

## 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	24.54	PASS
		1	3	24.52	PASS
		1	5	24.55	PASS
		3	0	23.65	PASS
		3	2	23.64	PASS
		3	3	23.58	PASS
		6	0	23.56	PASS
	MCH	1	0	24.61	PASS
		1	3	24.59	PASS
		1	5	24.64	PASS
		3	0	23.69	PASS
		3	2	23.74	PASS
		3	3	23.68	PASS
		6	0	23.59	PASS
16QAM	HCH	1	0	24.22	PASS
		1	3	24.17	PASS
		1	5	24.10	PASS
		3	0	23.37	PASS
		3	2	23.42	PASS
		3	3	23.36	PASS
		6	0	23.46	PASS
	LCH	1	0	23.67	PASS
		1	3	23.69	PASS
		1	5	23.63	PASS
		3	0	23.81	PASS
		3	2	23.76	PASS
		3	3	23.79	PASS
		6	0	22.44	PASS
	MCH	1	0	23.29	PASS
		1	3	23.29	PASS
		1	5	23.29	PASS
		3	0	23.53	PASS

		3	2	23.59	PASS
		3	3	23.55	PASS
		6	0	22.58	PASS
HCH	HCH	1	0	23.46	PASS
		1	3	23.45	PASS
		1	5	23.46	PASS
		3	0	22.97	PASS
		3	2	22.96	PASS
		3	3	22.92	PASS
		6	0	22.55	PASS

### Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.39	PASS
		1	7	24.43	PASS
		1	14	24.49	PASS
		8	0	23.56	PASS
		8	4	23.44	PASS
		8	7	23.49	PASS
		15	0	23.65	PASS
	MCH	1	0	24.61	PASS
		1	7	24.60	PASS
		1	14	24.55	PASS
		8	0	23.65	PASS
		8	4	23.71	PASS
		8	7	23.67	PASS
		15	0	23.66	PASS
16QAM	HCH	1	0	24.27	PASS
		1	7	24.19	PASS
		1	14	24.22	PASS
		8	0	23.38	PASS
		8	4	23.42	PASS
		8	7	23.40	PASS
		15	0	23.50	PASS
	LCH	1	0	23.52	PASS
		1	7	23.51	PASS
		1	14	23.58	PASS
		8	0	22.56	PASS
		8	4	22.62	PASS
		8	7	22.64	PASS
		15	0	22.73	PASS

	MCH	1	0	23.53	PASS
		1	7	23.60	PASS
		1	14	23.47	PASS
		8	0	22.70	PASS
		8	4	22.66	PASS
		8	7	22.72	PASS
		15	0	22.73	PASS
	HCH	1	0	23.23	PASS
		1	7	23.20	PASS
		1	14	23.12	PASS
		8	0	22.73	PASS
		8	4	22.67	PASS
		8	7	22.62	PASS
		15	0	22.68	PASS

### Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.53	PASS
		1	12	24.55	PASS
		1	24	24.53	PASS
		12	0	23.59	PASS
		12	6	23.66	PASS
		12	13	23.57	PASS
		25	0	23.56	PASS
	MCH	1	0	24.55	PASS
		1	12	24.46	PASS
		1	24	24.52	PASS
		12	0	23.62	PASS
		12	6	23.61	PASS
		12	13	23.65	PASS
		25	0	23.66	PASS
	HCH	1	0	24.49	PASS
		1	12	24.47	PASS
		1	24	24.46	PASS
		12	0	23.49	PASS
		12	6	23.41	PASS
		12	13	23.52	PASS
		25	0	23.52	PASS
16QAM	LCH	1	0	23.39	PASS
		1	12	23.44	PASS
		1	24	23.40	PASS

		12	0	22.63	PASS
		12	6	22.63	PASS
		12	13	22.72	PASS
		25	0	22.86	PASS
MCH	MCH	1	0	23.18	PASS
		1	12	23.26	PASS
		1	24	23.23	PASS
		12	0	22.80	PASS
		12	6	22.77	PASS
		12	13	22.81	PASS
		25	0	22.83	PASS
HCH	HCH	1	0	23.15	PASS
		1	12	23.17	PASS
		1	24	23.13	PASS
		12	0	22.41	PASS
		12	6	22.45	PASS
		12	13	22.45	PASS
		25	0	22.68	PASS

### Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.37	PASS
		1	24	24.40	PASS
		1	49	24.48	PASS
		25	0	23.61	PASS
		25	12	23.45	PASS
		25	25	23.70	PASS
		50	0	23.61	PASS
	MCH	1	0	24.73	PASS
		1	24	24.57	PASS
		1	49	24.59	PASS
		25	0	23.73	PASS
		25	12	23.59	PASS
		25	25	23.73	PASS
		50	0	23.59	PASS
	HCH	1	0	24.43	PASS
		1	24	24.37	PASS
		1	49	24.29	PASS
		25	0	23.42	PASS
		25	12	23.51	PASS
		25	25	23.38	PASS

		50	0	23.37	PASS
16QAM	LCH	1	0	23.49	PASS
		1	24	23.46	PASS
		1	49	23.56	PASS
		25	0	22.73	PASS
		25	12	22.65	PASS
		25	25	22.77	PASS
		50	0	22.71	PASS
	MCH	1	0	23.34	PASS
		1	24	23.24	PASS
		1	49	23.22	PASS
		25	0	22.80	PASS
		25	12	22.76	PASS
		25	25	22.79	PASS
		50	0	22.77	PASS
	HCH	1	0	23.76	PASS
		1	24	23.69	PASS
		1	49	23.60	PASS
		25	0	22.59	PASS
		25	12	22.58	PASS
		25	25	22.64	PASS
		50	0	22.65	PASS

### Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.47	PASS
		1	37	24.54	PASS
		1	74	24.59	PASS
		37	0	23.49	PASS
		37	18	23.72	PASS
		37	38	23.78	PASS
		75	0	23.57	PASS
	MCH	1	0	24.68	PASS
		1	37	24.55	PASS
		1	74	24.65	PASS
		37	0	23.70	PASS
		37	18	23.60	PASS
		37	38	23.62	PASS
		75	0	23.65	PASS
	HCH	1	0	24.61	PASS
		1	37	24.45	PASS

		1	74	24.34	PASS
		37	0	23.44	PASS
		37	18	23.46	PASS
		37	38	23.47	PASS
		75	0	23.50	PASS
16QAM	LCH	1	0	23.53	PASS
		1	37	23.62	PASS
		1	74	23.70	PASS
		37	0	22.76	PASS
		37	18	22.83	PASS
		37	38	22.90	PASS
		75	0	22.84	PASS
	MCH	1	0	23.69	PASS
		1	37	23.62	PASS
		1	74	23.60	PASS
		37	0	22.89	PASS
		37	18	22.76	PASS
		37	38	22.77	PASS
		75	0	22.71	PASS
	HCH	1	0	23.81	PASS
		1	37	23.76	PASS
		1	74	23.59	PASS
		37	0	22.70	PASS
		37	18	22.65	PASS
		37	38	22.53	PASS
		75	0	22.68	PASS

### Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.54	PASS
		1	49	24.69	PASS
		1	99	24.77	PASS
		50	0	23.56	PASS
		50	25	23.51	PASS
		50	50	23.53	PASS
		100	0	23.65	PASS
	MCH	1	0	24.58	PASS
		1	49	24.44	PASS
		1	99	24.41	PASS
		50	0	23.78	PASS
		50	25	23.62	PASS

		50	50	23.55	PASS
		100	0	23.66	PASS
16QAM	HCH	1	0	24.94	PASS
		1	49	24.86	PASS
		1	99	24.77	PASS
		50	0	23.83	PASS
		50	25	23.46	PASS
		50	50	23.54	PASS
		100	0	23.61	PASS
16QAM	LCH	1	0	23.60	PASS
		1	49	23.64	PASS
		1	99	23.79	PASS
		50	0	22.72	PASS
		50	25	22.77	PASS
		50	50	22.89	PASS
		100	0	22.65	PASS
	MCH	1	0	23.91	PASS
		1	49	23.92	PASS
		1	99	23.89	PASS
		50	0	22.90	PASS
		50	25	22.77	PASS
		50	50	22.72	PASS
		100	0	22.70	PASS
16QAM	HCH	1	0	23.90	PASS
		1	49	23.81	PASS
		1	99	23.71	PASS
		50	0	22.67	PASS
		50	25	22.69	PASS
		50	50	22.56	PASS
		100	0	22.64	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	3.9	<13	PASS
		1	3	3.92	<13	PASS
		1	5	3.94	<13	PASS
		3	0	3.93	<13	PASS
		3	2	3.92	<13	PASS
		3	3	3.99	<13	PASS
		6	0	4.64	<13	PASS
	MCH	1	0	4.09	<13	PASS
		1	3	4.05	<13	PASS
		1	5	3.88	<13	PASS
		3	0	4.15	<13	PASS
		3	2	4.11	<13	PASS
		3	3	4.18	<13	PASS
		6	0	4.73	<13	PASS
16QAM	LCH	1	0	3.78	<13	PASS
		1	3	3.61	<13	PASS
		1	5	3.6	<13	PASS
		3	0	3.7	<13	PASS
		3	2	3.57	<13	PASS
		3	3	3.6	<13	PASS
		6	0	4.2	<13	PASS
	MCH	1	0	4.07	<13	PASS
		1	3	4.12	<13	PASS
		1	5	4.21	<13	PASS
		3	0	4.93	<13	PASS
		3	2	4.74	<13	PASS
		3	3	4.75	<13	PASS
		6	0	5.54	<13	PASS

		3	2	5.24	<13	PASS
		3	3	5.22	<13	PASS
		6	0	5.67	<13	PASS
HCH		1	0	4.46	<13	PASS
		1	3	4.3	<13	PASS
		1	5	4.4	<13	PASS
		3	0	4.77	<13	PASS
		3	2	4.82	<13	PASS
		3	3	4.79	<13	PASS
		6	0	5.14	<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	3.95	<13	PASS
		1	7	3.94	<13	PASS
		1	14	4.03	<13	PASS
		8	0	4.65	<13	PASS
		8	4	4.69	<13	PASS
		8	7	4.74	<13	PASS
		15	0	4.72	<13	PASS
	MCH	1	0	4.05	<13	PASS
		1	7	3.95	<13	PASS
		1	14	4.02	<13	PASS
		8	0	4.76	<13	PASS
		8	4	4.74	<13	PASS
		8	7	4.74	<13	PASS
		15	0	4.84	<13	PASS
	HCH	1	0	3.83	<13	PASS
		1	7	3.7	<13	PASS
		1	14	3.59	<13	PASS
		8	0	4.41	<13	PASS
		8	4	4.36	<13	PASS
		8	7	4.29	<13	PASS
		15	0	4.3	<13	PASS
16QAM	LCH	1	0	4.23	<13	PASS
		1	7	4.24	<13	PASS
		1	14	4.27	<13	PASS
		8	0	5.53	<13	PASS
		8	4	5.4	<13	PASS

		8	7	5.5	<13	PASS
		15	0	5.57	<13	PASS
MCH	1	0		4.56	<13	PASS
	1	7		4.47	<13	PASS
	1	14		4.61	<13	PASS
	8	0		5.59	<13	PASS
	8	4		5.54	<13	PASS
	8	7		5.57	<13	PASS
	15	0		5.65	<13	PASS
HCH	1	0		4.3	<13	PASS
	1	7		4.14	<13	PASS
	1	14		4.03	<13	PASS
	8	0		5.21	<13	PASS
	8	4		5.23	<13	PASS
	8	7		5.14	<13	PASS
	15	0		5.11	<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	4.13	<13	PASS
		1	12	4.2	<13	PASS
		1	24	4.29	<13	PASS
		12	0	4.64	<13	PASS
		12	6	4.72	<13	PASS
		12	13	4.73	<13	PASS
		25	0	4.65	<13	PASS
	MCH	1	0	4.17	<13	PASS
		1	12	4.18	<13	PASS
		1	24	4.15	<13	PASS
		12	0	4.78	<13	PASS
		12	6	4.74	<13	PASS
		12	13	4.7	<13	PASS
		25	0	4.75	<13	PASS
	HCH	1	0	3.86	<13	PASS
		1	12	3.62	<13	PASS
		1	24	3.44	<13	PASS
		12	0	4.5	<13	PASS
		12	6	4.49	<13	PASS
		12	13	4.27	<13	PASS

		25	0	4.37	<13	PASS
16QAM	LCH	1	0	4.87	<13	PASS
		1	12	4.92	<13	PASS
		1	24	5.09	<13	PASS
		12	0	5.59	<13	PASS
		12	6	5.61	<13	PASS
		12	13	5.61	<13	PASS
		25	0	5.43	<13	PASS
	MCH	1	0	4.84	<13	PASS
		1	12	4.79	<13	PASS
		1	24	4.85	<13	PASS
		12	0	5.56	<13	PASS
		12	6	5.62	<13	PASS
		12	13	5.59	<13	PASS
		25	0	5.63	<13	PASS
	HCH	1	0	5.02	<13	PASS
		1	12	4.98	<13	PASS
		1	24	4.7	<13	PASS
		12	0	5.45	<13	PASS
		12	6	5.34	<13	PASS
		12	13	5.27	<13	PASS
		25	0	5.18	<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	3.98	<13	PASS
		1	24	4.14	<13	PASS
		1	49	4.17	<13	PASS
		25	0	4.69	<13	PASS
		25	12	4.83	<13	PASS
		25	25	4.81	<13	PASS
		50	0	4.82	<13	PASS
	MCH	1	0	3.84	<13	PASS
		1	24	3.97	<13	PASS
		1	49	3.91	<13	PASS
		25	0	4.8	<13	PASS
		25	12	4.78	<13	PASS
		25	25	4.86	<13	PASS
		50	0	4.8	<13	PASS

		1	0	4.18	<13	PASS
		1	24	3.93	<13	PASS
		1	49	3.54	<13	PASS
	HCH	25	0	4.64	<13	PASS
		25	12	4.63	<13	PASS
		25	25	4.39	<13	PASS
		50	0	4.55	<13	PASS
16QAM	LCH	1	0	4.25	<13	PASS
		1	24	4.4	<13	PASS
		1	49	4.62	<13	PASS
		25	0	5.58	<13	PASS
		25	12	5.71	<13	PASS
		25	25	5.69	<13	PASS
		50	0	5.61	<13	PASS
	MCH	1	0	4.65	<13	PASS
		1	24	4.58	<13	PASS
		1	49	4.71	<13	PASS
		25	0	5.65	<13	PASS
		25	12	5.61	<13	PASS
		25	25	5.65	<13	PASS
		50	0	5.6	<13	PASS
	HCH	1	0	5.2	<13	PASS
		1	24	4.73	<13	PASS
		1	49	4.25	<13	PASS
		25	0	5.64	<13	PASS
		25	12	5.51	<13	PASS
		25	25	5.23	<13	PASS
		50	0	5.39	<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	3.94	<13	PASS
		1	37	4.28	<13	PASS
		1	74	4.33	<13	PASS
		37	0	4.76	<13	PASS
		37	18	4.8	<13	PASS
		37	38	4.82	<13	PASS
		75	0	5.24	<13	PASS
	MCH	1	0	4.23	<13	PASS

	16QAM	HCH	1	37	4.01	<13	PASS
			1	74	4.13	<13	PASS
			37	0	4.78	<13	PASS
			37	18	4.8	<13	PASS
			37	38	4.79	<13	PASS
			75	0	5.2	<13	PASS
		LCH	1	0	4.12	<13	PASS
			1	37	3.98	<13	PASS
			1	74	3.5	<13	PASS
			37	0	4.85	<13	PASS
			37	18	4.77	<13	PASS
			37	38	4.56	<13	PASS
			75	0	5.08	<13	PASS
		MCH	1	0	4.03	<13	PASS
			1	37	4.43	<13	PASS
			1	74	4.55	<13	PASS
			37	0	5.65	<13	PASS
			37	18	5.71	<13	PASS
			37	38	5.66	<13	PASS
			75	0	5.78	<13	PASS
		HCH	1	0	4.66	<13	PASS
			1	37	4.62	<13	PASS
			1	74	4.57	<13	PASS
			37	0	5.64	<13	PASS
			37	18	5.66	<13	PASS
			37	38	5.63	<13	PASS
			75	0	5.79	<13	PASS

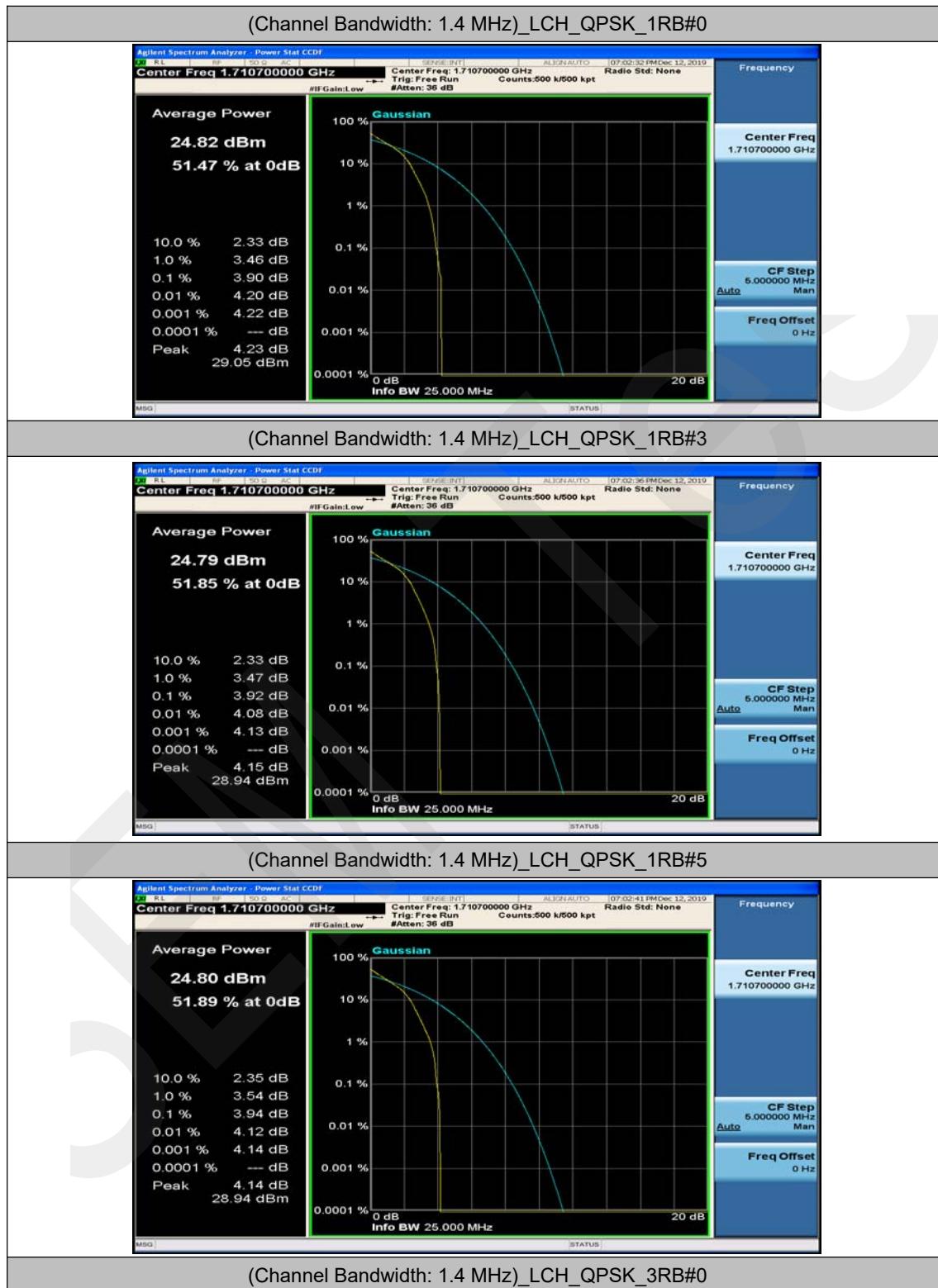
### Channel Bandwidth: 20 MHz

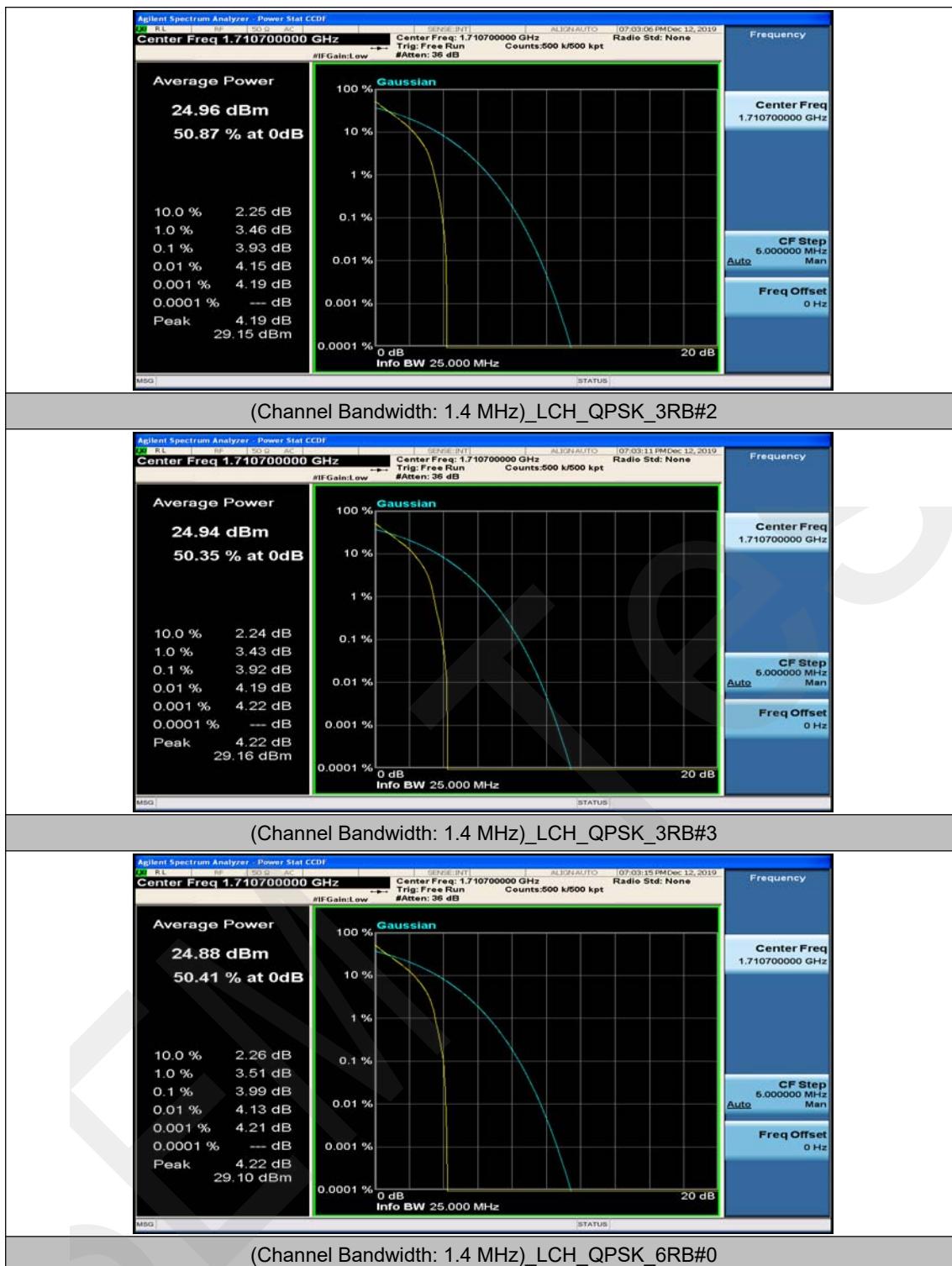
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.85	<13	PASS
		1	49	4.08	<13	PASS

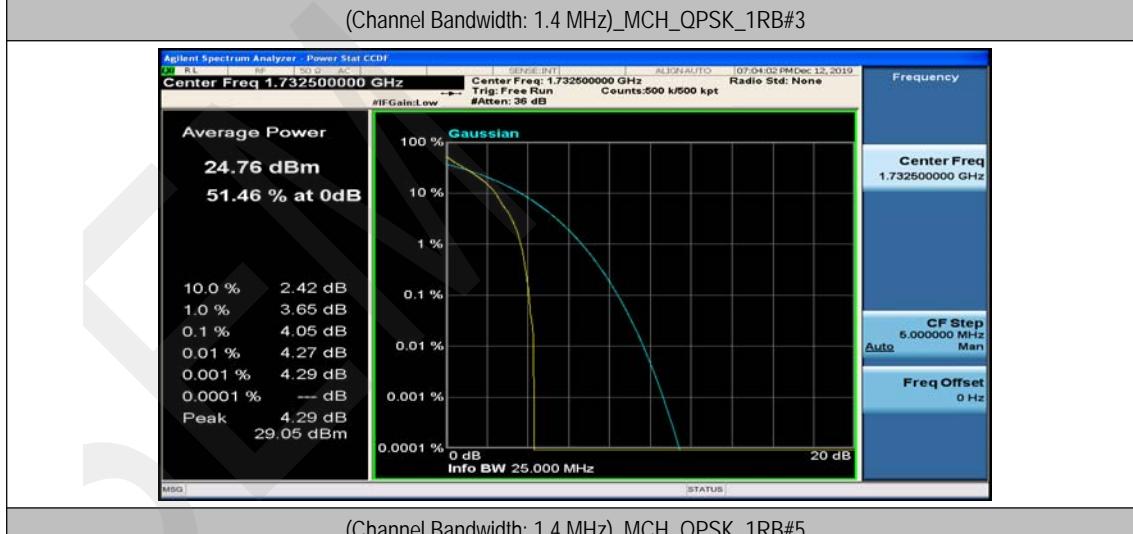
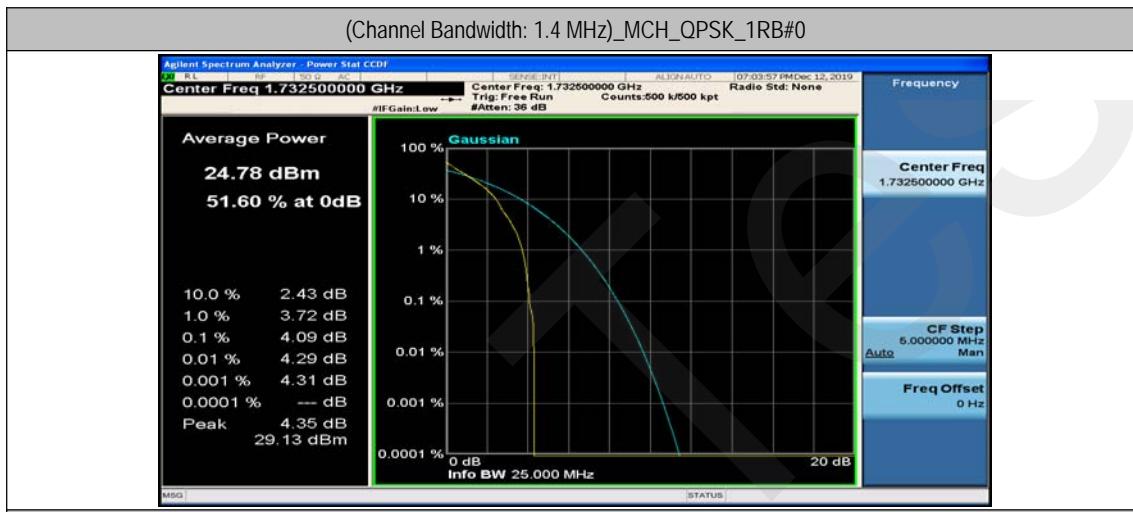
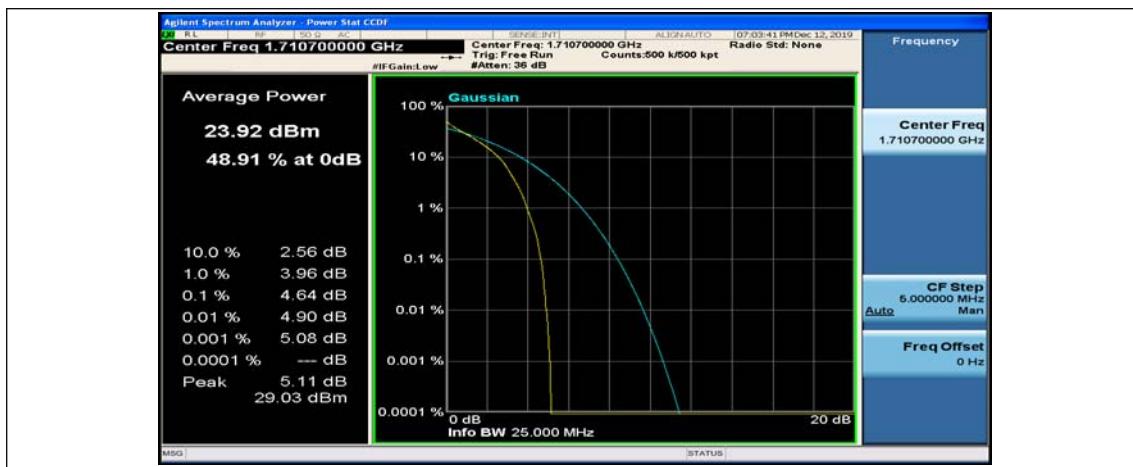
		1	99	3.99	<13	PASS
		50	0	4.9	<13	PASS
		50	25	4.96	<13	PASS
		50	50	4.94	<13	PASS
		100	0	5.18	<13	PASS
	MCH	1	0	4.15	<13	PASS
		1	49	4.06	<13	PASS
		1	99	4.04	<13	PASS
		50	0	4.91	<13	PASS
		50	25	4.85	<13	PASS
		50	50	4.91	<13	PASS
		100	0	5.18	<13	PASS
	HCH	1	0	4.19	<13	PASS
		1	49	4.27	<13	PASS
		1	99	3.63	<13	PASS
		50	0	4.88	<13	PASS
		50	25	4.83	<13	PASS
		50	50	4.71	<13	PASS
		100	0	5.07	<13	PASS
16QAM	LCH	1	0	5.04	<13	PASS
		1	49	5.47	<13	PASS
		1	99	5.03	<13	PASS
		50	0	5.71	<13	PASS
		50	25	5.73	<13	PASS
		50	50	5.72	<13	PASS
		100	0	5.9	<13	PASS
	MCH	1	0	5.17	<13	PASS
		1	49	5.04	<13	PASS
		1	99	5.17	<13	PASS
		50	0	5.69	<13	PASS
		50	25	5.6	<13	PASS
		50	50	5.71	<13	PASS
		100	0	5.87	<13	PASS
	HCH	1	0	4.89	<13	PASS
		1	49	4.89	<13	PASS
		1	99	4.15	<13	PASS
		50	0	5.7	<13	PASS
		50	25	5.62	<13	PASS
		50	50	5.54	<13	PASS
		100	0	5.83	<13	PASS

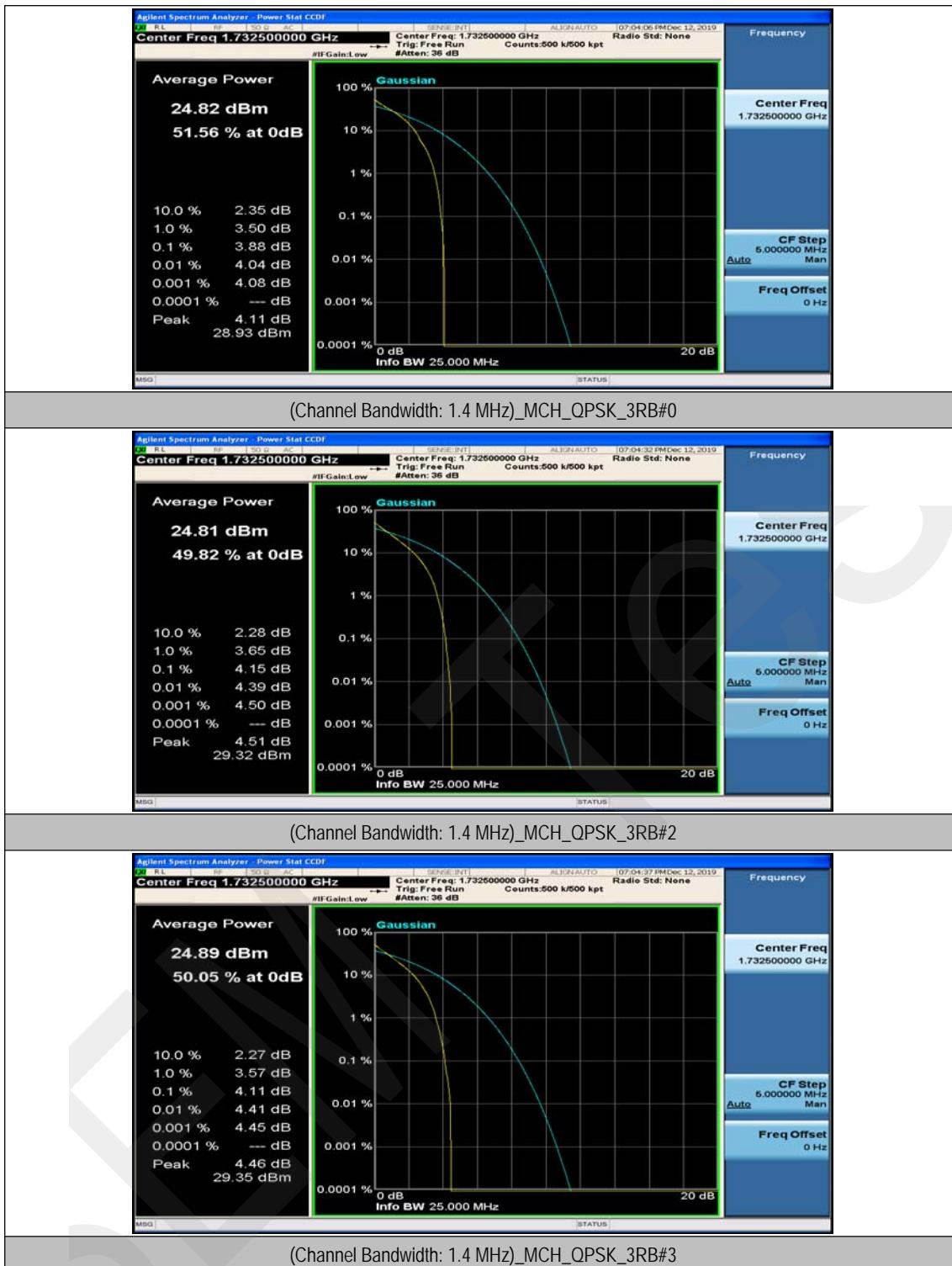
## Test Graphs

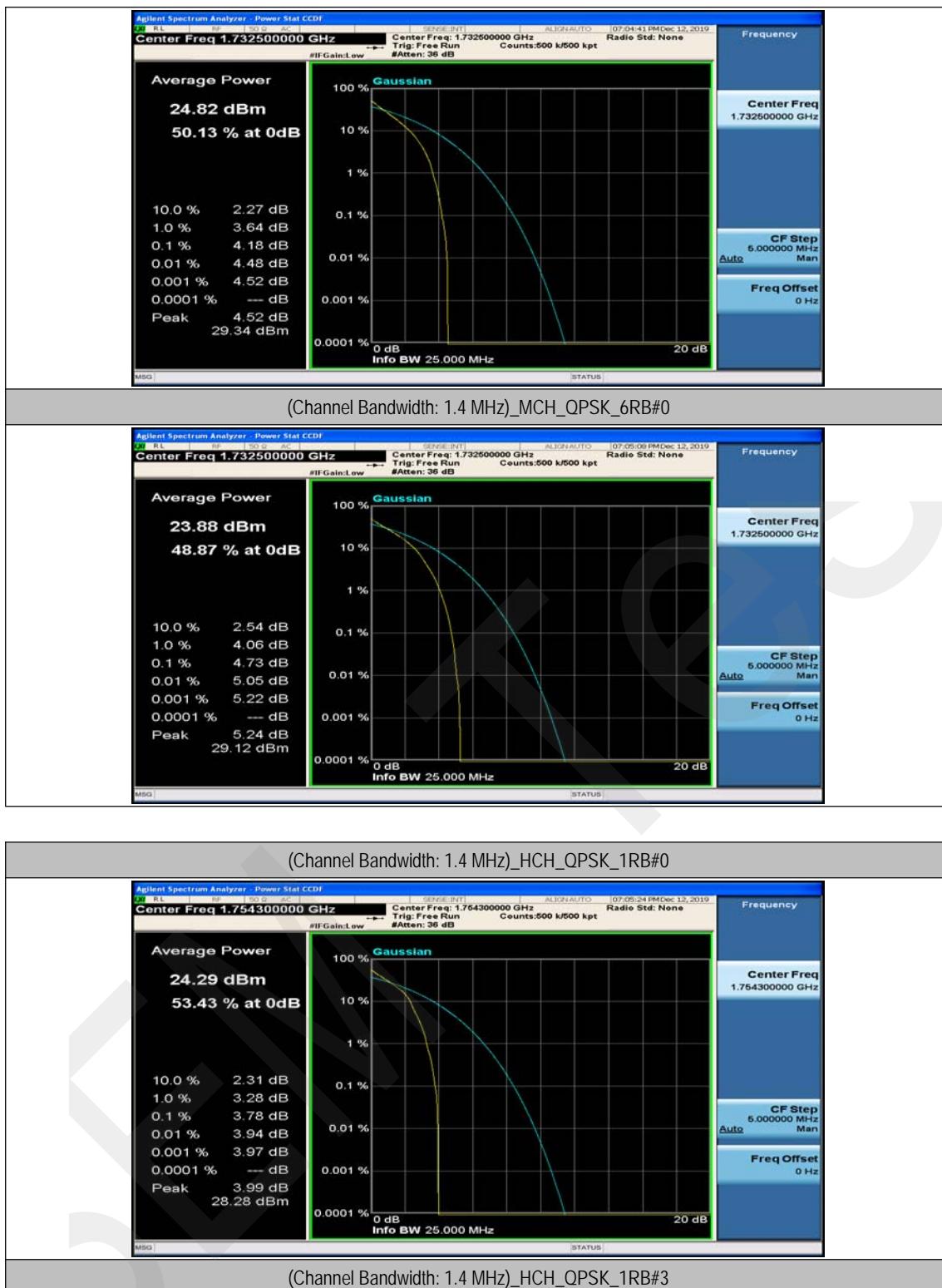
### Channel Bandwidth: 1.4 MHz





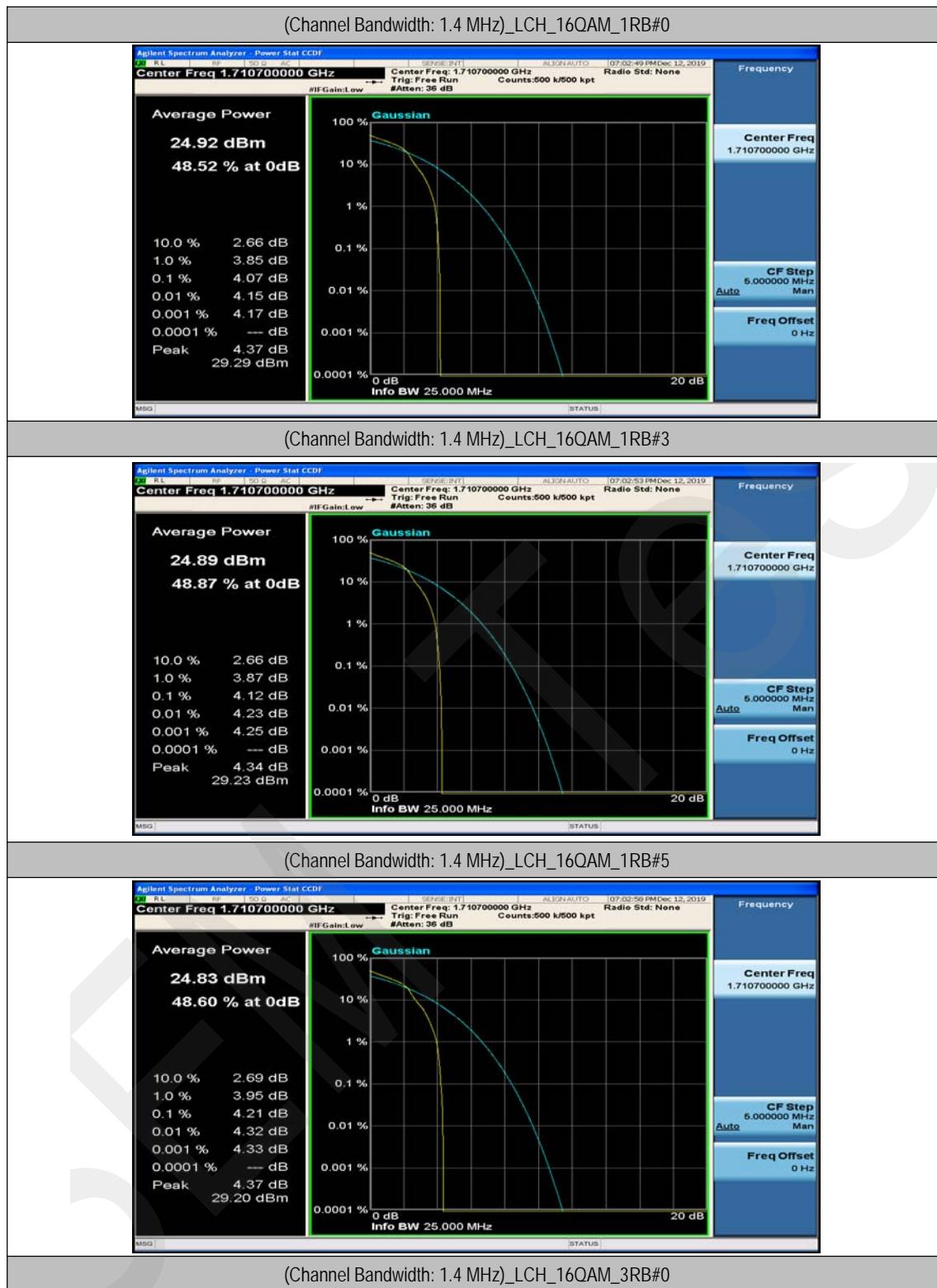


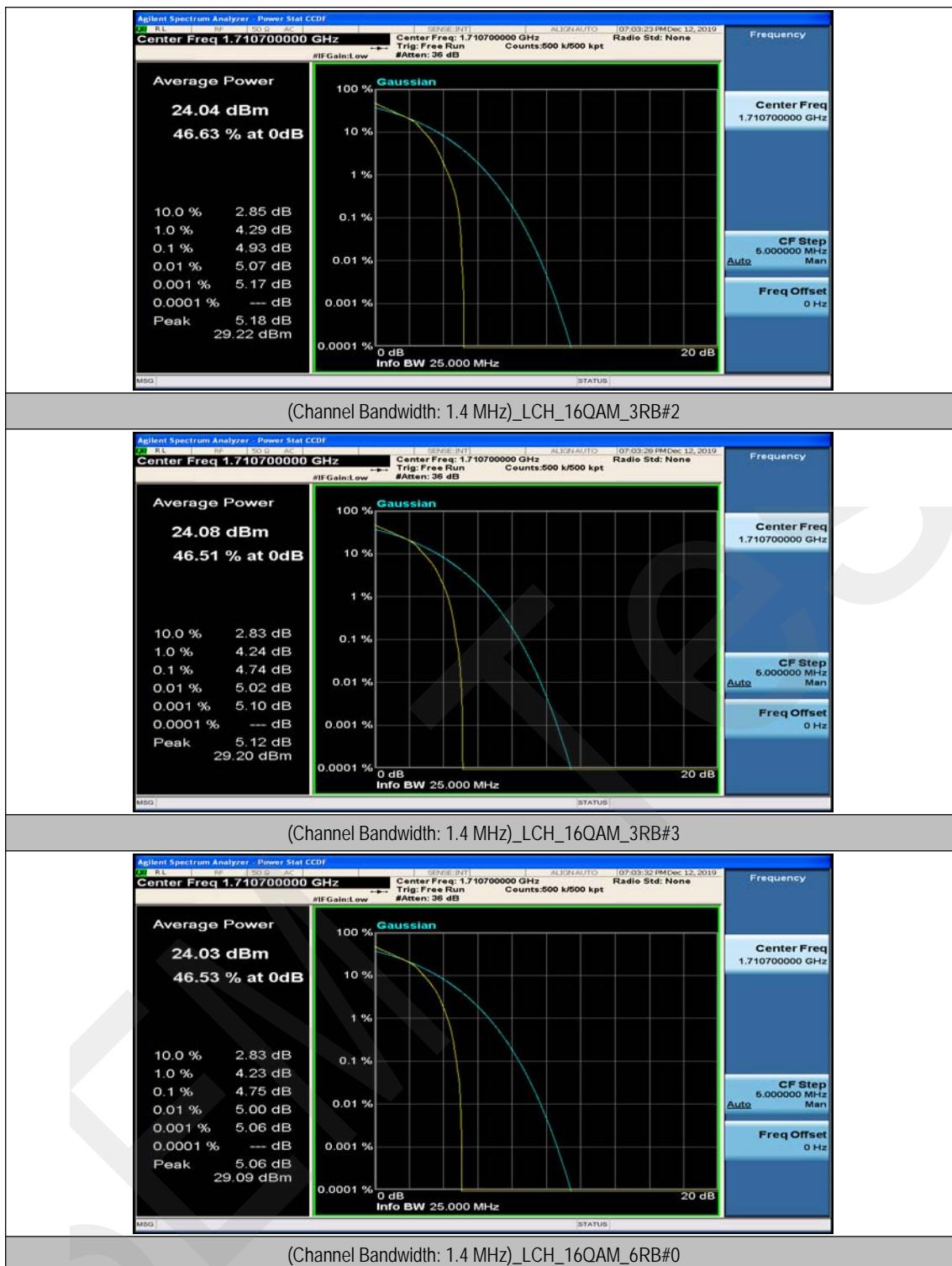


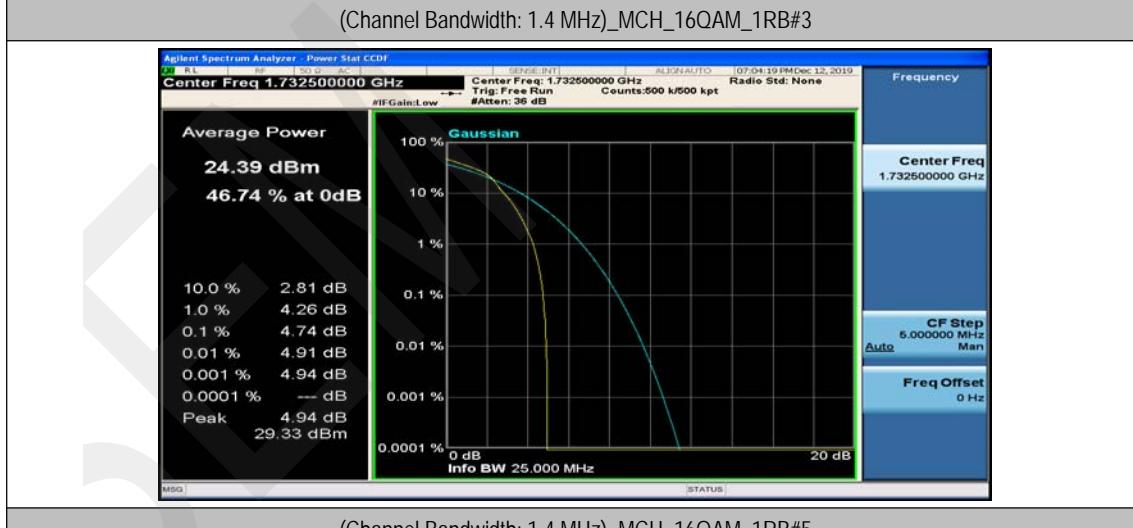
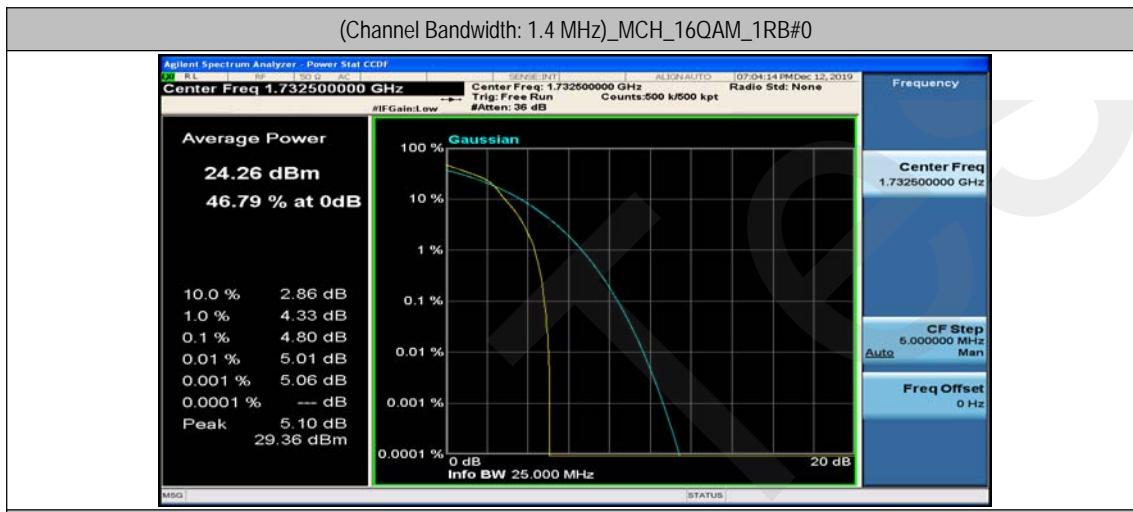


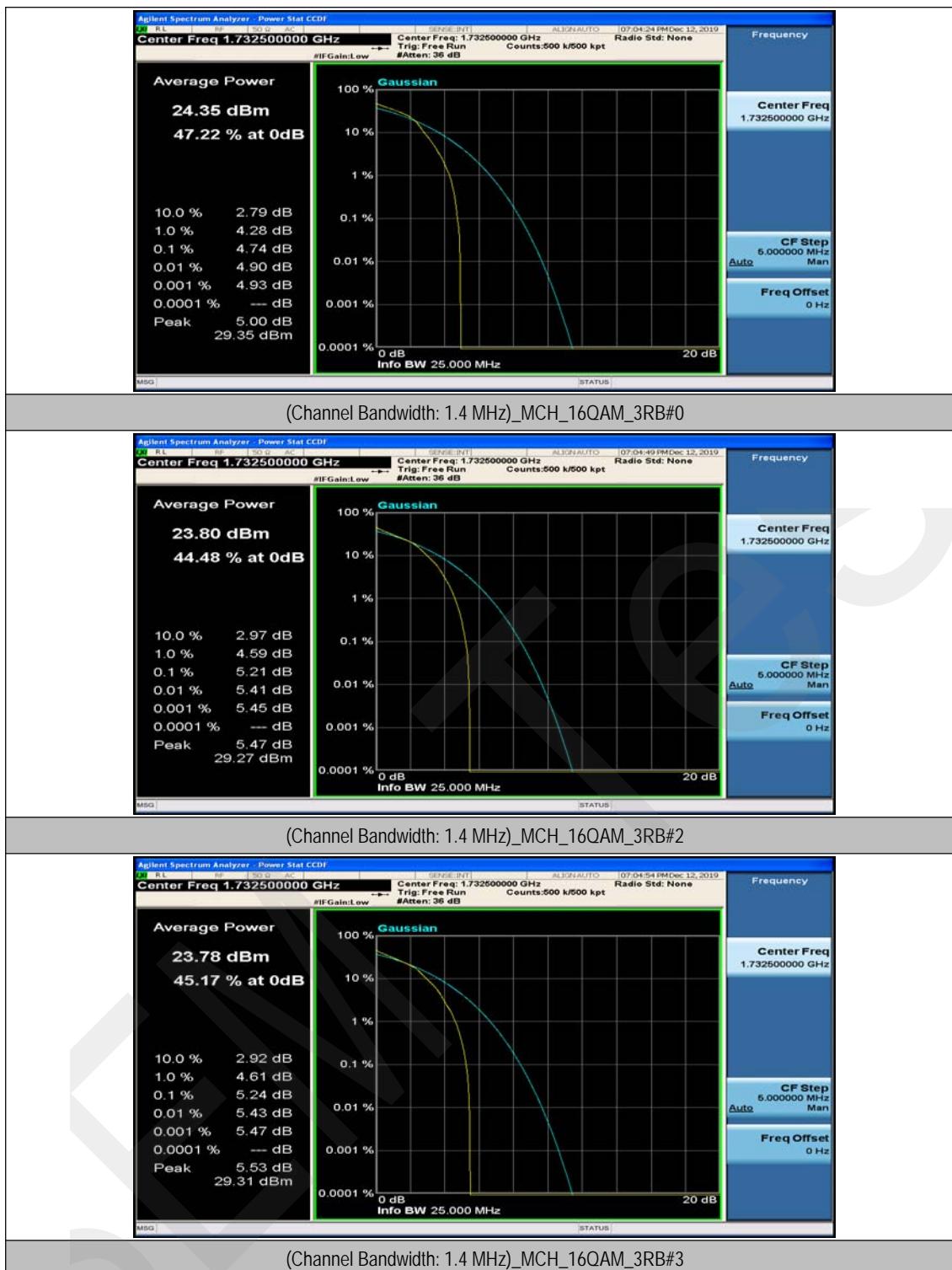


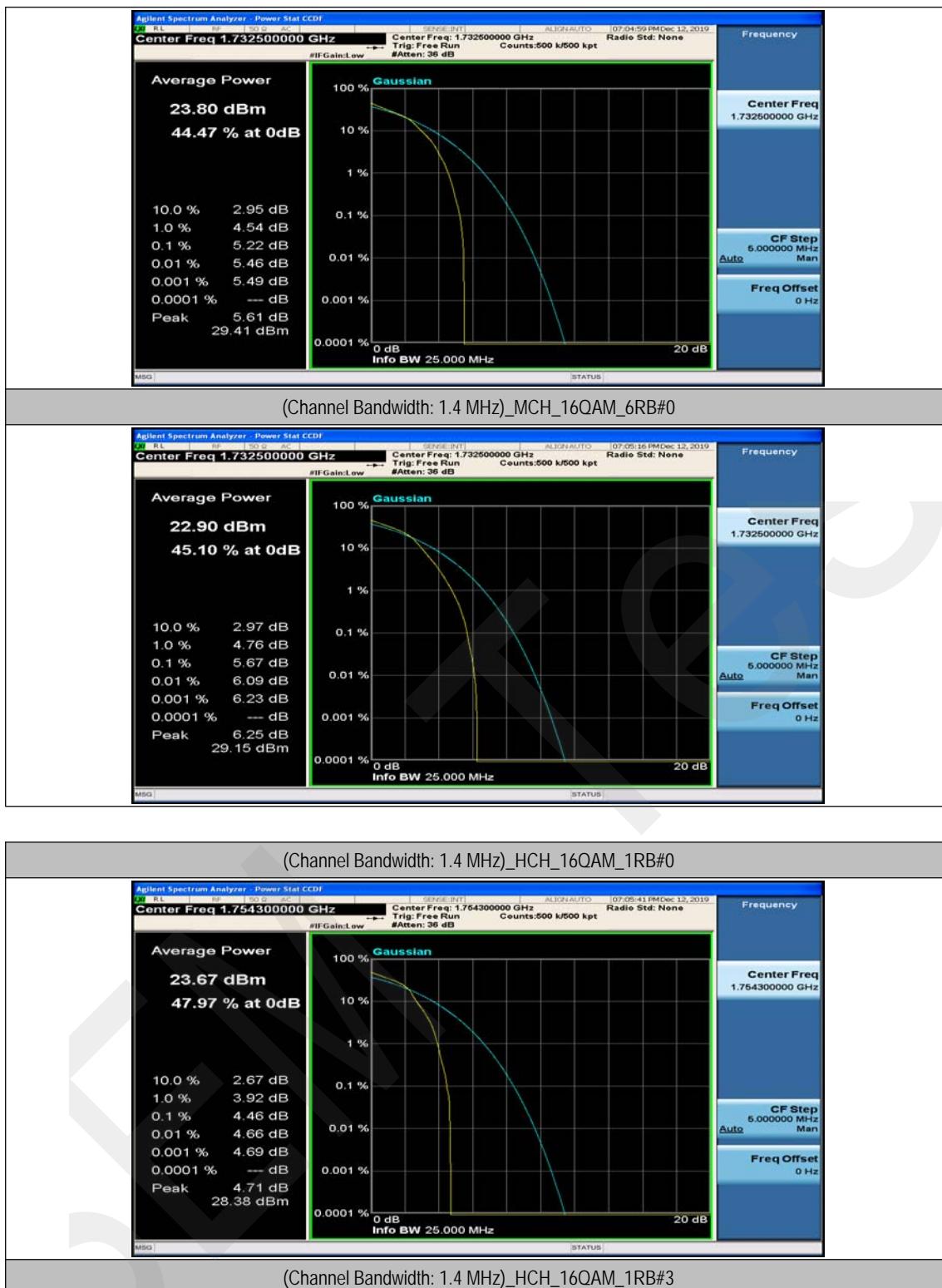


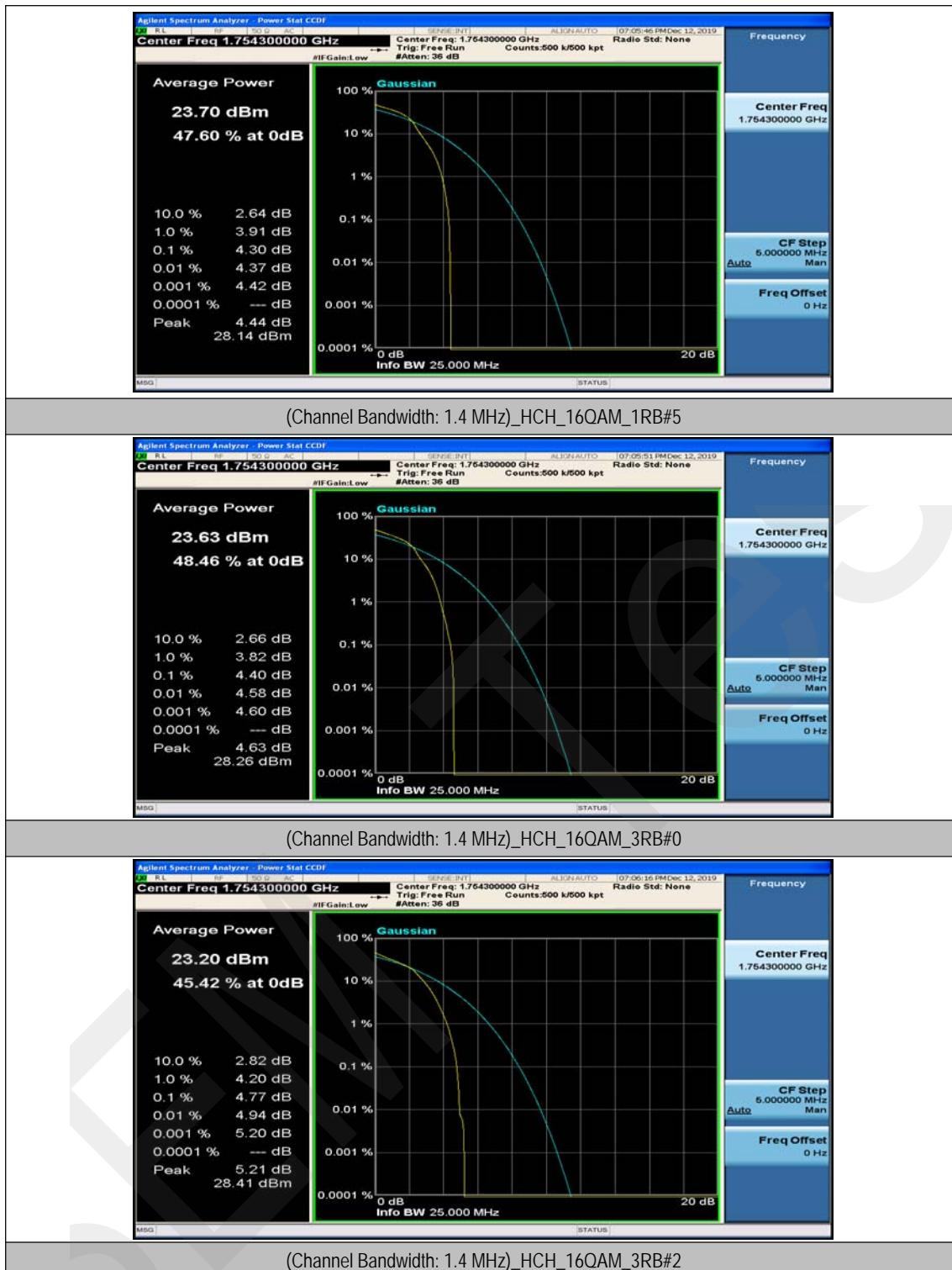


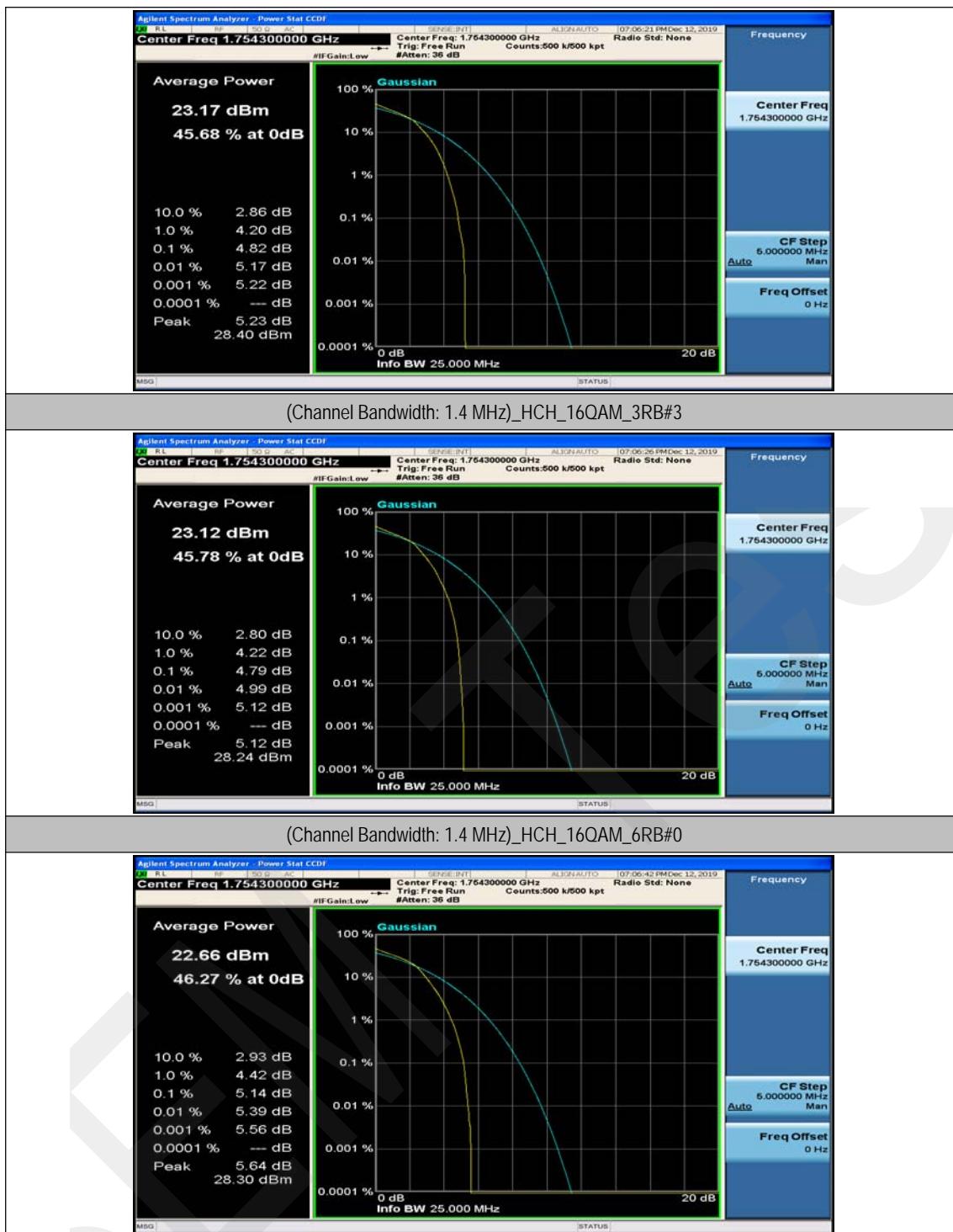






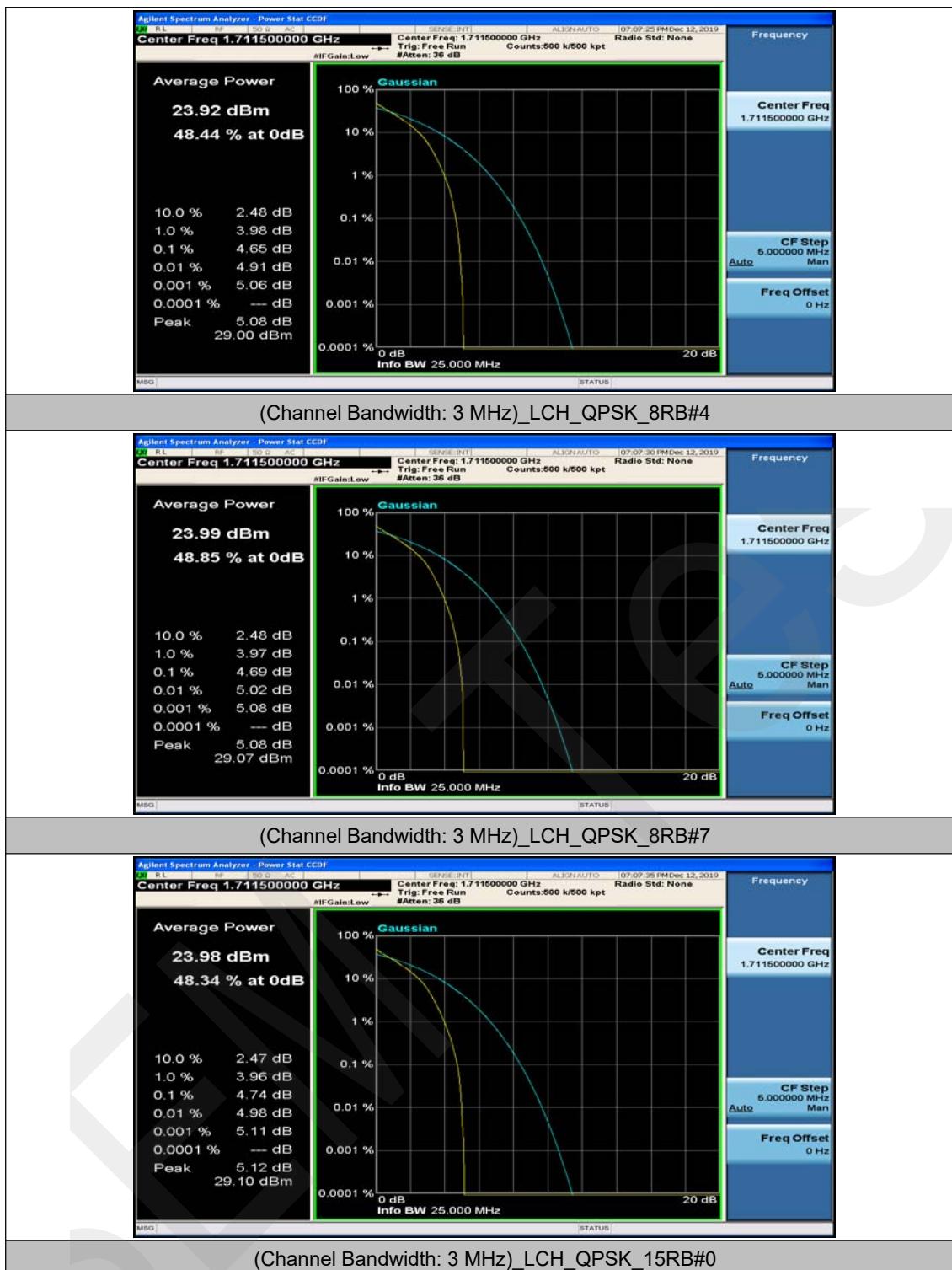


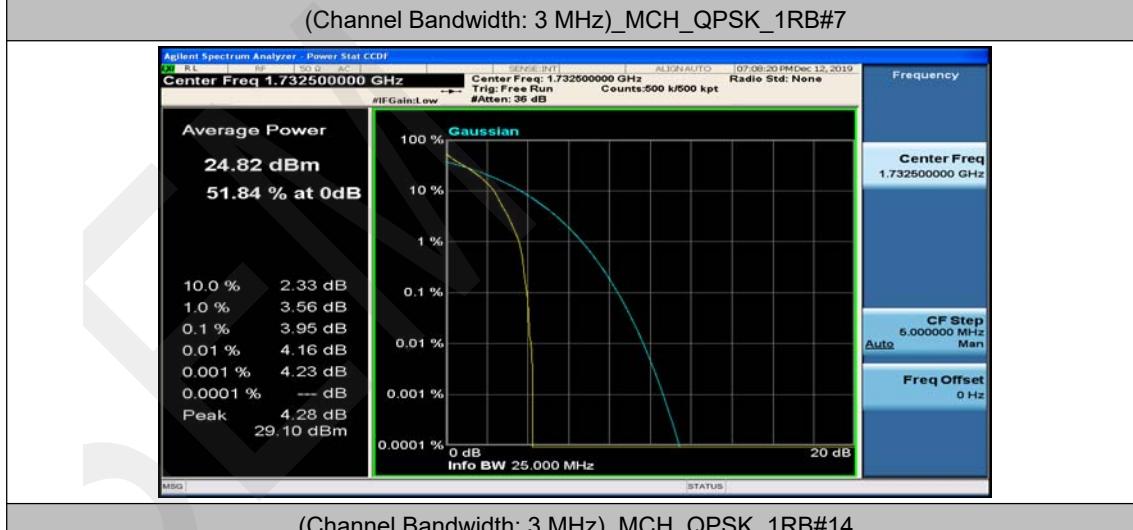
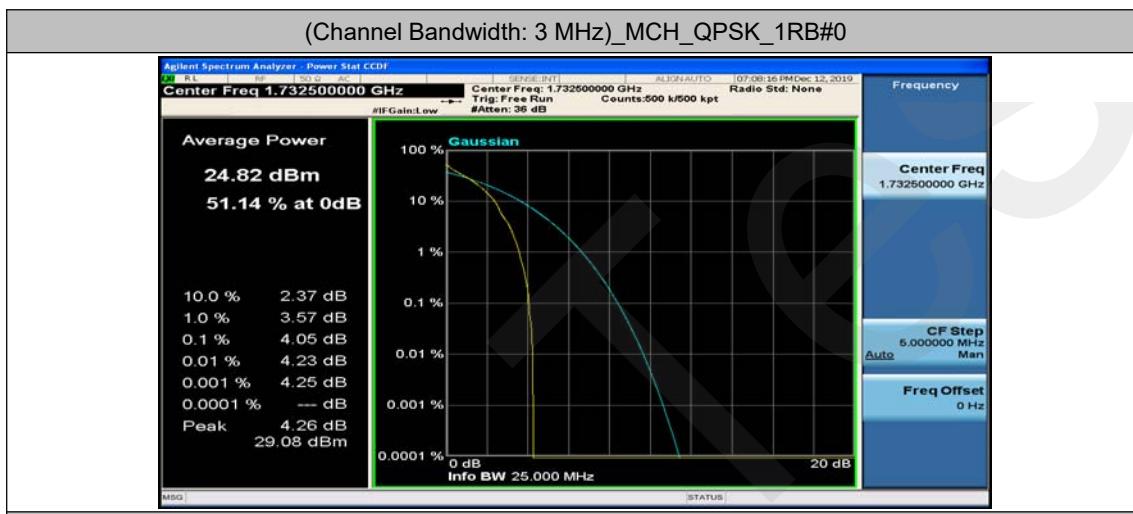
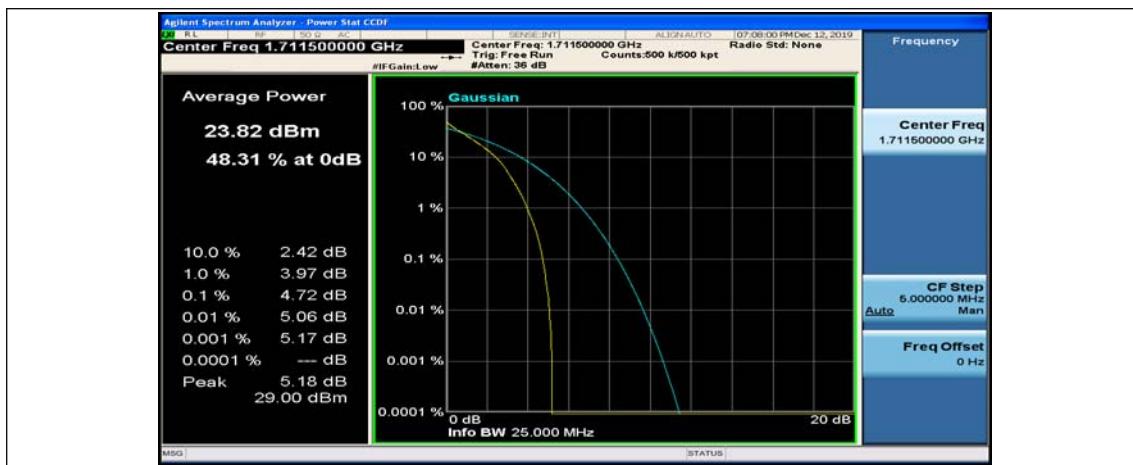




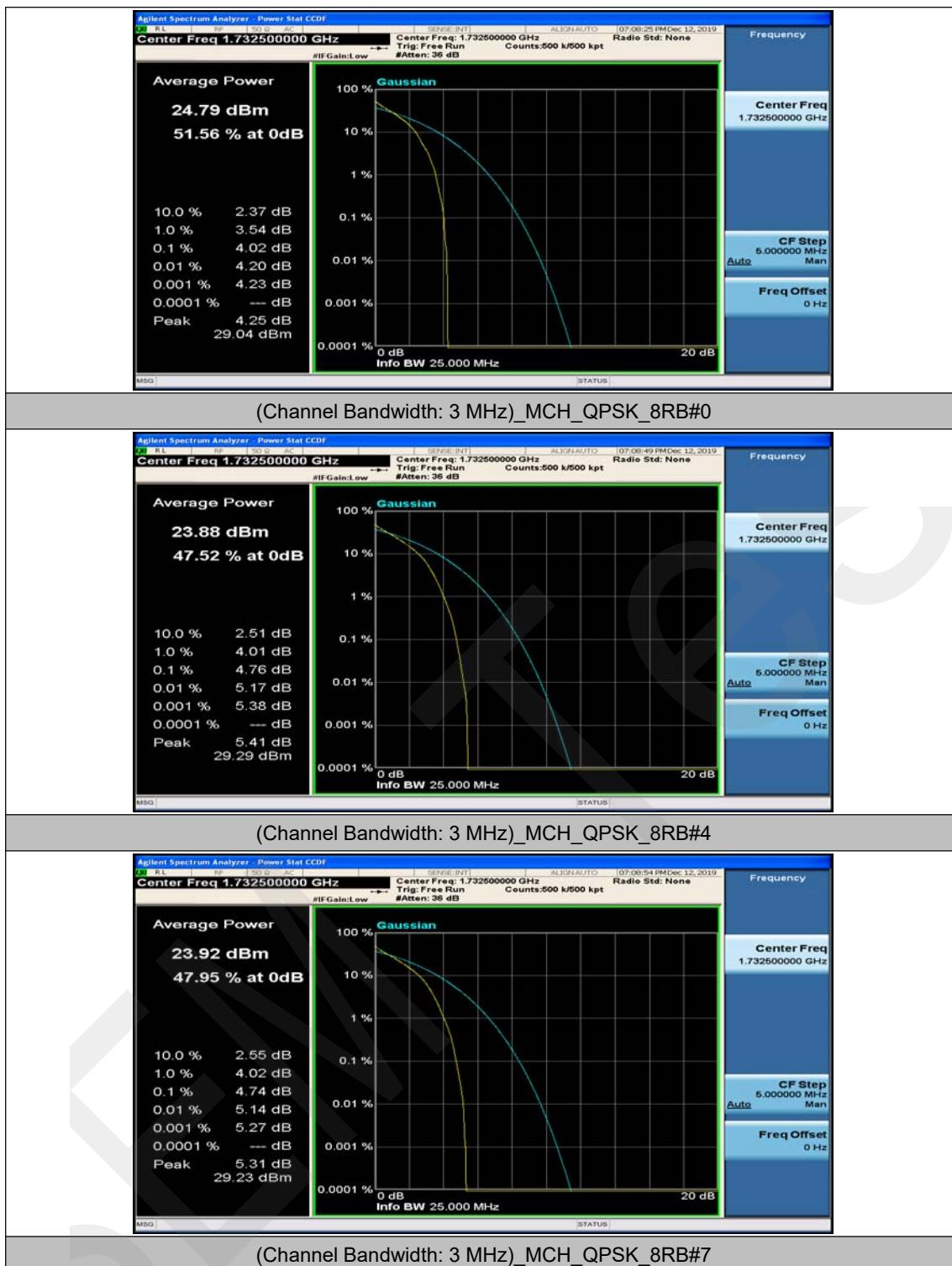
## Channel Bandwidth: 3 MHz

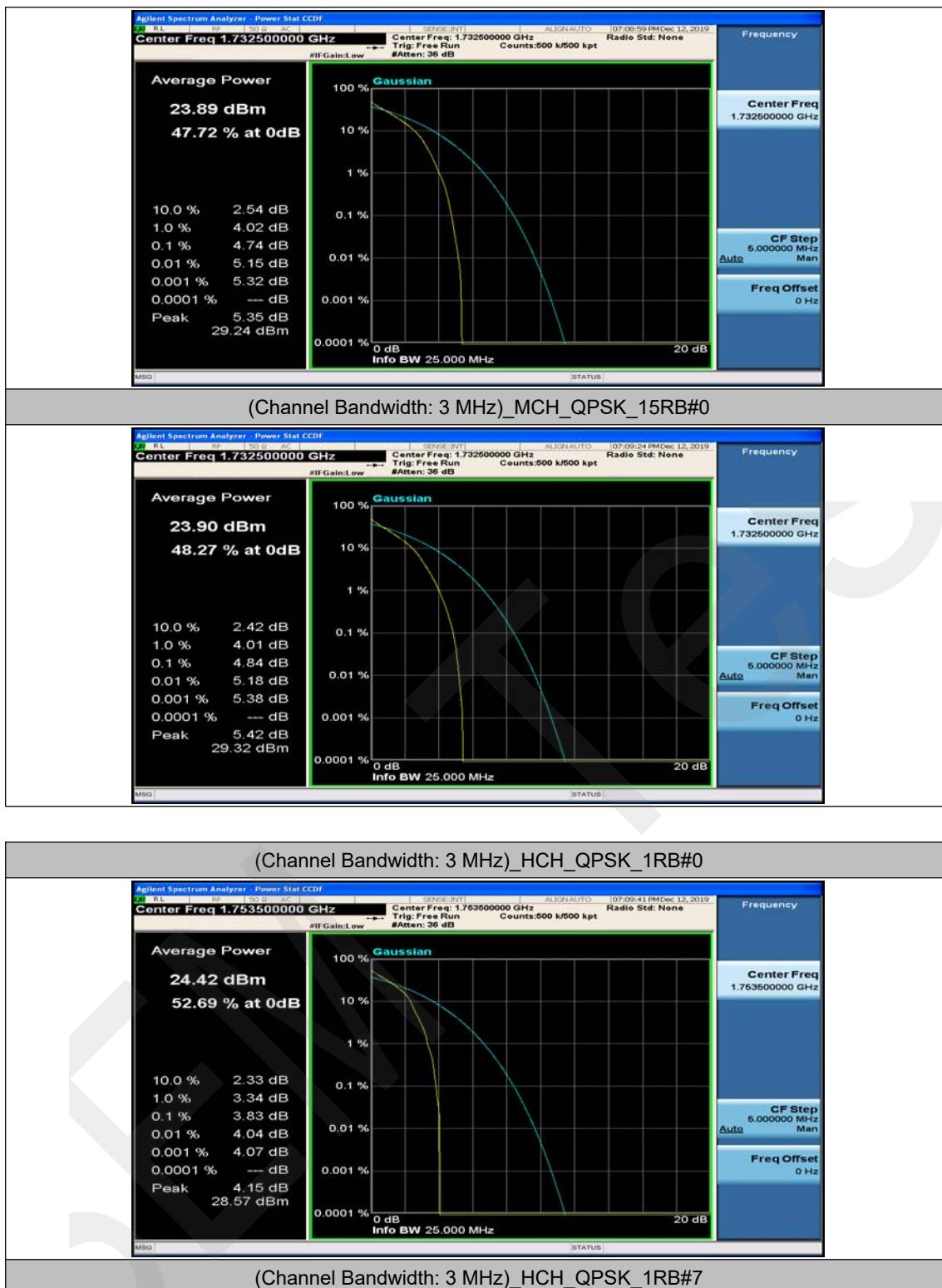


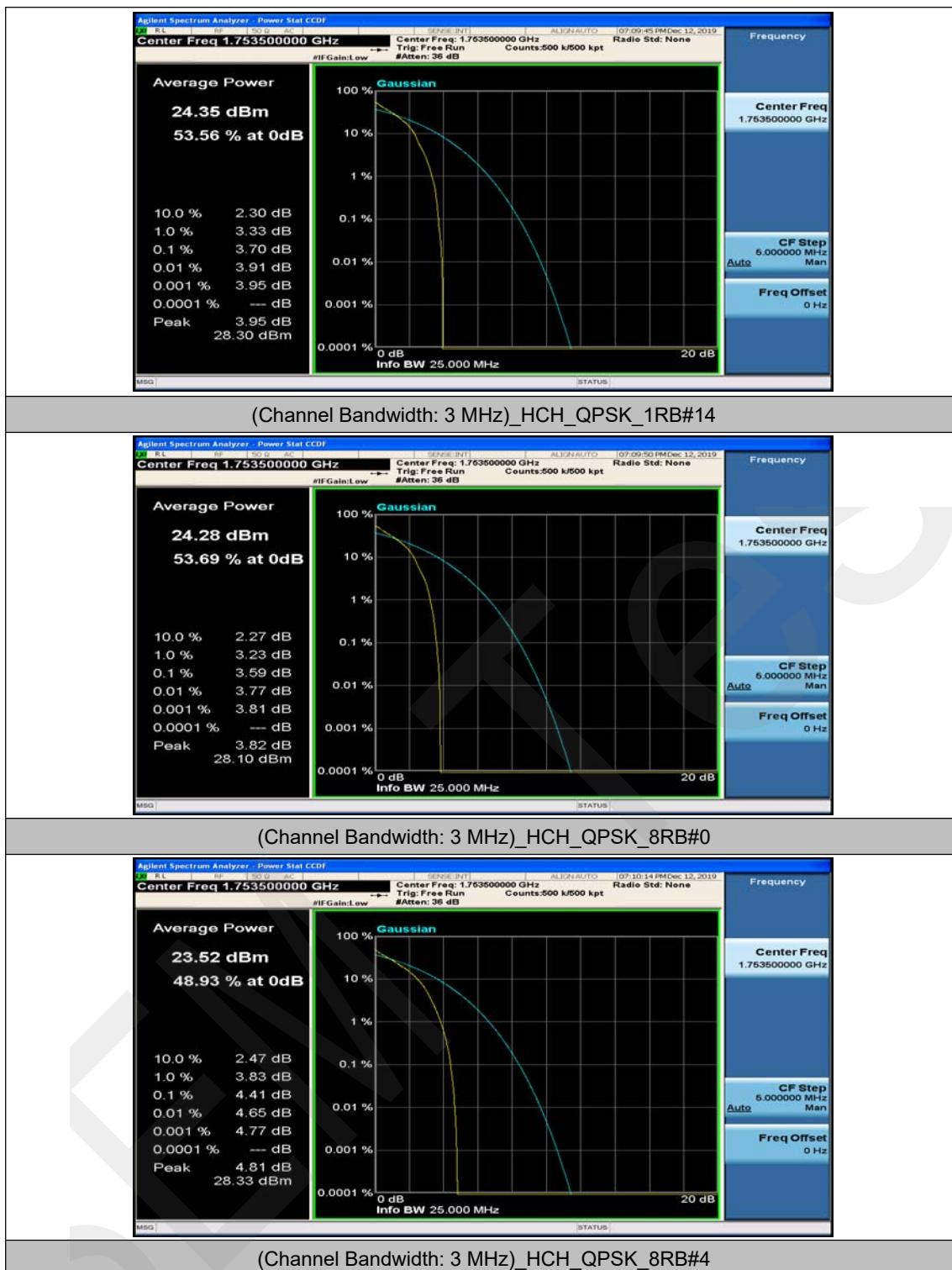


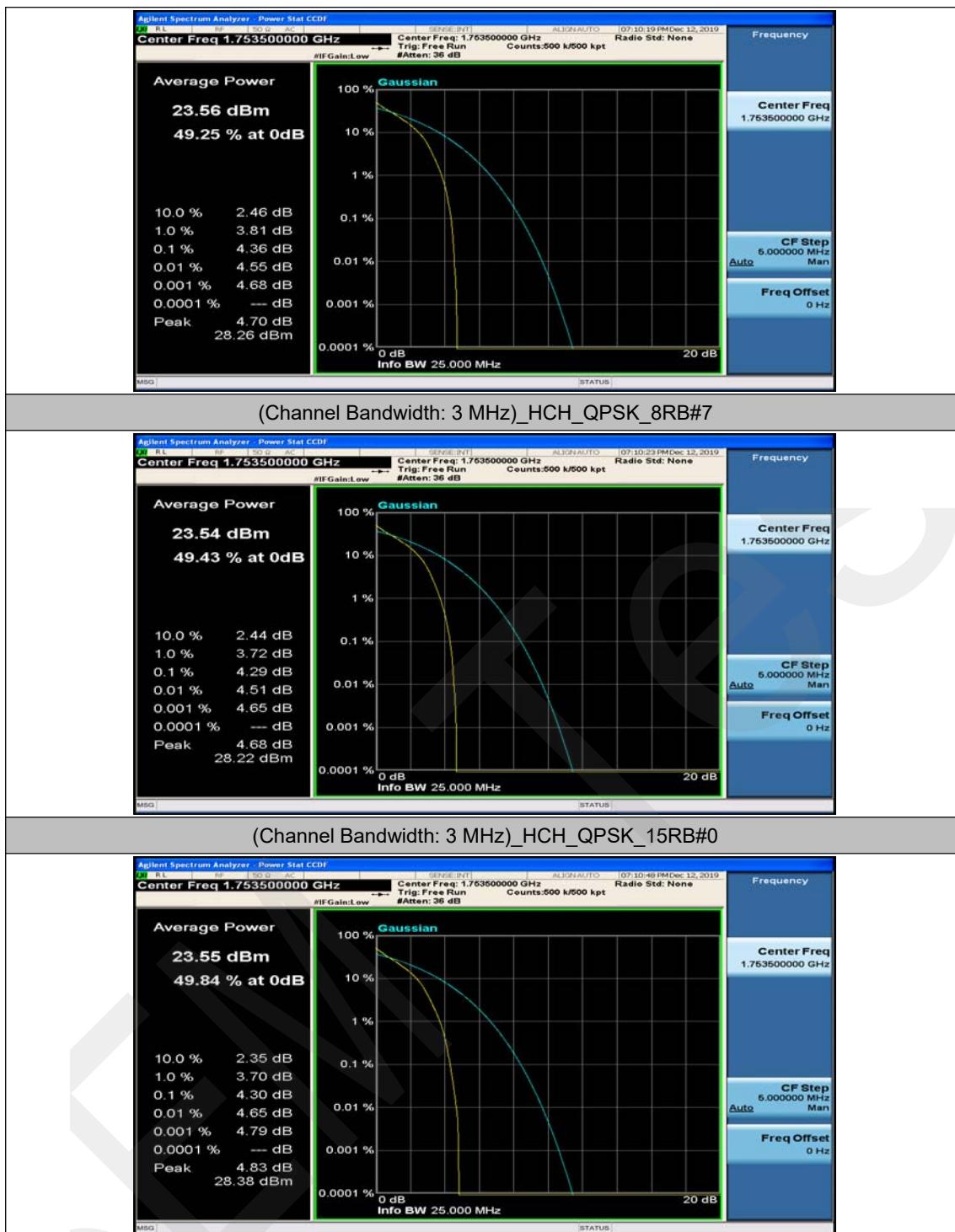


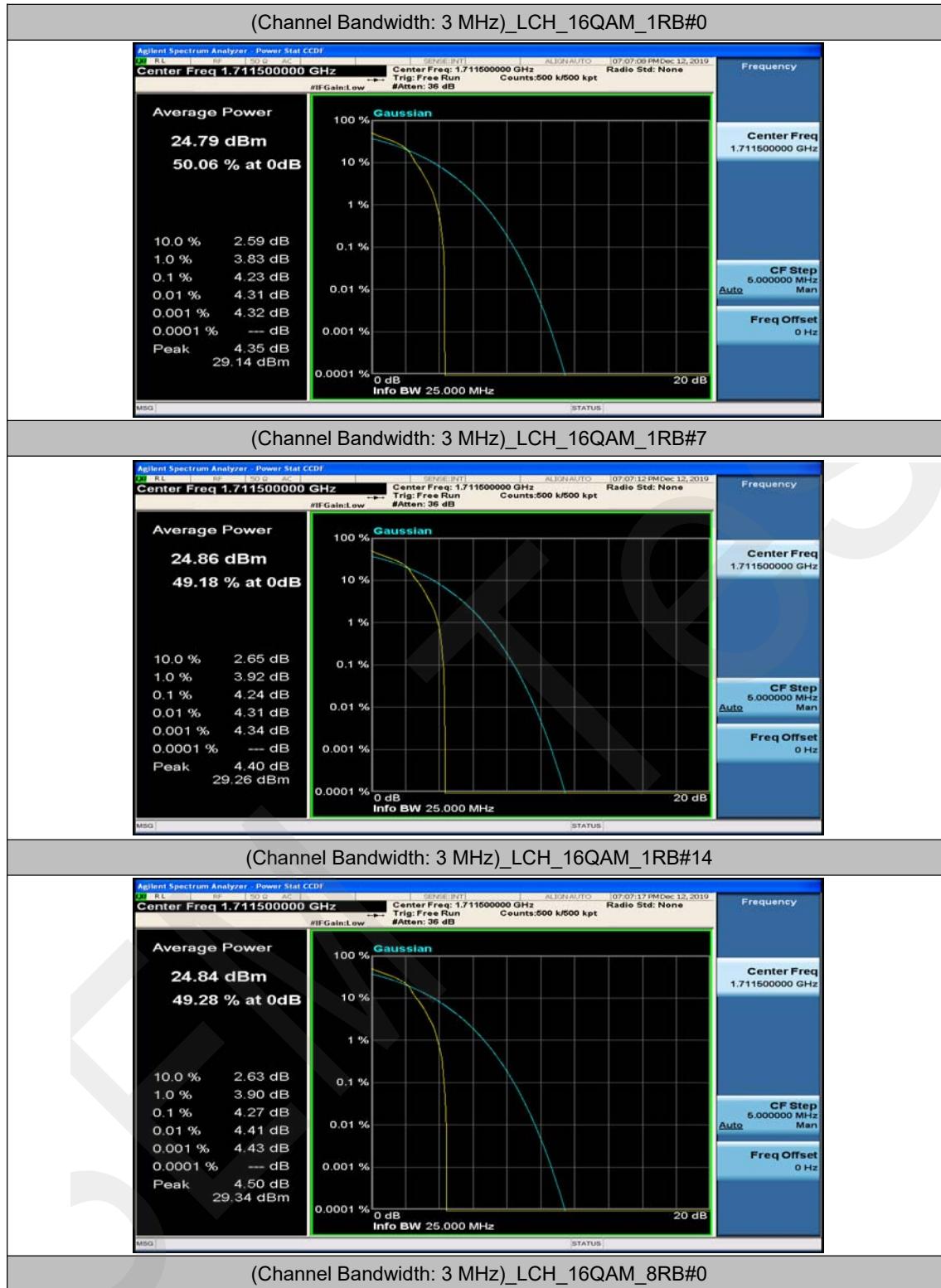
(Channel Bandwidth: 3 MHz)\_MCH\_QPSK\_1RB#14

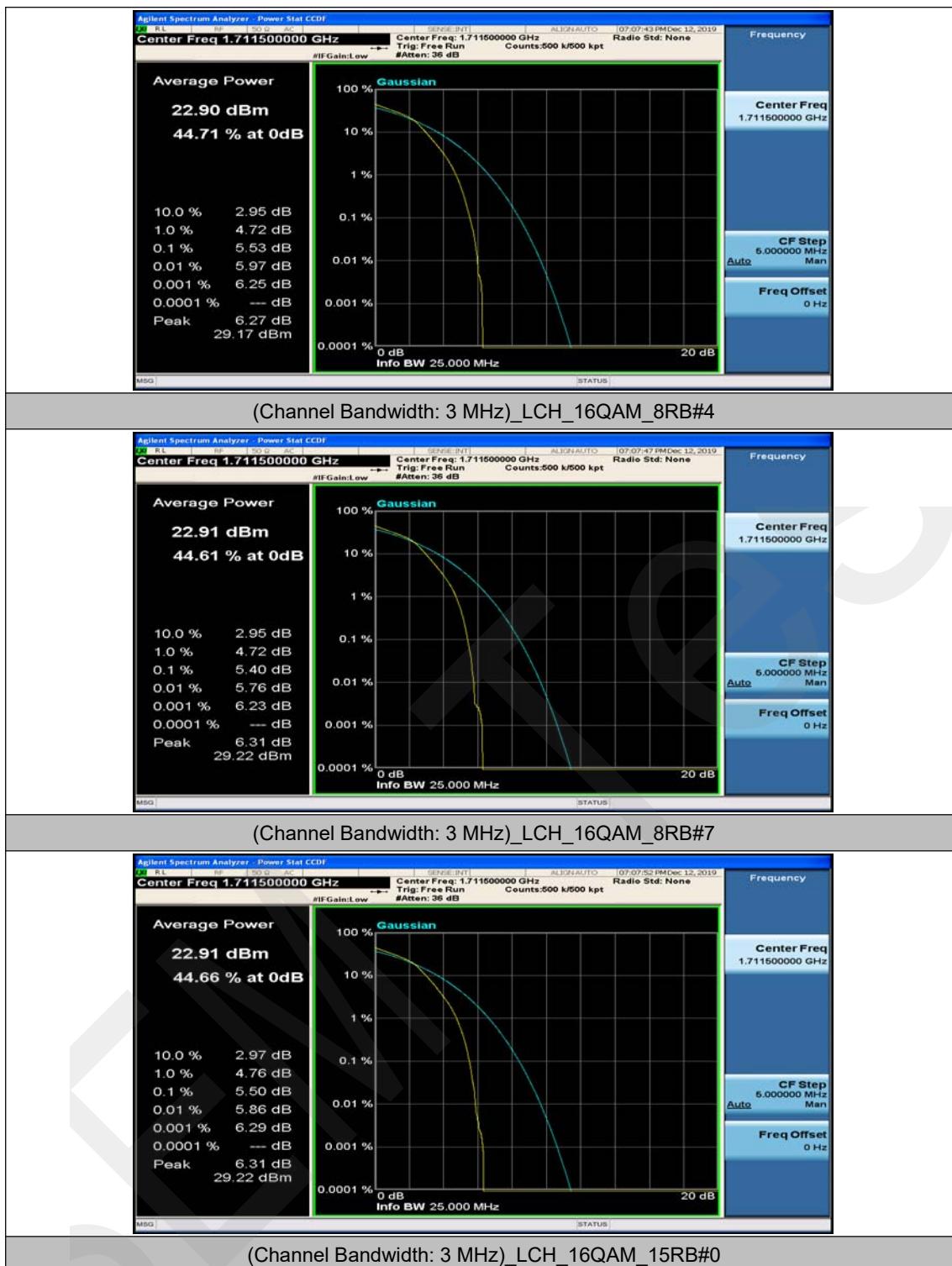


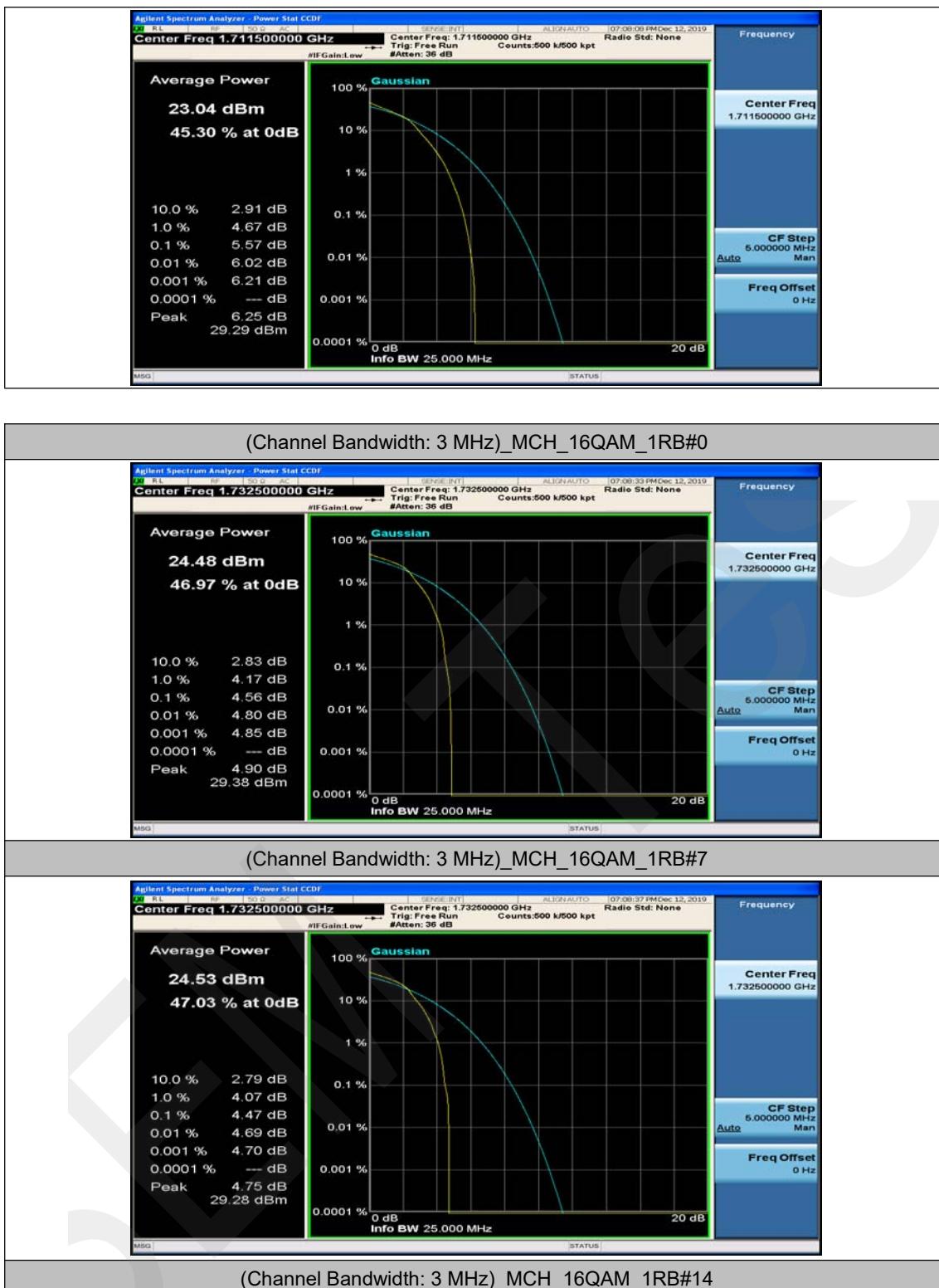


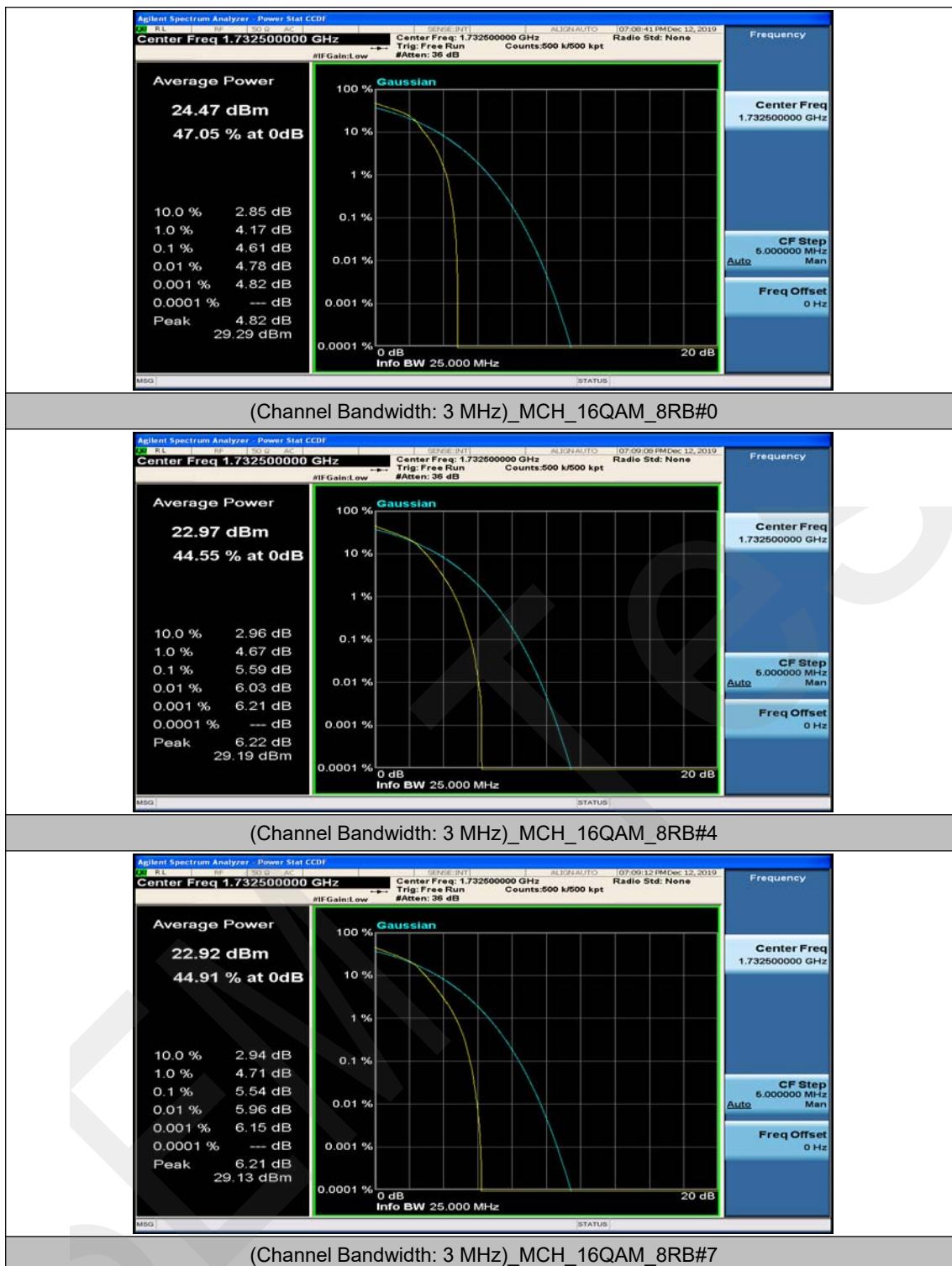


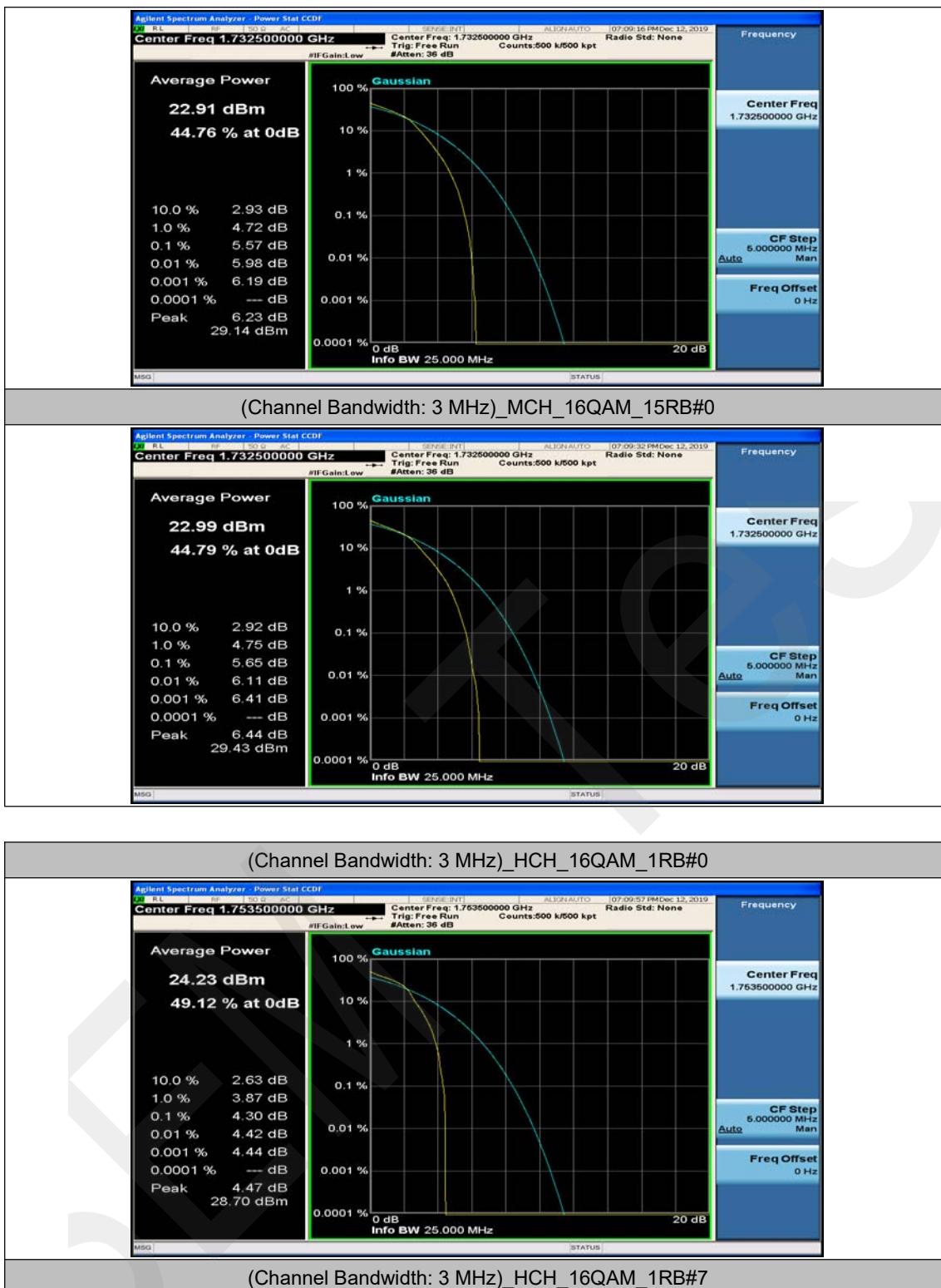




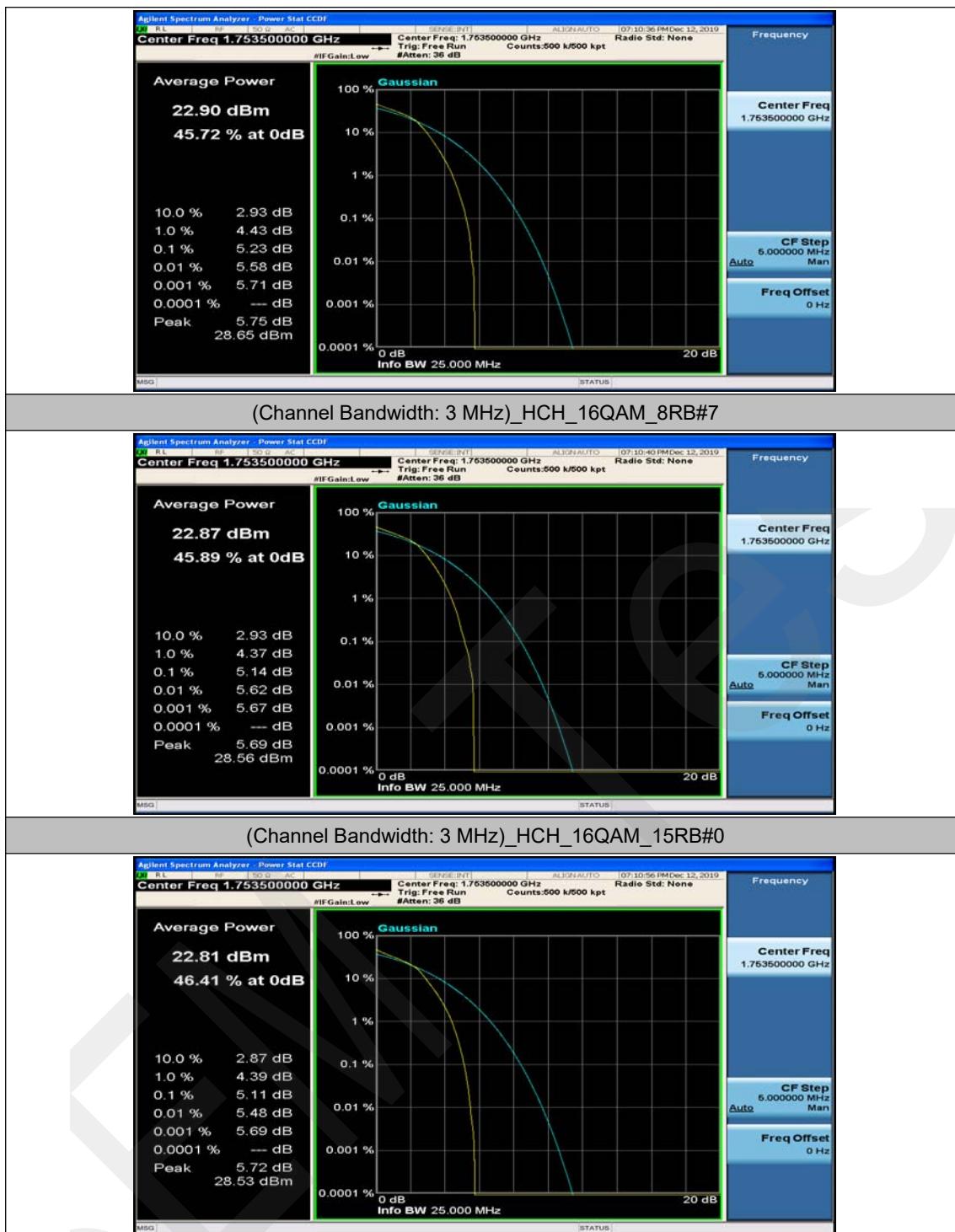




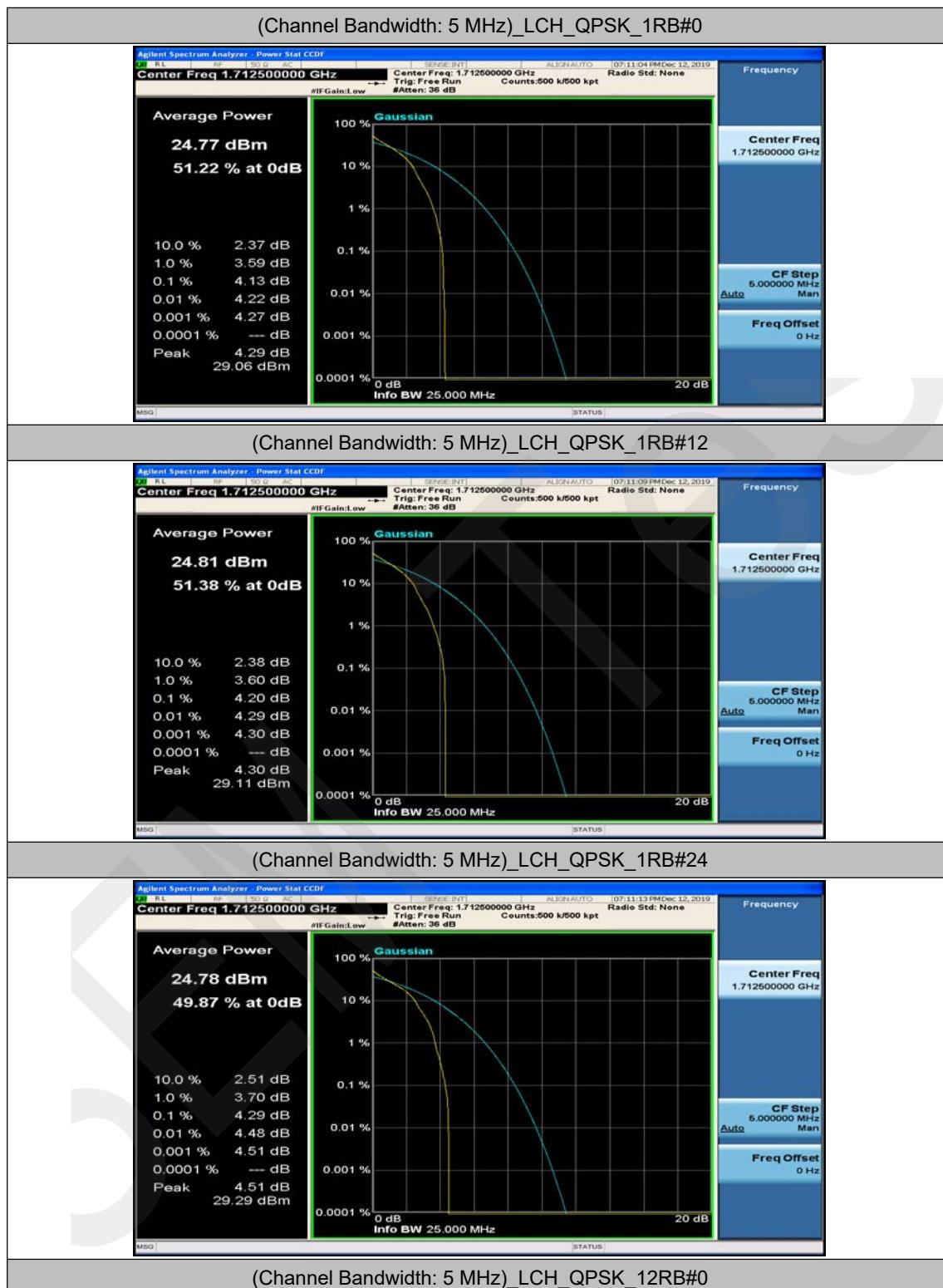


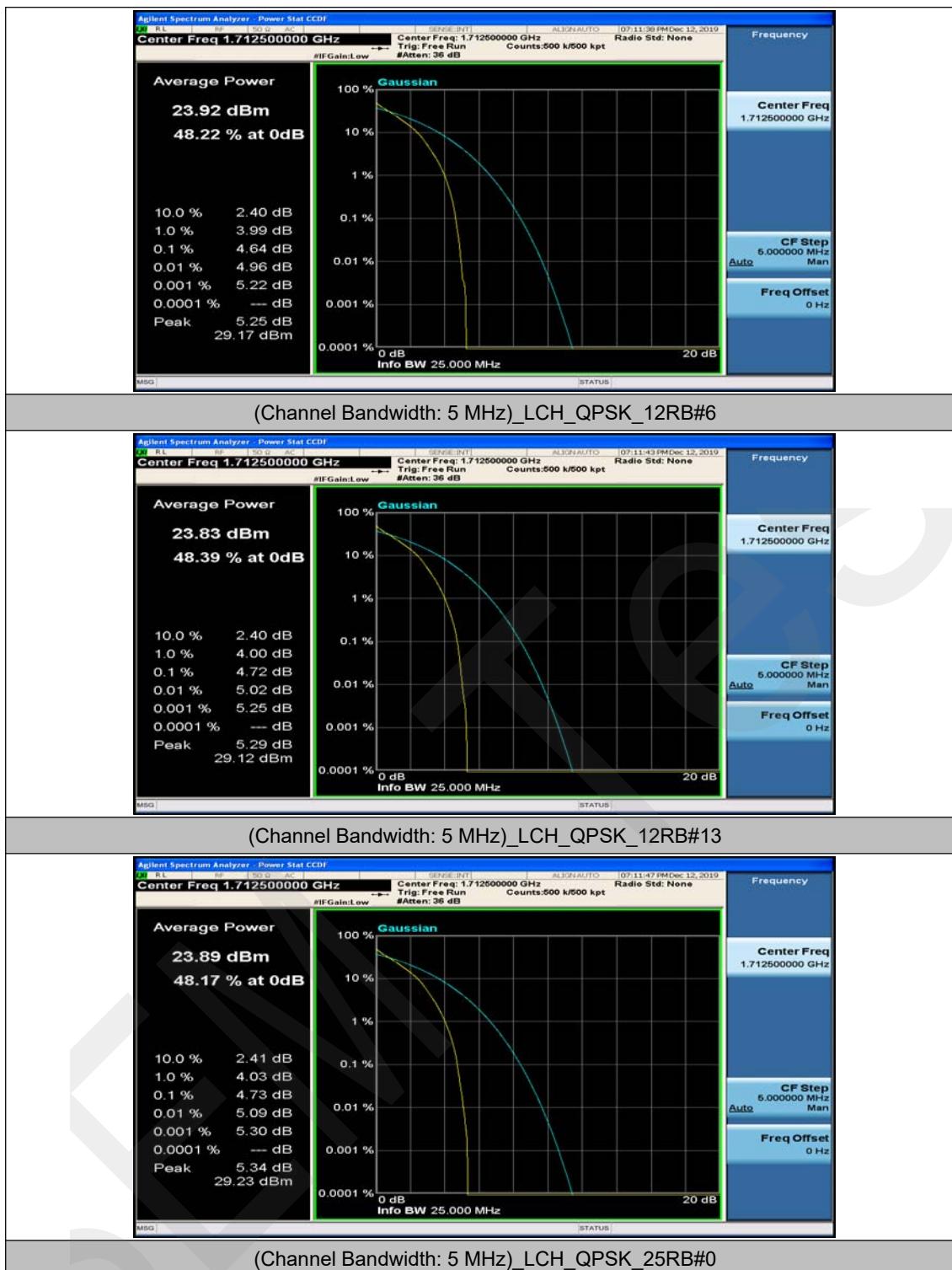


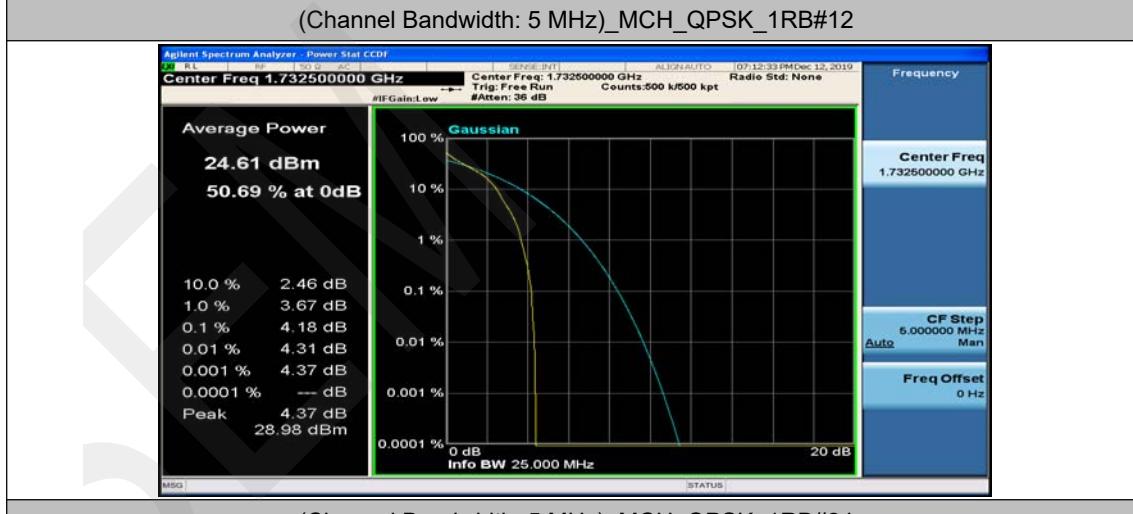
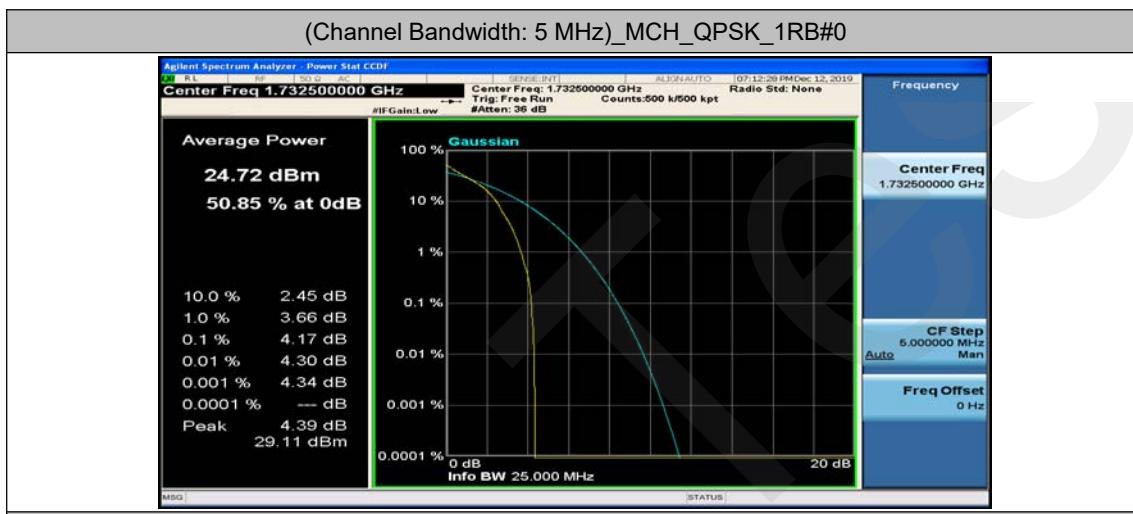
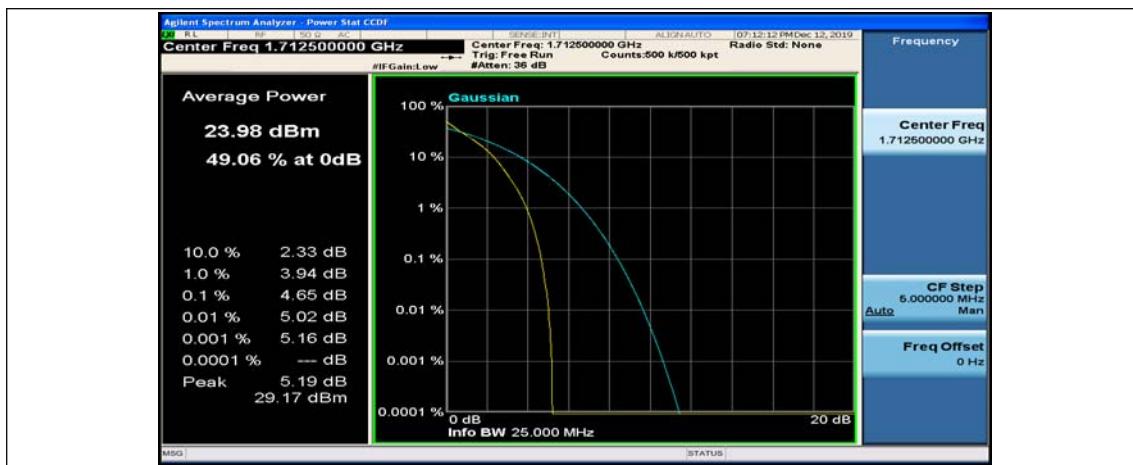




## Channel Bandwidth: 5 MHz







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

