

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	24.19	PASS
		1	3	24.12	PASS
		1	5	24.12	PASS
		3	0	24.12	PASS
		3	2	24.08	PASS
		3	3	24.07	PASS
		6	0	23.16	PASS
	MCH	1	0	23.73	PASS
		1	3	23.69	PASS
		1	5	23.72	PASS
		3	0	23.75	PASS
		3	2	23.66	PASS
		3	3	23.70	PASS
		6	0	22.68	PASS
16QAM	HCH	1	0	23.43	PASS
		1	3	23.25	PASS
		1	5	23.40	PASS
		3	0	23.41	PASS
		3	2	23.36	PASS
		3	3	23.36	PASS
		6	0	22.52	PASS
	LCH	1	0	23.29	PASS
		1	3	23.33	PASS
		1	5	23.29	PASS
		3	0	23.22	PASS
		3	2	23.14	PASS
		3	3	23.12	PASS
		6	0	22.11	PASS
	MCH	1	0	23.03	PASS
		1	3	23.01	PASS
		1	5	23.01	PASS
		3	0	22.67	PASS

		3	2	22.62	PASS
		3	3	22.64	PASS
		6	0	21.59	PASS
HCH	HCH	1	0	22.73	PASS
		1	3	22.60	PASS
		1	5	22.72	PASS
		3	0	22.53	PASS
		3	2	22.49	PASS
		3	3	22.53	PASS
		6	0	21.72	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.05	PASS
		1	7	24.09	PASS
		1	14	24.01	PASS
		8	0	23.15	PASS
		8	4	23.17	PASS
		8	7	23.14	PASS
		15	0	23.12	PASS
	MCH	1	0	23.64	PASS
		1	7	23.63	PASS
		1	14	23.57	PASS
		8	0	22.73	PASS
		8	4	22.70	PASS
		8	7	22.68	PASS
		15	0	22.66	PASS
16QAM	HCH	1	0	23.40	PASS
		1	7	23.24	PASS
		1	14	23.34	PASS
		8	0	22.58	PASS
		8	4	22.52	PASS
		8	7	22.53	PASS
		15	0	22.50	PASS
	LCH	1	0	23.29	PASS
		1	7	23.32	PASS
		1	14	23.24	PASS
		8	0	22.15	PASS
		8	4	22.18	PASS
		8	7	22.12	PASS
		15	0	22.06	PASS

		1	0	22.86	PASS
		1	7	22.86	PASS
		1	14	22.81	PASS
		8	0	21.73	PASS
		8	4	21.73	PASS
		8	7	21.66	PASS
		15	0	21.62	PASS
		1	0	22.82	PASS
		1	7	22.65	PASS
		1	14	22.77	PASS
		8	0	21.63	PASS
		8	4	21.62	PASS
		8	7	21.61	PASS
		15	0	21.58	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.16	PASS
		1	12	24.11	PASS
		1	24	24.04	PASS
		12	0	23.19	PASS
		12	6	23.14	PASS
		12	13	23.14	PASS
		25	0	23.13	PASS
	MCH	1	0	23.78	PASS
		1	12	23.74	PASS
		1	24	23.67	PASS
		12	0	22.81	PASS
		12	6	22.77	PASS
		12	13	22.75	PASS
		25	0	22.71	PASS
	HCH	1	0	23.68	PASS
		1	12	22.82	PASS
		1	24	23.17	PASS
		12	0	22.39	PASS
		12	6	22.09	PASS
		12	13	22.07	PASS
		25	0	22.19	PASS
16QAM	LCH	1	0	23.51	PASS
		1	12	23.42	PASS
		1	24	23.36	PASS

		12	0	22.26	PASS
		12	6	22.25	PASS
		12	13	22.24	PASS
		25	0	22.14	PASS
MCH		1	0	23.10	PASS
		1	12	23.03	PASS
		1	24	22.98	PASS
		12	0	21.90	PASS
		12	6	21.86	PASS
		12	13	21.86	PASS
		25	0	21.71	PASS
HCH		1	0	22.69	PASS
		1	12	21.96	PASS
		1	24	22.25	PASS
		12	0	21.54	PASS
		12	6	21.23	PASS
		12	13	21.19	PASS
		25	0	21.32	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.16	PASS
		1	24	24.08	PASS
		1	49	24.01	PASS
		25	0	23.17	PASS
		25	12	23.10	PASS
		25	25	23.07	PASS
		50	0	23.13	PASS
MCH		1	0	23.83	PASS
		1	24	23.74	PASS
		1	49	23.68	PASS
		25	0	22.81	PASS
		25	12	22.76	PASS
		25	25	22.72	PASS
		50	0	22.73	PASS
HCH		1	0	23.66	PASS
		1	24	23.39	PASS
		1	49	22.63	PASS
		25	0	22.69	PASS
		25	12	22.62	PASS

		25	25	22.16	PASS
		50	0	22.63	PASS
16QAM	LCH	1	0	23.41	PASS
		1	24	23.32	PASS
		1	49	23.25	PASS
		25	0	22.14	PASS
		25	12	22.10	PASS
		25	25	22.08	PASS
		50	0	22.11	PASS
	MCH	1	0	23.08	PASS
		1	24	22.97	PASS
		1	49	22.91	PASS
		25	0	21.78	PASS
		25	12	21.72	PASS
		25	25	21.68	PASS
		50	0	21.69	PASS
	HCH	1	0	22.99	PASS
		1	24	22.89	PASS
		1	49	22.11	PASS
		25	0	21.67	PASS
		25	12	21.67	PASS
		25	25	21.29	PASS
		50	0	21.66	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.19	PASS
		1	37	24.06	PASS
		1	74	23.94	PASS
		37	0	23.24	PASS
		37	18	23.20	PASS
		37	38	23.10	PASS
		75	0	23.20	PASS
	MCH	1	0	23.91	PASS
		1	37	23.74	PASS
		1	74	23.67	PASS
		37	0	22.92	PASS
		37	18	22.85	PASS
		37	38	22.79	PASS
		75	0	22.86	PASS

			1	0	23.74	PASS
			1	37	23.67	PASS
			1	74	22.78	PASS
			37	0	22.80	PASS
			37	18	22.79	PASS
			37	38	22.46	PASS
			75	0	22.77	PASS
			1	0	23.42	PASS
			1	37	23.29	PASS
			1	74	23.20	PASS
			37	0	22.19	PASS
			37	18	22.14	PASS
			37	38	22.06	PASS
			75	0	22.16	PASS
			1	0	23.14	PASS
			1	37	22.96	PASS
			1	74	22.91	PASS
			37	0	21.86	PASS
			37	18	21.81	PASS
			37	38	21.73	PASS
			75	0	21.80	PASS
			1	0	22.95	PASS
			1	37	22.91	PASS
			1	74	22.19	PASS
			37	0	21.75	PASS
			37	18	21.73	PASS
			37	38	21.59	PASS
			75	0	21.70	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	24.33	PASS
		1	49	24.13	PASS
		1	99	24.03	PASS
		50	0	24.18	PASS
		50	25	23.03	PASS
		50	50	22.99	PASS
		100	0	23.10	PASS
	MCH	1	0	24.10	PASS
		1	49	23.89	PASS

		1	99	23.86	PASS
		50	0	22.91	PASS
		50	25	22.78	PASS
		50	50	22.76	PASS
		100	0	22.82	PASS
	HCH	1	0	23.85	PASS
		1	49	23.76	PASS
		1	99	22.79	PASS
		50	0	22.70	PASS
		50	25	22.69	PASS
		50	50	22.70	PASS
		100	0	22.69	PASS
		1	0	23.48	PASS
	LCH	1	49	23.27	PASS
		1	99	23.14	PASS
		50	0	22.13	PASS
		50	25	22.02	PASS
		50	50	21.92	PASS
		100	0	22.08	PASS
		1	0	23.24	PASS
	MCH	1	49	22.99	PASS
		1	99	22.98	PASS
		50	0	21.87	PASS
		50	25	21.73	PASS
		50	50	21.71	PASS
		100	0	21.78	PASS
		1	0	23.09	PASS
	HCH	1	49	23.01	PASS
		1	99	22.24	PASS
		50	0	21.72	PASS
		50	25	21.66	PASS
		50	50	21.68	PASS
		100	0	21.66	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	4.19	<13	PASS
		1	3	4.19	<13	PASS
		1	5	4.15	<13	PASS
		3	0	4.49	<13	PASS
		3	2	4.52	<13	PASS
		3	3	4.51	<13	PASS
		6	0	5.23	<13	PASS
	MCH	1	0	4.5	<13	PASS
		1	3	4.45	<13	PASS
		1	5	4.43	<13	PASS
		3	0	4.81	<13	PASS
		3	2	4.85	<13	PASS
		3	3	4.82	<13	PASS
		6	0	5.31	<13	PASS
16QAM	LCH	1	0	3.89	<13	PASS
		1	3	4.02	<13	PASS
		1	5	3.91	<13	PASS
		3	0	4.52	<13	PASS
		3	2	4.5	<13	PASS
		3	3	4.53	<13	PASS
		6	0	5.14	<13	PASS
	MCH	1	0	5.05	<13	PASS
		1	3	4.97	<13	PASS
		1	5	5.08	<13	PASS
		3	0	5.45	<13	PASS
		3	2	5.48	<13	PASS
		3	3	5.42	<13	PASS
		6	0	6.01	<13	PASS

		3	2	5.79	<13	PASS
		3	3	5.77	<13	PASS
		6	0	6.14	<13	PASS
HCH		1	0	4.72	<13	PASS
		1	3	4.85	<13	PASS
		1	5	4.73	<13	PASS
		3	0	5.36	<13	PASS
		3	2	5.34	<13	PASS
		3	3	5.38	<13	PASS
		6	0	5.84	<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	4.11	<13	PASS
		1	7	4.11	<13	PASS
		1	14	4.12	<13	PASS
		8	0	5.05	<13	PASS
		8	4	5.01	<13	PASS
		8	7	5.07	<13	PASS
		15	0	5.27	<13	PASS
	MCH	1	0	4.41	<13	PASS
		1	7	4.48	<13	PASS
		1	14	4.41	<13	PASS
		8	0	5.23	<13	PASS
		8	4	5.19	<13	PASS
		8	7	5.26	<13	PASS
		15	0	5.37	<13	PASS
	HCH	1	0	3.9	<13	PASS
		1	7	4.01	<13	PASS
		1	14	3.91	<13	PASS
		8	0	4.97	<13	PASS
		8	4	4.99	<13	PASS
		8	7	5.09	<13	PASS
		15	0	5.29	<13	PASS
16QAM	LCH	1	0	4.97	<13	PASS
		1	7	4.95	<13	PASS
		1	14	5	<13	PASS
		8	0	5.67	<13	PASS
		8	4	5.7	<13	PASS

		8	7	5.7	<13	PASS
		15	0	6.09	<13	PASS
MCH		1	0	5.31	<13	PASS
		1	7	5.28	<13	PASS
		1	14	5.16	<13	PASS
		8	0	5.77	<13	PASS
		8	4	5.91	<13	PASS
		8	7	5.83	<13	PASS
		15	0	6.13	<13	PASS
HCH		1	0	4.7	<13	PASS
		1	7	4.74	<13	PASS
		1	14	4.67	<13	PASS
		8	0	5.6	<13	PASS
		8	4	5.59	<13	PASS
		8	7	5.66	<13	PASS
		15	0	5.95	<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	3.9	<13	PASS
		1	12	3.93	<13	PASS
		1	24	3.96	<13	PASS
		12	0	5.01	<13	PASS
		12	6	4.96	<13	PASS
		12	13	5	<13	PASS
		25	0	5.25	<13	PASS
	MCH	1	0	4.16	<13	PASS
		1	12	4.25	<13	PASS
		1	24	4.21	<13	PASS
		12	0	5.18	<13	PASS
		12	6	5.11	<13	PASS
		12	13	5.18	<13	PASS
		25	0	5.37	<13	PASS
	HCH	1	0	3.78	<13	PASS
		1	12	4.33	<13	PASS
		1	24	4.15	<13	PASS
		12	0	5.02	<13	PASS
		12	6	5.03	<13	PASS
		12	13	5.12	<13	PASS

		25	0	5.27	<13	PASS
16QAM	LCH	1	0	4.87	<13	PASS
		1	12	4.88	<13	PASS
		1	24	4.9	<13	PASS
		12	0	5.82	<13	PASS
		12	6	5.77	<13	PASS
		12	13	5.71	<13	PASS
		25	0	5.96	<13	PASS
	MCH	1	0	5.05	<13	PASS
		1	12	5.12	<13	PASS
		1	24	5.08	<13	PASS
		12	0	5.94	<13	PASS
		12	6	5.94	<13	PASS
		12	13	5.95	<13	PASS
		25	0	6.05	<13	PASS
	HCH	1	0	4.4	<13	PASS
		1	12	4.76	<13	PASS
		1	24	4.65	<13	PASS
		12	0	5.95	<13	PASS
		12	6	5.93	<13	PASS
		12	13	5.99	<13	PASS
		25	0	5.91	<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	4.08	<13	PASS
		1	24	4.08	<13	PASS
		1	49	4.15	<13	PASS
		25	0	5.05	<13	PASS
		25	12	5.03	<13	PASS
		25	25	5.11	<13	PASS
		50	0	5.22	<13	PASS
	MCH	1	0	4.33	<13	PASS
		1	24	4.39	<13	PASS
		1	49	4.2	<13	PASS
		25	0	5.15	<13	PASS
		25	12	5.15	<13	PASS
		25	25	5.26	<13	PASS
		50	0	5.37	<13	PASS

		1	0	3.84	<13	PASS
		1	24	3.92	<13	PASS
		1	49	4.2	<13	PASS
	HCH	25	0	5.07	<13	PASS
		25	12	4.97	<13	PASS
		25	25	5.15	<13	PASS
		50	0	5.35	<13	PASS
16QAM	LCH	1	0	4.94	<13	PASS
		1	24	4.9	<13	PASS
		1	49	5	<13	PASS
		25	0	5.81	<13	PASS
		25	12	5.77	<13	PASS
		25	25	5.83	<13	PASS
		50	0	5.91	<13	PASS
	MCH	1	0	5.12	<13	PASS
		1	24	5.23	<13	PASS
		1	49	5.12	<13	PASS
		25	0	5.91	<13	PASS
		25	12	5.88	<13	PASS
		25	25	5.98	<13	PASS
		50	0	6.03	<13	PASS
	HCH	1	0	4.73	<13	PASS
		1	24	4.7	<13	PASS
		1	49	5	<13	PASS
		25	0	5.81	<13	PASS
		25	12	5.69	<13	PASS
		25	25	5.86	<13	PASS
		50	0	6.01	<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	9.93	<13	PASS
		1	37	4.11	<13	PASS
		1	74	9.36	<13	PASS
		37	0	4.52	<13	PASS
		37	18	5.12	<13	PASS
		37	38	4.73	<13	PASS
		75	0	4.89	<13	PASS
	MCH	1	0	10.34	<13	PASS

		1	37	4.37	<13	PASS
		1	74	8.99	<13	PASS
		37	0	4.56	<13	PASS
		37	18	5.23	<13	PASS
		37	38	4.72	<13	PASS
		75	0	5.04	<13	PASS
		1	0	9.22	<13	PASS
		1	37	3.97	<13	PASS
		1	74	8.91	<13	PASS
		37	0	4.49	<13	PASS
		37	18	5.08	<13	PASS
		37	38	4.67	<13	PASS
		75	0	4.98	<13	PASS
16QAM	LCH	1	0	10.15	<13	PASS
		1	37	4.92	<13	PASS
		1	74	9.67	<13	PASS
		37	0	5.71	<13	PASS
		37	18	5.85	<13	PASS
		37	38	5.82	<13	PASS
		75	0	6.05	<13	PASS
	MCH	1	0	9.65	<13	PASS
		1	37	5.19	<13	PASS
		1	74	9.08	<13	PASS
		37	0	5.7	<13	PASS
		37	18	5.95	<13	PASS
		37	38	5.88	<13	PASS
		75	0	6.14	<13	PASS
	HCH	1	0	9.45	<13	PASS
		1	37	4.83	<13	PASS
		1	74	10.02	<13	PASS
		37	0	5.71	<13	PASS
		37	18	5.91	<13	PASS
		37	38	5.77	<13	PASS
		75	0	6.07	<13	PASS

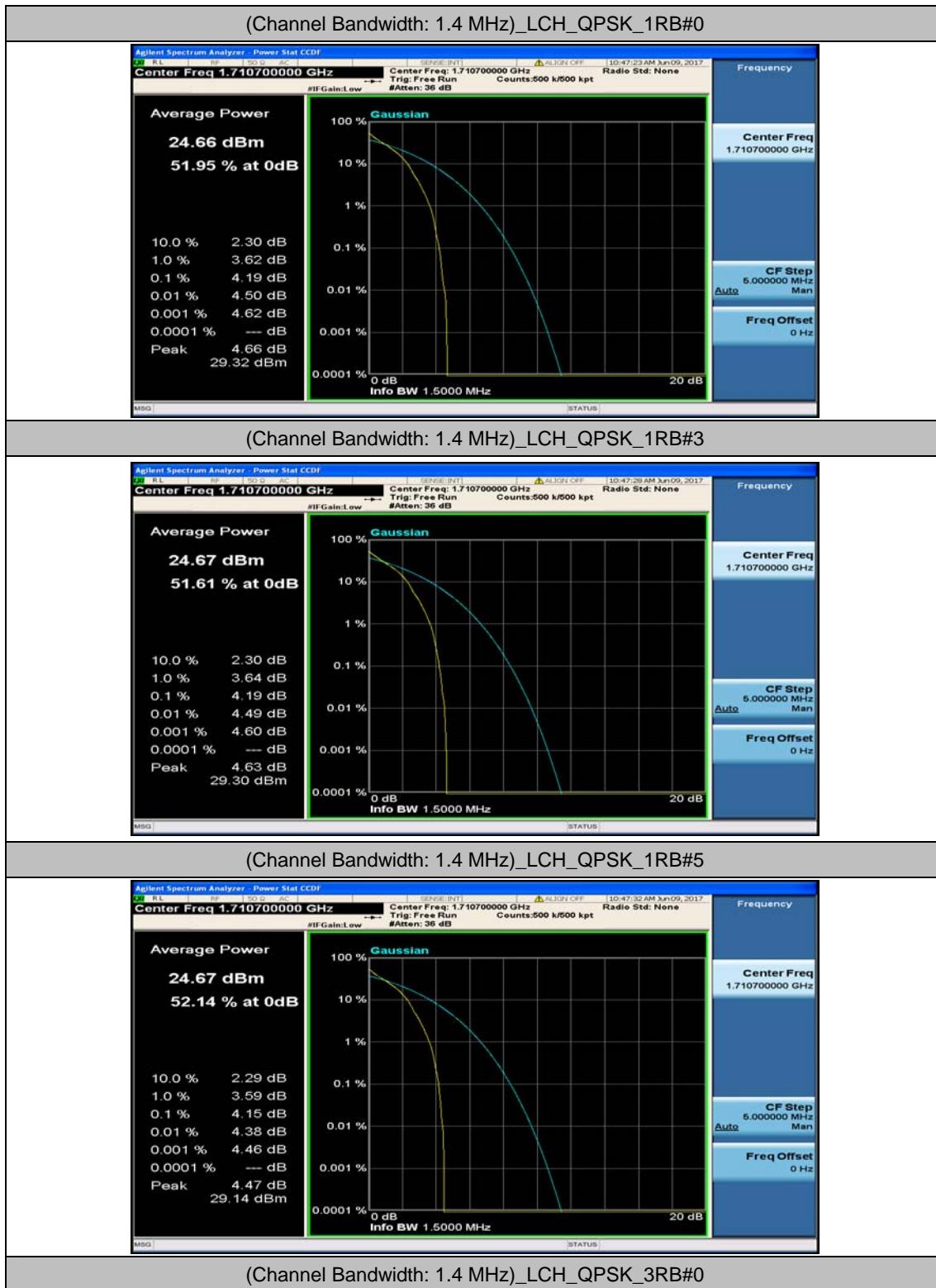
Channel Bandwidth: 20 MHz

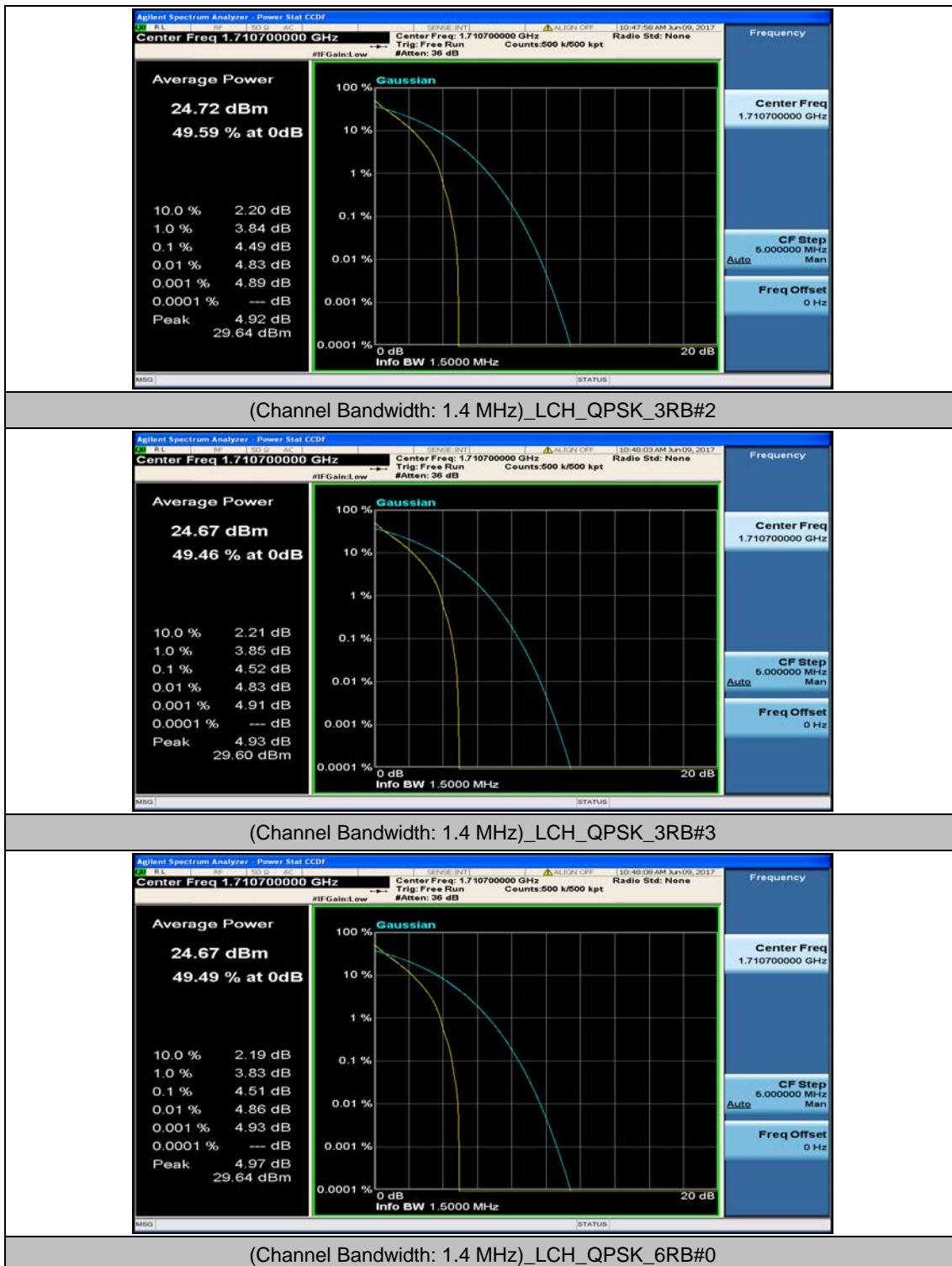
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	9.73	<13	PASS
		1	49	4.04	<13	PASS

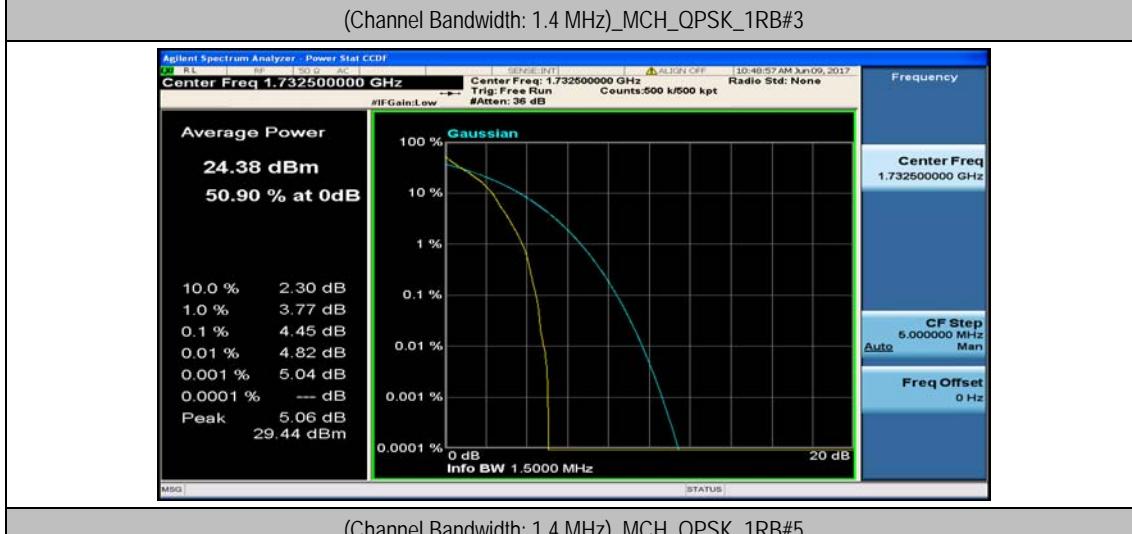
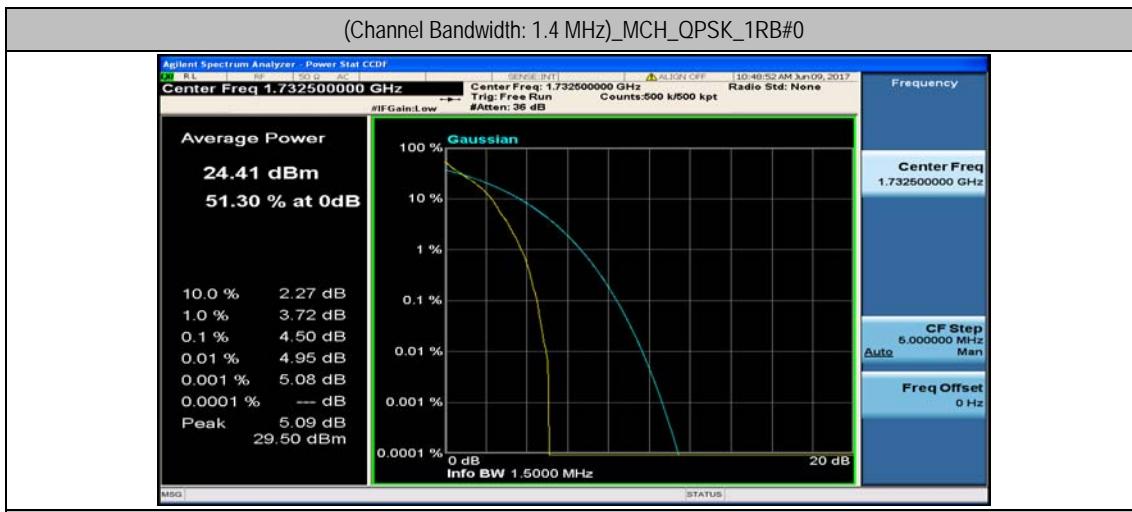
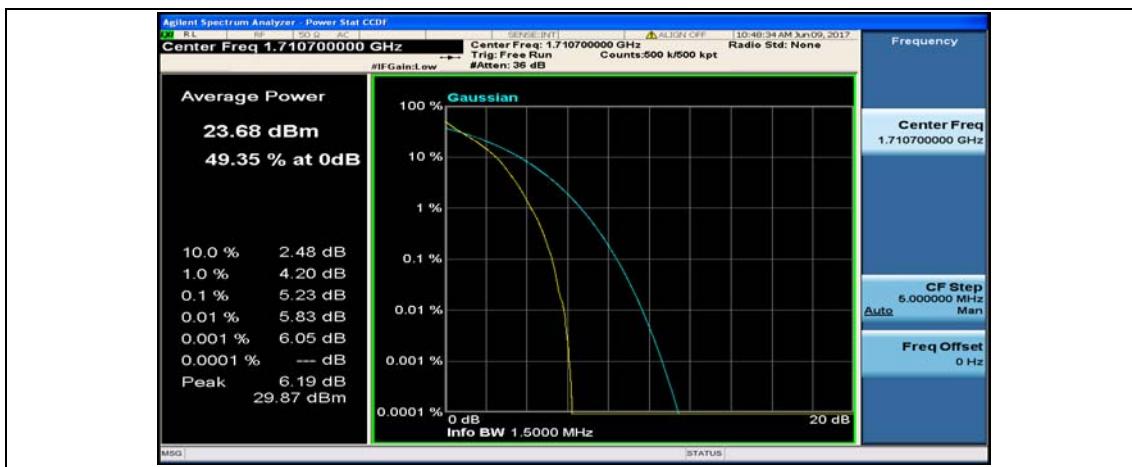
		1	99	10.22	<13	PASS
		50	0	5.37	<13	PASS
		50	25	5.35	<13	PASS
		50	50	5.64	<13	PASS
		100	0	5.78	<13	PASS
	MCH	1	0	9.94	<13	PASS
		1	49	4.23	<13	PASS
		1	99	9.66	<13	PASS
		50	0	5.46	<13	PASS
		50	25	5.41	<13	PASS
		50	50	5.73	<13	PASS
		100	0	5.8	<13	PASS
	HCH	1	0	10.06	<13	PASS
		1	49	4.04	<13	PASS
		1	99	10.6	<13	PASS
		50	0	5.34	<13	PASS
		50	25	5.25	<13	PASS
		50	50	5.66	<13	PASS
		100	0	5.79	<13	PASS
16QAM	LCH	1	0	9.5	<13	PASS
		1	49	4.87	<13	PASS
		1	99	10.02	<13	PASS
		50	0	6.36	<13	PASS
		50	25	6.02	<13	PASS
		50	50	6.52	<13	PASS
		100	0	6.66	<13	PASS
	MCH	1	0	10.21	<13	PASS
		1	49	5.1	<13	PASS
		1	99	9.97	<13	PASS
		50	0	6.32	<13	PASS
		50	25	6.08	<13	PASS
		50	50	6.53	<13	PASS
		100	0	6.66	<13	PASS
	HCH	1	0	10.1	<13	PASS
		1	49	4.72	<13	PASS
		1	99	10.04	<13	PASS
		50	0	6.34	<13	PASS
		50	25	5.96	<13	PASS
		50	50	6.42	<13	PASS
		100	0	6.57	<13	PASS

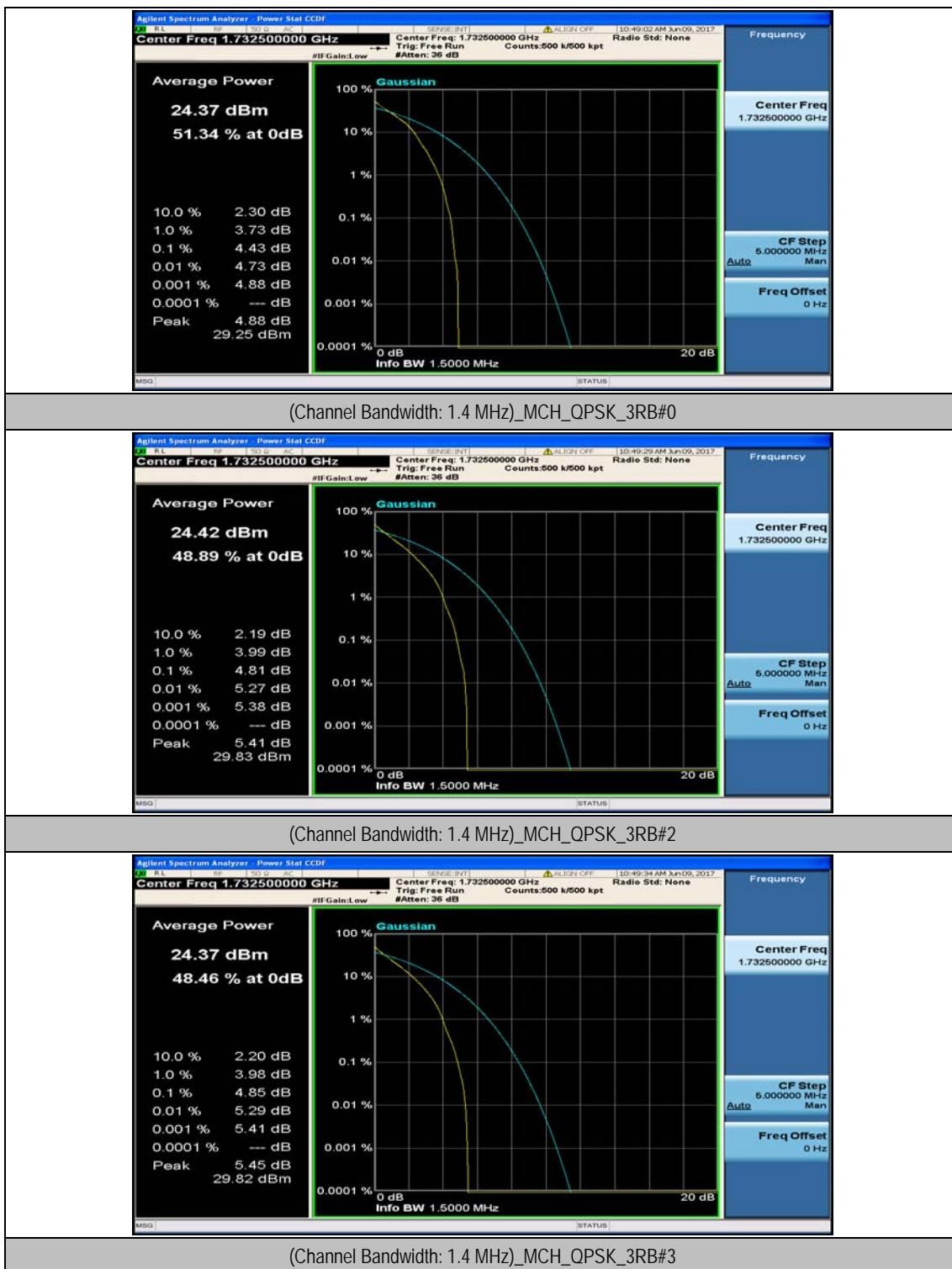
Test Graphs

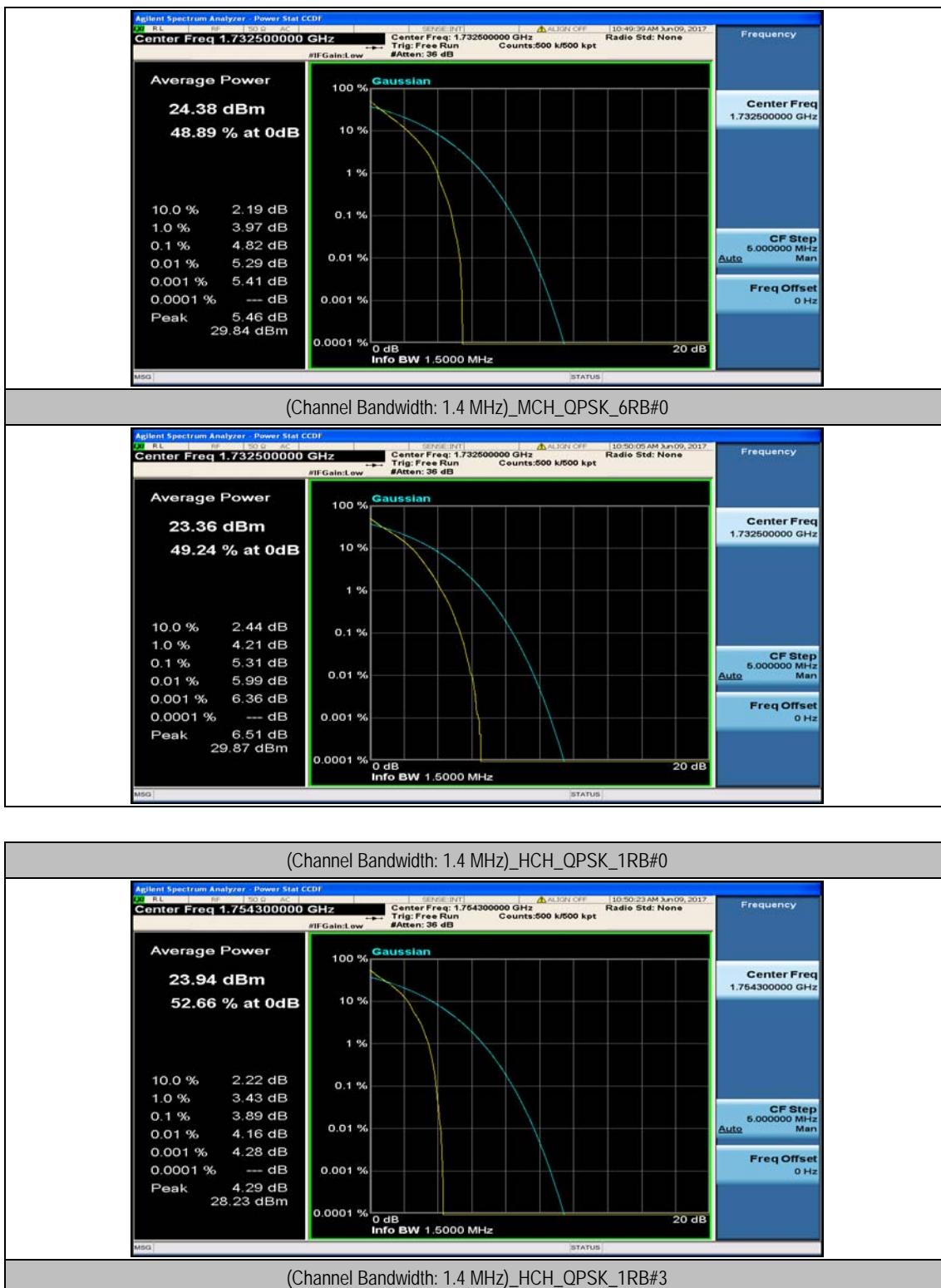
Channel Bandwidth: 1.4 MHz

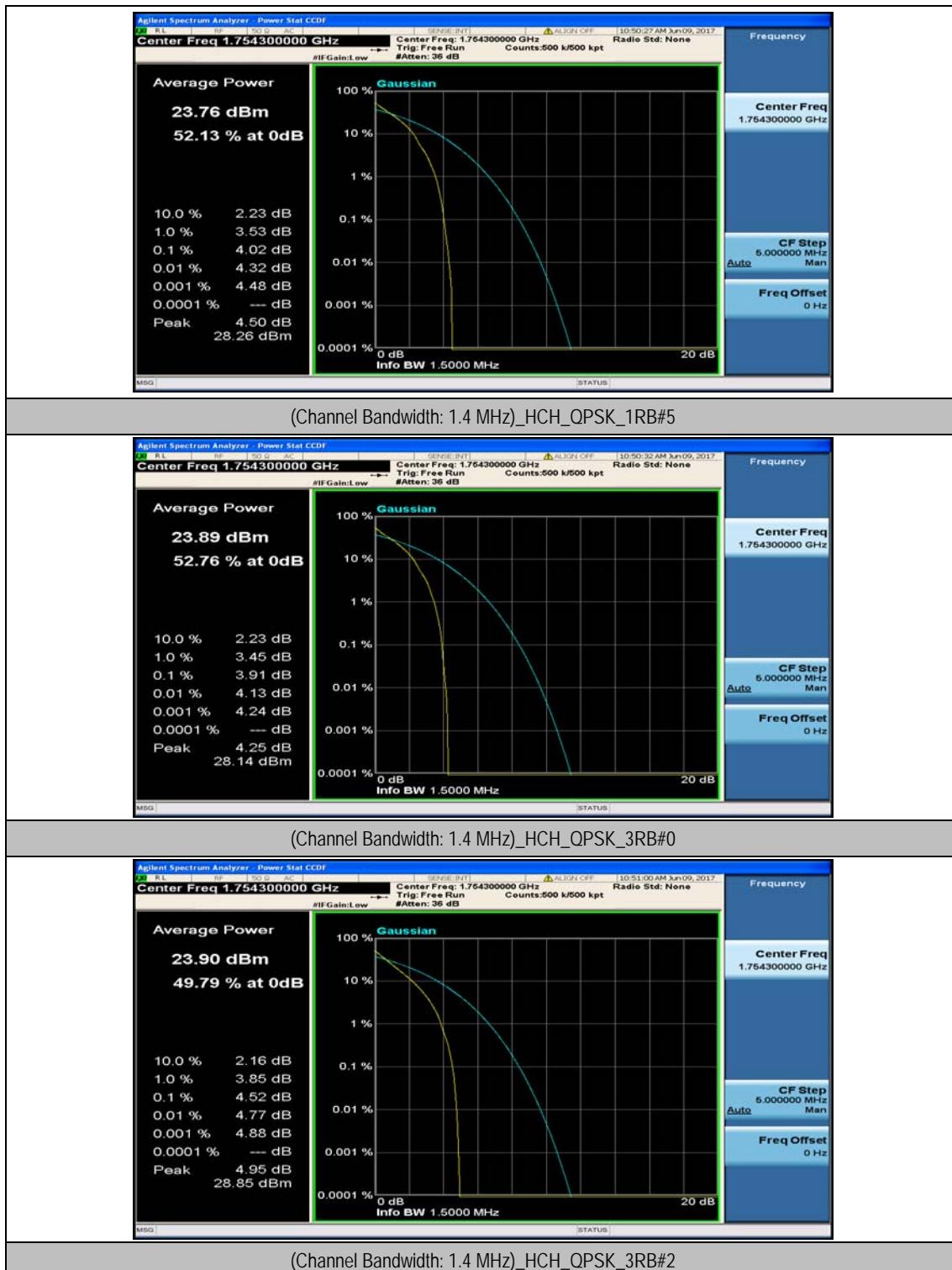


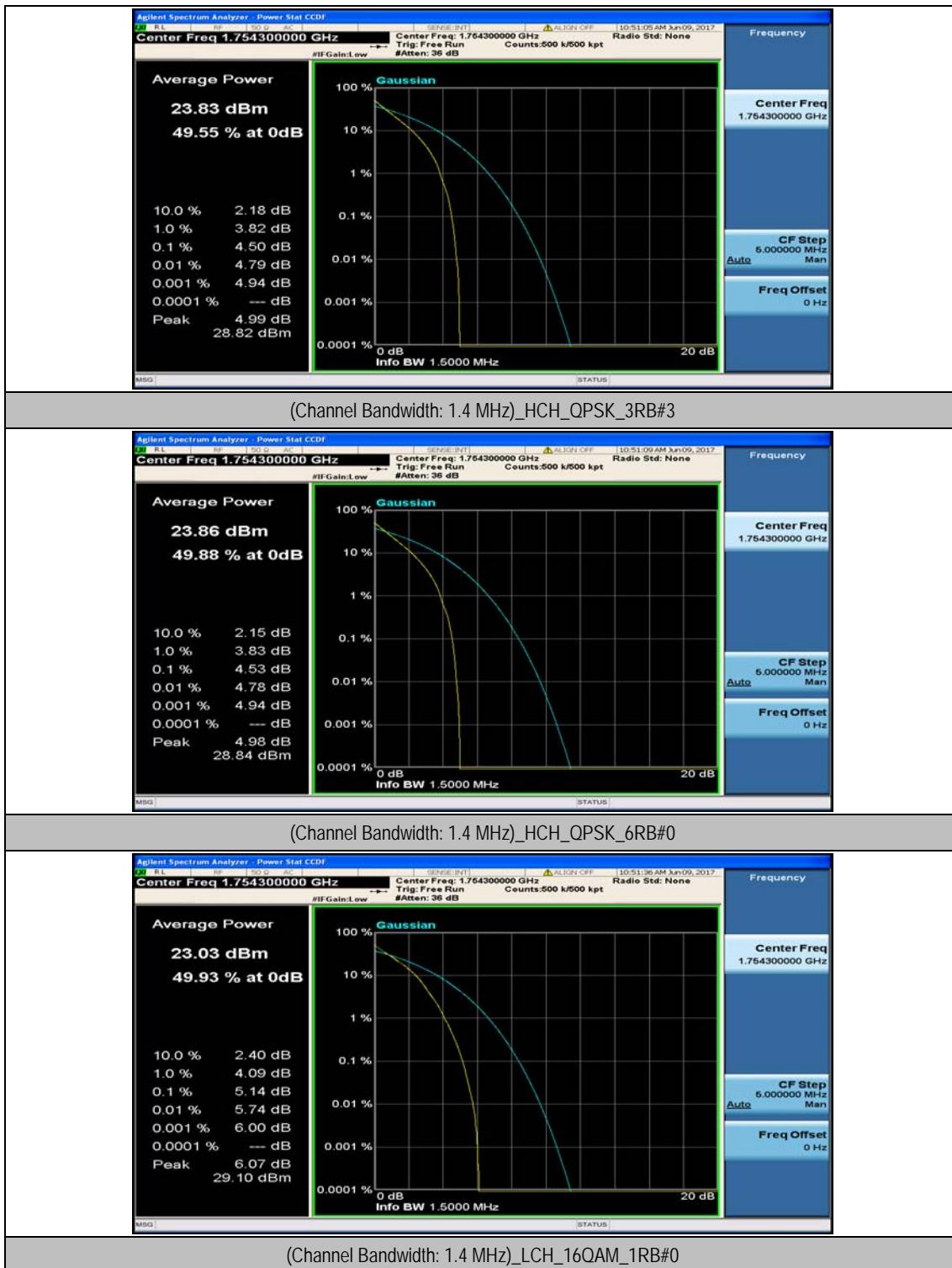


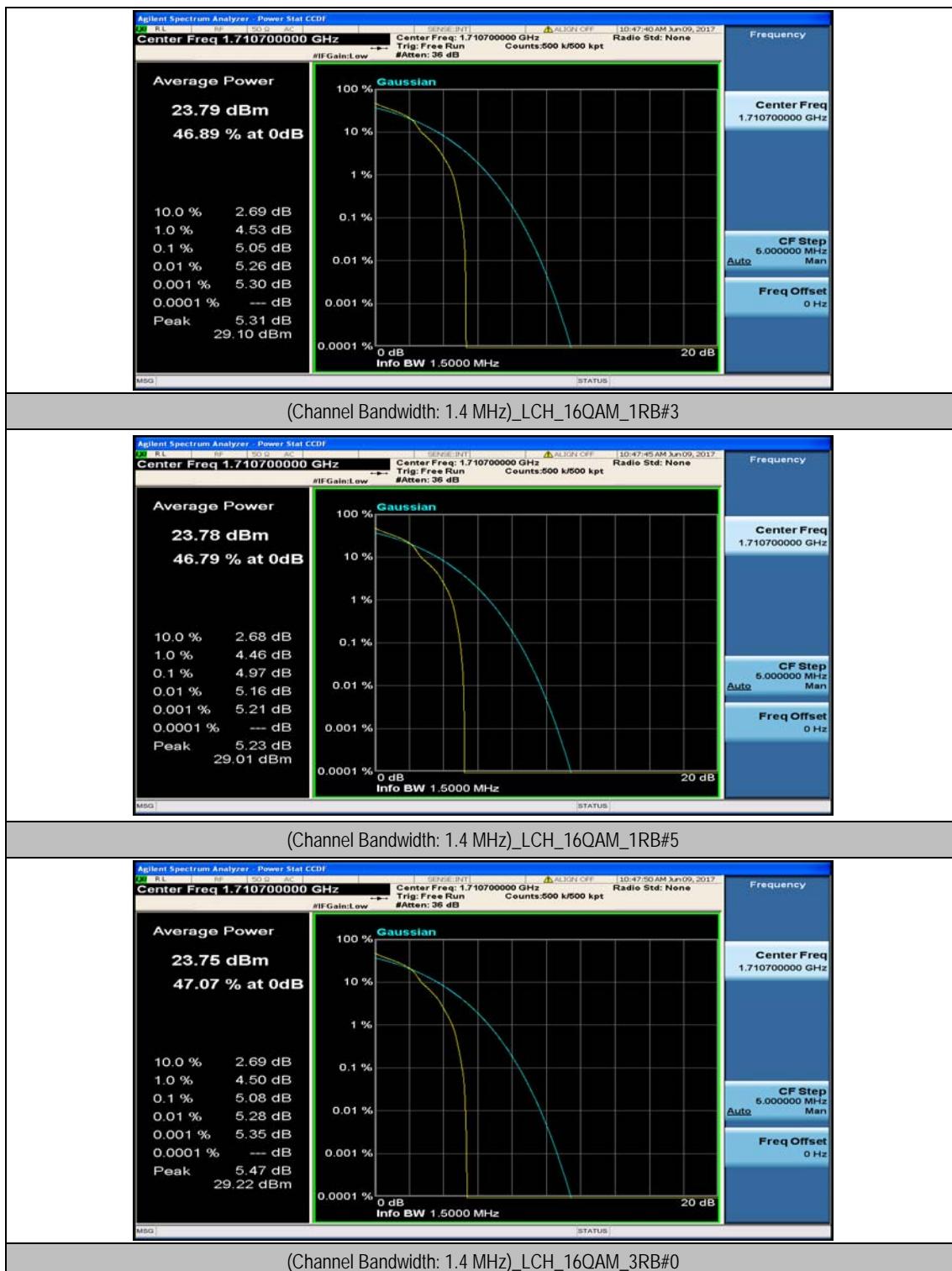


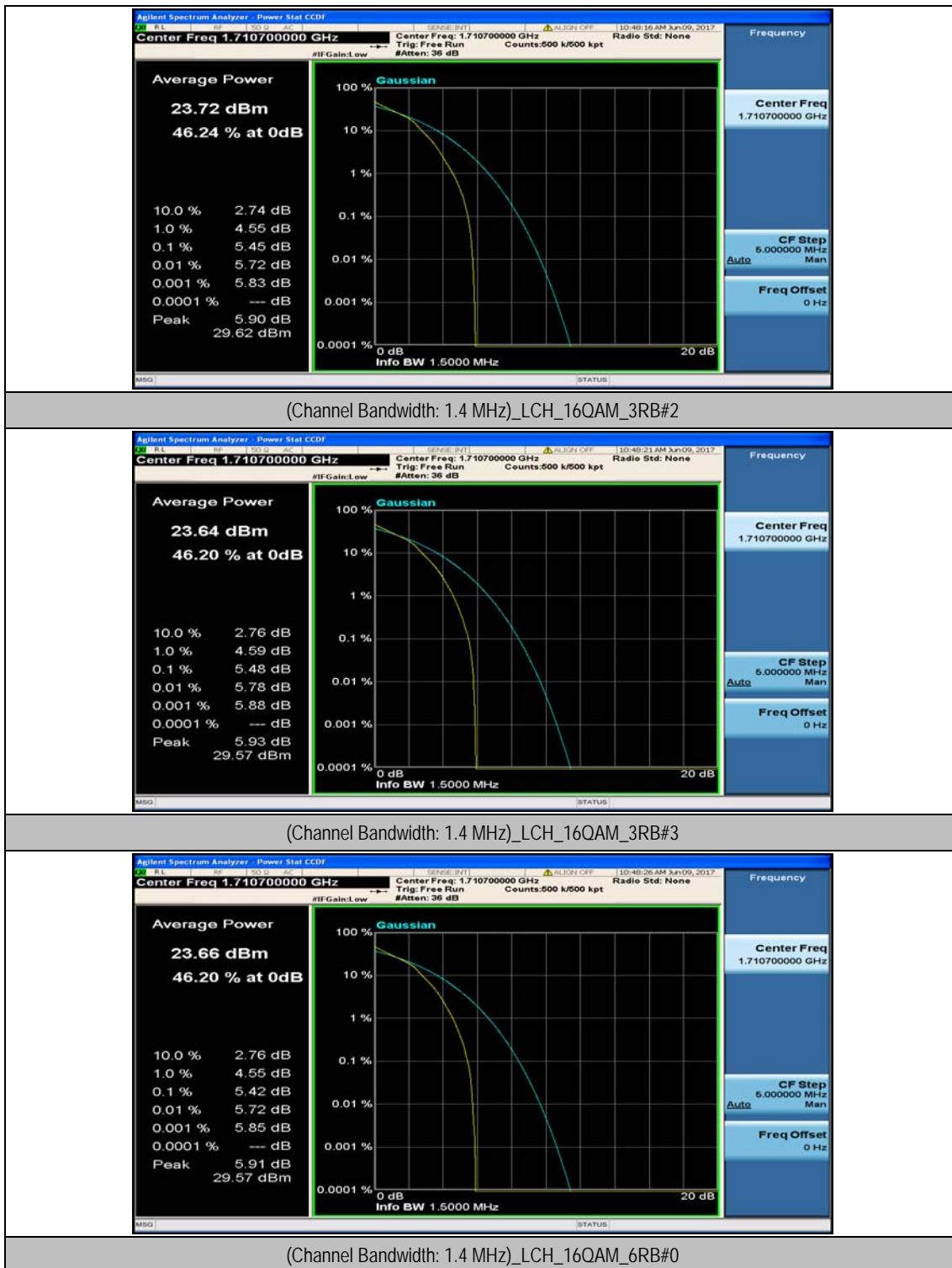


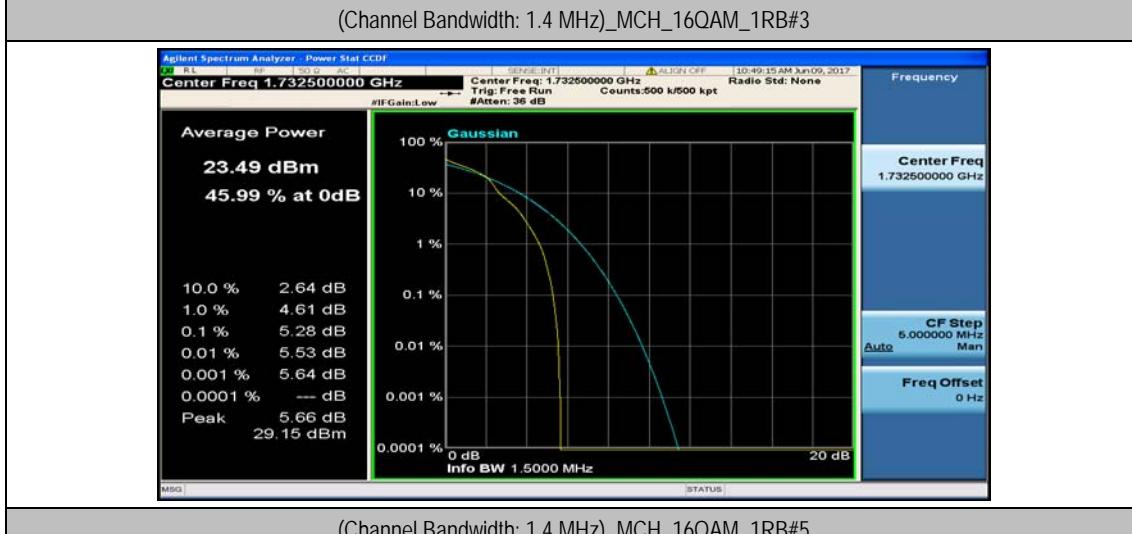
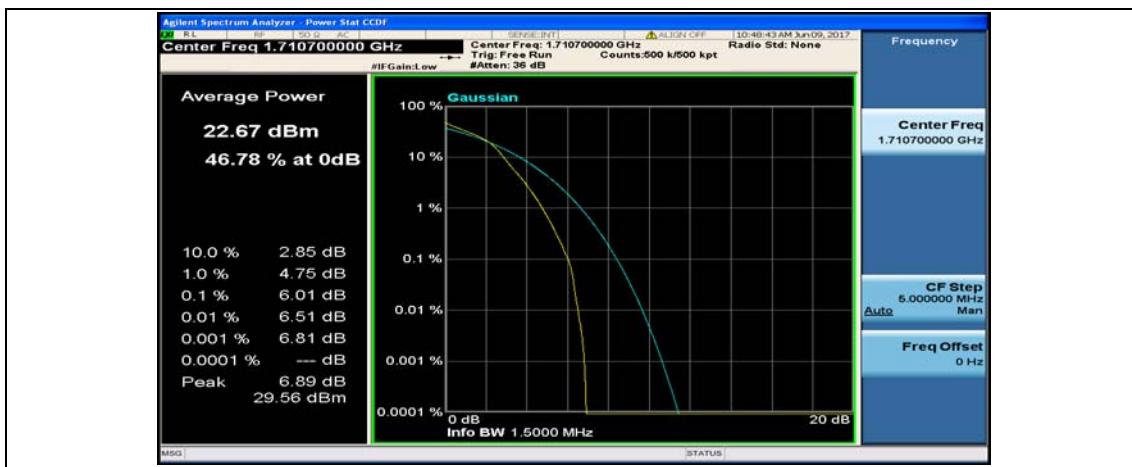


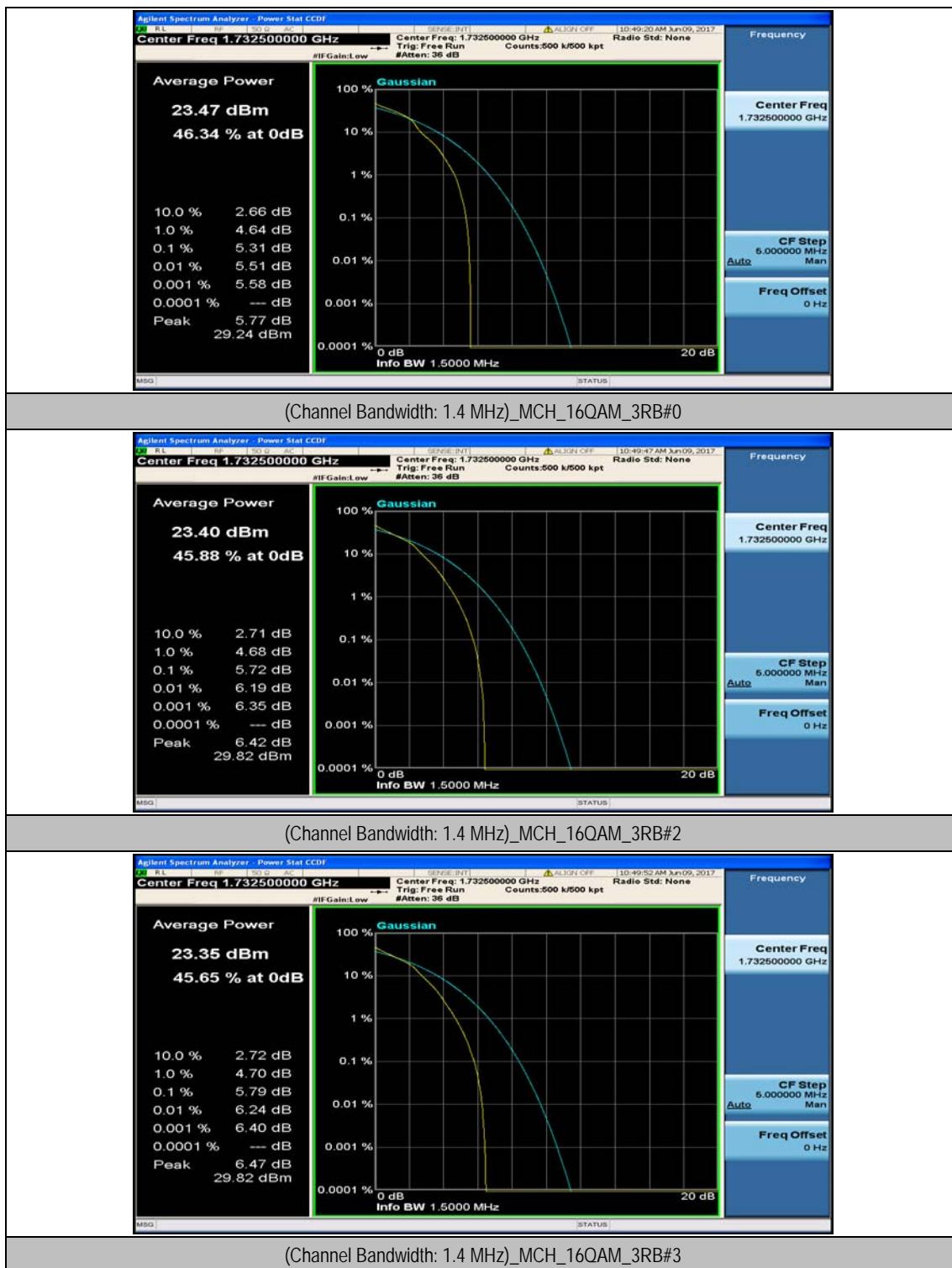


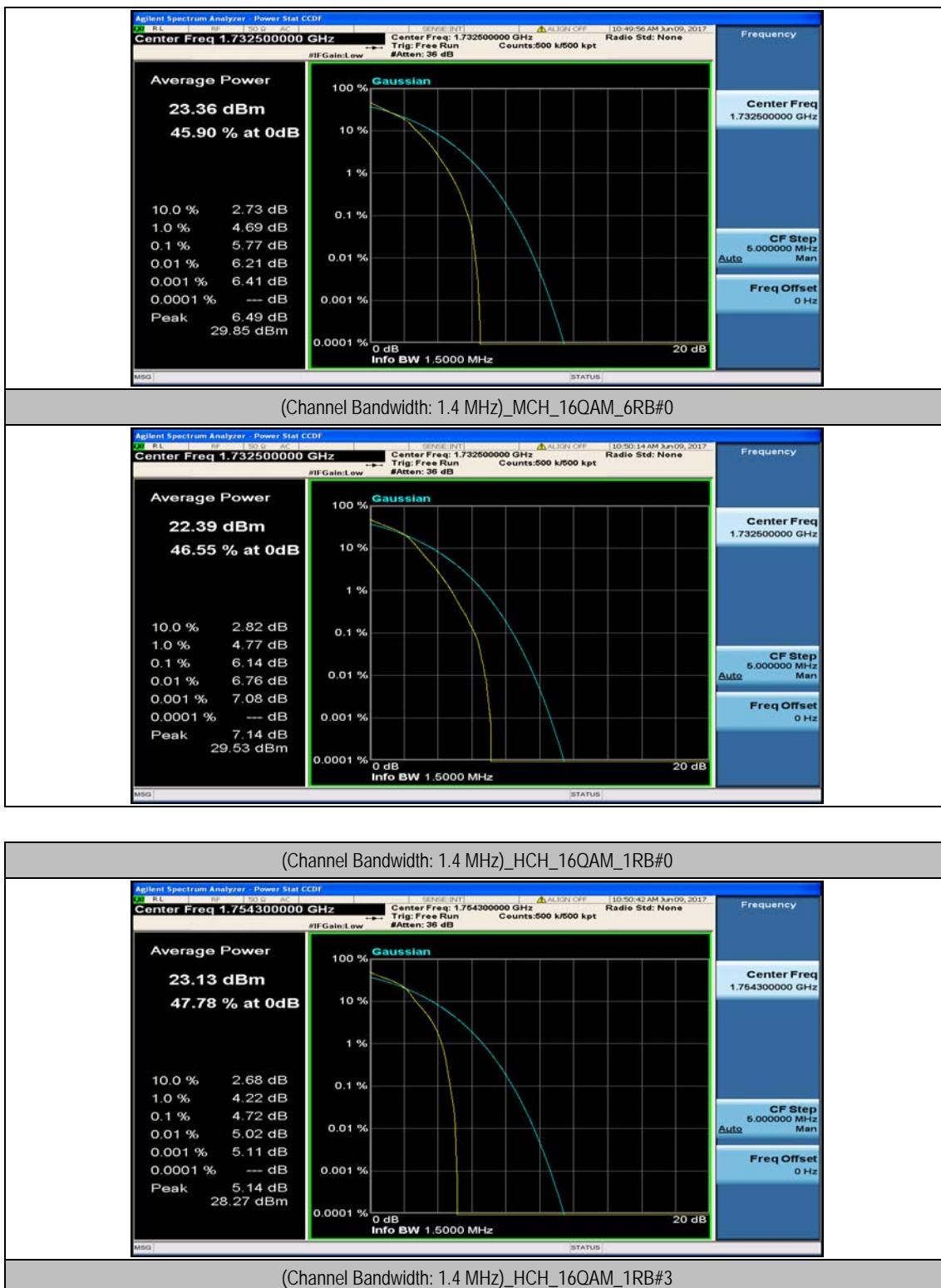


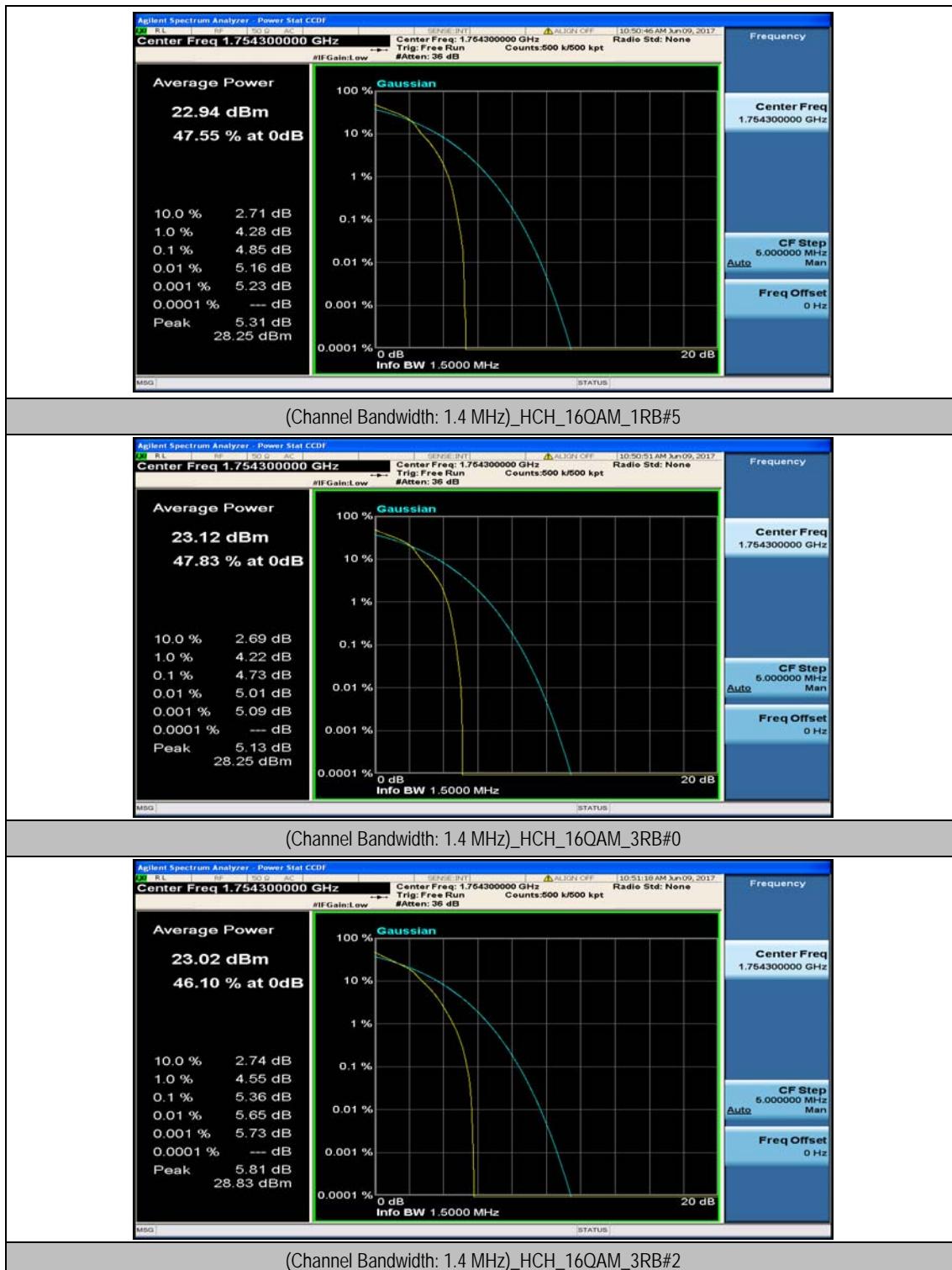


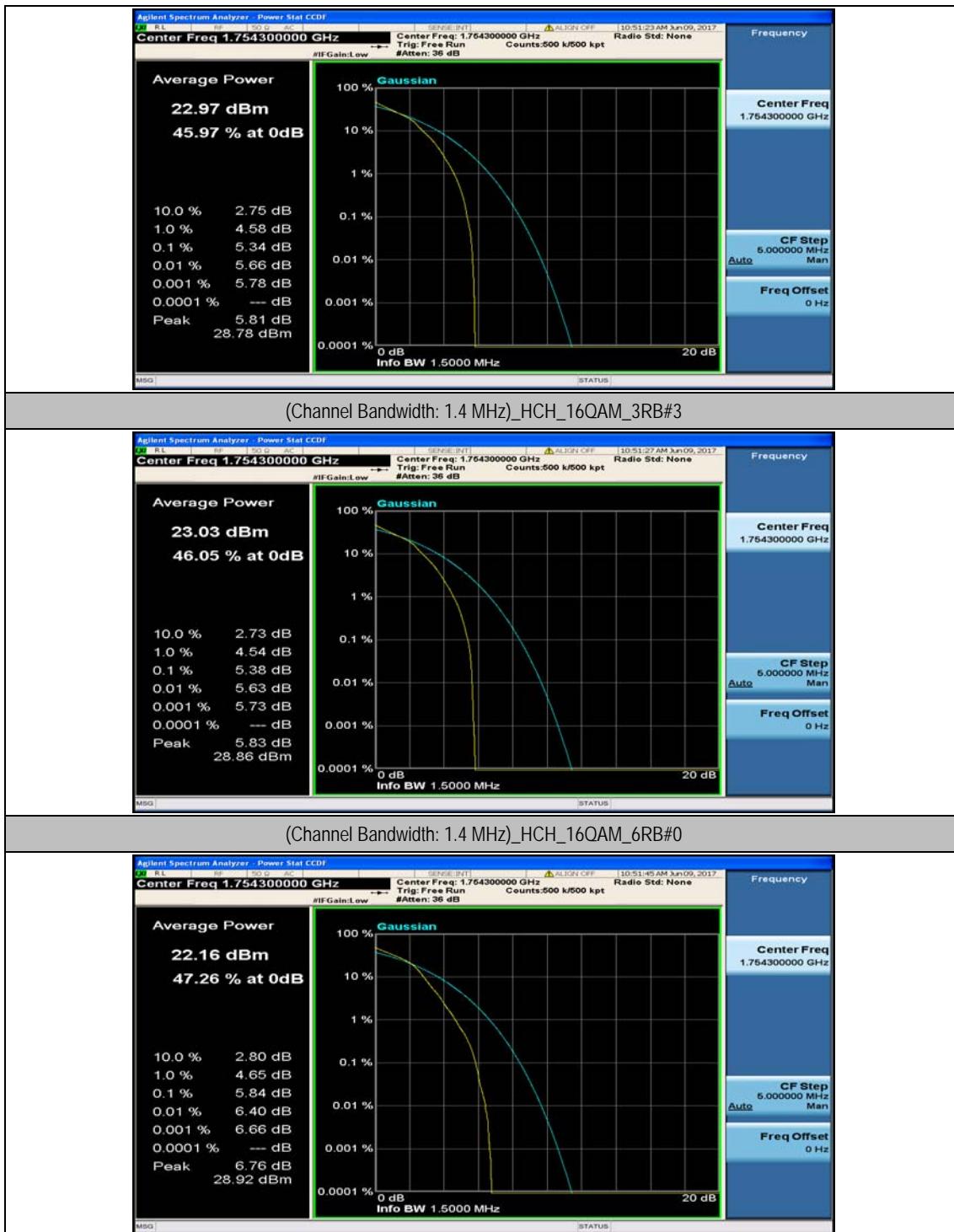




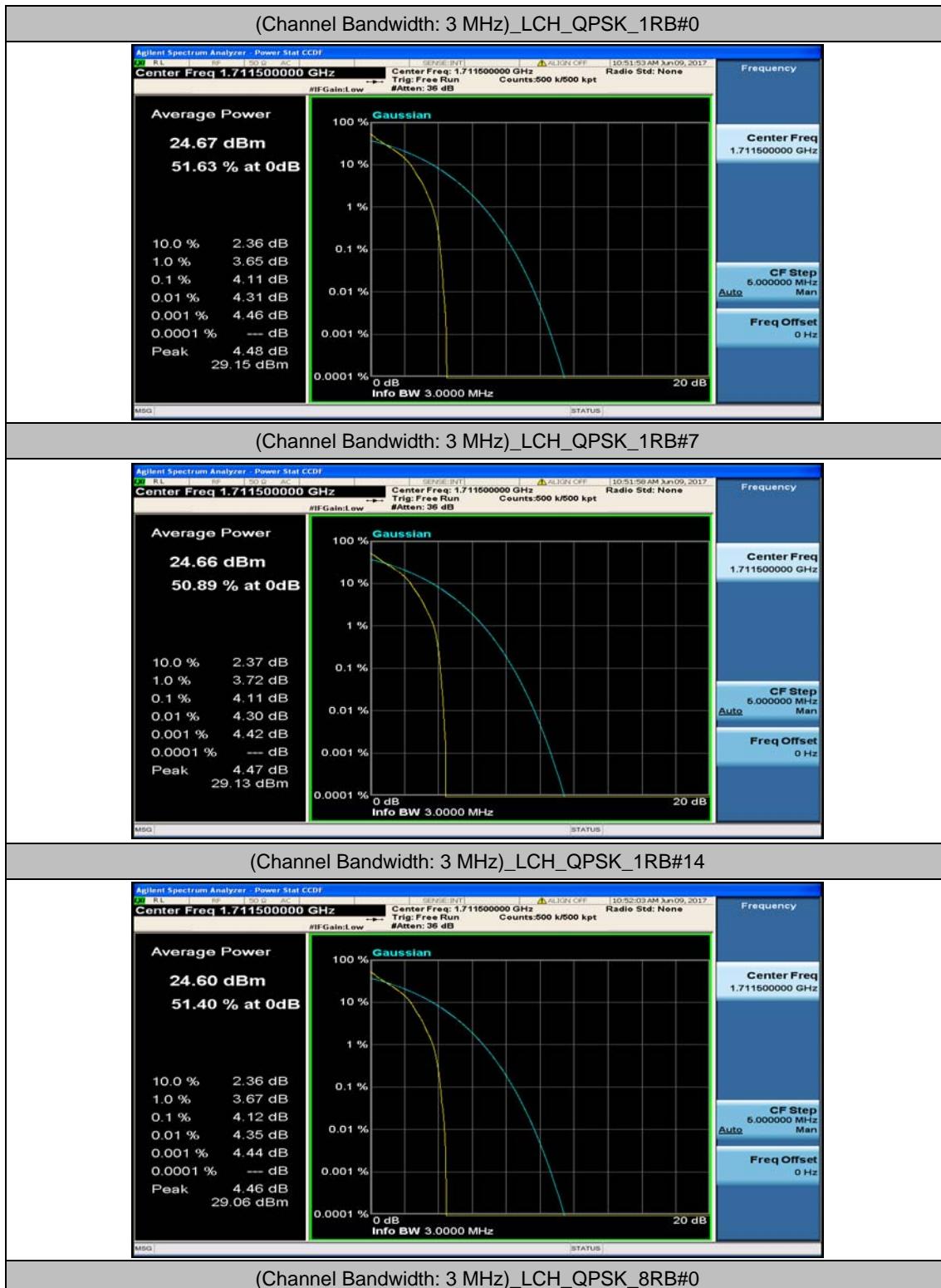


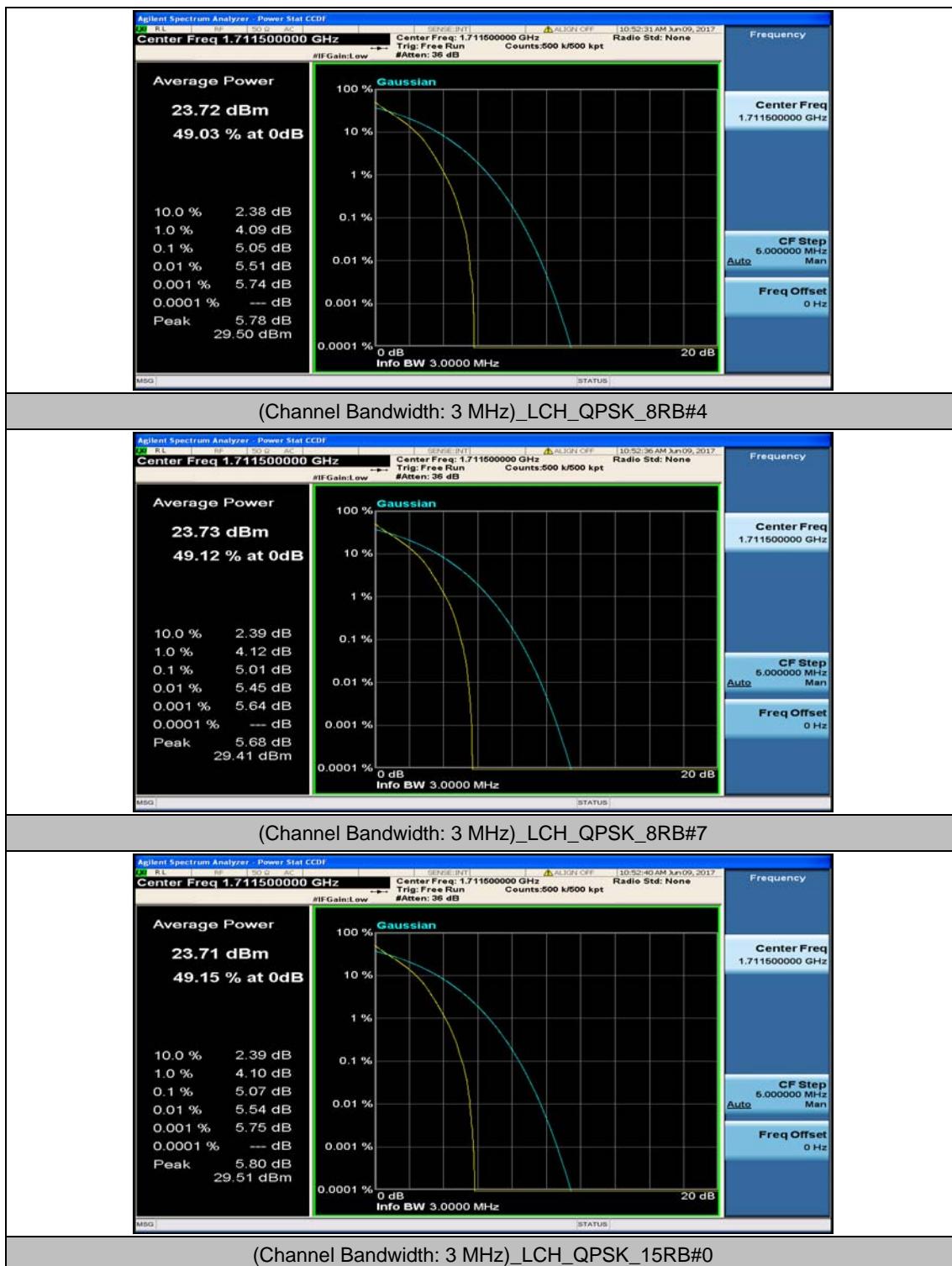


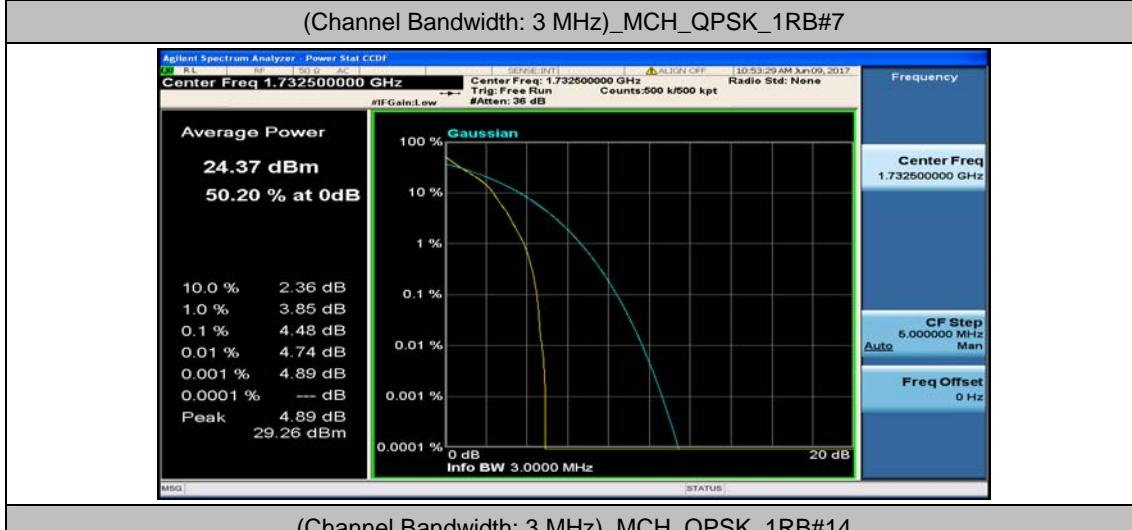
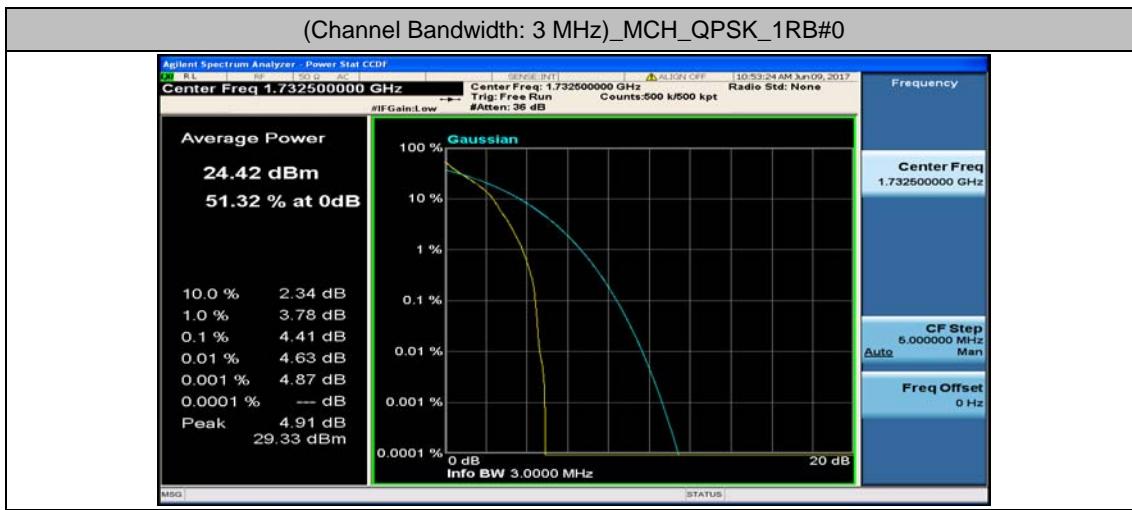
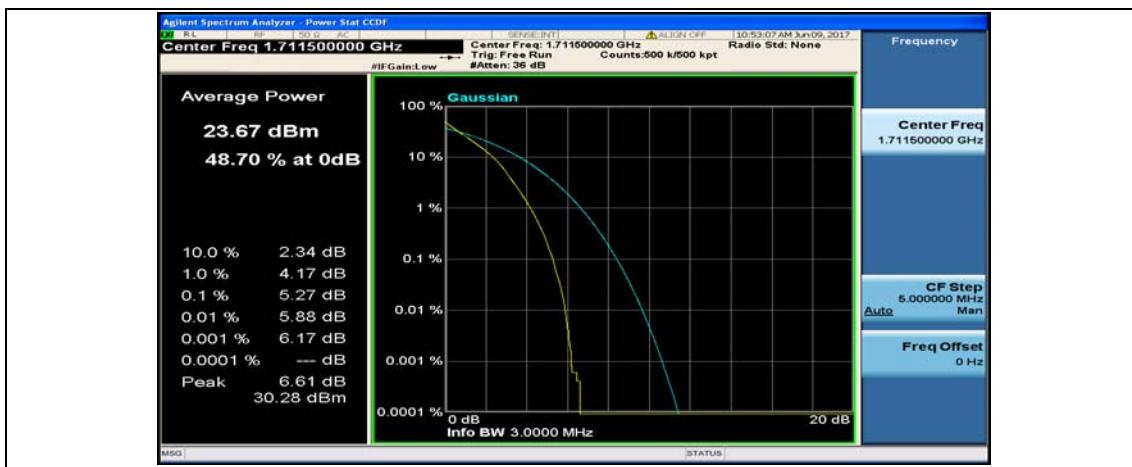




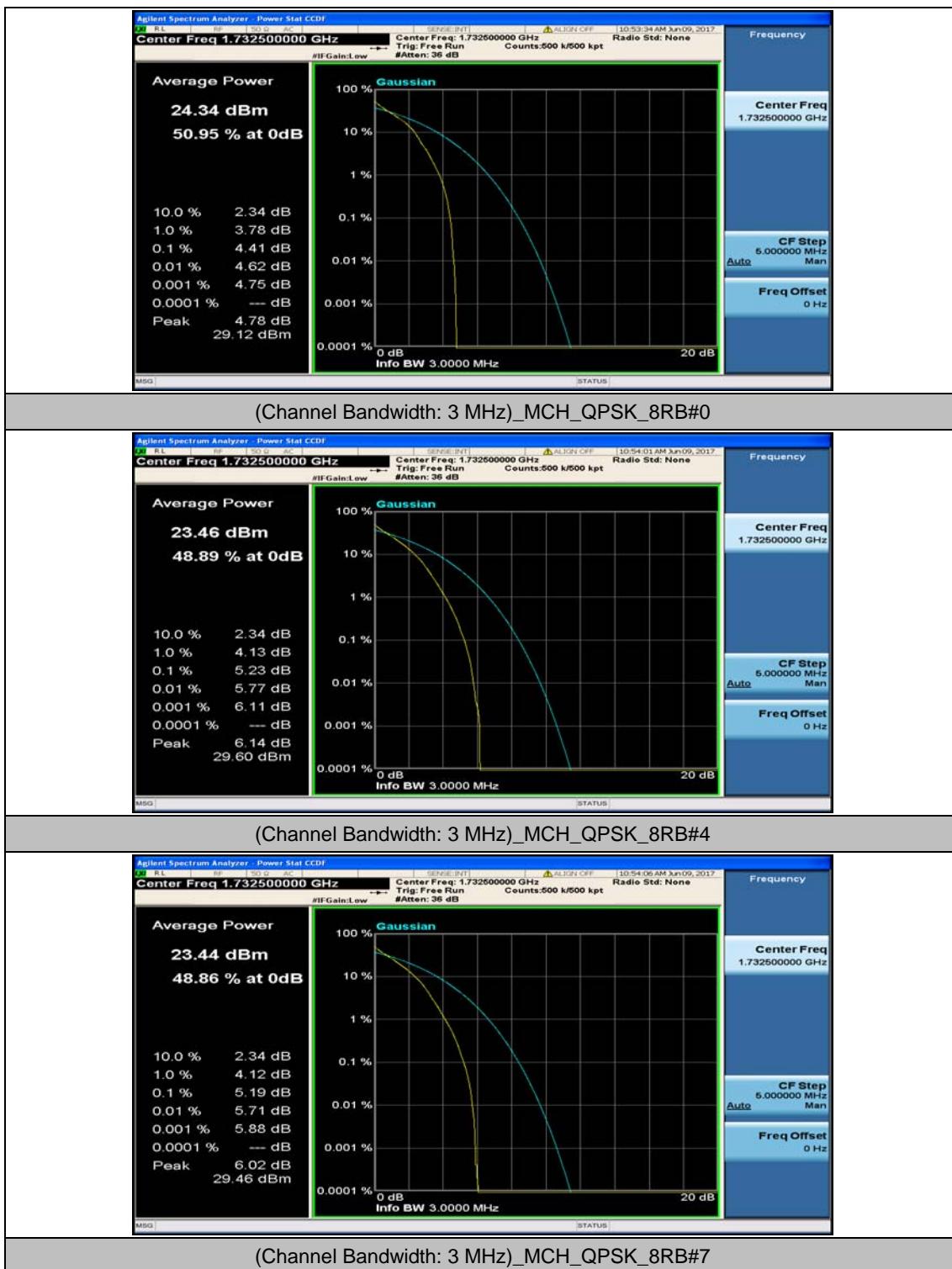
Channel Bandwidth: 3 MHz

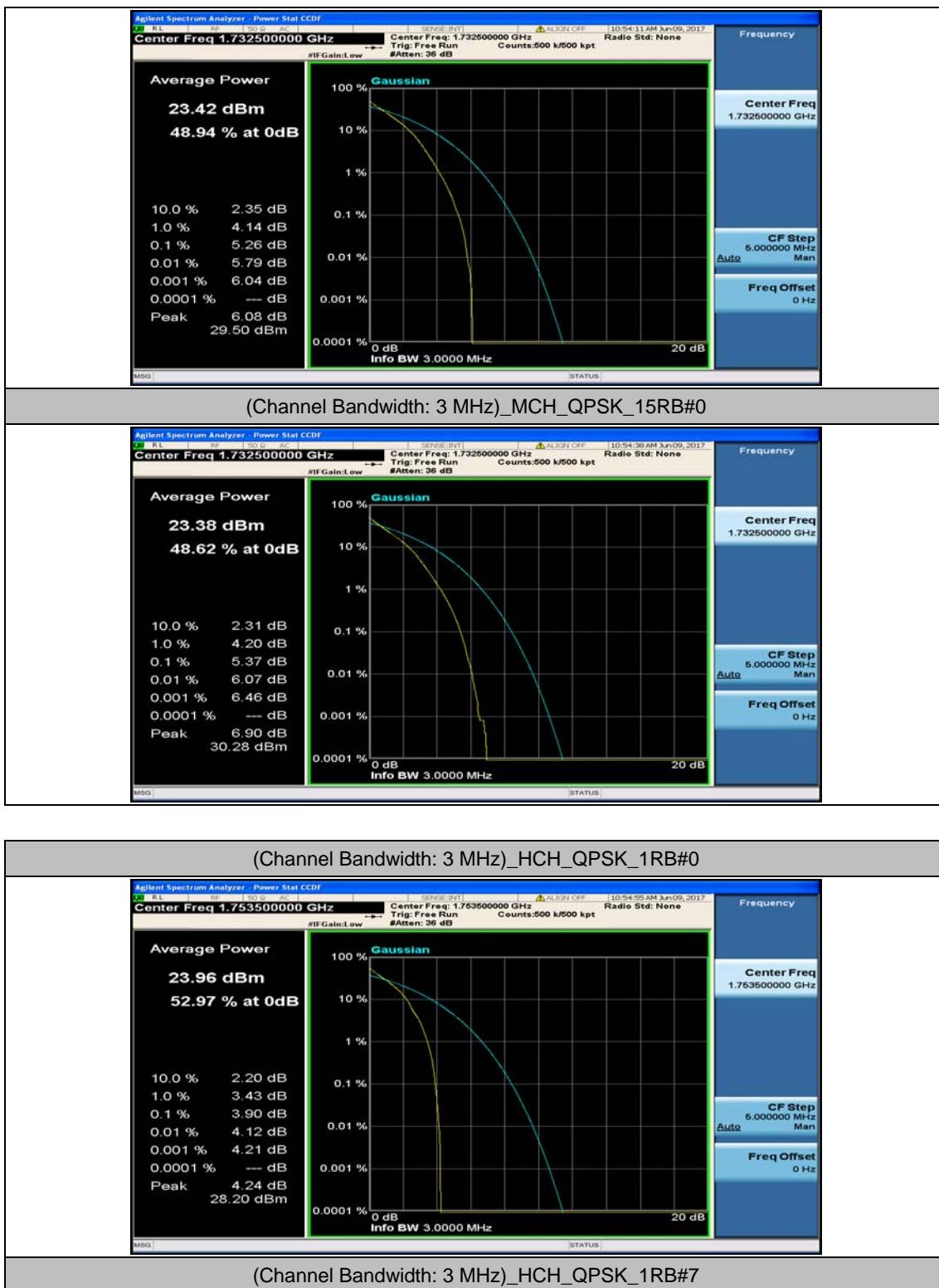


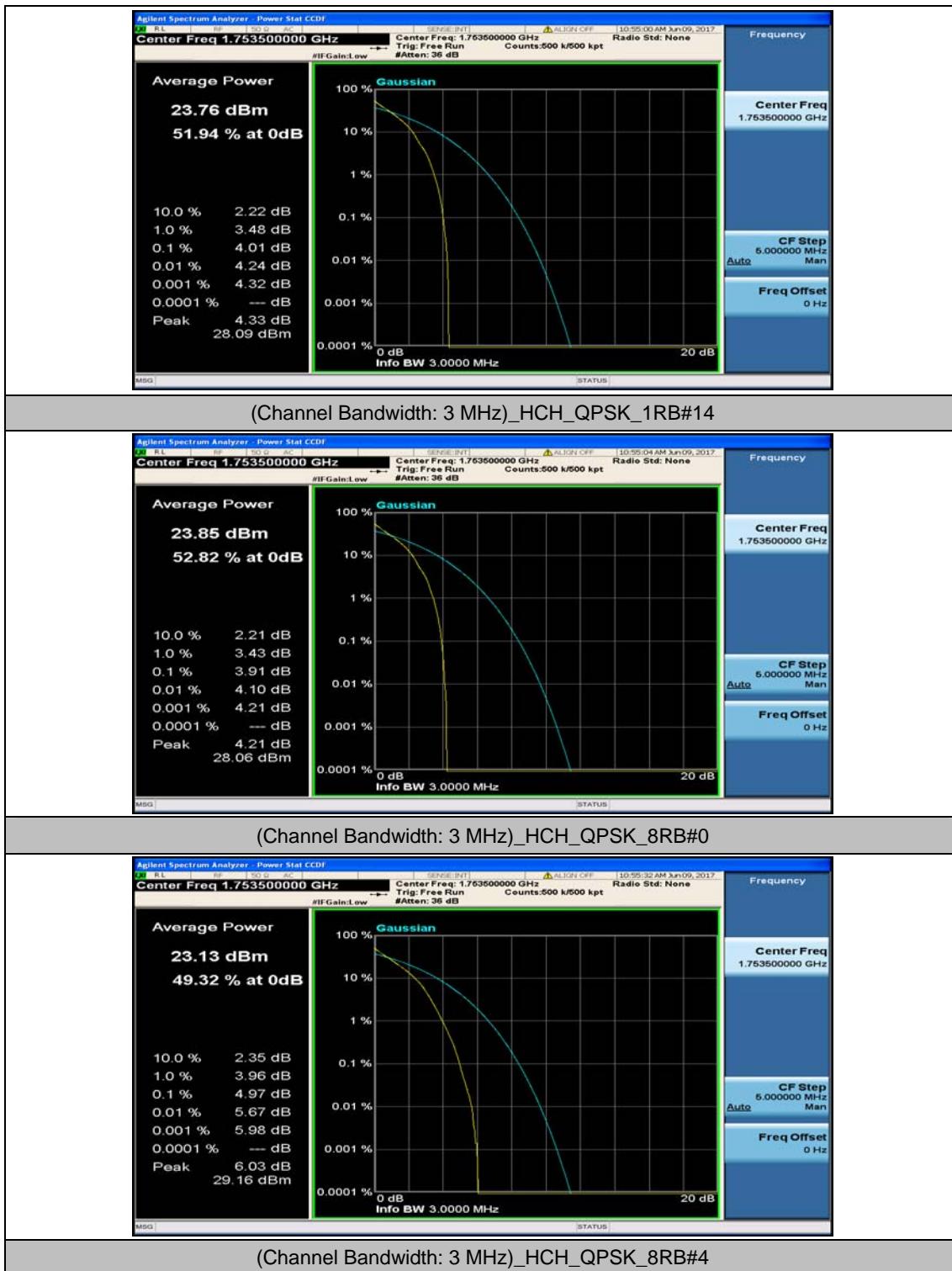


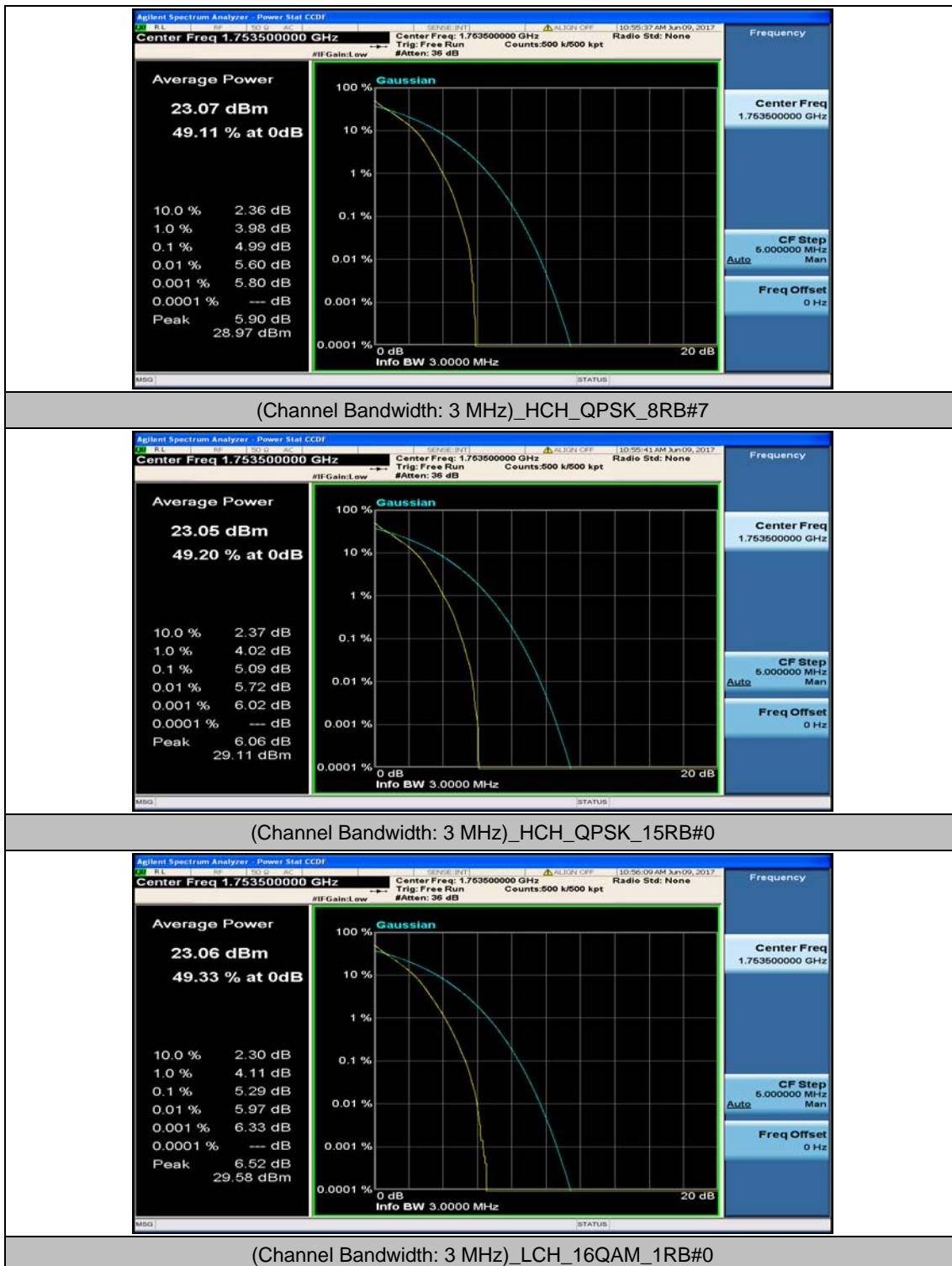


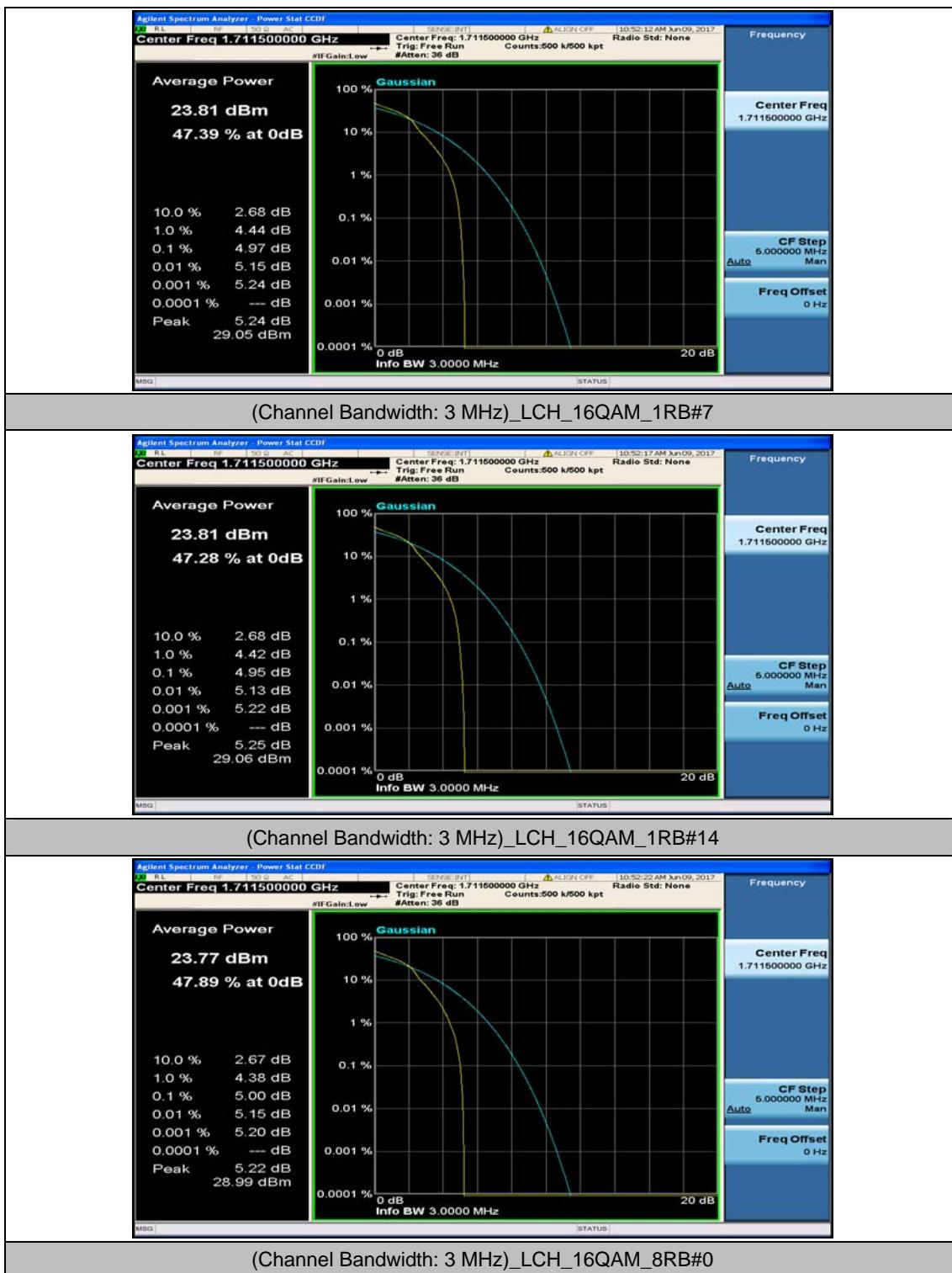
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

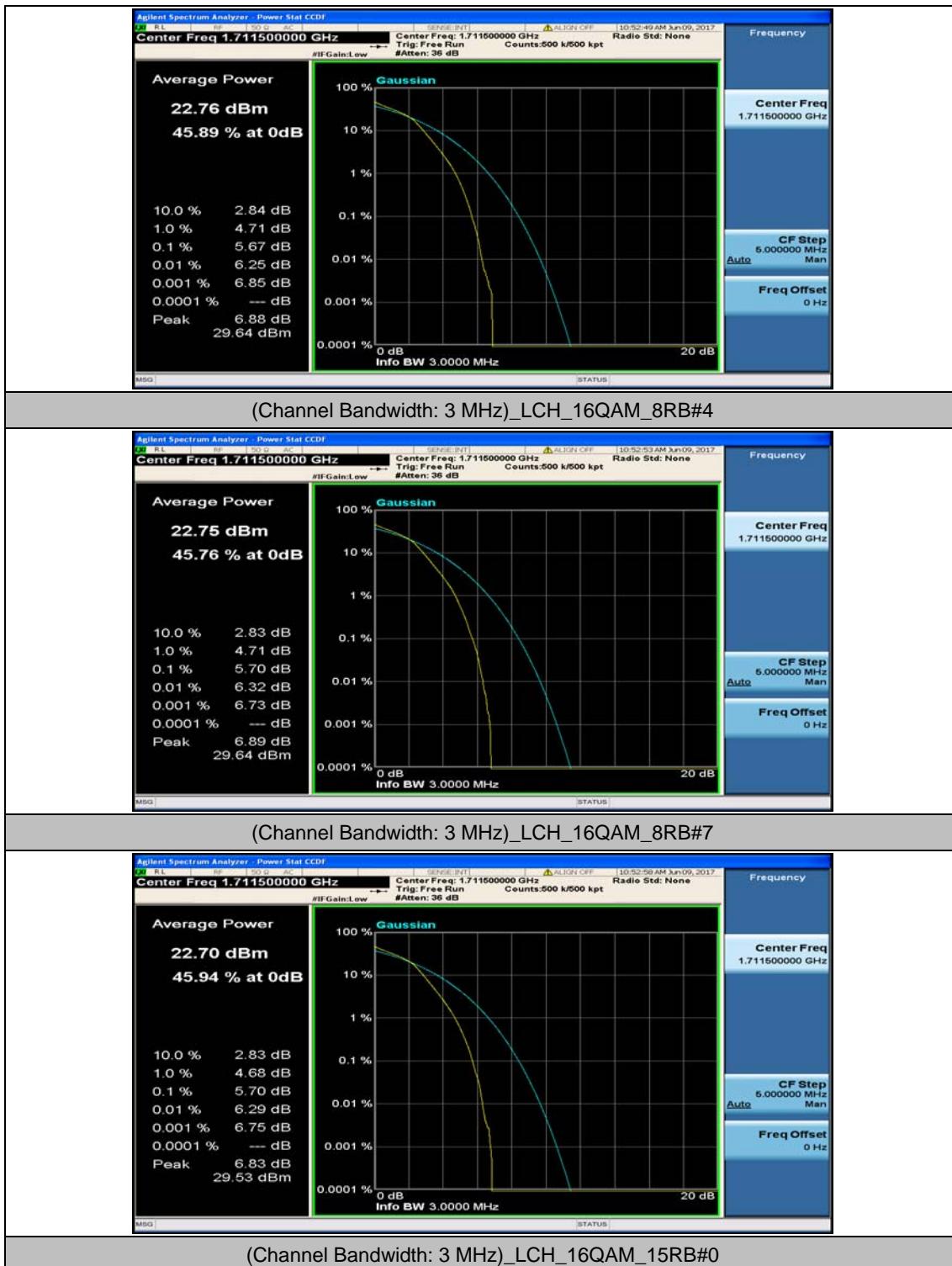


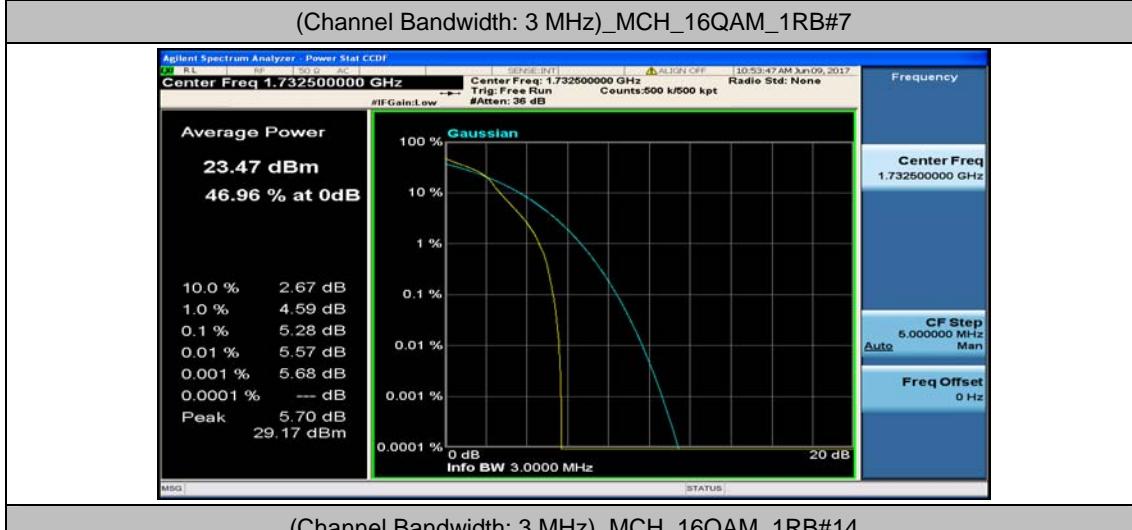
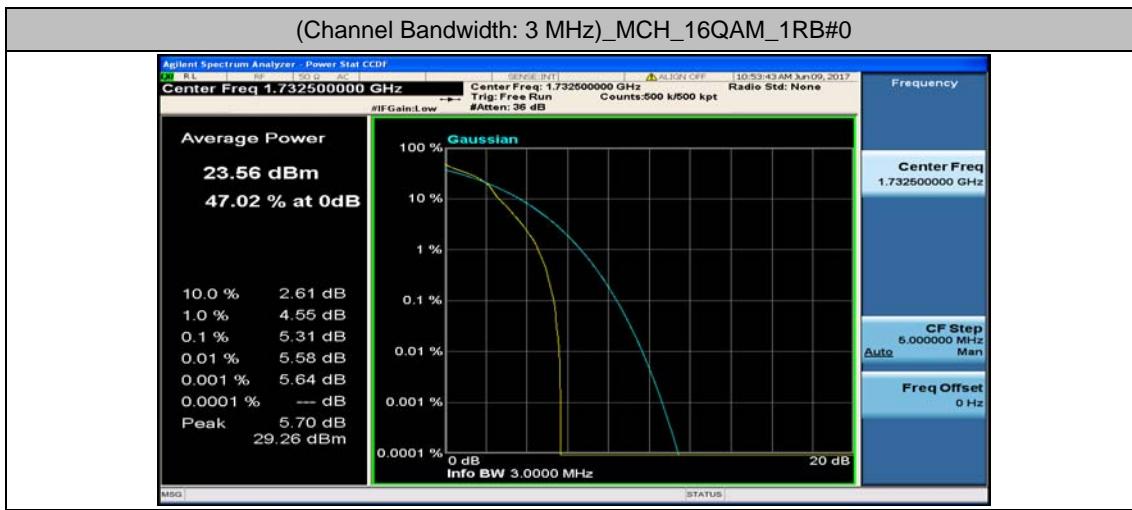
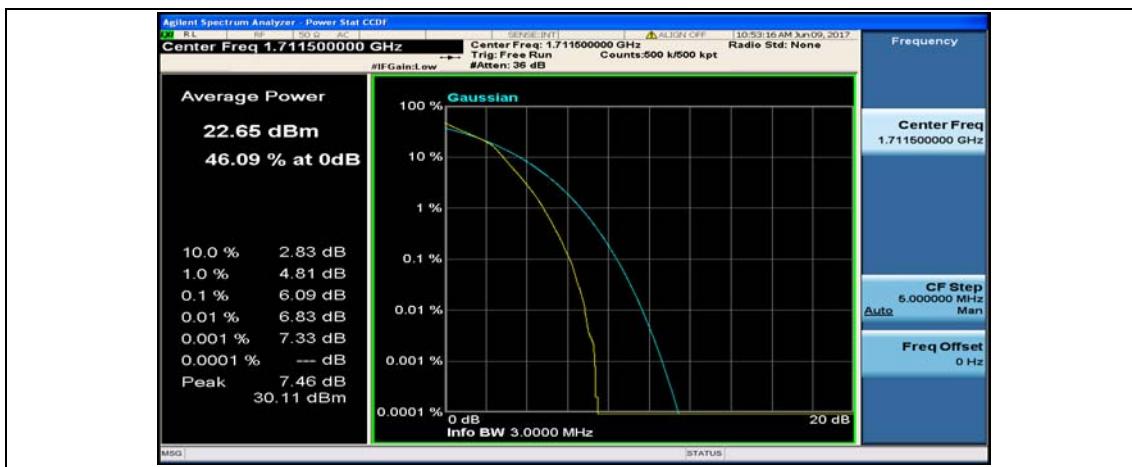


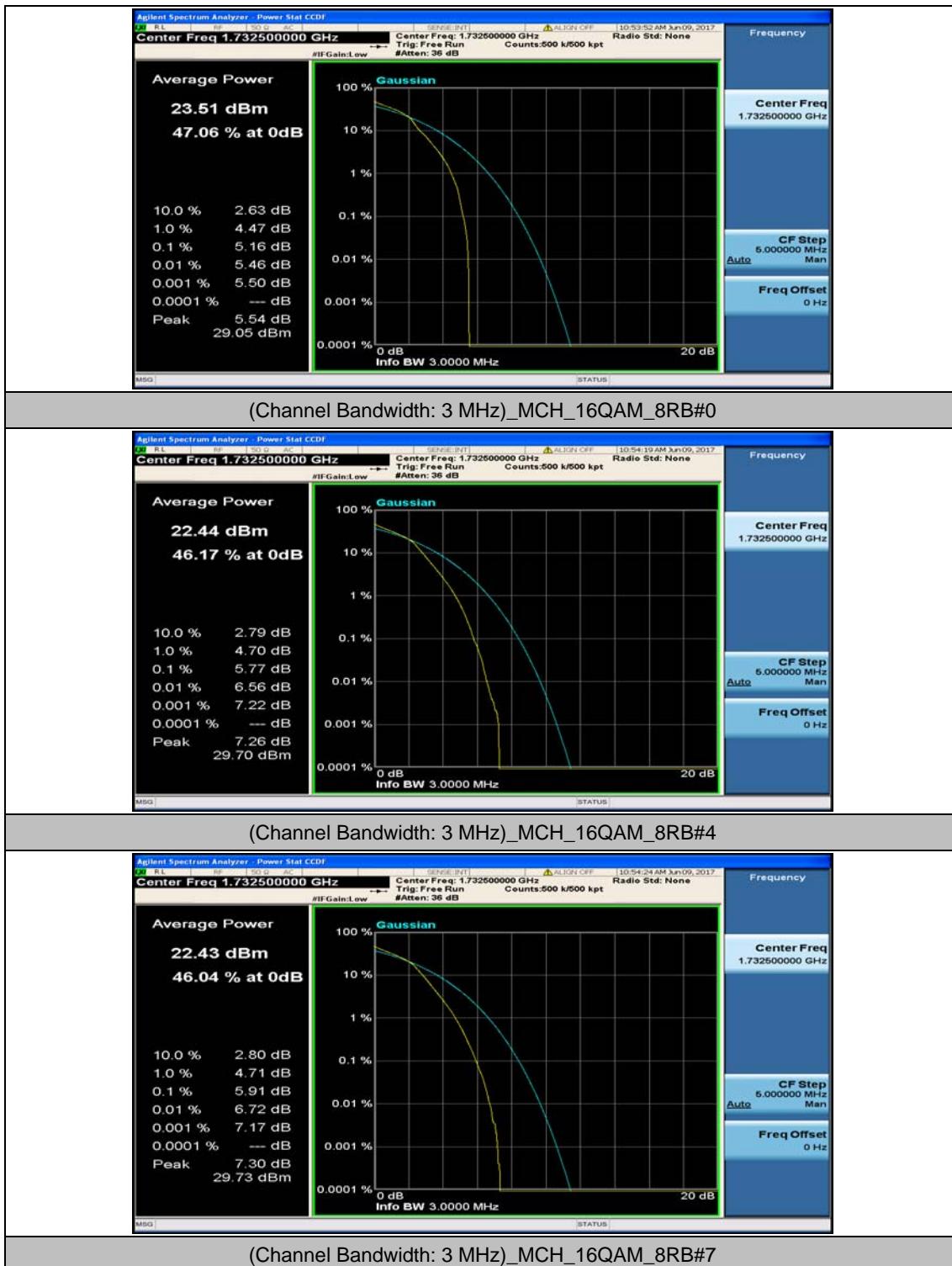


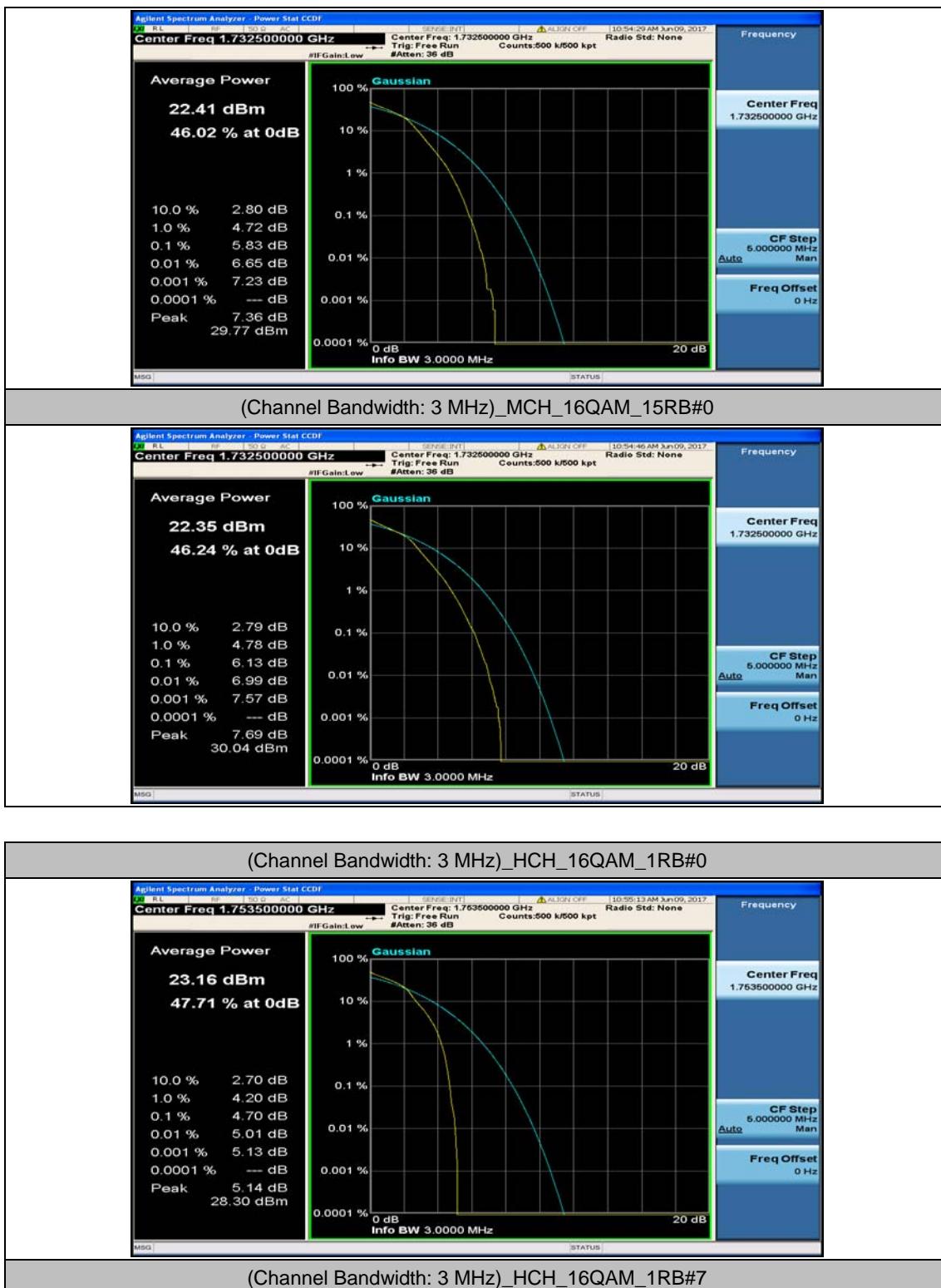


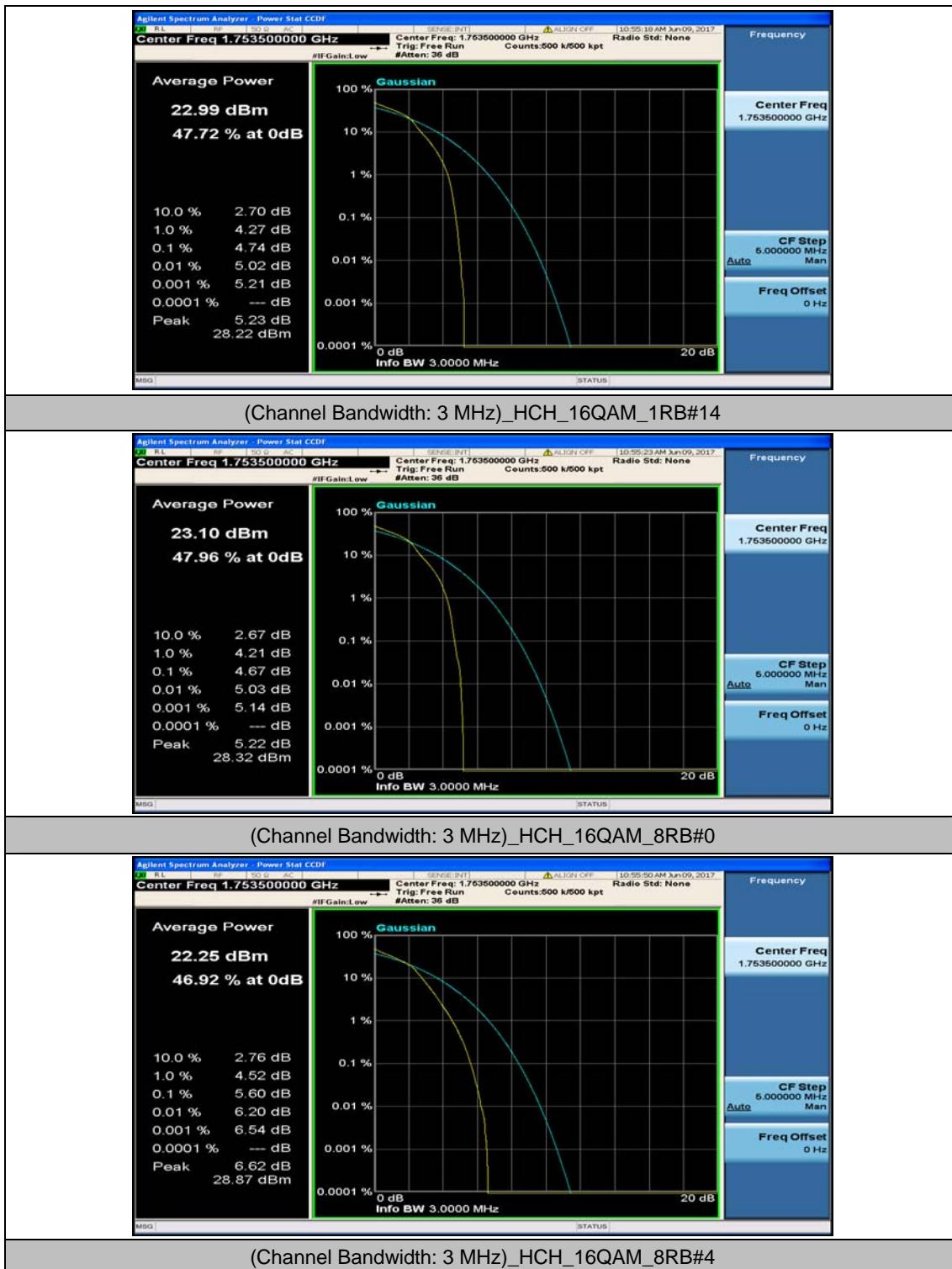


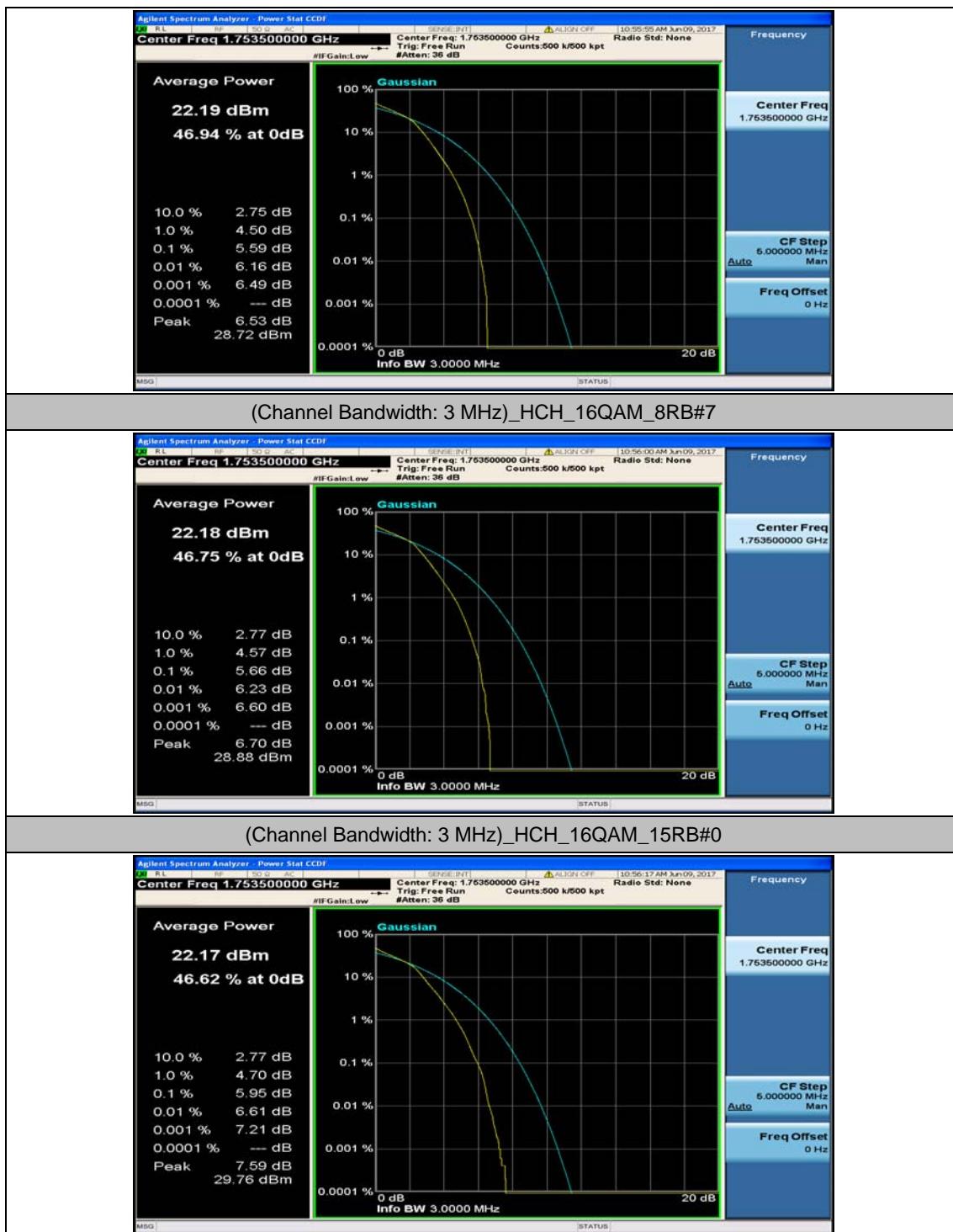




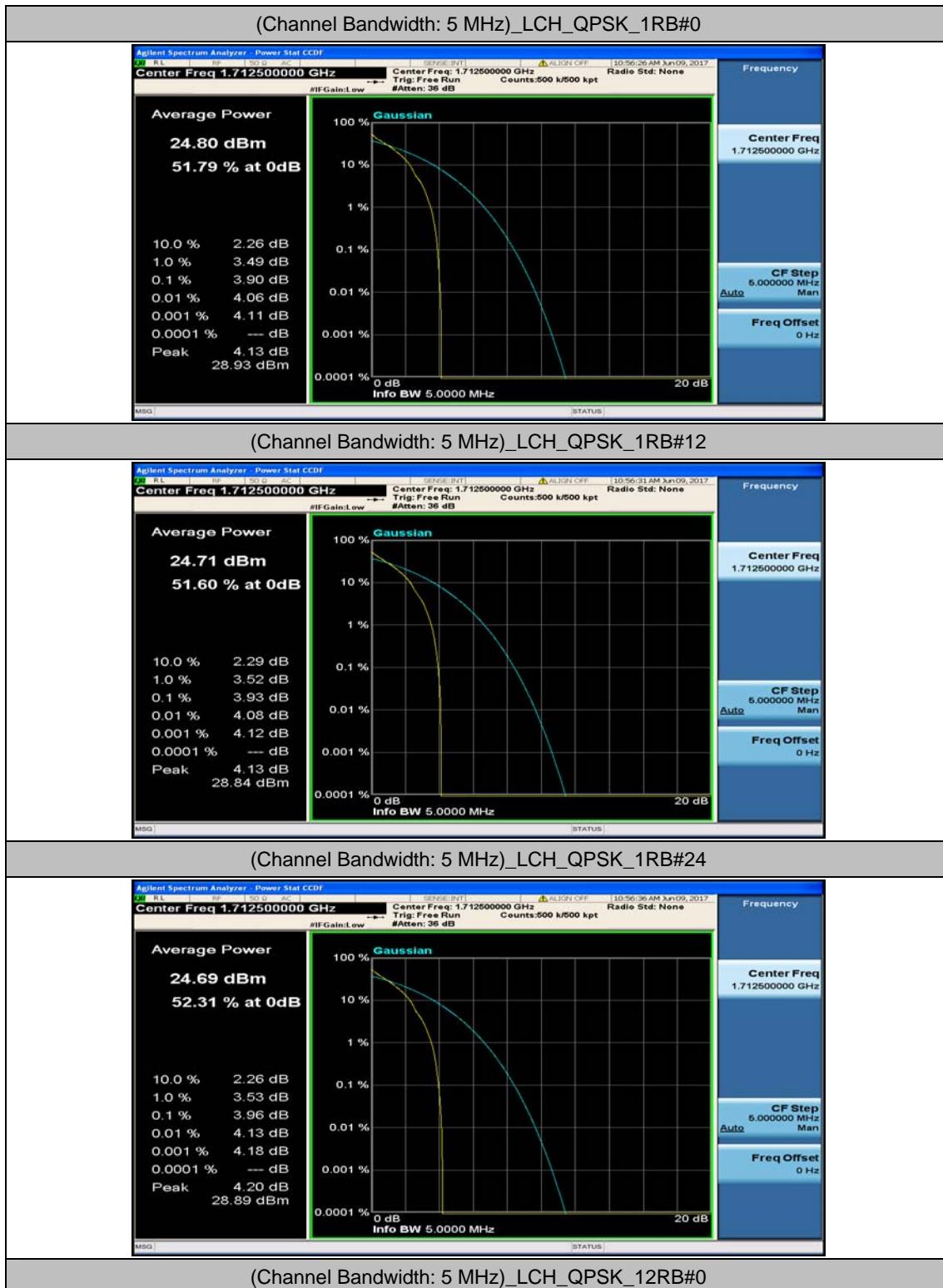


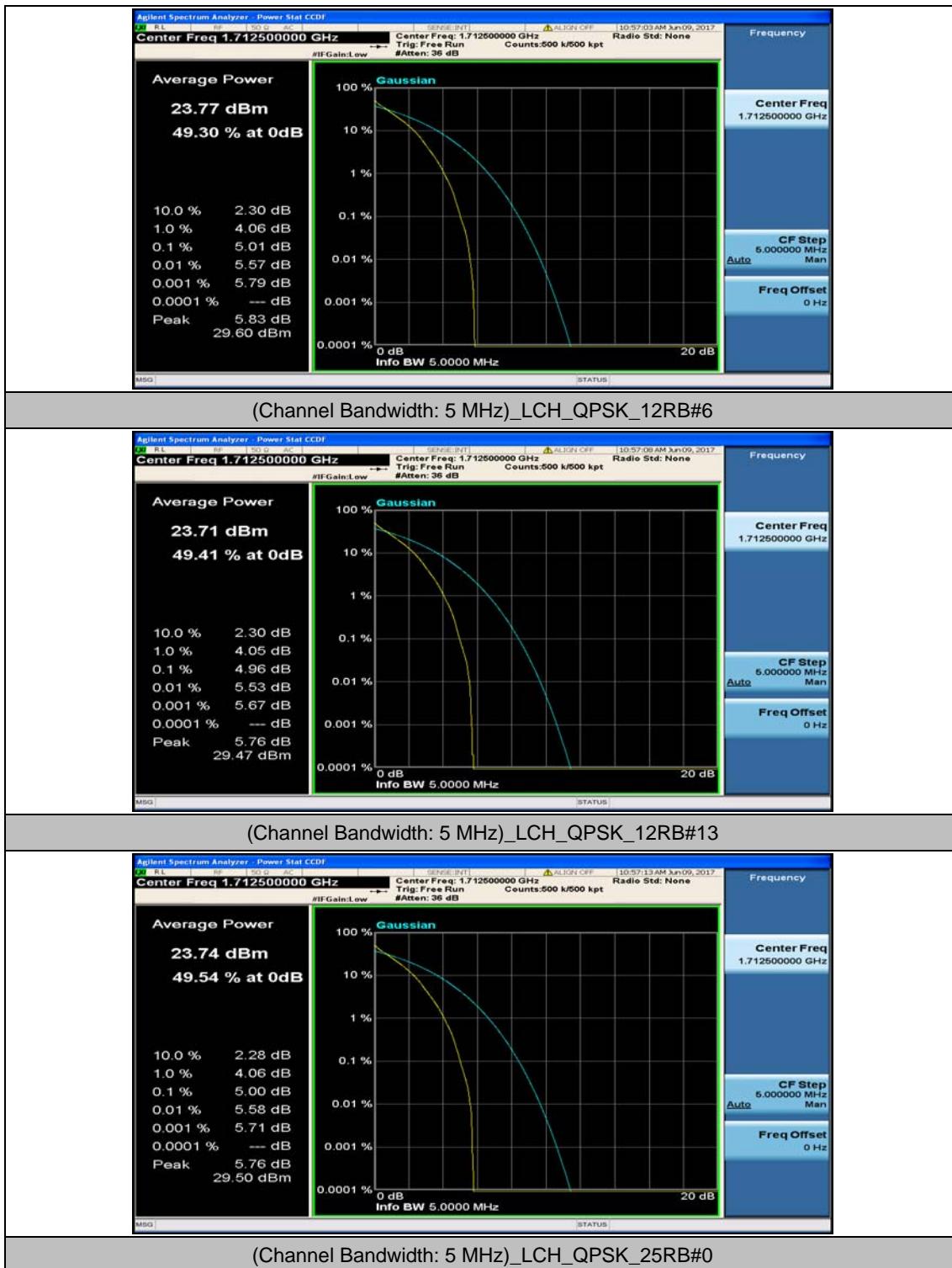


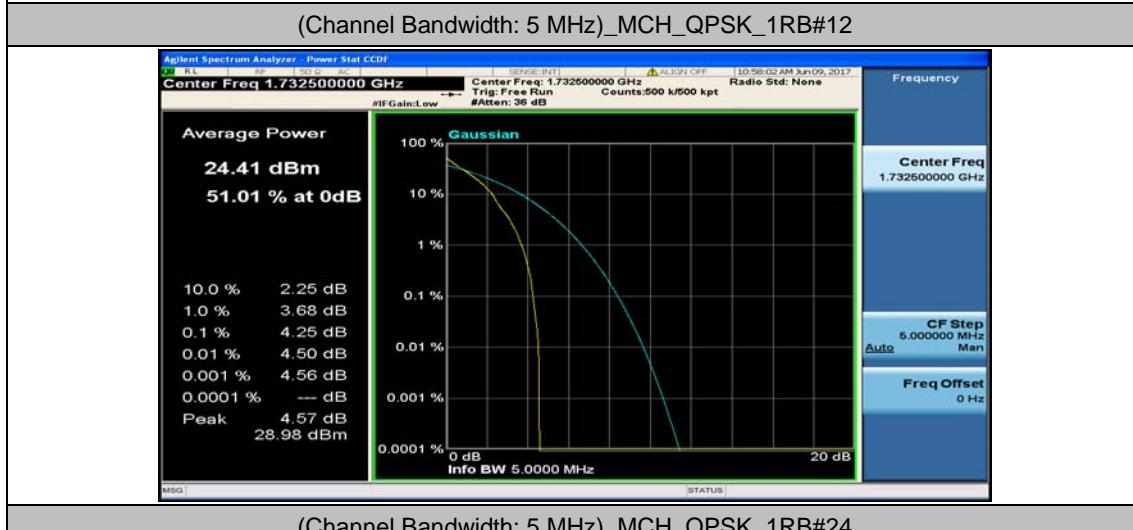
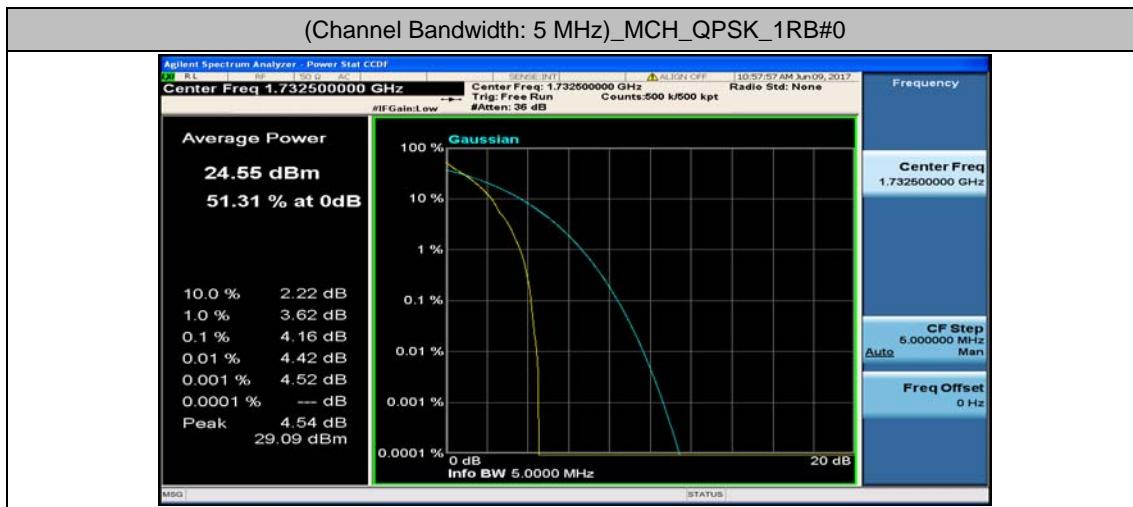




Channel Bandwidth: 5 MHz







(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

