

## 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	23.77	PASS
		1	3	23.68	PASS
		1	5	23.73	PASS
		3	0	22.26	PASS
		3	2	22.25	PASS
		3	3	22.26	PASS
		6	0	22.24	PASS
	MCH	1	0	22.58	PASS
		1	3	22.51	PASS
		1	5	22.4	PASS
		3	0	22.65	PASS
		3	2	22.16	PASS
		3	3	22.17	PASS
		6	0	22.21	PASS
16QAM	HCH	1	0	22.08	PASS
		1	3	22.04	PASS
		1	5	22.06	PASS
		3	0	22.12	PASS
		3	2	22.32	PASS
		3	3	22.14	PASS
		6	0	22.32	PASS
	LCH	1	0	22.87	PASS
		1	3	22.21	PASS
		1	5	22.48	PASS
		3	0	22.44	PASS
		3	2	22.35	PASS
		3	3	22.35	PASS
		6	0	21.22	PASS
	MCH	1	0	22.27	PASS
		1	3	22.25	PASS
		1	5	22.21	PASS

	HCH	3	0	21.95	PASS
		3	2	21.91	PASS
		3	3	21.91	PASS
		6	0	21.02	PASS
		1	0	21.22	PASS
		1	3	21.25	PASS
		1	5	21.19	PASS
		3	0	21.29	PASS
		3	2	21.32	PASS
		3	3	21.39	PASS
		6	0	20.48	PASS

### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.62	PASS
		1	7	23.67	PASS
		1	14	22.93	PASS
		8	0	22.24	PASS
		8	4	22.25	PASS
		8	7	22.24	PASS
		15	0	22.15	PASS
	MCH	1	0	23.41	PASS
		1	7	23.11	PASS
		1	14	23.11	PASS
		8	0	22.23	PASS
		8	4	22.19	PASS
		8	7	22.18	PASS
		15	0	22.07	PASS
	HCH	1	0	22.11	PASS
		1	7	22.07	PASS
		1	14	22.01	PASS
		8	0	21.19	PASS
		8	4	21.15	PASS
		8	7	21.14	PASS
		15	0	21.15	PASS
16QAM	LCH	1	0	22.37	PASS
		1	7	22.41	PASS
		1	14	22.35	PASS
		8	0	21.34	PASS
		8	4	21.24	PASS

		8	7	21.32	PASS
		15	0	21.12	PASS
MCH	MCH	1	0	22.27	PASS
		1	7	22.23	PASS
		1	14	22.14	PASS
		8	0	21.12	PASS
		8	4	21.06	PASS
		8	7	21.06	PASS
		15	0	21.05	PASS
HCH	HCH	1	0	21.3	PASS
		1	7	21.27	PASS
		1	14	21.13	PASS
		8	0	20.55	PASS
		8	4	20.65	PASS
		8	7	20.39	PASS
		15	0	20.47	PASS

### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.49	PASS
		1	12	22.99	PASS
		1	24	23.51	PASS
		12	0	22.23	PASS
		12	6	22.31	PASS
		12	13	22.27	PASS
		25	0	22.24	PASS
QPSK	MCH	1	0	23.35	PASS
		1	12	22.85	PASS
		1	24	22.93	PASS
		12	0	22.22	PASS
		12	6	22.15	PASS
		12	13	22.09	PASS
		25	0	22.08	PASS
QPSK	HCH	1	0	22.35	PASS
		1	12	22.16	PASS
		1	24	22.13	PASS
		12	0	21.17	PASS
		12	6	21.19	PASS
		12	13	21.32	PASS
		25	0	21.17	PASS

16QAM	LCH	1	0	22.39	PASS
		1	12	22.26	PASS
		1	24	22.42	PASS
		12	0	21.42	PASS
		12	6	21.43	PASS
		12	13	20.99	PASS
		25	0	21.41	PASS
	MCH	1	0	22.33	PASS
		1	12	22.16	PASS
		1	24	22.06	PASS
		12	0	21.27	PASS
		12	6	21.2	PASS
		12	13	21.12	PASS
		25	0	21.05	PASS
	HCH	1	0	21.5	PASS
		1	12	21.3	PASS
		1	24	21.23	PASS
		12	0	20.65	PASS
		12	6	20.78	PASS
		12	13	20.64	PASS
		25	0	20.48	PASS

### Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.49	PASS
		1	24	22.99	PASS
		1	49	23.51	PASS
		25	0	22.23	PASS
		25	12	22.31	PASS
		25	25	22.27	PASS
		50	0	22.24	PASS
	MCH	1	0	23.35	PASS
		1	24	22.85	PASS
		1	49	22.93	PASS
		25	0	22.22	PASS
		25	12	22.15	PASS
		25	25	22.09	PASS
		50	0	22.08	PASS
	HCH	1	0	22.35	PASS
		1	24	22.16	PASS

		1	49	22.13	PASS
		25	0	21.17	PASS
		25	12	21.19	PASS
		25	25	21.32	PASS
		50	0	21.17	PASS
16QAM	LCH	1	0	22.39	PASS
		1	24	22.26	PASS
		1	49	22.42	PASS
		25	0	21.42	PASS
		25	12	21.43	PASS
		25	25	20.99	PASS
		50	0	21.41	PASS
	MCH	1	0	22.33	PASS
		1	24	22.16	PASS
		1	49	22.06	PASS
		25	0	21.27	PASS
		25	12	21.2	PASS
		25	25	21.12	PASS
		50	0	21.05	PASS
	HCH	1	0	21.5	PASS
		1	24	21.3	PASS
		1	49	21.23	PASS
		25	0	20.65	PASS
		25	12	20.78	PASS
		25	25	20.64	PASS
		50	0	20.48	PASS

### Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.17	PASS
		1	37	23.12	PASS
		1	74	22.88	PASS
		37	0	22.36	PASS
		37	18	22.27	PASS
		37	38	22.18	PASS
		75	0	22.27	PASS
	MCH	1	0	22.8	PASS
		1	37	22.69	PASS
		1	74	22.15	PASS
		37	0	22.58	PASS

	HCH	37	18	22.24	PASS
		37	38	21.62	PASS
		75	0	22.25	PASS
		1	0	22.17	PASS
		1	37	22.39	PASS
		1	74	22.08	PASS
		37	0	21.32	PASS
		37	18	21.45	PASS
16QAM	LCH	37	38	21.35	PASS
		75	0	21.9	PASS
		1	0	22.52	PASS
		1	37	22.42	PASS
		1	74	22.11	PASS
		37	0	21.35	PASS
		37	18	21.25	PASS
	MCH	37	38	21.15	PASS
		75	0	21.26	PASS
		1	0	22.23	PASS
		1	37	22.21	PASS
		1	74	21.27	PASS
		37	0	21.38	PASS
		37	18	21.22	PASS
	HCH	37	38	20.83	PASS
		75	0	21.23	PASS
		1	0	21.68	PASS
		1	37	21.77	PASS
		1	74	21.35	PASS
		37	0	21.78	PASS
		37	18	21.75	PASS
		37	38	21.09	PASS
		75	0	21.66	PASS

### Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.26	PASS
		1	49	22.97	PASS
		1	99	22.88	PASS
		50	0	22.22	PASS
		50	25	22.09	PASS
		50	50	21.93	PASS

		100	0	21.75	PASS
MCH	1	0	23.78		PASS
	1	49	22.56		PASS
	1	99	22.01		PASS
	50	0	22.71		PASS
	50	25	22.1		PASS
	50	50	21.46		PASS
	100	0	22.62		PASS
HCH	1	0	23.38		PASS
	1	49	22.93		PASS
	1	99	22.76		PASS
	50	0	21.25		PASS
	50	25	21.9		PASS
	50	50	21.32		PASS
	100	0	21.11		PASS
LCH	1	0	22.49		PASS
	1	49	22.28		PASS
	1	99	21.94		PASS
	50	0	21.13		PASS
	50	25	21.1		PASS
	50	50	20.73		PASS
	100	0	21.31		PASS
MCH	1	0	22.15		PASS
	1	49	21.94		PASS
	1	99	21.1		PASS
	50	0	21.36		PASS
	50	25	21.13		PASS
	50	50	20.65		PASS
	100	0	21.12		PASS
HCH	1	0	21.57		PASS
	1	49	21.97		PASS
	1	99	21.05		PASS
	50	0	20.35		PASS
	50	25	21.14		PASS
	50	50	21.22		PASS
	100	0	21.17		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	3.86	<13	PASS
		1	5	3.75	<13	PASS
		3	0	4.06	<13	PASS
		3	2	4.11	<13	PASS
		3	3	4.1	<13	PASS
		6	0	4.98	<13	PASS
	MCH	1	0	2.61	<13	PASS
		1	3	2.42	<13	PASS
		1	5	2.45	<13	PASS
		3	0	2.49	<13	PASS
		3	2	2.52	<13	PASS
		3	3	2.51	<13	PASS
		6	0	3.42	<13	PASS
16QAM	LCH	1	0	3.4	<13	PASS
		1	3	3.22	<13	PASS
		1	5	3.13	<13	PASS
		3	0	3.5	<13	PASS
		3	2	3.43	<13	PASS
		3	3	3.49	<13	PASS
		6	0	4.52	<13	PASS
	MCH	1	0	4.73	<13	PASS
		1	3	4.73	<13	PASS
		1	5	4.83	<13	PASS
		3	0	4.89	<13	PASS
		3	2	4.95	<13	PASS
		3	3	5	<13	PASS
		6	0	5.85	<13	PASS

		3	0	3.43	<13	PASS
		3	2	3.45	<13	PASS
		3	3	3.39	<13	PASS
		6	0	4.39	<13	PASS
HCH		1	0	4.53	<13	PASS
		1	3	4.32	<13	PASS
		1	5	4.47	<13	PASS
		3	0	4.43	<13	PASS
		3	2	4.56	<13	PASS
		3	3	4.46	<13	PASS
		6	0	5.46	<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	3.42	<13	PASS
		1	7	3.61	<13	PASS
		1	14	4.1	<13	PASS
		8	0	5.19	<13	PASS
		8	4	5.04	<13	PASS
		8	7	5.07	<13	PASS
		15	0	5.32	<13	PASS
	MCH	1	0	2.29	<13	PASS
		1	7	2.24	<13	PASS
		1	14	2.28	<13	PASS
		8	0	3.47	<13	PASS
		8	4	3.45	<13	PASS
		8	7	3.44	<13	PASS
		15	0	3.61	<13	PASS
	HCH	1	0	3.57	<13	PASS
		1	7	3.45	<13	PASS
		1	14	3.2	<13	PASS
		8	0	4.76	<13	PASS
		8	4	4.68	<13	PASS
		8	7	4.56	<13	PASS
		15	0	4.74	<13	PASS
16QAM	LCH	1	0	4.76	<13	PASS
		1	7	4.77	<13	PASS
		1	14	4.97	<13	PASS
		8	0	5.8	<13	PASS

		8	4	5.99	<13	PASS
		8	7	5.92	<13	PASS
		15	0	6.28	<13	PASS
MCH		1	0	3.48	<13	PASS
		1	7	3.39	<13	PASS
		1	14	3.49	<13	PASS
		8	0	4.39	<13	PASS
		8	4	4.38	<13	PASS
		8	7	4.35	<13	PASS
		15	0	4.52	<13	PASS
HCH		1	0	4.67	<13	PASS
		1	7	4.4	<13	PASS
		1	14	4.32	<13	PASS
		8	0	5.7	<13	PASS
		8	4	5.64	<13	PASS
		8	7	5.61	<13	PASS
		15	0	5.65	<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	3.62	<13	PASS
		1	12	4.23	<13	PASS
		1	24	3.84	<13	PASS
		12	0	5.16	<13	PASS
		12	6	5.11	<13	PASS
		12	13	5.18	<13	PASS
		25	0	5.36	<13	PASS
	MCH	1	0	2.36	<13	PASS
		1	12	2.71	<13	PASS
		1	24	2.6	<13	PASS
		12	0	3.51	<13	PASS
		12	6	3.5	<13	PASS
		12	13	3.49	<13	PASS
		25	0	3.63	<13	PASS
	HCH	1	0	3.61	<13	PASS
		1	12	3.5	<13	PASS
		1	24	3.22	<13	PASS
		12	0	4.98	<13	PASS
		12	6	4.86	<13	PASS

		12	13	4.72	<13	PASS
		25	0	4.93	<13	PASS
16QAM	LCH	1	0	4.99	<13	PASS
		1	12	5.15	<13	PASS
		1	24	5.16	<13	PASS
		12	0	6.04	<13	PASS
		12	6	6.27	<13	PASS
		12	13	6.28	<13	PASS
		25	0	6.16	<13	PASS
	MCH	1	0	3.54	<13	PASS
		1	12	3.49	<13	PASS
		1	24	3.47	<13	PASS
		12	0	4.47	<13	PASS
		12	6	4.45	<13	PASS
		12	13	4.42	<13	PASS
		25	0	4.62	<13	PASS
	HCH	1	0	4.63	<13	PASS
		1	12	4.48	<13	PASS
		1	24	4.26	<13	PASS
		12	0	5.85	<13	PASS
		12	6	5.72	<13	PASS
		12	13	5.59	<13	PASS
		25	0	5.76	<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	3.89	<13	PASS
		1	24	3.99	<13	PASS
		1	49	4.33	<13	PASS
		25	0	5.17	<13	PASS
		25	12	5.21	<13	PASS
		25	25	5.15	<13	PASS
		50	0	5.31	<13	PASS
	MCH	1	0	2.48	<13	PASS
		1	24	2.51	<13	PASS
		1	49	3.23	<13	PASS
		25	0	3.65	<13	PASS
		25	12	3.6	<13	PASS
		25	25	3.72	<13	PASS

		50	0	3.74	<13	PASS
	HCH	1	0	3.94	<13	PASS
		1	24	3.85	<13	PASS
		1	49	3.34	<13	PASS
		25	0	5.32	<13	PASS
		25	12	5.14	<13	PASS
		25	25	5.33	<13	PASS
		50	0	5.28	<13	PASS
	LCH	1	0	4.71	<13	PASS
		1	24	4.94	<13	PASS
		1	49	4.88	<13	PASS
		25	0	6.04	<13	PASS
		25	12	6.12	<13	PASS
		25	25	6.35	<13	PASS
		50	0	6.11	<13	PASS
	MCH	1	0	3.61	<13	PASS
		1	24	3.34	<13	PASS
		1	49	4.06	<13	PASS
		25	0	4.62	<13	PASS
		25	12	4.57	<13	PASS
		25	25	4.59	<13	PASS
		50	0	4.66	<13	PASS
	HCH	1	0	4.98	<13	PASS
		1	24	4.91	<13	PASS
		1	49	4.3	<13	PASS
		25	0	6.21	<13	PASS
		25	12	6.04	<13	PASS
		25	25	5.86	<13	PASS
		50	0	5.89	<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	3.74	<13	PASS
		1	37	3.87	<13	PASS
		1	74	3.4	<13	PASS
		37	0	5.12	<13	PASS
		37	18	5.13	<13	PASS
		37	38	4.92	<13	PASS
		75	0	5.41	<13	PASS

	MCH	1	0	3.31	<13	PASS
		1	37	2.87	<13	PASS
		1	74	3.5	<13	PASS
		37	0	3.62	<13	PASS
		37	18	3.47	<13	PASS
		37	38	3.98	<13	PASS
		75	0	4.18	<13	PASS
	HCH	1	0	3.3	<13	PASS
		1	37	4.02	<13	PASS
		1	74	3.5	<13	PASS
		37	0	5.06	<13	PASS
		37	18	5.35	<13	PASS
		37	38	5.38	<13	PASS
		75	0	5.6	<13	PASS
16QAM	LCH	1	0	4.62	<13	PASS
		1	37	4.8	<13	PASS
		1	74	4.43	<13	PASS
		37	0	6	<13	PASS
		37	18	6.06	<13	PASS
		37	38	5.86	<13	PASS
		75	0	6.15	<13	PASS
	MCH	1	0	3.97	<13	PASS
		1	37	3.32	<13	PASS
		1	74	4.3	<13	PASS
		37	0	4.65	<13	PASS
		37	18	4.5	<13	PASS
		37	38	4.77	<13	PASS
		75	0	4.99	<13	PASS
	HCH	1	0	4.44	<13	PASS
		1	37	5.05	<13	PASS
		1	74	4.93	<13	PASS
		37	0	5.98	<13	PASS
		37	18	6.3	<13	PASS
		37	38	6.26	<13	PASS
		75	0	6.38	<13	PASS

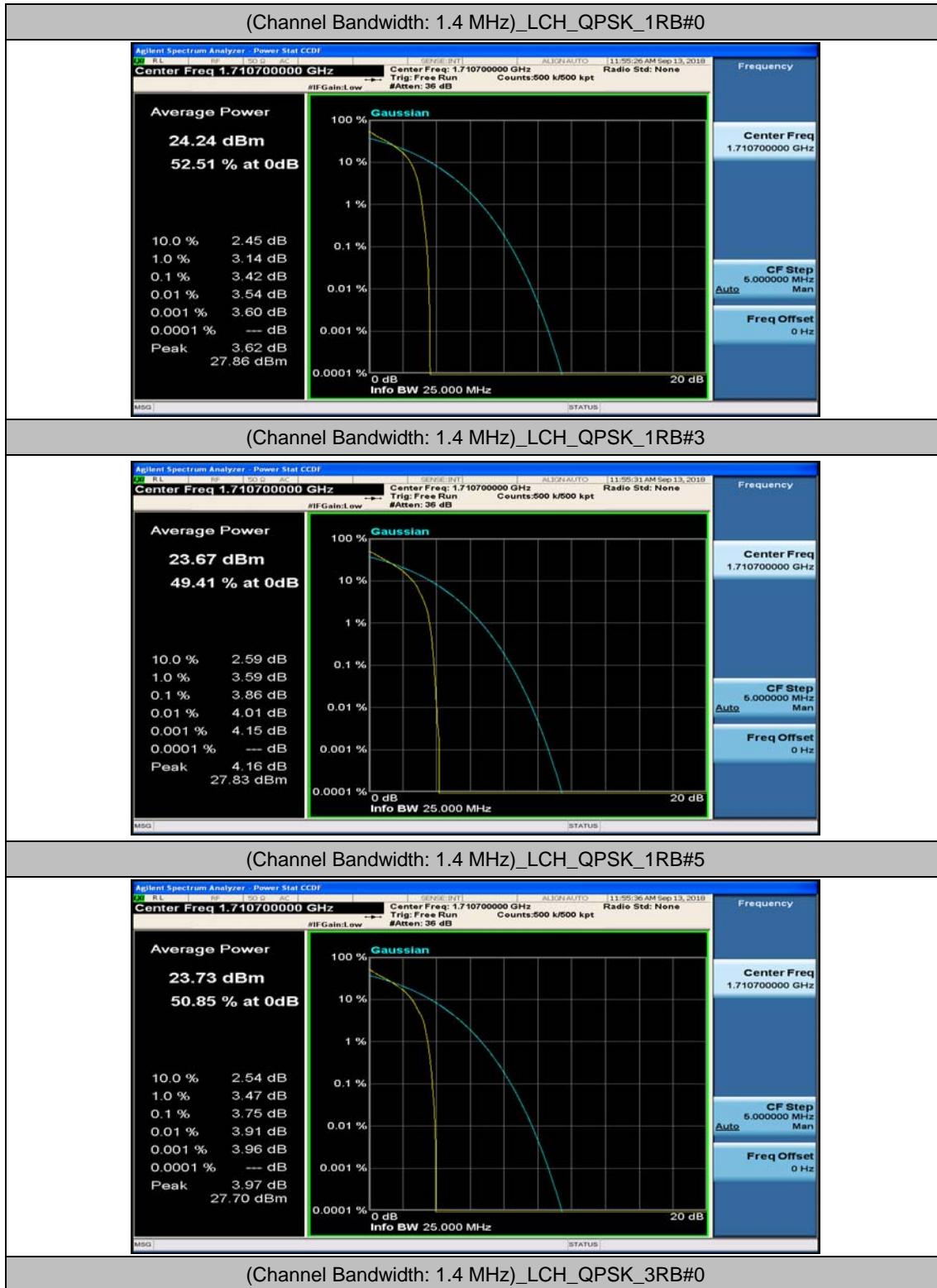
### Channel Bandwidth: 20 MHz

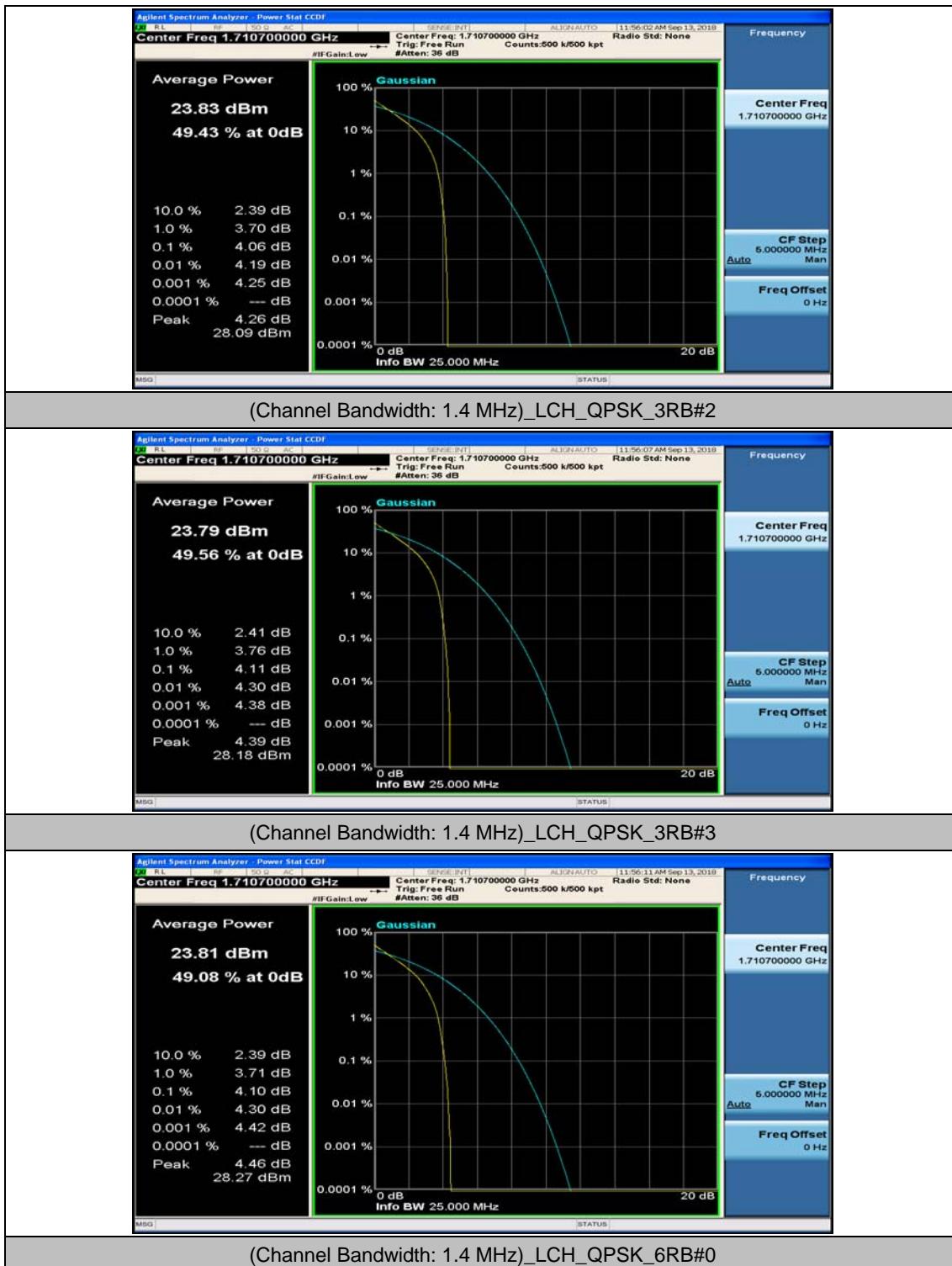
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.58	<13	PASS

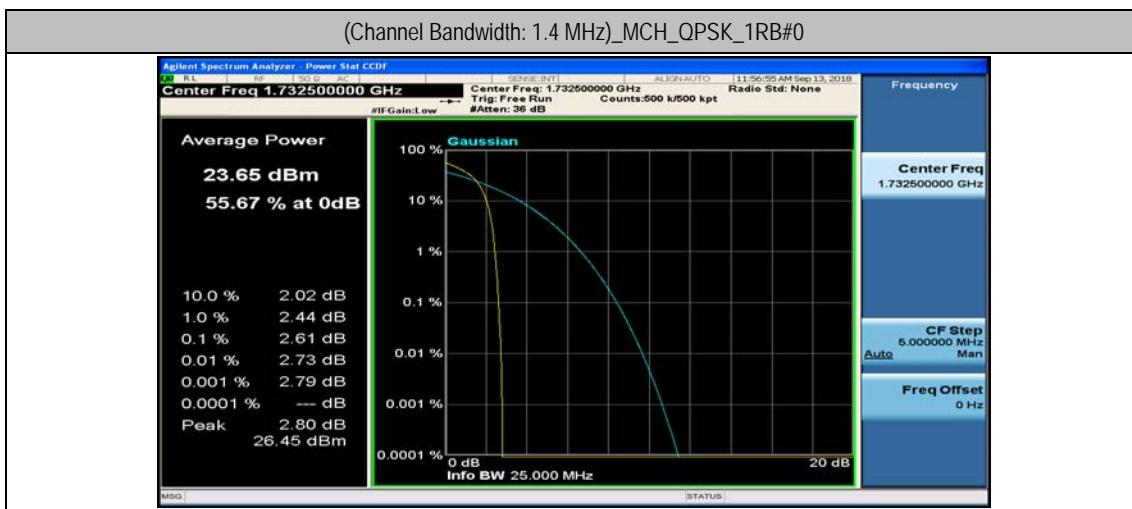
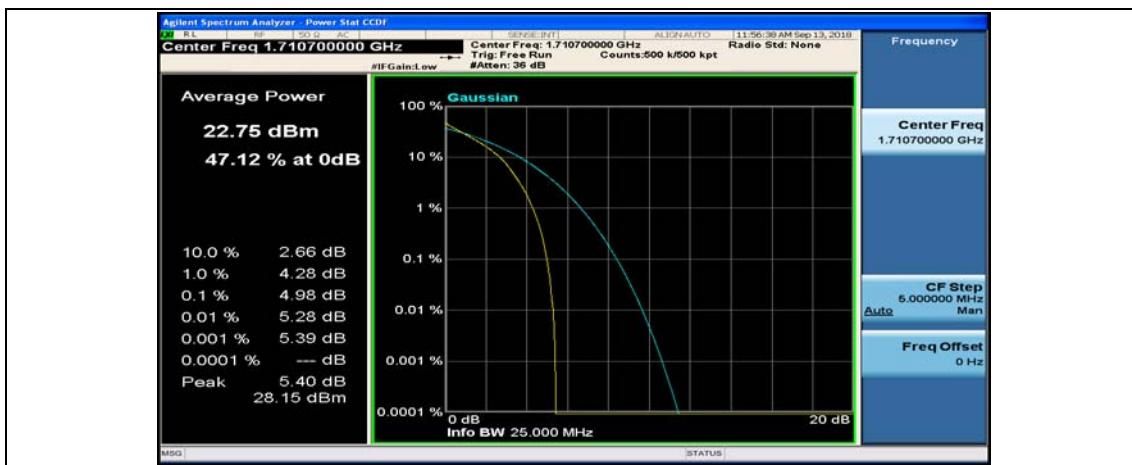
		1	49	3.88	<13	PASS
		1	99	2.86	<13	PASS
		50	0	5.23	<13	PASS
		50	25	5.09	<13	PASS
		50	50	4.74	<13	PASS
		100	0	5.61	<13	PASS
	MCH	1	0	3.45	<13	PASS
		1	49	2.87	<13	PASS
		1	99	3.58	<13	PASS
		50	0	4.03	<13	PASS
		50	25	3.71	<13	PASS
		50	50	4.33	<13	PASS
		100	0	4.56	<13	PASS
	HCH	1	0	2.58	<13	PASS
		1	49	4.09	<13	PASS
		1	99	3.47	<13	PASS
		50	0	4.75	<13	PASS
		50	25	5.37	<13	PASS
		50	50	5.55	<13	PASS
		100	0	5.64	<13	PASS
16QAM	LCH	1	0	4.63	<13	PASS
		1	49	4.78	<13	PASS
		1	99	3.79	<13	PASS
		50	0	6.1	<13	PASS
		50	25	6.19	<13	PASS
		50	50	5.07	<13	PASS
		100	0	6.19	<13	PASS
	MCH	1	0	4.5	<13	PASS
		1	49	3.29	<13	PASS
		1	99	4.68	<13	PASS
		50	0	4.94	<13	PASS
		50	25	4.64	<13	PASS
		50	50	5.09	<13	PASS
		100	0	5.32	<13	PASS
	HCH	1	0	3.98	<13	PASS
		1	49	4.89	<13	PASS
		1	99	5.01	<13	PASS
		50	0	5.76	<13	PASS
		50	25	6.31	<13	PASS
		50	50	6.25	<13	PASS
		100	0	6.33	<13	PASS

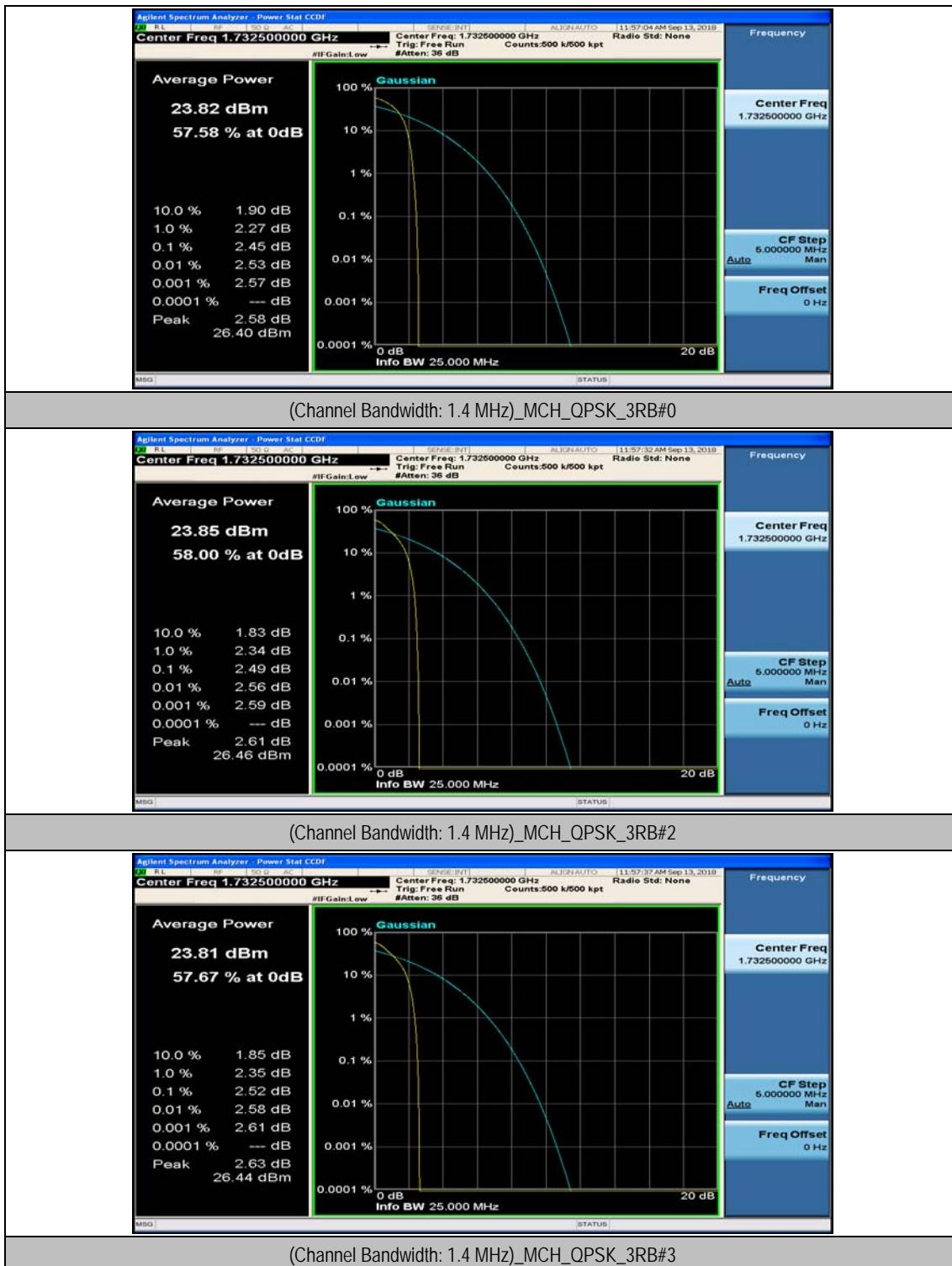
## Test Graphs

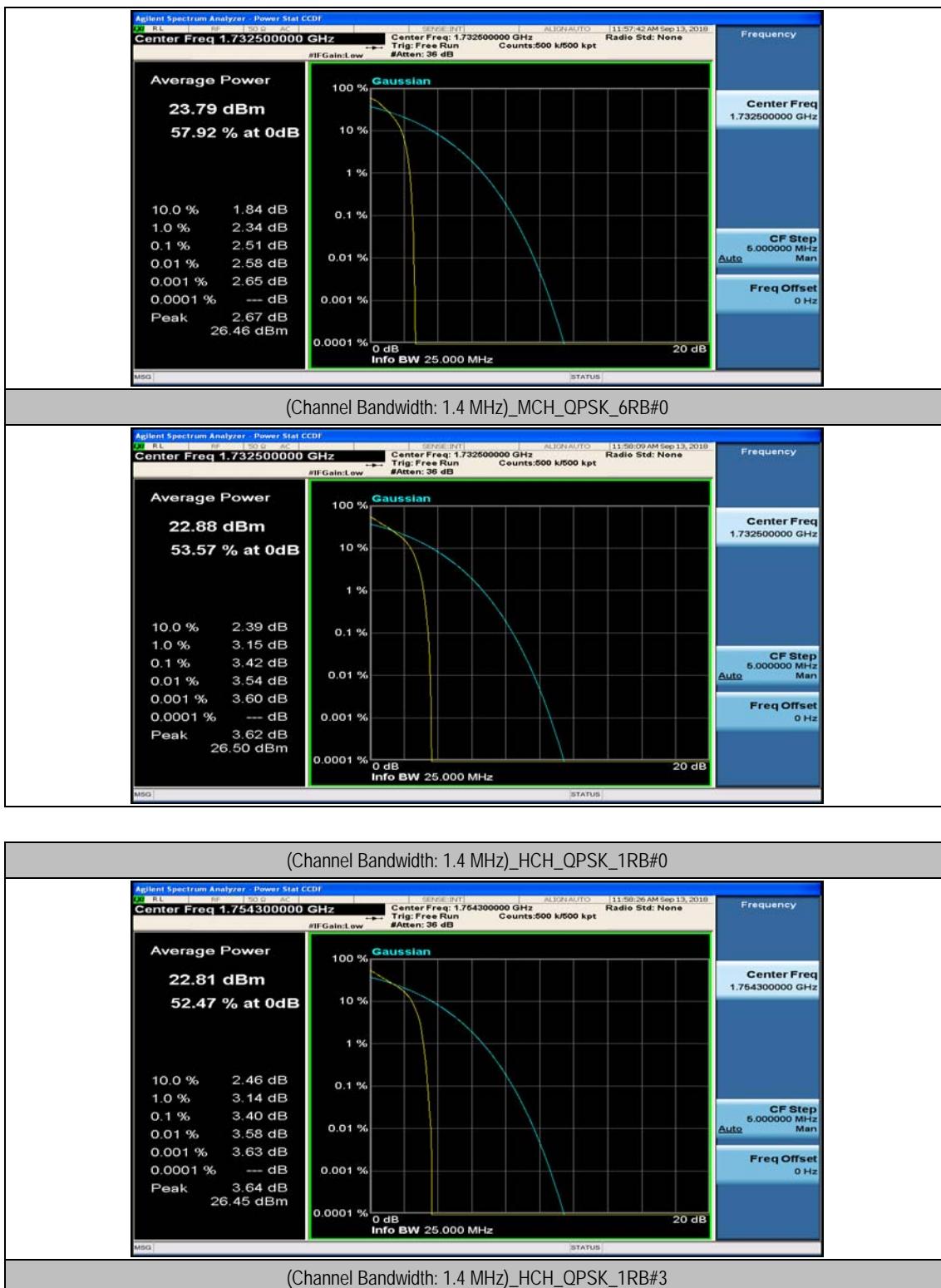
### Channel Bandwidth: 1.4 MHz

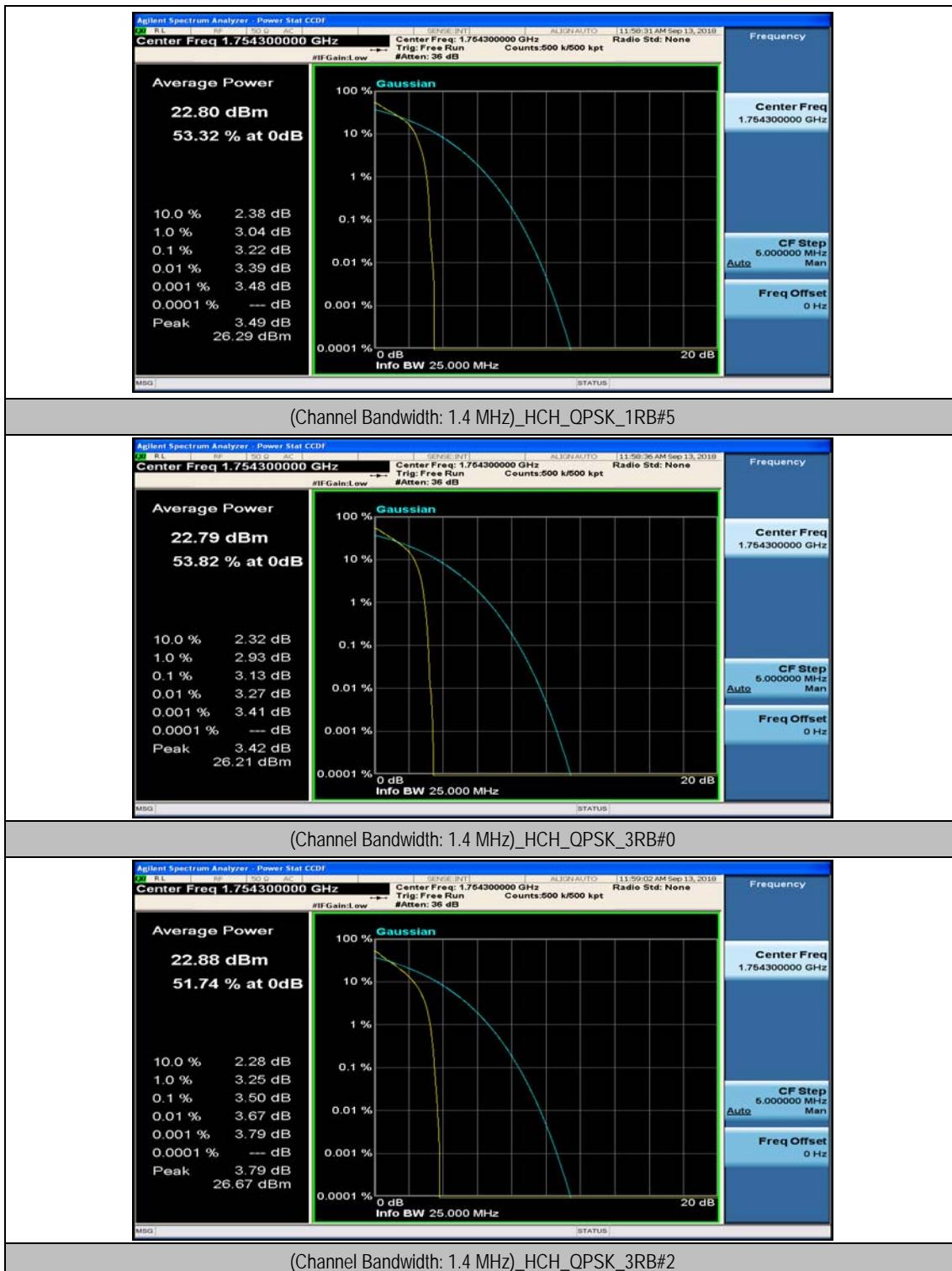


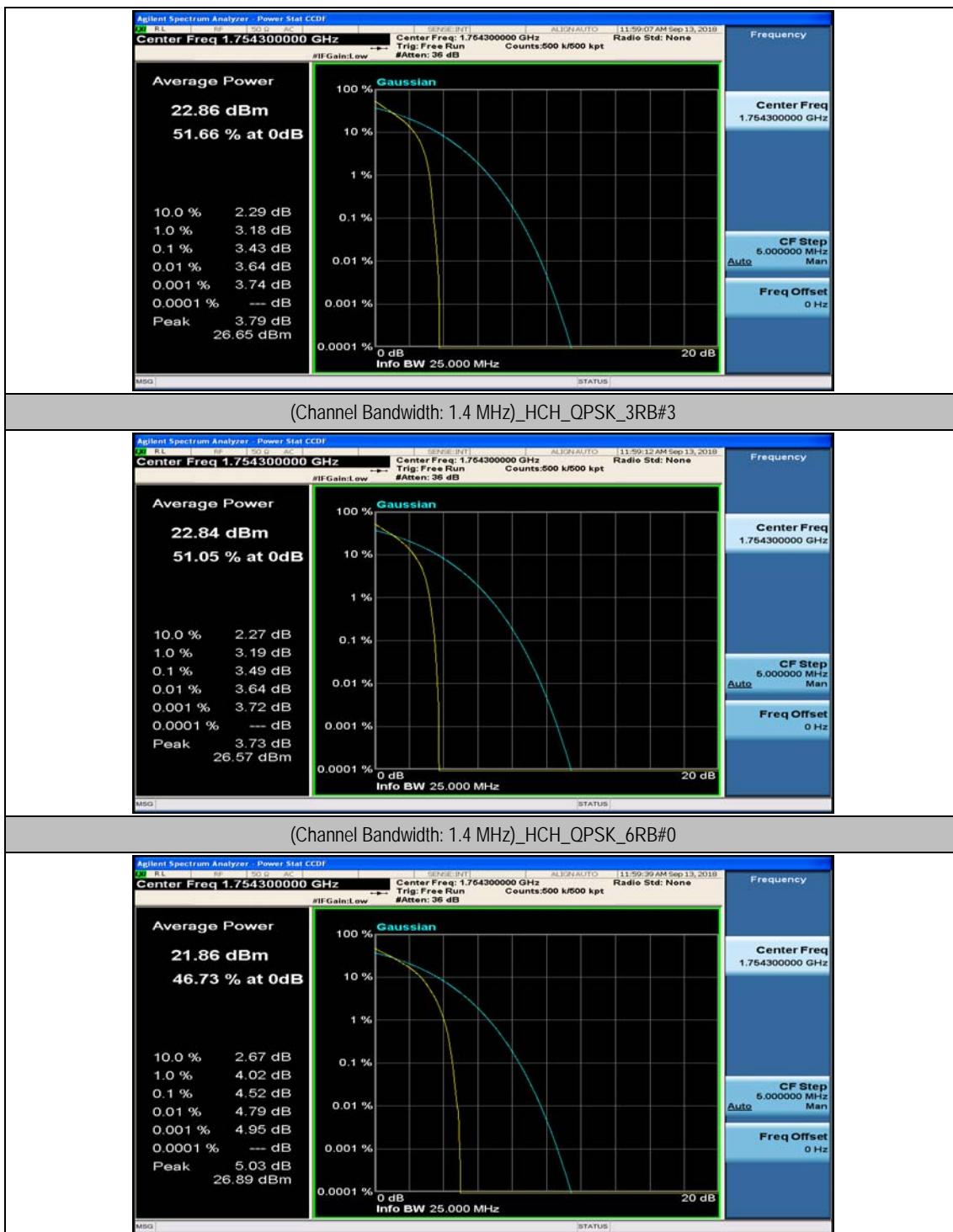


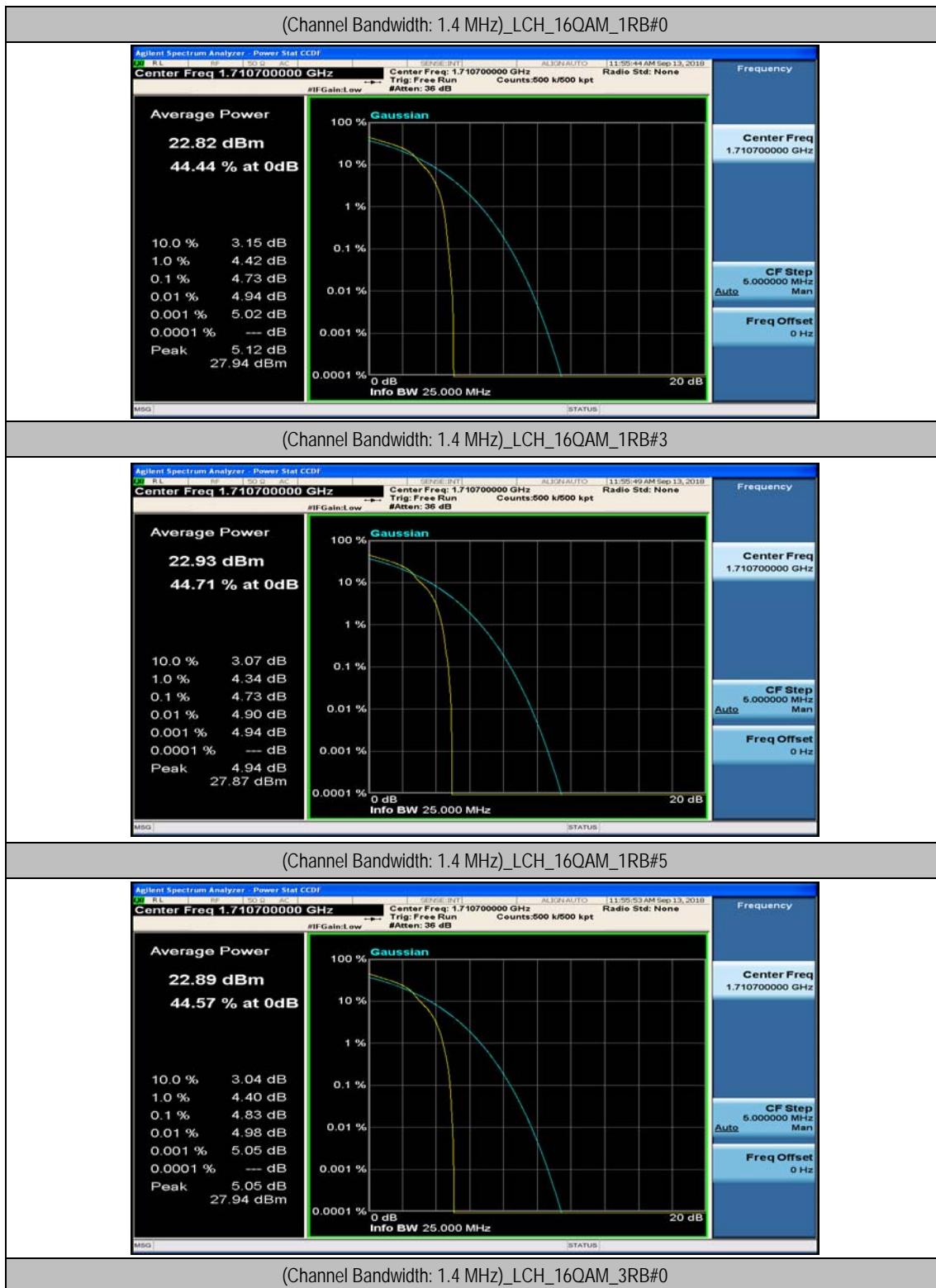


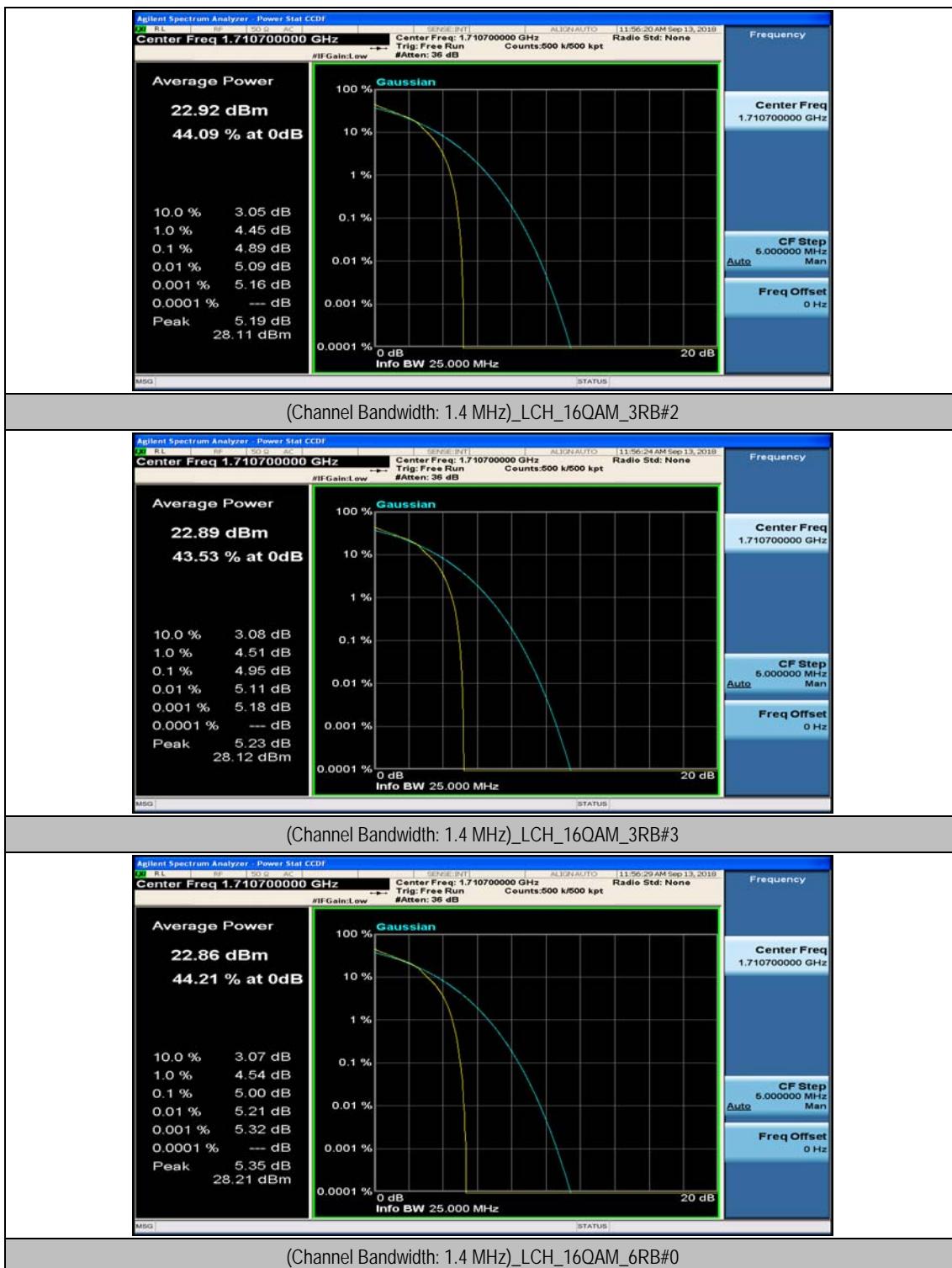


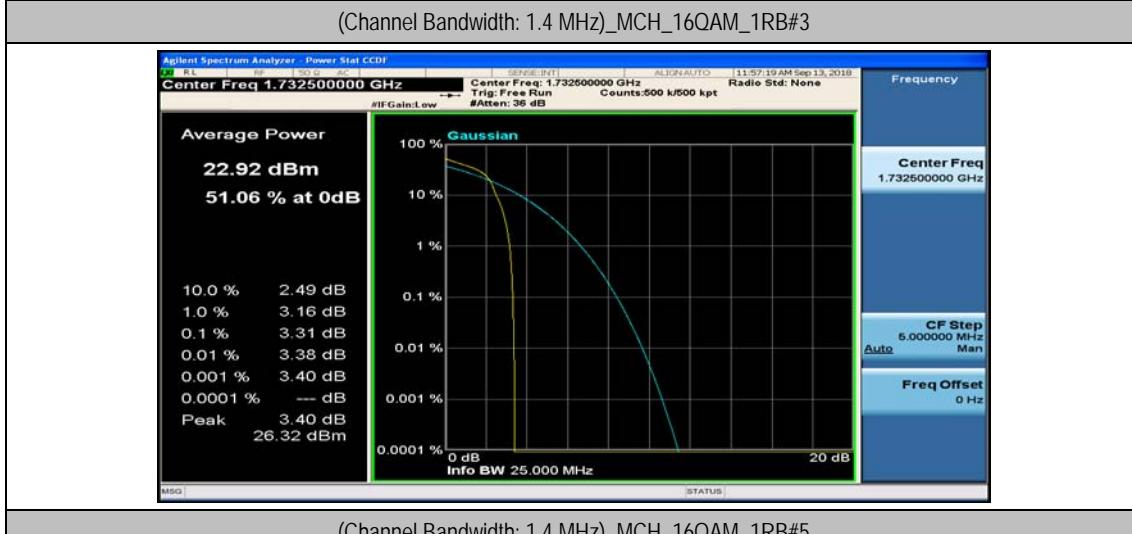
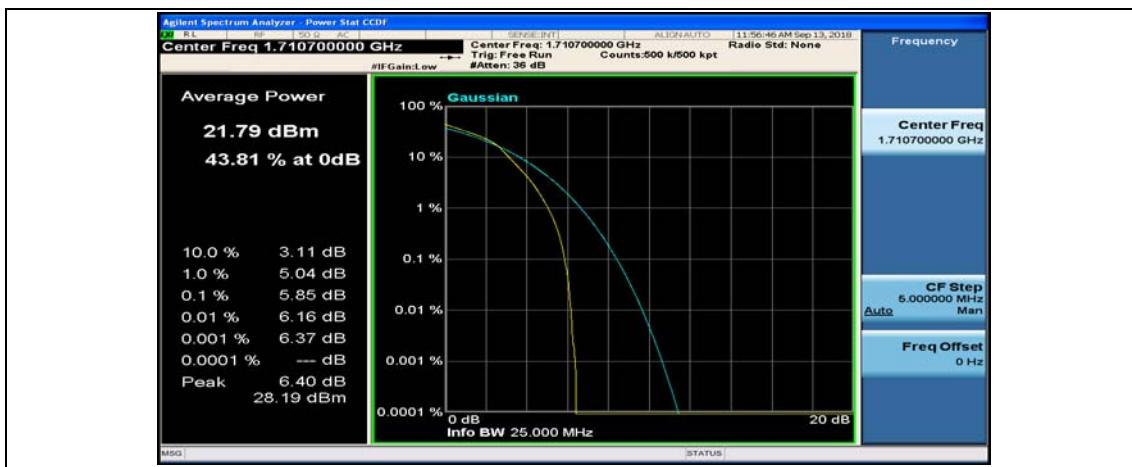


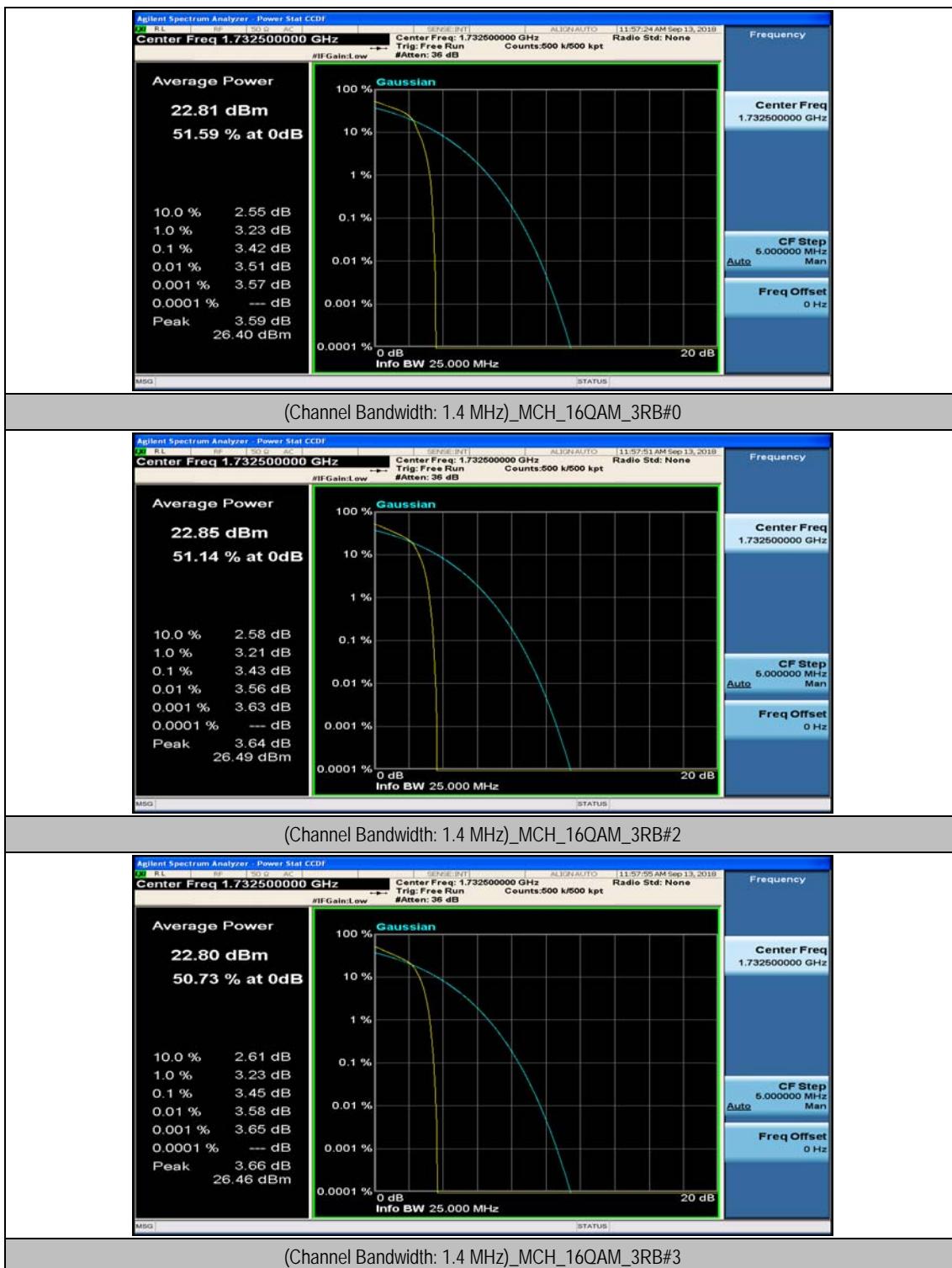


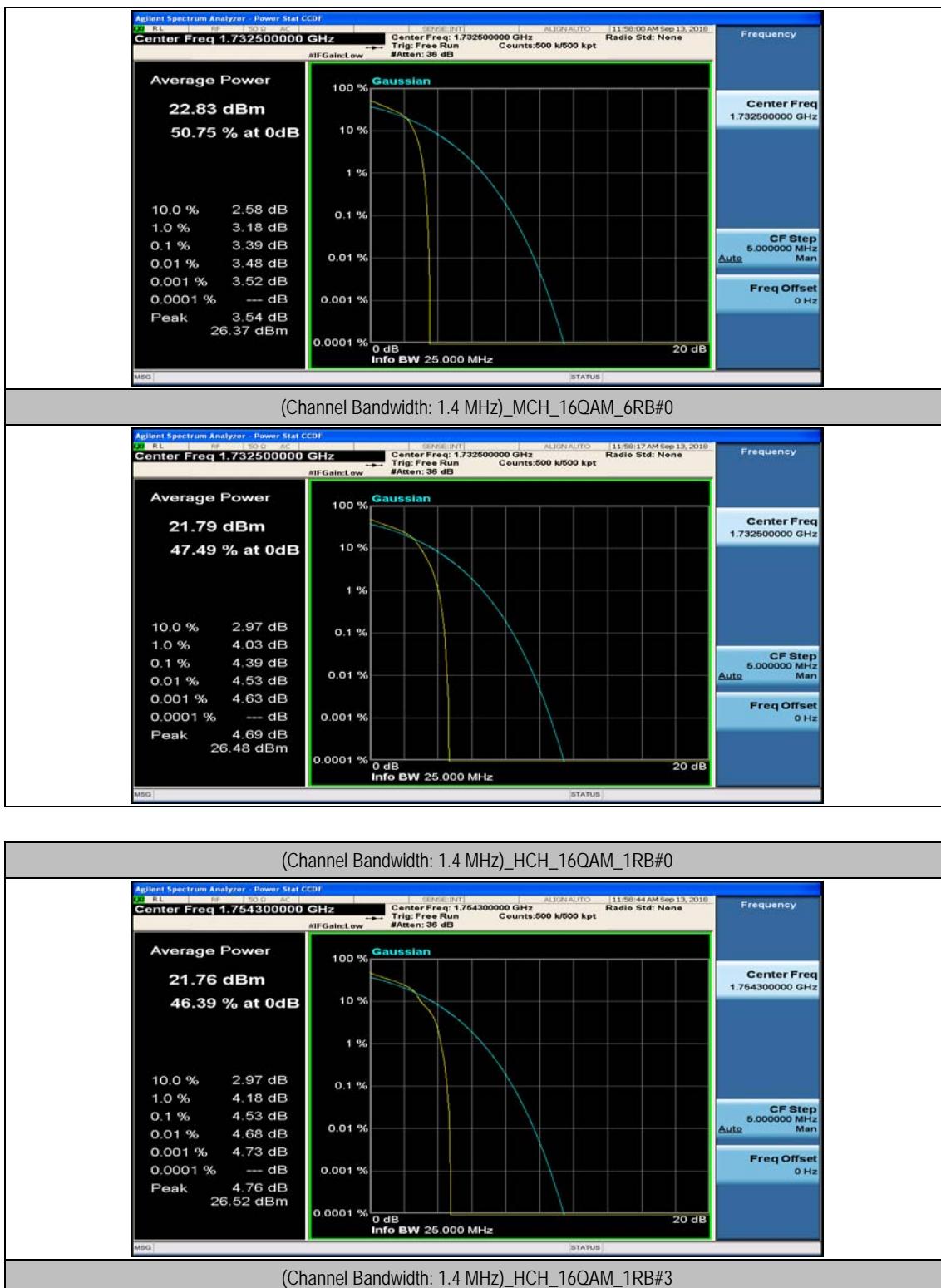


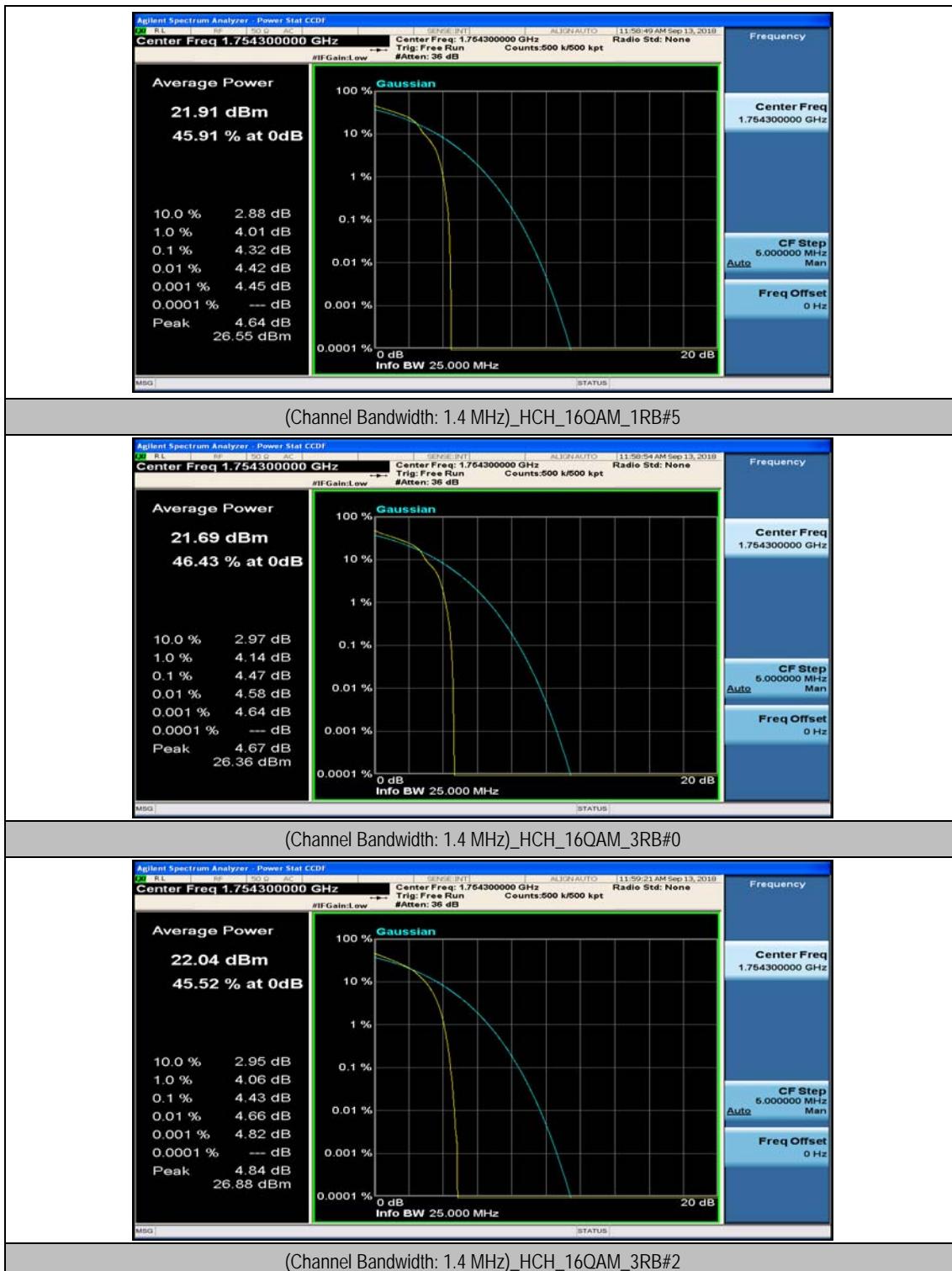


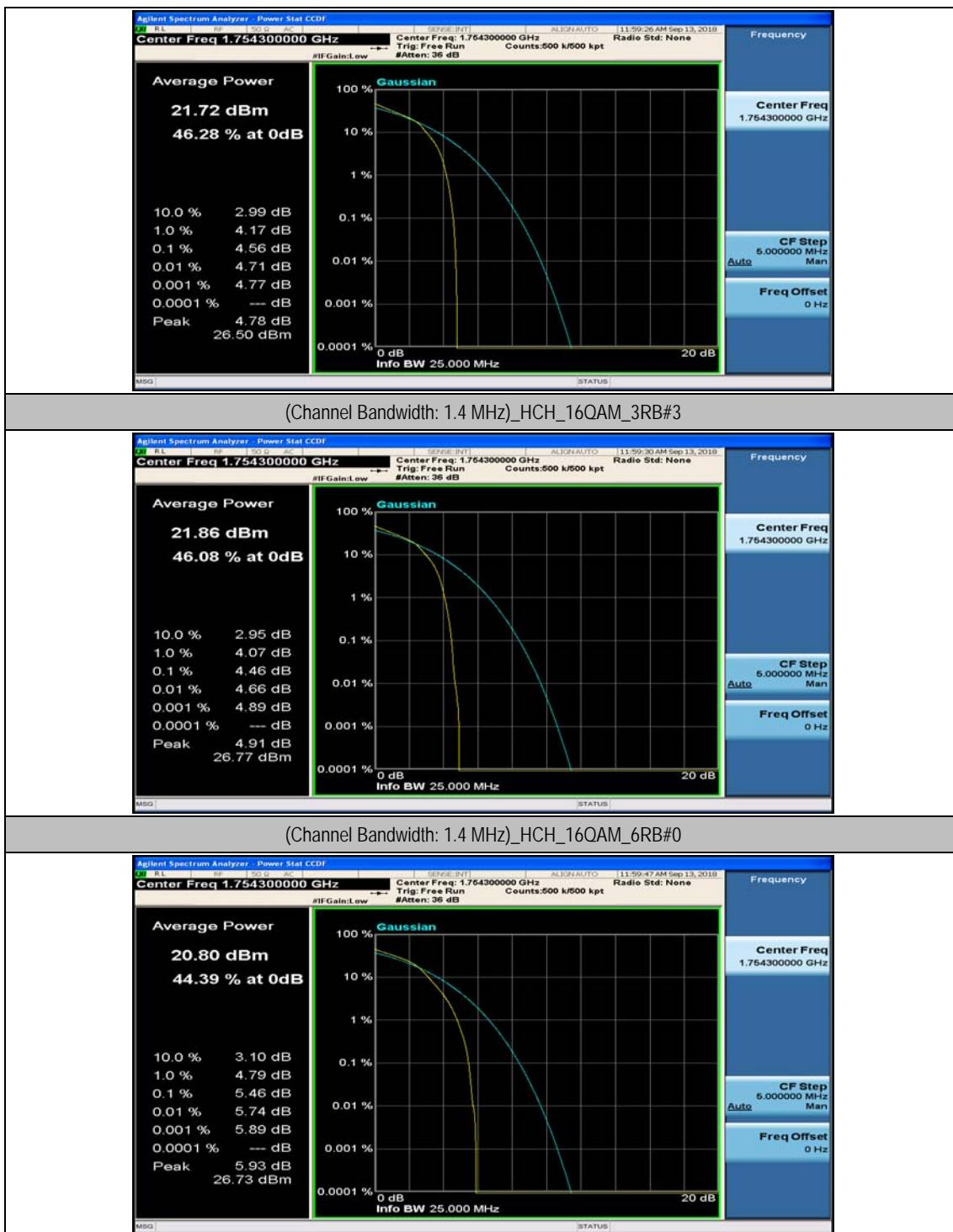




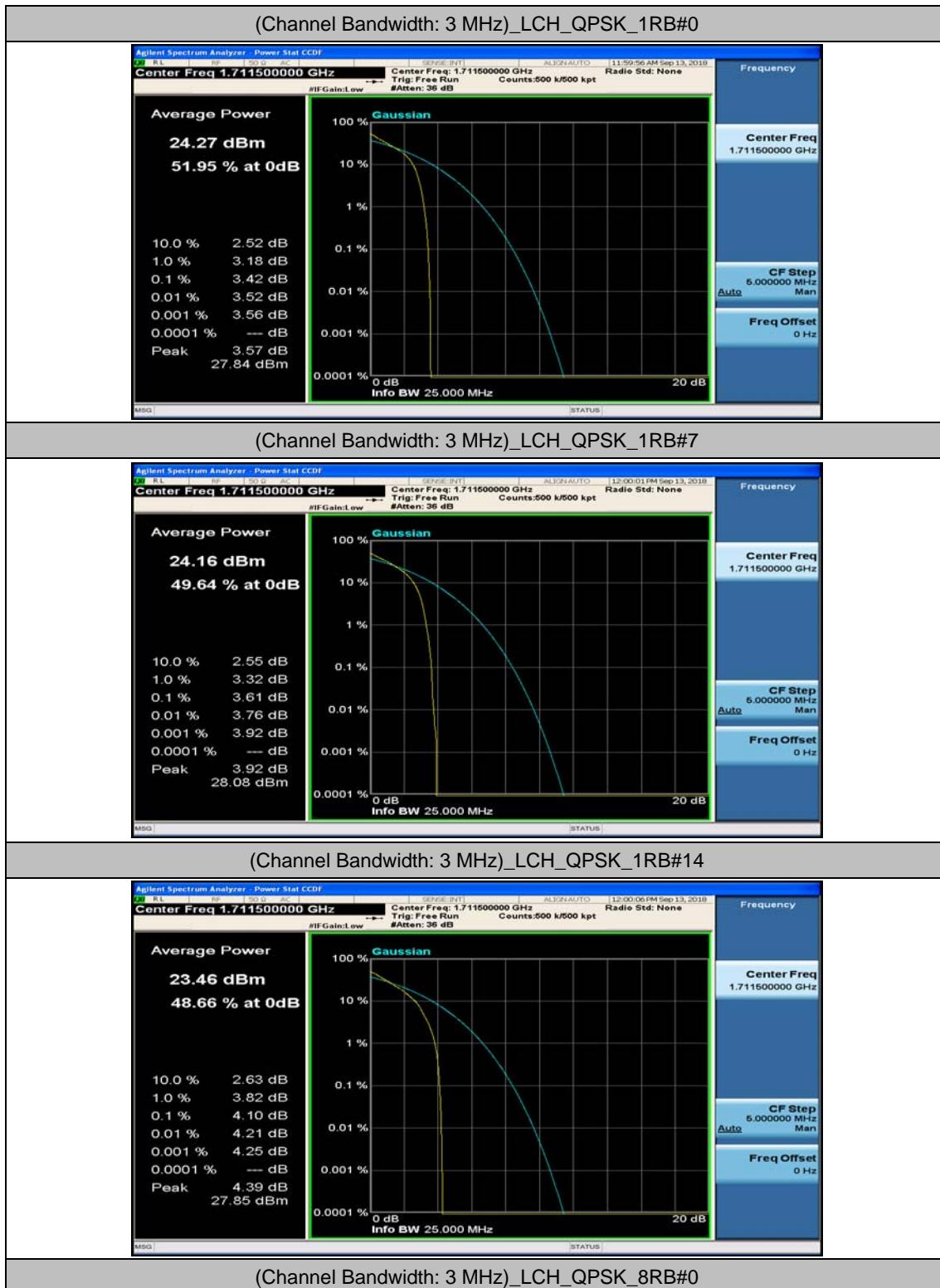


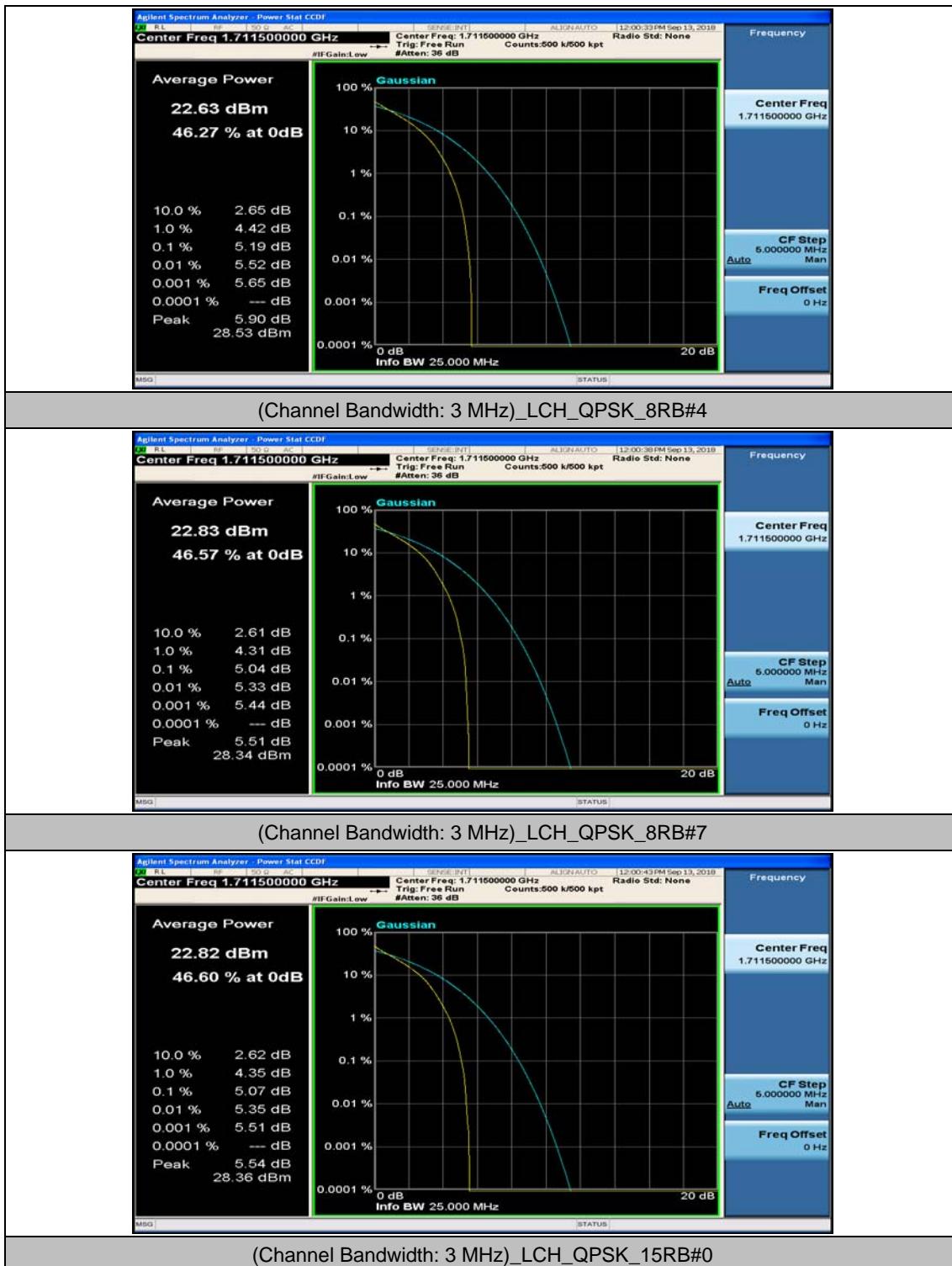


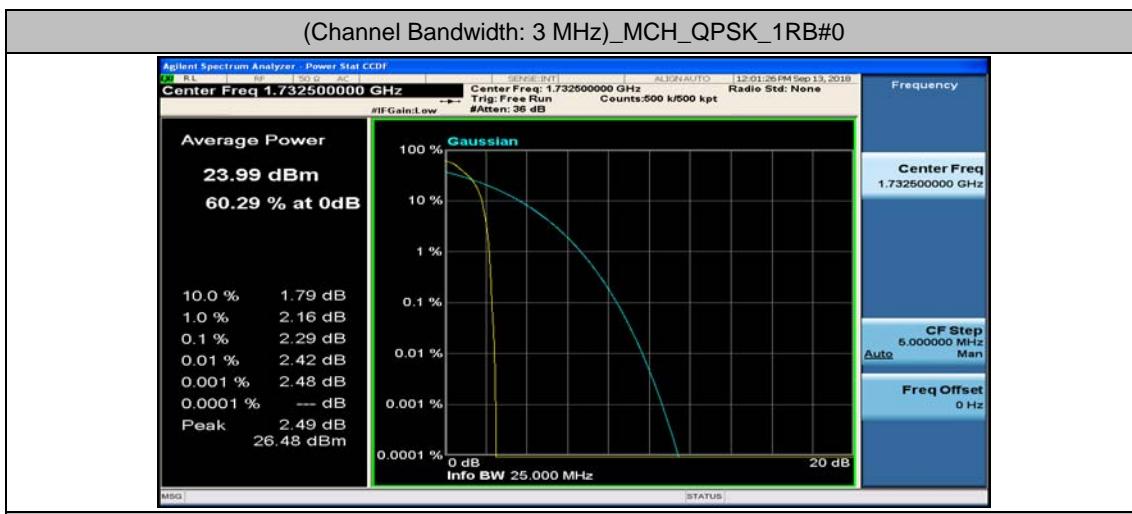
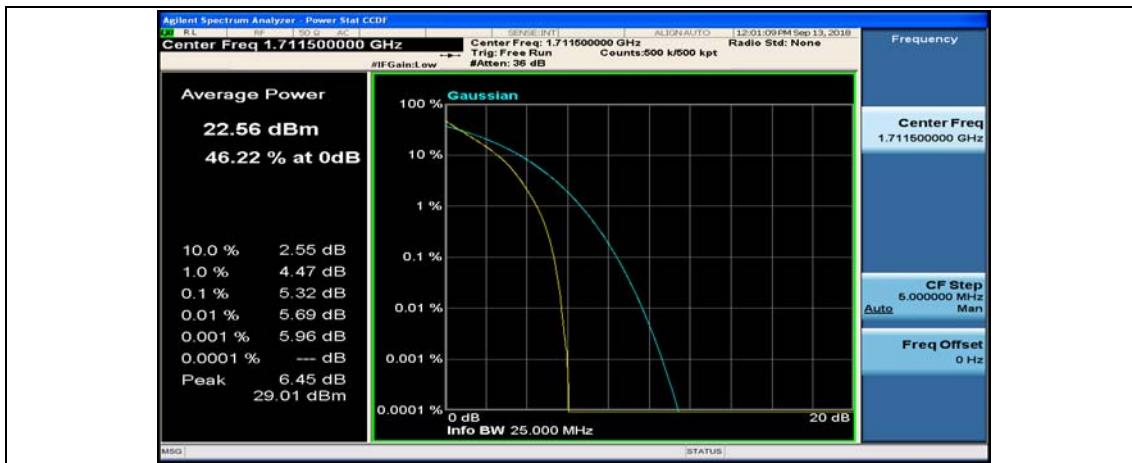




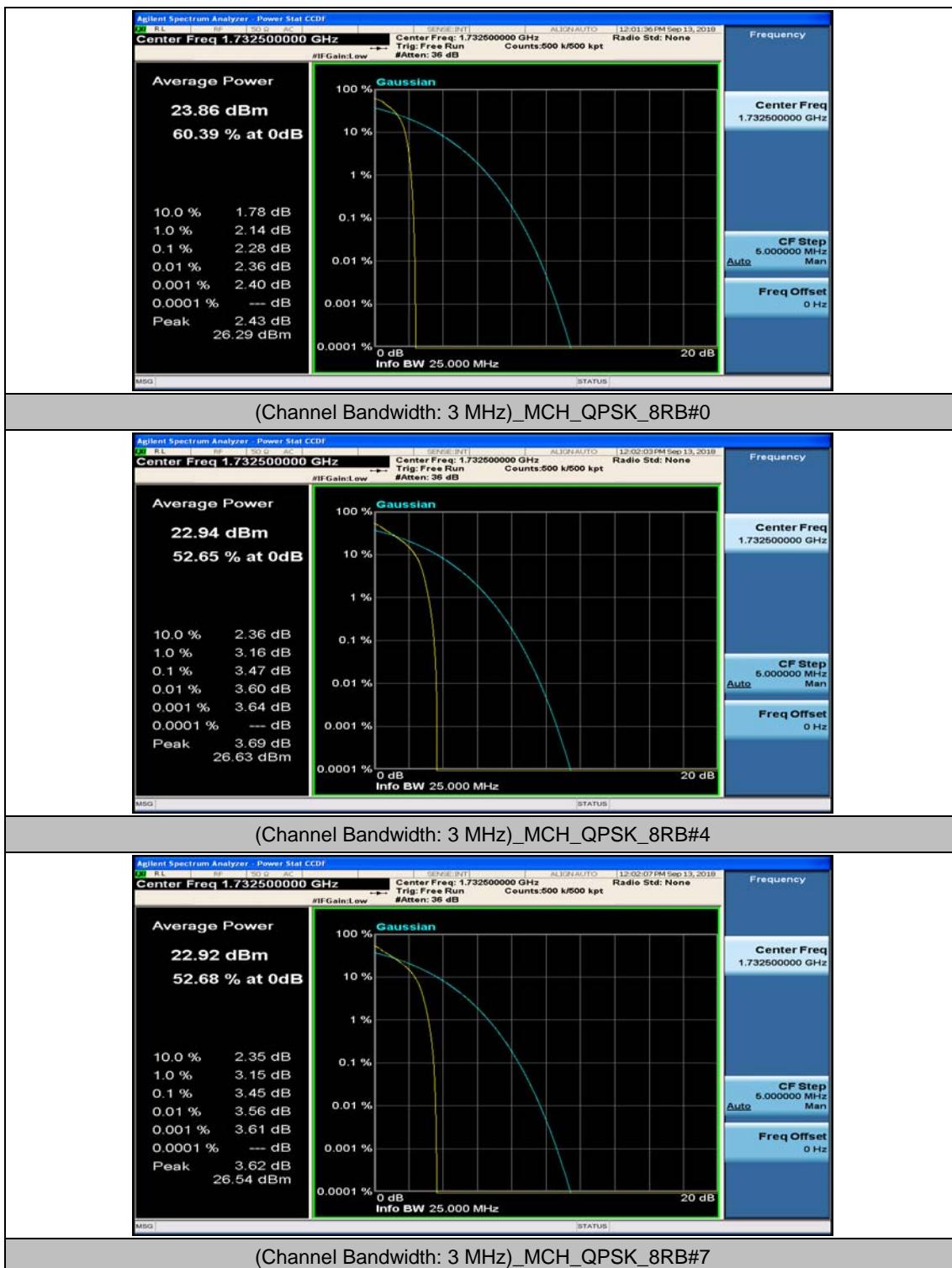
## Channel Bandwidth: 3 MHz

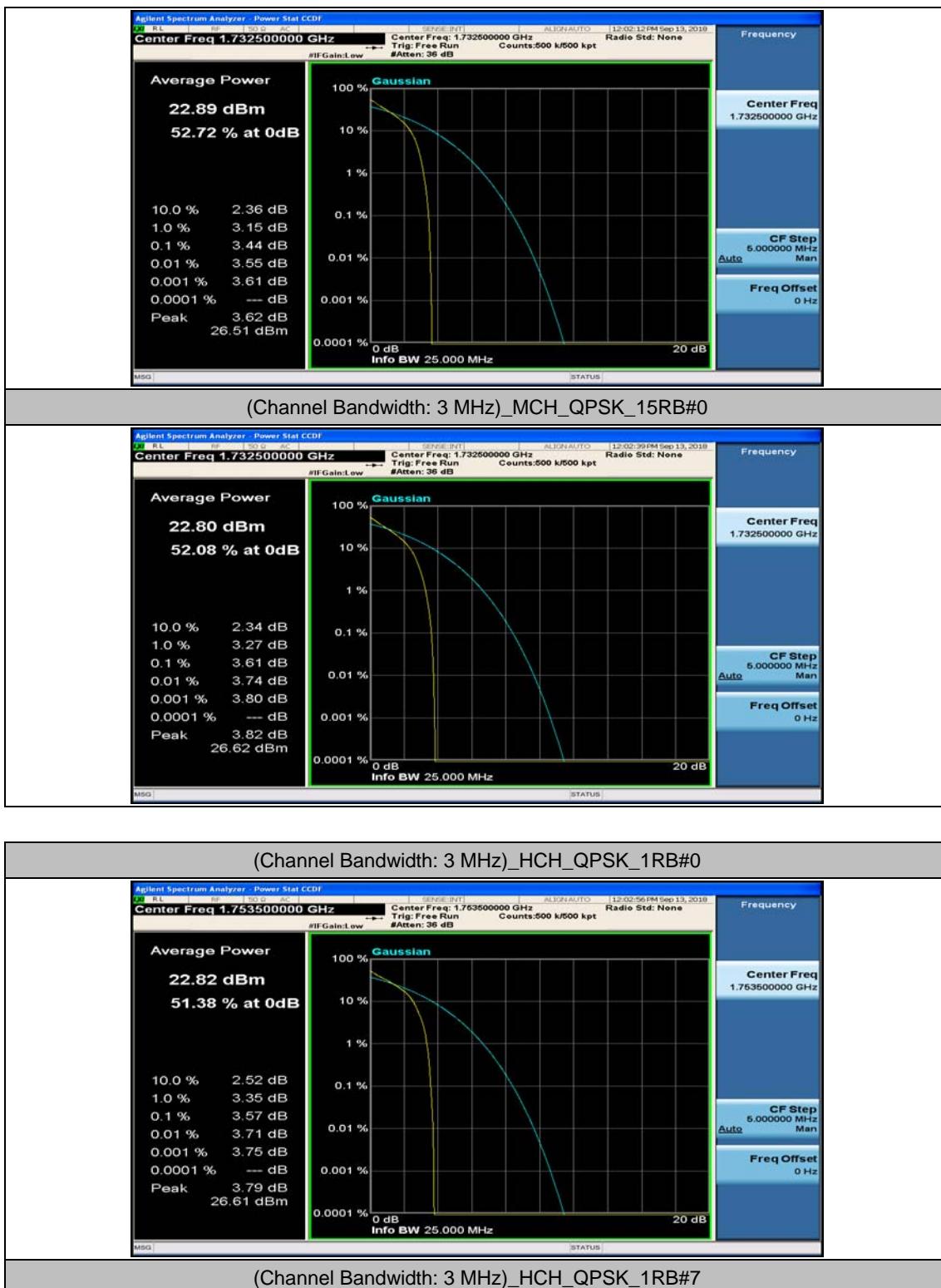


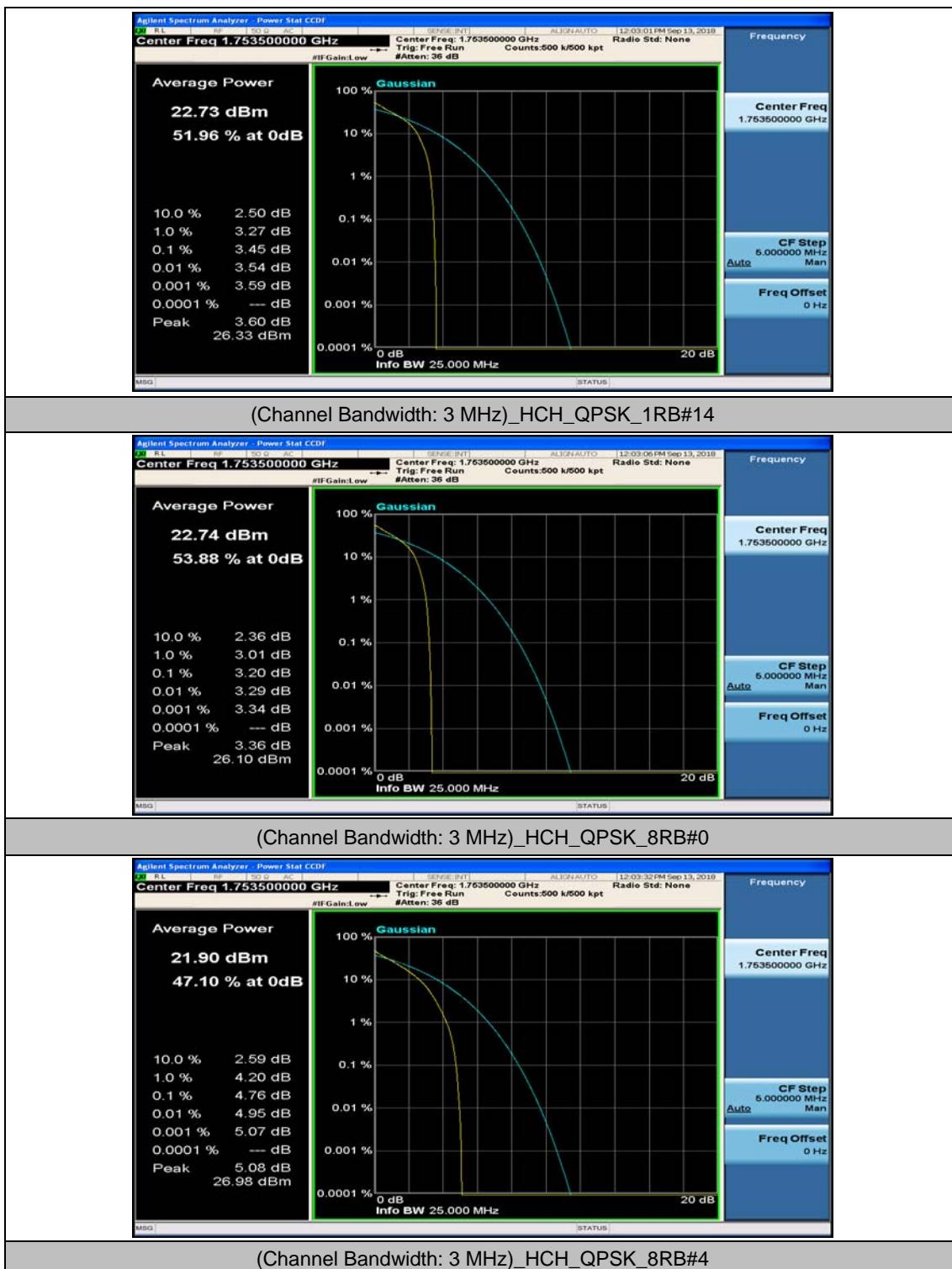


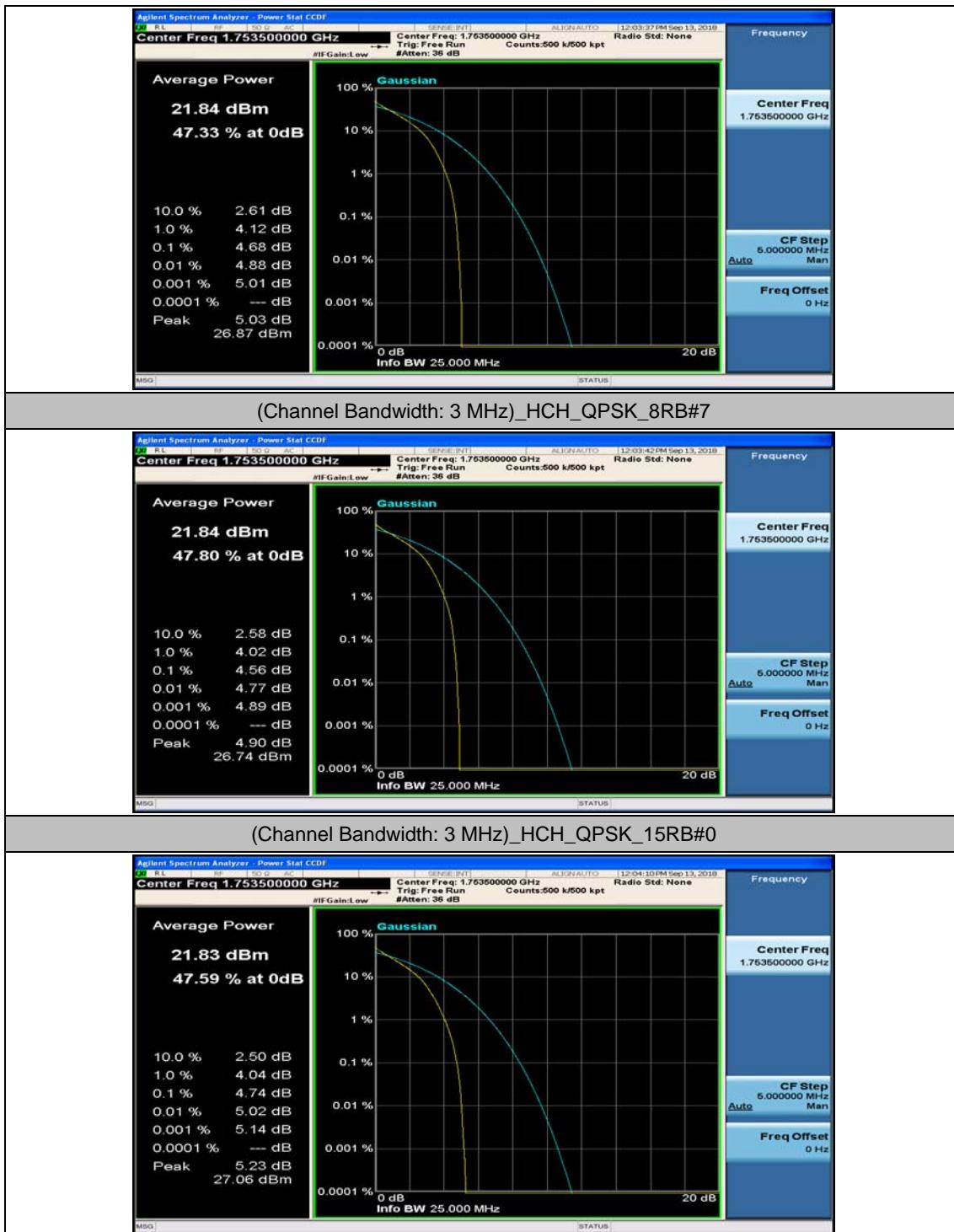


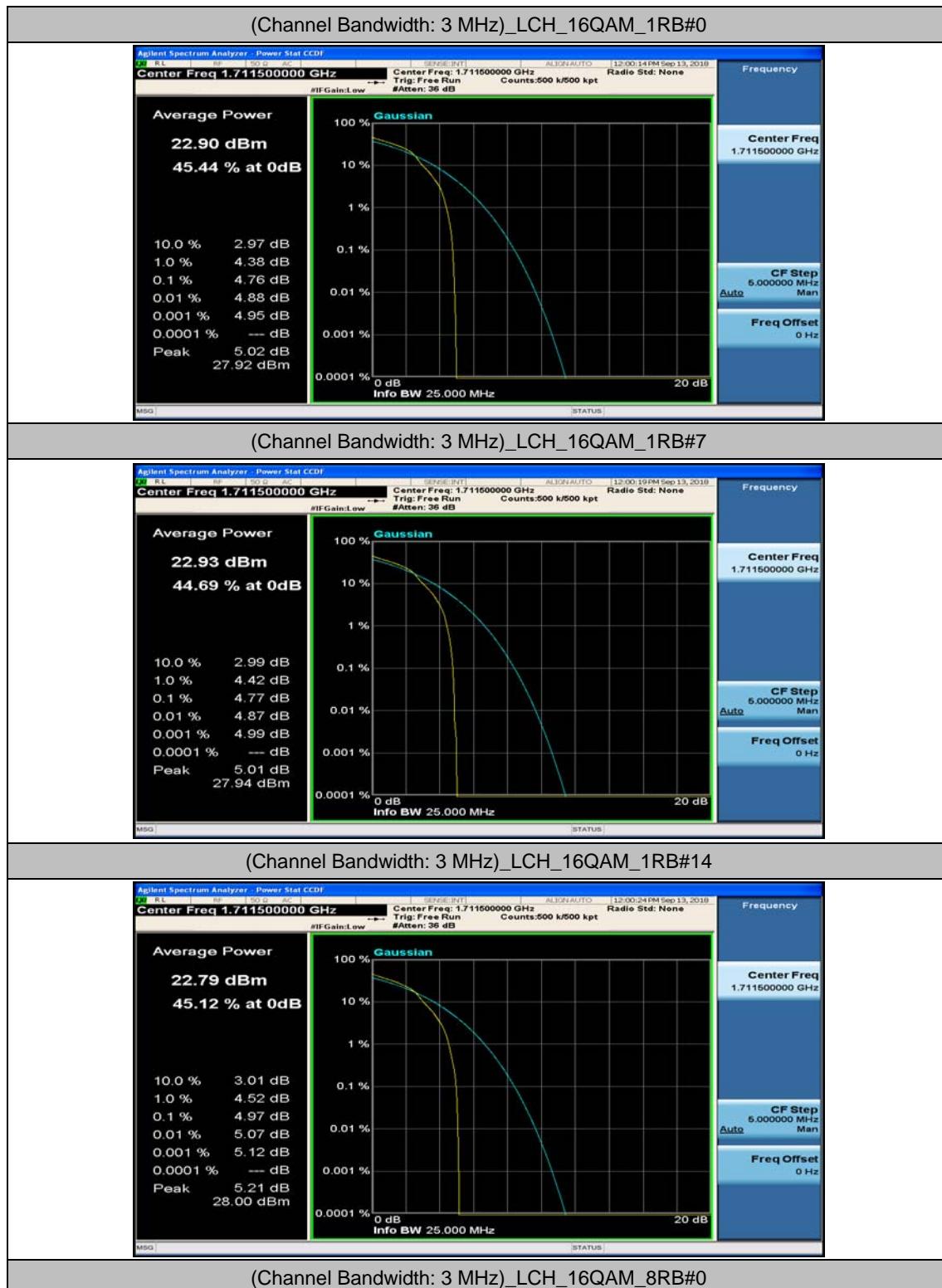
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_1RB#14

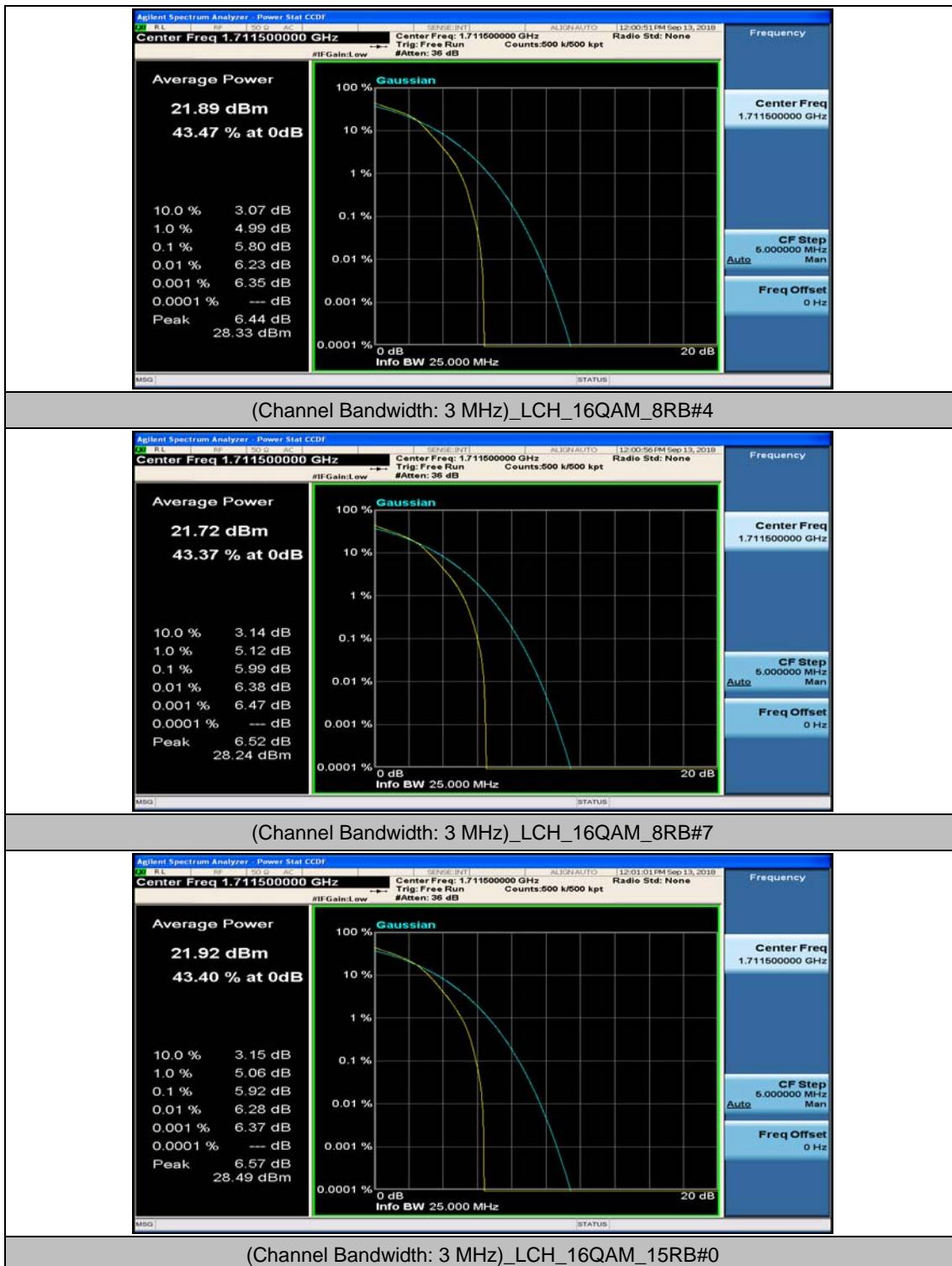


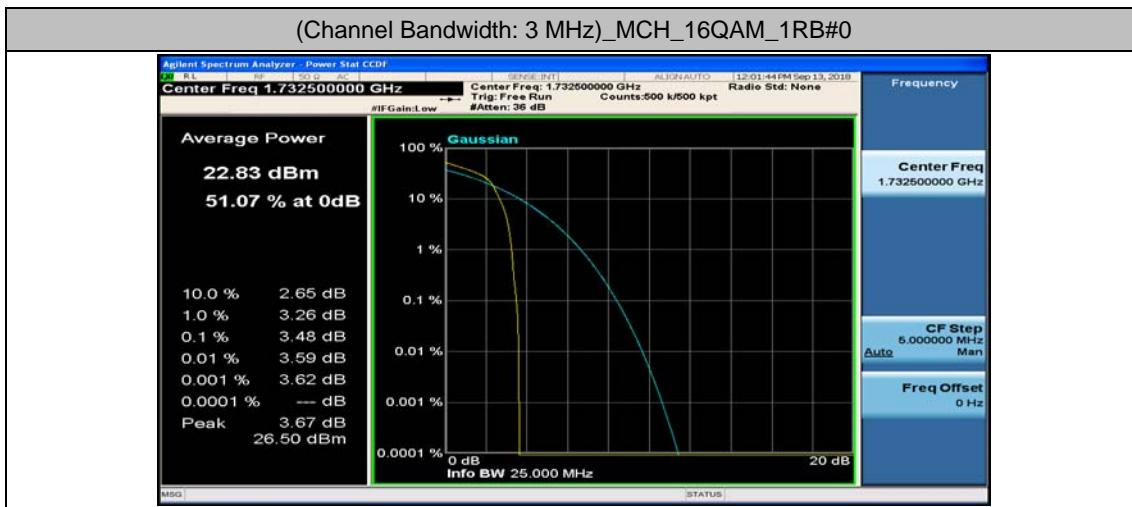
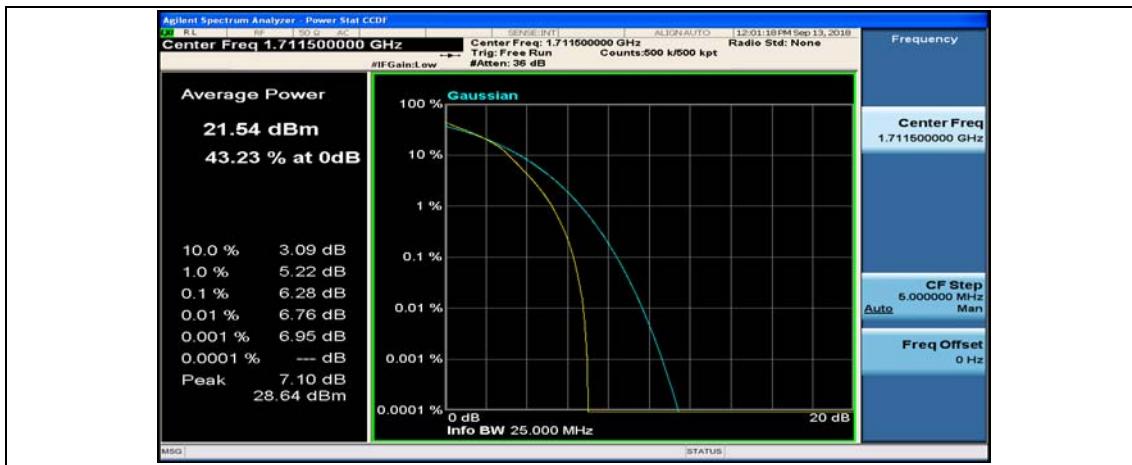




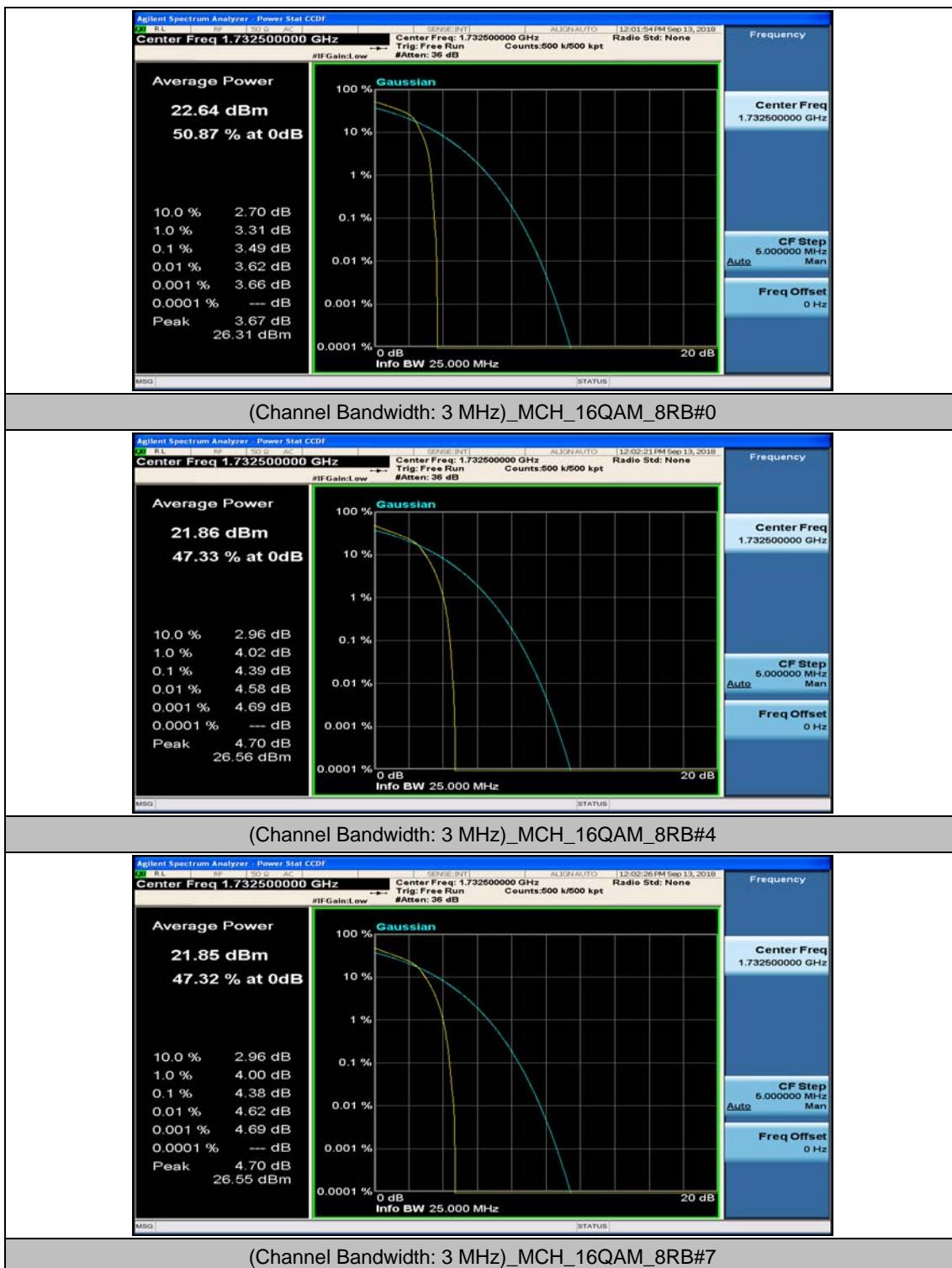


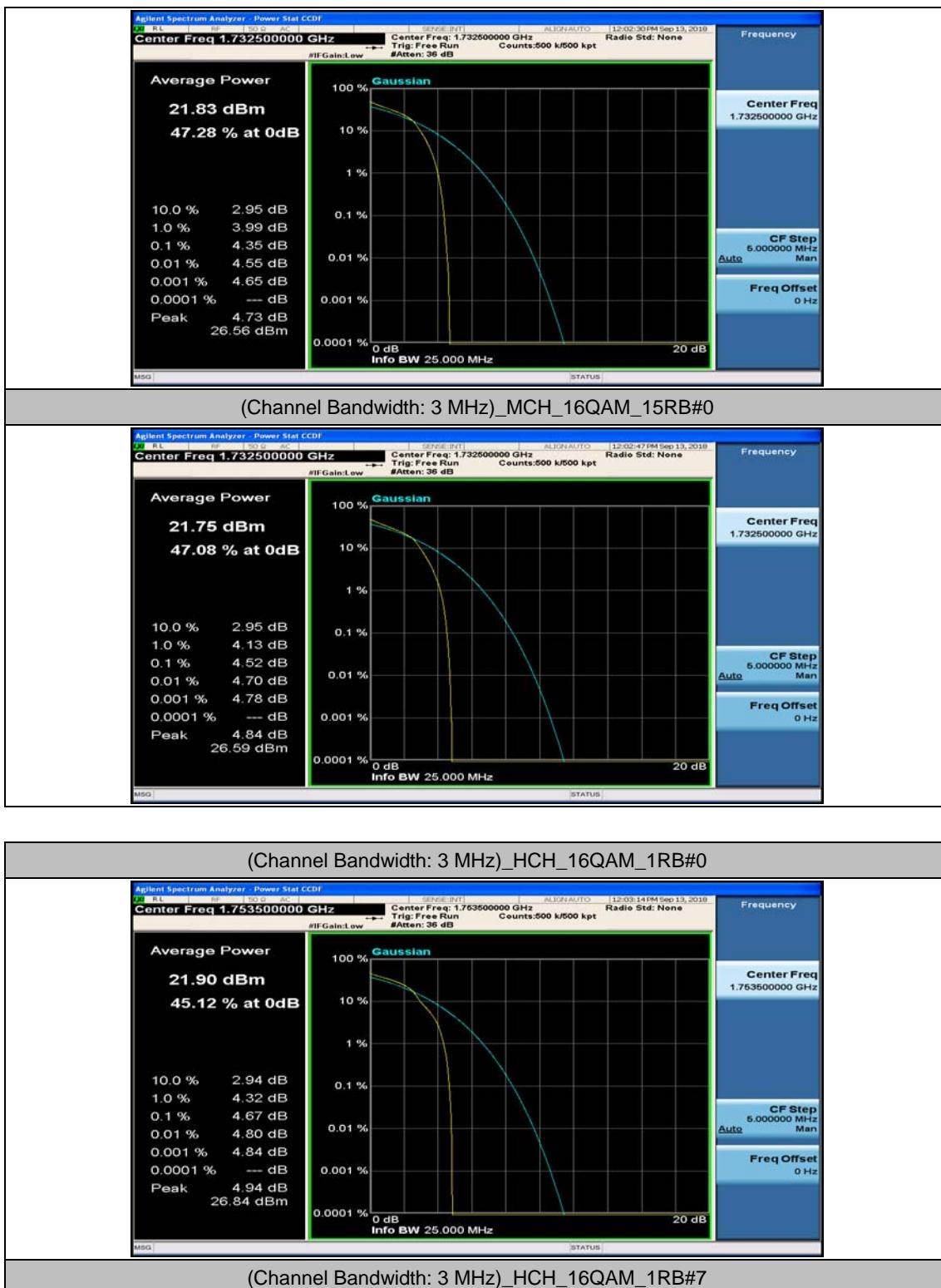


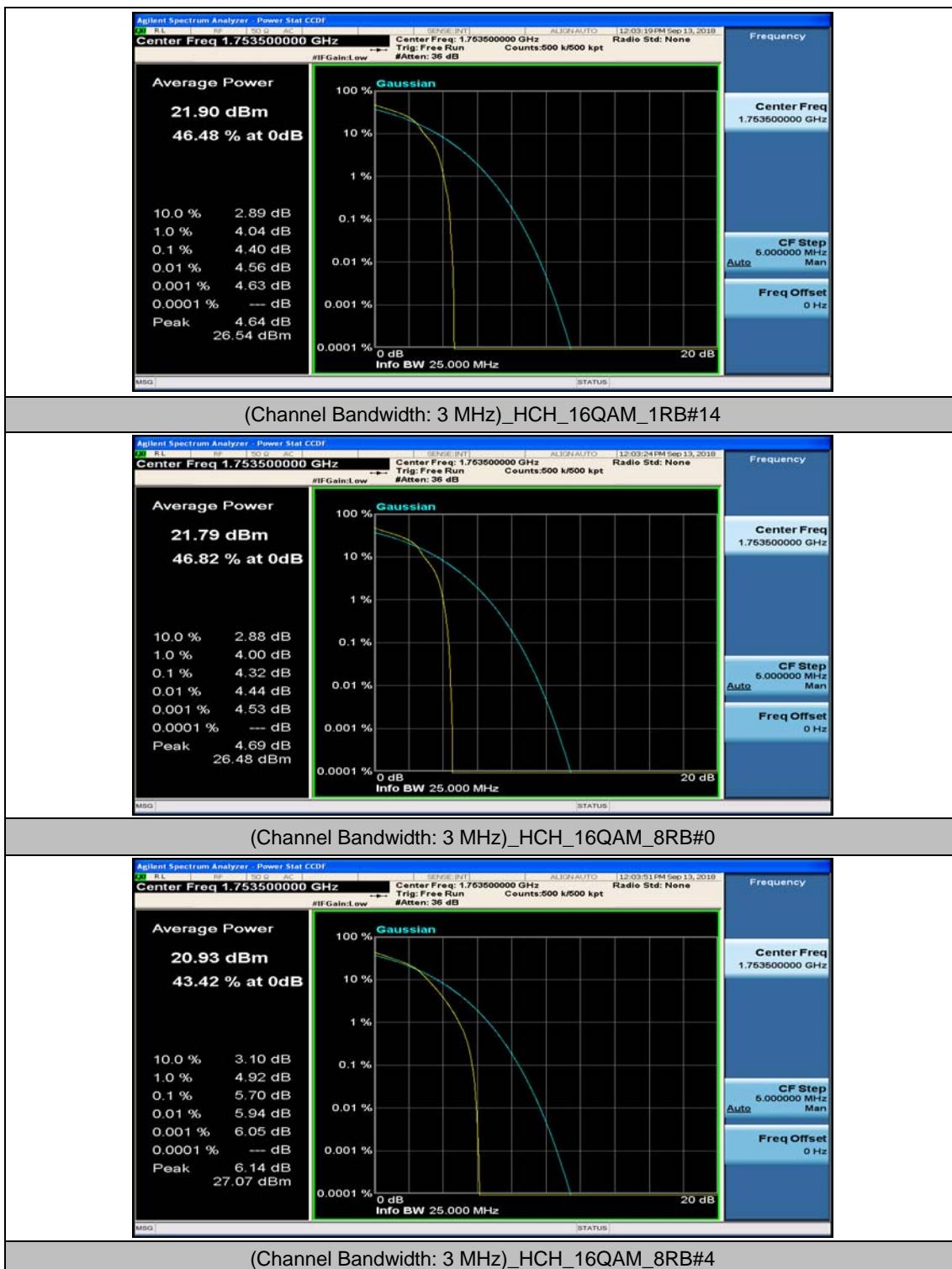


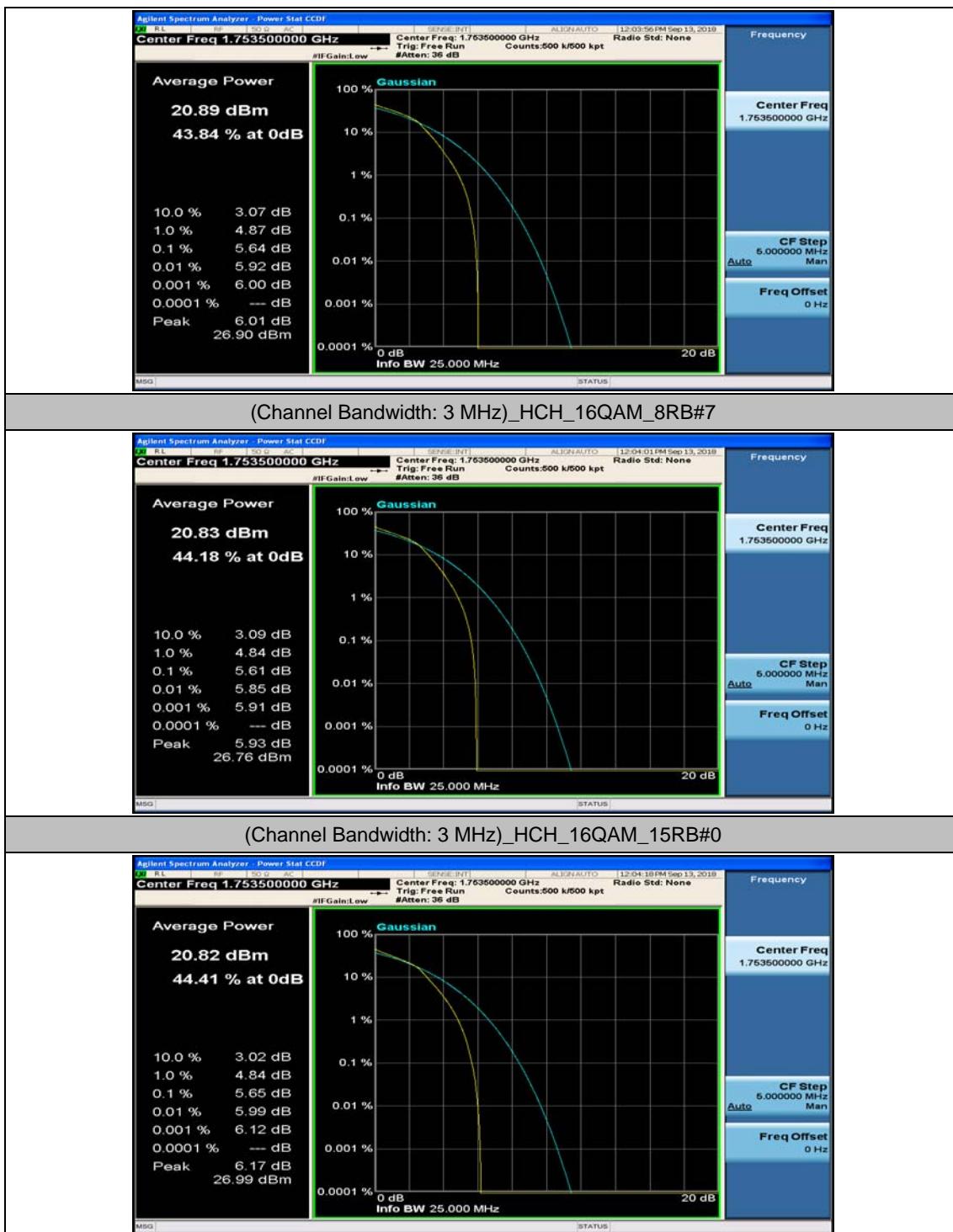


**(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_1RB#14**

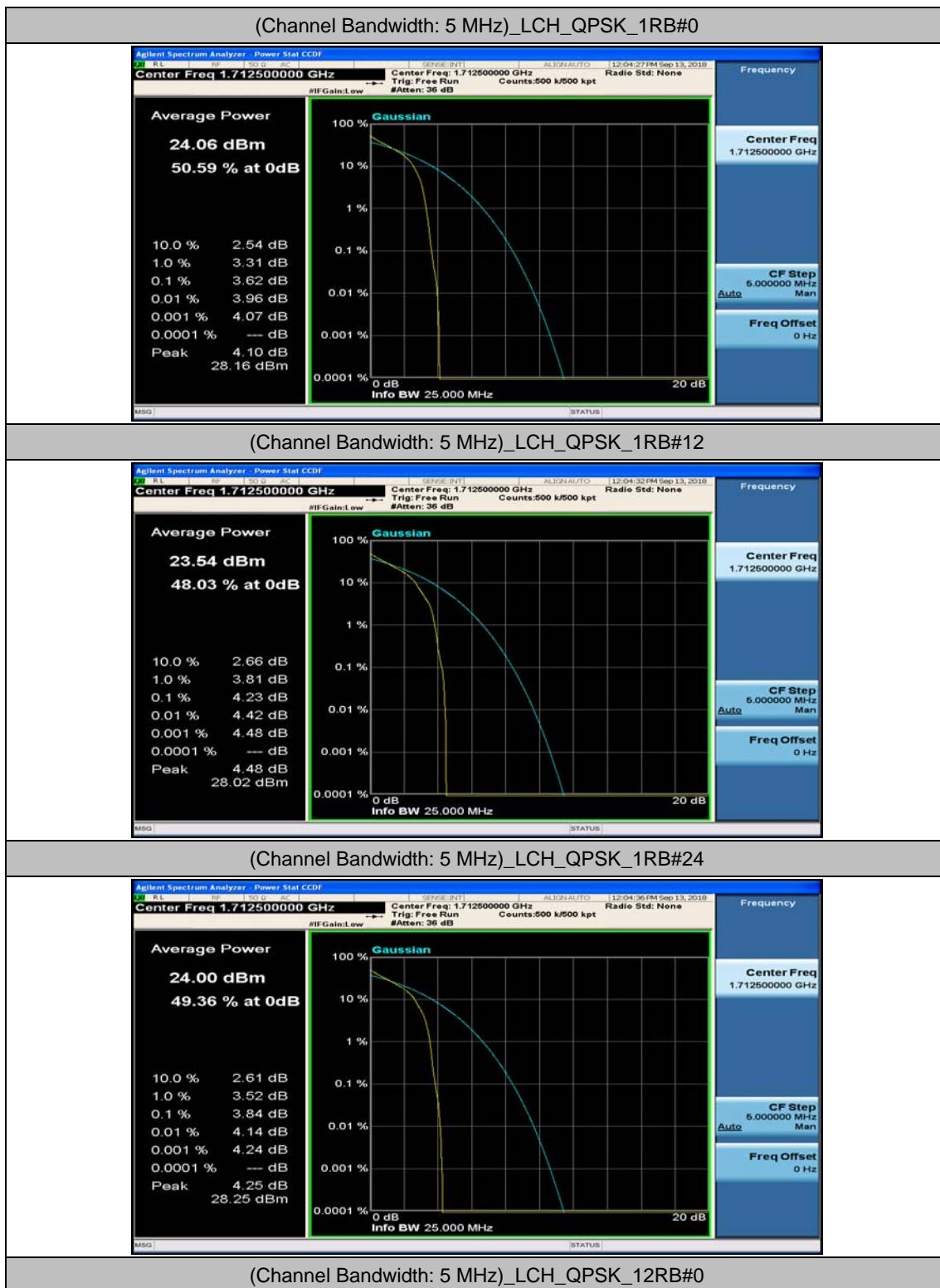


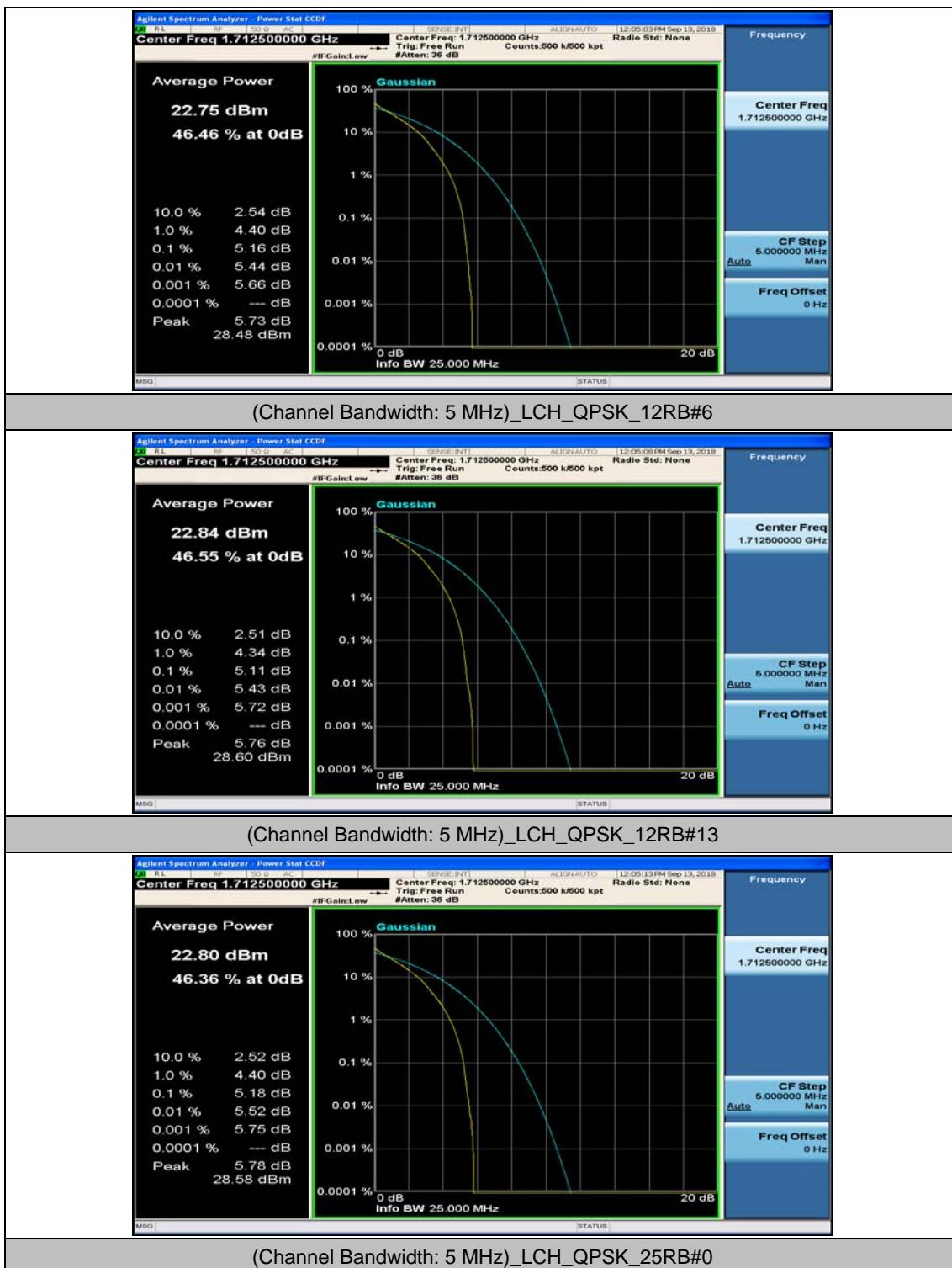


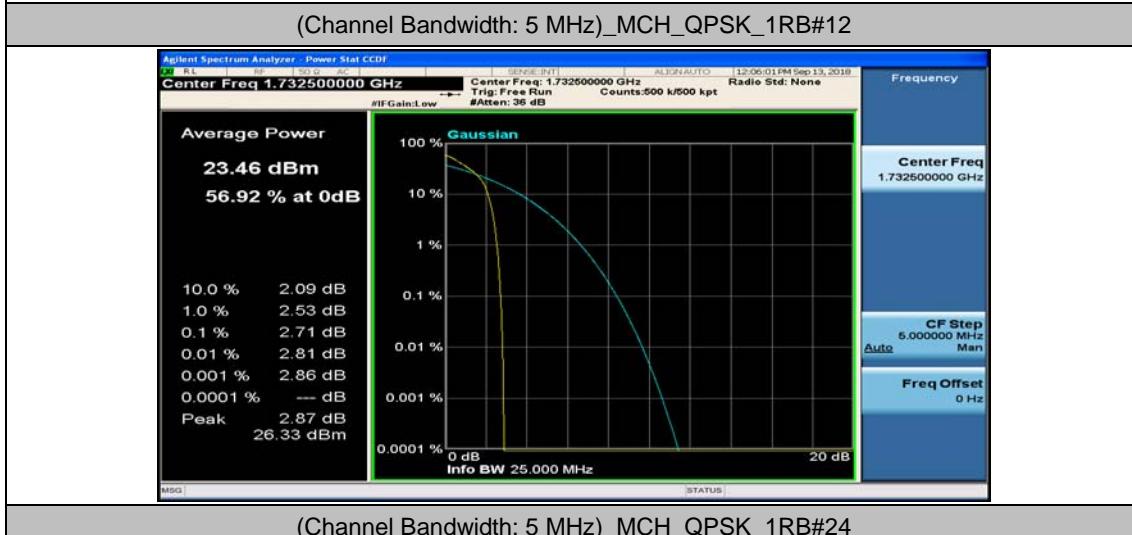
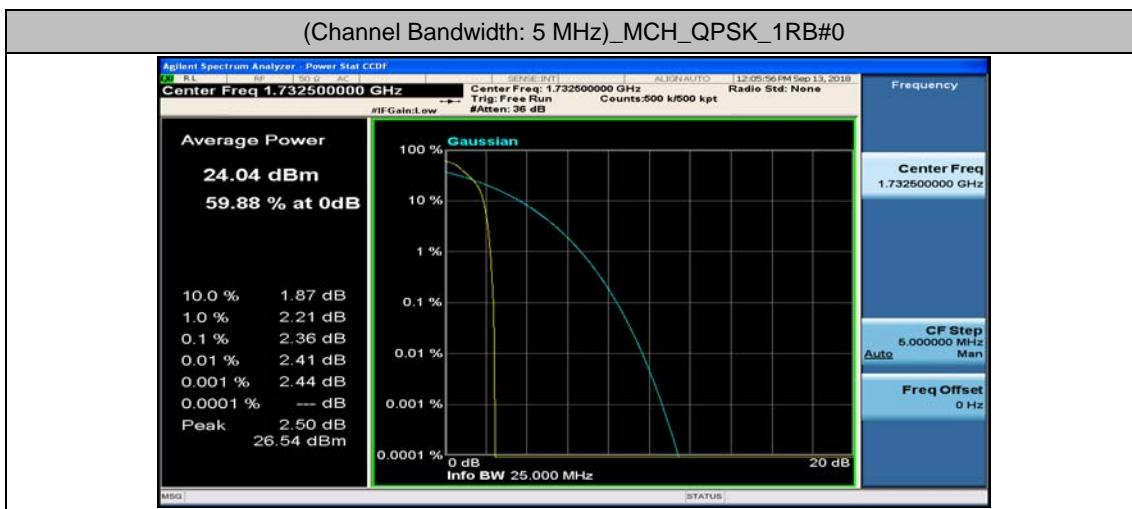
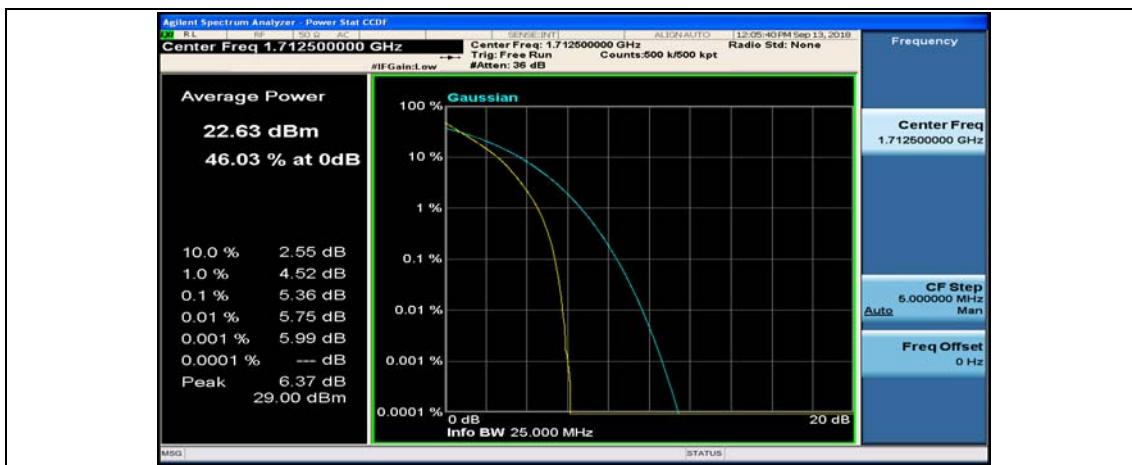




## Channel Bandwidth: 5 MHz







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

