# Appendix A: Test Data for E-UTRA Band 41

**Product Name: GNSS RECEIVER** Trade Mark: SOUTH, KOLIDA, SANDING, RUIDE, TIANYU **Test Model: K5** 

#### **Environmental Conditions**

Temperature:	23.2 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Mina.Xu
Supervised by:	Tom.Liu

### **A.1 Conducted Output Power**

Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)						
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict
		1	0	22.51	22.51	PASS
		1	12	22.69	22.46	PASS
		1	24	22.77	22.39	PASS
	LCH	12	0	22.75	22.37	PASS
		12	6	22.80	22.42	PASS
		12	13	22.70	22.36	PASS
		25	0	22.60	22.24	PASS
		1	0	20.01	19.13	PASS
		1	12	20.43	19.52	PASS
QPSK /		1	24	20.26	19.44	PASS
16QAM	MCH	12	0	19.19	18.20	PASS
TOQAIVI		12	6	19.29	18.31	PASS
		12	13	19.32	18.33	PASS
		25	0	19.26	18.32	PASS
		1	0	20.61	19.77	PASS
		1	12	20.76	19.90	PASS
		1	24	20.31	19.48	PASS
	HCH	12	0	19.72	18.72	PASS
		12	6	19.67	18.71	PASS
		12	13	19.51	18.53	PASS
		25	0	19.57	18.67	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict	
Wodulation	Channel	Size	Offset	QPSK	16QAM	verdict	
		1	0	22.49	22.30	PASS	
		1	24	22.31	22.21	PASS	
		1	49	21.71	21.69	PASS	
	LCH	25	0	22.51	22.15	PASS	
		25	12	22.32	22.02	PASS	
		25	25	21.96	21.72	PASS	
		50	0	22.18	21.93	PASS	
		1	0	19.94	19.25	PASS	
	МСН	1	24	20.18	19.47	PASS	
QPSK /		1	49	20.48	19.78	PASS	
16QAM		25	0	19.13	18.16	PASS	
TOQAIVI		25	12	19.25	18.30	PASS	
		25	25	19.41	18.40	PASS	
		50	0	19.28	18.33	PASS	
		1	0	21.09	20.42	PASS	
		1	24	20.83	20.08	PASS	
		1	49	20.40	19.71	PASS	
	HCH	25	0	20.04	19.05	PASS	
		25	12	19.82	18.88	PASS	
		25	25	19.60	18.60	PASS	
		50	0	19.74	18.84	PASS	

Conducted Output Power Test Result (Channel Bandwidth: 15 MHz)						
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict
		1	0	22.37	22.19	PASS
		1	37	21.77	21.73	PASS
		1	74	21.27	21.20	PASS
	LCH	37	0	22.20	21.85	PASS
		37	18	21.79	21.53	PASS
		37	38	21.38	21.15	PASS
		75	0	21.75	21.22	PASS
		1	0	19.80	19.11	PASS
		1	37	20.30	19.63	PASS
QPSK /		1	74	20.55	19.93	PASS
16QAM	MCH	37	0	19.20	18.14	PASS
TOQAIVI		37	18	19.34	18.29	PASS
		37	38	19.54	18.49	PASS
		75	0	19.37	18.35	PASS
		1	0	21.22	20.49	PASS
		1	37	21.16	20.39	PASS
		1	74	20.29	19.59	PASS
	HCH	37	0	20.35	19.31	PASS
		37	18	20.16	19.09	PASS
		37	38	19.84	18.76	PASS
		75	0	20.12	19.08	PASS

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)						
Modulation	Channel	RB Configuration		Average Power [dBm]	Average Power [dBm]	Verdict	
Modulation	Chamilei	Size	Offset	QPSK	16QAM	Verdict	
		1	0	22.42	22.15	PASS	
		1	49	21.61	21.55	PASS	
		1	99	21.41	21.39	PASS	
	LCH	50	0	21.97	21.68	PASS	
		50	25	21.41	21.14	PASS	
		50	50	21.20	20.93	PASS	
		100	0	21.65	21.08	PASS	
		1	0	19.73	18.99	PASS	
		1	49	20.20	19.53	PASS	
QPSK /		1	99	20.54	19.93	PASS	
16QAM	MCH	50	0	19.02	17.99	PASS	
IOQAIVI		50	25	19.32	18.31	PASS	
		50	50	19.51	18.54	PASS	
		100	0	19.28	18.29	PASS	
		1	0	21.01	20.34	PASS	
		1	49	21.27	20.54	PASS	
		1	99	20.18	19.55	PASS	
	HCH	50	0	20.23	19.32	PASS	
		50	25	20.15	19.21	PASS	
		50	50	19.74	18.83	PASS	
		100	0	20.00	19.03	PASS	

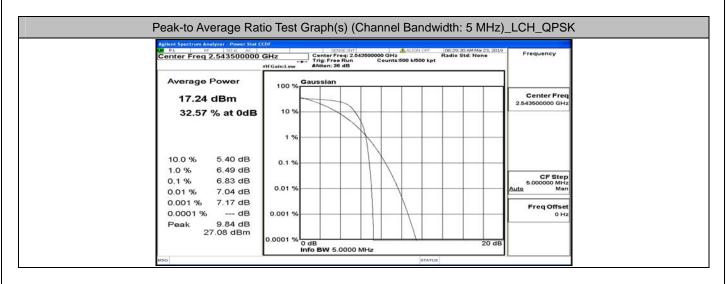
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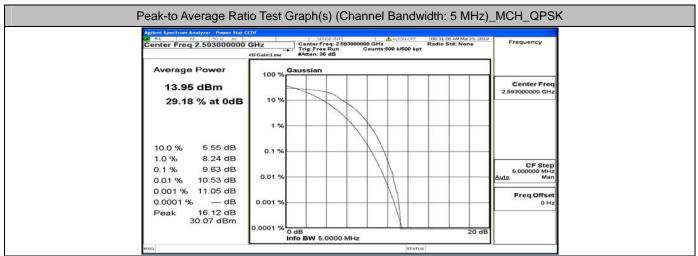
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Grianner	[dB]	[dB]	verdict		
	LCH	6.83	<13	PASS		
QPSK	MCH	9.63	<13	PASS		
	HCH	9.17	<13	PASS		
	LCH	9.33	<13	PASS		
16QAM	MCH	9.82	<13	PASS		
	HCH	11.21	<13	PASS		

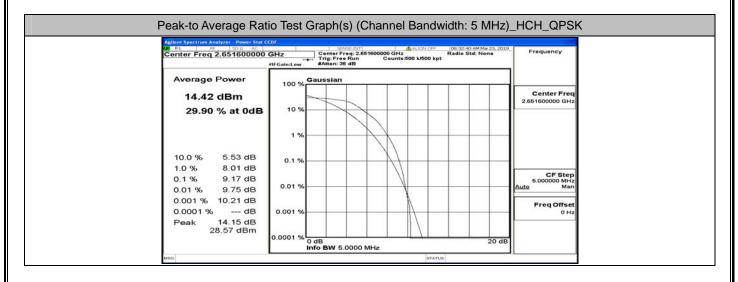
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
Modulation	Chame	[dB]	[dB]	verdict	
	LCH	7.15	<13	PASS	
QPSK	MCH	10.71	<13	PASS	
	HCH	8.23	<13	PASS	
	LCH	7.69	<13	PASS	
16QAM	MCH	9.87	<13	PASS	
	HCH	10.09	<13	PASS	

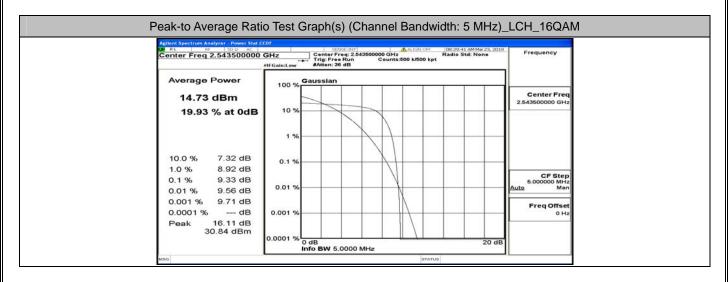
Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Channel	[dB]	[dB]	verdict		
	LCH	7.72	<13	PASS		
QPSK	MCH	8.83	<13	PASS		
	HCH	9.44	<13	PASS		
	LCH	10.15	<13	PASS		
16QAM	MCH	10.65	<13	PASS		
	HCH	11.24	<13	PASS		

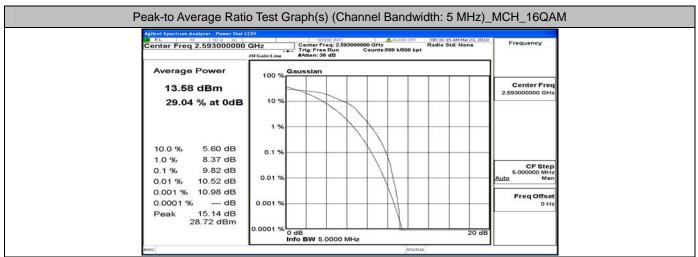
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)					
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict	
iviodulation	Grianner	[dB]	[dB]	verdict	
	LCH	8.86	<13	PASS	
QPSK	MCH	9.13	<13	PASS	
	HCH	10.83	<13	PASS	
	LCH	9.42	<13	PASS	
16QAM	MCH	10.36	<13	PASS	
	HCH	8.77	<13	PASS	

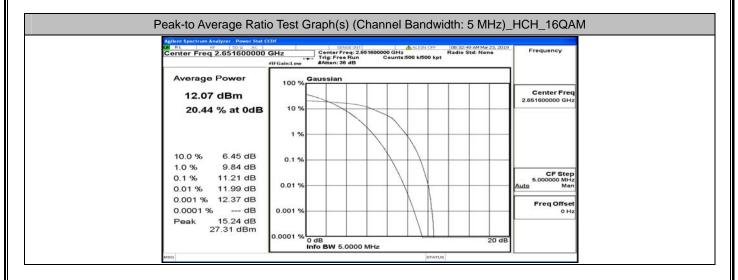


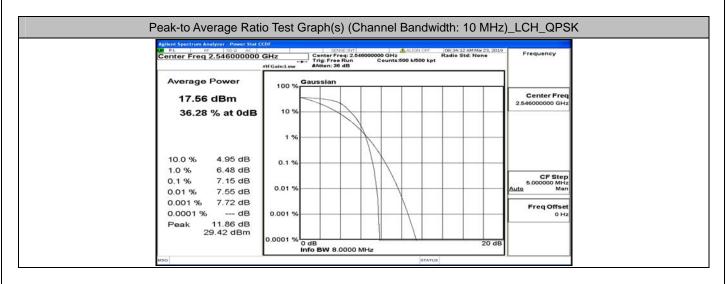


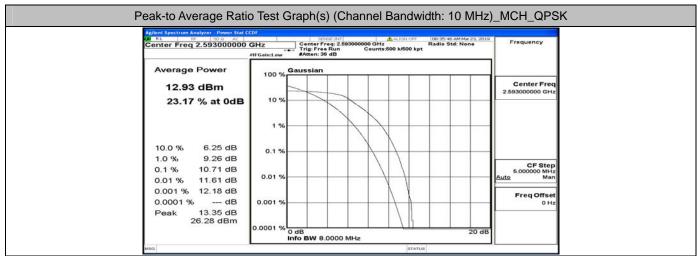


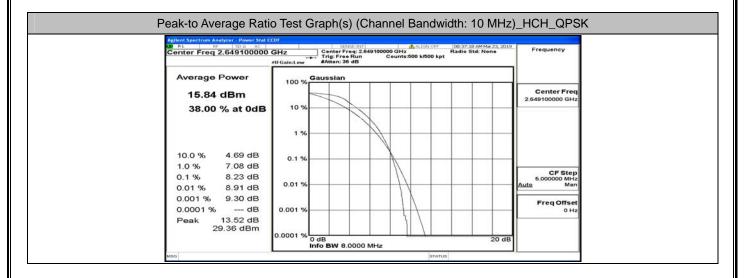


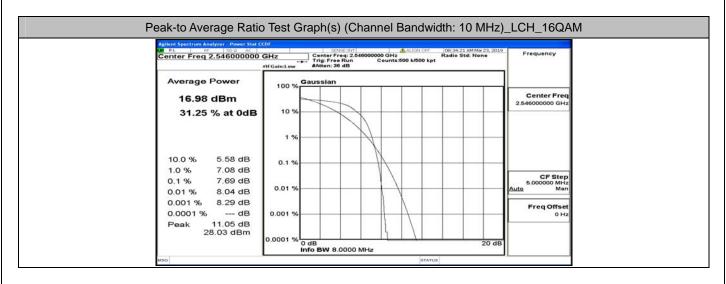


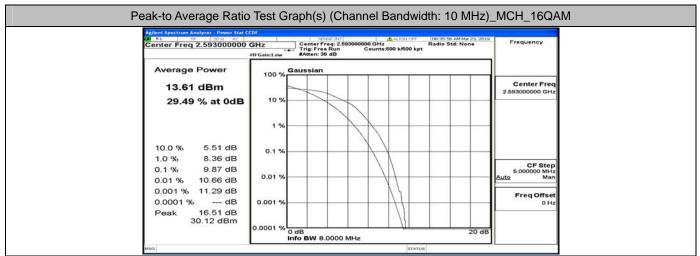


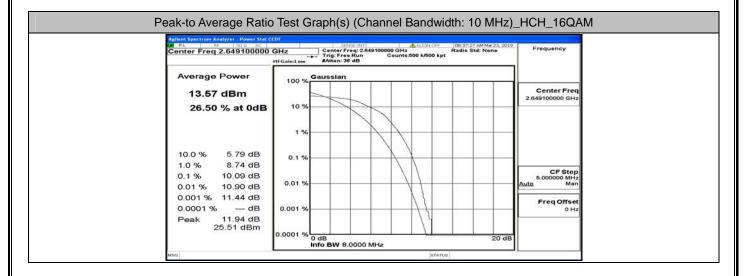


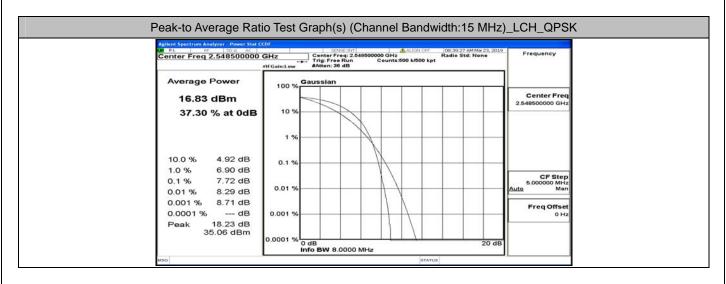


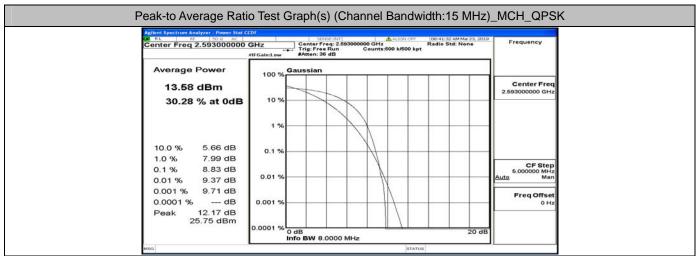


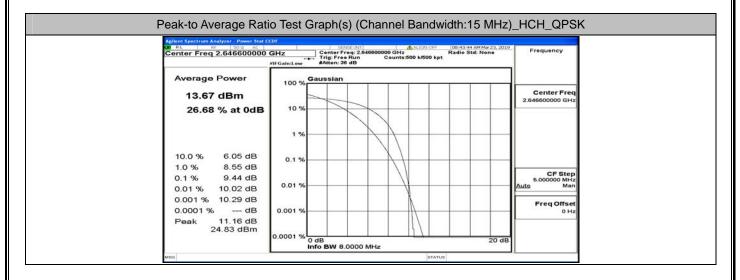


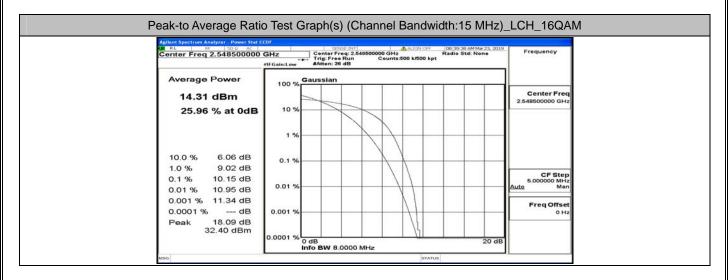


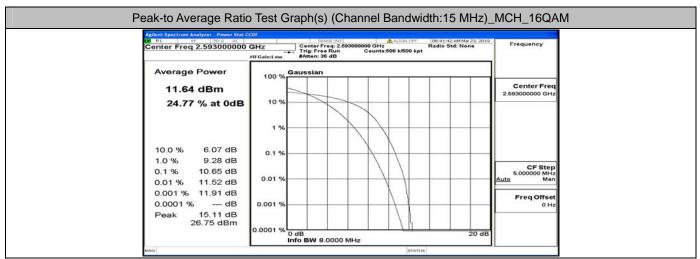


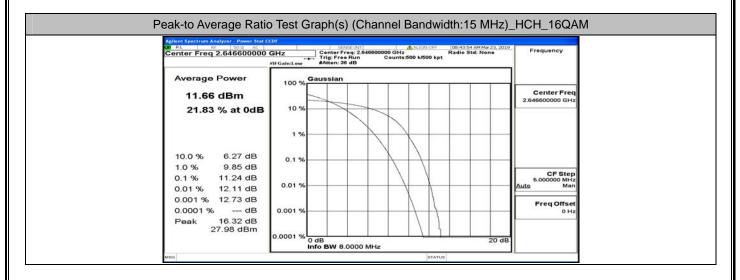


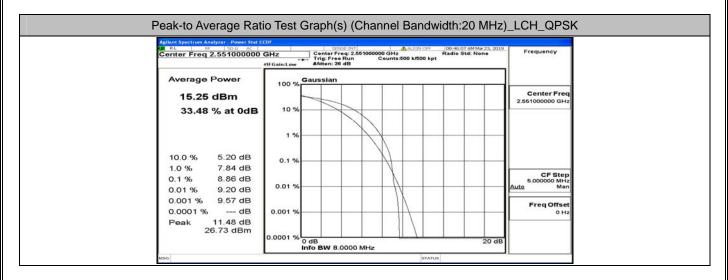


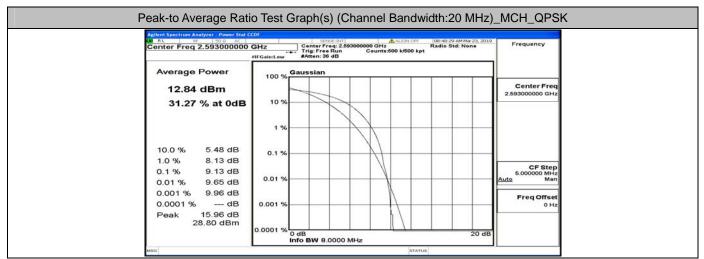


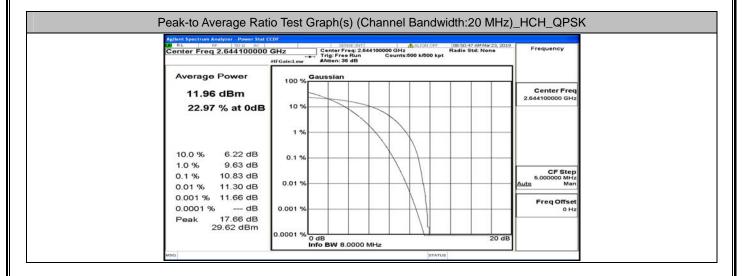


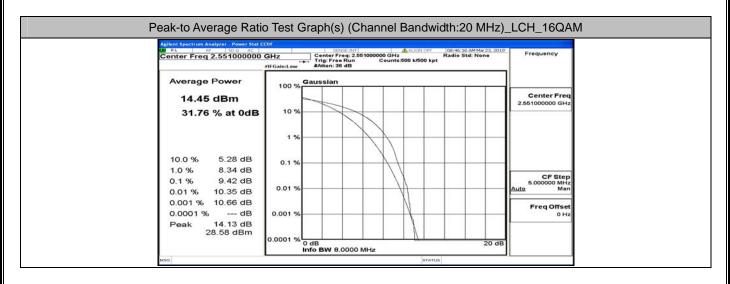


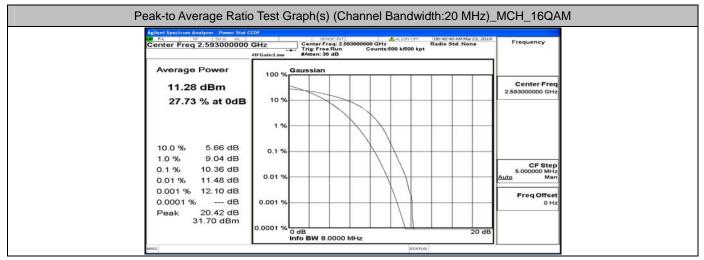


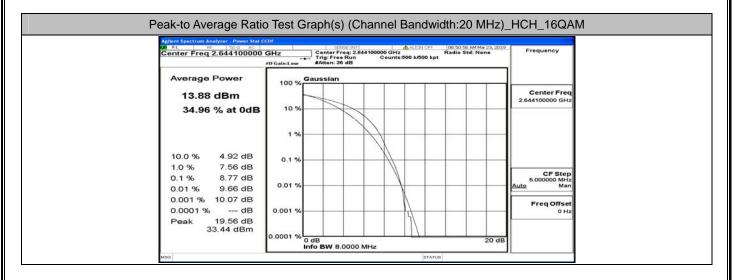












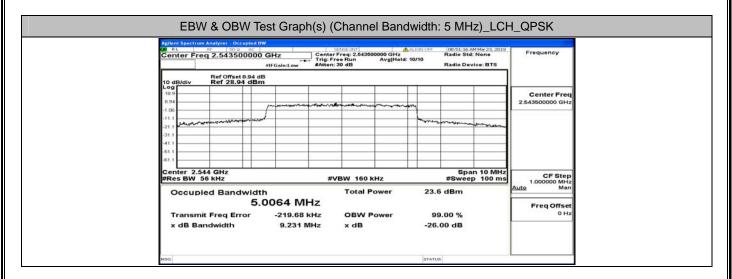
## A.3 26dB Bandwidth and Occupied Bandwidth

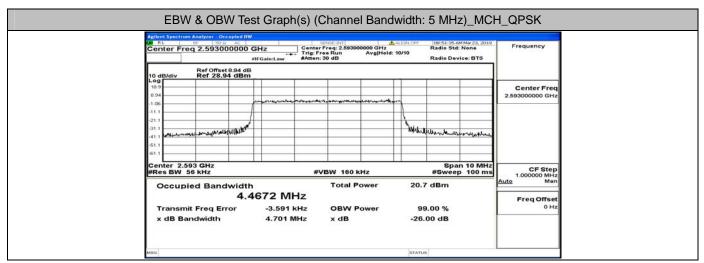
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)					
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict	
IVIOGUIATIOTI	Charmer	(MHz)	(MHz)	verdict	
	LCH	5.0064	9.231	PASS	
QPSK	MCH	4.4672	4.701	PASS	
	HCH	4.4820	4.743	PASS	
	LCH	5.4389	9.894	PASS	
16QAM	MCH	4.4768	4.739	PASS	
	HCH	4.4681	4.734	PASS	

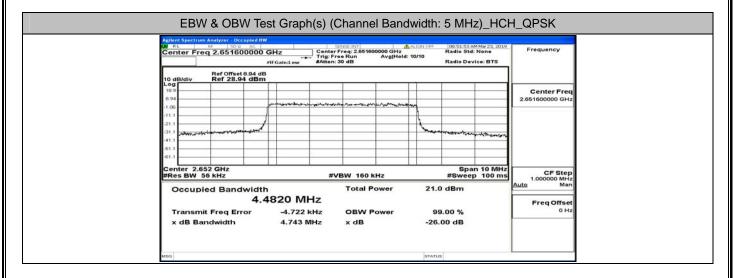
	EBW & OBW Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict			
	OTTAIL IT OT	(MHz)	(MHz)	70.0.0			
	LCH	9.1909	17.10	PASS			
QPSK	MCH	8.9280	9.349	PASS			
	HCH	8.9369	9.368	PASS			
	LCH	9.9194	18.86	PASS			
16QAM	MCH	8.9252	9.305	PASS			
	HCH	8.9285	9.326	PASS			

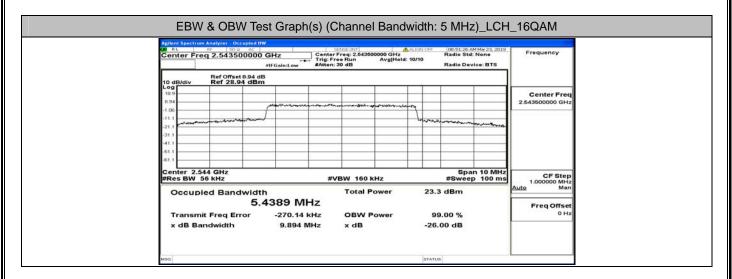
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict		
	LCH	13.670	28.20	PASS		
QPSK	MCH	13.397	13.97	PASS		
	HCH	13.394	14.00	PASS		
	LCH	13.530	25.25	PASS		
16QAM	MCH	13.404	14.00	PASS		
	HCH	13.387	13.94	PASS		

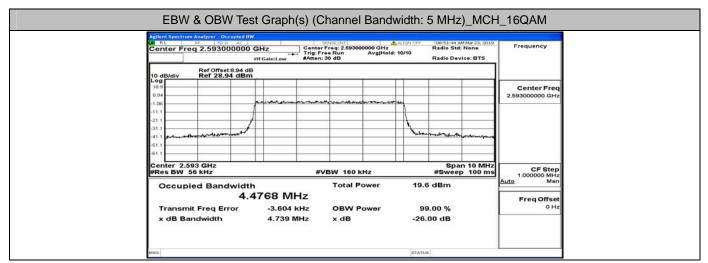
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
		(MHz)	(MHz)	
QPSK	LCH	17.972	31.91	PASS
	MCH	17.826	18.53	PASS
	HCH	17.834	18.51	PASS
16QAM	LCH	17.970	26.56	PASS
	MCH	17.849	18.52	PASS
	HCH	17.827	18.61	PASS

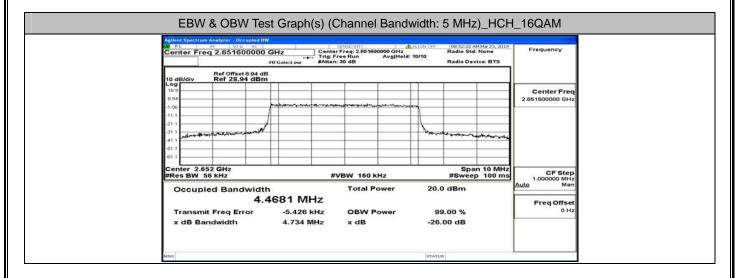


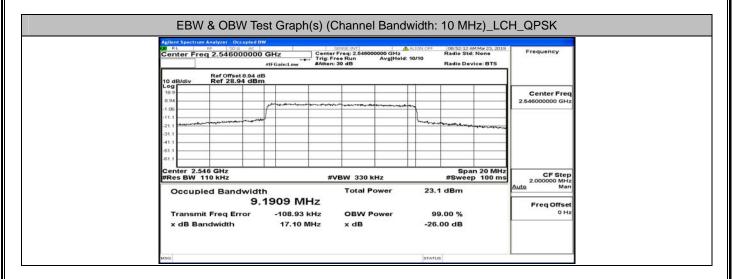


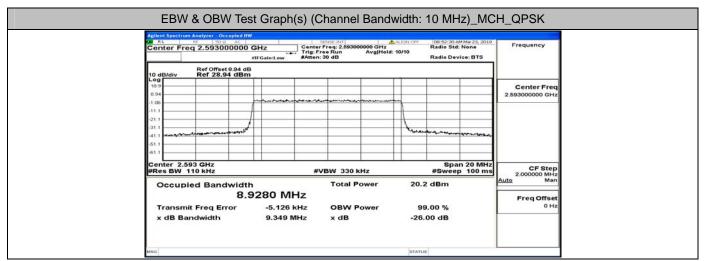


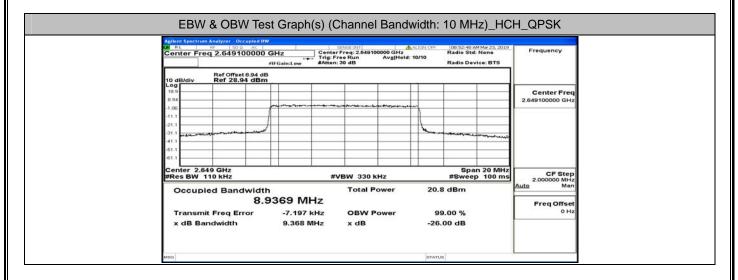


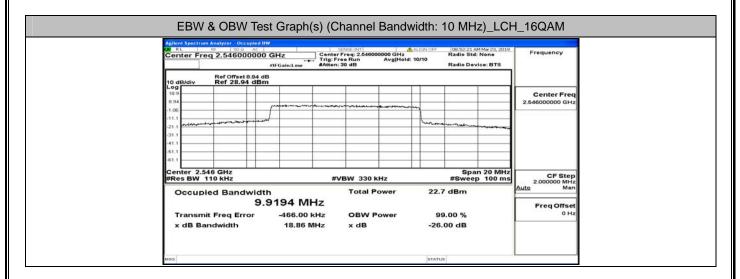


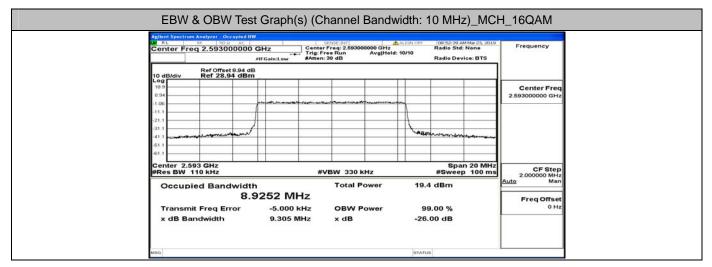


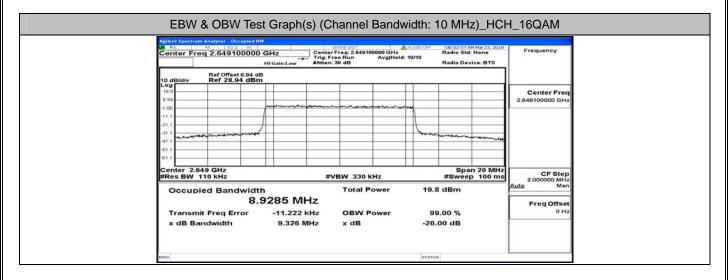


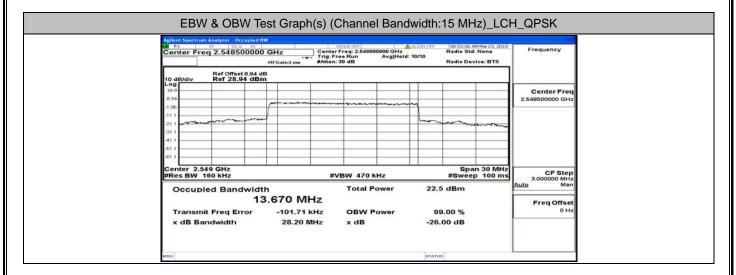


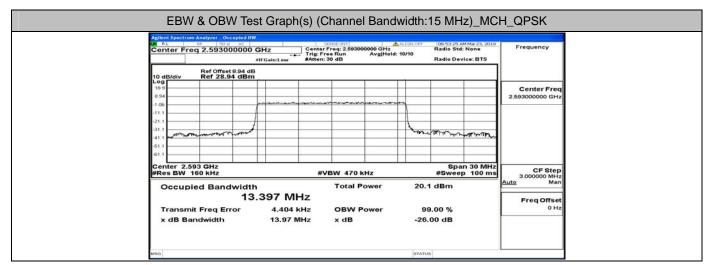


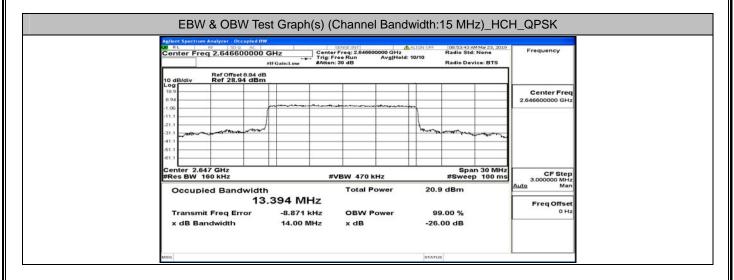


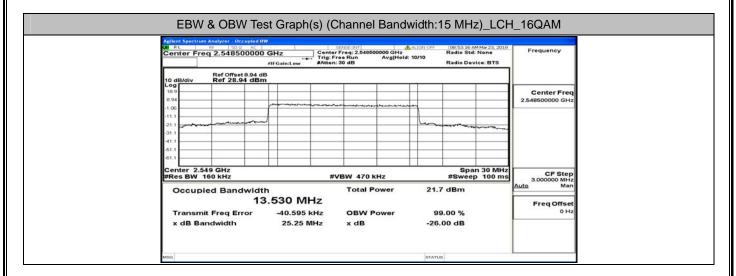


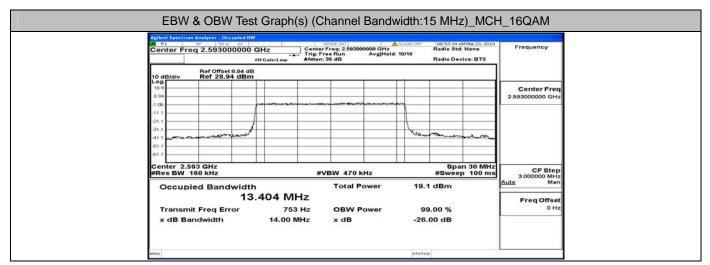


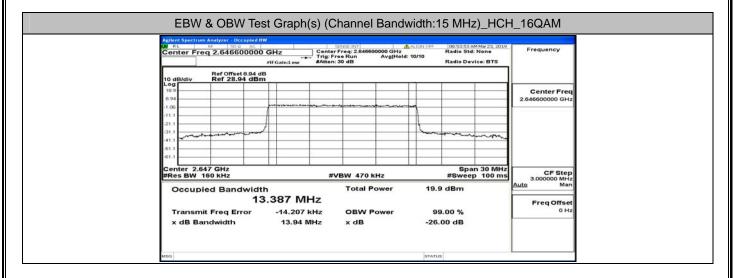


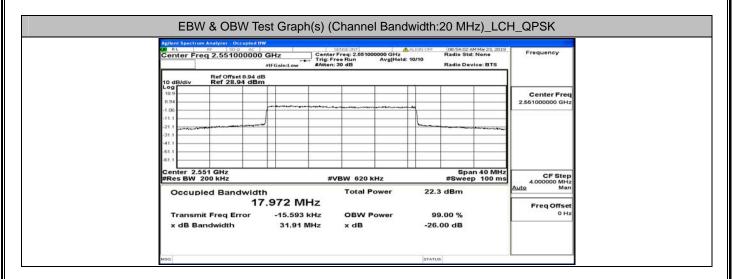


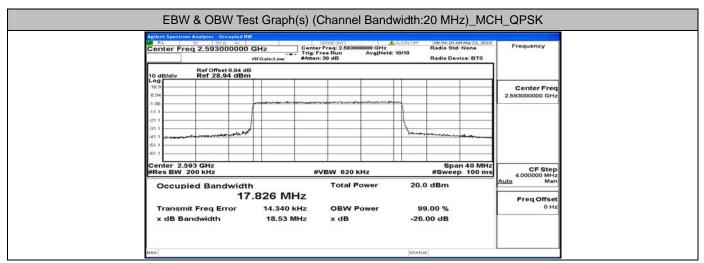


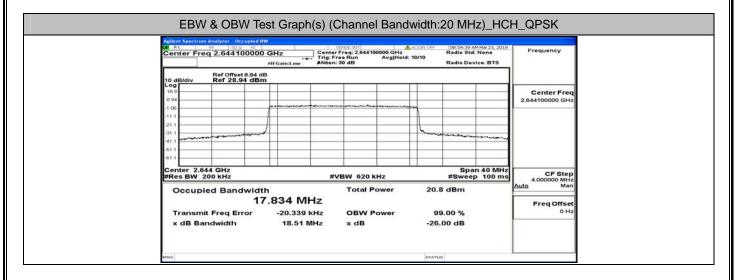


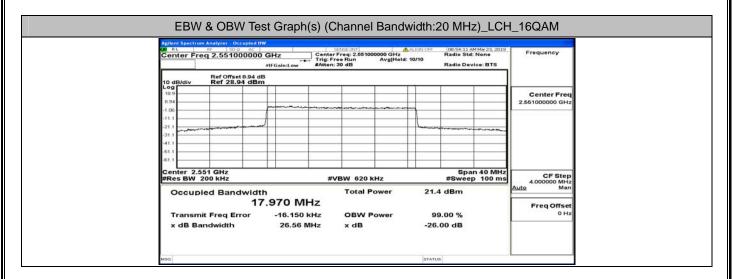


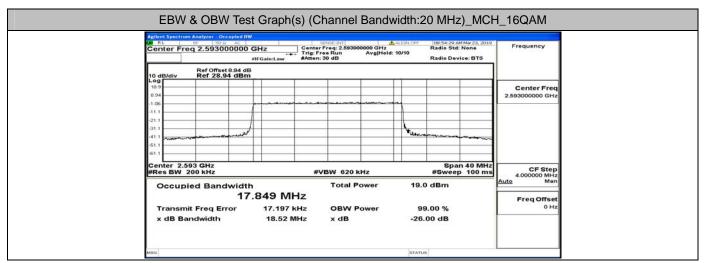


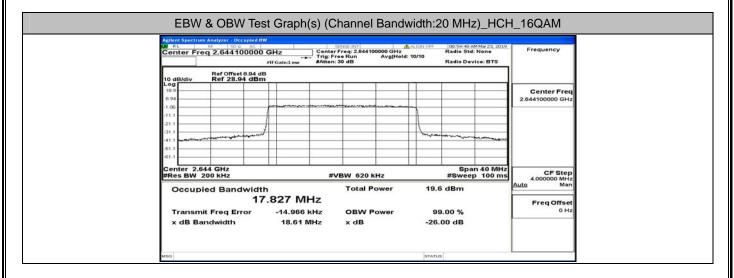




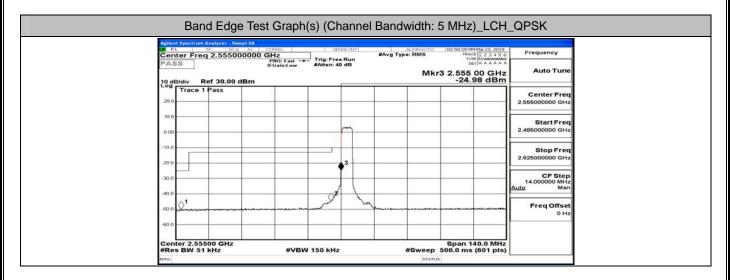


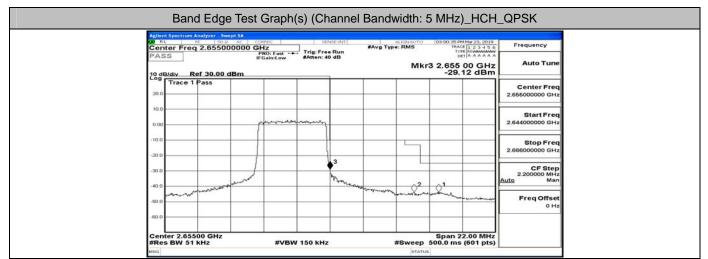


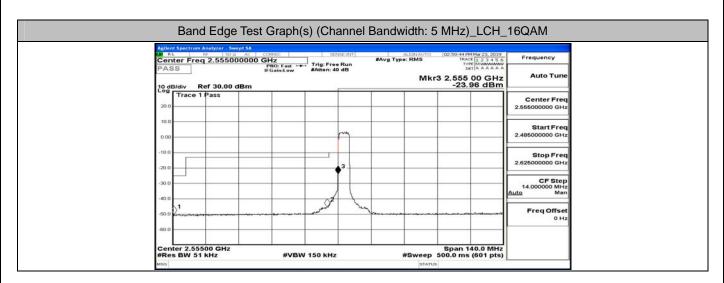


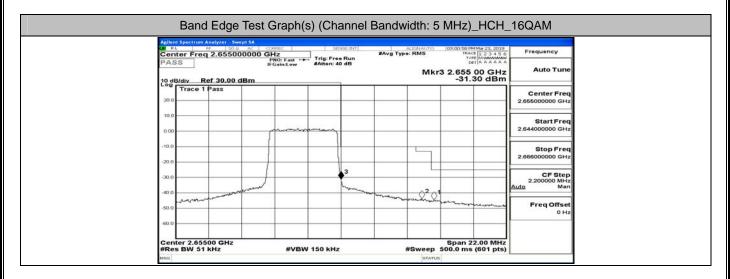


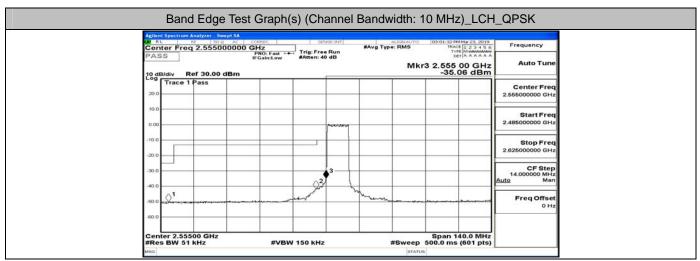
#### A.4 Band Edge

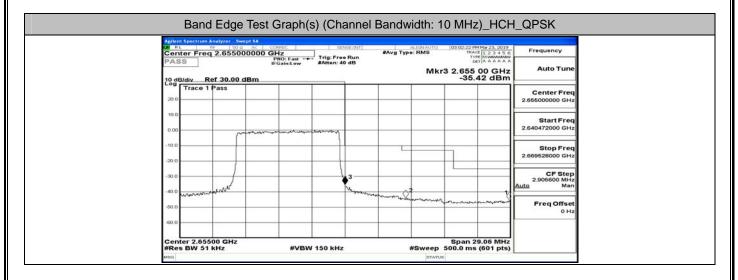


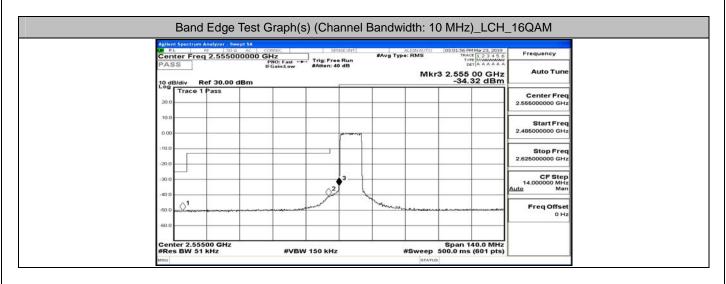


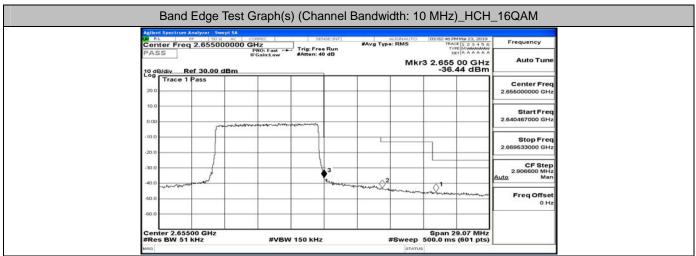


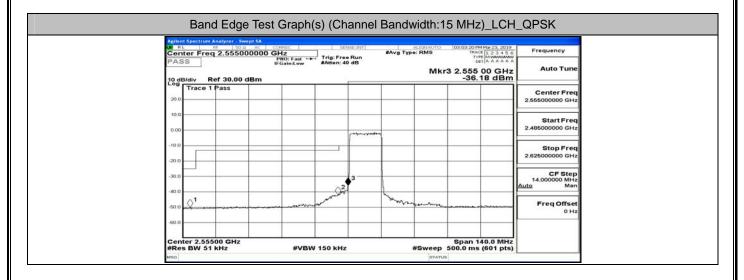


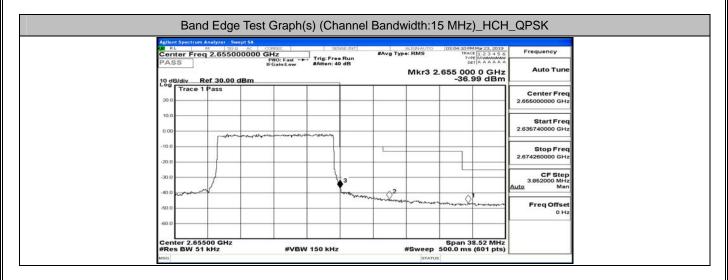


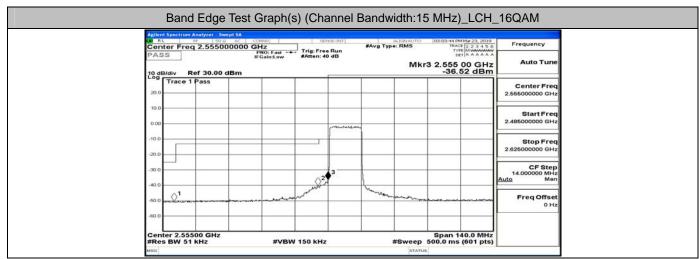


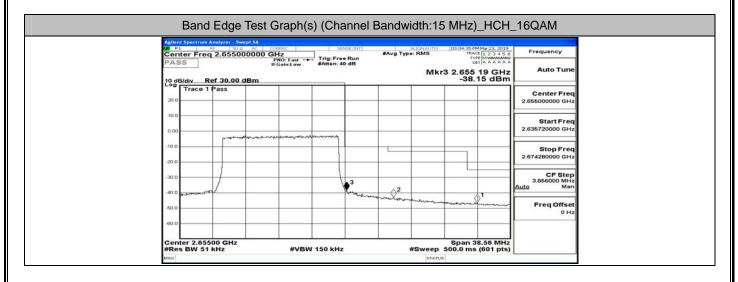


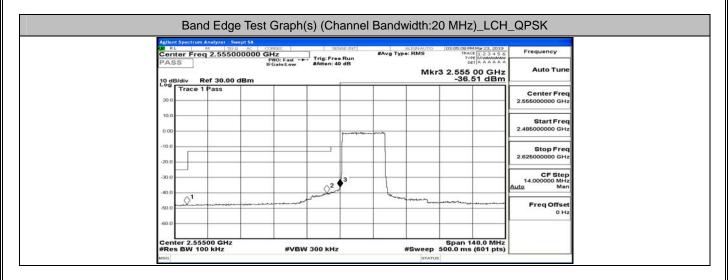


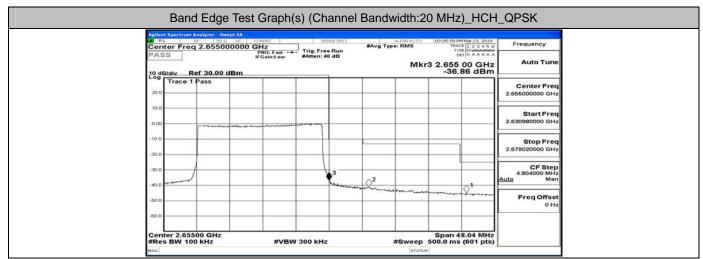


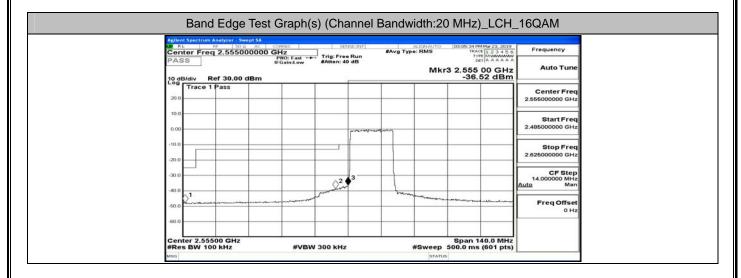


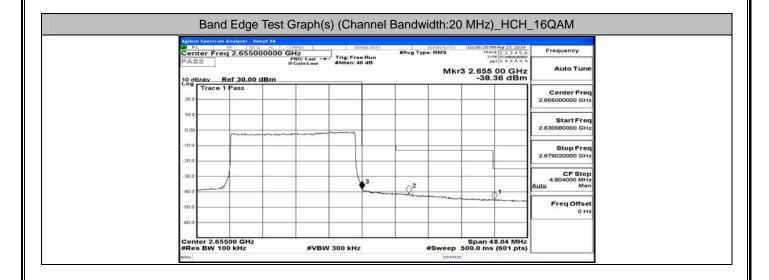












### A.5 Conducted Spurious Emission

