Appendix D Test Data for E-UTRA Band 4

Product Name: BluePad-55 v2

Trade Mark: N/A

Test Model: BluePad-55 v2

Environmental Conditions

Temperature:	24.3° C
Relative Humidity:	54.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

D.1 Conducted Output Power

D.1 GOIIG	Conducted Output Power Test Result (Channel Bandwidth: 1.4 MHz)							
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict		
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict		
		1	0	22.82	22.11	PASS		
		1	3	22.68	22.09	PASS		
		1	5	22.54	21.90	PASS		
	LCH	3	0	22.71	21.99	PASS		
		3	2	22.66	21.91	PASS		
		3	3	22.54	21.81	PASS		
		6	0	22.60	21.72	PASS		
		1	0	23.19	22.55	PASS		
	МСН	1	3	23.27	22.48	PASS		
QPSK /		1	5	23.11	22.32	PASS		
16QAM		3	0	23.18	22.30	PASS		
TOQAIVI		3	2	23.24	22.42	PASS		
		3	3	23.22	22.40	PASS		
		6	0	22.25	21.10	PASS		
		1	0	23.55	22.44	PASS		
		1	3	23.69	22.53	PASS		
		1	5	23.70	22.45	PASS		
	HCH	3	0	23.60	22.46	PASS		
		3	2	23.80	22.58	PASS		
		3	3	23.81	22.45	PASS		
		6	0	22.54	21.79	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 3 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	22.84	22.18	PASS		
		1	7	22.59	21.98	PASS		
		1	14	22.18	21.54	PASS		
	LCH	8	0	22.58	21.65	PASS		
		8	4	22.41	21.44	PASS		
		8	7	22.25	21.43	PASS		
		15	0	22.41	21.51	PASS		
		1	0	23.05	22.30	PASS		
		1	7	23.27	22.27	PASS		
QPSK /		1	14	23.40	22.12	PASS		
16QAM	MCH	8	0	22.21	21.28	PASS		
IOQAIVI		8	4	22.25	21.32	PASS		
		8	7	22.13	21.37	PASS		
		15	0	22.14	21.43	PASS		
		1	0	23.37	22.49	PASS		
		1	7	23.76	22.87	PASS		
		1	14	23.80	22.98	PASS		
	HCH	8	0	22.40	21.45	PASS		
		8	4	22.54	21.58	PASS		
		8	7	22.56	21.69	PASS		
		15	0	22.45	21.57	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 5 MHz)								
Madulation	Channal	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	\/a ==li =t			
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict			
		1	0	22.77	22.22	PASS			
		1	12	22.35	21.84	PASS			
		1	24	21.96	21.41	PASS			
	LCH	12	0	22.46	21.71	PASS			
		12	6	22.28	21.50	PASS			
		12	13	21.98	21.23	PASS			
		25	0	22.18	21.37	PASS			
		1	0	23.02	22.38	PASS			
		1	12	23.27	22.49	PASS			
QPSK /		1	24	23.56	22.39	PASS			
16QAM	MCH	12	0	22.17	21.35	PASS			
IOQAW		12	6	22.15	21.42	PASS			
		12	13	22.15	21.35	PASS			
		25	0	22.14	21.13	PASS			
		1	0	23.07	21.72	PASS			
		1	12	23.92	22.13	PASS			
		1	24	24.45	22.19	PASS			
	HCH	12	0	22.43	21.37	PASS			
		12	6	22.59	21.71	PASS			
		12	13	22.65	21.80	PASS			
		25	0	22.47	21.71	PASS			

	Conducted Output Power Test Result (Channel Bandwidth: 10 MHz)							
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Vardiet		
Modulation	Channel	Size	Offset	QPSK	16QAM	Verdict		
		1	0	21.96	21.34	PASS		
		1	24	22.08	21.49	PASS		
		1	49	22.03	21.42	PASS		
	LCH	25	0	21.91	21.03	PASS		
		25	12	21.96	21.06	PASS		
		25	25	21.93	21.07	PASS		
		50	0	21.92	21.03	PASS		
		1	0	22.55	21.96	PASS		
		1	24	23.29	22.70	PASS		
QPSK /		1	49	23.32	22.22	PASS		
16QAM	MCH	25	0	22.25	21.25	PASS		
IOQAW		25	12	22.23	21.20	PASS		
		25	25	22.05	21.15	PASS		
		50	0	22.08	21.29	PASS		
		1	0	22.13	21.65	PASS		
		1	24	23.14	22.68	PASS		
		1	49	23.59	23.11	PASS		
	HCH	25	0	22.34	21.50	PASS		
		25	12	22.52	21.63	PASS		
		25	25	22.58	21.73	PASS		
		50	0	22.36	21.37	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	21.78	21.11	PASS		
		1	37	22.32	21.72	PASS		
		1	74	22.93	22.30	PASS		
	LCH	37	0	21.73	20.79	PASS		
		37	18	22.22	21.33	PASS		
		37	38	22.83	21.94	PASS		
		75	0	22.26	21.41	PASS		
		1	0	22.71	22.13	PASS		
		1	37	23.16	22.56	PASS		
QPSK /		1	74	23.23	21.97	PASS		
16QAM	MCH	37	0	22.28	21.48	PASS		
IOQAW		37	18	22.15	21.27	PASS		
		37	38	21.97	21.01	PASS		
		75	0	22.16	21.29	PASS		
		1	0	23.05	22.47	PASS		
		1	37	22.65	22.16	PASS		
		1	74	23.31	22.77	PASS		
	HCH	37	0	22.11	21.17	PASS		
		37	18	22.27	21.19	PASS		
		37	38	22.53	21.59	PASS		
		75	0	22.30	21.36	PASS		

	Conducted Output Power Test Result (Channel Bandwidth: 20 MHz)								
Modulation	Channel	RB Con	figuration	Average Power [dBm]	Average Power [dBm]	Verdict			
Modulation	Channel	Size	Offset	QPSK	16QAM	verdict			
		1	0	21.42	20.61	PASS			
		1	49	23.07	22.27	PASS			
		1	99	22.05	21.24	PASS			
	LCH	50	0	21.72	20.80	PASS			
		50	25	22.80	21.89	PASS			
		50	50	23.03	22.11	PASS			
		100	0	22.42	21.51	PASS			
	мсн	1	0	22.65	21.88	PASS			
		1	49	23.18	22.43	PASS			
QPSK /		1	99	22.64	21.22	PASS			
16QAM		50	0	22.46	21.47	PASS			
TOQAM		50	25	22.17	21.26	PASS			
		50	50	21.95	21.07	PASS			
		100	0	22.22	21.34	PASS			
		1	0	22.80	21.81	PASS			
		1	49	22.94	22.01	PASS			
		1	99	23.08	22.49	PASS			
	HCH	50	0	21.99	21.15	PASS			
		50	25	22.11	21.07	PASS			
		50	50	22.35	21.28	PASS			
		100	0	22.20	21.23	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	5.49	<13	PASS			
QPSK	MCH	5.26	<13	PASS			
	HCH	5.11	<13	PASS			
16QAM	LCH	5.97	<13	PASS			
	MCH	6.08	<13	PASS			
	HCH	5.92	<13	PASS			

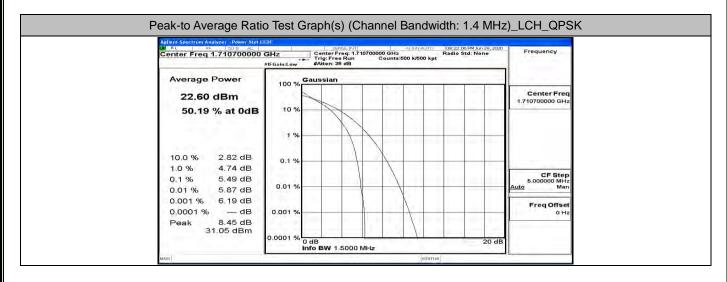
Peak-to Average Ratio Test Result (Channel Bandwidth: 3 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
Modulation	Charmer	[dB]	[dB]	verdict		
	LCH	5.28	<13	PASS		
QPSK	MCH	5.28	<13	PASS		
	HCH	5.26	<13	PASS		
16QAM	LCH	6.2	<13	PASS		
	MCH	6.18	<13	PASS		
	HCH	6	<13	PASS		

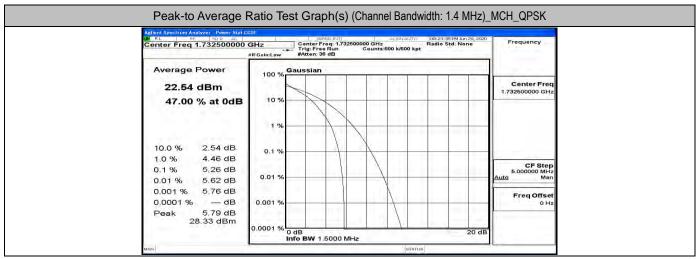
Peak-to Average Ratio Test Result (Channel Bandwidth: 5 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
iviodulation	Griannei	[dB]	[dB]	verdict		
	LCH	5.33	<13	PASS		
QPSK	MCH	5.29	<13	PASS		
	HCH	5.28	<13	PASS		
	LCH	6.25	<13	PASS		
16QAM	MCH	6.05	<13	PASS		
	HCH	6.09	<13	PASS		

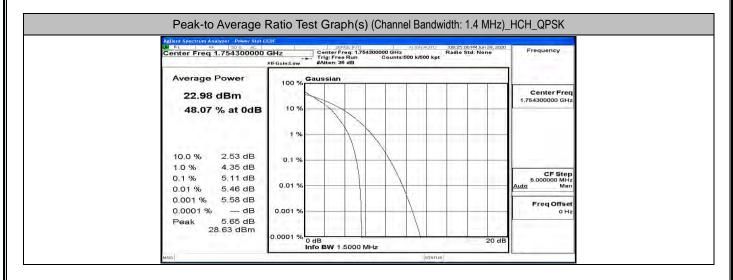
Peak-to Average Ratio Test Result (Channel Bandwidth: 10 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict		
iviodulation	Griannei	[dB]	[dB]	verdict		
	LCH	5.54	<13	PASS		
QPSK	MCH	5.27	<13	PASS		
	HCH	5.32	<13	PASS		
	LCH	6.5	<13	PASS		
16QAM	MCH	6.02	<13	PASS		
	HCH	6.04	<13	PASS		

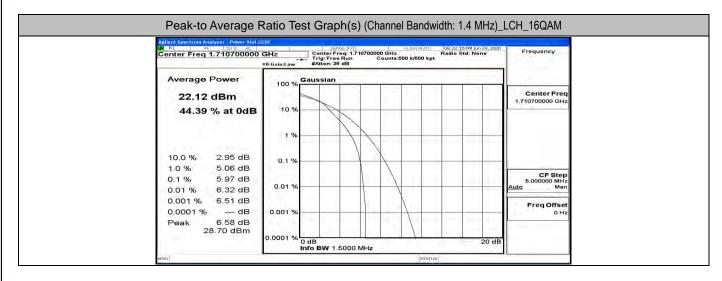
	Peak-to Average Ratio Test Result (Channel Bandwidth: 15 MHz)						
Modulation	Channel	Peak-to-Average Ratio	Limit	Verdict			
Modulation	Grianne	[dB]	[dB]	verdict			
	LCH	5.57	<13	PASS			
QPSK	MCH	5.02	<13	PASS			
	HCH	5.08	<13	PASS			
	LCH	6.48	<13	PASS			
16QAM	MCH	6.19	<13	PASS			
	HCH	6.19	<13	PASS			

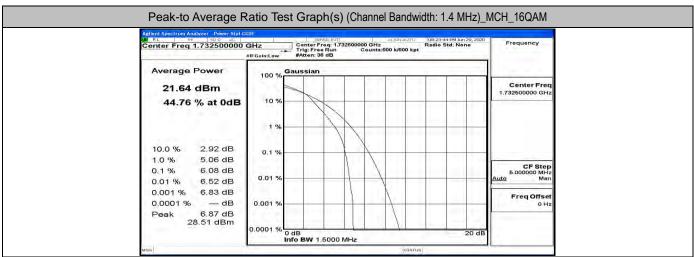
Peak-to Average Ratio Test Result (Channel Bandwidth: 20 MHz)				
M. I.I.C	Channel	Peak-to-Average Ratio	Limit	Verdict
Modulation		[dB]	[dB]	
QPSK	LCH	5.7	<13	PASS
	MCH	5.74	<13	PASS
	HCH	5.79	<13	PASS
16QAM	LCH	6.79	<13	PASS
	MCH	6.75	<13	PASS
	HCH	6.72	<13	PASS

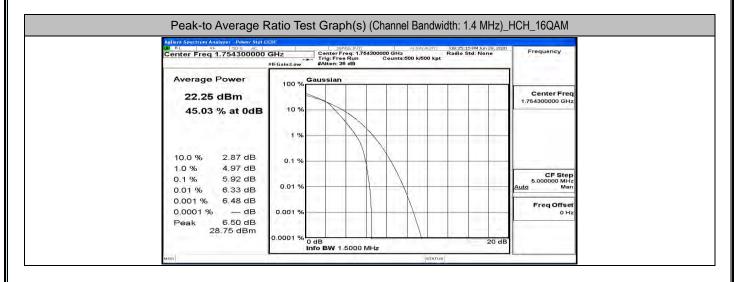


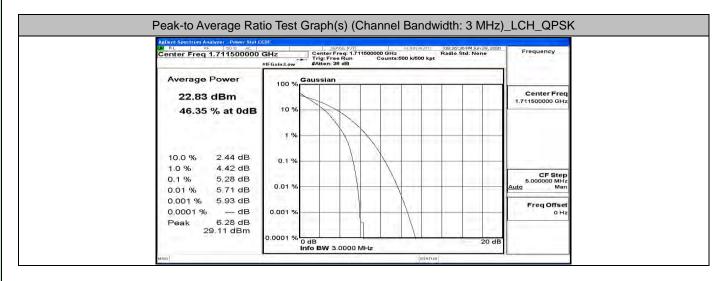


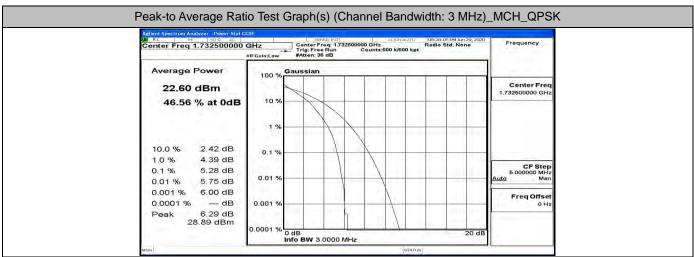


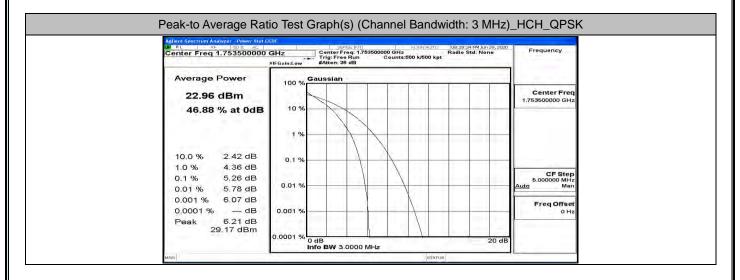


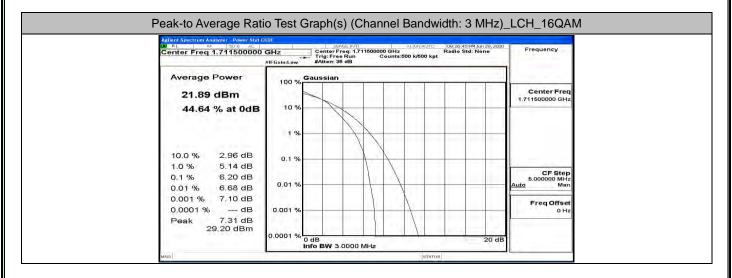


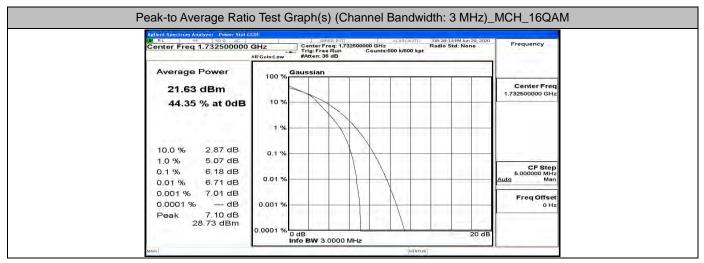


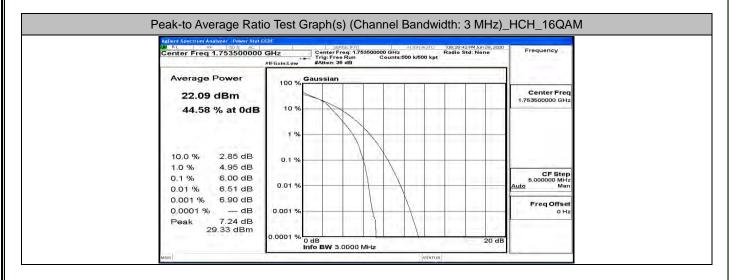


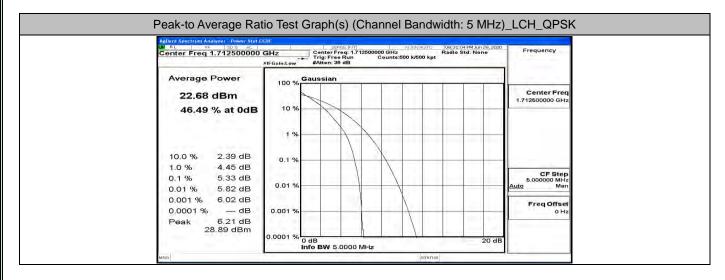


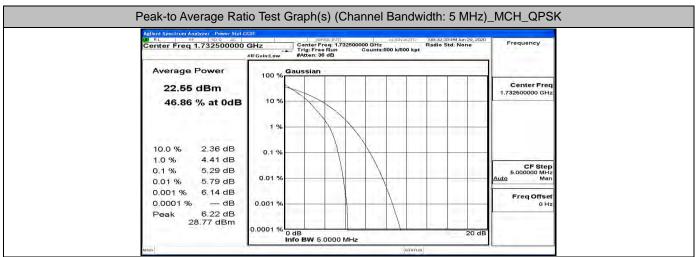


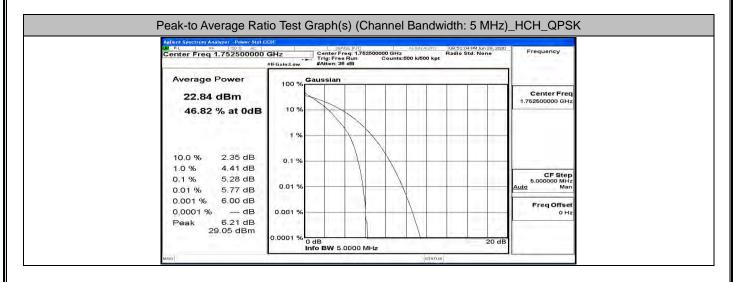


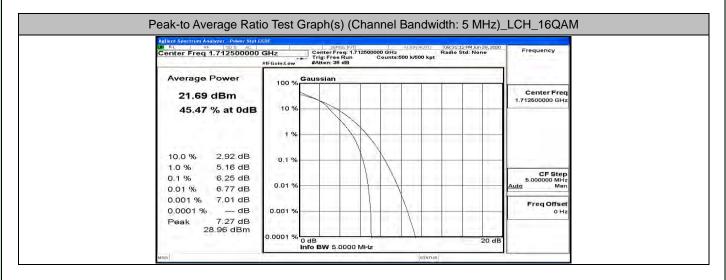


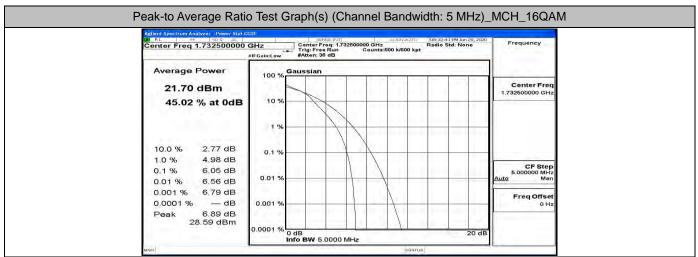


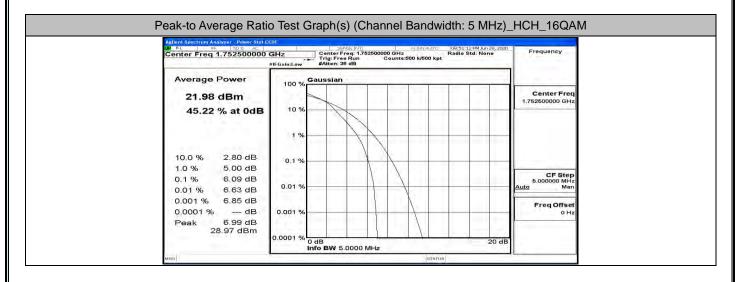


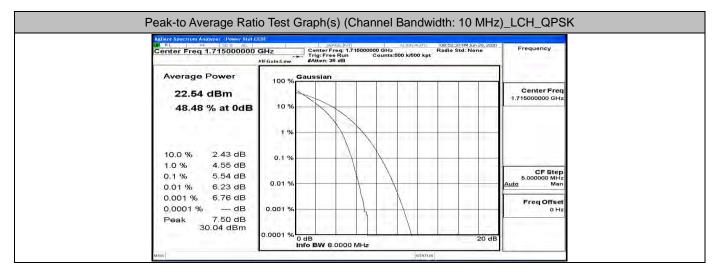


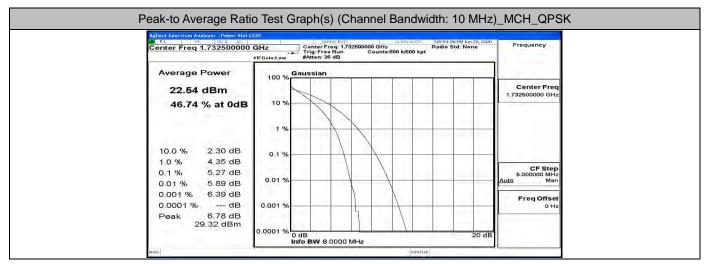


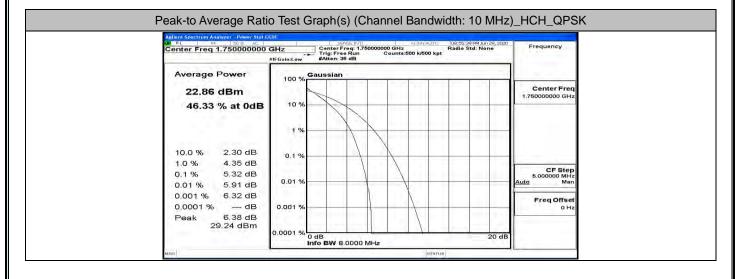


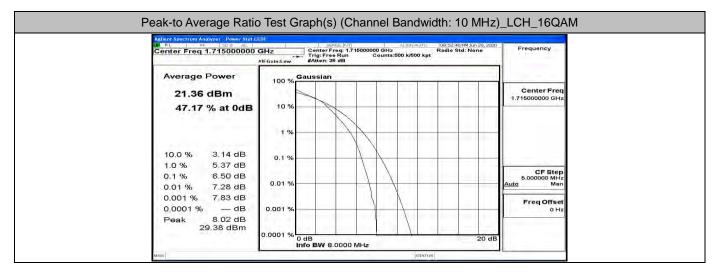


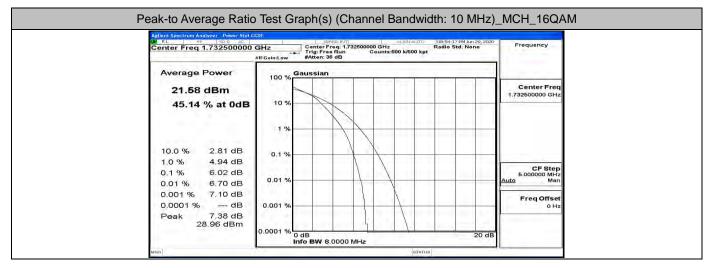


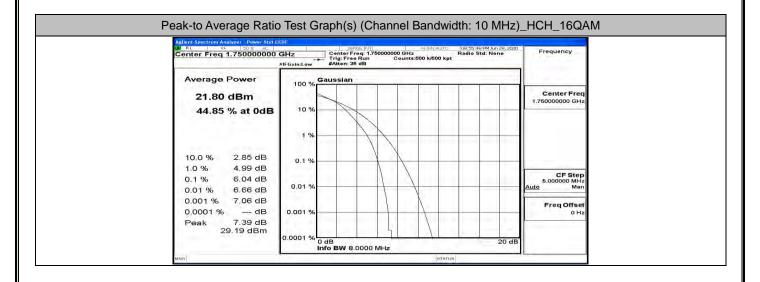


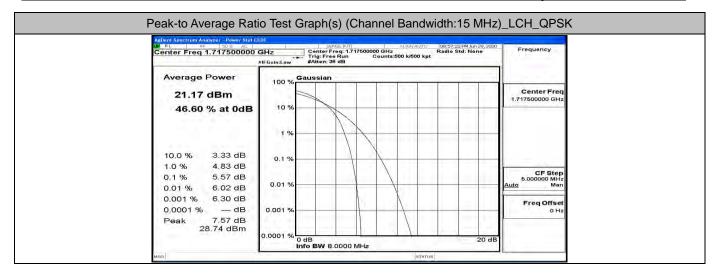


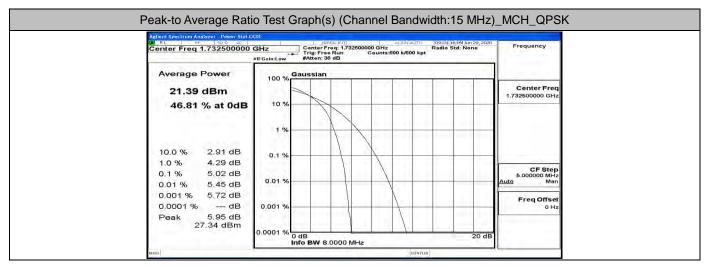


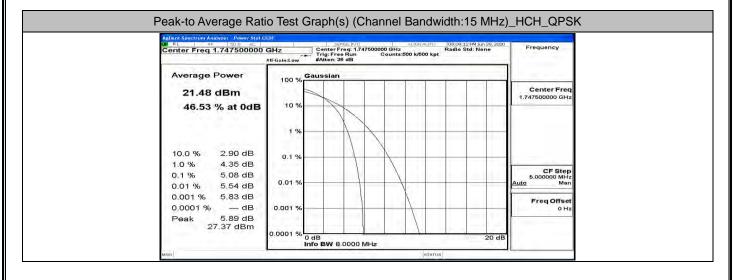


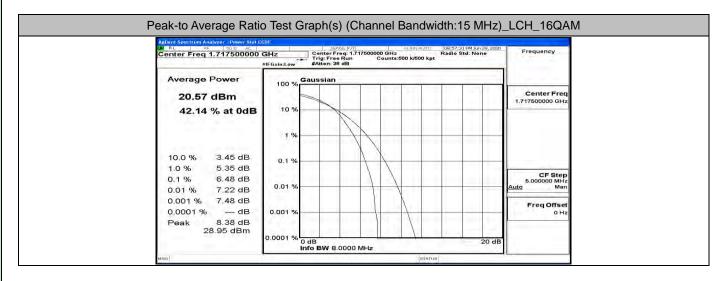


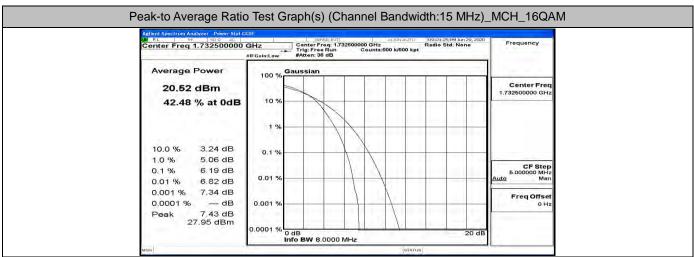


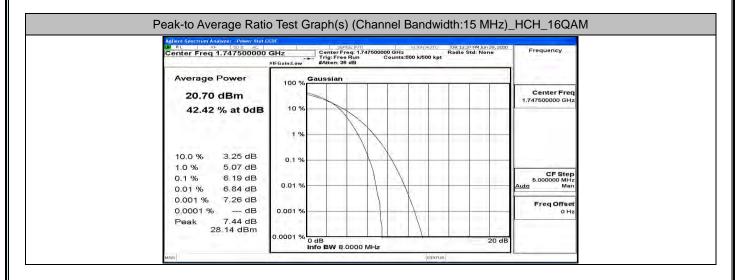


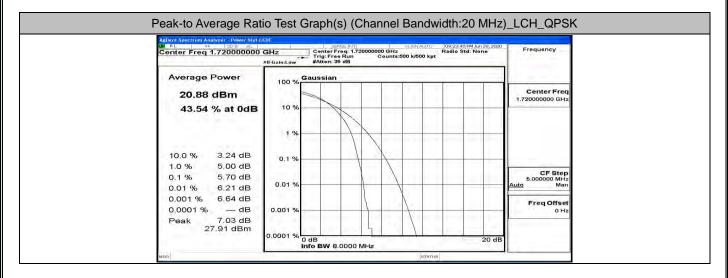


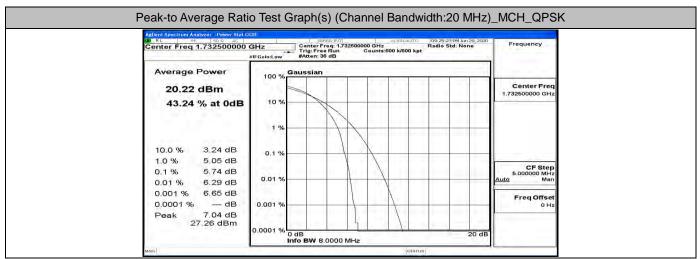


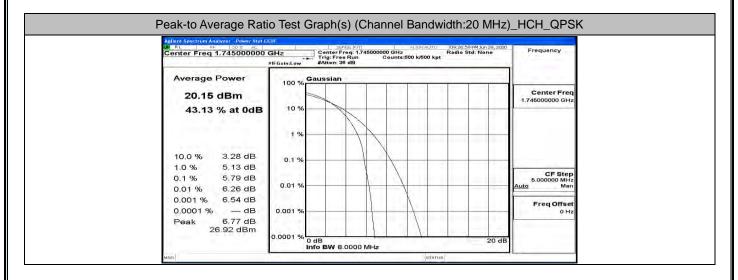


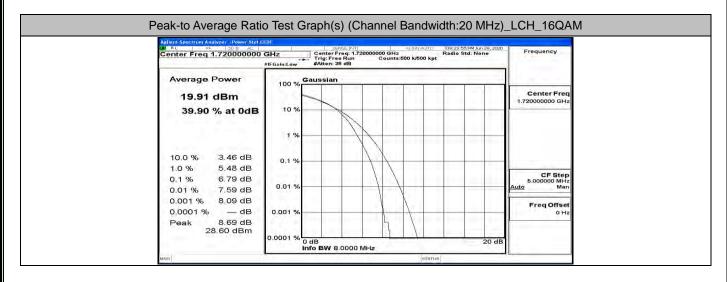


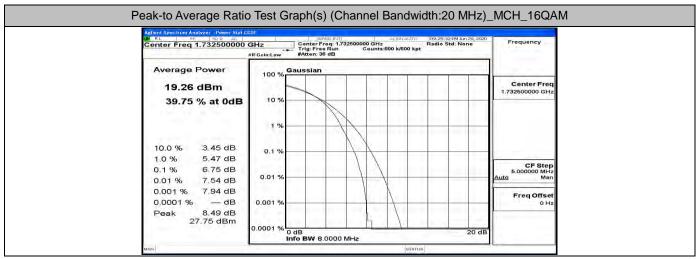


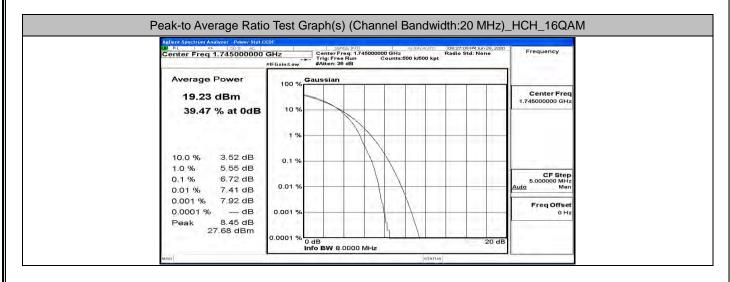












D.3 26dB Bandwidth and Occupied Bandwidth

EBW & OBW Test Result (Channel Bandwidth: 1.4 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	1.0770	1.228	PASS
	MCH	1.0762	1.205	PASS
	HCH	1.0801	1.226	PASS
16QAM	LCH	1.0805	1.237	PASS
	MCH	1.0802	1.253	PASS
	HCH	1.0762	1.220	PASS

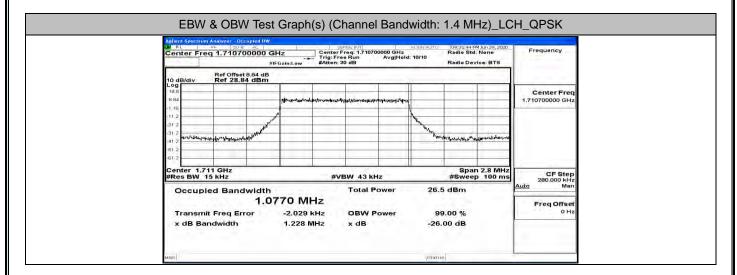
EBW & OBW Test Result (Channel Bandwidth: 3 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	2.6846	2.892	PASS
	MCH	2.6865	2.889	PASS
	HCH	2.6850	2.904	PASS
16QAM	LCH	2.6825	2.886	PASS
	MCH	2.6855	2.898	PASS
	HCH	2.6875	2.902	PASS

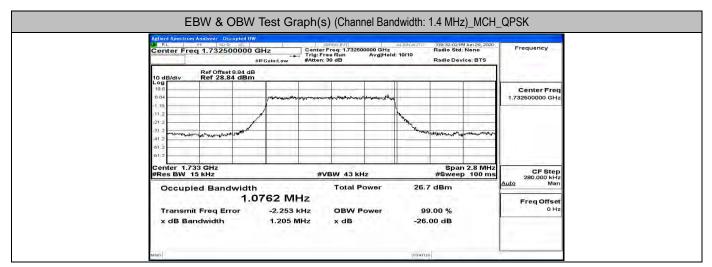
EBW & OBW Test Result (Channel Bandwidth: 5 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	4.4719	4.792	PASS
	MCH	4.4783	4.831	PASS
	HCH	4.4679	4.800	PASS
16QAM	LCH	4.4776	4.791	PASS
	MCH	4.4646	4.819	PASS
	HCH	4.4798	4.831	PASS

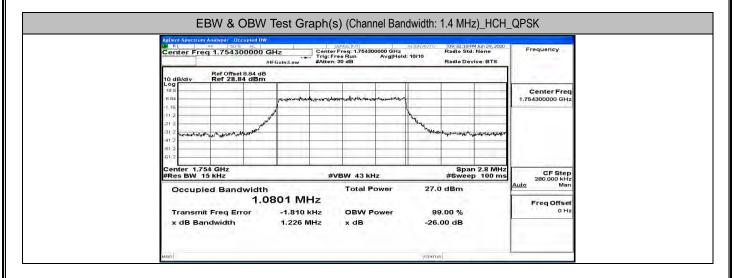
EBW & OBW Test Result (Channel Bandwidth: 10 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	19.814	20.00	PASS
	MCH	8.9346	9.491	PASS
	HCH	8.9198	9.467	PASS
16QAM	LCH	8.9282	9.458	PASS
	MCH	8.9279	9.466	PASS
	HCH	8.9343	9.450	PASS

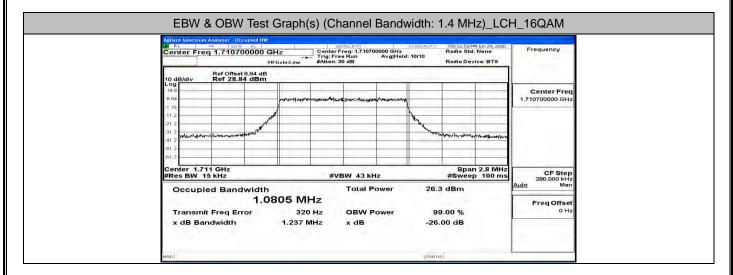
EBW & OBW Test Result (Channel Bandwidth: 15 MHz)				
Modulation	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
	LCH	13.403	14.05	PASS
QPSK	MCH	13.394	14.05	PASS
	HCH	13.409	14.15	PASS
16QAM	LCH	13.392	14.00	PASS
	MCH	13.384	13.97	PASS
	HCH	13.411	14.03	PASS

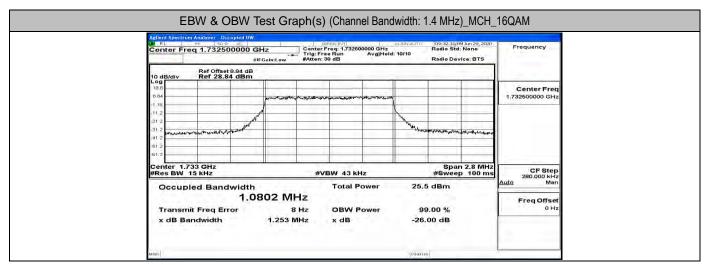
EBW & OBW Test Result (Channel Bandwidth: 20 MHz)				
Mandadada	Channel	Occupied Bandwidth	26dB Bandwidth	Verdict
Modulation		(MHz)	(MHz)	
QPSK	LCH	17.816	18.54	PASS
	MCH	17.819	18.56	PASS
	HCH	17.853	18.73	PASS
16QAM	LCH	17.810	18.55	PASS
	MCH	17.842	18.59	PASS
	HCH	17.852	18.67	PASS

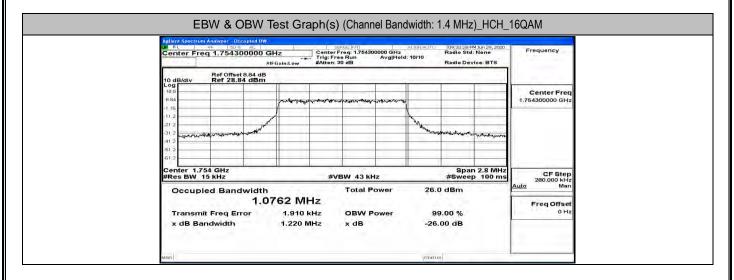


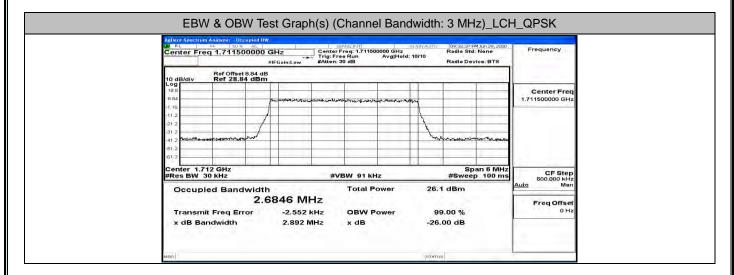


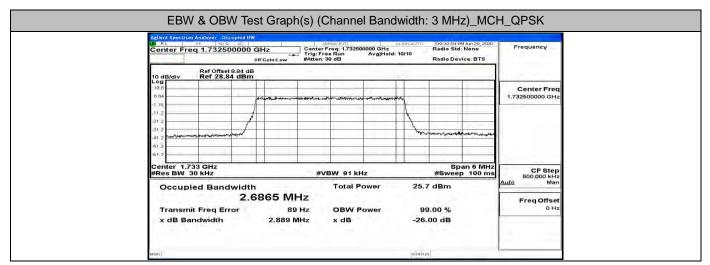


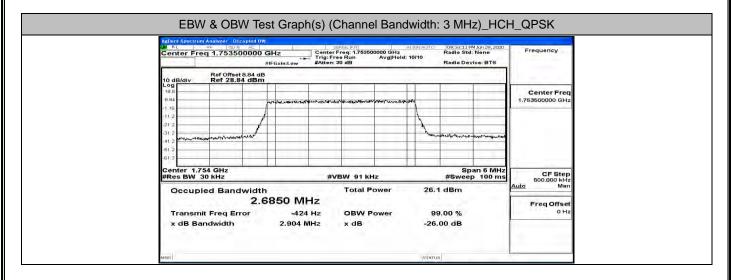


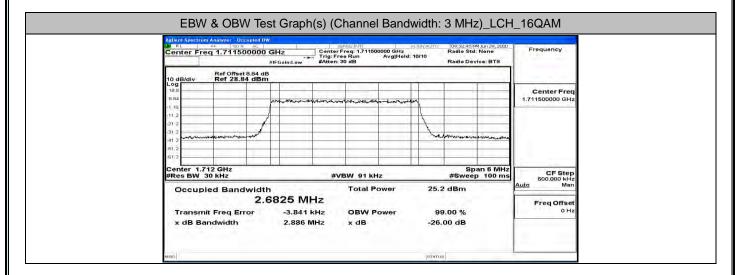


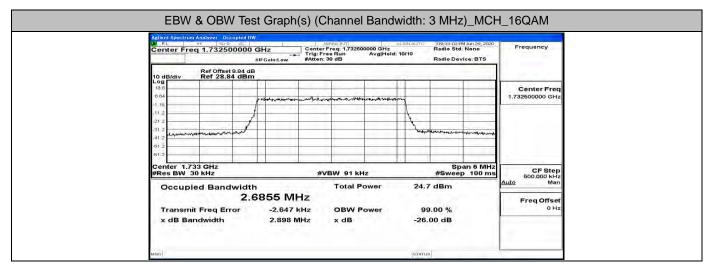


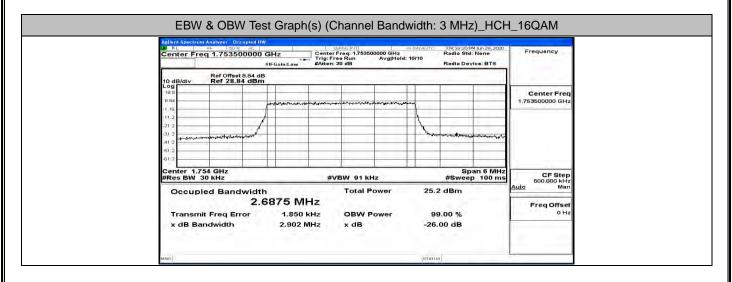


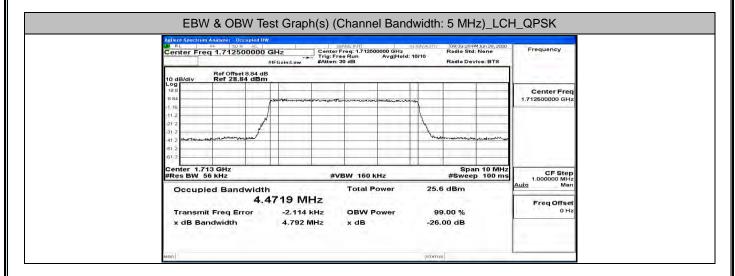


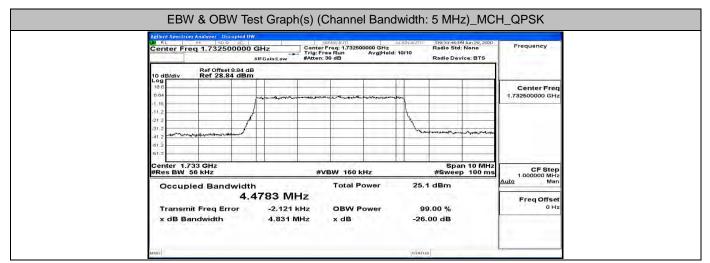


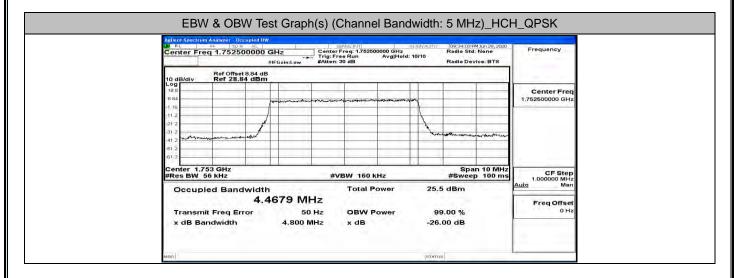


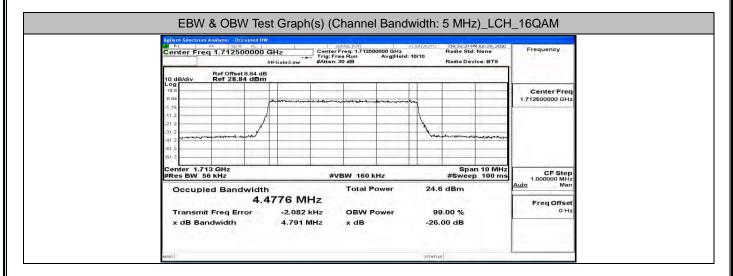


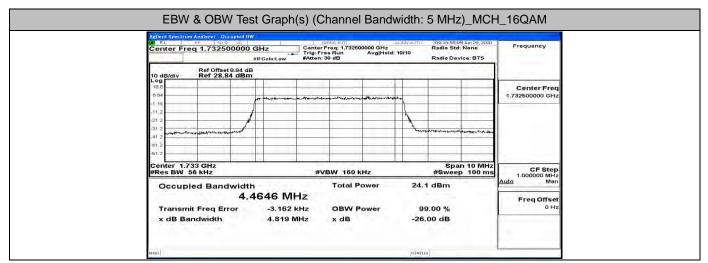


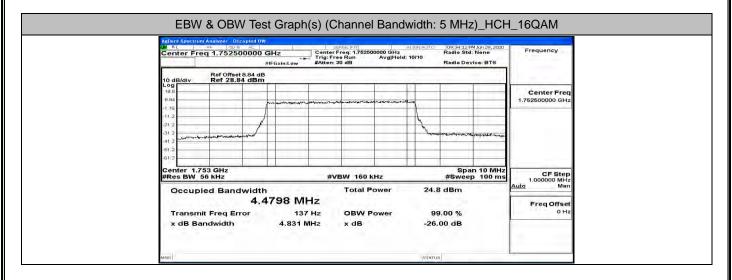


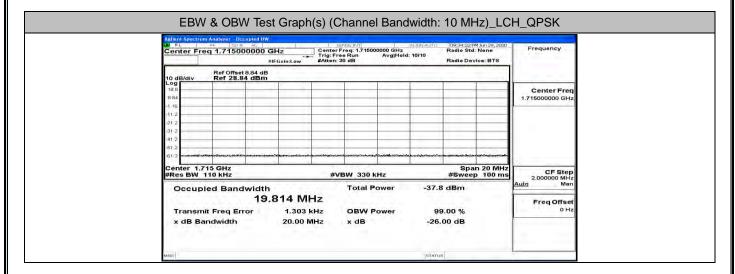


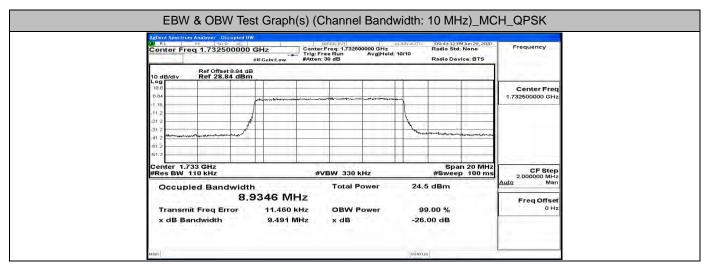


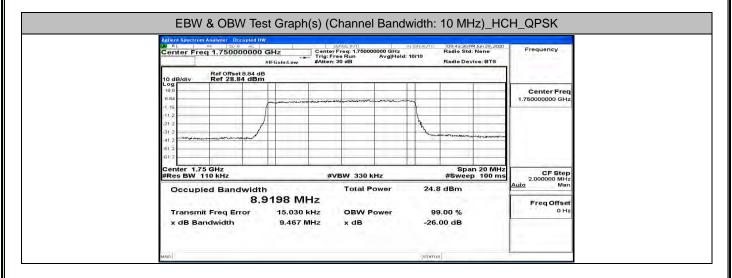


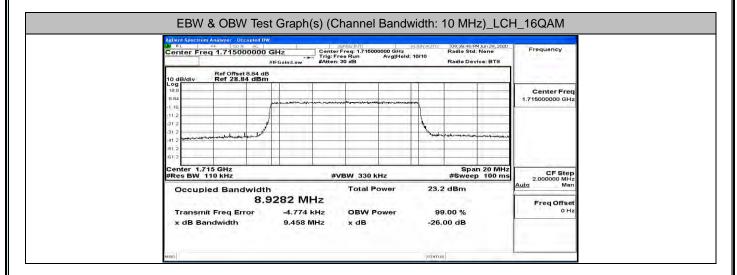


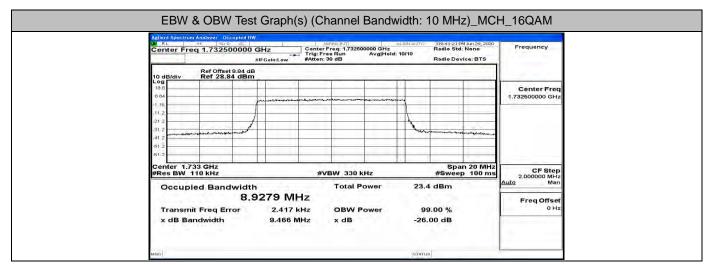


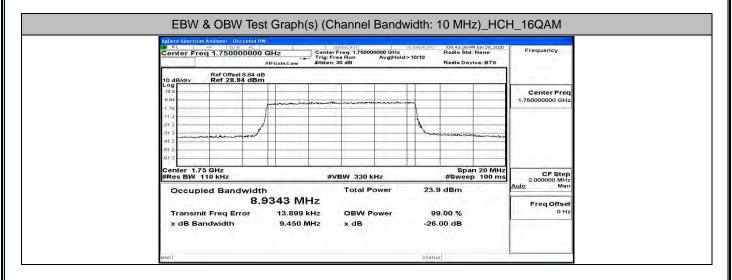


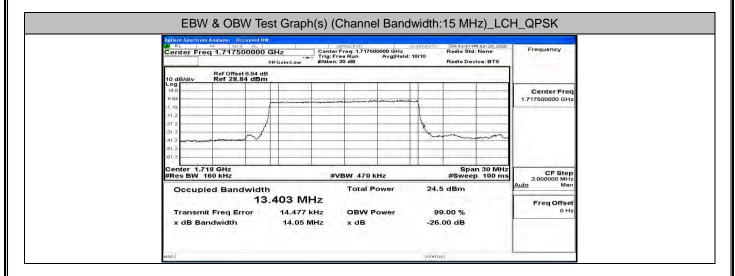


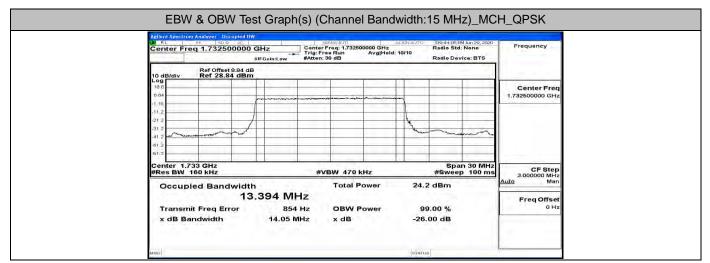


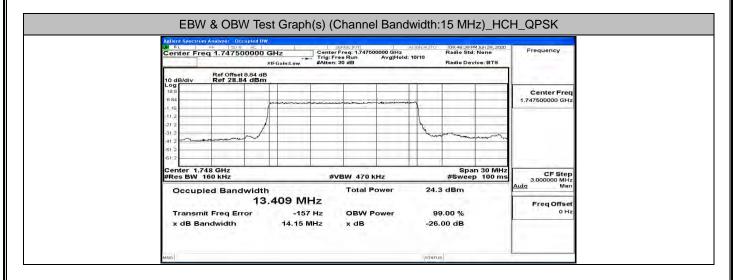


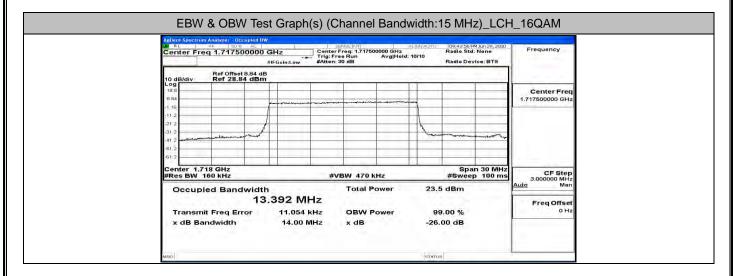


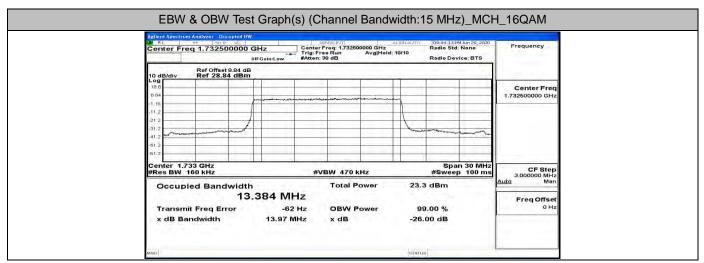


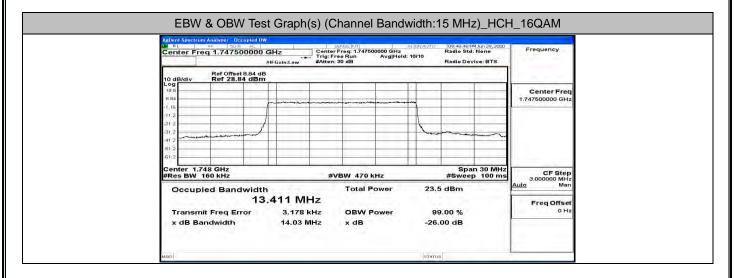


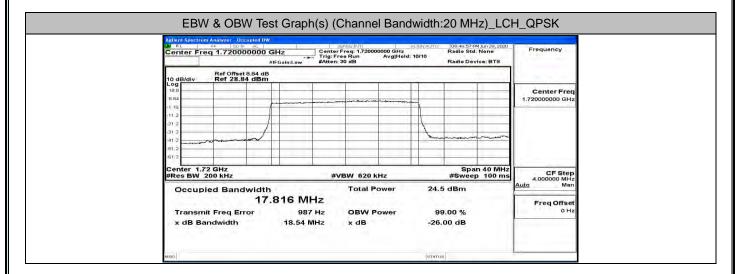


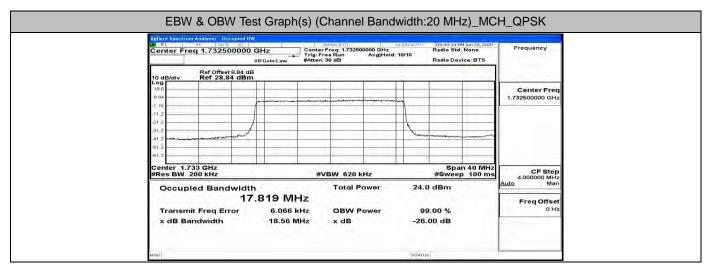


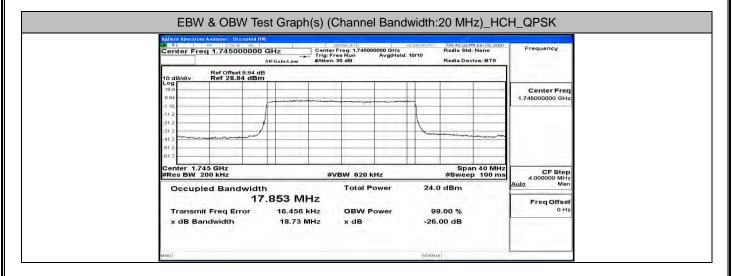


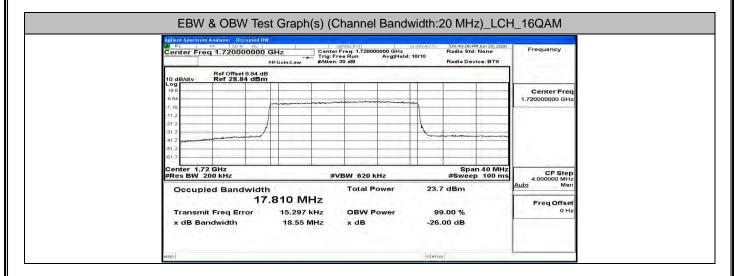


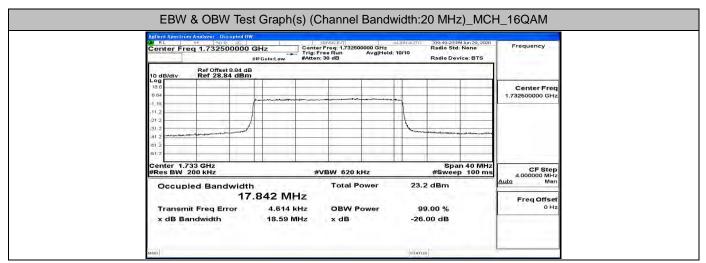


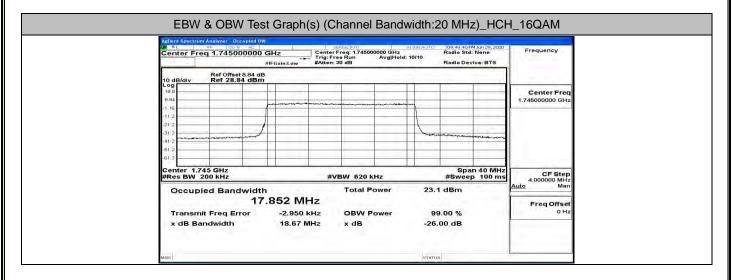




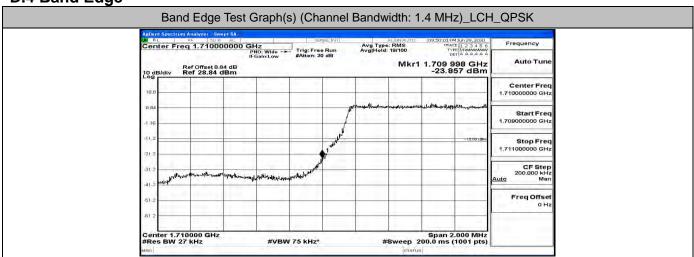


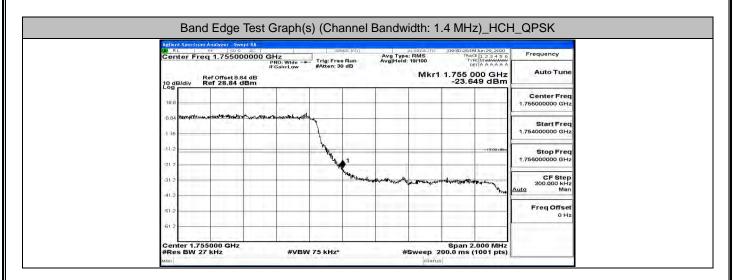


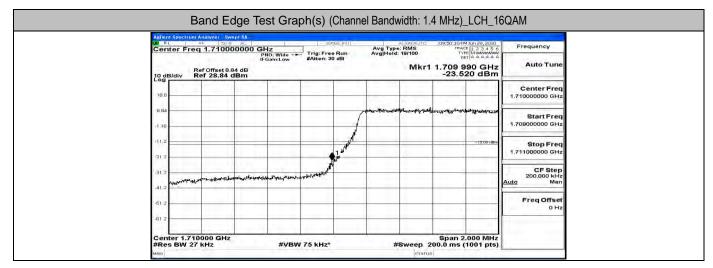


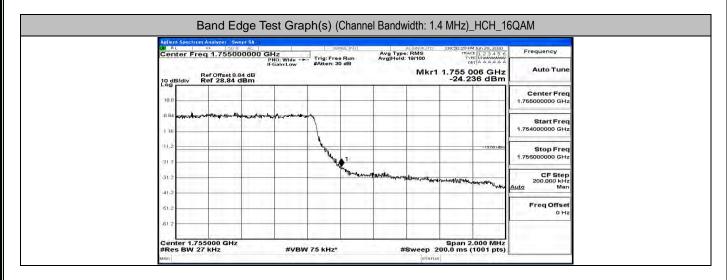


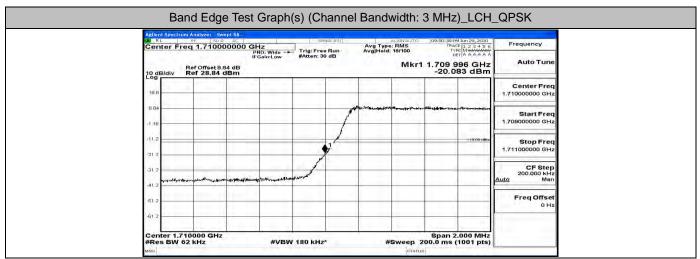
D.4 Band Edge

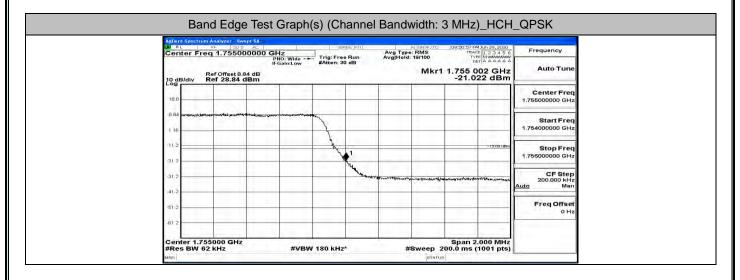


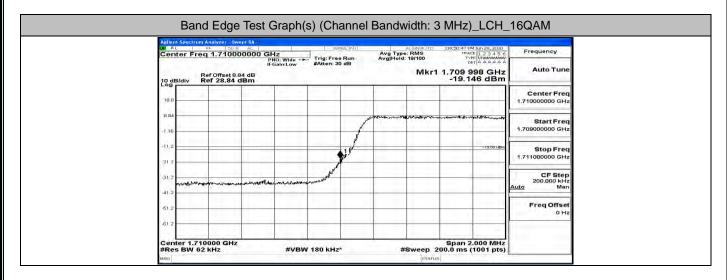


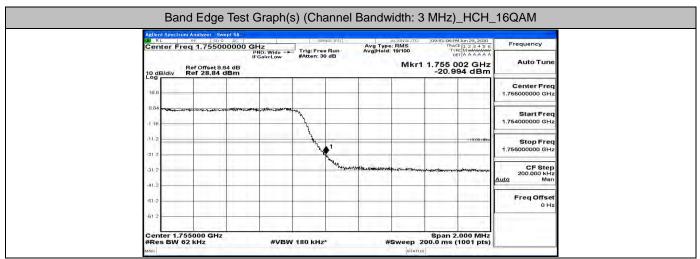


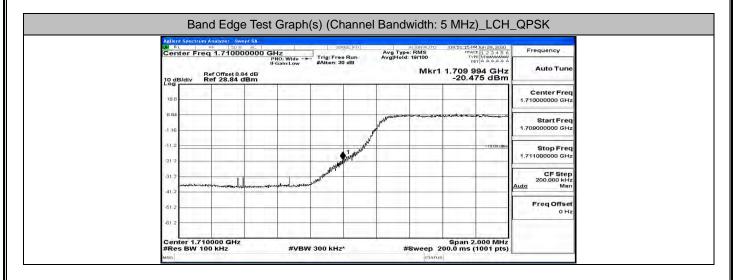


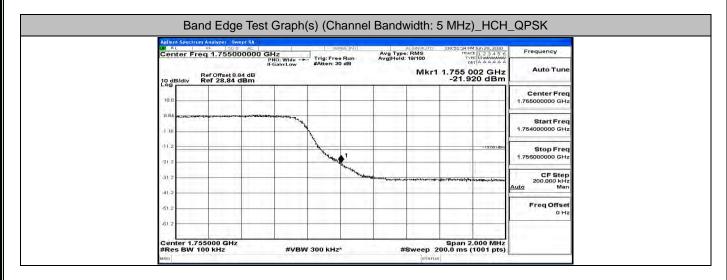


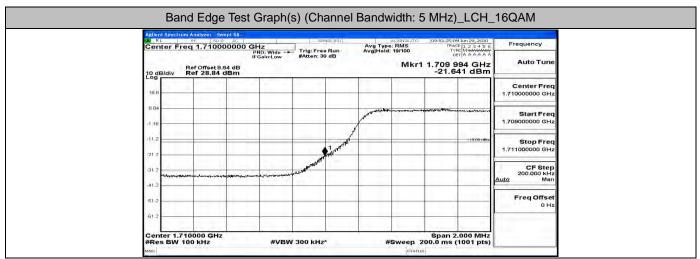


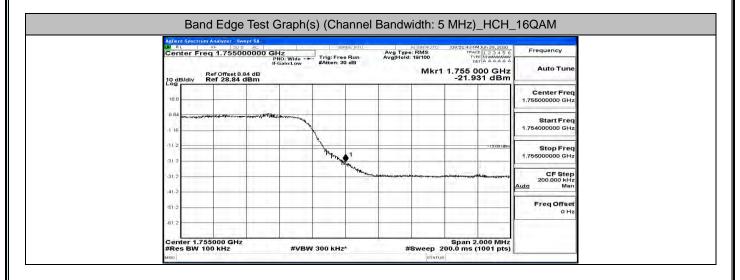


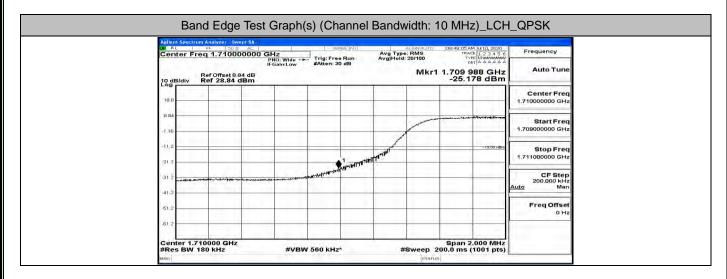


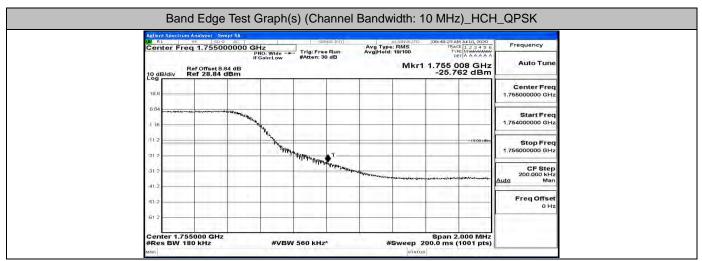


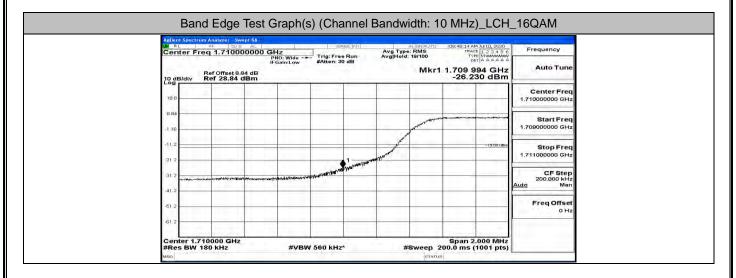


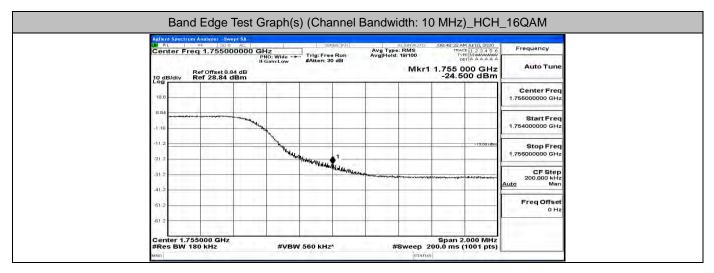


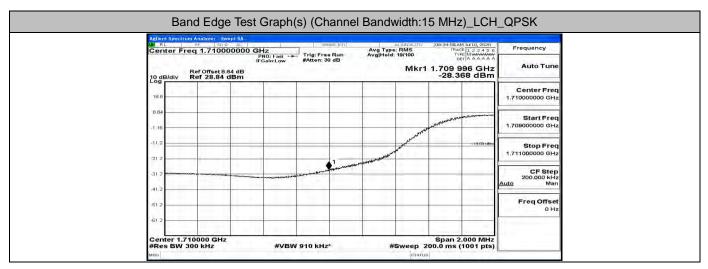


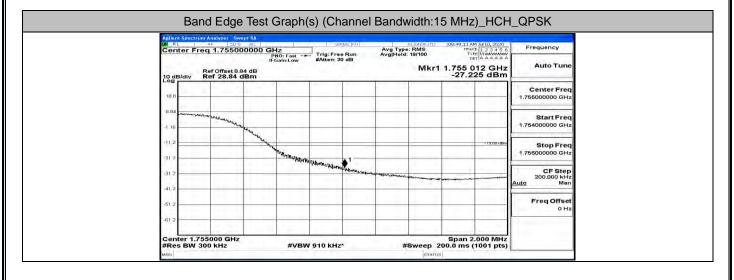


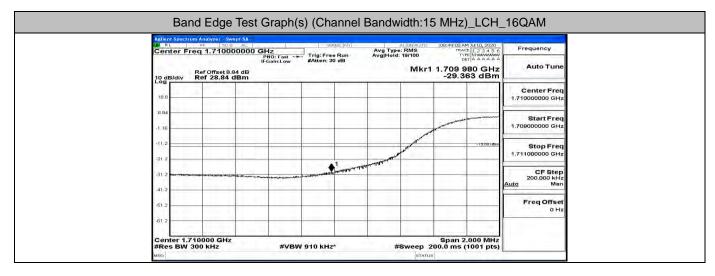


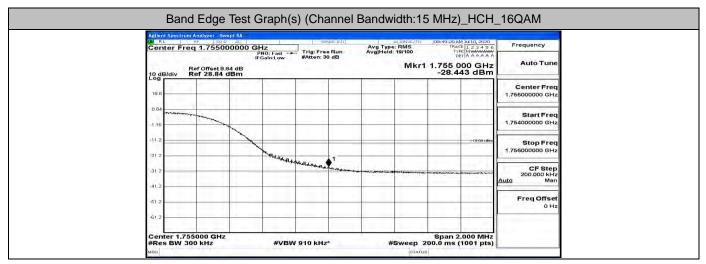


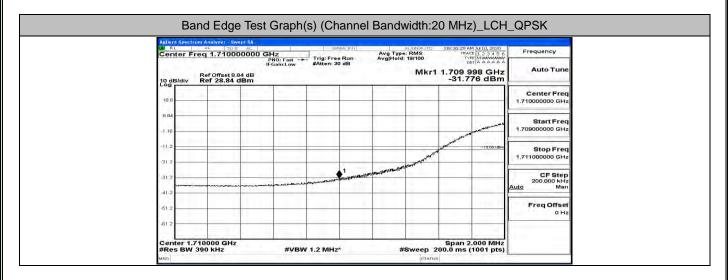


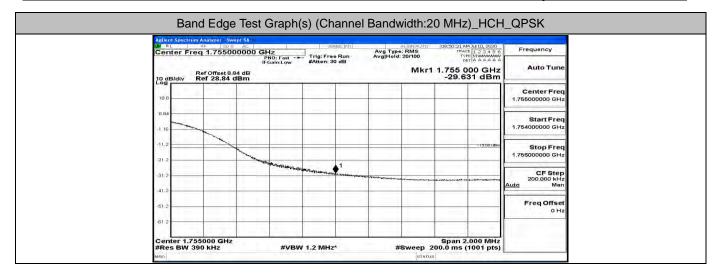


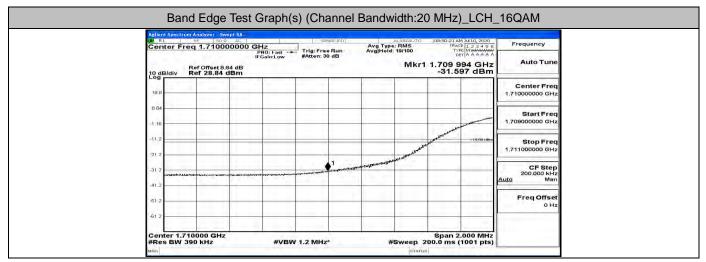


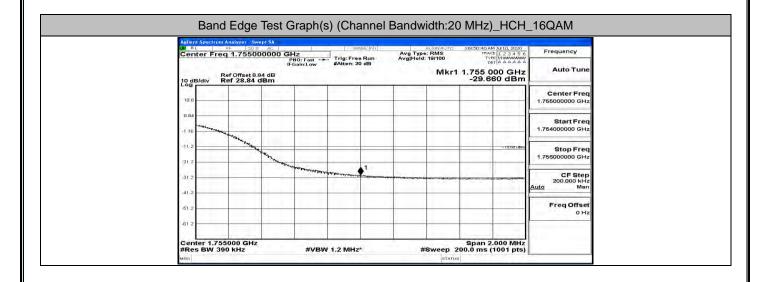




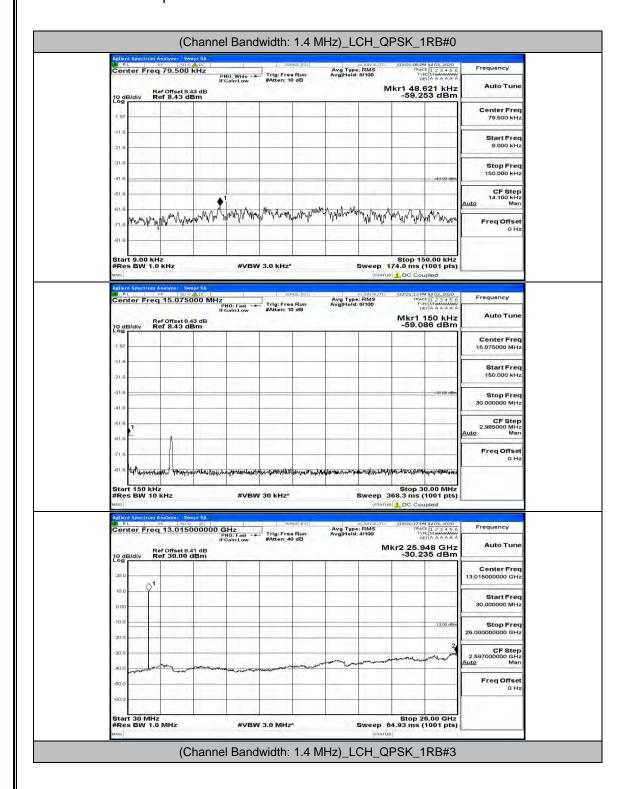


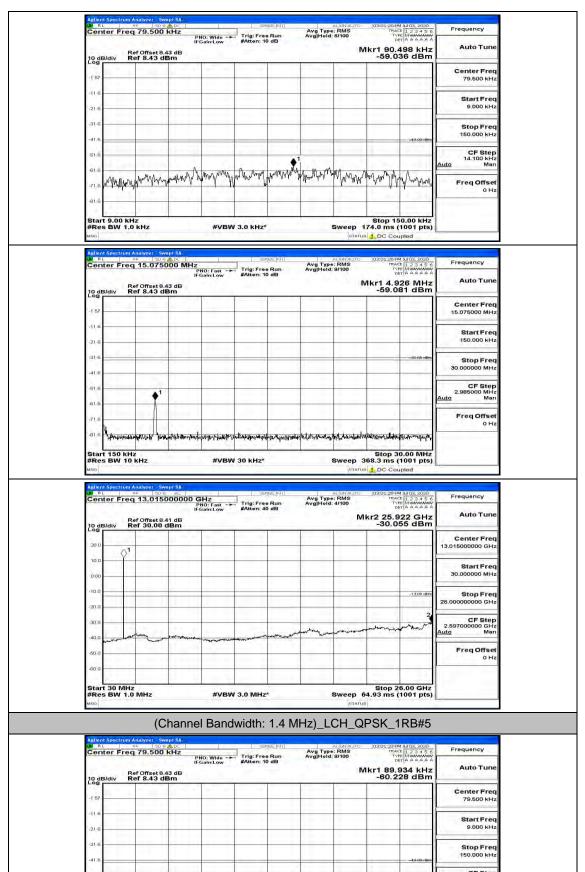






D.5 Conducted Spurious Emission Channel Bandwidth: 1.4 MHz

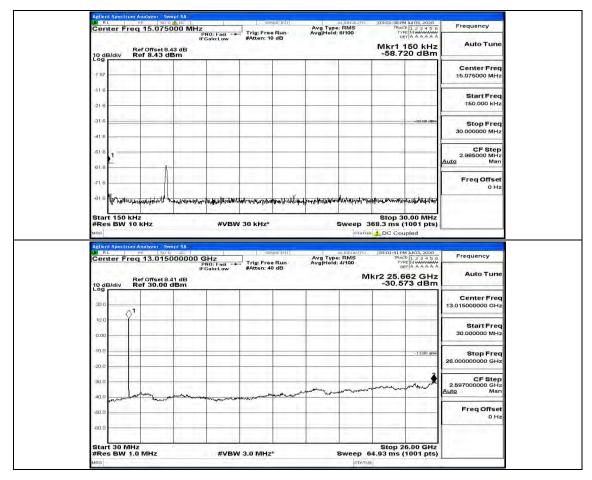


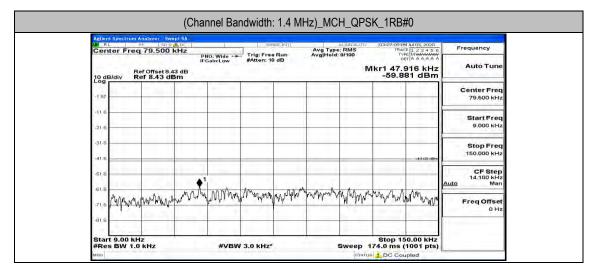


Start 9.00 kHz #Res BW 1.0 kHz

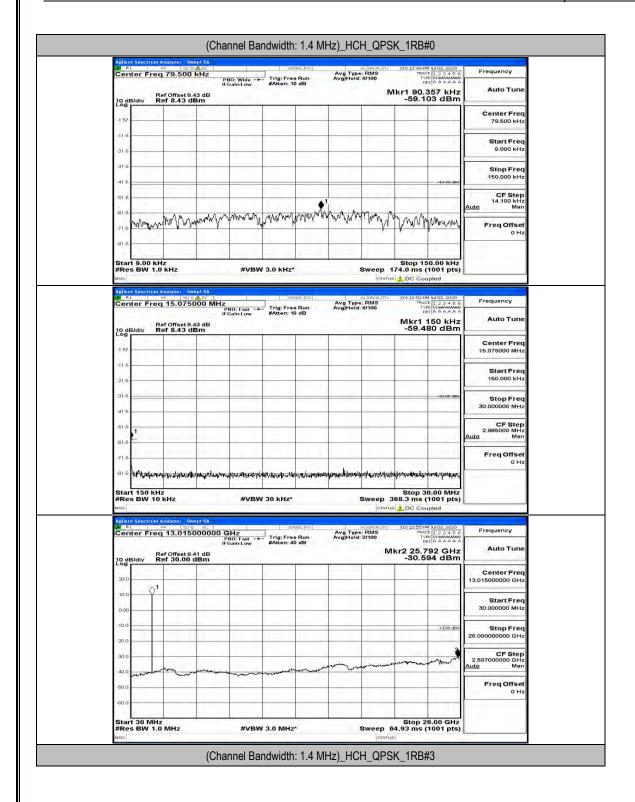
#VBW 3.0 kHz*

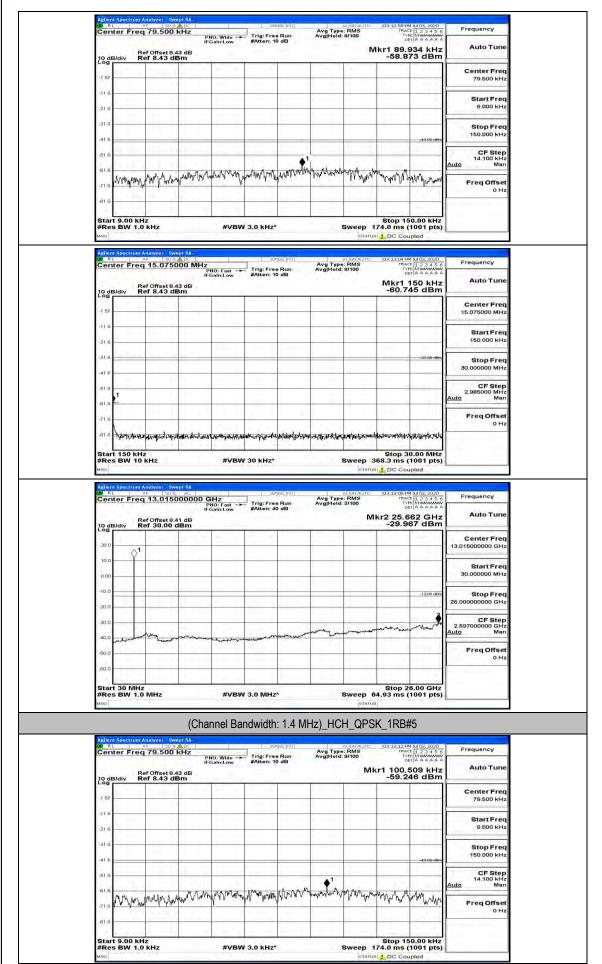
Stop 150.00 kHz Sweep 174.0 ms (1001 pts)

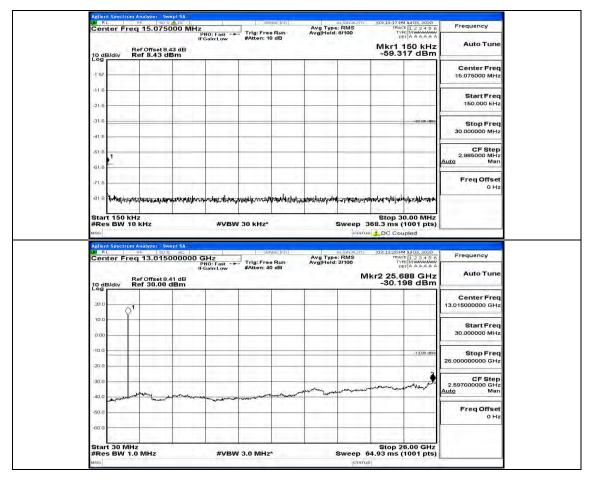


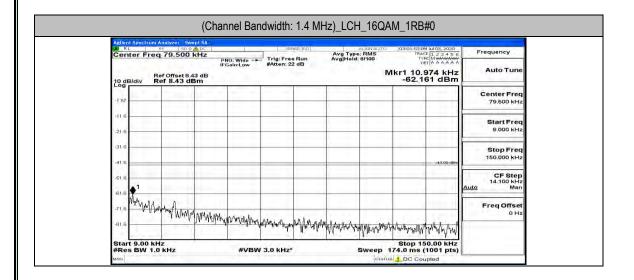


#VBW 3.0 MHz*





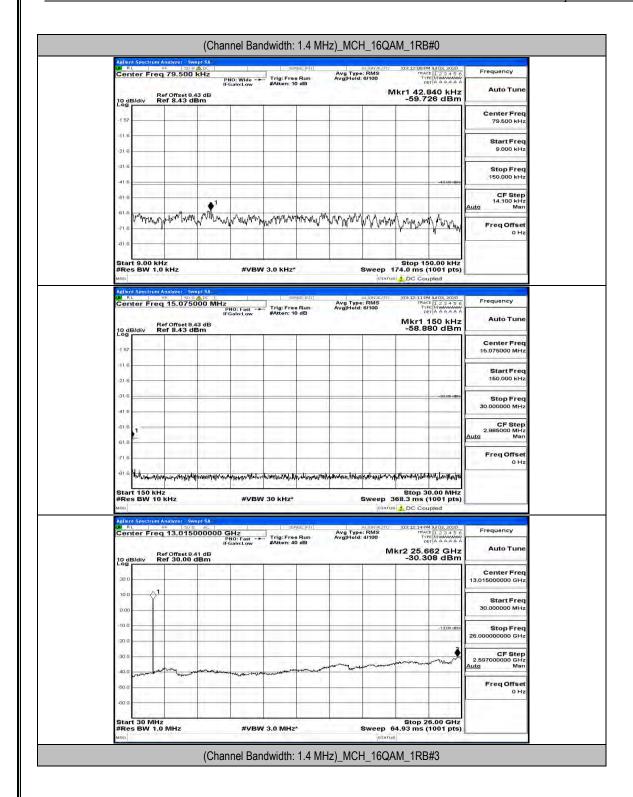


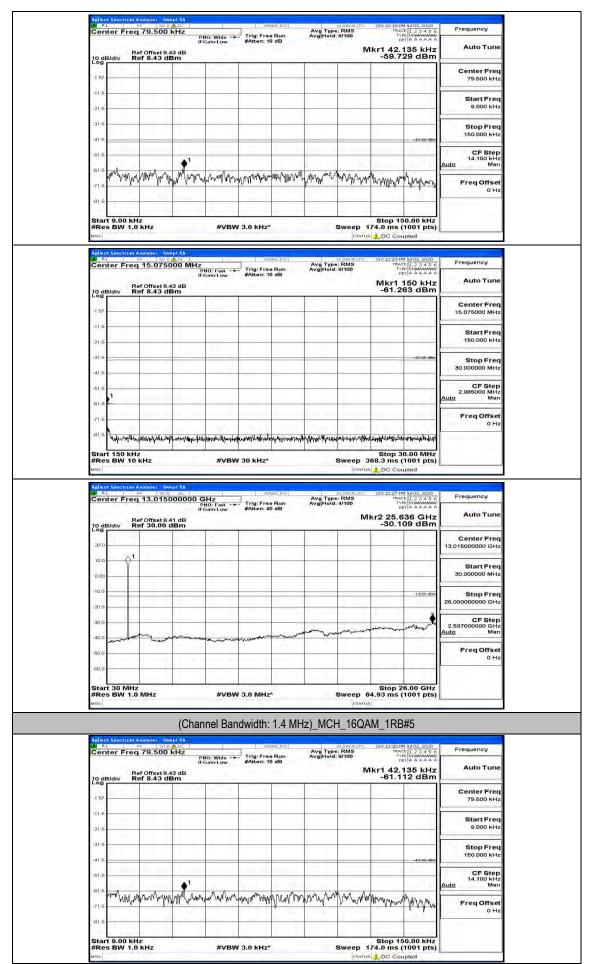


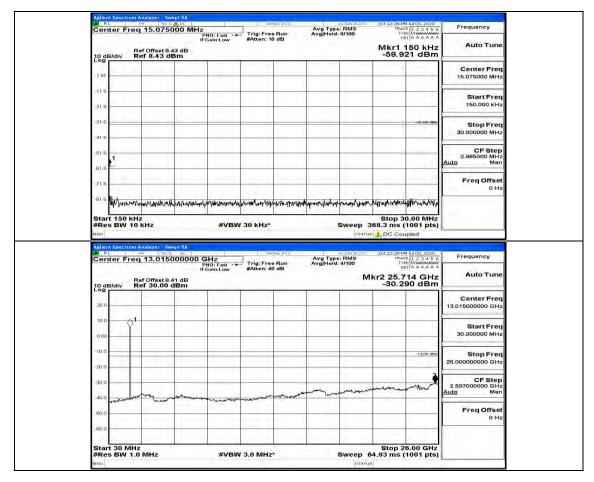
Start 30 MHz #Res BW 1.0 MHz

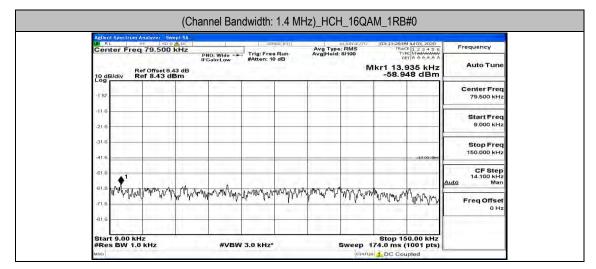
#VBW 3.0 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)







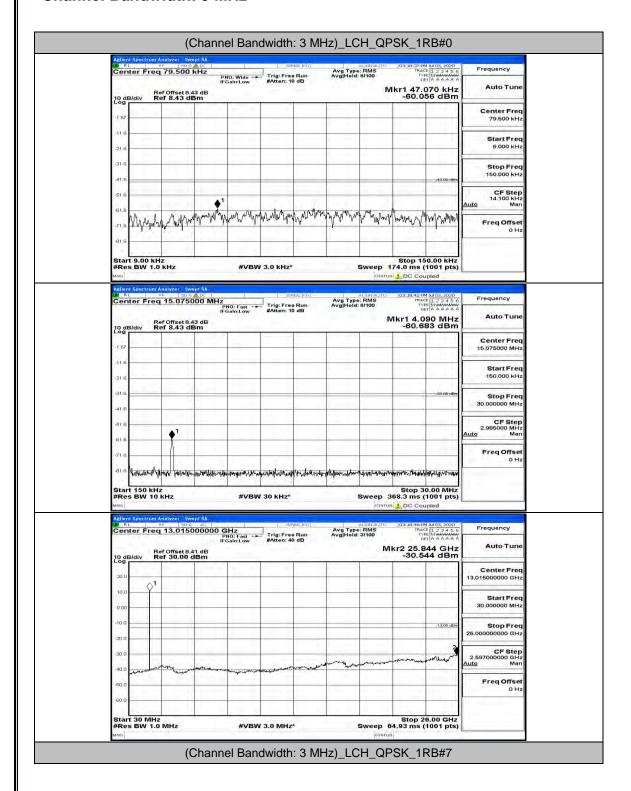


Start 30 MHz #Res BW 1.0 MHz

#VBW 3.0 MHz*

Stop 26.00 GHz Sweep 64.93 ms (1001 pts)

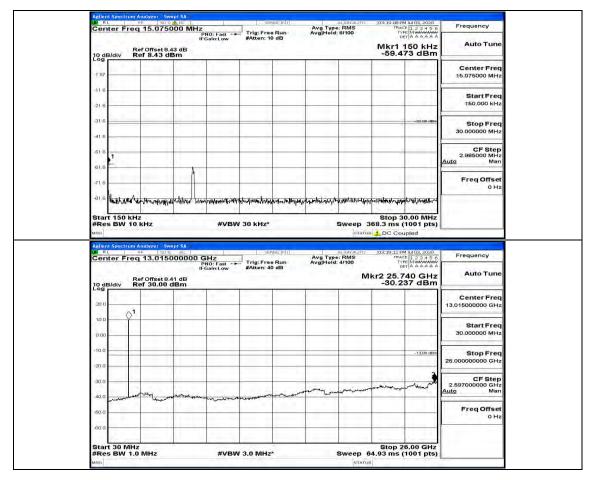
Channel Bandwidth: 3 MHz

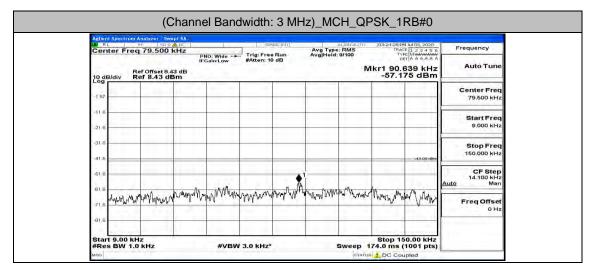


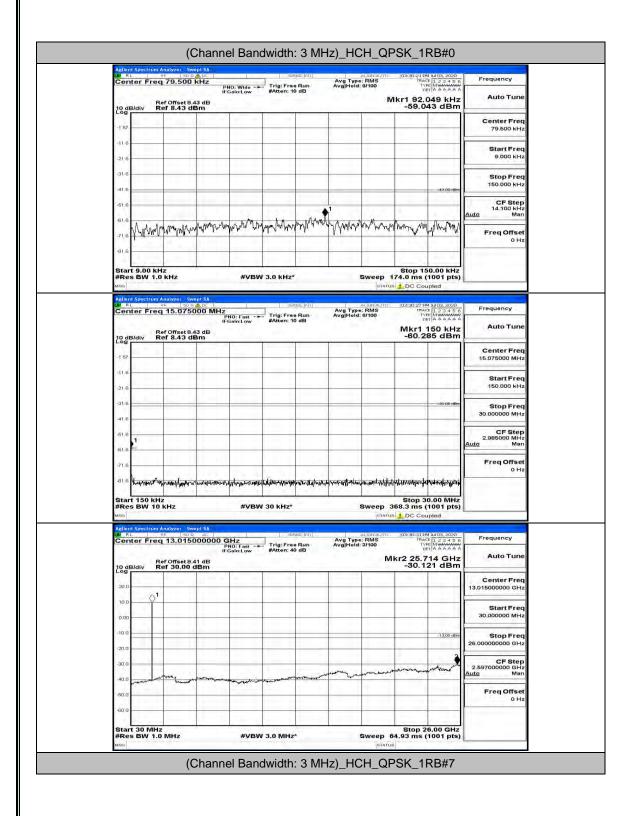
Stop 150.00 kHz Sweep 174.0 ms (1001 pts)

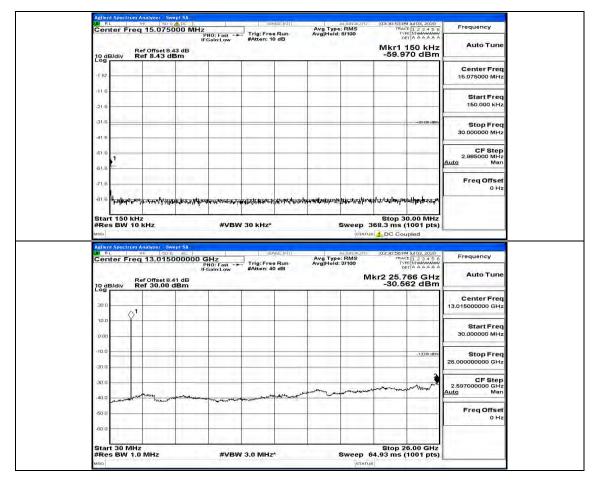
Start 9.00 kHz #Res BW 1.0 kHz

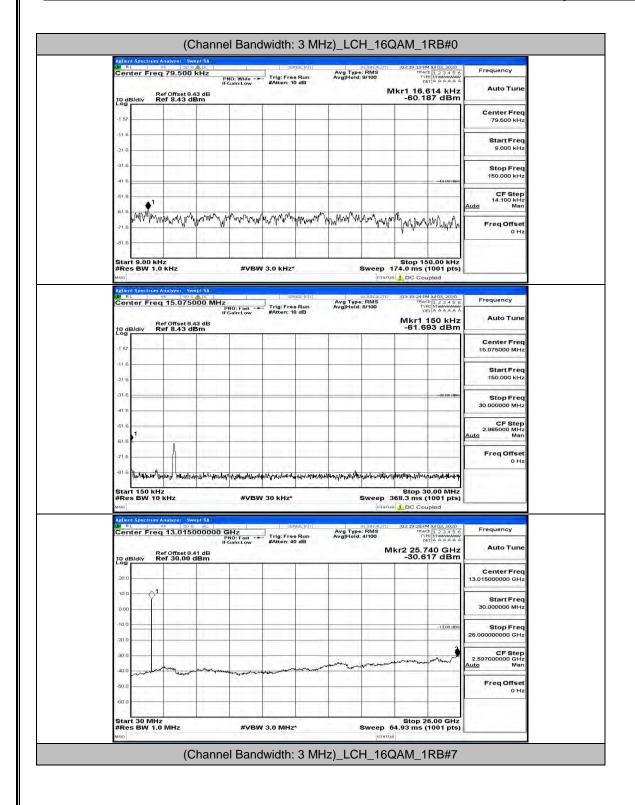
#VBW 3.0 kHz*

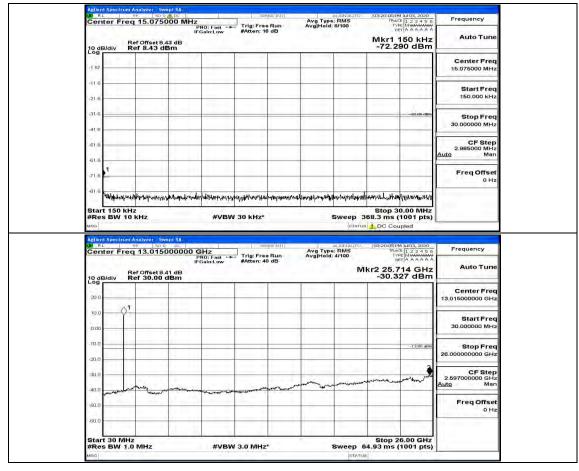


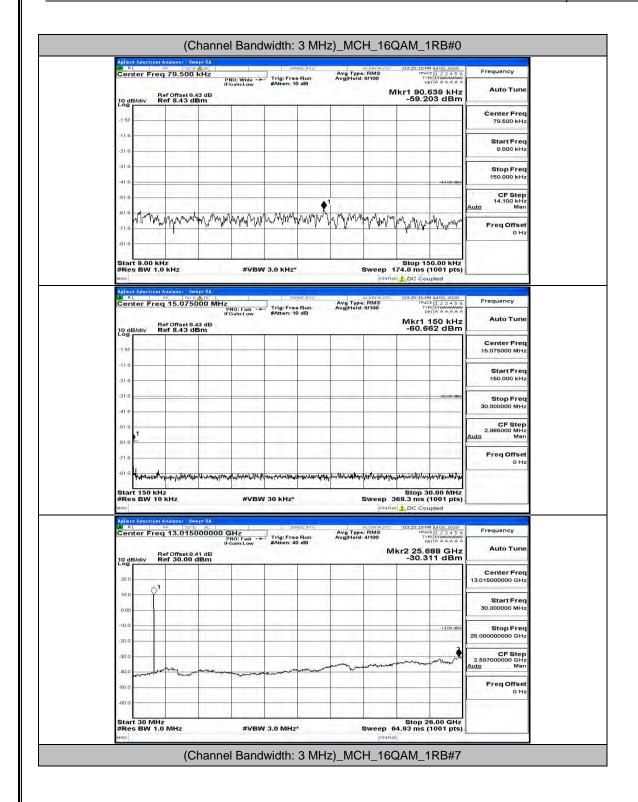








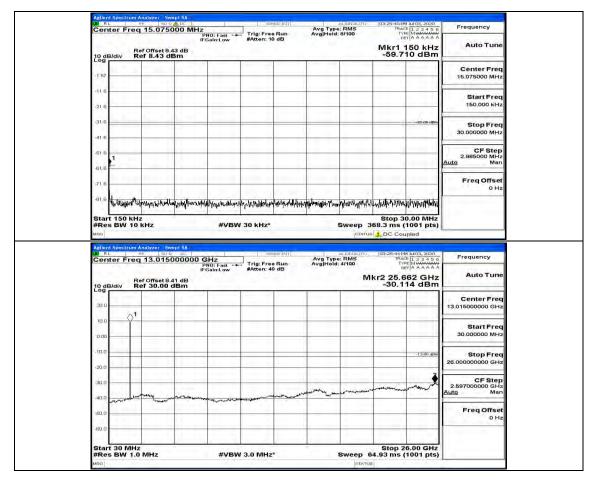


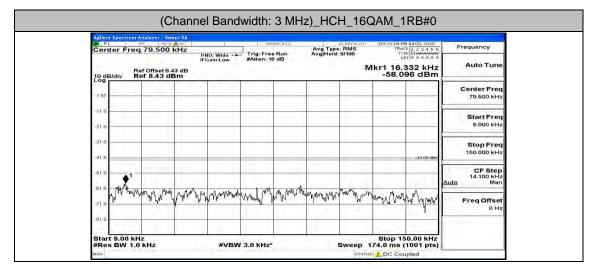


Stop 150.00 kHz Sweep 174.0 ms (1001 pts)

Start 9.00 kHz #Res BW 1.0 kHz

#VBW 3.0 kHz*





Channel Bandwidth: 5 MHz

