Appendix D: Test Data for E-UTRA Band 2

Product Name: Mobile Radio Trade Mark: ANYSECU Test Model: W2plus

Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond.Lu
Supervised by:	Wang.Chuang

D.1 Conducted Output Power

Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict	
Modulation	Charmer	Size	Offset	QPSK	16QAM	verdict	
		1	0	23.19	22.29	PASS	
		1	3	23.26	22.40	PASS	
		1	5	23.16	22.27	PASS	
	LCH	3	0	23.16	22.24	PASS	
		3	2	23.16	22.21	PASS	
		3	3	23.16	22.21	PASS	
		6	0	22.34	21.22	PASS	
		1	0	22.67	21.98	PASS	
		1	3	22.71	22.08	PASS	
QPSK /		1	5	22.64	21.95	PASS	
16QAM	MCH	3	0	22.73	21.69	PASS	
TOQAW		3	2	22.68	21.68	PASS	
		3	3	22.68	21.68	PASS	
		6	0	21.77	20.72	PASS	
		1	0	22.56	21.77	PASS	
		1	3	22.64	21.91	PASS	
		1	5	22.58	21.79	PASS	
	HCH	3	0	22.62	21.64	PASS	
		3	2	22.60	21.63	PASS	
		3	3	22.60	21.68	PASS	
		6	0	21.70	20.78	PASS	

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a nali at		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	23.15	22.32	PASS		
		1	7	23.22	22.40	PASS		
		1	14	23.04	22.22	PASS		
	LCH	8	0	22.31	21.28	PASS		
		8	4	22.29	21.30	PASS		
		8	7	22.26	21.26	PASS		
		15	0	22.22	21.15	PASS		
		1	0	22.61	21.84	PASS		
		1	7	22.72	21.94	PASS		
QPSK /		1	14	22.56	21.81	PASS		
16QAM	MCH	8	0	21.79	20.82	PASS		
TOQAIVI		8	4	21.76	20.82	PASS		
		8	7	21.75	20.78	PASS		
		15	0	21.74	20.72	PASS		
		1	0	22.51	21.83	PASS		
		1	7	22.66	21.97	PASS		
		1	14	22.57	21.87	PASS		
	HCH	8	0	21.65	20.66	PASS		
		8	4	21.66	20.61	PASS		
		8	7	21.66	20.64	PASS		
	_	15	0	21.60	20.59	PASS		

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a.u.di.a.t		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	23.29	22.51	PASS		
		1	12	23.26	22.53	PASS		
		1	24	23.06	22.35	PASS		
	LCH	12	0	22.31	21.40	PASS		
		12	6	22.27	21.36	PASS		
		12	13	22.19	21.31	PASS		
		25	0	22.18	21.20	PASS		
		1	0	22.80	22.07	PASS		
	МСН	1	12	22.85	22.12	PASS		
QPSK /		1	24	22.68	21.99	PASS		
16QAM		12	0	21.86	20.96	PASS		
TOQAIVI		12	6	21.82	20.93	PASS		
		12	13	21.79	20.91	PASS		
		25	0	21.78	20.81	PASS		
		1	0	22.52	21.52	PASS		
		1	12	22.70	21.69	PASS		
		1	24	22.69	21.63	PASS		
	HCH	12	0	21.59	20.63	PASS		
		12	6	21.64	20.68	PASS		
		12	13	21.68	20.72	PASS		
		25	0	21.60	20.63	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a.u.di.a.t			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.24	22.43	PASS			
		1	24	23.02	22.25	PASS			
		1	49	22.71	21.94	PASS			
	LCH	25	0	22.22	21.20	PASS			
		25	12	22.07	21.10	PASS			
		25	25	21.91	20.94	PASS			
		50	0	22.05	21.07	PASS			
		1	0	22.37	21.79	PASS			
		1	24	22.77	22.02	PASS			
QPSK /		1	49	22.58	21.83	PASS			
16QAM	MCH	25	0	21.83	20.82	PASS			
TOQAW		25	12	21.80	20.82	PASS			
		25	25	21.74	20.74	PASS			
		50	0	21.77	20.79	PASS			
		1	0	21.54	21.04	PASS			
		1	24	22.22	21.72	PASS			
		1	49	22.56	21.99	PASS			
	HCH	25	0	20.96	20.10	PASS			
		25	12	21.29	20.53	PASS			
		25	25	21.62	20.66	PASS			
		50	0	21.31	20.50	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Madulation	Channal	RB Configuration		Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.27	22.43	PASS			
		1	37	22.92	22.17	PASS			
		1	74	22.39	21.70	PASS			
	LCH	37	0	22.29	21.22	PASS			
		37	18	22.04	21.00	PASS			
		37	38	21.86	20.78	PASS			
		75	0	22.09	21.03	PASS			
		1	0	22.22	21.63	PASS			
	мсн	1	37	22.87	22.11	PASS			
ODCK /		1	74	22.42	21.70	PASS			
QPSK / 16QAM		37	0	21.81	20.85	PASS			
TOQAW		37	18	21.92	20.86	PASS			
		37	38	21.78	20.72	PASS			
		75	0	21.87	20.82	PASS			
		1	0	22.15	21.29	PASS			
		1	37	21.58	21.02	PASS			
		1	74	22.66	21.91	PASS			
	нсн	37	0	20.99	20.15	PASS			
		37	18	20.87	20.03	PASS			
		37	38	21.33	20.52	PASS			
		75	0	21.15	20.32	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Madulation	Channal	RB Configuration		Average Power [dBm]	Average Power [dBm]	\/a ==li =4			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.43	22.50	PASS			
		1	49	22.85	22.00	PASS			
		1	99	21.82	21.07	PASS			
	LCH	50	0	22.10	21.09	PASS			
		50	25	21.82	20.80	PASS			
		50	50	21.54	20.60	PASS			
		100	0	21.82	20.82	PASS			
		1	0	22.25	21.49	PASS			
	MCH	1	49	22.93	22.05	PASS			
QPSK /		1	99	22.43	21.61	PASS			
16QAM		50	0	21.62	20.74	PASS			
TOQAW		50	25	21.81	20.82	PASS			
		50	50	21.66	20.65	PASS			
		100	0	21.73	20.72	PASS			
		1	0	22.36	21.63	PASS			
		1	49	21.45	20.93	PASS			
		1	99	22.65	22.01	PASS			
	HCH	50	0	21.17	20.21	PASS			
		50	25	20.77	19.99	PASS			
		50	50	20.97	20.18	PASS			
		100	0	21.20	20.30	PASS			

D.2 Peak-to-Average Ratio

Peak-to Average Ratio Test Result (Channel Bandwidth: 1.4 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
iviodulation	Griannei	[dB]	[dB]	verdict			
	LCH	4.23	<13	PASS			
QPSK	MCH	4.72	<13	PASS			
	HCH	4.75	<13	PASS			
16QAM	LCH	5.08	<13	PASS			
	MCH	5.54	<13	PASS			
	HCH	5.53	<13	PASS			

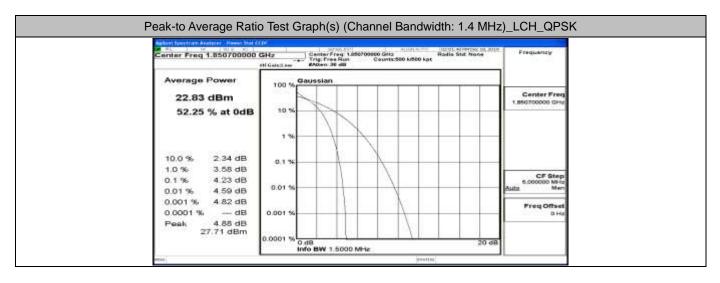
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict			
Modulation	Channel	[dB]	[dB]	Verdict			
	LCH	4.67	<13	PASS			
QPSK	MCH	5.06	<13	PASS			
	HCH	5.08	<13	PASS			
16QAM	LCH	5.5	<13	PASS			
	MCH	5.82	<13	PASS			
	HCH	5.78	<13	PASS			

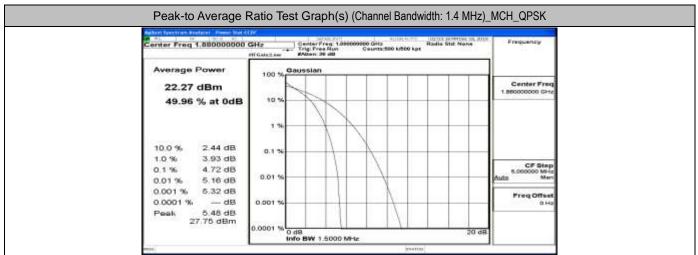
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict		
Modulation	Channel	[dB]	[dB]	Verdict		
	LCH	4.76	<13	PASS		
QPSK	MCH	5.11	<13	PASS		
	HCH	5.15	<13	PASS		
	LCH	5.56	<13	PASS		
16QAM	MCH	5.8	<13	PASS		
	HCH	5.86	<13	PASS		

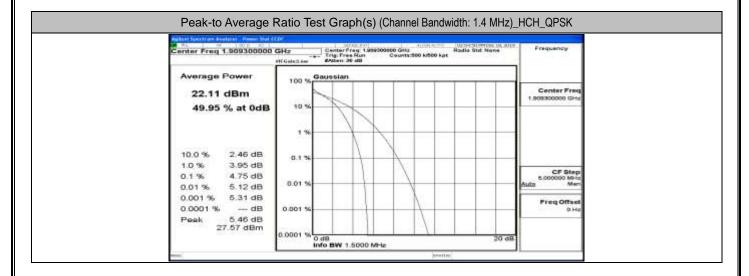
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Griannei	[dB]	[dB]	verdict		
	LCH	5.1	<13	PASS		
QPSK	MCH	5.2	<13	PASS		
	HCH	5.39	<13	PASS		
	LCH	5.77	<13	PASS		
16QAM	MCH	5.89	<13	PASS		
	HCH	6.08	<13	PASS		

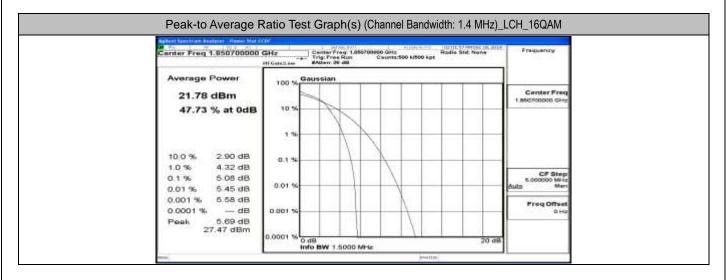
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict				
Modulation	Griannei	[dB]	[dB]	verdict				
	LCH	5.01	<13	PASS				
QPSK	MCH	4.94	<13	PASS				
	HCH	5.08	<13	PASS				
	LCH	6.12	<13	PASS				
16QAM	MCH	6.12	<13	PASS				
	HCH	6.23	<13	PASS				

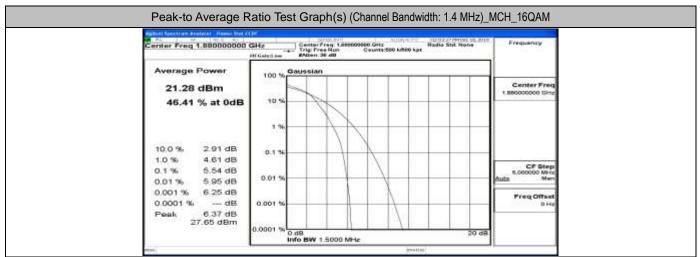
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Madulatian	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.75	<13	PASS
	MCH	5.71	<13	PASS
	HCH	5.82	<13	PASS
16QAM	LCH	6.71	<13	PASS
	MCH	6.7	<13	PASS
	HCH	6.61	<13	PASS

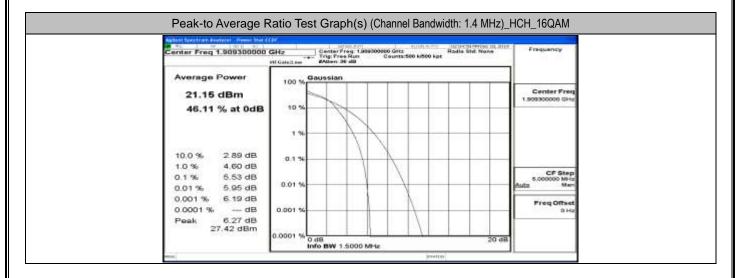


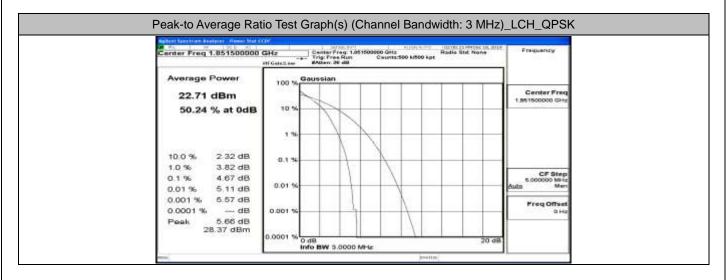


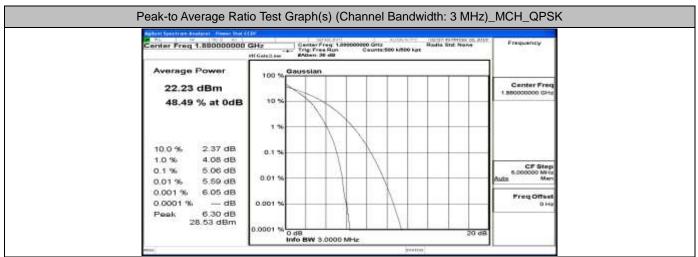


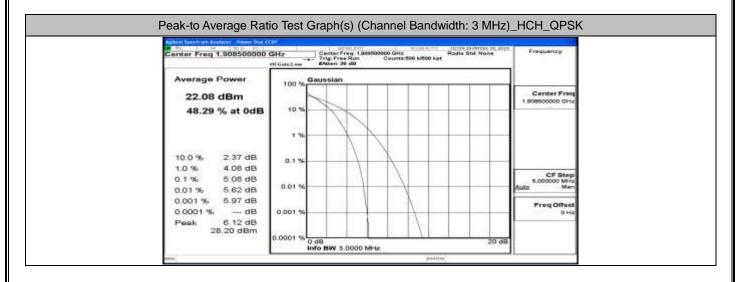


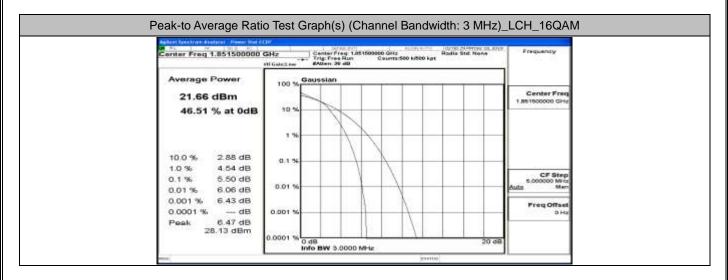


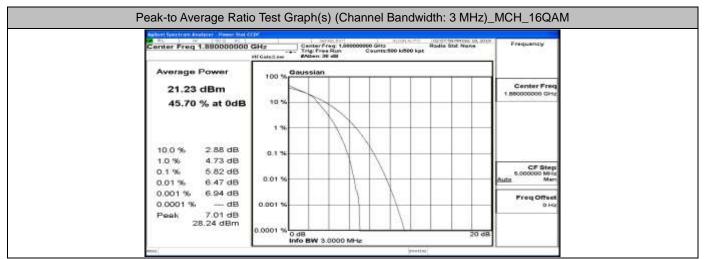


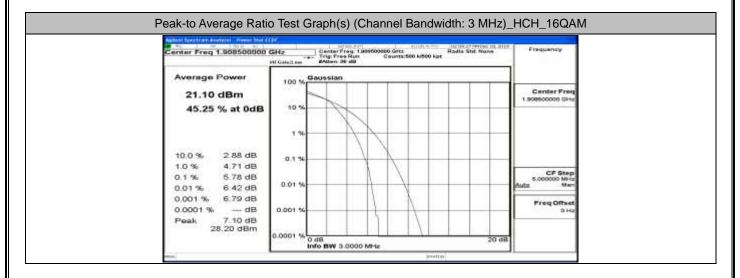


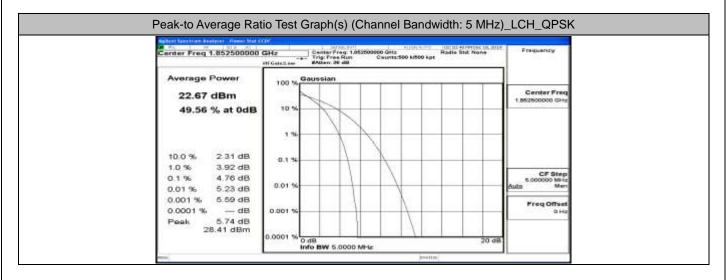


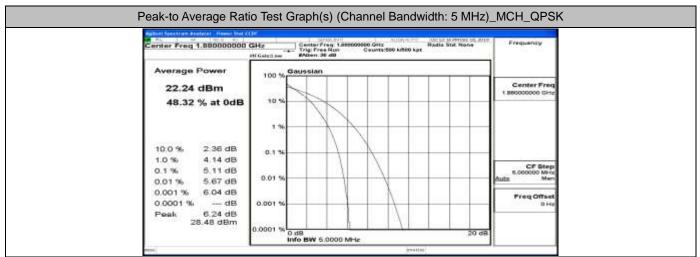


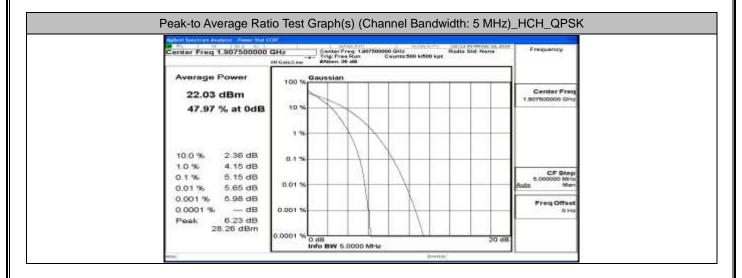


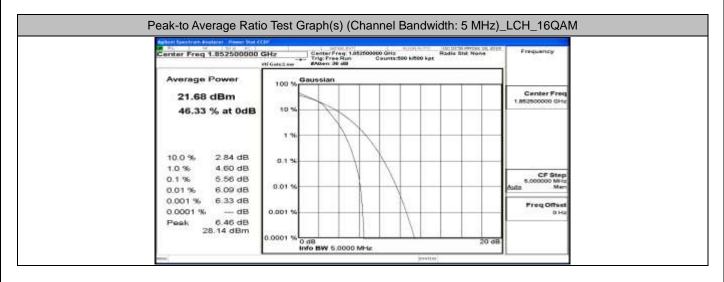


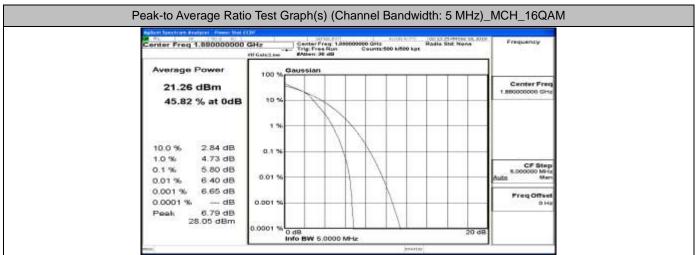


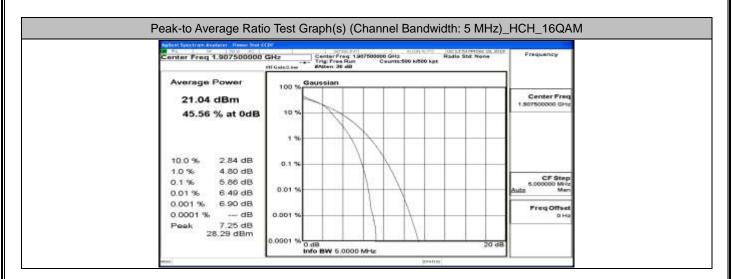




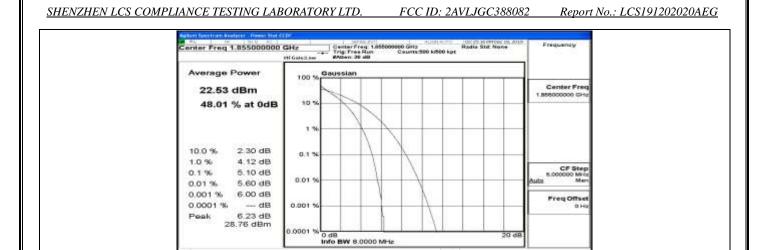


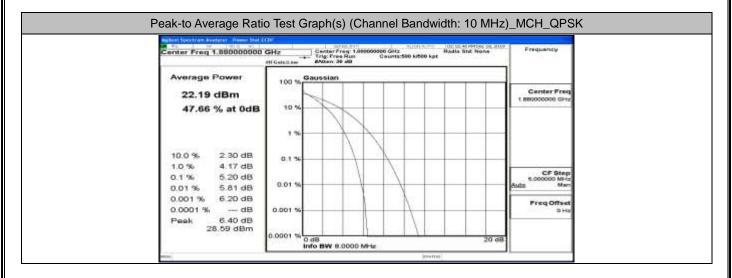


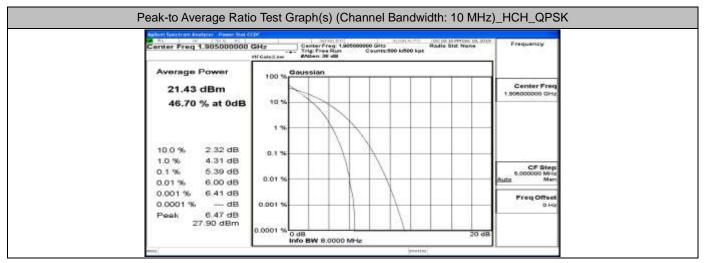


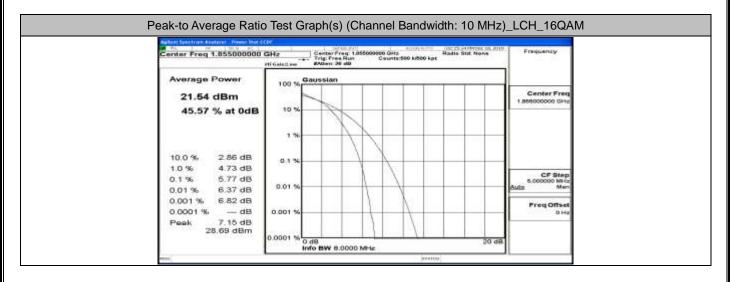


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK

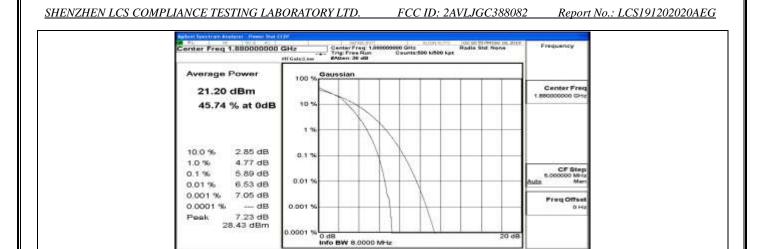


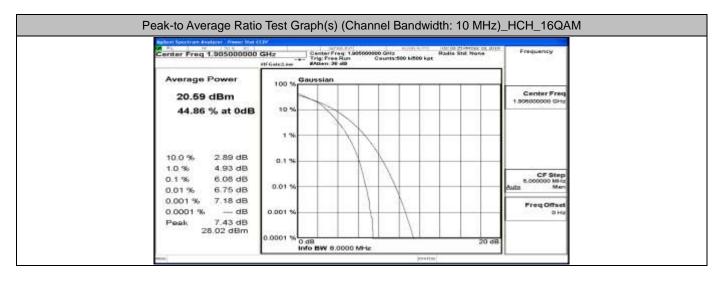


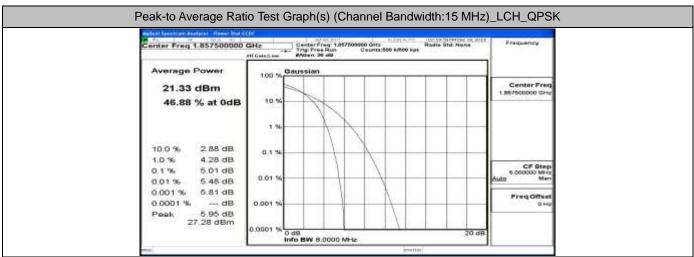


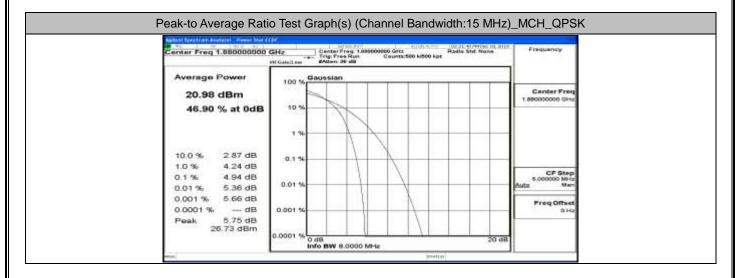


Peak-to Average Ratio Test Graph(s) (Channel Bandwidth: 10 MHz)_MCH_16QAM

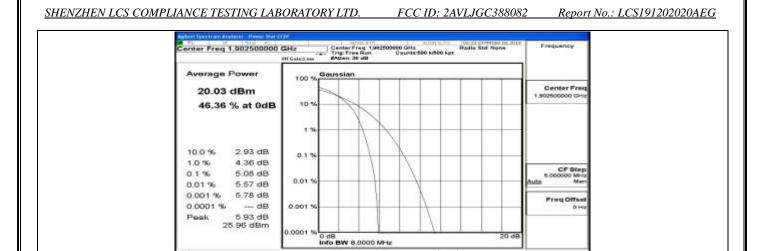


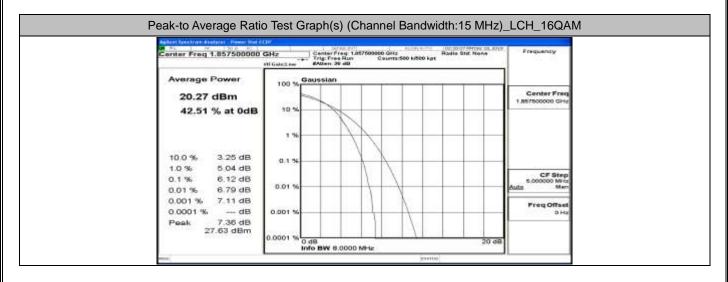


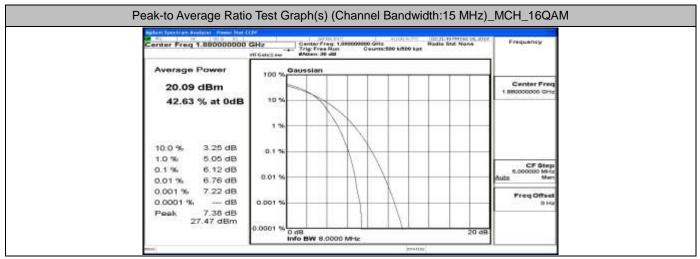


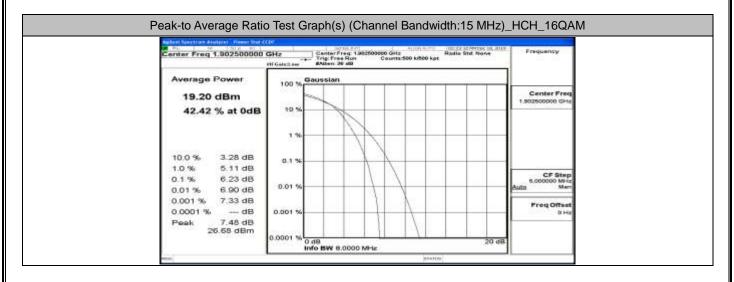


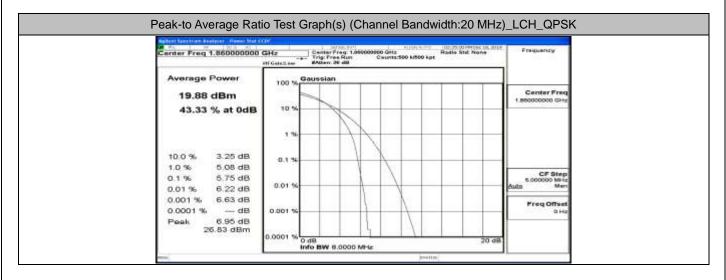
Peak-to Average Ratio Test Graph(s) (Channel Bandwidth:15 MHz)_HCH_QPSK

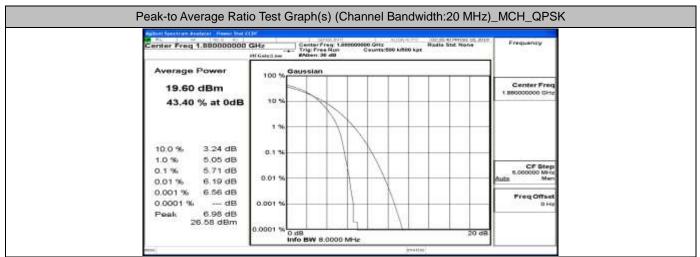


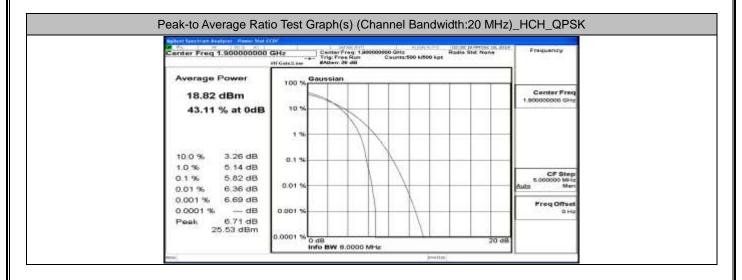


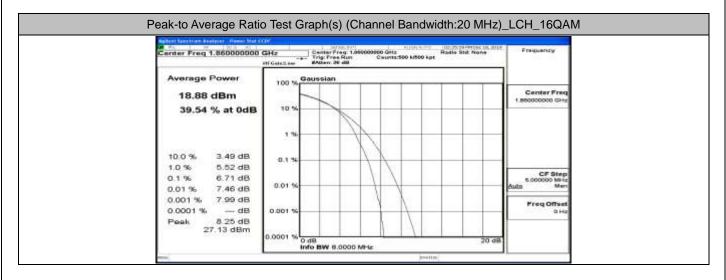


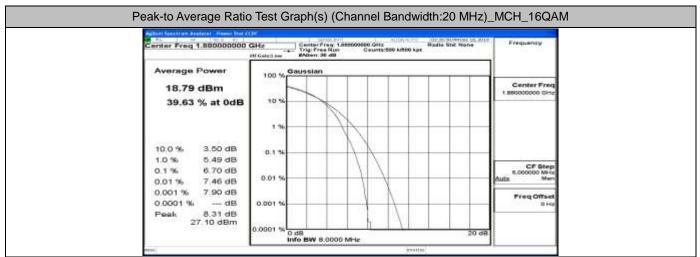


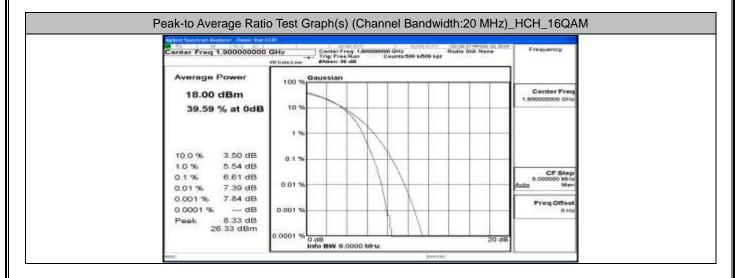












D.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	1.0794	1.251	PASS
	MCH	1.0775	1.209	PASS
	HCH	1.0782	1.228	PASS
16QAM	LCH	1.0825	1.242	PASS
	MCH	1.0786	1.220	PASS
	HCH	1.0784	1.231	PASS

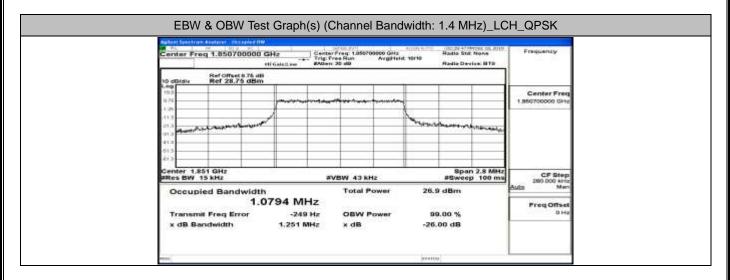
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation	Chame	(MHz)	(MHz)	
QPSK	LCH	2.6834	2.874	PASS
	MCH	2.6836	2.887	PASS
	HCH	2.6824	2.901	PASS
16QAM	LCH	2.6853	2.892	PASS
	MCH	2.6821	2.873	PASS
	HCH	2.6875	2.873	PASS

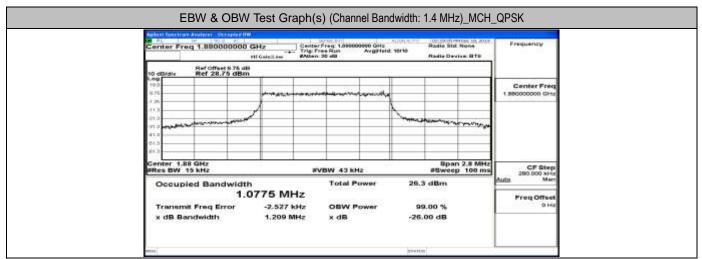
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	4.4819	4.862	PASS	
	MCH	4.4808	4.854	PASS	
	HCH	4.4773	4.816	PASS	
16QAM	LCH	4.4837	4.848	PASS	
	MCH	4.4768	4.826	PASS	
	HCH	4.4858	4.845	PASS	

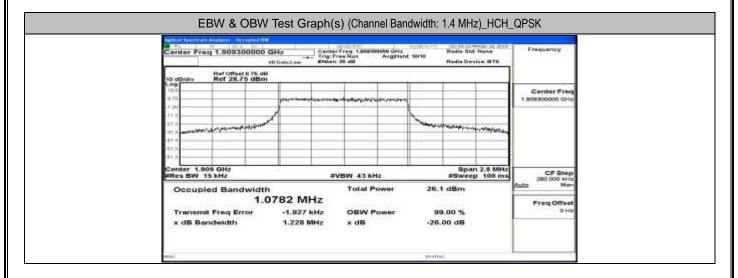
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	8.9421	9.500	PASS	
	MCH	8.9300	9.463	PASS	
	HCH	8.9195	9.420	PASS	
16QAM	LCH	8.9257	9.432	PASS	
	MCH	8.9345	9.493	PASS	
	HCH	8.9325	9.376	PASS	

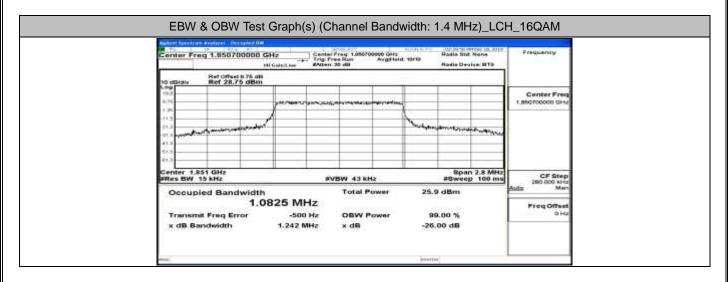
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	13.420	14.13	PASS	
	MCH	13.394	14.08	PASS	
	HCH	13.411	14.02	PASS	
16QAM	LCH	13.406	14.02	PASS	
	MCH	13.393	14.06	PASS	
	HCH	13.413	14.10	PASS	

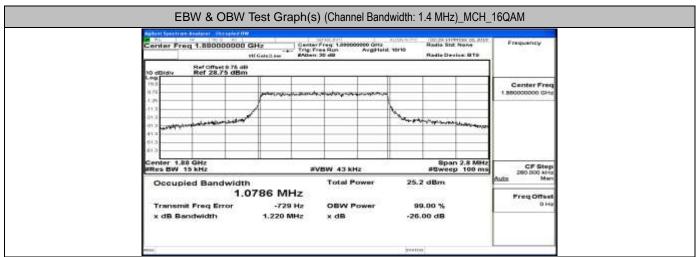
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
Modulation		(MHz)	(MHz)		
QPSK	LCH	17.853	18.67	PASS	
	MCH	17.862	18.64	PASS	
	HCH	17.870	18.68	PASS	
16QAM	LCH	17.877	18.63	PASS	
	MCH	17.864	18.62	PASS	
	HCH	17.844	18.56	PASS	

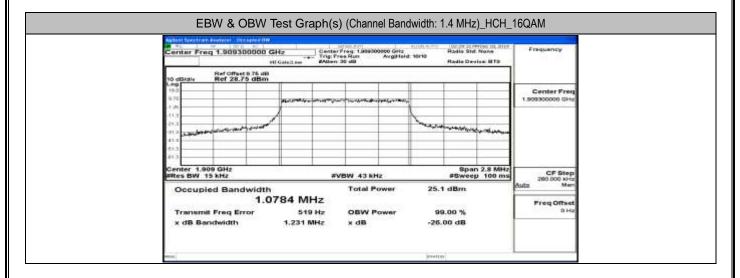


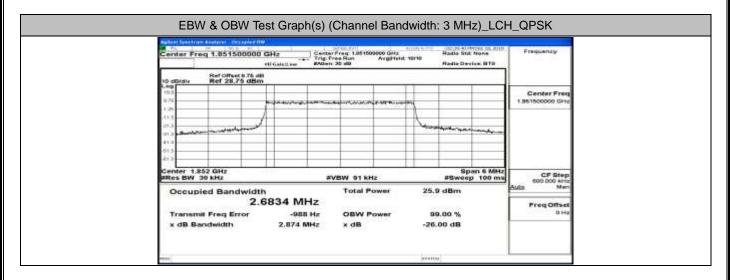


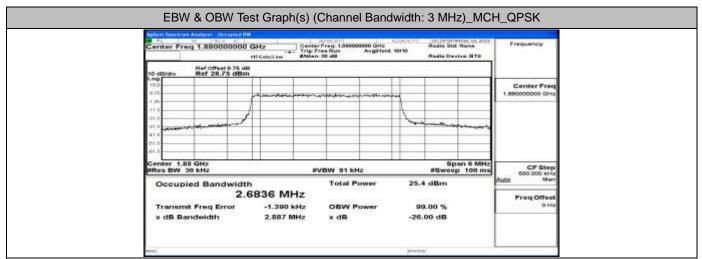


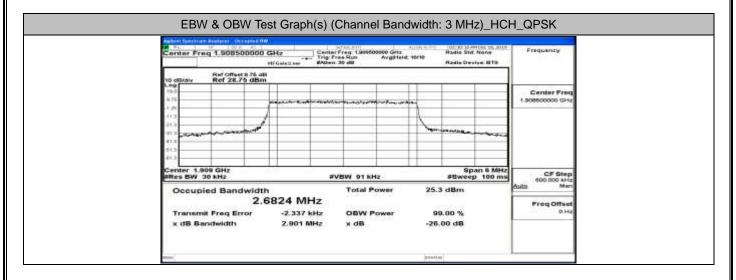


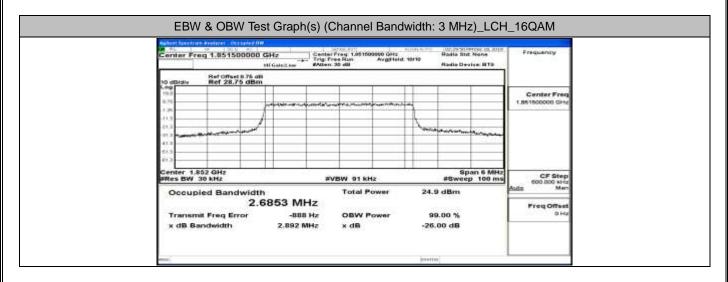


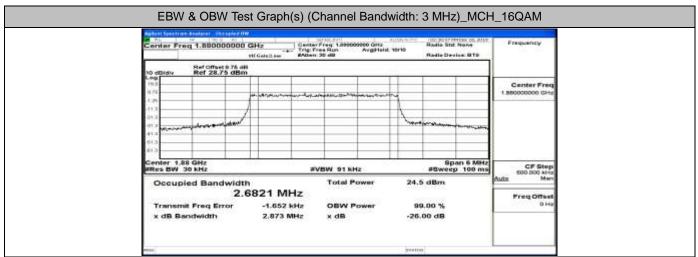


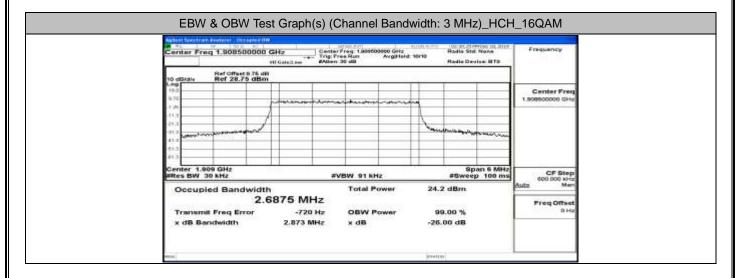


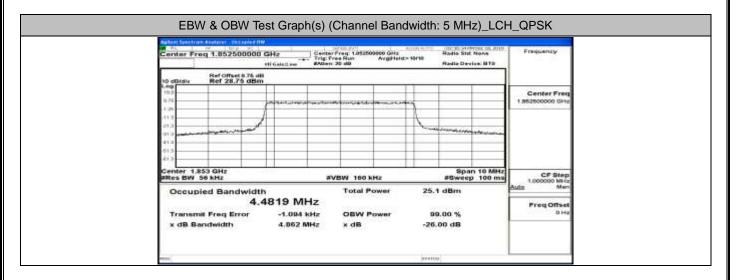


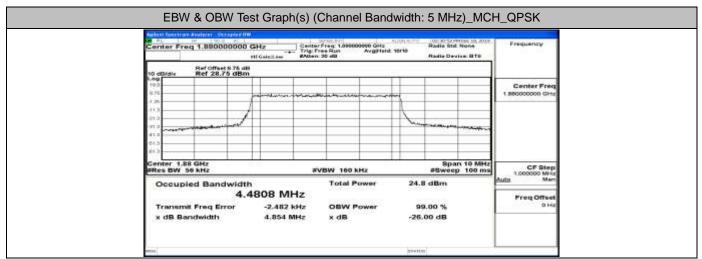


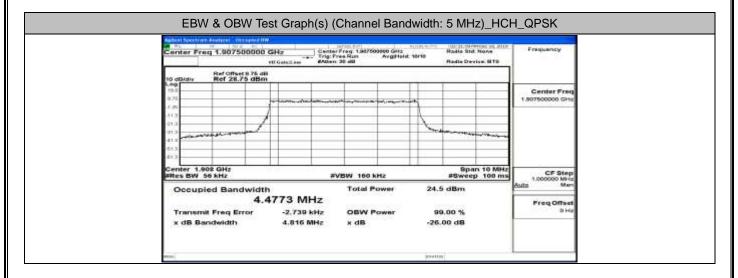


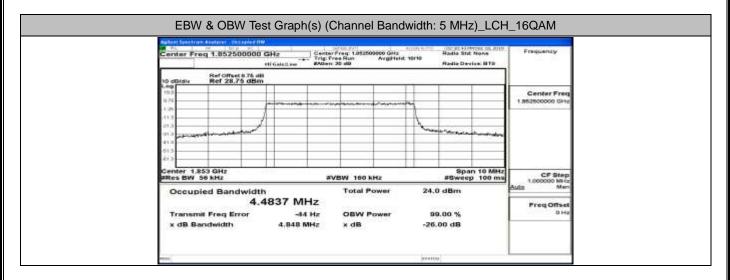


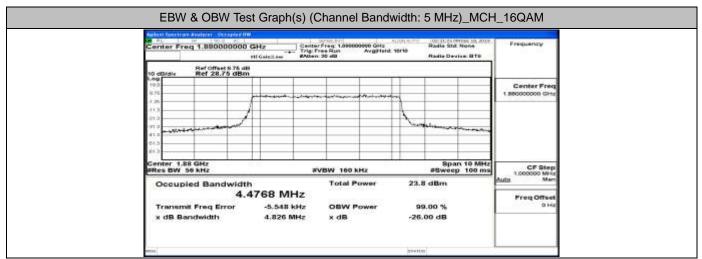


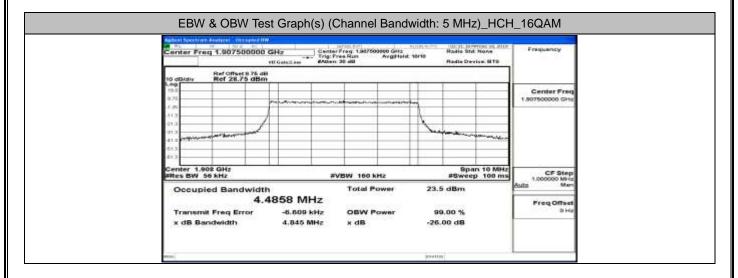


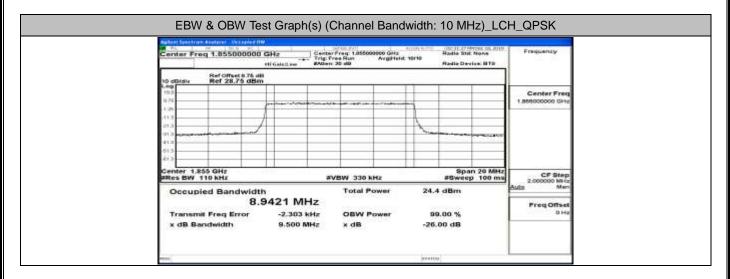


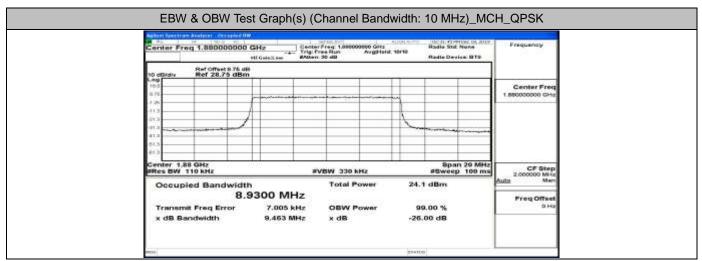


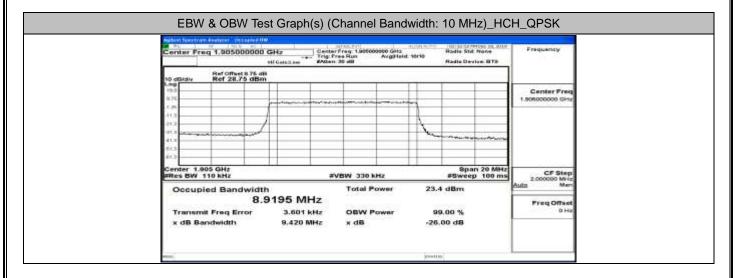


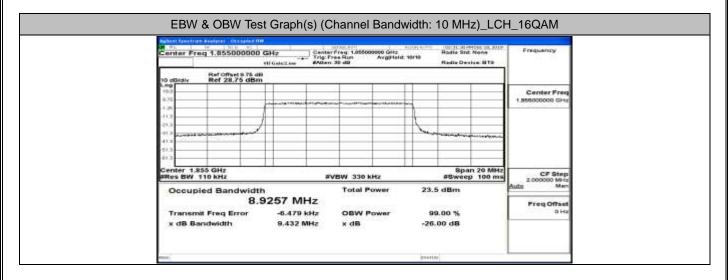


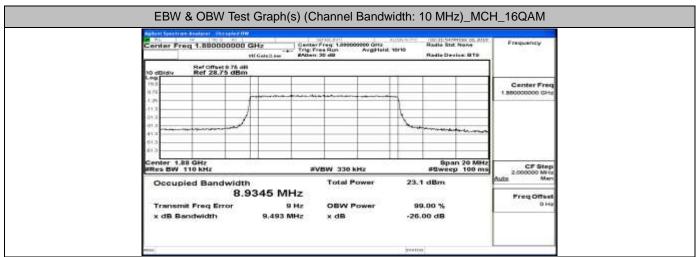


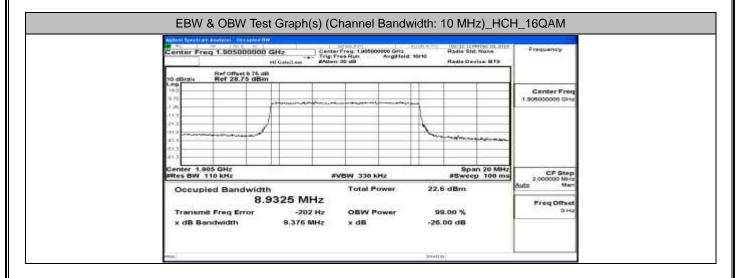


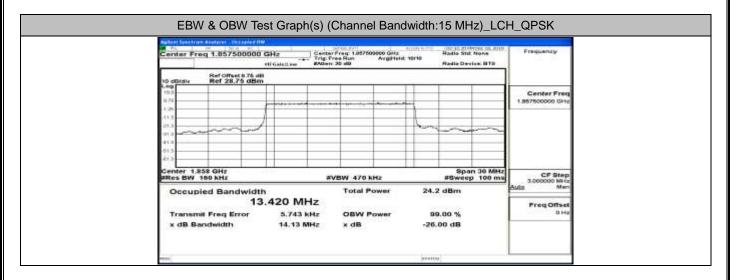


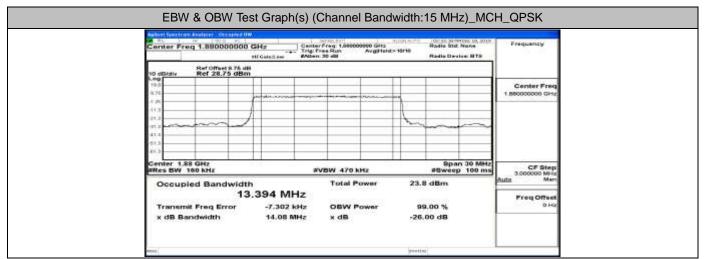


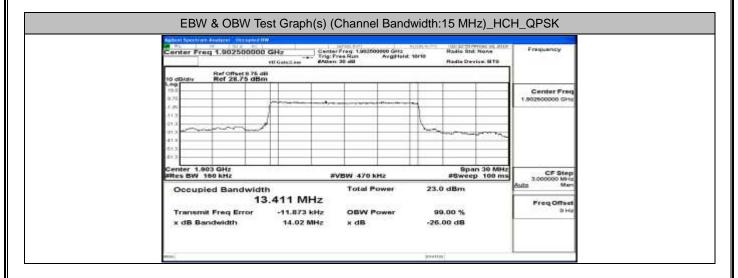


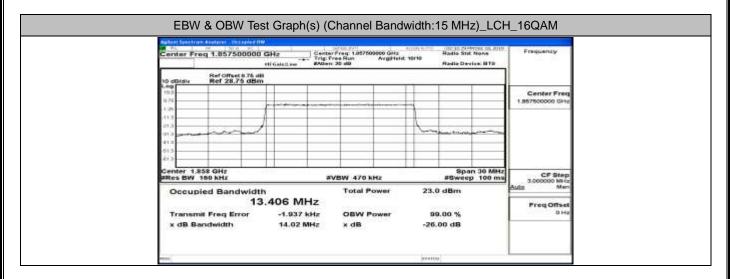


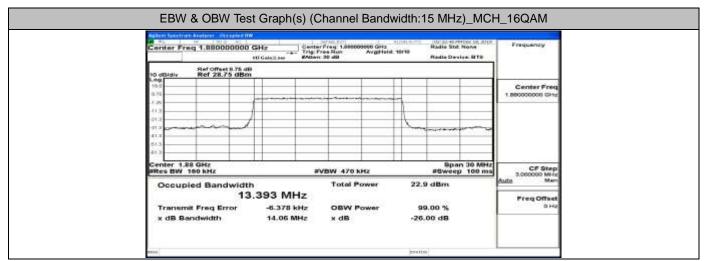


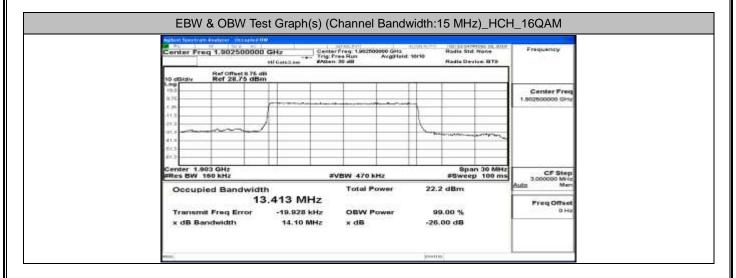


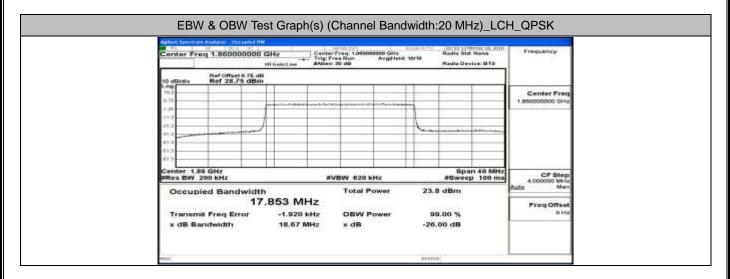


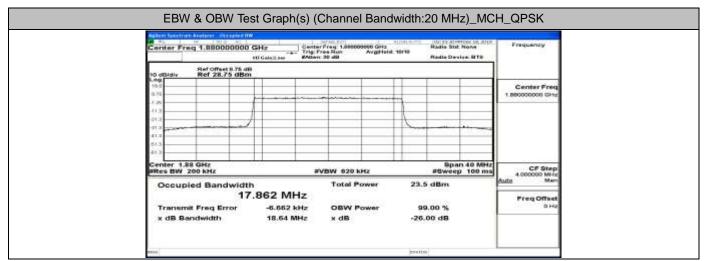


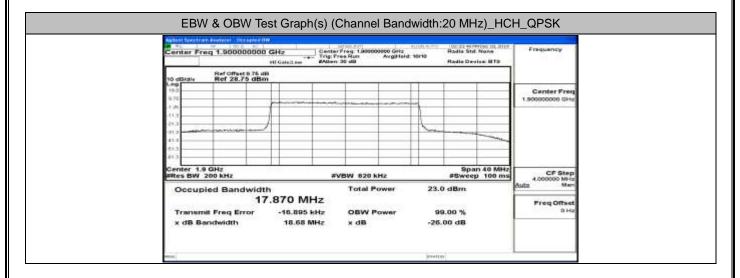


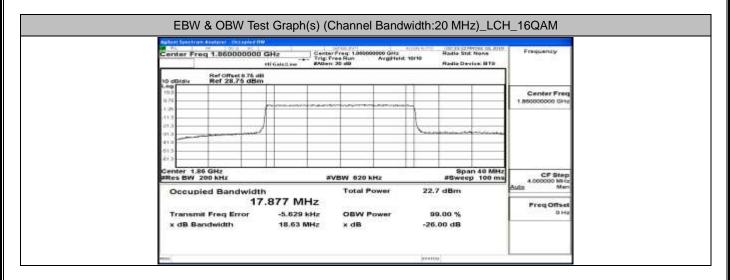


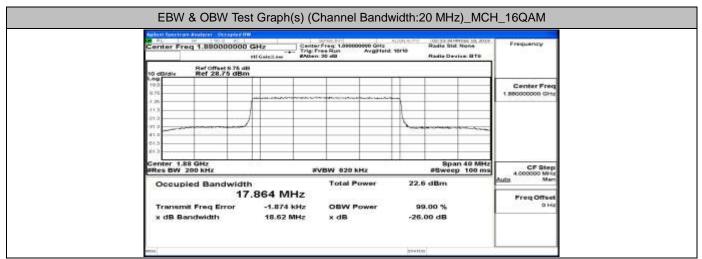


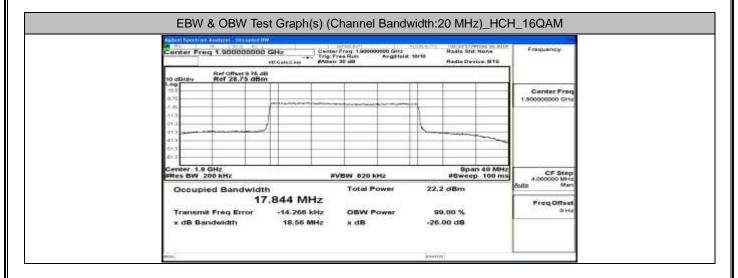




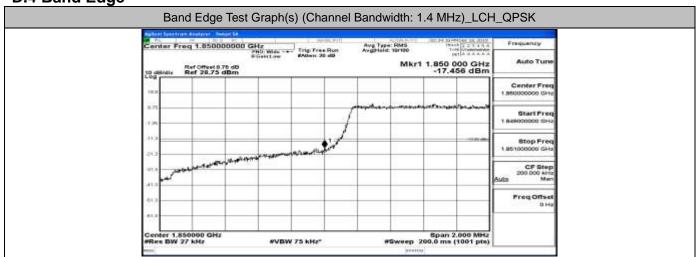


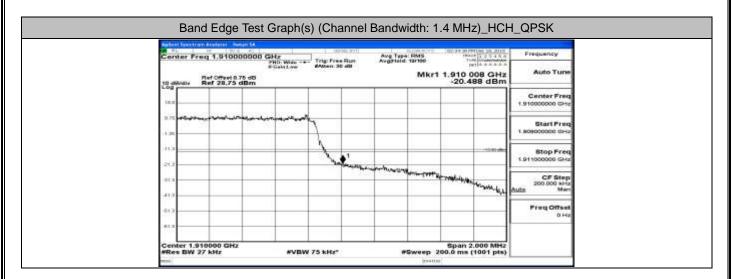


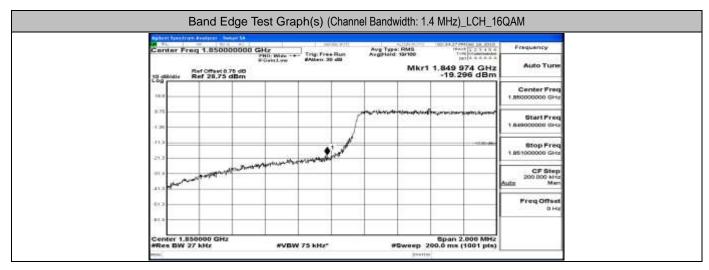


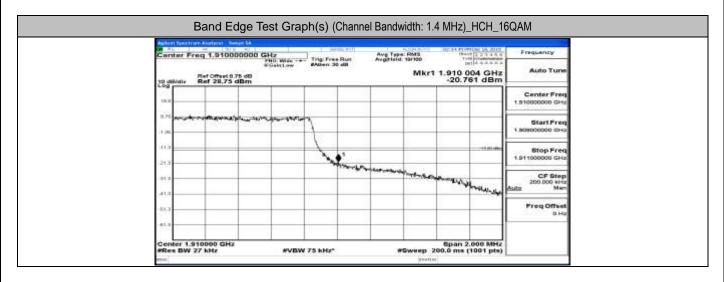


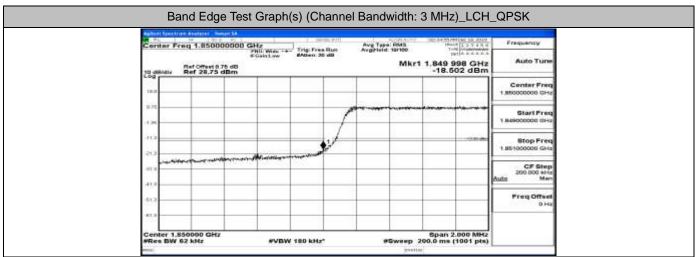
D.4 Band Edge

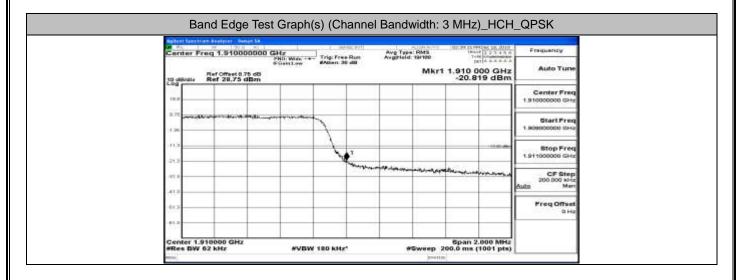


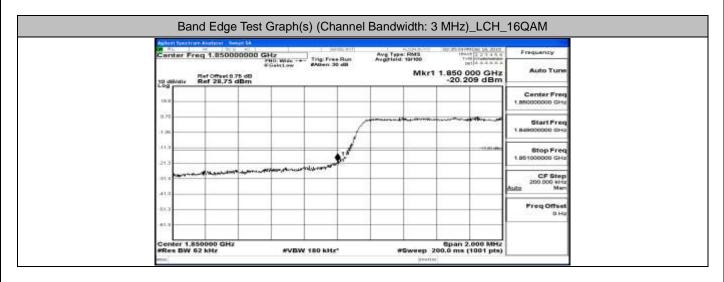


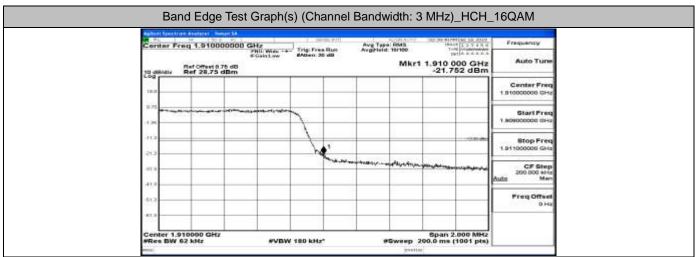


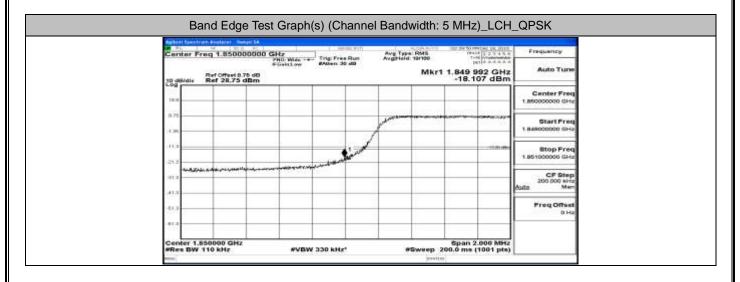


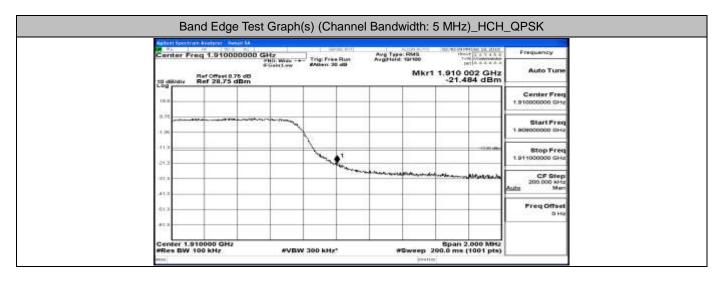


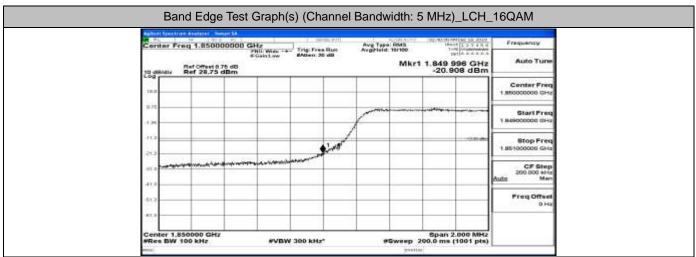


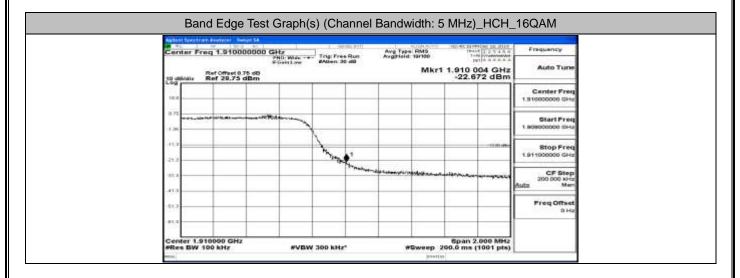




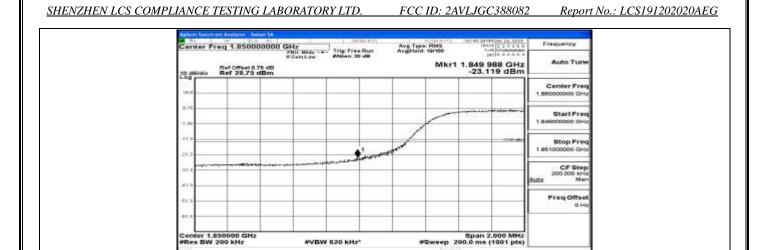


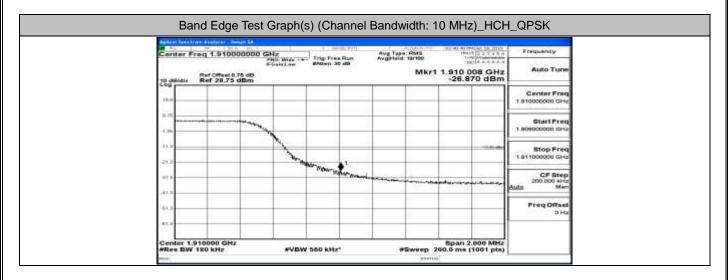


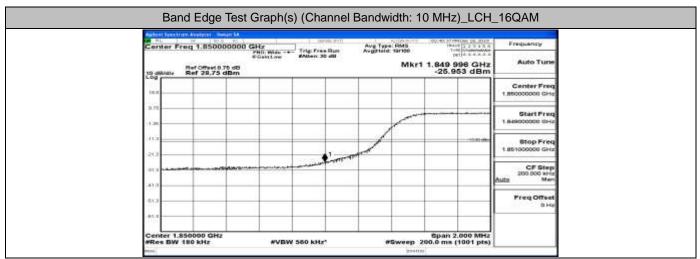


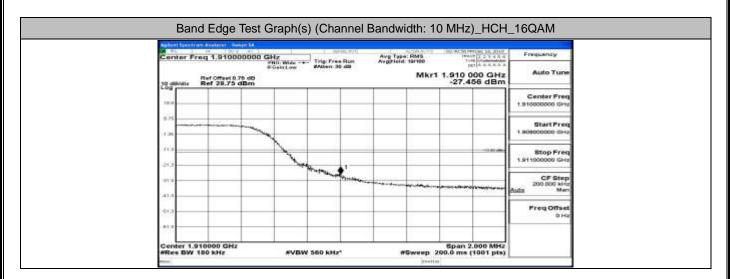


Band Edge Test Graph(s) (Channel Bandwidth: 10 MHz)_LCH_QPSK

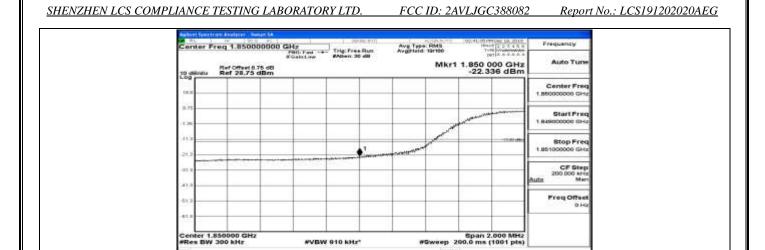


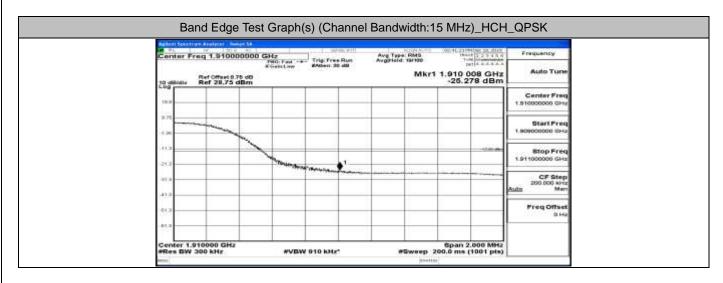


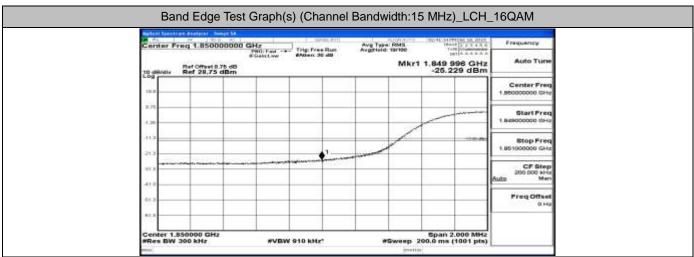


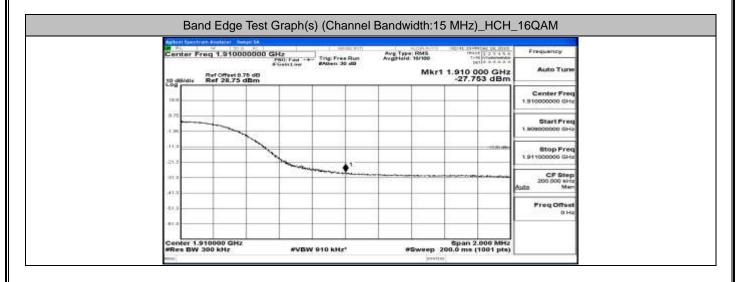


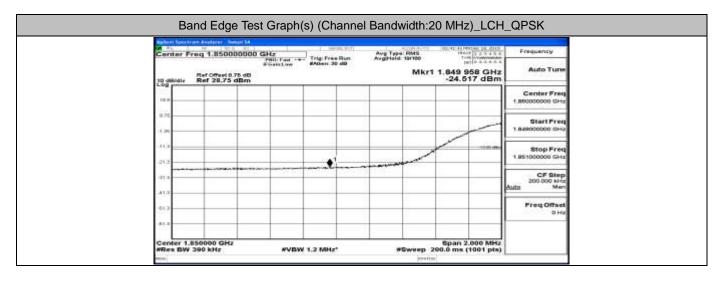
Band Edge Test Graph(s) (Channel Bandwidth:15 MHz)_LCH_QPSK

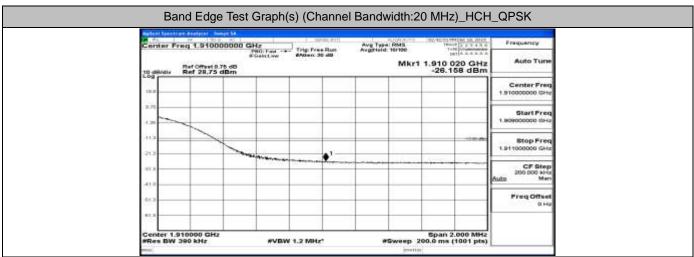


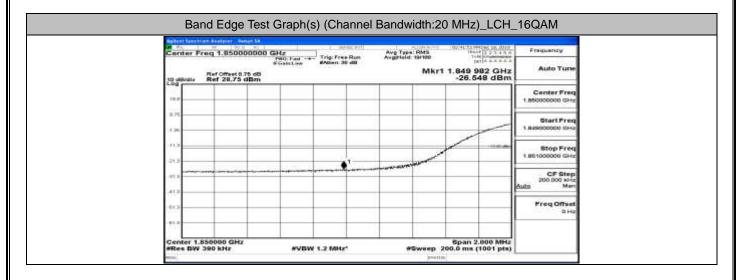


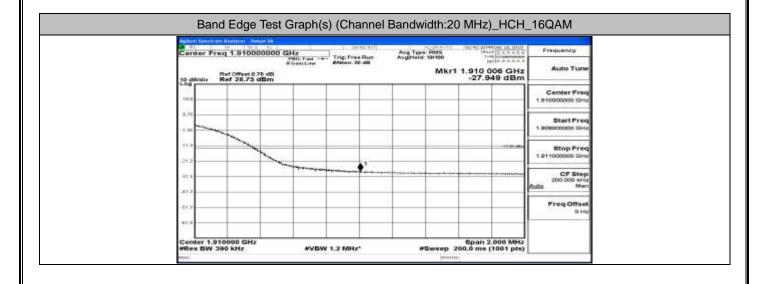




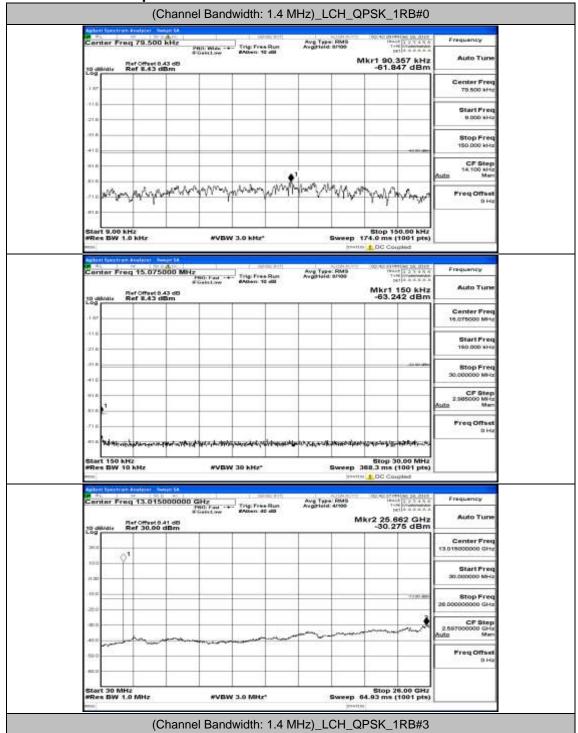


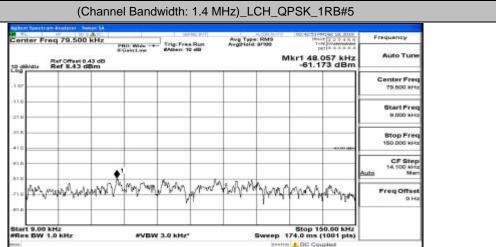


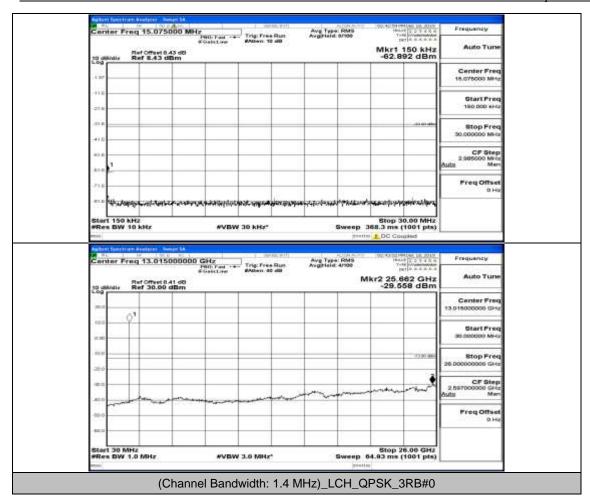


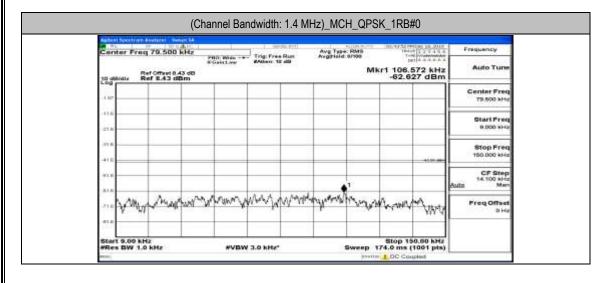


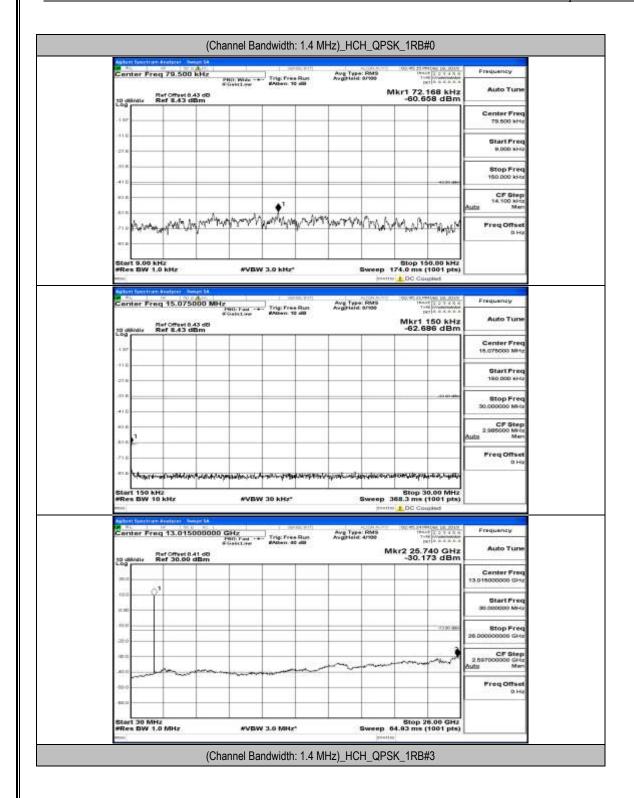
D.5 Conducted Spurious Emission





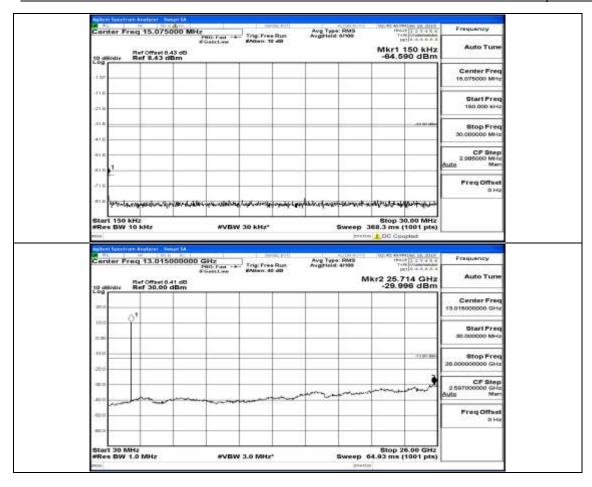


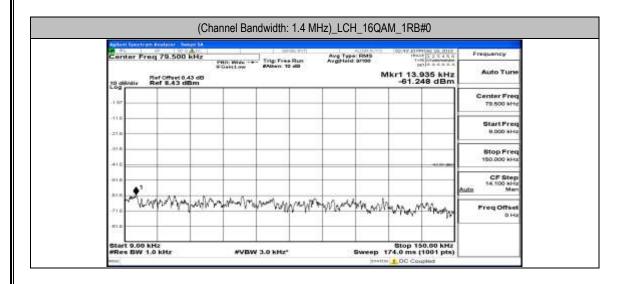


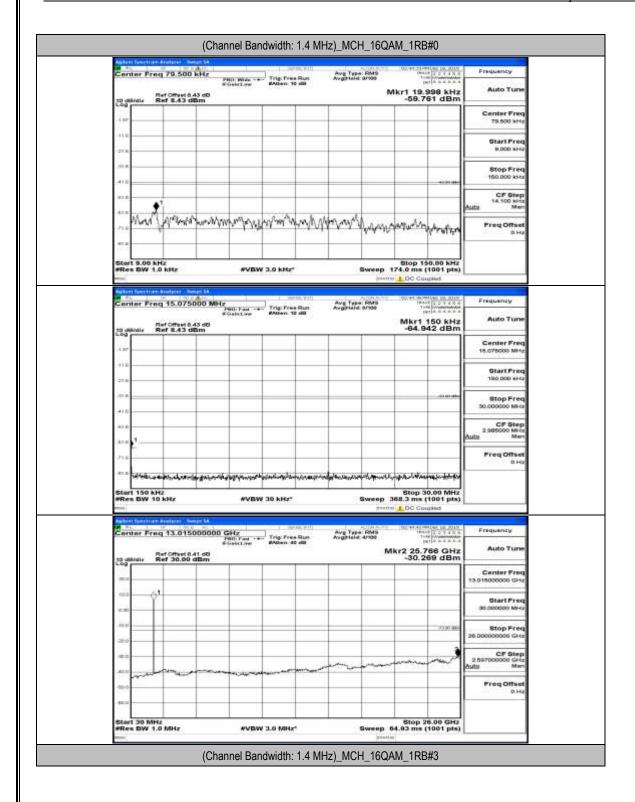


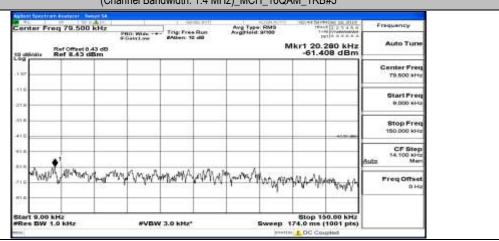
WVBW 3.0 kHz*

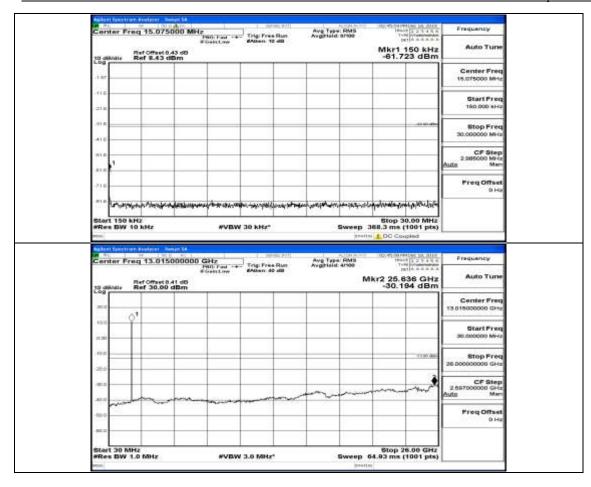
Stop 150.60 kHz Sweep 174.0 ms (1001 pts)

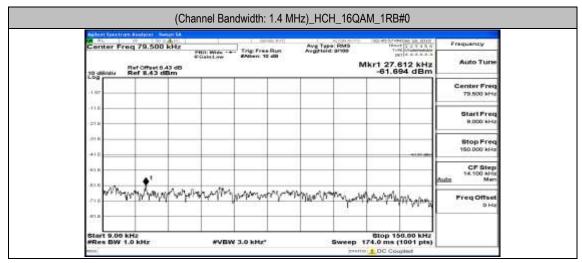




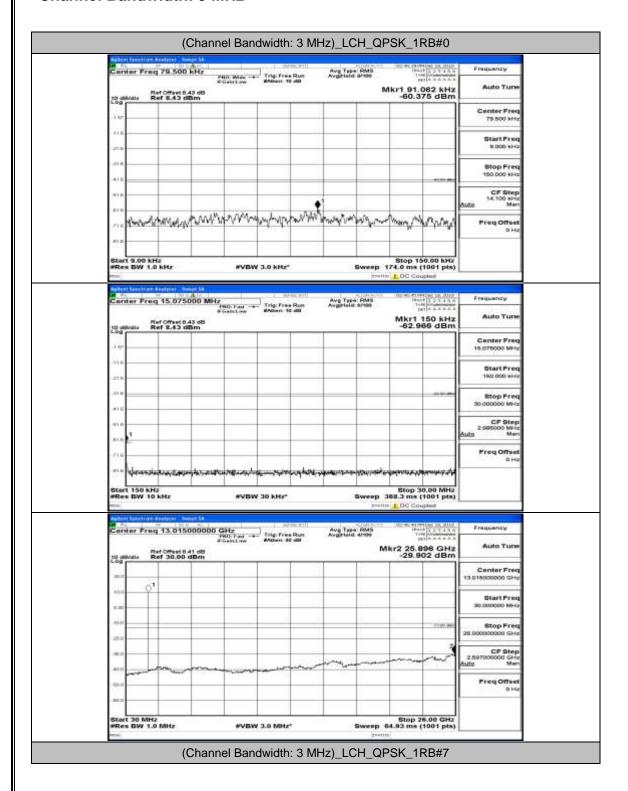


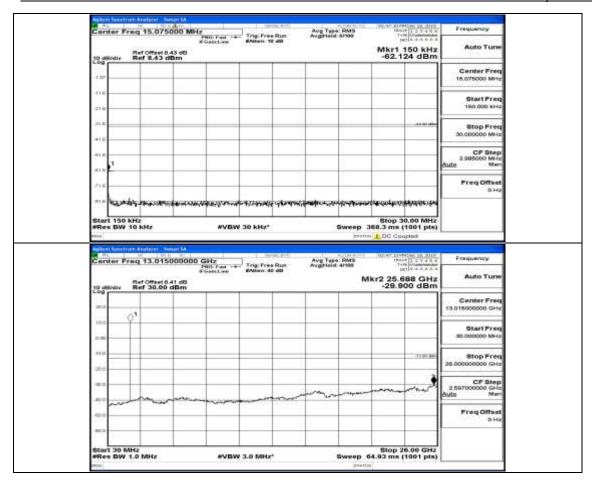


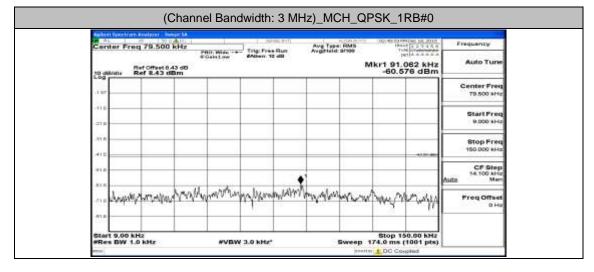


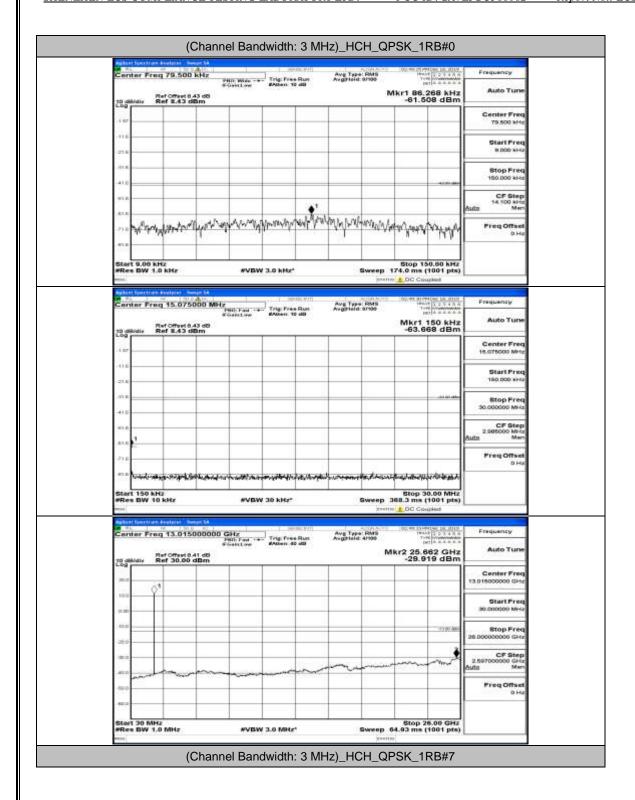


Channel Bandwidth: 3 MHz



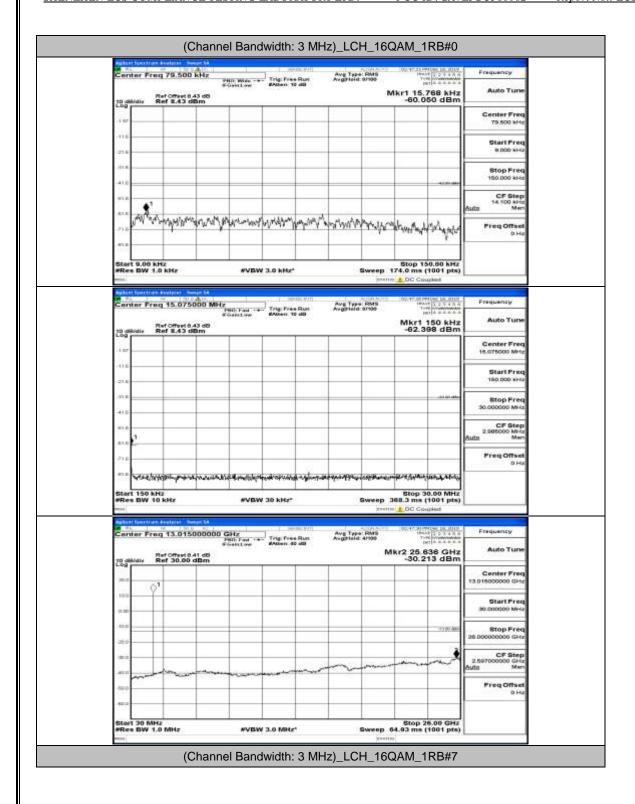






WVBW 3.6 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)



WVBW 3.6 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)

