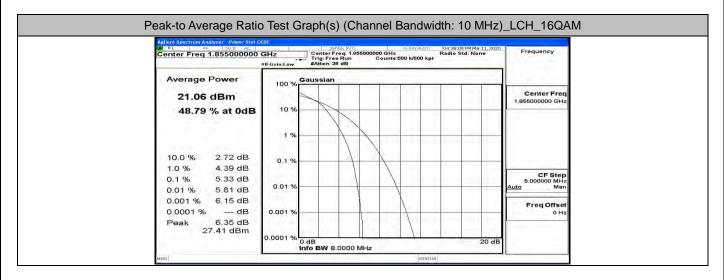


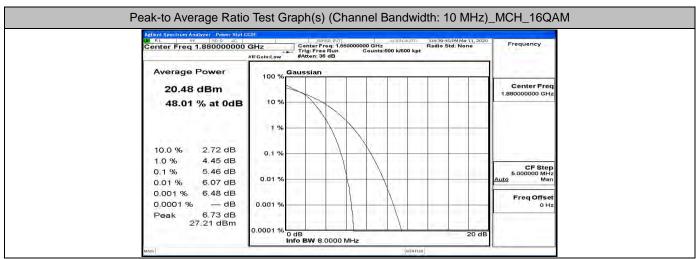


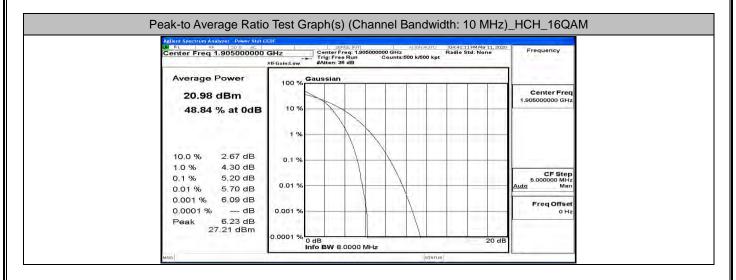


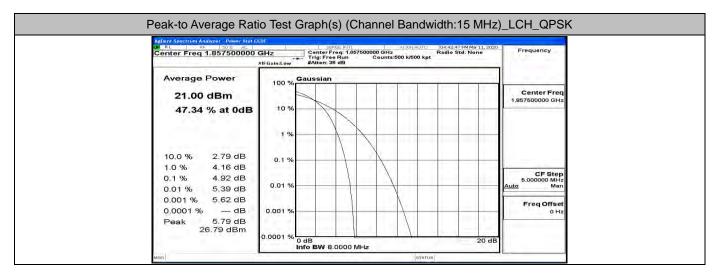


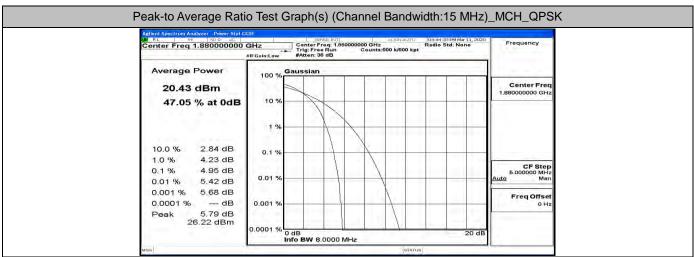


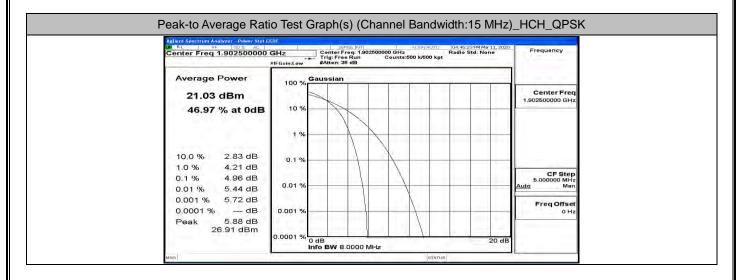


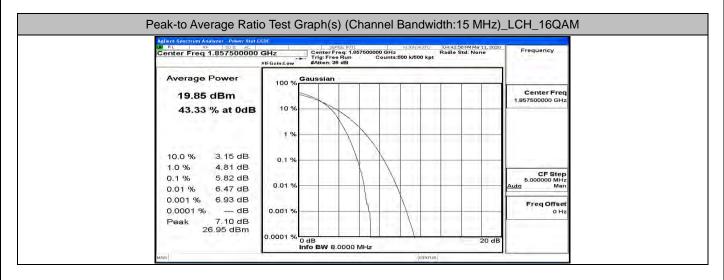


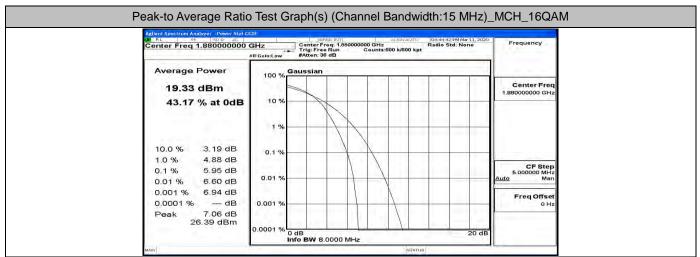


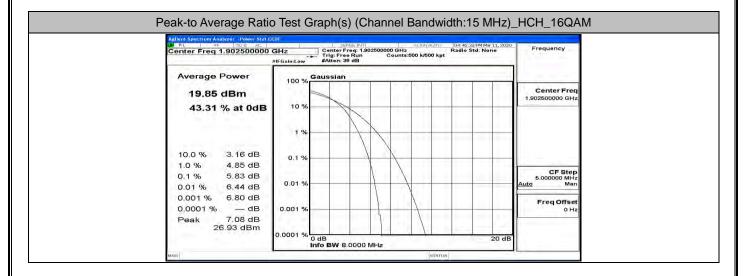


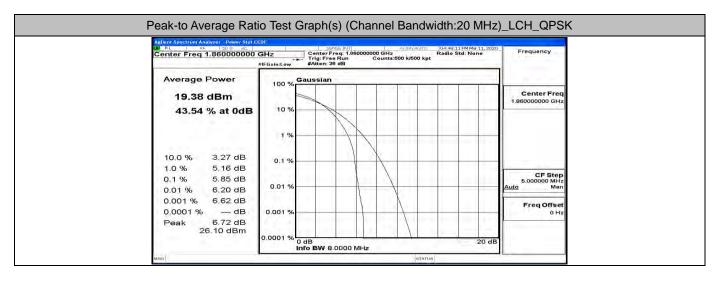


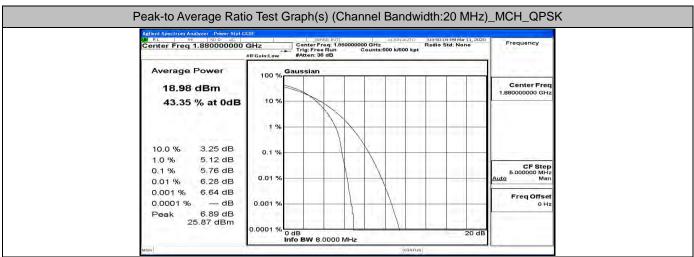


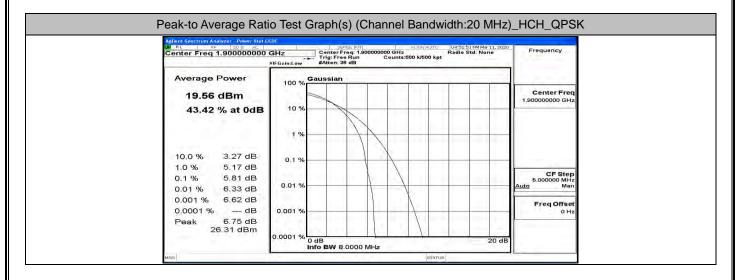


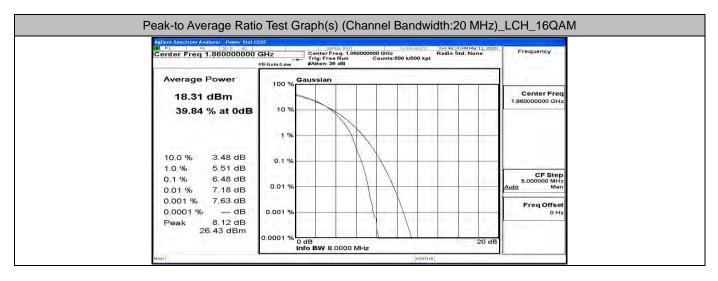


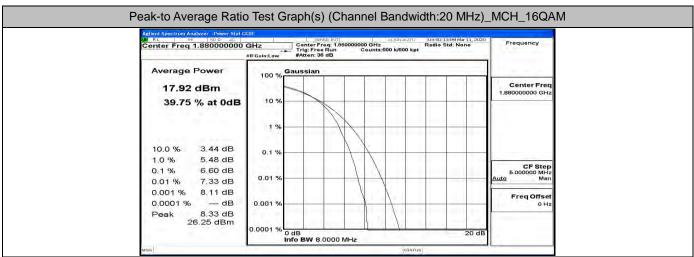


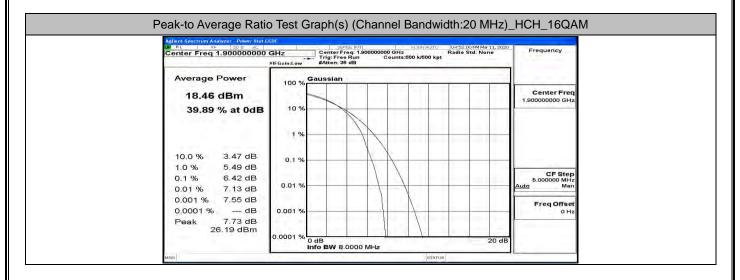












G.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	1.0778	1.258	PASS
	MCH	1.0786	1.258	PASS
	HCH	1.3487	2.320	PASS
16QAM	LCH	1.0814	1.254	PASS
	MCH	1.0787	1.238	PASS
	HCH	1.0997	2.157	PASS

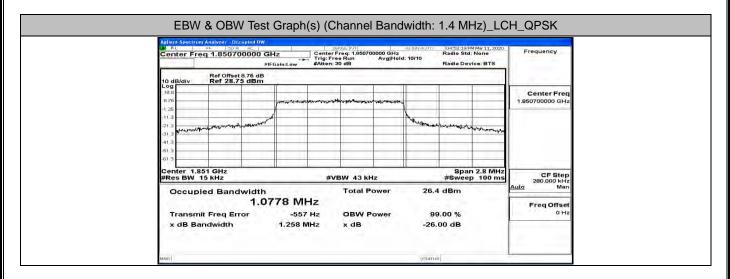
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	2.6828	2.864	PASS
	MCH	2.6839	2.845	PASS
	HCH	2.7000	4.741	PASS
16QAM	LCH	2.6804	2.834	PASS
	MCH	2.6795	2.844	PASS
	HCH	2.6907	4.172	PASS

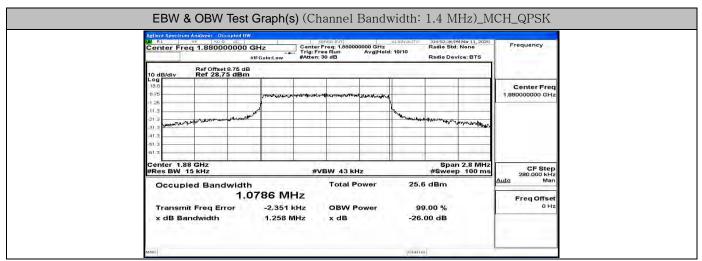
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	4.4774	4.755	PASS
	MCH	4.4769	4.721	PASS
	HCH	4.4866	6.220	PASS
16QAM	LCH	4.4715	4.755	PASS
	MCH	4.4807	4.749	PASS
	HCH	4.4939	5.263	PASS

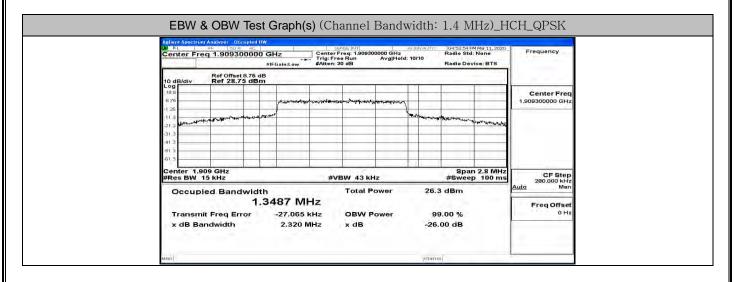
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	8.9518	9.418	PASS
	MCH	8.9557	9.516	PASS
	HCH	8.9664	11.63	PASS
16QAM	LCH	8.9425	9.381	PASS
	MCH	8.9483	9.487	PASS
	HCH	8.9498	9.511	PASS

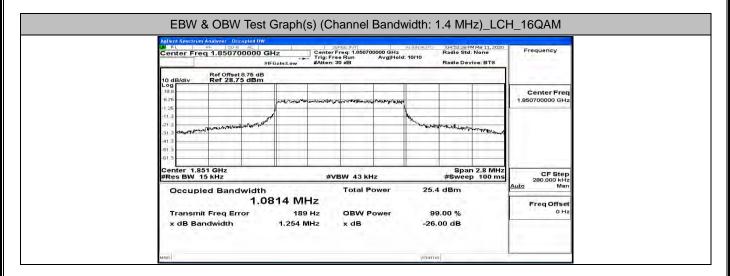
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
iviodulation		(MHz)	(MHz)	
QPSK	LCH	13.424	19.41	PASS
	MCH	13.459	18.83	PASS
	HCH	13.447	21.52	PASS
16QAM	LCH	13.407	14.08	PASS
	MCH	13.424	14.03	PASS
	HCH	13.430	17.64	PASS

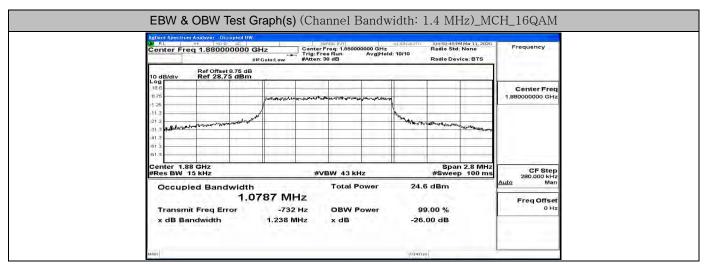
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	17.872	18.68	PASS
	MCH	17.885	18.84	PASS
	HCH	17.870	20.90	PASS
16QAM	LCH	17.870	18.59	PASS
	MCH	17.882	18.64	PASS
	HCH	17.866	18.88	PASS

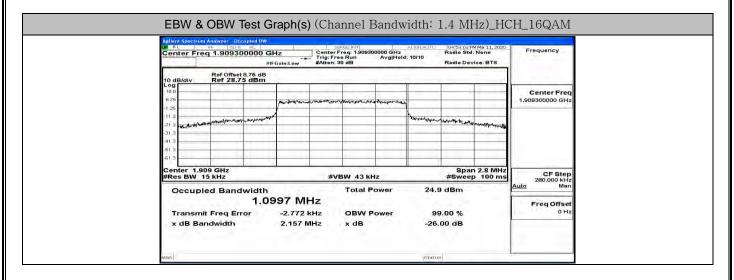


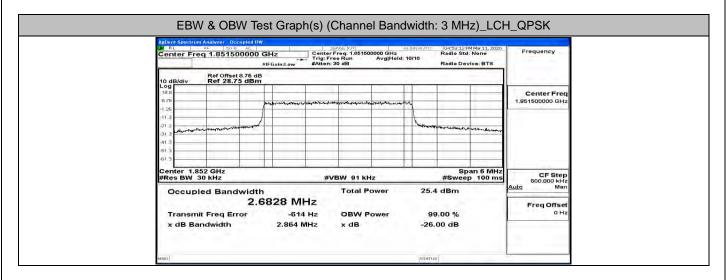


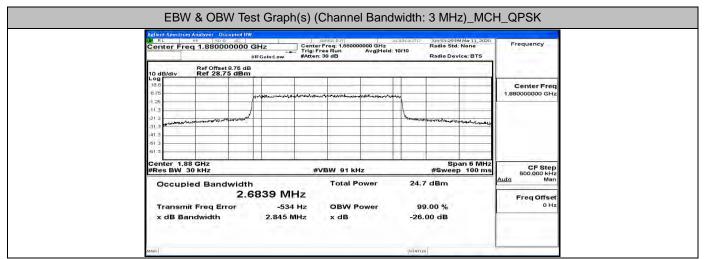


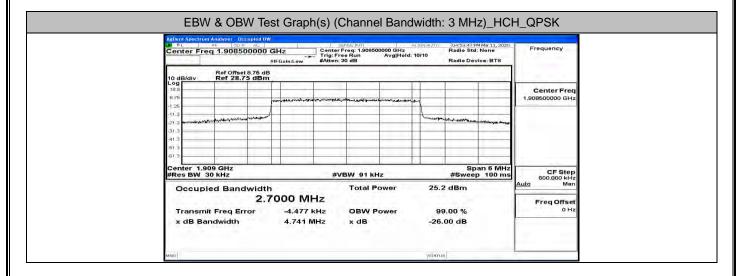


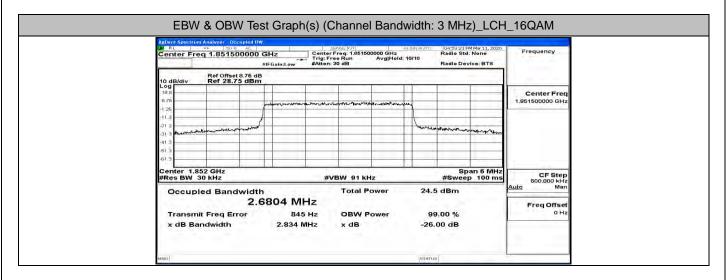


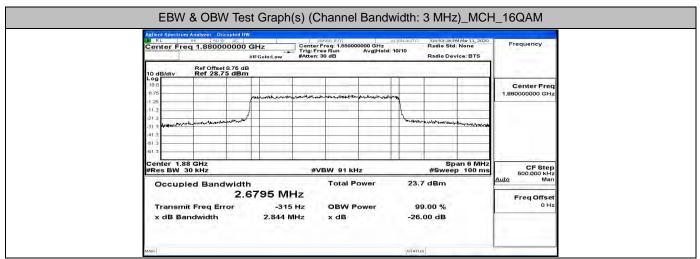


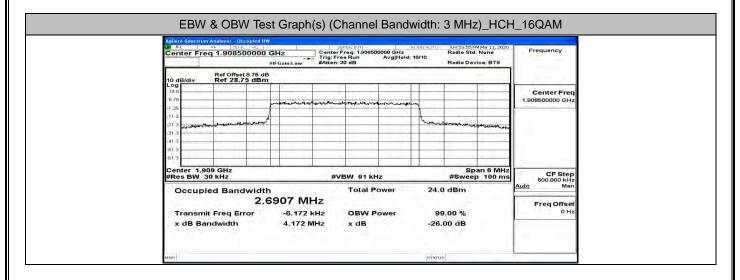


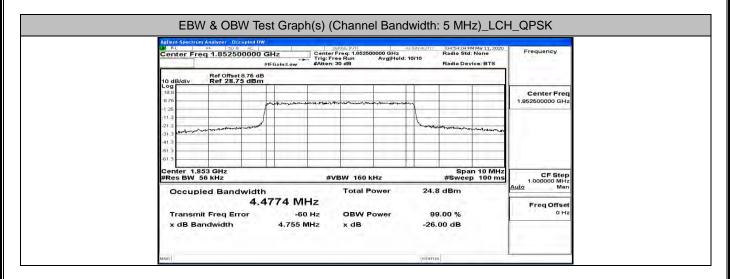


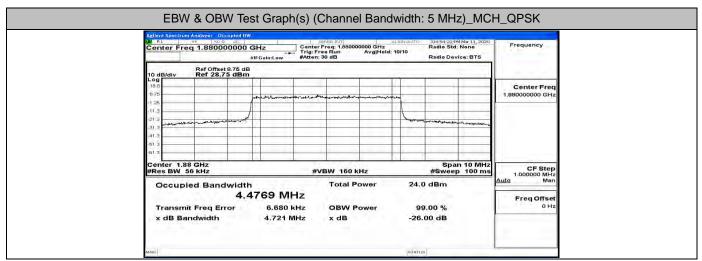


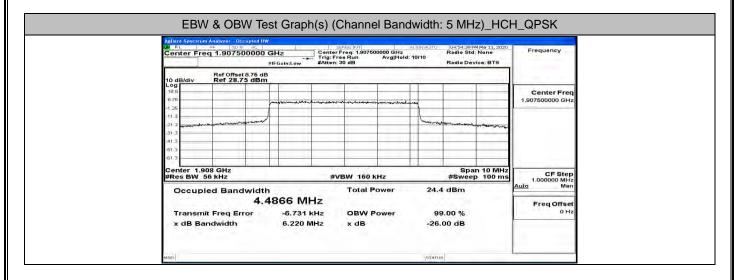


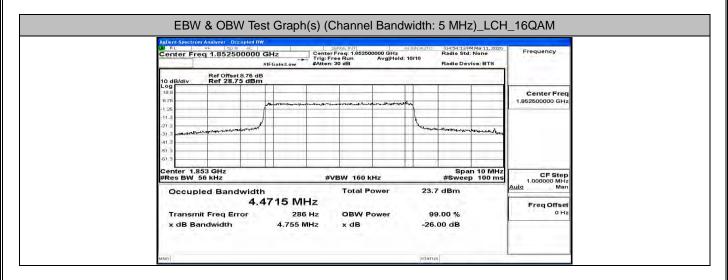


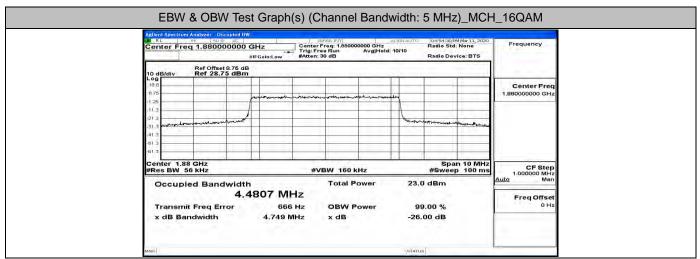


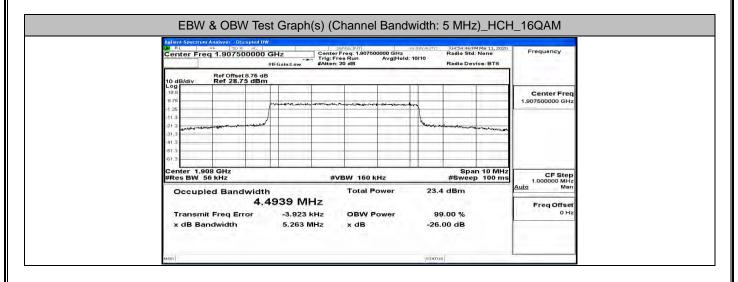


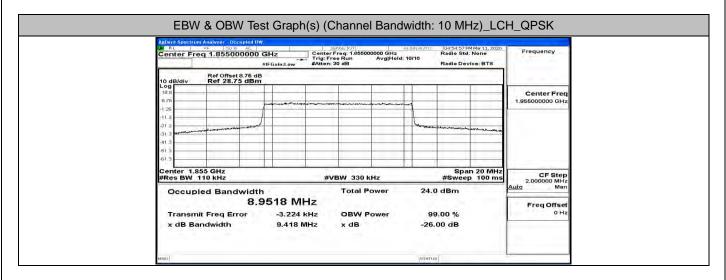


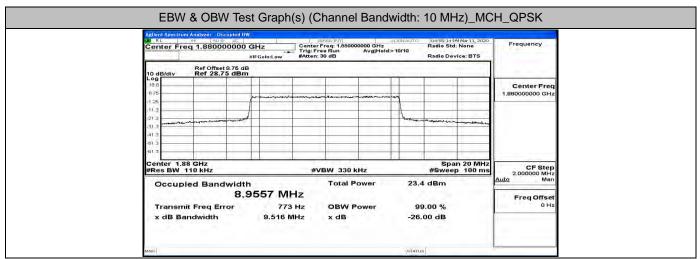


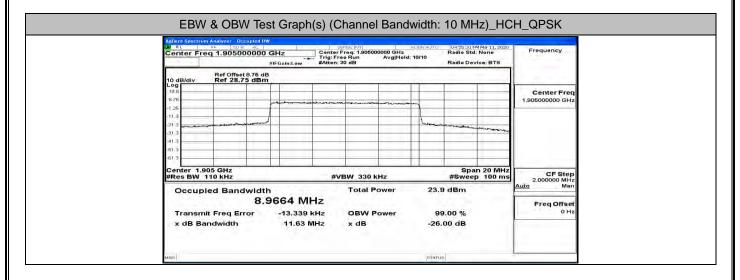


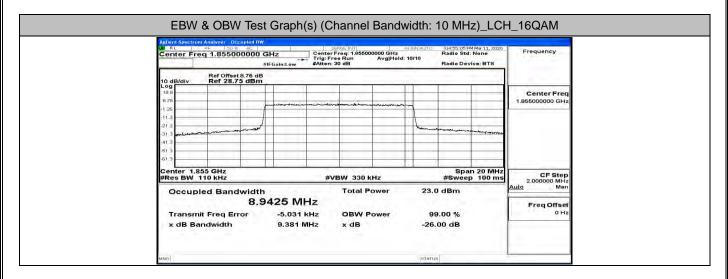


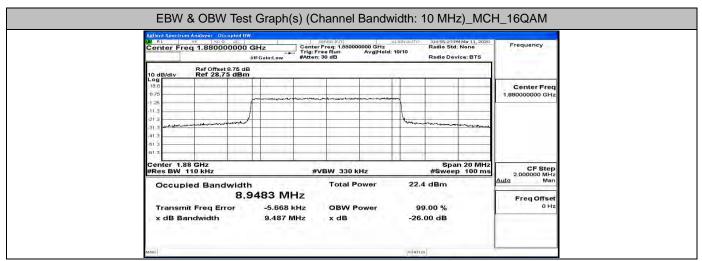


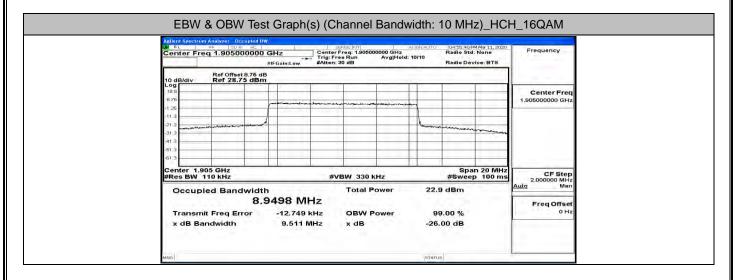


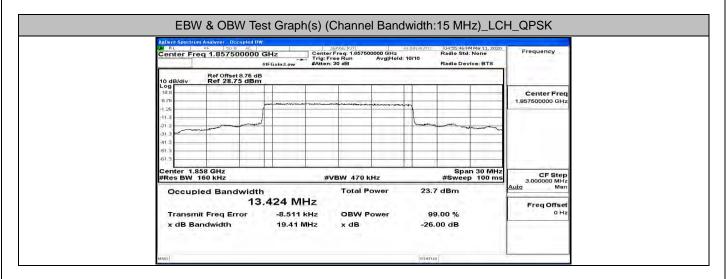


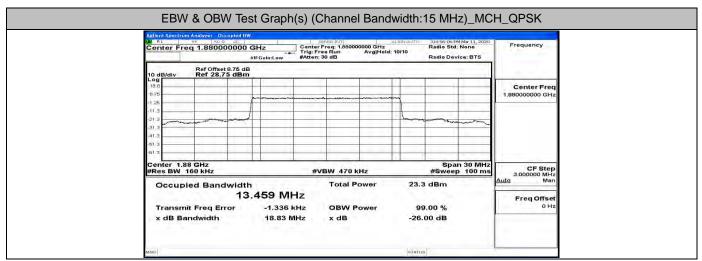


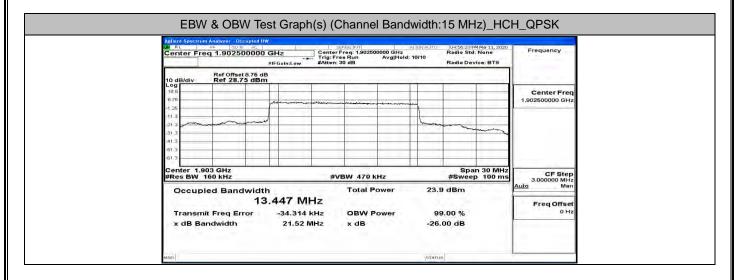


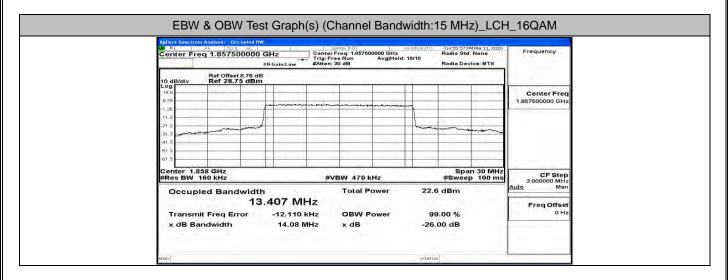


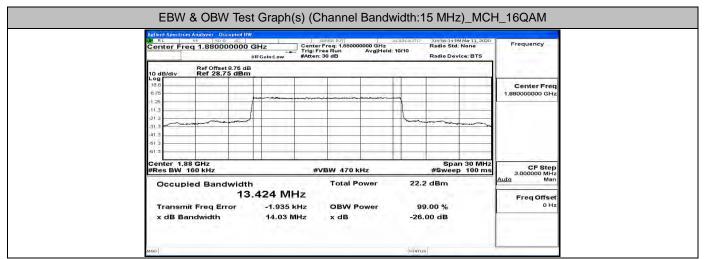


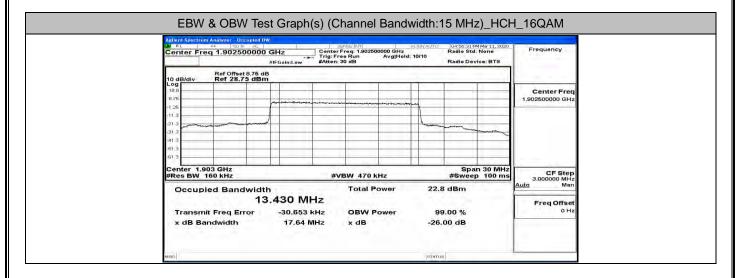


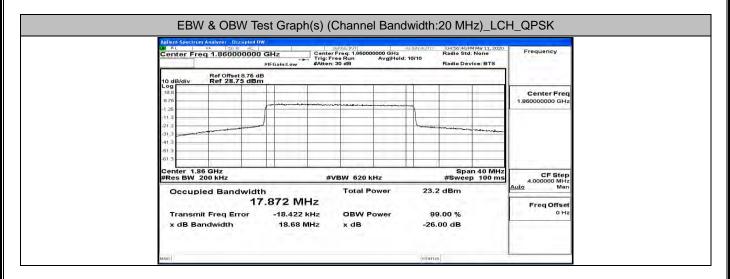


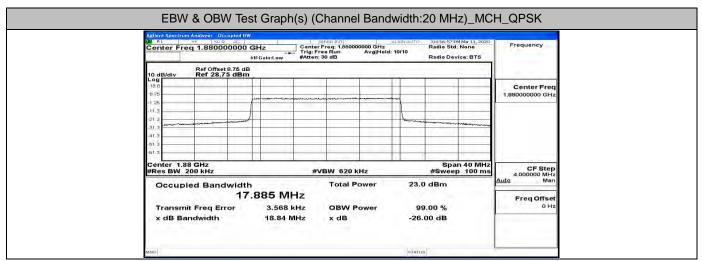


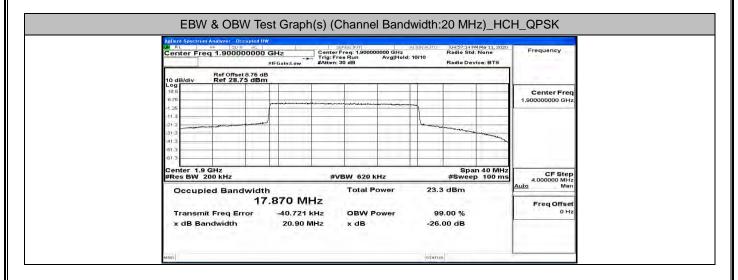


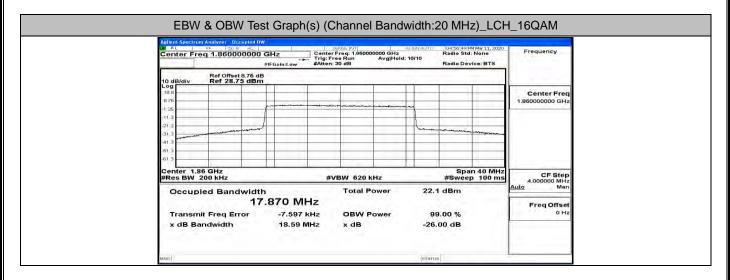


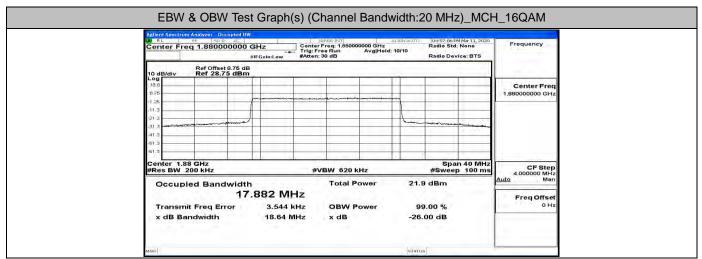


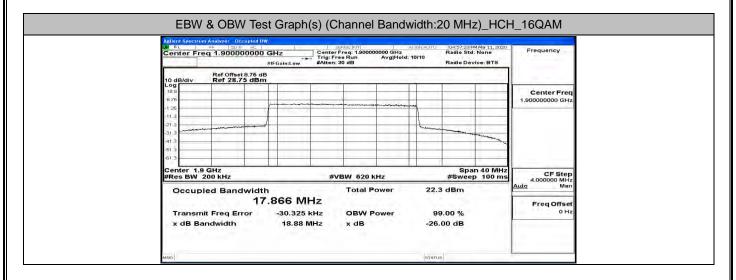




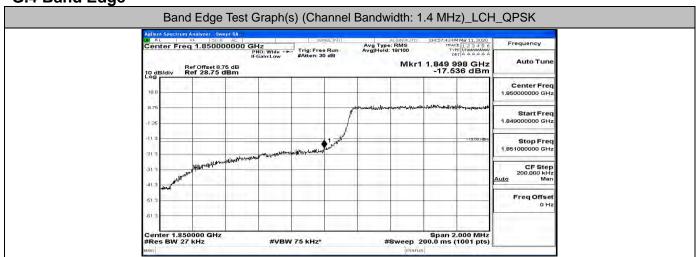


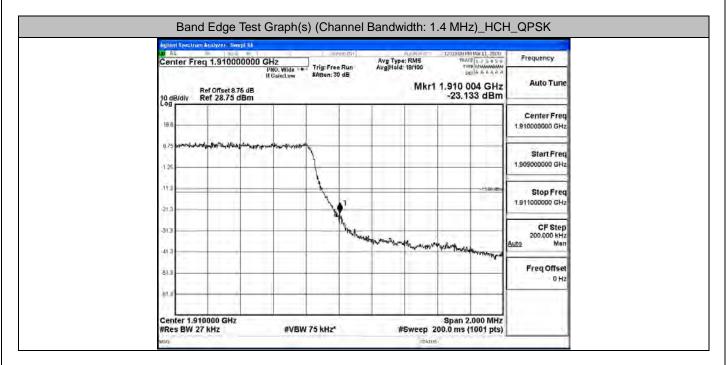


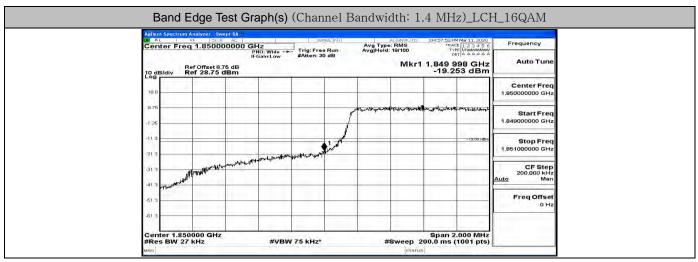


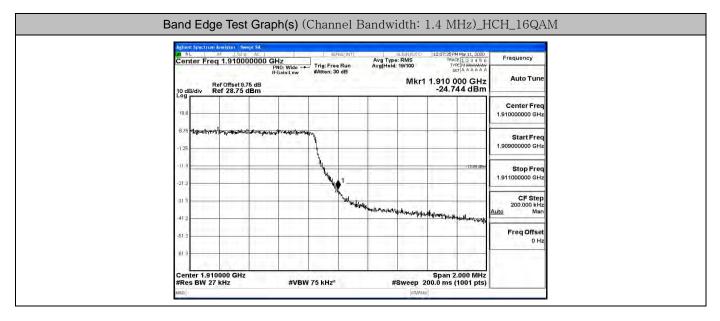


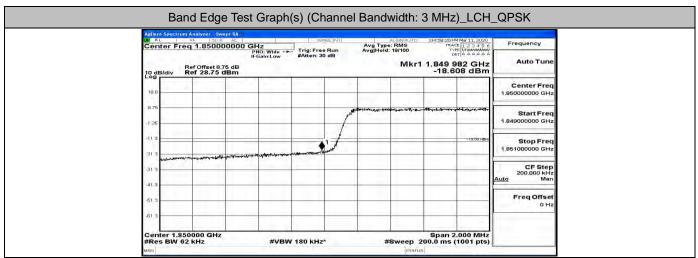
G.4 Band Edge

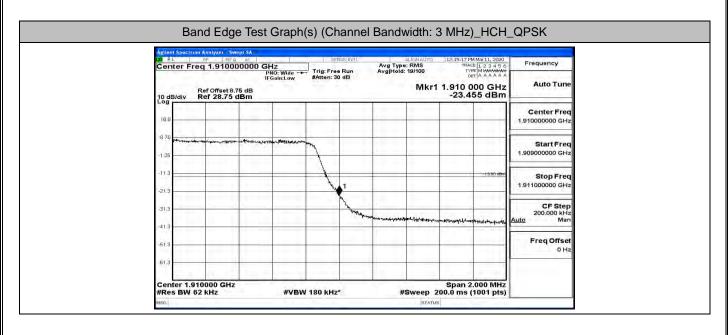


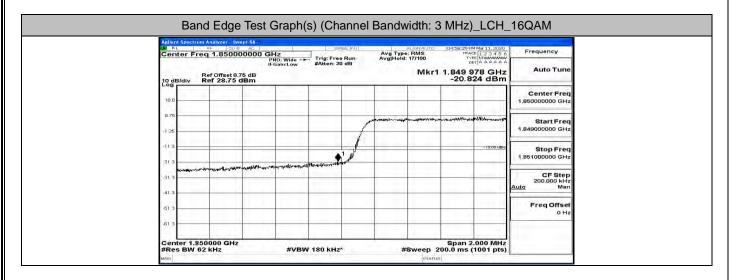


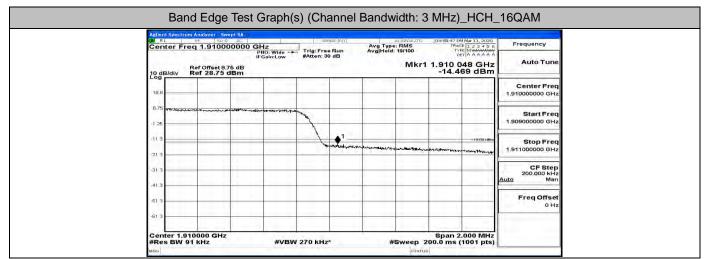


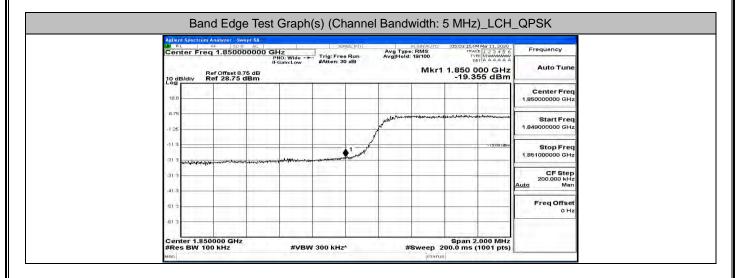


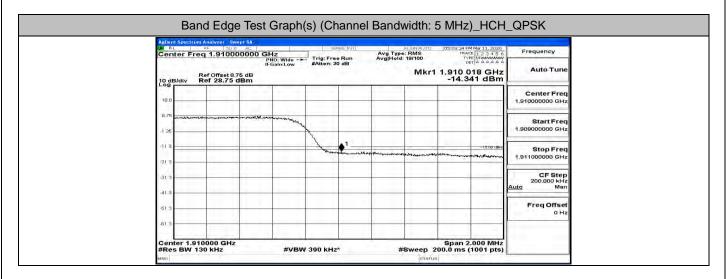


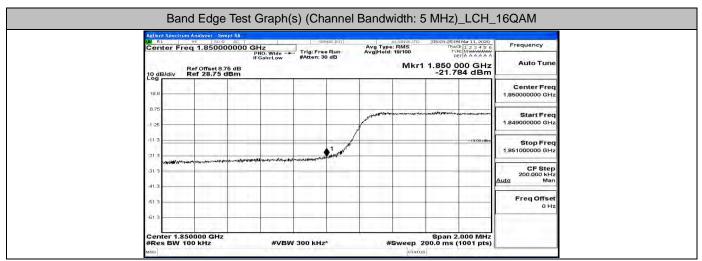


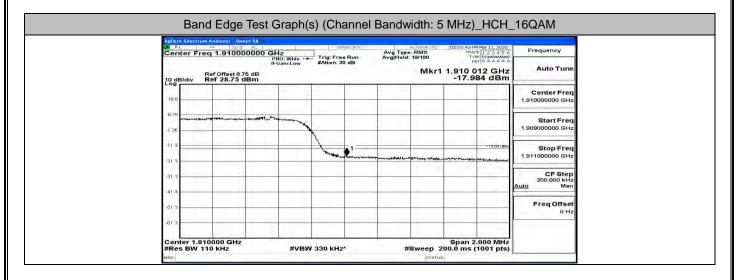


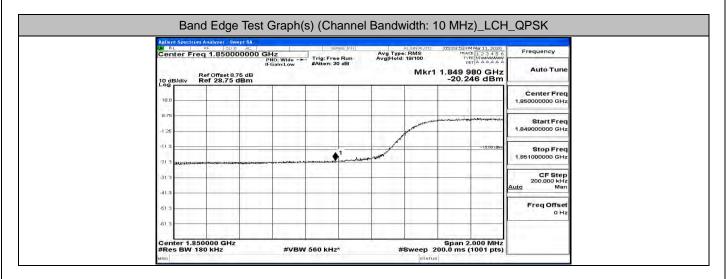


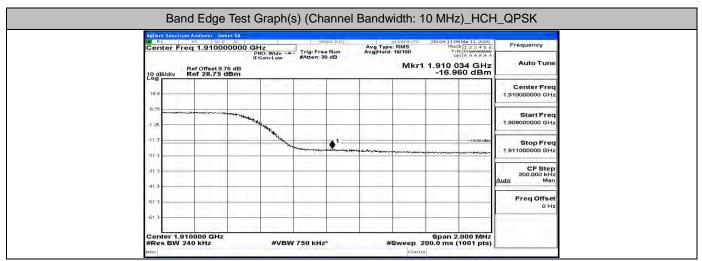


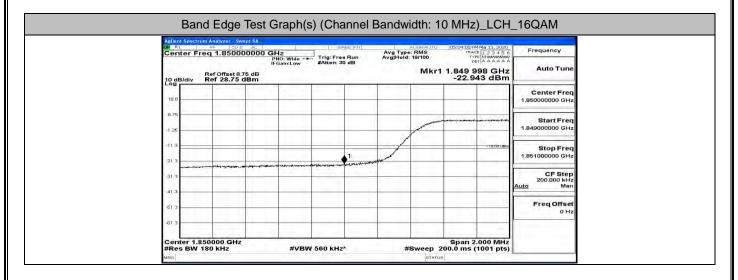


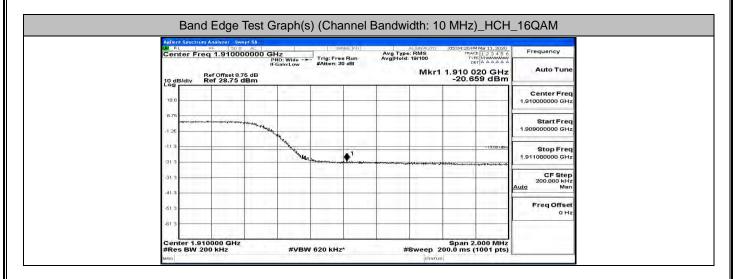


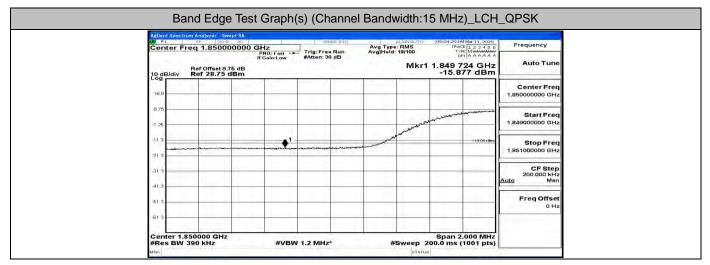


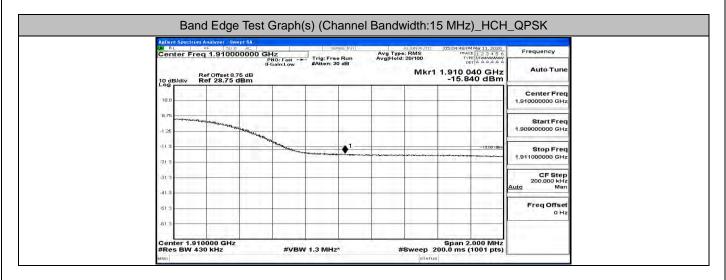


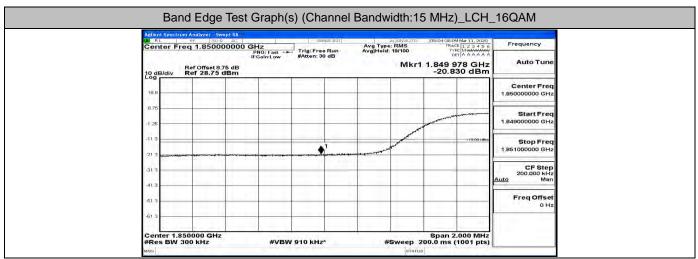


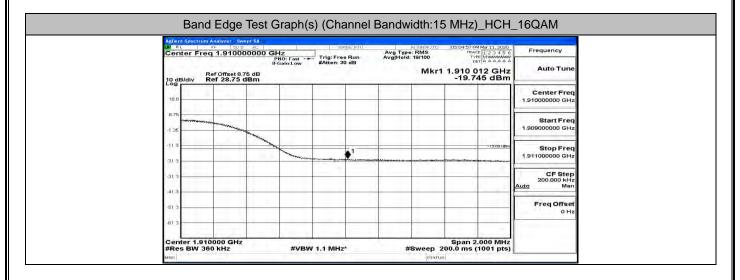


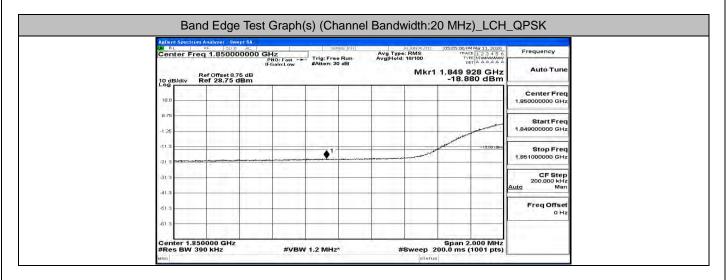


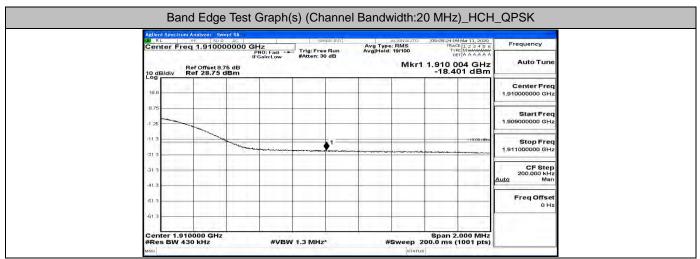


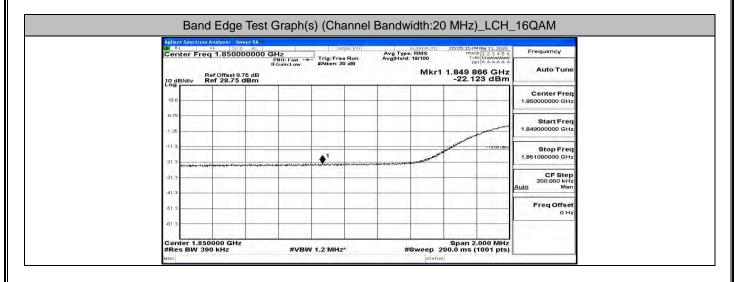


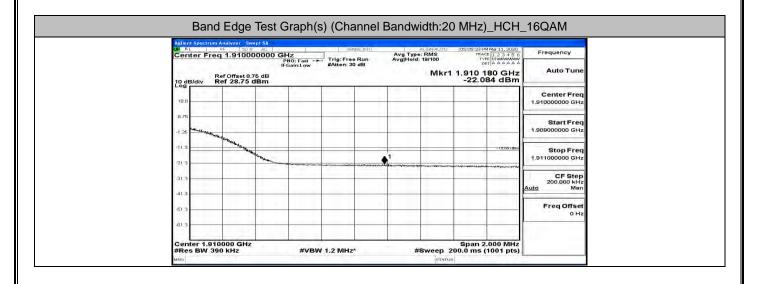






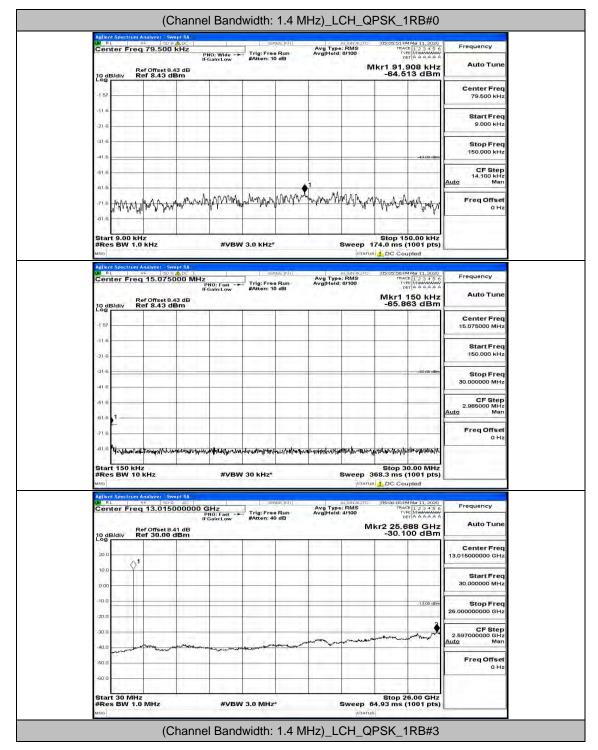


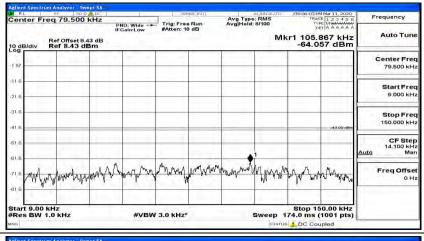


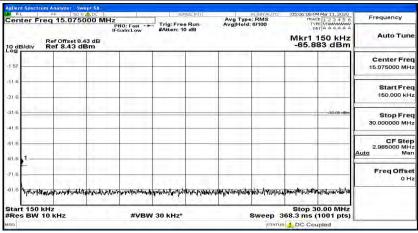


G.5 Conducted Spurious Emission

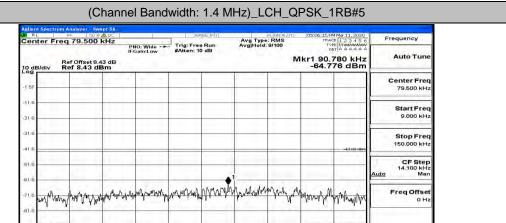
Channel Bandwidth: 1.4 MHz





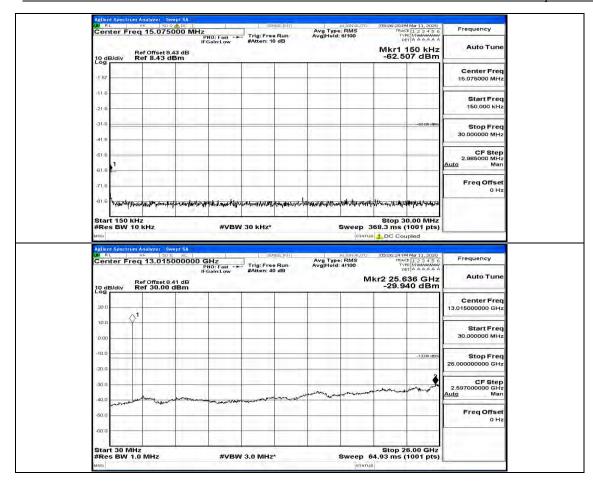


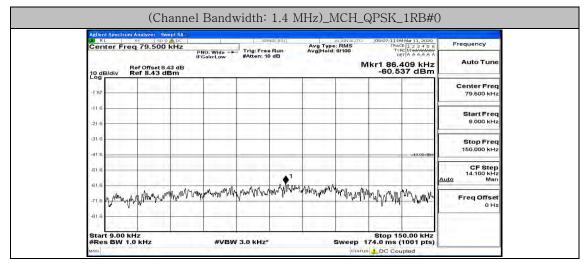




#VBW 3.0 kHz*

Start 9.00 kHz #Res BW 1.0 kHz Stop 150.00 kHz Sweep 174.0 ms (1001 pts)

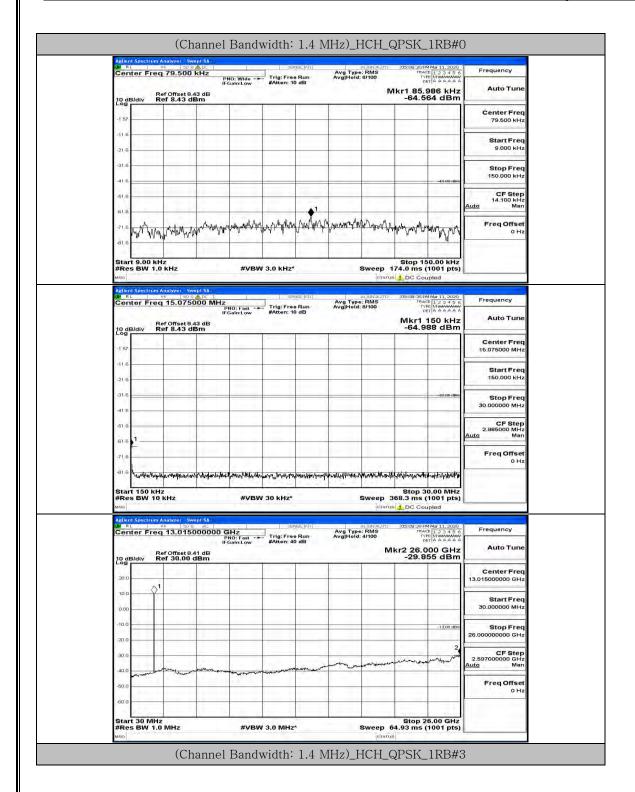


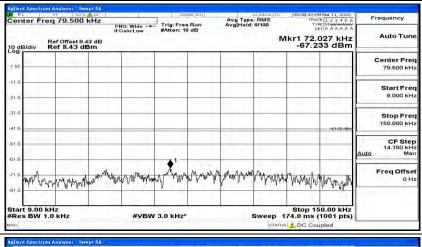


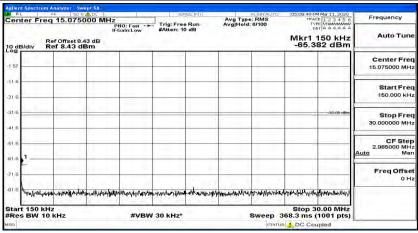
Start 30 MHz #Res BW 1.0 MHz

#VBW 3.0 MHz*

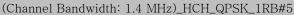
Stop 26.00 GHz Sweep 64.93 ms (1001 pts) Freq Offset

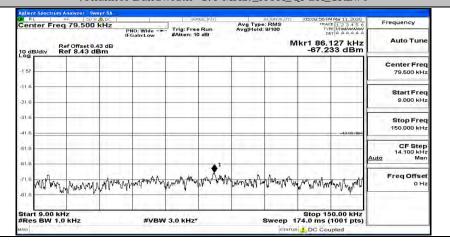


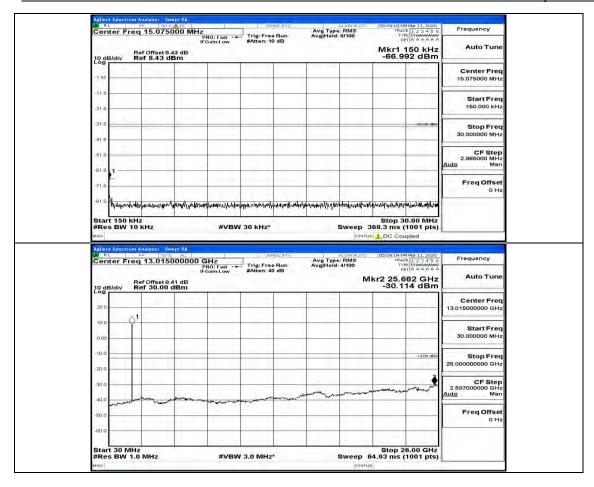


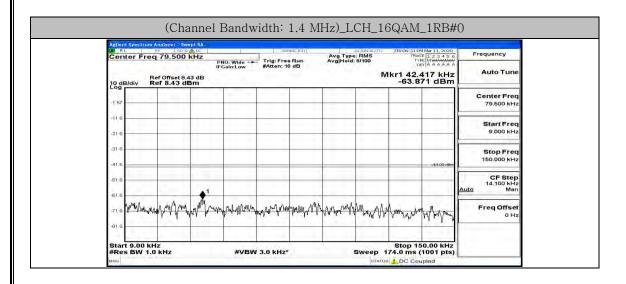








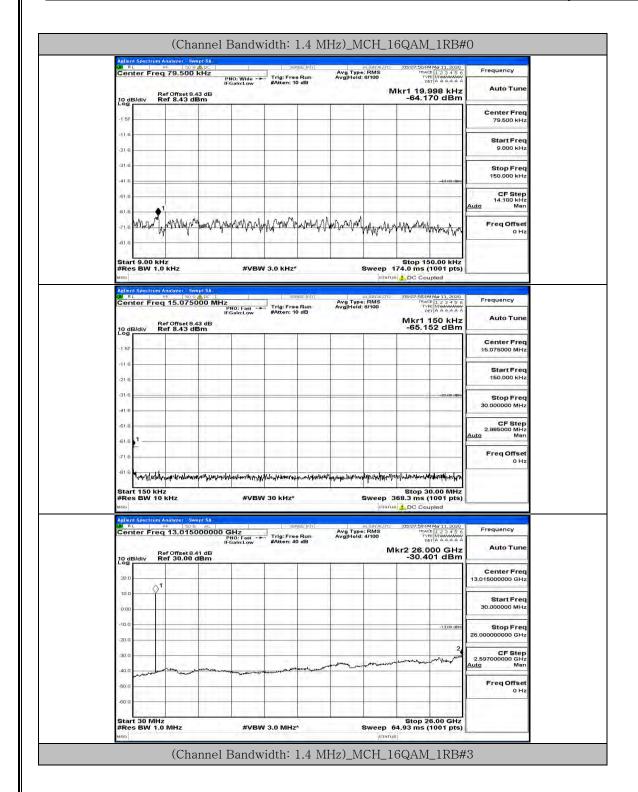


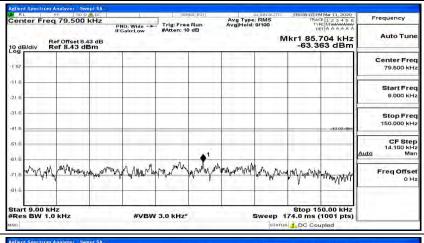


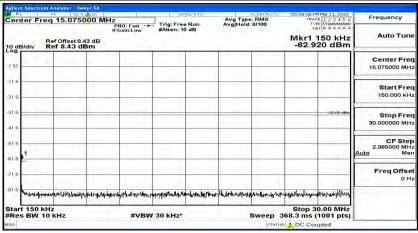
Start 30 MHz #Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts) Freq Offset

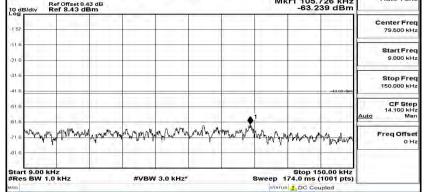


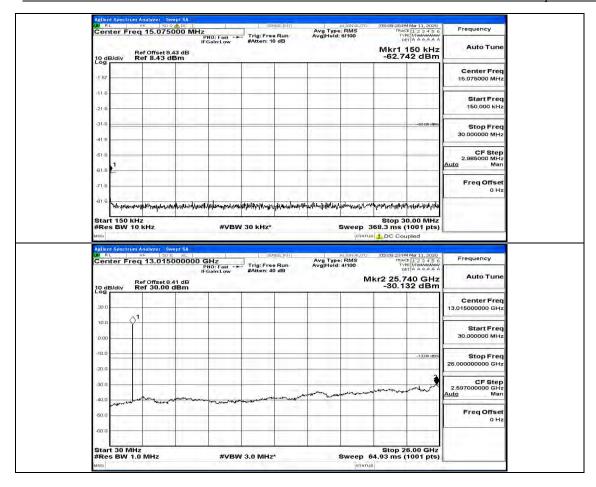


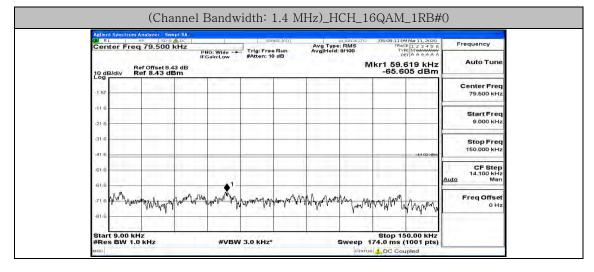










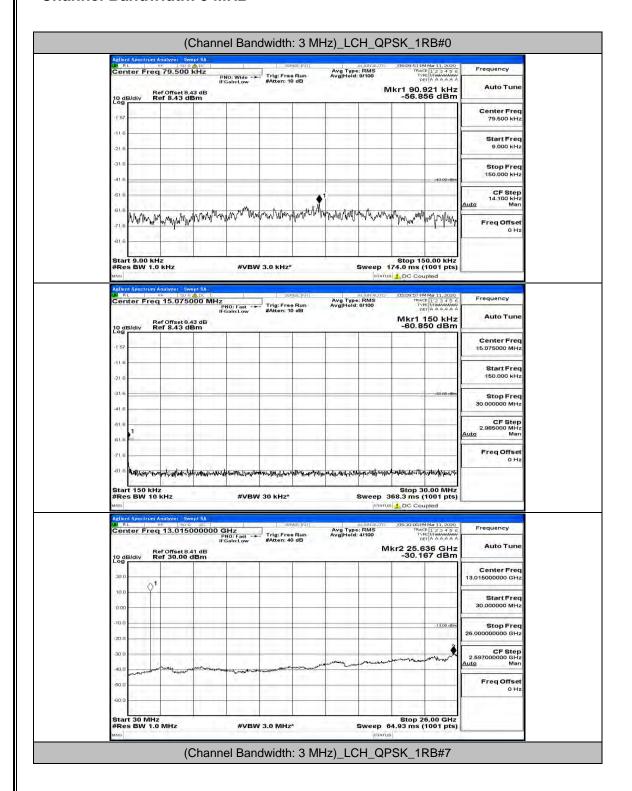


Start 30 MHz #Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts) Freq Offset

Channel Bandwidth: 3 MHz

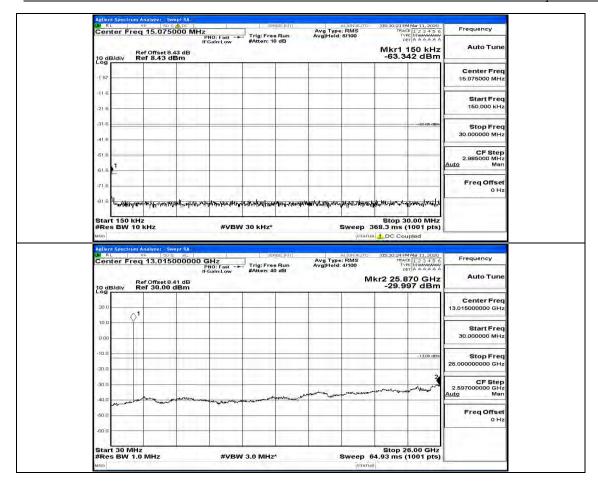


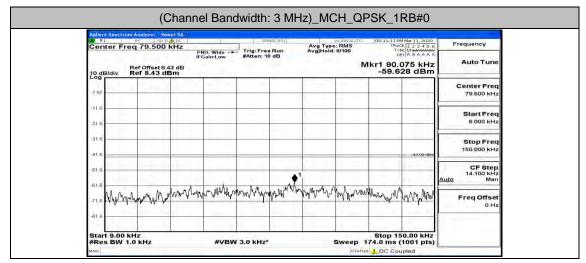
Freq Offset 0 Hz

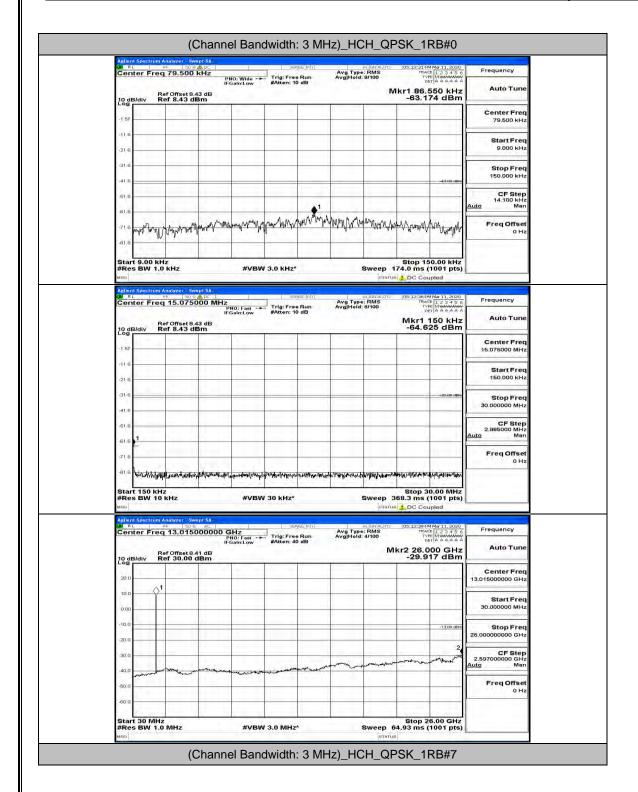
h.r.m.m.n.h.l.m.m.m.m.h.l.b.

#VBW 3.0 kHz*

Start 9.00 kHz #Res BW 1.0 kHz



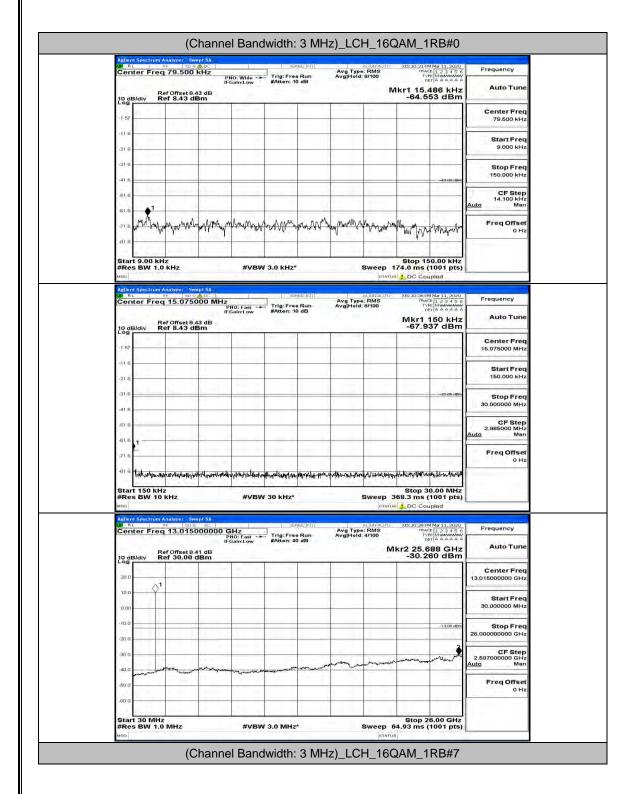




Start 9.00 kHz #Res BW 1.0 kHz #VBW 3.0 MHz*

Start 30 MHz #Res BW 1.0 MHz Freq Offset 0 Hz

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)



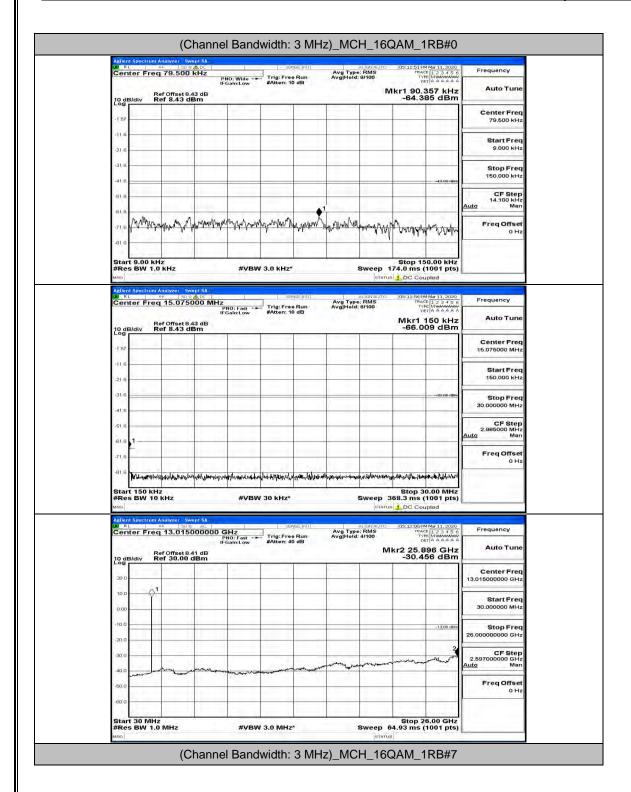
Start 9.00 kHz #Res BW 1.0 kHz

#VBW 3.0 kHz*

#VBW 3.0 MHz*

Start 30 MHz #Res BW 1.0 MHz Freq Offset 0 Hz

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)



Start 9.00 kHz #Res BW 1.0 kHz

#VBW 3.0 kHz*

Freq Offset 0 Hz

