Appendix F: Test Data for E-UTRA Band 2

Product Name: 4G SMARTPHONE
Test Model: X7

Environmental Conditions

Temperature:	24.5 ° C	
Relative Humidity:	54.2%	
ATM Pressure:	100.0 kPa	
Test Engineer:	Diamond Lu	
Supervised by:	Wang Chuang	

F.1 Conducted Output Power <SIM1>

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz) **RB** Configuration Average Power [dBm] Average Power [dBm] Modulation Channel Verdict **QPSK** 16QAM Size Offset 0 23.48 22.51 **PASS** 1 3 23.57 22.71 **PASS** 22.46 **PASS** 1 5 23.49 LCH 3 0 23.44 22.44 **PASS** 3 23.54 22.53 **PASS** 3 3 23.58 22.44 **PASS** 6 0 22.55 21.36 **PASS** 1 0 23.33 22.58 **PASS** 1 3 23.57 22.69 **PASS PASS** 1 5 23.42 22.60 QPSK / **PASS** MCH 3 0 23.44 22.24 16QAM 3 2 23.50 22.34 **PASS** 3 3 23.49 22.28 **PASS** 6 0 **PASS** 22.50 21.17 0 **PASS** 1 23.65 22.74 1 3 23.96 22.76 **PASS PASS** 1 5 23.69 22.70 **PASS HCH** 3 0 22.69 23.60 23.69 3 22.65 **PASS** 2 3 3 23.57 22.71 **PASS** 0 6 23.34 22.19 **PASS**

		Conducte	d Output Po	wer Test Result (Channel Band	dwidth: 3 MHz)	
Modulation	Channal	RB Configuration		Average Power [dBm]	Average Power [dBm]) (a nali a t
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	23.65	22.69	PASS
		1	7	23.70	22.74	PASS
		1	14	23.61	22.67	PASS
	LCH	8	0	22.60	21.41	PASS
		8	4	22.56	21.52	PASS
		8	7	22.59	21.40	PASS
		15	0	22.57	21.27	PASS
		1	0	23.43	22.51	PASS
	мсн	1	7	23.71	22.70	PASS
ODCK /		1	14	23.43	22.56	PASS
QPSK / 16QAM		8	0	22.48	21.34	PASS
TOQAW		8	4	22.55	21.41	PASS
		8	7	22.44	21.36	PASS
		15	0	22.43	21.22	PASS
		1	0	23.22	22.66	PASS
		1	7	23.53	22.77	PASS
		1	14	23.28	22.74	PASS
	HCH	8	0	22.76	21.57	PASS
		8	4	22.94	21.57	PASS
		8	7	22.78	21.51	PASS
		15	0	22.77	21.56	PASS

		Conducte	d Output Pov	wer Test Result (Channel Ban	dwidth: 5 MHz)	
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vardiat
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	23.42	22.66	PASS
		1	12	23.51	22.73	PASS
		1	24	23.46	22.69	PASS
	LCH	12	0	22.57	21.45	PASS
		12	6	22.69	21.65	PASS
		12	13	22.62	21.61	PASS
		25	0	22.66	21.46	PASS
		1	0	23.45	22.56	PASS
	MCH	1	12	23.62	22.78	PASS
ODCK /		1	24	23.39	22.47	PASS
QPSK / 16QAM		12	0	22.55	21.44	PASS
TOQAIVI		12	6	22.51	21.56	PASS
		12	13	22.50	21.37	PASS
		25	0	22.50	21.35	PASS
		1	0	23.53	22.40	PASS
		1	12	23.26	22.71	PASS
		1	24	23.54	22.50	PASS
	НСН	12	0	22.83	21.64	PASS
		12	6	22.82	21.68	PASS
		12	13	22.85	21.59	PASS
	_	25	0	22.83	21.68	PASS

		Conducted	d Output Pow	ver Test Result (Channel Band	dwidth: 10 MHz)	
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict
		1	0	23.66	22.68	PASS
		1	24	23.60	22.65	PASS
		1	49	23.59	22.54	PASS
	LCH	25	0	22.52	21.39	PASS
		25	12	22.64	21.38	PASS
		25	25	22.70	21.54	PASS
		50	0	22.68	21.46	PASS
		1	0	23.52	22.57	PASS
	МСН	1	24	23.59	22.73	PASS
QPSK /		1	49	23.37	22.52	PASS
16QAM		25	0	22.58	21.34	PASS
TOQAM		25	12	22.51	21.36	PASS
		25	25	22.46	21.30	PASS
		50	0	22.51	21.28	PASS
		1	0	23.91	22.74	PASS
		1	24	23.18	22.70	PASS
		1	49	23.59	22.75	PASS
	HCH	25	0	22.97	21.78	PASS
		25	12	22.86	21.59	PASS
		25	25	22.76	21.57	PASS
		50	0	22.91	21.72	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)									
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4				
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict				
		1	0	23.51	22.64	PASS				
		1	37	23.74	22.74	PASS				
		1	74	23.50	22.52	PASS				
	LCH	37	0	22.61	21.28	PASS				
		37	18	22.67	21.44	PASS				
		37	38	22.75	21.44	PASS				
		75	0	22.67	21.44	PASS				
		1	0	23.46	22.55	PASS				
	мсн	1	37	23.58	22.78	PASS				
QPSK /		1	74	23.39	22.40	PASS				
16QAM		37	0	22.58	21.38	PASS				
TOQAW		37	18	22.56	21.32	PASS				
		37	38	22.49	21.24	PASS				
		75	0	22.58	21.33	PASS				
		1	0	23.61	22.60	PASS				
		1	37	23.33	22.73	PASS				
		1	74	23.67	22.74	PASS				
	HCH	37	0	23.11	21.75	PASS				
		37	18	23.11	21.74	PASS				
		37	38	22.92	21.58	PASS				
		75	0	23.07	21.64	PASS				

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)									
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/andiat				
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict				
		1	0	23.49	22.47	PASS				
		1	49	23.80	22.72	PASS				
		1	99	23.39	22.33	PASS				
	LCH	50	0	22.43	21.23	PASS				
		50	25	22.69	21.39	PASS				
		50	50	22.56	21.32	PASS				
		100	0	22.44	21.28	PASS				
		1	0	23.37	22.38	PASS				
	мсн	1	49	23.76	22.64	PASS				
QPSK /		1	99	23.25	22.32	PASS				
16QAM		50	0	22.53	21.23	PASS				
TOQAW		50	25	22.55	21.29	PASS				
		50	50	22.45	21.20	PASS				
		100	0	22.46	21.28	PASS				
		1	0	23.38	22.58	PASS				
		1	49	23.71	22.66	PASS				
		1	99	23.35	22.67	PASS				
	HCH	50	0	22.76	21.51	PASS				
		50	25	22.86	21.58	PASS				
		50	50	22.56	21.36	PASS				
		100	0	22.65	21.43	PASS				

<SIM2>

		Conducted	Output Pow	er Test Result (Channel Band	width: 1.4 MHz)	
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/andiat
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	23.29	22.28	PASS
		1	3	23.44	22.47	PASS
		1	5	23.33	22.26	PASS
	LCH	3	0	23.27	22.25	PASS
		3	2	23.39	22.32	PASS
		3	3	23.40	22.21	PASS
		6	0	22.44	21.17	PASS
		1	0	23.15	22.33	PASS
	МСН	1	3	23.43	22.47	PASS
QPSK /		1	5	23.29	22.38	PASS
16QAM		3	0	23.32	22.05	PASS
TOQAM		3	2	23.33	22.13	PASS
		3	3	23.31	22.05	PASS
		6	0	22.34	21.08	PASS
		1	0	23.52	22.52	PASS
		1	3	23.77	22.55	PASS
		1	5	23.55	22.48	PASS
	НСН	3	0	23.46	22.50	PASS
		3	2	23.54	22.44	PASS
		3	3	23.40	22.51	PASS
		6	0	23.15	22.03	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.49	22.44	PASS			
		1	7	23.55	22.49	PASS			
		1	14	23.48	22.41	PASS			
	LCH	8	0	22.43	21.19	PASS			
		8	4	22.37	21.32	PASS			
		8	7	22.41	21.22	PASS			
		15	0	22.45	21.04	PASS			
		1	0	23.24	22.32	PASS			
	МСН	1	7	23.55	22.45	PASS			
QPSK /		1	14	23.23	22.30	PASS			
16QAM		8	0	22.27	21.13	PASS			
IOQAW		8	4	22.39	21.24	PASS			
		8	7	22.24	21.11	PASS			
		15	0	22.28	21.05	PASS			
		1	0	23.06	22.46	PASS			
		1	7	23.40	22.54	PASS			
		1	14	23.13	22.56	PASS			
	HCH	8	0	22.58	21.32	PASS			
		8	4	22.73	21.36	PASS			
		8	7	22.60	21.31	PASS			
		15	0	22.60	21.33	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.30	22.40	PASS			
		1	12	23.32	22.47	PASS			
		1	24	23.28	22.48	PASS			
	LCH	12	0	22.43	21.23	PASS			
		12	6	22.51	21.43	PASS			
		12	13	22.44	21.42	PASS			
		25	0	22.50	21.25	PASS			
		1	0	23.32	22.32	PASS			
	МСН	1	12	23.50	22.53	PASS			
QPSK /		1	24	23.18	22.30	PASS			
16QAM		12	0	22.41	21.26	PASS			
IOQAW		12	6	22.38	21.39	PASS			
		12	13	22.32	21.20	PASS			
		25	0	22.36	21.16	PASS			
		1	0	23.33	22.23	PASS			
		1	12	23.13	22.54	PASS			
		1	24	23.35	22.32	PASS			
	HCH	12	0	22.64	21.47	PASS			
		12	6	22.65	21.46	PASS			
		12	13	22.70	21.43	PASS			
		25	0	22.67	21.50	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)									
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vandiat				
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict				
		1	0	23.46	22.52	PASS				
		1	24	23.43	22.47	PASS				
		1	49	23.46	22.33	PASS				
	LCH	25	0	22.35	21.16	PASS				
		25	12	22.44	21.19	PASS				
		25	25	22.50	21.29	PASS				
		50	0	22.56	21.25	PASS				
		1	0	23.31	22.34	PASS				
	мсн	1	24	23.45	22.54	PASS				
QPSK /		1	49	23.24	22.28	PASS				
16QAM		25	0	22.37	21.14	PASS				
IOQAW		25	12	22.39	21.19	PASS				
		25	25	22.32	21.14	PASS				
		50	0	22.39	21.03	PASS				
		1	0	23.76	22.55	PASS				
		1	24	23.04	22.44	PASS				
		1	49	23.43	22.53	PASS				
	HCH	25	0	22.81	21.53	PASS				
	-	25	12	22.72	21.36	PASS				
		25	25	22.56	21.32	PASS				
		50	0	22.74	21.46	PASS				

		Conducted	Output Pow	ver Test Result (Channel Band	dwidth: 15 MHz)	
Madulation	Channal	RB Conf	figuration	Average Power [dBm]	Average Power [dBm]	Vardiat
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	23.34	22.45	PASS
		1	37	23.54	22.57	PASS
		1	74	23.35	22.35	PASS
	LCH	37	0	22.41	21.11	PASS
		37	18	22.47	21.20	PASS
		37	38	22.55	21.21	PASS
		75	0	22.47	21.22	PASS
		1	0	23.29	22.35	PASS
	мсн	1	37	23.38	22.61	PASS
ODCK /		1	74	23.18	22.23	PASS
QPSK / 16QAM		37	0	22.39	21.14	PASS
TOQAIVI		37	18	22.41	21.09	PASS
		37	38	22.38	21.04	PASS
		75	0	22.41	21.12	PASS
		1	0	23.43	22.44	PASS
		1	37	23.16	22.53	PASS
		1	74	23.48	22.53	PASS
	HCH	37	0	22.92	21.56	PASS
		37	18	22.98	21.55	PASS
		37	38	22.77	21.33	PASS
		75	0	22.88	21.47	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)									
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =4				
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict				
		1	0	23.38	22.28	PASS				
		1	49	23.66	22.49	PASS				
		1	99	23.23	22.13	PASS				
	LCH	50	0	22.31	21.06	PASS				
		50	25	22.53	21.15	PASS				
		50	50	22.39	21.10	PASS				
		100	0	22.26	21.06	PASS				
		1	0	23.22	22.20	PASS				
	МСН	1	49	23.60	22.39	PASS				
QPSK /		1	99	23.12	22.10	PASS				
16QAM		50	0	22.35	21.05	PASS				
IOQAW		50	25	22.43	21.07	PASS				
		50	50	22.26	21.04	PASS				
		100	0	22.30	21.04	PASS				
		1	0	23.26	22.34	PASS				
		1	49	23.52	22.47	PASS				
		1	99	23.21	22.47	PASS				
	HCH	50	0	22.59	21.29	PASS				
		50	25	22.67	21.38	PASS				
		50	50	22.43	21.12	PASS				
		100	0	22.48	21.27	PASS				

F.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict
Woddiation	Charmer	[dB]	[dB]	verdict
	LCH	5.16	<13	PASS
QPSK	MCH	5.28	<13	PASS
	HCH	4.15	<13	PASS
16QAM	LCH	6.04	<13	PASS
	MCH	6.24	<13	PASS
	HCH	4.96	<13	PASS

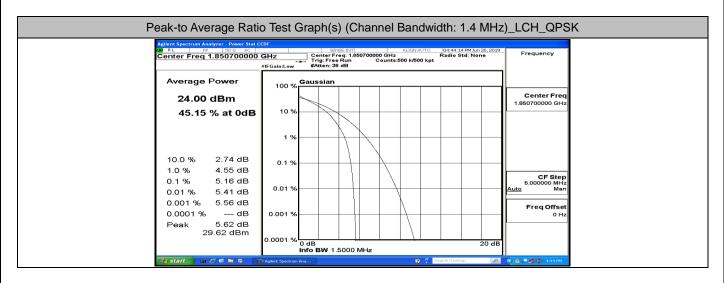
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation	Channel	[dB]	[dB]	verdict	
	LCH	5.14	<13	PASS	
QPSK	MCH	5.34	<13	PASS	
	HCH	4.45	<13	PASS	
	LCH	6.09	<13	PASS	
16QAM	MCH	6.27	<13	PASS	
	HCH	5.24	<13	PASS	

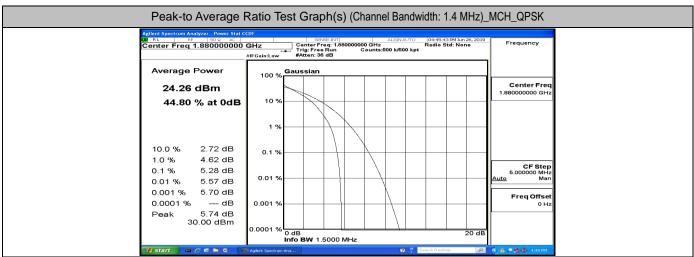
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)					
Modulation	01	Peak-to-Average Ratio	Limit	Verdict	
Modulation	Channel	[dB]	[dB]	verdict	
	LCH	5.02	<13	PASS	
QPSK	MCH	5.28	<13	PASS	
	HCH	4.48	<13	PASS	
	LCH	5.91	<13	PASS	
16QAM	MCH	6.17	<13	PASS	
	HCH	5.31	<13	PASS	

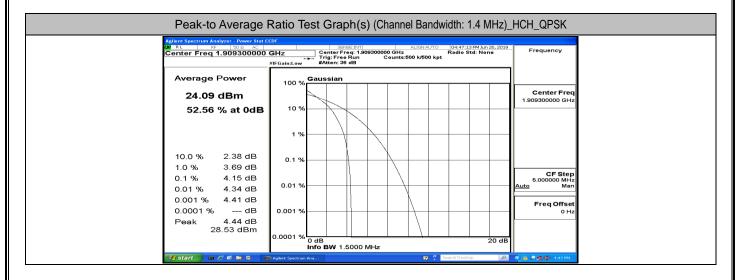
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Ohamad	Peak-to-Average Ratio	Limit	Verdict	
Modulation	Channel	[dB]	[dB]	verdict	
	LCH	5.01	<13	PASS	
QPSK	MCH	5.25	<13	PASS	
	HCH	4.93	<13	PASS	
16QAM	LCH	5.82	<13	PASS	
	MCH	6.09	<13	PASS	
	HCH	5.76	<13	PASS	

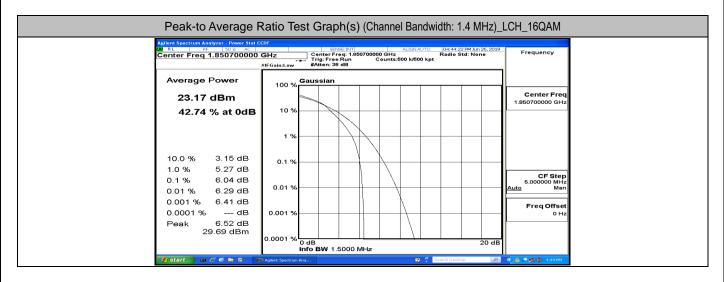
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation	Griannei	[dB]	[dB]	verdict	
	LCH	4.86	<13	PASS	
QPSK	MCH	5.04	<13	PASS	
	HCH	5.11	<13	PASS	
	LCH	6.18	<13	PASS	
16QAM	MCH	6.34	<13	PASS	
	HCH	6.37	<13	PASS	

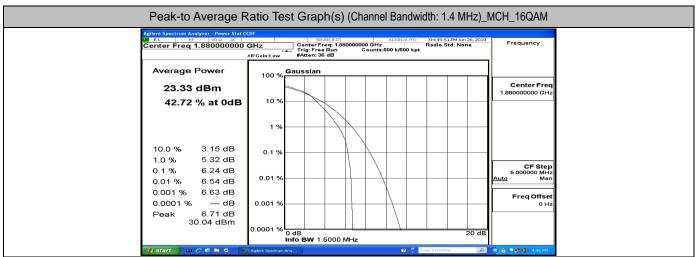
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)					
Modulation		Peak-to-Average Ratio	Limit	Verdict	
iviodulation	Channel	[dB]	[dB]	verdict	
	LCH	5.73	<13	PASS	
QPSK	MCH	5.75	<13	PASS	
	HCH	5.89	<13	PASS	
	LCH	6.72	<13	PASS	
16QAM	MCH	6.9	<13	PASS	
	HCH	6.88	<13	PASS	

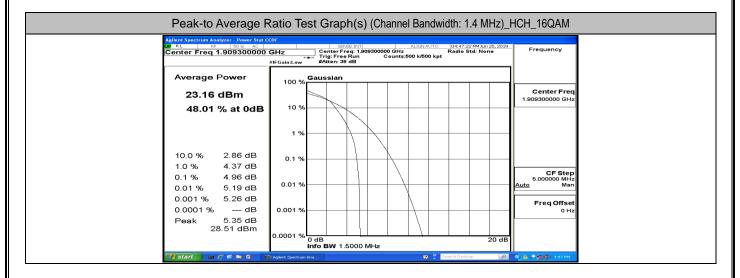


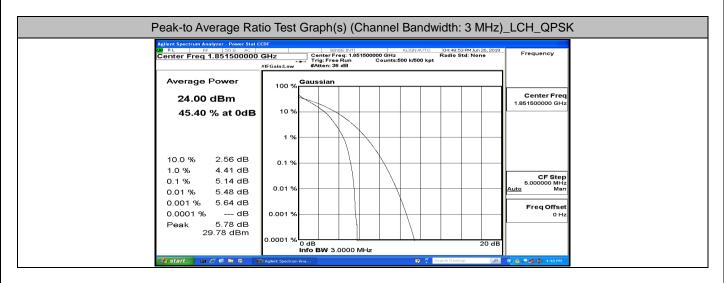


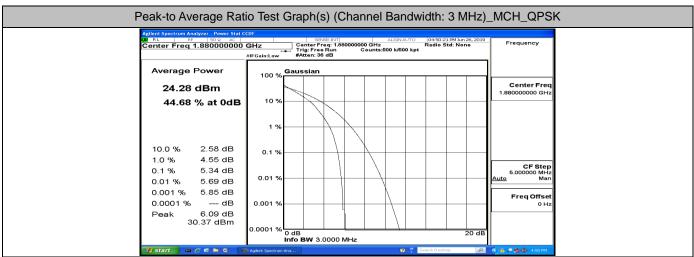


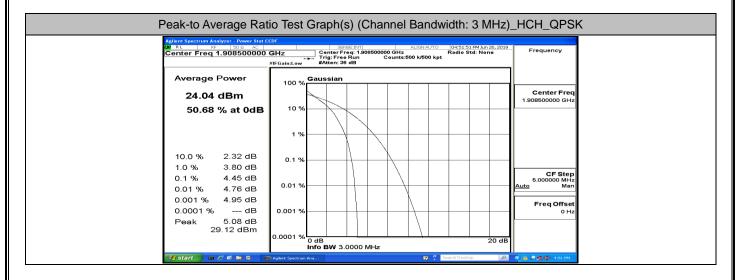


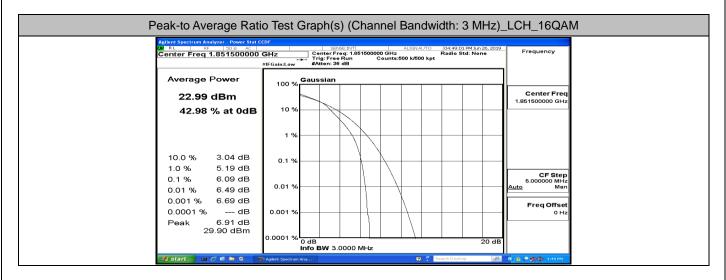


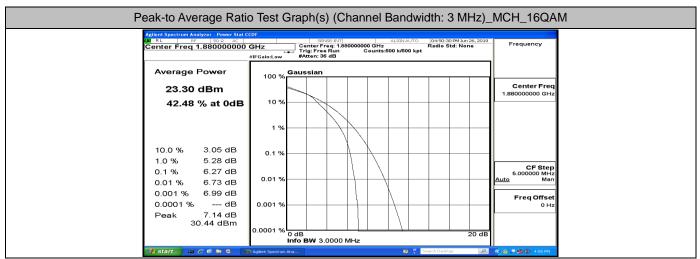


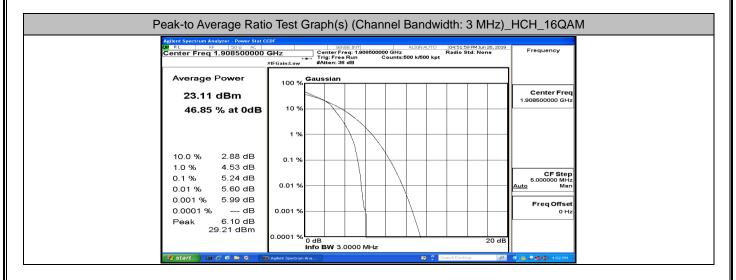


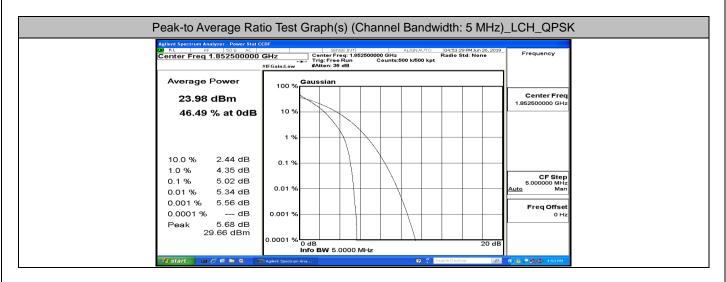


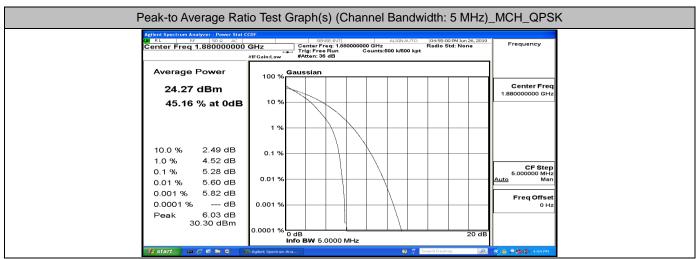


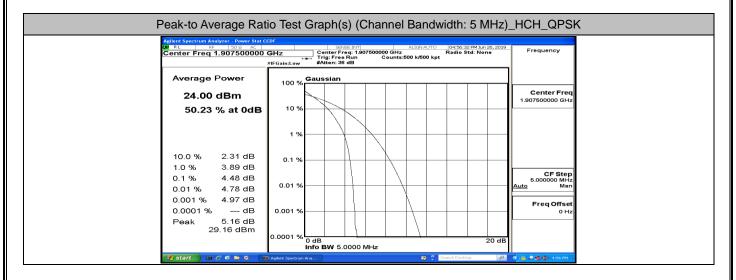


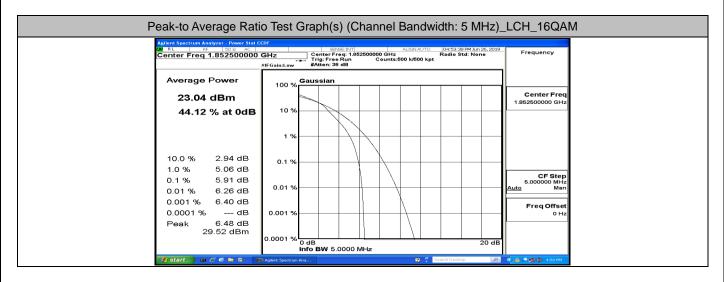


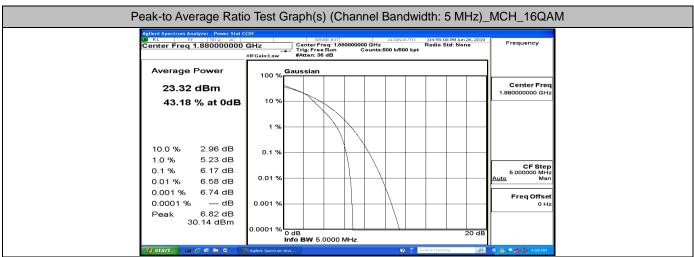


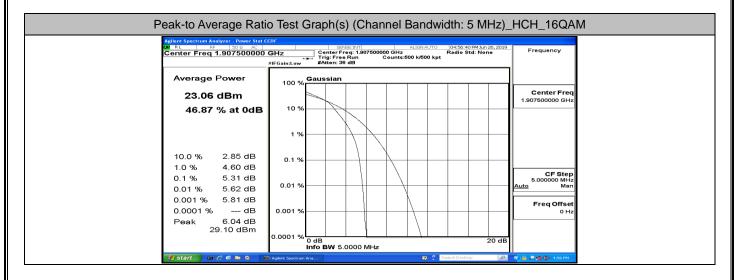


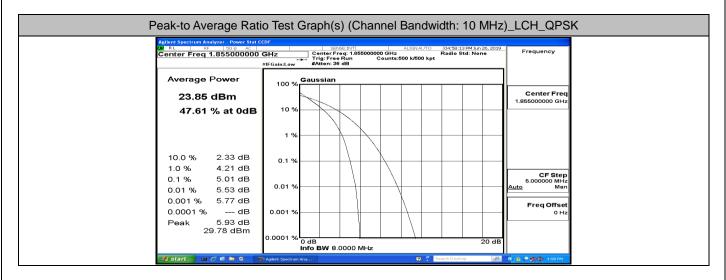


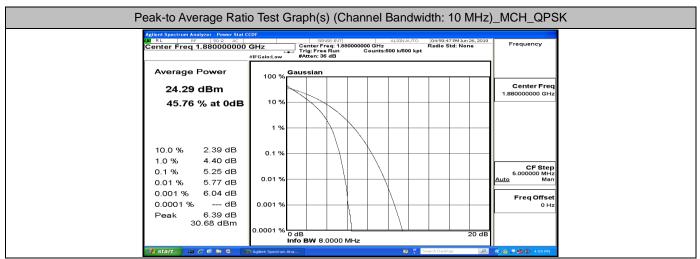


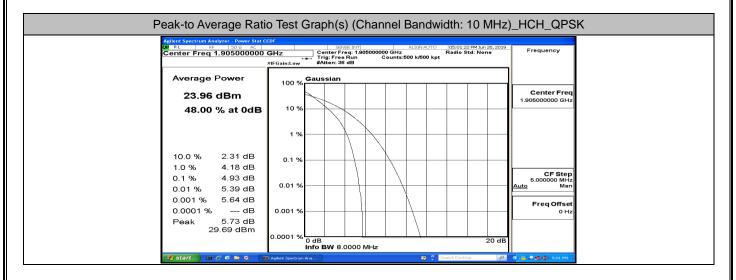


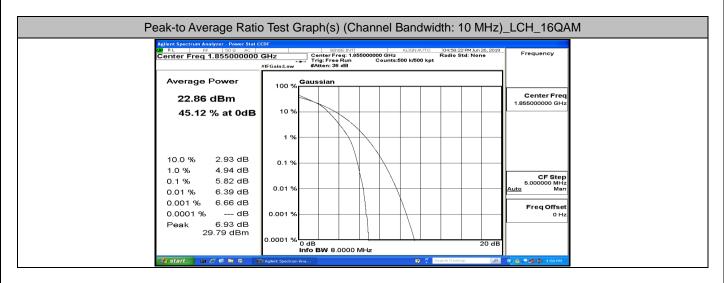


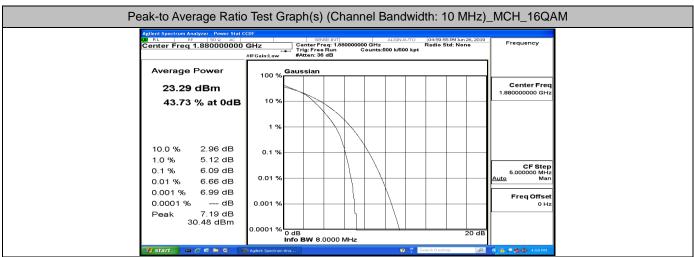


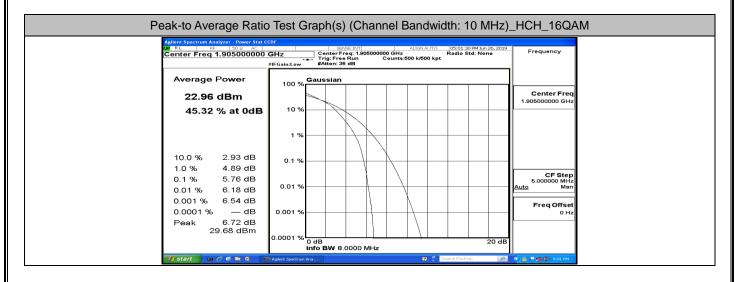


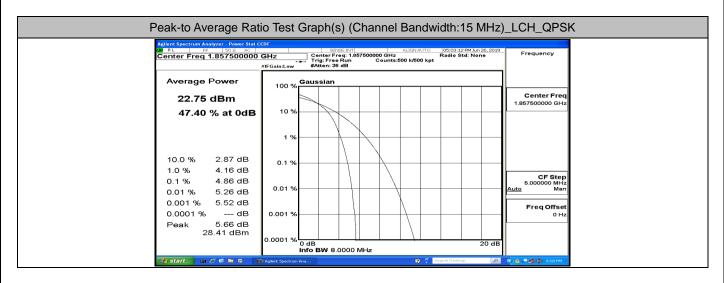


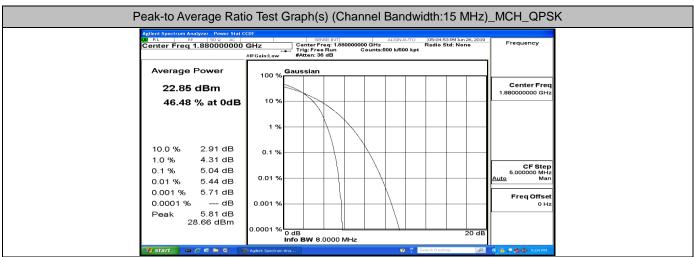


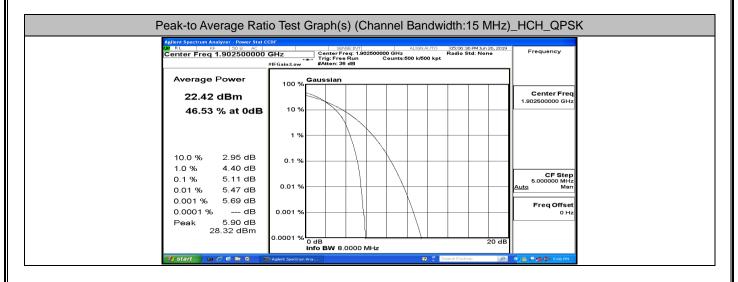


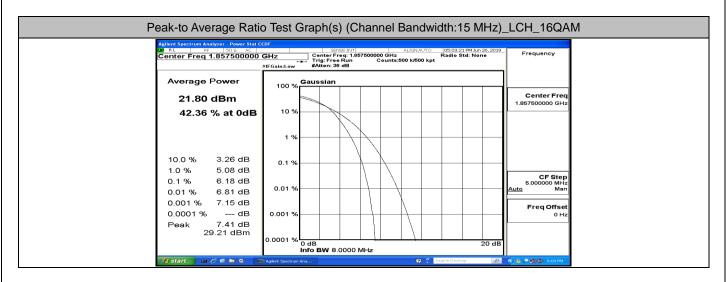


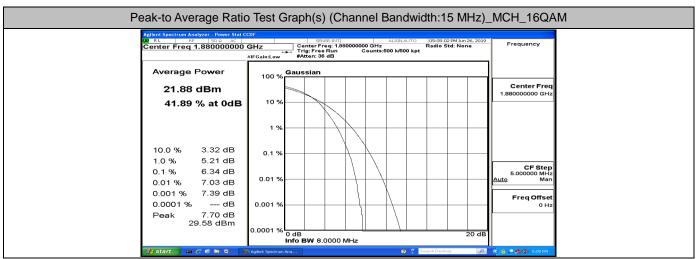


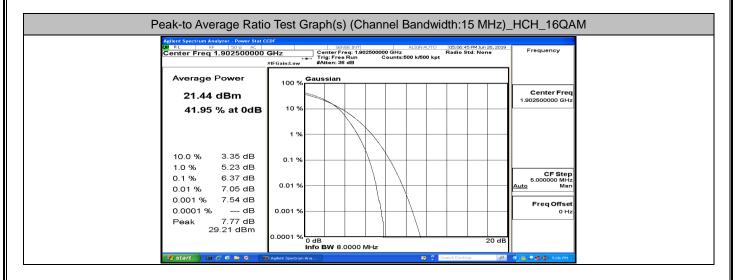


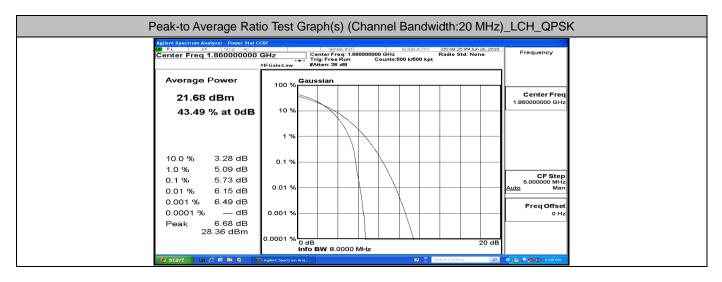


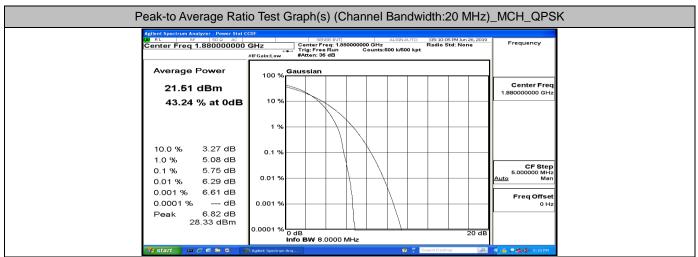


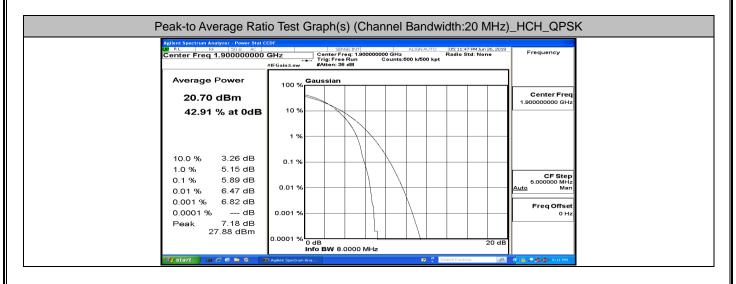


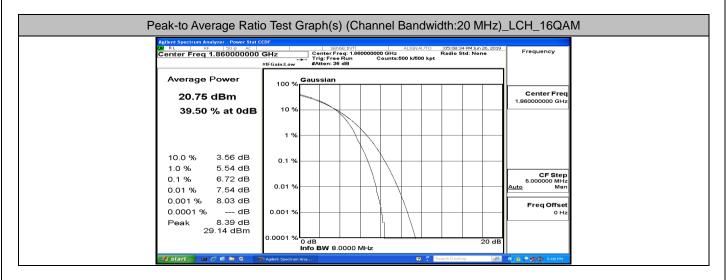


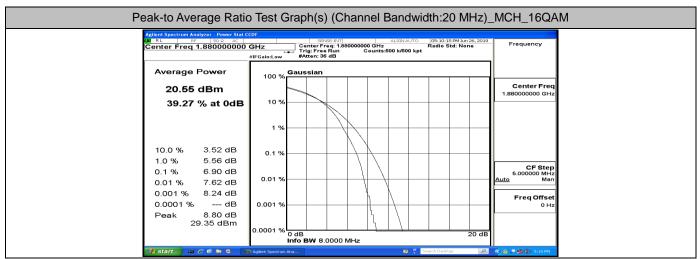


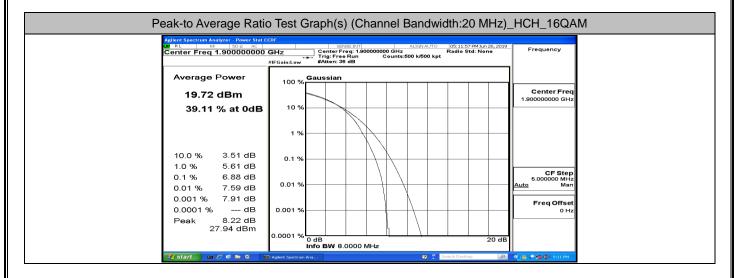












F.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict	
	LCH	1.0796	1.265	PASS	
QPSK	MCH	1.0788	1.260	PASS	
	HCH	1.0812	1.337	PASS	
16QAM	LCH	1.0833	1.255	PASS	
	MCH	1.0814	1.247	PASS	
	HCH	1.0837	1.398	PASS	

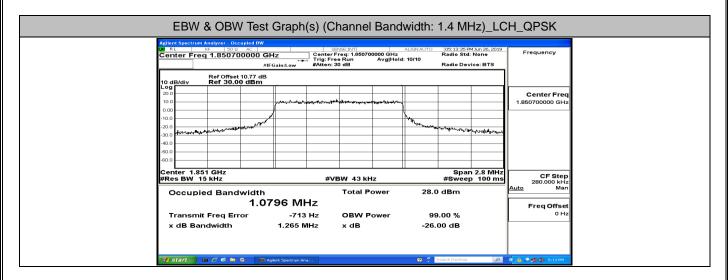
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation	Chame	(MHz)	(MHz)	verdict	
QPSK	LCH	2.6831	2.901	PASS	
	MCH	2.6870	2.918	PASS	
	HCH	2.6910	2.954	PASS	
16QAM	LCH	2.6848	2.977	PASS	
	MCH	2.6874	2.961	PASS	
	HCH	2.6881	2.919	PASS	

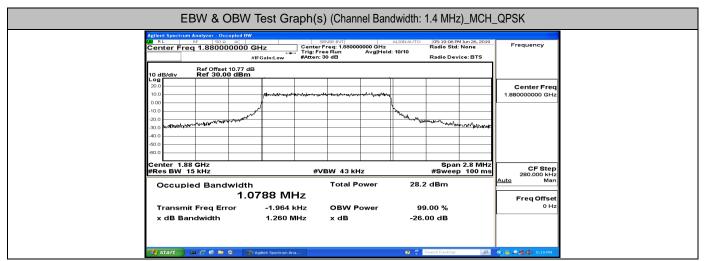
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)					
Modulation	01 1	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation	Channel	(MHz)	(MHz)	verdict	
	LCH	4.4828	4.812	PASS	
QPSK	MCH	4.4730	4.814	PASS	
	HCH	4.4759	4.820	PASS	
16QAM	LCH	4.4789	4.820	PASS	
	MCH	4.4790	4.785	PASS	
	HCH	4.4785	4.846	PASS	

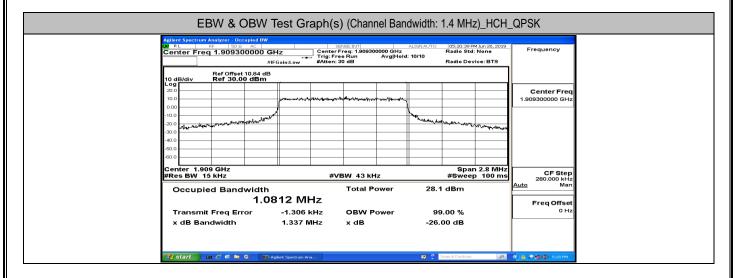
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation	Channel	(MHz)	(MHz)	verdict	
	LCH	8.9177	9.473	PASS	
QPSK	MCH	8.9503	9.424	PASS	
	HCH	8.9107	9.369	PASS	
	LCH	8.9225	9.482	PASS	
16QAM	MCH	8.9397	9.497	PASS	
	HCH	8.9341	9.470	PASS	

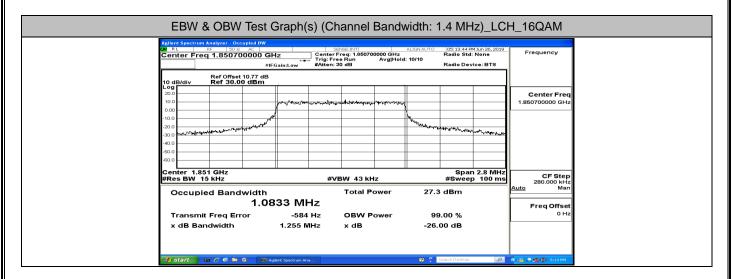
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
iviodulation	Channe	(MHz)	(MHz)	verdict	
	LCH	13.362	14.00	PASS	
QPSK	MCH	13.417	14.11	PASS	
	HCH	13.411	14.11	PASS	
	LCH	13.366	14.01	PASS	
16QAM	MCH	13.421	14.09	PASS	
	HCH	13.416	14.06	PASS	

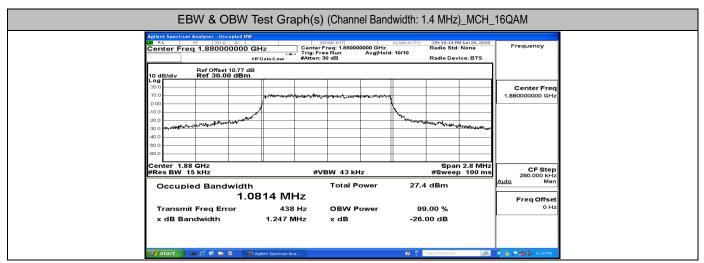
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)					
Modulation	01 1	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation	Channel	(MHz)	(MHz)	verdict	
	LCH	17.820	18.60	PASS	
QPSK	MCH	17.861	18.74	PASS	
	HCH	17.900	18.64	PASS	
	LCH	17.825	18.55	PASS	
16QAM	MCH	17.873	18.65	PASS	
	HCH	17.905	18.69	PASS	

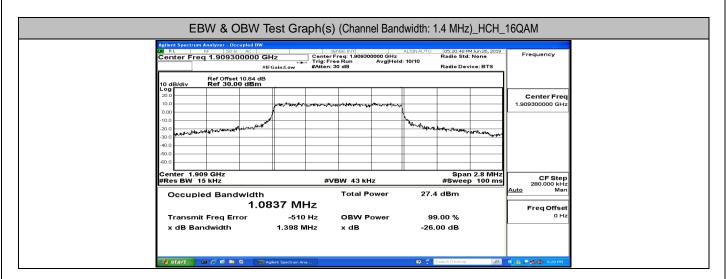


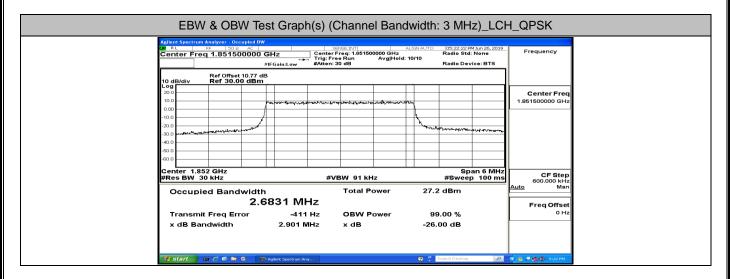


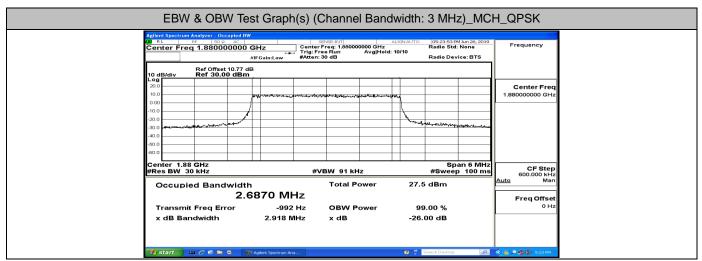


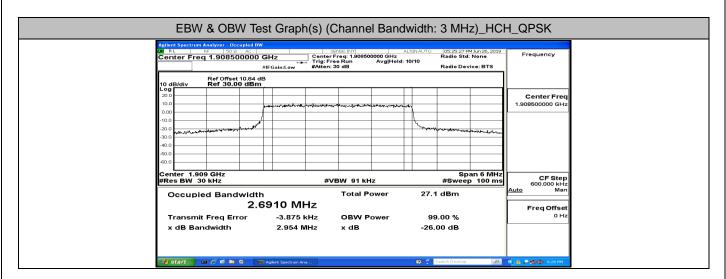


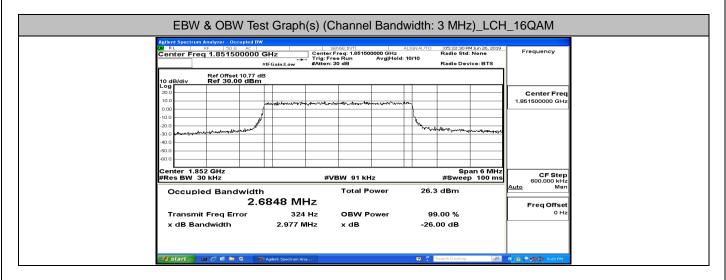


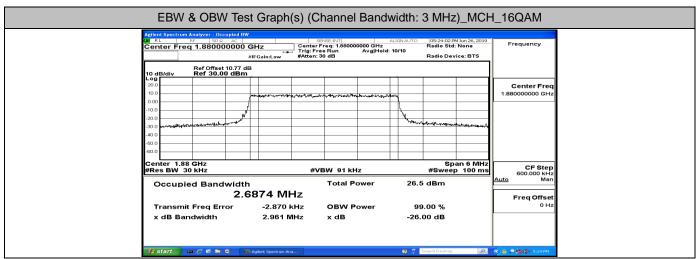


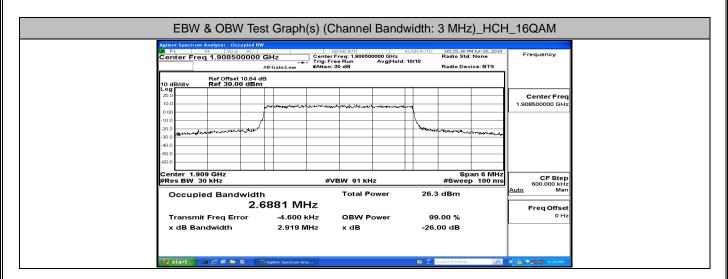


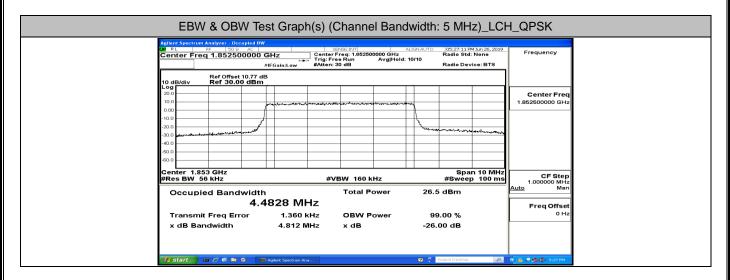


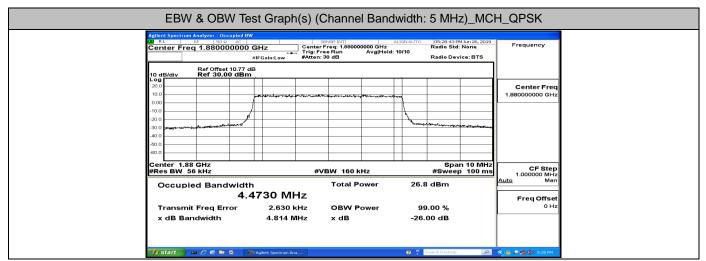


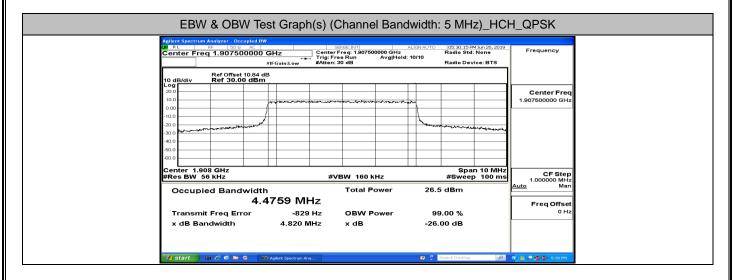


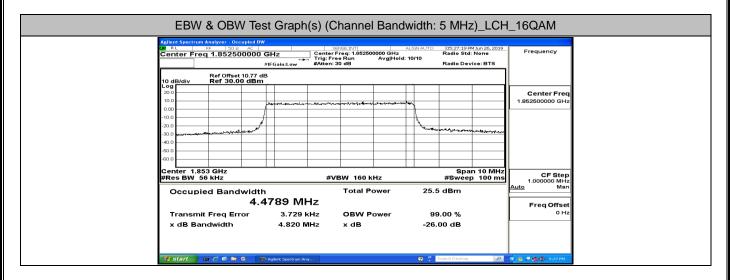


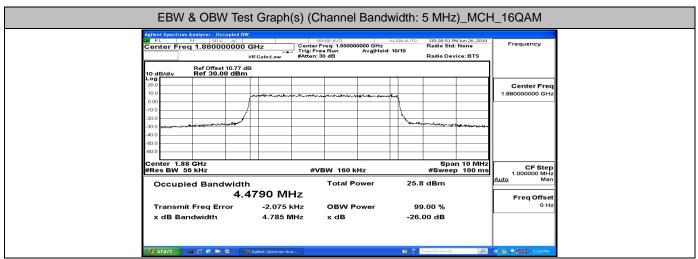


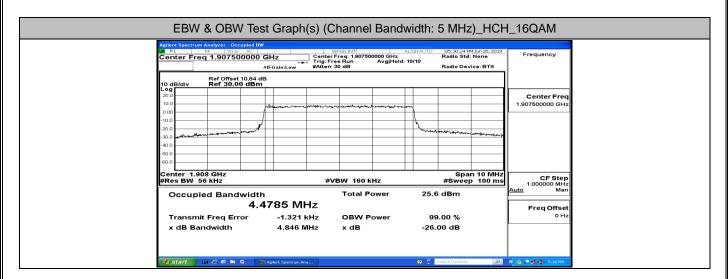


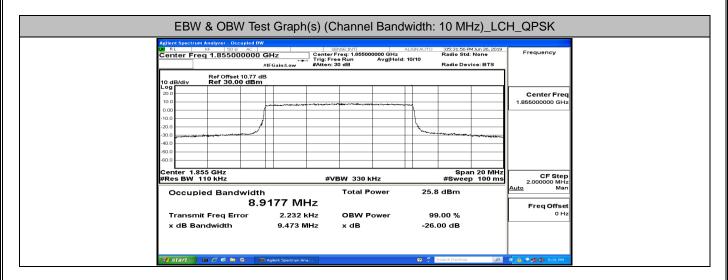


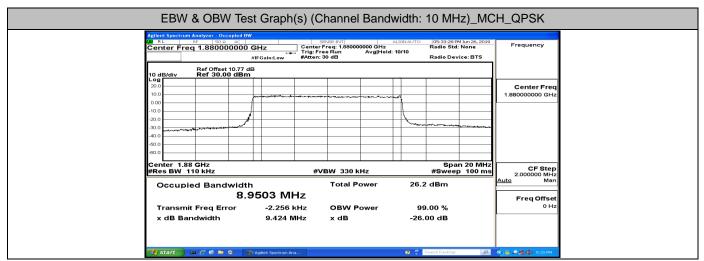


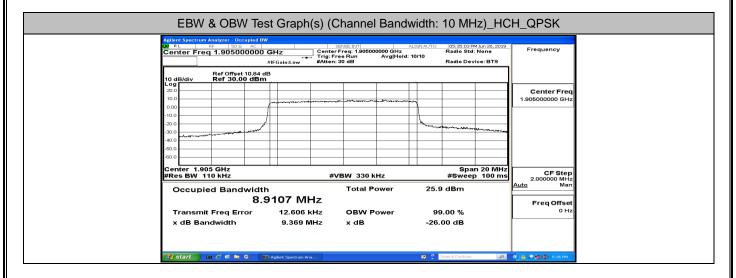


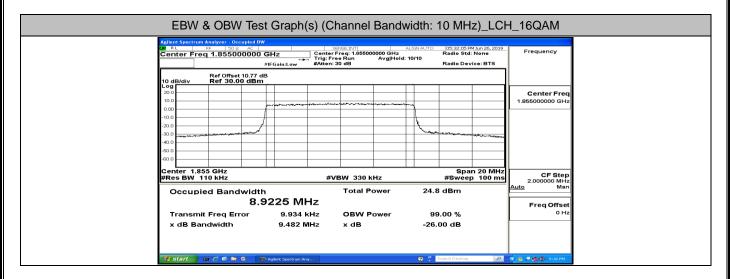


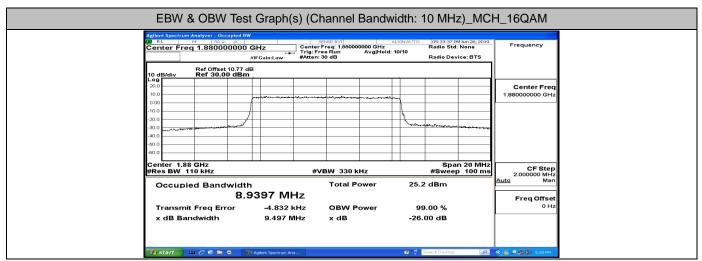


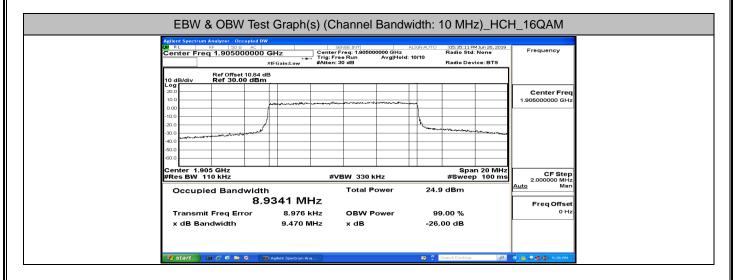


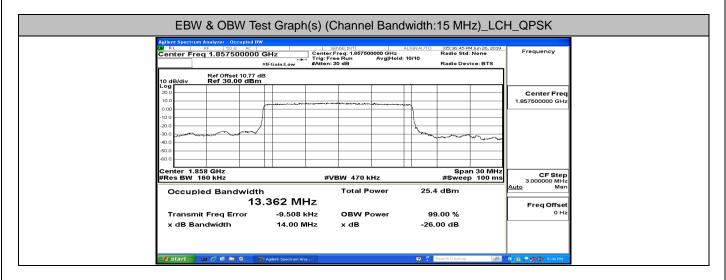


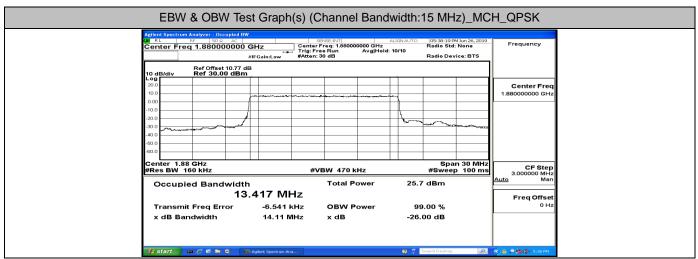


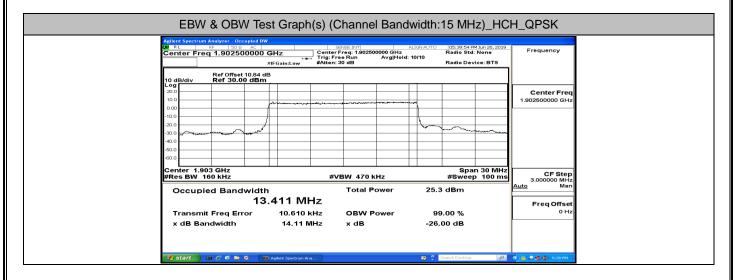


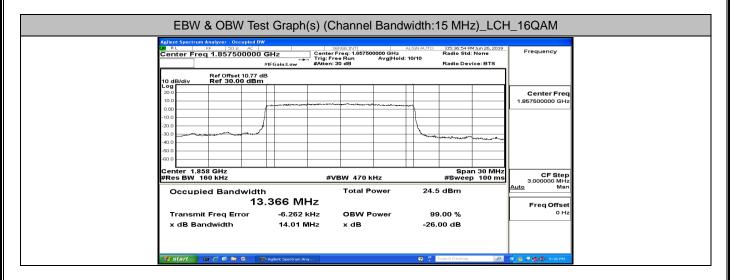


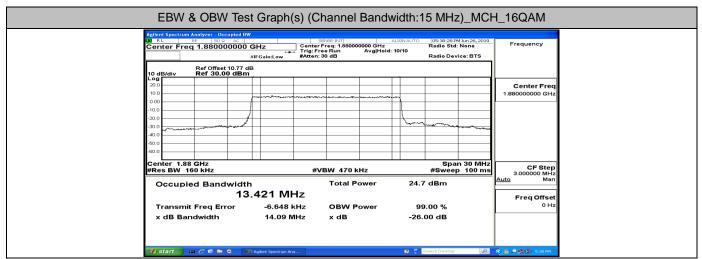


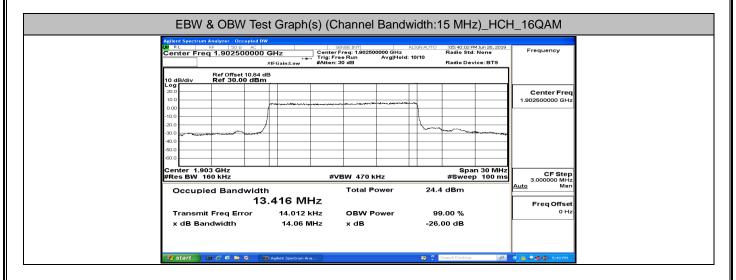


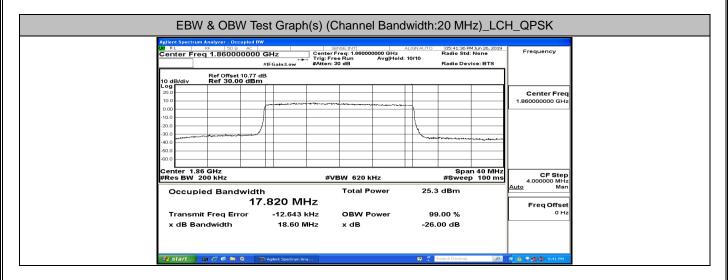


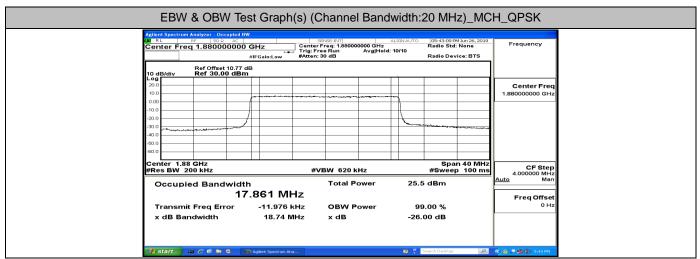


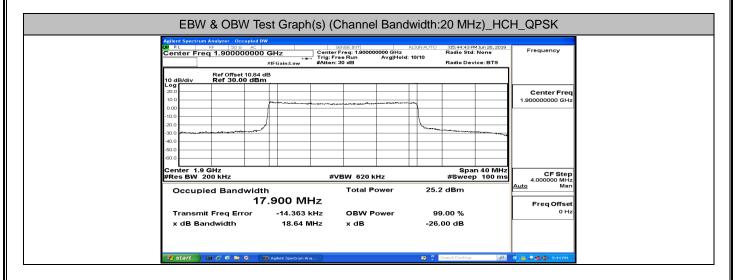


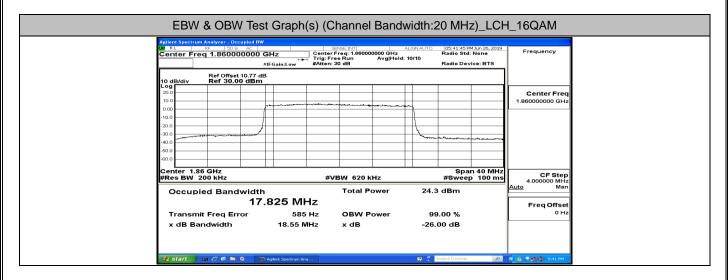


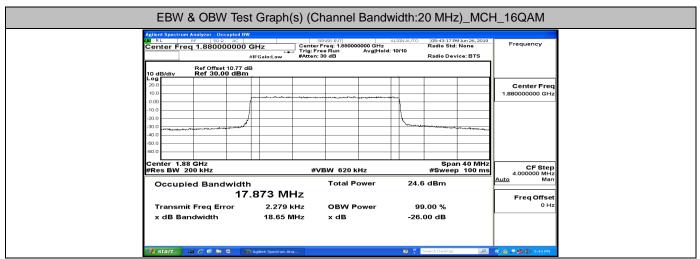


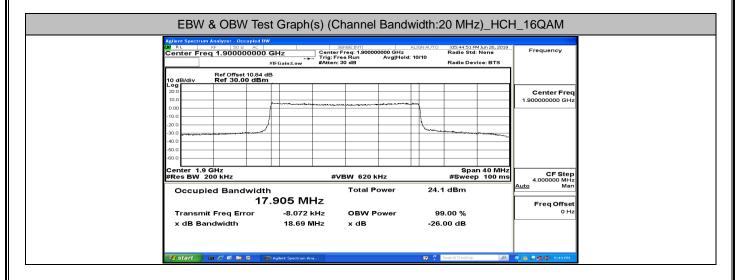












F.4 Band Edge

