

Appendix for Band 26(824-849MHz)

Product Name: Rugged Phone
Model No: CM17XA

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	21.97	PASS
		1	3	22.08	PASS
		1	5	21.97	PASS
		3	0	22.04	PASS
		3	2	22.09	PASS
		3	3	22.02	PASS
		6	0	21.00	PASS
	MCH	1	0	21.87	PASS
		1	3	21.97	PASS
		1	5	21.90	PASS
		3	0	21.98	PASS
		3	2	21.99	PASS
		3	3	21.98	PASS
		6	0	20.92	PASS
	HCH	1	0	21.90	PASS
		1	3	22.11	PASS
		1	5	21.95	PASS
		3	0	21.94	PASS
		3	2	22.02	PASS
		3	3	21.98	PASS
		6	0	20.97	PASS
16QAM	LCH	1	0	21.11	PASS
		1	3	21.29	PASS
		1	5	21.16	PASS
		3	0	21.11	PASS
		3	2	21.14	PASS
		3	3	21.10	PASS
		6	0	20.92	PASS
	MCH	1	0	21.24	PASS
		1	3	21.37	PASS
		1	5	21.21	PASS
		3	0	20.92	PASS
		3	2	20.99	PASS

		3	3	20.97	PASS
		6	0	20.94	PASS
	HCH	1	0	21.10	PASS
		1	3	21.21	PASS
		1	5	21.05	PASS
		3	0	20.99	PASS
		3	2	21.04	PASS
		3	3	21.05	PASS
		6	0	20.54	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.98	PASS
		1	7	22.28	PASS
		1	14	22.01	PASS
		8	0	21.03	PASS
		8	4	21.06	PASS
		8	7	21.03	PASS
		15	0	21.02	PASS
	MCH	1	0	21.98	PASS
		1	7	22.23	PASS
		1	14	21.96	PASS
		8	0	20.95	PASS
		8	4	20.99	PASS
		8	7	20.95	PASS
		15	0	20.96	PASS
	HCH	1	0	21.98	PASS
		1	7	22.25	PASS
		1	14	21.96	PASS
		8	0	20.96	PASS
		8	4	21.00	PASS
		8	7	20.91	PASS
		15	0	20.94	PASS
16QAM	LCH	1	0	21.21	PASS
		1	7	21.50	PASS
		1	14	21.26	PASS
		8	0	20.54	PASS
		8	4	20.67	PASS
		8	7	20.74	PASS
		15	0	20.83	PASS

	MCH	1	0	21.31	PASS
		1	7	21.45	PASS
		1	14	21.34	PASS
		8	0	20.90	PASS
		8	4	20.62	PASS
		8	7	20.97	PASS
		15	0	20.50	PASS
	HCH	1	0	21.19	PASS
		1	7	21.44	PASS
		1	14	21.12	PASS
		8	0	20.84	PASS
		8	4	20.94	PASS
		8	7	20.85	PASS
		15	0	20.92	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.96	PASS
		1	12	22.34	PASS
		1	24	22.02	PASS
		12	0	20.98	PASS
		12	6	21.06	PASS
		12	13	21.05	PASS
		25	0	21.06	PASS
	MCH	1	0	21.91	PASS
		1	12	22.26	PASS
		1	24	21.92	PASS
		12	0	20.95	PASS
		12	6	20.98	PASS
		12	13	20.92	PASS
		25	0	20.94	PASS
	HCH	1	0	22.03	PASS
		1	12	22.22	PASS
		1	24	21.95	PASS
		12	0	20.91	PASS
		12	6	20.93	PASS
		12	13	20.87	PASS
		25	0	20.97	PASS
16QAM	LCH	1	0	21.18	PASS
		1	12	21.40	PASS

		1	24	21.24	PASS
		12	0	20.60	PASS
		12	6	20.80	PASS
		12	13	20.56	PASS
		25	0	20.51	PASS
	MCH	1	0	21.14	PASS
		1	12	21.55	PASS
		1	24	21.11	PASS
		12	0	20.63	PASS
		12	6	20.58	PASS
		12	13	20.76	PASS
		25	0	20.72	PASS
	HCH	1	0	21.13	PASS
		1	12	21.31	PASS
		1	24	21.04	PASS
		12	0	20.91	PASS
		12	6	20.91	PASS
		12	13	20.91	PASS
		25	0	20.96	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.00	PASS
		1	24	22.17	PASS
		1	49	21.94	PASS
		25	0	21.09	PASS
		25	12	21.07	PASS
		25	25	21.13	PASS
		50	0	21.07	PASS
	MCH	1	0	21.95	PASS
		1	24	22.10	PASS
		1	49	21.94	PASS
		25	0	21.09	PASS
		25	12	21.01	PASS
		25	25	20.93	PASS
		50	0	20.98	PASS
	HCH	1	0	22.00	PASS
		1	24	22.24	PASS
		1	49	21.96	PASS
		25	0	21.21	PASS

		25	12	21.03	PASS
		25	25	21.13	PASS
		50	0	21.16	PASS
16QAM	LCH	1	0	21.27	PASS
		1	24	21.47	PASS
		1	49	21.22	PASS
		25	0	20.50	PASS
		25	12	20.62	PASS
		25	25	20.95	PASS
		50	0	20.89	PASS
	MCH	1	0	21.37	PASS
		1	24	21.46	PASS
		1	49	21.20	PASS
		25	0	20.53	PASS
		25	12	20.78	PASS
		25	25	20.96	PASS
		50	0	20.68	PASS
	HCH	1	0	21.20	PASS
		1	24	21.38	PASS
		1	49	21.17	PASS
		25	0	20.52	PASS
		25	12	20.57	PASS
		25	25	20.66	PASS
		50	0	20.82	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.37	PASS
		1	37	22.27	PASS
		1	74	21.79	PASS
		37	0	21.01	PASS
		37	18	21.08	PASS
		37	38	20.97	PASS
		75	0	21.03	PASS
	MCH	1	0	21.99	PASS
		1	37	22.13	PASS
		1	74	21.87	PASS
		37	0	20.98	PASS
		37	18	21.04	PASS
		37	38	20.94	PASS

	HCH	75	0	21.04	PASS
		1	0	21.91	PASS
		1	37	22.09	PASS
		1	74	21.80	PASS
		37	0	21.08	PASS
		37	18	21.06	PASS
		37	38	21.06	PASS
		75	0	21.11	PASS
16QAM	LCH	1	0	21.19	PASS
		1	37	21.37	PASS
		1	74	21.05	PASS
		37	0	20.78	PASS
		37	18	20.50	PASS
		37	38	20.62	PASS
		75	0	20.91	PASS
	MCH	1	0	21.26	PASS
		1	37	21.33	PASS
		1	74	21.07	PASS
		37	0	20.52	PASS
		37	18	20.56	PASS
		37	38	20.66	PASS
		75	0	20.81	PASS
	HCH	1	0	21.14	PASS
		1	37	21.26	PASS
		1	74	20.96	PASS
		37	0	20.68	PASS
		37	18	20.65	PASS
		37	38	20.73	PASS
		75	0	20.52	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	4.43	<13	PASS
		1	3	4.37	<13	PASS
		1	5	4.44	<13	PASS
		3	0	4.4	<13	PASS
		3	2	4.46	<13	PASS
		3	3	4.53	<13	PASS
		6	0	4.87	<13	PASS
	MCH	1	0	4.69	<13	PASS
		1	3	4.62	<13	PASS
		1	5	4.61	<13	PASS
		3	0	4.59	<13	PASS
		3	2	4.52	<13	PASS
		3	3	4.54	<13	PASS
		6	0	5.16	<13	PASS
	HCH	1	0	4.24	<13	PASS
		1	3	3.96	<13	PASS
		1	5	3.74	<13	PASS
		3	0	4.39	<13	PASS
		3	2	4.16	<13	PASS
		3	3	4.08	<13	PASS
		6	0	4.8	<13	PASS
16QAM	LCH	1	0	5.39	<13	PASS
		1	3	5.26	<13	PASS
		1	5	5.42	<13	PASS
		3	0	5.19	<13	PASS
		3	2	5.23	<13	PASS
		3	3	5.24	<13	PASS
		6	0	5.89	<13	PASS
	MCH	1	0	5.41	<13	PASS
		1	3	5.36	<13	PASS
		1	5	5.49	<13	PASS

		3	0	5.68	<13	PASS
		3	2	5.54	<13	PASS
		3	3	5.57	<13	PASS
		6	0	6.04	<13	PASS
	HCH	1	0	5.42	<13	PASS
		1	3	5.02	<13	PASS
		1	5	4.86	<13	PASS
		3	0	5.45	<13	PASS
		3	2	5.16	<13	PASS
		3	3	5.1	<13	PASS
		6	0	5.75	<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	4.22	<13	PASS
		1	7	4.31	<13	PASS
		1	14	4.46	<13	PASS
		8	0	5.09	<13	PASS
		8	4	5.09	<13	PASS
		8	7	5.17	<13	PASS
		15	0	5.06	<13	PASS
	MCH	1	0	4.43	<13	PASS
		1	7	4.3	<13	PASS
		1	14	4.28	<13	PASS
		8	0	5.19	<13	PASS
		8	4	5.05	<13	PASS
		8	7	5.05	<13	PASS
		15	0	5.22	<13	PASS
	HCH	1	0	4.64	<13	PASS
		1	7	4.39	<13	PASS
		1	14	3.79	<13	PASS
		8	0	5.41	<13	PASS
		8	4	5.19	<13	PASS
		8	7	4.94	<13	PASS
		15	0	5.05	<13	PASS
16QAM	LCH	1	0	5.22	<13	PASS
		1	7	5.38	<13	PASS
		1	14	5.4	<13	PASS
		8	0	5.7	<13	PASS

		8	4	5.85	<13	PASS
		8	7	5.86	<13	PASS
		15	0	5.96	<13	PASS
	MCH	1	0	5.41	<13	PASS
		1	7	5.24	<13	PASS
		1	14	5.09	<13	PASS
		8	0	5.91	<13	PASS
		8	4	5.86	<13	PASS
		8	7	5.83	<13	PASS
		15	0	5.98	<13	PASS
	HCH	1	0	5.53	<13	PASS
		1	7	5.7	<13	PASS
		1	14	4.9	<13	PASS
		8	0	6.31	<13	PASS
		8	4	6.23	<13	PASS
		8	7	5.97	<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	4.52	<13	PASS
		1	12	4.54	<13	PASS
		1	24	4.73	<13	PASS
		12	0	5.11	<13	PASS
		12	6	5.11	<13	PASS
		12	13	5.17	<13	PASS
		25	0	5.1	<13	PASS
	MCH	1	0	4.81	<13	PASS
		1	12	4.45	<13	PASS
		1	24	4.35	<13	PASS
		12	0	5.15	<13	PASS
		12	6	5.02	<13	PASS
		12	13	5.02	<13	PASS
		25	0	5.16	<13	PASS
	HCH	1	0	4.28	<13	PASS
		1	12	4.57	<13	PASS
		1	24	3.91	<13	PASS
		12	0	5.26	<13	PASS
		12	6	5.34	<13	PASS

		12	13	5.19	<13	PASS
		25	0	5.24	<13	PASS
16QAM	LCH	1	0	5.33	<13	PASS
		1	12	5.18	<13	PASS
		1	24	5.51	<13	PASS
		12	0	5.91	<13	PASS
		12	6	6	<13	PASS
		12	13	6.08	<13	PASS
		25	0	5.88	<13	PASS
		25	0	5.88	<13	PASS
	MCH	1	0	5.82	<13	PASS
		1	12	5.54	<13	PASS
		1	24	5.48	<13	PASS
		12	0	6.01	<13	PASS
		12	6	5.86	<13	PASS
		12	13	5.9	<13	PASS
		25	0	5.93	<13	PASS
	HCH	1	0	4.96	<13	PASS
		1	12	5.71	<13	PASS
		1	24	4.84	<13	PASS
		12	0	6.08	<13	PASS
		12	6	6.1	<13	PASS
		12	13	5.94	<13	PASS
		25	0	6.09	<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	4.35	<13	PASS
		1	24	4.55	<13	PASS
		1	49	4.72	<13	PASS
		25	0	5.12	<13	PASS
		25	12	5.24	<13	PASS
		25	25	5.28	<13	PASS
		50	0	5.25	<13	PASS
	MCH	1	0	4.62	<13	PASS
		1	24	4.43	<13	PASS
		1	49	3.92	<13	PASS
		25	0	5.3	<13	PASS
		25	12	5.18	<13	PASS
		25	25	5	<13	PASS

	HCH	50	0	5.16	<13	PASS
		1	0	4.08	<13	PASS
		1	24	4.1	<13	PASS
		1	49	4.15	<13	PASS
		25	0	4.66	<13	PASS
		25	12	5	<13	PASS
		25	25	5.17	<13	PASS
		50	0	5.3	<13	PASS
16QAM	LCH	1	0	5.24	<13	PASS
		1	24	5.52	<13	PASS
		1	49	5.62	<13	PASS
		25	0	5.9	<13	PASS
		25	12	6.07	<13	PASS
		25	25	6.13	<13	PASS
		50	0	6.01	<13	PASS
	MCH	1	0	5.43	<13	PASS
		1	24	5.26	<13	PASS
		1	49	4.83	<13	PASS
		25	0	6.12	<13	PASS
		25	12	6	<13	PASS
		25	25	5.87	<13	PASS
		50	0	5.95	<13	PASS
	HCH	1	0	5.24	<13	PASS
		1	24	5.08	<13	PASS
		1	49	5.03	<13	PASS
		25	0	5.54	<13	PASS
		25	12	5.87	<13	PASS
		25	25	6.04	<13	PASS
		50	0	6.06	<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	4.33	<13	PASS
		1	37	4.62	<13	PASS
		1	74	4.4	<13	PASS
		37	0	5.19	<13	PASS
		37	18	5.24	<13	PASS
		37	38	5.18	<13	PASS
		75	0	5.48	<13	PASS

	MCH	1	0	4.71	<13	PASS
		1	37	4.31	<13	PASS
		1	74	4.05	<13	PASS
		37	0	5.24	<13	PASS
		37	18	5.1	<13	PASS
		37	38	4.92	<13	PASS
		75	0	5.38	<13	PASS
	HCH	1	0	4.53	<13	PASS
		1	37	3.9	<13	PASS
		1	74	4.23	<13	PASS
		37	0	4.95	<13	PASS
		37	18	4.87	<13	PASS
		37	38	5.22	<13	PASS
		75	0	5.62	<13	PASS
16QAM	LCH	1	0	5.26	<13	PASS
		1	37	5.64	<13	PASS
		1	74	5.33	<13	PASS
		37	0	5.98	<13	PASS
		37	18	6.02	<13	PASS
		37	38	6.03	<13	PASS
		75	0	6.16	<13	PASS
	MCH	1	0	5.66	<13	PASS
		1	37	5.46	<13	PASS
		1	74	5.13	<13	PASS
		37	0	6.14	<13	PASS
		37	18	6.01	<13	PASS
		37	38	5.76	<13	PASS
		75	0	6.02	<13	PASS
	HCH	1	0	5.94	<13	PASS
		1	37	5.16	<13	PASS
		1	74	5.28	<13	PASS
		37	0	5.83	<13	PASS
		37	18	5.69	<13	PASS
		37	38	5.98	<13	PASS
		75	0	6.2	<13	PASS

Test Graphs

Channel Bandwidth: 1.4 MHz

(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#0



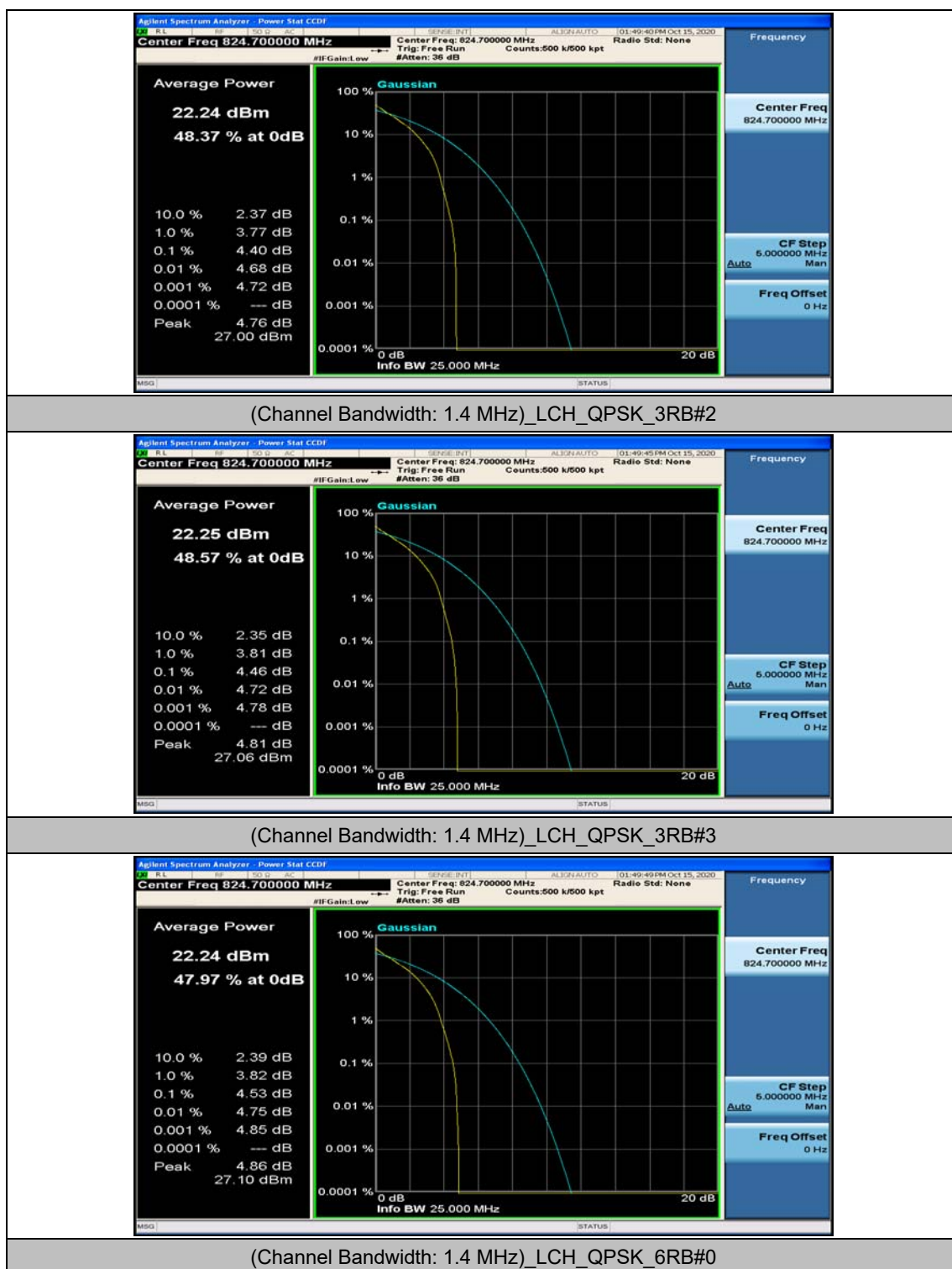
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#3



(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_1RB#5

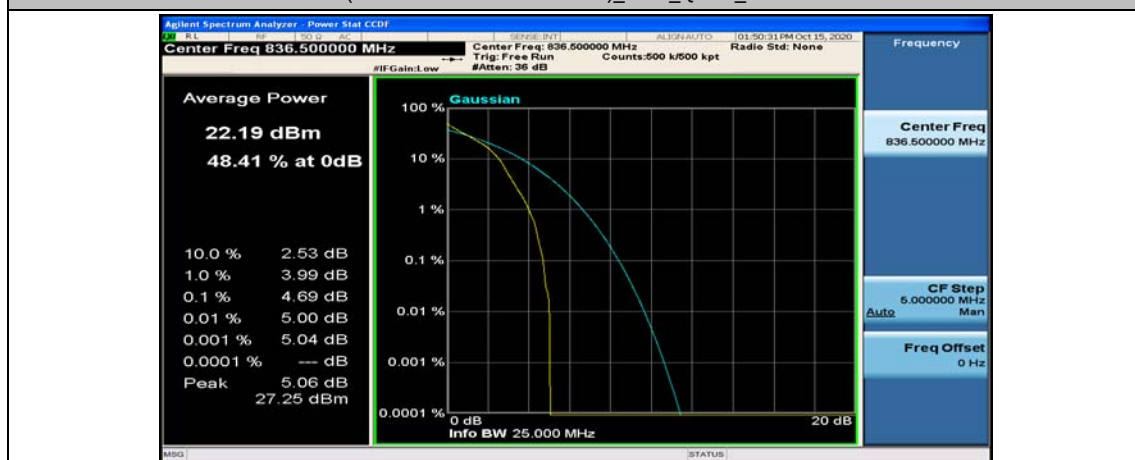


(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#0





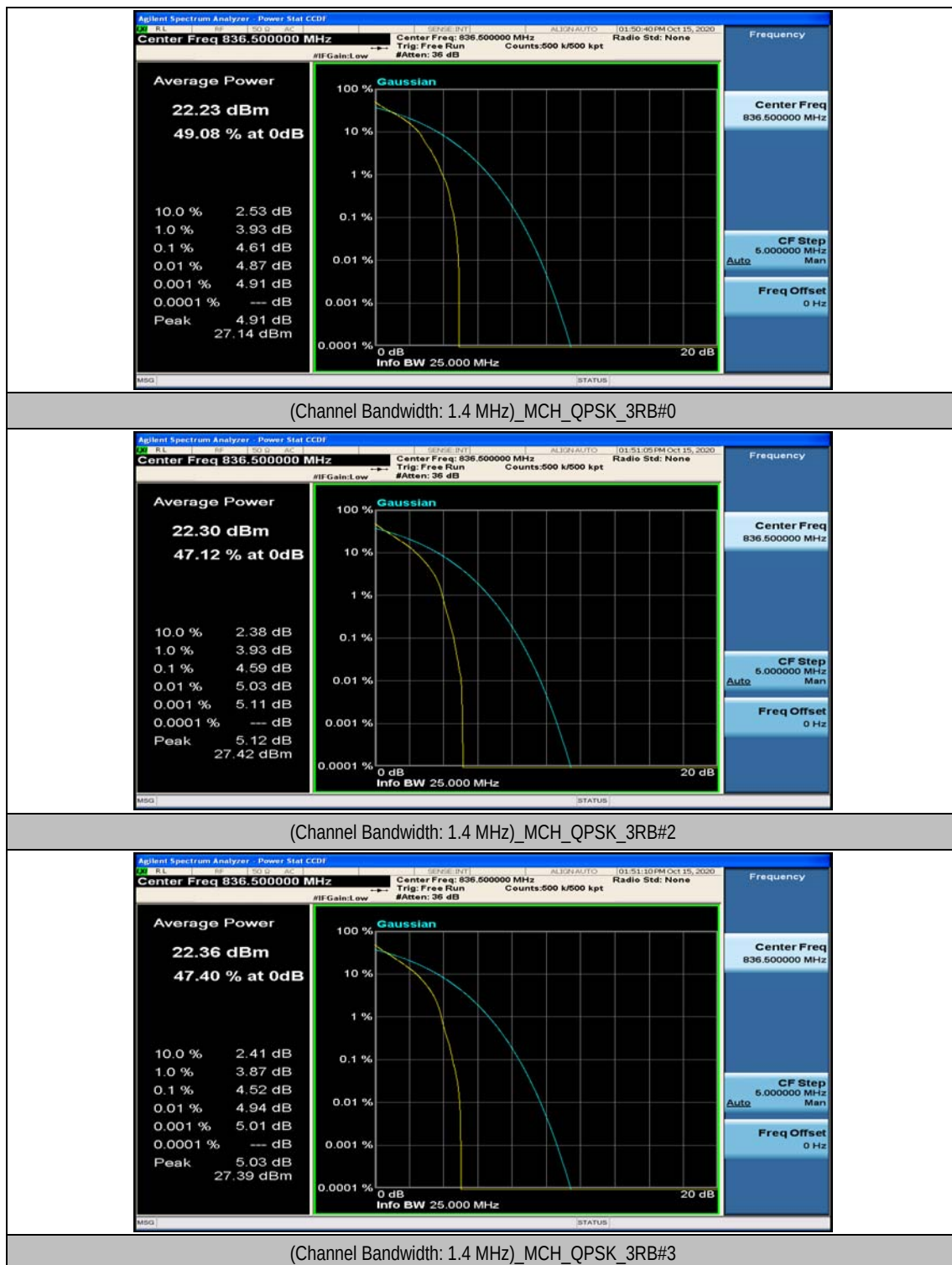
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

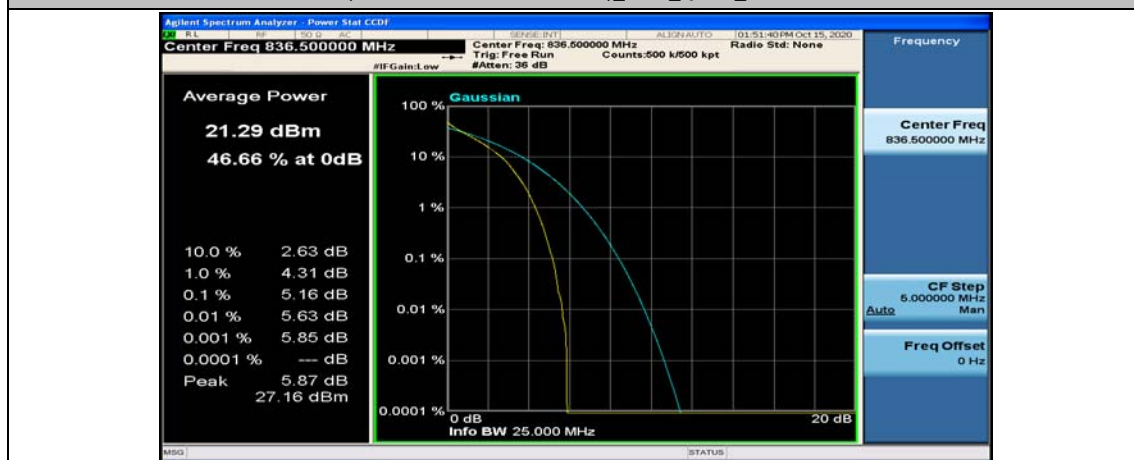


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5





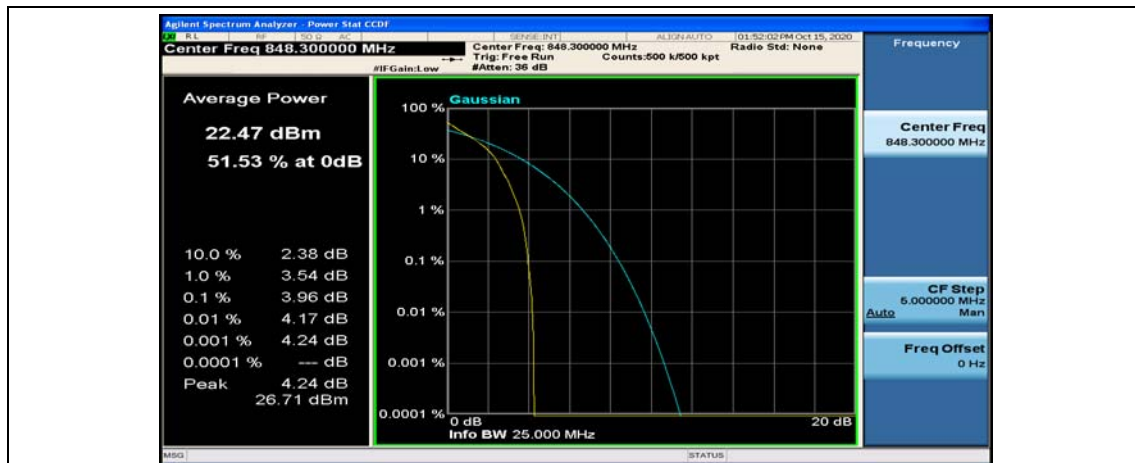
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_6RB#0



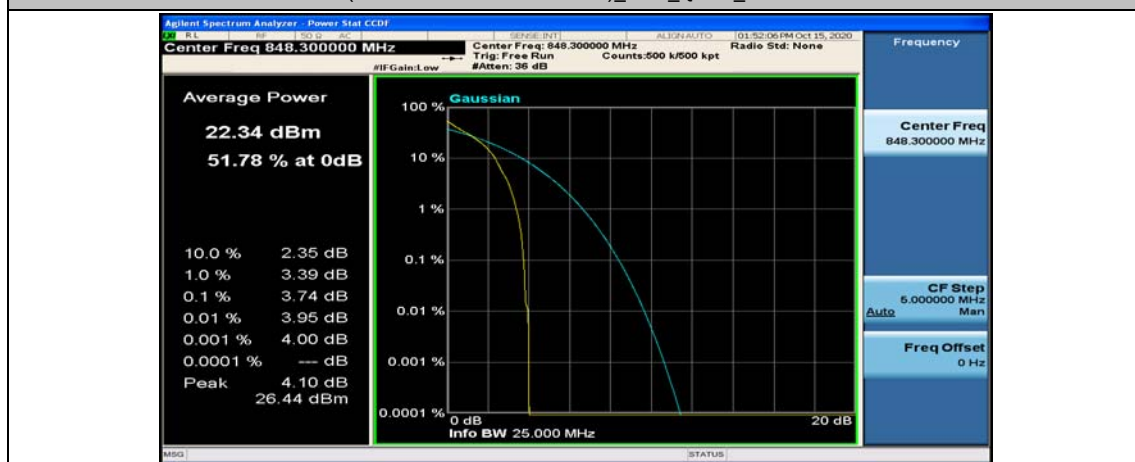
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#3



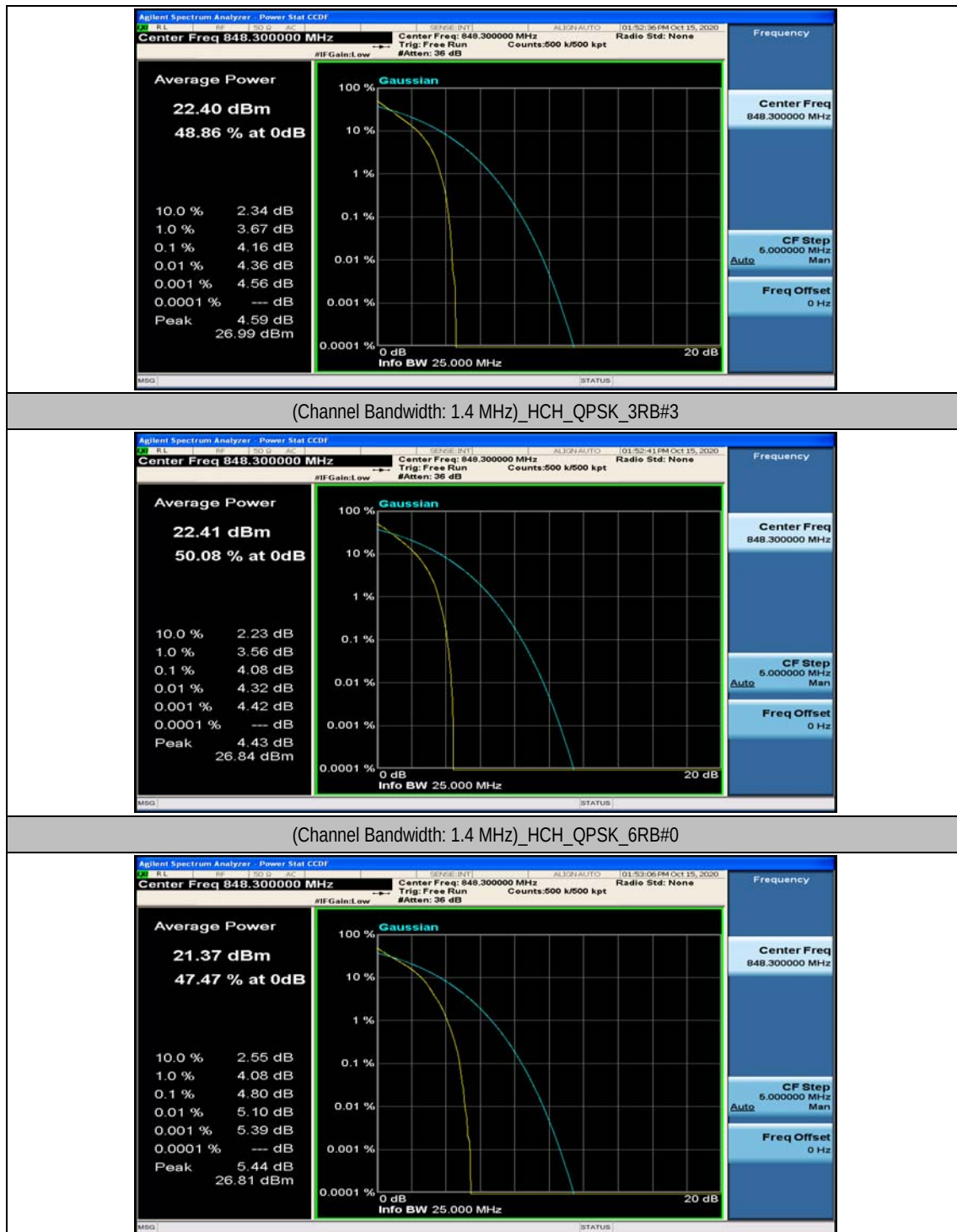
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_1RB#5



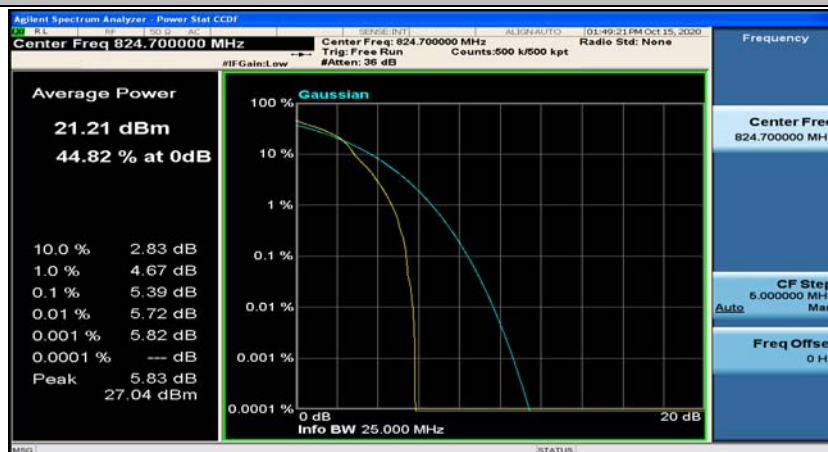
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_3RB#2



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#0



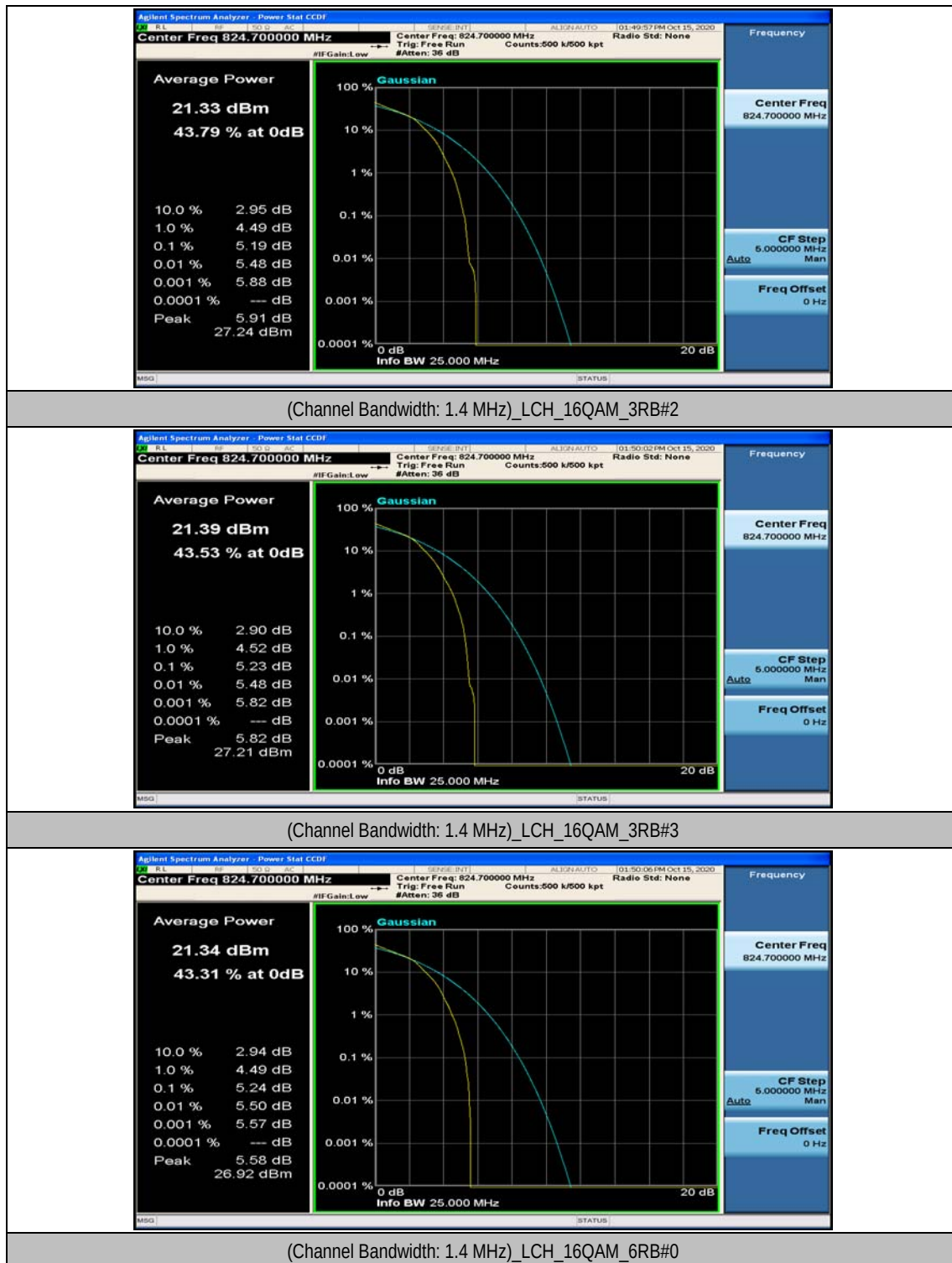
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3

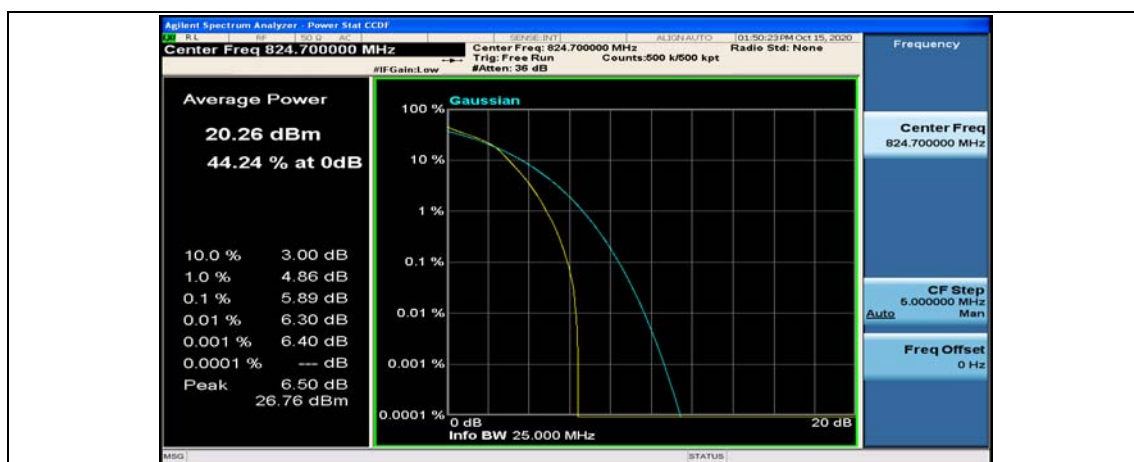


(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#0





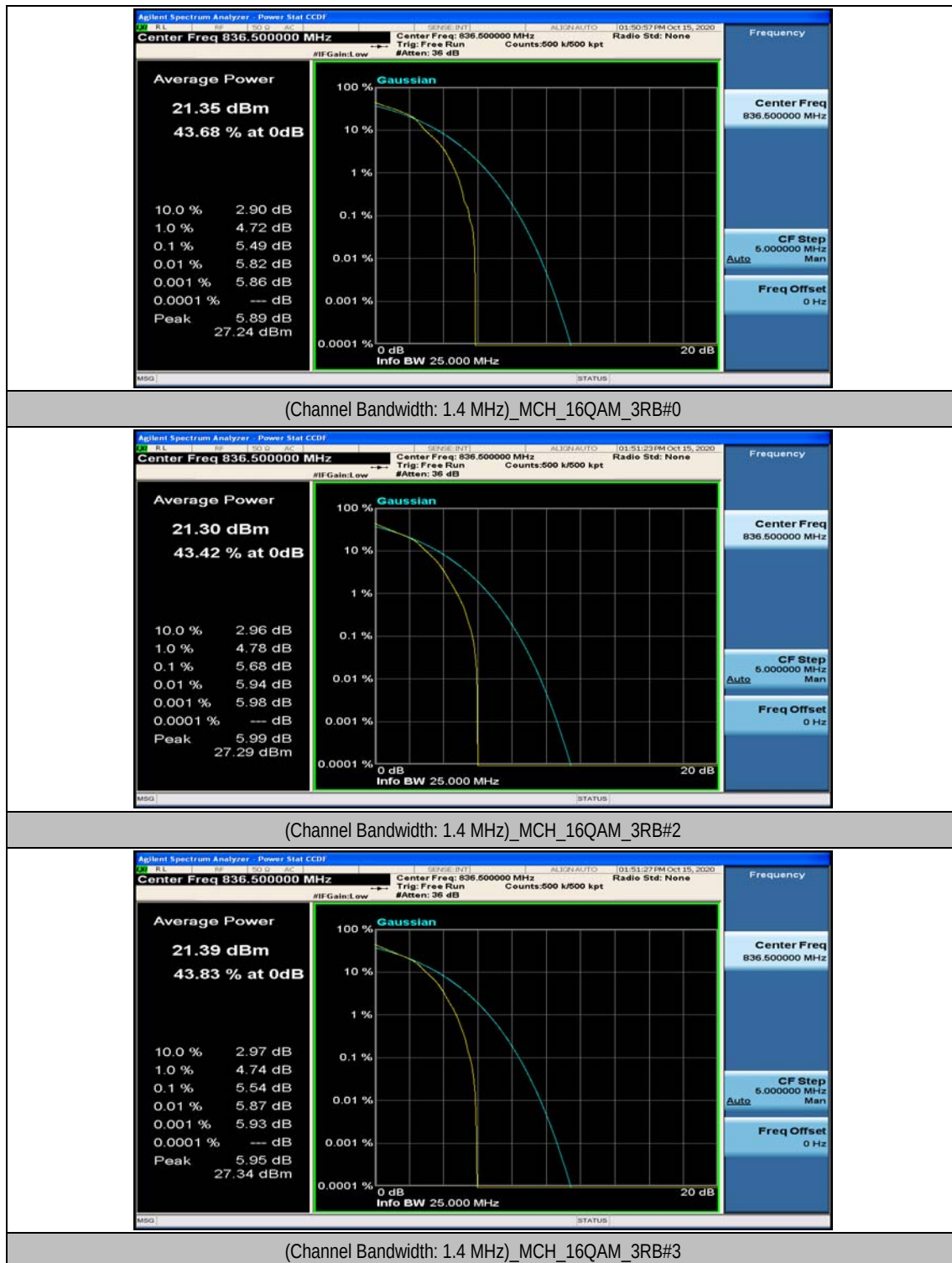
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0

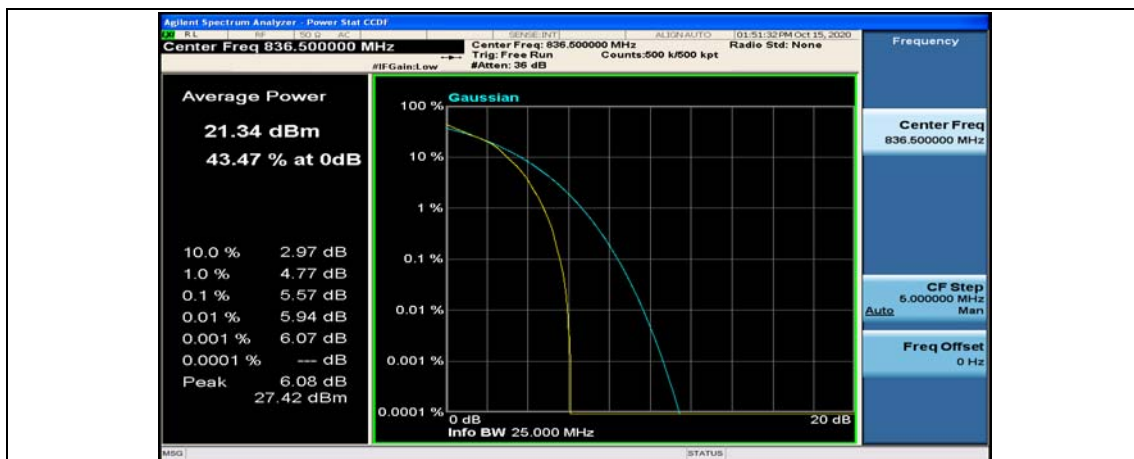


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5





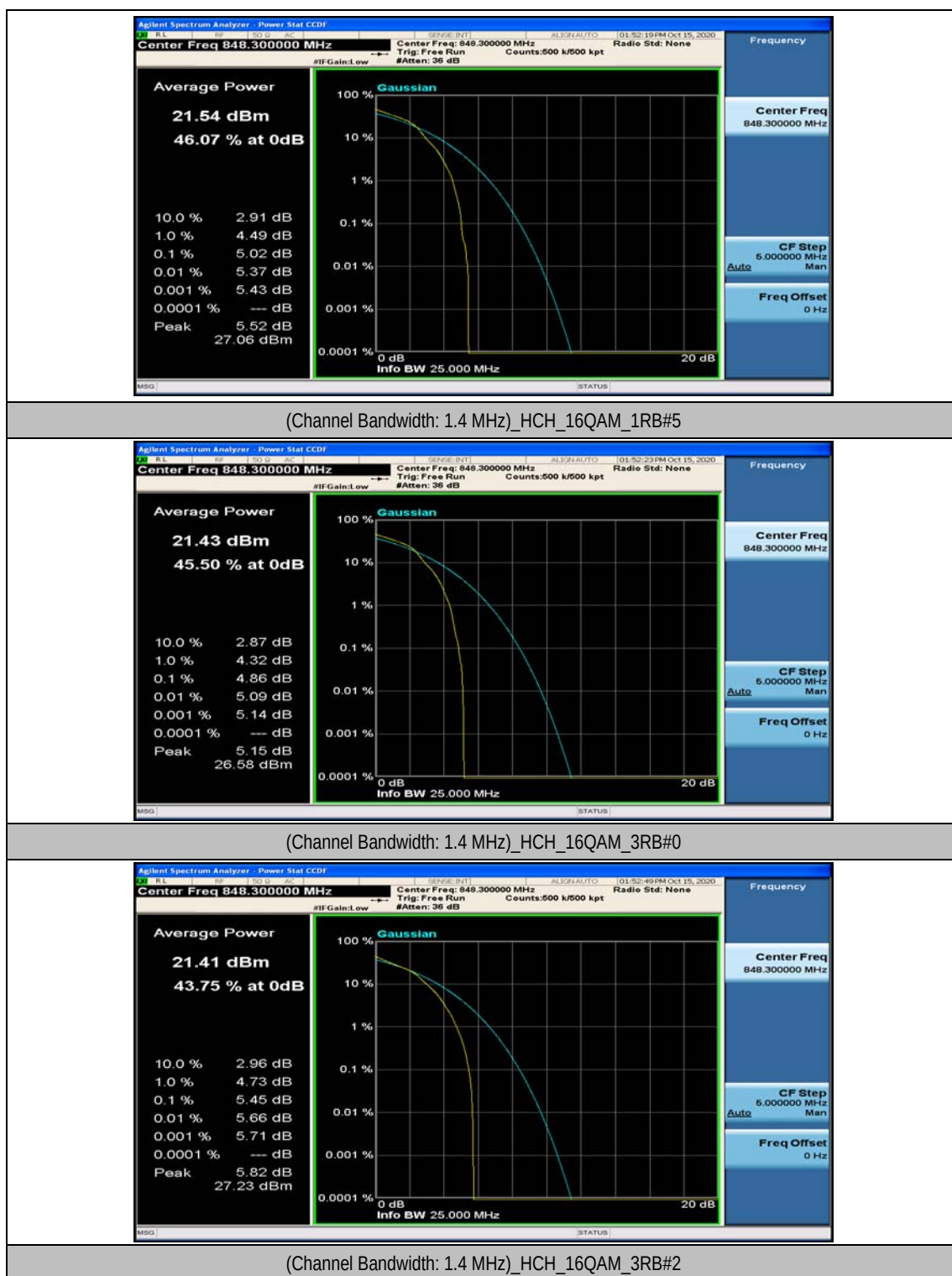
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0

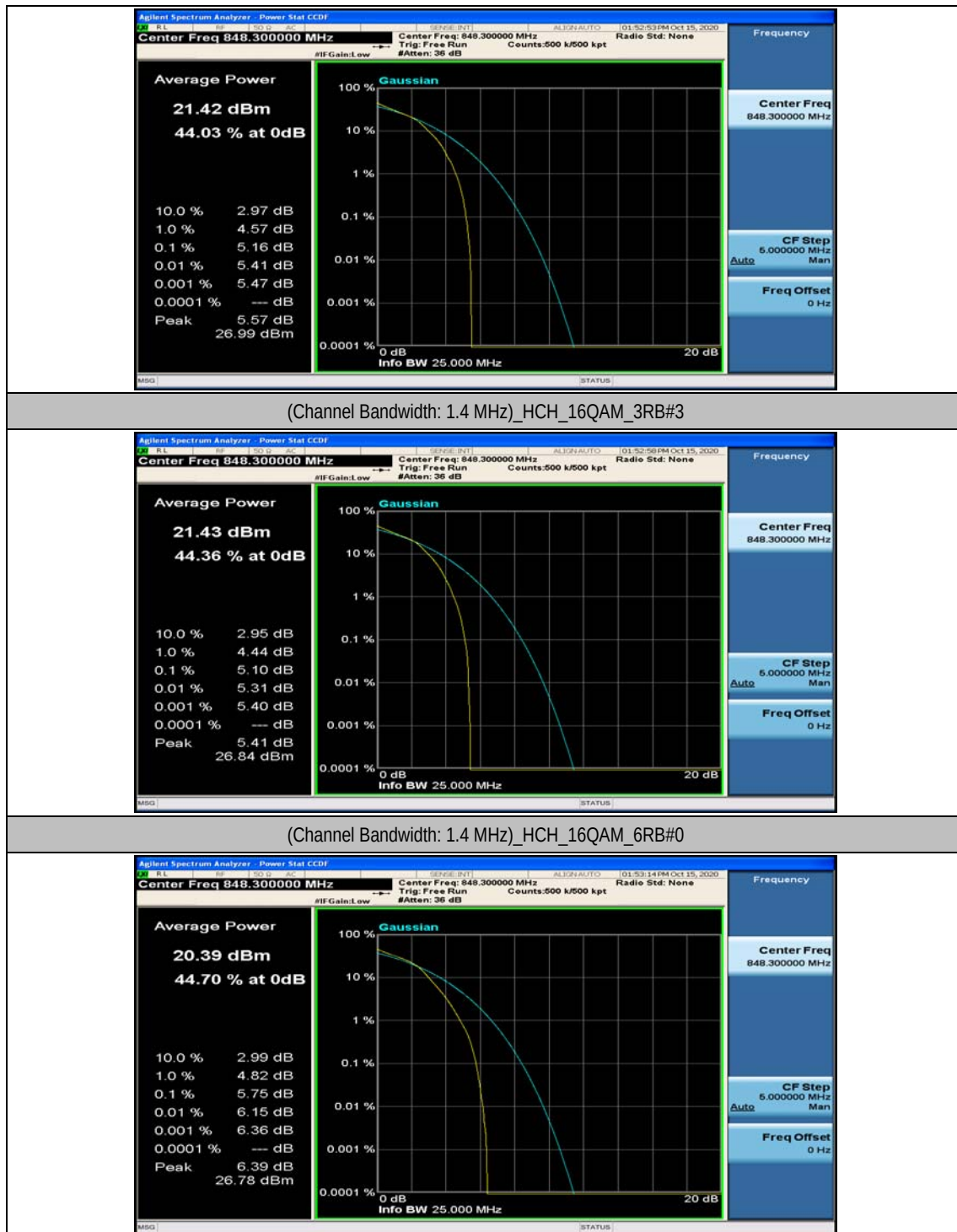


(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3





Channel Bandwidth: 3 MHz

(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#0



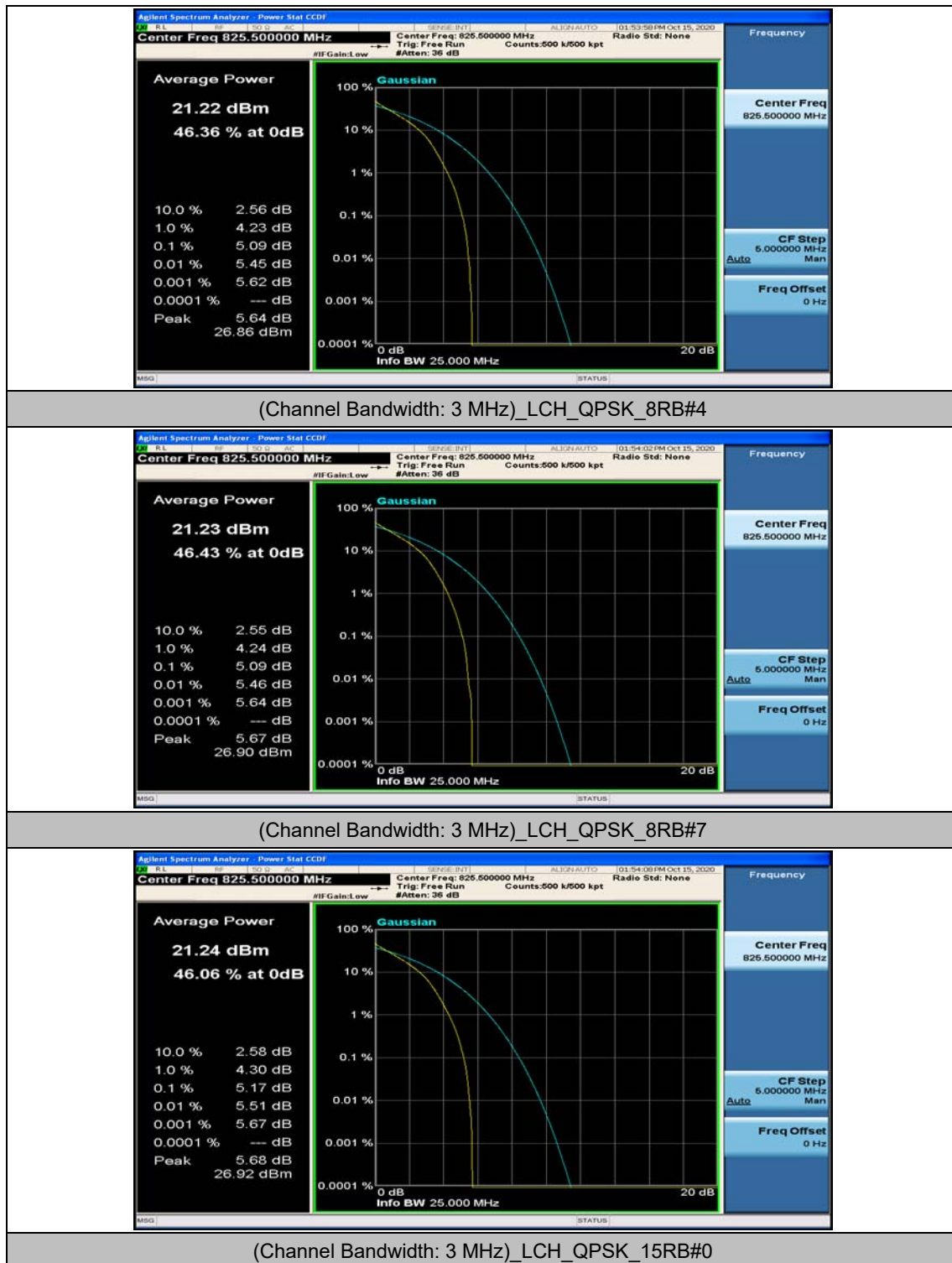
(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#7

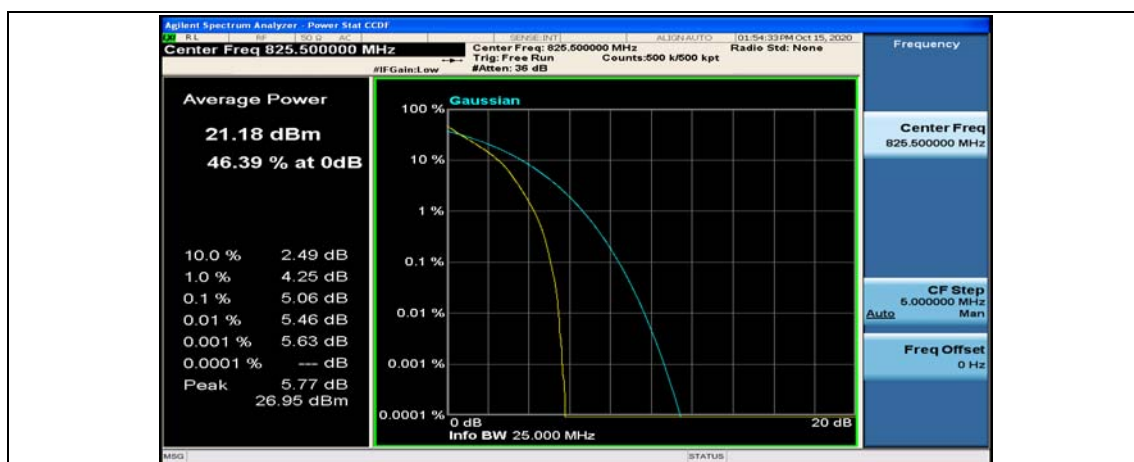


(Channel Bandwidth: 3 MHz)_LCH_QPSK_1RB#14



(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#0





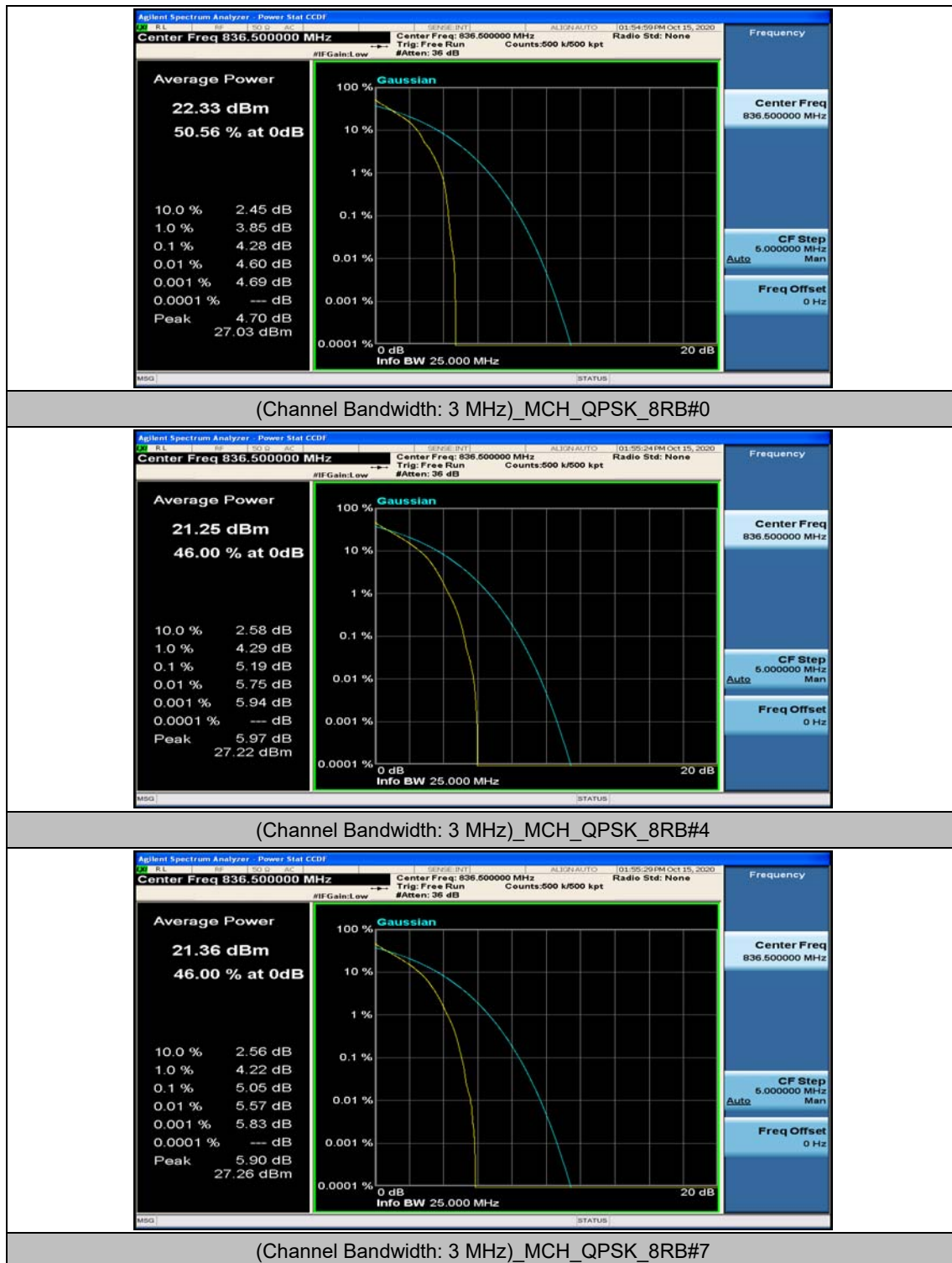
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14

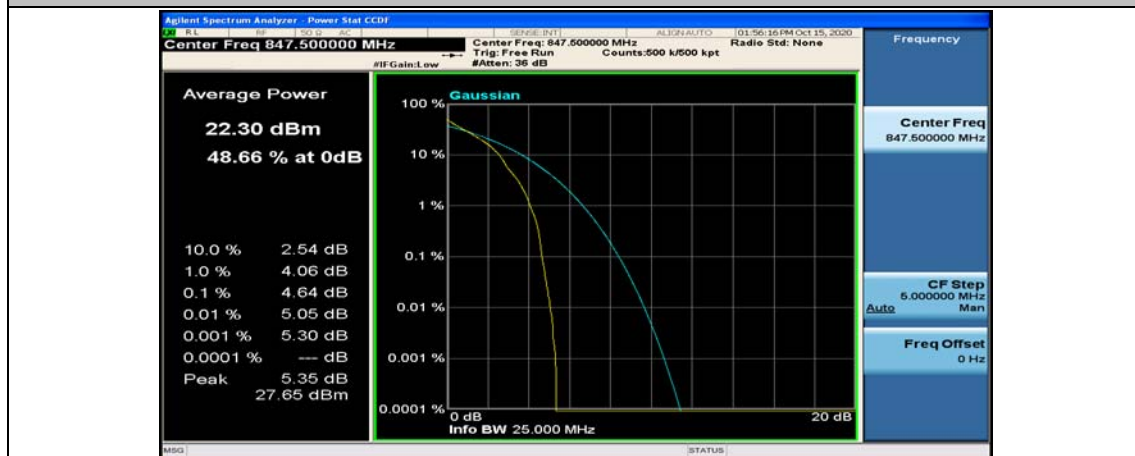




(Channel Bandwidth: 3 MHz)_MCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



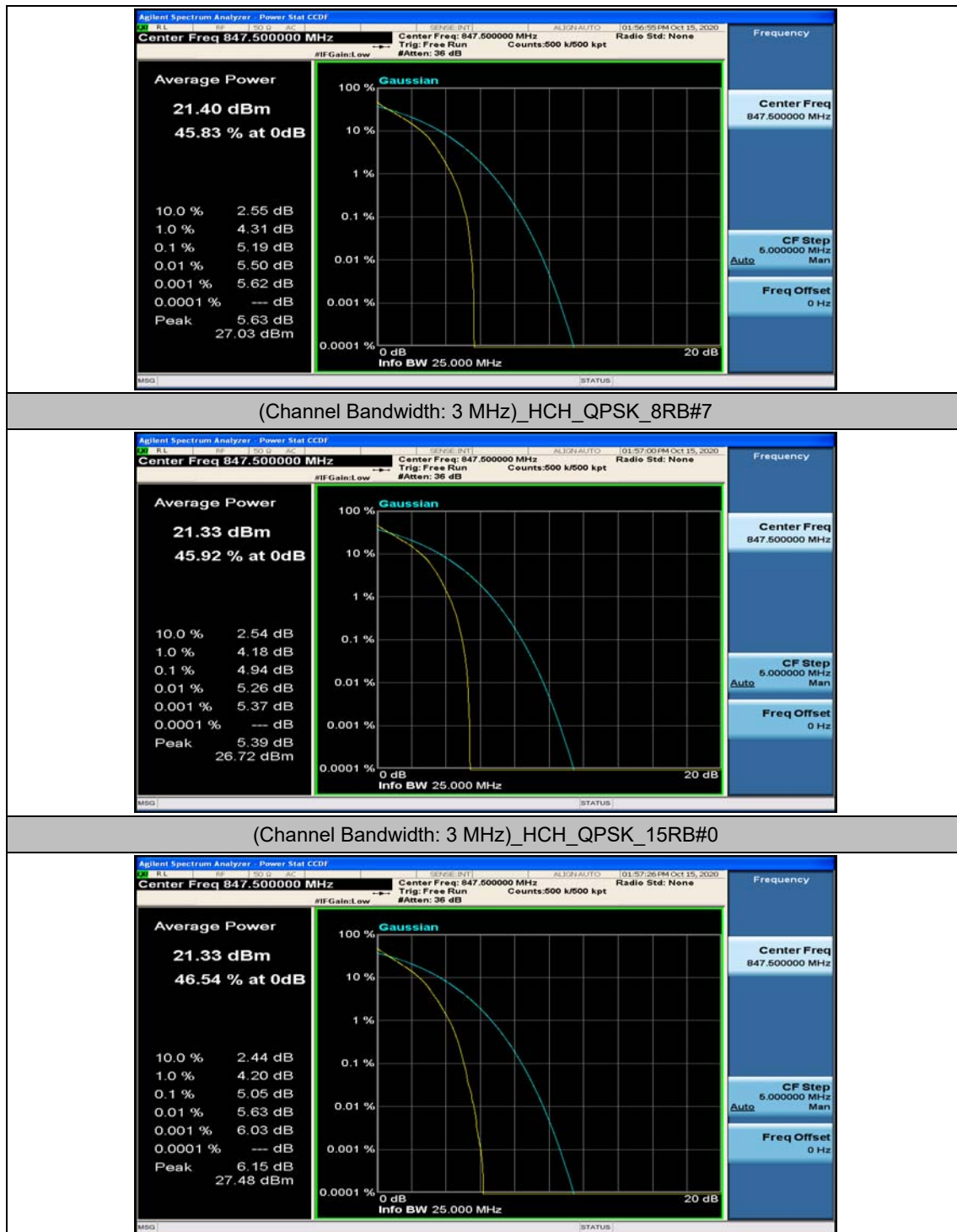
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#14



(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#0



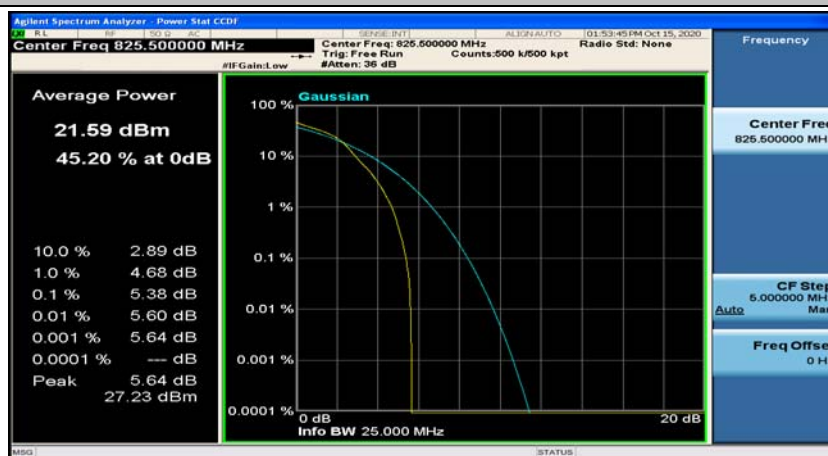
(Channel Bandwidth: 3 MHz)_HCH_QPSK_8RB#4



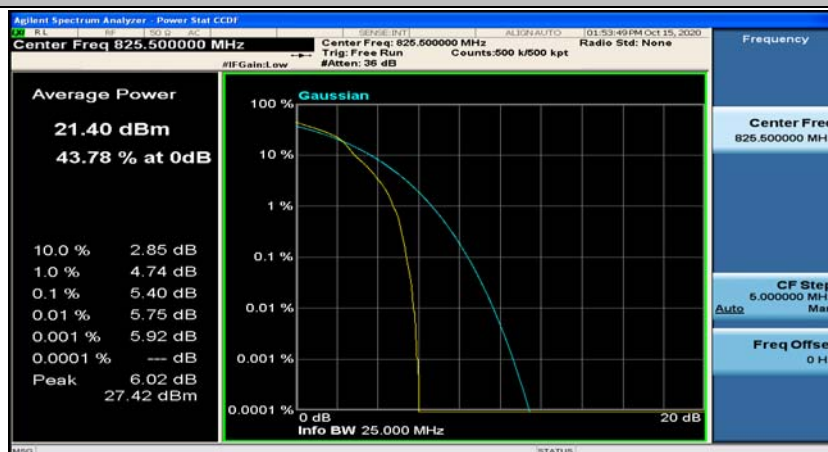
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



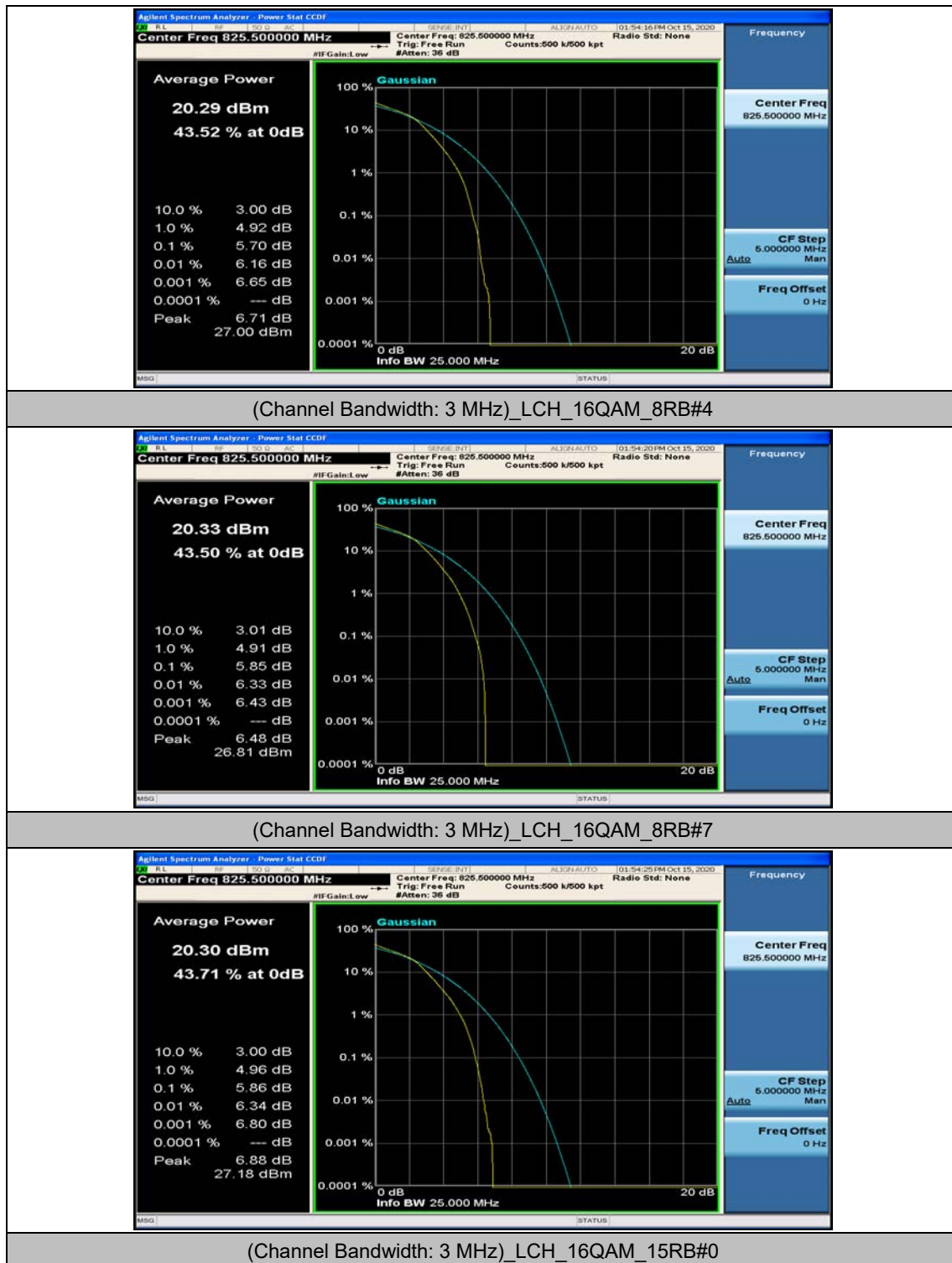
(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14



(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#0





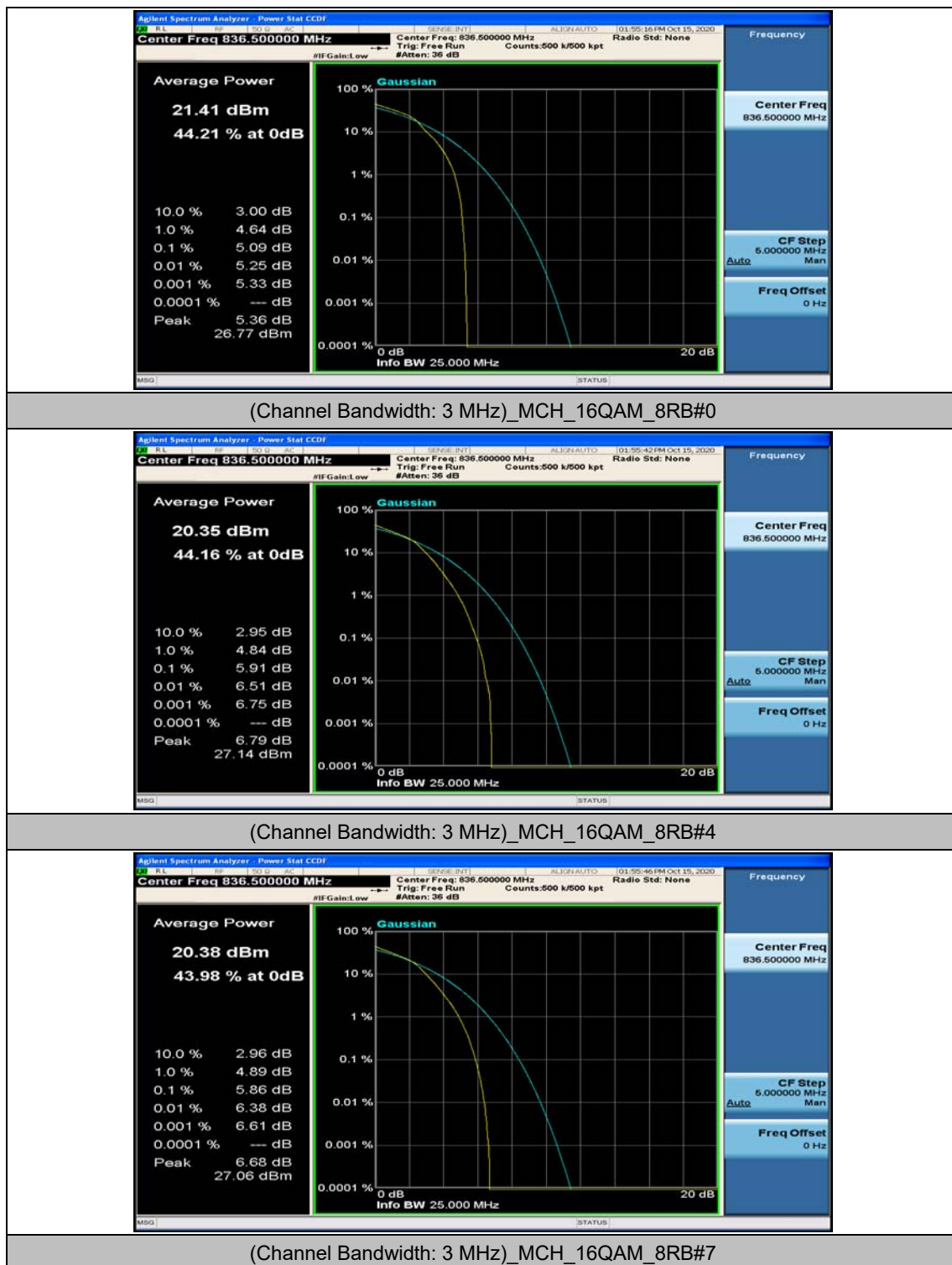
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14





(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0



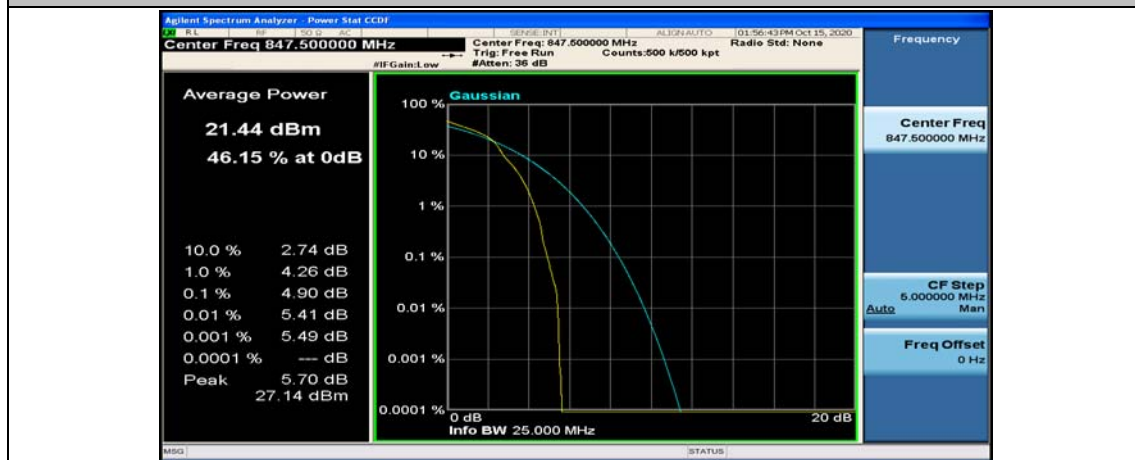
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#7



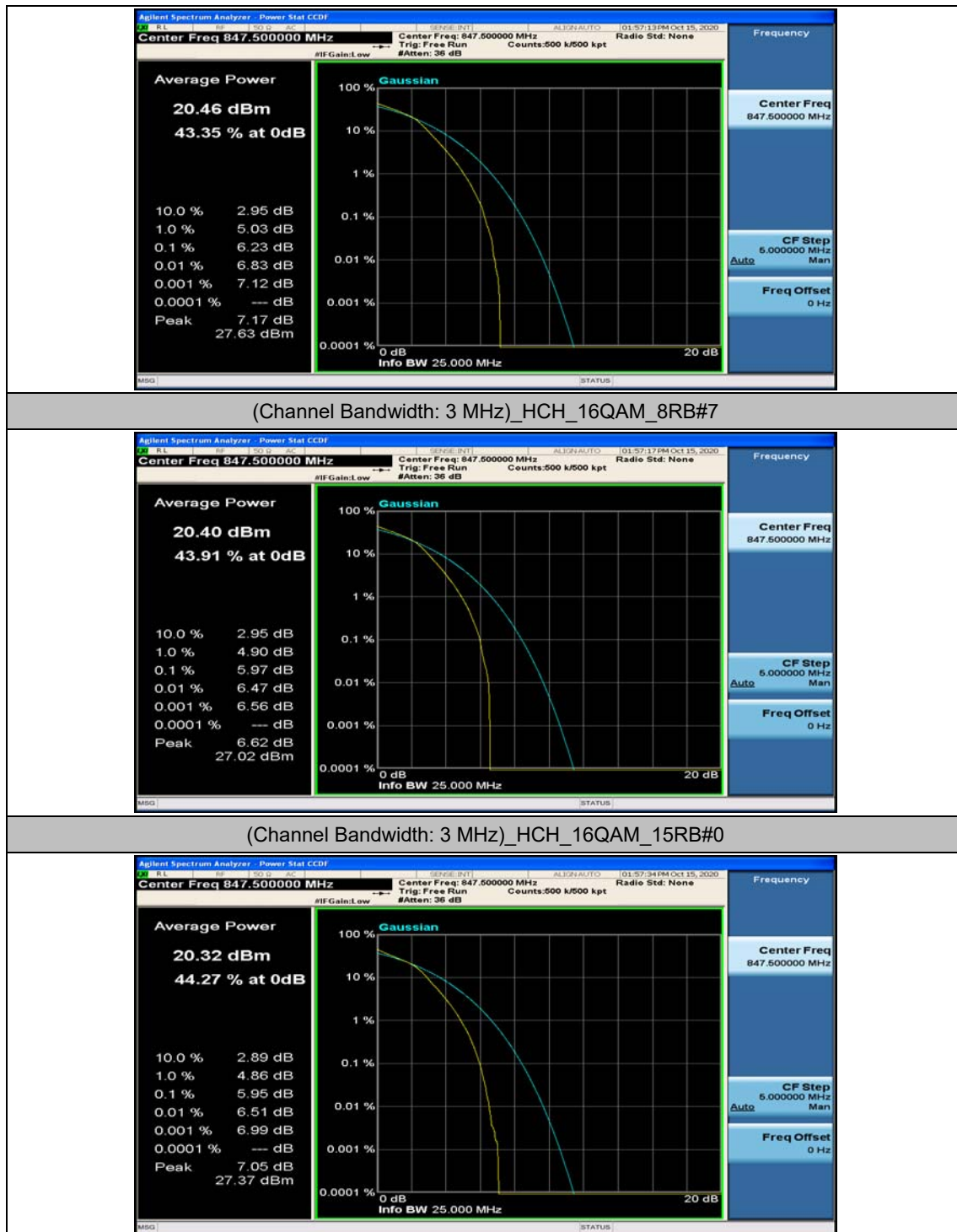
(Channel Bandwidth: 3 MHz)_HCH_16QAM_1RB#14



(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#0



(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#4

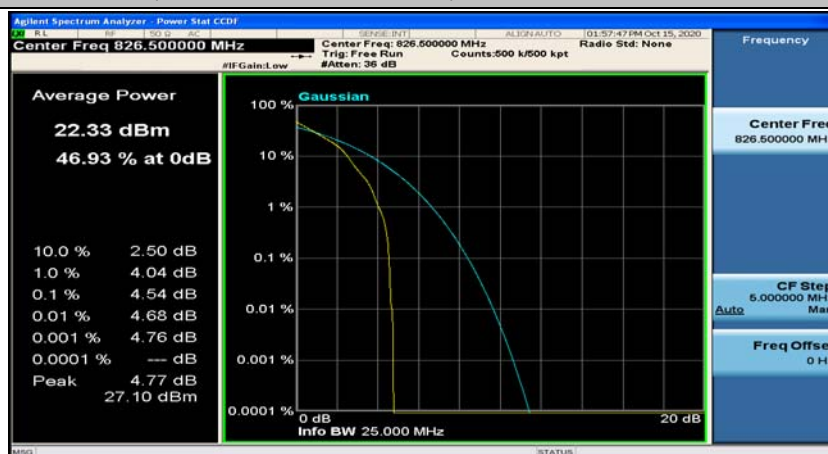


Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



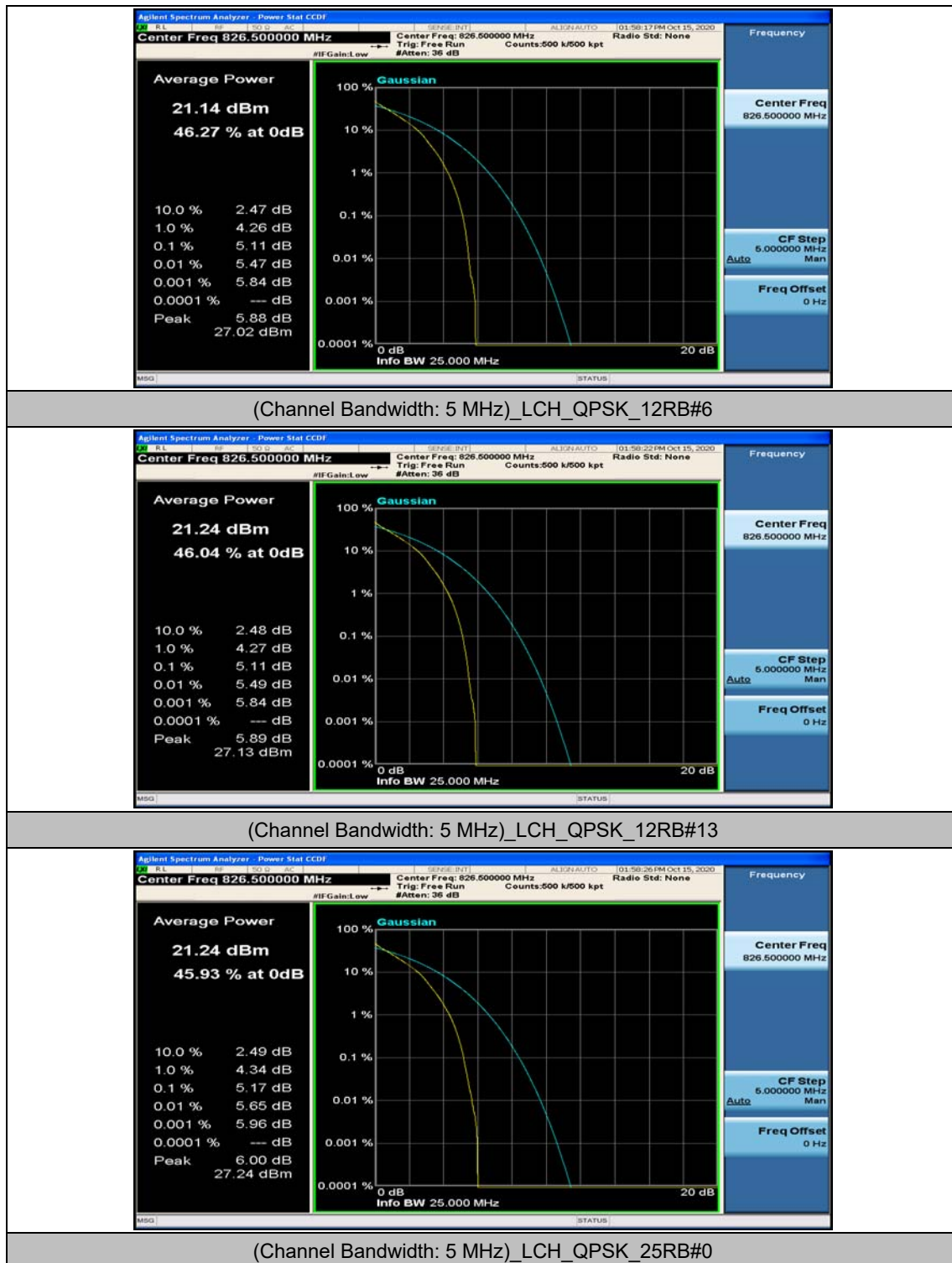
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

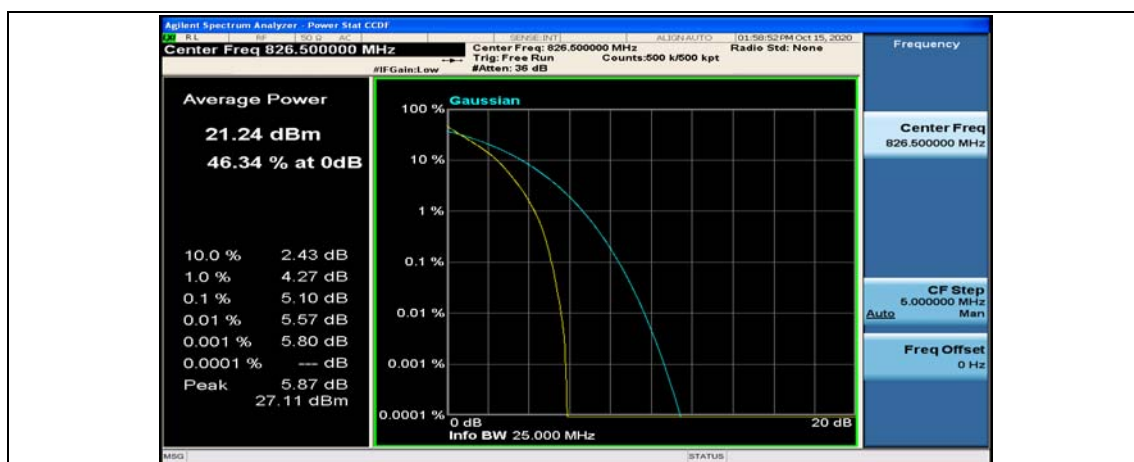


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24



(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0





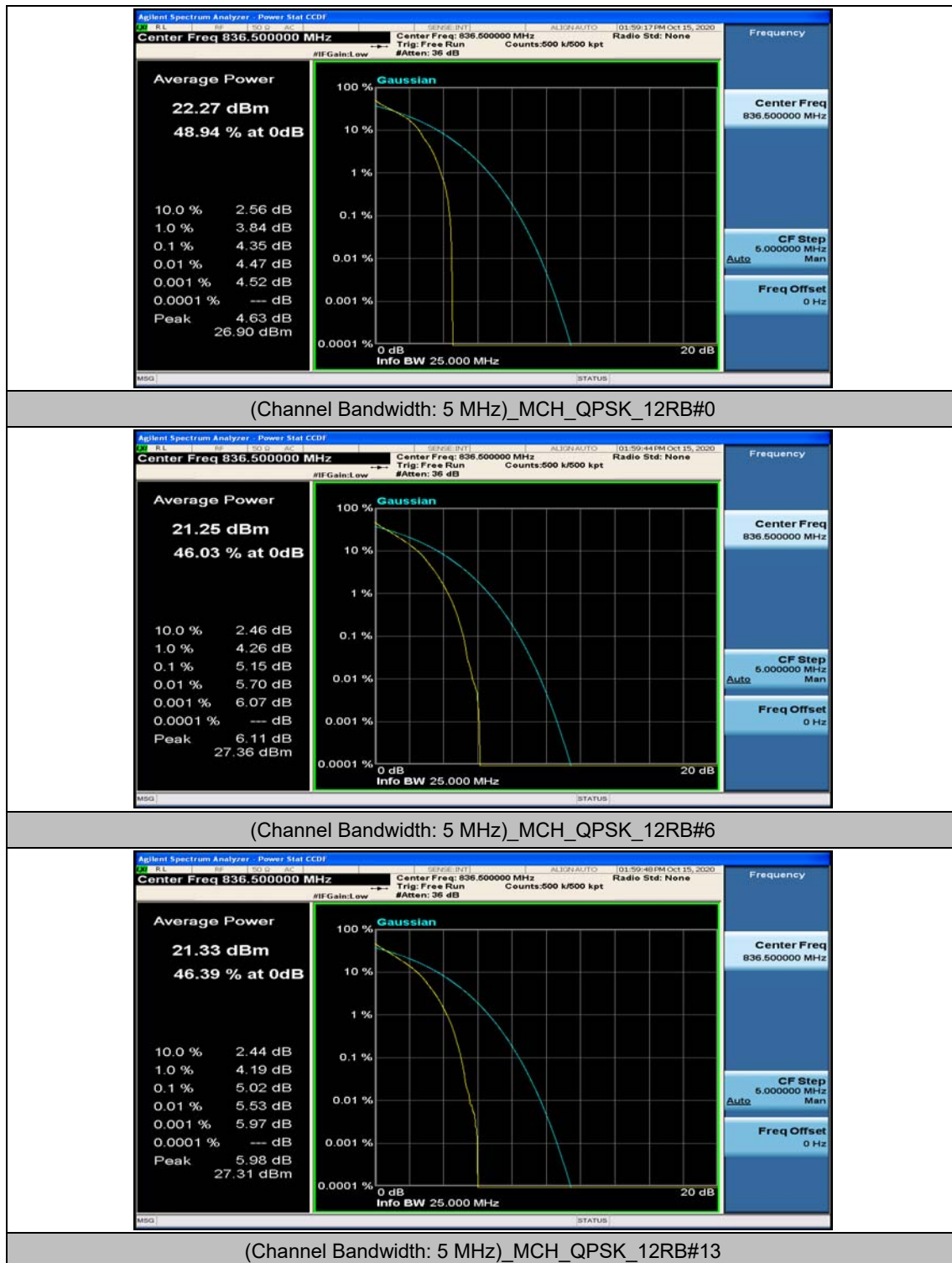
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

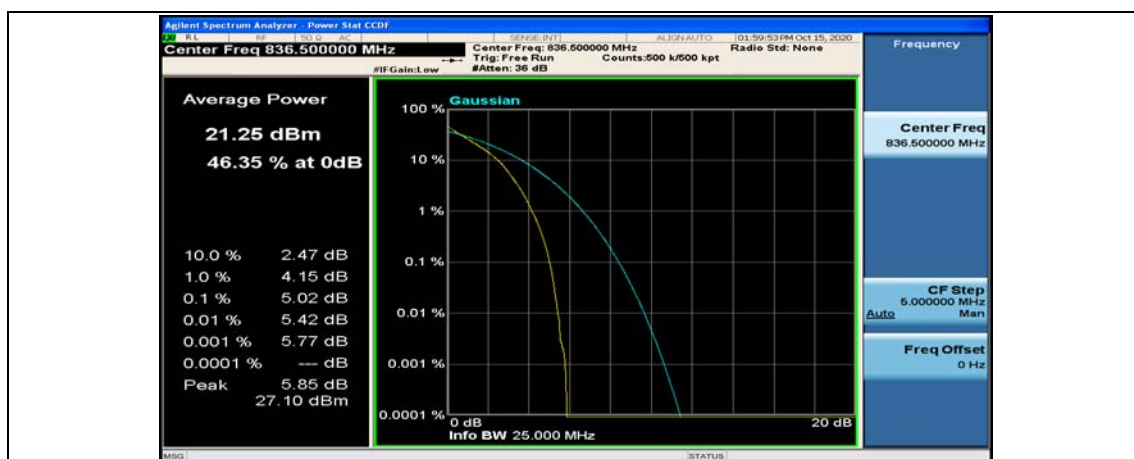


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

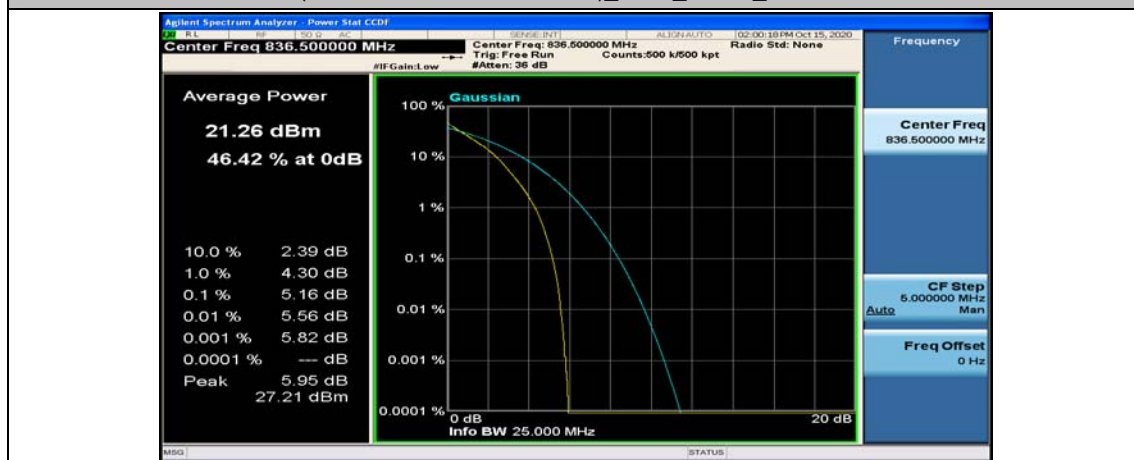


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24





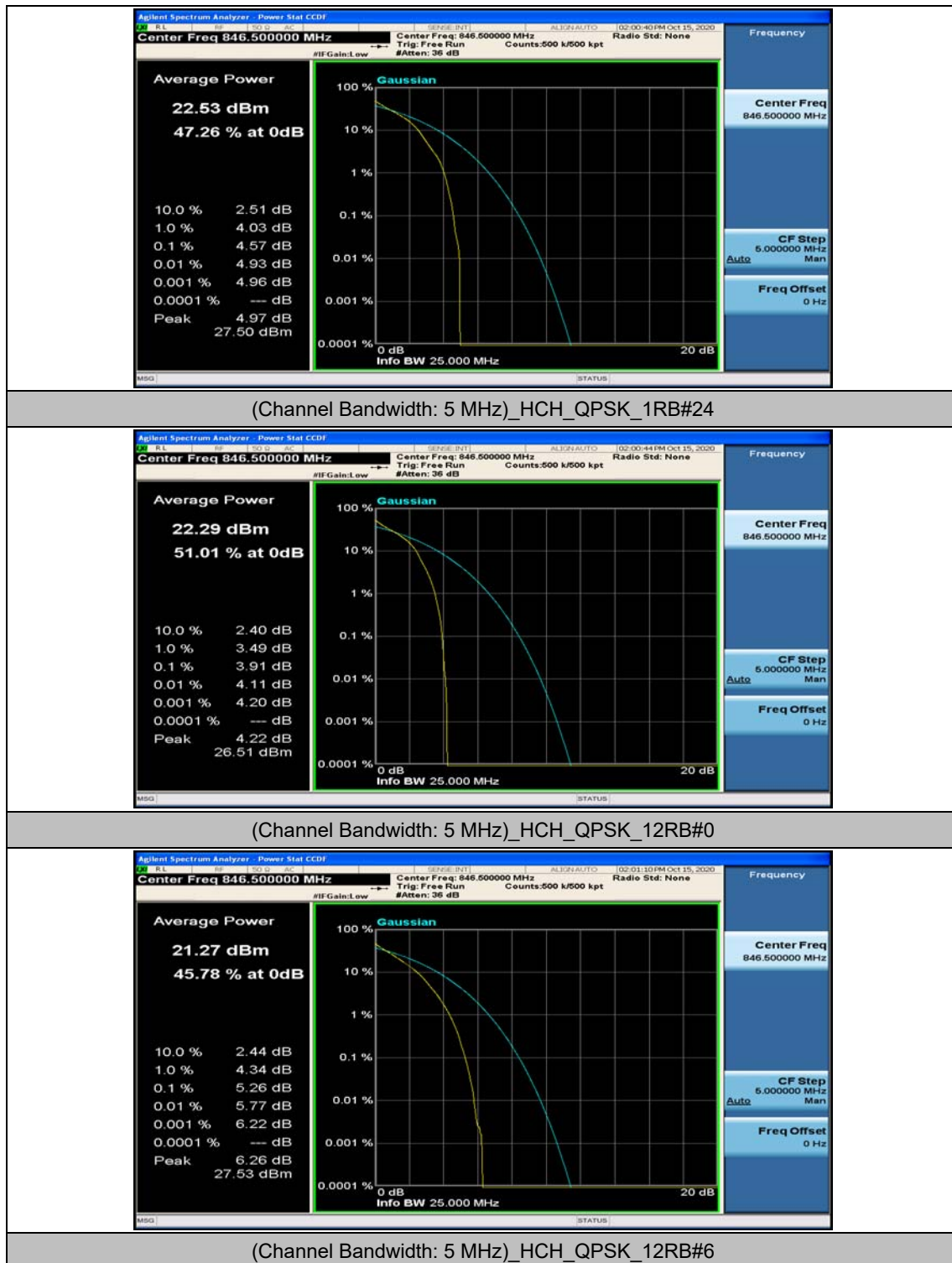
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0

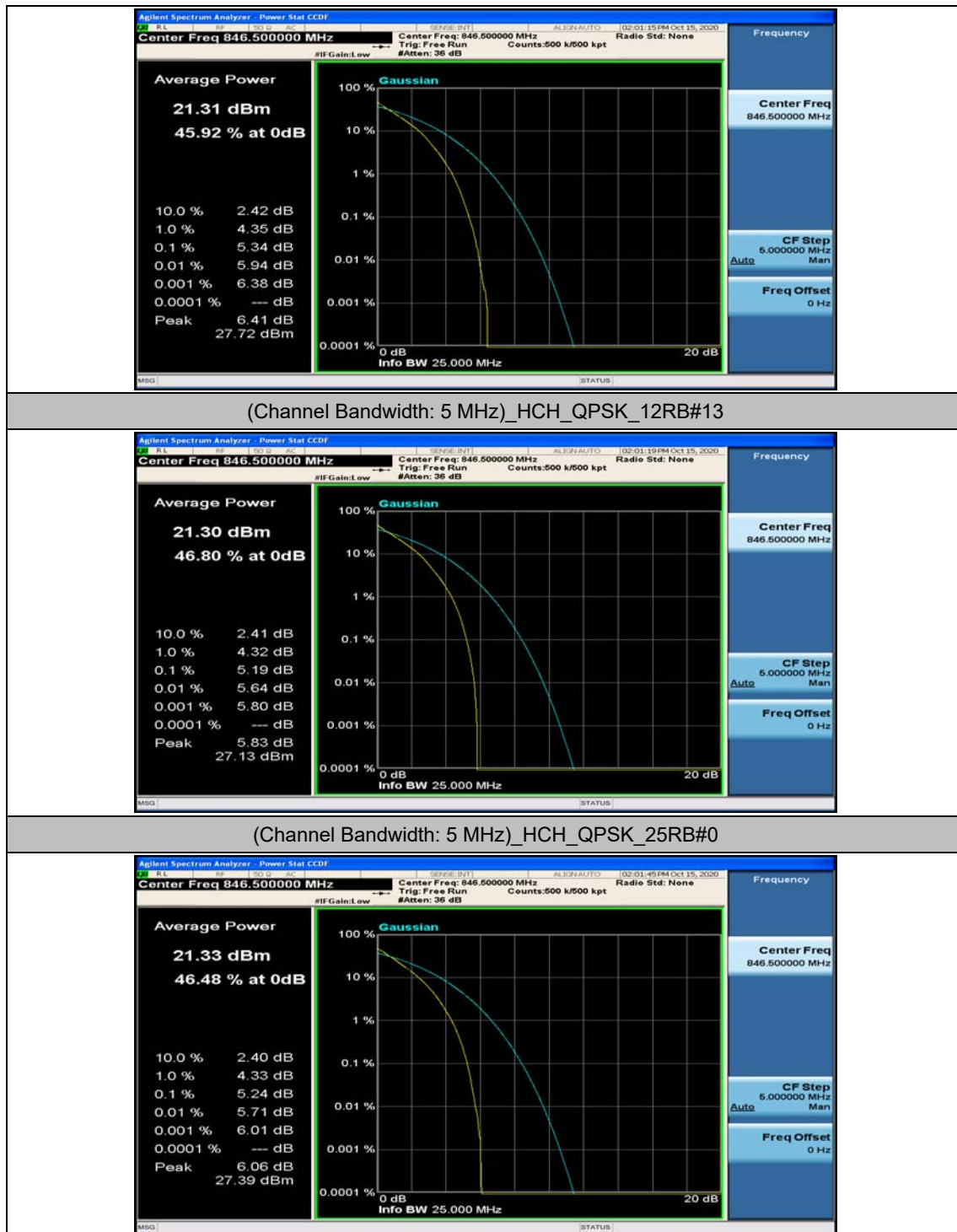


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

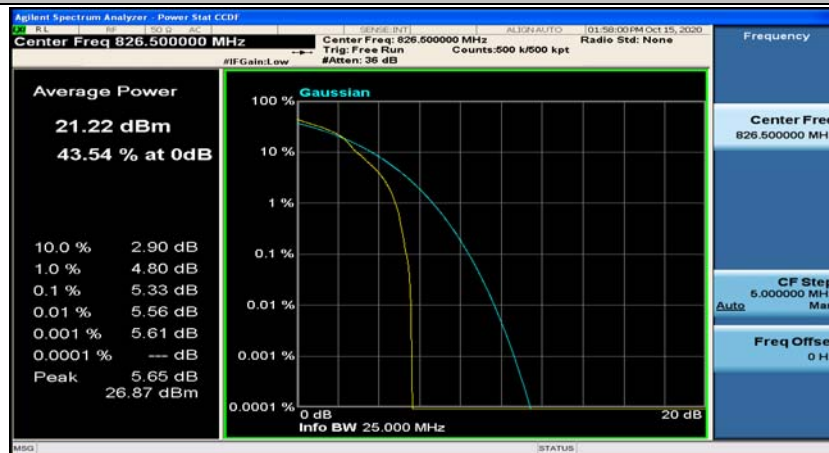


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12





(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



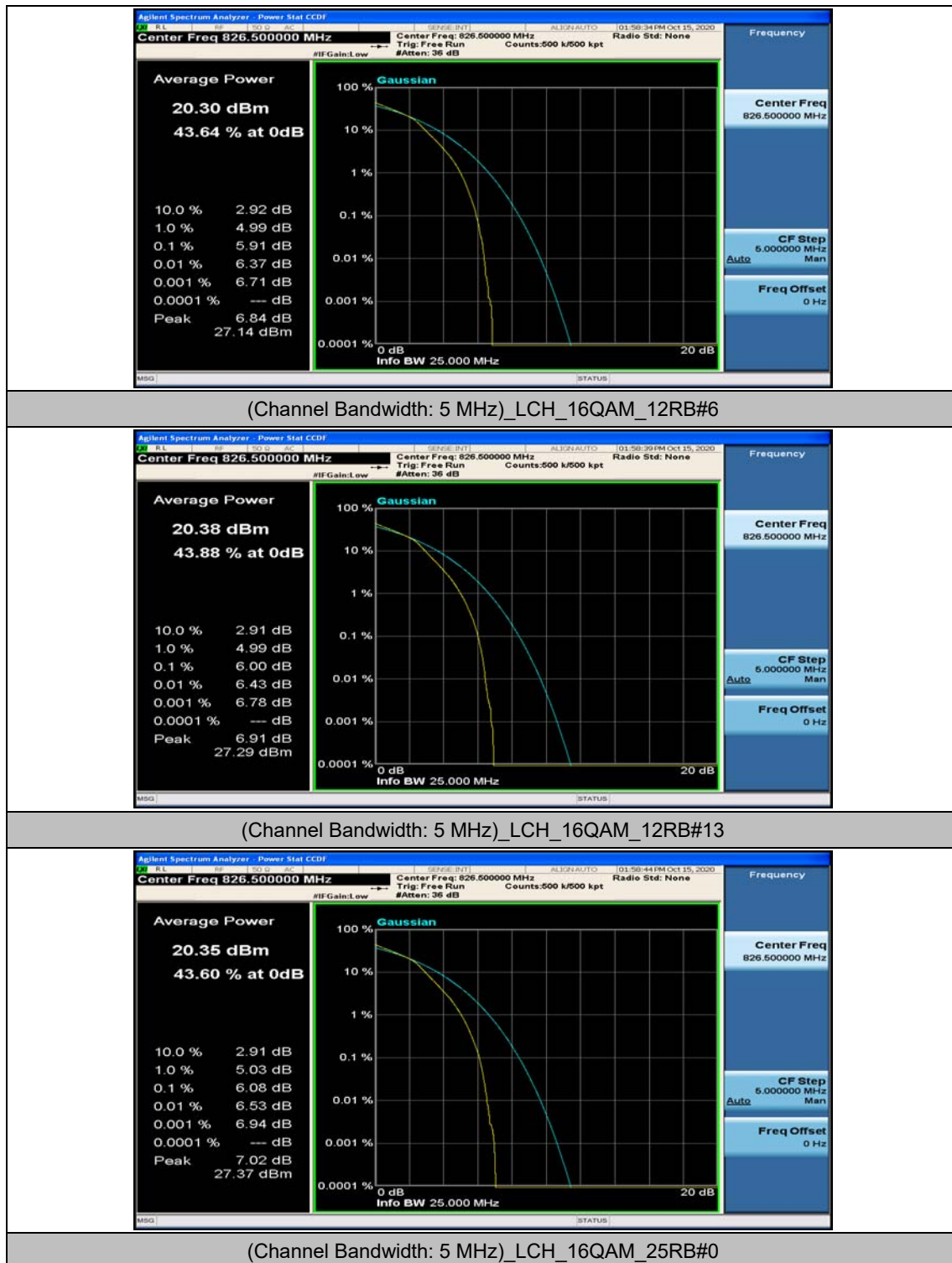
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0





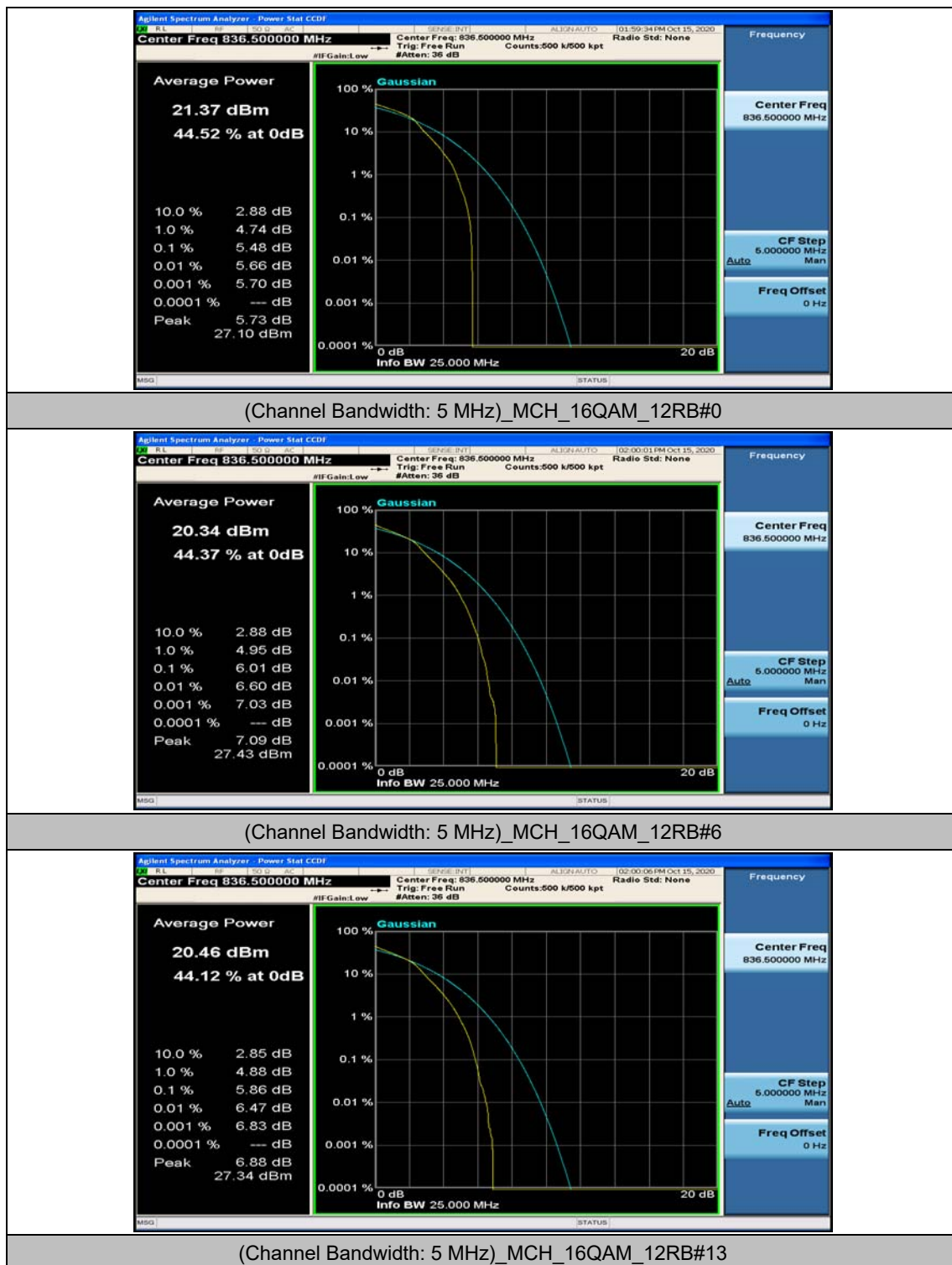
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24





(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

