Appendix B: Test Data for E-UTRA Band 4

Product Name: LTE GSM/WCDMA Smartphone

Trade Mark: DOOGEE Test Model: S70 Lite

Environmental Conditions

Temperature:	22.8
Relative Humidity:	53.2
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Jayden Zhuo

B.1 Conducted Output Power

	Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a.u.di.a.t			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.01	22.28	PASS			
		1	3	23.11	22.45	PASS			
		1	5	23.00	22.31	PASS			
	LCH	3	0	23.11	22.27	PASS			
		3	2	23.15	22.25	PASS			
		3	3	23.09	22.23	PASS			
		6	0	22.09	21.07	PASS			
	MCH	1	0	22.87	22.17	PASS			
		1	3	22.92	22.34	PASS			
QPSK /		1	5	22.89	22.16	PASS			
16QAM		3	0	22.98	21.90	PASS			
TOQAIVI		3	2	22.93	21.95	PASS			
		3	3	22.95	21.93	PASS			
		6	0	21.89	20.83	PASS			
		1	0	22.57	21.82	PASS			
		1	3	22.72	21.98	PASS			
		1	5	22.59	21.84	PASS			
	HCH	3	0	22.70	21.74	PASS			
		3	2	22.76	21.74	PASS			
		3	3	22.70	21.76	PASS			
		6	0	21.64	20.75	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 3 MHz)								
Madulation	Chamal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a naliat			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	23.09	22.34	PASS			
		1	7	23.32	22.58	PASS			
		1	14	23.17	22.40	PASS			
	LCH	8	0	22.08	21.18	PASS			
		8	4	22.14	21.23	PASS			
		8	7	22.10	21.16	PASS			
		15	0	22.07	21.10	PASS			
		1	0	22.91	22.14	PASS			
	MCH	1	7	23.08	22.34	PASS			
QPSK /		1	14	22.84	22.09	PASS			
16QAM		8	0	21.92	20.93	PASS			
TOQAIVI		8	4	21.94	21.01	PASS			
		8	7	21.90	20.93	PASS			
		15	0	21.87	20.85	PASS			
		1	0	22.67	22.00	PASS			
		1	7	22.84	22.22	PASS			
		1	14	22.60	21.98	PASS			
	HCH	8	0	21.67	20.69	PASS			
		8	4	21.69	20.67	PASS			
		8	7	21.65	20.63	PASS			
		15	0	21.60	20.65	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	22.99	22.41	PASS			
		1	12	23.30	22.81	PASS			
		1	24	22.96	22.39	PASS			
	LCH	12	0	22.09	21.28	PASS			
		12	6	22.14	21.34	PASS			
		12	13	22.09	21.25	PASS			
		25	0	22.12	21.17	PASS			
	MCH	1	0	22.80	22.21	PASS			
		1	12	23.08	22.49	PASS			
QPSK /		1	24	22.75	22.06	PASS			
16QAM		12	0	21.89	21.05	PASS			
TOQAIVI		12	6	21.98	21.11	PASS			
		12	13	21.84	20.98	PASS			
		25	0	21.87	20.93	PASS			
		1	0	22.60	21.59	PASS			
		1	12	22.85	21.93	PASS			
		1	24	22.55	21.55	PASS			
	HCH	12	0	21.66	20.71	PASS			
		12	6	21.68	20.79	PASS			
		12	13	21.59	20.66	PASS			
	_	25	0	21.69	20.70	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)								
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict			
		1	0	23.03	22.29	PASS			
		1	24	23.28	22.57	PASS			
		1	49	23.08	22.37	PASS			
	LCH	25	0	22.18	21.19	PASS			
		25	12	22.15	21.17	PASS			
		25	25	22.22	21.22	PASS			
		50	0	22.16	21.21	PASS			
	MCH	1	0	22.87	22.16	PASS			
		1	24	23.05	22.28	PASS			
QPSK /		1	49	22.77	21.99	PASS			
16QAM		25	0	21.96	20.96	PASS			
TOQAW		25	12	21.94	20.95	PASS			
		25	25	21.90	20.90	PASS			
		50	0	21.95	20.91	PASS			
		1	0	22.64	22.03	PASS			
		1	24	22.84	22.19	PASS			
		1	49	22.56	21.98	PASS			
	HCH	25	0	21.82	20.86	PASS			
		25	12	21.73	20.75	PASS			
		25	25	21.59	20.63	PASS			
		50	0	21.71	20.76	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)								
Modulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict			
		1	0	23.02	22.27	PASS			
		1	37	23.34	22.50	PASS			
		1	74	22.95	22.25	PASS			
	LCH	37	0	22.13	21.14	PASS			
		37	18	22.15	21.17	PASS			
		37	38	22.18	21.17	PASS			
		75	0	22.17	21.16	PASS			
		1	0	22.78	22.07	PASS			
	мсн	1	37	23.03	22.23	PASS			
QPSK /		1	74	22.65	21.88	PASS			
16QAM		37	0	21.93	20.90	PASS			
TOQAIVI		37	18	21.99	20.95	PASS			
		37	38	21.90	20.84	PASS			
		75	0	21.97	20.93	PASS			
		1	0	22.70	21.90	PASS			
		1	37	22.92	22.07	PASS			
		1	74	22.53	21.77	PASS			
	HCH	37	0	21.86	20.81	PASS			
		37	18	21.80	20.82	PASS			
		37	38	21.66	20.68	PASS			
		75	0	21.83	20.75	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Modulation	Channel		figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
		Size	Offset	QPSK	16QAM				
		1	0	23.02	22.20	PASS			
		1	49	23.41	22.56	PASS			
		1	99	22.94	22.13	PASS			
	LCH	50	0	22.04	21.04	PASS			
		50	25	22.15	21.14	PASS			
		50	50	22.17	21.12	PASS			
		100	0	22.14	21.09	PASS			
	МСН	1	0	22.93	22.04	PASS			
		1	49	23.16	22.31	PASS			
QPSK /		1	99	22.65	21.78	PASS			
16QAM		50	0	21.84	20.80	PASS			
TOQAIVI		50	25	21.93	20.89	PASS			
		50	50	21.76	20.74	PASS			
		100	0	21.80	20.84	PASS			
		1	0	22.74	22.03	PASS			
		1	49	22.95	22.27	PASS			
		1	99	22.54	21.86	PASS			
	HCH	50	0	21.80	20.87	PASS			
		50	25	21.76	20.80	PASS			
		50	50	21.57	20.63	PASS			
		100	0	21.64	20.66	PASS			

B.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	5.41	<13	PASS				
QPSK	MCH	5.11	<13	PASS				
	HCH	5.17	<13	PASS				
	LCH	6.36	<13	PASS				
16QAM	MCH	6.04	<13	PASS				
	HCH	6.08	<13	PASS				

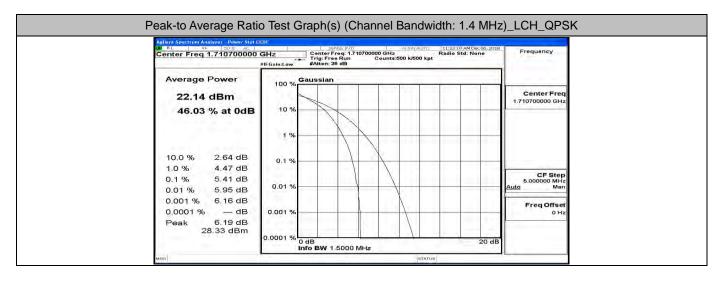
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Channel	[dB]	[dB]	verdict			
	LCH	5.44	<13	PASS			
QPSK	MCH	5.2	<13	PASS			
	HCH	5.29	<13	PASS			
	LCH	6.37	<13	PASS			
16QAM	MCH	6.13	<13	PASS			
	HCH	6.09	<13	PASS			

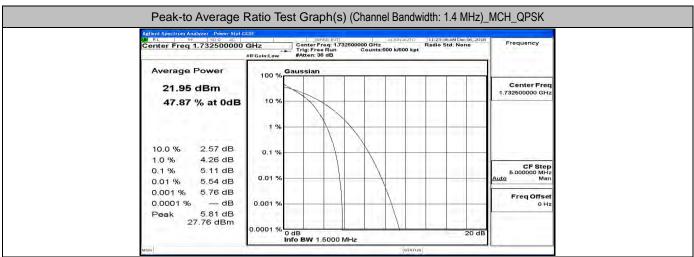
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Griannei	[dB]	[dB]	verdict			
	LCH	5.48	<13	PASS			
QPSK	MCH	5.25	<13	PASS			
	HCH	5.3	<13	PASS			
	LCH	6.32	<13	PASS			
16QAM	MCH	6.04	<13	PASS			
	HCH	6.11	<13	PASS			

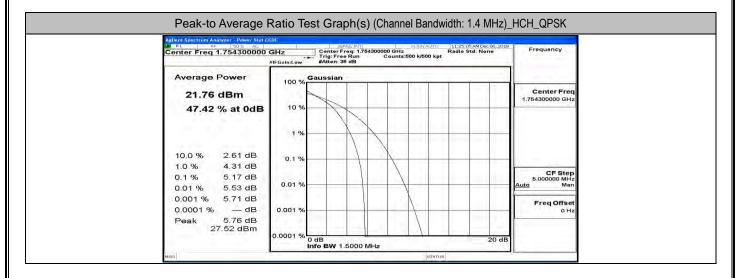
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
iviodulation	Griannei	[dB]	[dB]	verdict			
	LCH	5.57	<13	PASS			
QPSK	MCH	5.32	<13	PASS			
	HCH	5.34	<13	PASS			
	LCH	6.28	<13	PASS			
16QAM	MCH	6.06	<13	PASS			
	HCH	6.07	<13	PASS			

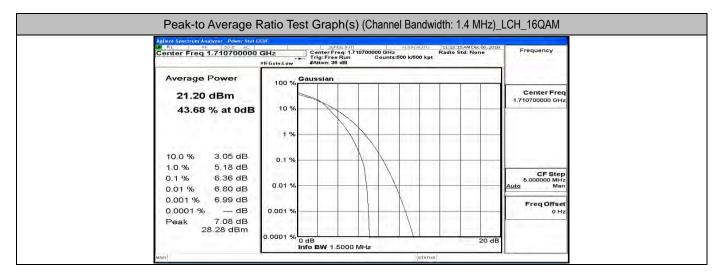
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)							
Modulation	Channel	Peak-to-Average Ratio	Limit	Vordict				
Modulation	Chame	[dB]	[dB]	Verdict				
	LCH	5.04	<13	PASS				
QPSK	MCH	5.02	<13	PASS				
	HCH	4.93	<13	PASS				
	LCH	6.34	<13	PASS				
16QAM	MCH	6.24	<13	PASS				
	HCH	6.19	<13	PASS				

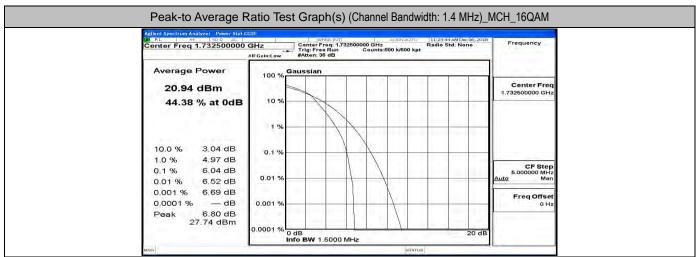
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
Mandadatian	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.73	<13	PASS
	MCH	5.69	<13	PASS
	HCH	5.71	<13	PASS
16QAM	LCH	6.83	<13	PASS
	MCH	6.78	<13	PASS
	HCH	6.68	<13	PASS

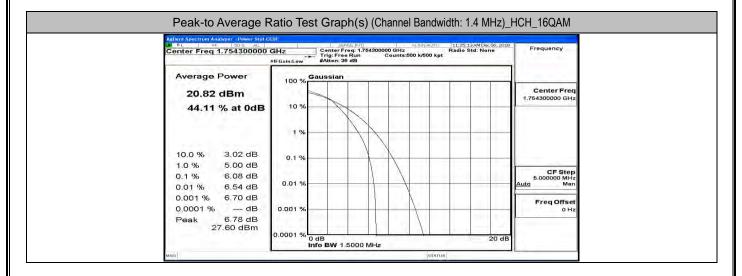


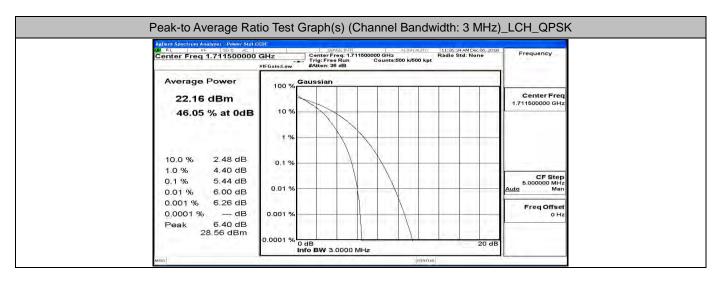


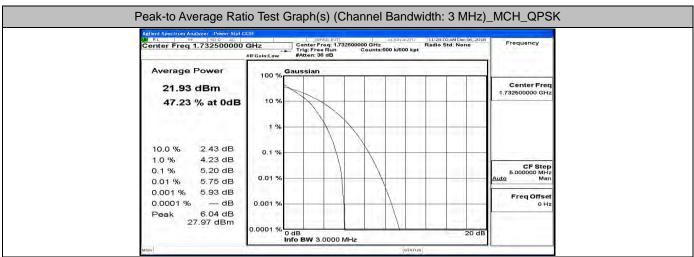


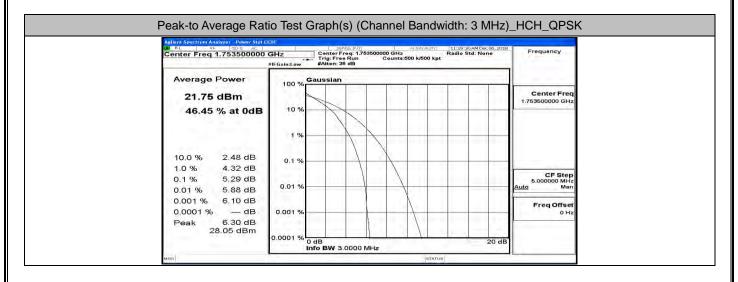


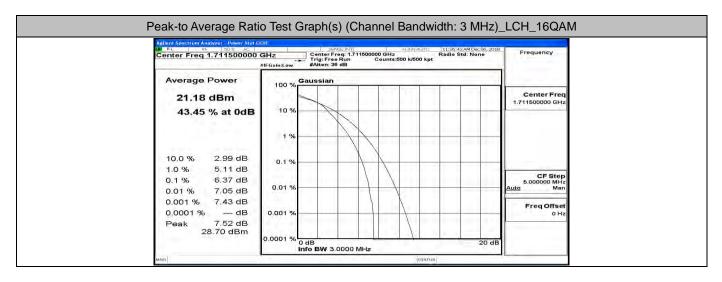


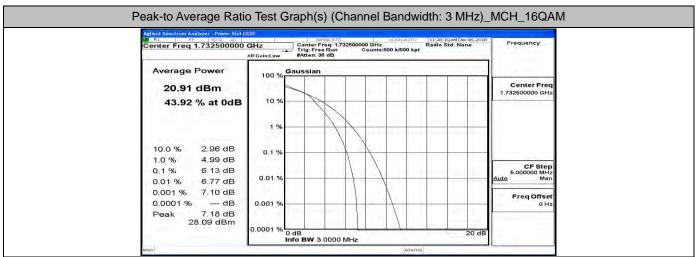


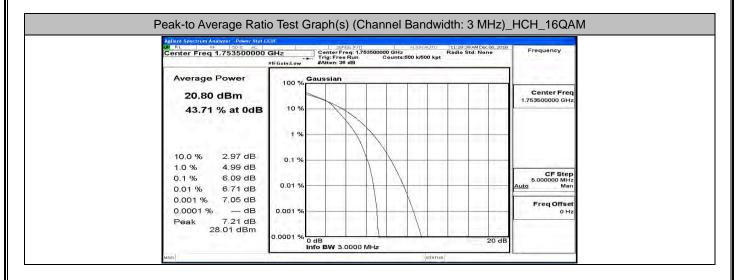


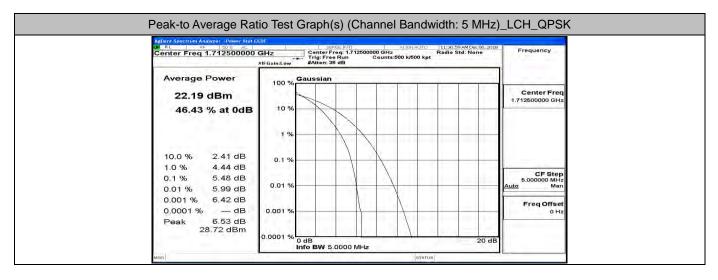


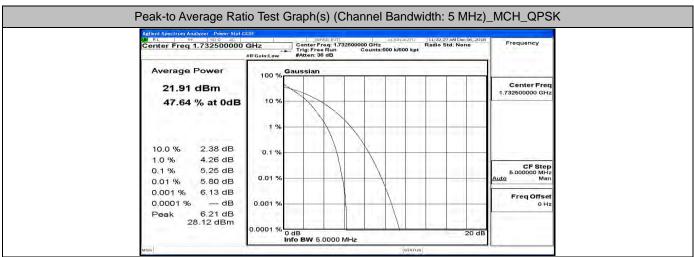


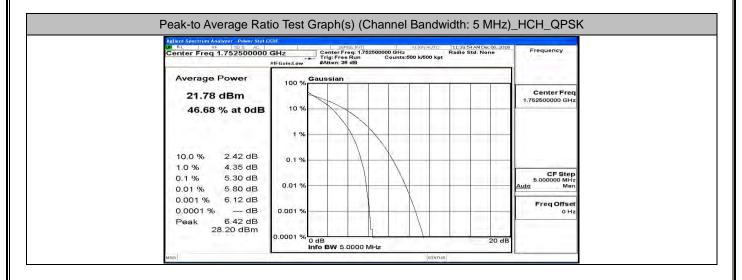


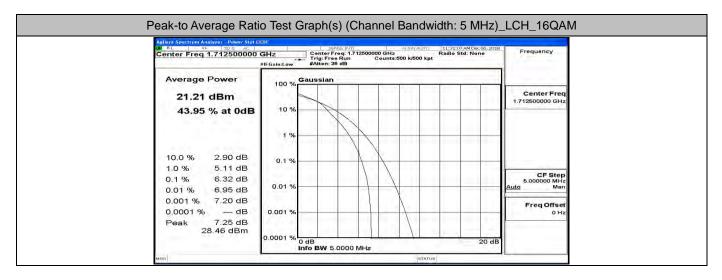


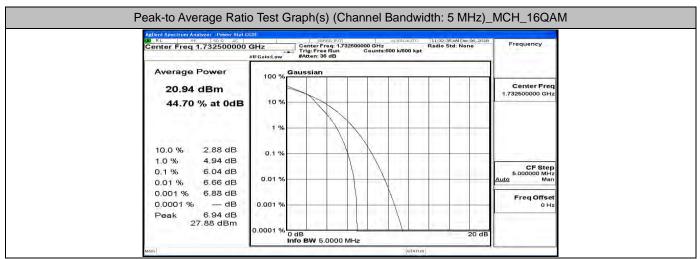


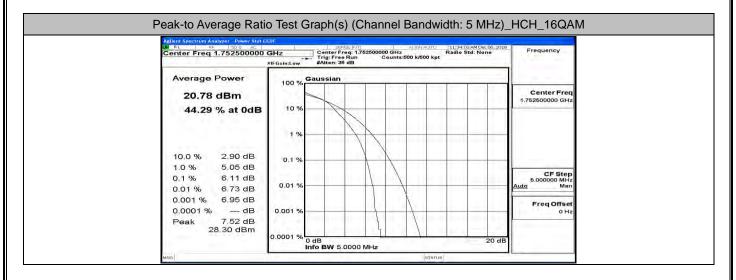


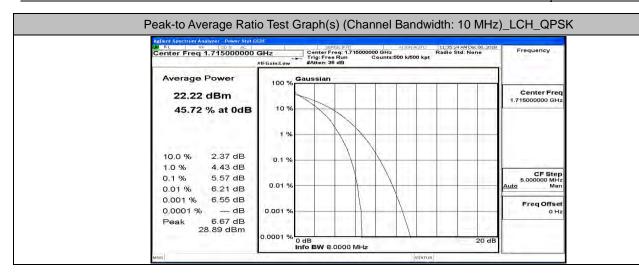


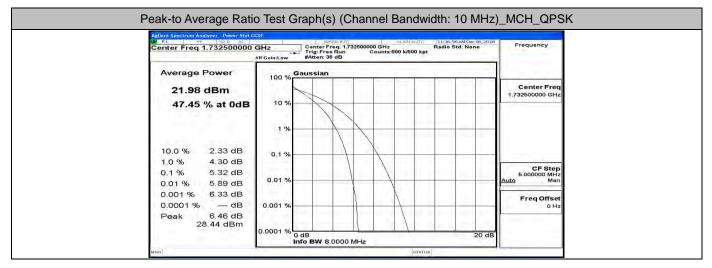


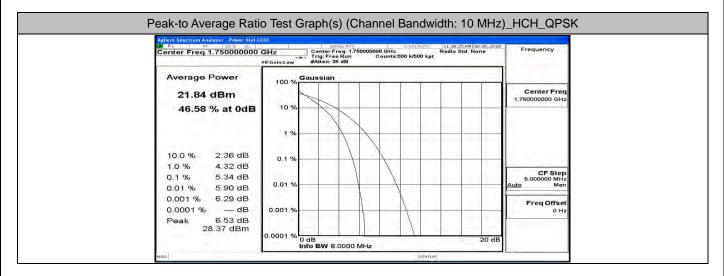


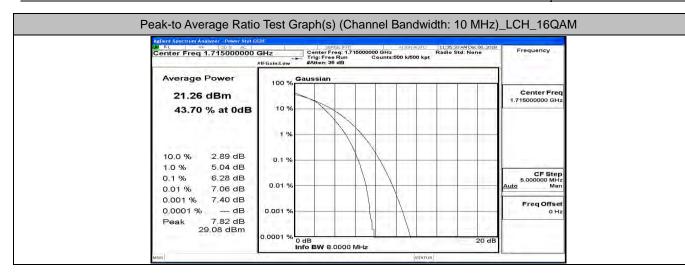


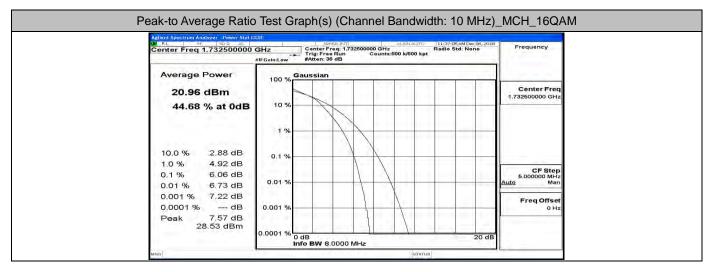


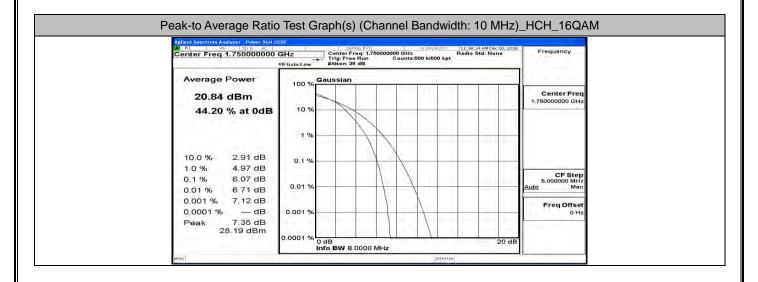


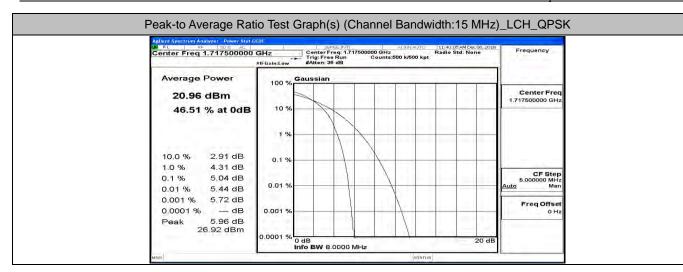


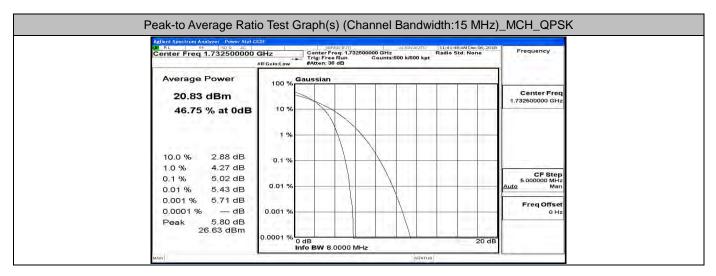


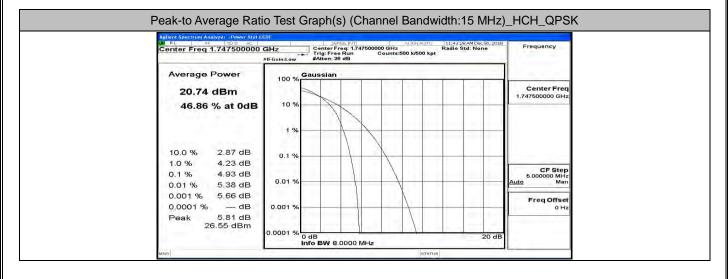


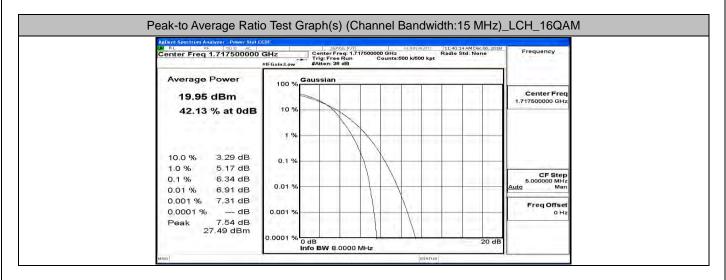


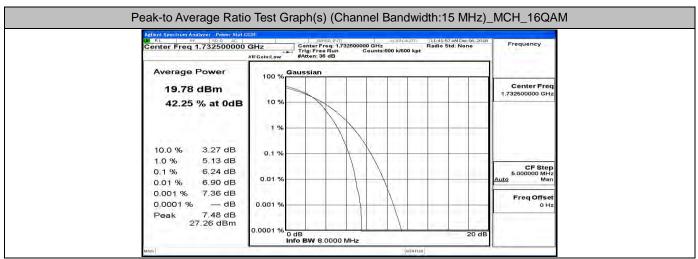


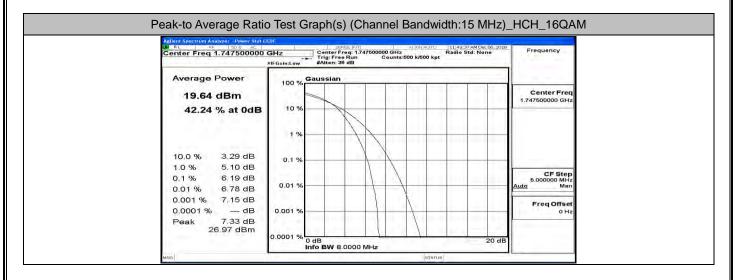


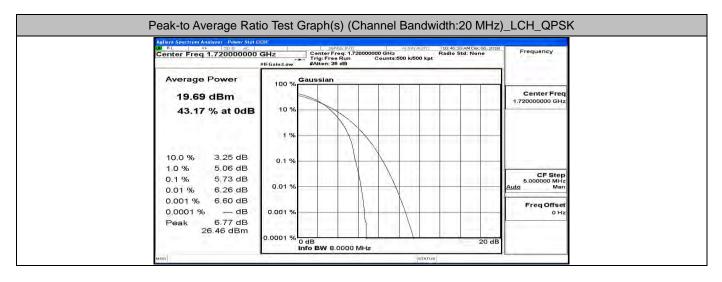


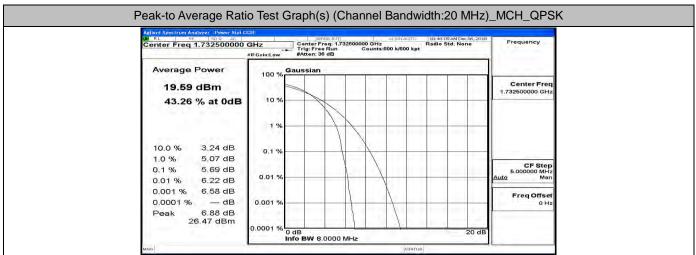


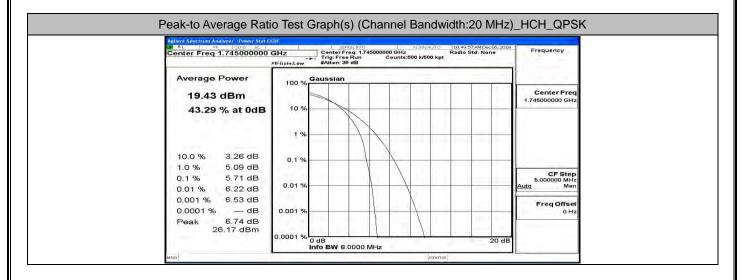


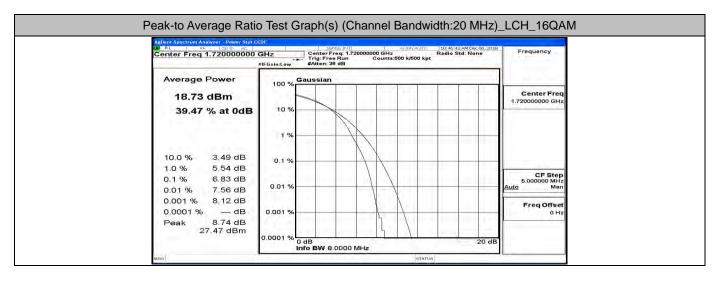


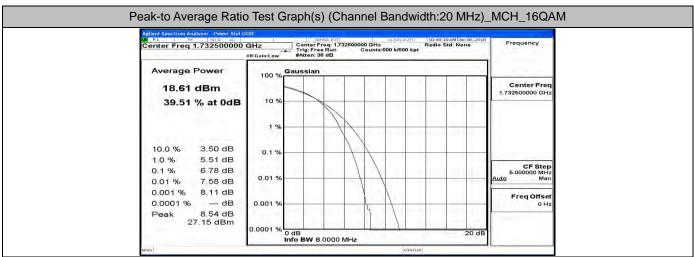


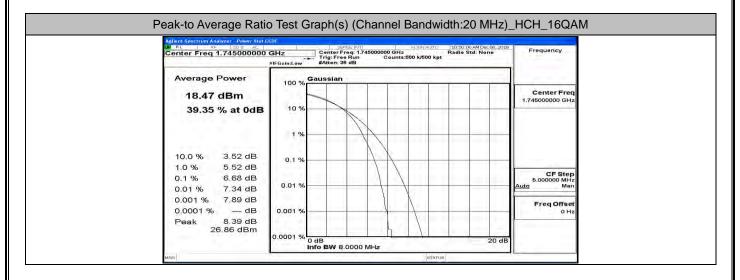












B.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
		(MHz)	(MHz)		
QPSK	LCH	1.0765	1.216	PASS	
	MCH	1.0747	1.210	PASS	
	НСН	1.0770	1.220	PASS	
16QAM	LCH	1.0778	1.245	PASS	
	MCH	1.0773	1.235	PASS	
	HCH	1.0754	1.237	PASS	

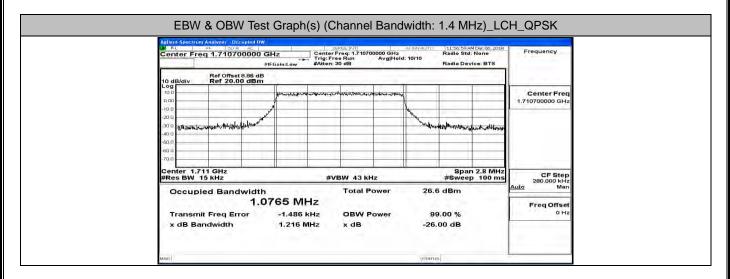
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	2.6796	2.833	PASS
	MCH	2.6792	2.818	PASS
	HCH	2.6805	2.834	PASS
16QAM	LCH	2.6799	2.845	PASS
	MCH	2.6812	2.814	PASS
	HCH	2.6864	2.839	PASS

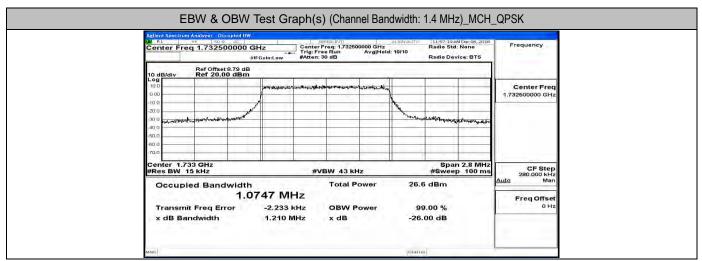
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	4.4836	4.858	PASS
	MCH	4.4849	4.821	PASS
	HCH	4.4765	4.895	PASS
16QAM	LCH	4.4787	4.886	PASS
	MCH	4.4673	4.886	PASS
	HCH	4.4843	4.871	PASS

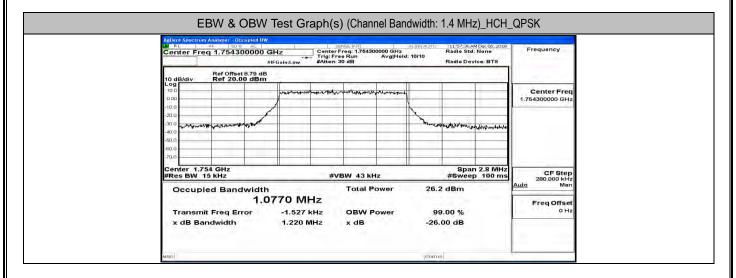
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	8.9505	9.568	PASS
	MCH	8.9433	9.573	PASS
	HCH	8.9342	9.462	PASS
16QAM	LCH	8.9416	9.509	PASS
	MCH	8.9424	9.452	PASS
	HCH	8.9469	9.495	PASS

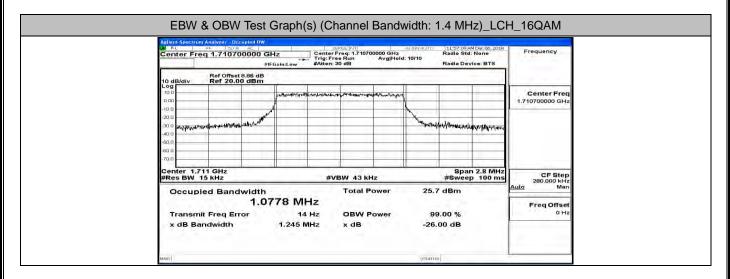
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	13.411	14.14	PASS
	MCH	13.417	14.14	PASS
	HCH	13.387	14.06	PASS
16QAM	LCH	13.414	14.10	PASS
	MCH	13.398	14.07	PASS
	HCH	13.407	14.09	PASS

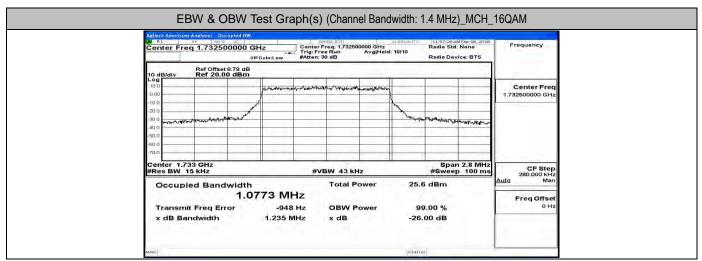
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Mandada Gara	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	17.871	18.69	PASS
	MCH	17.842	18.65	PASS
	HCH	17.863	18.62	PASS
16QAM	LCH	17.872	18.69	PASS
	MCH	17.858	18.62	PASS
	HCH	17.842	18.70	PASS

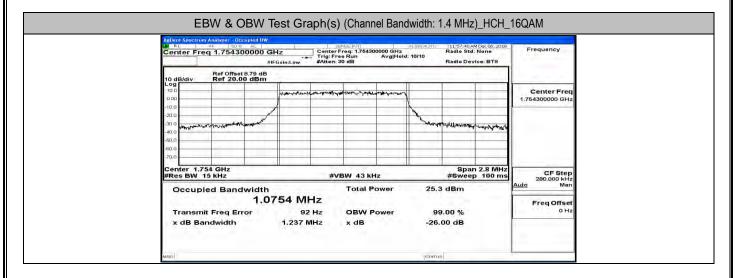


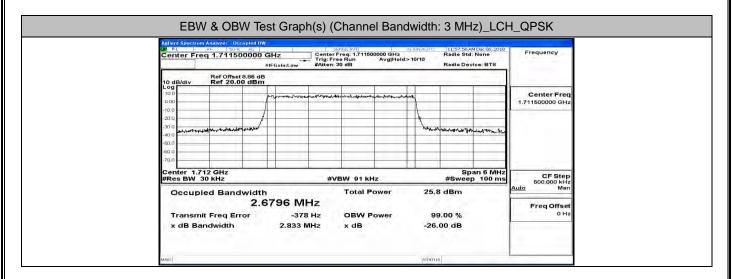


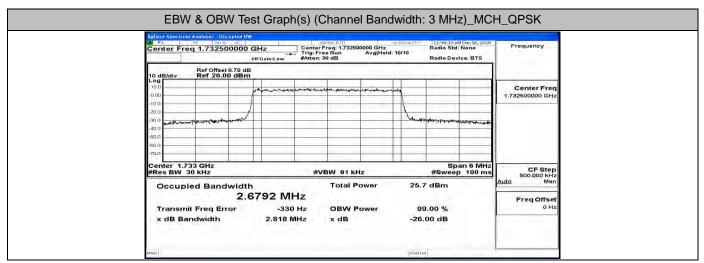


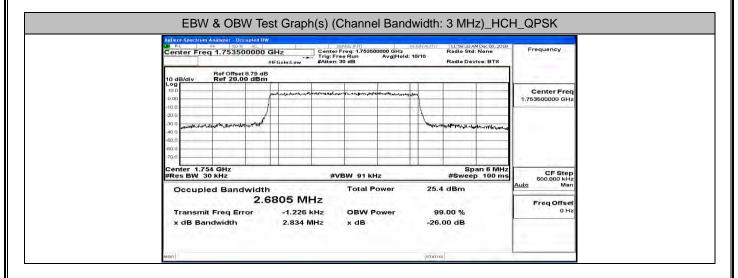


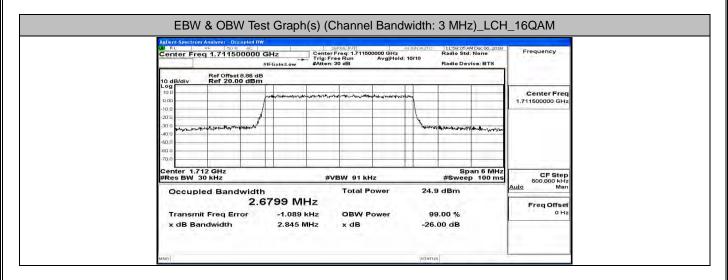


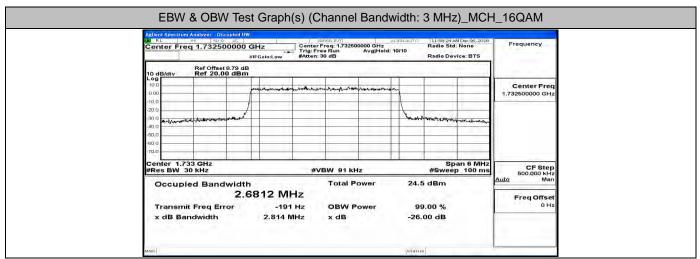


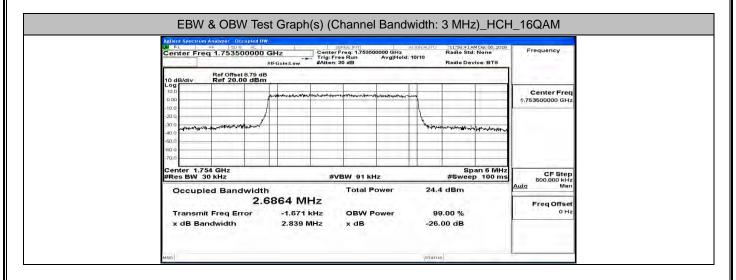


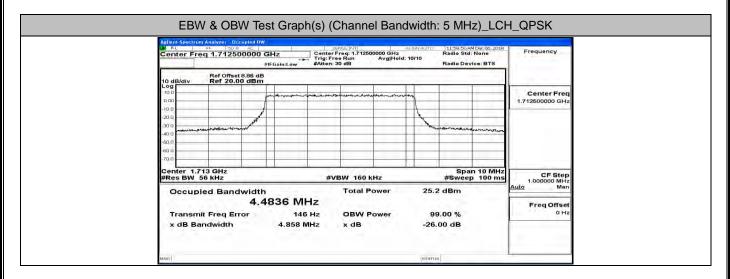


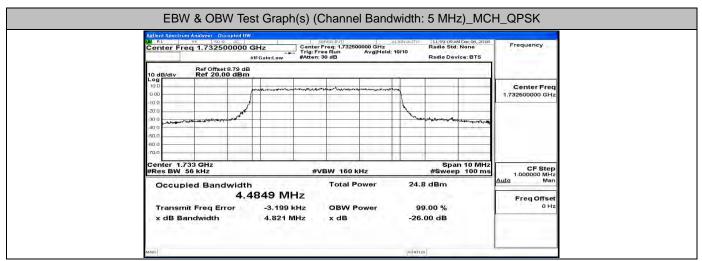


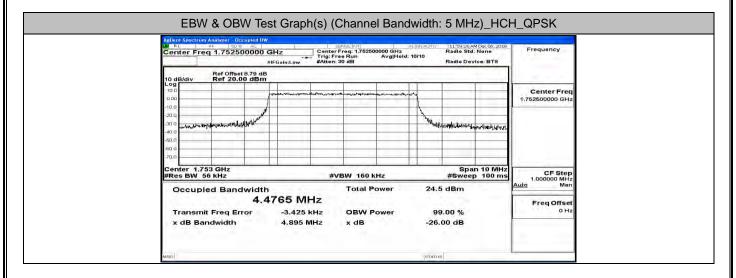


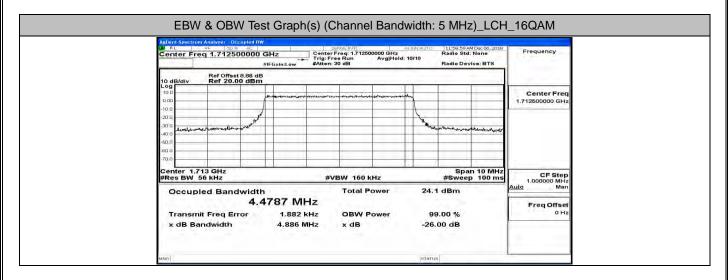


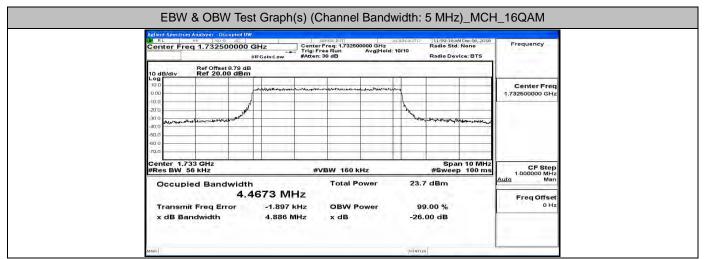


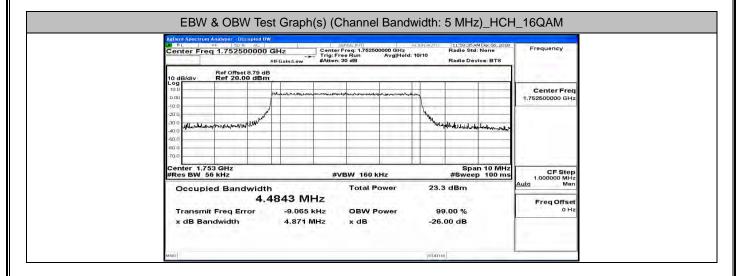


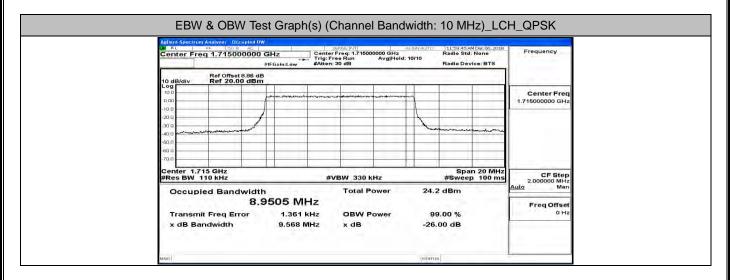


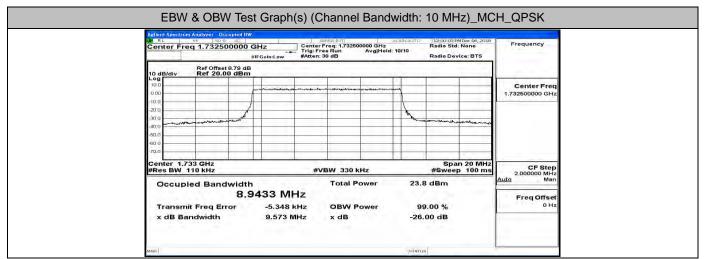


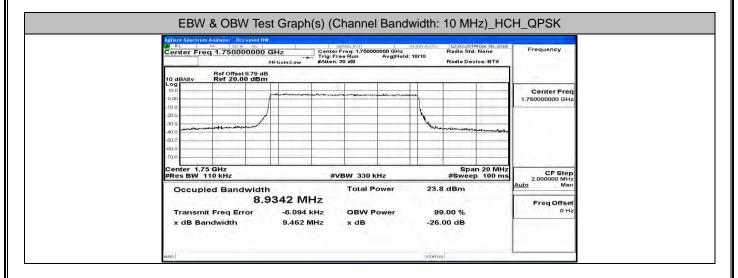


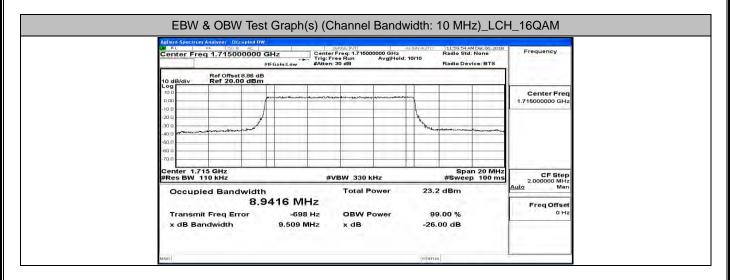


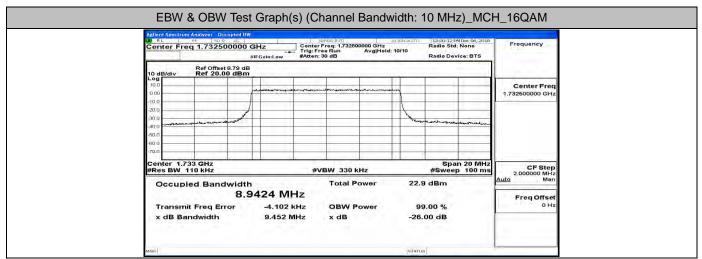


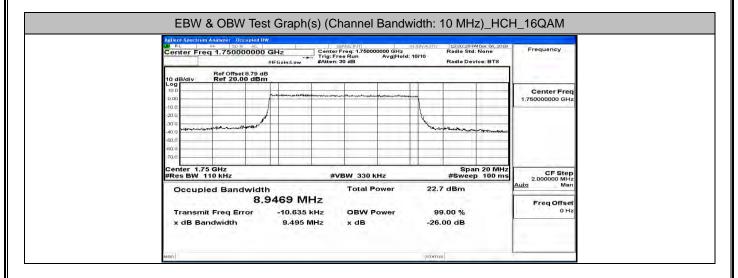


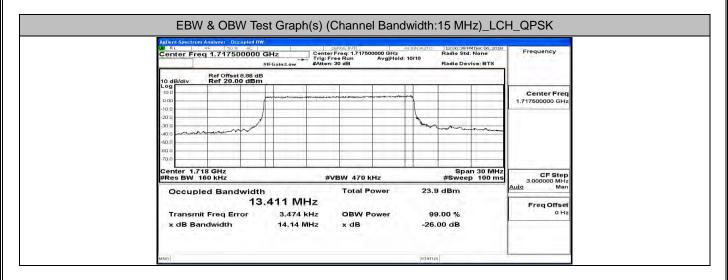


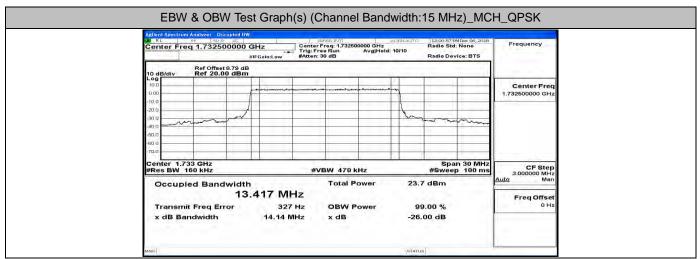


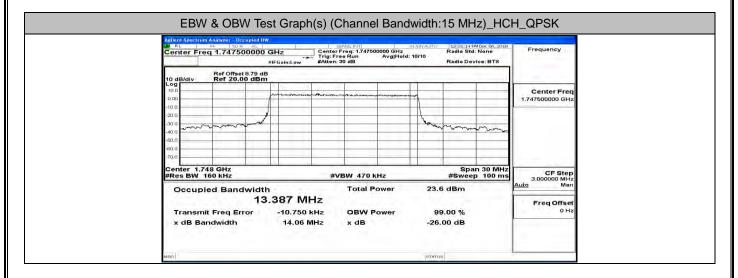


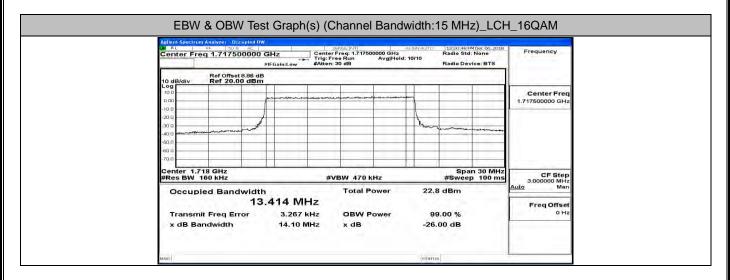


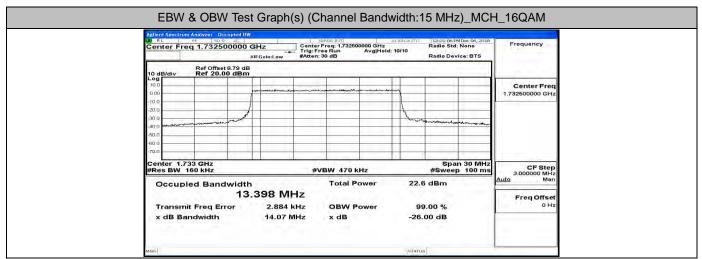


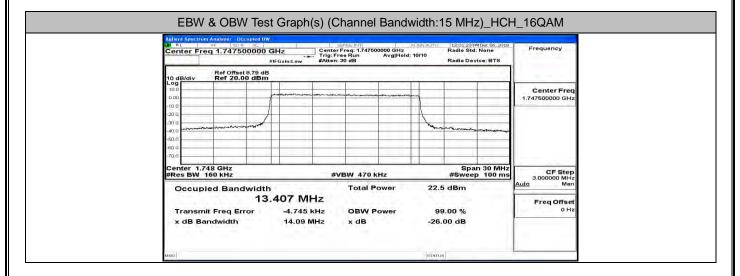


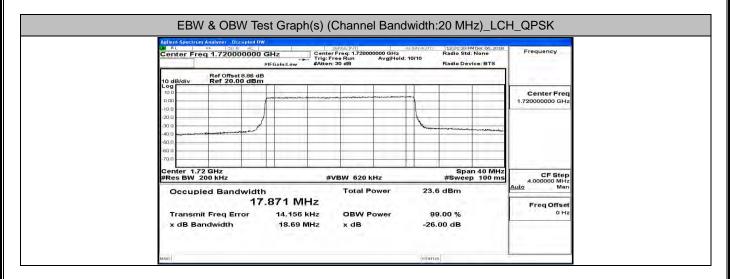


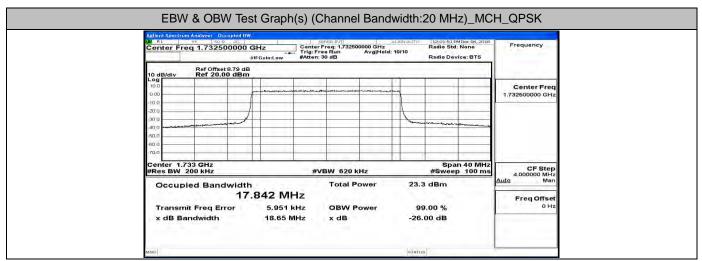


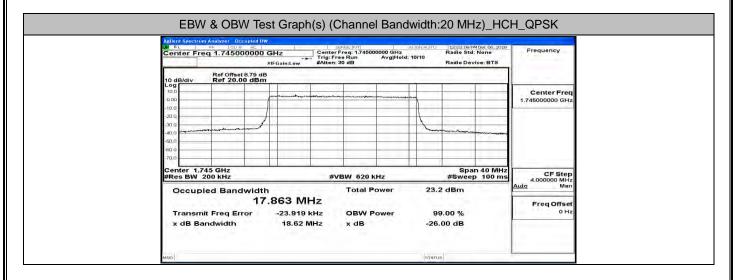


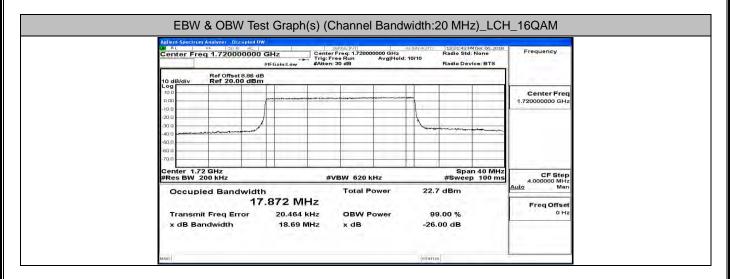


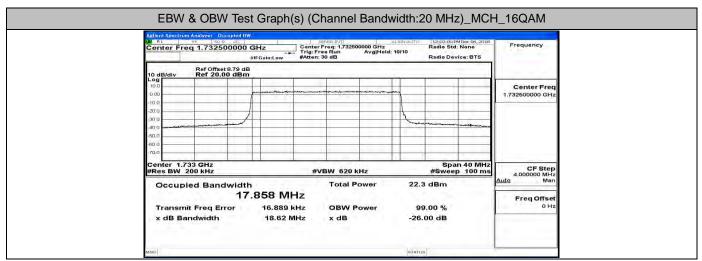


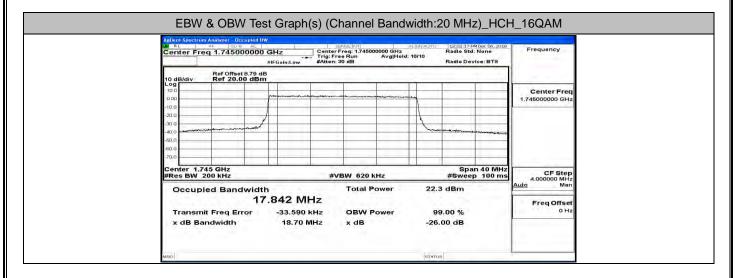




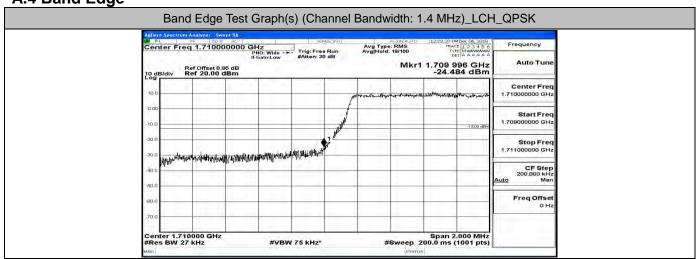


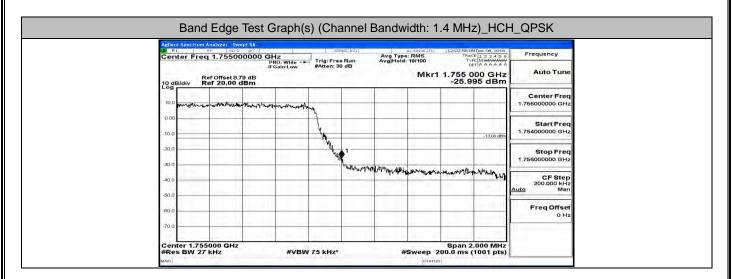


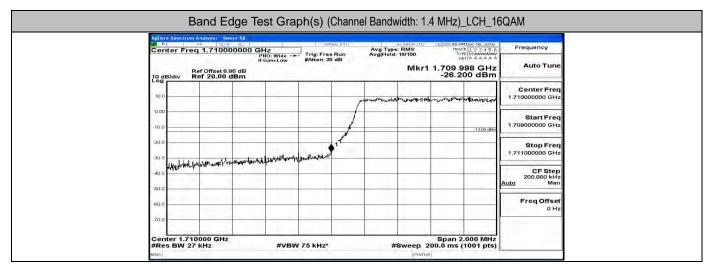


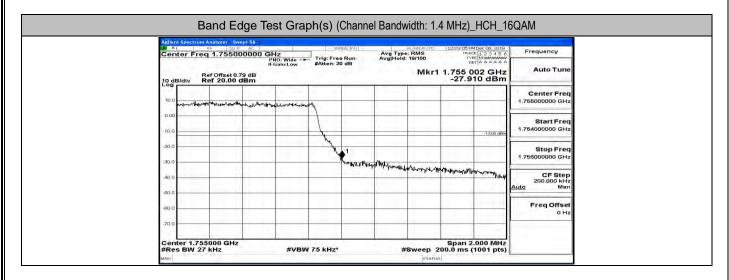


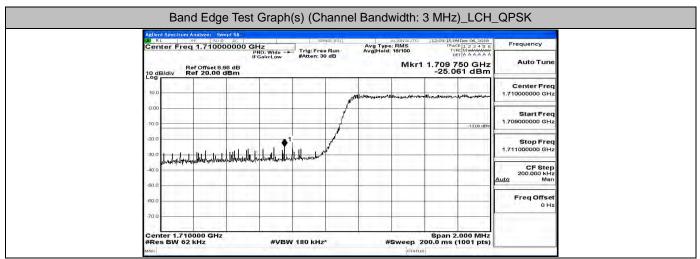
A.4 Band Edge

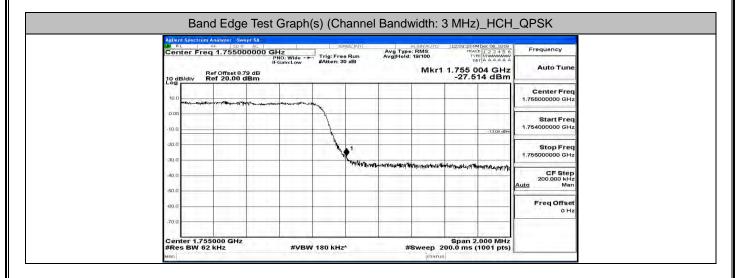


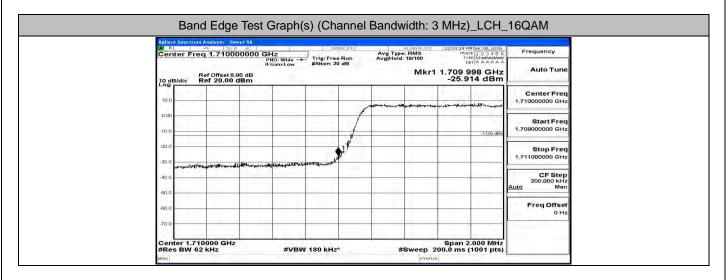


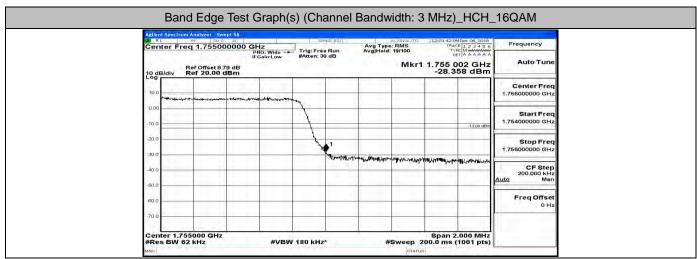


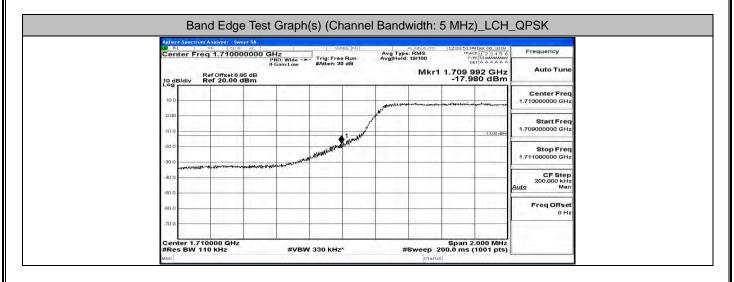


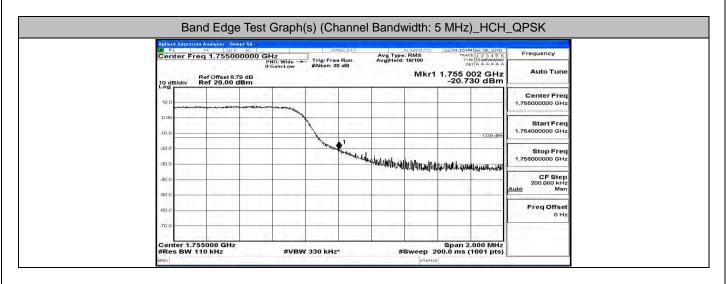


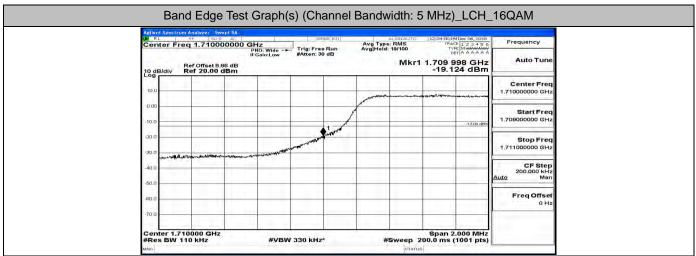


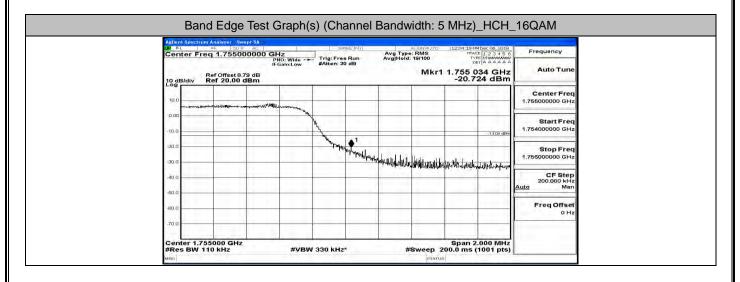


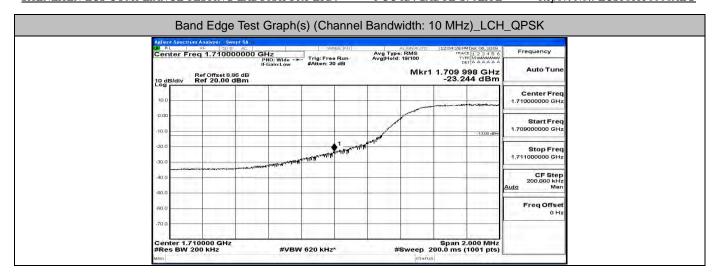


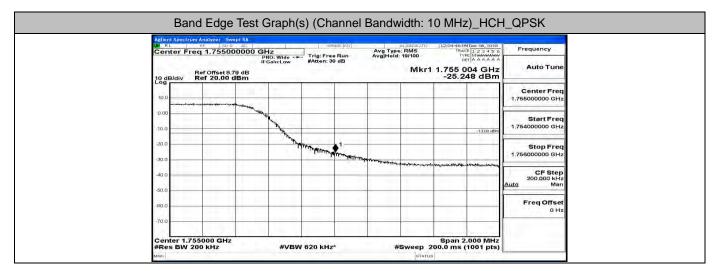


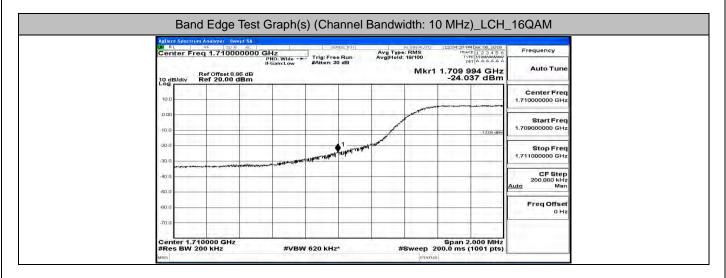


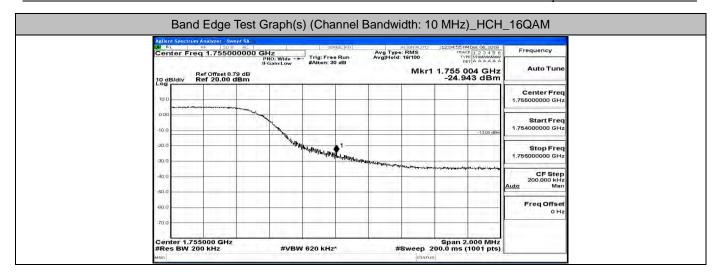


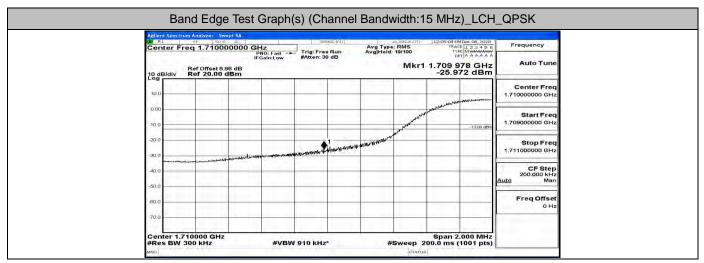


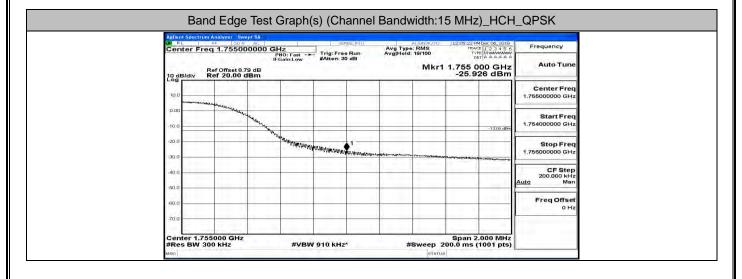


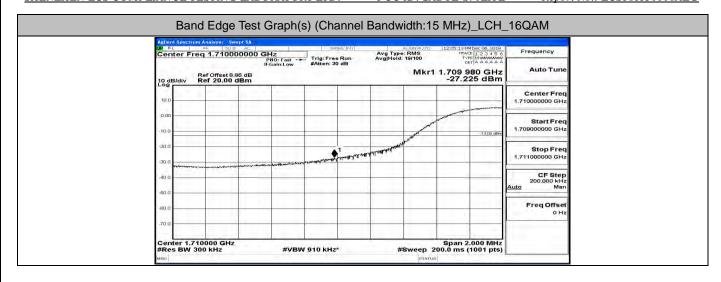


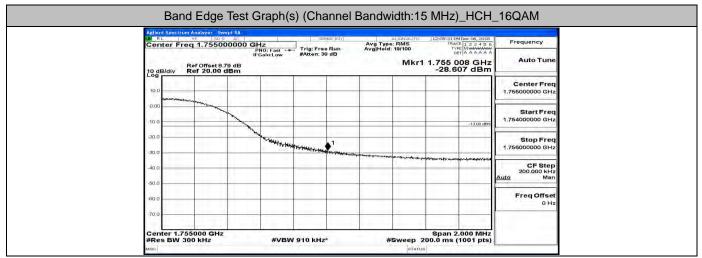


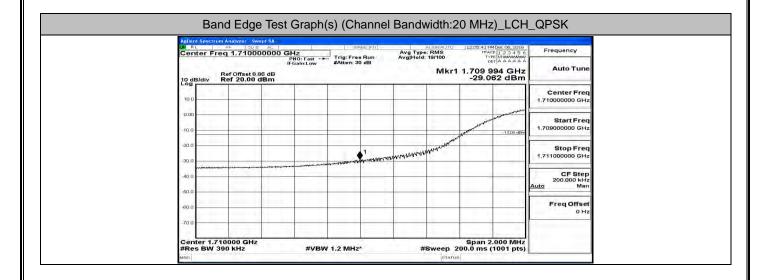


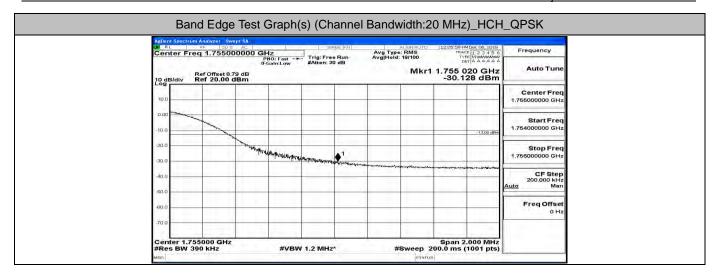


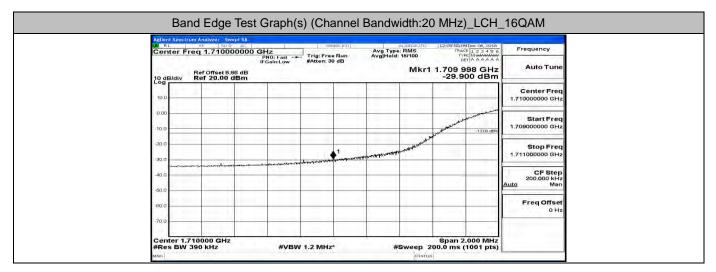


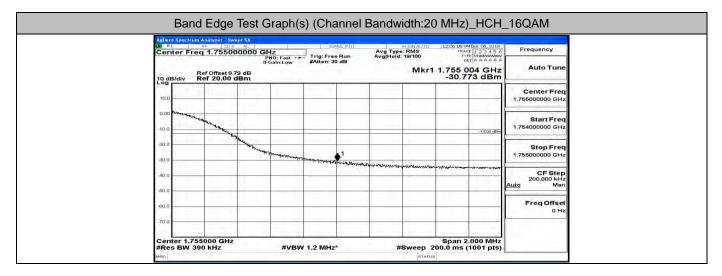












B.5 Conducted Spurious Emission

