Appendix D: Test Data for E-UTRA Band 4

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

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	Chame	Size	Offset	QPSK	16QAM	verdict	
		1	0	21.65	20.90	PASS	
		1	3	21.79	21.13	PASS	
		1	5	21.59	20.90	PASS	
	LCH	3	0	21.70	20.91	PASS	
		3	2	21.75	20.93	PASS	
		3	3	21.72	20.90	PASS	
		6	0	20.69	19.67	PASS	
		1	0	21.35	20.72	PASS	
		1	3	21.43	20.92	PASS	
QPSK /		1	5	21.35	20.69	PASS	
16QAM	MCH	3	0	21.43	20.46	PASS	
TOQAIVI		3	2	21.43	20.51	PASS	
		3	3	21.42	20.49	PASS	
		6	0	20.40	19.36	PASS	
		1	0	21.41	20.75	PASS	
		1	3	21.57	20.90	PASS	
		1	5	21.39	20.76	PASS	
	HCH	3	0	21.50	20.60	PASS	
		3	2	21.53	20.64	PASS	
		3	3	21.53	20.64	PASS	
		6	0	20.46	19.58	PASS	

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vandiat		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.61	21.01	PASS		
		1	7	21.88	21.20	PASS		
		1	14	21.59	20.95	PASS		
	LCH	8	0	20.65	19.73	PASS		
		8	4	20.72	19.76	PASS		
		8	7	20.67	19.70	PASS		
		15	0	20.64	19.61	PASS		
		1	0	21.28	20.63	PASS		
	МСН	1	7	21.57	20.93	PASS		
QPSK /		1	14	21.36	20.67	PASS		
16QAM		8	0	20.36	19.41	PASS		
TOQAIVI		8	4	20.40	19.49	PASS		
		8	7	20.36	19.41	PASS		
		15	0	20.38	19.32	PASS		
		1	0	21.37	20.81	PASS		
		1	7	21.65	21.07	PASS		
		1	14	21.42	20.89	PASS		
	HCH	8	0	20.39	19.41	PASS		
		8	4	20.44	19.41	PASS		
		8	7	20.40	19.42	PASS		
		15	0	20.38	19.40	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	21.58	21.03	PASS		
		1	12	21.85	21.25	PASS		
		1	24	21.47	20.92	PASS		
	LCH	12	0	20.65	19.79	PASS		
		12	6	20.68	19.90	PASS		
		12	13	20.57	19.76	PASS		
		25	0	20.68	19.71	PASS		
		1	0	21.19	20.62	PASS		
		1	12	21.57	20.98	PASS		
QPSK /	MCH	1	24	21.31	20.73	PASS		
16QAM		12	0	20.31	19.45	PASS		
IOQAIVI		12	6	20.39	19.56	PASS		
		12	13	20.30	19.52	PASS		
		25	0	20.35	19.40	PASS		
		1	0	21.26	20.31	PASS		
		1	12	21.61	20.60	PASS		
		1	24	21.34	20.44	PASS		
	HCH	12	0	20.38	19.42	PASS		
		12	6	20.43	19.47	PASS		
		12	13	20.42	19.44	PASS		
		25	0	20.42	19.44	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vardiet		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.63	21.00	PASS		
		1	24	21.69	21.05	PASS		
		1	49	21.31	20.64	PASS		
	LCH	25	0	20.73	19.74	PASS		
		25	12	20.62	19.61	PASS		
		25	25	20.52	19.56	PASS		
		50	0	20.58	19.64	PASS		
		1	0	21.17	20.49	PASS		
		1	24	21.54	20.82	PASS		
QPSK /		1	49	21.28	20.64	PASS		
16QAM	MCH	25	0	20.35	19.35	PASS		
TOQAM		25	12	20.40	19.41	PASS		
		25	25	20.44	19.48	PASS		
		50	0	20.38	19.40	PASS		
		1	0	21.25	20.71	PASS		
		1	24	21.51	20.97	PASS		
		1	49	21.34	20.82	PASS		
	HCH	25	0	20.46	19.51	PASS		
		25	12	20.34	19.41	PASS		
		25	25	20.41	19.47	PASS		
		50	0	20.45	19.45	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	21.61	20.96	PASS		
		1	37	21.65	21.01	PASS		
		1	74	21.13	20.47	PASS		
	LCH	37	0	20.54	19.59	PASS		
		37	18	20.48	19.48	PASS		
		37	38	20.40	19.37	PASS		
		75	0	20.51	19.48	PASS		
	МСН	1	0	21.08	20.42	PASS		
		1	37	21.58	20.90	PASS		
QPSK /		1	74	21.24	20.58	PASS		
16QAM		37	0	20.25	19.24	PASS		
TOQAM		37	18	20.43	19.39	PASS		
		37	38	20.42	19.43	PASS		
		75	0	20.36	19.33	PASS		
		1	0	21.23	20.62	PASS		
		1	37	21.44	20.90	PASS		
		1	74	21.26	20.65	PASS		
	HCH	37	0	20.33	19.39	PASS		
		37	18	20.37	19.38	PASS		
		37	38	20.33	19.34	PASS		
		75	0	20.39	19.37	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)							
Madulation	Channal	RB Conf	figuration	Average Power [dBm]	Average Power [dBm]	\/a nali a t		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.60	20.88	PASS		
		1	49	21.64	20.84	PASS		
		1	99	21.29	20.48	PASS		
	LCH	50	0	20.47	19.43	PASS		
		50	25	20.43	19.39	PASS		
		50	50	20.47	19.50	PASS		
		100	0	20.46	19.47	PASS		
		1	0	21.09	20.30	PASS		
	мсн	1	49	21.65	20.85	PASS		
QPSK /		1	99	21.28	20.45	PASS		
16QAM		50	0	20.15	19.11	PASS		
TOQAW		50	25	20.42	19.35	PASS		
		50	50	20.40	19.38	PASS		
		100	0	20.24	19.23	PASS		
		1	0	21.33	20.79	PASS		
		1	49	21.54	20.93	PASS		
		1	99	21.28	20.72	PASS		
	HCH	50	0	20.43	19.44	PASS		
		50	25	20.37	19.42	PASS		
		50	50	20.24	19.32	PASS		
		100	0	20.36	19.33	PASS		

D.2 Peak-to-Average Ratio

	Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict				
	LCH	5.77	<13	PASS				
QPSK	MCH	5.56	<13	PASS				
	HCH	5.67	<13	PASS				
	LCH	6.77	<13	PASS				
16QAM	MCH	6.44	<13	PASS				
	HCH	6.65	<13	PASS				

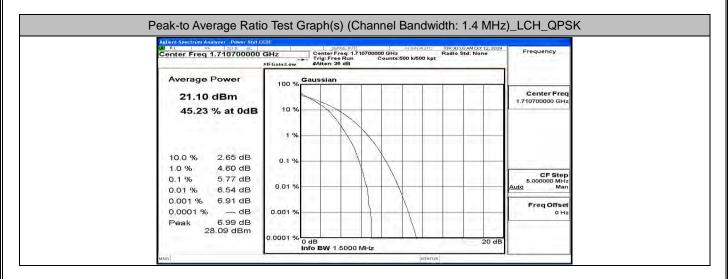
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict		
Modulation	Channel	[dB]	[dB]	Verdict		
	LCH	5.72	<13	PASS		
QPSK	MCH	5.63	<13	PASS		
	HCH	5.81	<13	PASS		
	LCH	6.71	<13	PASS		
16QAM	MCH	6.55	<13	PASS		
	HCH	6.5	<13	PASS		

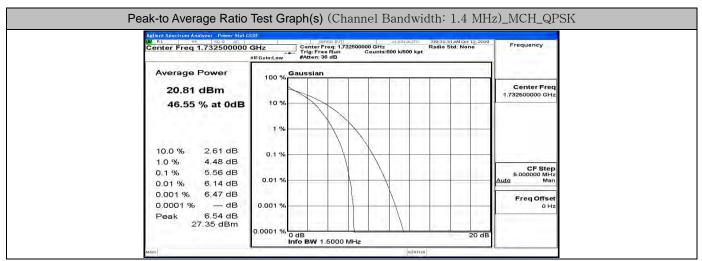
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
iviodulation	Griannei	[dB]	[dB]	verdict		
	LCH	5.85	<13	PASS		
QPSK	MCH	5.63	<13	PASS		
	HCH	5.78	<13	PASS		
	LCH	6.66	<13	PASS		
16QAM	MCH	6.47	<13	PASS		
	HCH	6.59	<13	PASS		

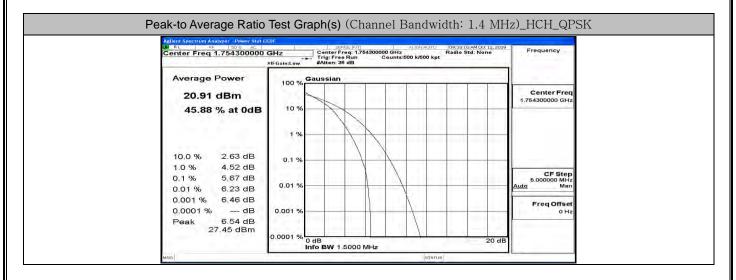
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Griannei	[dB]	[dB]	verdict		
	LCH	5.87	<13	PASS		
QPSK	MCH	5.62	<13	PASS		
	HCH	5.82	<13	PASS		
	LCH	6.54	<13	PASS		
16QAM	MCH	6.34	<13	PASS		
	HCH	6.54	<13	PASS		

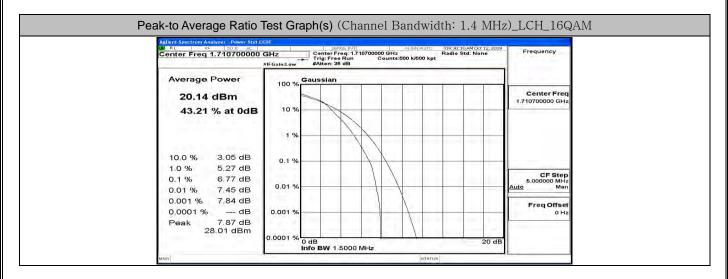
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
IVIOGUIATION	Griannei	[dB]	[dB]	verdict			
	LCH	5.06	<13	PASS			
QPSK	MCH	4.95	<13	PASS			
	HCH	4.98	<13	PASS			
	LCH	6.39	<13	PASS			
16QAM	MCH	6.28	<13	PASS			
	HCH	6.3	<13	PASS			

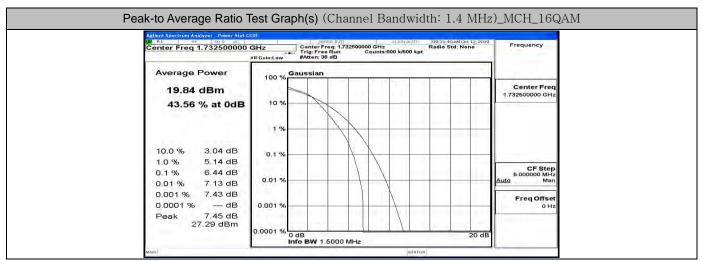
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
M. I.I.C	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.74	<13	PASS
	MCH	5.66	<13	PASS
	HCH	5.72	<13	PASS
16QAM	LCH	6.85	<13	PASS
	MCH	6.78	<13	PASS
	HCH	6.76	<13	PASS

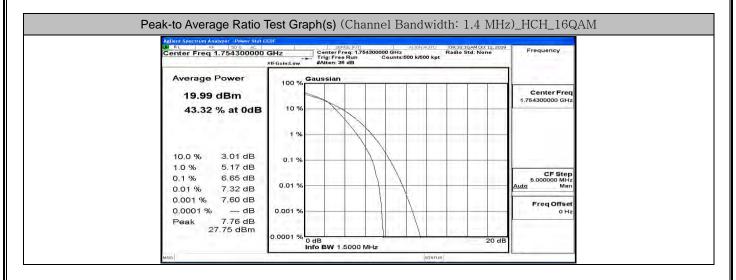


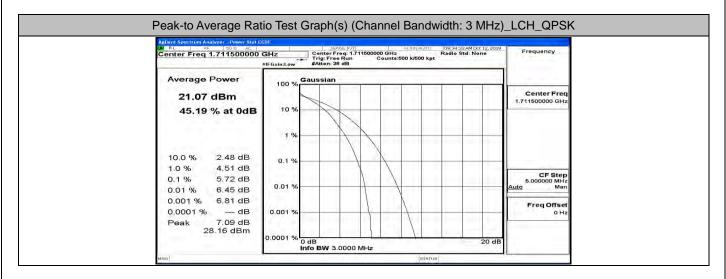


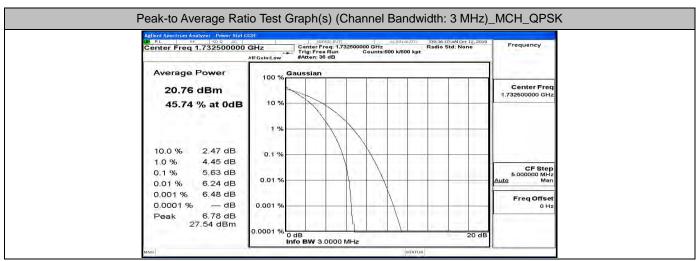


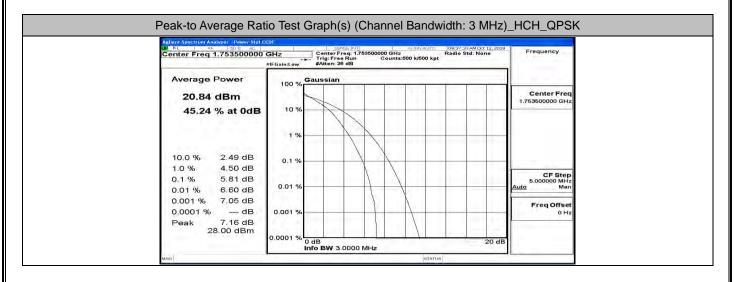


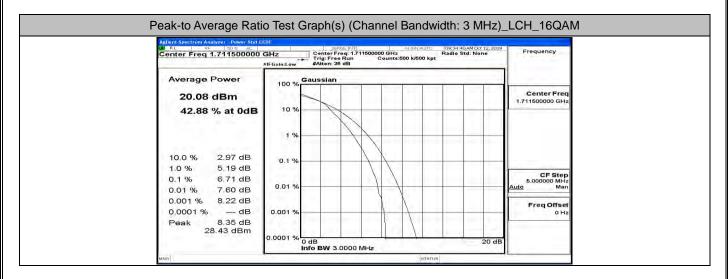


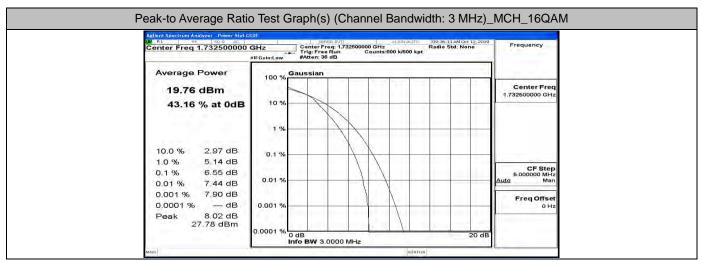


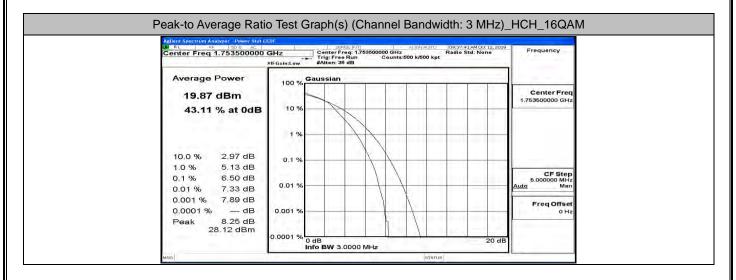


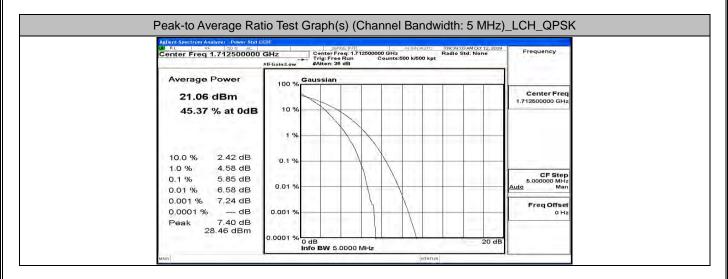


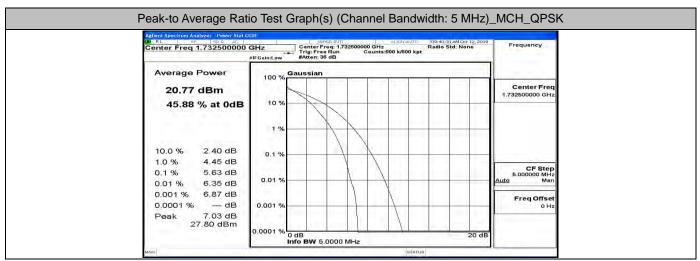


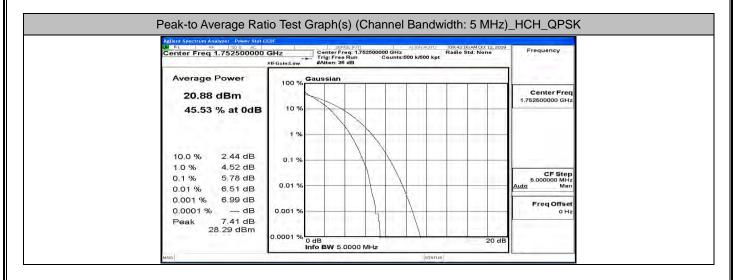


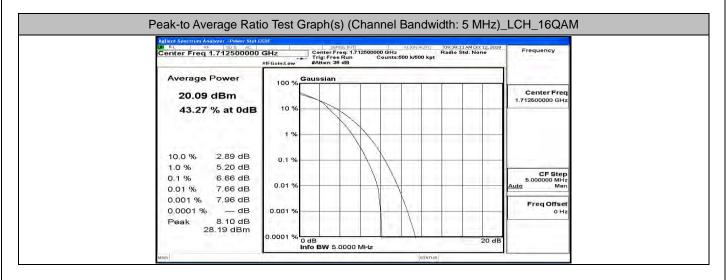


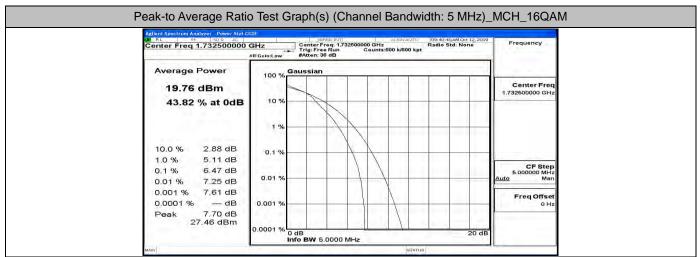


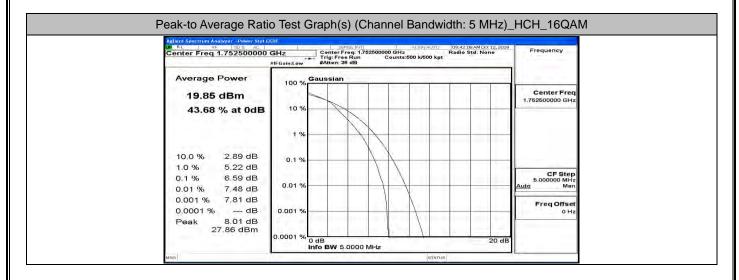






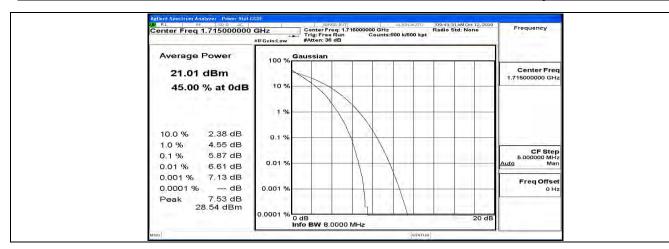


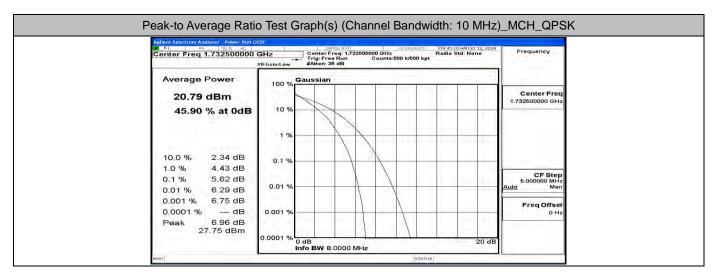


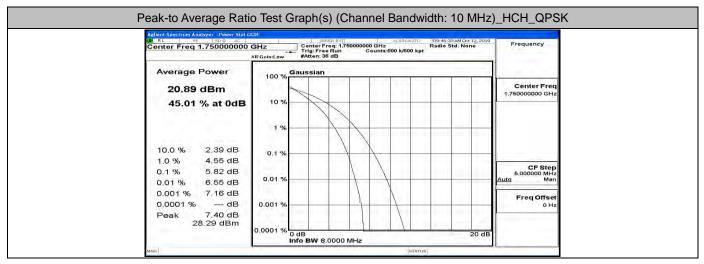


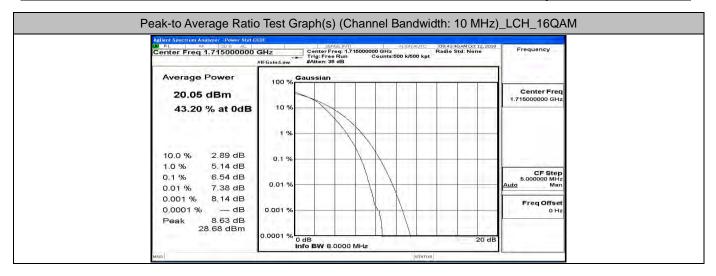
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK

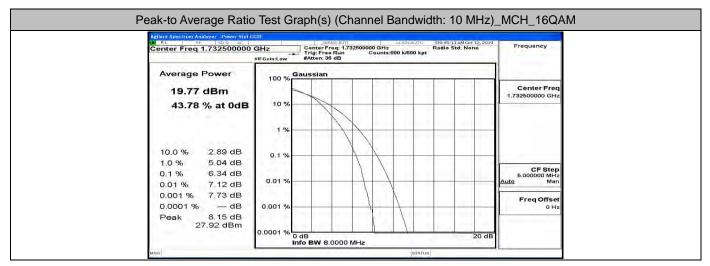
SHENZHEN LCS COMPLIANCE TESTING LABORATORY LTD. FCC ID: 2AUSM-ACCESSONE Report No.: LCS190912020AEC

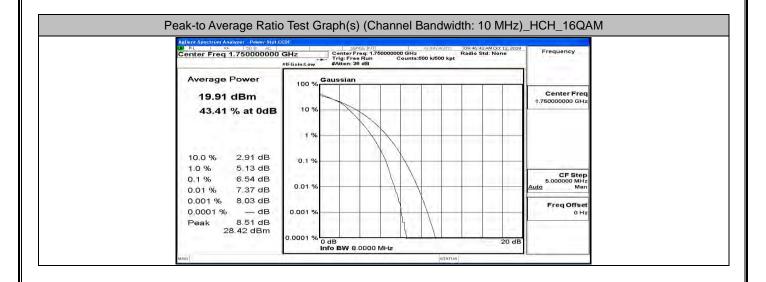


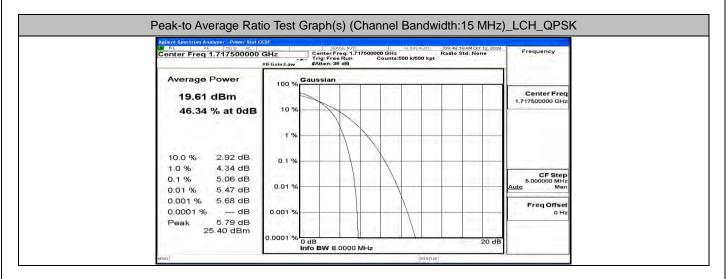


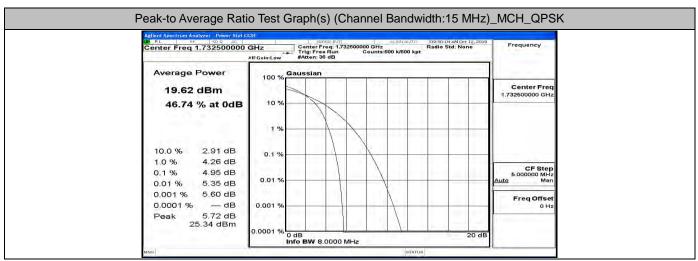


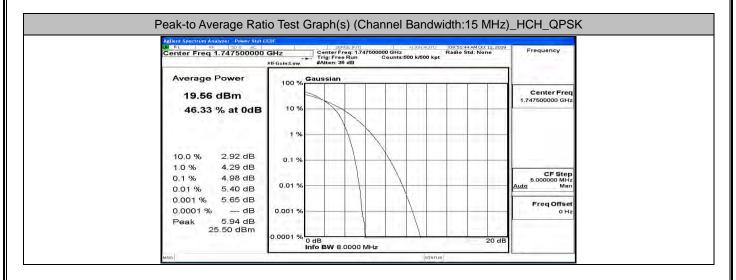


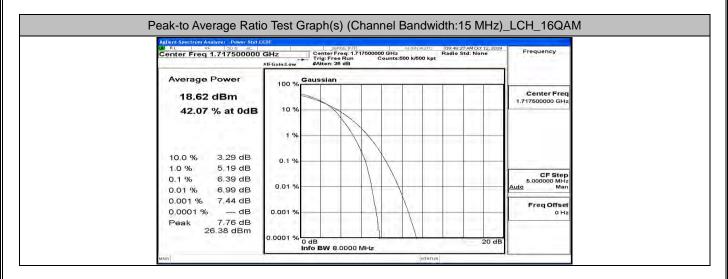


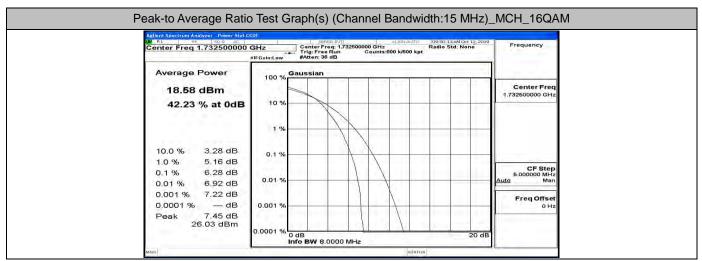


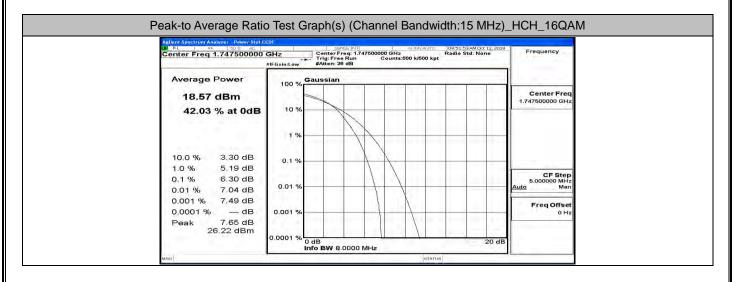


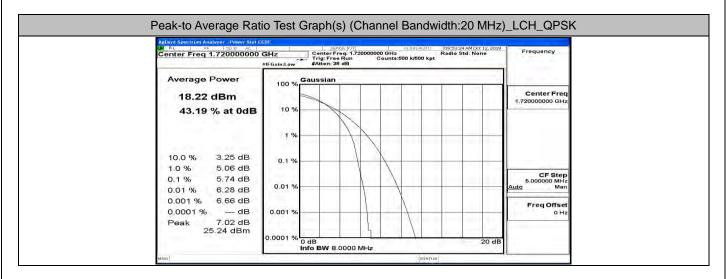


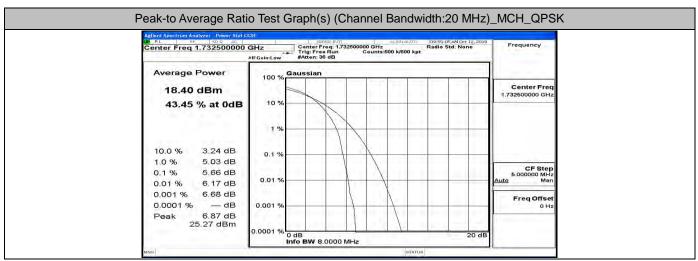


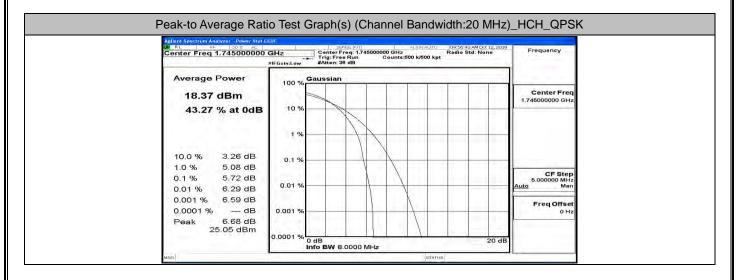


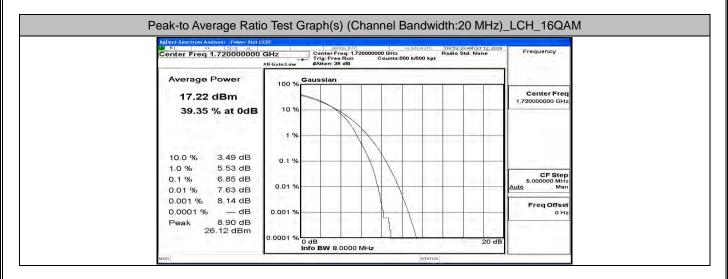


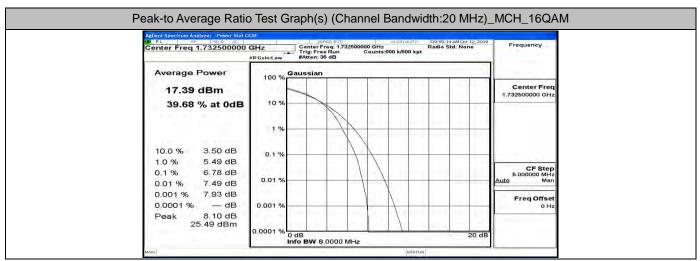


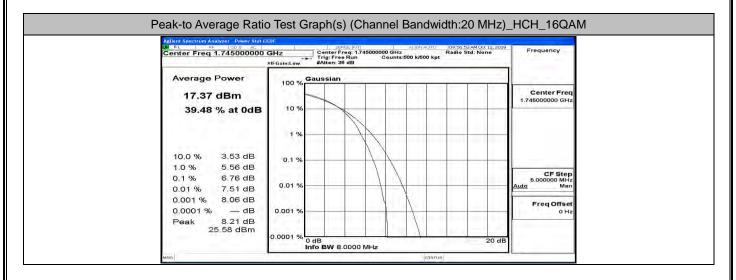












D.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	1.0741	1.215	PASS	
	MCH	1.0735	1.210	PASS	
	HCH	1.0776	1.222	PASS	
16QAM	LCH	1.0810	1.245	PASS	
	MCH	1.0782	1.228	PASS	
	HCH	1.0769	1.224	PASS	

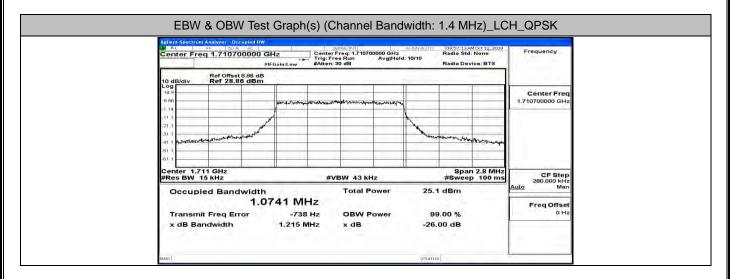
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation	Chame	(MHz)	(MHz)	
QPSK	LCH	2.6784	2.835	PASS
	MCH	2.6745	2.822	PASS
	HCH	2.6782	2.833	PASS
16QAM	LCH	2.6814	2.826	PASS
	MCH	2.6783	2.821	PASS
	HCH	2.6799	2.829	PASS

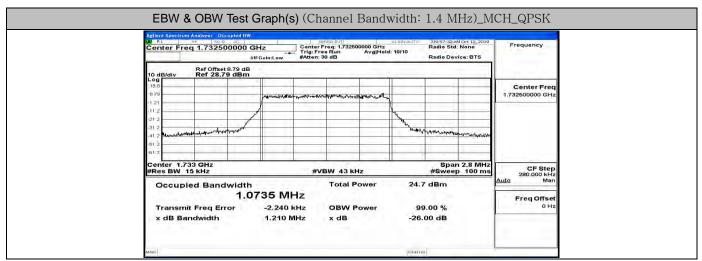
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	4.4812	4.854	PASS
	MCH	4.4762	4.863	PASS
	HCH	4.4804	4.875	PASS
16QAM	LCH	4.4806	4.843	PASS
	MCH	4.4765	4.834	PASS
	HCH	4.4841	4.880	PASS

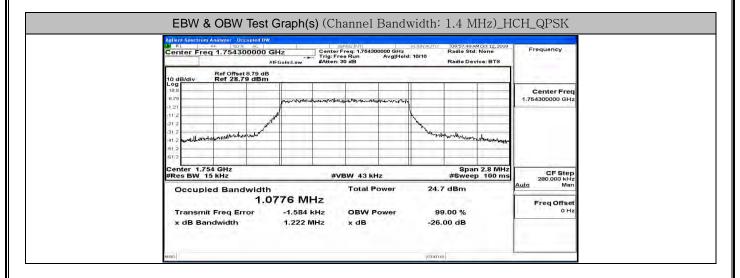
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	8.9454	9.545	PASS	
	MCH	8.9318	9.572	PASS	
	HCH	8.9549	9.541	PASS	
16QAM	LCH	8.9423	9.572	PASS	
	MCH	8.9406	9.526	PASS	
	HCH	8.9464	9.574	PASS	

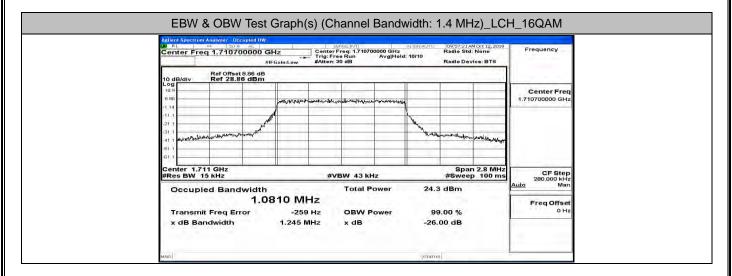
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	13.414	14.16	PASS
	MCH	13.383	14.15	PASS
	HCH	13.392	14.04	PASS
16QAM	LCH	13.416	14.07	PASS
	MCH	13.395	14.00	PASS
	HCH	13.390	14.18	PASS

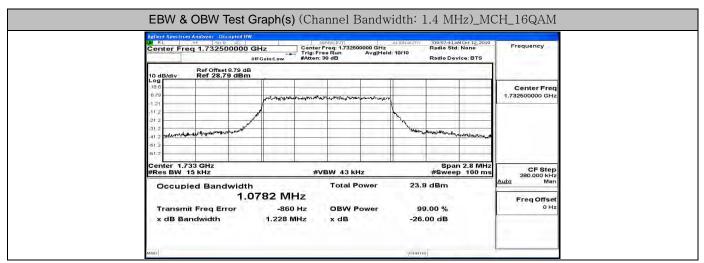
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
iviodulation		(MHz)	(MHz)		
QPSK	LCH	17.887	18.65	PASS	
	MCH	17.835	18.64	PASS	
	HCH	17.864	18.57	PASS	
16QAM	LCH	17.894	18.66	PASS	
	MCH	17.837	18.60	PASS	
	HCH	17.860	18.72	PASS	

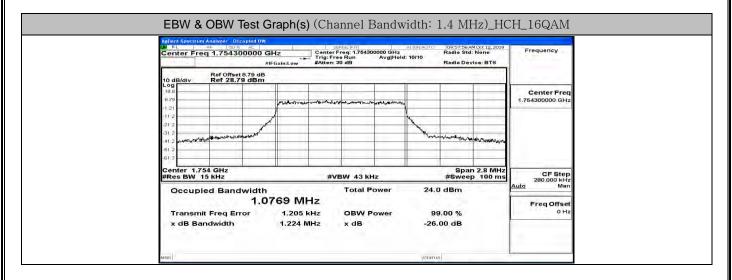


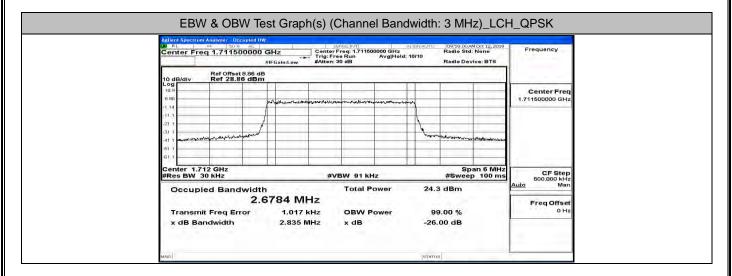


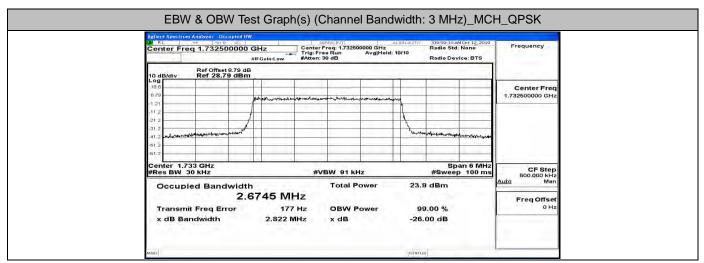


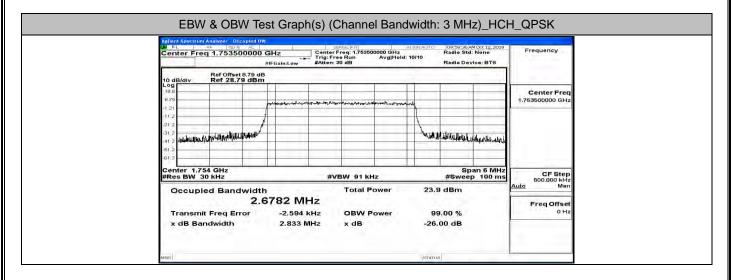


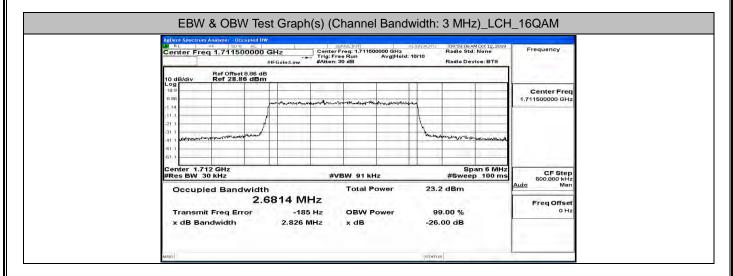


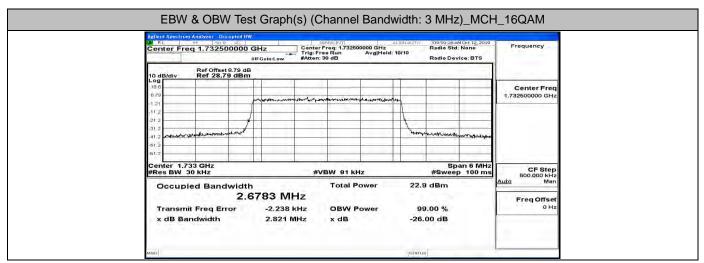


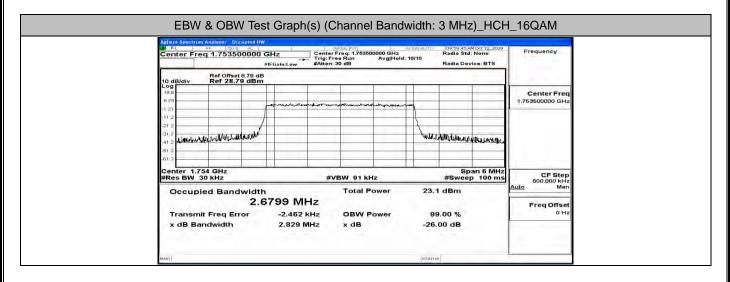


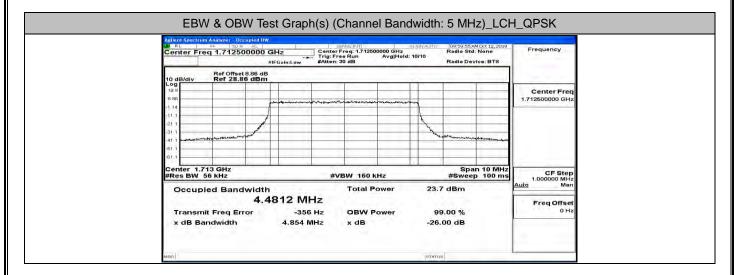


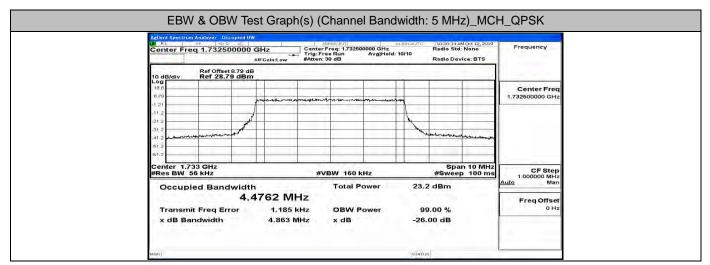


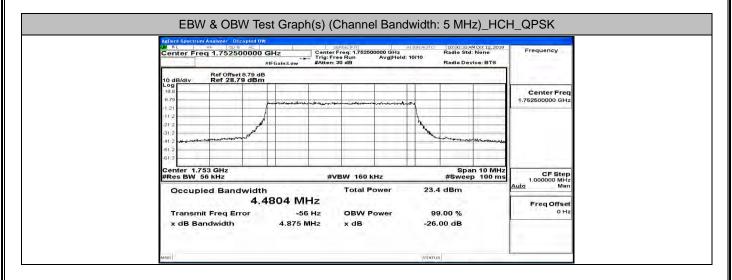


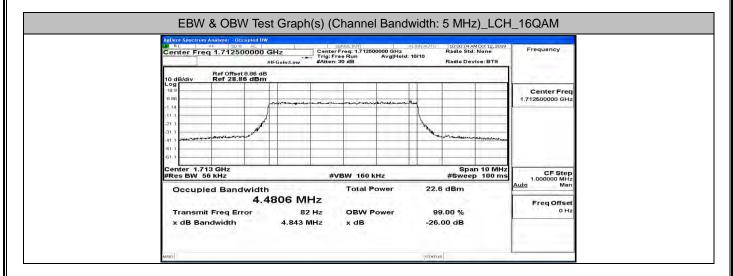


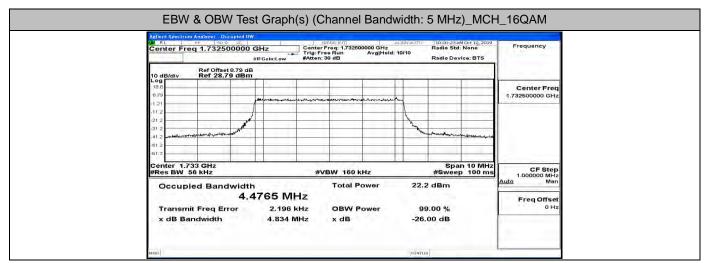


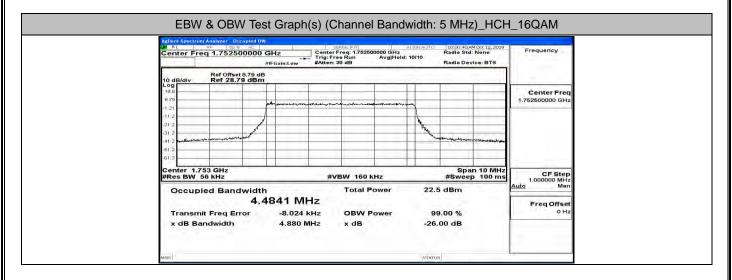


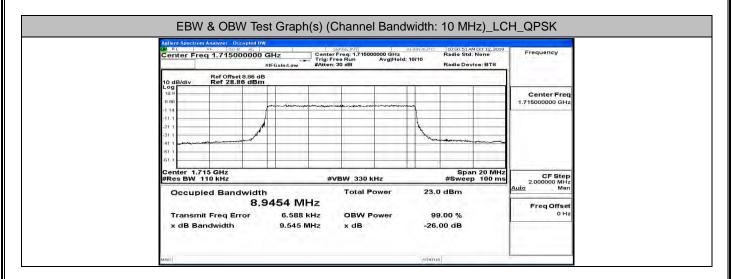


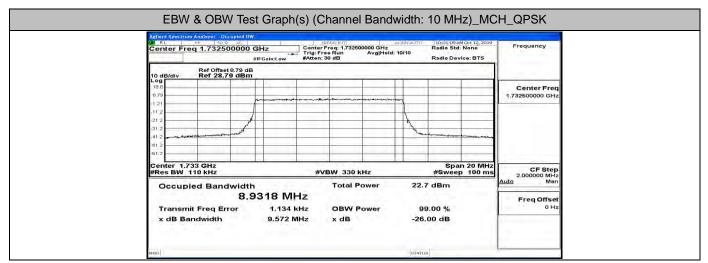


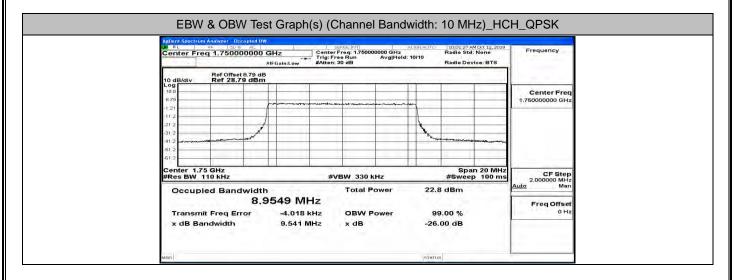


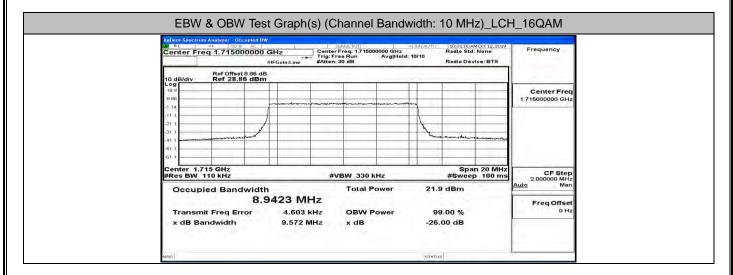


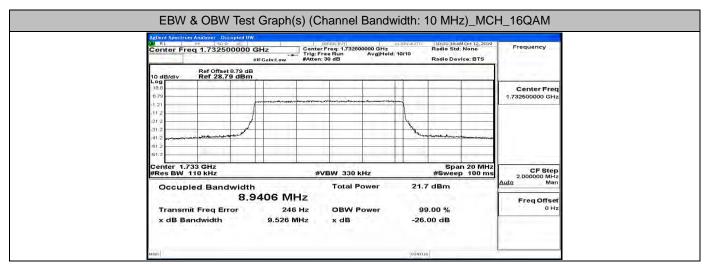


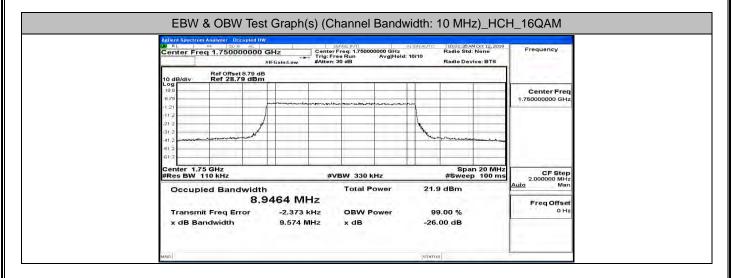


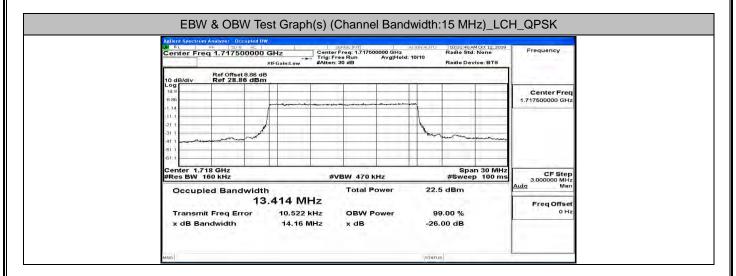


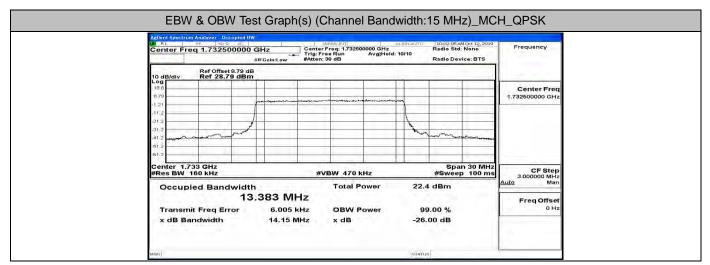


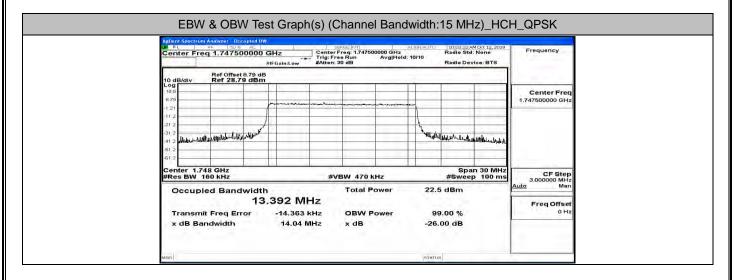


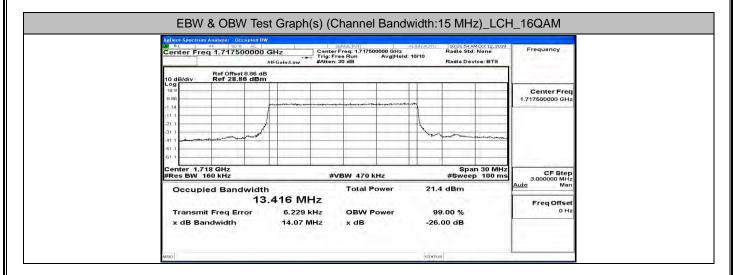


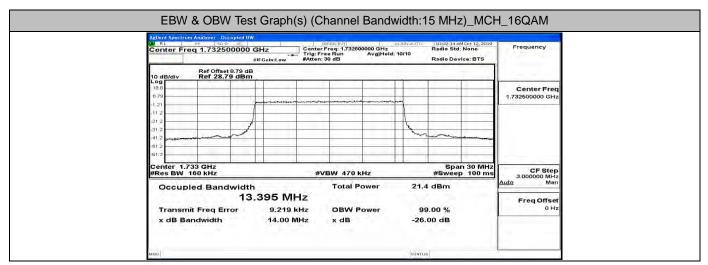


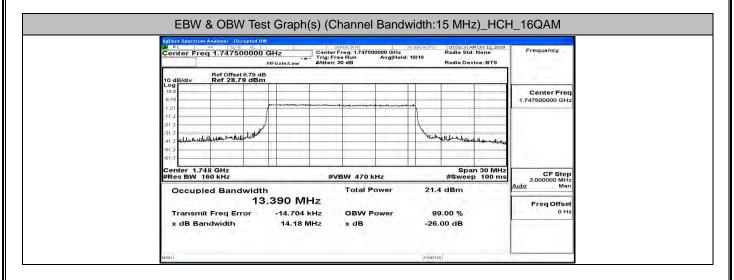


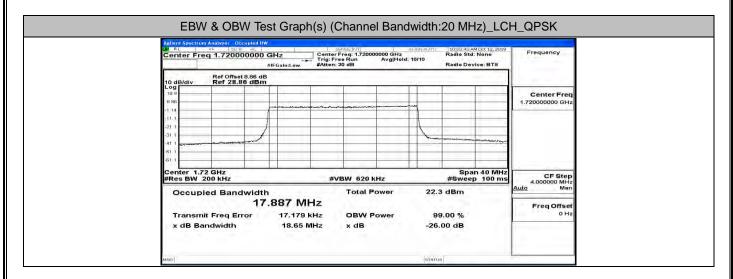


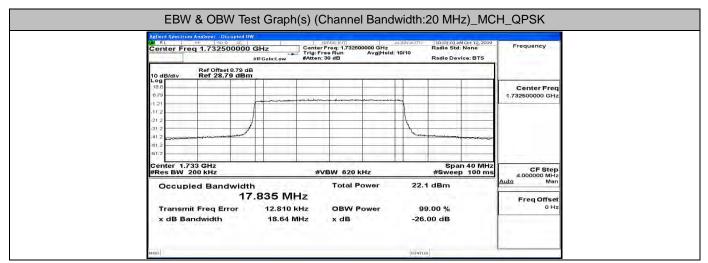


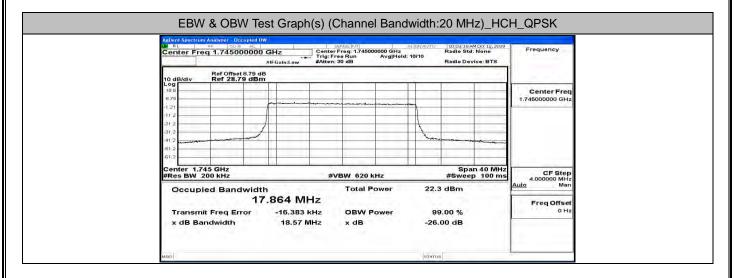


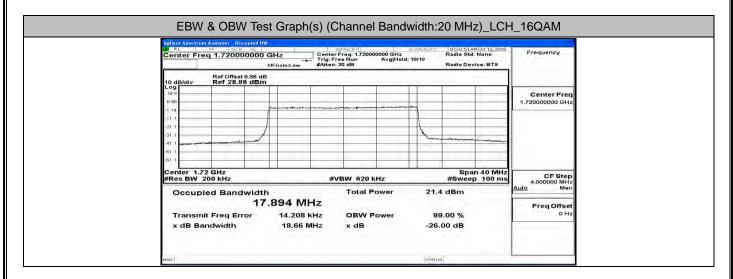


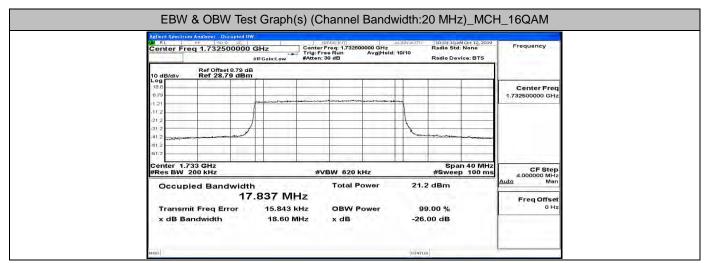


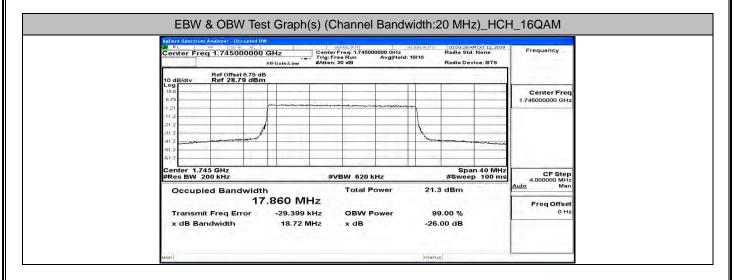




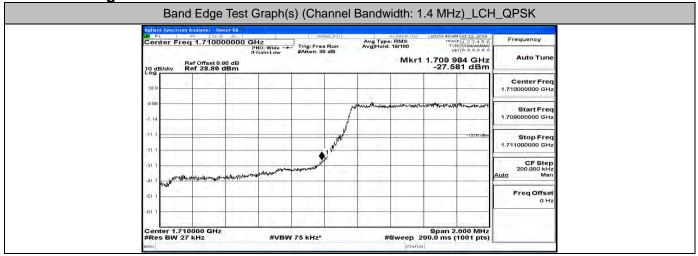


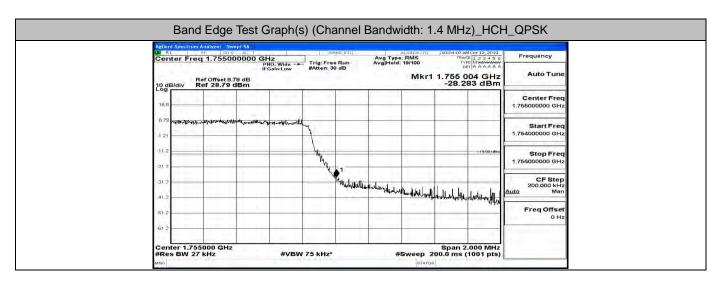


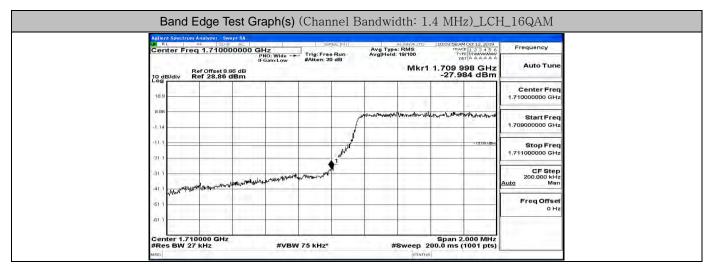


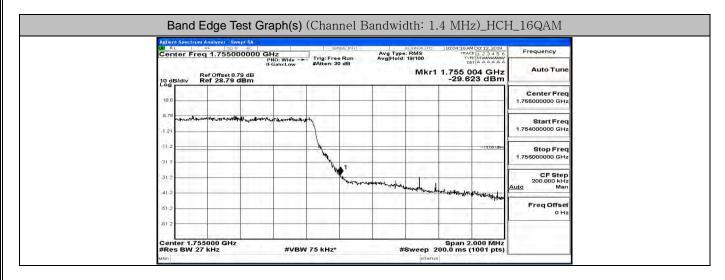


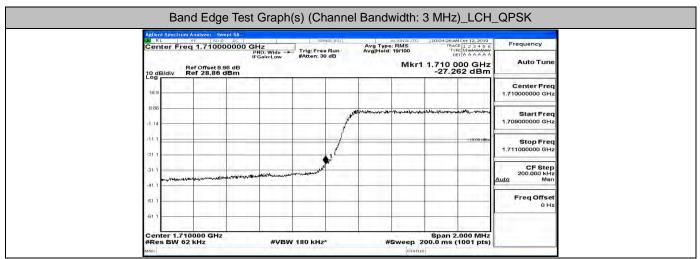
D.4 Band Edge

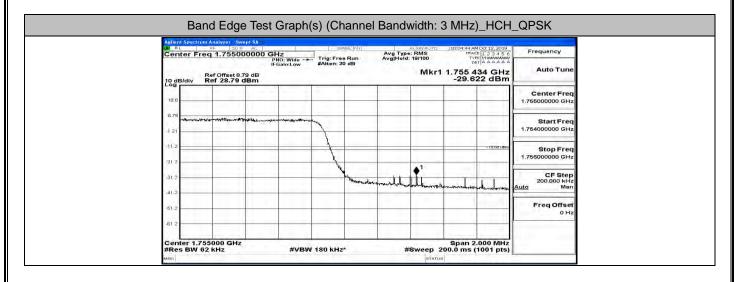


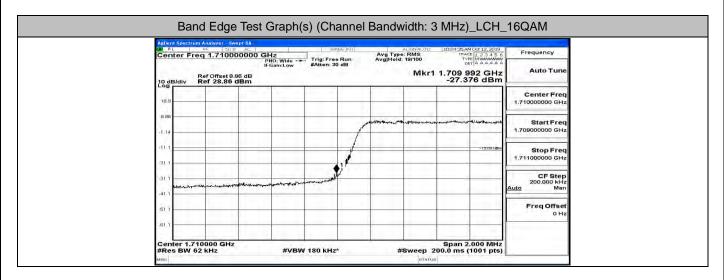


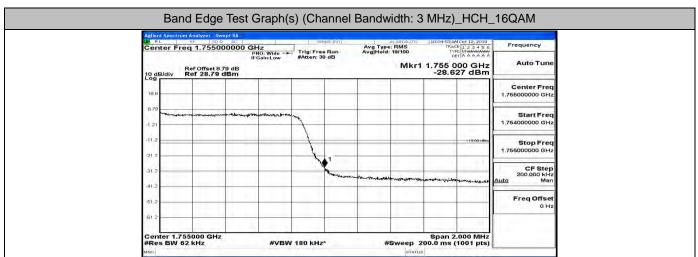


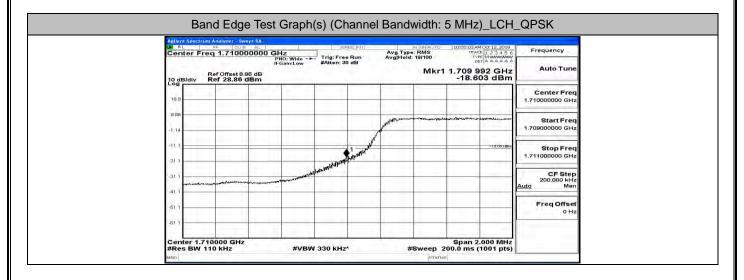


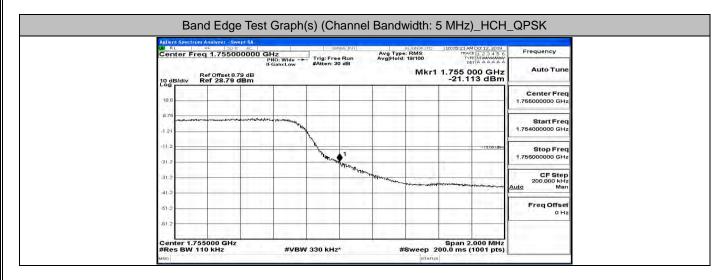


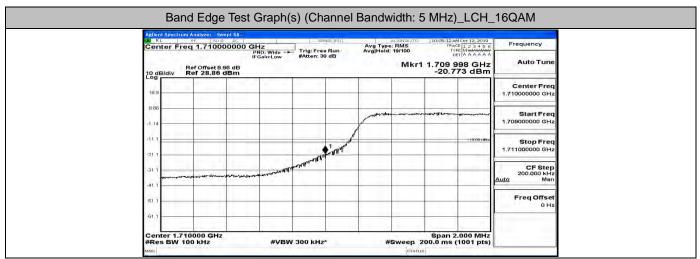


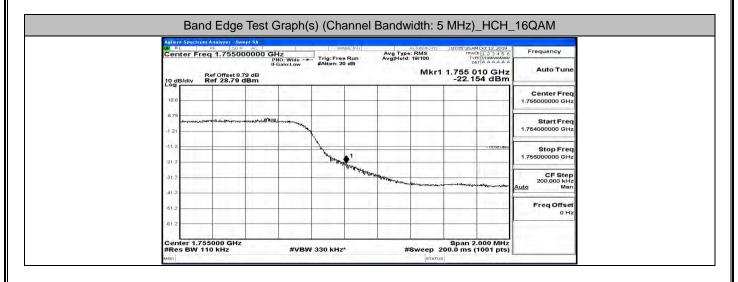


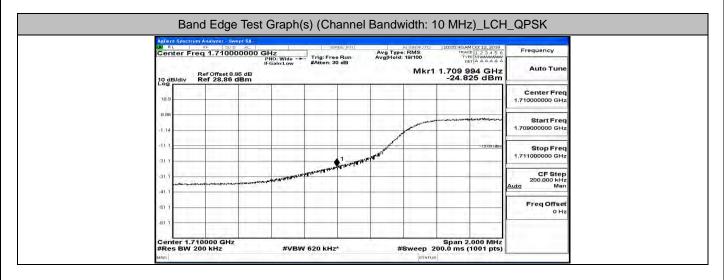


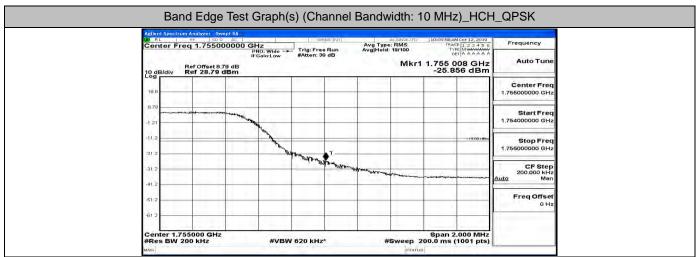


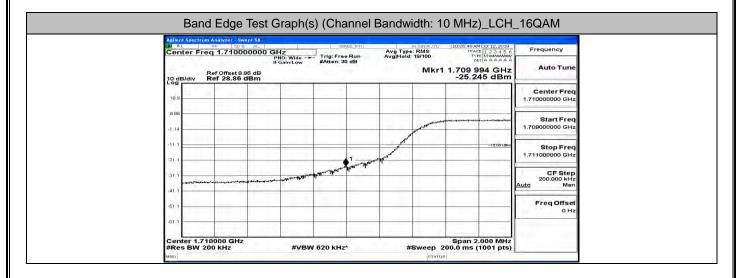


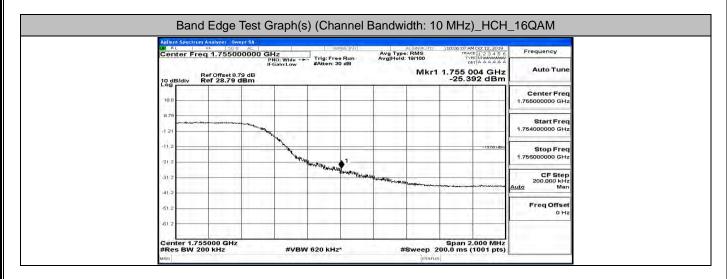


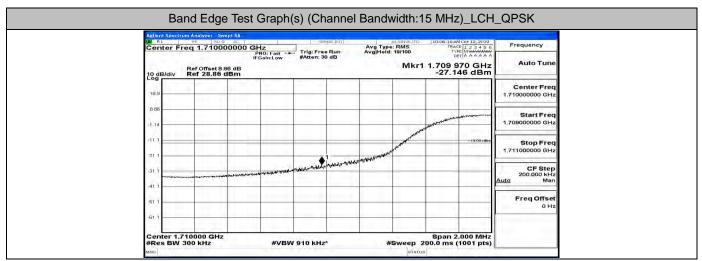


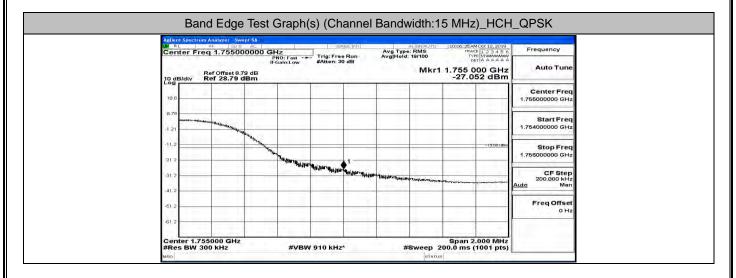


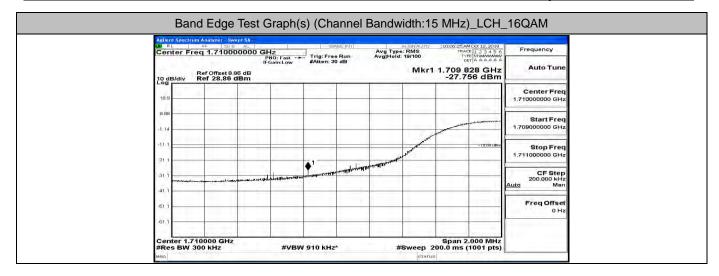


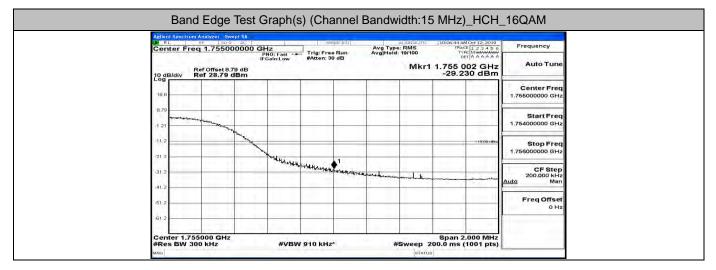


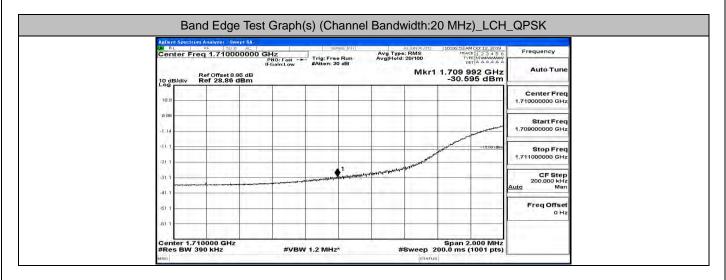


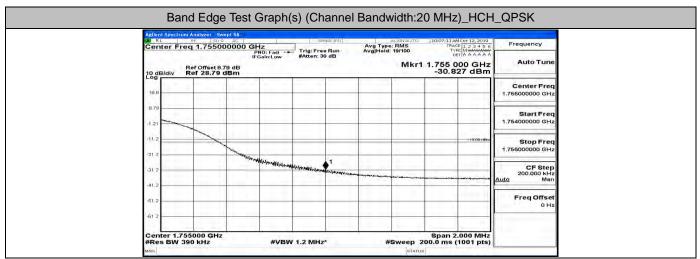


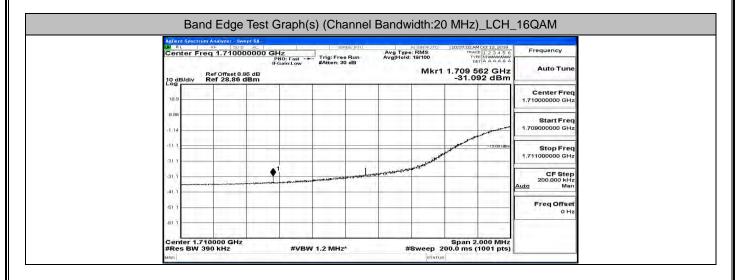


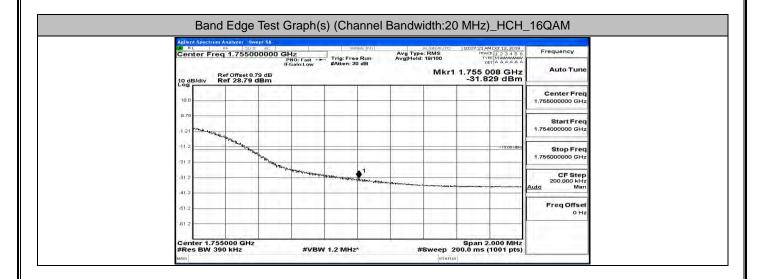












D.5 Conducted Spurious Emission

