

Appendix for Band 38

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	21.28	PASS
		1	12	21.63	PASS
		1	24	21.28	PASS
		12	0	20.42	PASS
		12	6	20.52	PASS
		12	13	20.51	PASS
		25	0	20.38	PASS
	MCH	1	0	21.52	PASS
		1	12	21.89	PASS
		1	24	21.56	PASS
		12	0	20.56	PASS
		12	6	20.57	PASS
		12	13	20.56	PASS
		25	0	20.56	PASS
	HCH	1	0	21.77	PASS
		1	12	22.09	PASS
		1	24	21.77	PASS
		12	0	20.79	PASS
		12	6	20.82	PASS
		12	13	20.77	PASS
		25	0	20.81	PASS
16QAM	LCH	1	0	20.39	PASS
		1	12	20.66	PASS
		1	24	20.37	PASS
		12	0	20.38	PASS
		12	6	20.40	PASS
		12	13	20.33	PASS

	MCH	25	0	20.55	PASS
		1	0	20.83	PASS
		1	12	21.13	PASS
		1	24	20.84	PASS
		12	0	20.69	PASS
		12	6	20.71	PASS
		12	13	20.66	PASS
		25	0	20.65	PASS
	HCH	1	0	20.98	PASS
		1	12	21.31	PASS
		1	24	21.01	PASS
		12	0	20.84	PASS
		12	6	20.85	PASS
		12	13	20.82	PASS
		25	0	20.85	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.47	PASS
		1	24	21.55	PASS
		1	49	21.46	PASS
		25	0	20.51	PASS
		25	12	20.47	PASS
		25	25	20.43	PASS
		50	0	20.39	PASS
	MCH	1	0	21.66	PASS
		1	24	21.72	PASS
		1	49	21.63	PASS
		25	0	20.63	PASS
		25	12	20.63	PASS
		25	25	20.65	PASS
		50	0	20.59	PASS
	HCH	1	0	21.80	PASS
		1	24	21.92	PASS
		1	49	21.82	PASS
		25	0	20.87	PASS
		25	12	20.88	PASS
		25	25	20.85	PASS
		50	0	20.84	PASS
16QAM	LCH	1	0	20.58	PASS

		1	24	20.71	PASS
		1	49	20.61	PASS
		25	0	20.47	PASS
		25	12	20.43	PASS
		25	25	20.38	PASS
		50	0	20.37	PASS
	MCH	1	0	20.89	PASS
		1	24	21.03	PASS
		1	49	20.94	PASS
		25	0	20.69	PASS
		25	12	20.67	PASS
		25	25	20.67	PASS
		50	0	20.66	PASS
	HCH	1	0	21.17	PASS
		1	24	21.29	PASS
		1	49	21.18	PASS
		25	0	20.89	PASS
		25	12	20.89	PASS
		25	25	20.87	PASS
		50	0	20.86	PASS

Channel Bandwidth: 15 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.46	PASS
		1	37	21.70	PASS
		1	74	21.36	PASS
		37	0	20.55	PASS
		37	18	20.52	PASS
		37	38	20.48	PASS
		75	0	20.52	PASS
	MCH	1	0	21.57	PASS
		1	37	21.89	PASS
		1	74	21.63	PASS
		37	0	20.61	PASS
		37	18	20.63	PASS
		37	38	20.59	PASS
		75	0	20.63	PASS
	HCH	1	0	21.69	PASS
		1	37	22.14	PASS
		1	74	21.73	PASS

		37	0	20.75	PASS
		37	18	20.83	PASS
		37	38	20.83	PASS
		75	0	20.84	PASS
16QAM	LCH	1	0	20.59	PASS
		1	37	20.86	PASS
		1	74	20.55	PASS
		37	0	20.50	PASS
		37	18	20.48	PASS
		37	38	20.45	PASS
		75	0	20.53	PASS
	MCH	1	0	20.76	PASS
		1	37	21.09	PASS
		1	74	20.82	PASS
		37	0	20.62	PASS
		37	18	20.64	PASS
		37	38	20.64	PASS
		75	0	20.60	PASS
	HCH	1	0	21.04	PASS
		1	37	21.46	PASS
		1	74	21.11	PASS
		37	0	20.73	PASS
		37	18	20.82	PASS
		37	38	20.82	PASS
		75	0	20.81	PASS

Channel Bandwidth: 20 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	LCH	1	0	21.40	PASS
		1	49	21.60	PASS
		1	99	21.40	PASS
		50	0	20.45	PASS
		50	25	20.42	PASS
		50	50	20.36	PASS
		100	0	20.40	PASS
	MCH	1	0	21.54	PASS
		1	49	21.78	PASS
		1	99	21.60	PASS
		50	0	20.55	PASS
		50	25	20.58	PASS

		50	50	20.58	PASS
		100	0	20.54	PASS
	HCH	1	0	21.57	PASS
		1	49	21.93	PASS
		1	99	21.62	PASS
		50	0	20.68	PASS
		50	25	20.79	PASS
		50	50	20.75	PASS
		100	0	20.69	PASS
16QAM	LCH	1	0	20.53	PASS
		1	49	20.78	PASS
		1	99	20.60	PASS
		50	0	20.39	PASS
		50	25	20.40	PASS
		50	50	20.61	PASS
		100	0	20.39	PASS
	MCH	1	0	20.77	PASS
		1	49	21.01	PASS
		1	99	20.85	PASS
		50	0	20.58	PASS
		50	25	20.63	PASS
		50	50	20.63	PASS
		100	0	20.54	PASS
	HCH	1	0	20.72	PASS
		1	49	21.00	PASS
		1	99	20.80	PASS
		50	0	20.68	PASS
		50	25	20.80	PASS
		50	50	20.77	PASS
		100	0	20.69	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	8.69	<13	PASS
		1	12	9.94	<13	PASS
		1	24	7.34	<13	PASS
		12	0	9.12	<13	PASS
		12	6	11.81	<13	PASS
		12	13	7.96	<13	PASS
		25	0	8.06	<13	PASS
	MCH	1	0	9.36	<13	PASS
		1	12	9.16	<13	PASS
		1	24	8.14	<13	PASS
		12	0	9.74	<13	PASS
		12	6	9.84	<13	PASS
		12	13	6.67	<13	PASS
		25	0	6.98	<13	PASS
	HCH	1	0	9.39	<13	PASS
		1	12	8.65	<13	PASS
		1	24	9.69	<13	PASS
		12	0	8.98	<13	PASS
		12	6	9.08	<13	PASS
		12	13	10.64	<13	PASS
		25	0	8.35	<13	PASS
16QAM	LCH	1	0	8.99	<13	PASS
		1	12	8.63	<13	PASS
		1	24	7.44	<13	PASS
		12	0	11.94	<13	PASS
		12	6	9.8	<13	PASS
		12	13	8.7	<13	PASS
		25	0	7.92	<13	PASS
	MCH	1	0	8.41	<13	PASS
		1	12	9.7	<13	PASS
		1	24	11.93	<13	PASS

		12	0	8.99	<13	PASS
		12	6	8.95	<13	PASS
		12	13	11.3	<13	PASS
		25	0	11.24	<13	PASS
	HCH	1	0	8.07	<13	PASS
		1	12	9.94	<13	PASS
		1	24	8.97	<13	PASS
		12	0	11.48	<13	PASS
		12	6	8.41	<13	PASS
		12	13	9.92	<13	PASS
		25	0	8.93	<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	10.5	<13	PASS
		1	24	6.1	<13	PASS
		1	49	8.27	<13	PASS
		25	0	7.56	<13	PASS
		25	12	9.37	<13	PASS
		25	25	7.82	<13	PASS
		50	0	8.02	<13	PASS
		50	0	8.02	<13	PASS
	MCH	1	0	10.21	<13	PASS
		1	24	10.97	<13	PASS
		1	49	9.25	<13	PASS
		25	0	9.12	<13	PASS
		25	12	10.54	<13	PASS
		25	25	7.77	<13	PASS
		50	0	8.03	<13	PASS
		50	0	8.03	<13	PASS
	HCH	1	0	9.06	<13	PASS
		1	24	8.69	<13	PASS
		1	49	8.11	<13	PASS
		25	0	9.13	<13	PASS
		25	12	8.85	<13	PASS
		25	25	9.11	<13	PASS
		50	0	9.77	<13	PASS
		50	0	9.77	<13	PASS
16QAM	LCH	1	0	7.54	<13	PASS
		1	24	10.02	<13	PASS
		1	49	9.98	<13	PASS
		25	0	9.01	<13	PASS

		25	12	9.36	<13	PASS
		25	25	11.45	<13	PASS
		50	0	7.57	<13	PASS
	MCH	1	0	10.57	<13	PASS
		1	24	9.37	<13	PASS
		1	49	10.43	<13	PASS
		25	0	10.8	<13	PASS
		25	12	9.64	<13	PASS
		25	25	10.2	<13	PASS
		50	0	9.88	<13	PASS
	HCH	1	0	9.16	<13	PASS
		1	24	9.56	<13	PASS
		1	49	9.53	<13	PASS
		25	0	9.55	<13	PASS
		25	12	8.81	<13	PASS
		25	25	11.81	<13	PASS
		50	0	8.9	<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	8.48	<13	PASS
		1	37	9.24	<13	PASS
		1	74	10.1	<13	PASS
		37	0	6.49	<13	PASS
		37	18	7.75	<13	PASS
		37	38	8.07	<13	PASS
		75	0	7.72	<13	PASS
	MCH	1	0	8.99	<13	PASS
		1	37	8.41	<13	PASS
		1	74	9.72	<13	PASS
		37	0	9.96	<13	PASS
		37	18	10.15	<13	PASS
		37	38	8.84	<13	PASS
		75	0	9.07	<13	PASS
	HCH	1	0	7.83	<13	PASS
		1	37	8.38	<13	PASS
		1	74	8.87	<13	PASS
		37	0	8.5	<13	PASS
		37	18	11.8	<13	PASS

		37	38	8.44	<13	PASS
		75	0	8.31	<13	PASS
16QAM	LCH	1	0	10.23	<13	PASS
		1	37	9.14	<13	PASS
		1	74	11.07	<13	PASS
		37	0	10.71	<13	PASS
		37	18	8.1	<13	PASS
		37	38	8.42	<13	PASS
		75	0	10.3	<13	PASS
		75	0	10.3	<13	PASS
	MCH	1	0	9.44	<13	PASS
		1	37	10.32	<13	PASS
		1	74	8.56	<13	PASS
		37	0	8.67	<13	PASS
		37	18	8.11	<13	PASS
		37	38	7.85	<13	PASS
		75	0	10.46	<13	PASS
	HCH	1	0	12.31	<13	PASS
		1	37	11.87	<13	PASS
		1	74	9.66	<13	PASS
		37	0	8.22	<13	PASS
		37	18	8.01	<13	PASS
		37	38	10.03	<13	PASS
		75	0	8.51	<13	PASS

Channel Bandwidth: 20 MHz

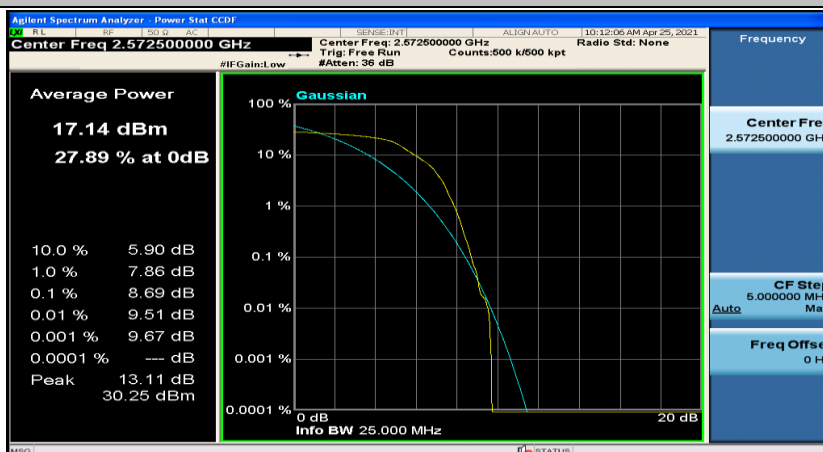
Channel Bandwidth: 20 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	LCH	1	0	7.24	<13	PASS
		1	49	7.89	<13	PASS
		1	99	9.77	<13	PASS
		50	0	11.26	<13	PASS
		50	25	8.18	<13	PASS
		50	50	8.94	<13	PASS
		100	0	8.32	<13	PASS
	MCH	1	0	9.45	<13	PASS
		1	49	9.41	<13	PASS
		1	99	8.88	<13	PASS
		50	0	9.95	<13	PASS
		50	25	12.03	<13	PASS
		50	50	10.08	<13	PASS

		100	0	7.68	<13	PASS
	HCH	1	0	9.37	<13	PASS
		1	49	9.47	<13	PASS
		1	99	10.06	<13	PASS
		50	0	7.99	<13	PASS
		50	25	9.35	<13	PASS
		50	50	9.64	<13	PASS
		100	0	12.95	<13	PASS
16QAM	LCH	1	0	7.53	<13	PASS
		1	49	8.45	<13	PASS
		1	99	9.41	<13	PASS
		50	0	8.64	<13	PASS
		50	25	9.27	<13	PASS
		50	50	8.77	<13	PASS
		100	0	11.7	<13	PASS
	MCH	1	0	7.56	<13	PASS
		1	49	10.32	<13	PASS
		1	99	9.92	<13	PASS
		50	0	9.97	<13	PASS
		50	25	8.61	<13	PASS
		50	50	9.36	<13	PASS
		100	0	9.4	<13	PASS
	HCH	1	0	10.3	<13	PASS
		1	49	9.8	<13	PASS
		1	99	10.48	<13	PASS
		50	0	11.31	<13	PASS
		50	25	9.67	<13	PASS
		50	50	9.81	<13	PASS
		100	0	9.48	<13	PASS

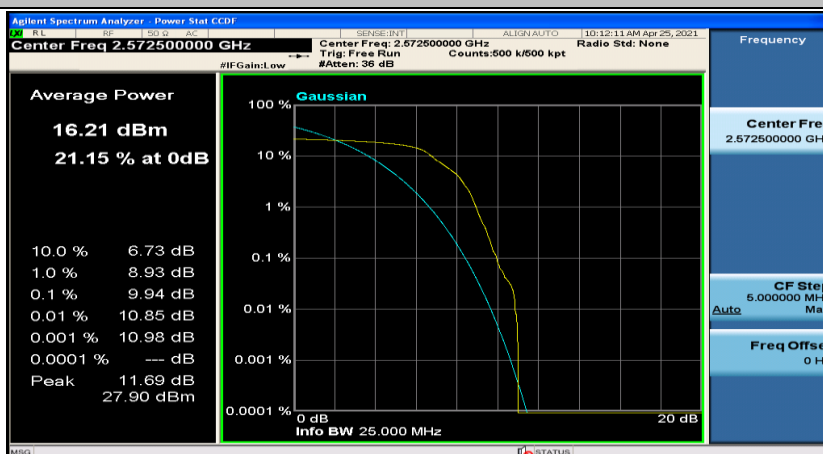
Test Graphs

Channel Bandwidth: 5 MHz

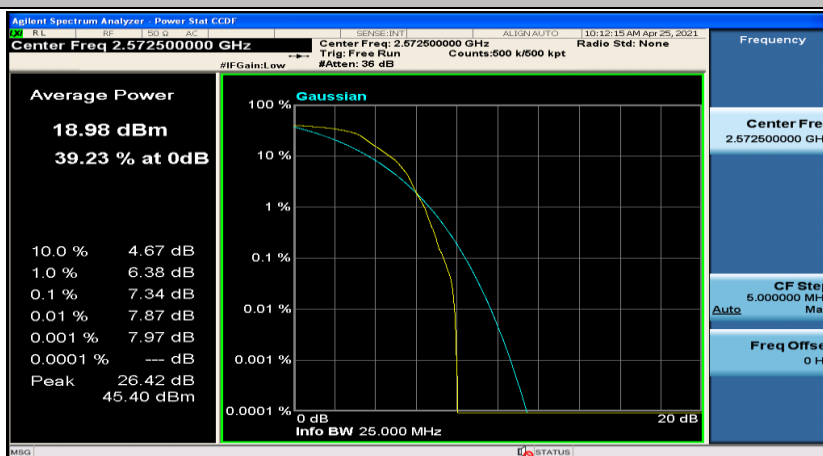
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



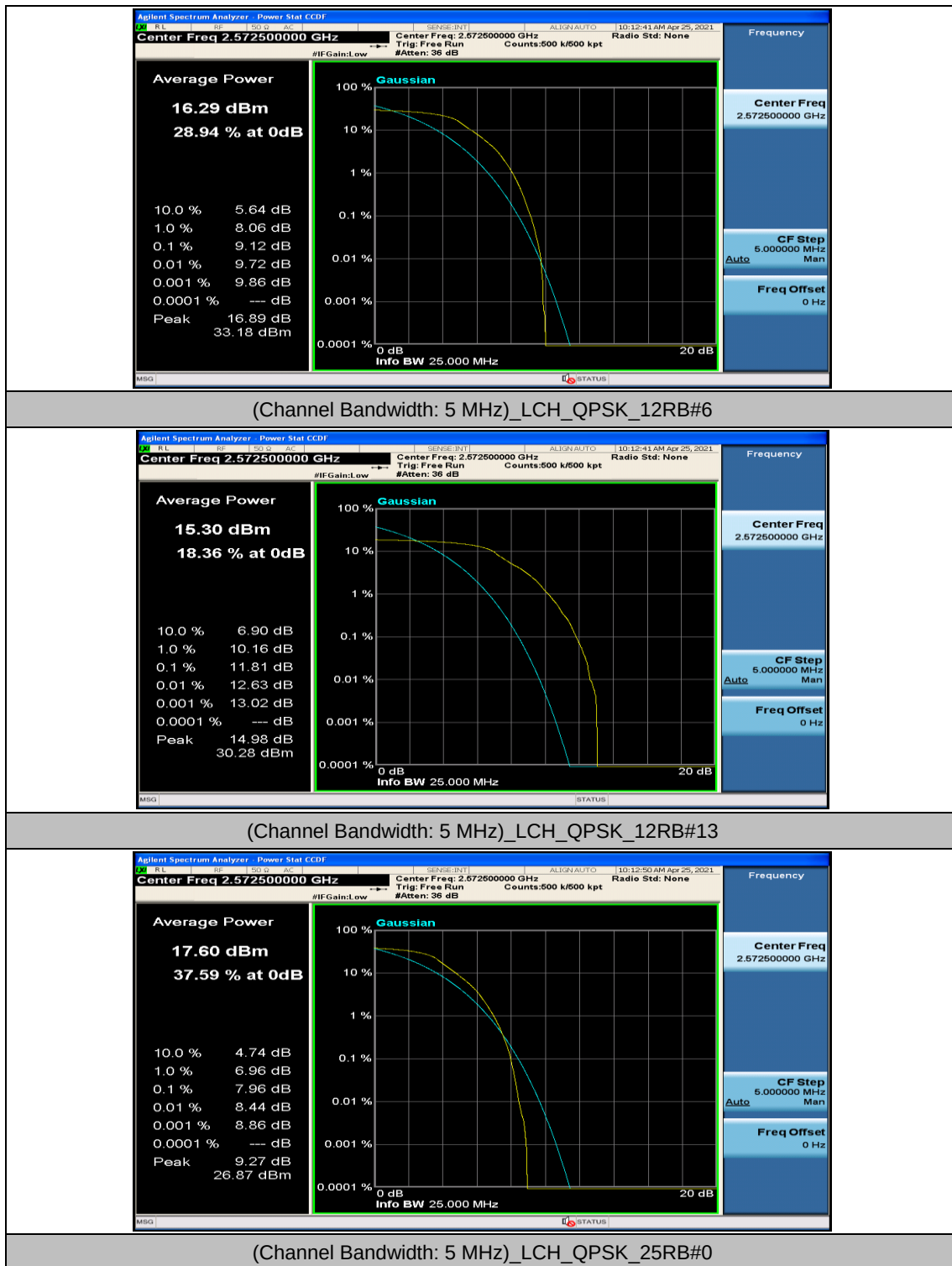
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12

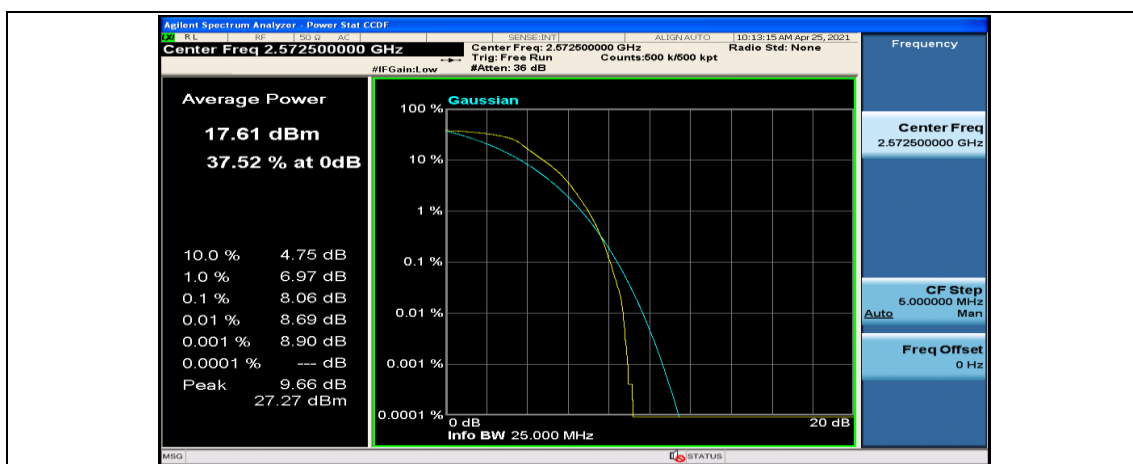


(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

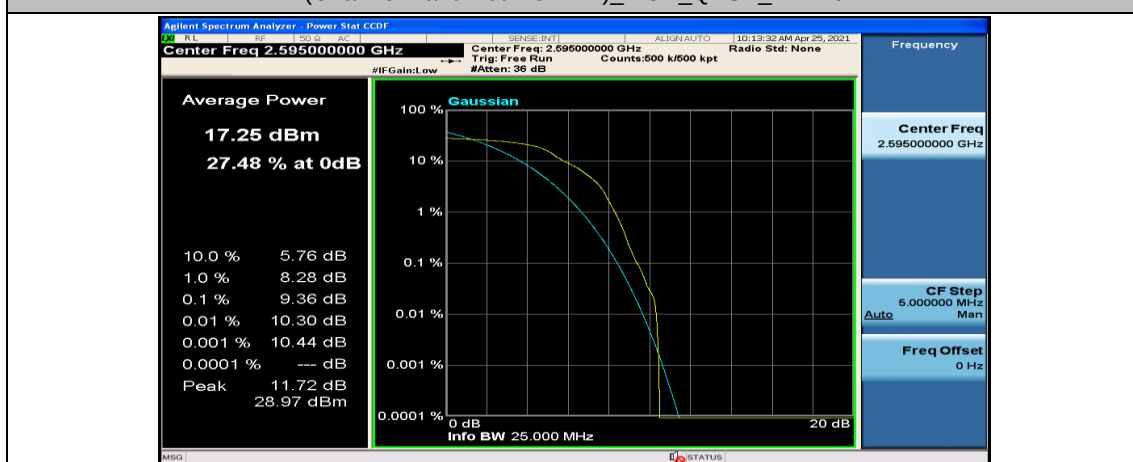


(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0

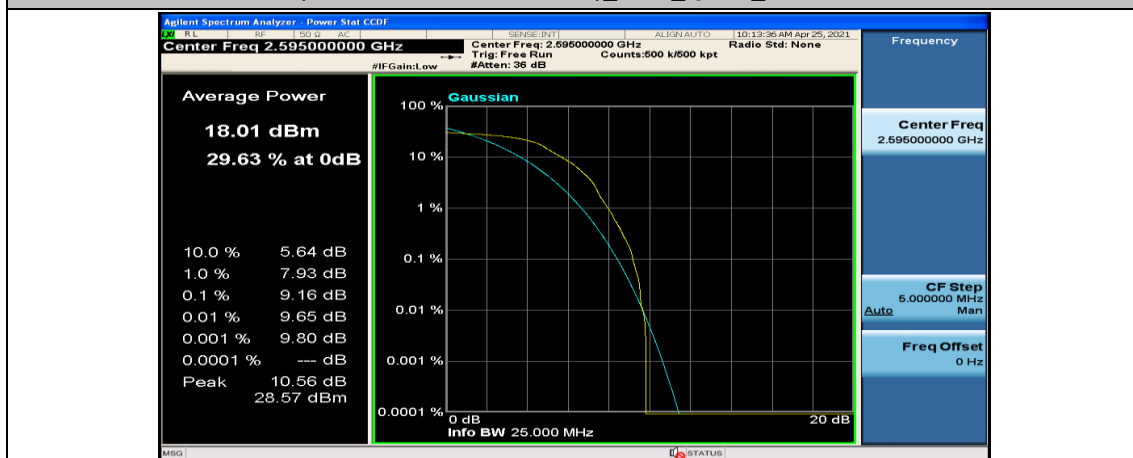




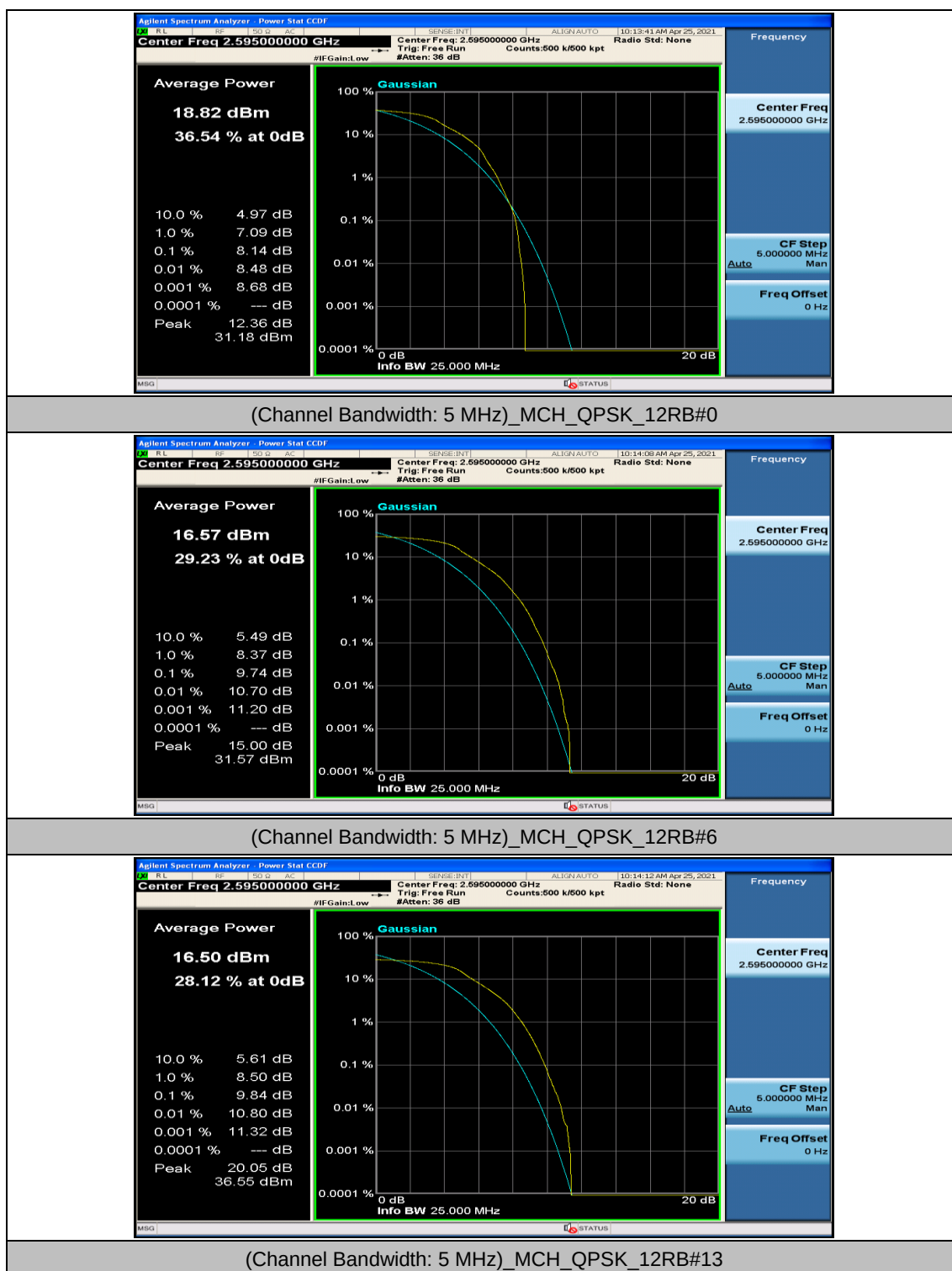
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

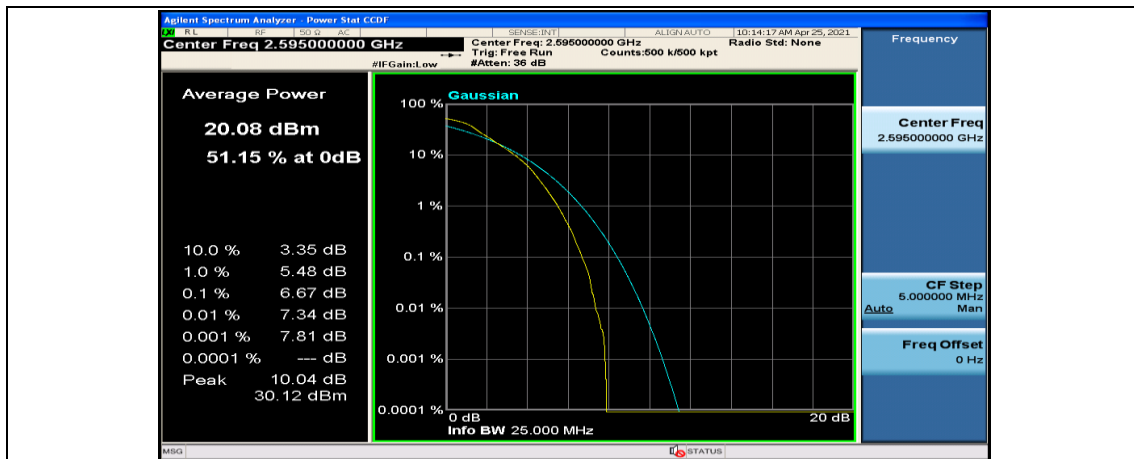


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

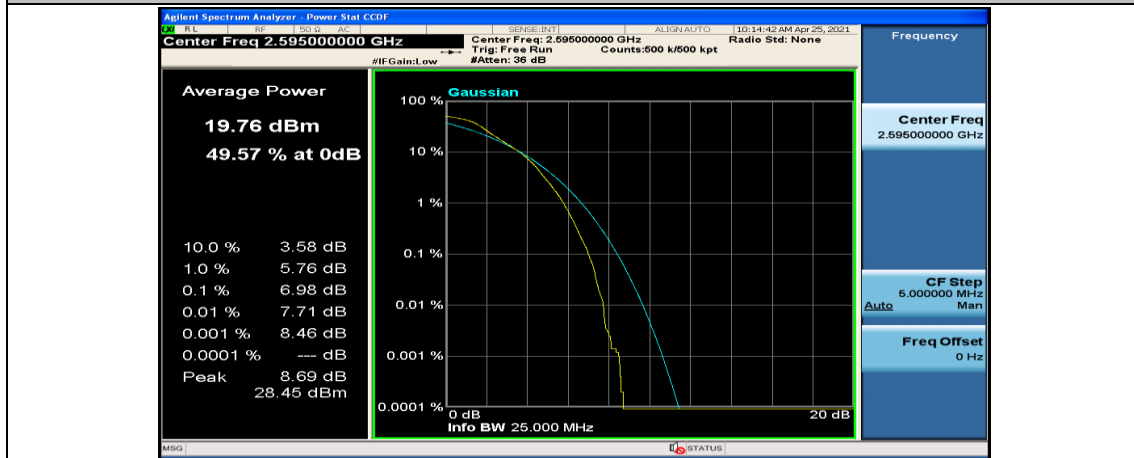


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

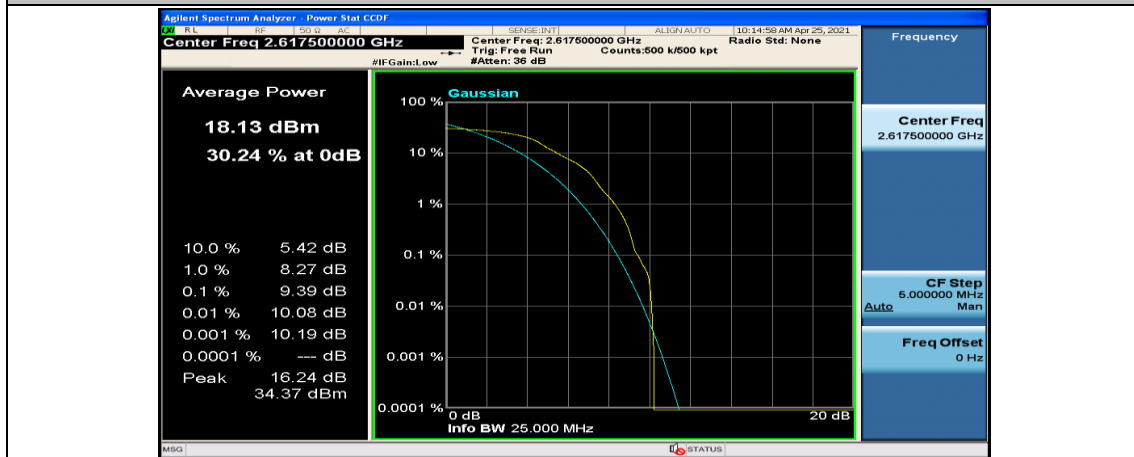




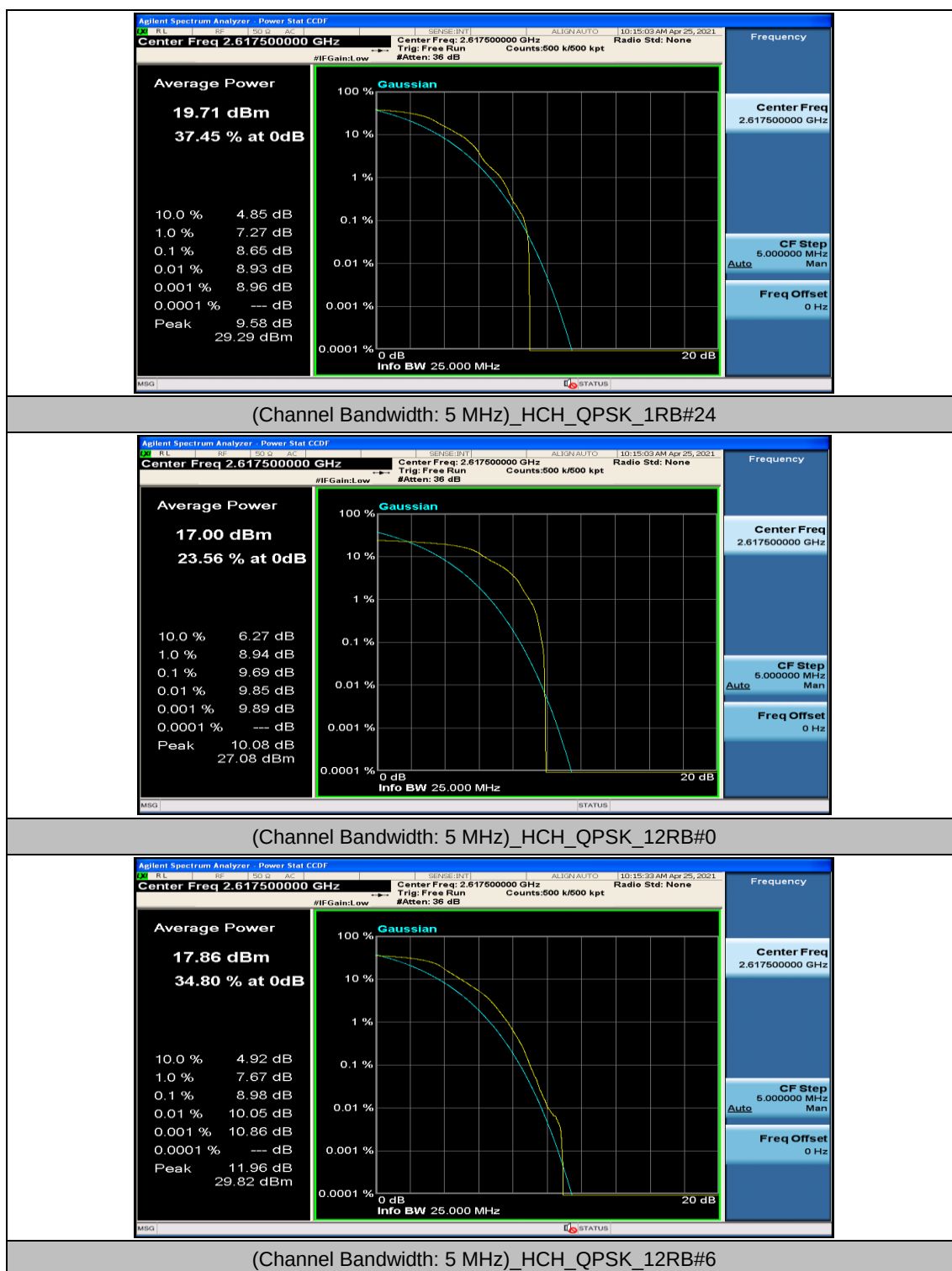
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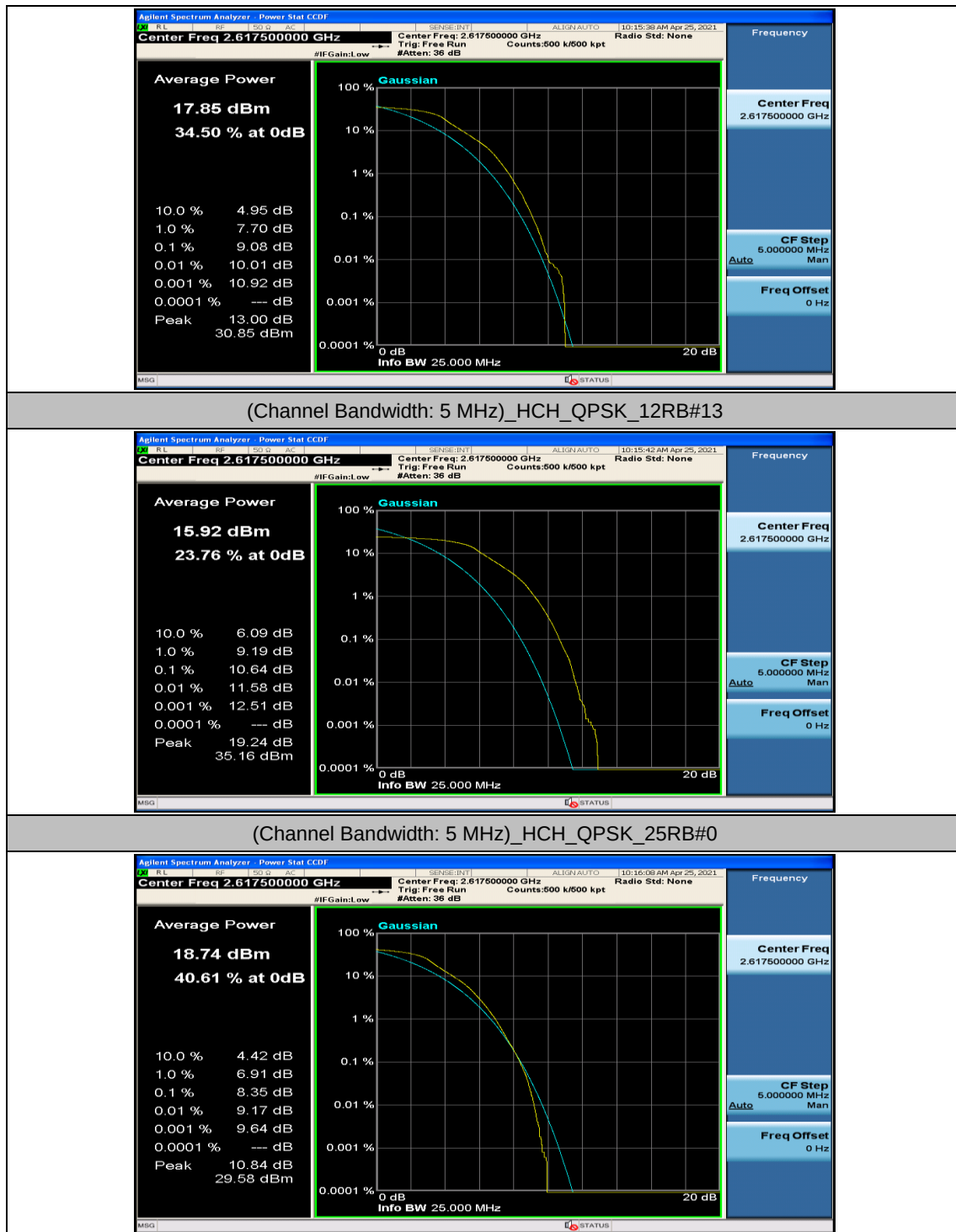


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

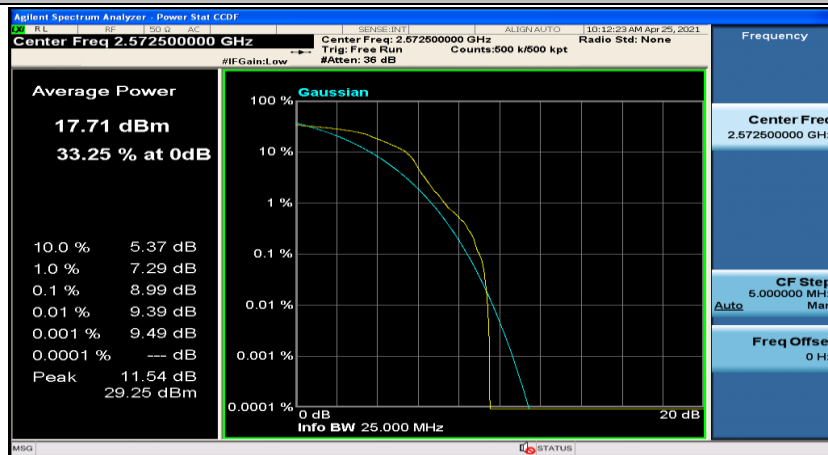


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

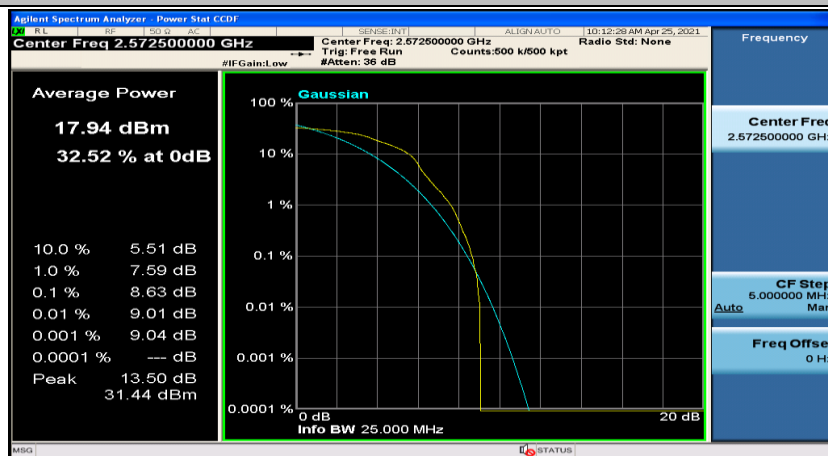




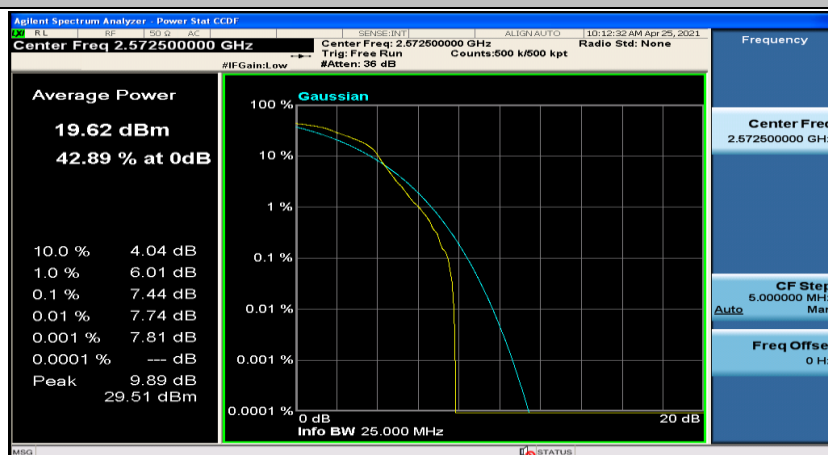
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



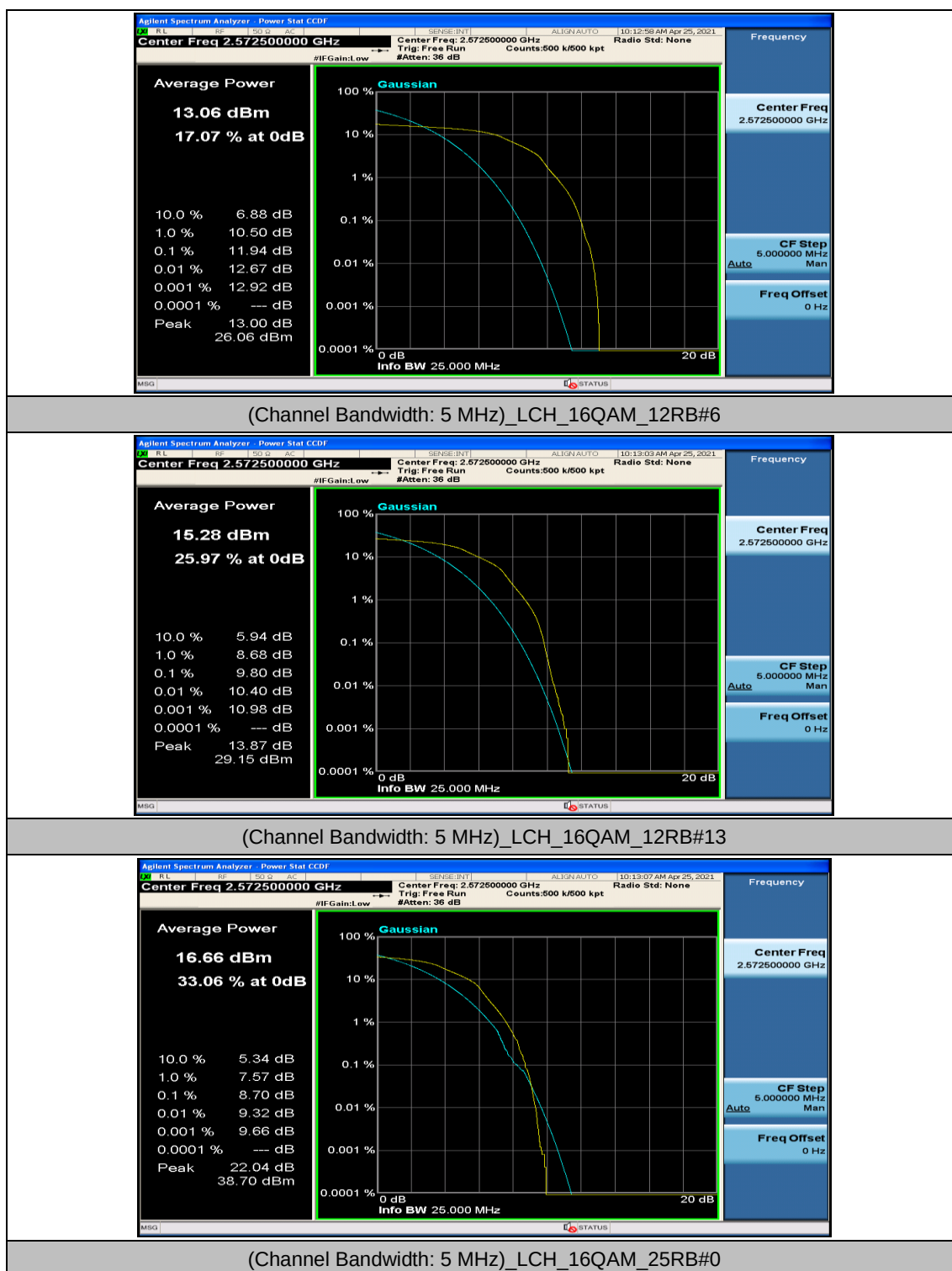
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

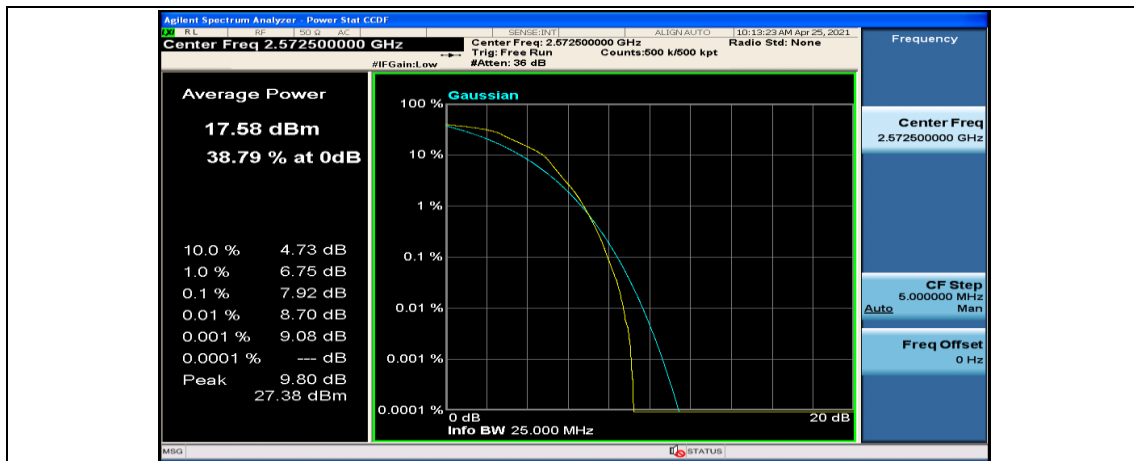


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

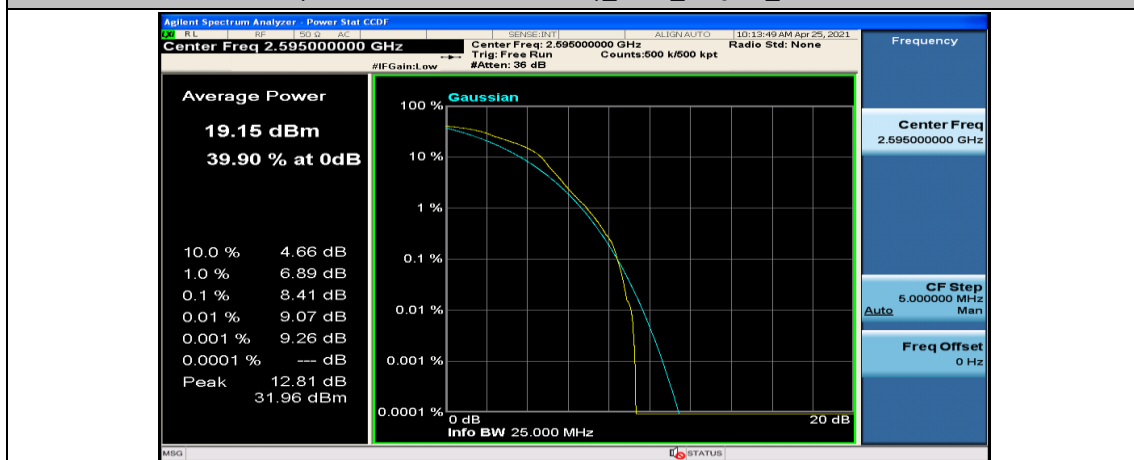


(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0

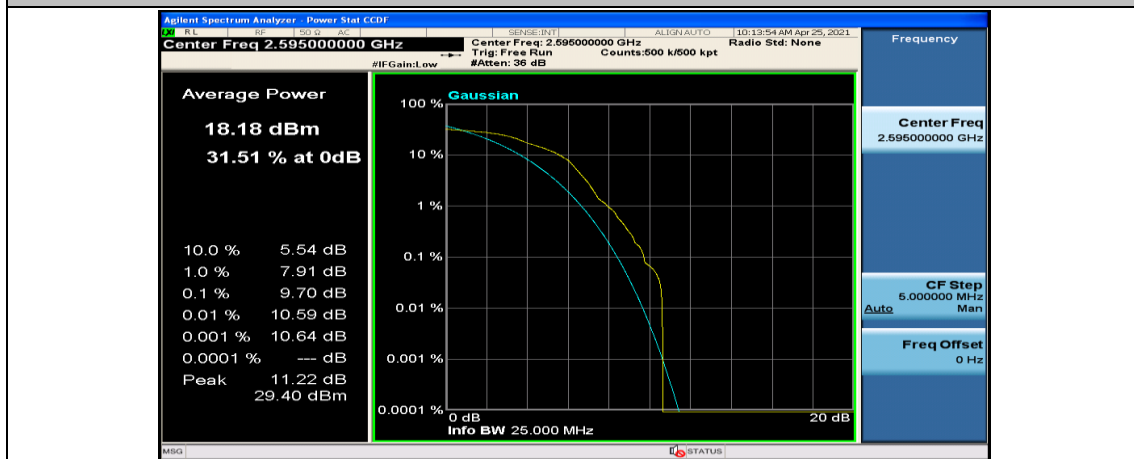




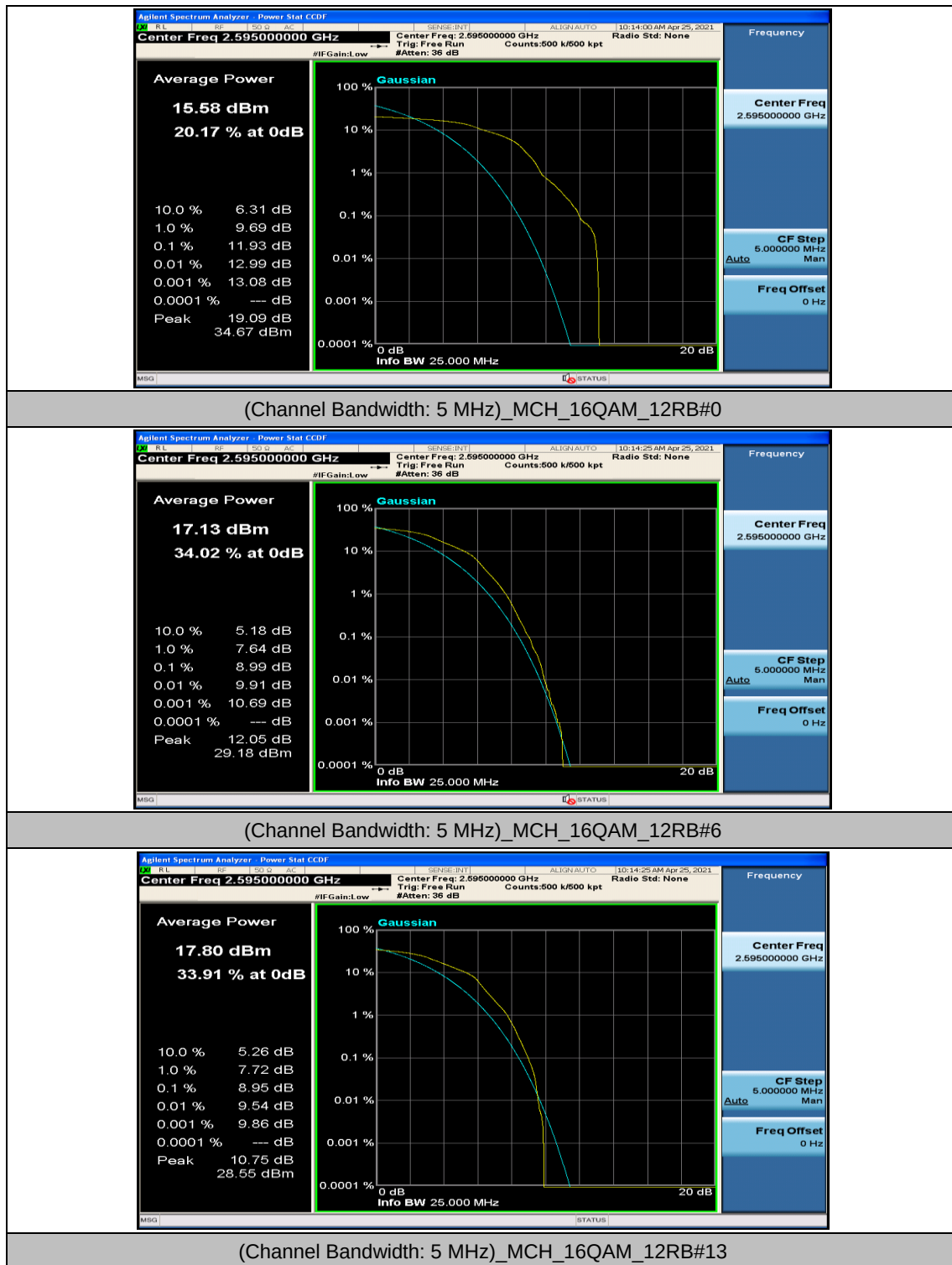
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

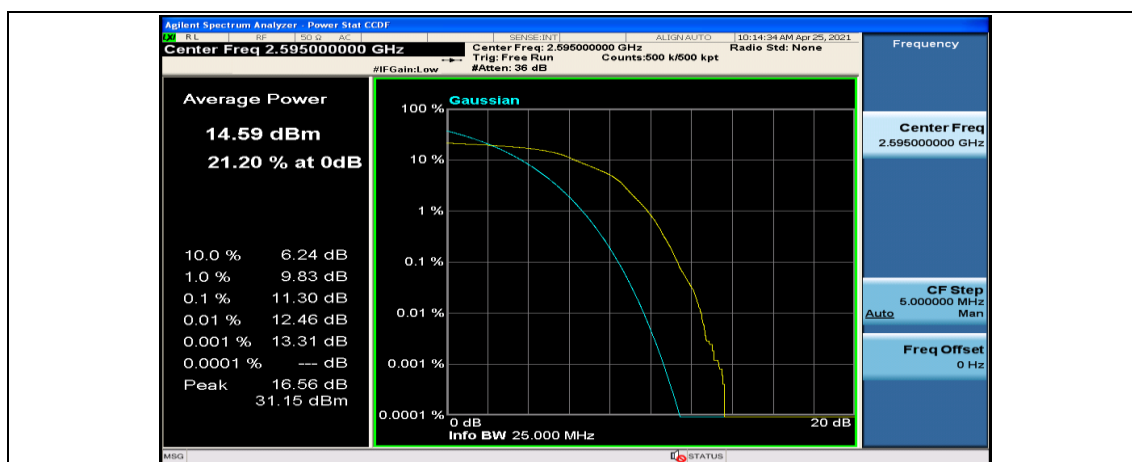


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

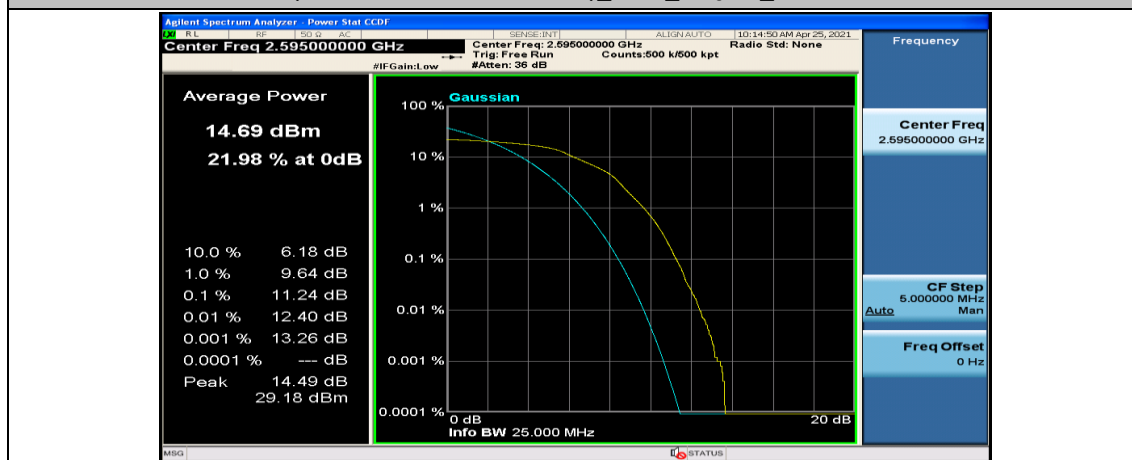


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

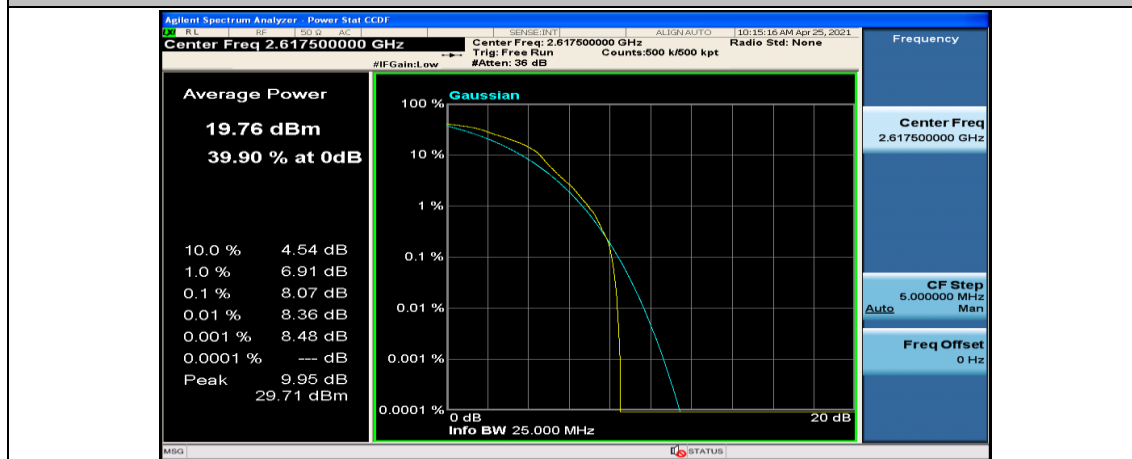




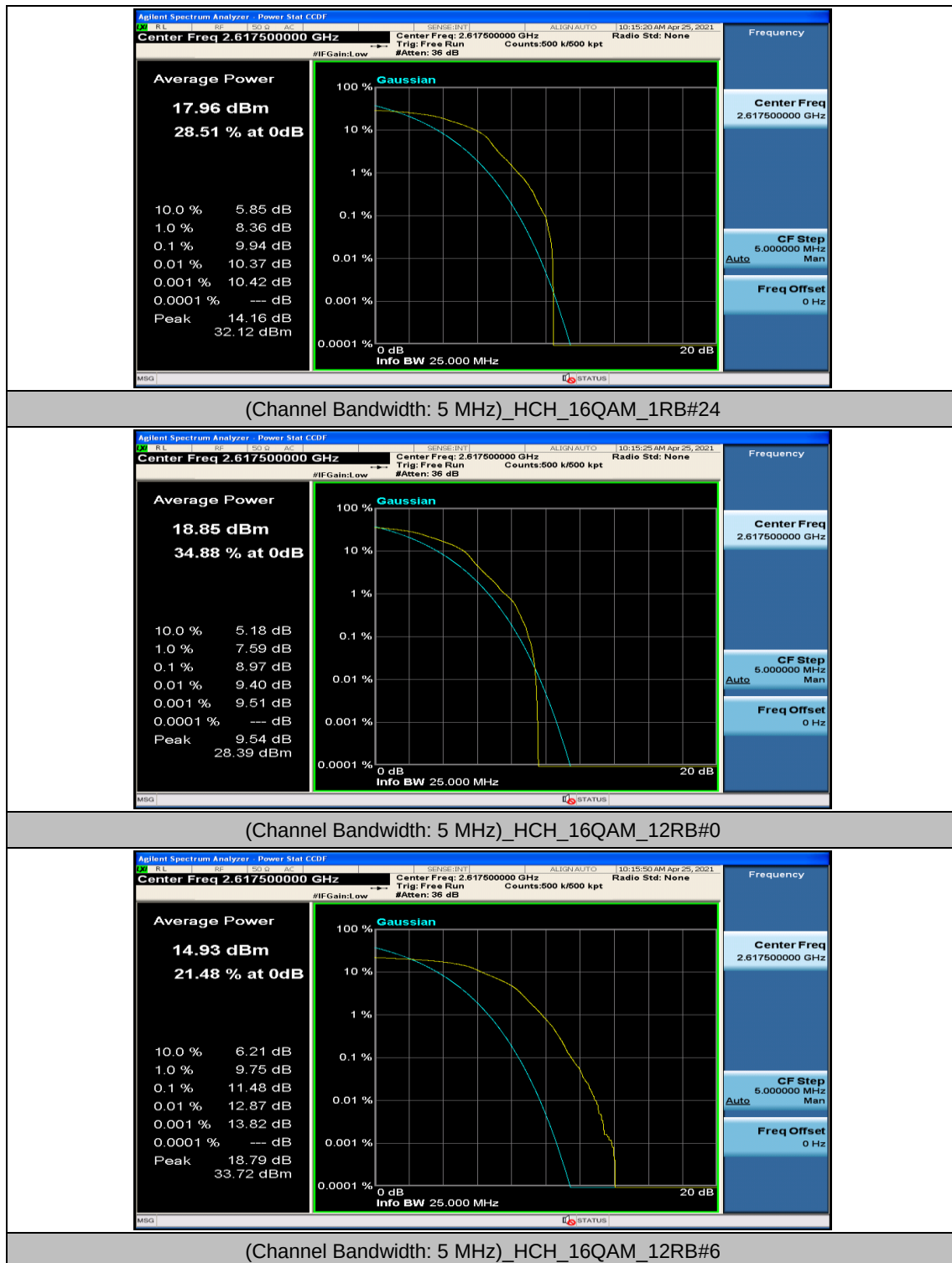
(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

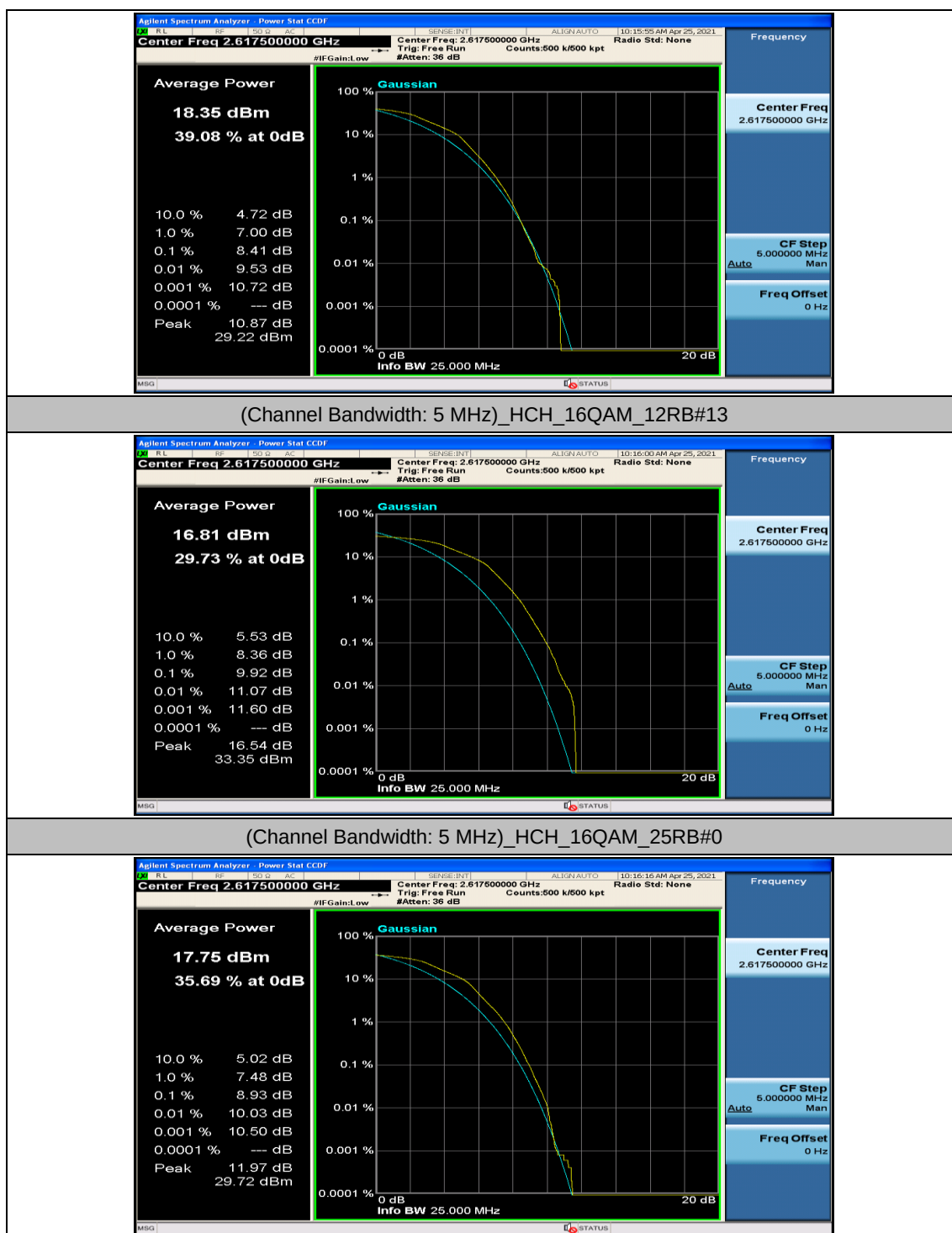


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

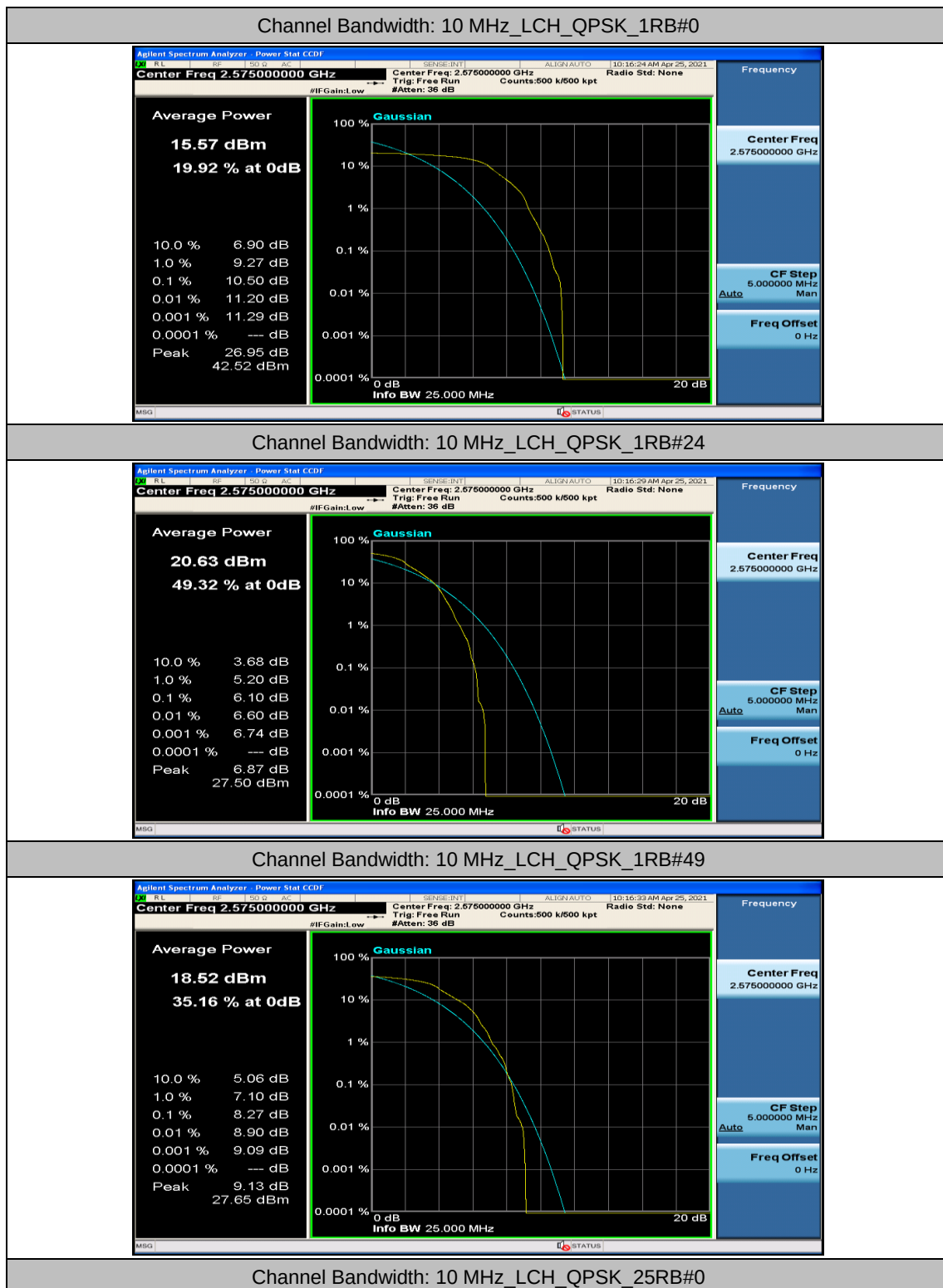


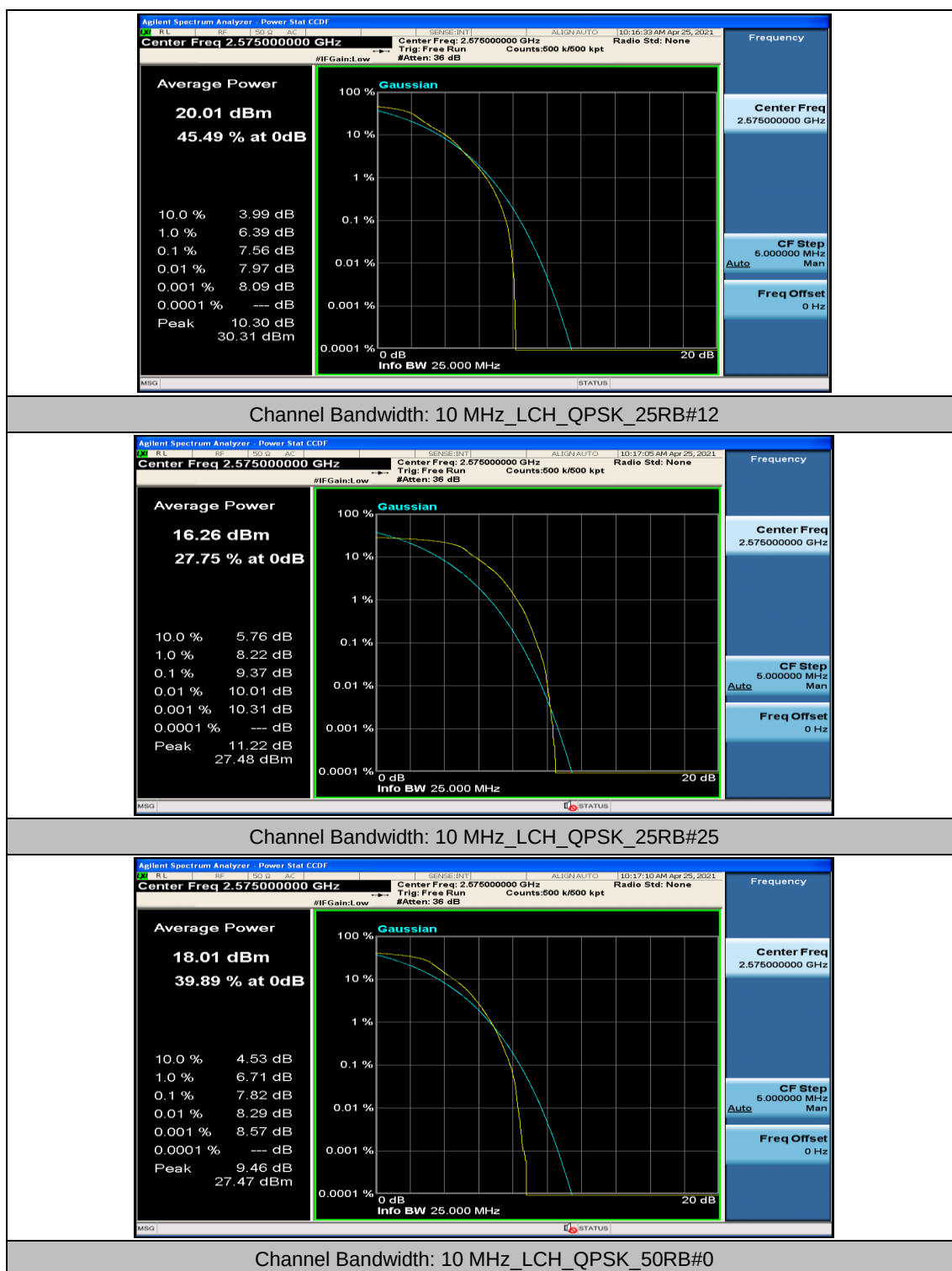
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

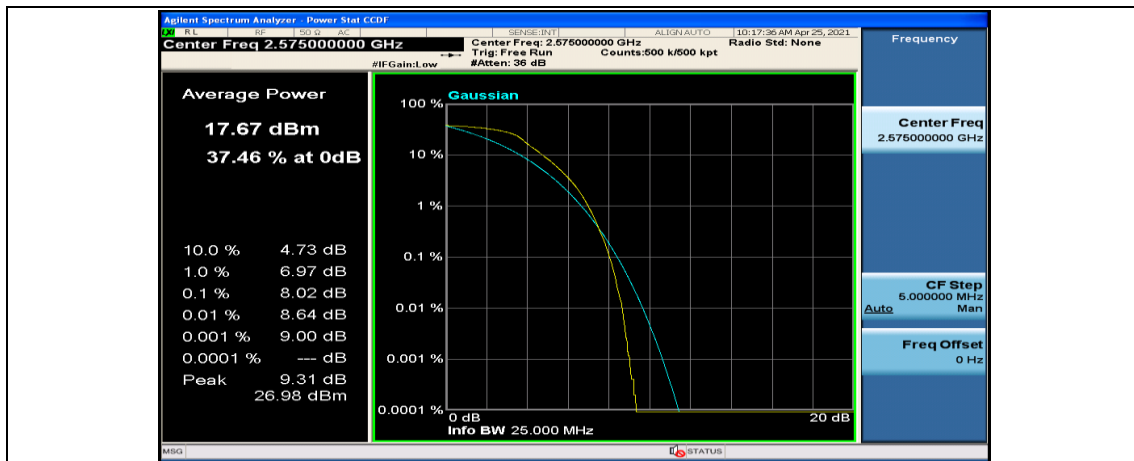




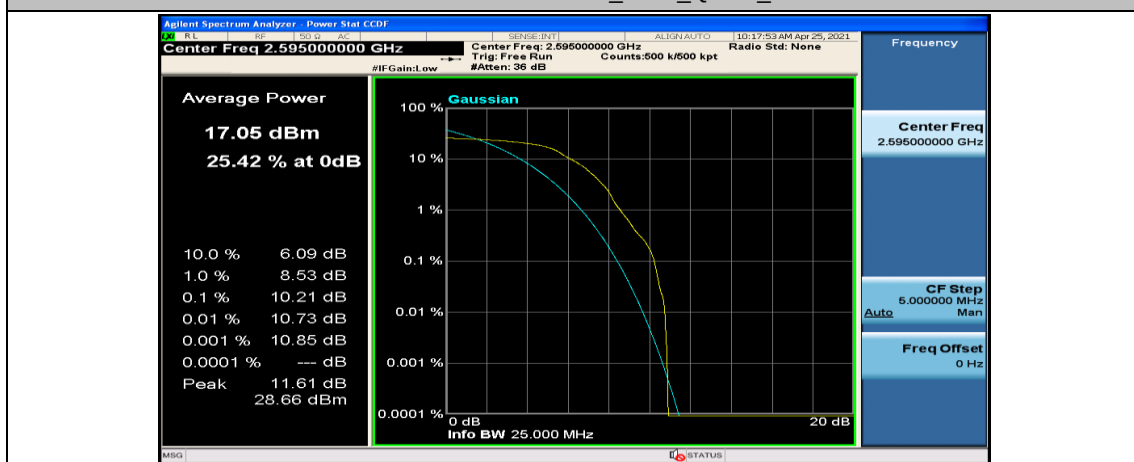
Channel Bandwidth: 10 MHz



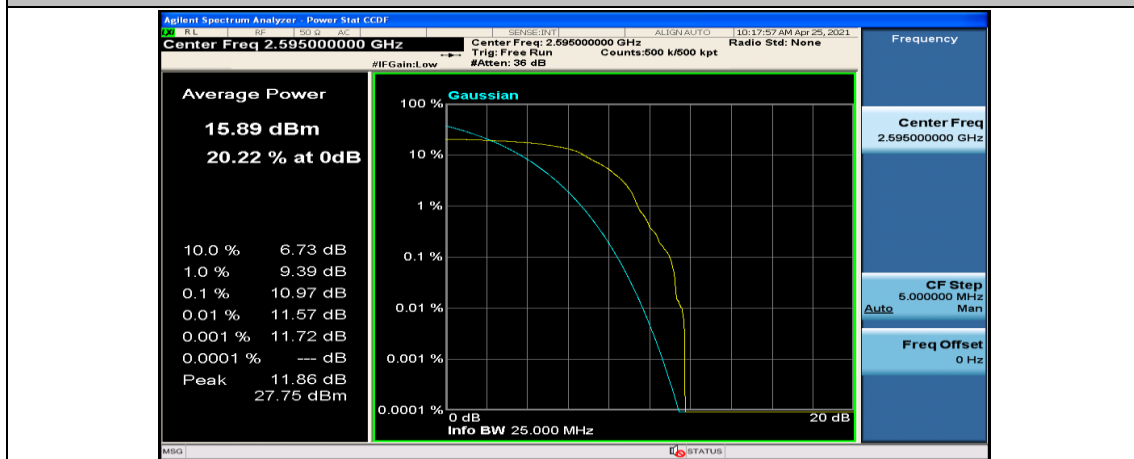




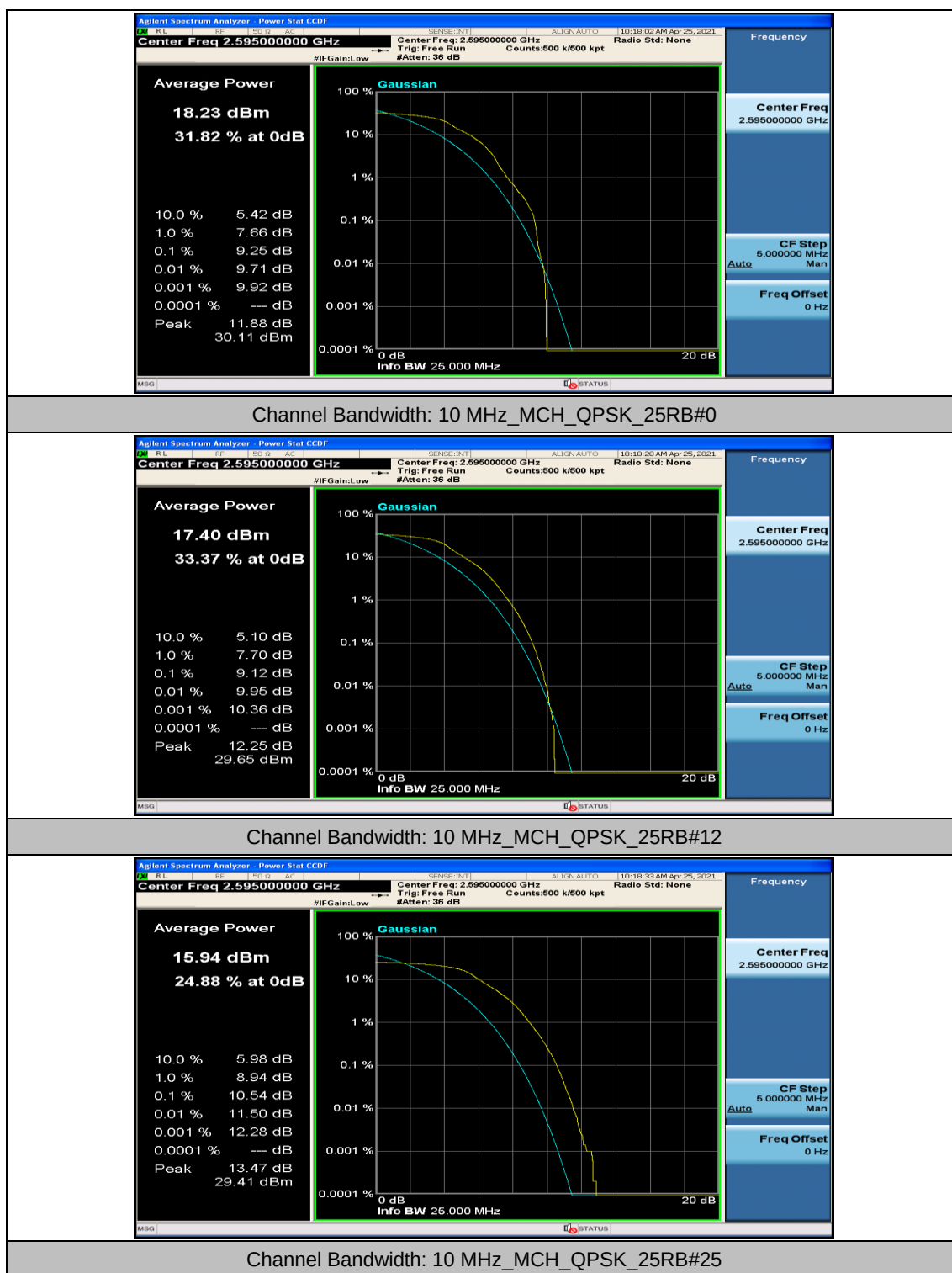
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0

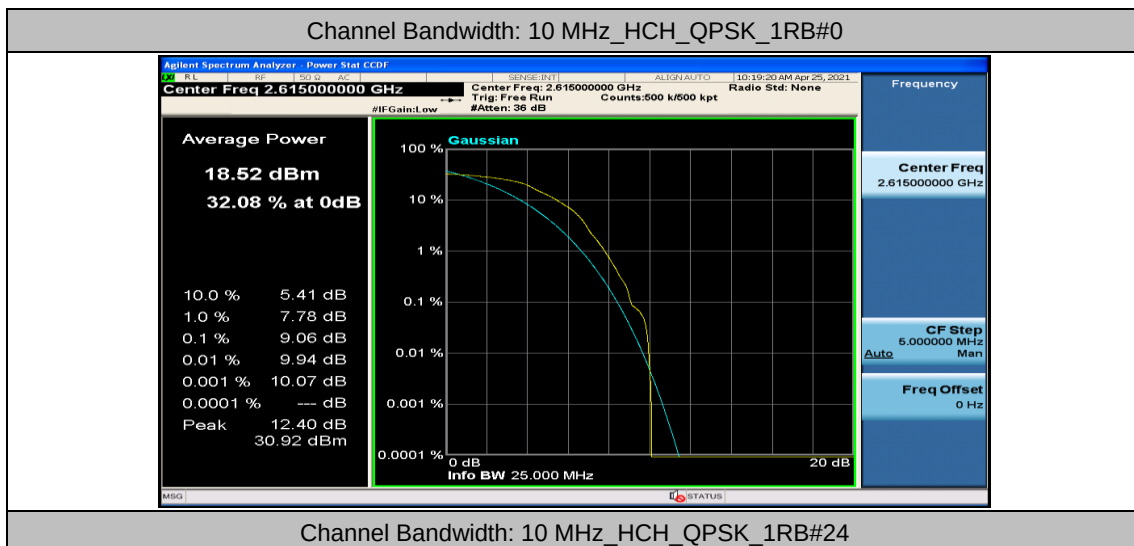
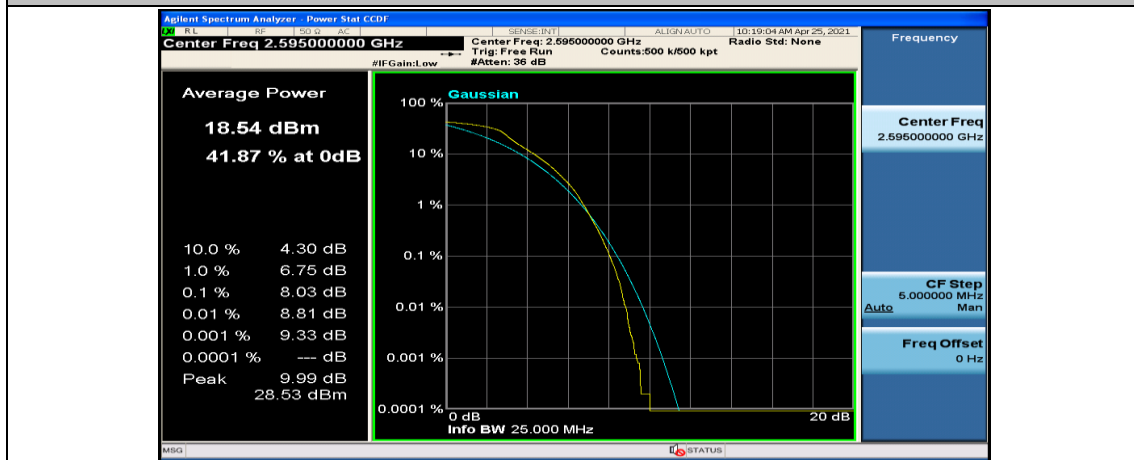
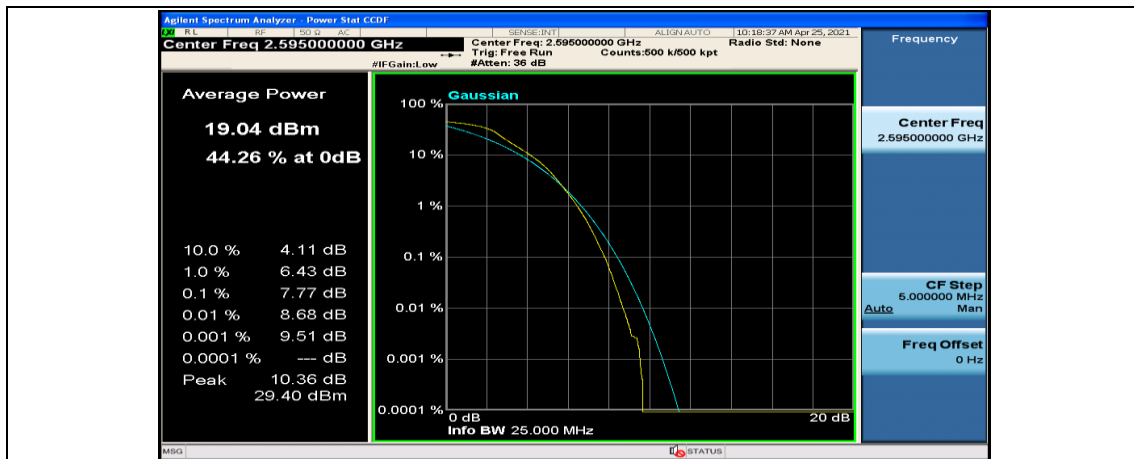


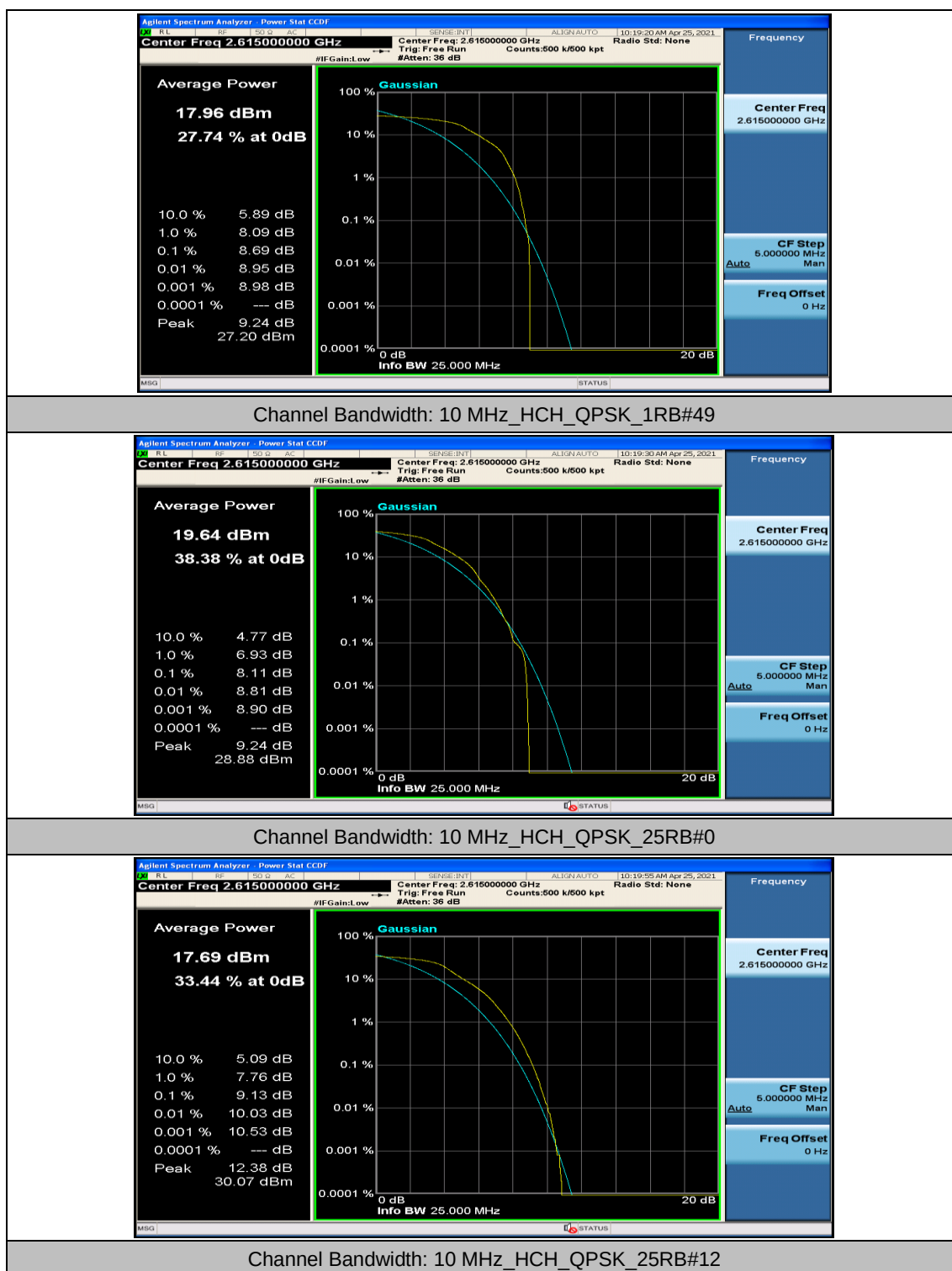
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

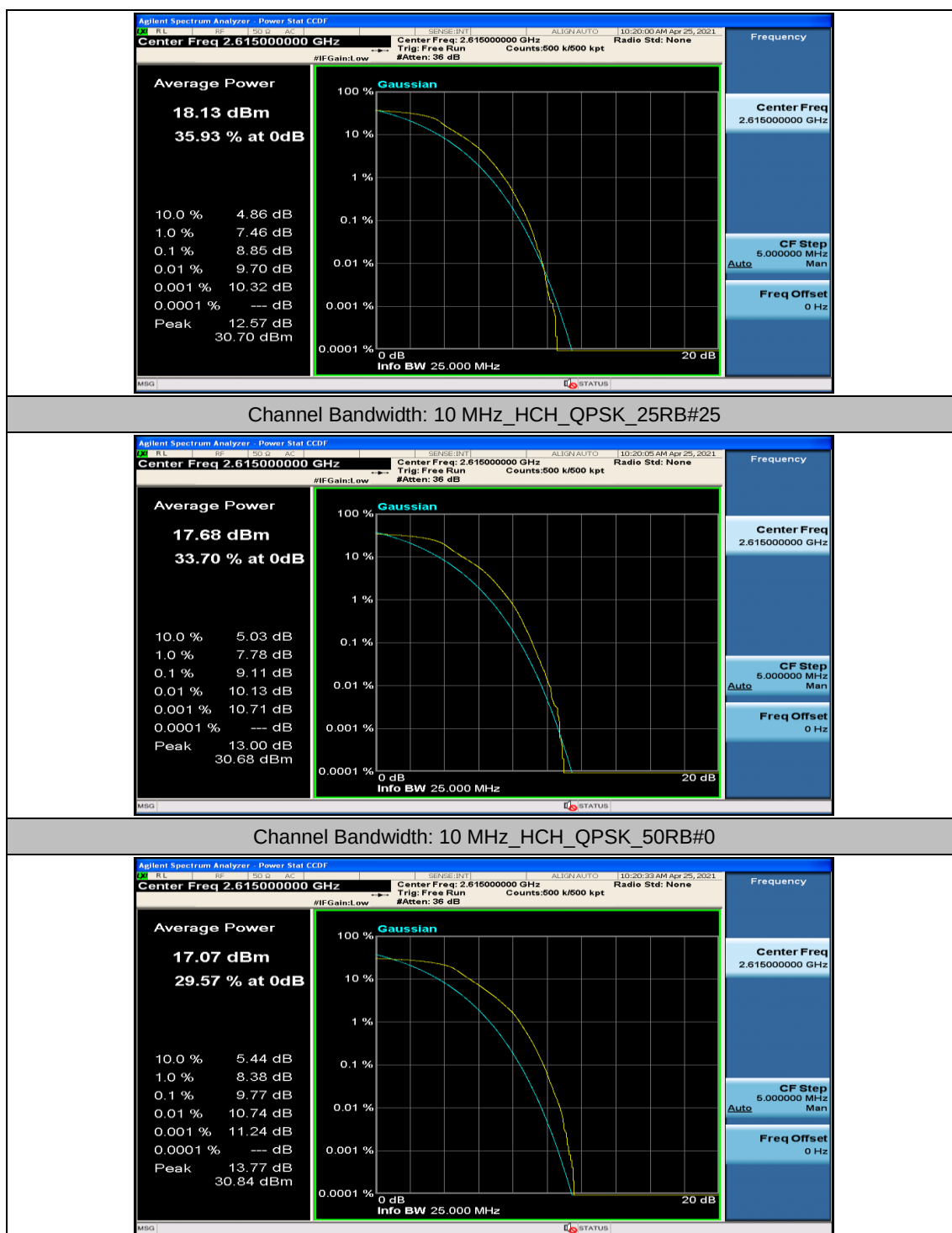


Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49

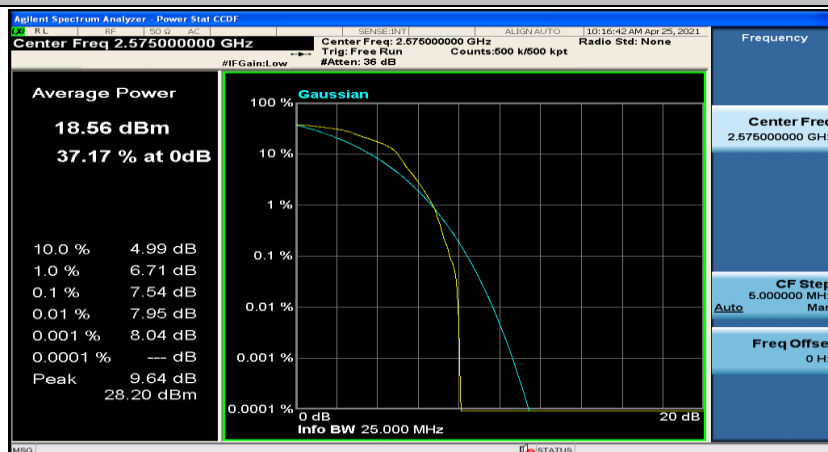




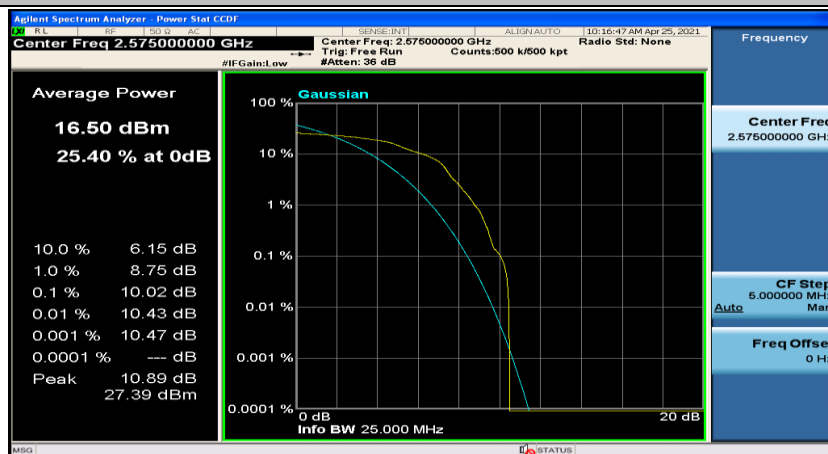




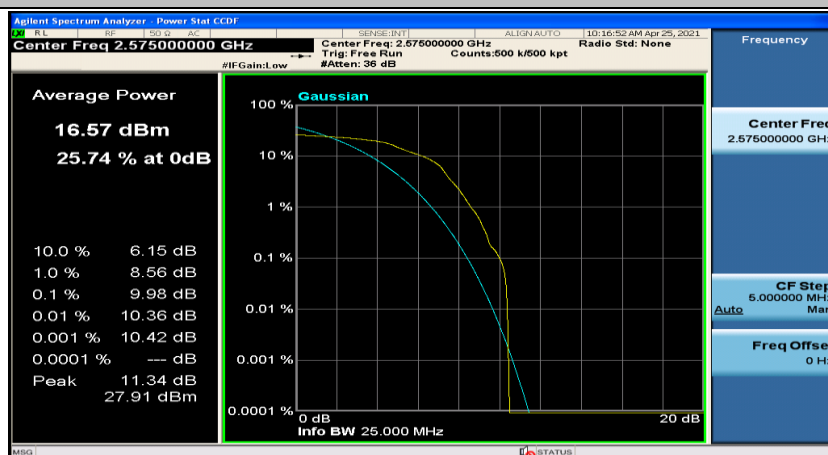
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#0



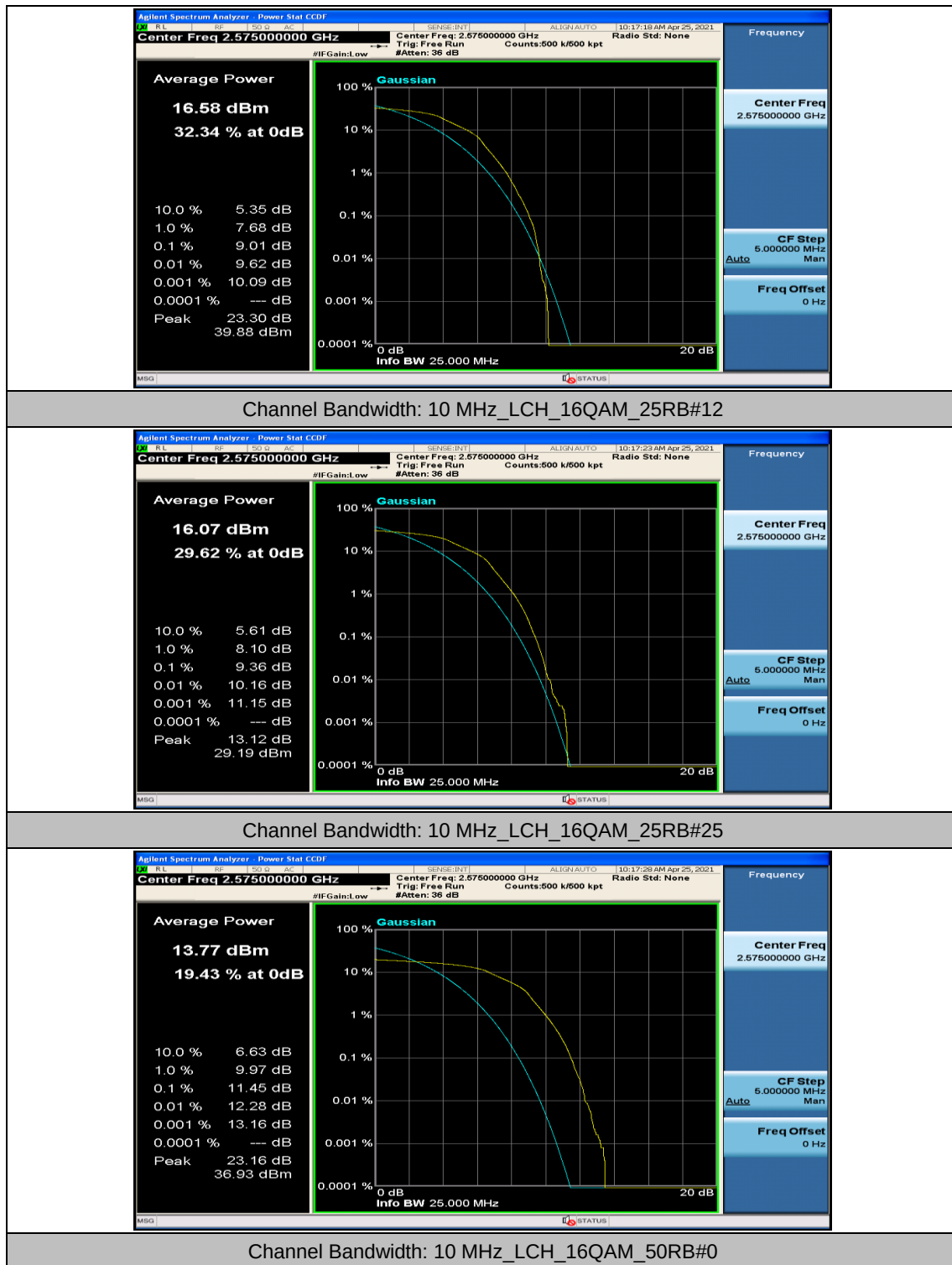
Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#24

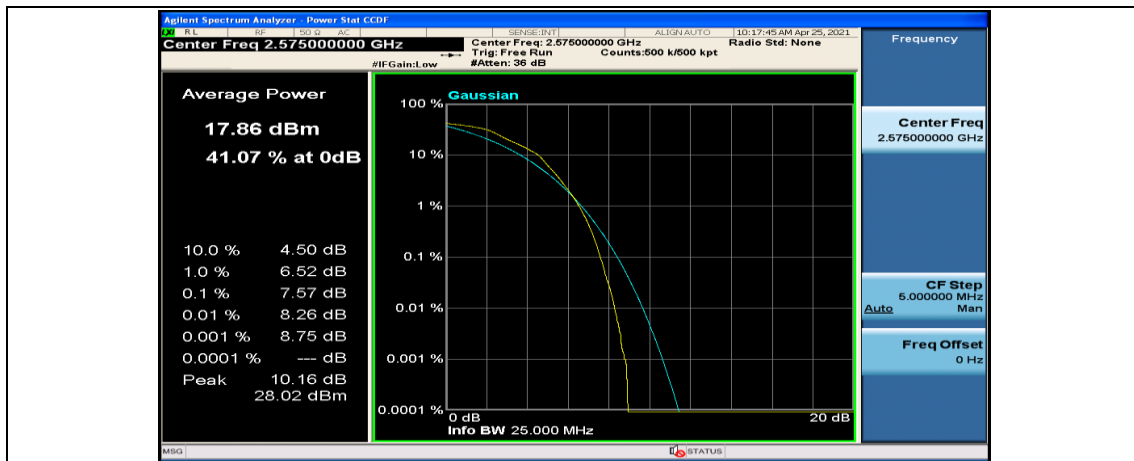


Channel Bandwidth: 10 MHz_LCH_16QAM_1RB#49

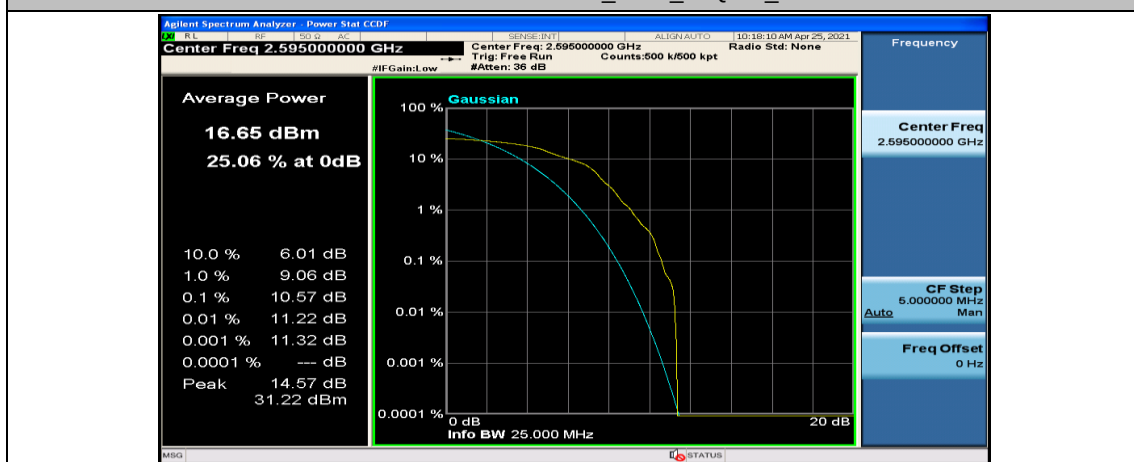


Channel Bandwidth: 10 MHz_LCH_16QAM_25RB#0

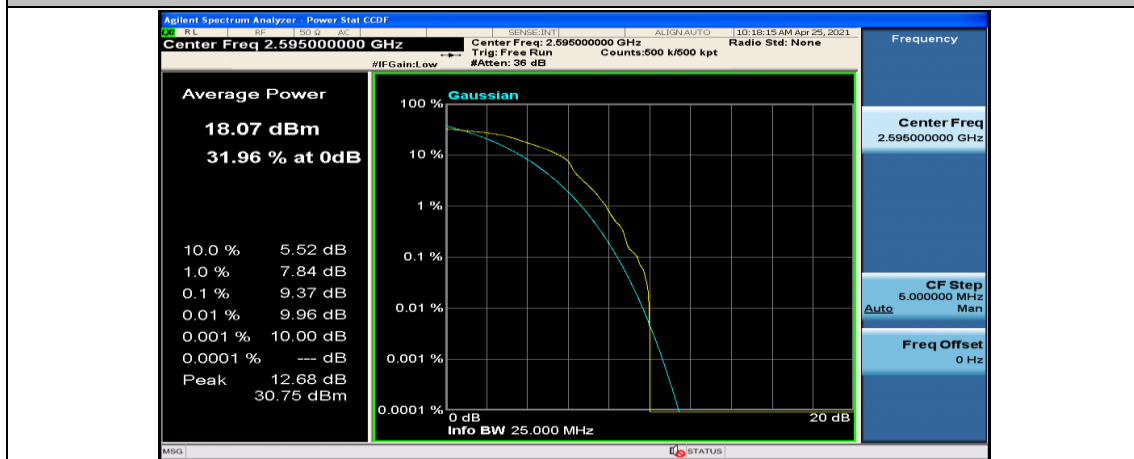




Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49

