Appendix D: Test Data for E-UTRA Band 2

Product Name: 4G dash Camera Trade Mark: N/A **Test Model: ES-D4**

Environmental Conditions

Temperature:	23.5
Relative Humidity:	53.1
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden Zhuo

D.1 Conducted Output Power

	Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	23.34	22.46	PASS		
		1	3	23.38	22.59	PASS		
		1	5	23.37	22.50	PASS		
	LCH	3	0	23.32	22.39	PASS		
		3	2	23.33	22.36	PASS		
		3	3	23.35	22.38	PASS		
		6	0	22.39	21.32	PASS		
		1	0	23.84	23.03	PASS		
		1	3	23.88	23.11	PASS		
ODCK /	MCH	1	5	23.82	23.02	PASS		
QPSK / 16QAM		3	0	23.84	22.68	PASS		
IOQAW		3	2	23.80	22.66	PASS		
		3	3	23.81	22.67	PASS		
		6	0	22.92	21.78	PASS		
		1	0	23.81	22.88	PASS		
		1	3	23.62	23.02	PASS		
		1	5	23.67	22.94	PASS		
	HCH	3	0	23.77	22.70	PASS		
		3	2	23.77	22.68	PASS		
		3	3	23.76	22.72	PASS		
		6	0	22.91	21.93	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	23.35	22.39	PASS			
		1	7	23.45	22.51	PASS			
		1	14	23.45	22.50	PASS			
	LCH	8	0	22.45	21.43	PASS			
		8	4	22.48	21.44	PASS			
		8	7	22.51	21.44	PASS			
		15	0	22.40	21.36	PASS			
	MCH	1	0	23.60	22.90	PASS			
		1	7	23.71	23.01	PASS			
QPSK /		1	14	23.62	22.87	PASS			
16QAM		8	0	22.80	21.85	PASS			
IOQAM		8	4	22.82	21.88	PASS			
		8	7	22.83	21.85	PASS			
		15	0	22.81	21.74	PASS			
		1	0	23.61	22.90	PASS			
		1	7	23.75	23.02	PASS			
		1	14	23.68	23.00	PASS			
	HCH	8	0	22.74	21.71	PASS			
		8	4	22.74	21.72	PASS			
		8	7	22.77	21.75	PASS			
		15	0	22.72	21.71	PASS			

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulatian	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a =diat		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	23.33	22.68	PASS		
		1	12	23.50	22.80	PASS		
		1	24	23.48	22.80	PASS		
	LCH	12	0	22.45	21.57	PASS		
		12	6	22.48	21.59	PASS		
		12	13	22.53	21.65	PASS		
		25	0	22.43	21.45	PASS		
	мсн	1	0	23.75	23.06	PASS		
		1	12	23.83	23.14	PASS		
QPSK /		1	24	23.76	23.02	PASS		
16QAM		12	0	22.86	21.97	PASS		
IOQAW		12	6	22.86	21.96	PASS		
		12	13	22.84	21.95	PASS		
		25	0	22.78	21.78	PASS		
		1	0	23.64	22.61	PASS		
		1	12	23.80	22.77	PASS		
		1	24	23.81	22.74	PASS		
	HCH	12	0	22.71	21.74	PASS		
		12	6	22.75	21.78	PASS		
		12	13	22.79	21.83	PASS		
		25	0	22.70	21.73	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	23.27	22.56	PASS		
		1	24	23.51	22.73	PASS		
		1	49	23.50	22.80	PASS		
	LCH	25	0	22.46	21.45	PASS		
		25	12	22.54	21.54	PASS		
		25	25	22.56	21.57	PASS		
		50	0	22.51	21.50	PASS		
		1	0	23.60	22.88	PASS		
	мсн	1	24	23.78	23.03	PASS		
QPSK /		1	49	23.64	22.91	PASS		
16QAM		25	0	22.78	21.79	PASS		
IOQAW		25	12	22.78	21.78	PASS		
		25	25	22.77	21.76	PASS		
		50	0	22.74	21.74	PASS		
		1	0	23.40	22.83	PASS		
		1	24	23.58	22.90	PASS		
		1	49	23.58	23.04	PASS		
	HCH	25	0	22.55	21.61	PASS		
		25	12	22.62	21.66	PASS		
		25	25	22.68	21.71	PASS		
		50	0	22.62	21.69	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	RB Conf	figuration	Average Power [dBm]	Average Power [dBm]	Vardiet		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	23.33	22.58	PASS		
		1	37	23.60	22.85	PASS		
		1	74	23.31	22.74	PASS		
	LCH	37	0	22.60	21.54	PASS		
		37	18	22.63	21.60	PASS		
		37	38	22.60	21.57	PASS		
		75	0	22.60	21.58	PASS		
		1	0	23.50	22.83	PASS		
	MCH	1	37	23.76	23.05	PASS		
QPSK /		1	74	23.50	22.78	PASS		
16QAM		37	0	22.82	21.79	PASS		
TOQAIVI		37	18	22.89	21.83	PASS		
		37	38	22.81	21.74	PASS		
		75	0	22.82	21.78	PASS		
		1	0	23.33	22.62	PASS		
		1	37	23.54	22.80	PASS		
		1	74	23.73	22.95	PASS		
	HCH	37	0	22.44	21.57	PASS		
		37	18	22.58	21.62	PASS		
		37	38	22.73	21.71	PASS		
		75	0	22.64	21.64	PASS		

Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Modulation	Channel	RB Conf	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Wodulation	Chamilei	Size	Offset	QPSK	16QAM	verdict		
		1	0	23.44	22.60	PASS		
		1	49	23.59	22.74	PASS		
		1	99	23.42	22.72	PASS		
	LCH	50	0	22.53	21.52	PASS		
		50	25	22.54	21.53	PASS		
		50	50	22.56	21.56	PASS		
		100	0	22.53	21.54	PASS		
	мсн	1	0	23.56	22.76	PASS		
		1	49	23.91	23.03	PASS		
QPSK /		1	99	23.53	22.67	PASS		
16QAM		50	0	22.74	21.73	PASS		
IOQAW		50	25	22.78	21.75	PASS		
		50	50	22.71	21.67	PASS		
		100	0	22.71	21.71	PASS		
		1	0	23.57	22.91	PASS		
		1	49	23.43	22.80	PASS		
		1	99	23.77	23.07	PASS		
	HCH	50	0	22.37	21.48	PASS		
		50	25	22.48	21.60	PASS		
		50	50	22.63	21.68	PASS		
		100	0	22.59	21.63	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	5.06	<13	PASS			
QPSK	MCH	4.80	<13	PASS			
	HCH	4.86	<13	PASS			
	LCH	5.84	<13	PASS			
16QAM	MCH	5.63	<13	PASS			
	HCH	5.69	<13	PASS			

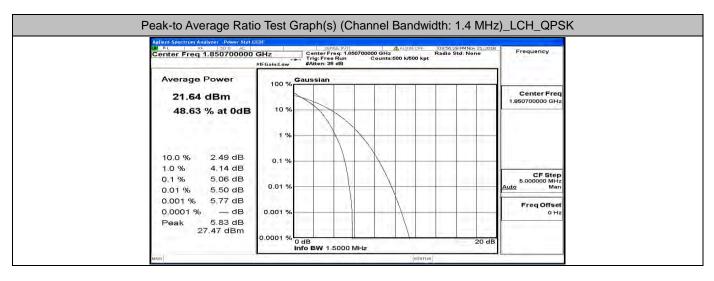
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Channel	[dB]	[dB]	verdict			
	LCH	5.19	<13	PASS			
QPSK	MCH	5.06	<13	PASS			
	HCH	5.17	<13	PASS			
	LCH	5.95	<13	PASS			
16QAM	MCH	5.85	<13	PASS			
	HCH	5.81	<13	PASS			

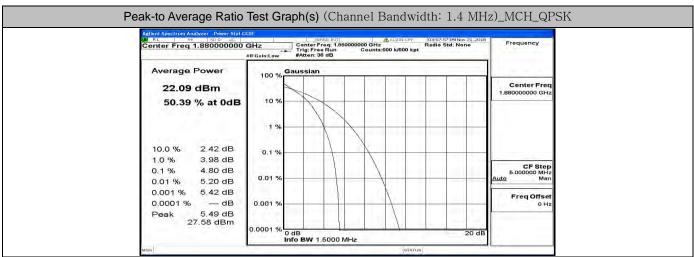
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict		
Modulation	Griannei	[dB]	[dB]	Verdict		
	LCH	5.2	<13	PASS		
QPSK	MCH	5.12	<13	PASS		
	HCH	5.05	<13	PASS		
	LCH	5.88	<13	PASS		
16QAM	MCH	5.84	<13	PASS		
	HCH	5.77	<13	PASS		

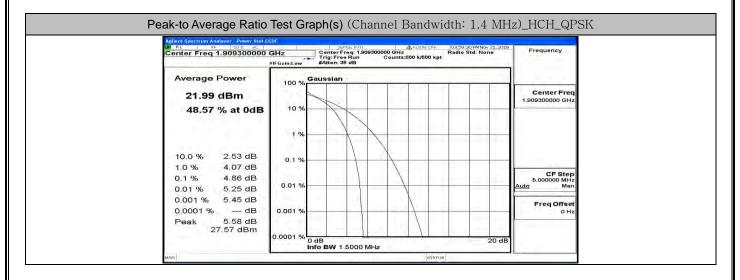
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict		
Modulation	Chamilei	[dB]	[dB]	Verdict		
	LCH	5.29	<13	PASS		
QPSK	MCH	5.21	<13	PASS		
	HCH	5.22	<13	PASS		
	LCH	5.93	<13	PASS		
16QAM	MCH	5.88	<13	PASS		
	HCH	5.92	<13	PASS		

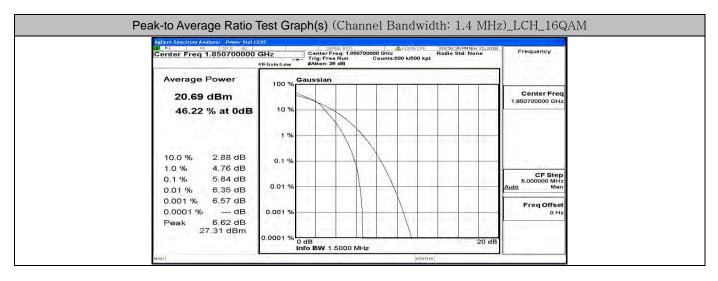
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Modulation	Grianner	[dB]	[dB]	verdict				
	LCH	4.92	<13	PASS				
QPSK	MCH	4.93	<13	PASS				
	HCH	4.94	<13	PASS				
	LCH	6.06	<13	PASS				
16QAM	MCH	6.07	<13	PASS				
	HCH	6.21	<13	PASS				

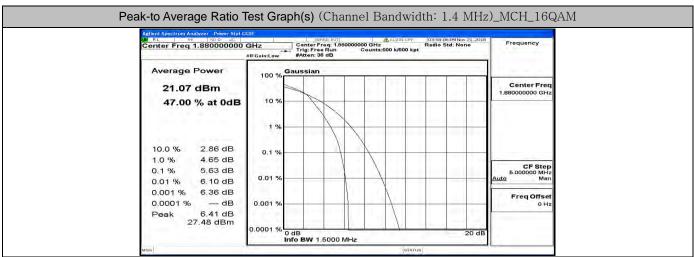
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation		[dB]	[dB]		
QPSK	LCH	5.72	<13	PASS	
	MCH	5.64	<13	PASS	
	HCH	5.82	<13	PASS	
16QAM	LCH	6.68	<13	PASS	
	MCH	6.65	<13	PASS	
	HCH	6.82	<13	PASS	

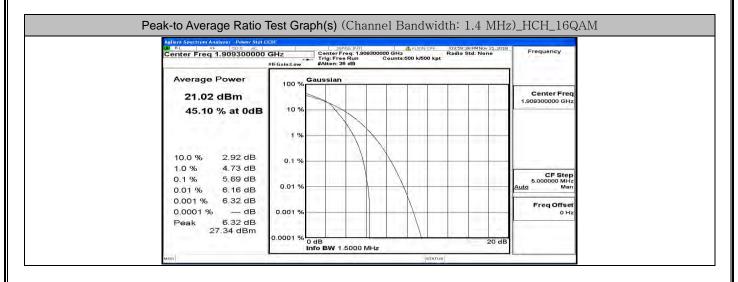


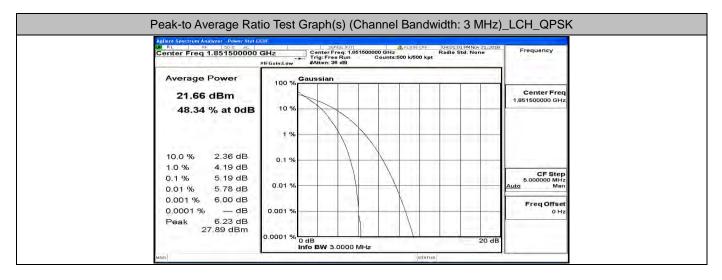


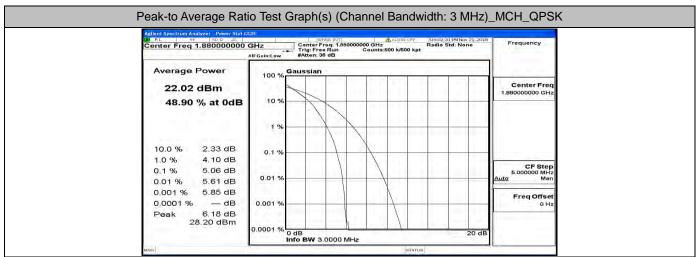


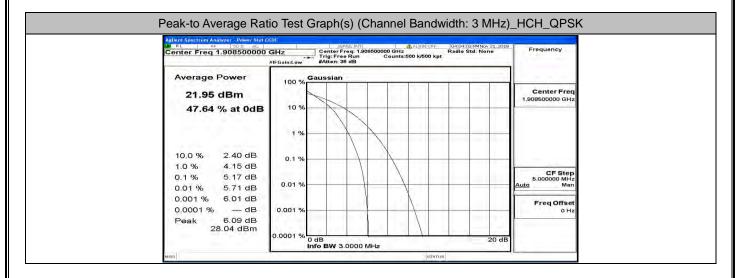


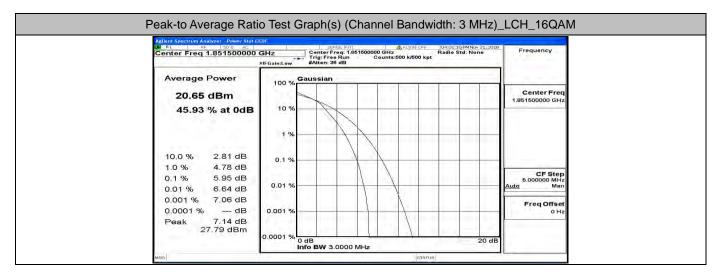


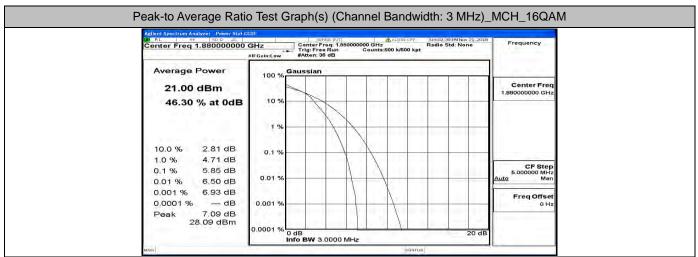


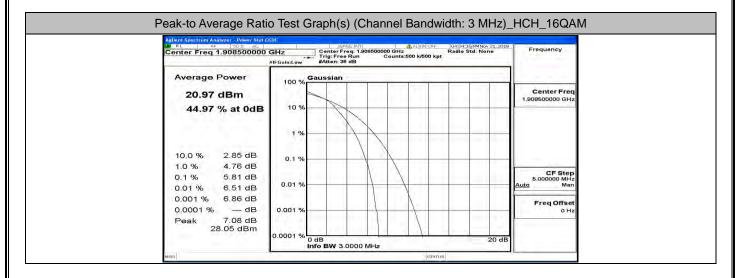


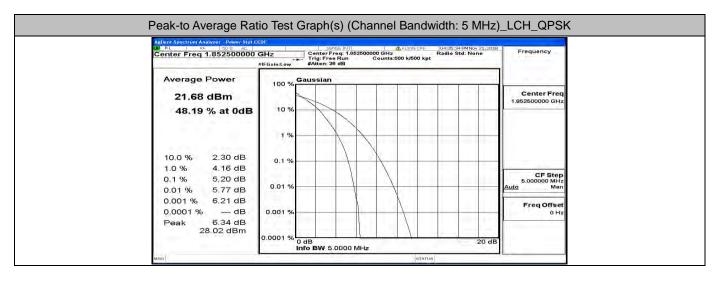


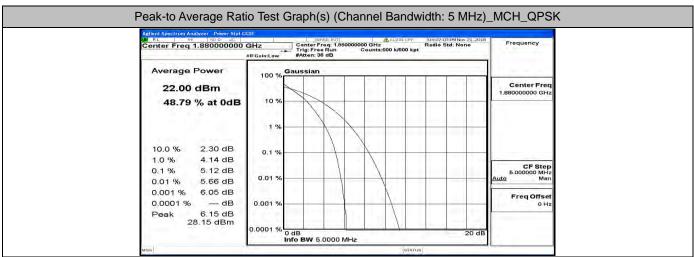


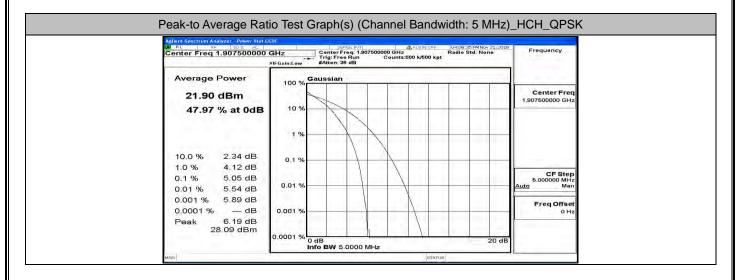


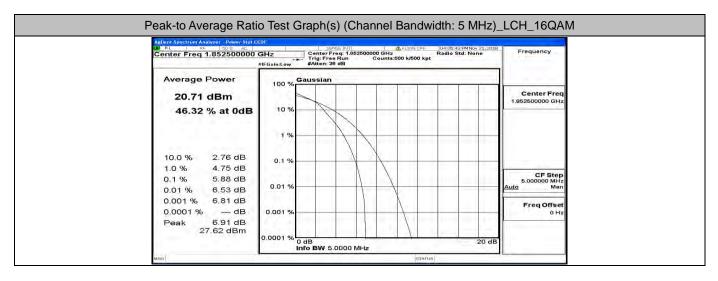


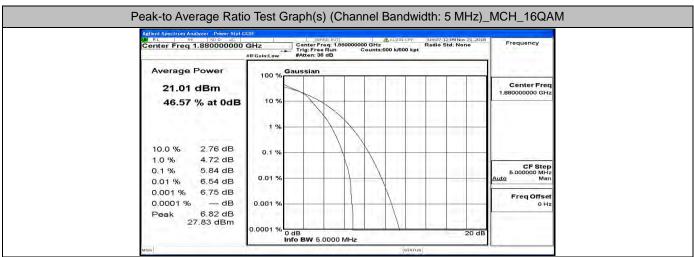


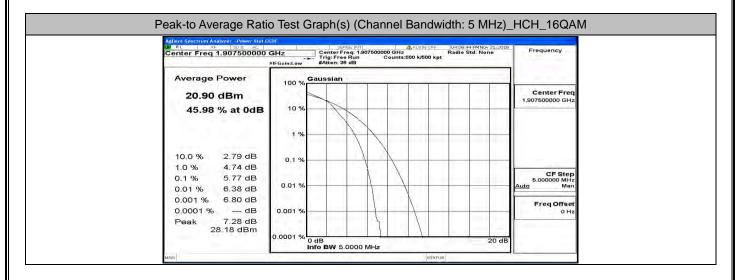


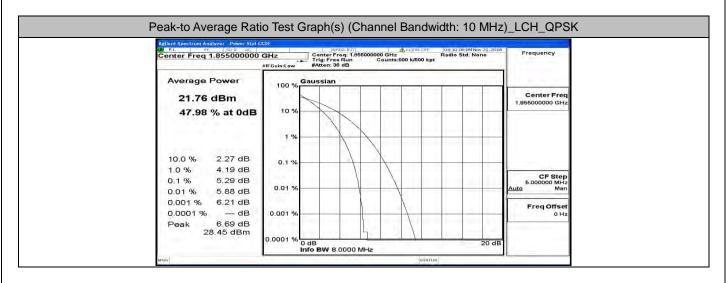


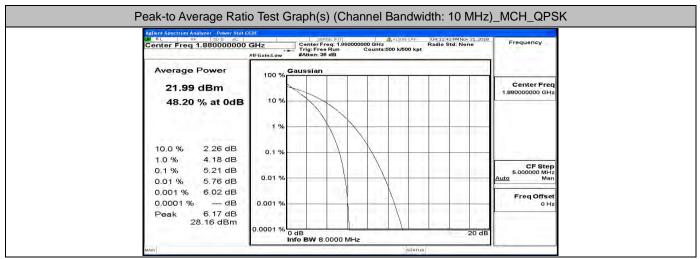


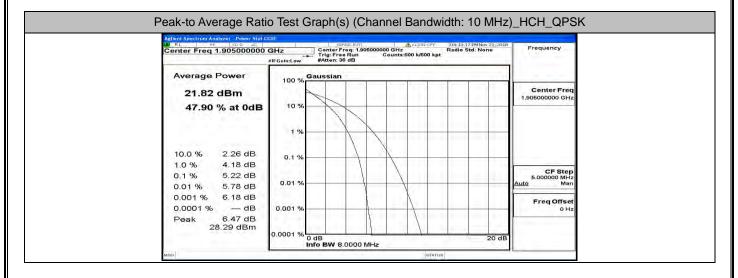


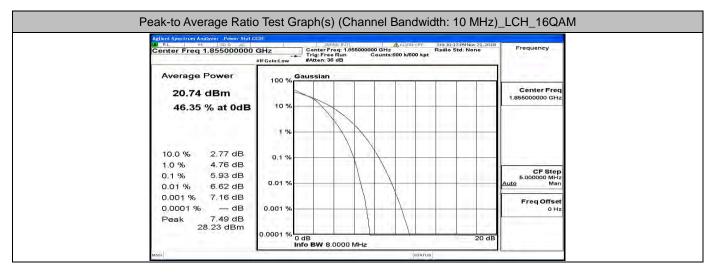


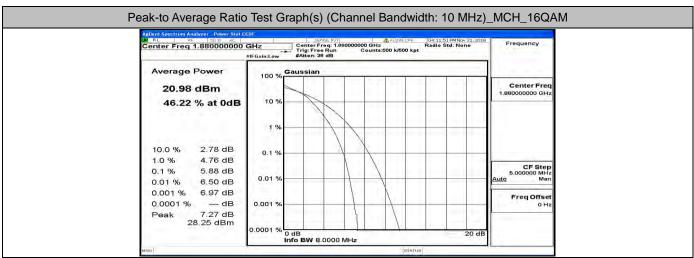


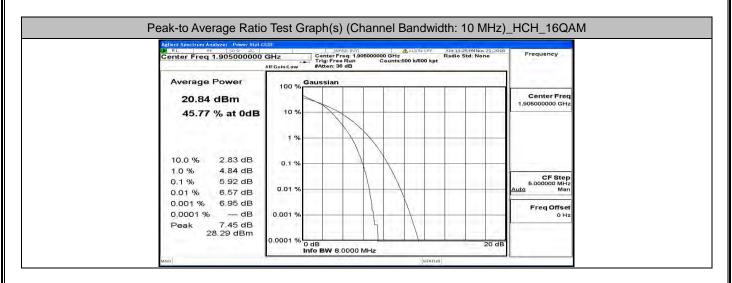


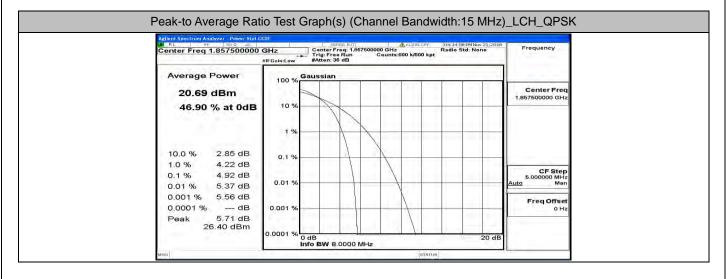


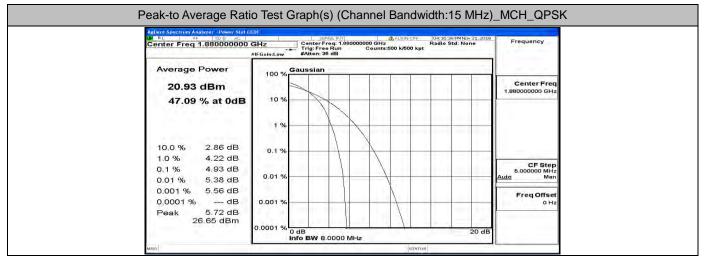


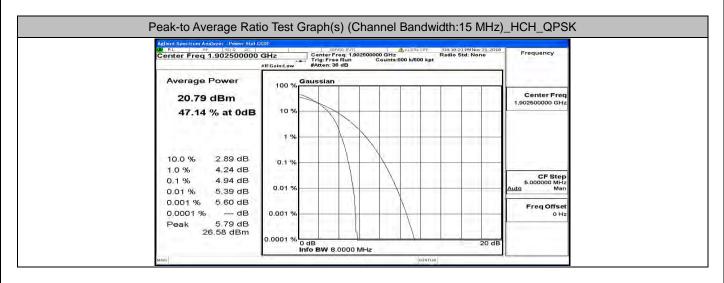


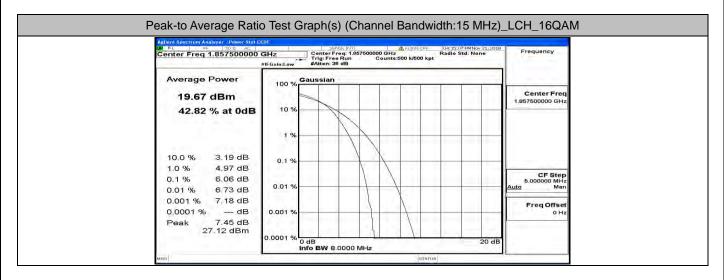


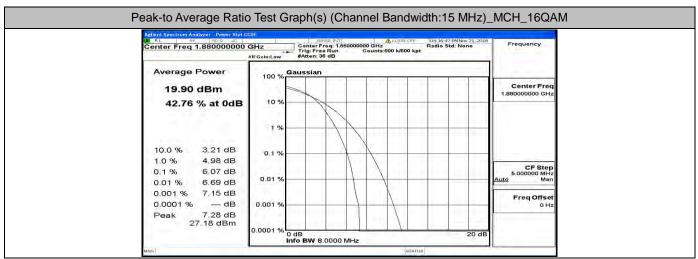


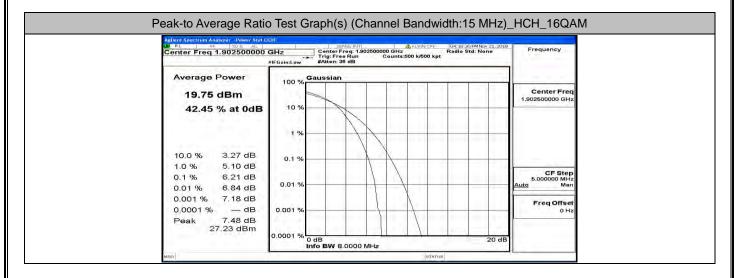


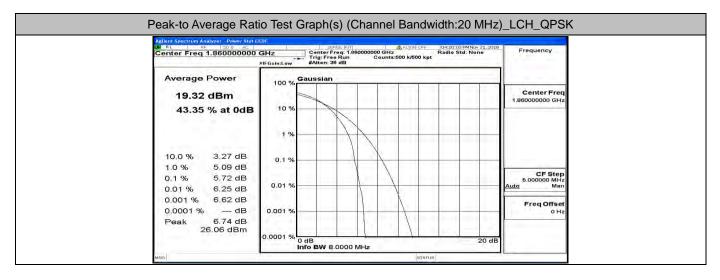


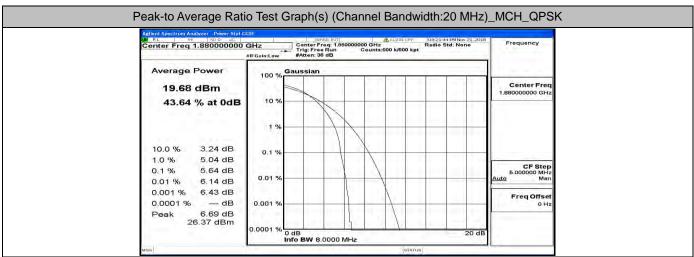


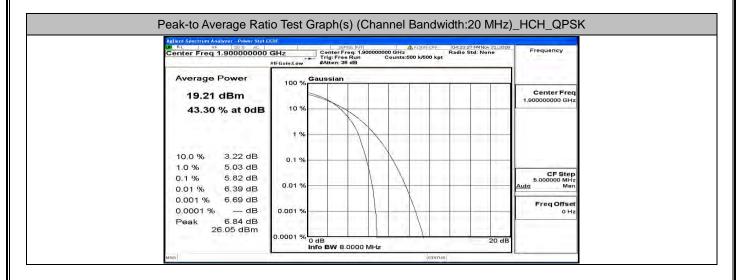


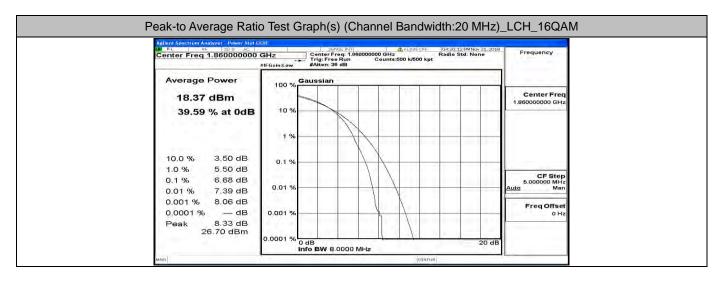


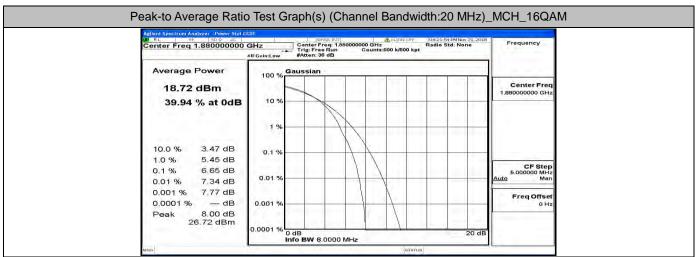


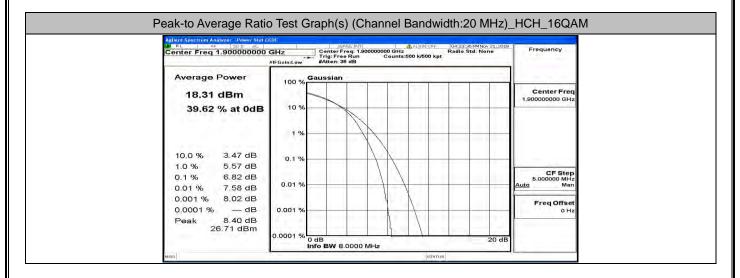












D.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
iviodulation		(MHz)	(MHz)		
QPSK	LCH	1.0786	1.242	PASS	
	MCH	1.0787	1.228	PASS	
	HCH	1.0799	1.228	PASS	
16QAM	LCH	1.0823	1.231	PASS	
	MCH	1.0799	1.224	PASS	
	HCH	1.0779	1.198	PASS	

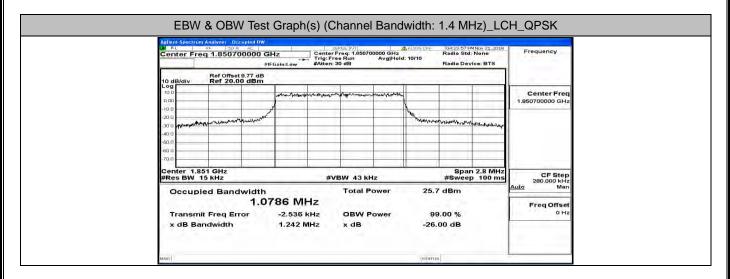
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation	Chame	(MHz)	(MHz)		
QPSK	LCH	2.6885	2.864	PASS	
	MCH	2.6834	2.876	PASS	
	HCH	2.6830	2.880	PASS	
16QAM	LCH	2.6839	2.870	PASS	
	MCH	2.6881	2.886	PASS	
	HCH	2.6841	2.870	PASS	

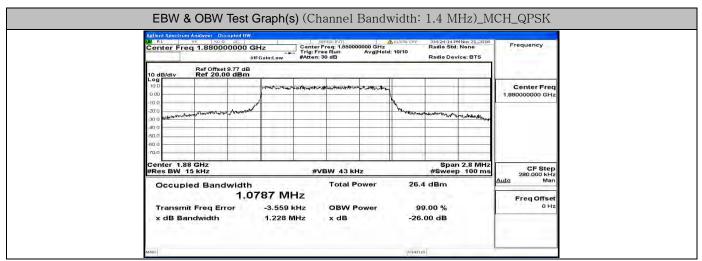
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	4.4862	4.869	PASS	
	MCH	4.4796	4.843	PASS	
	HCH	4.4796	4.842	PASS	
16QAM	LCH	4.4792	4.845	PASS	
	MCH	4.4870	4.835	PASS	
	HCH	4.4822	4.838	PASS	

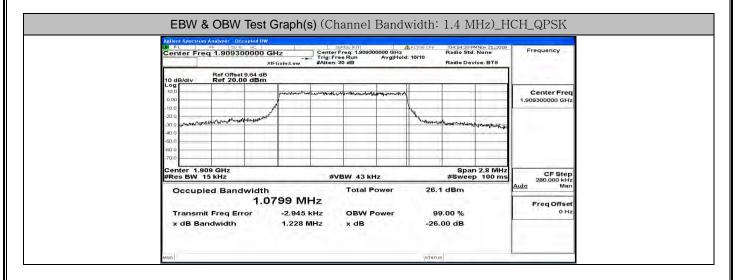
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)					
Madulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	8.9467	9.608	PASS	
	MCH	8.9366	9.448	PASS	
	HCH	8.9129	9.413	PASS	
16QAM	LCH	8.9264	9.444	PASS	
	MCH	8.9353	9.562	PASS	
	HCH	8.9335	9.446	PASS	

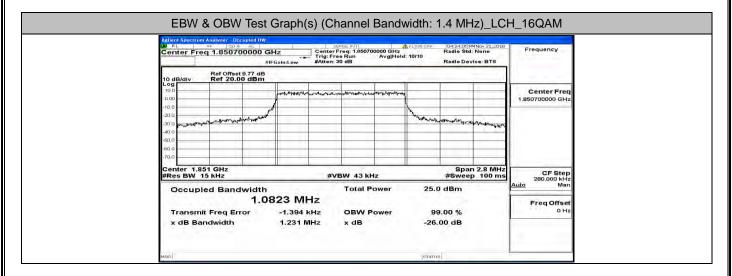
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	13.398	14.16	PASS	
	MCH	13.416	14.08	PASS	
	HCH	13.392	13.96	PASS	
16QAM	LCH	13.408	14.02	PASS	
	MCH	13.396	14.11	PASS	
	HCH	13.405	14.05	PASS	

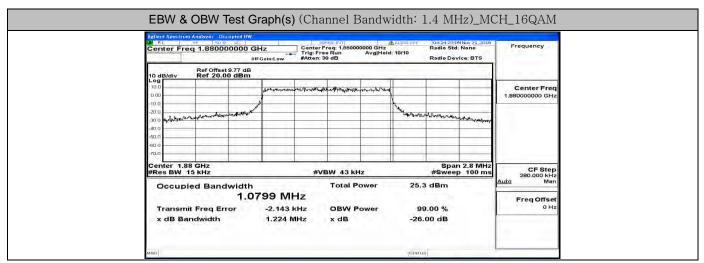
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)					
Manhalatina	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	17.864	18.67	PASS	
	MCH	17.853	18.62	PASS	
	HCH	17.884	18.68	PASS	
16QAM	LCH	17.873	18.65	PASS	
	MCH	17.850	18.59	PASS	
	HCH	17.857	18.68	PASS	

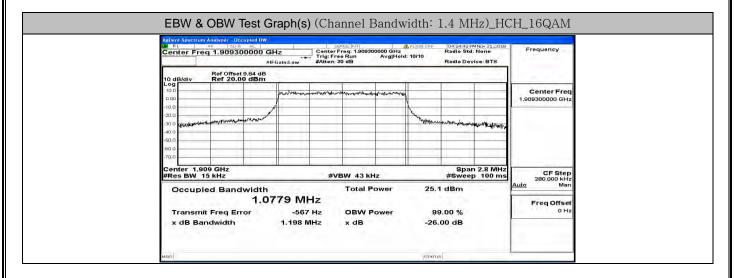


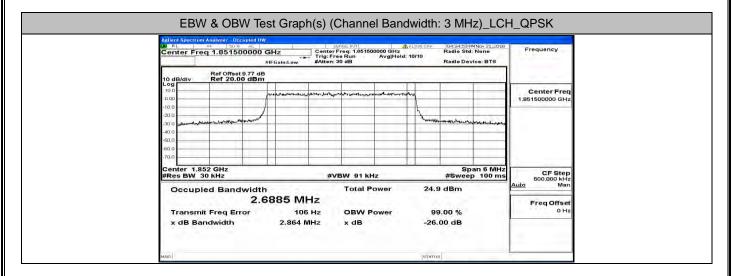


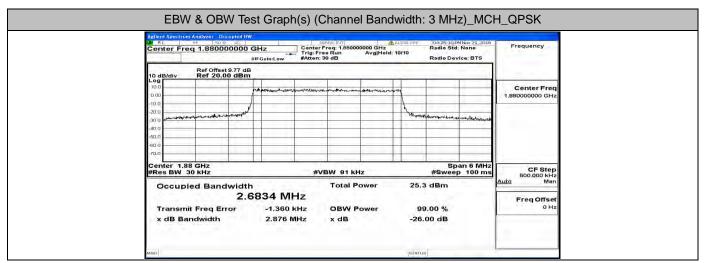


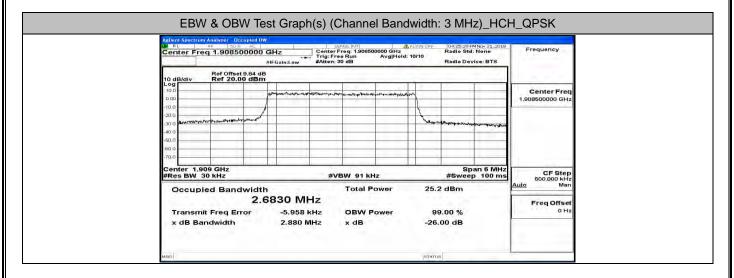


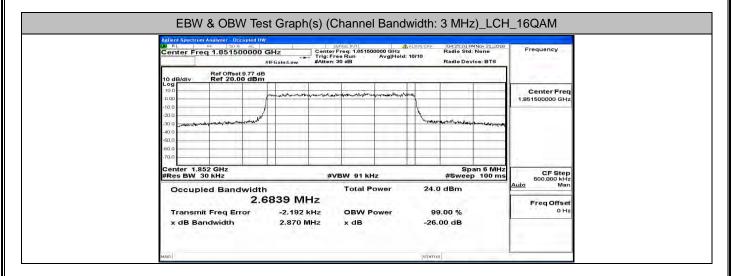


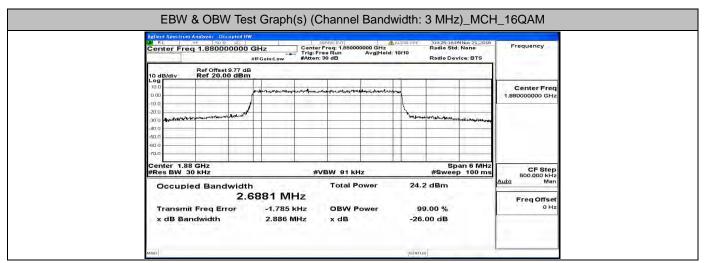


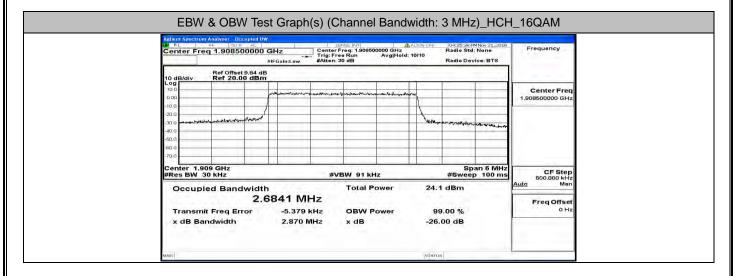


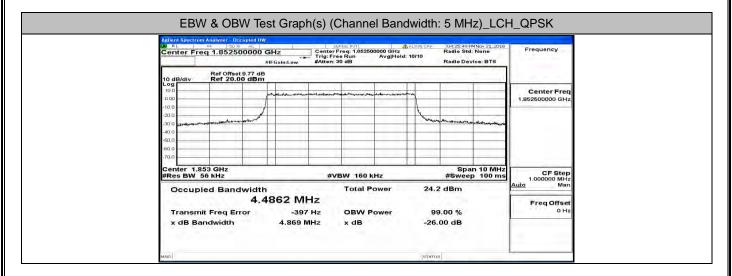


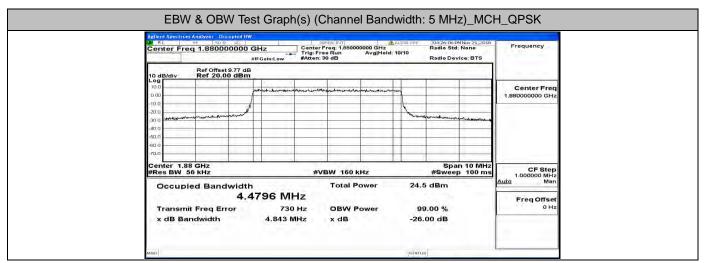


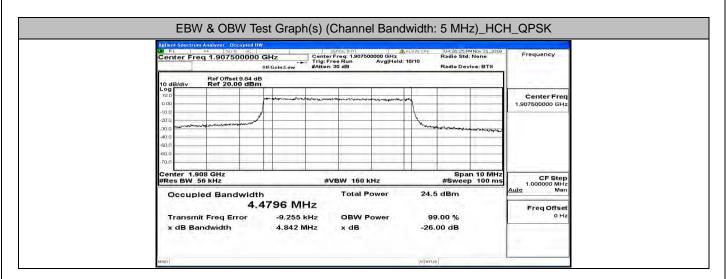


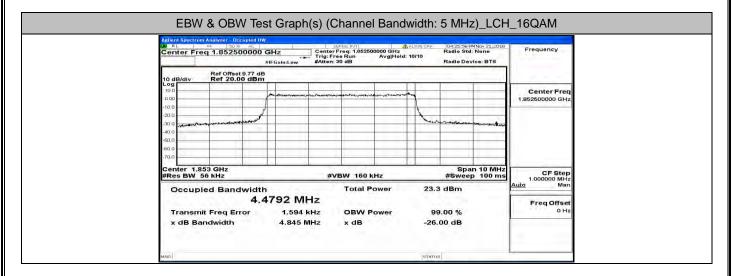


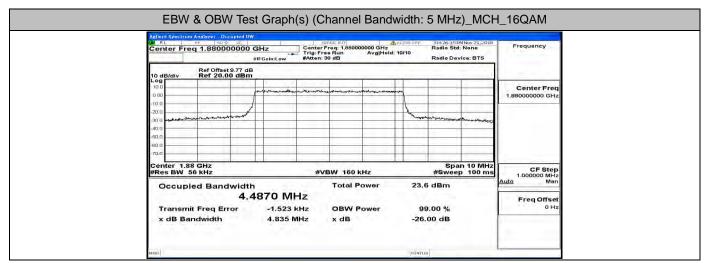


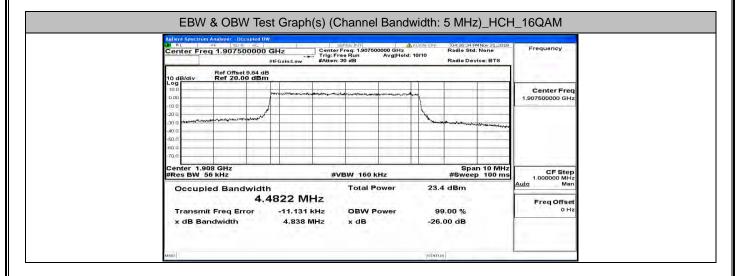


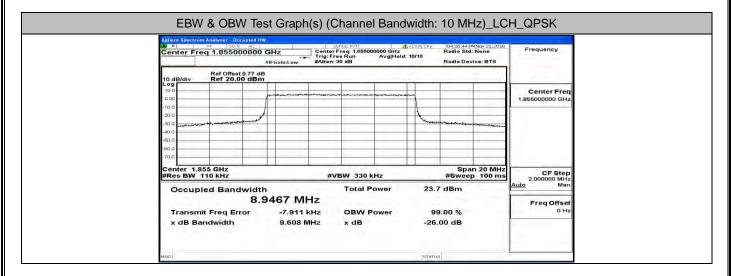


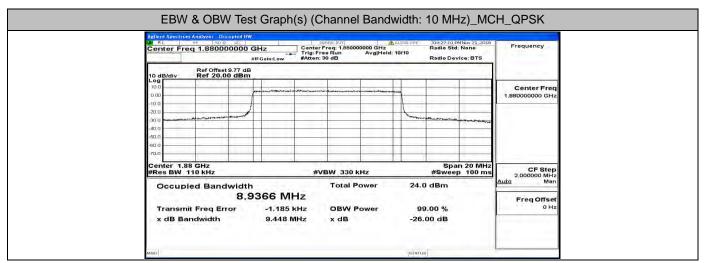


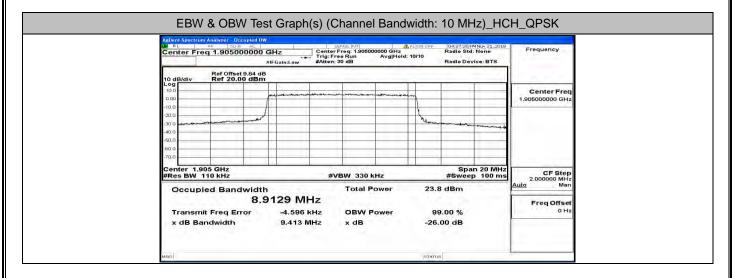


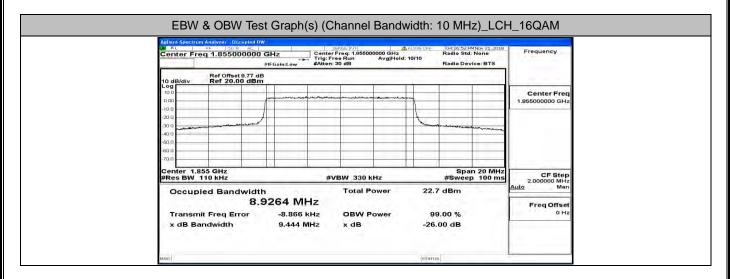


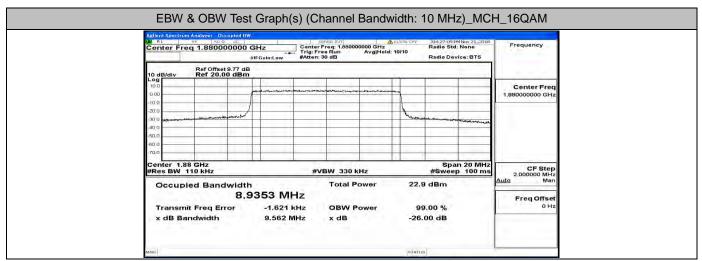


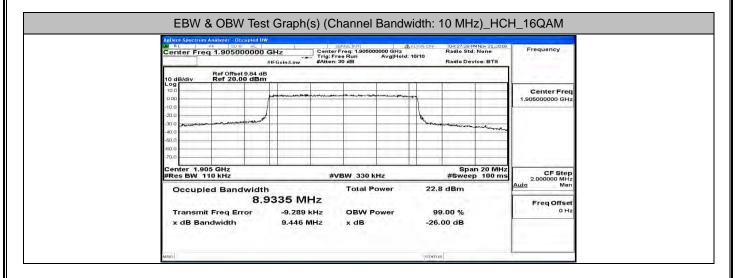


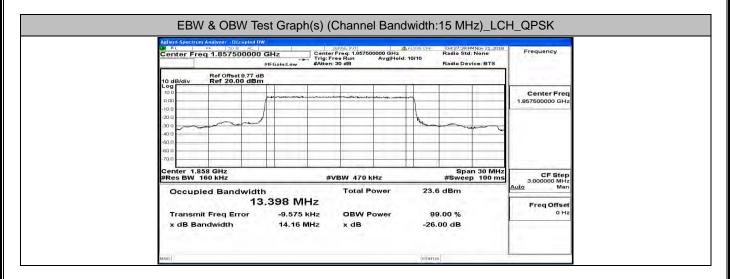


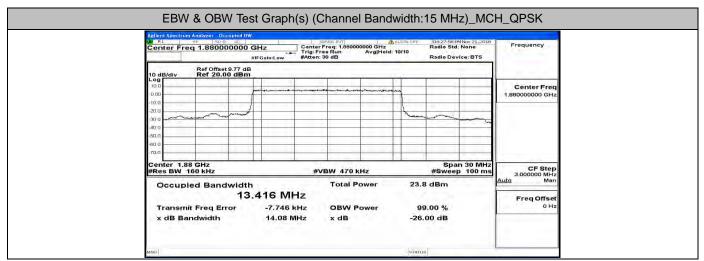


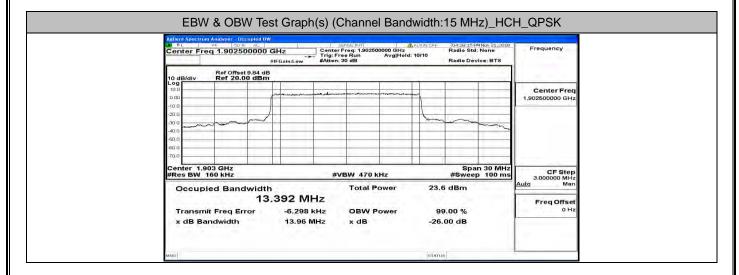


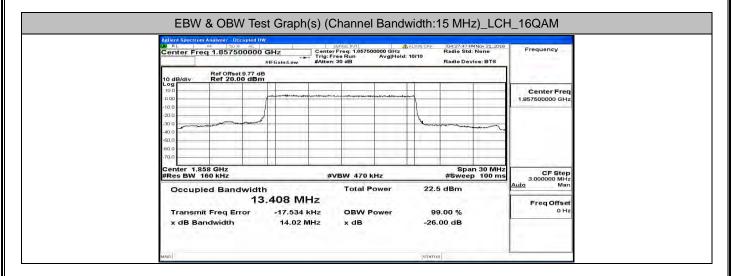


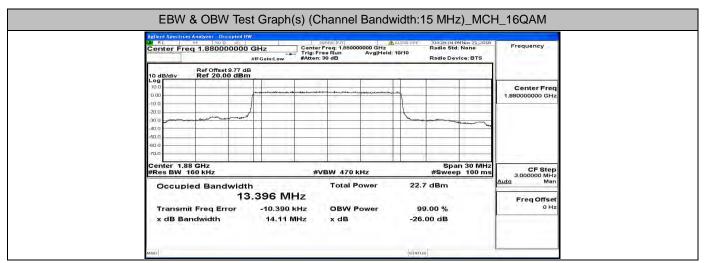


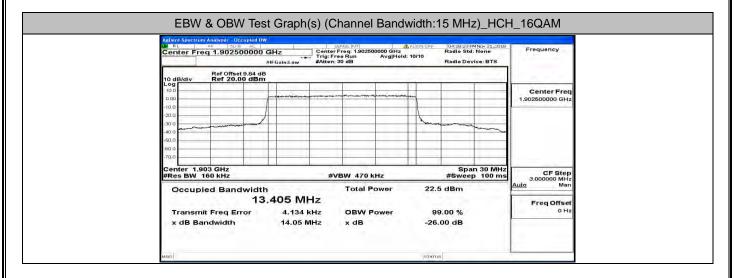


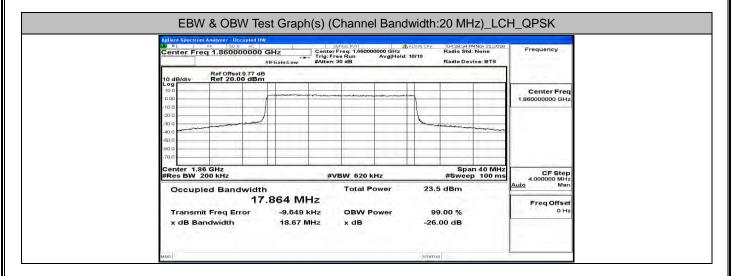


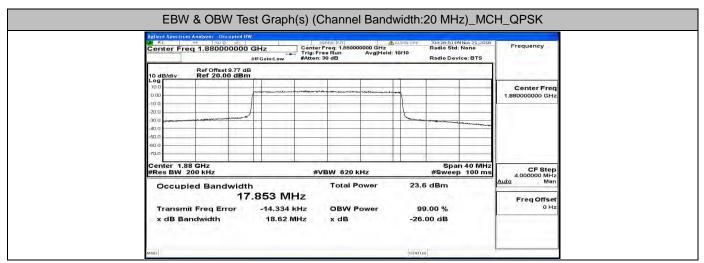


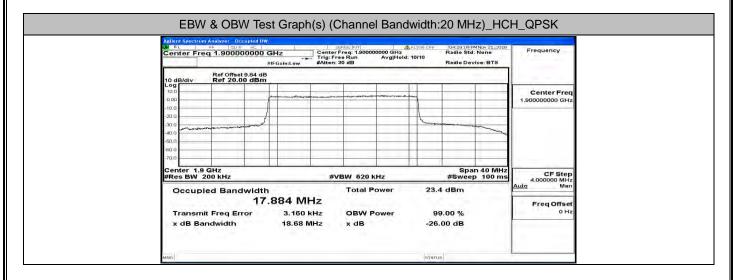


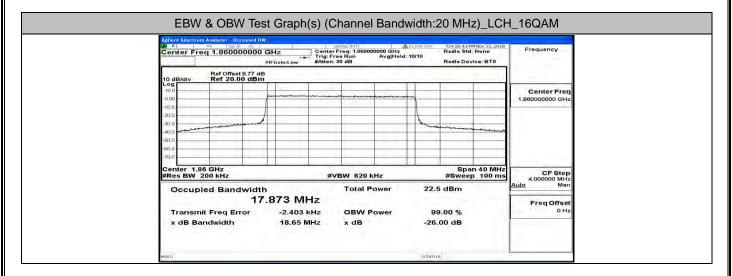


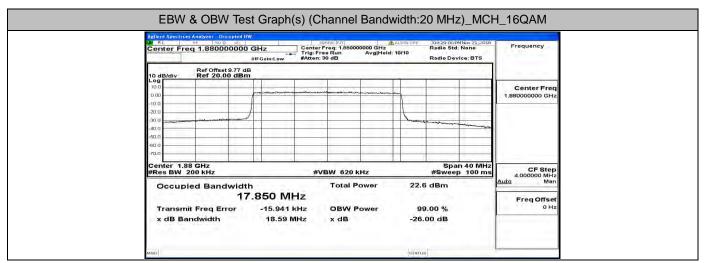


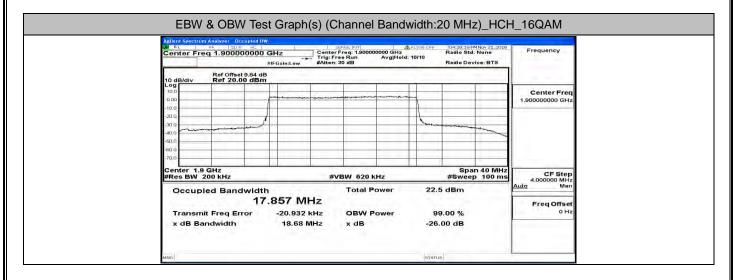




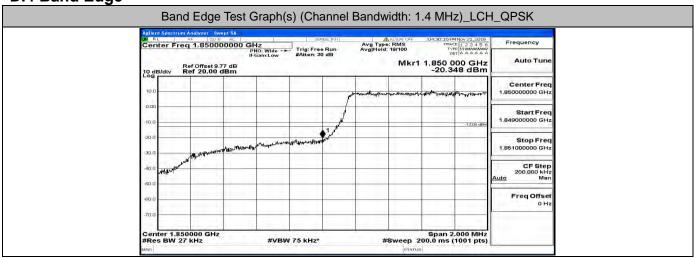


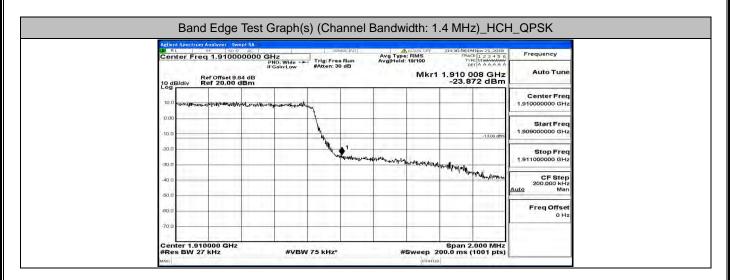


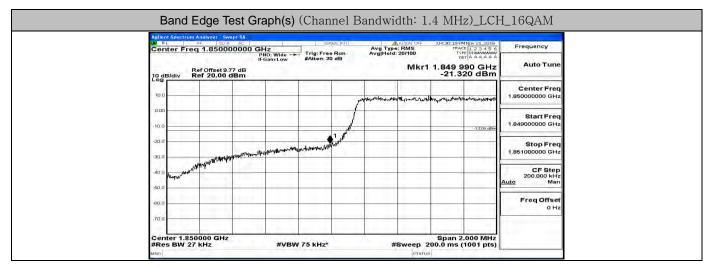


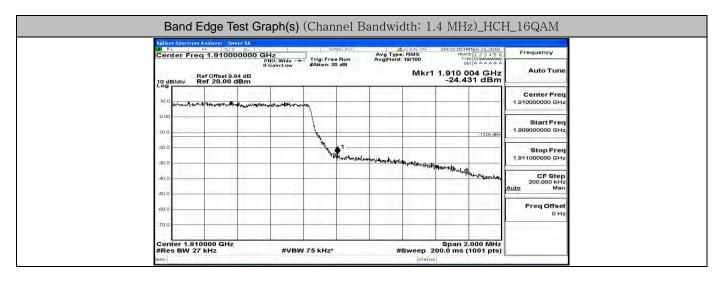


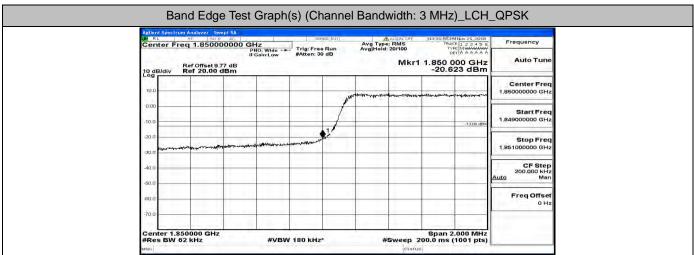
D.4 Band Edge

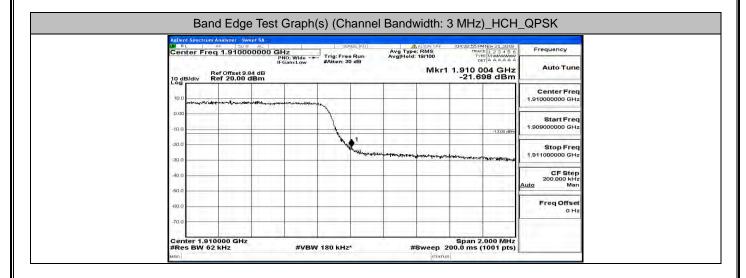


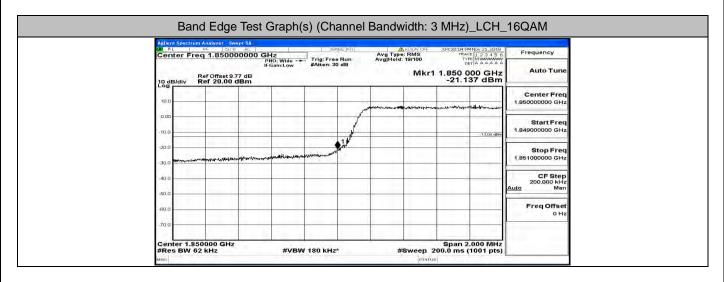


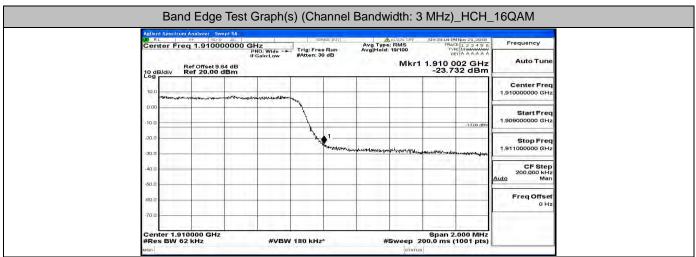


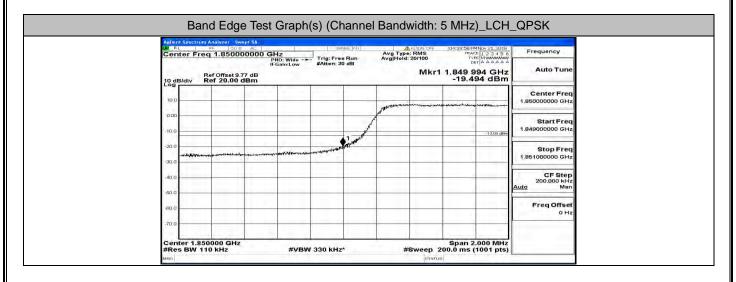


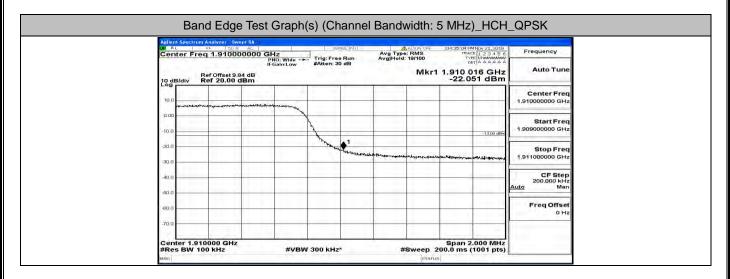


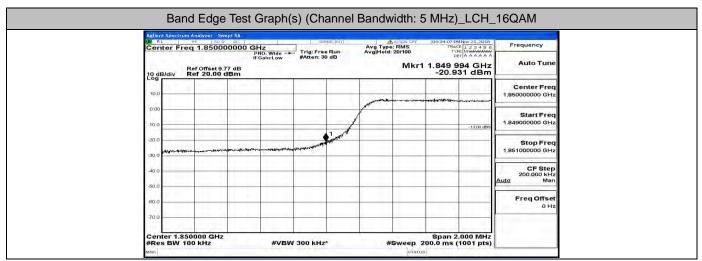


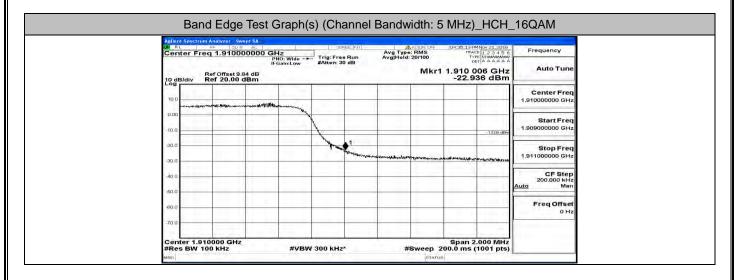


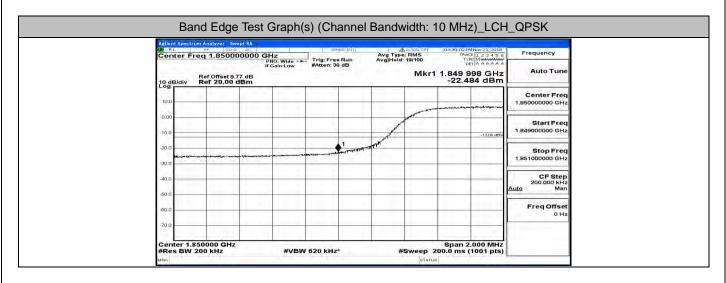


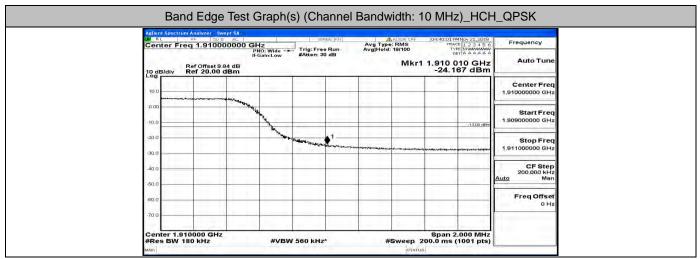


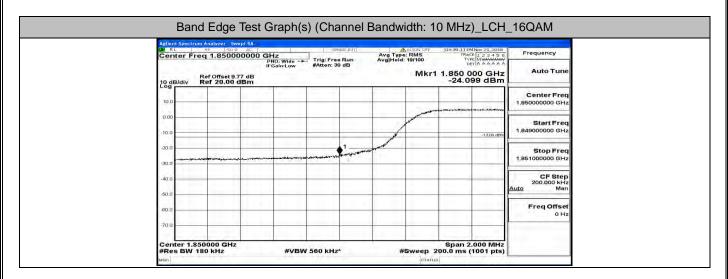


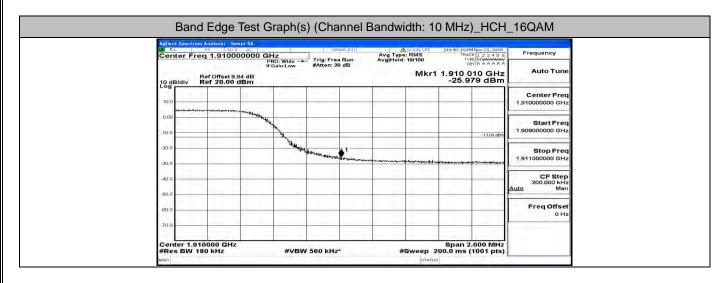


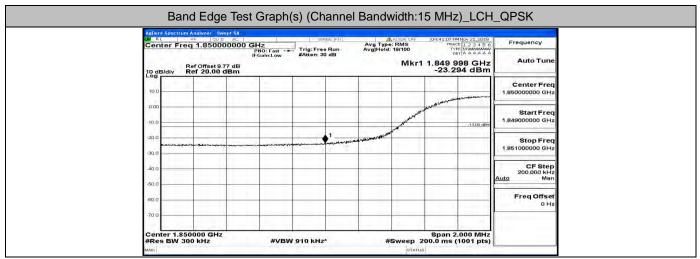


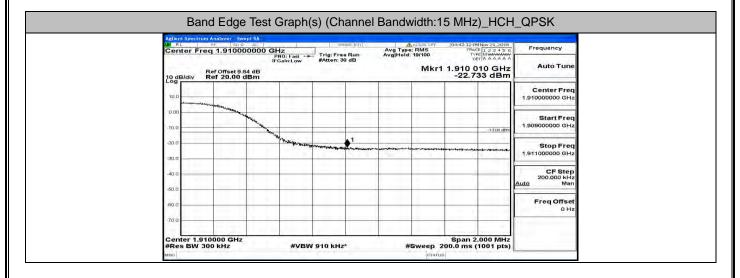


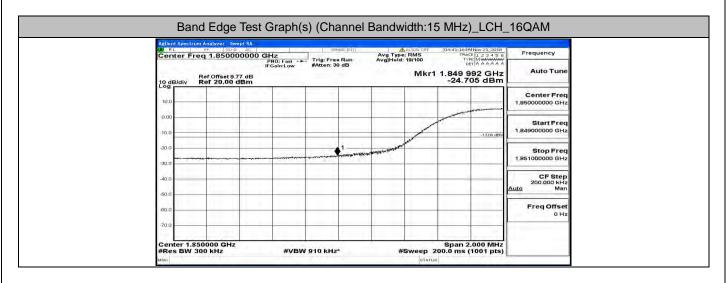


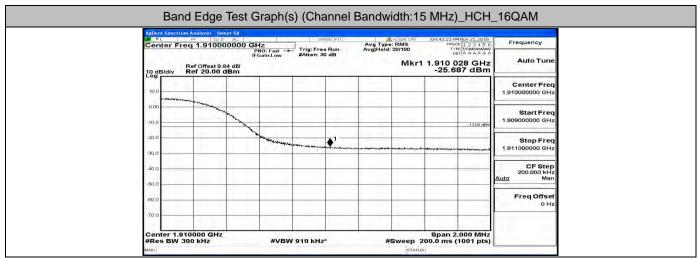


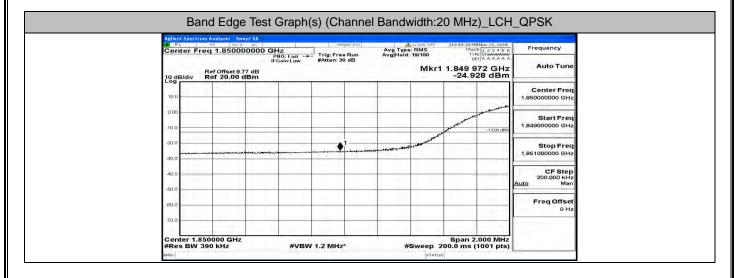


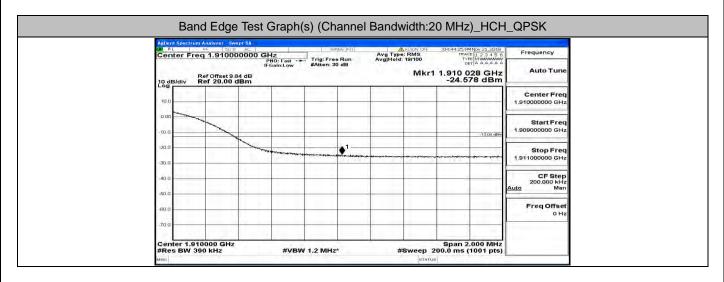


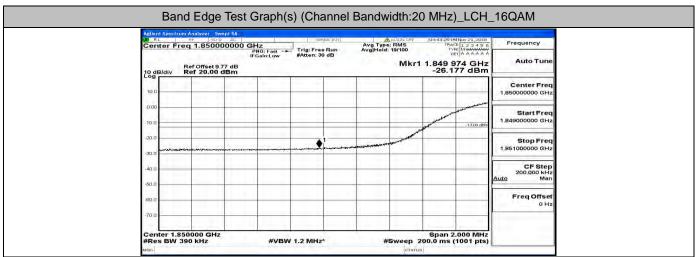


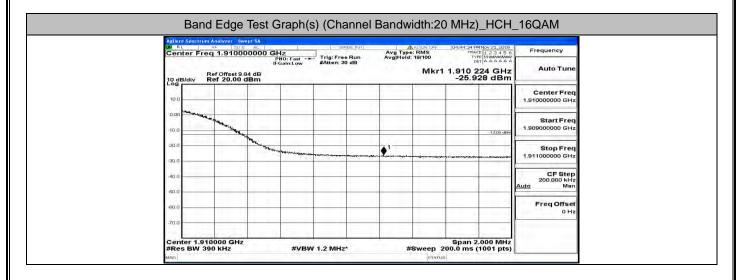












D.5 Conducted Spurious Emission

