

## 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	24.21	PASS
		1	3	24.14	PASS
		1	5	24.18	PASS
		3	0	23.13	PASS
		3	2	23.1	PASS
		3	3	23.11	PASS
		6	0	22.25	PASS
	MCH	1	0	24.13	PASS
		1	3	24.1	PASS
		1	5	24.11	PASS
		3	0	23.09	PASS
		3	2	23	PASS
		3	3	23.04	PASS
		6	0	22.19	PASS
16QAM	LCH	1	0	23.51	PASS
		1	3	23.46	PASS
		1	5	23.47	PASS
		3	0	22.78	PASS
		3	2	22.74	PASS
		3	3	22.73	PASS
		6	0	21.59	PASS
	MCH	1	0	23.3	PASS
		1	3	23.32	PASS
		1	5	23.28	PASS
		3	0	22.19	PASS
		3	2	22.13	PASS
		3	3	22.13	PASS
		6	0	21.13	PASS

		3	0	22.95	PASS
		3	2	22.92	PASS
		3	3	22.94	PASS
		6	0	22.05	PASS
HCH	HCH	1	0	22.64	PASS
		1	3	22.64	PASS
		1	5	22.6	PASS
		3	0	22.45	PASS
		3	2	22.39	PASS
		3	3	22.4	PASS
		6	0	21.6	PASS

### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.1	PASS
		1	7	24.11	PASS
		1	14	24.08	PASS
		8	0	23.24	PASS
		8	4	23.22	PASS
		8	7	23.21	PASS
		15	0	23.2	PASS
	MCH	1	0	24.13	PASS
		1	7	24.15	PASS
		1	14	24.1	PASS
		8	0	23.18	PASS
		8	4	23.17	PASS
		8	7	23.18	PASS
		15	0	23.08	PASS
	HCH	1	0	23.59	PASS
		1	7	23.54	PASS
		1	14	23.45	PASS
		8	0	22.64	PASS
		8	4	22.6	PASS
		8	7	22.57	PASS
		15	0	22.56	PASS
16QAM	LCH	1	0	23.28	PASS
		1	7	23.31	PASS
		1	14	23.27	PASS
		8	0	22.21	PASS
		8	4	22.22	PASS
		8	7	22.18	PASS

		15	0	22.09	PASS
MCH		1	0	23.33	PASS
		1	7	23.33	PASS
		1	14	23.28	PASS
		8	0	22.08	PASS
		8	4	22.08	PASS
		8	7	22.09	PASS
		15	0	22	PASS
HCH		1	0	22.73	PASS
		1	7	22.69	PASS
		1	14	22.57	PASS
		8	0	21.52	PASS
		8	4	21.48	PASS
		8	7	21.45	PASS
		15	0	21.5	PASS

### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.26	PASS
		1	12	24.24	PASS
		1	24	24.17	PASS
		12	0	23.24	PASS
		12	6	23.2	PASS
		12	13	23.22	PASS
		25	0	23.17	PASS
	MCH	1	0	24.2	PASS
		1	12	24.19	PASS
		1	24	24.13	PASS
		12	0	23.16	PASS
		12	6	23.14	PASS
		12	13	23.16	PASS
		25	0	23.09	PASS
	HCH	1	0	23.83	PASS
		1	12	23.72	PASS
		1	24	23.58	PASS
		12	0	22.74	PASS
		12	6	22.68	PASS
		12	13	22.6	PASS
		25	0	22.61	PASS
16QAM	LCH	1	0	23.4	PASS

		1	12	23.38	PASS
		1	24	23.35	PASS
		12	0	22.23	PASS
		12	6	22.2	PASS
		12	13	22.21	PASS
		25	0	22.13	PASS
	MCH	1	0	23.31	PASS
		1	12	23.3	PASS
		1	24	23.25	PASS
		12	0	22.2	PASS
		12	6	22.19	PASS
		12	13	22.17	PASS
		25	0	22.03	PASS
	HCH	1	0	22.94	PASS
		1	12	22.8	PASS
		1	24	22.68	PASS
		12	0	21.68	PASS
		12	6	21.62	PASS
		12	13	21.55	PASS
		25	0	21.58	PASS

### Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.17	PASS
		1	24	24.15	PASS
		1	49	24	PASS
		25	0	23.19	PASS
		25	12	23.17	PASS
		25	25	23.18	PASS
		50	0	23.18	PASS
QPSK	MCH	1	0	24.21	PASS
		1	24	24.17	PASS
		1	49	24.13	PASS
		25	0	23.13	PASS
		25	12	23.14	PASS
		25	25	23.12	PASS
		50	0	23.14	PASS
QPSK	HCH	1	0	23.95	PASS
		1	24	23.78	PASS
		1	49	23.53	PASS

		25	0	22.83	PASS
		25	12	22.73	PASS
		25	25	22.66	PASS
		50	0	22.73	PASS
16QAM	LCH	1	0	23.37	PASS
		1	24	23.36	PASS
		1	49	23.34	PASS
		25	0	22.15	PASS
		25	12	22.12	PASS
		25	25	22.14	PASS
		50	0	22.16	PASS
	MCH	1	0	23.46	PASS
		1	24	23.41	PASS
		1	49	23.36	PASS
		25	0	22.12	PASS
		25	12	22.1	PASS
		25	25	22.08	PASS
		50	0	22.13	PASS
	HCH	1	0	23.1	PASS
		1	24	22.93	PASS
		1	49	22.68	PASS
		25	0	21.8	PASS
		25	12	21.67	PASS
		25	25	21.61	PASS
		50	0	21.72	PASS

### Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.21	PASS
		1	37	24.14	PASS
		1	74	24.09	PASS
		37	0	23.33	PASS
		37	18	23.29	PASS
		37	38	23.34	PASS
		75	0	23.35	PASS
	MCH	1	0	24.24	PASS
		1	37	24.2	PASS
		1	74	24.17	PASS
		37	0	23.32	PASS
		37	18	23.31	PASS

	HCH	37	38	23.31	PASS
		75	0	23.32	PASS
		1	0	24.13	PASS
		1	37	23.87	PASS
		1	74	23.61	PASS
		37	0	23.14	PASS
		37	18	22.99	PASS
		37	38	22.85	PASS
16QAM	LCH	75	0	23	PASS
		1	0	23.41	PASS
		1	37	23.37	PASS
		1	74	23.36	PASS
		37	0	22.25	PASS
		37	18	22.21	PASS
		37	38	22.24	PASS
	MCH	75	0	22.27	PASS
		1	0	23.41	PASS
		1	37	23.36	PASS
		1	74	23.28	PASS
		37	0	22.25	PASS
		37	18	22.23	PASS
		37	38	22.2	PASS
	HCH	75	0	22.22	PASS
		1	0	23.26	PASS
		1	37	23.07	PASS
		1	74	22.73	PASS
		37	0	22.02	PASS
		37	18	21.89	PASS
		37	38	21.74	PASS
		75	0	21.93	PASS

### Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.33	PASS
		1	49	24.27	PASS
		1	99	24.3	PASS
		50	0	23.22	PASS
		50	25	23.18	PASS
		50	50	23.2	PASS
		100	0	23.19	PASS

	MCH	1	0	24.34	PASS
		1	49	24.29	PASS
		1	99	24.18	PASS
		50	0	23.35	PASS
		50	25	23.14	PASS
		50	50	23.14	PASS
		100	0	23.13	PASS
	HCH	1	0	24.14	PASS
		1	49	23.91	PASS
		1	99	23.54	PASS
		50	0	23.08	PASS
		50	25	22.93	PASS
		50	50	22.78	PASS
		100	0	22.92	PASS
16QAM	LCH	1	0	23.44	PASS
		1	49	23.37	PASS
		1	99	23.41	PASS
		50	0	22.17	PASS
		50	25	22.12	PASS
		50	50	22.14	PASS
		100	0	22.15	PASS
	MCH	1	0	23.35	PASS
		1	49	23.36	PASS
		1	99	23.39	PASS
		50	0	22.21	PASS
		50	25	22.13	PASS
		50	50	22.13	PASS
		100	0	22.1	PASS
	HCH	1	0	23.29	PASS
		1	49	23.08	PASS
		1	99	22.72	PASS
		50	0	22.04	PASS
		50	25	21.91	PASS
		50	50	21.77	PASS
		100	0	21.89	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	3.42	<13	PASS
		1	3	3.41	<13	PASS
		1	5	3.50	<13	PASS
		3	0	3.26	<13	PASS
		3	2	3.34	<13	PASS
		3	3	3.33	<13	PASS
		6	0	4.16	<13	PASS
	MCH	1	0	3.56	<13	PASS
		1	3	3.56	<13	PASS
		1	5	3.53	<13	PASS
		3	0	3.39	<13	PASS
		3	2	3.35	<13	PASS
		3	3	3.41	<13	PASS
		6	0	4.16	<13	PASS
16QAM	LCH	1	0	3.71	<13	PASS
		1	3	3.61	<13	PASS
		1	5	3.58	<13	PASS
		3	0	3.44	<13	PASS
		3	2	3.40	<13	PASS
		3	3	3.38	<13	PASS
		6	0	4.17	<13	PASS
	MCH	1	0	4.46	<13	PASS
		1	3	4.38	<13	PASS
		1	5	4.39	<13	PASS
		3	0	4.29	<13	PASS
		3	2	4.31	<13	PASS
		3	3	4.27	<13	PASS
		6	0	5.11	<13	PASS

		3	3	4.38	<13	PASS
		6	0	5.05	<13	PASS
HCH		1	0	4.68	<13	PASS
		1	3	4.49	<13	PASS
		1	5	4.66	<13	PASS
		3	0	4.23	<13	PASS
		3	2	4.21	<13	PASS
		3	3	4.24	<13	PASS
		6	0	5.07	<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	3.43	<13	PASS
		1	7	3.52	<13	PASS
		1	14	3.72	<13	PASS
		8	0	4.21	<13	PASS
		8	4	4.25	<13	PASS
		8	7	4.24	<13	PASS
		15	0	4.40	<13	PASS
	MCH	1	0	3.54	<13	PASS
		1	7	3.56	<13	PASS
		1	14	3.47	<13	PASS
		8	0	4.21	<13	PASS
		8	4	4.21	<13	PASS
		8	7	4.23	<13	PASS
		15	0	4.50	<13	PASS
	HCH	1	0	3.62	<13	PASS
		1	7	3.57	<13	PASS
		1	14	3.66	<13	PASS
		8	0	4.34	<13	PASS
		8	4	4.28	<13	PASS
		8	7	4.24	<13	PASS
		15	0	4.44	<13	PASS
16QAM	LCH	1	0	4.41	<13	PASS
		1	7	4.42	<13	PASS
		1	14	4.70	<13	PASS
		8	0	5.01	<13	PASS
		8	4	5.06	<13	PASS
		8	7	5.1	<13	PASS

		15	0	5.33	<13	PASS
MCH	1	0		4.50	<13	PASS
	1	7		4.37	<13	PASS
	1	14		4.49	<13	PASS
	8	0		5.08	<13	PASS
	8	4		5.04	<13	PASS
	8	7		5.06	<13	PASS
	15	0		5.27	<13	PASS
HCH	1	0		4.72	<13	PASS
	1	7		4.62	<13	PASS
	1	14		4.65	<13	PASS
	8	0		5.25	<13	PASS
	8	4		5.30	<13	PASS
	8	7		5.16	<13	PASS
	15	0		5.29	<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	3.5	<13	PASS
		1	12	3.74	<13	PASS
		1	24	3.98	<13	PASS
		12	0	4.39	<13	PASS
		12	6	4.45	<13	PASS
		12	13	4.58	<13	PASS
		25	0	4.61	<13	PASS
QPSK	MCH	1	0	3.60	<13	PASS
		1	12	3.59	<13	PASS
		1	24	3.64	<13	PASS
		12	0	4.31	<13	PASS
		12	6	4.23	<13	PASS
		12	13	4.31	<13	PASS
		25	0	4.46	<13	PASS
QPSK	HCH	1	0	3.64	<13	PASS
		1	12	3.59	<13	PASS
		1	24	3.57	<13	PASS
		12	0	4.51	<13	PASS
		12	6	4.41	<13	PASS
		12	13	4.41	<13	PASS
		25	0	4.62	<13	PASS

16QAM	LCH	1	0	4.47	<13	PASS
		1	12	4.51	<13	PASS
		1	24	4.83	<13	PASS
		12	0	5.24	<13	PASS
		12	6	5.32	<13	PASS
		12	13	5.46	<13	PASS
		25	0	5.36	<13	PASS
	MCH	1	0	4.57	<13	PASS
		1	12	4.51	<13	PASS
		1	24	4.70	<13	PASS
		12	0	5.13	<13	PASS
		12	6	5.13	<13	PASS
		12	13	5.15	<13	PASS
		25	0	5.34	<13	PASS
	HCH	1	0	4.63	<13	PASS
		1	12	4.53	<13	PASS
		1	24	4.38	<13	PASS
		12	0	5.26	<13	PASS
		12	6	5.28	<13	PASS
		12	13	5.25	<13	PASS
		25	0	5.41	<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	3.43	<13	PASS
		1	24	3.82	<13	PASS
		1	49	4.32	<13	PASS
		25	0	4.55	<13	PASS
		25	12	4.73	<13	PASS
		25	25	4.79	<13	PASS
		50	0	4.77	<13	PASS
	MCH	1	0	3.53	<13	PASS
		1	24	3.42	<13	PASS
		1	49	3.55	<13	PASS
		25	0	4.47	<13	PASS
		25	12	4.44	<13	PASS
		25	25	4.44	<13	PASS
		50	0	4.58	<13	PASS
	HCH	1	0	3.92	<13	PASS

		1	24	3.8	<13	PASS
		1	49	3.56	<13	PASS
		25	0	4.62	<13	PASS
		25	12	4.59	<13	PASS
		25	25	4.51	<13	PASS
		50	0	4.71	<13	PASS
16QAM	LCH	1	0	4.33	<13	PASS
		1	24	4.76	<13	PASS
		1	49	5.19	<13	PASS
		25	0	5.42	<13	PASS
		25	12	5.62	<13	PASS
		25	25	5.59	<13	PASS
		50	0	5.56	<13	PASS
	MCH	1	0	4.53	<13	PASS
		1	24	4.52	<13	PASS
		1	49	4.47	<13	PASS
		25	0	5.33	<13	PASS
		25	12	5.31	<13	PASS
		25	25	5.29	<13	PASS
		50	0	5.35	<13	PASS
	HCH	1	0	4.88	<13	PASS
		1	24	4.83	<13	PASS
		1	49	4.73	<13	PASS
		25	0	5.55	<13	PASS
		25	12	5.55	<13	PASS
		25	25	5.41	<13	PASS
		50	0	5.56	<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	3.41	<13	PASS
		1	37	3.97	<13	PASS
		1	74	3.97	<13	PASS
		37	0	4.64	<13	PASS
		37	18	4.77	<13	PASS
		37	38	4.87	<13	PASS
		75	0	5.02	<13	PASS
	MCH	1	0	3.76	<13	PASS
		1	37	3.54	<13	PASS

	HCH	1	74	3.69	<13	PASS
		37	0	4.46	<13	PASS
		37	18	4.41	<13	PASS
		37	38	4.44	<13	PASS
		75	0	4.82	<13	PASS
		1	0	3.75	<13	PASS
		1	37	3.79	<13	PASS
		1	74	3.54	<13	PASS
		37	0	4.72	<13	PASS
		37	18	4.66	<13	PASS
	LCH	37	38	4.58	<13	PASS
		75	0	4.95	<13	PASS
		1	0	4.4	<13	PASS
		1	37	4.81	<13	PASS
		1	74	4.89	<13	PASS
		37	0	5.44	<13	PASS
		37	18	5.64	<13	PASS
16QAM	MCH	37	38	5.66	<13	PASS
		75	0	5.72	<13	PASS
		1	0	4.78	<13	PASS
		1	37	4.57	<13	PASS
		1	74	4.7	<13	PASS
		37	0	5.35	<13	PASS
		37	18	5.29	<13	PASS
	HCH	37	38	5.33	<13	PASS
		75	0	5.51	<13	PASS
		1	0	4.88	<13	PASS
		1	37	4.84	<13	PASS
		1	74	4.54	<13	PASS
		37	0	5.58	<13	PASS
		37	18	5.47	<13	PASS
		37	38	5.42	<13	PASS
		75	0	5.62	<13	PASS

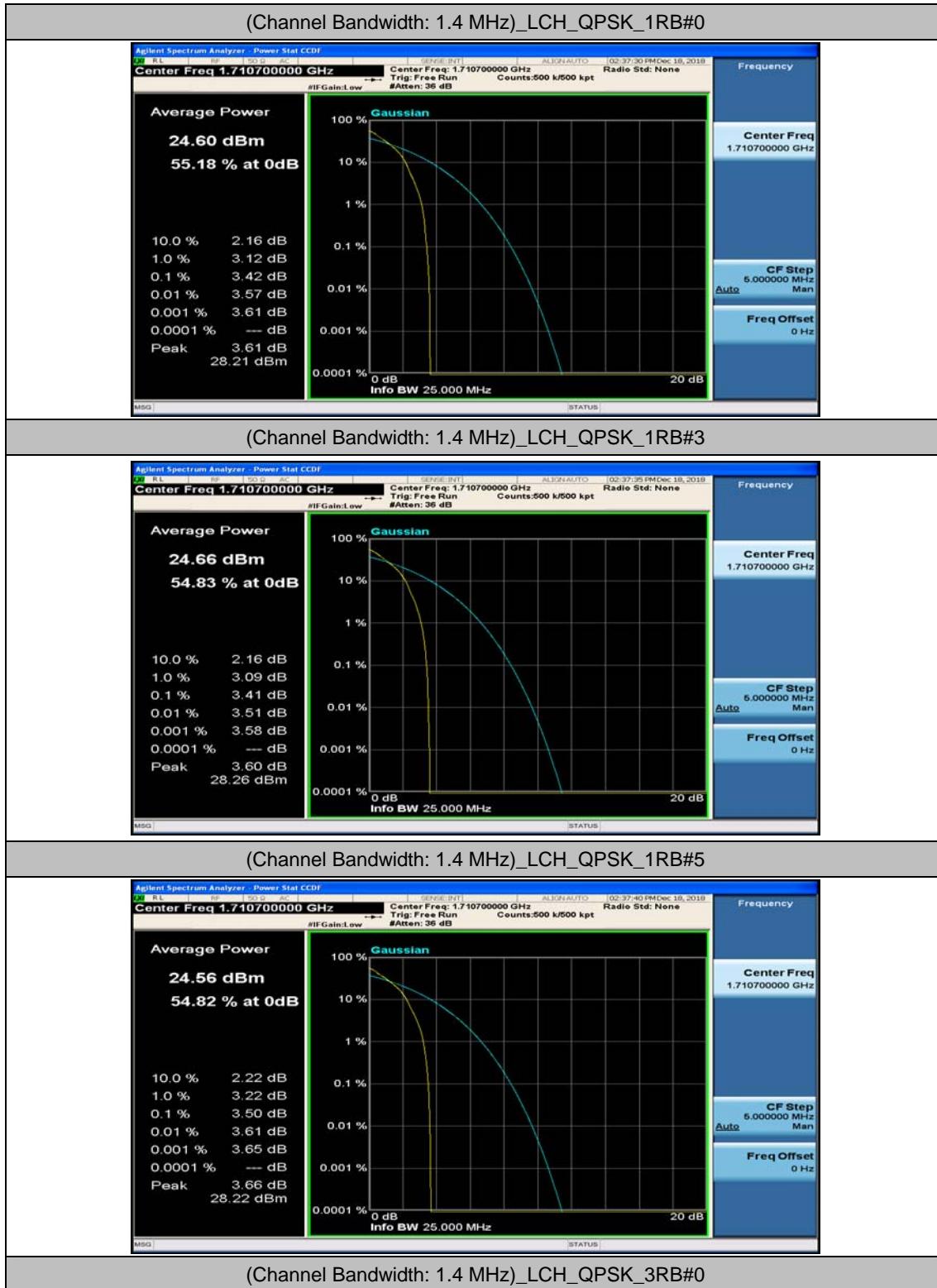
### Channel Bandwidth: 20 MHz

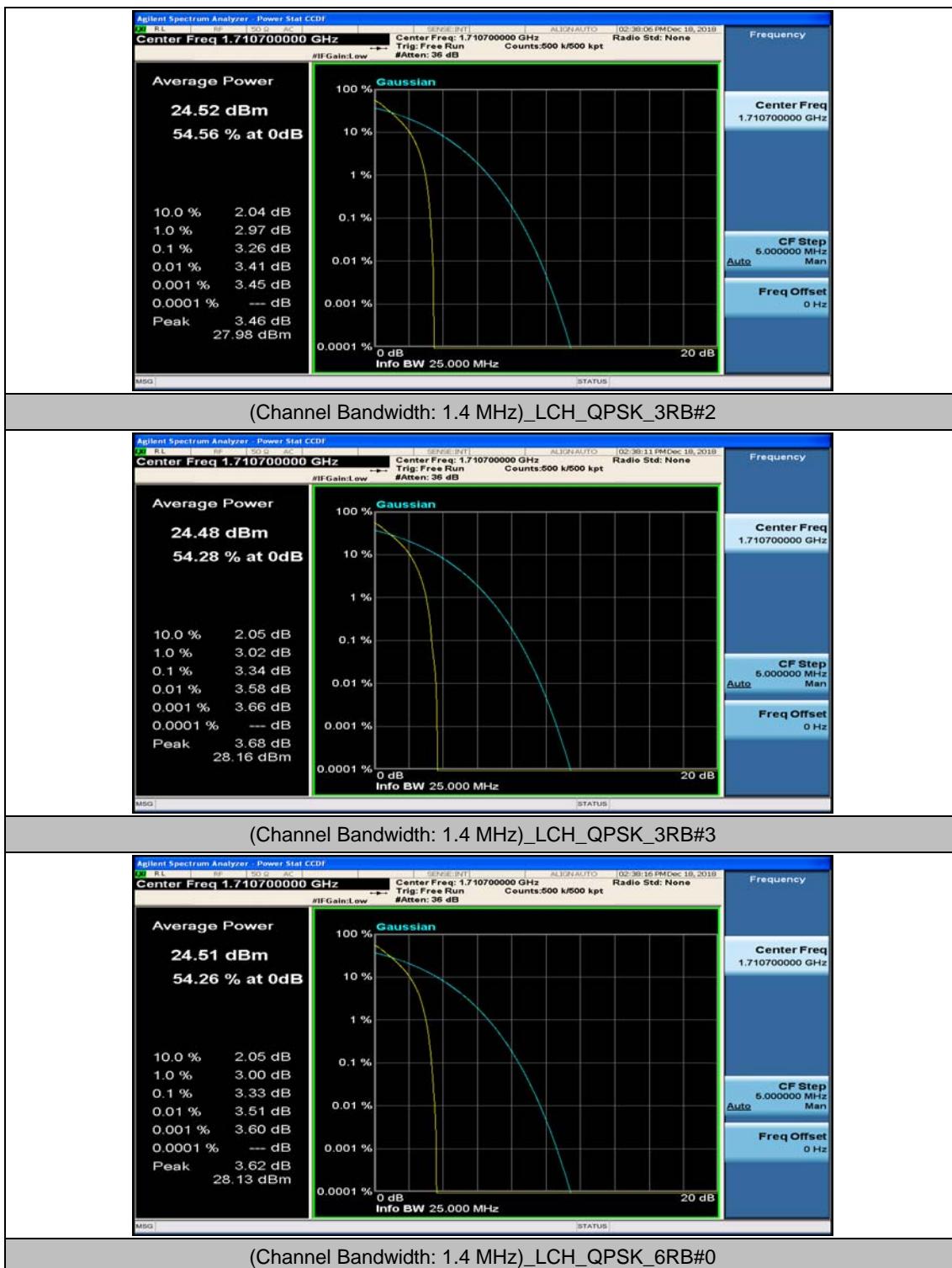
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.38	<13	PASS
		1	49	4.1	<13	PASS
		1	99	3.55	<13	PASS

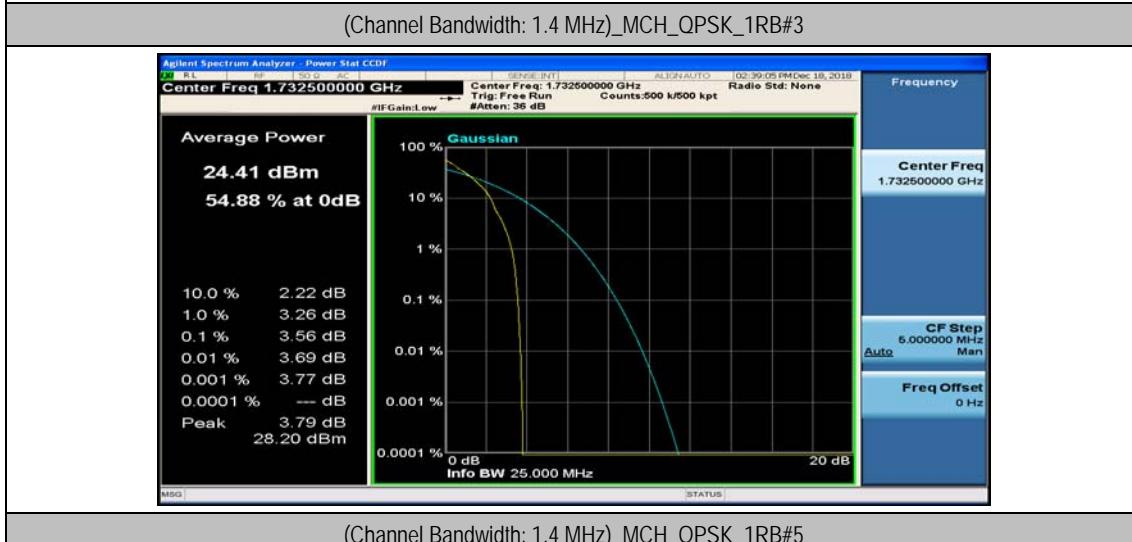
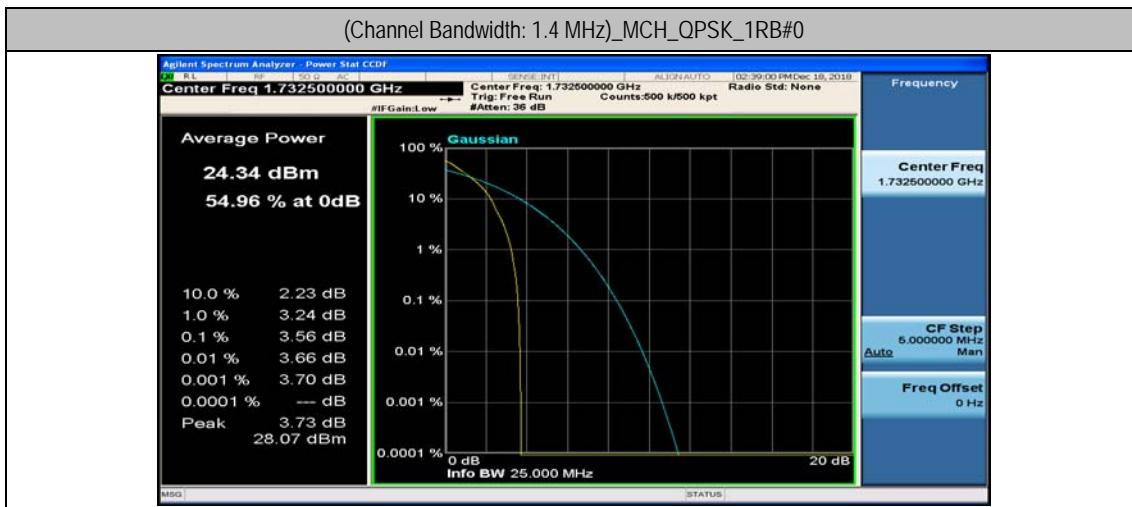
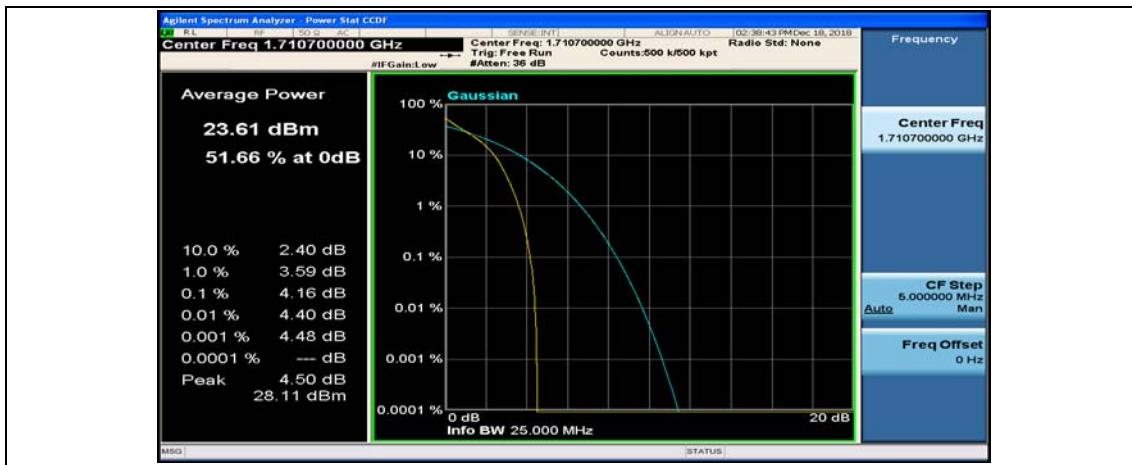
		50	0	4.77	<13	PASS
		50	25	4.91	<13	PASS
		50	50	4.86	<13	PASS
		100	0	5.02	<13	PASS
	MCH	1	0	3.94	<13	PASS
		1	49	3.48	<13	PASS
		1	99	3.99	<13	PASS
		50	0	4.65	<13	PASS
	HCH	50	25	4.56	<13	PASS
		50	50	4.68	<13	PASS
		100	0	4.93	<13	PASS
		1	0	3.48	<13	PASS
		1	49	3.94	<13	PASS
		1	99	3.63	<13	PASS
		50	0	4.69	<13	PASS
		50	25	4.77	<13	PASS
	LCH	50	50	4.78	<13	PASS
		100	0	4.95	<13	PASS
		1	0	4.22	<13	PASS
		1	49	4.99	<13	PASS
		1	99	4.52	<13	PASS
		50	0	5.6	<13	PASS
		50	25	5.68	<13	PASS
		50	50	5.62	<13	PASS
	MCH	100	0	5.76	<13	PASS
		1	0	4.76	<13	PASS
		1	49	4.43	<13	PASS
		1	99	4.81	<13	PASS
		50	0	5.47	<13	PASS
		50	25	5.35	<13	PASS
		50	50	5.47	<13	PASS
		100	0	5.67	<13	PASS
	HCH	1	0	4.6	<13	PASS
		1	49	4.94	<13	PASS
		1	99	4.71	<13	PASS
		50	0	5.55	<13	PASS
		50	25	5.64	<13	PASS
		50	50	5.6	<13	PASS
		100	0	5.74	<13	PASS

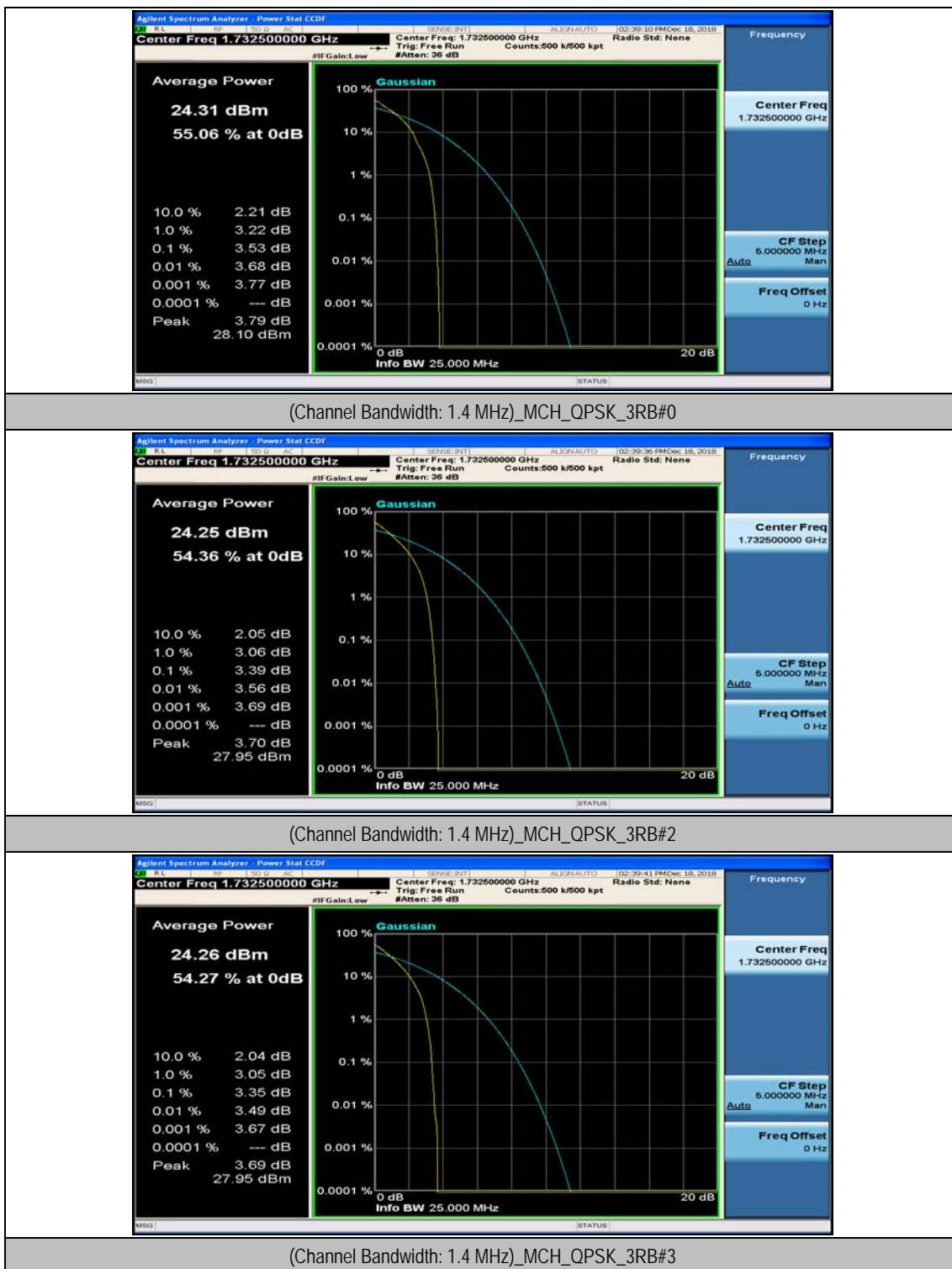
## Test Graphs

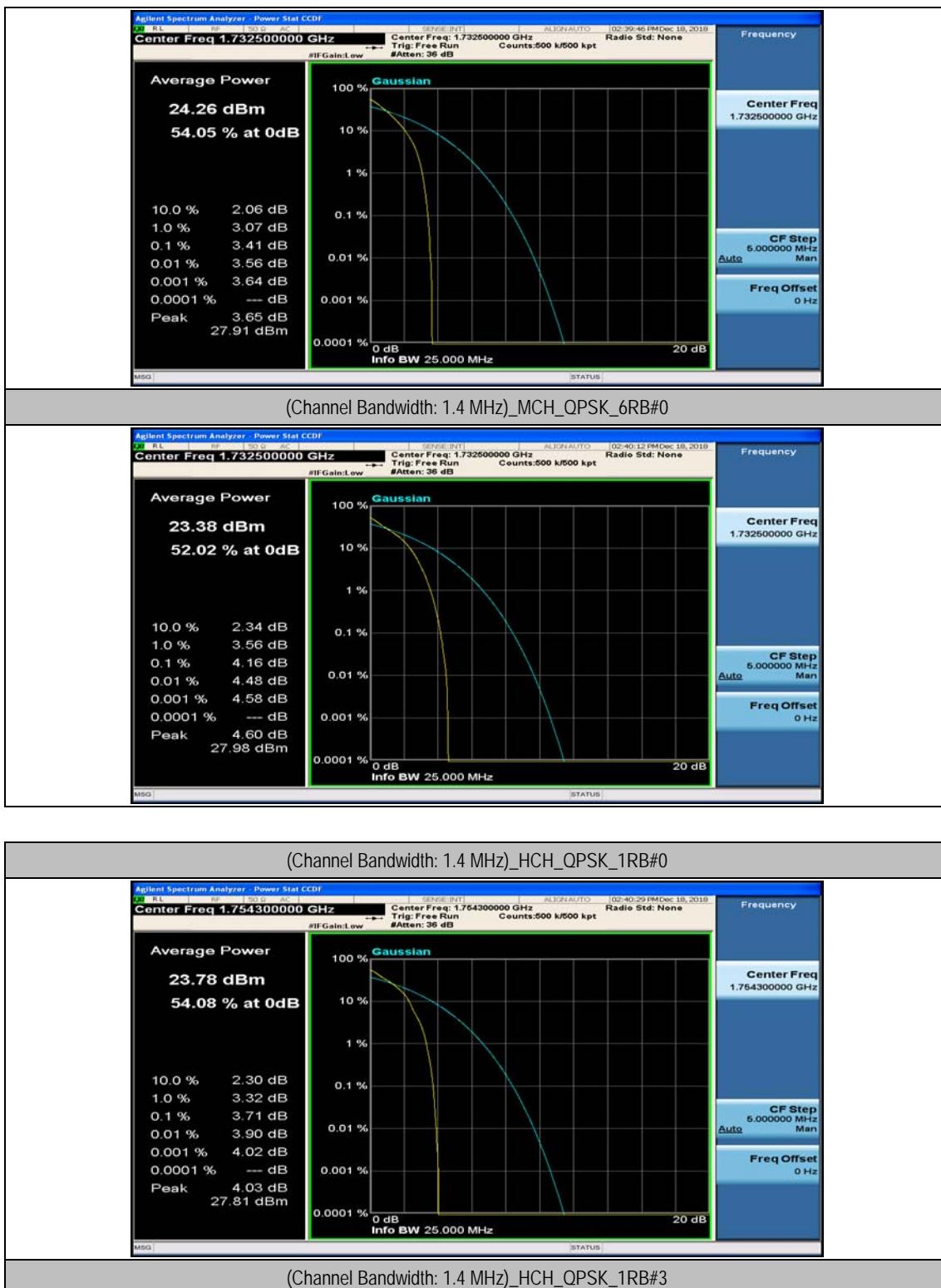
### Channel Bandwidth: 1.4 MHz

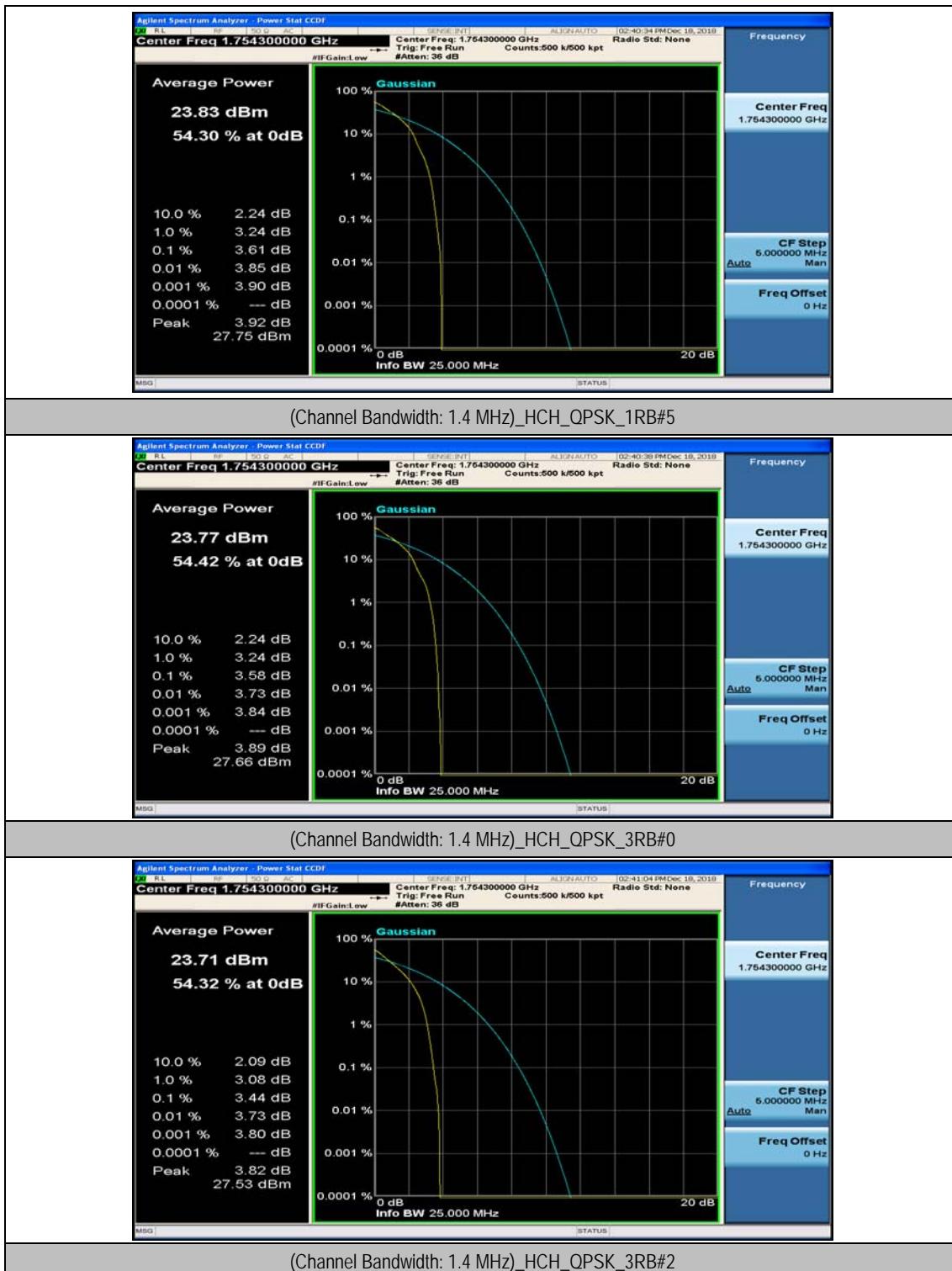


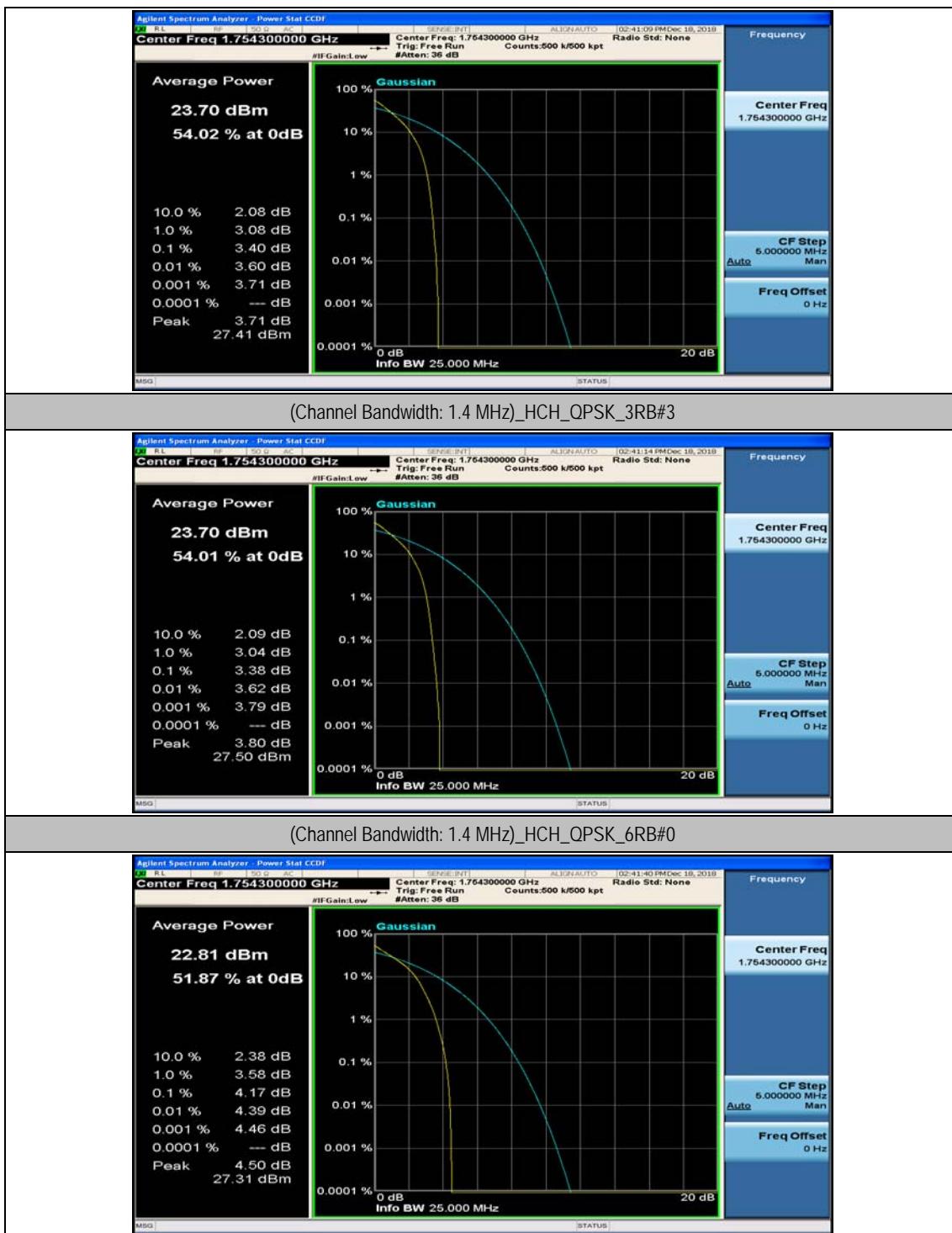


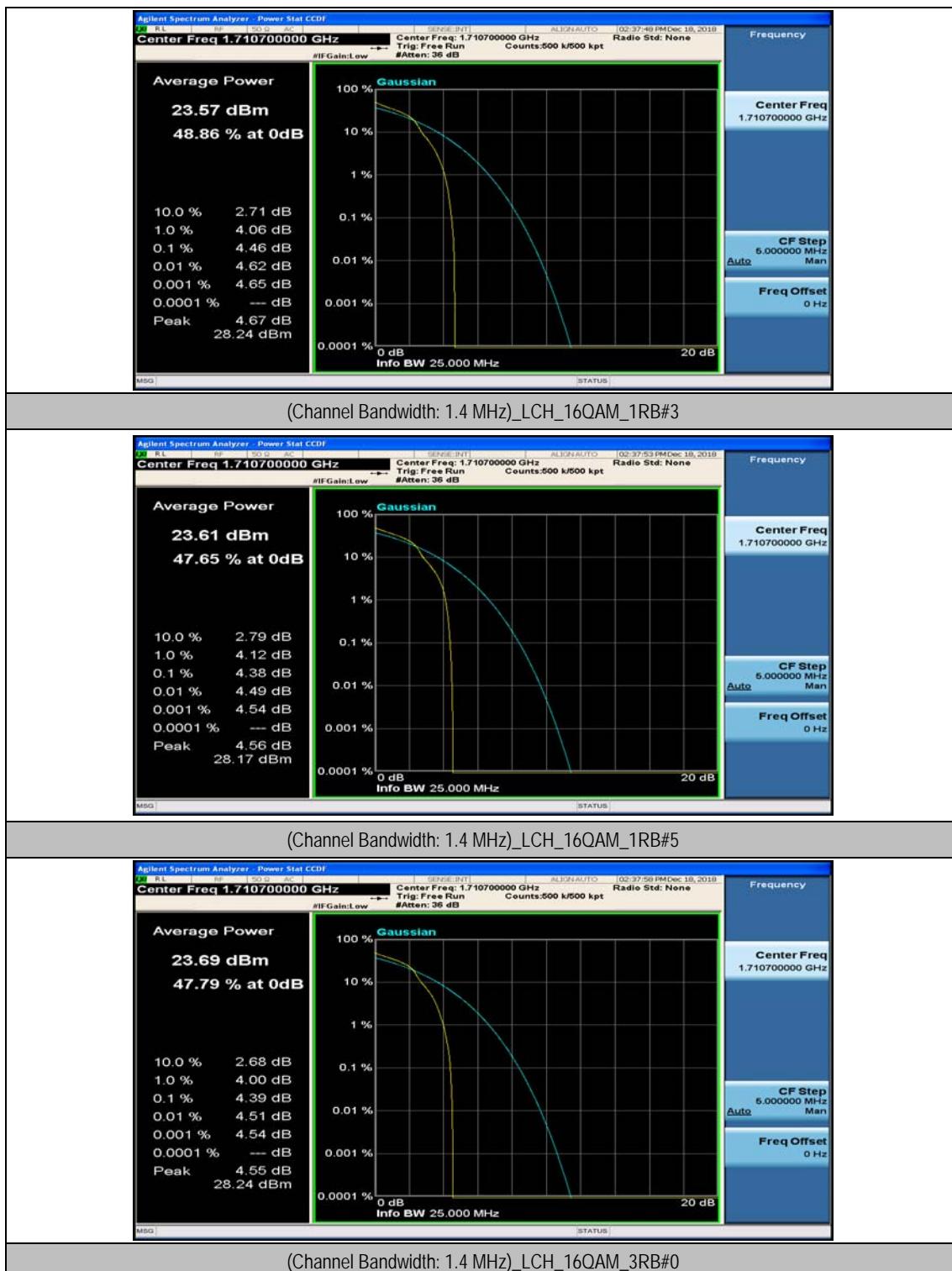


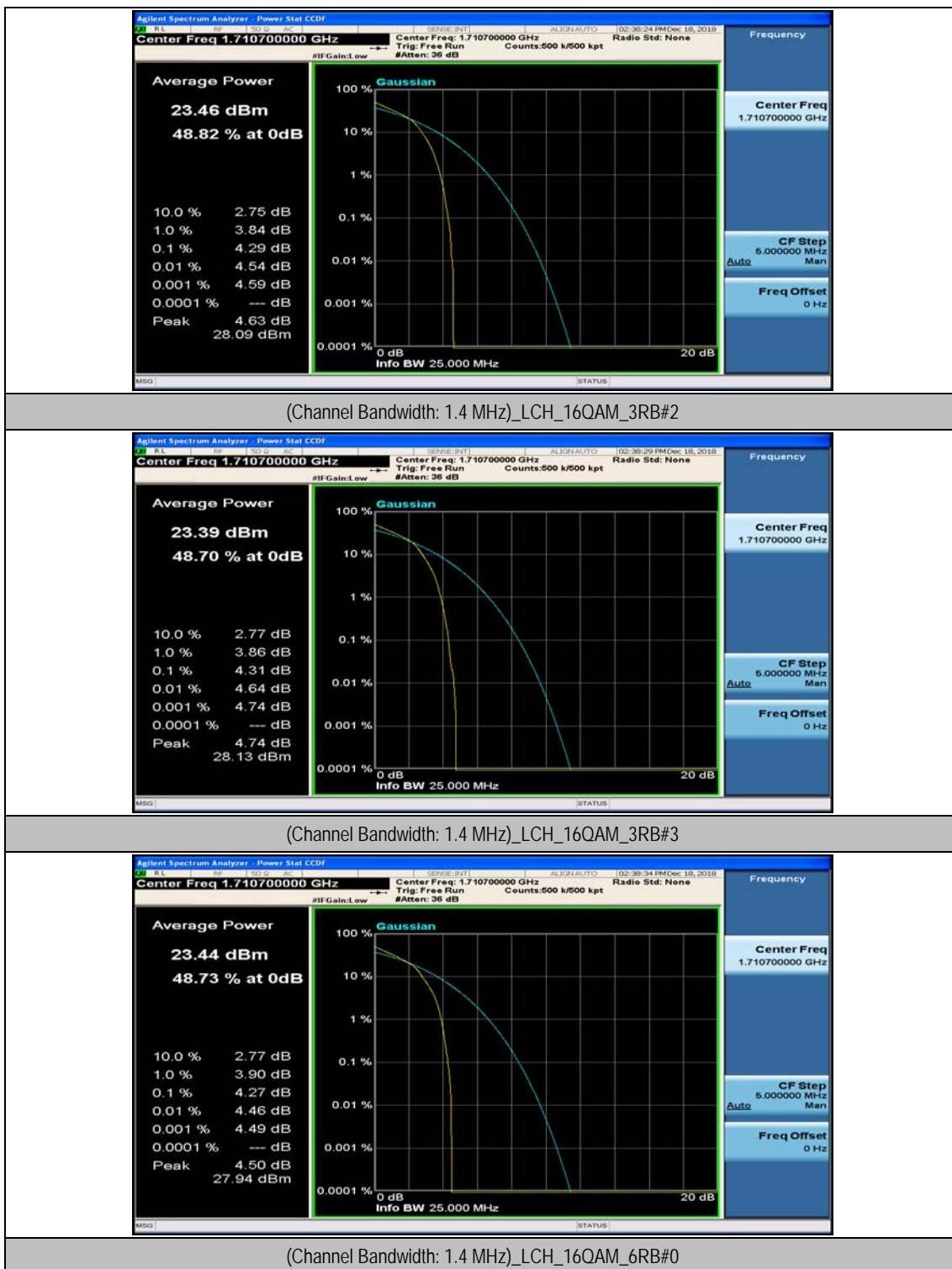


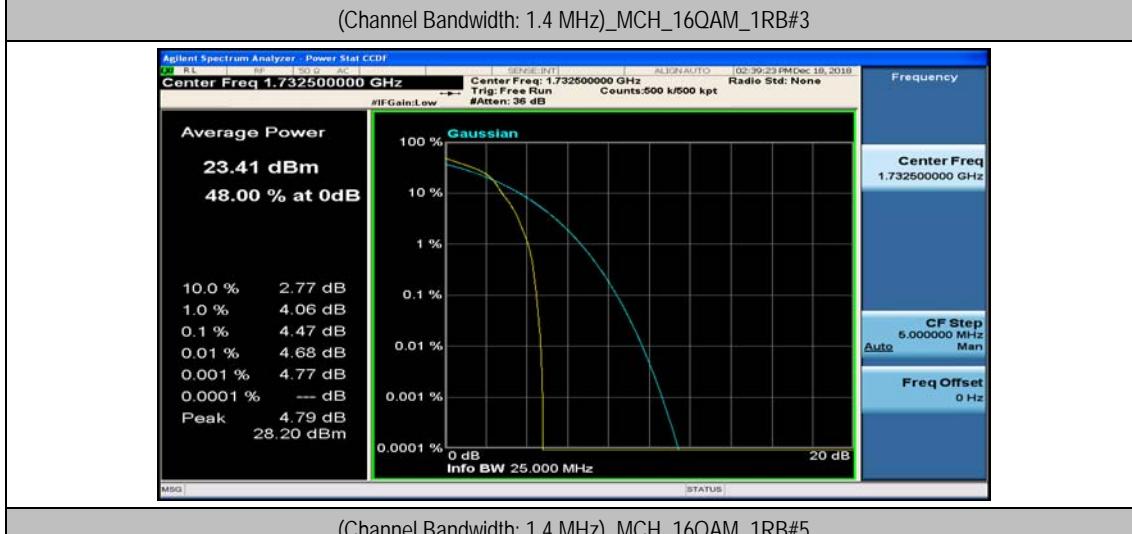
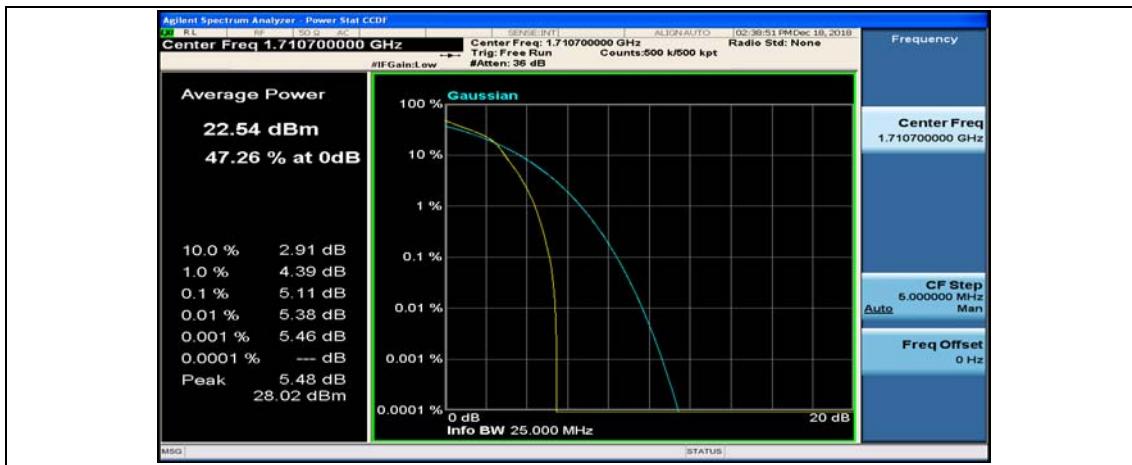


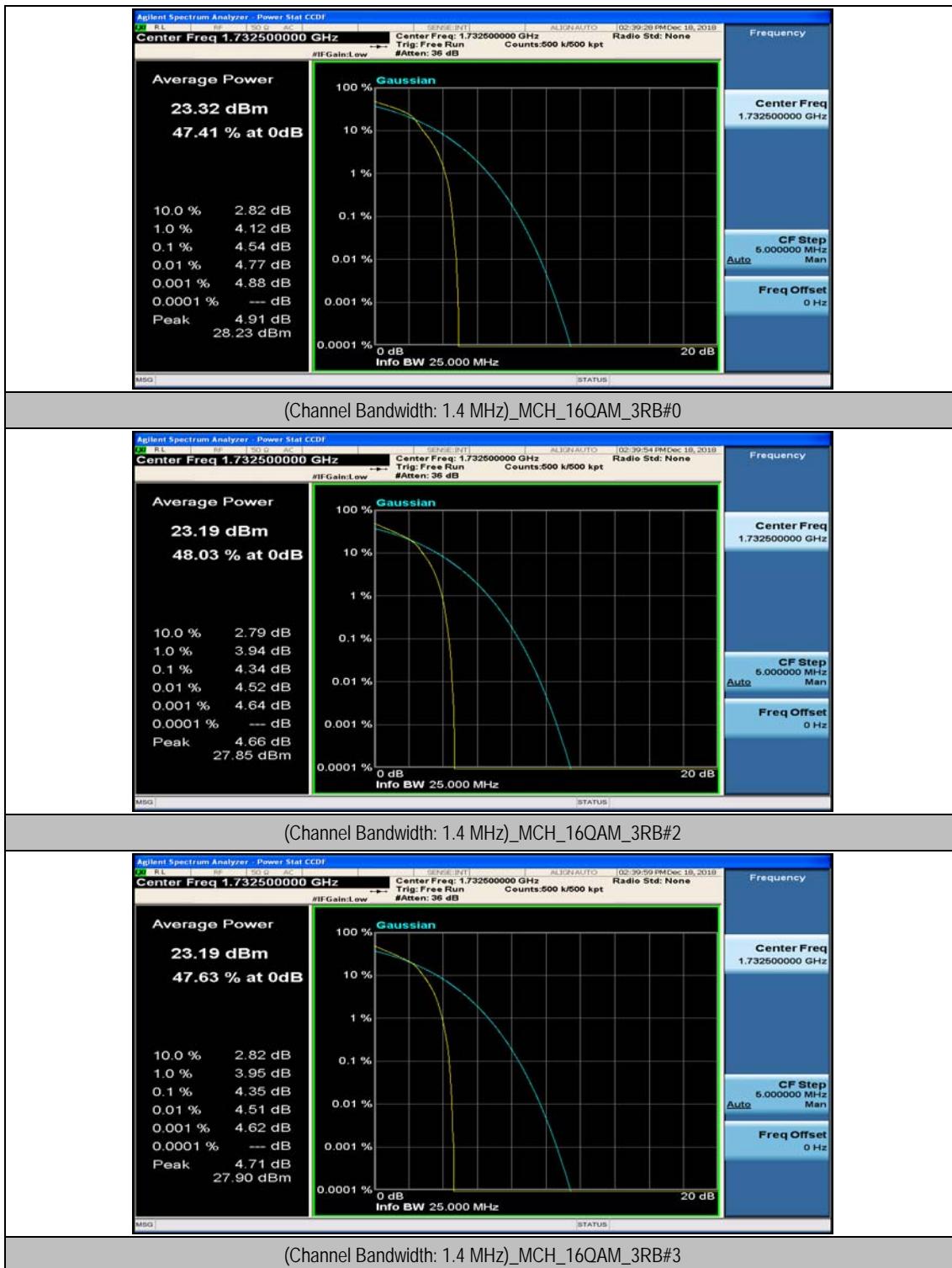


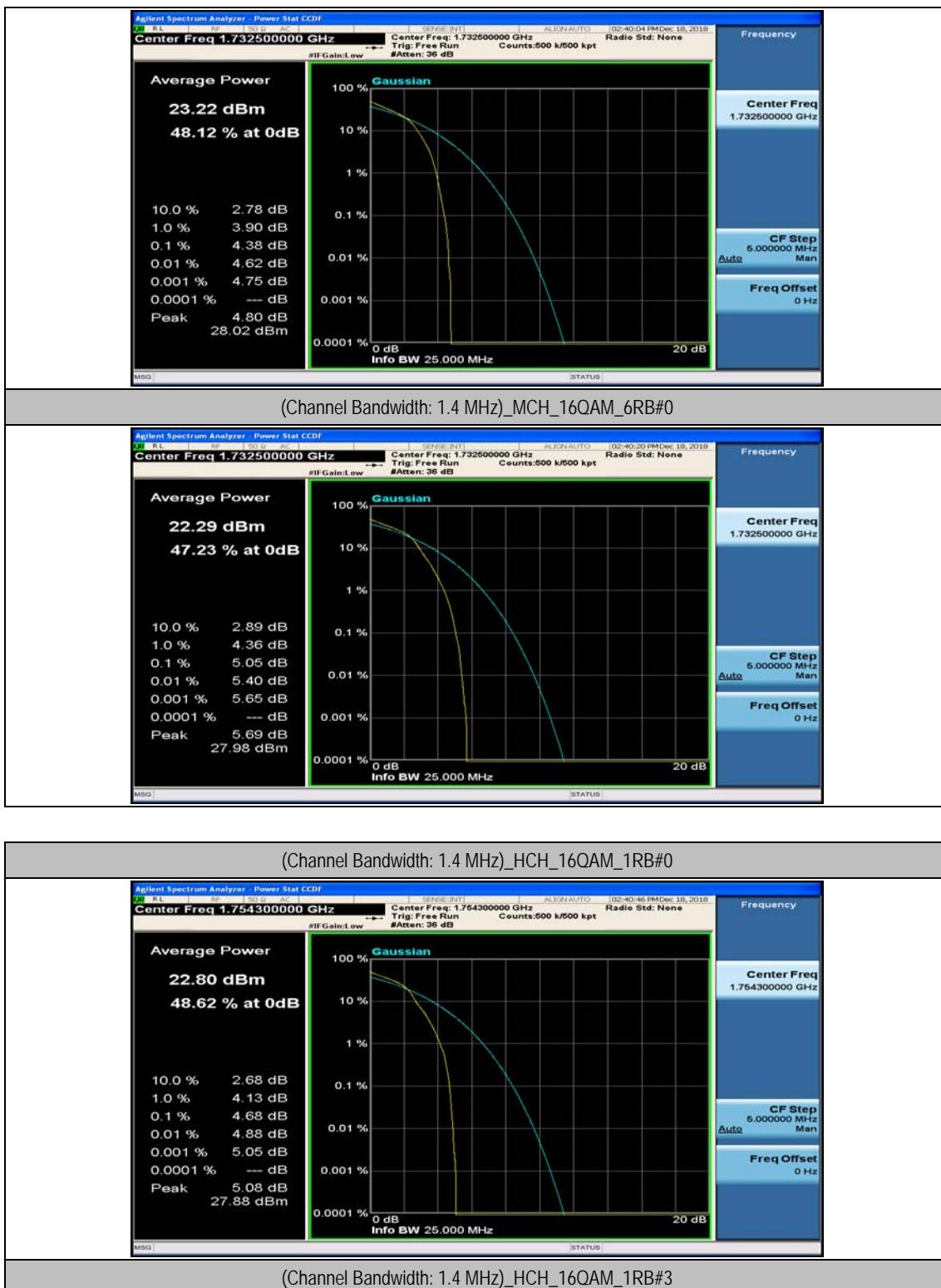


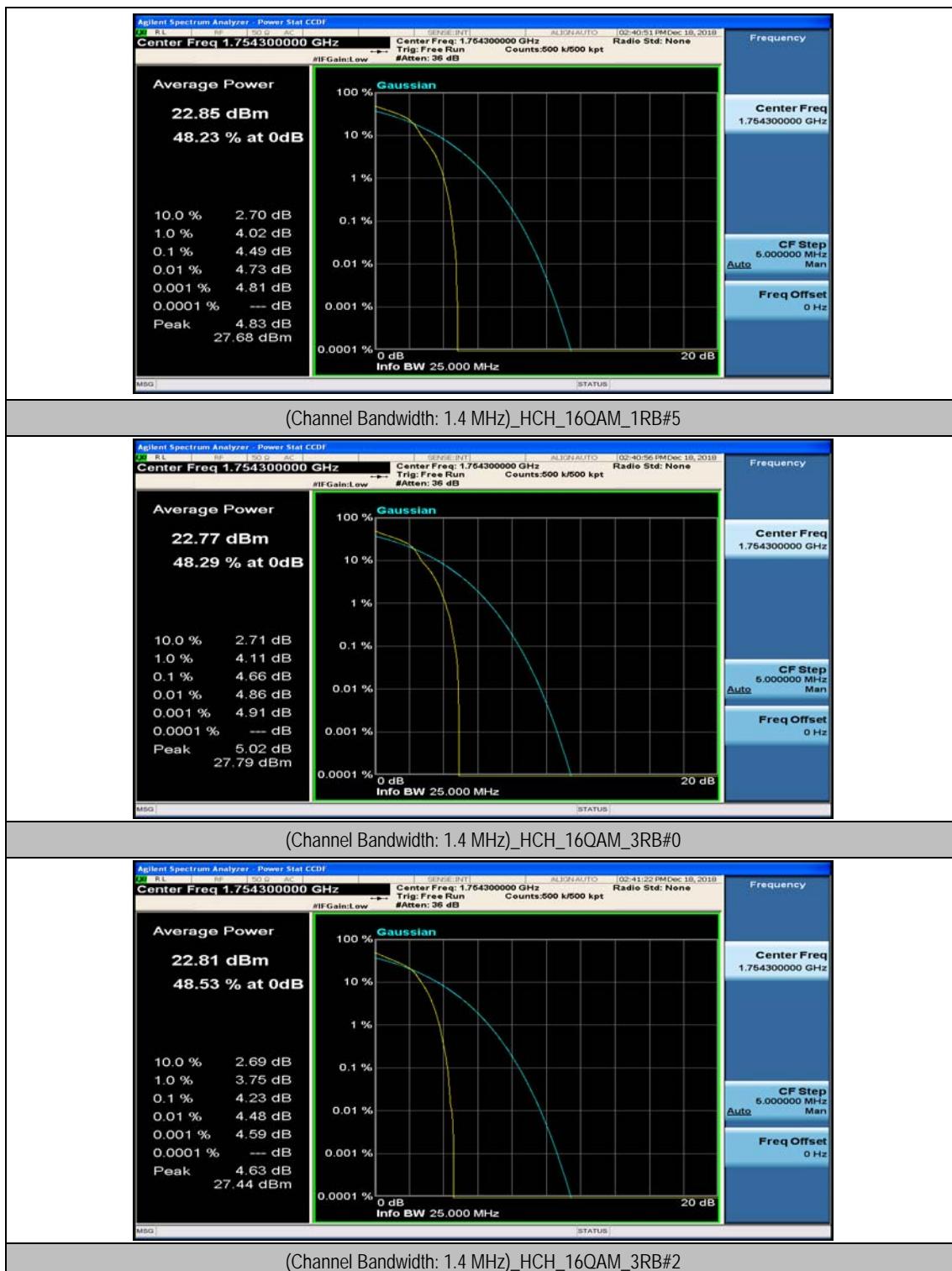


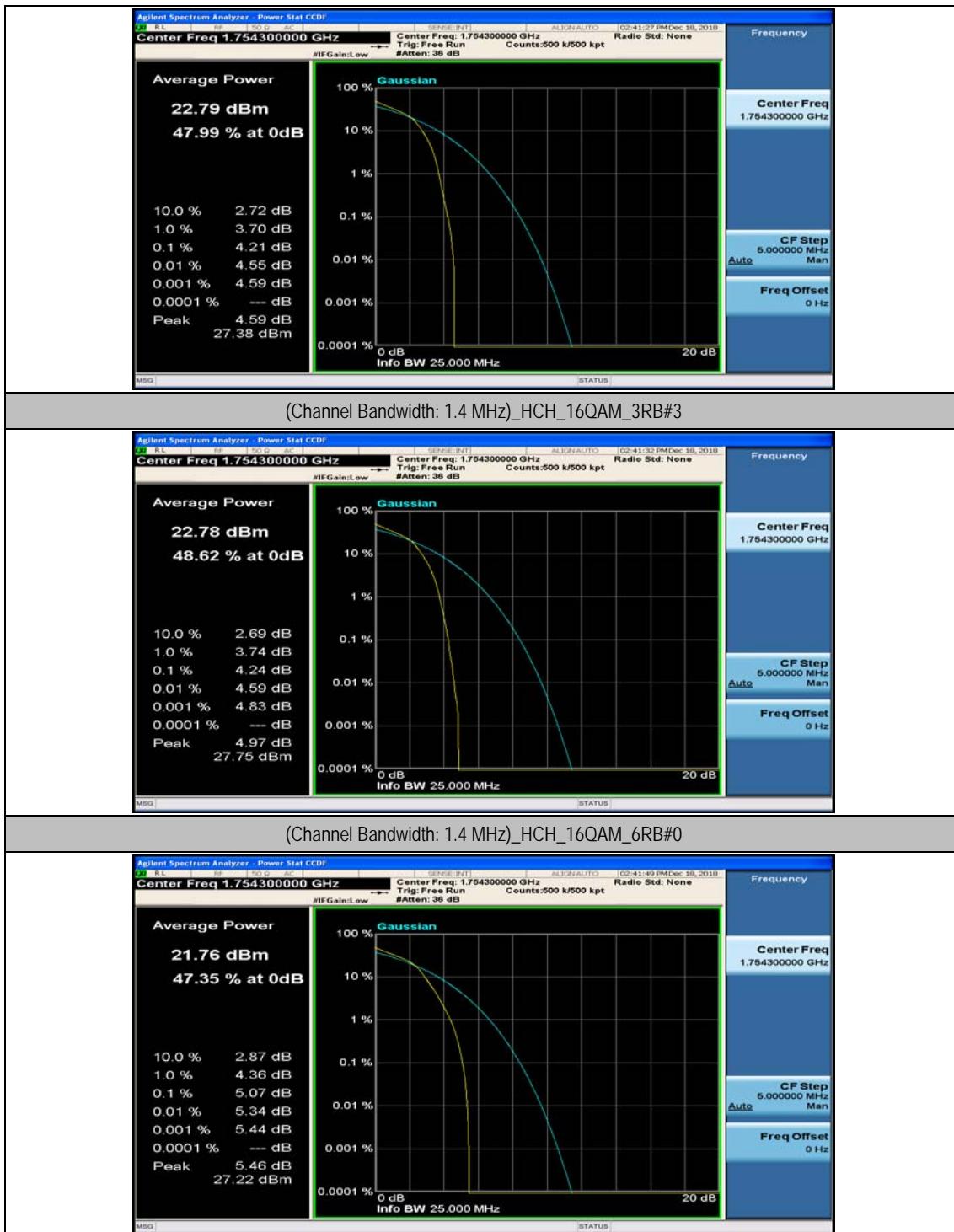




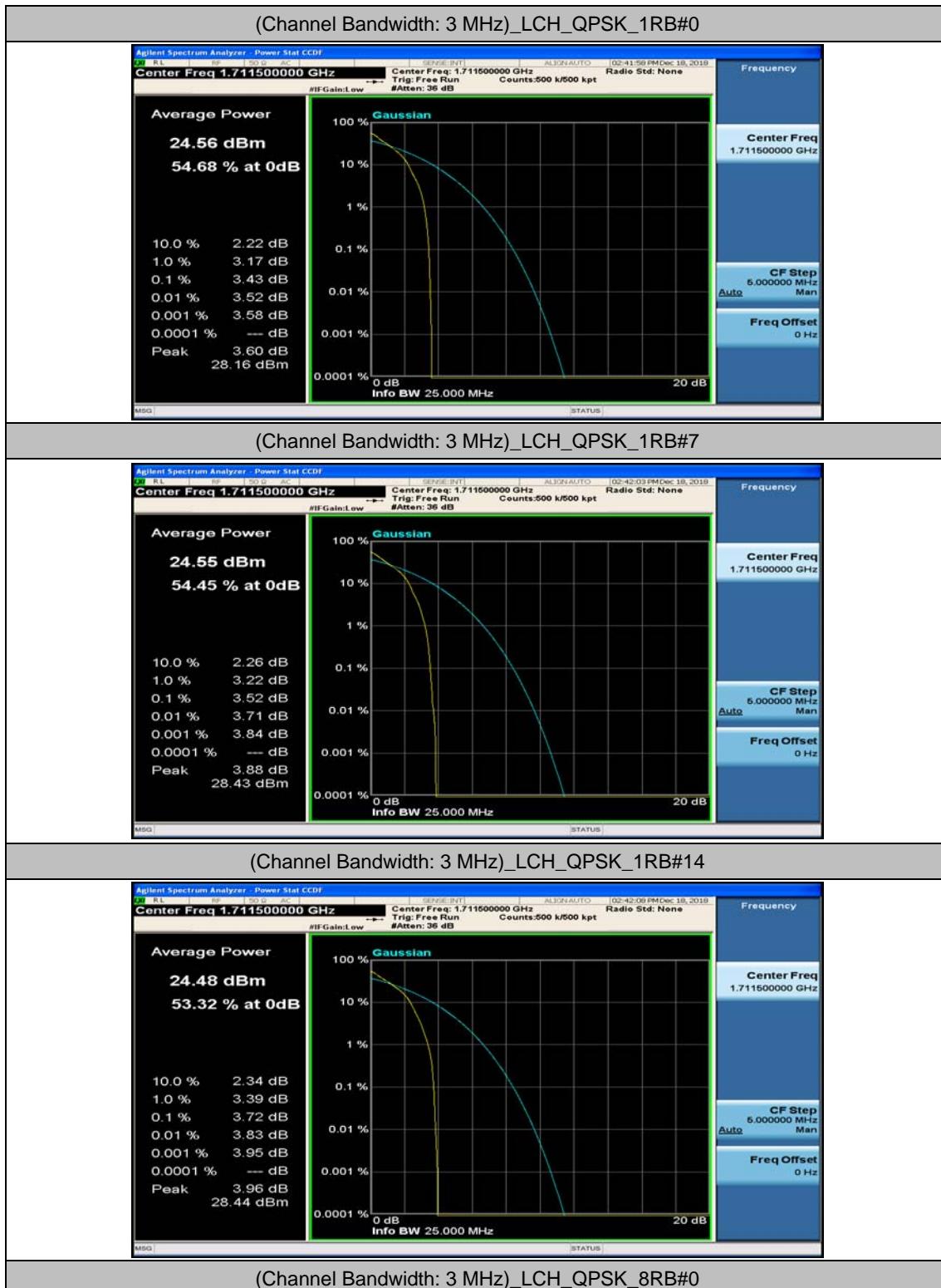


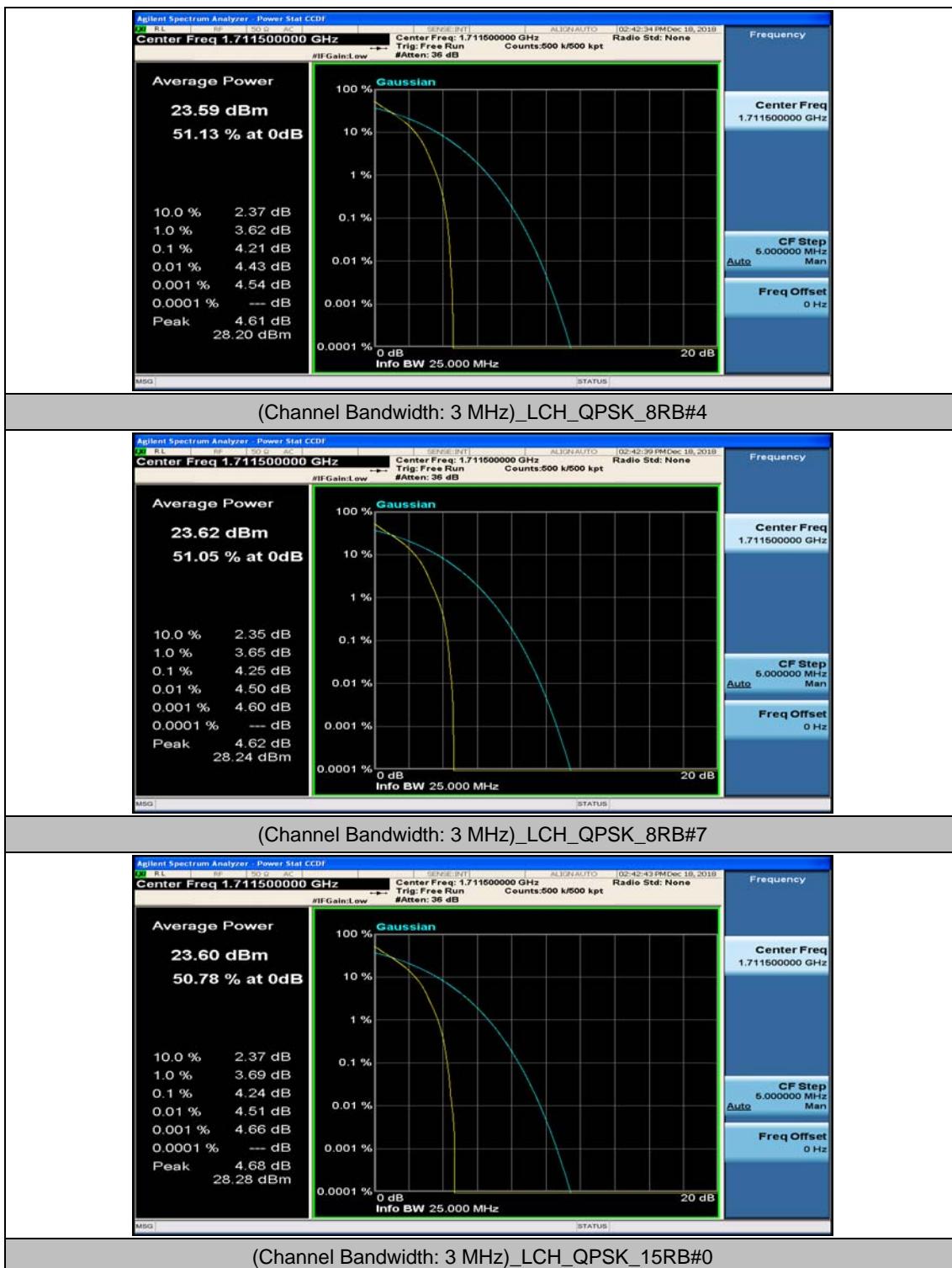


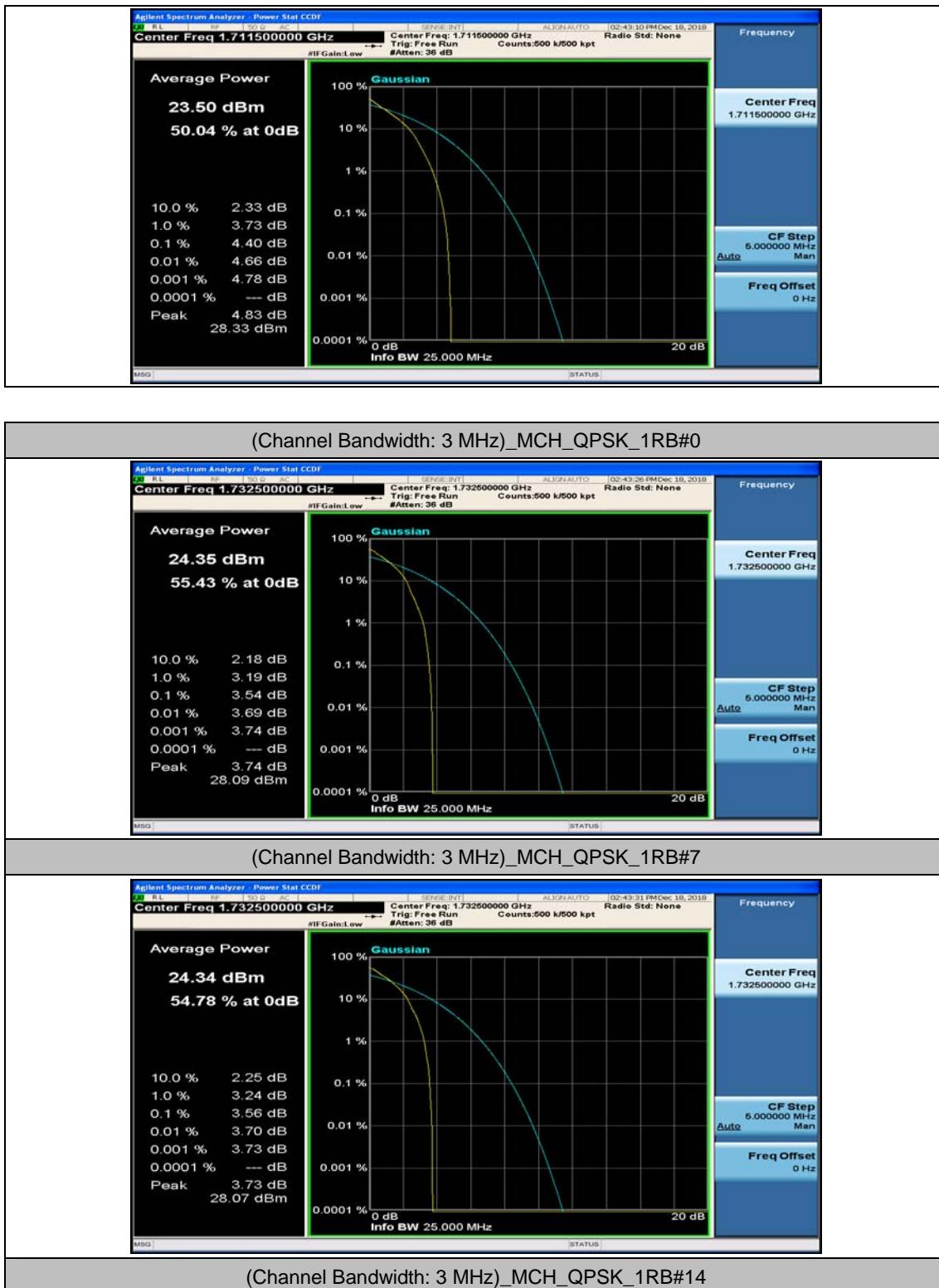


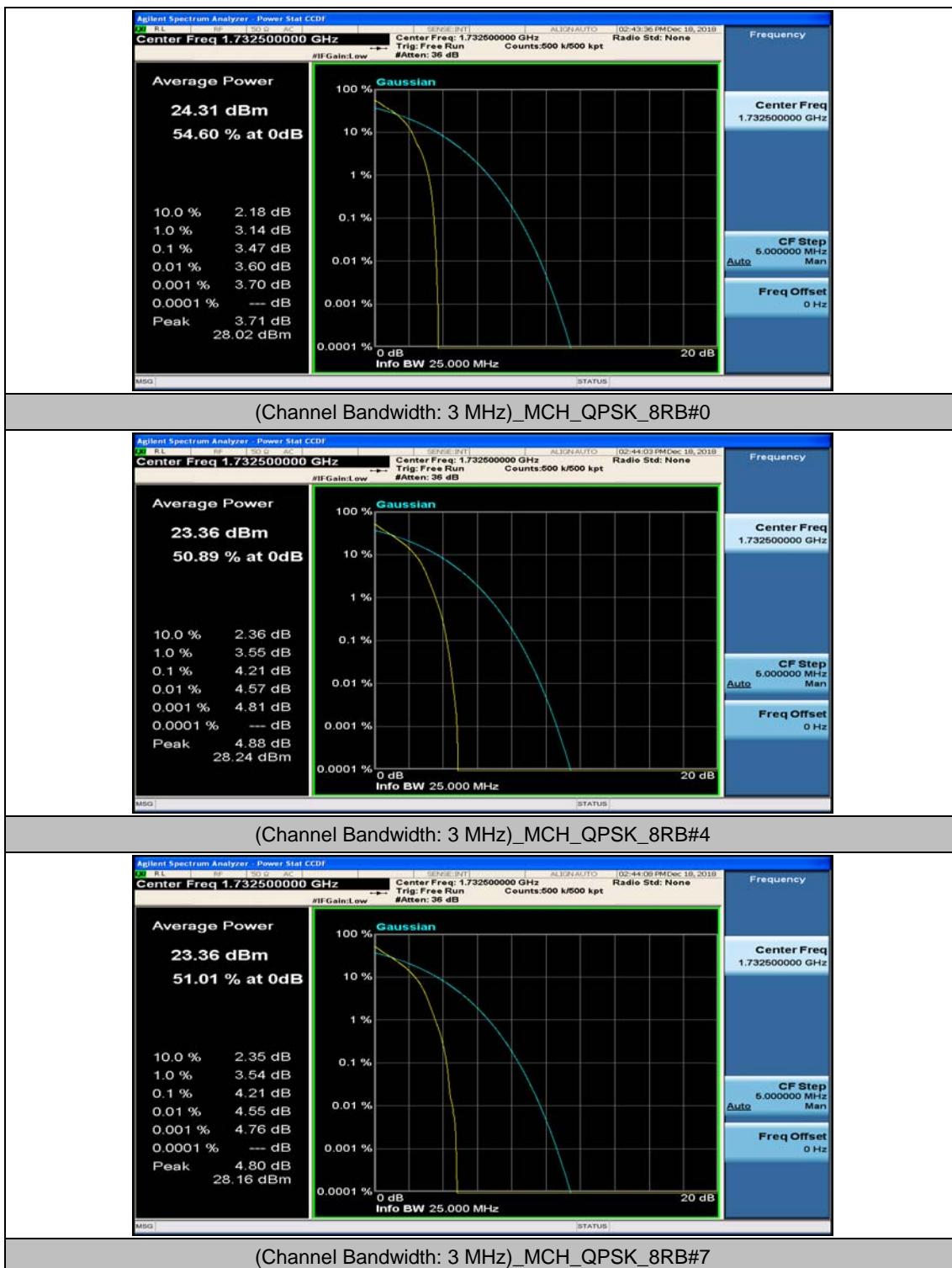


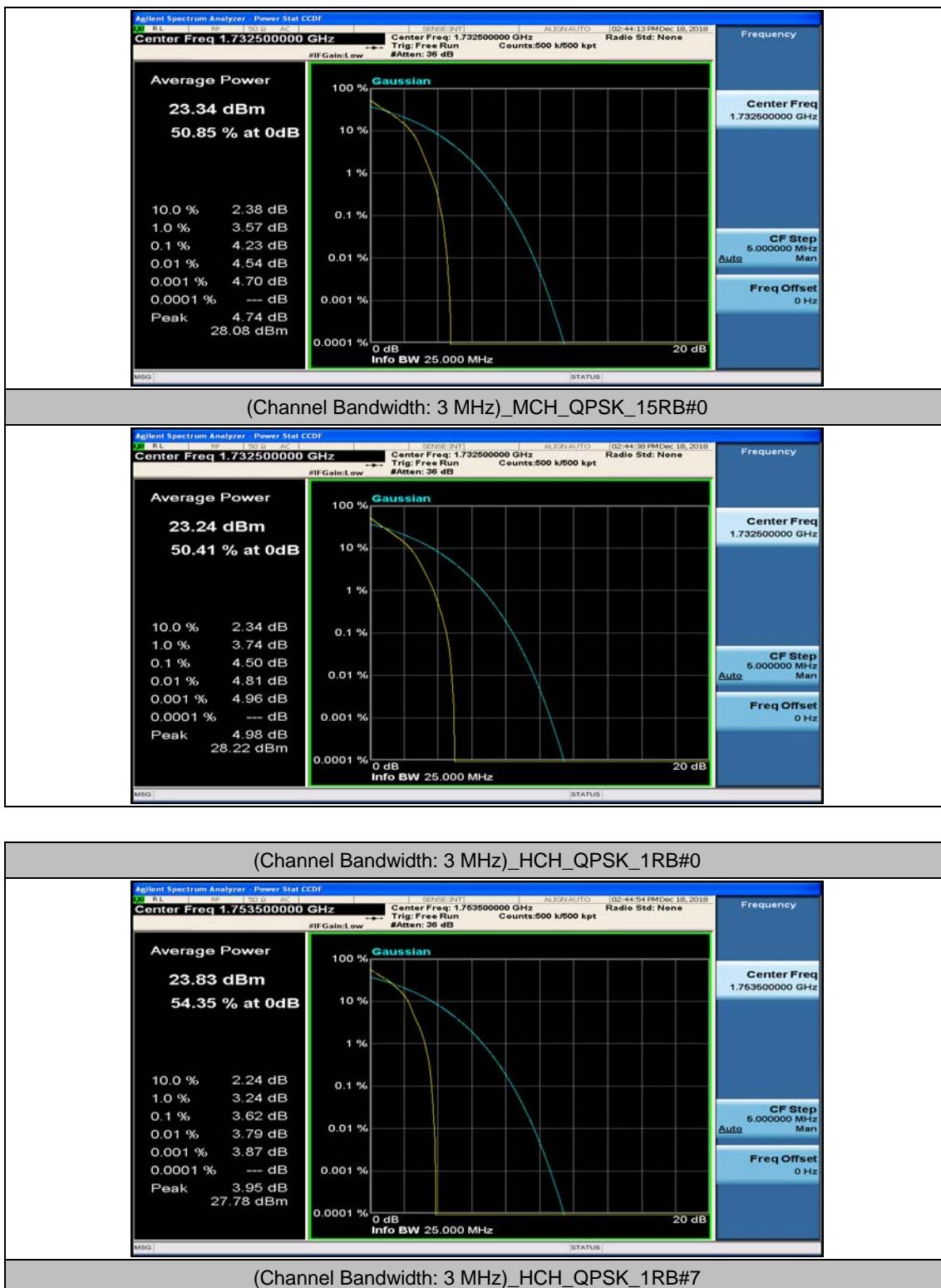
## Channel Bandwidth: 3 MHz

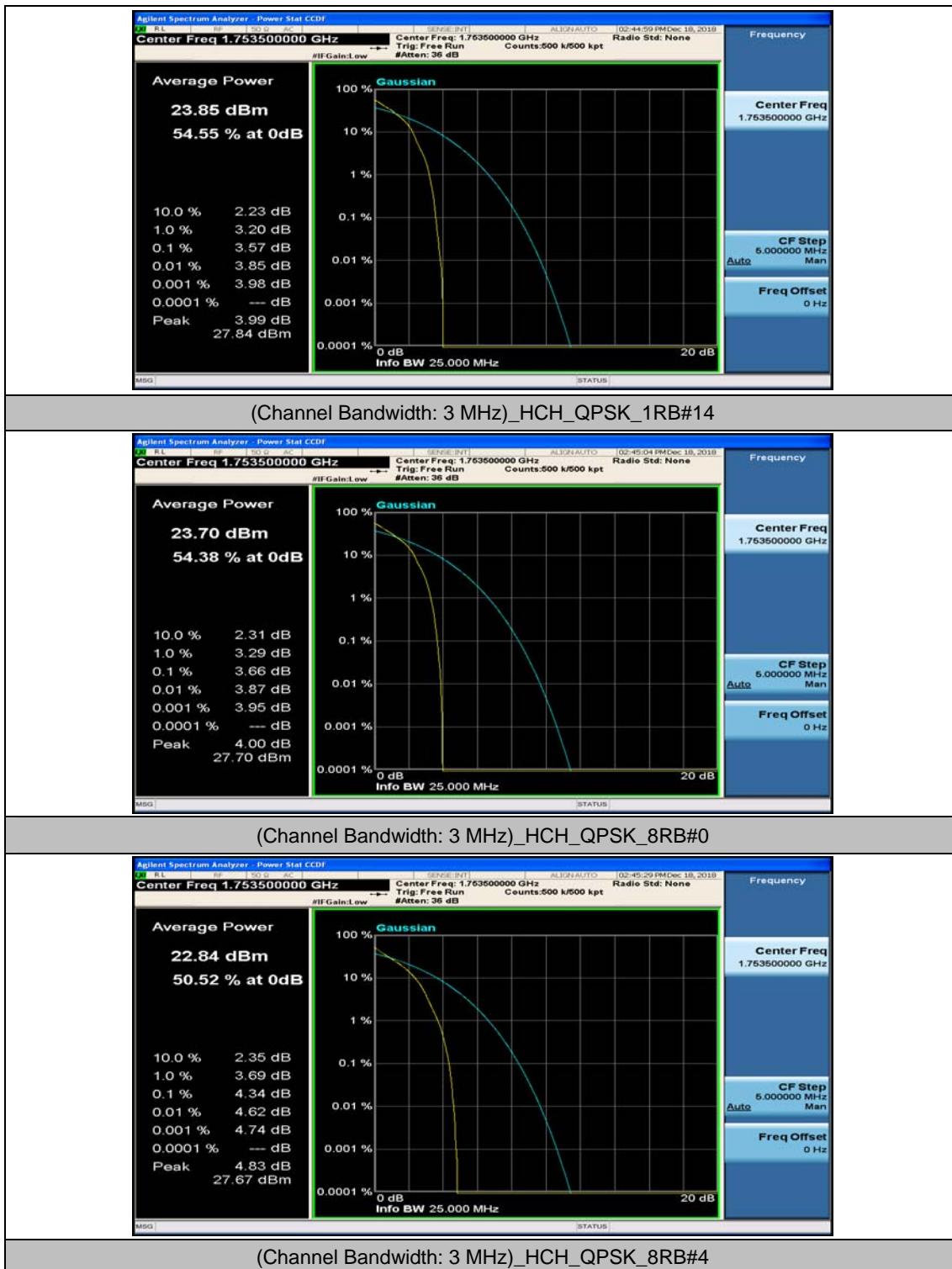


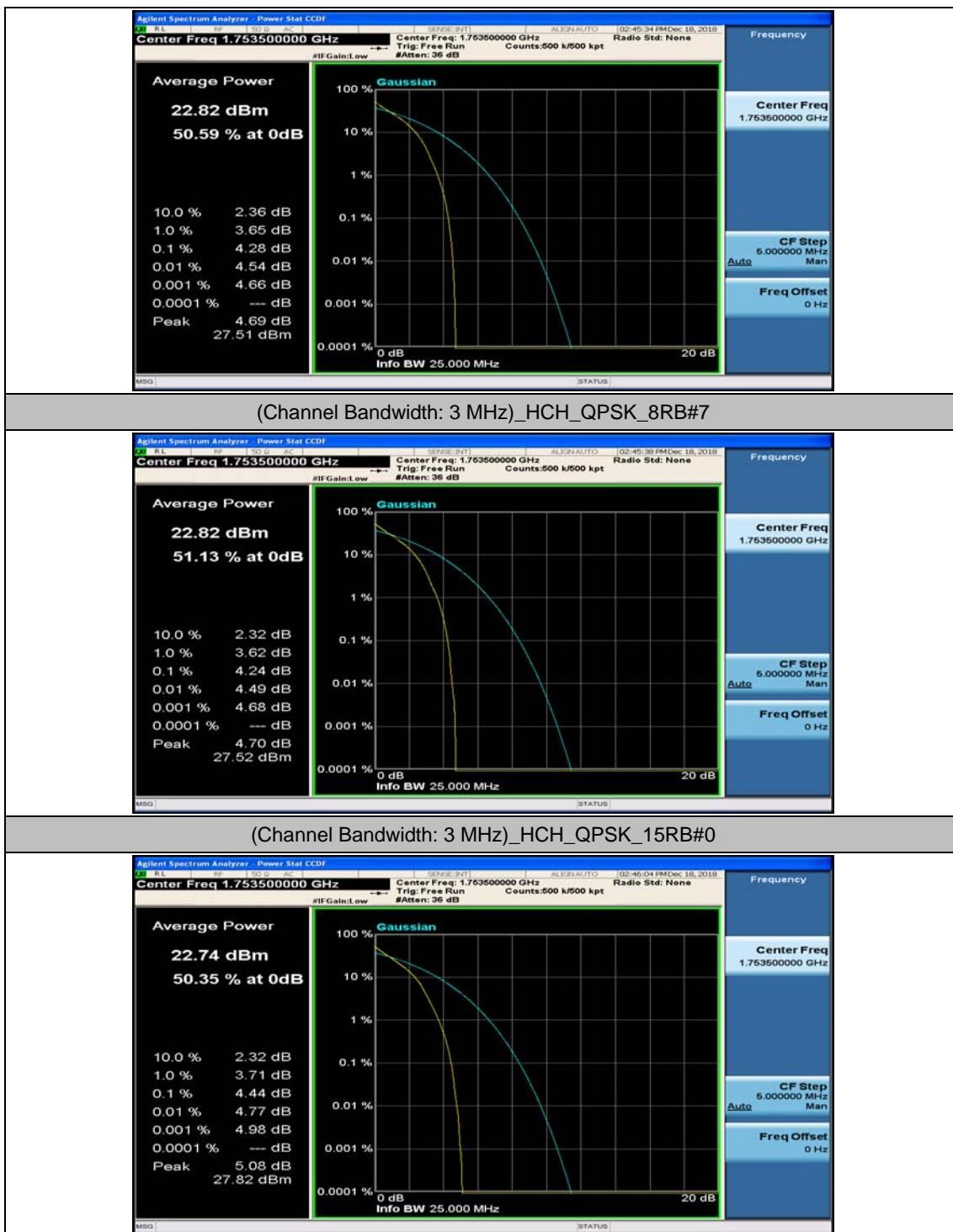


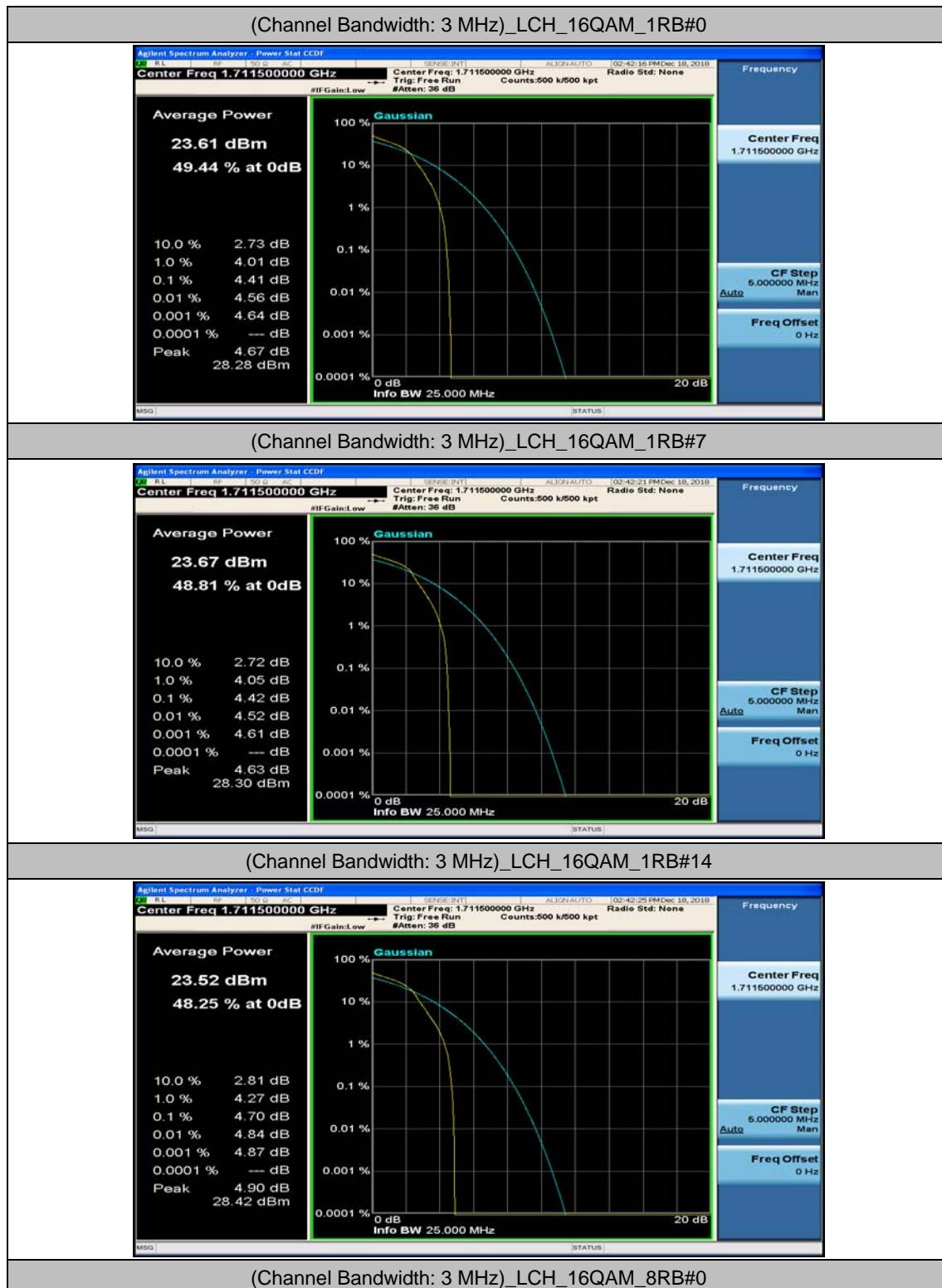


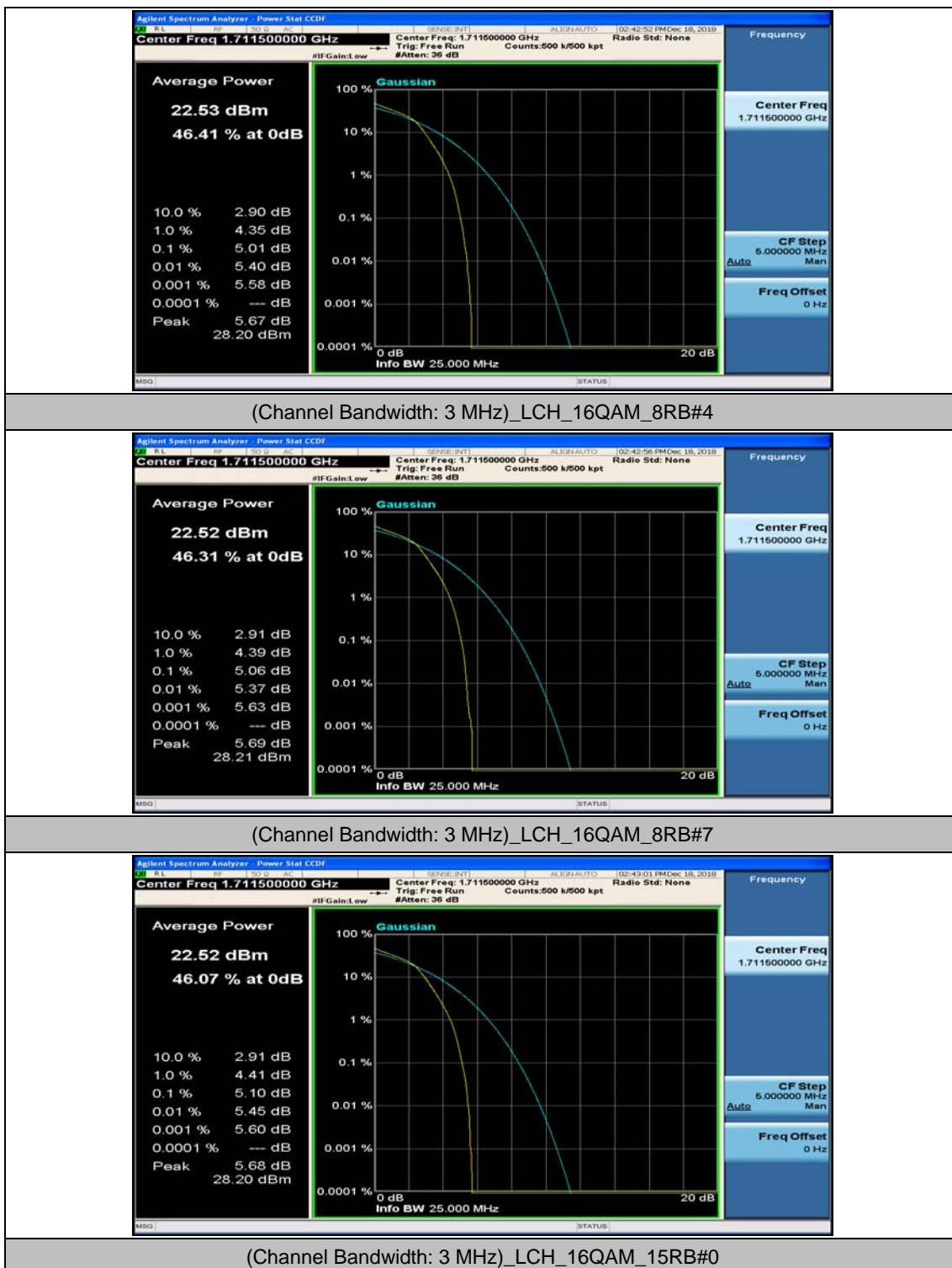


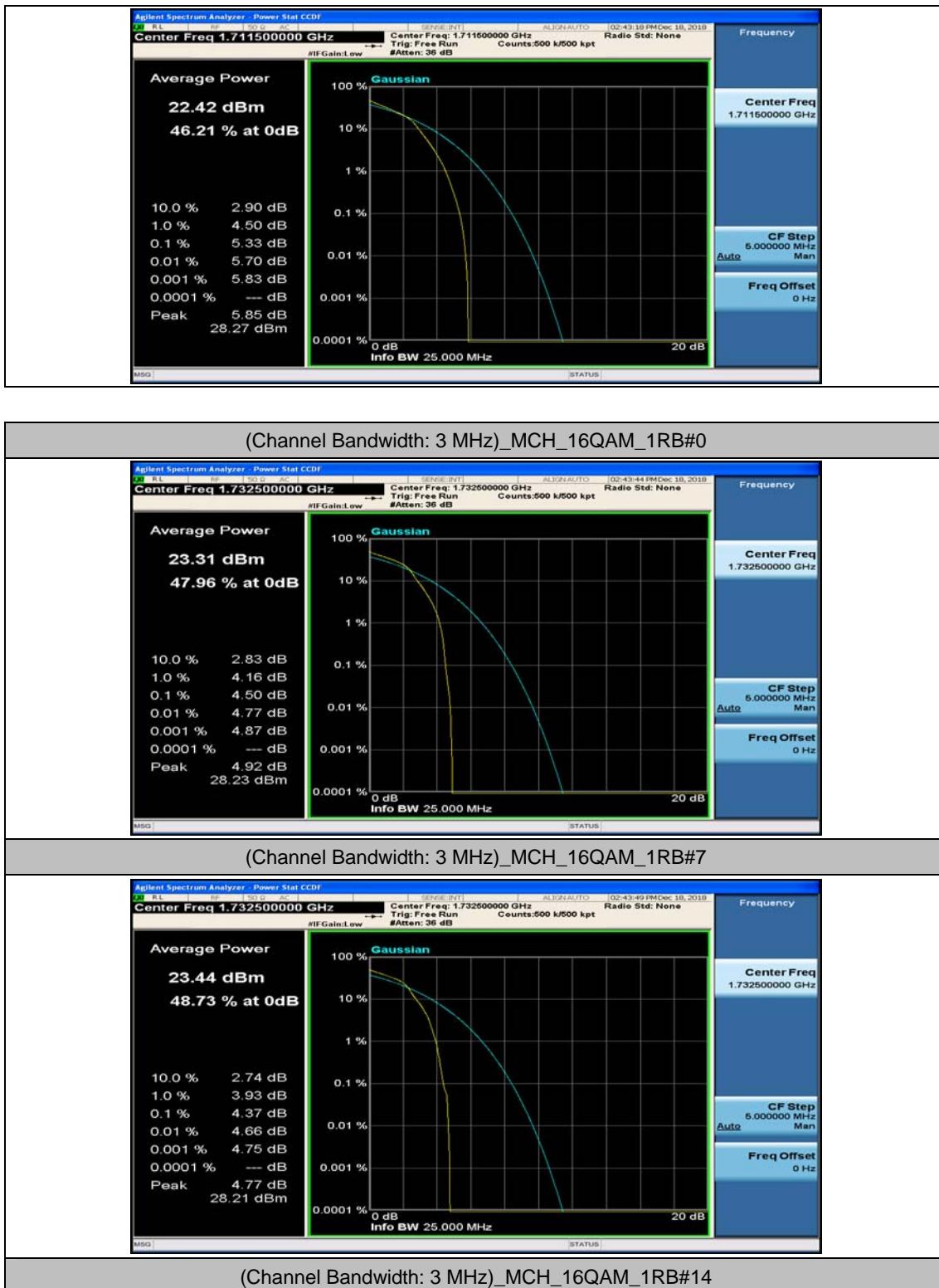


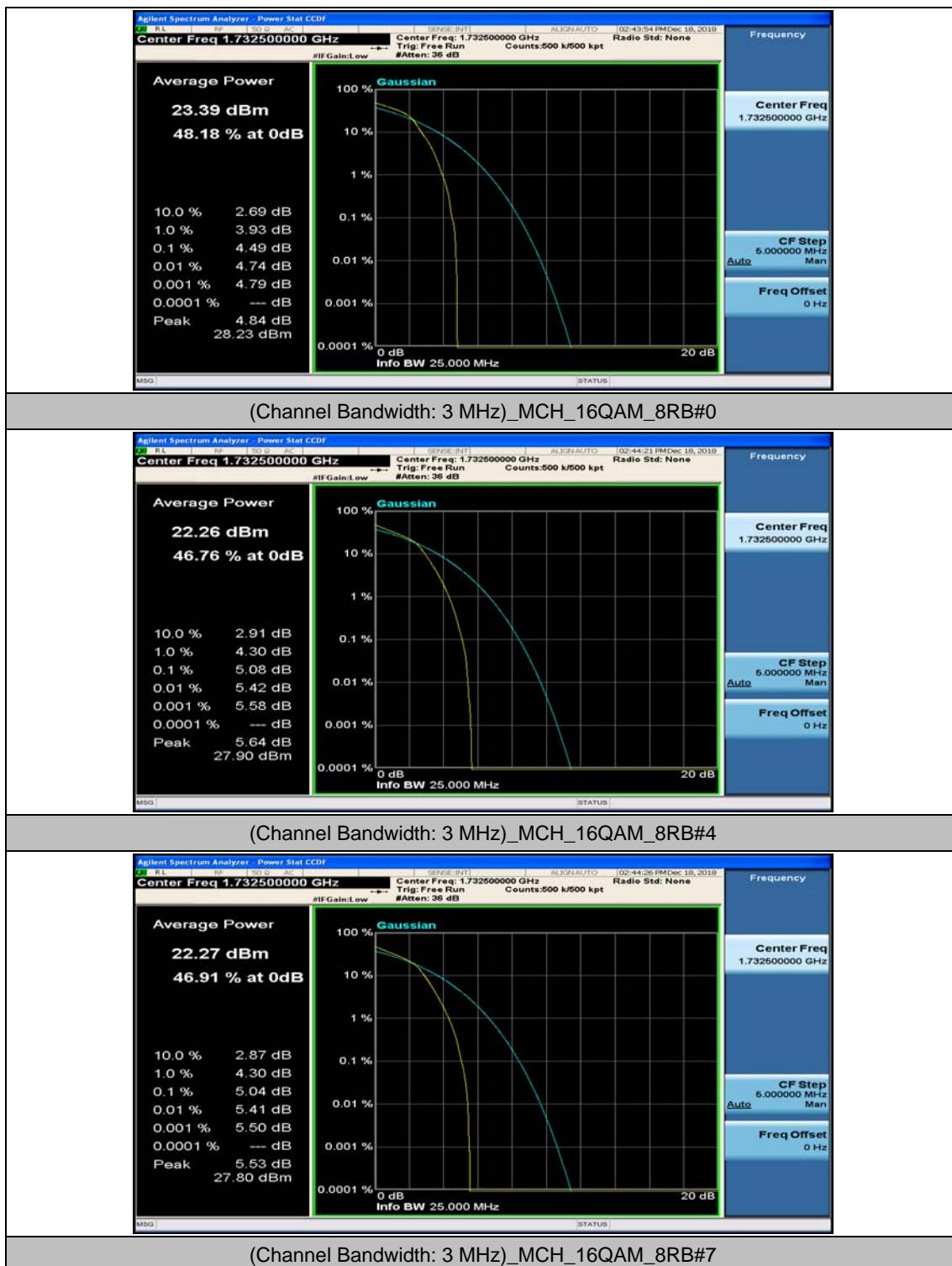


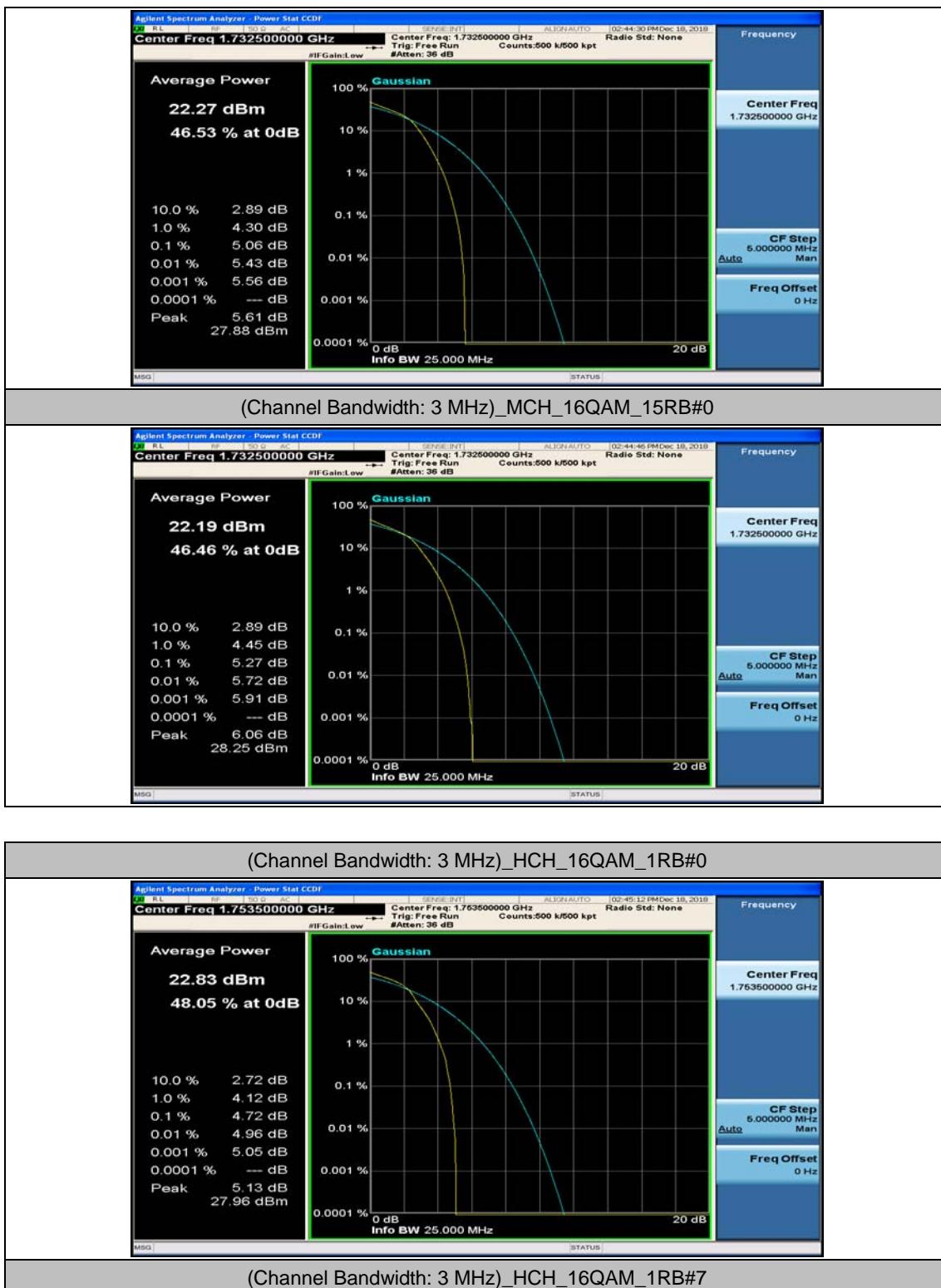


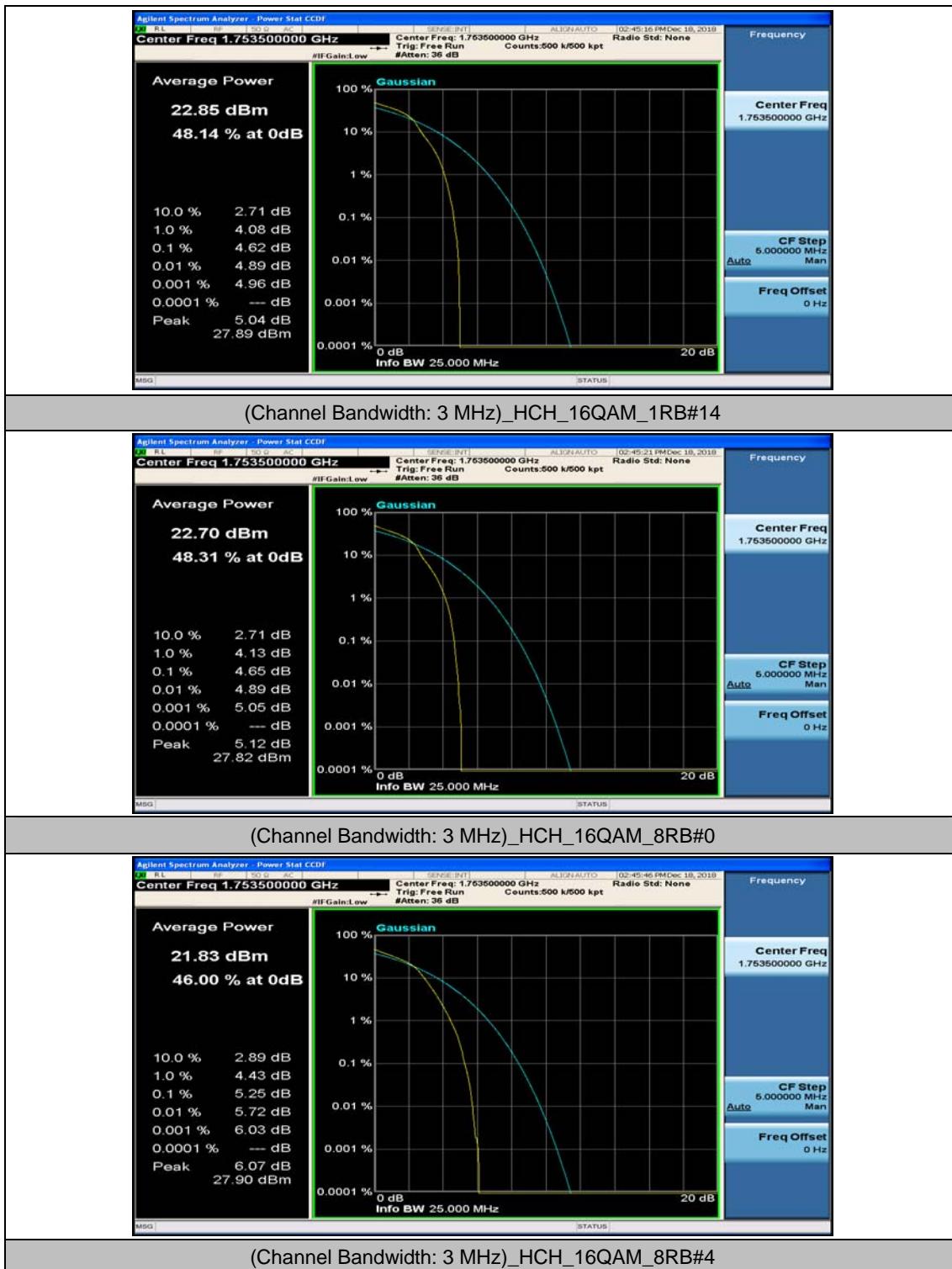


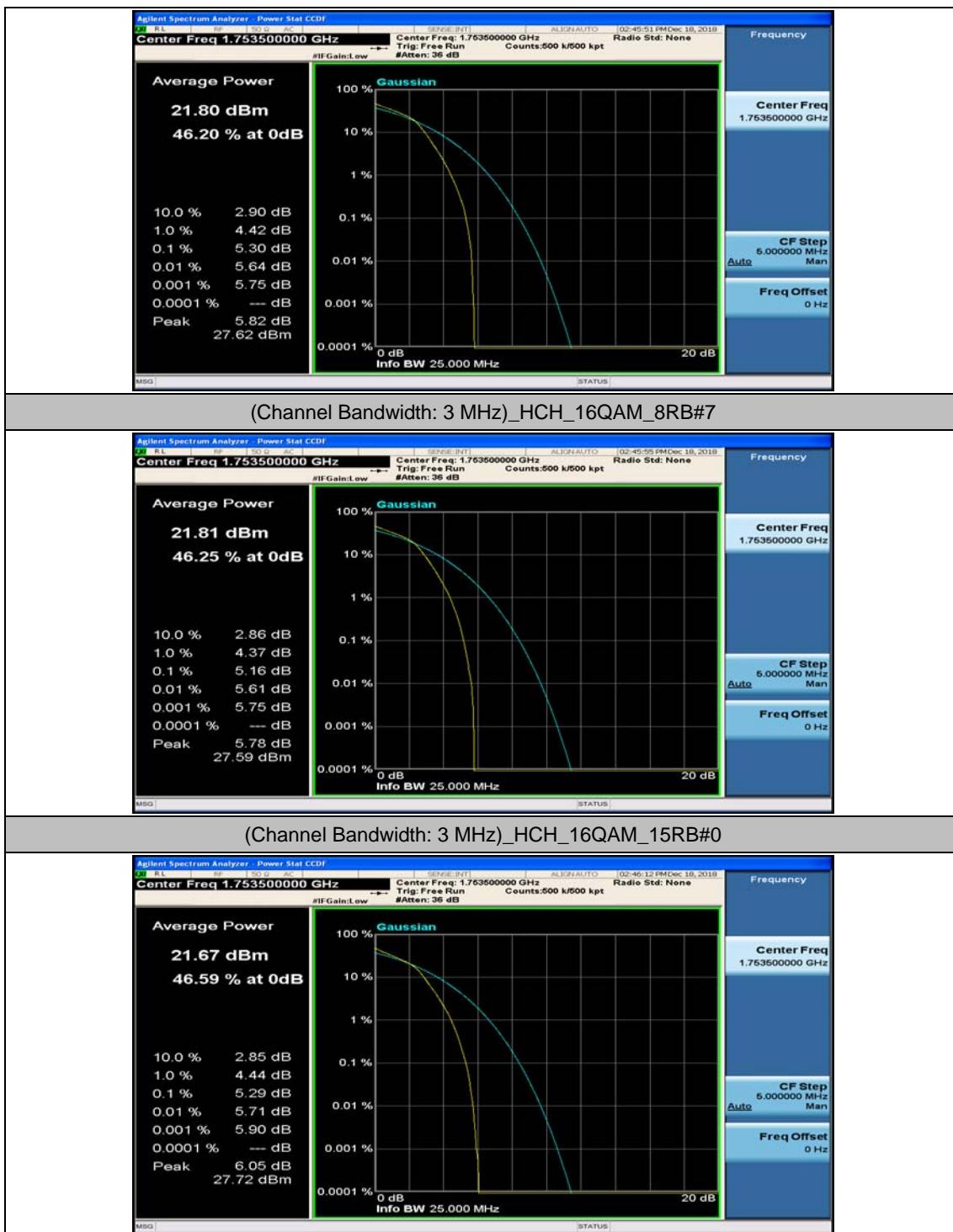




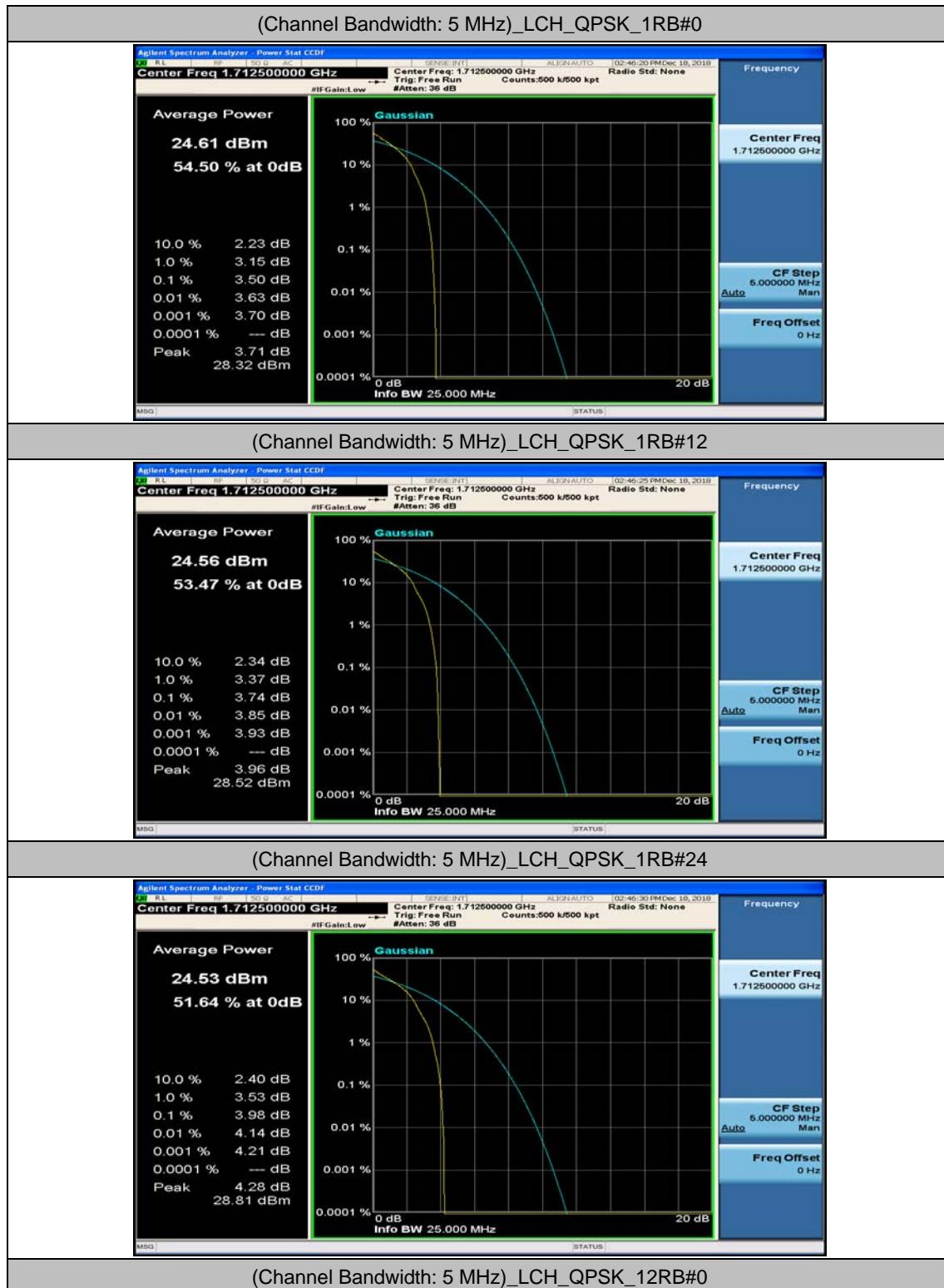


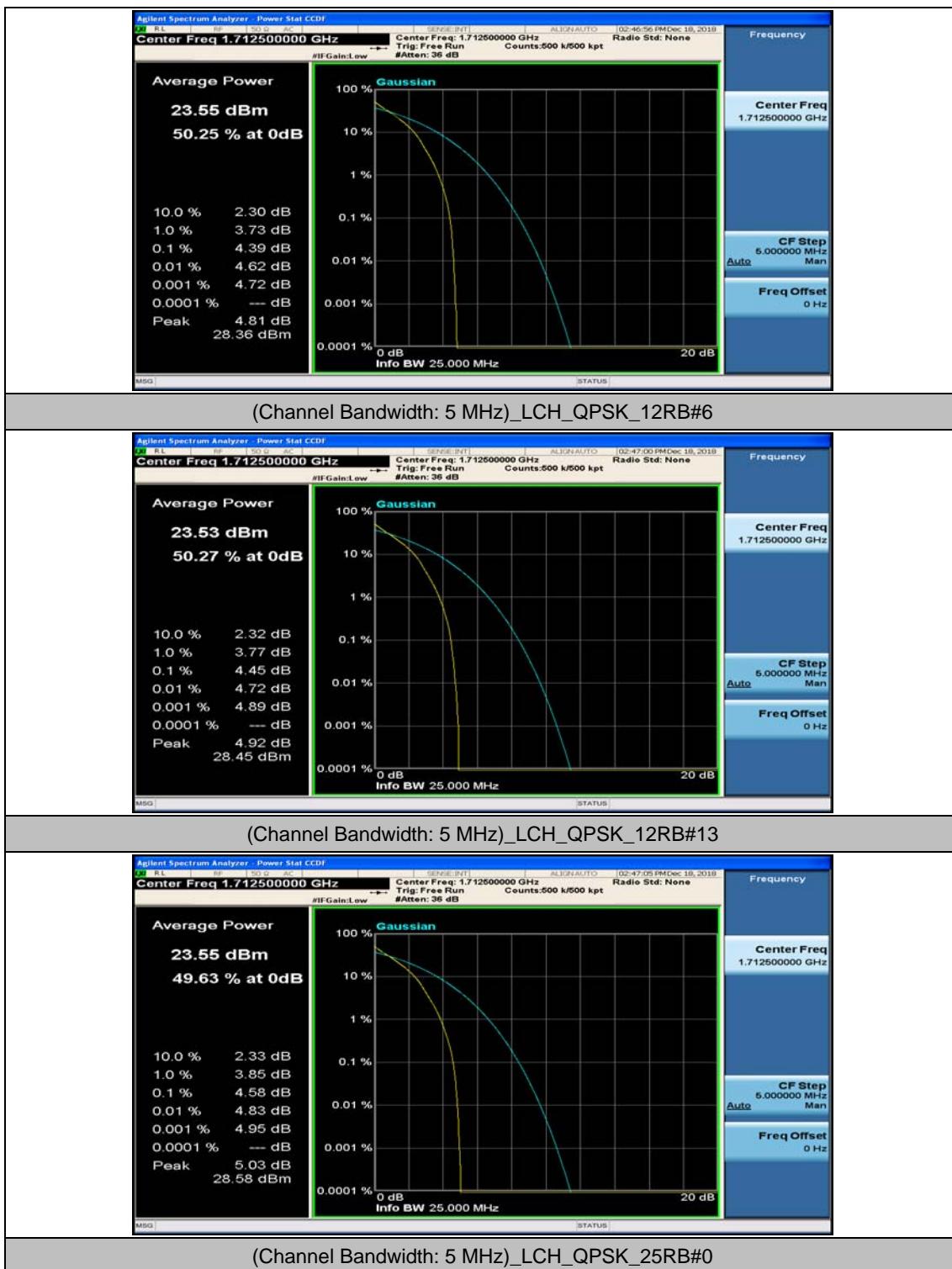


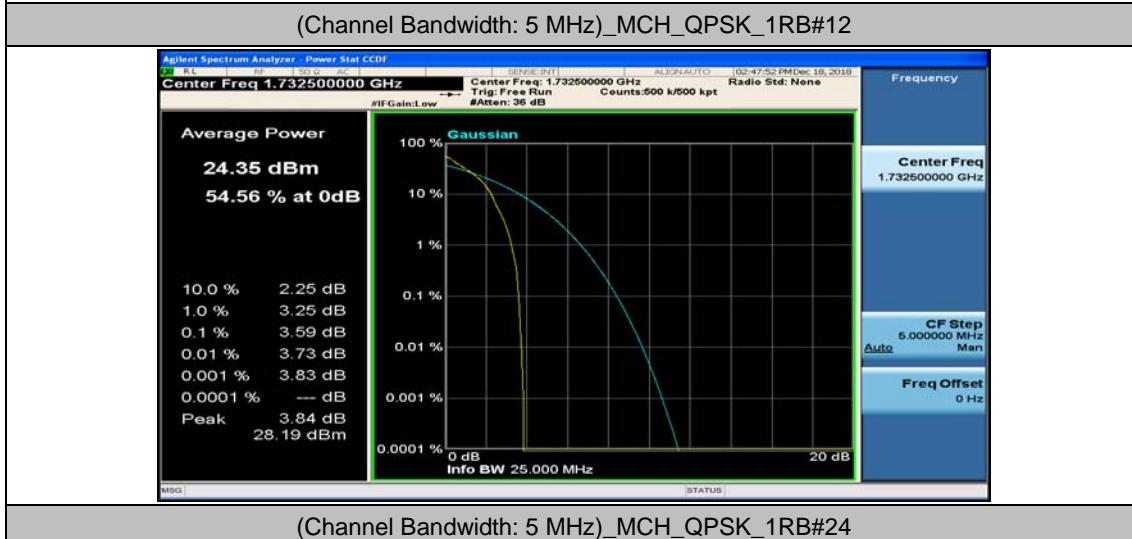
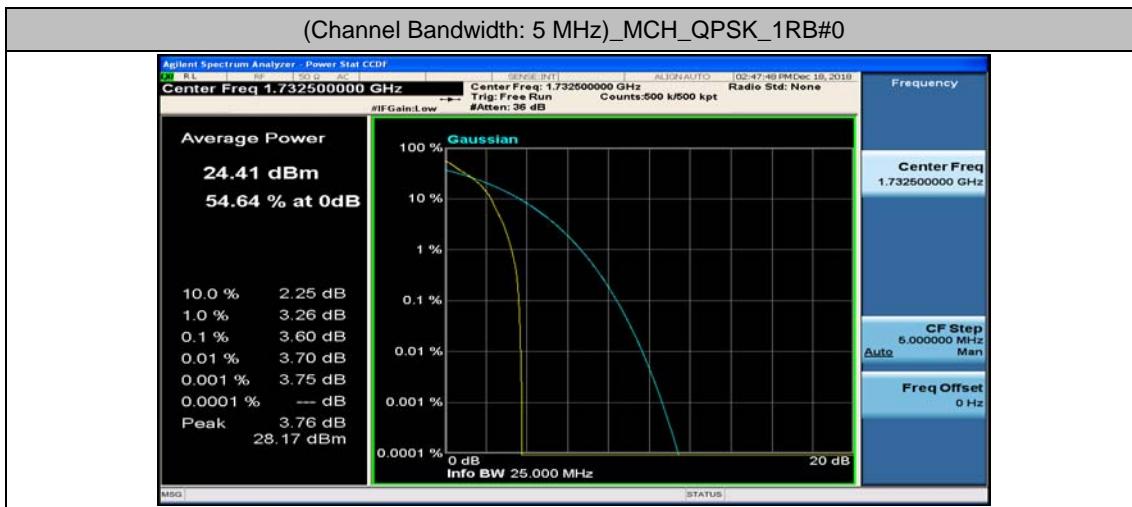
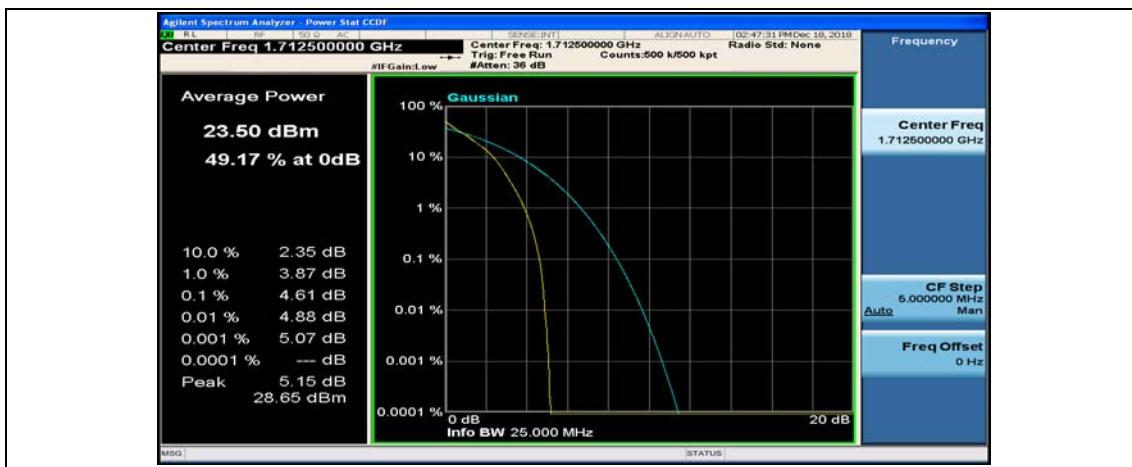




## Channel Bandwidth: 5 MHz







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

