

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	22.09	PASS
		1	3	21.91	PASS
		1	5	22.11	PASS
		3	0	22.58	PASS
		3	2	22.73	PASS
		3	3	22.06	PASS
		6	0	22.85	PASS
	MCH	1	0	22.24	PASS
		1	3	22.66	PASS
		1	5	22.86	PASS
		3	0	22.42	PASS
		3	2	22.52	PASS
		3	3	22.32	PASS
		6	0	22.69	PASS
	HCH	1	0	22.68	PASS
		1	3	22.41	PASS
		1	5	22.26	PASS
		3	0	22.2	PASS
		3	2	22.37	PASS
		3	3	21.99	PASS
		6	0	22.63	PASS
16QAM	LCH	1	0	22.61	PASS
		1	3	22.56	PASS
		1	5	22.58	PASS
		3	0	22.35	PASS
		3	2	22.03	PASS
		3	3	22.06	PASS
		6	0	22.77	PASS
	MCH	1	0	22.26	PASS
		1	3	22.20	PASS
		1	5	22.29	PASS

	HCH	3	0	22.50	PASS
		3	2	22.09	PASS
		3	3	22.80	PASS
		6	0	22.20	PASS
		1	0	22.34	PASS
		1	3	22.86	PASS
		1	5	22.28	PASS
		3	0	22.43	PASS
	LCH	3	2	22.40	PASS
		3	3	22.56	PASS
		6	0	22.04	PASS
		1	0	22.34	PASS
		1	7	22.46	PASS
		1	14	22.30	PASS
		8	0	22.49	PASS
		8	4	22.69	PASS
QPSK	MCH	8	7	22.24	PASS
		15	0	22.31	PASS
	LCH	1	0	22.08	PASS
		1	7	22.17	PASS
		1	14	22.88	PASS
		8	0	22.33	PASS
		8	4	21.90	PASS
	HCH	8	7	22.05	PASS
		15	0	22.87	PASS
		1	0	22.06	PASS
		1	7	22.03	PASS
		1	14	22.13	PASS
		8	0	22.42	PASS
		8	4	22.01	PASS
16QAM	LCH	8	7	22.06	PASS
		15	0	22.46	PASS
		1	0	22.85	PASS
		1	7	22.56	PASS
		1	14	22.65	PASS
		8	0	21.95	PASS
		8	4	22.55	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.34	PASS
		1	7	22.46	PASS
		1	14	22.30	PASS
		8	0	22.49	PASS
		8	4	22.69	PASS
		8	7	22.24	PASS
		15	0	22.31	PASS
	MCH	1	0	22.08	PASS
		1	7	22.17	PASS
		1	14	22.88	PASS
		8	0	22.33	PASS
		8	4	21.90	PASS
		8	7	22.05	PASS
		15	0	22.87	PASS
	HCH	1	0	22.06	PASS
		1	7	22.03	PASS
		1	14	22.13	PASS
		8	0	22.42	PASS
		8	4	22.01	PASS
		8	7	22.06	PASS
		15	0	22.46	PASS
16QAM	LCH	1	0	22.85	PASS
		1	7	22.56	PASS
		1	14	22.65	PASS
		8	0	21.95	PASS
		8	4	22.55	PASS

		8	7	22.01	PASS
		15	0	22.41	PASS
MCH	MCH	1	0	22.75	PASS
		1	7	22.07	PASS
		1	14	22.83	PASS
		8	0	22.75	PASS
		8	4	22.84	PASS
		8	7	21.96	PASS
		15	0	22.58	PASS
		1	0	22.46	PASS
HCH	HCH	1	7	22.19	PASS
		1	14	22.64	PASS
		8	0	22.87	PASS
		8	4	22.13	PASS
		8	7	22.71	PASS
		15	0	22.78	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.77	PASS
		1	12	22.28	PASS
		1	24	22.51	PASS
		12	0	22.19	PASS
		12	6	22.21	PASS
		12	13	22.64	PASS
		25	0	22.60	PASS
	MCH	1	0	21.91	PASS
		1	12	22.48	PASS
		1	24	21.97	PASS
		12	0	22.40	PASS
		12	6	22.46	PASS
		12	13	22.37	PASS
		25	0	22.02	PASS
	HCH	1	0	22.71	PASS
		1	12	22.64	PASS
		1	24	22.24	PASS
		12	0	22.74	PASS
		12	6	22.05	PASS
		12	13	22.36	PASS

		25	0	21.96	PASS
16QAM	LCH	1	0	22.60	PASS
		1	12	22.42	PASS
		1	24	22.47	PASS
		12	0	21.96	PASS
		12	6	22.65	PASS
		12	13	22.28	PASS
		25	0	22.52	PASS
16QAM	MCH	1	0	22.03	PASS
		1	12	22.36	PASS
		1	24	22.58	PASS
		12	0	22.16	PASS
		12	6	22.21	PASS
		12	13	22.69	PASS
		25	0	22.81	PASS
16QAM	HCH	1	0	22.68	PASS
		1	12	22.76	PASS
		1	24	22.75	PASS
		12	0	22.11	PASS
		12	6	22.15	PASS
		12	13	22.08	PASS
		25	0	22.83	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.84	PASS
		1	24	22.03	PASS
		1	49	22.29	PASS
		25	0	22.29	PASS
		25	12	22.65	PASS
		25	25	22.51	PASS
		50	0	22.51	PASS
	MCH	1	0	21.96	PASS
		1	24	22.09	PASS
		1	49	22.73	PASS
		25	0	22.62	PASS
		25	12	22.01	PASS
		25	25	22.63	PASS
		50	0	21.97	PASS

		1	0	22.27	PASS
		1	24	22.79	PASS
		1	49	22.34	PASS
	HCH	25	0	22.21	PASS
		25	12	21.95	PASS
		25	25	22.26	PASS
		50	0	22.40	PASS
16QAM	LCH	1	0	22.04	PASS
		1	24	22.43	PASS
		1	49	22.42	PASS
		25	0	22.10	PASS
		25	12	22.75	PASS
		25	25	22.15	PASS
		50	0	22.70	PASS
	MCH	1	0	22.29	PASS
		1	24	22.04	PASS
		1	49	22.80	PASS
		25	0	22.55	PASS
		25	12	22.46	PASS
		25	25	22.15	PASS
		50	0	22.43	PASS
	HCH	1	0	22.43	PASS
		1	24	22.23	PASS
		1	49	22.34	PASS
		25	0	22.52	PASS
		25	12	22.59	PASS
		25	25	22.78	PASS
		50	0	22.16	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.03	PASS
		1	37	22.33	PASS
		1	74	22.77	PASS
		37	0	22.24	PASS
		37	18	22.71	PASS
		37	38	22.54	PASS
		75	0	22.68	PASS
	MCH	1	0	22.53	PASS

		1	37	22.46	PASS
		1	74	22.85	PASS
		37	0	22.11	PASS
		37	18	22.66	PASS
		37	38	22.72	PASS
		75	0	22.14	PASS
		1	0	22.32	PASS
		1	37	22.08	PASS
		1	74	22.46	PASS
		37	0	22.85	PASS
		37	18	22.15	PASS
		37	38	22.33	PASS
		75	0	22.70	PASS
16QAM	LCH	1	0	21.92	PASS
		1	37	22.68	PASS
		1	74	22.20	PASS
		37	0	22.50	PASS
		37	18	22.69	PASS
		37	38	22.85	PASS
		75	0	22.09	PASS
	MCH	1	0	22.60	PASS
		1	37	22.54	PASS
		1	74	22.32	PASS
		37	0	22.47	PASS
		37	18	22.62	PASS
		37	38	22.19	PASS
		75	0	22.62	PASS
	HCH	1	0	21.92	PASS
		1	37	22.20	PASS
		1	74	22.01	PASS
		37	0	22.10	PASS
		37	18	22.45	PASS
		37	38	22.06	PASS
		75	0	22.08	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.96	PASS
		1	49	22.86	PASS
		1	99	22.68	PASS

		50	0	22.35	PASS
		50	25	22.32	PASS
		50	50	22.84	PASS
		100	0	22.75	PASS
MCH	MCH	1	0	22.35	PASS
		1	49	22.52	PASS
		1	99	22.79	PASS
		50	0	22.35	PASS
		50	25	21.90	PASS
		50	50	22.34	PASS
		100	0	22.65	PASS
HCH	HCH	1	0	22.34	PASS
		1	49	21.92	PASS
		1	99	22.50	PASS
		50	0	22.33	PASS
		50	25	22.06	PASS
		50	50	22.34	PASS
		100	0	22.26	PASS
16QAM	LCH	1	0	22.13	PASS
		1	49	22.21	PASS
		1	99	22.71	PASS
		50	0	22.49	PASS
		50	25	22.29	PASS
		50	50	22.58	PASS
		100	0	22.28	PASS
	MCH	1	0	21.96	PASS
		1	49	22.76	PASS
		1	99	22.09	PASS
		50	0	21.99	PASS
		50	25	22.75	PASS
		50	50	22.09	PASS
		100	0	21.91	PASS
	HCH	1	0	22.28	PASS
		1	49	22.77	PASS
		1	99	22.15	PASS
		50	0	22.03	PASS
		50	25	22.6	PASS
		50	50	22.81	PASS
		100	0	22.71	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	3.51	<13	PASS
		1	3	3.39	<13	PASS
		1	5	3.47	<13	PASS
		3	0	3.57	<13	PASS
		3	2	3.4	<13	PASS
		3	3	3.45	<13	PASS
		6	0	4.63	<13	PASS
	MCH	1	0	3.48	<13	PASS
		1	3	3.4	<13	PASS
		1	5	3.46	<13	PASS
		3	0	3.69	<13	PASS
		3	2	3.64	<13	PASS
		3	3	3.68	<13	PASS
		6	0	4.78	<13	PASS
16QAM	LCH	1	0	2.55	<13	PASS
		1	3	2.42	<13	PASS
		1	5	2.48	<13	PASS
		3	0	2.82	<13	PASS
		3	2	2.7	<13	PASS
		3	3	2.77	<13	PASS
		6	0	3.91	<13	PASS
	MCH	1	0	4.43	<13	PASS
		1	3	4.36	<13	PASS
		1	5	4.47	<13	PASS
		3	0	4.46	<13	PASS
		3	2	4.42	<13	PASS
		3	3	4.43	<13	PASS
		6	0	5.47	<13	PASS

		3	2	4.66	<13	PASS
		3	3	4.67	<13	PASS
		6	0	5.59	<13	PASS
HCH		1	0	3.59	<13	PASS
		1	3	3.47	<13	PASS
		1	5	3.53	<13	PASS
		3	0	3.65	<13	PASS
		3	2	3.57	<13	PASS
		3	3	3.6	<13	PASS
		6	0	4.79	<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	3.42	<13	PASS
		1	14	3.4	<13	PASS
		8	0	4.54	<13	PASS
		8	4	4.42	<13	PASS
		8	7	4.51	<13	PASS
		15	0	4.91	<13	PASS
	MCH	1	0	3.59	<13	PASS
		1	7	3.6	<13	PASS
		1	14	3.7	<13	PASS
		8	0	4.65	<13	PASS
		8	4	4.59	<13	PASS
		8	7	4.72	<13	PASS
		15	0	5.01	<13	PASS
	HCH	1	0	2.63	<13	PASS
		1	7	2.51	<13	PASS
		1	14	2.46	<13	PASS
		8	0	3.83	<13	PASS
		8	4	3.66	<13	PASS
		8	7	3.76	<13	PASS
		15	0	4.42	<13	PASS
16QAM	LCH	1	0	4.4	<13	PASS
		1	7	4.31	<13	PASS
		1	14	4.35	<13	PASS
		8	0	5.26	<13	PASS
		8	4	5.22	<13	PASS

		8	7	5.29	<13	PASS
		15	0	5.72	<13	PASS
MCH		1	0	4.48	<13	PASS
		1	7	4.52	<13	PASS
		1	14	4.63	<13	PASS
		8	0	5.35	<13	PASS
		8	4	5.32	<13	PASS
		8	7	5.43	<13	PASS
		15	0	5.85	<13	PASS
HCH		1	0	3.67	<13	PASS
		1	7	3.55	<13	PASS
		1	14	3.49	<13	PASS
		8	0	4.65	<13	PASS
		8	4	4.47	<13	PASS
		8	7	4.62	<13	PASS
		15	0	5.15	<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	3.29	<13	PASS
		1	12	3.27	<13	PASS
		1	24	3.26	<13	PASS
		12	0	4.52	<13	PASS
		12	6	4.4	<13	PASS
		12	13	4.46	<13	PASS
		25	0	4.92	<13	PASS
	MCH	1	0	3.45	<13	PASS
		1	12	3.41	<13	PASS
		1	24	3.58	<13	PASS
		12	0	4.63	<13	PASS
		12	6	4.53	<13	PASS
		12	13	4.69	<13	PASS
		25	0	5.05	<13	PASS
	HCH	1	0	2.83	<13	PASS
		1	12	2.56	<13	PASS
		1	24	2.47	<13	PASS
		12	0	3.98	<13	PASS
		12	6	3.74	<13	PASS
		12	13	3.81	<13	PASS

		25	0	4.46	<13	PASS
16QAM	LCH	1	0	4.25	<13	PASS
		1	12	4.23	<13	PASS
		1	24	4.25	<13	PASS
		12	0	5.39	<13	PASS
		12	6	5.25	<13	PASS
		12	13	5.32	<13	PASS
		25	0	5.68	<13	PASS
	MCH	1	0	4.38	<13	PASS
		1	12	4.42	<13	PASS
		1	24	4.46	<13	PASS
		12	0	5.41	<13	PASS
		12	6	5.4	<13	PASS
		12	13	5.49	<13	PASS
		25	0	5.78	<13	PASS
	HCH	1	0	3.62	<13	PASS
		1	12	3.52	<13	PASS
		1	24	3.3	<13	PASS
		12	0	4.93	<13	PASS
		12	6	4.7	<13	PASS
		12	13	4.72	<13	PASS
		25	0	5.25	<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	3.33	<13	PASS
		1	24	3.33	<13	PASS
		1	49	3.35	<13	PASS
		25	0	4.7	<13	PASS
		25	12	4.55	<13	PASS
		25	25	4.69	<13	PASS
		50	0	5.02	<13	PASS
	MCH	1	0	3.48	<13	PASS
		1	24	3.59	<13	PASS
		1	49	3.71	<13	PASS
		25	0	4.82	<13	PASS
		25	12	4.77	<13	PASS
		25	25	4.89	<13	PASS
		50	0	5.14	<13	PASS

		1	0	3.32	<13	PASS
	HCH	1	24	2.88	<13	PASS
		1	49	2.51	<13	PASS
		25	0	4.66	<13	PASS
		25	12	4.28	<13	PASS
		25	25	4.28	<13	PASS
		50	0	4.89	<13	PASS
		1	0	4.27	<13	PASS
	LCH	1	24	4.2	<13	PASS
		1	49	4.31	<13	PASS
		25	0	5.52	<13	PASS
		25	12	5.4	<13	PASS
		25	25	5.49	<13	PASS
		50	0	5.75	<13	PASS
		1	0	4.44	<13	PASS
	MCH	1	24	4.55	<13	PASS
		1	49	4.68	<13	PASS
		25	0	5.64	<13	PASS
		25	12	5.56	<13	PASS
		25	25	5.72	<13	PASS
		50	0	5.88	<13	PASS
		1	0	4.31	<13	PASS
	HCH	1	24	3.93	<13	PASS
		1	49	3.58	<13	PASS
		25	0	5.49	<13	PASS
		25	12	5.16	<13	PASS
		25	25	5.12	<13	PASS
		50	0	5.67	<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	9.66	<13	PASS
		1	37	3.39	<13	PASS
		1	74	9.07	<13	PASS
		37	0	4.5	<13	PASS
		37	18	4.82	<13	PASS
		37	38	4.58	<13	PASS
		75	0	4.93	<13	PASS
	MCH	1	0	9.95	<13	PASS

	16QAM	HCH	1	37	3.59	<13	PASS
			1	74	8.89	<13	PASS
			37	0	4.53	<13	PASS
			37	18	4.95	<13	PASS
			37	38	4.64	<13	PASS
			75	0	4.95	<13	PASS
		LCH	1	0	9.36	<13	PASS
			1	37	3.16	<13	PASS
			1	74	9.23	<13	PASS
			37	0	4.56	<13	PASS
			37	18	4.74	<13	PASS
			37	38	4.52	<13	PASS
			75	0	4.96	<13	PASS
		MCH	1	0	10.25	<13	PASS
			1	37	4.3	<13	PASS
			1	74	9.39	<13	PASS
			37	0	5.65	<13	PASS
			37	18	5.58	<13	PASS
			37	38	5.73	<13	PASS
			75	0	6.04	<13	PASS
		HCH	1	0	9.41	<13	PASS
			1	37	4.58	<13	PASS
			1	74	8.94	<13	PASS
			37	0	5.69	<13	PASS
			37	18	5.74	<13	PASS
			37	38	5.77	<13	PASS
			75	0	6.09	<13	PASS

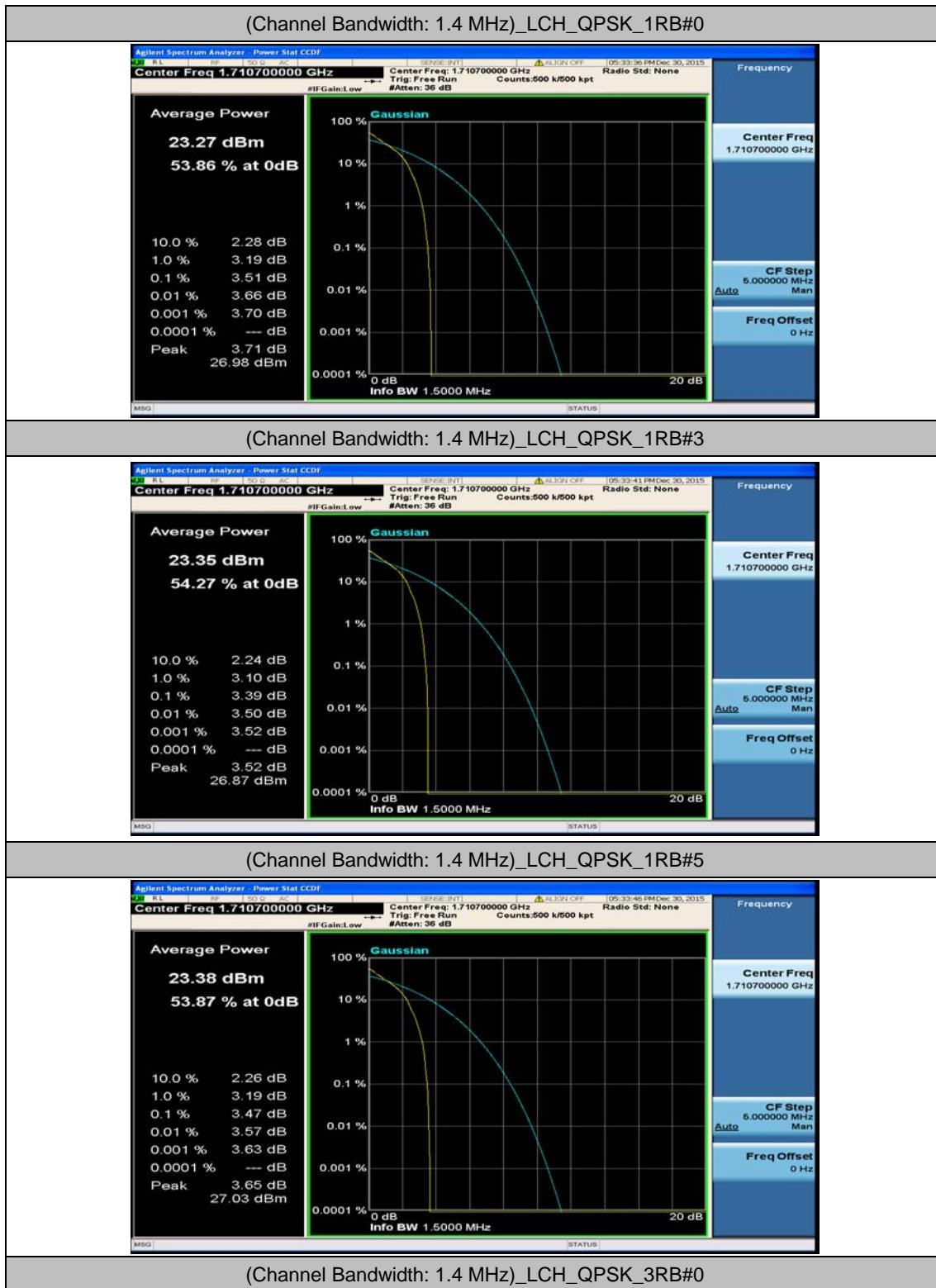
Channel Bandwidth: 20 MHz

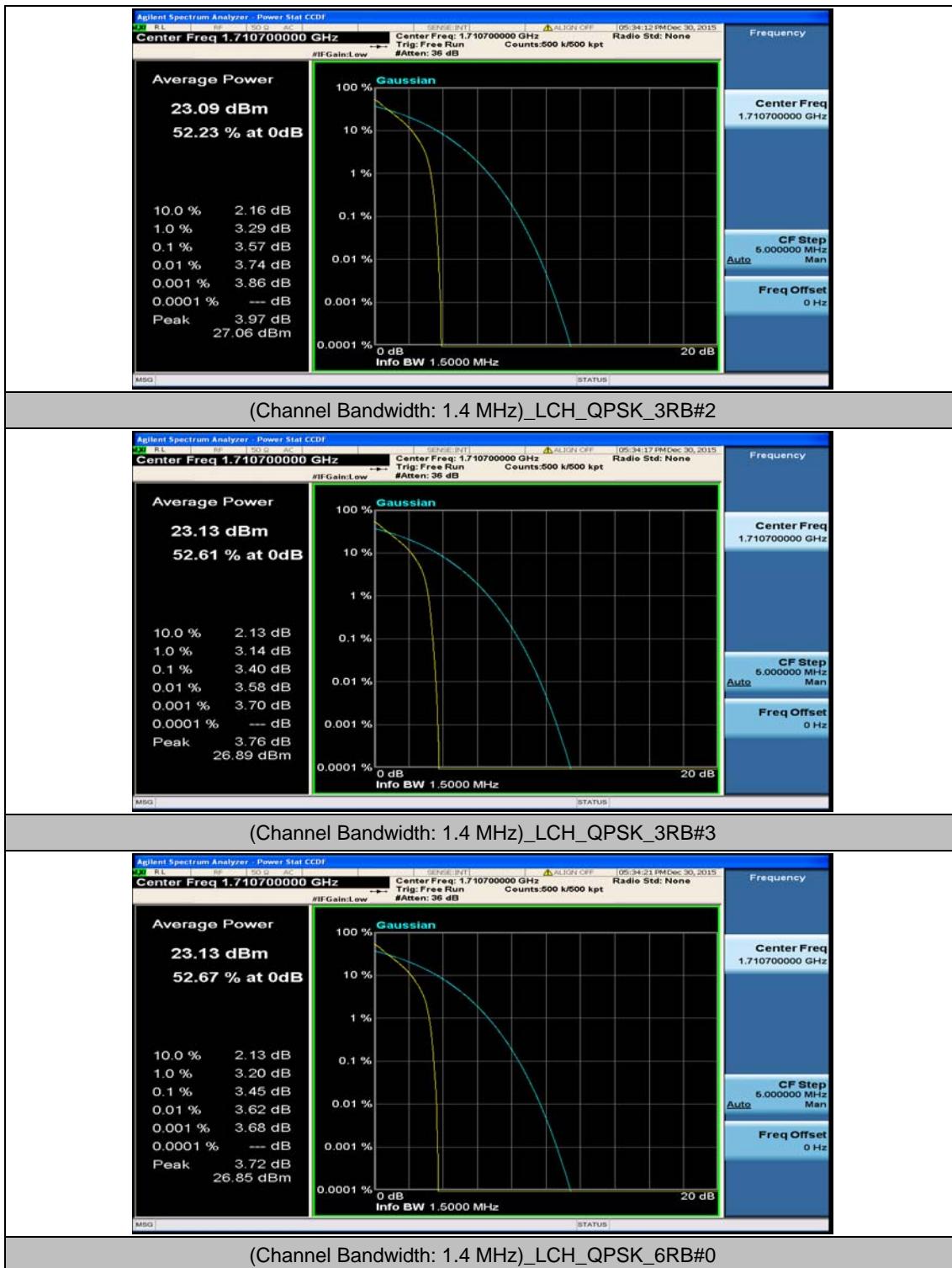
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	11.58	<13	PASS

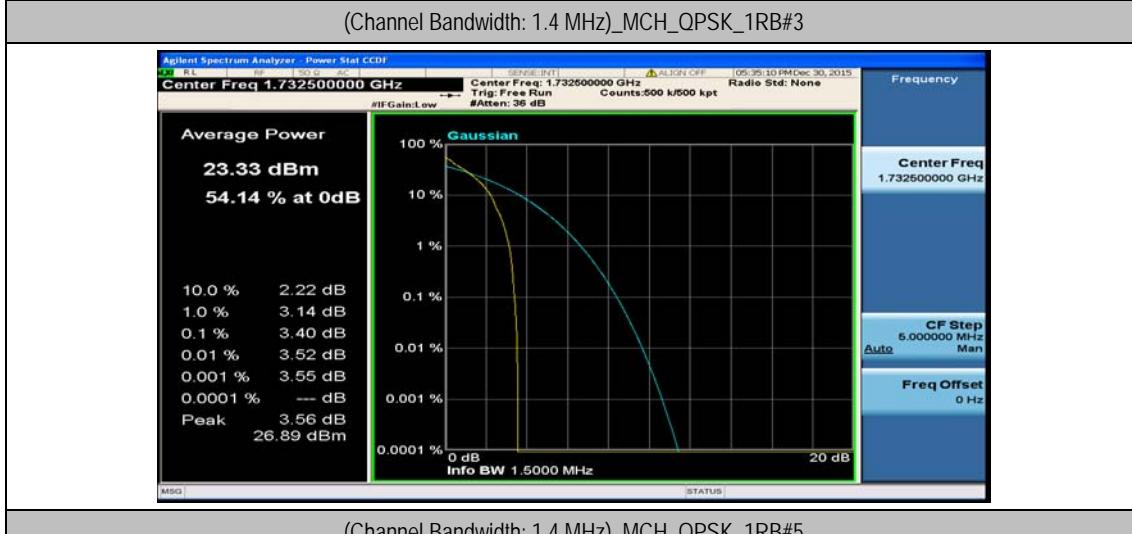
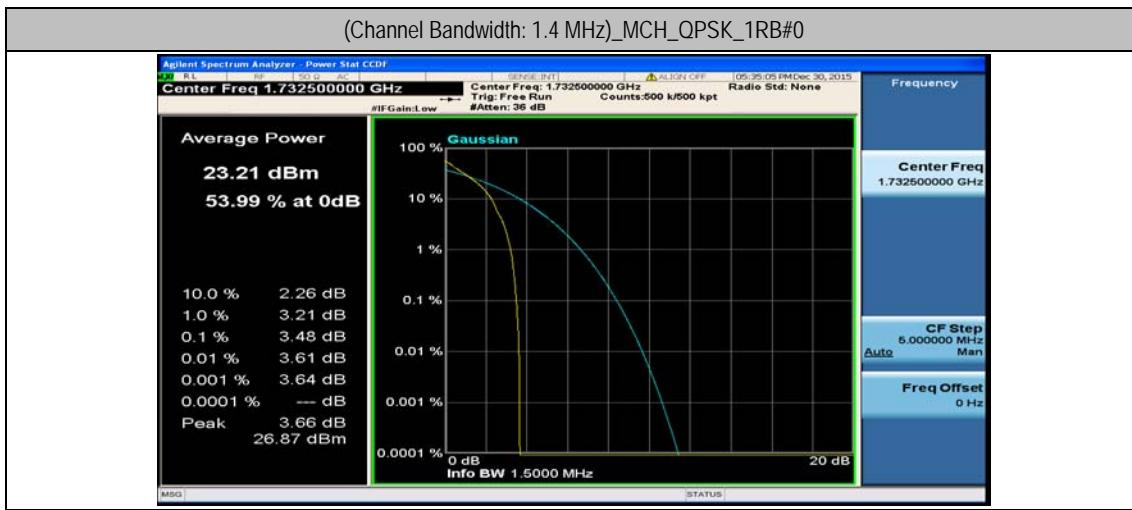
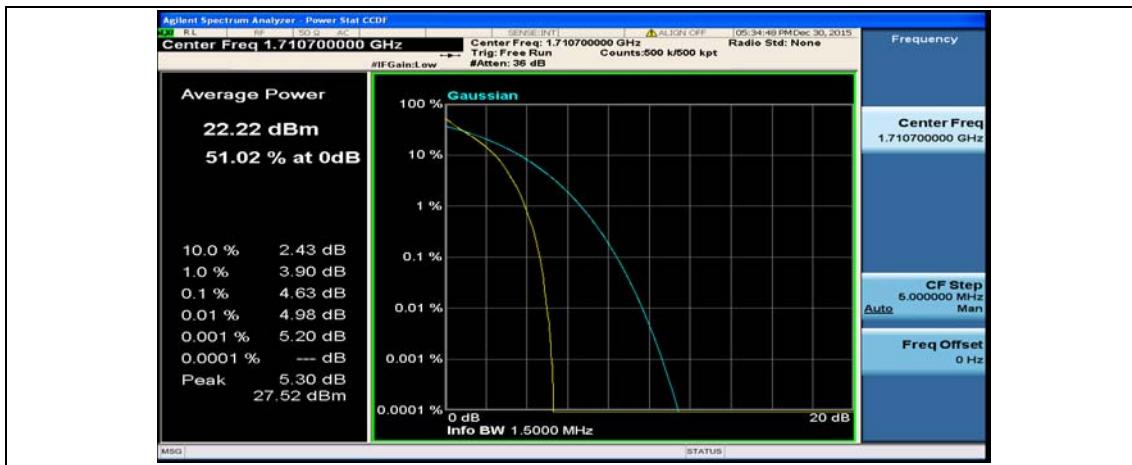
		1	49	3.44	<13	PASS
		1	99	11.71	<13	PASS
		50	0	5.4	<13	PASS
		50	25	5.09	<13	PASS
		50	50	5.63	<13	PASS
		100	0	5.7	<13	PASS
	MCH	1	0	10.26	<13	PASS
		1	49	3.62	<13	PASS
		1	99	10.36	<13	PASS
		50	0	5.47	<13	PASS
		50	25	5.14	<13	PASS
		50	50	5.65	<13	PASS
		100	0	5.7	<13	PASS
	HCH	1	0	10.21	<13	PASS
		1	49	3.55	<13	PASS
		1	99	10.97	<13	PASS
		50	0	5.49	<13	PASS
		50	25	5.15	<13	PASS
		50	50	5.76	<13	PASS
		100	0	5.77	<13	PASS
	LCH	1	0	11.65	<13	PASS
		1	49	4.29	<13	PASS
		1	99	11.52	<13	PASS
		50	0	6.36	<13	PASS
		50	25	5.83	<13	PASS
		50	50	6.46	<13	PASS
		100	0	6.65	<13	PASS
	MCH	1	0	10.05	<13	PASS
		1	49	4.43	<13	PASS
		1	99	10.4	<13	PASS
		50	0	6.43	<13	PASS
		50	25	5.89	<13	PASS
		50	50	6.5	<13	PASS
		100	0	6.71	<13	PASS
	HCH	1	0	10.68	<13	PASS
		1	49	4.4	<13	PASS
		1	99	10.39	<13	PASS
		50	0	6.49	<13	PASS
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		50	50	6.56	<13	PASS
		100	0	6.68	<13	PASS

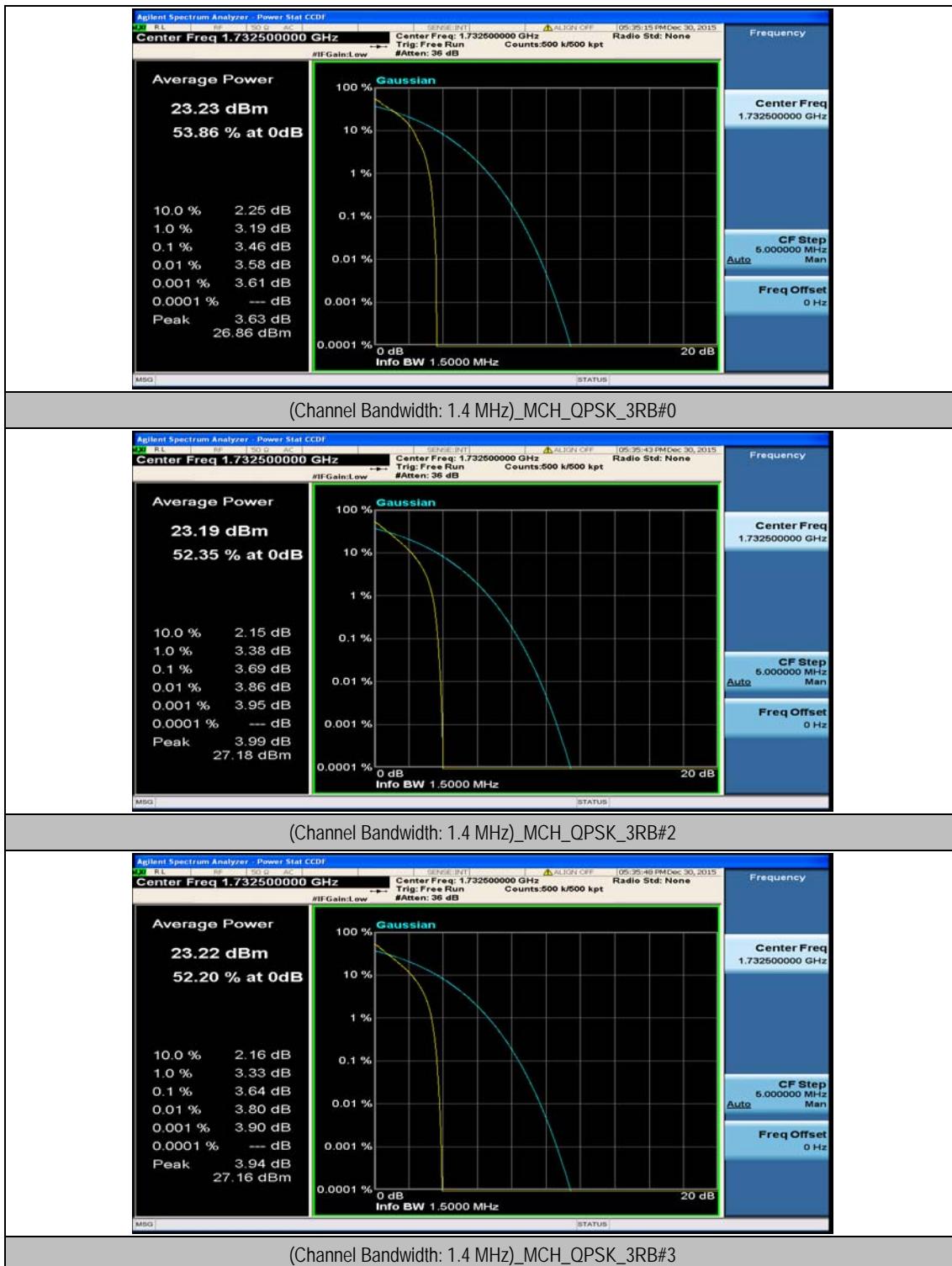
Test Graphs

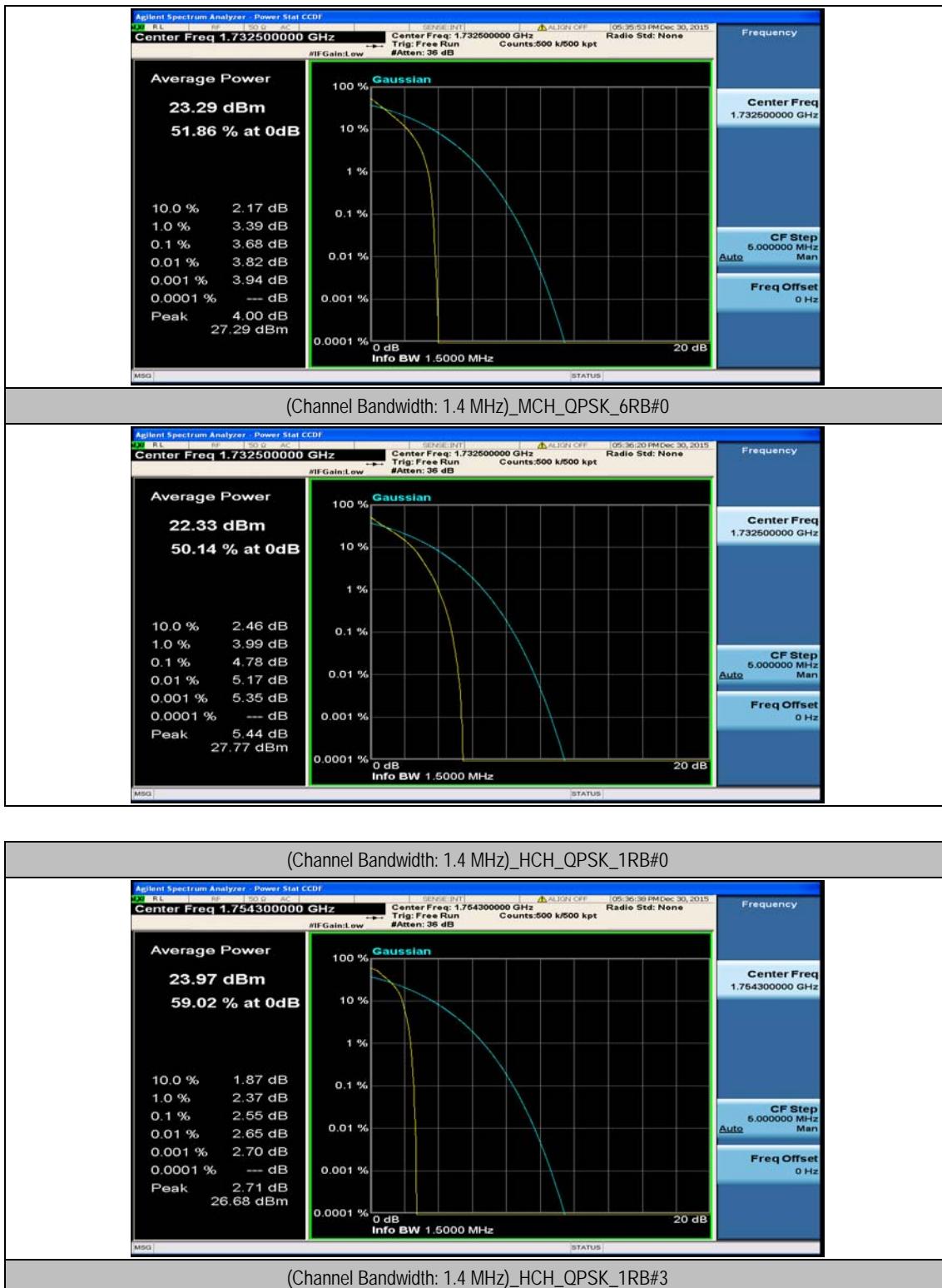
Channel Bandwidth: 1.4 MHz

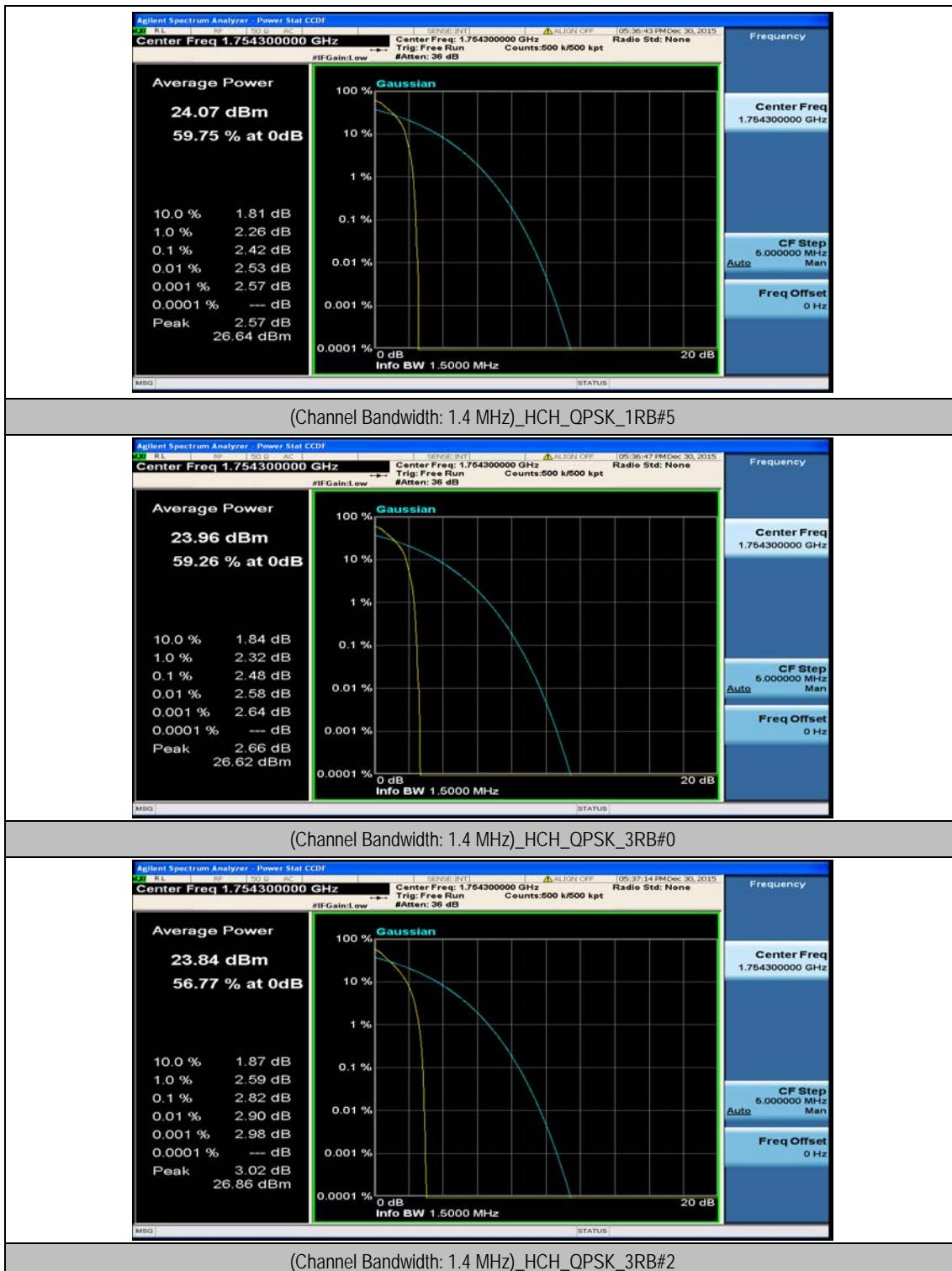


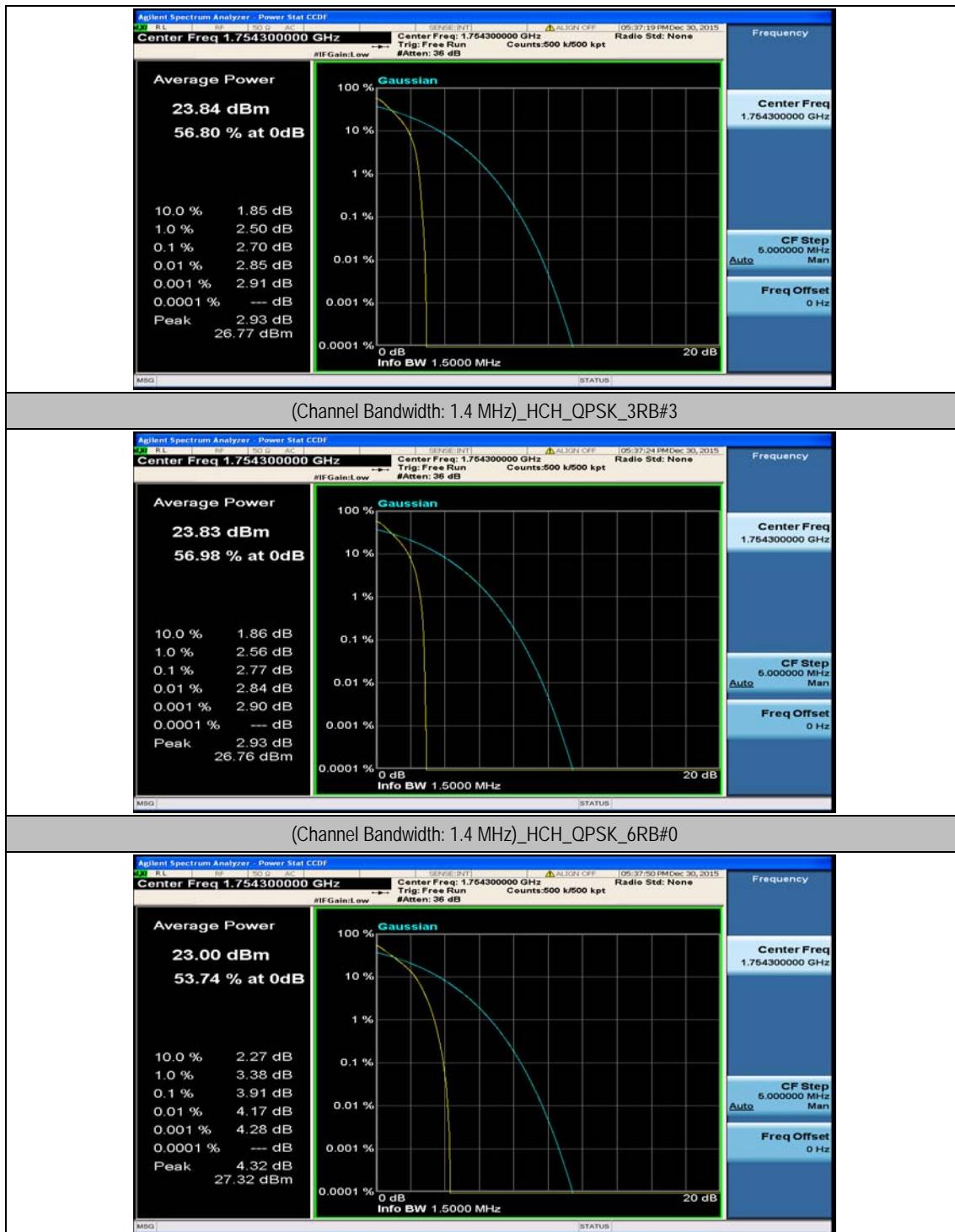


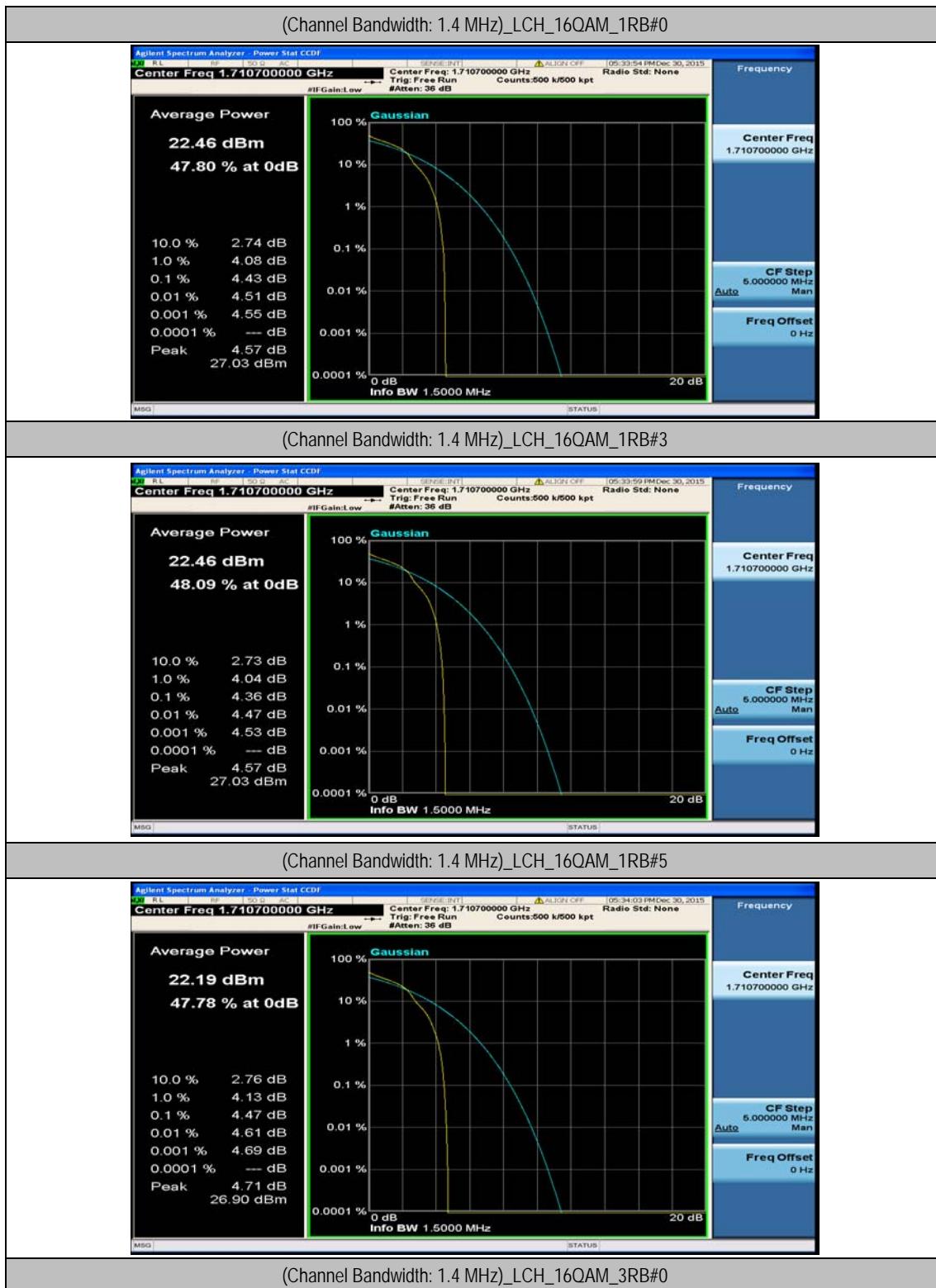


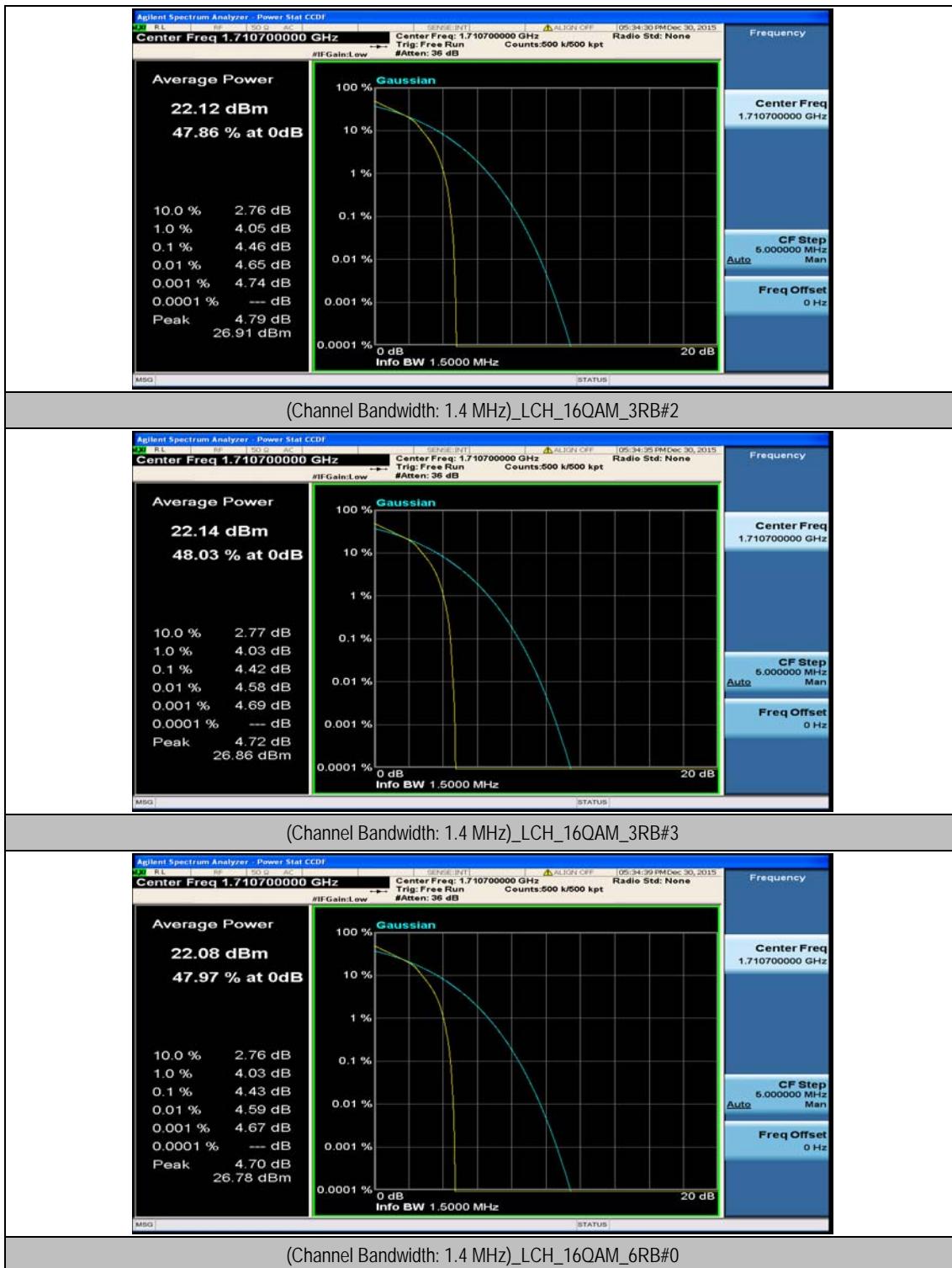


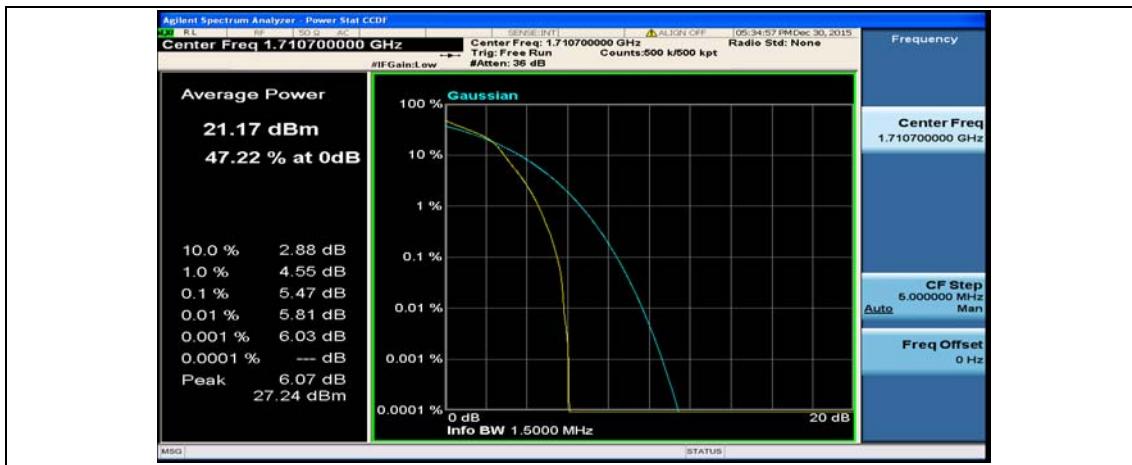


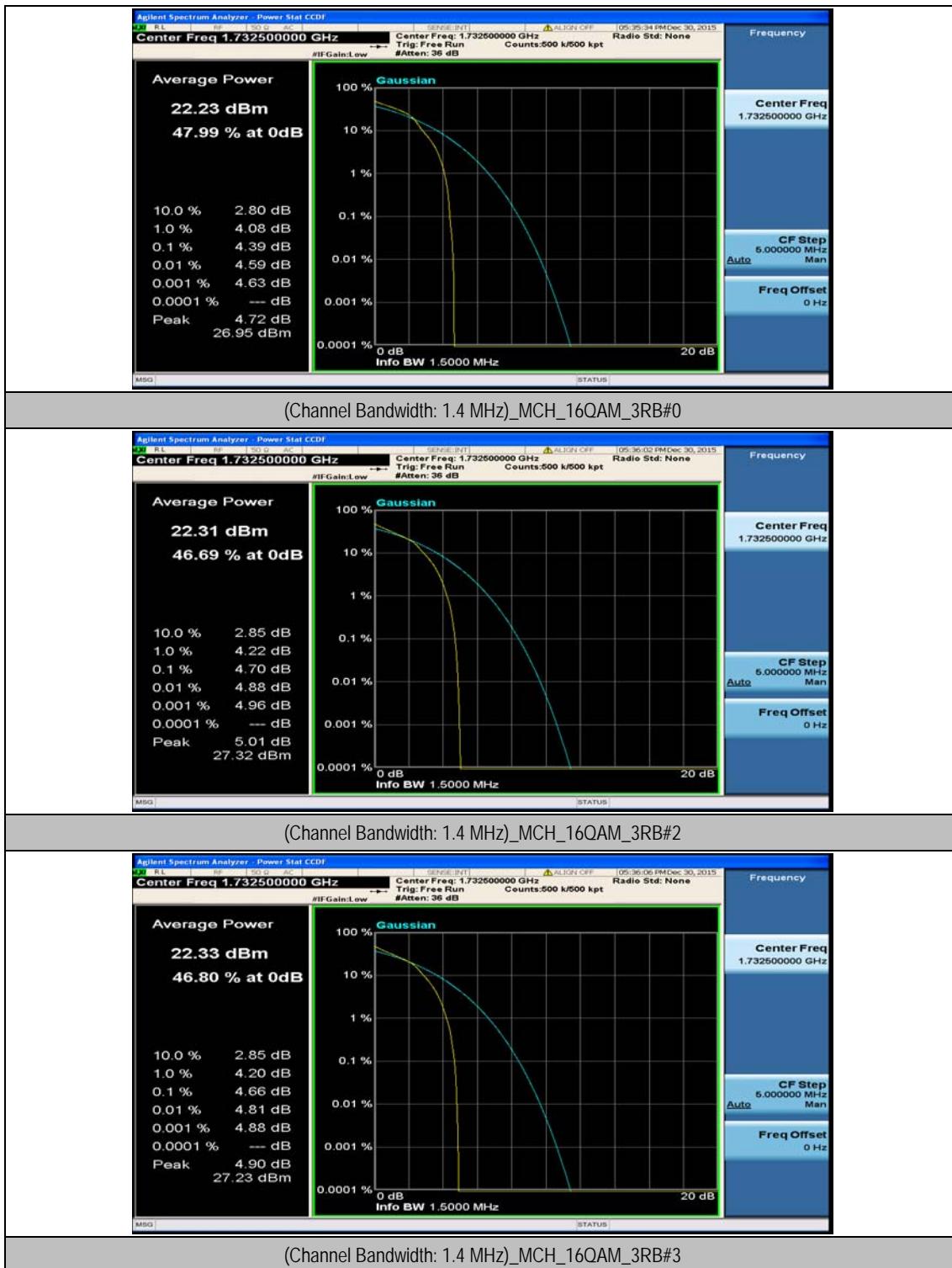


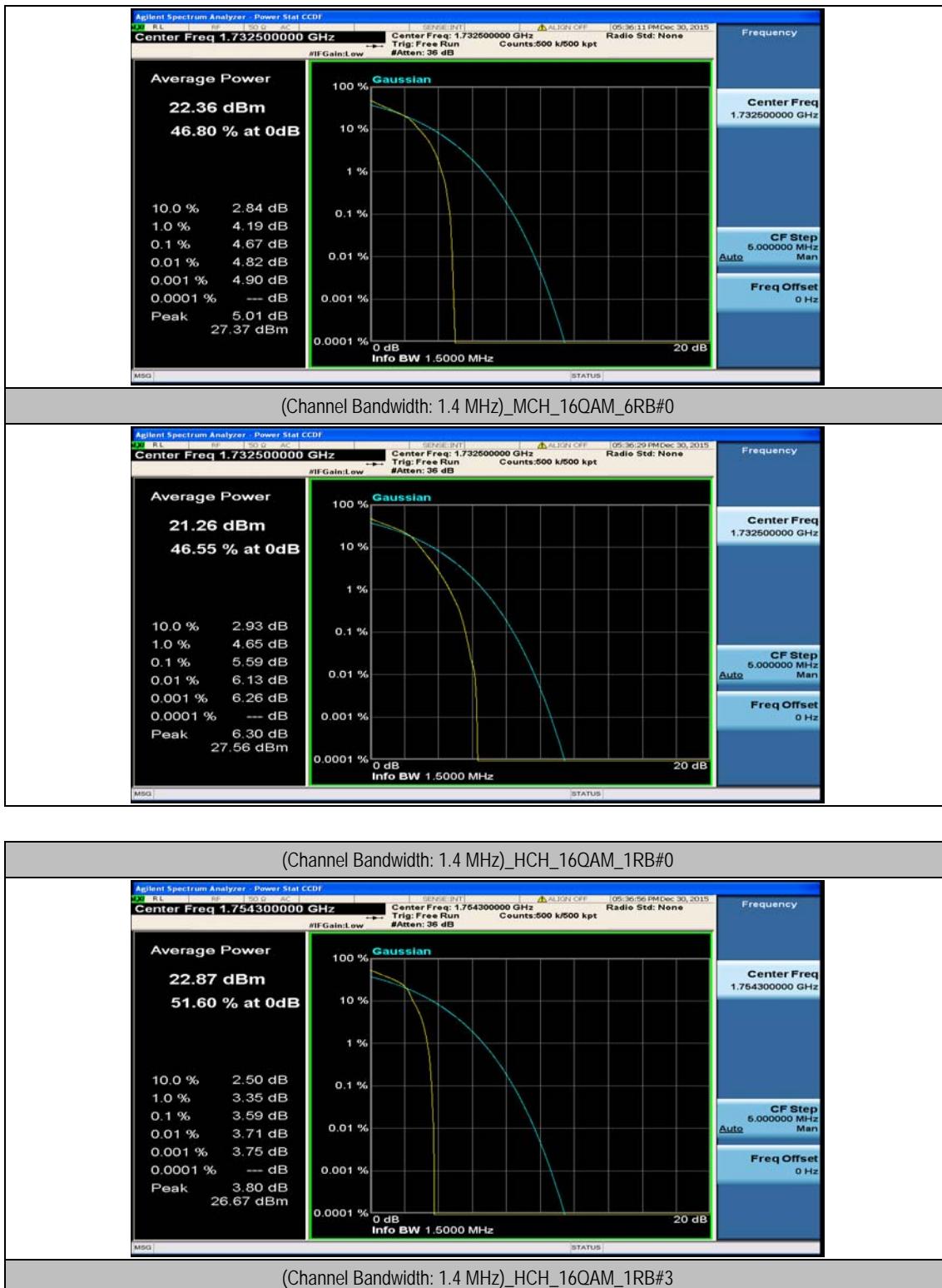


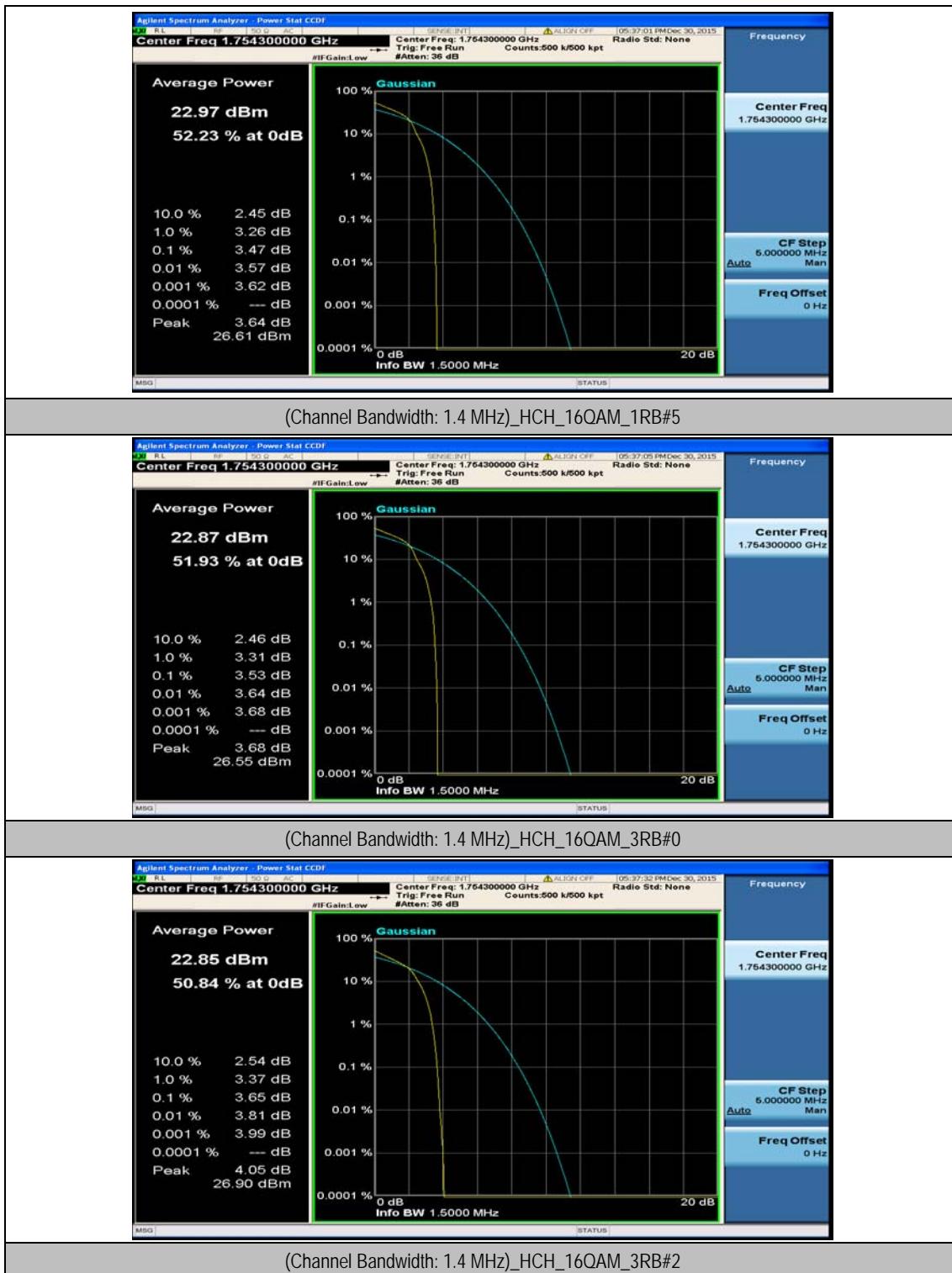


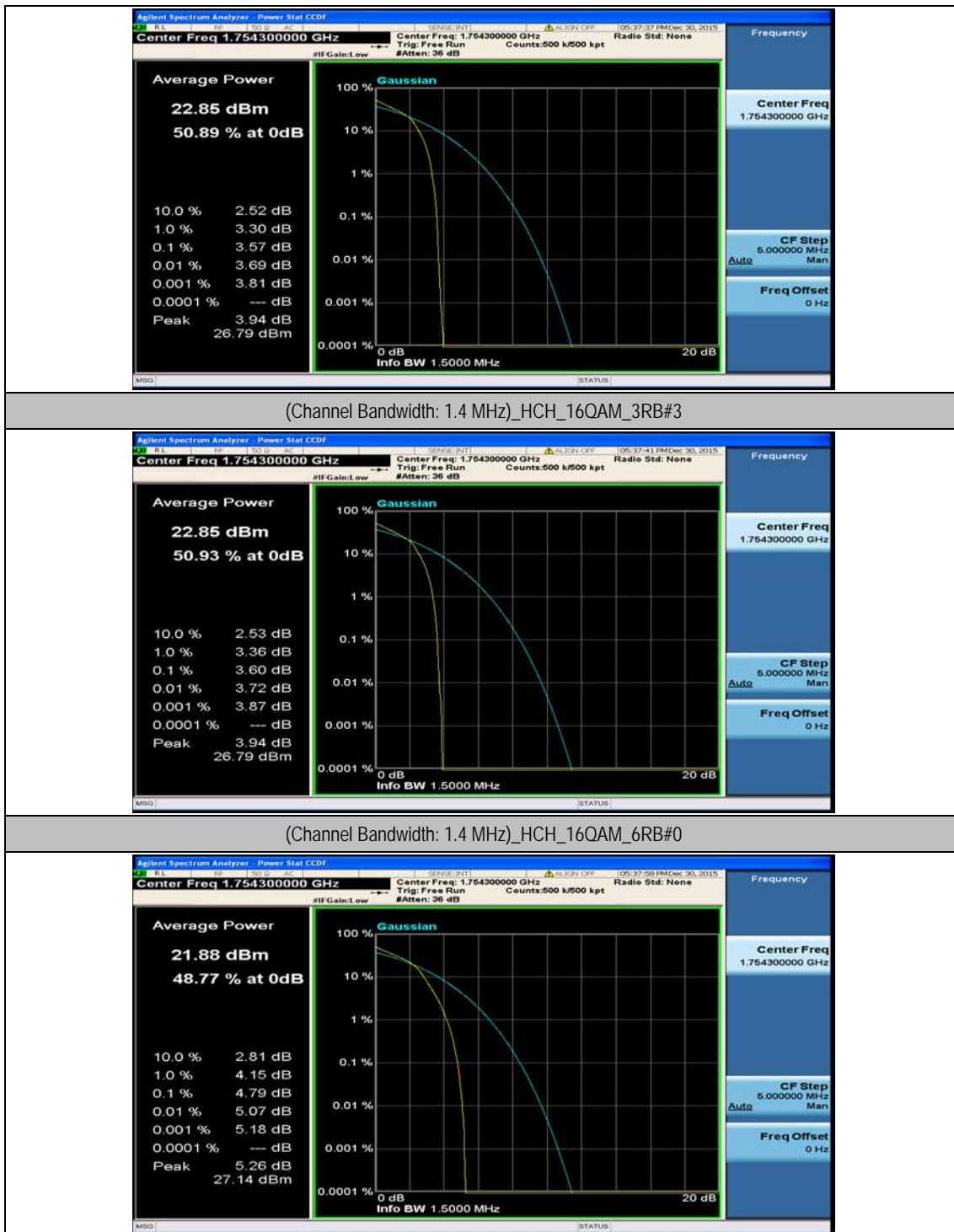




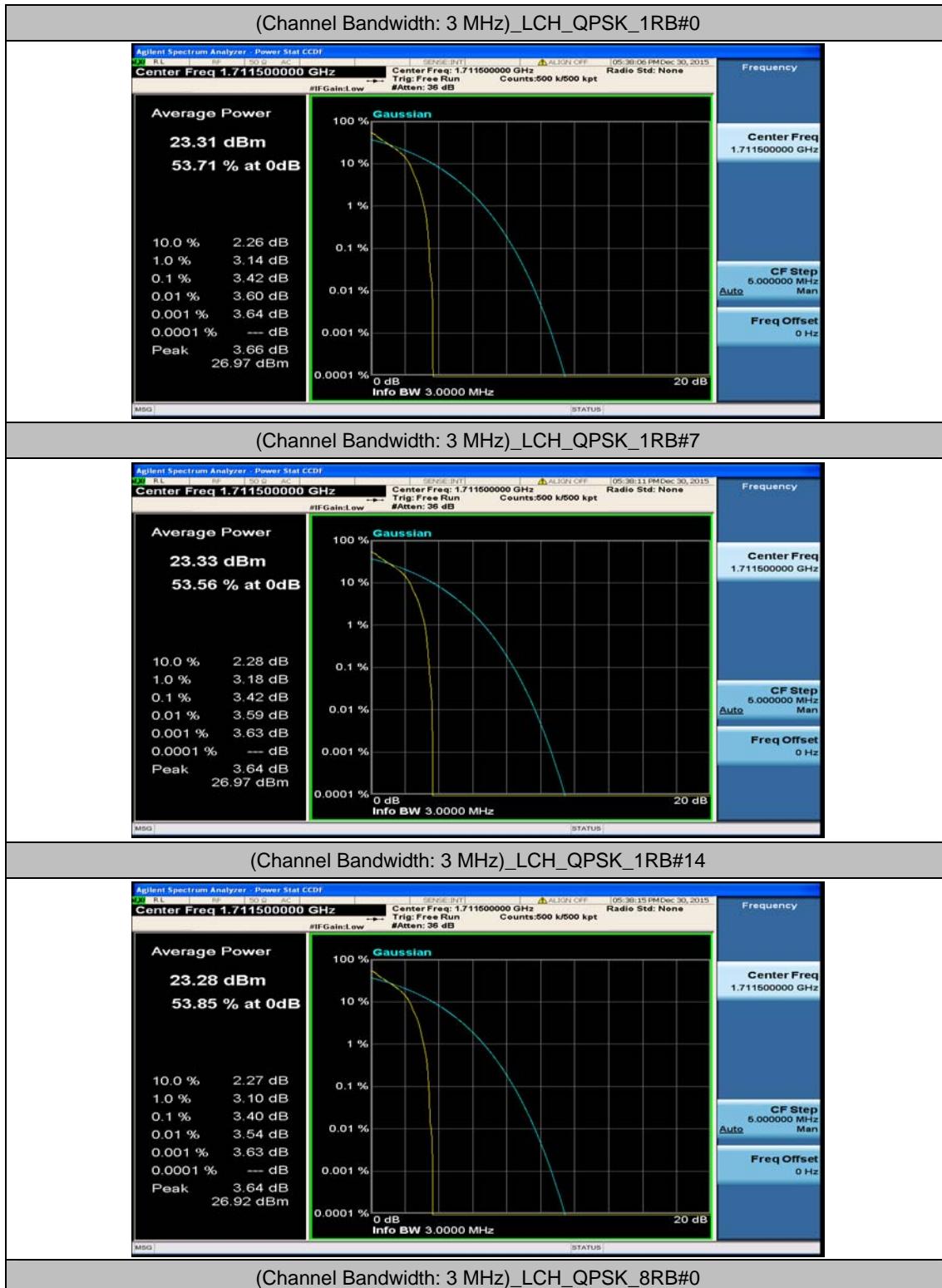


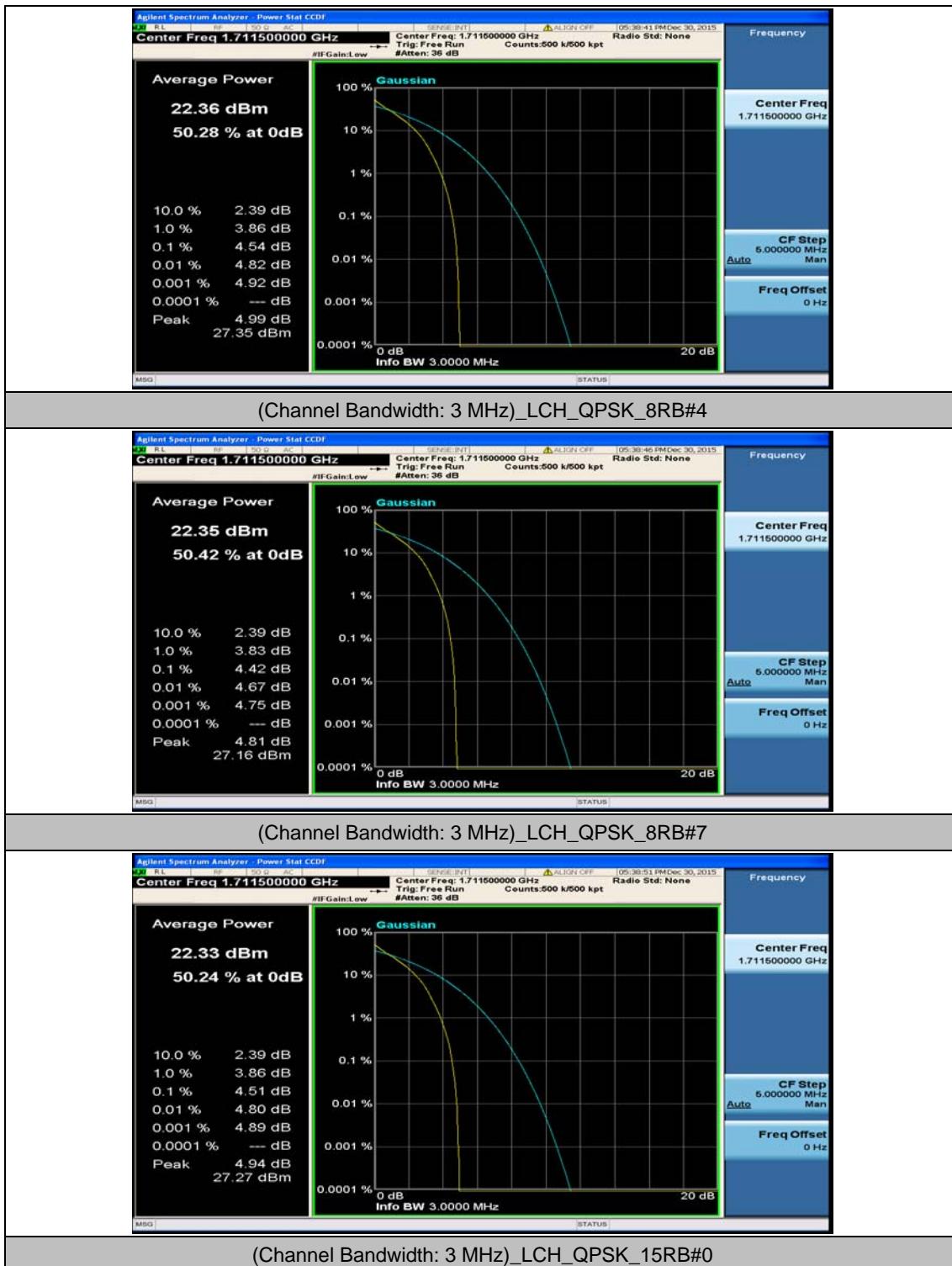


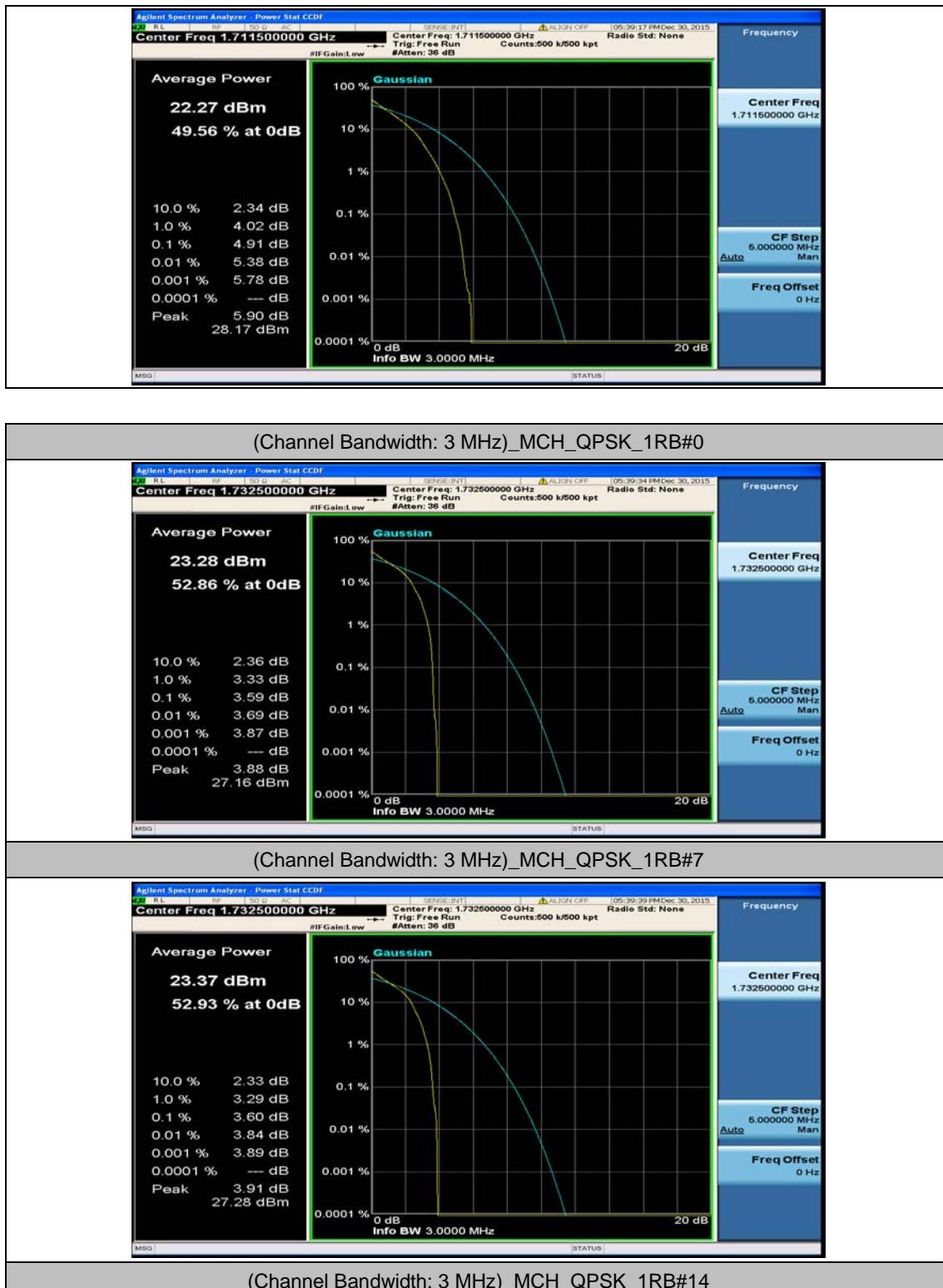


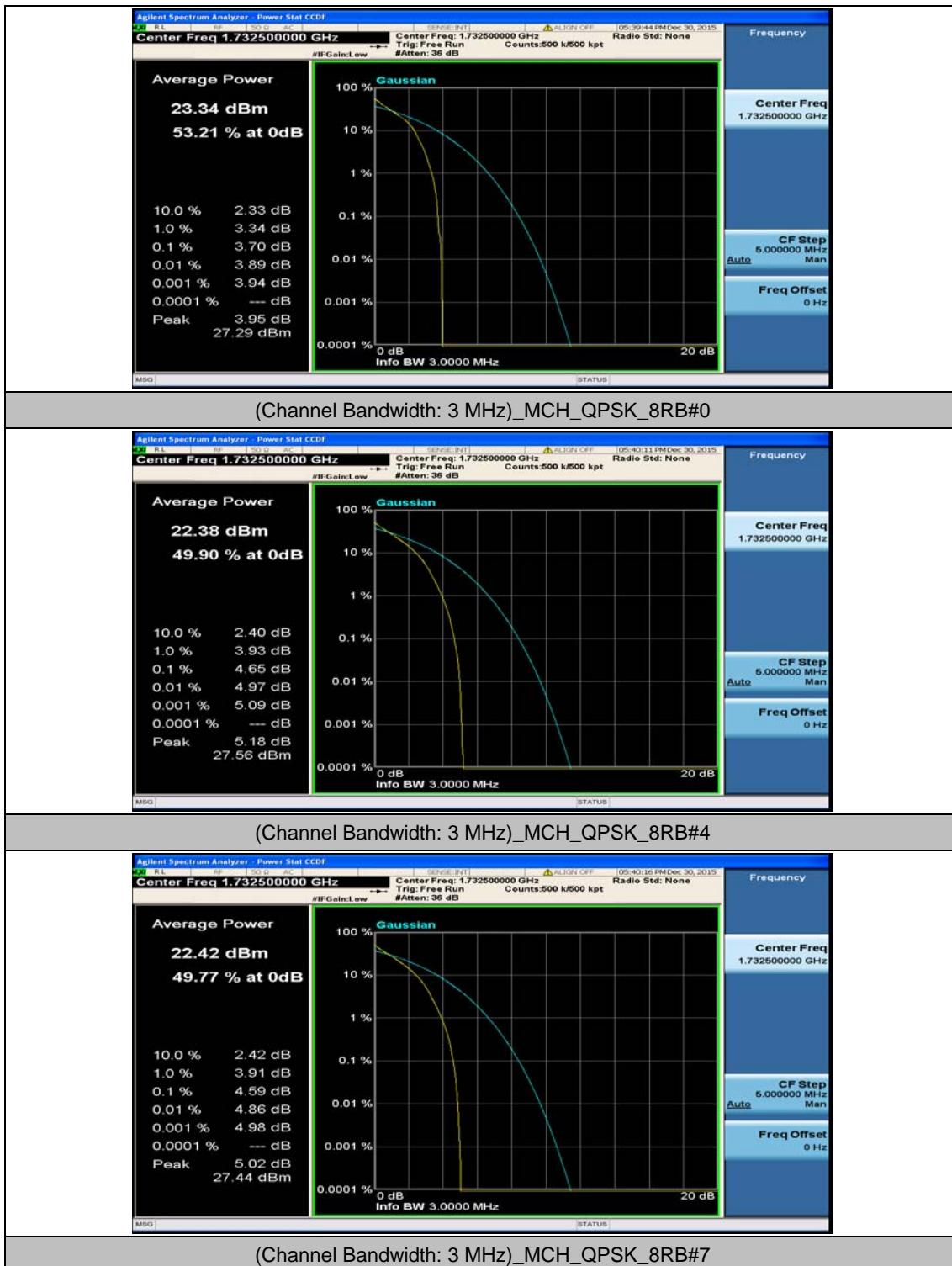


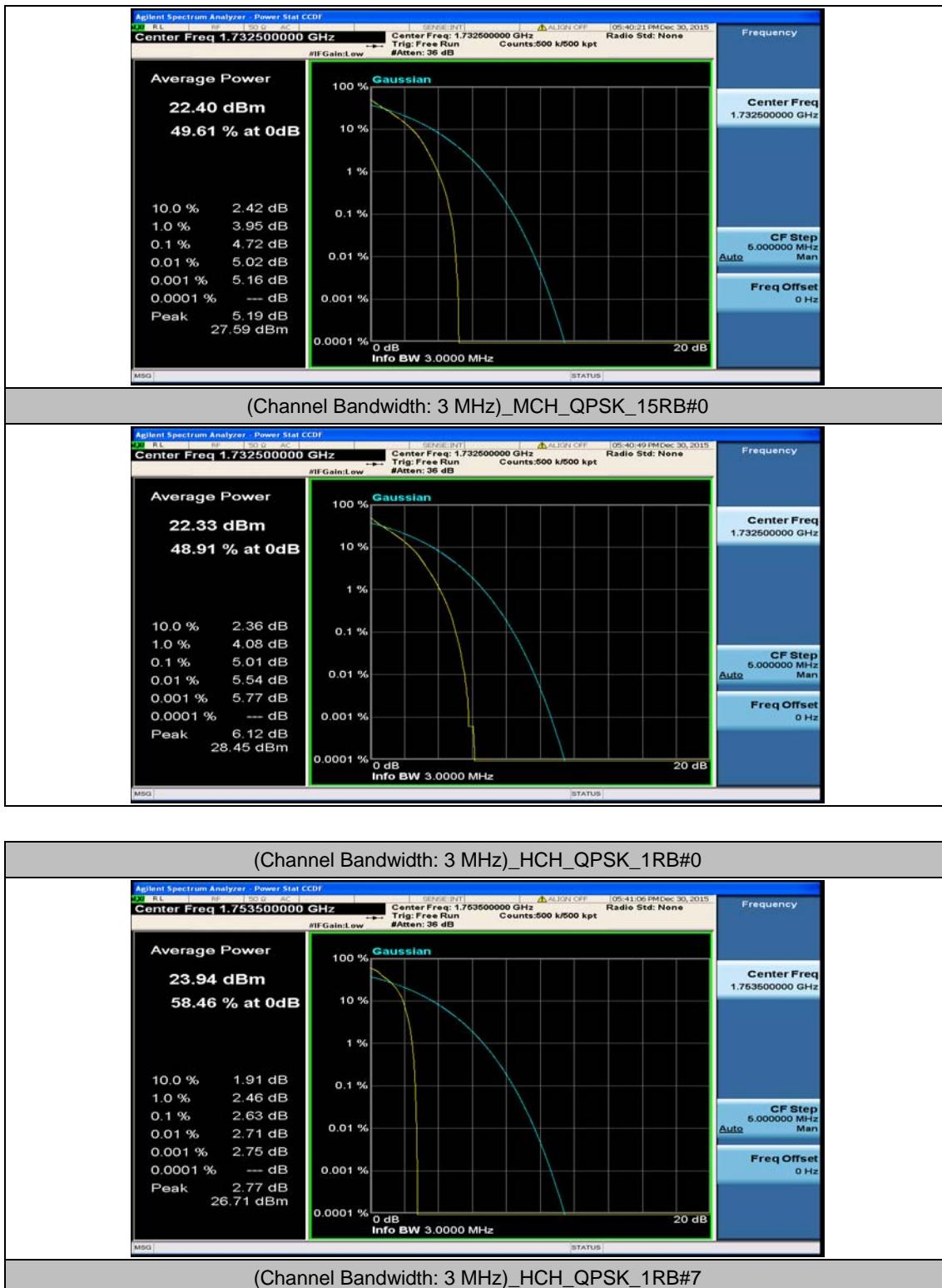
Channel Bandwidth: 3 MHz

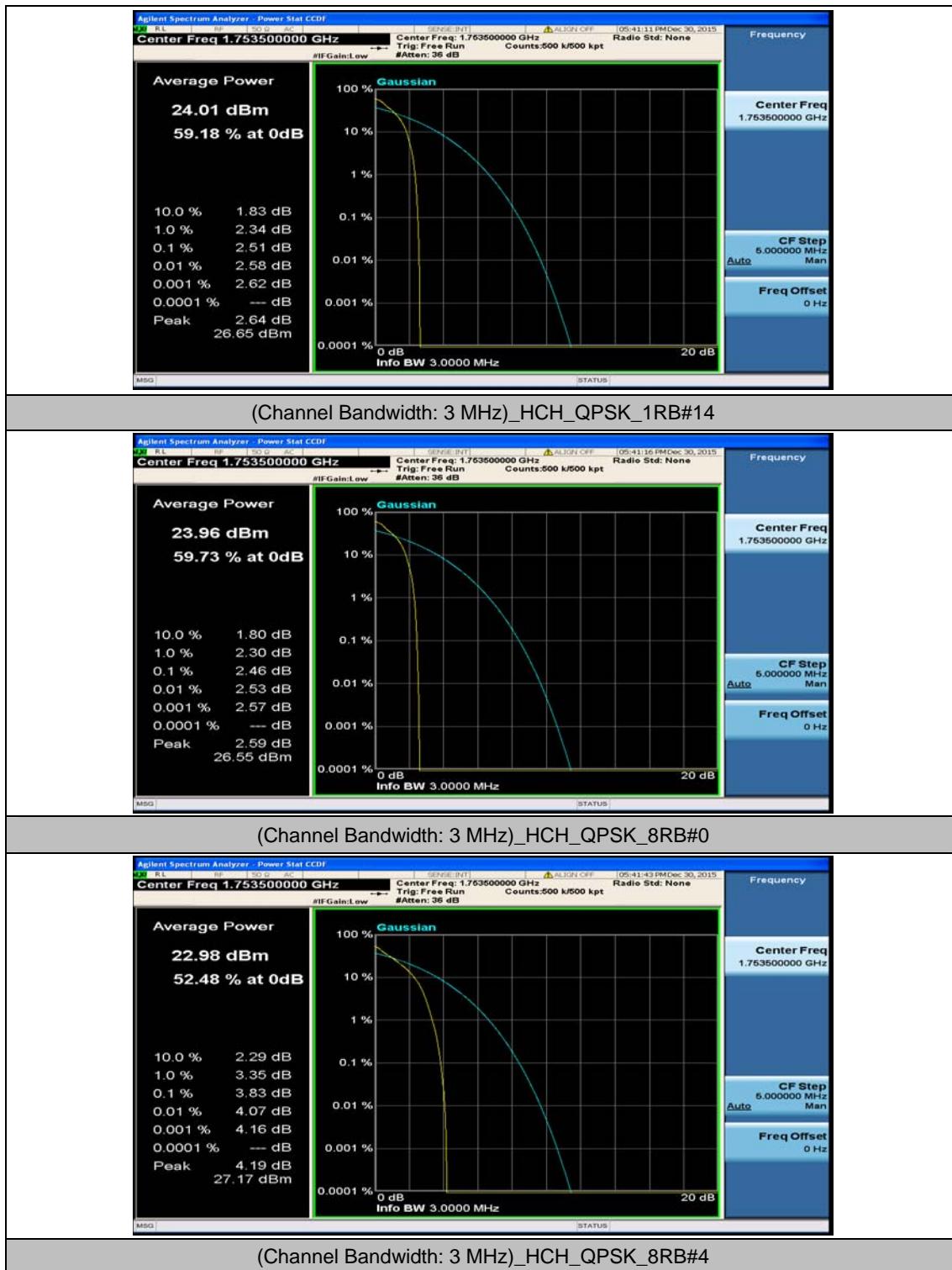


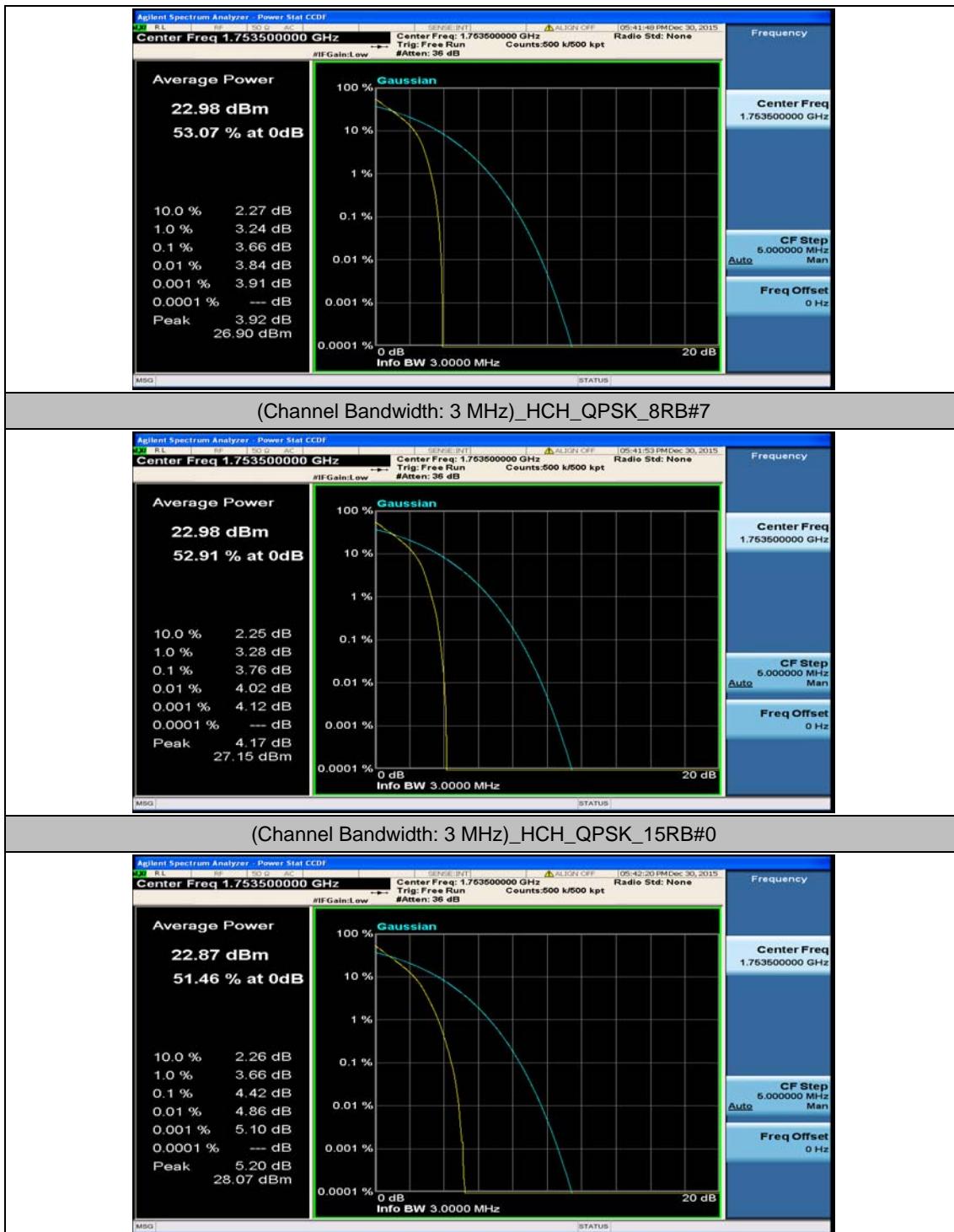


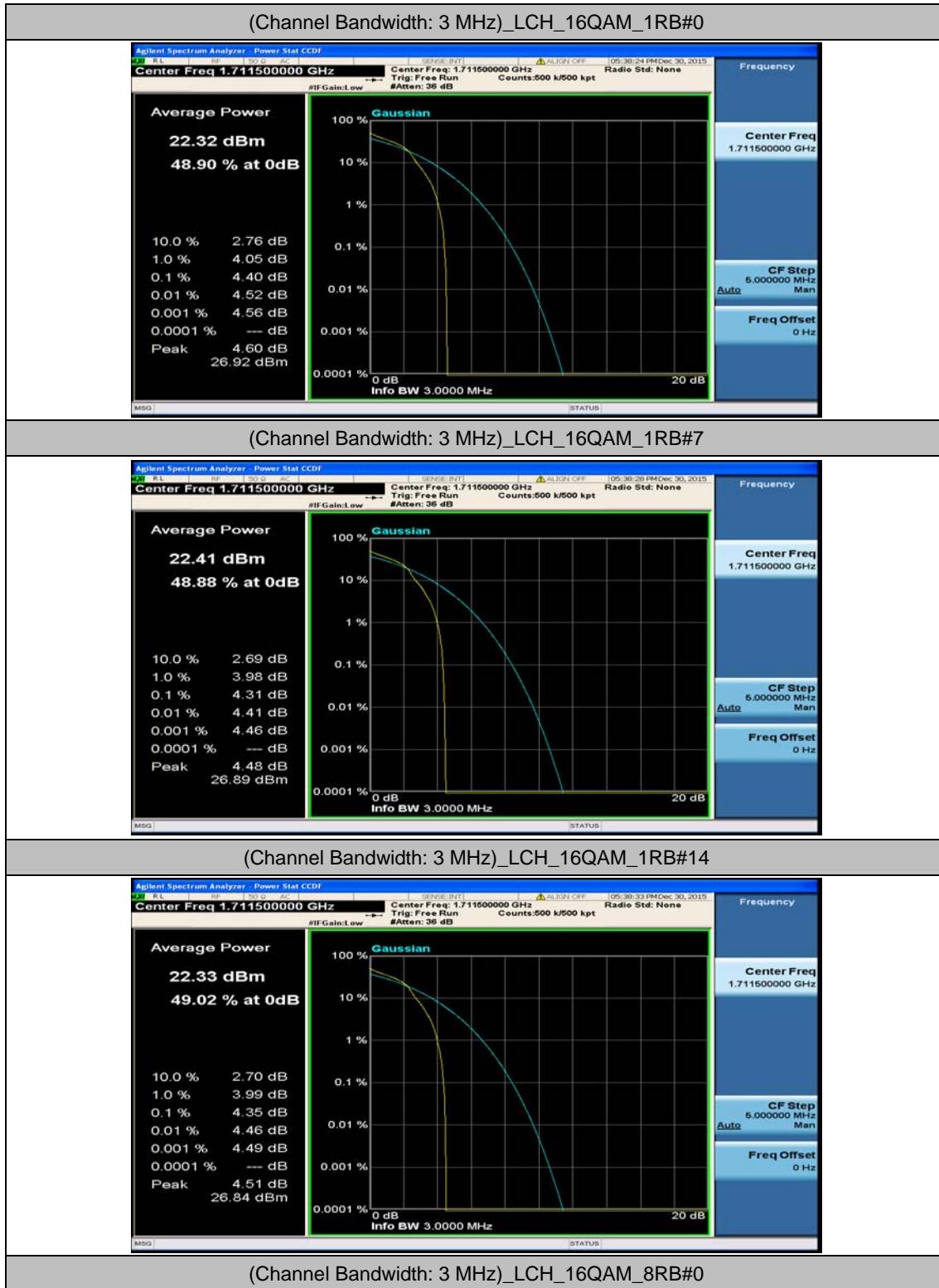


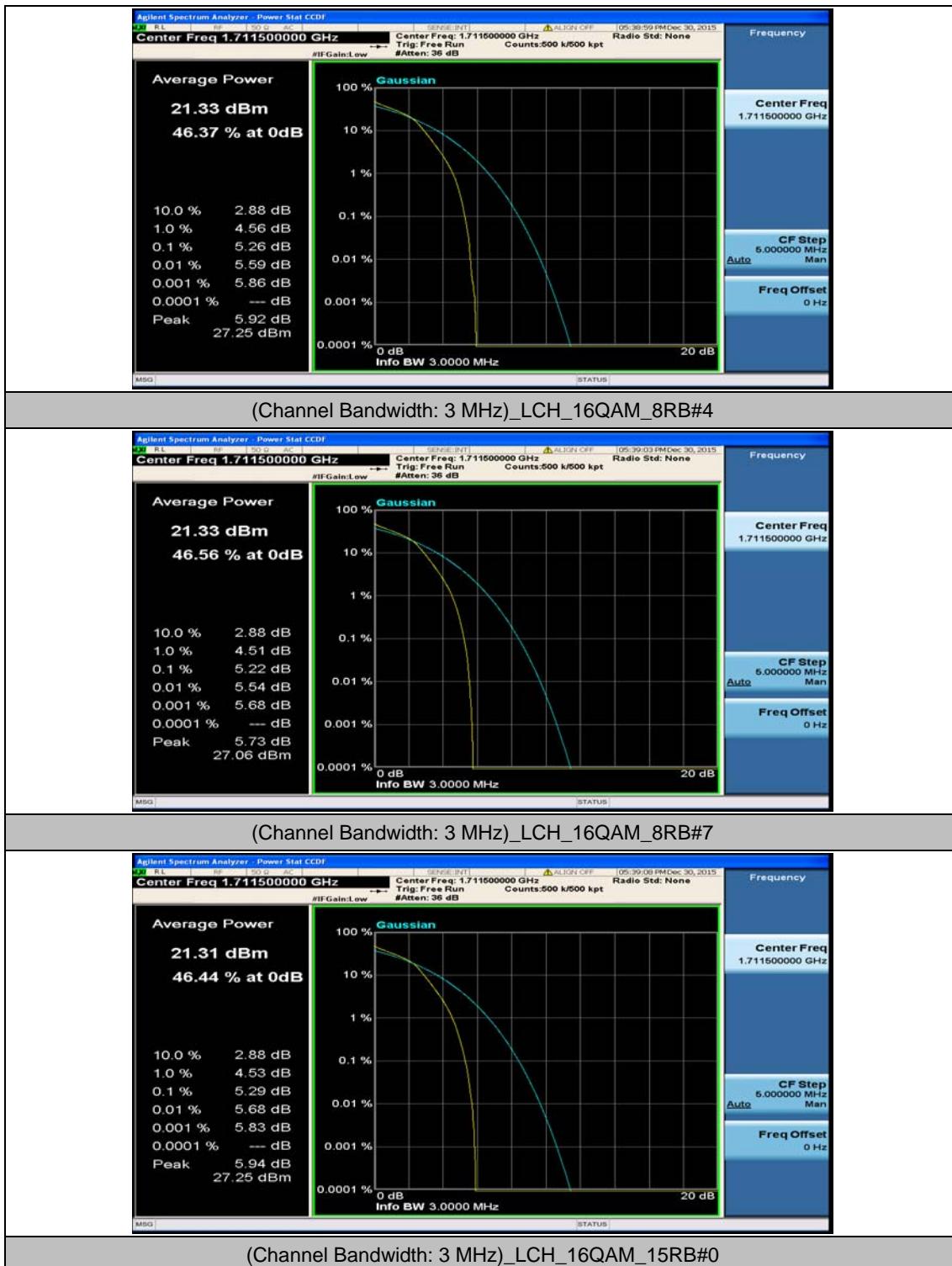


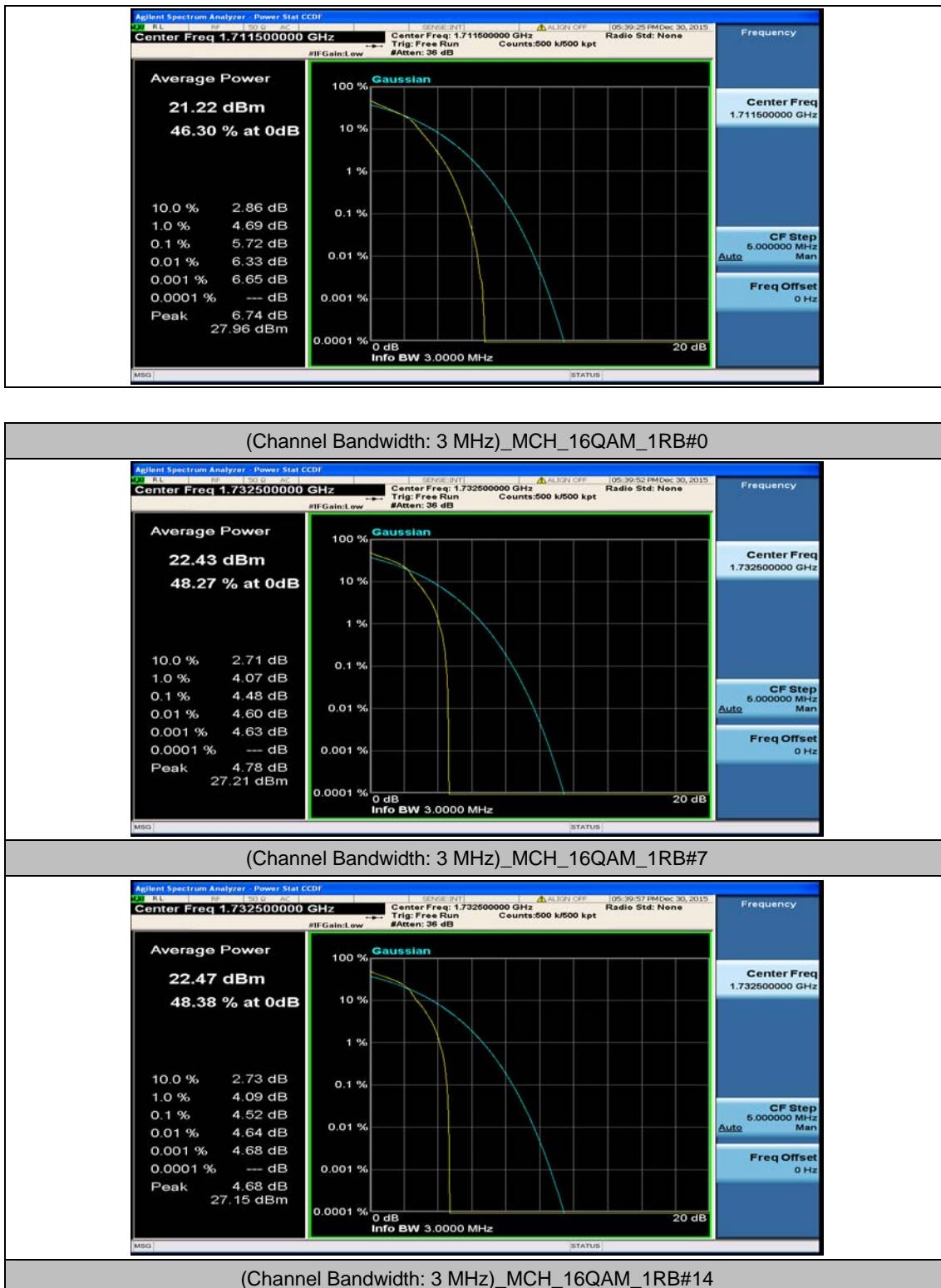


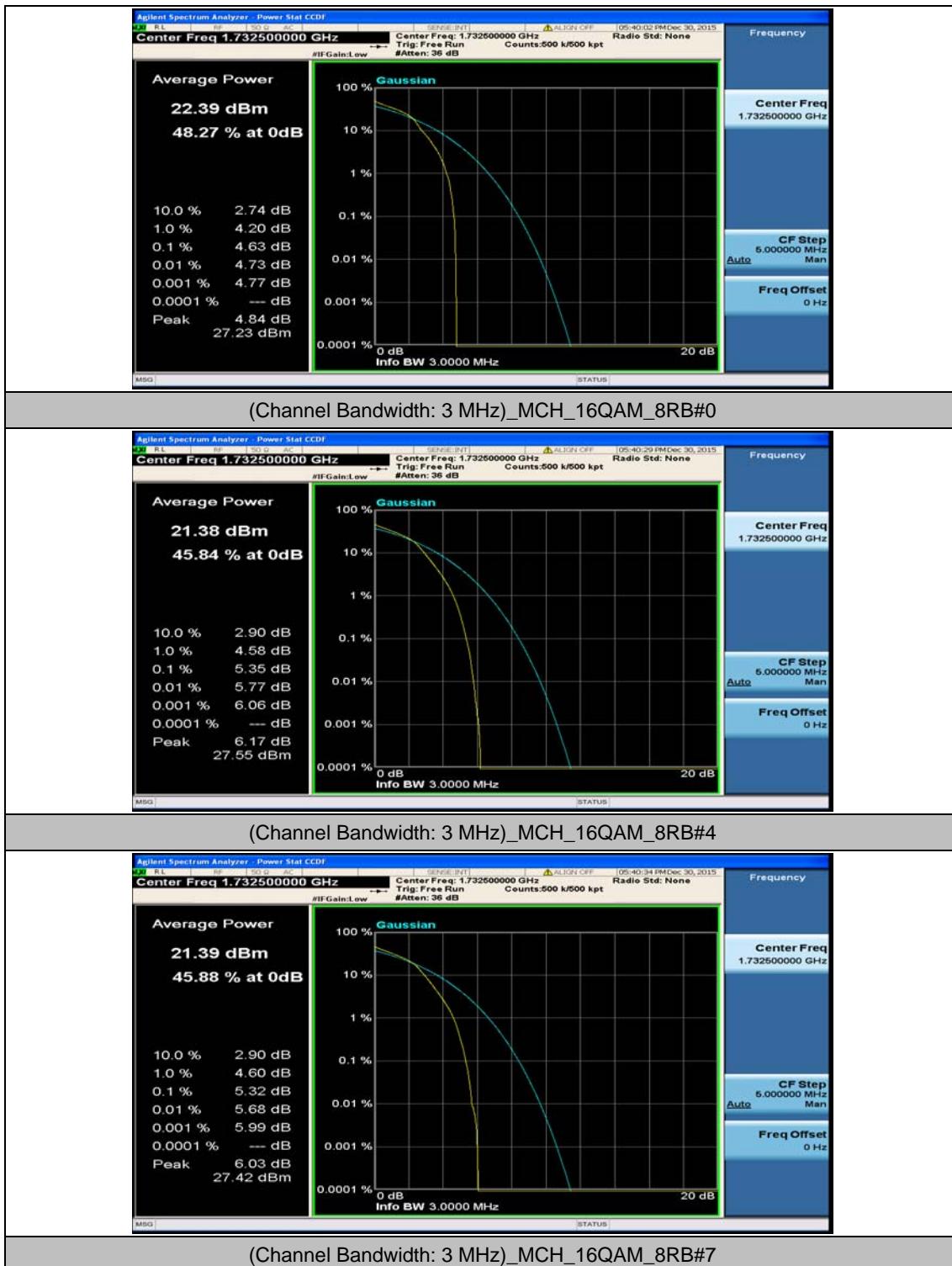


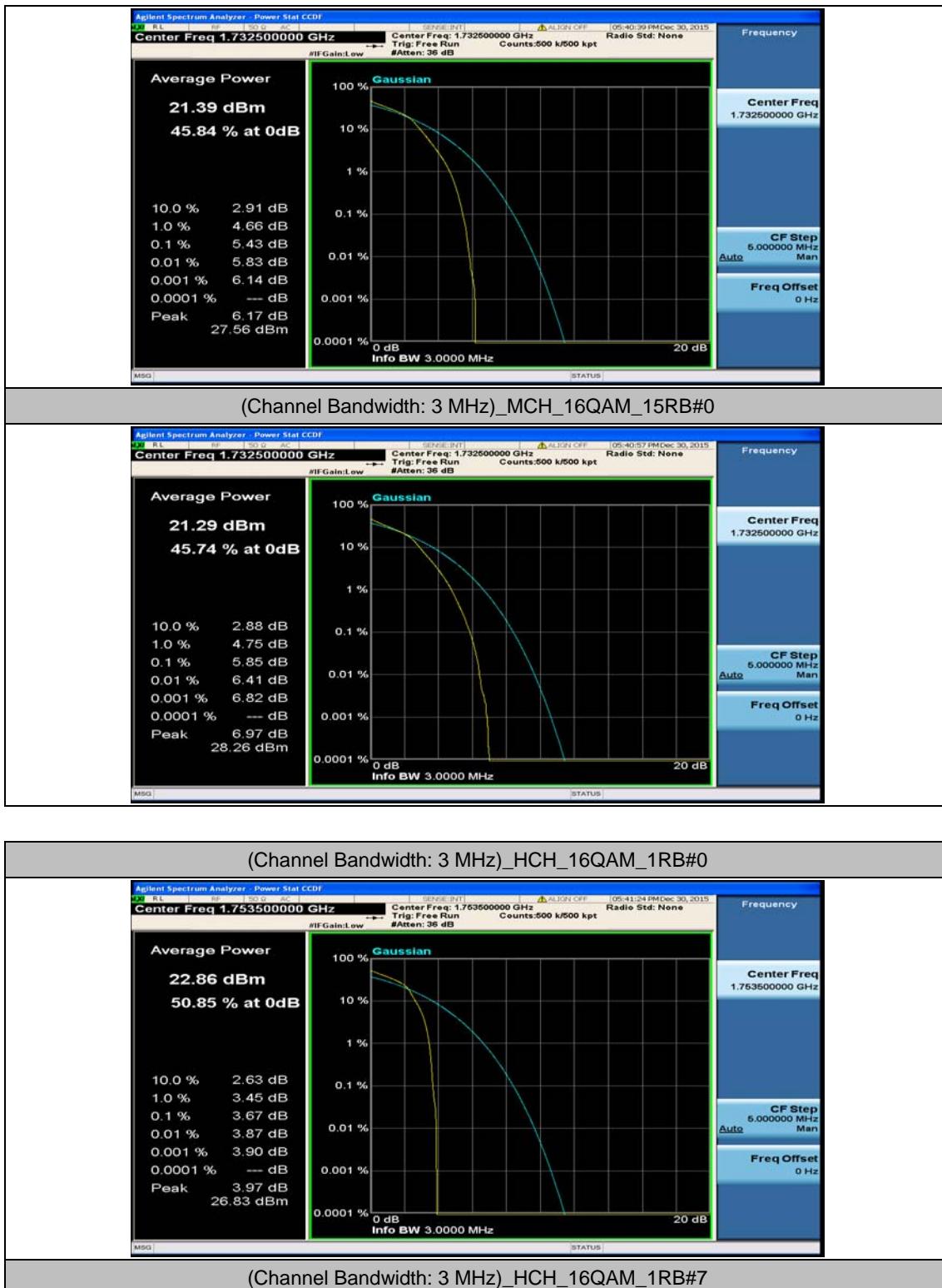


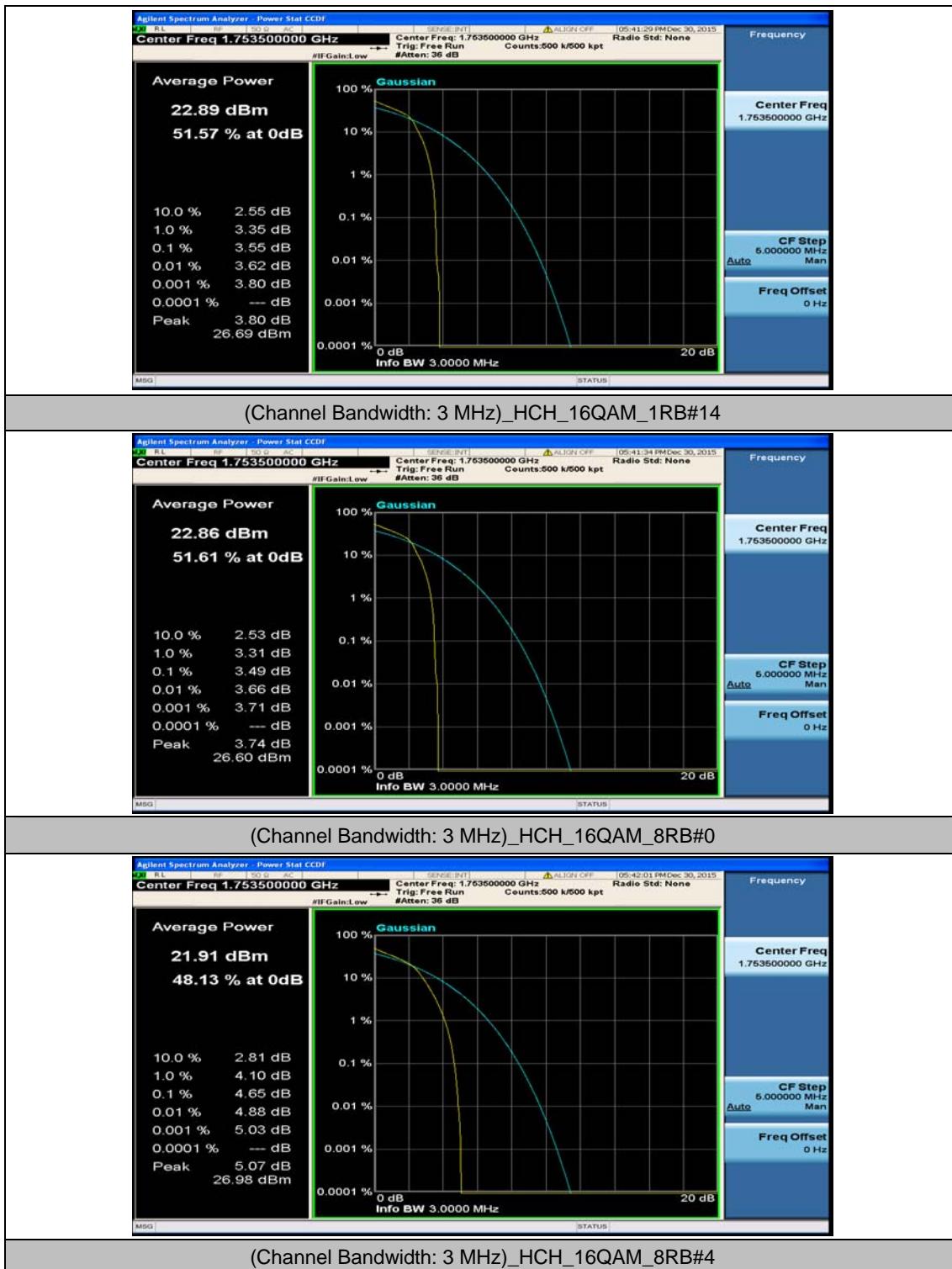


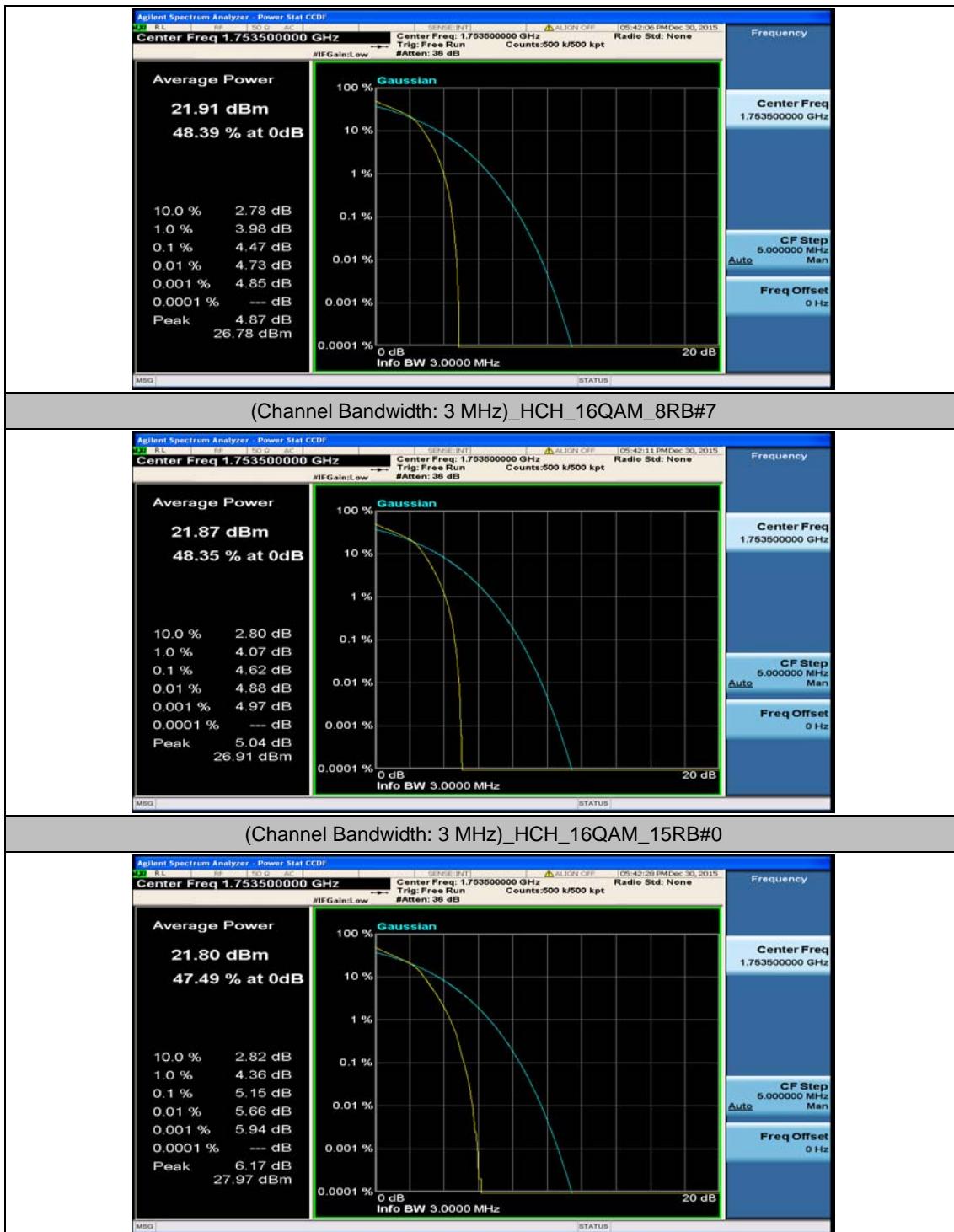




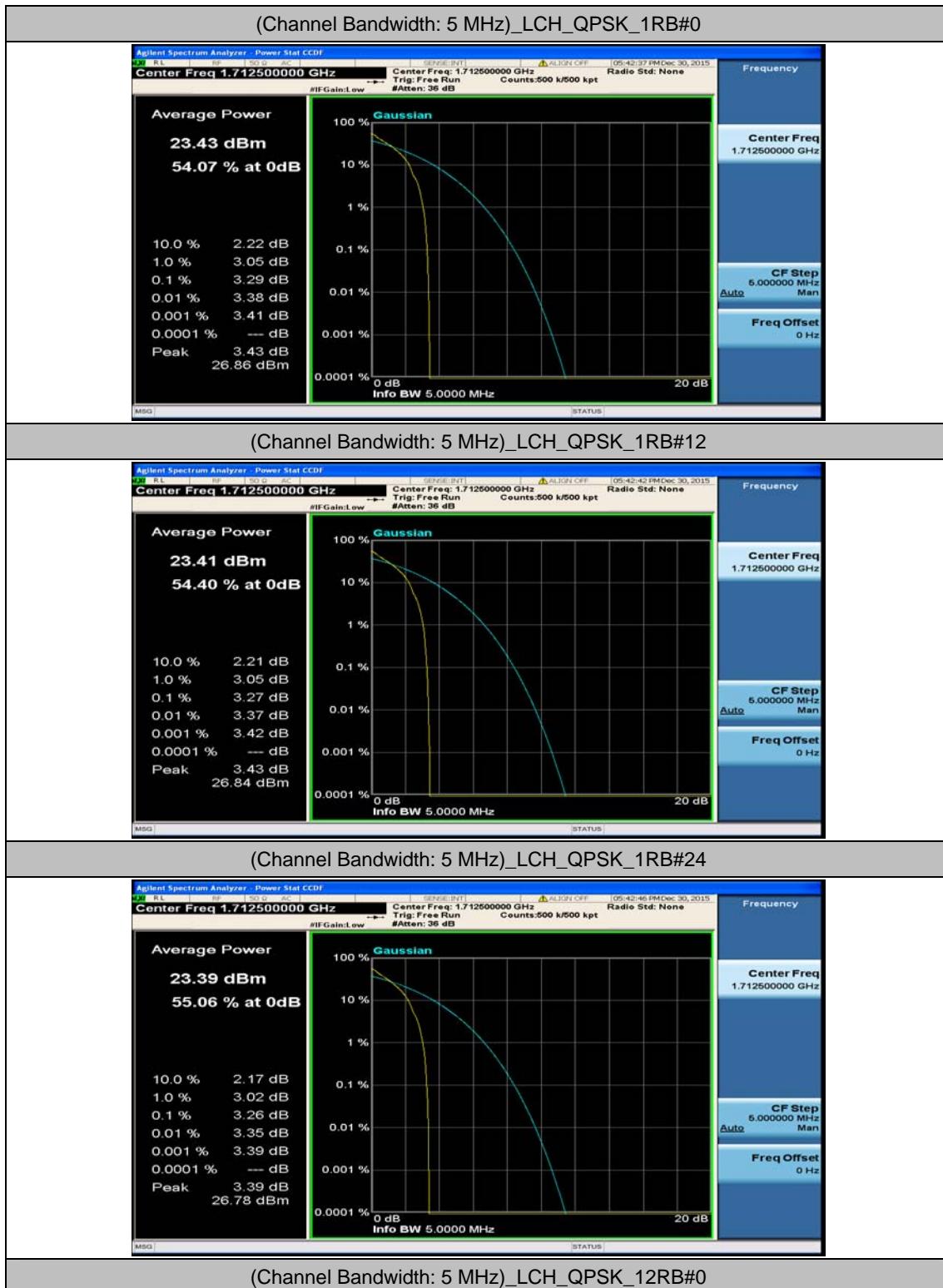


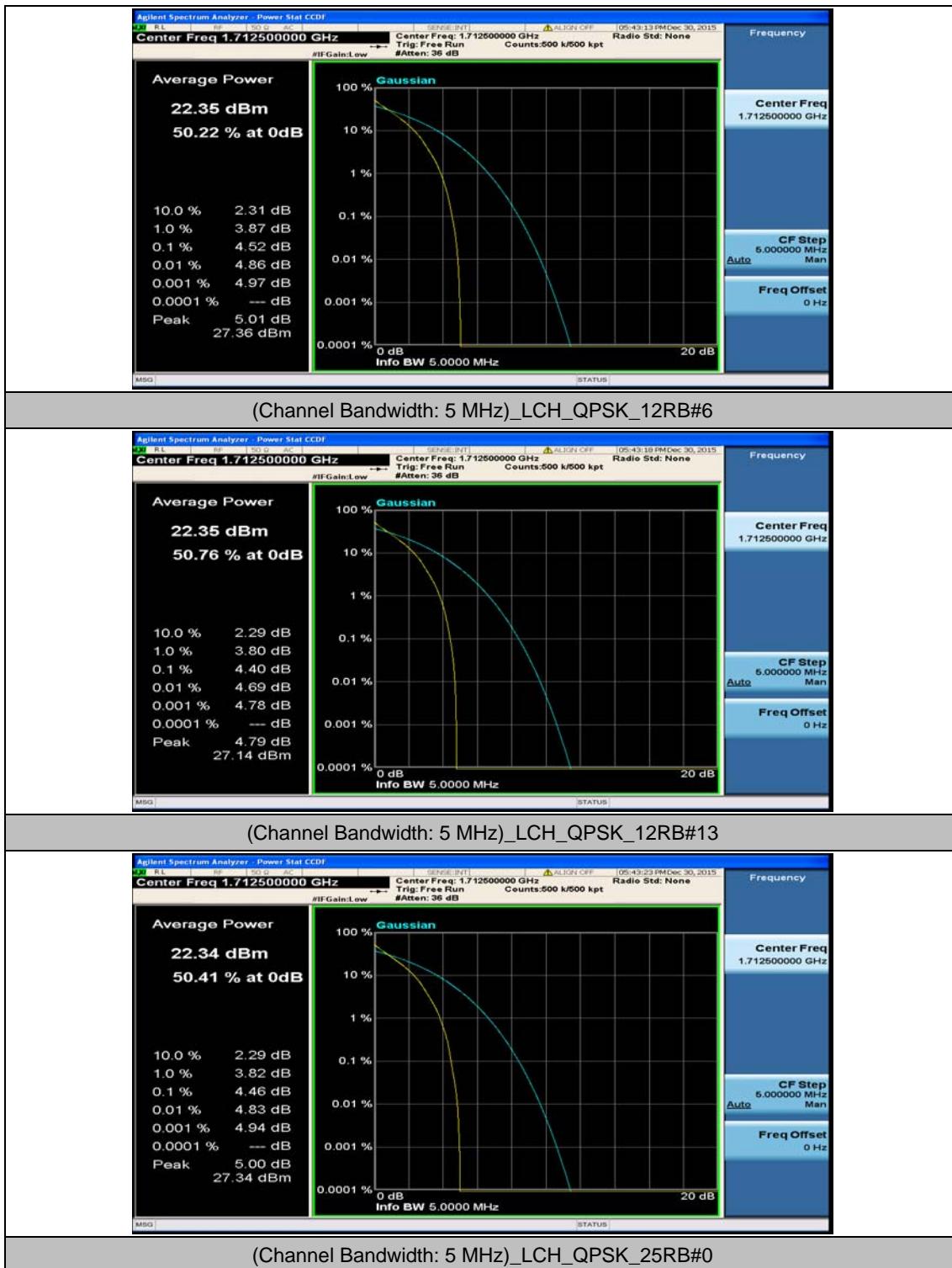


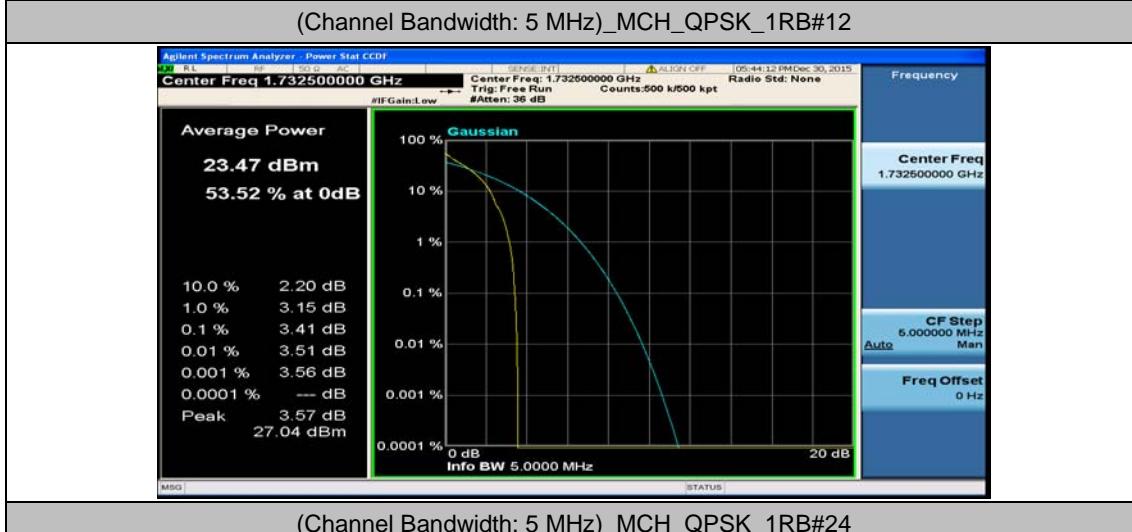
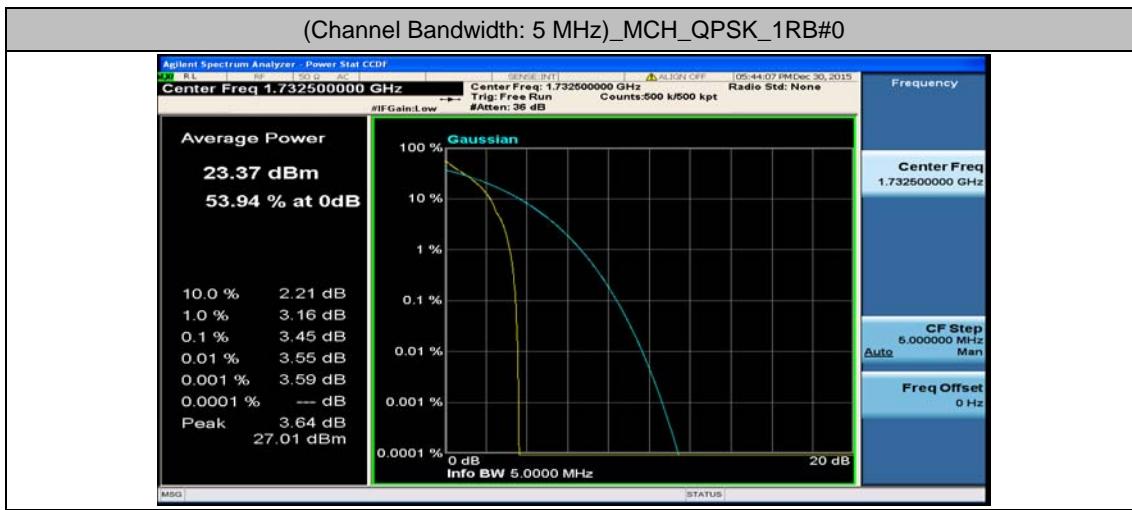
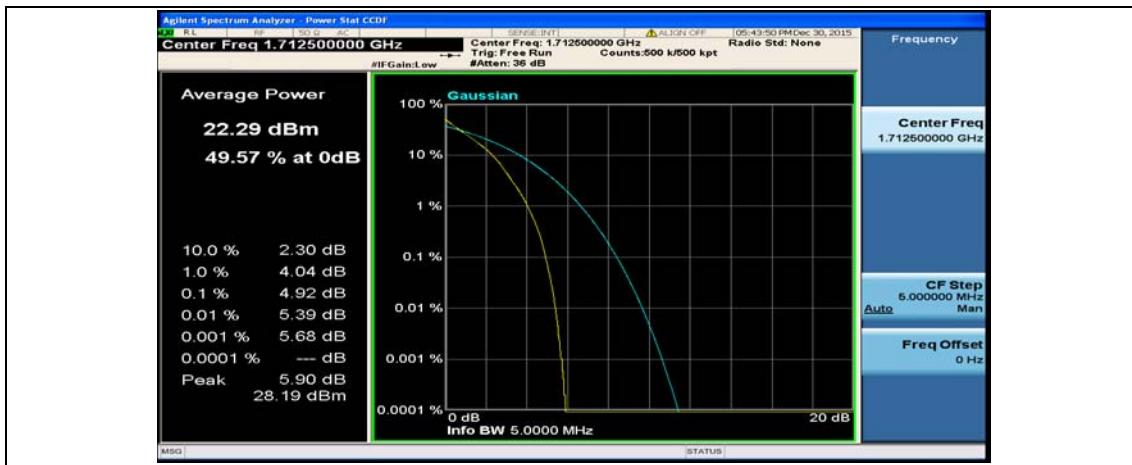




Channel Bandwidth: 5 MHz







(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

