

# **Appendix for Band 5**

# **Appendix A: Average Power Output Data**

**Test Result** 

**Channel Bandwidth: 1.4 MHz** 

Modulati		RB Con	figuration		V
on	Channel	Size	Offset	Average Power [dBm]	Verdict
		1	0	23.39	PASS
		1	3	23.57	PASS
		1	5	23.36	PASS
	LCH	3	0	22.49	PASS
		3	2	22.42	PASS
		3	3	22.48	PASS
		6	0	22.42	PASS
		1	0	23.06	PASS
		1	3	23.14	PASS
		1	5	22.99	PASS
QPSK	MCH	3	0	22.6	PASS
		3	2	22.62	PASS
		3	3	22.62	PASS
		6	0	22.05	PASS
		1	0	22.91	PASS
		1	3	23.02	PASS
		1	5	22.92	PASS
	HCH	3	0	22.52	PASS
		3	2	22.52	PASS
		3	3	22.54	PASS
		6	0	21.85	PASS
		1	0	22.85	PASS
		1	3	22.91	PASS
		1	5	22.78	PASS
	LCH	3	0	21.51	PASS
160 4 14		3	2	21.45	PASS
16QAM		3	3	21.56	PASS
		6	0	21.12	PASS
		1	0	22.35	PASS
	MCH	1	3	22.52	PASS
		1	5	22.31	PASS

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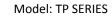




	3	0	21.78	PASS
	3	2	21.77	PASS
	3	3	21.79	PASS
	6	0	21.08	PASS
	1	0	22.15	PASS
	1	3	22.42	PASS
	1	5	22.16	PASS
HCH	3	0	21.53	PASS
	3	2	21.52	PASS
	3	3	21.57	PASS
	6	0	21.07	PASS

## **Channel Bandwidth: 3 MHz**

Modulation	Channel	RB Conf	iguration	Average Power [dBm]	Verdict
Modulation	Charmer	Size	Offset		verdict
		1	0	23.32	PASS
		1	7	23.49	PASS
		1	14	23.26	PASS
	LCH	8	0	22.47	PASS
		8	4	22.44	PASS
		8	7	22.43	PASS
		15	0	22.46	PASS
		1	0	23.09	PASS
		1	7	23.19	PASS
		1	14	22.97	PASS
QPSK	MCH	8	0	22.16	PASS
		8	4	22.1	PASS
		8	7	22.08	PASS
		15	0	22.09	PASS
		1	0	22.91	PASS
		1	7	23.07	PASS
		1	14	22.87	PASS
	HCH	8	0	21.93	PASS
		8	4	21.89	PASS
		8	7	21.89	PASS
		15	0	21.93	PASS
		1	0	22.65	PASS
		1	7	22.79	PASS
16QAM	LCH	1	14	22.51	PASS
IOQAW	LON	8	0	21.56	PASS
		8	4	21.54	PASS
		8	7	21.5	PASS



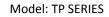


		15	0	21.48	PASS
		1	0	22.53	PASS
		1	7	22.6	PASS
		1	14	22.4	PASS
	MCH	8	0	21.19	PASS
		8	4	21.14	PASS
		8	7	21.13	PASS
		15	0	21.14	PASS
		1	0	22.15	PASS
		1	7	22.28	PASS
		1	14	22.12	PASS
	HCH	8	0	20.94	PASS
		8	4	20.91	PASS
		8	7	20.9	PASS
		15	0	21	PASS

## **Channel Bandwidth: 5 MHz**

Modulation	Channel	RB Conf	iguration	Average Power [dBm]	Verdict
Modulation	Criannei	Size	Offset	- Average Fower [ubili]	verdict
		1	0	23.5	PASS
		1	12	23.56	PASS
		1	24	23.33	PASS
	LCH	12	0	22.49	PASS
		12	6	22.46	PASS
		12	13	22.42	PASS
		25	0	22.4	PASS
		1	0	23.23	PASS
	мсн	1	12	23.32	PASS
		1	24	23.02	PASS
QPSK		12	0	22.22	PASS
		12	6	22.18	PASS
		12	13	22.13	PASS
		25	0	22.14	PASS
		1	0	23.07	PASS
		1	12	23.21	PASS
		1	24	22.97	PASS
	HCH	12	0	22.02	PASS
		12	6	21.98	PASS
		12	13	21.96	PASS
		25	0	21.94	PASS
160011	LCH	1	0	22.78	PASS
16QAM	LCH	1	12	22.86	PASS

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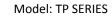


	1	24	22.55	PASS
	12	0	21.59	PASS
	12	6	21.53	PASS
	12	13	21.49	PASS
	25	0	21.47	PASS
	1	0	22.53	PASS
	1	12	22.57	PASS
	1	24	22.32	PASS
MCH	12	0	21.39	PASS
	12	6	21.36	PASS
	12	13	21.27	PASS
	25	0	21.21	PASS
	1	0	22.17	PASS
	1	12	22.39	PASS
	1	24	22.15	PASS
HCH	12	0	21.06	PASS
	12	6	21	PASS
	12	13	21.02	PASS
	25	0	21.03	PASS

## **Channel Bandwidth: 10 MHz**

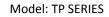
Modulation	Channel	RB Conf	iguration	Average Power [dBm]	Verdict
Modulation	Charmer	Size	Offset	Average Fower [ubili]	verdict
		1	0	<mark>23.58</mark>	PASS
		1	24	23.33	PASS
		1	49	23.14	PASS
	LCH	25	0	22.64	PASS
		25	12	22.39	PASS
		25	25	22.32	PASS
		50	0	22.59	PASS
		1	0	23.49	PASS
		1	24	23.11	PASS
QPSK		1	49	23	PASS
	MCH	25	0	22.52	PASS
		25	12	22.18	PASS
		25	25	22.18	PASS
		50	0	22.17	PASS
		1	0	23.14	PASS
		1	24	23	PASS
	HCH	1	49	22.97	PASS
		25	0	22.46	PASS
		25	12	22.18	PASS

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		25	25	22.17	PASS
		50	0	22.01	PASS
		1	0	22.76	PASS
		1	24	22.57	PASS
		1	49	22.47	PASS
	LCH	25	0	21.49	PASS
		25	12	21.44	PASS
		25	25	21.37	PASS
		50	0	21.44	PASS
		1	0	22.69	PASS
	МСН	1	24	22.58	PASS
		1	49	22.4	PASS
16QAM		25	0	21.32	PASS
		25	12	21.26	PASS
		25	25	21.16	PASS
		50	0	21.26	PASS
		1	0	22.36	PASS
		1	24	22.21	PASS
		1	49	22.22	PASS
	HCH	25	0	21.07	PASS
		25	12	21.05	PASS
		25	25	21.03	PASS
		50	0	21.1	PASS





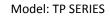
# Appendix B: Peak-to-Average Ratio

## **Test Result**

**Channel Bandwidth: 1.4 MHz** 

			Channel B	andwidth: 1.4 MHz		
Maria		RB Conf	figuration	Peak-to-Average Ratio	Limit	V/ E/
Modulation	Channel	Size	Offset	(dB)	(dB)	Verdict
		1	0	4.95	<13	PASS
		1	3	4.76	<13	PASS
		1	5	4.68	<13	PASS
	LCH	3	0	4.59	<13	PASS
		3	2	4.49	<13	PASS
		3	3	4.53	<13	PASS
		6	0	5.43	<13	PASS
		1	0	4.91	<13	PASS
		1	3	4.71	<13	PASS
		1	5	4.8	<13	PASS
QPSK	MCH	3	0	4.78	<13	PASS
		3	2	4.74	<13	PASS
		3	3	4.77	<13	PASS
		6	0	5.56	<13	PASS
	НСН	1	0	4.59	<13	PASS
		1	3	4.68	<13	PASS
		1	5	4.74	<13	PASS
		3	0	4.49	<13	PASS
		3	2	4.56	<13	PASS
		3	3	4.56	<13	PASS
		6	0	5.47	<13	PASS
		1	0	5.77	<13	PASS
		1	3	5.56	<13	PASS
		1	5	5.42	<13	PASS
	LCH	3	0	5.57	<13	PASS
		3	2	5.52	<13	PASS
16QAM		3	3	5.43	<13	PASS
		6	0	6.28	<13	PASS
		1	0	5.85	<13	PASS
	MO	1	3	5.6	<13	PASS
	MCH	1	5	5.79	<13	PASS
		3	0	5.51	<13	PASS

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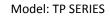


		3	2	5.47	<13	PASS
		3	3	5.47	<13	PASS
		6	0	6.28	<13	PASS
		1	0	5.52	<13	PASS
		1	3	5.61	<13	PASS
		1	5	5.68	<13	PASS
	HCH	3	0	5.47	<13	PASS
		3	2	5.5	<13	PASS
		3	3	5.57	<13	PASS
		6	0	6.29	<13	PASS

# **Channel Bandwidth: 3 MHz**

			Channel	Bandwidth: 3 MHz		
NAll - 4'	01	RB Conf	figuration	Peak-to-Average Ratio	Limit	\
Modulation	Channel	Size	Offset	[dB]	[dB]	Verdict
		1	0	4.77	<13	PASS
		1	7	4.44	<13	PASS
		1	14	4.03	<13	PASS
	LCH	8	0	5.33	<13	PASS
		8	4	5.15	<13	PASS
		8	7	5.06	<13	PASS
		15	0	5.21	<13	PASS
		1	0	4.78	<13	PASS
	мсн	1	7	4.69	<13	PASS
		1	14	4.62	<13	PASS
QPSK		8	0	5.52	<13	PASS
		8	4	5.56	<13	PASS
		8	7	5.5	<13	PASS
		15	0	5.65	<13	PASS
		1	0	4.41	<13	PASS
		1	7	4.58	<13	PASS
		1	14	4.79	<13	PASS
	HCH	8	0	5.28	<13	PASS
		8	4	5.46	<13	PASS
		8	7	5.49	<13	PASS
		15	0	5.46	<13	PASS
		1	0	5.66	<13	PASS
		1	7	5.3	<13	PASS
16QAM	LCH	1	14	4.95	<13	PASS
		8	0	6.08	<13	PASS
		8	4	5.98	<13	PASS

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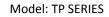


	8	7	5.8	<13	PASS
	15	0	6.12	<13	PASS
	1	0	5.71	<13	PASS
	1	7	5.57	<13	PASS
	1	14	5.64	<13	PASS
MCH	8	0	6.18	<13	PASS
	8	4	6.25	<13	PASS
	8	7	6.24	<13	PASS
	15	0	6.33	<13	PASS
	1	0	5.34	<13	PASS
	1	7	5.53	<13	PASS
	1	14	5.9	<13	PASS
HCH	8	0	6.25	<13	PASS
	8	4	6.36	<13	PASS
	8	7	6.42	<13	PASS
	15	0	6.24	<13	PASS

# **Channel Bandwidth: 5 MHz**

Channel Bandwidth: 5 MHz								
Modulation	Channel	RB Conf	iguration Offset	Peak-to-Average Ratio [dB]	Limit [dB]	Verdict		
	LCH	1	0	4.88	(13	PASS		
		1	12	4.05	<13	PASS		
		1	24	3.87	<13	PASS		
		12	0	5.31	<13	PASS		
		12	6	4.97	<13	PASS		
		12	13	4.68	<13	PASS		
		25	0	5.06	<13	PASS		
	МСН	1	0	4.7	<13	PASS		
		1	12	4.76	<13	PASS		
QPSK		1	24	4.63	<13	PASS		
QPSK		12	0	5.39	<13	PASS		
		12	6	5.43	<13	PASS		
		12	13	5.41	<13	PASS		
		25	0	5.55	<13	PASS		
	нсн	1	0	4.1	<13	PASS		
		1	12	4.28	<13	PASS		
		1	24	4.68	<13	PASS		
		12	0	5.14	<13	PASS		
		12	6	5.27	<13	PASS		
		12	13	5.48	<13	PASS		

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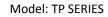


		25	0	5.41	<13	PASS
	LCH	1	0	5.61	<13	PASS
		1	12	4.87	<13	PASS
		1	24	4.63	<13	PASS
		12	0	6.13	<13	PASS
		12	6	5.86	<13	PASS
		12	13	5.6	<13	PASS
		25	0	5.88	<13	PASS
	MCH	1	0	5.47	<13	PASS
		1	12	5.65	<13	PASS
		1	24	5.57	<13	PASS
16QAM		12	0	6.21	<13	PASS
		12	6	6.26	<13	PASS
		12	13	6.22	<13	PASS
		25	0	6.36	<13	PASS
	НСН	1	0	4.94	<13	PASS
		1	12	5.18	<13	PASS
		1	24	5.51	<13	PASS
		12	0	5.95	<13	PASS
		12	6	6.15	<13	PASS
		12	13	6.25	<13	PASS
		25	0	6.19	<13	PASS

## **Channel Bandwidth: 10 MHz**

Channel Bandwidth: 10 MHz								
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict		
		Size	Offset	[dB]	[dB]	verdict		
ODO!	LCH	1	0	4.7	<13	PASS		
		1	24	3.73	<13	PASS		
		1	49	4.51	<13	PASS		
		25	0	5	<13	PASS		
		25	12	4.7	<13	PASS		
		25	25	4.88	<13	PASS		
		50	0	5.16	<13	PASS		
QPSK	MCH	1	0	4.05	<13	PASS		
		1	24	4.71	<13	PASS		
		1	49	4.26	<13	PASS		
		25	0	5.38	<13	PASS		
		25	12	5.54	<13	PASS		
		25	25	5.41	<13	PASS		
		50	0	5.4	<13	PASS		

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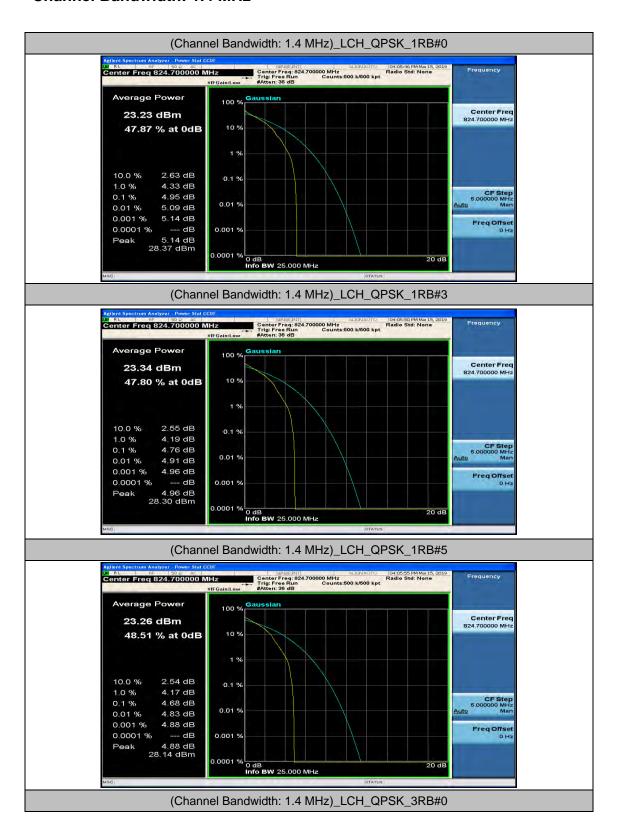


			1			
		1	0	4.32	<13	PASS
		1	24	4.05	<13	PASS
		1	49	4.67	<13	PASS
	НСН	25	0	5.07	<13	PASS
		25	12	5.09	<13	PASS
		25	25	5.25	<13	PASS
		50	0	5.32	<13	PASS
		1	0	5.67	<13	PASS
		1	24	4.61	<13	PASS
		1	49	5.35	<13	PASS
	LCH	25	0	5.89	<13	PASS
		25	12	5.58	<13	PASS
		25	25	5.76	<13	PASS
		50	0	5.85	<13	PASS
	МСН	1	0	4.99	<13	PASS
		1	24	5.66	<13	PASS
		1	49	5.07	<13	PASS
16QAM		25	0	6.24	<13	PASS
		25	12	6.33	<13	PASS
		25	25	6.28	<13	PASS
		50	0	6.17	<13	PASS
	НСН	1	0	5.43	<13	PASS
		1	24	5.16	<13	PASS
		1	49	5.74	<13	PASS
		25	0	6	<13	PASS
		25	12	5.98	<13	PASS
		25	25	6.19	<13	PASS
		50	0	6.13	<13	PASS

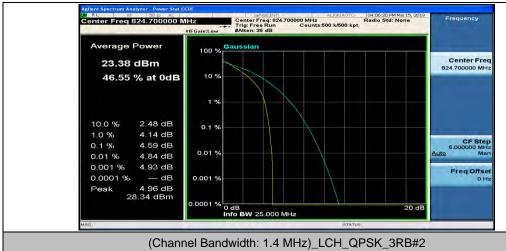


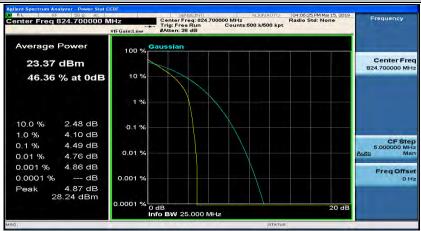
### **Test Graphs**

#### Channel Bandwidth: 1.4 MHz

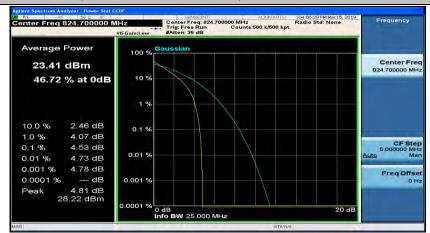






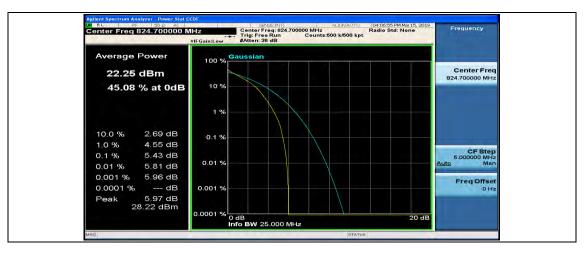


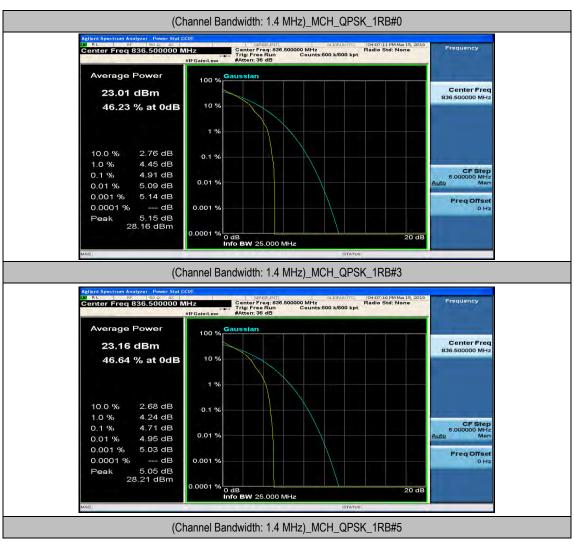
(Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_3RB#3



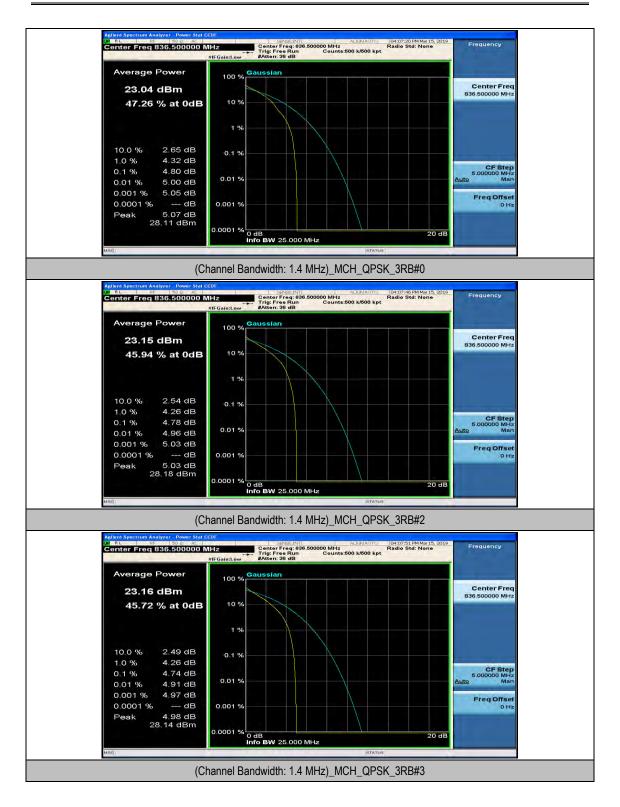
(Channel Bandwidth: 1.4 MHz)\_LCH\_QPSK\_6RB#0



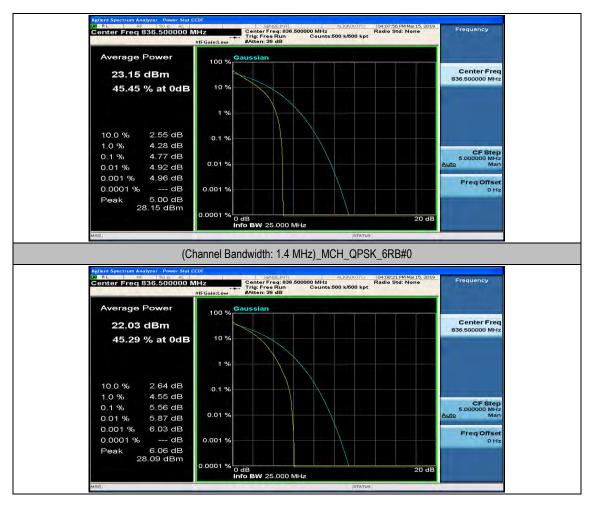


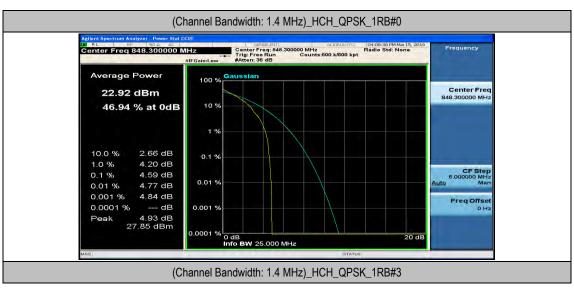




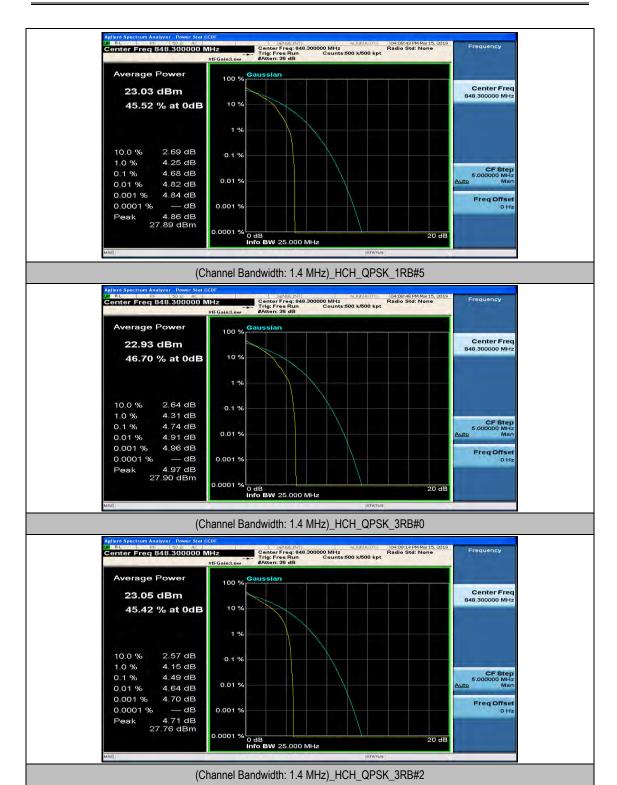




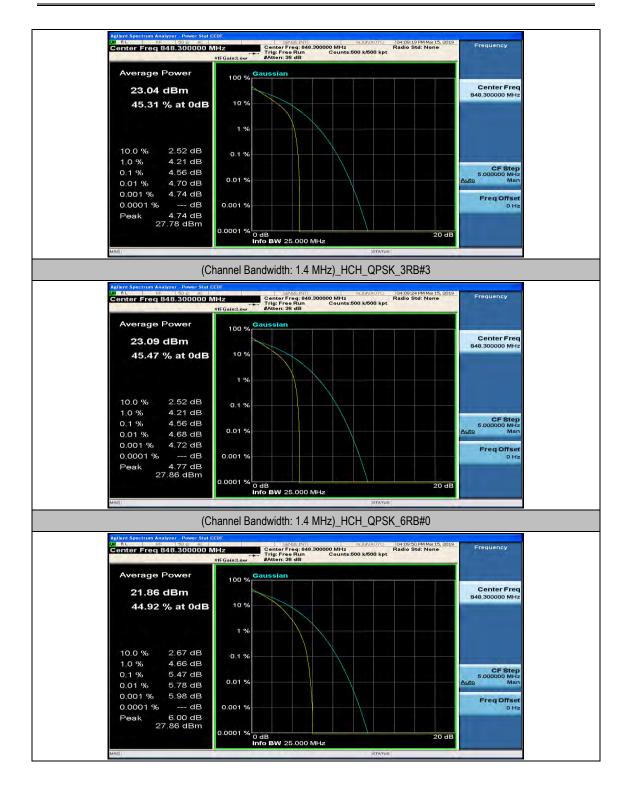




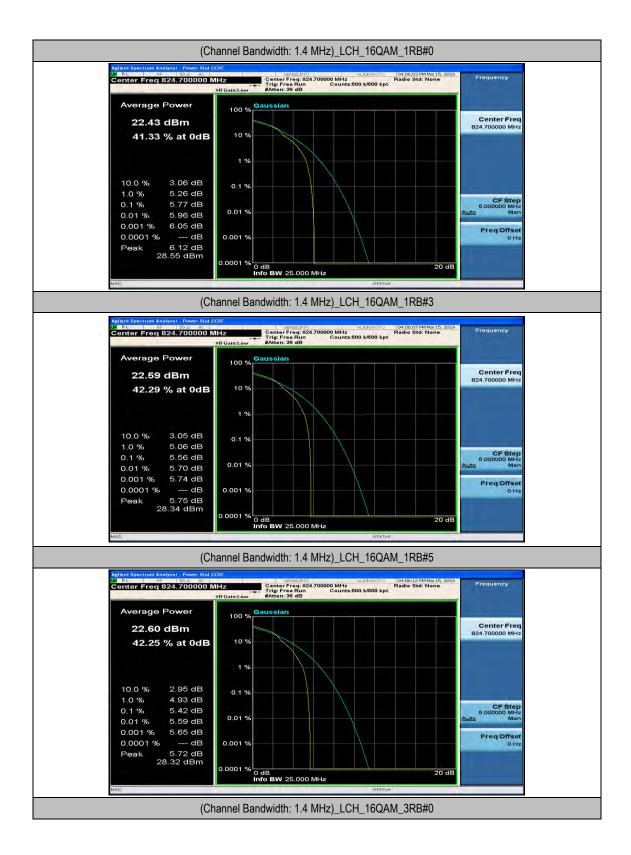




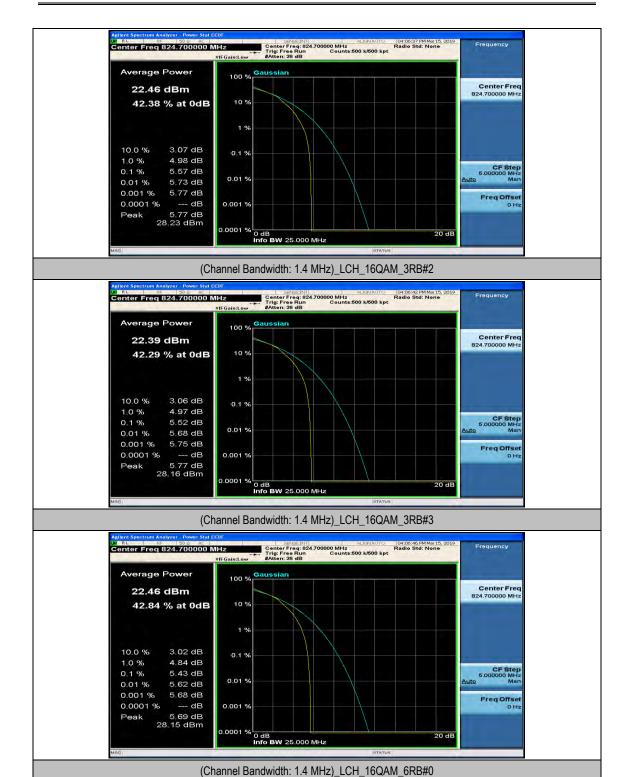




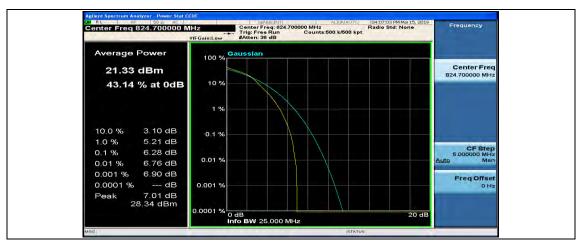


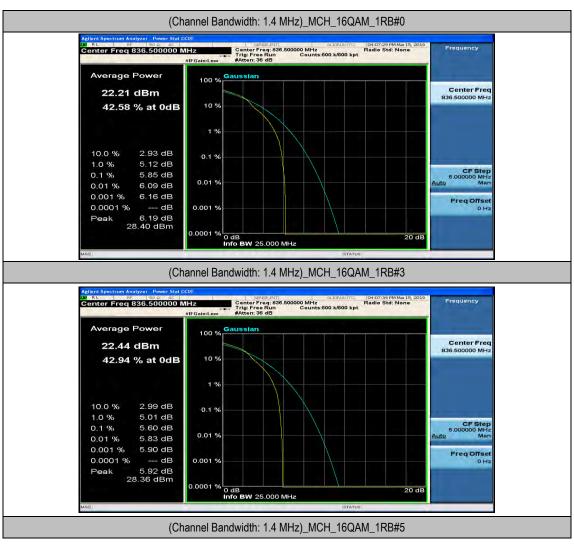






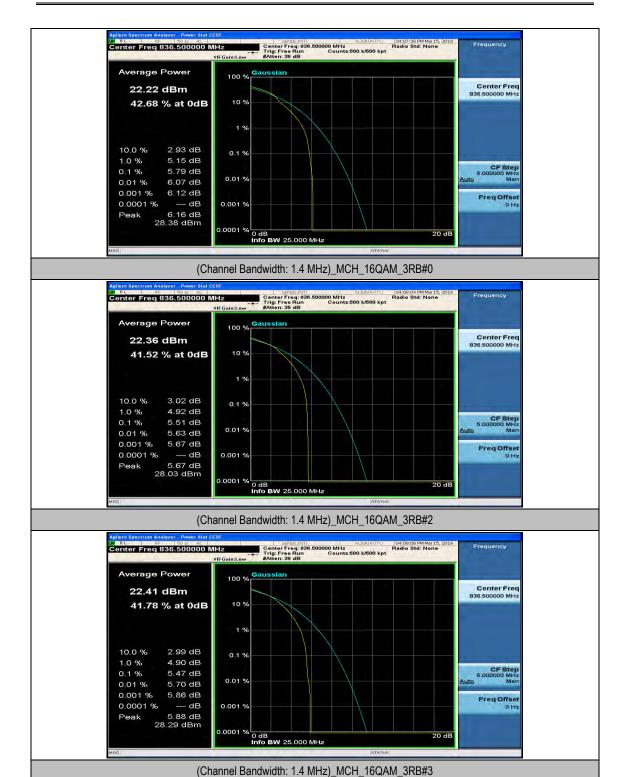




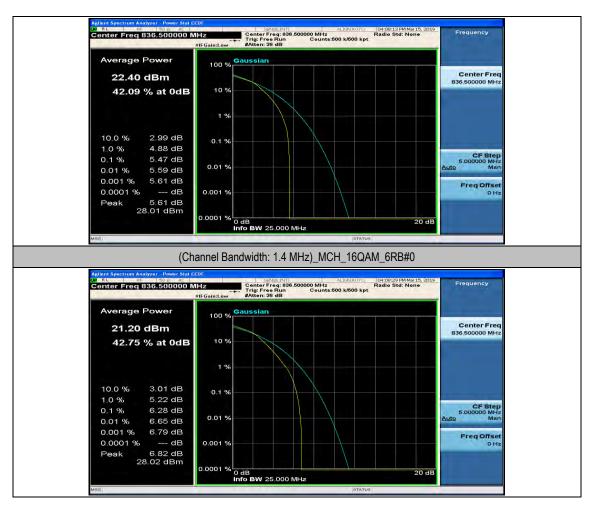


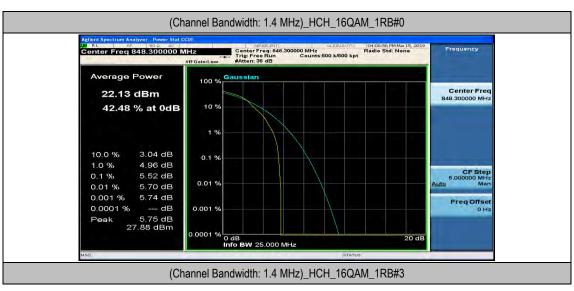
LTE Band 5



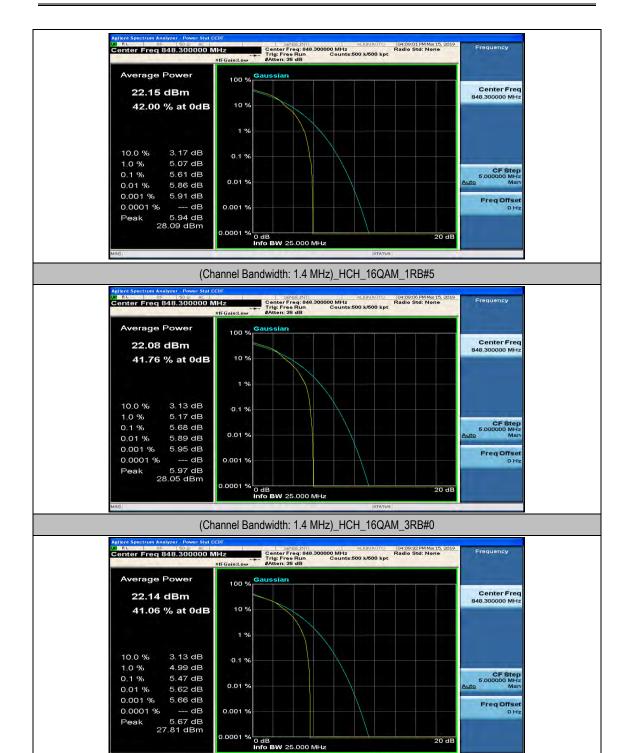






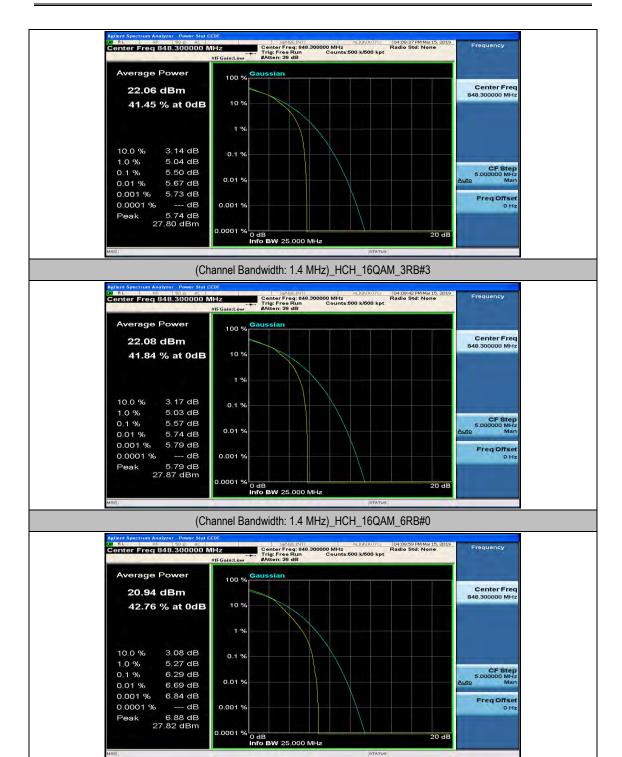






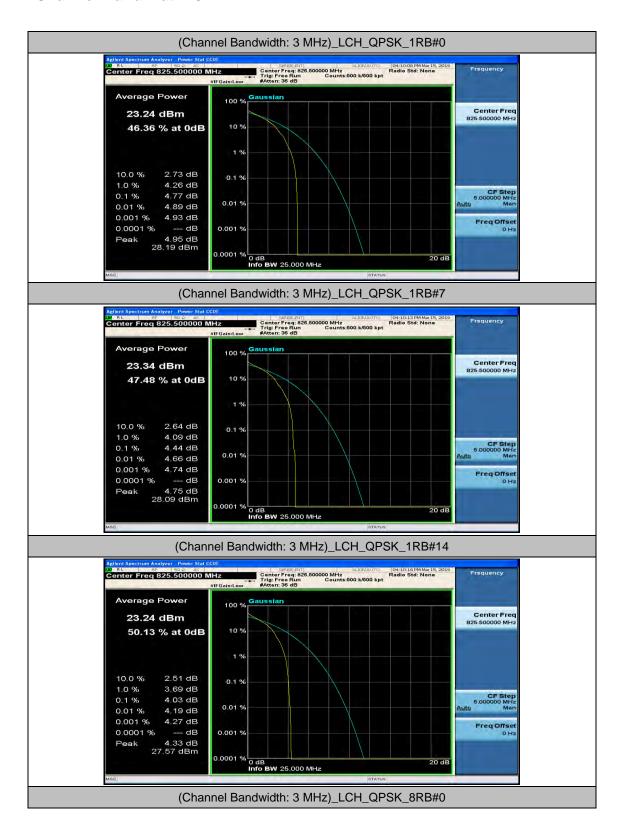
(Channel Bandwidth: 1.4 MHz)\_HCH\_16QAM\_3RB#2



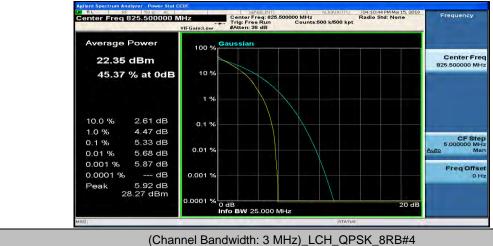


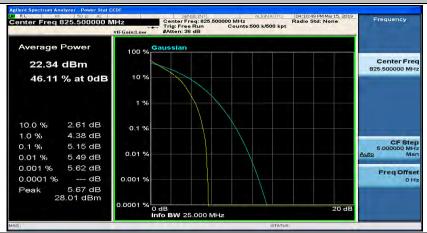


### **Channel Bandwidth: 3 MHz**

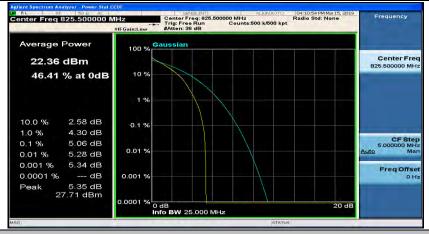






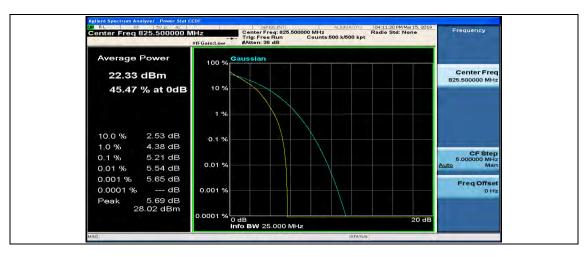


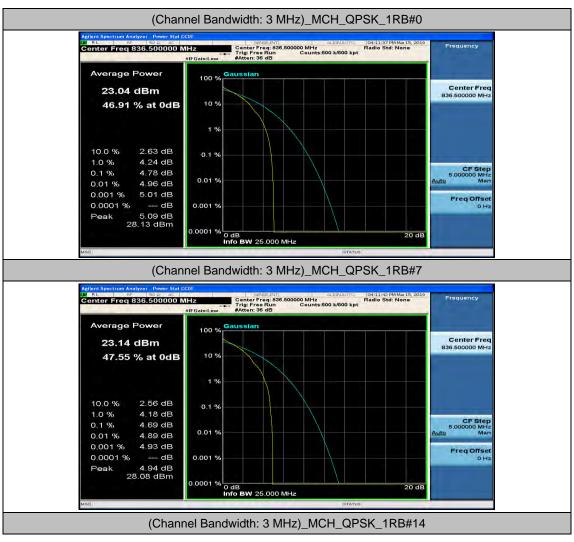
(Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_8RB#7



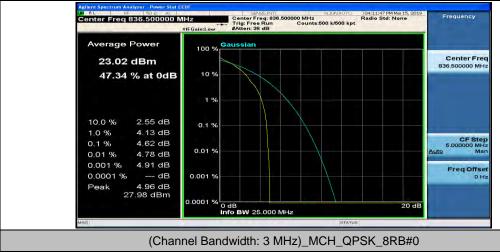
(Channel Bandwidth: 3 MHz)\_LCH\_QPSK\_15RB#0











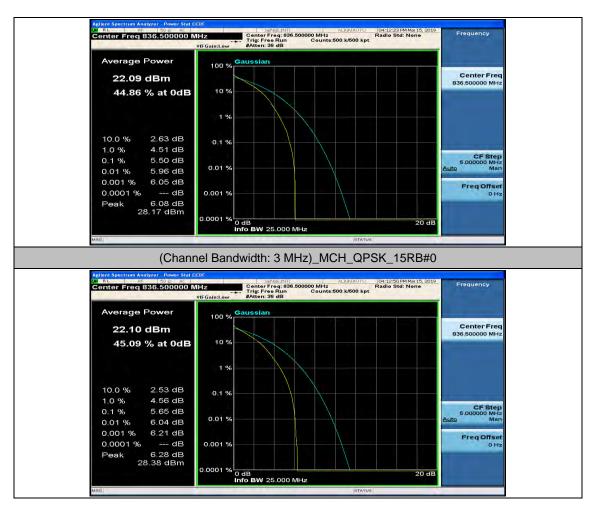


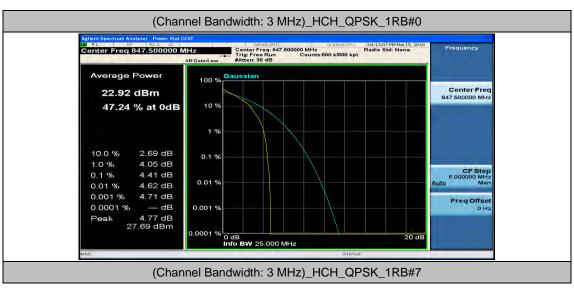
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_8RB#4



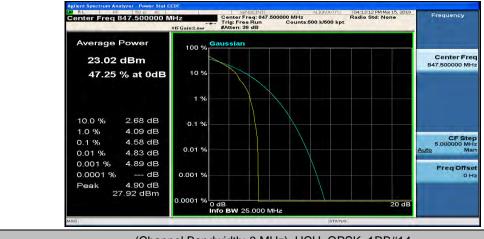
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_8RB#7







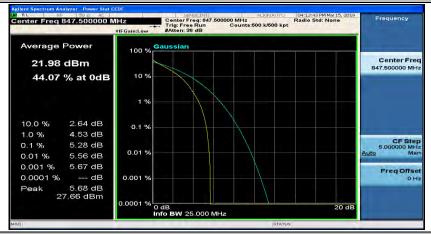




#### (Channel Bandwidth: 3 MHz)\_HCH\_QPSK\_1RB#14

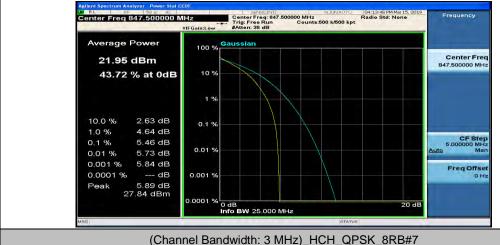


#### (Channel Bandwidth: 3 MHz)\_HCH\_QPSK\_8RB#0



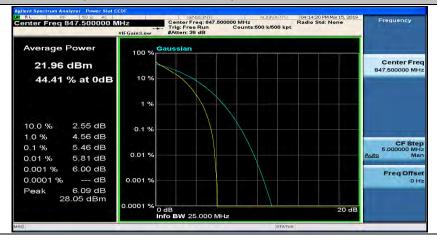
(Channel Bandwidth: 3 MHz)\_HCH\_QPSK\_8RB#4



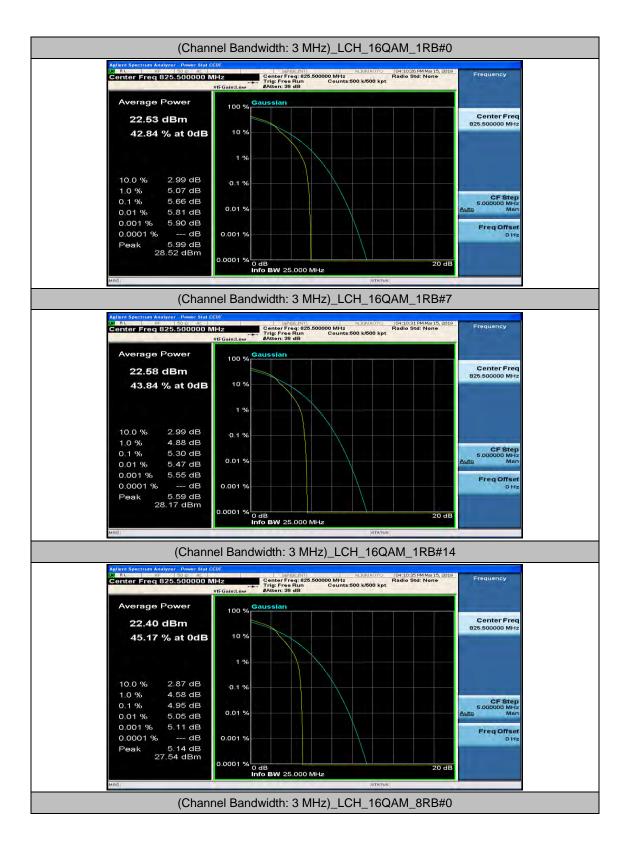




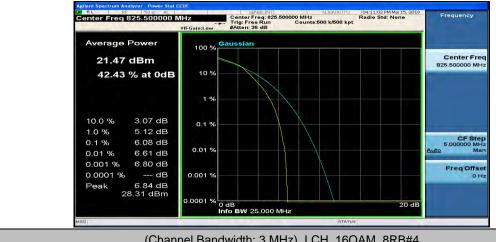
#### (Channel Bandwidth: 3 MHz)\_HCH\_QPSK\_15RB#0



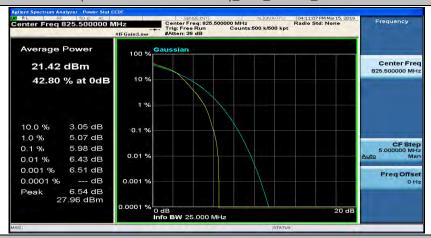








(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_8RB#4

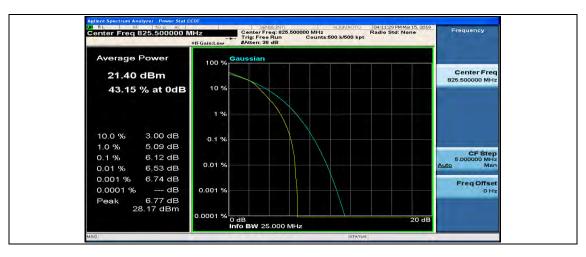


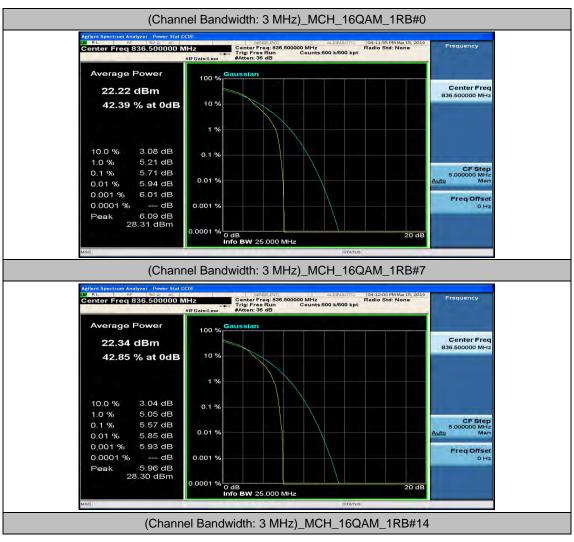
(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_8RB#7



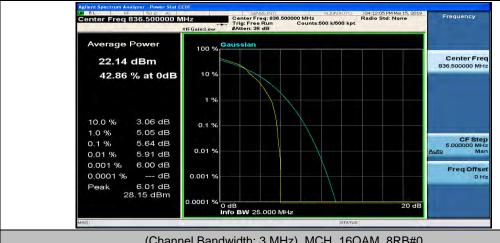
(Channel Bandwidth: 3 MHz)\_LCH\_16QAM\_15RB#0







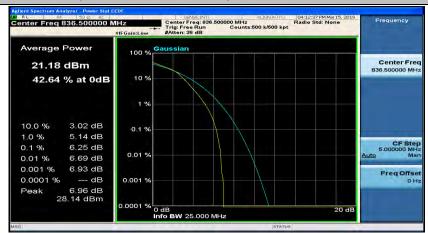




(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#0

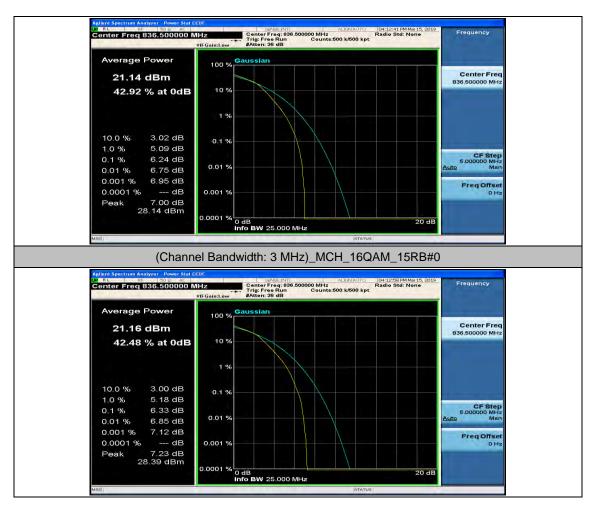


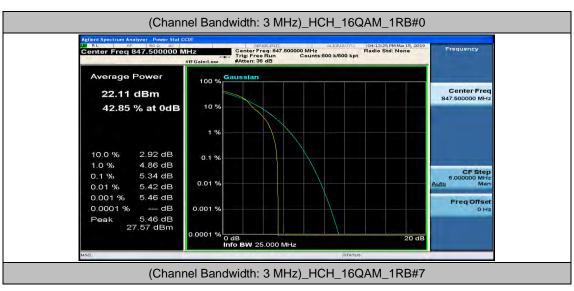
(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#4



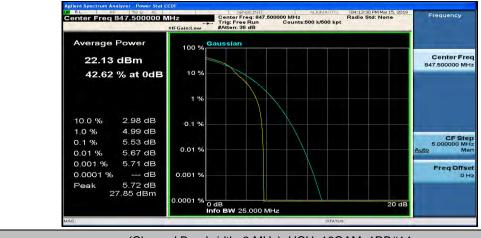
(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_8RB#7







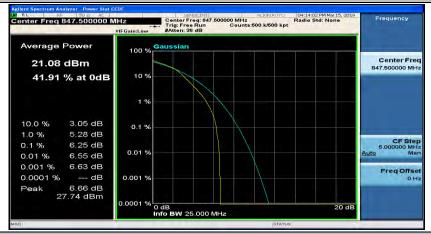




#### (Channel Bandwidth: 3 MHz)\_HCH\_16QAM\_1RB#14

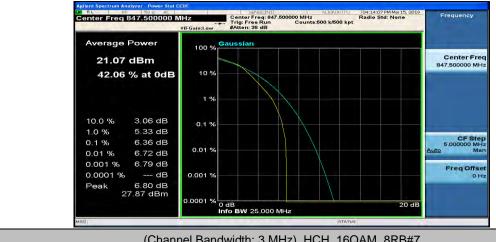


#### (Channel Bandwidth: 3 MHz)\_HCH\_16QAM\_8RB#0

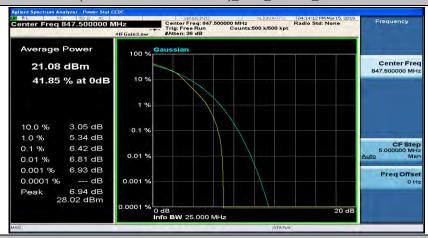


(Channel Bandwidth: 3 MHz)\_HCH\_16QAM\_8RB#4

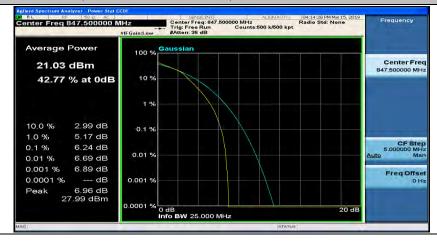




(Channel Bandwidth: 3 MHz)\_HCH\_16QAM\_8RB#7

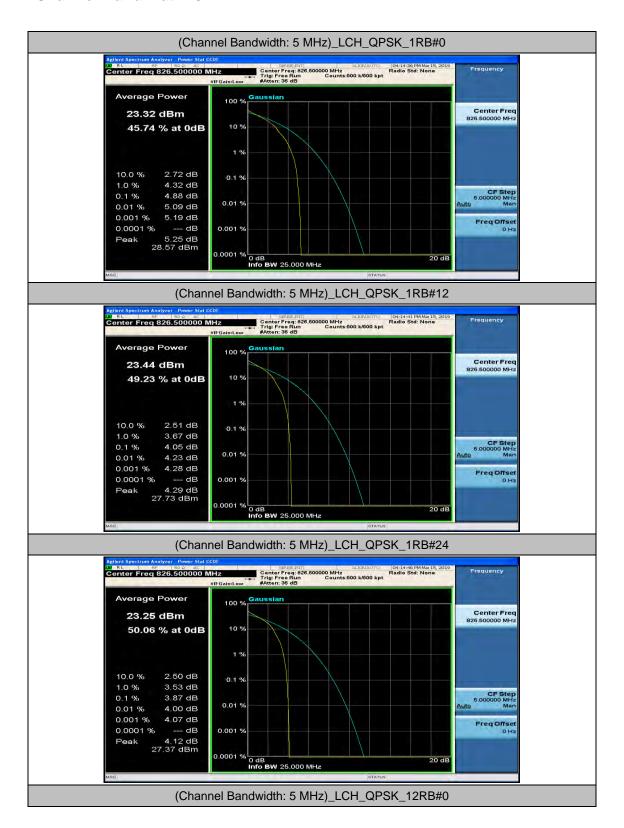


#### (Channel Bandwidth: 3 MHz)\_HCH\_16QAM\_15RB#0

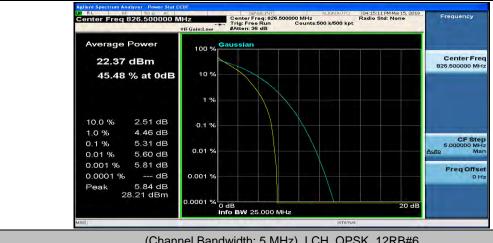




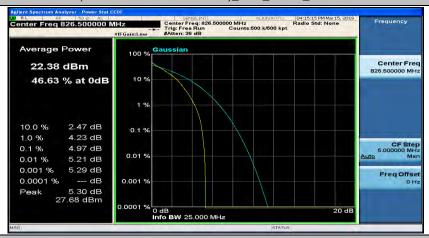
### **Channel Bandwidth: 5 MHz**



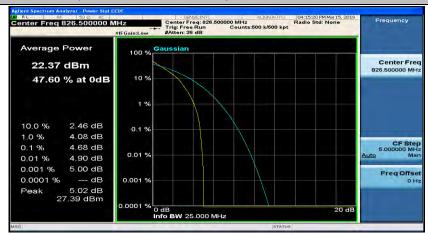




(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#6

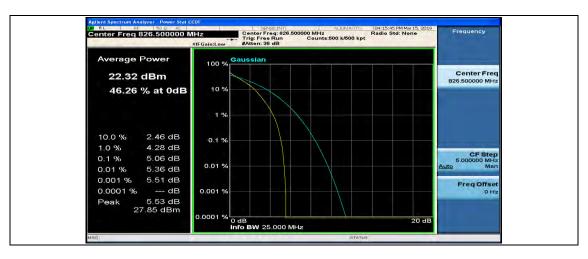


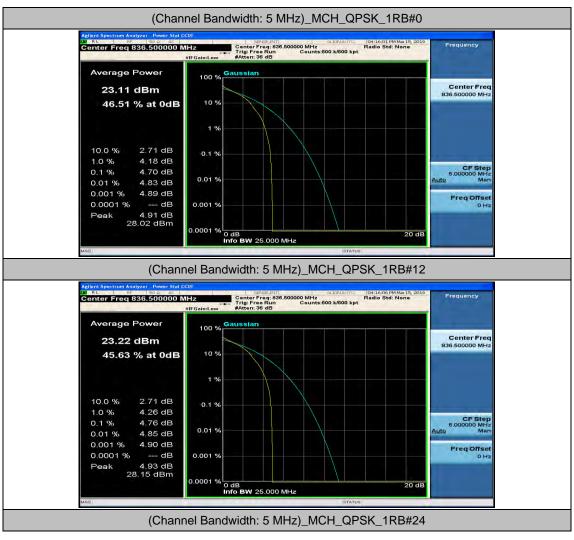
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_12RB#13



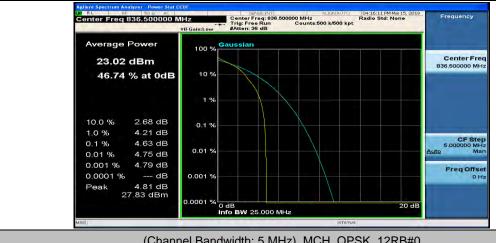
(Channel Bandwidth: 5 MHz)\_LCH\_QPSK\_25RB#0







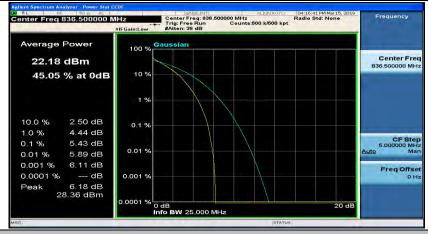




(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#0

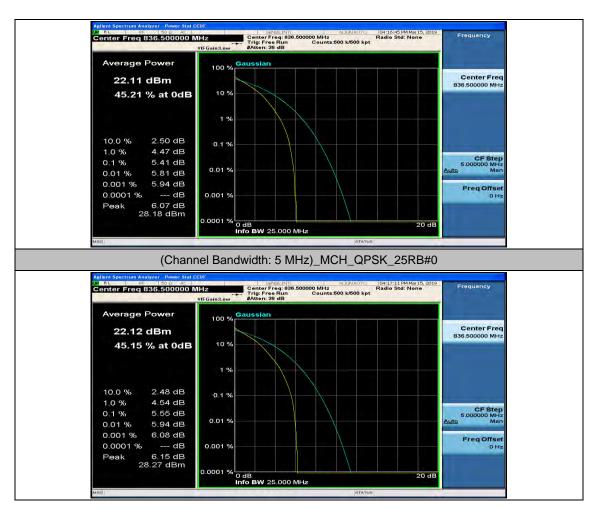


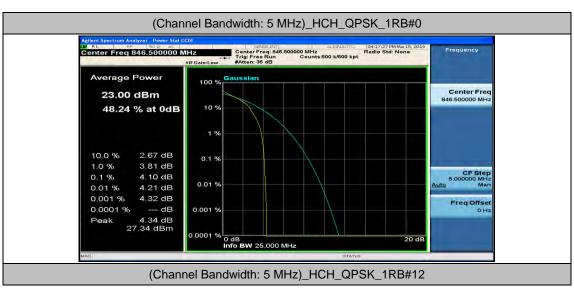
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#6



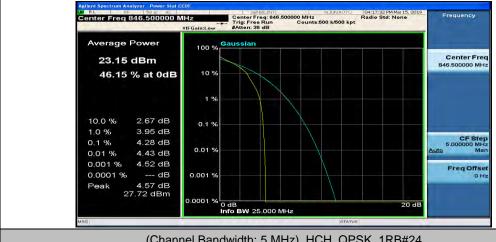
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_12RB#13



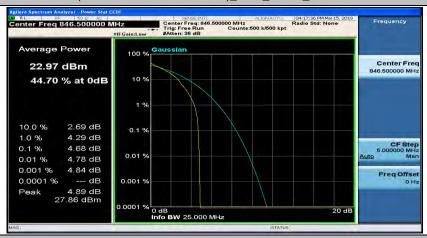




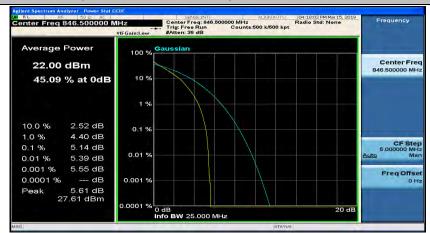




#### (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_1RB#24

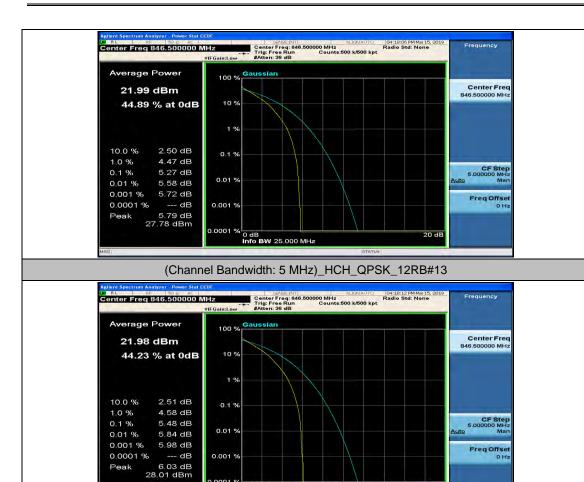


#### (Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_12RB#0



(Channel Bandwidth: 5 MHz)\_HCH\_QPSK\_12RB#6







0 dB Info BW 25.000 MHz

20 dB

0.0001 %

