

Appendix for Band 5

Product Name: TD-LTE Wireless Data Terminal

Model No: TC50

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	22.21	PASS
		1	3	22.37	PASS
		1	5	22.24	PASS
		3	0	22.25	PASS
		3	2	22.29	PASS
		3	3	22.26	PASS
		6	0	21.30	PASS
	MCH	1	0	22.43	PASS
		1	3	22.50	PASS
		1	5	22.40	PASS
		3	0	22.41	PASS
		3	2	22.44	PASS
		3	3	22.41	PASS
		6	0	21.46	PASS
	HCH	1	0	22.57	PASS
		1	3	22.72	PASS
		1	5	22.63	PASS
		3	0	22.58	PASS
		3	2	22.65	PASS
		3	3	22.66	PASS
		6	0	21.66	PASS
16QAM	LCH	1	0	21.35	PASS
		1	3	21.58	PASS
		1	5	21.39	PASS
		3	0	21.31	PASS
		3	2	21.36	PASS

		3	3	21.33	PASS
		6	0	20.25	PASS
	MCH	1	0	21.71	PASS
		1	3	21.88	PASS
		1	5	21.70	PASS
		3	0	21.38	PASS
		3	2	21.41	PASS
		3	3	21.38	PASS
		6	0	20.39	PASS
	HCH	1	0	21.75	PASS
		1	3	21.99	PASS
		1	5	21.79	PASS
		3	0	21.63	PASS
		3	2	21.64	PASS
		3	3	21.69	PASS
		6	0	20.74	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.27	PASS
		1	7	22.58	PASS
		1	14	22.33	PASS
		8	0	21.35	PASS
		8	4	21.35	PASS
		8	7	21.35	PASS
		15	0	21.29	PASS
	MCH	1	0	22.44	PASS
		1	7	22.73	PASS
		1	14	22.46	PASS
		8	0	21.44	PASS
		8	4	21.48	PASS
		8	7	21.46	PASS
		15	0	21.38	PASS
	HCH	1	0	22.65	PASS
		1	7	22.84	PASS
		1	14	22.65	PASS
		8	0	21.60	PASS
		8	4	21.70	PASS
		8	7	21.61	PASS
		15	0	21.58	PASS

16QAM	LCH	1	0	21.50	PASS
		1	7	21.70	PASS
		1	14	21.55	PASS
		8	0	20.42	PASS
		8	4	20.45	PASS
		8	7	20.43	PASS
		15	0	20.27	PASS
	MCH	1	0	21.77	PASS
		1	7	22.01	PASS
		1	14	21.78	PASS
		8	0	20.45	PASS
		8	4	20.48	PASS
		8	7	20.47	PASS
		15	0	20.41	PASS
	HCH	1	0	21.83	PASS
		1	7	22.02	PASS
		1	14	21.87	PASS
		8	0	20.50	PASS
		8	4	20.59	PASS
		8	7	20.53	PASS
		15	0	20.53	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.22	PASS
		1	12	22.57	PASS
		1	24	22.33	PASS
		12	0	21.27	PASS
		12	6	21.38	PASS
		12	13	21.32	PASS
		25	0	21.35	PASS
	MCH	1	0	22.40	PASS
		1	12	22.73	PASS
		1	24	22.39	PASS
		12	0	21.40	PASS
		12	6	21.44	PASS
		12	13	21.40	PASS
		25	0	21.43	PASS
	HCH	1	0	22.55	PASS
		1	12	22.93	PASS

		1	24	22.65	PASS
		12	0	21.63	PASS
		12	6	21.62	PASS
		12	13	21.55	PASS
		25	0	21.60	PASS
16QAM	LCH	1	0	21.45	PASS
		1	12	21.63	PASS
		1	24	21.52	PASS
		12	0	20.36	PASS
		12	6	20.48	PASS
		12	13	20.34	PASS
		25	0	20.35	PASS
	MCH	1	0	21.57	PASS
		1	12	22.01	PASS
		1	24	21.60	PASS
		12	0	20.52	PASS
		12	6	20.60	PASS
		12	13	20.52	PASS
		25	0	20.47	PASS
	HCH	1	0	21.68	PASS
		1	12	22.08	PASS
		1	24	21.77	PASS
		12	0	20.56	PASS
		12	6	20.58	PASS
		12	13	20.52	PASS
		25	0	20.56	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.30	PASS
		1	24	22.58	PASS
		1	49	22.39	PASS
		25	0	21.41	PASS
		25	12	21.40	PASS
		25	25	21.44	PASS
		50	0	21.41	PASS
	MCH	1	0	22.42	PASS
		1	24	22.97	PASS
		1	49	22.50	PASS
		25	0	21.47	PASS

		25	12	21.48	PASS
		25	25	21.51	PASS
		50	0	21.44	PASS
	HCH	1	0	22.58	PASS
		1	24	22.79	PASS
		1	49	22.66	PASS
		25	0	21.67	PASS
		25	12	21.64	PASS
		25	25	21.59	PASS
		50	0	21.58	PASS
16QAM	LCH	1	0	21.53	PASS
		1	24	21.79	PASS
		1	49	21.61	PASS
		25	0	20.42	PASS
		25	12	20.42	PASS
		25	25	20.48	PASS
		50	0	20.45	PASS
	MCH	1	0	21.74	PASS
		1	24	21.99	PASS
		1	49	21.82	PASS
		25	0	20.49	PASS
		25	12	20.55	PASS
		25	25	20.55	PASS
		50	0	20.48	PASS
	HCH	1	0	21.78	PASS
		1	24	21.98	PASS
		1	49	21.89	PASS
		25	0	20.63	PASS
		25	12	20.55	PASS
		25	25	20.50	PASS
		50	0	20.53	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	4.57	<13	PASS
		1	3	4.5	<13	PASS
		1	5	4.64	<13	PASS
		3	0	4.81	<13	PASS
		3	2	4.72	<13	PASS
		3	3	4.88	<13	PASS
		6	0	5.08	<13	PASS
	MCH	1	0	5.05	<13	PASS
		1	3	4.86	<13	PASS
		1	5	4.87	<13	PASS
		3	0	5.14	<13	PASS
		3	2	5.04	<13	PASS
		3	3	5.11	<13	PASS
		6	0	5.19	<13	PASS
	HCH	1	0	4.59	<13	PASS
		1	3	4.72	<13	PASS
		1	5	4.87	<13	PASS
		3	0	4.77	<13	PASS
		3	2	4.73	<13	PASS
		3	3	4.82	<13	PASS
		6	0	5.23	<13	PASS
16QAM	LCH	1	0	5.7	<13	PASS
		1	3	5.54	<13	PASS
		1	5	5.74	<13	PASS
		3	0	5.84	<13	PASS
		3	2	5.88	<13	PASS
		3	3	5.81	<13	PASS
		6	0	5.92	<13	PASS
	MCH	1	0	5.75	<13	PASS
		1	3	5.97	<13	PASS
		1	5	6.08	<13	PASS

		3	0	5.86	<13	PASS
		3	2	5.92	<13	PASS
		3	3	5.92	<13	PASS
		6	0	6.09	<13	PASS
	HCH	1	0	5.48	<13	PASS
		1	3	5.52	<13	PASS
		1	5	5.57	<13	PASS
		3	0	5.82	<13	PASS
		3	2	5.8	<13	PASS
		3	3	5.69	<13	PASS
		6	0	6.07	<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	4.67	<13	PASS
		1	7	4.81	<13	PASS
		1	14	4.81	<13	PASS
		8	0	5.19	<13	PASS
		8	4	5.21	<13	PASS
		8	7	5.25	<13	PASS
		15	0	5.13	<13	PASS
	MCH	1	0	4.73	<13	PASS
		1	7	4.74	<13	PASS
		1	14	4.69	<13	PASS
		8	0	5.35	<13	PASS
		8	4	5.16	<13	PASS
		8	7	5.33	<13	PASS
		15	0	5.39	<13	PASS
	HCH	1	0	4.6	<13	PASS
		1	7	4.57	<13	PASS
		1	14	4.61	<13	PASS
		8	0	5.21	<13	PASS
		8	4	5.13	<13	PASS
		8	7	5.33	<13	PASS
		15	0	5.19	<13	PASS
16QAM	LCH	1	0	5.61	<13	PASS
		1	7	5.65	<13	PASS
		1	14	5.63	<13	PASS
		8	0	5.92	<13	PASS

		8	4	5.87	<13	PASS
		8	7	5.98	<13	PASS
		15	0	6.09	<13	PASS
	MCH	1	0	5.61	<13	PASS
		1	7	5.57	<13	PASS
		1	14	5.68	<13	PASS
		8	0	5.97	<13	PASS
		8	4	5.95	<13	PASS
		8	7	5.89	<13	PASS
		15	0	6.11	<13	PASS
	HCH	1	0	5.48	<13	PASS
		1	7	5.55	<13	PASS
		1	14	5.6	<13	PASS
		8	0	6.22	<13	PASS
		8	4	6.21	<13	PASS
		8	7	6.25	<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	4.97	<13	PASS
		1	12	4.91	<13	PASS
		1	24	5.22	<13	PASS
		12	0	5.18	<13	PASS
		12	6	5.18	<13	PASS
		12	13	5.27	<13	PASS
		25	0	5.29	<13	PASS
	MCH	1	0	4.91	<13	PASS
		1	12	4.94	<13	PASS
		1	24	4.9	<13	PASS
		12	0	5.26	<13	PASS
		12	6	5.18	<13	PASS
		12	13	5.21	<13	PASS
		25	0	5.3	<13	PASS
	HCH	1	0	4.53	<13	PASS
		1	12	4.49	<13	PASS
		1	24	4.6	<13	PASS
		12	0	5.16	<13	PASS
		12	6	5.17	<13	PASS

		12	13	5.26	<13	PASS
		25	0	5.22	<13	PASS
16QAM	LCH	1	0	5.71	<13	PASS
		1	12	5.7	<13	PASS
		1	24	5.93	<13	PASS
		12	0	6.04	<13	PASS
		12	6	6.1	<13	PASS
		12	13	6.2	<13	PASS
		25	0	5.94	<13	PASS
		25	0	5.94	<13	PASS
	MCH	1	0	5.88	<13	PASS
		1	12	5.89	<13	PASS
		1	24	5.93	<13	PASS
		12	0	5.97	<13	PASS
		12	6	5.97	<13	PASS
		12	13	6.03	<13	PASS
		25	0	6.12	<13	PASS
	HCH	1	0	5.54	<13	PASS
		1	12	5.46	<13	PASS
		1	24	5.6	<13	PASS
		12	0	5.96	<13	PASS
		12	6	6	<13	PASS
		12	13	6.04	<13	PASS
		25	0	5.94	<13	PASS

Channel Bandwidth: 10 MHz

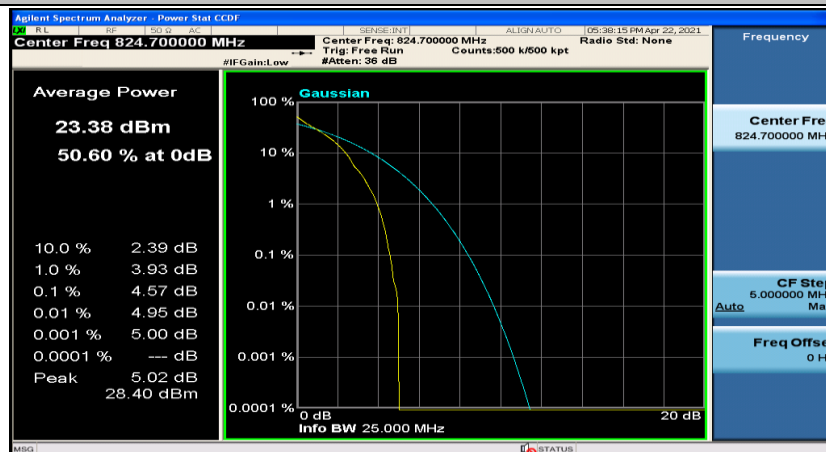
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.7	<13	PASS
		1	24	4.92	<13	PASS
		1	49	5.04	<13	PASS
		25	0	5.23	<13	PASS
		25	12	5.26	<13	PASS
		25	25	5.37	<13	PASS
		50	0	5.31	<13	PASS
	MCH	1	0	4.81	<13	PASS
		1	24	4.75	<13	PASS
		1	49	4.58	<13	PASS
		25	0	5.39	<13	PASS
		25	12	5.31	<13	PASS
		25	25	5.25	<13	PASS

		50	0	5.29	<13	PASS
	HCH	1	0	4.65	<13	PASS
		1	24	4.55	<13	PASS
		1	49	4.68	<13	PASS
		25	0	5.08	<13	PASS
		25	12	5.09	<13	PASS
		25	25	5.14	<13	PASS
		50	0	5.13	<13	PASS
16QAM	LCH	1	0	5.64	<13	PASS
		1	24	5.91	<13	PASS
		1	49	5.81	<13	PASS
		25	0	5.99	<13	PASS
		25	12	6.16	<13	PASS
		25	25	6.15	<13	PASS
		50	0	6.02	<13	PASS
	MCH	1	0	5.87	<13	PASS
		1	24	5.81	<13	PASS
		1	49	5.55	<13	PASS
		25	0	6.16	<13	PASS
		25	12	6.08	<13	PASS
		25	25	6.06	<13	PASS
		50	0	6.01	<13	PASS
	HCH	1	0	5.75	<13	PASS
		1	24	5.59	<13	PASS
		1	49	5.44	<13	PASS
		25	0	5.95	<13	PASS
		25	12	6.01	<13	PASS
		25	25	6.07	<13	PASS
		50	0	5.96	<13	PASS

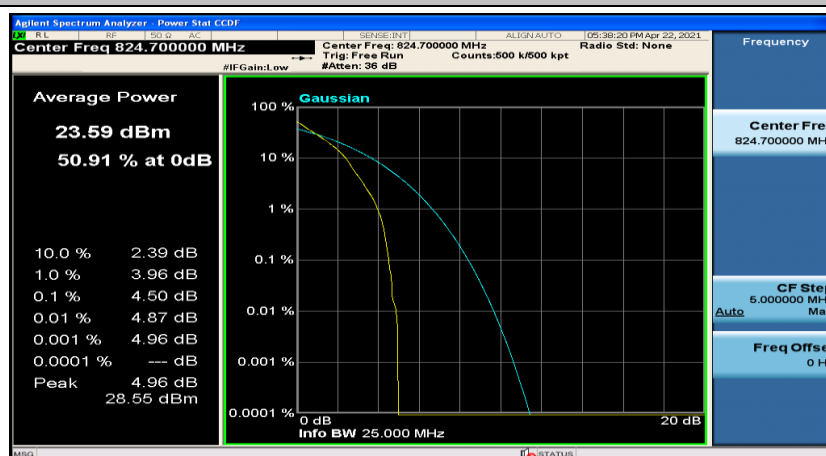
Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



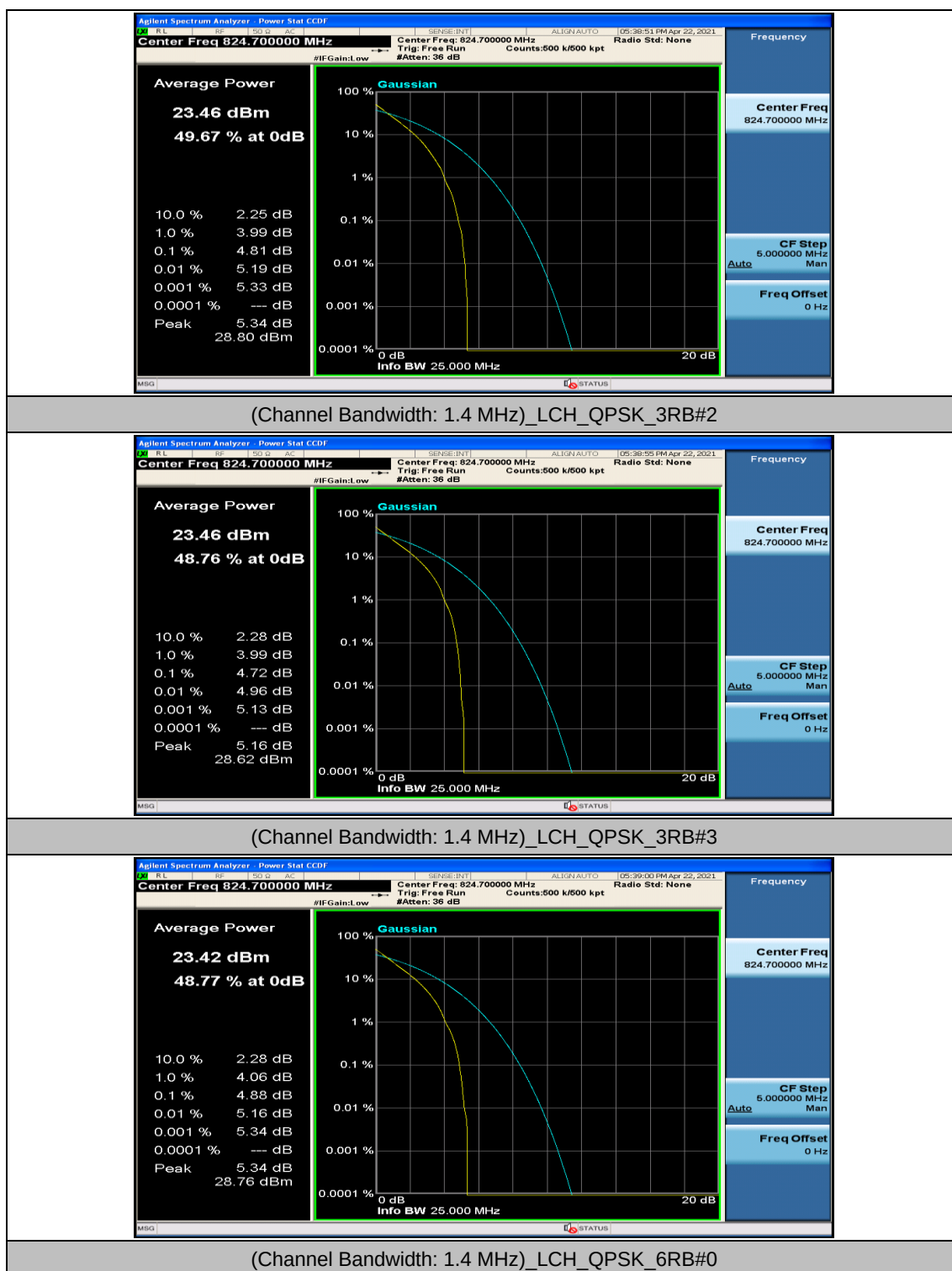
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3

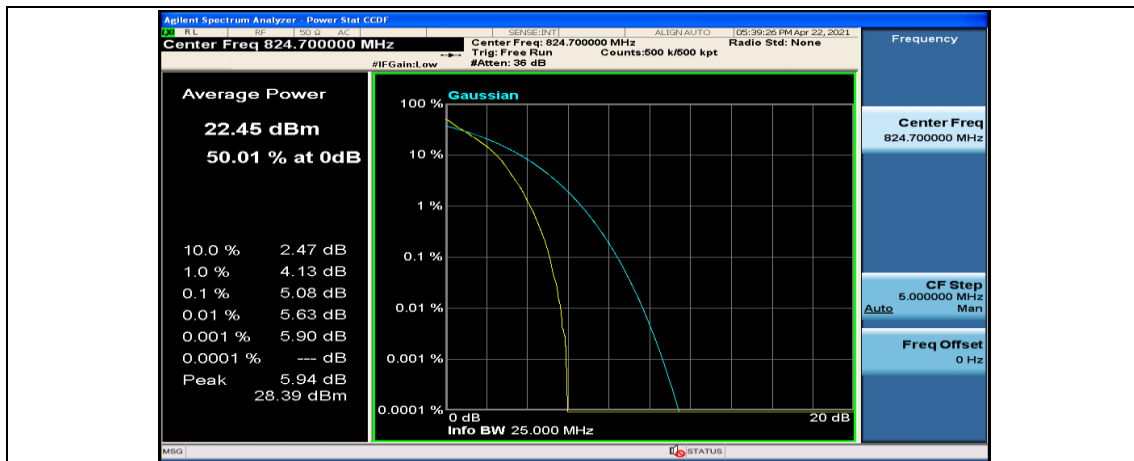


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

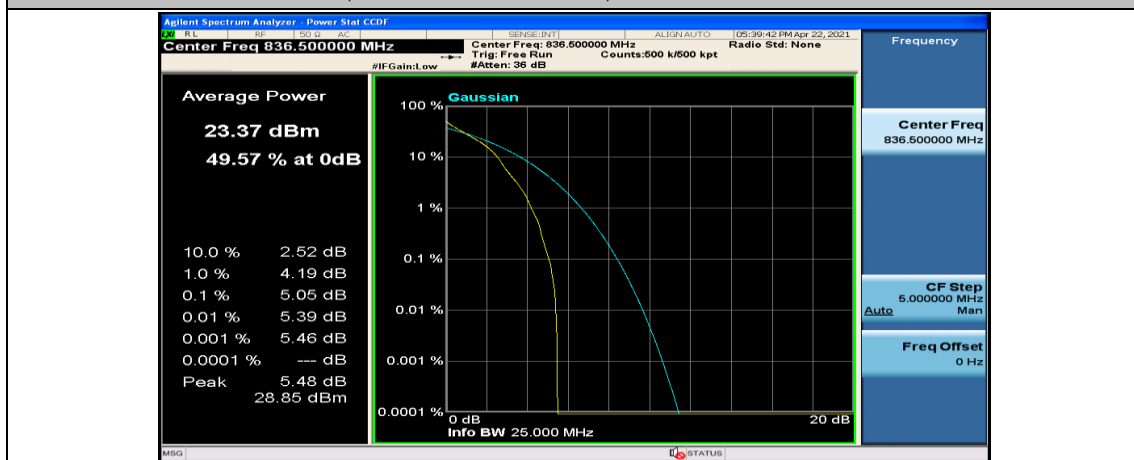


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#0

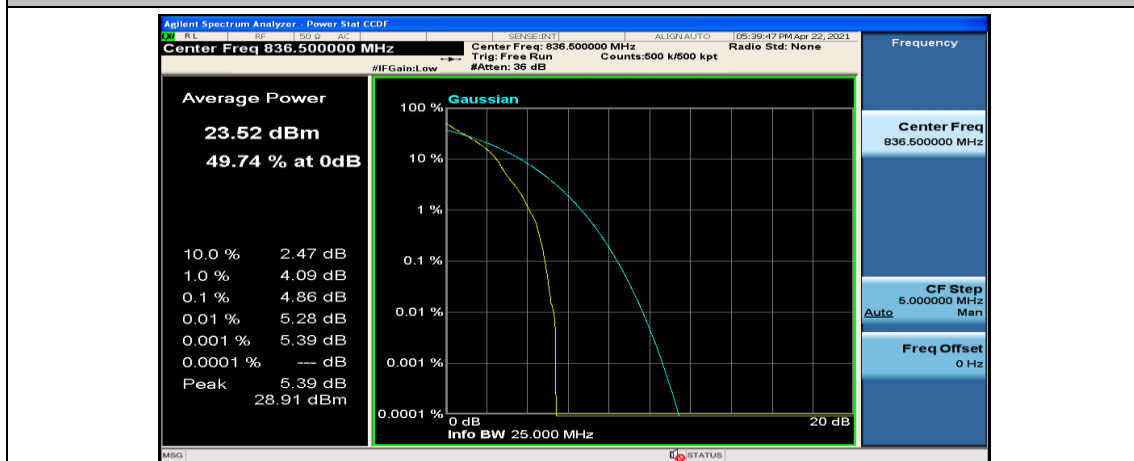




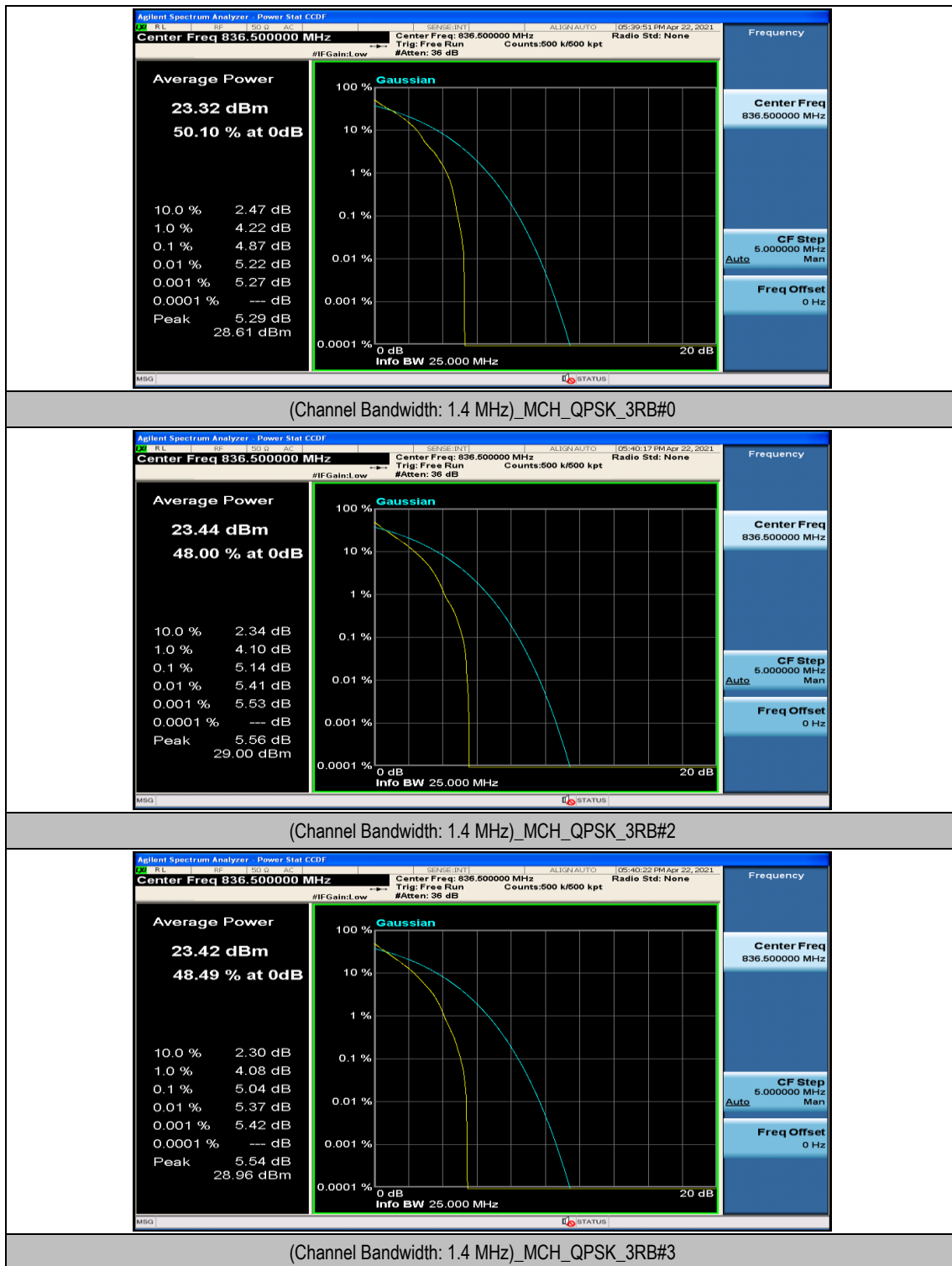
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0

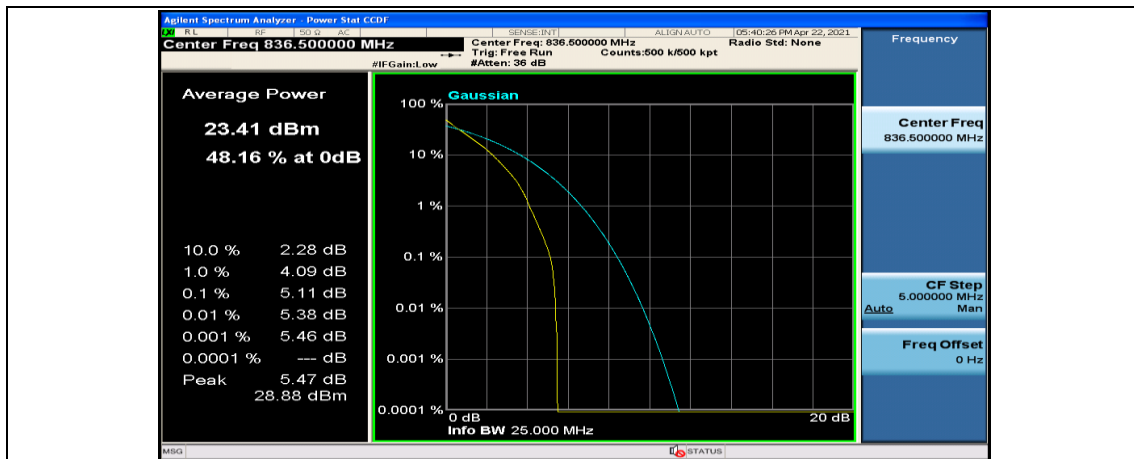


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

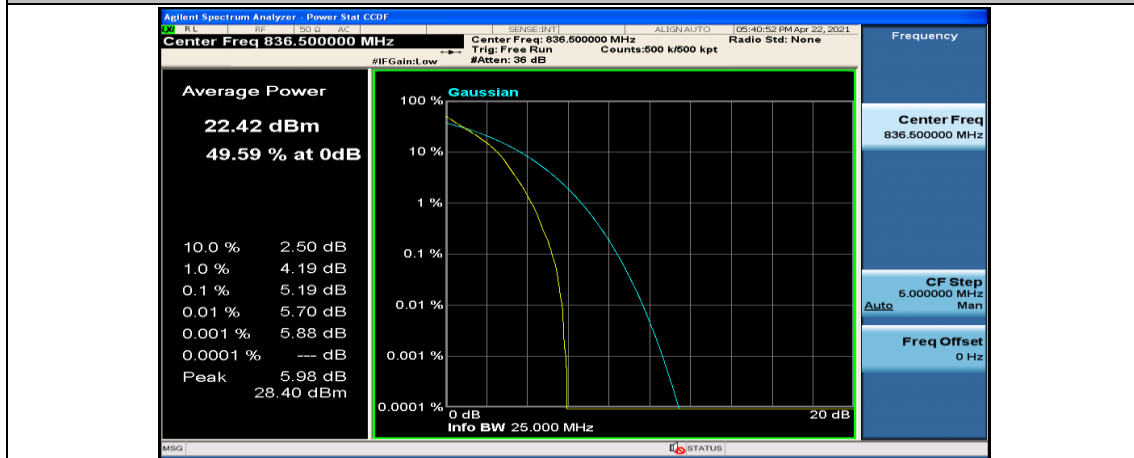


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

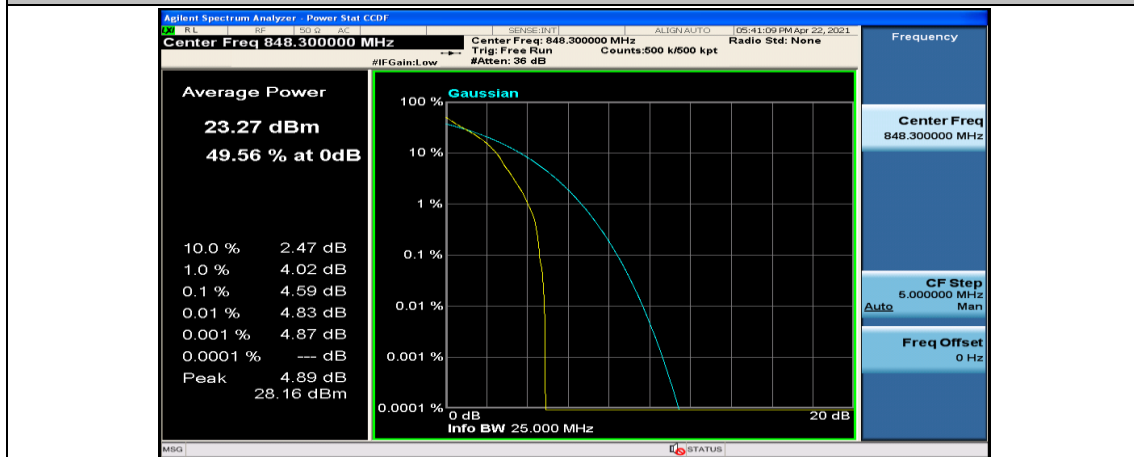




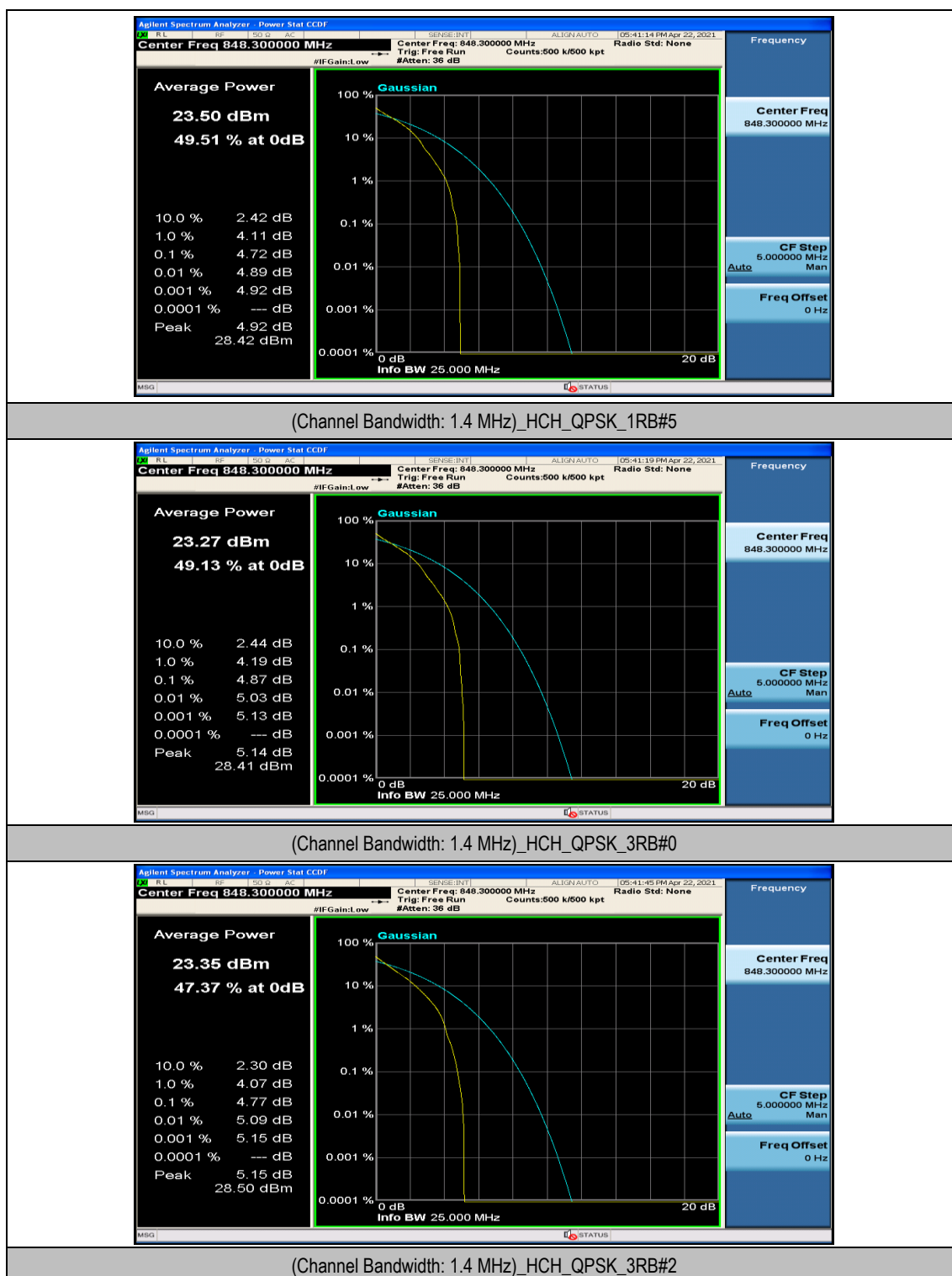
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_6RB#0

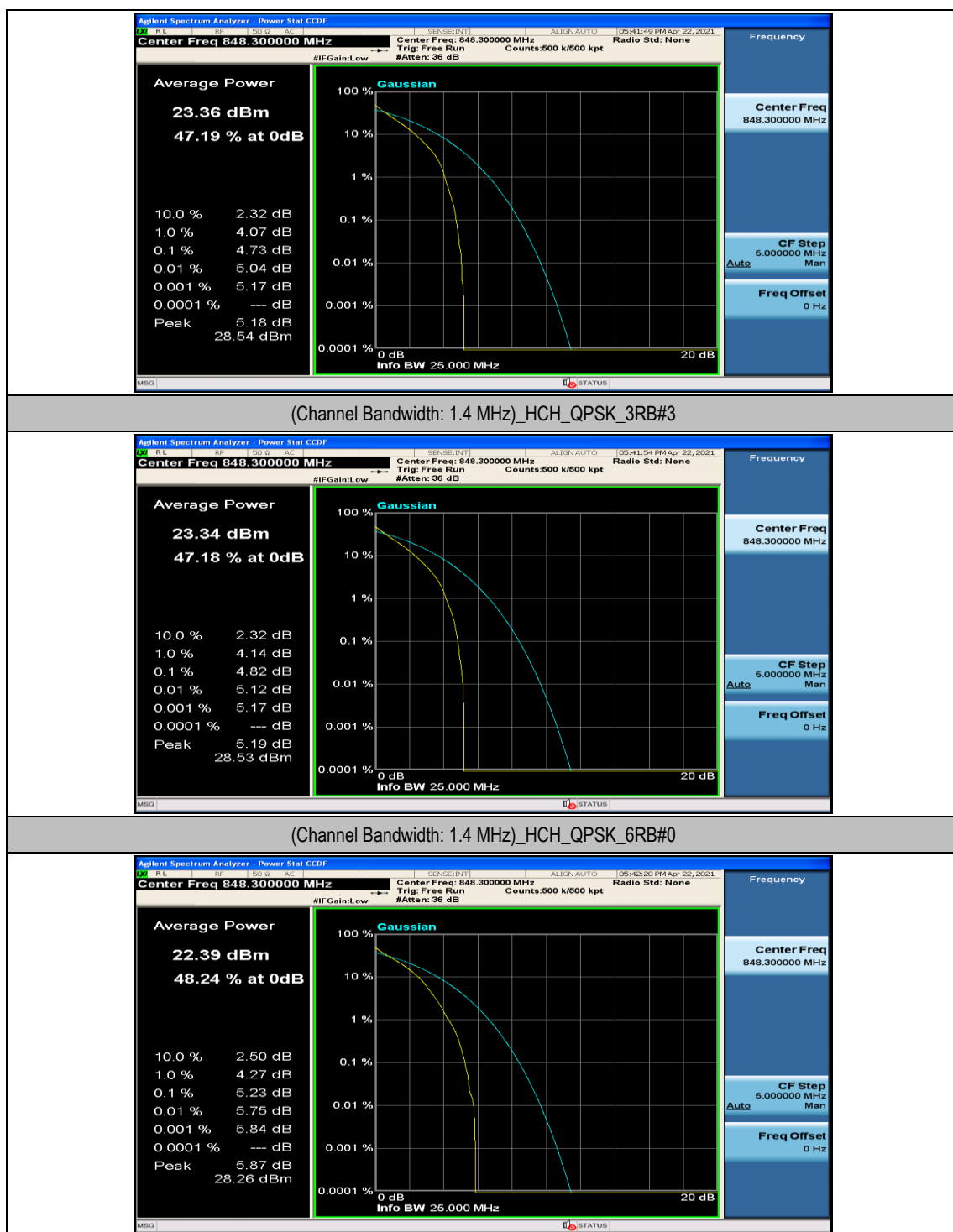


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0

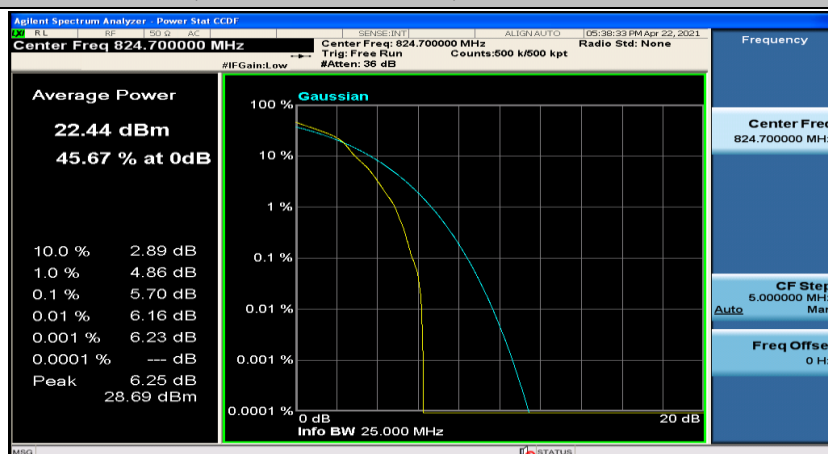


(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3

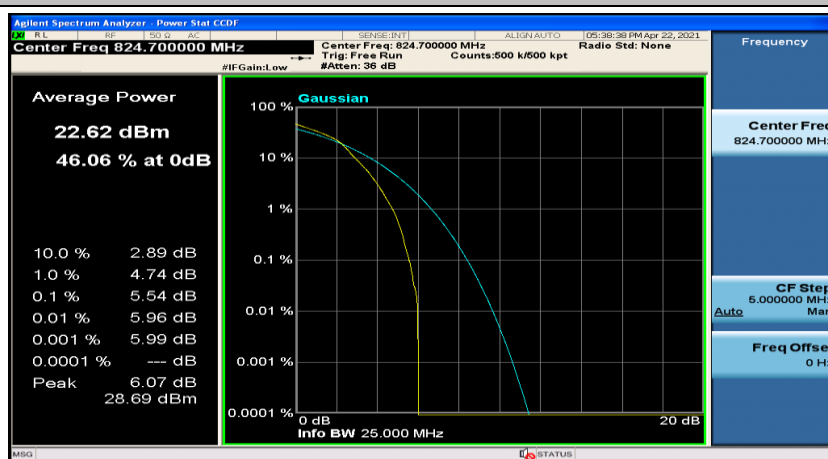




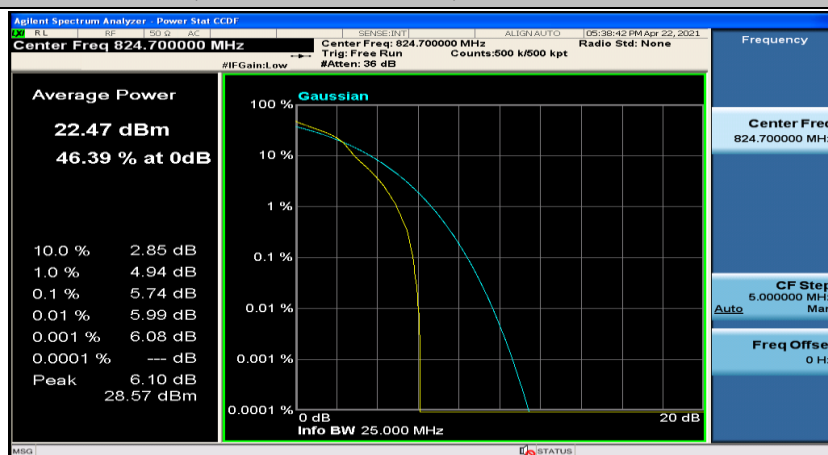
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



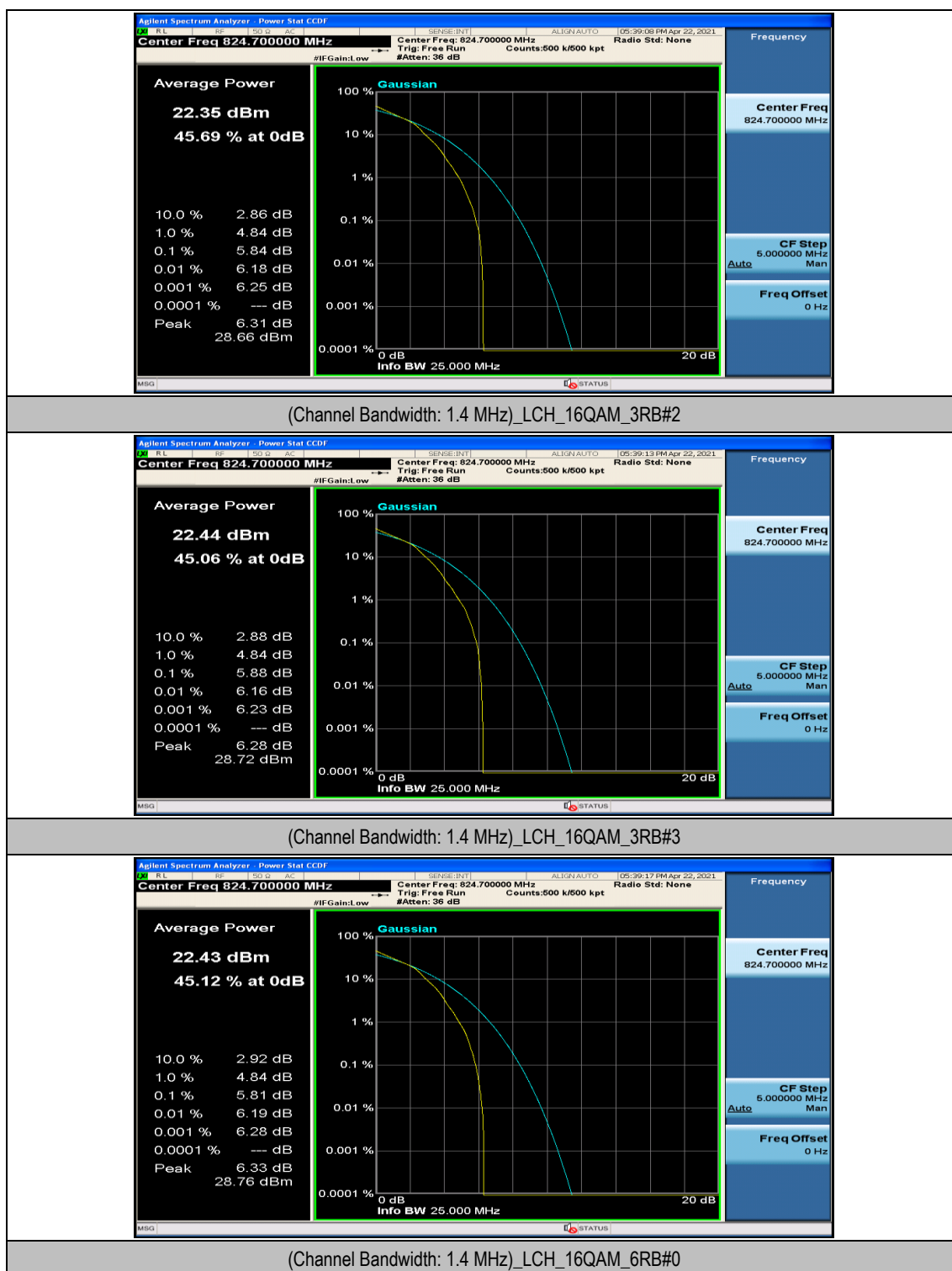
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

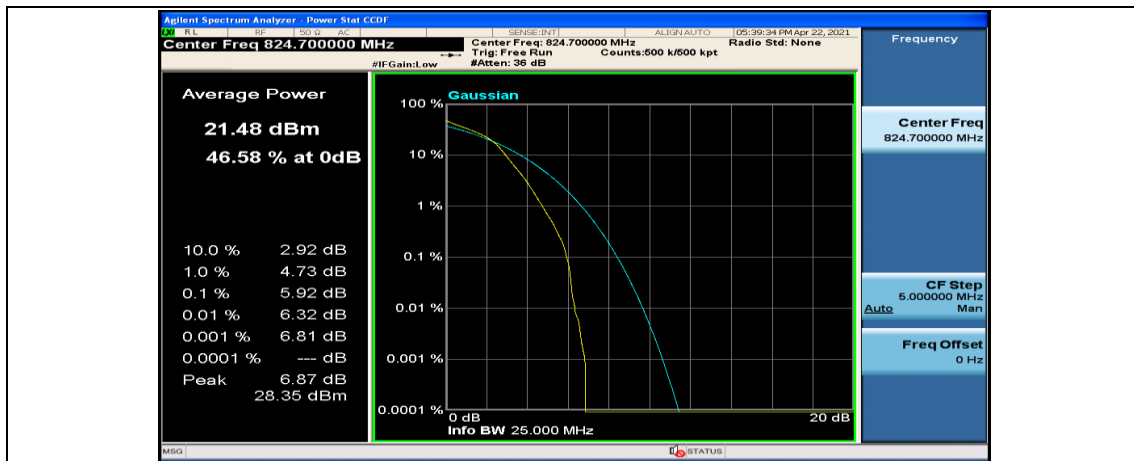


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5

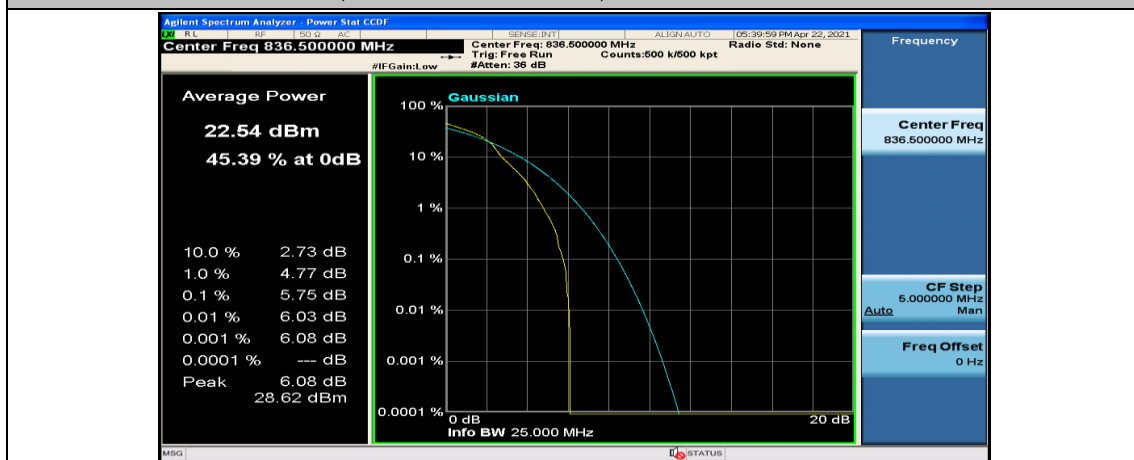


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#0

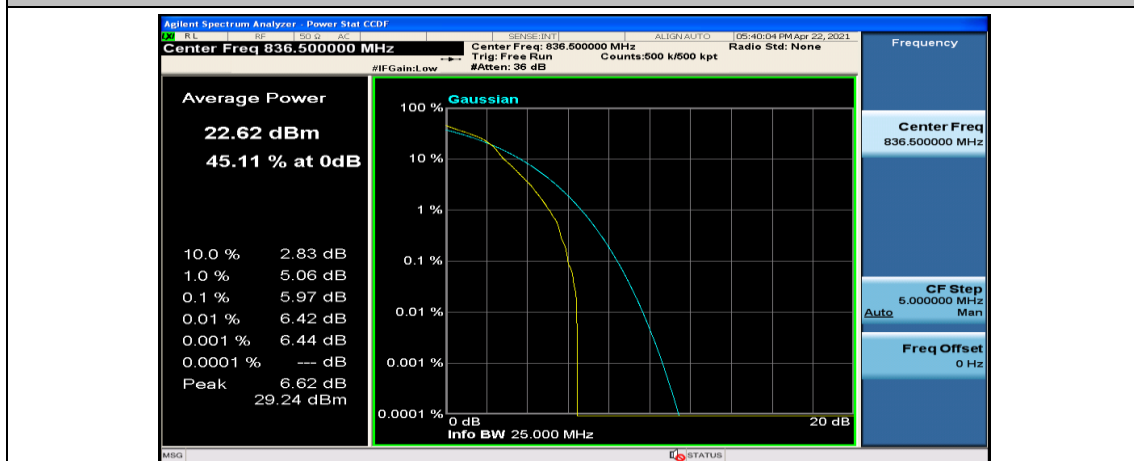




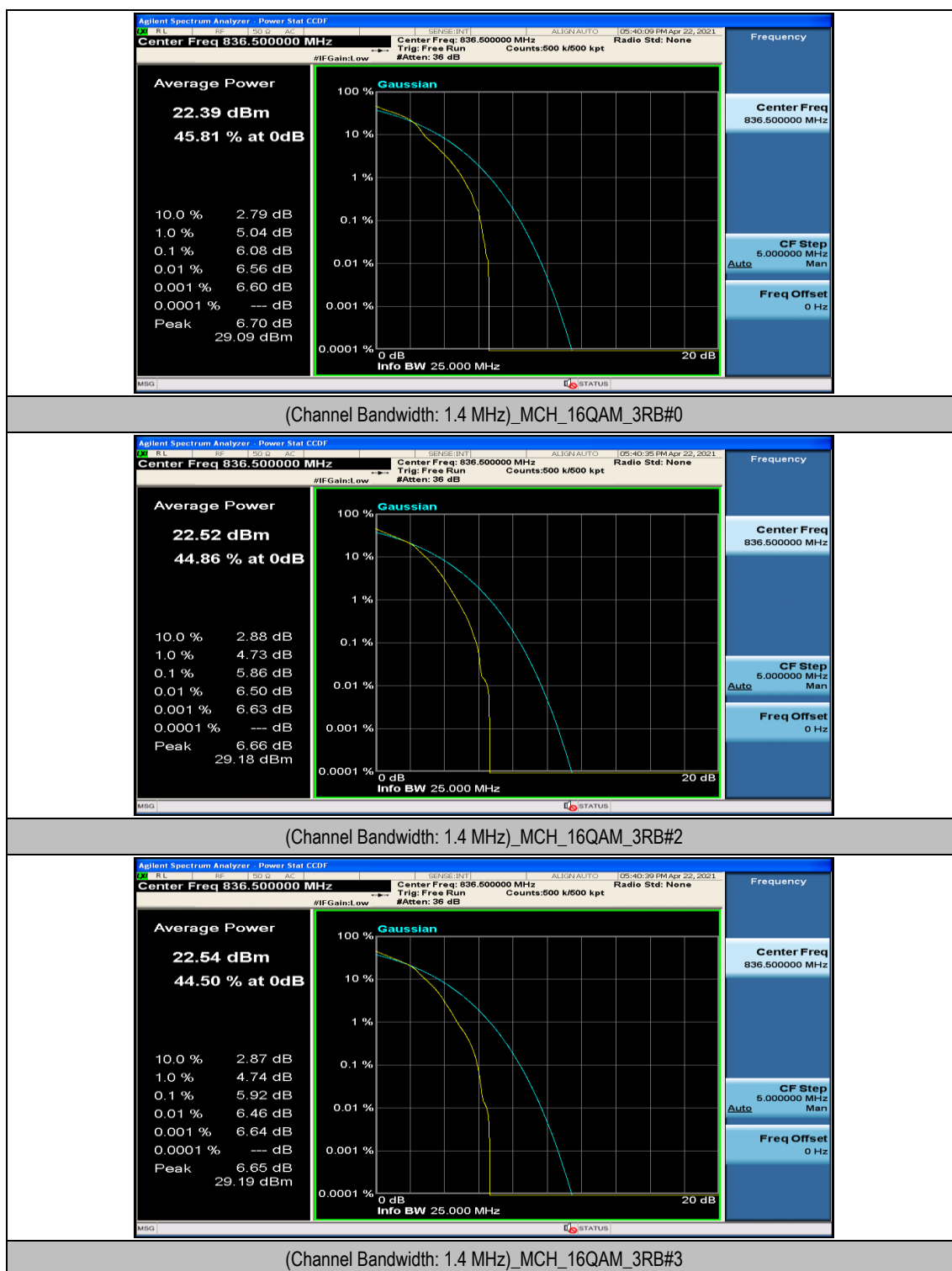
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

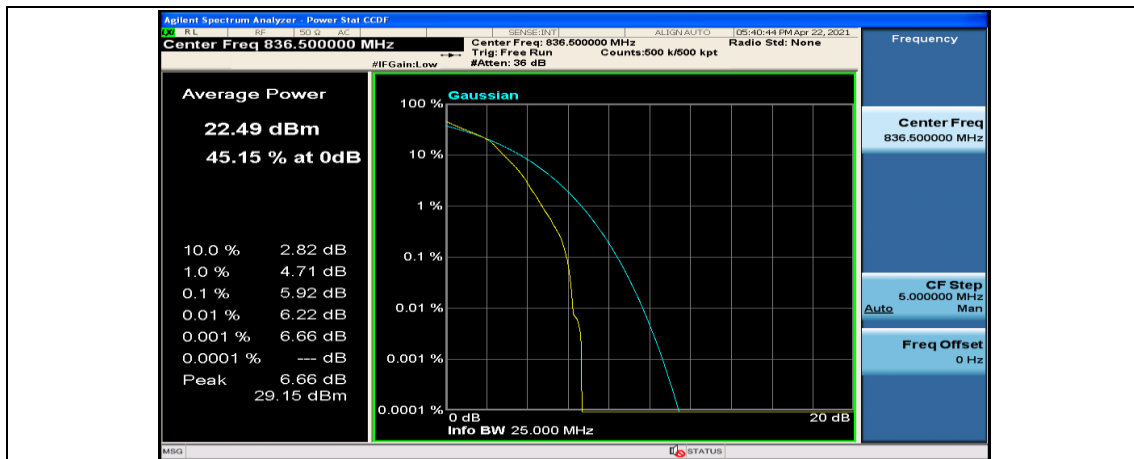


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

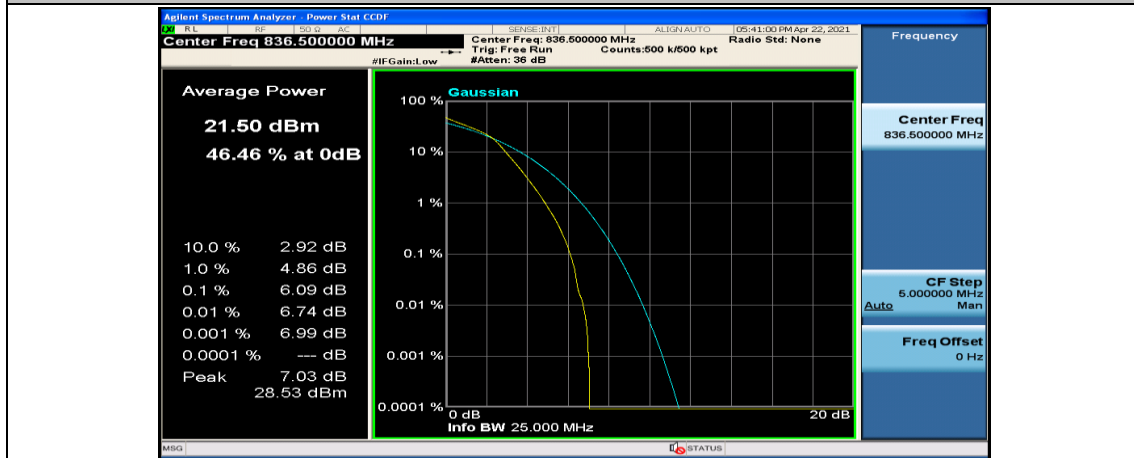


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

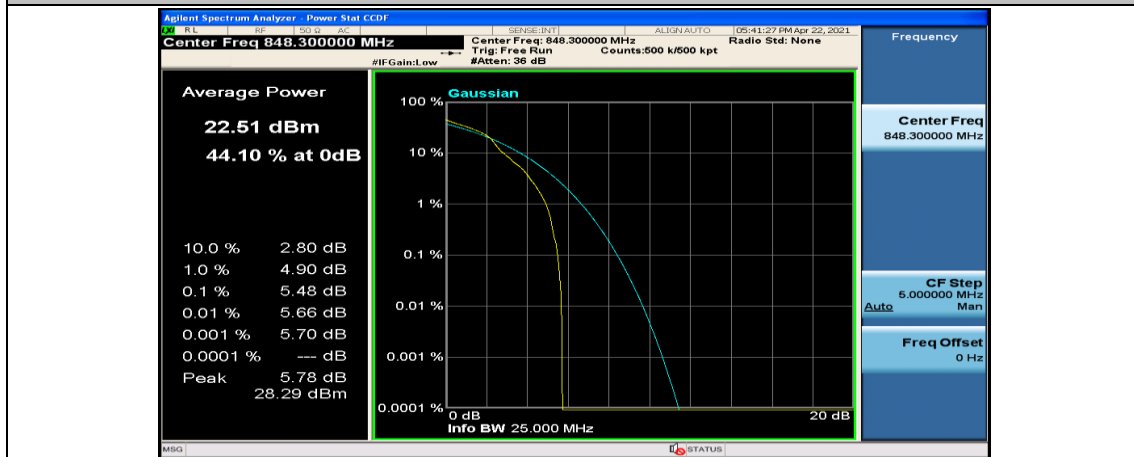




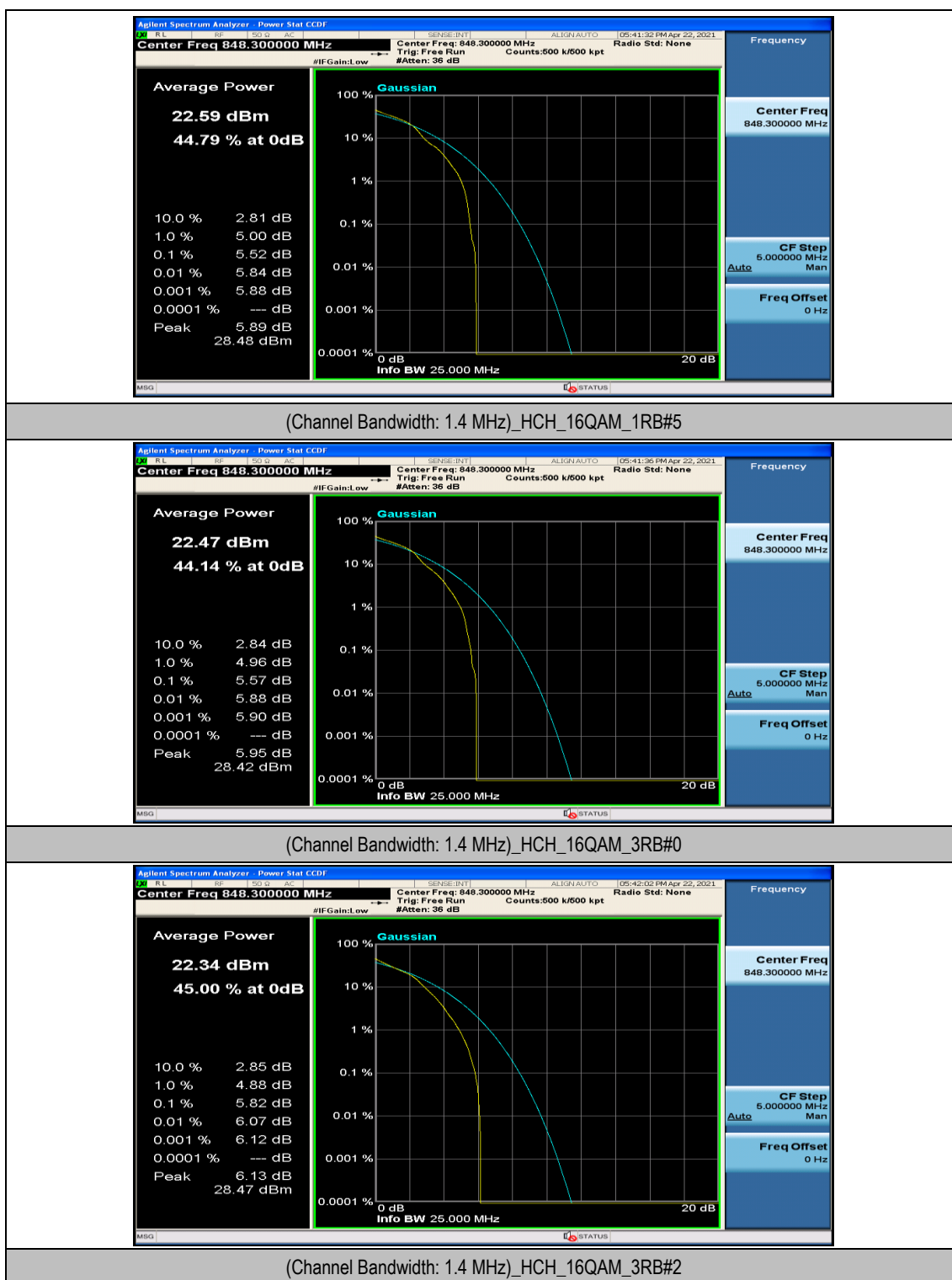
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0

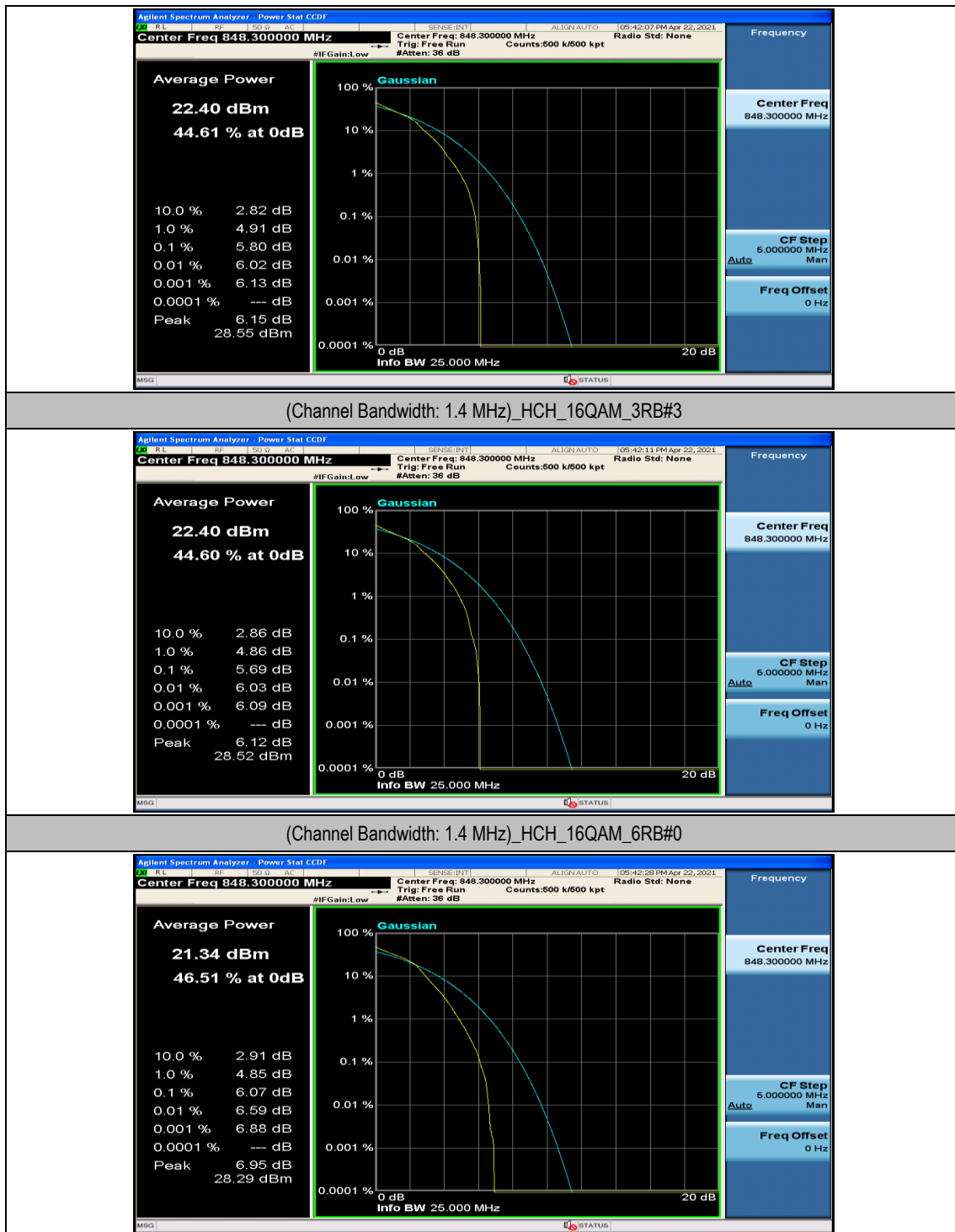


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



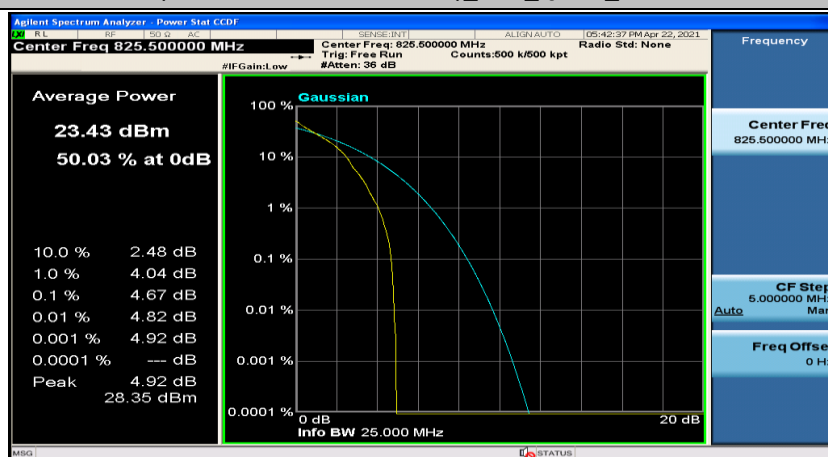
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



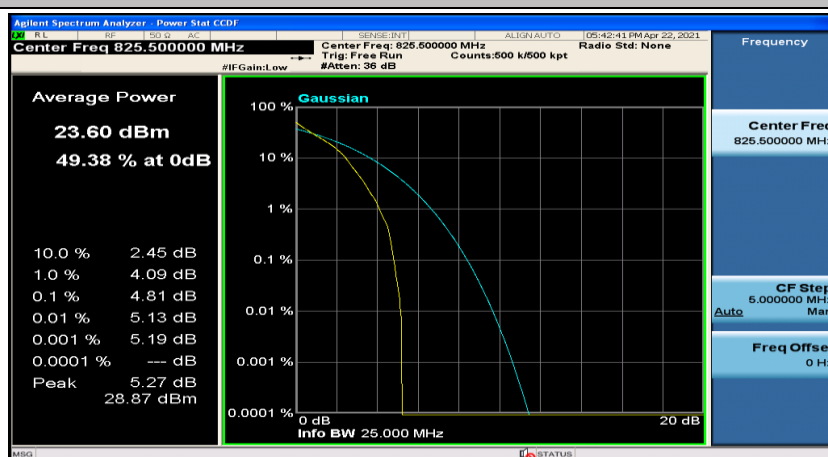


Channel Bandwidth: 3 MHz

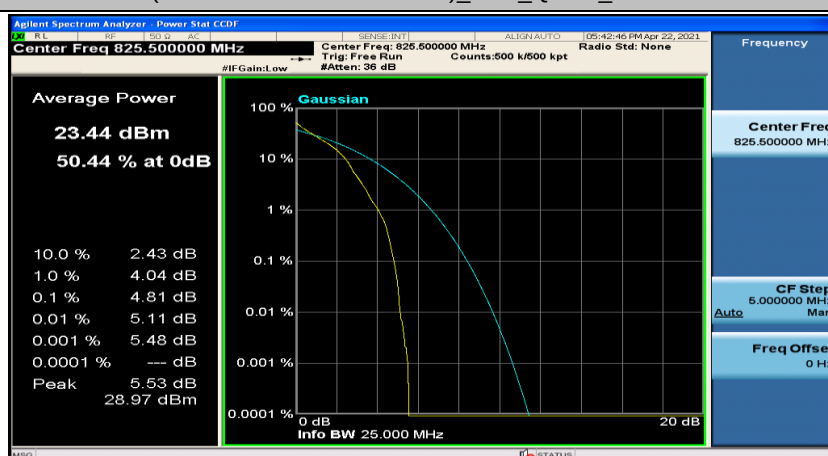
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



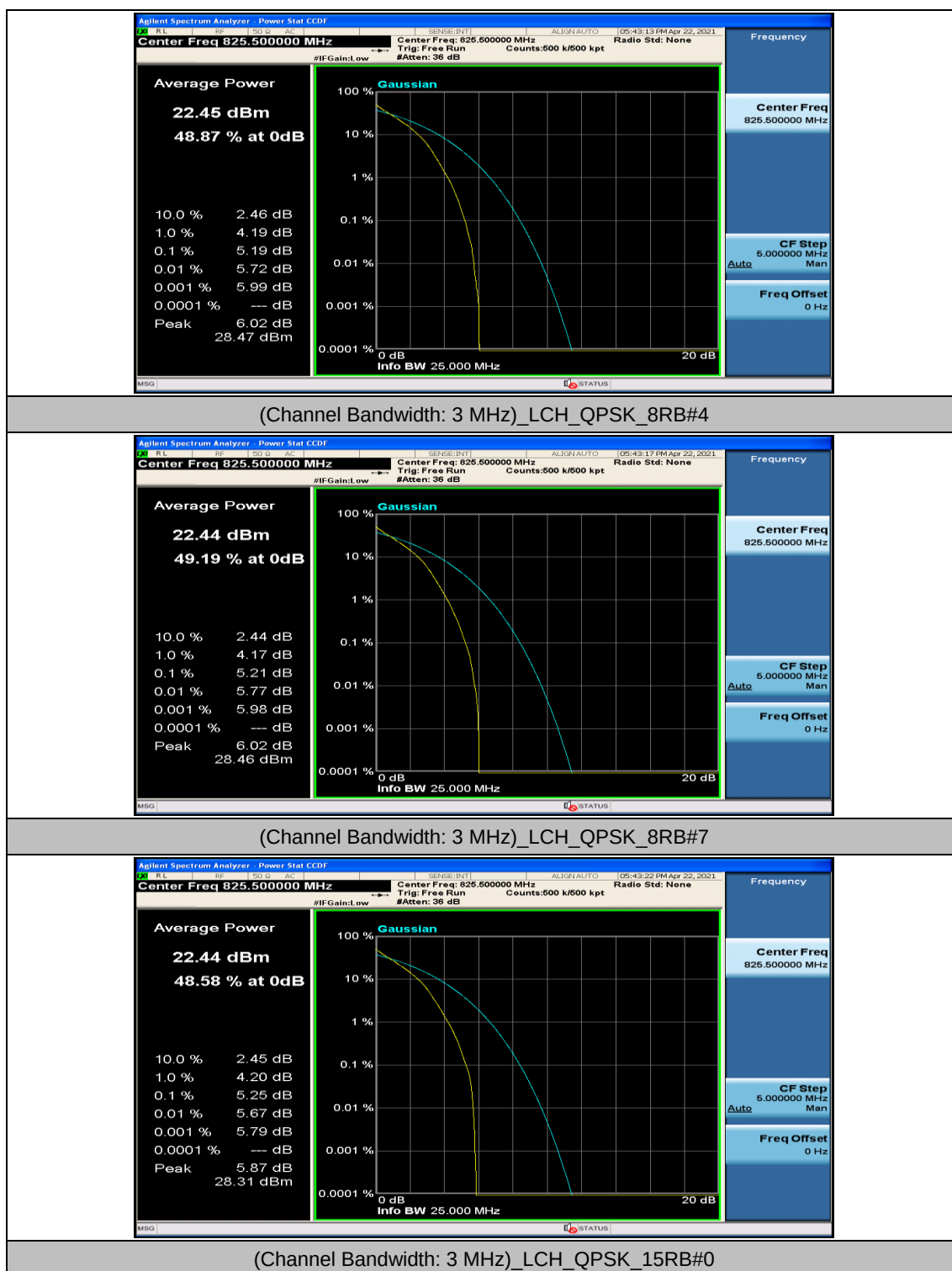
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

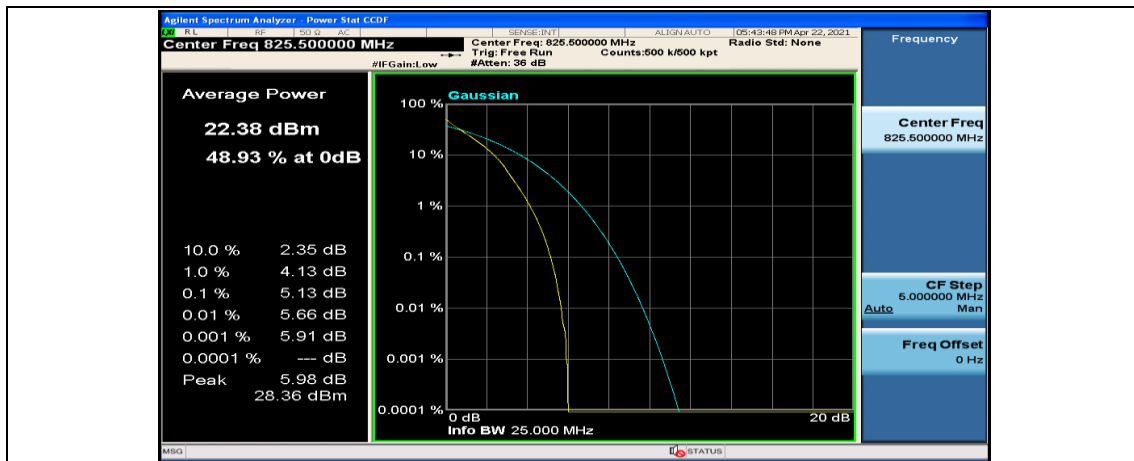


(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14

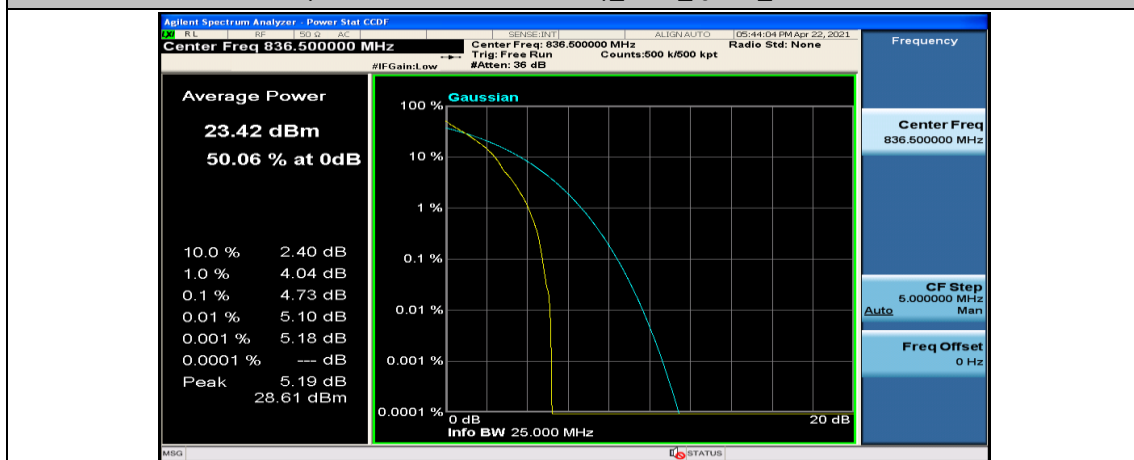


(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#0

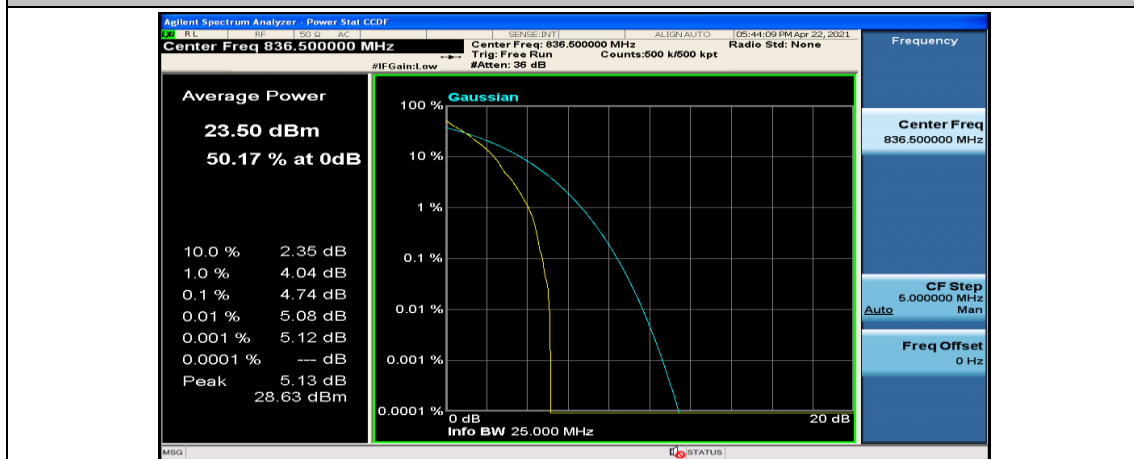




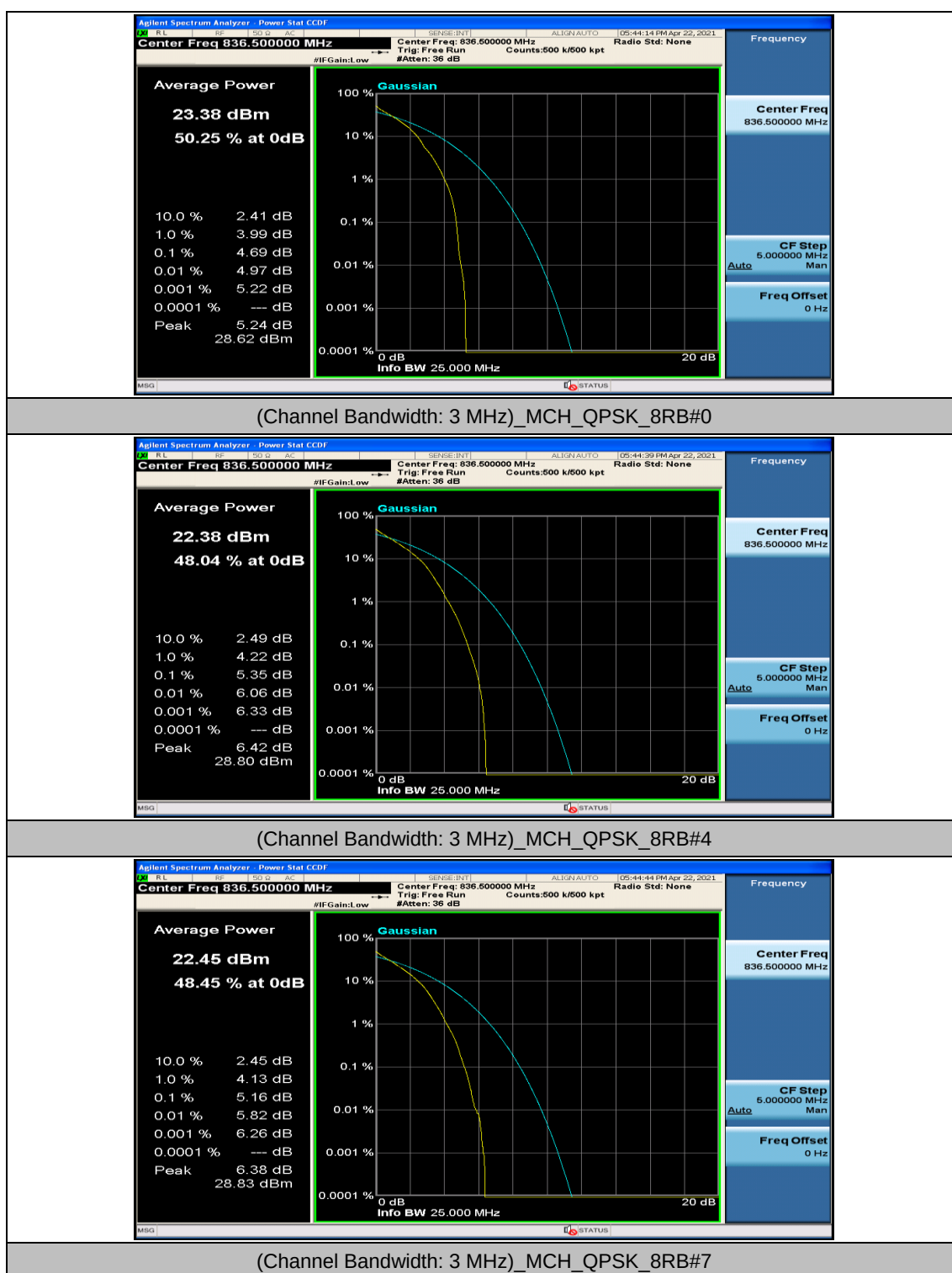
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0

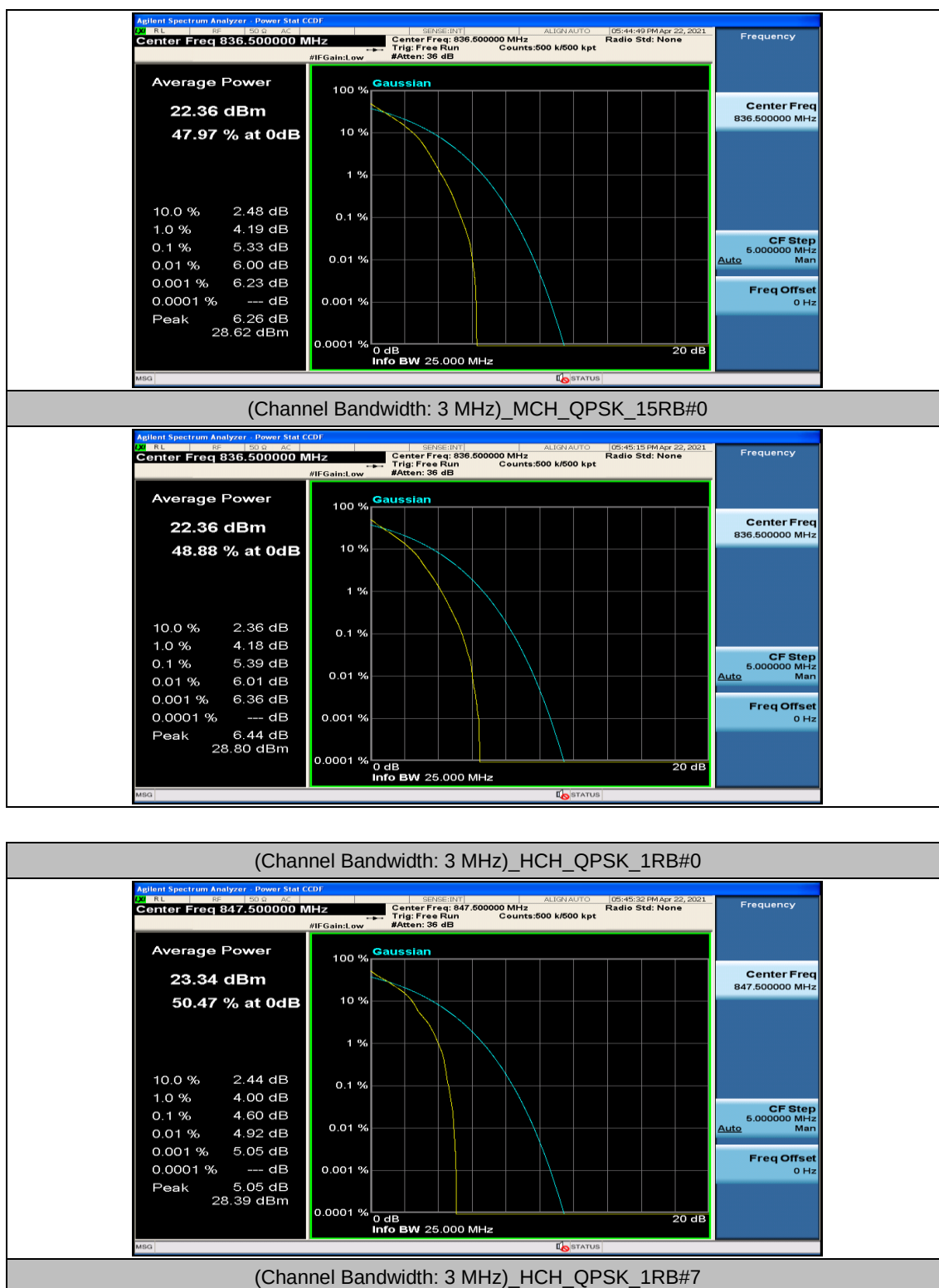


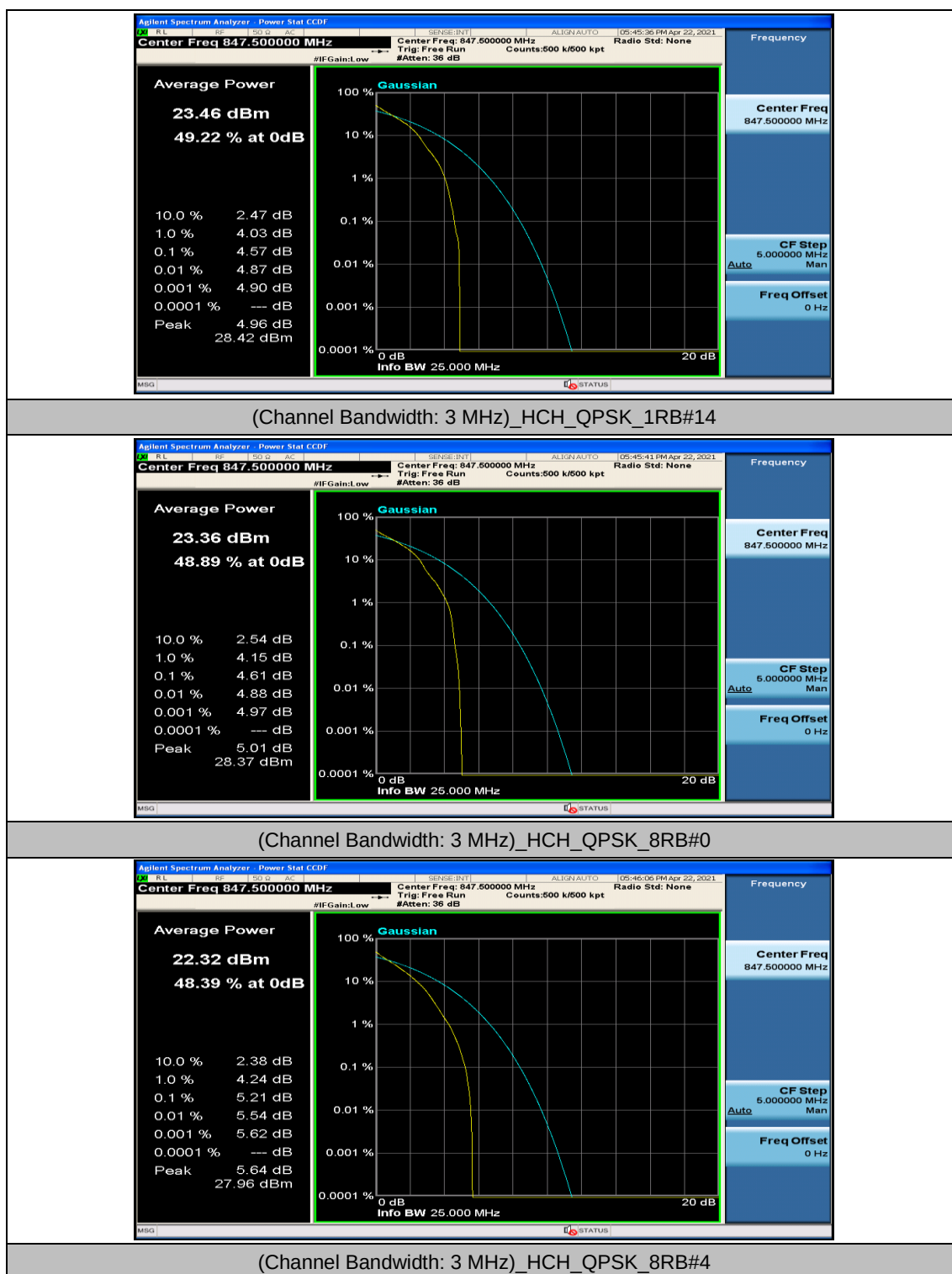
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7

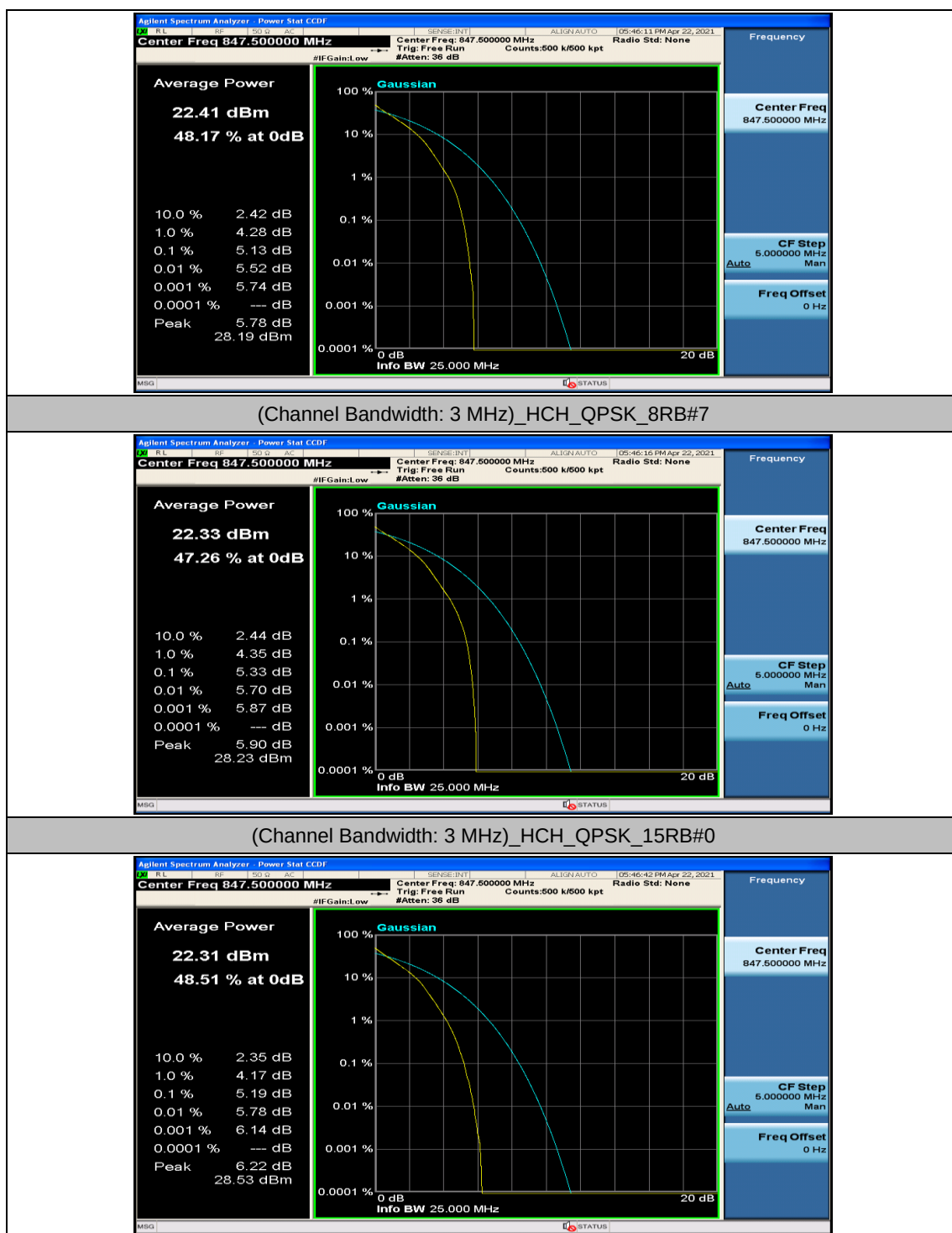


(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

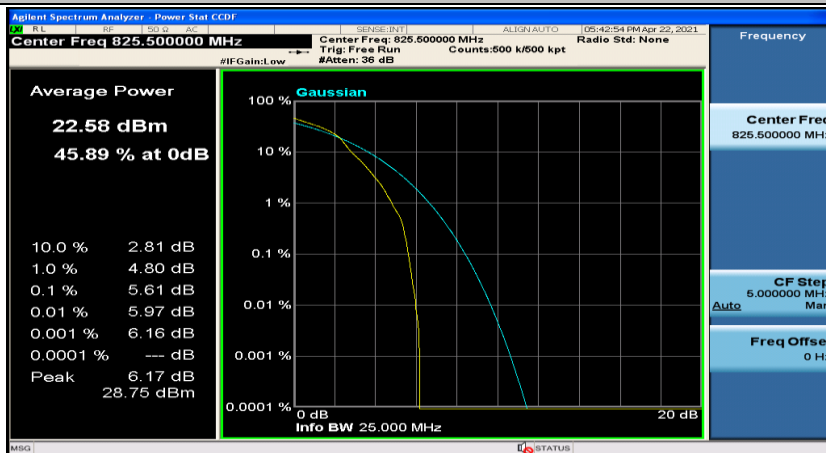




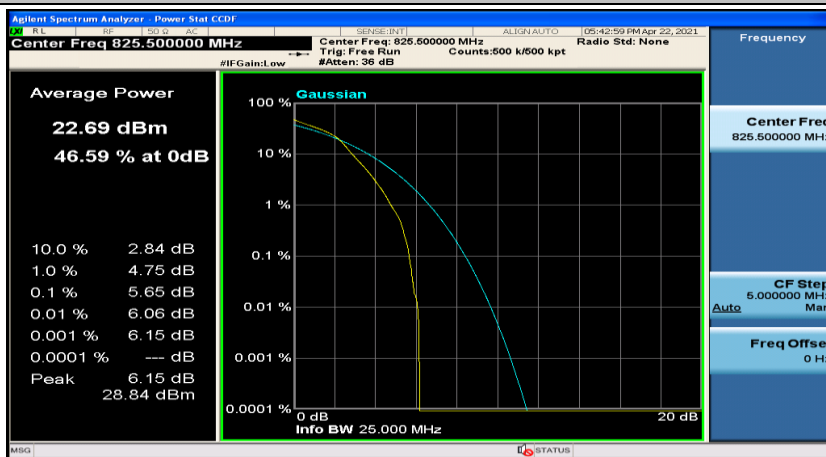




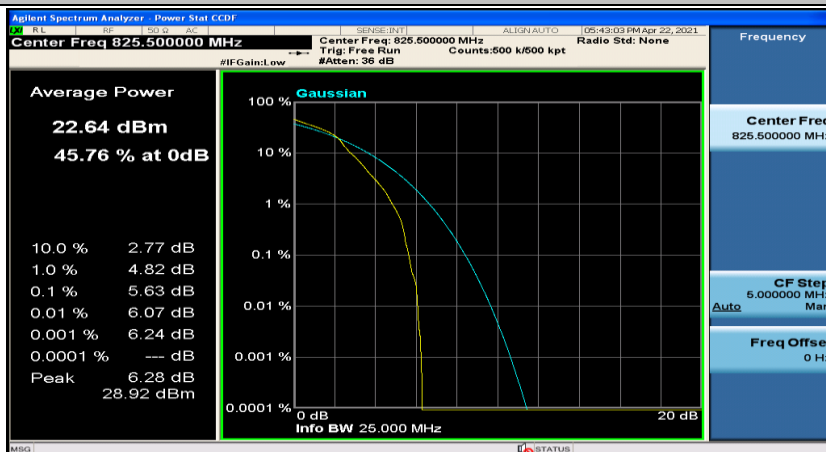
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



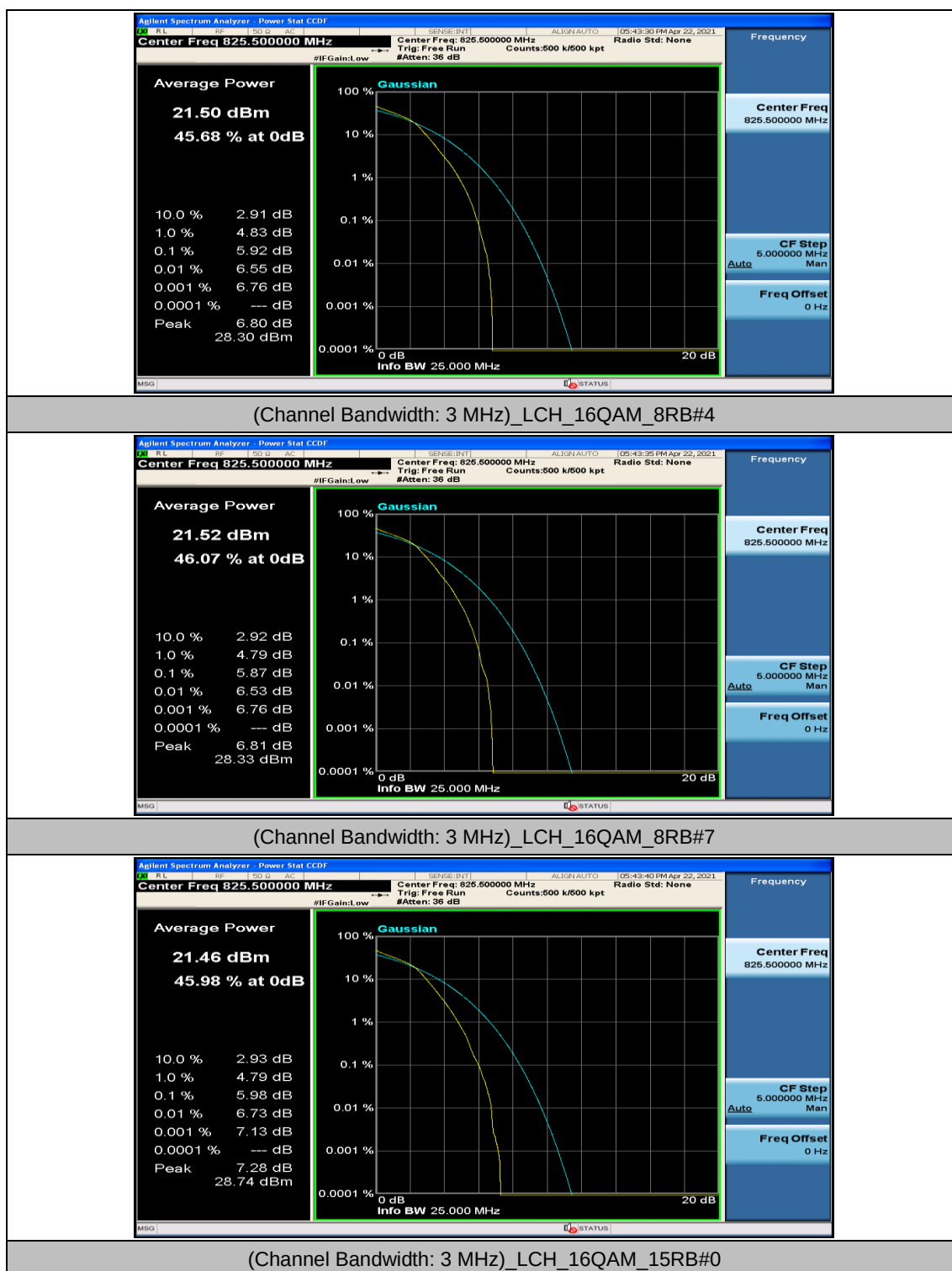
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7

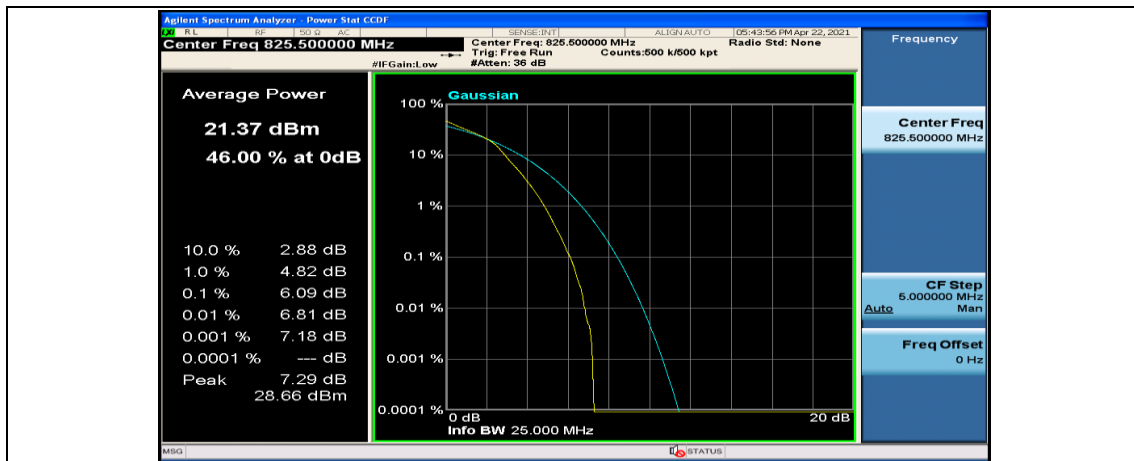


(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14

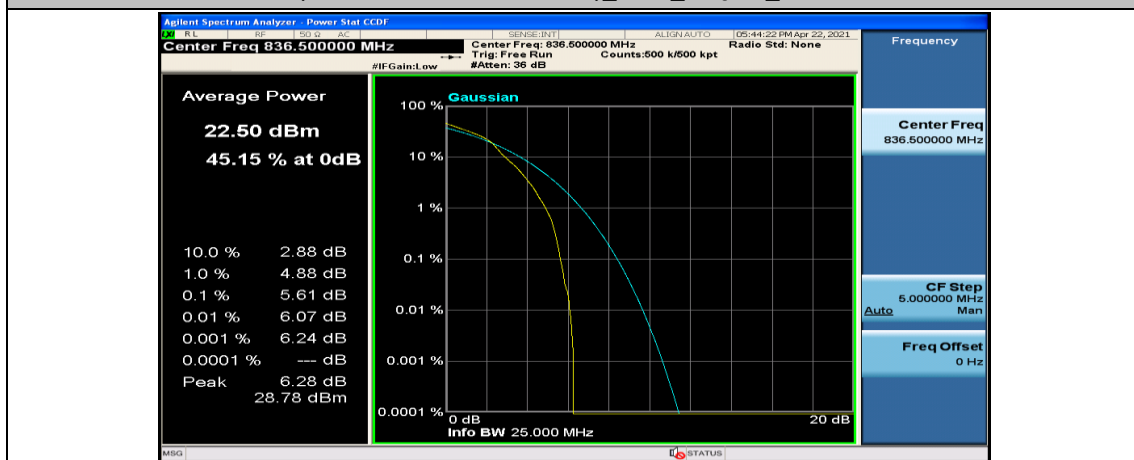


(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#0

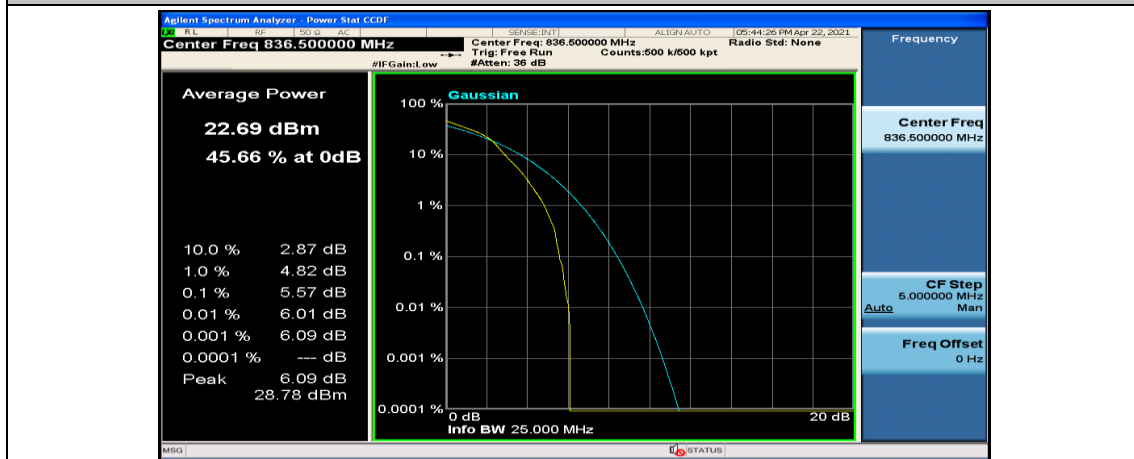




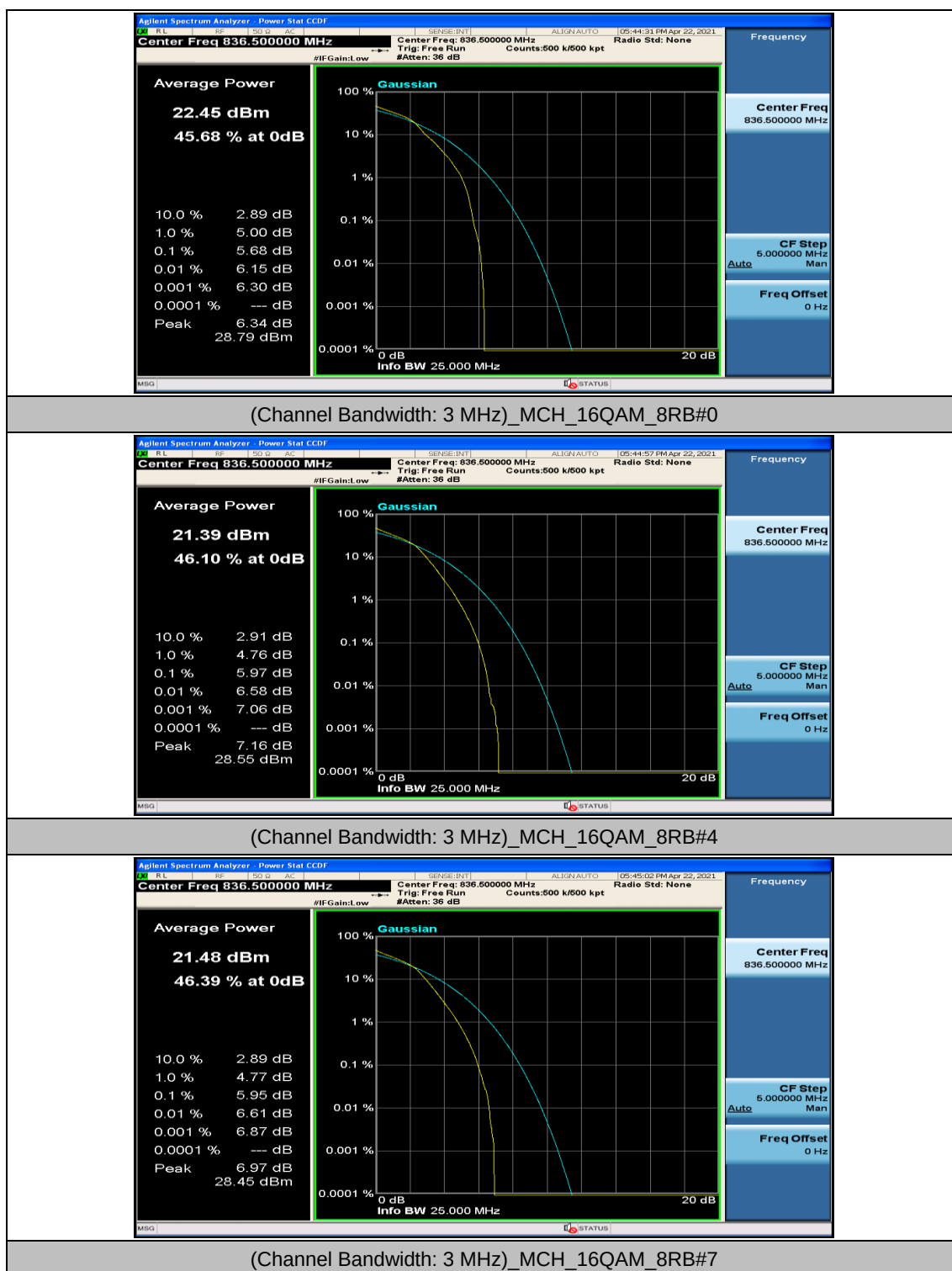
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0

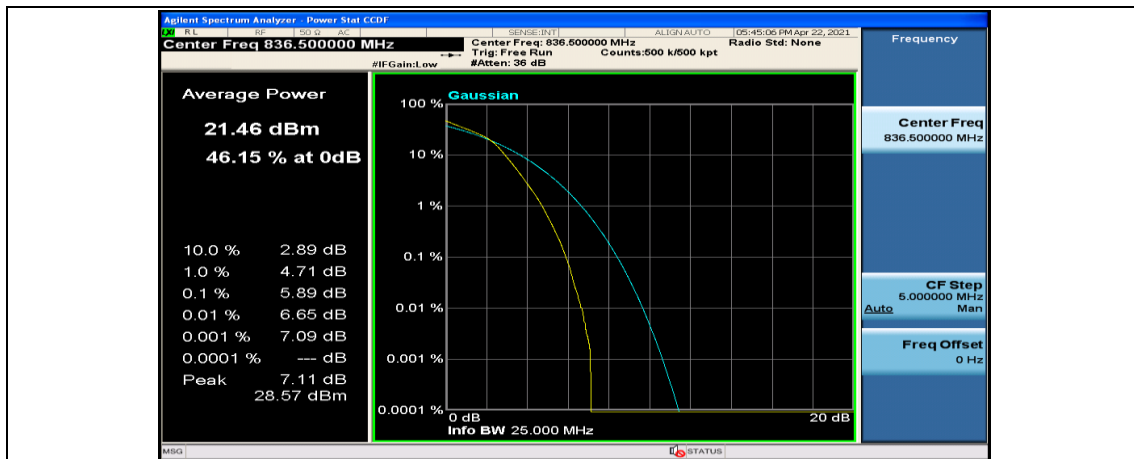


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7

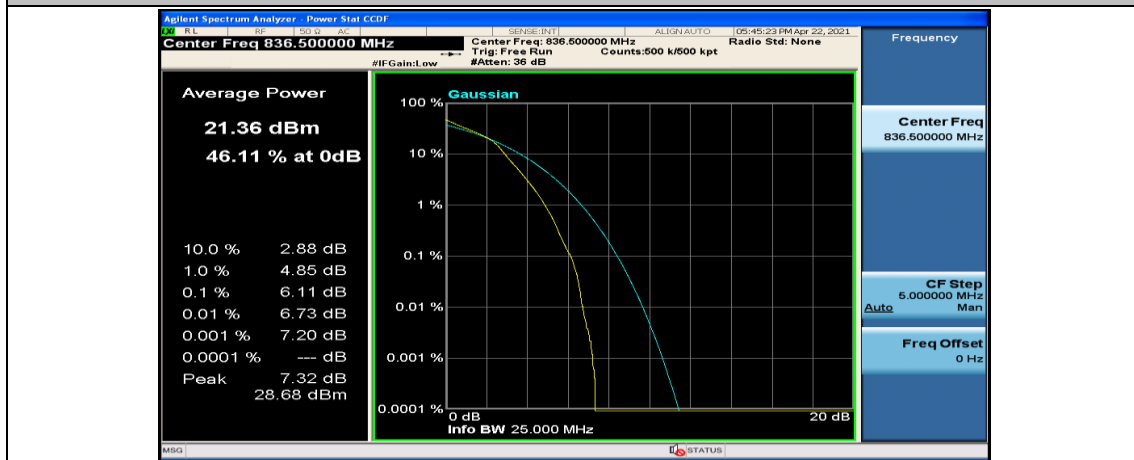


(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14

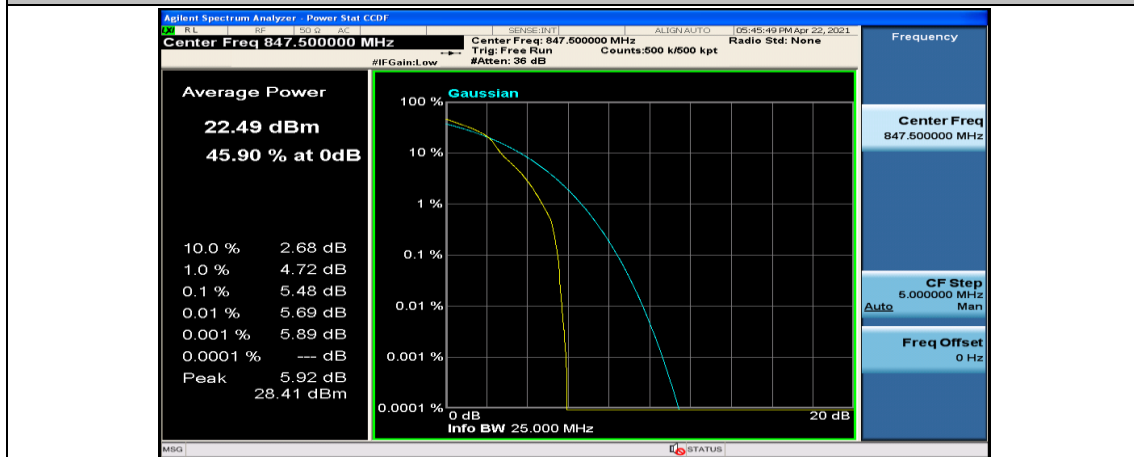




(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7

