

Appendix B: Peak-to-Average Ratio

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.55	<13	PASS
		1	3	4.61	<13	PASS
		1	5	4.63	<13	PASS
		3	0	4.7	<13	PASS
		3	2	4.75	<13	PASS
		3	3	4.76	<13	PASS
		6	0	5.04	<13	PASS
	MCH	1	0	5.01	<13	PASS
		1	3	4.99	<13	PASS
		1	5	4.88	<13	PASS
		3	0	5.19	<13	PASS
		3	2	5.12	<13	PASS
		3	3	5.16	<13	PASS
		6	0	5.46	<13	PASS
16QAM	LCH	1	0	5.46	<13	PASS
		1	3	5.57	<13	PASS
		1	5	5.79	<13	PASS
		3	0	5.76	<13	PASS
		3	2	5.83	<13	PASS
		3	3	5.74	<13	PASS
		6	0	5.71	<13	PASS
	MCH	1	0	4.98	<13	PASS
		1	3	5.19	<13	PASS
		1	5	5.1	<13	PASS
		3	0	5.41	<13	PASS
		3	2	5.4	<13	PASS
		3	3	5.46	<13	PASS
		6	0	6.25	<13	PASS

		6	0	6.83	<13	PASS
HCH	HCH	1	0	5.85	<13	PASS
		1	3	5.9	<13	PASS
		1	5	5.88	<13	PASS
		3	0	6.27	<13	PASS
		3	2	6.19	<13	PASS
		3	3	6.3	<13	PASS
		6	0	7.05	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.54	<13	PASS
		1	7	4.62	<13	PASS
		1	14	4.68	<13	PASS
		8	0	5.11	<13	PASS
		8	4	5.15	<13	PASS
		8	7	5.19	<13	PASS
		15	0	5.14	<13	PASS
	MCH	1	0	4.97	<13	PASS
		1	7	4.88	<13	PASS
		1	14	4.91	<13	PASS
		8	0	5.48	<13	PASS
		8	4	5.41	<13	PASS
		8	7	5.46	<13	PASS
		15	0	5.56	<13	PASS
	HCH	1	0	5.41	<13	PASS
		1	7	5.34	<13	PASS
		1	14	5.25	<13	PASS
		8	0	5.9	<13	PASS
		8	4	5.85	<13	PASS
		8	7	5.89	<13	PASS
		15	0	5.77	<13	PASS
16QAM	LCH	1	0	5.34	<13	PASS
		1	7	5.43	<13	PASS
		1	14	5.24	<13	PASS
		8	0	6.02	<13	PASS
		8	4	6.01	<13	PASS
		8	7	6.03	<13	PASS
		15	0	6.22	<13	PASS

	MCH	1	0	6.05	<13	PASS
		1	7	5.83	<13	PASS
		1	14	5.61	<13	PASS
		8	0	6.62	<13	PASS
		8	4	6.58	<13	PASS
		8	7	6.64	<13	PASS
		15	0	6.86	<13	PASS
	HCH	1	0	6.18	<13	PASS
		1	7	6.22	<13	PASS
		1	14	6.23	<13	PASS
		8	0	7.25	<13	PASS
		8	4	7.22	<13	PASS
		8	7	7.22	<13	PASS
		15	0	6.95	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.47	<13	PASS
		1	12	4.63	<13	PASS
		1	24	4.81	<13	PASS
		12	0	5.04	<13	PASS
		12	6	5.21	<13	PASS
		12	13	5.28	<13	PASS
		25	0	5.16	<13	PASS
	MCH	1	0	5.11	<13	PASS
		1	12	4.99	<13	PASS
		1	24	4.82	<13	PASS
		12	0	5.65	<13	PASS
		12	6	5.48	<13	PASS
		12	13	5.33	<13	PASS
		25	0	5.41	<13	PASS
	HCH	1	0	5.51	<13	PASS
		1	12	5.56	<13	PASS
		1	24	5.57	<13	PASS
		12	0	5.83	<13	PASS
		12	6	5.74	<13	PASS
		12	13	5.85	<13	PASS
		25	0	5.66	<13	PASS
16QAM	LCH	1	0	5.32	<13	PASS

		1	12	5.58	<13	PASS
		1	24	5.86	<13	PASS
		12	0	6.06	<13	PASS
		12	6	6.14	<13	PASS
		12	13	6.38	<13	PASS
		25	0	6.18	<13	PASS
MCH		1	0	6.03	<13	PASS
		1	12	5.94	<13	PASS
		1	24	5.71	<13	PASS
		12	0	6.64	<13	PASS
		12	6	6.59	<13	PASS
		12	13	6.7	<13	PASS
		25	0	6.7	<13	PASS
HCH		1	0	5.68	<13	PASS
		1	12	5.91	<13	PASS
		1	24	5.82	<13	PASS
		12	0	6.93	<13	PASS
		12	6	6.94	<13	PASS
		12	13	7.04	<13	PASS
		25	0	6.83	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.79	<13	PASS
		1	24	5.15	<13	PASS
		1	49	5.52	<13	PASS
		25	0	5.18	<13	PASS
		25	12	5.35	<13	PASS
		25	25	5.64	<13	PASS
		50	0	5.42	<13	PASS
QPSK	MCH	1	0	5.5	<13	PASS
		1	24	5.17	<13	PASS
		1	49	4.78	<13	PASS
		25	0	5.66	<13	PASS
		25	12	5.43	<13	PASS
		25	25	5.3	<13	PASS
		50	0	5.48	<13	PASS
QPSK	HCH	1	0	5.05	<13	PASS
		1	24	5.32	<13	PASS

		1	49	5.42	<13	PASS
		25	0	5.58	<13	PASS
		25	12	5.66	<13	PASS
		25	25	5.75	<13	PASS
		50	0	5.64	<13	PASS
16QAM	LCH	1	0	5.4	<13	PASS
		1	24	5.92	<13	PASS
		1	49	6.33	<13	PASS
		25	0	6.27	<13	PASS
		25	12	6.42	<13	PASS
		25	25	6.56	<13	PASS
		50	0	6.33	<13	PASS
	MCH	1	0	6.19	<13	PASS
		1	24	5.83	<13	PASS
		1	49	5.58	<13	PASS
		25	0	6.79	<13	PASS
		25	12	6.66	<13	PASS
		25	25	6.42	<13	PASS
		50	0	6.51	<13	PASS
	HCH	1	0	5.61	<13	PASS
		1	24	5.92	<13	PASS
		1	49	6.22	<13	PASS
		25	0	6.51	<13	PASS
		25	12	6.65	<13	PASS
		25	25	6.78	<13	PASS
		50	0	6.55	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.76	<13	PASS
		1	37	5.39	<13	PASS
		1	74	5.52	<13	PASS
		37	0	5.3	<13	PASS
		37	18	5.53	<13	PASS
		37	38	5.78	<13	PASS
		75	0	5.79	<13	PASS
	MCH	1	0	5.75	<13	PASS
		1	37	5.21	<13	PASS
		1	74	4.77	<13	PASS

16QAM	HCH	37	0	5.63	<13	PASS
		37	18	5.38	<13	PASS
		37	38	5.18	<13	PASS
		75	0	5.7	<13	PASS
		1	0	4.85	<13	PASS
		1	37	5.26	<13	PASS
		1	74	5.72	<13	PASS
		37	0	5.22	<13	PASS
	LCH	37	18	5.43	<13	PASS
		37	38	5.61	<13	PASS
		75	0	5.71	<13	PASS
		1	0	5.38	<13	PASS
		1	37	6.06	<13	PASS
		1	74	6.34	<13	PASS
		37	0	6.39	<13	PASS
		37	18	6.6	<13	PASS
	MCH	37	38	6.77	<13	PASS
		75	0	6.59	<13	PASS
		1	0	6.63	<13	PASS
		1	37	5.94	<13	PASS
		1	74	5.35	<13	PASS
		37	0	6.8	<13	PASS
		37	18	6.6	<13	PASS
		37	38	6.41	<13	PASS
	HCH	75	0	6.61	<13	PASS
		1	0	5.53	<13	PASS
		1	37	6.13	<13	PASS
		1	74	6.42	<13	PASS
		37	0	6.31	<13	PASS
		37	18	6.47	<13	PASS
		37	38	6.73	<13	PASS
		75	0	6.46	<13	PASS

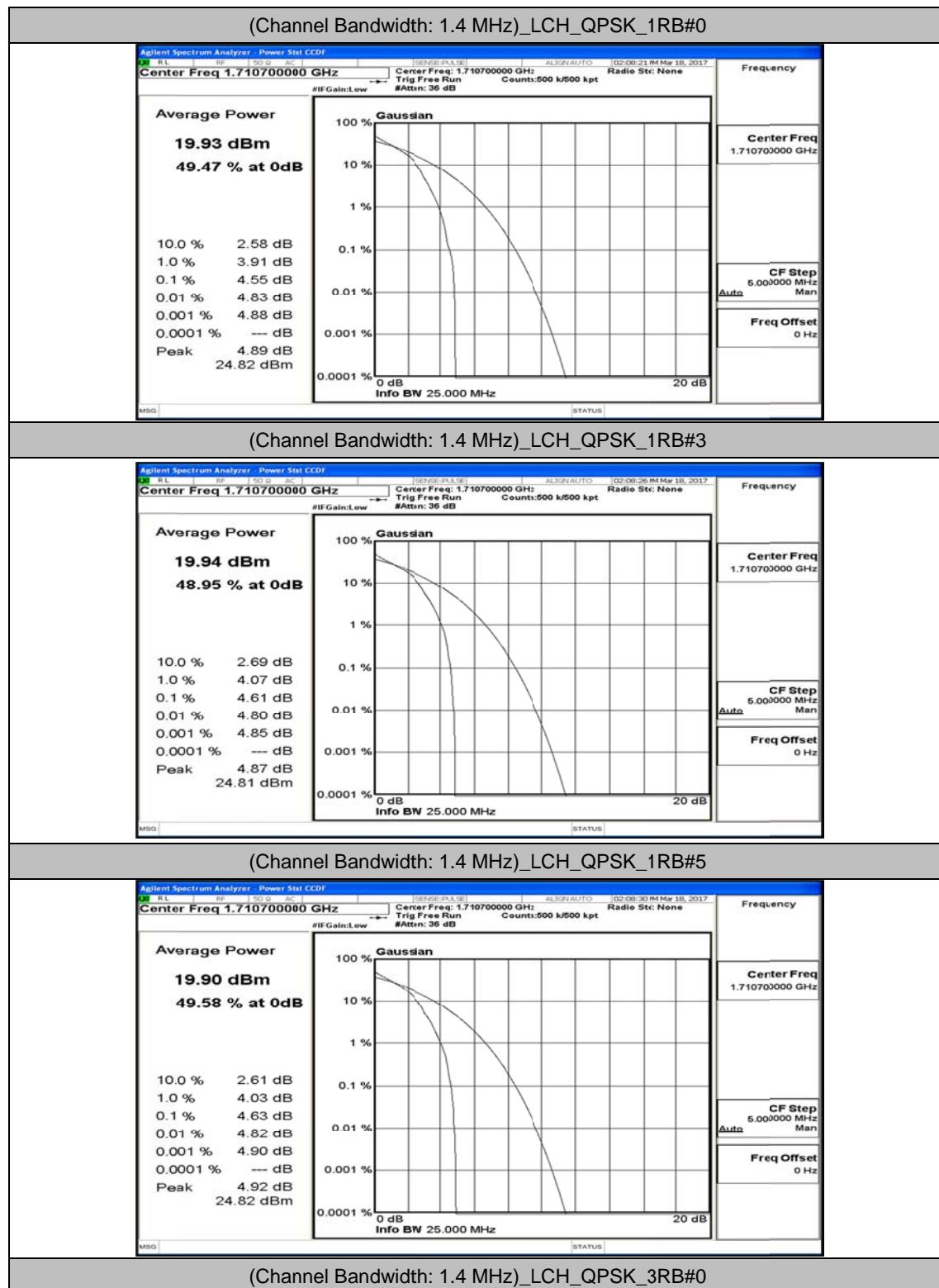
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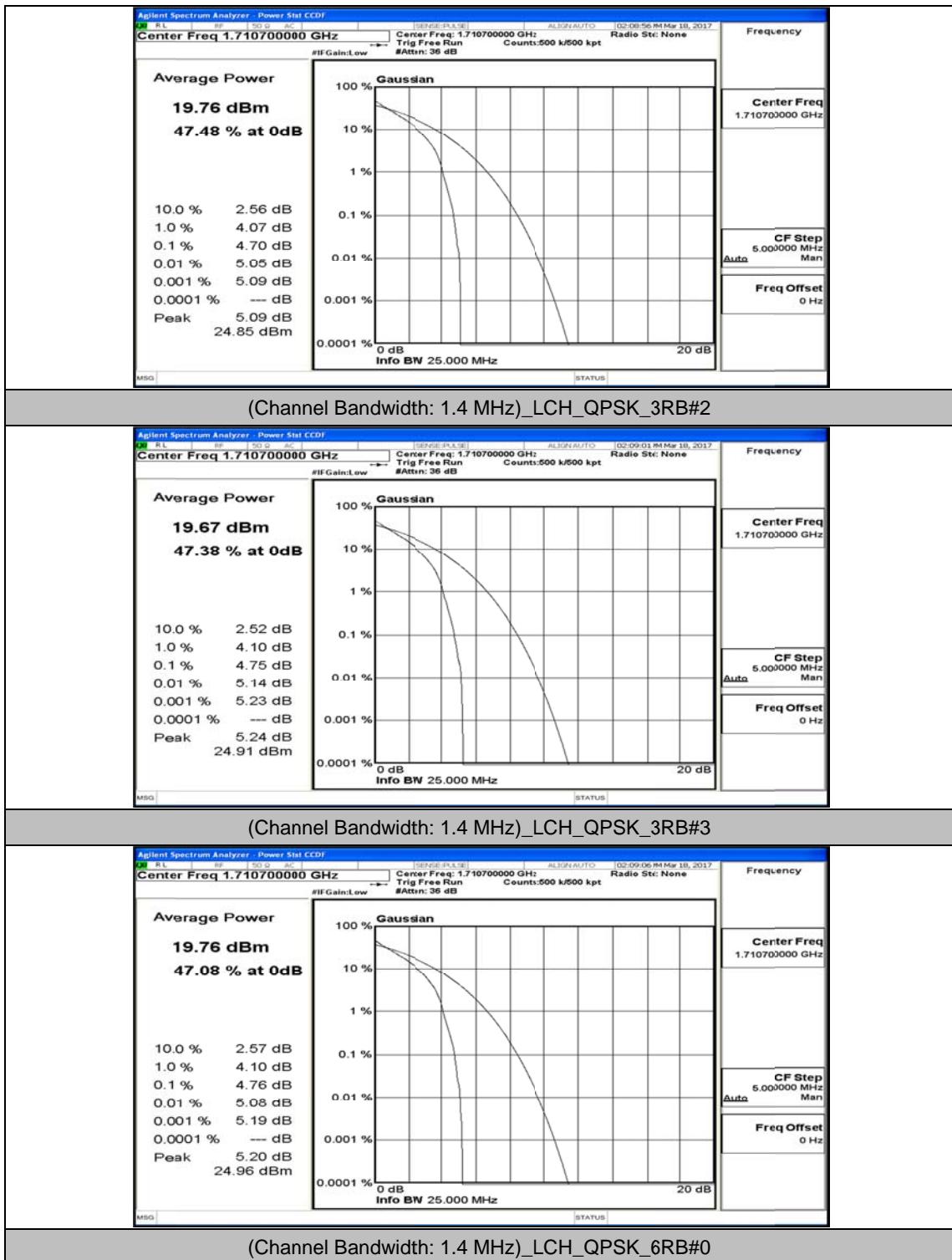
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.69	<13	PASS
		1	49	5.45	<13	PASS
		1	99	5.39	<13	PASS
		50	0	5.45	<13	PASS

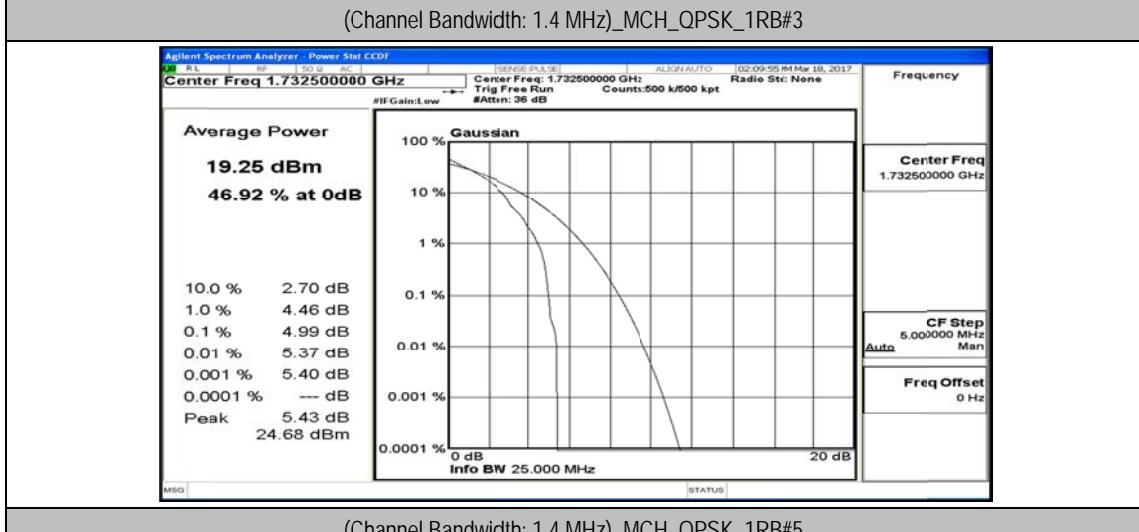
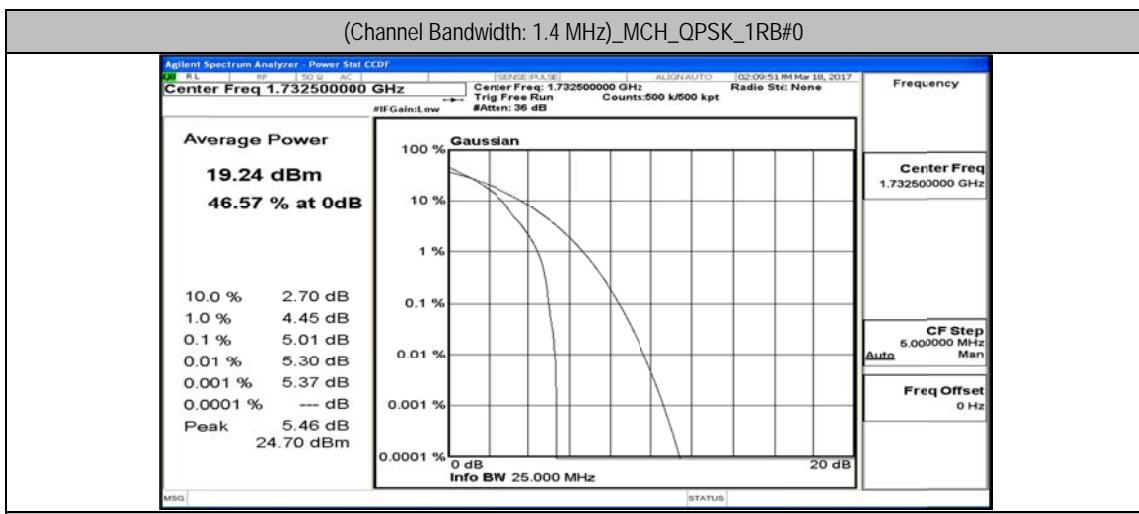
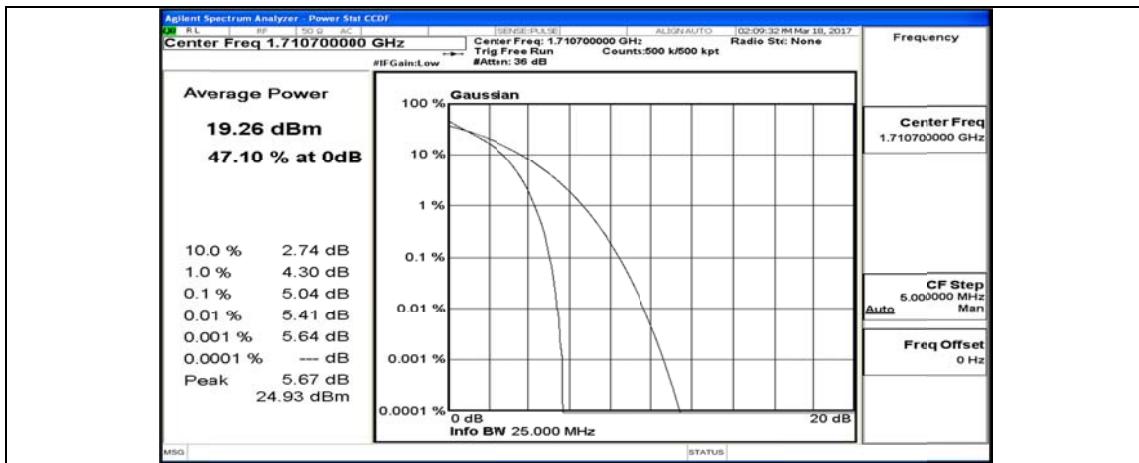
	MCH	50	25	5.63	<13	PASS
		50	50	5.75	<13	PASS
		100	0	5.62	<13	PASS
	HCH	1	0	5.51	<13	PASS
		1	49	5.15	<13	PASS
		1	99	4.76	<13	PASS
		50	0	5.68	<13	PASS
16QAM	LCH	50	25	5.38	<13	PASS
		50	50	5.16	<13	PASS
		100	0	5.56	<13	PASS
	MCH	1	0	5.01	<13	PASS
		1	49	5.08	<13	PASS
		1	99	5.7	<13	PASS
		50	0	5.19	<13	PASS
	HCH	50	25	5.28	<13	PASS
		50	50	5.56	<13	PASS
		100	0	5.42	<13	PASS
	LCH	1	0	5.08	<13	PASS
		1	49	6.27	<13	PASS
		1	99	5.87	<13	PASS
		50	0	6.56	<13	PASS
	MCH	50	25	6.73	<13	PASS
		50	50	6.75	<13	PASS
		100	0	6.57	<13	PASS
	HCH	1	0	5.81	<13	PASS
		1	49	5.77	<13	PASS
		1	99	5.16	<13	PASS
		50	0	6.79	<13	PASS
	LCH	50	25	6.53	<13	PASS
		50	50	6.41	<13	PASS
		100	0	6.57	<13	PASS
	MCH	1	0	5.12	<13	PASS
		1	49	5.48	<13	PASS
		1	99	6.29	<13	PASS
		50	0	6.18	<13	PASS
	HCH	50	25	6.27	<13	PASS
		50	50	6.55	<13	PASS
		100	0	6.35	<13	PASS

Test Graphs

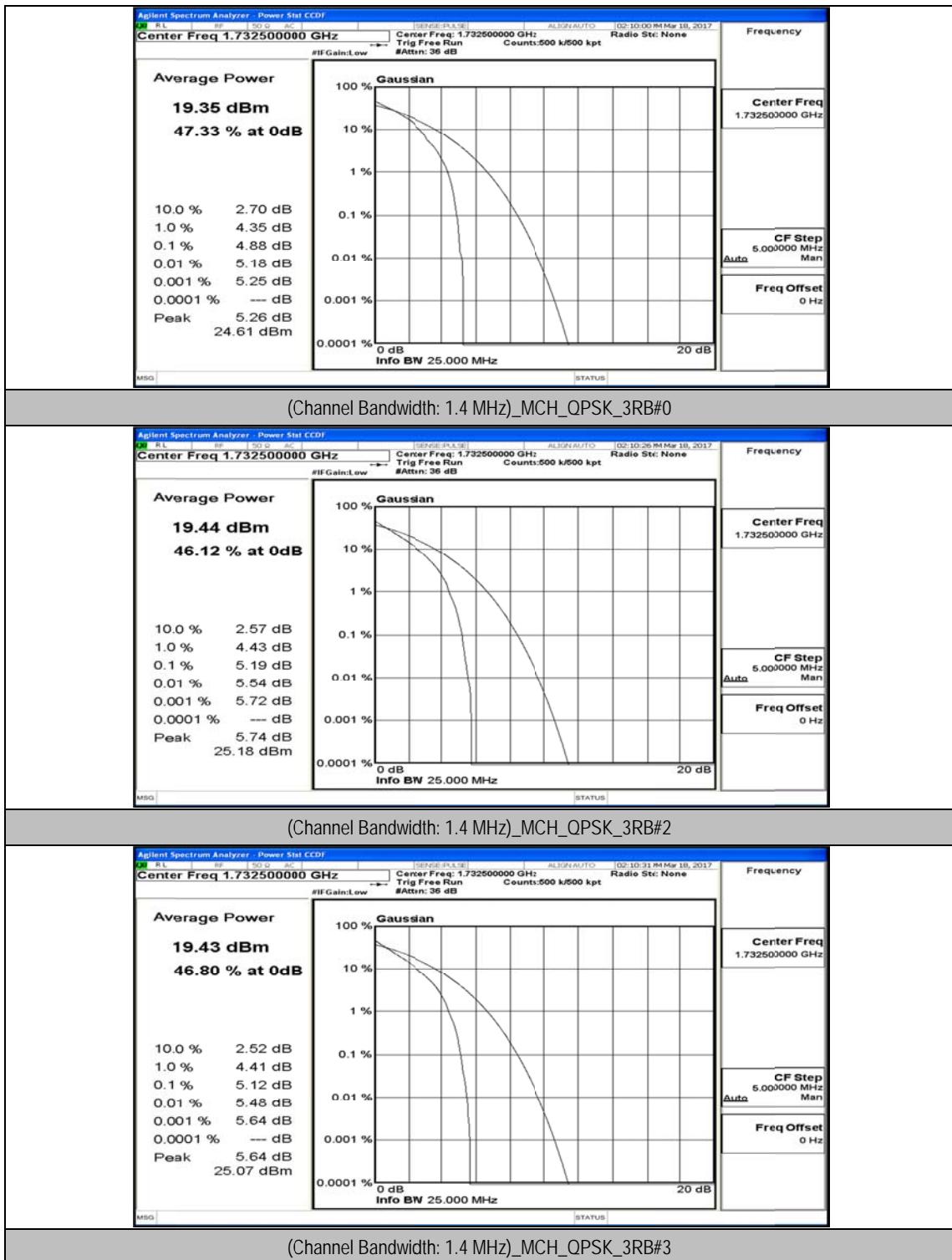
Channel Bandwidth: 1.4 MHz

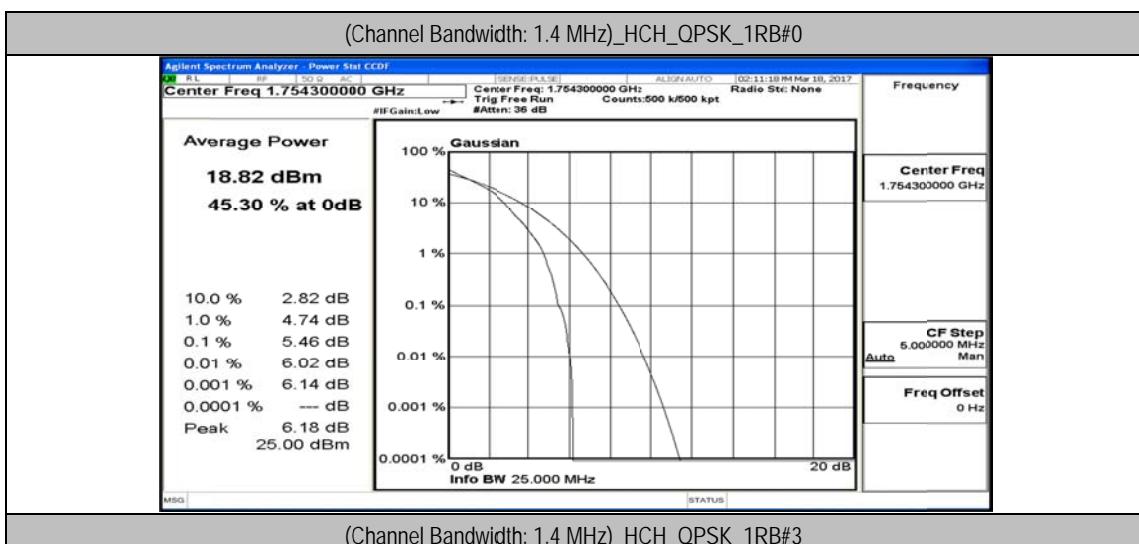
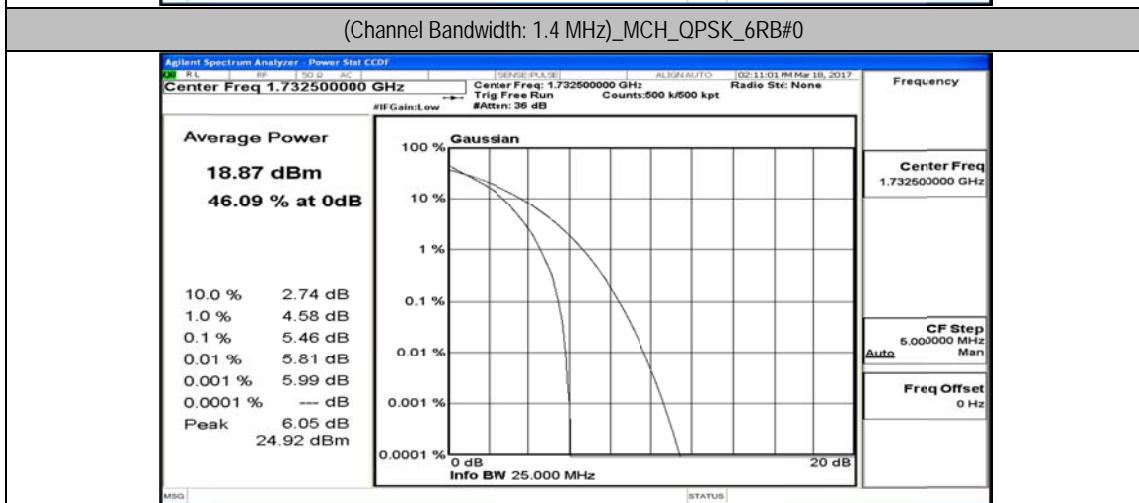
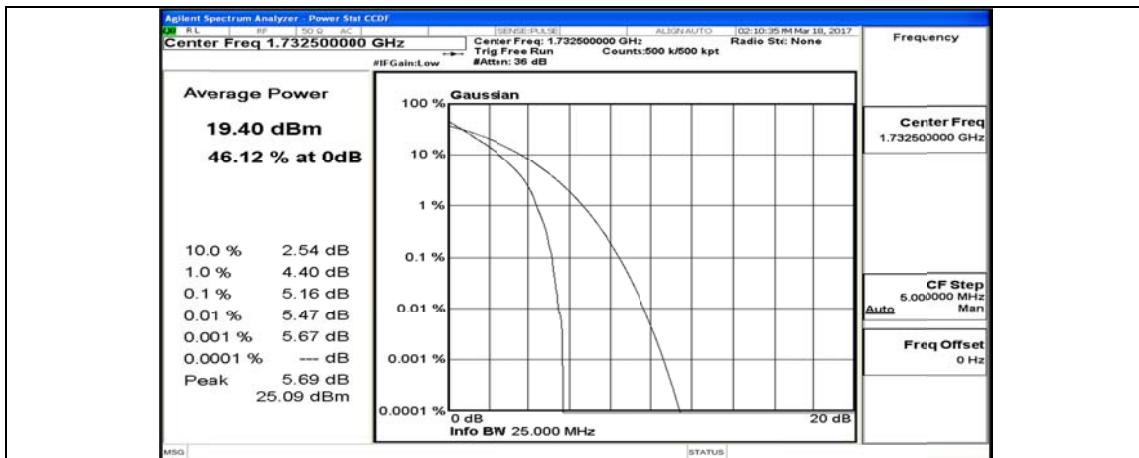




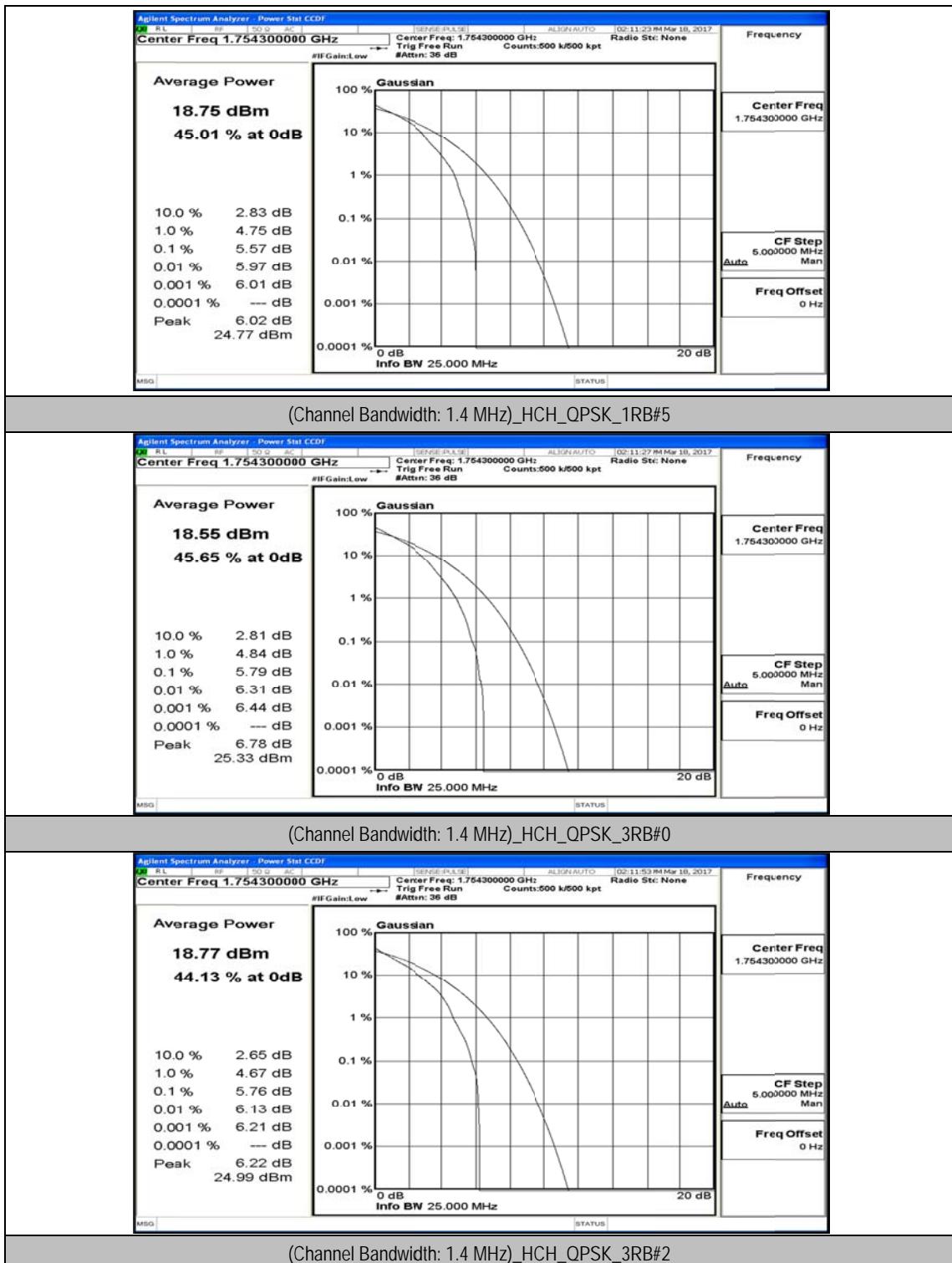


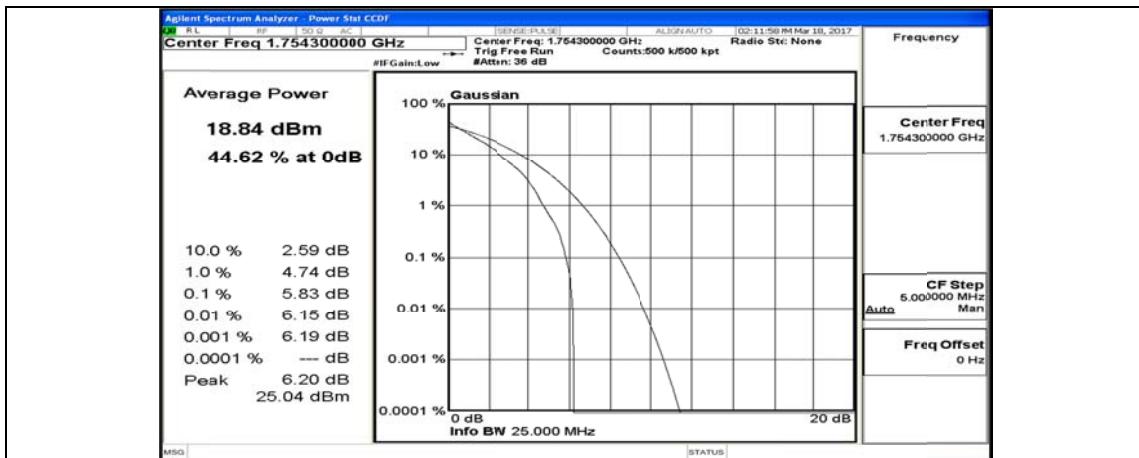
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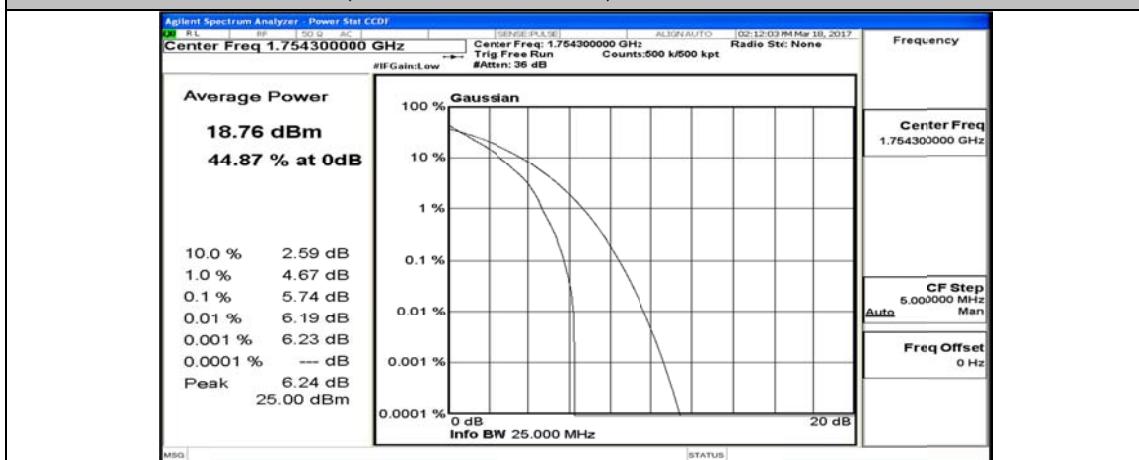


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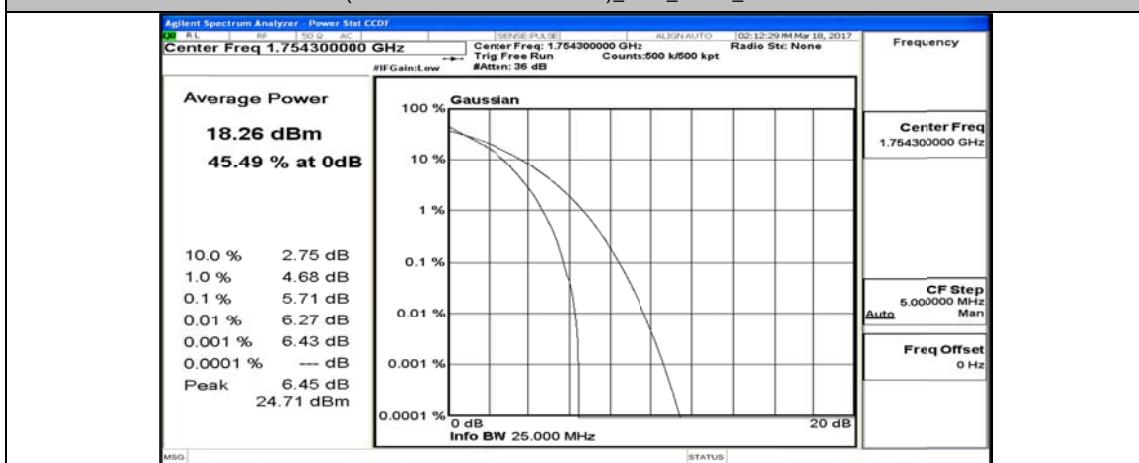




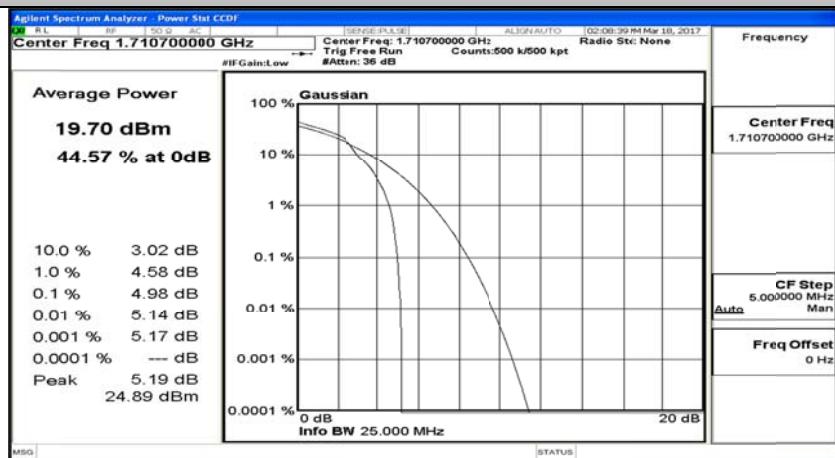
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#3



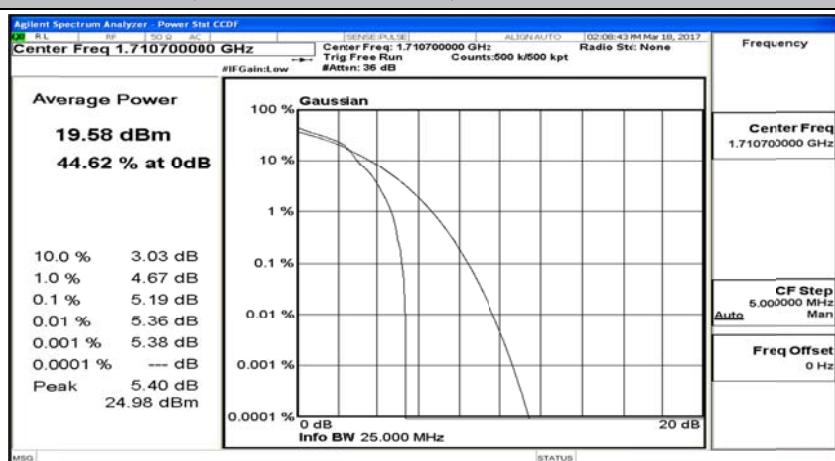
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0



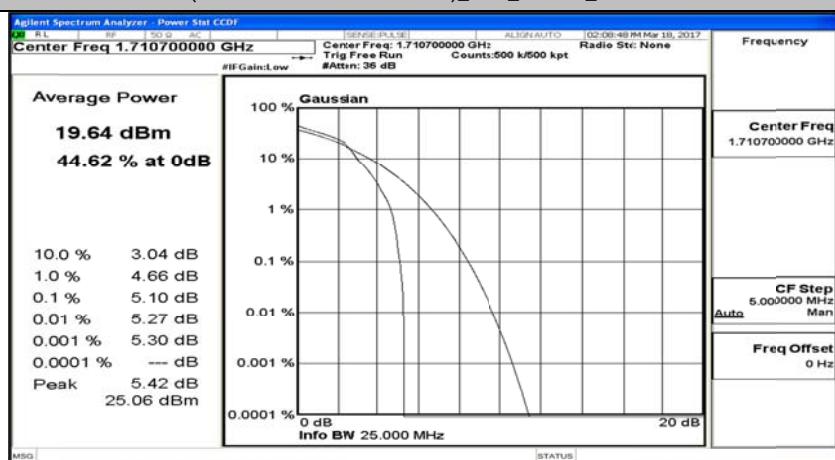
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



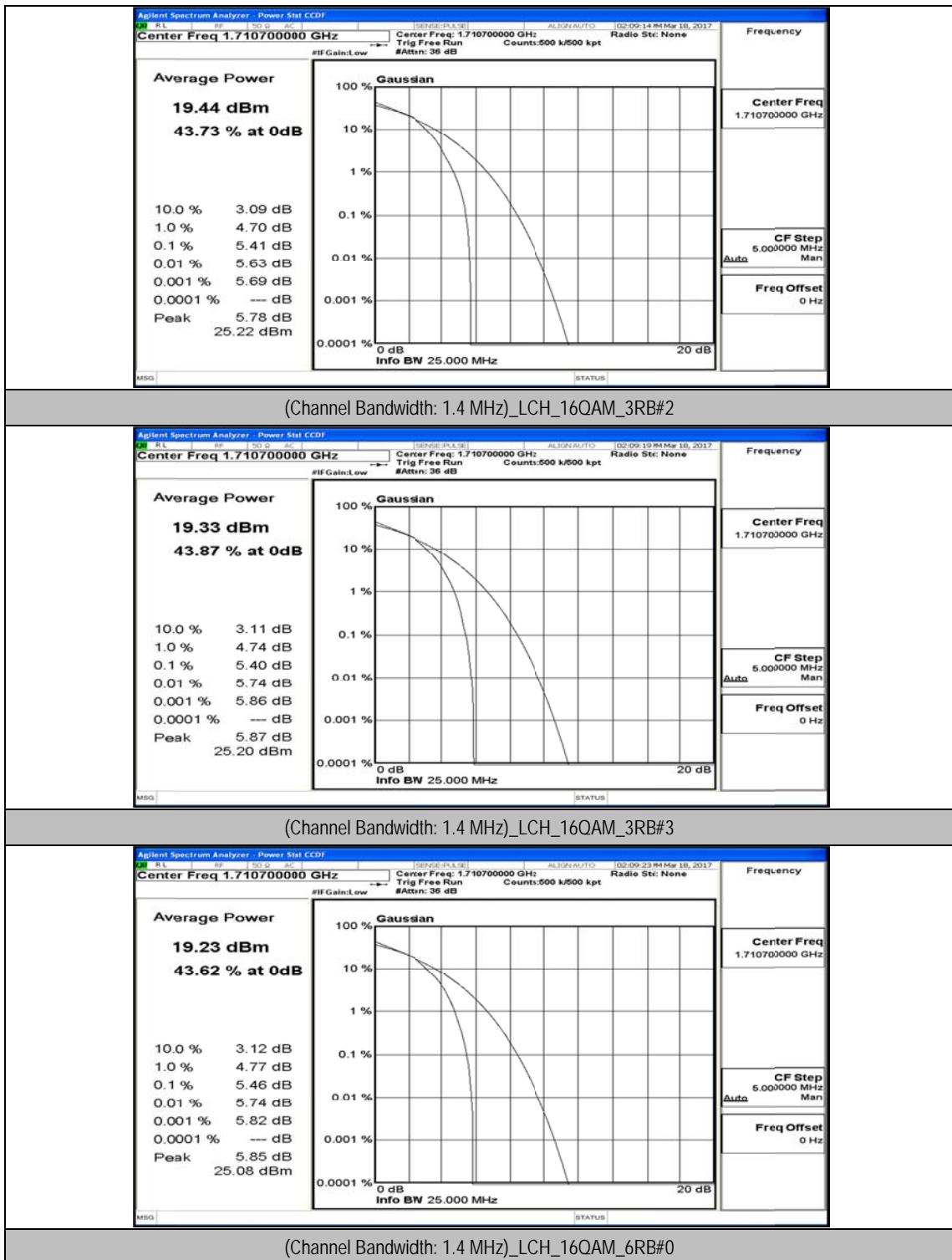
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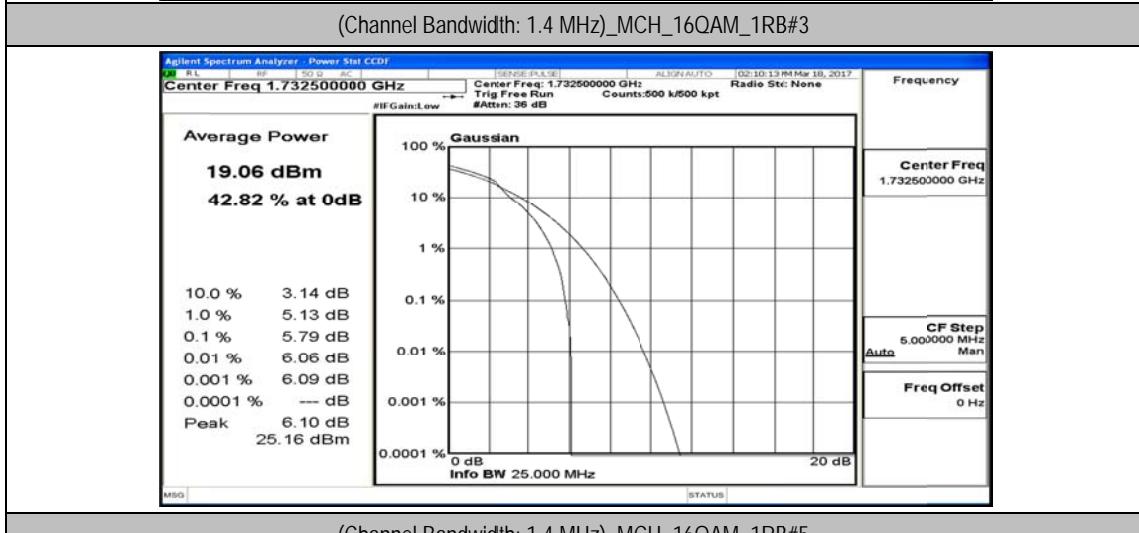
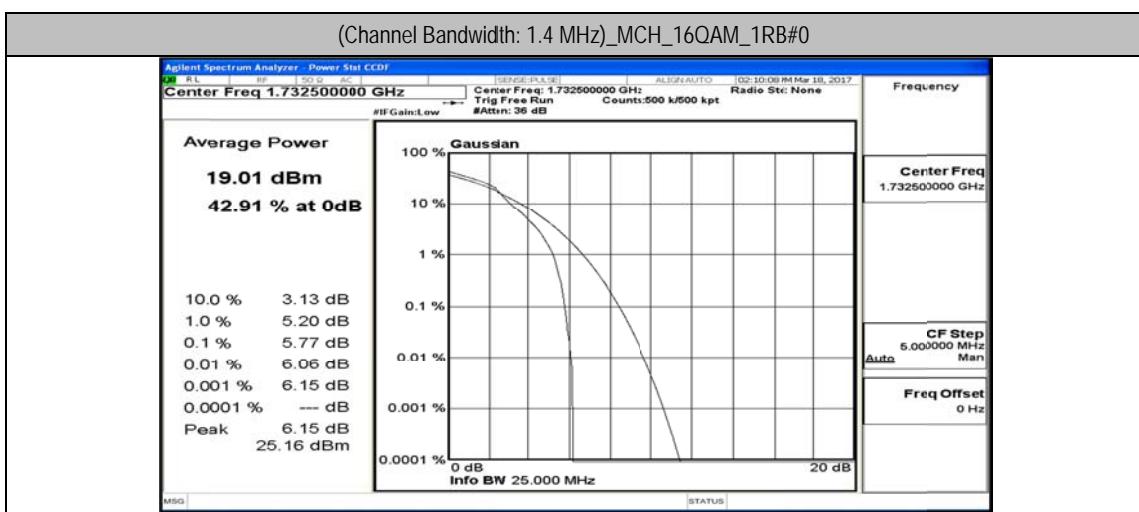
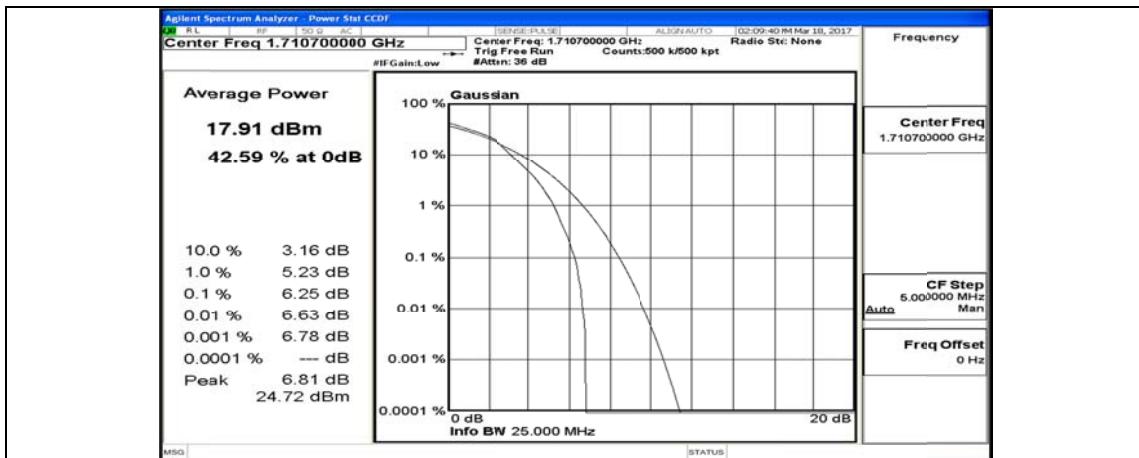


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

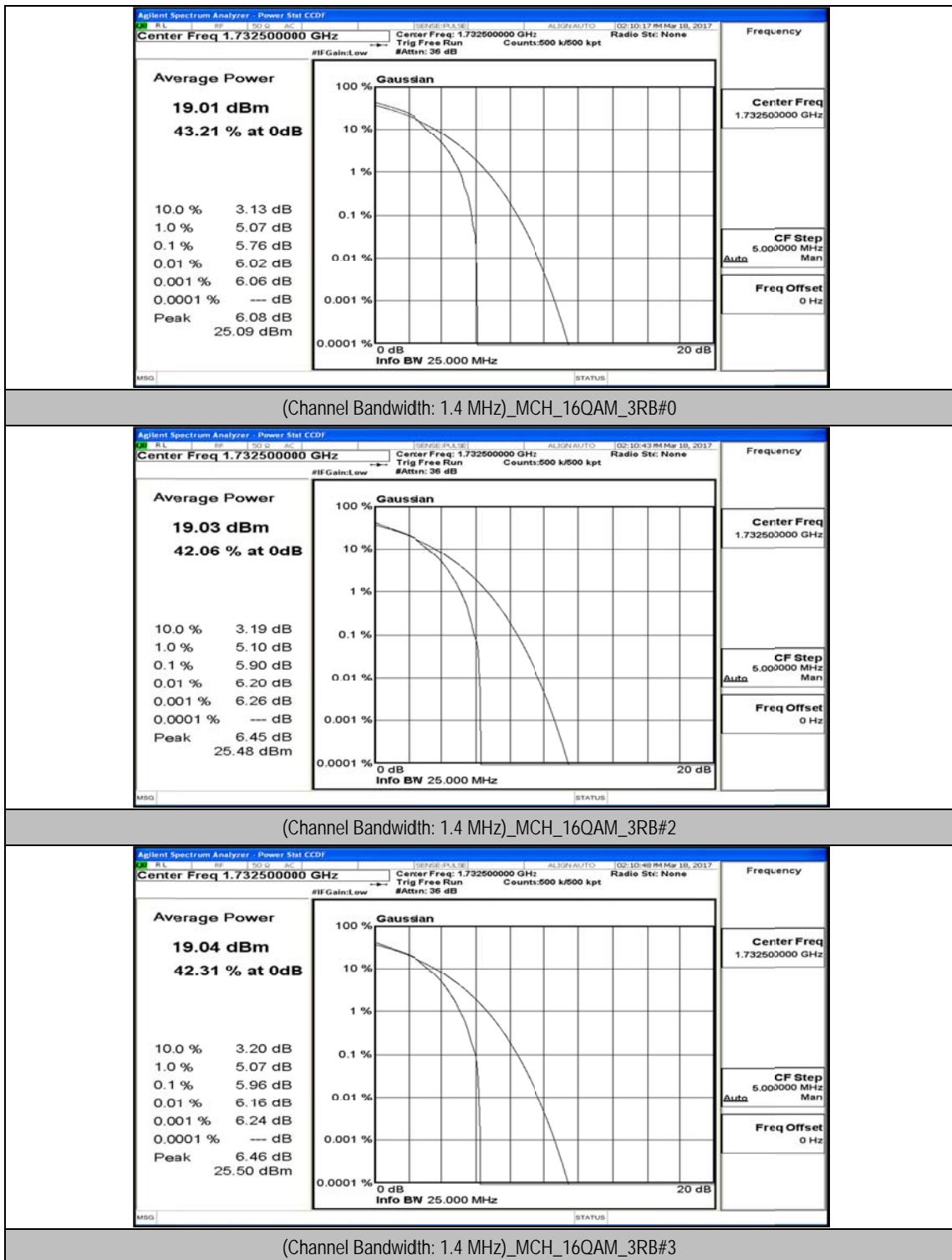


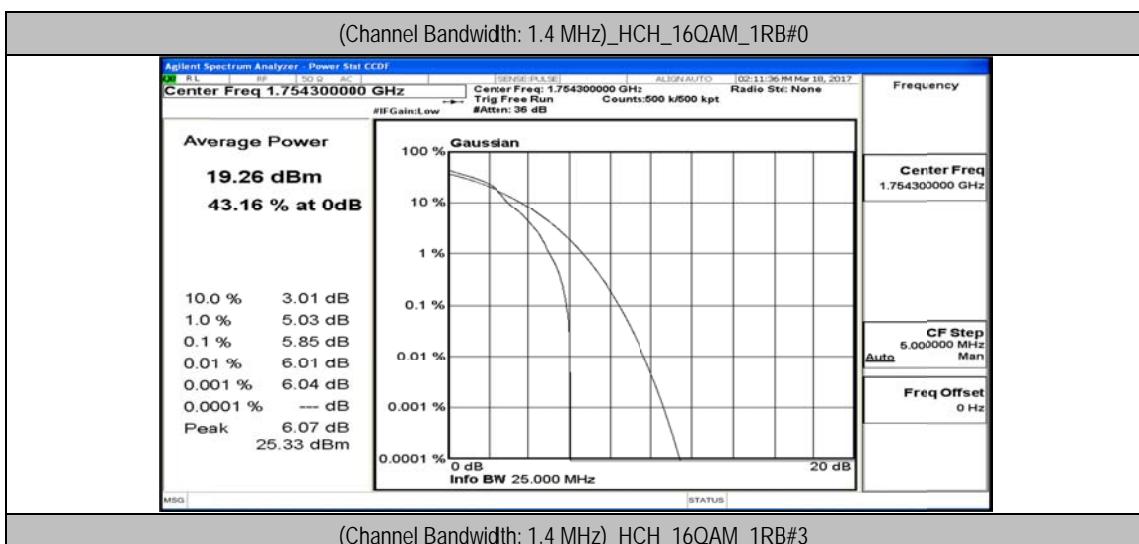
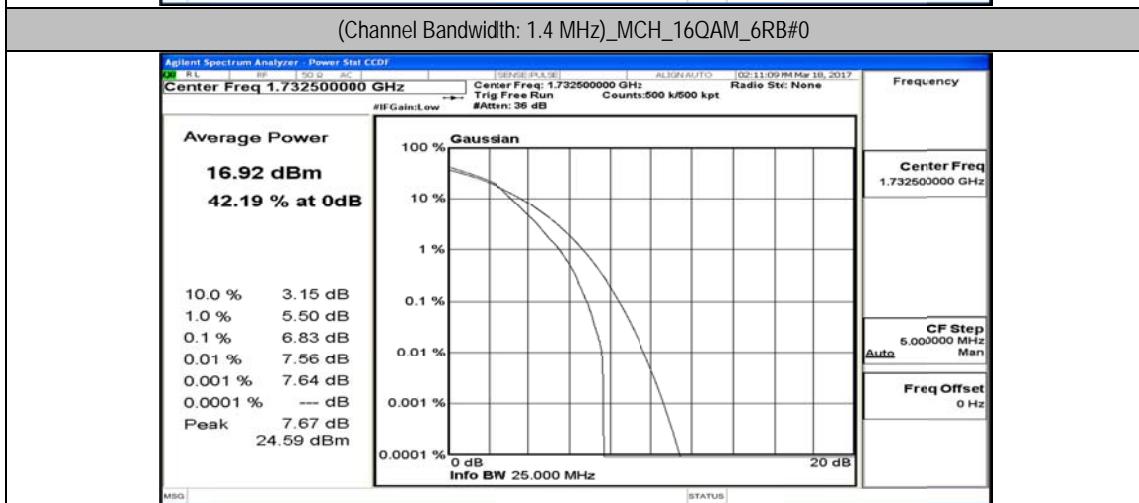
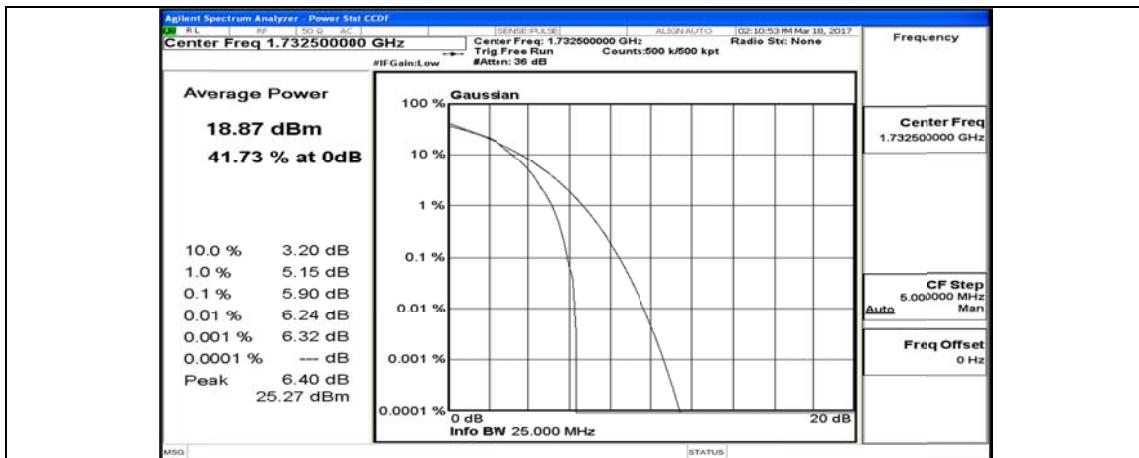
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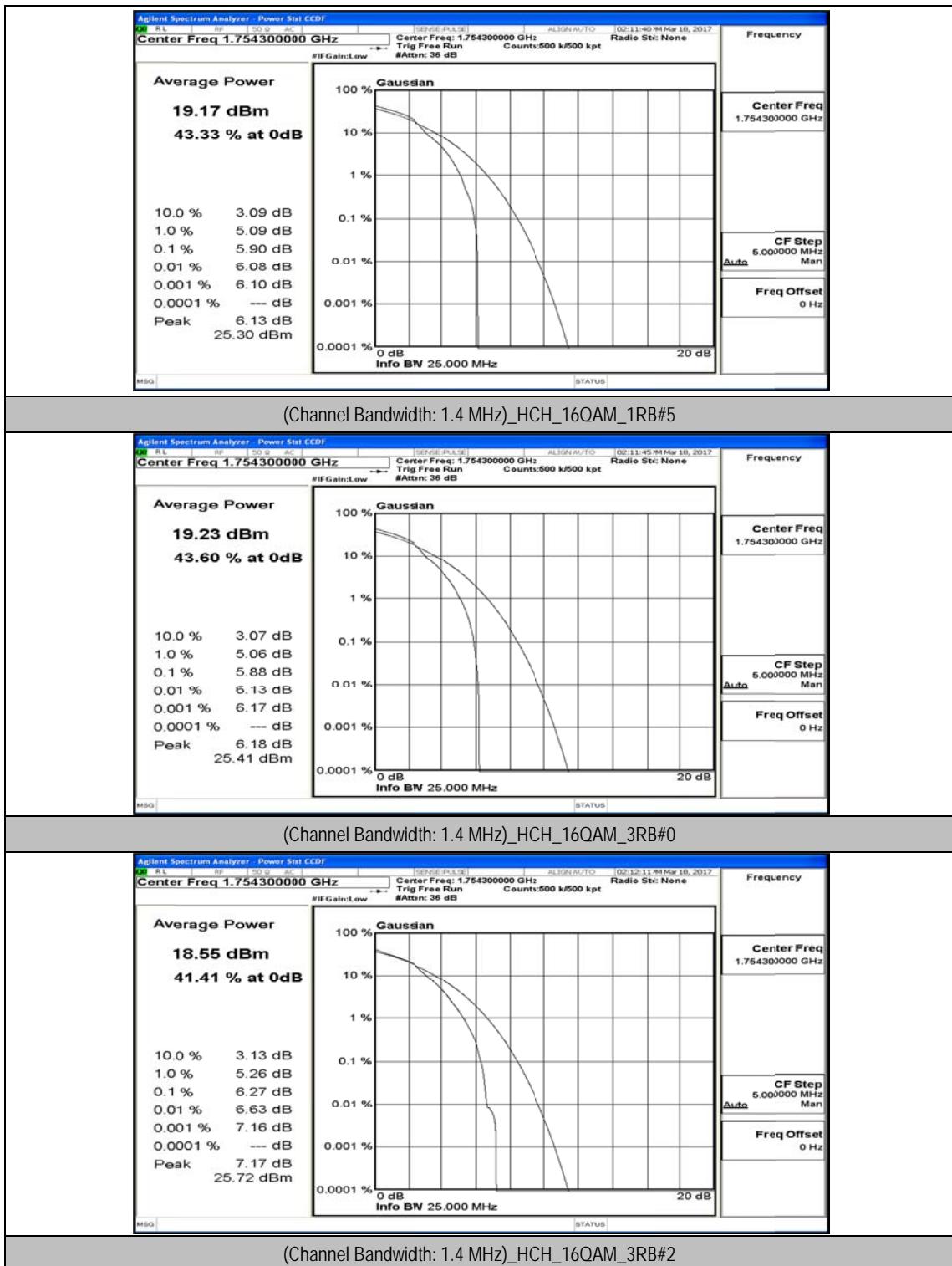


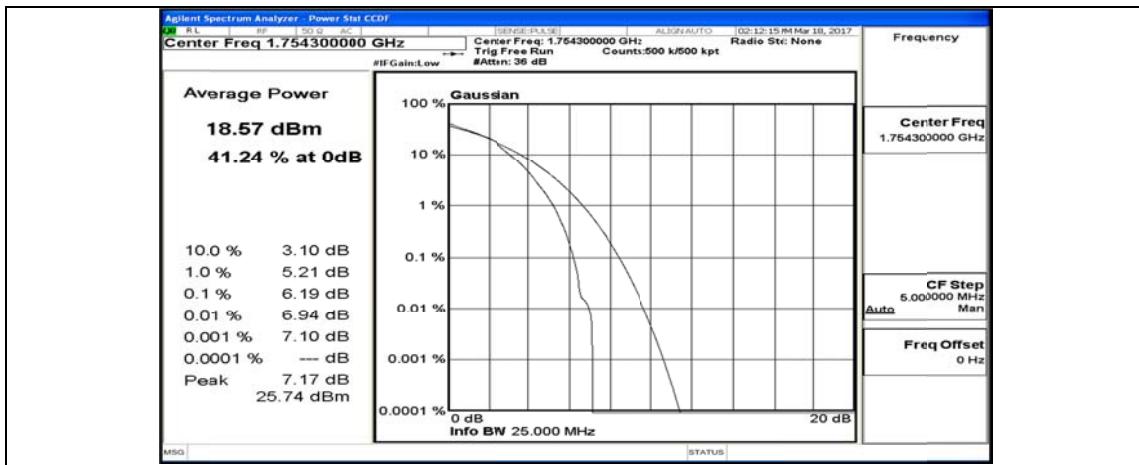


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

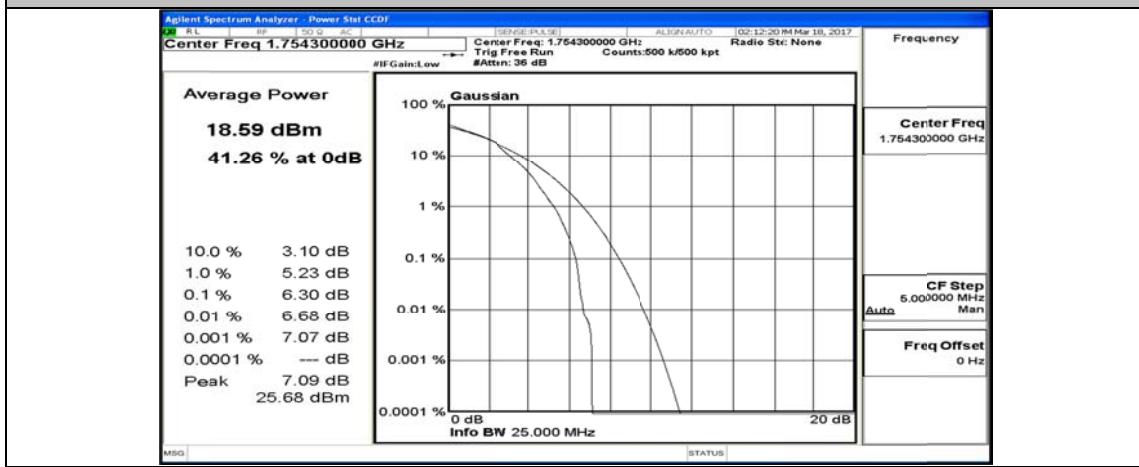




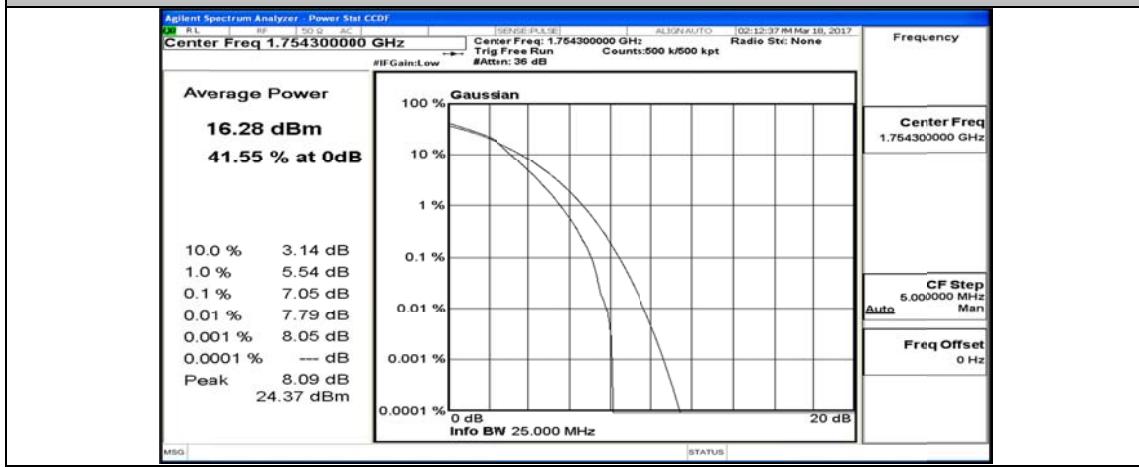




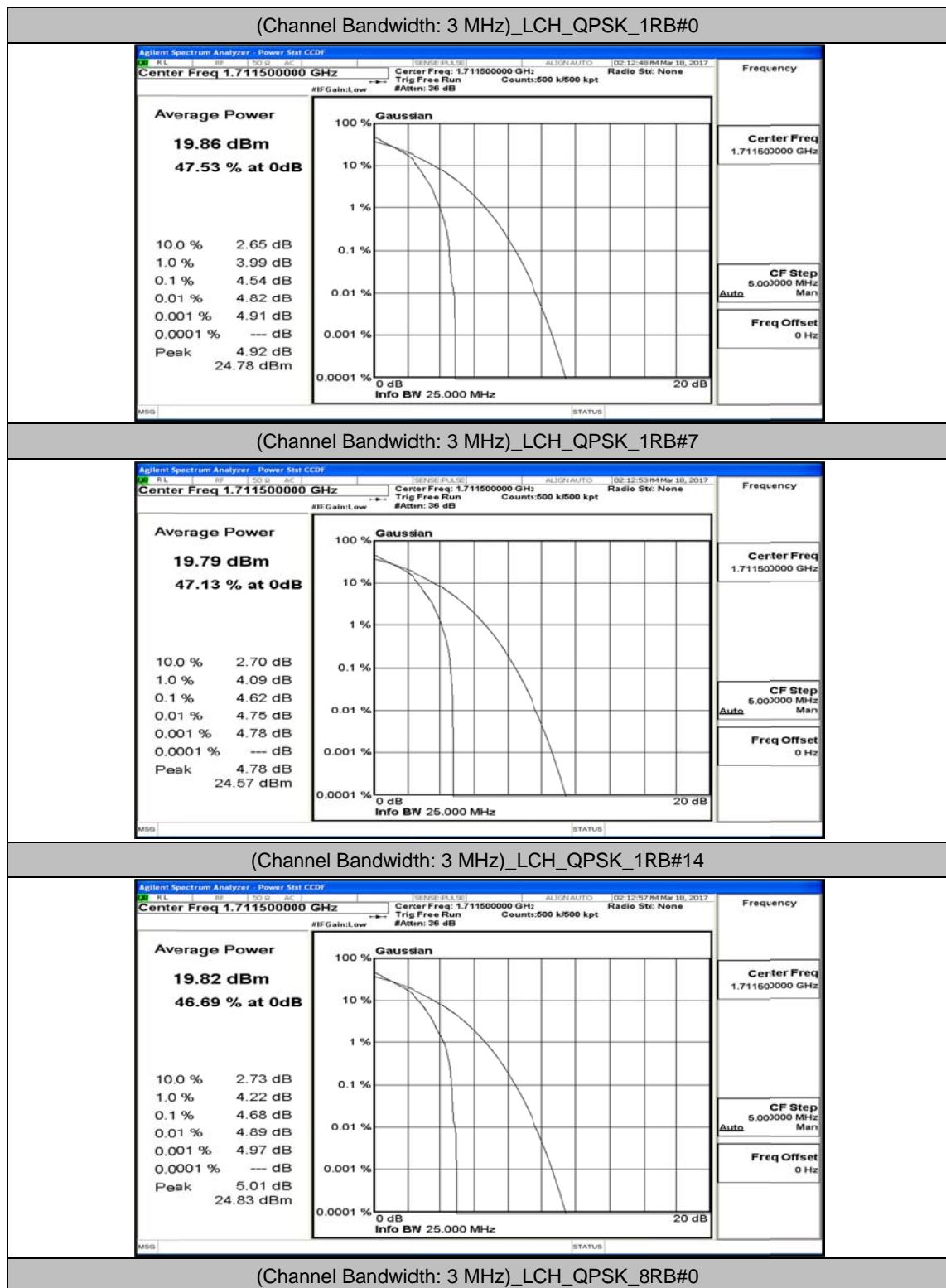
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#3

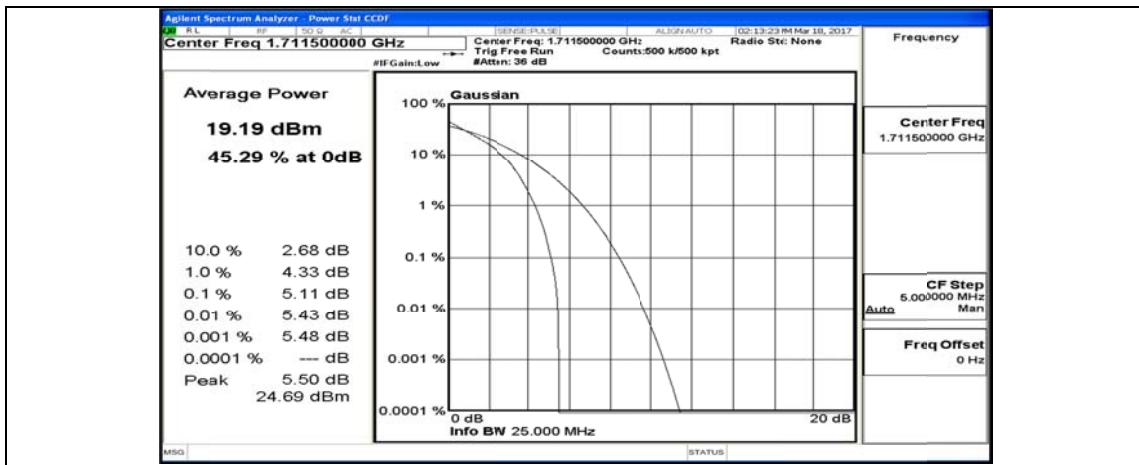


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0

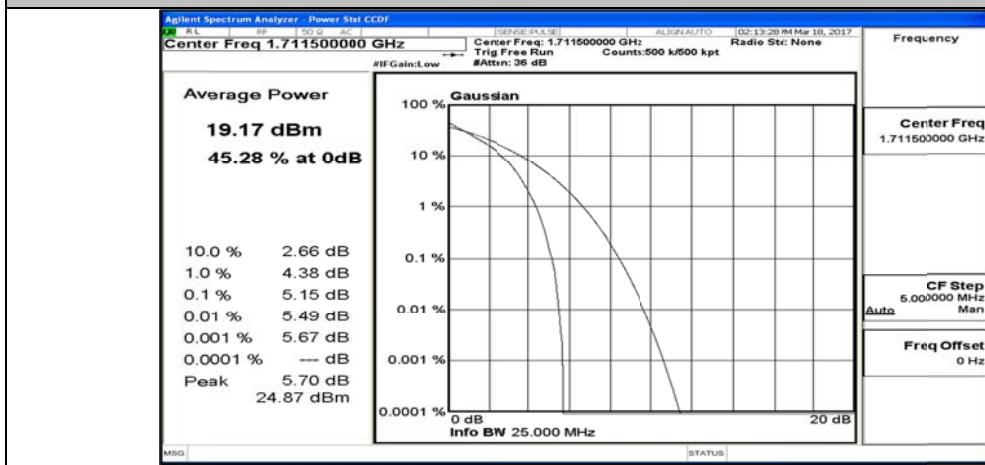


Channel Bandwidth: 3 MHz

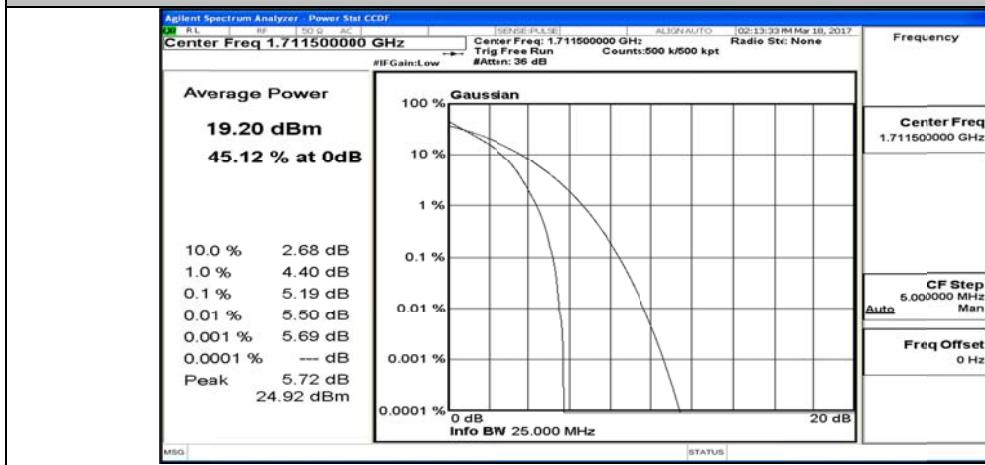




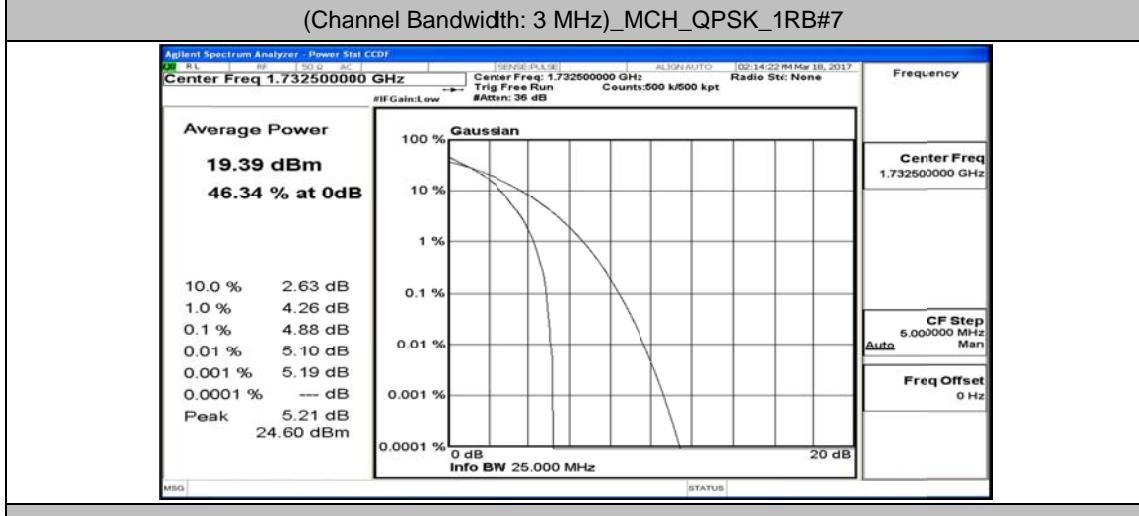
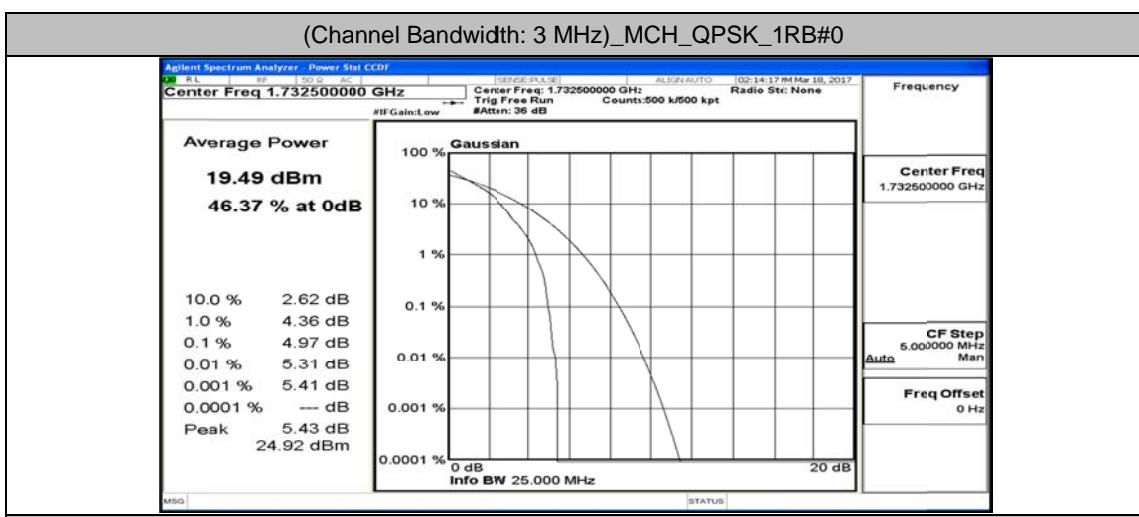
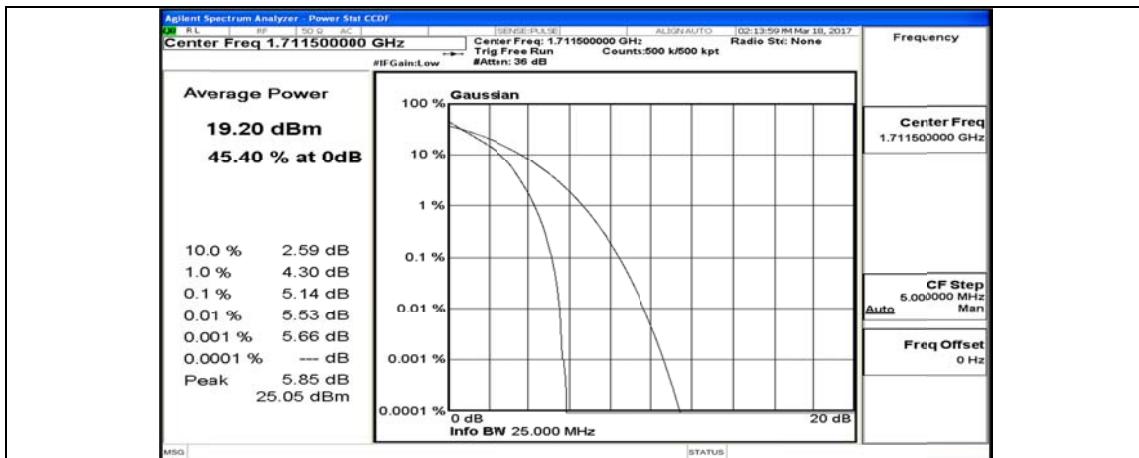
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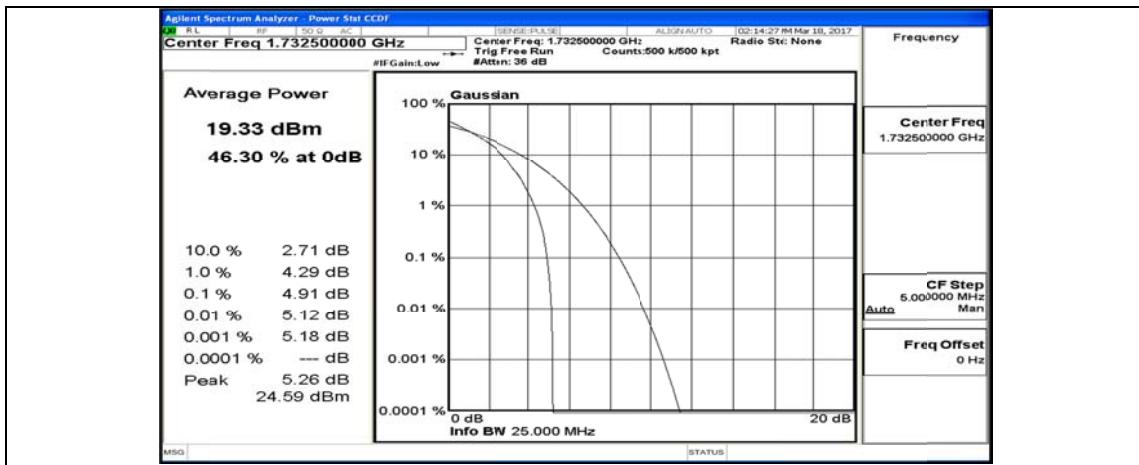
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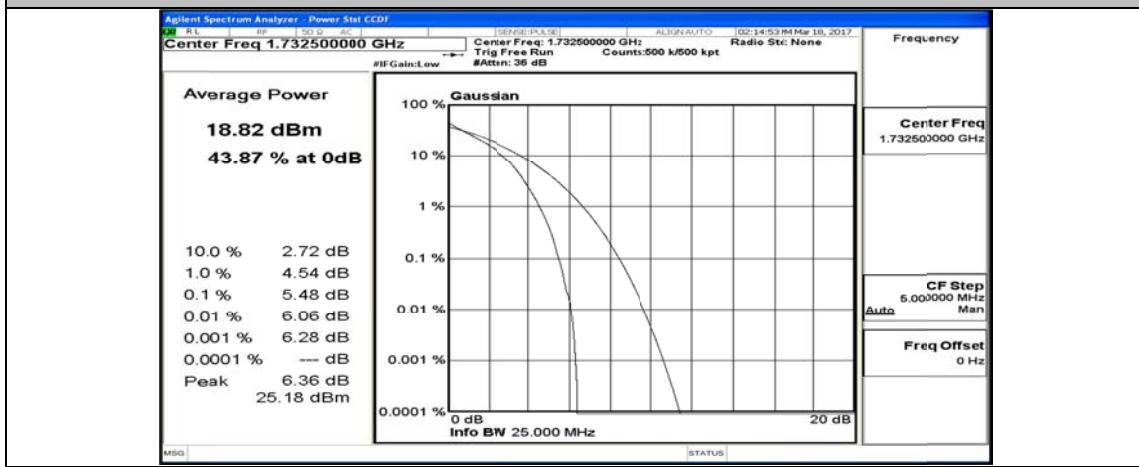
(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0



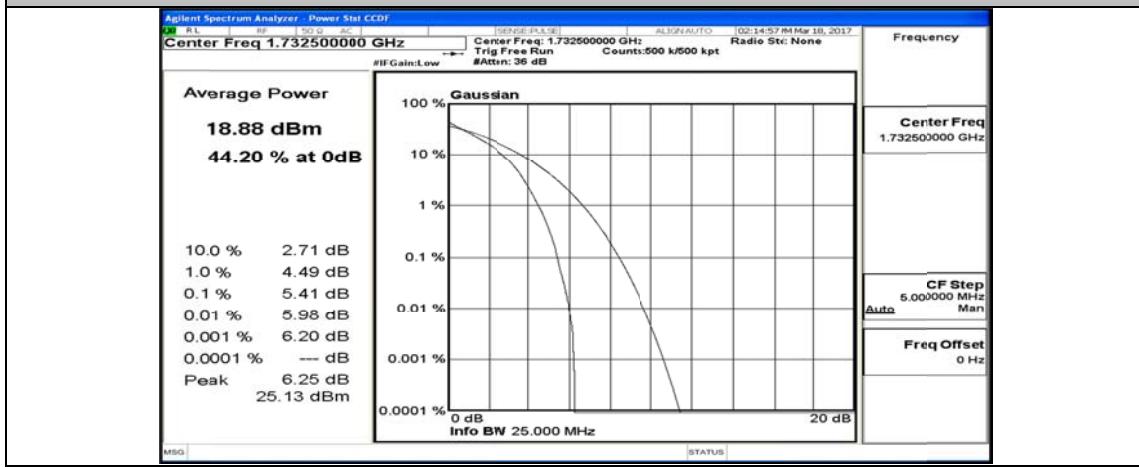
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



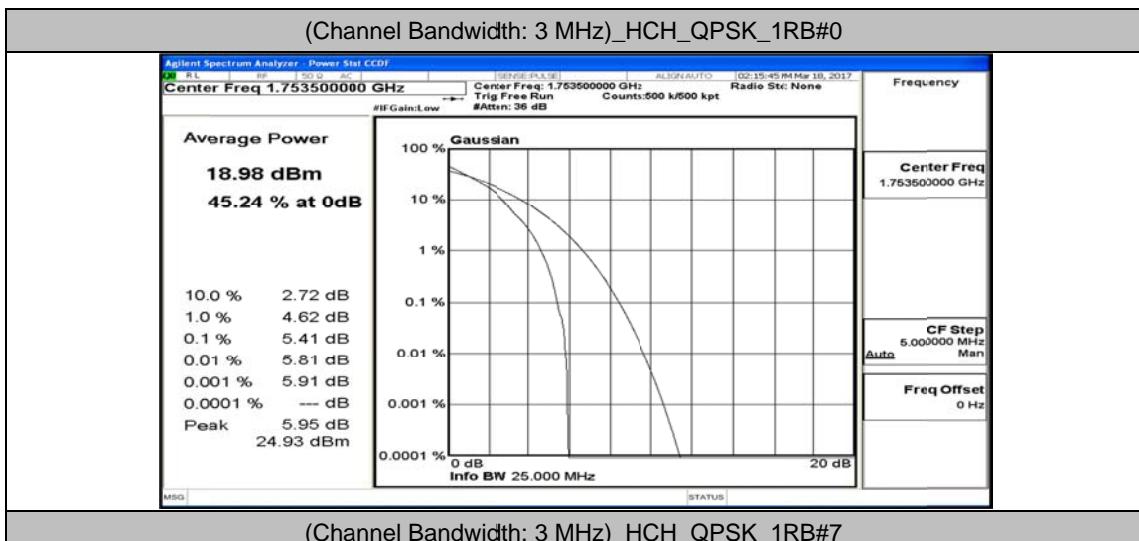
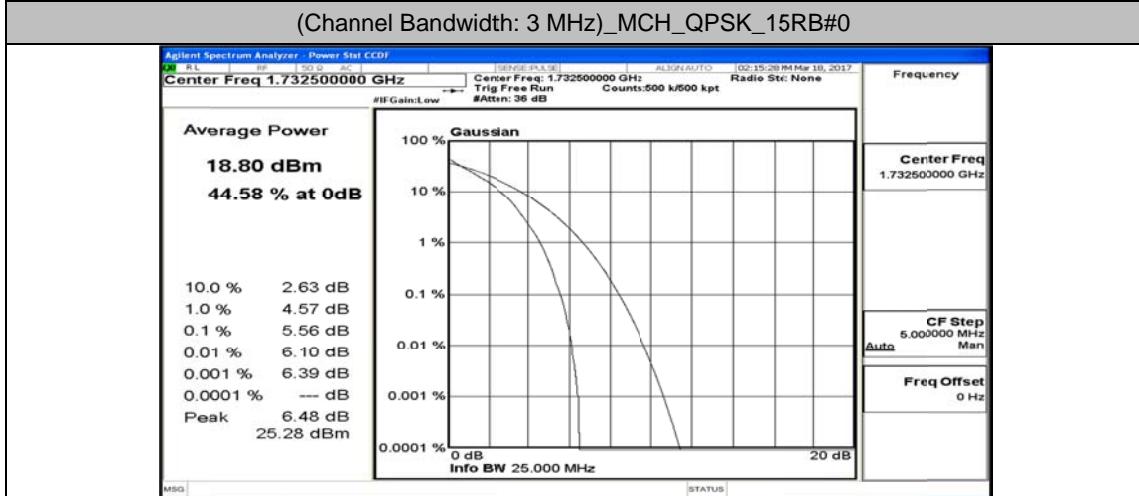
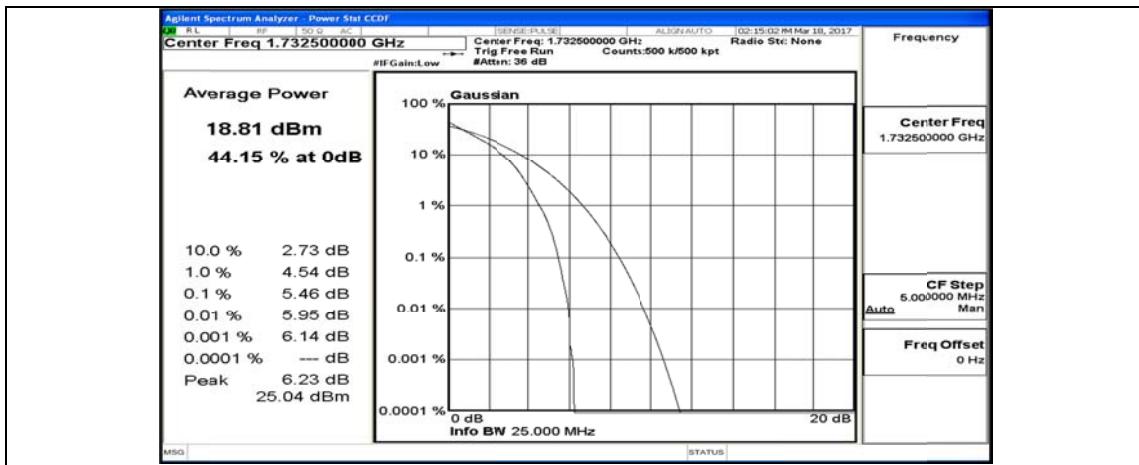
(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#0



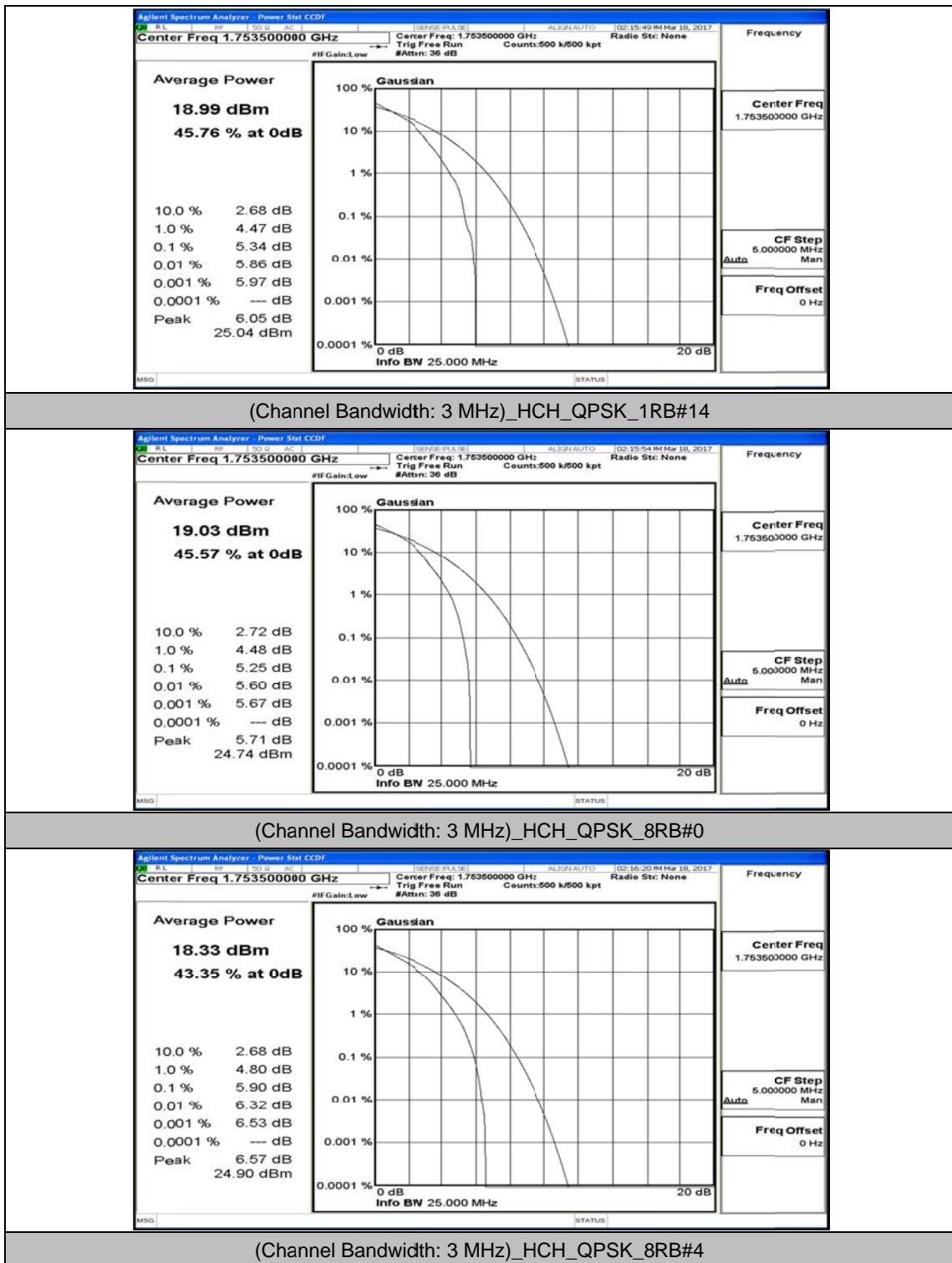
(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#4

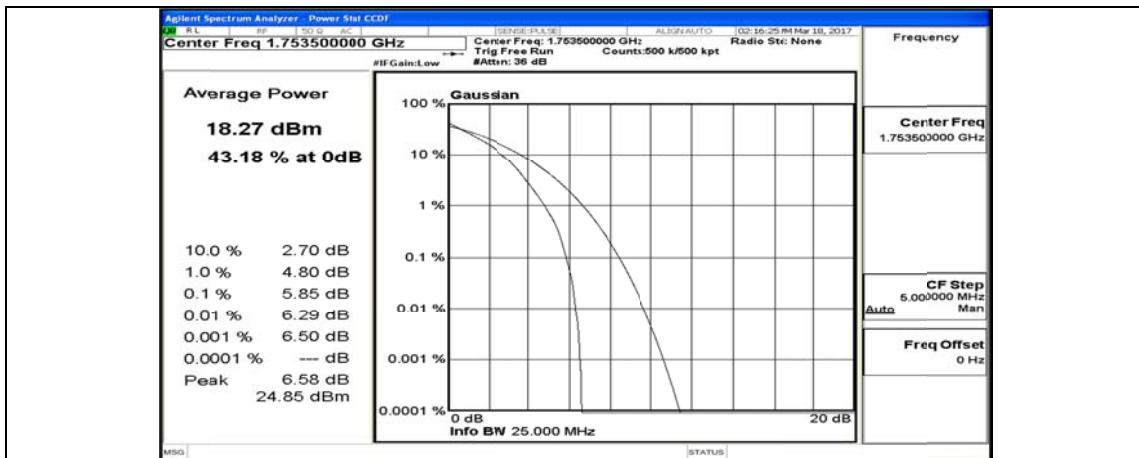


(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#7

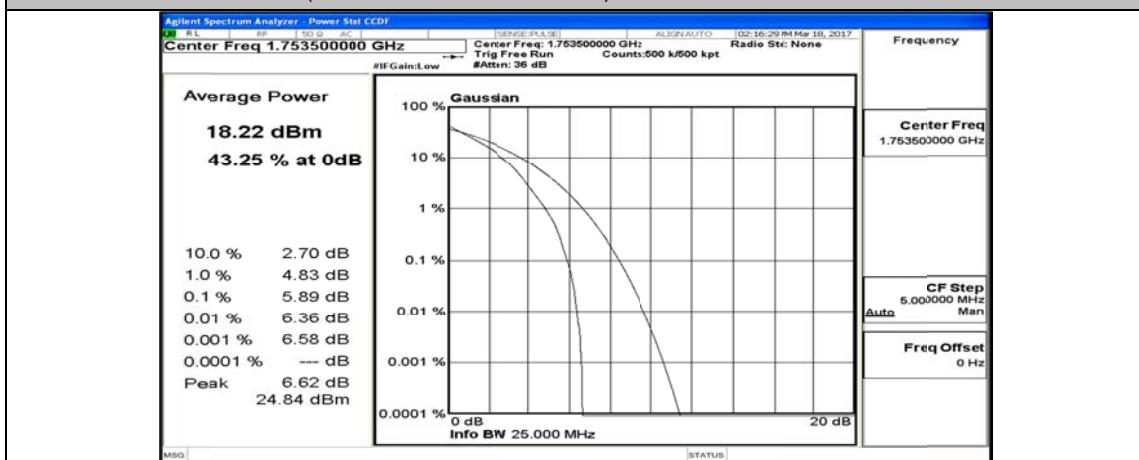


(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7

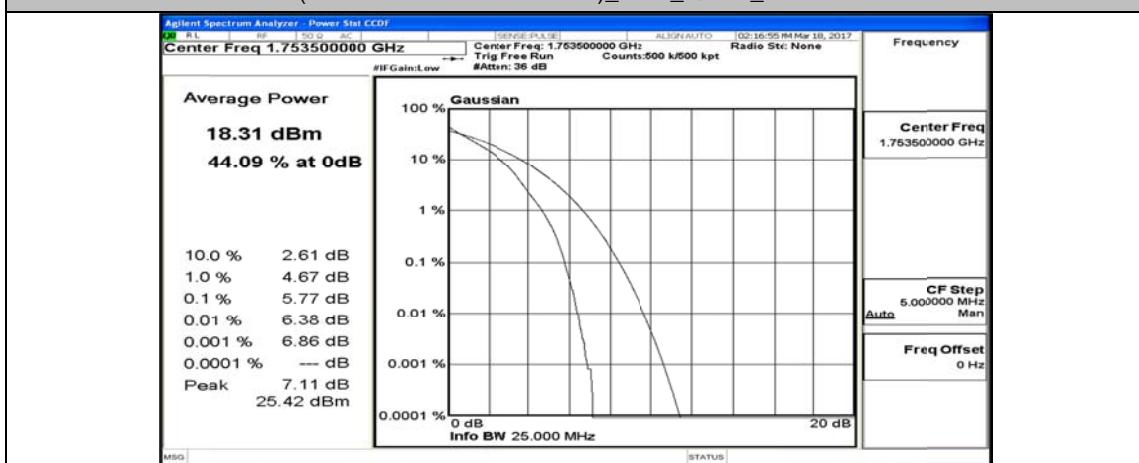




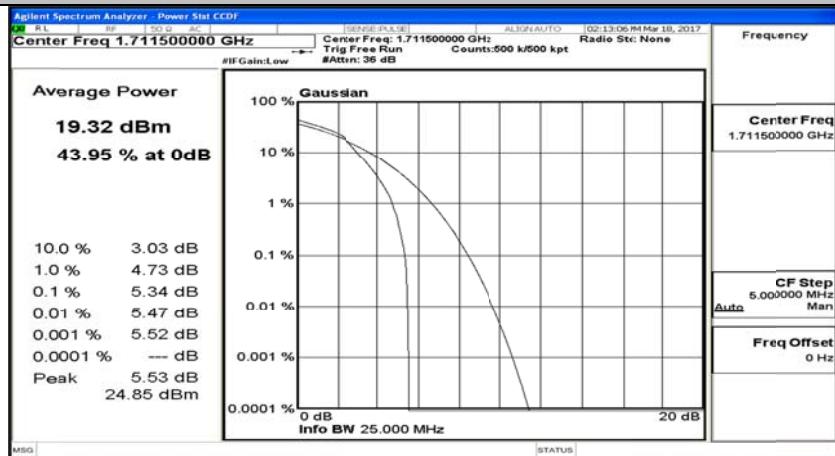
(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#7



(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



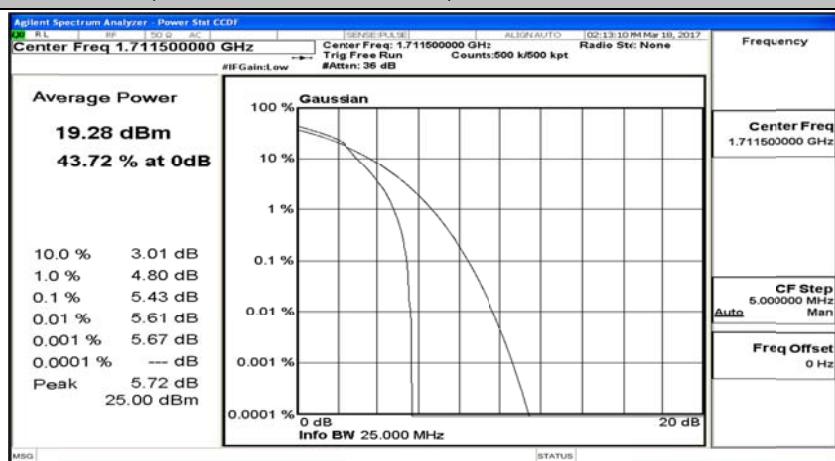
Frequency

Center Freq
1.711500000 GHz

CF Step
5.000000 MHz
Auto

Freq Offset
0 Hz

(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7



Frequency

Center Freq
1.711500000 GHz

CF Step
5.000000 MHz
Auto

Freq Offset
0 Hz

(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14



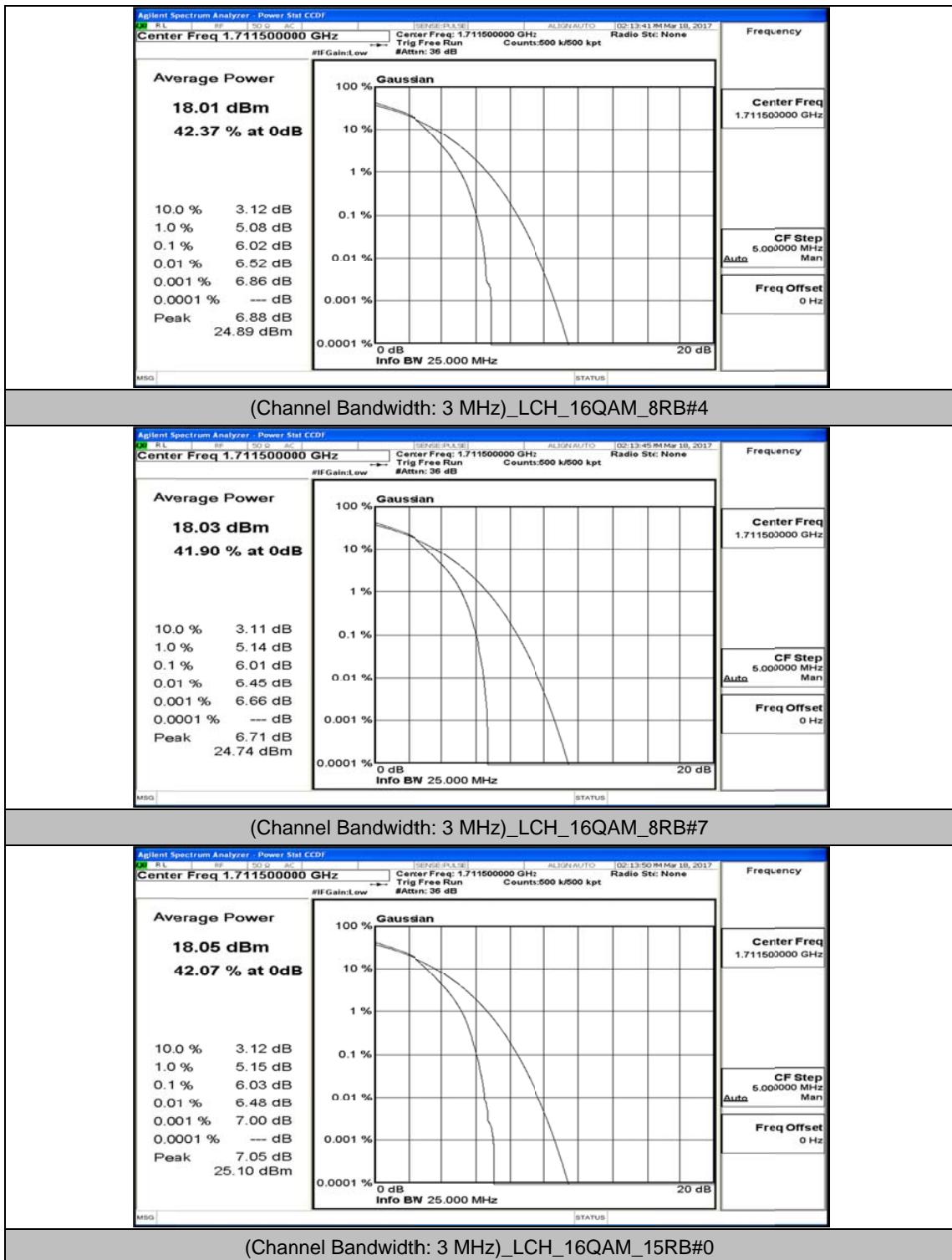
Frequency

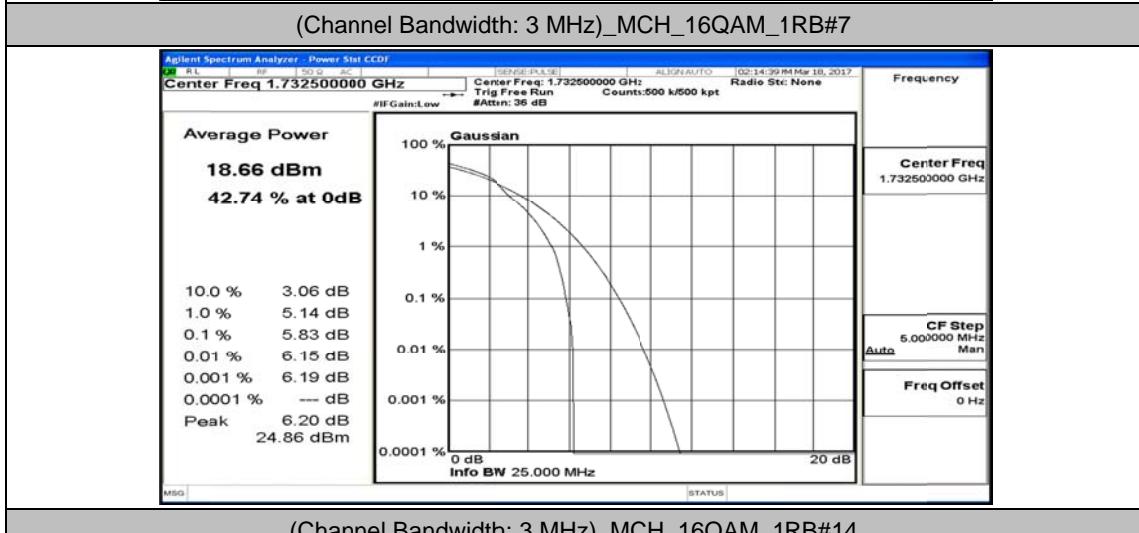
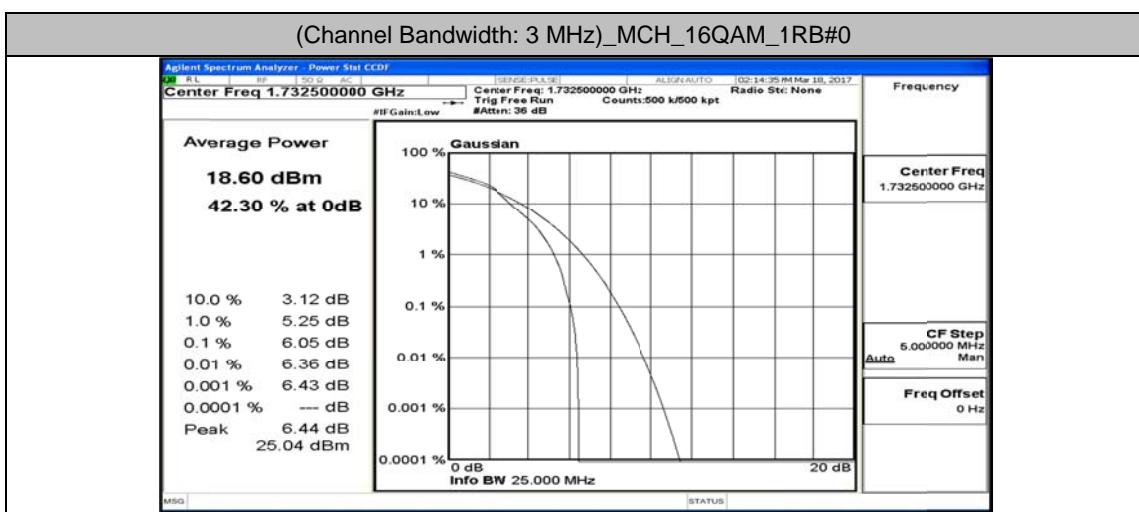
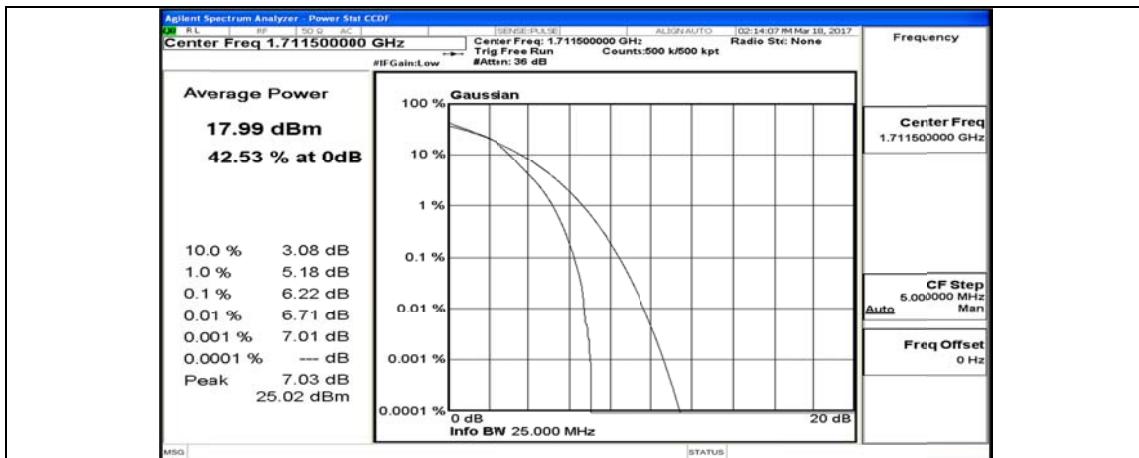
Center Freq
1.711500000 GHz

CF Step
5.000000 MHz
Auto

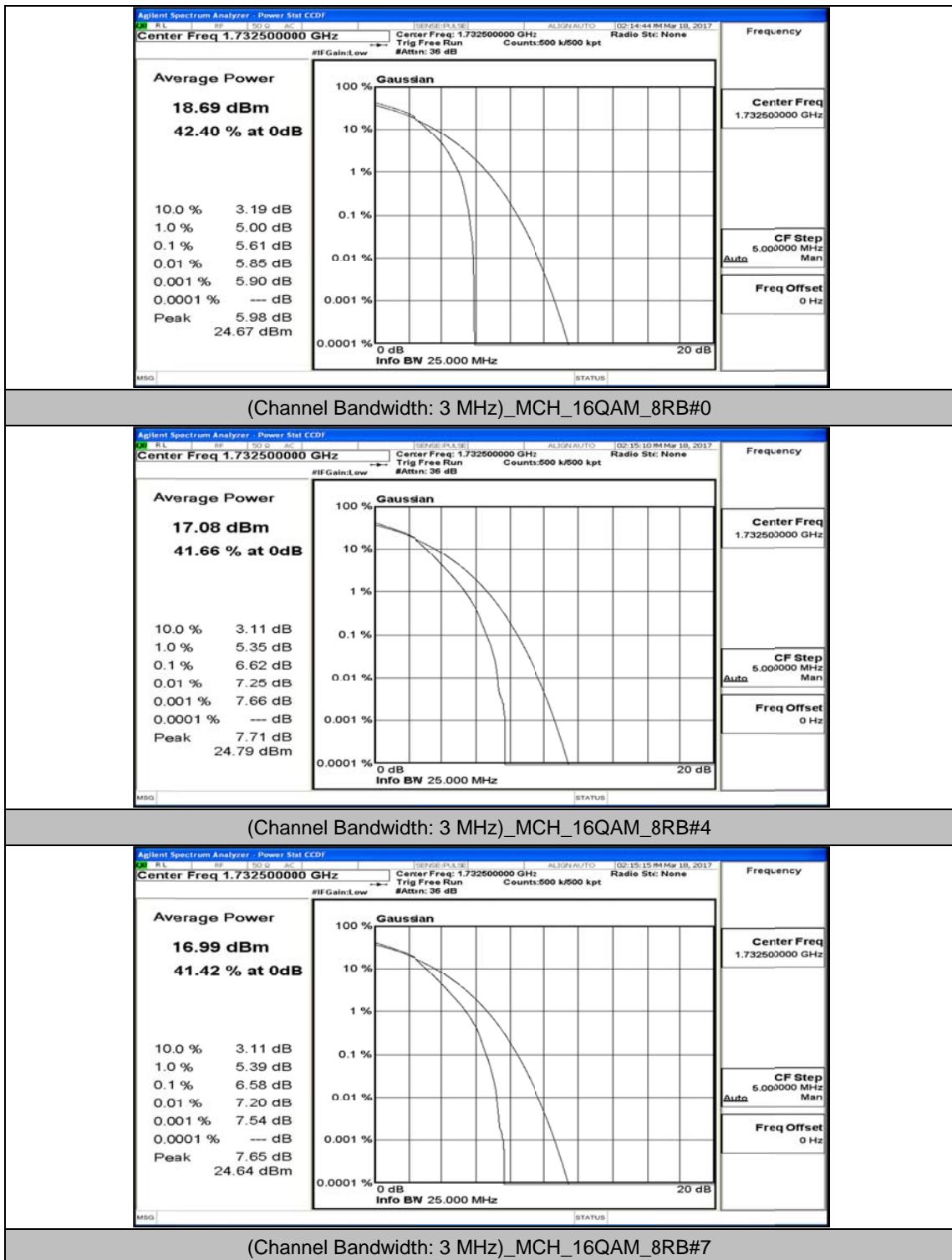
Freq Offset
0 Hz

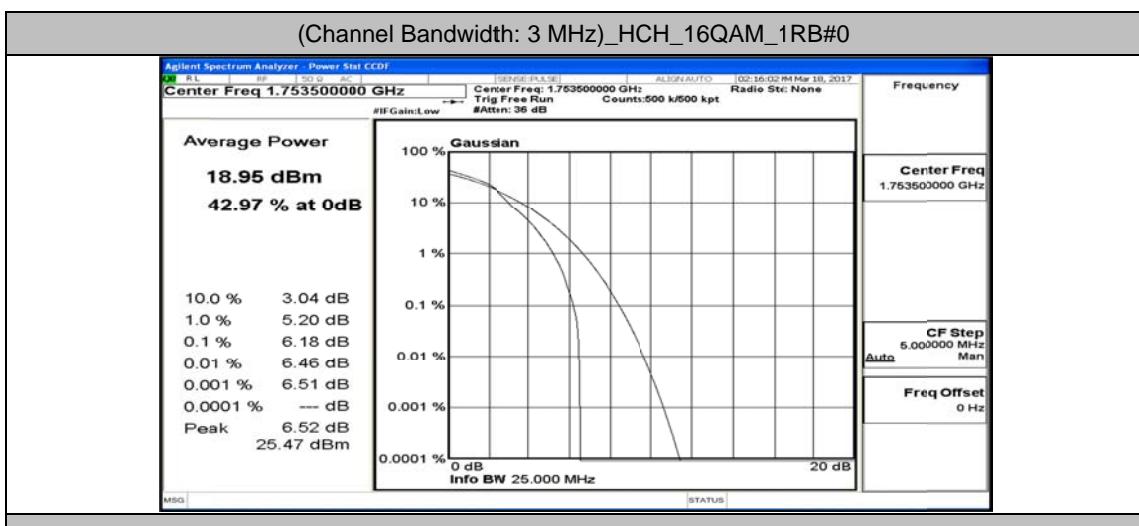
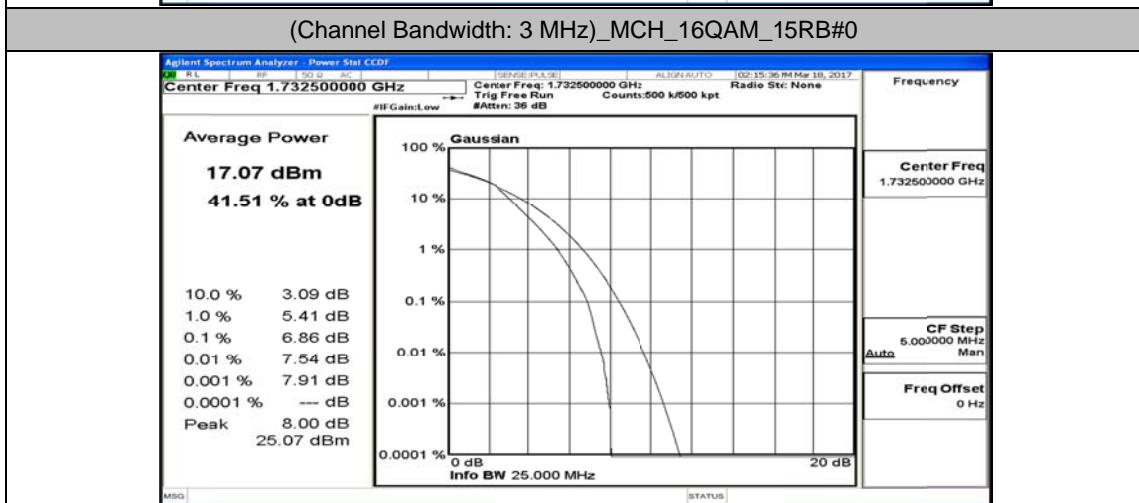
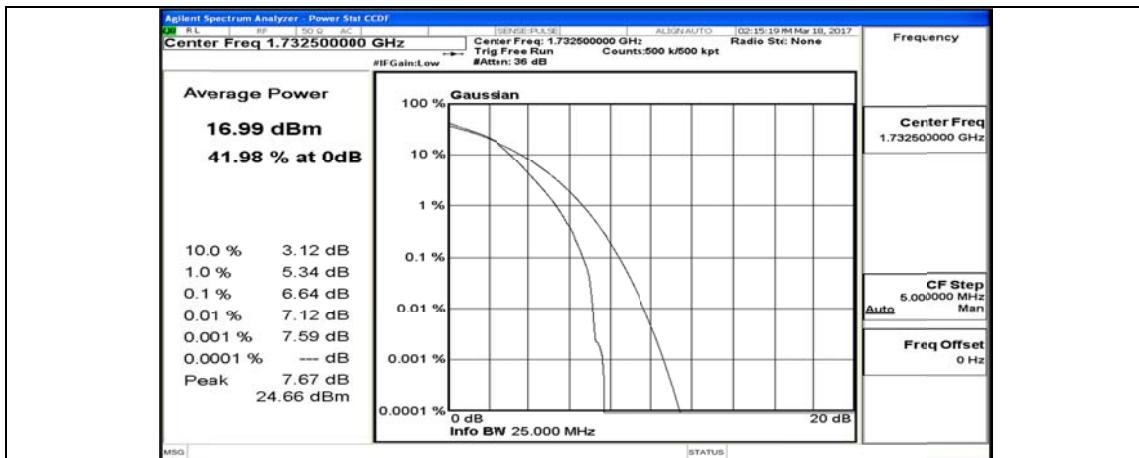
(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#0



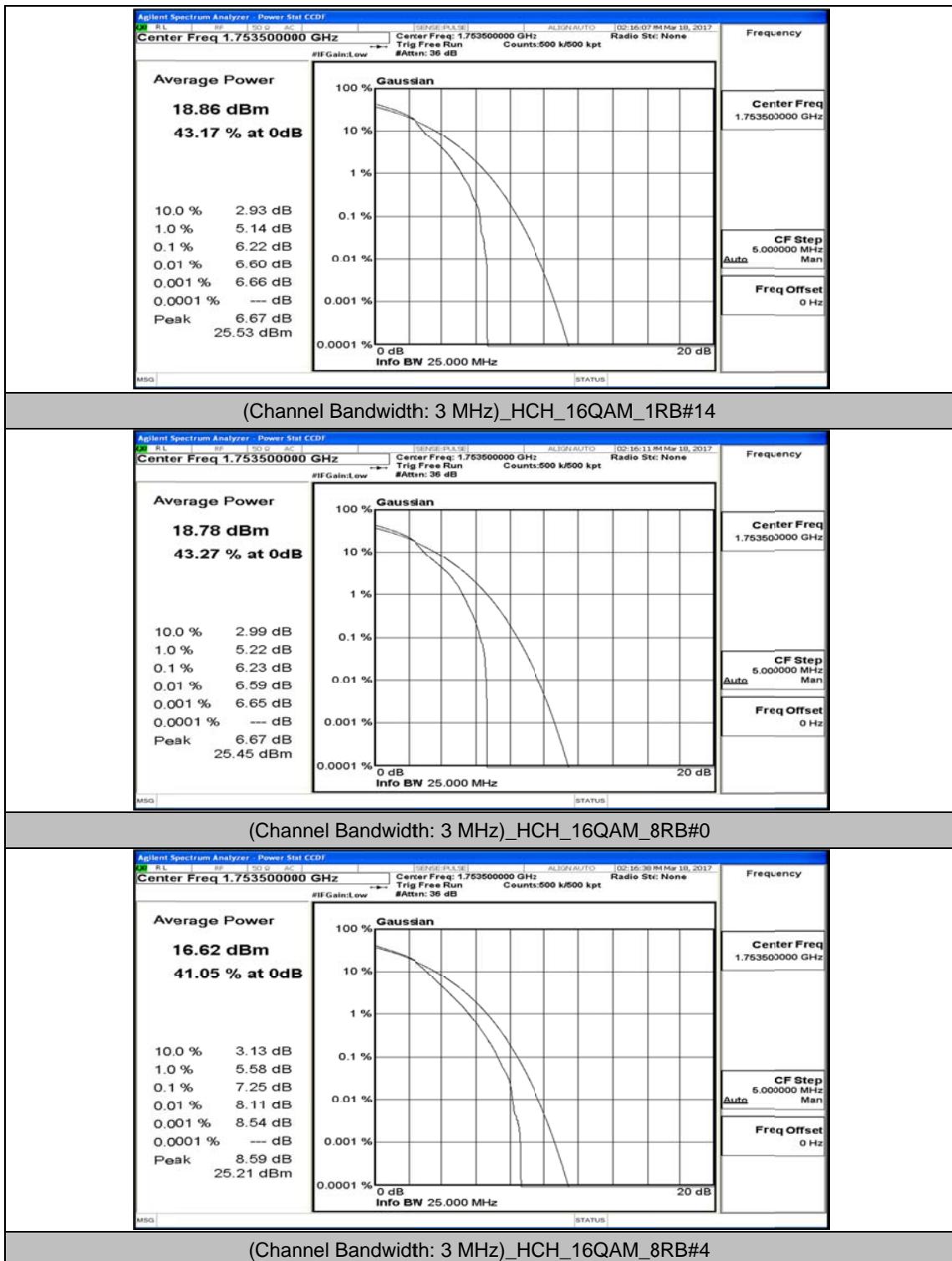


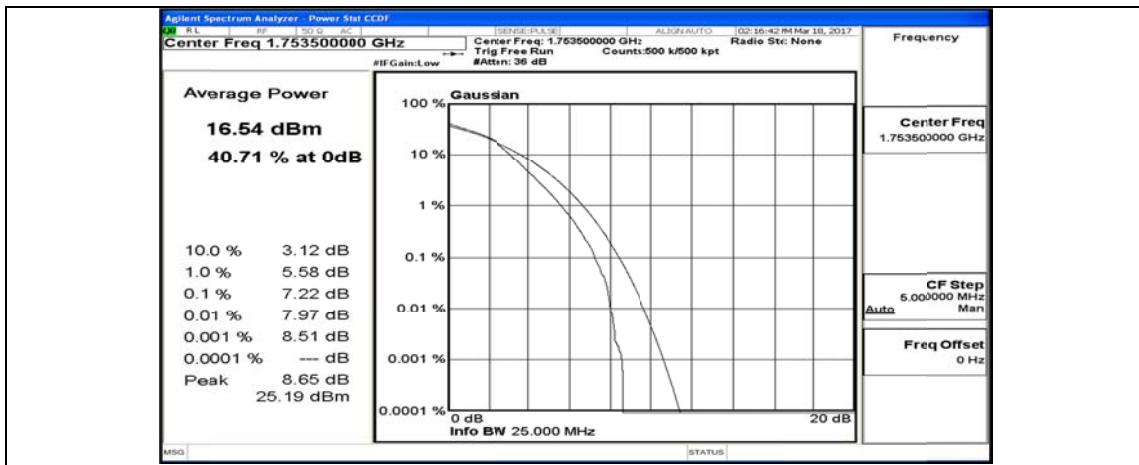
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14



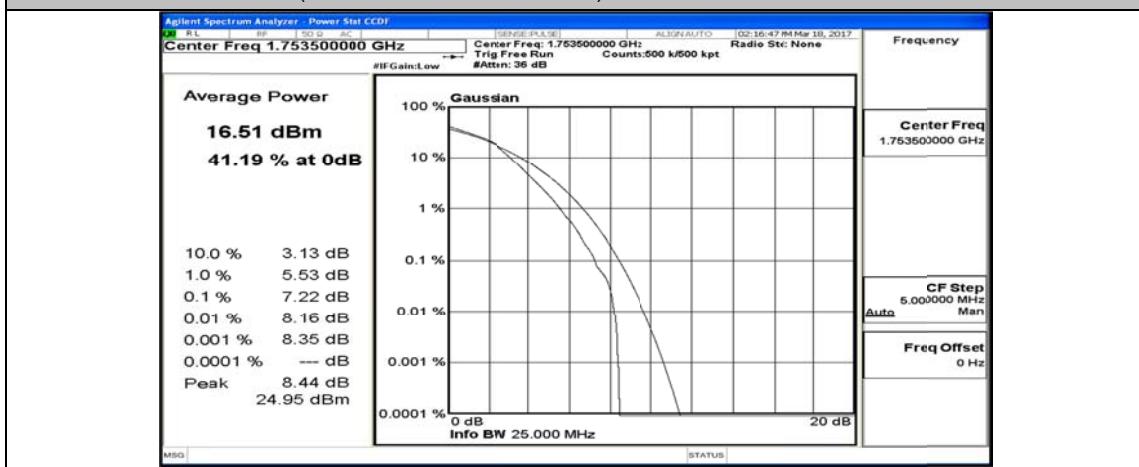


(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

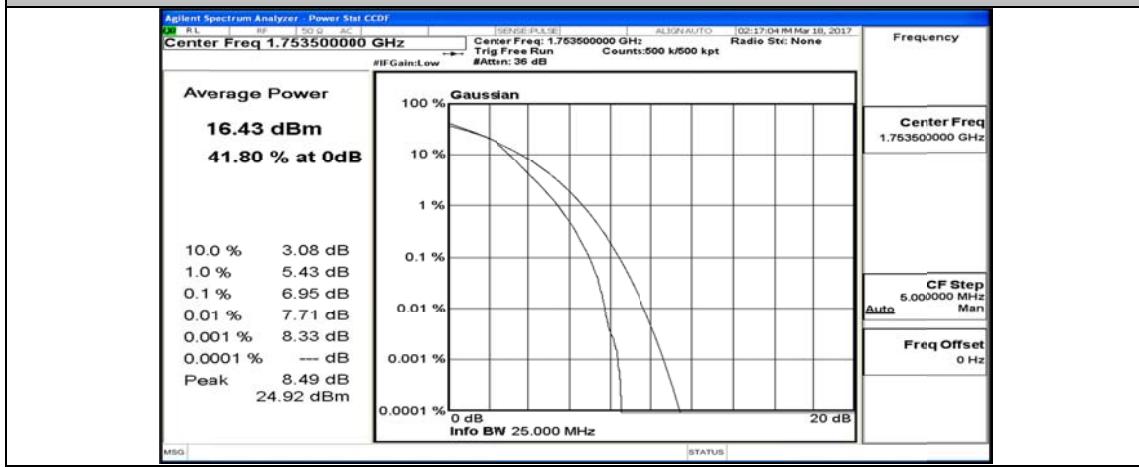




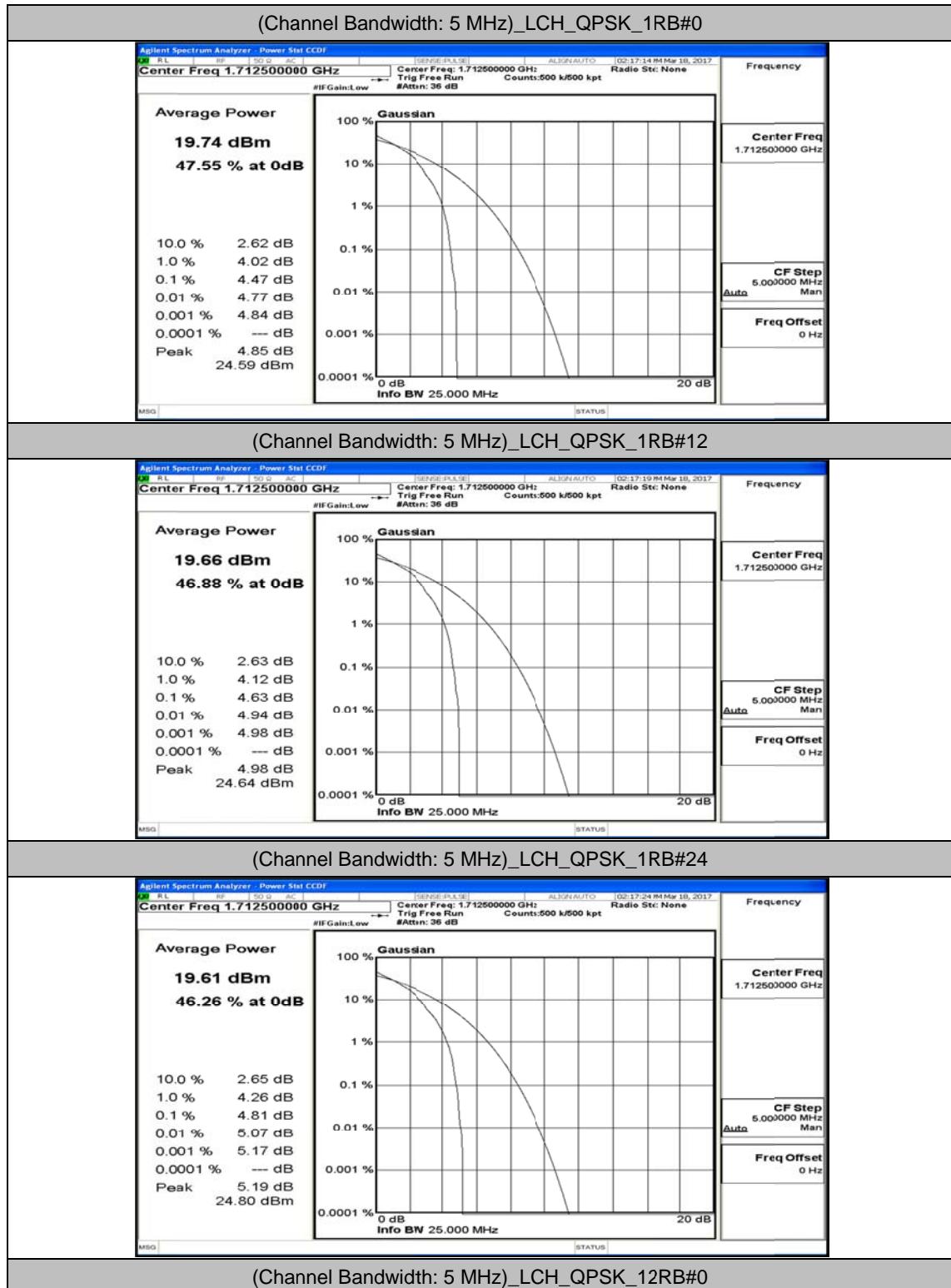
(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#7

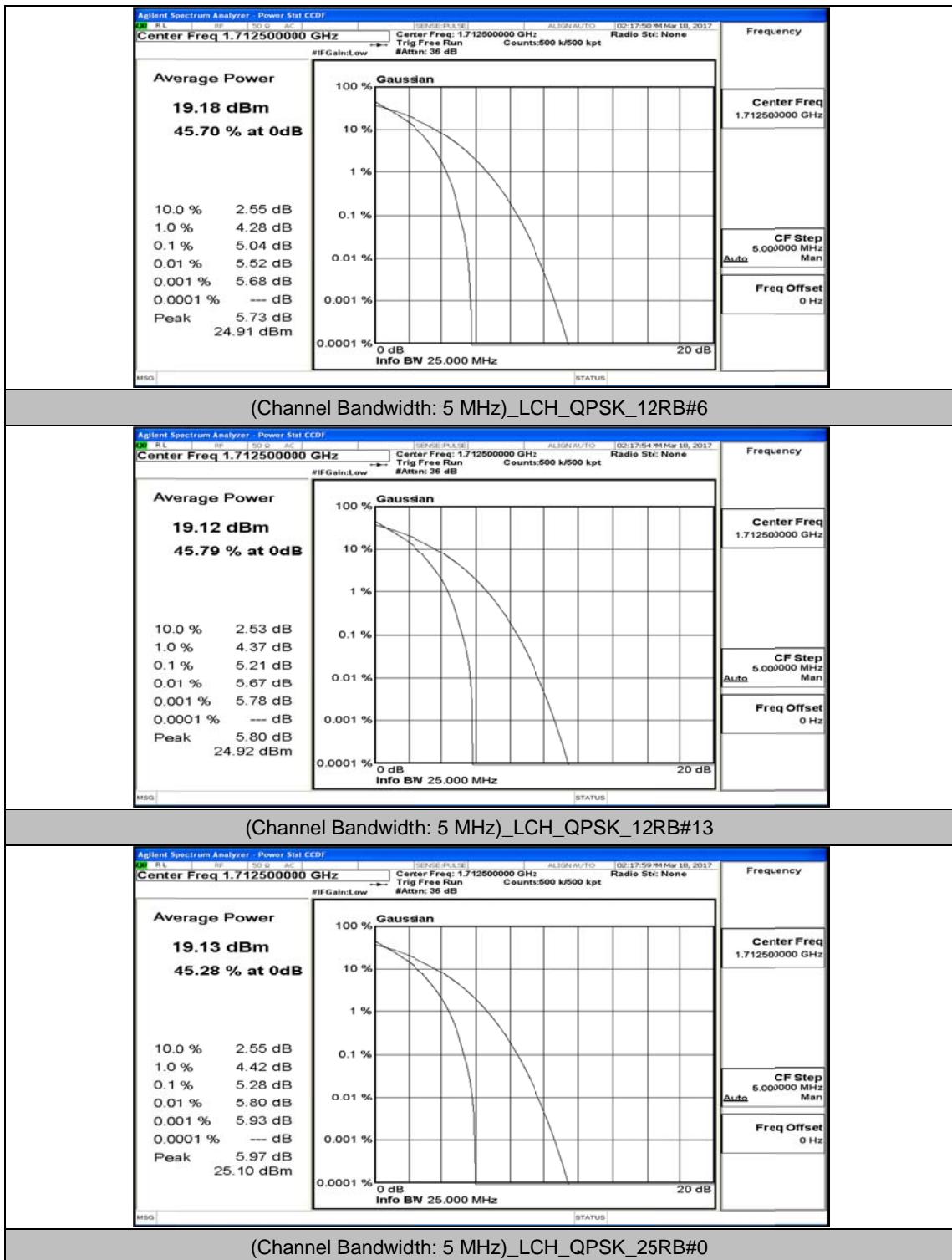


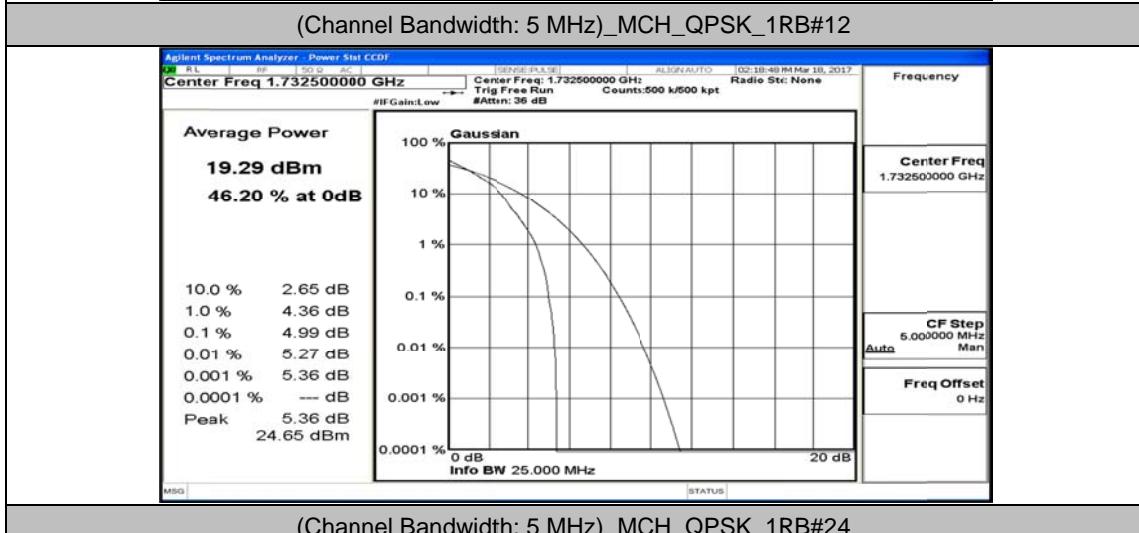
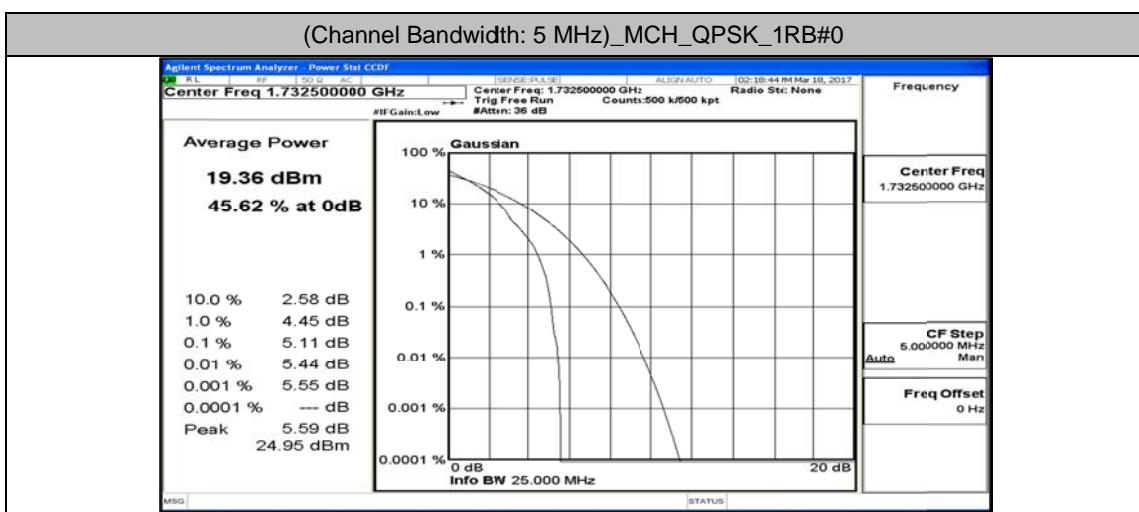
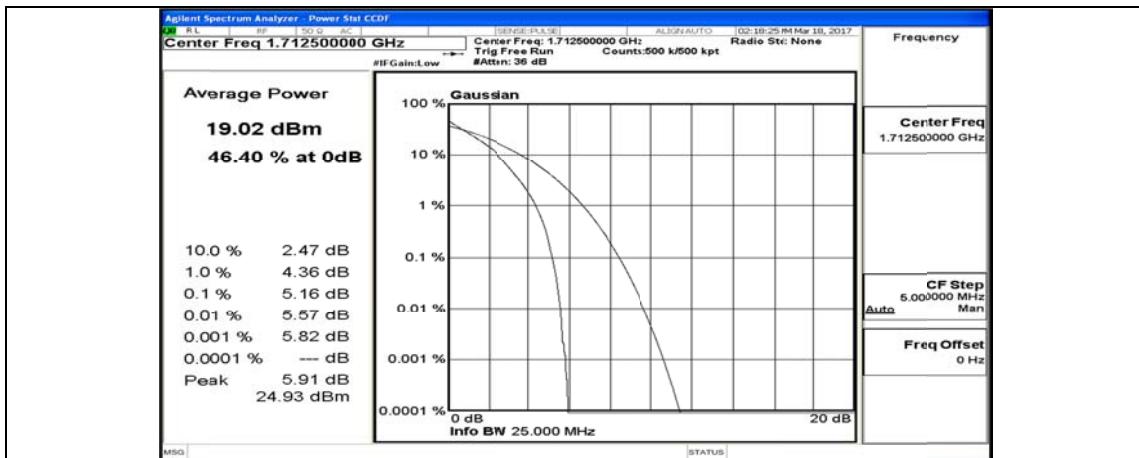
(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0



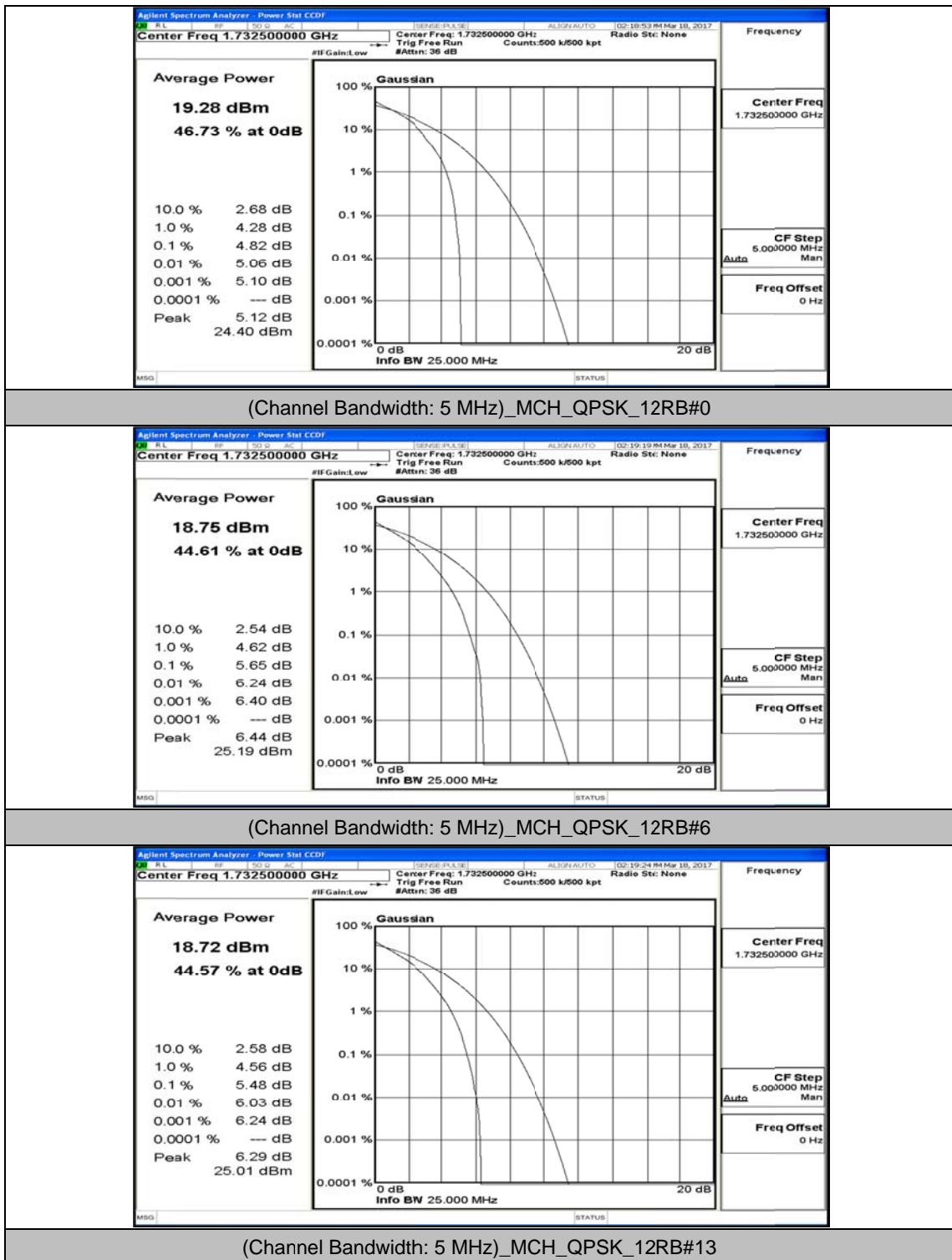
Channel Bandwidth: 5 MHz

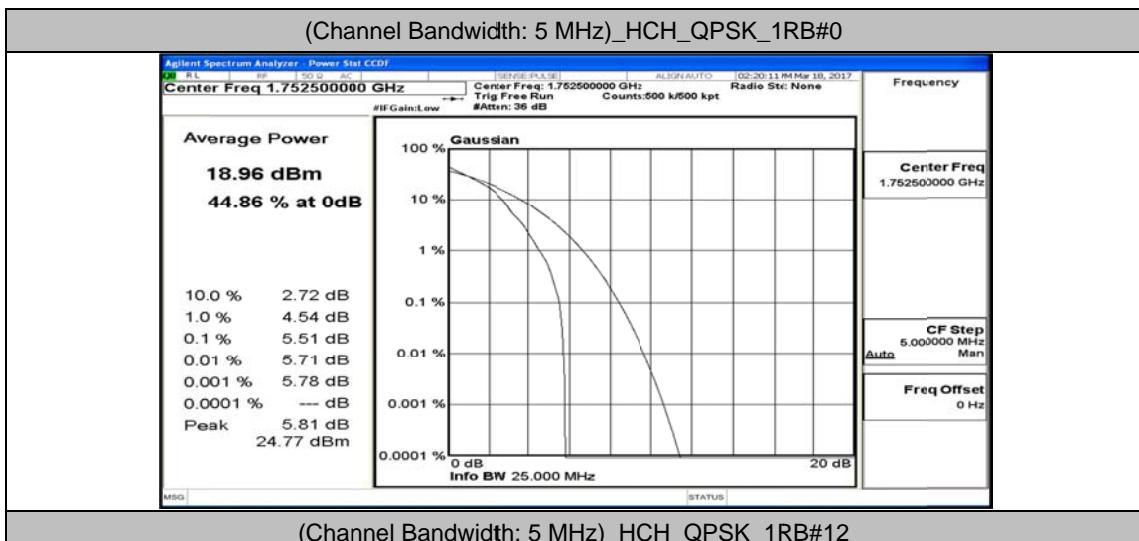
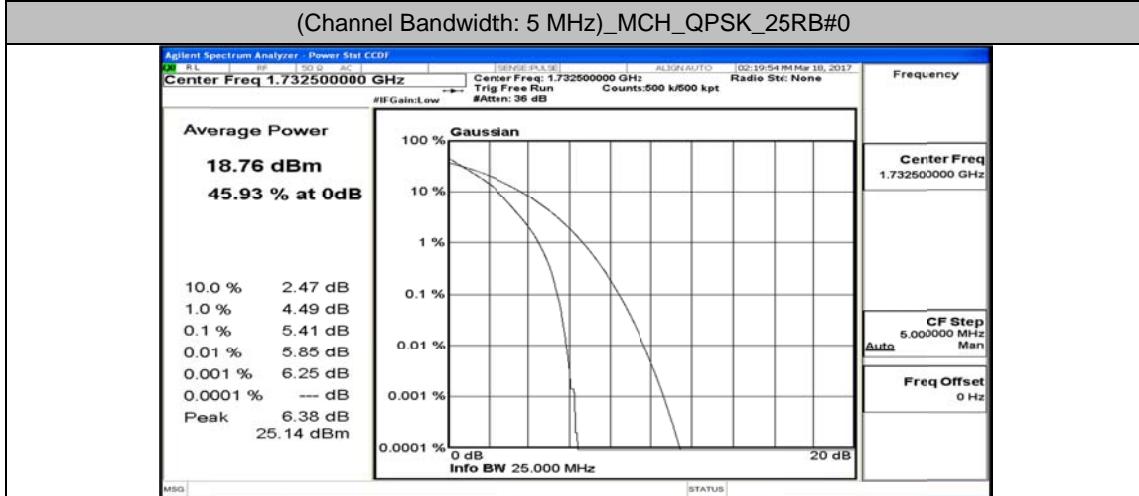
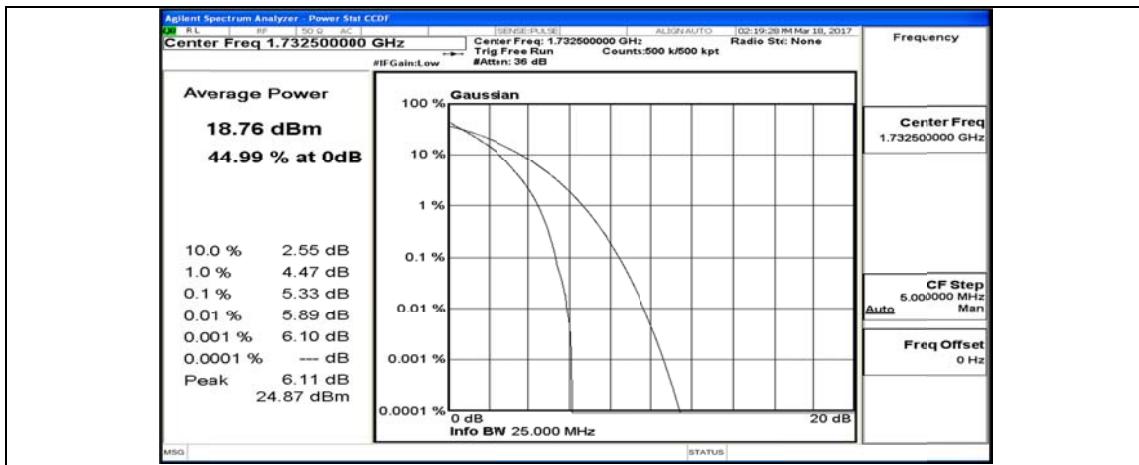




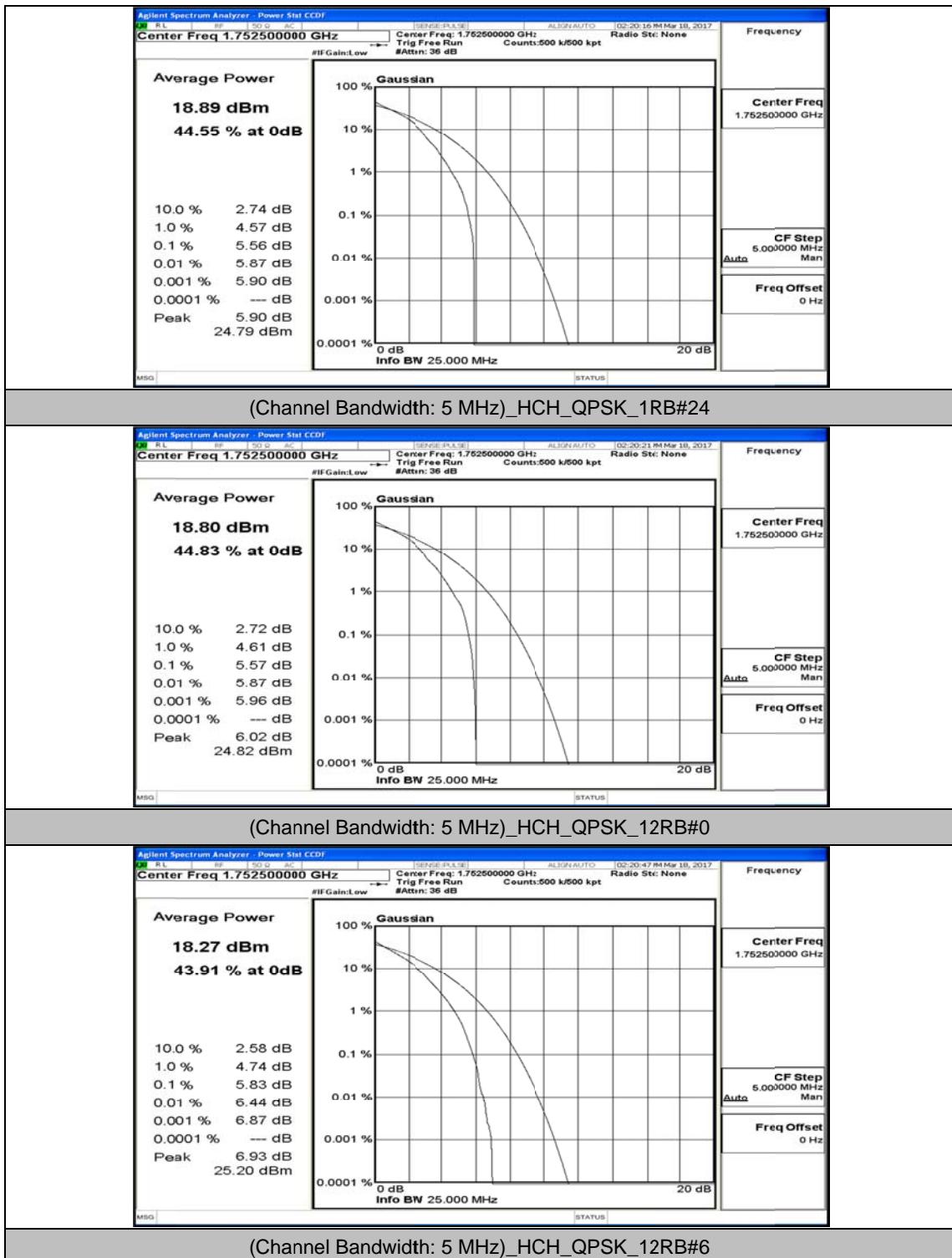


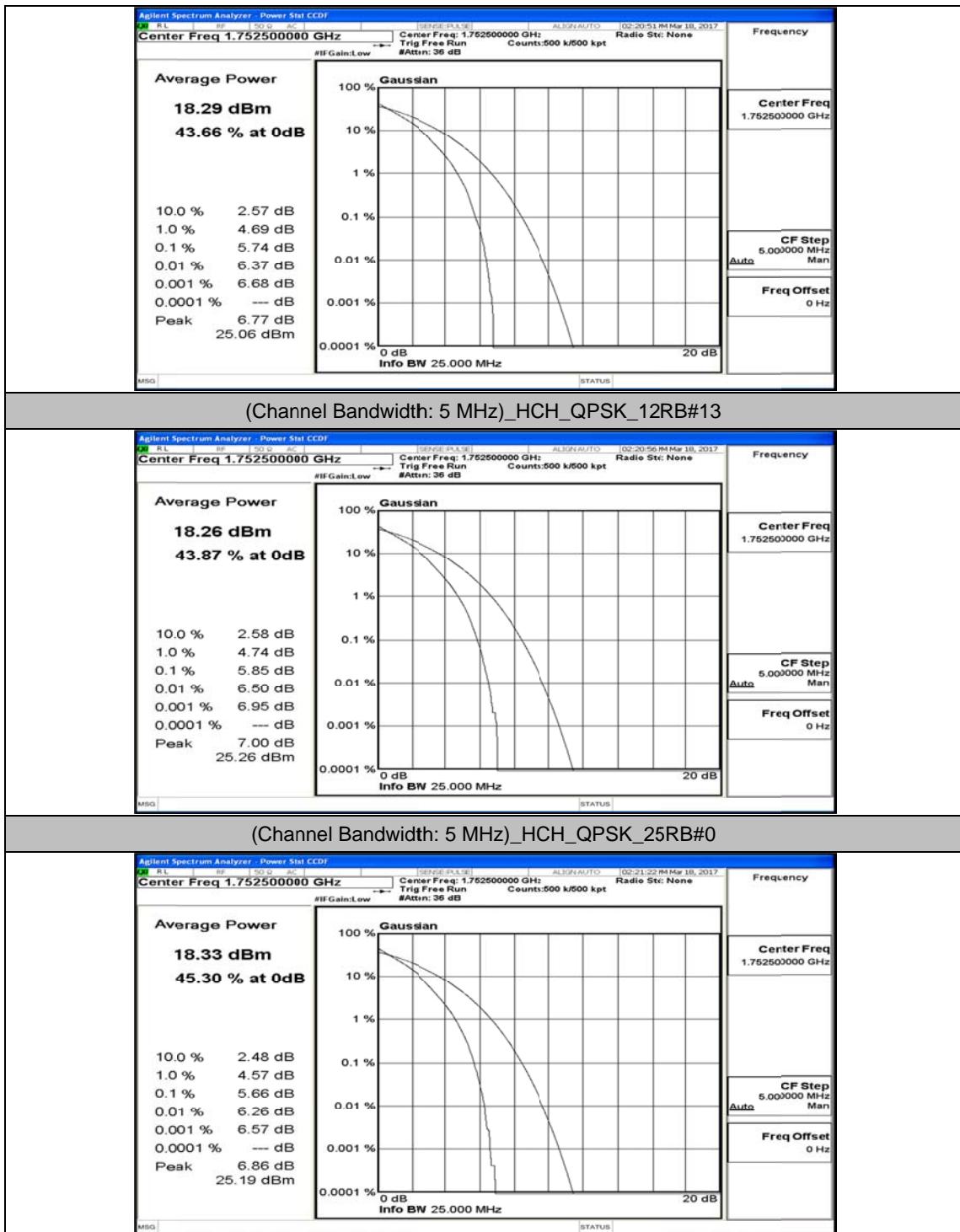
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24



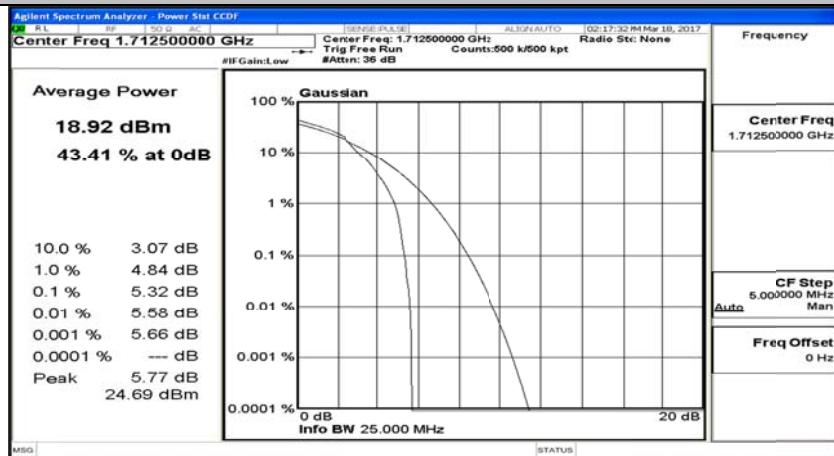


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

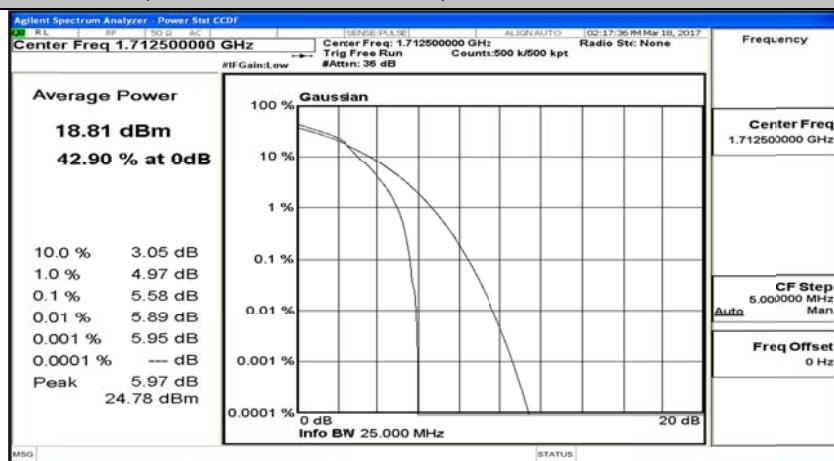




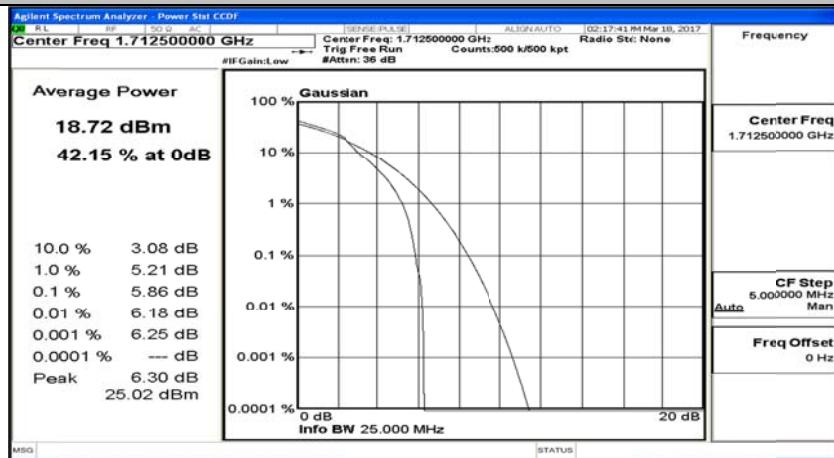
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



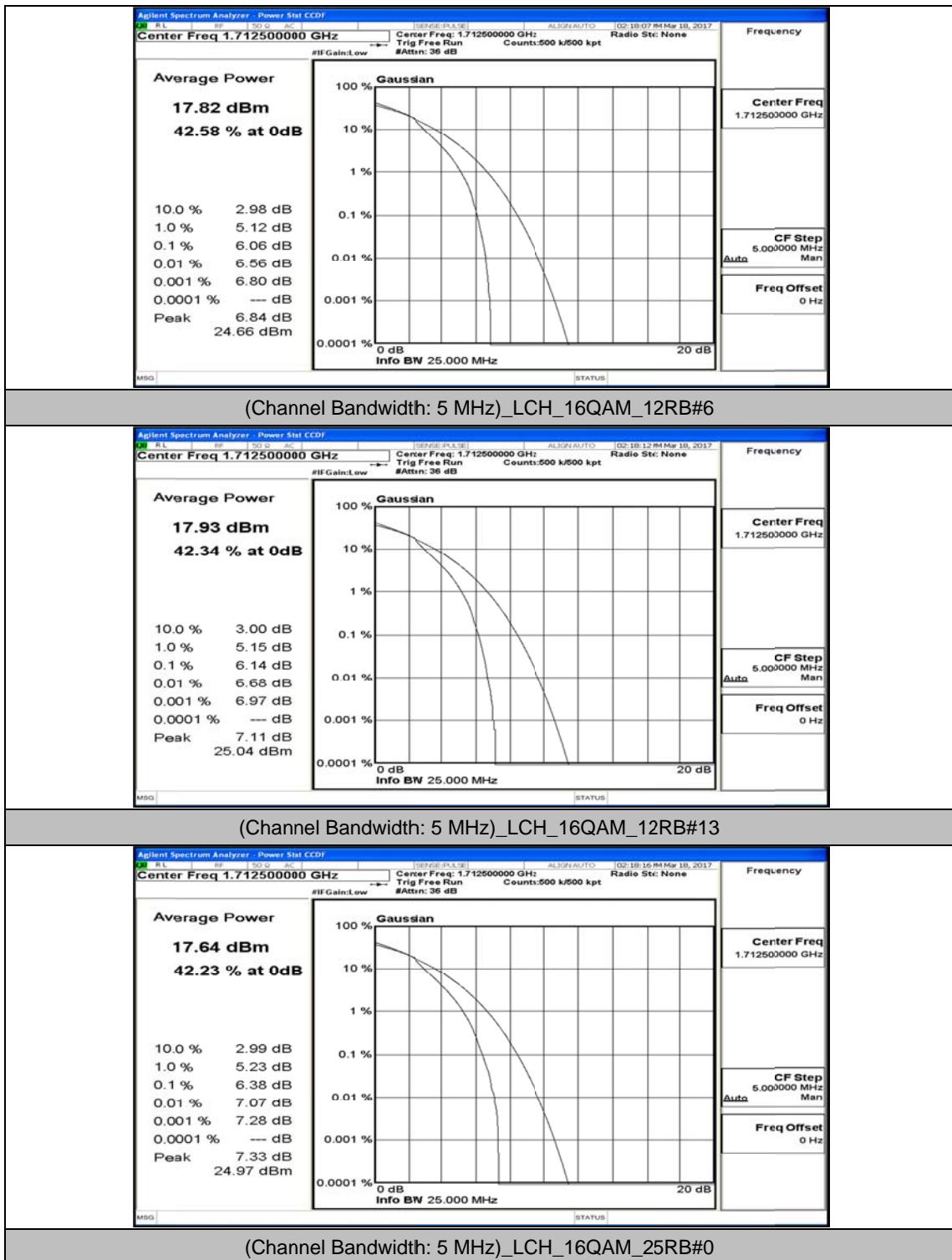
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

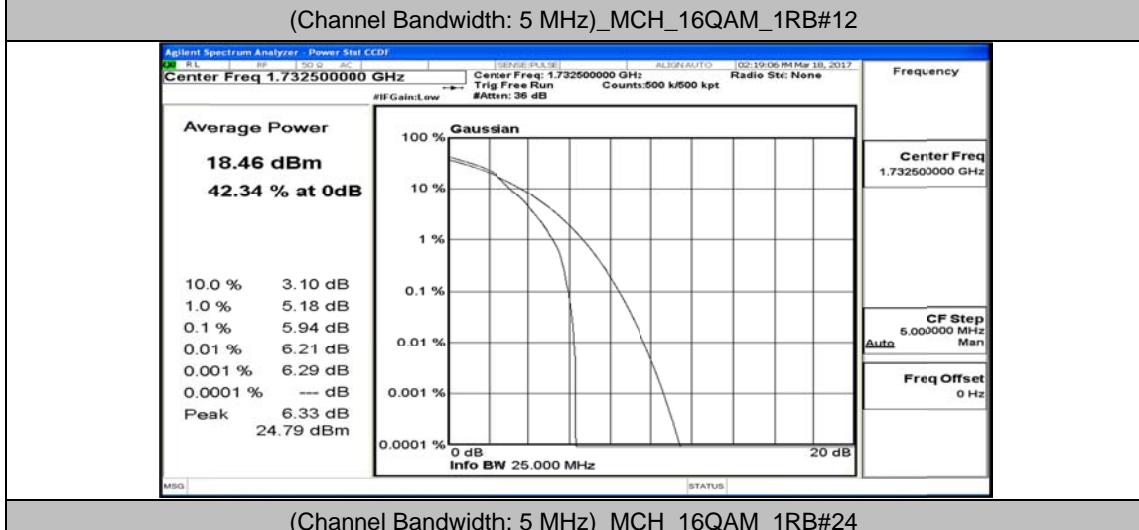
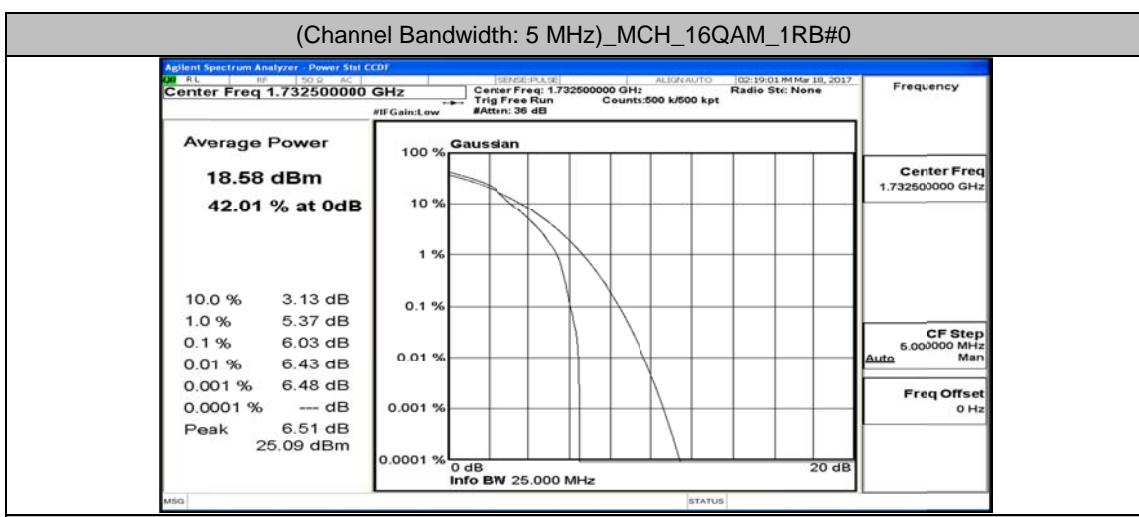
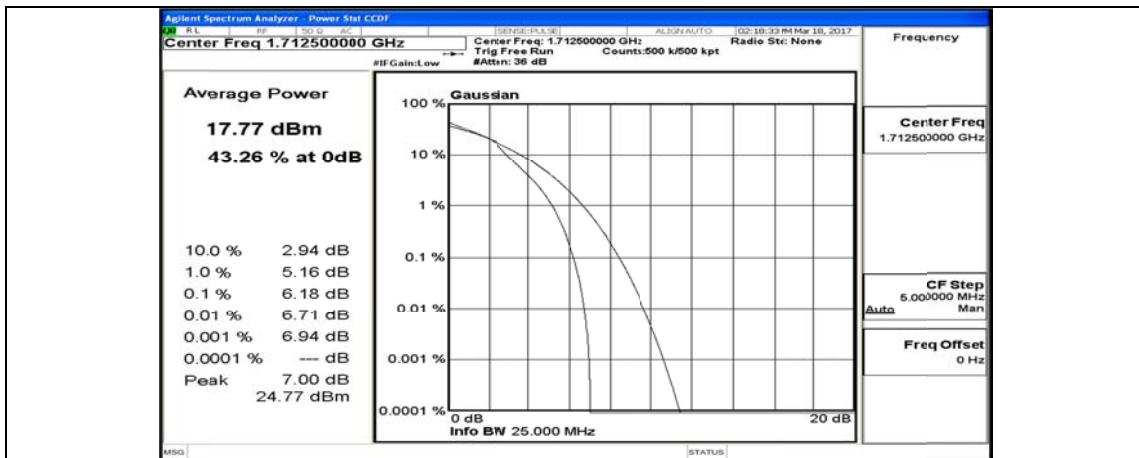


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

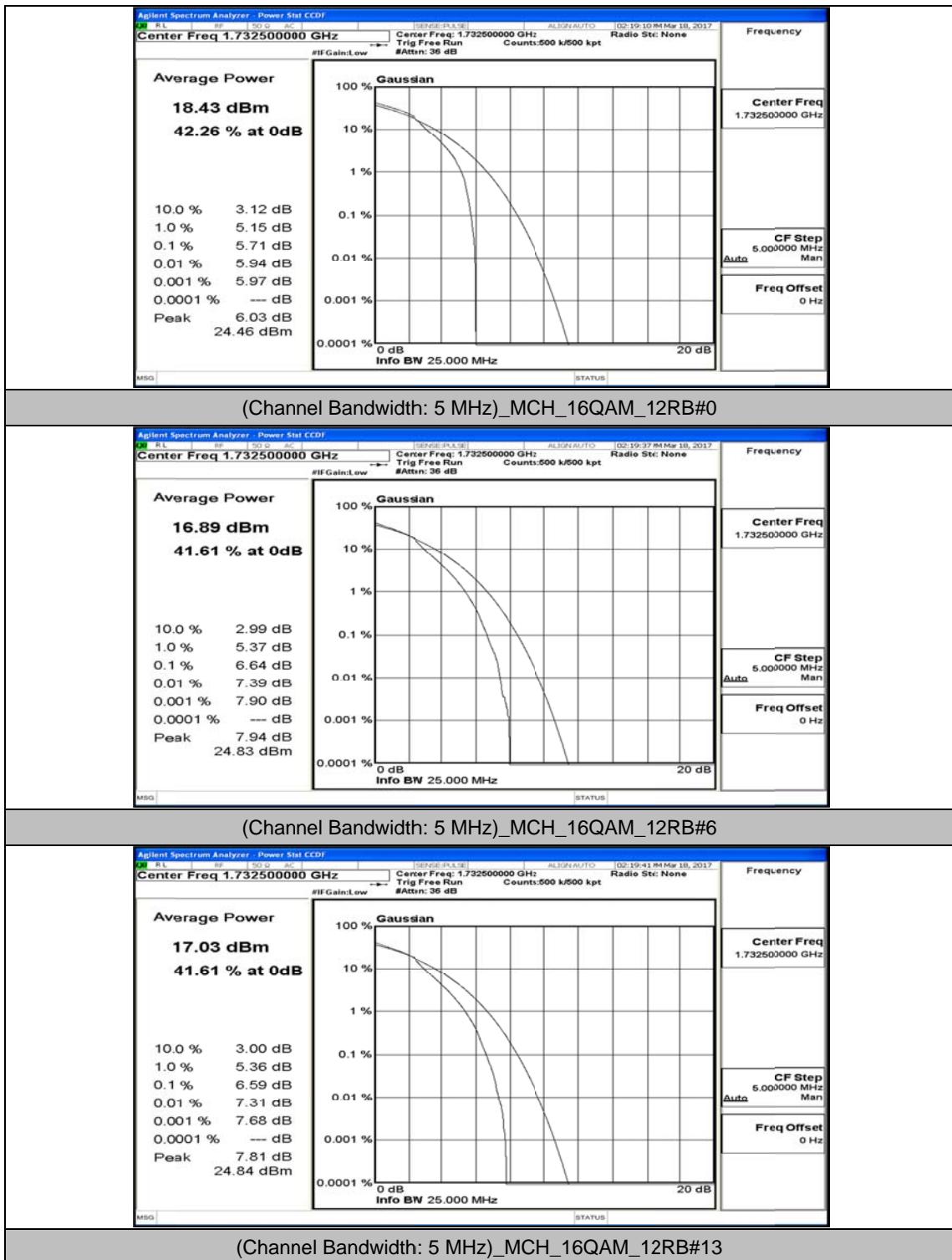


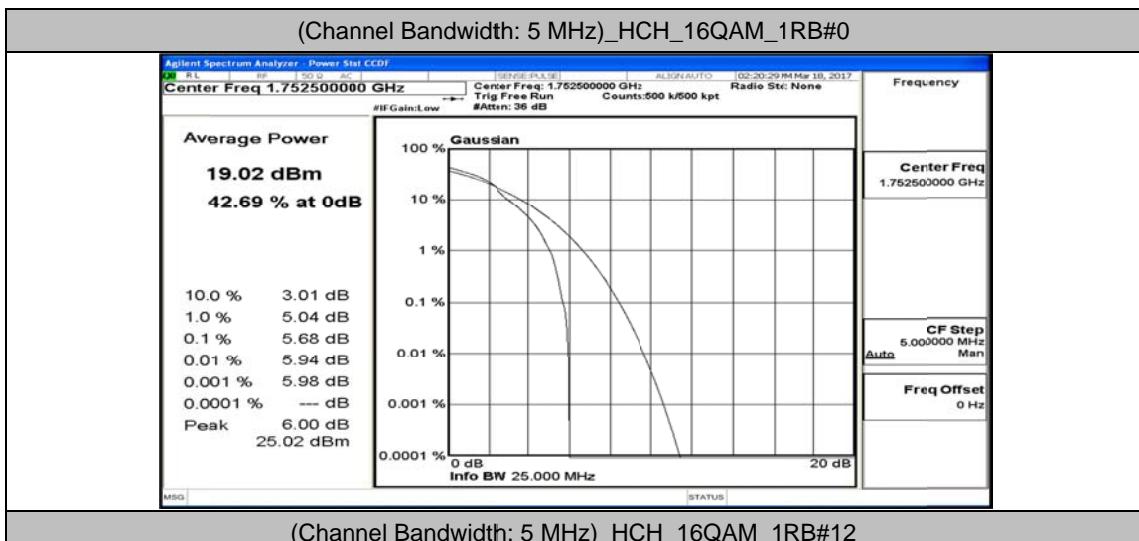
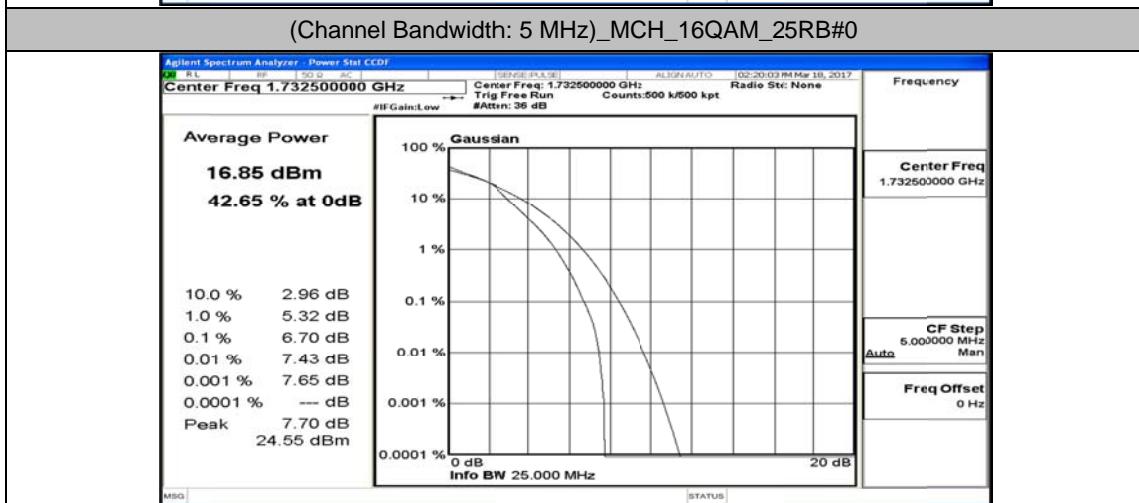
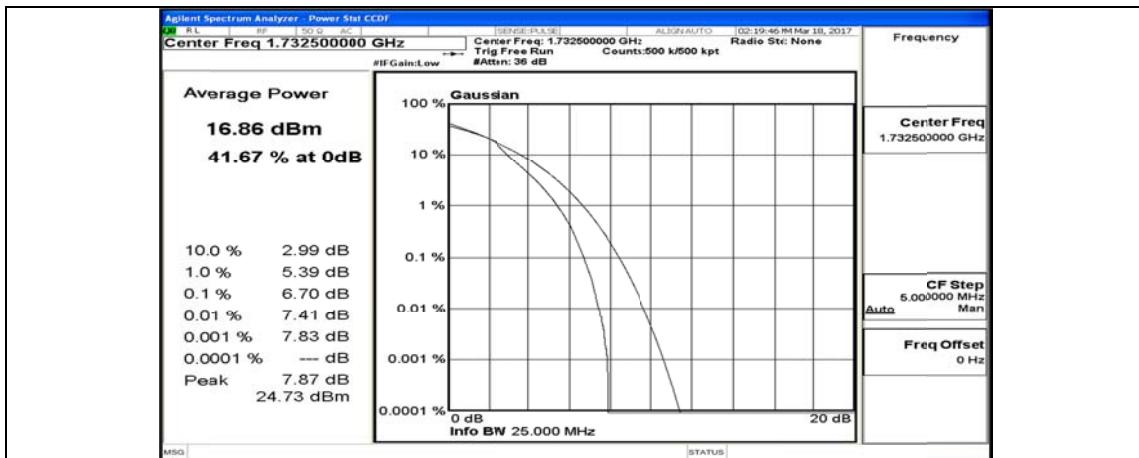
(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0



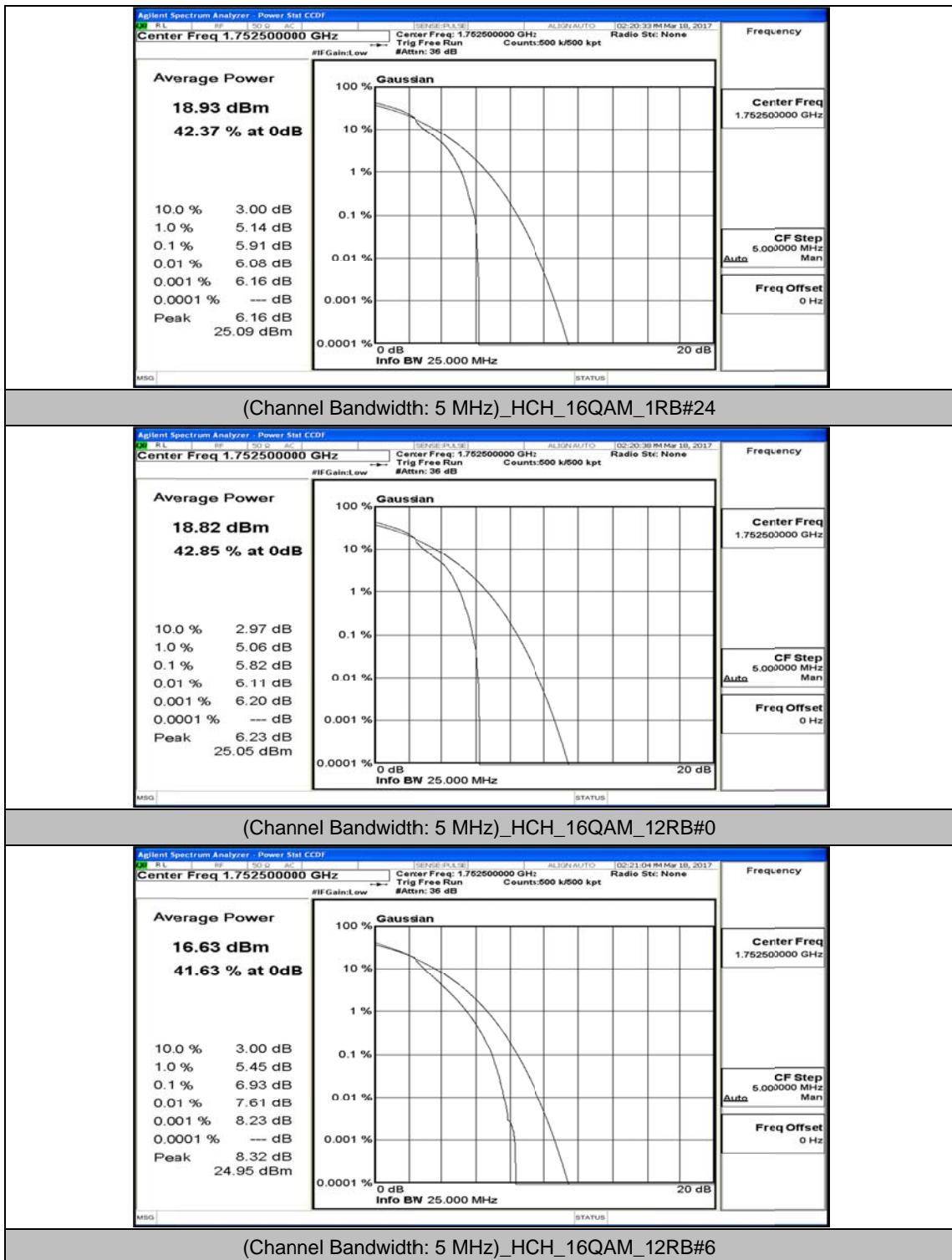


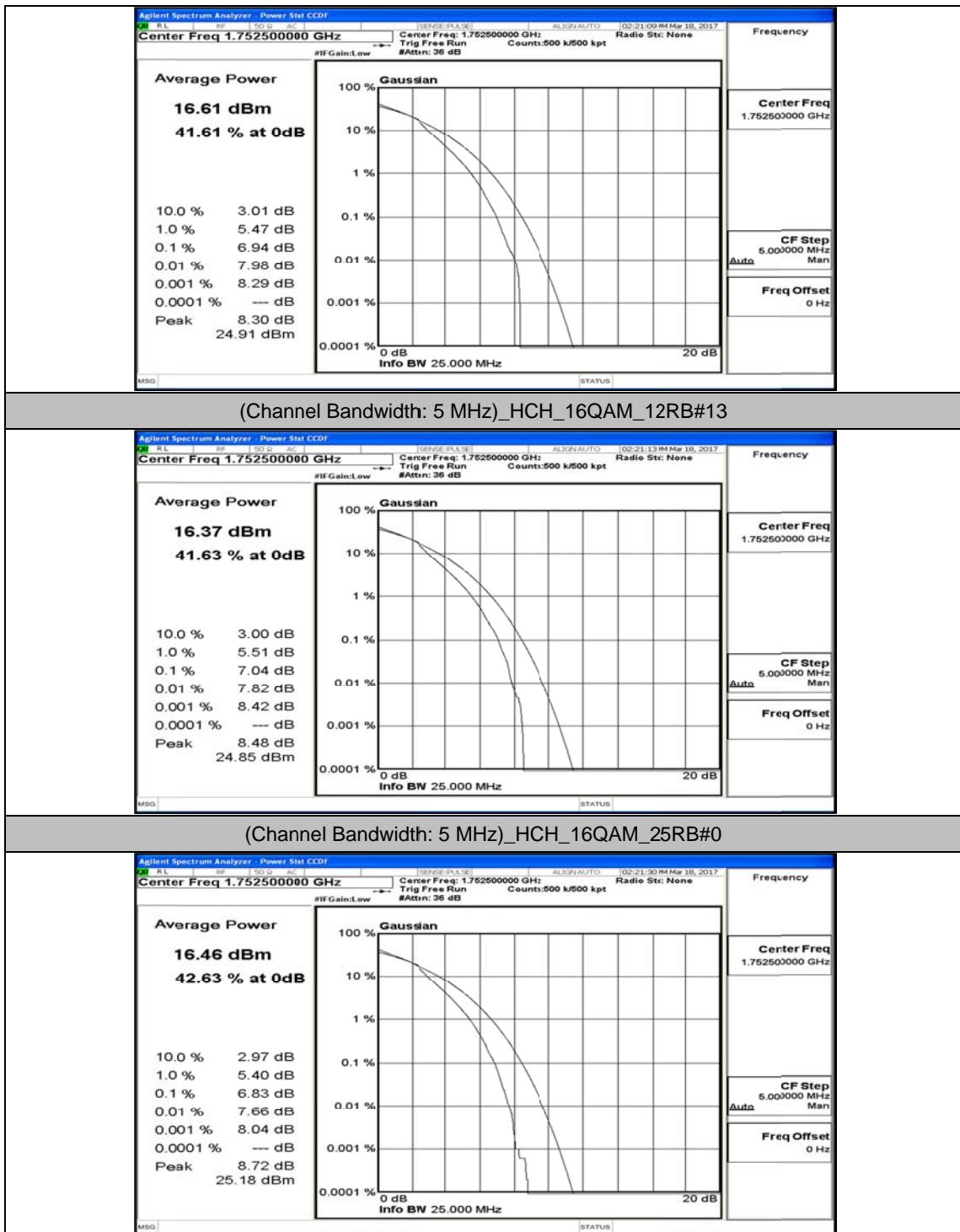
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



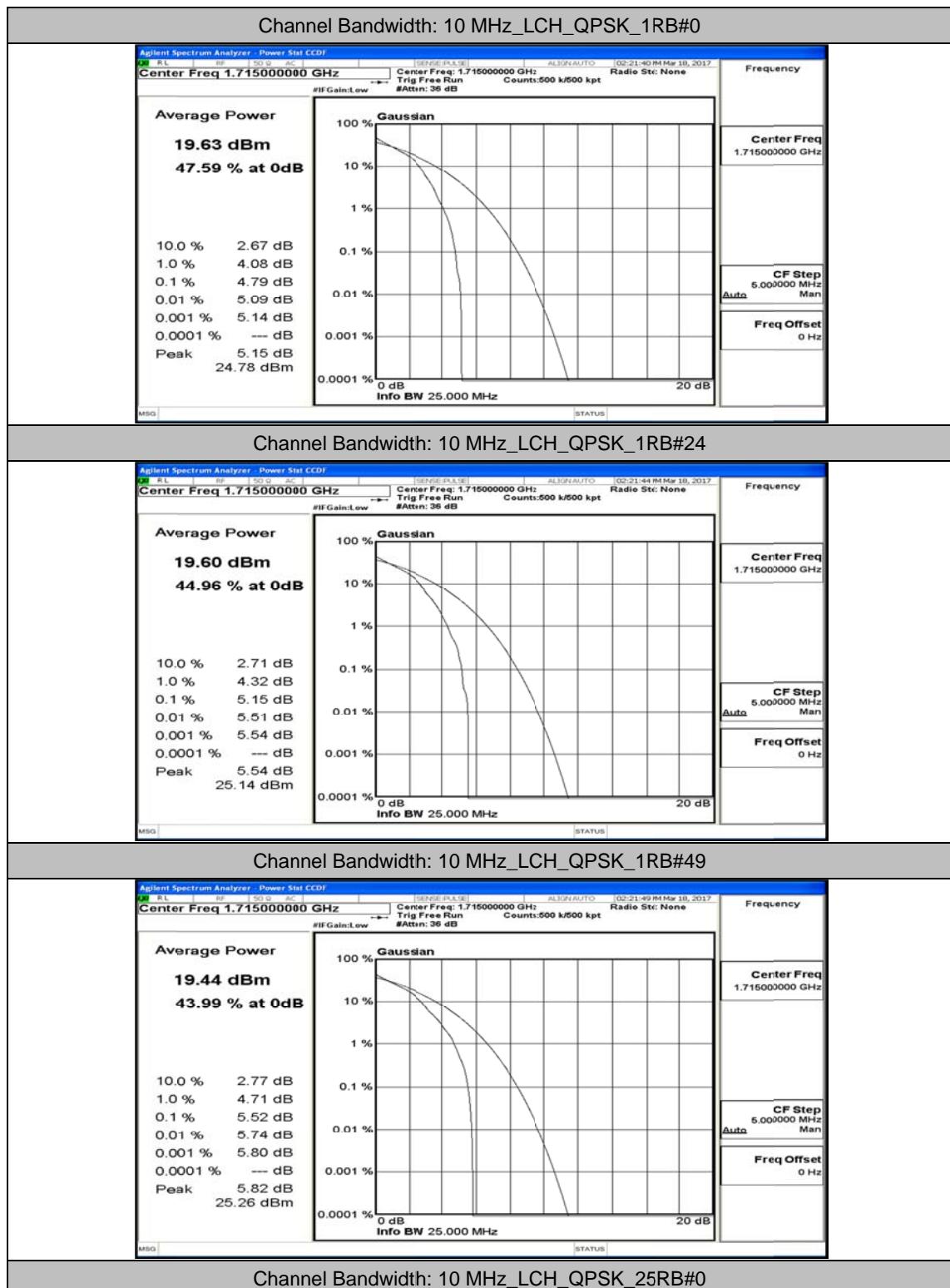


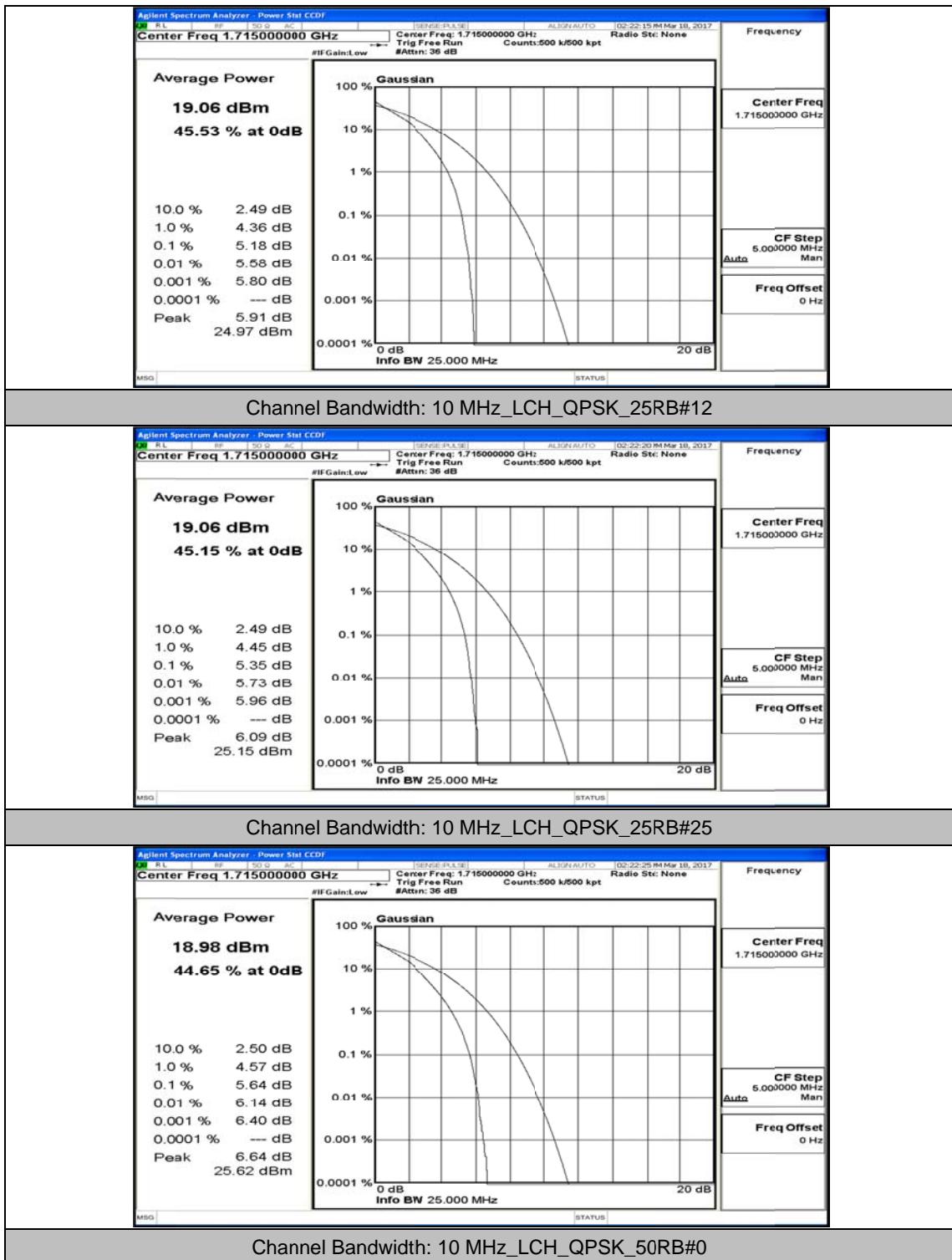
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

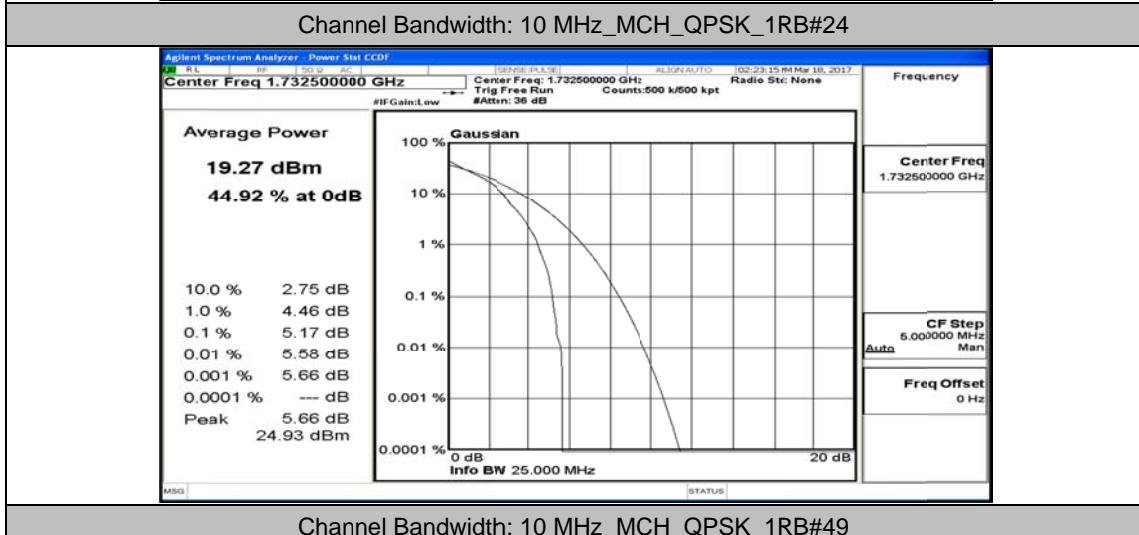
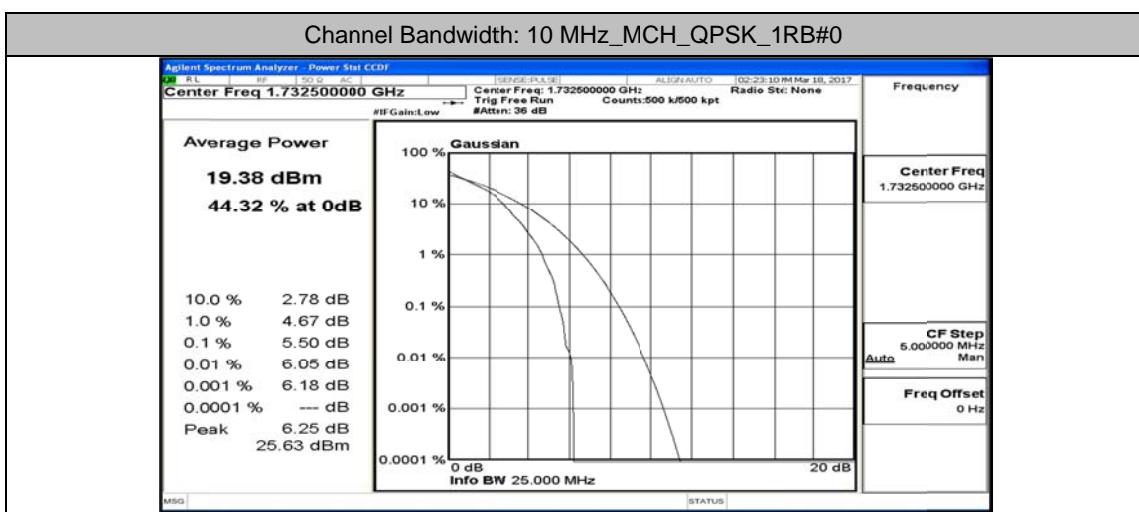
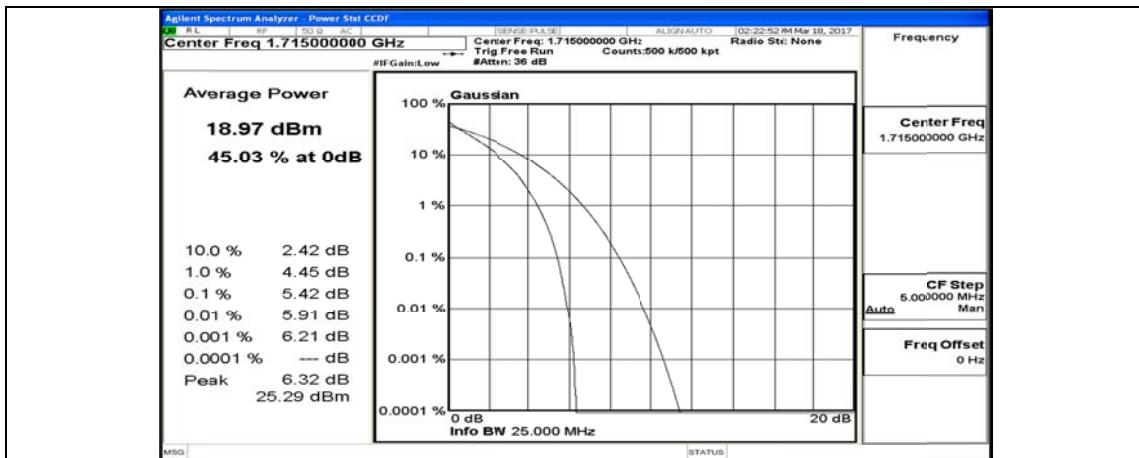




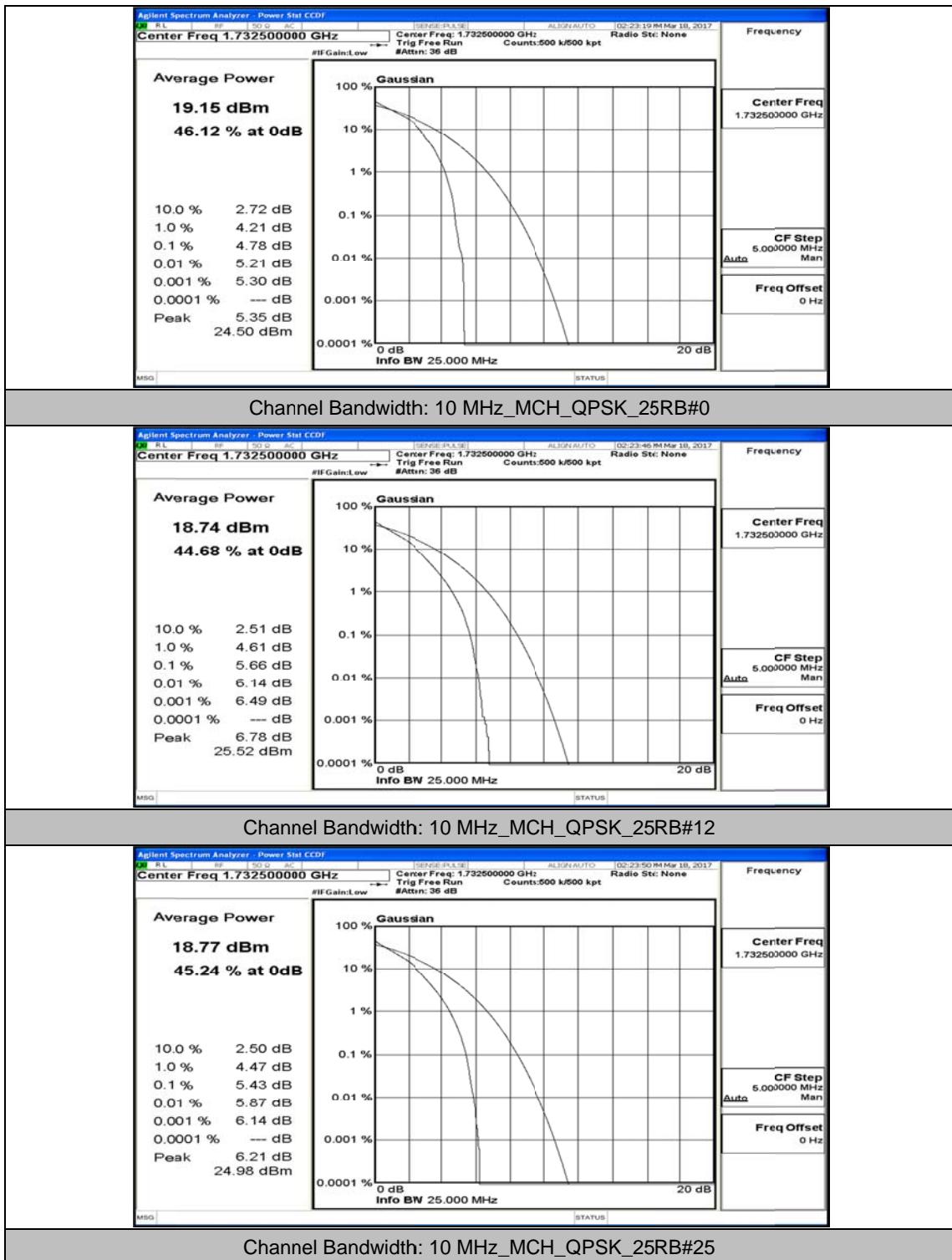
Channel Bandwidth: 10 MHz

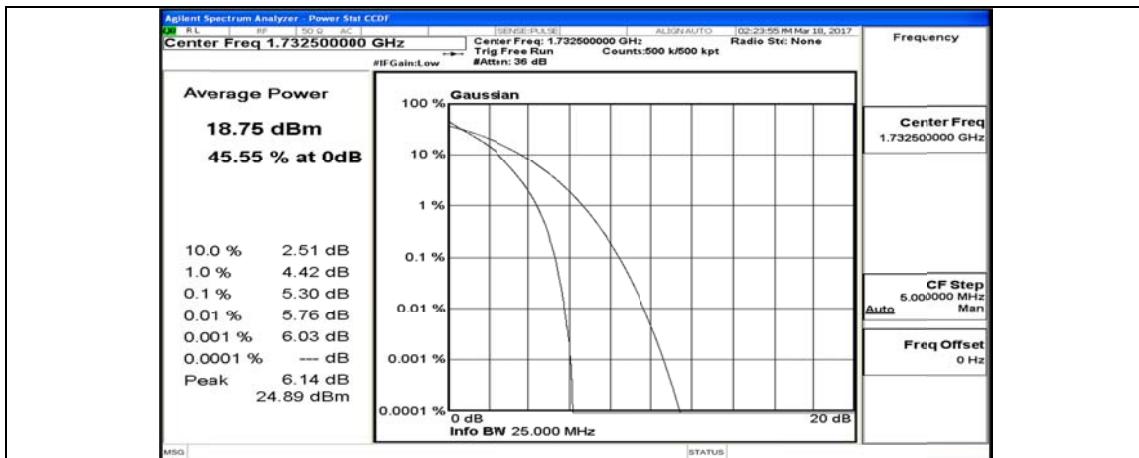




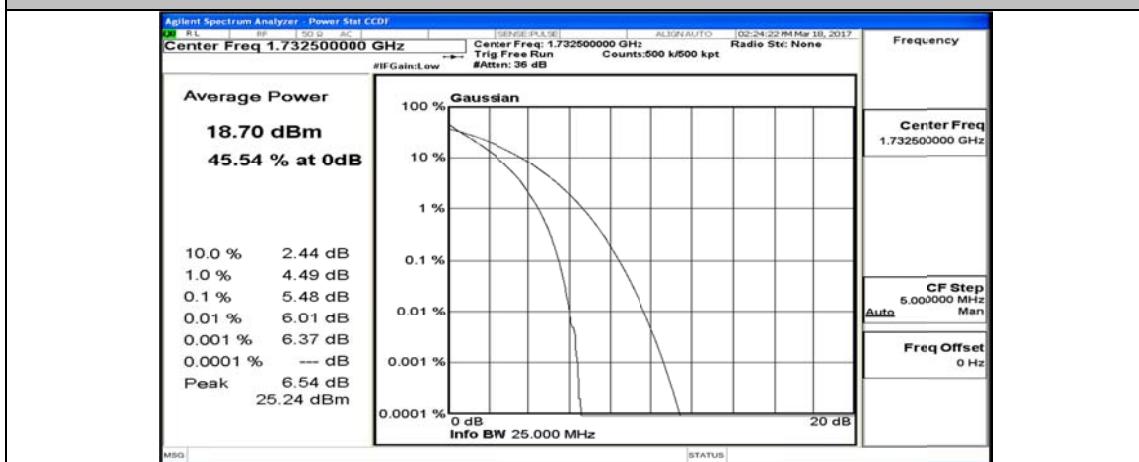


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

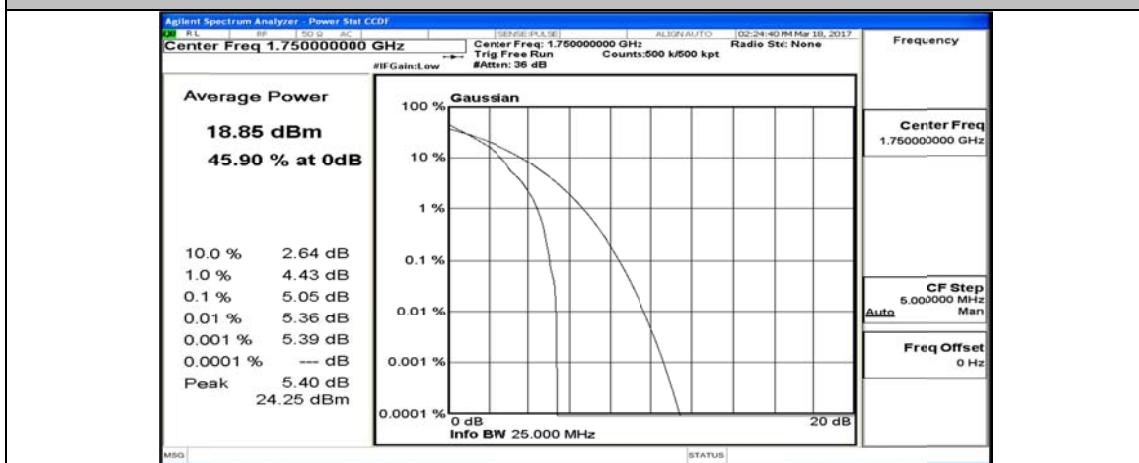




Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_HCH_QPSK_1RB#24

