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

Product Name: Biometric access system
Trade Mark: N/A
Test Model: Access One

#### **Environmental Conditions**

Temperature:	24.5°C
Relative Humidity:	54.4%
ATM Pressure:	100.0 kPa
Test Engineer:	JK ZHOU
Supervised by:	Wang.Chuang

# C.1 Conducted Output Power

	Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	21.33	20.62	PASS			
		1	3	21.38	20.73	PASS			
		1	5	21.33	20.57	PASS			
	LCH	3	0	21.42	20.62	PASS			
		3	2	21.44	20.63	PASS			
		3	3	21.41	20.61	PASS			
		6	0	20.40	19.38	PASS			
		1	0	21.39	20.85	PASS			
		1	3	21.50	21.01	PASS			
QPSK /	МСН	1	5	21.46	20.78	PASS			
16QAM		3	0	21.51	20.55	PASS			
TOQAIVI		3	2	21.48	20.58	PASS			
		3	3	21.50	20.58	PASS			
		6	0	20.46	19.42	PASS			
		1	0	21.01	20.30	PASS			
		1	3	21.22	20.55	PASS			
		1	5	21.19	20.45	PASS			
	HCH	3	0	21.11	20.21	PASS			
		3	2	21.17	20.29	PASS			
		3	3	21.21	20.32	PASS			
		6	0	20.16	19.27	PASS			

Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Madulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a nali at		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.37	20.74	PASS		
		1	7	21.65	21.02	PASS		
		1	14	21.38	20.70	PASS		
	LCH	8	0	20.44	19.50	PASS		
		8	4	20.47	19.57	PASS		
		8	7	20.39	19.45	PASS		
		15	0	20.43	19.41	PASS		
		1	0	21.42	20.72	PASS		
		1	7	21.63	20.95	PASS		
ODCK /		1	14	21.33	20.66	PASS		
QPSK / 16QAM	MCH	8	0	20.47	19.51	PASS		
TOQAIVI		8	4	20.47	19.56	PASS		
		8	7	20.44	19.46	PASS		
		15	0	20.42	19.40	PASS		
		1	0	20.79	20.17	PASS		
		1	7	21.23	20.58	PASS		
		1	14	21.16	20.52	PASS		
	HCH	8	0	19.93	18.93	PASS		
		8	4	20.09	18.99	PASS		
		8	7	20.06	18.99	PASS		
		15	0	19.94	18.94	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Mondiet			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	21.37	20.79	PASS			
		1	12	21.71	21.21	PASS			
		1	24	21.19	20.67	PASS			
	LCH	12	0	20.46	19.66	PASS			
		12	6	20.49	19.65	PASS			
		12	13	20.40	19.52	PASS			
		25	0	20.46	19.45	PASS			
		1	0	21.39	20.75	PASS			
	МСН	1	12	21.58	21.15	PASS			
QPSK /		1	24	21.25	20.62	PASS			
16QAM		12	0	20.47	19.61	PASS			
TOQAIVI		12	6	20.50	19.66	PASS			
		12	13	20.43	19.57	PASS			
		25	0	20.46	19.47	PASS			
		1	0	20.44	19.54	PASS			
		1	12	21.15	20.19	PASS			
		1	24	21.04	20.07	PASS			
	HCH	12	0	19.71	18.75	PASS			
		12	6	19.90	18.94	PASS			
		12	13	19.87	18.94	PASS			
		25	0	19.81	18.86	PASS			

Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a == : a t		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.40	20.71	PASS		
		1	24	21.46	20.79	PASS		
		1	49	21.13	20.49	PASS		
	LCH	25	0	20.48	19.48	PASS		
		25	12	20.37	19.38	PASS		
		25	25	20.28	19.34	PASS		
		50	0	20.39	19.39	PASS		
		1	0	21.43	20.75	PASS		
	мсн	1	24	21.61	20.92	PASS		
QPSK /		1	49	21.20	20.54	PASS		
16QAM		25	0	20.50	19.57	PASS		
TOQAM		25	12	20.46	19.46	PASS		
		25	25	20.43	19.41	PASS		
		50	0	20.48	19.49	PASS		
		1	0	20.26	19.67	PASS		
		1	24	20.70	20.15	PASS		
		1	49	21.05	20.48	PASS		
	HCH	25	0	19.41	18.39	PASS		
		25	12	19.60	18.62	PASS		
		25	25	19.75	18.75	PASS		
		50	0	19.54	18.54	PASS		

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Madulatian	Channal	RB Configuration		Average Power [dBm]	Average Power [dBm]	\/a ndiat		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.36	20.70	PASS		
		1	37	21.46	20.82	PASS		
		1	74	21.11	20.47	PASS		
	LCH	37	0	20.39	19.39	PASS		
		37	18	20.25	19.29	PASS		
		37	38	20.26	19.28	PASS		
		75	0	20.37	19.31	PASS		
	мсн	1	0	21.33	20.66	PASS		
		1	37	21.53	20.86	PASS		
QPSK /		1	74	21.04	20.31	PASS		
16QAM		37	0	20.59	19.20	PASS		
IOQAW		37	18	20.49	19.19	PASS		
		37	38	20.35	19.13	PASS		
		75	0	20.20	19.15	PASS		
		1	0	21.08	20.44	PASS		
		1	37	21.14	20.46	PASS		
		1	74	20.78	20.13	PASS		
	HCH	37	0	20.06	19.10	PASS		
		37	18	19.98	19.03	PASS		
		37	38	19.92	18.92	PASS		
		75	0	20.05	18.99	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict			
Wioddiation	Onamo	Size	Offset	QPSK	16QAM	Voluiot			
		1	0	21.05	20.33	PASS			
		1	49	21.35	20.58	PASS			
		1	99	21.27	20.46	PASS			
	LCH	50	0	20.04	19.00	PASS			
		50	25	20.14	19.15	PASS			
		50	50	20.25	19.20	PASS			
		100	0	20.11	19.11	PASS			
		1	0	21.30	20.47	PASS			
	МСН	1	49	21.43	20.59	PASS			
QPSK /		1	99	21.14	20.36	PASS			
16QAM		50	0	20.13	19.09	PASS			
TOQAIVI		50	25	20.18	19.17	PASS			
		50	50	20.12	19.13	PASS			
		100	0	20.15	19.09	PASS			
		1	0	21.25	20.60	PASS			
		1	49	21.21	20.60	PASS			
		1	99	20.82	20.15	PASS			
	HCH	50	0	20.32	19.31	PASS			
		50	25	20.00	19.06	PASS			
		50	50	19.90	18.90	PASS			
		100	0	20.07	19.06	PASS			

## C.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
iviodulation	Channel	[dB]	[dB]	verdict			
	LCH	5.81	<13	PASS			
QPSK	MCH	5.52	<13	PASS			
	HCH	5.28	<13	PASS			
	LCH	6.82	<13	PASS			
16QAM	MCH	6.43	<13	PASS			
	HCH	6.17	<13	PASS			

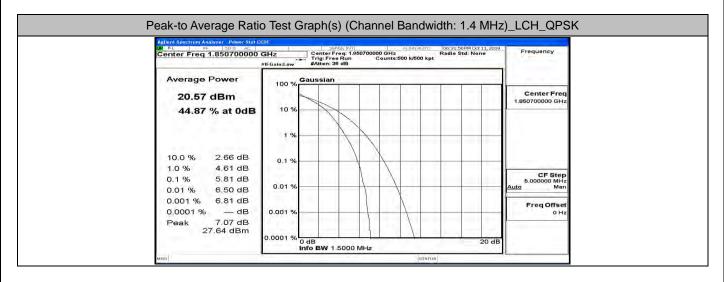
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordiet		
Modulation	Charmer	[dB]	[dB]	Verdict		
	LCH	5.72	<13	PASS		
QPSK	MCH	5.58	<13	PASS		
	HCH	5.47	<13	PASS		
	LCH	6.72	<13	PASS		
16QAM	MCH	6.48	<13	PASS		
	HCH	6.19	<13	PASS		

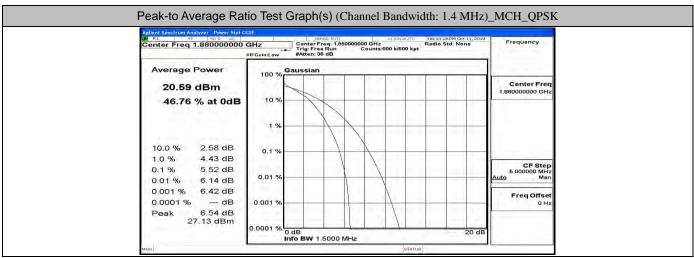
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Griannei	[dB]	[dB]	verdict			
	LCH	5.83	<13	PASS			
QPSK	MCH	5.61	<13	PASS			
	HCH	5.5	<13	PASS			
	LCH	6.73	<13	PASS			
16QAM	MCH	6.38	<13	PASS			
	HCH	6.28	<13	PASS			

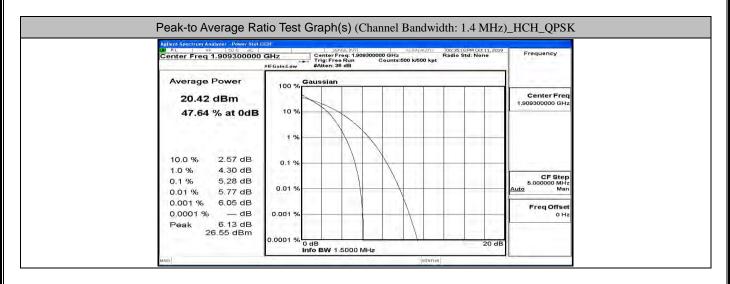
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channal	Peak-to-Average Ratio	Limit	Vordict			
Modulation	Channel	[dB]	[dB]	Verdict			
	LCH	5.8	<13	PASS			
QPSK	MCH	5.6	<13	PASS			
	HCH	5.64	<13	PASS			
	LCH	6.52	<13	PASS			
16QAM	MCH	6.32	<13	PASS			
	HCH	6.31	<13	PASS			

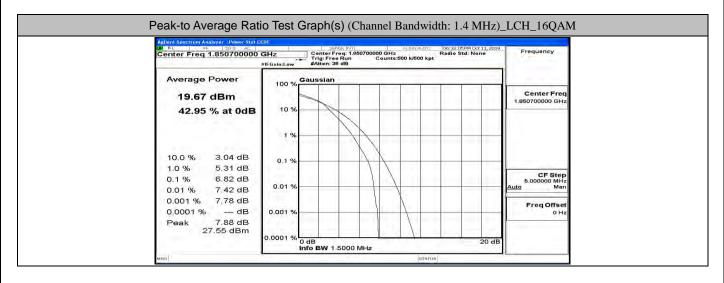
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict			
Modulation	Griannei	[dB]	[dB]	Verdict			
	LCH	5.04	<13	PASS			
QPSK	MCH	4.96	<13	PASS			
	HCH	5.05	<13	PASS			
	LCH	6.37	<13	PASS			
16QAM	MCH	6.27	<13	PASS			
	HCH	6.29	<13	PASS			

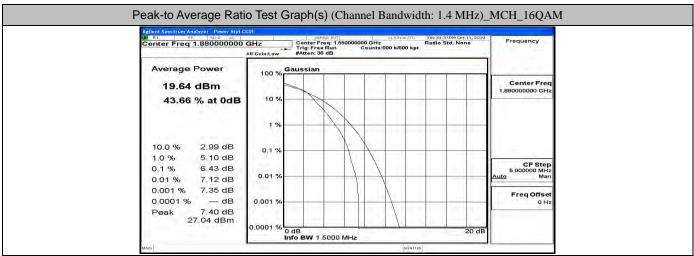
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation		[dB]	[dB]		
QPSK	LCH	5.7	<13	PASS	
	MCH	5.69	<13	PASS	
	HCH	5.74	<13	PASS	
16QAM	LCH	6.83	<13	PASS	
	MCH	6.78	<13	PASS	
	HCH	6.74	<13	PASS	

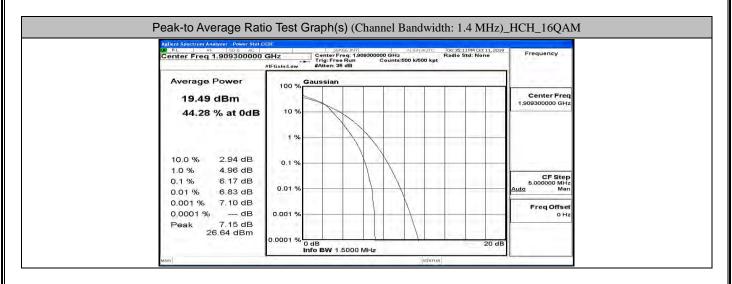


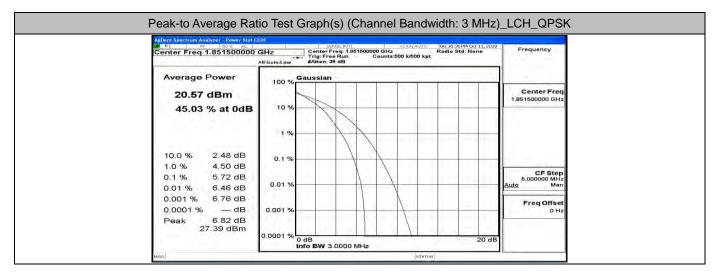


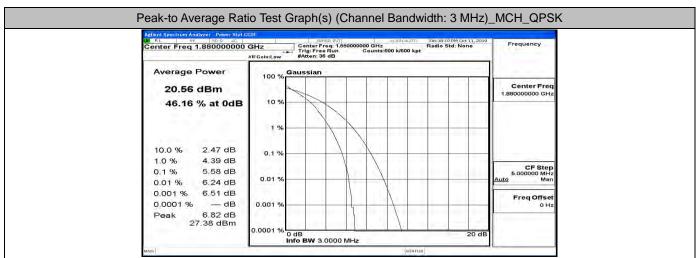


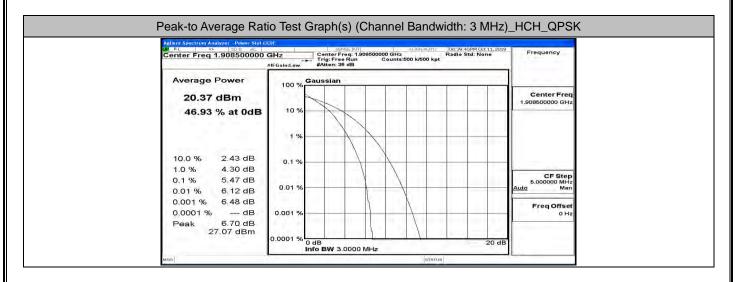


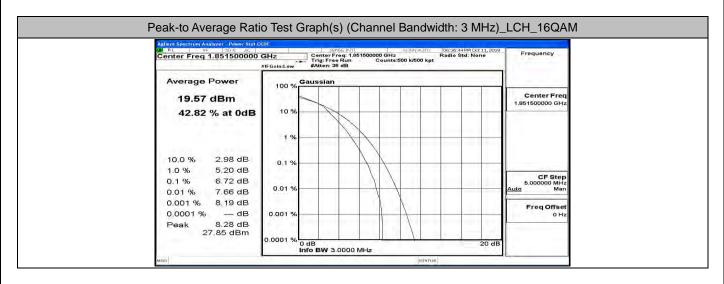


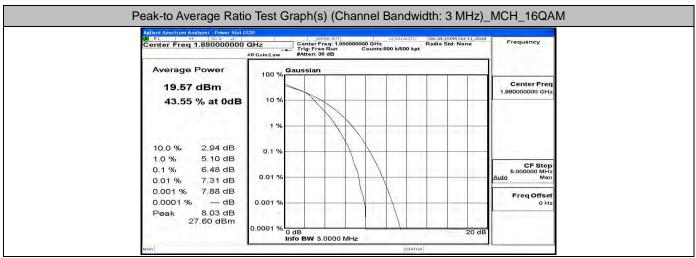


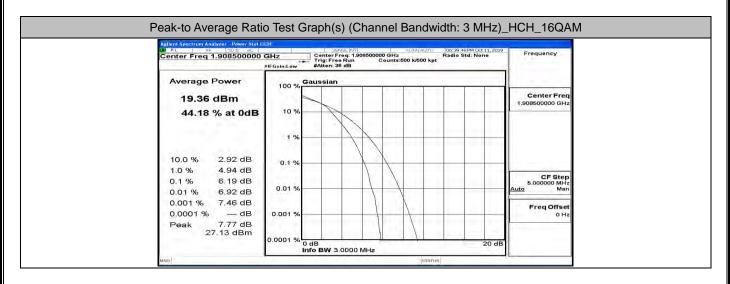


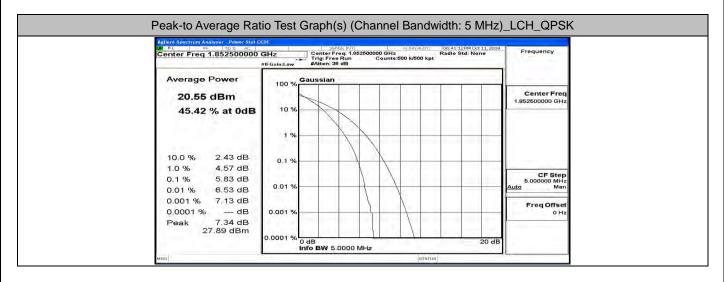


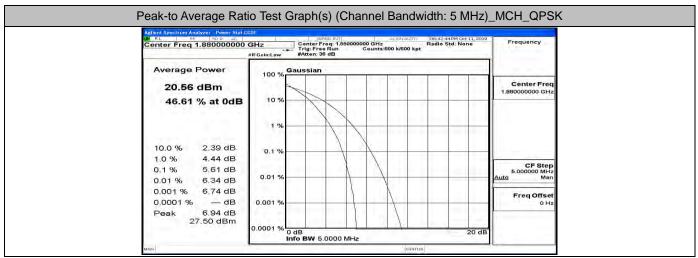


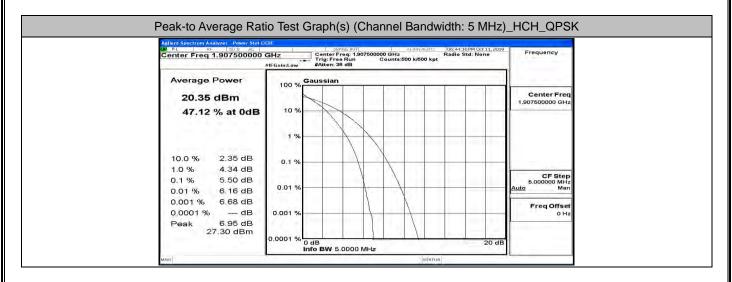


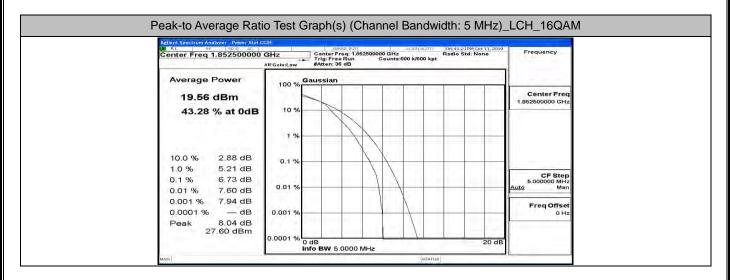


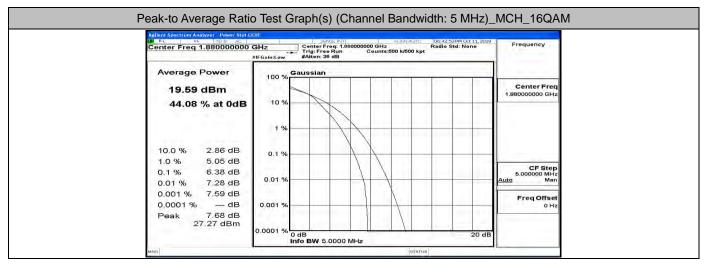


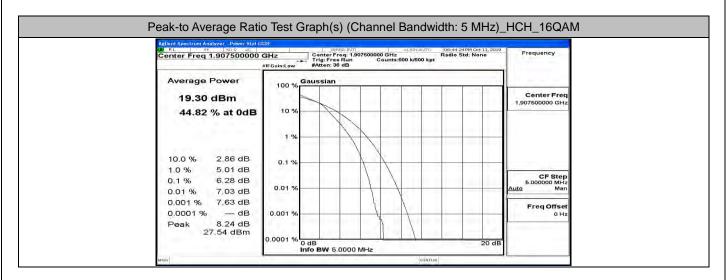


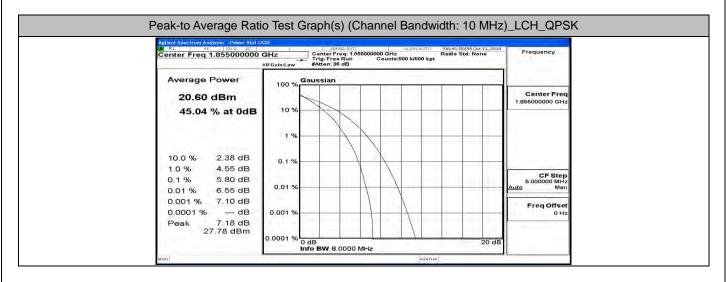


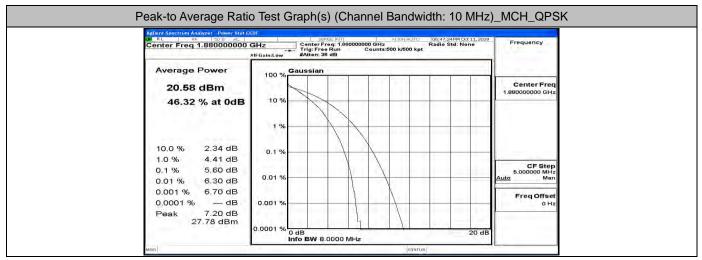


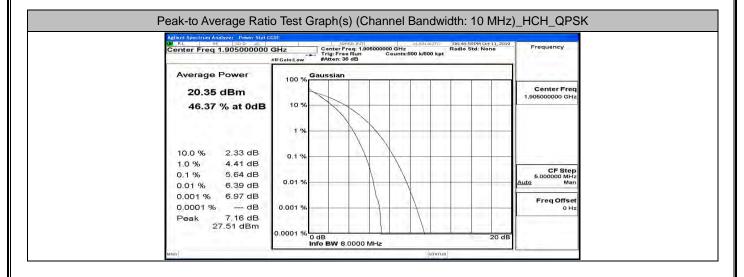


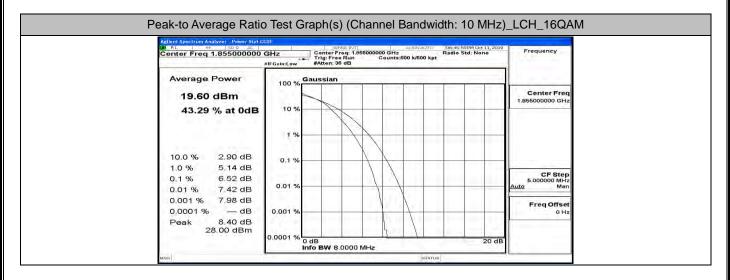


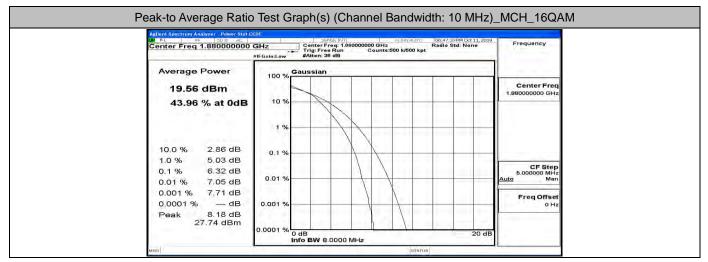


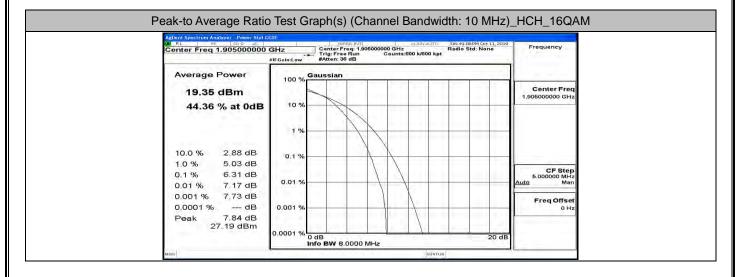


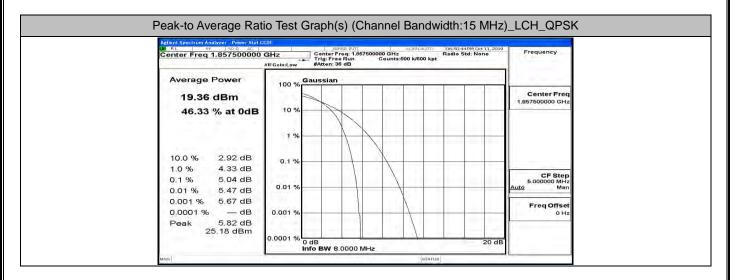


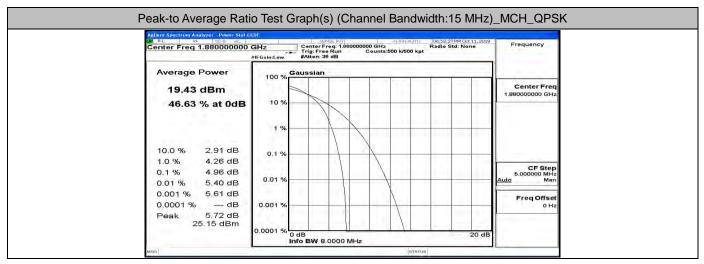


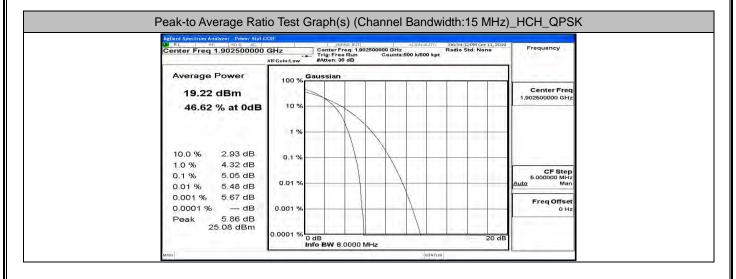


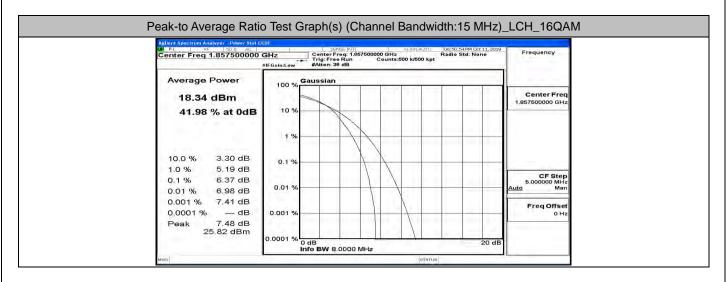


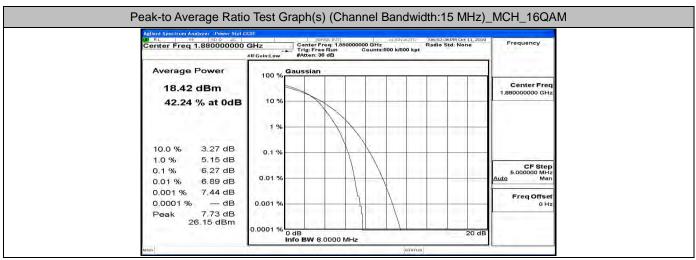


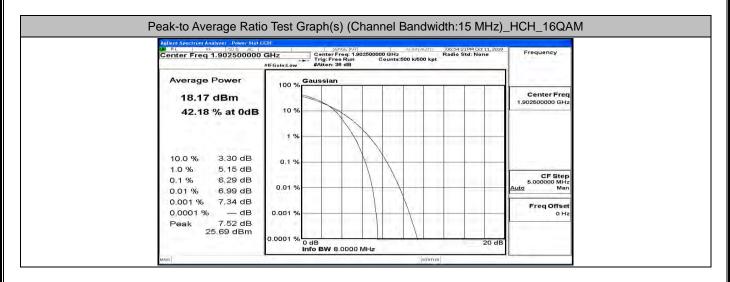


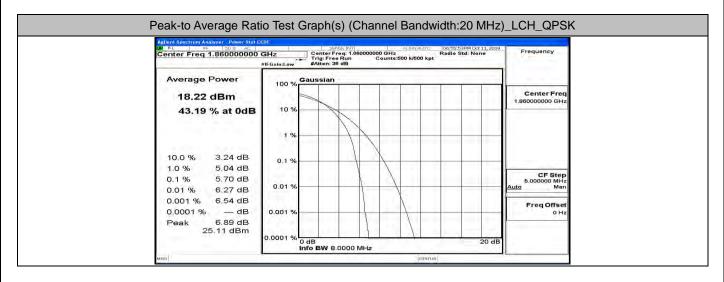


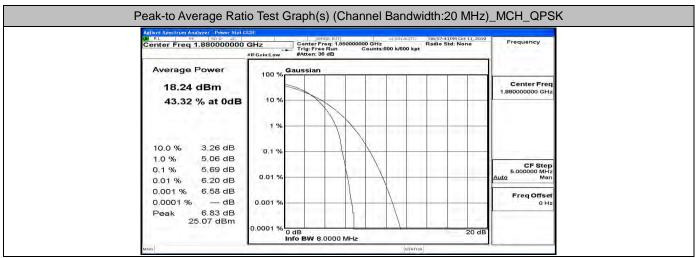


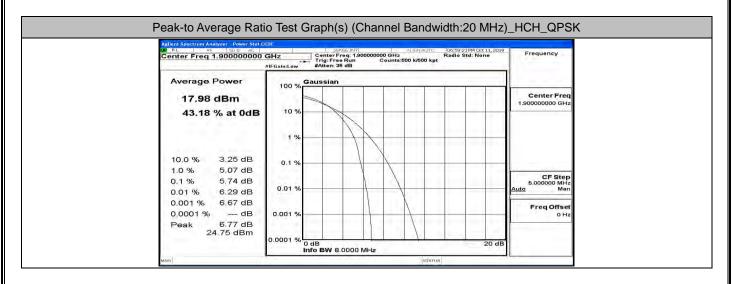


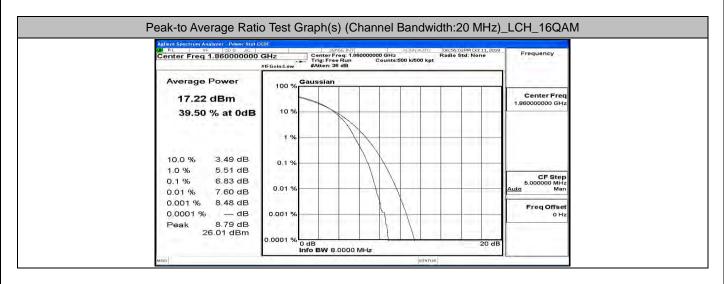


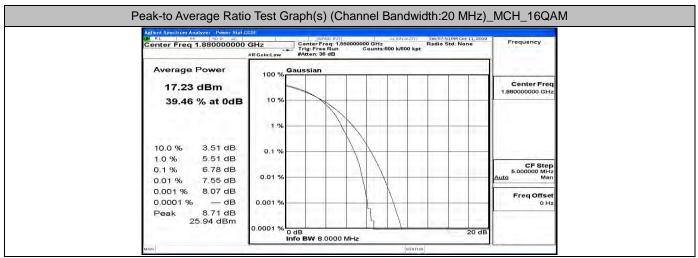


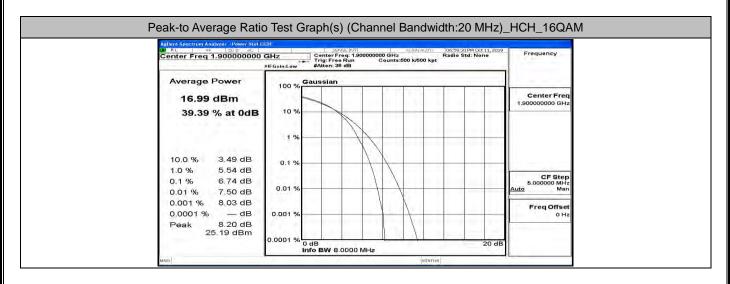












## C.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	1.0780	1.228	PASS
	MCH	1.0749	1.205	PASS
	HCH	1.0765	1.210	PASS
16QAM	LCH	1.0776	1.220	PASS
	MCH	1.0774	1.228	PASS
	HCH	1.0759	1.223	PASS

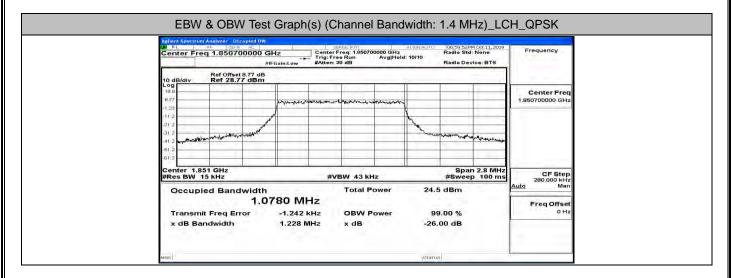
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
QPSK	LCH	2.6818	2.823	PASS
	MCH	2.6782	2.830	PASS
	HCH	2.6756	2.846	PASS
16QAM	LCH	2.6777	2.828	PASS
	MCH	2.6845	2.842	PASS
	HCH	2.6754	2.853	PASS

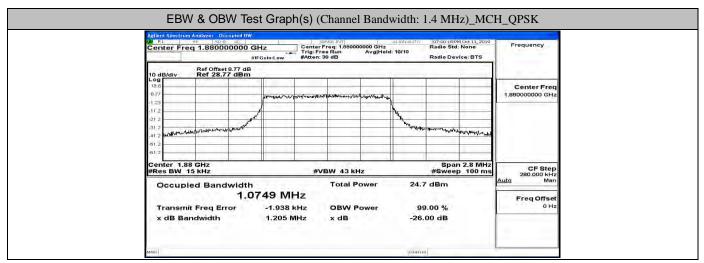
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	4.4735	4.882	PASS
	MCH	4.4754	4.857	PASS
	HCH	4.4747	4.837	PASS
16QAM	LCH	4.4678	4.889	PASS
	MCH	4.4798	4.839	PASS
	HCH	4.4837	4.898	PASS

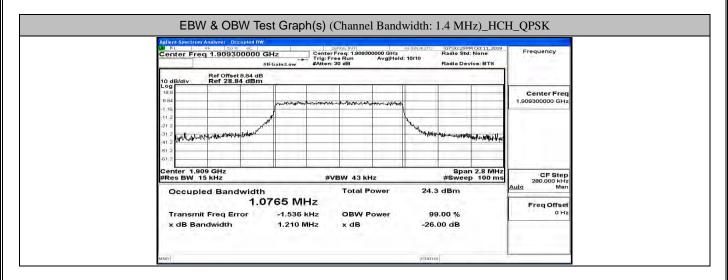
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	8.9480	9.609	PASS
	MCH	8.9448	9.482	PASS
	HCH	8.9422	9.563	PASS
16QAM	LCH	8.9391	9.493	PASS
	MCH	8.9464	9.519	PASS
	HCH	8.9547	9.465	PASS

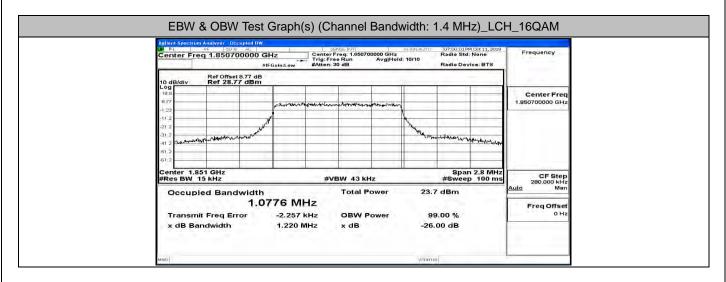
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
		(MHz)	(MHz)		
QPSK	LCH	13.415	14.18	PASS	
	MCH	13.405	14.15	PASS	
	HCH	13.400	14.09	PASS	
16QAM	LCH	13.414	14.09	PASS	
	MCH	13.399	14.09	PASS	
	HCH	13.407	14.15	PASS	

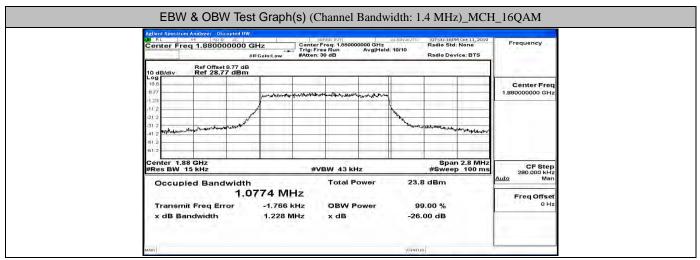
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	17.874	18.62	PASS	
	MCH	17.844	18.65	PASS	
	HCH	17.869	18.72	PASS	
16QAM	LCH	17.870	18.61	PASS	
	MCH	17.866	18.62	PASS	
	HCH	17.856	18.68	PASS	

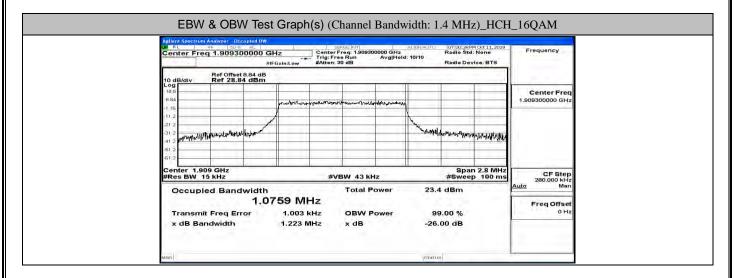


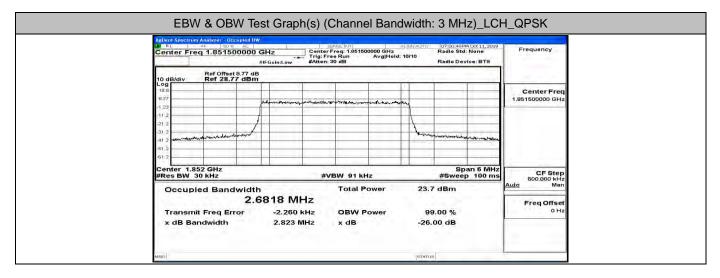


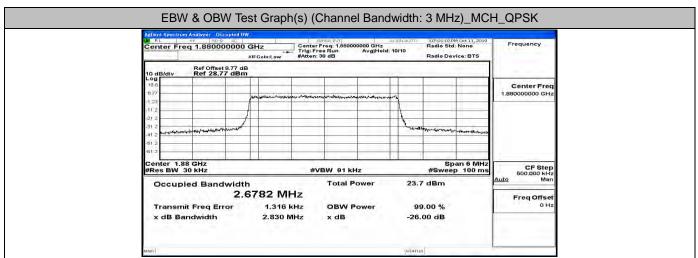


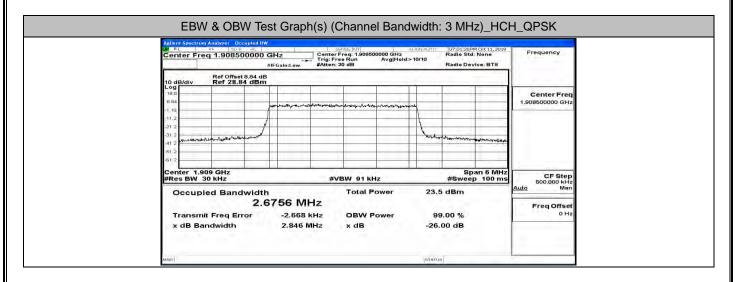


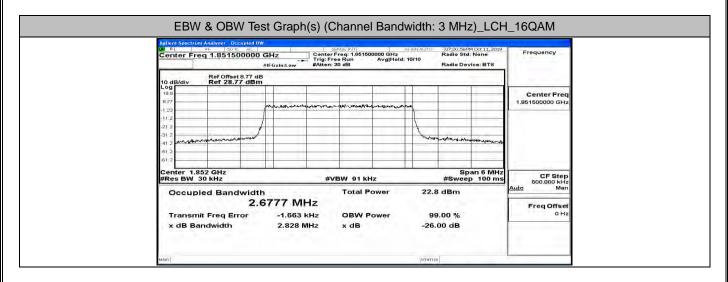


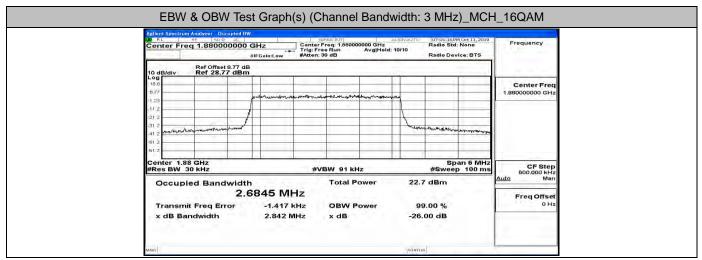


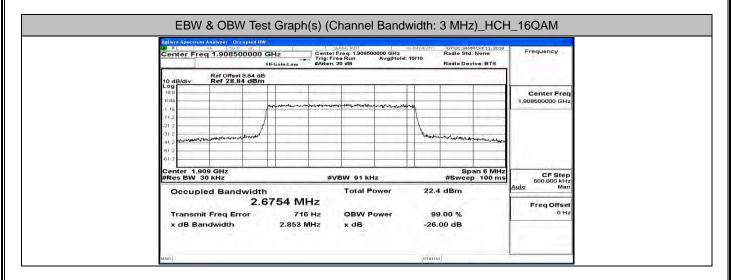


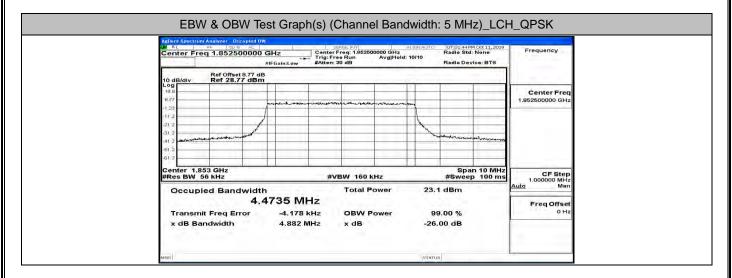


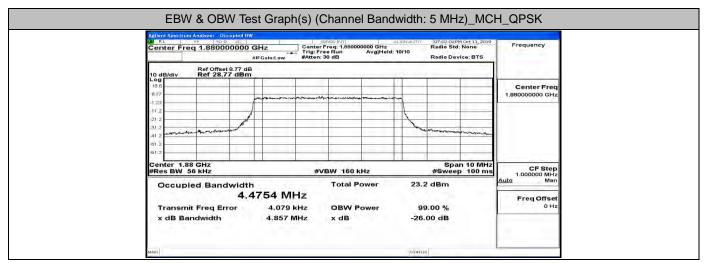


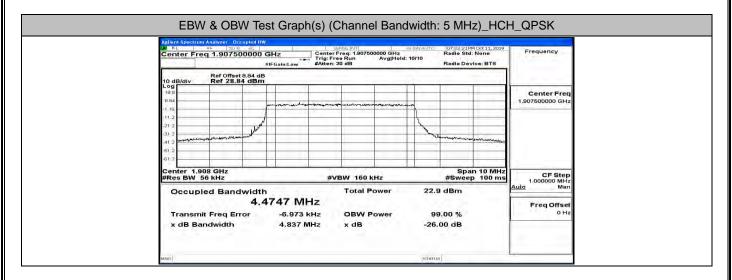


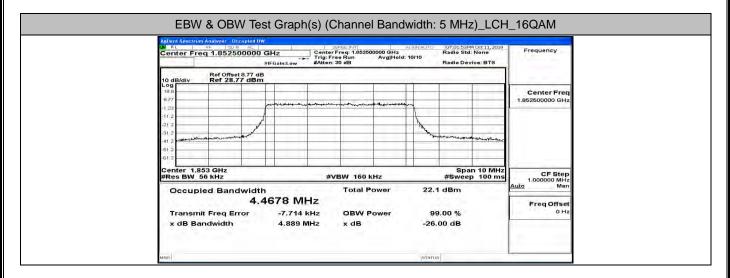


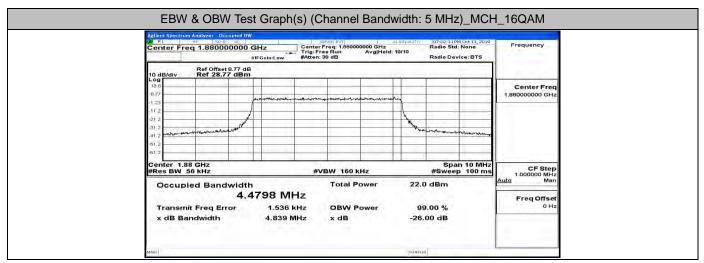


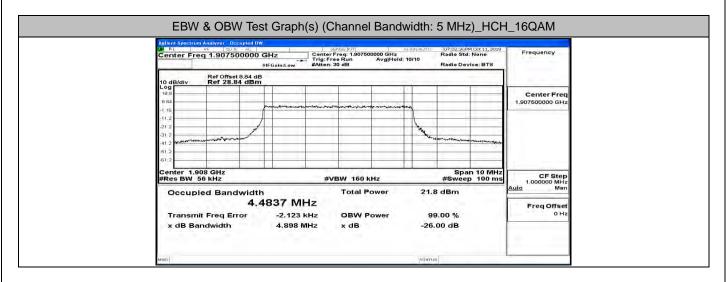


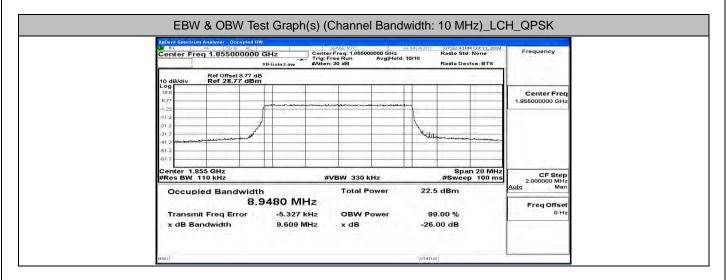


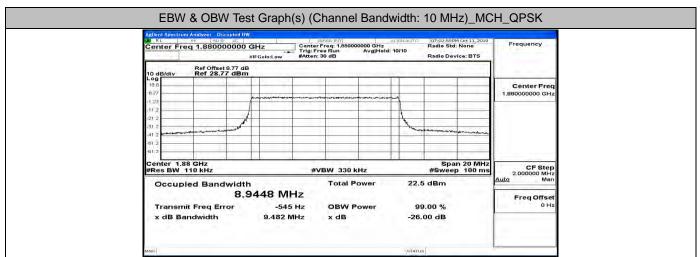


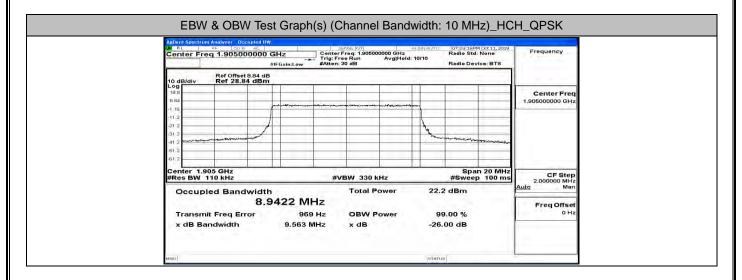


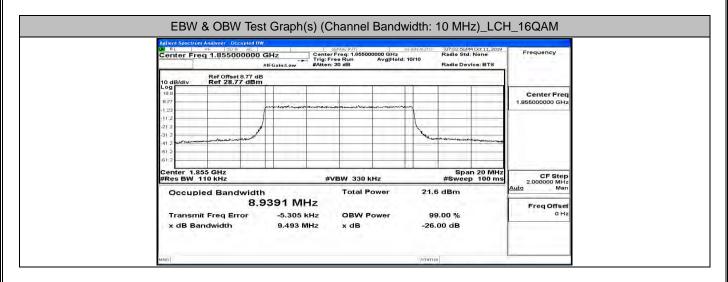


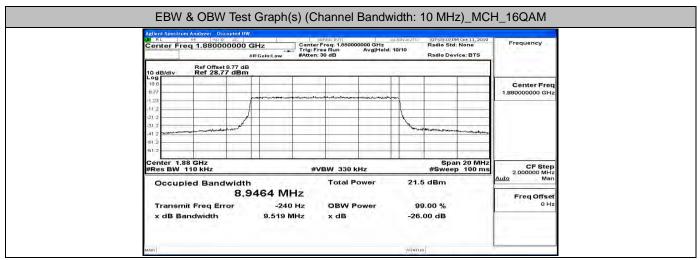


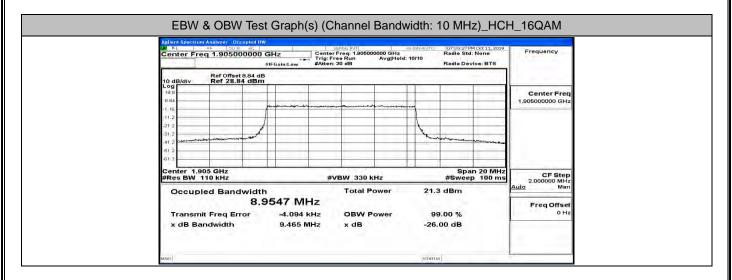


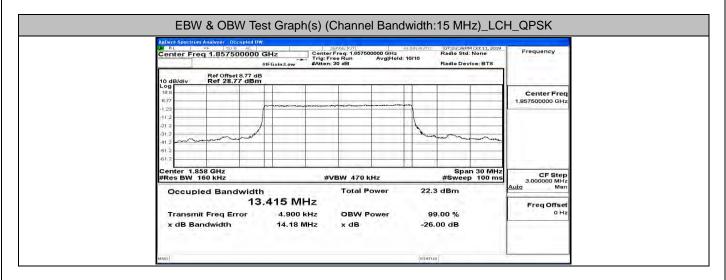


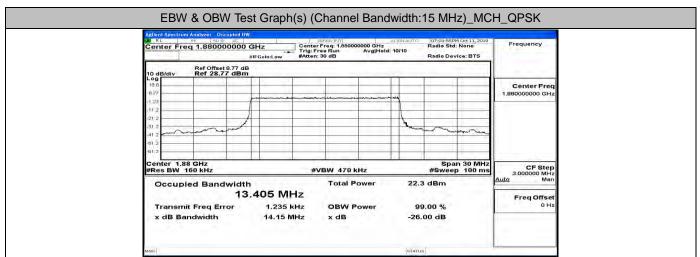


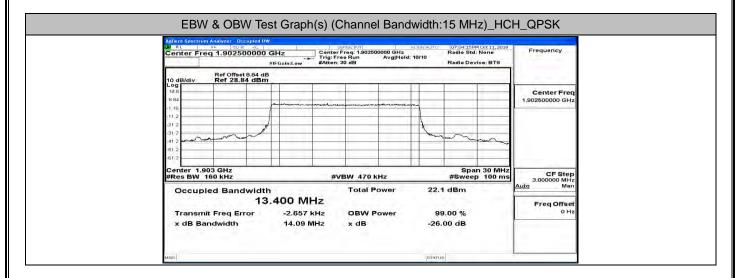


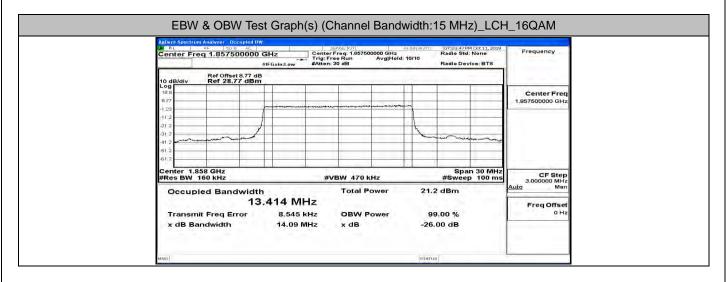


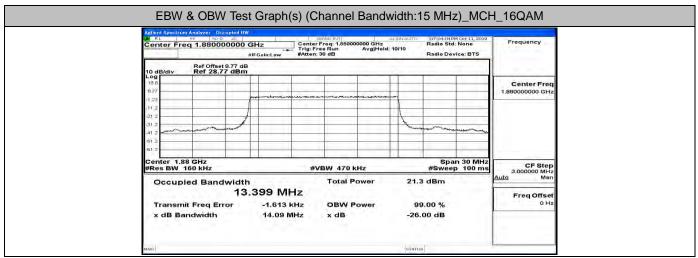


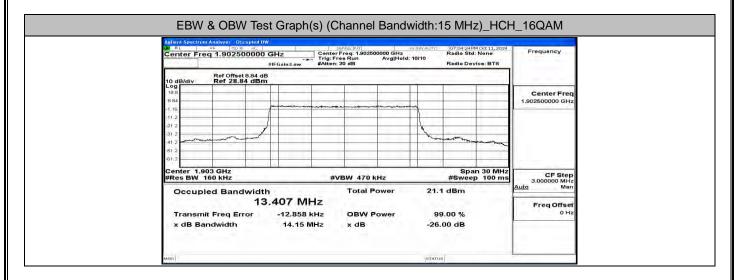


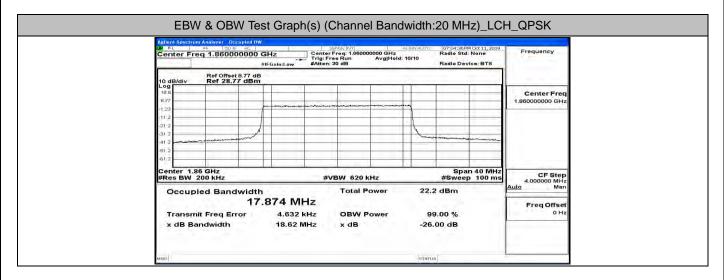


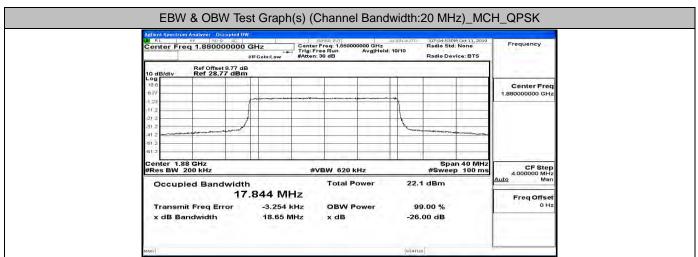


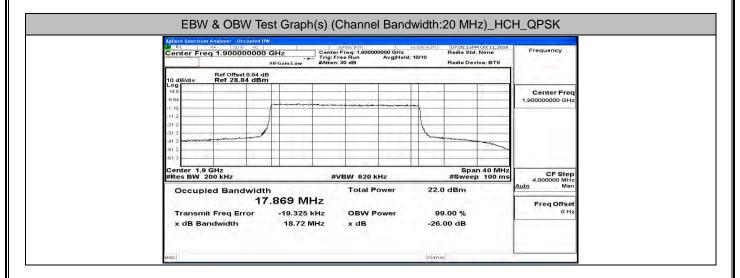


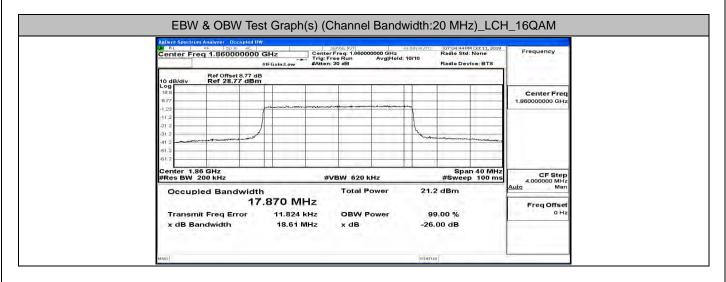


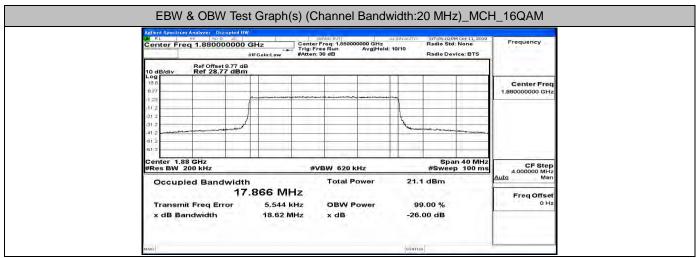


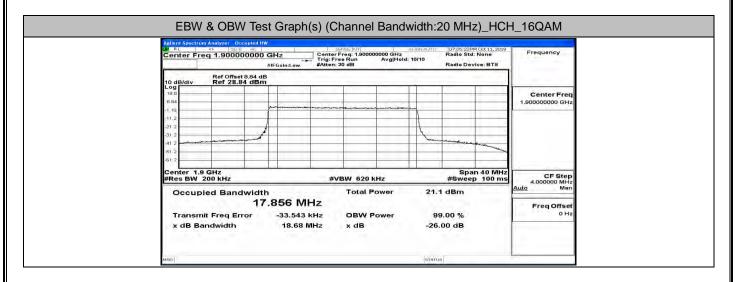




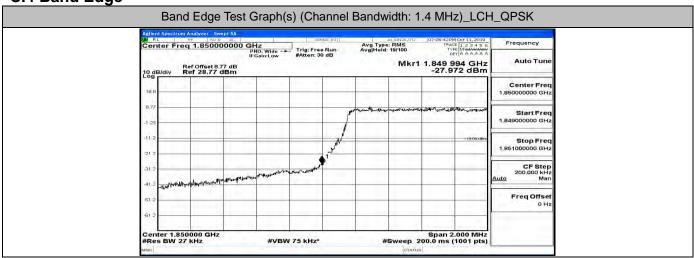


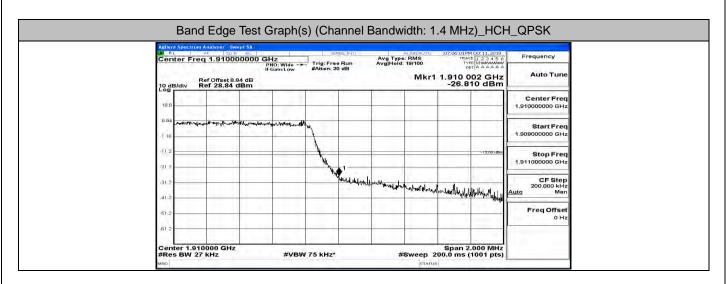


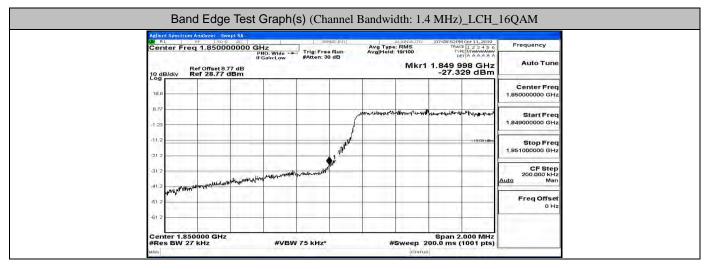


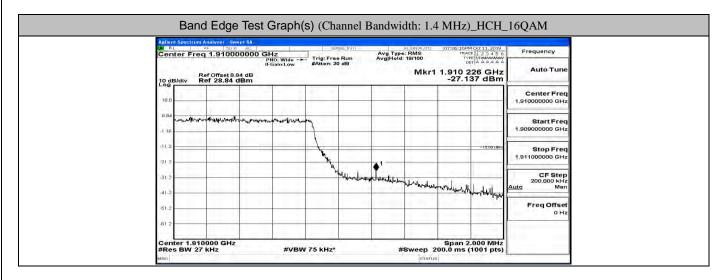


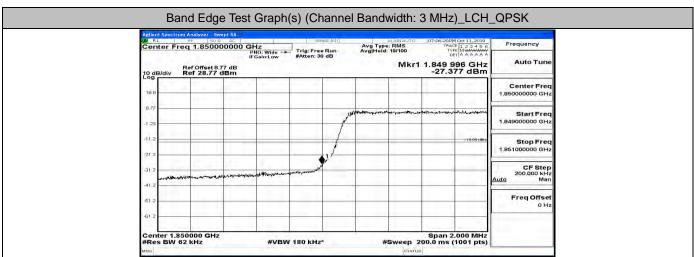
C.4 Band Edge

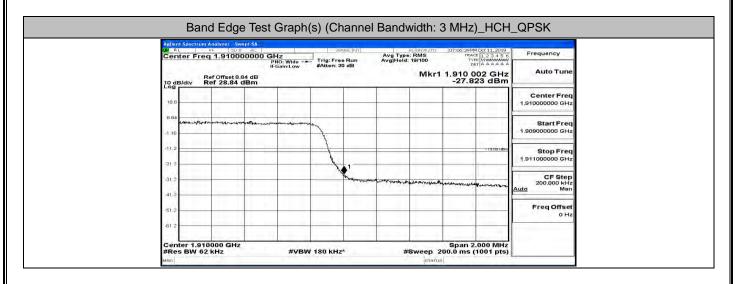


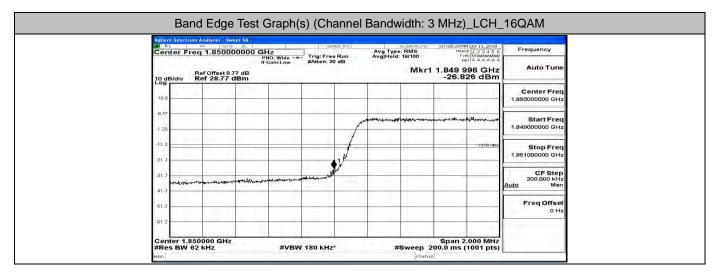


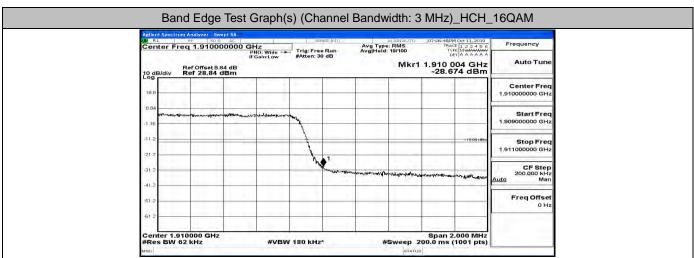


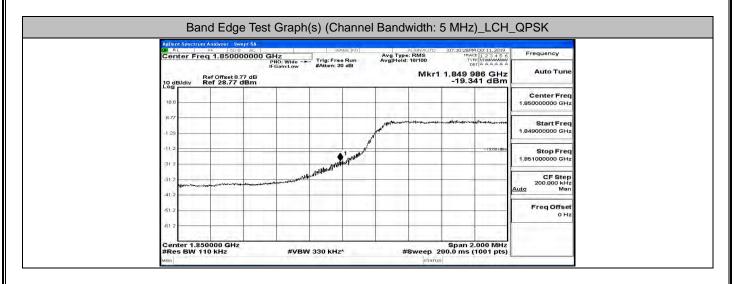


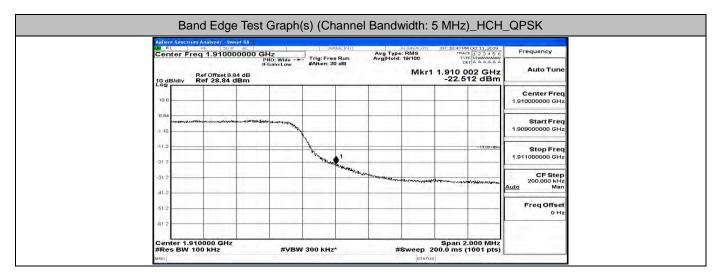


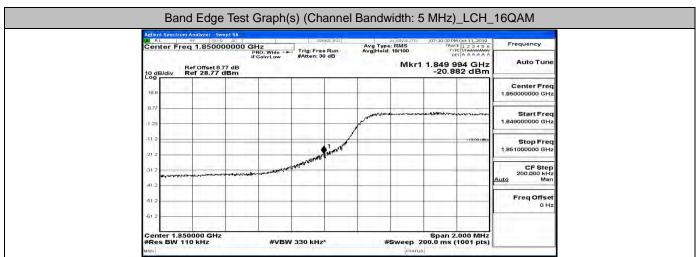


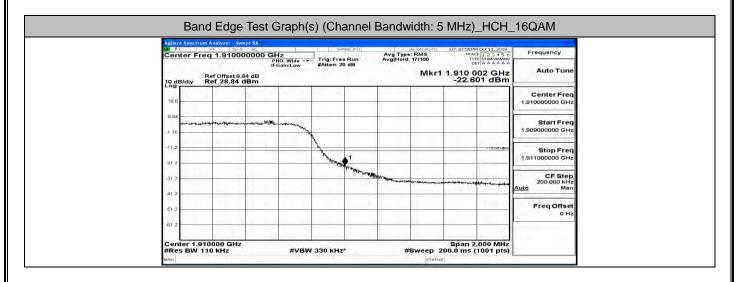


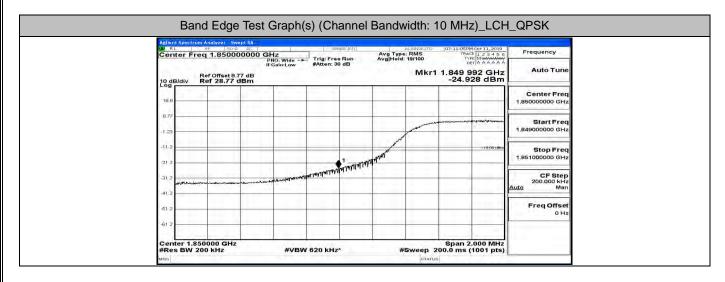


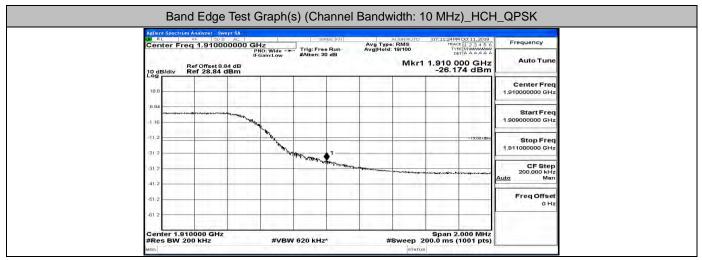


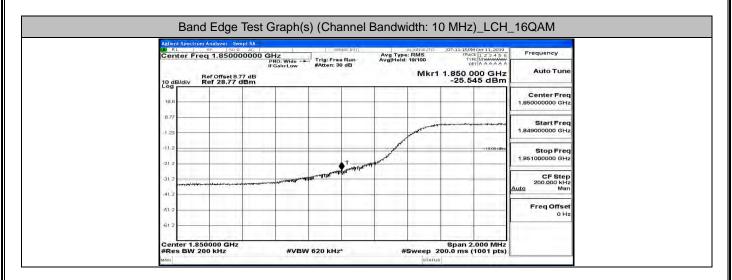


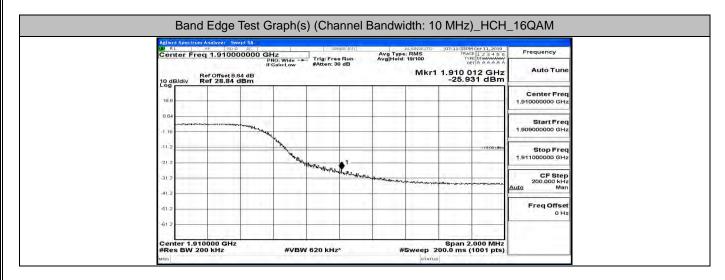


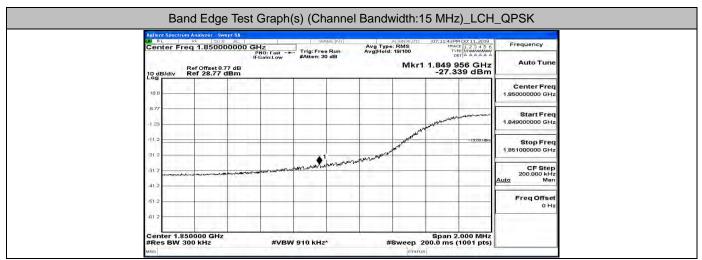


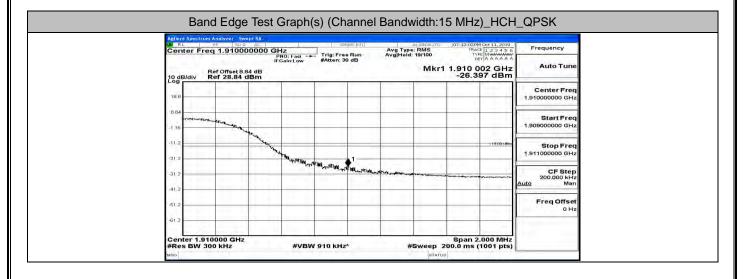


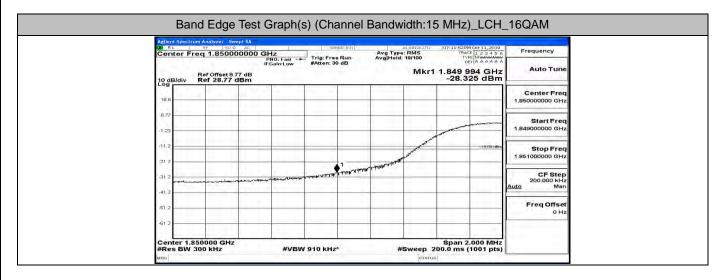


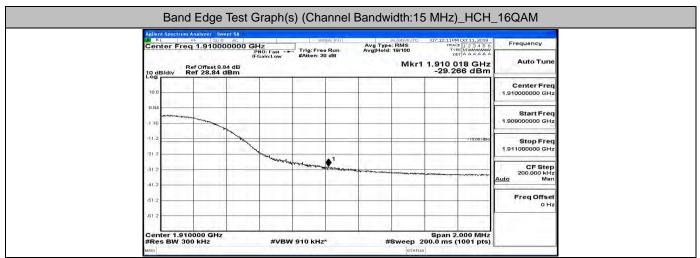


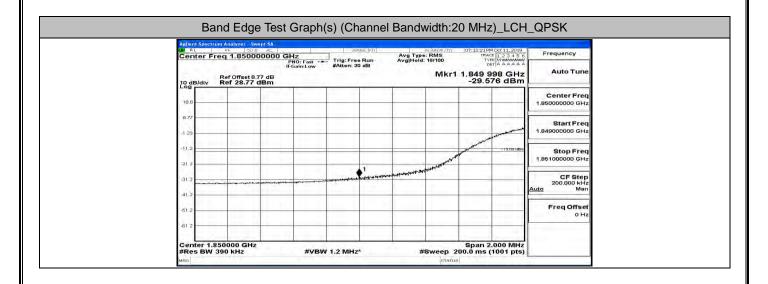


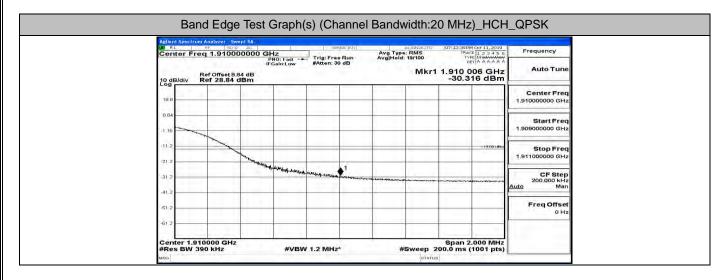


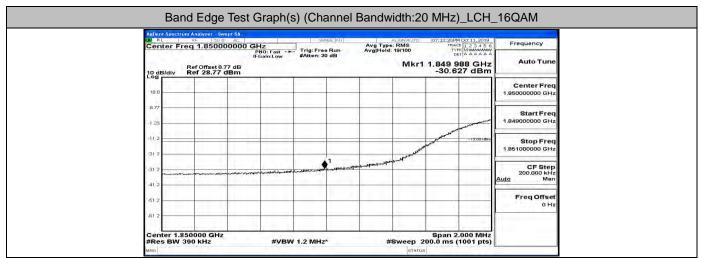


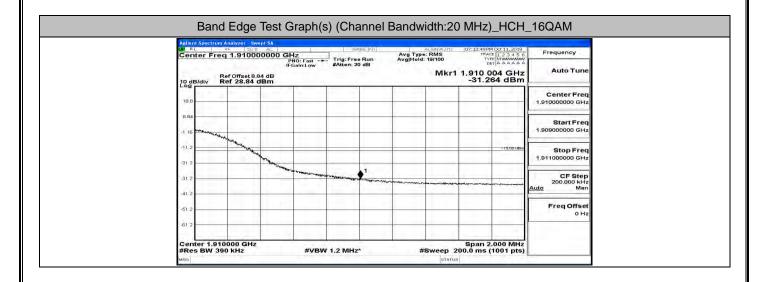












## **C.5 Conducted Spurious Emission**

