

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	22.49	PASS
		1	3	22.83	PASS
		1	5	22.27	PASS
		3	0	22.18	PASS
		3	2	22.29	PASS
		3	3	22.38	PASS
		6	0	22.14	PASS
	MCH	1	0	22.53	PASS
		1	3	21.89	PASS
		1	5	22.35	PASS
		3	0	22.52	PASS
		3	2	22.66	PASS
		3	3	22.61	PASS
		6	0	22.02	PASS
	HCH	1	0	22.71	PASS
		1	3	22.19	PASS
		1	5	22.36	PASS
		3	0	22.38	PASS
		3	2	22.66	PASS
		3	3	22.35	PASS
		6	0	21.94	PASS
16QAM	LCH	1	0	22.21	PASS
		1	3	22.15	PASS
		1	5	22.43	PASS
		3	0	22.11	PASS
		3	2	21.99	PASS
		3	3	22.45	PASS
		6	0	22.73	PASS
	MCH	1	0	22.19	PASS
		1	3	22.52	PASS
		1	5	22.67	PASS
		3	0	22.1	PASS
		3	2	22.62	PASS

		3	3	22.49	PASS
		6	0	21.99	PASS
HCH		1	0	22.53	PASS
		1	3	22.72	PASS
		1	5	21.97	PASS
		3	0	21.96	PASS
		3	2	21.99	PASS
		3	3	22.42	PASS
		6	0	22.35	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.46	PASS
		1	7	22.43	PASS
		1	14	22.79	PASS
		8	0	22.65	PASS
		8	4	22.09	PASS
		8	7	22.49	PASS
		15	0	22.34	PASS
	MCH	1	0	22.59	PASS
		1	7	22.38	PASS
		1	14	22.18	PASS
		8	0	21.99	PASS
		8	4	22.56	PASS
		8	7	22.7	PASS
		15	0	22.58	PASS
	HCH	1	0	22.34	PASS
		1	7	22.42	PASS
		1	14	22.81	PASS
		8	0	22.44	PASS
		8	4	22.46	PASS
		8	7	22.56	PASS
		15	0	22.72	PASS
16QAM	LCH	1	0	22.47	PASS
		1	7	22.75	PASS
		1	14	22.38	PASS
		8	0	22.23	PASS
		8	4	21.97	PASS
		8	7	22.25	PASS
		15	0	21.95	PASS
	MCH	1	0	22.29	PASS

		1	7	22.44	PASS
		1	14	22.57	PASS
		8	0	22.63	PASS
		8	4	22.84	PASS
		8	7	22.26	PASS
		15	0	22.36	PASS
	HCH	1	0	22.64	PASS
		1	7	22.56	PASS
		1	14	22.14	PASS
		8	0	22.88	PASS
		8	4	22.86	PASS
		8	7	22.24	PASS
		15	0	22.86	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.45	PASS
		1	12	22.82	PASS
		1	24	22.16	PASS
		12	0	22.06	PASS
		12	6	22.13	PASS
		12	13	22.75	PASS
		25	0	22.13	PASS
	MCH	1	0	22.64	PASS
		1	12	22.58	PASS
		1	24	22.55	PASS
		12	0	22.08	PASS
		12	6	22.73	PASS
		12	13	22.49	PASS
		25	0	22.92	PASS
	HCH	1	0	22.17	PASS
		1	12	22.12	PASS
		1	24	22.46	PASS
		12	0	22.34	PASS
		12	6	22.21	PASS
		12	13	22.52	PASS
		25	0	22.66	PASS
16QAM	LCH	1	0	22.57	PASS
		1	12	22.07	PASS
		1	24	22.58	PASS
		12	0	21.98	PASS

		12	6	22.09	PASS
		12	13	22.41	PASS
		25	0	22.39	PASS
MCH		1	0	22.88	PASS
		1	12	22.71	PASS
		1	24	22.05	PASS
		12	0	22.02	PASS
		12	6	22.73	PASS
		12	13	22.69	PASS
		25	0	22.31	PASS
		1	0	22.01	PASS
HCH		1	12	22.29	PASS
		1	24	22.87	PASS
		12	0	22.24	PASS
		12	6	22.24	PASS
		12	13	22.63	PASS
		25	0	22.75	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.18	PASS
		1	24	22.14	PASS
		1	49	22.29	PASS
		25	0	22.36	PASS
		25	12	22.49	PASS
		25	25	22.34	PASS
		50	0	21.89	PASS
	MCH	1	0	22.27	PASS
		1	24	22.82	PASS
		1	49	22.28	PASS
		25	0	22.77	PASS
		25	12	22.32	PASS
		25	25	22.13	PASS
		50	0	22.53	PASS
	HCH	1	0	22.84	PASS
		1	24	21.95	PASS
		1	49	22.33	PASS
		25	0	22.54	PASS
		25	12	22.22	PASS
		25	25	22.09	PASS
		50	0	22.41	PASS

16QAM	LCH	1	0	22.61	PASS
		1	24	22.44	PASS
		1	49	22.69	PASS
		25	0	22.43	PASS
		25	12	22.89	PASS
		25	25	22.79	PASS
		50	0	22.49	PASS
	MCH	1	0	21.97	PASS
		1	24	22.86	PASS
		1	49	21.97	PASS
		25	0	22.59	PASS
		25	12	22.39	PASS
		25	25	22.43	PASS
		50	0	22.54	PASS
	HCH	1	0	21.95	PASS
		1	24	22.82	PASS
		1	49	22.79	PASS
		25	0	22.68	PASS
		25	12	22.28	PASS
		25	25	22.77	PASS
		50	0	22.45	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.91	PASS
		1	37	22.46	PASS
		1	74	22.32	PASS
		37	0	22.47	PASS
		37	18	22.57	PASS
		37	38	21.98	PASS
		75	0	22.38	PASS
	MCH	1	0	21.91	PASS
		1	37	22.29	PASS
		1	74	22.25	PASS
		37	0	22.37	PASS
		37	18	22.21	PASS
		37	38	22.81	PASS
		75	0	22.14	PASS
	HCH	1	0	22.28	PASS
		1	37	22.12	PASS
		1	74	22.54	PASS

		37	0	22.85	PASS
		37	18	22.69	PASS
		37	38	22.27	PASS
		75	0	22.21	PASS
16QAM	LCH	1	0	22.52	PASS
		1	37	22.21	PASS
		1	74	22.02	PASS
		37	0	22.43	PASS
		37	18	22.17	PASS
		37	38	22.23	PASS
		75	0	22.74	PASS
	MCH	1	0	22.43	PASS
		1	37	22.46	PASS
		1	74	21.94	PASS
		37	0	22.24	PASS
		37	18	22.43	PASS
		37	38	22.77	PASS
		75	0	22.86	PASS
	HCH	1	0	21.89	PASS
		1	37	22.52	PASS
		1	74	21.89	PASS
		37	0	22.21	PASS
		37	18	22.08	PASS
		37	38	22.18	PASS
		75	0	21.92	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.75	PASS
		1	49	22.64	PASS
		1	99	22.05	PASS
		50	0	22.24	PASS
		50	25	22.85	PASS
		50	50	21.93	PASS
		100	0	22.87	PASS
	MCH	1	0	22.35	PASS
		1	49	22.73	PASS
		1	99	22.47	PASS
		50	0	22.45	PASS

		50	25	22.85	PASS
		50	50	22.86	PASS
		100	0	22.13	PASS
16QAM	HCH	1	0	22.02	PASS
		1	49	22.68	PASS
		1	99	22.38	PASS
		50	0	22.19	PASS
		50	25	21.91	PASS
		50	50	22.05	PASS
		100	0	22.66	PASS
		1	0	22.26	PASS
16QAM	LCH	1	49	22.32	PASS
		1	99	22.14	PASS
		50	0	22.04	PASS
		50	25	22.75	PASS
		50	50	22.87	PASS
		100	0	22.53	PASS
		1	0	22.84	PASS
16QAM	MCH	1	49	22.17	PASS
		1	99	22.07	PASS
		50	0	22.06	PASS
		50	25	22.21	PASS
		50	50	22.27	PASS
		100	0	21.97	PASS
		1	0	22.81	PASS
16QAM	HCH	1	49	22.66	PASS
		1	99	22.46	PASS
		50	0	22.27	PASS
		50	25	22.13	PASS
		50	50	22.03	PASS
		100	0	22.54	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	5.08	<13	PASS
		1	3	5.03	<13	PASS
		1	5	5.16	<13	PASS
		3	0	5.33	<13	PASS
		3	2	5.32	<13	PASS
		3	3	5.34	<13	PASS
		6	0	5.75	<13	PASS
	MCH	1	0	5.56	<13	PASS
		1	3	5.42	<13	PASS
		1	5	5.56	<13	PASS
		3	0	5.72	<13	PASS
		3	2	5.76	<13	PASS
		3	3	5.7	<13	PASS
		6	0	5.84	<13	PASS
16QAM	LCH	1	0	6.07	<13	PASS
		1	3	5.85	<13	PASS
		1	5	5.89	<13	PASS
		3	0	5.86	<13	PASS
		3	2	5.87	<13	PASS
		3	3	5.88	<13	PASS
		6	0	6.2	<13	PASS
	MCH	1	0	6.08	<13	PASS
		1	3	5.93	<13	PASS
		1	5	6	<13	PASS
		3	0	6.28	<13	PASS
		3	2	6.32	<13	PASS
		3	3	6.35	<13	PASS
		6	0	6.55	<13	PASS

		3	3	6.3	<13	PASS
		6	0	6.73	<13	PASS
HCH		1	0	6.59	<13	PASS
		1	3	6.55	<13	PASS
		1	5	6.49	<13	PASS
		3	0	6.82	<13	PASS
		3	2	7	<13	PASS
		3	3	6.86	<13	PASS
		6	0	7.09	<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	5.27	<13	PASS
		1	7	5.25	<13	PASS
		1	14	5.5	<13	PASS
		8	0	5.86	<13	PASS
		8	4	5.86	<13	PASS
		8	7	5.86	<13	PASS
		15	0	5.85	<13	PASS
	MCH	1	0	5.53	<13	PASS
		1	7	5.51	<13	PASS
		1	14	5.64	<13	PASS
		8	0	6.04	<13	PASS
		8	4	6.08	<13	PASS
		8	7	6.03	<13	PASS
		15	0	6.06	<13	PASS
	HCH	1	0	5.52	<13	PASS
		1	7	5.54	<13	PASS
		1	14	5.36	<13	PASS
		8	0	6.11	<13	PASS
		8	4	6.01	<13	PASS
		8	7	5.99	<13	PASS
		15	0	6.11	<13	PASS
16QAM	LCH	1	0	6.04	<13	PASS
		1	7	6.24	<13	PASS
		1	14	6.26	<13	PASS
		8	0	6.5	<13	PASS
		8	4	6.58	<13	PASS
		8	7	6.49	<13	PASS

		15	0	6.72	<13	PASS
MCH	1	0		6.63	<13	PASS
	1	7		6.48	<13	PASS
	1	14		6.61	<13	PASS
	8	0		6.64	<13	PASS
	8	4		6.67	<13	PASS
	8	7		6.53	<13	PASS
	15	0		6.79	<13	PASS
HCH	1	0		6.5	<13	PASS
	1	7		6.48	<13	PASS
	1	14		6.53	<13	PASS
	8	0		6.85	<13	PASS
	8	4		6.76	<13	PASS
	8	7		6.83	<13	PASS
	15	0		6.98	<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	5.08	<13	PASS
		1	12	5.23	<13	PASS
		1	24	5.37	<13	PASS
		12	0	5.87	<13	PASS
		12	6	5.78	<13	PASS
		12	13	5.97	<13	PASS
		25	0	5.95	<13	PASS
QPSK	MCH	1	0	5.25	<13	PASS
		1	12	5.21	<13	PASS
		1	24	5.29	<13	PASS
		12	0	5.96	<13	PASS
		12	6	5.95	<13	PASS
		12	13	5.85	<13	PASS
		25	0	6.05	<13	PASS
QPSK	HCH	1	0	8.47	<13	PASS
		1	12	5.8	<13	PASS
		1	24	5.56	<13	PASS
		12	0	6.08	<13	PASS
		12	6	6.13	<13	PASS
		12	13	6.05	<13	PASS
		25	0	6.14	<13	PASS

16QAM	LCH	1	0	5.92	<13	PASS
		1	12	5.92	<13	PASS
		1	24	6.3	<13	PASS
		12	0	6.56	<13	PASS
		12	6	6.65	<13	PASS
		12	13	6.69	<13	PASS
		25	0	6.69	<13	PASS
	MCH	1	0	6.36	<13	PASS
		1	12	6.2	<13	PASS
		1	24	6.15	<13	PASS
		12	0	6.78	<13	PASS
		12	6	6.79	<13	PASS
		12	13	6.7	<13	PASS
		25	0	6.79	<13	PASS
	HCH	1	0	6.52	<13	PASS
		1	12	6.45	<13	PASS
		1	24	6.34	<13	PASS
		12	0	7.16	<13	PASS
		12	6	7.18	<13	PASS
		12	13	7.12	<13	PASS
		25	0	6.88	<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	5.17	<13	PASS
		1	24	5.58	<13	PASS
		1	49	5.84	<13	PASS
		25	0	5.79	<13	PASS
		25	12	5.94	<13	PASS
		25	25	6.05	<13	PASS
		50	0	5.87	<13	PASS
	MCH	1	0	5.69	<13	PASS
		1	24	5.46	<13	PASS
		1	49	5.51	<13	PASS
		25	0	6.01	<13	PASS
		25	12	6.02	<13	PASS
		25	25	5.76	<13	PASS
		50	0	5.8	<13	PASS
	HCH	1	0	5.56	<13	PASS

		1	24	5.7	<13	PASS
		1	49	5.42	<13	PASS
		25	0	6.1	<13	PASS
		25	12	6.15	<13	PASS
		25	25	6.14	<13	PASS
		50	0	6.08	<13	PASS
16QAM	LCH	1	0	6.09	<13	PASS
		1	24	6.51	<13	PASS
		1	49	7.25	<13	PASS
		25	0	6.68	<13	PASS
		25	12	6.74	<13	PASS
		25	25	6.79	<13	PASS
		50	0	6.61	<13	PASS
	MCH	1	0	6.77	<13	PASS
		1	24	6.53	<13	PASS
		1	49	6.33	<13	PASS
		25	0	6.71	<13	PASS
		25	12	6.76	<13	PASS
		25	25	6.67	<13	PASS
		50	0	6.56	<13	PASS
	HCH	1	0	6.59	<13	PASS
		1	24	6.61	<13	PASS
		1	49	6.5	<13	PASS
		25	0	6.9	<13	PASS
		25	12	7.06	<13	PASS
		25	25	6.92	<13	PASS
		50	0	6.77	<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	5.26	<13	PASS
		1	37	5.88	<13	PASS
		1	74	5.88	<13	PASS
		37	0	5.82	<13	PASS
		37	18	5.99	<13	PASS
		37	38	6.02	<13	PASS
		75	0	6.27	<13	PASS
	MCH	1	0	6.03	<13	PASS
		1	37	5.46	<13	PASS

	HCH	1	74	5.4	<13	PASS
		37	0	5.92	<13	PASS
		37	18	5.87	<13	PASS
		37	38	5.8	<13	PASS
		75	0	6.14	<13	PASS
		1	0	5.52	<13	PASS
		1	37	5.98	<13	PASS
		1	74	5.99	<13	PASS
		37	0	5.96	<13	PASS
		37	18	6.01	<13	PASS
	LCH	37	38	6	<13	PASS
		75	0	6.27	<13	PASS
		1	0	6.05	<13	PASS
		1	37	6.96	<13	PASS
		1	74	6.96	<13	PASS
16QAM	MCH	37	0	6.65	<13	PASS
		37	18	6.75	<13	PASS
		37	38	6.75	<13	PASS
		75	0	6.77	<13	PASS
		1	0	6.86	<13	PASS
		1	37	6.64	<13	PASS
		1	74	6.43	<13	PASS
	HCH	37	0	6.74	<13	PASS
		37	18	6.62	<13	PASS
		37	38	6.61	<13	PASS
		75	0	6.63	<13	PASS
		1	0	6.54	<13	PASS
		1	37	7.13	<13	PASS
		1	74	6.75	<13	PASS
		37	0	6.77	<13	PASS

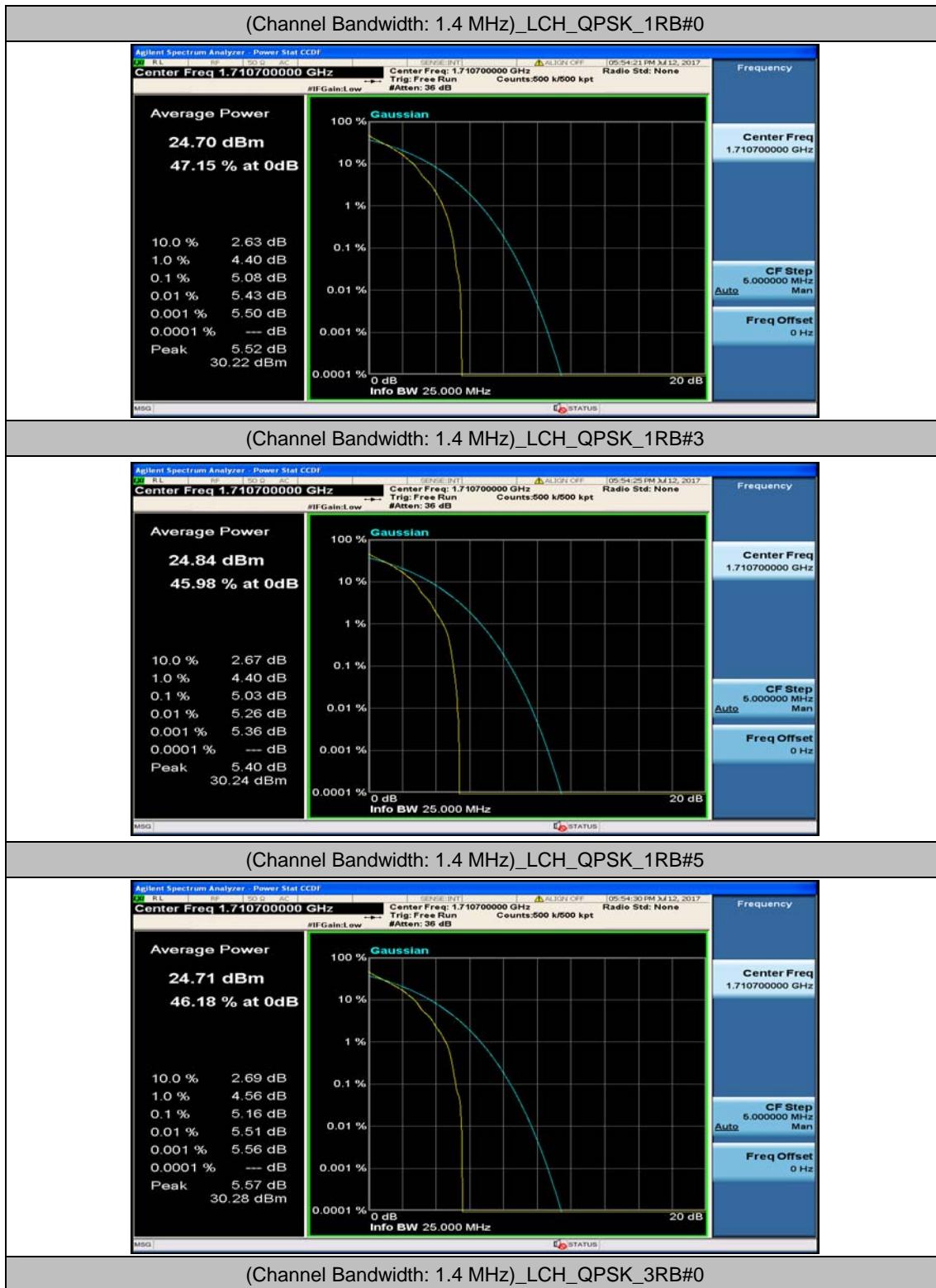
Channel Bandwidth: 20 MHz

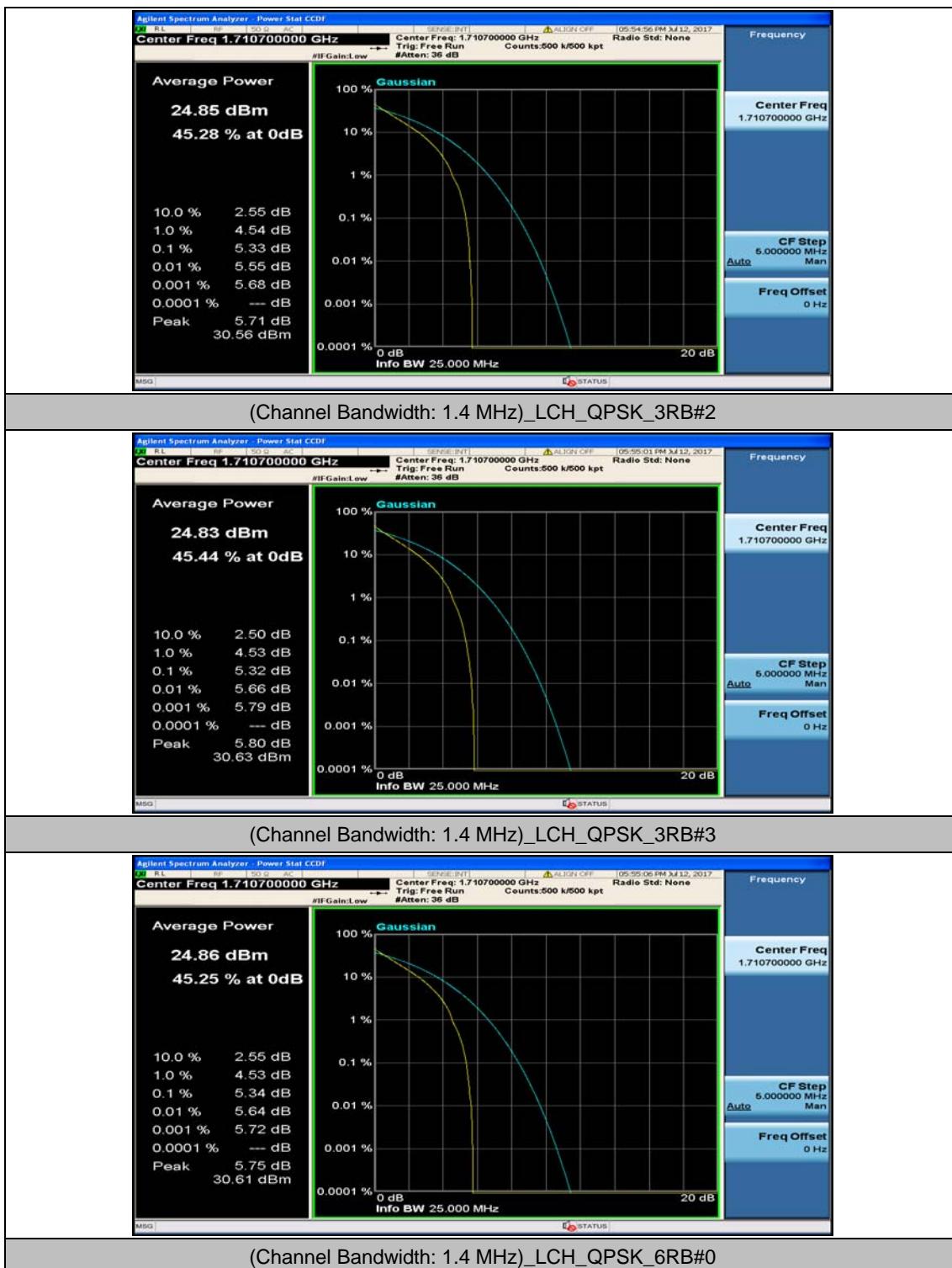
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	5.15	<13	PASS
		1	49	5.78	<13	PASS
		1	99	5.54	<13	PASS

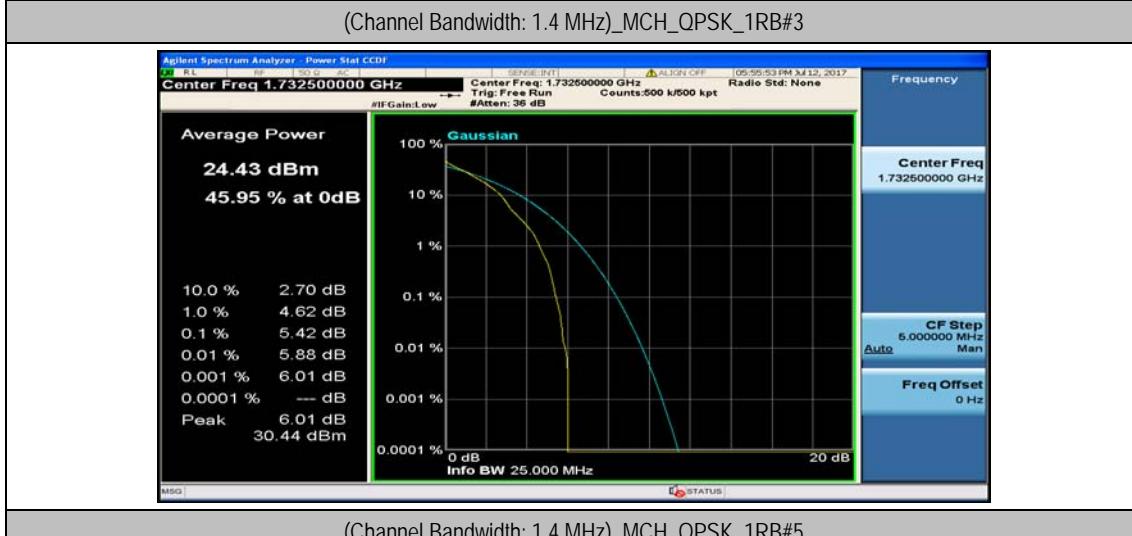
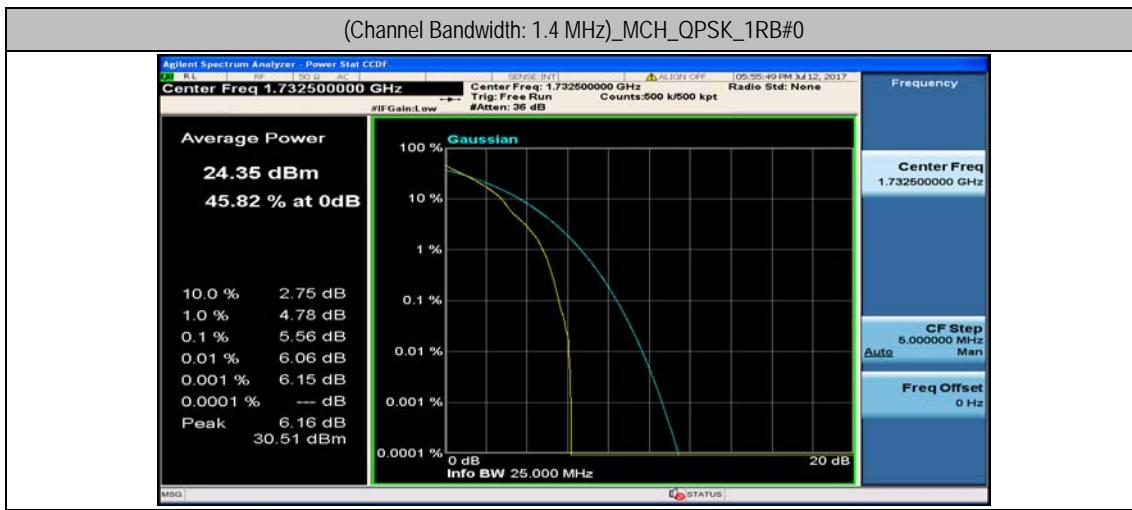
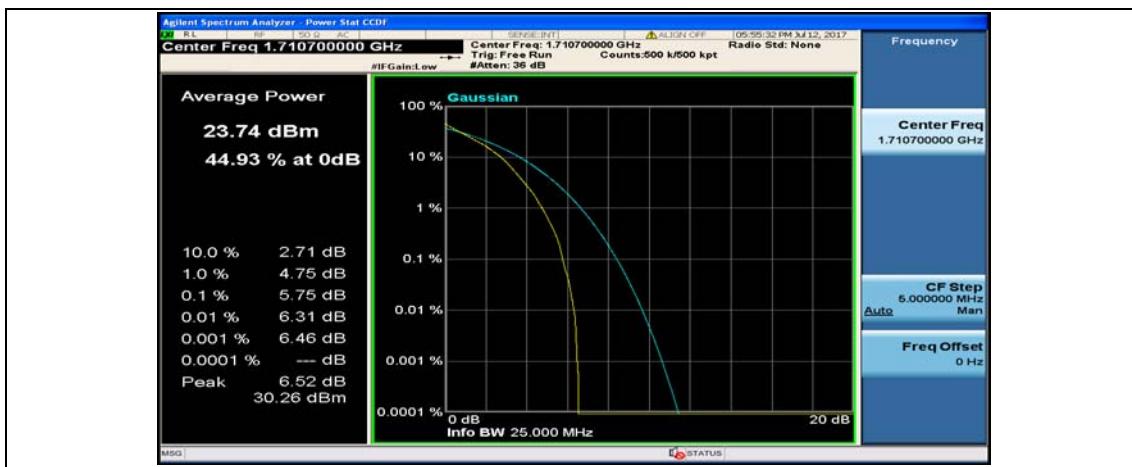
		50	0	5.92	<13	PASS
		50	25	6.01	<13	PASS
		50	50	5.99	<13	PASS
		100	0	5.96	<13	PASS
MCH	MCH	1	0	5.98	<13	PASS
		1	49	5.4	<13	PASS
		1	99	5.56	<13	PASS
		50	0	5.95	<13	PASS
		50	25	5.81	<13	PASS
		50	50	5.8	<13	PASS
		100	0	5.81	<13	PASS
HCH	HCH	1	0	5.56	<13	PASS
		1	49	5.98	<13	PASS
		1	99	6.09	<13	PASS
		50	0	5.87	<13	PASS
		50	25	6.02	<13	PASS
		50	50	6.01	<13	PASS
		100	0	5.93	<13	PASS
16QAM	LCH	1	0	6.1	<13	PASS
		1	49	6.9	<13	PASS
		1	99	6.99	<13	PASS
		50	0	6.65	<13	PASS
		50	25	6.8	<13	PASS
		50	50	6.75	<13	PASS
		100	0	6.71	<13	PASS
	MCH	1	0	6.97	<13	PASS
		1	49	6.14	<13	PASS
		1	99	6.76	<13	PASS
		50	0	6.74	<13	PASS
		50	25	6.66	<13	PASS
		50	50	6.57	<13	PASS
		100	0	6.54	<13	PASS
	HCH	1	0	6.25	<13	PASS
		1	49	6.62	<13	PASS
		1	99	6.44	<13	PASS
		50	0	6.55	<13	PASS
		50	25	6.71	<13	PASS
		50	50	6.8	<13	PASS
		100	0	6.63	<13	PASS

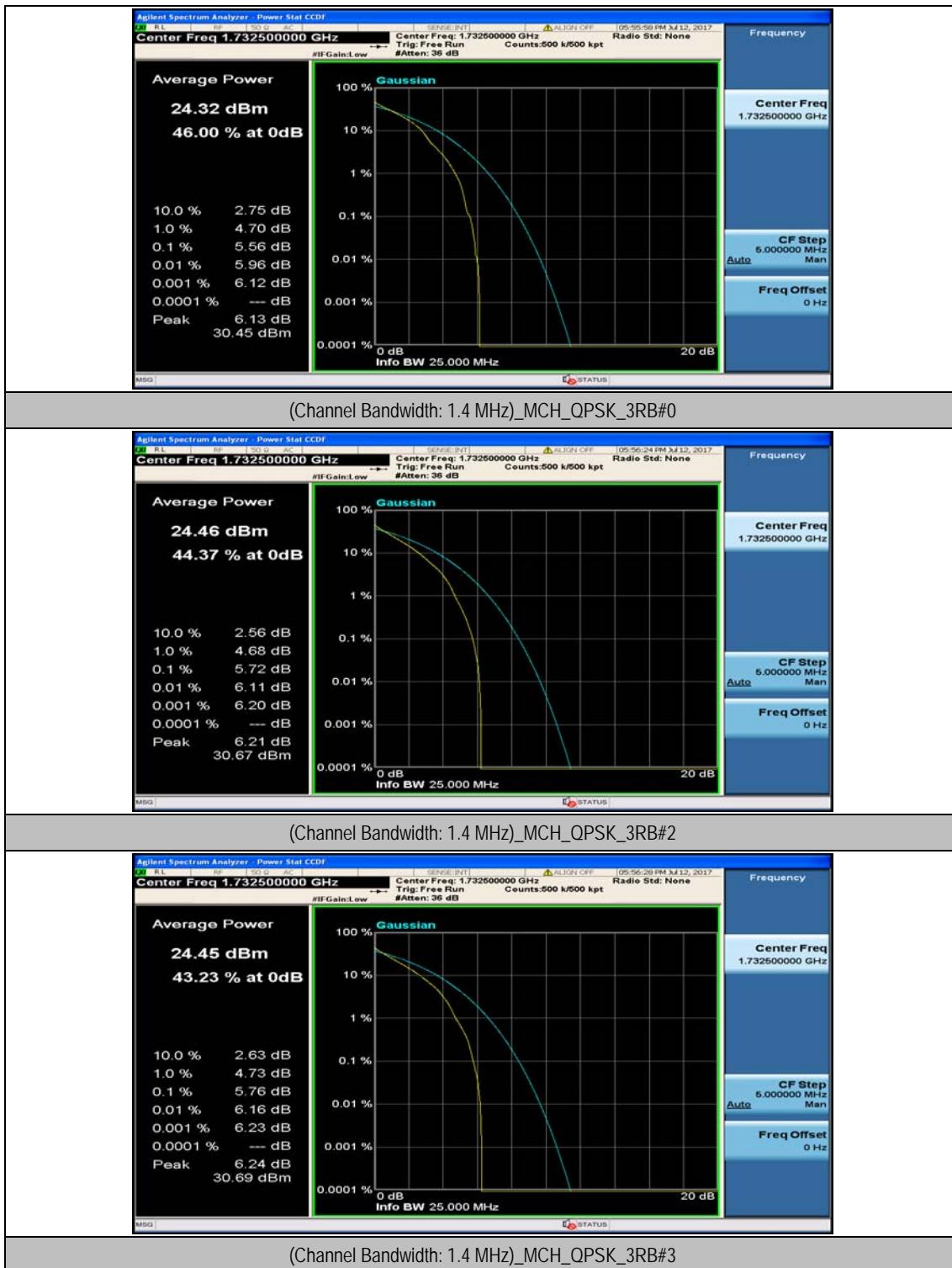
Test Graphs

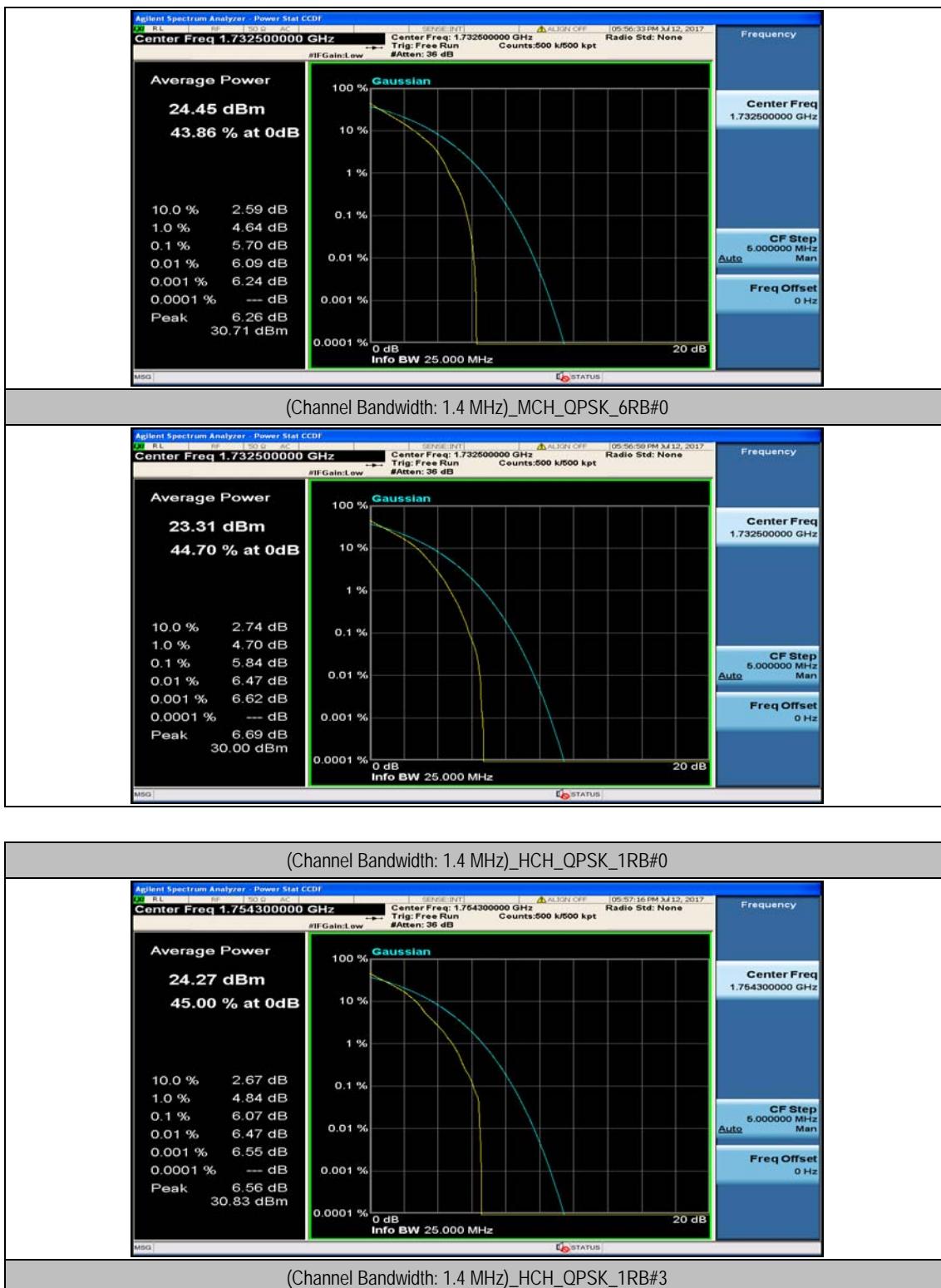
Channel Bandwidth: 1.4 MHz

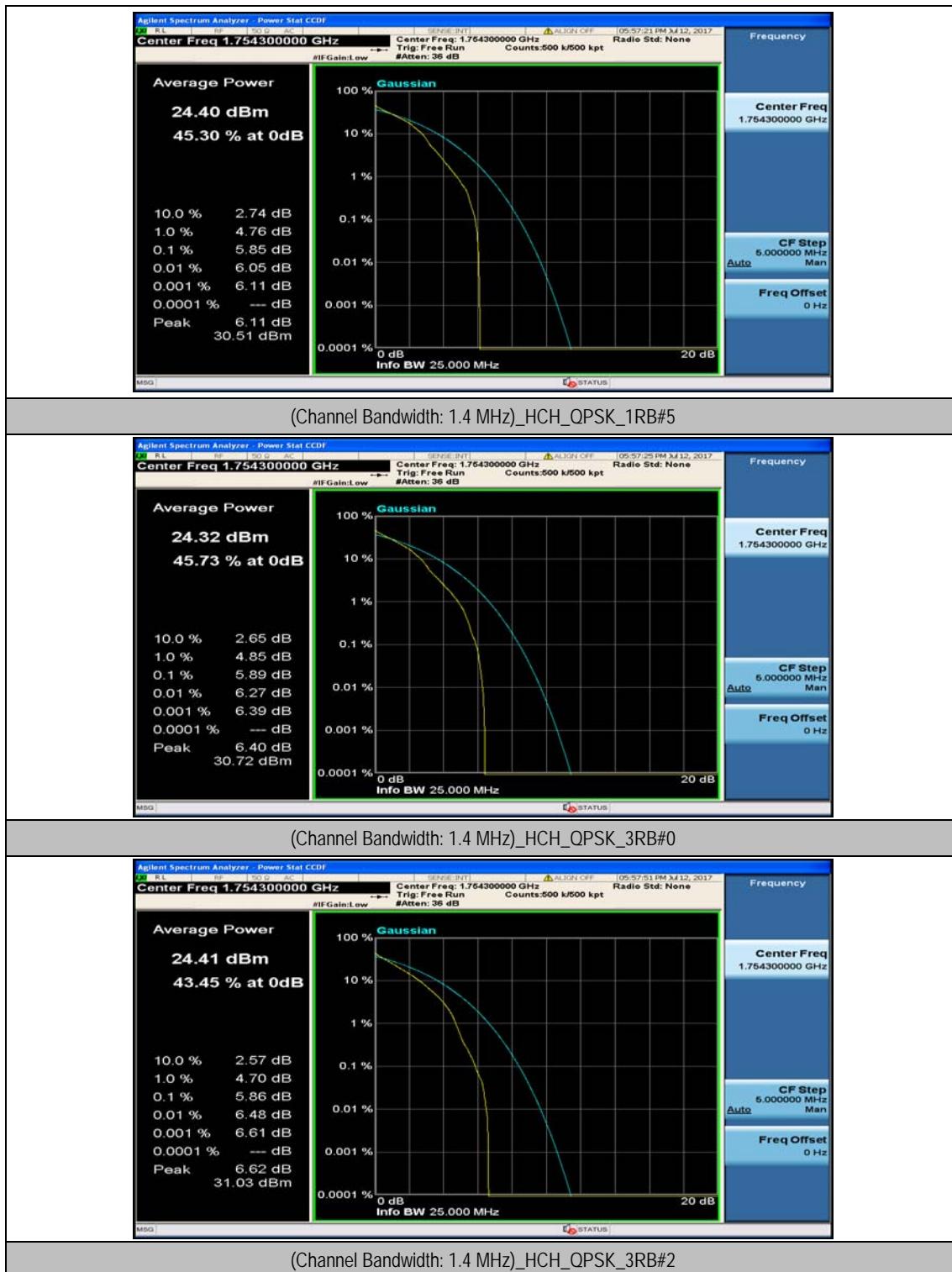


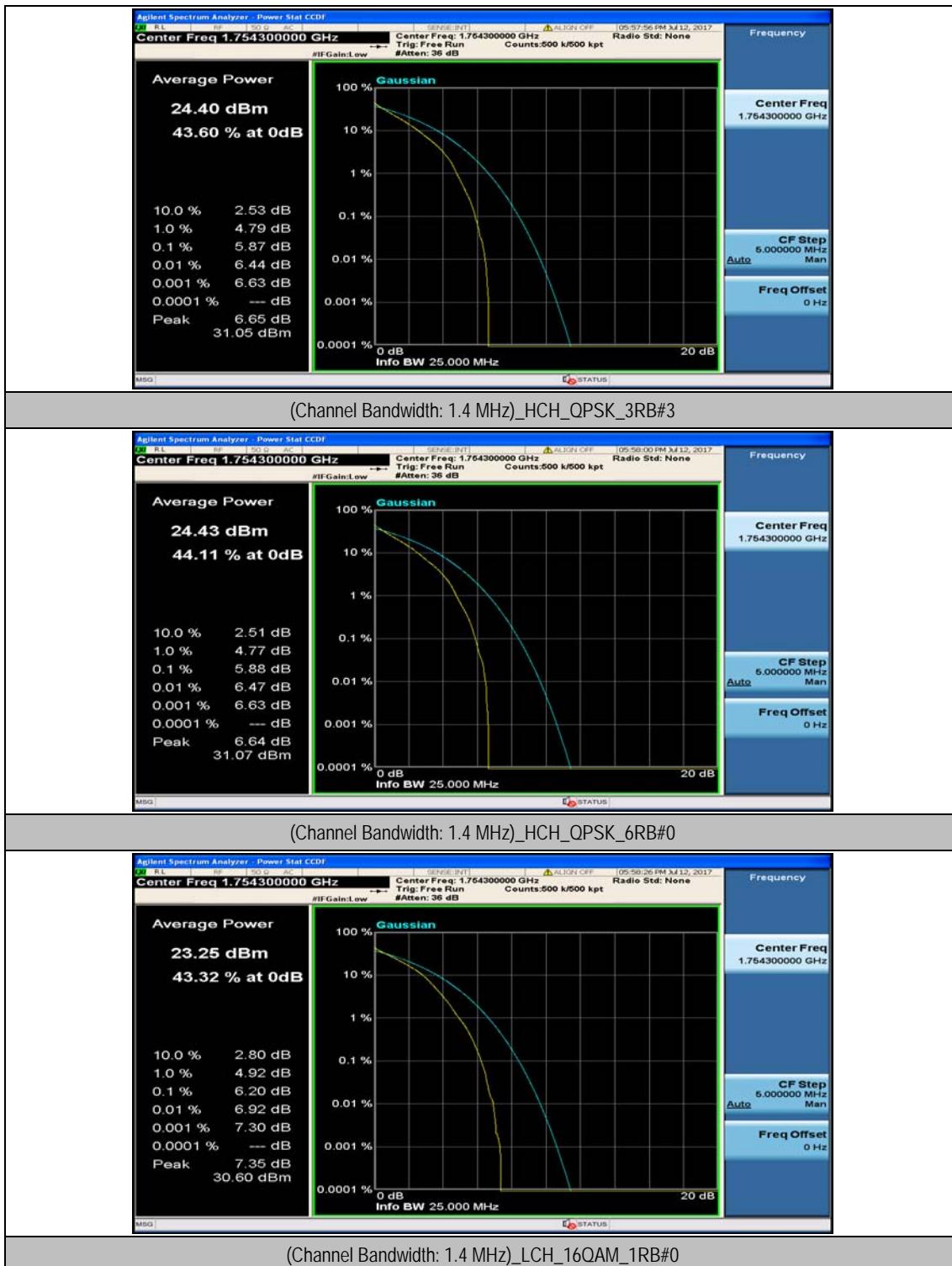


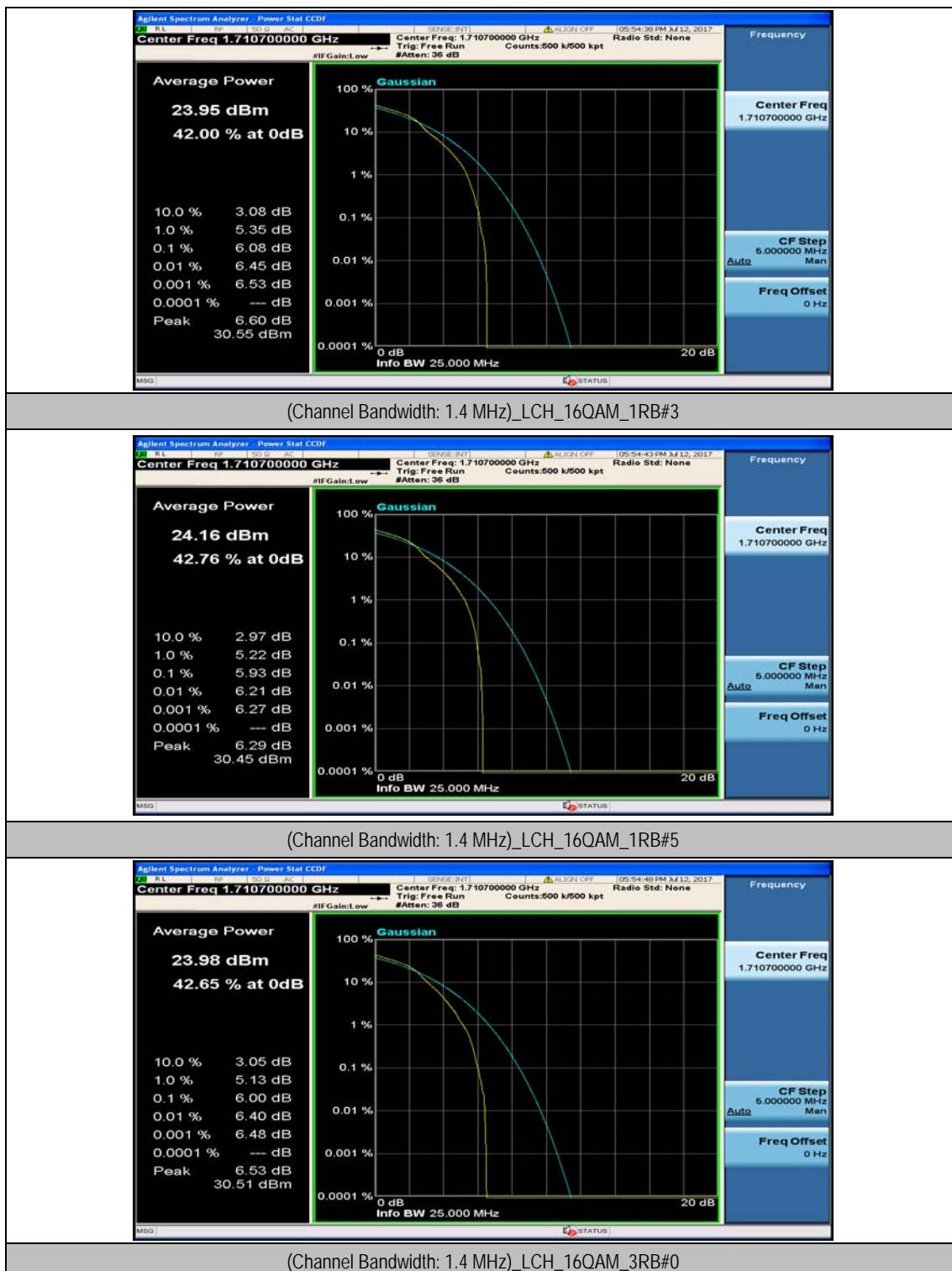


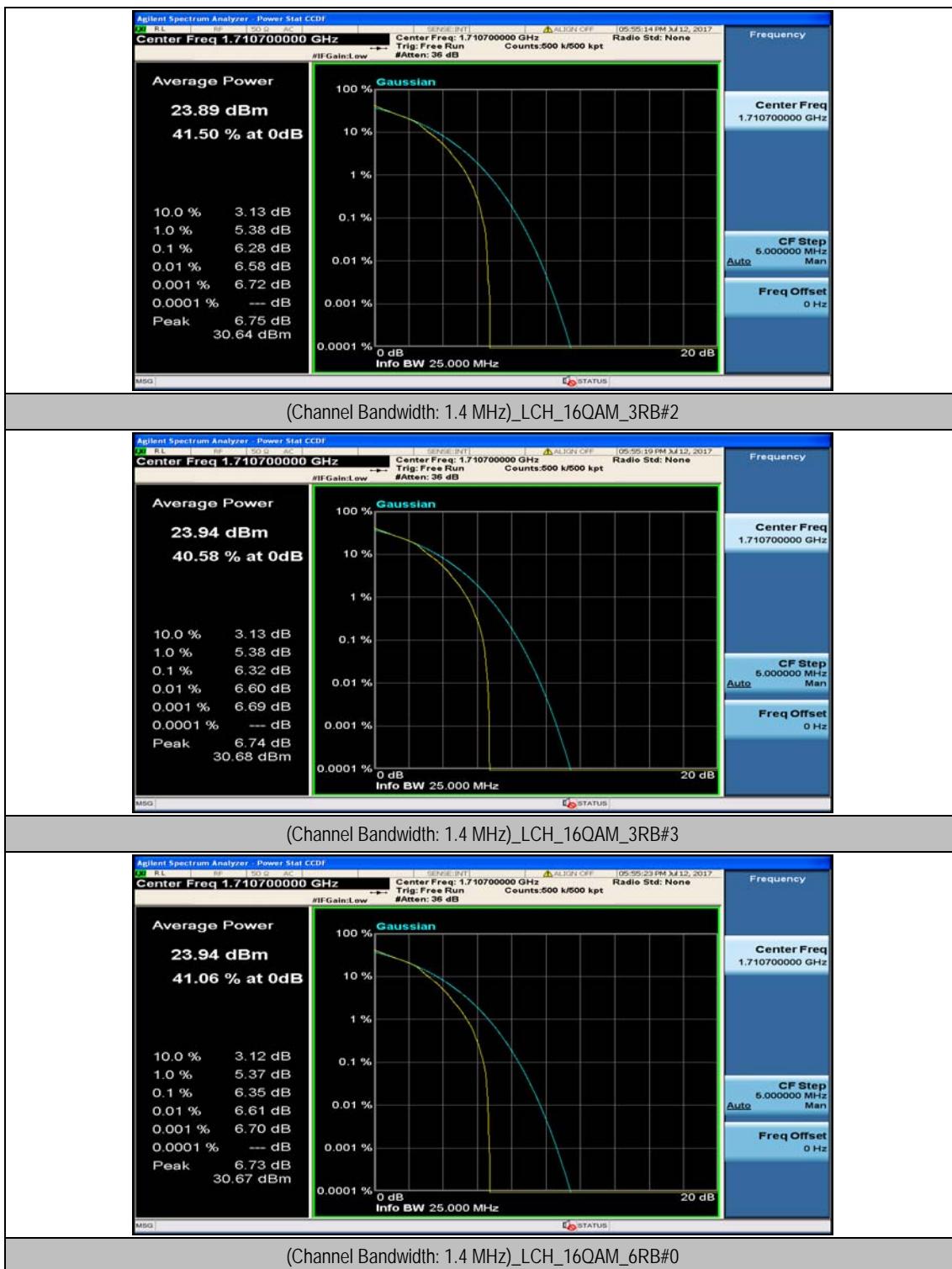


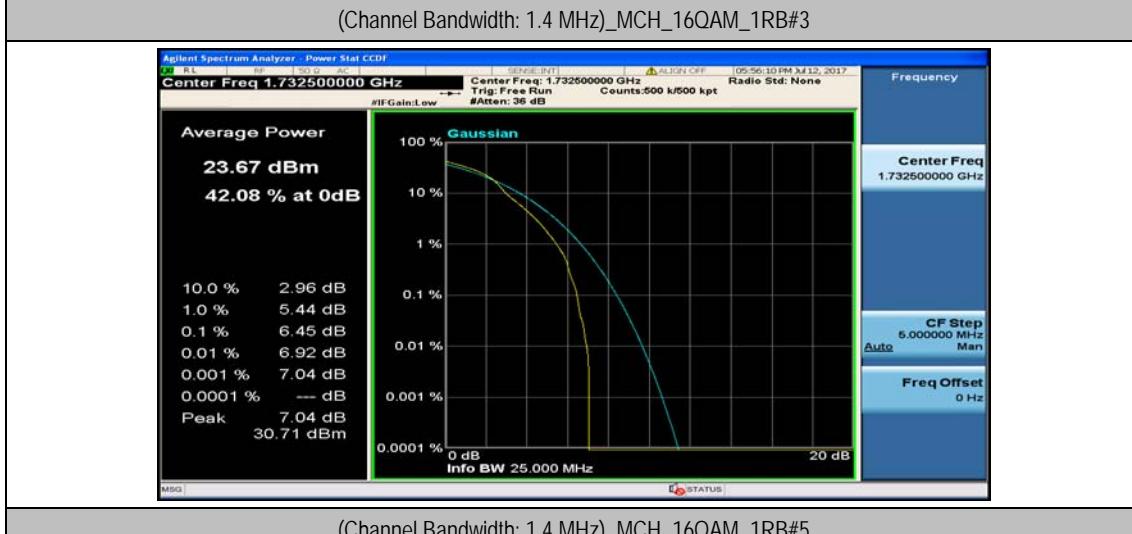
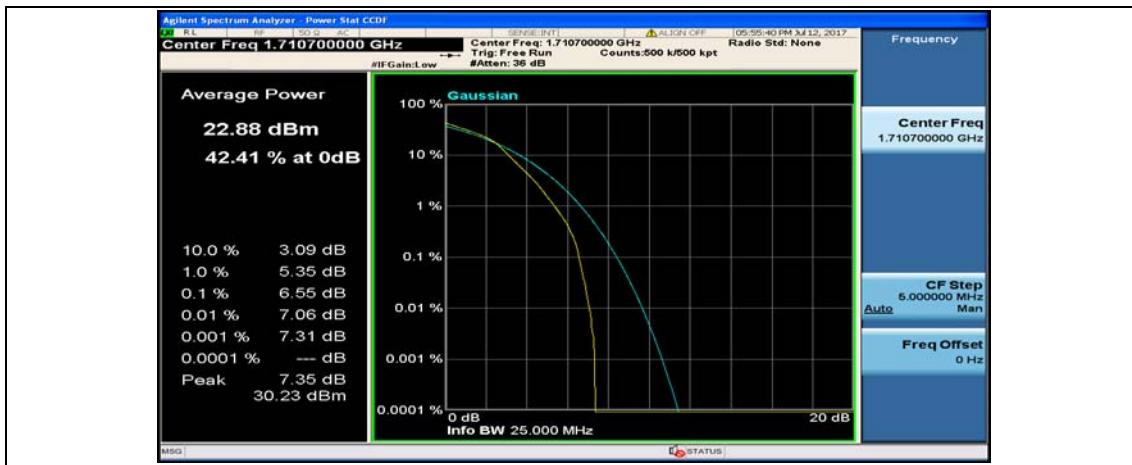


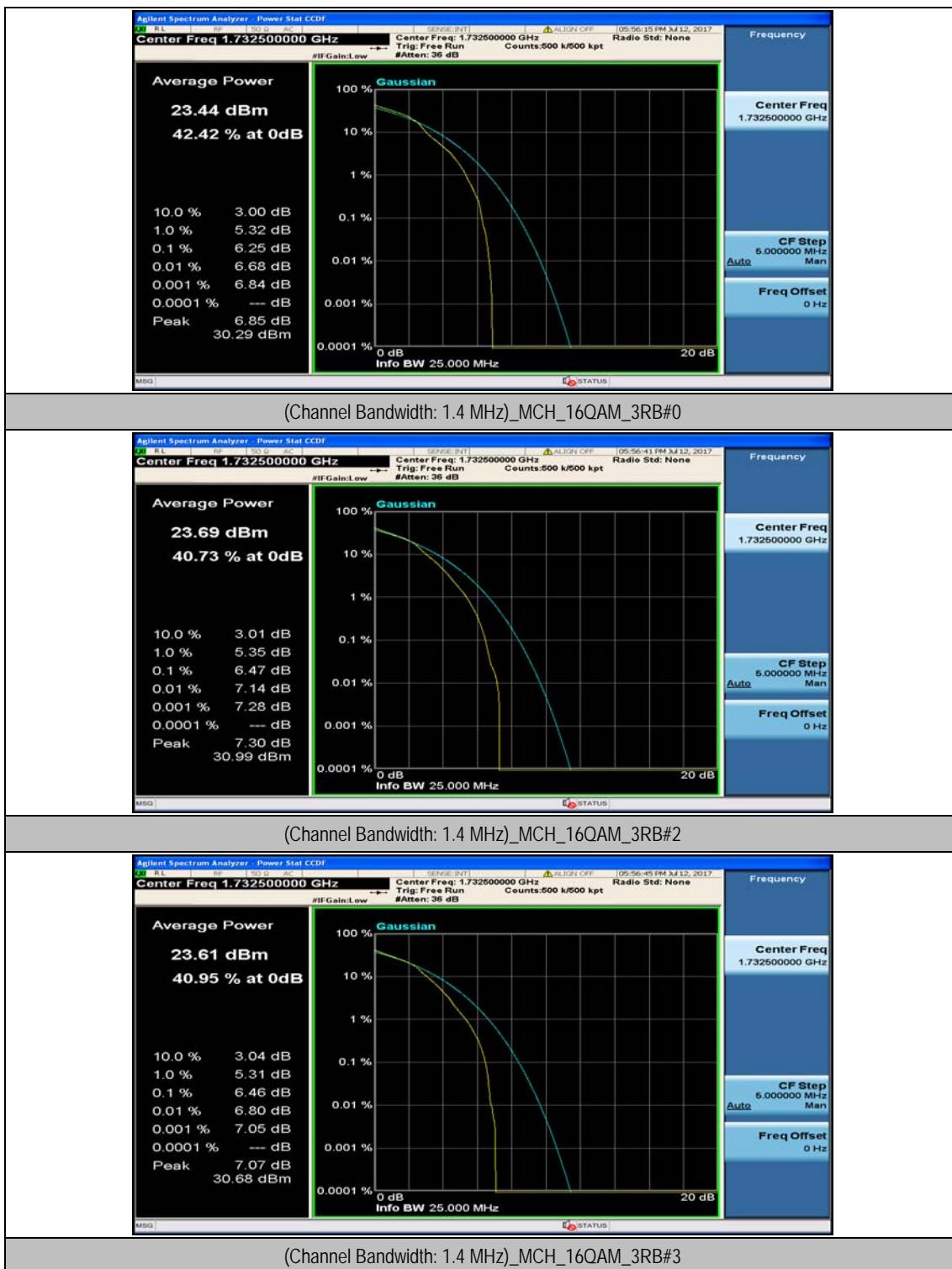


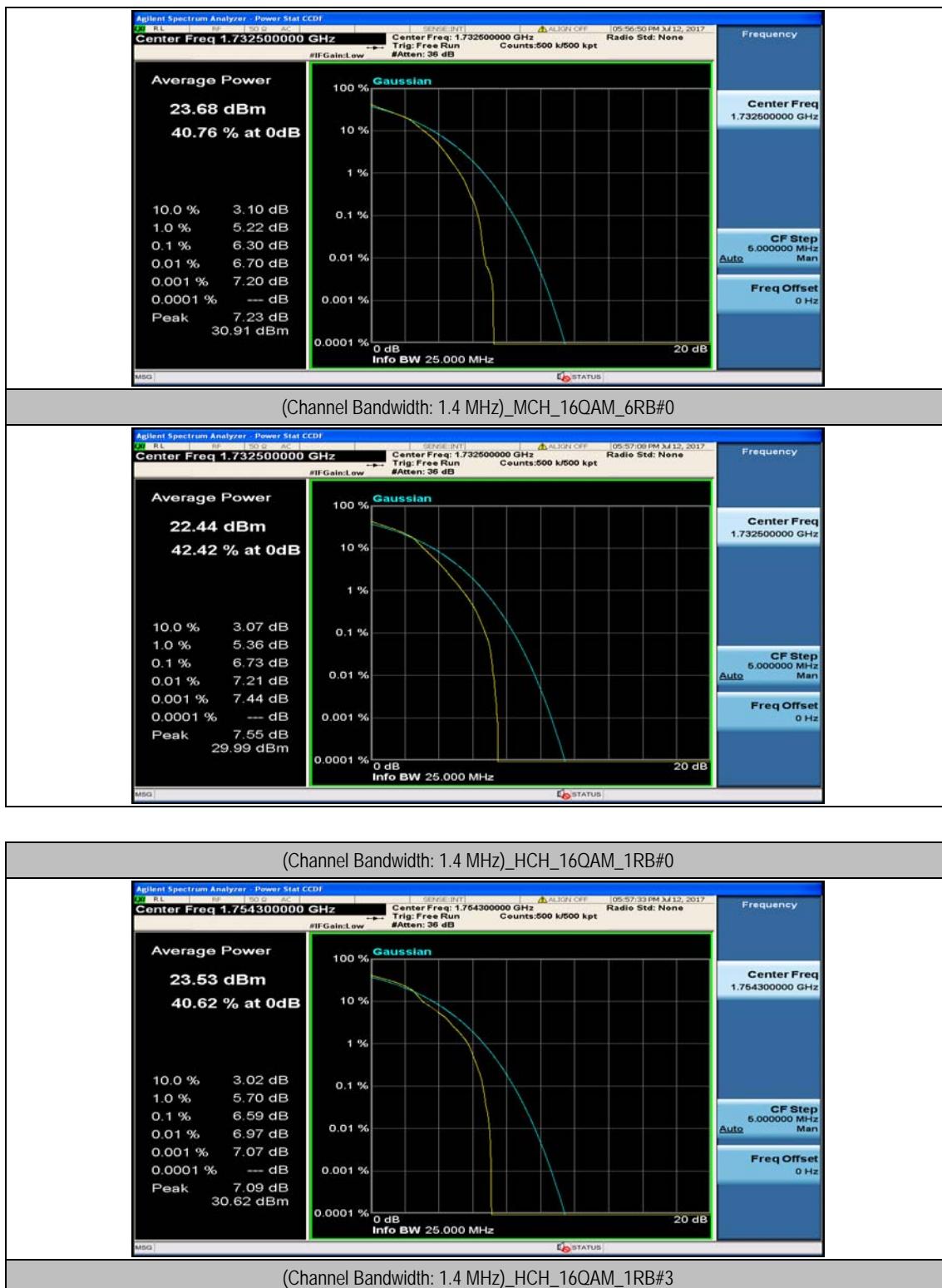


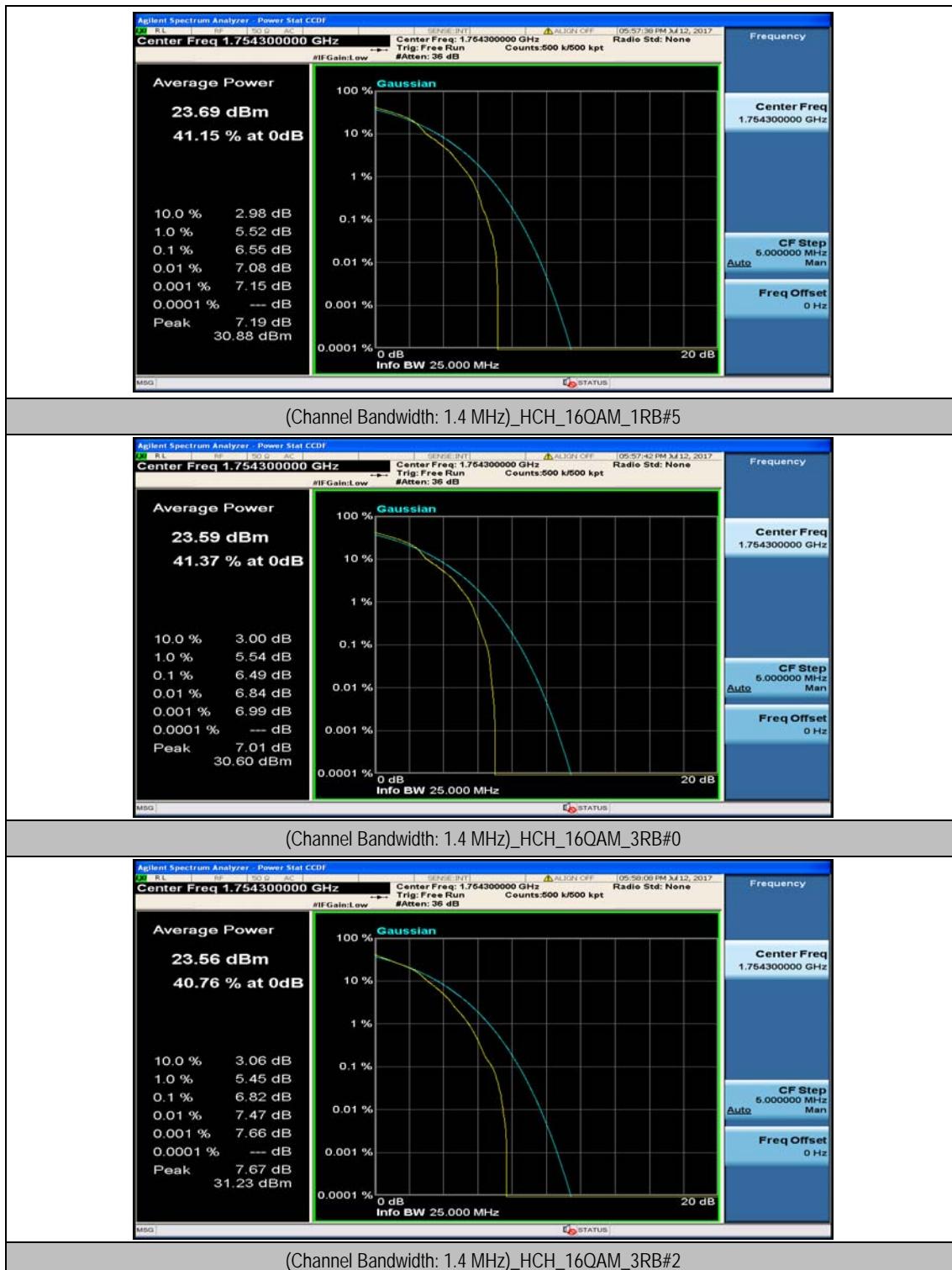


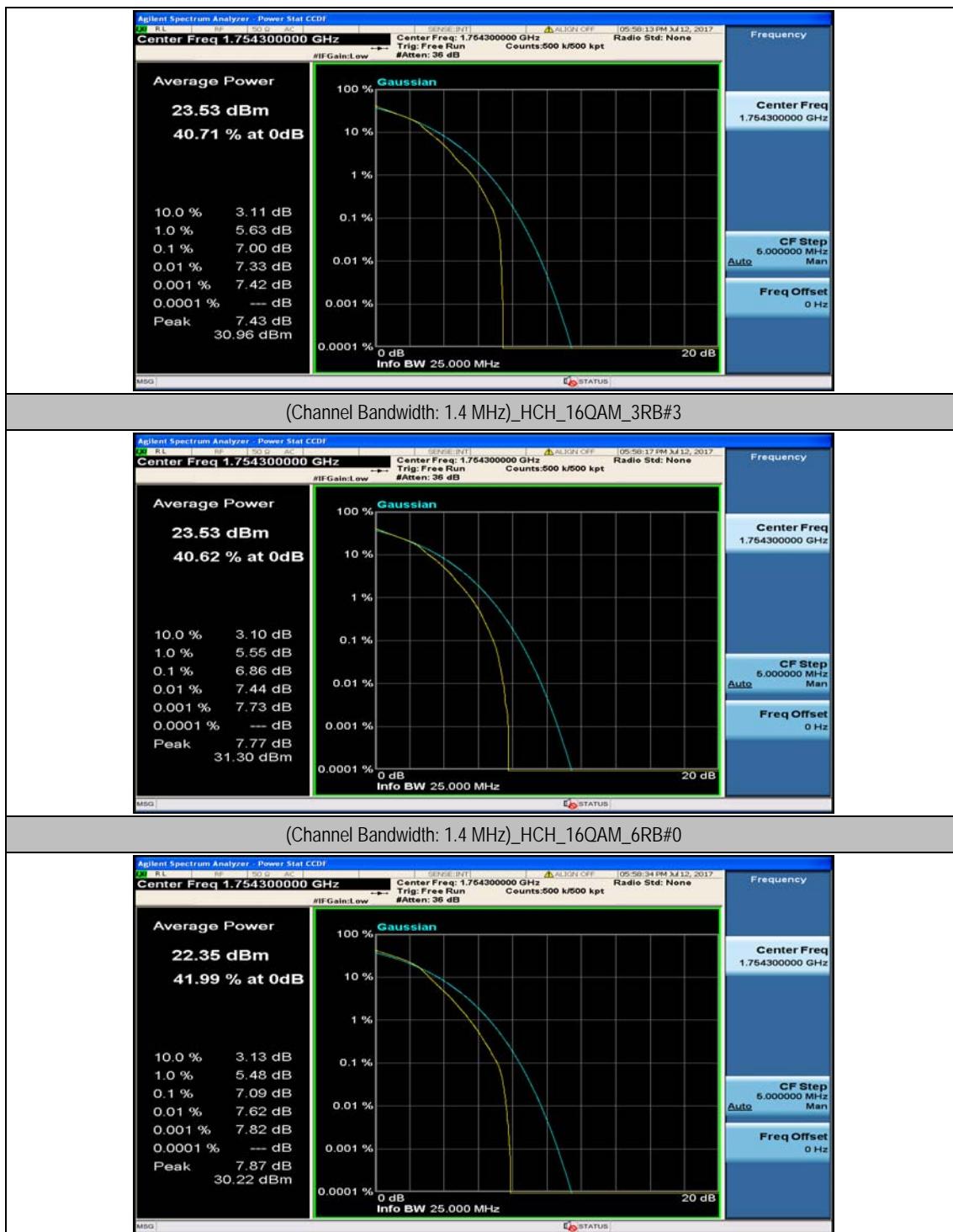




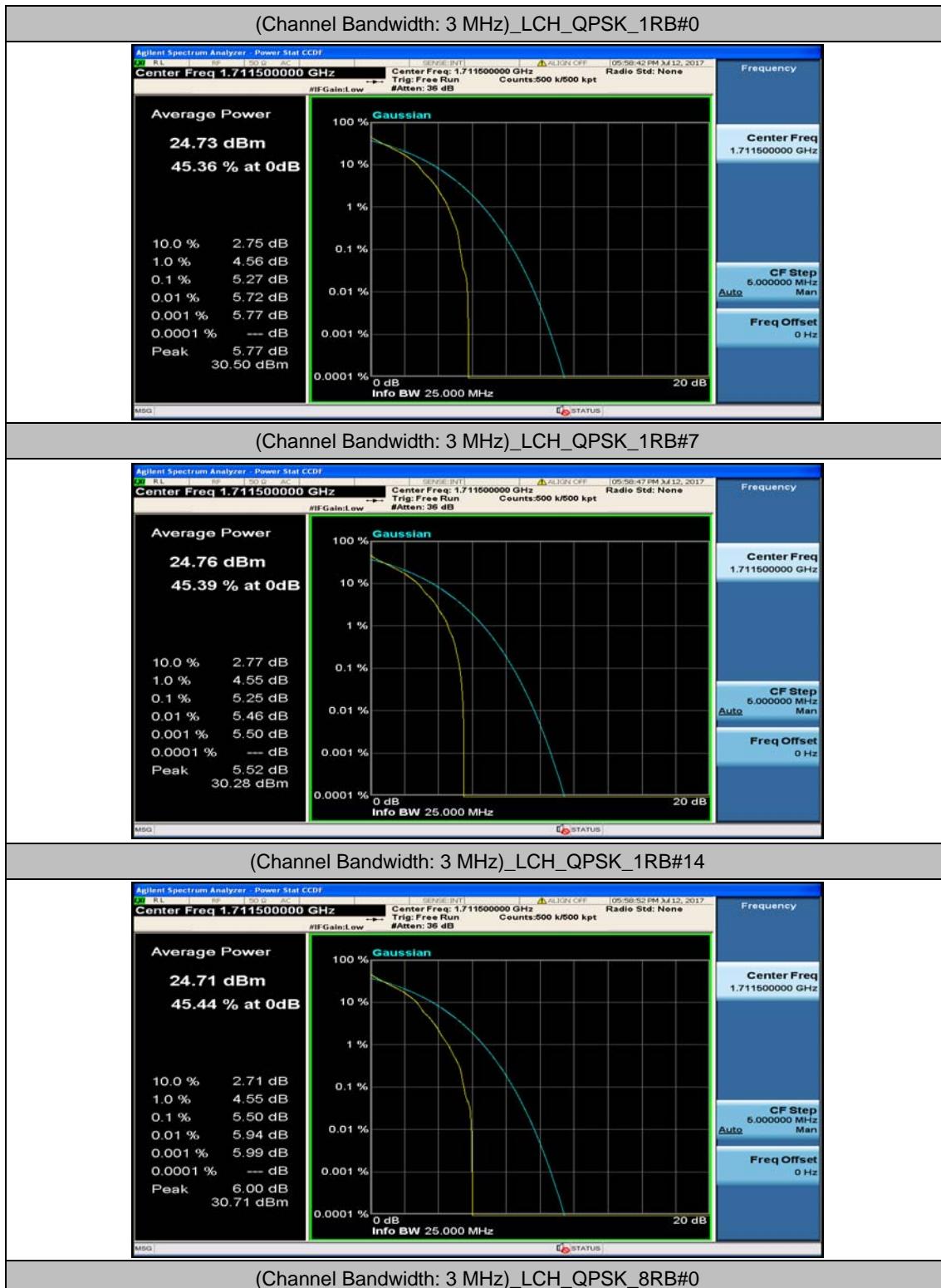


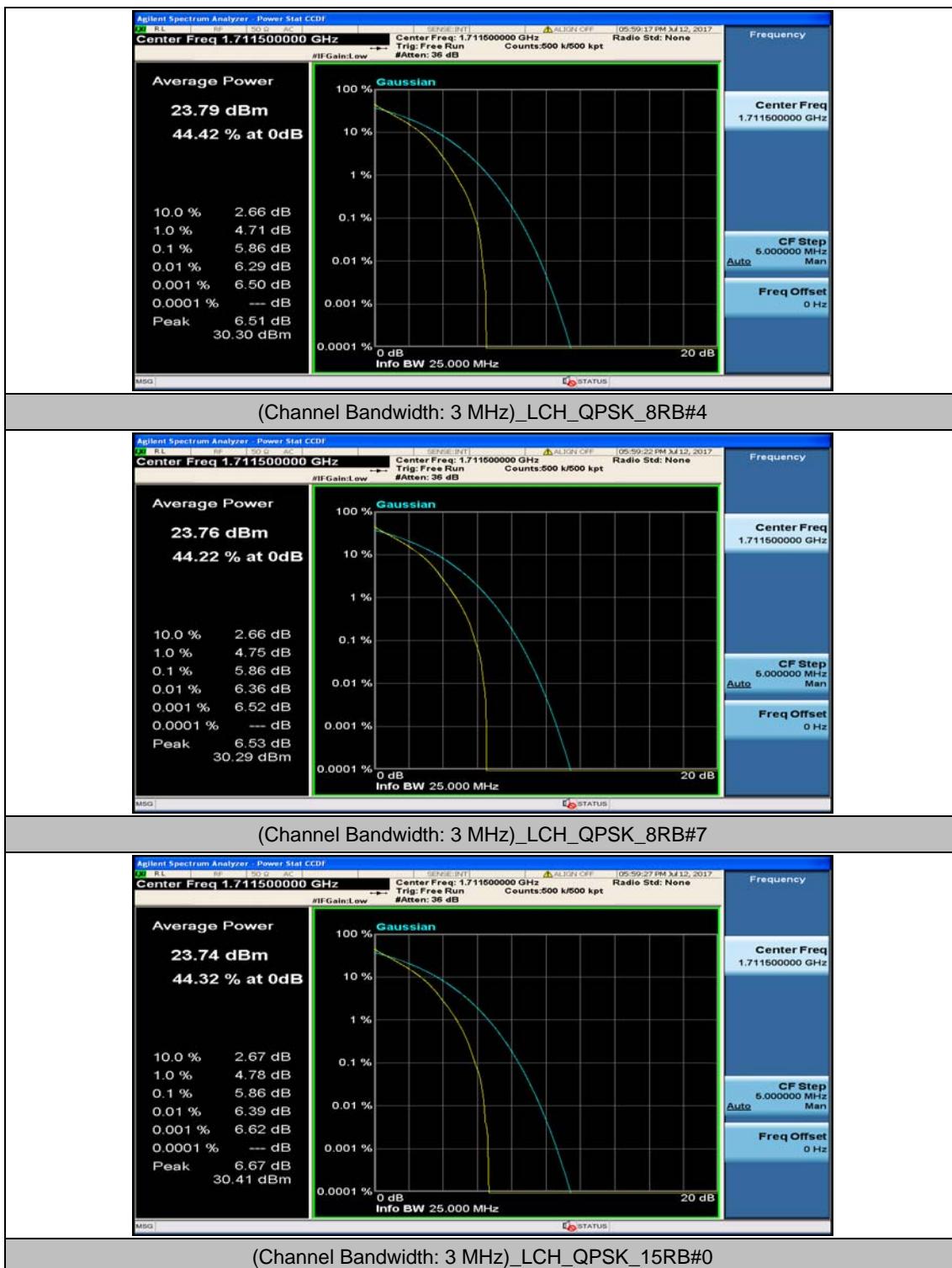


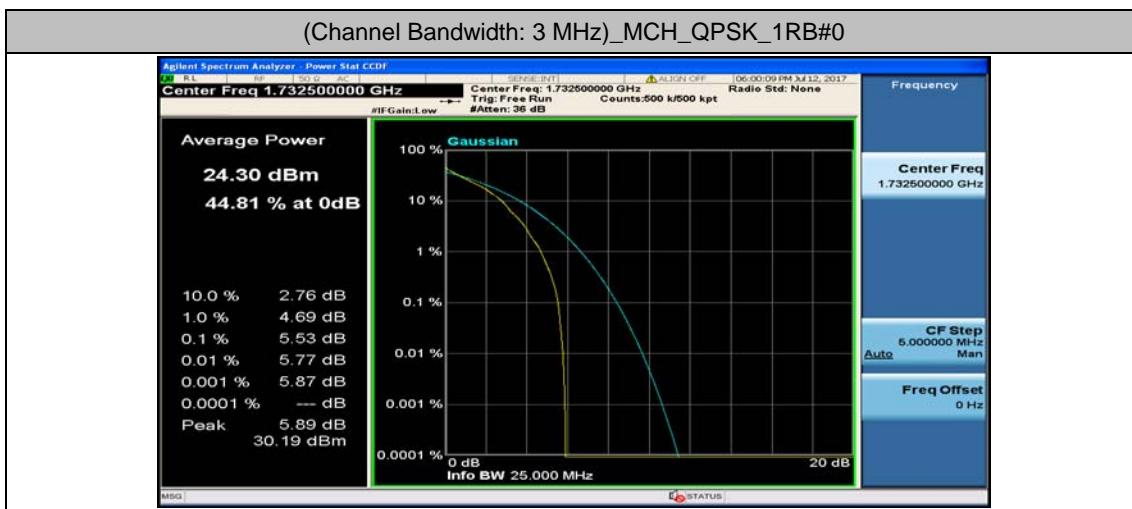
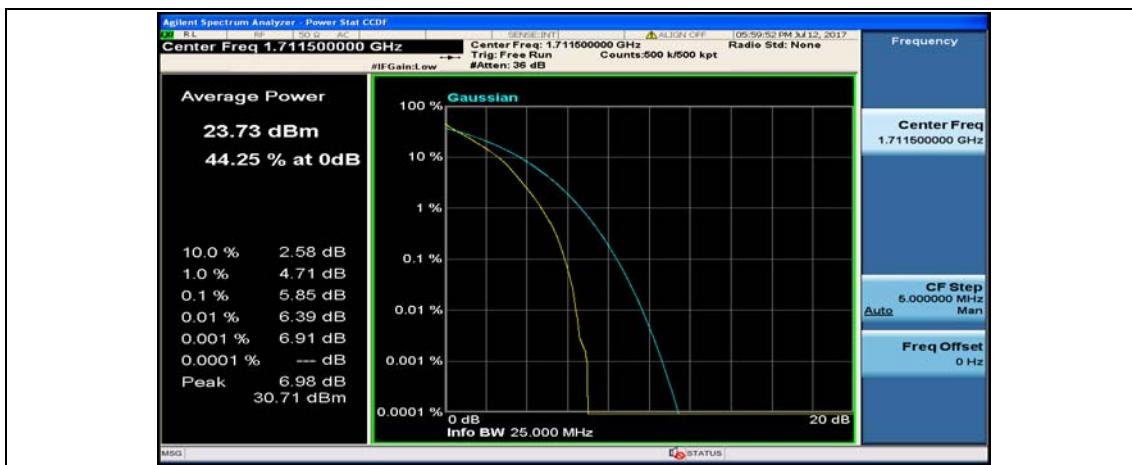


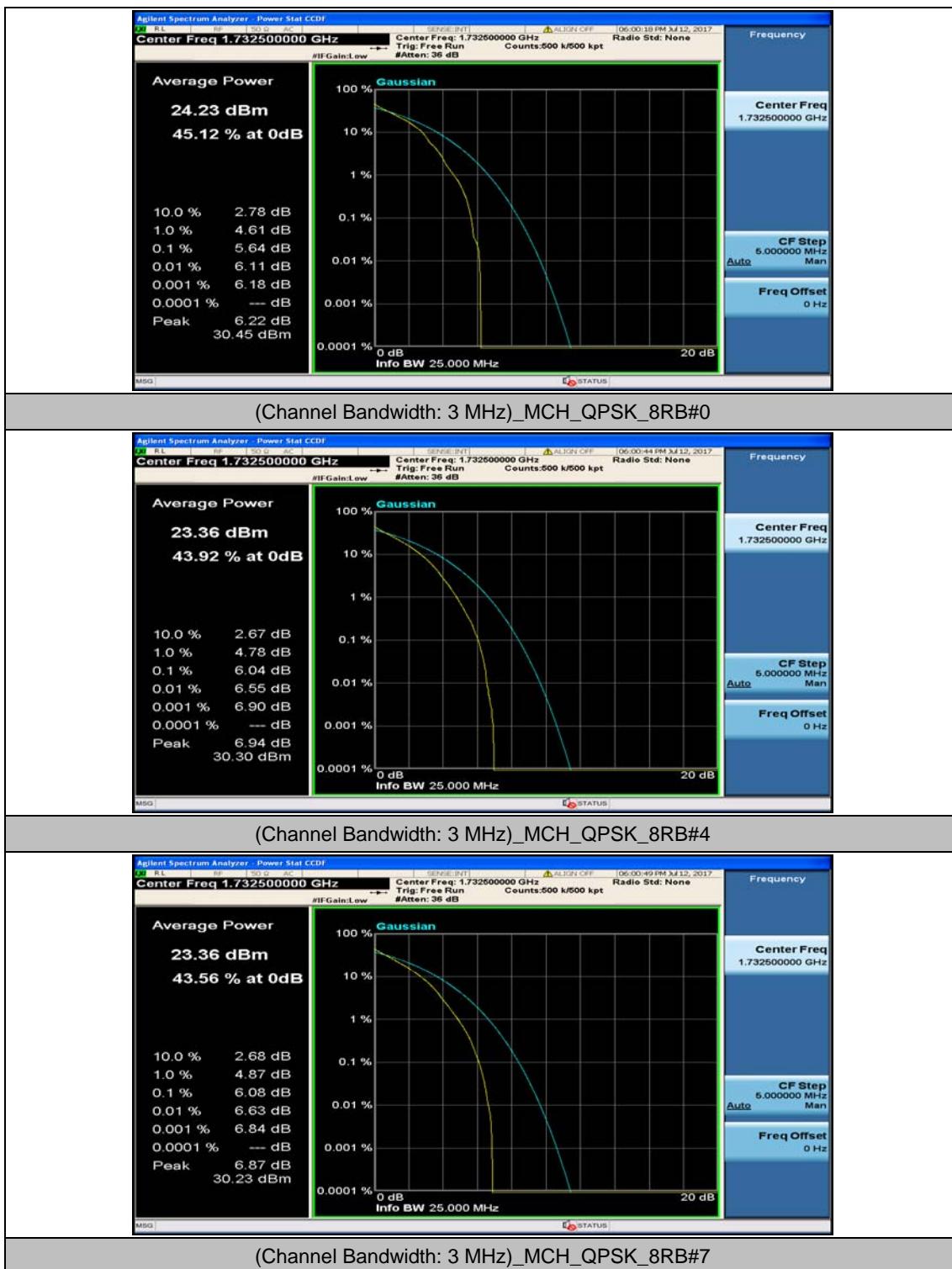


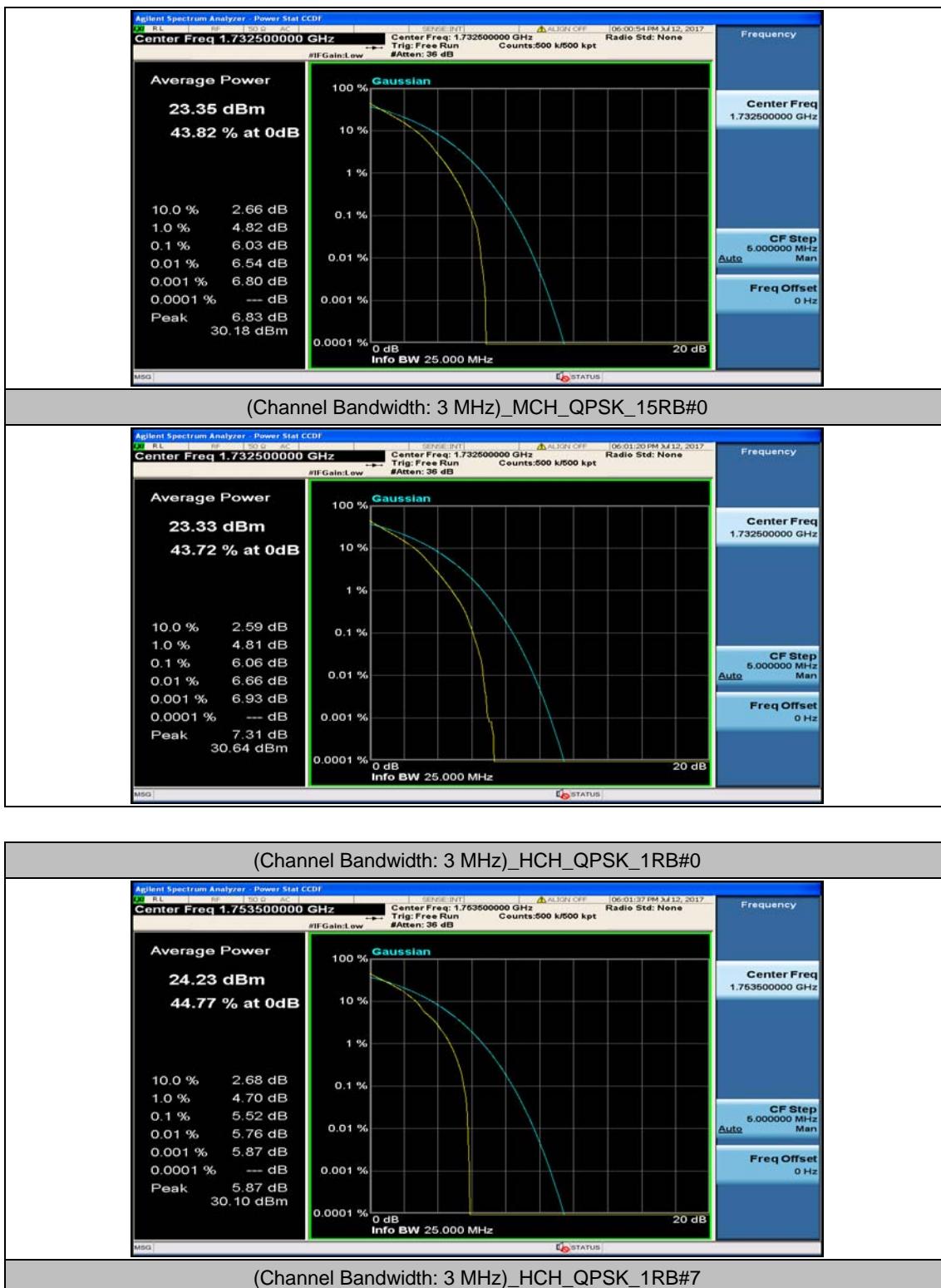
Channel Bandwidth: 3 MHz

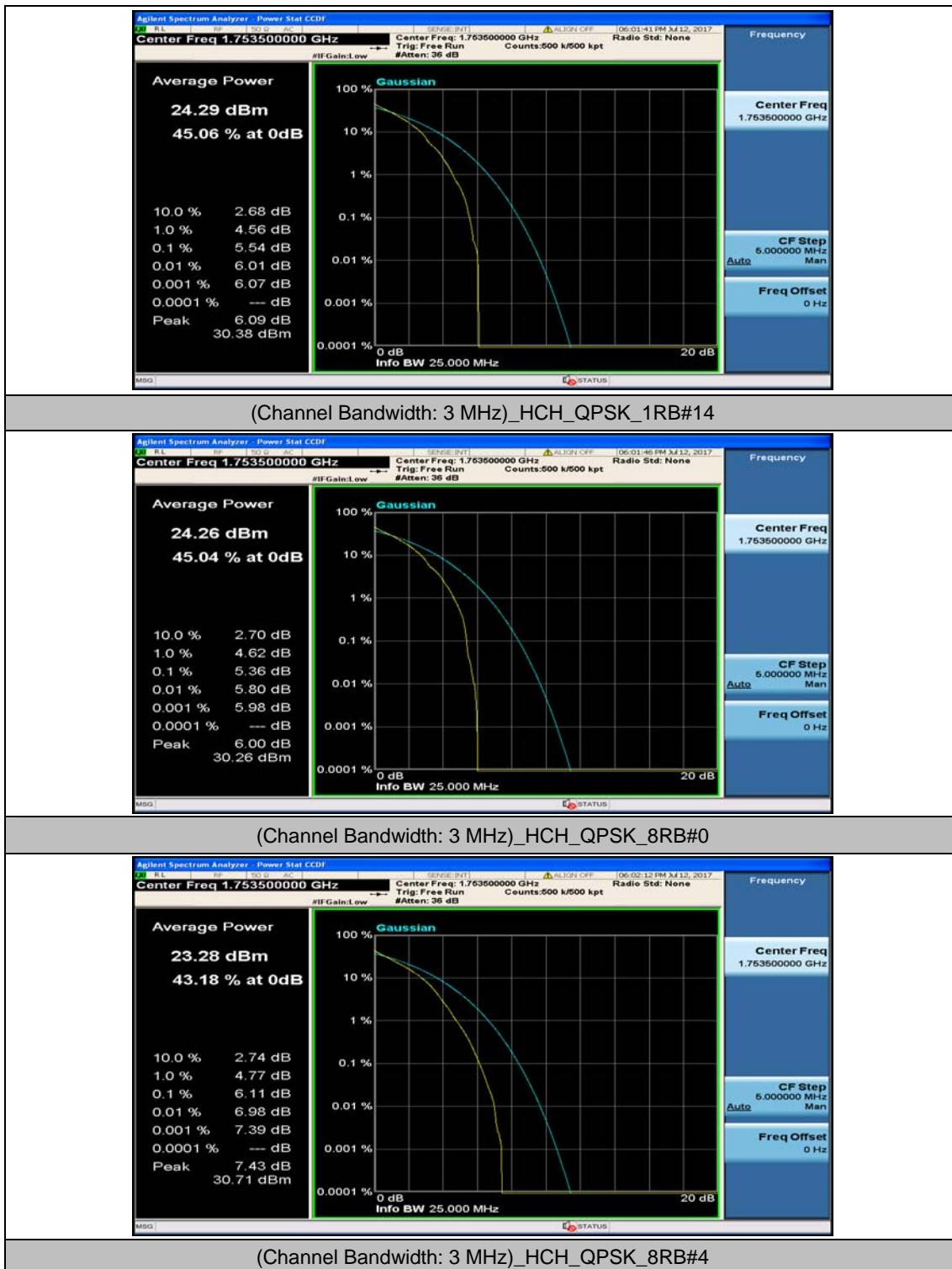


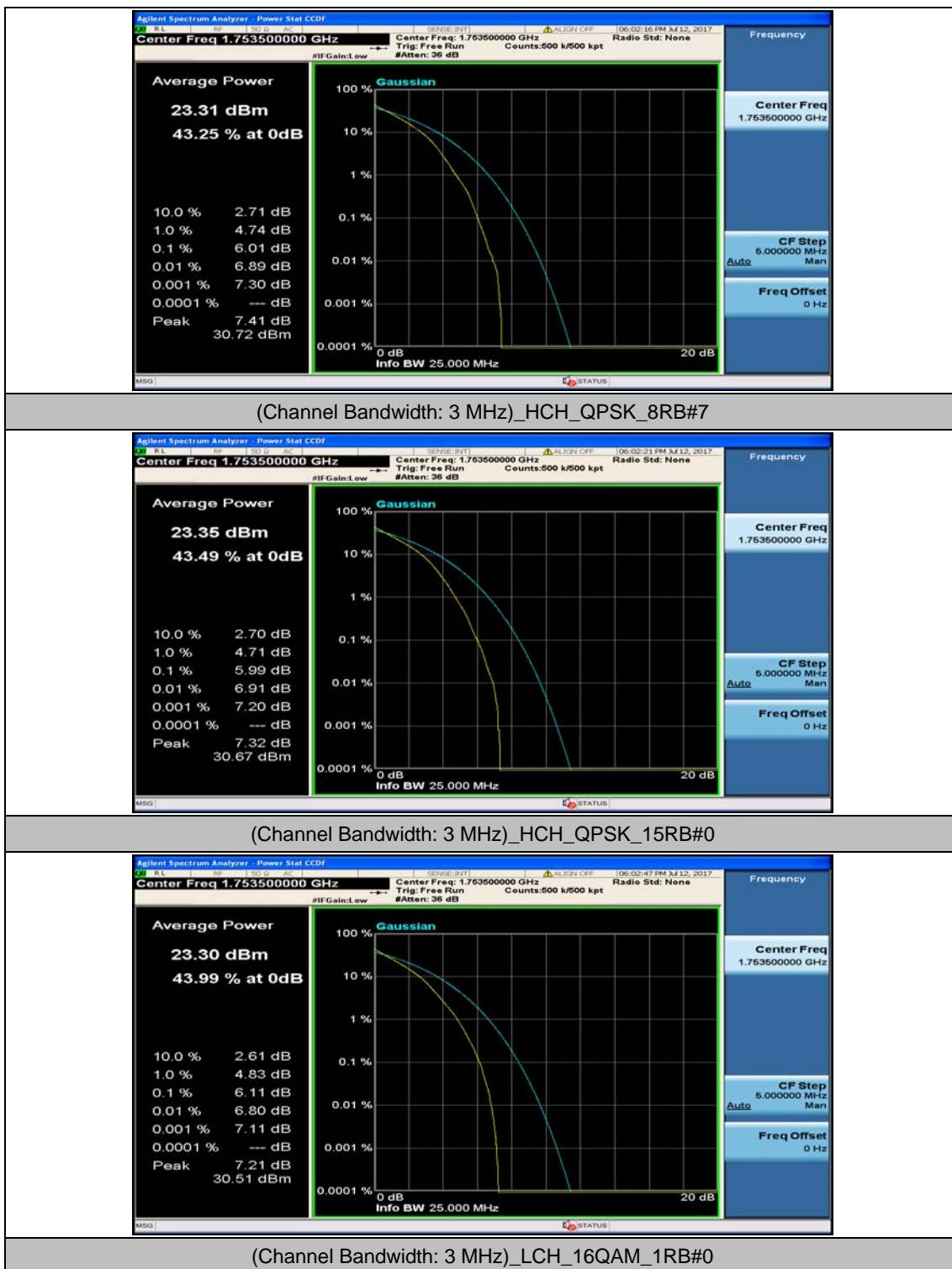


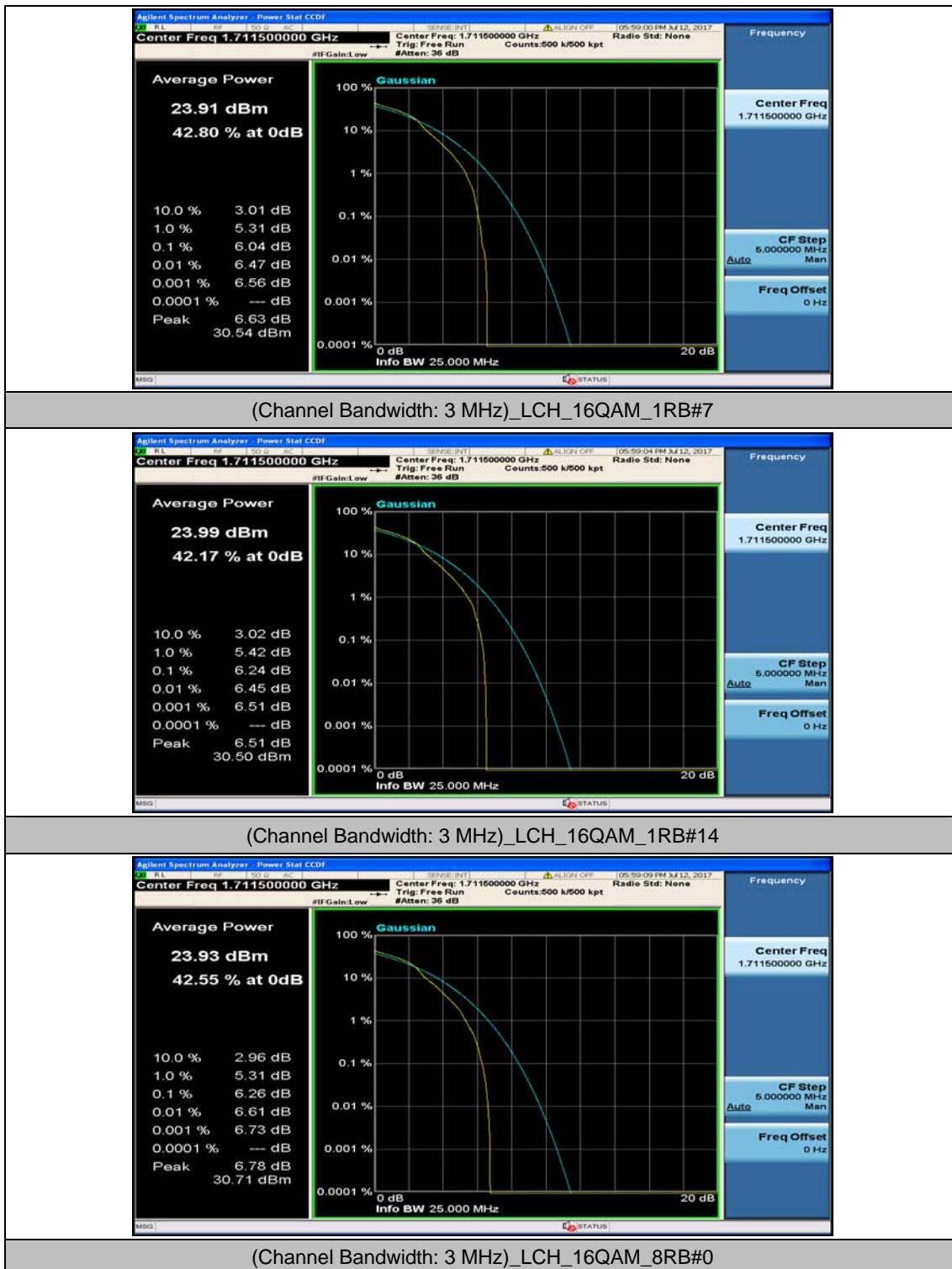


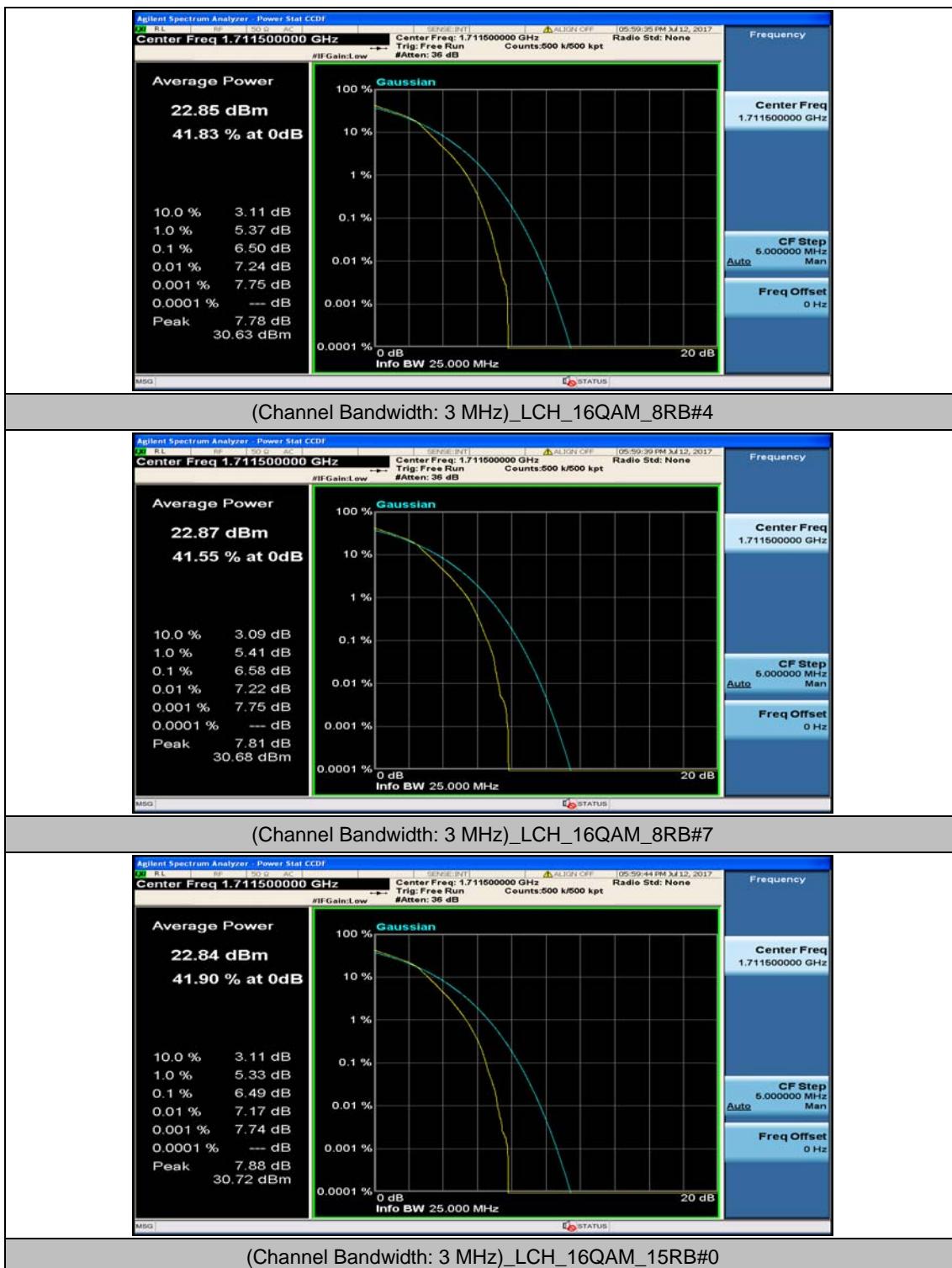


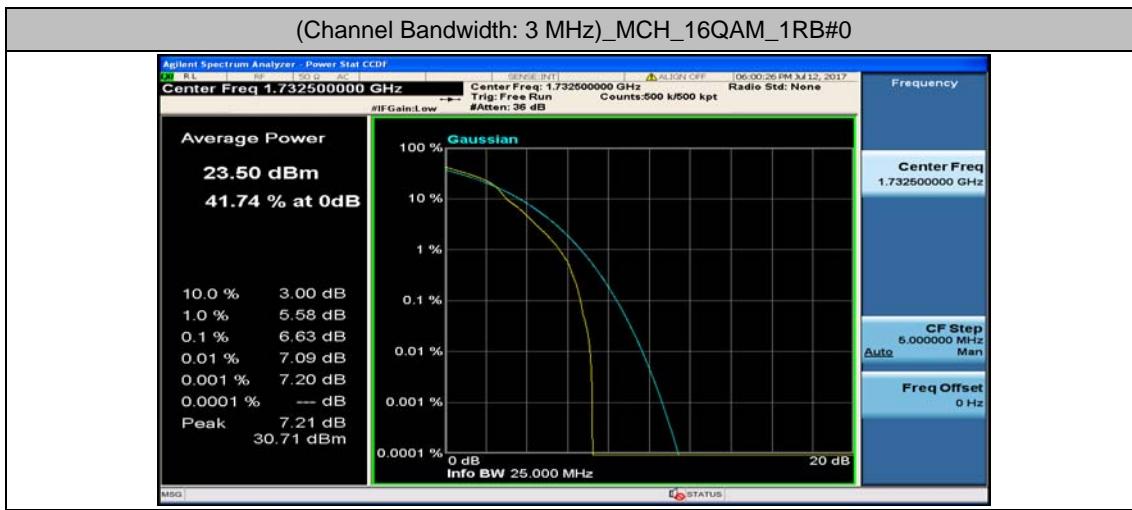
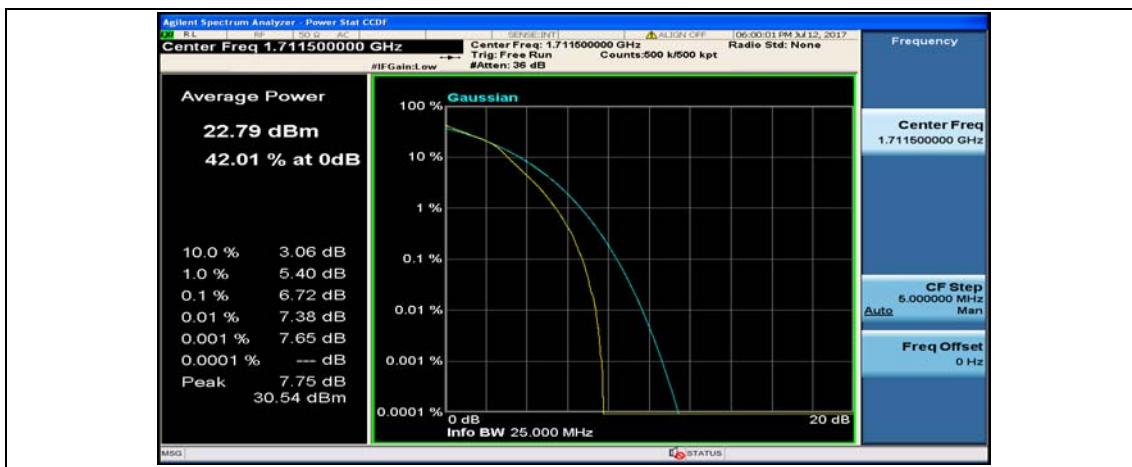




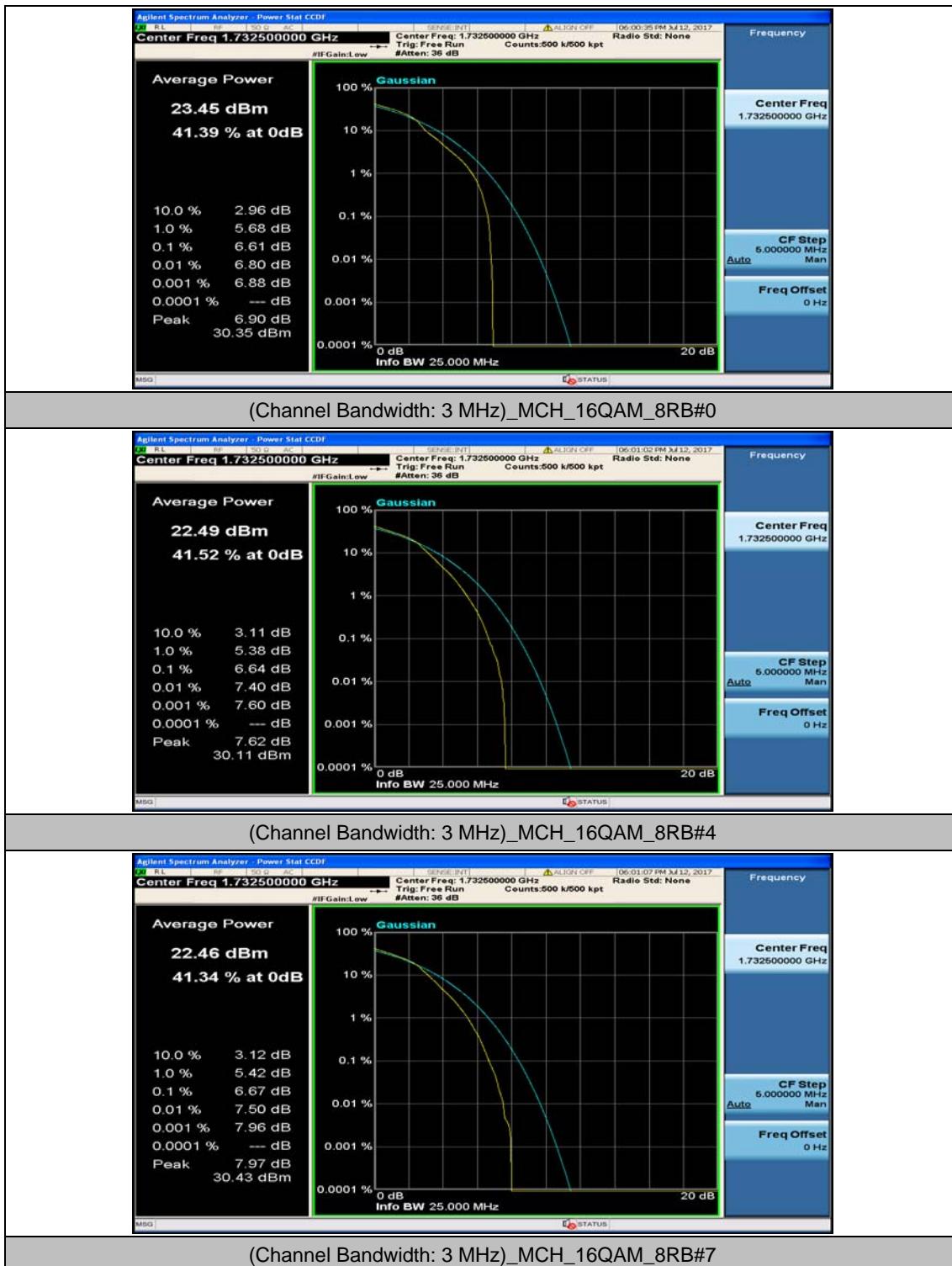


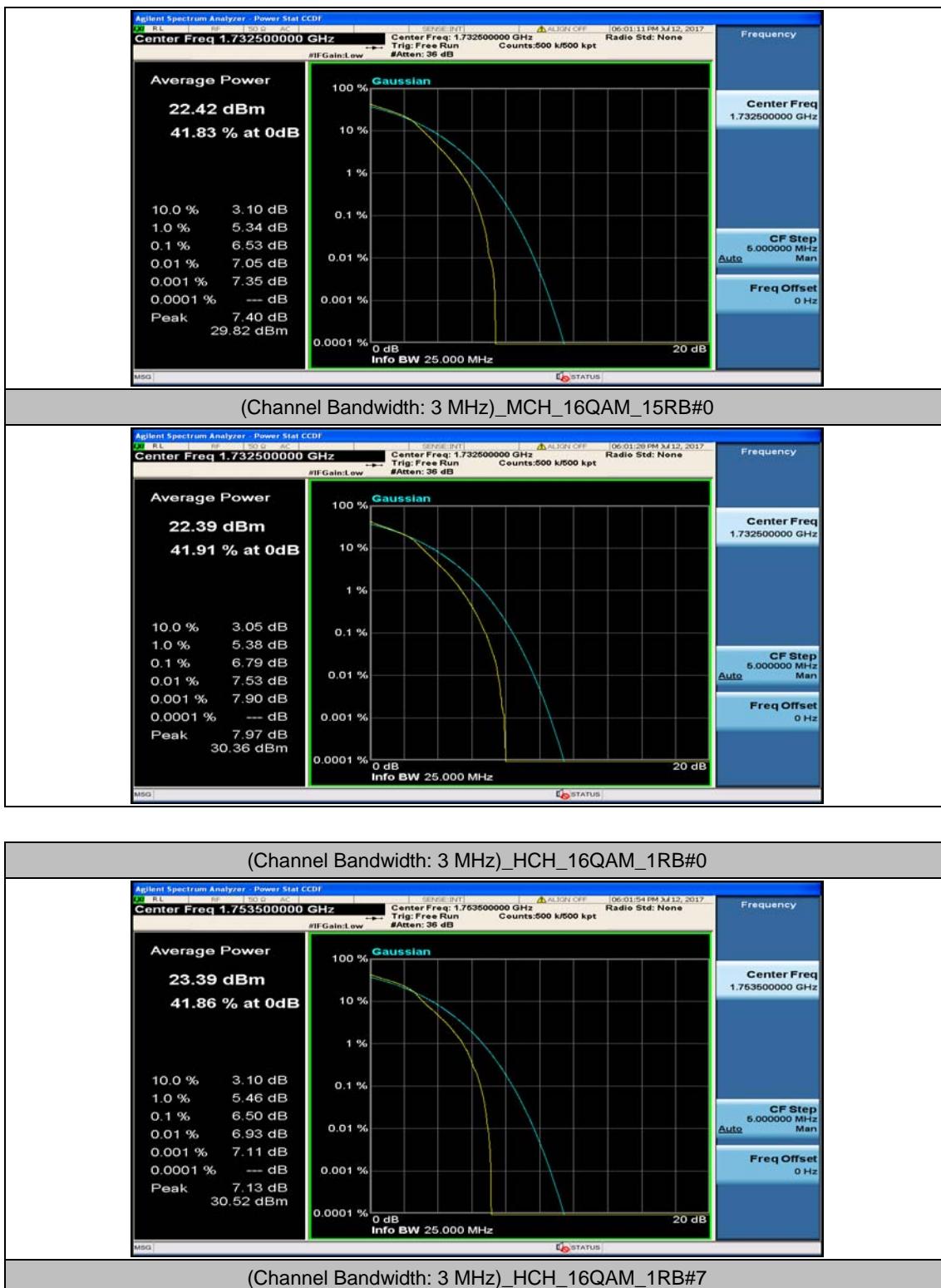


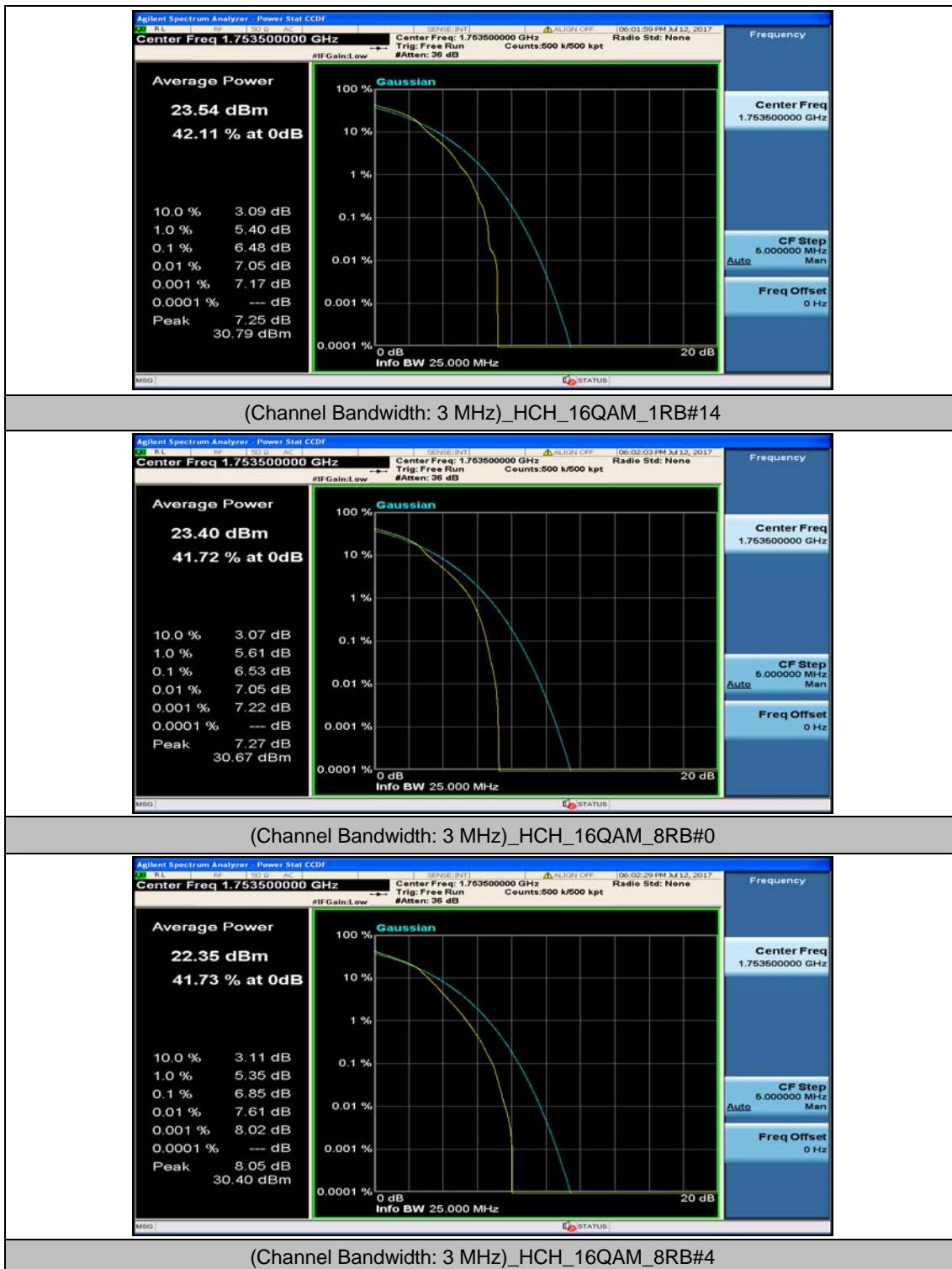


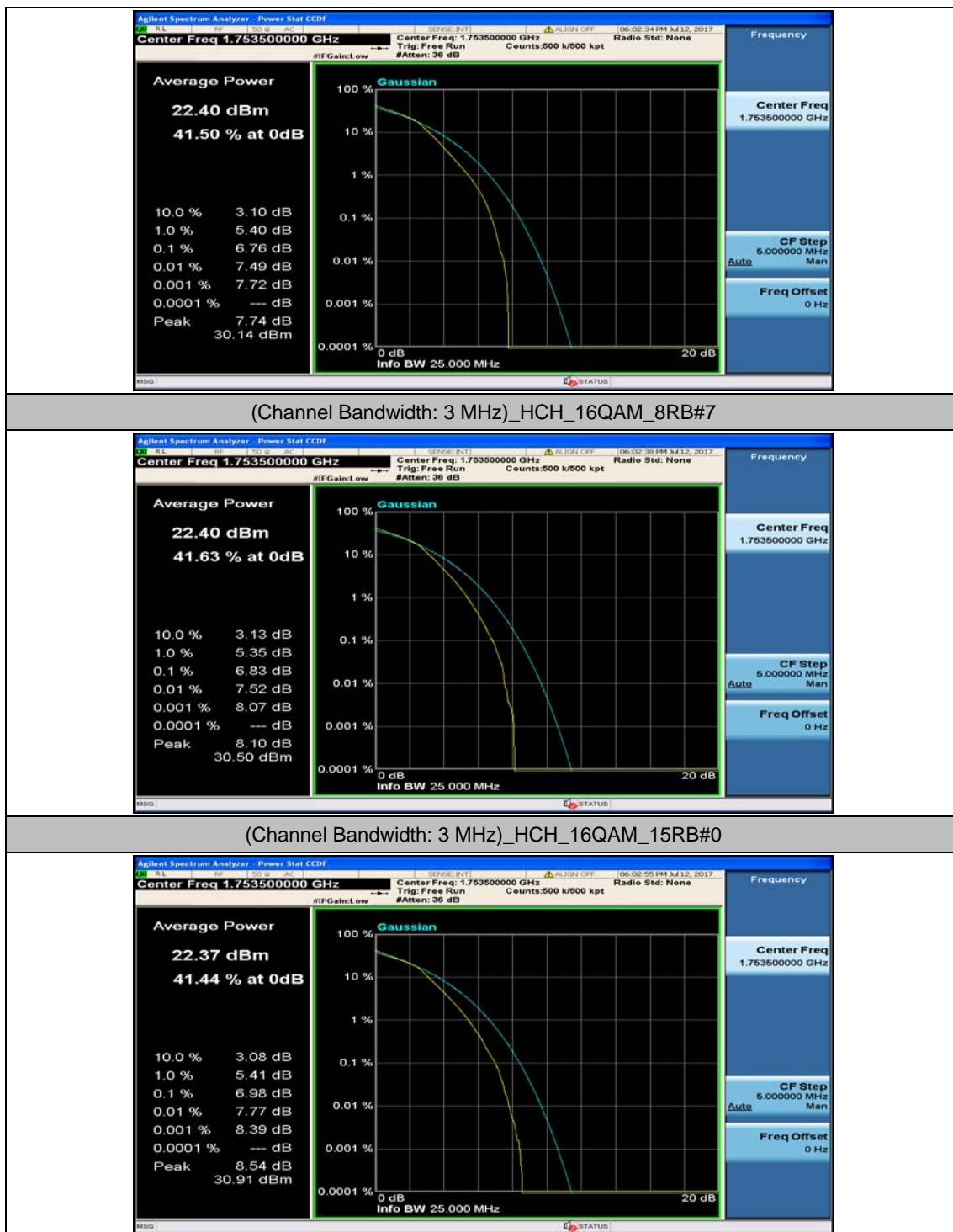


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14

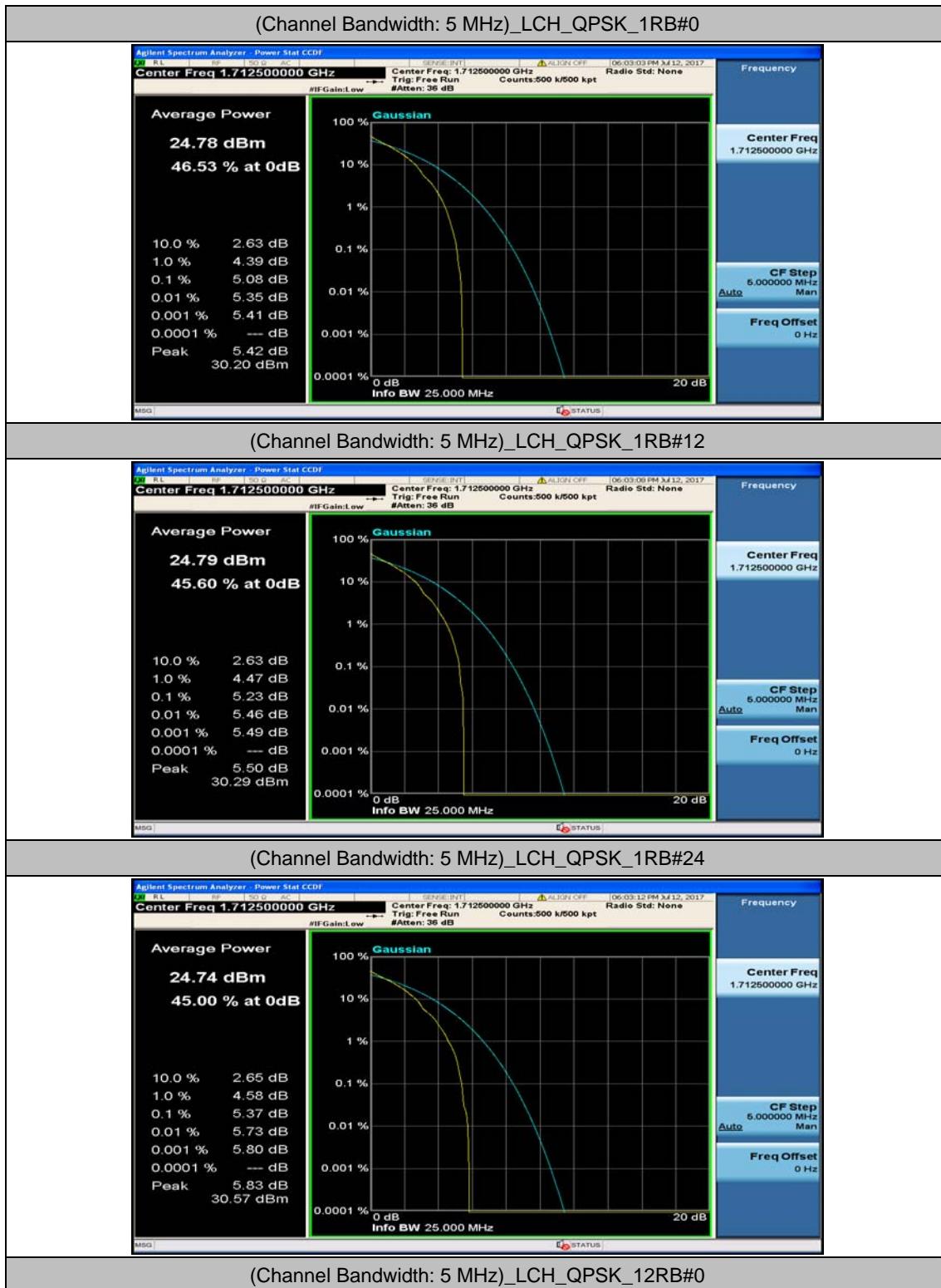


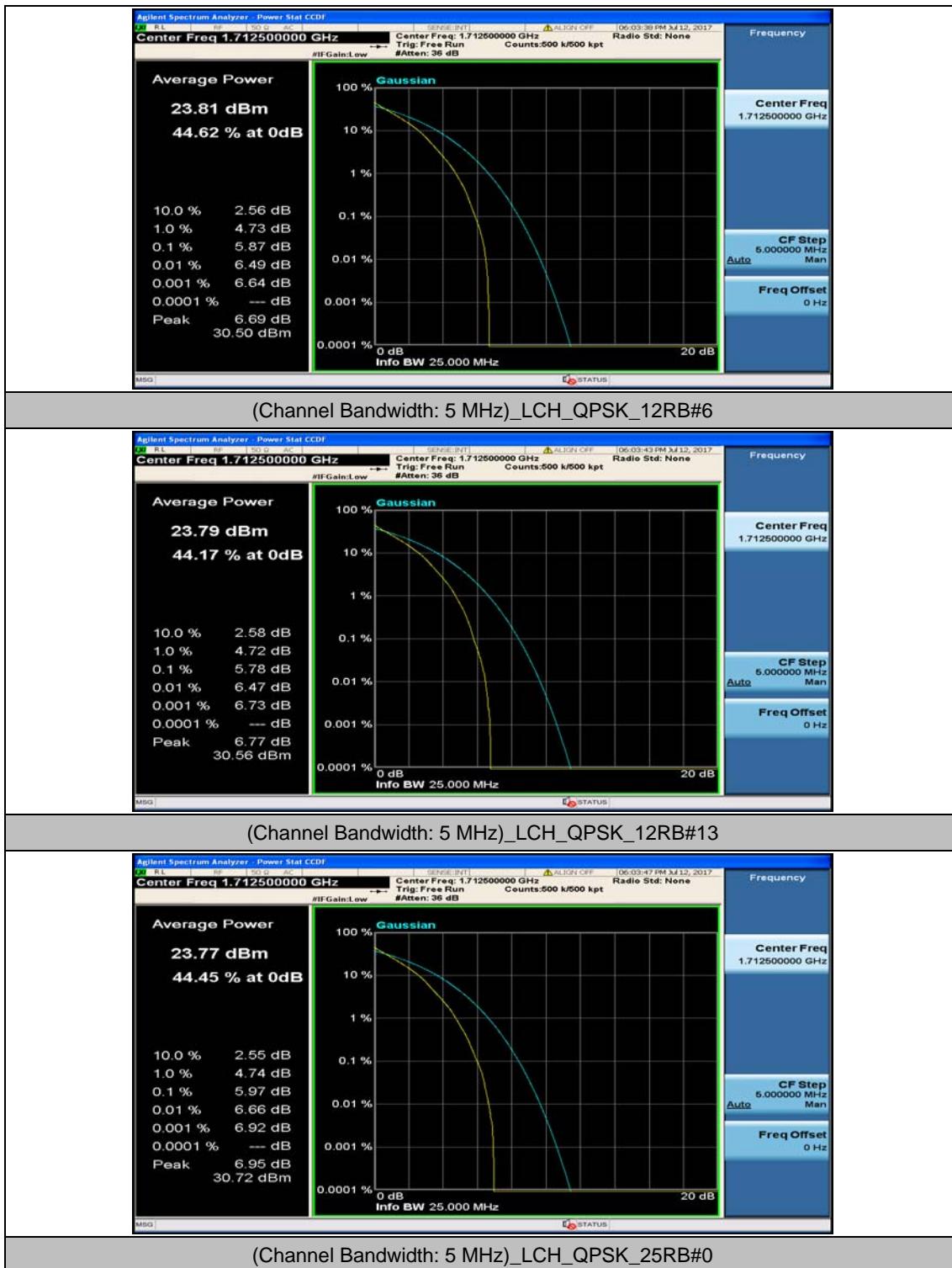


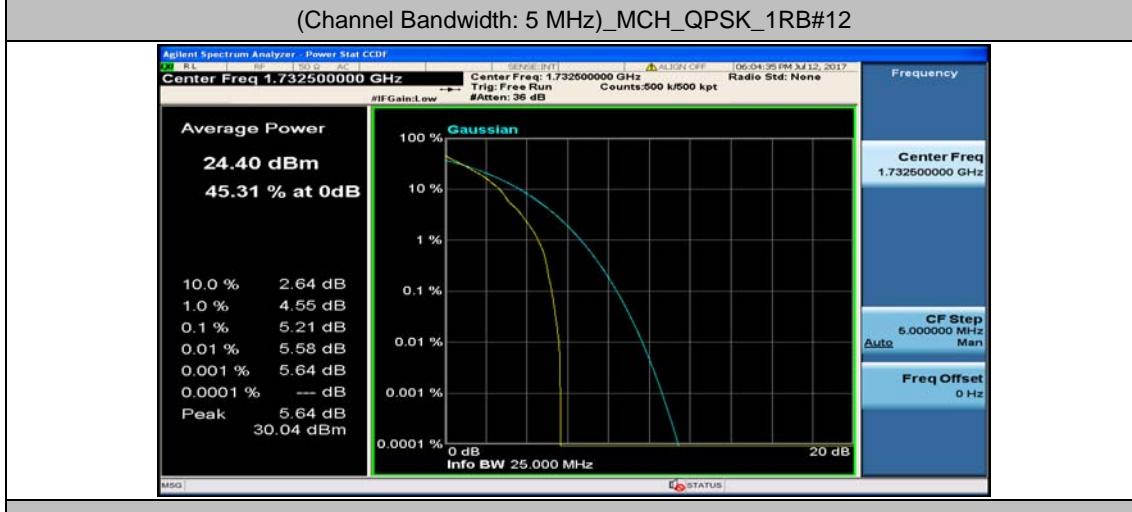
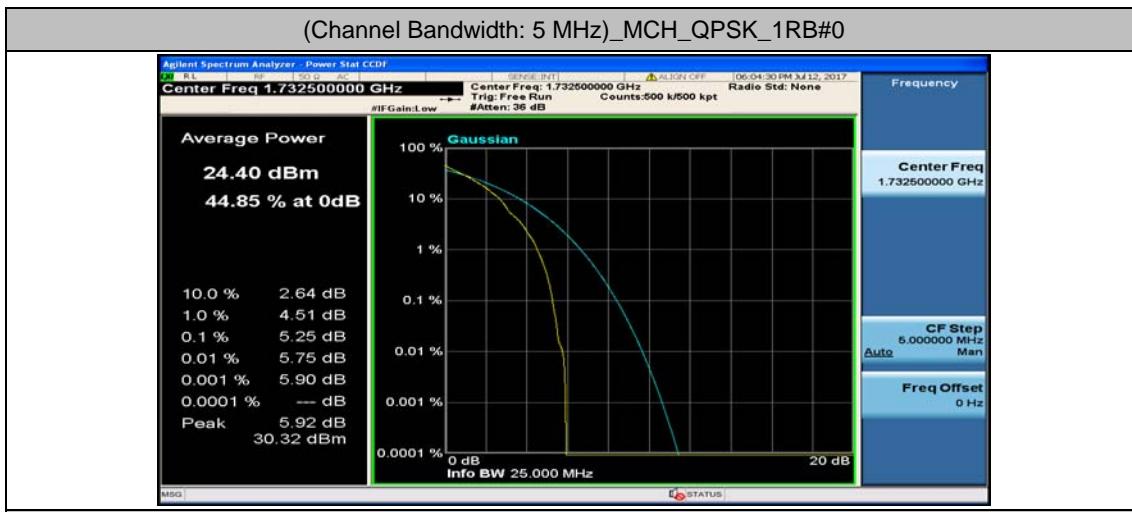
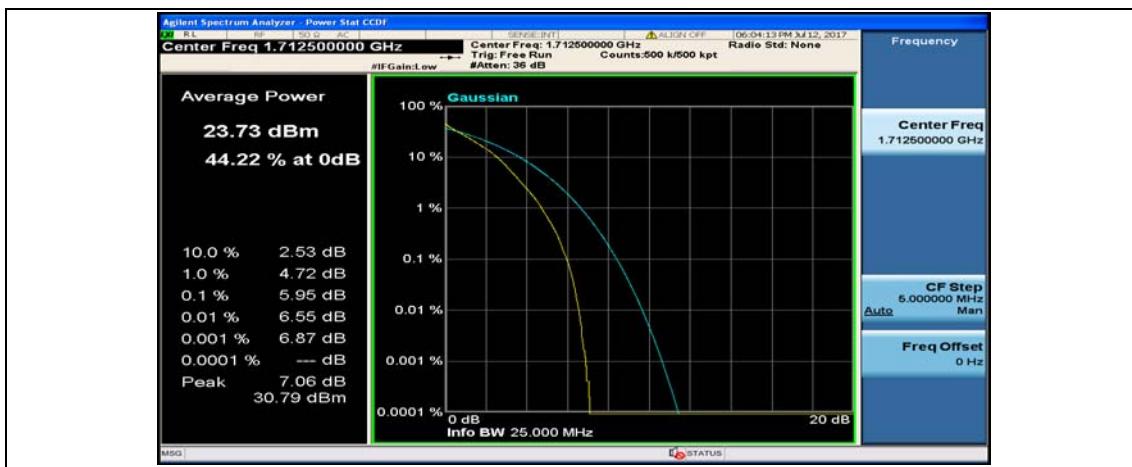




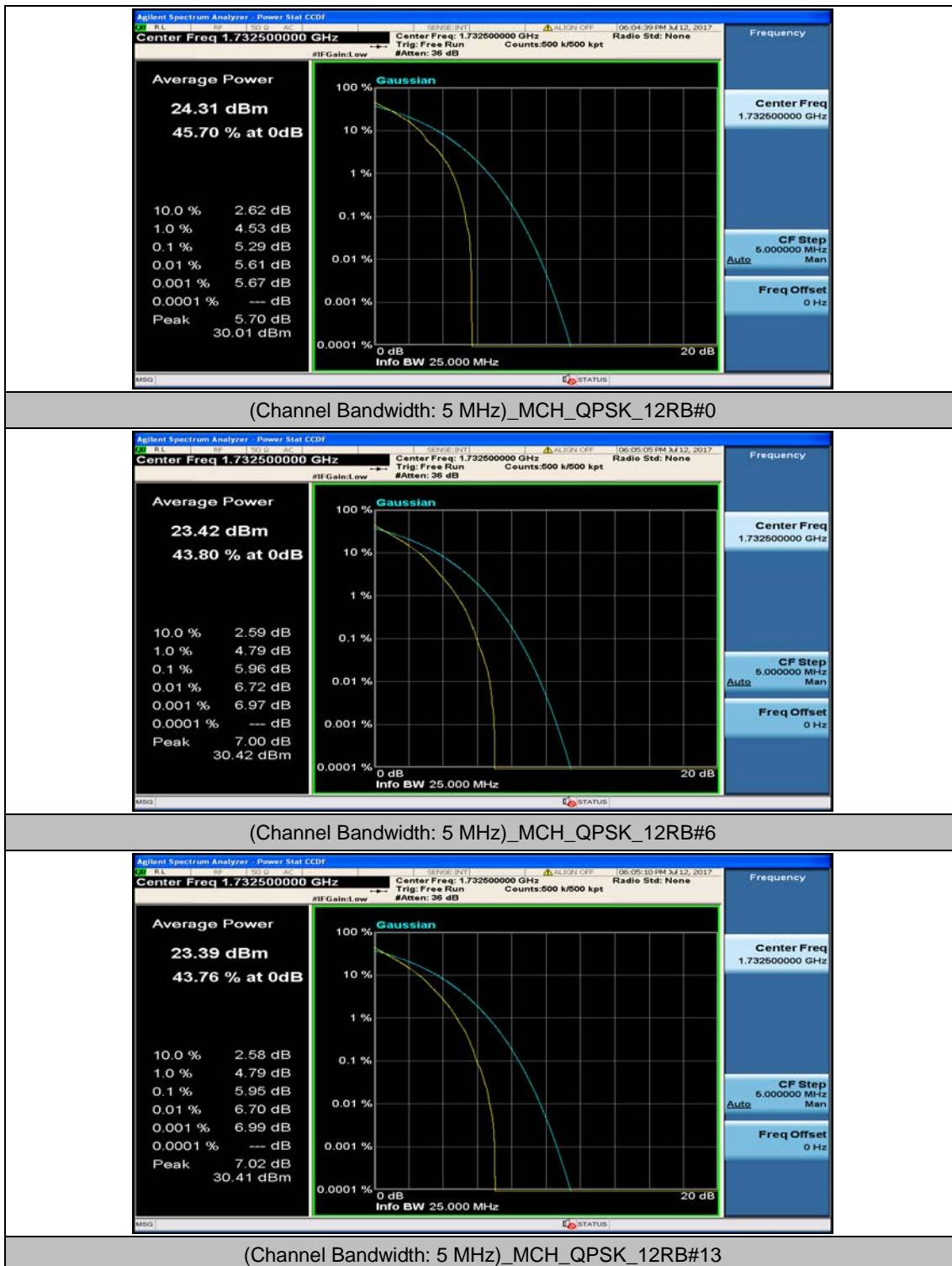
Channel Bandwidth: 5 MHz

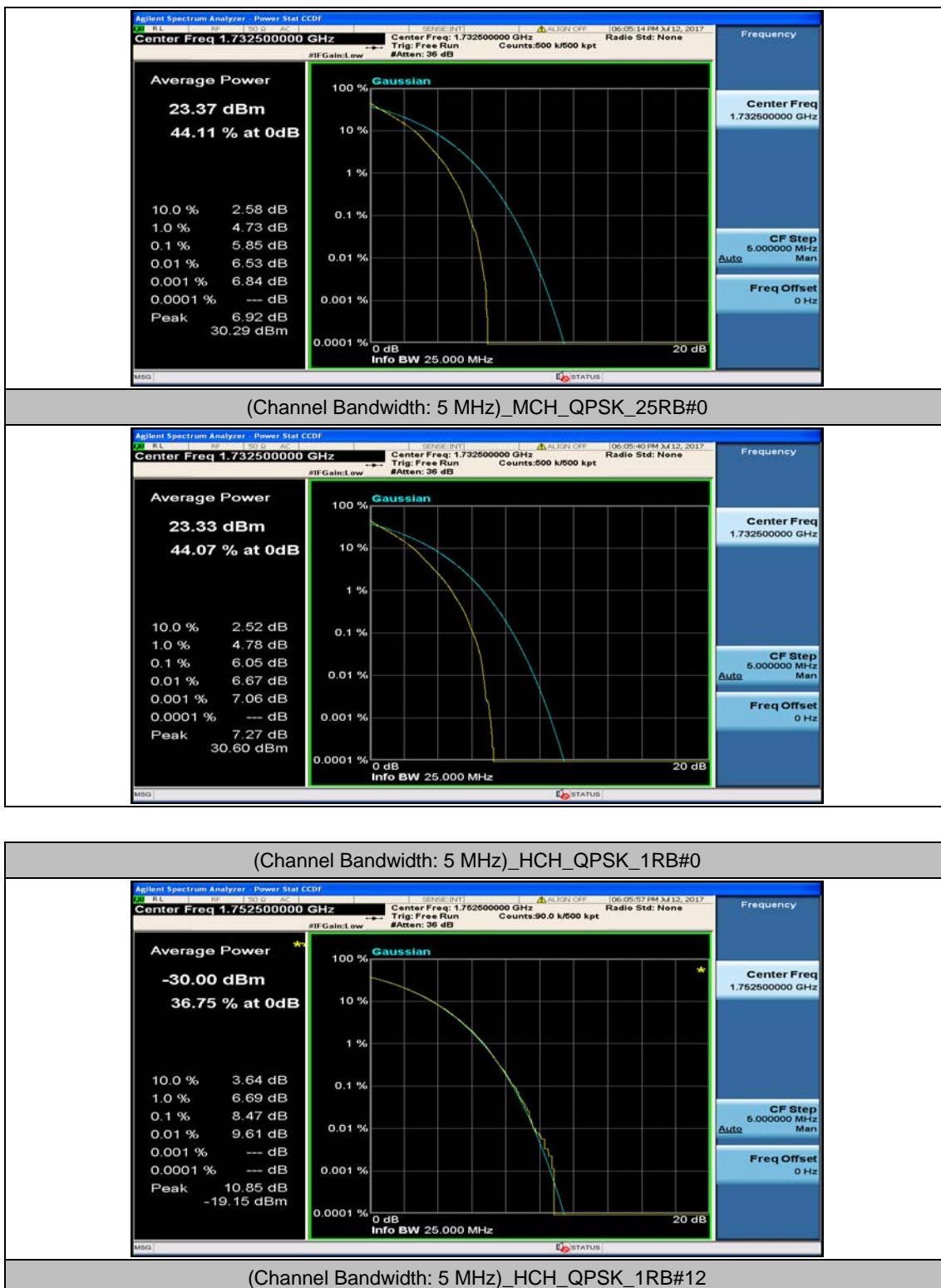


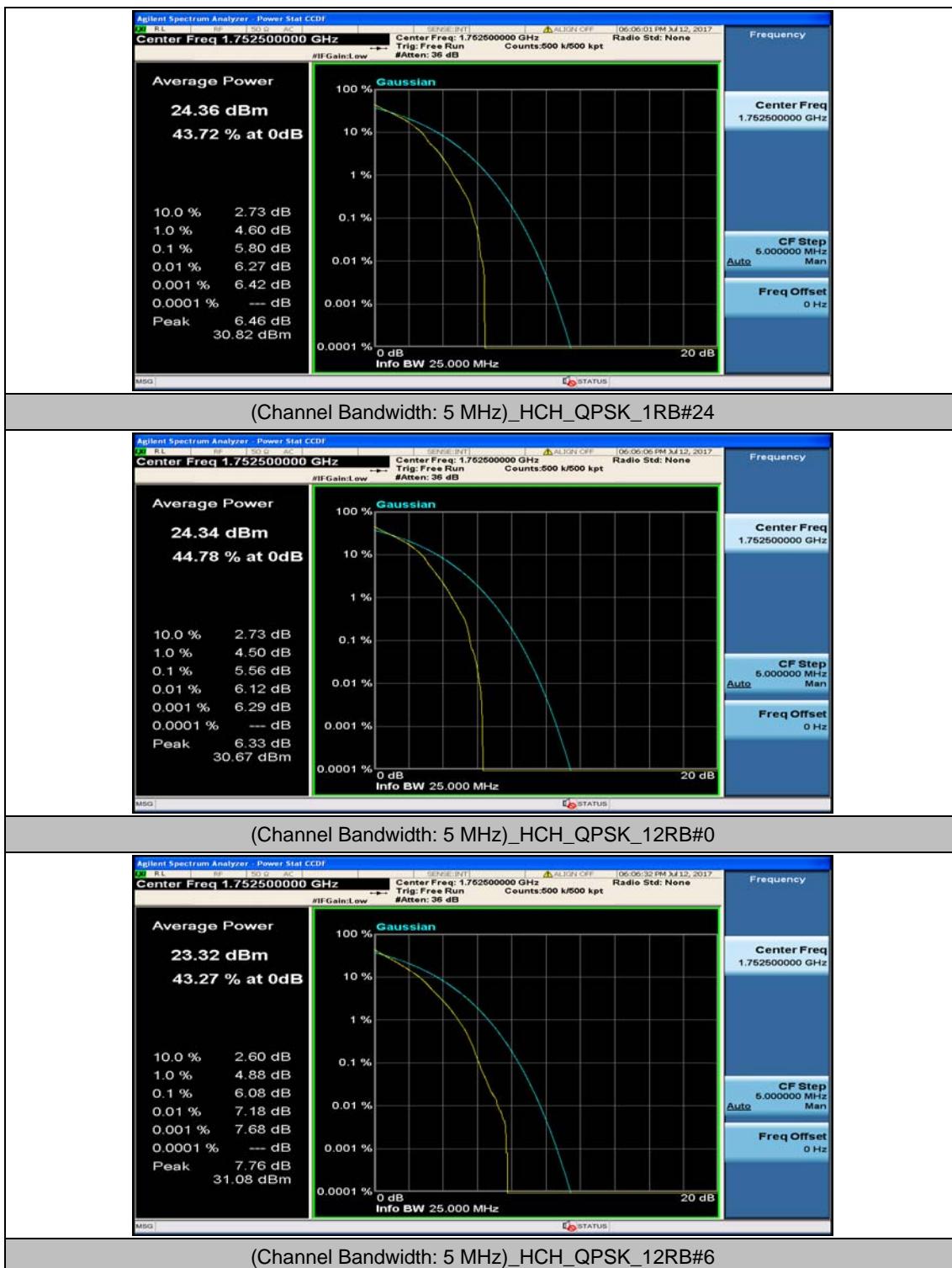


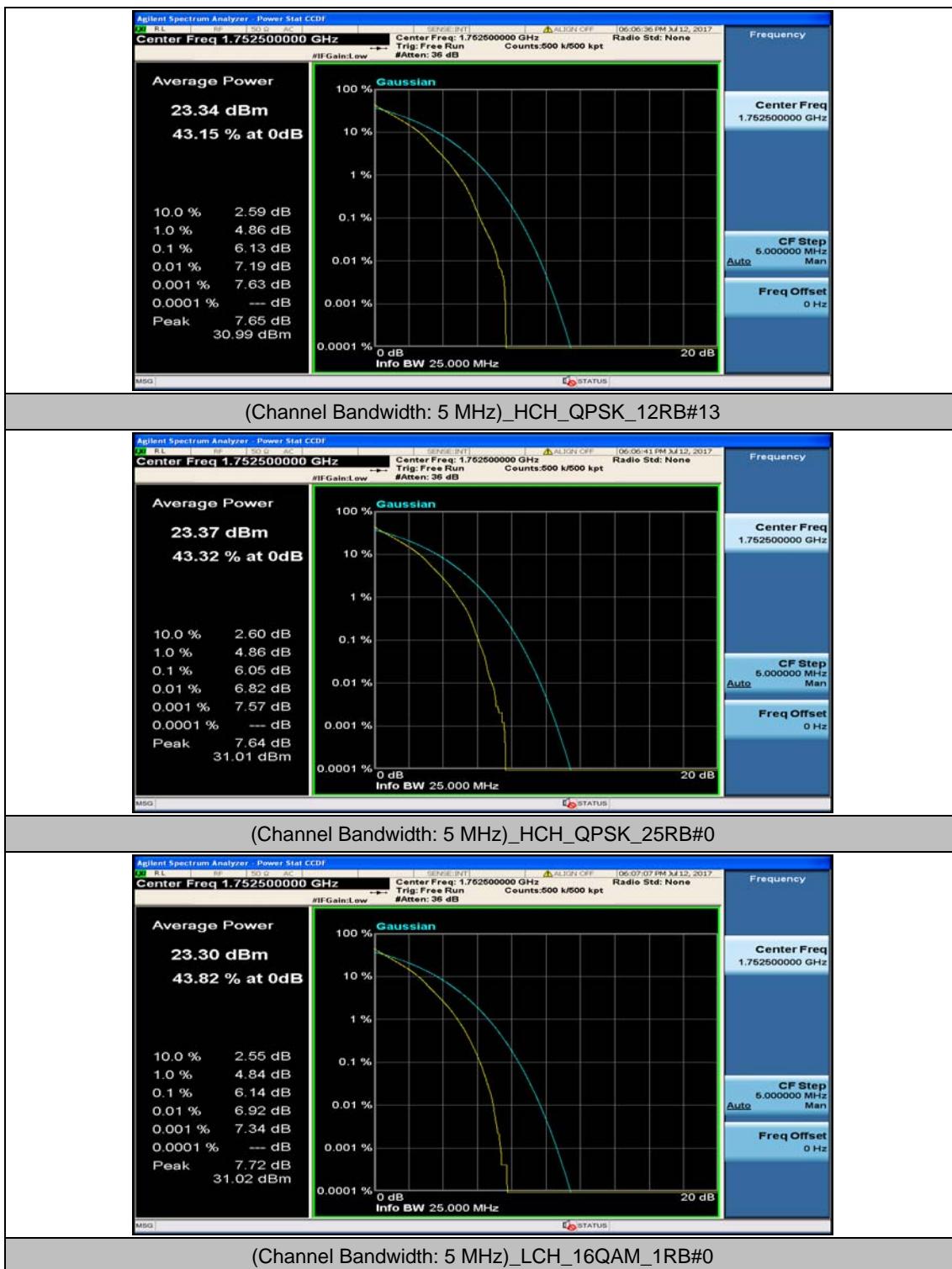


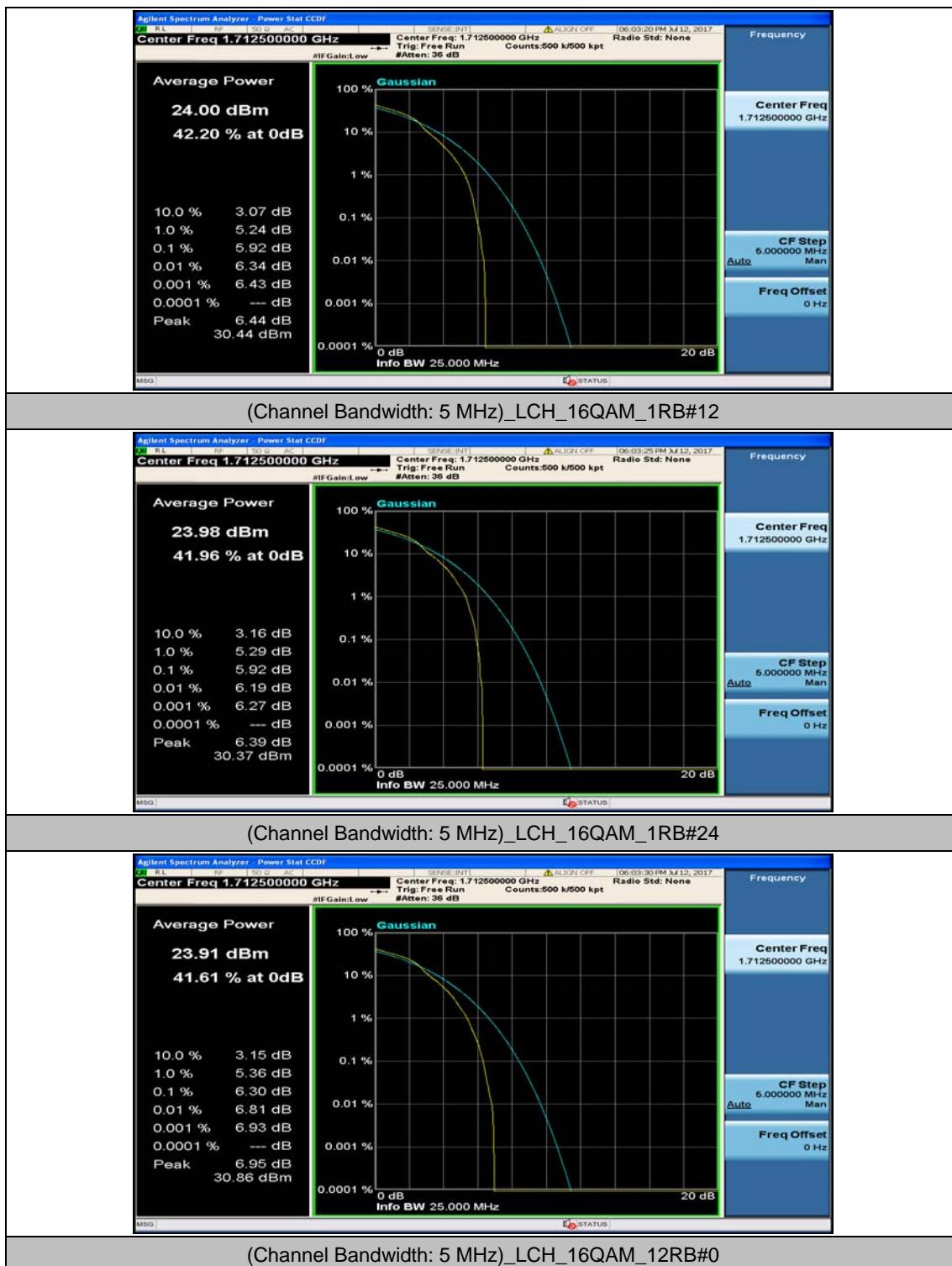
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

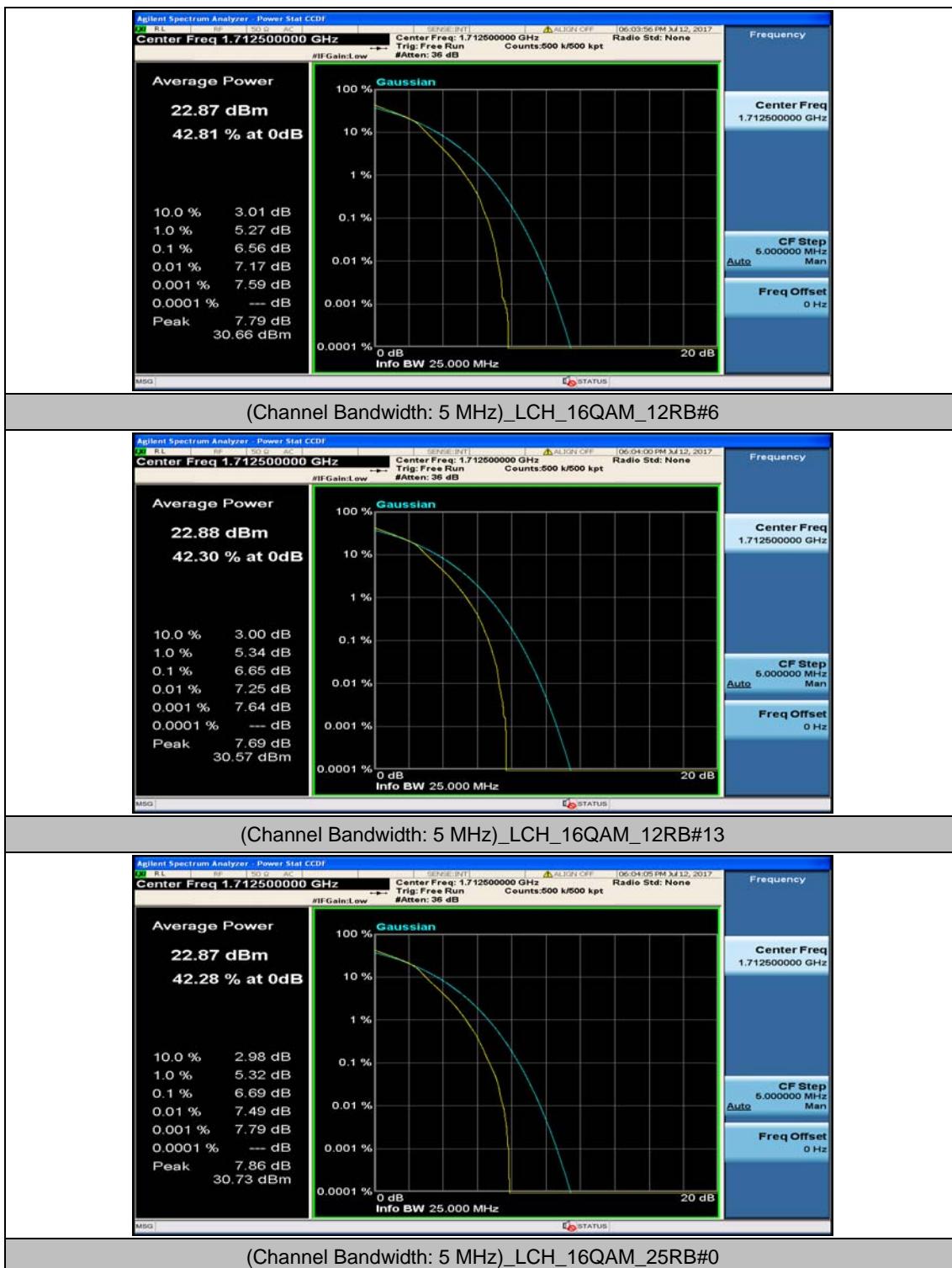


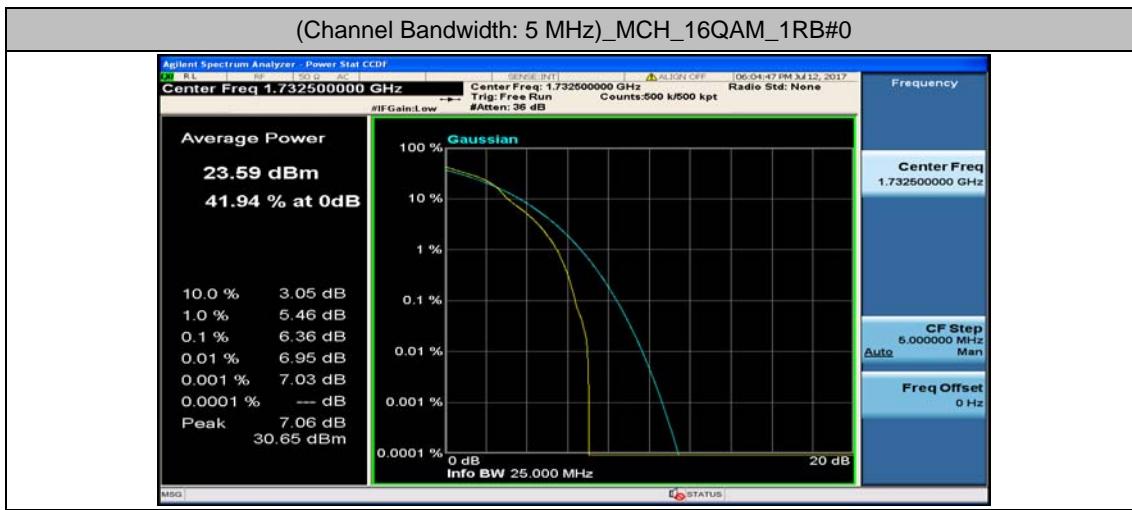
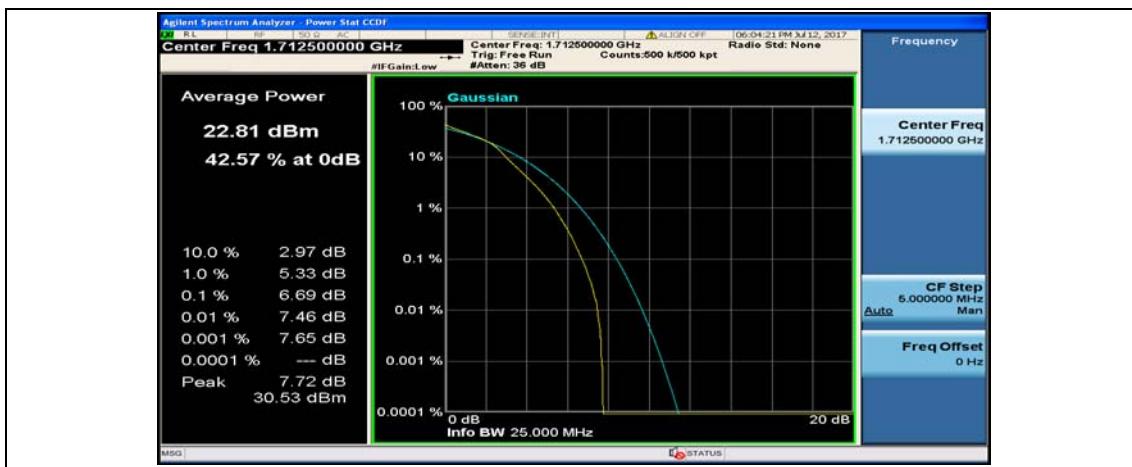


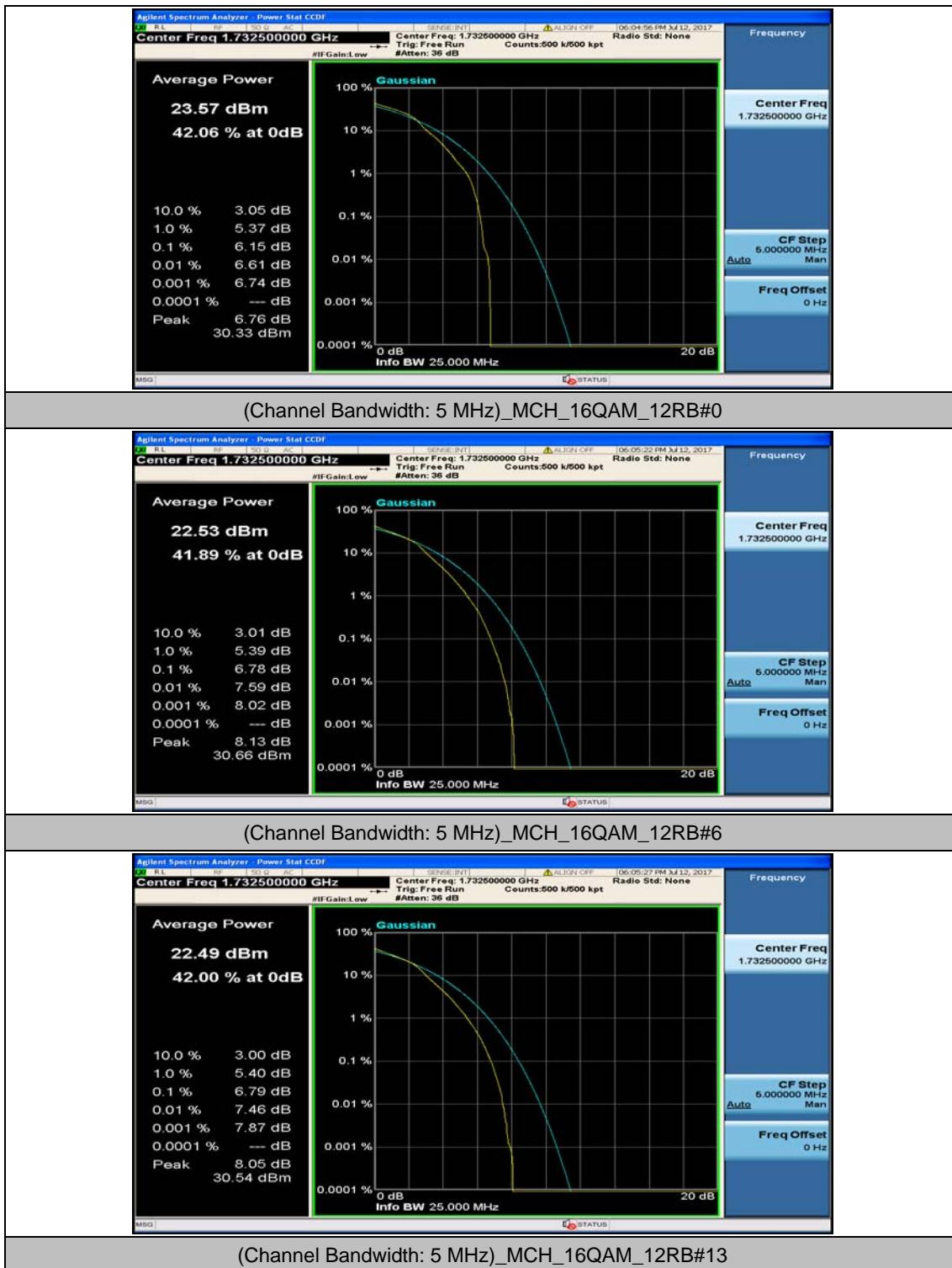


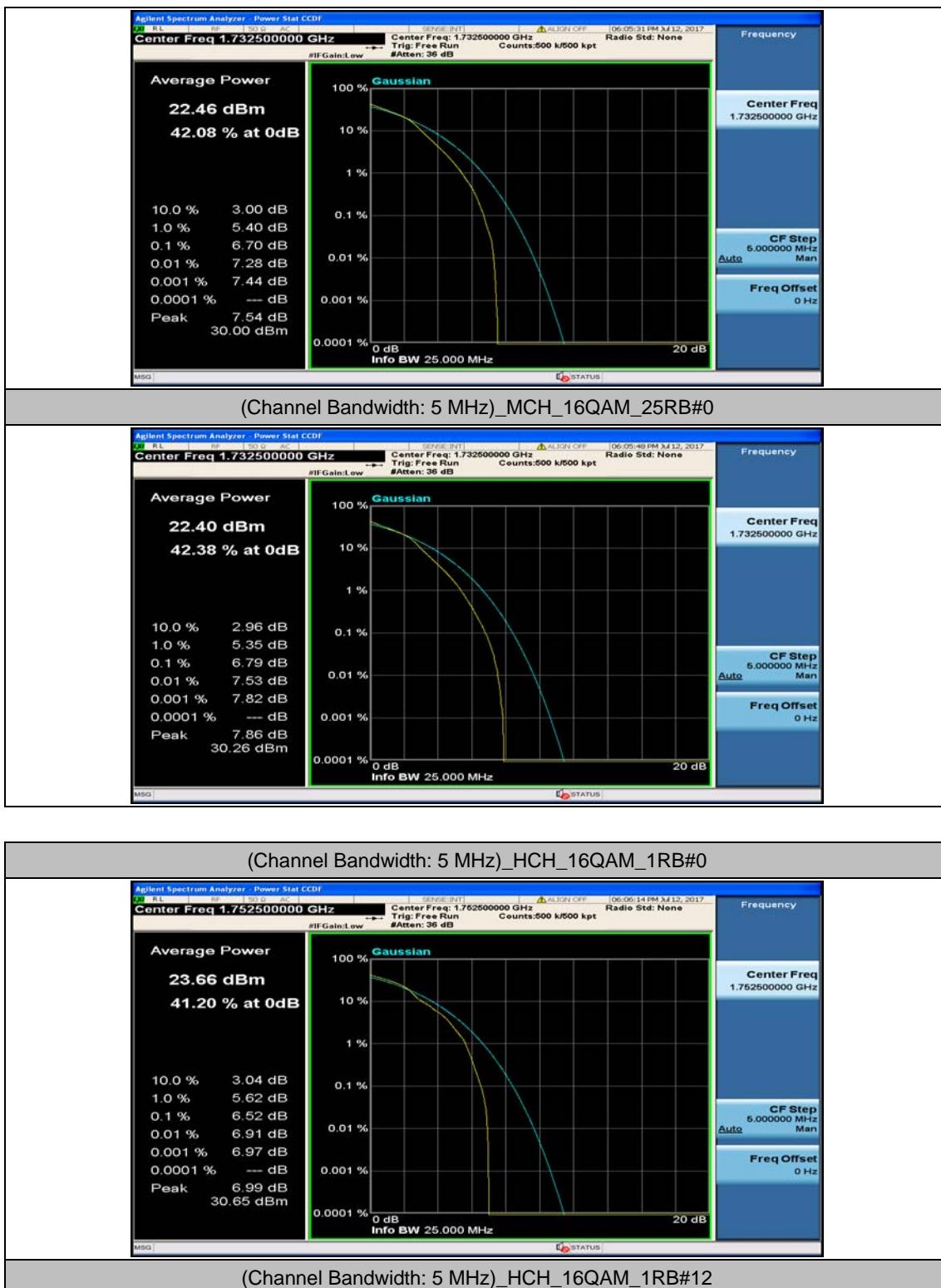


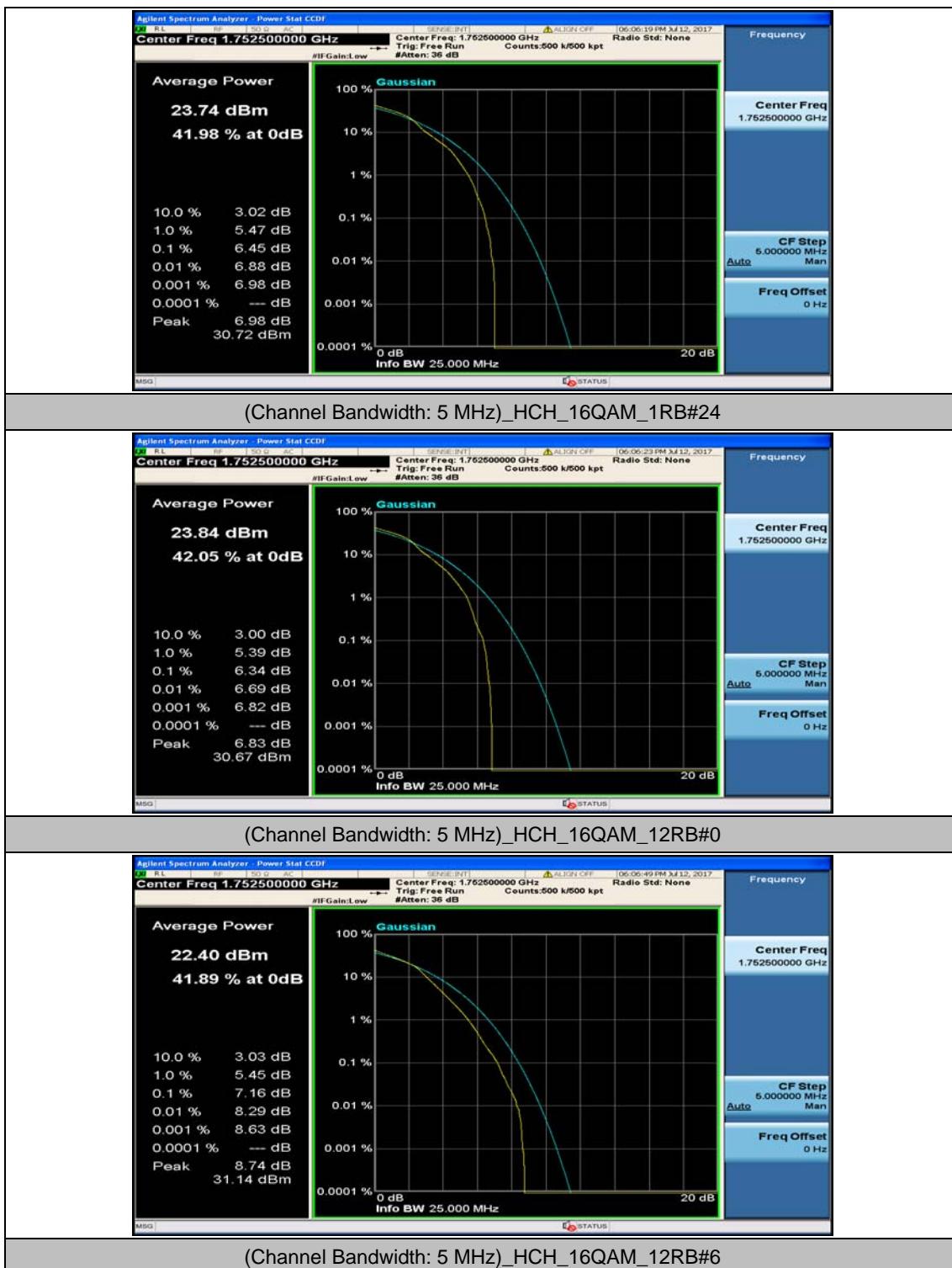


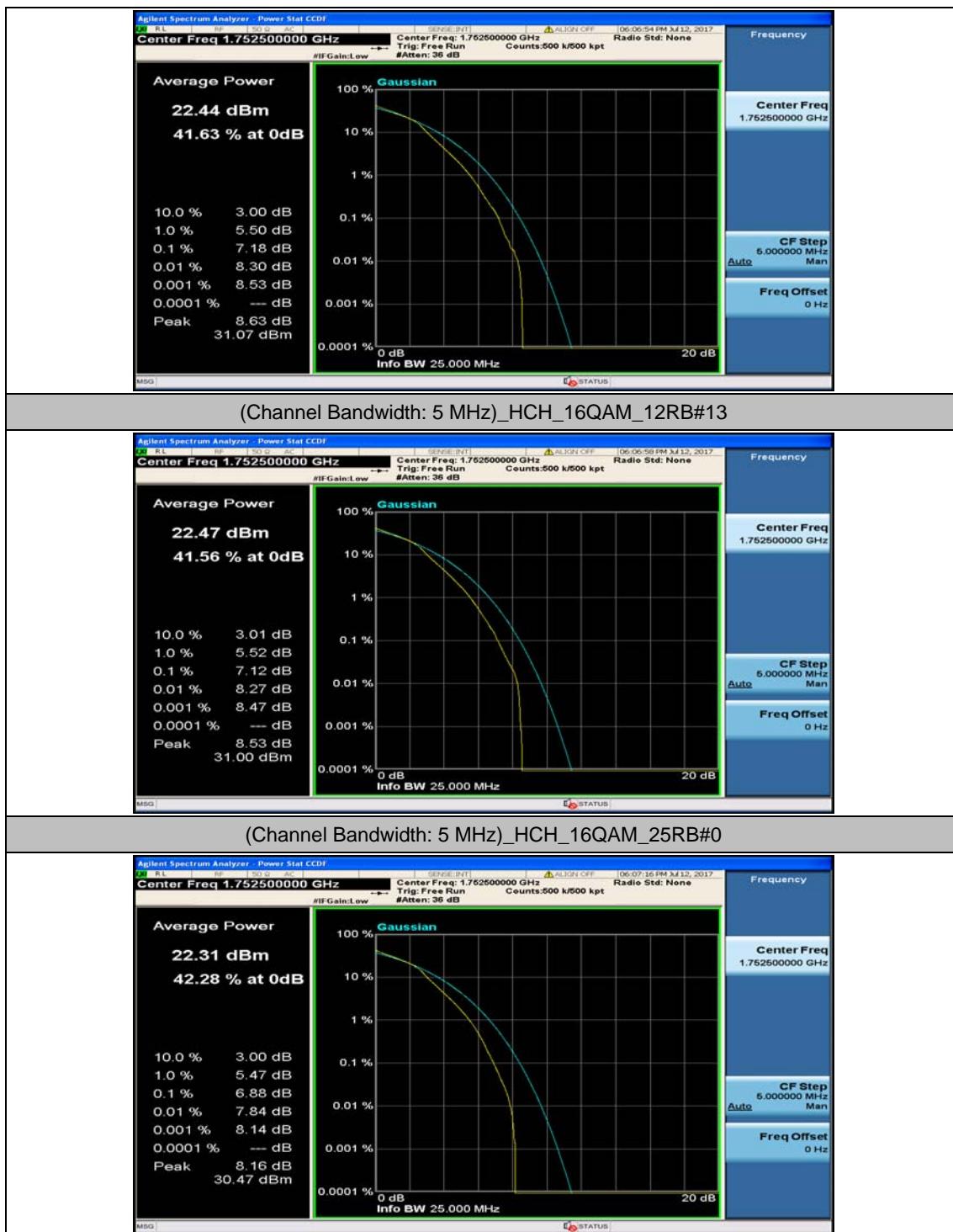


**(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24**









Channel Bandwidth: 10 MHz

