

## Appendix for Band 4

### Appendix A: Average Power Output Data

#### Test Result

##### Channel Bandwidth: 1.4 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.76	PASS
		1	3	22.94	PASS
		1	5	22.75	PASS
		3	0	22.53	PASS
		3	2	22.51	PASS
		3	3	22.52	PASS
		6	0	21.82	PASS
	MCH	1	0	22.79	PASS
		1	3	22.94	PASS
		1	5	22.83	PASS
		3	0	22.59	PASS
		3	2	22.51	PASS
		3	3	22.5	PASS
		6	0	21.53	PASS
16QAM	LCH	1	0	23.21	PASS
		1	3	23.38	PASS
		1	5	23.26	PASS
		3	0	22.28	PASS
		3	2	22.28	PASS
		3	3	22.26	PASS
		6	0	22.32	PASS
	MCH	1	0	21.95	PASS
		1	3	22.07	PASS
		1	5	21.93	PASS
		3	0	21.87	PASS
		3	2	21.87	PASS
		3	3	21.88	PASS
		6	0	20.87	PASS

		3	0	21.85	PASS
		3	2	21.86	PASS
		3	3	21.89	PASS
		6	0	20.67	PASS
HCH	HCH	1	0	22.44	PASS
		1	3	22.67	PASS
		1	5	22.46	PASS
		3	0	22.19	PASS
		3	2	22.22	PASS
		3	3	22.18	PASS
		6	0	21.14	PASS

### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.7	PASS
		1	7	22.97	PASS
		1	14	22.72	PASS
		8	0	21.72	PASS
		8	4	21.76	PASS
		8	7	21.72	PASS
		15	0	21.7	PASS
	MCH	1	0	22.78	PASS
		1	7	22.98	PASS
		1	14	22.78	PASS
		8	0	21.77	PASS
		8	4	21.8	PASS
		8	7	21.76	PASS
		15	0	21.69	PASS
16QAM	HCH	1	0	23.24	PASS
		1	7	23.47	PASS
		1	14	23.27	PASS
		8	0	22.26	PASS
		8	4	22.29	PASS
		8	7	22.24	PASS
		15	0	22.2	PASS
	LCH	1	0	21.91	PASS
		1	7	22.13	PASS
		1	14	21.89	PASS
		8	0	20.72	PASS
		8	4	20.74	PASS
		8	7	20.69	PASS

		15	0	20.62	PASS
MCH		1	0	21.98	PASS
		1	7	22.23	PASS
		1	14	22.02	PASS
		8	0	20.7	PASS
		8	4	20.7	PASS
		8	7	20.66	PASS
		15	0	20.66	PASS
HCH		1	0	22.37	PASS
		1	7	22.59	PASS
		1	14	22.38	PASS
		8	0	21.12	PASS
		8	4	21.14	PASS
		8	7	21.12	PASS
		15	0	21.13	PASS

### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.75	PASS
		1	12	23.02	PASS
		1	24	22.7	PASS
		12	0	21.66	PASS
		12	6	21.68	PASS
		12	13	21.69	PASS
		25	0	21.73	PASS
	MCH	1	0	22.73	PASS
		1	12	22.97	PASS
		1	24	22.81	PASS
		12	0	21.69	PASS
		12	6	21.74	PASS
		12	13	21.7	PASS
		25	0	21.71	PASS
	HCH	1	0	23.22	PASS
		1	12	23.58	PASS
		1	24	23.3	PASS
		12	0	22.12	PASS
		12	6	22.23	PASS
		12	13	22.21	PASS
		25	0	22.21	PASS
16QAM	LCH	1	0	21.94	PASS
		1	12	22.19	PASS

		1	24	21.86	PASS
		12	0	20.67	PASS
		12	6	20.74	PASS
		12	13	20.74	PASS
		25	0	20.66	PASS
	MCH	1	0	21.82	PASS
		1	12	22.18	PASS
		1	24	21.91	PASS
		12	0	20.76	PASS
		12	6	20.83	PASS
		12	13	20.80	PASS
		25	0	20.71	PASS
	HCH	1	0	22.22	PASS
		1	12	22.58	PASS
		1	24	22.30	PASS
		12	0	21.12	PASS
		12	6	21.22	PASS
		12	13	21.14	PASS
		25	0	21.20	PASS

### Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.68	PASS
		1	24	22.87	PASS
		1	49	22.63	PASS
		25	0	21.71	PASS
		25	12	21.7	PASS
		25	25	21.76	PASS
		50	0	21.68	PASS
	MCH	1	0	22.72	PASS
		1	24	22.95	PASS
		1	49	22.84	PASS
		25	0	21.78	PASS
		25	12	21.8	PASS
		25	25	21.83	PASS
		50	0	21.77	PASS
	HCH	1	0	23.04	PASS
		1	24	23.33	PASS
		1	49	23.26	PASS
		25	0	22.14	PASS
		25	12	22.16	PASS

		25	25	22.27	PASS
		50	0	22.12	PASS
16QAM	LCH	1	0	21.94	PASS
		1	24	22.08	PASS
		1	49	21.84	PASS
		25	0	20.67	PASS
		25	12	20.66	PASS
		25	25	20.73	PASS
		50	0	20.7	PASS
	MCH	1	0	21.99	PASS
		1	24	22.19	PASS
		1	49	22.08	PASS
		25	0	20.76	PASS
		25	12	20.74	PASS
		25	25	20.83	PASS
		50	0	20.77	PASS
	HCH	1	0	22.17	PASS
		1	24	22.48	PASS
		1	49	22.36	PASS
		25	0	21.08	PASS
		25	12	21.12	PASS
		25	25	21.2	PASS
		50	0	21.12	PASS

### Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.64	PASS
		1	37	22.9	PASS
		1	74	22.58	PASS
		37	0	21.78	PASS
		37	18	21.81	PASS
		37	38	21.8	PASS
		75	0	21.8	PASS
	MCH	1	0	22.68	PASS
		1	37	23.01	PASS
		1	74	22.87	PASS
		37	0	21.8	PASS
		37	18	21.91	PASS
		37	38	21.97	PASS
		75	0	21.94	PASS
	HCH	1	0	22.91	PASS

		1	37	23.37	PASS
		1	74	23.2	PASS
		37	0	22.14	PASS
		37	18	22.21	PASS
		37	38	22.29	PASS
		75	0	21.94	PASS
16QAM	LCH	1	0	21.86	PASS
		1	37	21.99	PASS
		1	74	21.79	PASS
		37	0	20.68	PASS
		37	18	20.72	PASS
		37	38	20.71	PASS
		75	0	20.69	PASS
	MCH	1	0	21.84	PASS
		1	37	22.22	PASS
		1	74	21.99	PASS
		37	0	20.76	PASS
		37	18	20.85	PASS
		37	38	20.91	PASS
		75	0	20.79	PASS
	HCH	1	0	22.05	PASS
		1	37	22.36	PASS
		1	74	22.31	PASS
		37	0	20.84	PASS
		37	18	20.77	PASS
		37	38	20.8	PASS
		75	0	20.79	PASS

### Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.59	PASS
		1	49	23.57	PASS
		1	99	23.12	PASS
		50	0	22.66	PASS
		50	25	22.64	PASS
		50	50	22.66	PASS
		100	0	22.68	PASS
	MCH	1	0	23.17	PASS
		1	49	23.28	PASS
		1	99	22.77	PASS
		50	0	22.13	PASS

		50	25	22.08	PASS
		50	50	21.94	PASS
		100	0	22.05	PASS
16QAM	HCH	1	0	22.7	PASS
		1	49	22.88	PASS
		1	99	22.36	PASS
		50	0	21.93	PASS
		50	25	21.83	PASS
		50	50	21.84	PASS
		100	0	21.83	PASS
		1	0	22.24	PASS
16QAM	LCH	1	49	22.54	PASS
		1	99	22.01	PASS
		50	0	21.04	PASS
		50	25	21.11	PASS
		50	50	21.05	PASS
		100	0	21.04	PASS
	MCH	1	0	22.18	PASS
		1	49	22.45	PASS
		1	99	22.01	PASS
		50	0	21.03	PASS
		50	25	21.03	PASS
		50	50	20.93	PASS
		100	0	20.94	PASS
16QAM	HCH	1	0	21.86	PASS
		1	49	22.1	PASS
		1	99	21.47	PASS
		50	0	20.88	PASS
		50	25	20.77	PASS
		50	50	20.8	PASS
		100	0	20.81	PASS

## 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	3.24	<13	PASS
		1	3	3.19	<13	PASS
		1	5	3.23	<13	PASS
		3	0	3.79	<13	PASS
		3	2	3.75	<13	PASS
		3	3	3.75	<13	PASS
		6	0	4.59	<13	PASS
	MCH	1	0	2.67	<13	PASS
		1	3	2.47	<13	PASS
		1	5	2.8	<13	PASS
		3	0	2.96	<13	PASS
		3	2	2.98	<13	PASS
		3	3	3.01	<13	PASS
		6	0	3.69	<13	PASS
16QAM	LCH	1	0	2.94	<13	PASS
		1	3	2.84	<13	PASS
		1	5	2.92	<13	PASS
		3	0	3.32	<13	PASS
		3	2	3.22	<13	PASS
		3	3	3.26	<13	PASS
		6	0	4	<13	PASS
	MCH	1	0	4.45	<13	PASS
		1	3	4.4	<13	PASS
		1	5	4.39	<13	PASS
		3	0	4.78	<13	PASS
		3	2	4.77	<13	PASS
		3	3	4.73	<13	PASS
		6	0	5.6	<13	PASS

		3	2	3.96	<13	PASS
		3	3	3.96	<13	PASS
		6	0	4.67	<13	PASS
HCH		1	0	4.14	<13	PASS
		1	3	3.91	<13	PASS
		1	5	3.99	<13	PASS
		3	0	4.29	<13	PASS
		3	2	4.26	<13	PASS
		3	3	4.36	<13	PASS
		6	0	5.04	<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	3.36	<13	PASS
		1	7	3.36	<13	PASS
		1	14	3.25	<13	PASS
		8	0	4.68	<13	PASS
		8	4	4.57	<13	PASS
		8	7	4.62	<13	PASS
		15	0	4.67	<13	PASS
	MCH	1	0	2.39	<13	PASS
		1	7	2.43	<13	PASS
		1	14	2.71	<13	PASS
		8	0	3.72	<13	PASS
		8	4	3.74	<13	PASS
		8	7	3.89	<13	PASS
		15	0	3.85	<13	PASS
	HCH	1	0	3.18	<13	PASS
		1	7	2.87	<13	PASS
		1	14	2.83	<13	PASS
		8	0	4.26	<13	PASS
		8	4	4.12	<13	PASS
		8	7	4.11	<13	PASS
		15	0	4.19	<13	PASS
16QAM	LCH	1	0	4.3	<13	PASS
		1	7	4.13	<13	PASS
		1	14	4.17	<13	PASS
		8	0	5.54	<13	PASS
		8	4	5.44	<13	PASS

		8	7	5.46	<13	PASS
		15	0	5.68	<13	PASS
MCH		1	0	3.49	<13	PASS
		1	7	3.63	<13	PASS
		1	14	3.73	<13	PASS
		8	0	4.64	<13	PASS
		8	4	4.71	<13	PASS
		8	7	4.84	<13	PASS
		15	0	4.82	<13	PASS
HCH		1	0	4.24	<13	PASS
		1	7	3.77	<13	PASS
		1	14	3.91	<13	PASS
		8	0	5.27	<13	PASS
		8	4	5.18	<13	PASS
		8	7	5.1	<13	PASS
		15	0	5.16	<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	3.6	<13	PASS
		1	12	3.31	<13	PASS
		1	24	3.37	<13	PASS
		12	0	4.77	<13	PASS
		12	6	4.63	<13	PASS
		12	13	4.49	<13	PASS
		25	0	4.64	<13	PASS
	MCH	1	0	2.51	<13	PASS
		1	12	2.69	<13	PASS
		1	24	2.96	<13	PASS
		12	0	3.73	<13	PASS
		12	6	3.78	<13	PASS
		12	13	4.01	<13	PASS
		25	0	3.88	<13	PASS
	HCH	1	0	3.36	<13	PASS
		1	12	3.03	<13	PASS
		1	24	2.94	<13	PASS
		12	0	4.5	<13	PASS
		12	6	4.34	<13	PASS
		12	13	4.22	<13	PASS

		25	0	4.37	<13	PASS
16QAM	LCH	1	0	4.28	<13	PASS
		1	12	4.17	<13	PASS
		1	24	4.18	<13	PASS
		12	0	5.74	<13	PASS
		12	6	5.64	<13	PASS
		12	13	5.52	<13	PASS
		25	0	5.54	<13	PASS
	MCH	1	0	3.52	<13	PASS
		1	12	3.63	<13	PASS
		1	24	3.93	<13	PASS
		12	0	4.64	<13	PASS
		12	6	4.73	<13	PASS
		12	13	4.97	<13	PASS
		25	0	4.82	<13	PASS
	HCH	1	0	4.19	<13	PASS
		1	12	3.85	<13	PASS
		1	24	3.86	<13	PASS
		12	0	5.41	<13	PASS
		12	6	5.16	<13	PASS
		12	13	5.11	<13	PASS
		25	0	5.24	<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	3.53	<13	PASS
		1	24	3.06	<13	PASS
		1	49	2.69	<13	PASS
		25	0	4.6	<13	PASS
		25	12	4.39	<13	PASS
		25	25	4.08	<13	PASS
		50	0	4.37	<13	PASS
	MCH	1	0	2.19	<13	PASS
		1	24	2.4	<13	PASS
		1	49	3.22	<13	PASS
		25	0	3.56	<13	PASS
		25	12	3.77	<13	PASS
		25	25	4.18	<13	PASS
		50	0	3.87	<13	PASS

		1	0	3.85	<13	PASS
		1	24	3.41	<13	PASS
		1	49	3.02	<13	PASS
	HCH	25	0	4.82	<13	PASS
		25	12	4.6	<13	PASS
		25	25	4.22	<13	PASS
		50	0	4.54	<13	PASS
16QAM	LCH	1	0	4.36	<13	PASS
		1	24	3.96	<13	PASS
		1	49	3.65	<13	PASS
		25	0	5.58	<13	PASS
		25	12	5.4	<13	PASS
		25	25	5.06	<13	PASS
		50	0	5.33	<13	PASS
	MCH	1	0	3.44	<13	PASS
		1	24	3.58	<13	PASS
		1	49	4.23	<13	PASS
		25	0	4.56	<13	PASS
		25	12	4.77	<13	PASS
		25	25	5.11	<13	PASS
		50	0	4.82	<13	PASS
	HCH	1	0	4.71	<13	PASS
		1	24	4.28	<13	PASS
		1	49	3.91	<13	PASS
		25	0	5.8	<13	PASS
		25	12	5.56	<13	PASS
		25	25	5.25	<13	PASS
		50	0	5.48	<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	3.48	<13	PASS
		1	37	2.7	<13	PASS
		1	74	2.33	<13	PASS
		37	0	4.44	<13	PASS
		37	18	4	<13	PASS
		37	38	3.55	<13	PASS
		75	0	4.4	<13	PASS
	MCH	1	0	2.28	<13	PASS

		1	37	2.4	<13	PASS
		1	74	3.52	<13	PASS
		37	0	3.33	<13	PASS
		37	18	3.6	<13	PASS
		37	38	4.14	<13	PASS
		75	0	4.22	<13	PASS
	HCH	1	0	3.78	<13	PASS
		1	37	3.51	<13	PASS
		1	74	2.91	<13	PASS
		37	0	4.94	<13	PASS
		37	18	4.79	<13	PASS
		37	38	4.39	<13	PASS
		75	0	4.97	<13	PASS
16QAM	LCH	1	0	4.46	<13	PASS
		1	37	3.7	<13	PASS
		1	74	3.36	<13	PASS
		37	0	5.39	<13	PASS
		37	18	5.07	<13	PASS
		37	38	4.63	<13	PASS
		75	0	5.32	<13	PASS
	MCH	1	0	3.36	<13	PASS
		1	37	3.42	<13	PASS
		1	74	4.5	<13	PASS
		37	0	4.39	<13	PASS
		37	18	4.67	<13	PASS
		37	38	5.2	<13	PASS
		75	0	5.08	<13	PASS
	HCH	1	0	4.69	<13	PASS
		1	37	4.49	<13	PASS
		1	74	3.94	<13	PASS
		37	0	5.79	<13	PASS
		37	18	5.65	<13	PASS
		37	38	5.28	<13	PASS
		75	0	5.78	<13	PASS

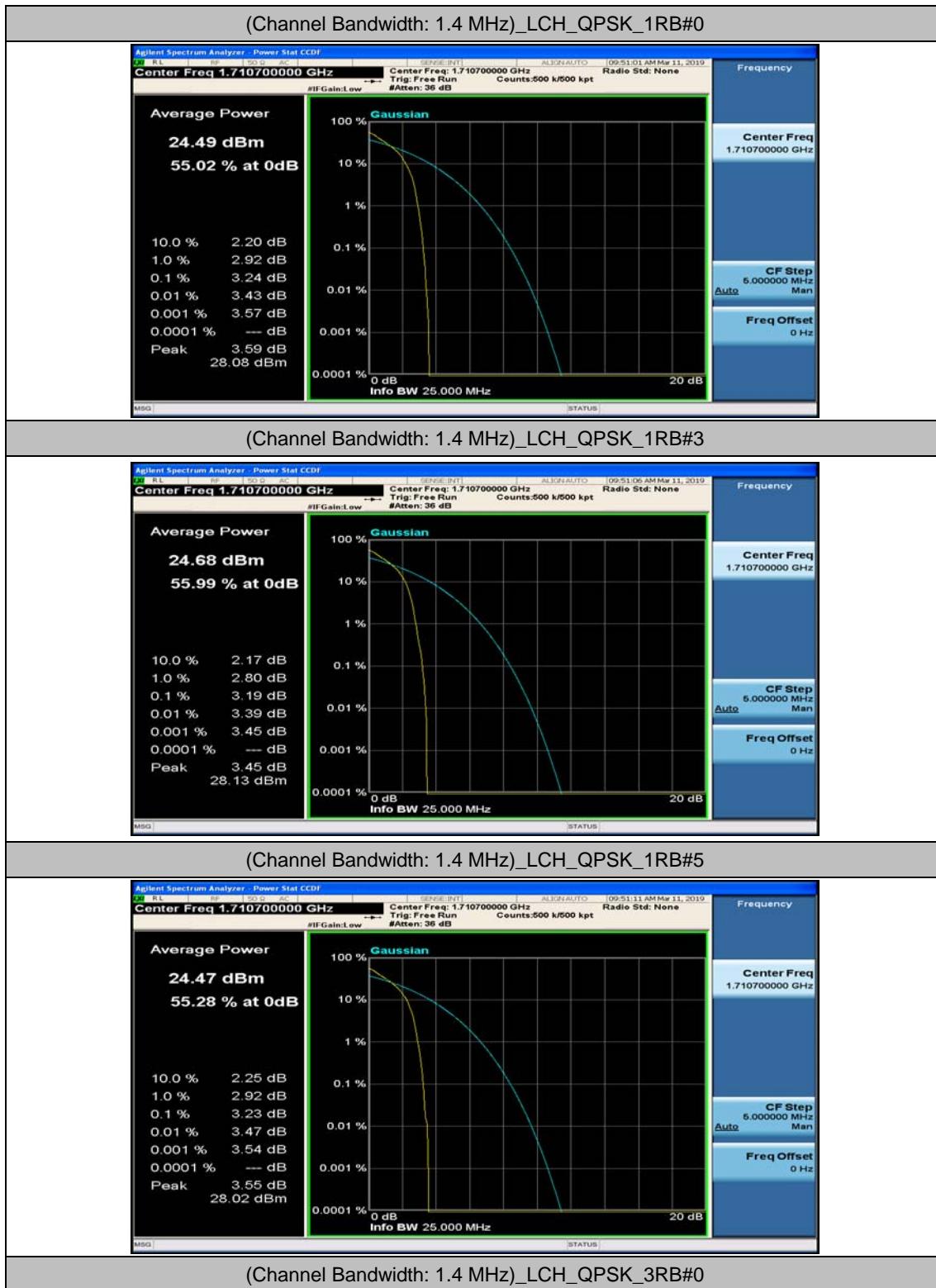
## Channel Bandwidth: 20 MHz

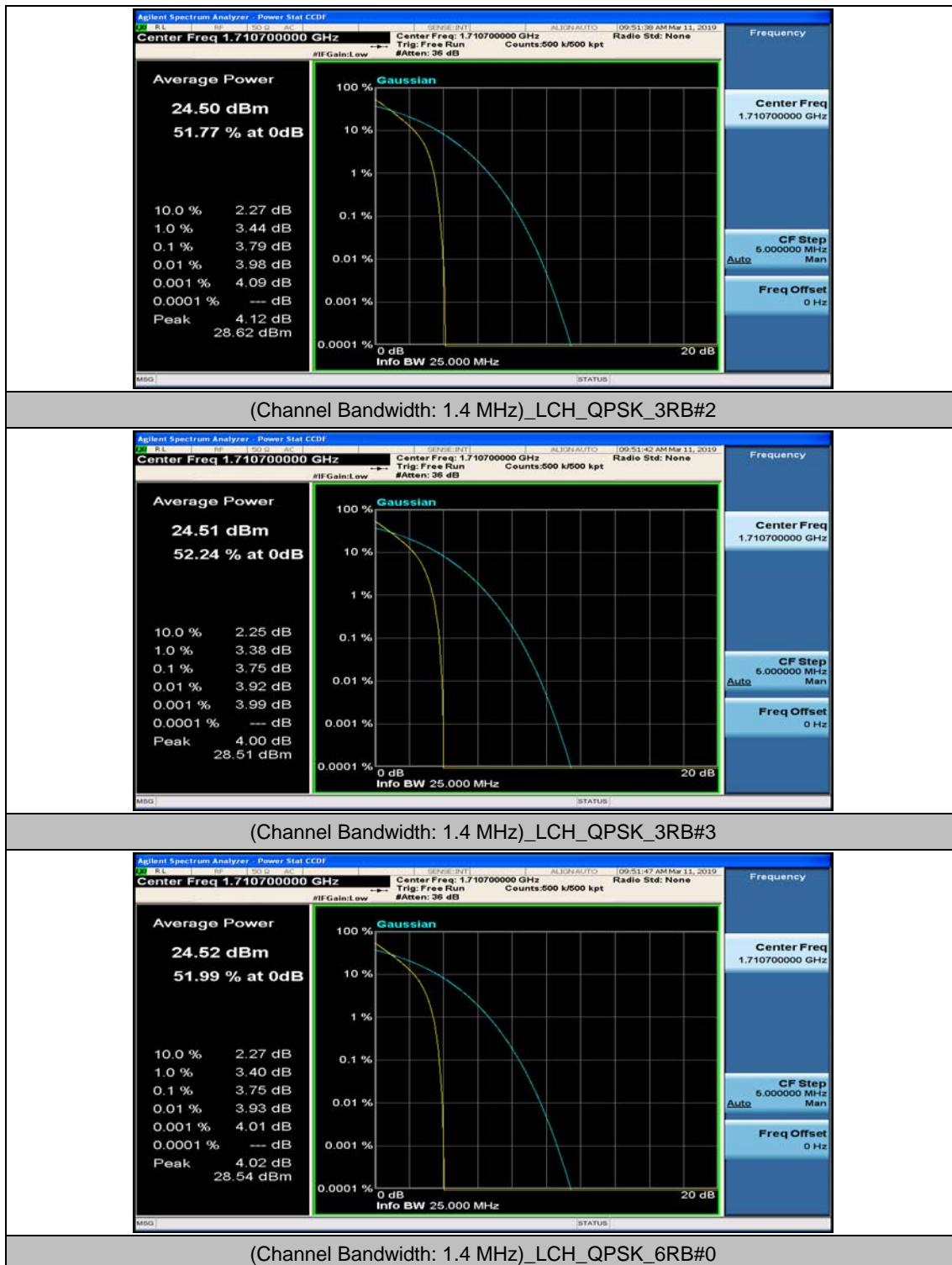
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.3	<13	PASS
		1	49	2.41	<13	PASS
		1	99	2.48	<13	PASS
		50	0	4.51	<13	PASS
		50	25	3.87	<13	PASS
		50	50	3.72	<13	PASS
		100	0	4.59	<13	PASS
	MCH	1	0	2.55	<13	PASS
		1	49	2.58	<13	PASS
		1	99	4.05	<13	PASS
		50	0	3.69	<13	PASS
		50	25	3.88	<13	PASS
		50	50	4.6	<13	PASS
		100	0	4.6	<13	PASS
16QAM	LCH	1	0	3.46	<13	PASS
		1	49	3.84	<13	PASS
		1	99	3.23	<13	PASS
		50	0	4.83	<13	PASS
		50	25	4.9	<13	PASS
		50	50	4.66	<13	PASS
		100	0	5.03	<13	PASS
	MCH	1	0	4.37	<13	PASS
		1	49	3.46	<13	PASS
		1	99	3.44	<13	PASS
		50	0	5.44	<13	PASS
		50	25	4.83	<13	PASS
		50	50	4.65	<13	PASS
		100	0	5.38	<13	PASS
	HCH	1	0	3.46	<13	PASS
		1	49	3.48	<13	PASS
		1	99	4.82	<13	PASS
		50	0	4.6	<13	PASS
		50	25	4.83	<13	PASS
		50	50	5.52	<13	PASS
		100	0	5.38	<13	PASS
	HCH	1	0	4.35	<13	PASS

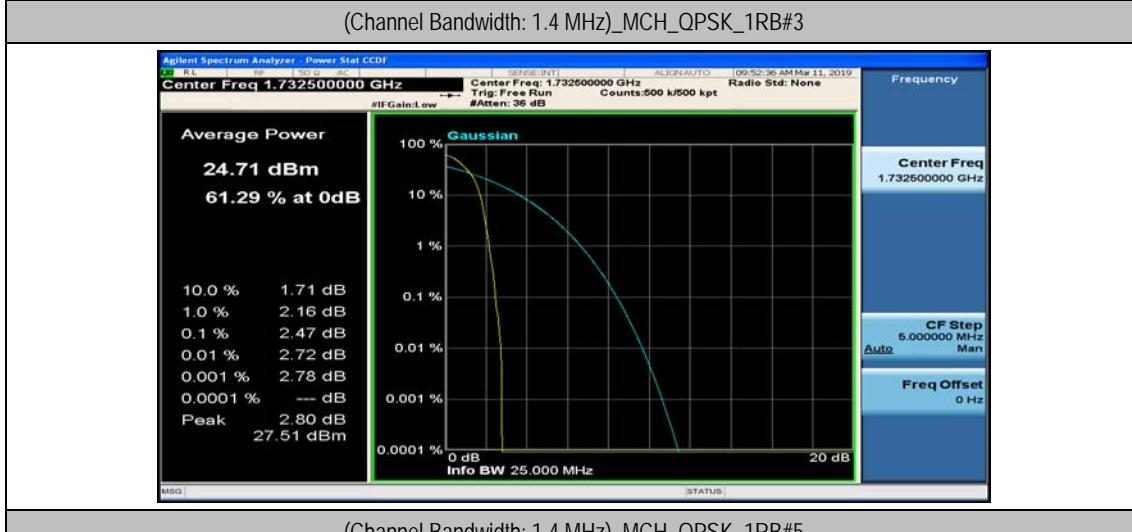
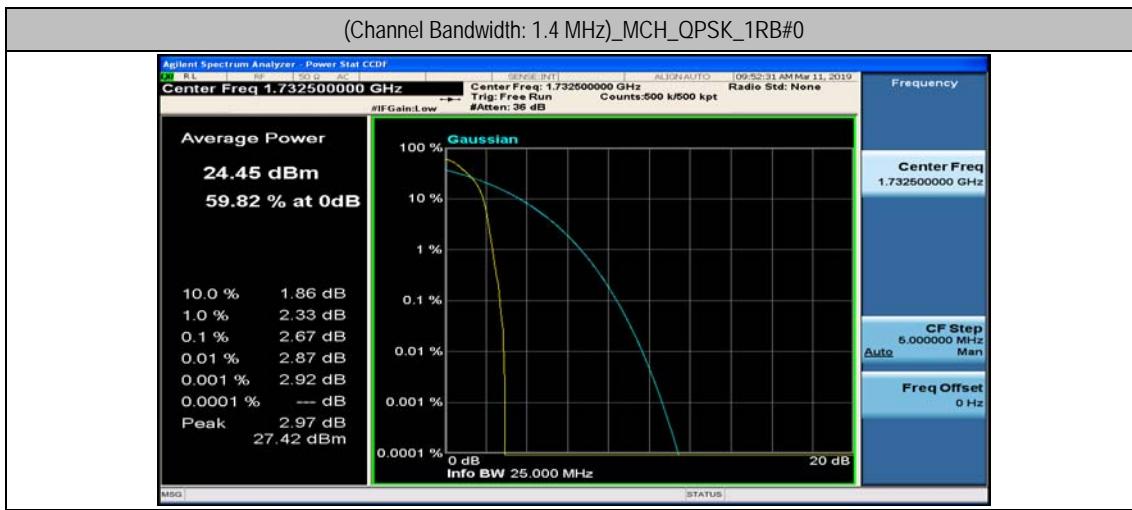
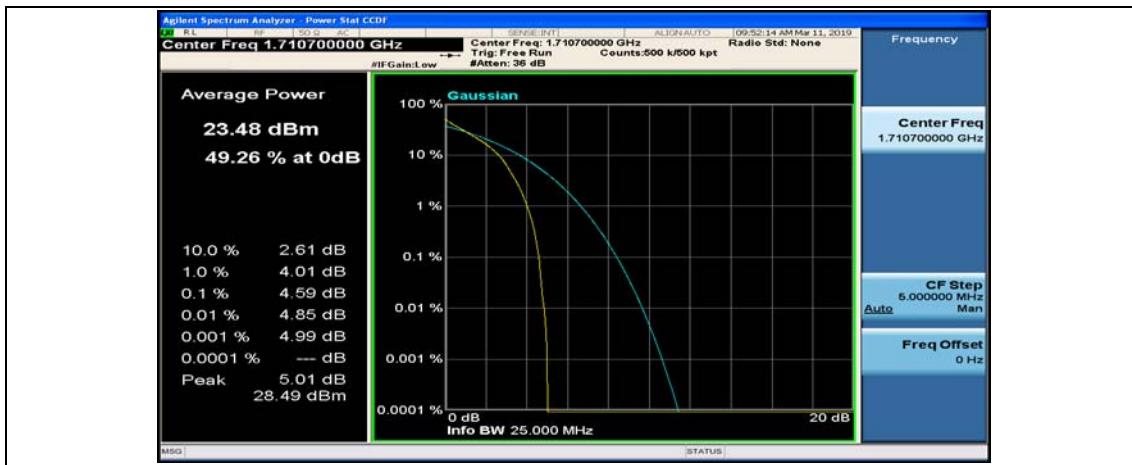
		1	49	4.67	<13	PASS
		1	99	4.21	<13	PASS
		50	0	5.78	<13	PASS
		50	25	5.79	<13	PASS
		50	50	5.59	<13	PASS
		100	0	5.86	<13	PASS

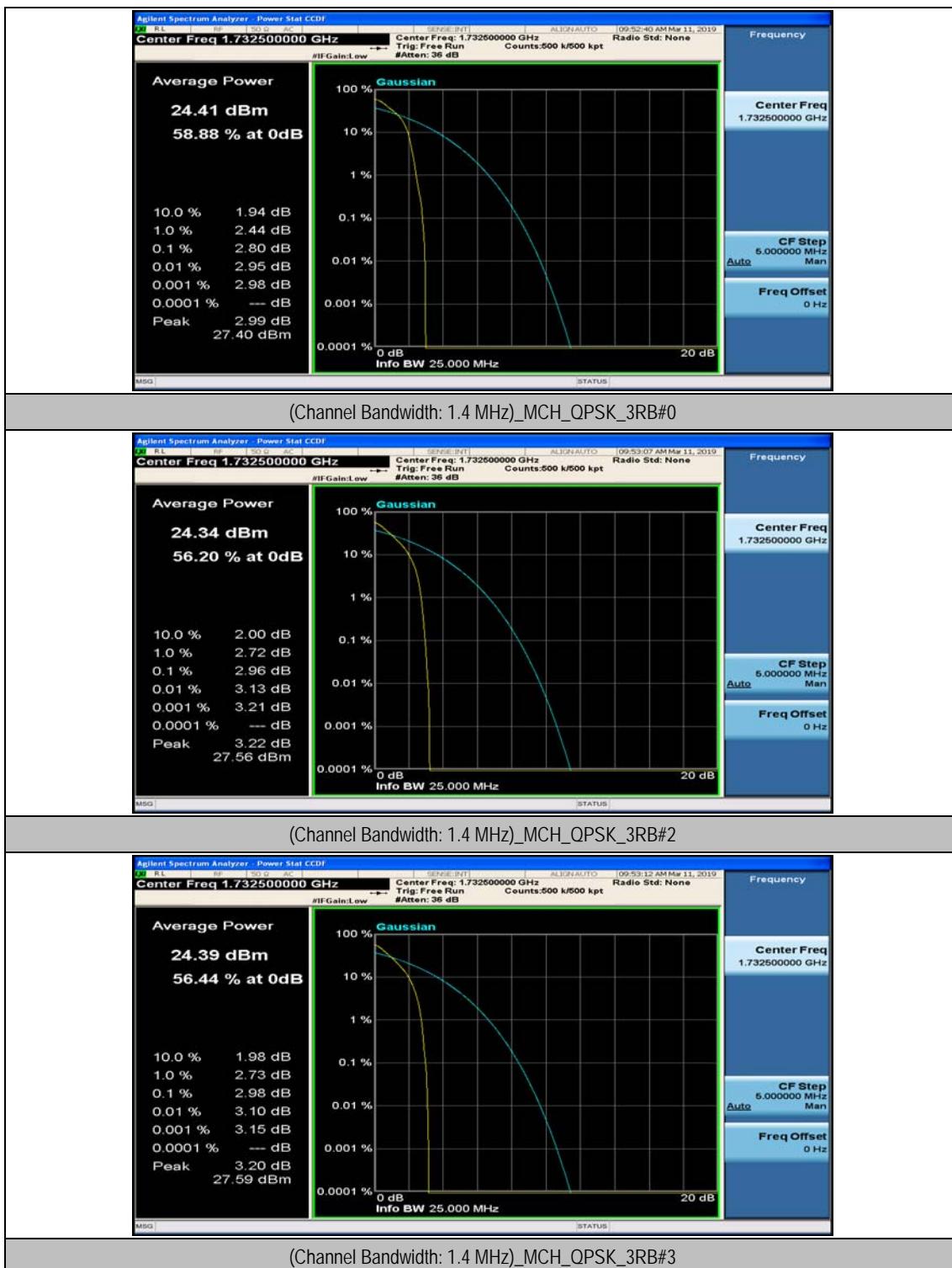
## Test Graphs

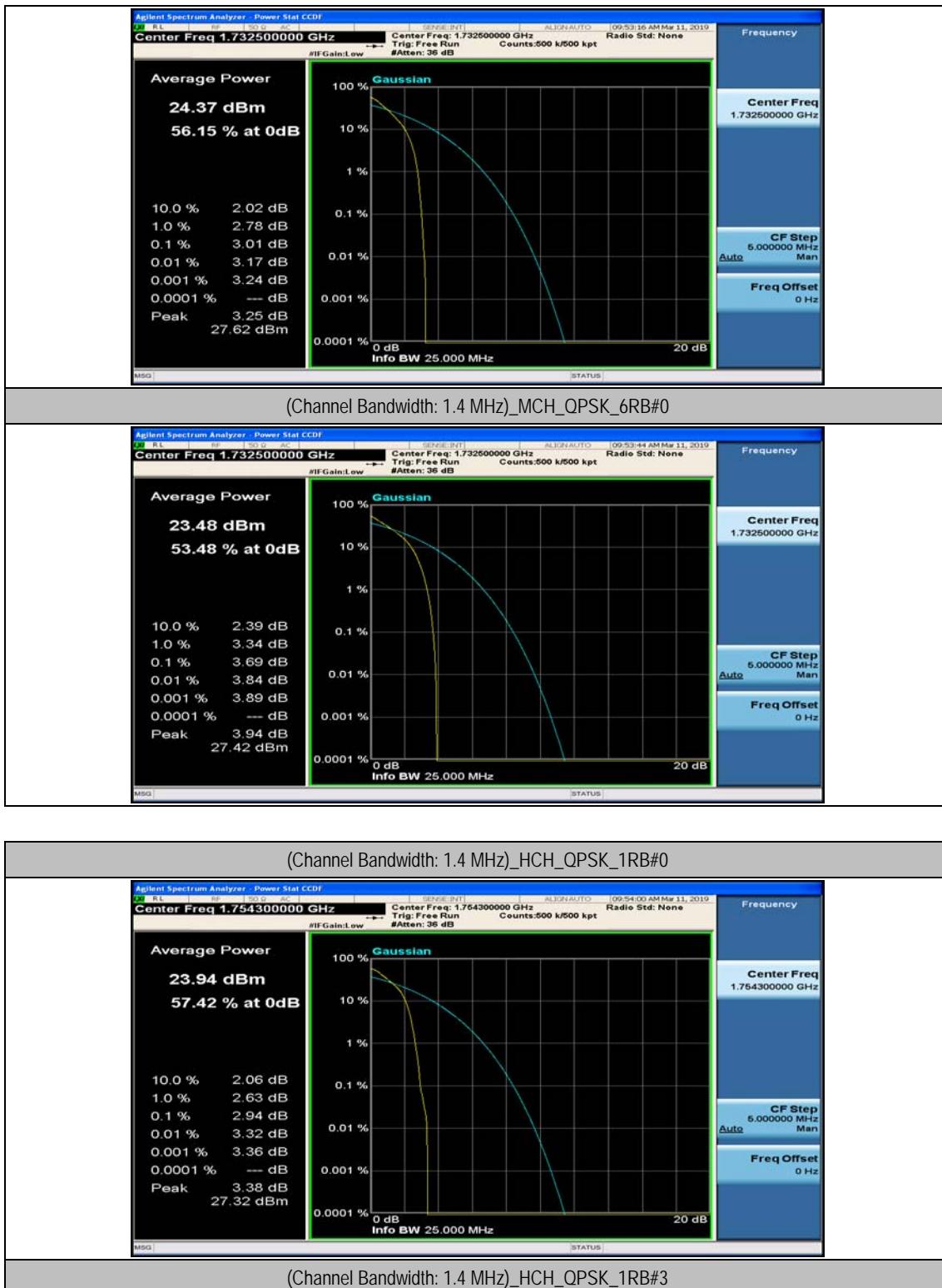
### Channel Bandwidth: 1.4 MHz

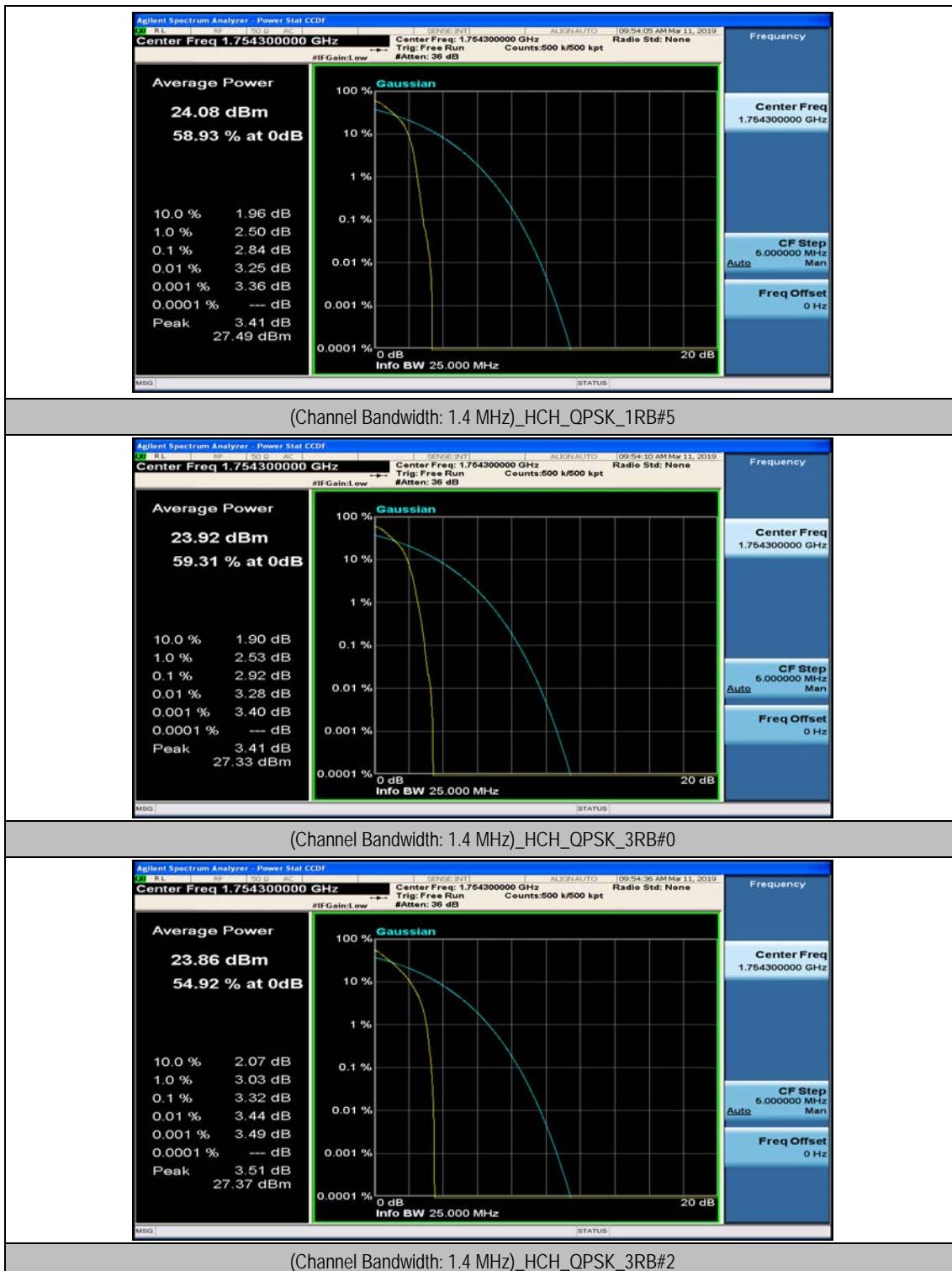


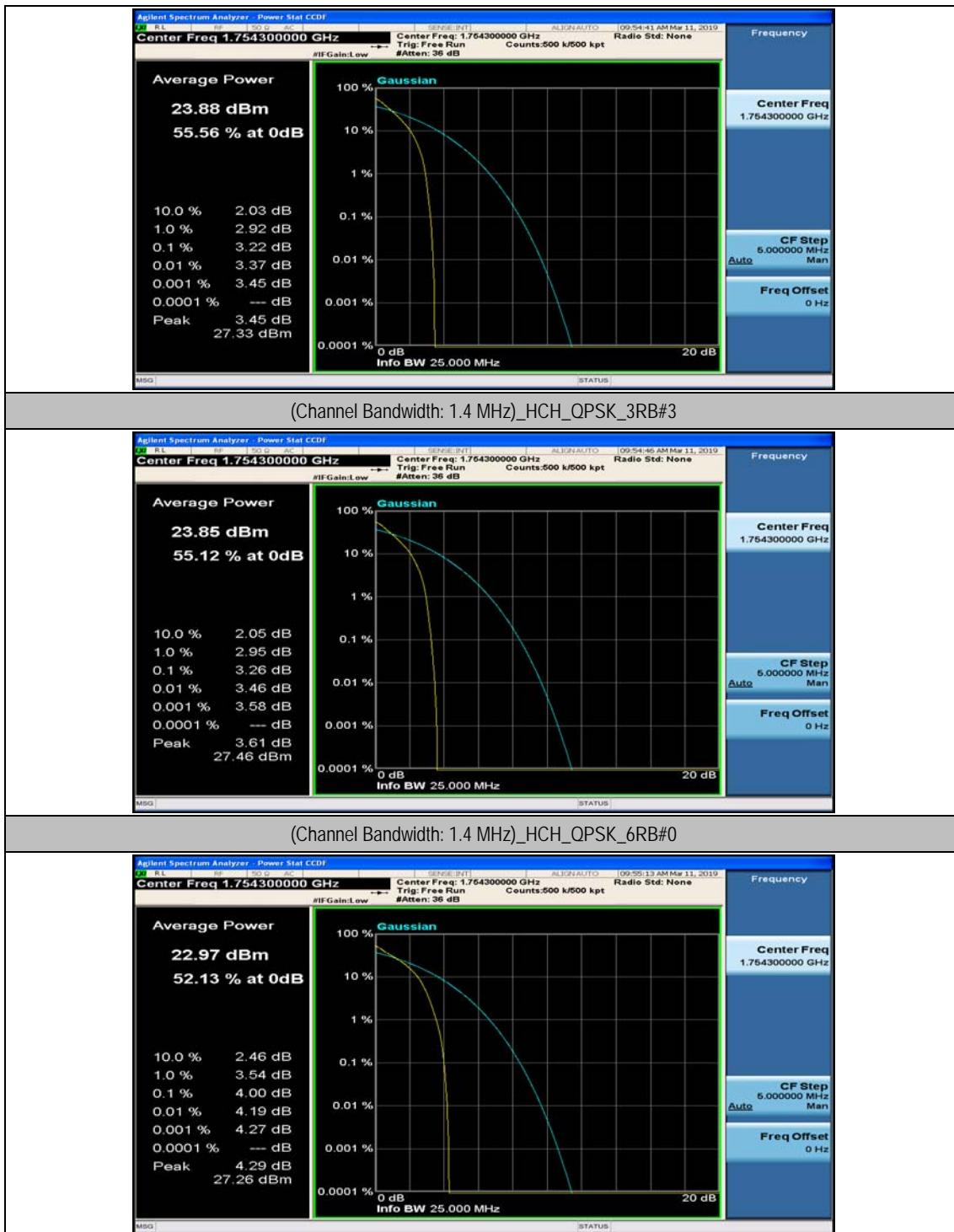


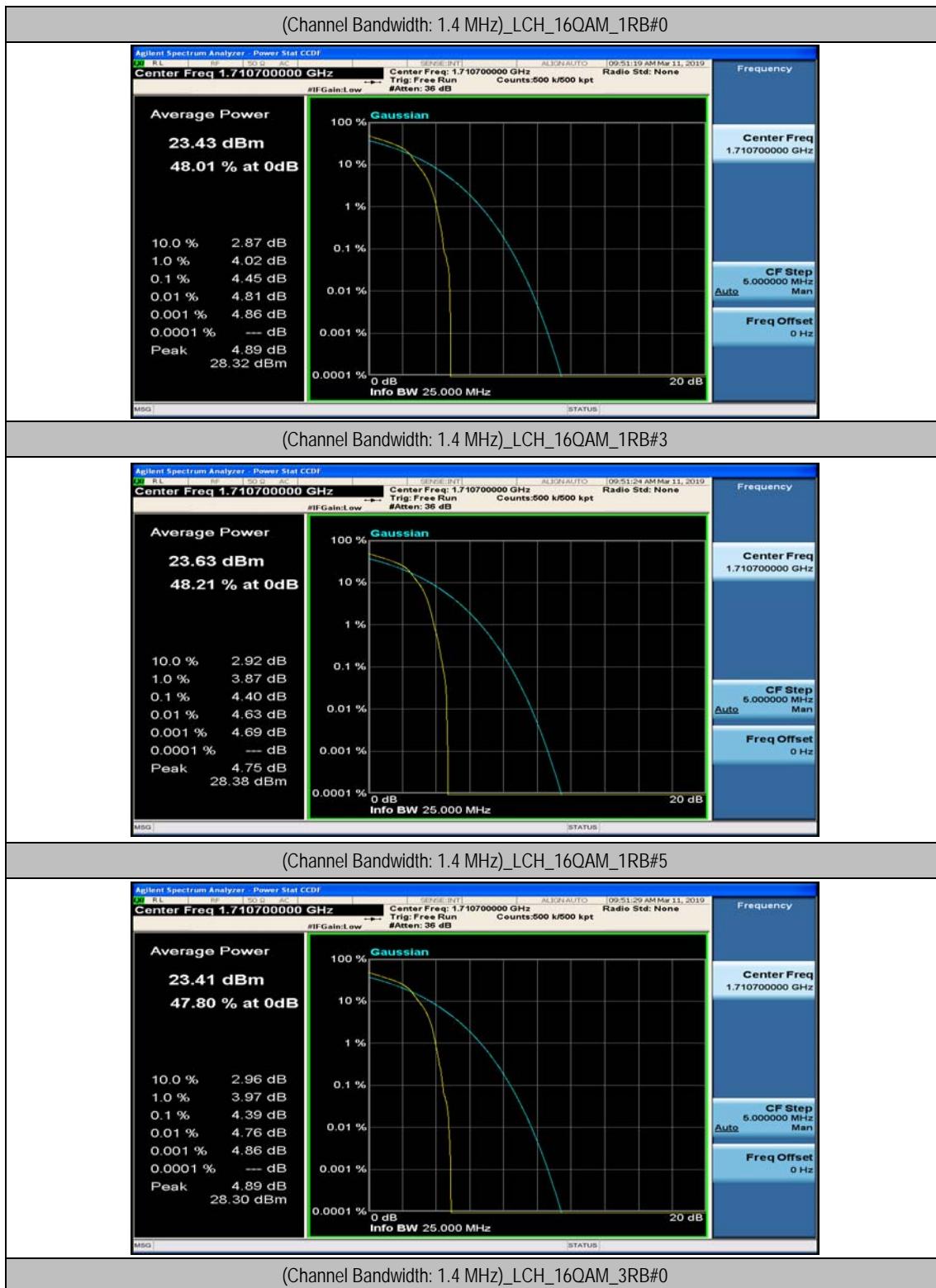


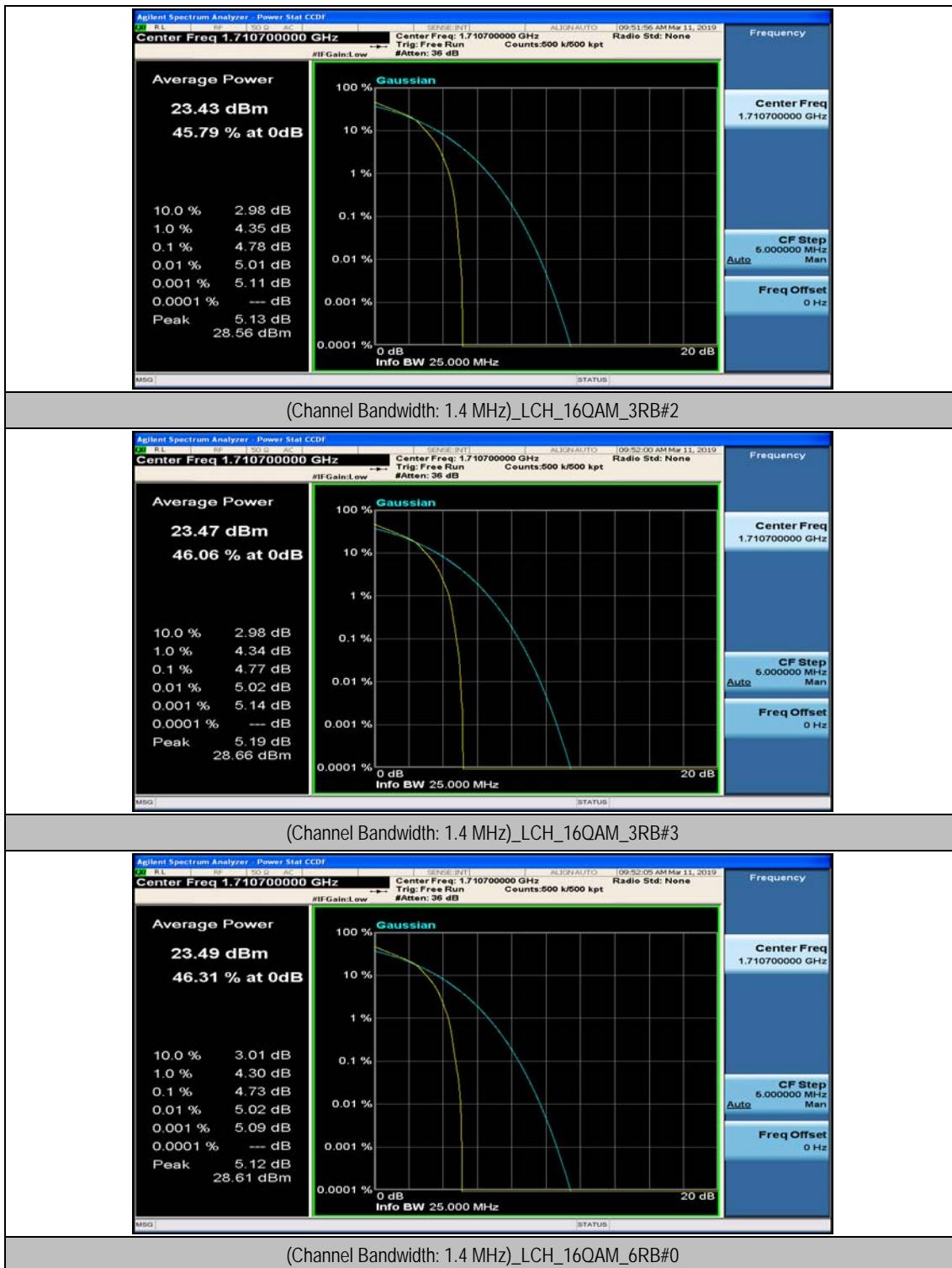


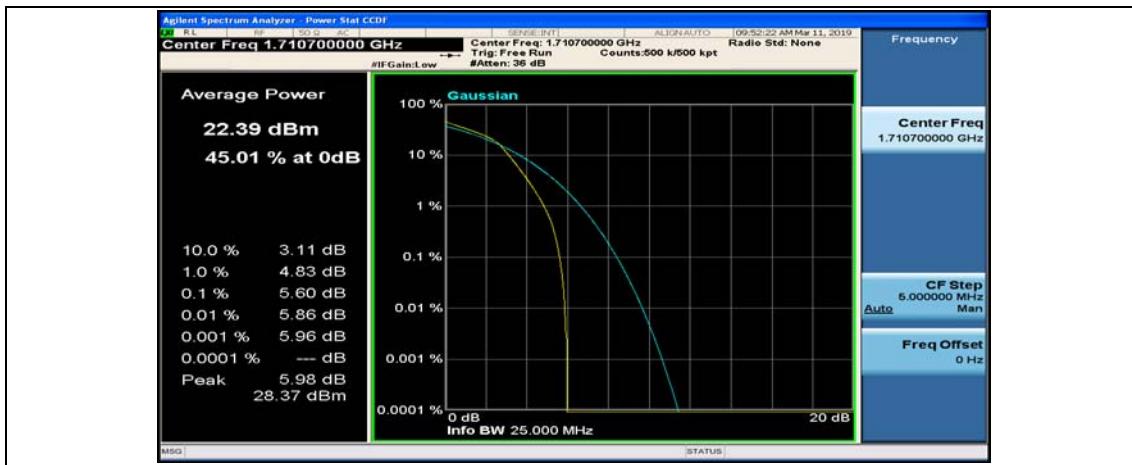


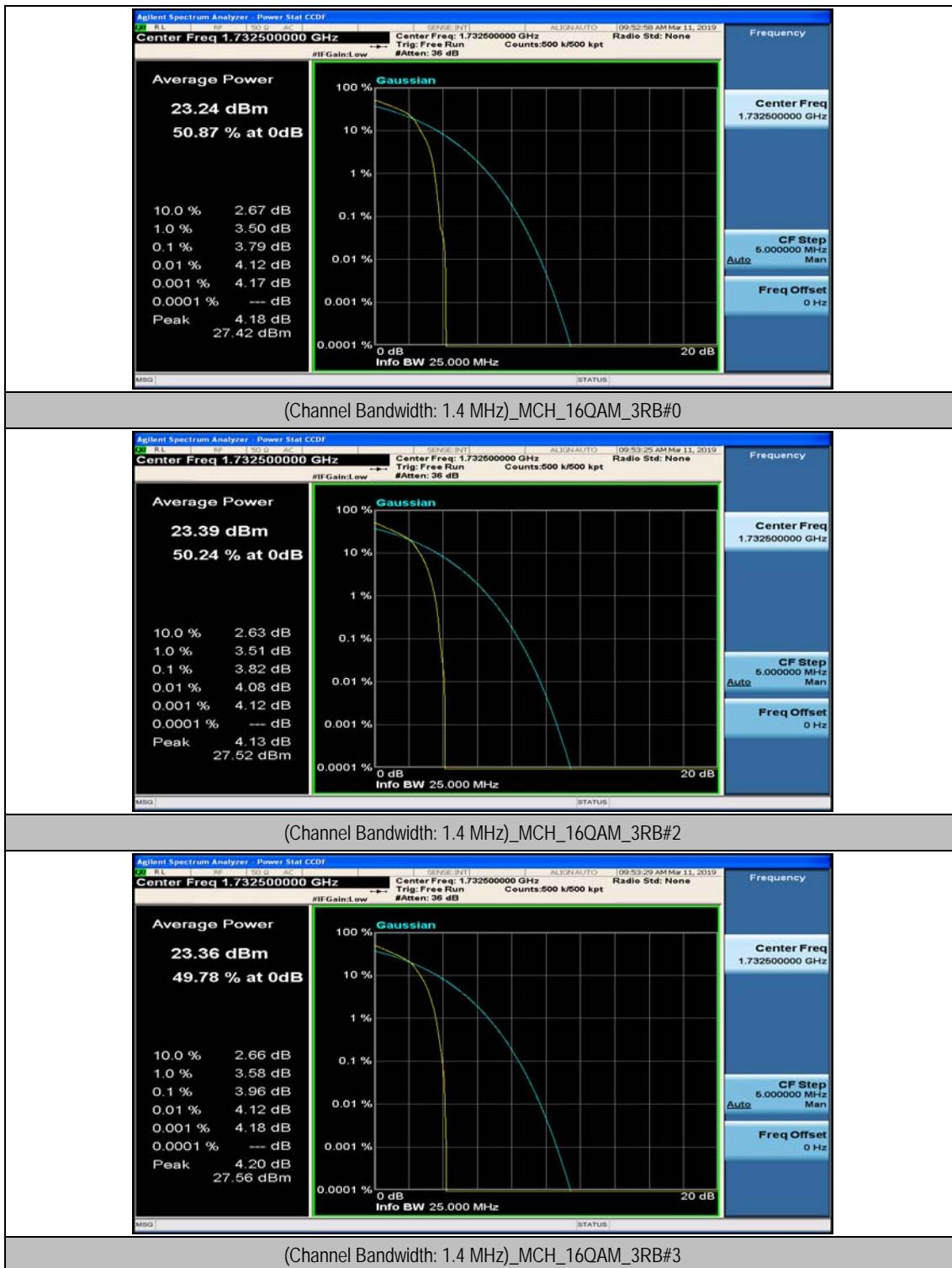


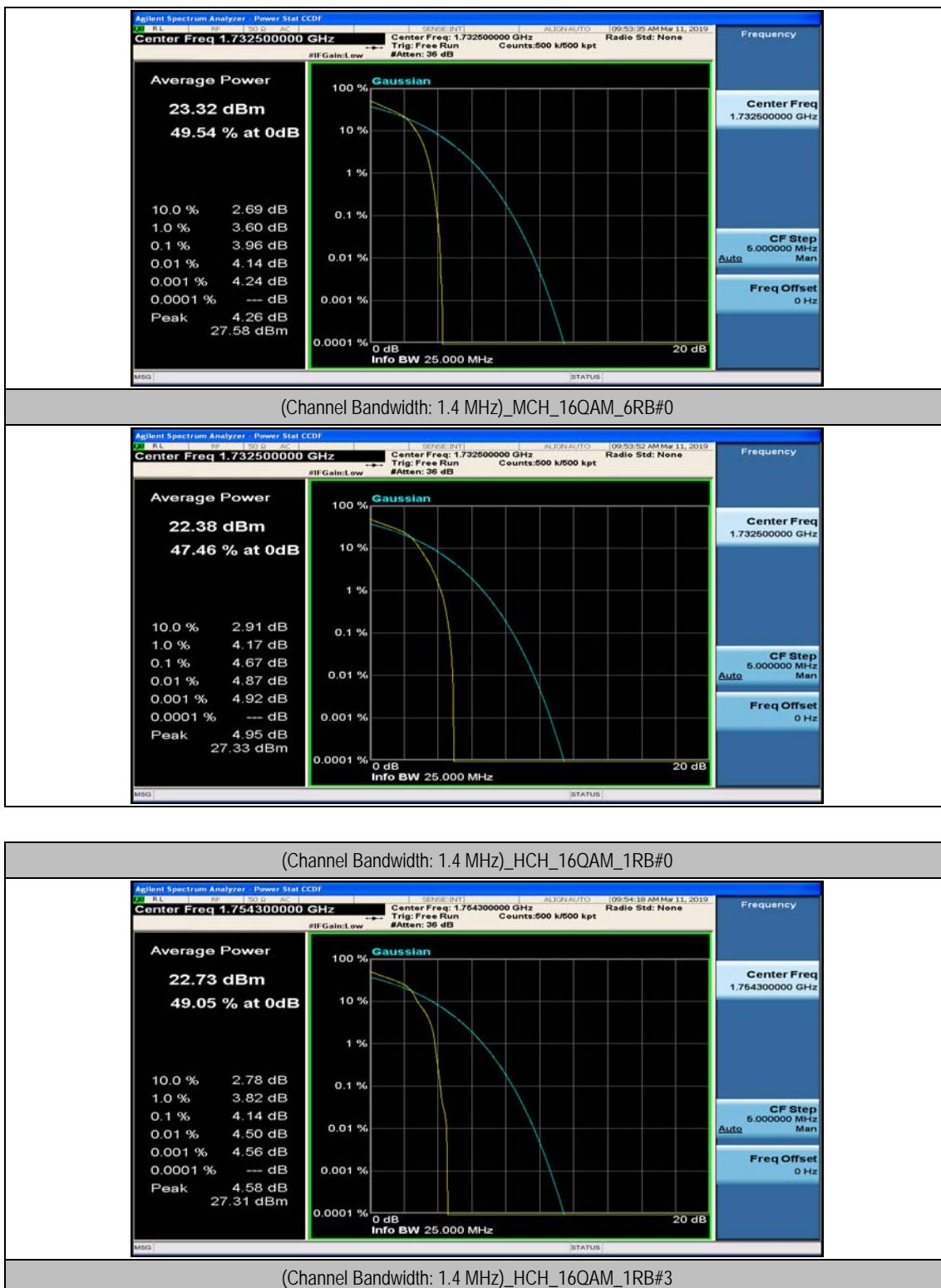


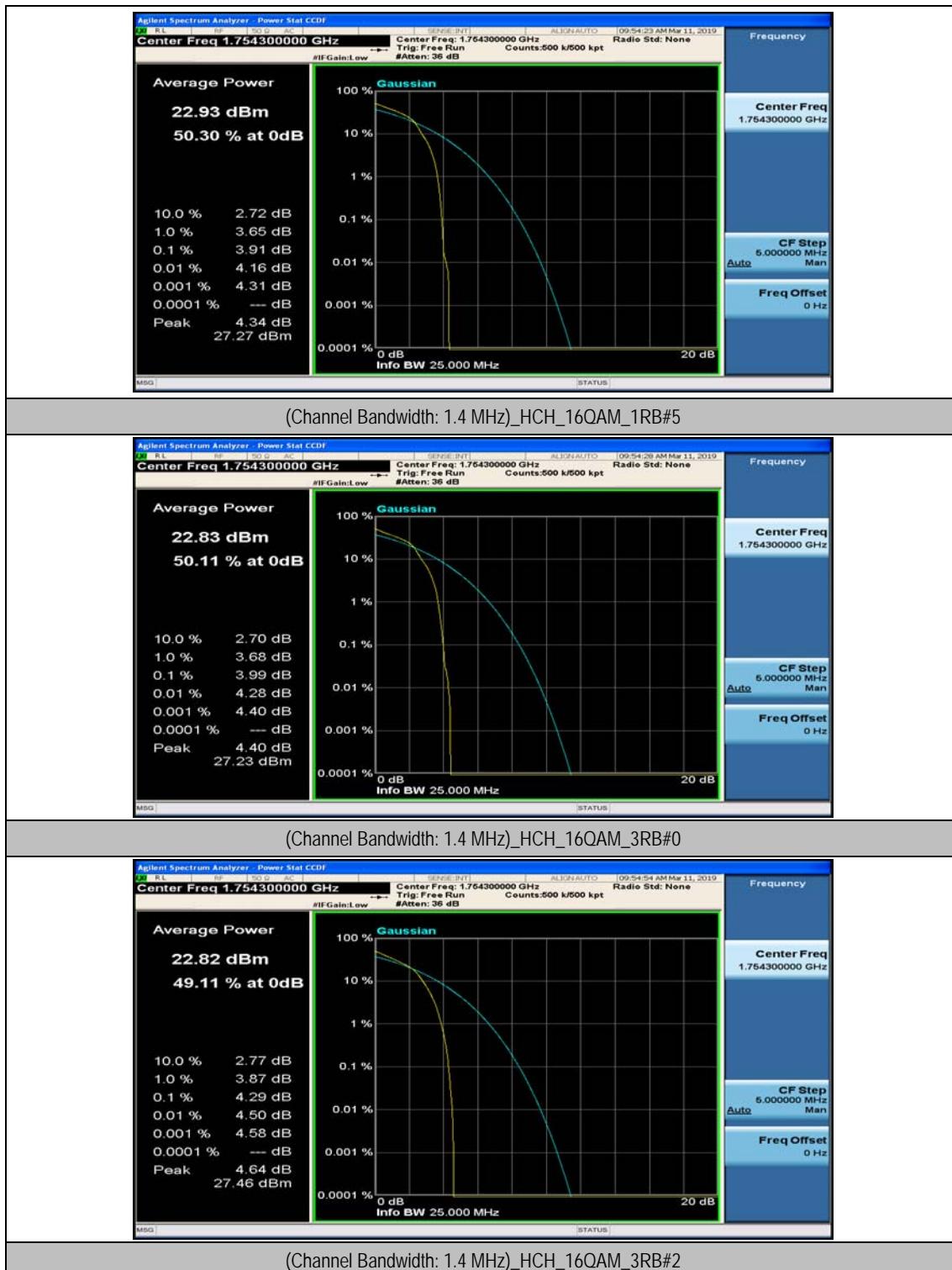


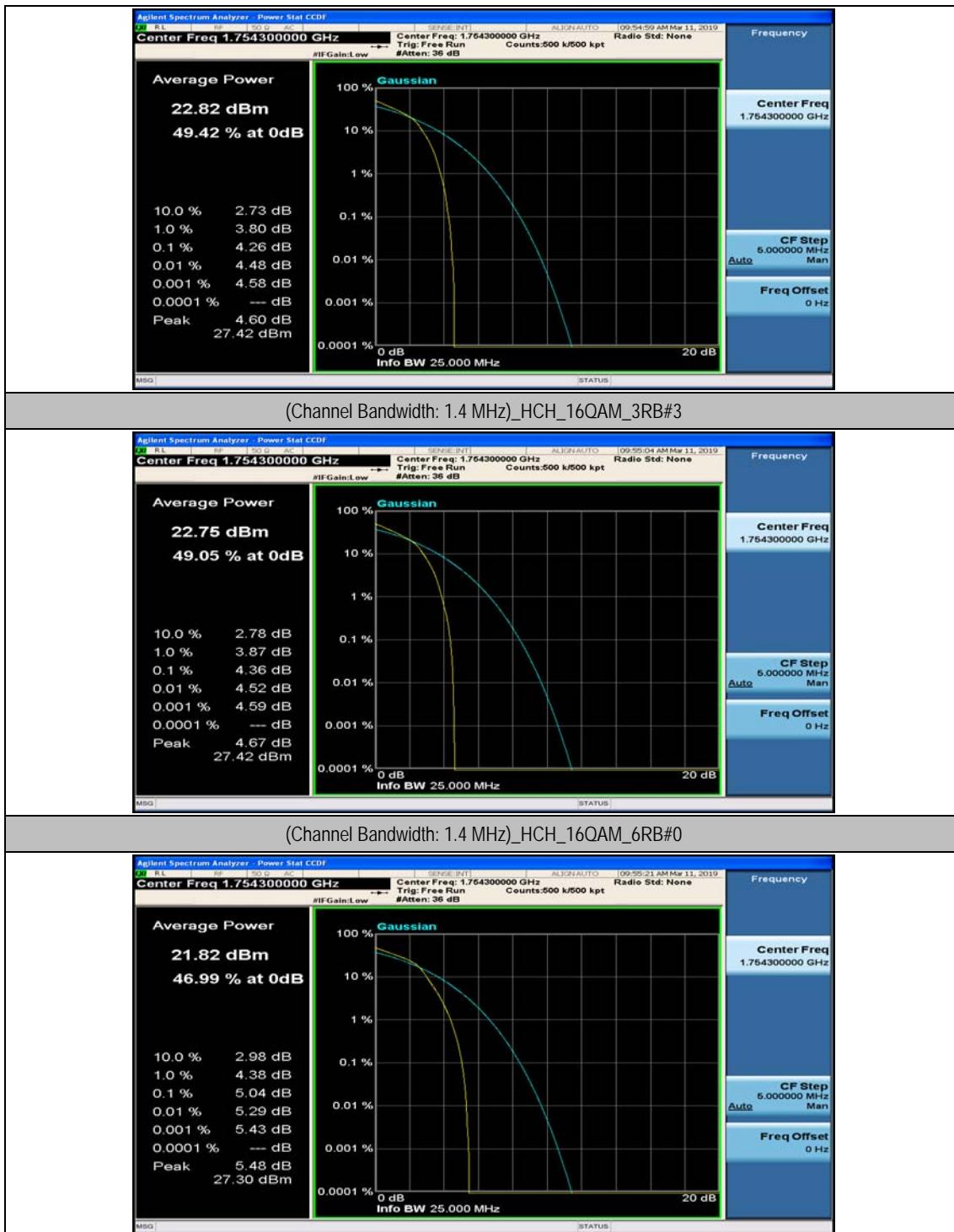




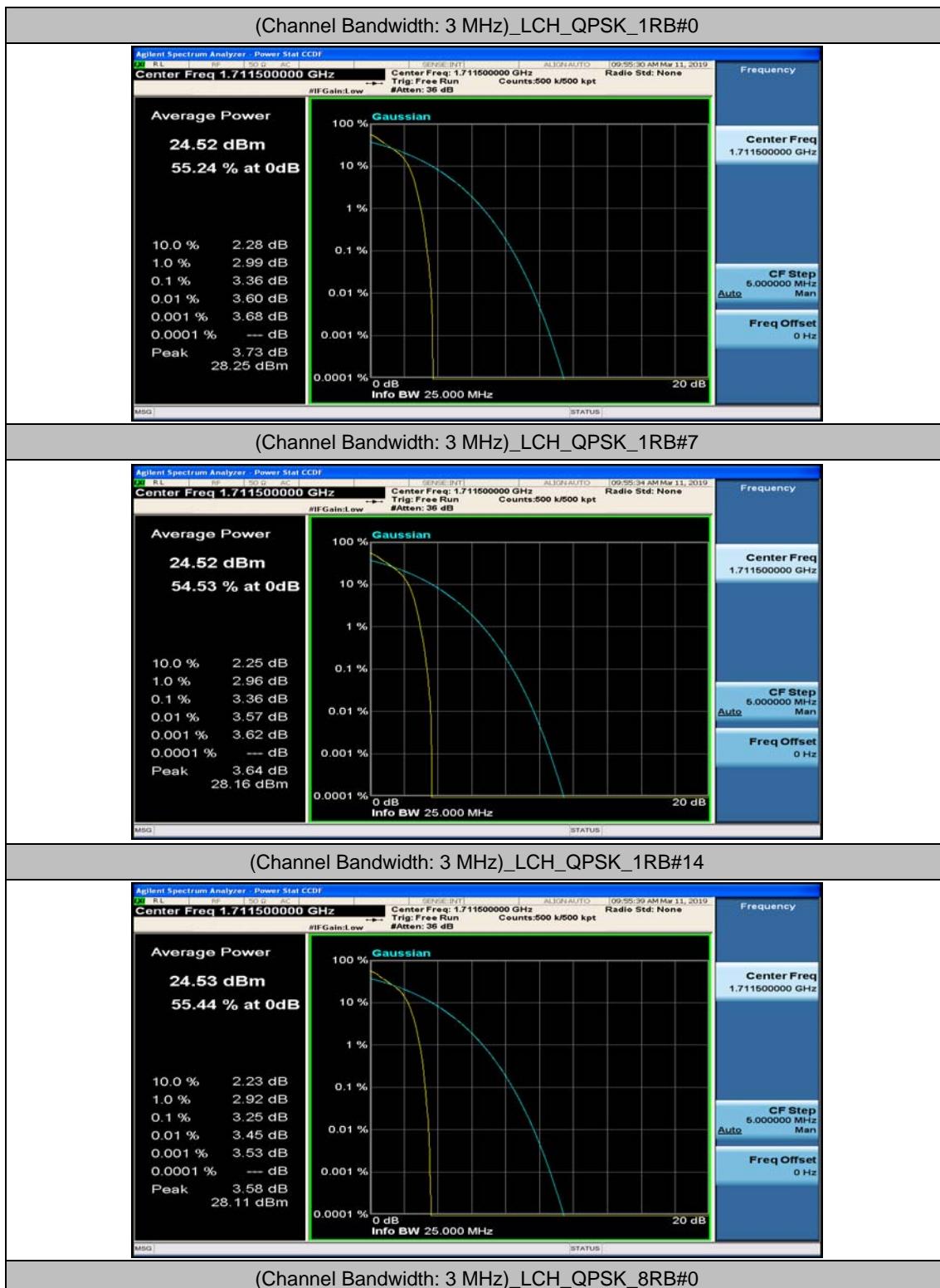


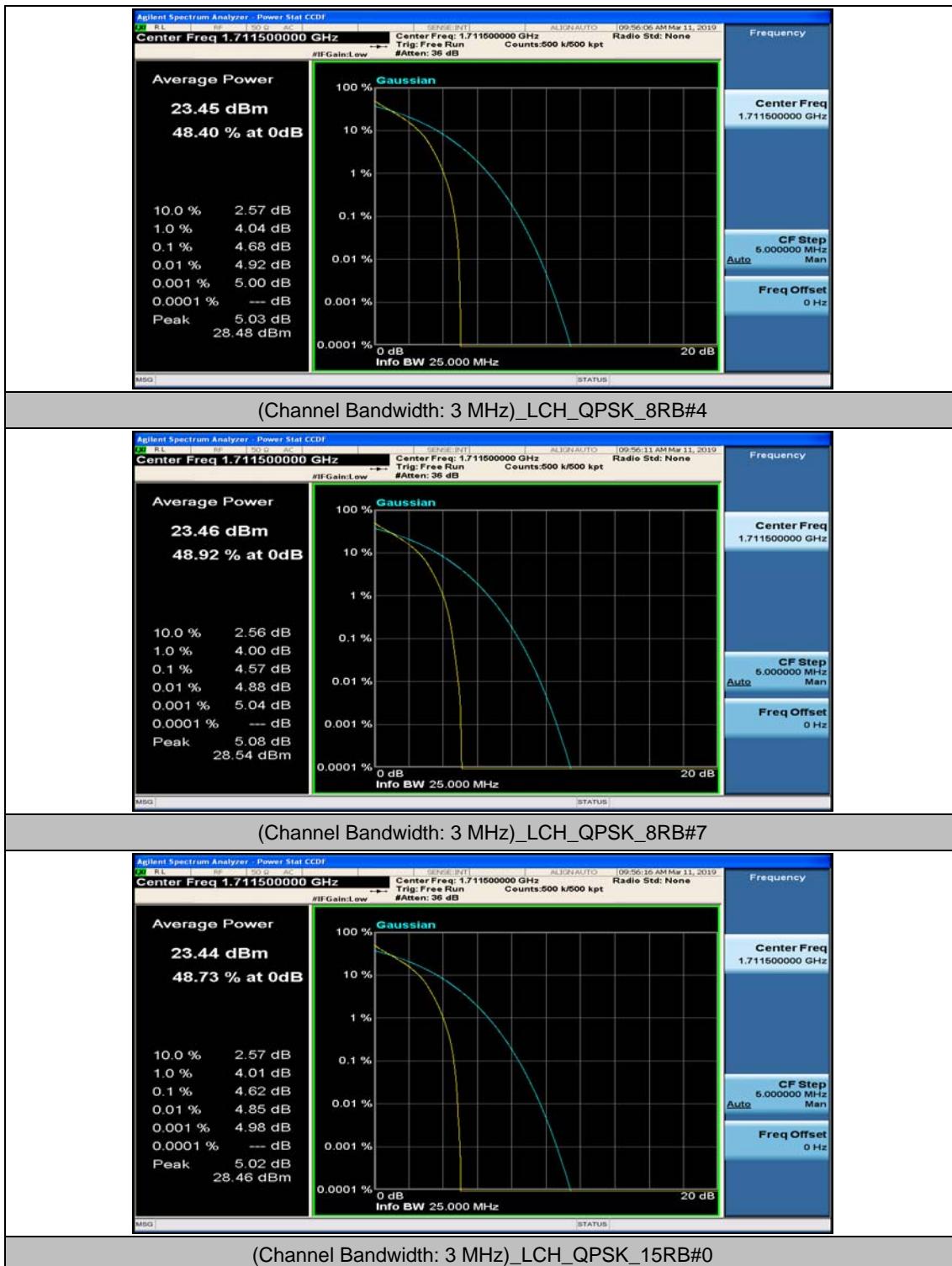


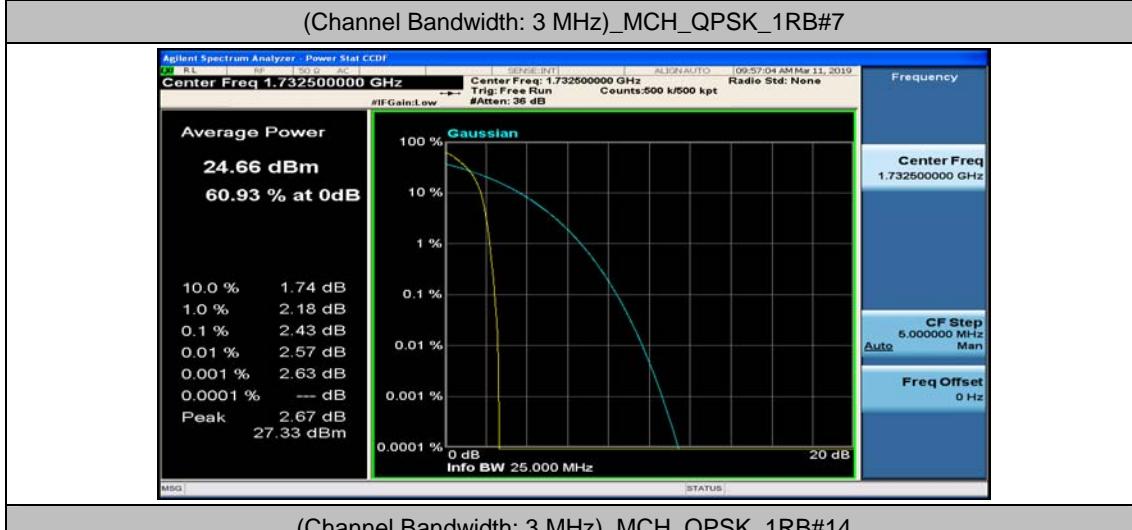
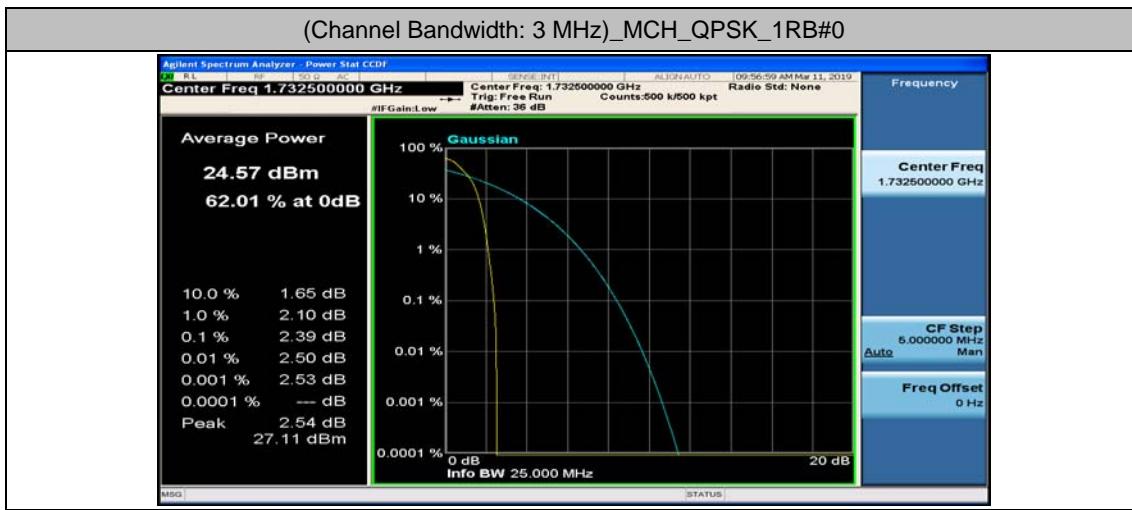
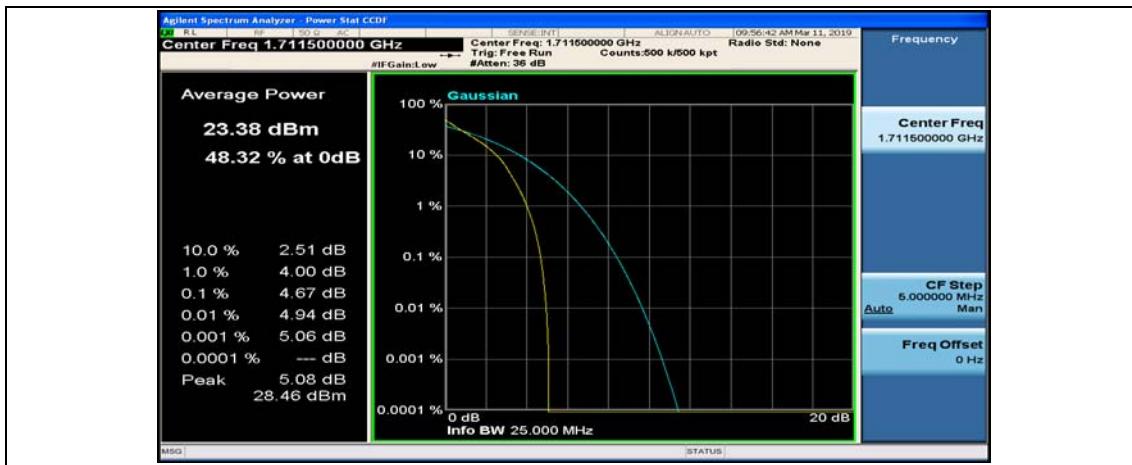




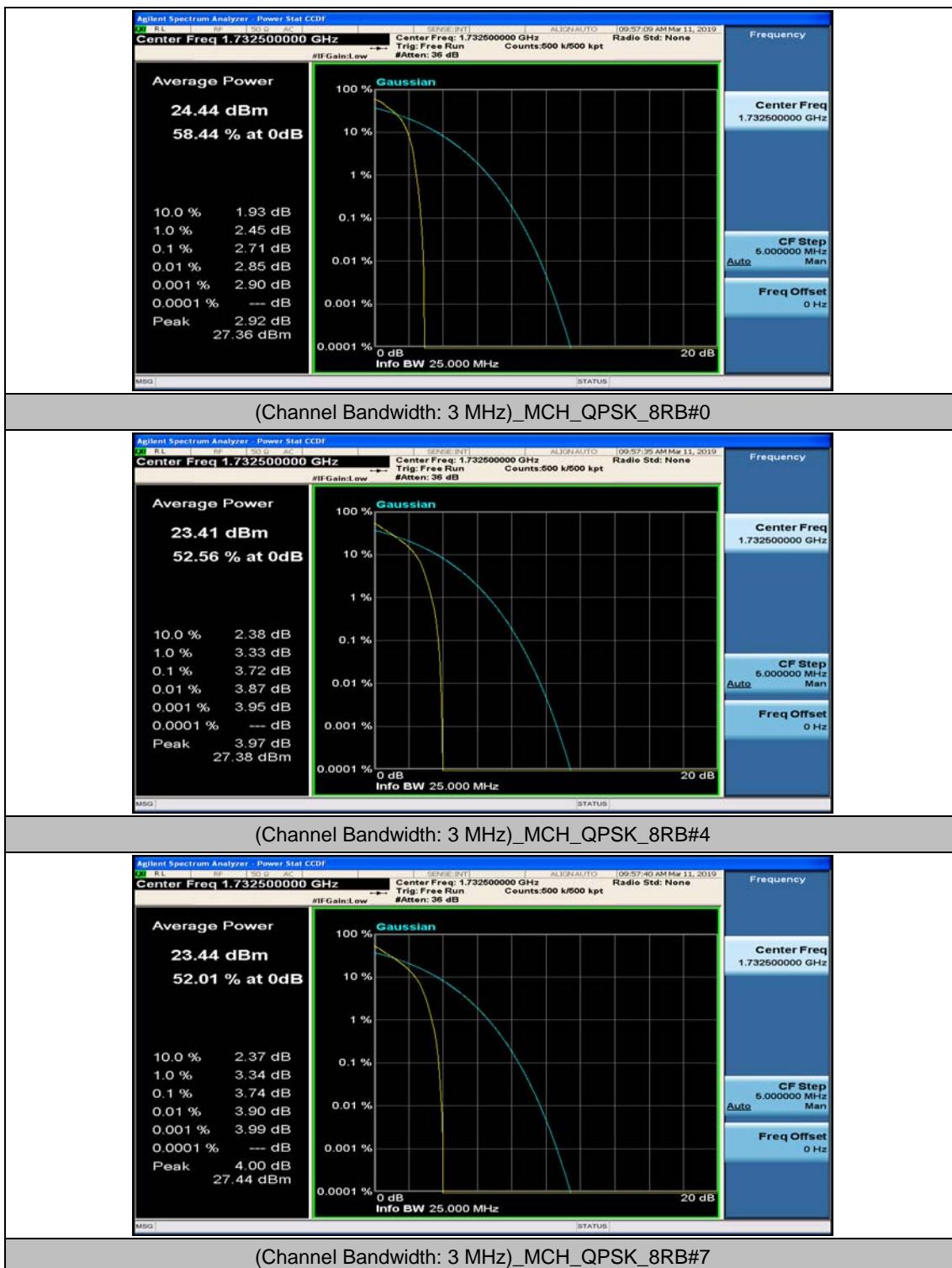
## Channel Bandwidth: 3 MHz

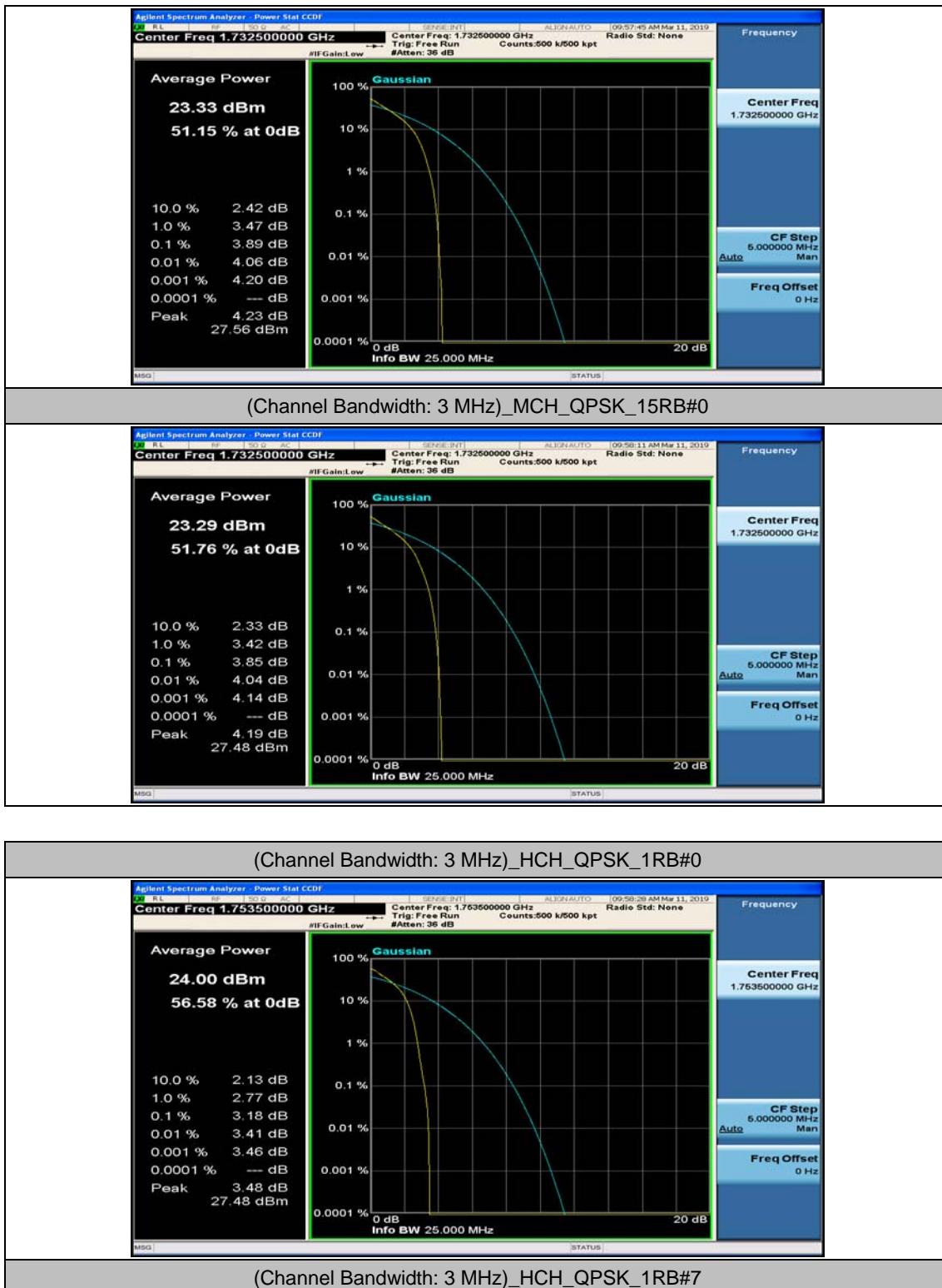


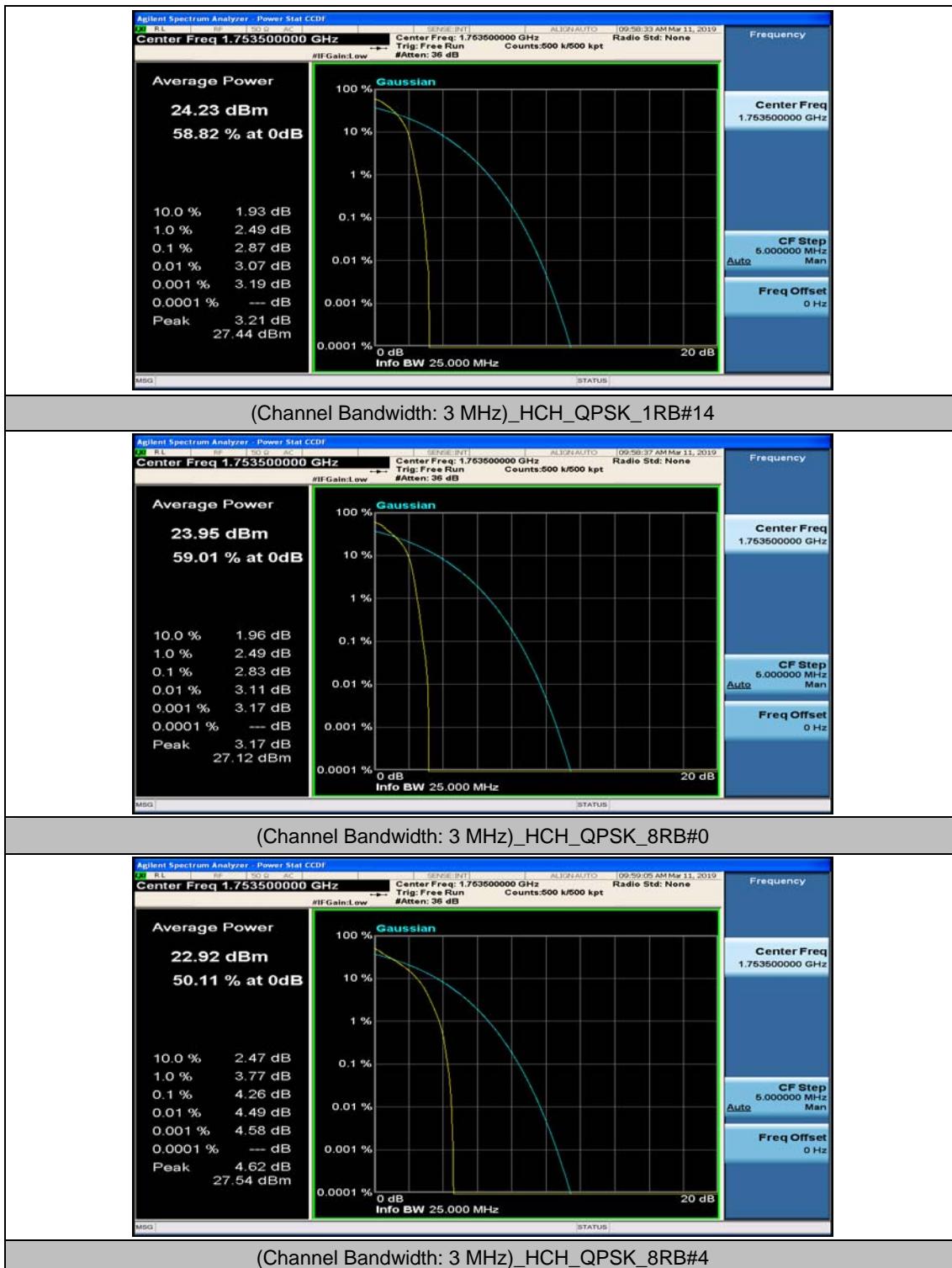


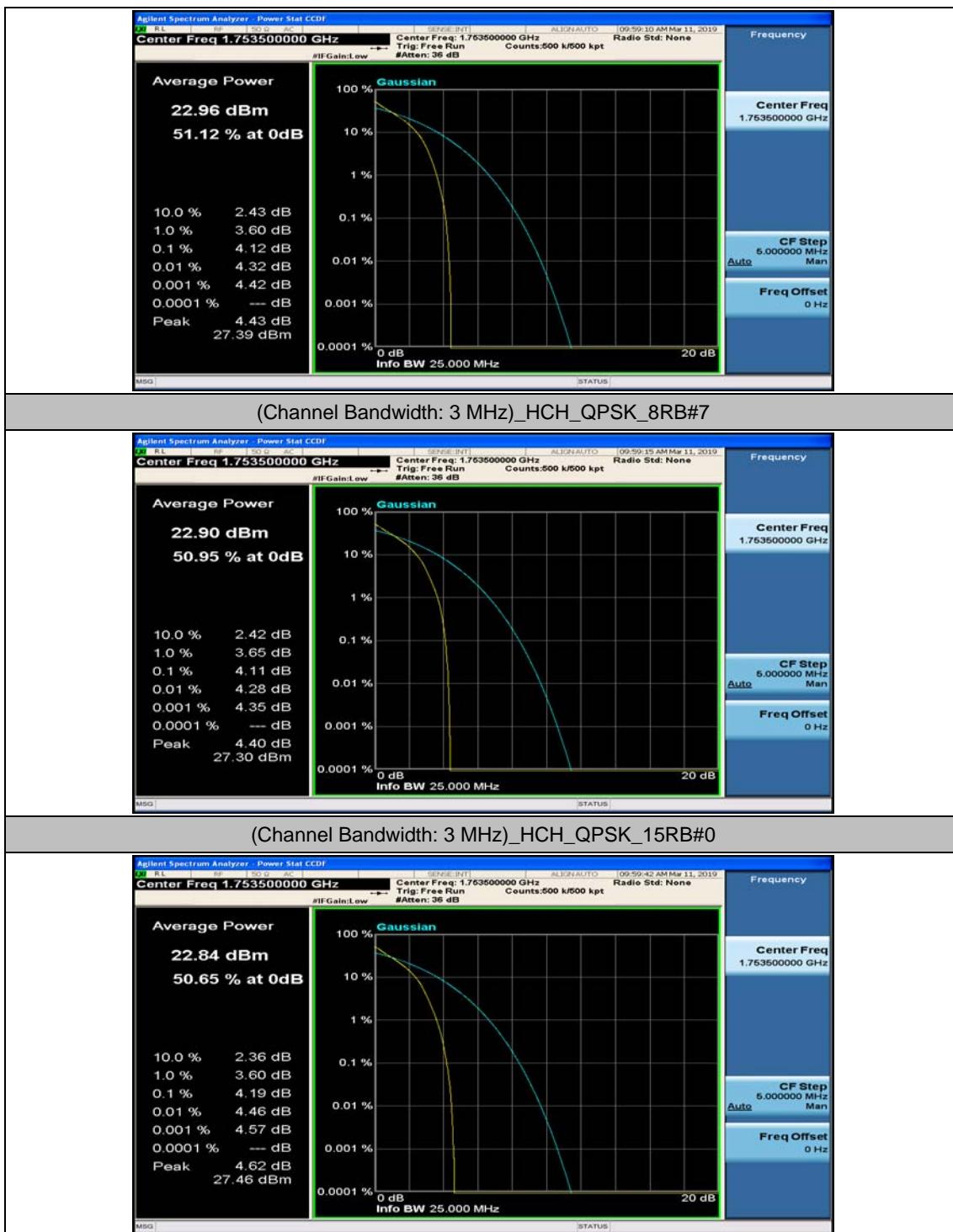


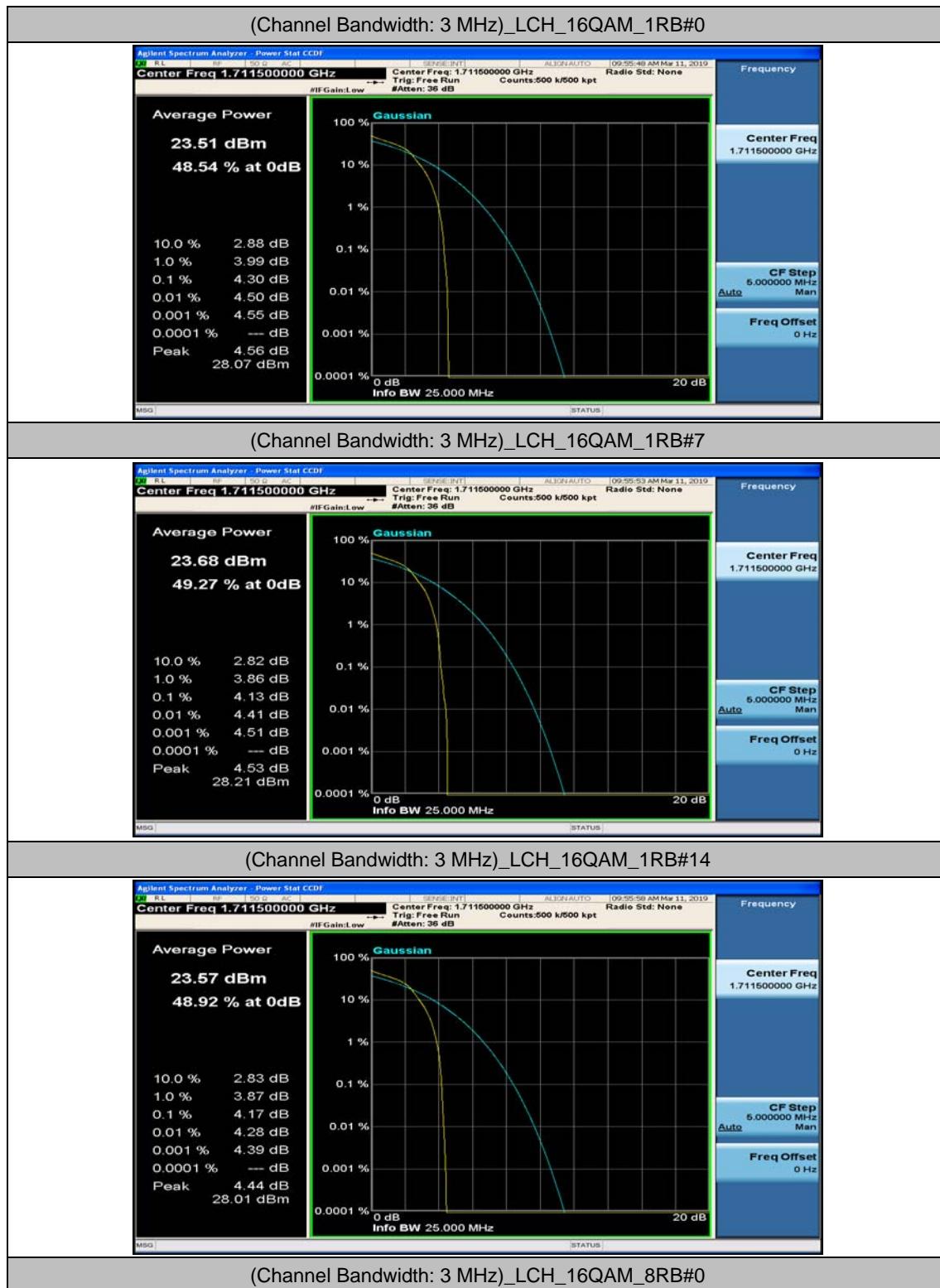
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_1RB#14

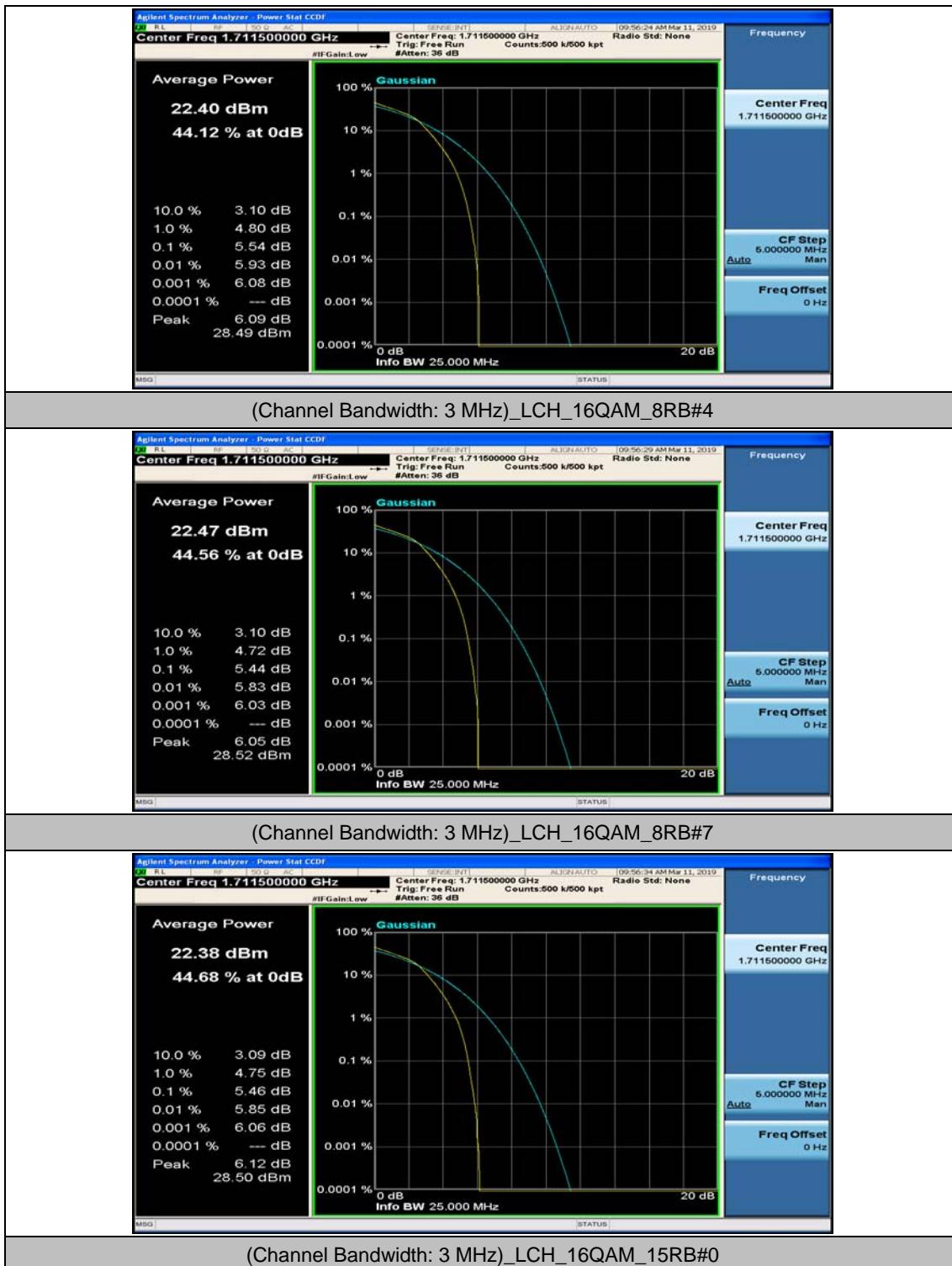


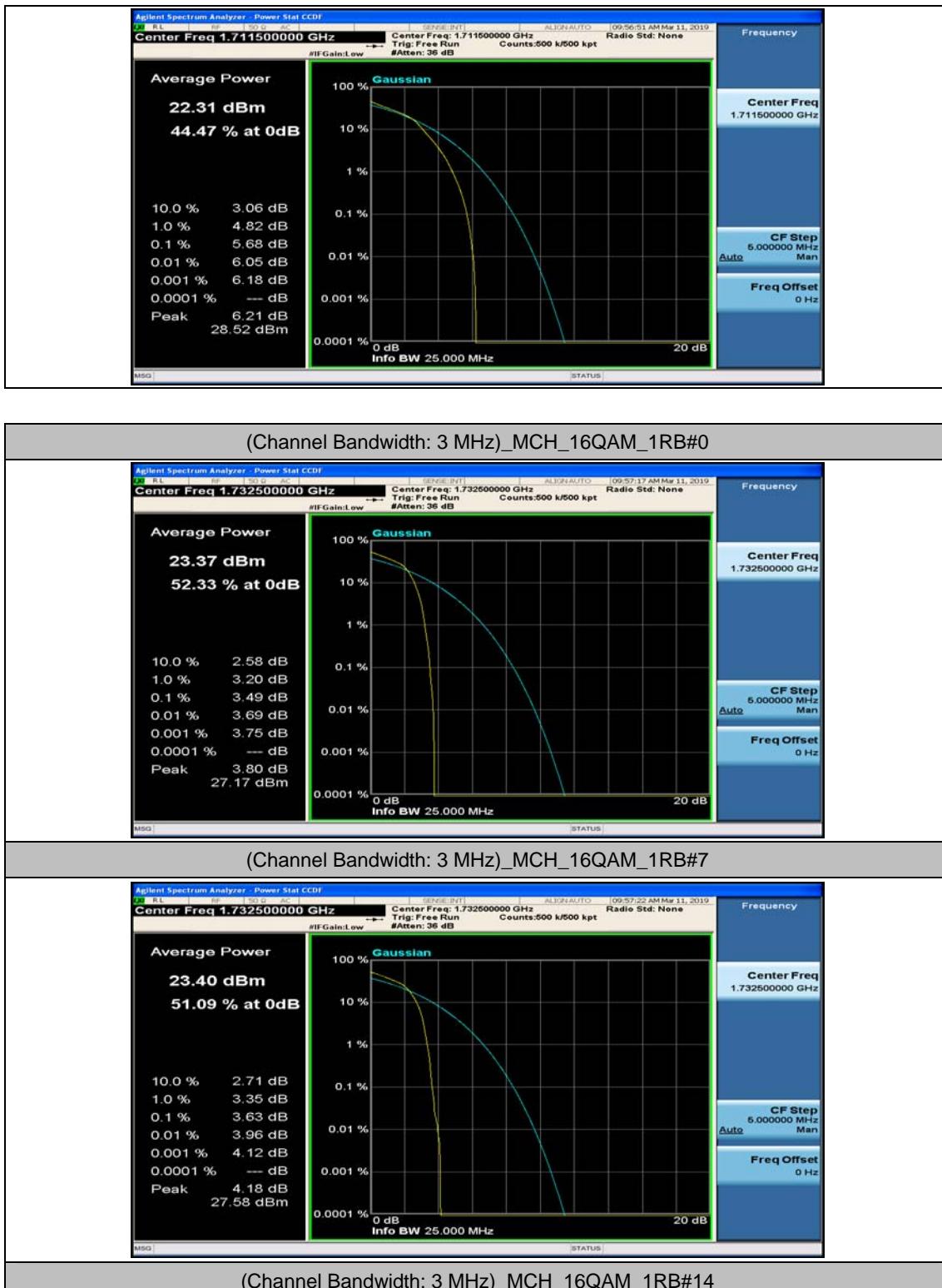


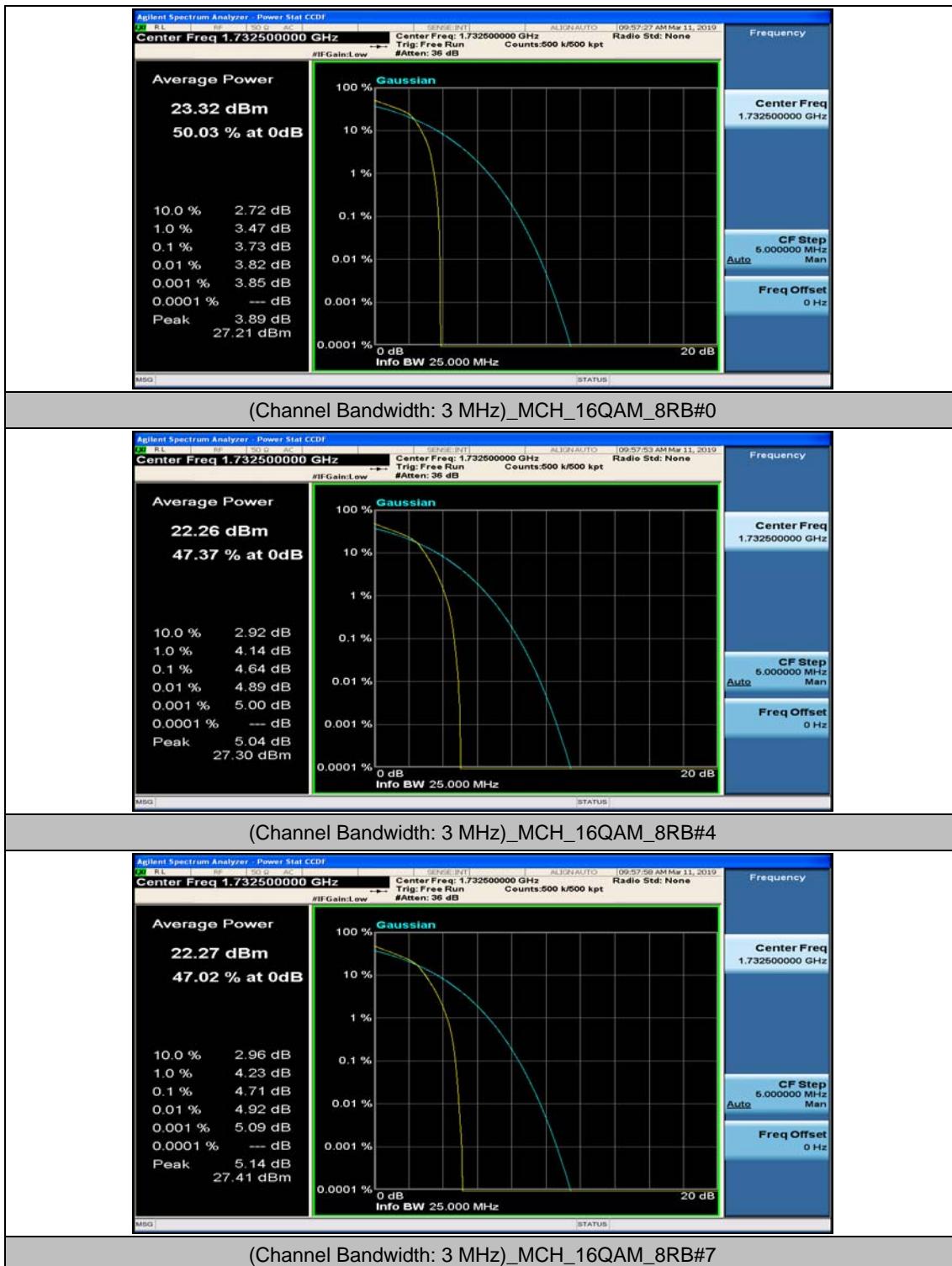


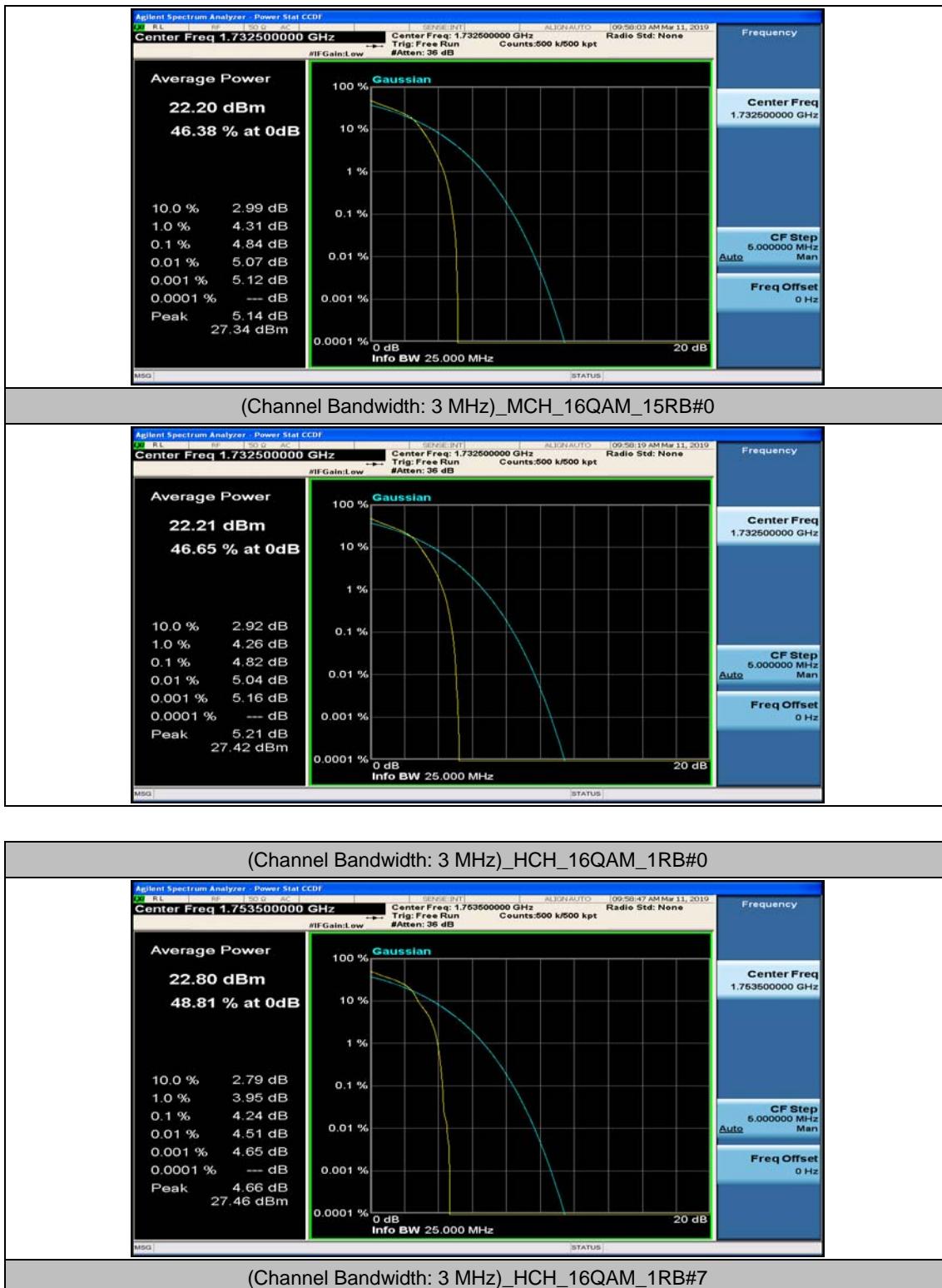


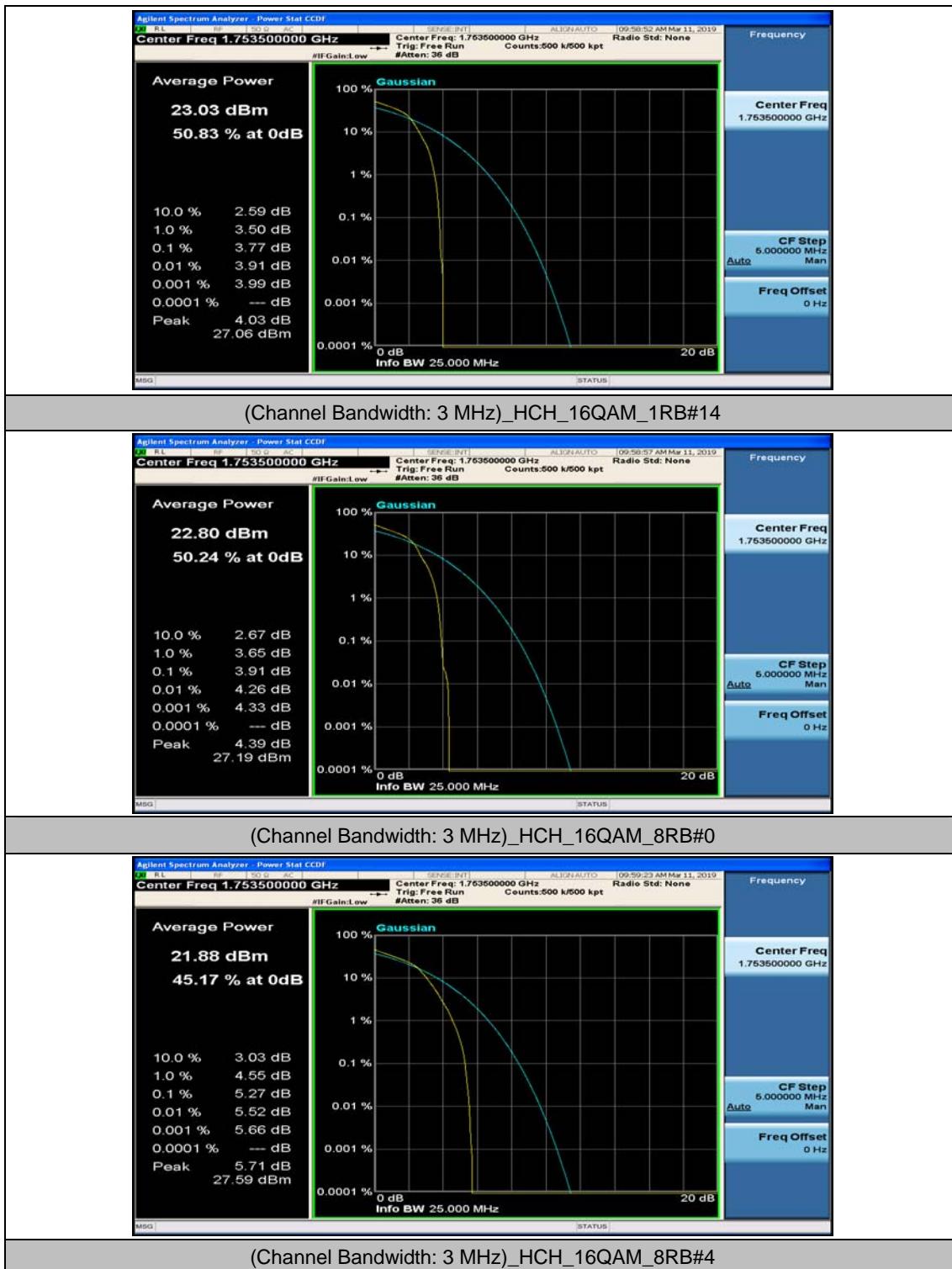


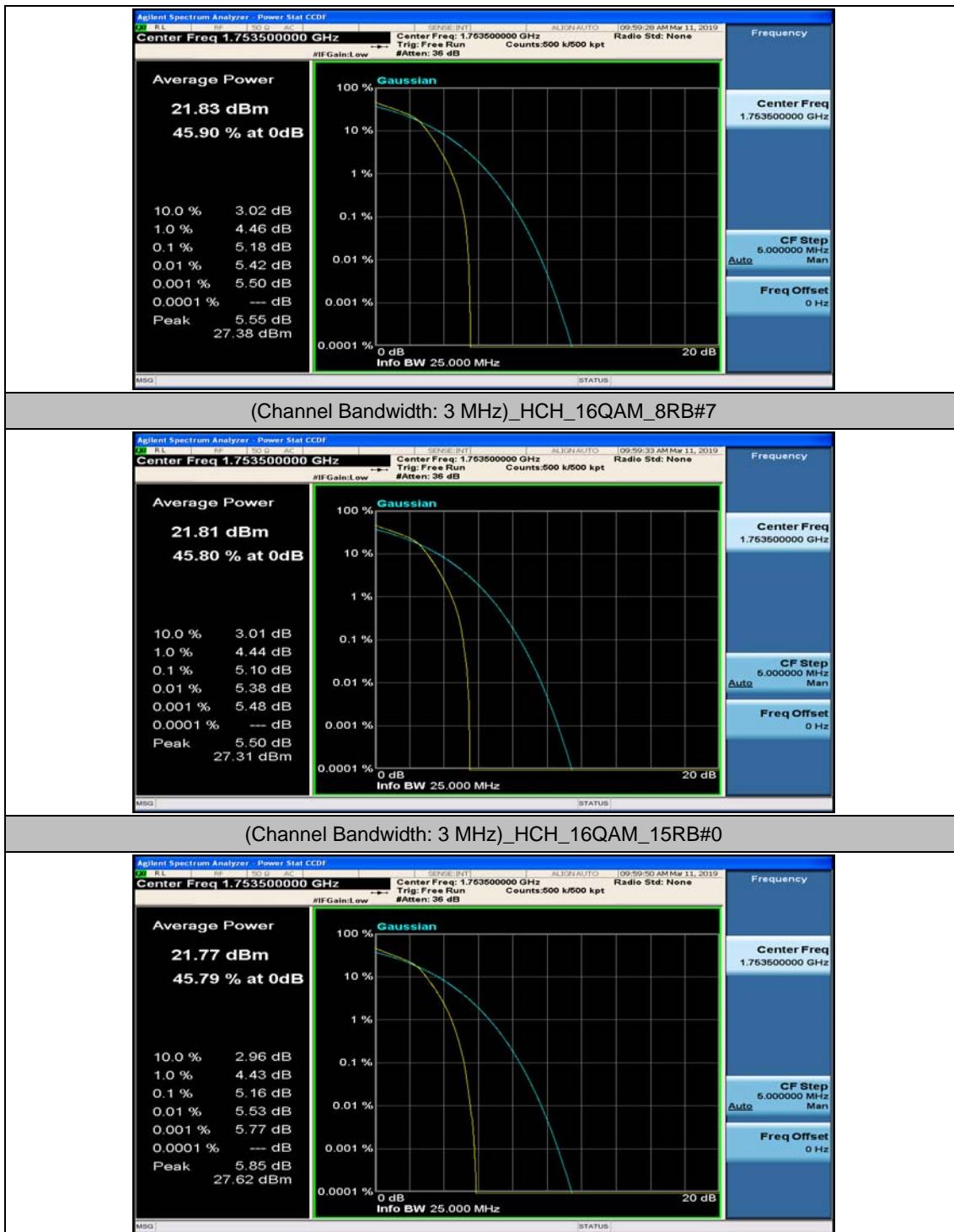




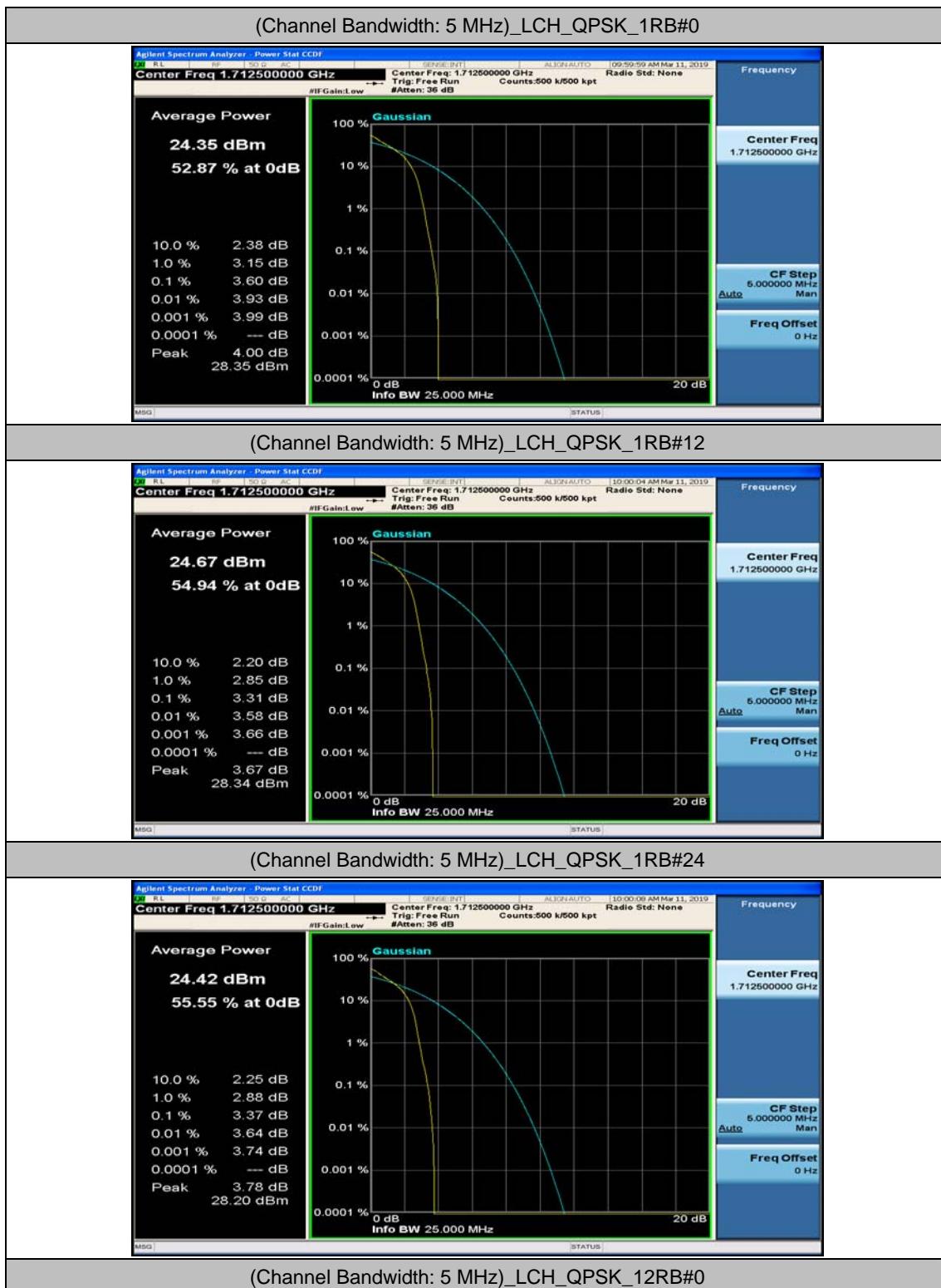


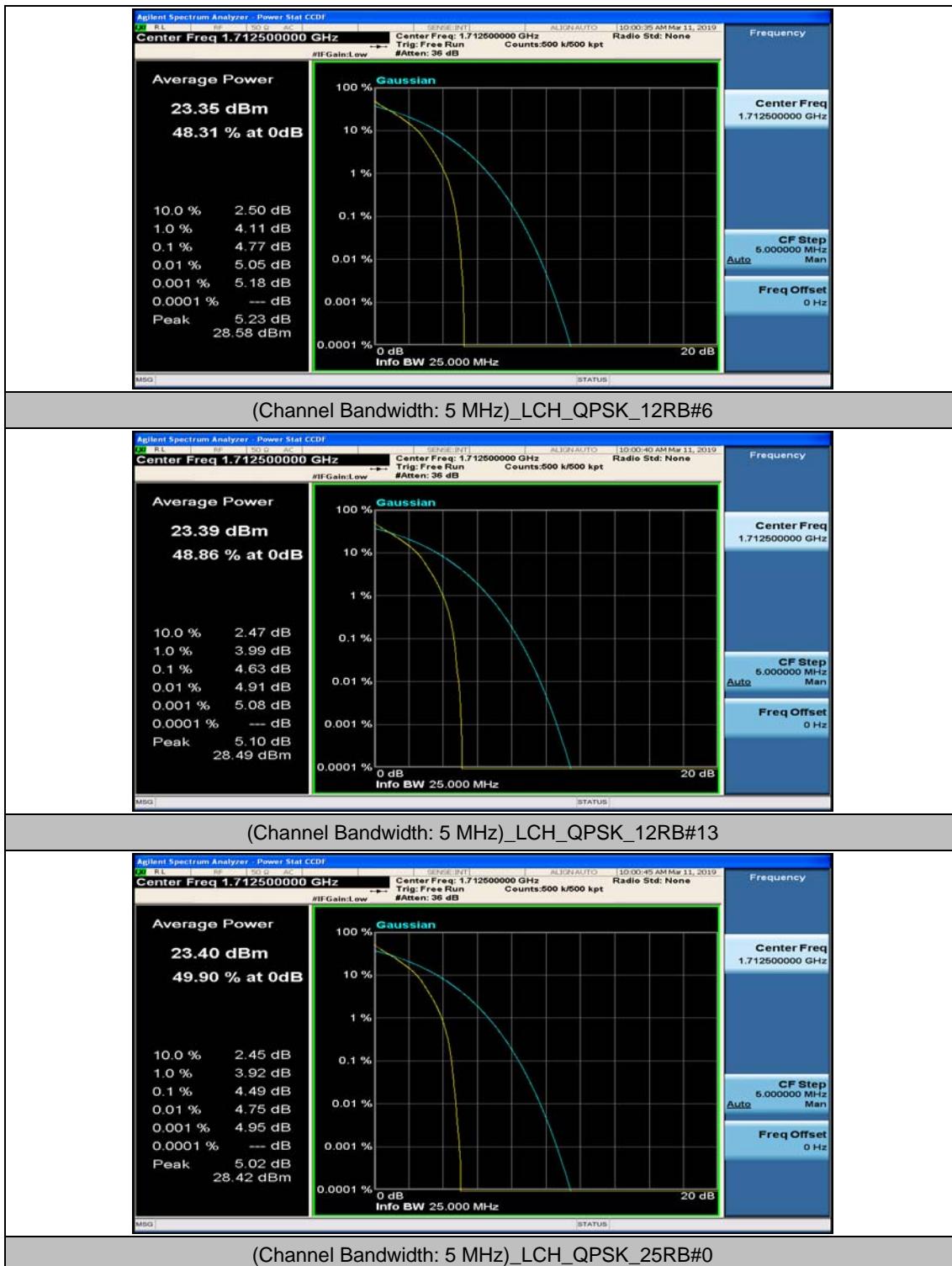


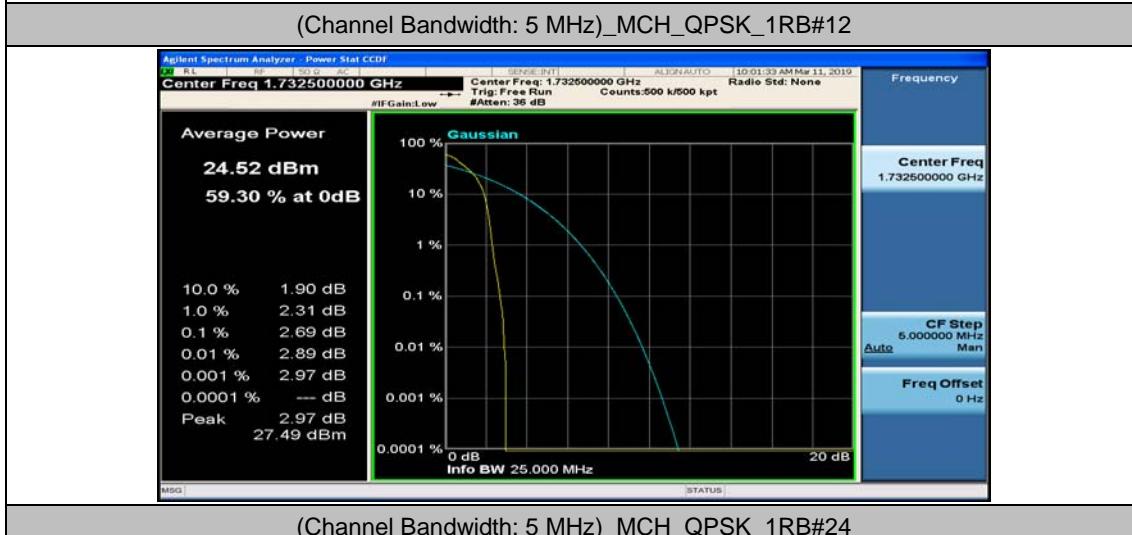
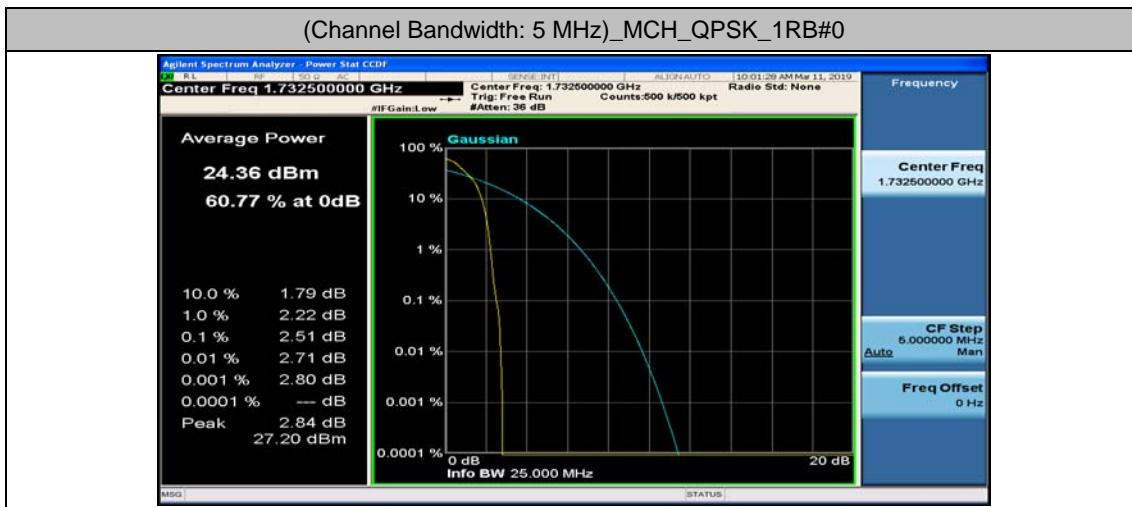
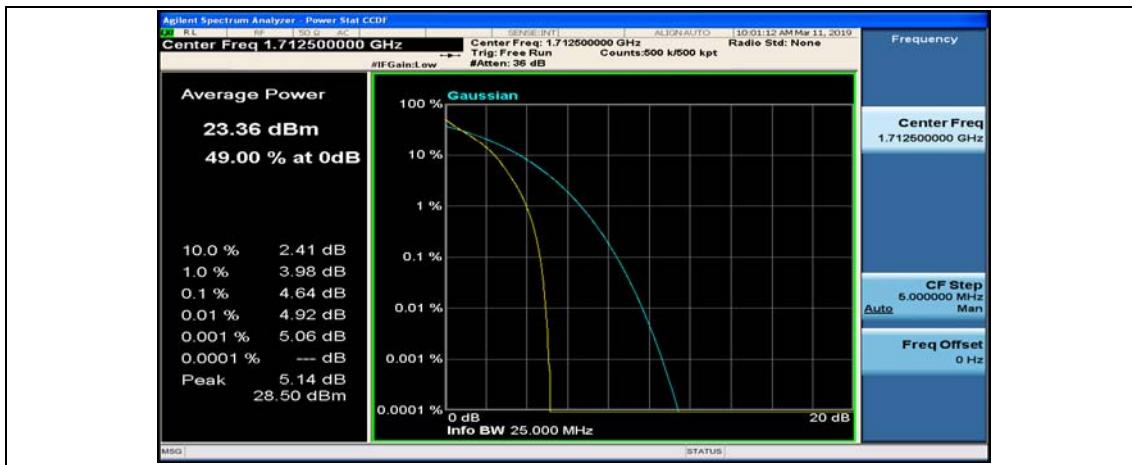




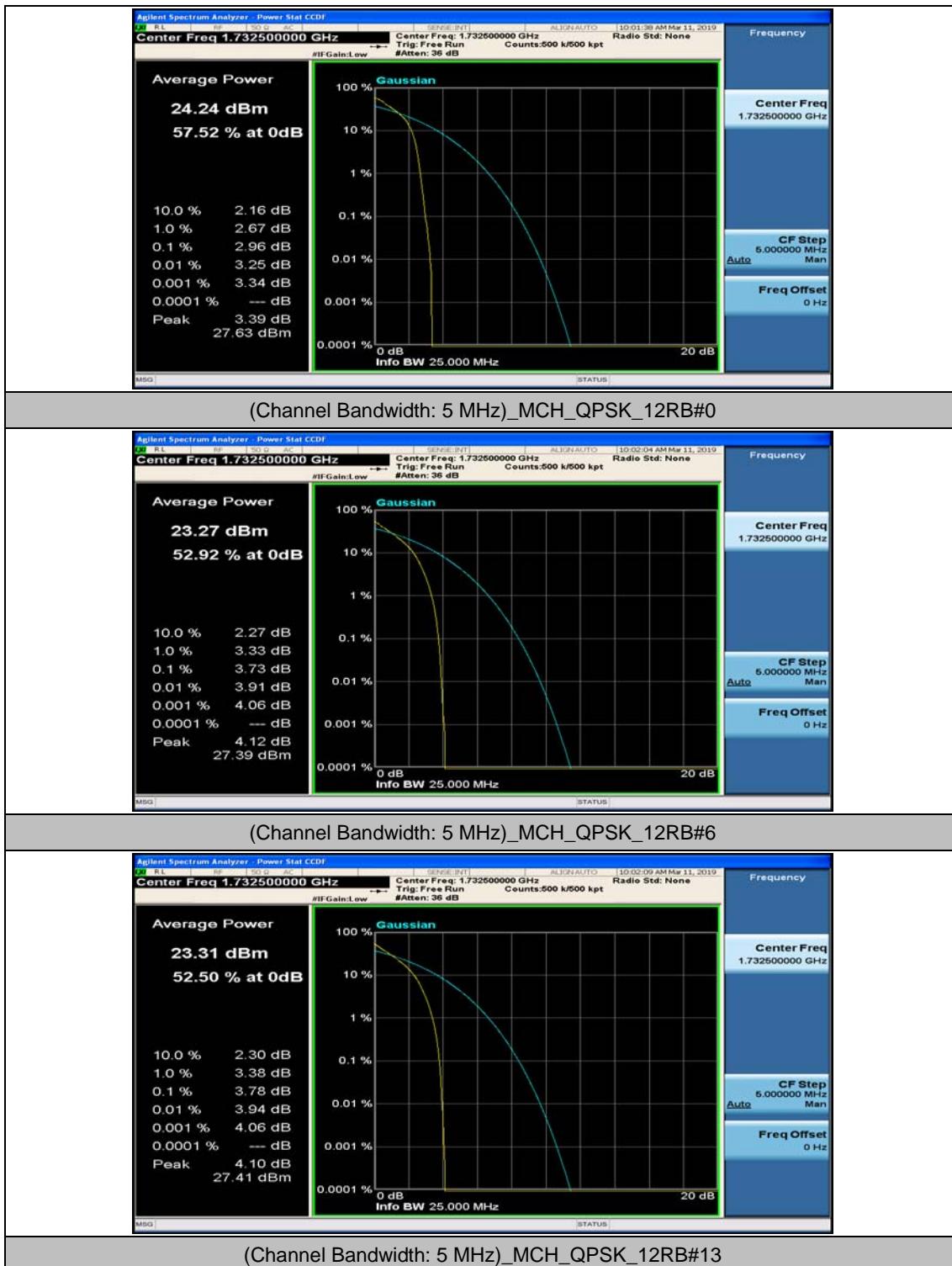
## Channel Bandwidth: 5 MHz

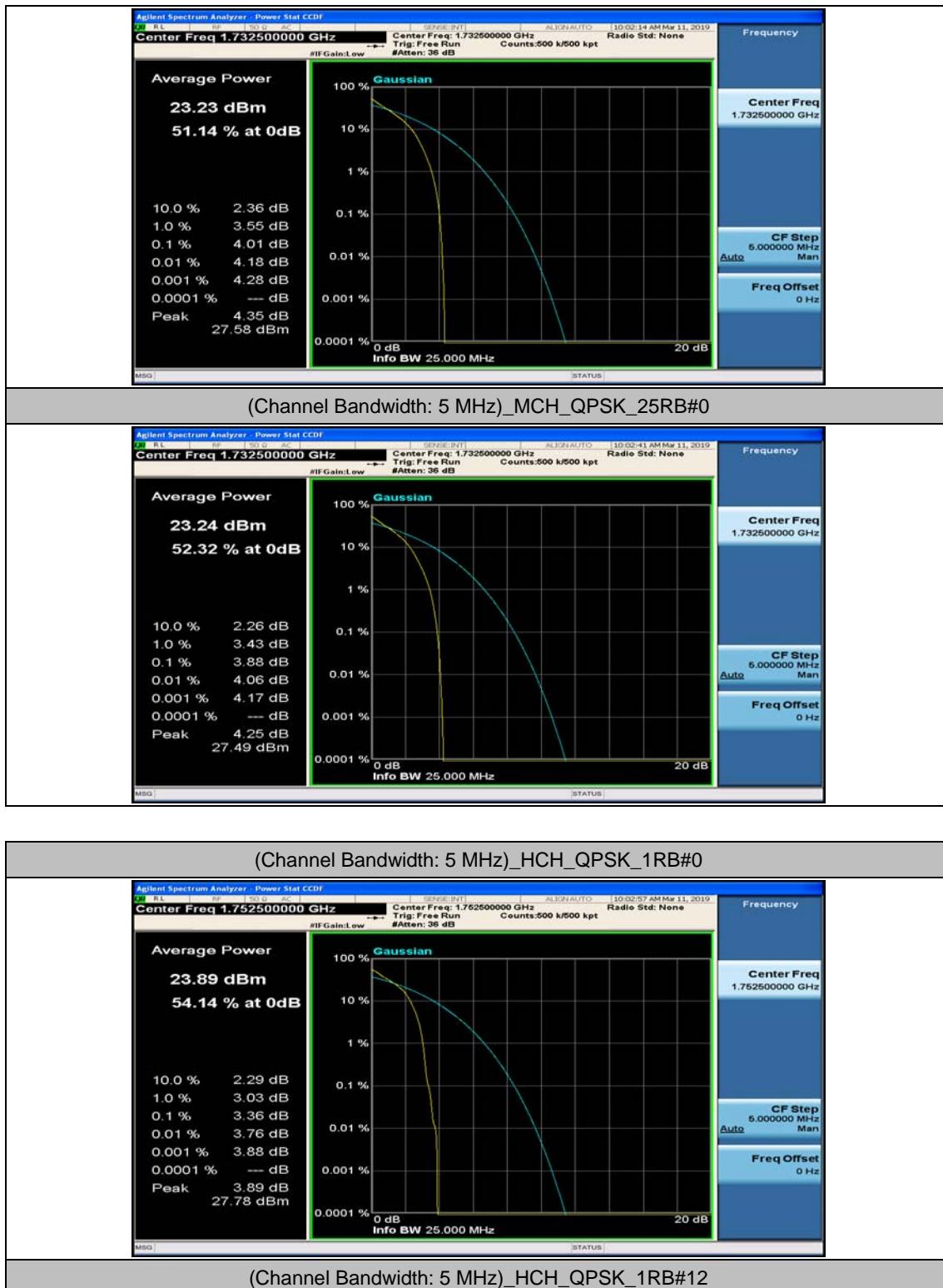


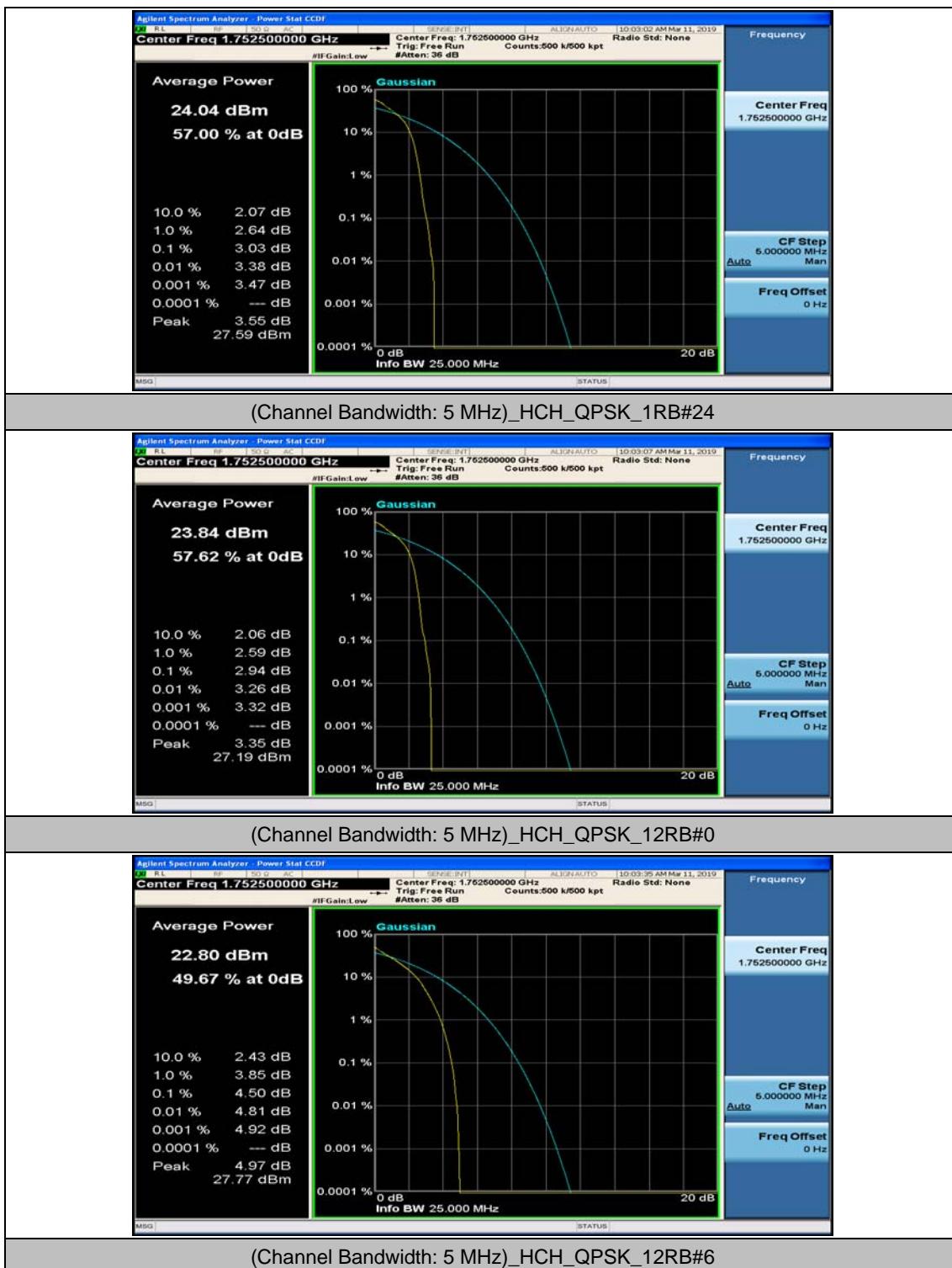


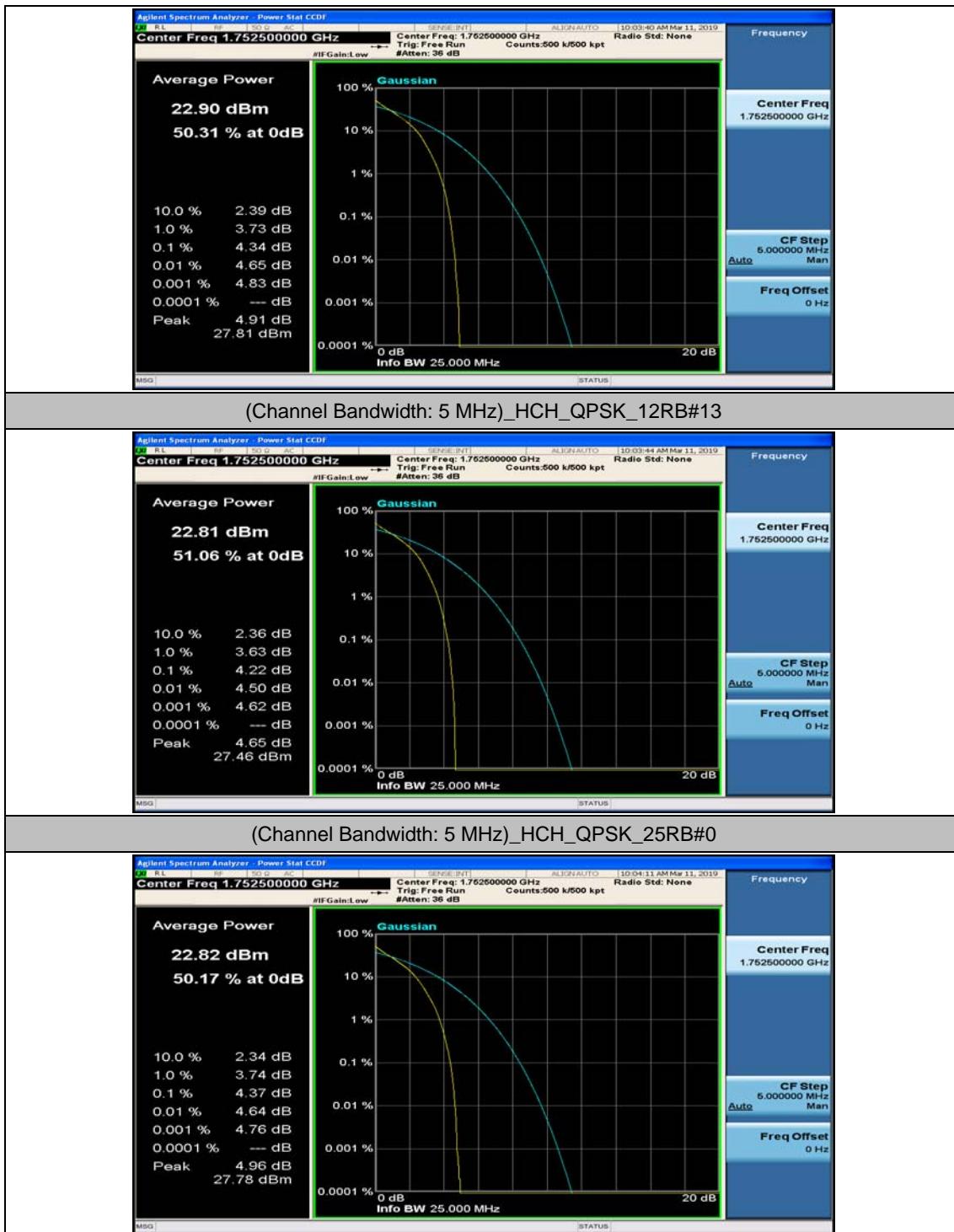


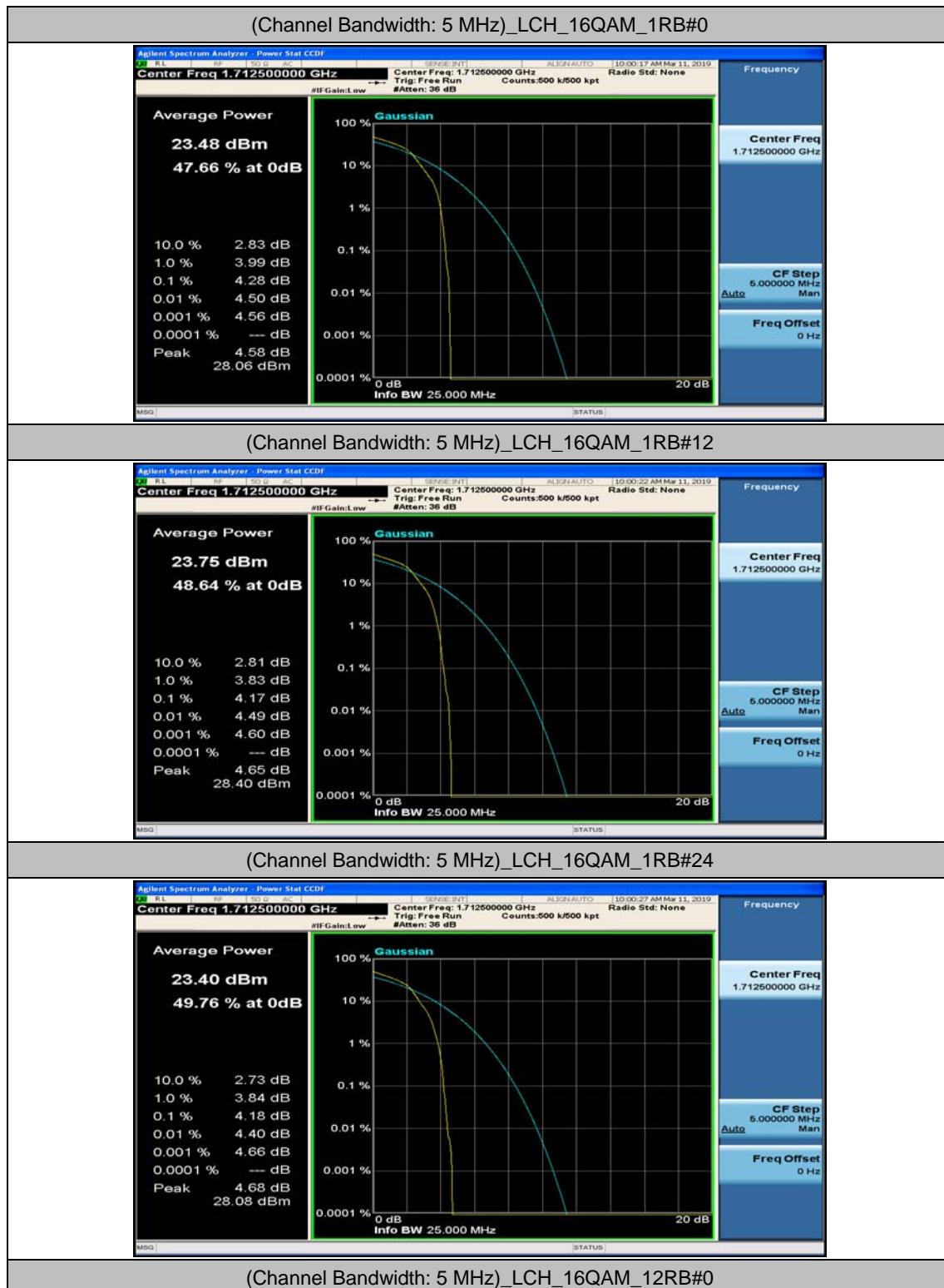
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#24

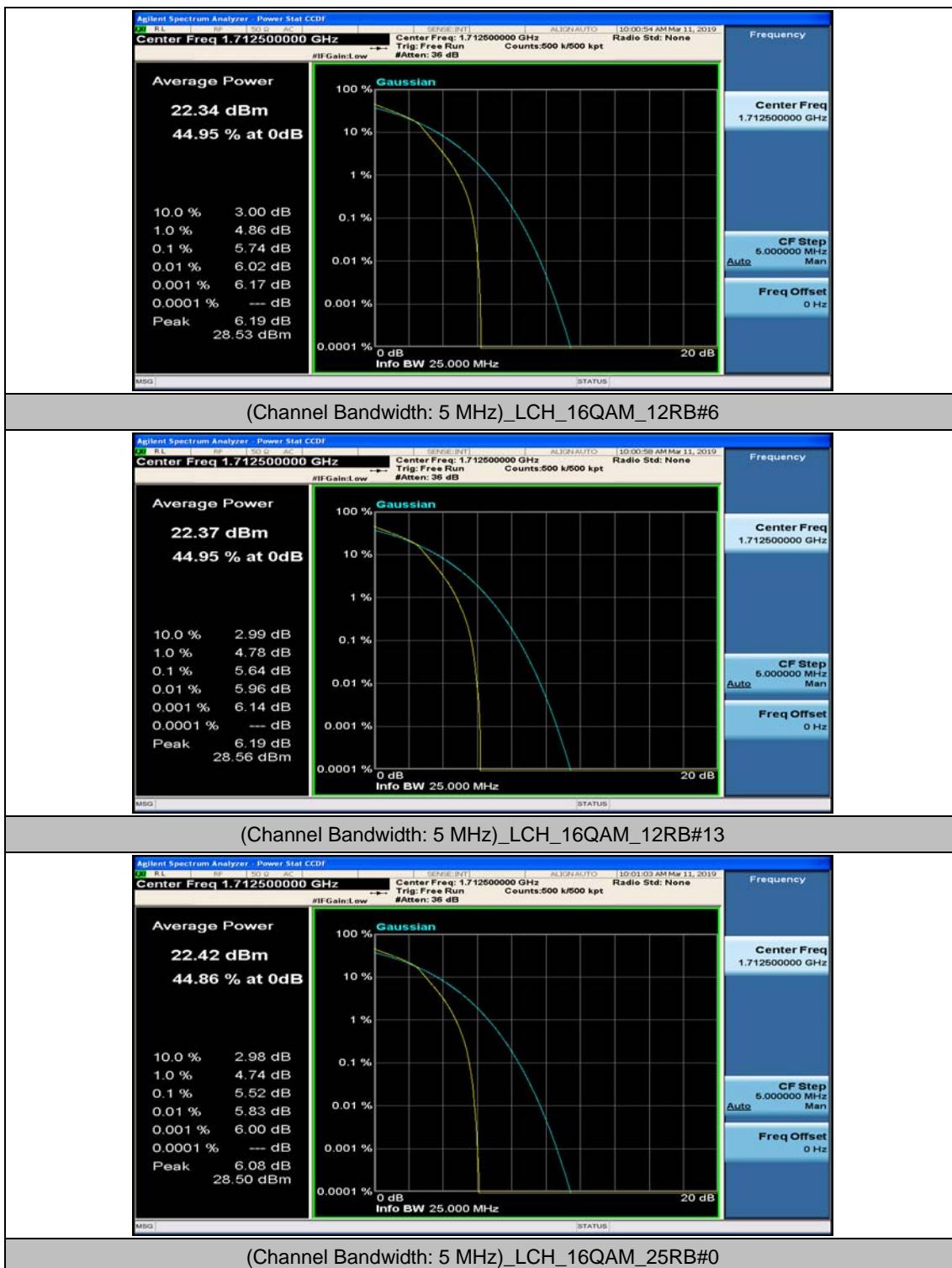


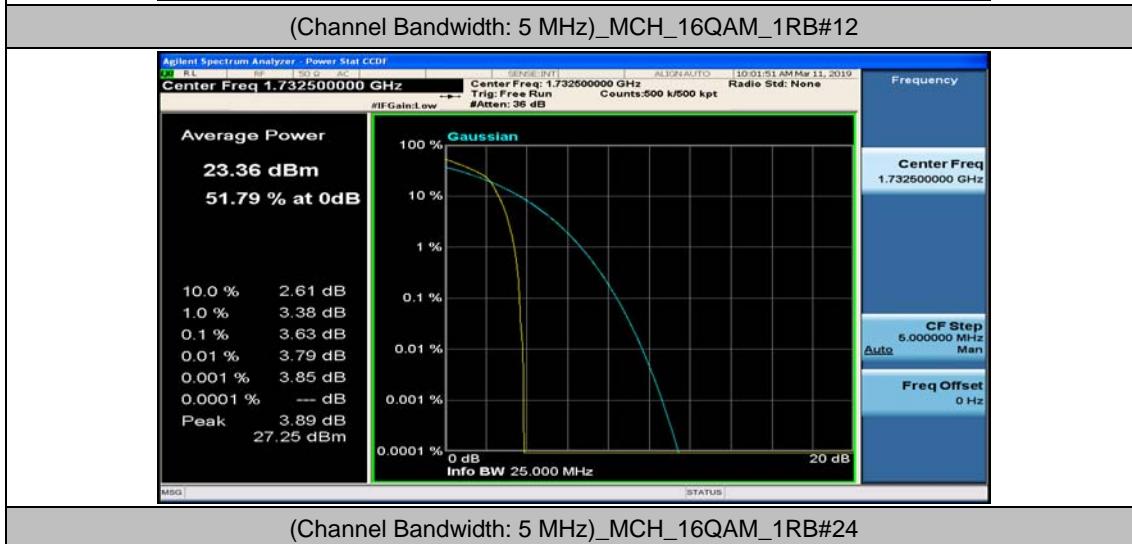
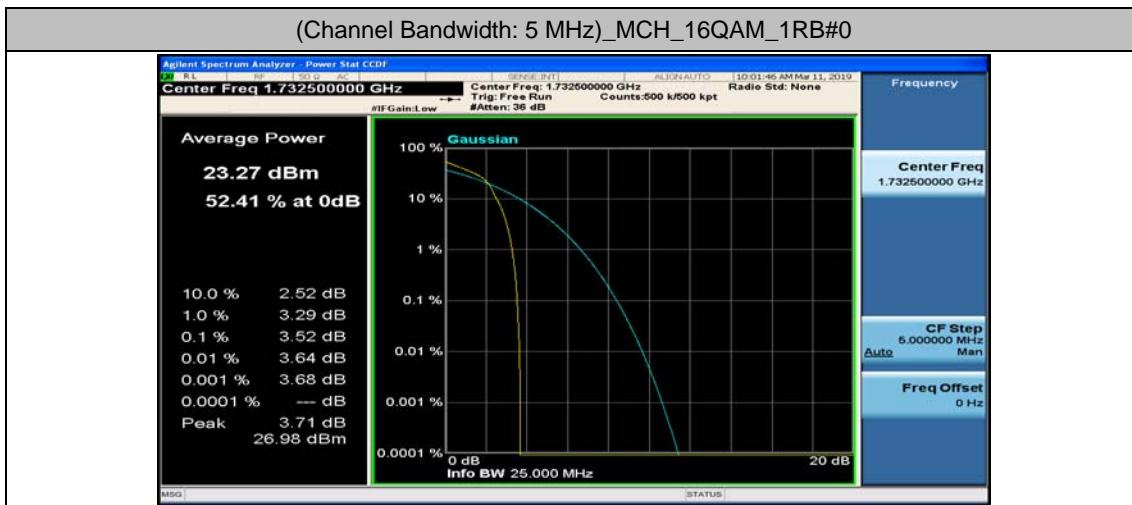
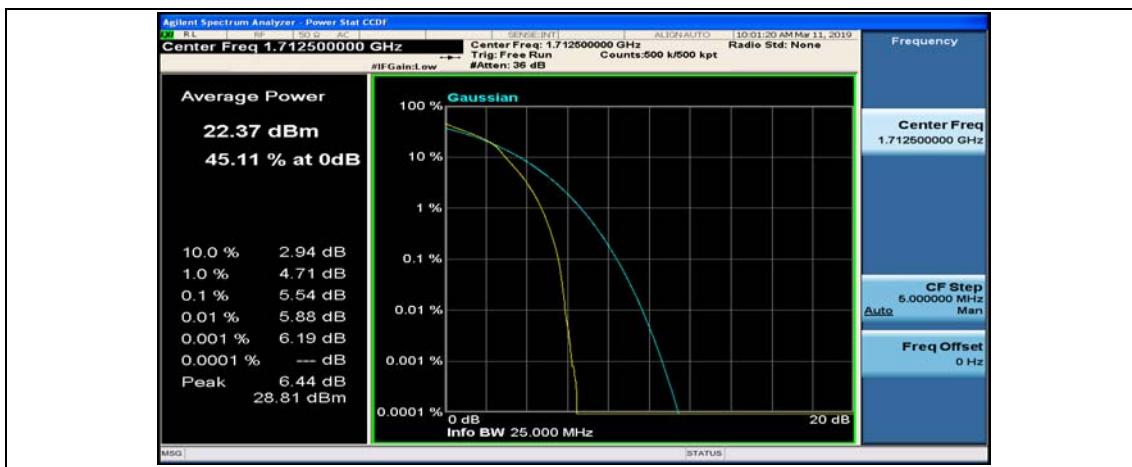




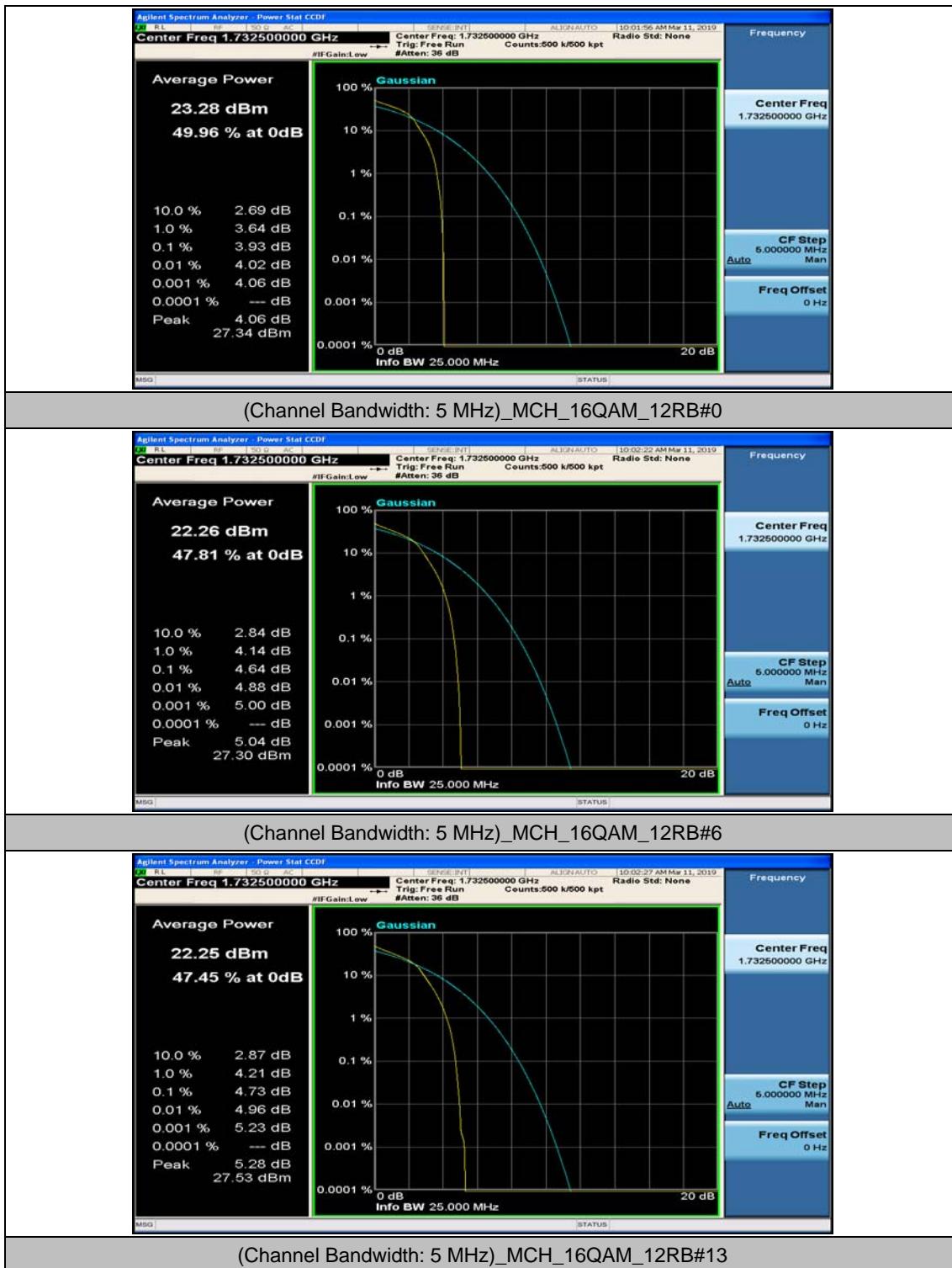


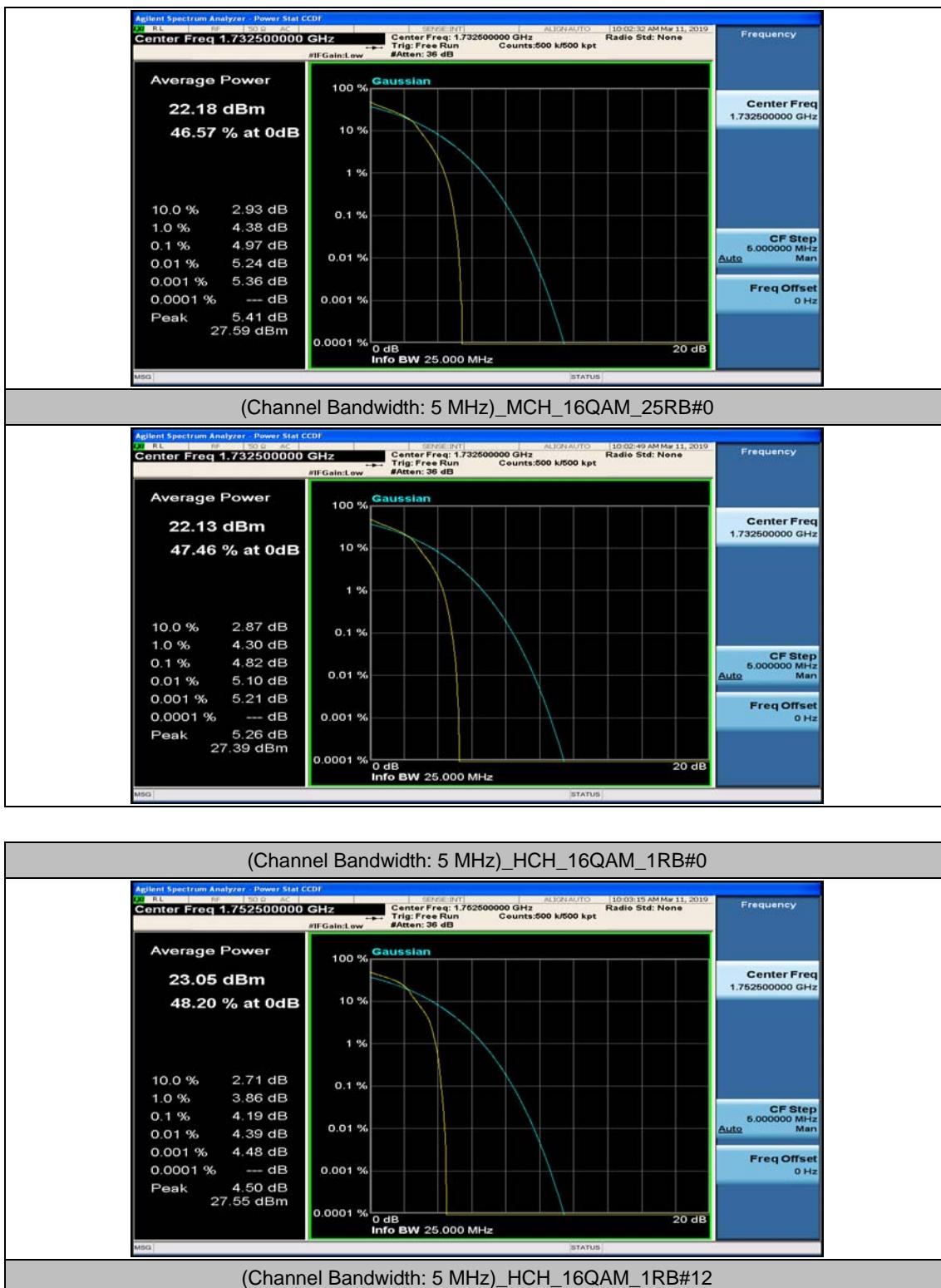


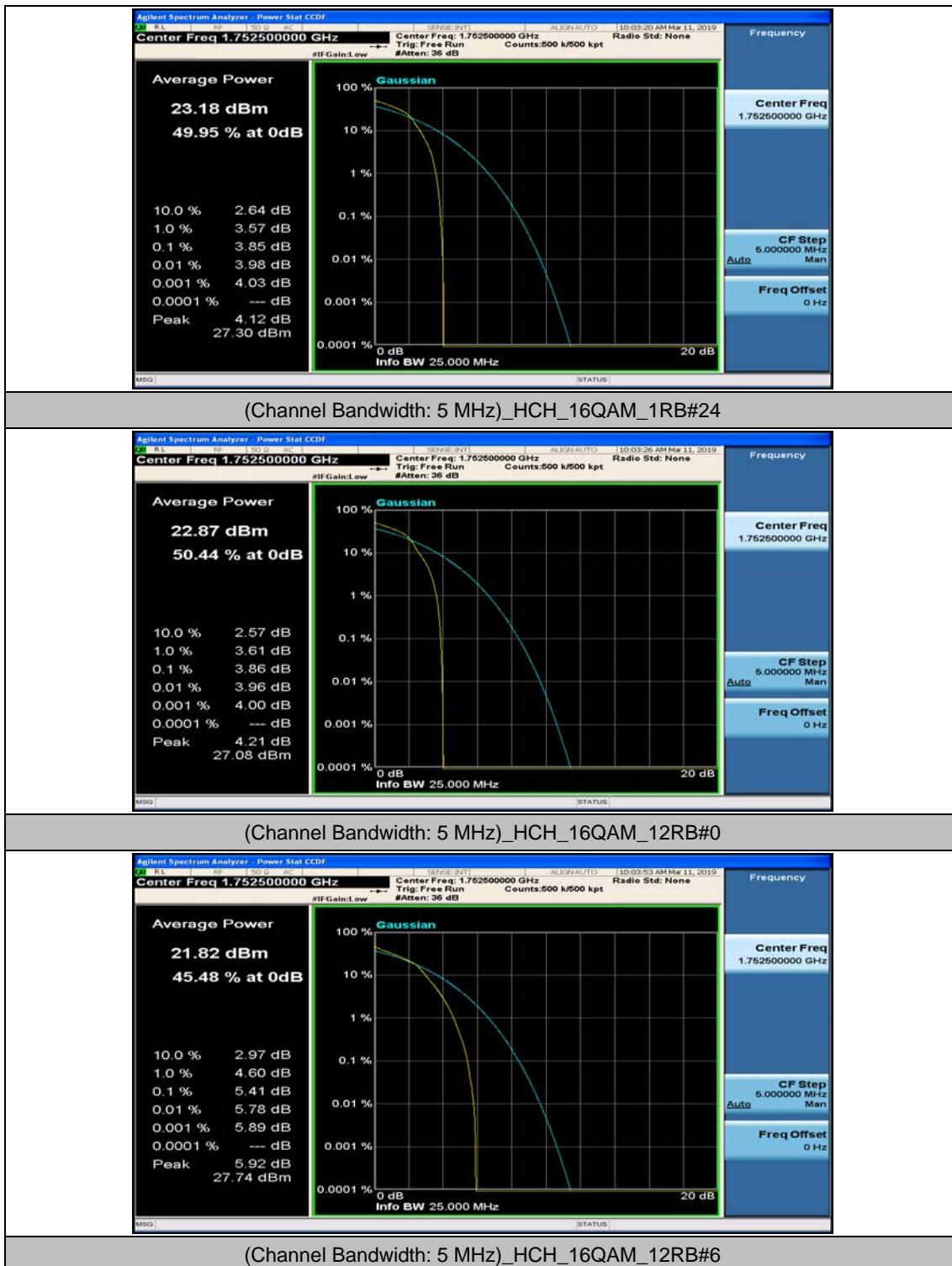


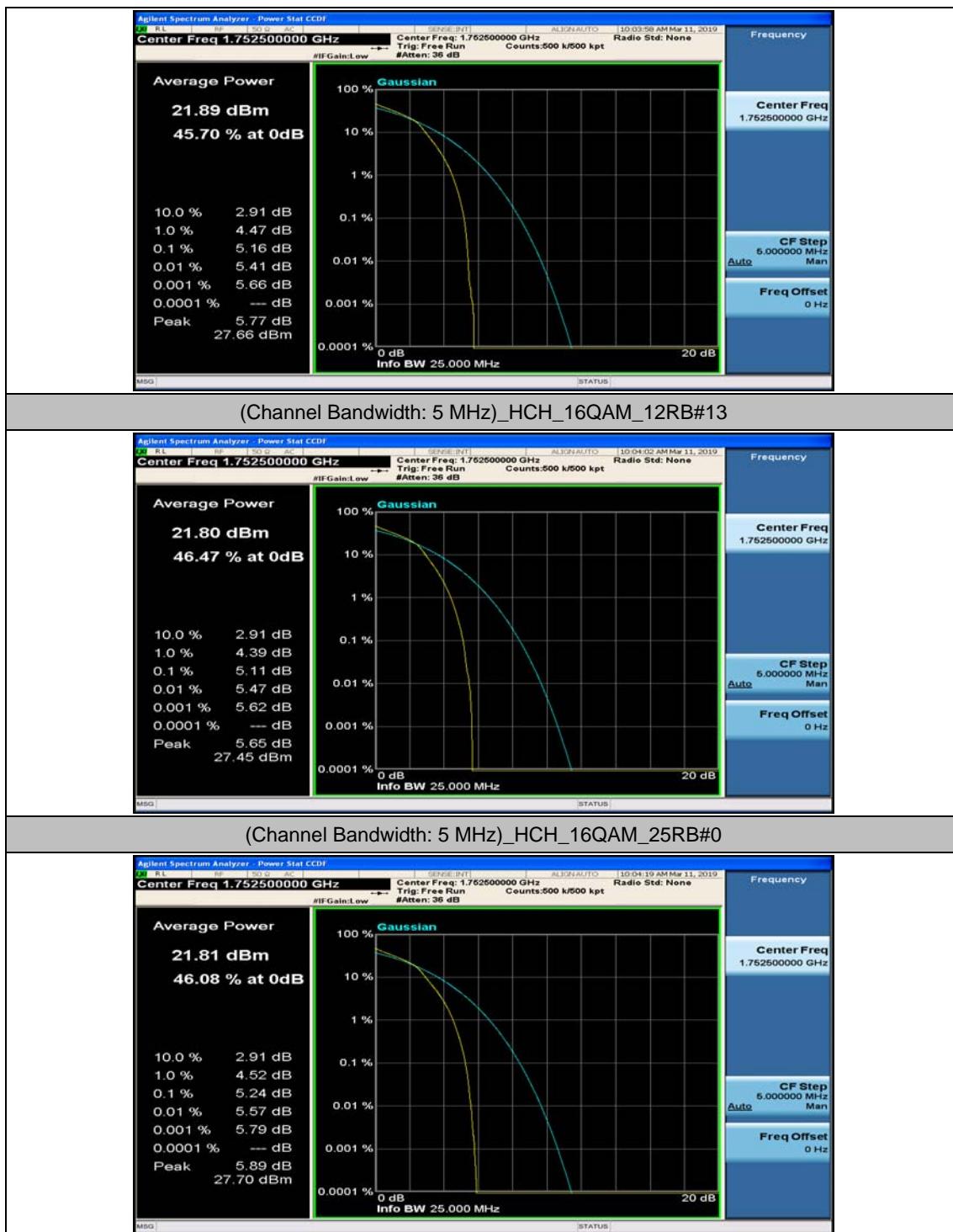


**(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#24**

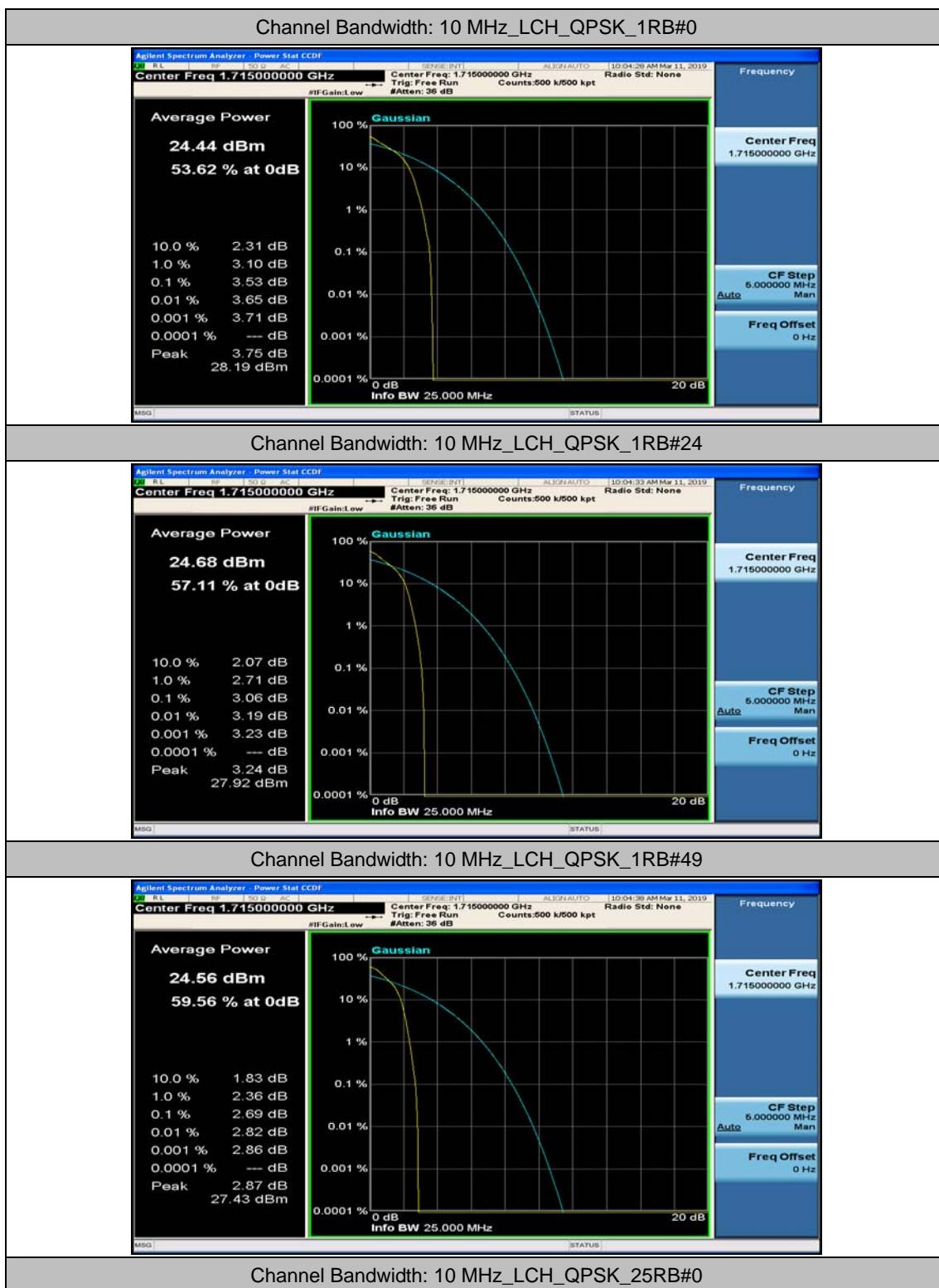


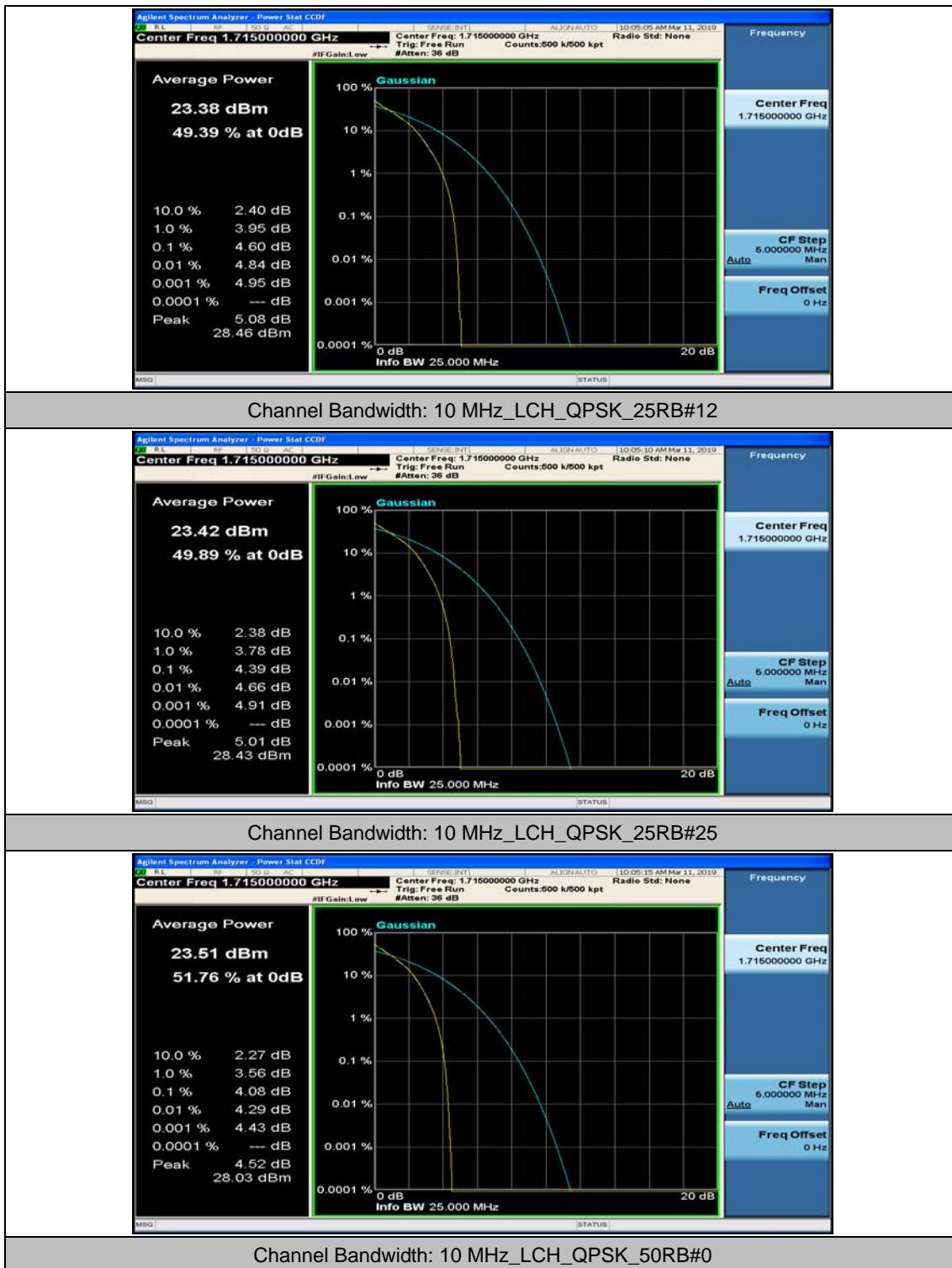


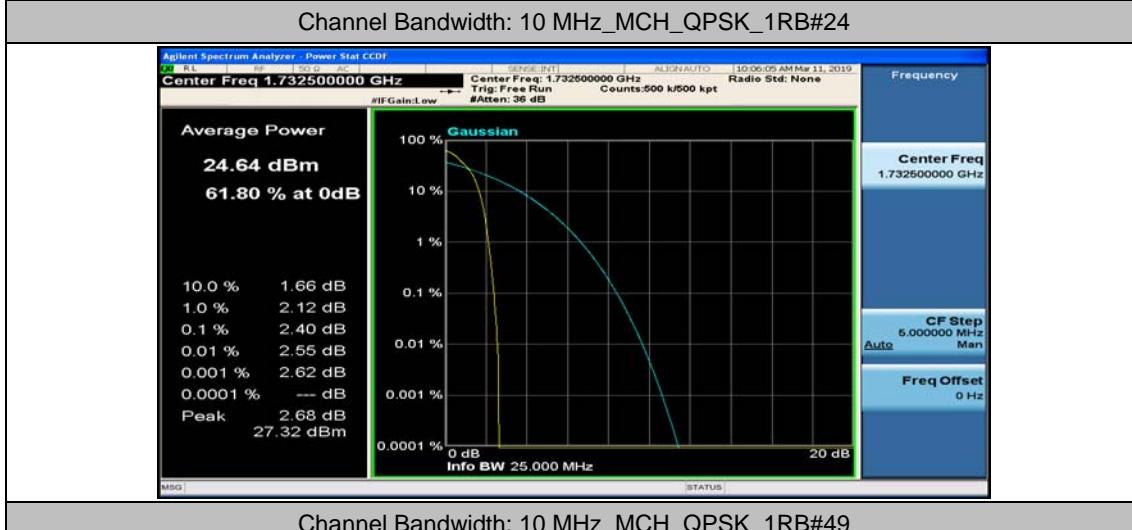
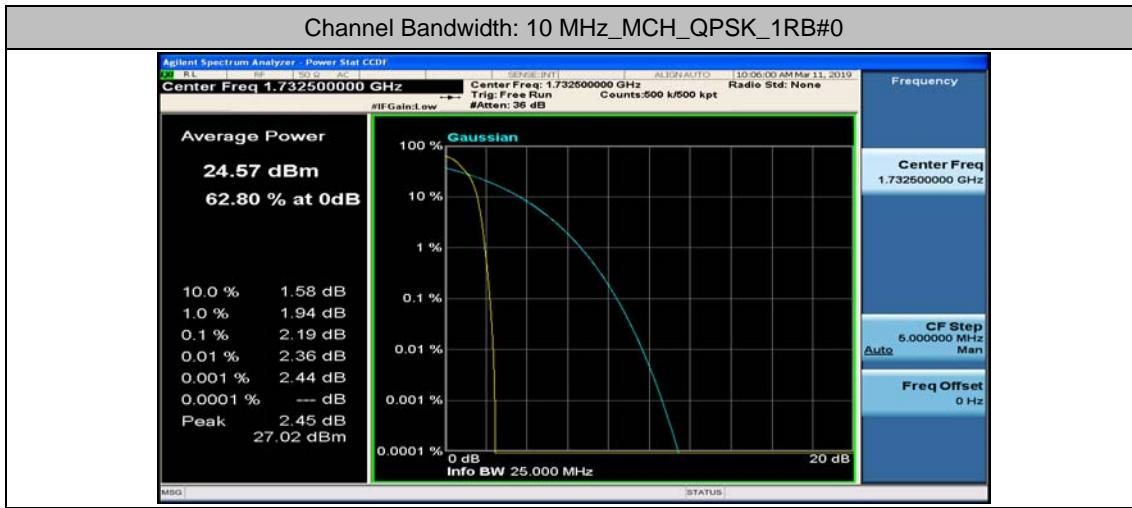
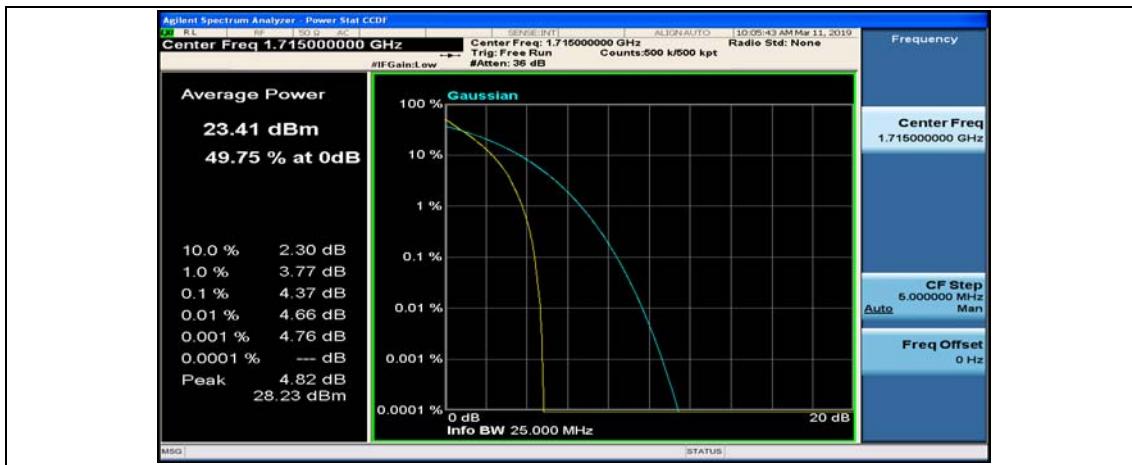




## Channel Bandwidth: 10 MHz







**Channel Bandwidth: 10 MHz\_MCH\_QPSK\_1RB#49**