

Appendix for Band 5

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	23.37	PASS
		1	3	23.44	PASS
		1	5	23.34	PASS
		3	0	23.36	PASS
		3	2	23.47	PASS
		3	3	23.40	PASS
		6	0	22.41	PASS
	MCH	1	0	23.02	PASS
		1	3	23.06	PASS
		1	5	23.05	PASS
		3	0	23.05	PASS
		3	2	23.04	PASS
		3	3	23.04	PASS
		6	0	22.07	PASS
	HCH	1	0	22.86	PASS
		1	3	23.03	PASS
		1	5	22.98	PASS
		3	0	22.95	PASS
		3	2	23.01	PASS
		3	3	22.94	PASS
		6	0	21.97	PASS
16QAM	LCH	1	0	22.56	PASS
		1	3	22.69	PASS
		1	5	22.55	PASS
		3	0	22.53	PASS
		3	2	22.49	PASS
		3	3	22.43	PASS
		6	0	21.34	PASS
	MCH	1	0	22.37	PASS
		1	3	22.50	PASS
		1	5	22.40	PASS
		3	0	22.03	PASS
		3	2	22.02	PASS

		3	3	22.05	PASS
		6	0	20.97	PASS
	HCH	1	0	22.02	PASS
		1	3	22.20	PASS
		1	5	21.99	PASS
		3	0	21.96	PASS
		3	2	21.99	PASS
		3	3	21.95	PASS
		6	0	20.99	PASS

Channel Bandwidth: 3 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.38	PASS
		1	7	23.58	PASS
		1	14	23.30	PASS
		8	0	22.36	PASS
		8	4	22.41	PASS
		8	7	22.36	PASS
		15	0	22.33	PASS
	MCH	1	0	23.09	PASS
		1	7	23.29	PASS
		1	14	23.04	PASS
		8	0	22.00	PASS
		8	4	22.07	PASS
		8	7	21.98	PASS
		15	0	21.97	PASS
	HCH	1	0	22.98	PASS
		1	7	23.19	PASS
		1	14	23.00	PASS
		8	0	21.87	PASS
		8	4	21.95	PASS
		8	7	21.85	PASS
		15	0	21.88	PASS
16QAM	LCH	1	0	22.71	PASS
		1	7	22.82	PASS
		1	14	22.53	PASS
		8	0	21.42	PASS
		8	4	21.46	PASS
		8	7	21.34	PASS
		15	0	21.24	PASS

	MCH	1	0	22.48	PASS
		1	7	22.65	PASS
		1	14	22.41	PASS
		8	0	21.00	PASS
		8	4	21.04	PASS
		8	7	20.95	PASS
		15	0	20.94	PASS
	HCH	1	0	22.26	PASS
		1	7	22.38	PASS
		1	14	22.04	PASS
		8	0	20.79	PASS
		8	4	20.89	PASS
		8	7	20.77	PASS
		15	0	20.80	PASS

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.39	PASS
		1	12	23.63	PASS
		1	24	23.23	PASS
		12	0	22.39	PASS
		12	6	22.37	PASS
		12	13	22.18	PASS
		25	0	22.32	PASS
	MCH	1	0	23.11	PASS
		1	12	23.30	PASS
		1	24	22.97	PASS
		12	0	21.95	PASS
		12	6	22.09	PASS
		12	13	21.91	PASS
		25	0	21.96	PASS
	HCH	1	0	22.98	PASS
		1	12	23.32	PASS
		1	24	23.02	PASS
		12	0	21.73	PASS
		12	6	21.97	PASS
		12	13	21.80	PASS
		25	0	21.77	PASS
16QAM	LCH	1	0	22.61	PASS
		1	12	22.76	PASS

		1	24	22.37	PASS
		12	0	21.43	PASS
		12	6	21.42	PASS
		12	13	21.20	PASS
		25	0	21.35	PASS
	MCH	1	0	22.31	PASS
		1	12	22.68	PASS
		1	24	22.21	PASS
		12	0	20.95	PASS
		12	6	21.15	PASS
		12	13	21.03	PASS
		25	0	20.93	PASS
	HCH	1	0	22.10	PASS
		1	12	22.40	PASS
		1	24	22.04	PASS
		12	0	20.67	PASS
		12	6	20.94	PASS
		12	13	20.77	PASS
		25	0	20.81	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	23.67	PASS
		1	24	23.42	PASS
		1	49	23.07	PASS
		25	0	22.58	PASS
		25	12	22.32	PASS
		25	25	22.37	PASS
		50	0	22.47	PASS
	MCH	1	0	23.15	PASS
		1	24	23.22	PASS
		1	49	23.04	PASS
		25	0	21.90	PASS
		25	12	22.05	PASS
		25	25	21.77	PASS
		50	0	21.81	PASS
	HCH	1	0	23.03	PASS
		1	24	23.16	PASS
		1	49	22.98	PASS
		25	0	22.36	PASS

		25	12	22.04	PASS
		25	25	22.30	PASS
		50	0	22.33	PASS
16QAM	LCH	1	0	22.63	PASS
		1	24	22.62	PASS
		1	49	22.36	PASS
		25	0	21.57	PASS
		25	12	21.28	PASS
		25	25	21.31	PASS
		50	0	21.43	PASS
	MCH	1	0	22.54	PASS
		1	24	22.62	PASS
		1	49	22.21	PASS
		25	0	20.89	PASS
		25	12	21.09	PASS
		25	25	20.77	PASS
		50	0	20.83	PASS
	HCH	1	0	22.19	PASS
		1	24	22.34	PASS
		1	49	22.08	PASS
		25	0	21.31	PASS
		25	12	21.03	PASS
		25	25	21.29	PASS
		50	0	21.32	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	4.34	<13	PASS
		1	3	4.25	<13	PASS
		1	5	4.52	<13	PASS
		3	0	4.28	<13	PASS
		3	2	4.29	<13	PASS
		3	3	4.38	<13	PASS
		6	0	4.89	<13	PASS
	MCH	1	0	4.36	<13	PASS
		1	3	4.22	<13	PASS
		1	5	4.27	<13	PASS
		3	0	4.51	<13	PASS
		3	2	4.5	<13	PASS
		3	3	4.47	<13	PASS
		6	0	4.94	<13	PASS
	HCH	1	0	4.37	<13	PASS
		1	3	3.85	<13	PASS
		1	5	3.72	<13	PASS
		3	0	4.34	<13	PASS
		3	2	4.06	<13	PASS
		3	3	3.93	<13	PASS
		6	0	4.6	<13	PASS
16QAM	LCH	1	0	5.03	<13	PASS
		1	3	5.18	<13	PASS
		1	5	5.17	<13	PASS
		3	0	5.3	<13	PASS
		3	2	5.22	<13	PASS
		3	3	5.47	<13	PASS
		6	0	5.77	<13	PASS
	MCH	1	0	5.51	<13	PASS
		1	3	5.35	<13	PASS
1		5	5.41	<13	PASS	

		3	0	5.54	<13	PASS
		3	2	5.55	<13	PASS
		3	3	5.49	<13	PASS
		6	0	5.84	<13	PASS
	HCH	1	0	5.35	<13	PASS
		1	3	4.85	<13	PASS
		1	5	4.67	<13	PASS
		3	0	5.17	<13	PASS
		3	2	4.87	<13	PASS
		3	3	4.84	<13	PASS
		6	0	5.53	<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	4.21	<13	PASS
		1	7	4.24	<13	PASS
		1	14	4.31	<13	PASS
		8	0	4.99	<13	PASS
		8	4	4.95	<13	PASS
		8	7	4.98	<13	PASS
		15	0	5	<13	PASS
	MCH	1	0	4.36	<13	PASS
		1	7	4.32	<13	PASS
		1	14	4.09	<13	PASS
		8	0	5.13	<13	PASS
		8	4	4.99	<13	PASS
		8	7	4.96	<13	PASS
		15	0	5.12	<13	PASS
	HCH	1	0	4.56	<13	PASS
		1	7	4.33	<13	PASS
		1	14	3.66	<13	PASS
		8	0	5.25	<13	PASS
		8	4	5.02	<13	PASS
		8	7	4.83	<13	PASS
		15	0	5	<13	PASS
16QAM	LCH	1	0	4.98	<13	PASS
		1	7	5.37	<13	PASS
		1	14	5.19	<13	PASS
		8	0	5.7	<13	PASS

		8	4	5.81	<13	PASS
		8	7	5.77	<13	PASS
		15	0	5.91	<13	PASS
	MCH	1	0	5.27	<13	PASS
		1	7	5.3	<13	PASS
		1	14	5.08	<13	PASS
		8	0	5.87	<13	PASS
		8	4	5.81	<13	PASS
		8	7	5.78	<13	PASS
		15	0	5.86	<13	PASS
	HCH	1	0	5.62	<13	PASS
		1	7	5.36	<13	PASS
		1	14	4.61	<13	PASS
		8	0	6.24	<13	PASS
		8	4	6.11	<13	PASS
		8	7	5.91	<13	PASS
		15	0	5.87	<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	4.48	<13	PASS
		1	24	4.72	<13	PASS
		12	0	5.01	<13	PASS
		12	6	5	<13	PASS
		12	13	5.07	<13	PASS
		25	0	5.05	<13	PASS
	MCH	1	0	4.69	<13	PASS
		1	12	4.4	<13	PASS
		1	24	4.36	<13	PASS
		12	0	5.05	<13	PASS
		12	6	4.98	<13	PASS
		12	13	4.89	<13	PASS
		25	0	5.07	<13	PASS
	HCH	1	0	4.16	<13	PASS
		1	12	4.57	<13	PASS
		1	24	3.79	<13	PASS
		12	0	5.15	<13	PASS
		12	6	5.23	<13	PASS

		12	13	4.98	<13	PASS
		25	0	5.11	<13	PASS
16QAM	LCH	1	0	5.29	<13	PASS
		1	12	5.17	<13	PASS
		1	24	5.44	<13	PASS
		12	0	5.99	<13	PASS
		12	6	5.96	<13	PASS
		12	13	5.98	<13	PASS
		25	0	5.77	<13	PASS
		MCH	1	0	5.6	<13
	1		12	5.49	<13	PASS
	1		24	5.33	<13	PASS
	12		0	5.95	<13	PASS
	12		6	5.83	<13	PASS
	12		13	5.75	<13	PASS
	25		0	5.91	<13	PASS
	HCH	1	0	5.17	<13	PASS
		1	12	5.42	<13	PASS
		1	24	4.67	<13	PASS
		12	0	5.96	<13	PASS
		12	6	6.05	<13	PASS
		12	13	5.92	<13	PASS
		25	0	5.95	<13	PASS

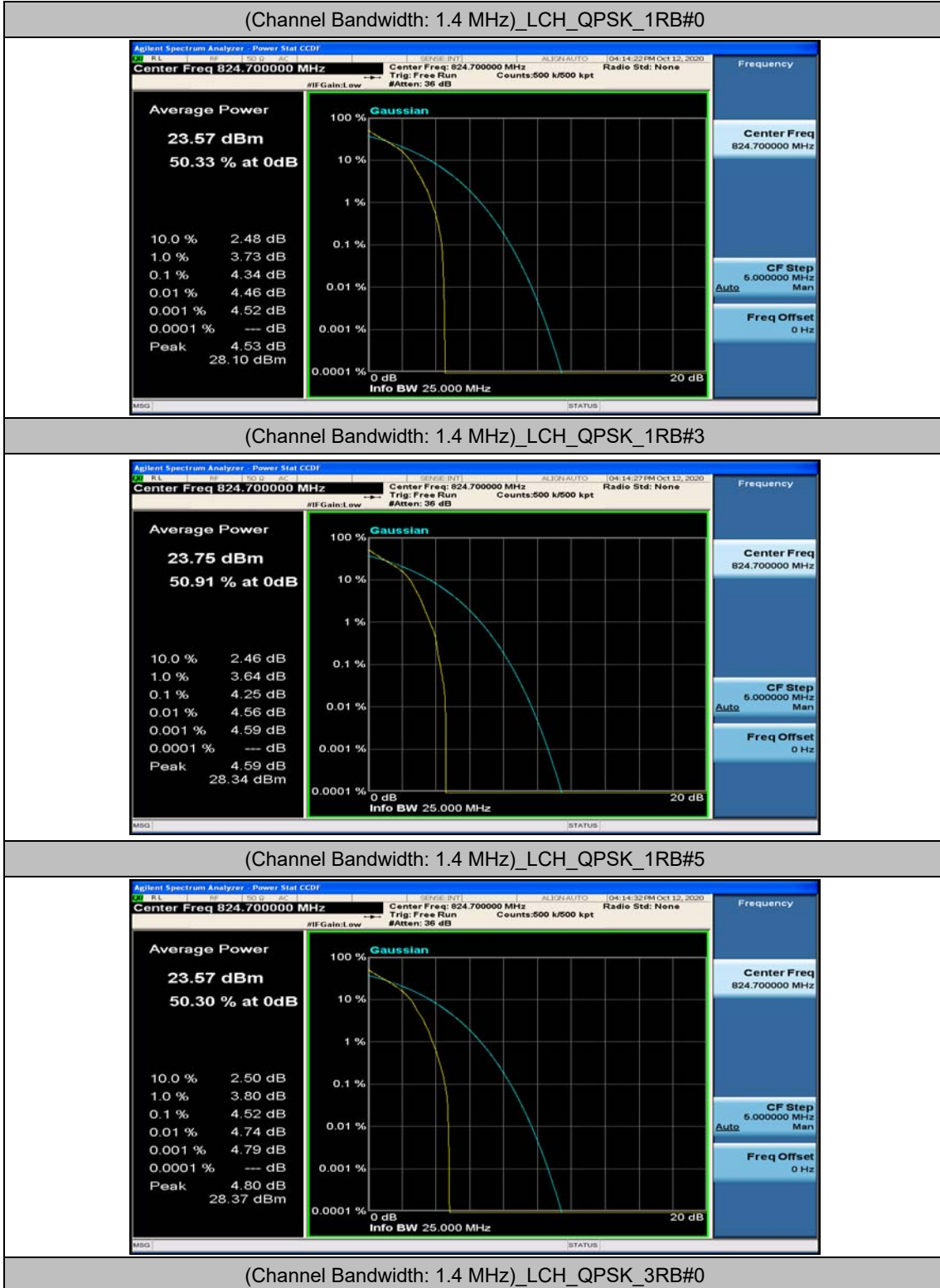
Channel Bandwidth: 10 MHz

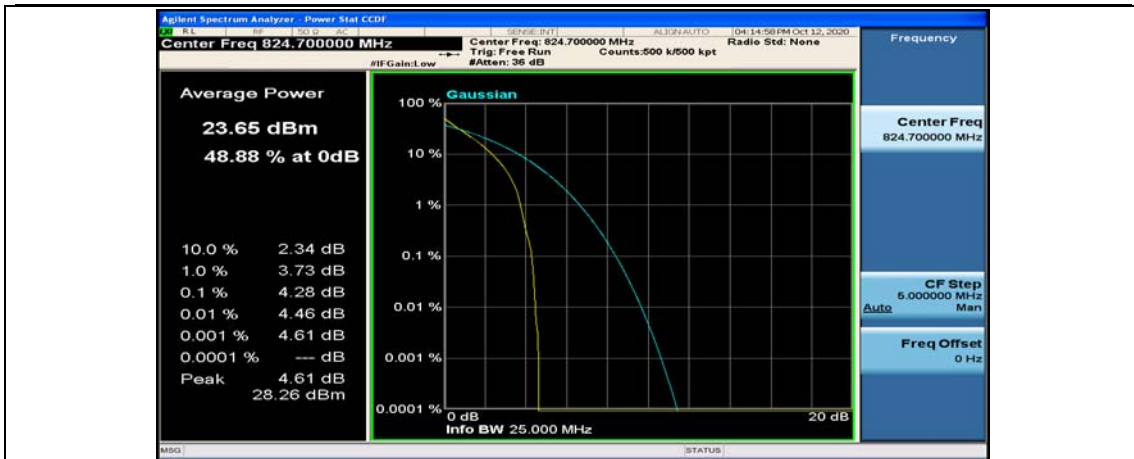
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.26	<13	PASS
		1	24	4.43	<13	PASS
		1	49	4.56	<13	PASS
		25	0	5.06	<13	PASS
		25	12	5.15	<13	PASS
		25	25	5.16	<13	PASS
		50	0	5.13	<13	PASS
	MCH	1	0	4.31	<13	PASS
		1	24	4.14	<13	PASS
		1	49	3.83	<13	PASS
		25	0	5.16	<13	PASS
		25	12	5.08	<13	PASS
		25	25	4.91	<13	PASS

		50	0	5.06	<13	PASS
	HCH	1	0	4.04	<13	PASS
		1	24	4.04	<13	PASS
		1	49	3.99	<13	PASS
		25	0	4.59	<13	PASS
		25	12	4.92	<13	PASS
		25	25	5.07	<13	PASS
		50	0	5.24	<13	PASS
16QAM	LCH	1	0	5.05	<13	PASS
		1	24	5.38	<13	PASS
		1	49	5.47	<13	PASS
		25	0	5.79	<13	PASS
		25	12	6.03	<13	PASS
		25	25	6.05	<13	PASS
		50	0	5.93	<13	PASS
	MCH	1	0	5.35	<13	PASS
		1	24	5.24	<13	PASS
		1	49	4.81	<13	PASS
		25	0	6.09	<13	PASS
		25	12	5.95	<13	PASS
		25	25	5.75	<13	PASS
		50	0	5.91	<13	PASS
	HCH	1	0	5.07	<13	PASS
		1	24	4.97	<13	PASS
		1	49	4.94	<13	PASS
		25	0	5.52	<13	PASS
		25	12	5.74	<13	PASS
		25	25	5.95	<13	PASS
		50	0	5.99	<13	PASS

Test Graphs

Channel Bandwidth: 1.4 MHz





(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#2



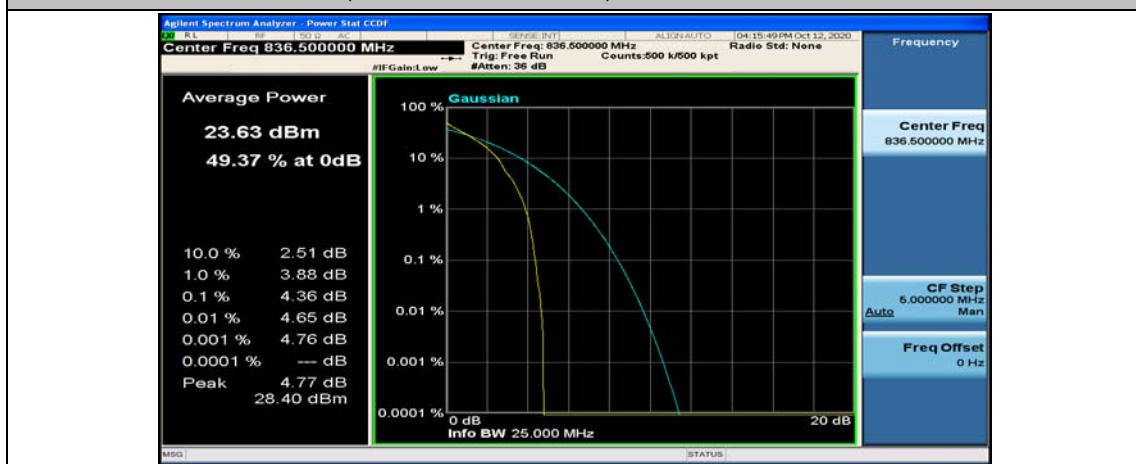
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_3RB#3



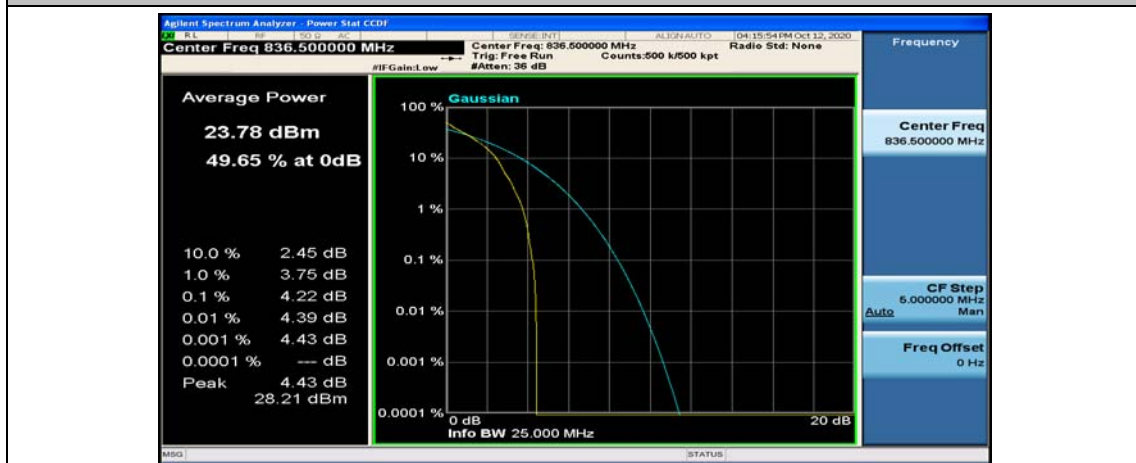
(Channel Bandwidth: 1.4 MHz)_LCH_QPSK_6RB#0



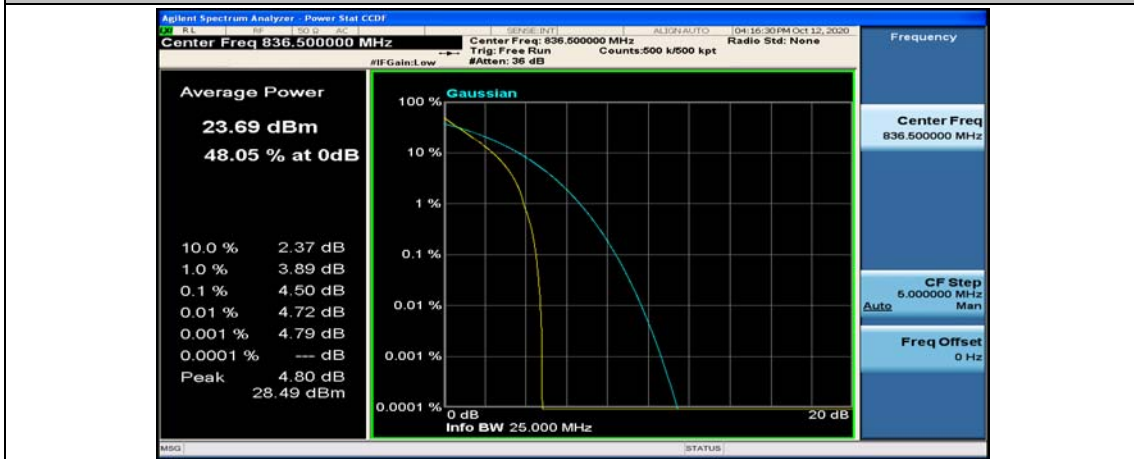
(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#3

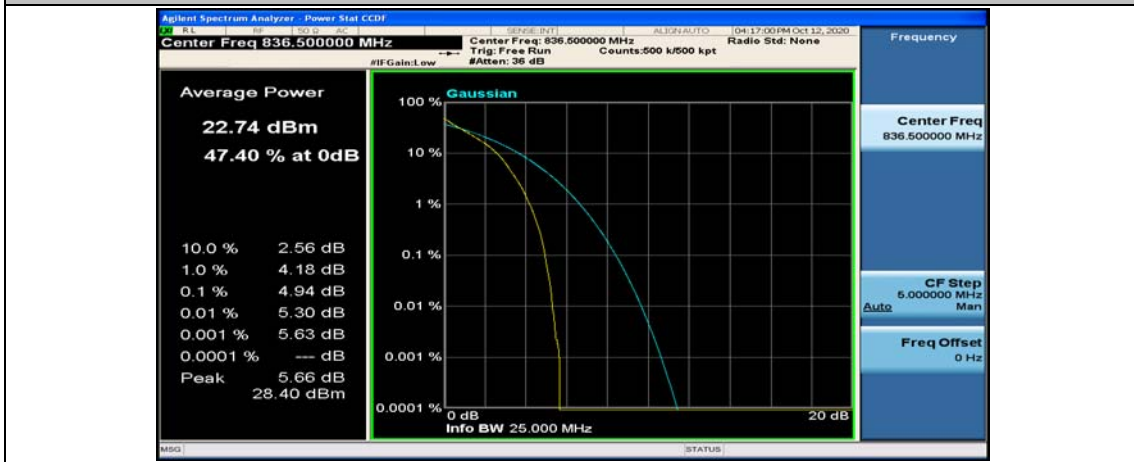


(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_1RB#5

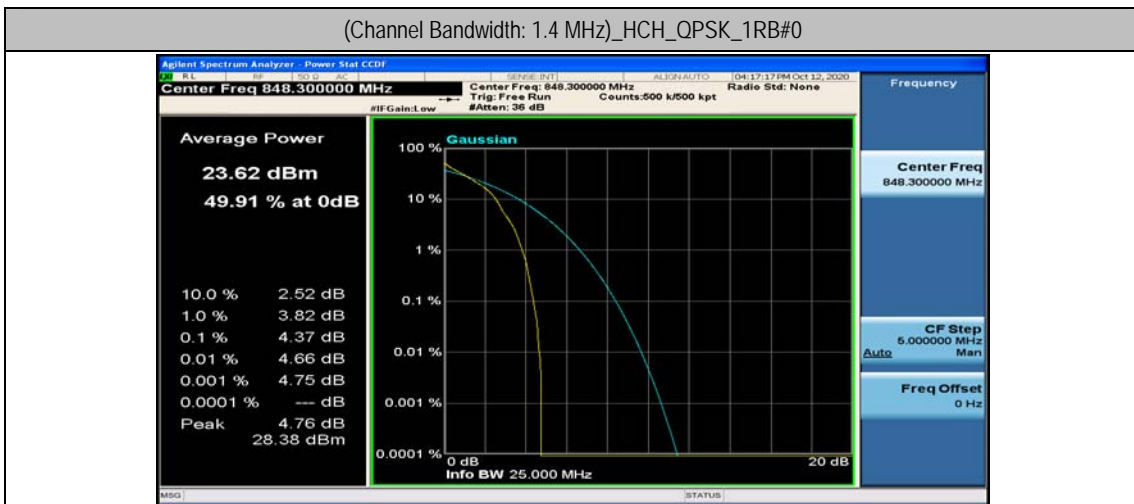




(Channel Bandwidth: 1.4 MHz)_MCH_QPSK_6RB#0



(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



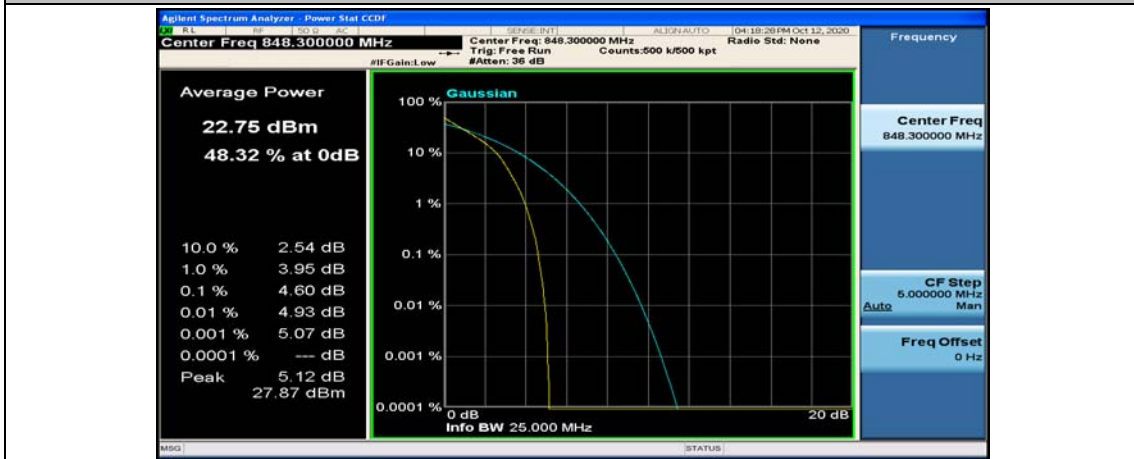
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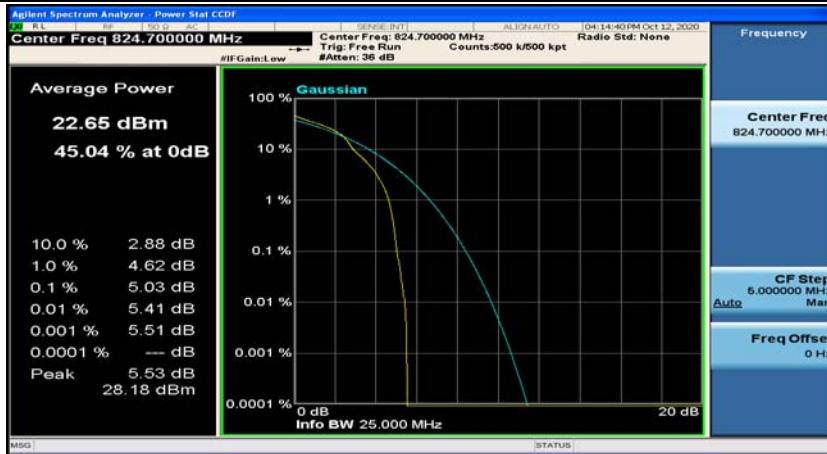
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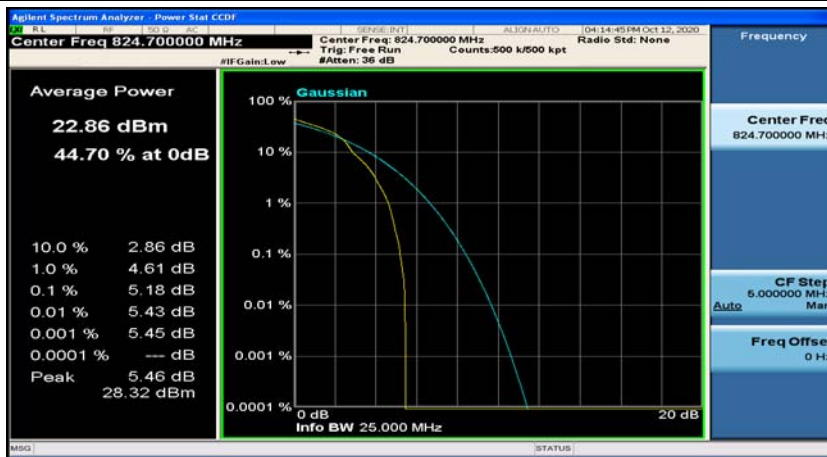
(Channel Bandwidth: 1.4 MHz)_HCH_QPSK_6RB#0



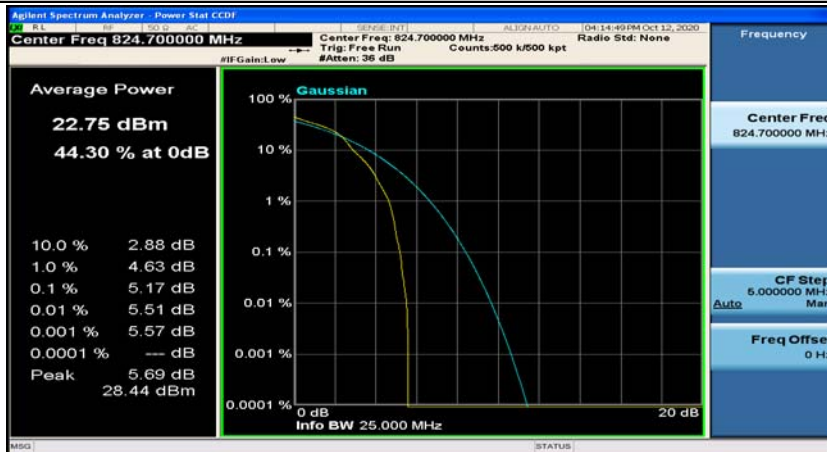
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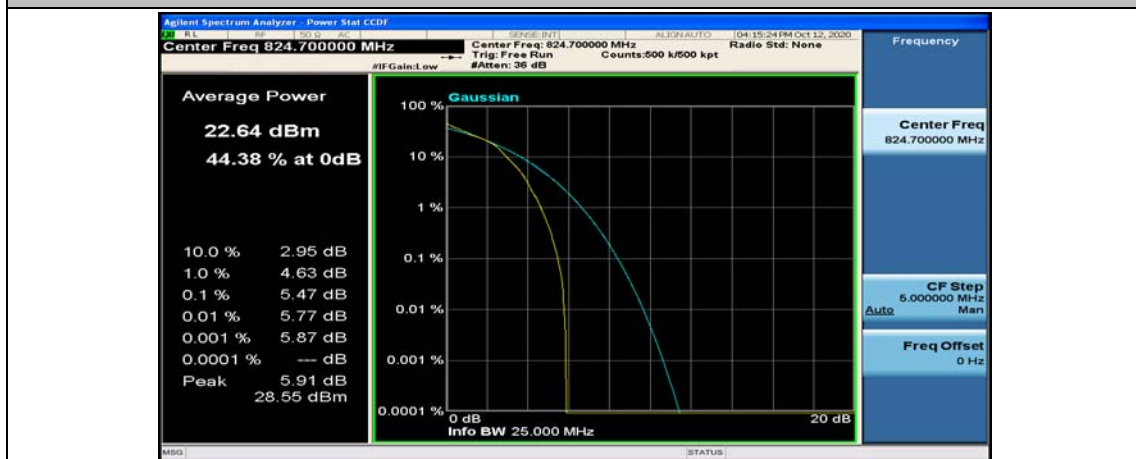
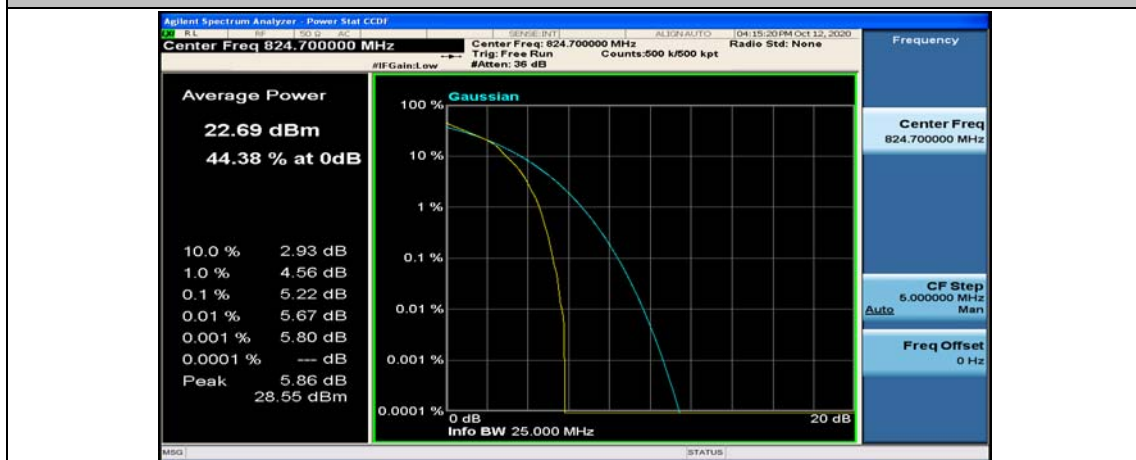
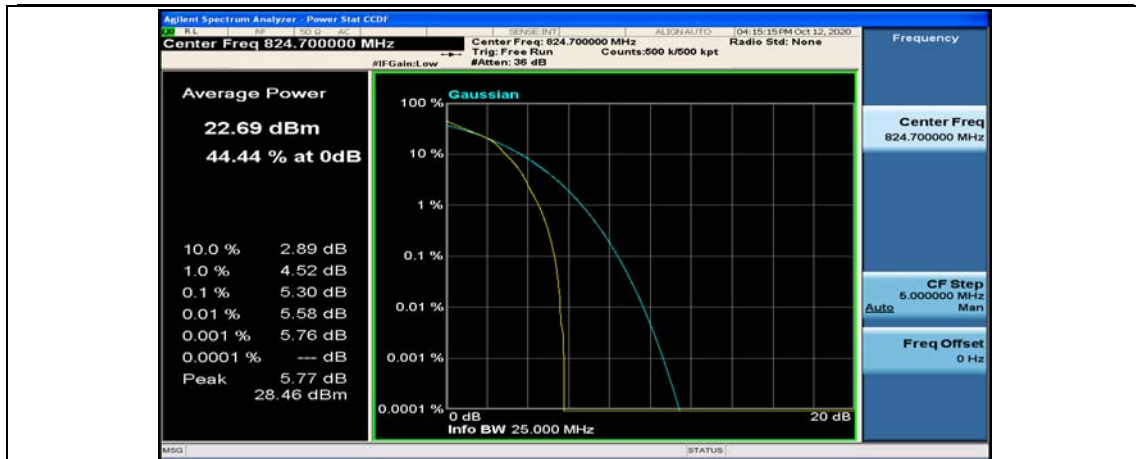
(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#3



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_1RB#5



(Channel Bandwidth: 1.4 MHz)_LCH_16QAM_3RB#0





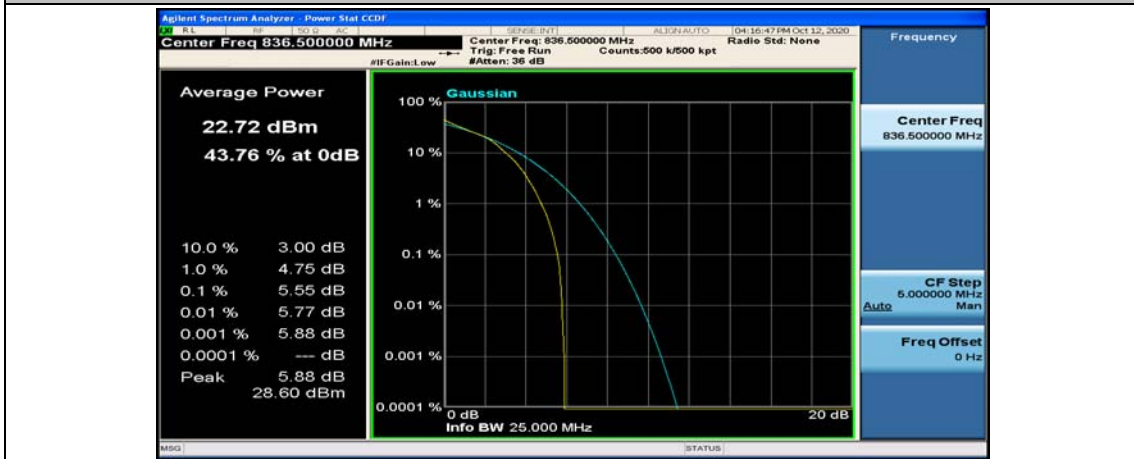
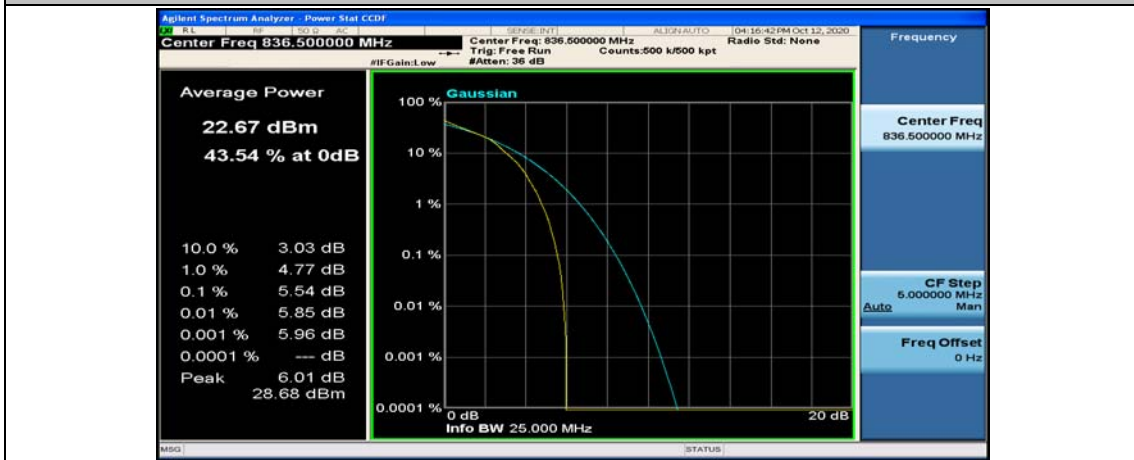
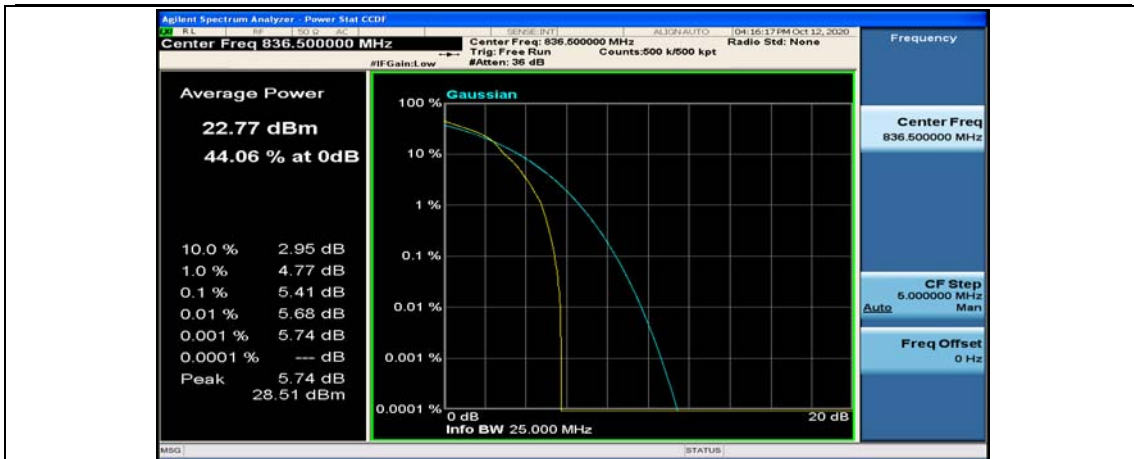
(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#3

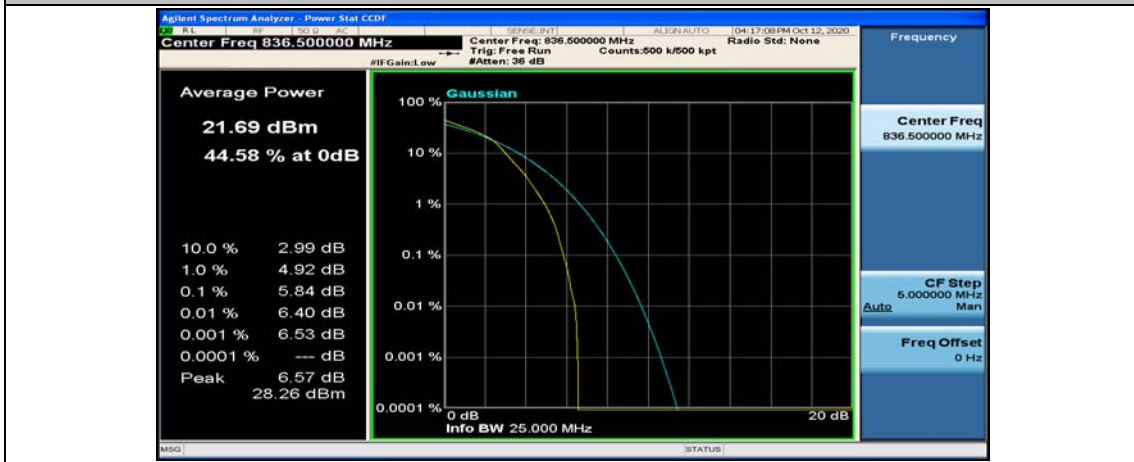


(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_1RB#5

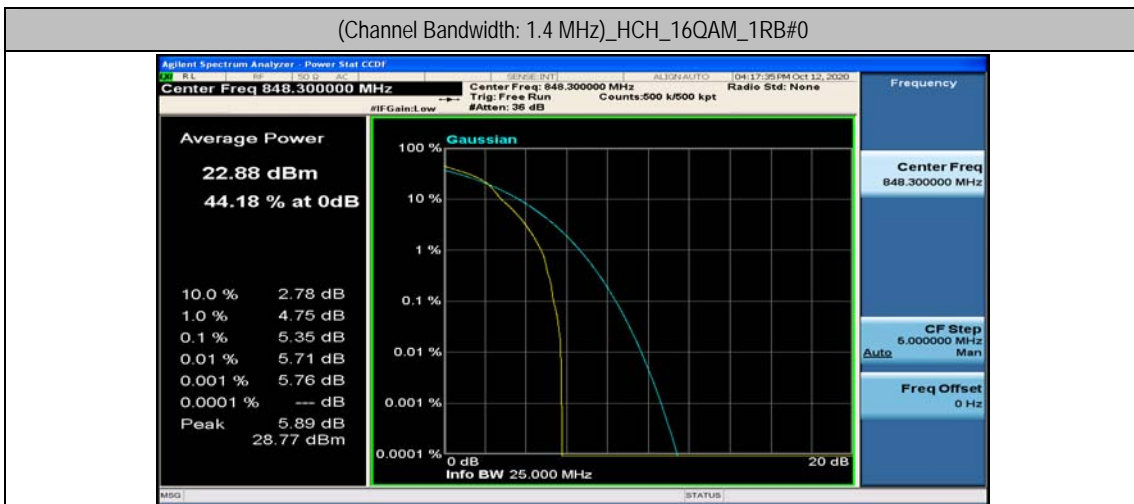




(Channel Bandwidth: 1.4 MHz)_MCH_16QAM_6RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#3



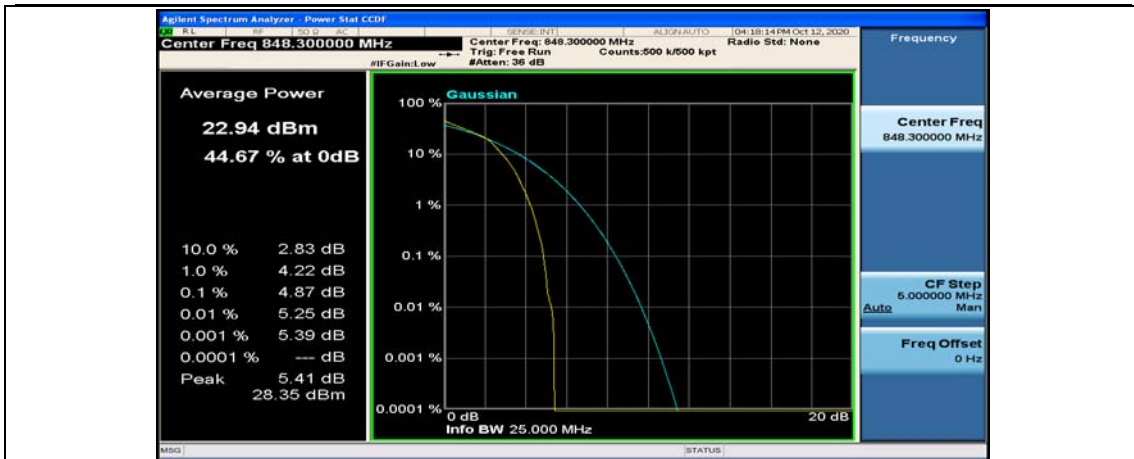
(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_1RB#5



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#0



(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_3RB#2



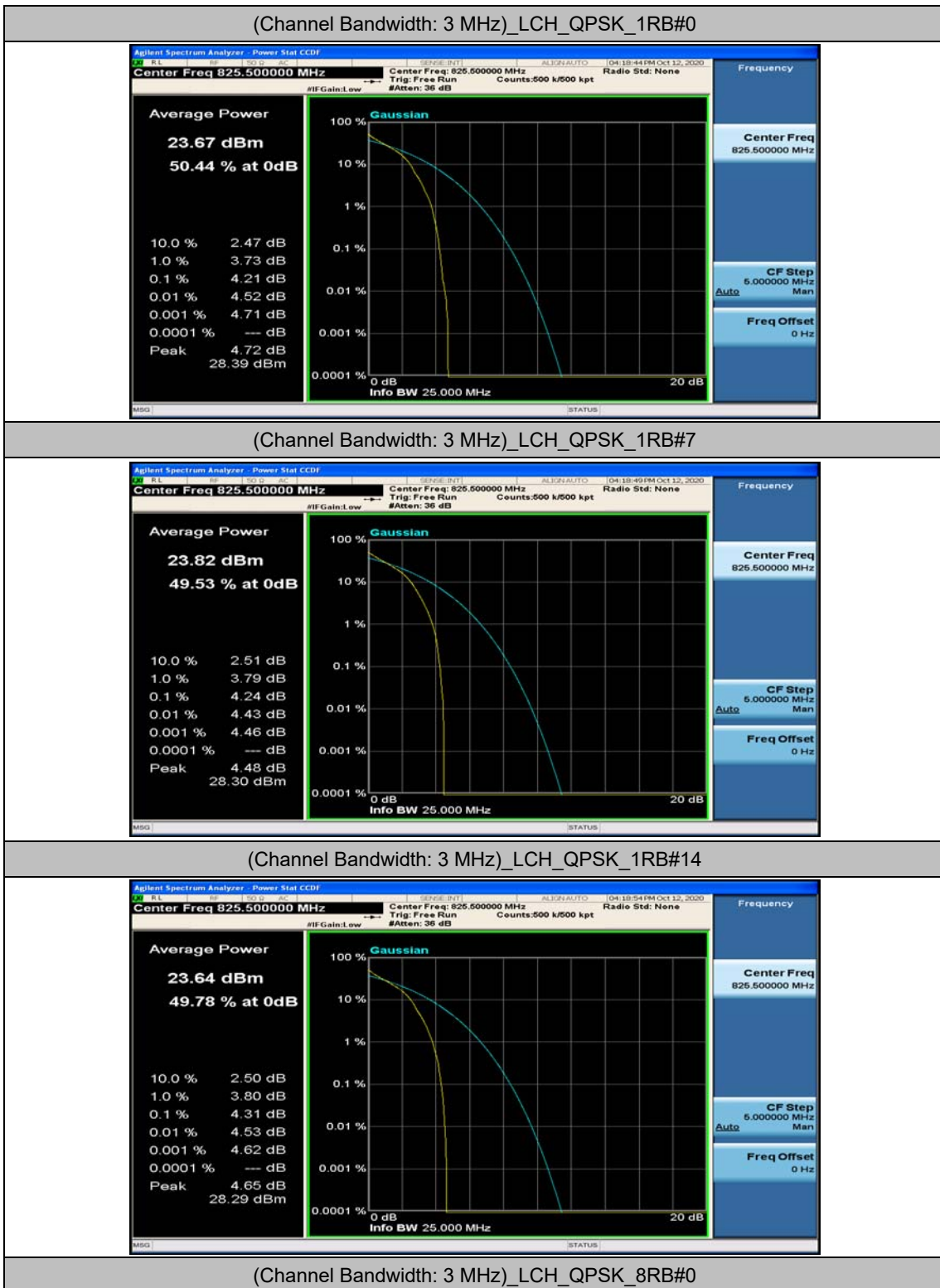
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(Channel Bandwidth: 1.4 MHz)_HCH_16QAM_6RB#0



Channel Bandwidth: 3 MHz





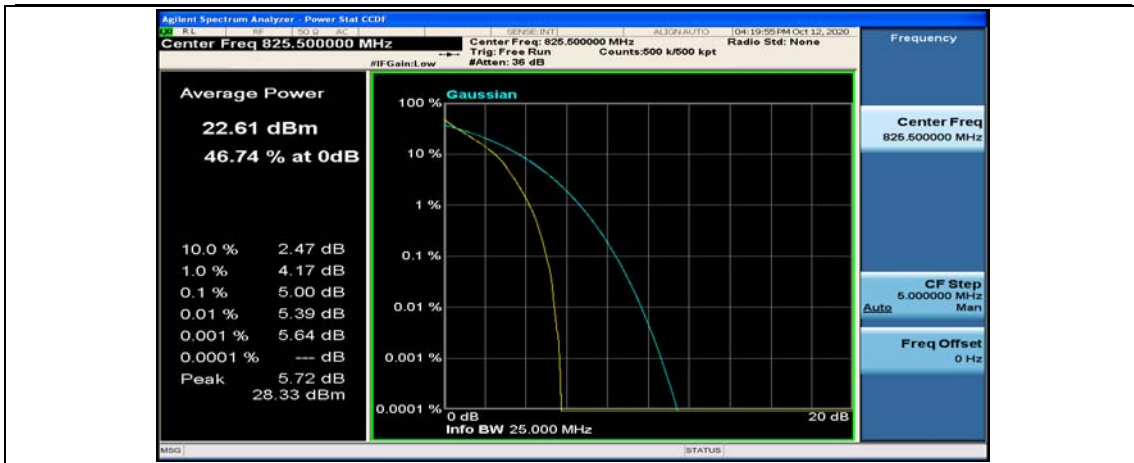
(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#4



(Channel Bandwidth: 3 MHz)_LCH_QPSK_8RB#7



(Channel Bandwidth: 3 MHz)_LCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#7



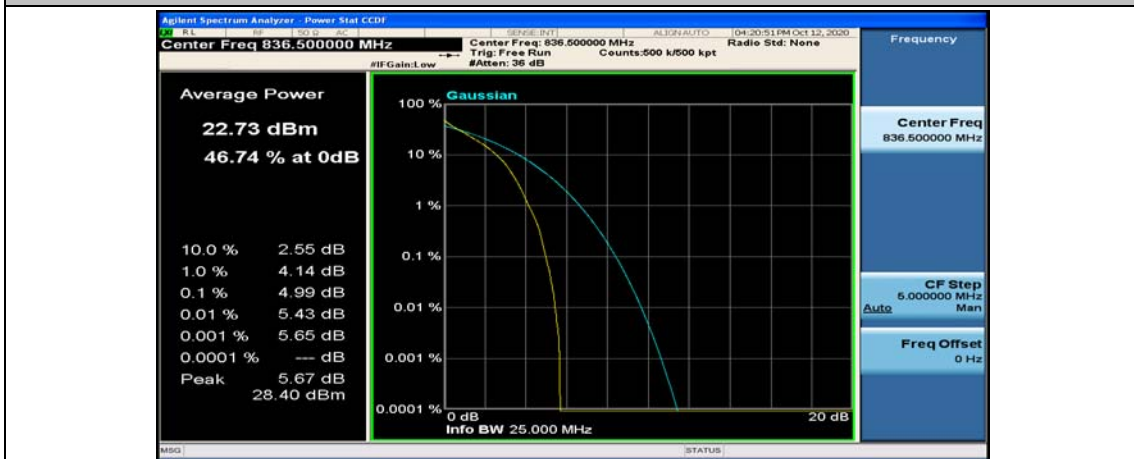
(Channel Bandwidth: 3 MHz)_MCH_QPSK_1RB#14



(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#0



(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#4



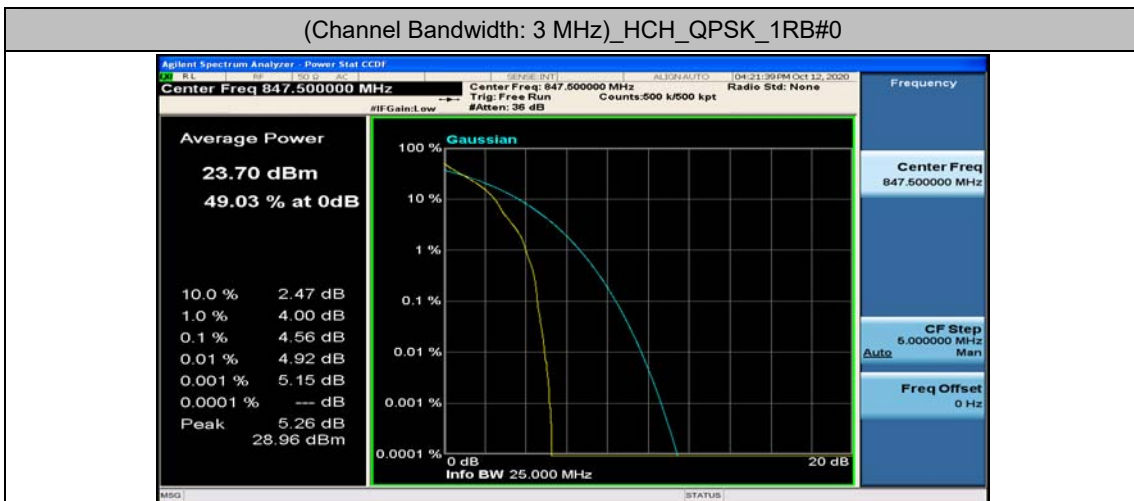
(Channel Bandwidth: 3 MHz)_MCH_QPSK_8RB#7



(Channel Bandwidth: 3 MHz)_MCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#0



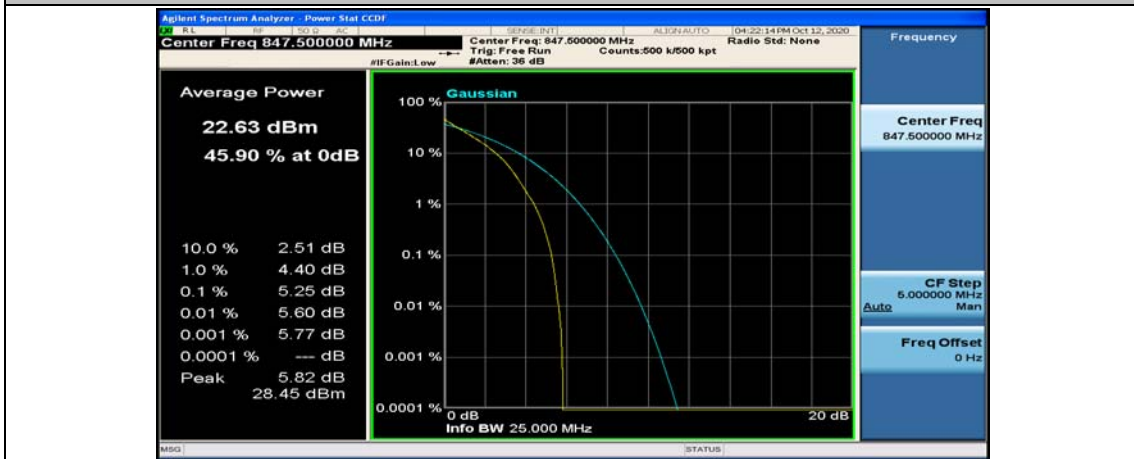
(Channel Bandwidth: 3 MHz)_HCH_QPSK_1RB#7



(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)_HCH_QPSK_8RB#7



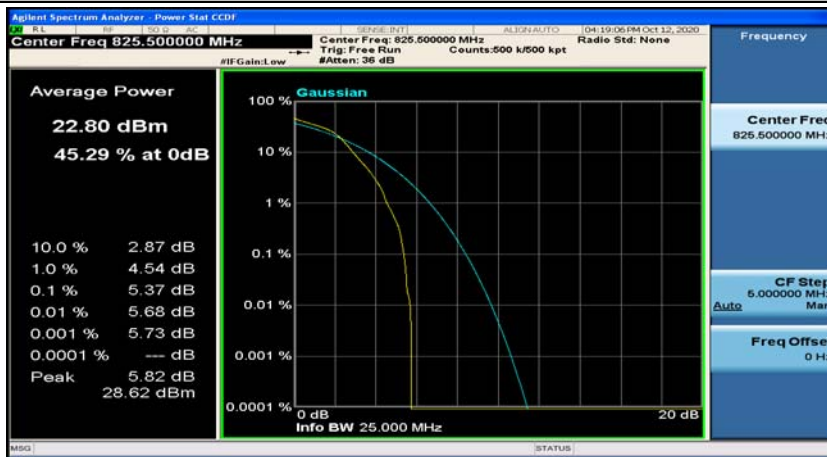
(Channel Bandwidth: 3 MHz)_HCH_QPSK_15RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_LCH_16QAM_1RB#14



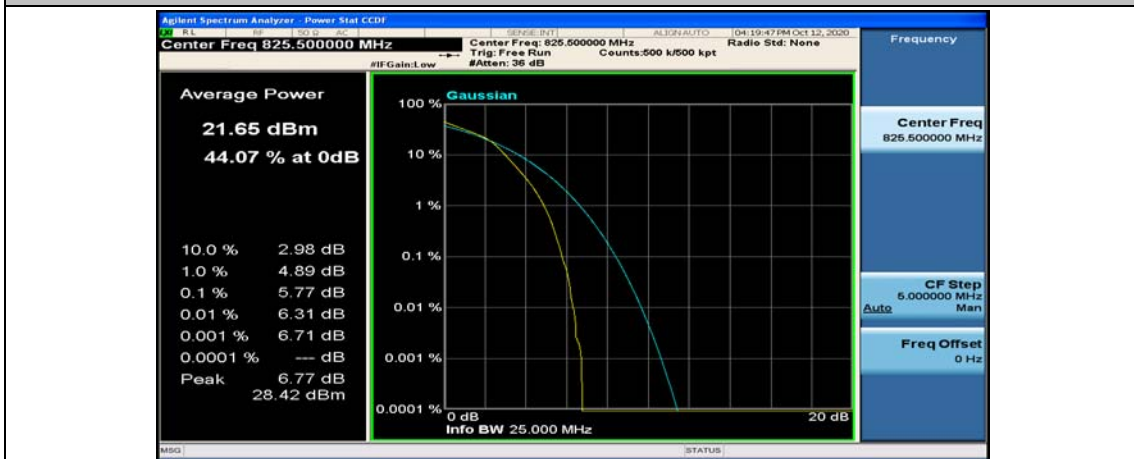
(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#0



(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#4



(Channel Bandwidth: 3 MHz)_LCH_16QAM_8RB#7



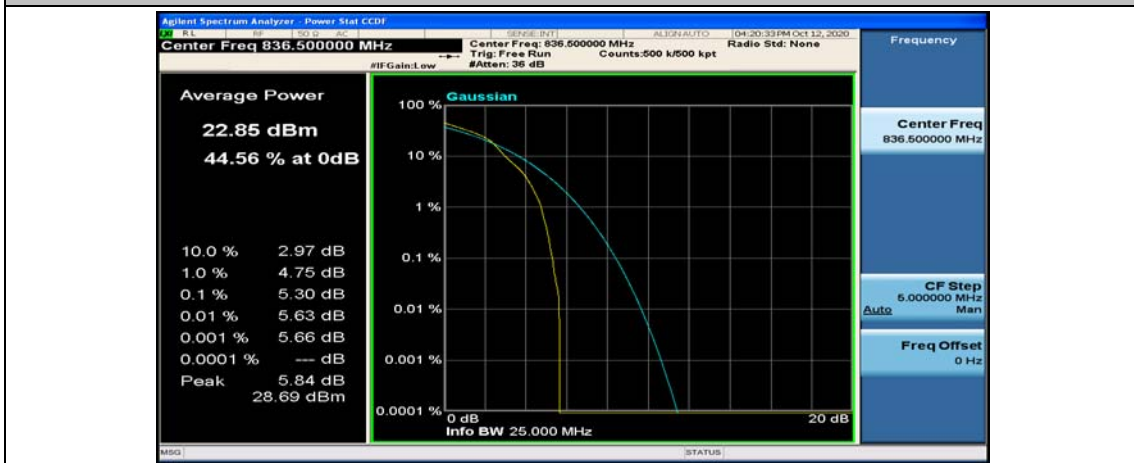
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(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#0



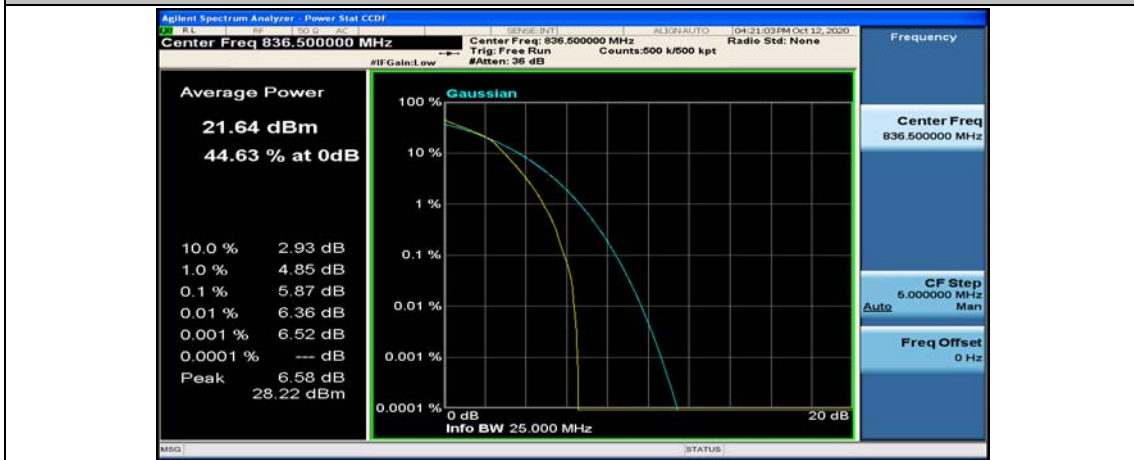
(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#7



(Channel Bandwidth: 3 MHz)_MCH_16QAM_1RB#14



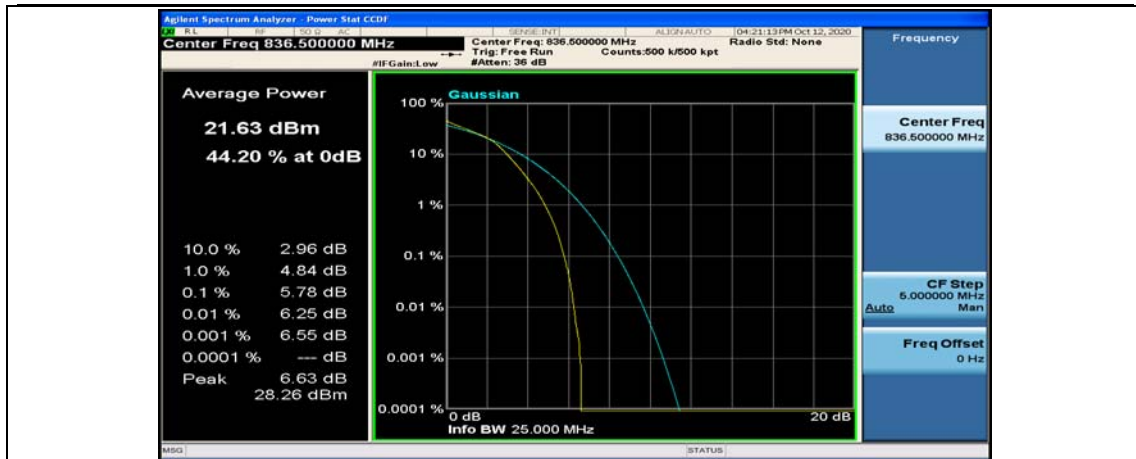
(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#0



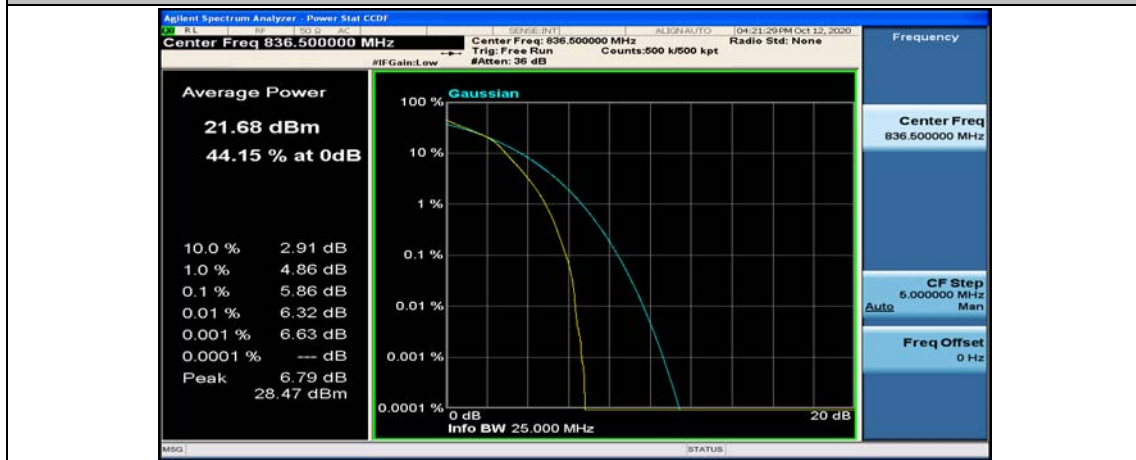
(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#4



(Channel Bandwidth: 3 MHz)_MCH_16QAM_8RB#7



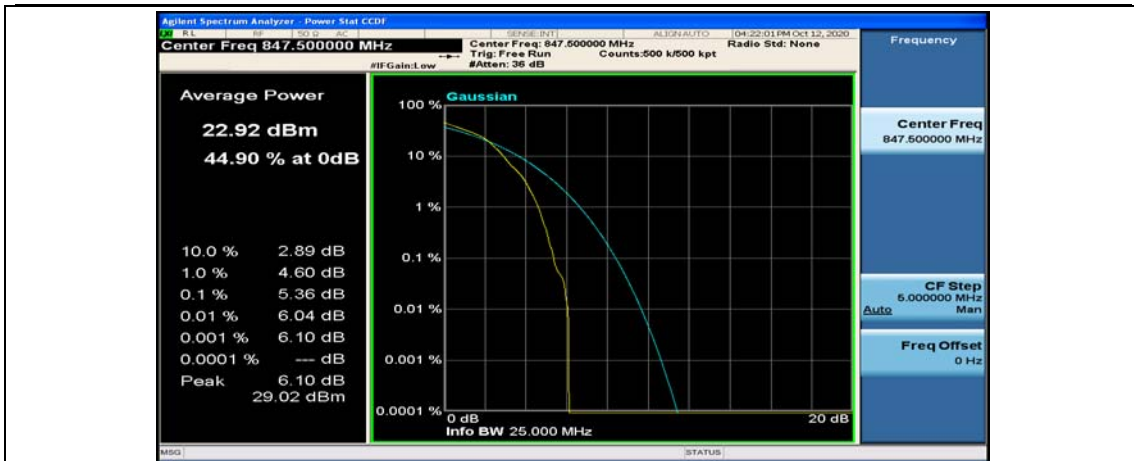
(Channel Bandwidth: 3 MHz)_MCH_16QAM_15RB#0



(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



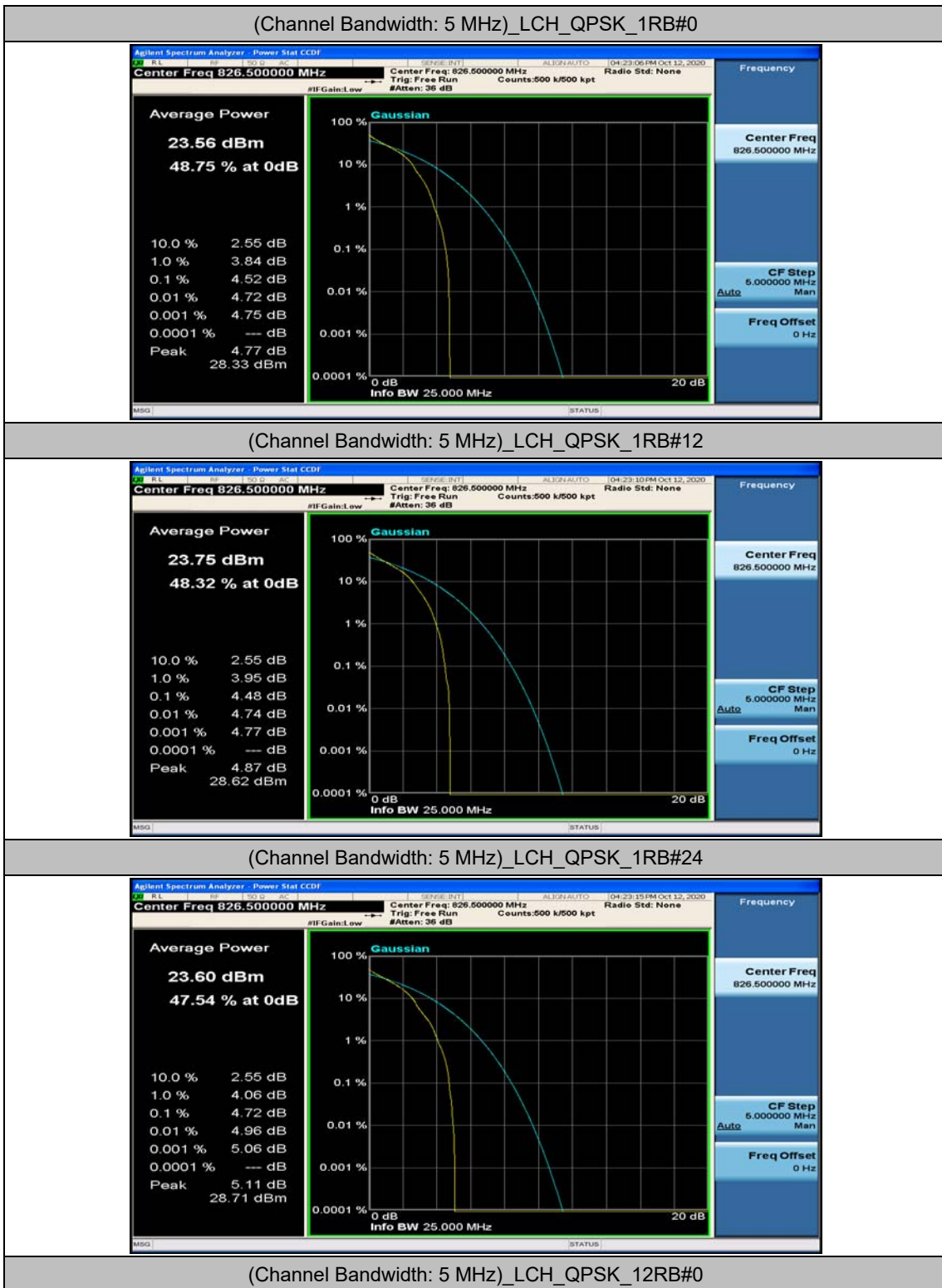
(Channel Bandwidth: 3 MHz)_HCH_16QAM_8RB#7



(Channel Bandwidth: 3 MHz)_HCH_16QAM_15RB#0



Channel Bandwidth: 5 MHz





(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6



(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13



(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#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



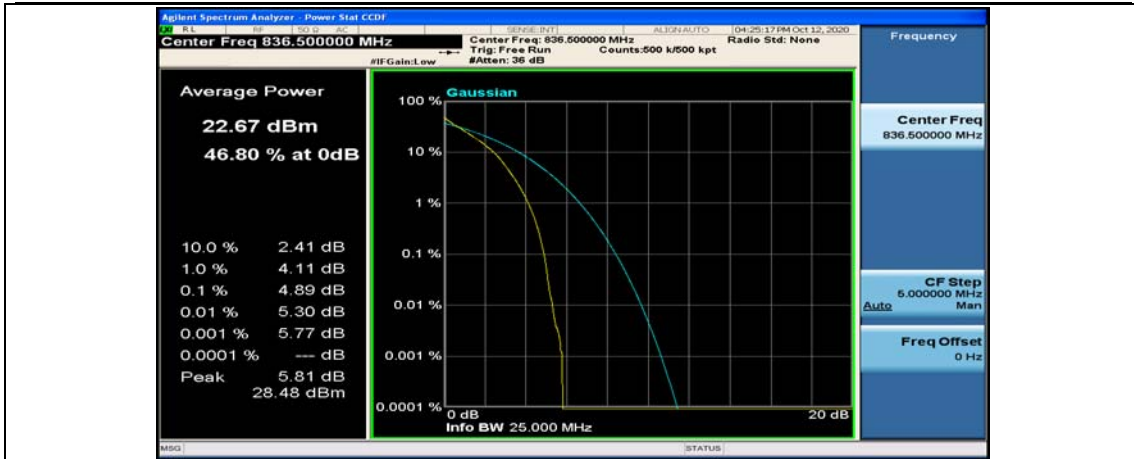
(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#0



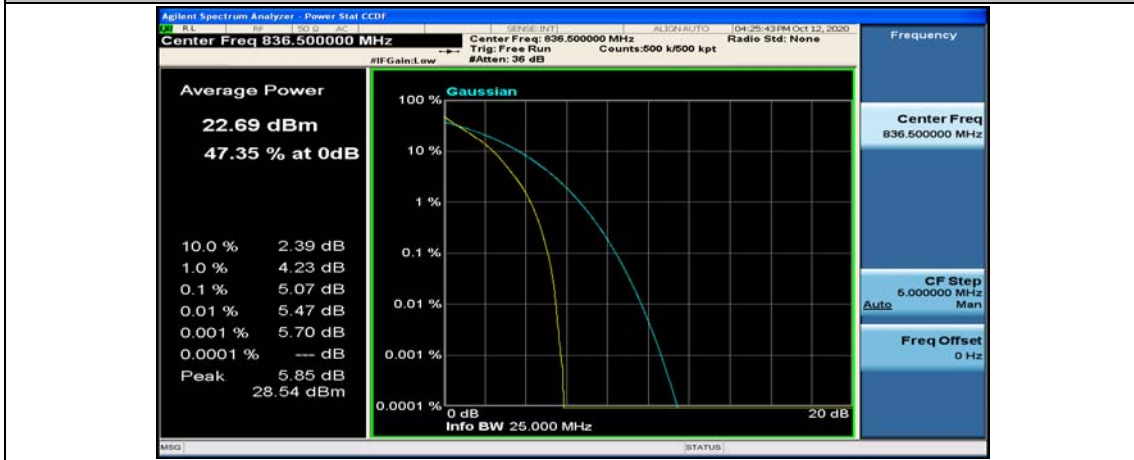
(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#6



(Channel Bandwidth: 5 MHz)_MCH_QPSK_12RB#13



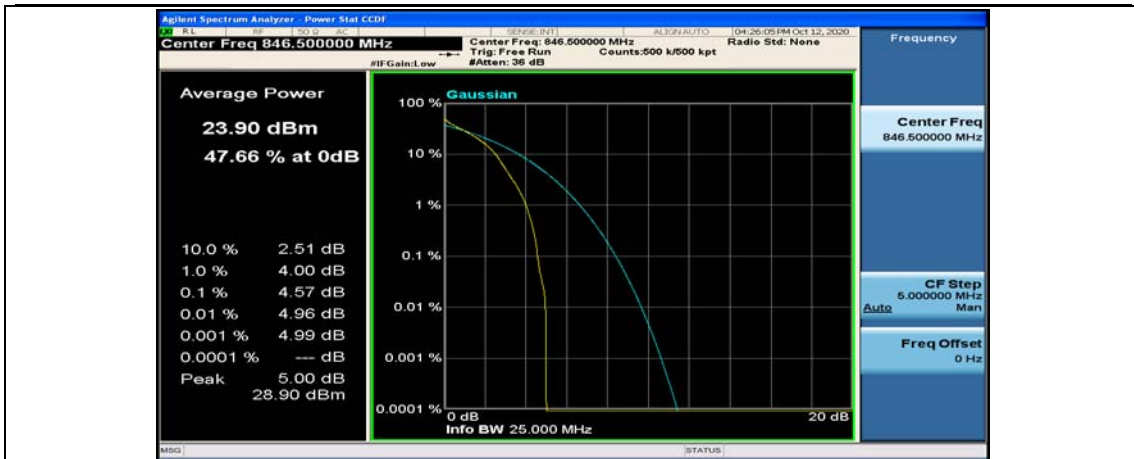
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



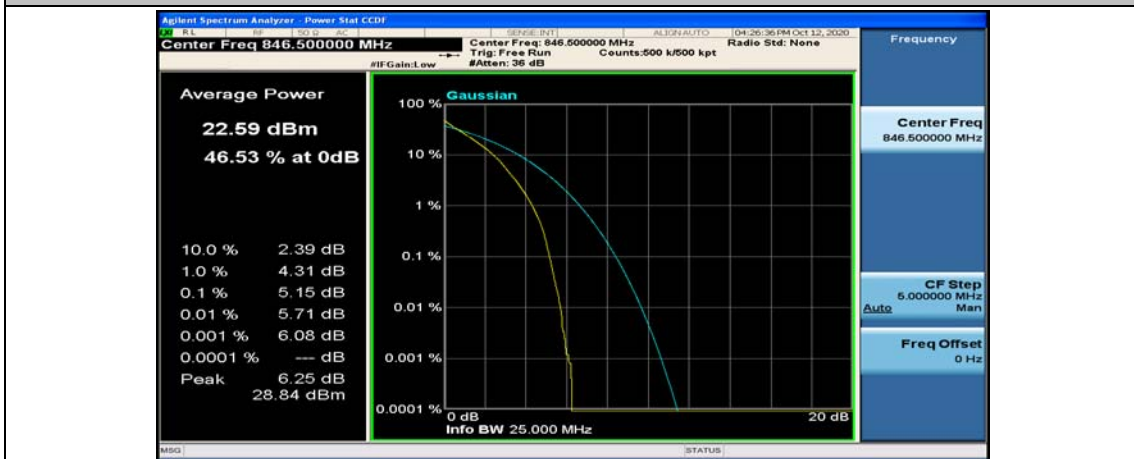
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24



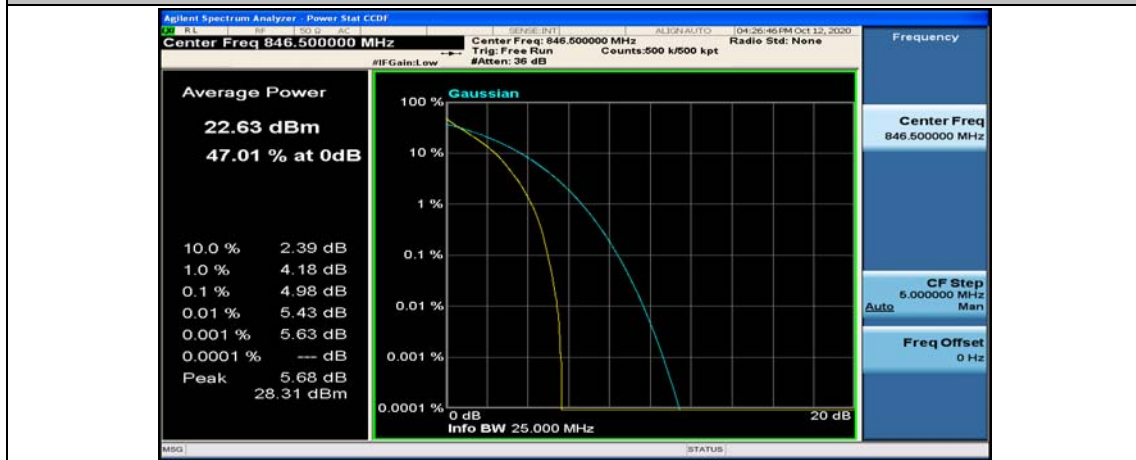
(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#6



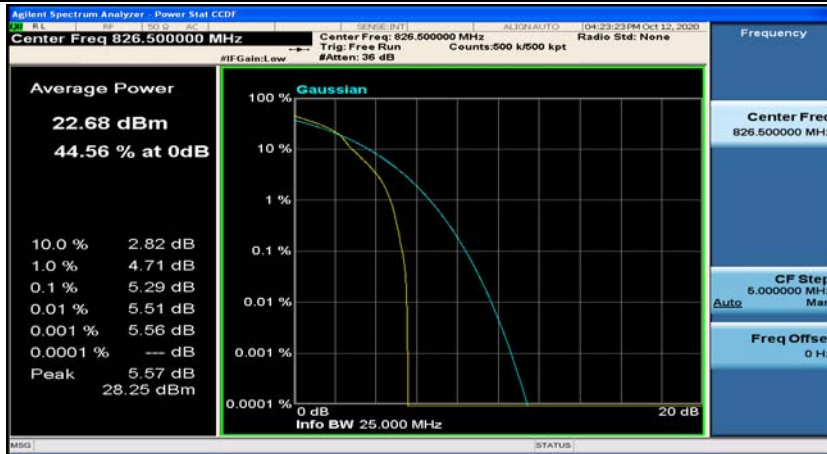
(Channel Bandwidth: 5 MHz)_HCH_QPSK_12RB#13



(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



(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)_LCH_16QAM_12RB#6



(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#13



(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



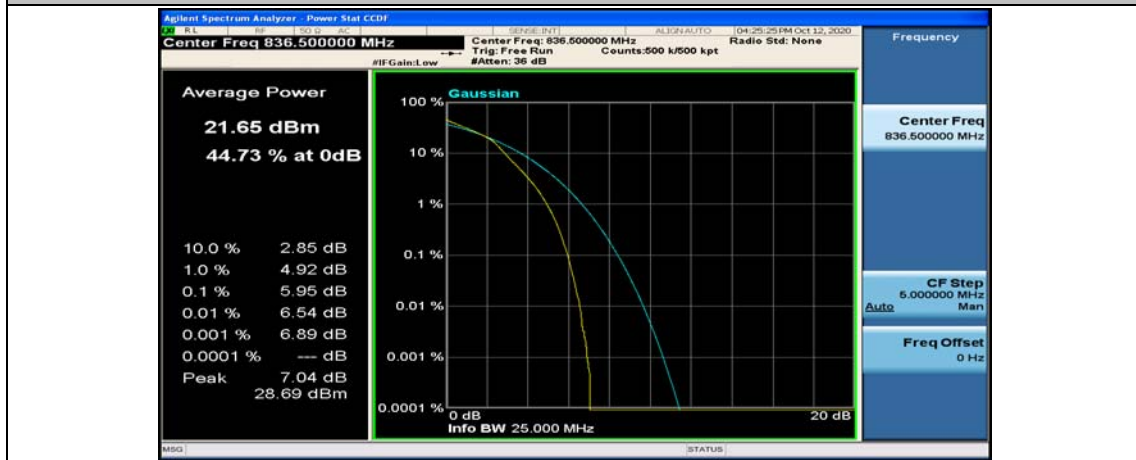
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#6



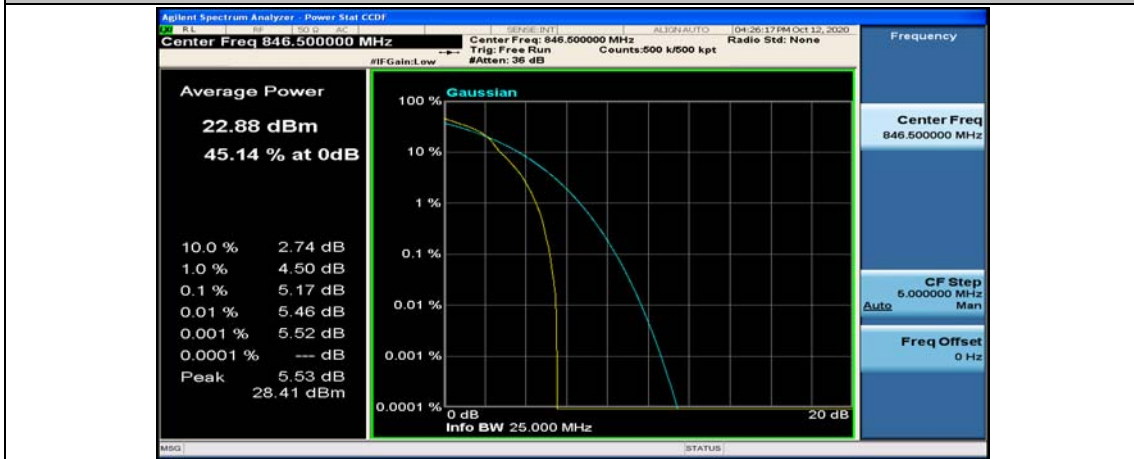
(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#13



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



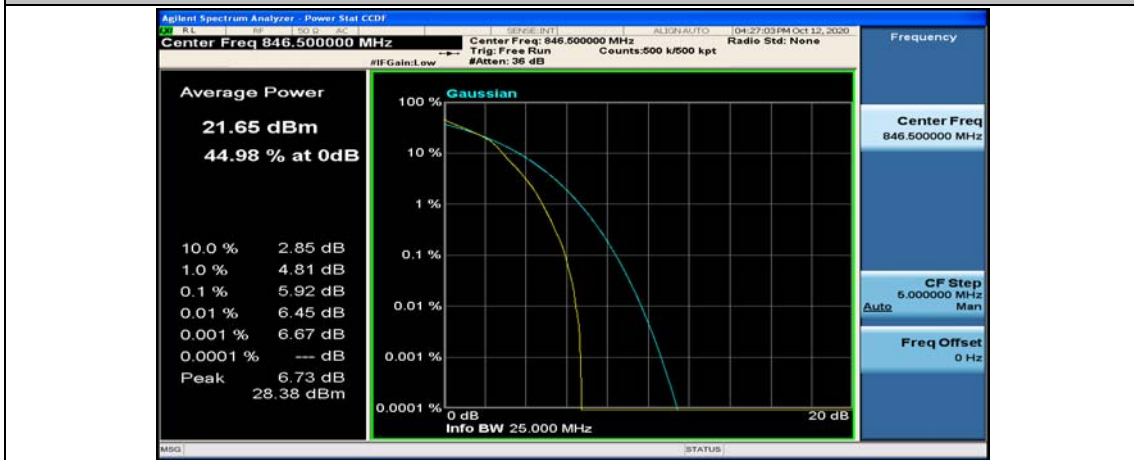
(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#6



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#13



(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



Channel Bandwidth: 10 MHz

