# Appendix D: Test Data for E-UTRA Band 2

**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

## **D.1 Conducted Output Power**

	Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	22.53	21.73	PASS		
		1	3	22.57	21.92	PASS		
		1	5	22.50	21.89	PASS		
	LCH	3	0	22.43	21.56	PASS		
		3	2	22.59	21.68	PASS		
		3	3	22.45	21.67	PASS		
		6	0	21.53	20.25	PASS		
		1	0	22.45	21.46	PASS		
	МСН	1	3	22.63	21.69	PASS		
QPSK /		1	5	22.52	21.44	PASS		
16QAM		3	0	22.61	21.66	PASS		
TOQAIVI		3	2	22.73	21.70	PASS		
		3	3	22.56	21.58	PASS		
		6	0	21.87	21.02	PASS		
		1	0	22.97	22.07	PASS		
		1	3	23.02	22.16	PASS		
		1	5	22.93	22.05	PASS		
	HCH	3	0	22.83	22.05	PASS		
		3	2	22.94	22.14	PASS		
		3	3	22.77	22.16	PASS		
		6	0	21.92	20.45	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict			
		1	0	22.47	21.78	PASS			
		1	7	22.44	21.53	PASS			
		1	14	22.67	21.98	PASS			
	LCH	8	0	21.57	20.55	PASS			
		8	4	21.60	20.56	PASS			
		8	7	21.74	20.58	PASS			
		15	0	21.57	20.70	PASS			
	MCH	1	0	22.83	22.21	PASS			
		1	7	22.79	22.20	PASS			
QPSK /		1	14	22.82	22.35	PASS			
16QAM		8	0	21.79	21.01	PASS			
TOQAIVI		8	4	21.70	20.74	PASS			
		8	7	21.71	20.68	PASS			
		15	0	21.73	20.89	PASS			
		1	0	22.73	21.64	PASS			
		1	7	22.77	21.91	PASS			
		1	14	23.11	21.69	PASS			
	HCH	8	0	21.99	20.95	PASS			
		8	4	21.97	20.76	PASS			
		8	7	21.92	20.70	PASS			
		15	0	21.93	20.95	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	22.56	21.38	PASS		
		1	12	22.79	21.26	PASS		
		1	24	22.73	21.38	PASS		
	LCH	12	0	21.73	20.82	PASS		
		12	6	21.63	20.82	PASS		
		12	13	21.81	20.89	PASS		
		25	0	21.76	20.91	PASS		
	MCH	1	0	22.90	21.68	PASS		
		1	12	23.09	21.79	PASS		
QPSK /		1	24	22.93	21.70	PASS		
16QAM		12	0	21.85	21.09	PASS		
TOQAM		12	6	21.82	20.80	PASS		
		12	13	21.87	20.99	PASS		
		25	0	21.81	20.86	PASS		
		1	0	23.17	21.58	PASS		
		1	12	22.95	21.49	PASS		
		1	24	23.13	21.54	PASS		
	HCH	12	0	21.93	20.73	PASS		
		12	6	21.87	20.70	PASS		
		12	13	21.99	20.93	PASS		
<u> </u>		25	0	21.93	20.98	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/andiat			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.63	22.61	PASS			
		1	24	22.73	22.55	PASS			
		1	49	23.07	22.45	PASS			
	LCH	25	0	21.93	21.11	PASS			
		25	12	21.74	20.89	PASS			
		25	25	21.93	20.97	PASS			
		50	0	21.79	20.84	PASS			
	MCH	1	0	23.11	21.74	PASS			
		1	24	22.66	22.30	PASS			
QPSK /		1	49	23.01	22.44	PASS			
16QAM		25	0	22.02	20.91	PASS			
TOQAW		25	12	21.84	21.00	PASS			
		25	25	21.88	21.05	PASS			
		50	0	21.89	20.96	PASS			
		1	0	22.95	21.79	PASS			
		1	24	22.73	21.83	PASS			
		1	49	23.06	21.95	PASS			
	HCH	25	0	22.07	21.10	PASS			
		25	12	21.94	20.99	PASS			
		25	25	21.98	21.02	PASS			
		50	0	21.92	21.16	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Modulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/ordint			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.64	22.21	PASS			
		1	37	22.94	22.35	PASS			
		1	74	23.04	22.39	PASS			
	LCH	37	0	21.71	20.61	PASS			
		37	18	21.94	20.71	PASS			
		37	38	22.10	20.92	PASS			
		75	0	22.07	21.11	PASS			
	мсн	1	0	22.97	22.64	PASS			
		1	37	22.87	22.36	PASS			
QPSK /		1	74	22.79	22.53	PASS			
16QAM		37	0	21.85	21.08	PASS			
TOQAM		37	18	21.96	21.06	PASS			
		37	38	21.89	20.79	PASS			
		75	0	21.82	21.04	PASS			
		1	0	22.80	21.78	PASS			
		1	37	23.21	22.13	PASS			
		1	74	23.02	21.92	PASS			
	HCH	37	0	21.90	20.94	PASS			
		37	18	21.93	20.91	PASS			
		37	38	21.93	20.90	PASS			
		75	0	21.93	20.97	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)							
Madulation	Channal	RB Conf	figuration	Average Power [dBm]	Average Power [dBm]	Vardiet		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	22.89	21.31	PASS		
		1	49	23.24	21.47	PASS		
		1	99	22.99	21.65	PASS		
	LCH	50	0	21.91	20.97	PASS		
		50	25	22.03	21.03	PASS		
		50	50	22.12	21.21	PASS		
		100	0	21.99	21.00	PASS		
		1	0	22.91	21.79	PASS		
	мсн	1	49	23.21	21.84	PASS		
ODCK /		1	99	22.88	21.45	PASS		
QPSK / 16QAM		50	0	22.05	21.16	PASS		
TOQAIVI		50	25	21.99	21.03	PASS		
		50	50	21.92	20.96	PASS		
		100	0	21.99	21.12	PASS		
		1	0	22.59	21.38	PASS		
		1	49	22.70	21.60	PASS		
		1	99	23.02	21.48	PASS		
	HCH	50	0	22.01	20.70	PASS		
		50	25	22.05	20.94	PASS		
		50	50	22.08	20.86	PASS		
		100	0	22.06	20.81	PASS		

#### D.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	3.85	<13	PASS		
QPSK	MCH	3.95	<13	PASS		
	HCH	4.66	<13	PASS		
	LCH	4.81	<13	PASS		
16QAM	MCH	4.79	<13	PASS		
	HCH	5.52	<13	PASS		

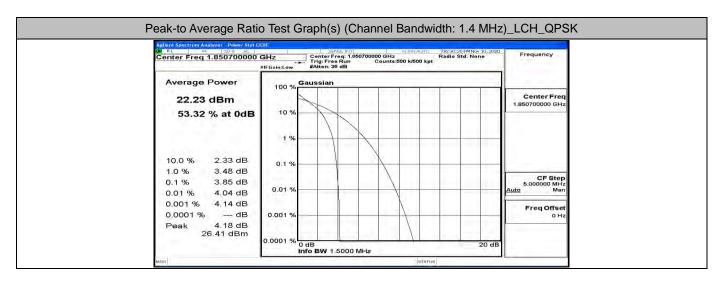
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Channel	[dB]	[dB]	verdict		
	LCH	4.1	<13	PASS		
QPSK	MCH	4.24	<13	PASS		
	HCH	4.69	<13	PASS		
16QAM	LCH	4.91	<13	PASS		
	MCH	5.05	<13	PASS		
	HCH	5.58	<13	PASS		

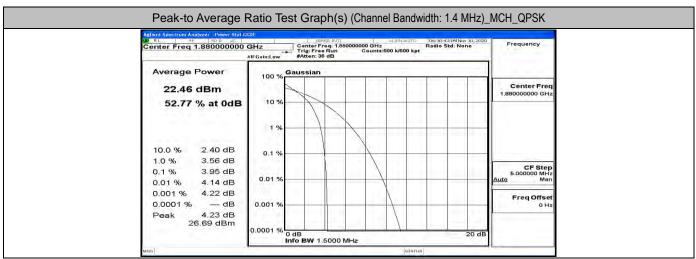
	Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Chamer	[dB]	[dB]	verdict			
	LCH	4	<13	PASS			
QPSK	MCH	4.18	<13	PASS			
	HCH	4.69	<13	PASS			
	LCH	4.69	<13	PASS			
16QAM	MCH	4.95	<13	PASS			
	HCH	5.52	<13	PASS			

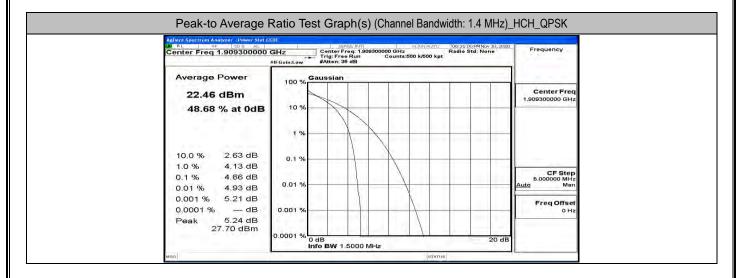
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Griannei	[dB]	[dB]	verdict		
	LCH	4.35	<13	PASS		
QPSK	MCH	4.39	<13	PASS		
	HCH	4.66	<13	PASS		
	LCH	5.11	<13	PASS		
16QAM	MCH	5.13	<13	PASS		
	HCH	5.48	<13	PASS		

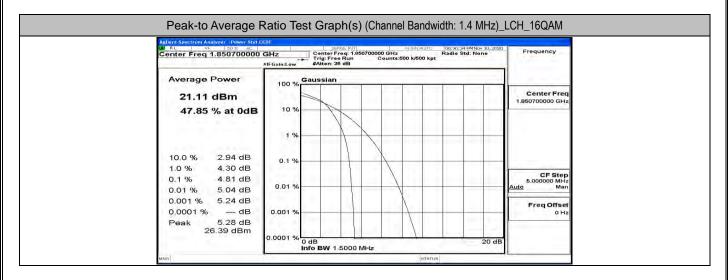
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Modulation	Grianner	[dB]	[dB]	verdict				
	LCH	4.96	<13	PASS				
QPSK	MCH	4.87	<13	PASS				
	HCH	4.85	<13	PASS				
	LCH	6.02	<13	PASS				
16QAM	MCH	5.87	<13	PASS				
	HCH	6.03	<13	PASS				

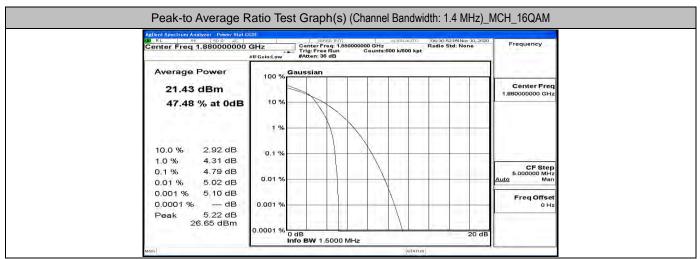
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Mandadatian	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.81	<13	PASS
	MCH	5.7	<13	PASS
	HCH	5.66	<13	PASS
16QAM	LCH	6.87	<13	PASS
	MCH	6.46	<13	PASS
	HCH	6.65	<13	PASS

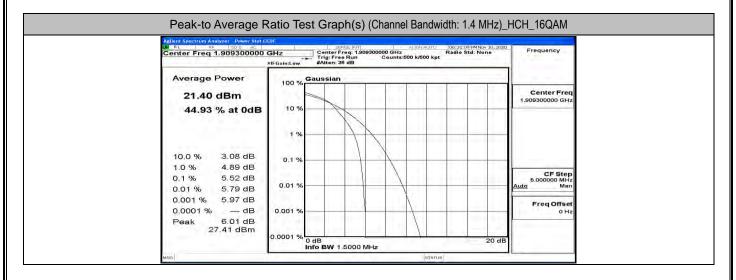


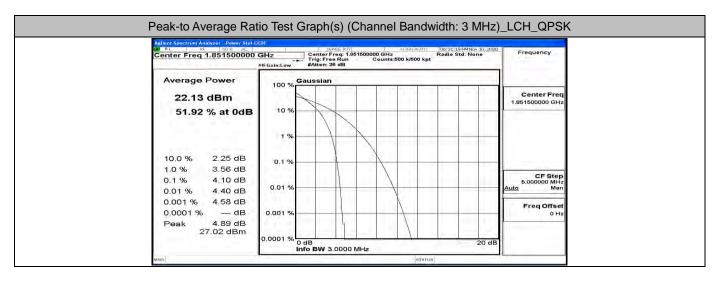


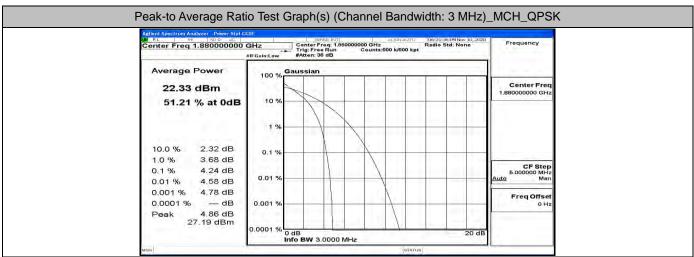


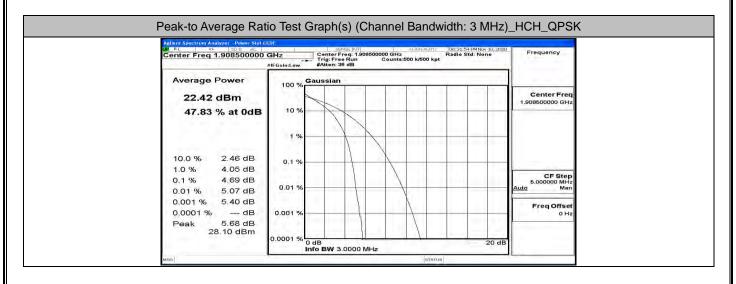


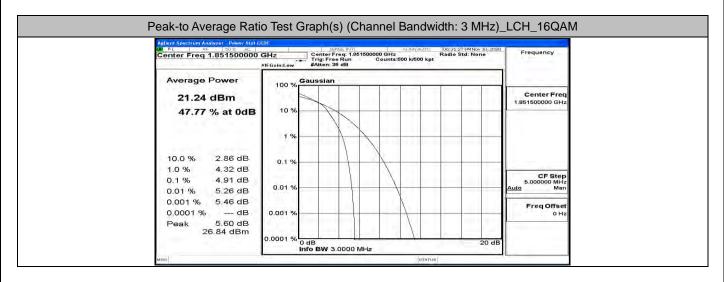


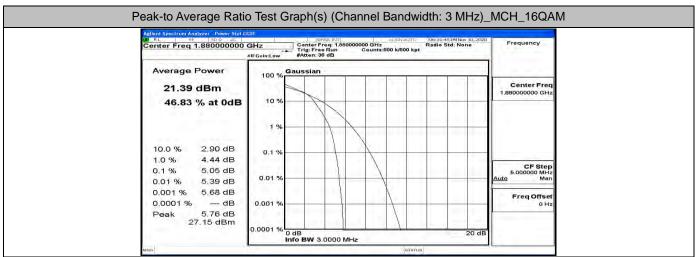


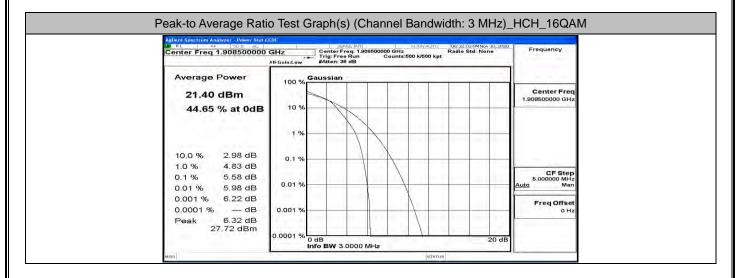


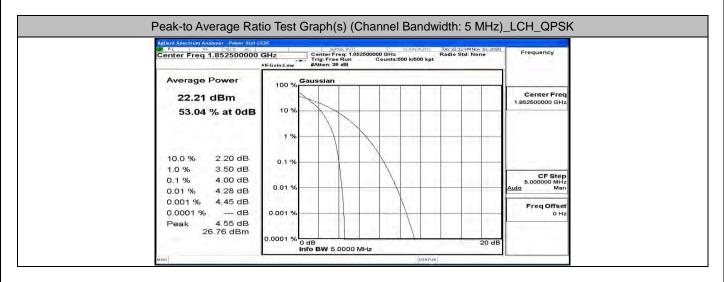


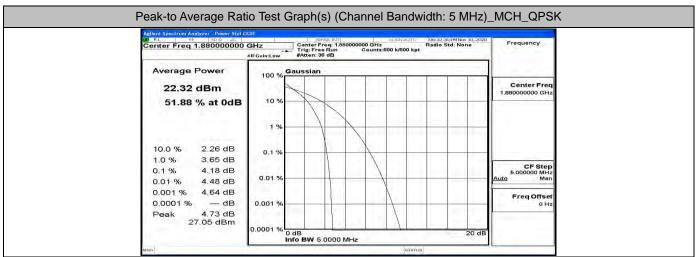


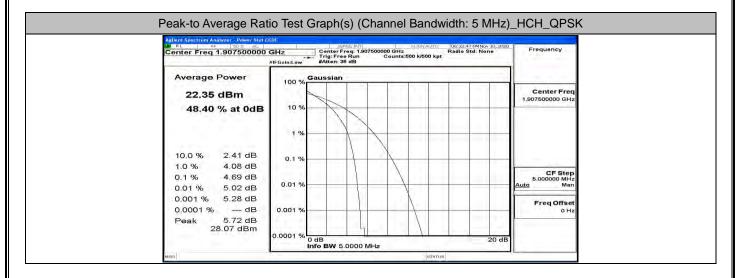


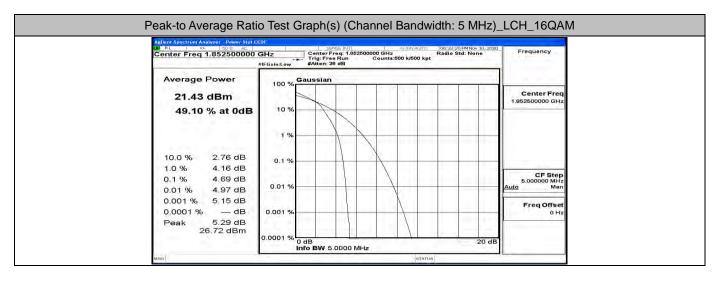


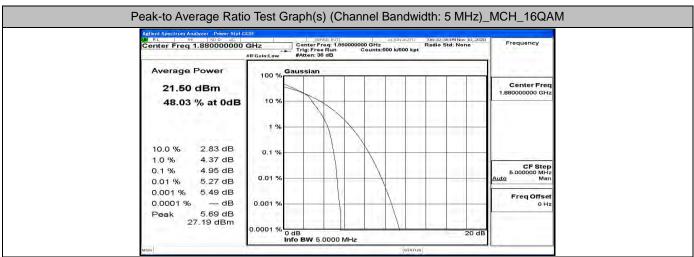


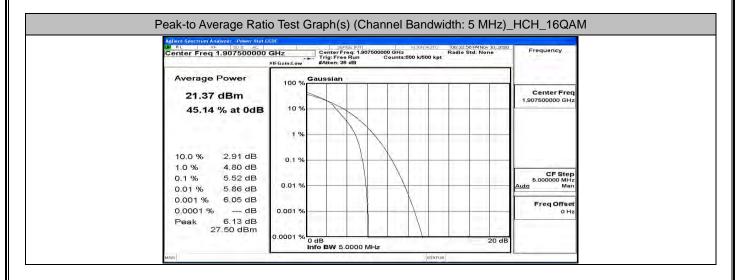


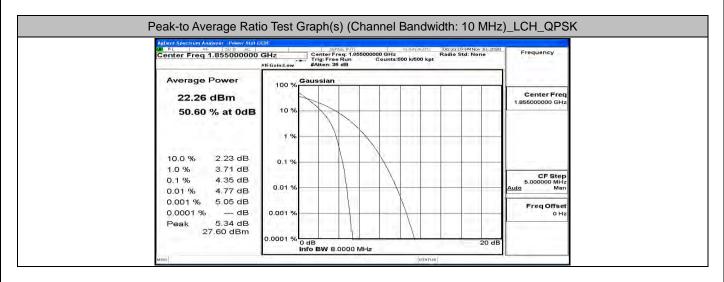


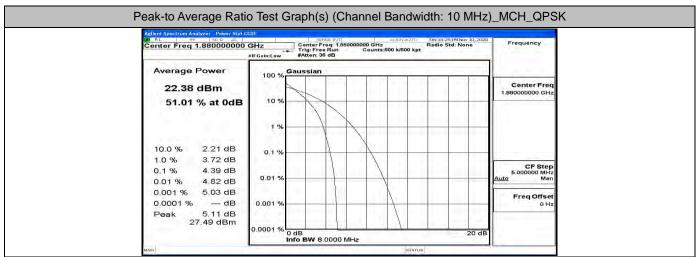


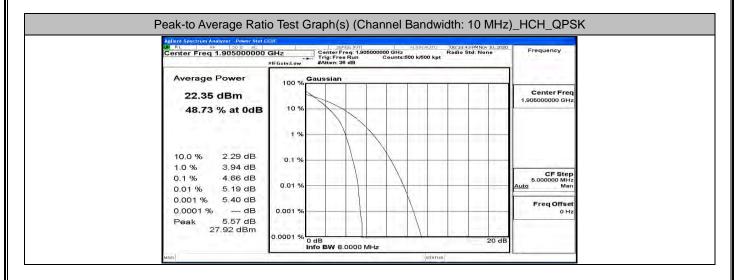


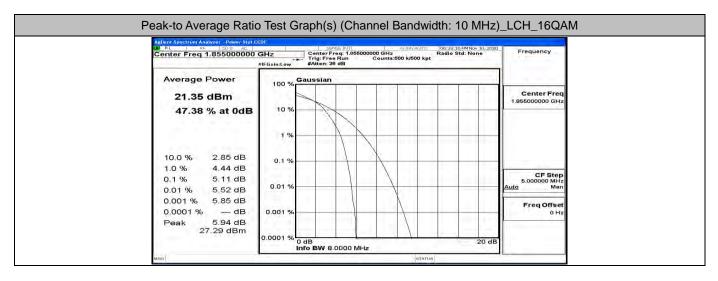


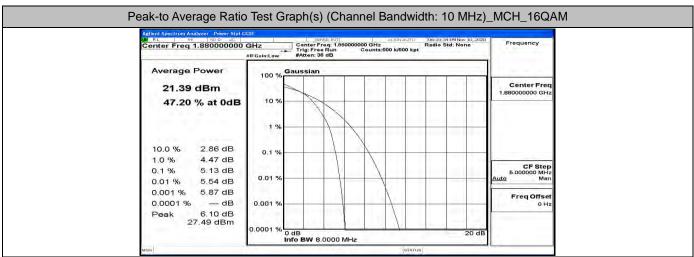


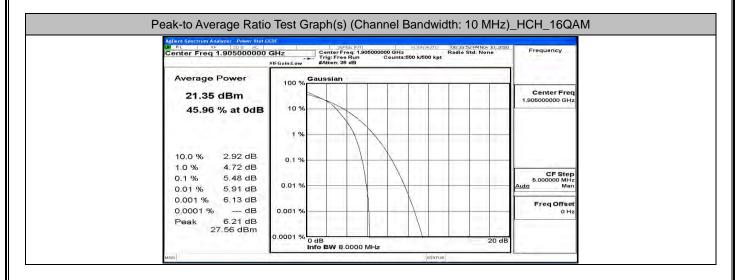


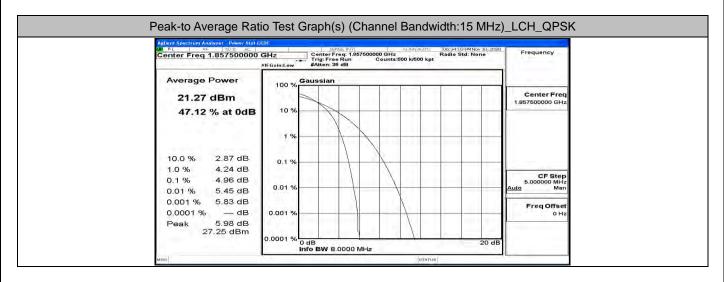


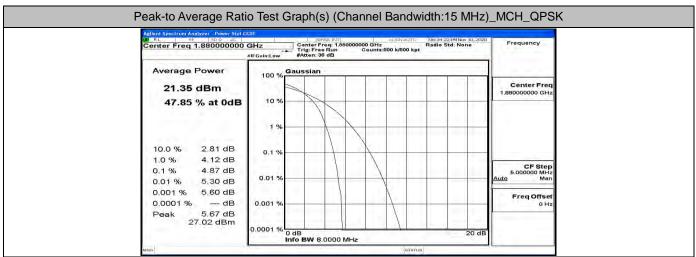


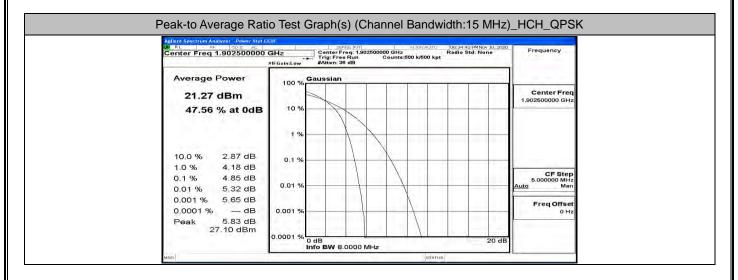


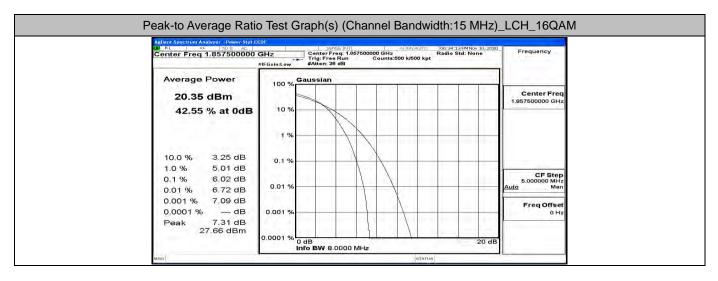


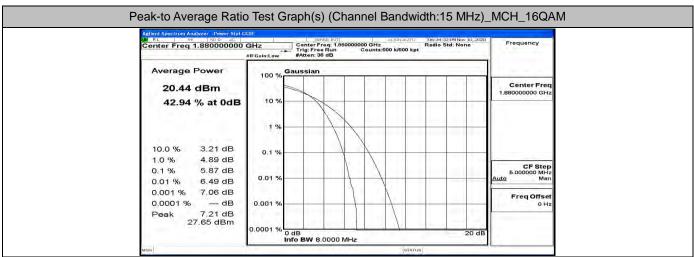


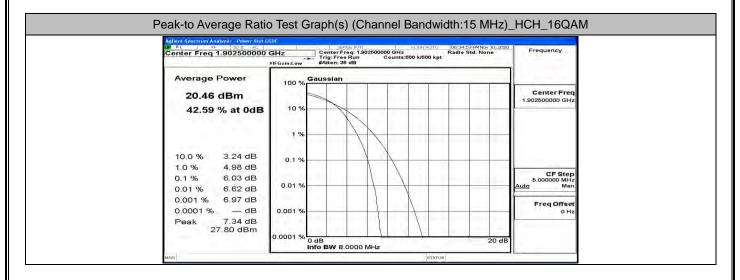


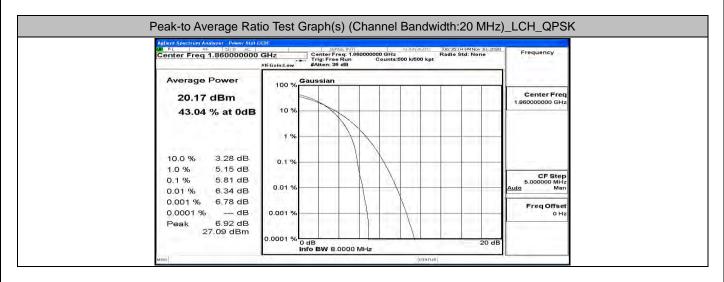


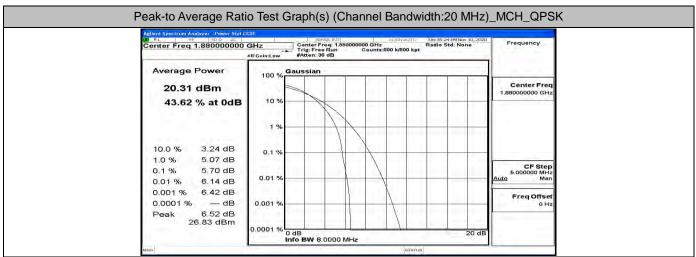


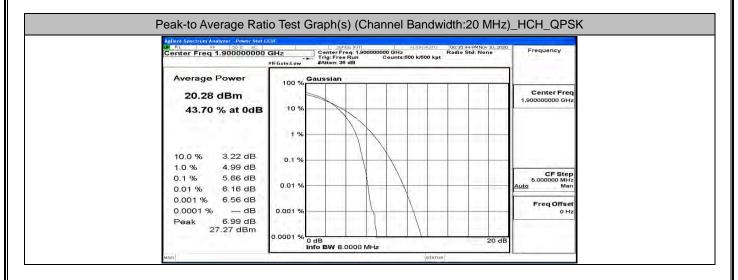


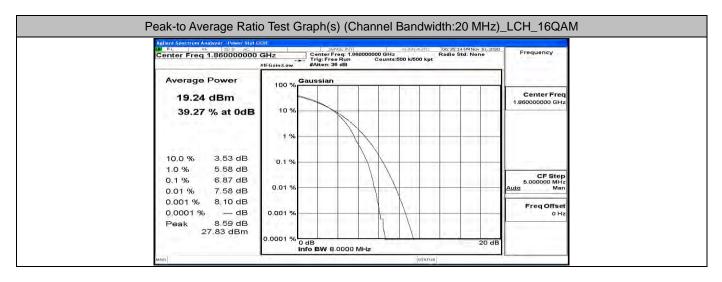


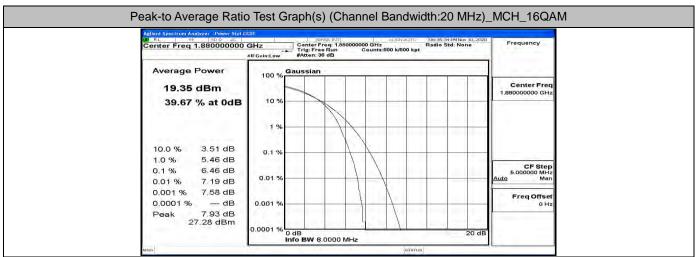


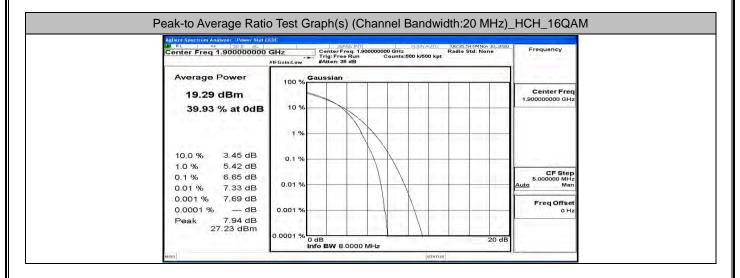












## D.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
		(MHz)	(MHz)		
QPSK	LCH	1.0773	1.245	PASS	
	MCH	1.0789	1.239	PASS	
	HCH	1.0777	1.249	PASS	
16QAM	LCH	1.0824	1.258	PASS	
	MCH	1.0788	1.252	PASS	
	HCH	1.0805	1.256	PASS	

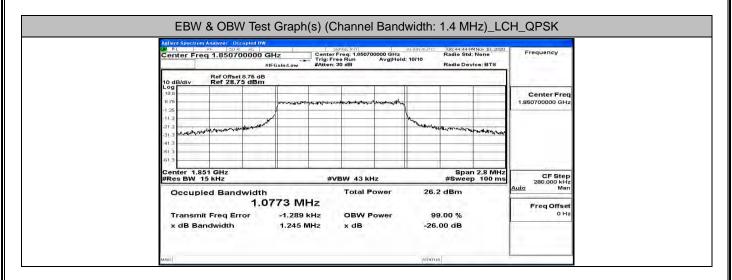
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	2.6857	2.928	PASS
	MCH	2.6832	2.921	PASS
	HCH	2.6840	2.860	PASS
16QAM	LCH	2.6877	2.911	PASS
	MCH	2.6866	2.948	PASS
	HCH	2.6808	2.890	PASS

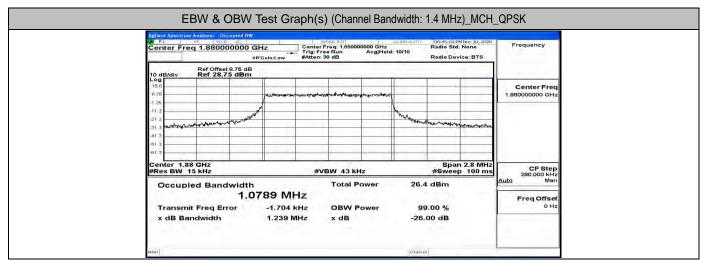
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	4.4827	4.878	PASS
	MCH	4.4687	4.853	PASS
	HCH	4.4889	4.789	PASS
16QAM	LCH	4.4823	4.828	PASS
	MCH	4.4770	4.735	PASS
	HCH	4.4798	4.840	PASS

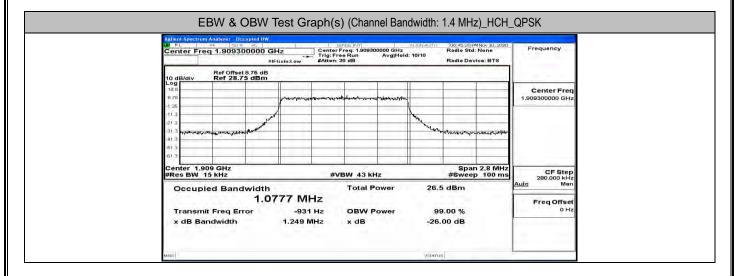
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	8.9169	9.471	PASS
	MCH	8.9199	9.500	PASS
	HCH	8.9232	9.432	PASS
16QAM	LCH	8.9227	9.491	PASS
	MCH	8.9244	9.480	PASS
	HCH	8.9050	9.473	PASS

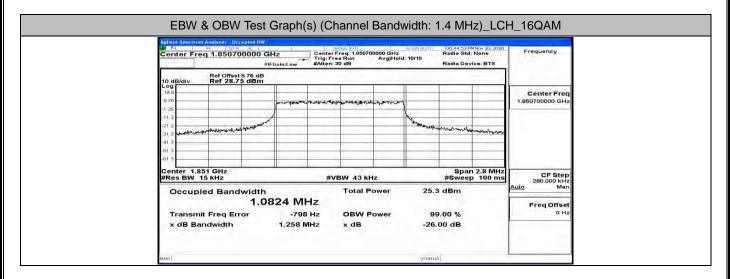
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	13.366	14.19	PASS
	MCH	13.363	13.95	PASS
	HCH	13.376	13.99	PASS
16QAM	LCH	13.373	14.03	PASS
	MCH	13.353	14.02	PASS
	HCH	13.367	14.03	PASS

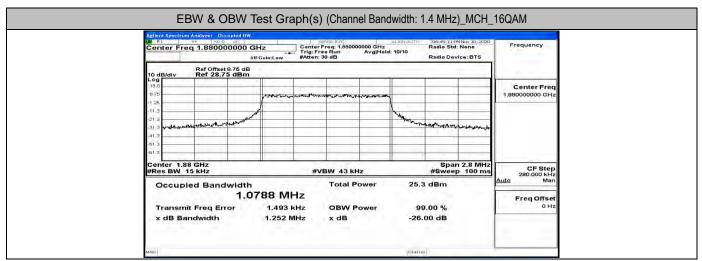
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	17.814	18.66	PASS
	MCH	17.782	18.55	PASS
	HCH	17.824	18.51	PASS
16QAM	LCH	17.827	18.60	PASS
	MCH	17.792	18.62	PASS
	HCH	17.801	18.53	PASS

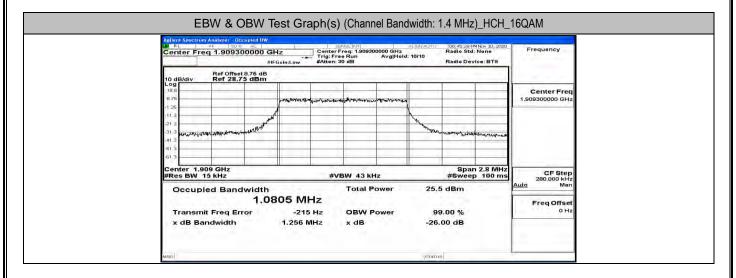


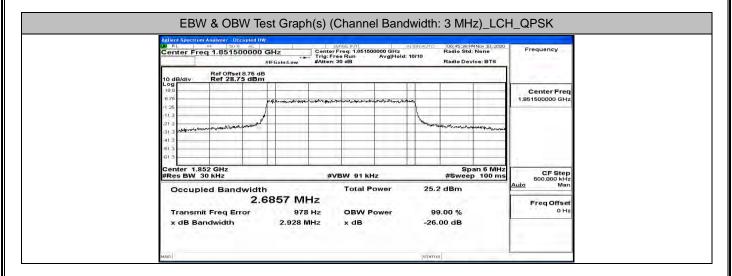


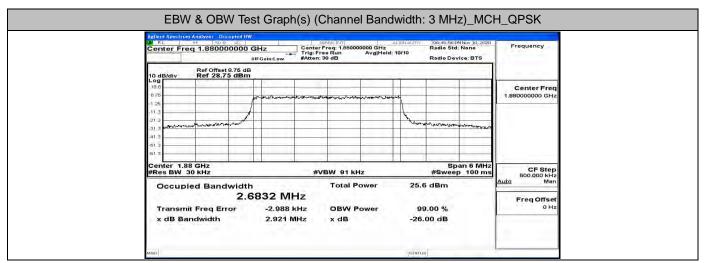


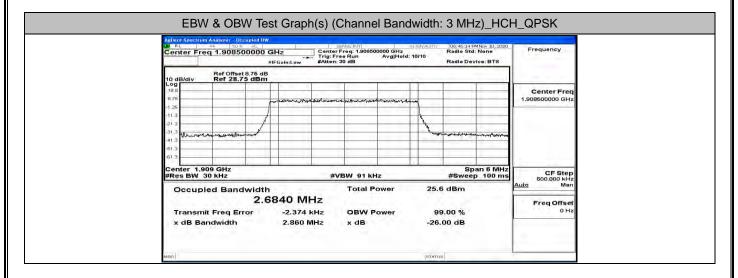


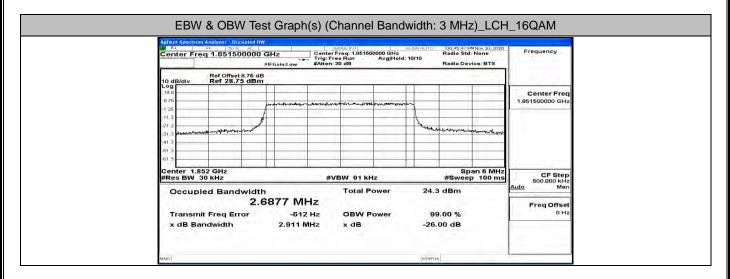


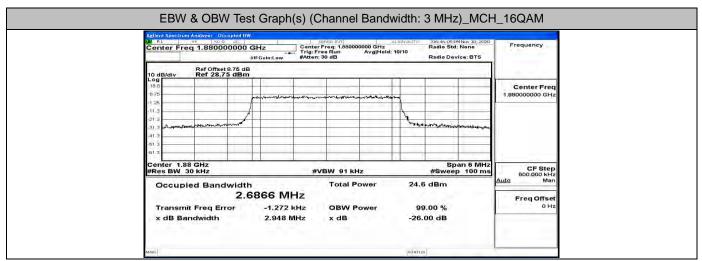


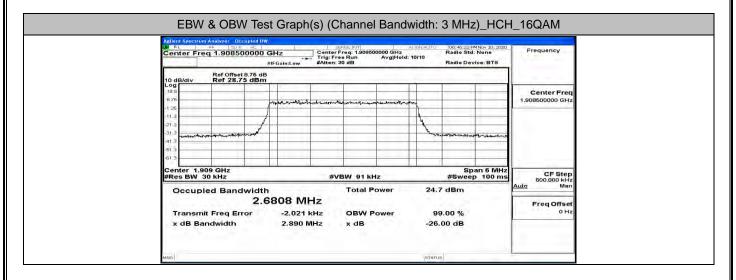


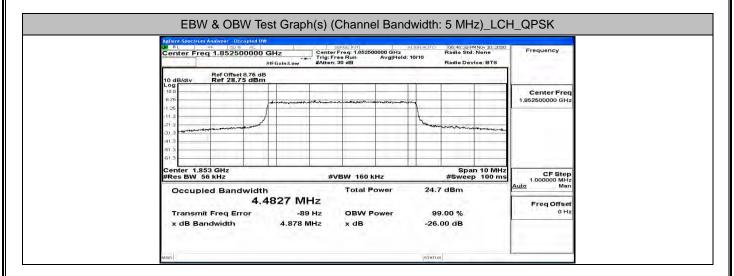


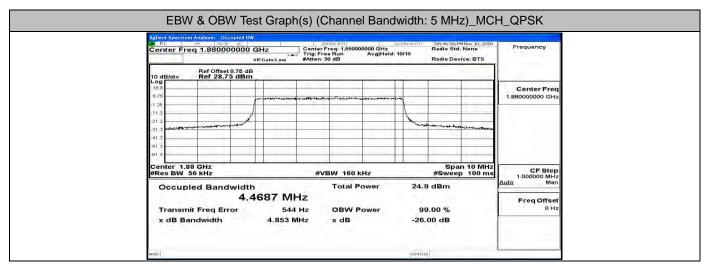


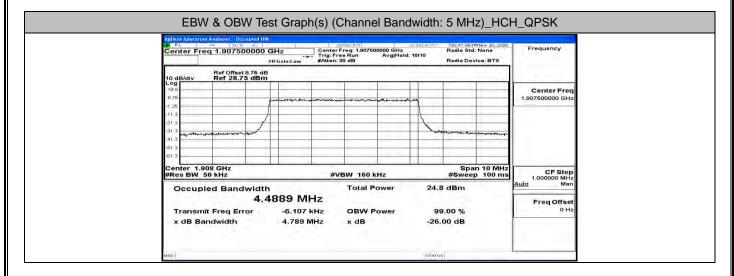


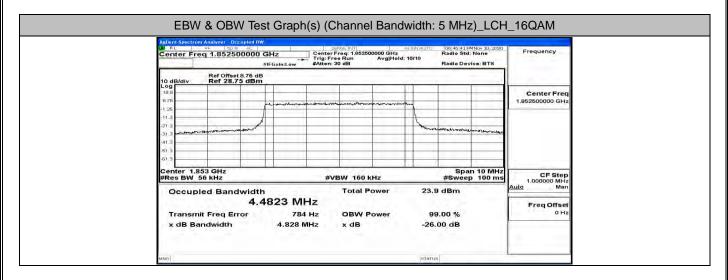


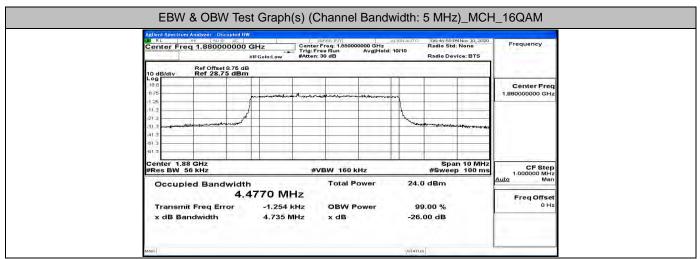


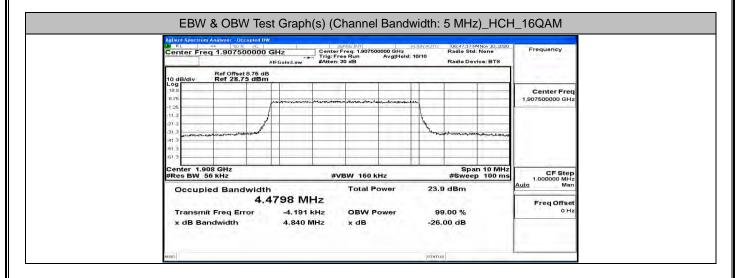


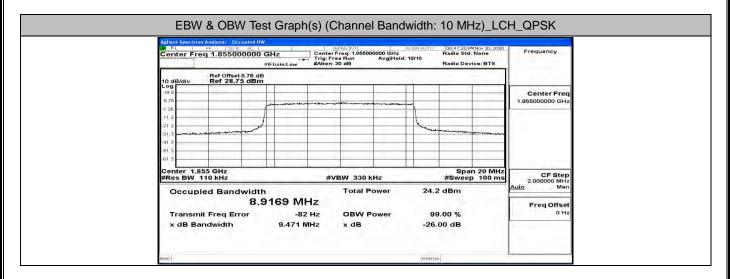


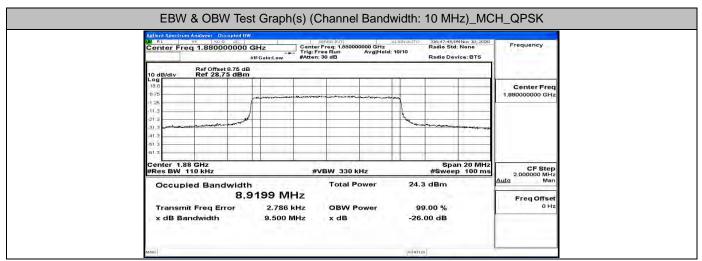


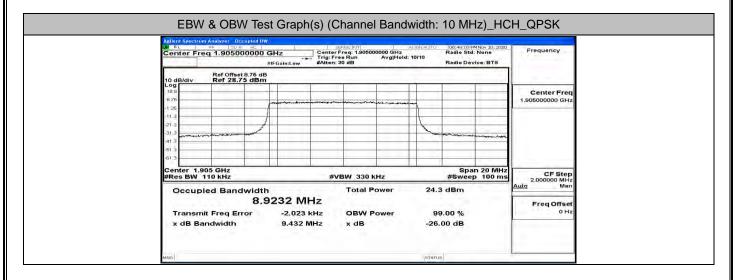


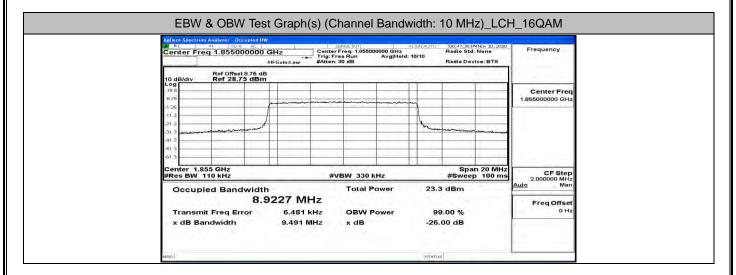


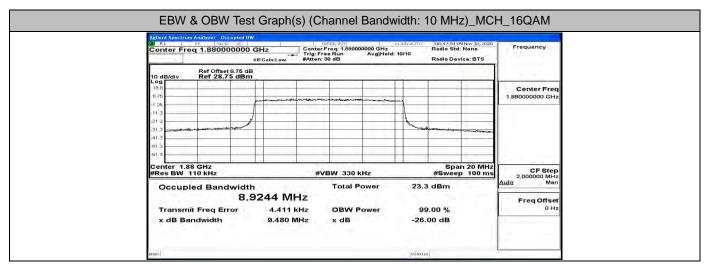


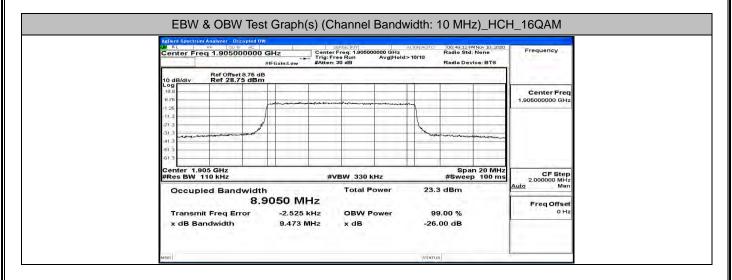


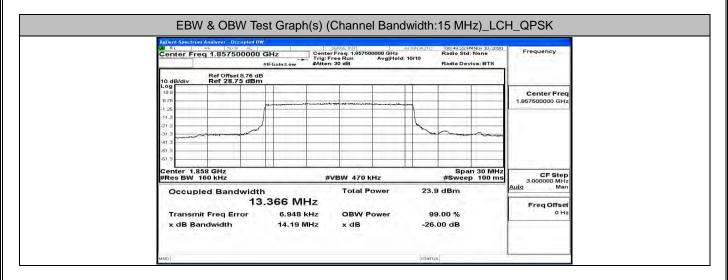


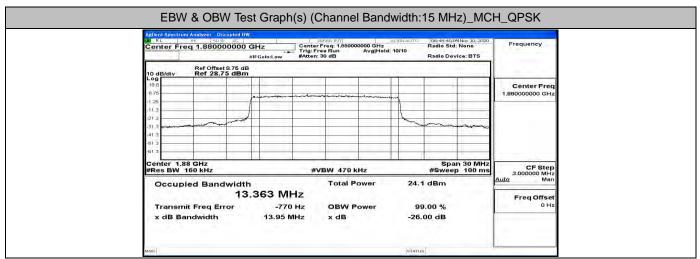


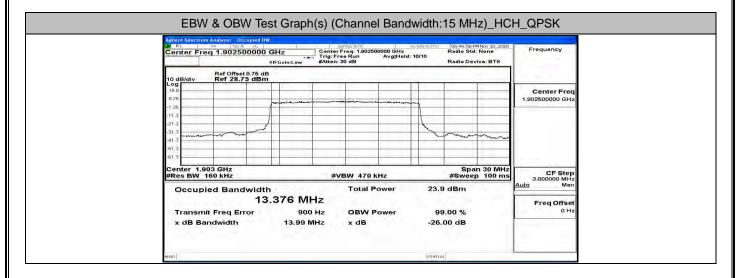


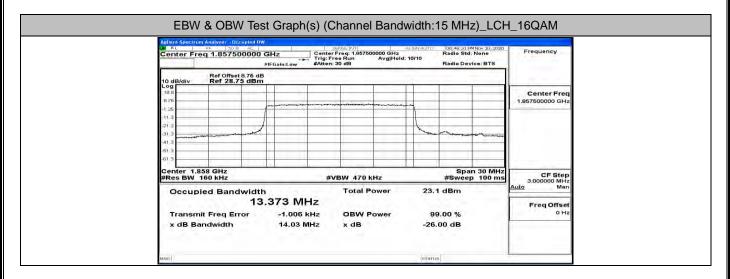


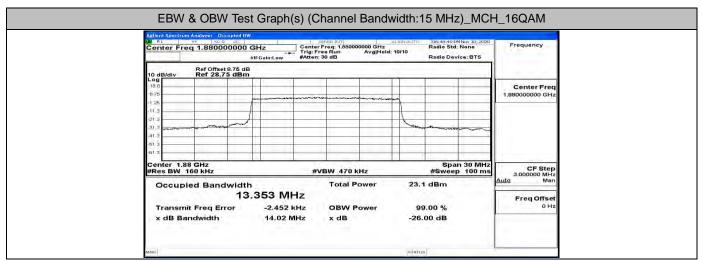


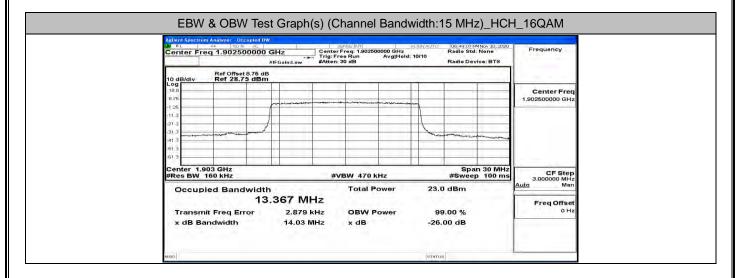


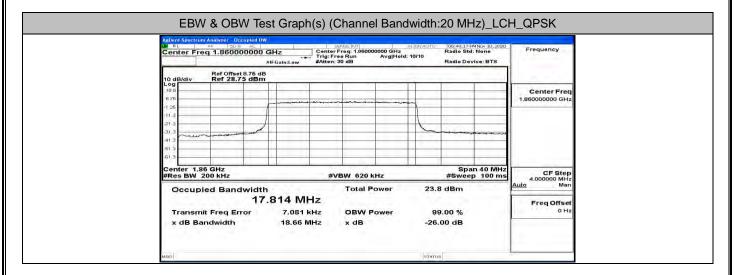


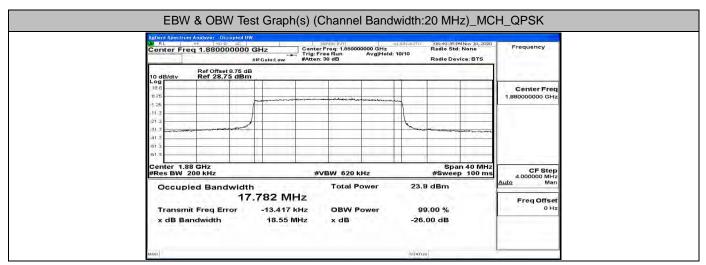


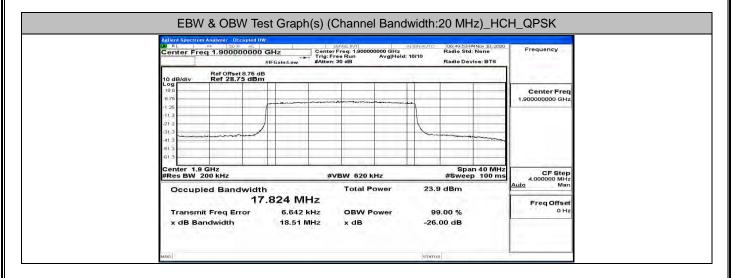


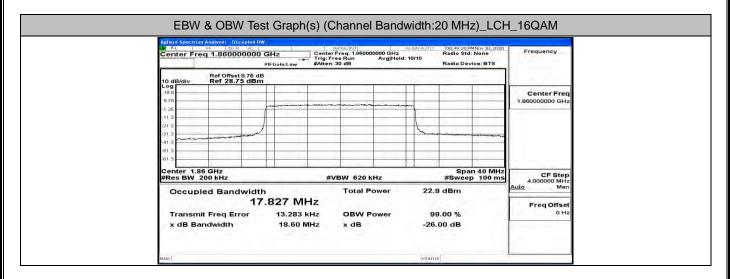


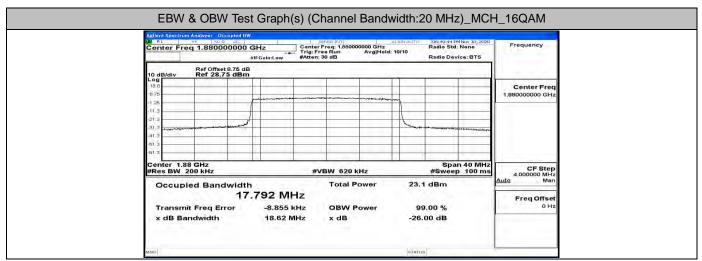


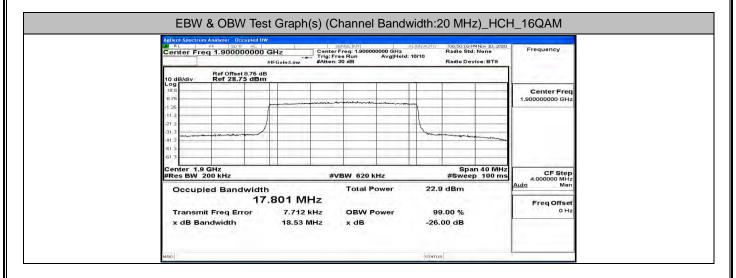




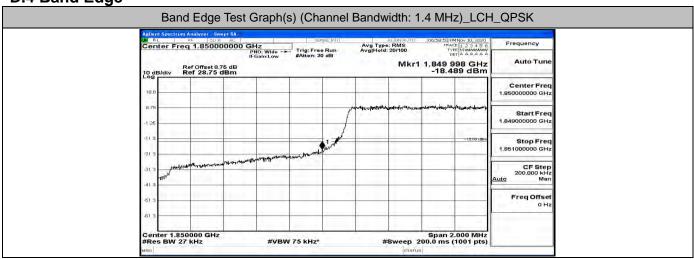


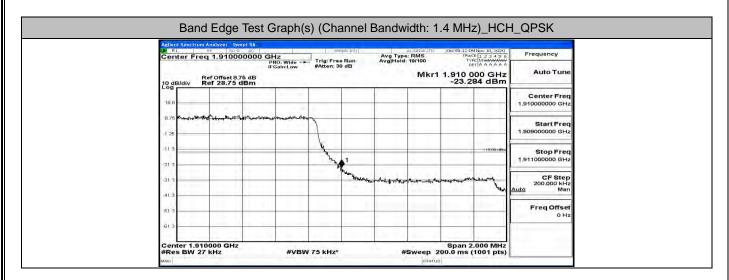


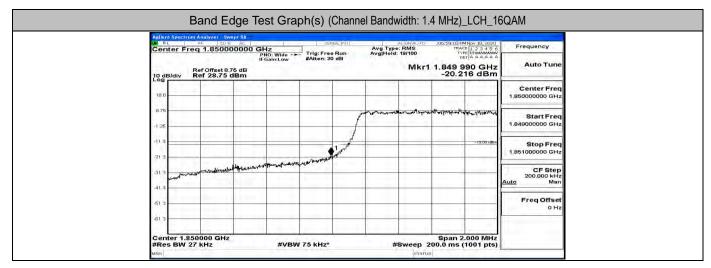


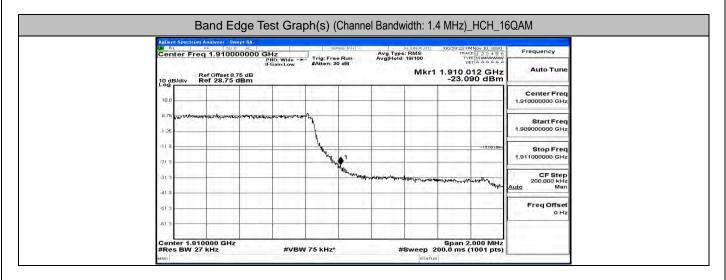


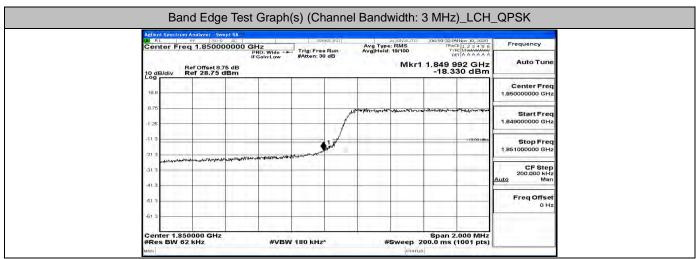
**D.4 Band Edge** 

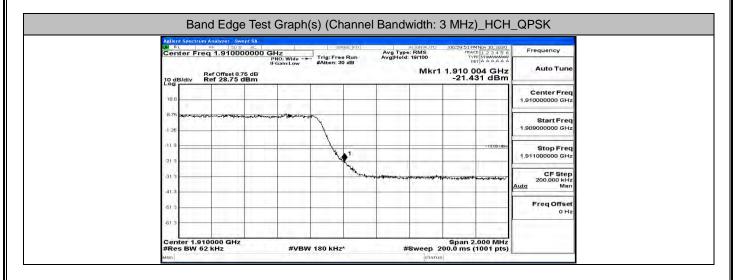


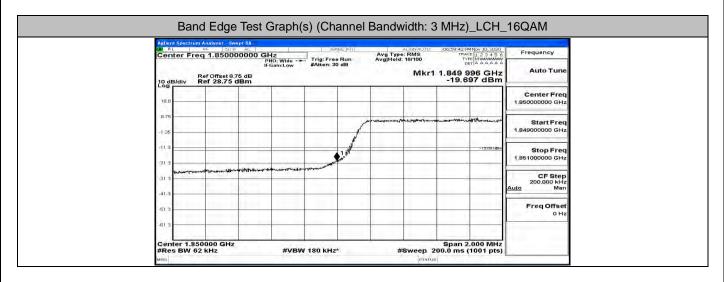


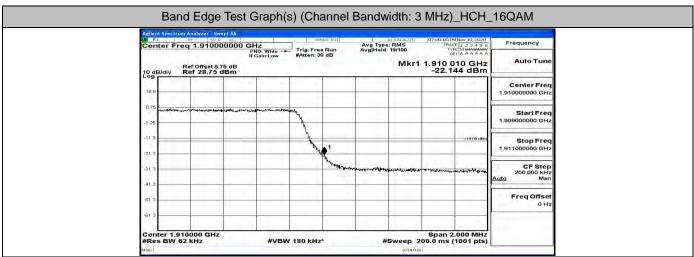


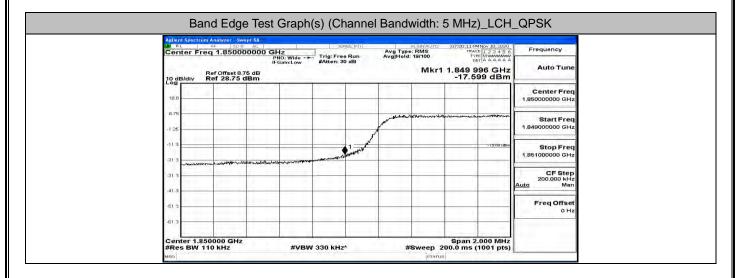


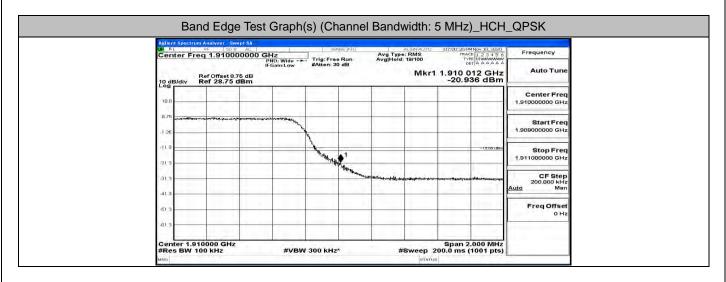


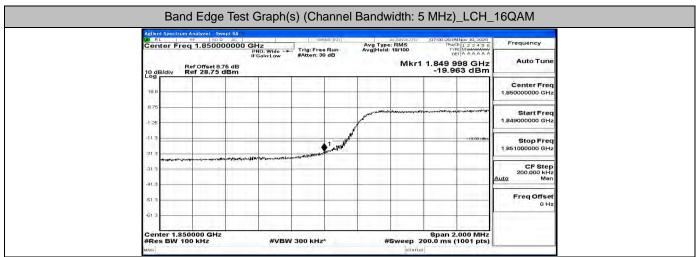


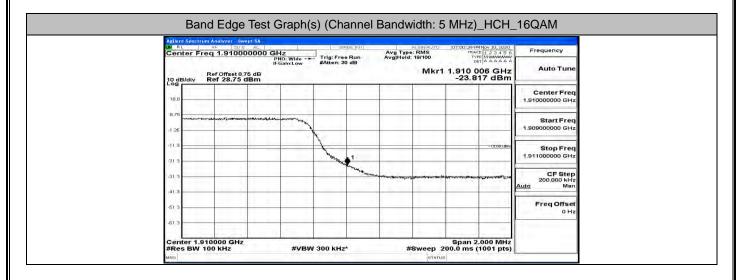


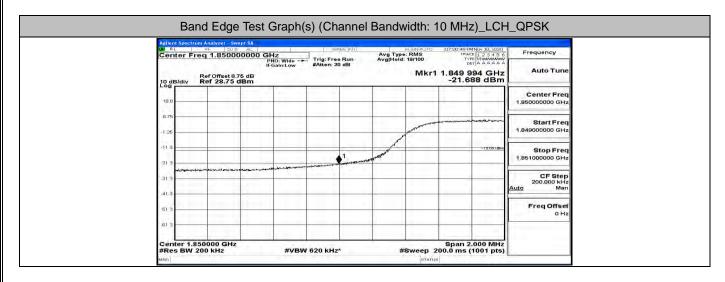


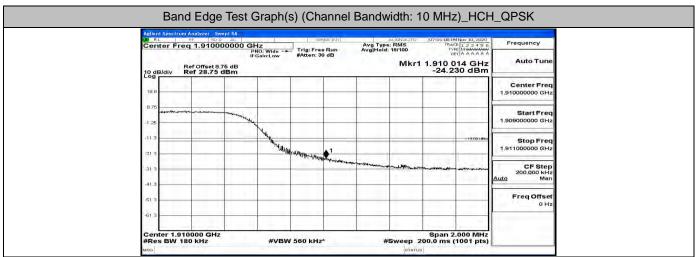


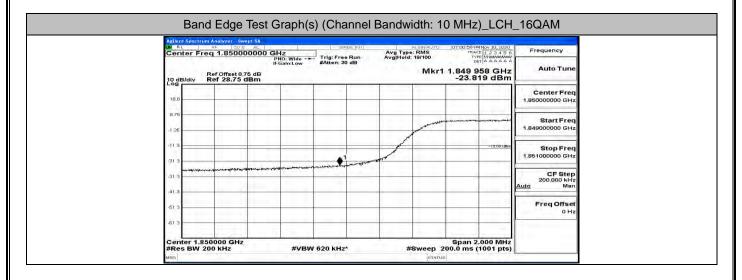


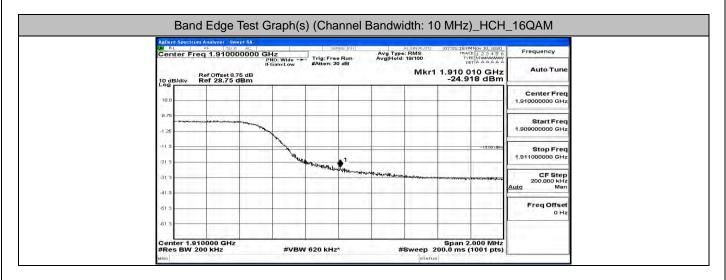


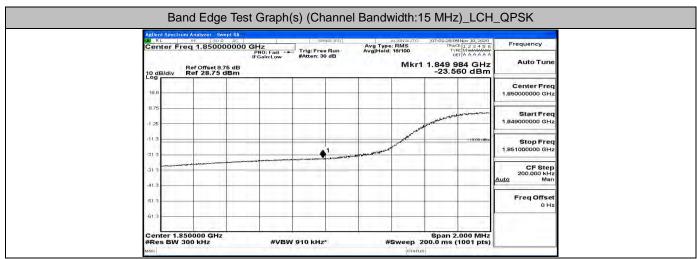


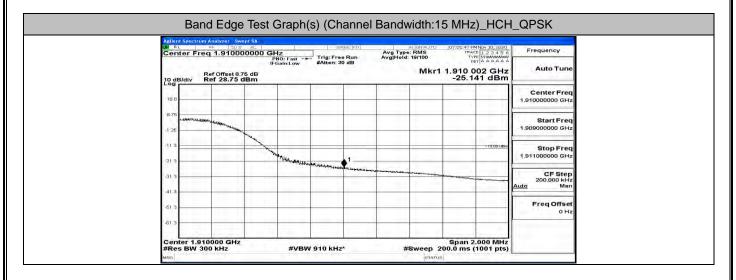


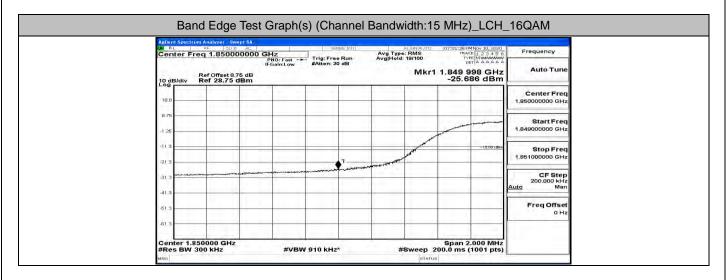


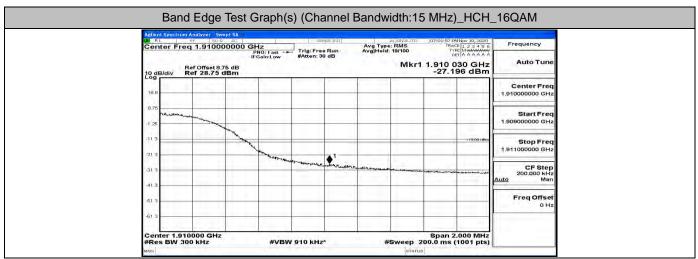


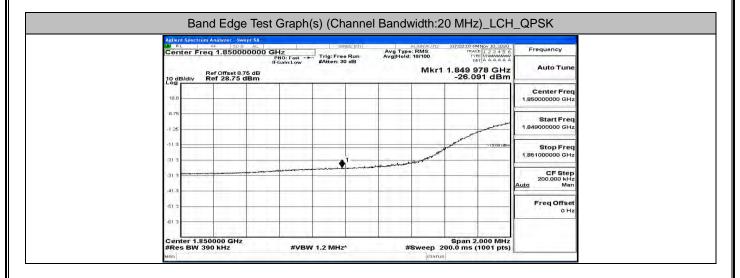


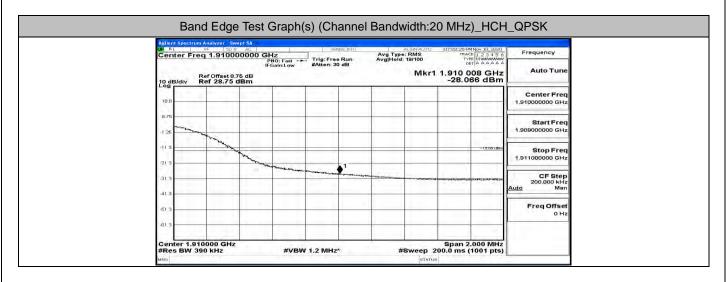


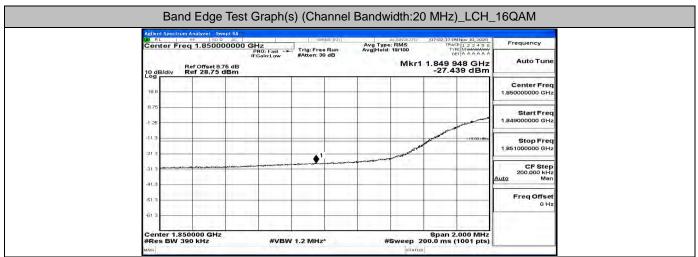


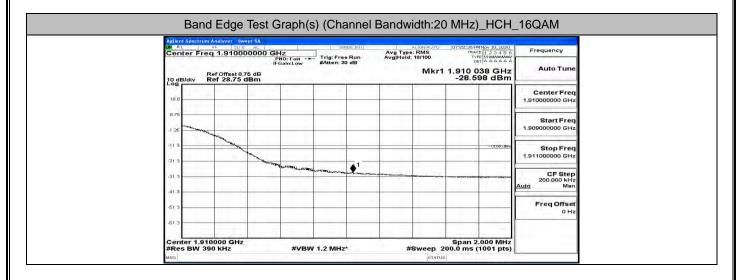








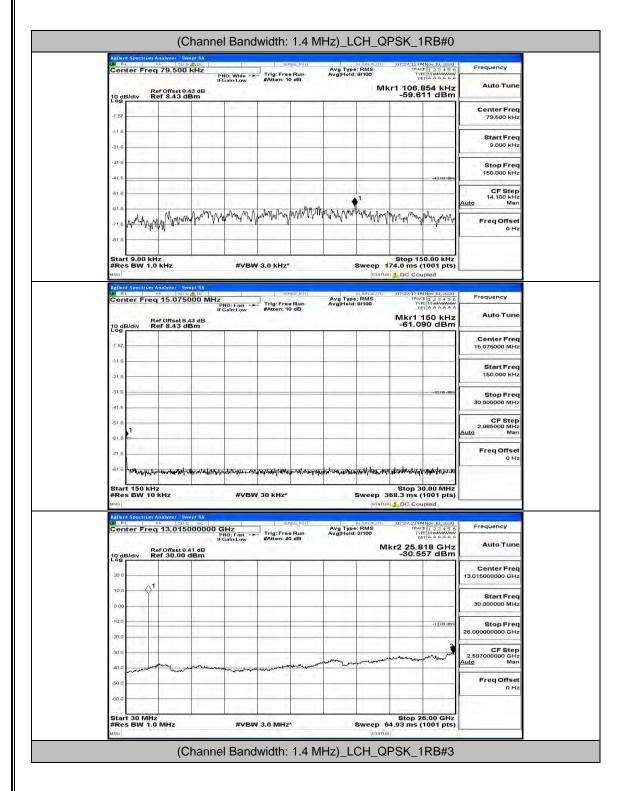


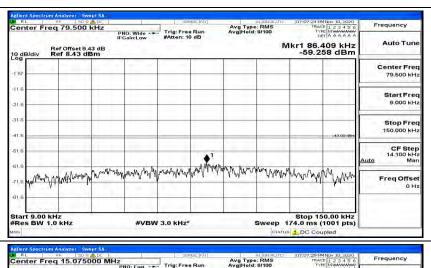


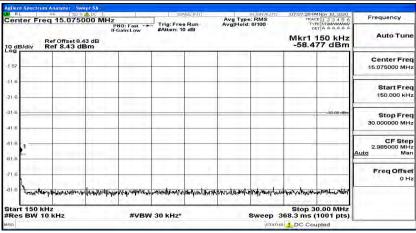
## **D.5 Conducted Spurious Emission**

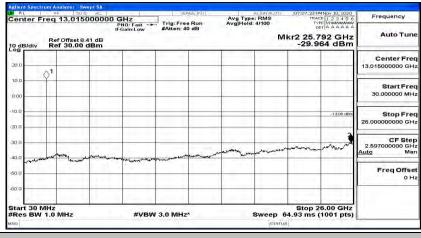
## **Test Graphs**

**Channel Bandwidth: 1.4 MHz** 

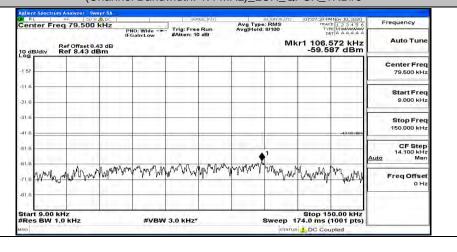


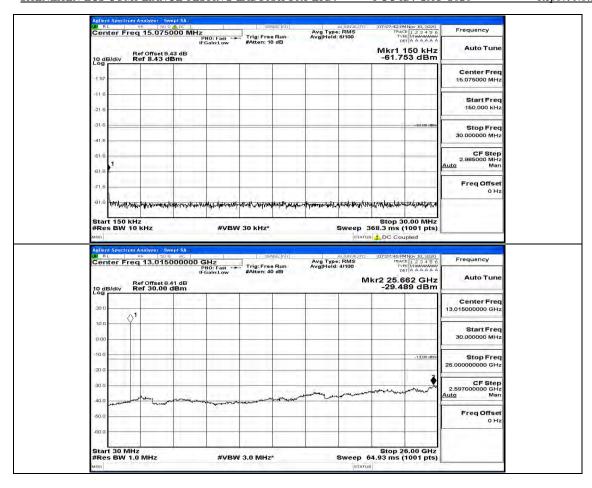


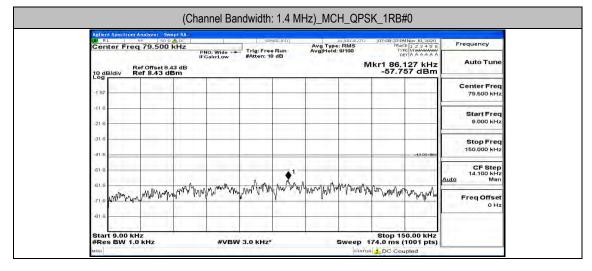




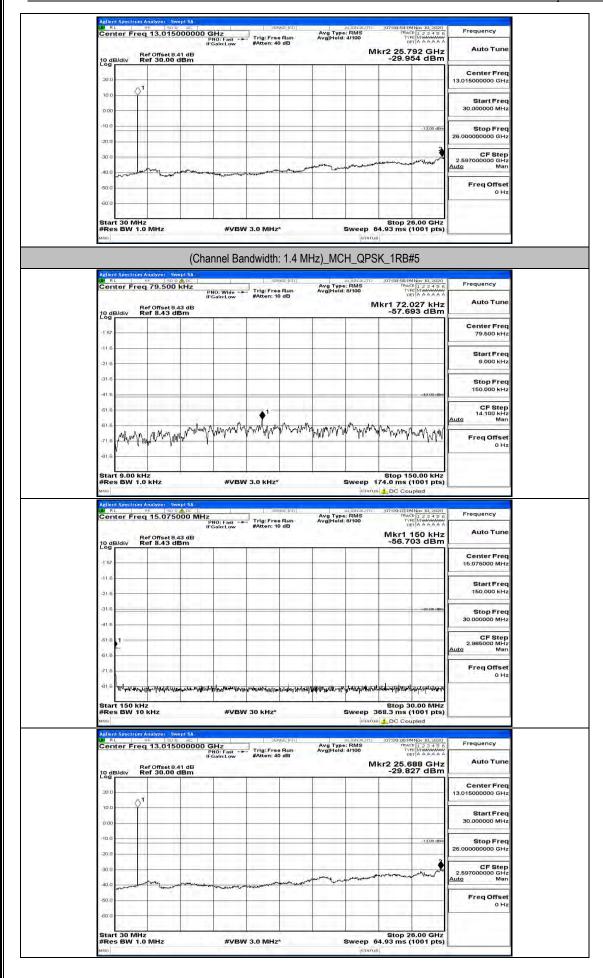


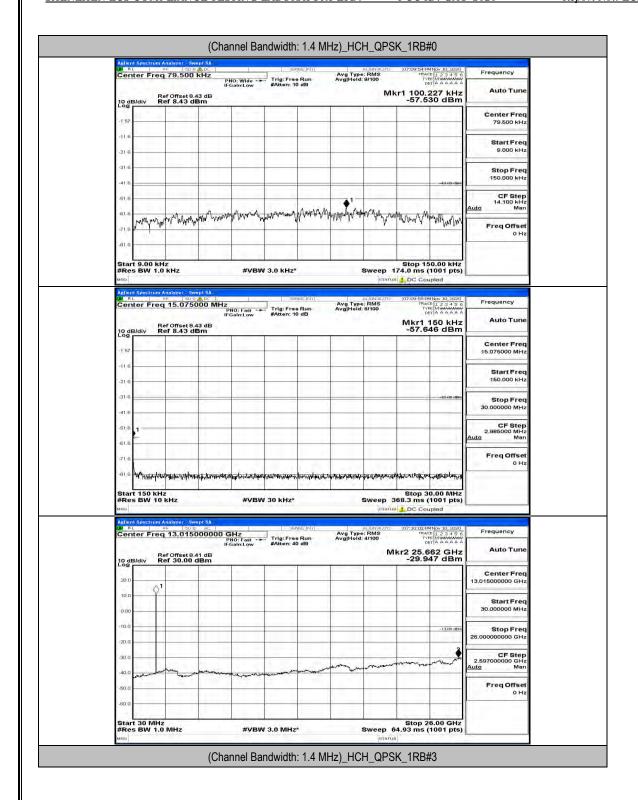


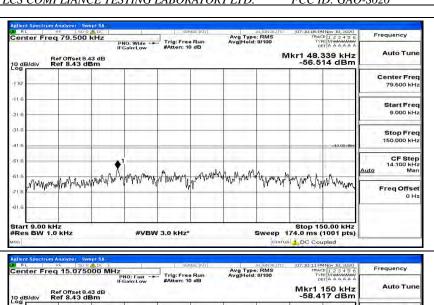


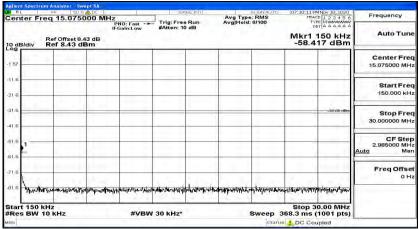


Stop Fred 30.000000 MHz

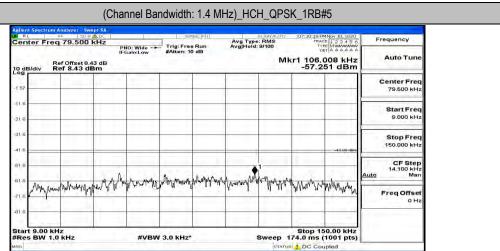


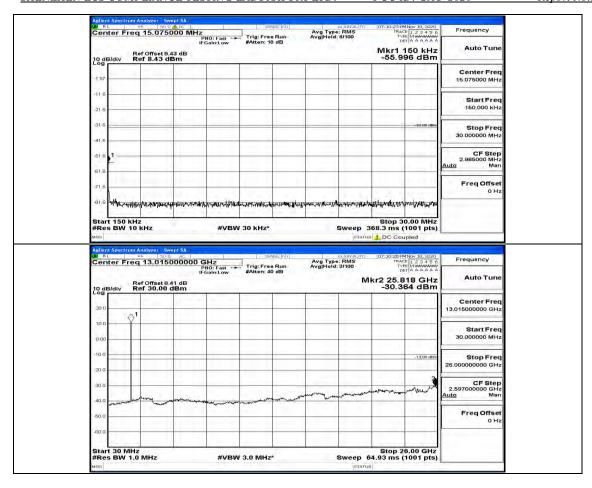


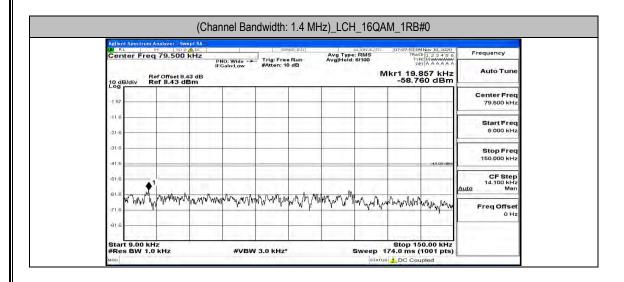










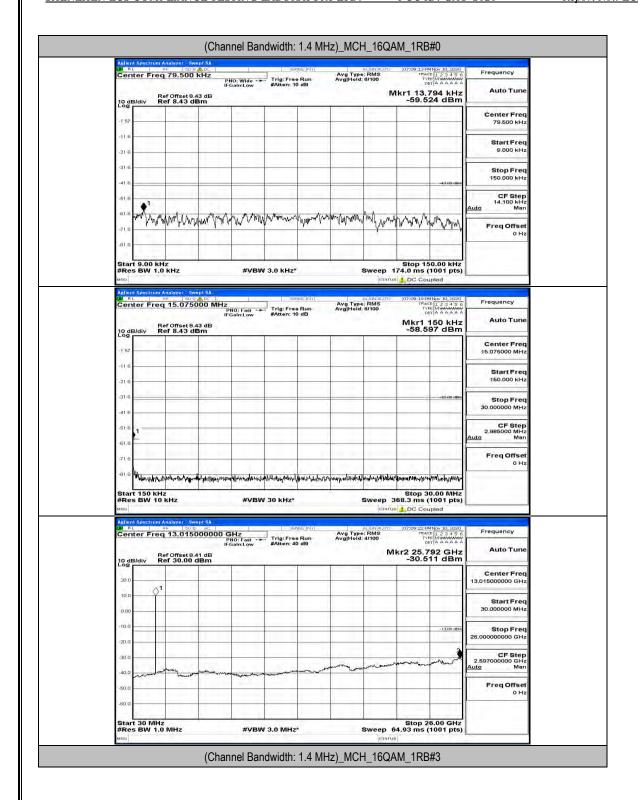


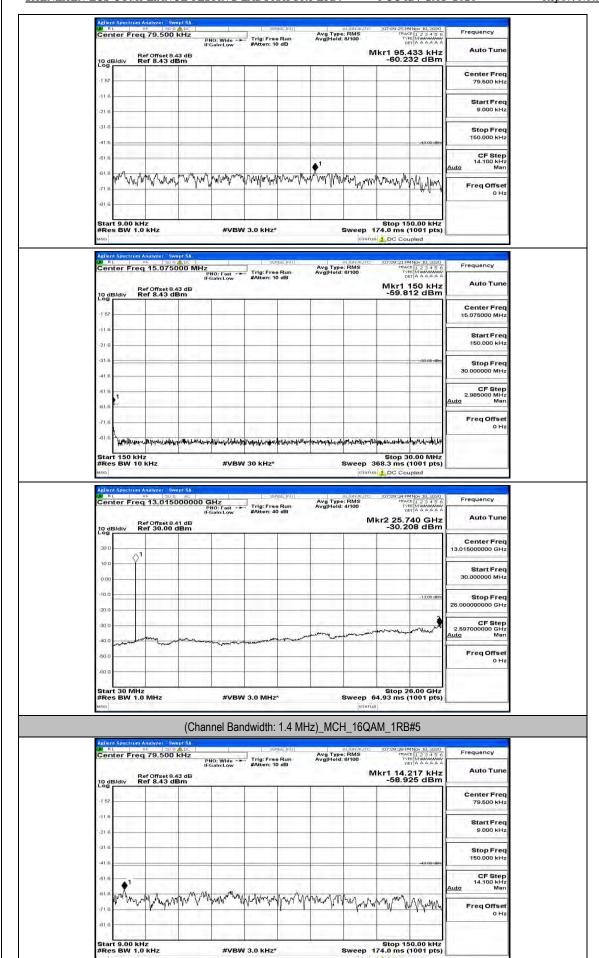
Stop 30.00 MHz Sweep 368.3 ms (1001 pts)

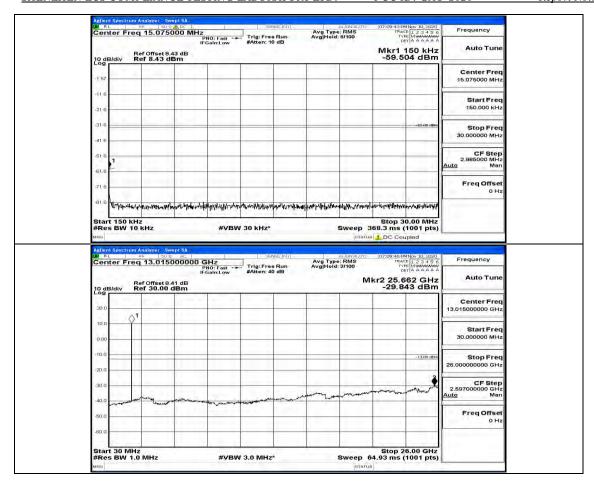
#VBW 30 kHz\*

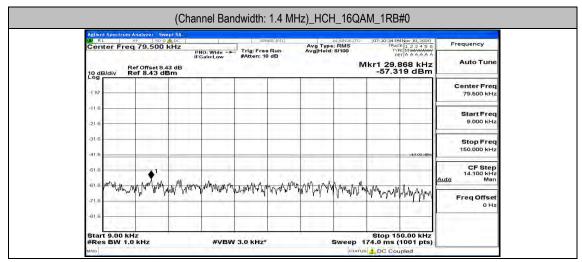
Start 150 kHz #Res BW 10 kHz Freq Offse

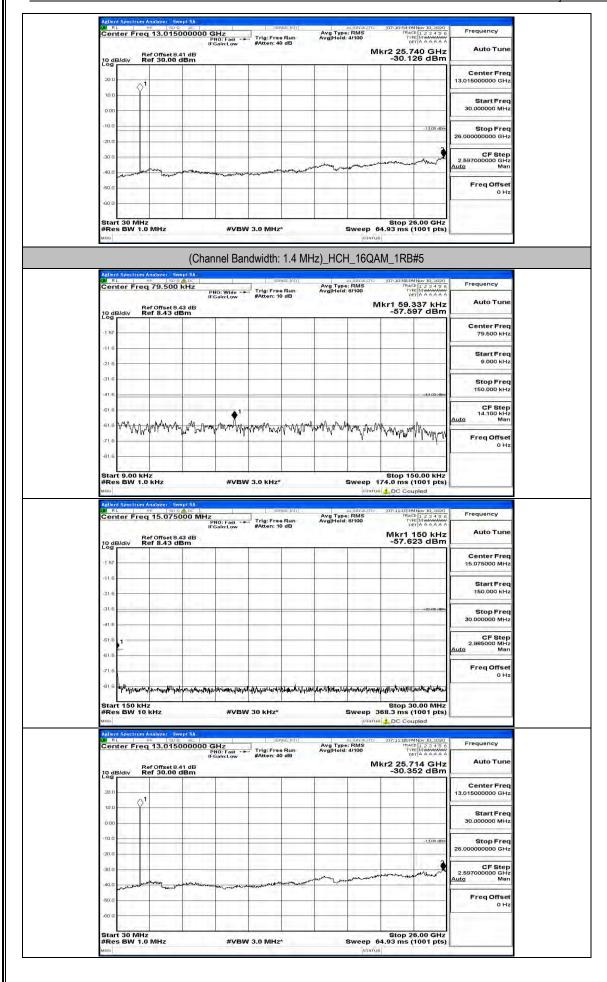




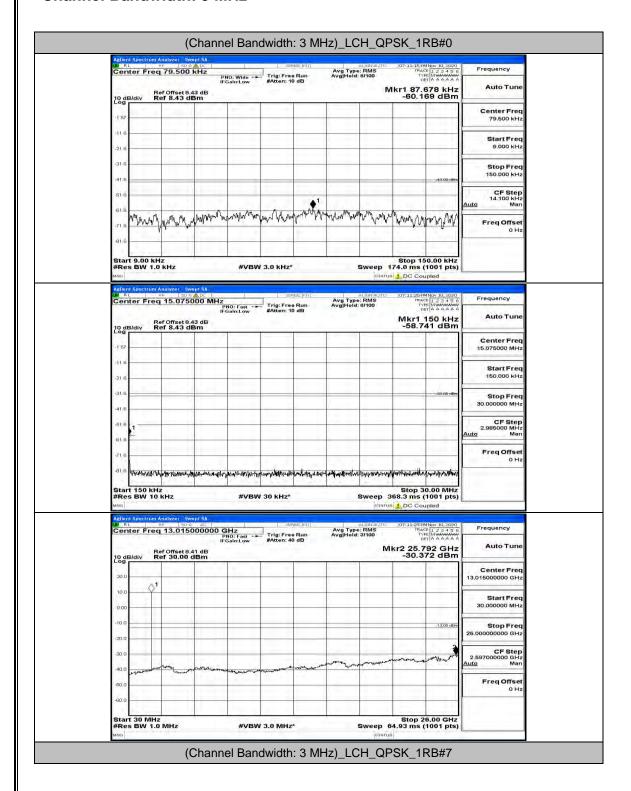


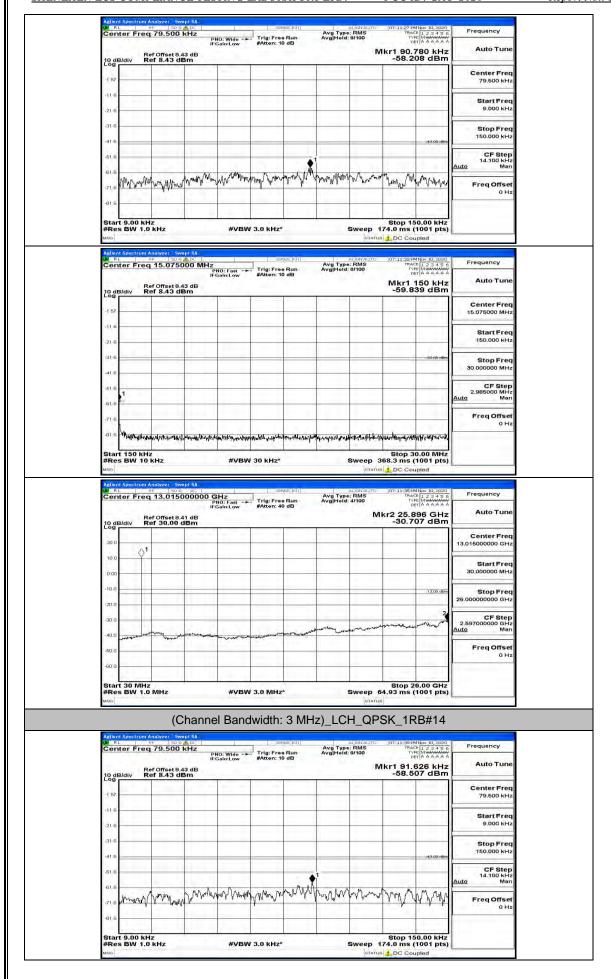


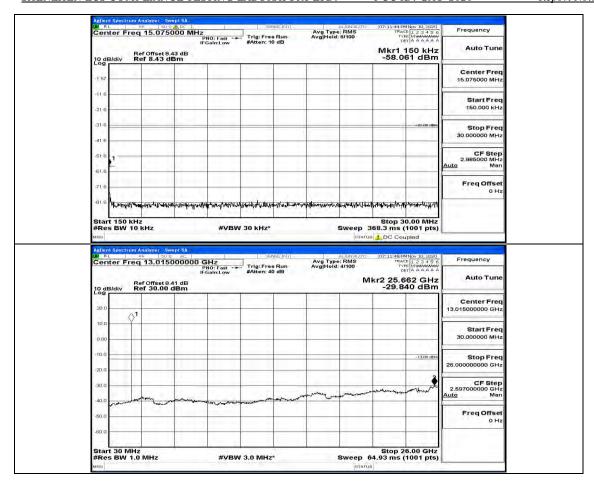


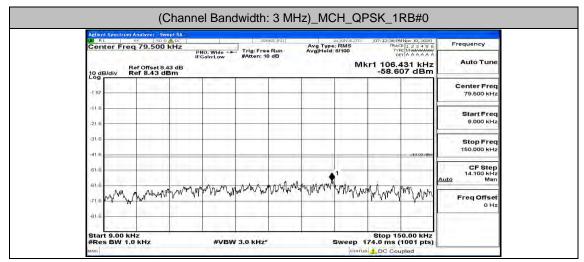


## **Channel Bandwidth: 3 MHz**





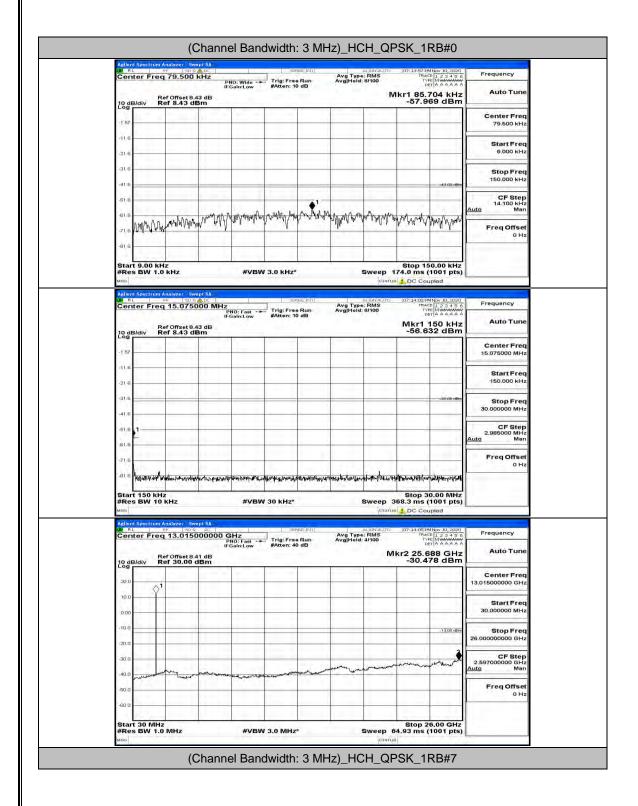


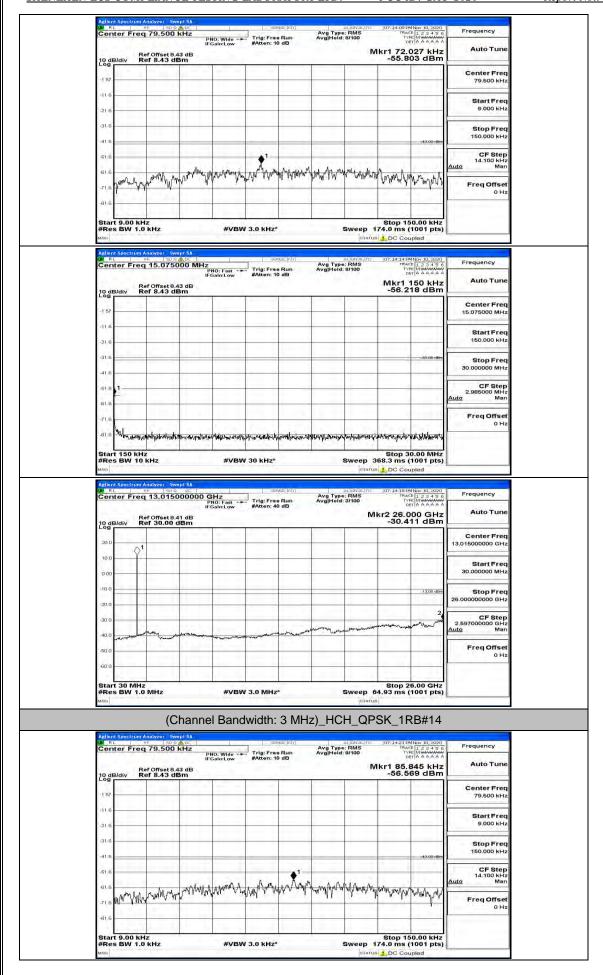


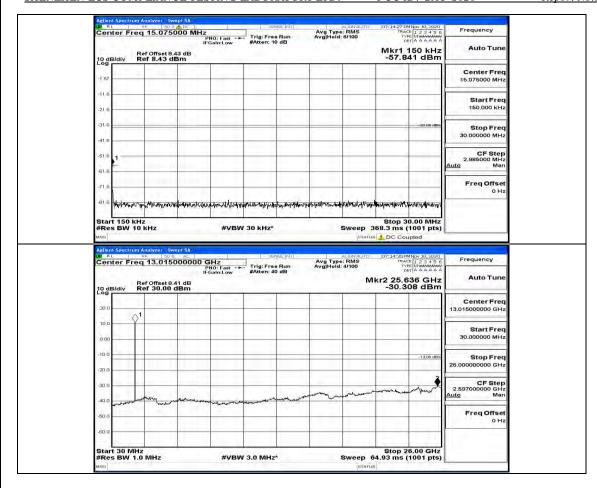
FCC ID: GAO-S626

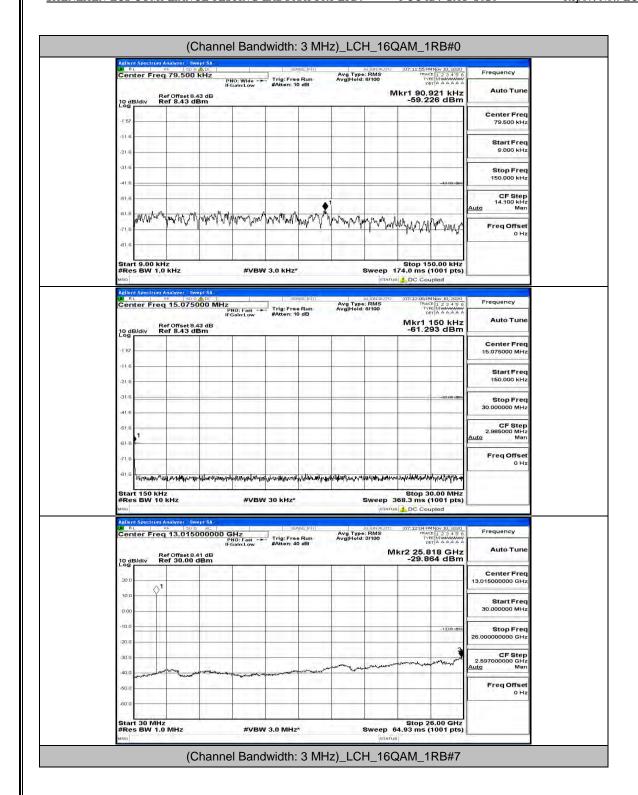
Report No.: LCS200817125AEG

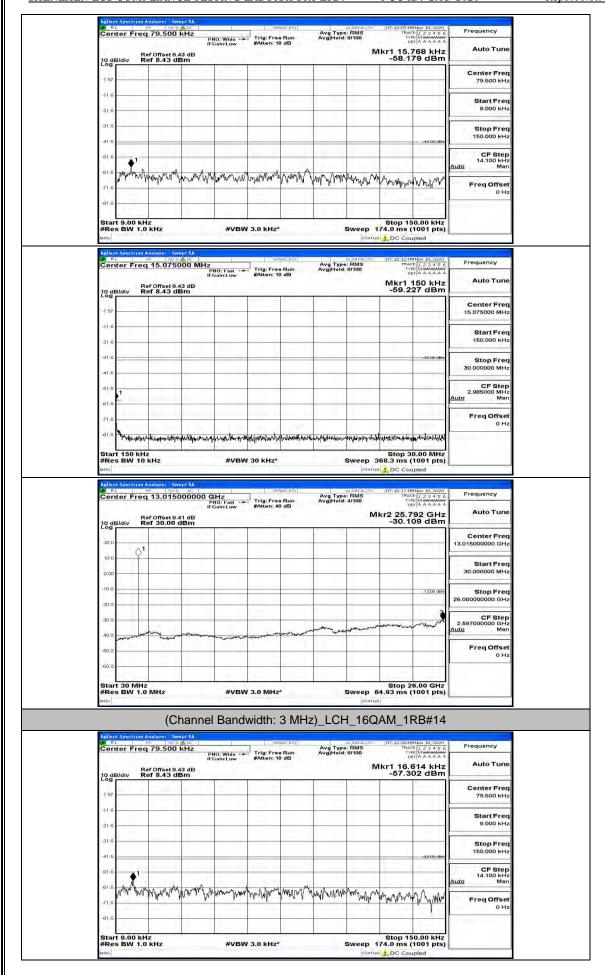
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD.

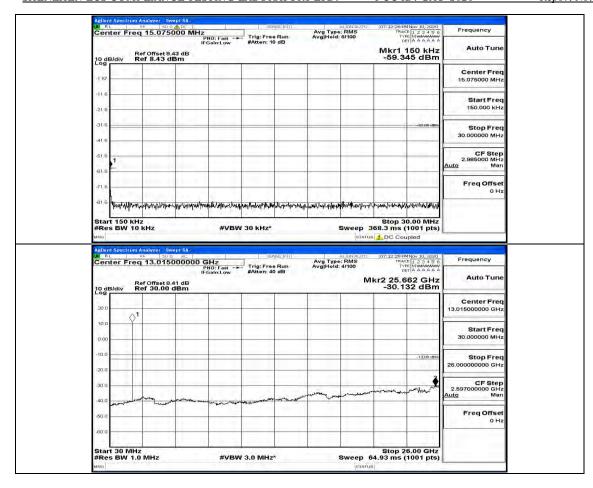


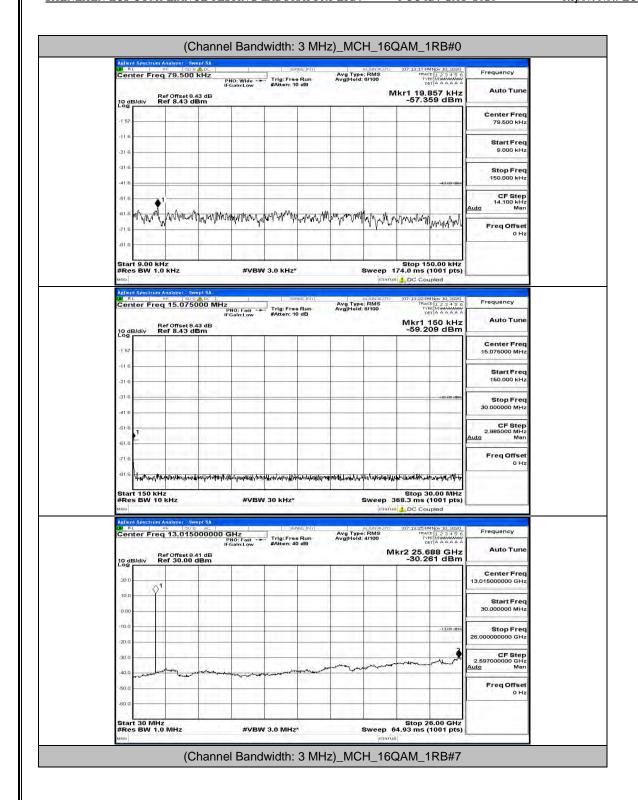


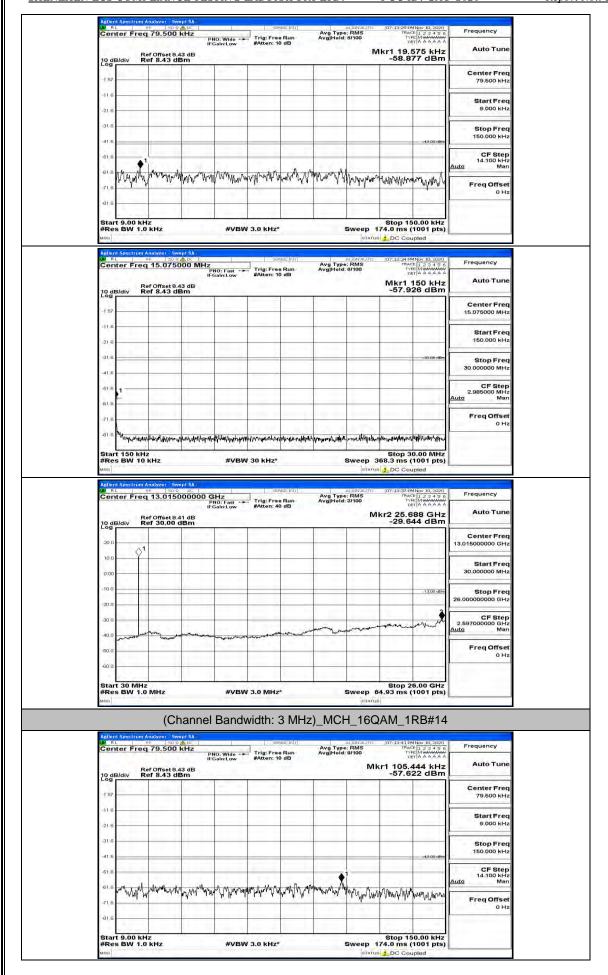


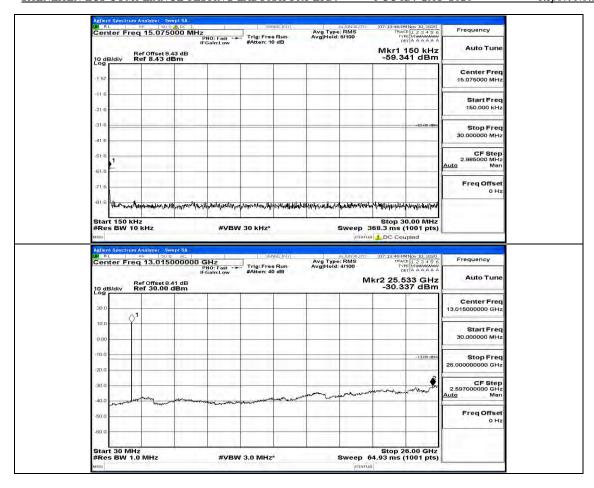


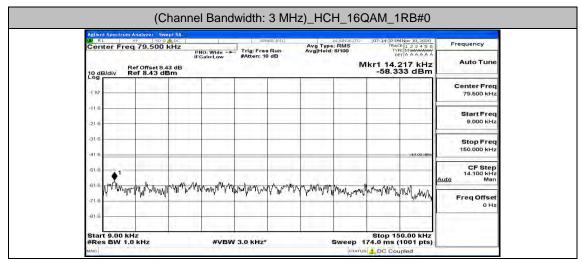












Stop 26.00 GHz Sweep 64.93 ms (1001 pts)

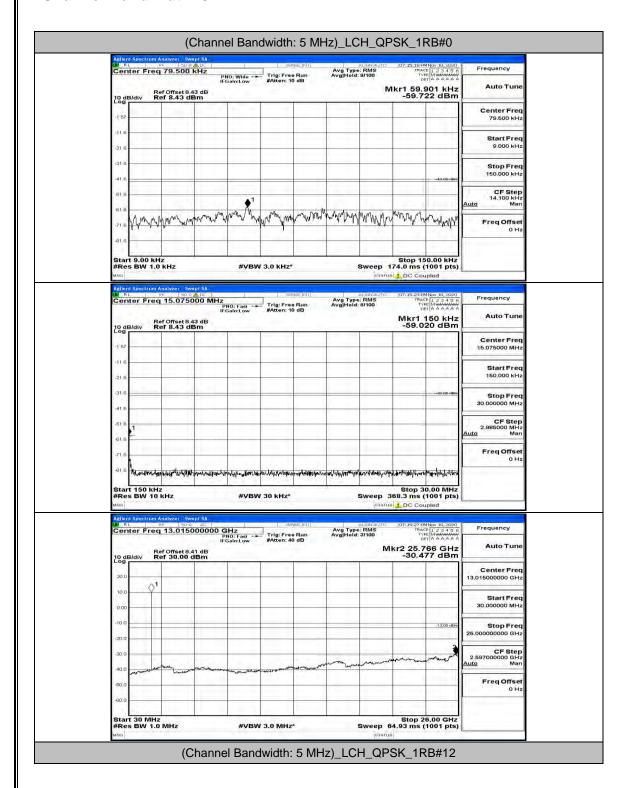
Start 30 MHz #Res BW 1.0 MHz

#VBW 3.0 MHz

Stop Free 6.000000000 GH

> Freq Offset 0 Hz

## **Channel Bandwidth: 5 MHz**



FCC ID: GAO-S626

Report No.: LCS200817125AEG

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