Appendix A.2: Peak-to-Average Ratio

Test Result

Channel Bandwidth: 1.4 MHz

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	(dB)	(dB)	
QPSK	LCH	1	0	4.63	<13	PASS
		1	3	4.67	<13	PASS
		1	5	4.65	<13	PASS
		3	0	4.99	<13	PASS
		3	2	5.1	<13	PASS
		3	3	5.01	<13	PASS
		6	0	6.01	<13	PASS
	MCH	1	0	4.4	<13	PASS
		1	3	4.43	<13	PASS
		1	5	4.34	<13	PASS
		3	0	4.73	<13	PASS
		3	2	4.74	<13	PASS
		3	3	4.76	<13	PASS
		6	0	5.58	<13	PASS
	HCH	1	0	3.27	<13	PASS
		1	3	3.12	<13	PASS
		1	5	3.1	<13	PASS
		3	0	3.54	<13	PASS
		3	2	3.4	<13	PASS
		3	3	3.37	<13	PASS
		6	0	4.72	<13	PASS
16QAM	LCH	1	0	5.56	<13	PASS
		1	3	5.53	<13	PASS
		1	5	5.46	<13	PASS
		3	0	5.99	<13	PASS
		3	2	5.97	<13	PASS
		3	3	5.86	<13	PASS
		6	0	6.68	<13	PASS
	MCH	1	0	5.4	<13	PASS
		1	3	5.41	<13	PASS
		1	5	5.36	<13	PASS
		3	0	5.62	<13	PASS
		3	2	5.63	<13	PASS

		3	3	5.65	<13	PASS
		6	0	6.37	<13	PASS
	HCH	1	0	4.29	<13	PASS
		1	3	4.19	<13	PASS
		1	5	4.13	<13	PASS
		3	0	4.37	<13	PASS
		3	2	4.27	<13	PASS
		3	3	4.24	<13	PASS
		6	0	5.58	<13	PASS

Channel Bandwidth: 3 MHz

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	4.69	<13	PASS
		1	7	4.61	<13	PASS
		1	14	4.59	<13	PASS
		8	0	5.78	<13	PASS
		8	4	5.8	<13	PASS
		8	7	5.78	<13	PASS
		15	0	6.1	<13	PASS
	MCH	1	0	4.48	<13	PASS
		1	7	4.49	<13	PASS
		1	14	4.42	<13	PASS
		8	0	5.55	<13	PASS
		8	4	5.53	<13	PASS
		8	7	5.58	<13	PASS
		15	0	5.68	<13	PASS
	HCH	1	0	3.46	<13	PASS
		1	7	3.3	<13	PASS
		1	14	2.99	<13	PASS
		8	0	4.83	<13	PASS
		8	4	4.65	<13	PASS
		8	7	4.61	<13	PASS
		15	0	5.11	<13	PASS
16QAM	LCH	1	0	5.53	<13	PASS
		1	7	5.54	<13	PASS
		1	14	5.45	<13	PASS
		8	0	6.39	<13	PASS
		8	4	6.55	<13	PASS
		8	7	6.6	<13	PASS

		15	0	6.85	<13	PASS
	MCH	1	0	5.34	<13	PASS
		1	7	5.36	<13	PASS
		1	14	5.4	<13	PASS
		8	0	6.2	<13	PASS
		8	4	6.18	<13	PASS
		8	7	6.22	<13	PASS
		15	0	6.55	<13	PASS
	HCH	1	0	4.57	<13	PASS
		1	7	4.34	<13	PASS
		1	14	4.16	<13	PASS
		8	0	5.58	<13	PASS
		8	4	5.54	<13	PASS
		8	7	5.4	<13	PASS
		15	0	5.87	<13	PASS

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	4.57	<13	PASS
		1	12	4.44	<13	PASS
		1	24	4.53	<13	PASS
		12	0	5.71	<13	PASS
		12	6	5.73	<13	PASS
		12	13	5.78	<13	PASS
		25	0	5.95	<13	PASS
	MCH	1	0	4.23	<13	PASS
		1	12	4.49	<13	PASS
		1	24	4.35	<13	PASS
		12	0	5.52	<13	PASS
		12	6	5.59	<13	PASS
		12	13	5.63	<13	PASS
		25	0	5.72	<13	PASS
	HCH	1	0	3.68	<13	PASS
		1	12	3.43	<13	PASS
		1	24	3.02	<13	PASS
		12	0	4.93	<13	PASS
		12	6	4.8	<13	PASS
		12	13	4.66	<13	PASS
		25	0	5.19	<13	PASS

Modulation	Channel	Size	Offset	PAR	Limit	Verdict
16QAM	LCH	1	0	5.38	<13	PASS
		1	12	5.4	<13	PASS
		1	24	5.57	<13	PASS
		12	0	6.53	<13	PASS
		12	6	6.49	<13	PASS
		12	13	6.53	<13	PASS
		25	0	6.65	<13	PASS
	MCH	1	0	5.2	<13	PASS
		1	12	5.4	<13	PASS
		1	24	5.31	<13	PASS
		12	0	6.3	<13	PASS
		12	6	6.21	<13	PASS
		12	13	6.26	<13	PASS
		25	0	6.45	<13	PASS
	HCH	1	0	4.46	<13	PASS
		1	12	4.34	<13	PASS
		1	24	4.02	<13	PASS
		12	0	5.84	<13	PASS
		12	6	5.73	<13	PASS
		12	13	5.62	<13	PASS
		25	0	5.94	<13	PASS

Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	4.57	<13	PASS
		1	24	4.55	<13	PASS
		1	49	4.6	<13	PASS
		25	0	5.85	<13	PASS
		25	12	5.86	<13	PASS
		25	25	5.81	<13	PASS
		50	0	5.81	<13	PASS
	MCH	1	0	4.42	<13	PASS
		1	24	4.35	<13	PASS
		1	49	4.22	<13	PASS
		25	0	5.7	<13	PASS
		25	12	5.7	<13	PASS
		25	25	5.63	<13	PASS
		50	0	5.71	<13	PASS
	HCH	1	0	3.59	<13	PASS

Modulation	Channel	Size	Offset	Value	Limit	Verdict
		1	24	3.45	<13	PASS
		1	49	2.95	<13	PASS
		25	0	5.17	<13	PASS
		25	12	5.05	<13	PASS
		25	25	4.95	<13	PASS
		50	0	5.32	<13	PASS
16QAM	LCH	1	0	5.38	<13	PASS
		1	24	5.39	<13	PASS
		1	49	5.44	<13	PASS
		25	0	6.59	<13	PASS
		25	12	6.65	<13	PASS
		25	25	6.57	<13	PASS
		50	0	6.53	<13	PASS
	MCH	1	0	5.15	<13	PASS
		1	24	5.21	<13	PASS
		1	49	5.2	<13	PASS
		25	0	6.5	<13	PASS
		25	12	6.39	<13	PASS
		25	25	6.34	<13	PASS
		50	0	6.41	<13	PASS
	HCH	1	0	4.62	<13	PASS
		1	24	4.62	<13	PASS
		1	49	4.16	<13	PASS
		25	0	5.94	<13	PASS
		25	12	5.86	<13	PASS
		25	25	5.79	<13	PASS
		50	0	6.05	<13	PASS

Channel Bandwidth: 15 MHz

Channel Bandwidth: 15 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	9.19	<13	PASS
		1	37	4.59	<13	PASS
		1	74	9.13	<13	PASS
		37	0	5	<13	PASS
		37	18	5.83	<13	PASS
		37	38	5.04	<13	PASS
		75	0	4.98	<13	PASS
	MCH	1	0	9.03	<13	PASS
		1	37	4.37	<13	PASS

		1	74	9.5	<13	PASS
		37	0	4.84	<13	PASS
		37	18	5.59	<13	PASS
		37	38	4.87	<13	PASS
		75	0	5.09	<13	PASS
	HCH	1	0	9.03	<13	PASS
		1	37	3.7	<13	PASS
		1	74	9.51	<13	PASS
		37	0	4.67	<13	PASS
		37	18	5.2	<13	PASS
		37	38	4.66	<13	PASS
		75	0	4.96	<13	PASS
16QAM	LCH	1	0	9.07	<13	PASS
		1	37	5.43	<13	PASS
		1	74	9.72	<13	PASS
		37	0	6.27	<13	PASS
		37	18	6.61	<13	PASS
		37	38	6.24	<13	PASS
		75	0	6.33	<13	PASS
	MCH	1	0	9.29	<13	PASS
		1	37	5.23	<13	PASS
		1	74	9.51	<13	PASS
		37	0	6.05	<13	PASS
		37	18	6.38	<13	PASS
		37	38	6.19	<13	PASS
		75	0	6.3	<13	PASS
	HCH	1	0	9.08	<13	PASS
		1	37	4.55	<13	PASS
		1	74	10.29	<13	PASS
		37	0	5.89	<13	PASS
		37	18	6.03	<13	PASS
		37	38	5.95	<13	PASS
		75	0	6.18	<13	PASS

Channel Bandwidth: 20 MHz

Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio	Limit	Verdict
		Size	Offset	[dB]	[dB]	
QPSK	LCH	1	0	9.67	<13	PASS
		1	49	4.48	<13	PASS
		1	99	9.7	<13	PASS

		50	0	5.65	<13	PASS
		50	25	5.81	<13	PASS
		50	50	5.86	<13	PASS
		100	0	5.67	<13	PASS
	MCH	1	0	9.7	<13	PASS
		1	49	4.24	<13	PASS
		1	99	9.38	<13	PASS
		50	0	5.55	<13	PASS
		50	25	5.66	<13	PASS
		50	50	5.81	<13	PASS
		100	0	5.73	<13	PASS
	HCH	1	0	9.07	<13	PASS
		1	49	3.89	<13	PASS
		1	99	10.82	<13	PASS
		50	0	5.49	<13	PASS
		50	25	5.37	<13	PASS
		50	50	5.76	<13	PASS
		100	0	5.76	<13	PASS
16QAM	LCH	1	0	10.05	<13	PASS
		1	49	5.46	<13	PASS
		1	99	9.86	<13	PASS
		50	0	6.73	<13	PASS
		50	25	6.54	<13	PASS
		50	50	6.76	<13	PASS
		100	0	6.83	<13	PASS
	MCH	1	0	9.79	<13	PASS
		1	49	5	<13	PASS
		1	99	9.33	<13	PASS
		50	0	6.6	<13	PASS
		50	25	6.38	<13	PASS
		50	50	6.72	<13	PASS
		100	0	6.8	<13	PASS
	HCH	1	0	9.88	<13	PASS
		1	49	4.55	<13	PASS
		1	99	9.68	<13	PASS
		50	0	6.51	<13	PASS
		50	25	6.14	<13	PASS
		50	50	6.66	<13	PASS
		100	0	6.74	<13	PASS

Test Graphs

Channel Bandwidth: 1.4 MHz

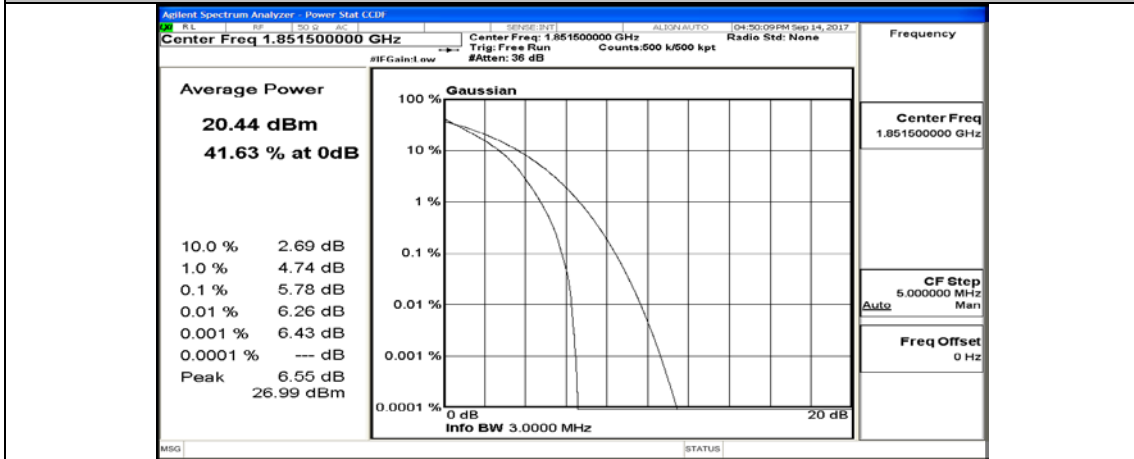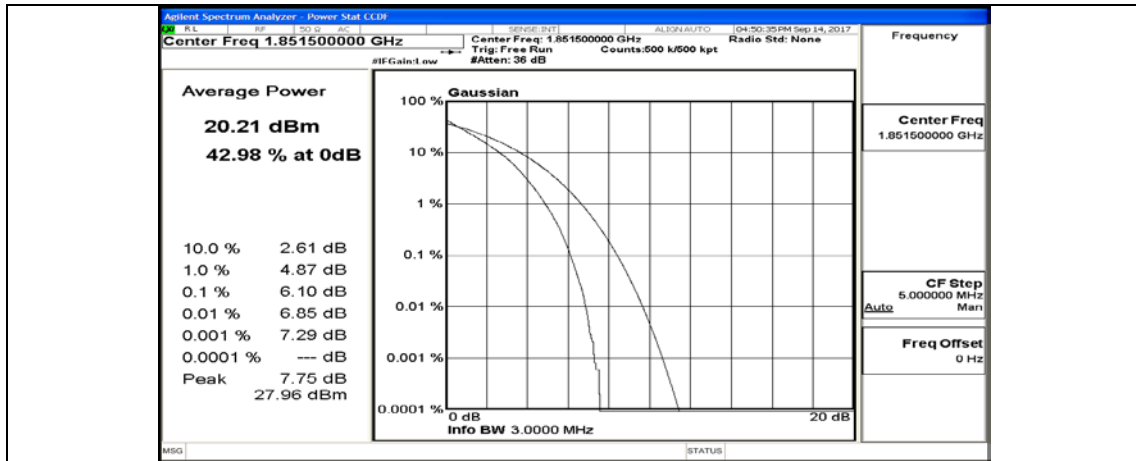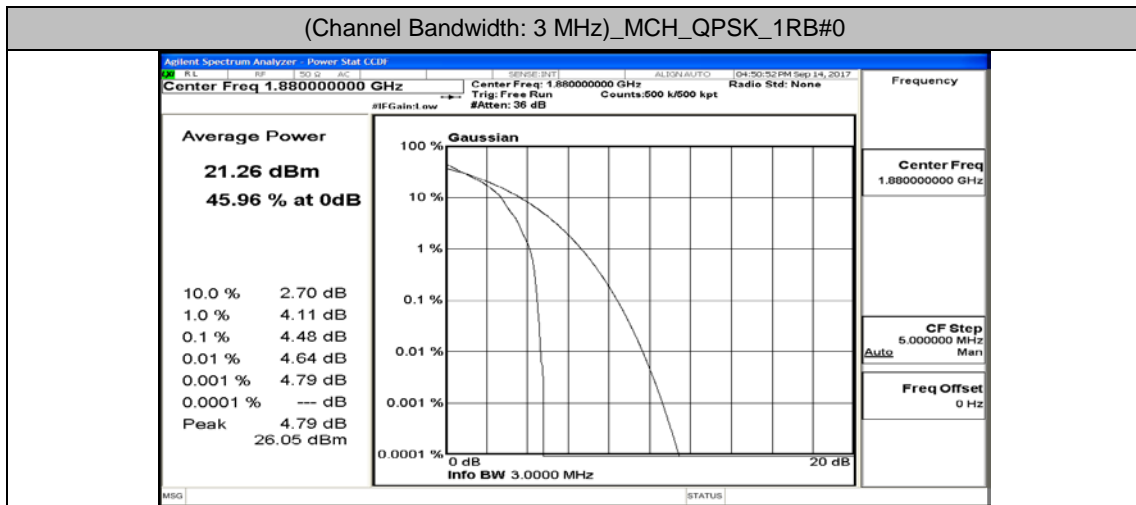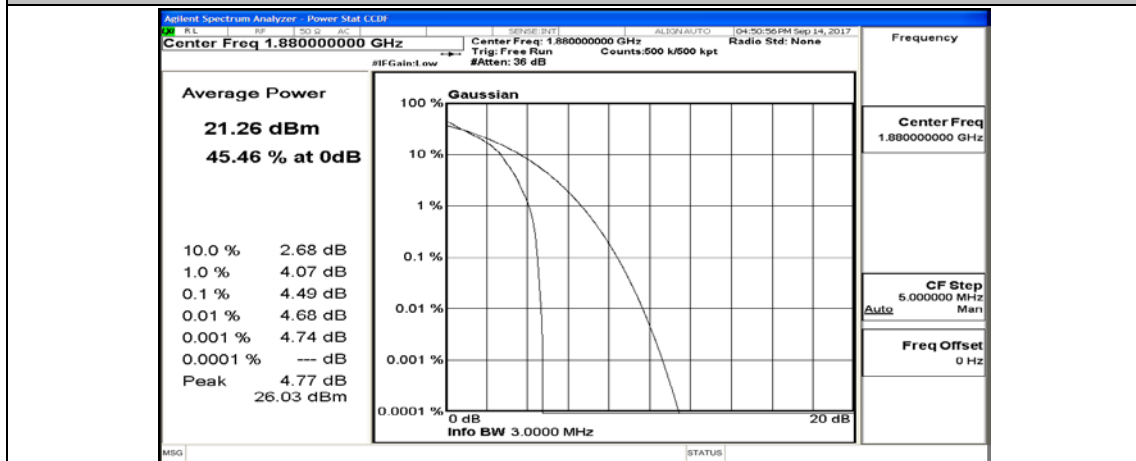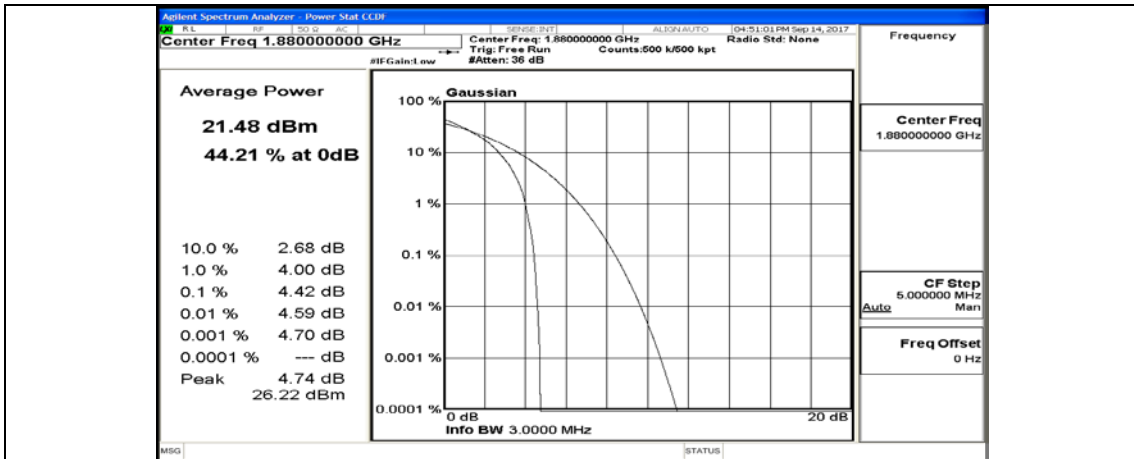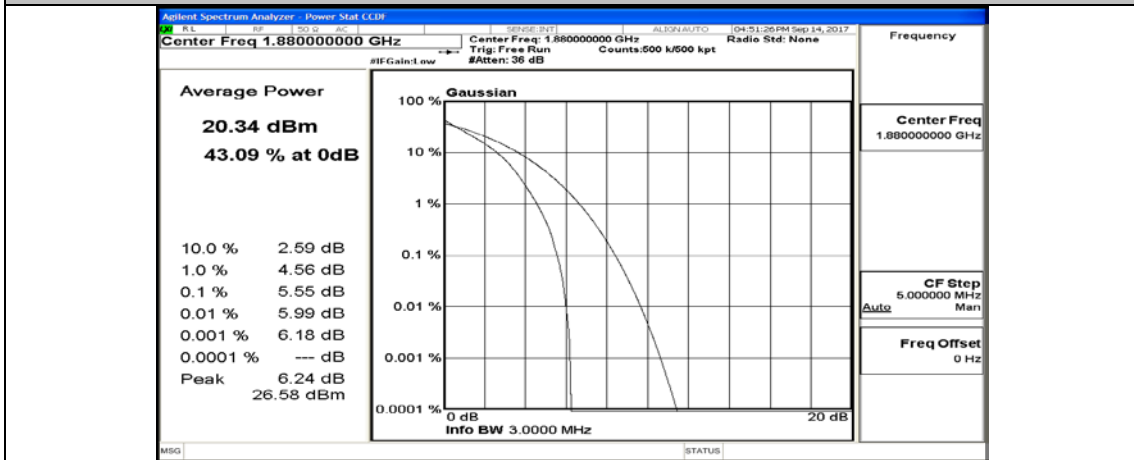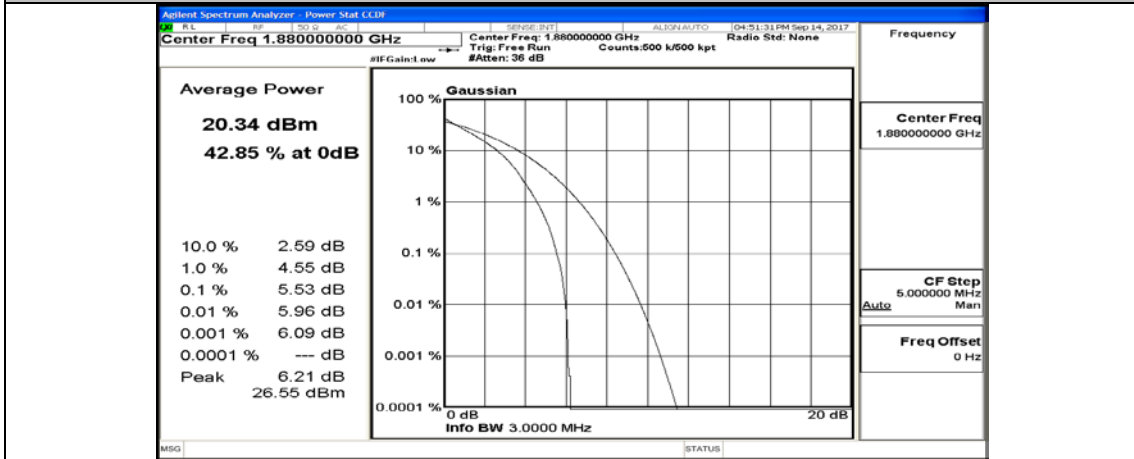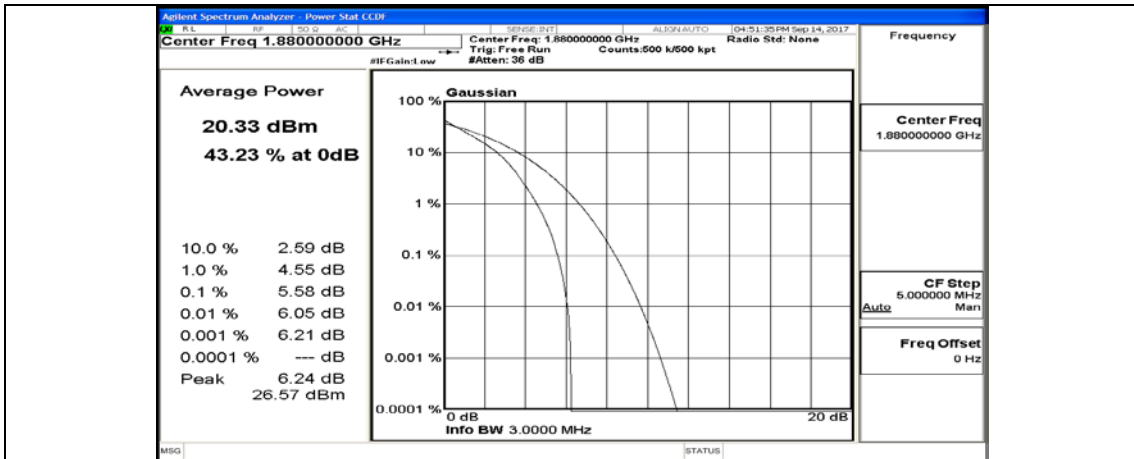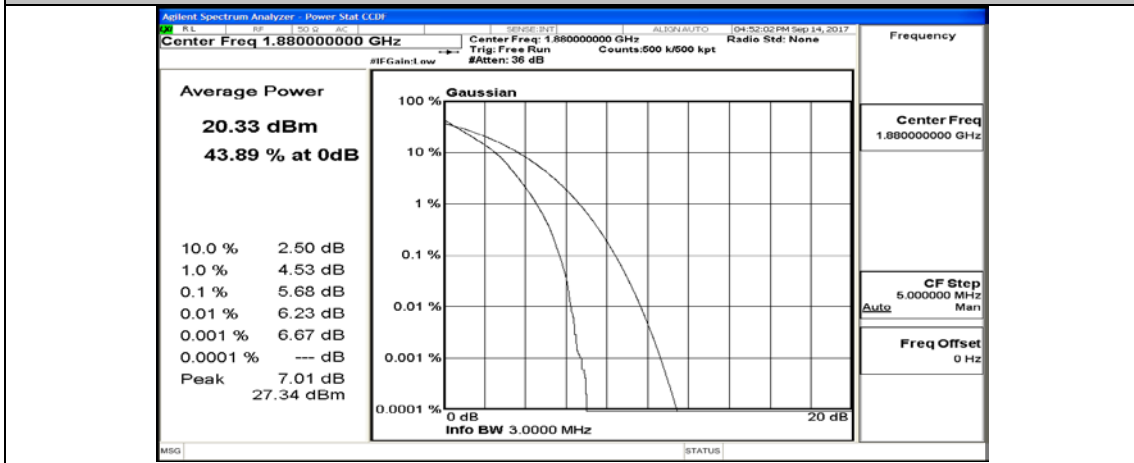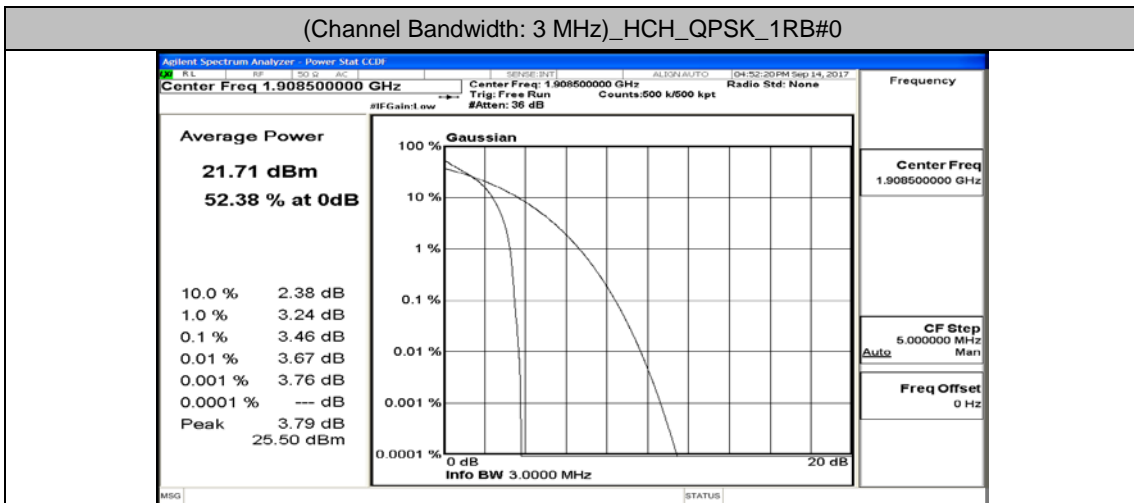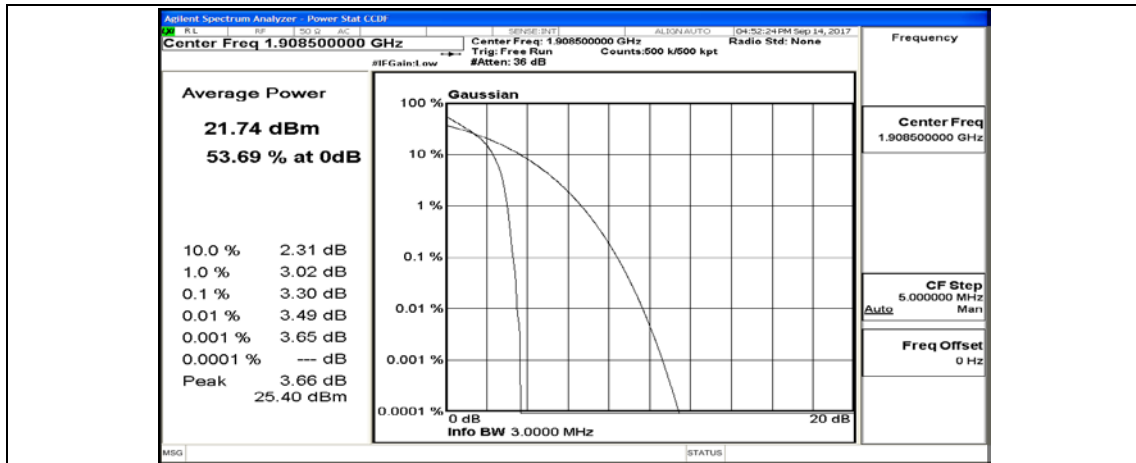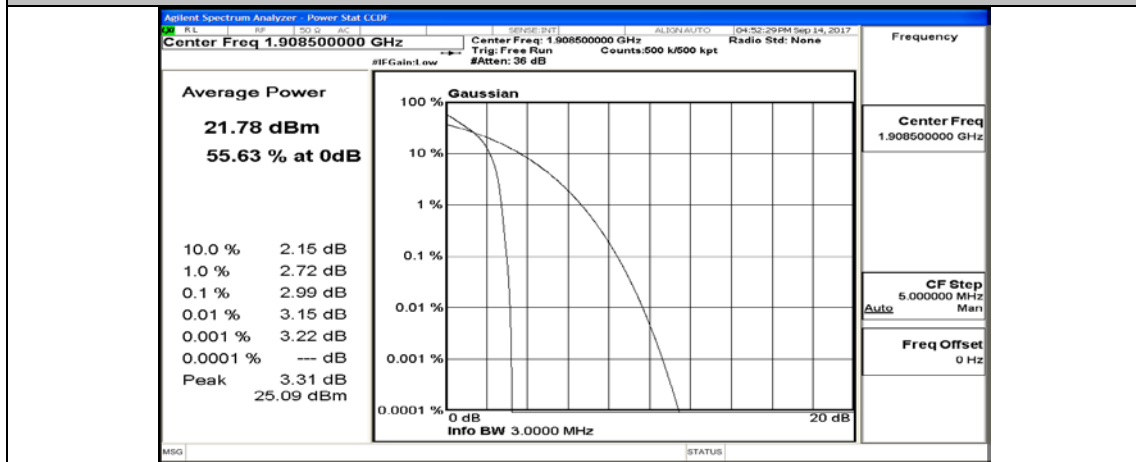| (Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0 |
| --- |
| |
| (Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3 |
| |
| (Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5 |
| |
| (Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#0 |
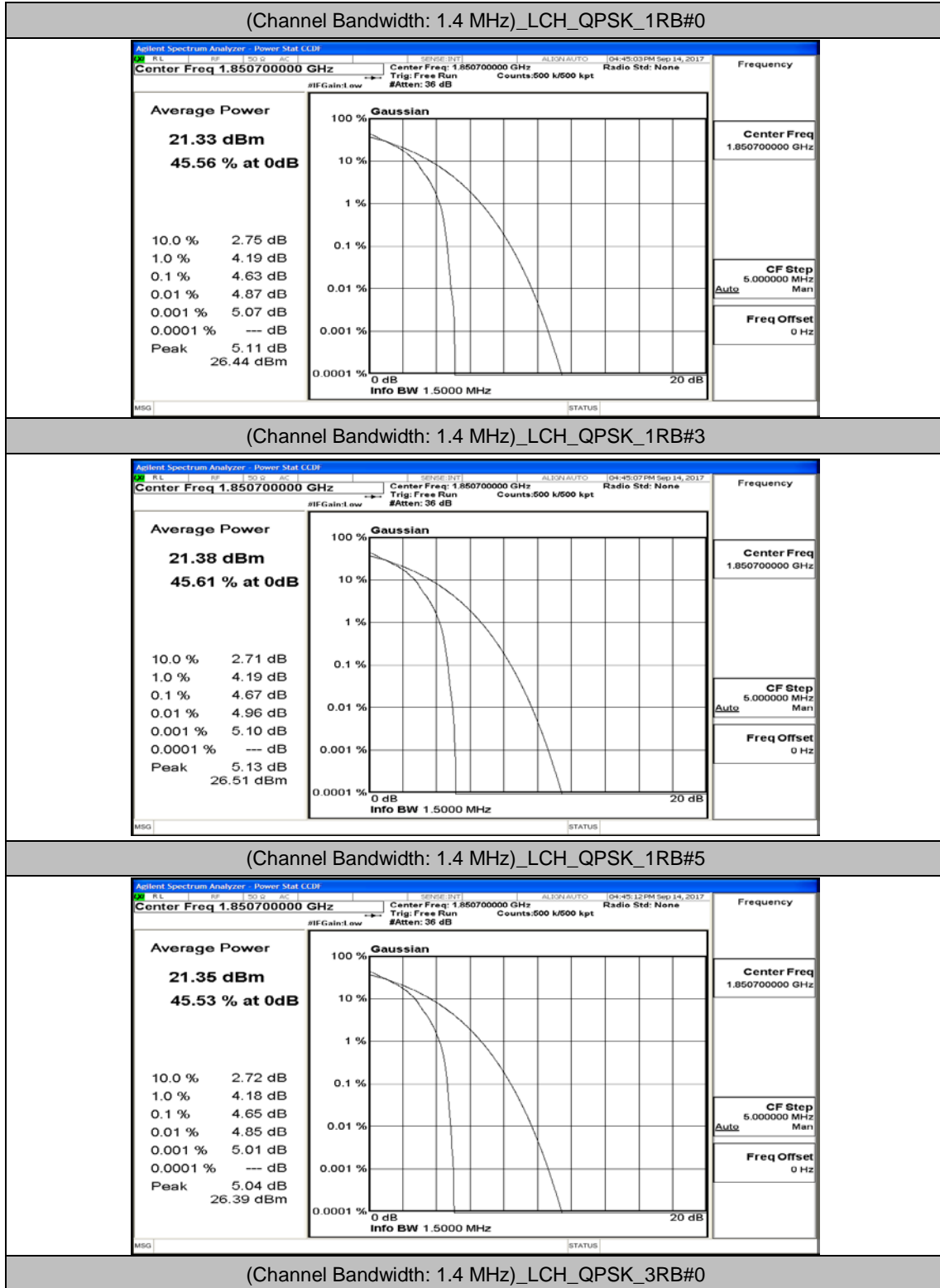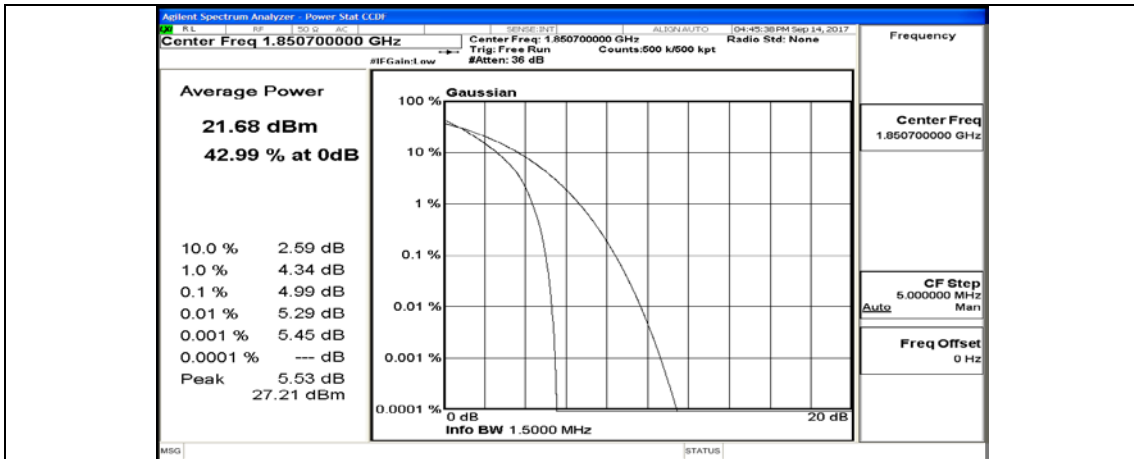
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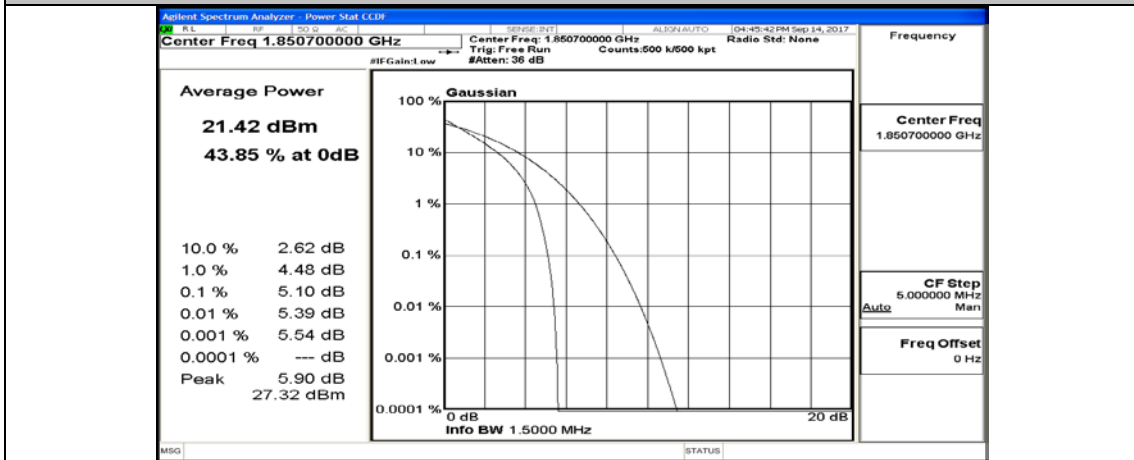
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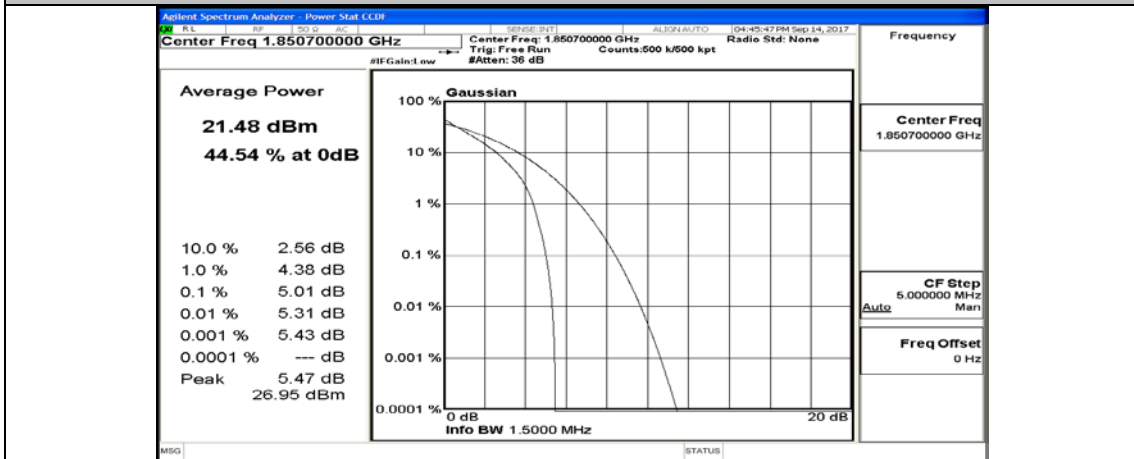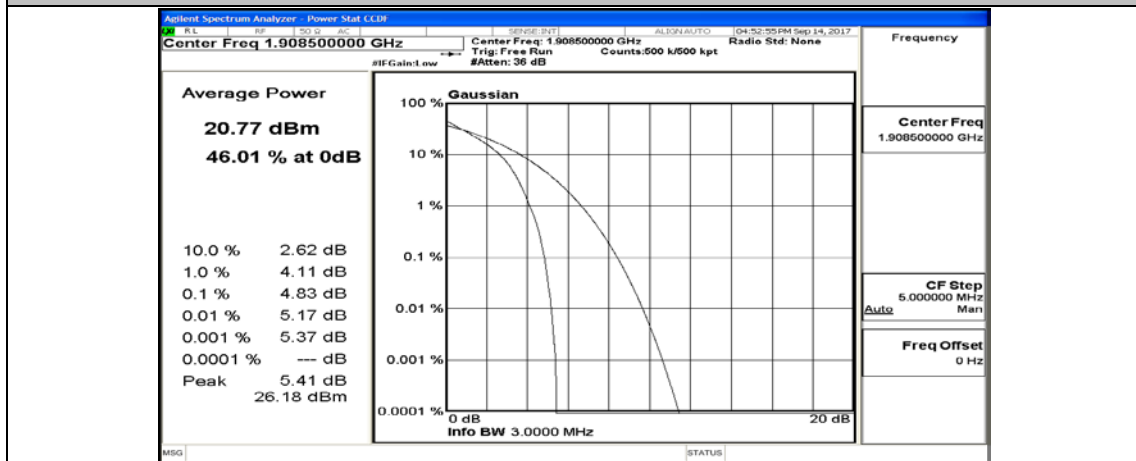

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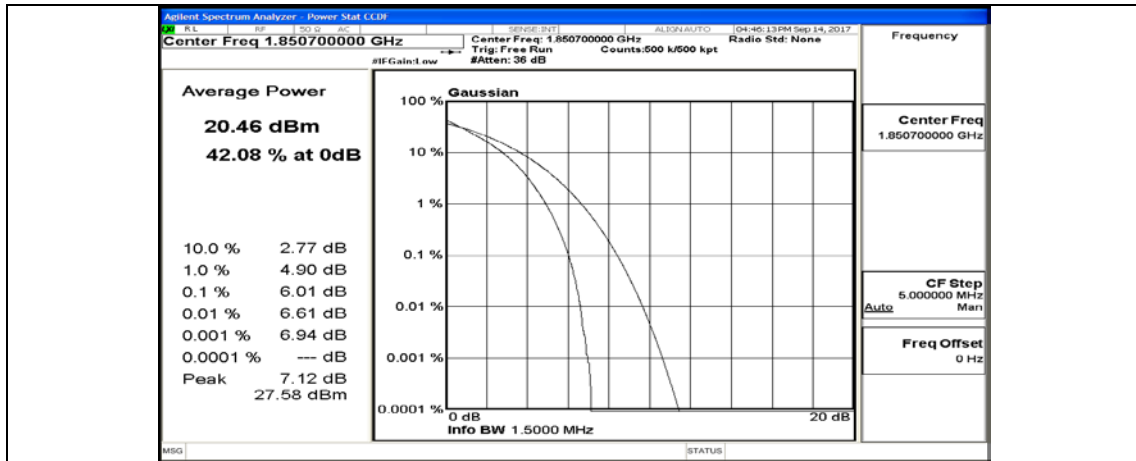
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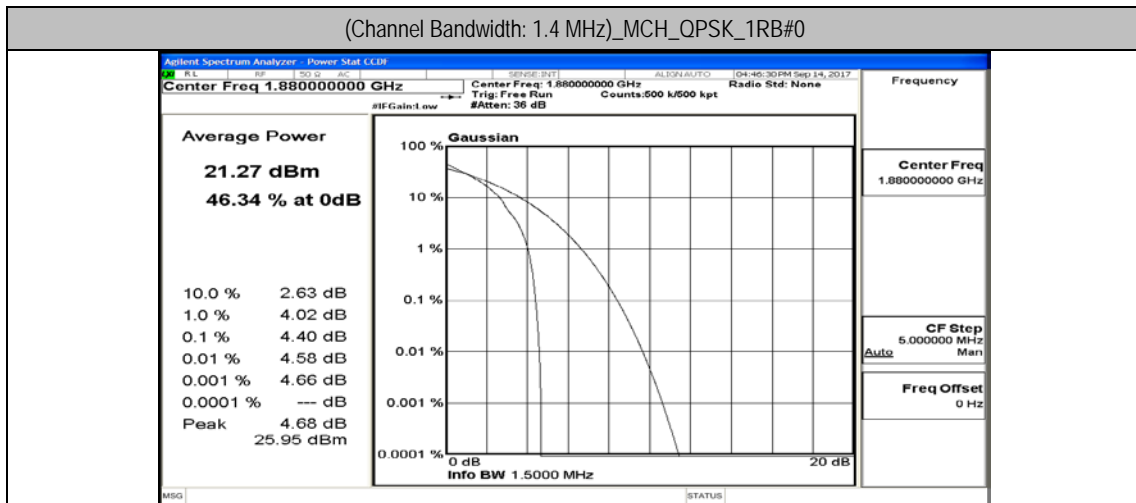

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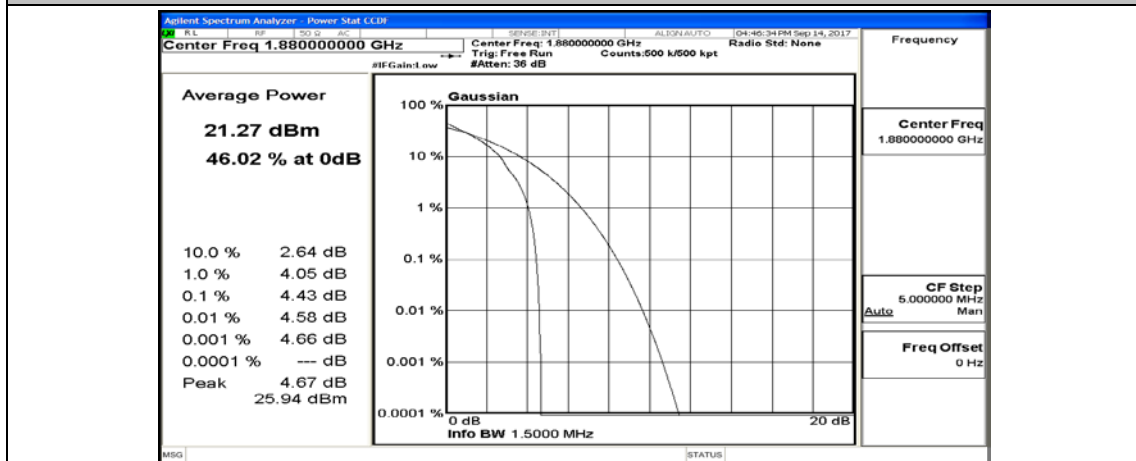
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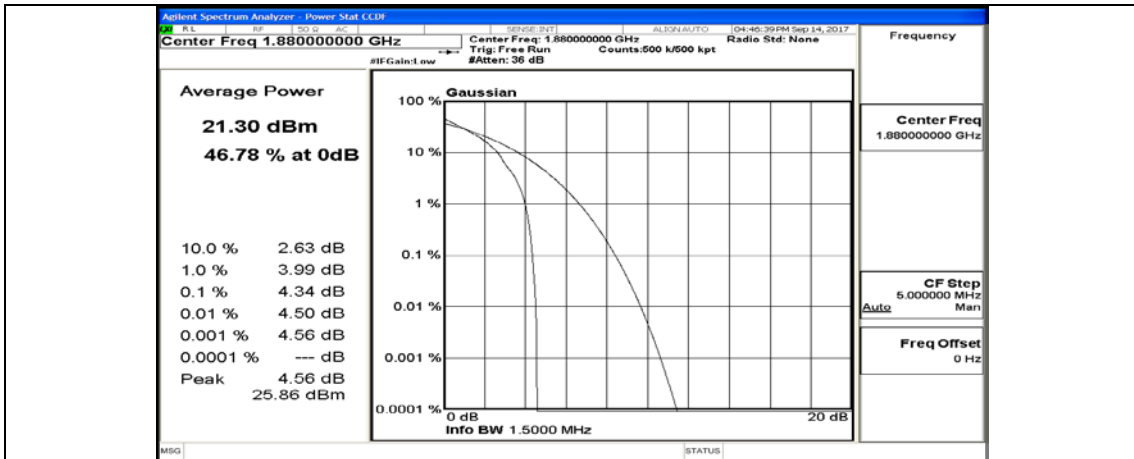
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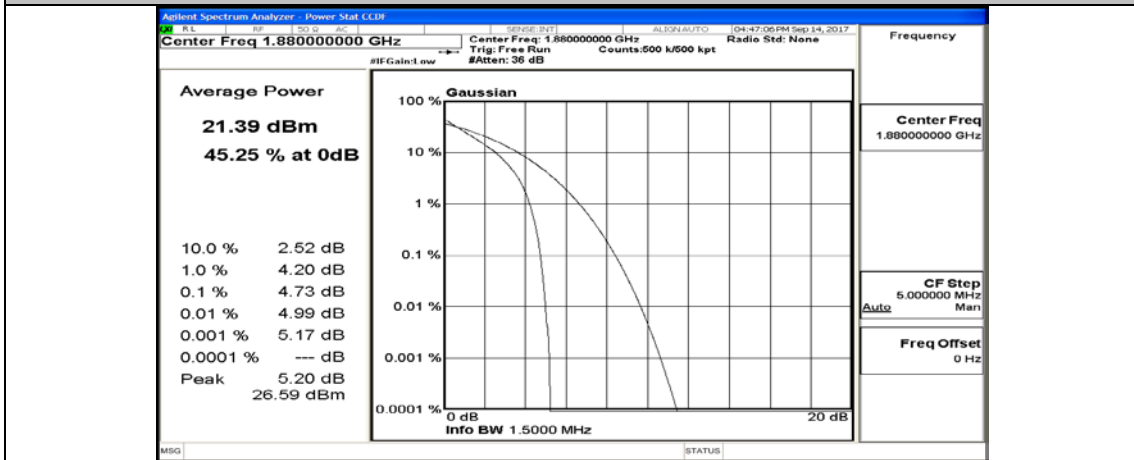
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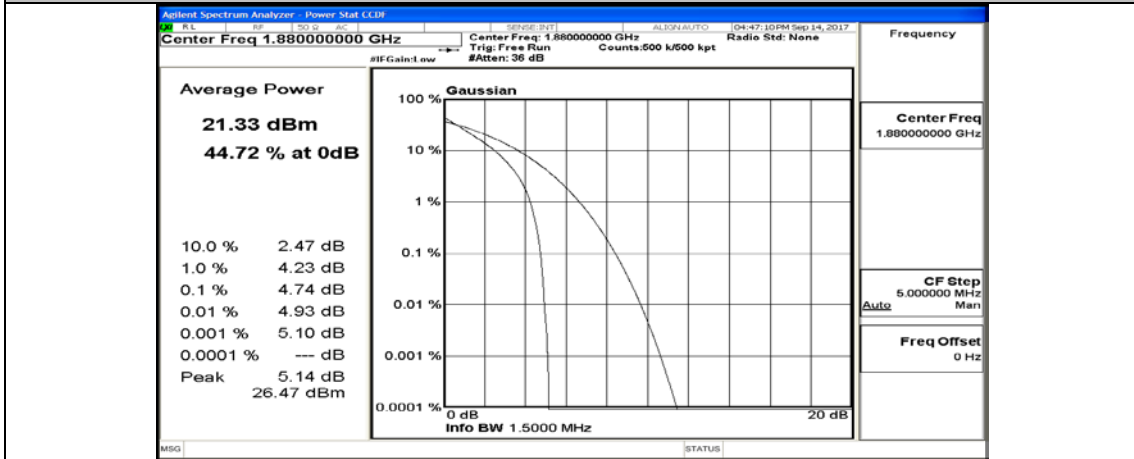
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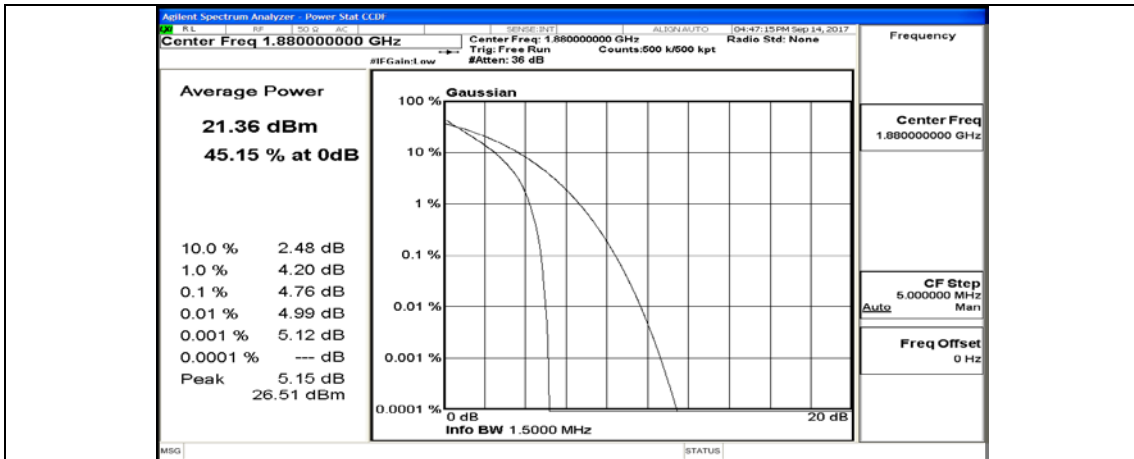
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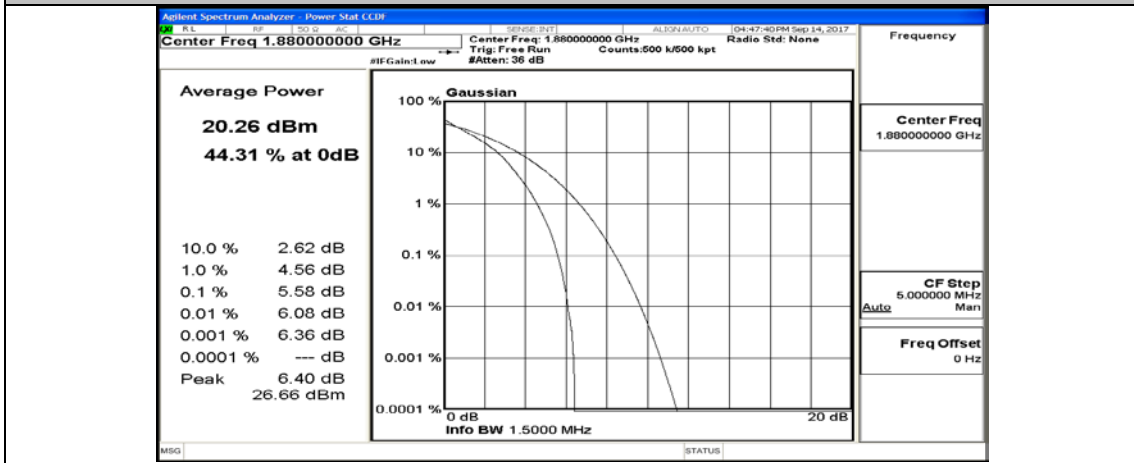
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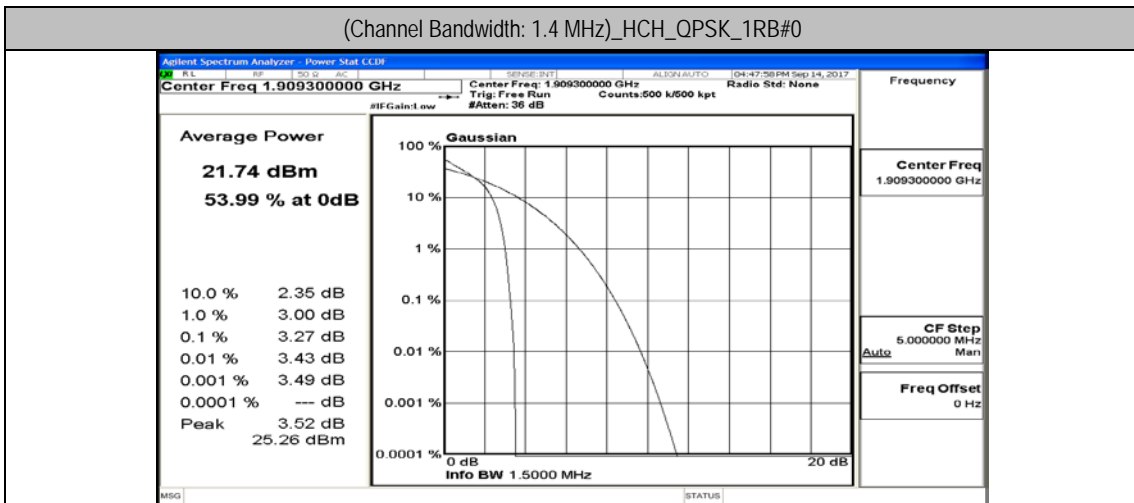
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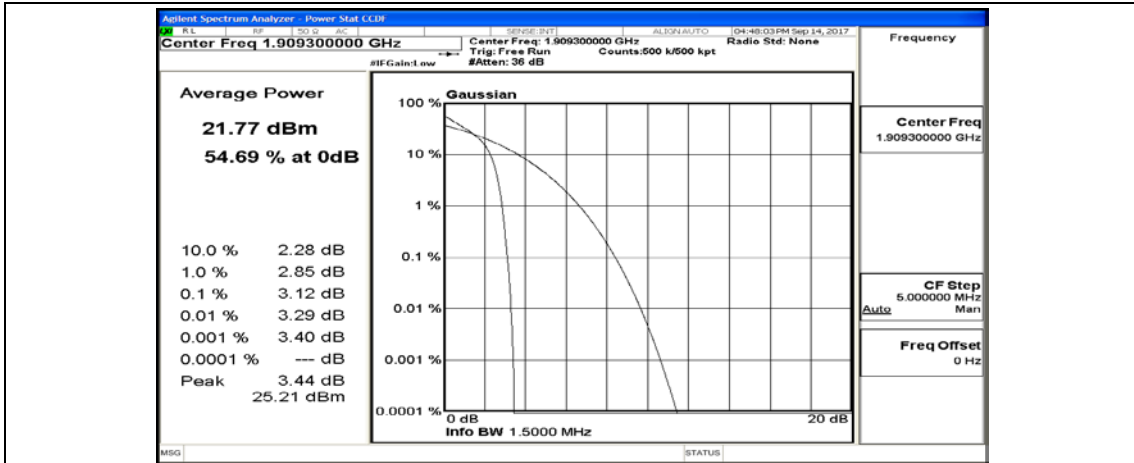
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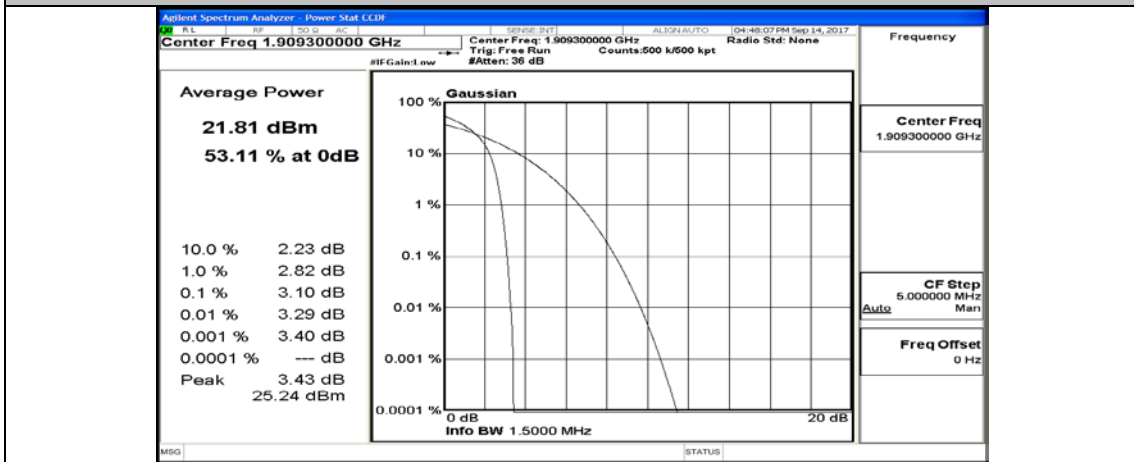
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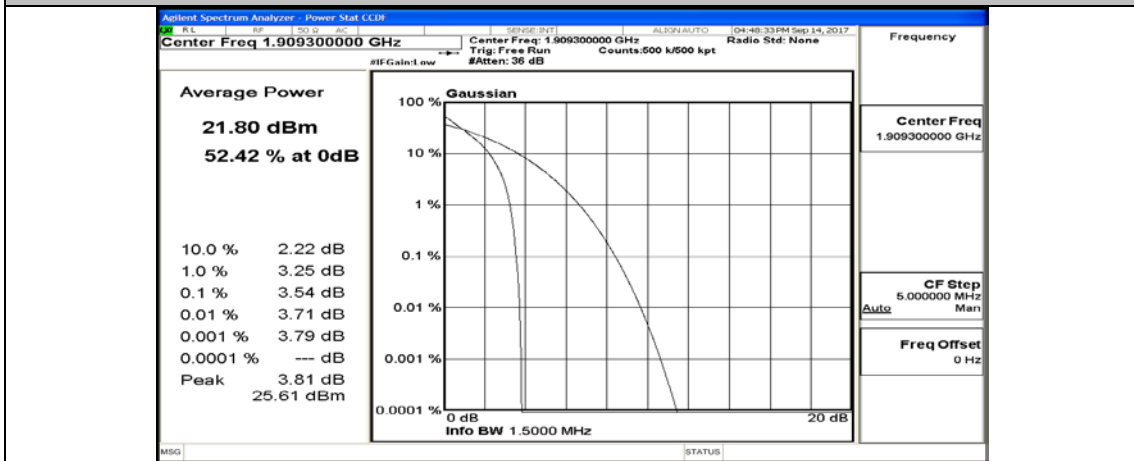
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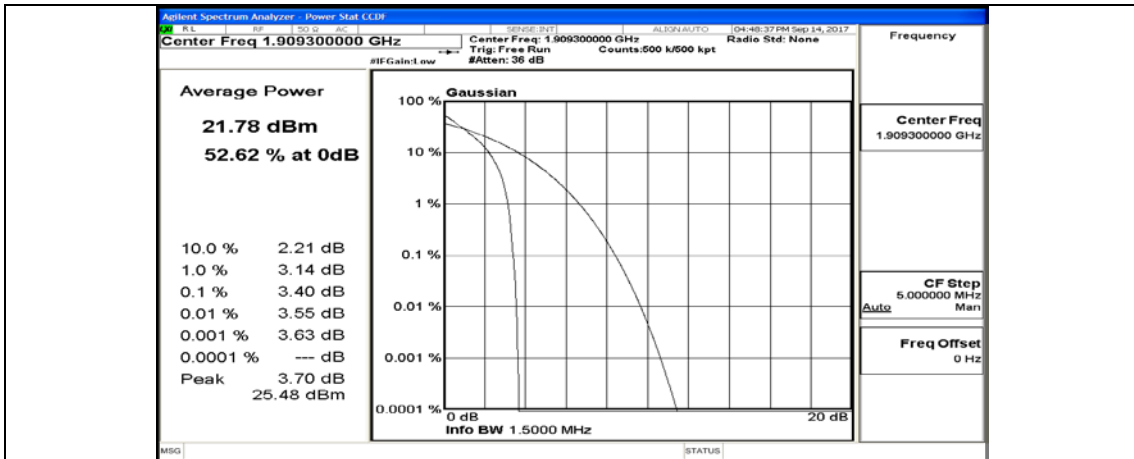
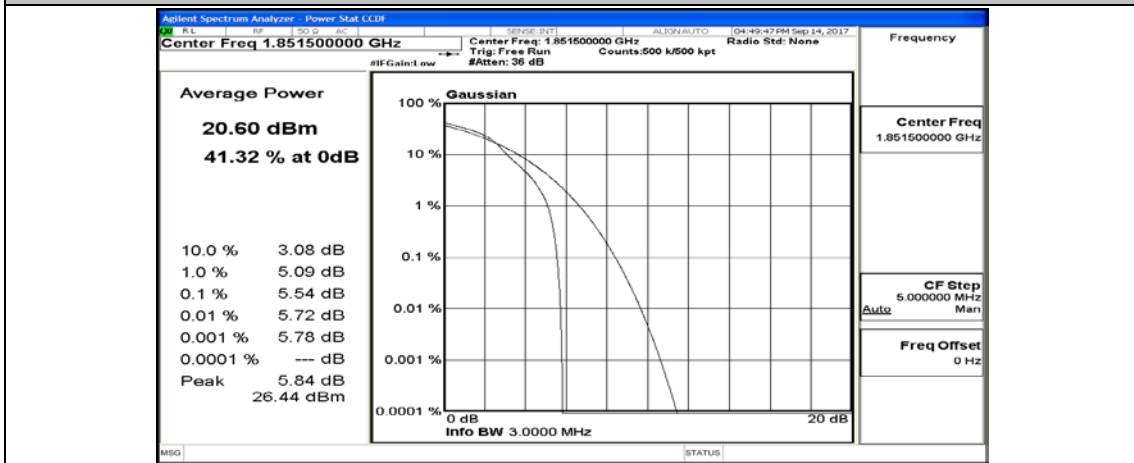(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#3
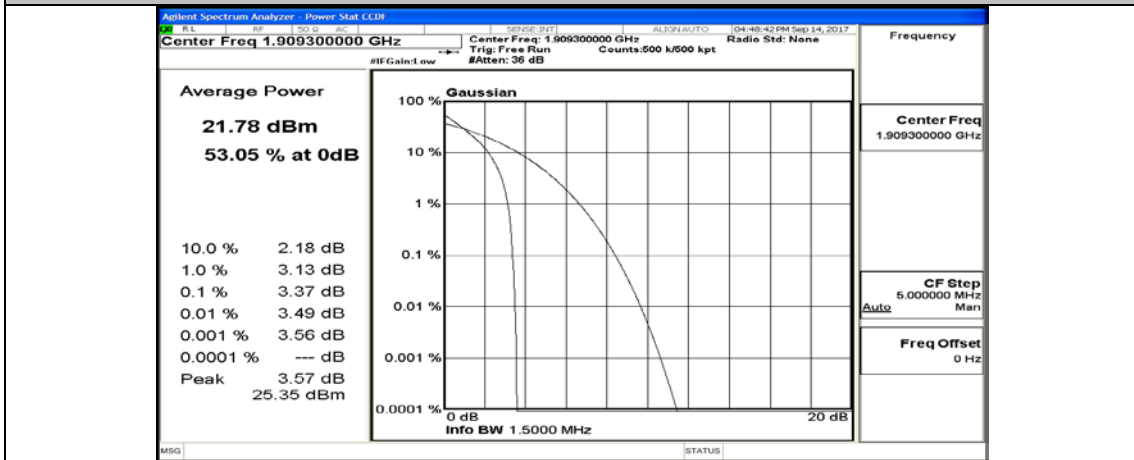
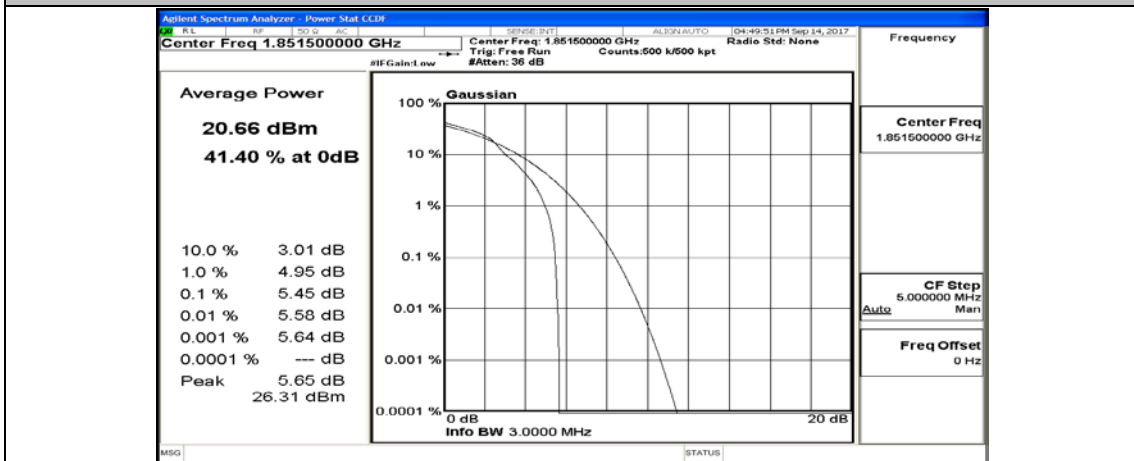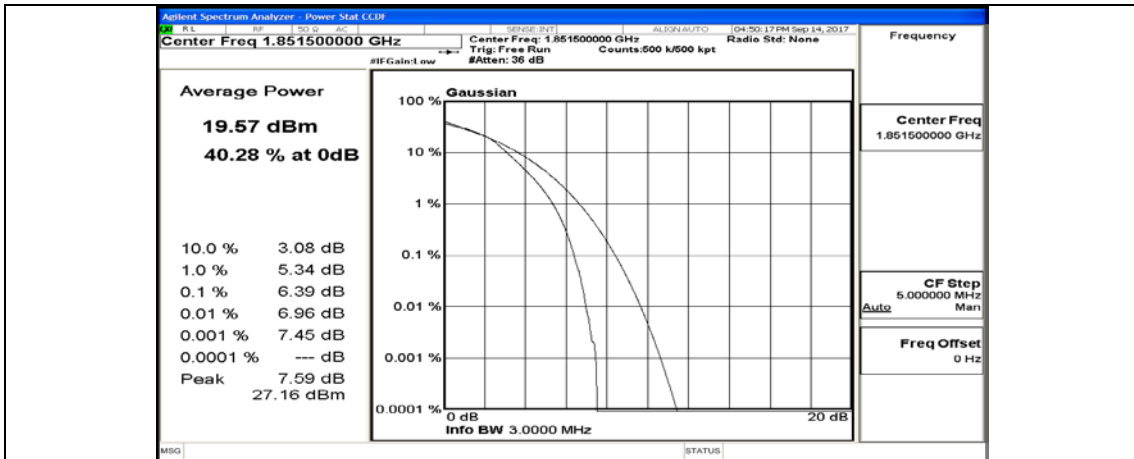(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0
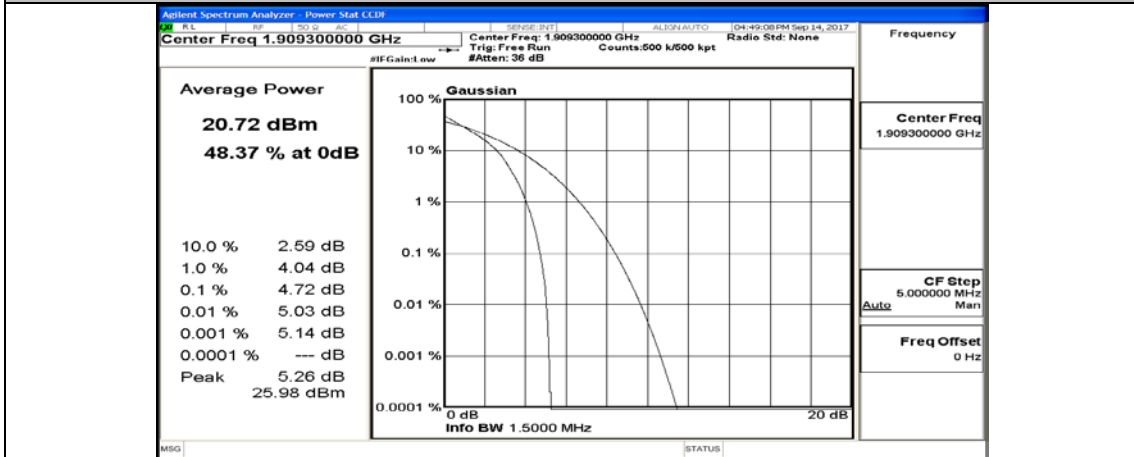
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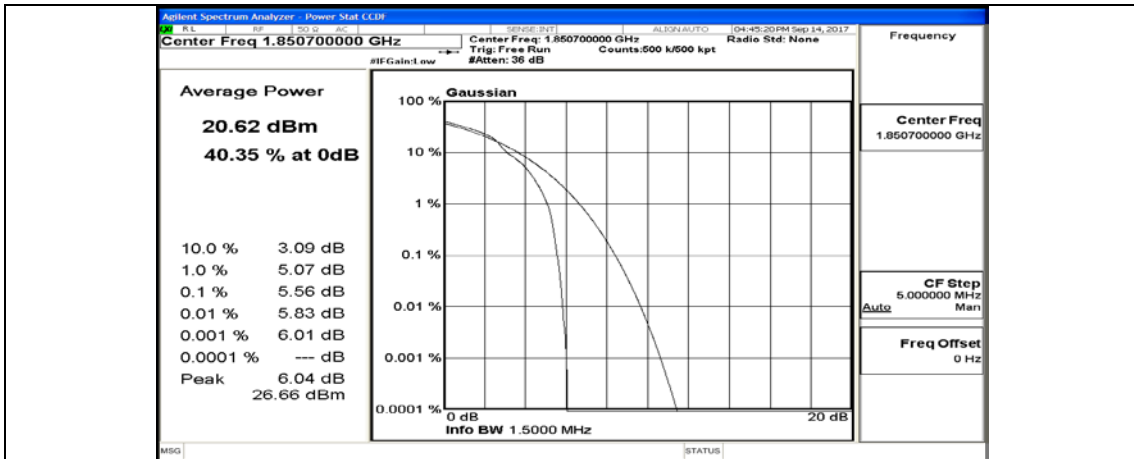
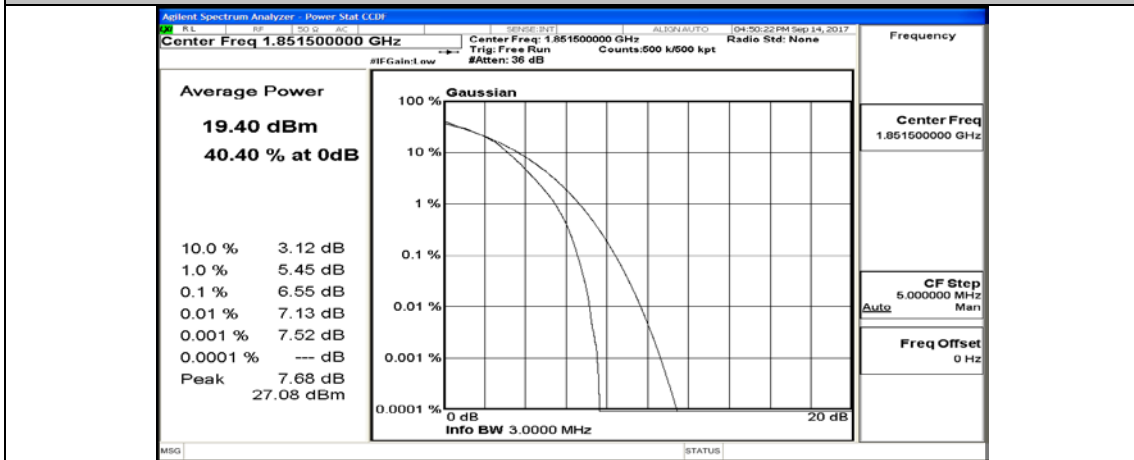(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3
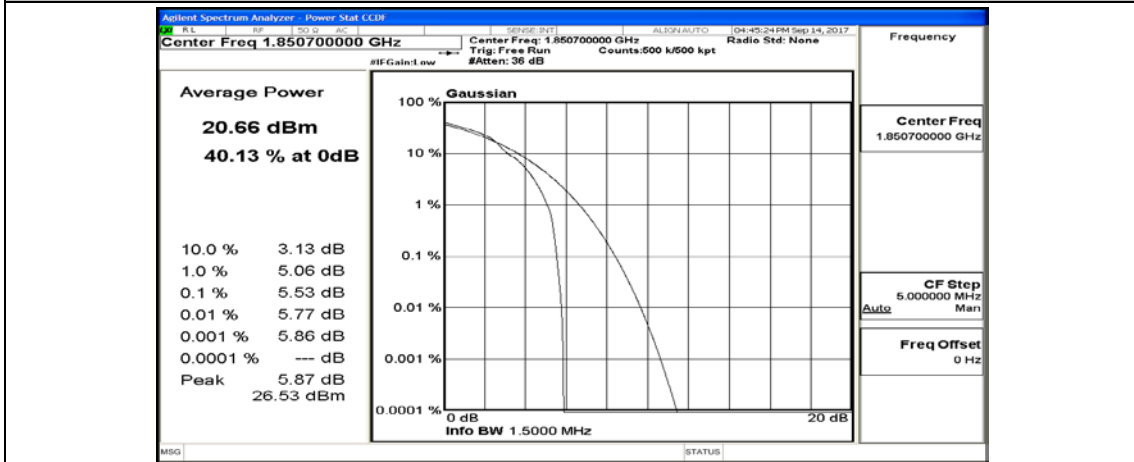
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5
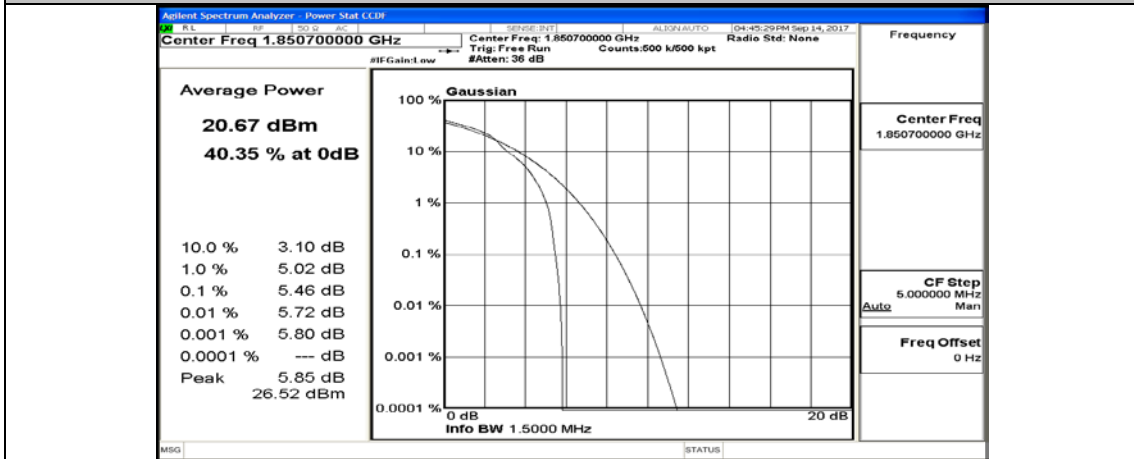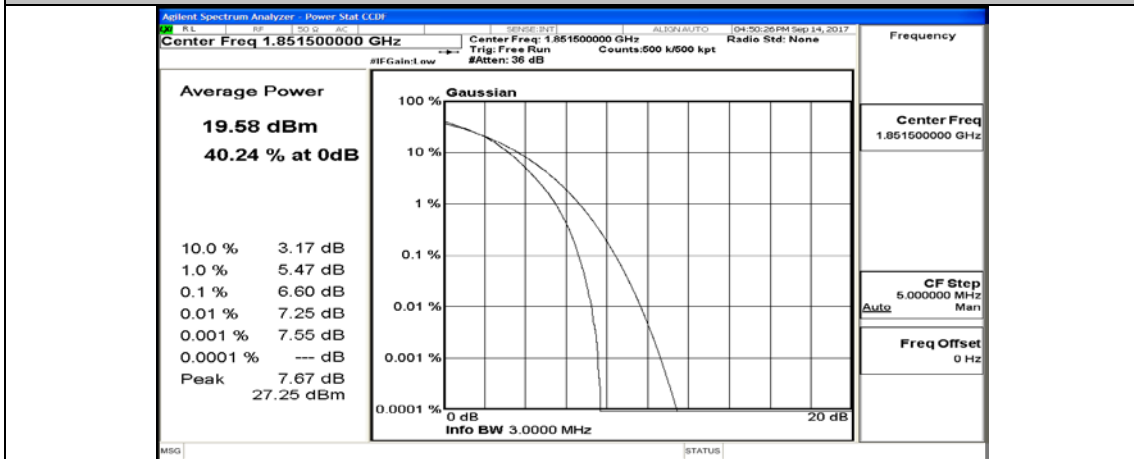

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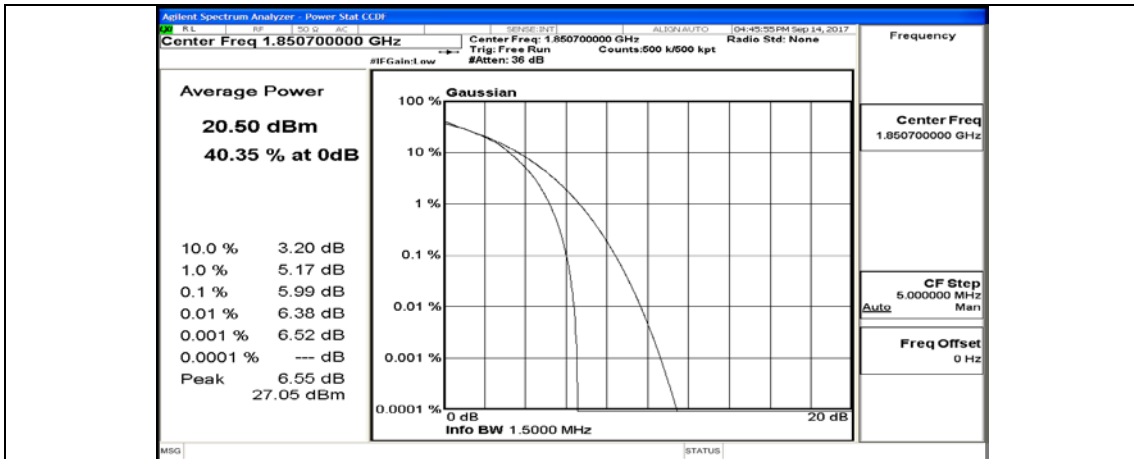
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#2
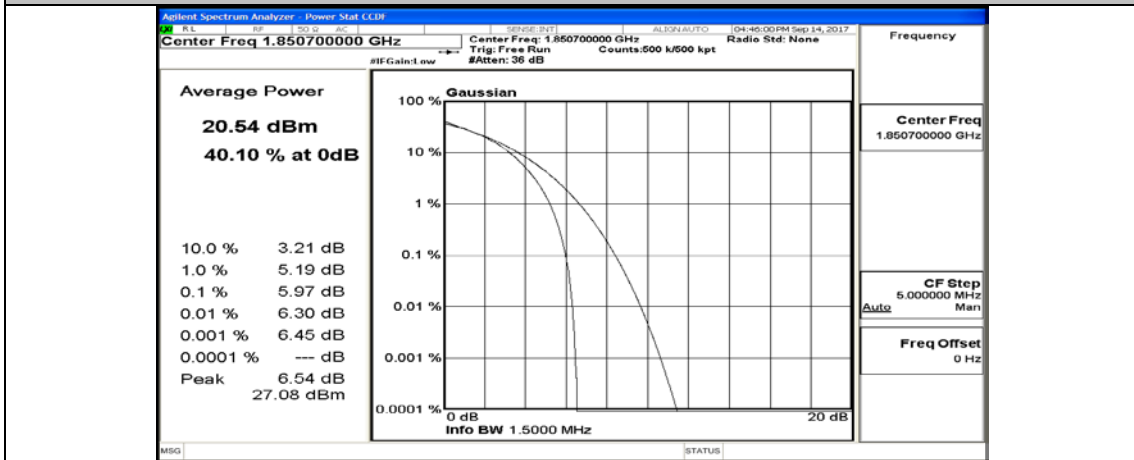
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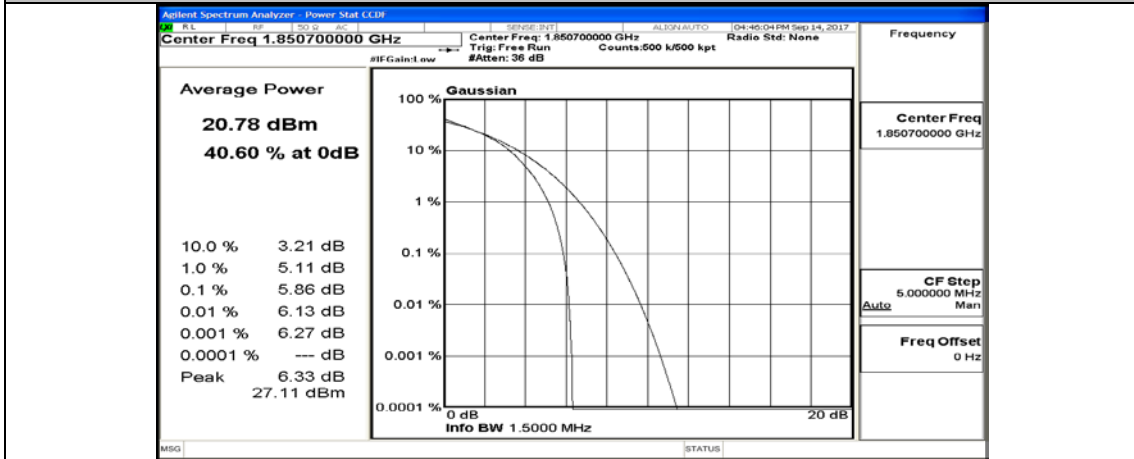
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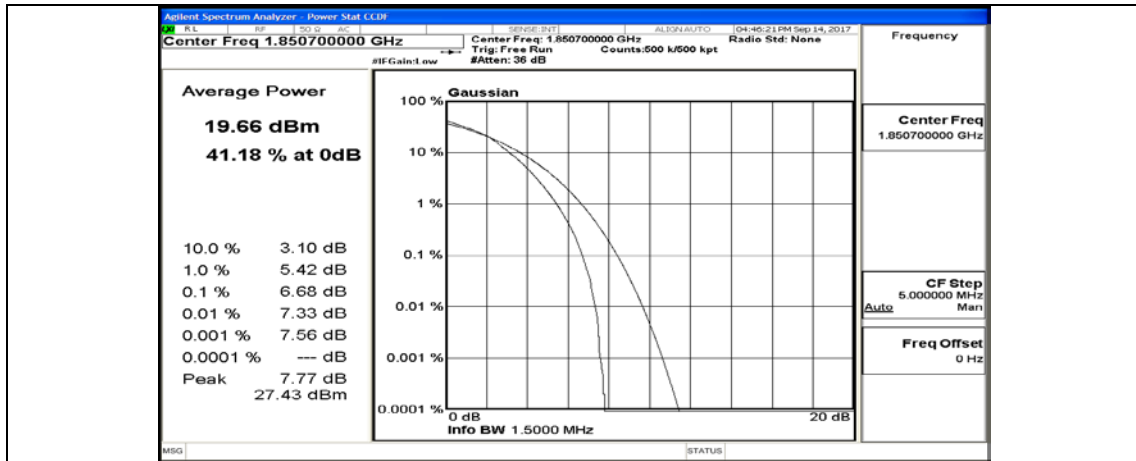
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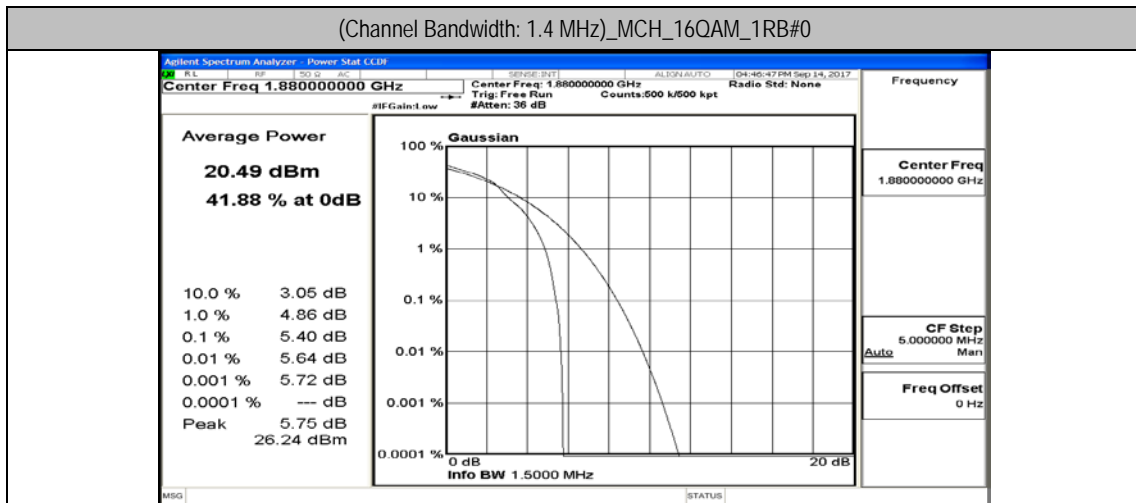
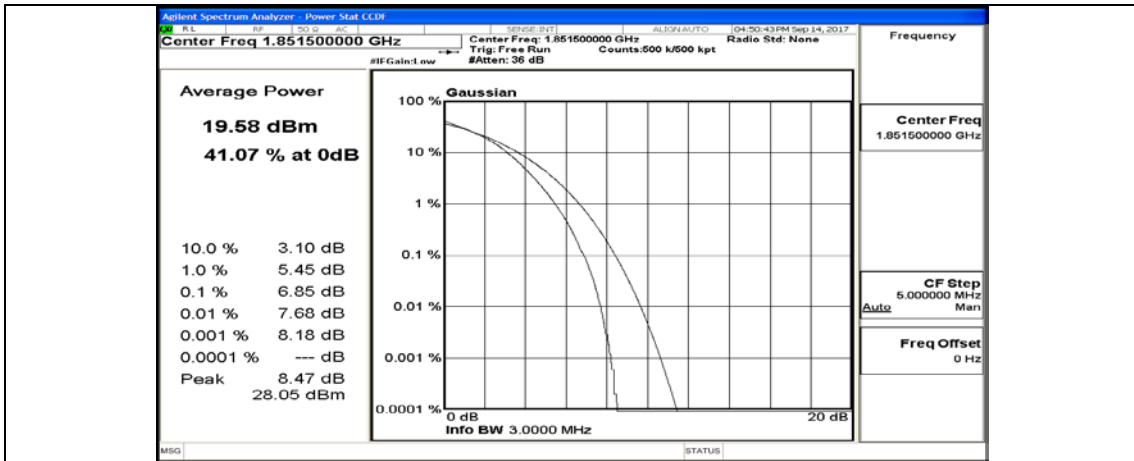(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3
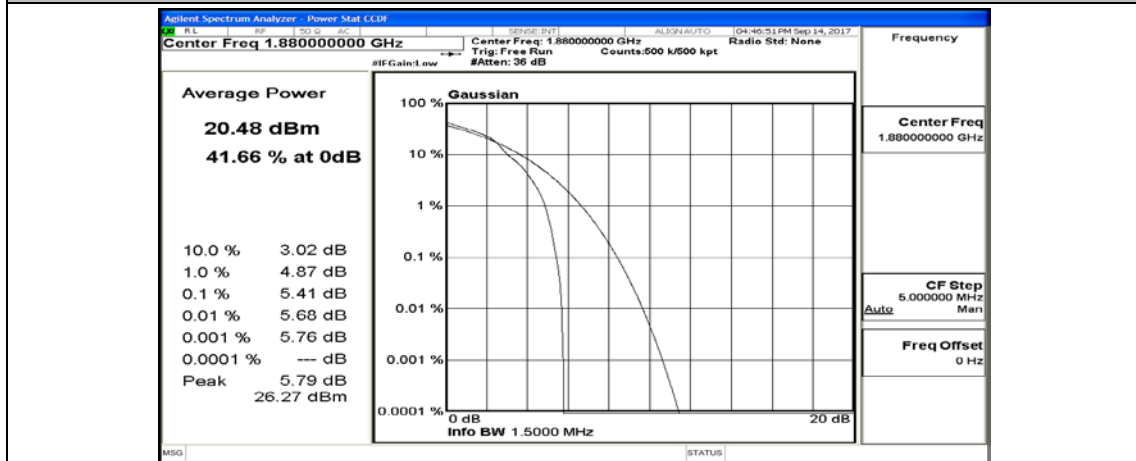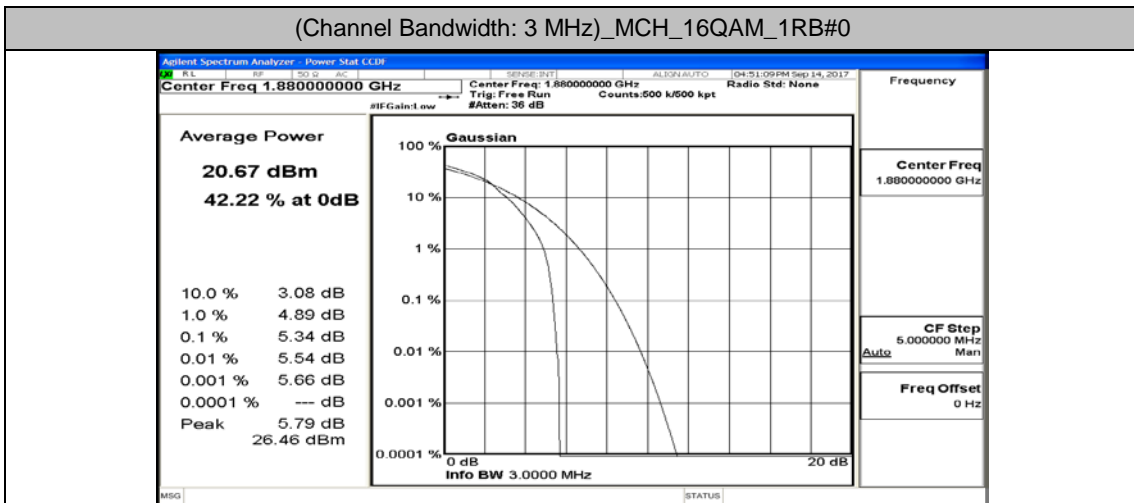

(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5
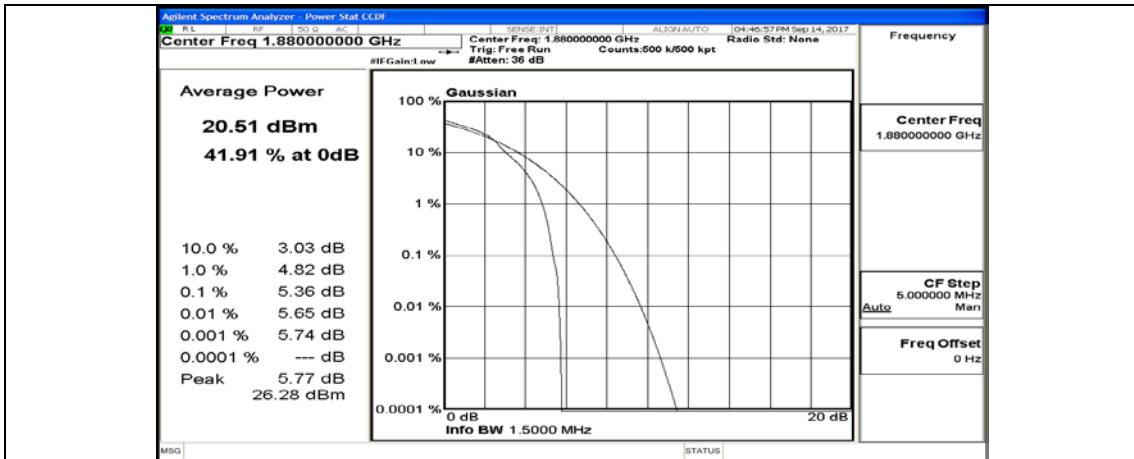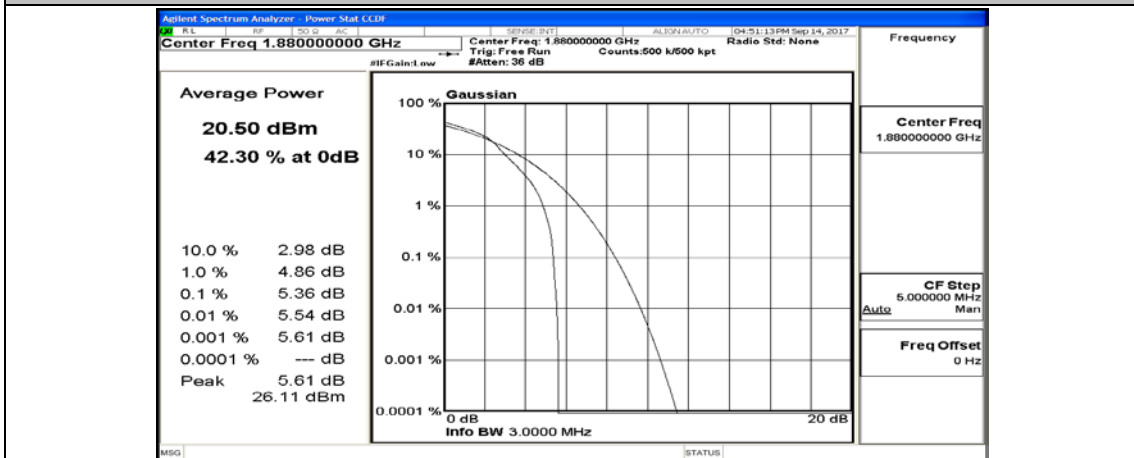
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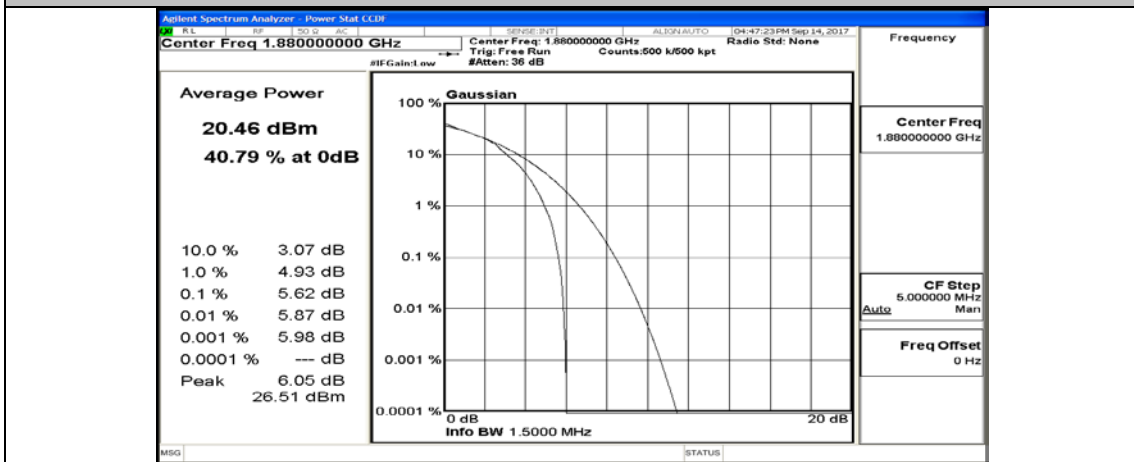
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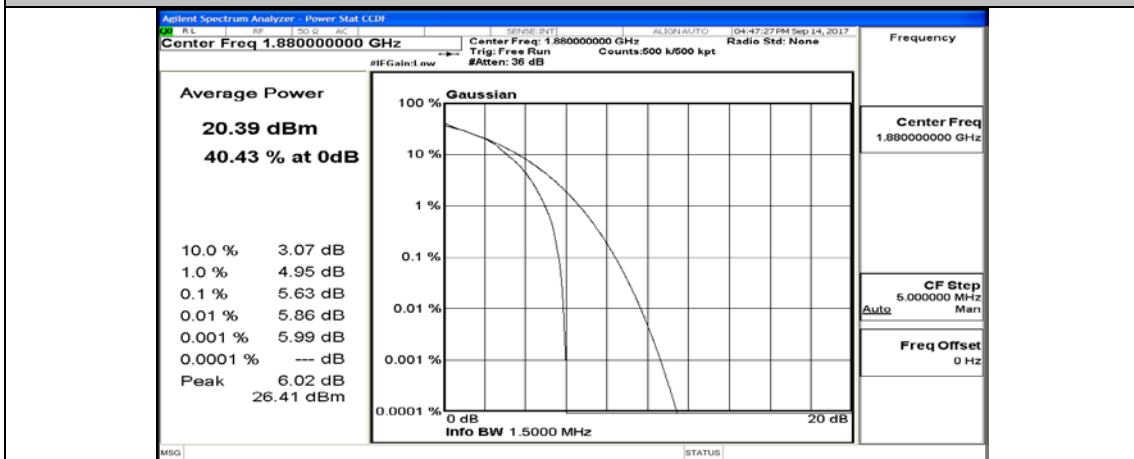
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_3RB#3
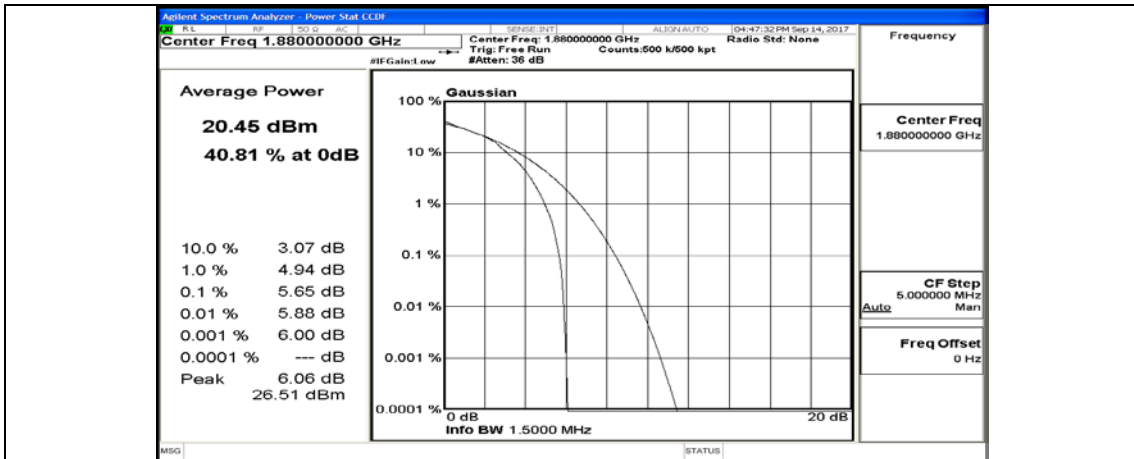
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0
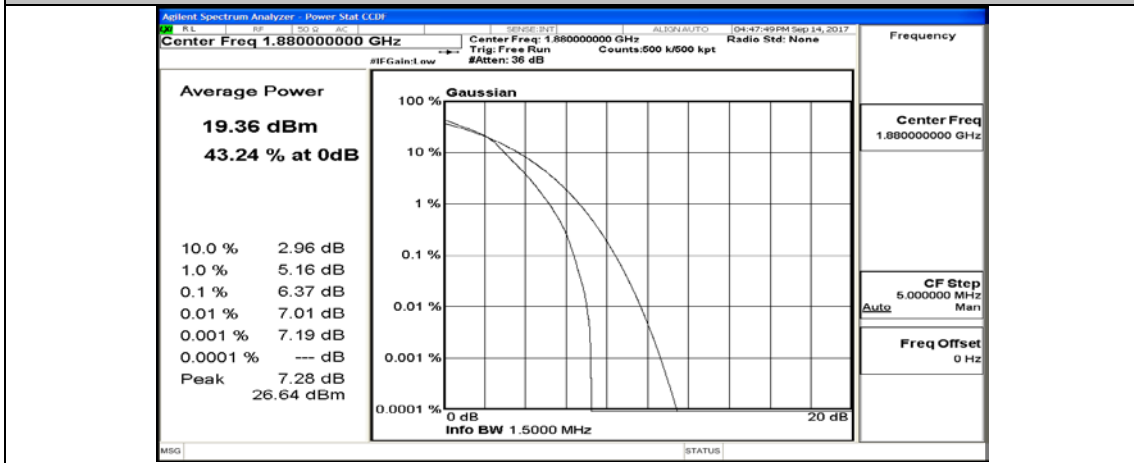
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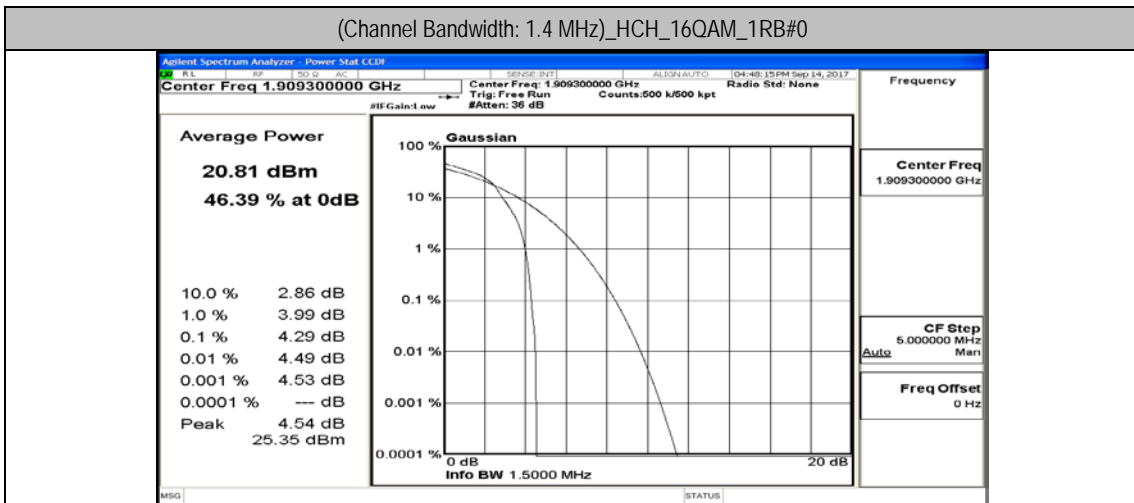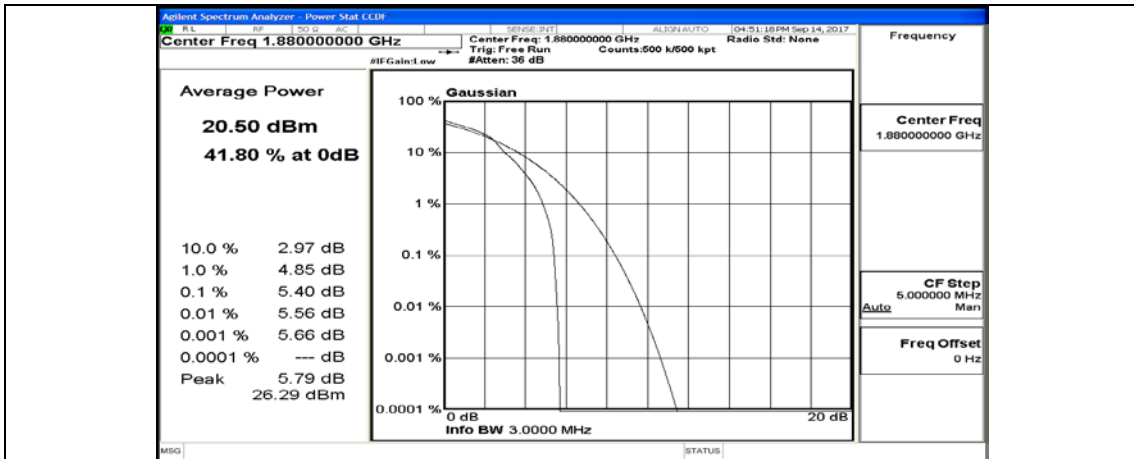

(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3
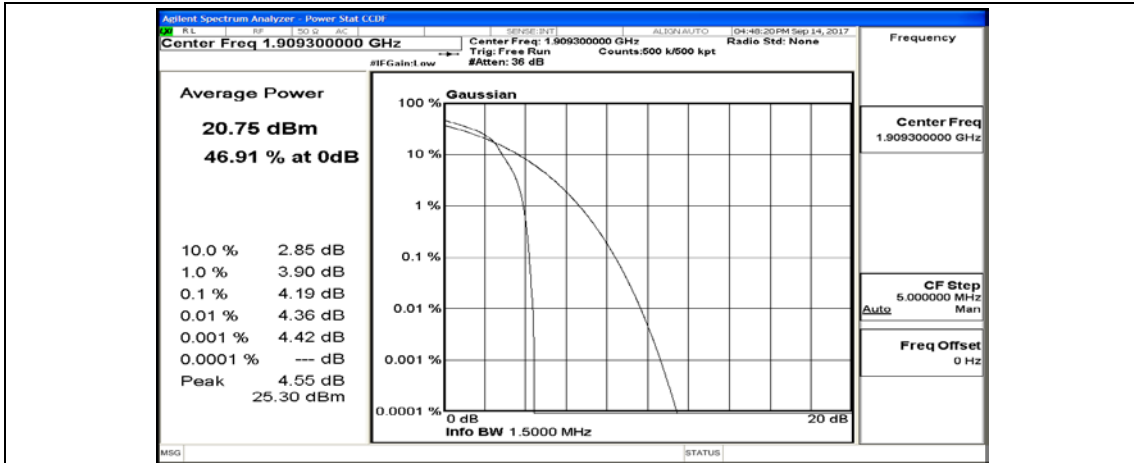
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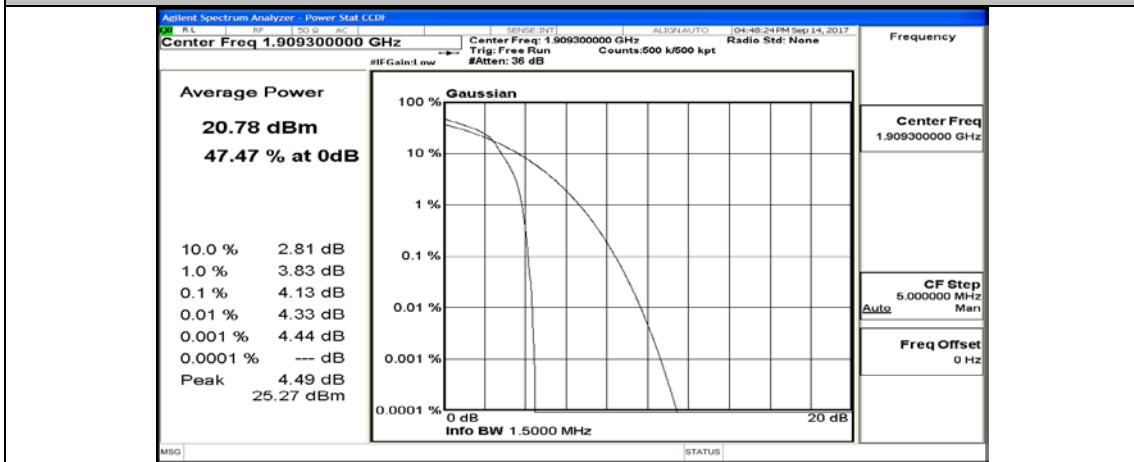
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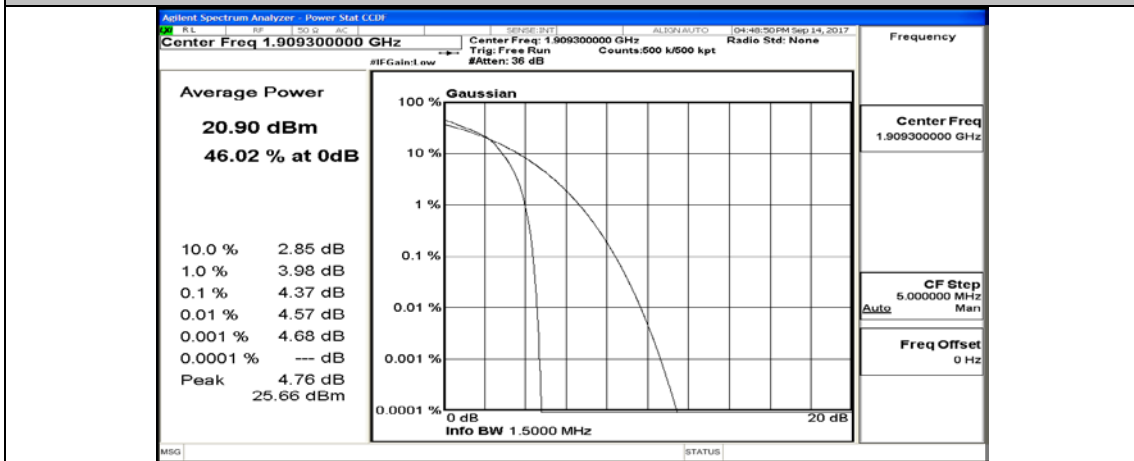
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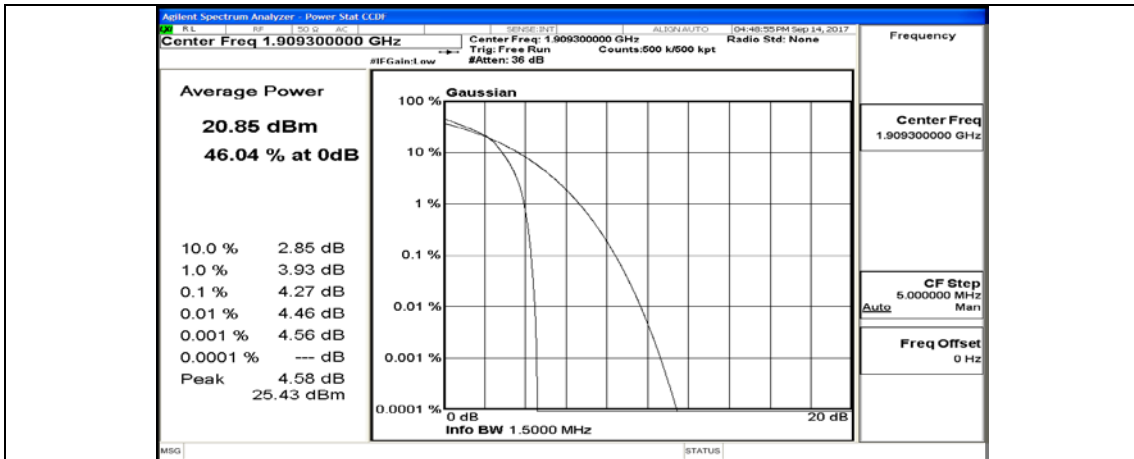
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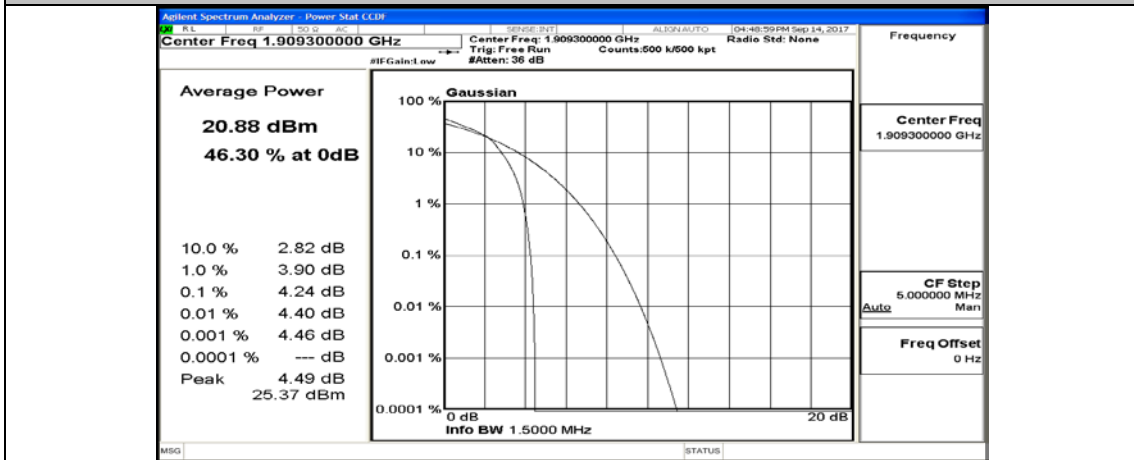
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0
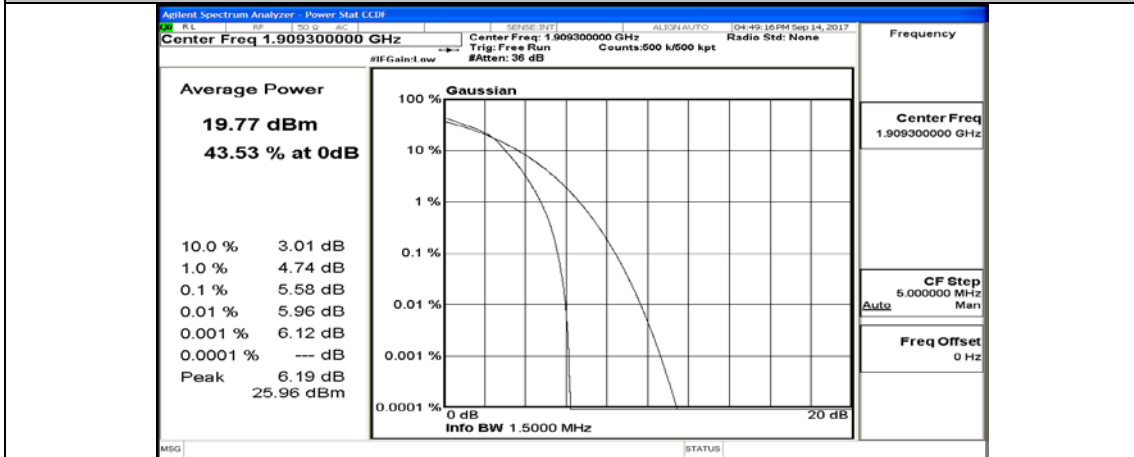
Channel Bandwidth: 3 MHz

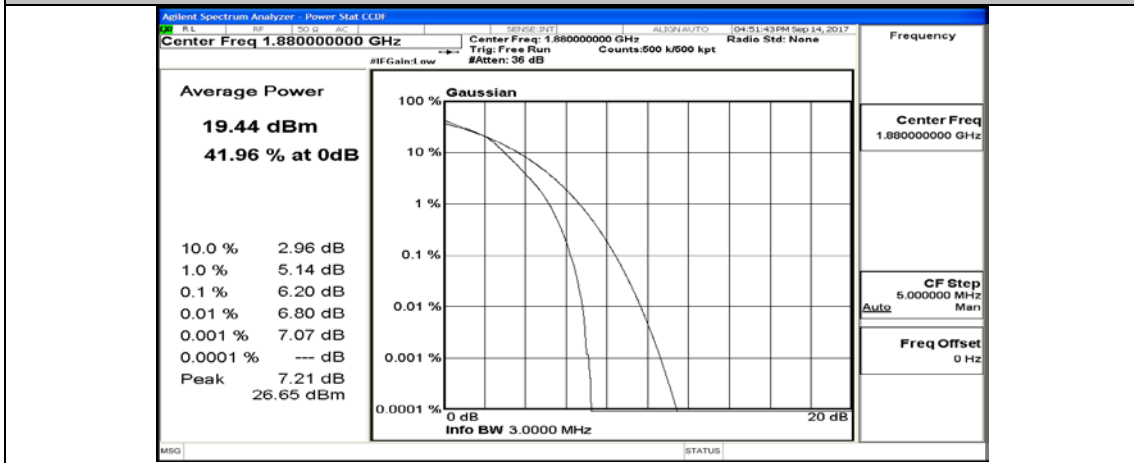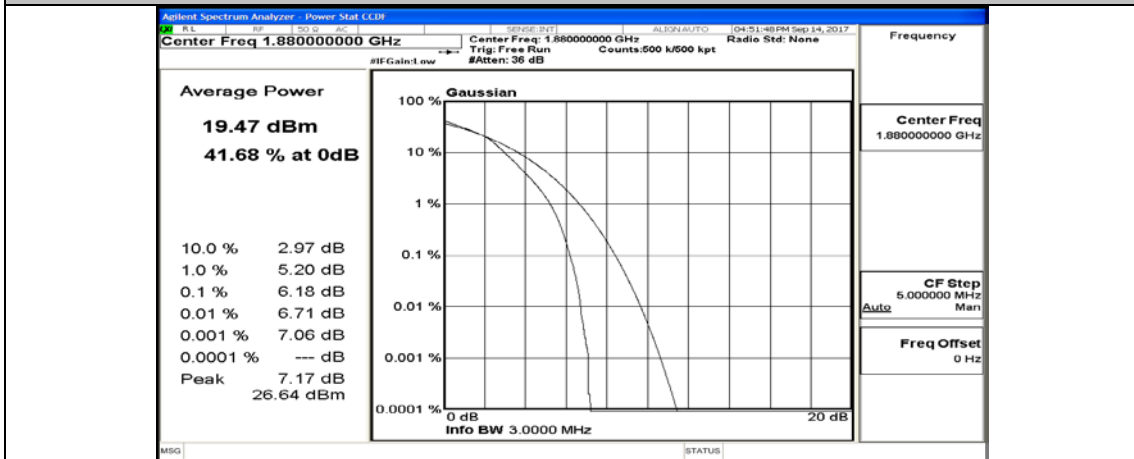| (Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0 |
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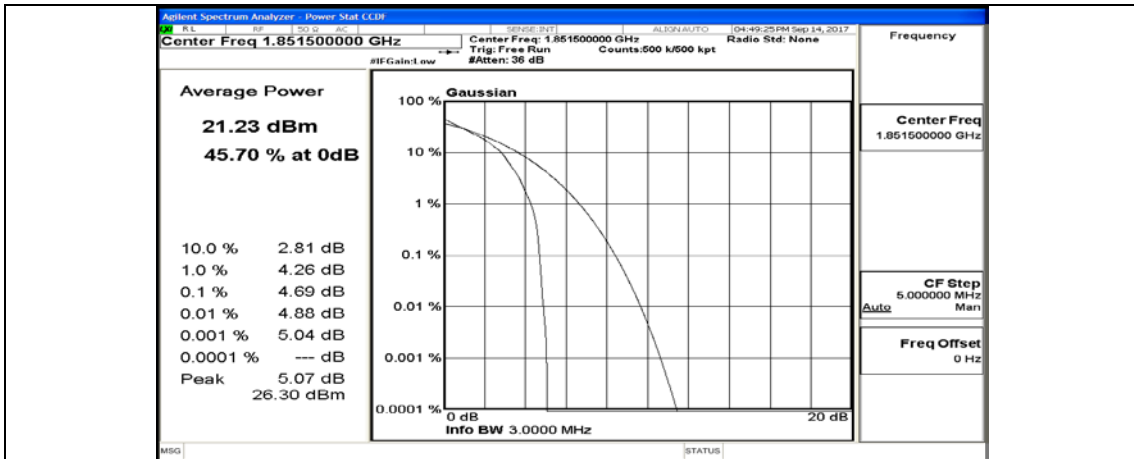
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7
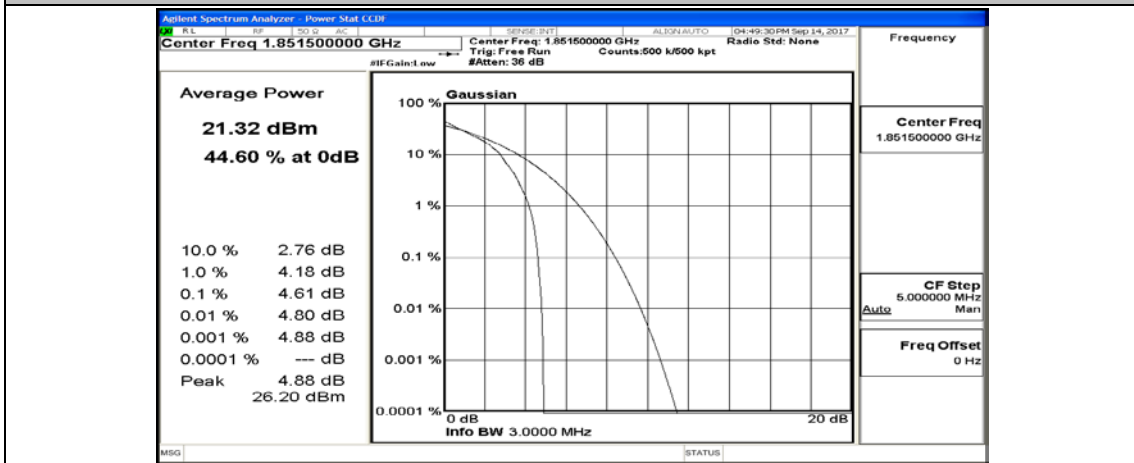
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14
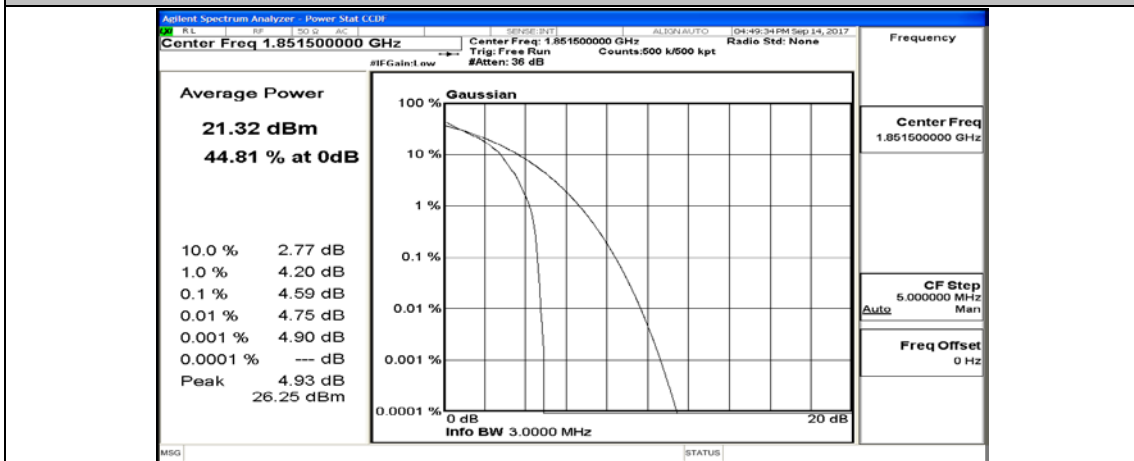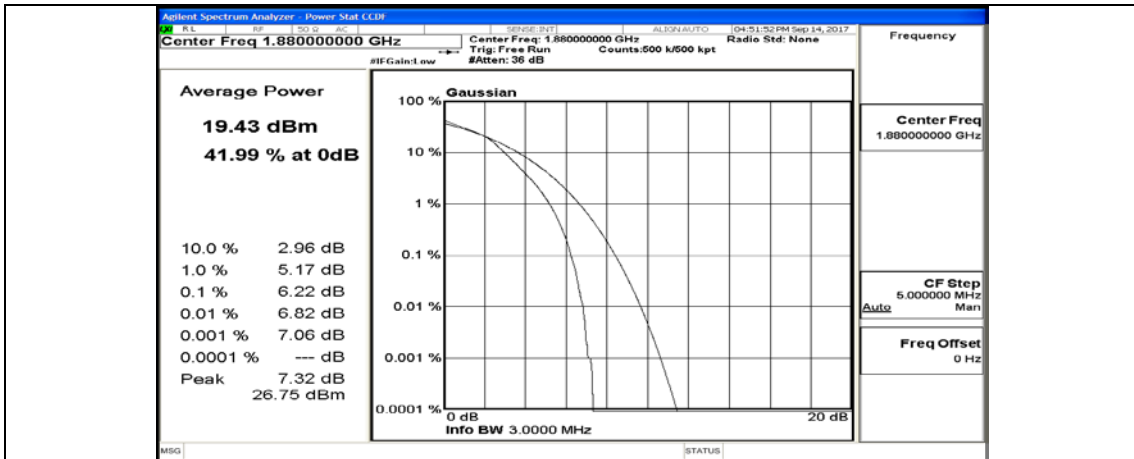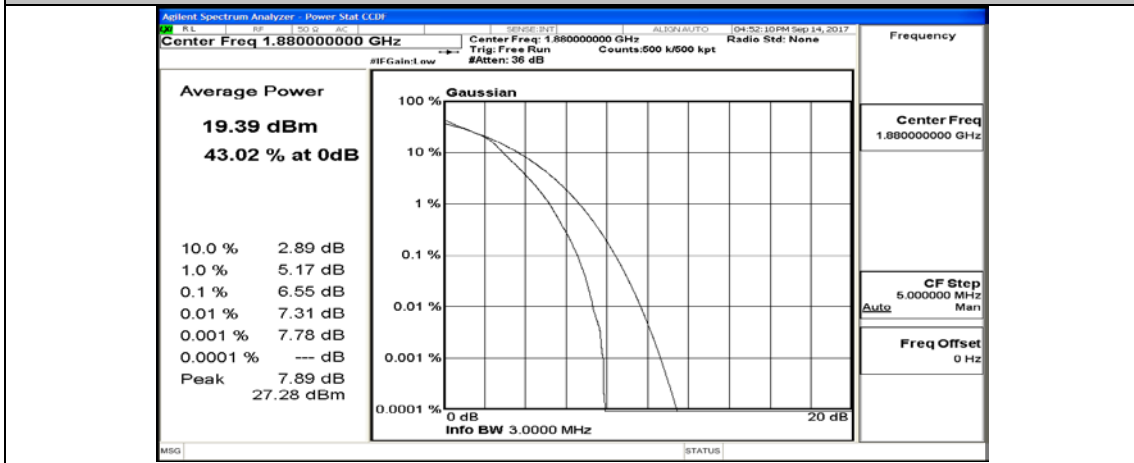

(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#0
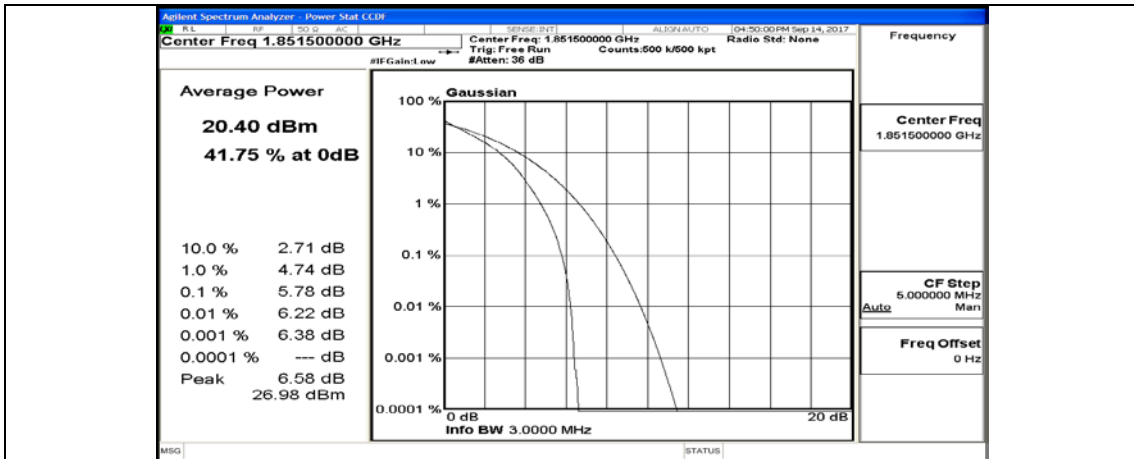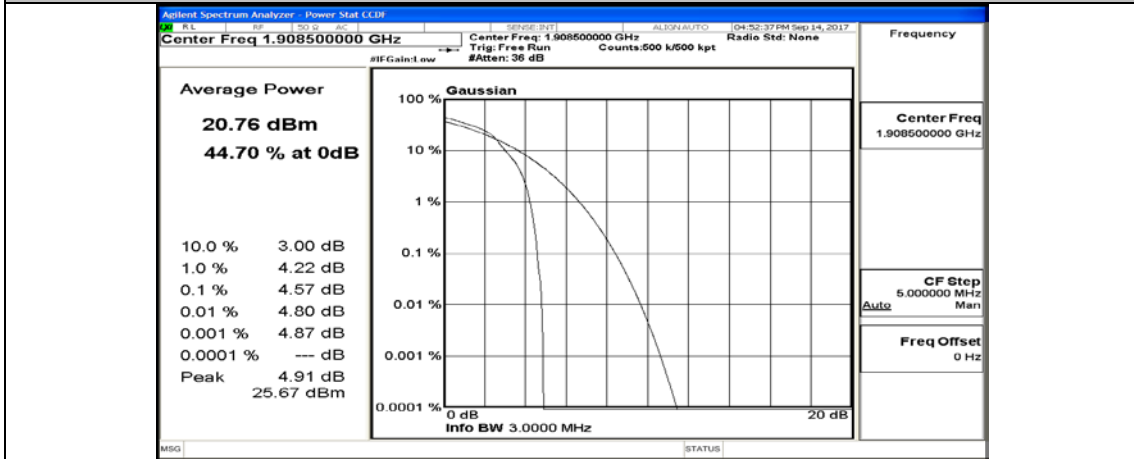
(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#4
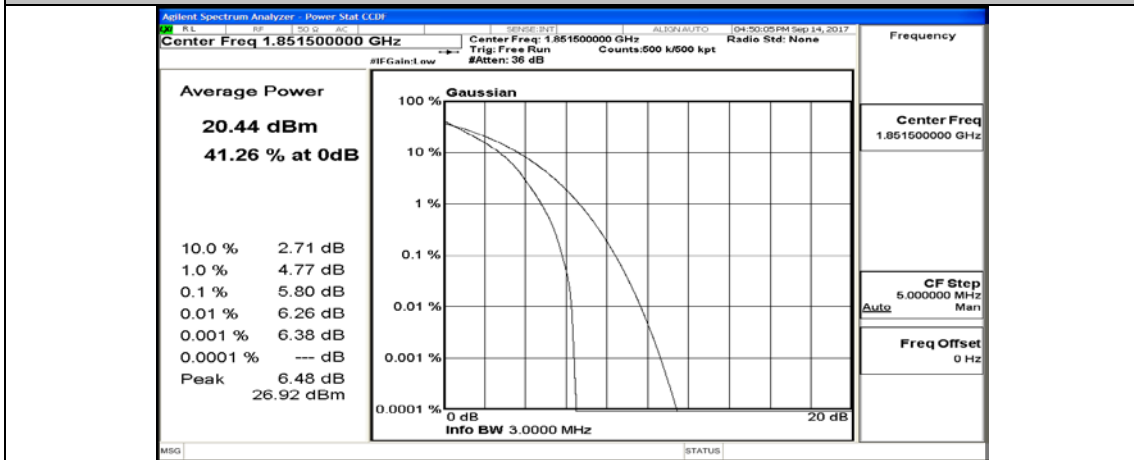
(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#7

(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7

(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#0

(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#4
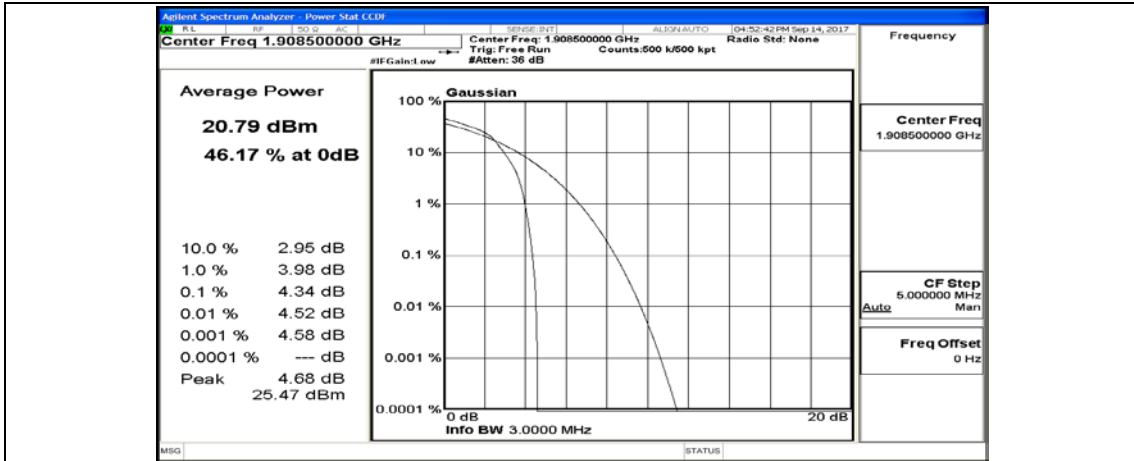

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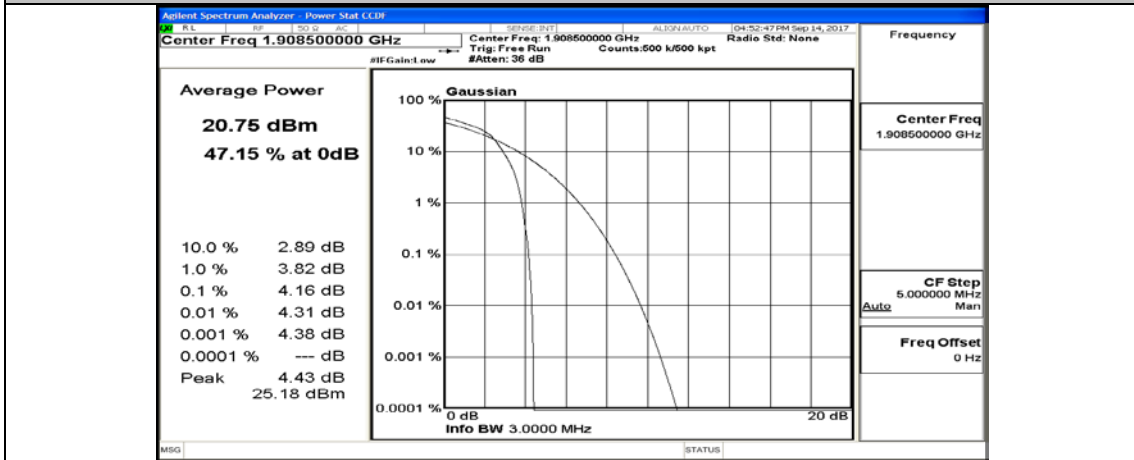
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(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0

(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#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
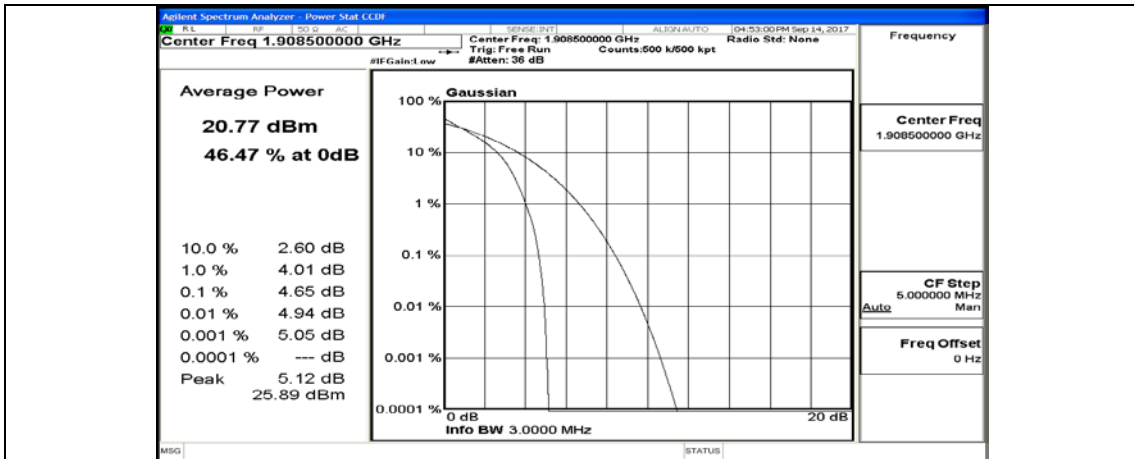
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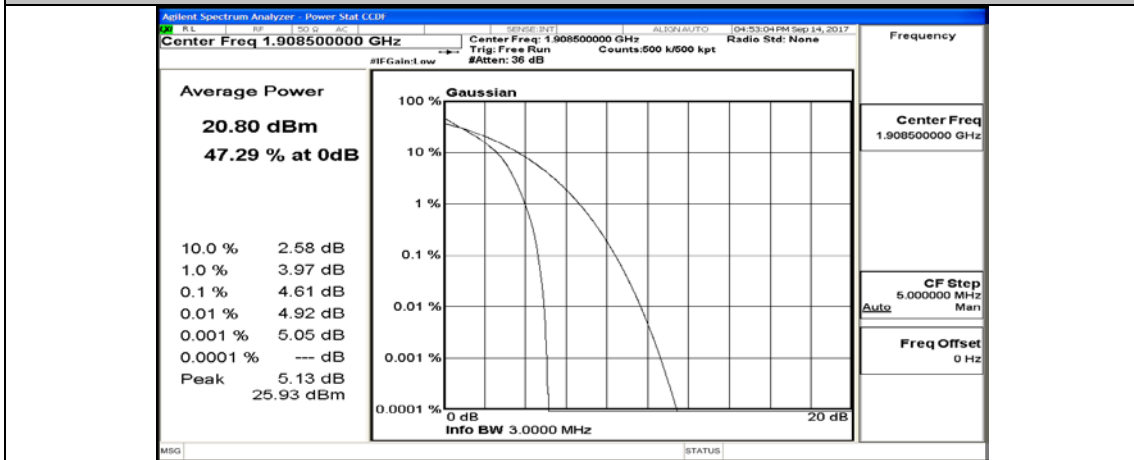
(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0
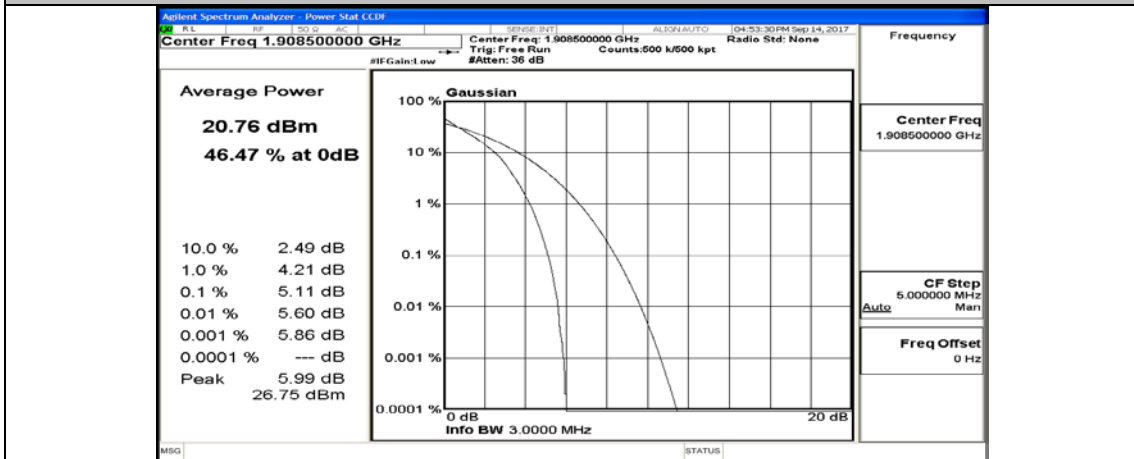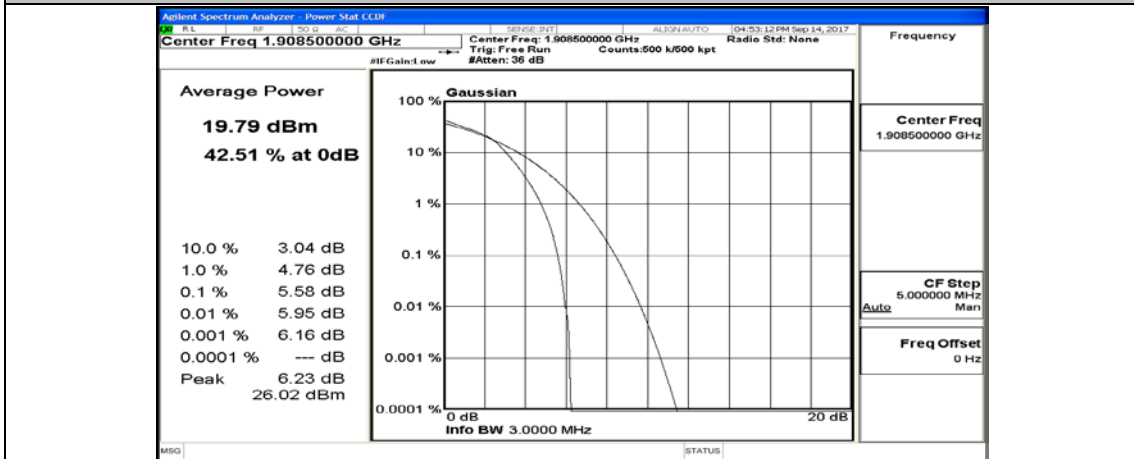

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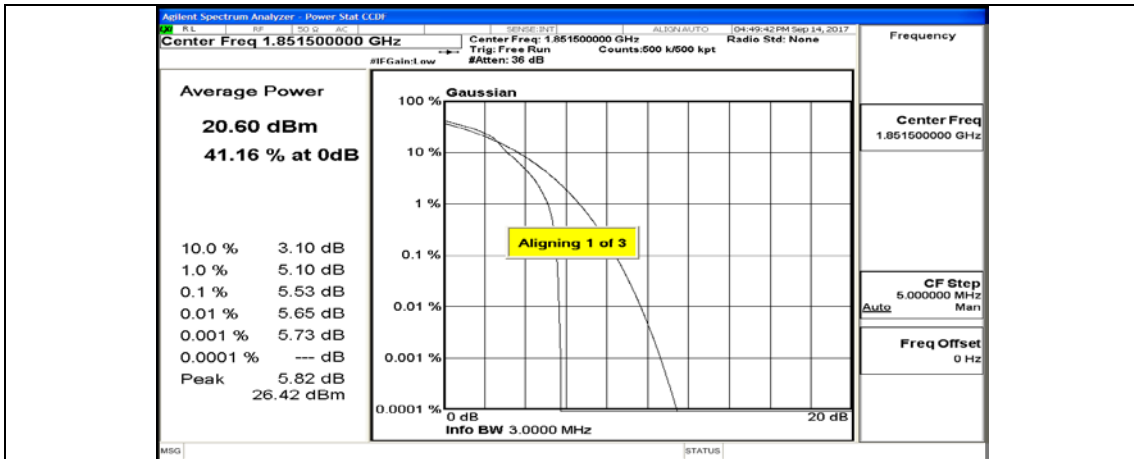
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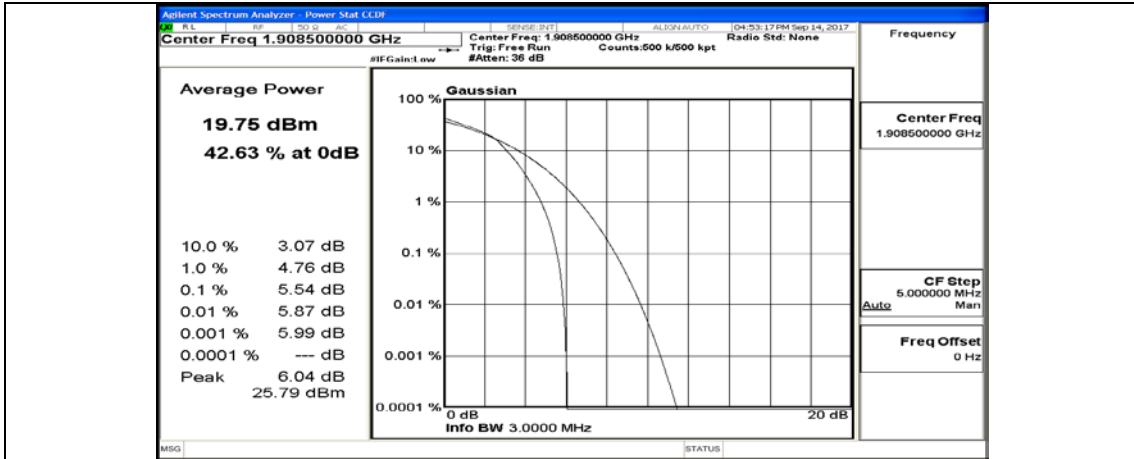

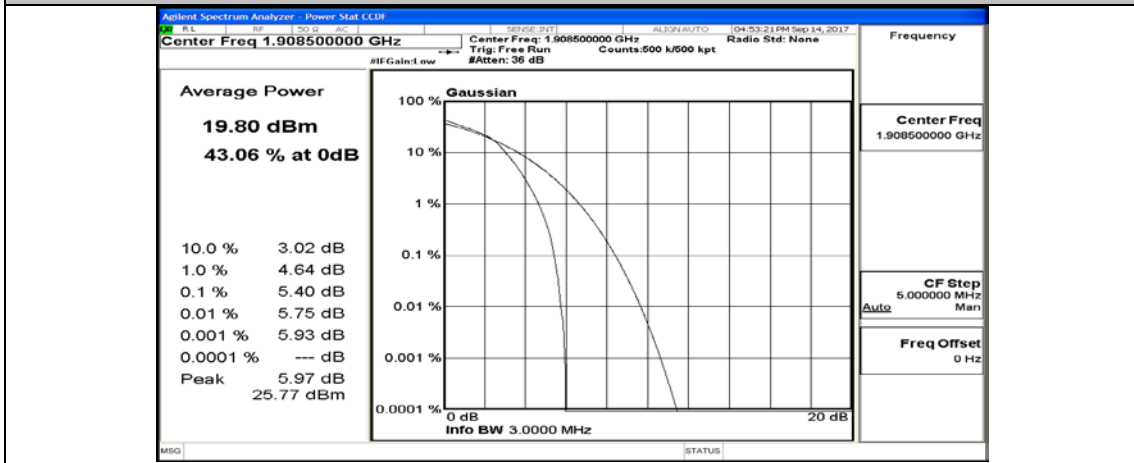(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14

(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#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_1RB#0

(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14

(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)_MCH_16QAM_15RB#0


(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0

(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#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
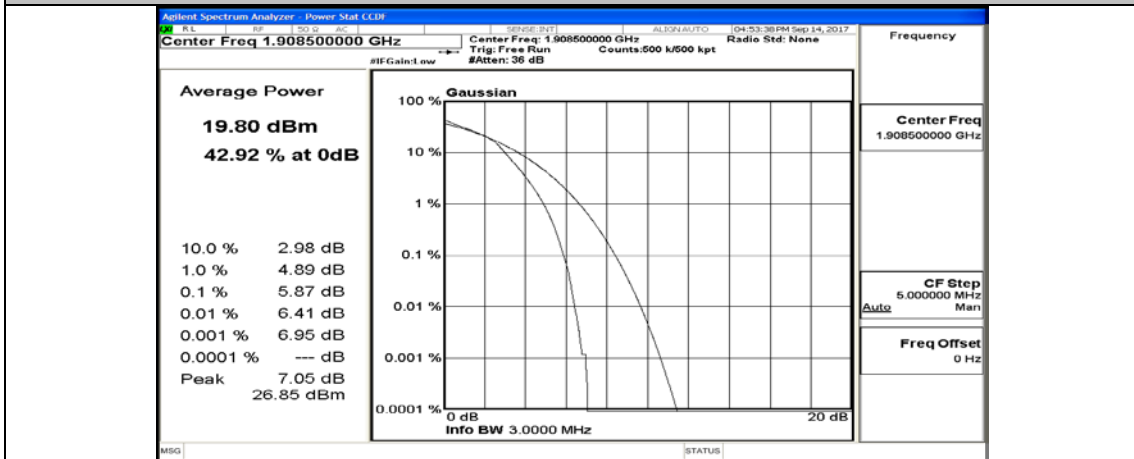
Channel Bandwidth: 5 MHz
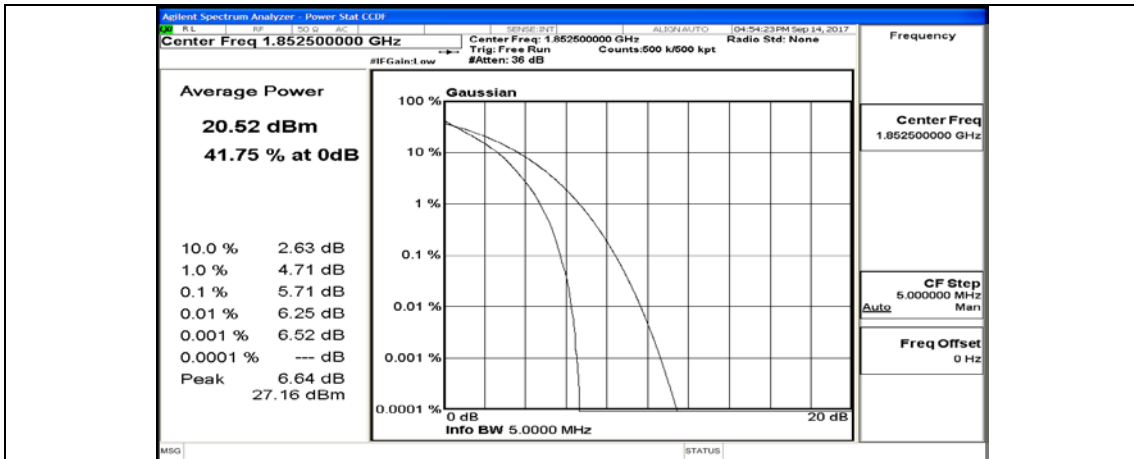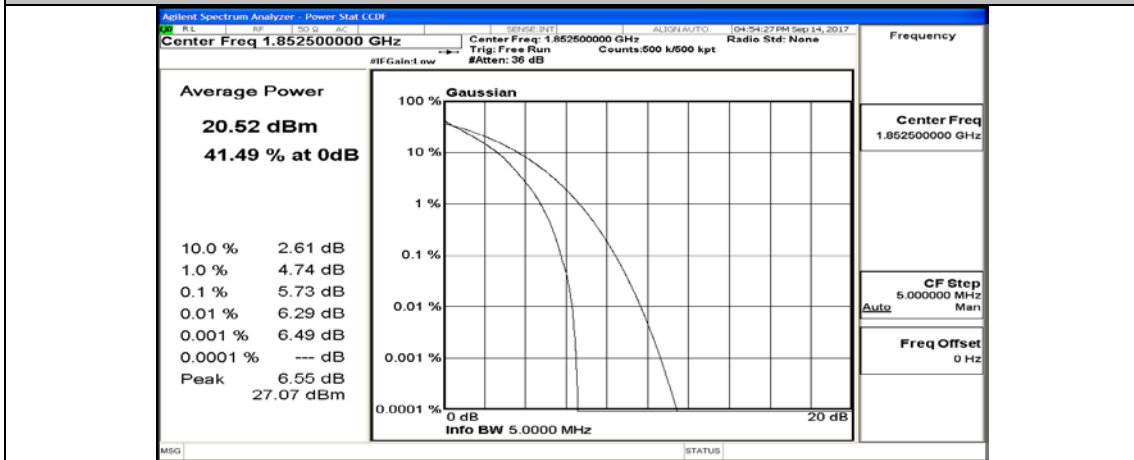
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0
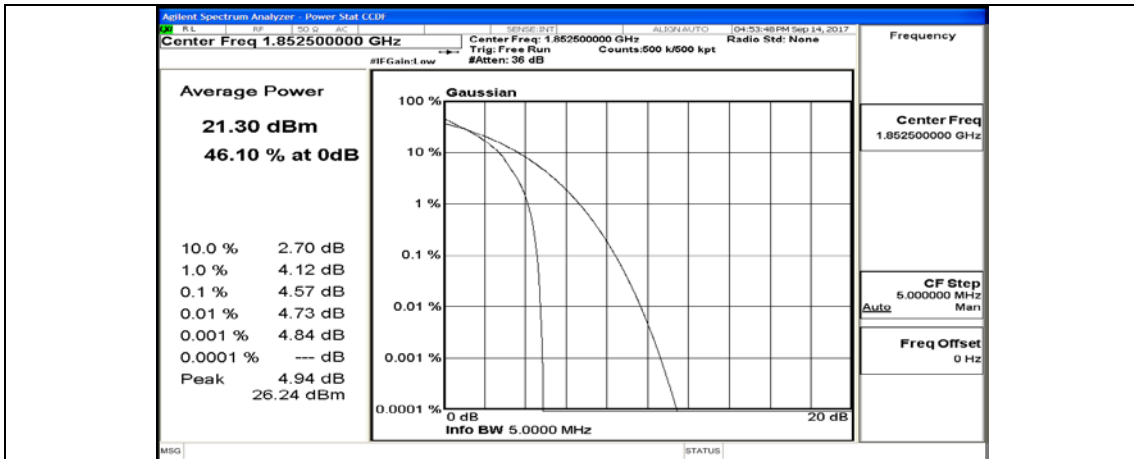
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12
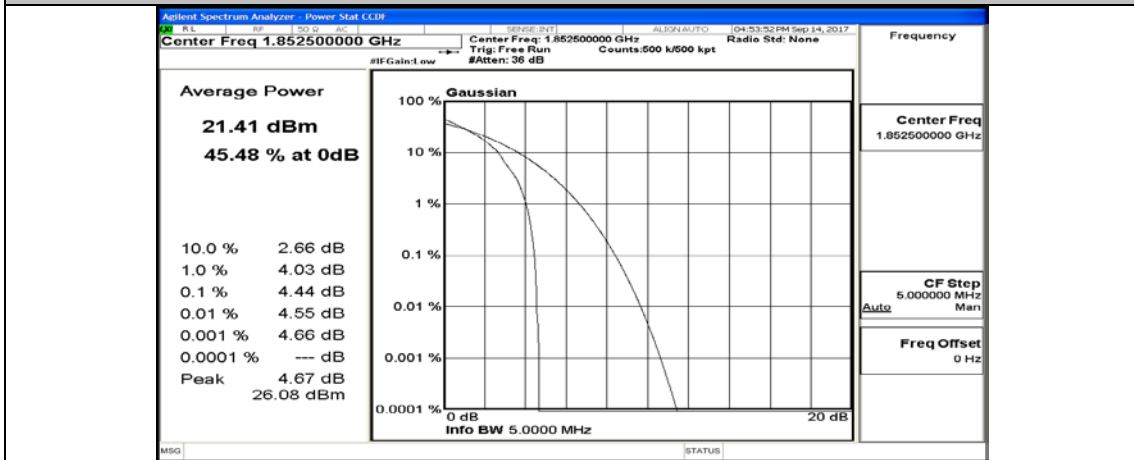
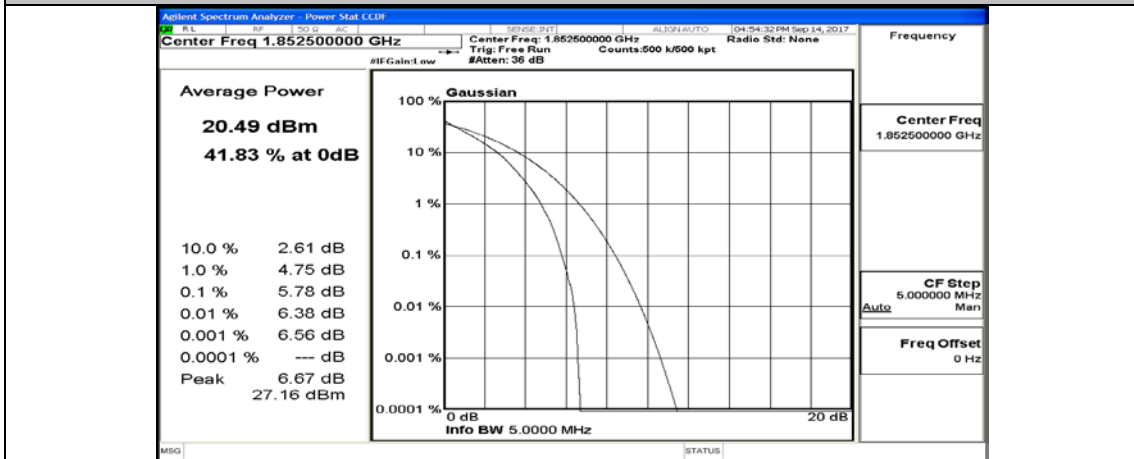(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24
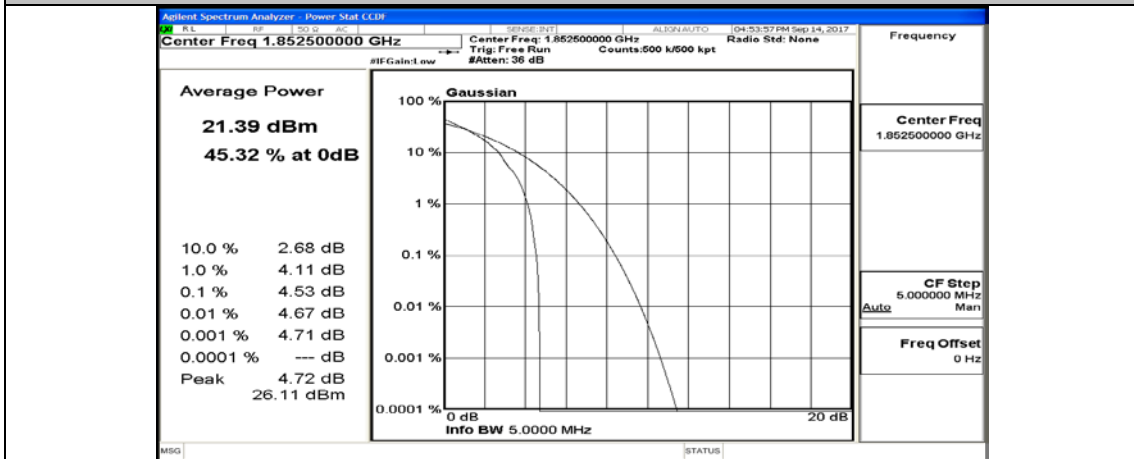
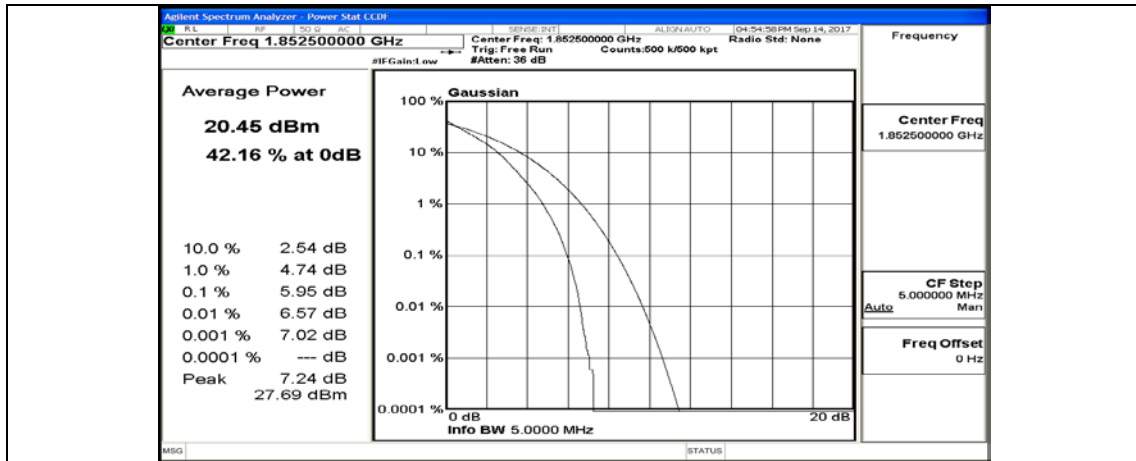(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0

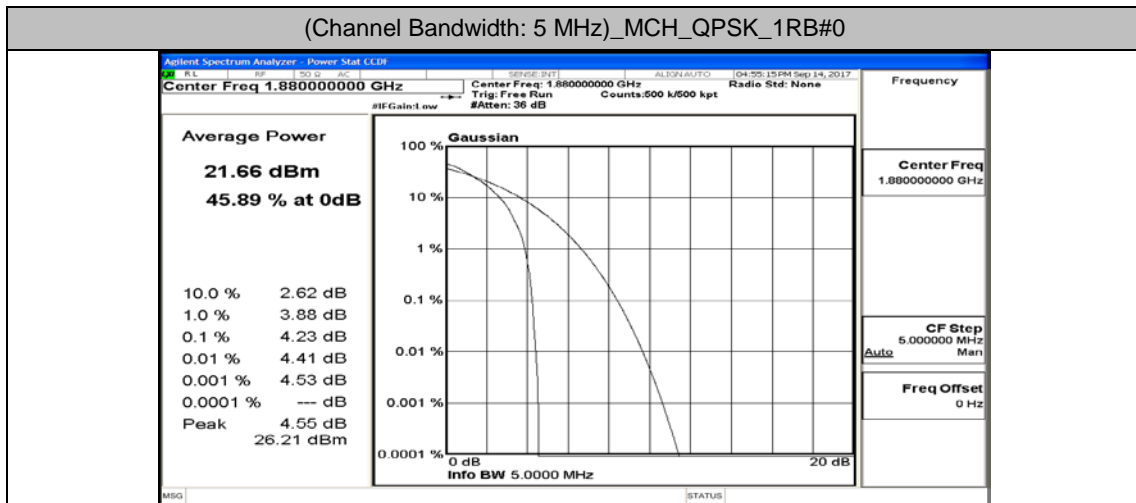(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6

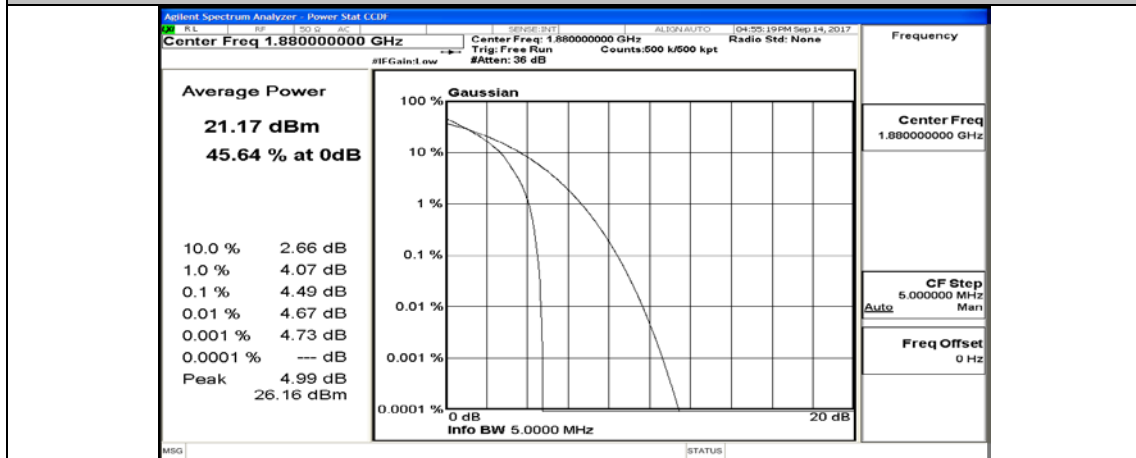(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13

(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24