

## 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	22.13	PASS
		1	3	22.15	PASS
		1	5	22.11	PASS
		3	0	21.28	PASS
		3	2	21.27	PASS
		3	3	21.20	PASS
		6	0	21.69	PASS
	MCH	1	0	22.36	PASS
		1	3	22.28	PASS
		1	5	22.32	PASS
		3	0	21.37	PASS
		3	2	21.33	PASS
		3	3	21.33	PASS
		6	0	21.78	PASS
16QAM	HCH	1	0	22.40	PASS
		1	3	22.39	PASS
		1	5	22.45	PASS
		3	0	21.54	PASS
		3	2	21.59	PASS
		3	3	21.53	PASS
		6	0	21.96	PASS
	LCH	1	0	21.42	PASS
		1	3	21.42	PASS
		1	5	21.45	PASS
		3	0	21.61	PASS
		3	2	21.59	PASS
		3	3	21.56	PASS
		6	0	20.69	PASS
	MCH	1	0	21.91	PASS
		1	3	21.96	PASS
		1	5	21.93	PASS
		3	0	21.55	PASS

		3	2	21.52	PASS
		3	3	21.54	PASS
		6	0	20.80	PASS
HCH	HCH	1	0	21.45	PASS
		1	3	21.46	PASS
		1	5	21.44	PASS
		3	0	21.54	PASS
		3	2	21.59	PASS
		3	3	21.55	PASS
		6	0	20.33	PASS

### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.17	PASS
		1	7	22.18	PASS
		1	14	22.17	PASS
		8	0	21.67	PASS
		8	4	21.76	PASS
		8	7	21.70	PASS
		15	0	21.76	PASS
	MCH	1	0	22.29	PASS
		1	7	22.28	PASS
		1	14	22.27	PASS
		8	0	21.93	PASS
		8	4	21.76	PASS
		8	7	21.93	PASS
		15	0	21.77	PASS
	HCH	1	0	22.43	PASS
		1	7	22.38	PASS
		1	14	22.44	PASS
		8	0	21.42	PASS
		8	4	21.46	PASS
		8	7	21.42	PASS
		15	0	21.51	PASS
16QAM	LCH	1	0	21.82	PASS
		1	7	21.69	PASS
		1	14	21.72	PASS
		8	0	20.69	PASS
		8	4	20.76	PASS
		8	7	20.80	PASS
		15	0	20.85	PASS

	MCH	1	0	21.82	PASS
		1	7	21.75	PASS
		1	14	21.69	PASS
		8	0	20.53	PASS
		8	4	21.00	PASS
		8	7	20.41	PASS
		15	0	20.74	PASS
	HCH	1	0	21.85	PASS
		1	7	21.87	PASS
		1	14	21.91	PASS
		8	0	20.35	PASS
		8	4	20.33	PASS
		8	7	20.34	PASS
		15	0	20.33	PASS

### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.19	PASS
		1	12	22.24	PASS
		1	24	22.22	PASS
		12	0	21.69	PASS
		12	6	21.67	PASS
		12	13	21.72	PASS
		25	0	21.69	PASS
	MCH	1	0	22.28	PASS
		1	12	22.22	PASS
		1	24	22.25	PASS
		12	0	21.83	PASS
		12	6	21.77	PASS
		12	13	21.82	PASS
		25	0	21.85	PASS
	HCH	1	0	22.67	PASS
		1	12	22.56	PASS
		1	24	22.58	PASS
		12	0	21.45	PASS
		12	6	21.41	PASS
		12	13	21.44	PASS
		25	0	21.15	PASS
16QAM	LCH	1	0	21.56	PASS
		1	12	21.57	PASS
		1	24	21.63	PASS

		12	0	20.83	PASS
		12	6	20.87	PASS
		12	13	20.87	PASS
		25	0	20.41	PASS
MCH	MCH	1	0	21.52	PASS
		1	12	21.45	PASS
		1	24	21.49	PASS
		12	0	20.45	PASS
		12	6	20.41	PASS
		12	13	20.43	PASS
		25	0	20.47	PASS
HCH	HCH	1	0	21.80	PASS
		1	12	21.73	PASS
		1	24	21.81	PASS
		12	0	20.53	PASS
		12	6	20.59	PASS
		12	13	20.55	PASS
		25	0	20.37	PASS

## Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.10	PASS
		1	24	22.14	PASS
		1	49	22.18	PASS
		25	0	21.65	PASS
		25	12	21.75	PASS
		25	25	21.70	PASS
		50	0	21.74	PASS
QPSK	MCH	1	0	22.35	PASS
		1	24	22.24	PASS
		1	49	22.37	PASS
		25	0	21.90	PASS
		25	12	21.78	PASS
		25	25	21.92	PASS
		50	0	21.81	PASS
QPSK	HCH	1	0	22.45	PASS
		1	24	22.50	PASS
		1	49	22.53	PASS
		25	0	21.55	PASS
		25	12	21.54	PASS
		25	25	21.13	PASS

		50	0	21.98	PASS
16QAM	LCH	1	0	21.70	PASS
		1	24	21.69	PASS
		1	49	21.74	PASS
		25	0	20.84	PASS
		25	12	20.47	PASS
		25	25	20.95	PASS
		50	0	20.38	PASS
	MCH	1	0	21.49	PASS
		1	24	21.50	PASS
		1	49	21.54	PASS
		25	0	20.58	PASS
		25	12	20.53	PASS
		25	25	20.54	PASS
		50	0	20.37	PASS
	HCH	1	0	21.13	PASS
		1	24	21.28	PASS
		1	49	21.27	PASS
		25	0	20.35	PASS
		25	12	20.36	PASS
		25	25	20.32	PASS
		50	0	20.33	PASS

### Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.14	PASS
		1	37	22.15	PASS
		1	74	22.25	PASS
		37	0	21.69	PASS
		37	18	21.81	PASS
		37	38	21.78	PASS
		75	0	21.81	PASS
	MCH	1	0	22.30	PASS
		1	37	22.31	PASS
		1	74	22.39	PASS
		37	0	21.44	PASS
		37	18	21.44	PASS
		37	38	21.45	PASS
		75	0	21.79	PASS
	HCH	1	0	22.40	PASS
		1	37	22.41	PASS

		1	74	22.56	PASS
		37	0	21.49	PASS
		37	18	21.49	PASS
		37	38	21.34	PASS
		75	0	21.92	PASS
16QAM	LCH	1	0	21.72	PASS
		1	37	21.70	PASS
		1	74	21.72	PASS
		37	0	20.38	PASS
		37	18	20.96	PASS
		37	38	20.88	PASS
		75	0	20.84	PASS
	MCH	1	0	21.72	PASS
		1	37	21.71	PASS
		1	74	21.79	PASS
		37	0	20.98	PASS
		37	18	20.31	PASS
		37	38	20.33	PASS
		75	0	20.38	PASS
	HCH	1	0	21.38	PASS
		1	37	21.35	PASS
		1	74	21.33	PASS
		37	0	20.32	PASS
		37	18	20.37	PASS
		37	38	20.38	PASS
		75	0	20.48	PASS

### Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.36	PASS
		1	49	22.56	PASS
		1	99	22.54	PASS
		50	0	21.76	PASS
		50	25	21.85	PASS
		50	50	21.85	PASS
		100	0	21.85	PASS
	MCH	1	0	22.38	PASS
		1	49	22.46	PASS
		1	99	22.55	PASS
		50	0	21.89	PASS
		50	25	21.93	PASS

	HCH	50	50	21.94	PASS
		100	0	21.93	PASS
		1	0	22.22	PASS
		1	49	22.36	PASS
		1	99	22.99	PASS
		50	0	21.84	PASS
		50	25	21.93	PASS
		50	50	21.98	PASS
16QAM	LCH	100	0	21.95	PASS
		1	0	21.88	PASS
		1	49	21.93	PASS
		1	99	21.53	PASS
		50	0	20.55	PASS
		50	25	20.93	PASS
		50	50	20.88	PASS
	MCH	100	0	20.95	PASS
		1	0	21.83	PASS
		1	49	21.93	PASS
		1	99	21.44	PASS
		50	0	21.00	PASS
		50	25	20.66	PASS
		50	50	20.97	PASS
	HCH	100	0	20.54	PASS
		1	0	21.46	PASS
		1	49	21.47	PASS
		1	99	21.99	PASS
		50	0	20.44	PASS
		50	25	20.54	PASS
		50	50	20.42	PASS
		100	0	20.36	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	5.09	<13	PASS
		1	3	4.83	<13	PASS
		1	5	5.15	<13	PASS
		3	0	5.46	<13	PASS
		3	2	5.42	<13	PASS
		3	3	5.4	<13	PASS
		6	0	5.44	<13	PASS
	MCH	1	0	5.2	<13	PASS
		1	3	5.62	<13	PASS
		1	5	5.31	<13	PASS
		3	0	5.48	<13	PASS
		3	2	5.34	<13	PASS
		3	3	5.48	<13	PASS
		6	0	5.66	<13	PASS
16QAM	LCH	1	0	5.55	<13	PASS
		1	3	5.17	<13	PASS
		1	5	5.44	<13	PASS
		3	0	5.61	<13	PASS
		3	2	5.52	<13	PASS
		3	3	5.52	<13	PASS
		6	0	5.46	<13	PASS
	MCH	1	0	6.11	<13	PASS
		1	3	5.93	<13	PASS
		1	5	6.05	<13	PASS
		3	0	6.36	<13	PASS
		3	2	6.33	<13	PASS
		3	3	6.41	<13	PASS
		6	0	6.25	<13	PASS

		3	2	6.41	<13	PASS
		3	3	6.41	<13	PASS
		6	0	6.52	<13	PASS
HCH		1	0	6.52	<13	PASS
		1	3	5.94	<13	PASS
		1	5	6.01	<13	PASS
		3	0	6.45	<13	PASS
		3	2	6.04	<13	PASS
		3	3	6.38	<13	PASS
		6	0	6.37	<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	5.59	<13	PASS
		1	7	5.21	<13	PASS
		1	14	5.44	<13	PASS
		8	0	5.46	<13	PASS
		8	4	5.54	<13	PASS
		8	7	5.71	<13	PASS
		15	0	5.55	<13	PASS
	MCH	1	0	5.15	<13	PASS
		1	7	5.09	<13	PASS
		1	14	4.88	<13	PASS
		8	0	5.55	<13	PASS
		8	4	5.56	<13	PASS
		8	7	5.74	<13	PASS
		15	0	5.69	<13	PASS
	HCH	1	0	5.28	<13	PASS
		1	7	5.21	<13	PASS
		1	14	5.35	<13	PASS
		8	0	5.62	<13	PASS
		8	4	5.64	<13	PASS
		8	7	5.62	<13	PASS
		15	0	5.44	<13	PASS
16QAM	LCH	1	0	5.91	<13	PASS
		1	7	6.01	<13	PASS
		1	14	6.16	<13	PASS
		8	0	6.19	<13	PASS
		8	4	6.28	<13	PASS

		8	7	6.29	<13	PASS
		15	0	6.47	<13	PASS
MCH		1	0	5.84	<13	PASS
		1	7	5.64	<13	PASS
		1	14	5.82	<13	PASS
		8	0	6.45	<13	PASS
		8	4	6.38	<13	PASS
		8	7	6.22	<13	PASS
		15	0	6.36	<13	PASS
HCH		1	0	6.18	<13	PASS
		1	7	6.17	<13	PASS
		1	14	6.02	<13	PASS
		8	0	6.61	<13	PASS
		8	4	6.61	<13	PASS
		8	7	6.52	<13	PASS
		15	0	6.25	<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	5.63	<13	PASS
		1	12	5.55	<13	PASS
		1	24	5.7	<13	PASS
		12	0	5.5	<13	PASS
		12	6	5.63	<13	PASS
		12	13	5.6	<13	PASS
		25	0	5.51	<13	PASS
	MCH	1	0	5.38	<13	PASS
		1	12	5.21	<13	PASS
		1	24	5.33	<13	PASS
		12	0	5.48	<13	PASS
		12	6	5.38	<13	PASS
		12	13	5.42	<13	PASS
		25	0	5.51	<13	PASS
	HCH	1	0	5.38	<13	PASS
		1	12	5.2	<13	PASS
		1	24	5.31	<13	PASS
		12	0	5.46	<13	PASS
		12	6	5.6	<13	PASS
		12	13	5.46	<13	PASS

		25	0	5.52	<13	PASS
16QAM	LCH	1	0	6.23	<13	PASS
		1	12	6.29	<13	PASS
		1	24	6.23	<13	PASS
		12	0	6.51	<13	PASS
		12	6	6.44	<13	PASS
		12	13	6.48	<13	PASS
		25	0	6.22	<13	PASS
	MCH	1	0	6	<13	PASS
		1	12	6.3	<13	PASS
		1	24	6.4	<13	PASS
		12	0	6.15	<13	PASS
		12	6	6.28	<13	PASS
		12	13	6.17	<13	PASS
		25	0	6.26	<13	PASS
	HCH	1	0	6.41	<13	PASS
		1	12	6.07	<13	PASS
		1	24	5.9	<13	PASS
		12	0	6.29	<13	PASS
		12	6	6.42	<13	PASS
		12	13	6.36	<13	PASS
		25	0	6.31	<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	5.34	<13	PASS
		1	24	5.3	<13	PASS
		1	49	5.26	<13	PASS
		25	0	5.54	<13	PASS
		25	12	5.63	<13	PASS
		25	25	5.61	<13	PASS
		50	0	5.51	<13	PASS
	MCH	1	0	5.15	<13	PASS
		1	24	5.11	<13	PASS
		1	49	5.04	<13	PASS
		25	0	5.67	<13	PASS
		25	12	5.61	<13	PASS
		25	25	5.6	<13	PASS
		50	0	5.6	<13	PASS

		1	0	5.4	<13	PASS
	HCH	1	24	5.17	<13	PASS
		1	49	5.3	<13	PASS
		25	0	5.5	<13	PASS
		25	12	5.5	<13	PASS
		25	25	5.49	<13	PASS
		50	0	5.49	<13	PASS
		1	0	6.17	<13	PASS
	LCH	1	24	5.95	<13	PASS
		1	49	6.38	<13	PASS
		25	0	6.38	<13	PASS
		25	12	6.46	<13	PASS
		25	25	6.44	<13	PASS
		50	0	6.23	<13	PASS
		1	0	5.71	<13	PASS
	MCH	1	24	5.82	<13	PASS
		1	49	6.01	<13	PASS
		25	0	6.37	<13	PASS
		25	12	6.37	<13	PASS
		25	25	6.45	<13	PASS
		50	0	6.35	<13	PASS
		1	0	6.62	<13	PASS
	HCH	1	24	6.21	<13	PASS
		1	49	6.32	<13	PASS
		25	0	6.4	<13	PASS
		25	12	6.3	<13	PASS
		25	25	6.39	<13	PASS
		50	0	6.36	<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	5.47	<13	PASS
		1	37	5.3	<13	PASS
		1	74	5.34	<13	PASS
		37	0	5.48	<13	PASS
		37	18	5.5	<13	PASS
		37	38	5.55	<13	PASS
		75	0	5.83	<13	PASS
	MCH	1	0	5.59	<13	PASS

	16QAM	HCH	1	37	5.46	<13	PASS
			1	74	5.48	<13	PASS
			37	0	5.56	<13	PASS
			37	18	5.56	<13	PASS
			37	38	5.51	<13	PASS
			75	0	5.9	<13	PASS
		LCH	1	0	5.33	<13	PASS
			1	37	5.23	<13	PASS
			1	74	5.37	<13	PASS
			37	0	5.55	<13	PASS
			37	18	5.57	<13	PASS
			37	38	5.52	<13	PASS
			75	0	5.87	<13	PASS
		MCH	1	0	6.3	<13	PASS
			1	37	6.1	<13	PASS
			1	74	6.14	<13	PASS
			37	0	6.3	<13	PASS
			37	18	6.31	<13	PASS
			37	38	6.34	<13	PASS
			75	0	6.38	<13	PASS
		HCH	1	0	6.27	<13	PASS
			1	37	6.05	<13	PASS
			1	74	6.3	<13	PASS
			37	0	6.4	<13	PASS
			37	18	6.41	<13	PASS
			37	38	6.36	<13	PASS
			75	0	6.32	<13	PASS
		LCH	1	0	6.45	<13	PASS
			1	37	6.22	<13	PASS
			1	74	6.13	<13	PASS
			37	0	6.27	<13	PASS
			37	18	6.25	<13	PASS
			37	38	6.33	<13	PASS
			75	0	6.33	<13	PASS

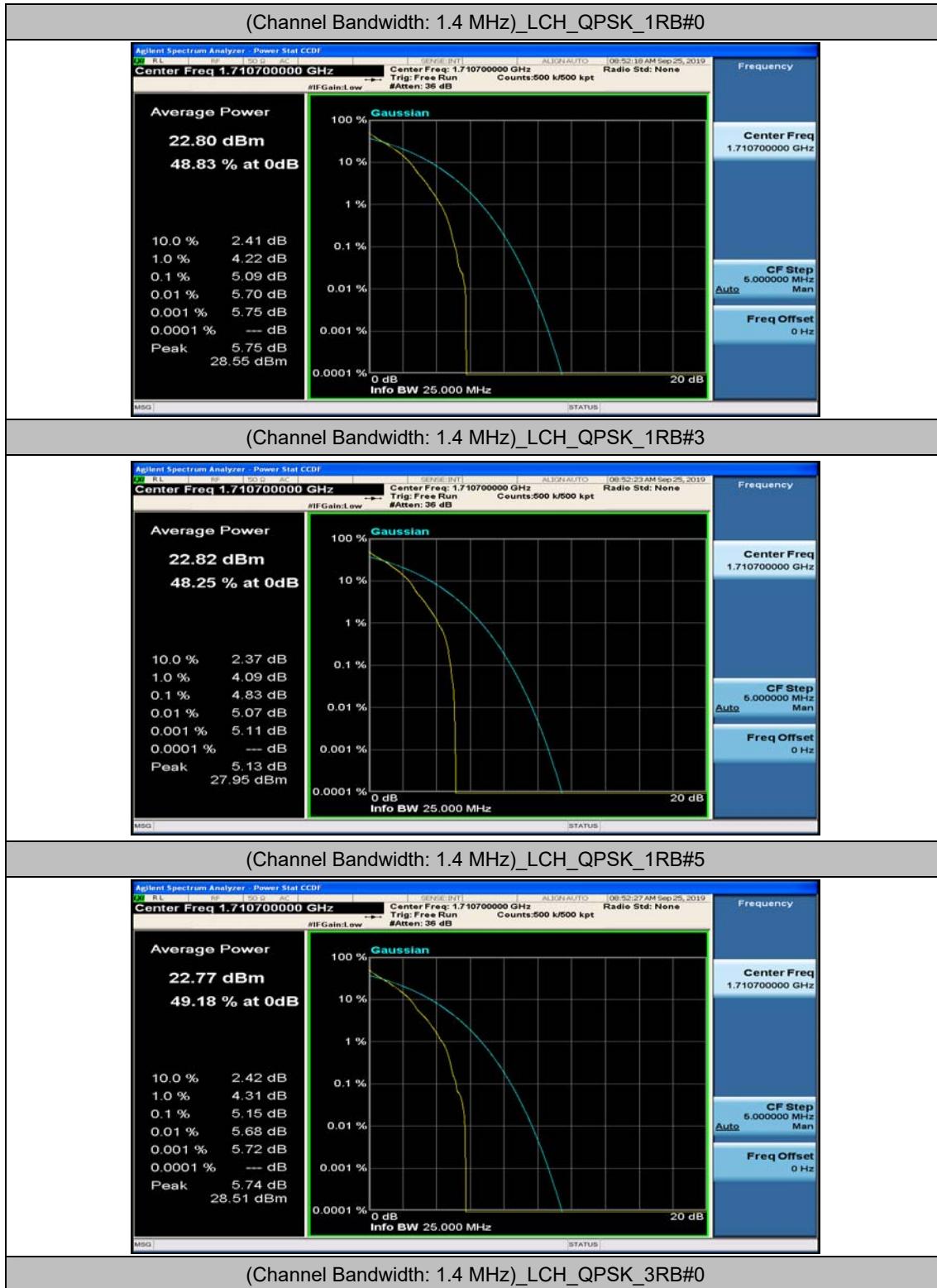
**Channel Bandwidth: 20 MHz**

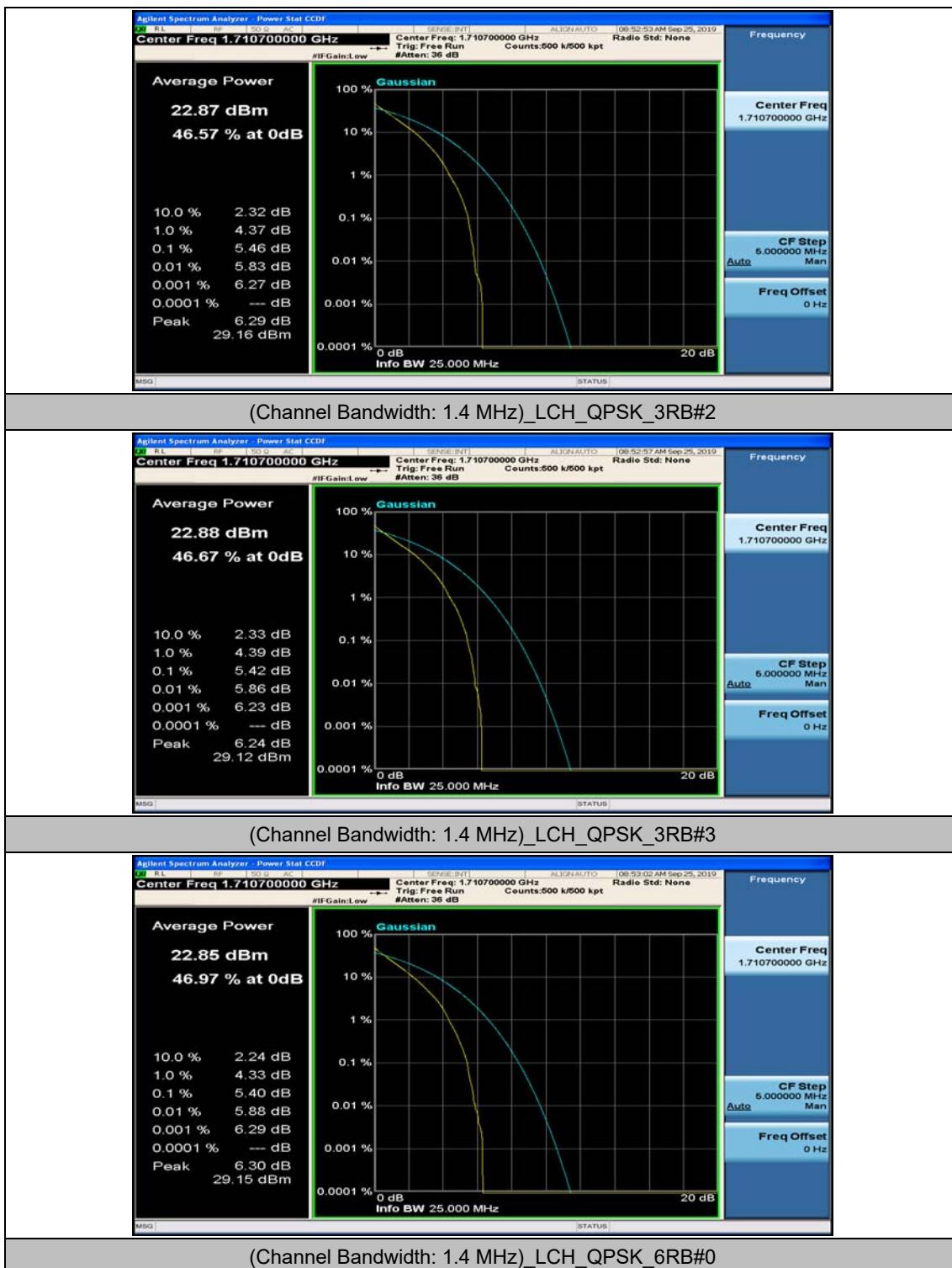
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.28	<13	PASS
		1	49	5.49	<13	PASS
		1	99	5.16	<13	PASS
		50	0	5.53	<13	PASS
		50	25	5.55	<13	PASS
		50	50	5.5	<13	PASS
		100	0	5.6	<13	PASS
	MCH	1	0	5.42	<13	PASS
		1	49	5.5	<13	PASS
		1	99	5.62	<13	PASS
		50	0	5.62	<13	PASS
		50	25	5.63	<13	PASS
		50	50	5.64	<13	PASS
		100	0	5.66	<13	PASS
16QAM	LCH	1	0	5.4	<13	PASS
		1	49	5.65	<13	PASS
		1	99	5.52	<13	PASS
		50	0	5.57	<13	PASS
		50	25	5.6	<13	PASS
		50	50	5.54	<13	PASS
		100	0	5.74	<13	PASS
	MCH	1	0	6.54	<13	PASS
		1	49	6.31	<13	PASS
		1	99	6.11	<13	PASS
		50	0	6.21	<13	PASS
		50	25	6.33	<13	PASS
		50	50	6.33	<13	PASS
		100	0	6.28	<13	PASS
	HCH	1	0	6.17	<13	PASS
		1	49	6.18	<13	PASS
		1	99	6.14	<13	PASS
		50	0	6.35	<13	PASS
		50	25	6.34	<13	PASS
		50	50	6.36	<13	PASS
		100	0	6.37	<13	PASS
	HCH	1	0	6.48	<13	PASS

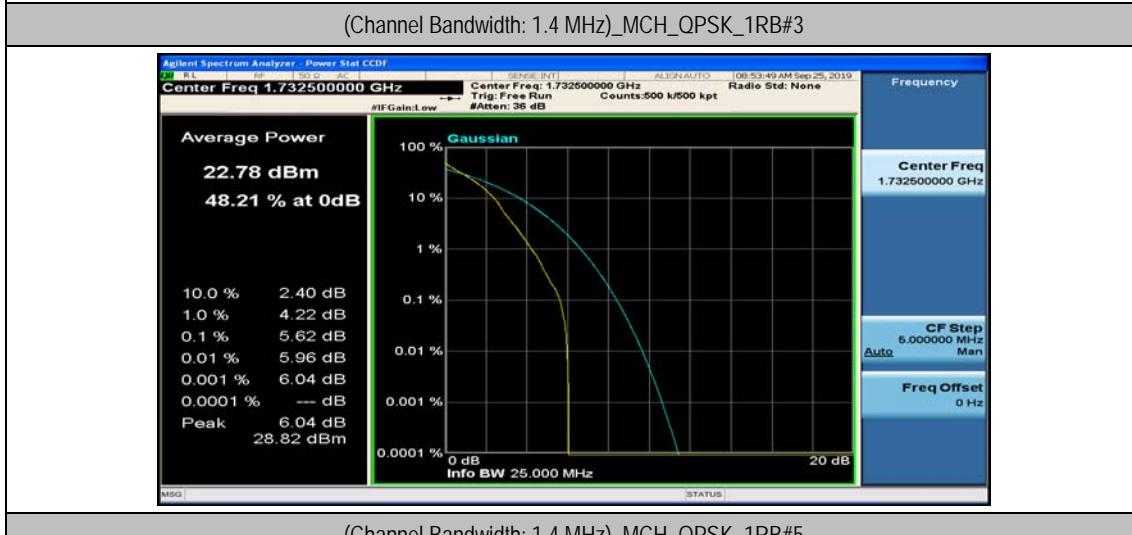
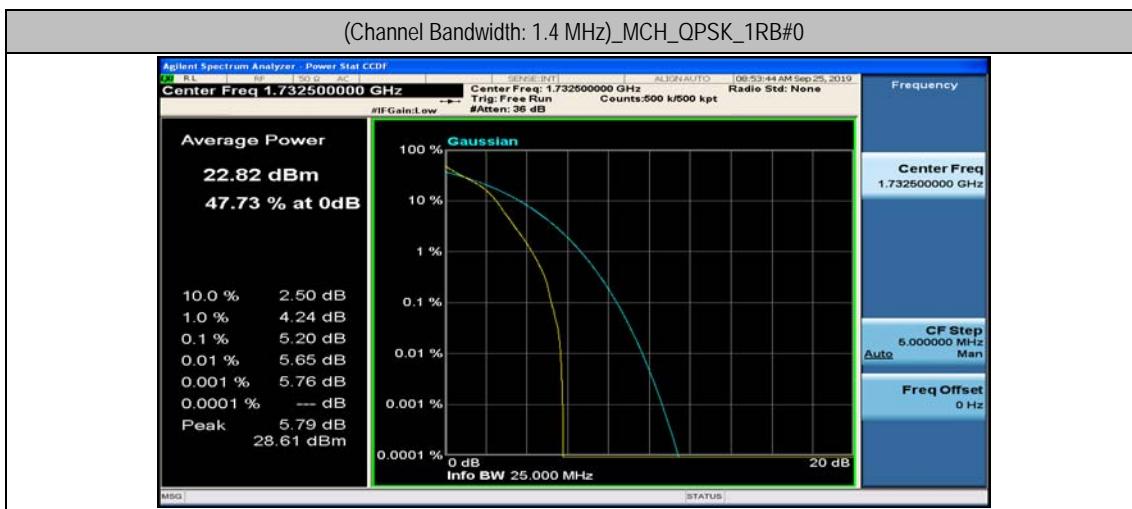
		1	49	6.56	<13	PASS
		1	99	6.09	<13	PASS
		50	0	6.33	<13	PASS
		50	25	6.32	<13	PASS
		50	50	6.37	<13	PASS
		100	0	6.39	<13	PASS

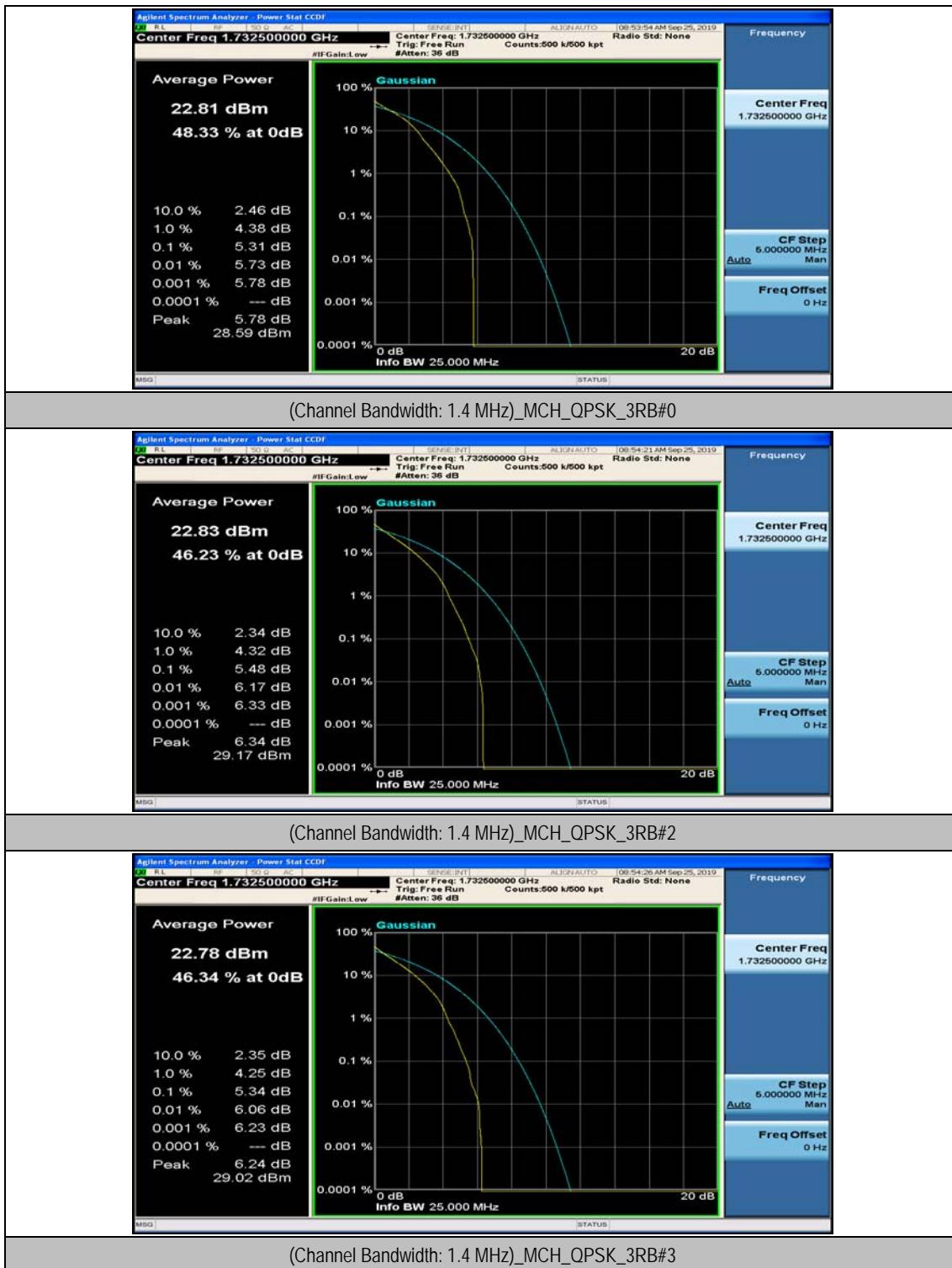
## Test Graphs

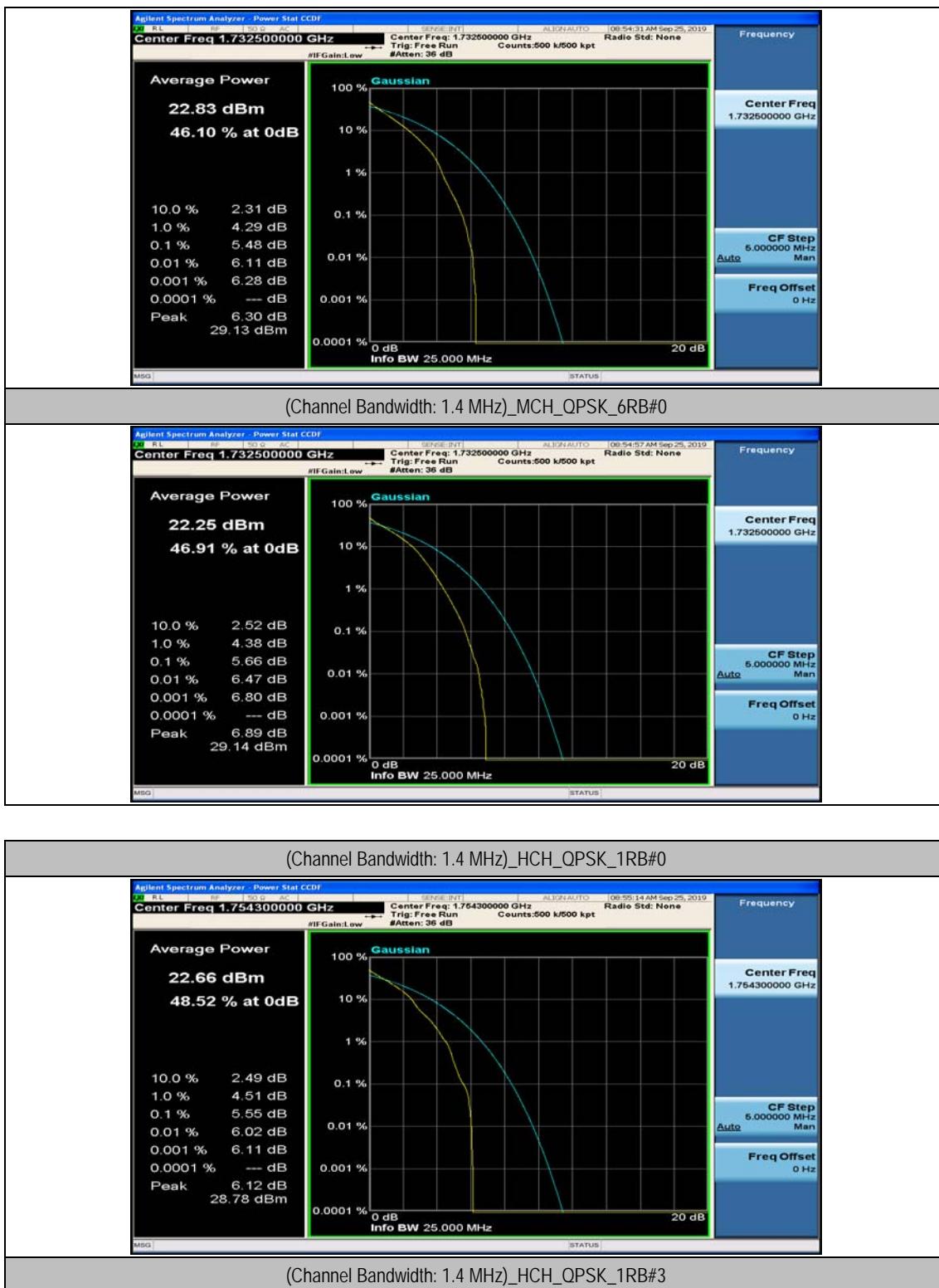
### Channel Bandwidth: 1.4 MHz

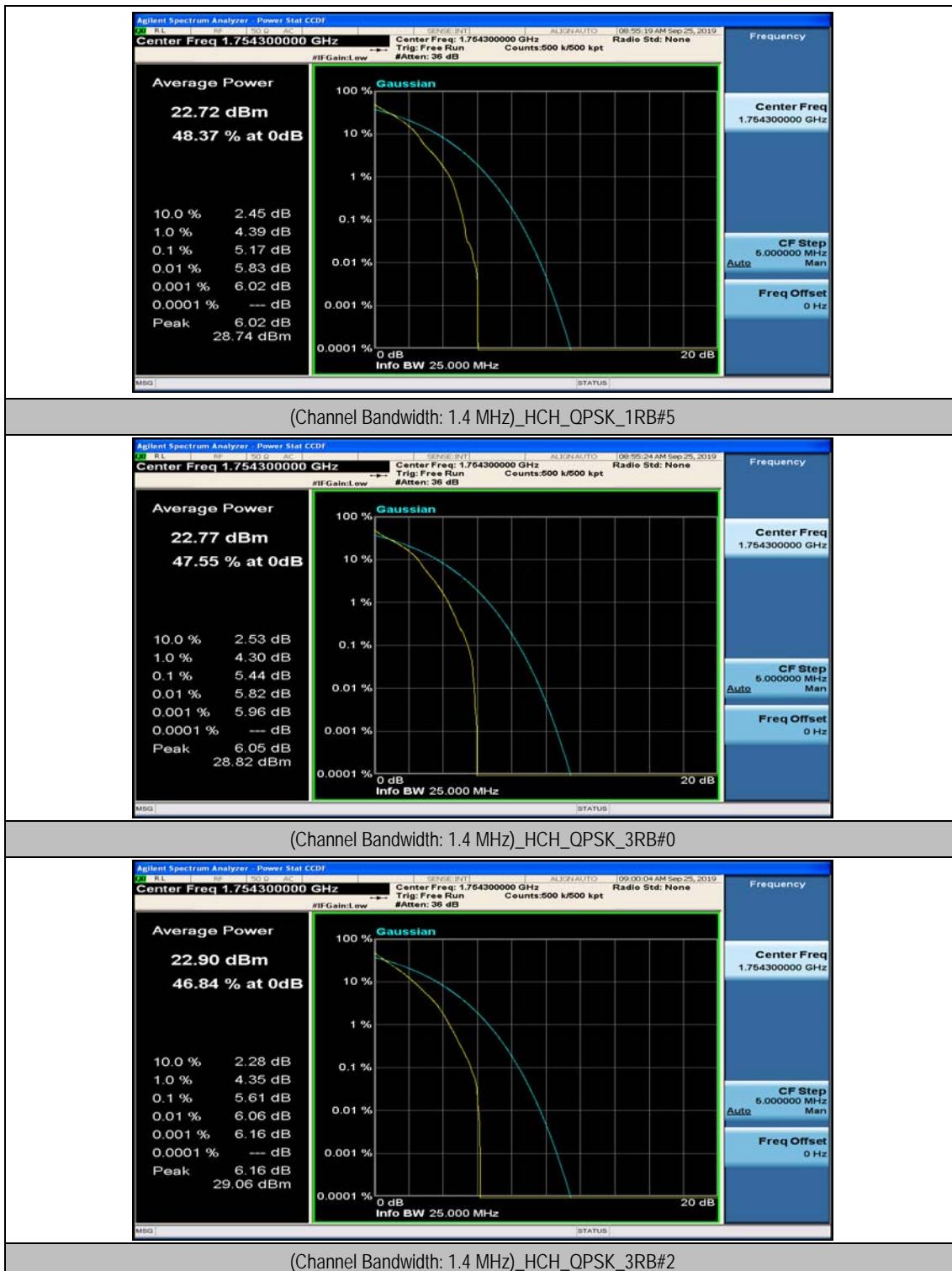


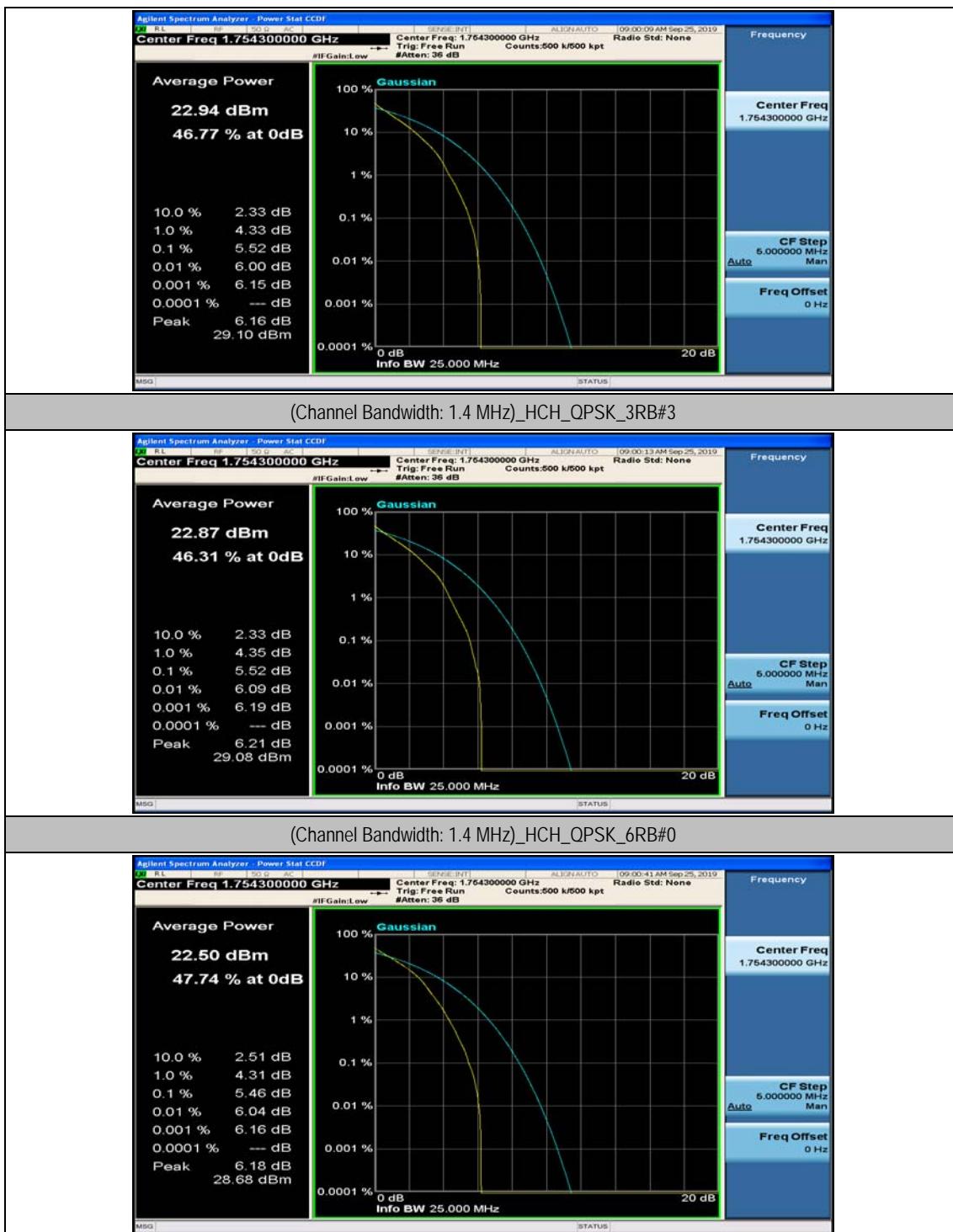


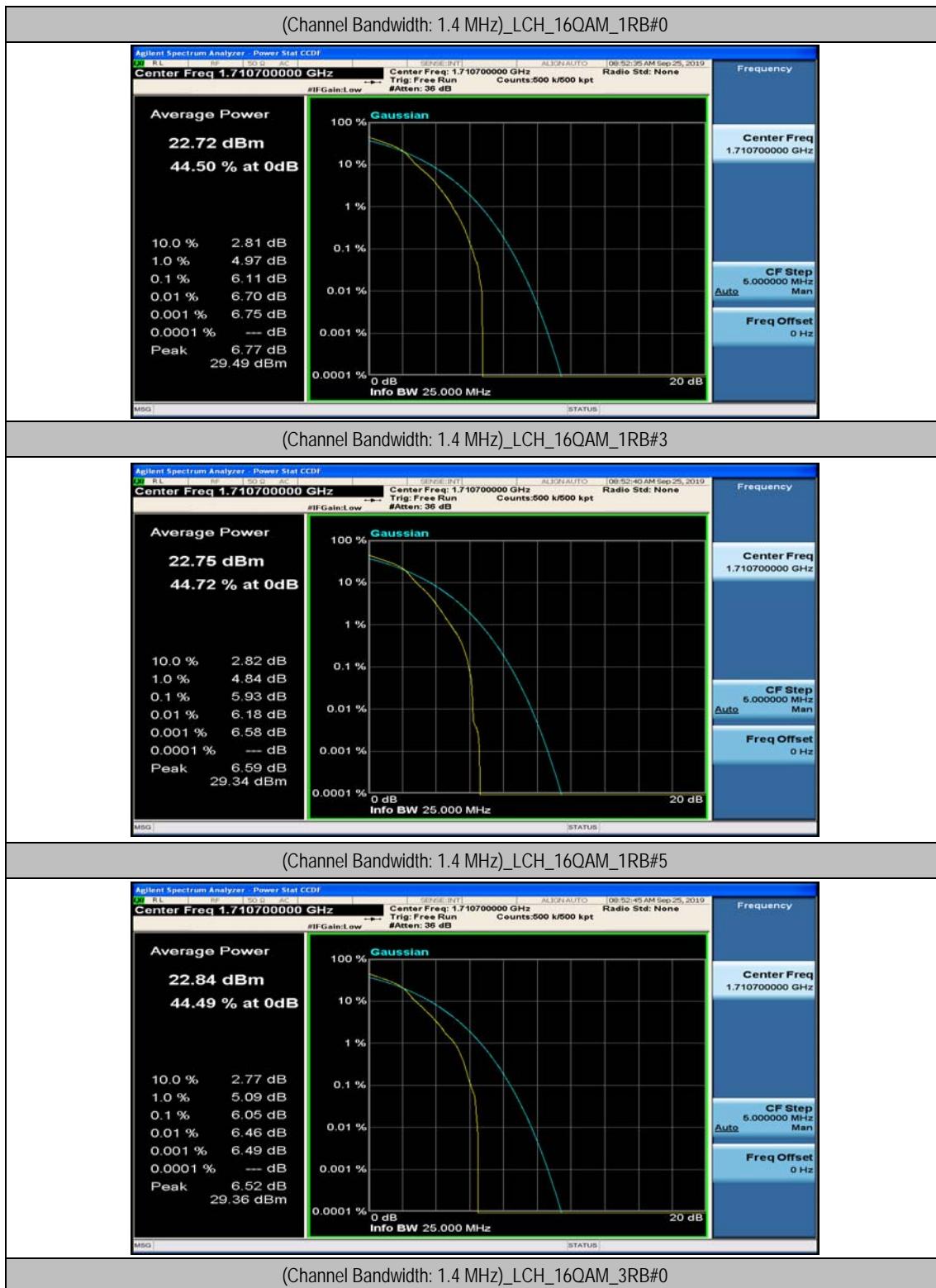


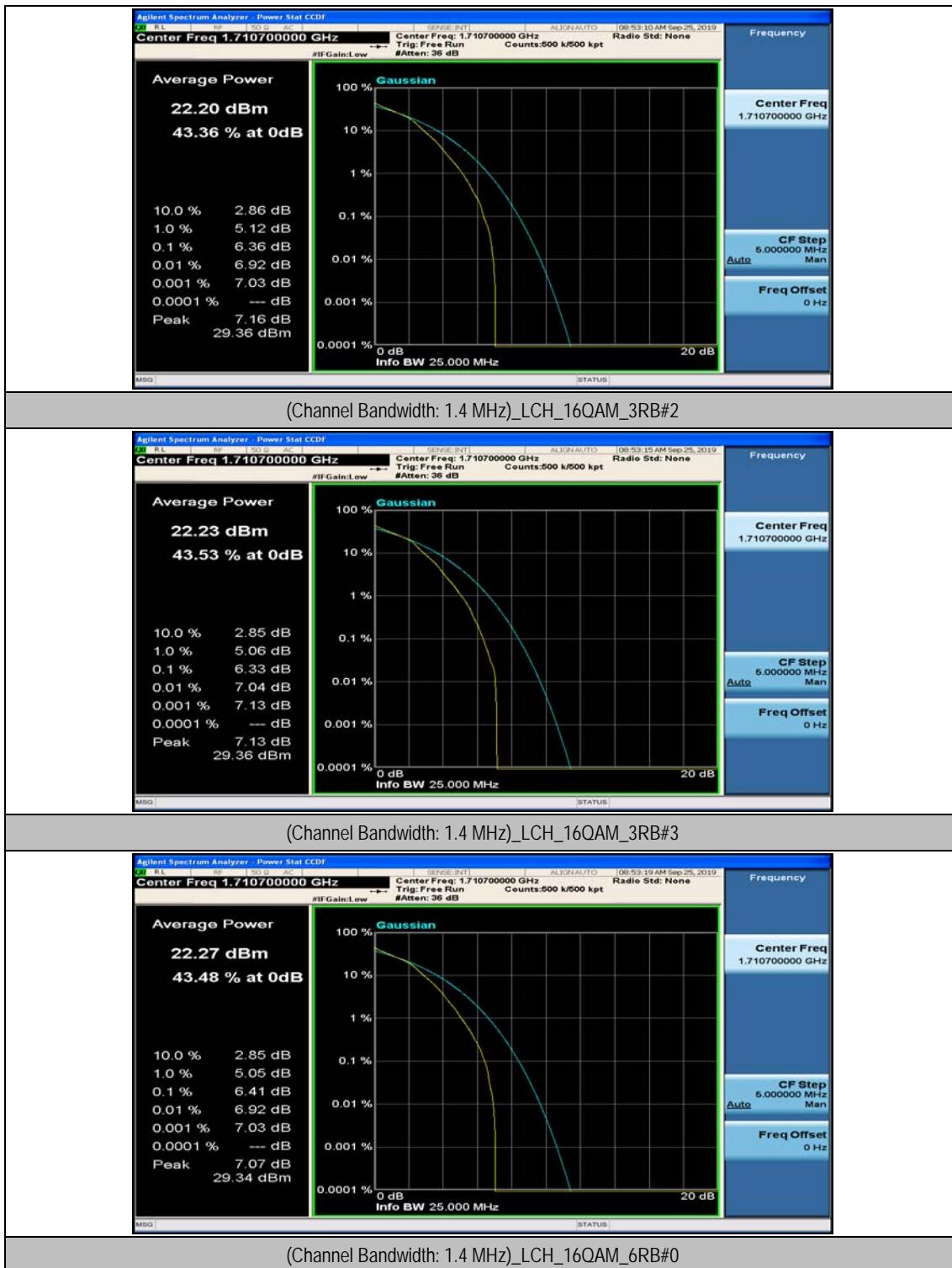


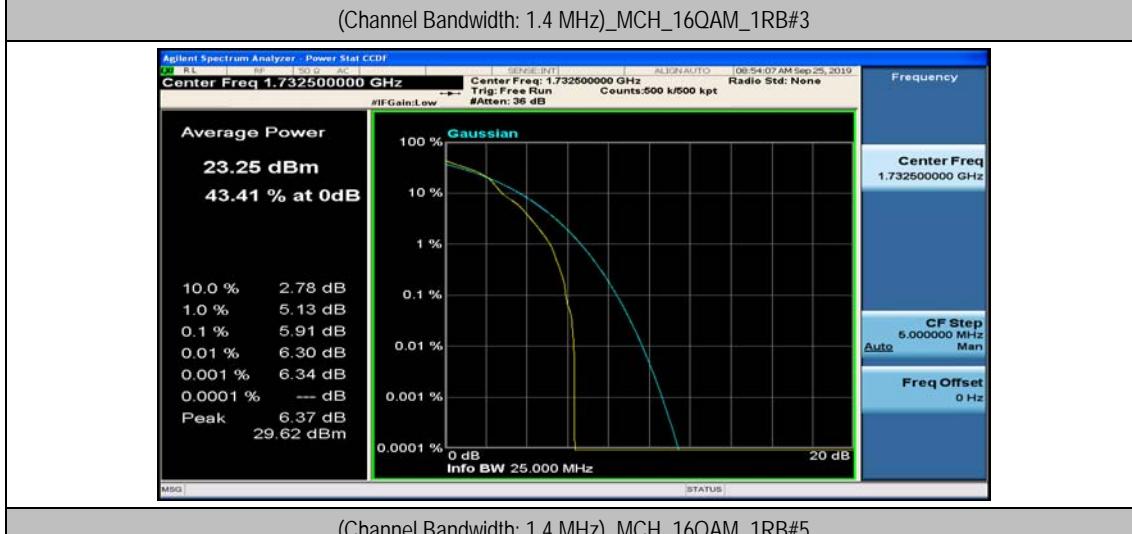
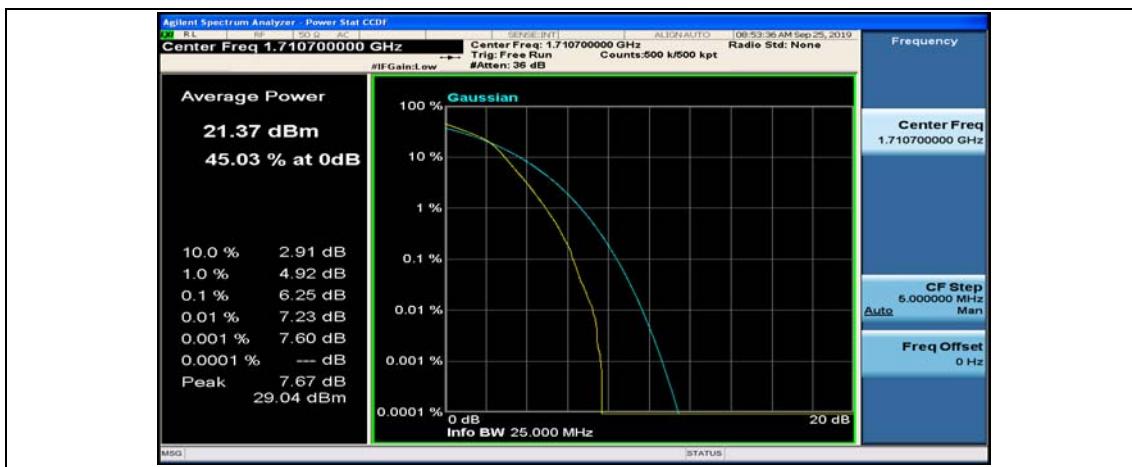


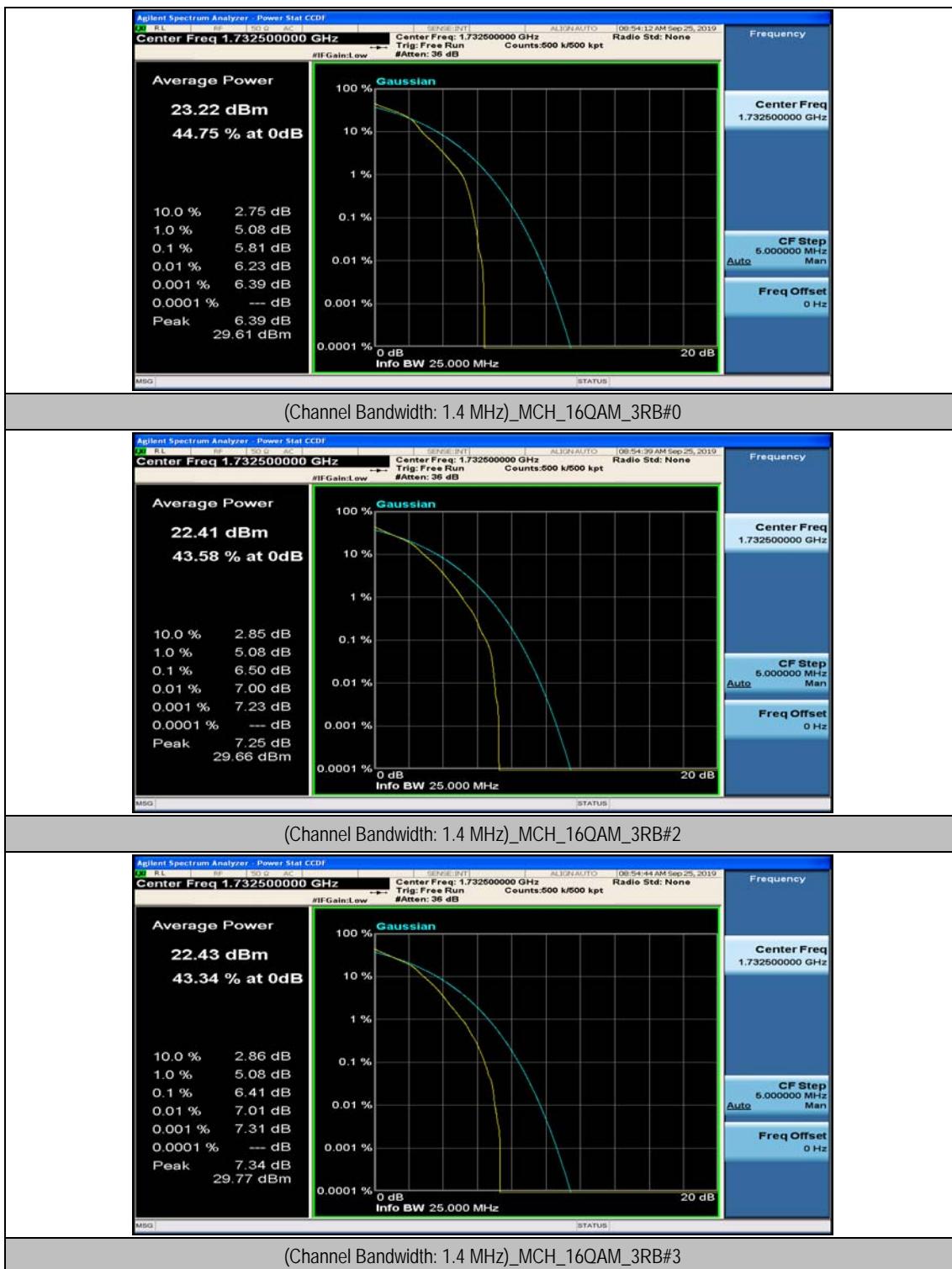


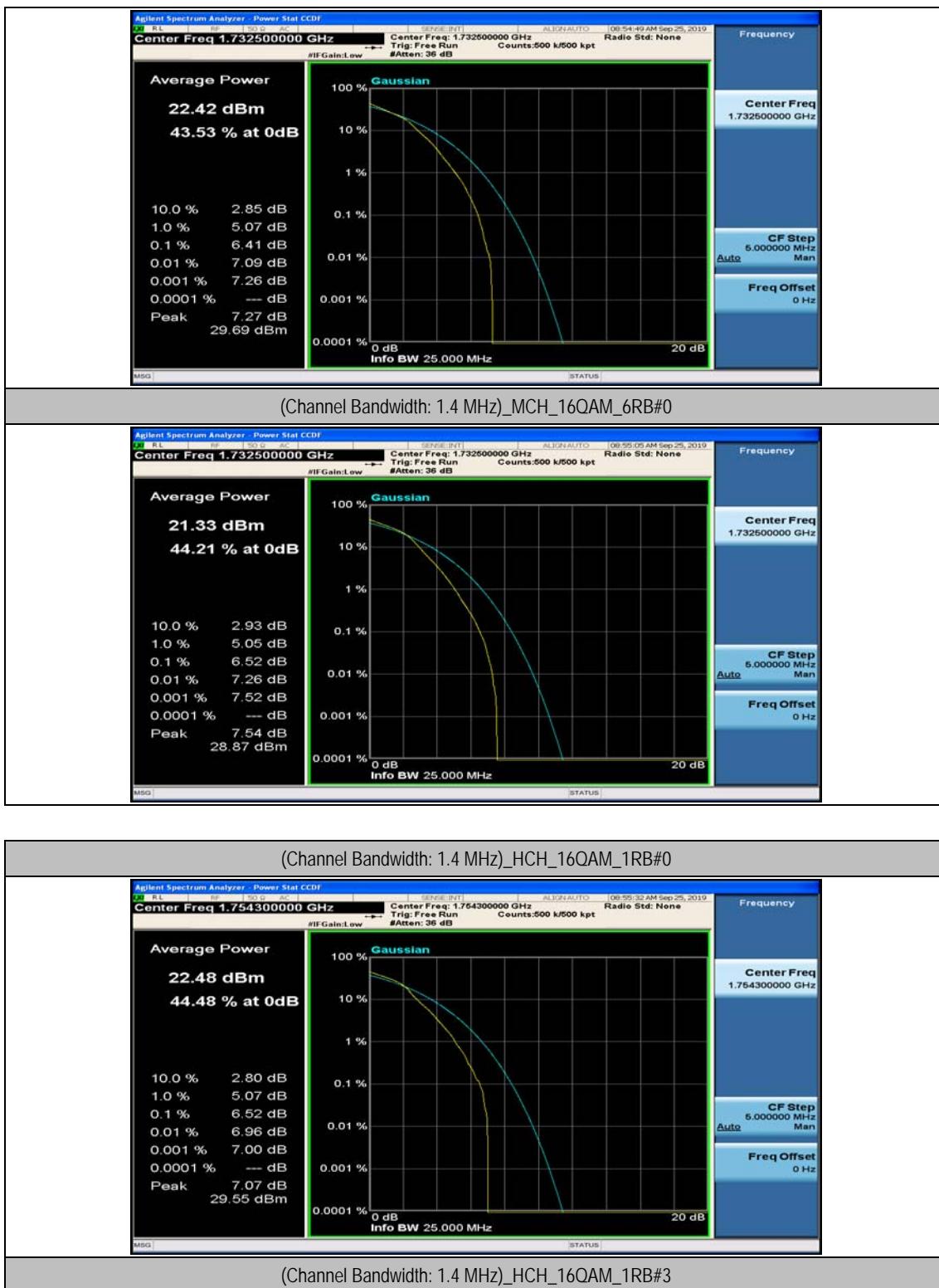


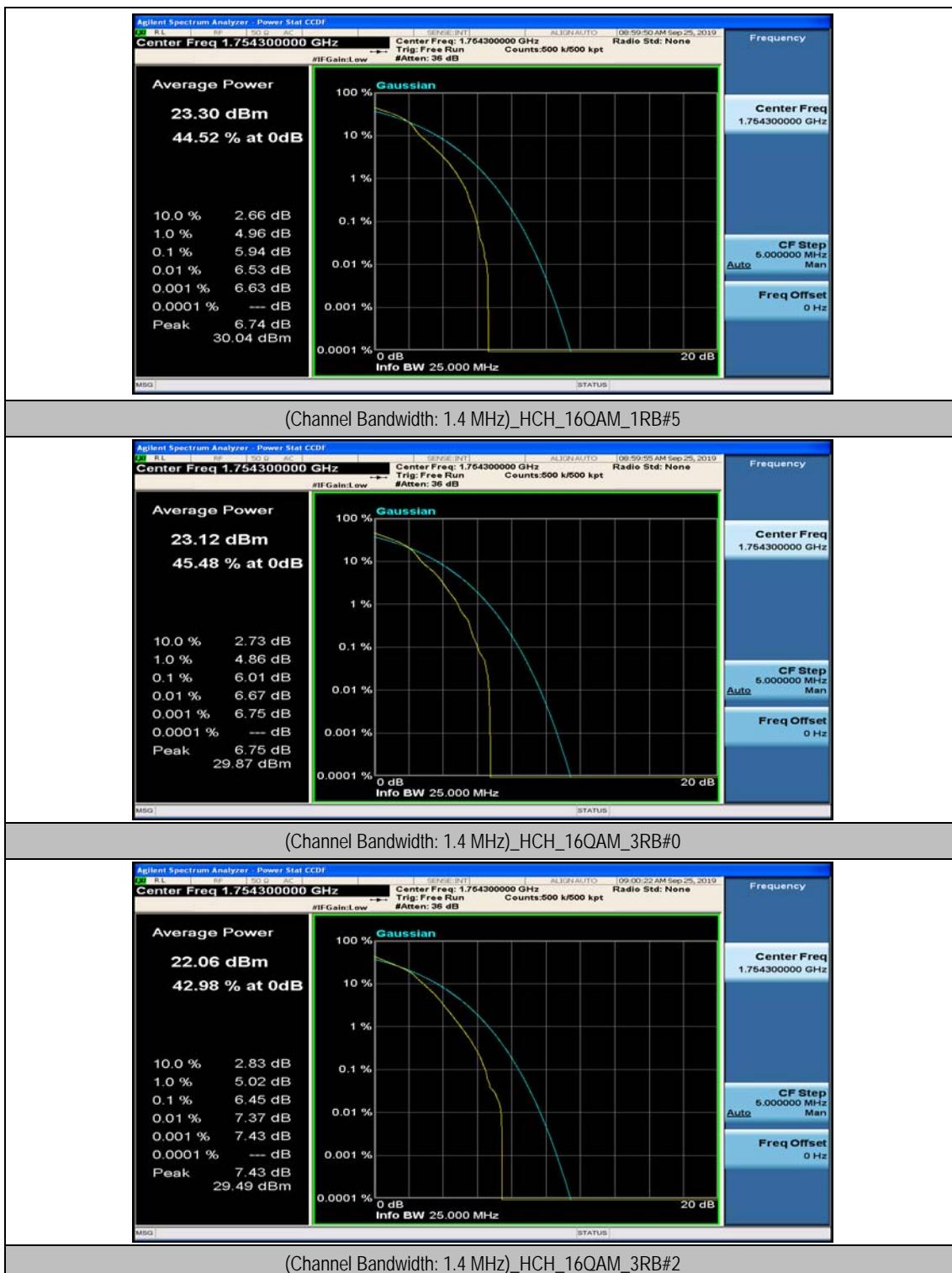


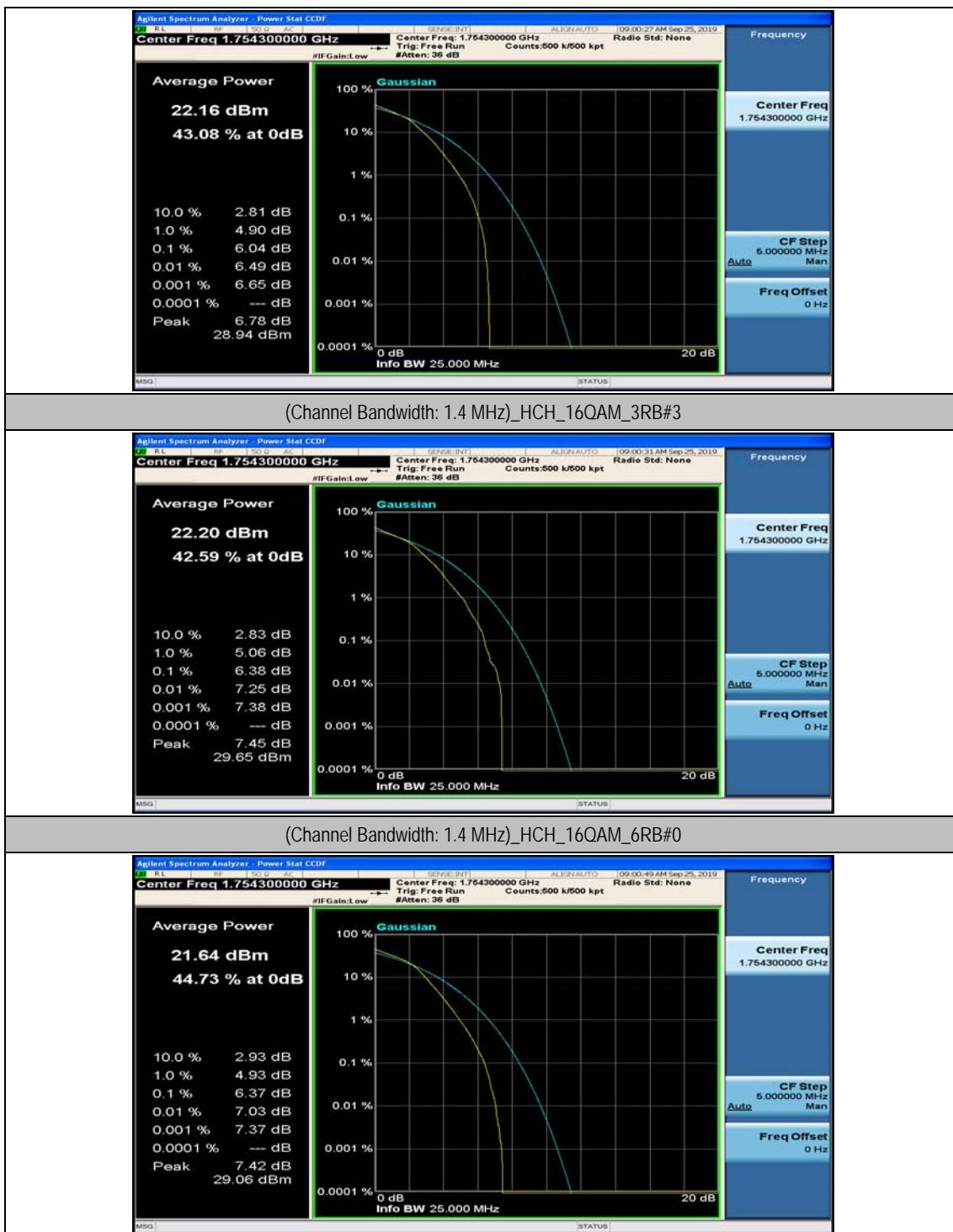




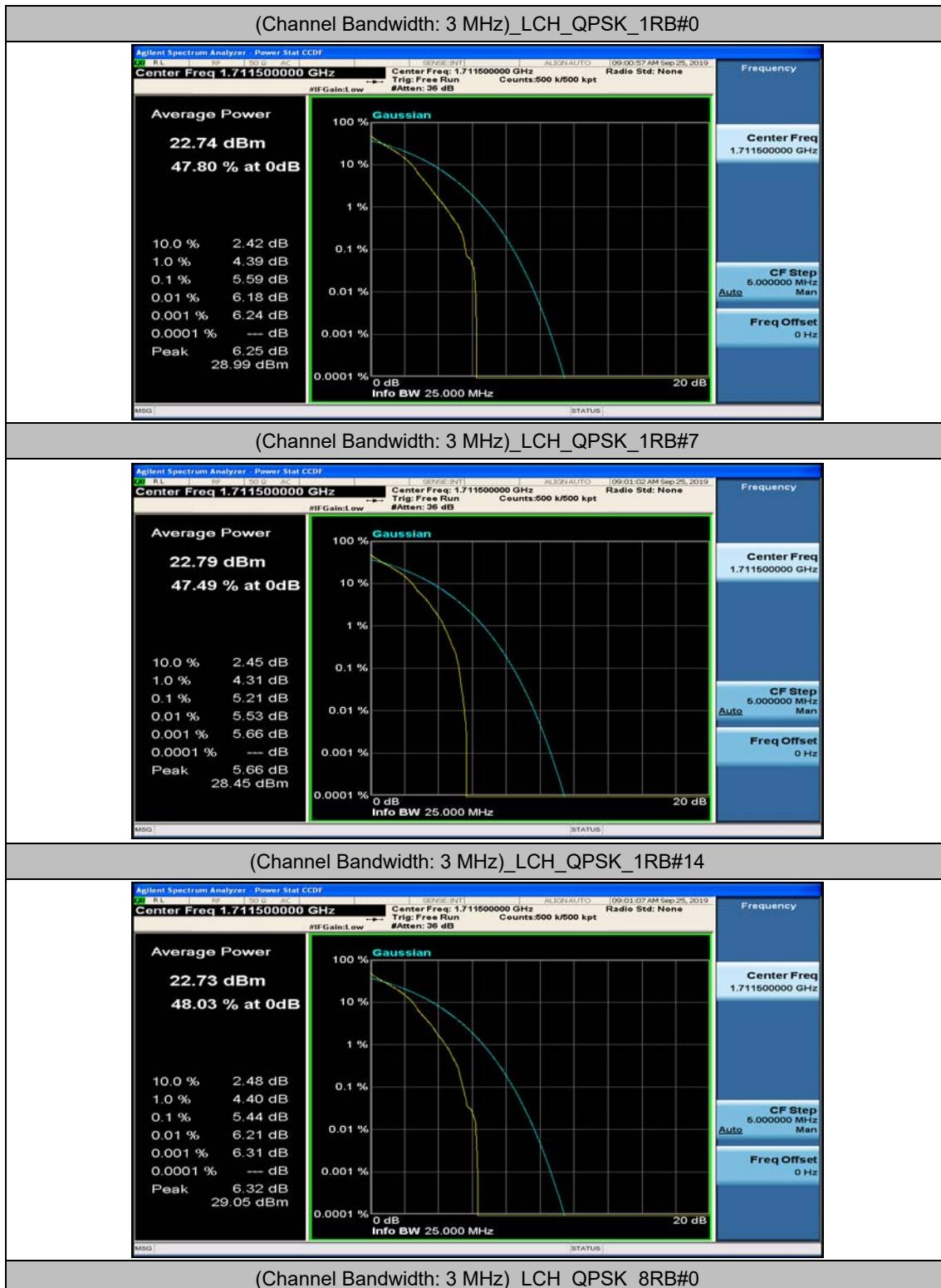


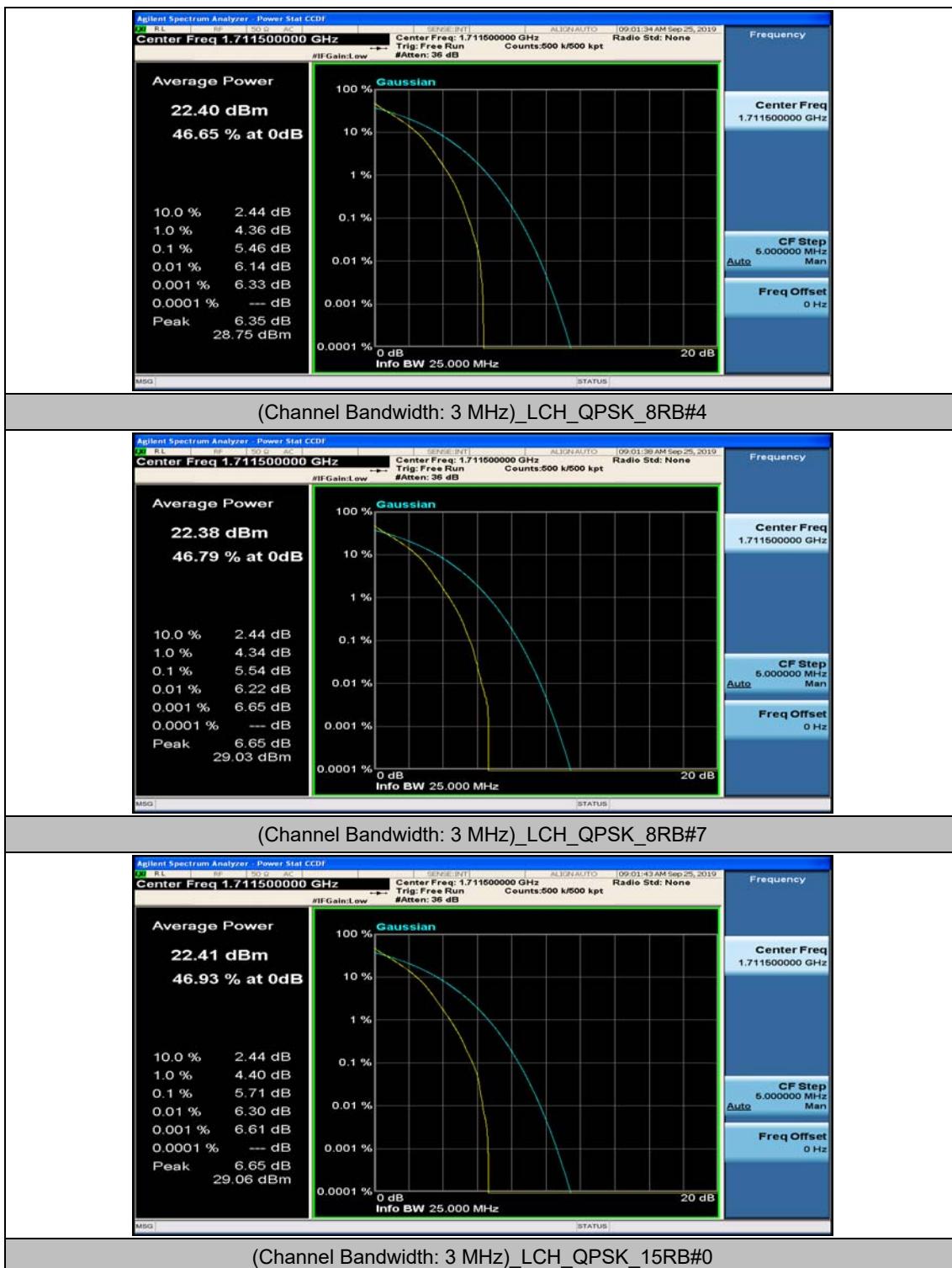


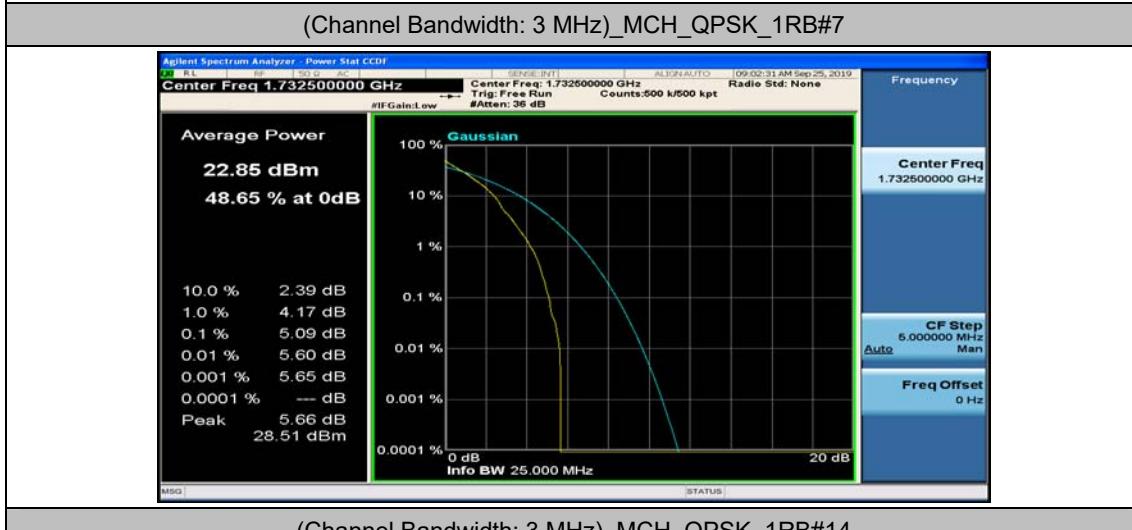
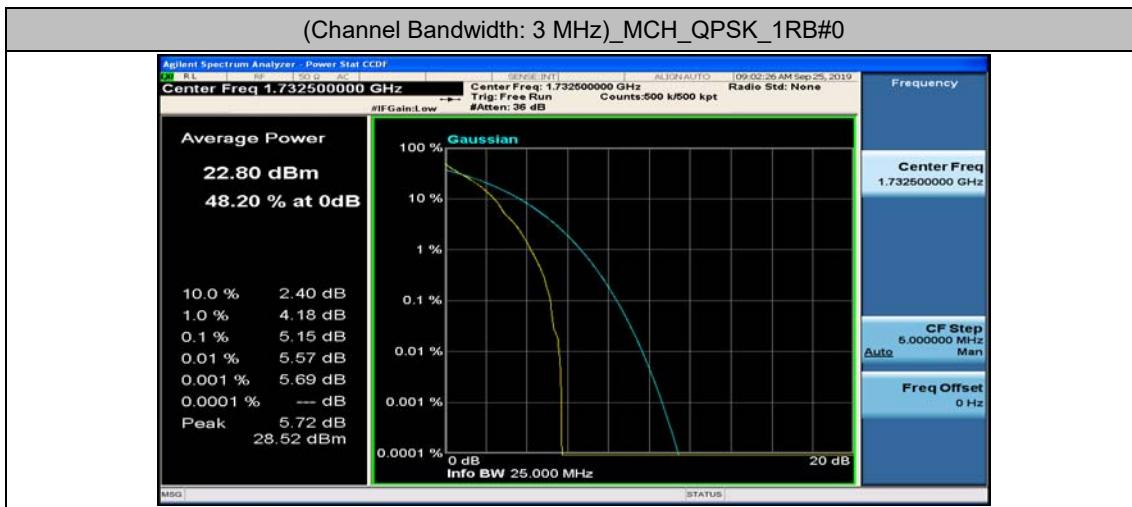
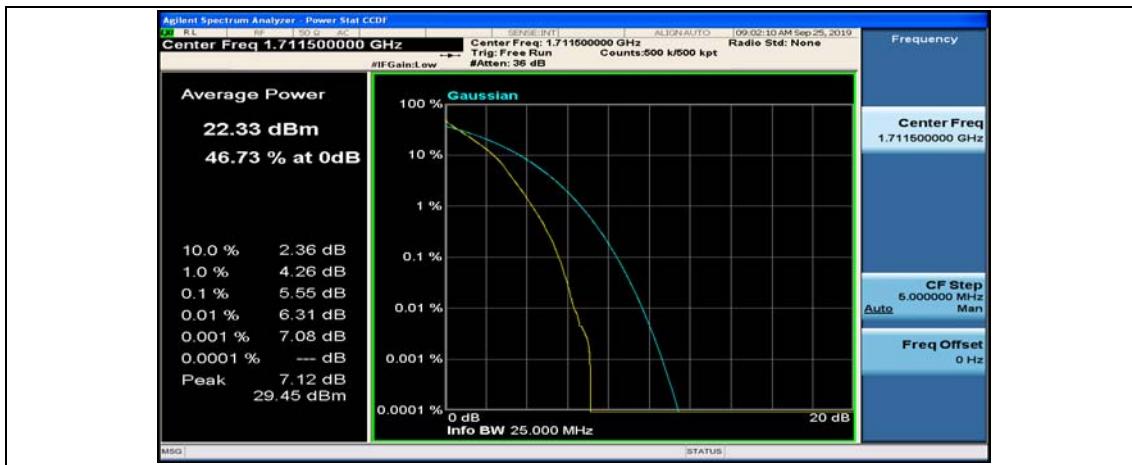




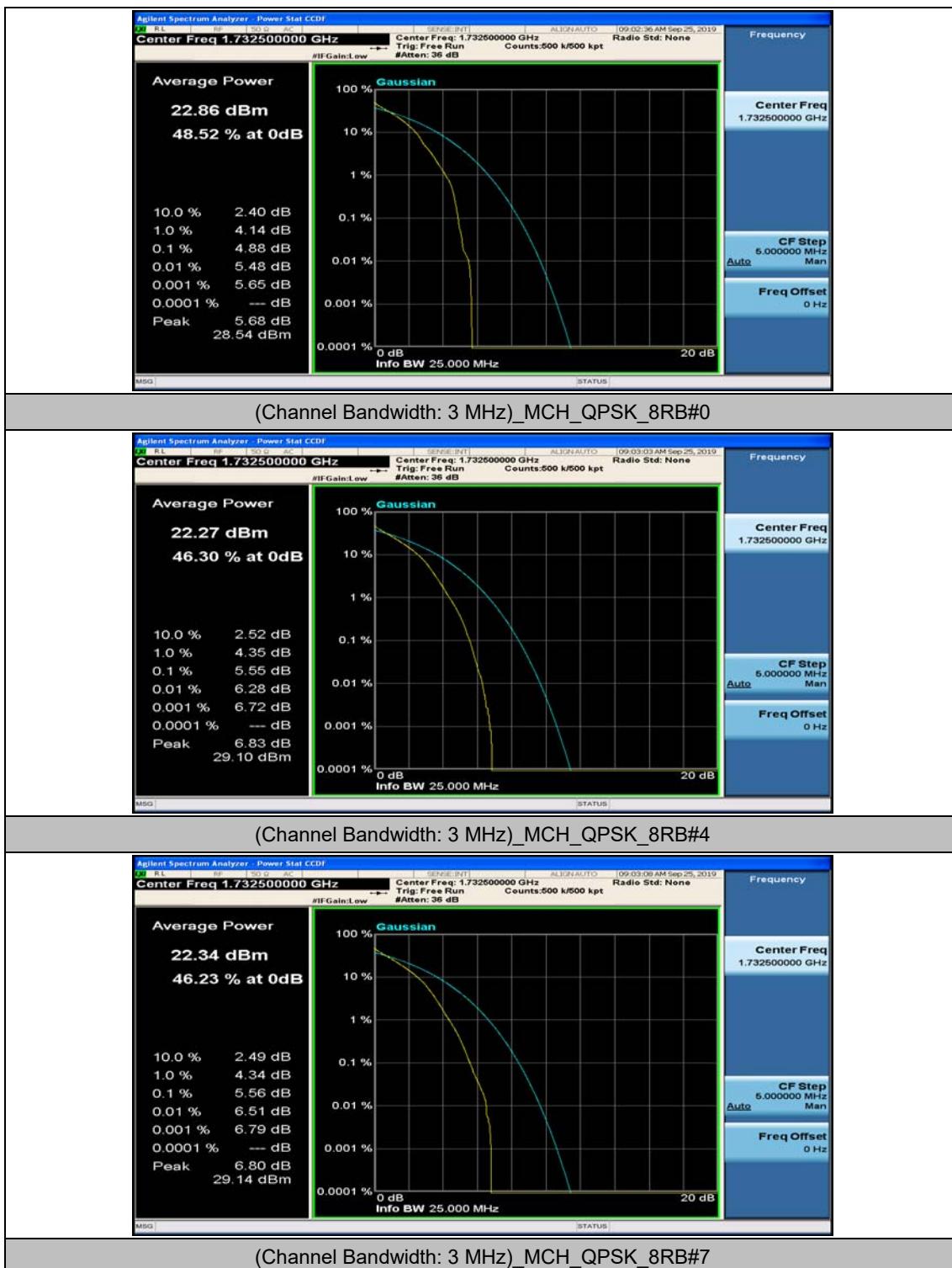
## Channel Bandwidth: 3 MHz

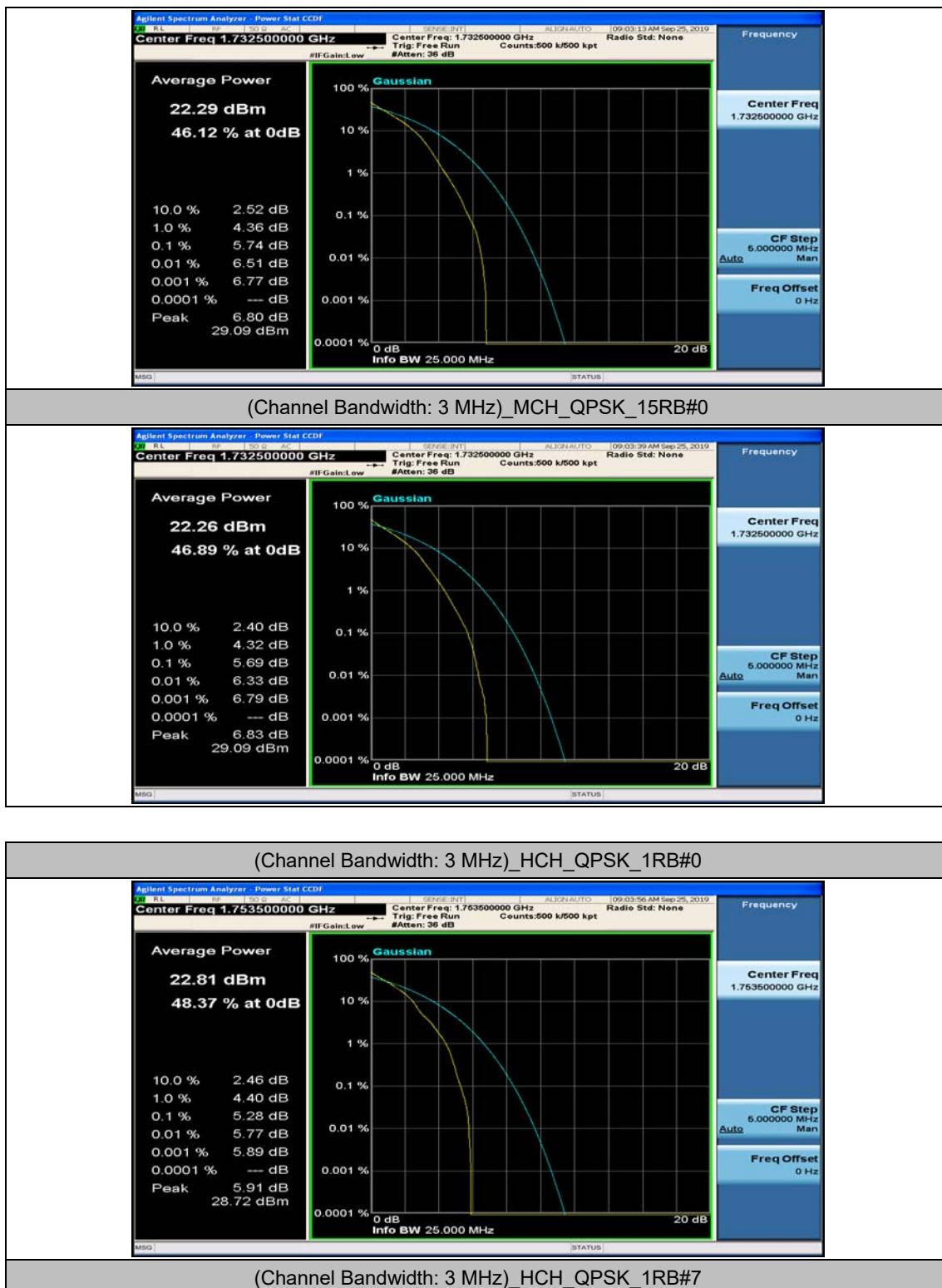


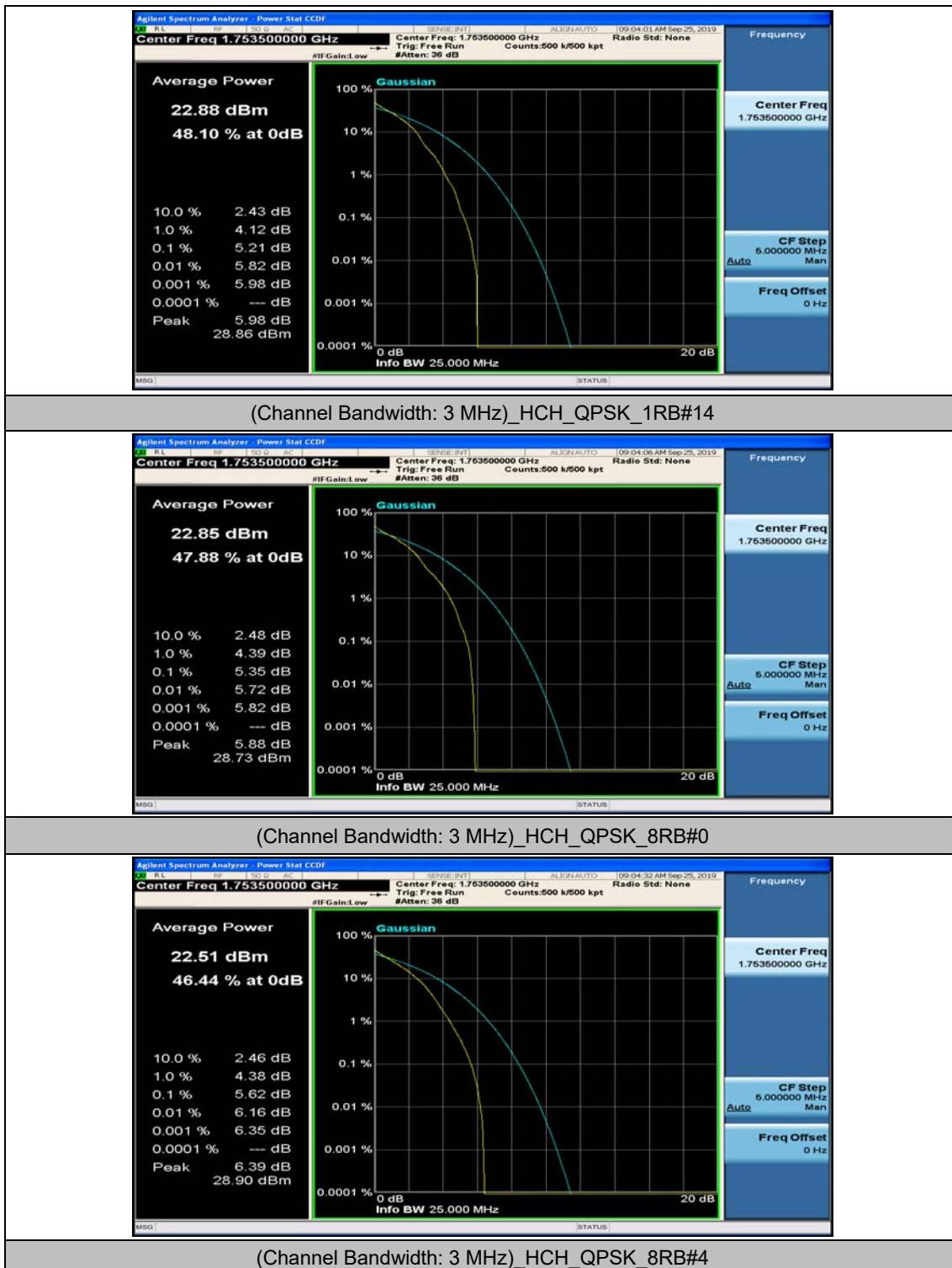


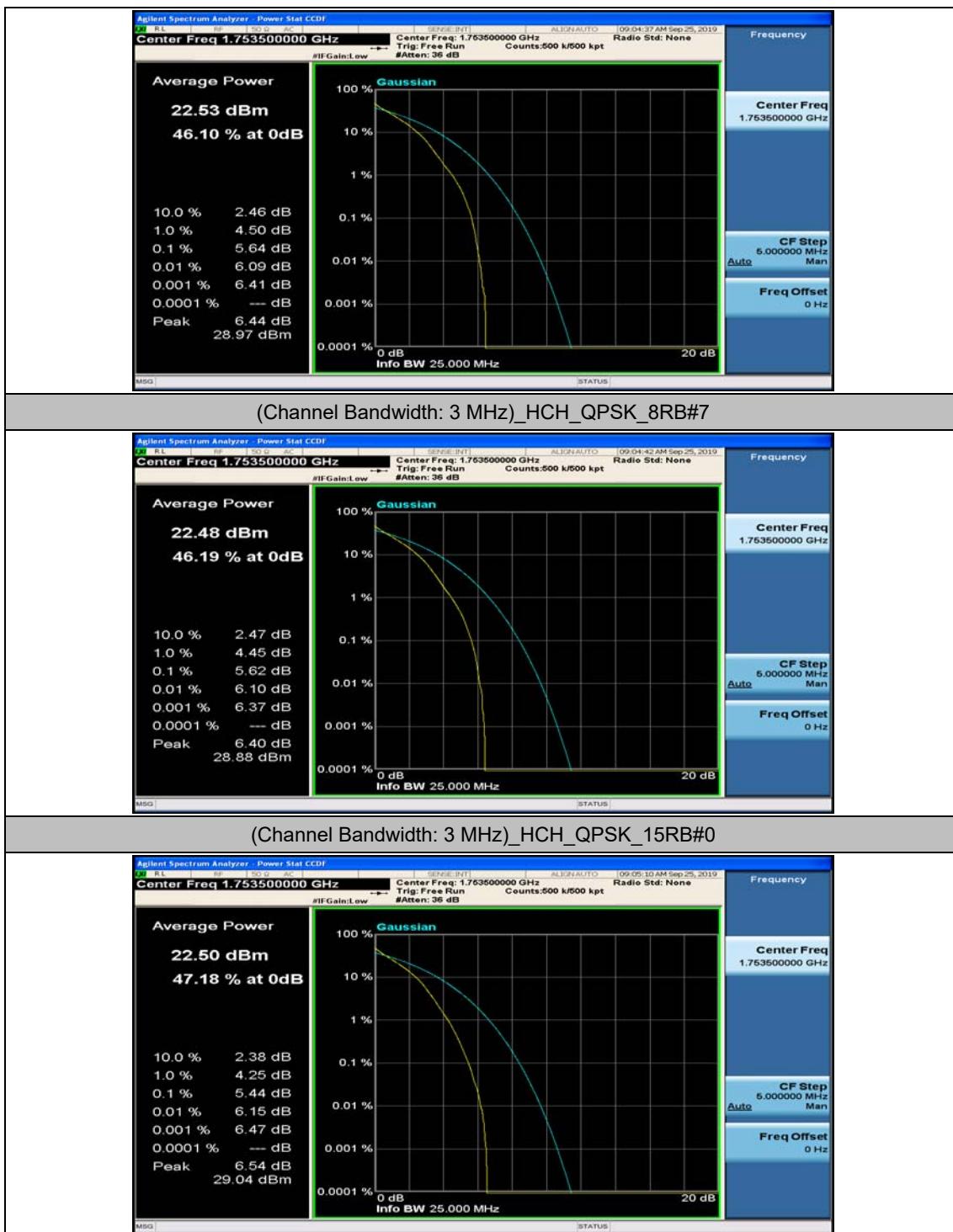


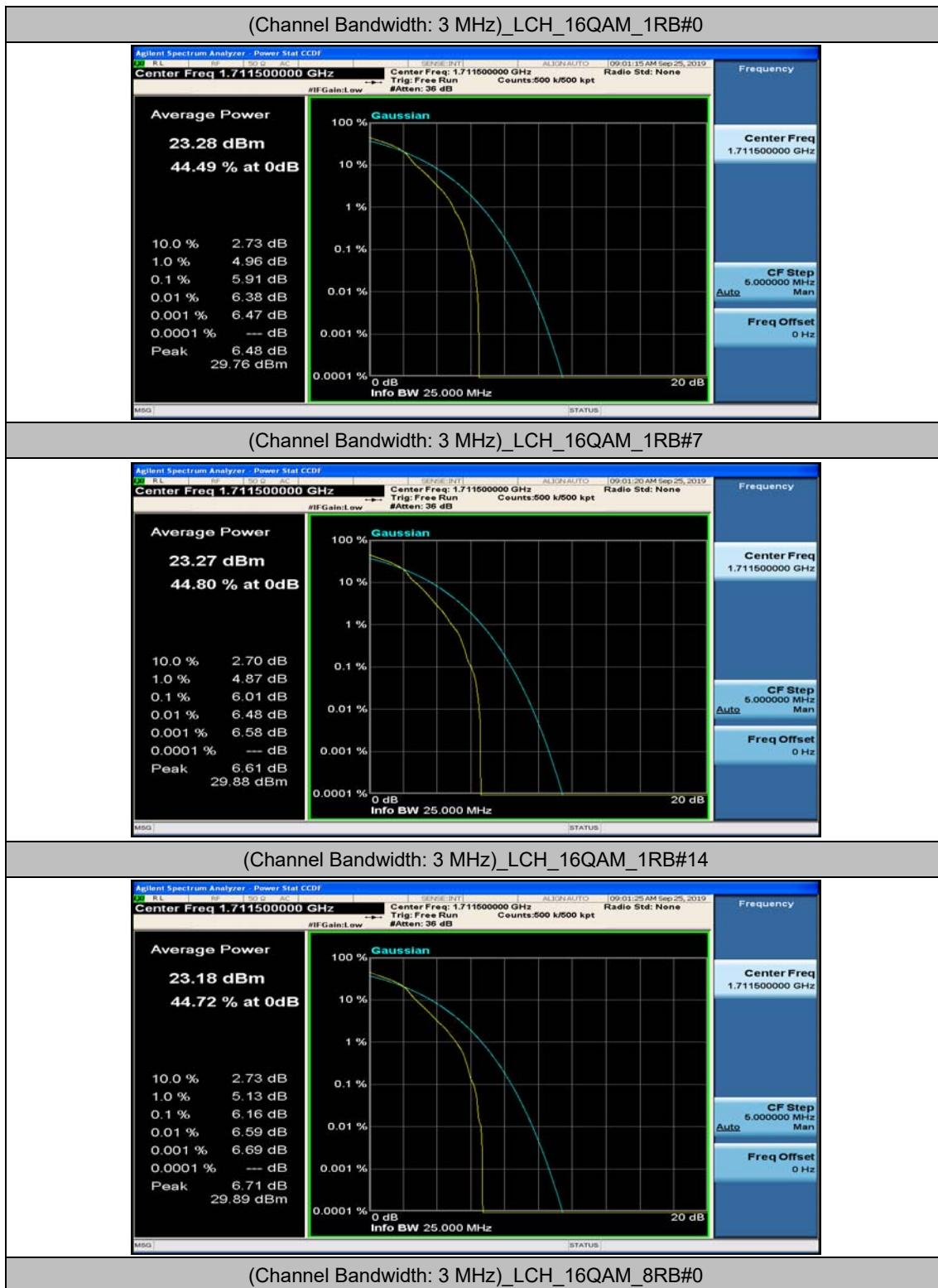
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_1RB#14

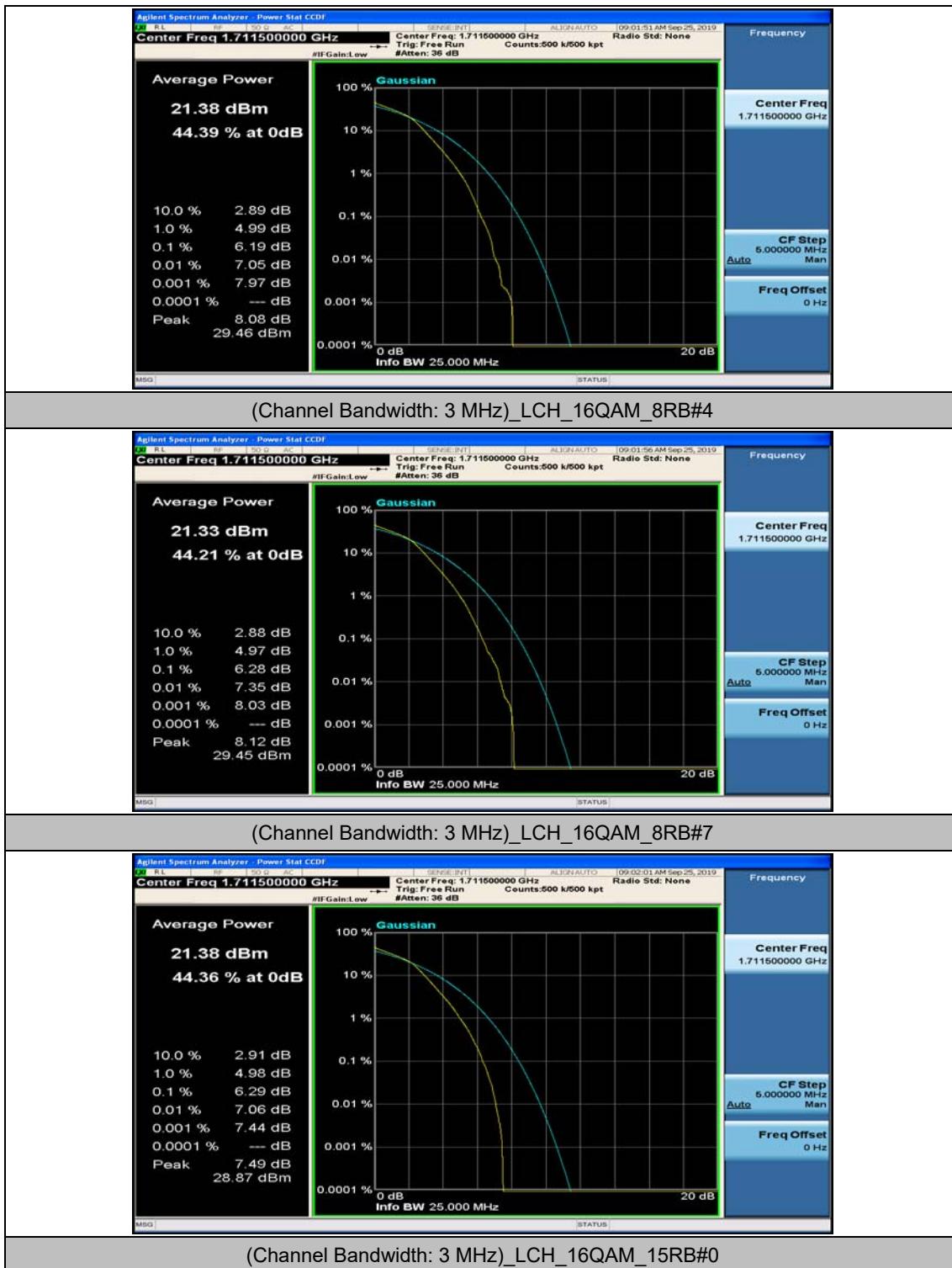


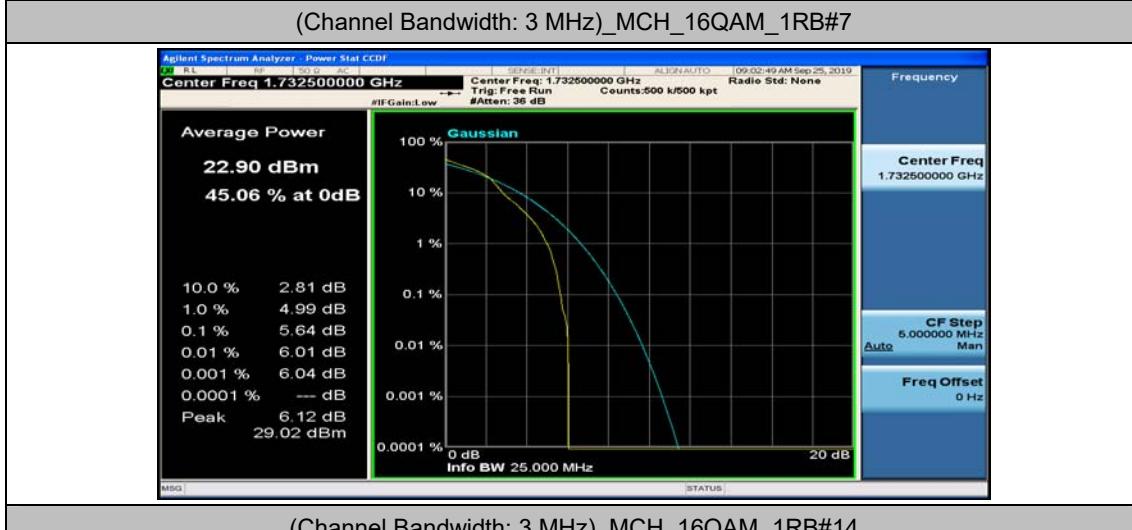
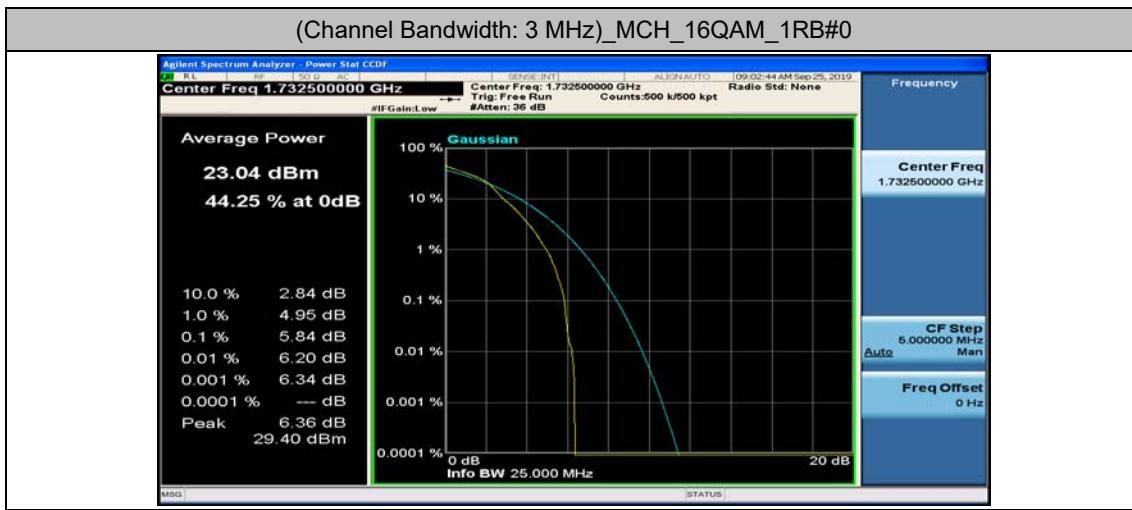




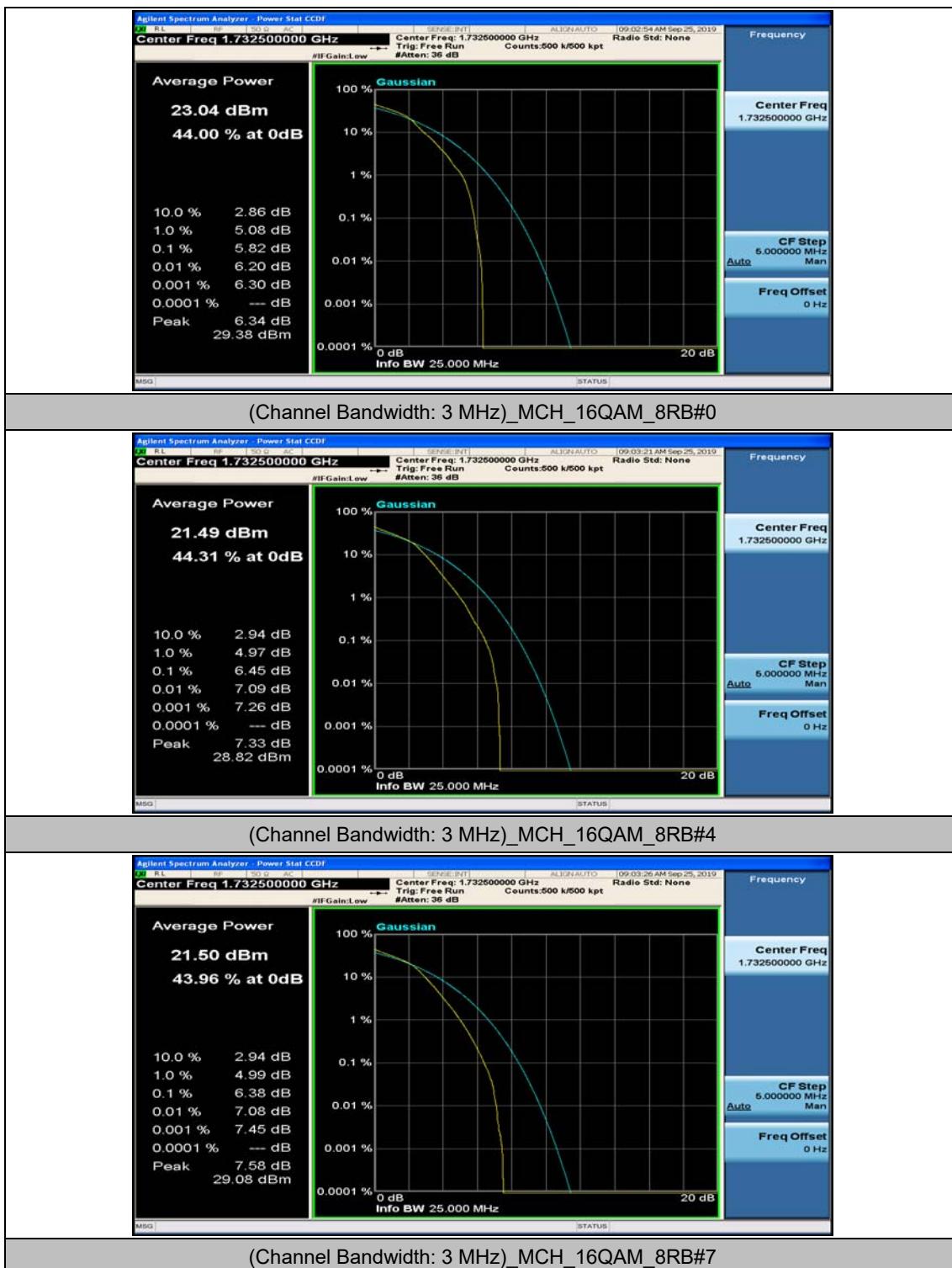


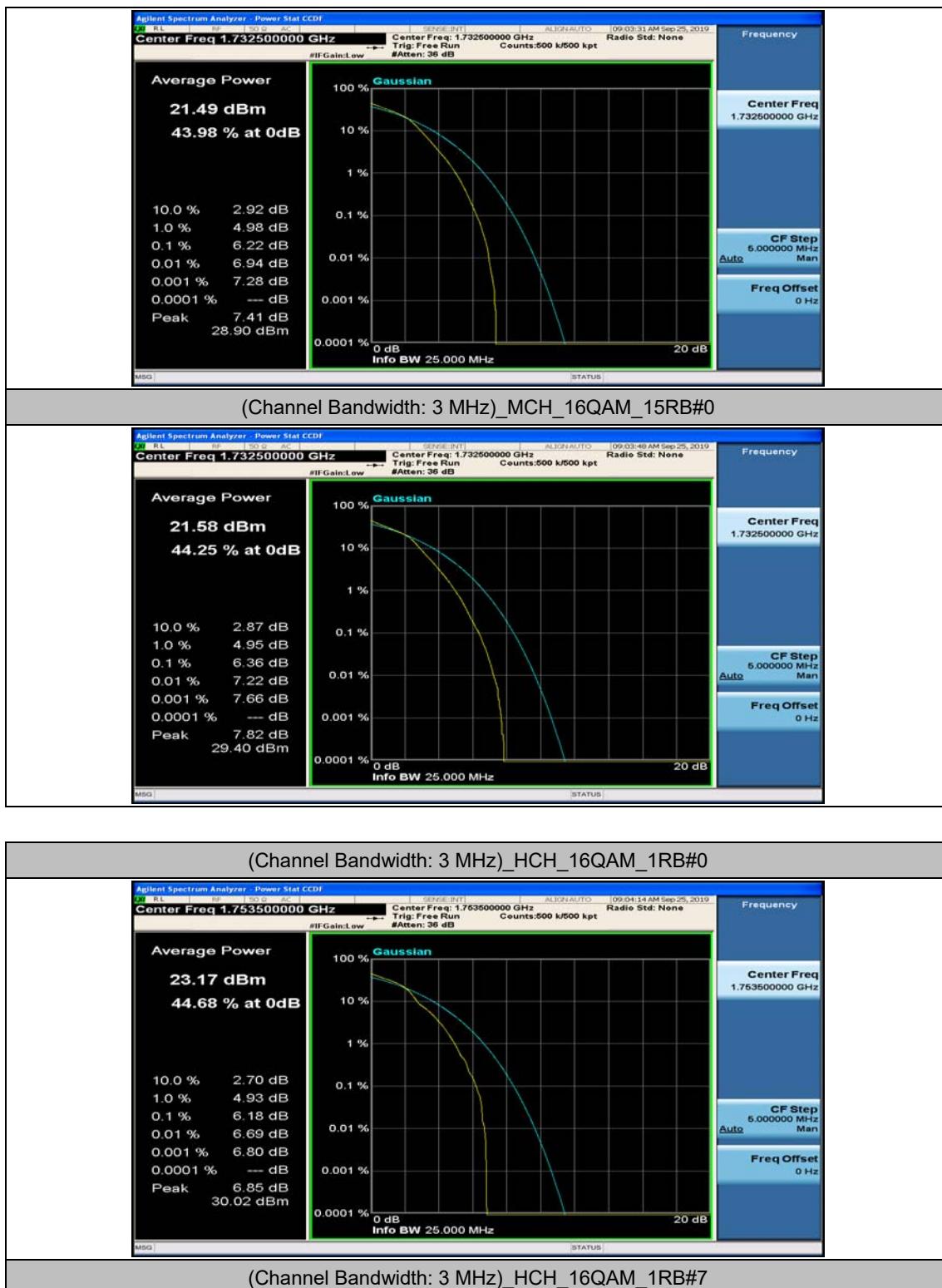


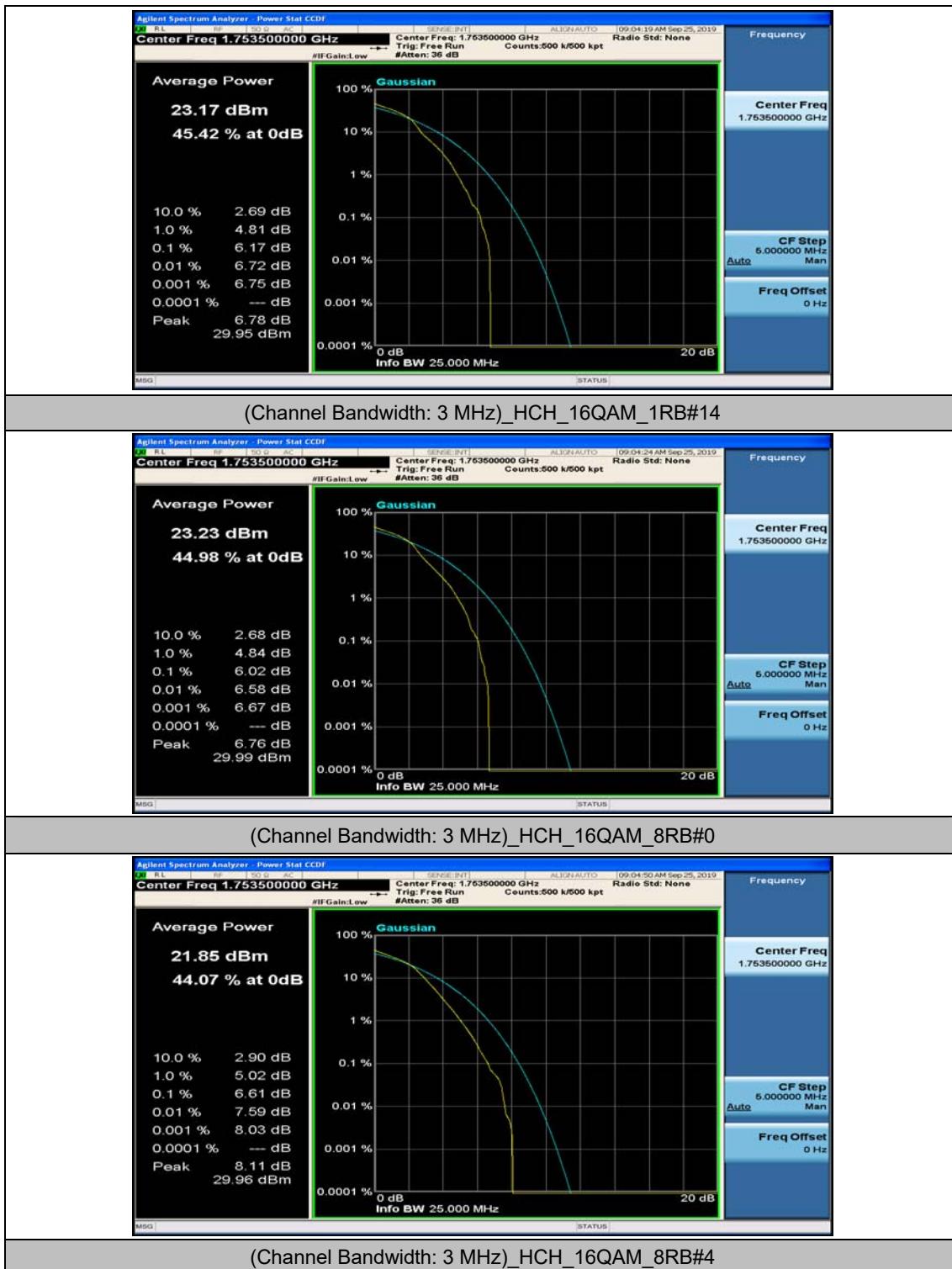


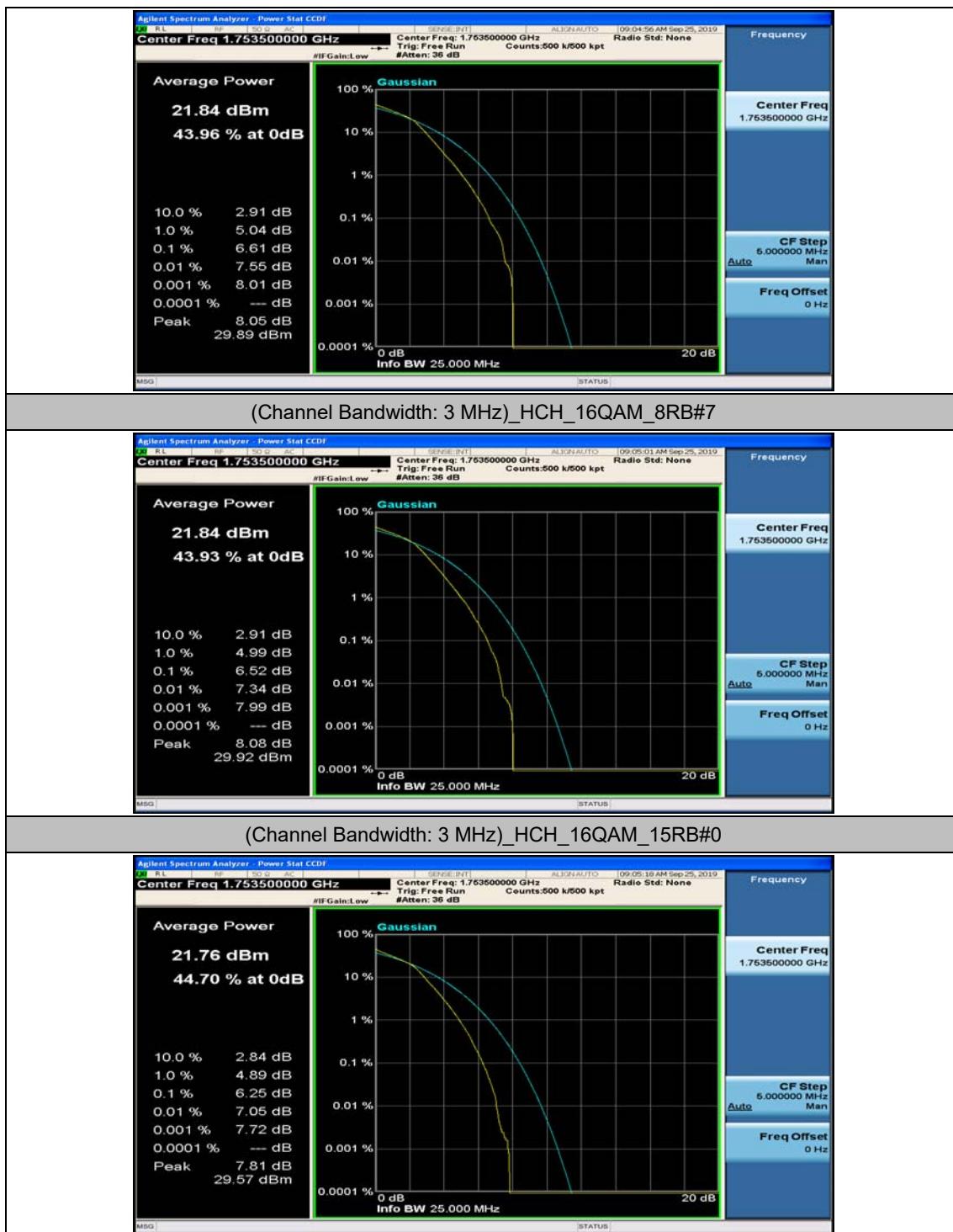


**(Channel Bandwidth: 3 MHz)\_MCH\_16QAM\_1RB#14**

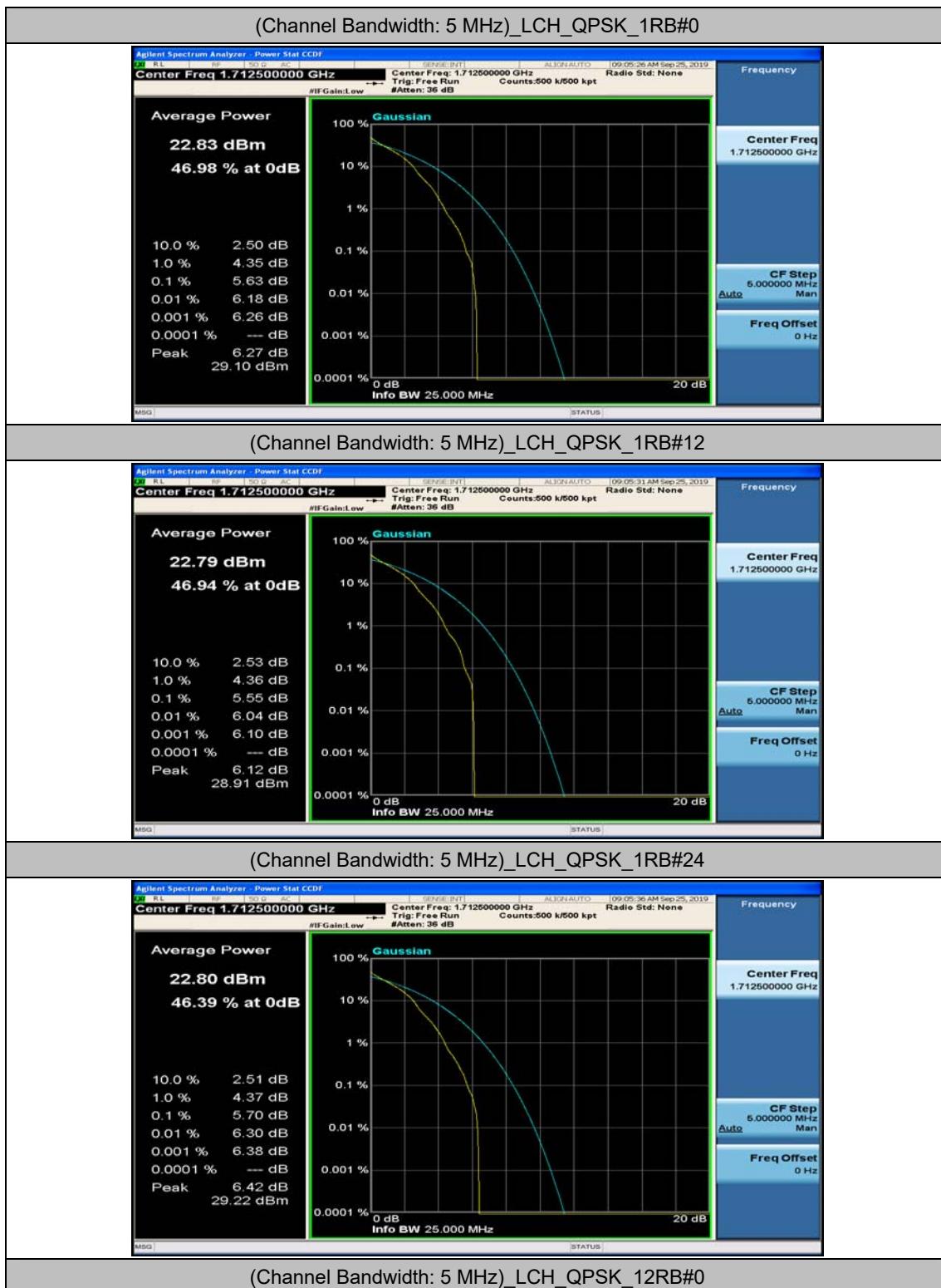


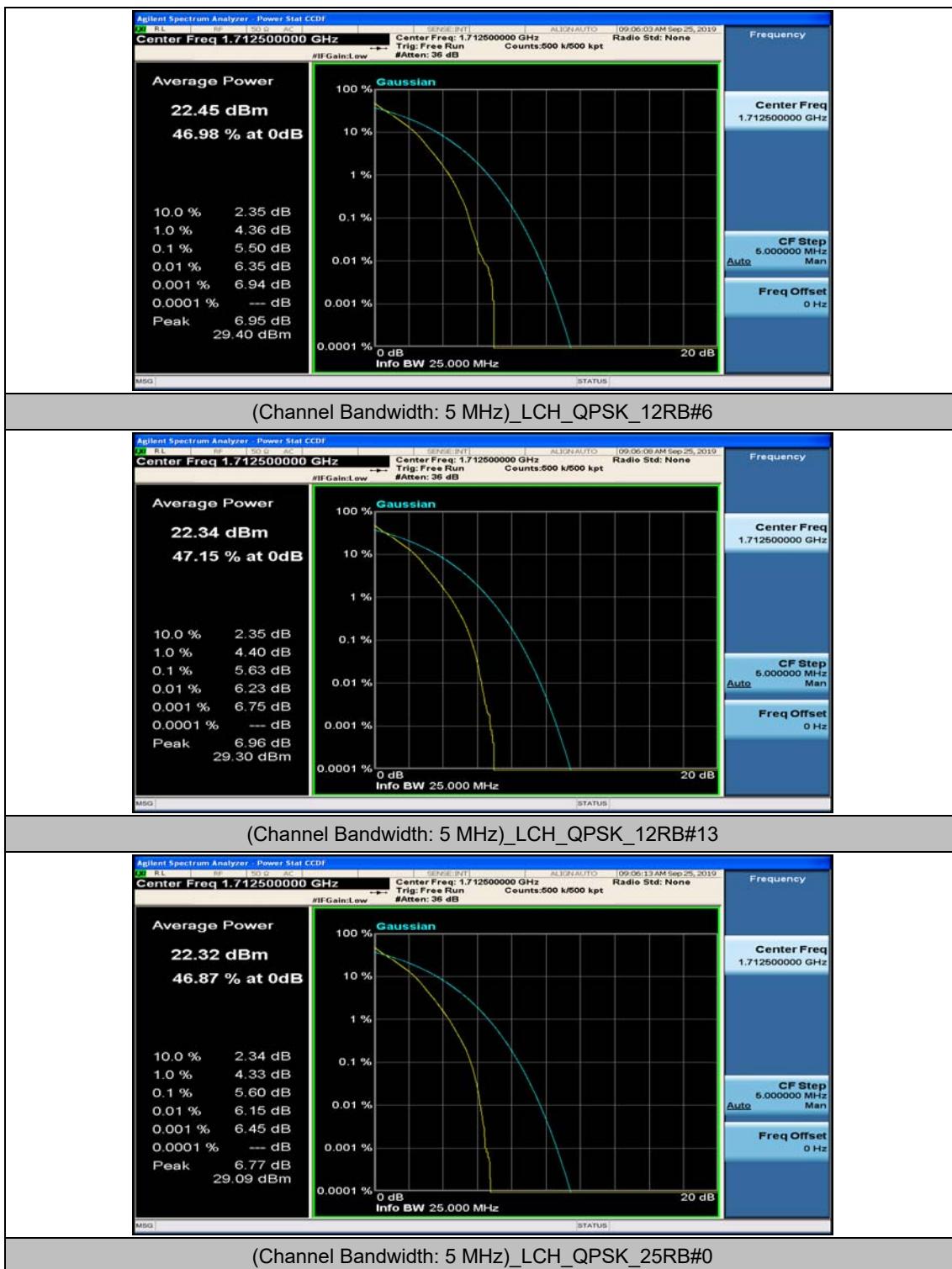


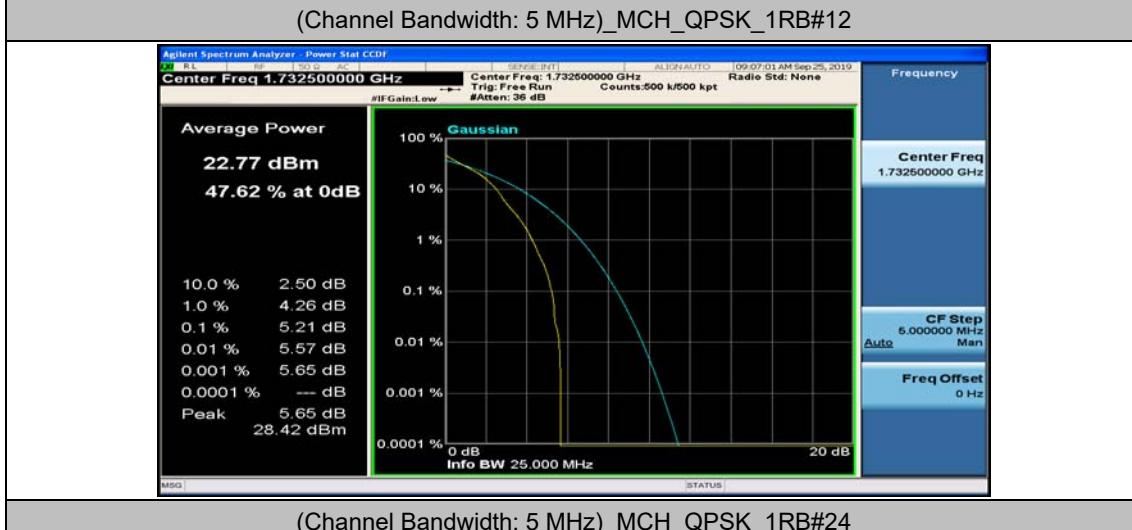
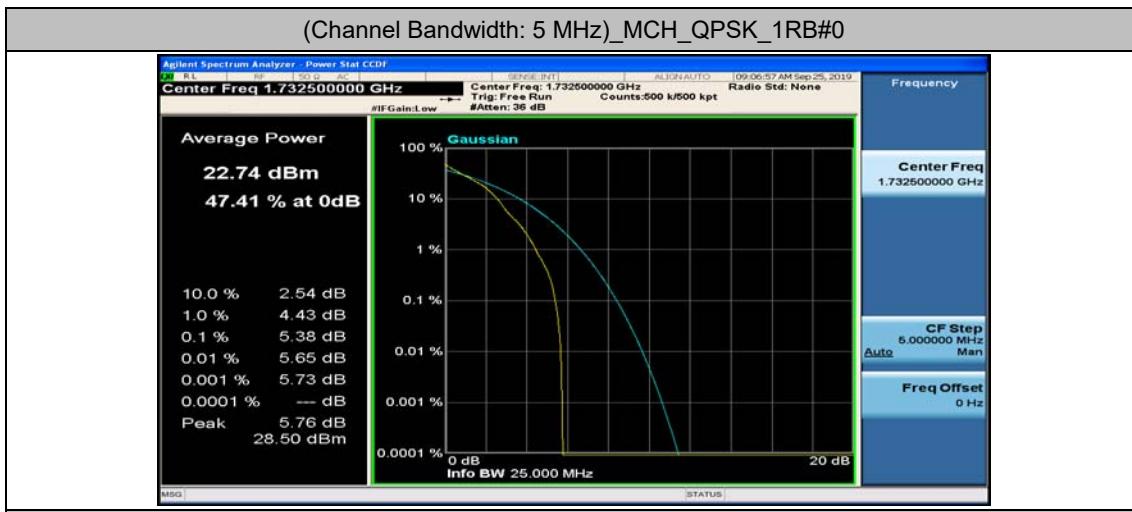
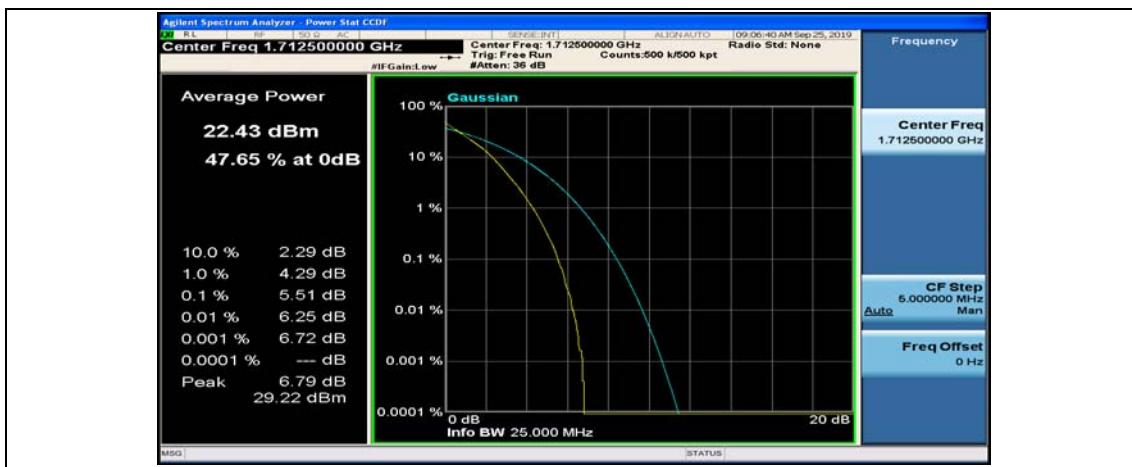




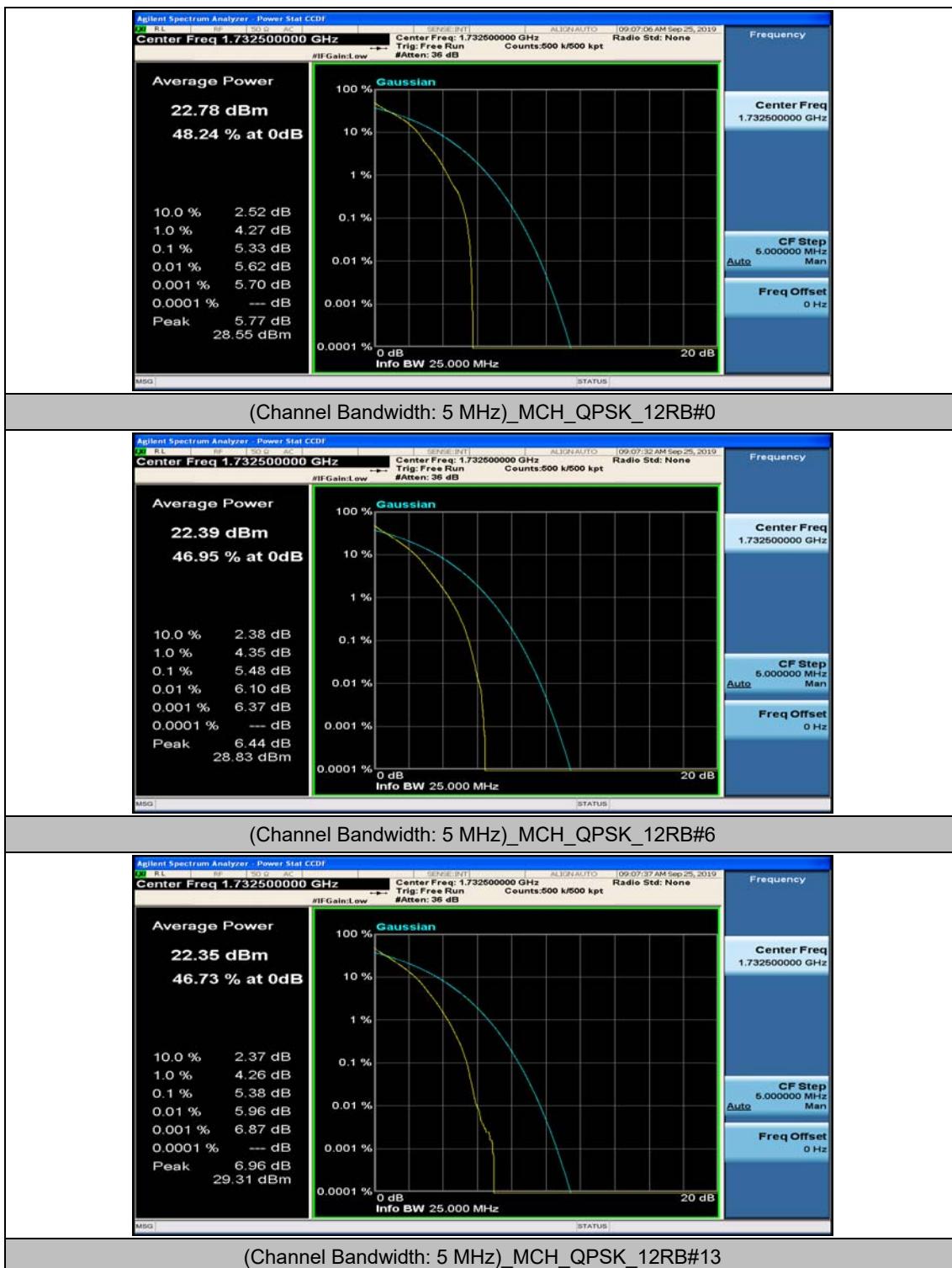
## Channel Bandwidth: 5 MHz

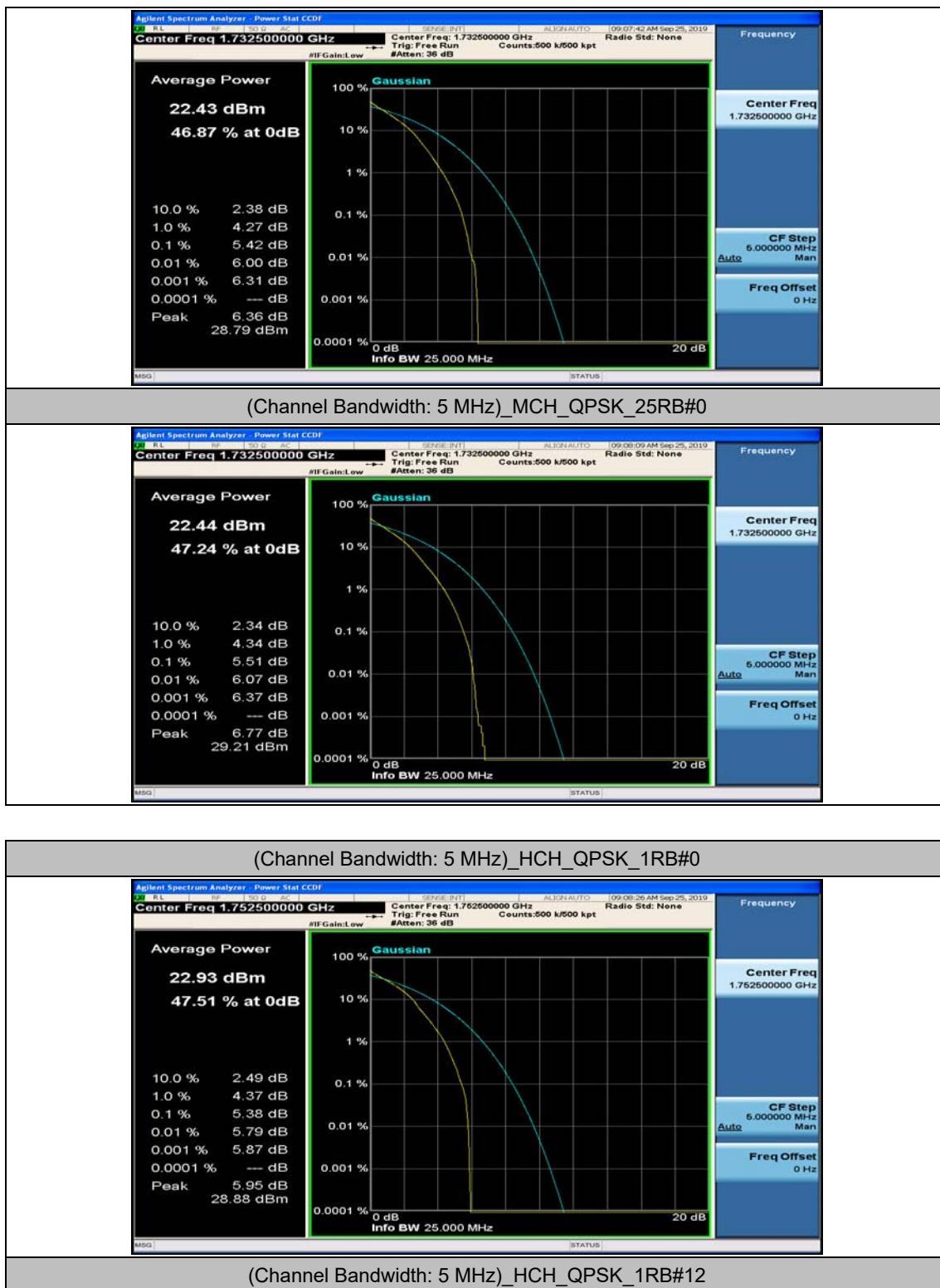


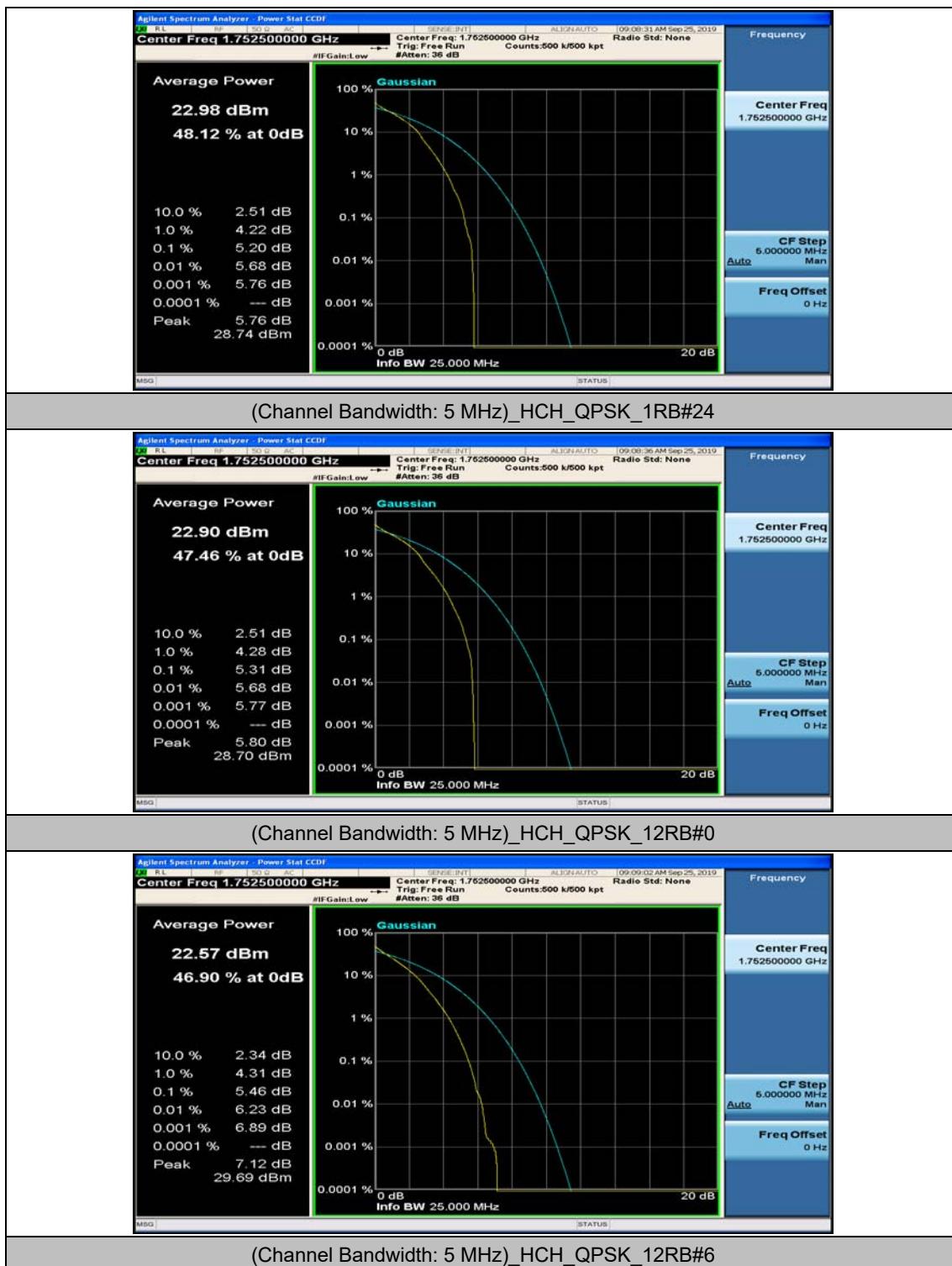


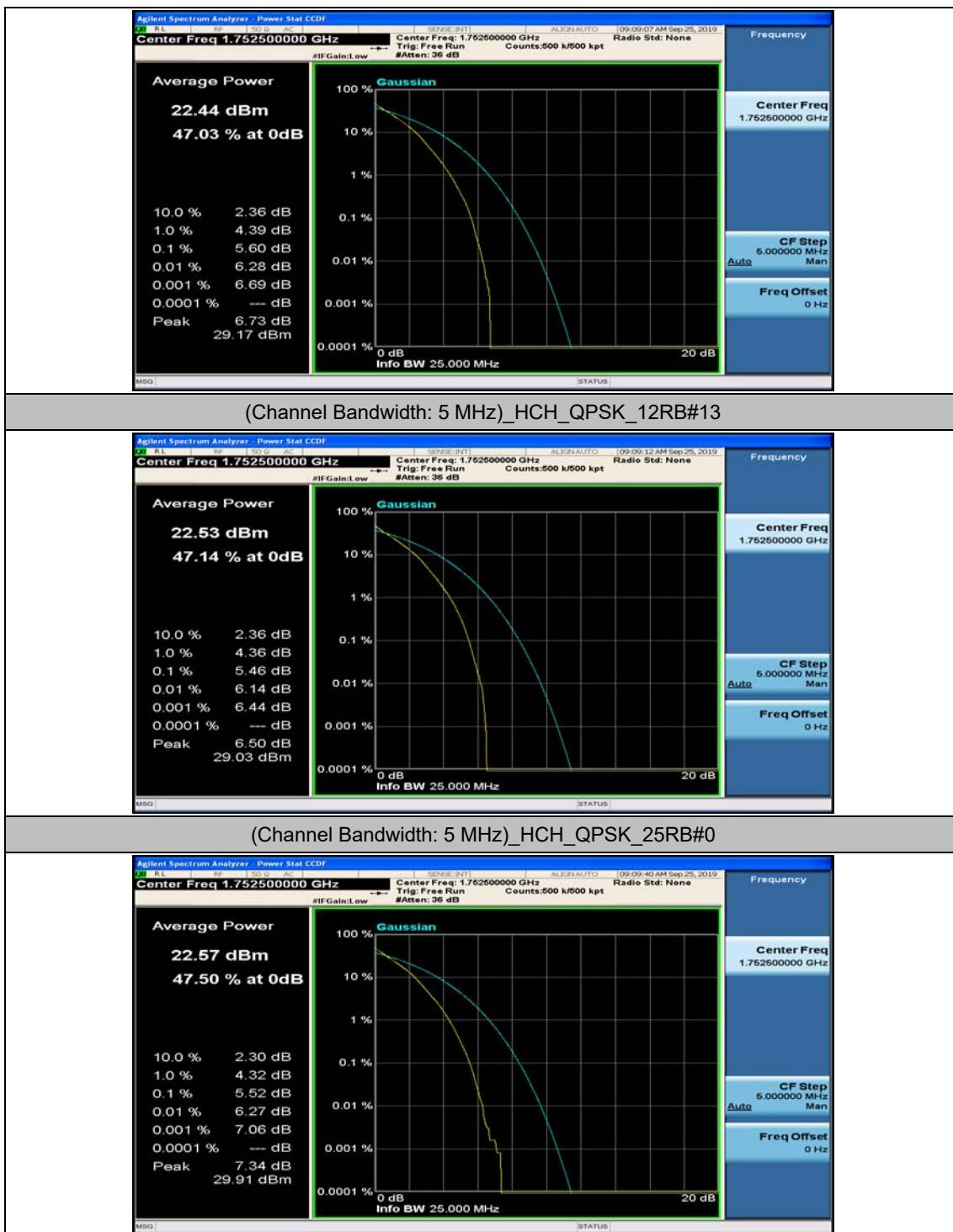


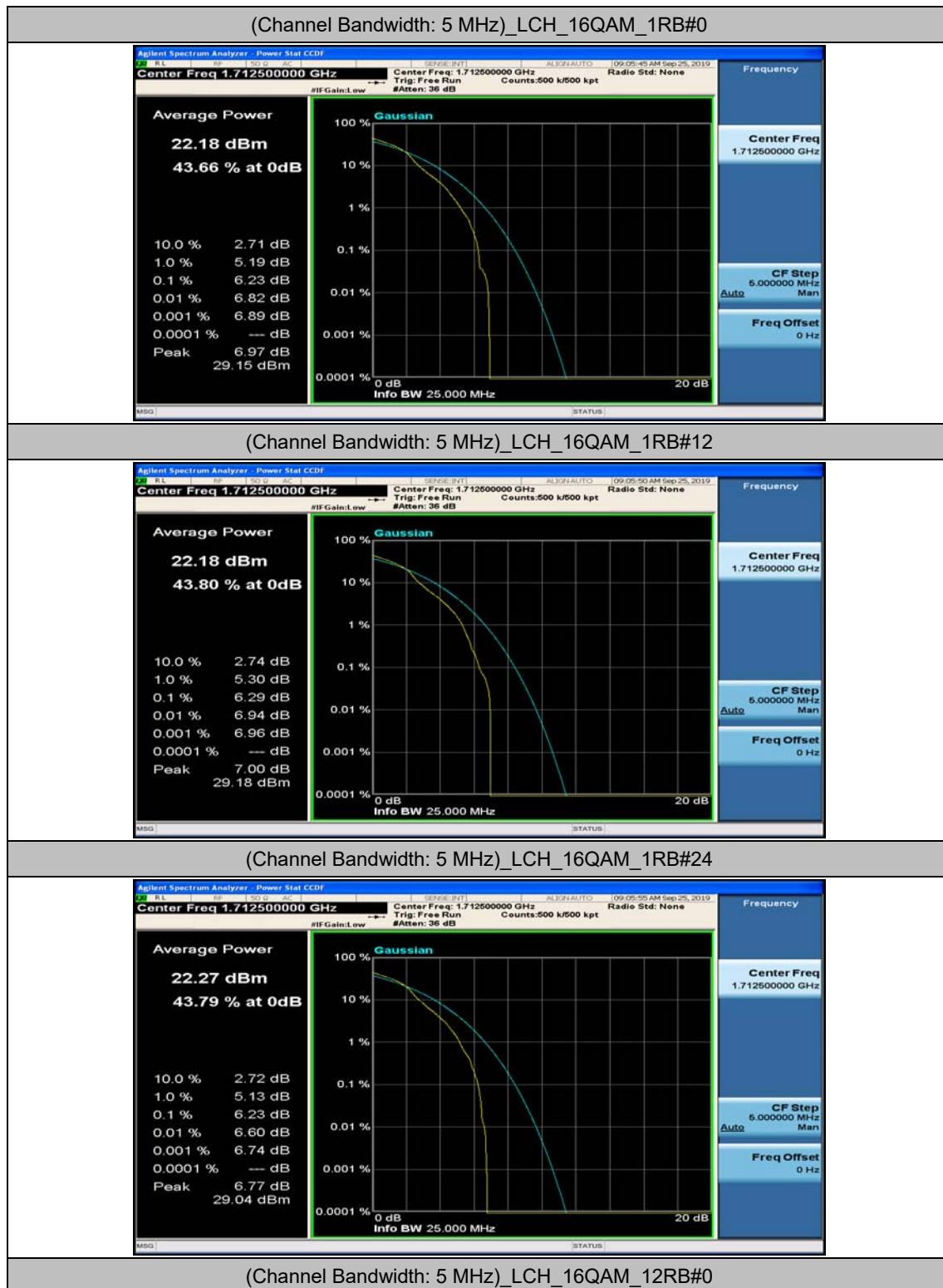
(Channel Bandwidth: 5 MHz)\_MCH\_QPSK\_1RB#24

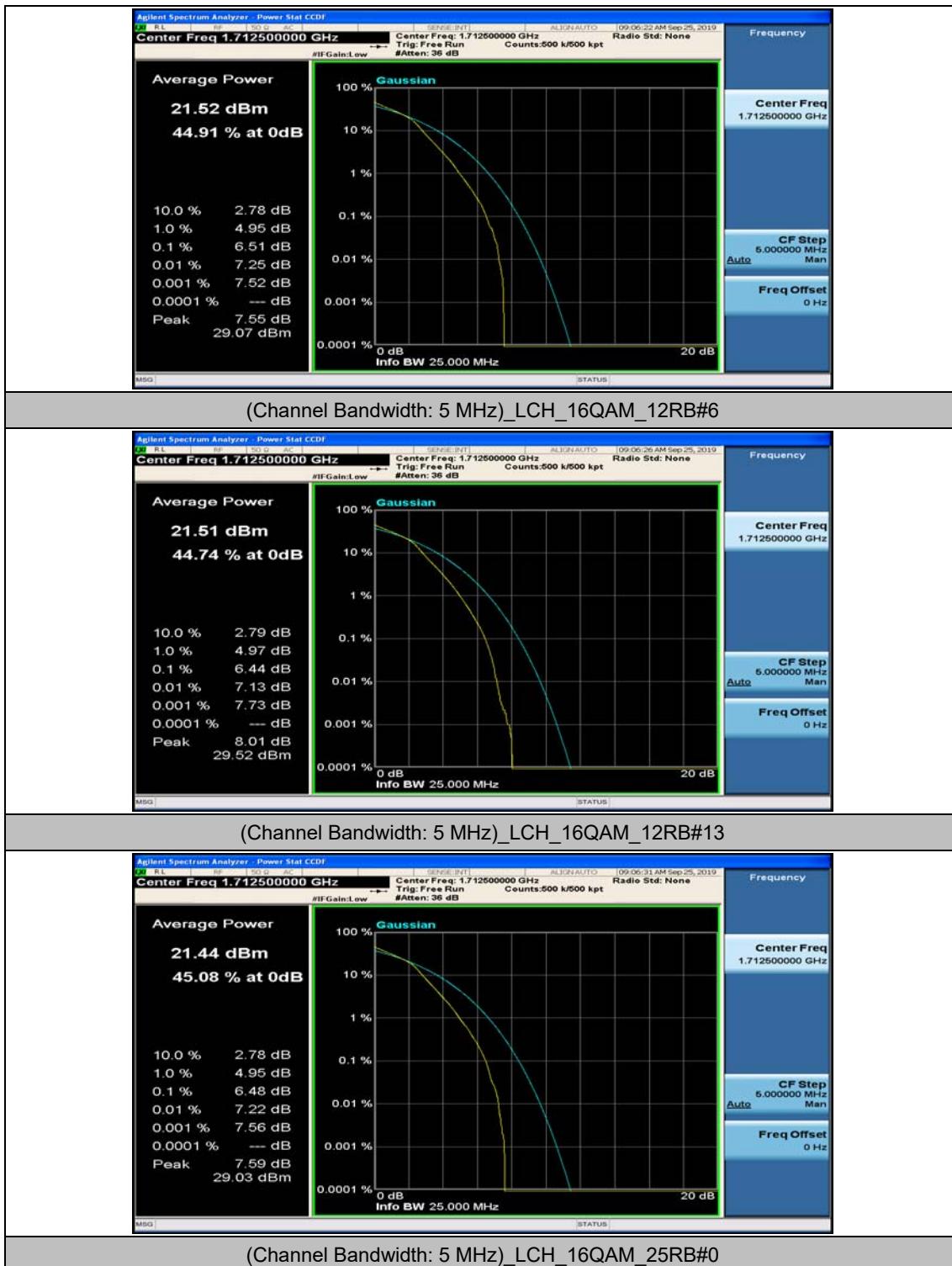


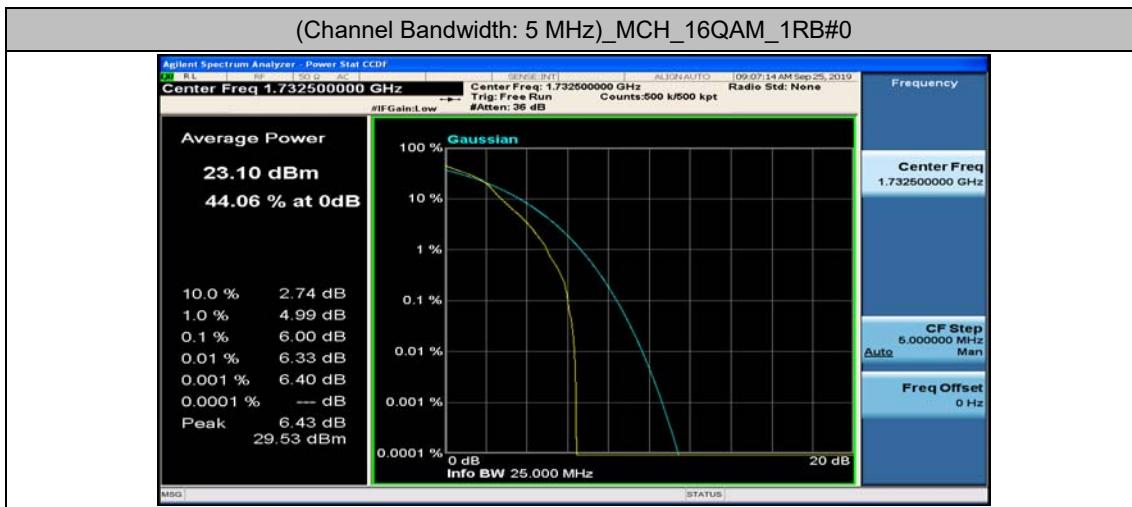
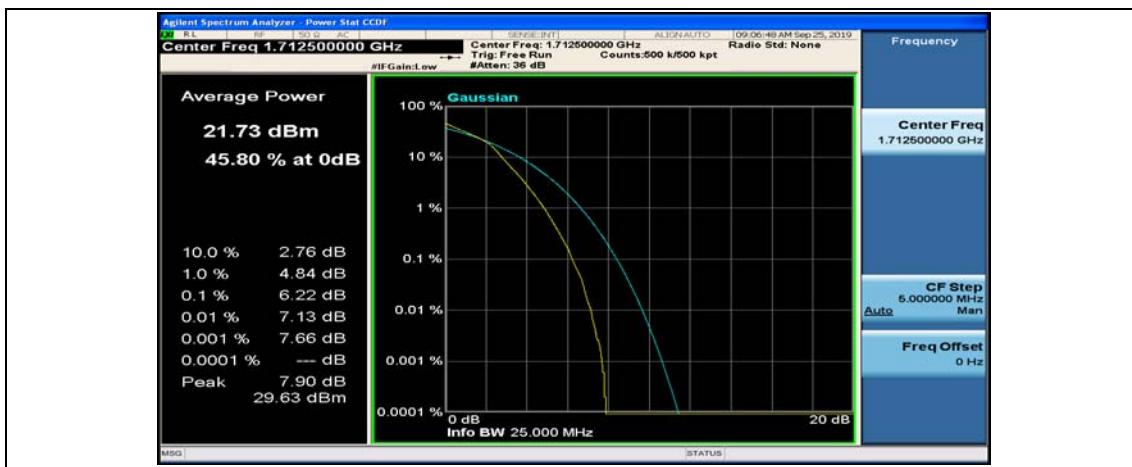




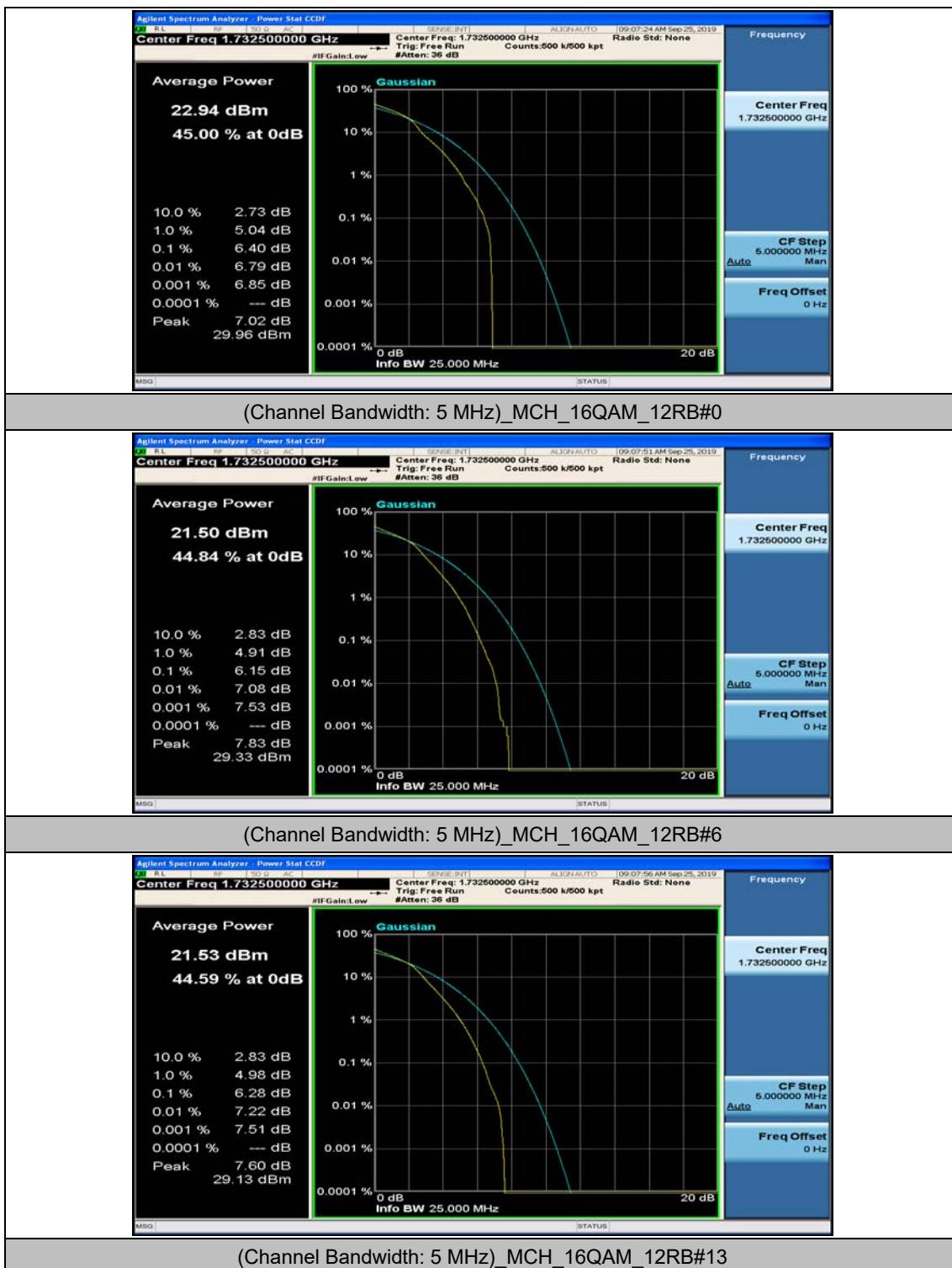


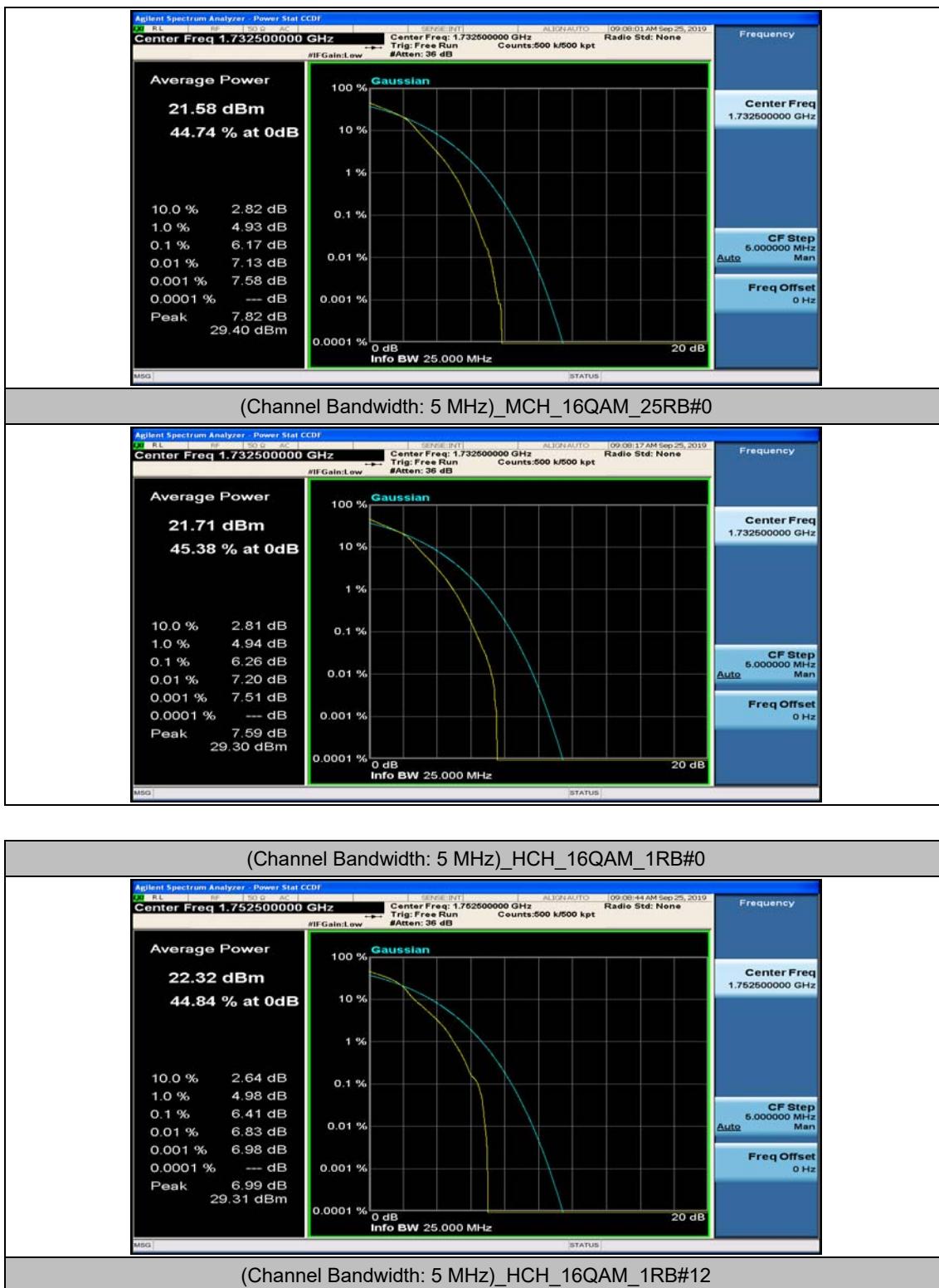


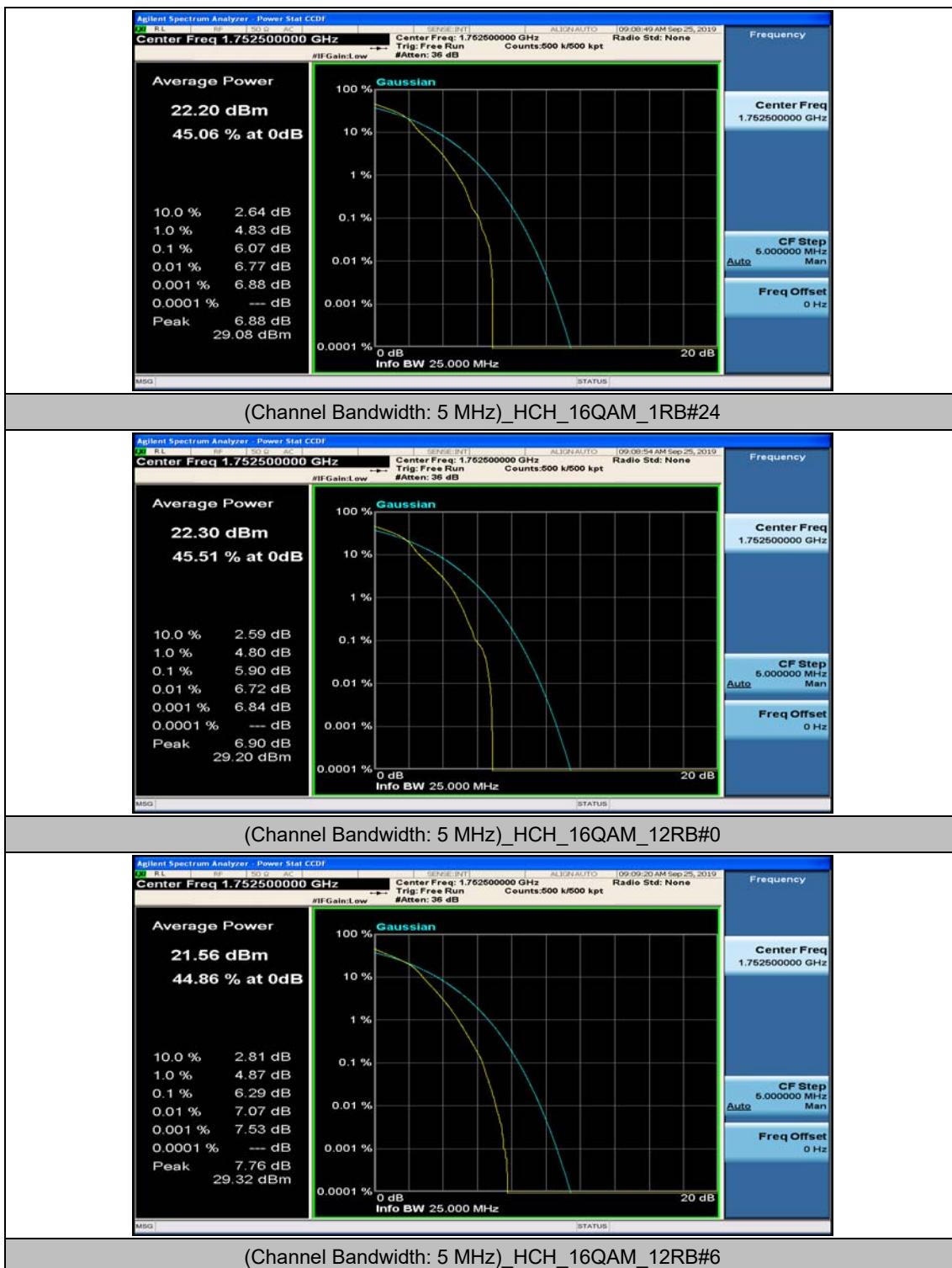


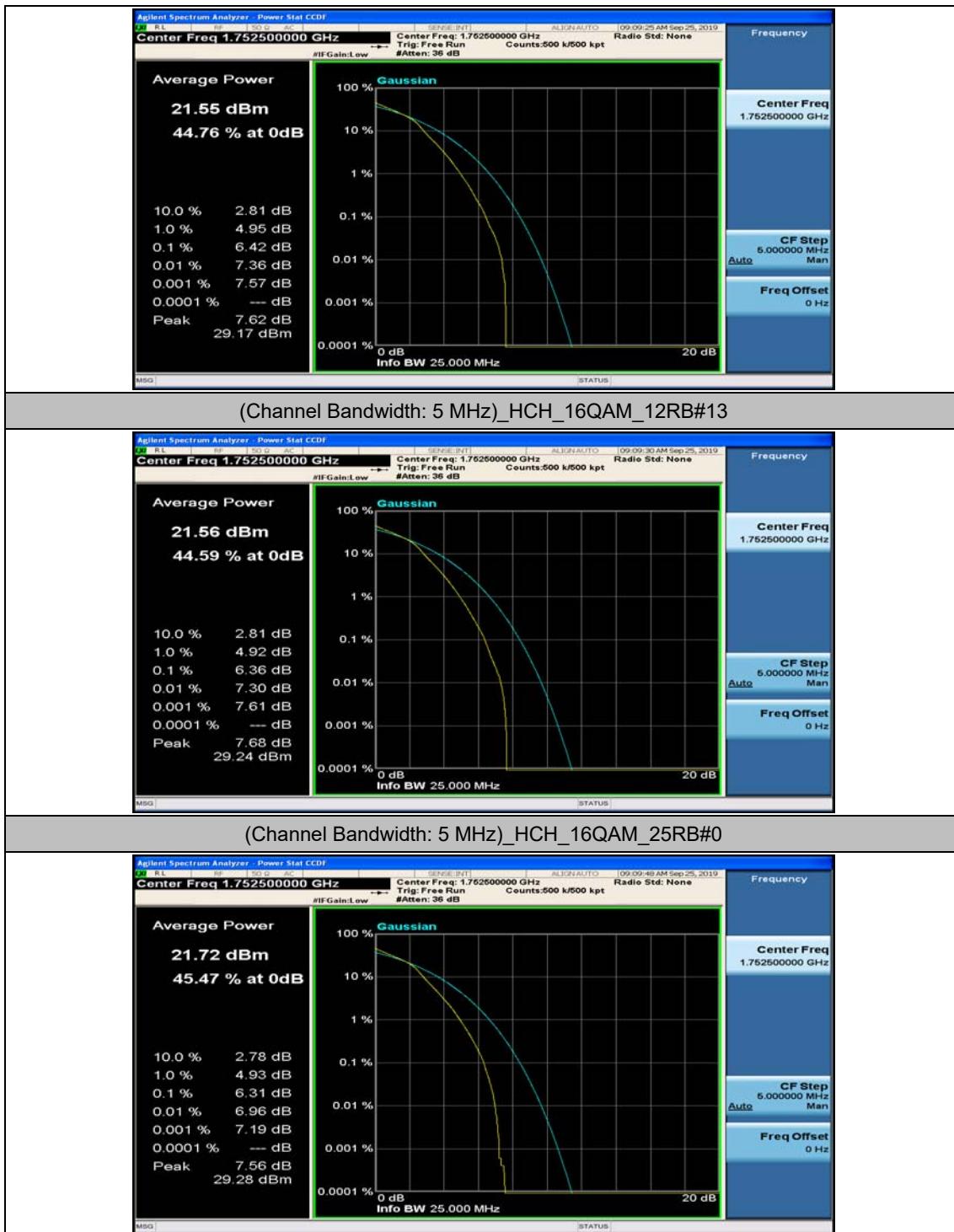


**(Channel Bandwidth: 5 MHz)\_MCH\_16QAM\_1RB#24**









## Channel Bandwidth: 10 MHz

