# Appendix B.2: Peak-to-Average Ratio

# **Test Result**

**Channel Bandwidth: 1.4 MHz** 

			Channel	Bandwidth: 1.4 MHz		
Modulation	Channel	RB Conf	iguration	Peak-to-Average Ratio	Limit	Verdict
Modulation	Channel	Size	Offset	(dB)	(dB)	verdict
		1	0	4.37	<13	PASS
		1	3	4.41	<13	PASS
		1	5	4.46	<13	PASS
	LCH	3	0	4.64	<13	PASS
		3	2	4.7	<13	PASS
		3	3	4.71	<13	PASS
		6	0	5.58	<13	PASS
		1	0	4.5	<13	PASS
		1	3	4.56	<13	PASS
		1	5	4.43	<13	PASS
QPSK	MCH	3	0	4.9	<13	PASS
		3	2	4.86	<13	PASS
		3	3	4.9	<13	PASS
		6	0	5.63	<13	PASS
		1	0	4.34	<13	PASS
		1	3	4.38	<13	PASS
		1	5	4.33	<13	PASS
	HCH	3	0	4.74	<13	PASS
		3	2	4.7	<13	PASS
		3	3	4.75	<13	PASS
		6	0	5.52	<13	PASS
		1	0	5.29	<13	PASS
		1	3	5.29	<13	PASS
		1	5	5.41	<13	PASS
	LCH	3	0	5.58	<13	PASS
		3	2	5.66	<13	PASS
		3	3	5.67	<13	PASS
16QAM		6	0	6.45	<13	PASS
		1	0	5.35	<13	PASS
		1	3	5.28	<13	PASS
	MCH	1	5	5.33	<13	PASS
	MCH	3	0	5.83	<13	PASS
		3	2	5.79	<13	PASS
		3	3	5.78	<13	PASS

SHENZHE	V LCS COMPLIA	NCE TESTING	LABORATORY LTD.	FCC ID: 2AMHDMYTH3	Report No.: LCS170502091AE	
	T	T				1
		6	0	6.51	<13	PASS
		1	0	5.11	<13	PASS
		1	3	5.12	<13	PASS
		1	5	5.08	<13	PASS
	HCH	3	0	5.52	<13	PASS
		3	2	5.49	<13	PASS
		3	3	5.49	<13	PASS
		6	0	6.32	<13	PASS

# **Channel Bandwidth: 3 MHz**

			Channel	Bandwidth: 3 MHz		
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
iviodulation	Channel	Size	Offset	[dB]	[dB]	verdict
		1	0	4.44	<13	PASS
		1	7	4.61	<13	PASS
		1	14	4.7	<13	PASS
	LCH	8	0	5.37	<13	PASS
		8	4	5.46	<13	PASS
		8	7	5.52	<13	PASS
		15	0	5.61	<13	PASS
		1	0	4.62	<13	PASS
		1	7	4.7	<13	PASS
		1	14	4.5	<13	PASS
QPSK	MCH	8	0	5.59	<13	PASS
		8	4	5.58	<13	PASS
		8	7	5.54	<13	PASS
		15	0	5.66	<13	PASS
		1	0	4.23	<13	PASS
		1	7	4.23	<13	PASS
		1	14	4.3	<13	PASS
	нсн	8	0	5.4	<13	PASS
		8	4	5.41	<13	PASS
		8	7	5.4	<13	PASS
		15	0	5.66	<13	PASS
		1	0	5.17	<13	PASS
		1	7	5.28	<13	PASS
		1	14	5.36	<13	PASS
160 114	LCH	8	0	6.13	<13	PASS
16QAM		8	4	6.22	<13	PASS
		8	7	6.17	<13	PASS
		15	0	6.51	<13	PASS
	MCH	1	0	5.38	<13	PASS

SHENZHEN	LCS COMPLIA	NCE TESTING	LABORATORY I	T.T.D. FCC ID: 2AMHDMYTH3	Report No.: LCS170502091AE	
		1	7	5.48	<13	PASS
		1	14	5.33	<13	PASS
		8	0	6.21	<13	PASS
		8	4	6.21	<13	PASS
		8	7	6.27	<13	PASS
		15	0	6.52	<13	PASS
		1	0	5.12	<13	PASS
		1	7	5.07	<13	PASS
		1	14	5.07	<13	PASS
	HCH	8	0	6.1	<13	PASS
		8	4	6.08	<13	PASS
		8	7	6.12	<13	PASS
		15	0	6.38	<13	PASS

**Channel Bandwidth: 5 MHz** 

			Channel	Bandwidth: 5 MHz		
Madulation	Channal	RB Configuration		Peak-to-Average Ratio	Limit	\/a.mdi.a.t
Modulation	Channel	Size	Offset	[dB]	[dB]	Verdict
		1	0	4.22	<13	PASS
		1	12	4.43	<13	PASS
		1	24	4.59	<13	PASS
	LCH	12	0	5.37	<13	PASS
		12	6	5.44	<13	PASS
		12	13	5.56	<13	PASS
		25	0	5.63	<13	PASS
		1	0	4.46	<13	PASS
		1	12	4.42	<13	PASS
		1	24	4.35	<13	PASS
QPSK	MCH	12	0	5.49	<13	PASS
		12	6	5.44	<13	PASS
		12	13	5.45	<13	PASS
		25	0	5.64	<13	PASS
		1	0	4.13	<13	PASS
		1	12	4.21	<13	PASS
		1	24	4.23	<13	PASS
	HCH	12	0	5.35	<13	PASS
		12	6	5.34	<13	PASS
		12	13	5.34	<13	PASS
		25	0	5.54	<13	PASS
		1	0	4.97	<13	PASS
16QAM	LCH	1	12	5.2	<13	PASS
		1	24	5.4	<13	PASS

SHENZHEN LCS COMPLIA		ANCE TESTING LABORATORY LTD.		FCC ID: 2AMHDMYTH3	Report No.: LCS170502091AE	
	1	10		0.24	.40	DACC
		12	0	6.21	<13	PASS
		12	6	6.26	<13	PASS
		12	13	6.39	<13	PASS
		25	0	6.41	<13	PASS
		1	0	5.22	<13	PASS
		1	12	5.15	<13	PASS
		1	24	5.09	<13	PASS
	MCH	12	0	6.31	<13	PASS
		12	6	6.24	<13	PASS
		12	13	6.25	<13	PASS
		25	0	6.45	<13	PASS
		1	0	4.93	<13	PASS
		1	12	4.9	<13	PASS
	НСН	1	24	4.9	<13	PASS
		12	0	6.29	<13	PASS
		12	6	6.23	<13	PASS
		12	13	6.27	<13	PASS
		25	0	6.34	<13	PASS

**Channel Bandwidth: 10 MHz** 

			Channel	Bandwidth: 10 MHz		
Modulation	Channel	RB Conf	figuration	Peak-to-Average Ratio	Limit	Verdict
Modulation	Chambi	Size	Offset	[dB]	[dB]	verdict
		1	0	4.27	<13	PASS
		1	24	4.72	<13	PASS
		1	49	4.78	<13	PASS
	LCH	25	0	5.48	<13	PASS
		25	12	5.6	<13	PASS
		25	25	5.65	<13	PASS
		50	0	5.61	<13	PASS
		1	0	4.59	<13	PASS
		1	24	4.46	<13	PASS
QPSK	MCH	1	49	4.22	<13	PASS
		25	0	5.48	<13	PASS
		25	12	5.48	<13	PASS
		25	25	5.4	<13	PASS
		50	0	5.54	<13	PASS
		1	0	3.96	<13	PASS
		1	24	4.17	<13	PASS
	HCH	1	49	4.1	<13	PASS
		25	0	5.27	<13	PASS
		25	12	5.36	<13	PASS

SHENZHEN .	LCS COMPLIA	NCE TESTING	LABORATORY LTD.	FCC ID: 2AMHDMYTH3	Report No.: LCS17	70502091AI
		25	25	5.35	<13	PASS
		50	0	5.48	<13	PASS
		1	0	5.06	<13	PASS
		1	24	5.41	<13	PASS
		1	49	5.56	<13	PASS
	LCH	25	0	6.32	<13	PASS
		25	12	6.42	<13	PASS
		25	25	6.51	<13	PASS
		50	0	6.35	<13	PASS
		1	0	5.24	<13	PASS
		1	24	5.29	<13	PASS
	МСН	1	49	5.28	<13	PASS
16QAM		25	0	6.34	<13	PASS
		25	12	6.34	<13	PASS
		25	25	6.27	<13	PASS
		50	0	6.28	<13	PASS
		1	0	4.83	<13	PASS
		1	24	4.97	<13	PASS
		1	49	5.01	<13	PASS
	HCH	25	0	6.12	<13	PASS
		25	12	6.17	<13	PASS
		25	25	6.24	<13	PASS
		50	0	6.19	<13	PASS

**Channel Bandwidth: 15 MHz** 

			Channe	Bandwidth: 15 MHz		
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
Wodulation	Cildille	Size	Offset	[dB]	[dB]	verdict
		1	0	7.81	<13	PASS
		1	37	4.81	<13	PASS
		1	74	8.89	<13	PASS
	LCH	37	0	4.72	<13	PASS
		37	18	5.61	<13	PASS
		37	38	4.96	<13	PASS
QPSK		75	0	5	<13	PASS
QPSK		1	0	7.71	<13	PASS
		1	37	4.45	<13	PASS
		1	74	9.13	<13	PASS
	МСН	37	0	4.7	<13	PASS
		37	18	5.46	<13	PASS
		37	38	4.89	<13	PASS
		75	0	4.94	<13	PASS

HCH    1	SHENZHEN	LCS COMPLIA	NCE TESTING	LABORATORY LTD.	FCC ID: 2AMHDMYTH3	Report No.: LCS170502091AE	
HCH    1			1	0	7.95	<13	PASS
HCH 37 0 4.55 13 PASS 37 18 5.25 13 PASS 13 PASS 14 PASS 15 PASS 15 PASS 16 PASS 16 PASS 17 PASS 18 PASS 17 PASS 18 PA			1	37	3.98	<13	PASS
18			1	74	9.36	<13	PASS
1		HCH	37	0	4.55	<13	PASS
1			37	18	5.25	<13	PASS
LCH			37	38	4.79	<13	PASS
LCH			75	0	4.93	<13	PASS
LCH			1	0	7.97	<13	PASS
LCH         37         0         6.05         <13         PASS           37         18         6.42         <13			1	37	5.59	<13	PASS
37			1	74	9.79	<13	PASS
16QAM MCH 37 0 6.4 413 PASS 16QAM MCH 37 0 6.3 413 PASS 37 18 6.12 413 PASS 1 75 0 6.3 413 PASS 1 75 0 75 0 75 0 75 0 75 0 75 0 75 0 75		LCH	37	0	6.05	<13	PASS
16QAM MCH 37 0 6.4 <13 PASS 1 0 8.43 <13 PASS 1 37 5.23 <13 PASS 1 1 74 10.16 <13 PASS 37 18 6.25 <13 PASS 37 38 6.12 <13 PASS 1 0 8.45 <13 PASS 1 0 8.45 <13 PASS 1 1 37 5.17 <13 PASS 1 1 74 10.26 <13 PASS 1 74 10.26 <13 PASS 37 18 6.16 <13 PASS 37 38 6.16 <13 PASS			37	18	6.42	<13	PASS
16QAM  MCH  100  8.43  11074  10.16  1			37	38	6.18	<13	PASS
1 37 5.23 <13 PASS 1 74 10.16 <13 PASS 37 18 6.25 <13 PASS 37 38 6.12 <13 PASS 75 0 6.3 <13 PASS 1 0 8.45 <13 PASS 1 37 5.17 <13 PASS 1 74 10.26 <13 PASS 37 18 6.16 <13 PASS 37 38 6.17 <13 PASS 4 1 74 10.26 <13 PASS 5 1 74 10.26 <13 PASS 5 1 75 17			75	0	6.4	<13	PASS
16QAM MCH			1	0	8.43	<13	PASS
16QAM       MCH       37       0       6       <13			1	37	5.23	<13	PASS
37       18       6.25       <13			1	74	10.16	<13	PASS
37       38       6.12       <13	16QAM	MCH	37	0	6	<13	PASS
75         0         6.3         <13         PASS           1         0         8.45         <13			37	18	6.25	<13	PASS
HCH 1 0 8.45 <13 PASS 1 37 5.17 <13 PASS 1 74 10.26 <13 PASS 37 18 6.16 <13 PASS 37 38 6.07 <13 PASS			37	38	6.12	<13	PASS
HCH 1 37 5.17 <13 PASS 1 10.26 <13 PASS 37 0 5.88 <13 PASS 37 18 6.16 <13 PASS 37 38 6.07 <13 PASS 38 SASS 38			75	0	6.3	<13	PASS
HCH 1 74 10.26 <13 PASS 37 0 5.88 <13 PASS 37 18 6.16 <13 PASS 37 38 6.07 <13 PASS 37 PASS 37 38 6.07			1	0	8.45	<13	PASS
HCH     37     0     5.88     <13     PASS       37     18     6.16     <13			1	37	5.17	<13	PASS
37 18 6.16 <13 PASS 37 38 6.07 <13 PASS			1	74	10.26	<13	PASS
37 38 6.07 <13 PASS		HCH	37	0	5.88	<13	PASS
			37	18	6.16	<13	PASS
75 0 6.28 <13 PASS			37	38	6.07	<13	PASS
			75	0	6.28	<13	PASS

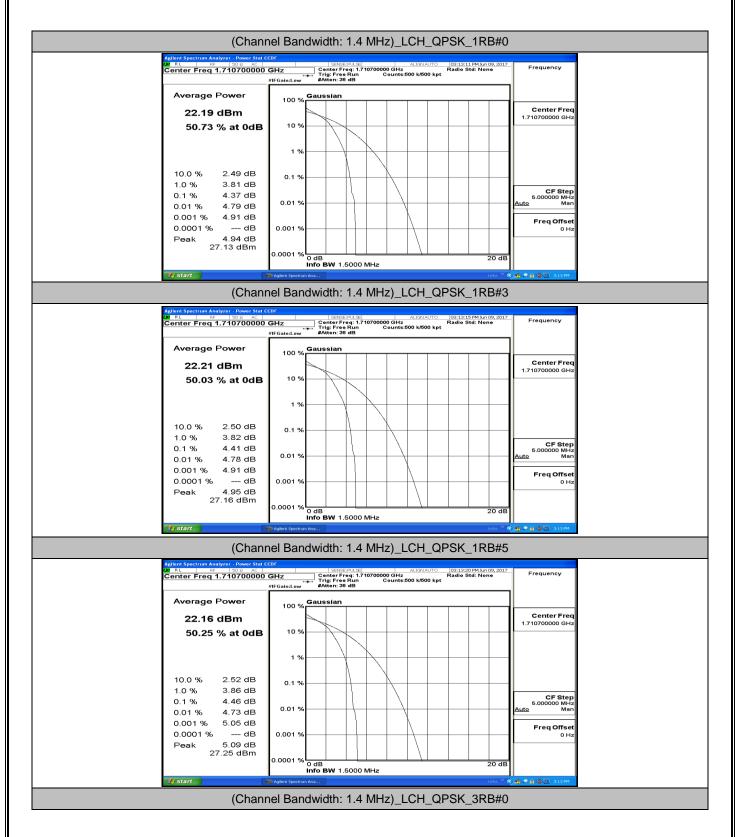
**Channel Bandwidth: 20 MHz** 

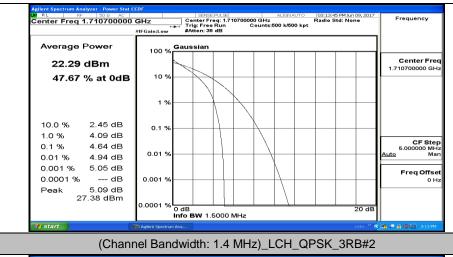
	Channel Bandwidth: 20 MHz									
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict				
Modulation	Cildille	Size	Offset	[dB]	[dB]	verdict				
		1	0	9.43	<13	PASS				
		1	49	4.57	<13	PASS				
		1	99	9.7	<13	PASS				
	LCH	50	0	5.53	<13	PASS				
QPSK		50	25	5.64	<13	PASS				
		50	50	5.91	<13	PASS				
		100	0	5.67	<13	PASS				
	MCH	1	0	9.69	<13	PASS				
	IVICH	1	49	4.19	<13	PASS				

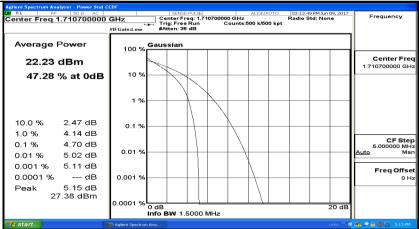
SHENZHEN	LCS COMPLIA	NCE TESTING	LABORATORY LTD.	FCC ID: 2AMHDMYTH3	Report No.: LCS17	70502091AE
		1	99	9.99	<13	PASS
		50	0	5.51	<13	PASS
		50	25	5.48	<13	PASS
		50	50	5.91	<13	PASS
		100	0	5.72	<13	PASS
		1	0	8.94	<13	PASS
		1	49	3.91	<13	PASS
		1	99	8.7	<13	PASS
	HCH	50	0	5.41	<13	PASS
		50	25	5.32	<13	PASS
		50	50	5.85	<13	PASS
		100	0	5.65	<13	PASS
		1	0	10.02	<13	PASS
		1	49	5.4	<13	PASS
		1	99	10.12	<13	PASS
	LCH	50	0	6.63	<13	PASS
		50	25	6.39	<13	PASS
		50	50	6.74	<13	PASS
		100	0	6.84	<13	PASS
		1	0	10.01	<13	PASS
		1	49	5.18	<13	PASS
		1	99	9.98	<13	PASS
16QAM	MCH	50	0	6.65	<13	PASS
		50	25	6.31	<13	PASS
		50	50	6.83	<13	PASS
		100	0	6.86	<13	PASS
		1	0	9.1	<13	PASS
		1	49	4.68	<13	PASS
		1	99	9.31	<13	PASS
	HCH	50	0	6.5	<13	PASS
		50	25	6.12	<13	PASS
		50	50	6.65	<13	PASS
		100	0	6.62	<13	PASS

# **Test Graphs**

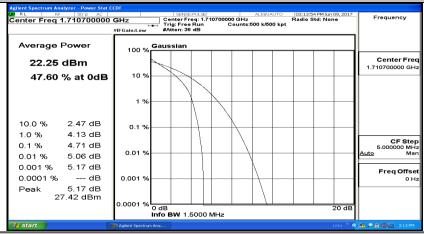
### **Channel Bandwidth: 1.4 MHz**



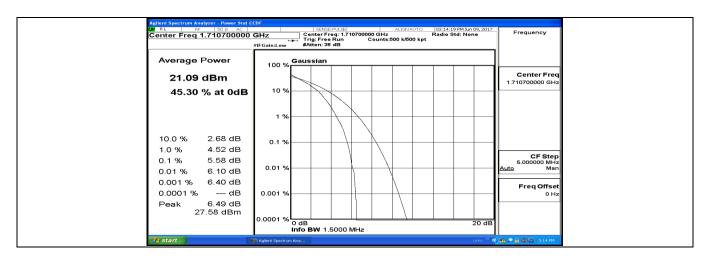


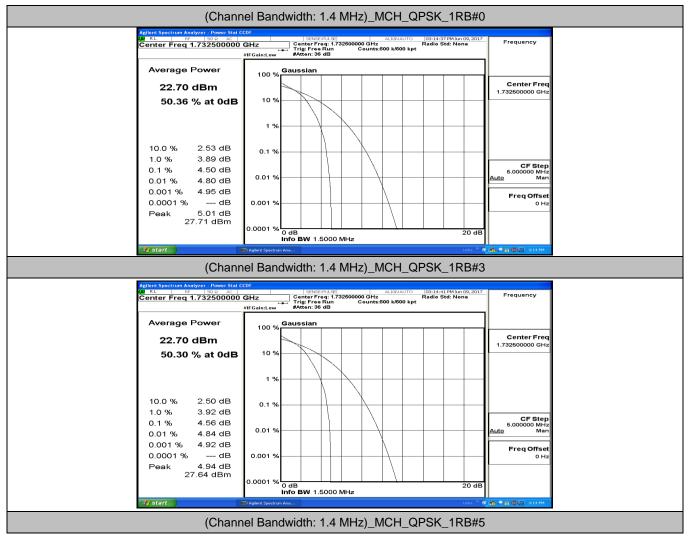


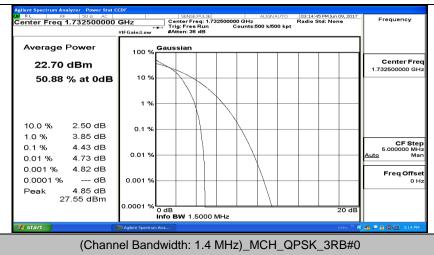
# (Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_3RB#3

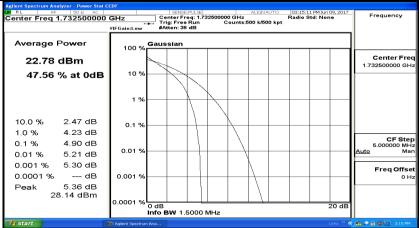


(Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_6RB#0

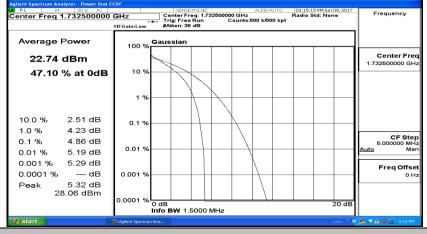




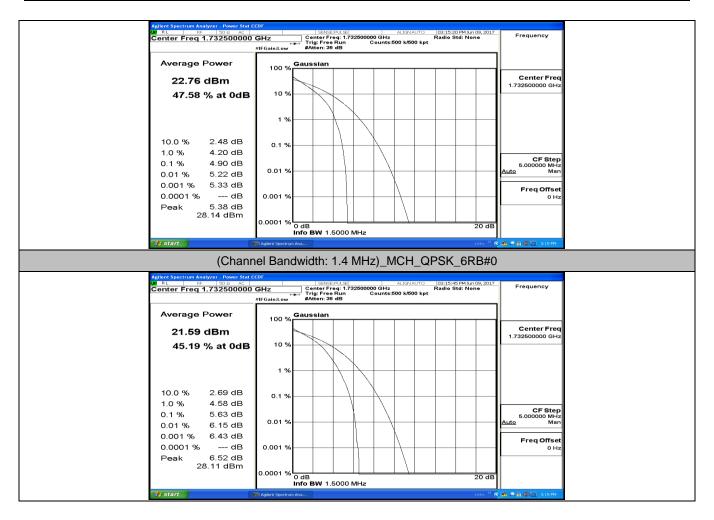


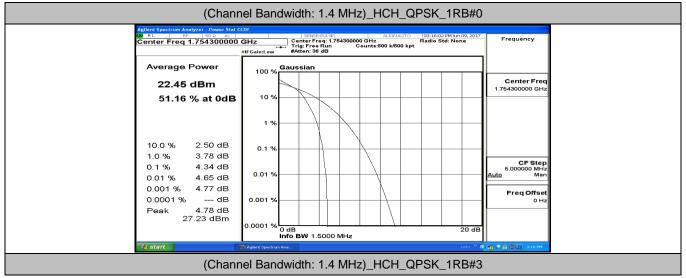


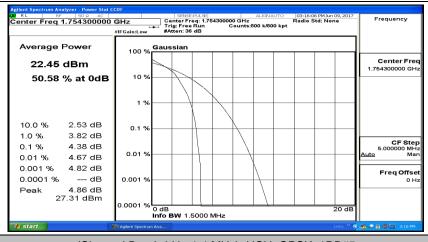
# (Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK\_3RB#2



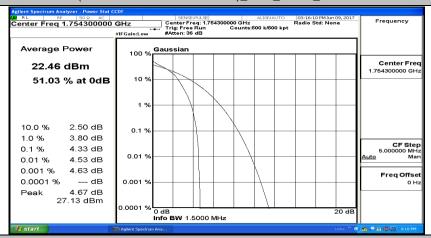
(Channel Bandwidth: 1.4 MHz)\_MCH\_QPSK\_3RB#3



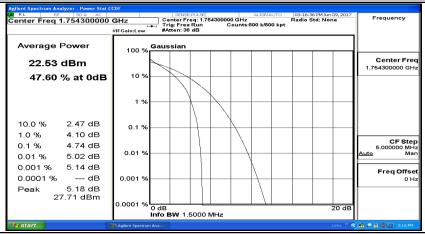




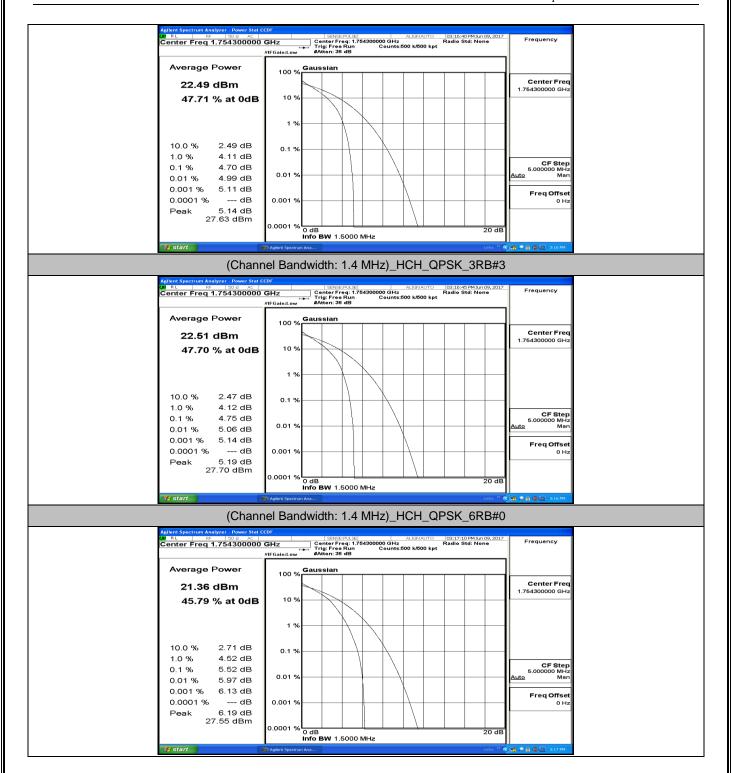
#### (Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK\_1RB#5



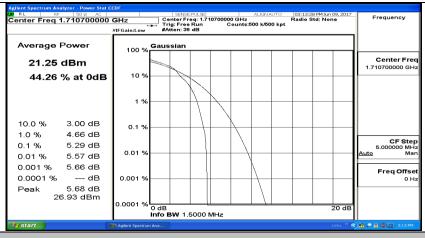
# (Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK\_3RB#0



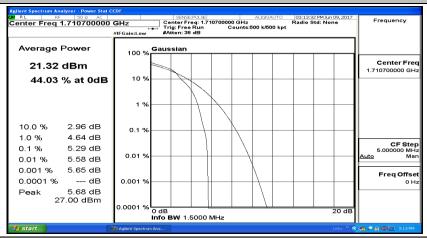
(Channel Bandwidth: 1.4 MHz)\_HCH\_QPSK\_3RB#2



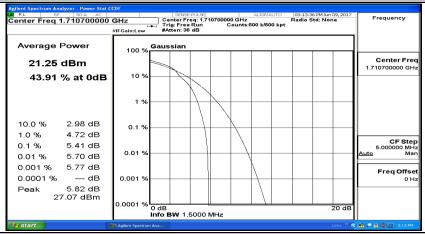
(Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_1RB#0



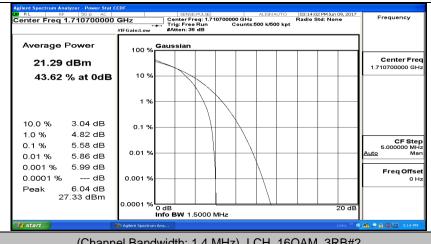
#### (Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_1RB#3



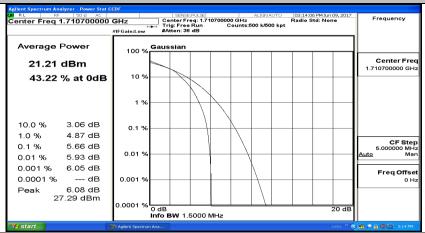
# (Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_1RB#5



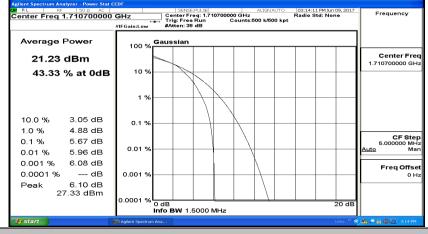
(Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_3RB#0



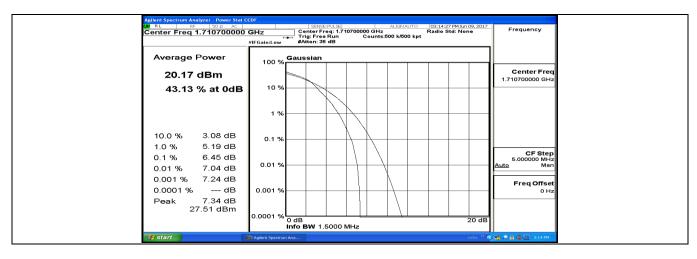
#### (Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_3RB#2

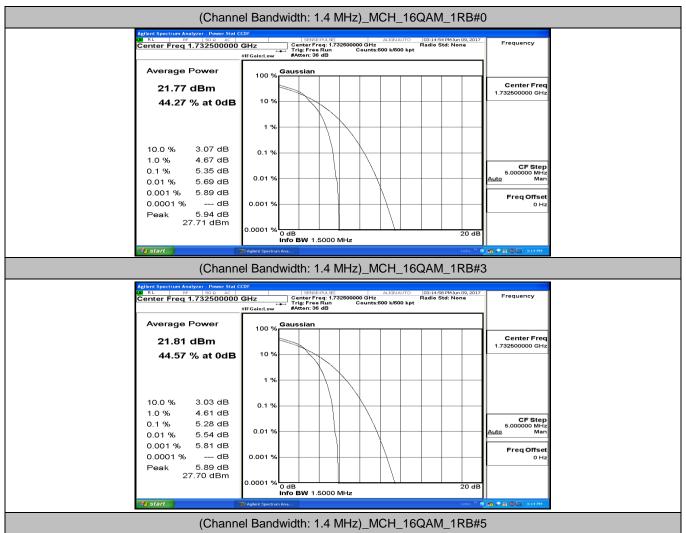


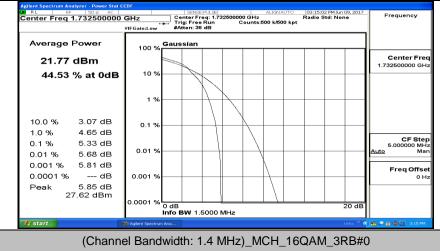
# (Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_3RB#3

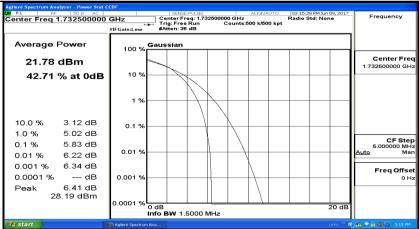


(Channel Bandwidth: 1.4 MHz)\_LCH\_16QAM\_6RB#0

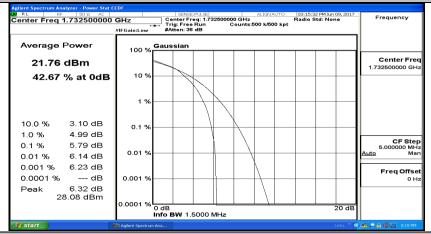




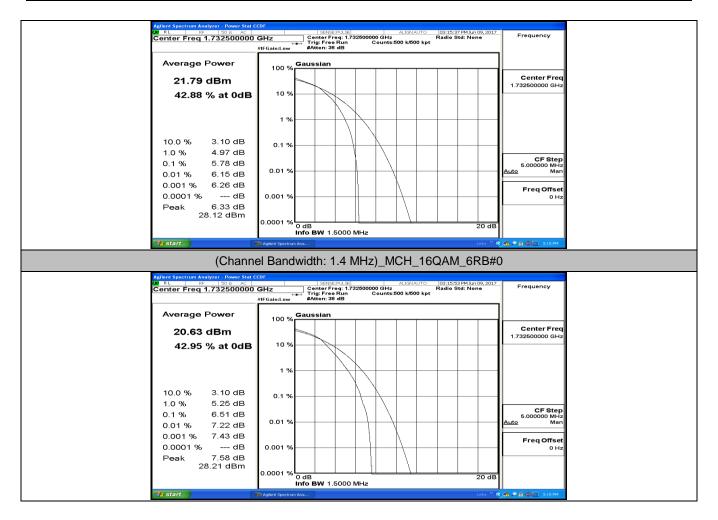


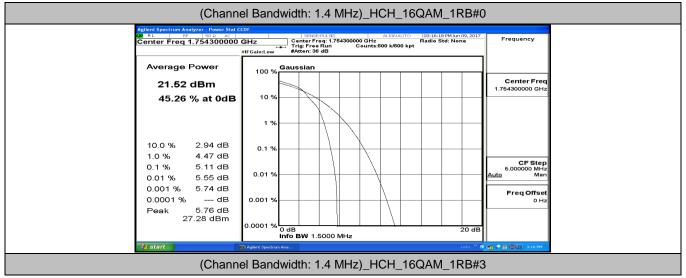


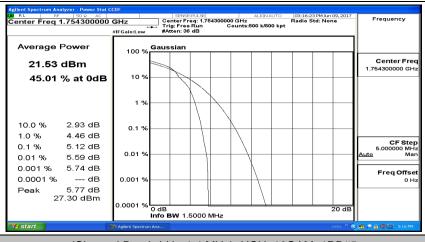
# (Channel Bandwidth: 1.4 MHz)\_MCH\_16QAM\_3RB#2



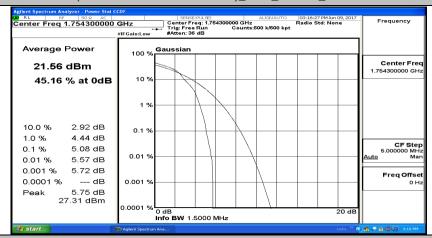
(Channel Bandwidth: 1.4 MHz)\_MCH\_16QAM\_3RB#3



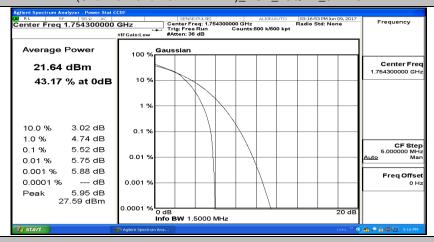




#### (Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM\_1RB#5



# (Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM\_3RB#0



(Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM\_3RB#2



**Channel Bandwidth: 3 MHz** 

(Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_1RB#0

0.1 %

0.01 %

Peak

0.001 %

0.0001 %

4.61 dB

4.85 dB

4.89 dB

--- dB

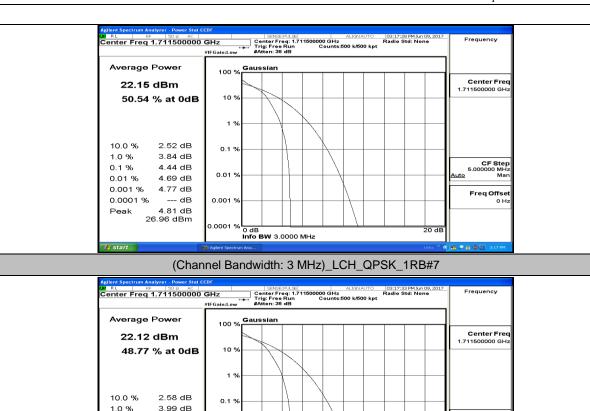
4.94 dB 27.06 dBm 0.01 %

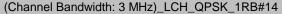
0.001 %

0.0001 %

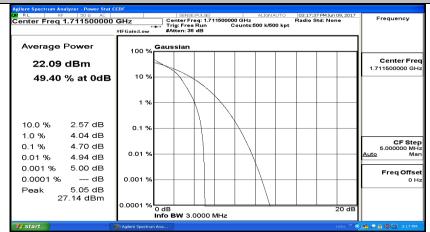
CF Step 5.000000 MHz Man

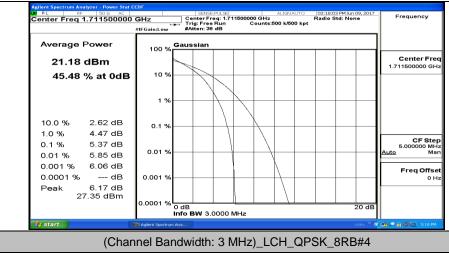
Freq Offset

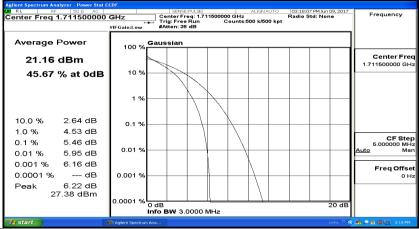




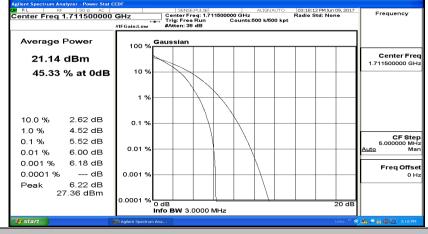
0 dB **Info BW** 3.0000 MHz



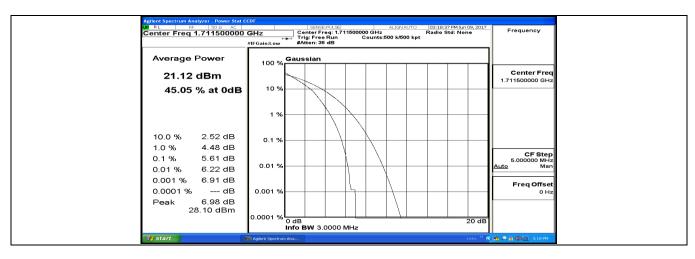


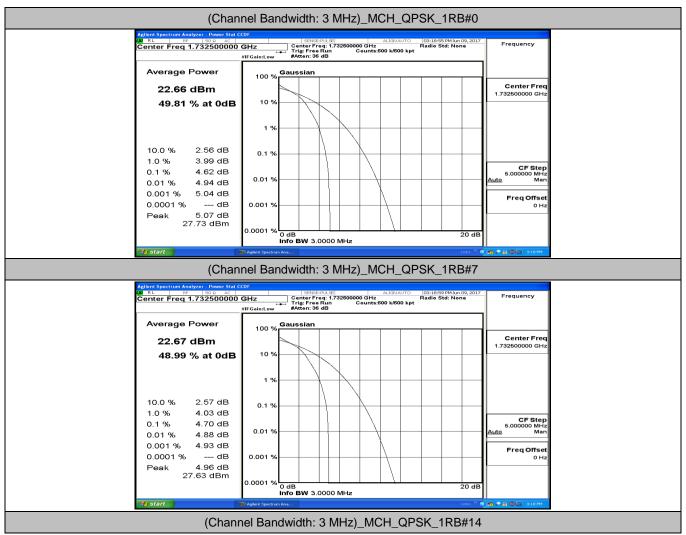


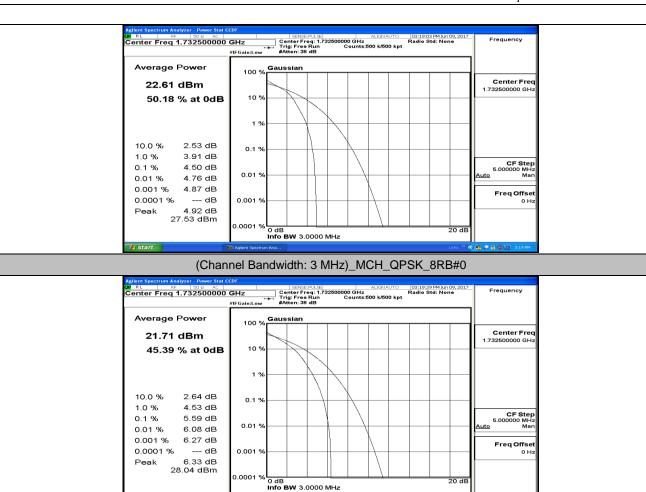
# (Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_8RB#7

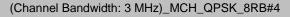


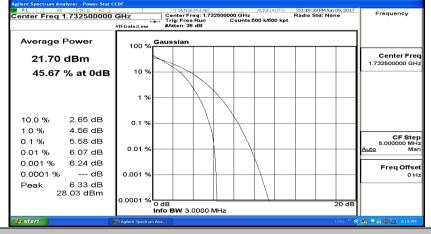
(Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_15RB#0



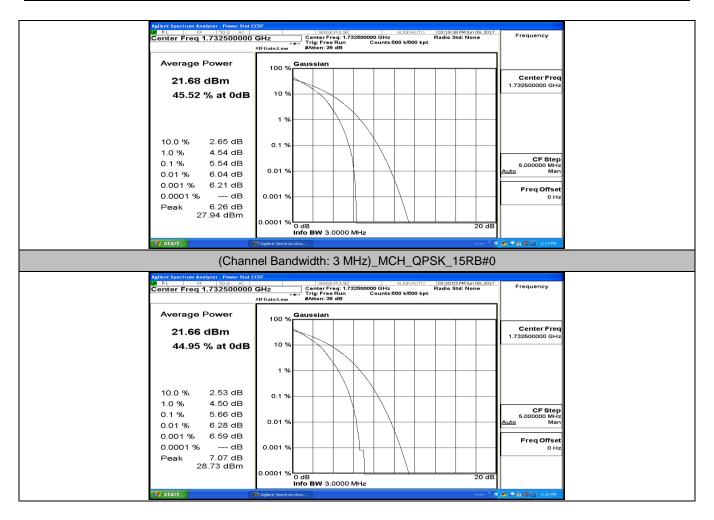


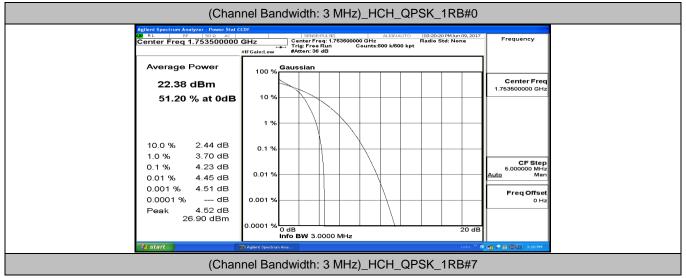


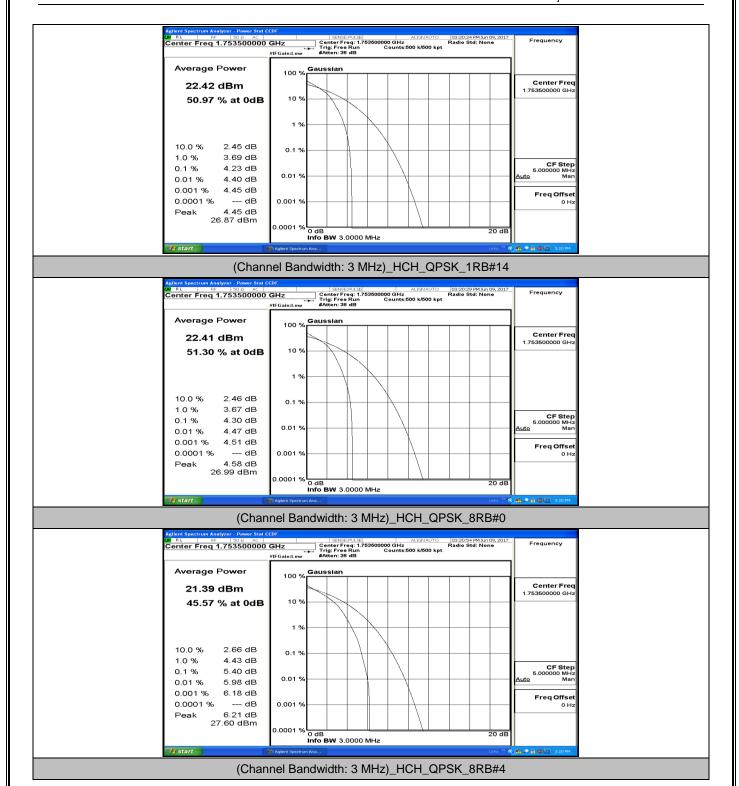


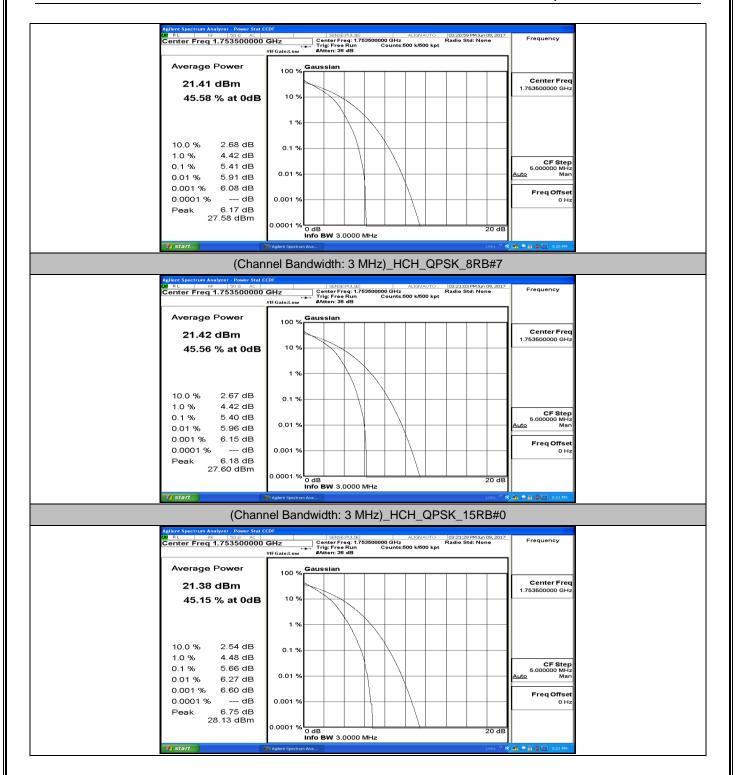


(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_8RB#7

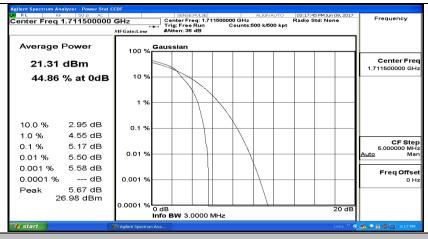




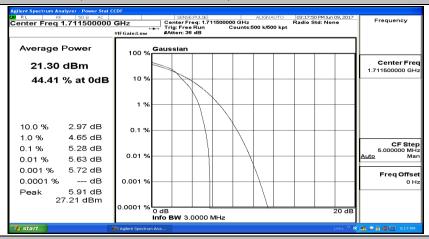




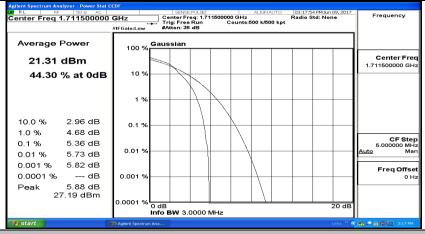
(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_1RB#0



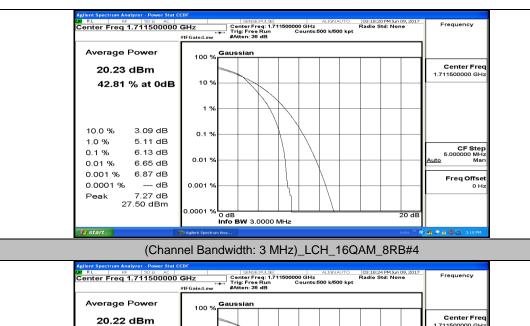
#### (Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_1RB#7

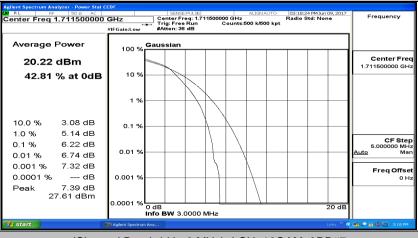


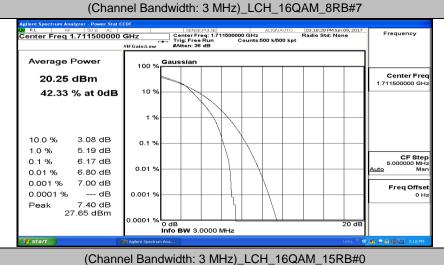
#### (Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_1RB#14

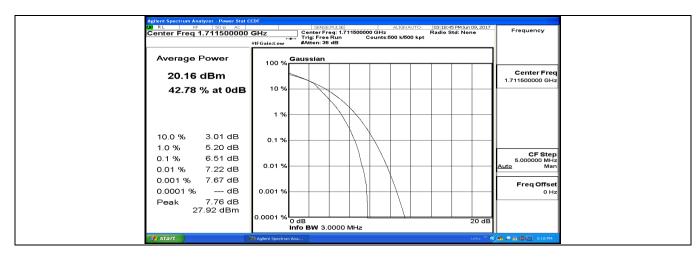


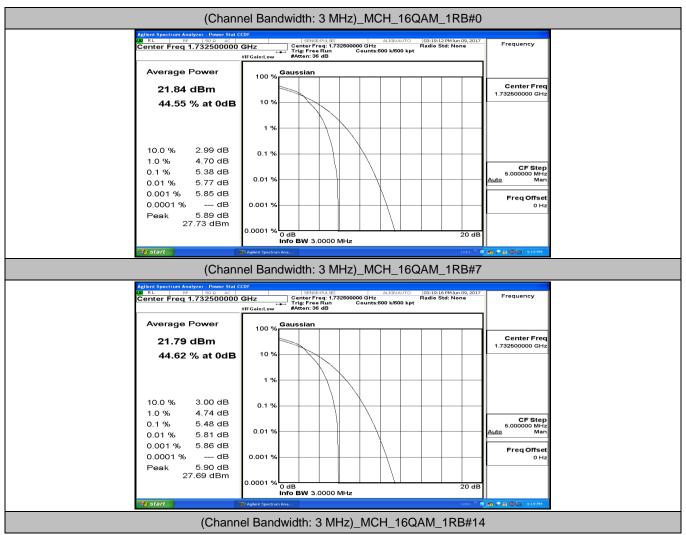
(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_8RB#0

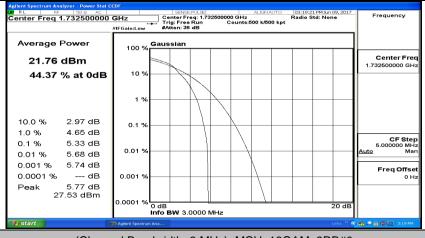




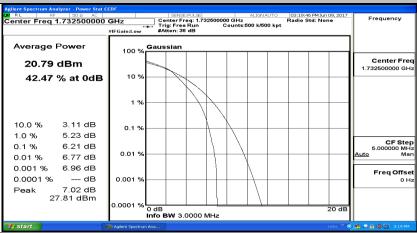




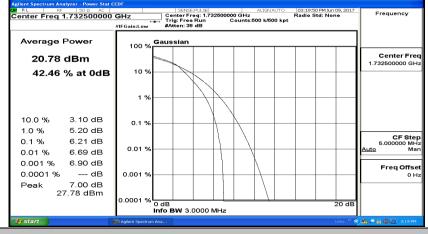




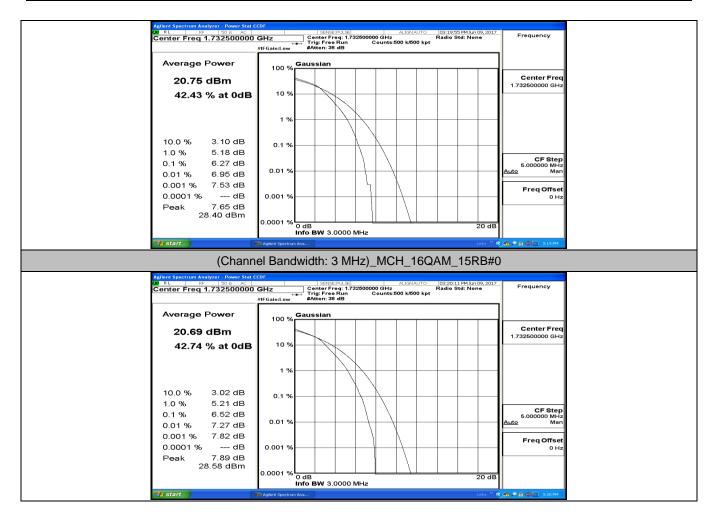
#### (Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#0

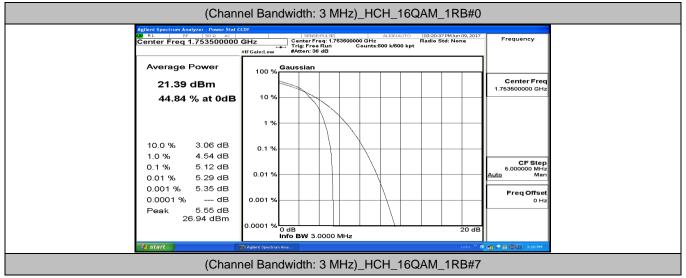


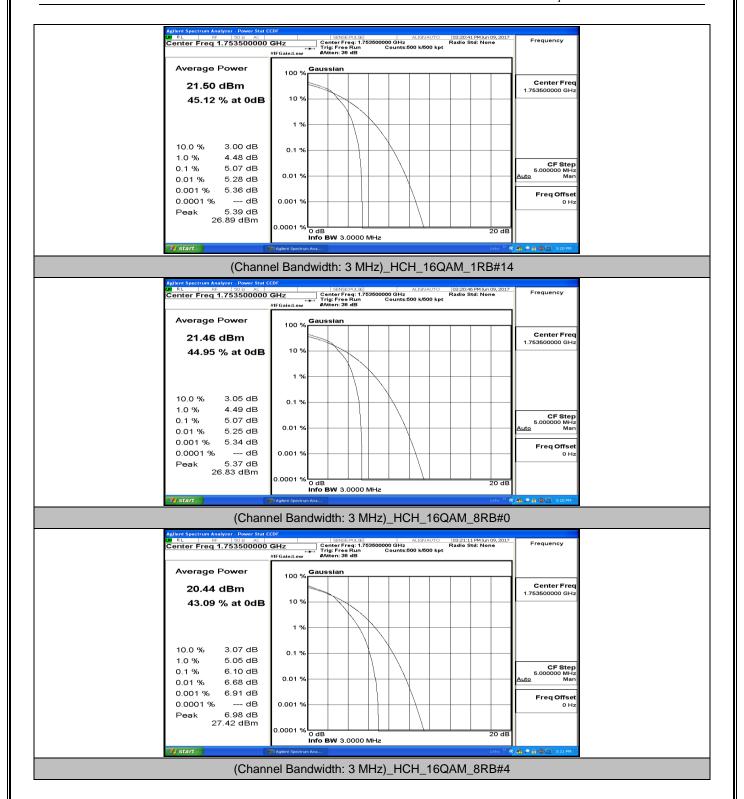
# (Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#4

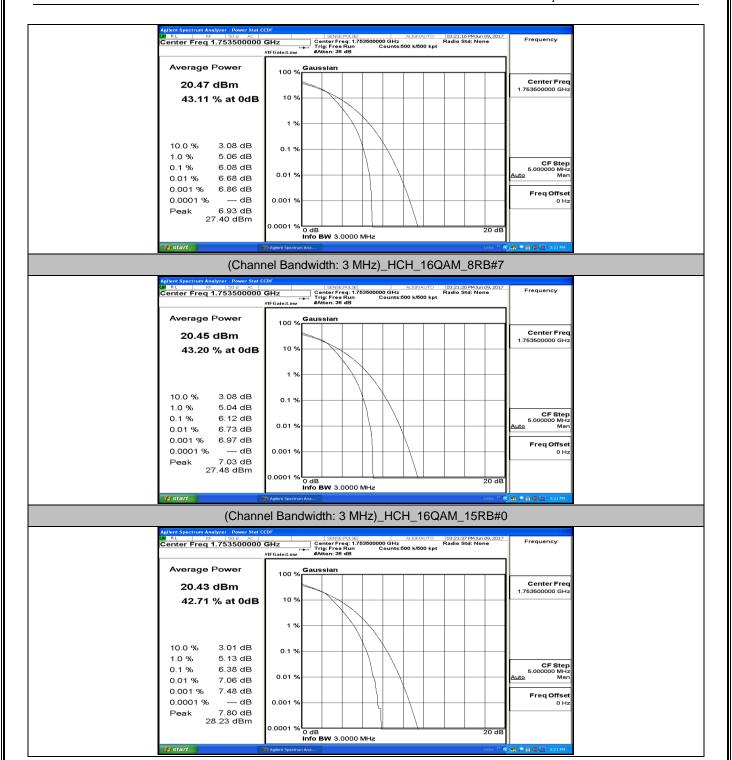


(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#7









**Channel Bandwidth: 5 MHz** 

(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_1RB#0

0.0001 %

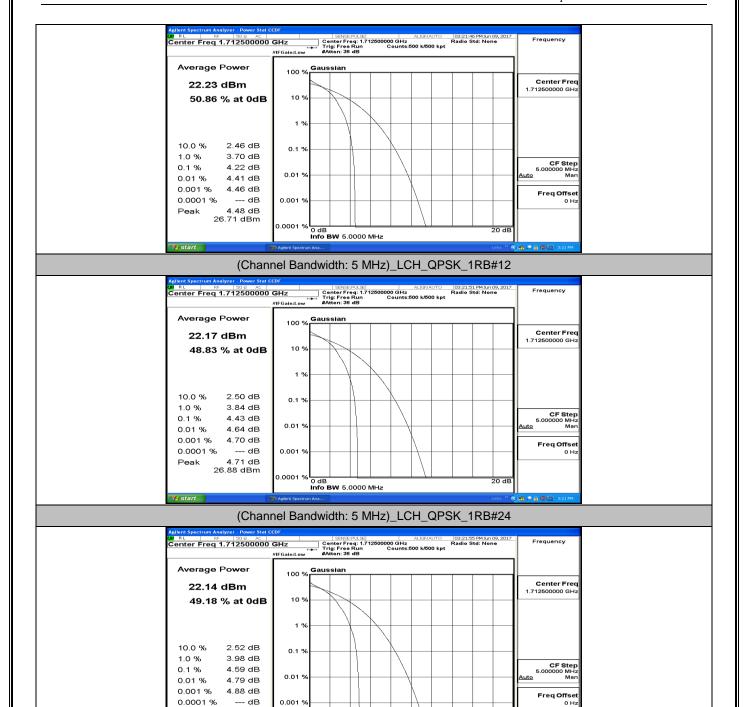
--- dB

4.92 dB 27.06 dBm

0.001 %

Info BW 5.0000 MHz

(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#0



1.0 %

0.1 %

0.01 %

Peak

0.001 %

0.0001 %

4.50 dB

5.**44** dB

6.02 dB

6.26 dB

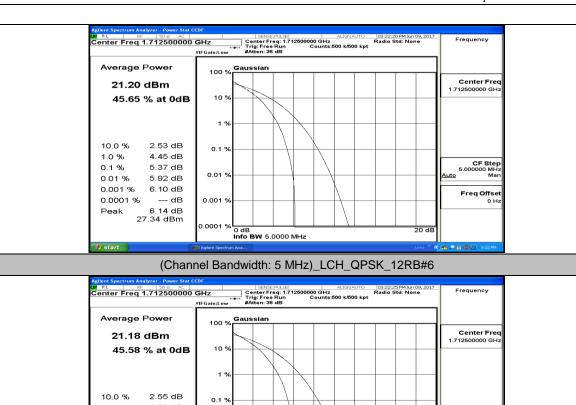
6.33 dB 27.51 dBm

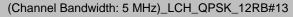
--- dB

0.0001 %

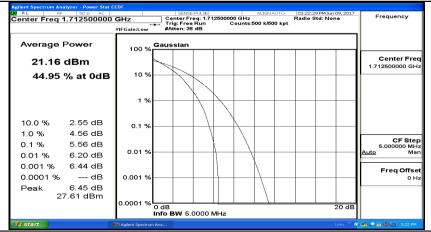
**CF Step** 5.000000 MHz Man

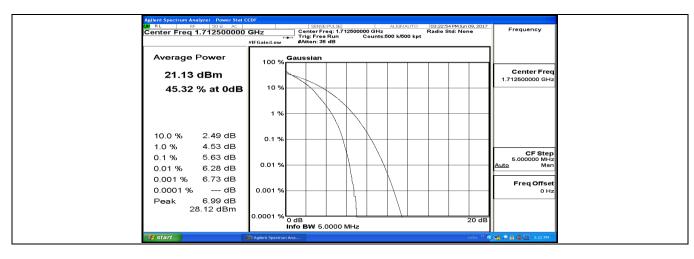
20 dB

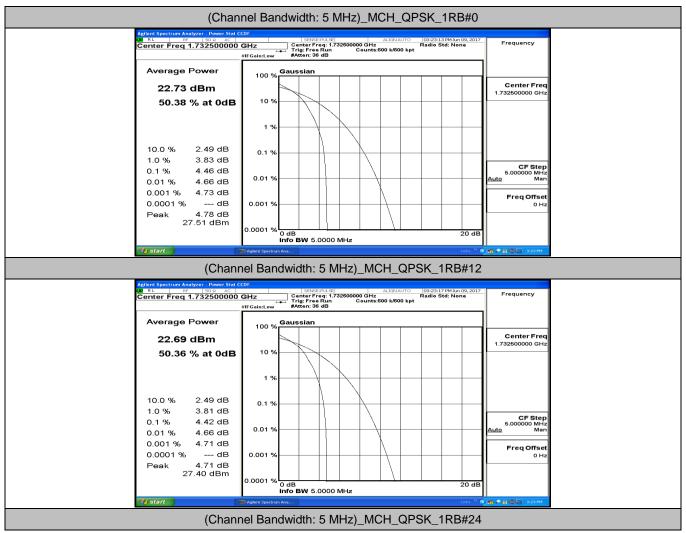


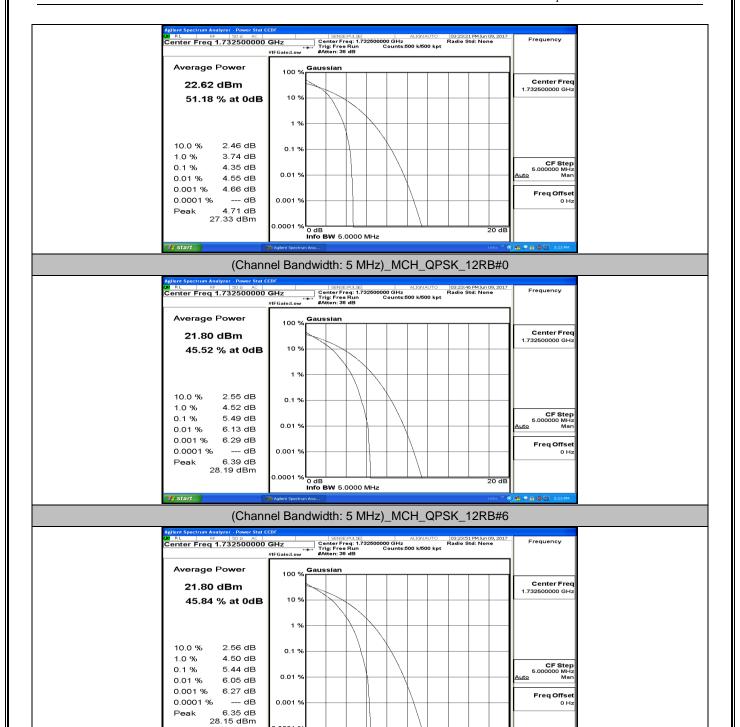


0 dB Info BW 5.0000 MHz









Info BW 5.0000 MHz

(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#13

