

Appendix for Band 40(2305-2315MHz)

Product Name: TD-LTE Wireless Data Terminal

Model No: TC50

Appendix A: Average Power Output Data

Test Result

Channel Bandwidth: 5 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.34	PASS
		1	12	21.66	PASS
		1	24	21.32	PASS
		12	0	20.37	PASS
		12	6	20.42	PASS
		12	13	20.39	PASS
		25	0	20.40	PASS
	MCH	1	0	21.34	PASS
		1	12	21.65	PASS
		1	24	21.33	PASS
		12	0	20.51	PASS
		12	6	20.38	PASS
		12	13	20.33	PASS
		25	0	20.37	PASS
	HCH	1	0	21.33	PASS
		1	12	21.66	PASS
		1	24	21.33	PASS
		12	0	20.32	PASS
		12	6	20.44	PASS
		12	13	20.38	PASS
		25	0	20.34	PASS
16QAM	LCH	1	0	20.54	PASS
		1	12	20.83	PASS
		1	24	20.49	PASS
		12	0	20.38	PASS
		12	6	20.39	PASS
		12	13	20.38	PASS

	MCH	25	0	20.51	PASS
		1	0	20.65	PASS
		1	12	20.97	PASS
		1	24	20.68	PASS
		12	0	20.37	PASS
		12	6	20.39	PASS
		12	13	20.41	PASS
		25	0	20.31	PASS
	HCH	1	0	20.58	PASS
		1	12	20.91	PASS
		1	24	20.59	PASS
		12	0	20.36	PASS
		12	6	20.38	PASS
		12	13	20.32	PASS
		25	0	20.35	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	MCH	1	0	21.43	PASS
		1	24	21.69	PASS
		1	49	21.39	PASS
		25	0	20.39	PASS
		25	12	20.45	PASS
		25	25	20.42	PASS
		50	0	20.40	PASS
16QAM	MCH	1	0	20.67	PASS
		1	24	20.75	PASS
		1	49	20.64	PASS
		25	0	20.34	PASS
		25	12	20.39	PASS
		25	25	20.34	PASS
		50	0	20.33	PASS

Appendix B: Peak-to-Average Ratio

Test Result

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	12.38	<13	PASS
		1	12	11.15	<13	PASS
		1	24	10.09	<13	PASS
		12	0	8.42	<13	PASS
		12	6	8.84	<13	PASS
		12	13	9.11	<13	PASS
		25	0	8.73	<13	PASS
	MCH	1	0	12.09	<13	PASS
		1	12	7.2	<13	PASS
		1	24	10	<13	PASS
		12	0	9.29	<13	PASS
		12	6	8.46	<13	PASS
		12	13	6.92	<13	PASS
		25	0	10.31	<13	PASS
	HCH	1	0	8.57	<13	PASS
		1	12	9.75	<13	PASS
		1	24	6.88	<13	PASS
		12	0	7.48	<13	PASS
		12	6	6.82	<13	PASS
		12	13	8.5	<13	PASS
		25	0	8.73	<13	PASS
16QAM	LCH	1	0	9.4	<13	PASS
		1	12	9.38	<13	PASS
		1	24	11.76	<13	PASS
		12	0	10.26	<13	PASS
		12	6	8.97	<13	PASS
		12	13	10.38	<13	PASS
		25	0	10.35	<13	PASS
	MCH	1	0	10.31	<13	PASS
		1	12	12.05	<13	PASS
		1	24	10.05	<13	PASS

		12	0	10.83	<13	PASS
		12	6	7.76	<13	PASS
		12	13	8.57	<13	PASS
		25	0	8.55	<13	PASS
	HCH	1	0	9.78	<13	PASS
		1	12	8.26	<13	PASS
		1	24	11.85	<13	PASS
		12	0	10.02	<13	PASS
		12	6	9.4	<13	PASS
		12	13	11.08	<13	PASS
		25	0	7.85	<13	PASS

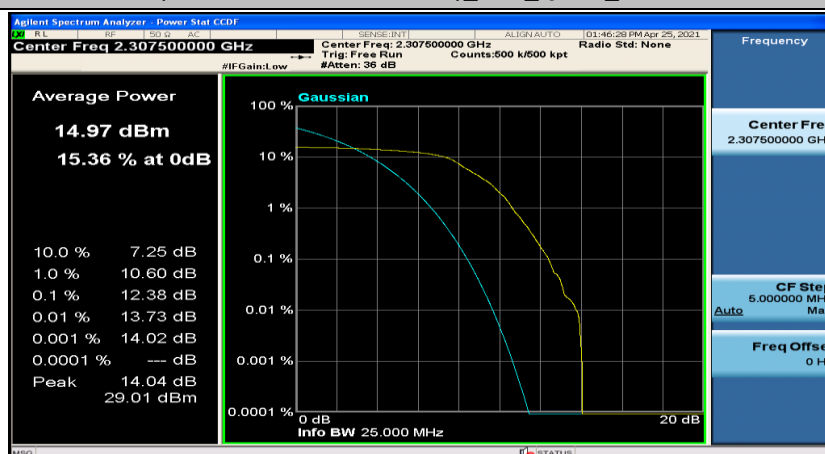
Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	11.1	<13	PASS
		1	24	8.35	<13	PASS
		1	49	9.97	<13	PASS
		25	0	8.64	<13	PASS
		25	12	7.96	<13	PASS
		25	25	9.63	<13	PASS
		50	0	10.98	<13	PASS
16QAM	MCH	1	0	9	<13	PASS
		1	24	7.43	<13	PASS
		1	49	9.78	<13	PASS
		25	0	9.58	<13	PASS
		25	12	9.51	<13	PASS
		25	25	9.41	<13	PASS
		50	0	9.96	<13	PASS

Test Graphs

Channel Bandwidth: 5 MHz

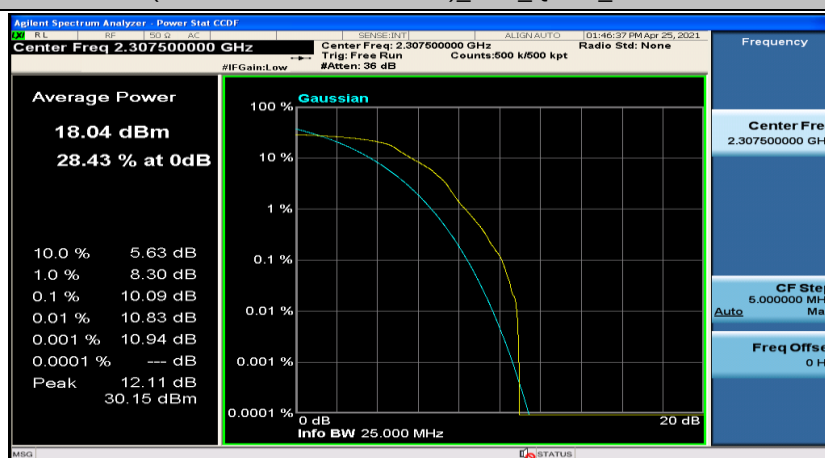
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



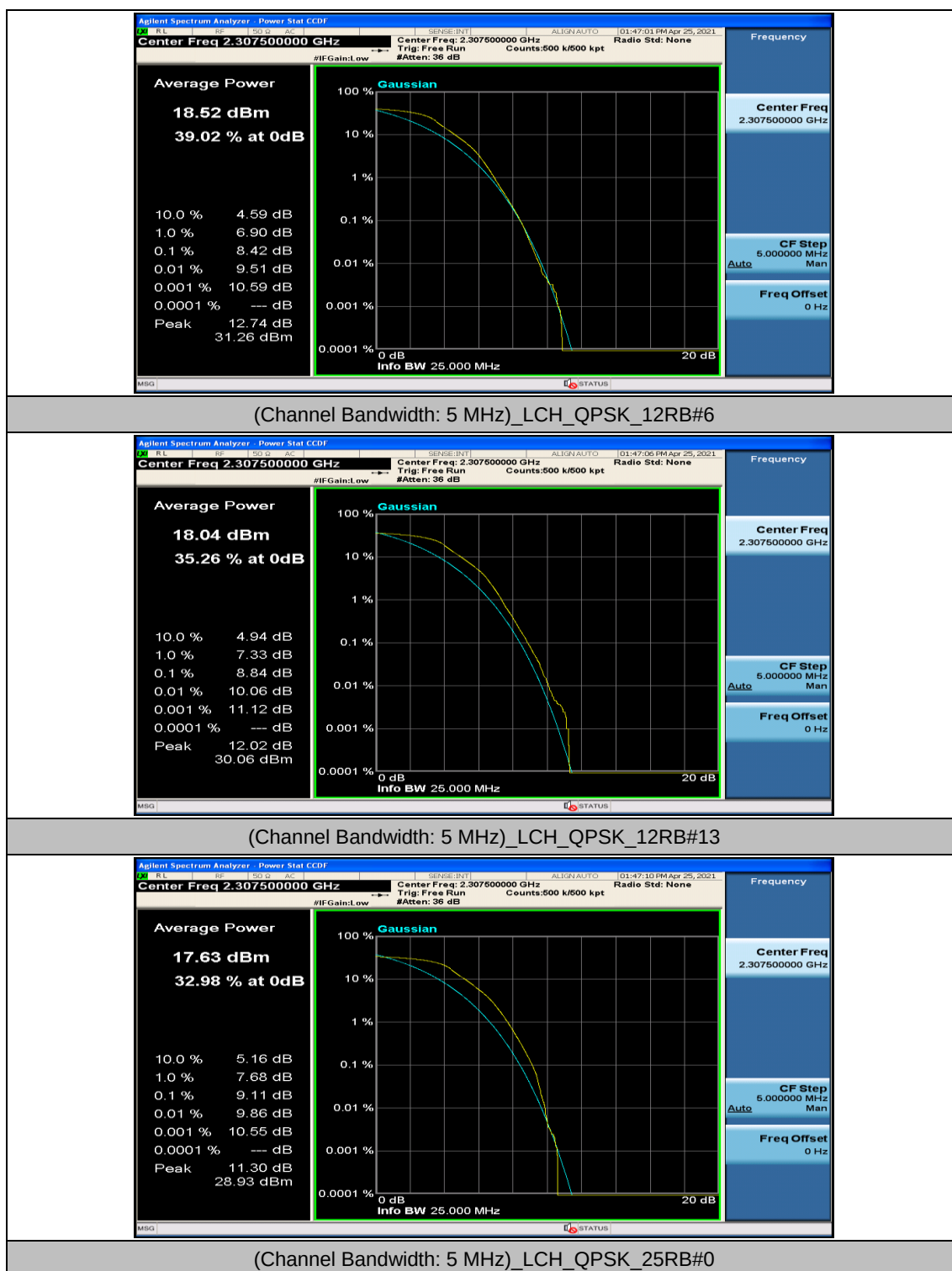
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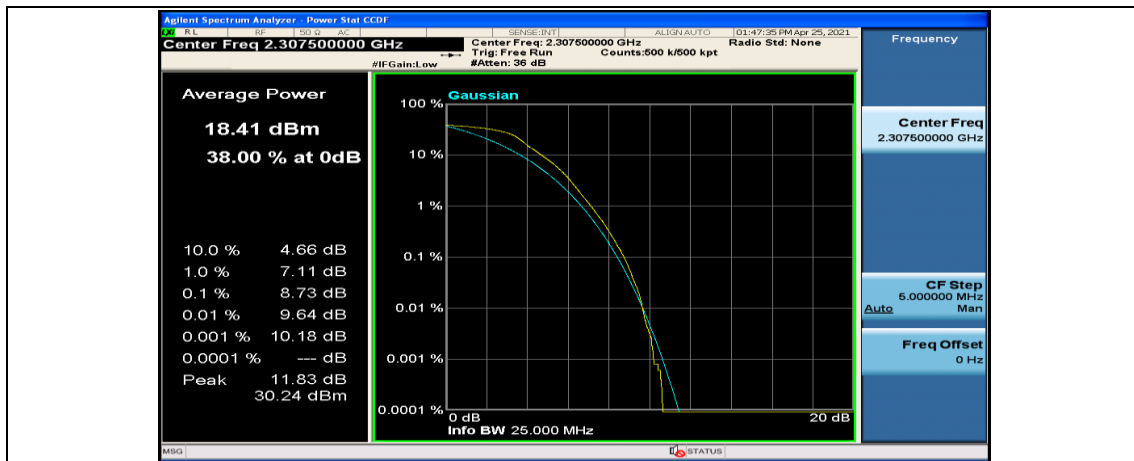


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

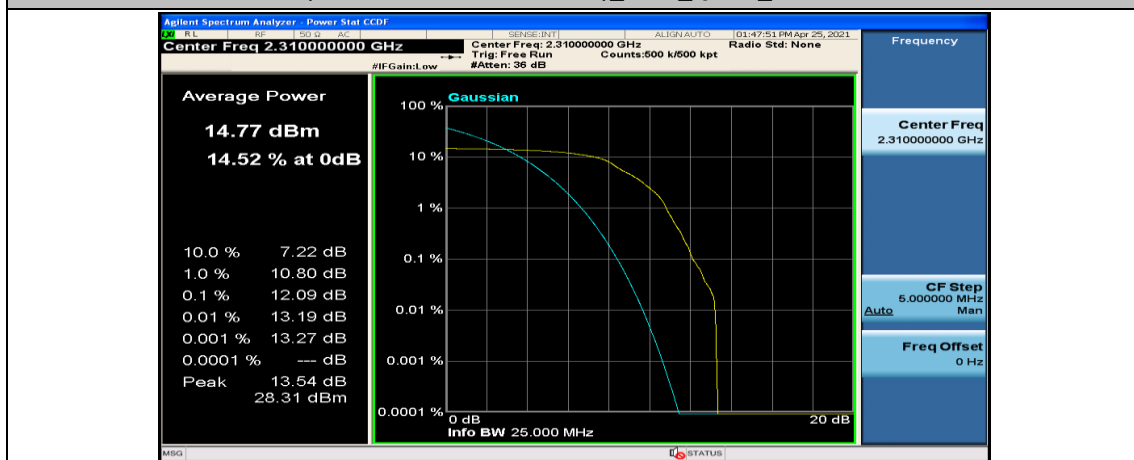


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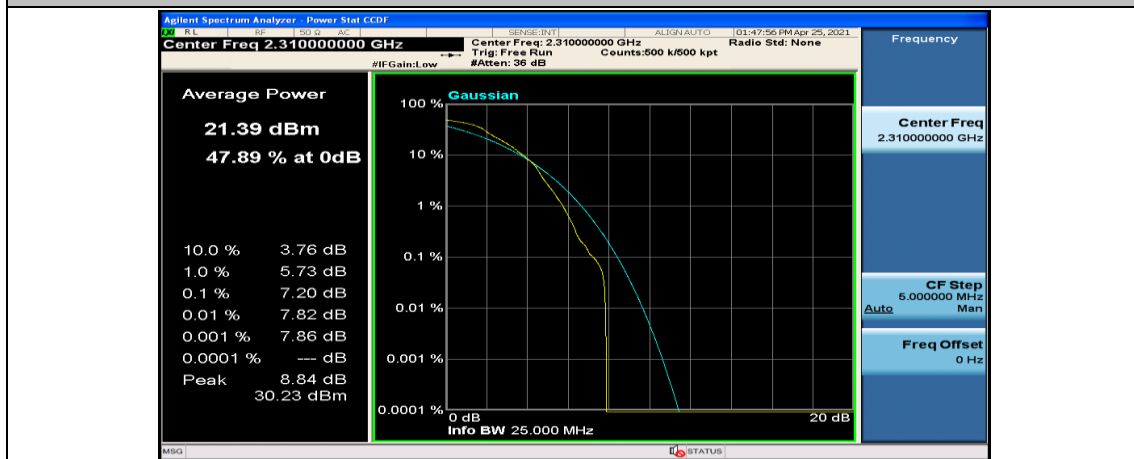




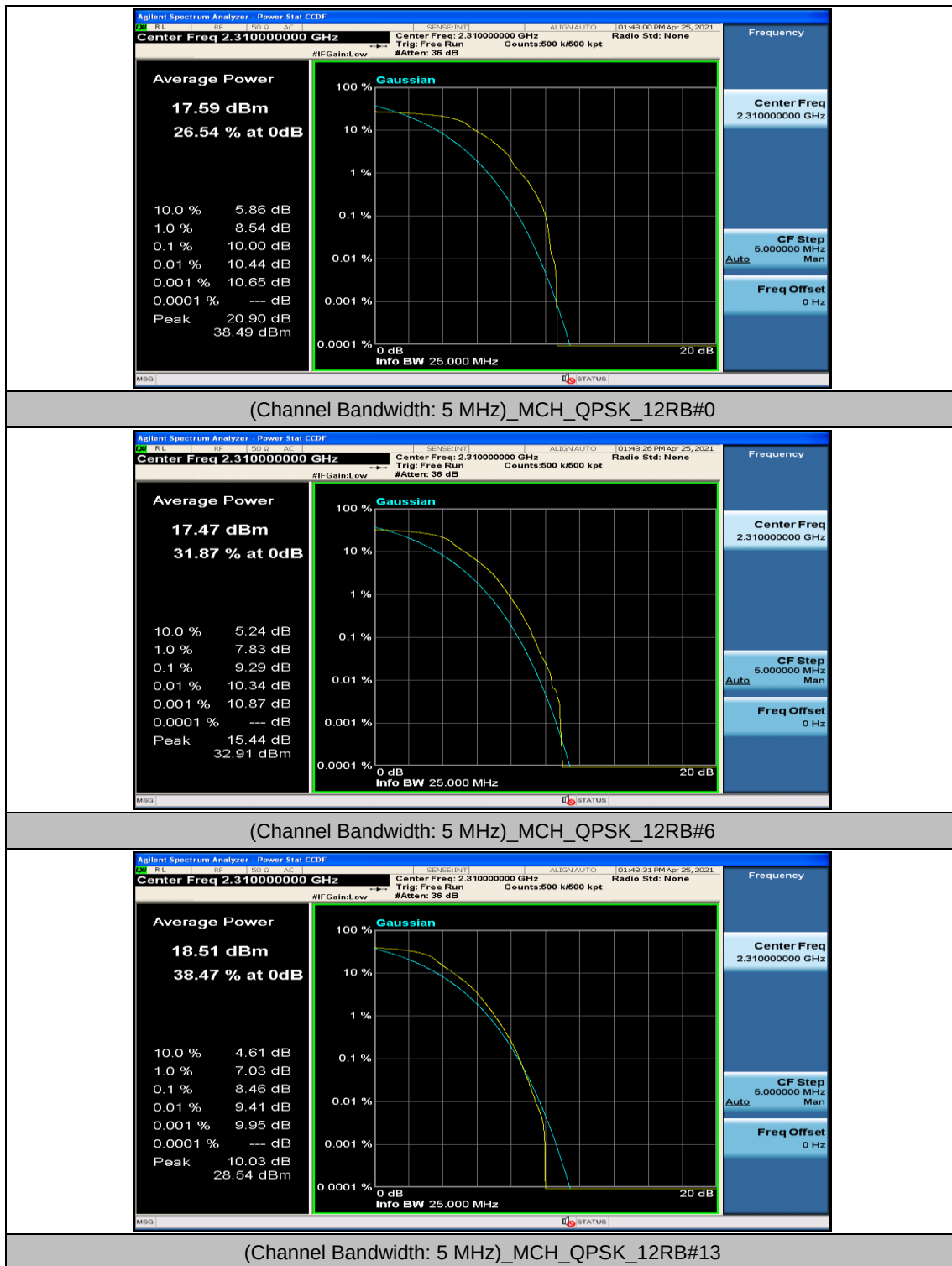
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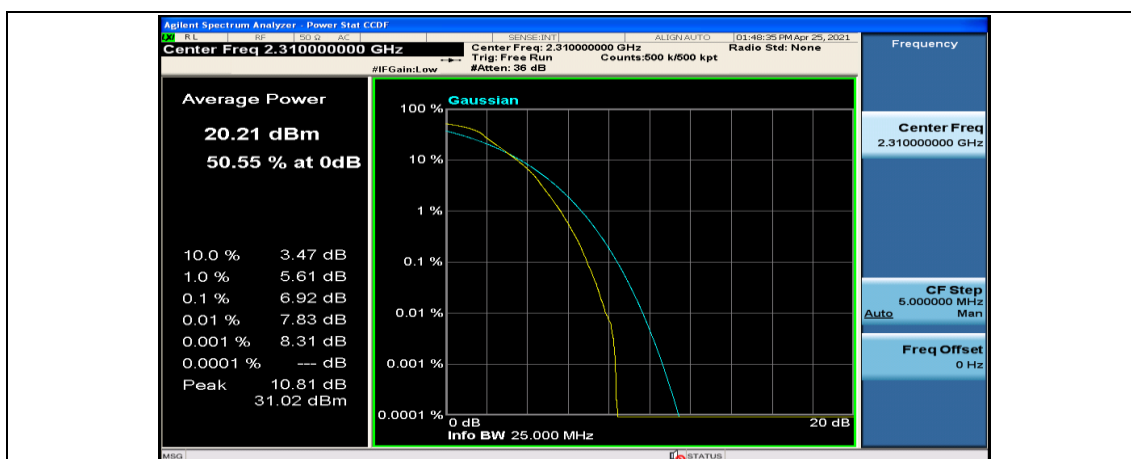


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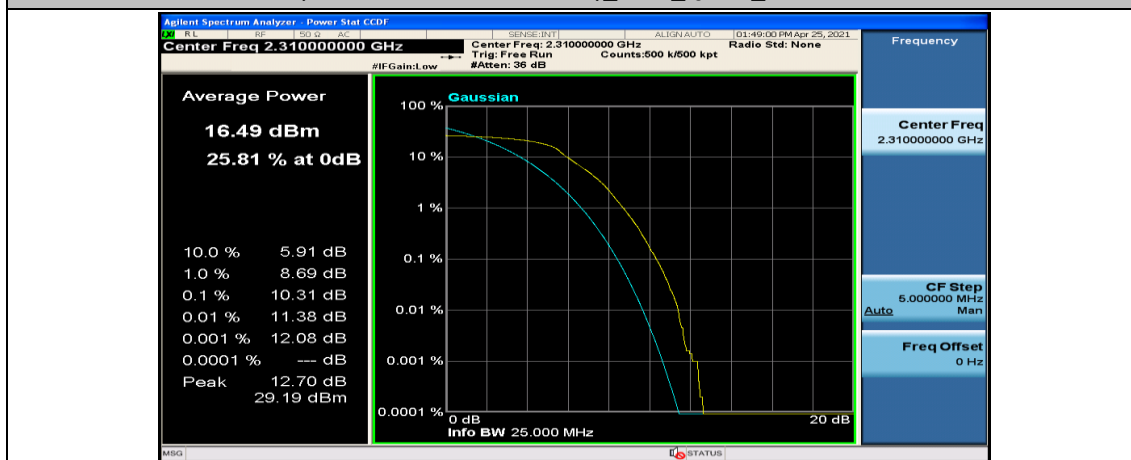


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

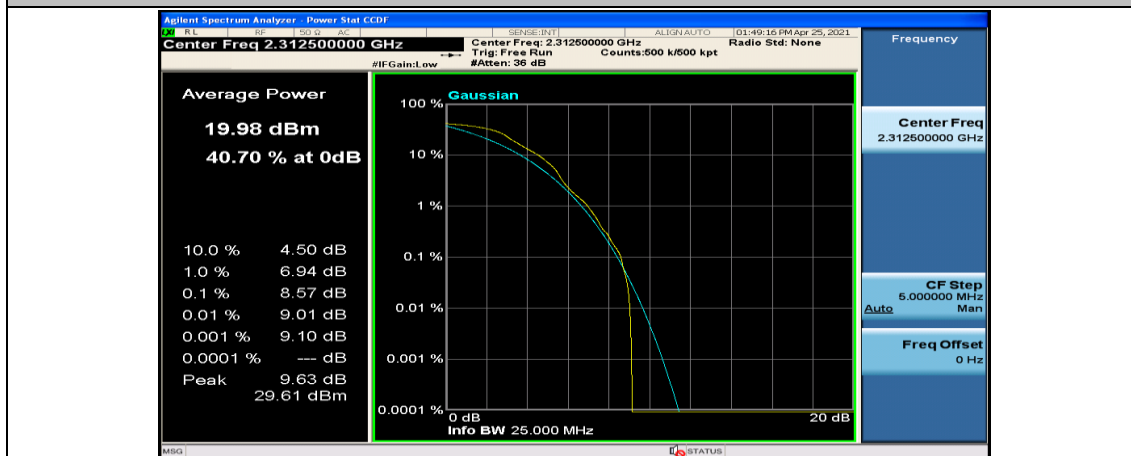




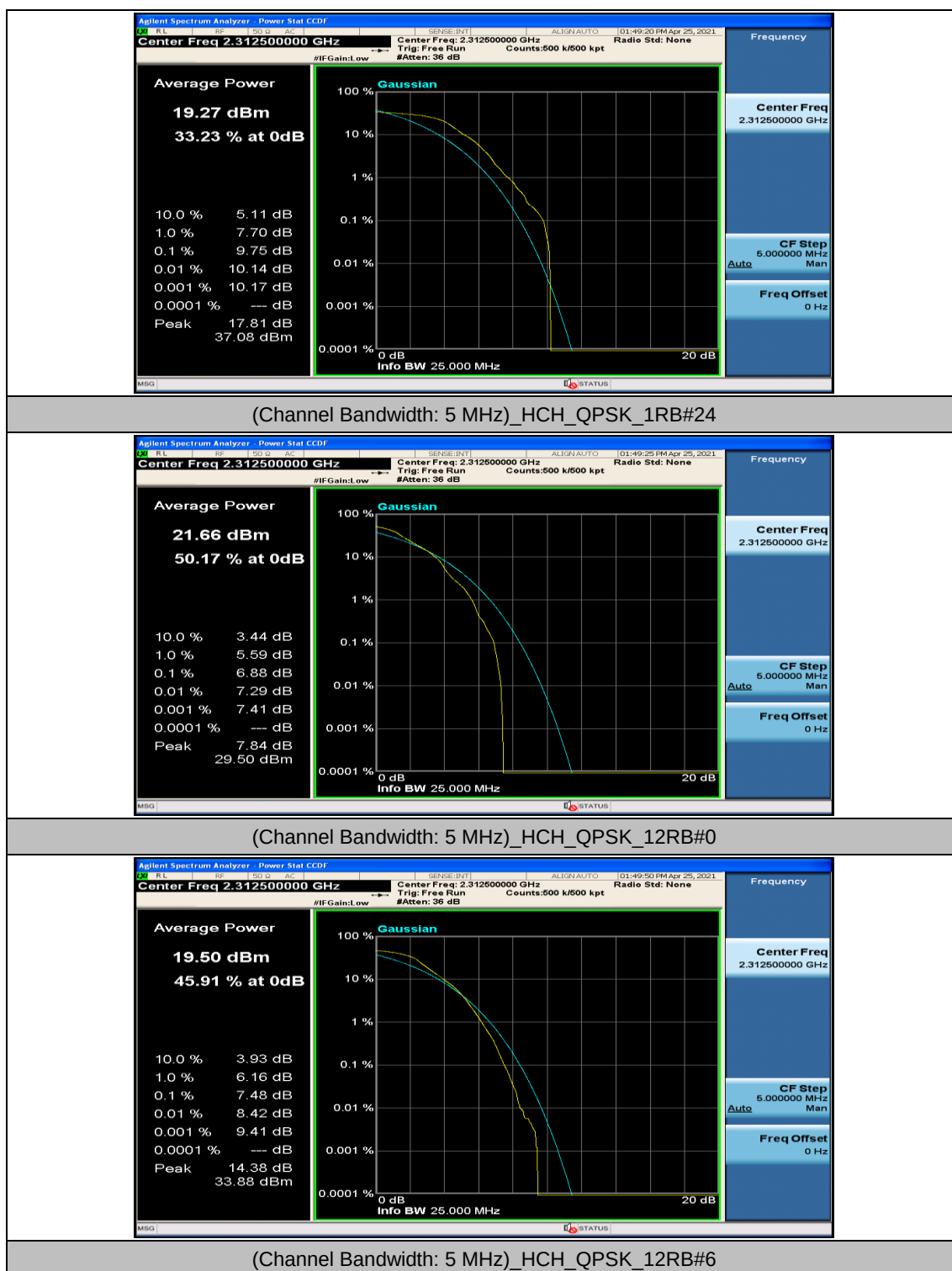
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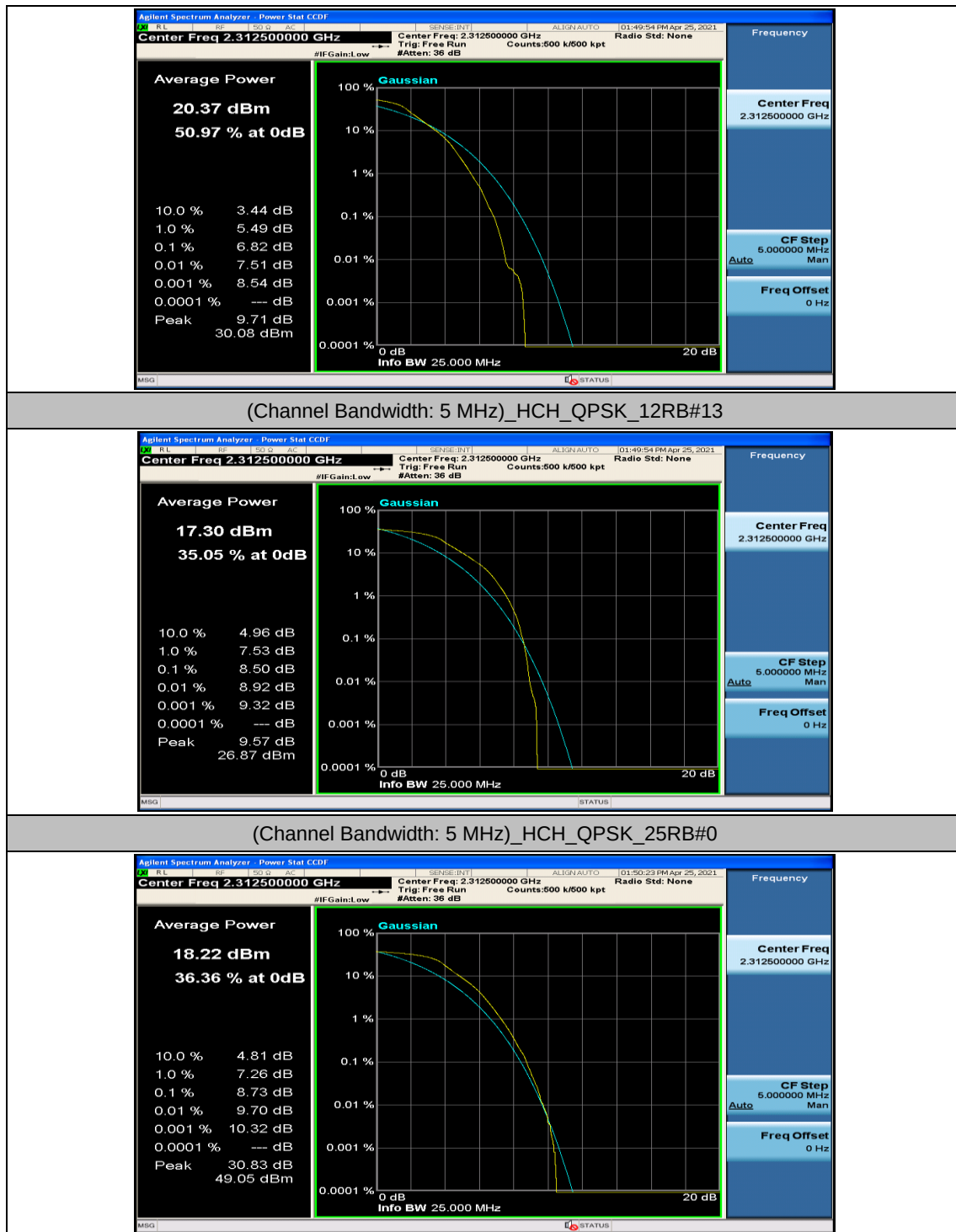


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

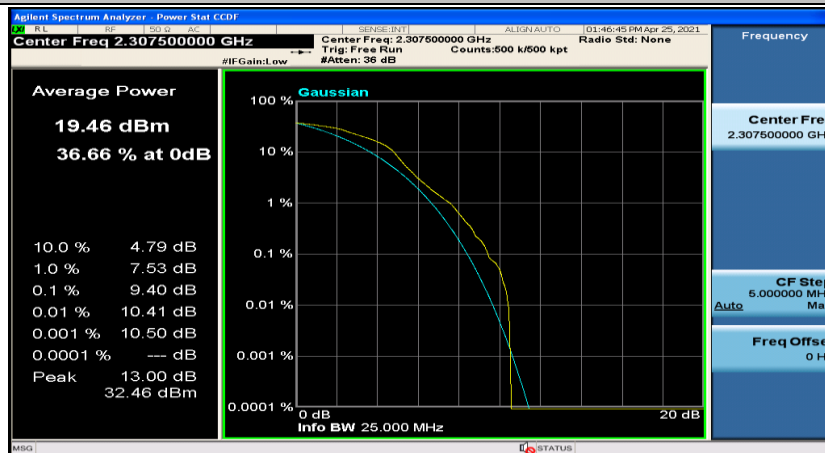


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12





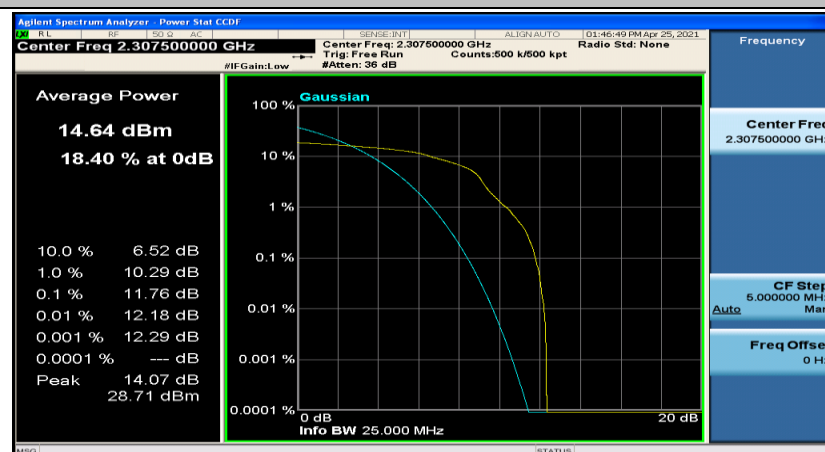
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



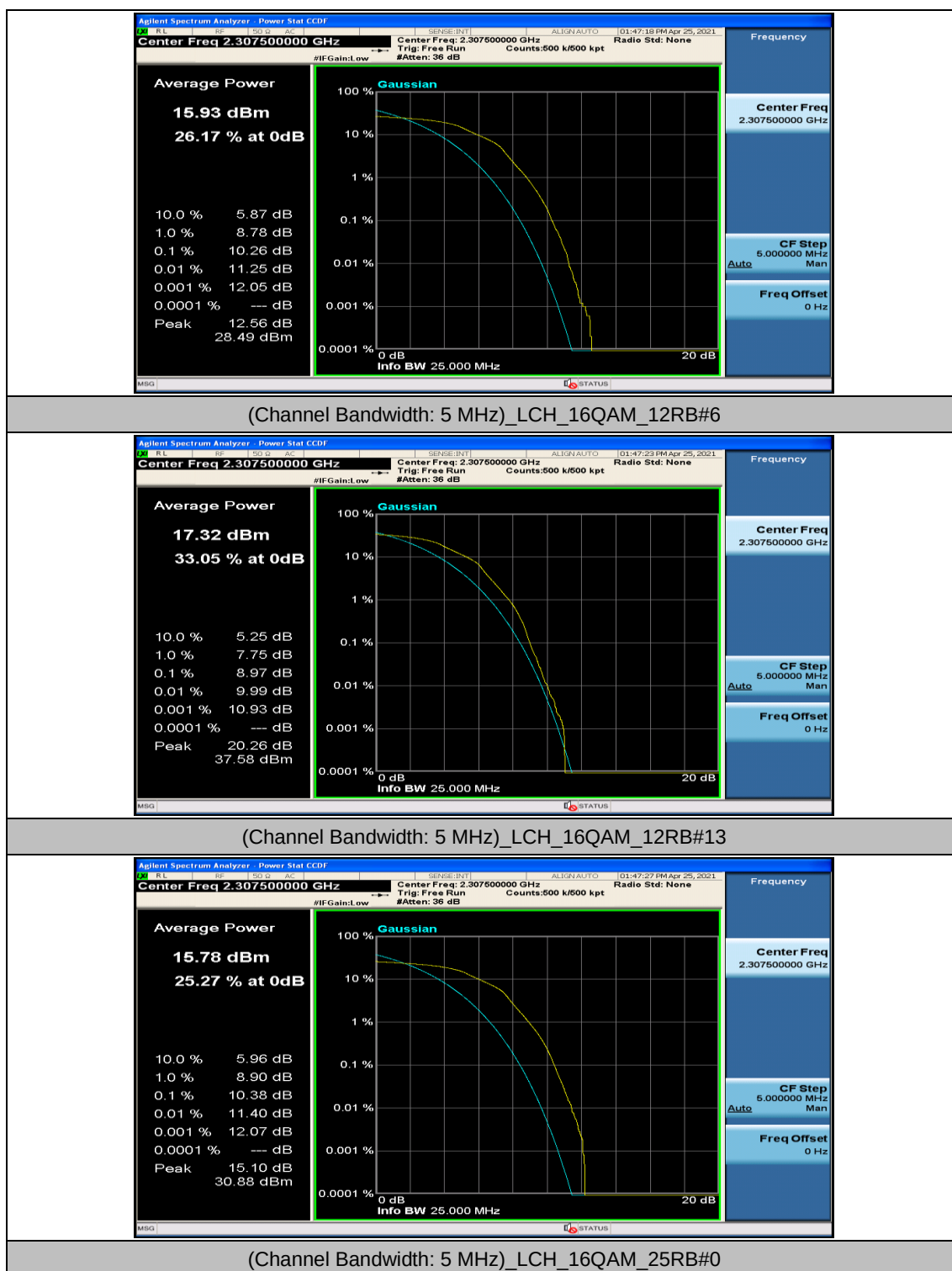
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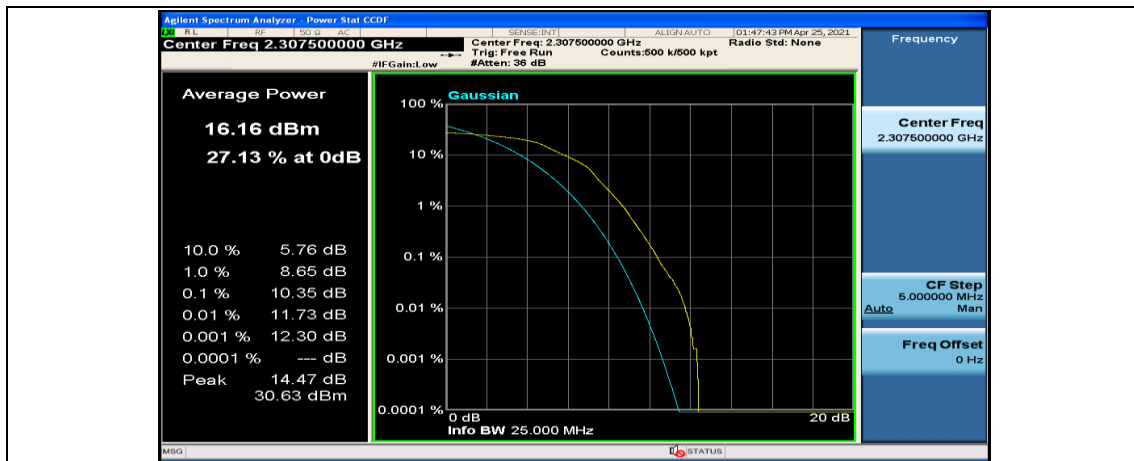


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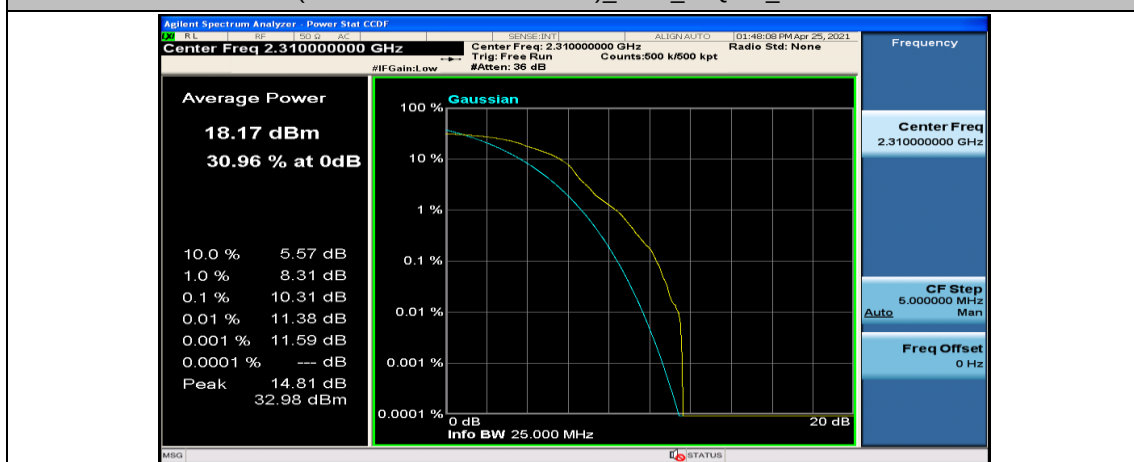


(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0

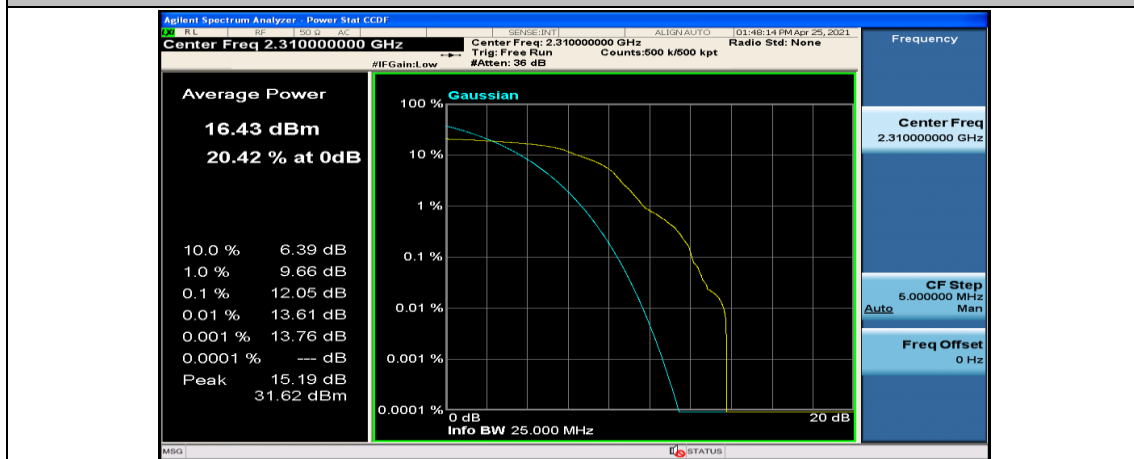




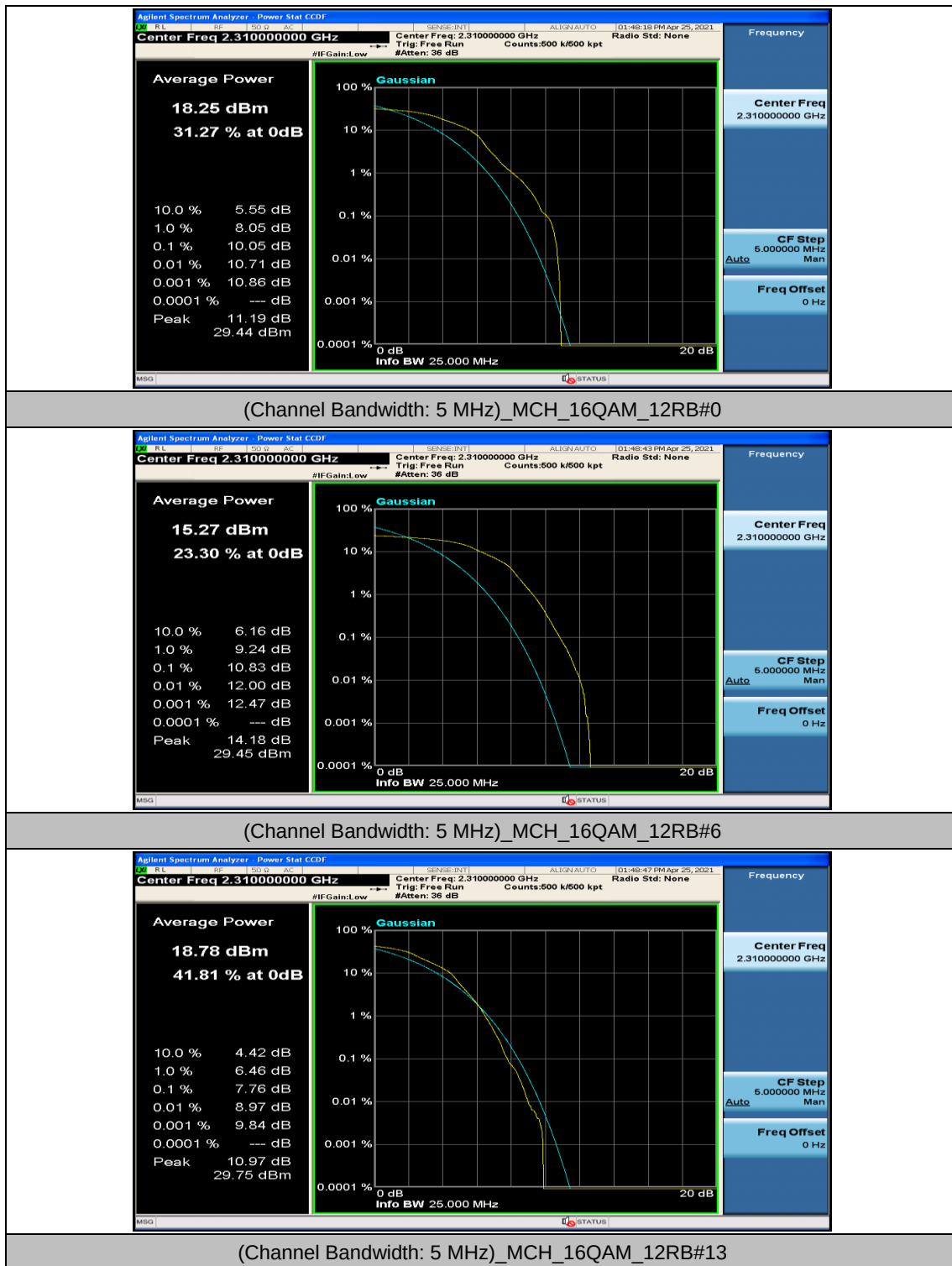
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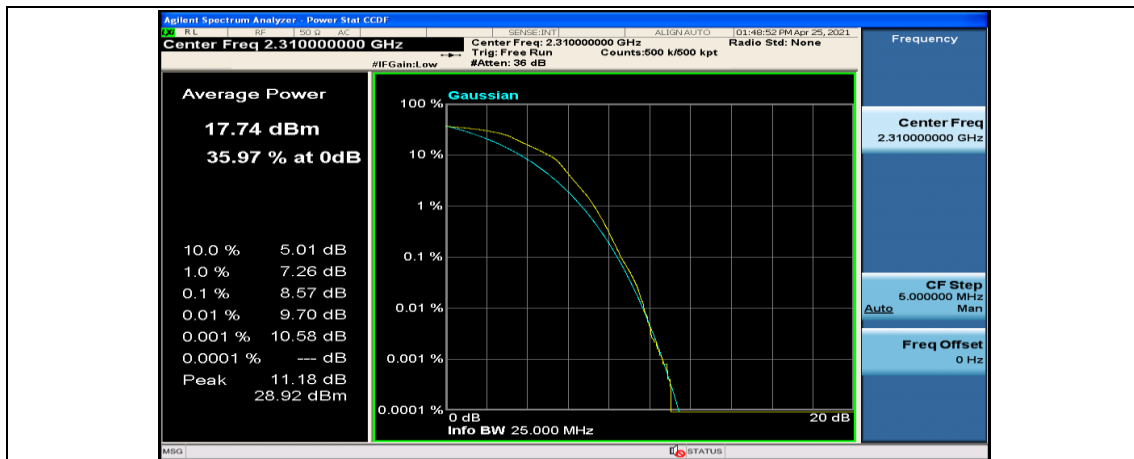


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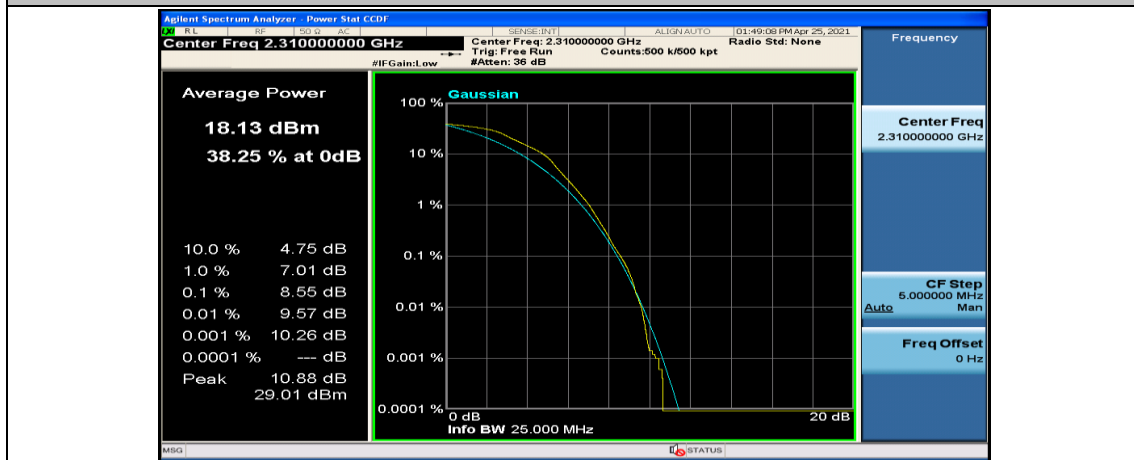


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

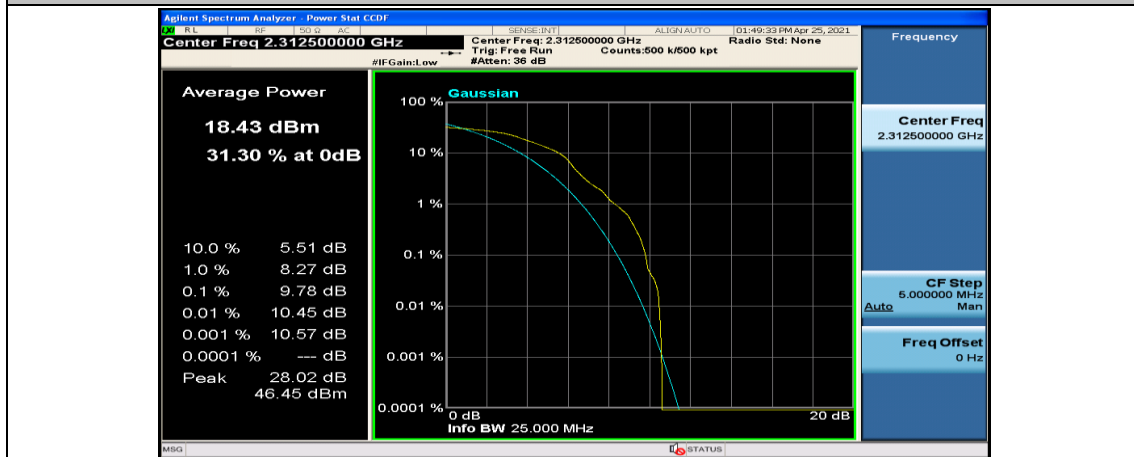




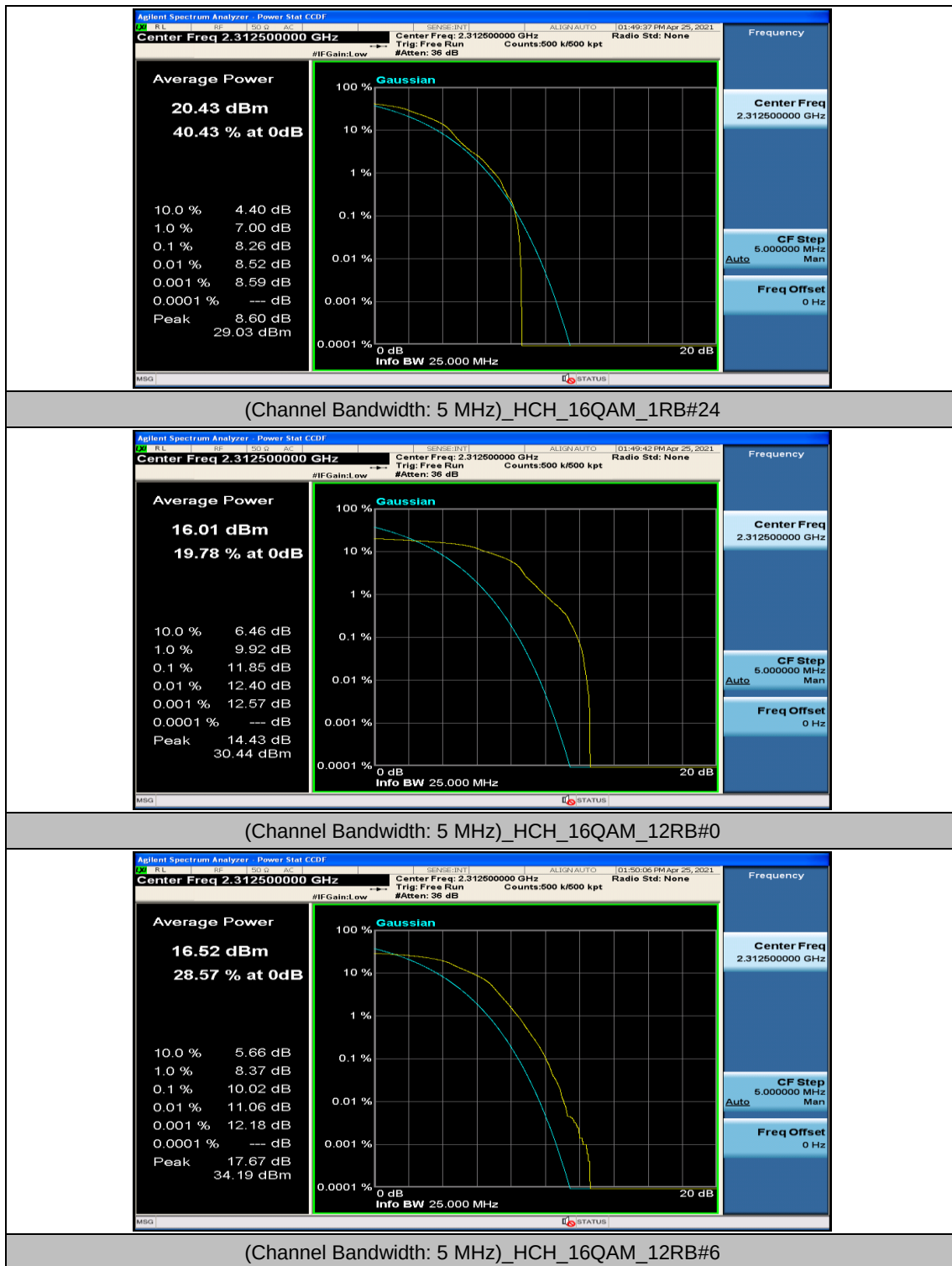
(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

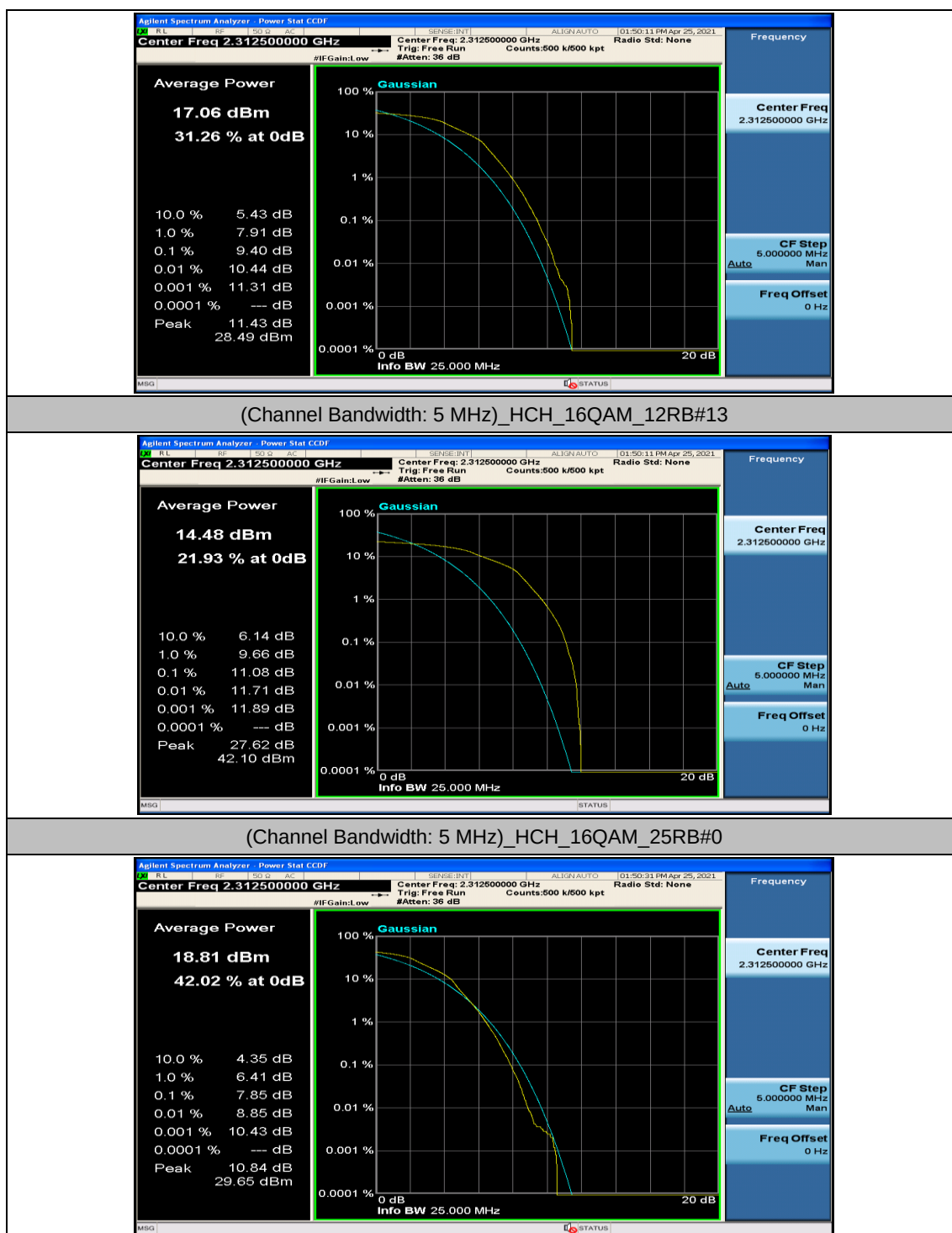


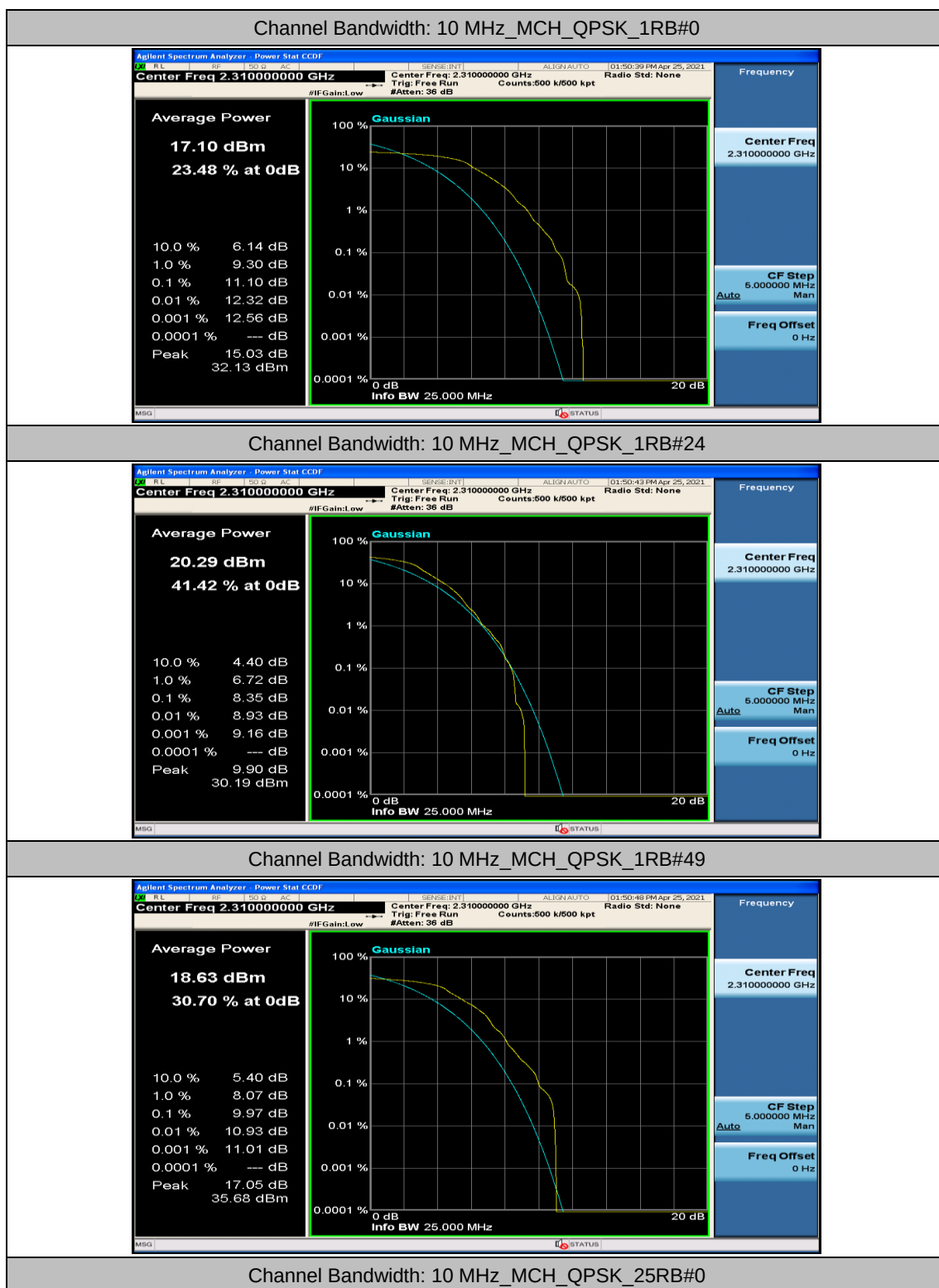
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

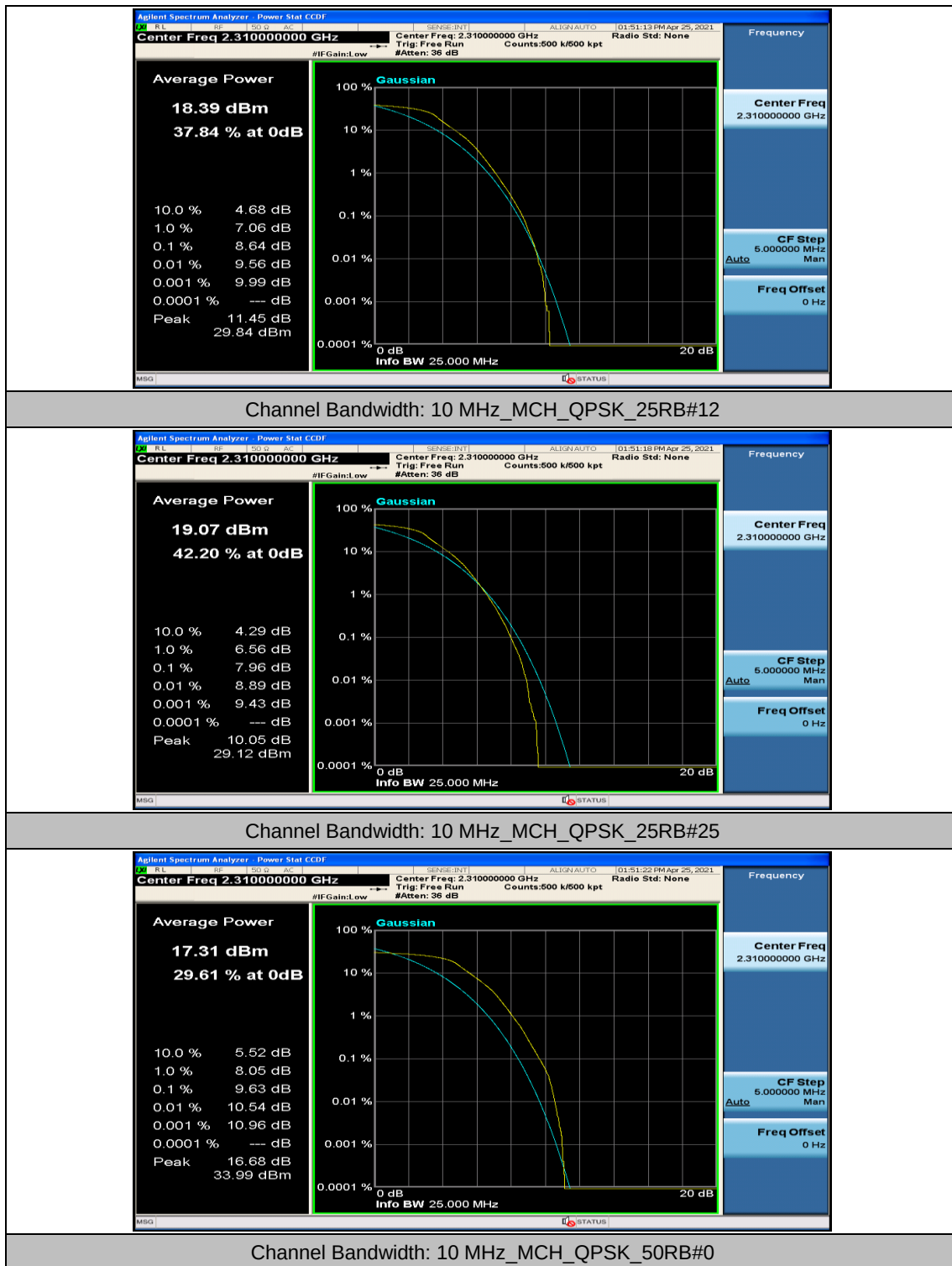


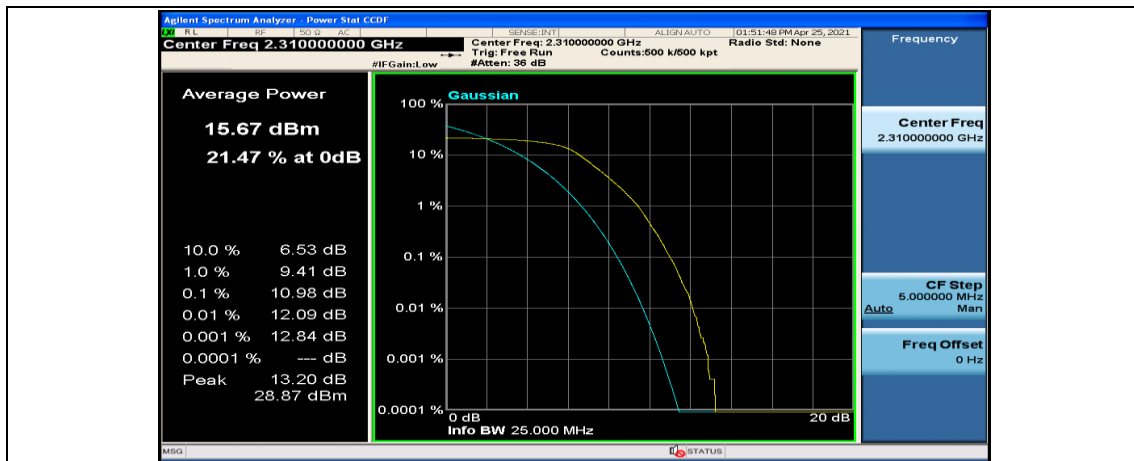
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



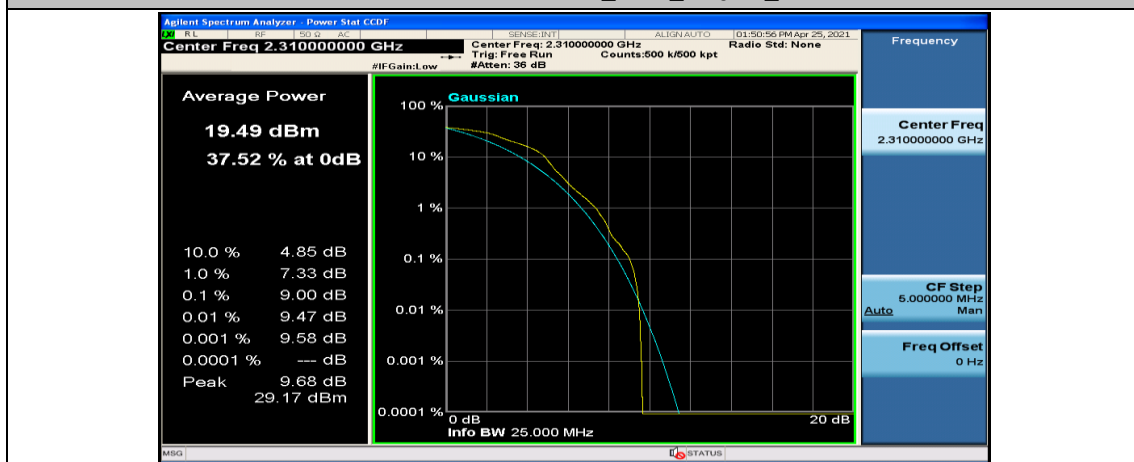


Channel Bandwidth: 10 MHz

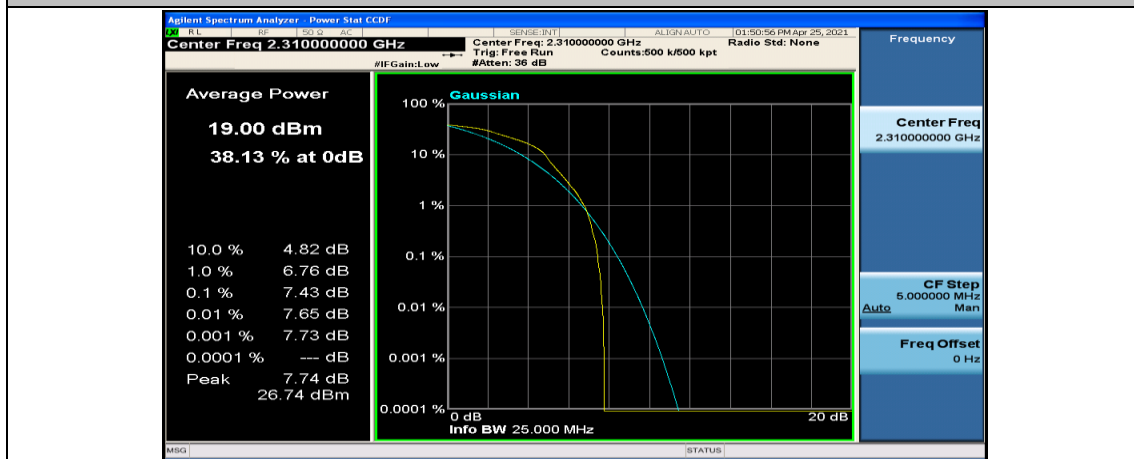




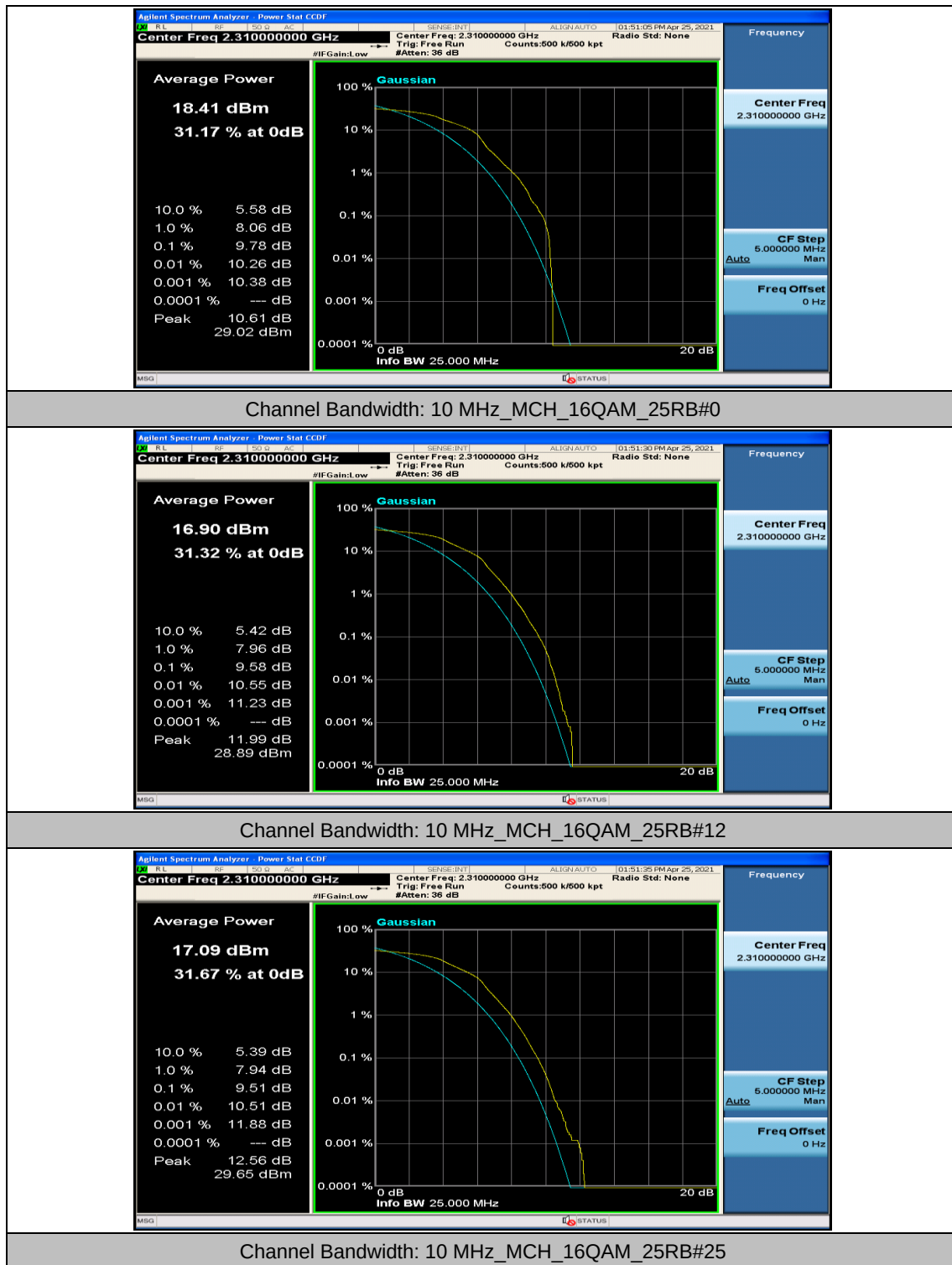
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

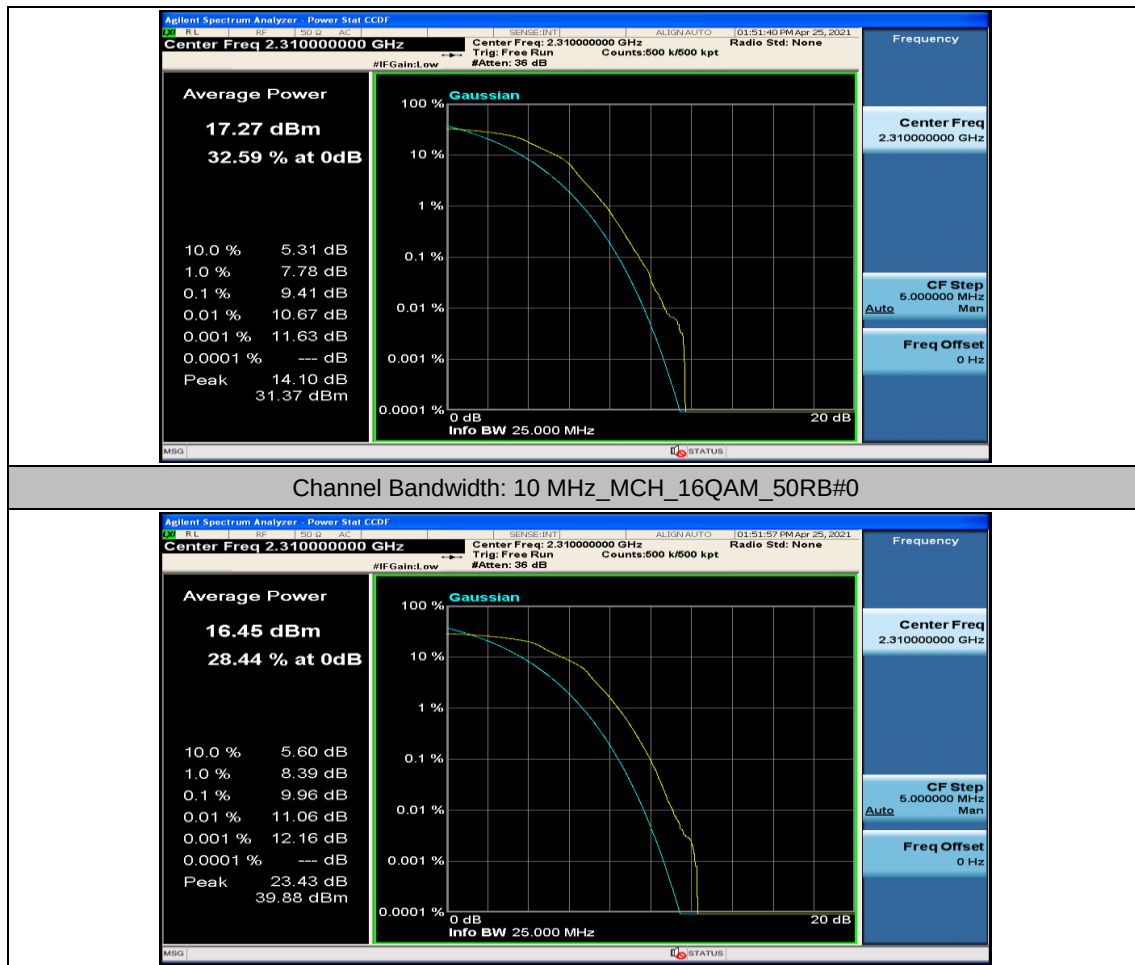


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49





Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Channel Bandwidth: 5 MHz

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4861	4.829	PASS
	MCH	25	0	4.4940	4.811	PASS
	HCH	25	0	4.4790	4.882	PASS
16QAM	LCH	25	0	4.4786	4.925	PASS
	MCH	25	0	4.4673	4.831	PASS
	HCH	25	0	4.4660	4.857	PASS

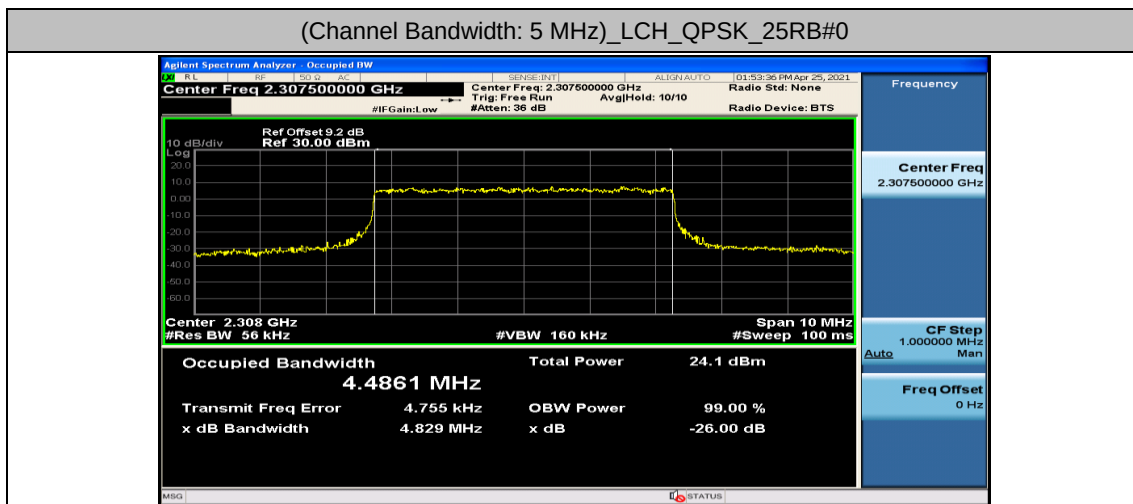
Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	MCH	50	0	8.9249	9.475	PASS
16QAM	MCH	50	0	8.9417	9.478	PASS

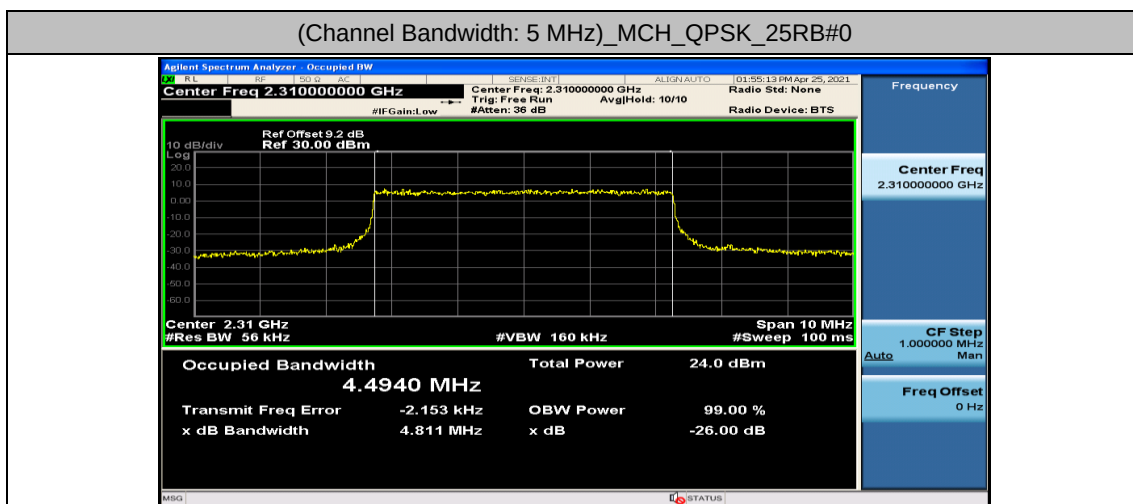
Test Graphs

Channel Bandwidth: 5 MHz

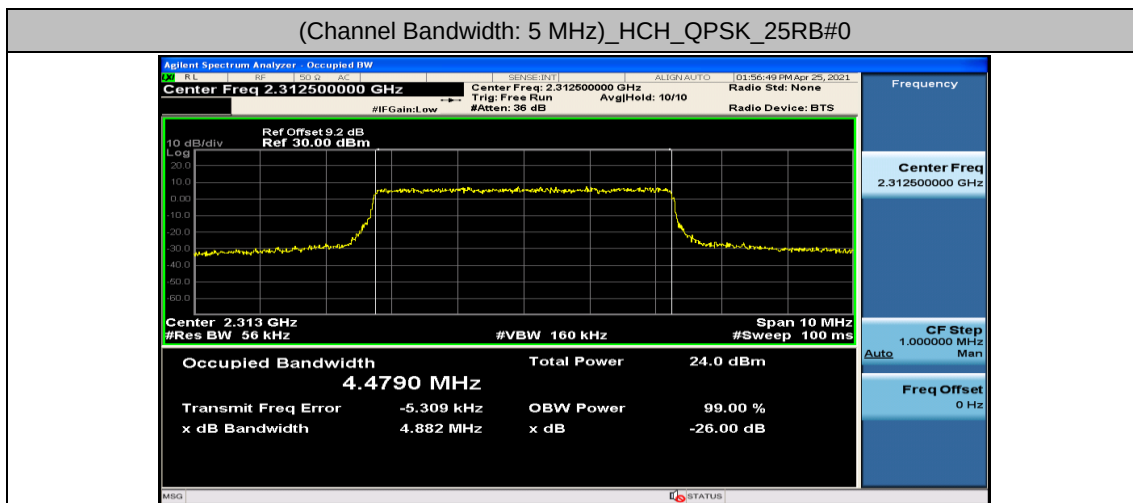
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



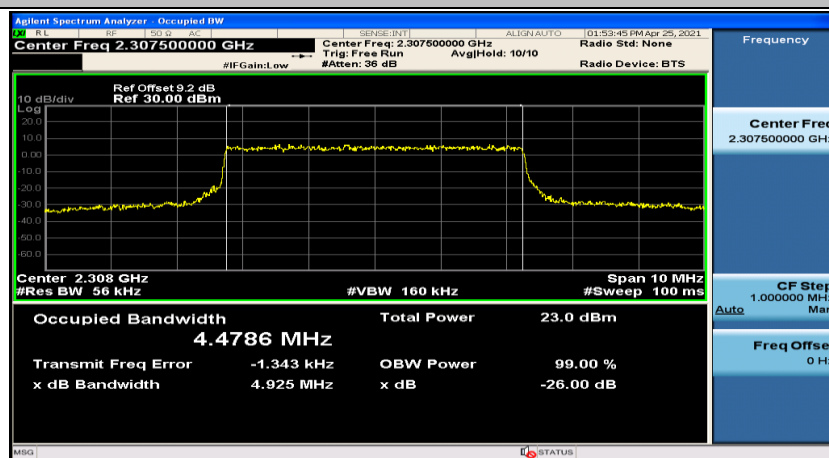
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



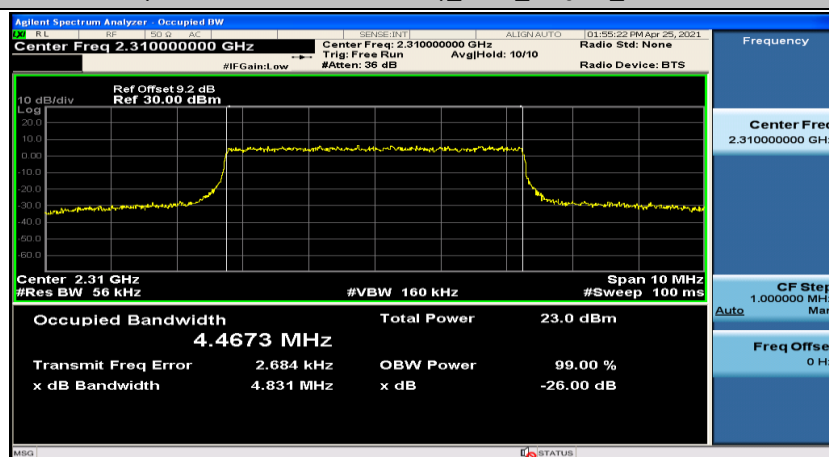
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



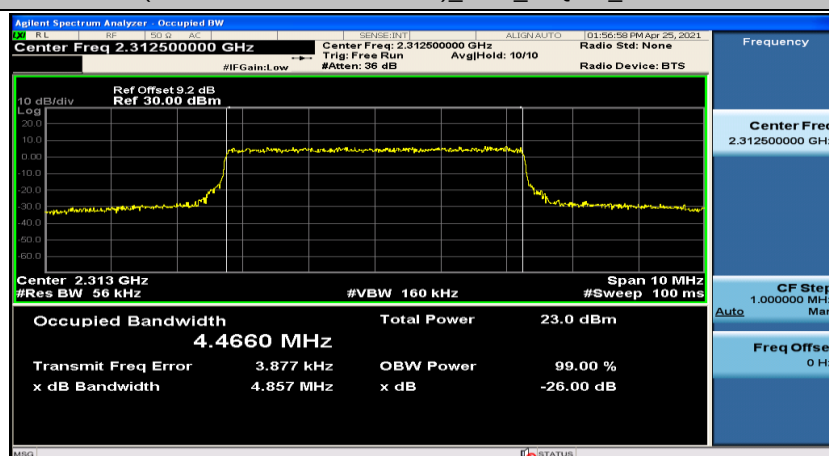
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



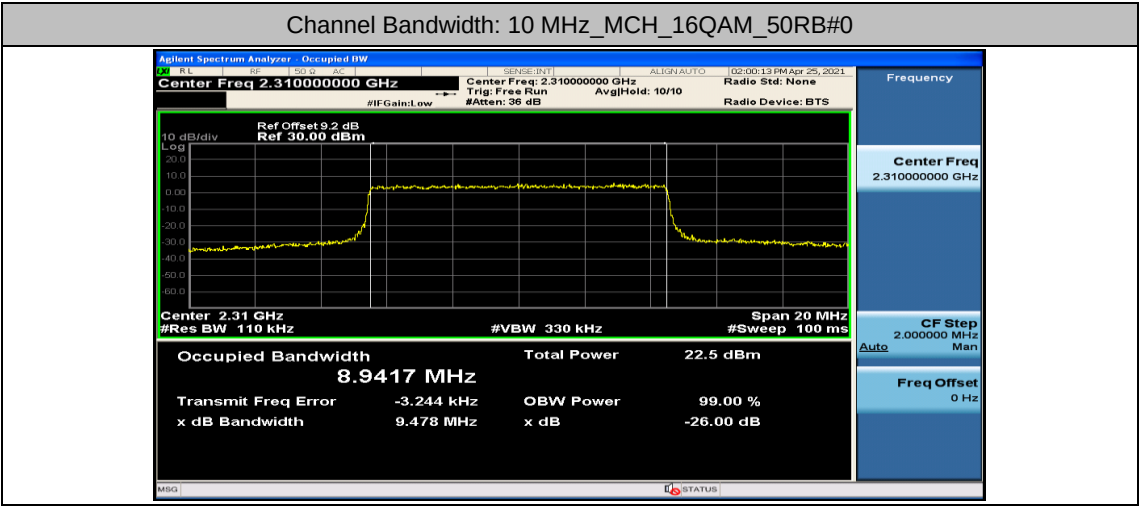
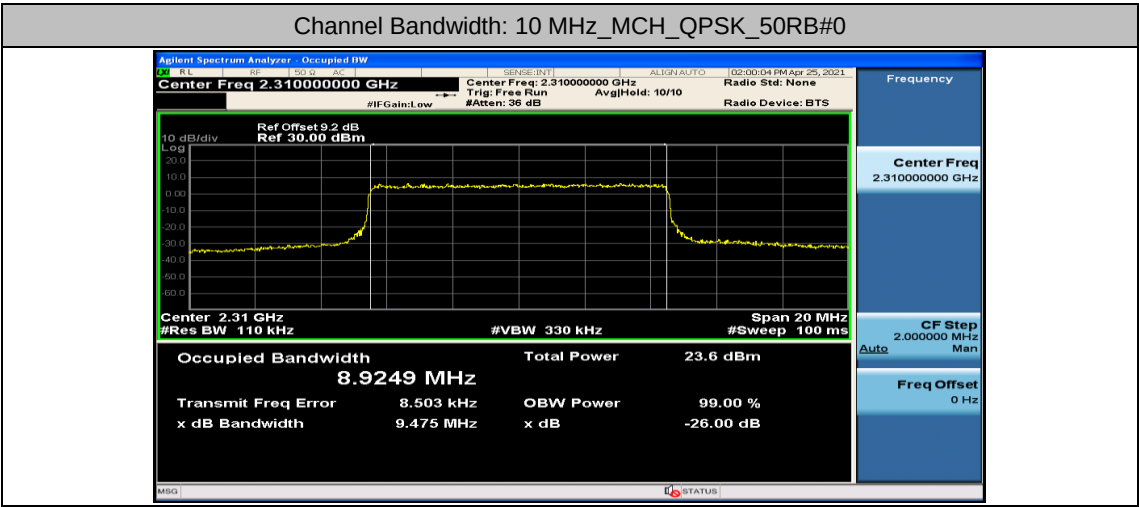
(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



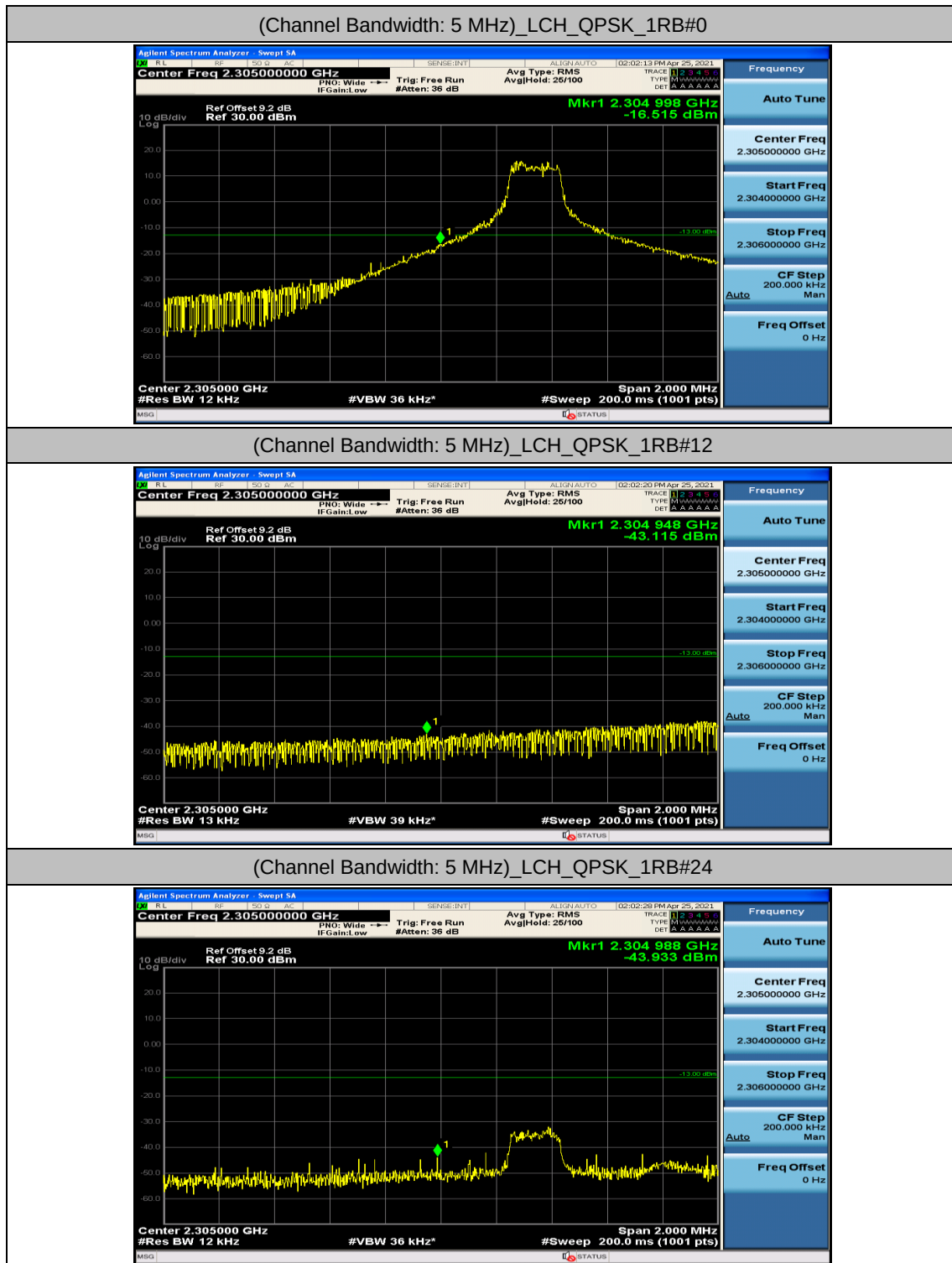
Channel Bandwidth: 10 MHz



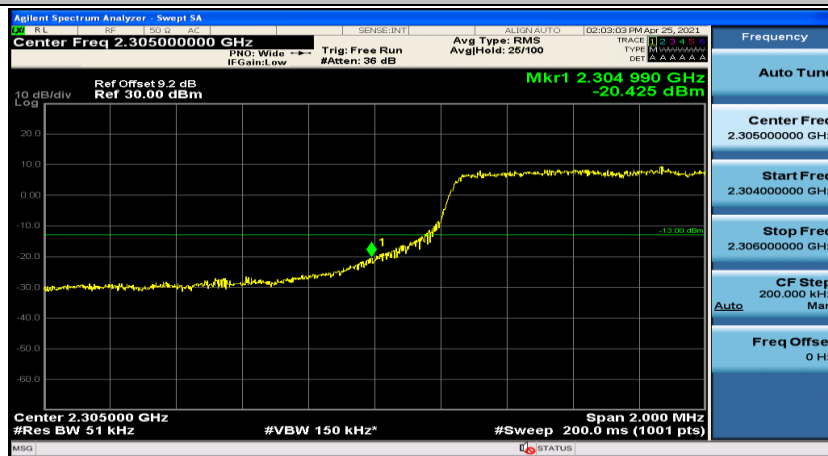
Appendix D: Band Edge

Test Graphs

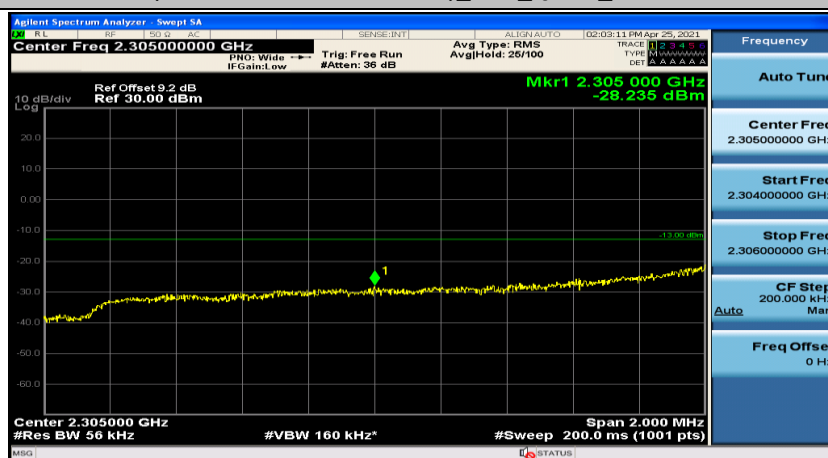
Channel Bandwidth: 5 MHz



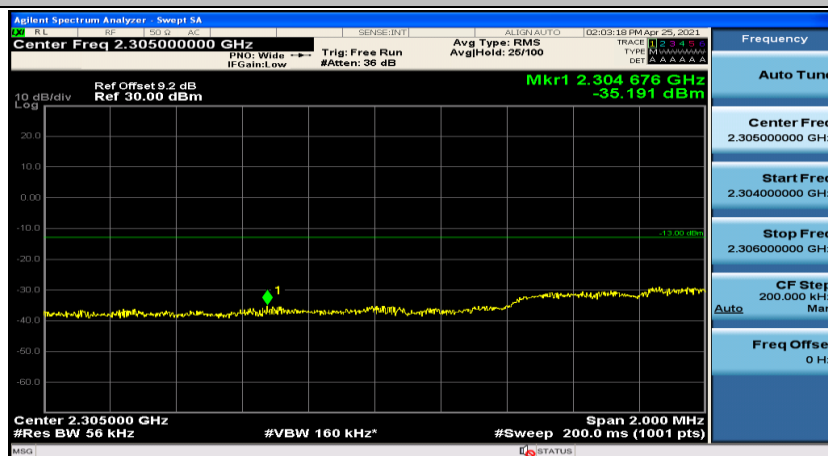
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0



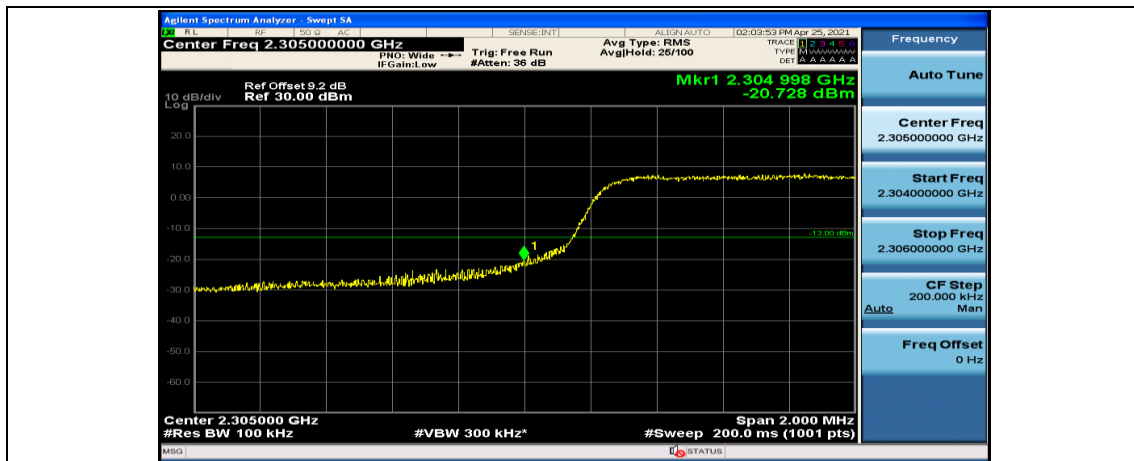
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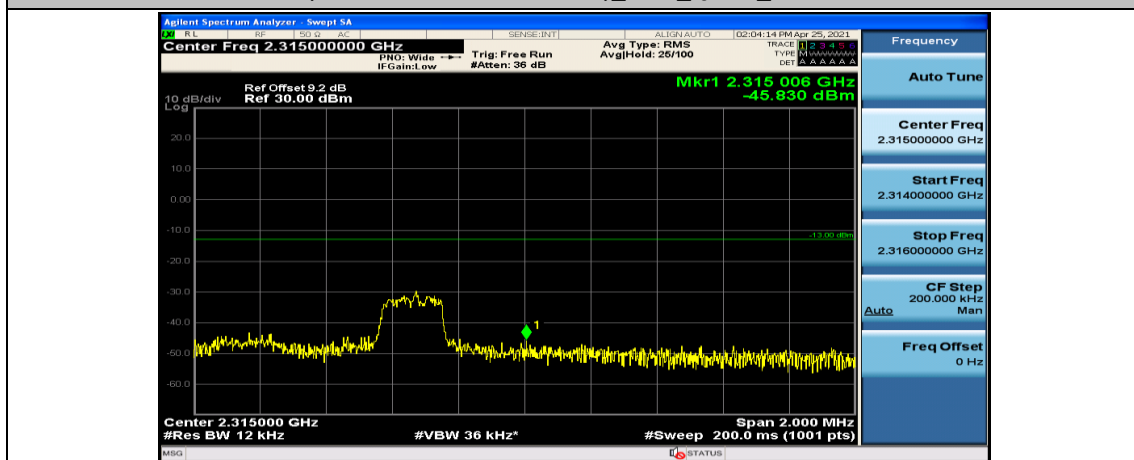
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13



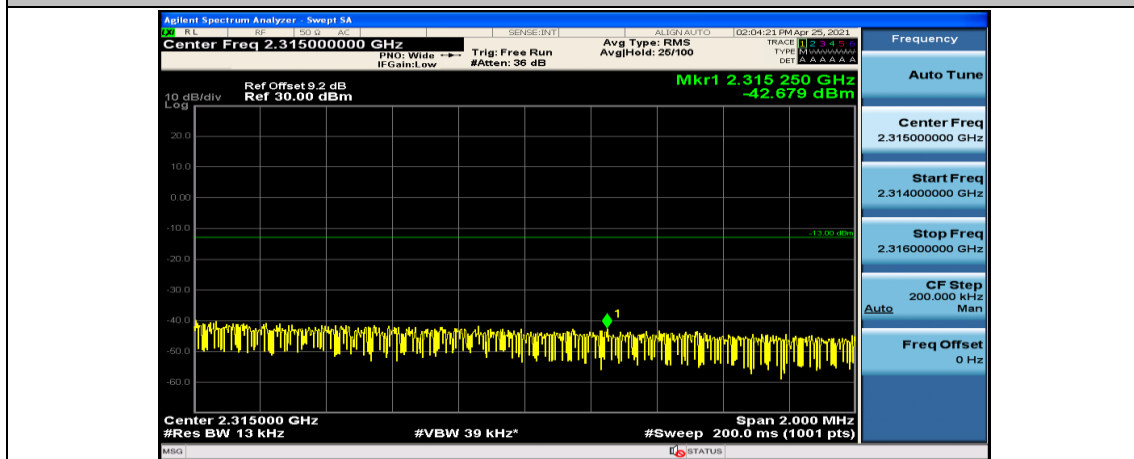
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



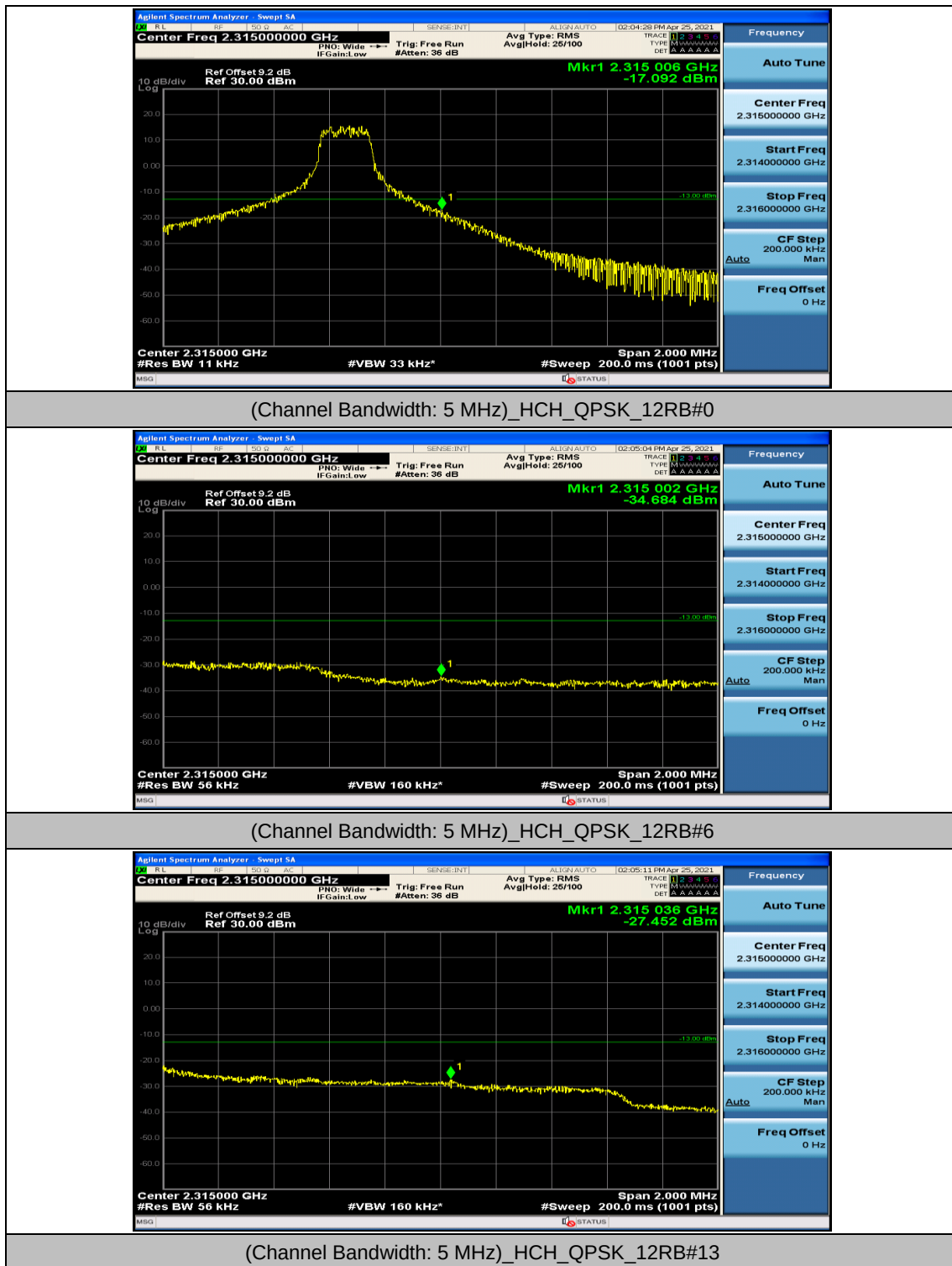
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

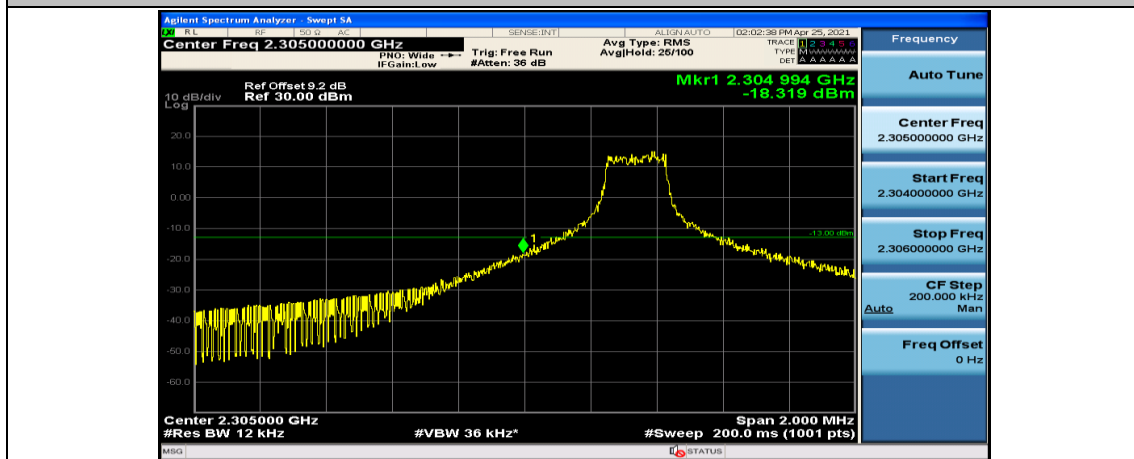




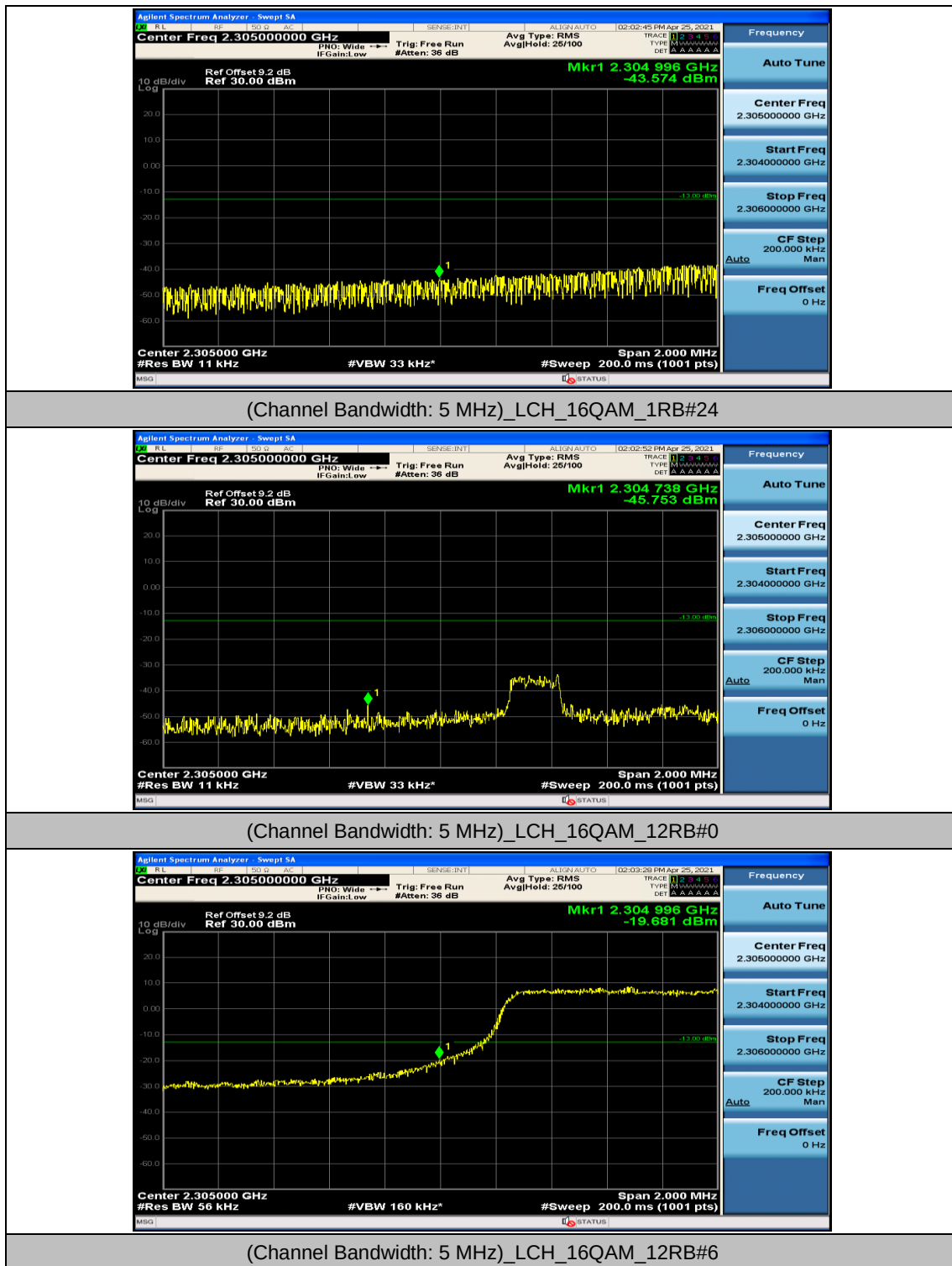
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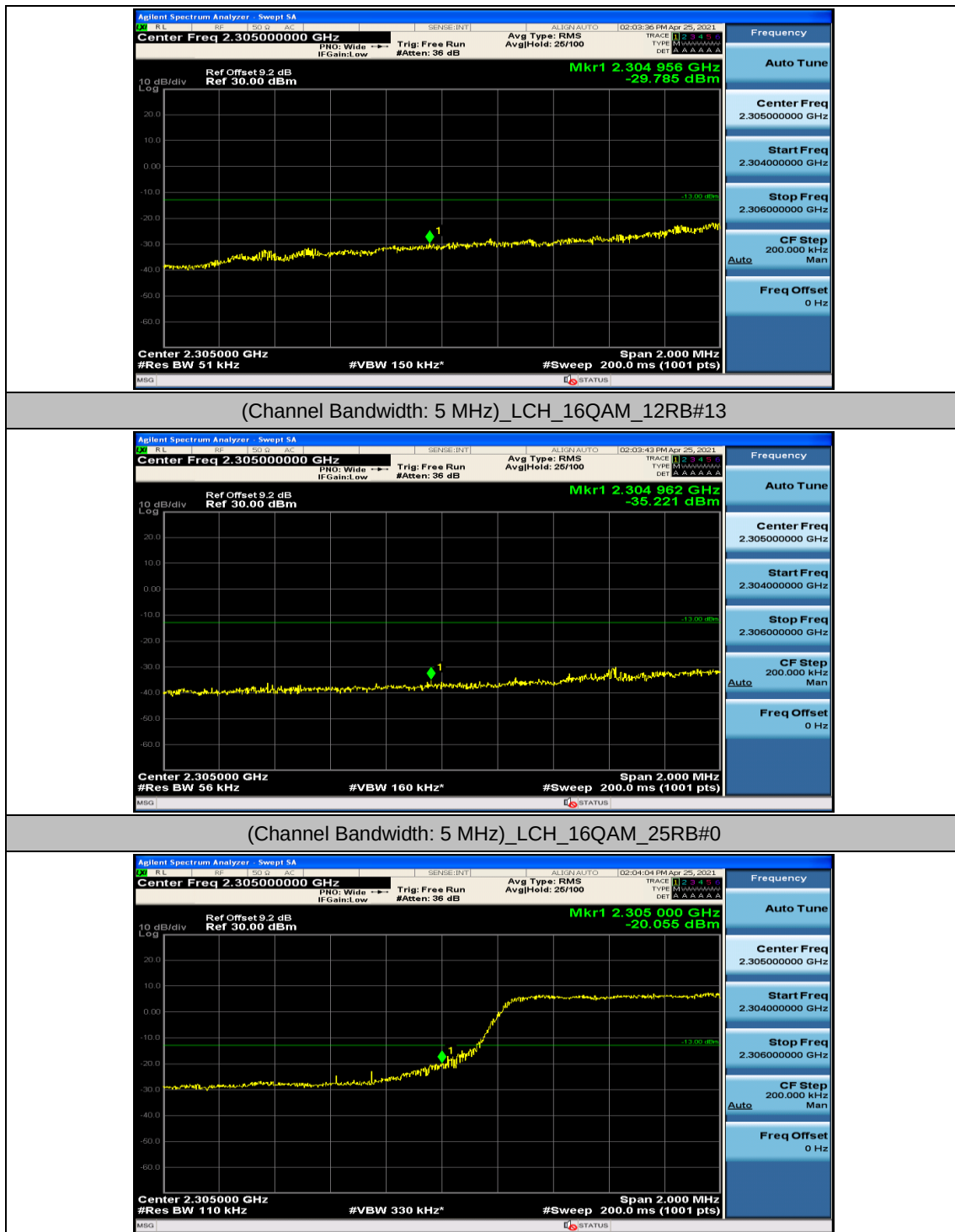


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

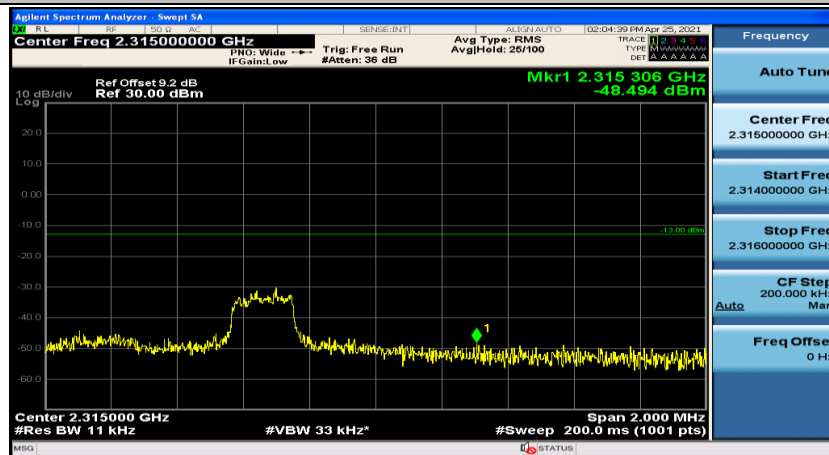


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

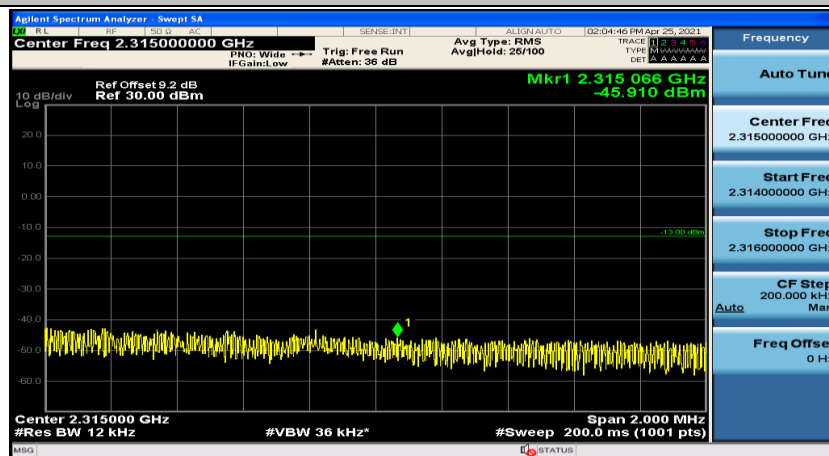




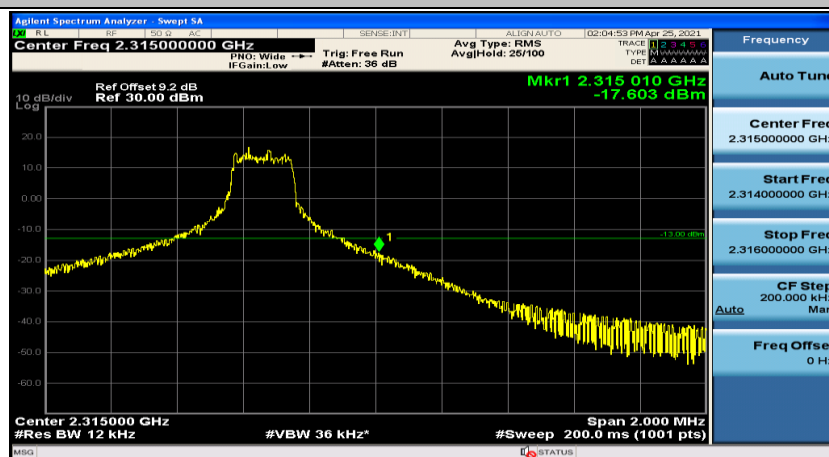
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#0

