

Appendix for Band 13

Product Name: 4G Power Socket
Model No: GSMSOCUS4G

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	23.74	PASS
		1	12	23.97	PASS
		1	24	23.91	PASS
		12	0	22.87	PASS
		12	6	23.01	PASS
		12	13	23.04	PASS
		25	0	22.79	PASS
	MCH	1	0	24.00	PASS
		1	12	24.19	PASS
		1	24	23.45	PASS
		12	0	22.85	PASS
		12	6	22.87	PASS
		12	13	22.58	PASS
		25	0	22.73	PASS
	HCH	1	0	23.53	PASS
		1	12	23.53	PASS
		1	24	23.83	PASS
		12	0	22.75	PASS
		12	6	22.73	PASS
		12	13	22.80	PASS
		25	0	22.74	PASS
16QAM	LCH	1	0	22.85	PASS
		1	12	22.97	PASS
		1	24	22.93	PASS
		12	0	21.60	PASS
		12	6	21.97	PASS
		12	13	21.99	PASS
		25	0	22.02	PASS
	MCH	1	0	23.22	PASS
		1	12	23.27	PASS
		1	24	22.09	PASS
		12	0	22.00	PASS
		12	6	22.02	PASS

		12	13	21.55	PASS
		25	0	21.80	PASS
	HCH	1	0	22.56	PASS
		1	12	22.04	PASS
		1	24	22.28	PASS
		12	0	21.69	PASS
		12	6	21.40	PASS
		12	13	21.45	PASS
		25	0	21.72	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	MCH	1	0	23.82	PASS
		1	24	24.28	PASS
		1	49	23.45	PASS
		25	0	23.06	PASS
		25	12	23.02	PASS
		25	25	22.64	PASS
		50	0	22.76	PASS
16QAM	MCH	1	0	23.22	PASS
		1	24	24.06	PASS
		1	49	22.86	PASS
		25	0	21.86	PASS
		25	12	21.74	PASS
		25	25	21.61	PASS
		50	0	21.83	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	3.92	<13	PASS
		1	12	4.08	<13	PASS
		1	24	4.1	<13	PASS
		12	0	5.38	<13	PASS
		12	6	5.48	<13	PASS
		12	13	5.77	<13	PASS
		25	0	5.88	<13	PASS
	MCH	1	0	4.1	<13	PASS
		1	12	4	<13	PASS
		1	24	3.92	<13	PASS
		12	0	5.66	<13	PASS
		12	6	5.45	<13	PASS
		12	13	5.33	<13	PASS
		25	0	5.66	<13	PASS
	HCH	1	0	3.99	<13	PASS
		1	12	3.86	<13	PASS
		1	24	4.17	<13	PASS
		12	0	5.39	<13	PASS
		12	6	5.28	<13	PASS
		12	13	5.52	<13	PASS
		25	0	5.78	<13	PASS
16QAM	LCH	1	0	4.62	<13	PASS
		1	12	4.85	<13	PASS
		1	24	4.88	<13	PASS
		12	0	6.27	<13	PASS
		12	6	6.36	<13	PASS
		12	13	6.64	<13	PASS
		25	0	6.62	<13	PASS
	MCH	1	0	4.96	<13	PASS
		1	12	4.89	<13	PASS
		1	24	4.67	<13	PASS
		12	0	6.58	<13	PASS

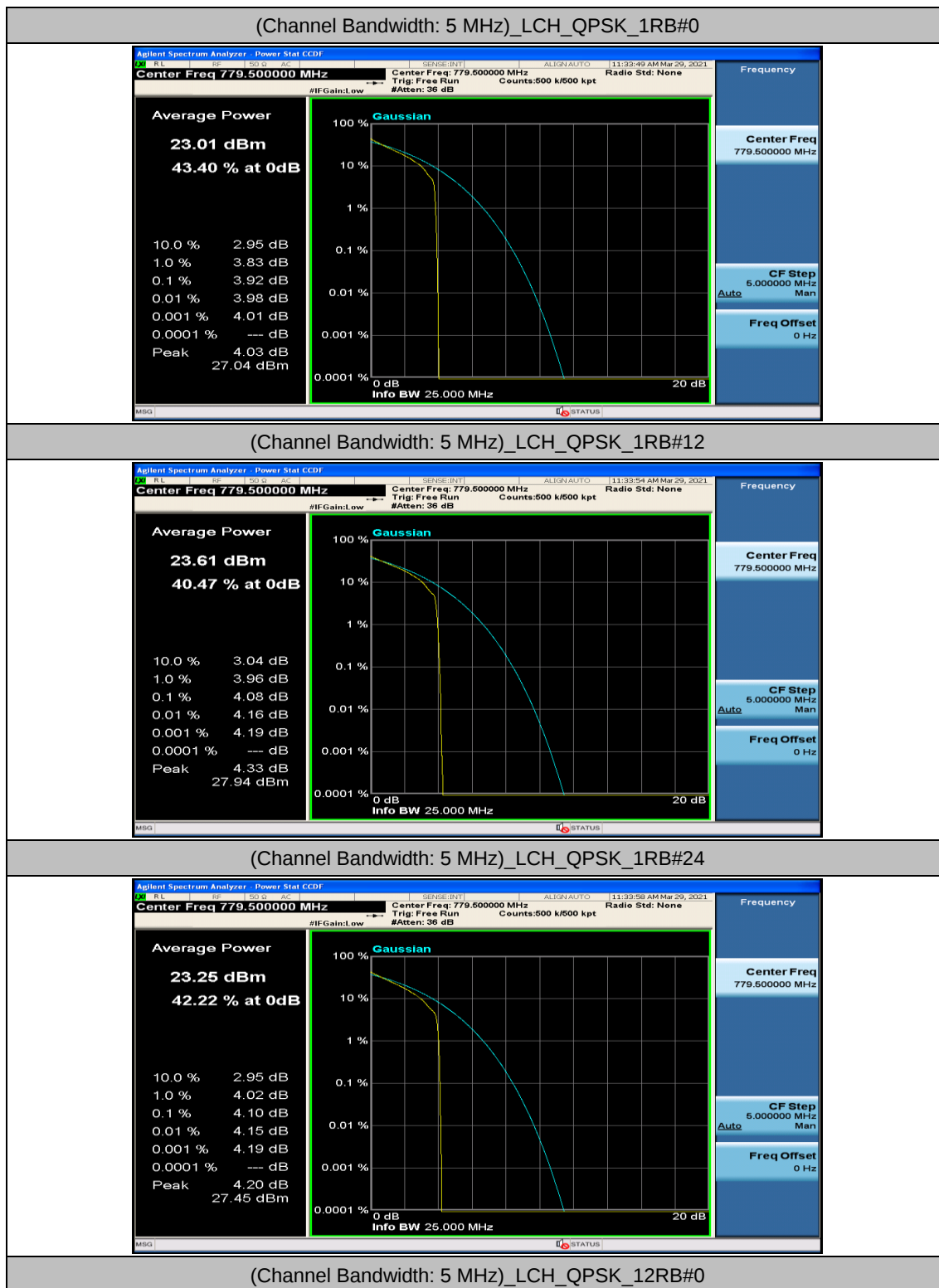
		12	6	6.36	<13	PASS
		12	13	6.22	<13	PASS
		25	0	6.65	<13	PASS
	HCH	1	0	4.67	<13	PASS
		1	12	4.56	<13	PASS
		1	24	4.81	<13	PASS
		12	0	6.23	<13	PASS
		12	6	6.14	<13	PASS
		12	13	6.38	<13	PASS
		25	0	6.61	<13	PASS

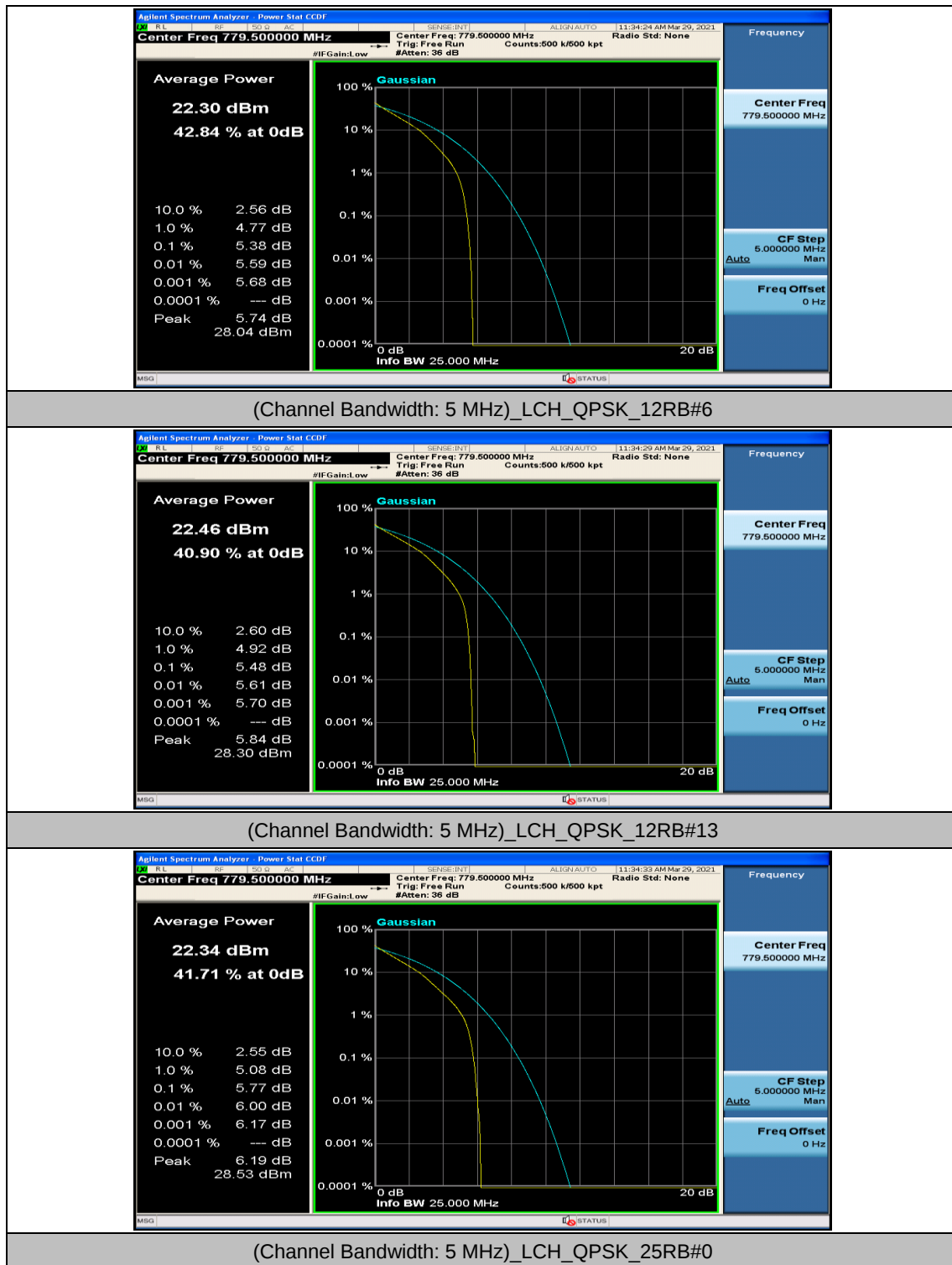
Channel Bandwidth: 10 MHz

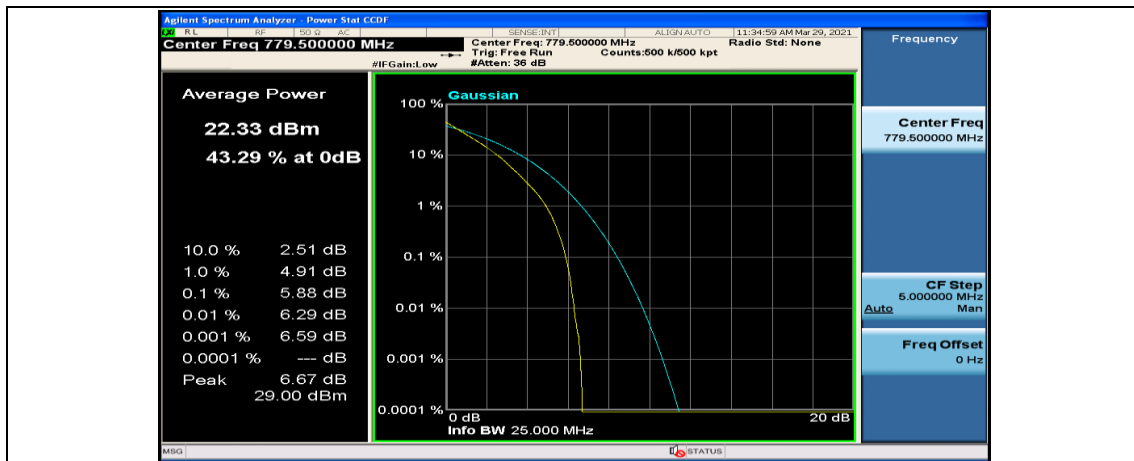
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Peak-to-Average Ratio [dB]	Limit [dB]	Verdict
		Size	Offset			
QPSK	MCH	1	0	3.82	<13	PASS
		1	24	3.99	<13	PASS
		1	49	4.1	<13	PASS
		25	0	5.56	<13	PASS
		25	12	5.35	<13	PASS
		25	25	5.49	<13	PASS
		50	0	5.46	<13	PASS
16QAM	MCH	1	0	4.59	<13	PASS
		1	24	4.78	<13	PASS
		1	49	4.9	<13	PASS
		25	0	6.42	<13	PASS
		25	12	6.28	<13	PASS
		25	25	6.36	<13	PASS
		50	0	6.38	<13	PASS

Test Graphs

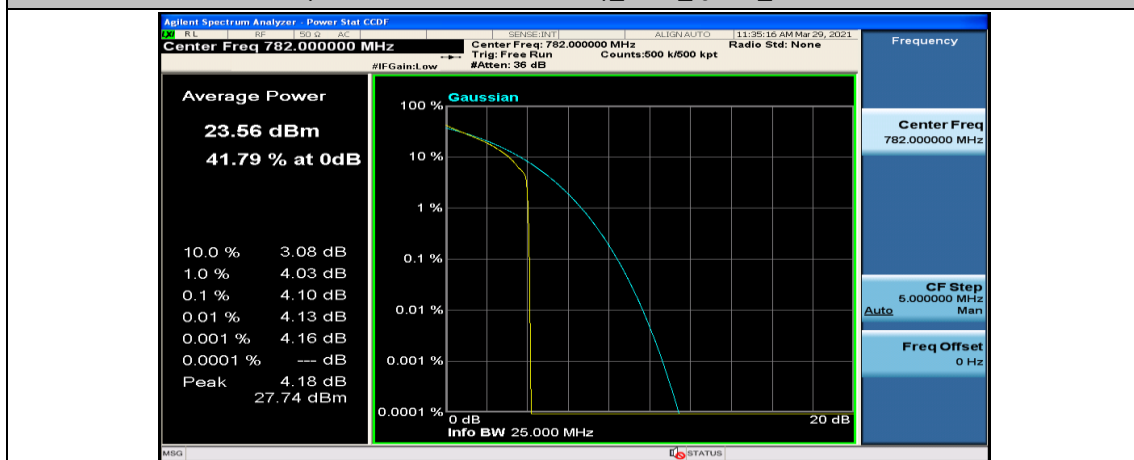
Channel Bandwidth: 5 MHz



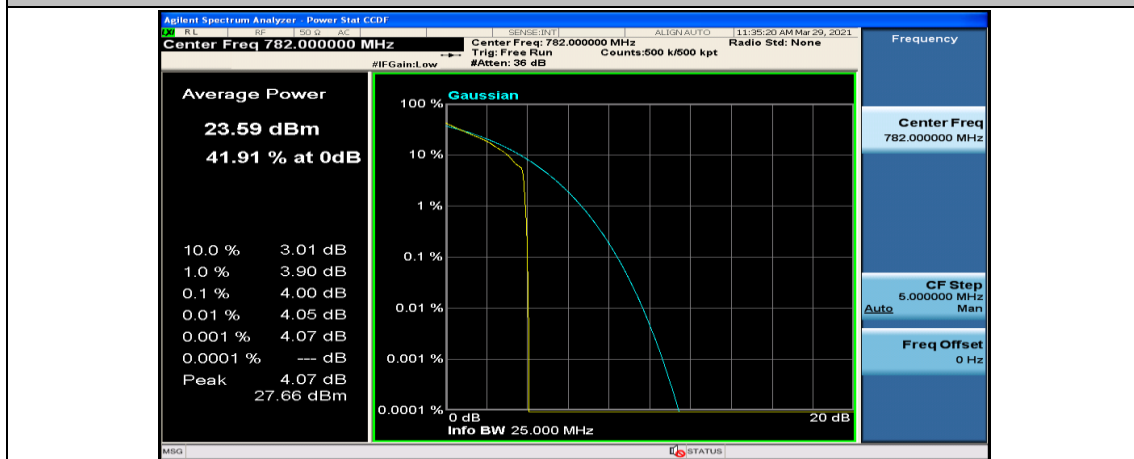




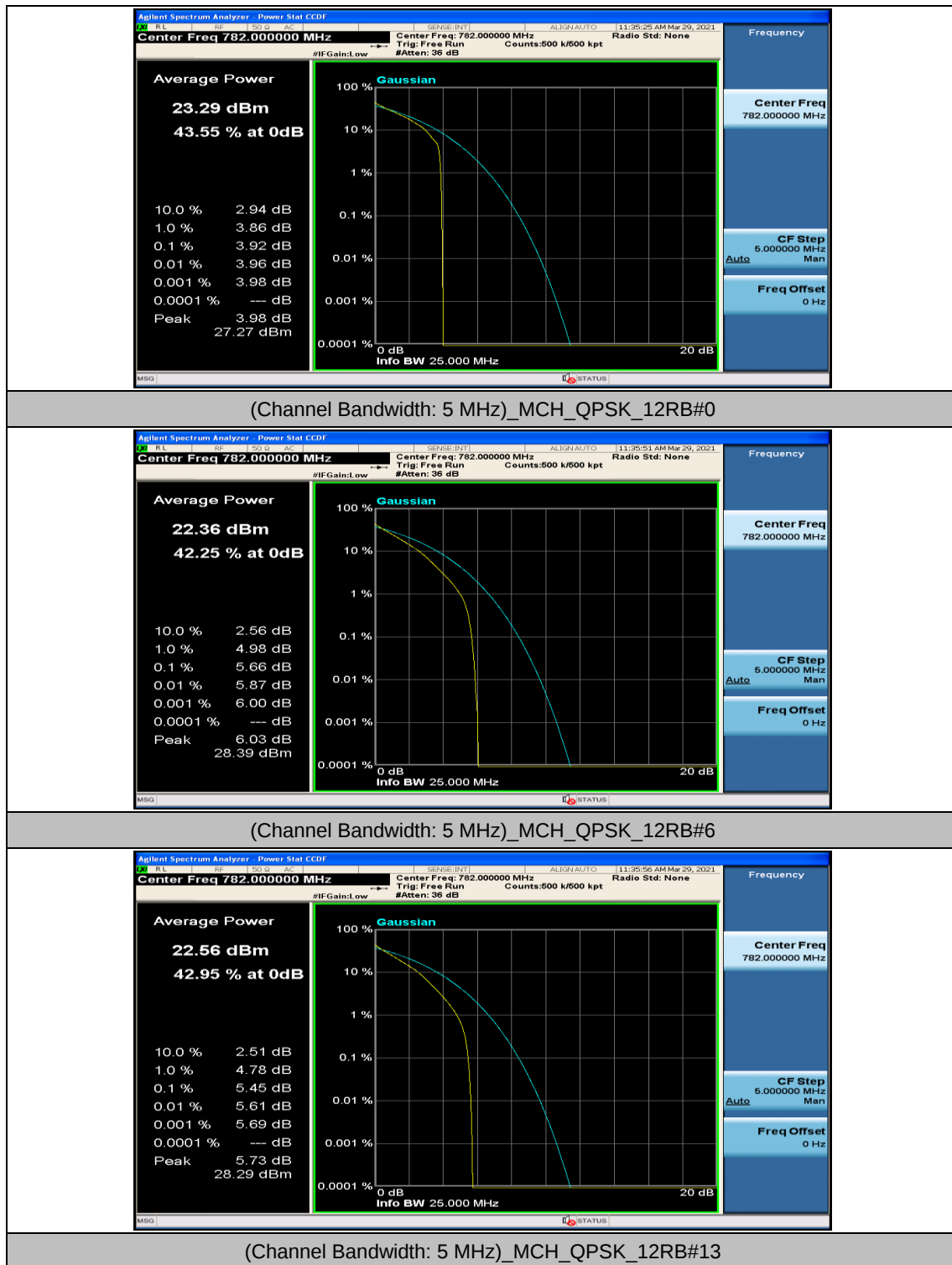
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#0

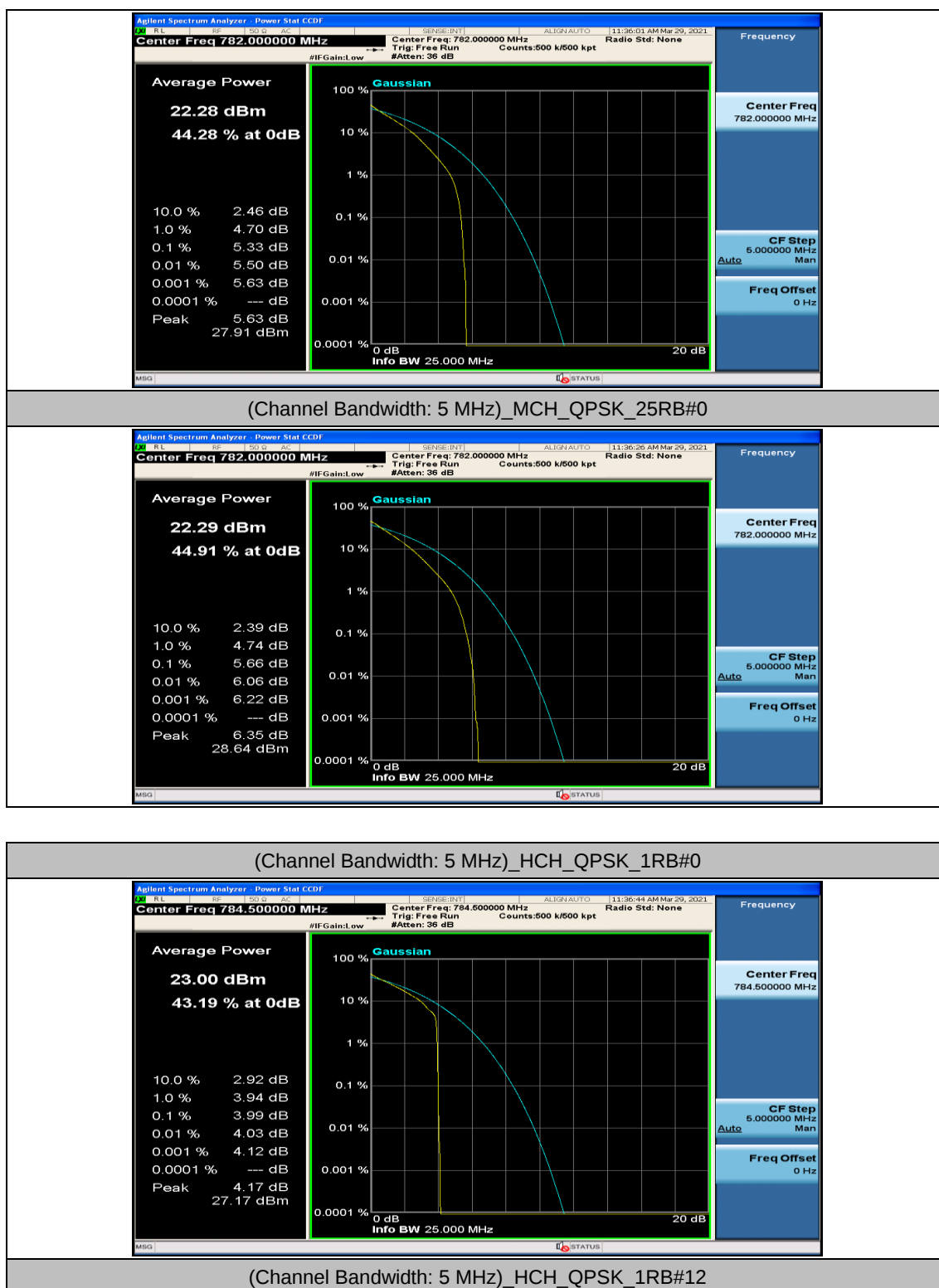


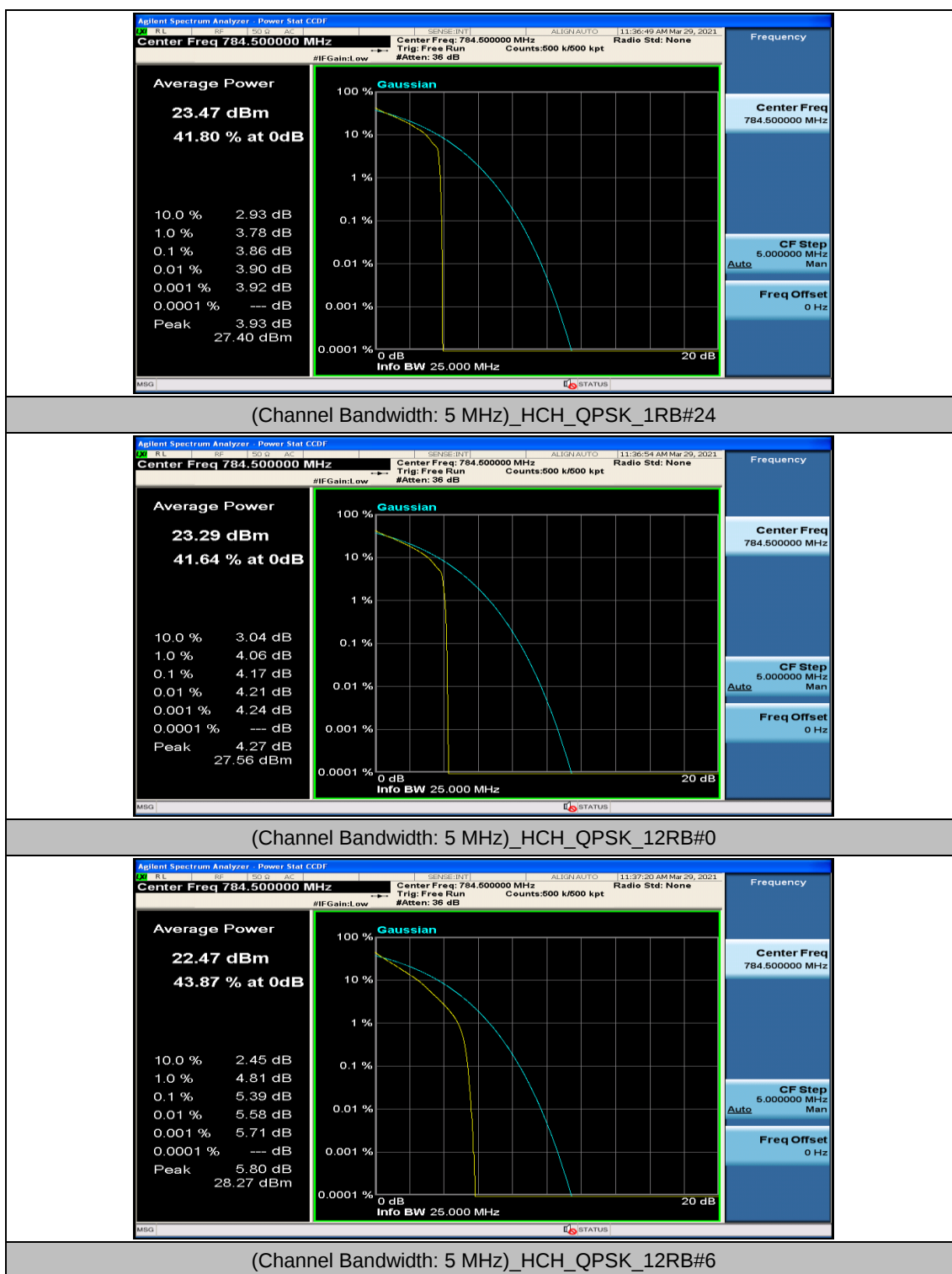
(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

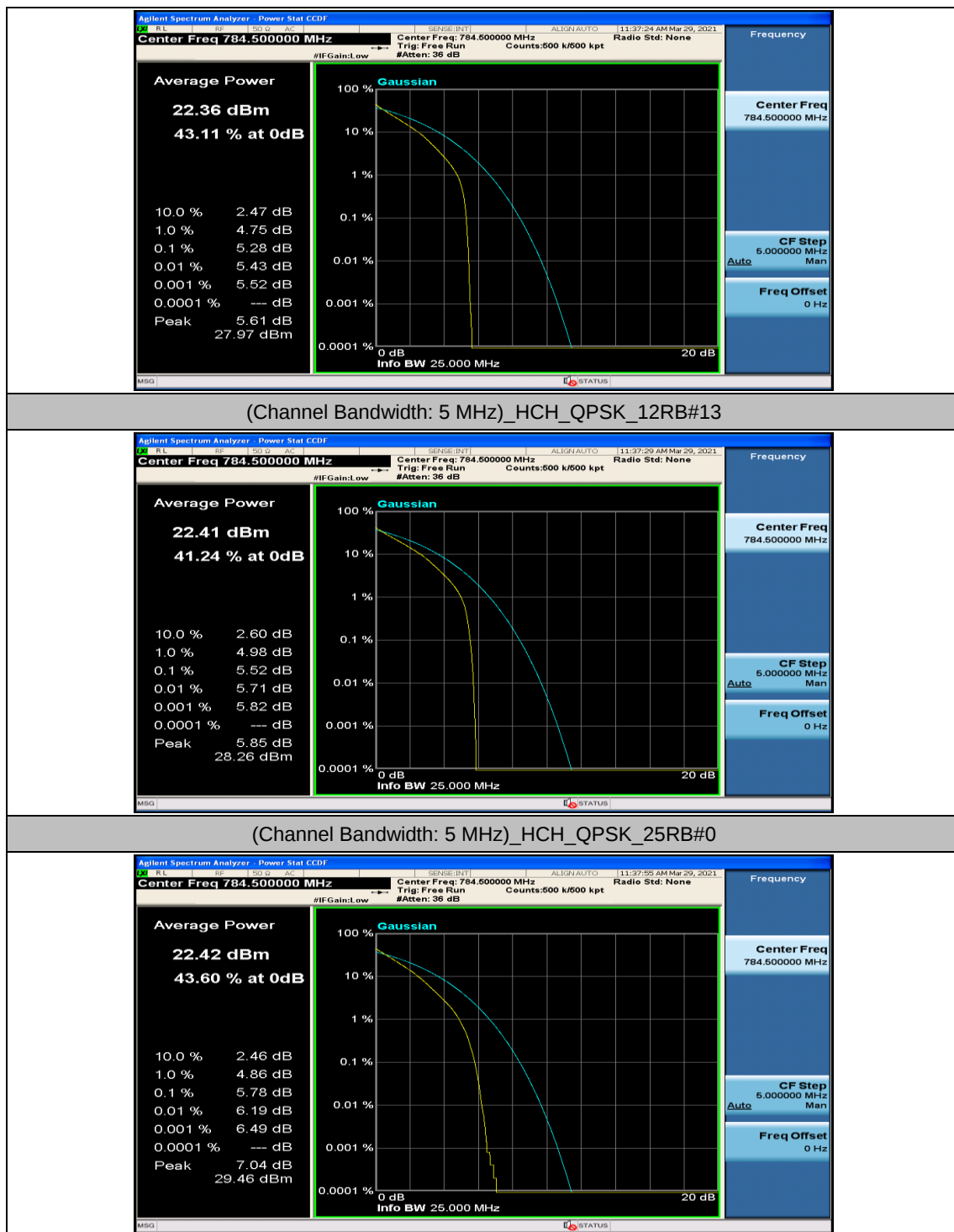


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24

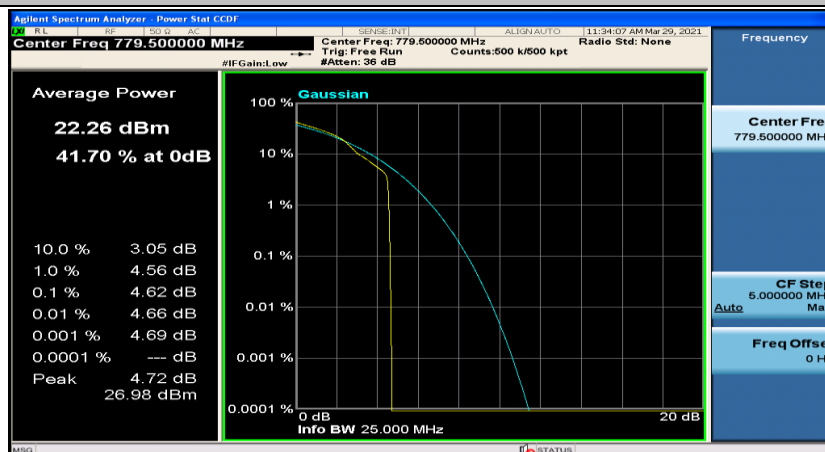




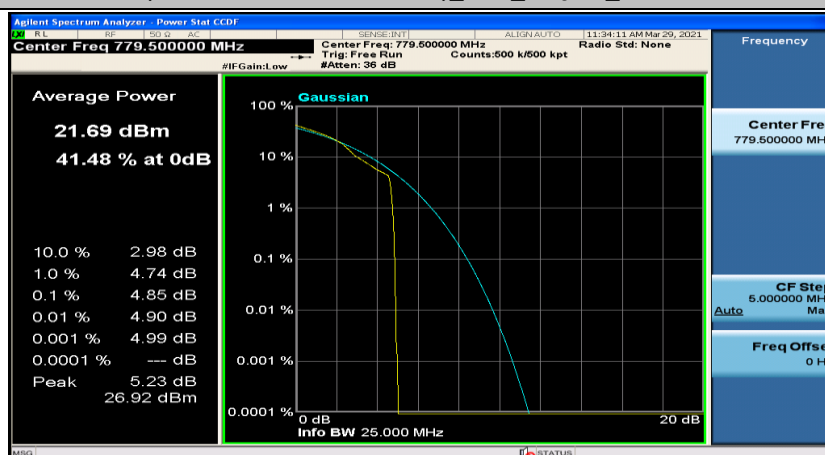




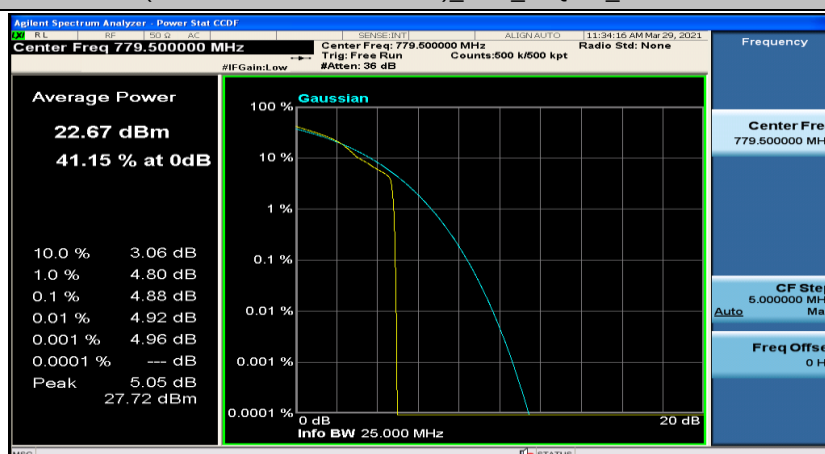
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0



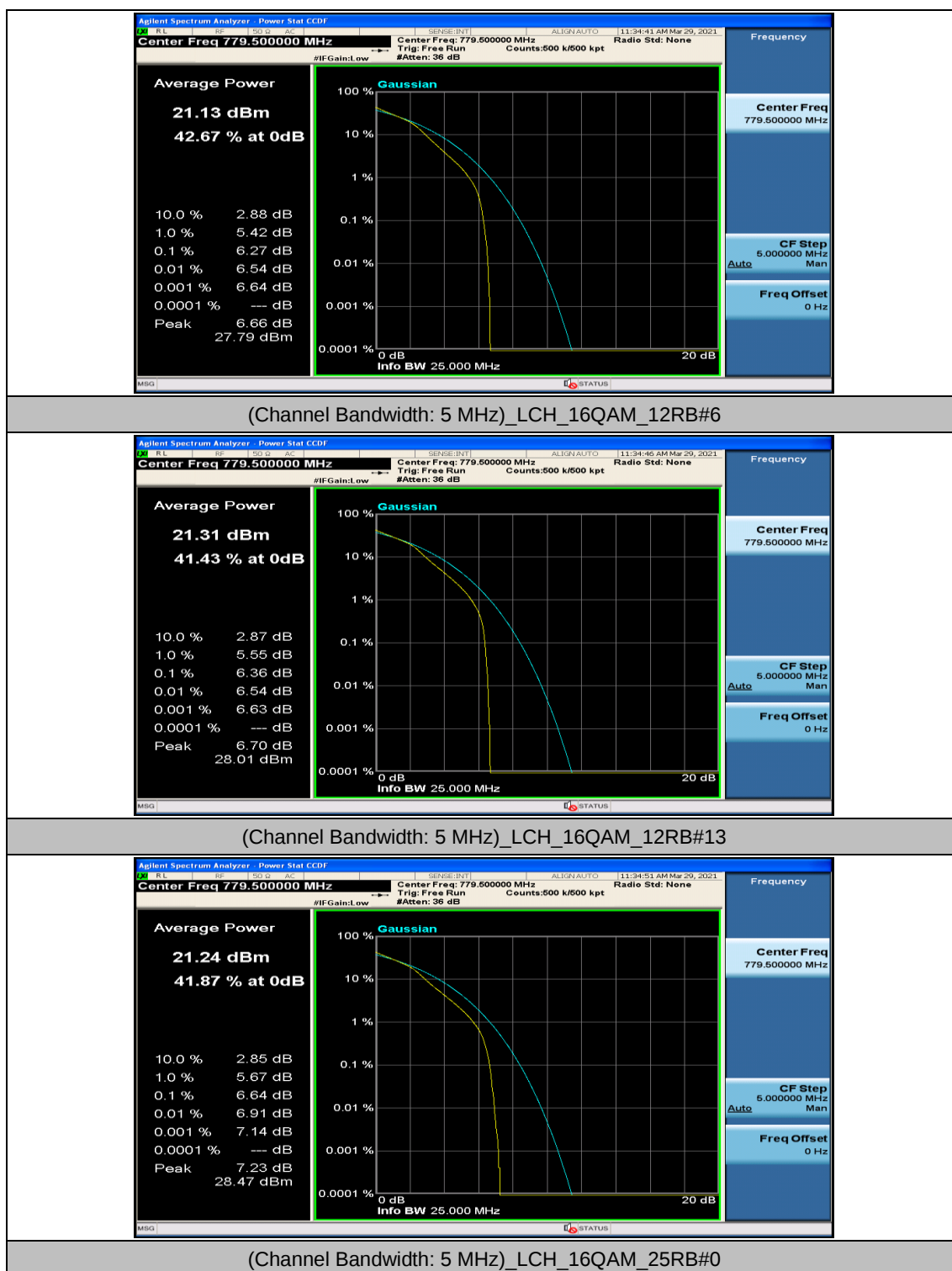
(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

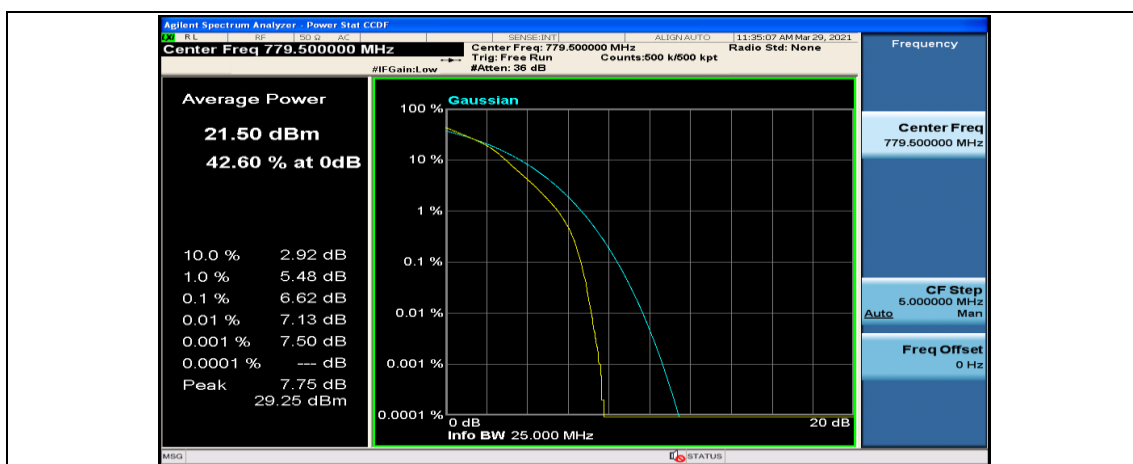


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#24

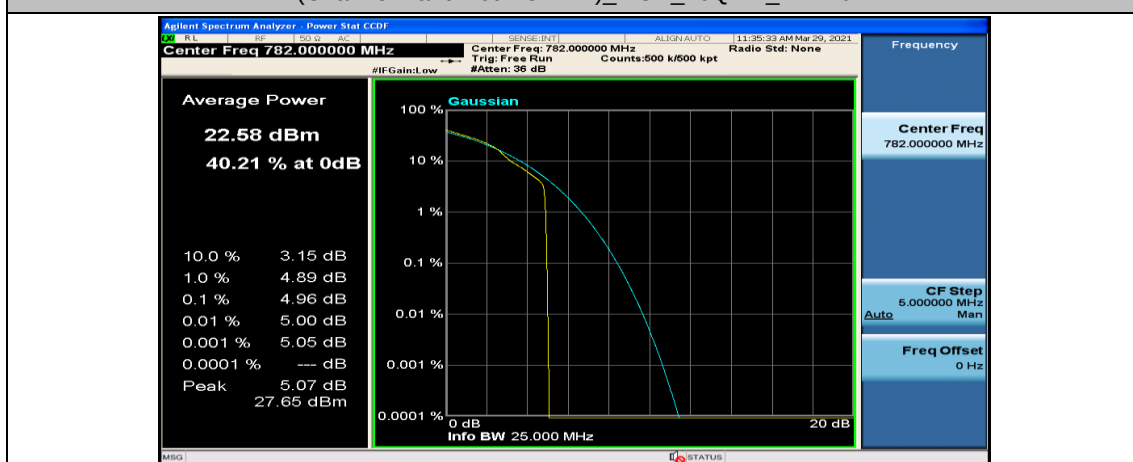


(Channel Bandwidth: 5 MHz)_LCH_16QAM_12RB#0

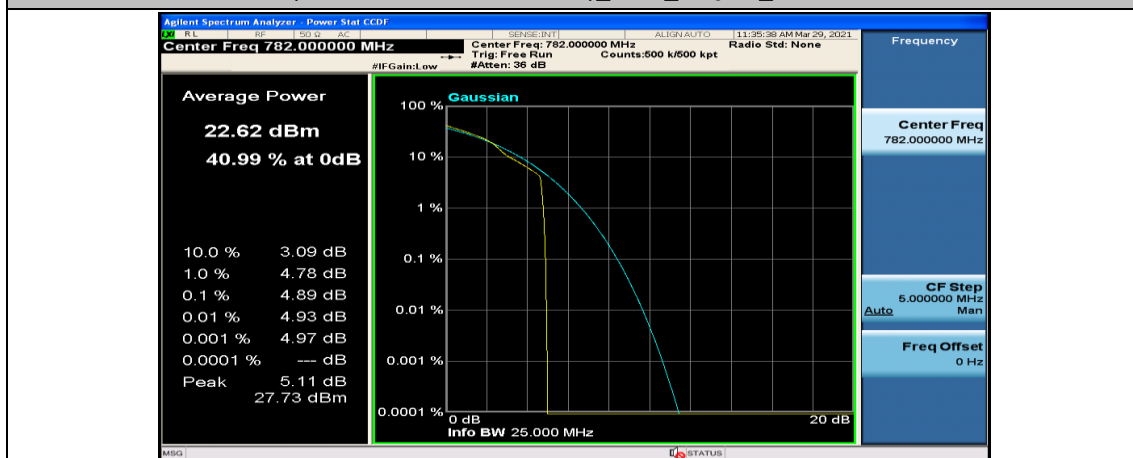




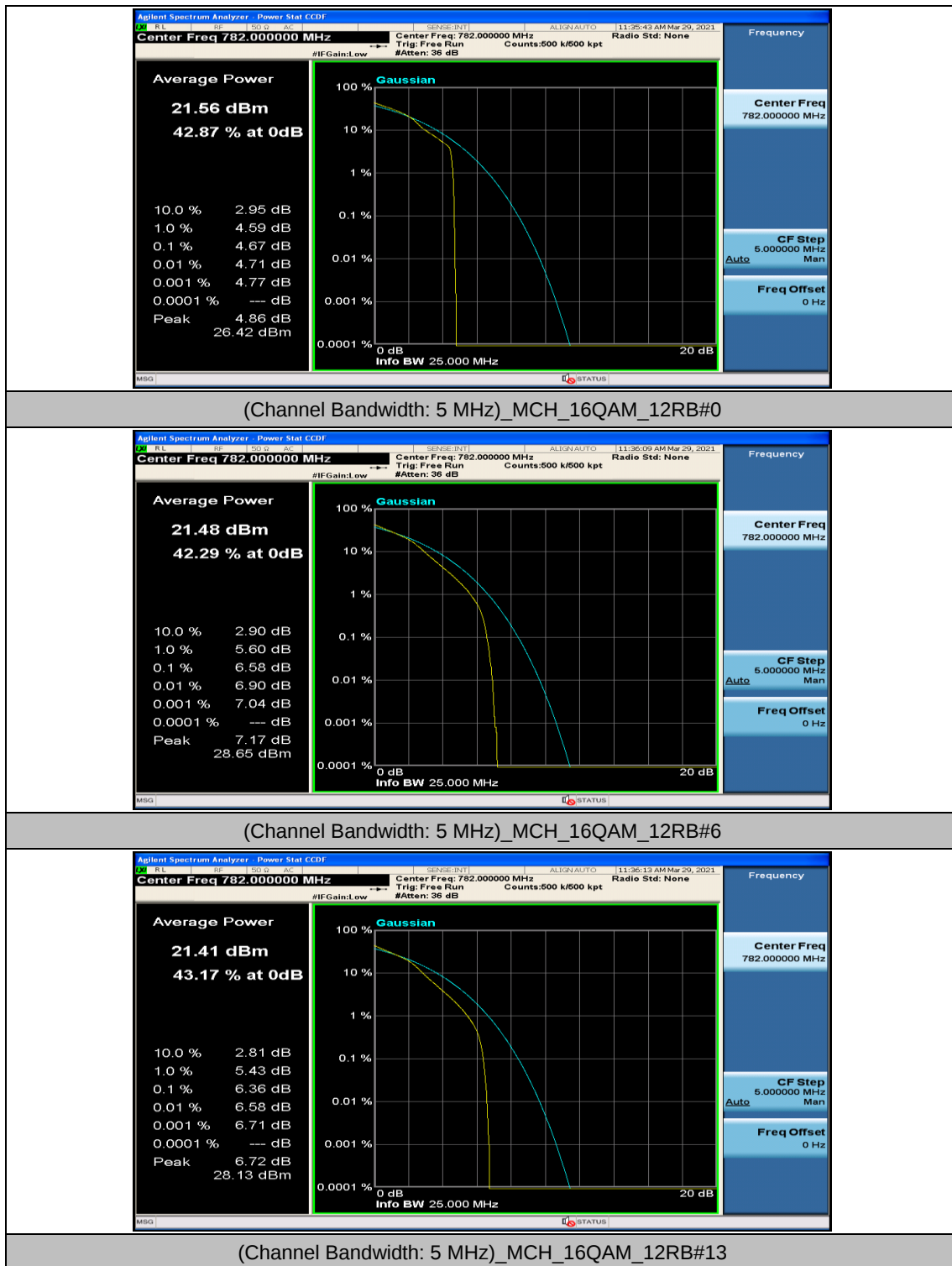
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

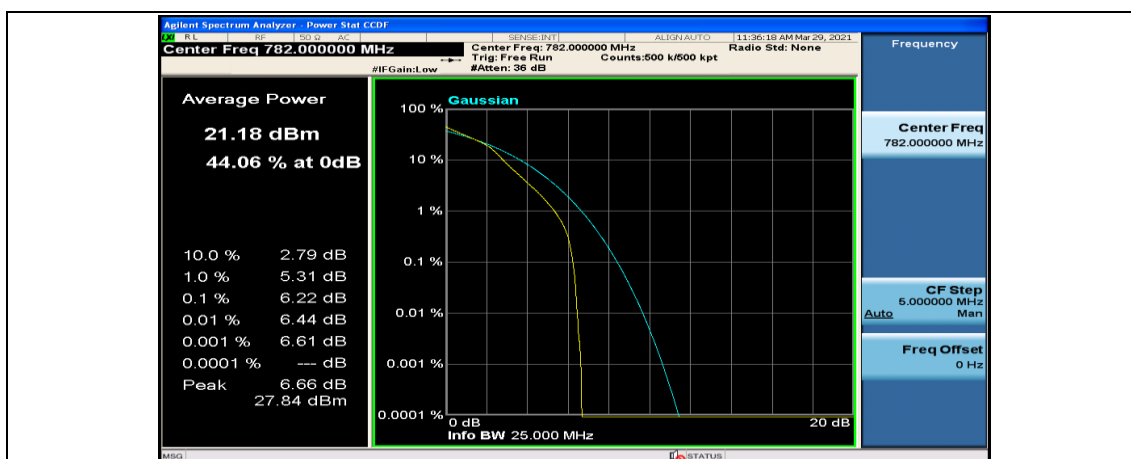


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

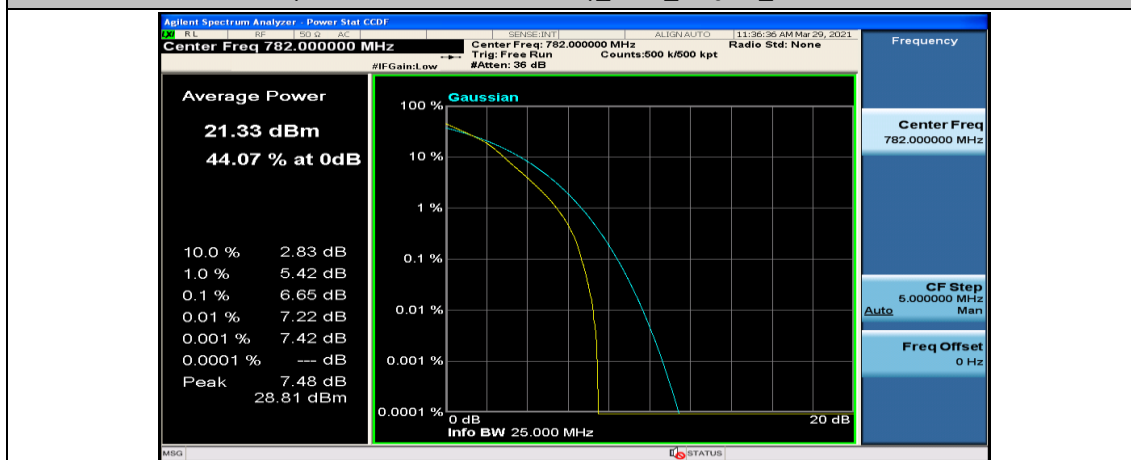


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

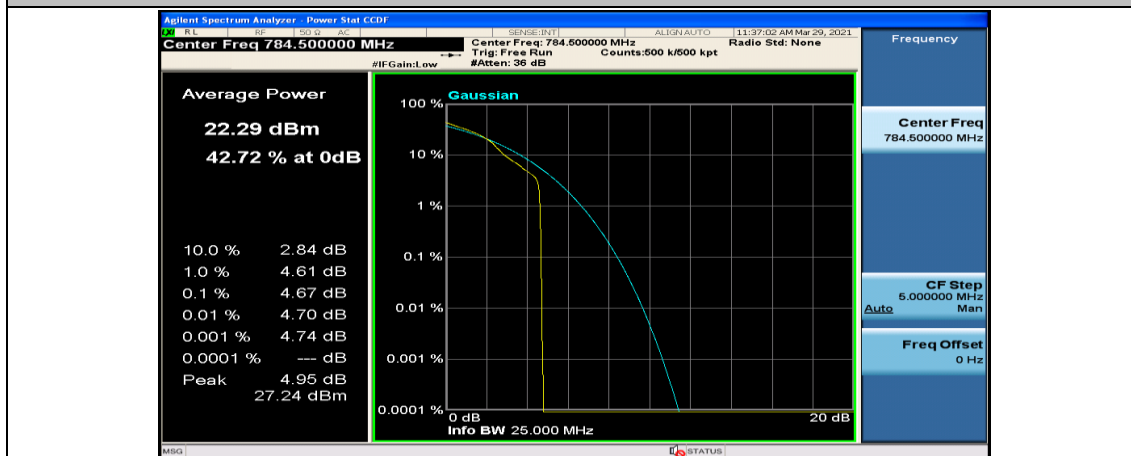




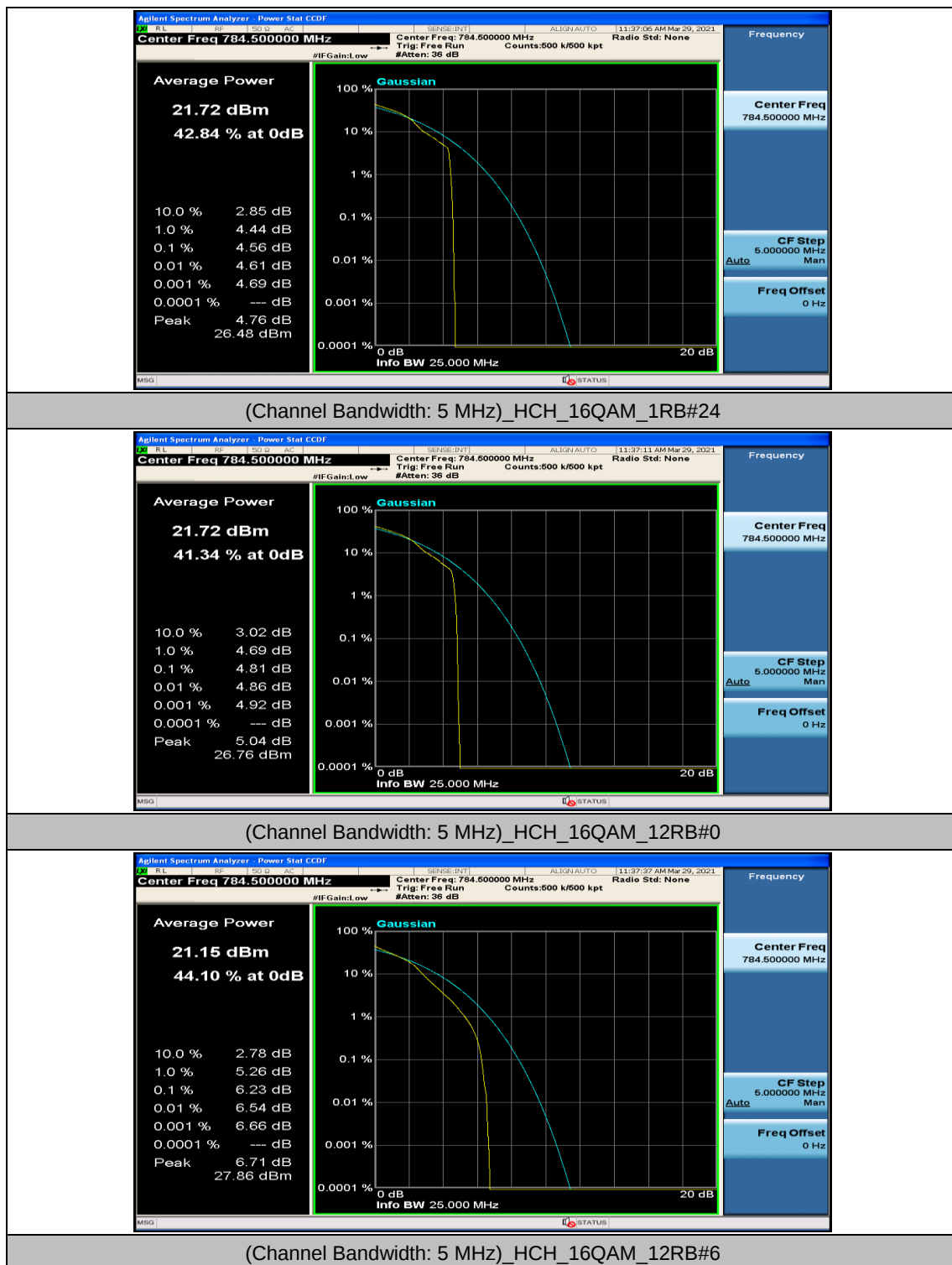
(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

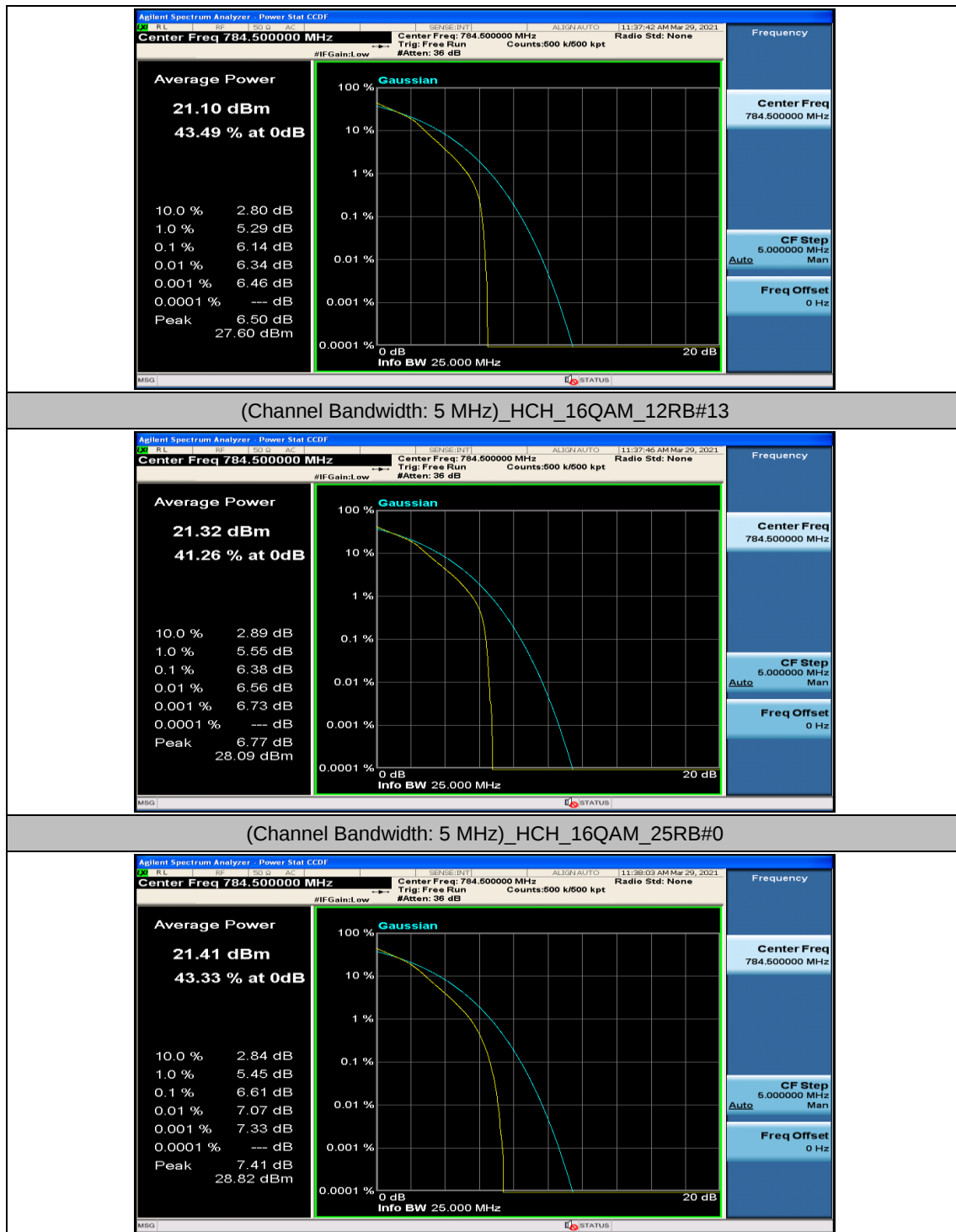


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0

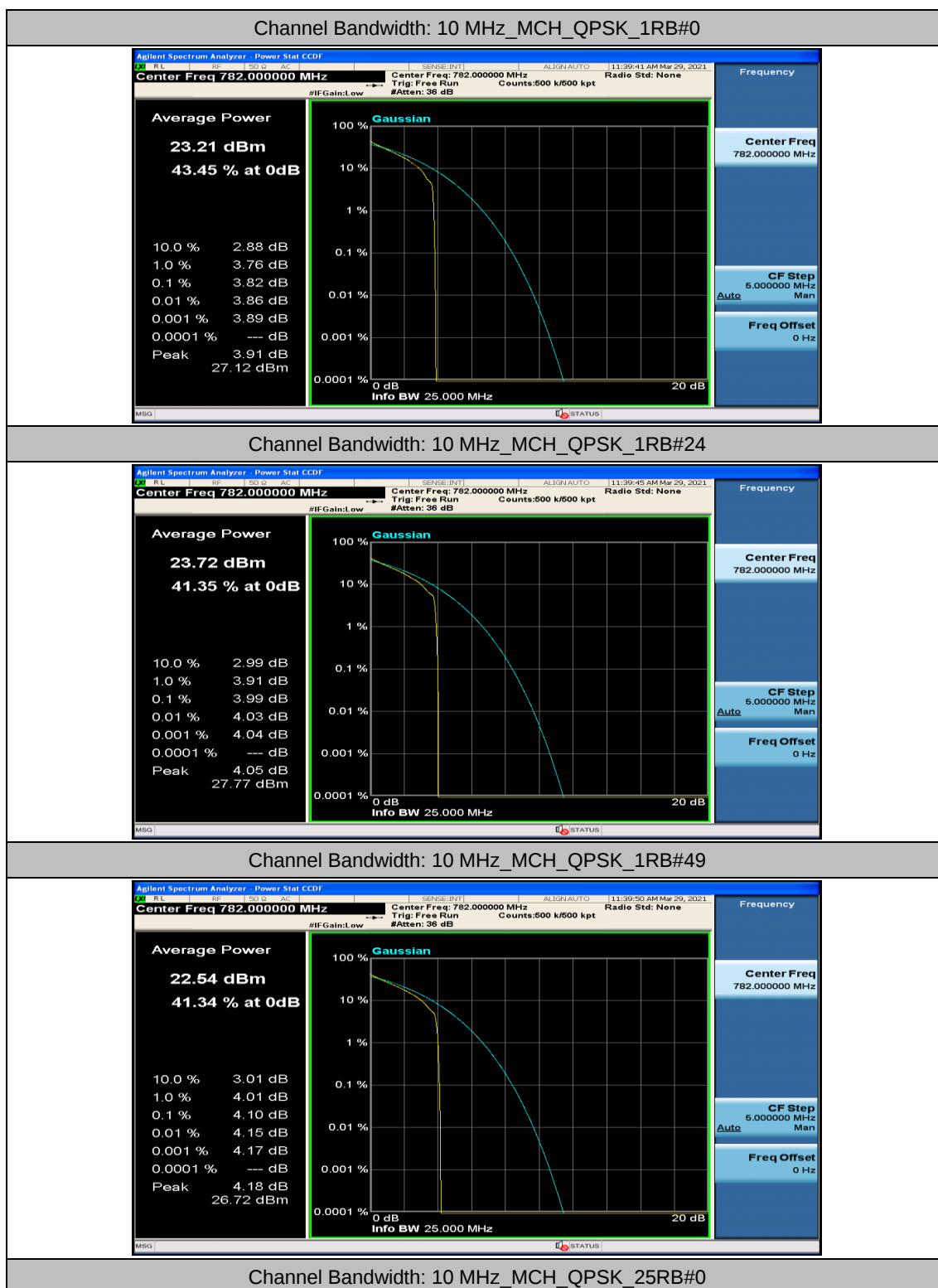


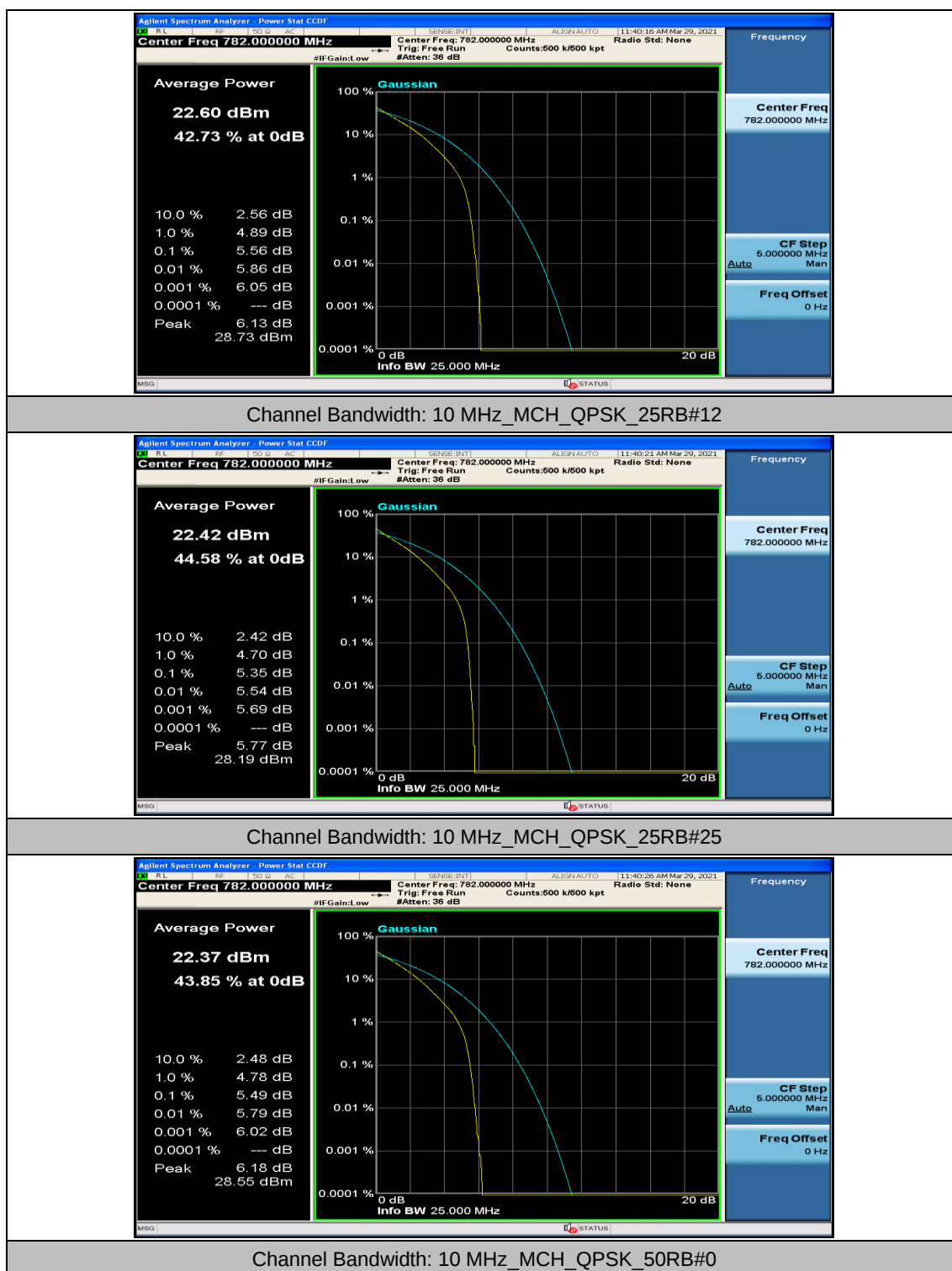
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12

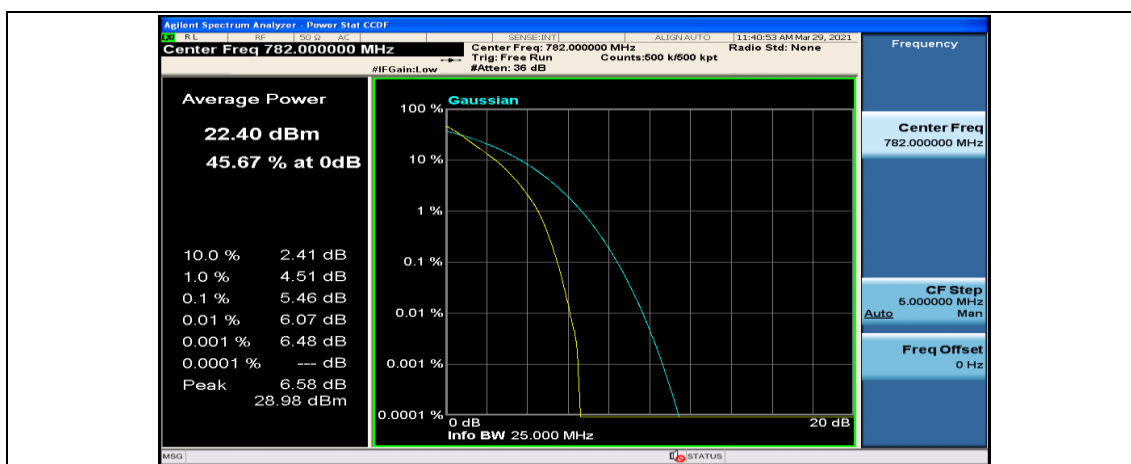




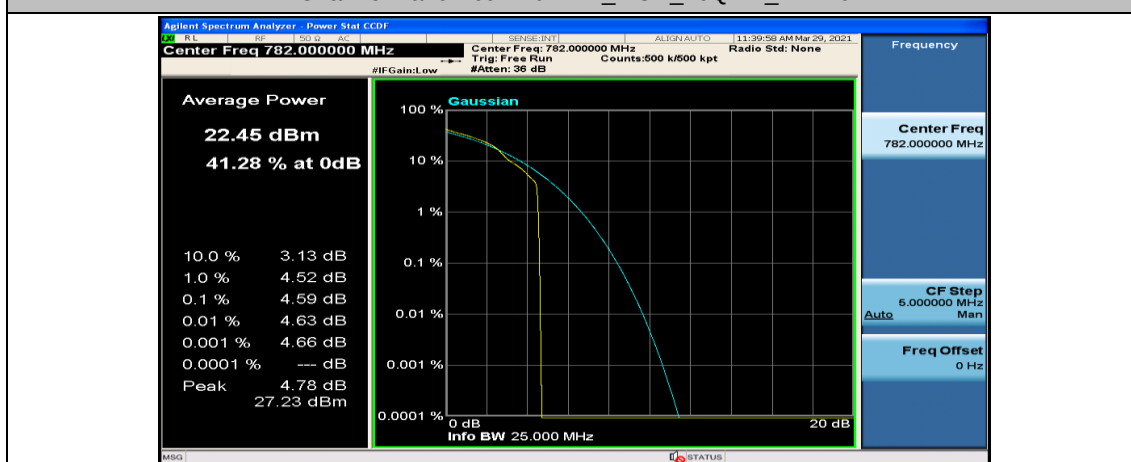
Channel Bandwidth: 10 MHz



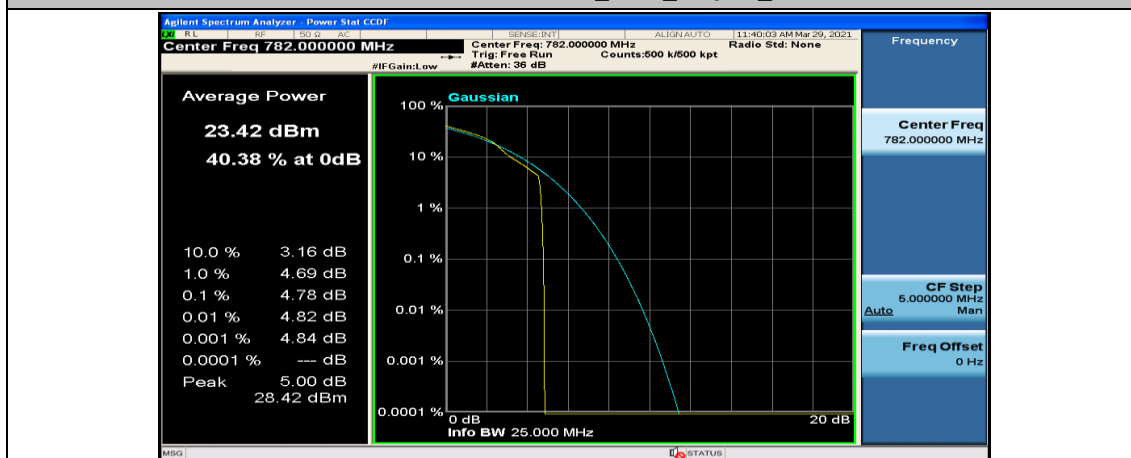




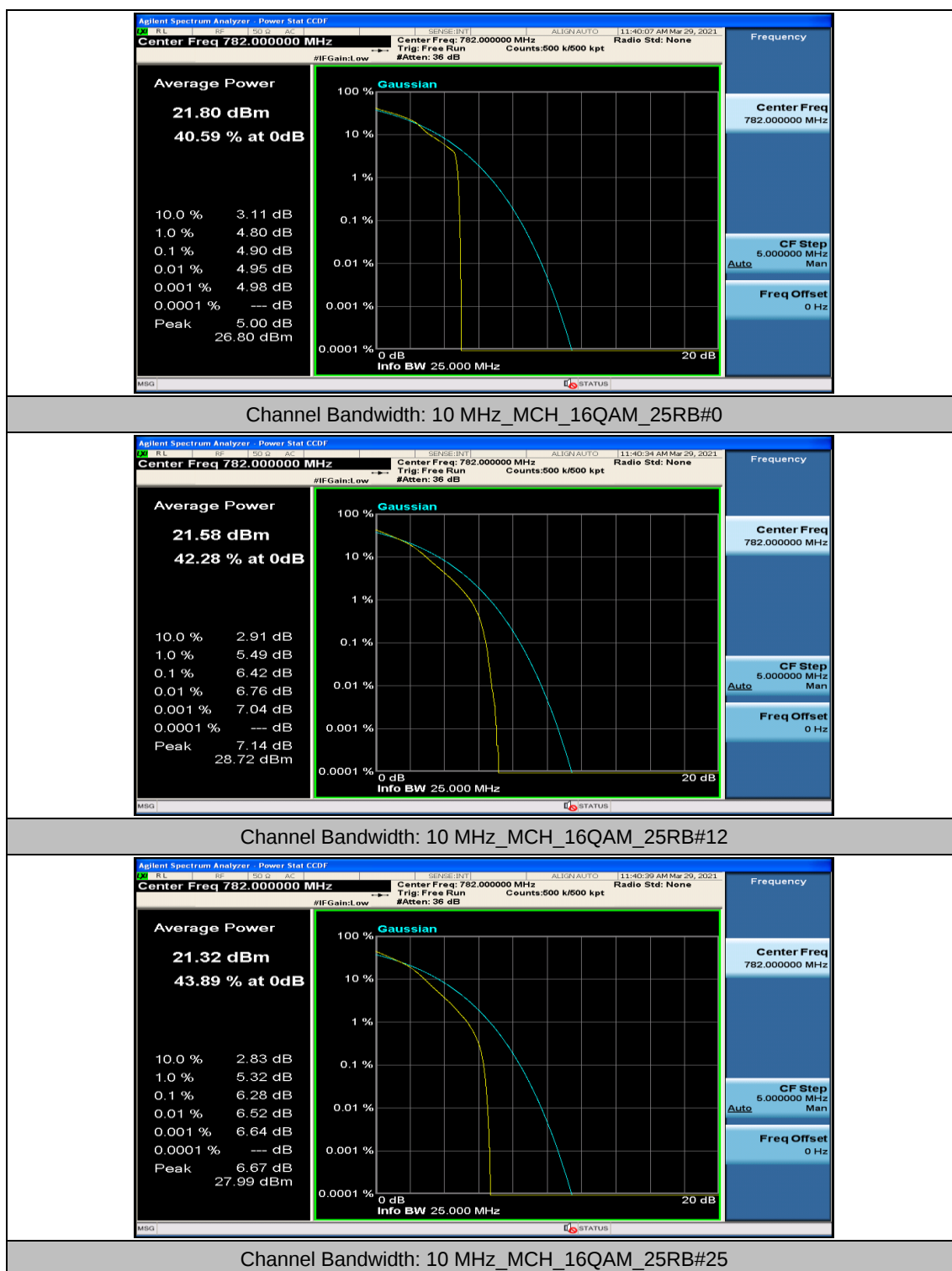
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

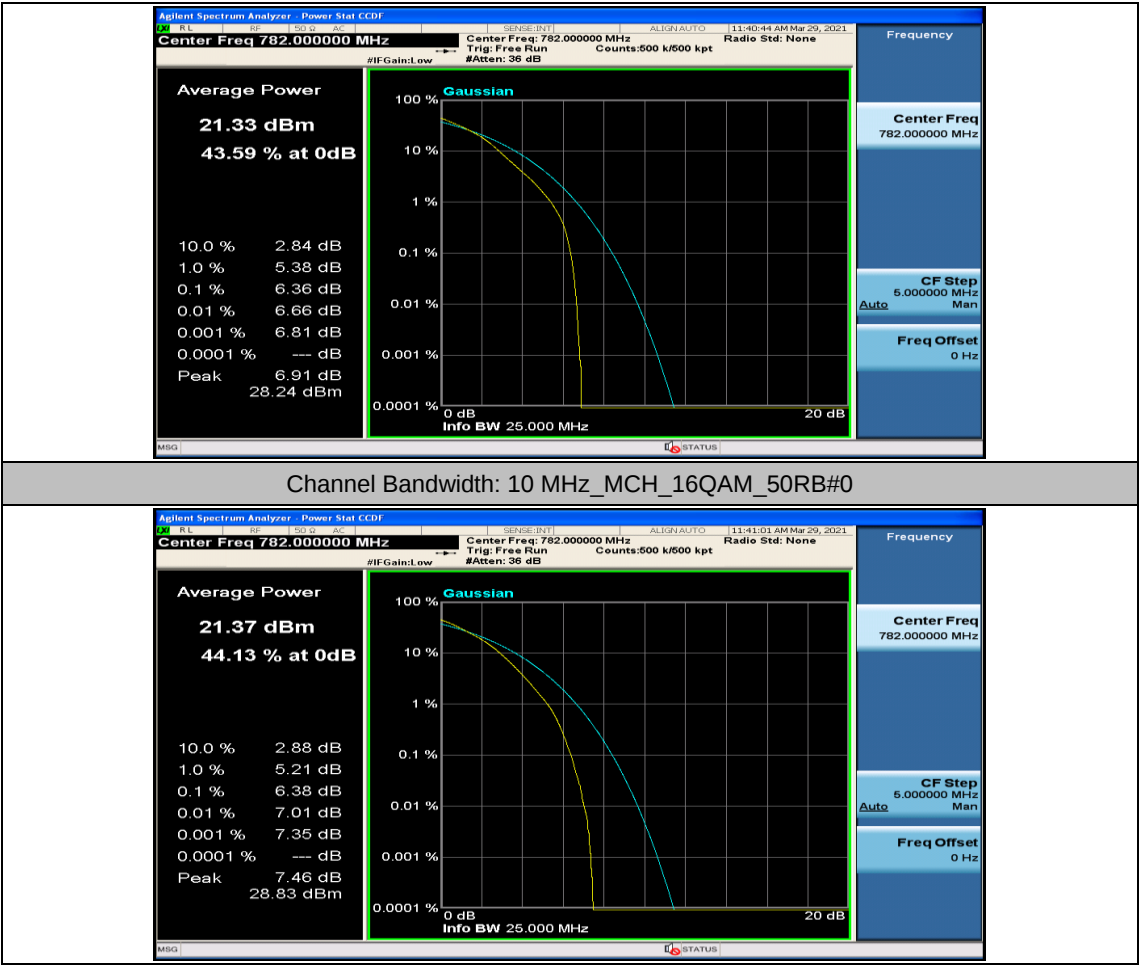


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49





Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Channel Bandwidth: 5 MHz

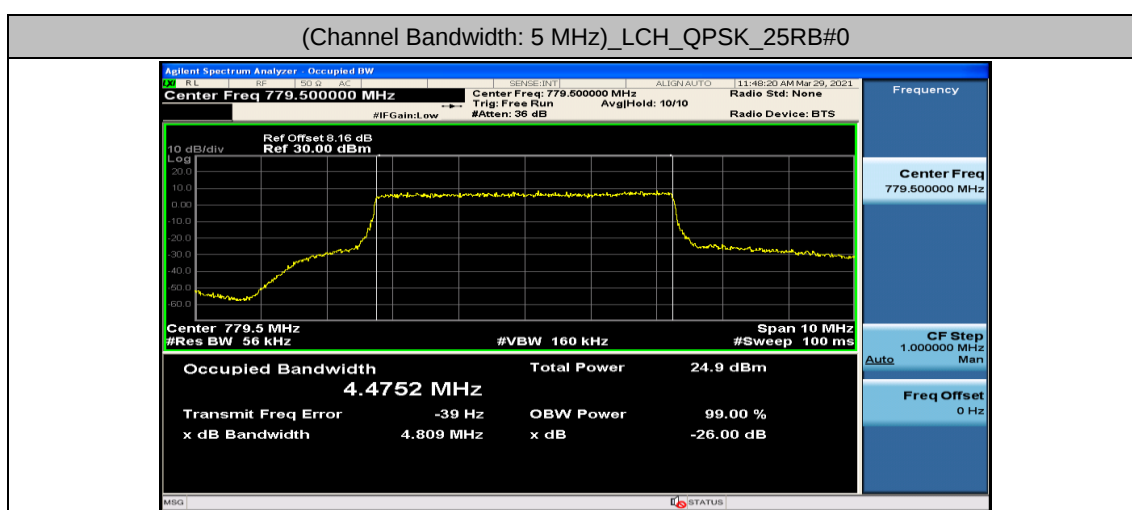
Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4752	4.809	PASS
	MCH	25	0	4.4795	4.769	PASS
	HCH	25	0	4.4688	4.807	PASS
16QAM	LCH	25	0	4.4786	4.759	PASS
	MCH	25	0	4.4609	4.770	PASS
	HCH	25	0	4.4792	4.741	PASS

Channel Bandwidth: 10 MHz

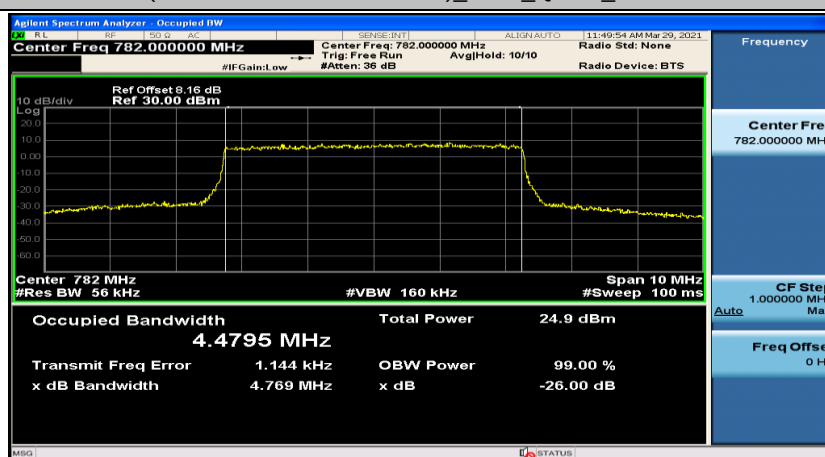
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	MCH	50	0	8.9142	9.458	PASS
16QAM	MCH	50	0	8.9089	9.393	PASS

Test Graphs

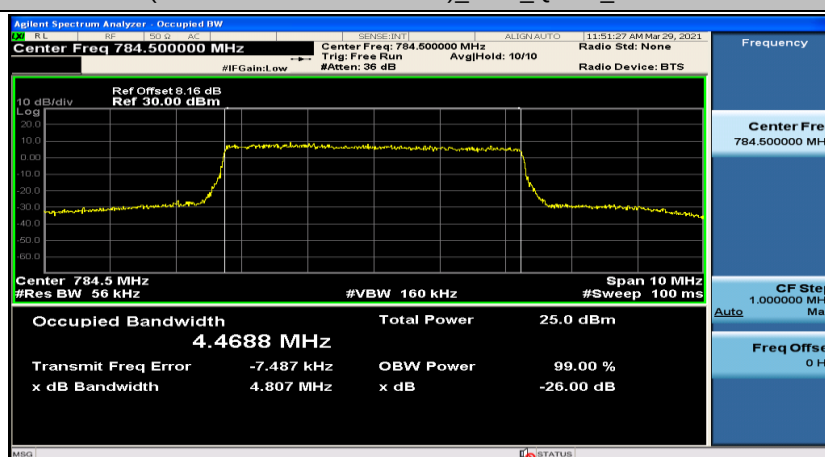
Channel Bandwidth: 5 MHz



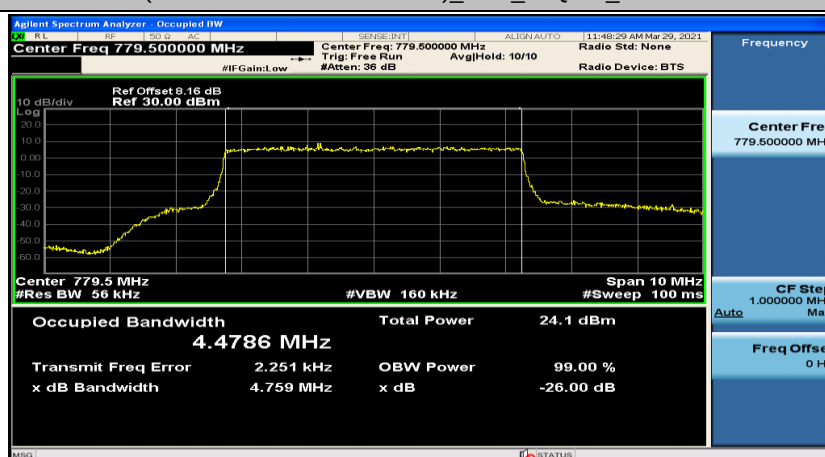
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



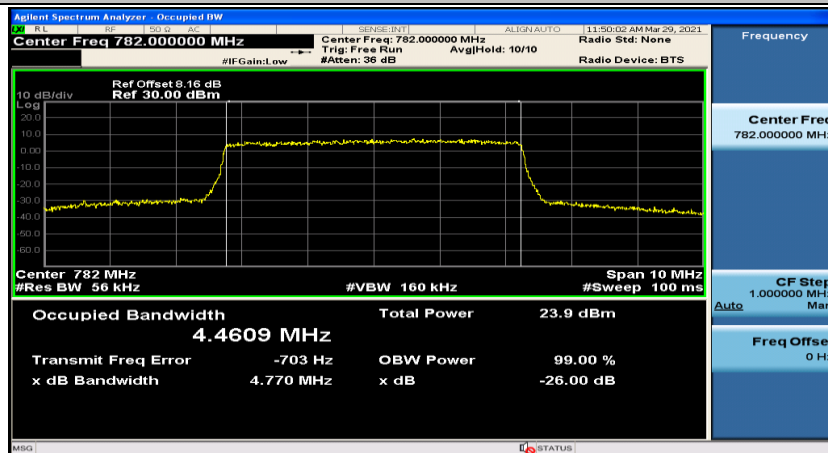
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



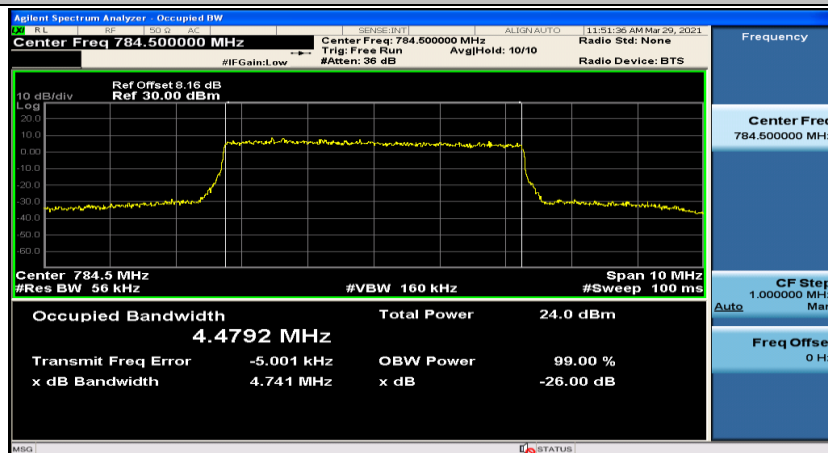
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

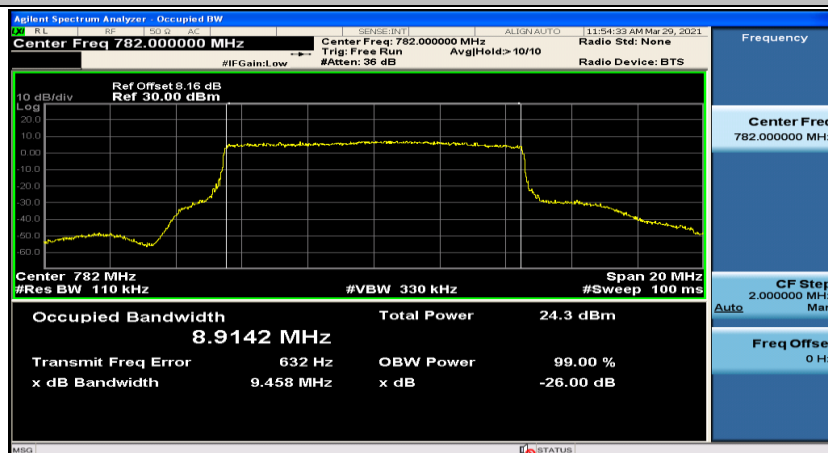


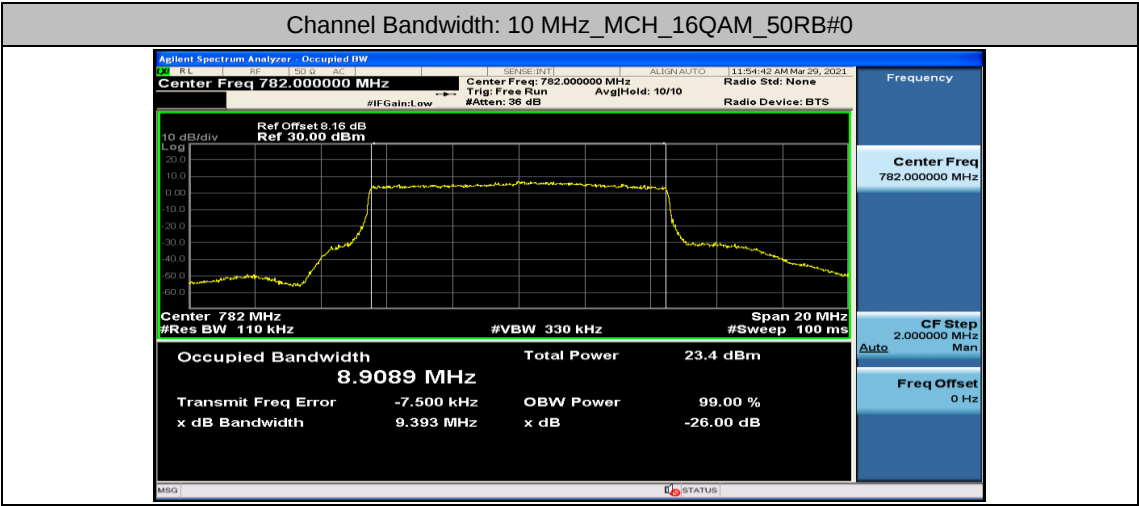
(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0

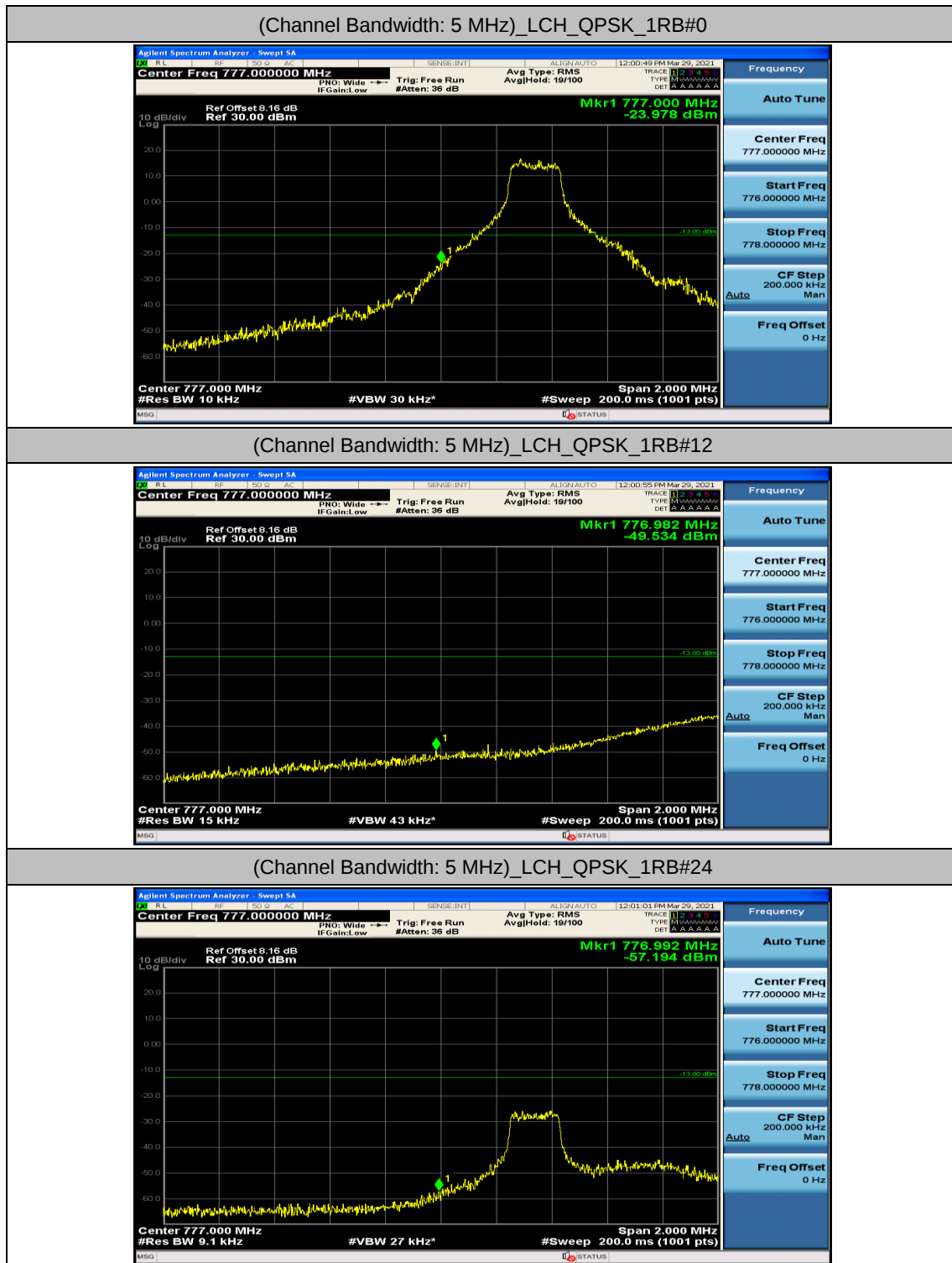




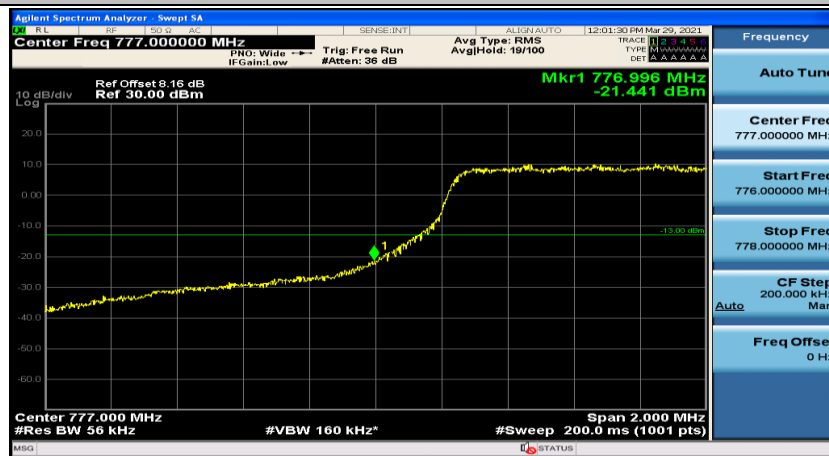
Appendix D: Band Edge

Test Graphs

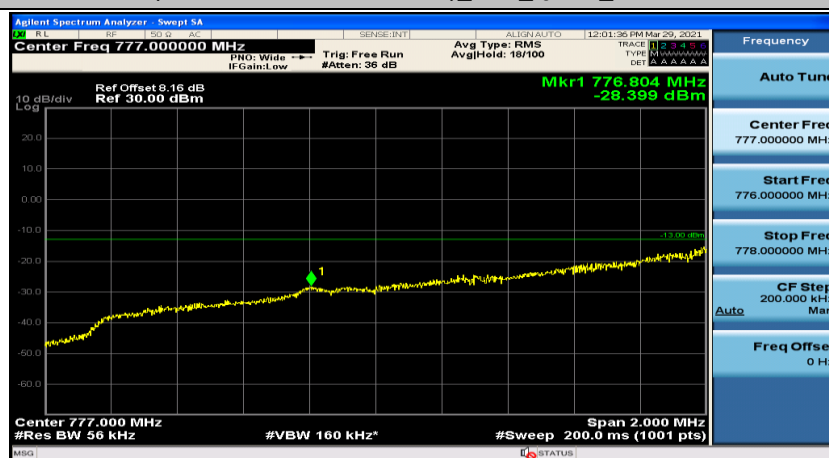
Channel Bandwidth: 5 MHz



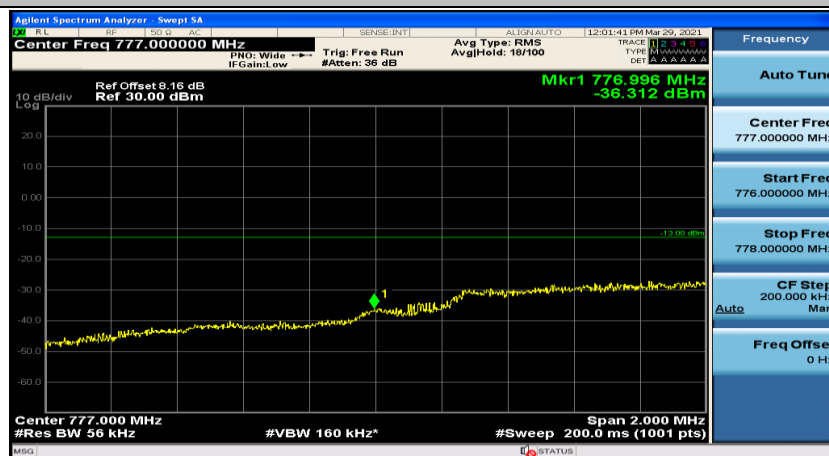
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0



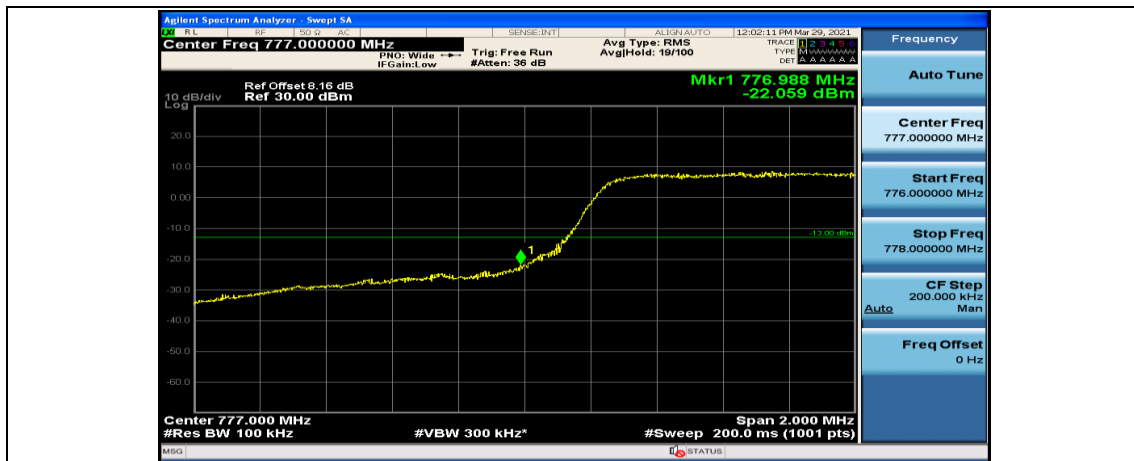
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6



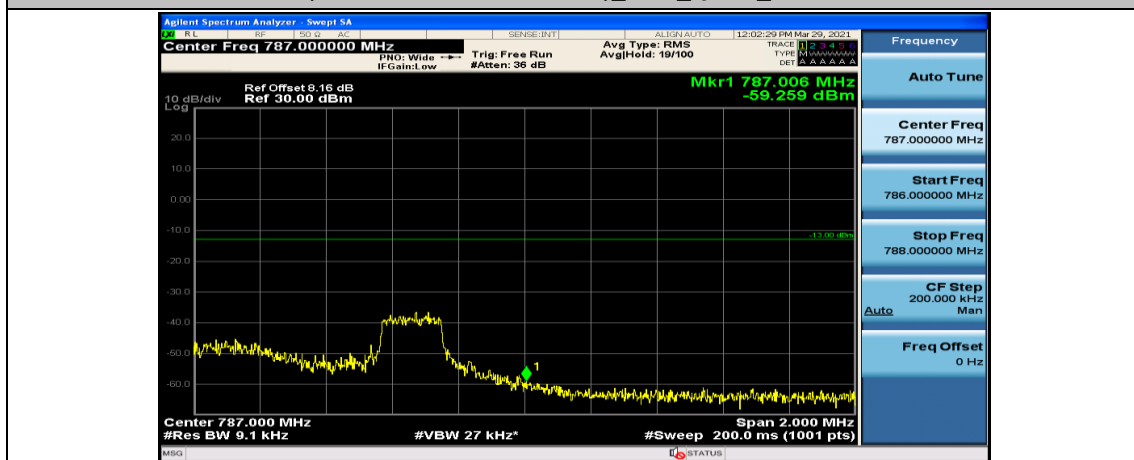
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13



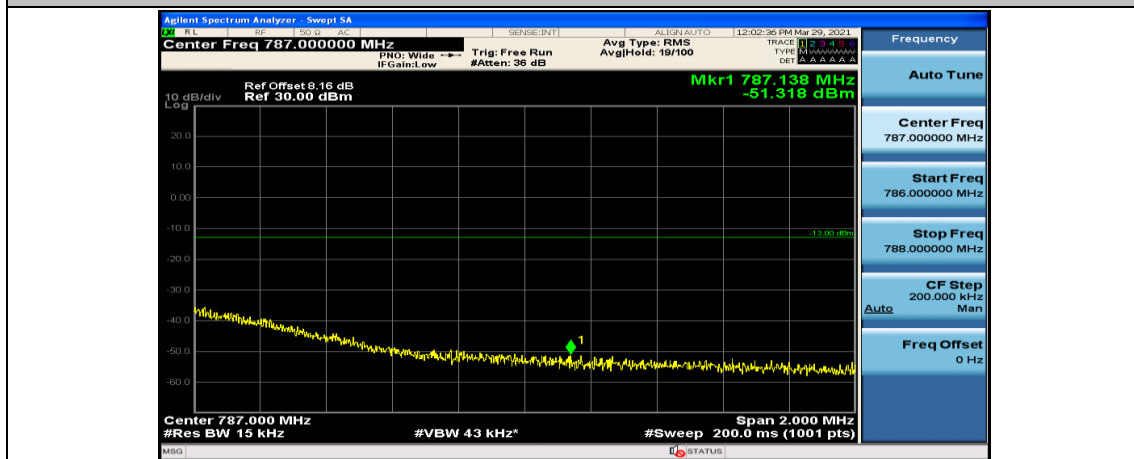
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



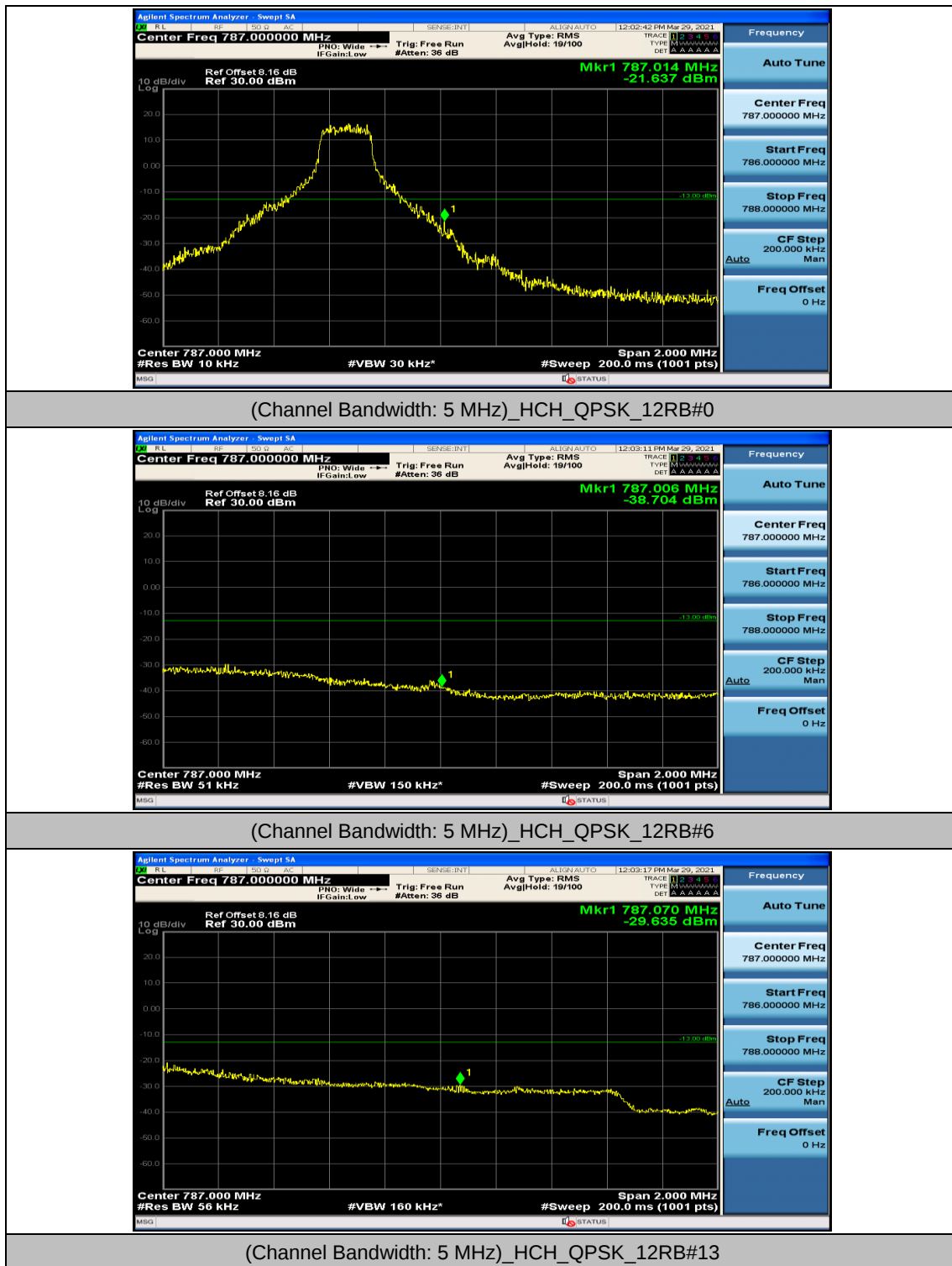
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

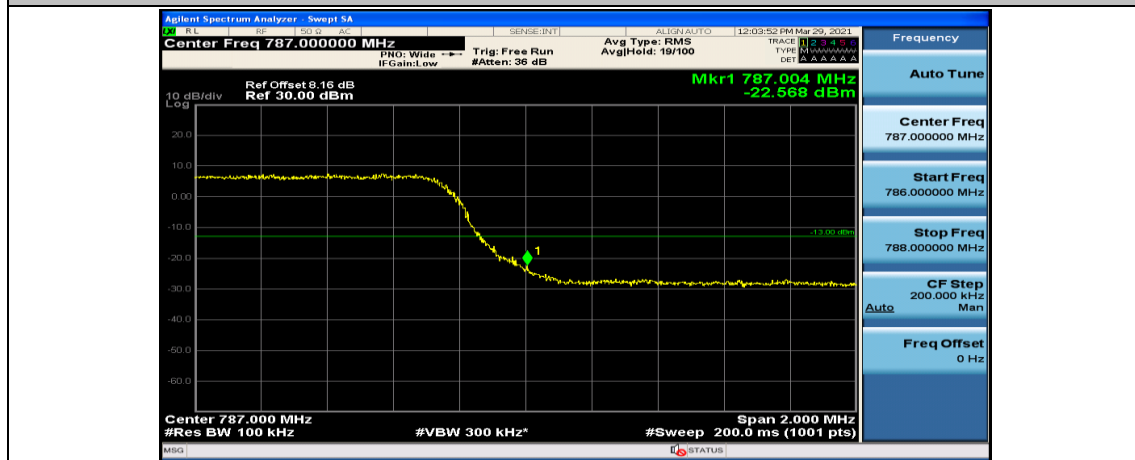


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

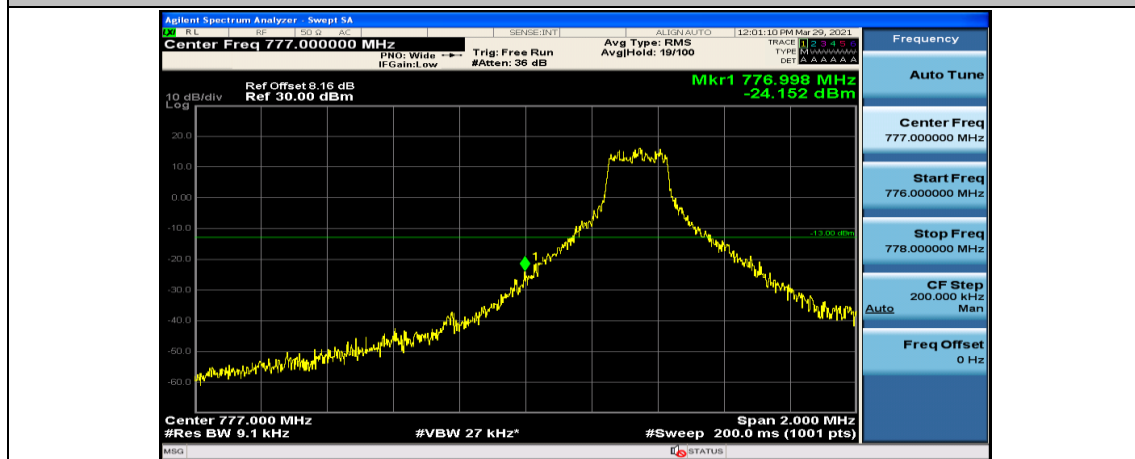




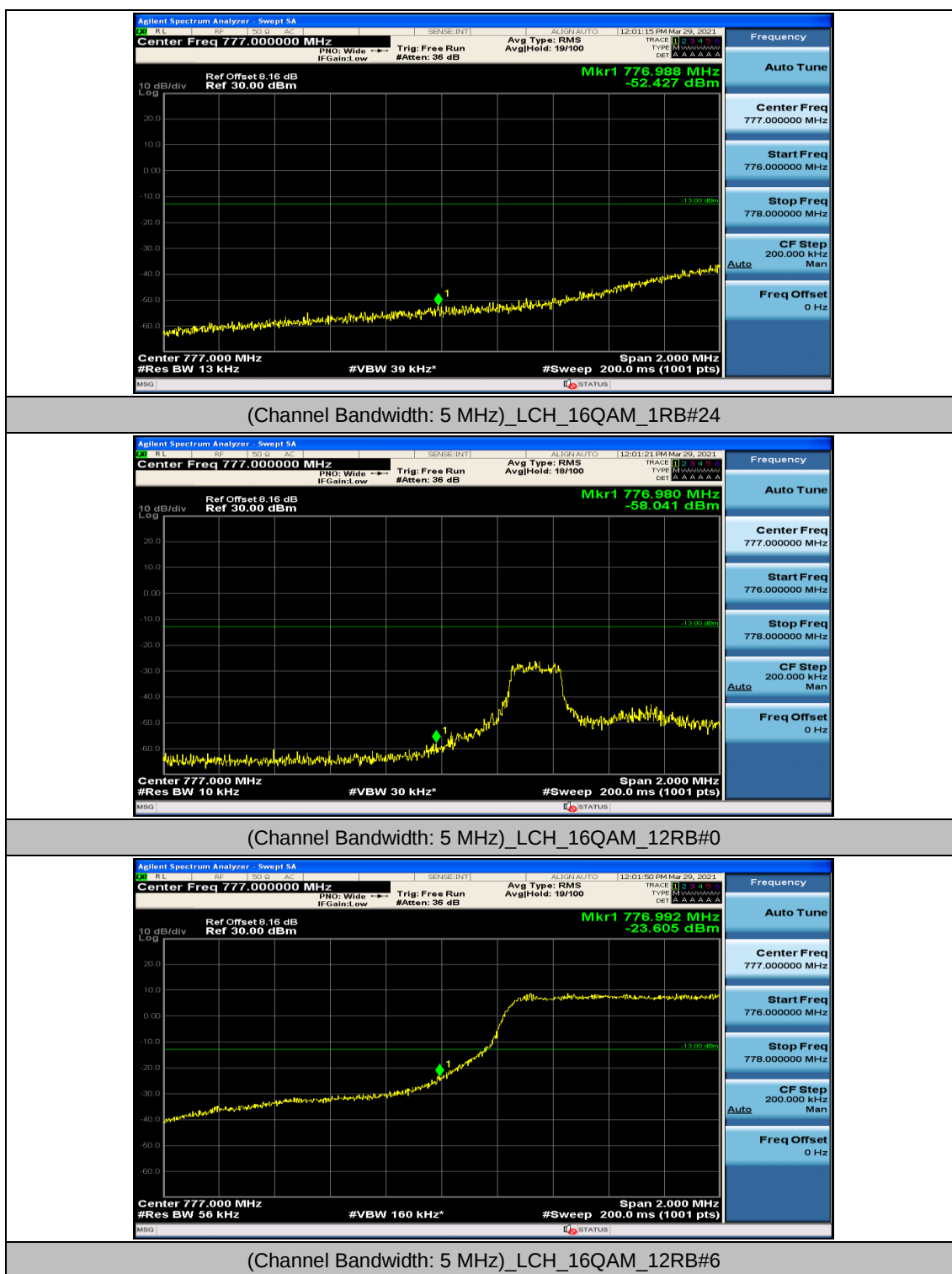
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

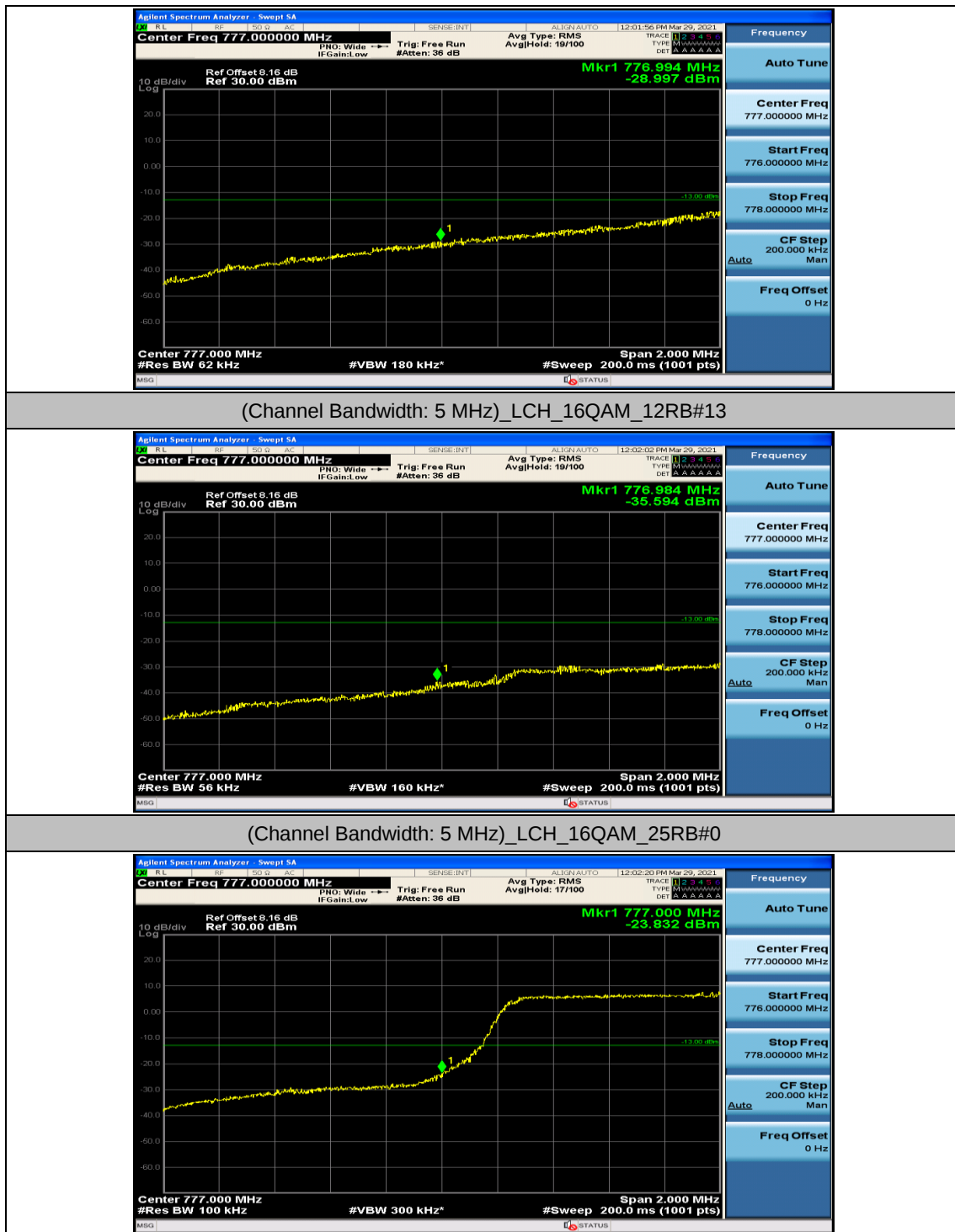


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#0

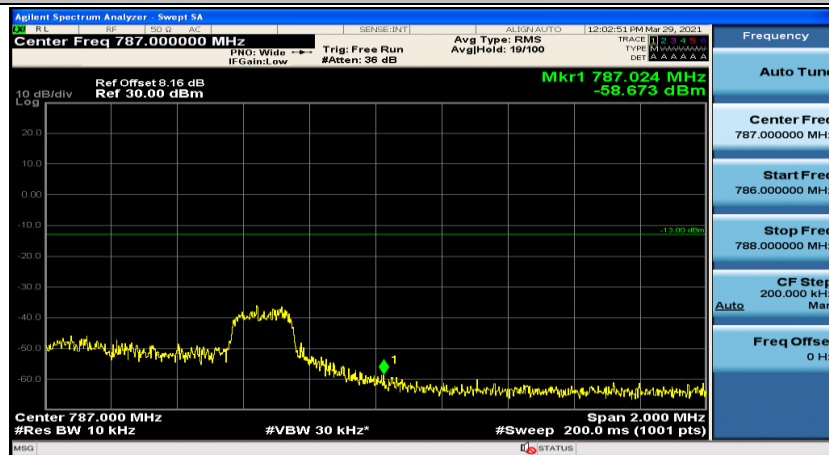


(Channel Bandwidth: 5 MHz)_LCH_16QAM_1RB#12

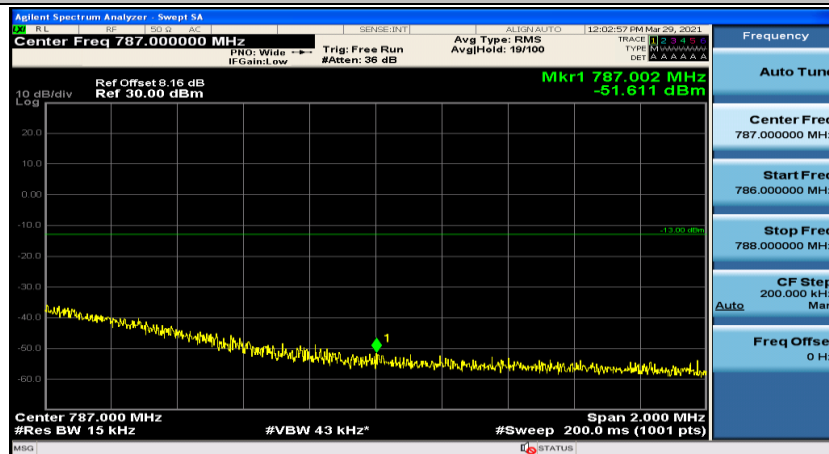




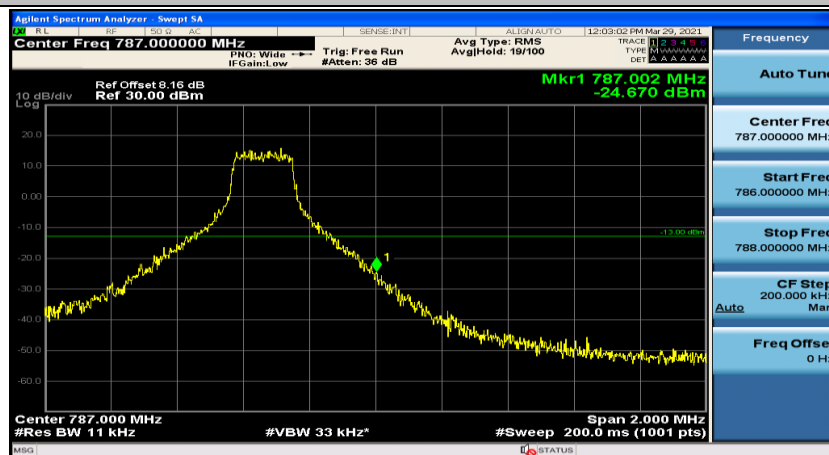
(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#24



(Channel Bandwidth: 5 MHz)_HCH_16QAM_12RB#0

