

Appendix for Band 7

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	22.09	PASS
		1	12	22.51	PASS
		1	24	22.13	PASS
		12	0	21.11	PASS
		12	6	21.18	PASS
		12	13	21.13	PASS
		25	0	21.13	PASS
	MCH	1	0	21.99	PASS
		1	12	22.26	PASS
		1	24	21.96	PASS
		12	0	21.01	PASS
		12	6	21.07	PASS
		12	13	20.97	PASS
		25	0	21.02	PASS
	HCH	1	0	21.89	PASS
		1	12	22.30	PASS
		1	24	21.86	PASS
		12	0	20.88	PASS
		12	6	20.93	PASS
		12	13	20.86	PASS
		25	0	20.91	PASS
16QAM	LCH	1	0	21.28	PASS
		1	12	21.62	PASS
		1	24	21.30	PASS
		12	0	20.46	PASS
		12	6	20.43	PASS
		12	13	20.45	PASS

	MCH	25	0	20.44	PASS
		1	0	21.29	PASS
		1	12	21.54	PASS
		1	24	21.18	PASS
		12	0	20.48	PASS
		12	6	20.51	PASS
		12	13	20.50	PASS
		25	0	20.36	PASS
	HCH	1	0	21.08	PASS
		1	12	21.39	PASS
		1	24	21.10	PASS
		12	0	20.93	PASS
		12	6	20.99	PASS
		12	13	20.95	PASS
		25	0	20.92	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.11	PASS
		1	24	22.32	PASS
		1	49	22.12	PASS
		25	0	21.19	PASS
		25	12	21.17	PASS
		25	25	21.16	PASS
		50	0	21.17	PASS
	MCH	1	0	22.08	PASS
		1	24	22.20	PASS
		1	49	21.92	PASS
		25	0	21.11	PASS
		25	12	21.02	PASS
		25	25	21.03	PASS
		50	0	21.03	PASS
	HCH	1	0	21.91	PASS
		1	24	22.13	PASS
		1	49	21.94	PASS
		25	0	20.95	PASS
		25	12	20.92	PASS
		25	25	20.94	PASS
		50	0	20.99	PASS
16QAM	LCH	1	0	21.27	PASS

		1	24	21.50	PASS
		1	49	21.34	PASS
		25	0	20.59	PASS
		25	12	20.59	PASS
		25	25	20.50	PASS
		50	0	20.48	PASS
	MCH	1	0	21.45	PASS
		1	24	21.54	PASS
		1	49	21.27	PASS
		25	0	20.75	PASS
		25	12	20.78	PASS
		25	25	20.77	PASS
		50	0	20.79	PASS
	HCH	1	0	21.23	PASS
		1	24	21.37	PASS
		1	49	21.17	PASS
		25	0	20.64	PASS
		25	12	20.60	PASS
		25	25	20.64	PASS
		50	0	20.65	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.51	PASS
		1	37	22.68	PASS
		1	74	22.46	PASS
		37	0	21.22	PASS
		37	18	21.25	PASS
		37	38	21.21	PASS
		75	0	21.26	PASS
	MCH	1	0	22.03	PASS
		1	37	22.21	PASS
		1	74	21.86	PASS
		37	0	21.08	PASS
		37	18	21.06	PASS
		37	38	21.03	PASS
		75	0	21.07	PASS
	HCH	1	0	21.88	PASS
		1	37	22.19	PASS
		1	74	21.82	PASS

		37	0	20.87	PASS
		37	18	20.96	PASS
		37	38	20.85	PASS
		75	0	20.96	PASS
16QAM	LCH	1	0	21.28	PASS
		1	37	21.46	PASS
		1	74	21.31	PASS
		37	0	20.43	PASS
		37	18	20.65	PASS
		37	38	20.40	PASS
		75	0	20.55	PASS
	MCH	1	0	21.34	PASS
		1	37	21.45	PASS
		1	74	21.08	PASS
		37	0	20.61	PASS
		37	18	20.73	PASS
		37	38	20.99	PASS
		75	0	20.64	PASS
	HCH	1	0	21.13	PASS
		1	37	21.46	PASS
		1	74	21.10	PASS
		37	0	20.86	PASS
		37	18	20.97	PASS
		37	38	20.97	PASS
		75	0	20.99	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	22.16	PASS
		1	49	22.71	PASS
		1	99	22.12	PASS
		50	0	21.16	PASS
		50	25	21.15	PASS
		50	50	21.14	PASS
		100	0	21.14	PASS
	MCH	1	0	22.04	PASS
		1	49	22.26	PASS
		1	99	21.83	PASS
		50	0	21.04	PASS
		50	25	21.05	PASS

		50	50	20.85	PASS
		100	0	20.90	PASS
	HCH	1	0	21.74	PASS
		1	49	22.02	PASS
		1	99	21.69	PASS
		50	0	20.94	PASS
		50	25	20.98	PASS
		50	50	20.96	PASS
		100	0	20.94	PASS
16QAM	LCH	1	0	21.24	PASS
		1	49	21.53	PASS
		1	99	21.28	PASS
		50	0	20.64	PASS
		50	25	20.68	PASS
		50	50	20.69	PASS
		100	0	20.62	PASS
	MCH	1	0	21.39	PASS
		1	49	21.54	PASS
		1	99	21.11	PASS
		50	0	20.57	PASS
		50	25	20.59	PASS
		50	50	20.52	PASS
		100	0	20.90	PASS
	HCH	1	0	20.97	PASS
		1	49	21.33	PASS
		1	99	21.04	PASS
		50	0	20.70	PASS
		50	25	20.72	PASS
		50	50	20.71	PASS
		100	0	20.65	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	4.53	<13	PASS
		1	12	4.45	<13	PASS
		1	24	4.69	<13	PASS
		12	0	4.83	<13	PASS
		12	6	4.73	<13	PASS
		12	13	4.78	<13	PASS
		25	0	4.87	<13	PASS
	MCH	1	0	5	<13	PASS
		1	12	4.83	<13	PASS
		1	24	4.85	<13	PASS
		12	0	5.31	<13	PASS
		12	6	5.19	<13	PASS
		12	13	5.23	<13	PASS
		25	0	5.26	<13	PASS
	HCH	1	0	5.72	<13	PASS
		1	12	5.58	<13	PASS
		1	24	5.67	<13	PASS
		12	0	5.9	<13	PASS
		12	6	5.82	<13	PASS
		12	13	5.88	<13	PASS
		25	0	5.99	<13	PASS
16QAM	LCH	1	0	5.52	<13	PASS
		1	12	5.56	<13	PASS
		1	24	5.49	<13	PASS
		12	0	5.58	<13	PASS
		12	6	5.53	<13	PASS
		12	13	5.52	<13	PASS
		25	0	5.71	<13	PASS
	MCH	1	0	6.28	<13	PASS
		1	12	5.61	<13	PASS
		1	24	5.52	<13	PASS

		12	0	5.97	<13	PASS
		12	6	5.93	<13	PASS
		12	13	5.88	<13	PASS
		25	0	5.97	<13	PASS
	HCH	1	0	6.46	<13	PASS
		1	12	6.3	<13	PASS
		1	24	6.25	<13	PASS
		12	0	6.78	<13	PASS
		12	6	6.82	<13	PASS
		12	13	6.73	<13	PASS
		25	0	6.54	<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	4.49	<13	PASS
		1	24	4.51	<13	PASS
		1	49	4.76	<13	PASS
		25	0	4.87	<13	PASS
		25	12	4.96	<13	PASS
		25	25	5.02	<13	PASS
		50	0	4.96	<13	PASS
	MCH	1	0	5.08	<13	PASS
		1	24	4.64	<13	PASS
		1	49	4.63	<13	PASS
		25	0	5.4	<13	PASS
		25	12	5.27	<13	PASS
		25	25	5.2	<13	PASS
		50	0	5.28	<13	PASS
	HCH	1	0	5.42	<13	PASS
		1	24	5.29	<13	PASS
		1	49	5.23	<13	PASS
		25	0	5.8	<13	PASS
		25	12	5.85	<13	PASS
		25	25	5.82	<13	PASS
		50	0	5.86	<13	PASS
16QAM	LCH	1	0	5.31	<13	PASS
		1	24	5.54	<13	PASS
		1	49	6	<13	PASS
		25	0	5.62	<13	PASS

		25	12	5.75	<13	PASS
		25	25	5.82	<13	PASS
		50	0	5.66	<13	PASS
	MCH	1	0	5.95	<13	PASS
		1	24	5.67	<13	PASS
		1	49	5.7	<13	PASS
		25	0	6.17	<13	PASS
		25	12	6.12	<13	PASS
		25	25	5.97	<13	PASS
		50	0	6.02	<13	PASS
	HCH	1	0	6.36	<13	PASS
		1	24	6.5	<13	PASS
		1	49	6.68	<13	PASS
		25	0	6.68	<13	PASS
		25	12	6.66	<13	PASS
		25	25	6.75	<13	PASS
		50	0	6.64	<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	4.46	<13	PASS
		1	37	4.79	<13	PASS
		1	74	4.96	<13	PASS
		37	0	4.95	<13	PASS
		37	18	5.05	<13	PASS
		37	38	5.23	<13	PASS
		75	0	5.49	<13	PASS
	MCH	1	0	5.41	<13	PASS
		1	37	4.94	<13	PASS
		1	74	4.91	<13	PASS
		37	0	5.41	<13	PASS
		37	18	5.25	<13	PASS
		37	38	5.06	<13	PASS
		75	0	5.6	<13	PASS
	HCH	1	0	5.01	<13	PASS
		1	37	5.2	<13	PASS
		1	74	5.42	<13	PASS
		37	0	5.72	<13	PASS
		37	18	5.84	<13	PASS

		37	38	5.88	<13	PASS
		75	0	6.11	<13	PASS
16QAM	LCH	1	0	5.57	<13	PASS
		1	37	5.46	<13	PASS
		1	74	6.12	<13	PASS
		37	0	5.66	<13	PASS
		37	18	5.84	<13	PASS
		37	38	6.01	<13	PASS
		75	0	5.97	<13	PASS
		75	0	5.97	<13	PASS
	MCH	1	0	6.34	<13	PASS
		1	37	5.87	<13	PASS
		1	74	5.69	<13	PASS
		37	0	6.18	<13	PASS
		37	18	6.08	<13	PASS
		37	38	5.88	<13	PASS
		75	0	6.07	<13	PASS
		75	0	6.07	<13	PASS
	HCH	1	0	6.18	<13	PASS
		1	37	6.44	<13	PASS
		1	74	6.37	<13	PASS
		37	0	6.51	<13	PASS
		37	18	6.51	<13	PASS
		37	38	6.57	<13	PASS
		75	0	6.59	<13	PASS
		75	0	6.59	<13	PASS

Channel Bandwidth: 20 MHz

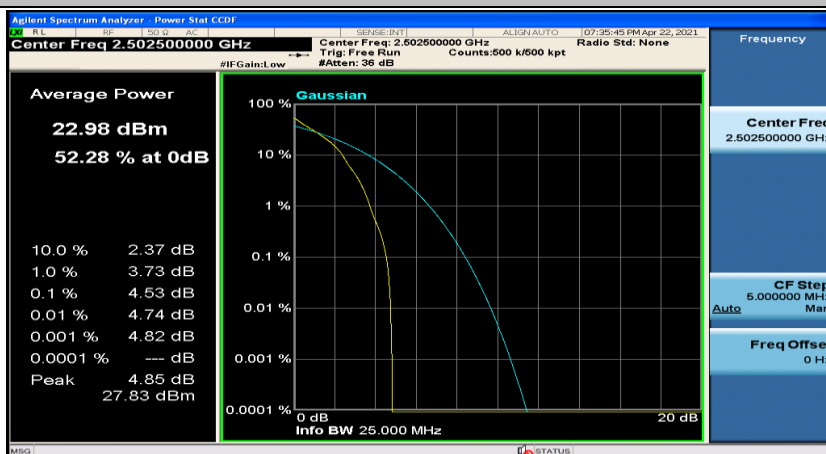
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	4.36	<13	PASS
		1	49	4.7	<13	PASS
		1	99	5.48	<13	PASS
		50	0	4.98	<13	PASS
		50	25	5.19	<13	PASS
		50	50	5.5	<13	PASS
		100	0	5.41	<13	PASS
		100	0	5.41	<13	PASS
	MCH	1	0	5.65	<13	PASS
		1	49	4.95	<13	PASS
		1	99	4.96	<13	PASS
		50	0	5.41	<13	PASS
		50	25	5.24	<13	PASS
		50	50	5.17	<13	PASS

		100	0	5.4	<13	PASS
	HCH	1	0	5.17	<13	PASS
		1	49	5.38	<13	PASS
		1	99	5.4	<13	PASS
		50	0	5.56	<13	PASS
		50	25	5.76	<13	PASS
		50	50	5.8	<13	PASS
		100	0	5.74	<13	PASS
16QAM	LCH	1	0	5.65	<13	PASS
		1	49	5.61	<13	PASS
		1	99	5.96	<13	PASS
		50	0	5.73	<13	PASS
		50	25	5.99	<13	PASS
		50	50	6.17	<13	PASS
		100	0	6.11	<13	PASS
	MCH	1	0	6.23	<13	PASS
		1	49	5.94	<13	PASS
		1	99	5.63	<13	PASS
		50	0	6.17	<13	PASS
		50	25	5.92	<13	PASS
		50	50	5.85	<13	PASS
		100	0	6.09	<13	PASS
	HCH	1	0	6.4	<13	PASS
		1	49	6.39	<13	PASS
		1	99	6.74	<13	PASS
		50	0	6.36	<13	PASS
		50	25	6.55	<13	PASS
		50	50	6.54	<13	PASS
		100	0	6.48	<13	PASS

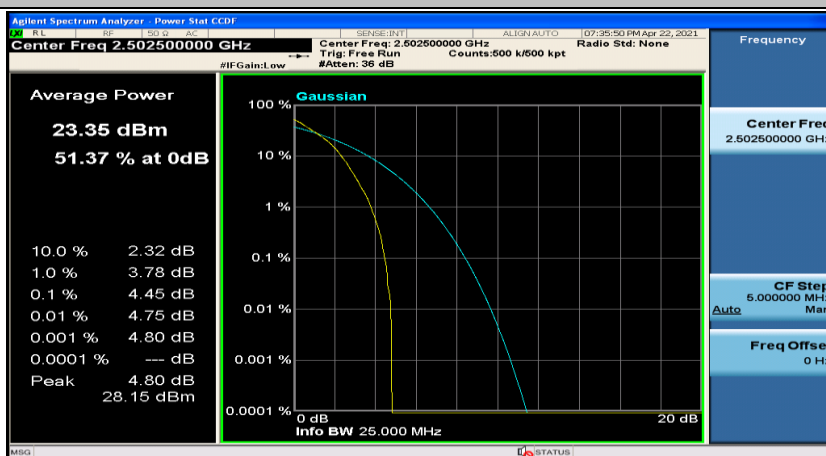
Test Graphs

Channel Bandwidth: 5 MHz

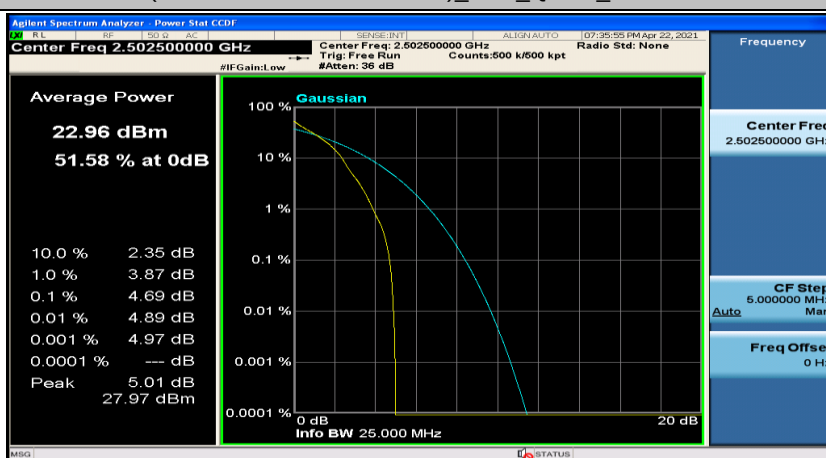
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



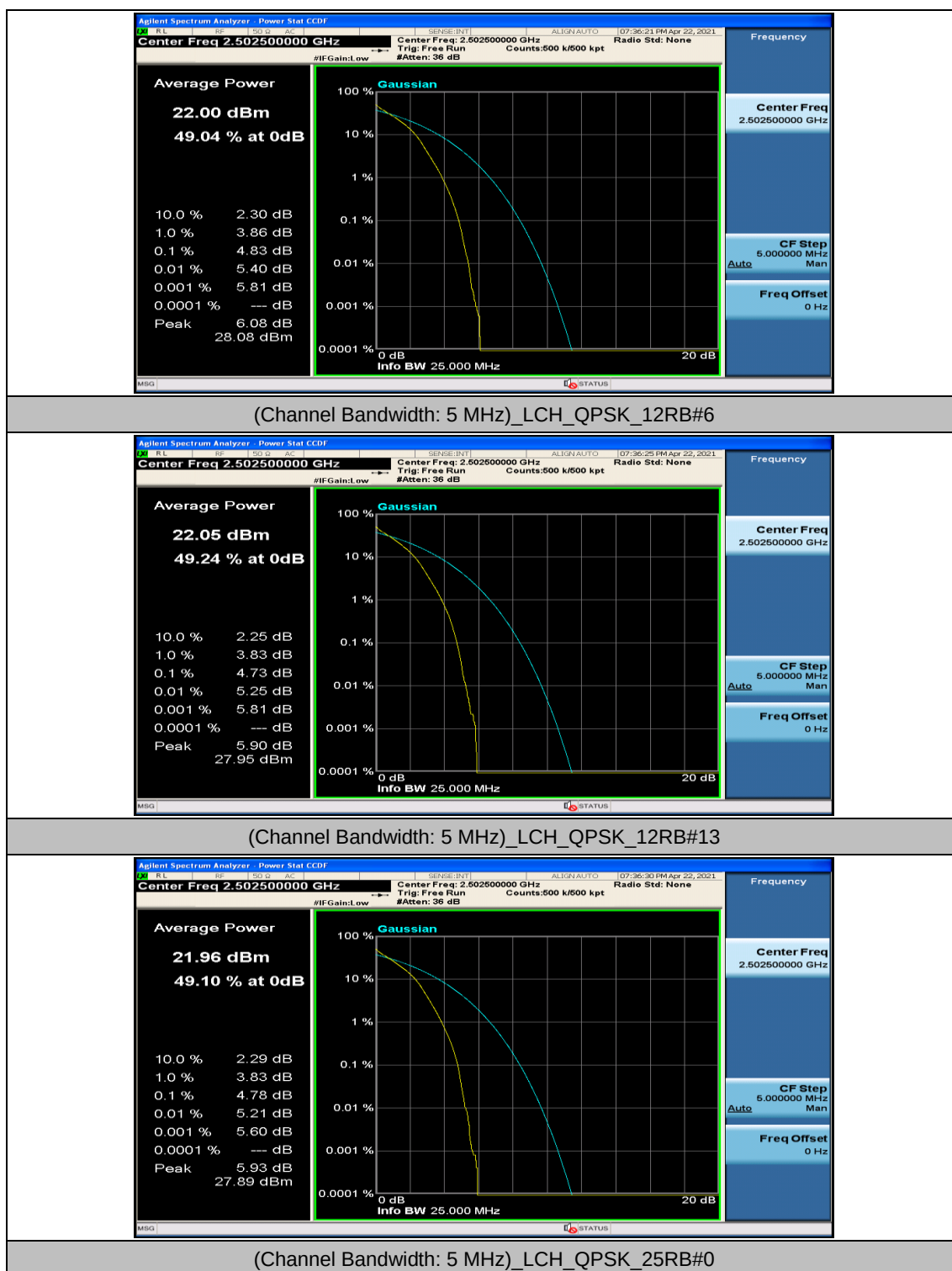
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

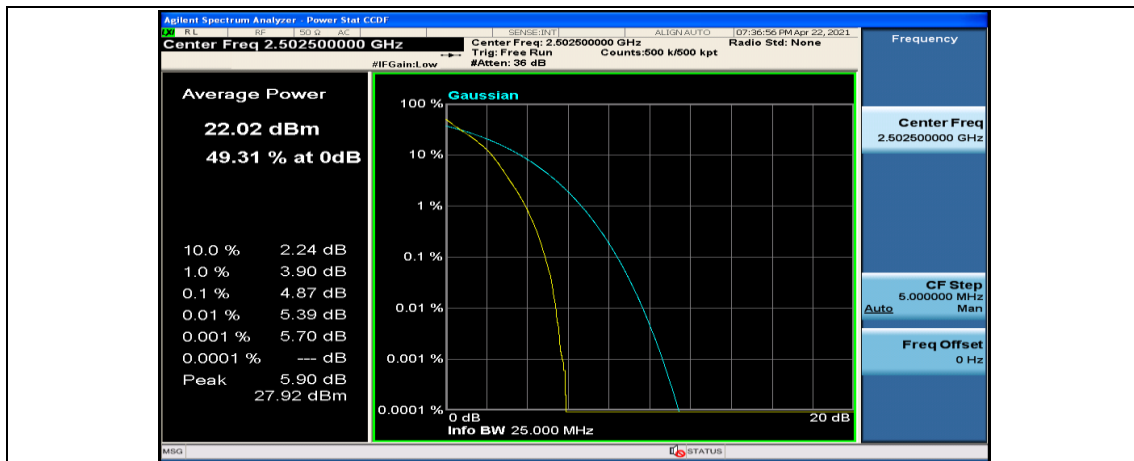


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

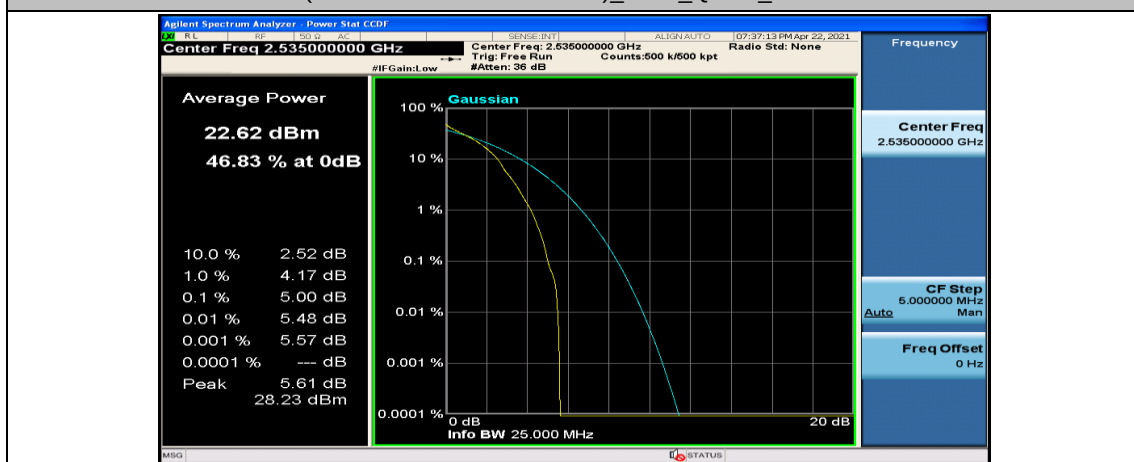


(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0

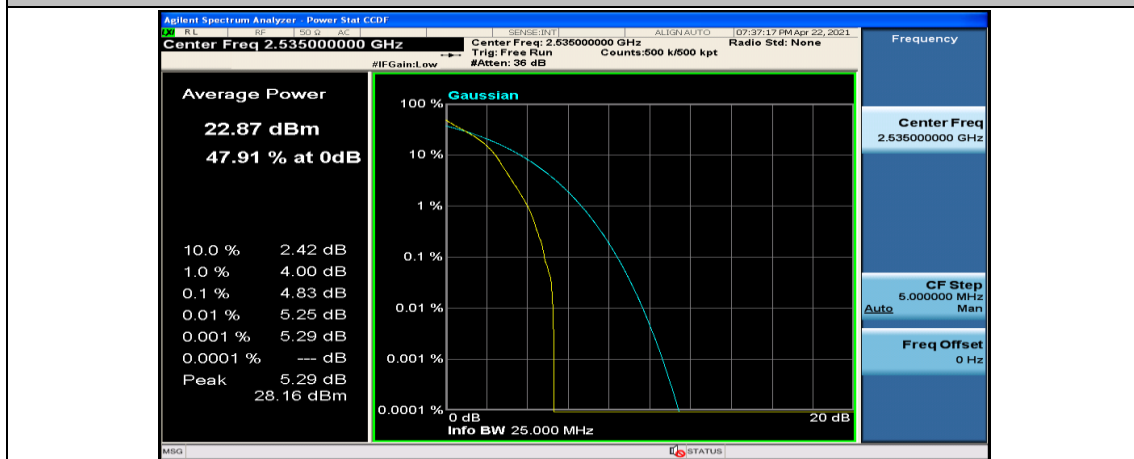




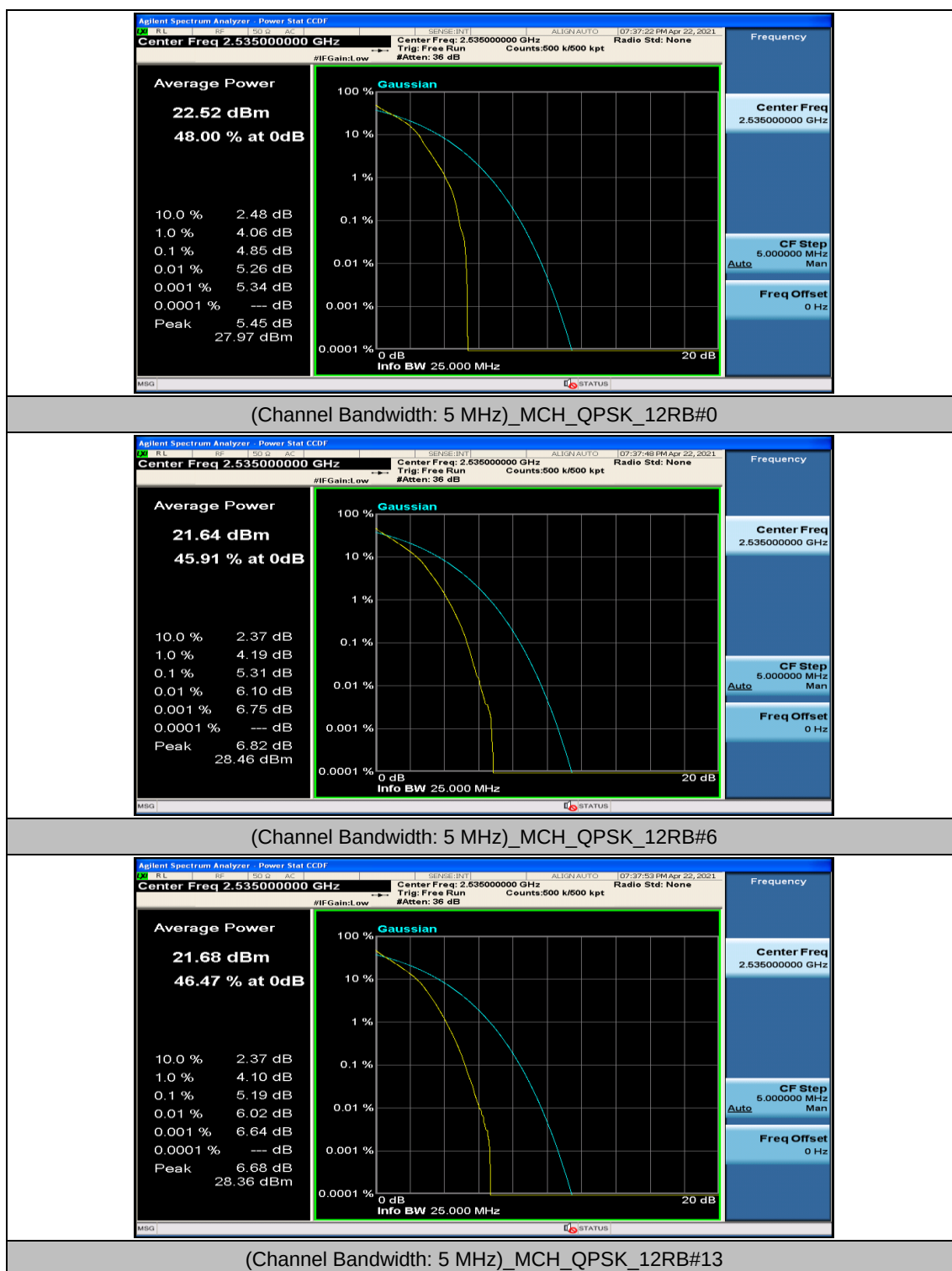
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

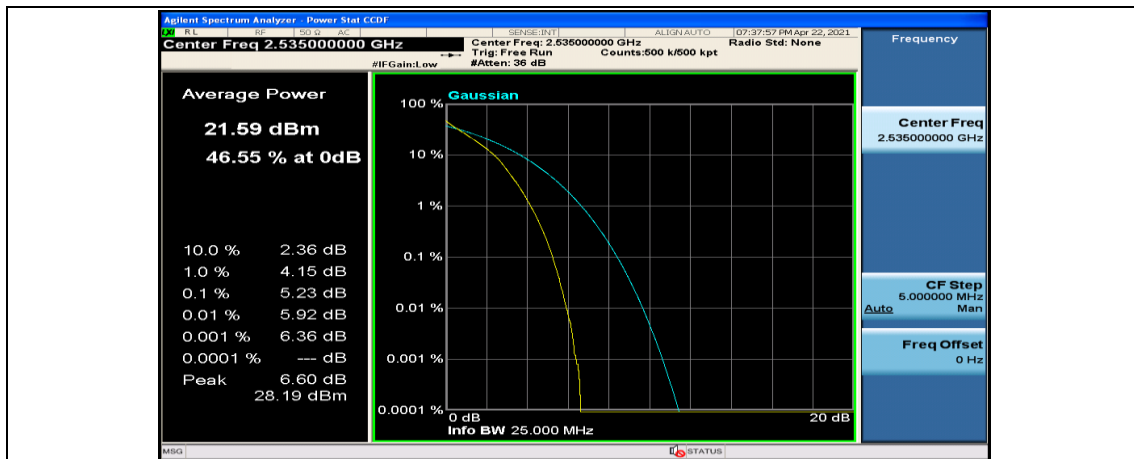


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

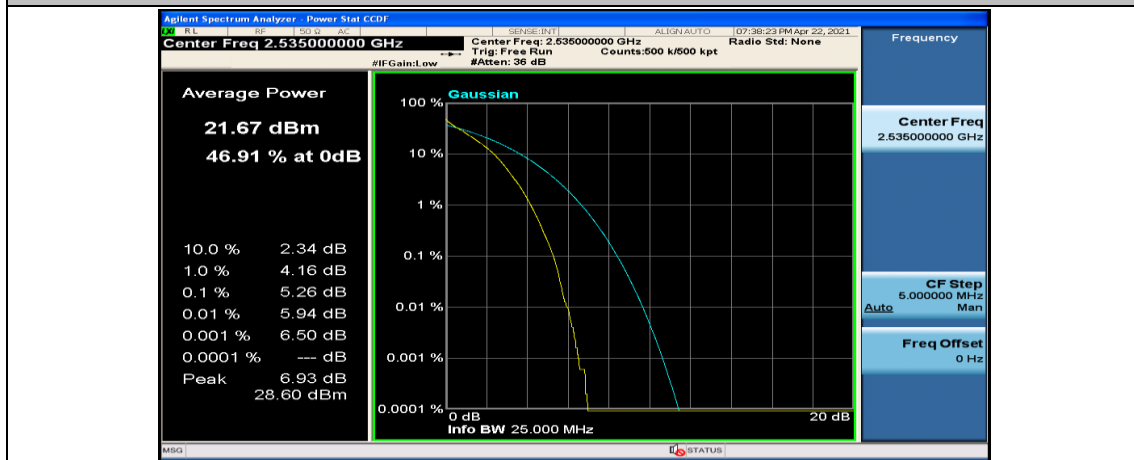


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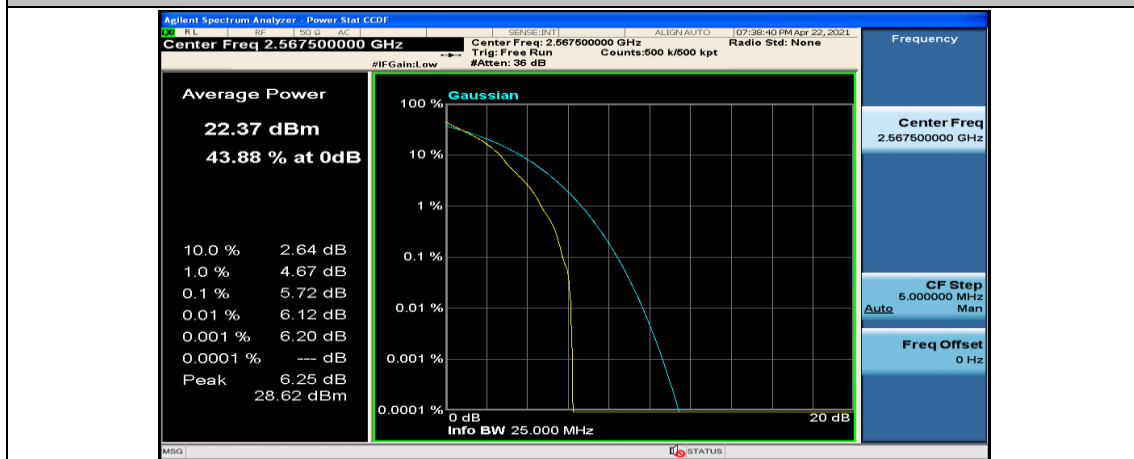




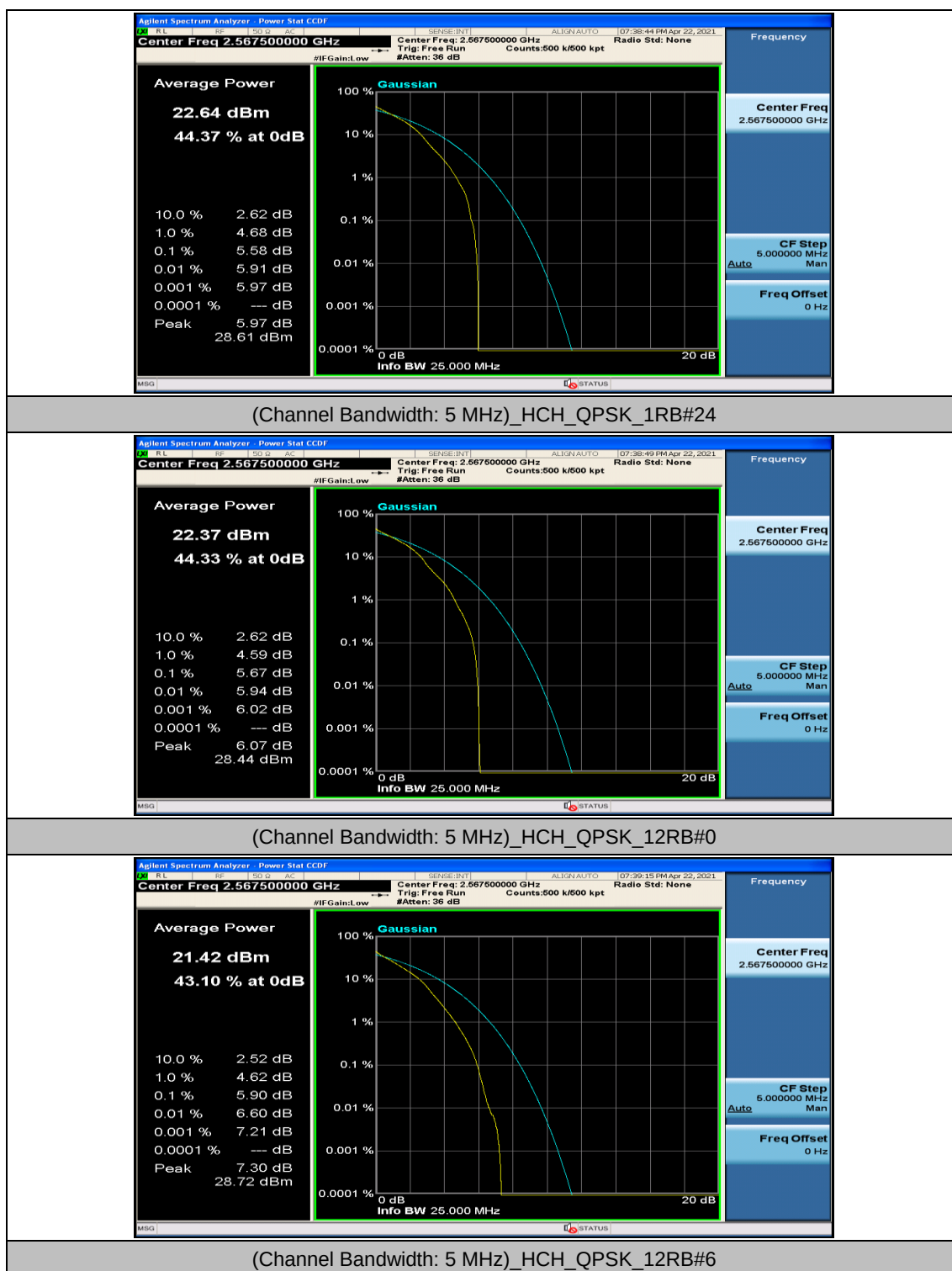
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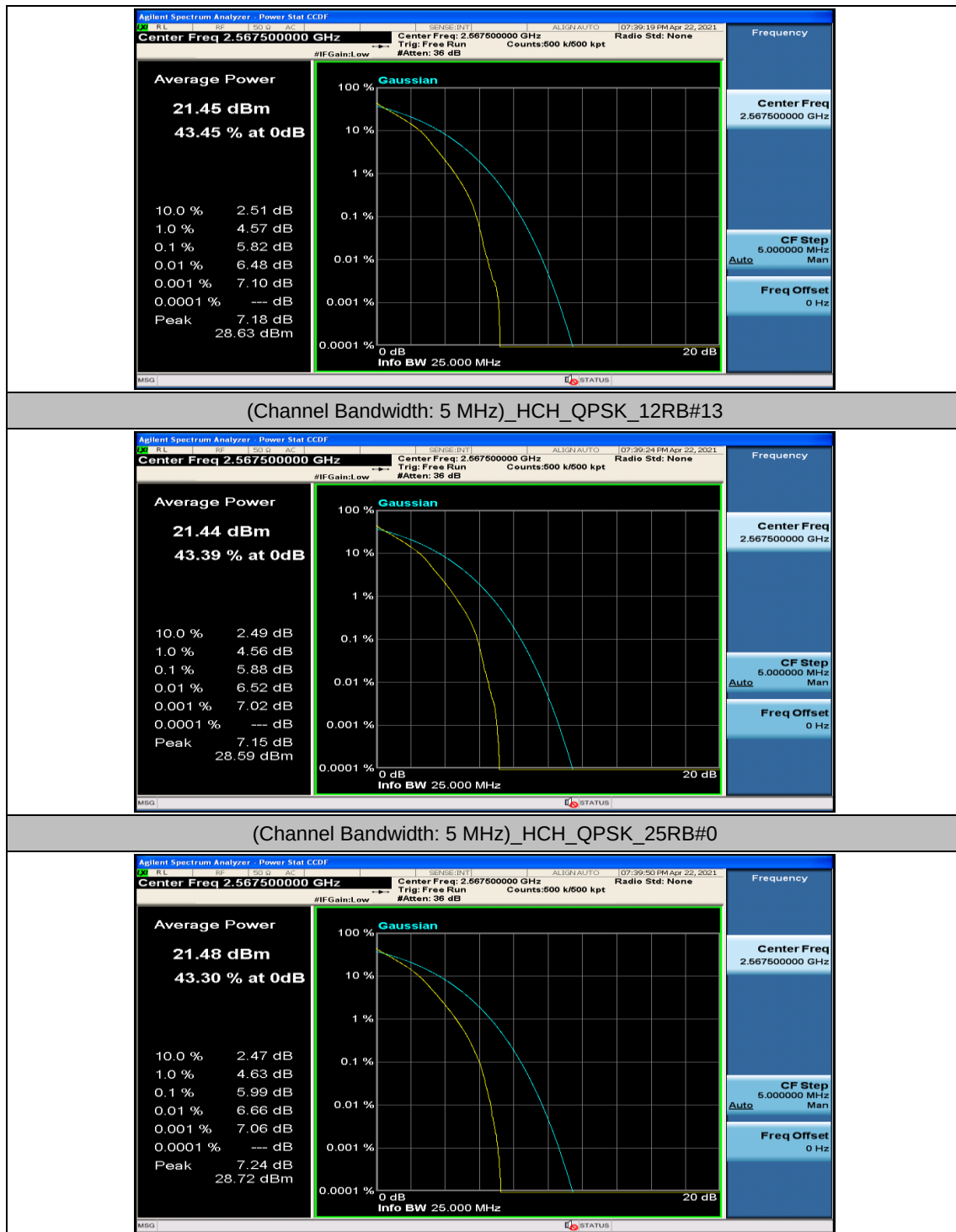


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

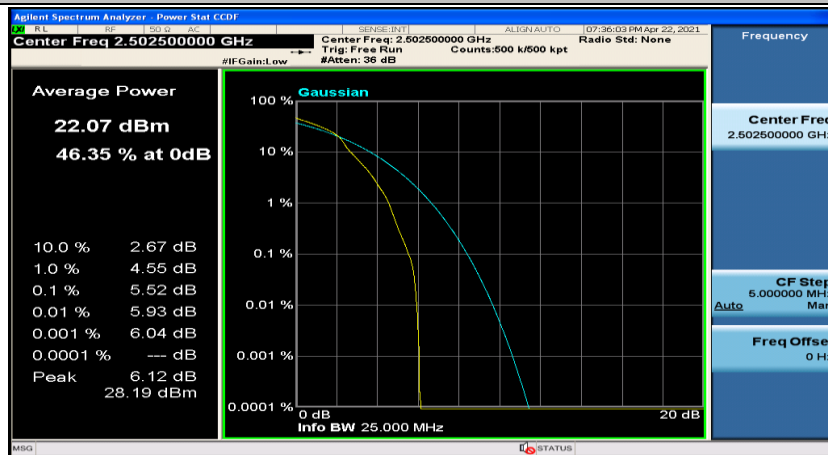


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

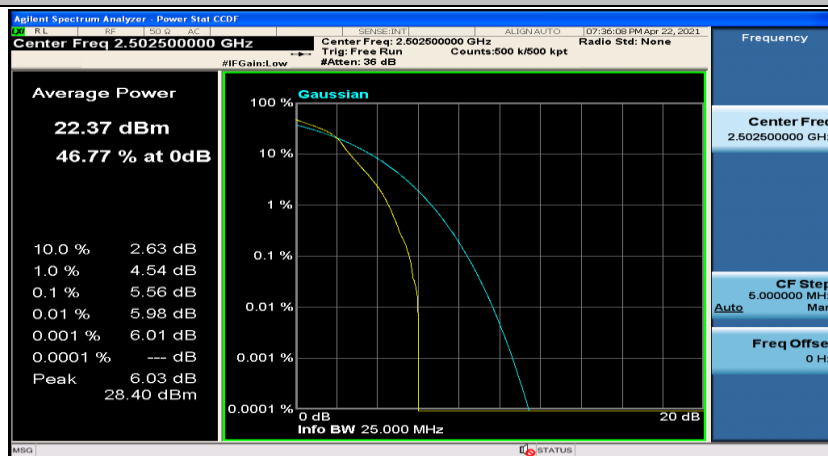




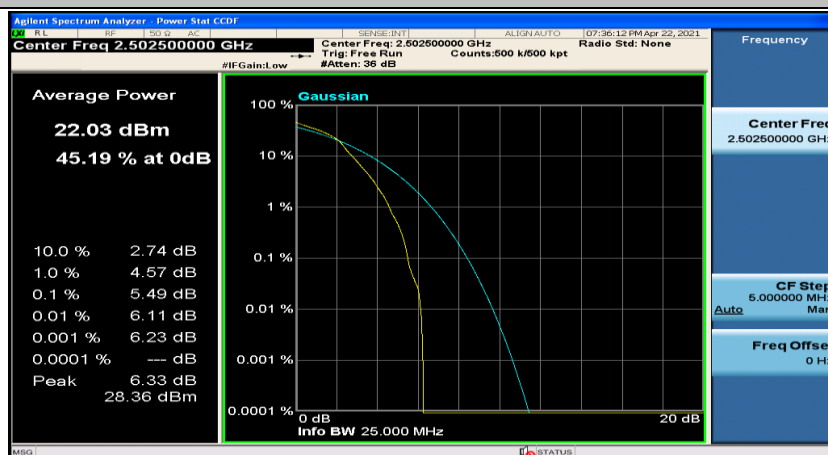
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



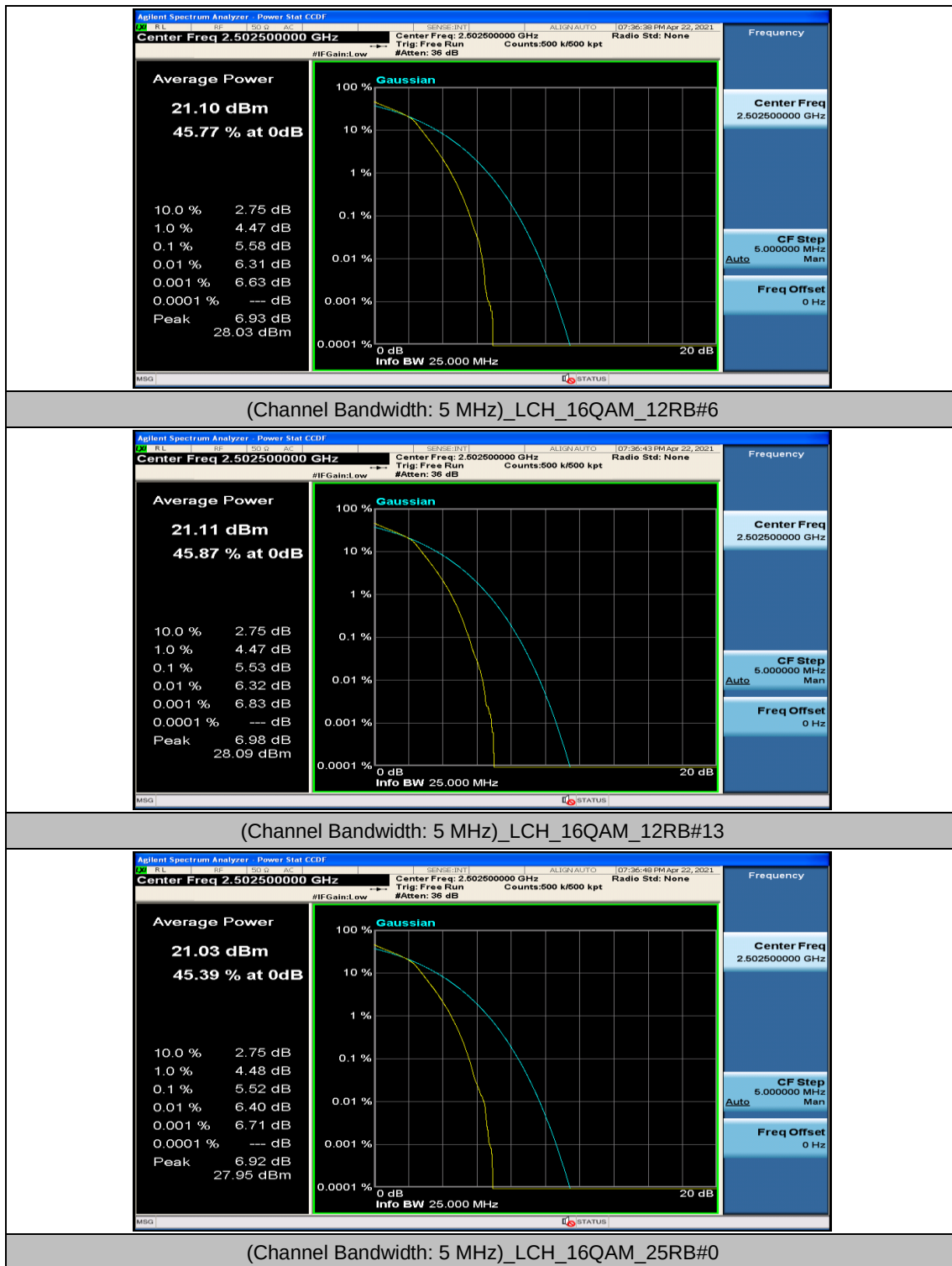
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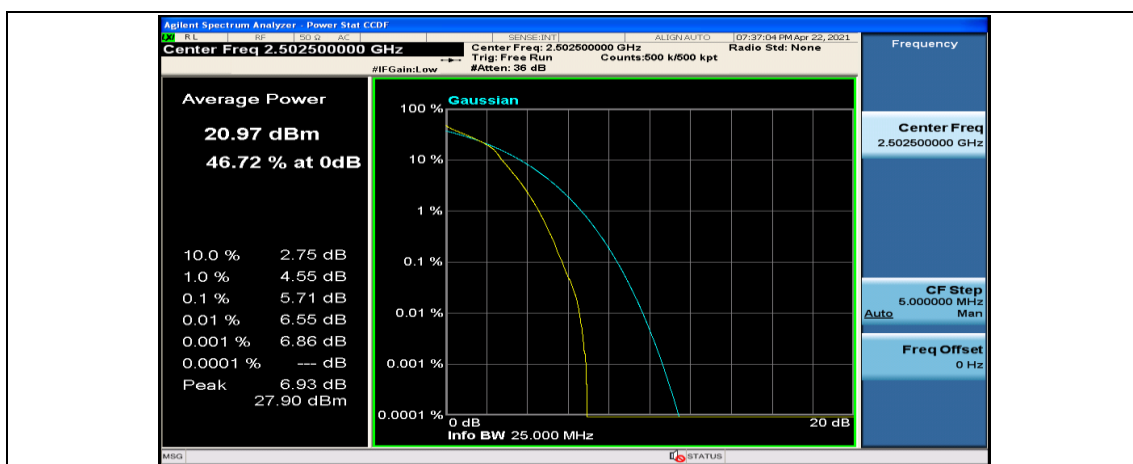


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

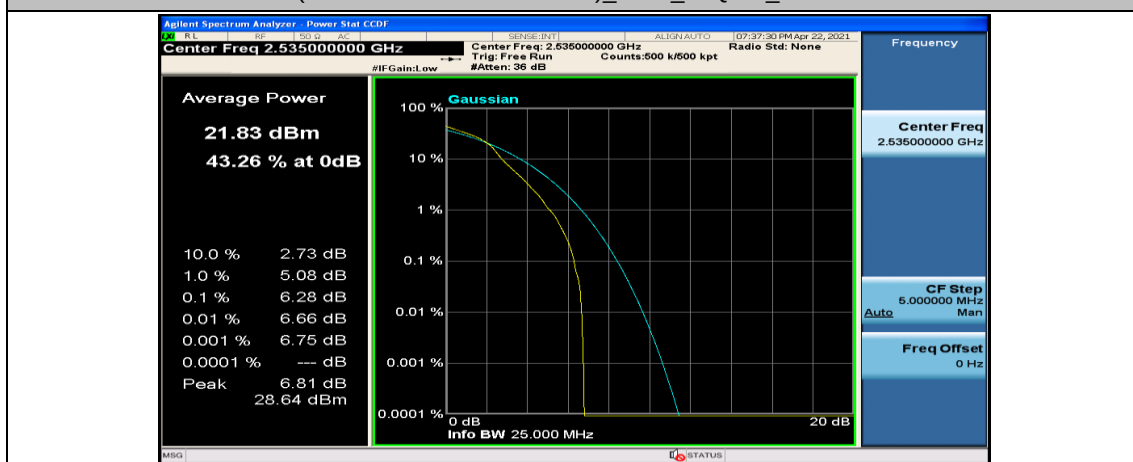


(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0

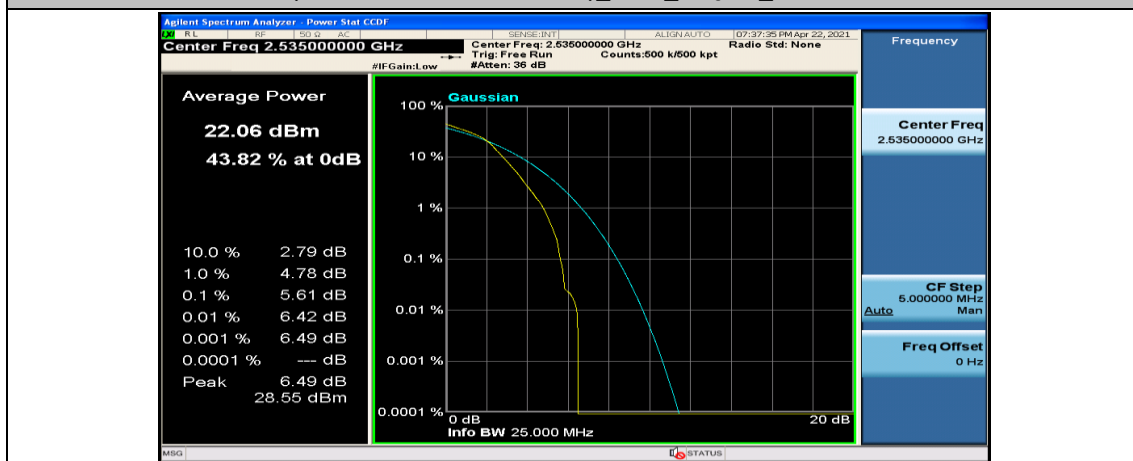




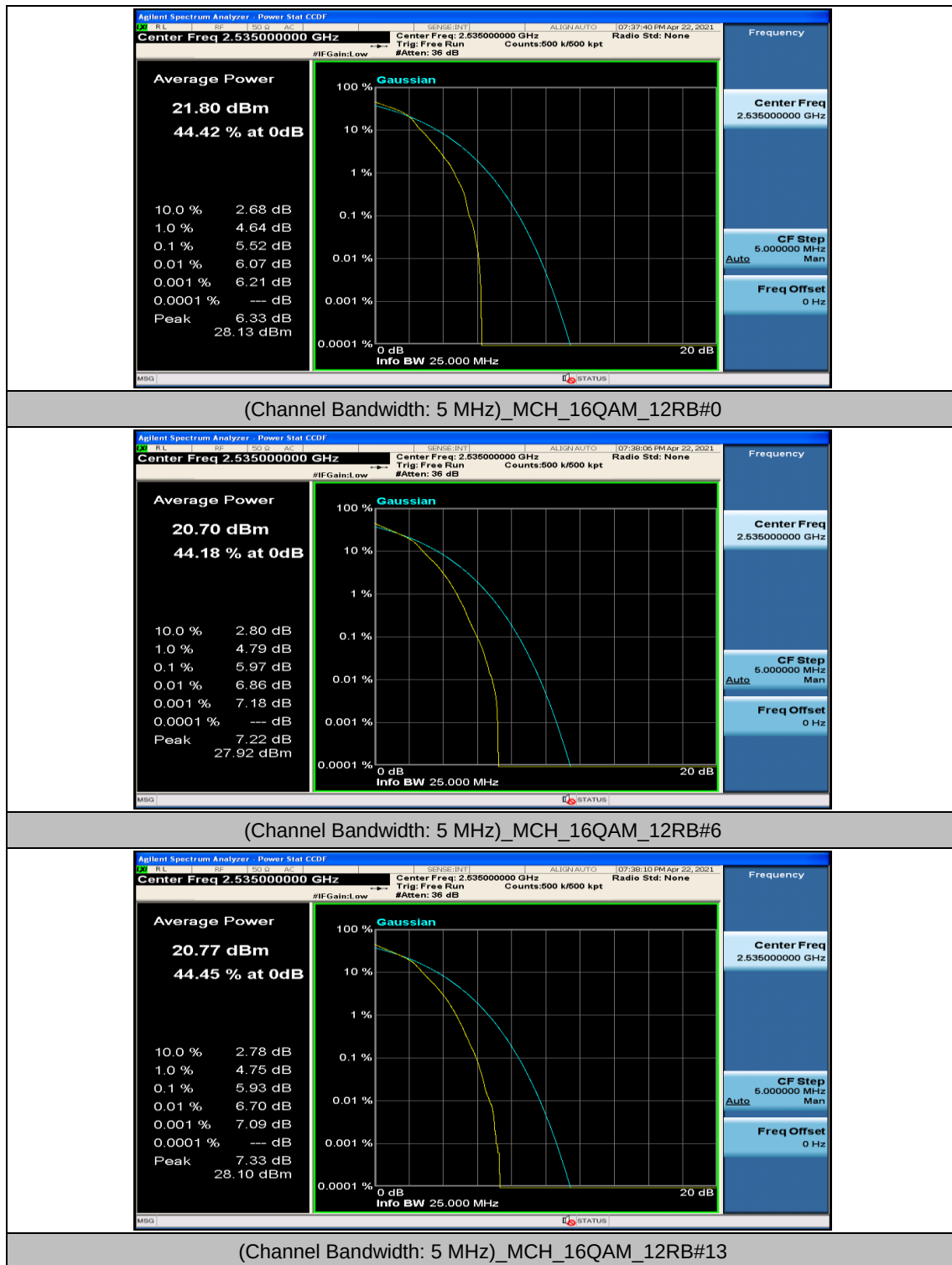
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

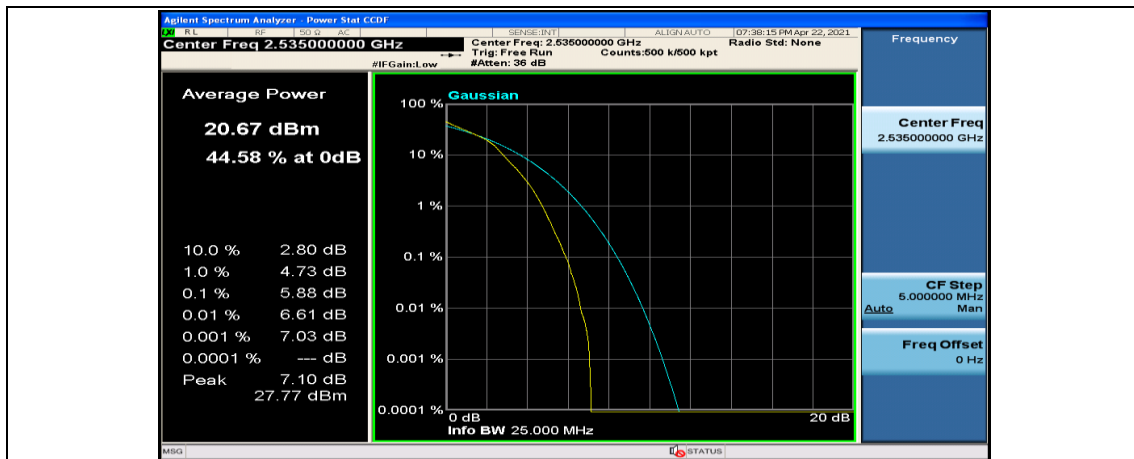


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

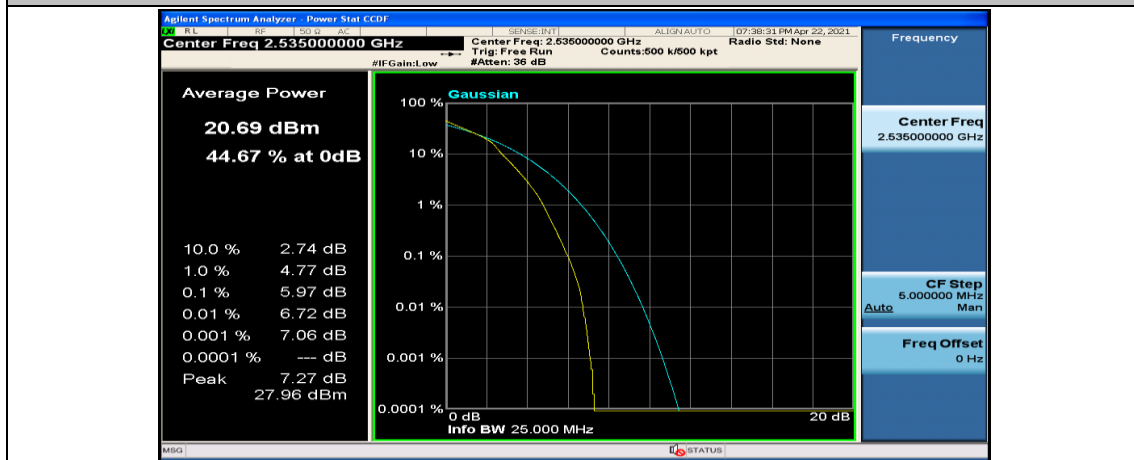


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

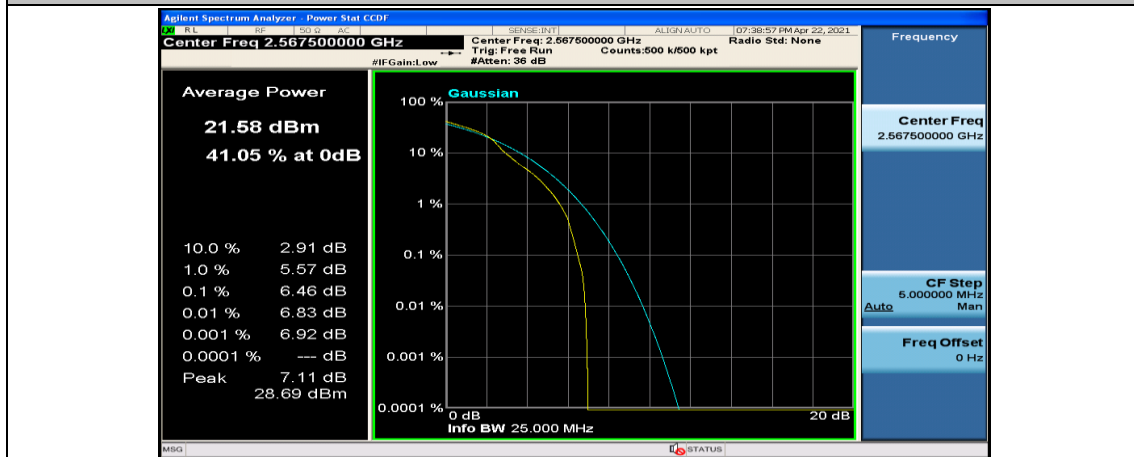




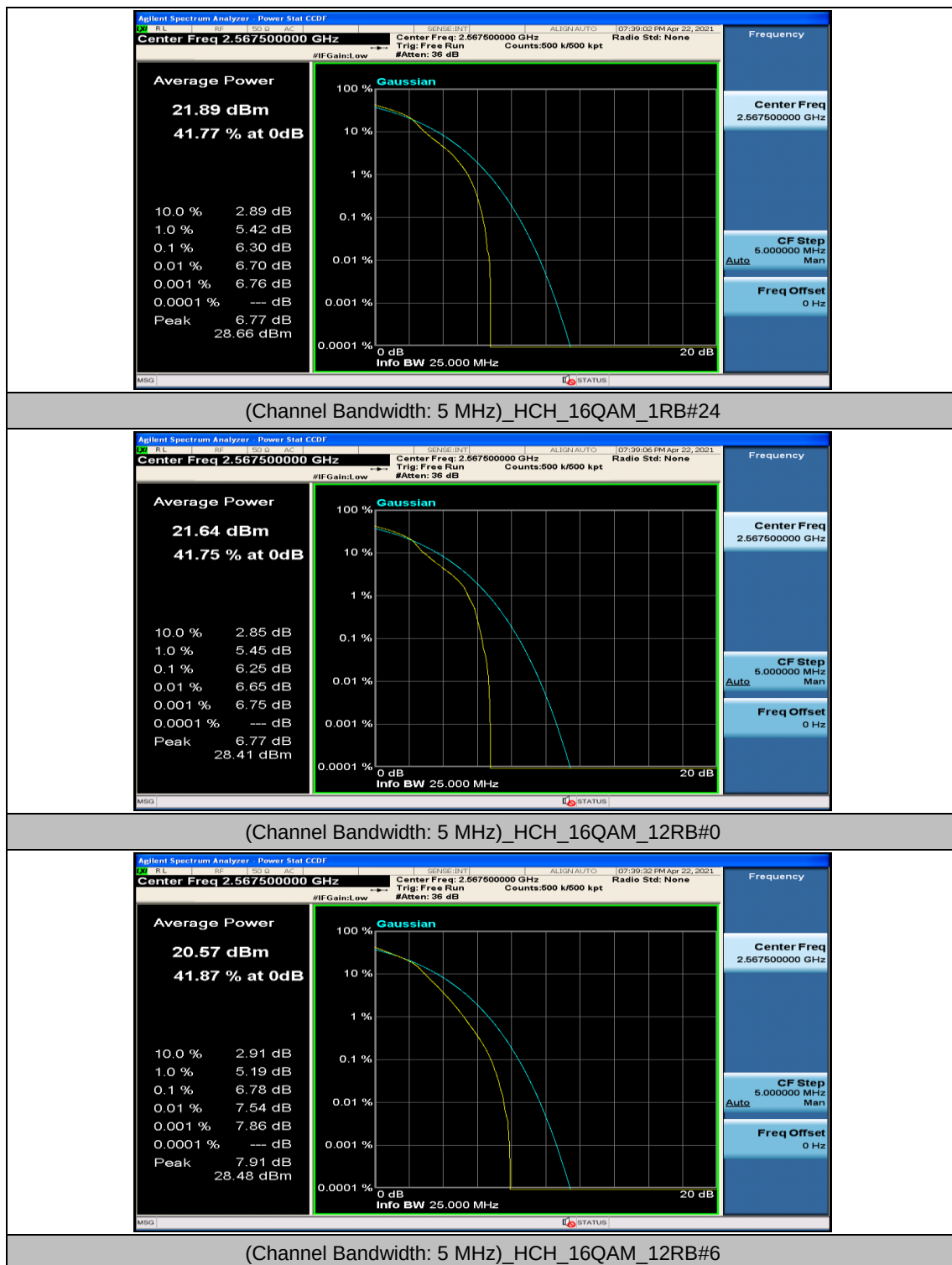
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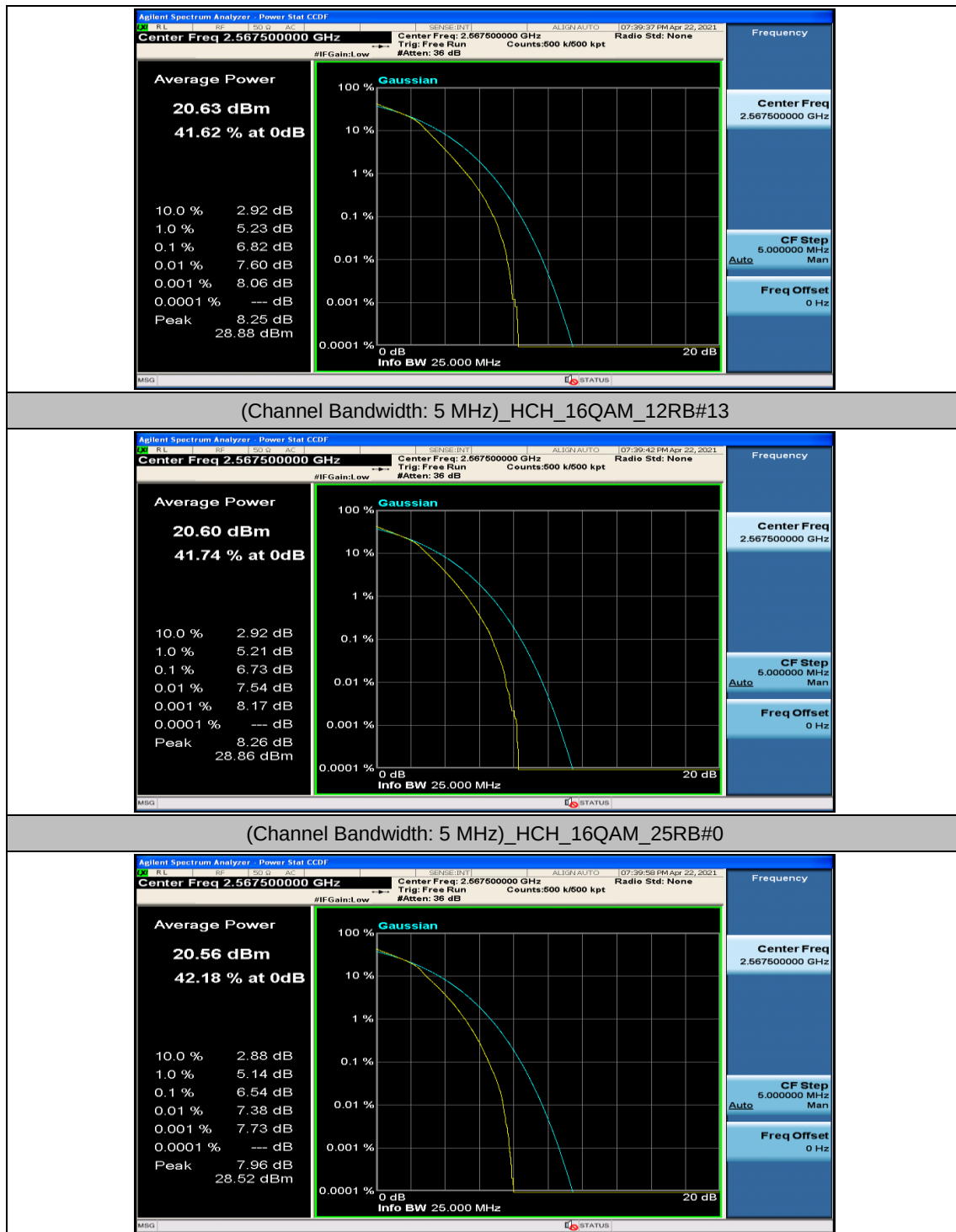


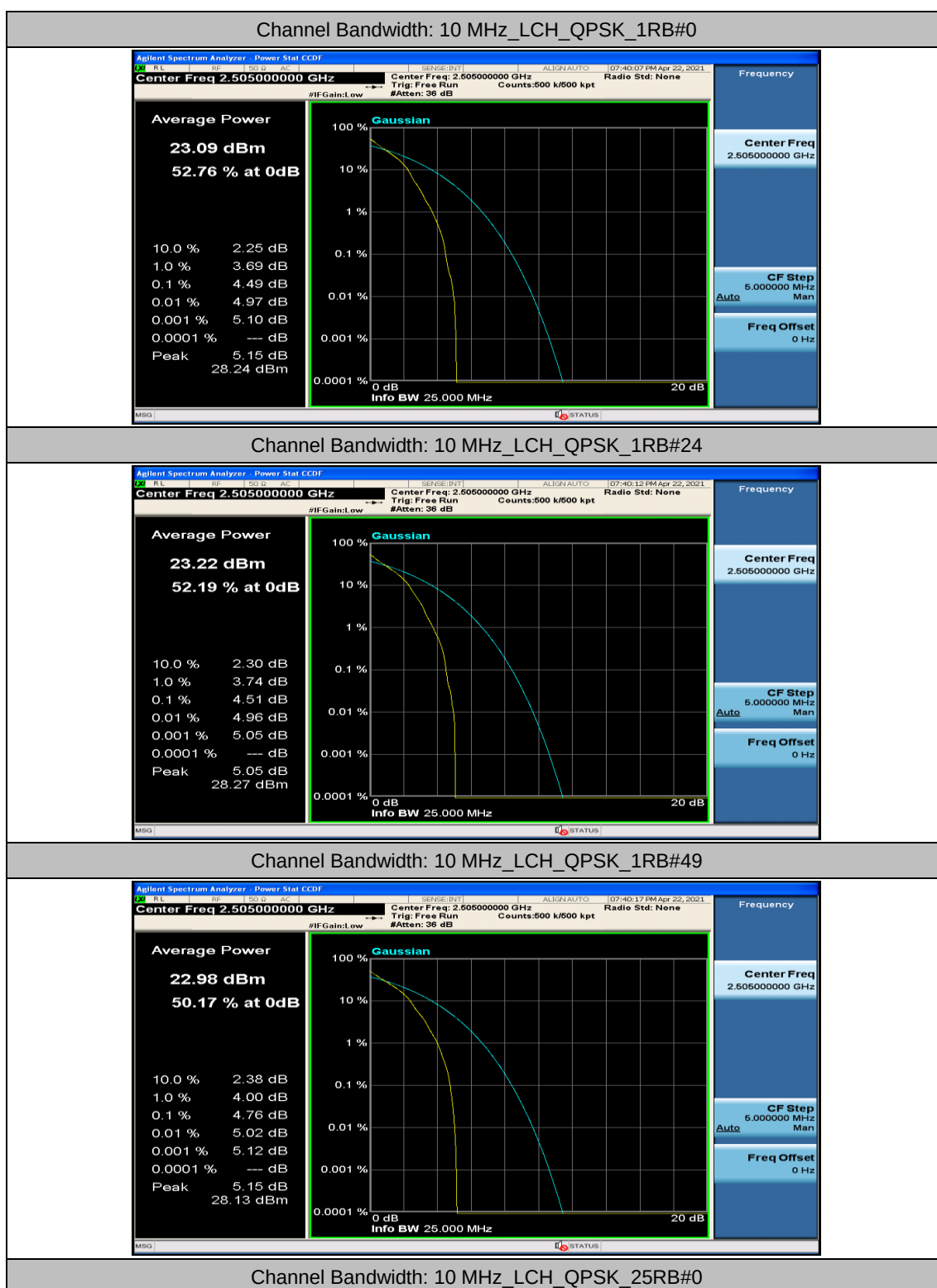
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

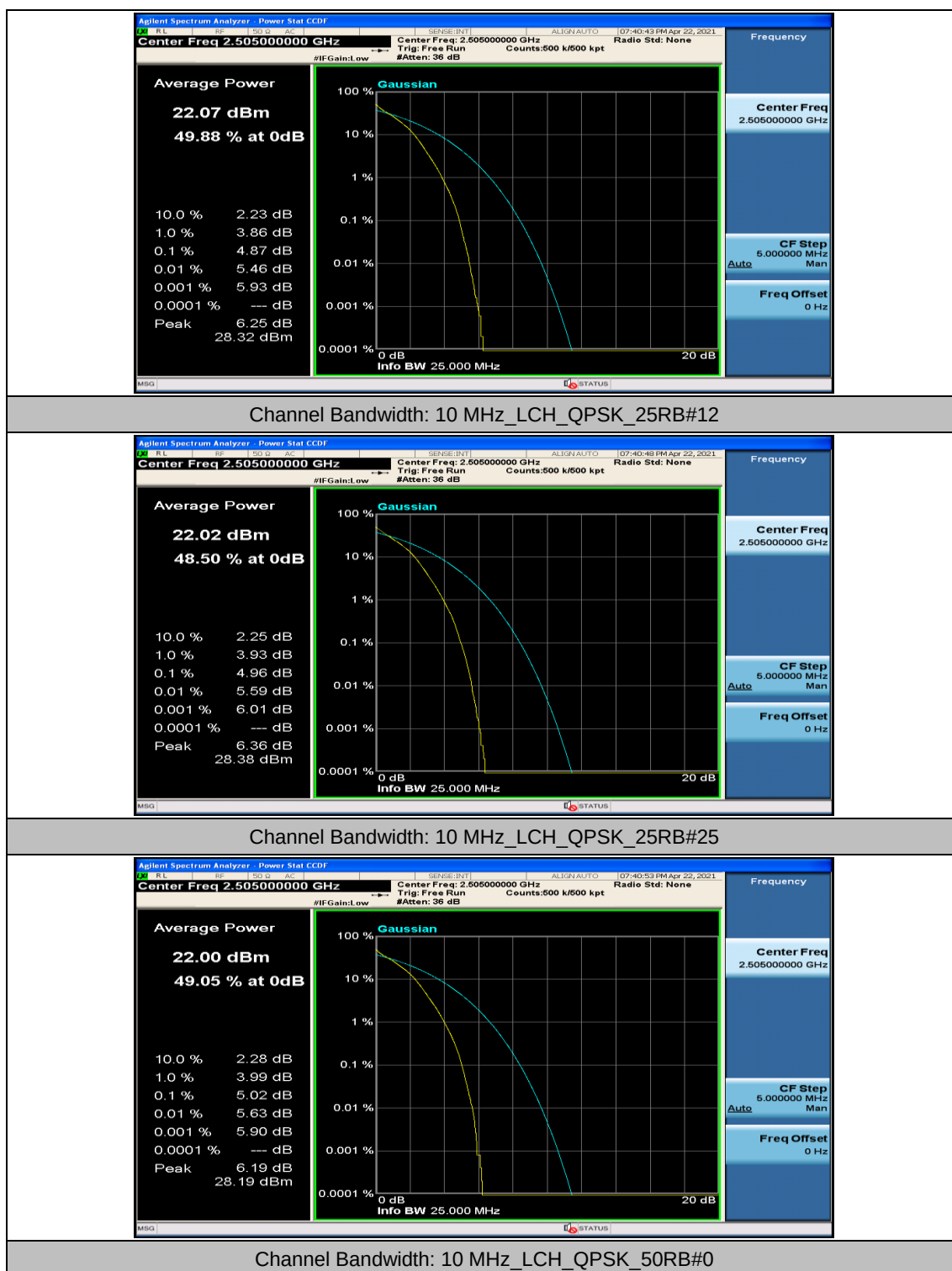


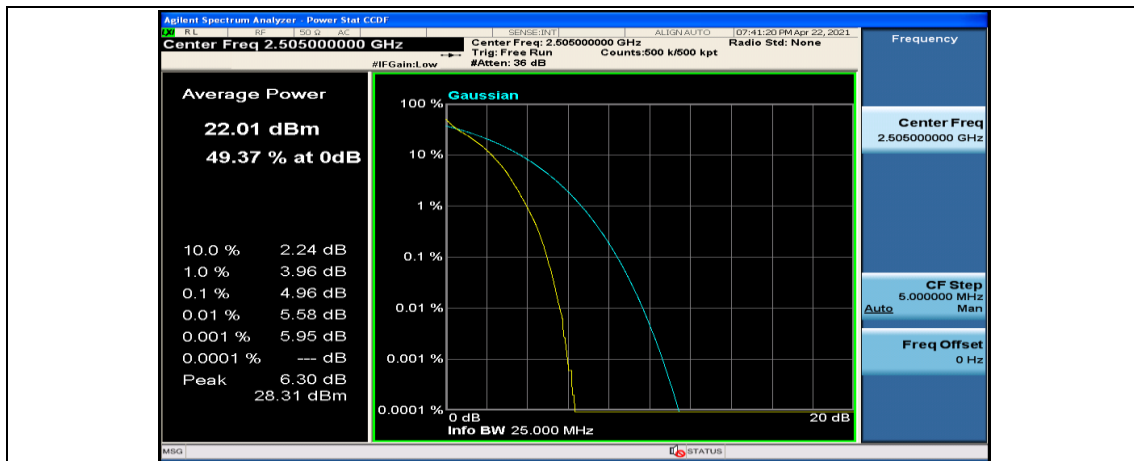
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



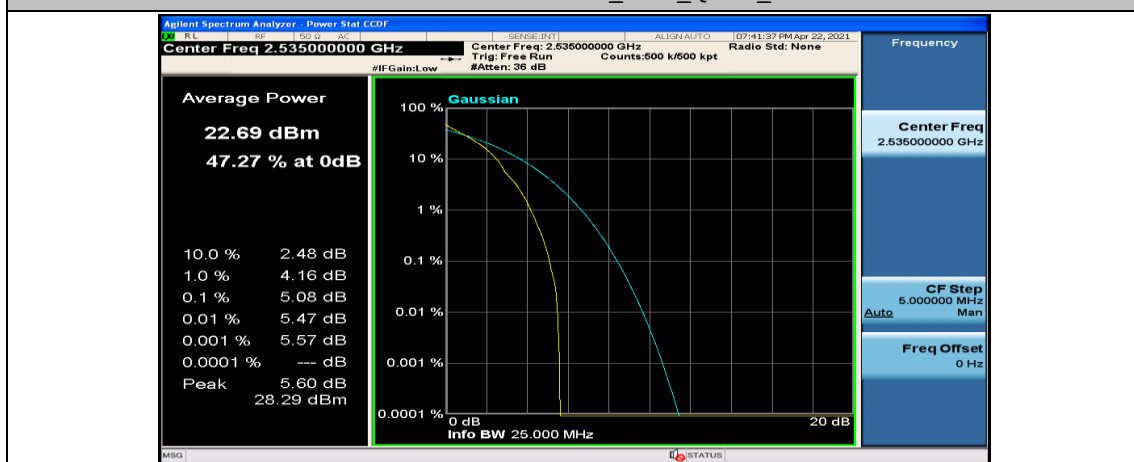


Channel Bandwidth: 10 MHz

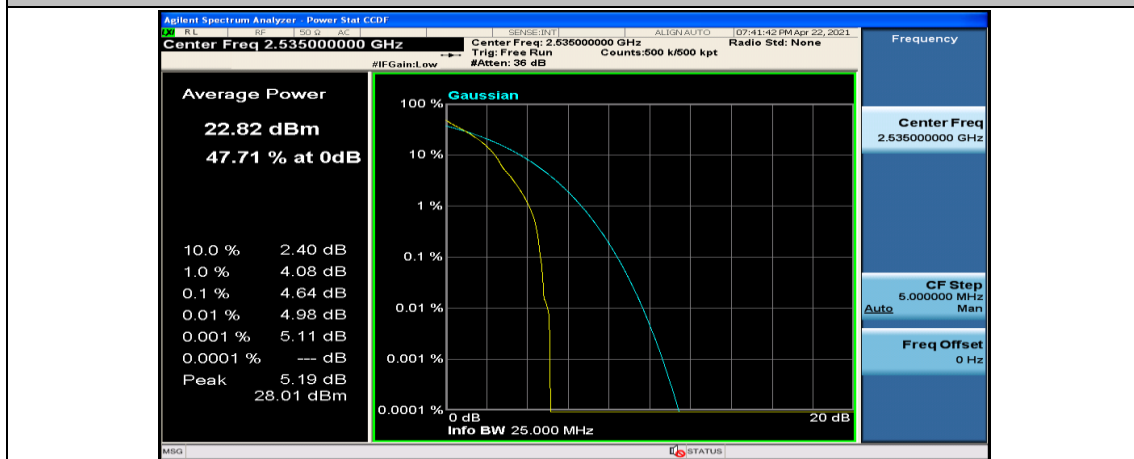




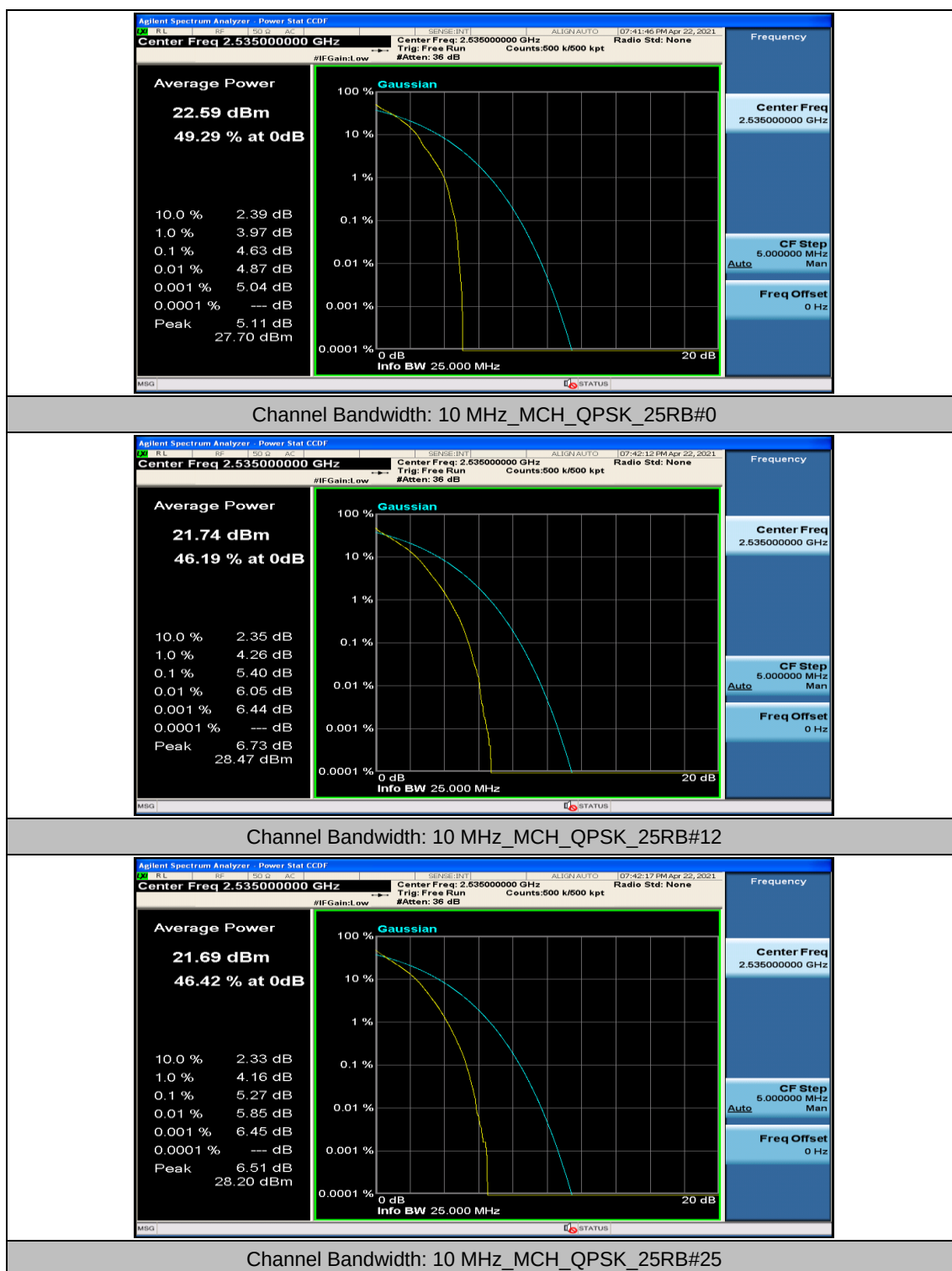
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

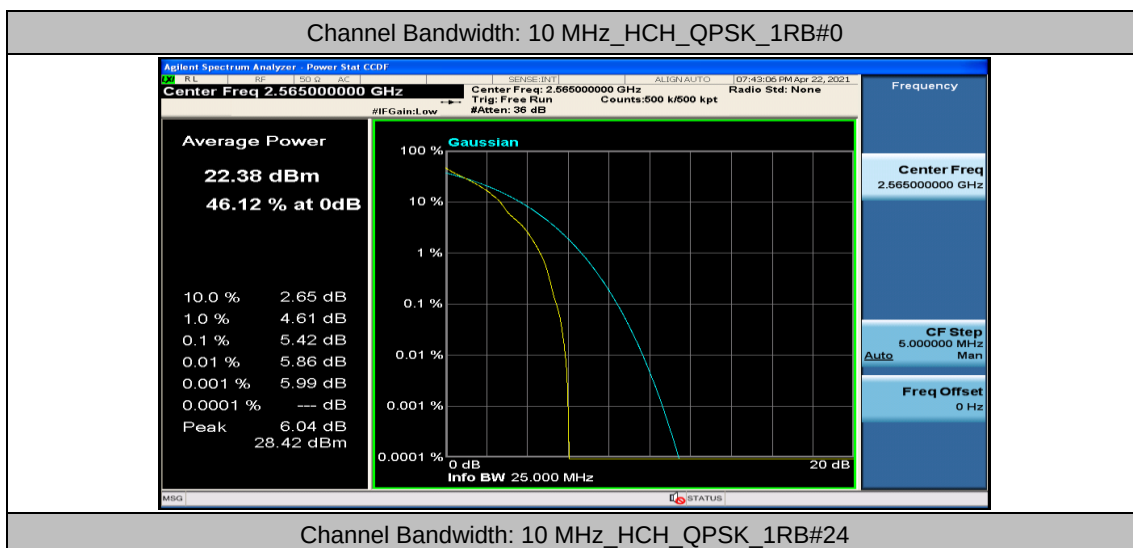
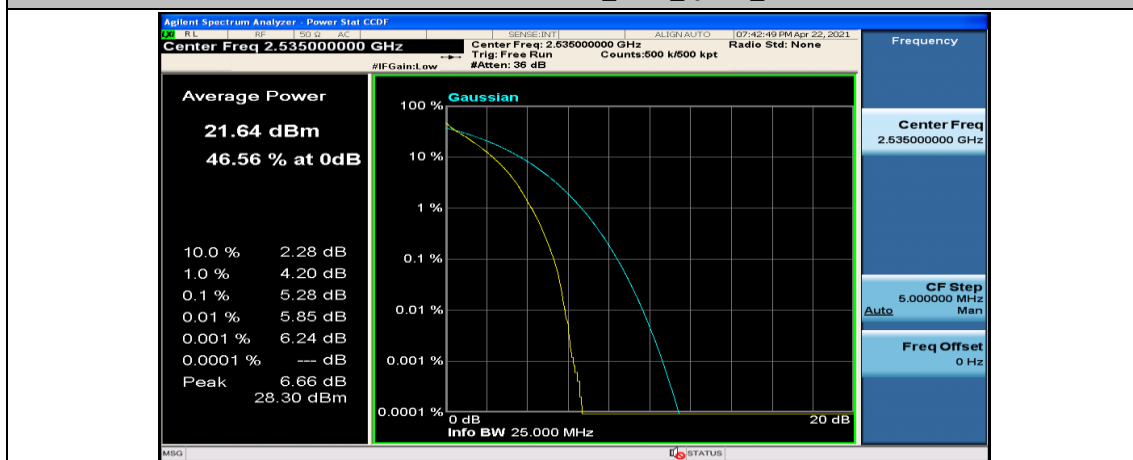
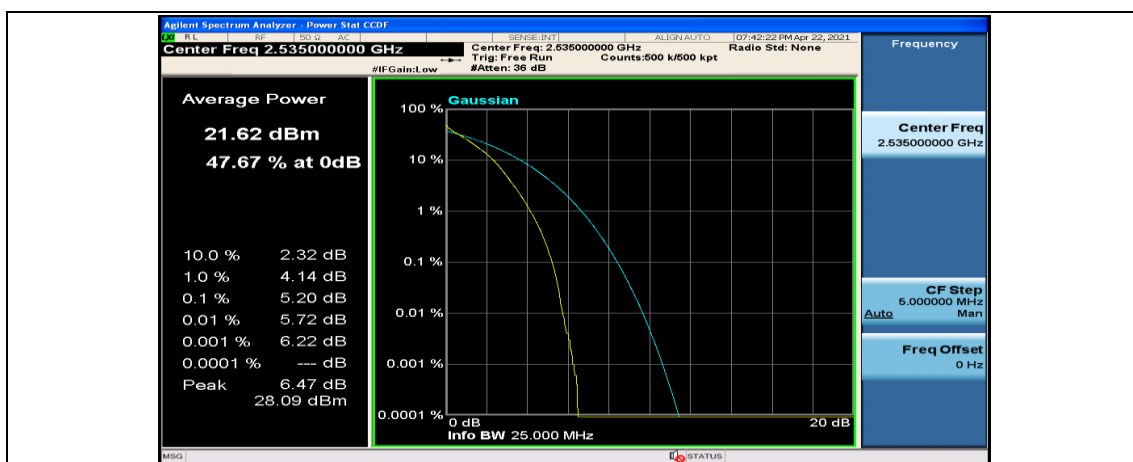


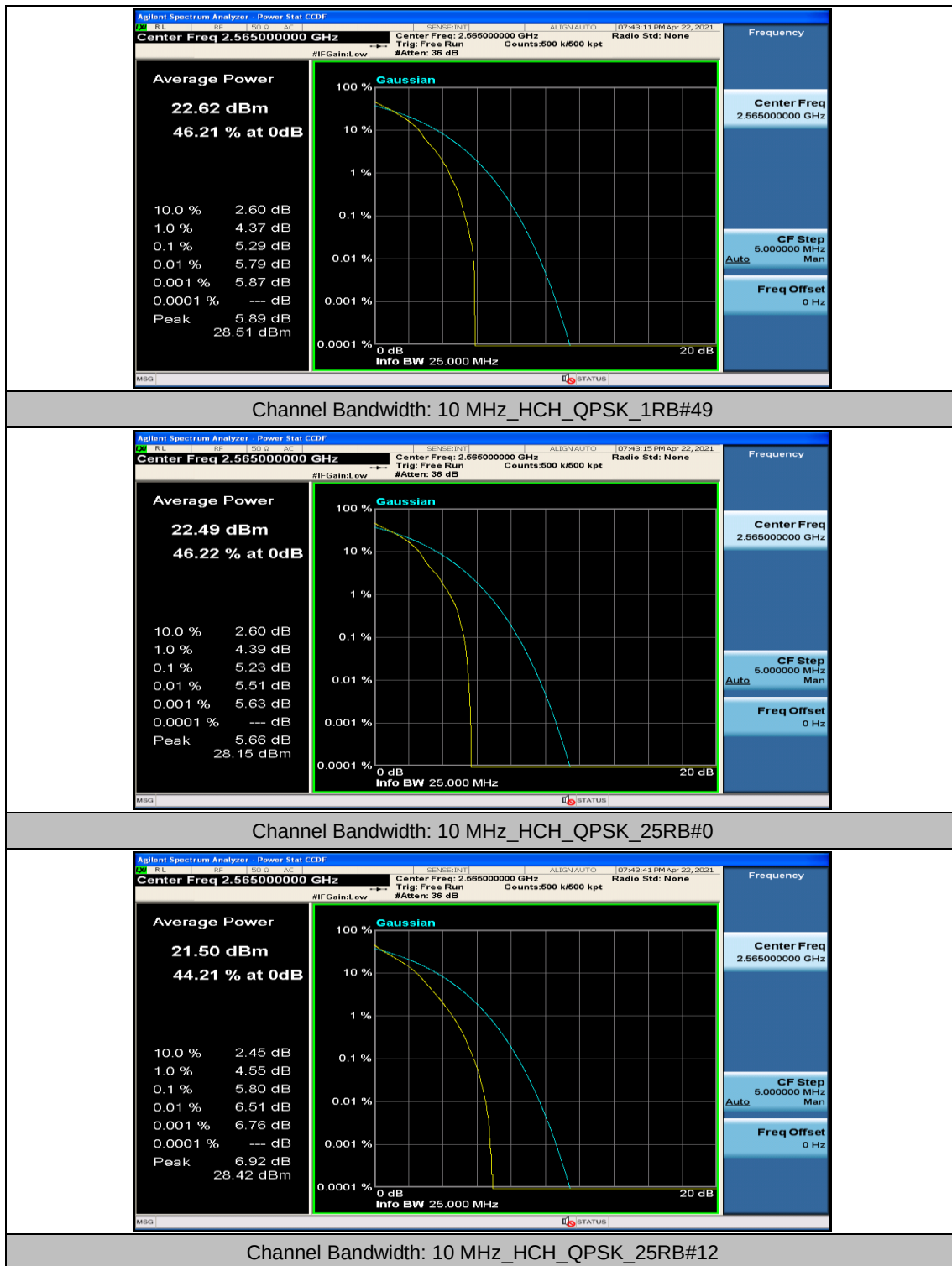
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

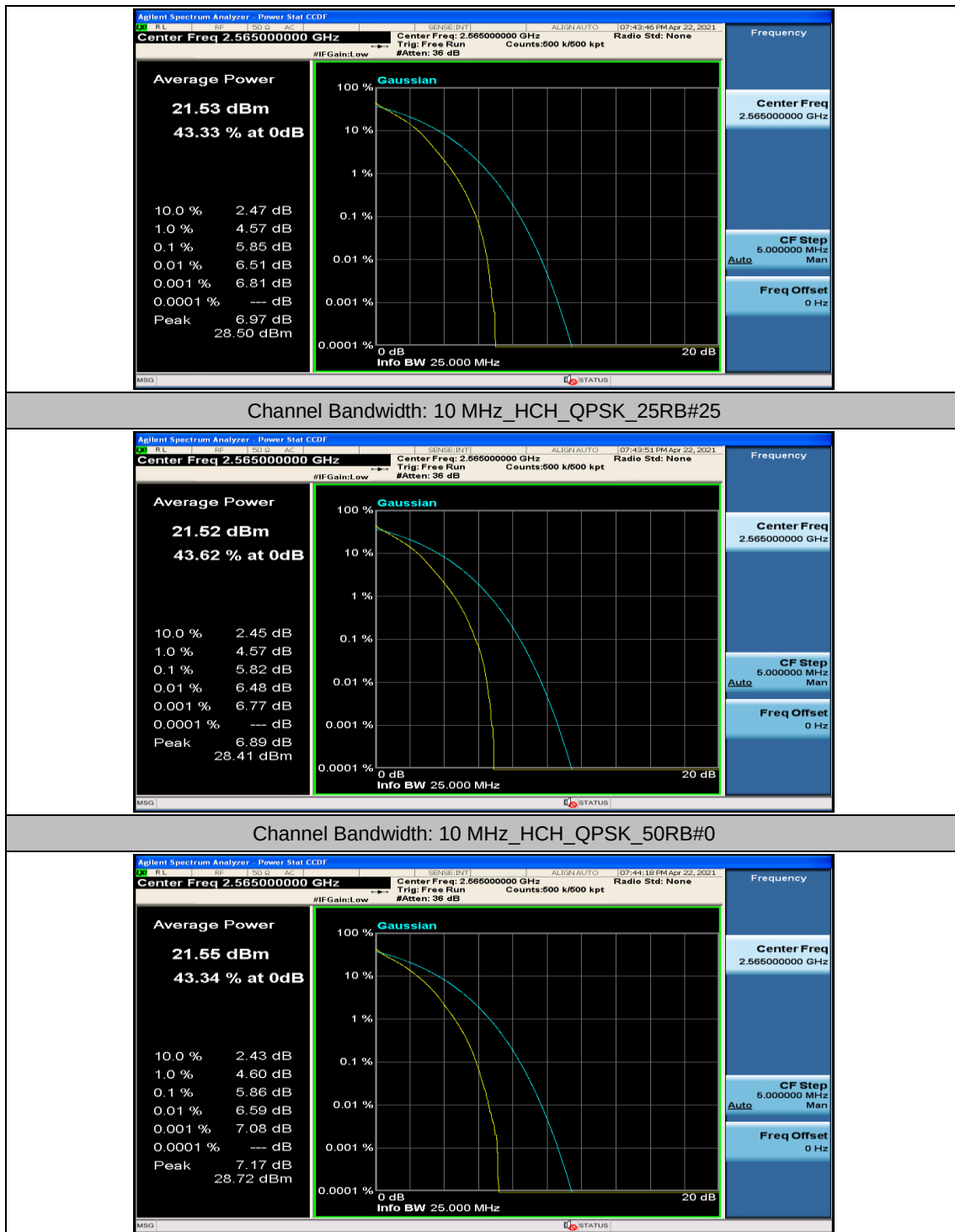


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

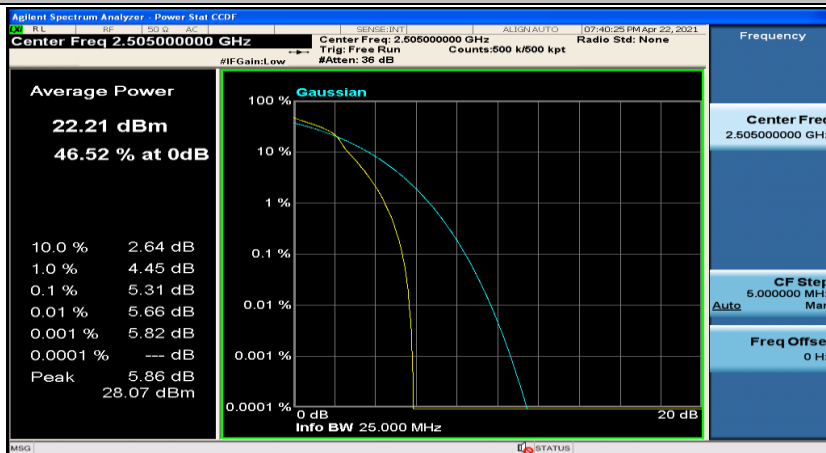




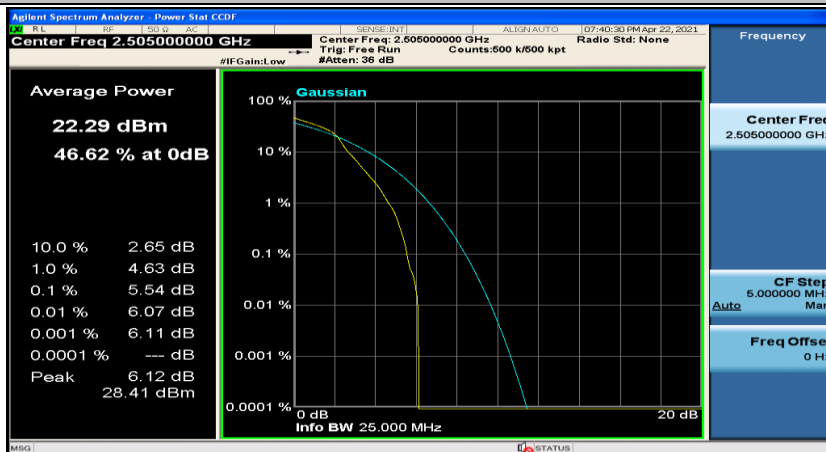




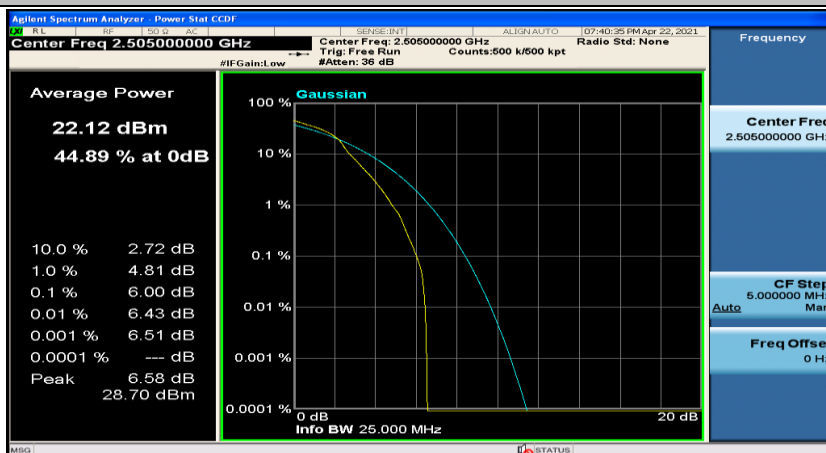
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



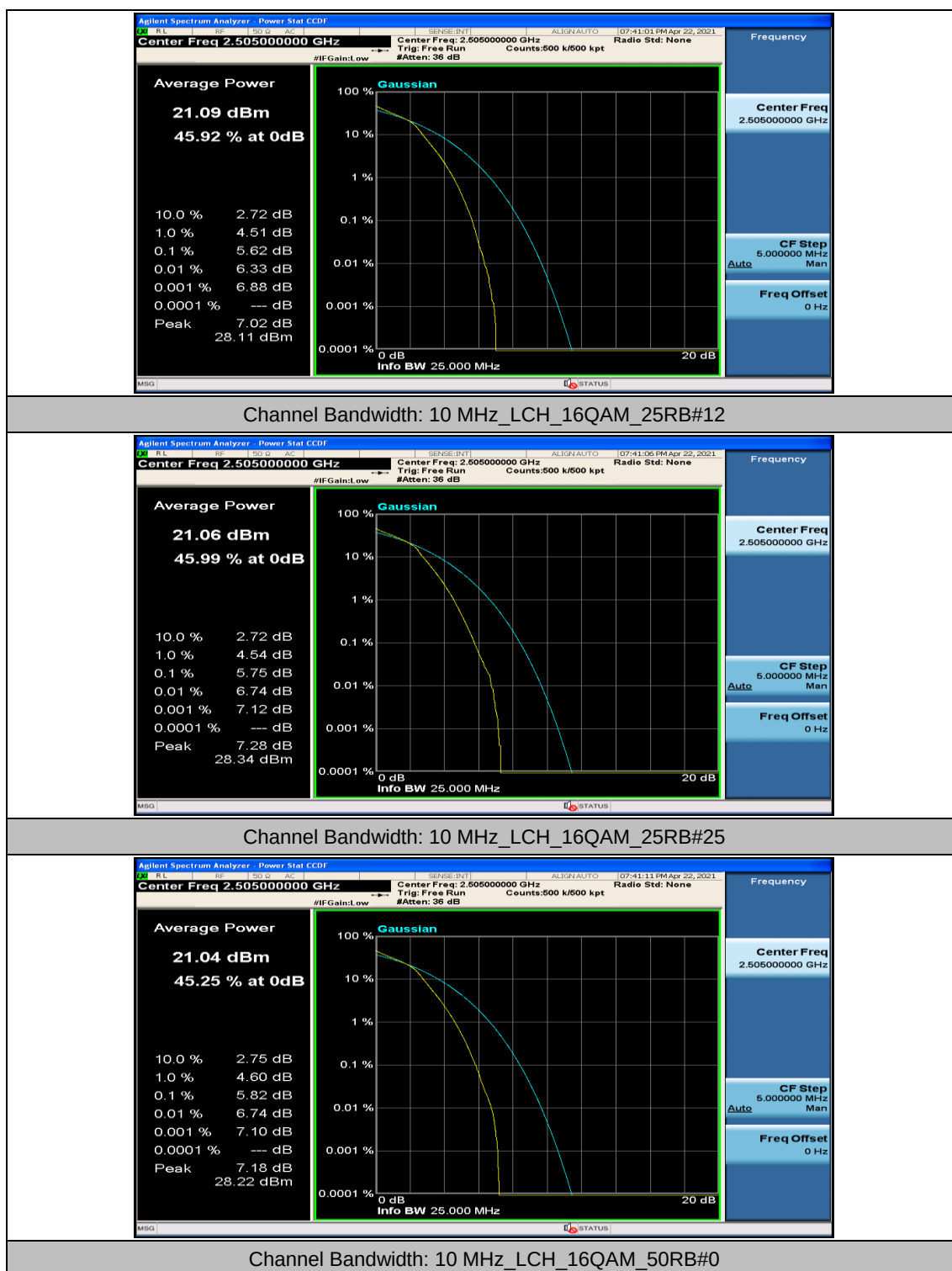
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

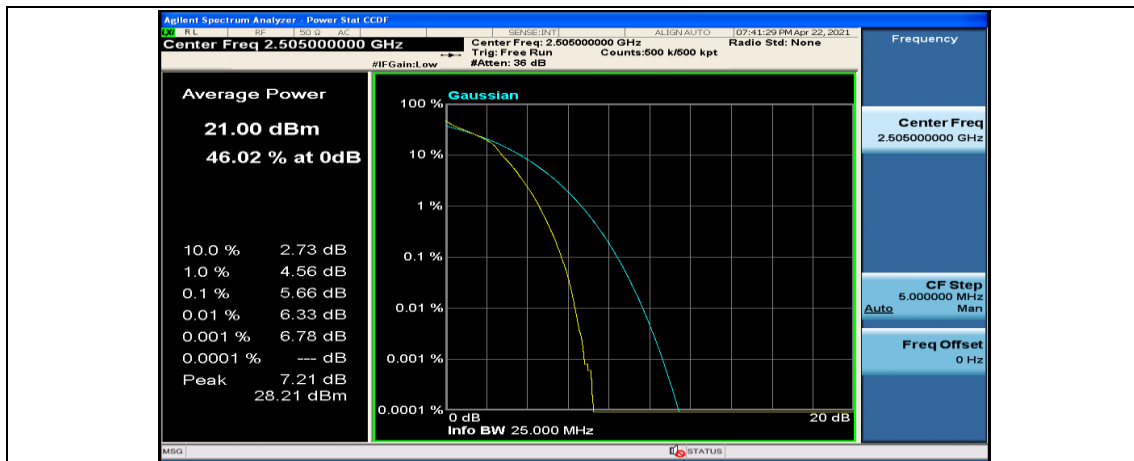


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

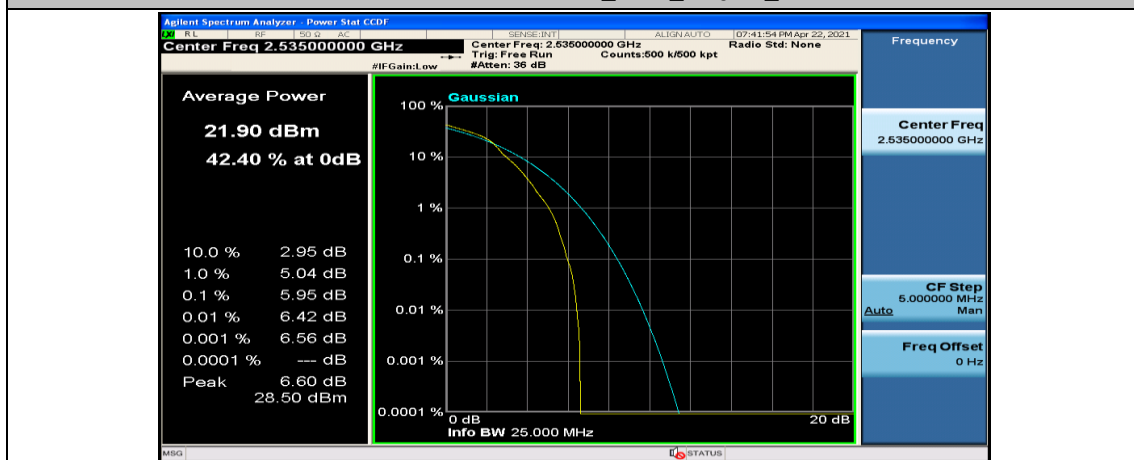


Channel Bandwidth: 10 MHz_LCH_16QAM_25RB#0

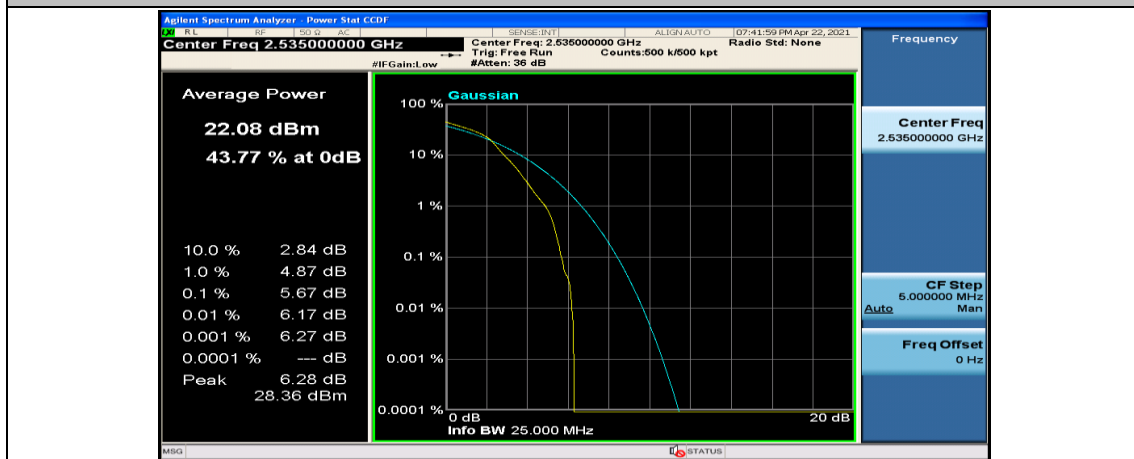




Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

