Appendix A: Test Data for E-UTRA Band 2

Product Name: Portable Data Collector Trade Mark: Newland

Test Model: NLS-NFT10

Environmental Conditions

Temperature:	24.5 ° C	
Relative Humidity:	53.6%	
ATM Pressure:	100.0 kPa	
Test Engineer:	WANGCHUANG	
Supervised by:	TOM.LIU	

A.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Madulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict	
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict	
		1	0	22.88	22.45	PASS	
		1	3	22.87	22.43	PASS	
		1	5	22.83	22.11	PASS	
	LCH	3	0	22.77	21.94	PASS	
		3	2	22.85	21.90	PASS	
		3	3	22.78	21.96	PASS	
		6	0	21.82	20.88	PASS	
		1	0	22.74	22.17	PASS	
	мсн	1	3	22.78	22.47	PASS	
QPSK /		1	5	22.74	22.04	PASS	
16QAM		3	0	22.78	21.84	PASS	
TOQAIVI		3	2	22.76	21.93	PASS	
		3	3	22.73	21.76	PASS	
		6	0	21.85	20.74	PASS	
		1	0	22.44	21.85	PASS	
		1	3	22.45	21.91	PASS	
		1	5	22.54	22.41	PASS	
	HCH	3	0	22.57	21.60	PASS	
		3	2	22.73	21.72	PASS	
		3	3	22.51	21.68	PASS	
		6	0	21.55	20.67	PASS	

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Madulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	22.73	22.16	PASS		
		1	7	22.99	22.10	PASS		
		1	14	22.64	21.88	PASS		
	LCH	8	0	21.85	20.93	PASS		
		8	4	21.76	20.95	PASS		
		8	7	21.78	20.87	PASS		
		15	0	21.82	20.80	PASS		
		1	0	22.60	22.26	PASS		
	MCH	1	7	22.68	22.00	PASS		
ODCK /		1	14	22.67	21.98	PASS		
QPSK / 16QAM		8	0	21.72	20.77	PASS		
TOQAW		8	4	21.77	20.84	PASS		
		8	7	21.70	20.75	PASS		
		15	0	21.77	20.69	PASS		
		1	0	22.46	21.82	PASS		
		1	7	22.54	21.82	PASS		
		1	14	22.43	21.58	PASS		
	HCH	8	0	21.65	20.63	PASS		
		8	4	21.57	20.72	PASS		
		8	7	21.51	20.67	PASS		
		15	0	21.51	20.57	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vardiet			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.93	22.33	PASS			
		1	12	22.90	22.25	PASS			
		1	24	22.62	21.91	PASS			
	LCH	12	0	21.90	21.06	PASS			
		12	6	21.87	20.94	PASS			
		12	13	21.80	20.96	PASS			
		25	0	21.83	20.88	PASS			
		1	0	22.74	22.14	PASS			
	MCH	1	12	22.62	22.08	PASS			
QPSK /		1	24	22.62	21.94	PASS			
16QAM		12	0	21.76	20.92	PASS			
TOQAIVI		12	6	21.72	20.90	PASS			
		12	13	21.76	20.91	PASS			
		25	0	21.75	20.82	PASS			
		1	0	22.58	21.69	PASS			
		1	12	23.24	21.73	PASS			
		1	24	21.88	21.30	PASS			
	HCH	12	0	21.55	20.72	PASS			
		12	6	21.57	20.58	PASS			
		12	13	21.52	20.71	PASS			
		25	0	21.63	20.72	PASS			

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a nali at	
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict	
		1	0	22.98	22.24	PASS	
		1	24	23.21	22.56	PASS	
		1	49	22.36	22.44	PASS	
	LCH	25	0	21.82	20.83	PASS	
		25	12	21.72	20.74	PASS	
		25	25	21.74	20.85	PASS	
		50	0	21.71	20.75	PASS	
		1	0	22.72	22.24	PASS	
	МСН	1	24	22.73	21.94	PASS	
QPSK /		1	49	22.58	21.79	PASS	
16QAM		25	0	21.64	20.68	PASS	
TOQAM		25	12	21.72	20.76	PASS	
		25	25	21.74	20.74	PASS	
		50	0	21.75	20.78	PASS	
		1	0	22.44	21.98	PASS	
		1	24	22.64	22.18	PASS	
		1	49	21.90	21.52	PASS	
	HCH	25	0	21.43	20.46	PASS	
		25	12	21.53	20.65	PASS	
		25	25	21.58	20.64	PASS	
_		50	0	21.60	20.62	PASS	

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	22.89	22.71	PASS		
		1	37	22.50	22.32	PASS		
		1	74	22.35	22.41	PASS		
	LCH	37	0	21.72	20.80	PASS		
		37	18	21.65	20.71	PASS		
		37	38	21.71	20.74	PASS		
		75	0	21.67	20.73	PASS		
		1	0	22.65	21.94	PASS		
	мсн	1	37	21.94	21.90	PASS		
QPSK /		1	74	20.32	22.07	PASS		
16QAM		37	0	21.57	20.61	PASS		
TOQAIVI		37	18	21.59	20.61	PASS		
		37	38	21.58	20.62	PASS		
		75	0	21.56	20.61	PASS		
		1	0	22.50	21.83	PASS		
		1	37	21.88	21.56	PASS		
		1	74	22.67	21.86	PASS		
	HCH	37	0	21.32	20.37	PASS		
		37	18	21.33	20.36	PASS		
		37	38	21.52	20.63	PASS		
_		75	0	21.39	20.44	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Modulation	Channel	RB Con Size	figuration Offset	Average Power [dBm] QPSK	Average Power [dBm] 16QAM	Verdict			
		1	0	22.74	21.86	PASS			
		1	49	22.73	22.05	PASS			
		1	99	21.83	20.75	PASS			
	LCH	50	0	21.64	20.60	PASS			
		50	25	21.59	20.66	PASS			
		50	50	21.75	20.77	PASS			
		100	0	21.71	20.80	PASS			
		1	0	22.77	21.84	PASS			
	МСН	1	49	22.69	21.75	PASS			
QPSK /		1	99	22.44	21.79	PASS			
16QAM		50	0	21.55	20.53	PASS			
TOQAM		50	25	21.60	20.56	PASS			
		50	50	21.60	20.60	PASS			
		100	0	21.57	20.61	PASS			
		1	0	22.57	21.81	PASS			
		1	49	21.68	21.12	PASS			
		1	99	22.89	21.69	PASS			
	HCH	50	0	21.40	20.52	PASS			
		50	25	21.29	20.37	PASS			
		50	50	21.56	20.54	PASS			
		100	0	21.45	20.50	PASS			

A.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	Grianner	[dB]	[dB]	verdict			
	LCH	5.09	<13	PASS			
QPSK	MCH	5.12	<13	PASS			
	HCH	4.02	<13	PASS			
	LCH	5.95	<13	PASS			
16QAM	MCH	6.04	<13	PASS			
	HCH	4.79	<13	PASS			

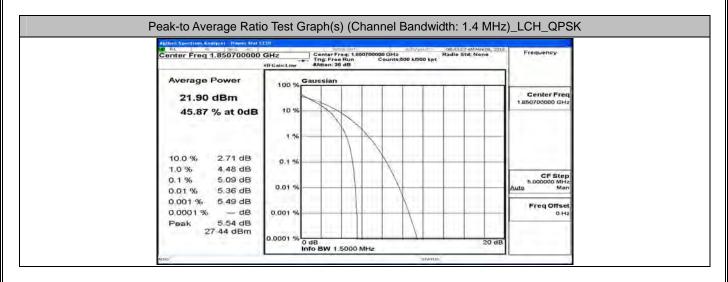
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Charmer	[dB]	[dB]	verdict		
	LCH	5.1	<13	PASS		
QPSK	MCH	5.19	<13	PASS		
	HCH	4.33	<13	PASS		
	LCH	6.02	<13	PASS		
16QAM	MCH	6.11	<13	PASS		
	HCH	5.12	<13	PASS		

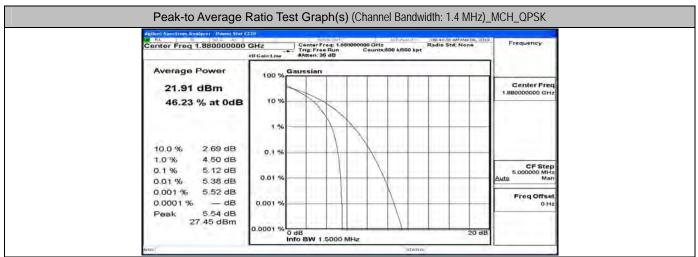
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict		
Modulation	Grianner	[dB]	[dB]	Verdict		
	LCH	5.04	<13	PASS		
QPSK	MCH	5.13	<13	PASS		
	HCH	4.37	<13	PASS		
	LCH	5.9	<13	PASS		
16QAM	MCH	6.01	<13	PASS		
	HCH	5.24	<13	PASS		

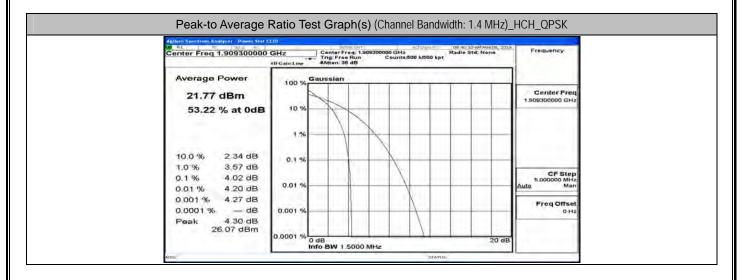
	Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Woddiation	Onamie	[dB]	[dB]	Verdict				
	LCH	5.01	<13	PASS				
QPSK	MCH	5.08	<13	PASS				
	HCH	4.87	<13	PASS				
	LCH	5.87	<13	PASS				
16QAM	MCH	5.97	<13	PASS				
	HCH	5.69	<13	PASS				

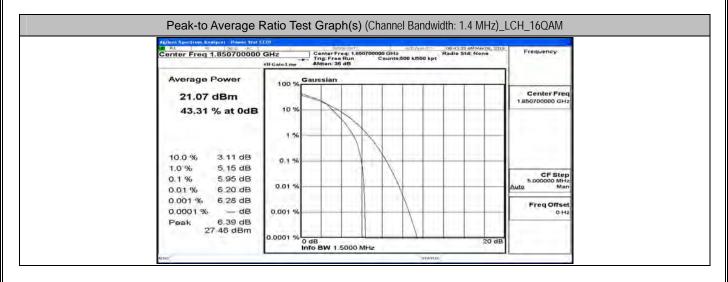
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Wodulation	Grianner	[dB]	[dB]	verdict				
	LCH	4.92	<13	PASS				
QPSK	MCH	4.99	<13	PASS				
	HCH	5.08	<13	PASS				
	LCH	6.21	<13	PASS				
16QAM	MCH	6.29	<13	PASS				
	HCH	6.35	<13	PASS				

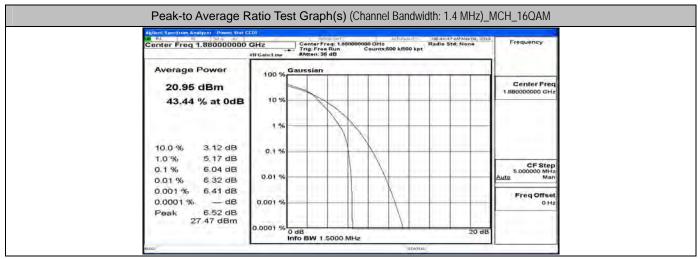
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Marakata Gara	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.69	<13	PASS
	MCH	5.68	<13	PASS
	HCH	5.87	<13	PASS
16QAM	LCH	6.75	<13	PASS
	MCH	6.86	<13	PASS
	HCH	6.86	<13	PASS

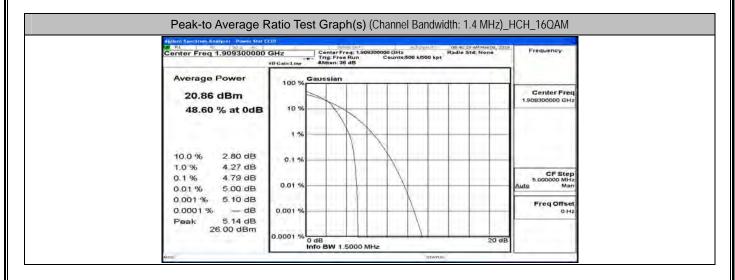


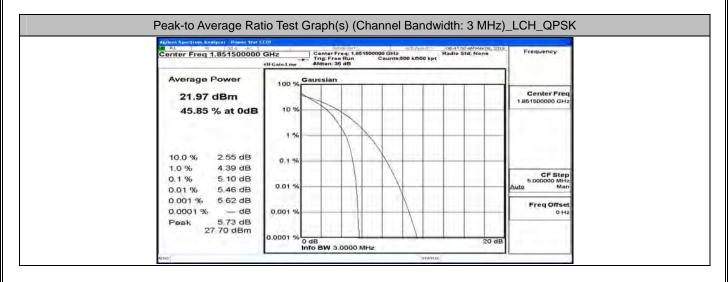


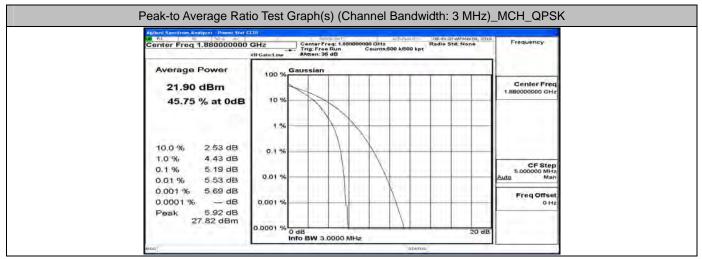


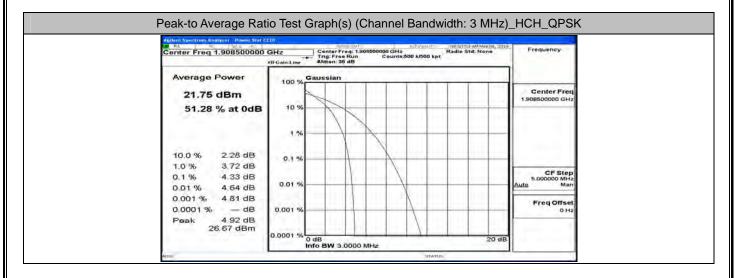


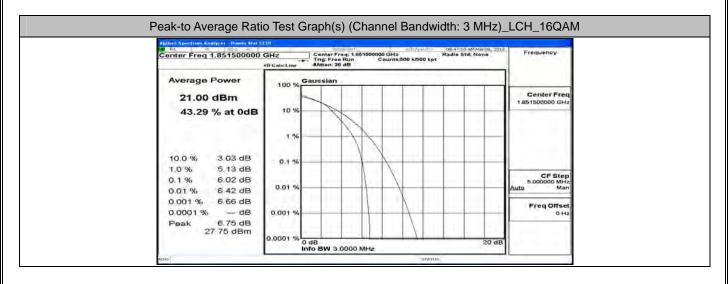


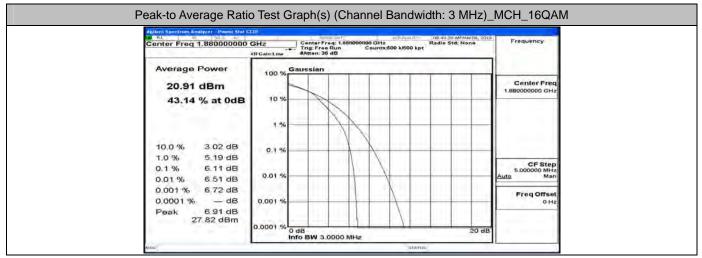


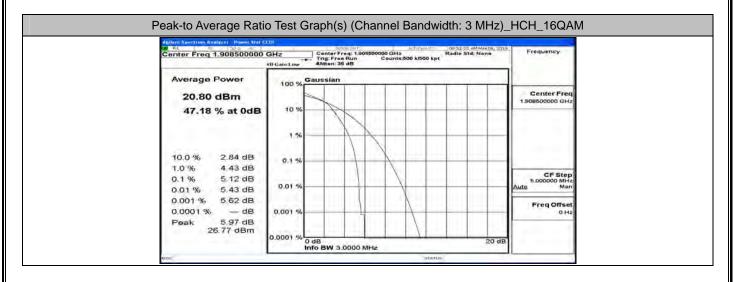


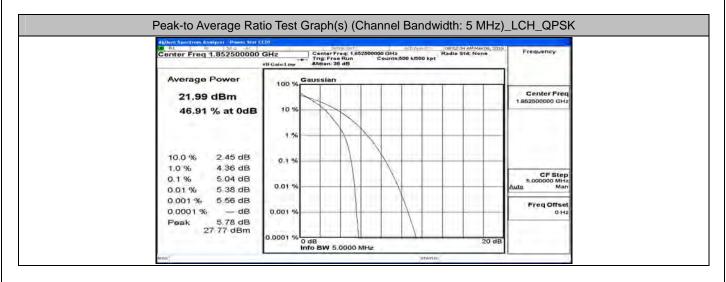


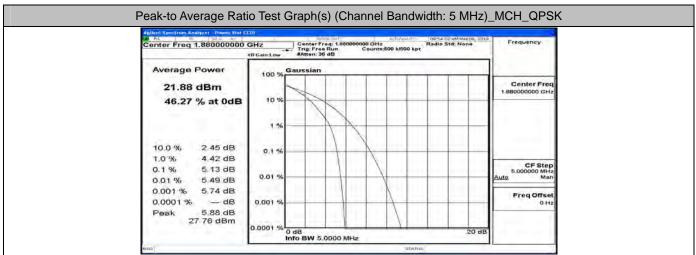


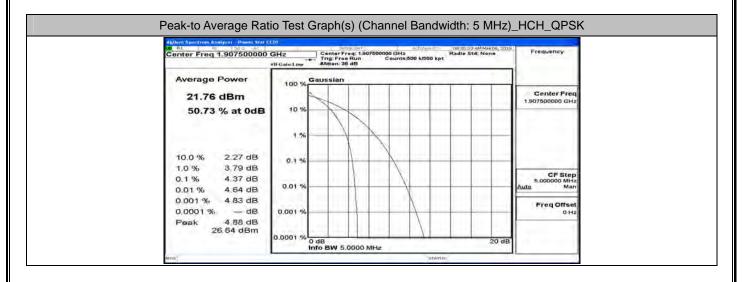


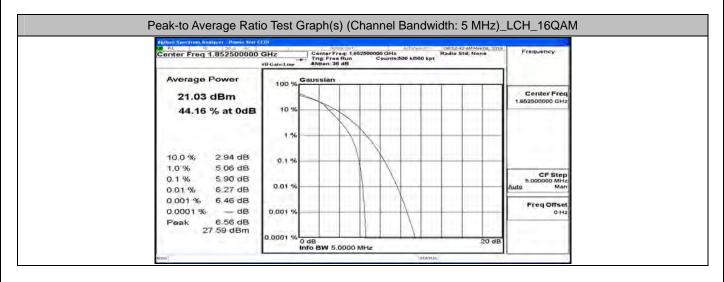


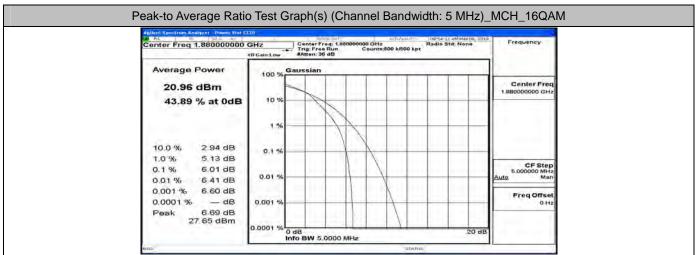


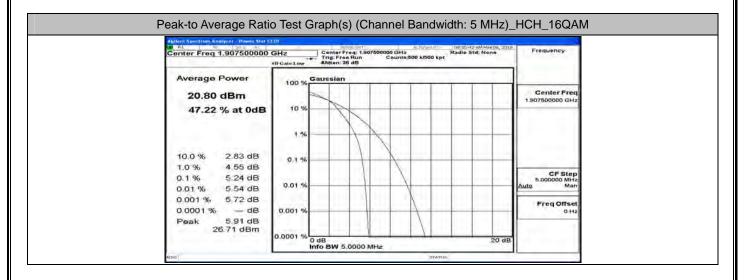


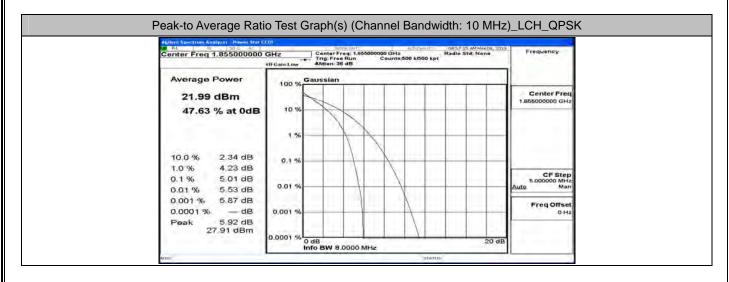


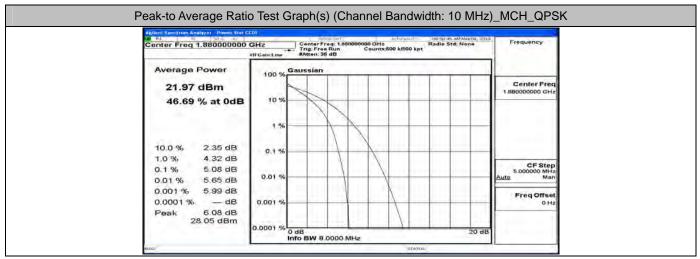


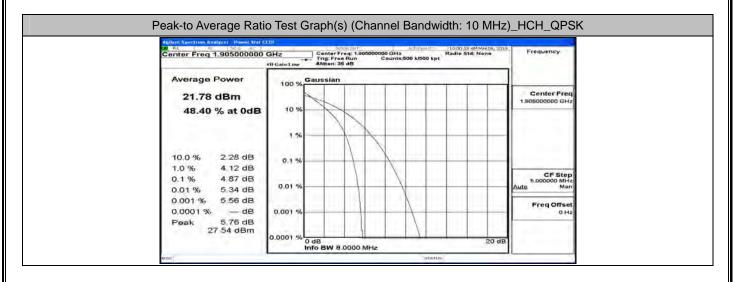


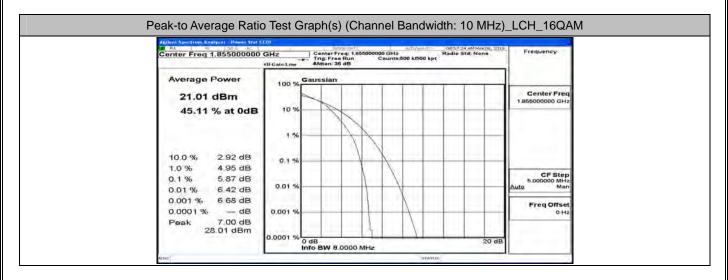


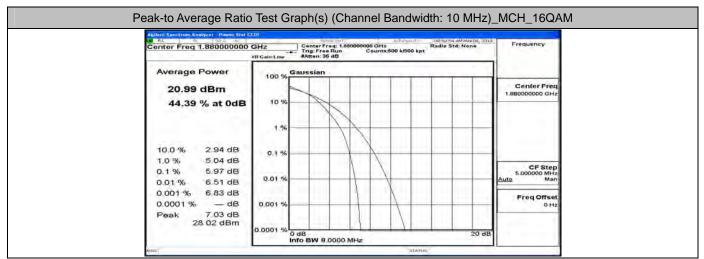


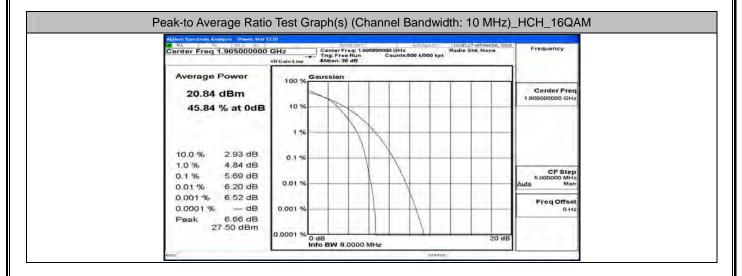


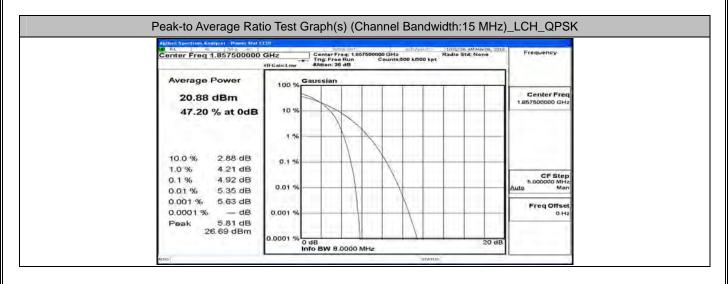


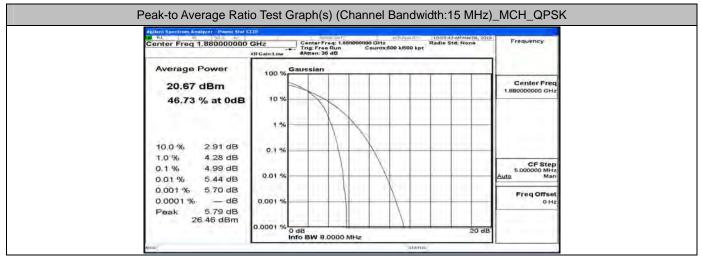


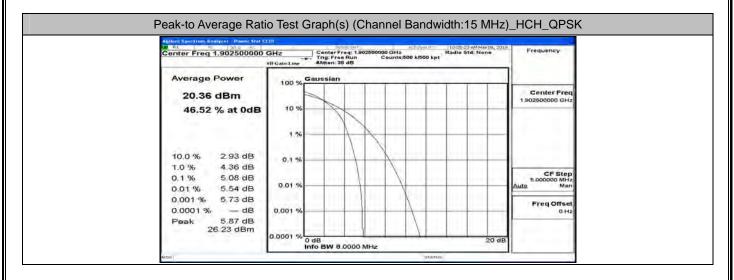


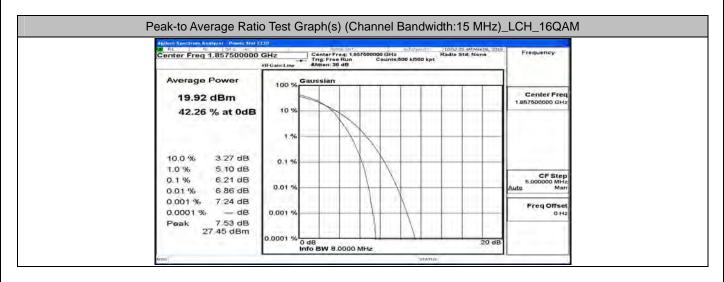


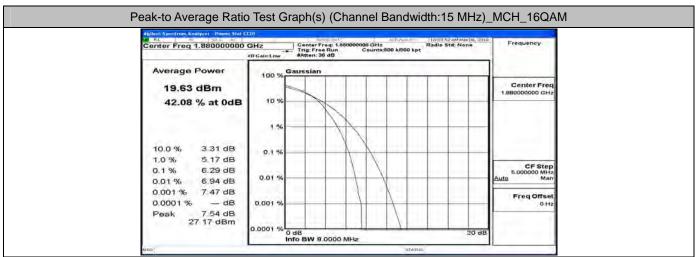


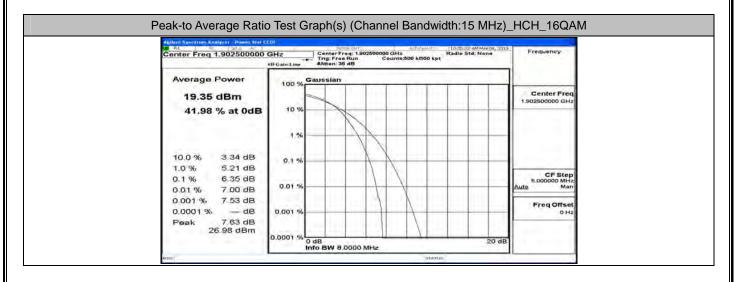


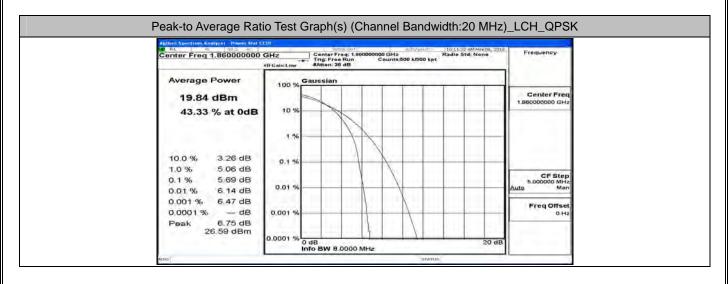


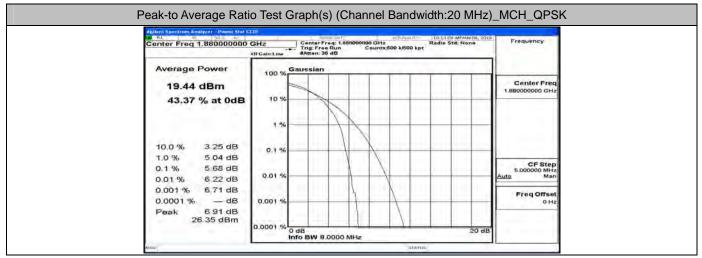


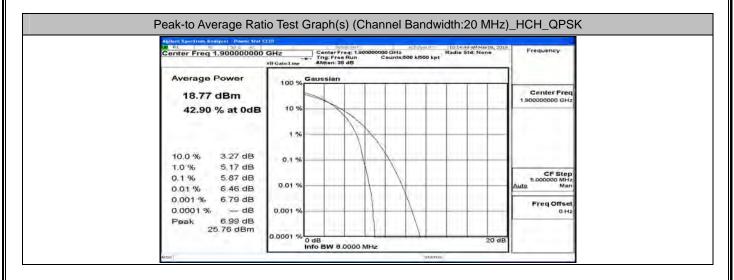


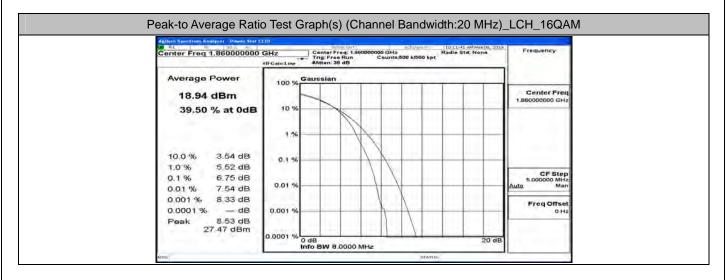


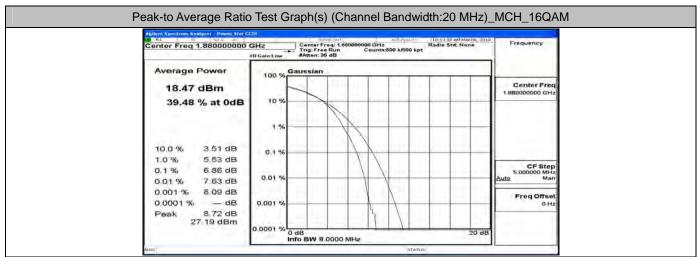


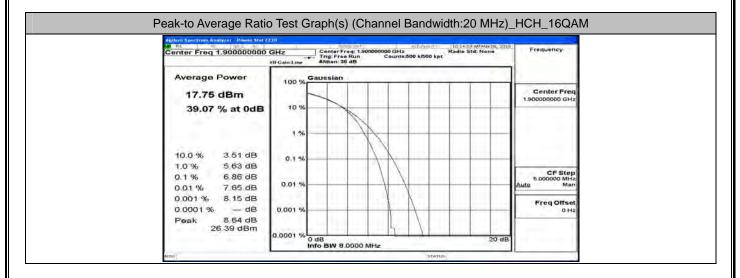












A.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Iviodulation		(MHz)	(MHz)		
QPSK	LCH	1.0798	1.260	PASS	
	MCH	1.0769	1.225	PASS	
	HCH	1.0809	1.288	PASS	
16QAM	LCH	1.0823	1.265	PASS	
	MCH	1.0807	1.267	PASS	
	HCH	1.0785	1.278	PASS	

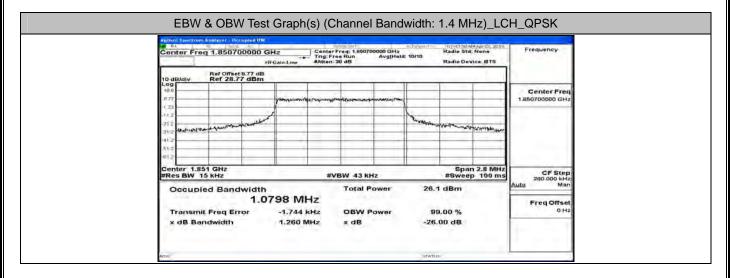
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	2.6835	2.905	PASS
	MCH	2.6848	2.907	PASS
	HCH	2.6881	2.925	PASS
16QAM	LCH	2.6885	2.921	PASS
	MCH	2.6840	2.954	PASS
	HCH	2.6834	2.903	PASS

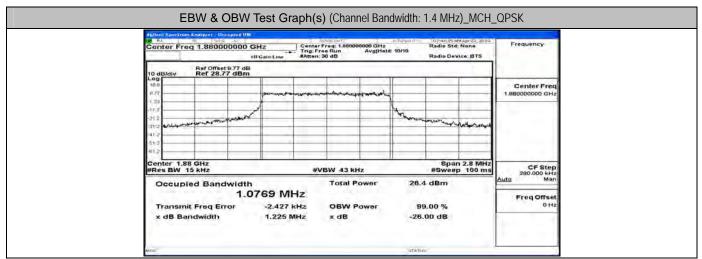
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
iviodulation		(MHz)	(MHz)	
QPSK	LCH	4.4822	4.852	PASS
	MCH	4.4751	4.806	PASS
	HCH	4.4738	4.814	PASS
16QAM	LCH	4.4709	4.821	PASS
	MCH	4.4841	4.830	PASS
	HCH	4.4830	4.881	PASS

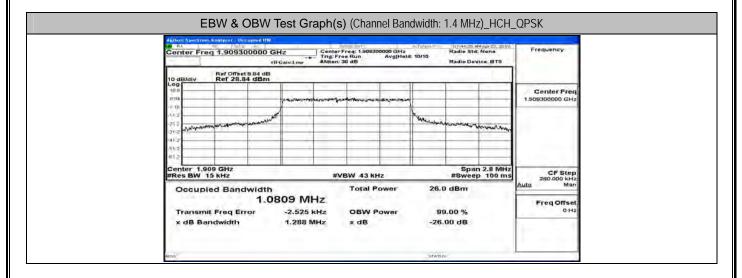
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	8.9171	9.428	PASS	
	MCH	8.9441	9.515	PASS	
	HCH	8.9275	9.441	PASS	
16QAM	LCH	8.9308	9.457	PASS	
	MCH	8.9365	9.465	PASS	
	HCH	8.9262	9.405	PASS	

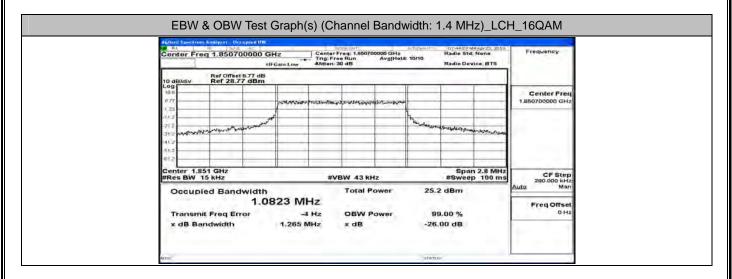
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Woddiation		(MHz)	(MHz)	
QPSK	LCH	13.368	13.98	PASS
	MCH	13.408	14.17	PASS
	HCH	13.404	14.02	PASS
16QAM	LCH	13.364	14.00	PASS
	MCH	13.406	14.06	PASS
	HCH	13.405	14.13	PASS

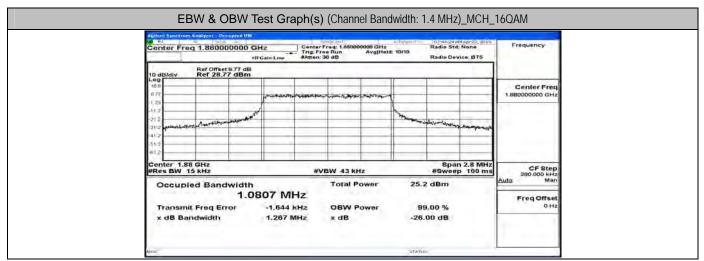
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	17.827	18.54	PASS
	MCH	17.864	18.61	PASS
	HCH	17.910	18.70	PASS
16QAM	LCH	17.817	18.52	PASS
	MCH	17.862	18.64	PASS
	HCH	17.895	18.66	PASS

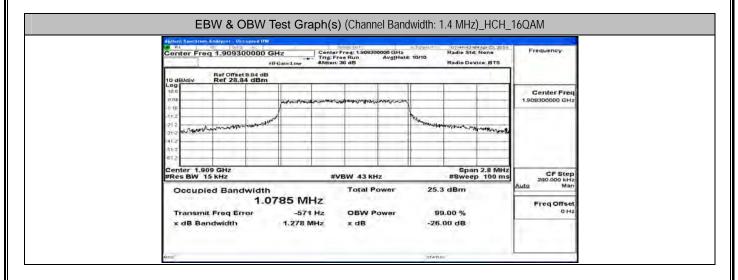


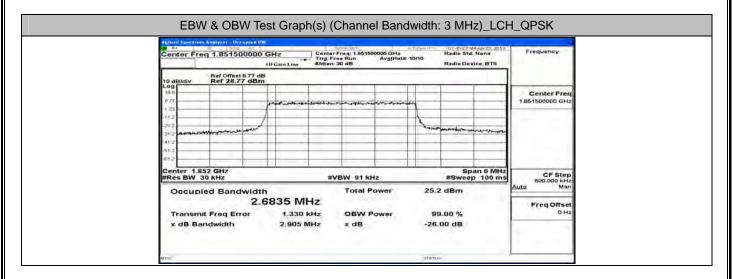


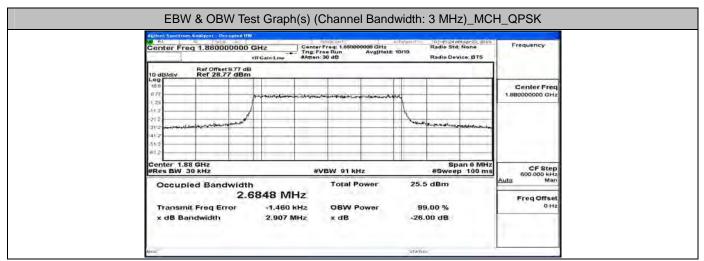


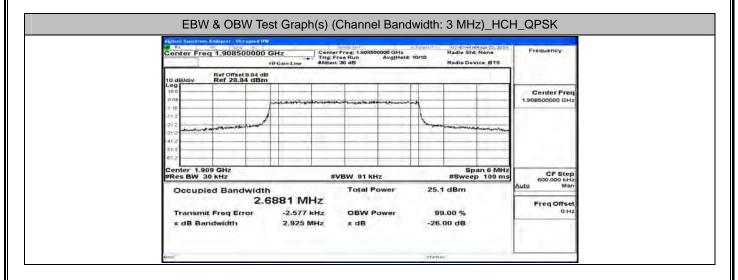


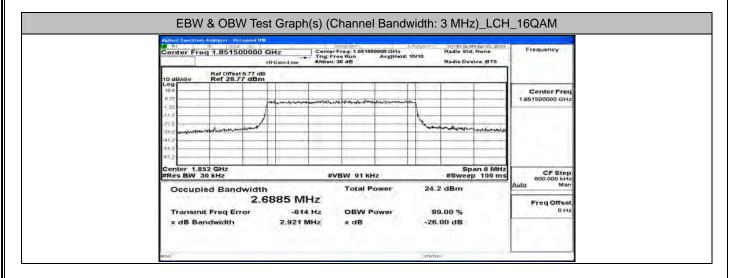


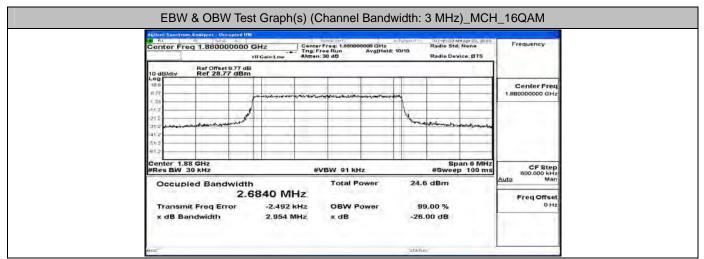


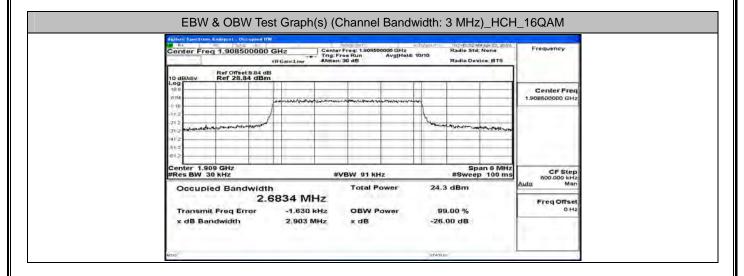


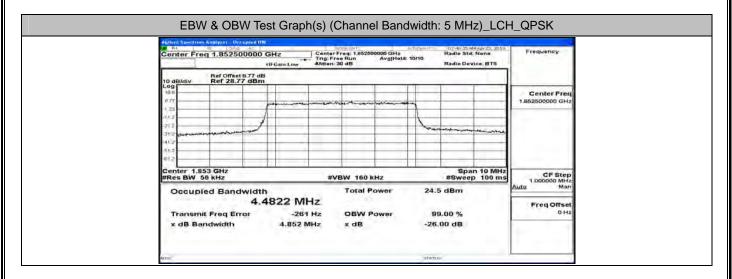


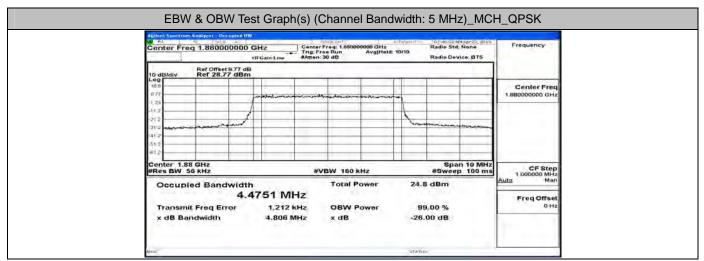


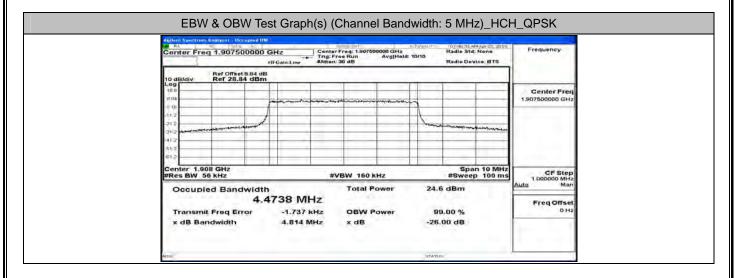


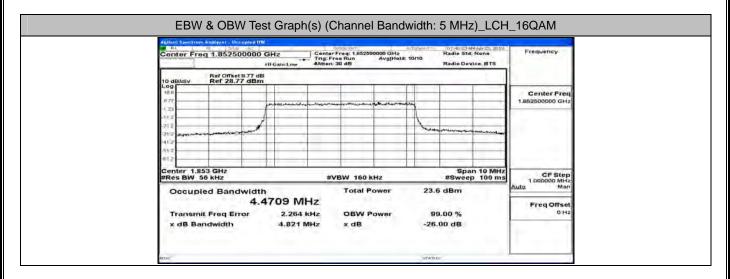


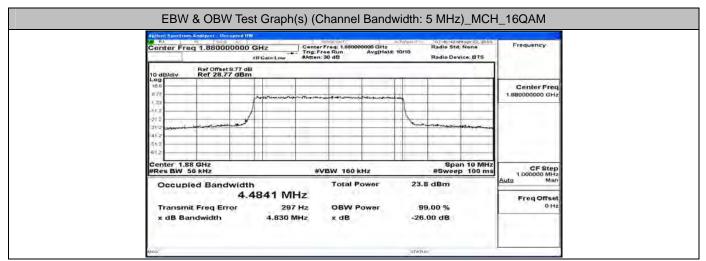


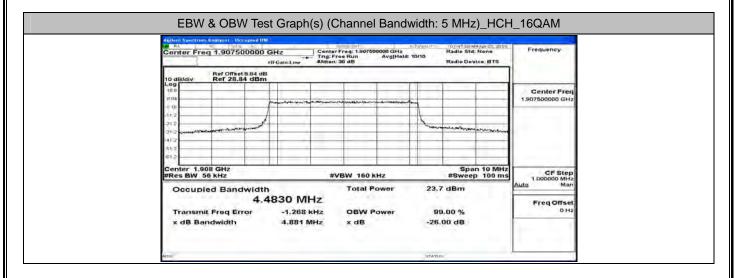


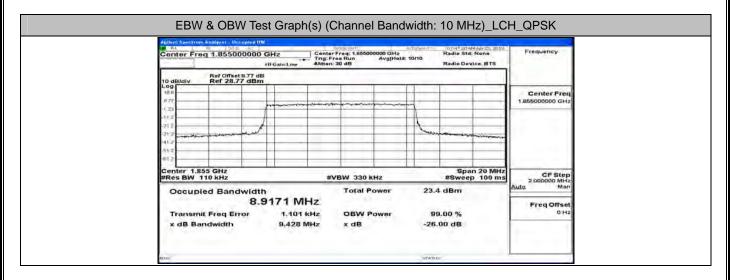


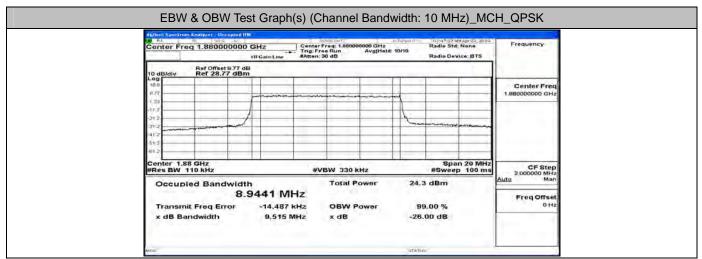


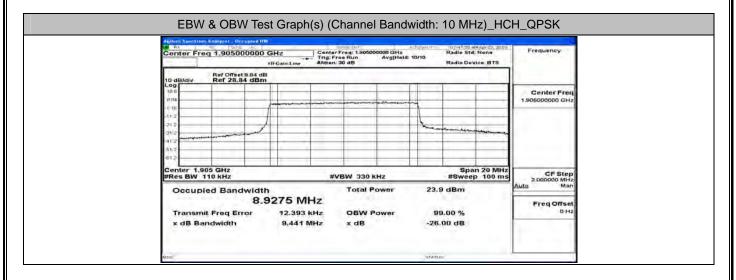


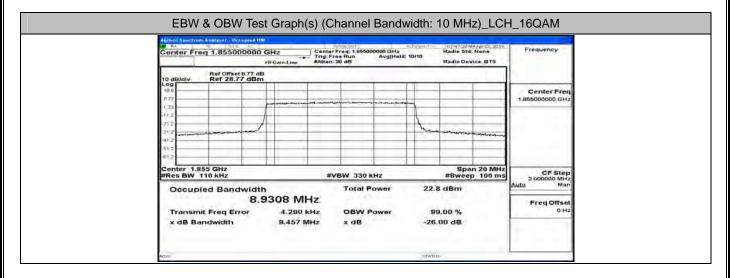


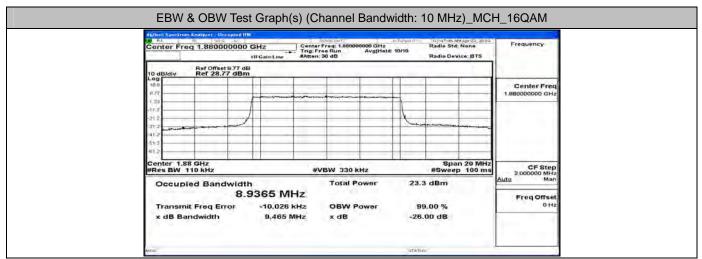


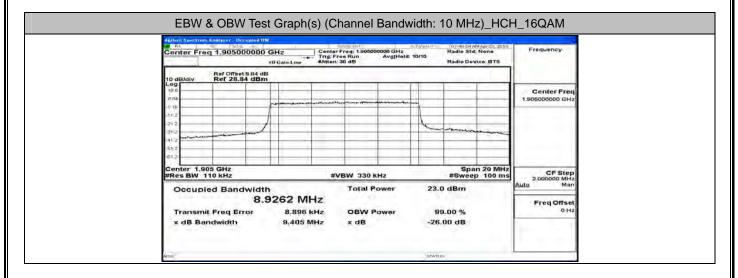


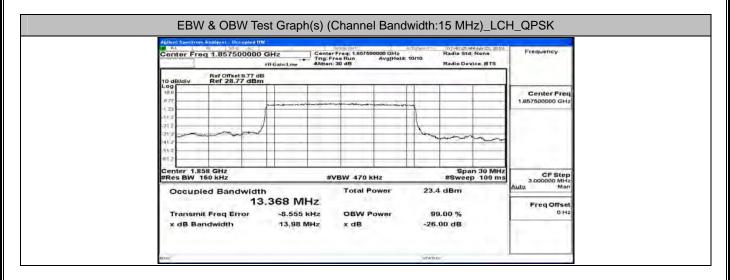


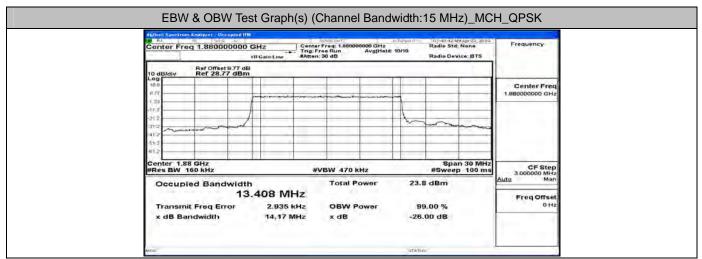


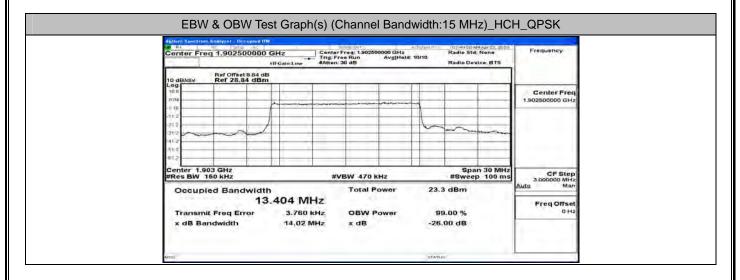


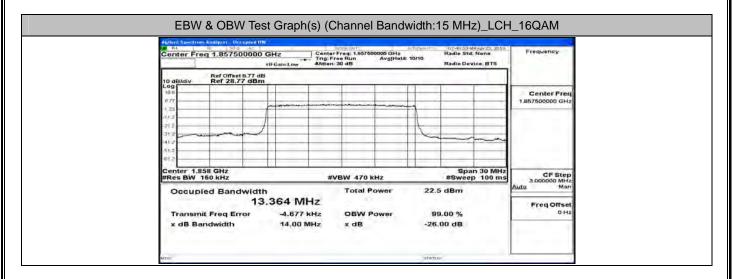


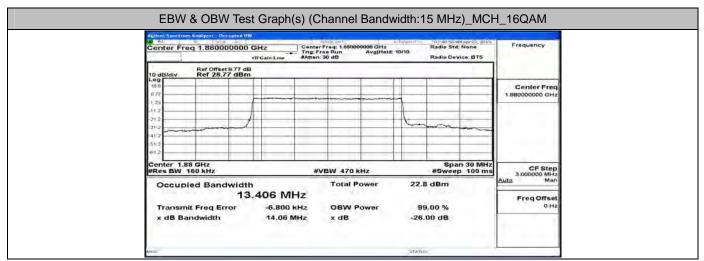


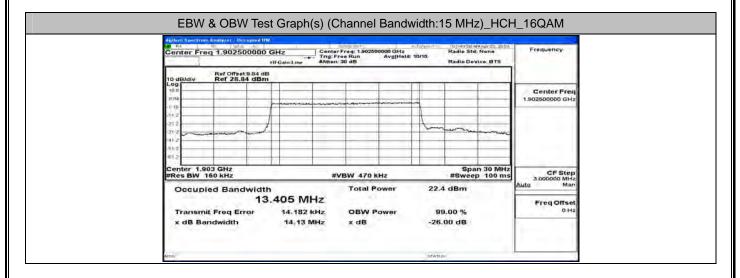


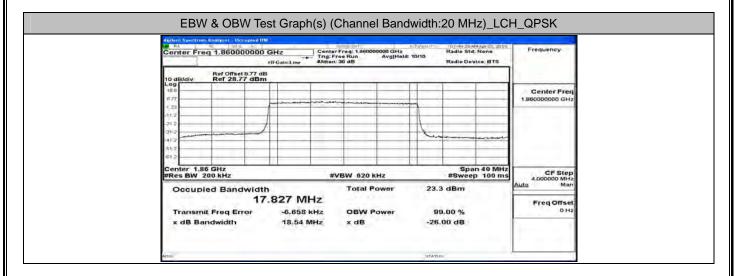


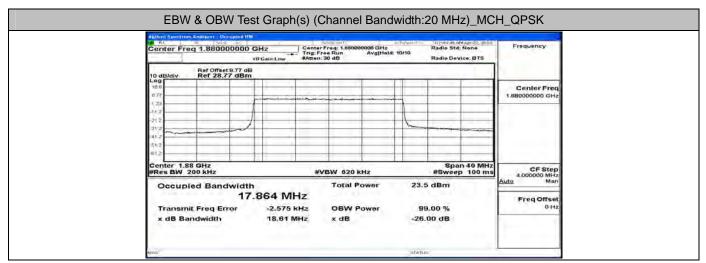


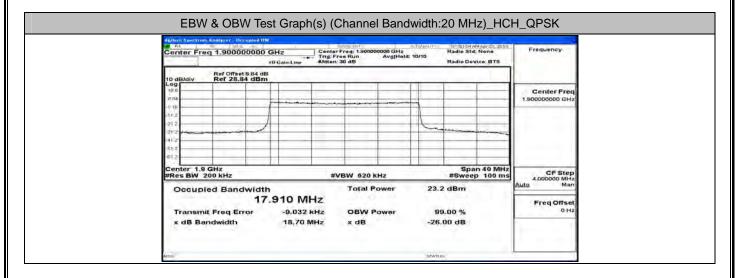


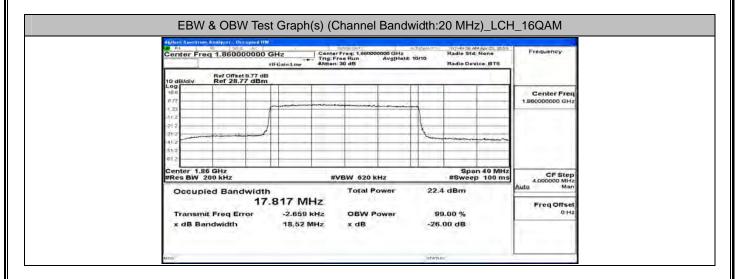


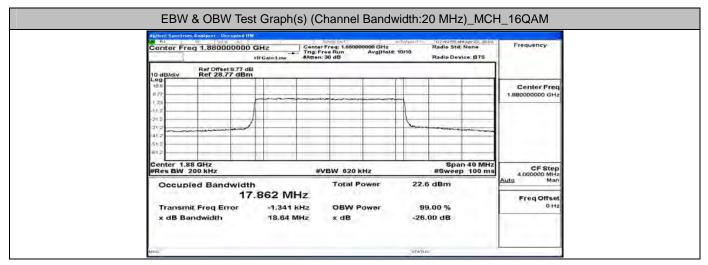


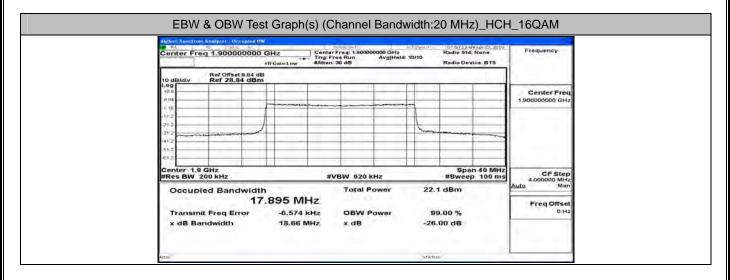




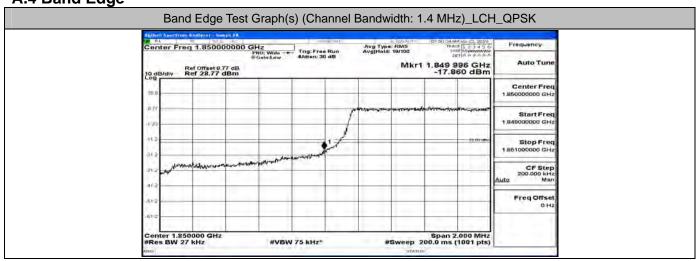


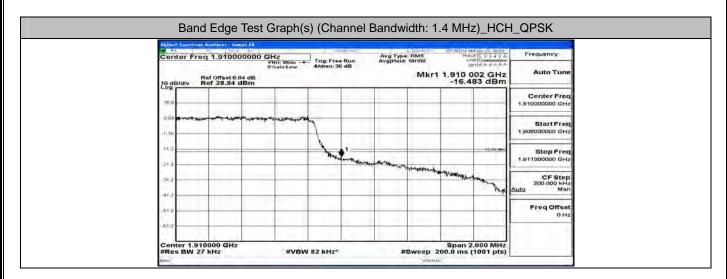


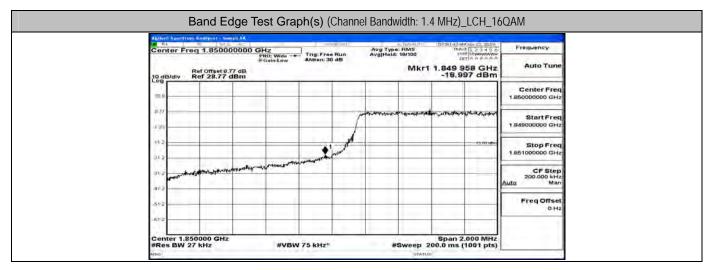


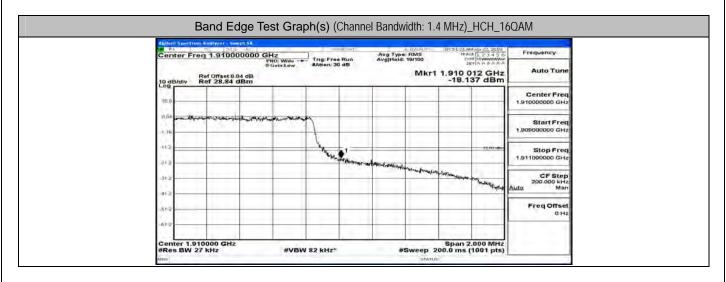


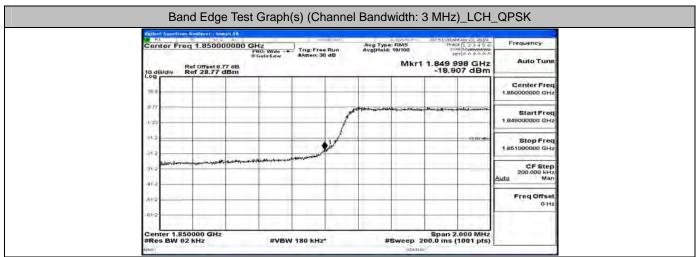
A.4 Band Edge

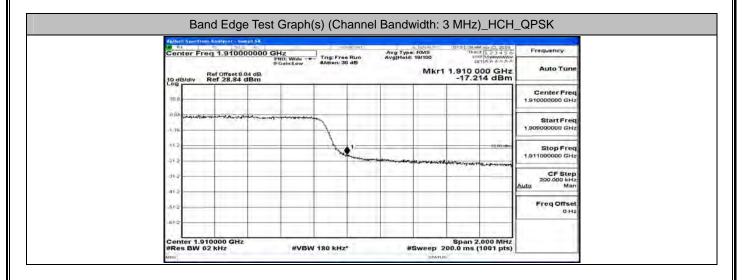


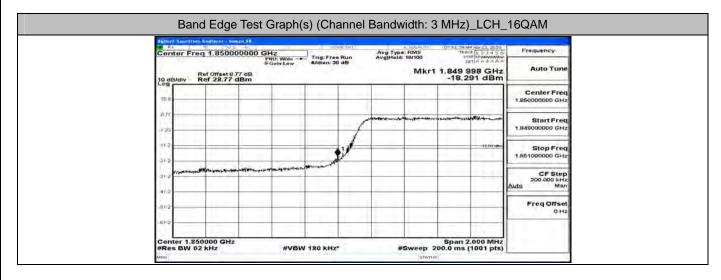


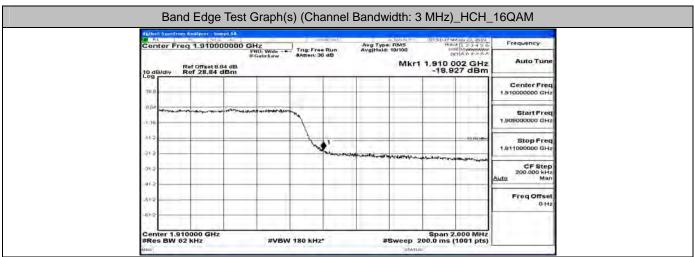


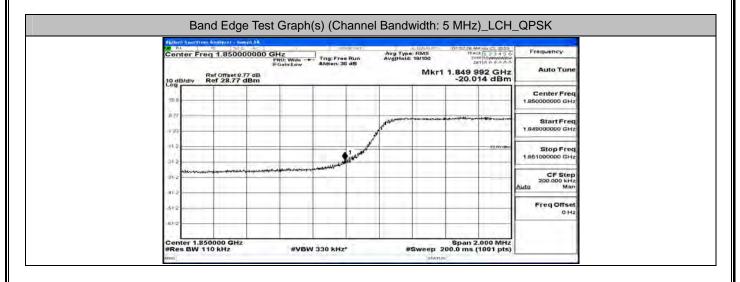


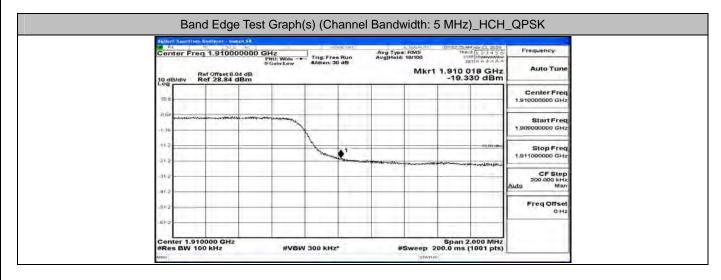


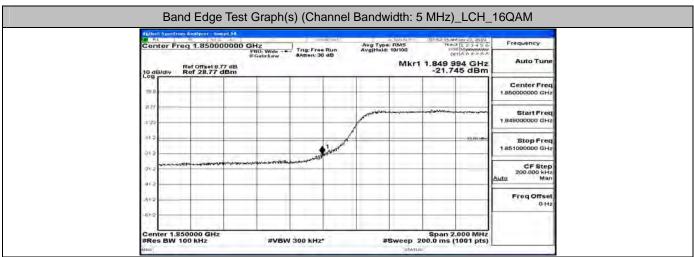


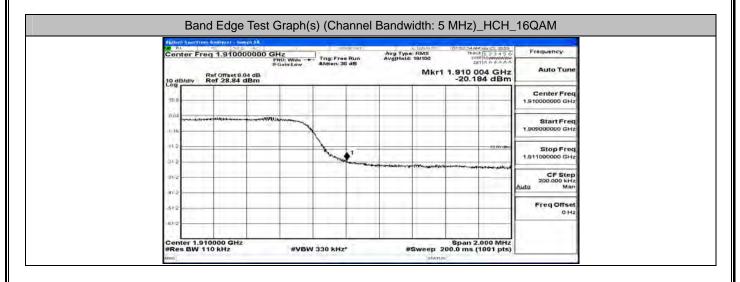


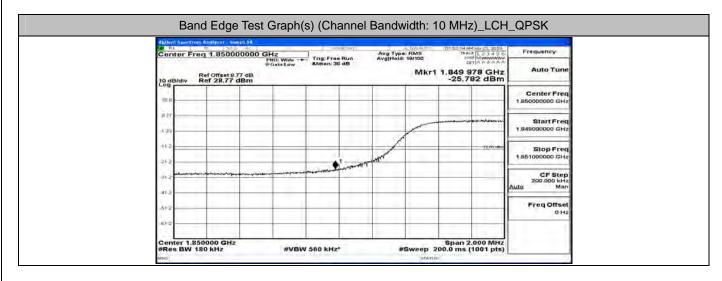


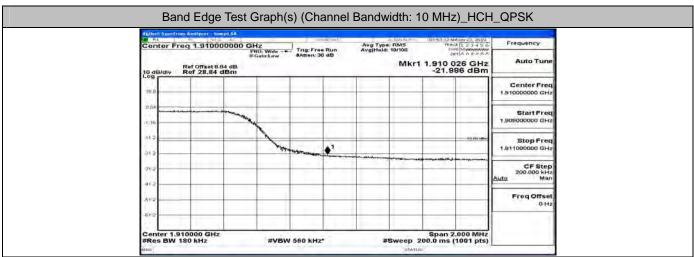


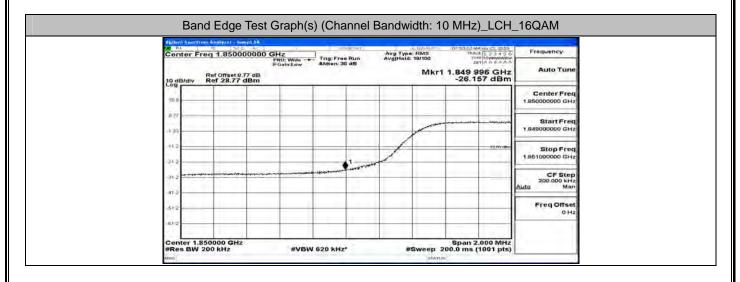


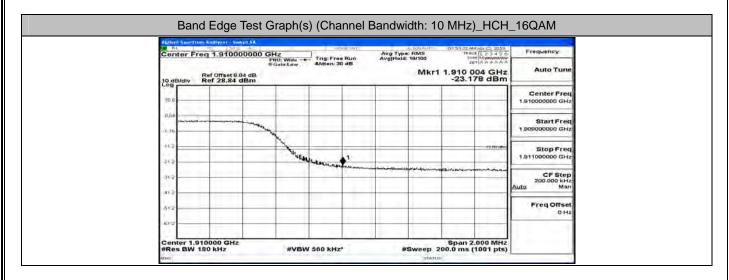


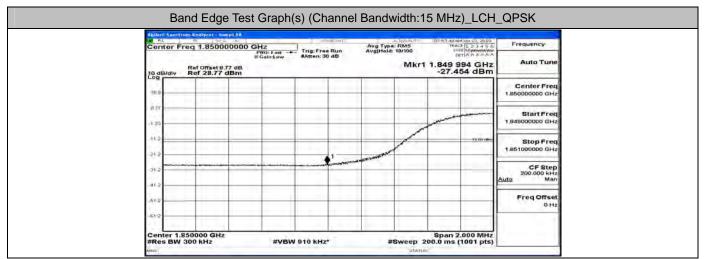


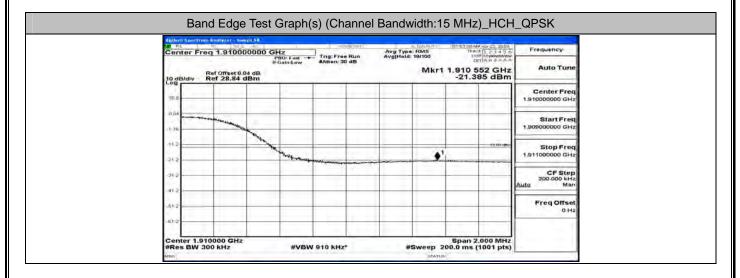


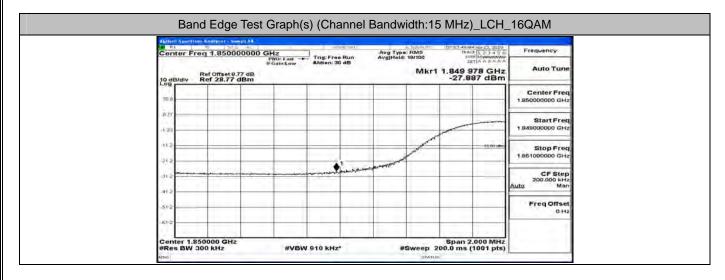


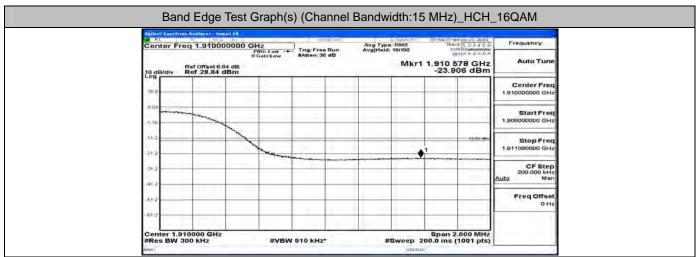


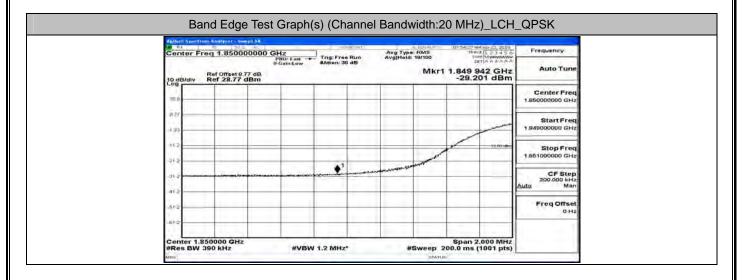


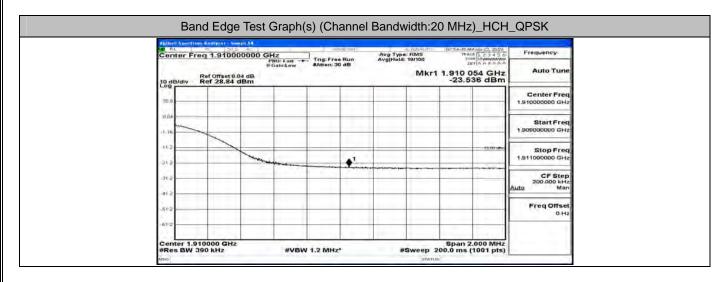


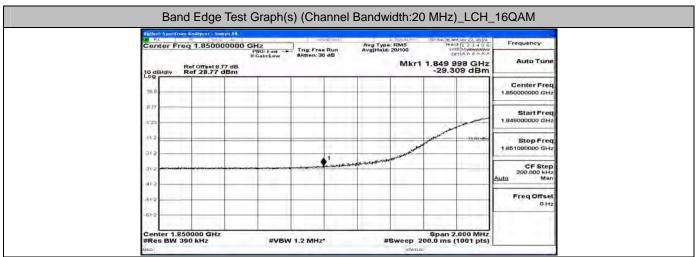


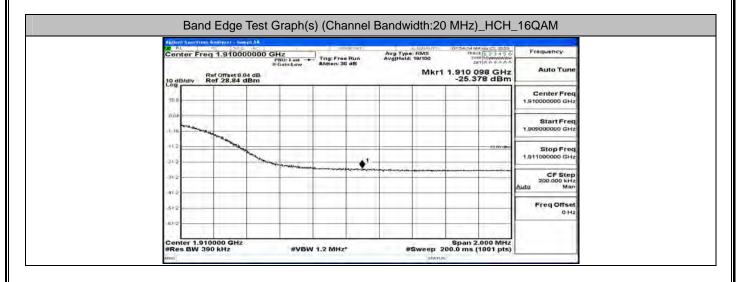












A.5 Conducted Spurious Emission

