

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	23.18	PASS
		1	3	23.12	PASS
		1	5	23.12	PASS
		3	0	23.3	PASS
		3	2	23.21	PASS
		3	3	23.24	PASS
		6	0	22.74	PASS
	MCH	1	0	23.95	PASS
		1	3	23.97	PASS
		1	5	23.97	PASS
		3	0	23.2	PASS
		3	2	22.97	PASS
		3	3	22.97	PASS
		6	0	21.99	PASS
16QAM	LCH	1	0	23.31	PASS
		1	3	23.25	PASS
		1	5	23.11	PASS
		3	0	23.28	PASS
		3	2	23.25	PASS
		3	3	23.32	PASS
		6	0	22.28	PASS
	MCH	1	0	23.07	PASS
		1	3	23.06	PASS
		1	5	23	PASS
		3	0	22.74	PASS
		3	2	22.67	PASS
		3	3	22.68	PASS
		6	0	21.66	PASS

		3	0	22.99	PASS
		3	2	22.96	PASS
		3	3	23.03	PASS
		6	0	22.08	PASS
HCH	HCH	1	0	22.46	PASS
		1	3	22.43	PASS
		1	5	22.31	PASS
		3	0	22.42	PASS
		3	2	22.36	PASS
		3	3	22.58	PASS
		6	0	21.22	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.62	PASS
		1	7	23.55	PASS
		1	14	23.41	PASS
		8	0	22.68	PASS
		8	4	22.63	PASS
		8	7	22.58	PASS
		15	0	22.62	PASS
	MCH	1	0	23.8	PASS
		1	7	23.89	PASS
		1	14	23.95	PASS
		8	0	22.92	PASS
		8	4	22.92	PASS
		8	7	22.99	PASS
		15	0	22.9	PASS
16QAM	HCH	1	0	22.52	PASS
		1	7	23.33	PASS
		1	14	23.05	PASS
		8	0	22.32	PASS
		8	4	22.41	PASS
		8	7	22.54	PASS
		15	0	22.35	PASS
	LCH	1	0	22.84	PASS
		1	7	22.76	PASS
		1	14	22.62	PASS
		8	0	21.71	PASS
		8	4	21.69	PASS
		8	7	21.62	PASS

		15	0	21.57	PASS
MCH		1	0	23.09	PASS
		1	7	23.2	PASS
		1	14	23.23	PASS
		8	0	21.92	PASS
		8	4	21.88	PASS
		8	7	21.95	PASS
		15	0	21.89	PASS
HCH		1	0	21.71	PASS
		1	7	21.55	PASS
		1	14	22.26	PASS
		8	0	21.41	PASS
		8	4	21.25	PASS
		8	7	21.14	PASS
		15	0	21.32	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.76	PASS
		1	12	23.57	PASS
		1	24	23.38	PASS
		12	0	22.65	PASS
		12	6	22.57	PASS
		12	13	22.49	PASS
		25	0	22.5	PASS
QPSK	MCH	1	0	23.81	PASS
		1	12	23.91	PASS
		1	24	23.99	PASS
		12	0	22.87	PASS
		12	6	22.9	PASS
		12	13	22.99	PASS
		25	0	22.87	PASS
QPSK	HCH	1	0	22.98	PASS
		1	12	22.56	PASS
		1	24	22.69	PASS
		12	0	21.75	PASS
		12	6	21.52	PASS
		12	13	22.32	PASS
		25	0	22.46	PASS
16QAM	LCH	1	0	22.91	PASS
		1	12	22.76	PASS

		1	24	22.58	PASS
		12	0	21.68	PASS
		12	6	21.6	PASS
		12	13	21.54	PASS
		25	0	21.5	PASS
	MCH	1	0	23.01	PASS
		1	12	23.12	PASS
		1	24	23.17	PASS
		12	0	21.98	PASS
		12	6	21.98	PASS
		12	13	22.06	PASS
		25	0	21.88	PASS
	HCH	1	0	22.08	PASS
		1	12	21.69	PASS
		1	24	21.98	PASS
		12	0	20.74	PASS
		12	6	20.74	PASS
		12	13	20.98	PASS
		25	0	20.69	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.62	PASS
		1	24	23.33	PASS
		1	49	23.22	PASS
		25	0	22.49	PASS
		25	12	22.37	PASS
		25	25	22.3	PASS
		50	0	22.42	PASS
QPSK	MCH	1	0	23.55	PASS
		1	24	23.86	PASS
		1	49	24.02	PASS
		25	0	22.75	PASS
		25	12	22.84	PASS
		25	25	22.96	PASS
		50	0	22.86	PASS
QPSK	HCH	1	0	23.59	PASS
		1	24	22.93	PASS
		1	49	22.65	PASS
		25	0	22.23	PASS
		25	12	21.91	PASS

		25	25	21.5	PASS
		50	0	21.89	PASS
16QAM	LCH	1	0	22.83	PASS
		1	24	22.54	PASS
		1	49	22.47	PASS
		25	0	21.5	PASS
		25	12	21.37	PASS
		25	25	21.3	PASS
		50	0	21.43	PASS
	MCH	1	0	22.95	PASS
		1	24	23.19	PASS
		1	49	23.35	PASS
		25	0	21.77	PASS
		25	12	21.87	PASS
		25	25	21.99	PASS
		50	0	21.91	PASS
	HCH	1	0	22.78	PASS
		1	24	22.13	PASS
		1	49	22.33	PASS
		25	0	21.21	PASS
		25	12	20.89	PASS
		25	25	20.74	PASS
		50	0	20.92	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.59	PASS
		1	37	23.23	PASS
		1	74	23.31	PASS
		37	0	22.55	PASS
		37	18	22.4	PASS
		37	38	22.36	PASS
		75	0	22.47	PASS
	MCH	1	0	23.43	PASS
		1	37	23.85	PASS
		1	74	24.07	PASS
		37	0	22.73	PASS
		37	18	22.93	PASS
		37	38	23.1	PASS
		75	0	22.95	PASS
	HCH	1	0	24.02	PASS

		1	37	23.31	PASS
		1	74	23.16	PASS
		37	0	22.86	PASS
		37	18	22.44	PASS
		37	38	21.87	PASS
		75	0	22.36	PASS
16QAM	LCH	1	0	22.8	PASS
		1	37	22.47	PASS
		1	74	22.58	PASS
		37	0	21.47	PASS
		37	18	21.35	PASS
		37	38	21.33	PASS
		75	0	21.42	PASS
	MCH	1	0	22.69	PASS
		1	37	23.1	PASS
		1	74	23.23	PASS
		37	0	21.73	PASS
		37	18	21.91	PASS
		37	38	22.07	PASS
		75	0	21.9	PASS
	HCH	1	0	23.17	PASS
		1	37	22.49	PASS
		1	74	22.17	PASS
		37	0	21.75	PASS
		37	18	21.36	PASS
		37	38	20.8	PASS
		75	0	21.32	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.7	PASS
		1	49	23.28	PASS
		1	99	23.75	PASS
		50	0	22.4	PASS
		50	25	22.29	PASS
		50	50	22.94	PASS
		100	0	22.38	PASS
	MCH	1	0	24	PASS
		1	49	23.93	PASS
		1	99	24.08	PASS
		50	0	22.9	PASS

		50	25	22.85	PASS
		50	50	23.32	PASS
		100	0	23.29	PASS
16QAM	HCH	1	0	23.96	PASS
		1	49	23.56	PASS
		1	99	22.98	PASS
		50	0	22.94	PASS
		50	25	22.58	PASS
		50	50	21.99	PASS
		100	0	22.45	PASS
		1	0	22.84	PASS
16QAM	LCH	1	49	22.46	PASS
		1	99	22.9	PASS
		50	0	21.38	PASS
		50	25	21.26	PASS
		50	50	21.44	PASS
		100	0	21.39	PASS
	MCH	1	0	22.71	PASS
		1	49	23.18	PASS
		1	99	23.3	PASS
		50	0	21.64	PASS
		50	25	21.88	PASS
		50	50	22.04	PASS
		100	0	21.8	PASS
16QAM	HCH	1	0	23.17	PASS
		1	49	22.78	PASS
		1	99	21.69	PASS
		50	0	21.94	PASS
		50	25	21.58	PASS
		50	50	21	PASS
		100	0	21.45	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	3.11	<13	PASS
		1	3	3.1	<13	PASS
		1	5	3.11	<13	PASS
		3	0	3.22	<13	PASS
		3	2	3.26	<13	PASS
		3	3	3.21	<13	PASS
		6	0	4.25	<13	PASS
	MCH	1	0	3.75	<13	PASS
		1	3	3.7	<13	PASS
		1	5	3.75	<13	PASS
		3	0	3.8	<13	PASS
		3	2	3.84	<13	PASS
		3	3	3.82	<13	PASS
		6	0	4.79	<13	PASS
16QAM	LCH	1	0	3.88	<13	PASS
		1	3	3.82	<13	PASS
		1	5	3.78	<13	PASS
		3	0	3.92	<13	PASS
		3	2	3.91	<13	PASS
		3	3	3.96	<13	PASS
		6	0	4.83	<13	PASS
	MCH	1	0	4.14	<13	PASS
		1	3	4.1	<13	PASS
		1	5	4.24	<13	PASS
		3	0	4.17	<13	PASS
		3	2	4.2	<13	PASS
		3	3	4.22	<13	PASS
		6	0	5.16	<13	PASS

		3	2	4.7	<13	PASS
		3	3	4.77	<13	PASS
		6	0	5.66	<13	PASS
HCH		1	0	4.82	<13	PASS
		1	3	4.78	<13	PASS
		1	5	4.84	<13	PASS
		3	0	4.68	<13	PASS
		3	2	4.77	<13	PASS
		3	3	4.68	<13	PASS
		6	0	5.66	<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	3.13	<13	PASS
		1	7	3.15	<13	PASS
		1	14	3.21	<13	PASS
		8	0	4.25	<13	PASS
		8	4	4.28	<13	PASS
		8	7	4.24	<13	PASS
		15	0	4.35	<13	PASS
	MCH	1	0	3.75	<13	PASS
		1	7	3.69	<13	PASS
		1	14	3.79	<13	PASS
		8	0	4.83	<13	PASS
		8	4	4.79	<13	PASS
		8	7	4.83	<13	PASS
		15	0	4.95	<13	PASS
	HCH	1	0	3.82	<13	PASS
		1	7	3.84	<13	PASS
		1	14	3.92	<13	PASS
		8	0	4.84	<13	PASS
		8	4	4.83	<13	PASS
		8	7	4.86	<13	PASS
		15	0	4.93	<13	PASS
16QAM	LCH	1	0	4.09	<13	PASS
		1	7	4.13	<13	PASS
		1	14	4.18	<13	PASS
		8	0	5.07	<13	PASS
		8	4	5.12	<13	PASS

		8	7	5.13	<13	PASS
		15	0	5.35	<13	PASS
MCH		1	0	4.69	<13	PASS
		1	7	4.63	<13	PASS
		1	14	4.67	<13	PASS
		8	0	5.66	<13	PASS
		8	4	5.61	<13	PASS
		8	7	5.66	<13	PASS
		15	0	5.78	<13	PASS
HCH		1	0	4.74	<13	PASS
		1	7	4.85	<13	PASS
		1	14	4.95	<13	PASS
		8	0	5.75	<13	PASS
		8	4	5.83	<13	PASS
		8	7	5.82	<13	PASS
		15	0	5.77	<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	3.17	<13	PASS
		1	12	3.2	<13	PASS
		1	24	3.33	<13	PASS
		12	0	4.32	<13	PASS
		12	6	4.33	<13	PASS
		12	13	4.38	<13	PASS
		25	0	4.45	<13	PASS
	MCH	1	0	3.71	<13	PASS
		1	12	3.74	<13	PASS
		1	24	3.82	<13	PASS
		12	0	4.78	<13	PASS
		12	6	4.76	<13	PASS
		12	13	4.83	<13	PASS
		25	0	4.92	<13	PASS
	HCH	1	0	3.7	<13	PASS
		1	12	3.77	<13	PASS
		1	24	3.88	<13	PASS
		12	0	4.82	<13	PASS
		12	6	4.86	<13	PASS
		12	13	4.89	<13	PASS

		25	0	4.95	<13	PASS
16QAM	LCH	1	0	4.05	<13	PASS
		1	12	4.08	<13	PASS
		1	24	4.22	<13	PASS
		12	0	5.2	<13	PASS
		12	6	5.25	<13	PASS
		12	13	5.24	<13	PASS
		25	0	5.27	<13	PASS
	MCH	1	0	4.63	<13	PASS
		1	12	4.8	<13	PASS
		1	24	4.78	<13	PASS
		12	0	5.69	<13	PASS
		12	6	5.65	<13	PASS
		12	13	5.6	<13	PASS
		25	0	5.8	<13	PASS
	HCH	1	0	4.6	<13	PASS
		1	12	4.52	<13	PASS
		1	24	4.65	<13	PASS
		12	0	5.64	<13	PASS
		12	6	5.72	<13	PASS
		12	13	5.74	<13	PASS
		25	0	5.78	<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	3.12	<13	PASS
		1	24	3.24	<13	PASS
		1	49	3.38	<13	PASS
		25	0	4.37	<13	PASS
		25	12	4.45	<13	PASS
		25	25	4.52	<13	PASS
		50	0	4.51	<13	PASS
	MCH	1	0	3.59	<13	PASS
		1	24	3.67	<13	PASS
		1	49	3.64	<13	PASS
		25	0	4.92	<13	PASS
		25	12	4.94	<13	PASS
		25	25	4.86	<13	PASS
		50	0	4.93	<13	PASS

		1	0	3.57	<13	PASS
		1	24	3.58	<13	PASS
		1	49	3.84	<13	PASS
	HCH	25	0	4.63	<13	PASS
		25	12	4.77	<13	PASS
		25	25	4.85	<13	PASS
		50	0	4.83	<13	PASS
16QAM	LCH	1	0	4.14	<13	PASS
		1	24	4.16	<13	PASS
		1	49	4.38	<13	PASS
		25	0	5.3	<13	PASS
		25	12	5.36	<13	PASS
		25	25	5.44	<13	PASS
		50	0	5.38	<13	PASS
	MCH	1	0	4.49	<13	PASS
		1	24	4.64	<13	PASS
		1	49	4.65	<13	PASS
		25	0	5.75	<13	PASS
		25	12	5.81	<13	PASS
		25	25	5.75	<13	PASS
		50	0	5.78	<13	PASS
	HCH	1	0	4.58	<13	PASS
		1	24	4.67	<13	PASS
		1	49	4.83	<13	PASS
		25	0	5.6	<13	PASS
		25	12	5.68	<13	PASS
		25	25	5.77	<13	PASS
		50	0	5.69	<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	3.06	<13	PASS
		1	37	3.3	<13	PASS
		1	74	3.57	<13	PASS
		37	0	4.27	<13	PASS
		37	18	4.39	<13	PASS
		37	38	4.65	<13	PASS
		75	0	4.86	<13	PASS
	MCH	1	0	3.71	<13	PASS

	16QAM	HCH	1	37	3.79	<13	PASS
			1	74	3.82	<13	PASS
			37	0	4.82	<13	PASS
			37	18	4.82	<13	PASS
			37	38	4.8	<13	PASS
			75	0	5.36	<13	PASS
		LCH	1	0	3.47	<13	PASS
			1	37	3.45	<13	PASS
			1	74	3.98	<13	PASS
			37	0	4.59	<13	PASS
			37	18	4.61	<13	PASS
			37	38	4.78	<13	PASS
			75	0	5.08	<13	PASS
		MCH	1	0	4.02	<13	PASS
			1	37	4.19	<13	PASS
			1	74	4.56	<13	PASS
			37	0	5.29	<13	PASS
			37	18	5.38	<13	PASS
			37	38	5.54	<13	PASS
			75	0	5.65	<13	PASS
		HCH	1	0	4.57	<13	PASS
			1	37	4.6	<13	PASS
			1	74	4.59	<13	PASS
			37	0	5.7	<13	PASS
			37	18	5.64	<13	PASS
			37	38	5.71	<13	PASS
			75	0	5.91	<13	PASS

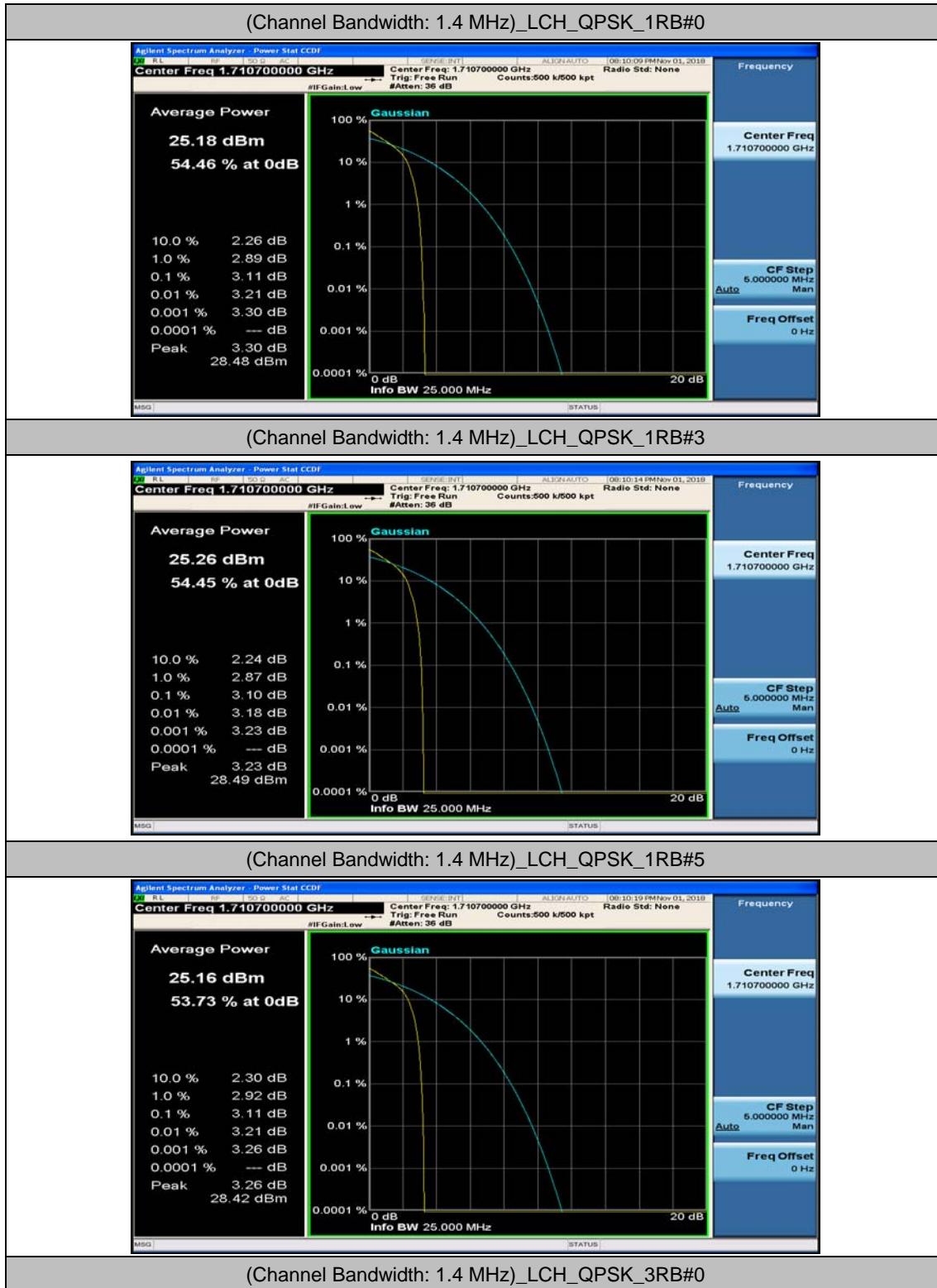
Channel Bandwidth: 20 MHz

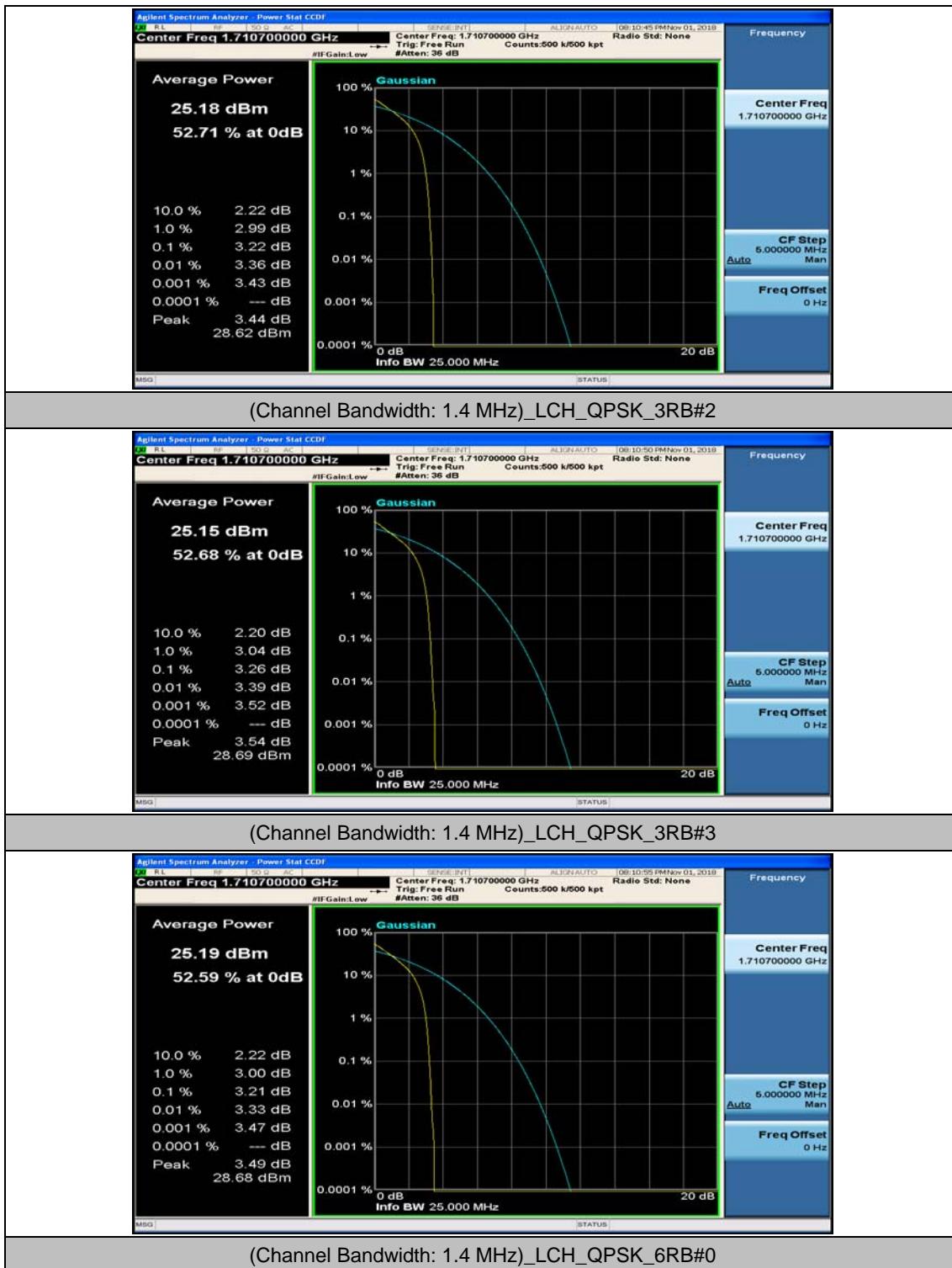
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	3.07	<13	PASS
		1	49	3.43	<13	PASS

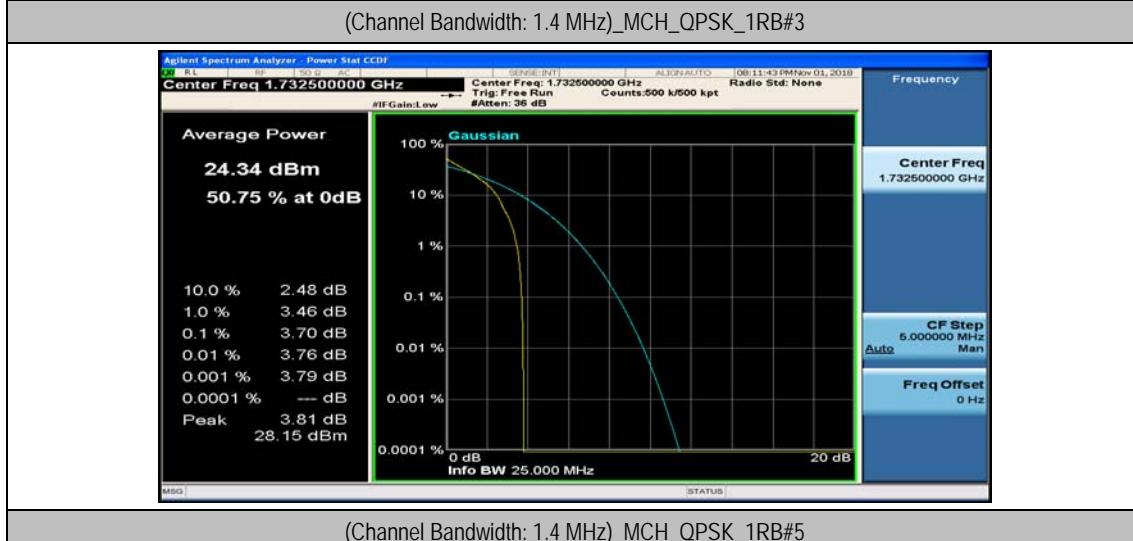
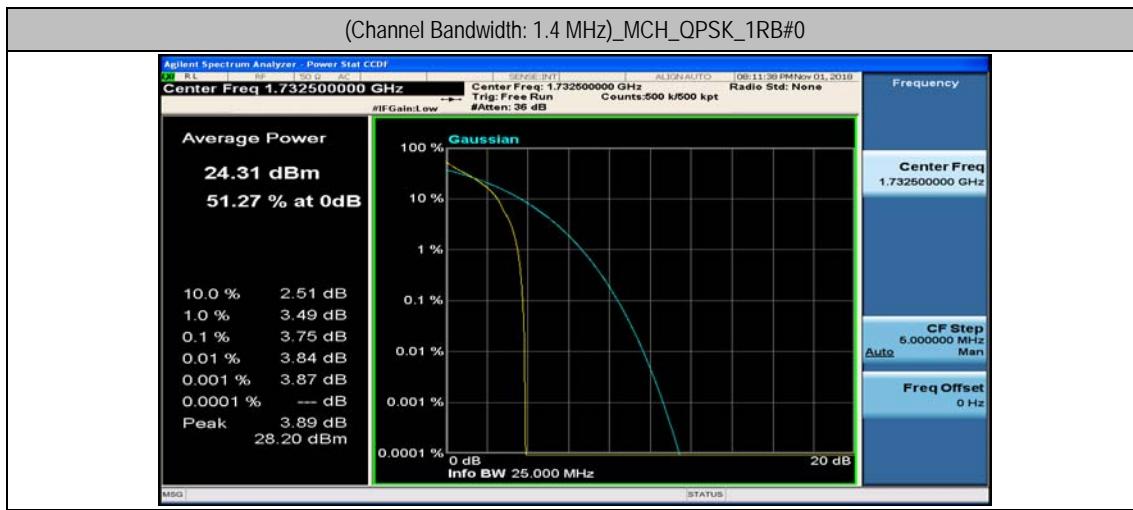
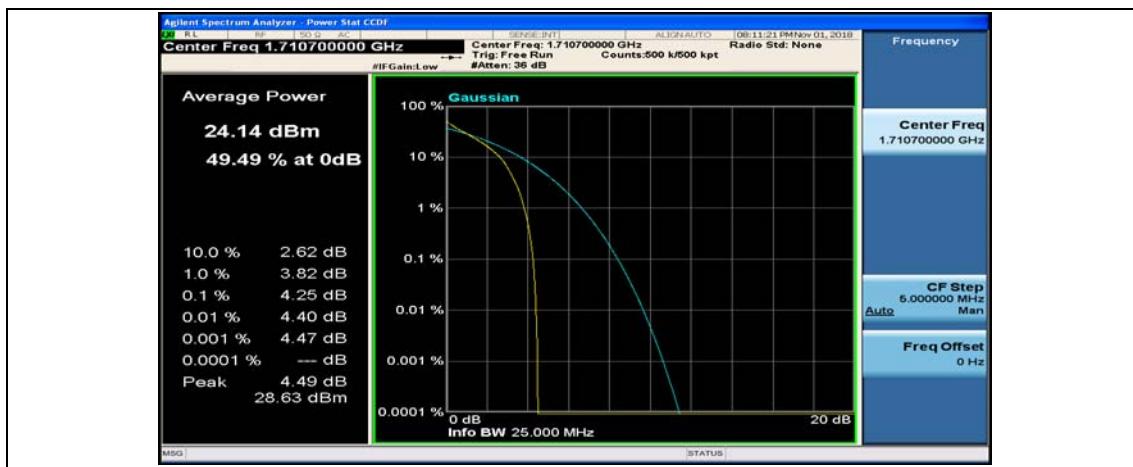
		1	99	3.55	<13	PASS
		50	0	4.66	<13	PASS
		50	25	4.93	<13	PASS
		50	50	5	<13	PASS
		100	0	5.21	<13	PASS
	MCH	1	0	3.83	<13	PASS
		1	49	3.84	<13	PASS
		1	99	3.57	<13	PASS
		50	0	5.11	<13	PASS
		50	25	4.9	<13	PASS
		50	50	5.05	<13	PASS
		100	0	5.58	<13	PASS
	HCH	1	0	4.07	<13	PASS
		1	49	3.65	<13	PASS
		1	99	3.88	<13	PASS
		50	0	4.76	<13	PASS
		50	25	4.7	<13	PASS
		50	50	4.8	<13	PASS
		100	0	5.09	<13	PASS
	LCH	1	0	4.01	<13	PASS
		1	49	4.14	<13	PASS
		1	99	4.68	<13	PASS
		50	0	5.56	<13	PASS
		50	25	5.56	<13	PASS
		50	50	5.66	<13	PASS
		100	0	5.9	<13	PASS
	MCH	1	0	4.47	<13	PASS
		1	49	4.62	<13	PASS
		1	99	4.52	<13	PASS
		50	0	5.93	<13	PASS
		50	25	5.86	<13	PASS
		50	50	5.78	<13	PASS
		100	0	6.01	<13	PASS
	HCH	1	0	4.76	<13	PASS
		1	49	4.45	<13	PASS
		1	99	4.83	<13	PASS
		50	0	5.67	<13	PASS
		50	25	5.56	<13	PASS
		50	50	5.71	<13	PASS
		100	0	5.88	<13	PASS

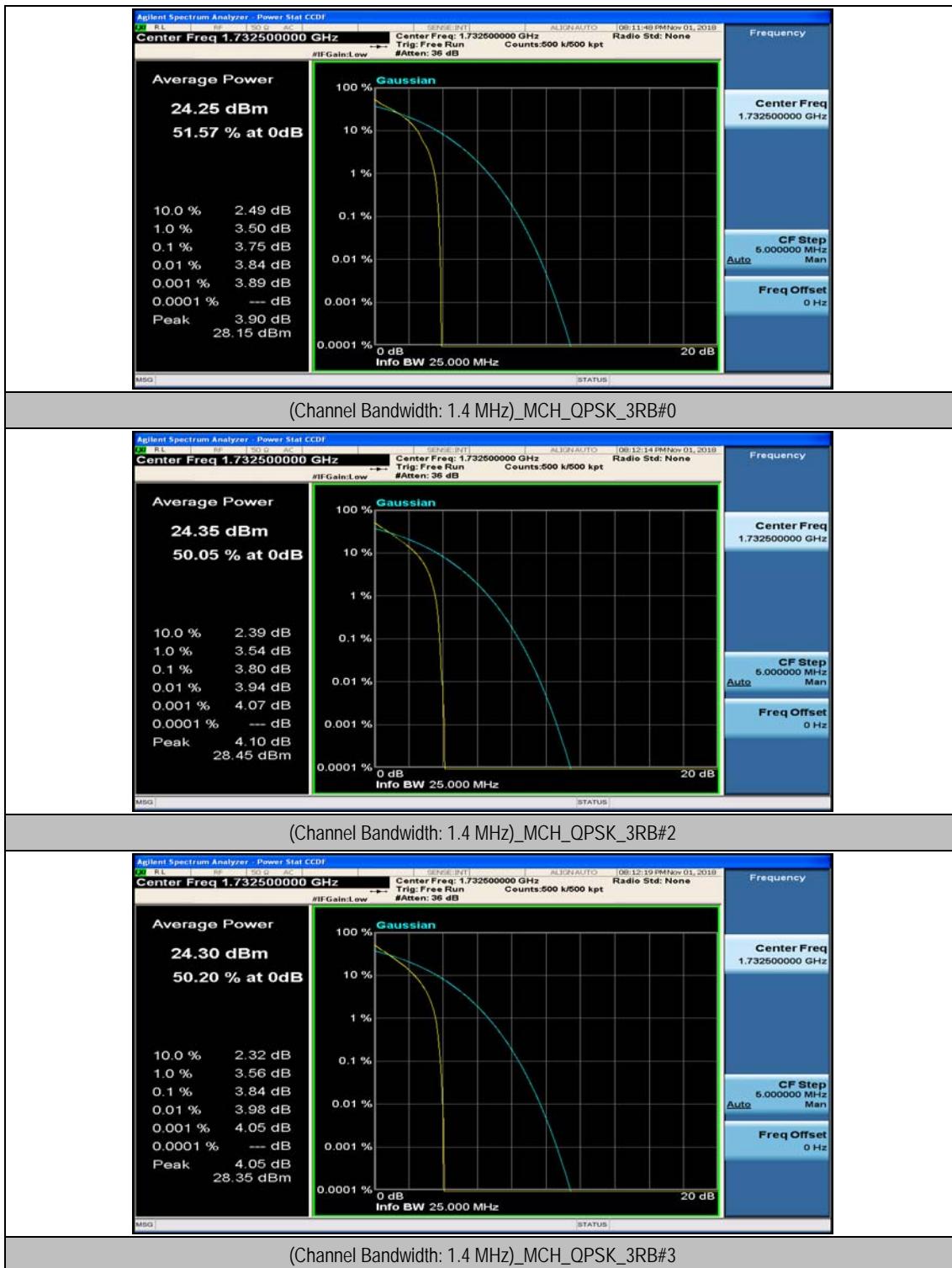
Test Graphs

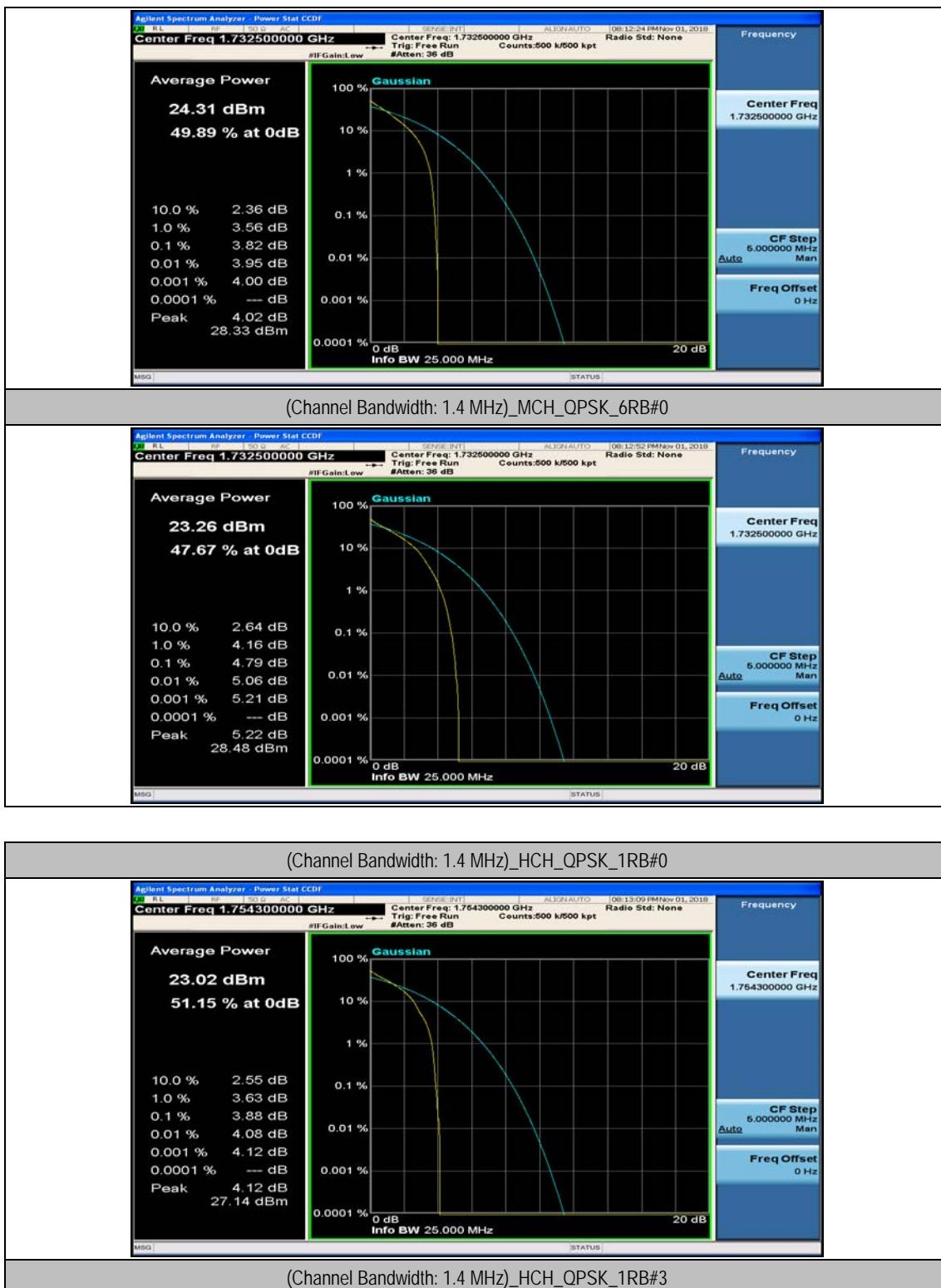
Channel Bandwidth: 1.4 MHz

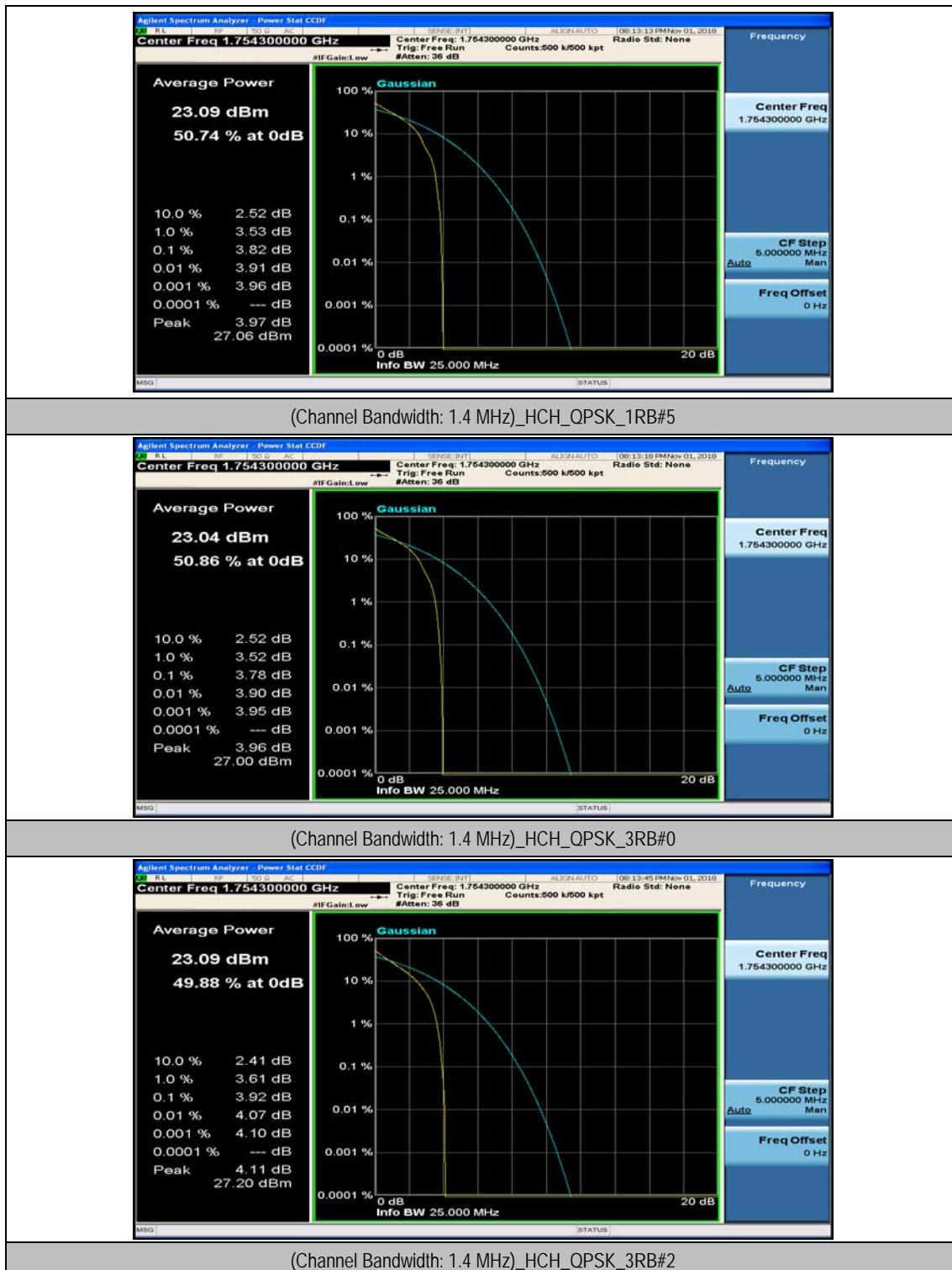


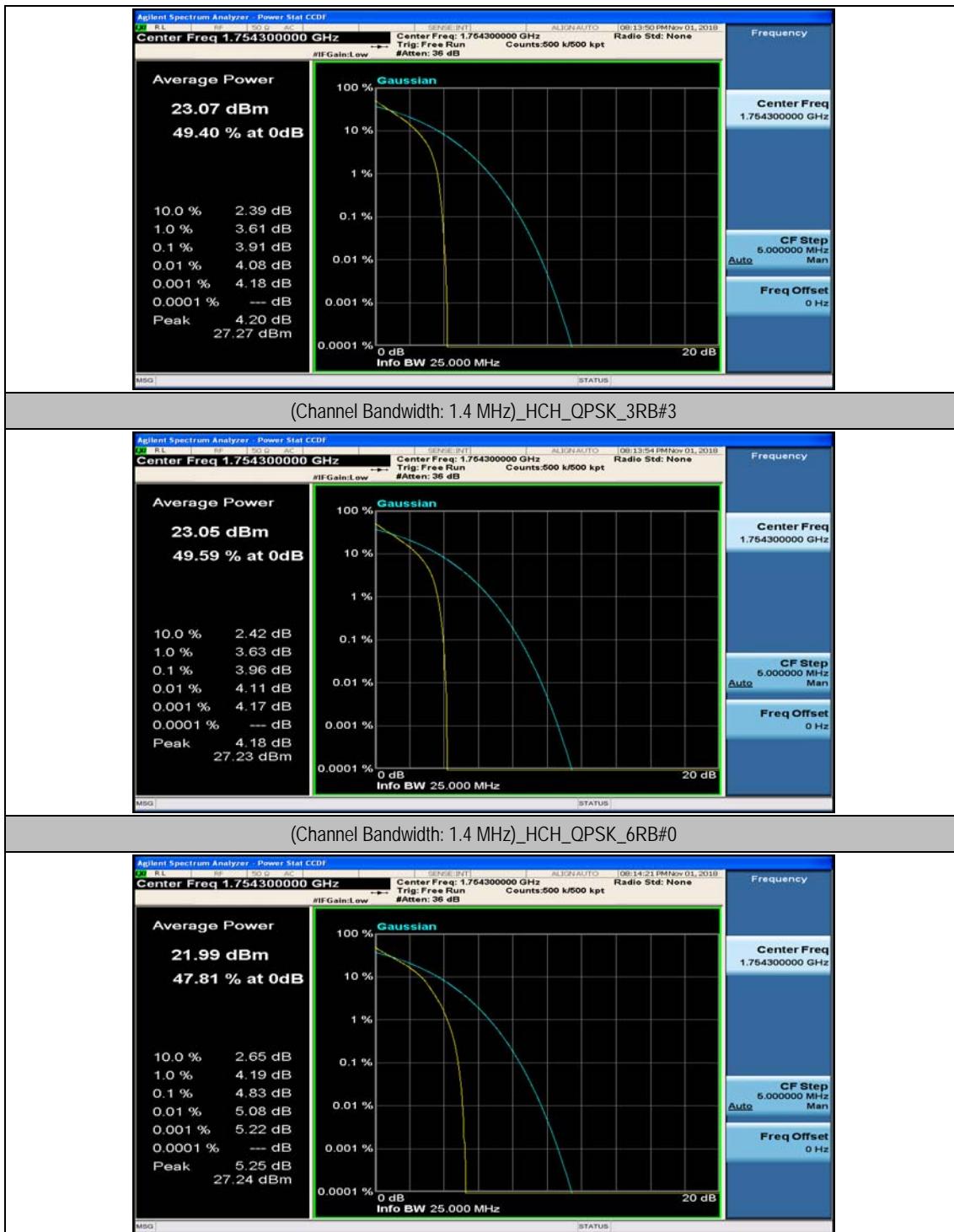


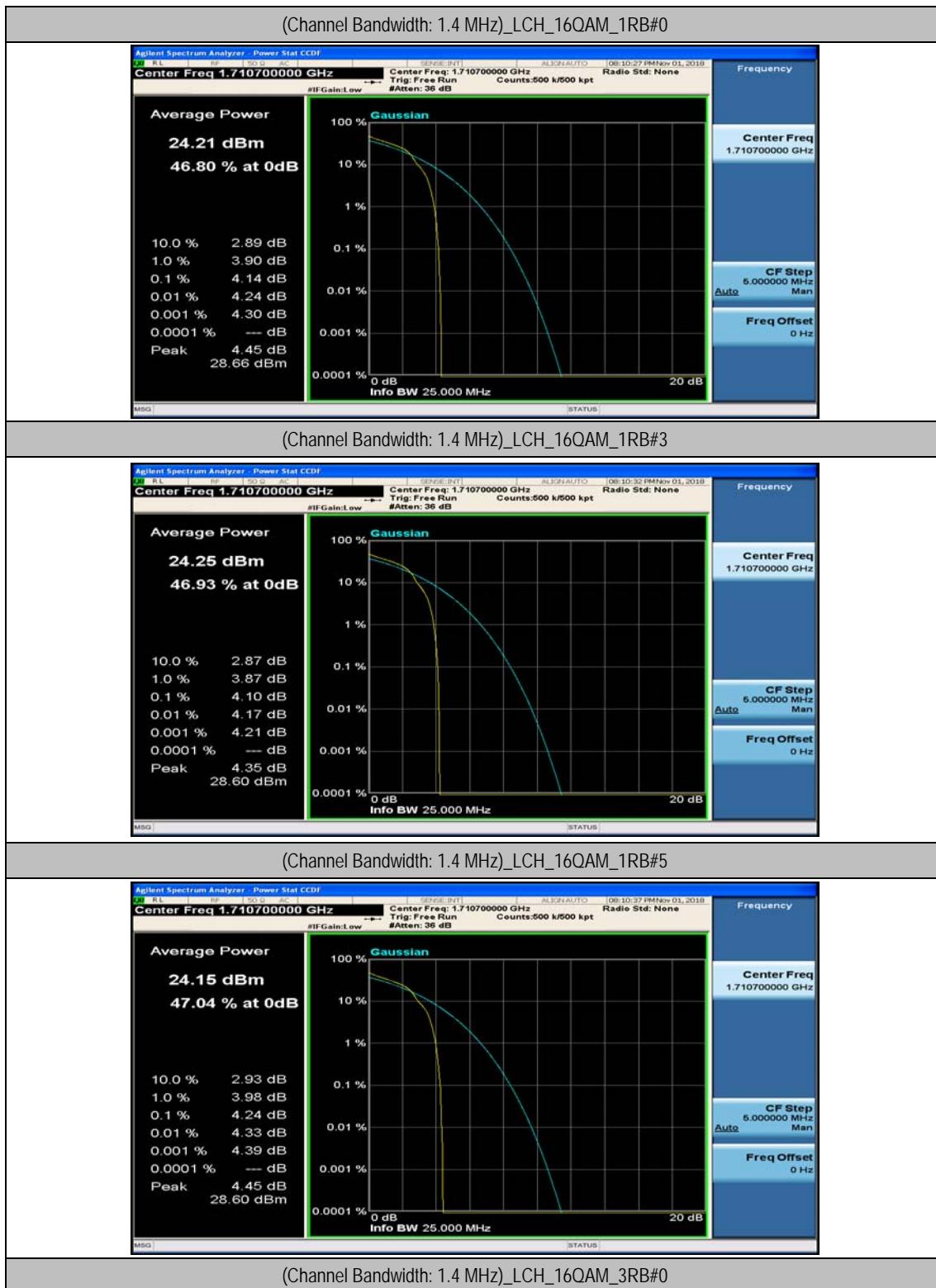


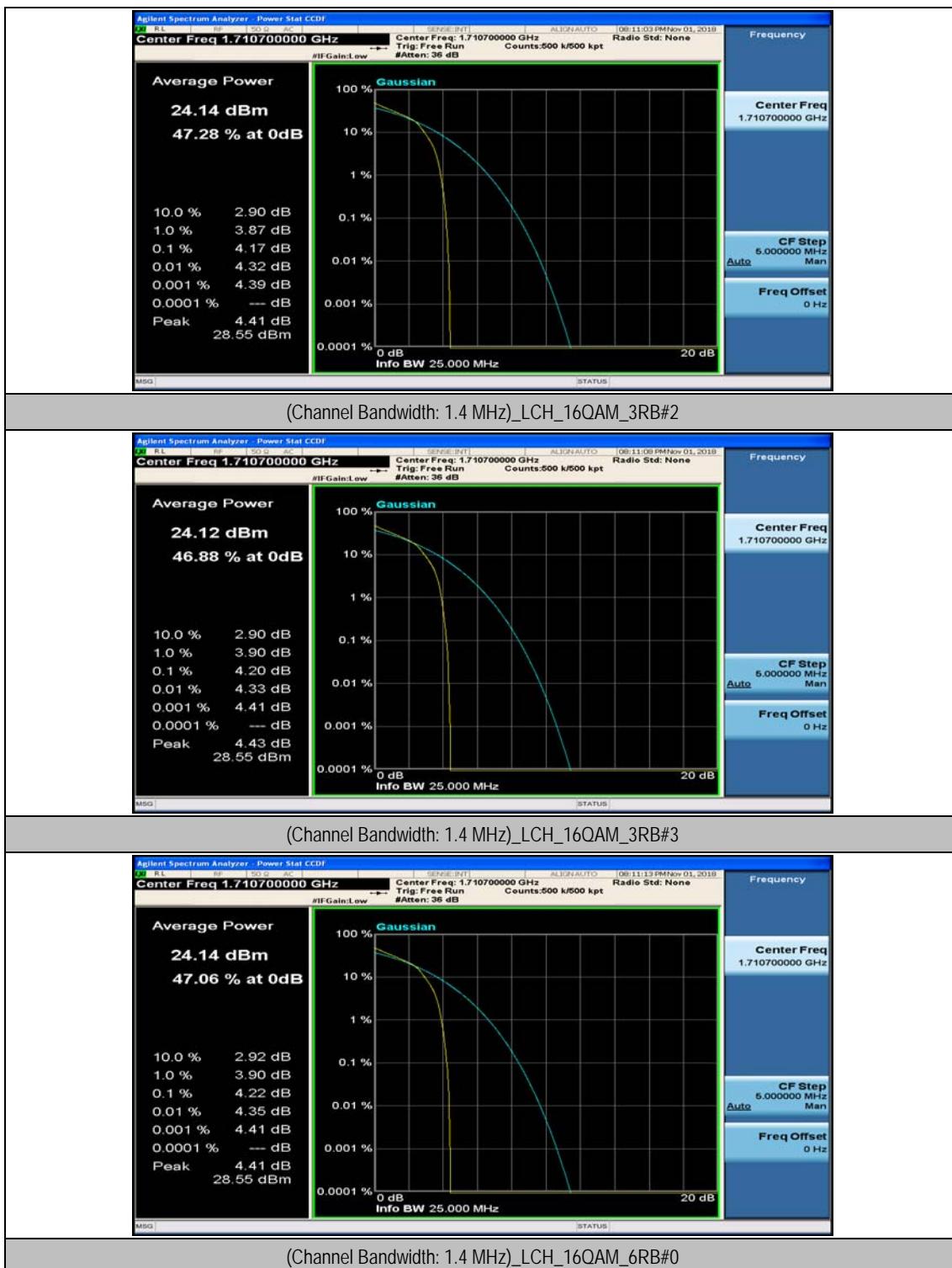


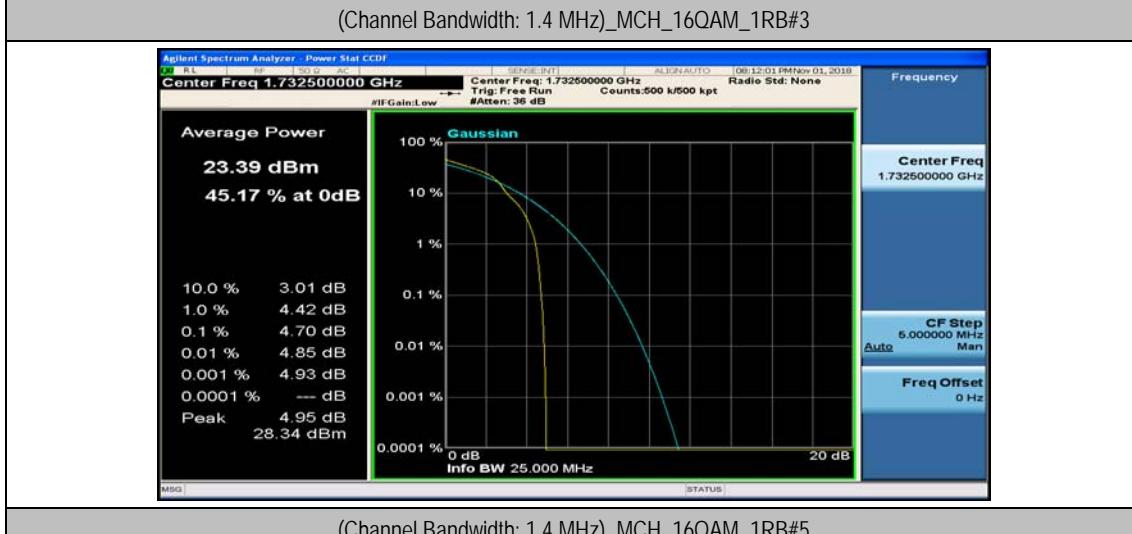
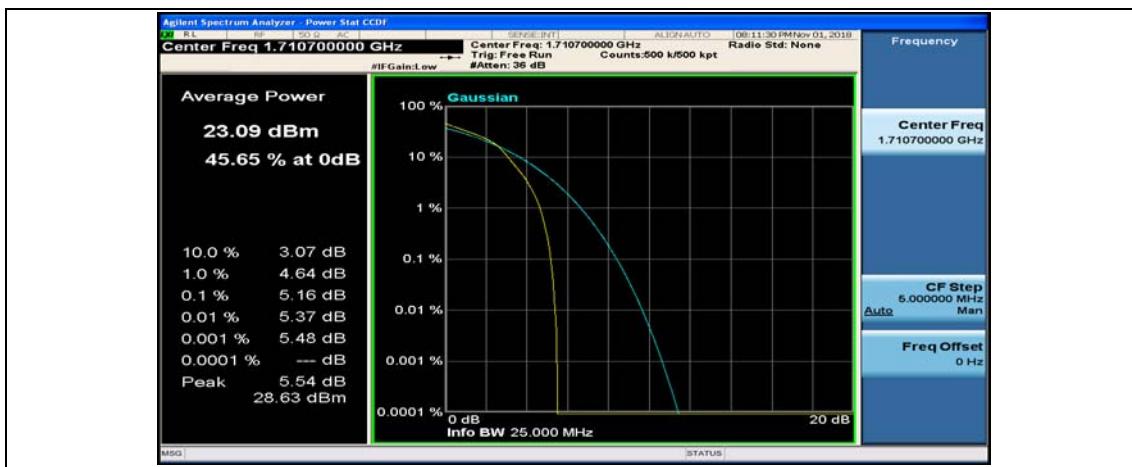


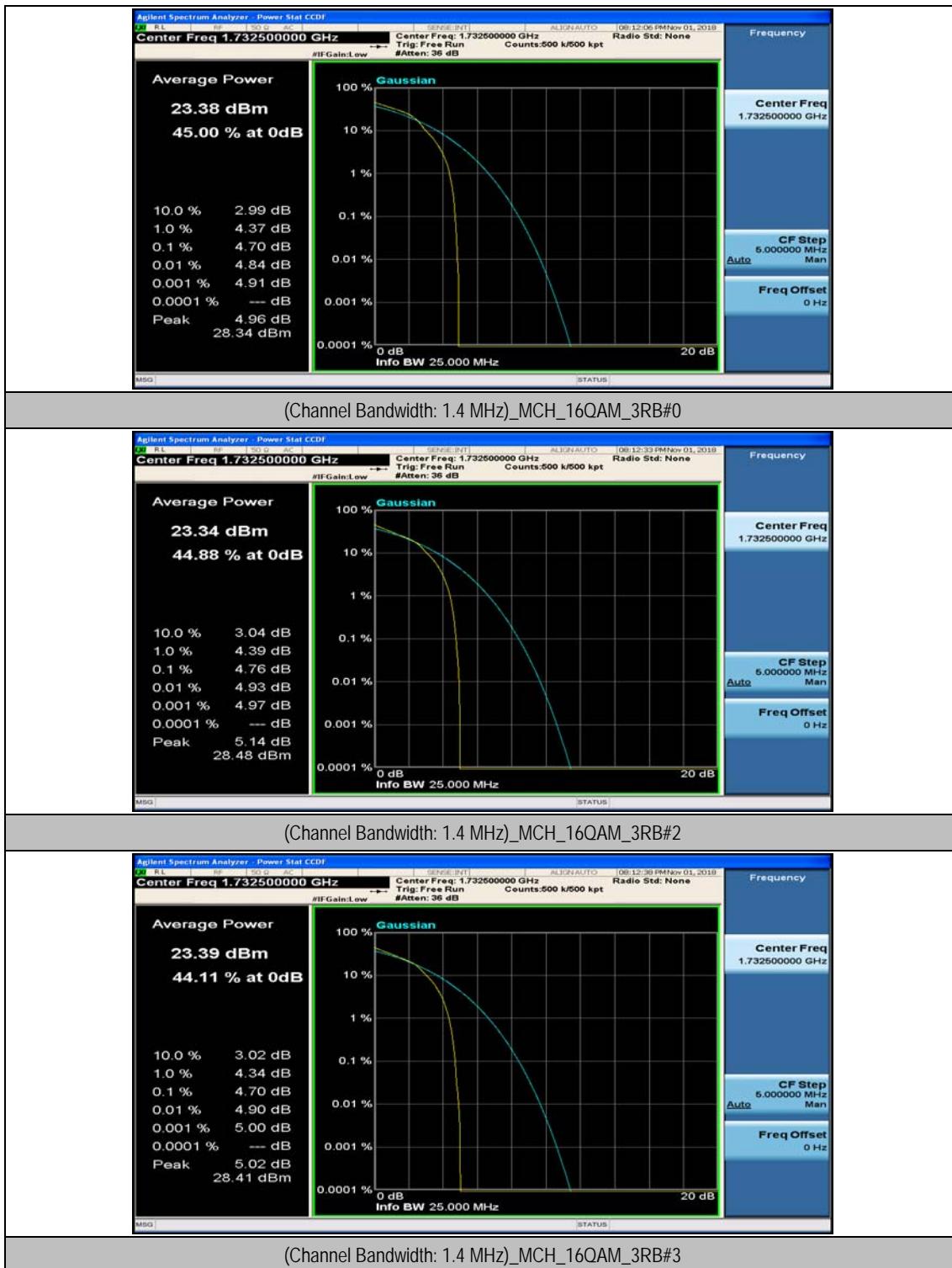


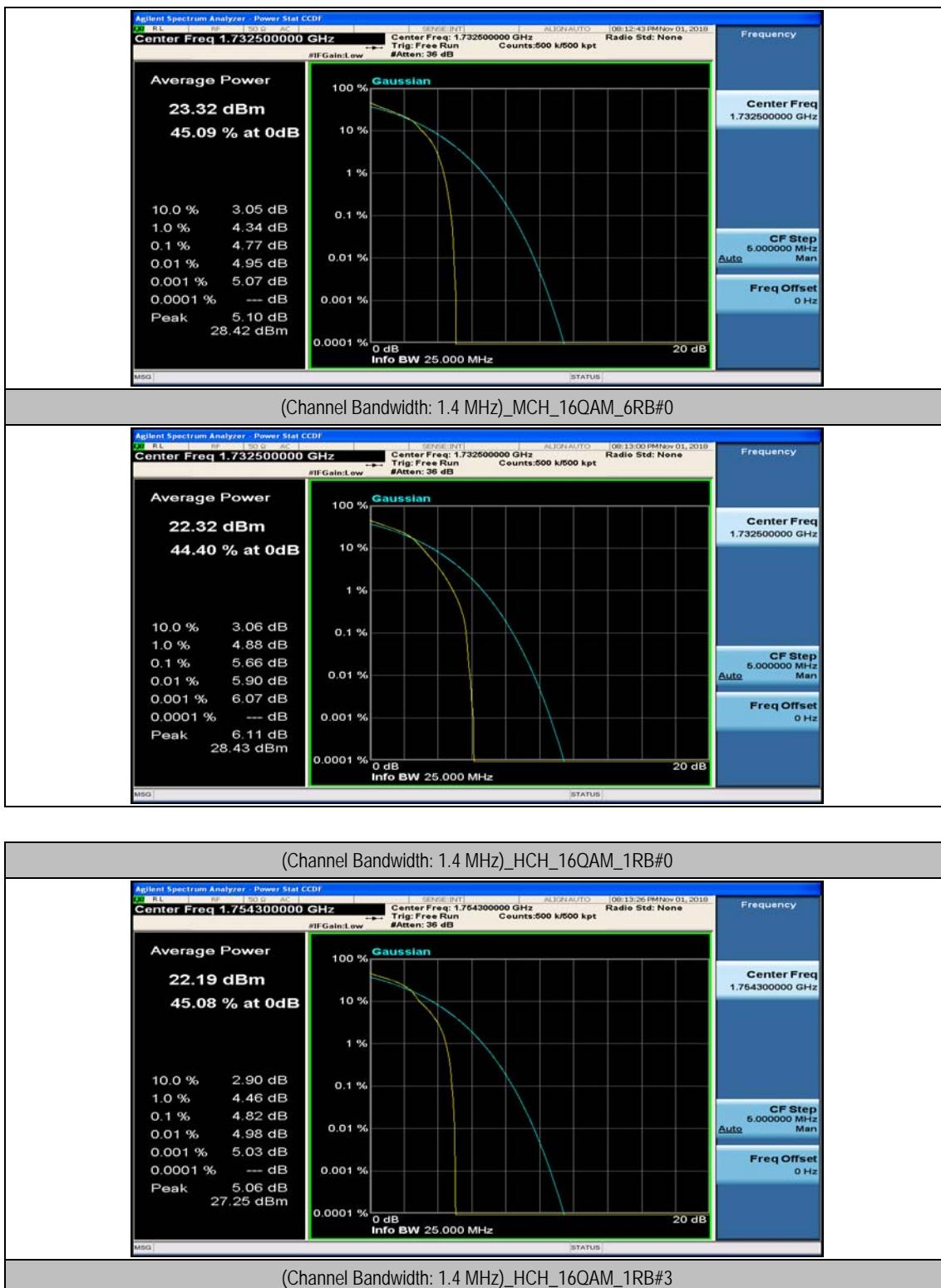


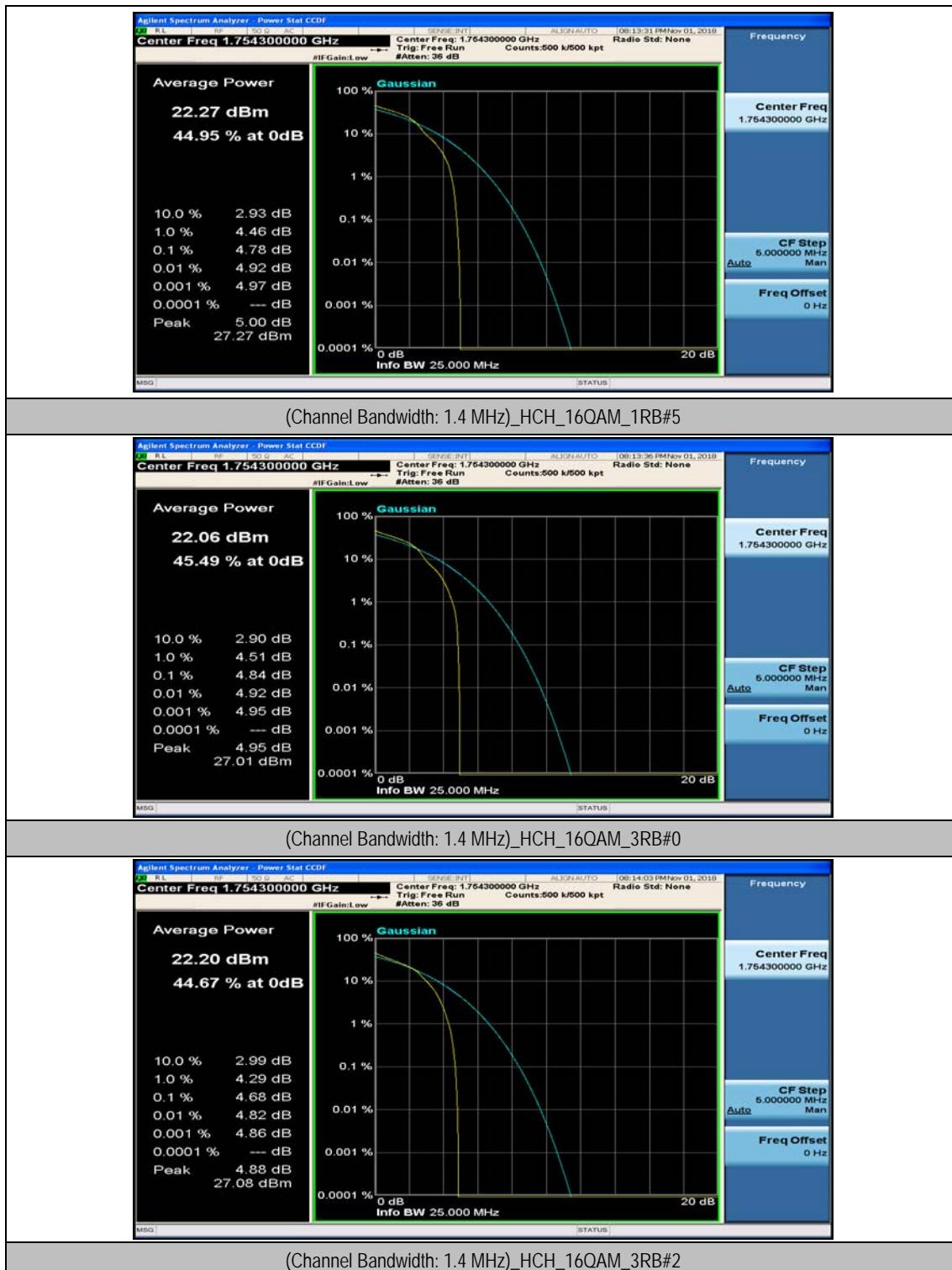


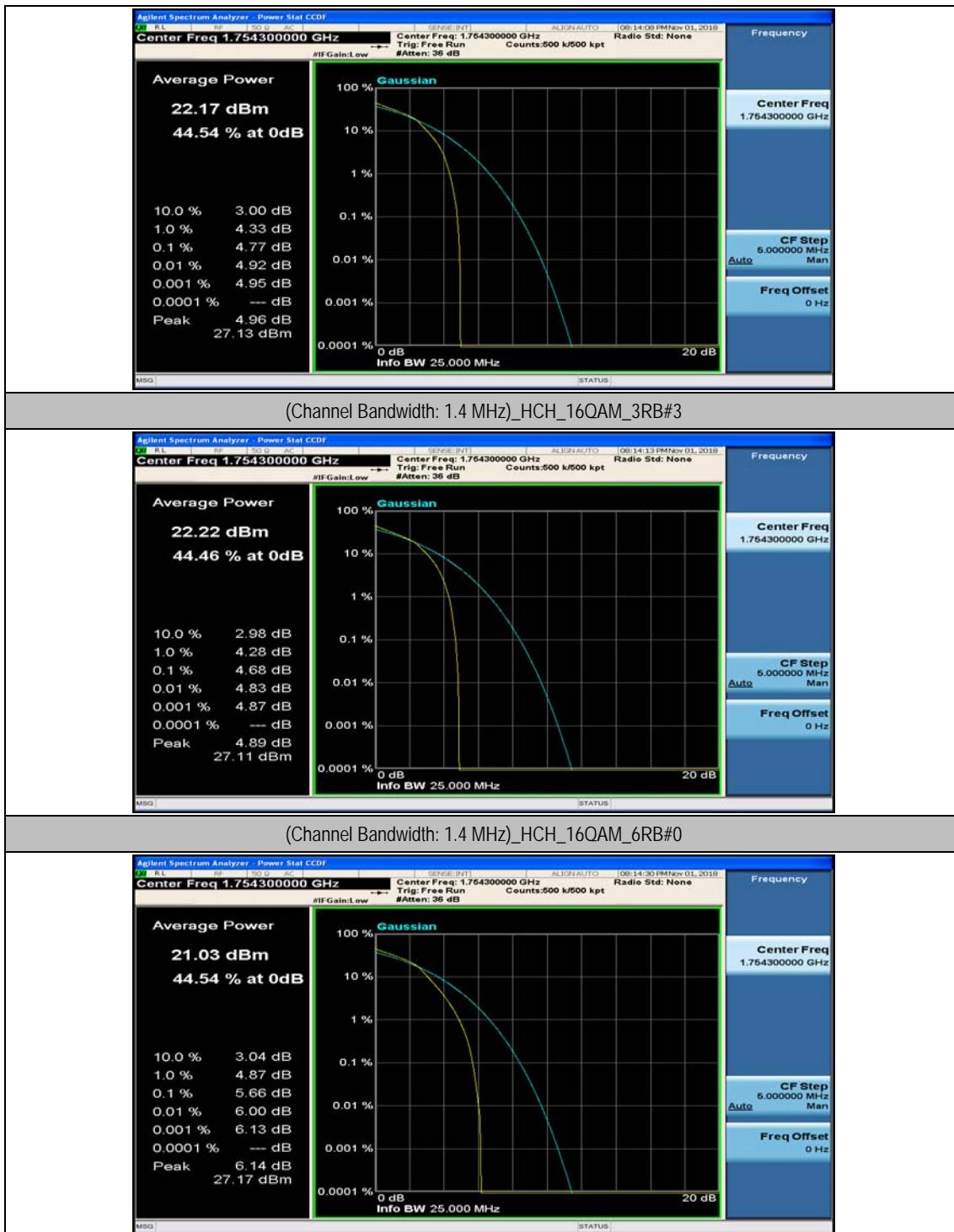




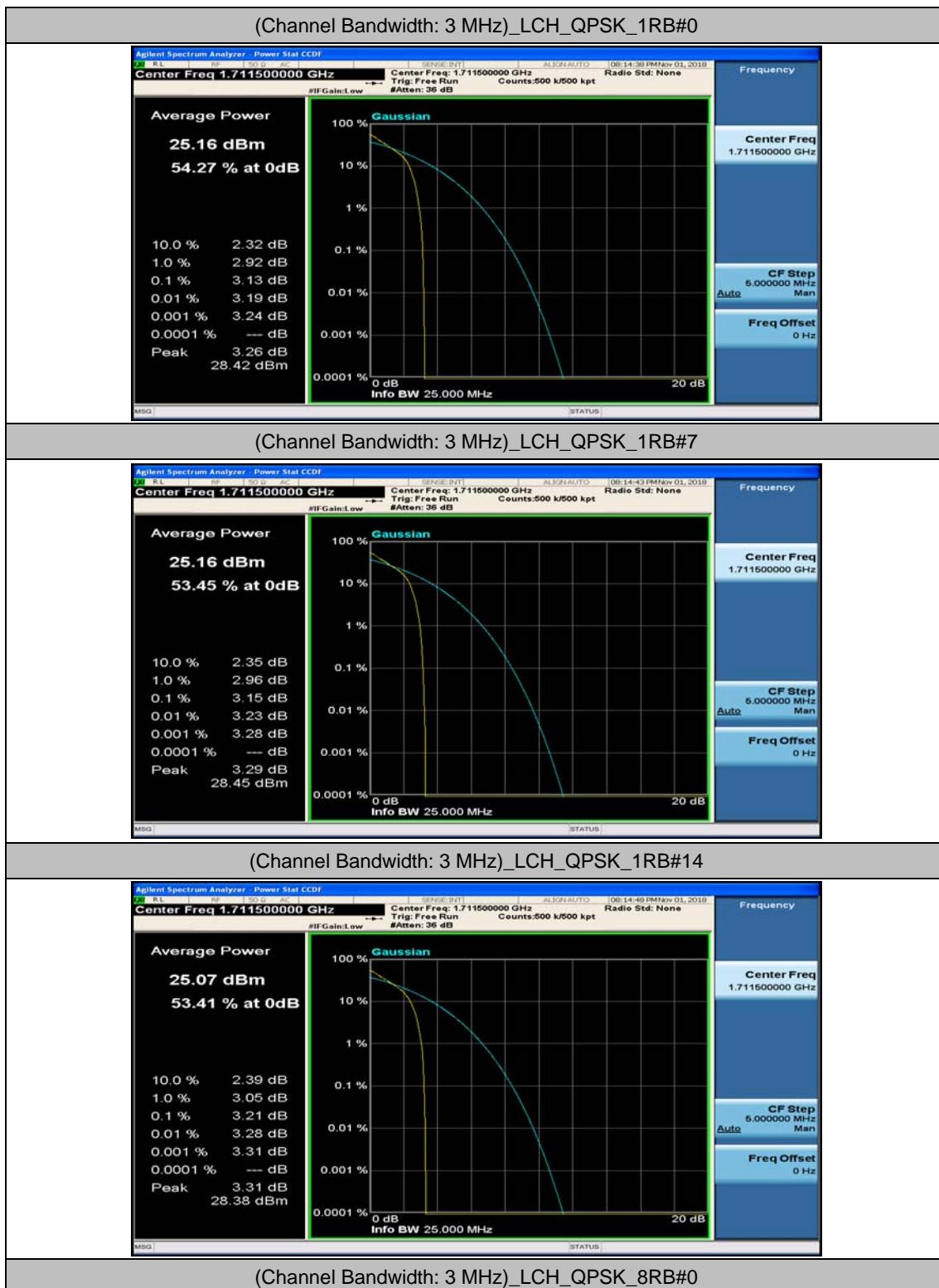


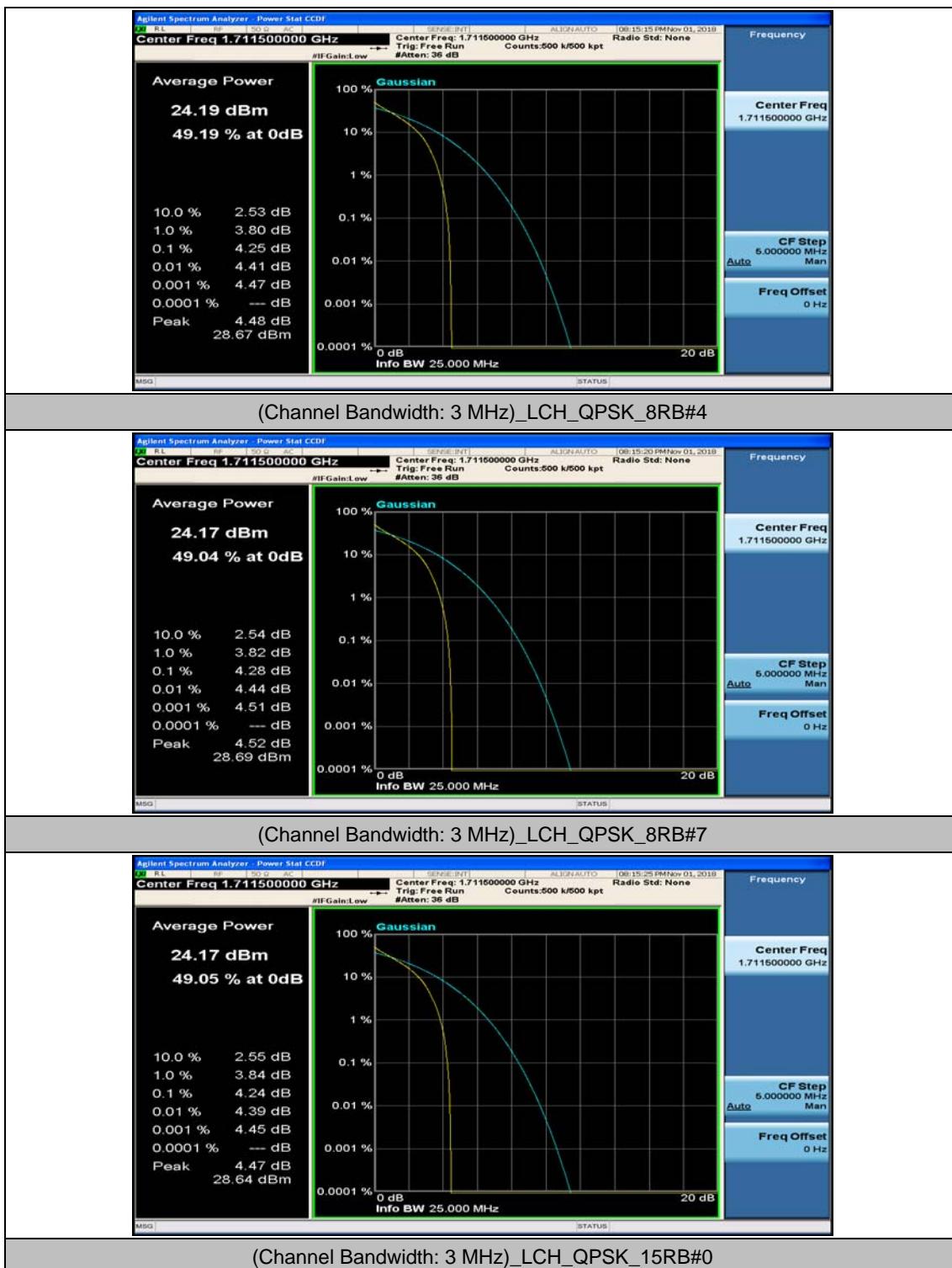


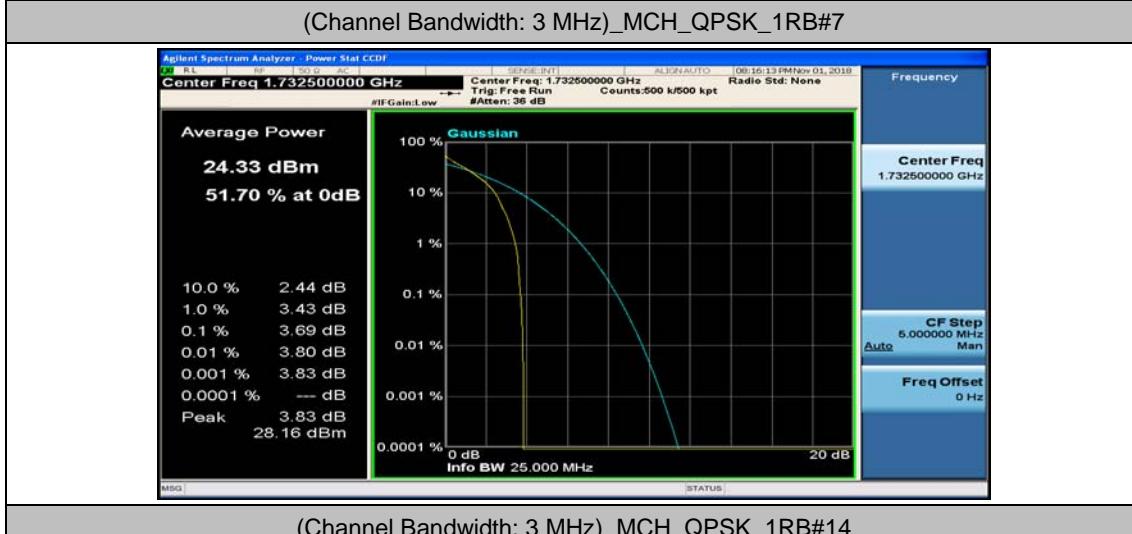
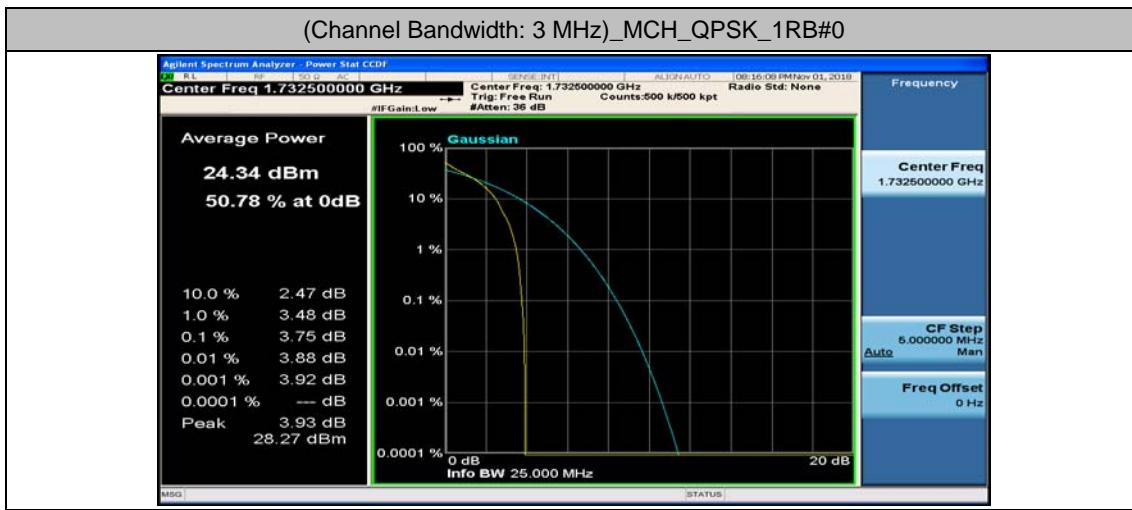
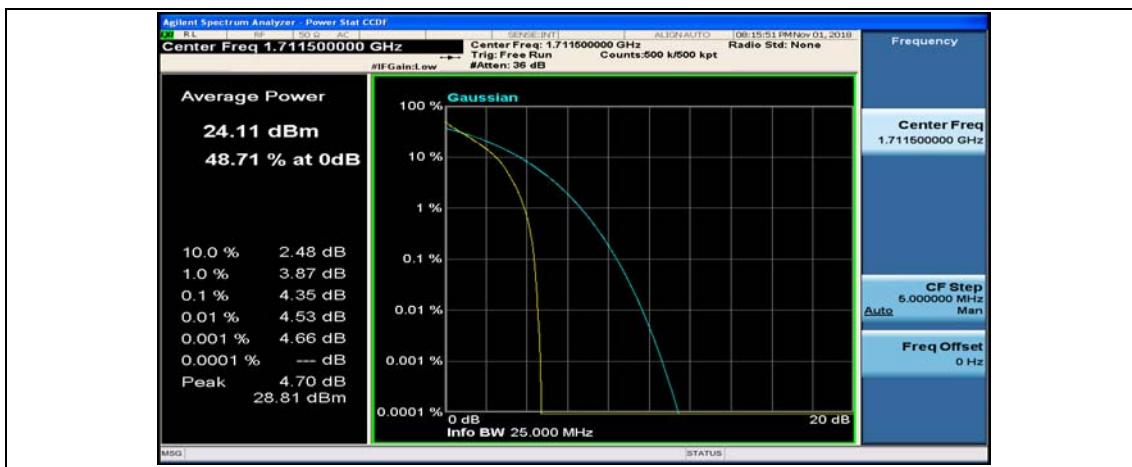


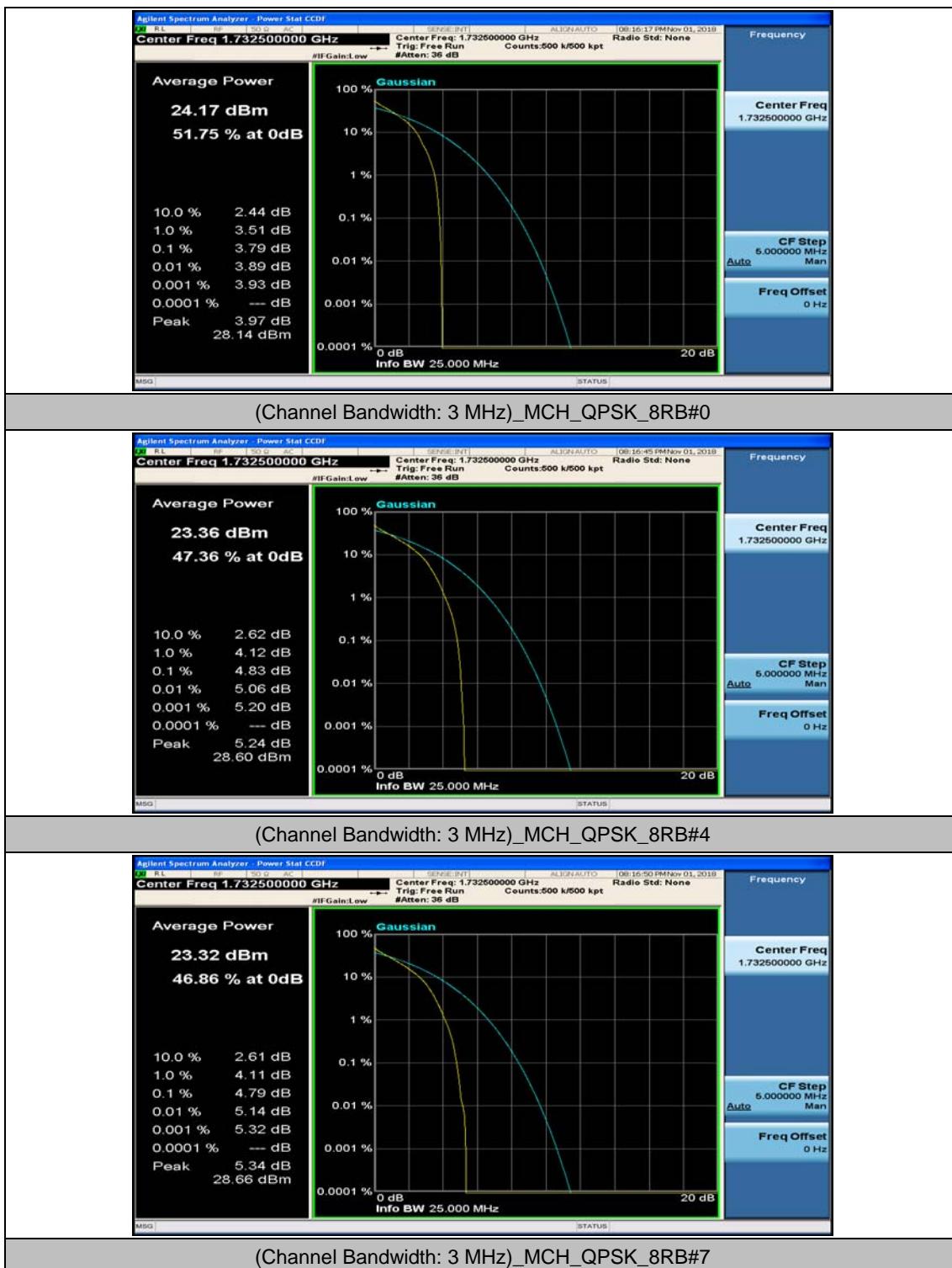


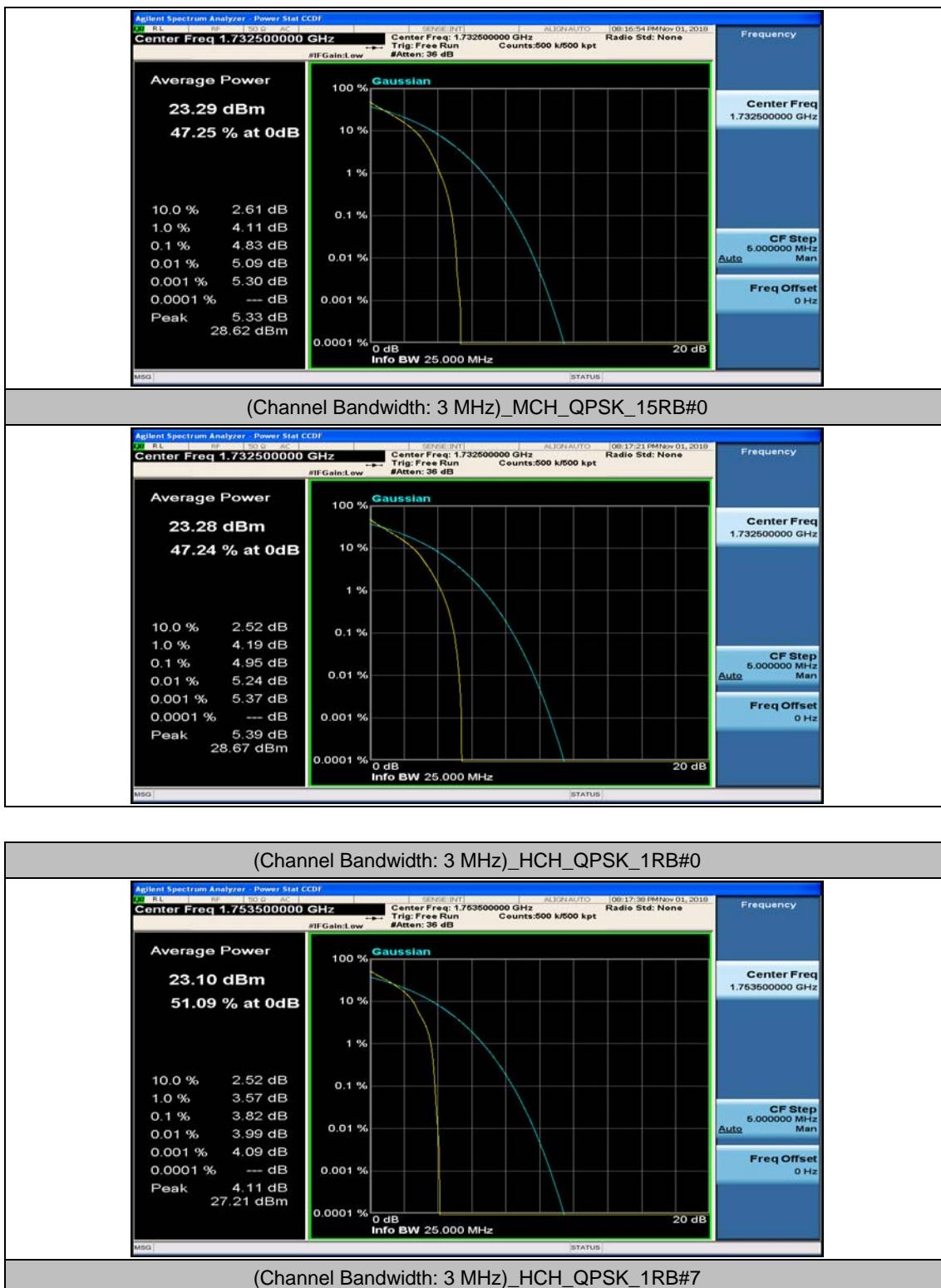
Channel Bandwidth: 3 MHz

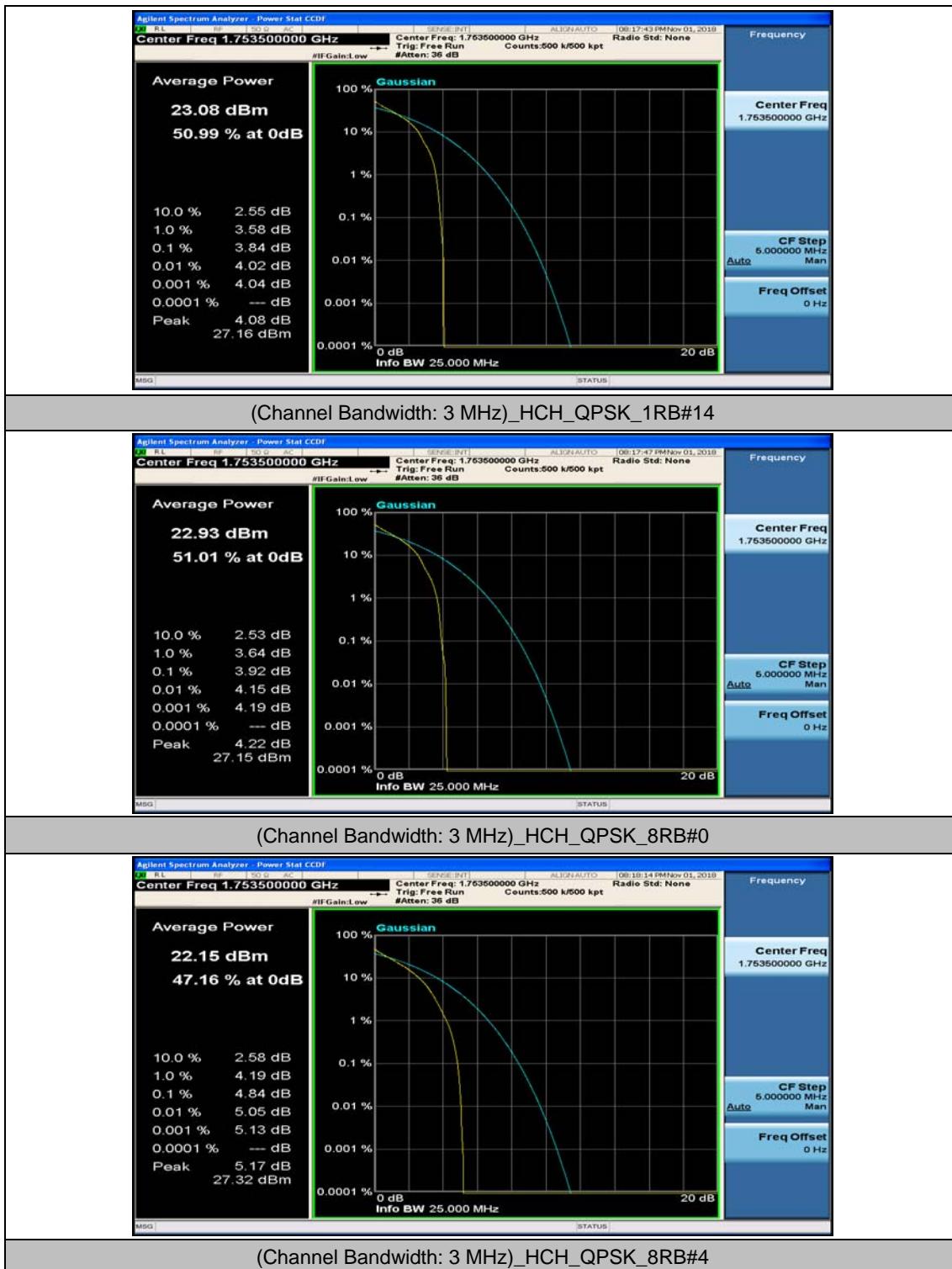


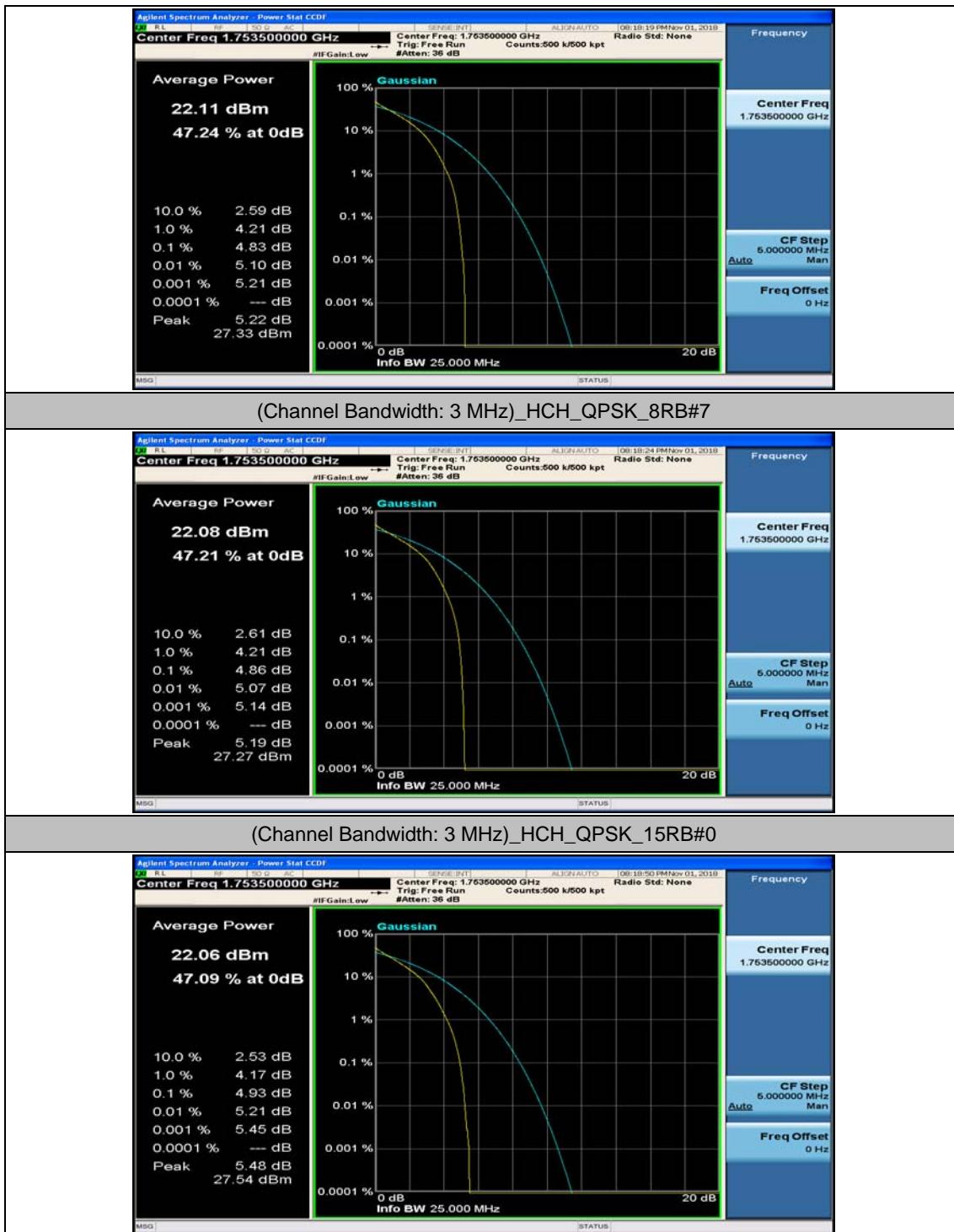


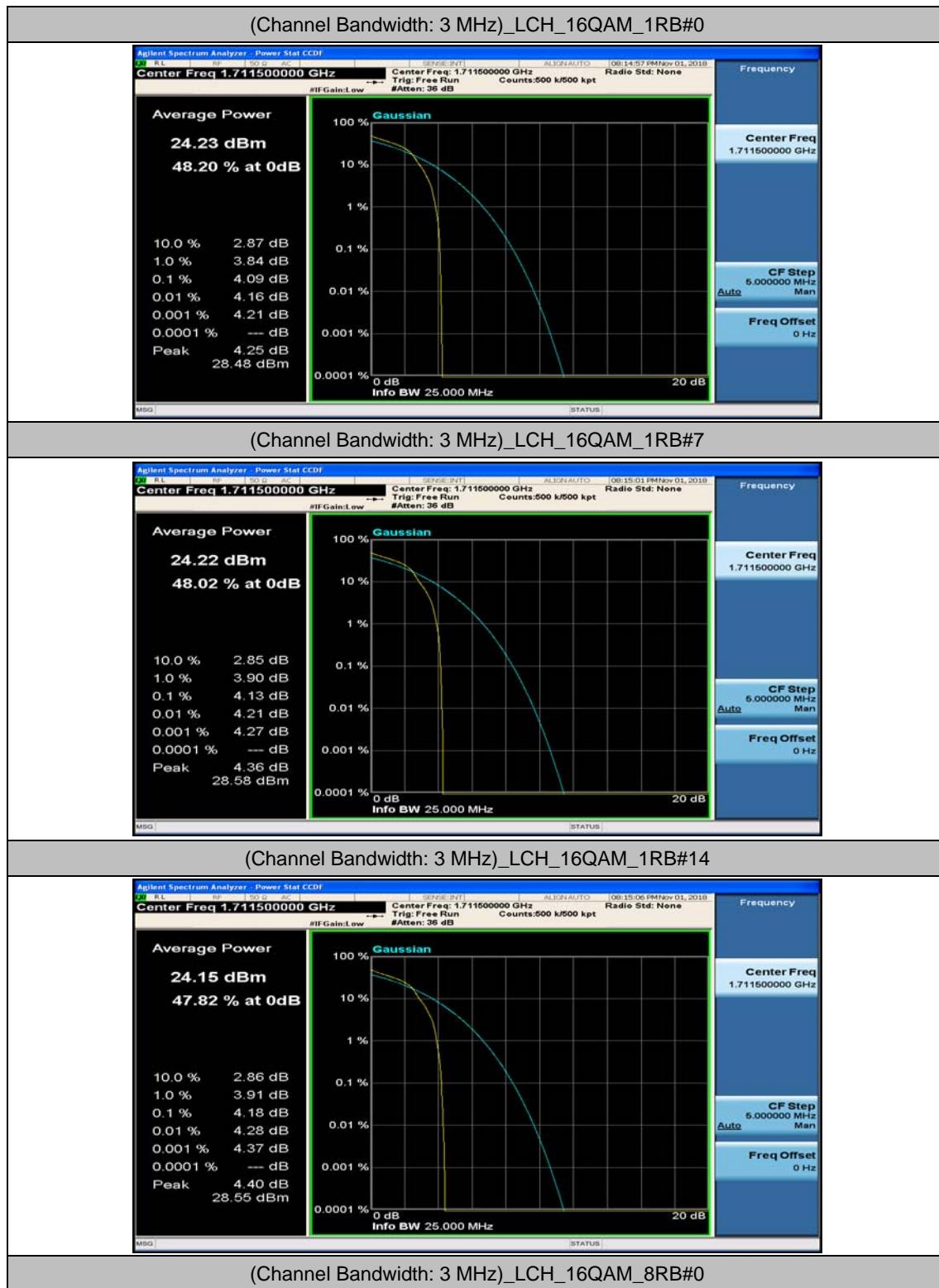


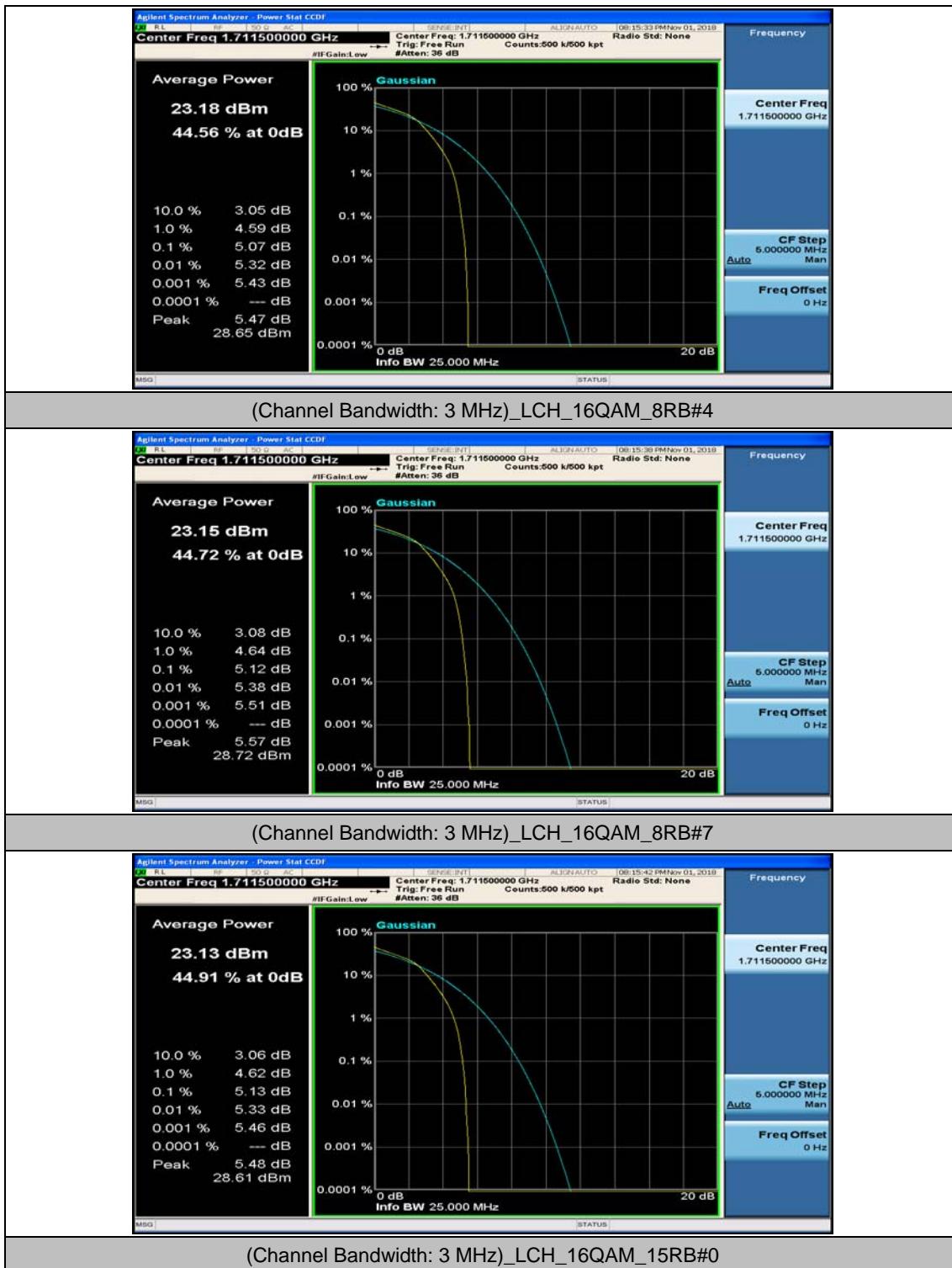


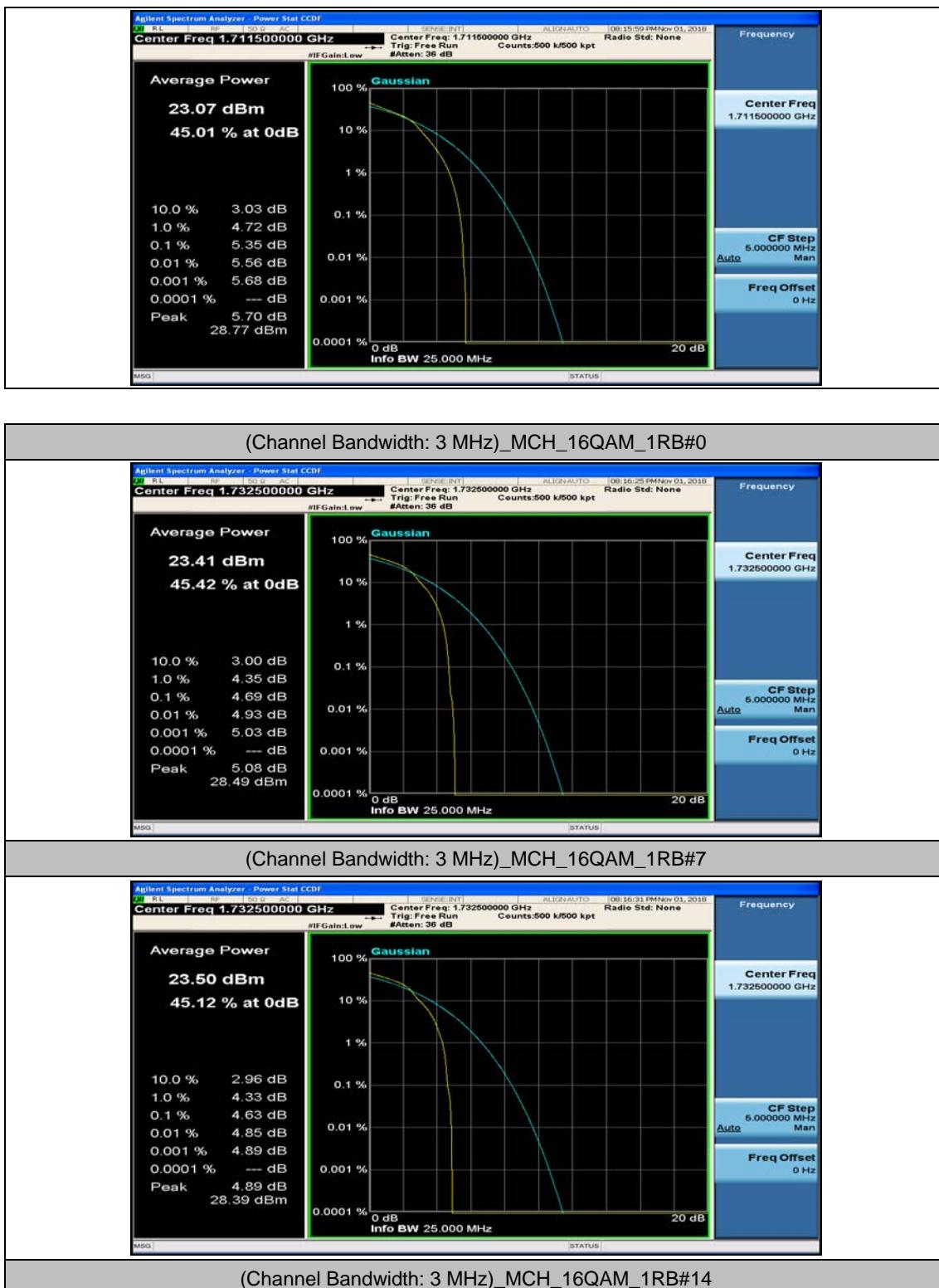


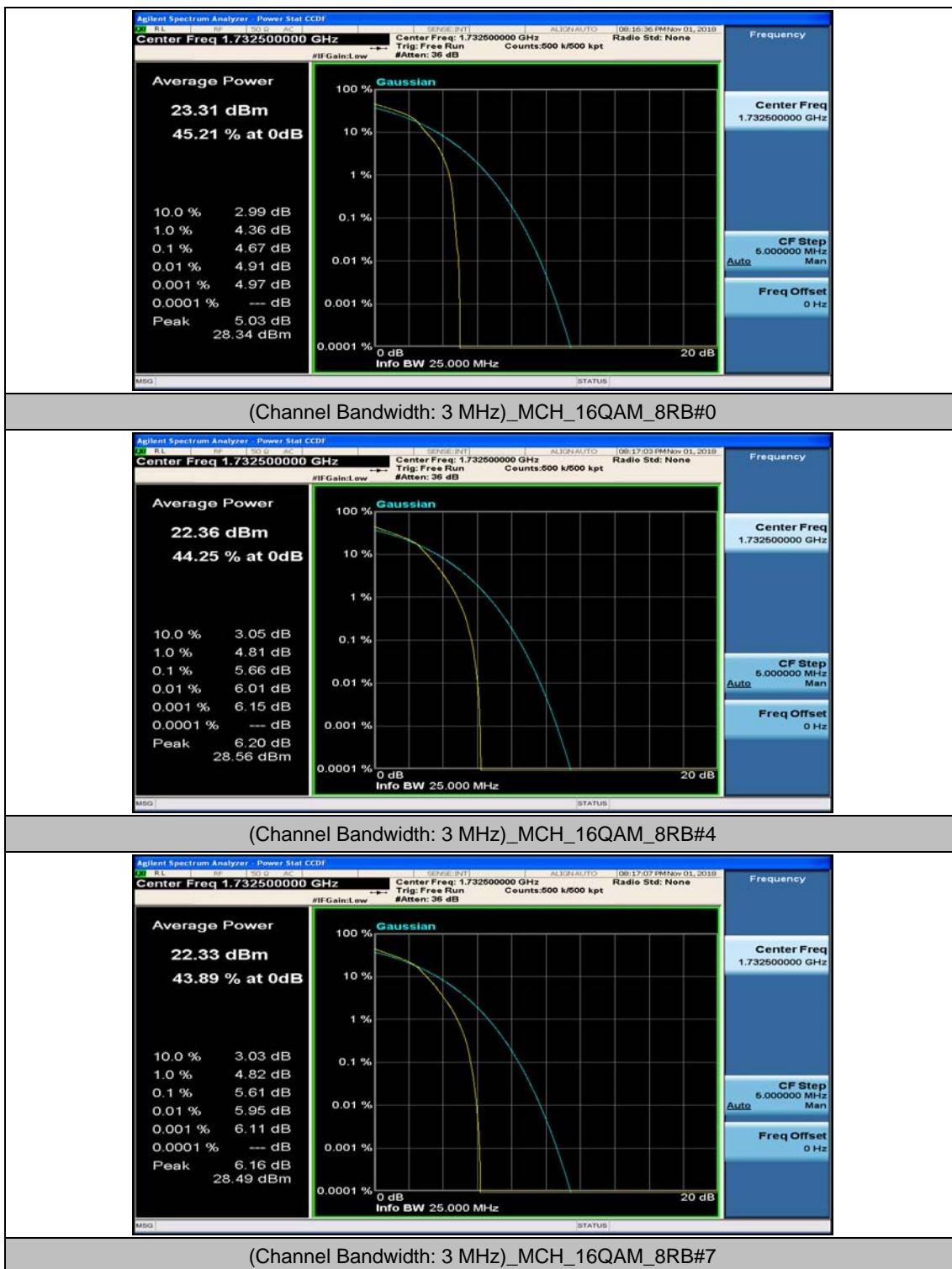


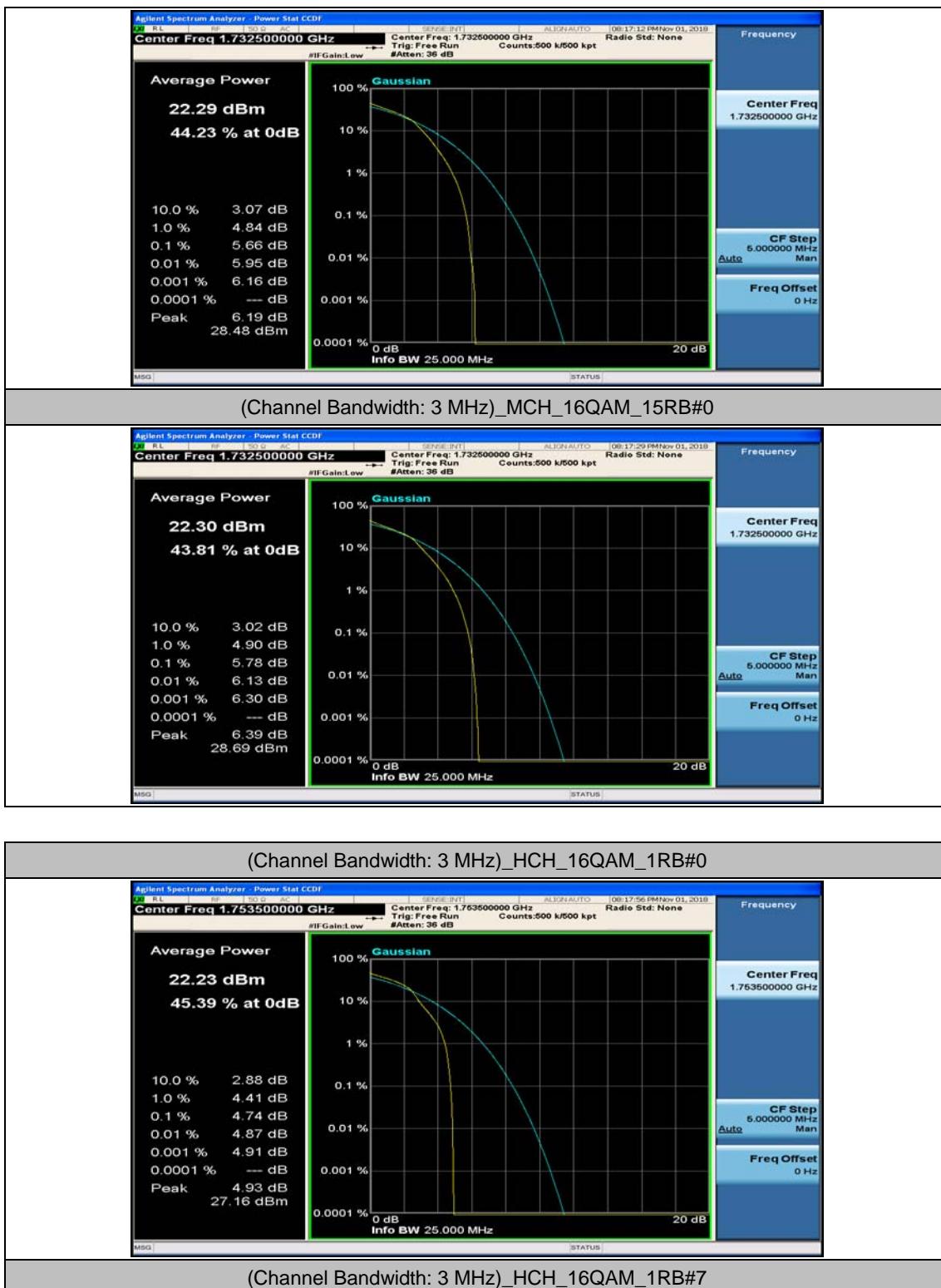


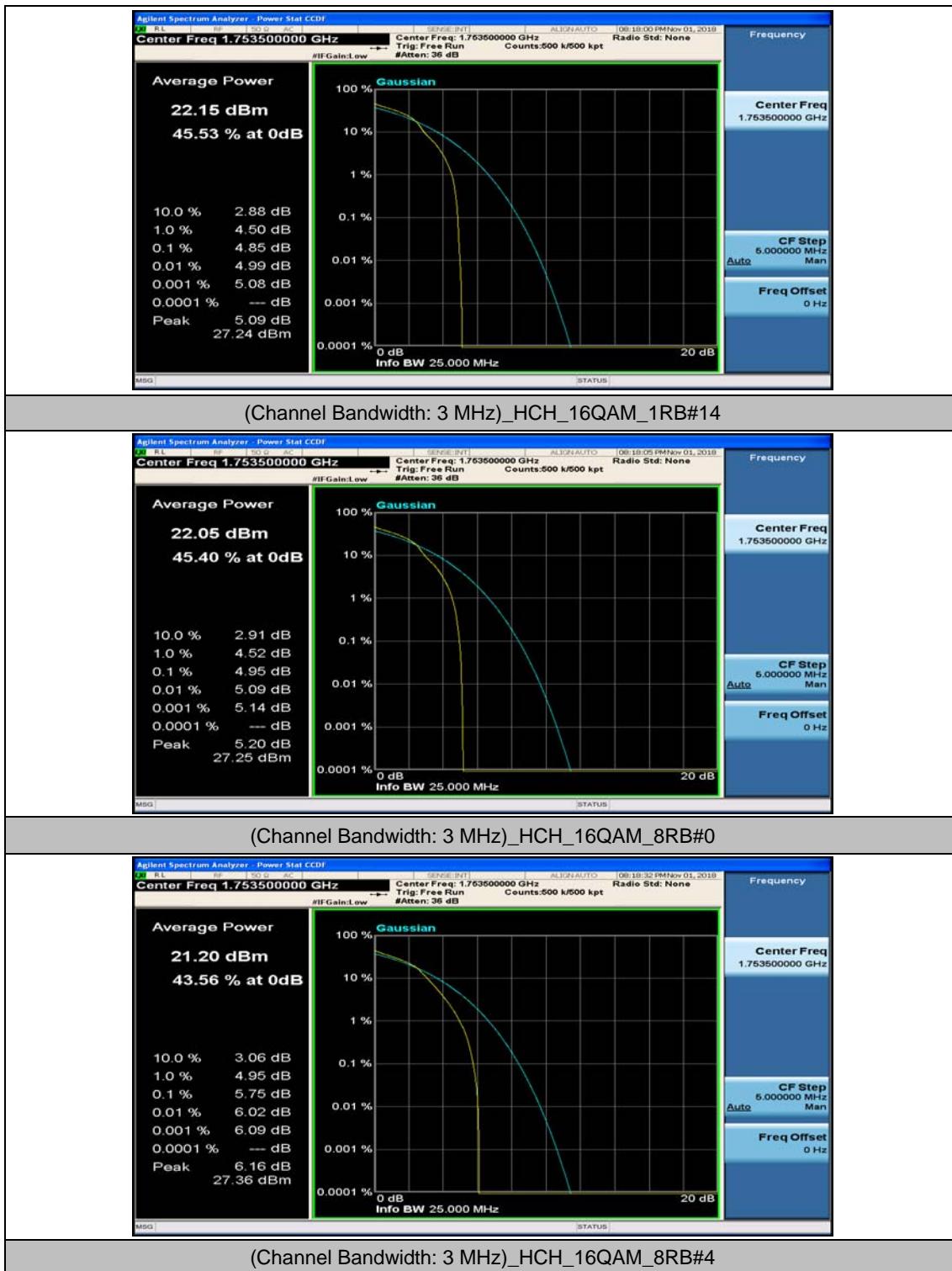


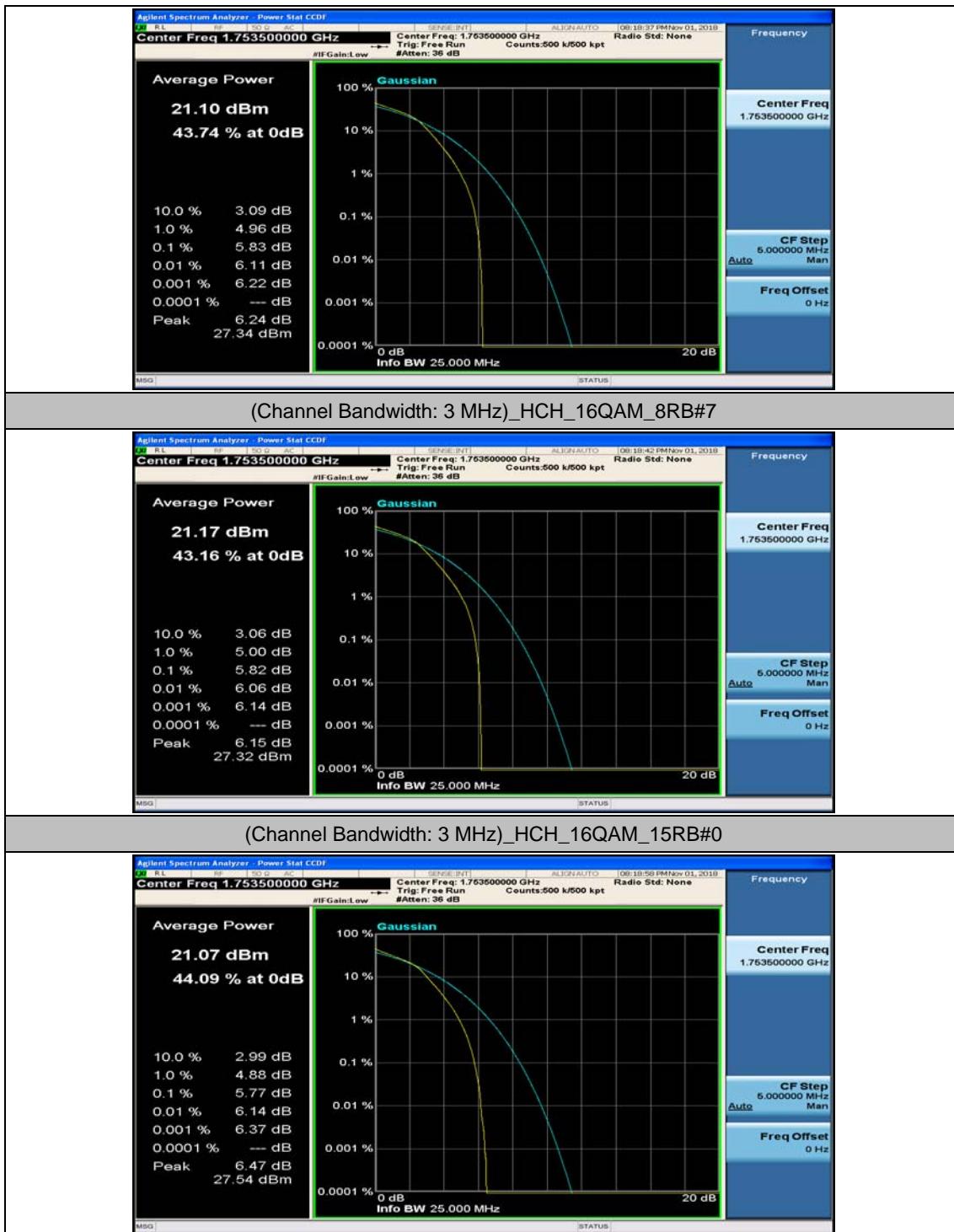




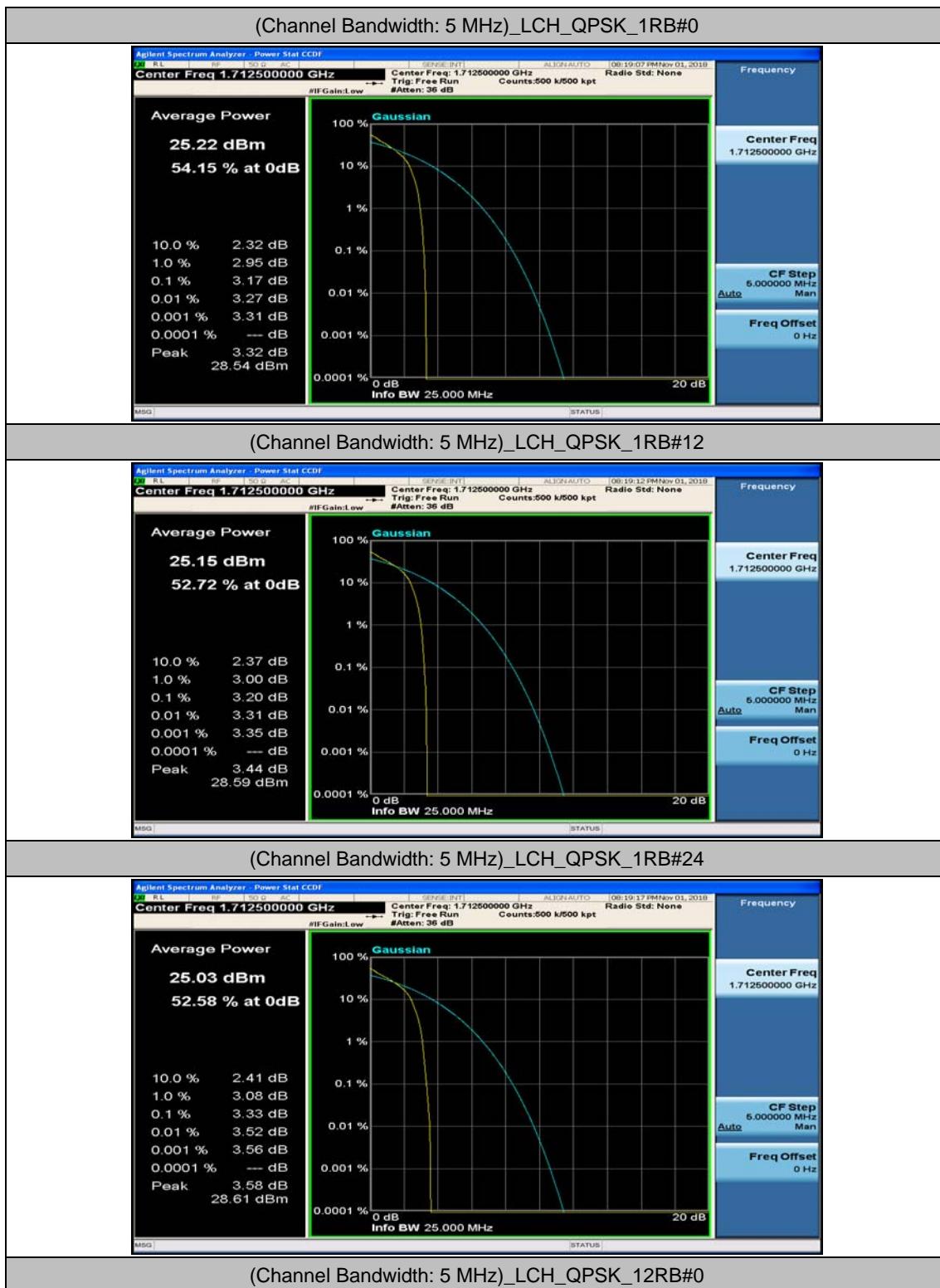


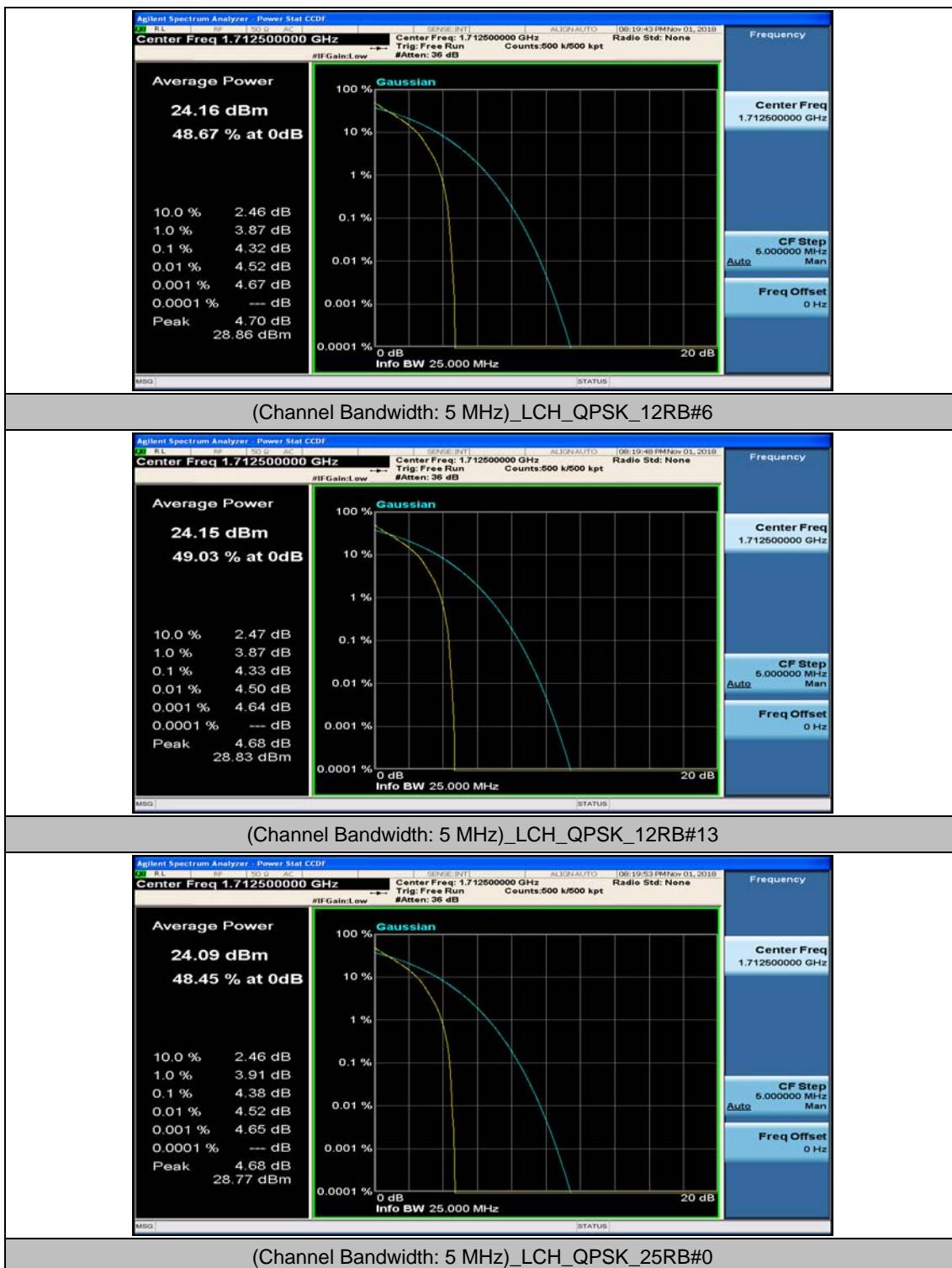


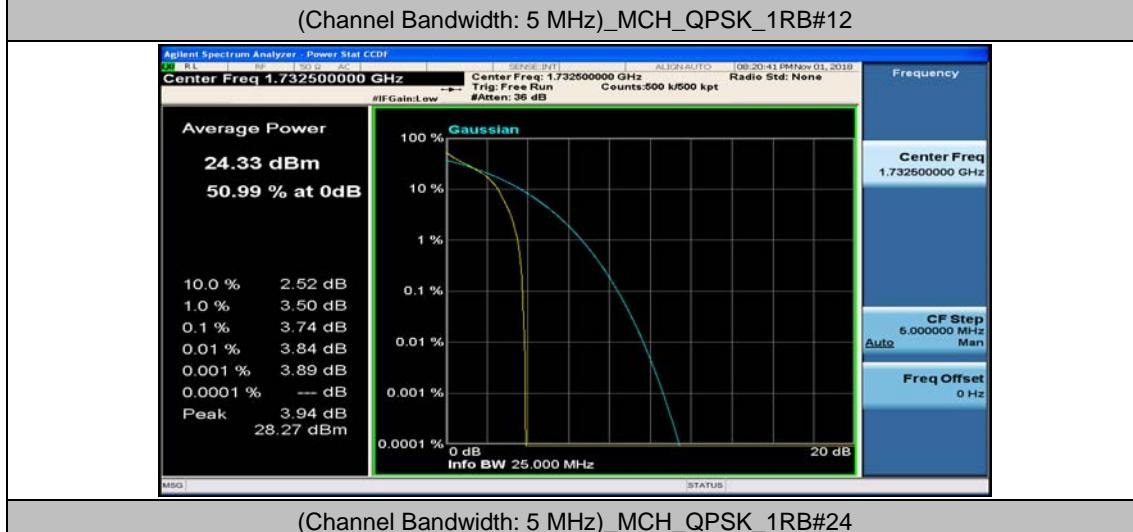
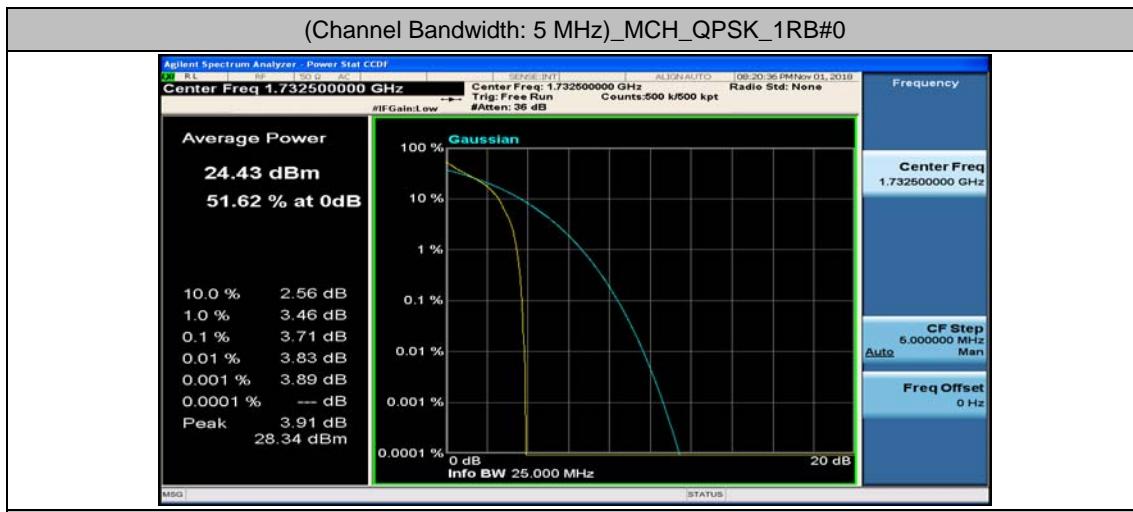
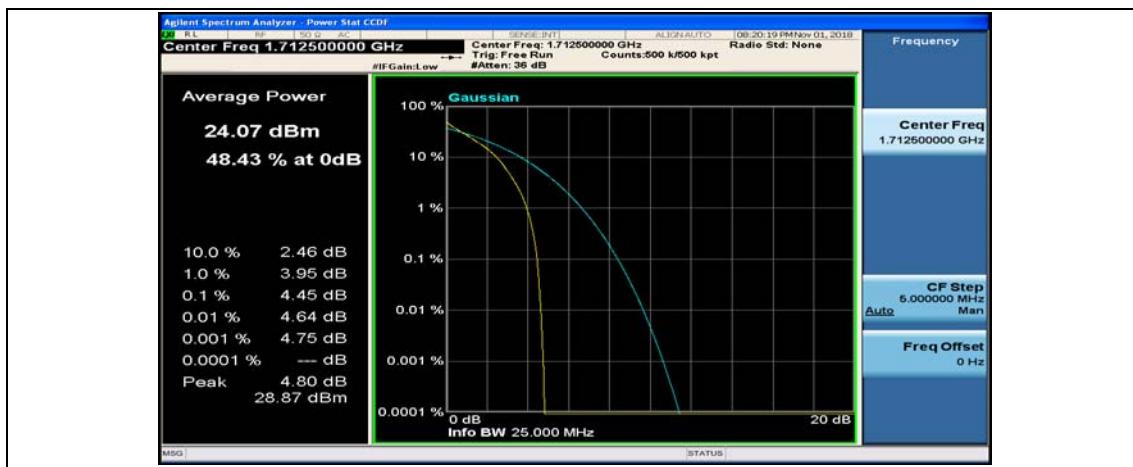




Channel Bandwidth: 5 MHz





**(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24**

