

Appendix for Band 40(2350-2360MHz)

Product Name: Rugged Phone

Model No: CM17XA

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	22.69	PASS
		1	12	22.96	PASS
		1	24	22.66	PASS
		12	0	21.66	PASS
		12	6	21.68	PASS
		12	13	21.69	PASS
		25	0	21.72	PASS
	MCH	1	0	22.66	PASS
		1	12	22.94	PASS
		1	24	22.63	PASS
		12	0	21.63	PASS
		12	6	21.66	PASS
		12	13	21.66	PASS
		25	0	21.67	PASS
	HCH	1	0	22.62	PASS
		1	12	22.90	PASS
		1	24	22.59	PASS
		12	0	21.59	PASS
		12	6	21.68	PASS
		12	13	21.67	PASS
		25	0	21.69	PASS
16QAM	LCH	1	0	21.87	PASS
		1	12	22.16	PASS
		1	24	21.84	PASS
		12	0	20.73	PASS
		12	6	20.78	PASS
		12	13	20.75	PASS
		25	0	20.72	PASS
	MCH	1	0	22.00	PASS
		1	12	22.26	PASS
		1	24	21.99	PASS
		12	0	20.74	PASS
		12	6	20.77	PASS

		12	13	20.77	PASS
		25	0	20.67	PASS
	HCH	1	0	21.90	PASS
		1	12	22.16	PASS
		1	24	21.89	PASS
		12	0	20.61	PASS
		12	6	20.68	PASS
		12	13	20.70	PASS
		25	0	20.72	PASS

Channel Bandwidth: 10 MHz

Modulation	Channel	RB Configuration		Average Power [dBm]	Verdict
		Size	Offset		
QPSK	MCH	1	0	22.99	PASS
		1	24	22.79	PASS
		1	49	22.75	PASS
		25	0	21.76	PASS
		25	12	21.77	PASS
		25	25	21.84	PASS
		50	0	21.79	PASS
16QAM	MCH	1	0	22.05	PASS
		1	24	22.05	PASS
		1	49	21.96	PASS
		25	0	20.75	PASS
		25	12	20.76	PASS
		25	25	20.82	PASS
		50	0	20.77	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	10.31	<13	PASS
		1	12	11.44	<13	PASS
		1	24	8.8	<13	PASS
		12	0	9.73	<13	PASS
		12	6	8.78	<13	PASS
		12	13	9.37	<13	PASS
		25	0	12.18	<13	PASS
	MCH	1	0	8.7	<13	PASS
		1	12	6.27	<13	PASS
		1	24	8.4	<13	PASS
		12	6	10.38	<13	PASS
		12	13	7.95	<13	PASS
		25	0	9.82	<13	PASS
	HCH	1	0	10.59	<13	PASS
		1	12	10.92	<13	PASS
		1	24	12.97	<13	PASS
		12	0	9.29	<13	PASS
		12	6	11.35	<13	PASS
		12	13	8.09	<13	PASS
		25	0	9.65	<13	PASS
16QAM	LCH	1	0	9.41	<13	PASS
		1	12	10.59	<13	PASS
		1	24	11.36	<13	PASS
		12	0	10.04	<13	PASS
		12	6	9.7	<13	PASS
		12	13	9.2	<13	PASS
		25	0	12.34	<13	PASS
	MCH	1	0	11.35	<13	PASS
		1	12	8.98	<13	PASS
		1	24	11.12	<13	PASS
		12	6	10.27	<13	PASS

		12	13	9.81	<13	PASS
	HCH	1	0	11.67	<13	PASS
		1	12	9.19	<13	PASS
		1	24	8.4	<13	PASS
		12	0	8.72	<13	PASS
		12	6	10.32	<13	PASS
		12	13	9.09	<13	PASS
		25	0	10.99	<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	11.32	<13	PASS
		1	24	8.72	<13	PASS
		1	49	8.41	<13	PASS
		25	0	9.77	<13	PASS
		25	12	8.36	<13	PASS
		25	25	8.09	<13	PASS
		50	0	8.51	<13	PASS
16QAM	MCH	1	0	10.98	<13	PASS
		1	24	9.96	<13	PASS
		1	49	8.64	<13	PASS
		25	0	10.71	<13	PASS
		25	12	11.1	<13	PASS
		25	25	8.87	<13	PASS
		50	0	9.52	<13	PASS

Test Graphs

Channel Bandwidth: 5 MHz

(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



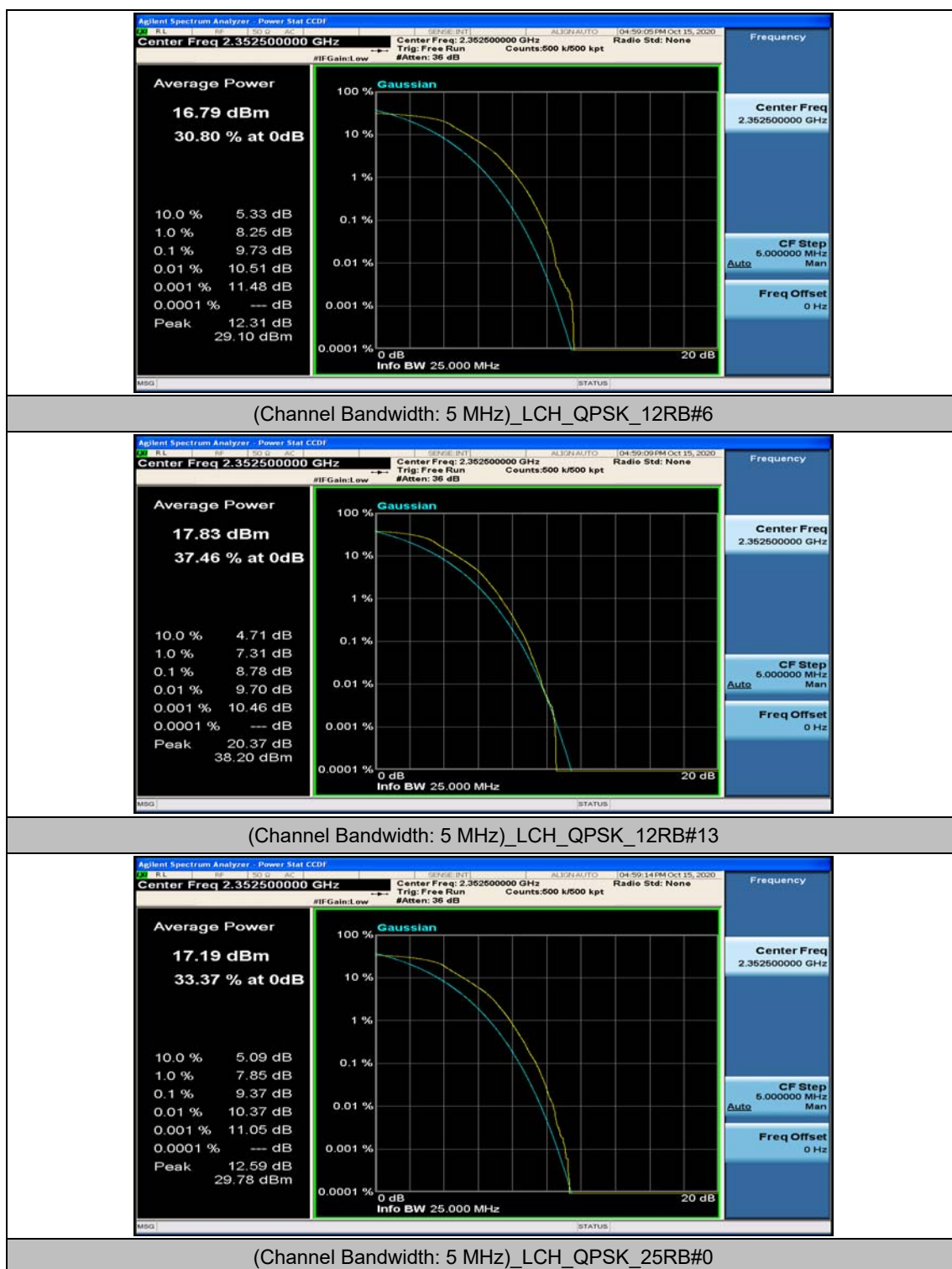
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24

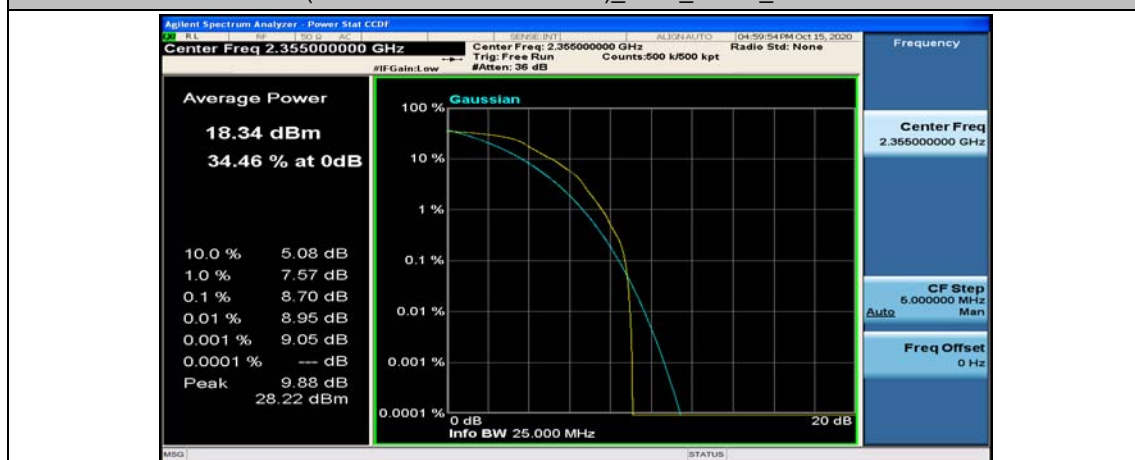


(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0





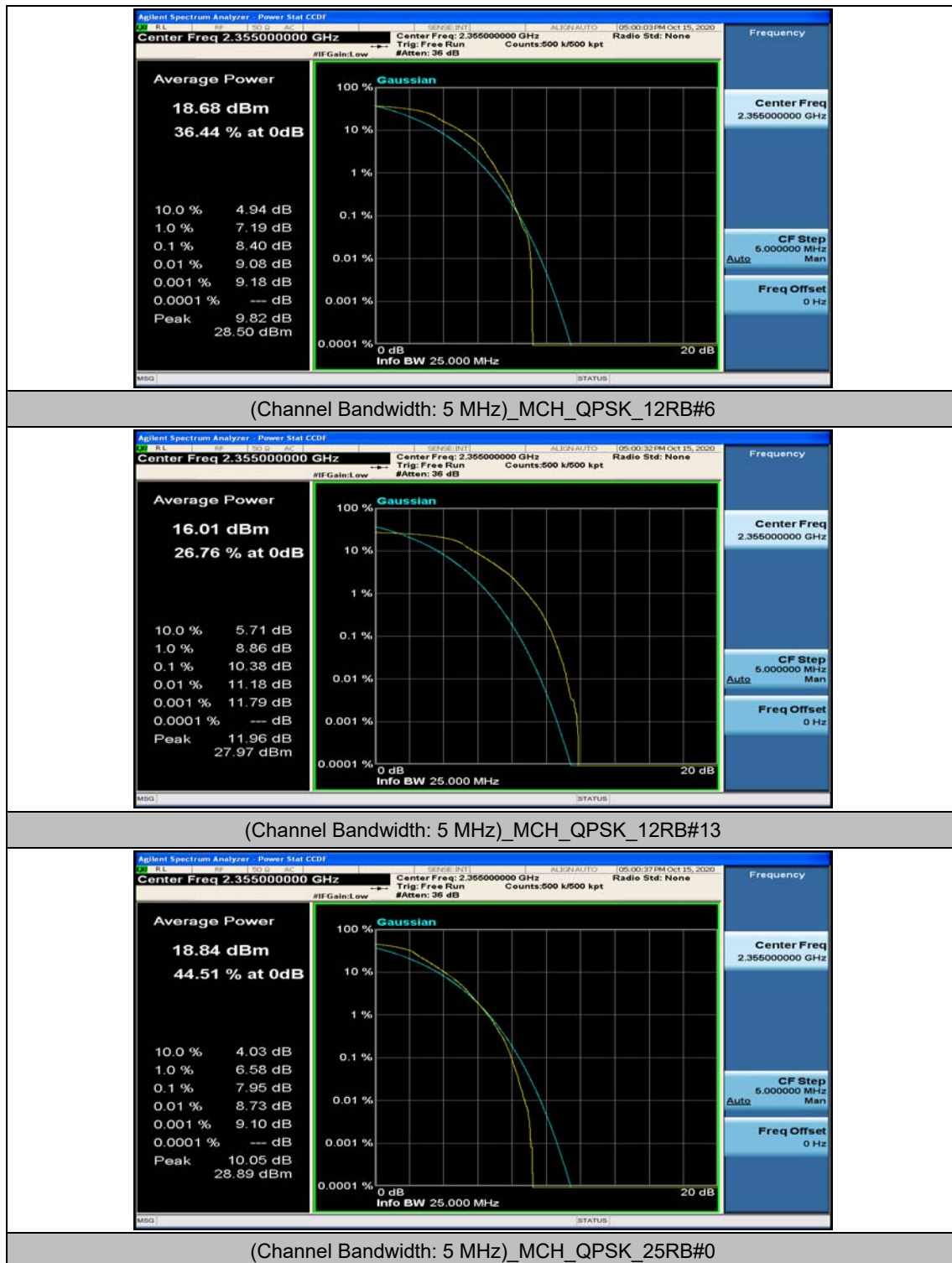
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(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#12

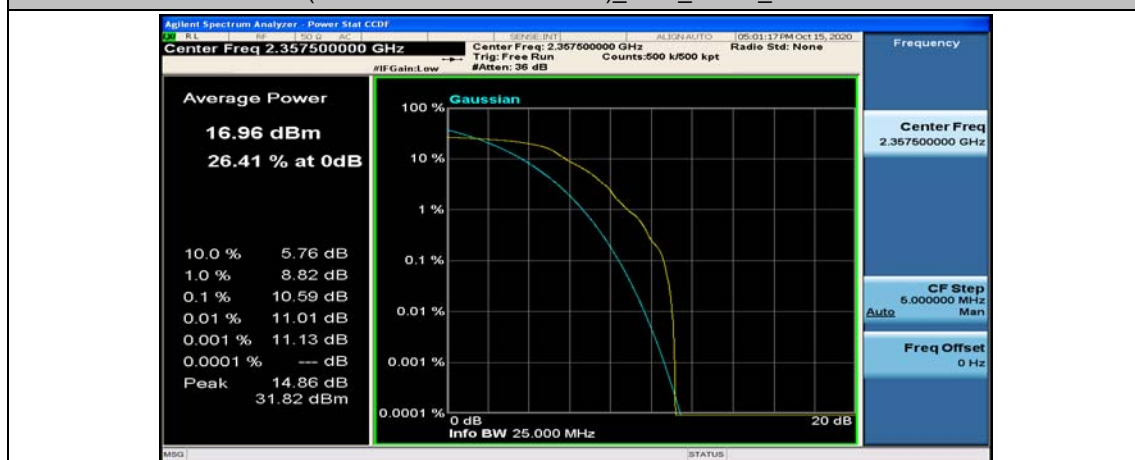


(Channel Bandwidth: 5 MHz)_MCH_QPSK_1RB#24





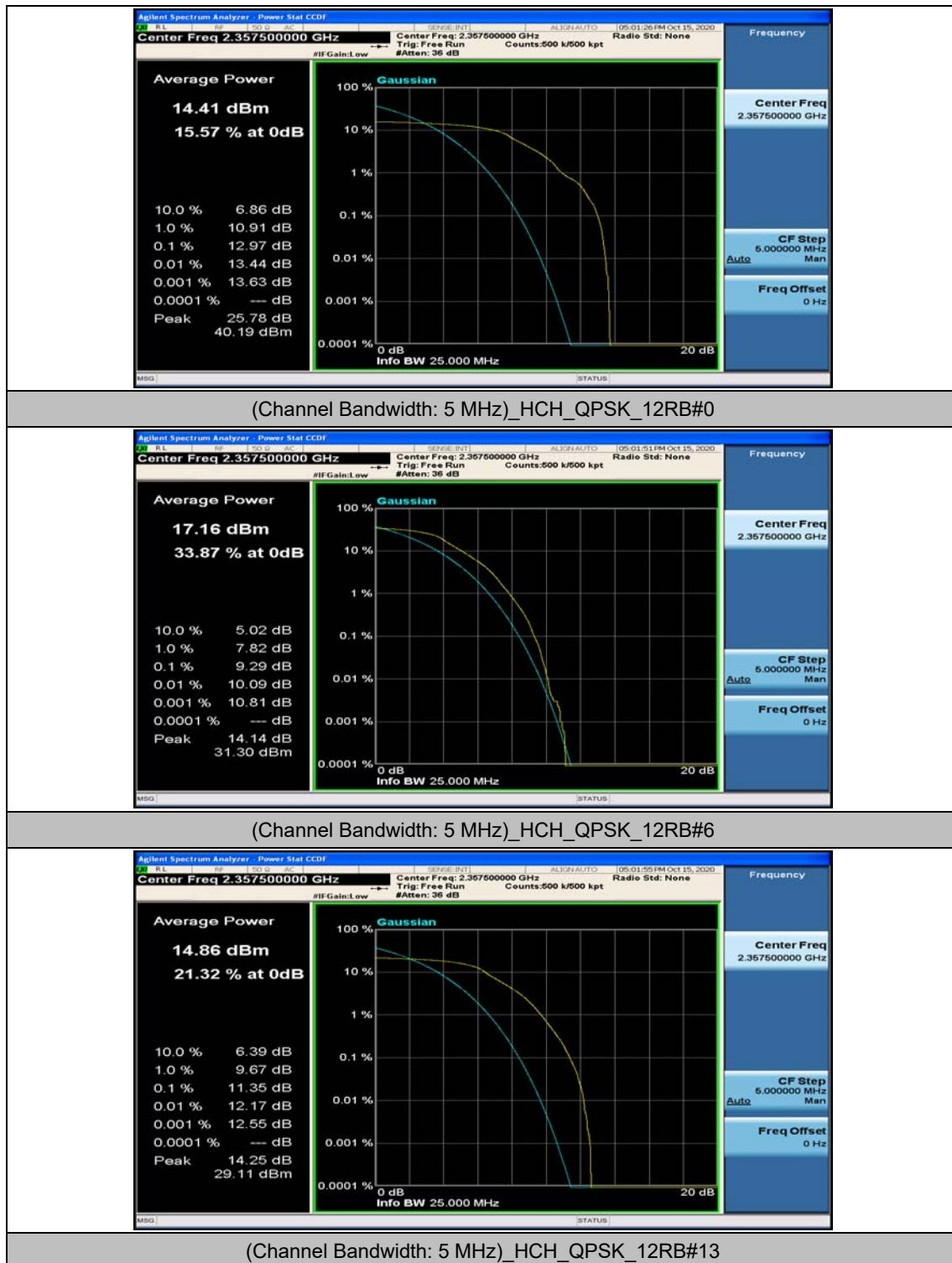
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

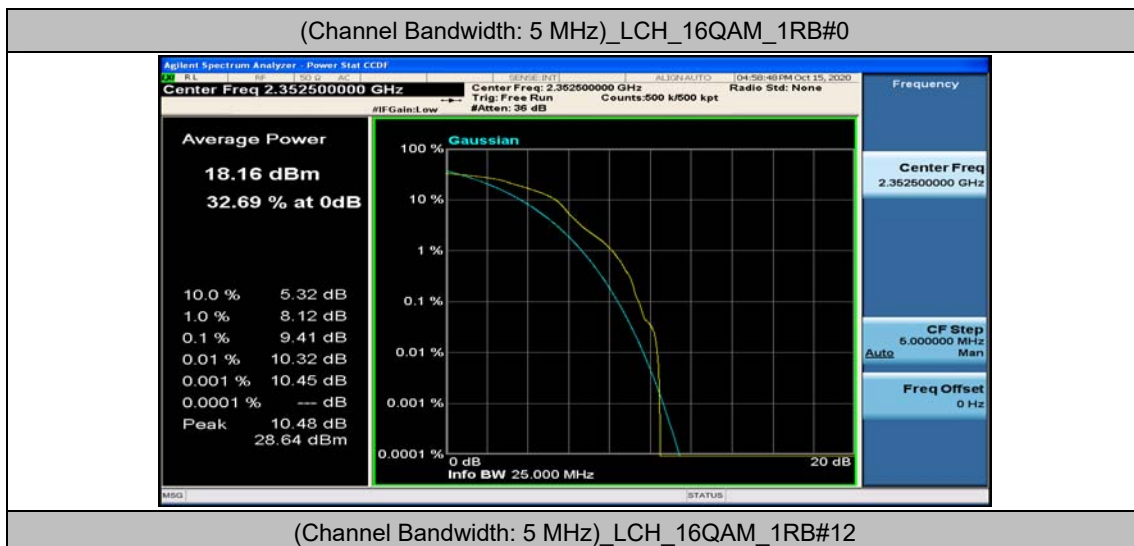
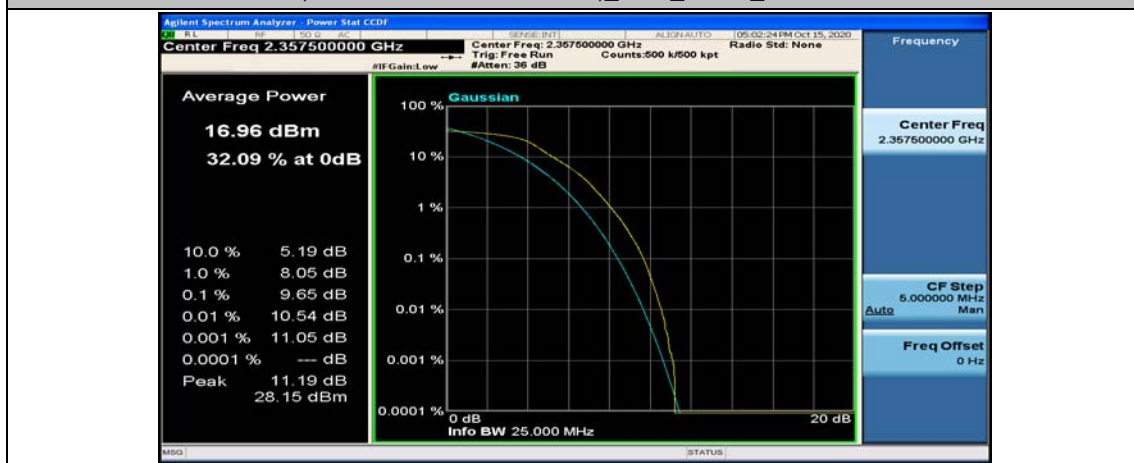
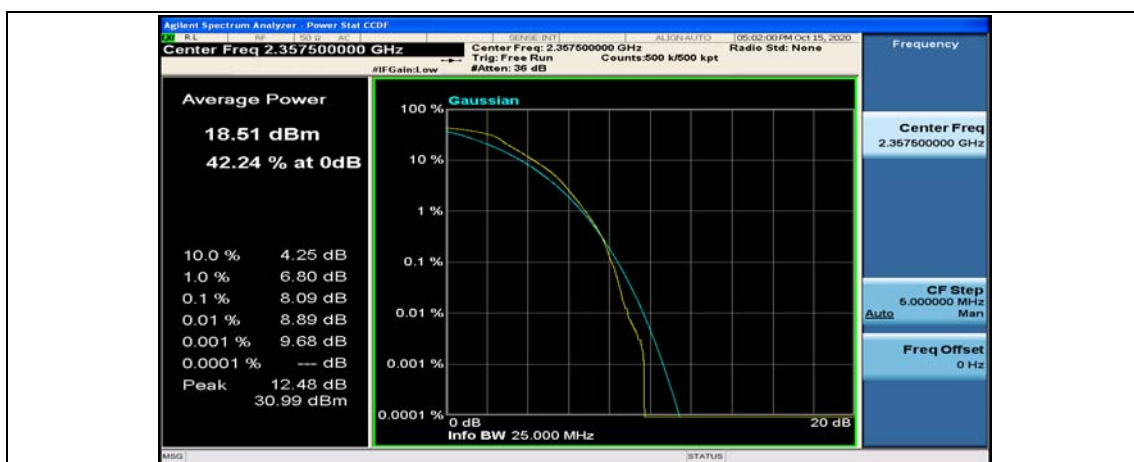


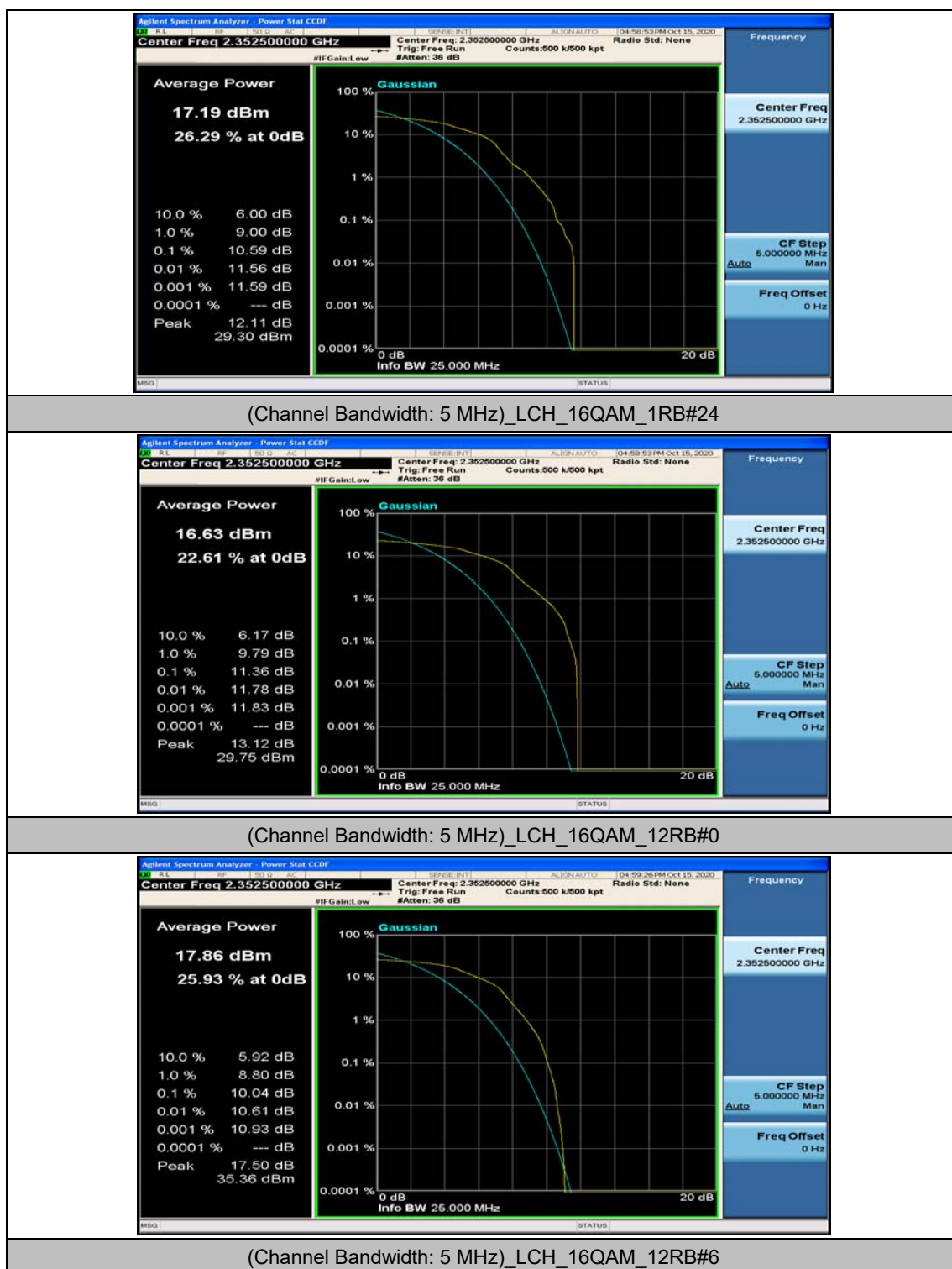
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12

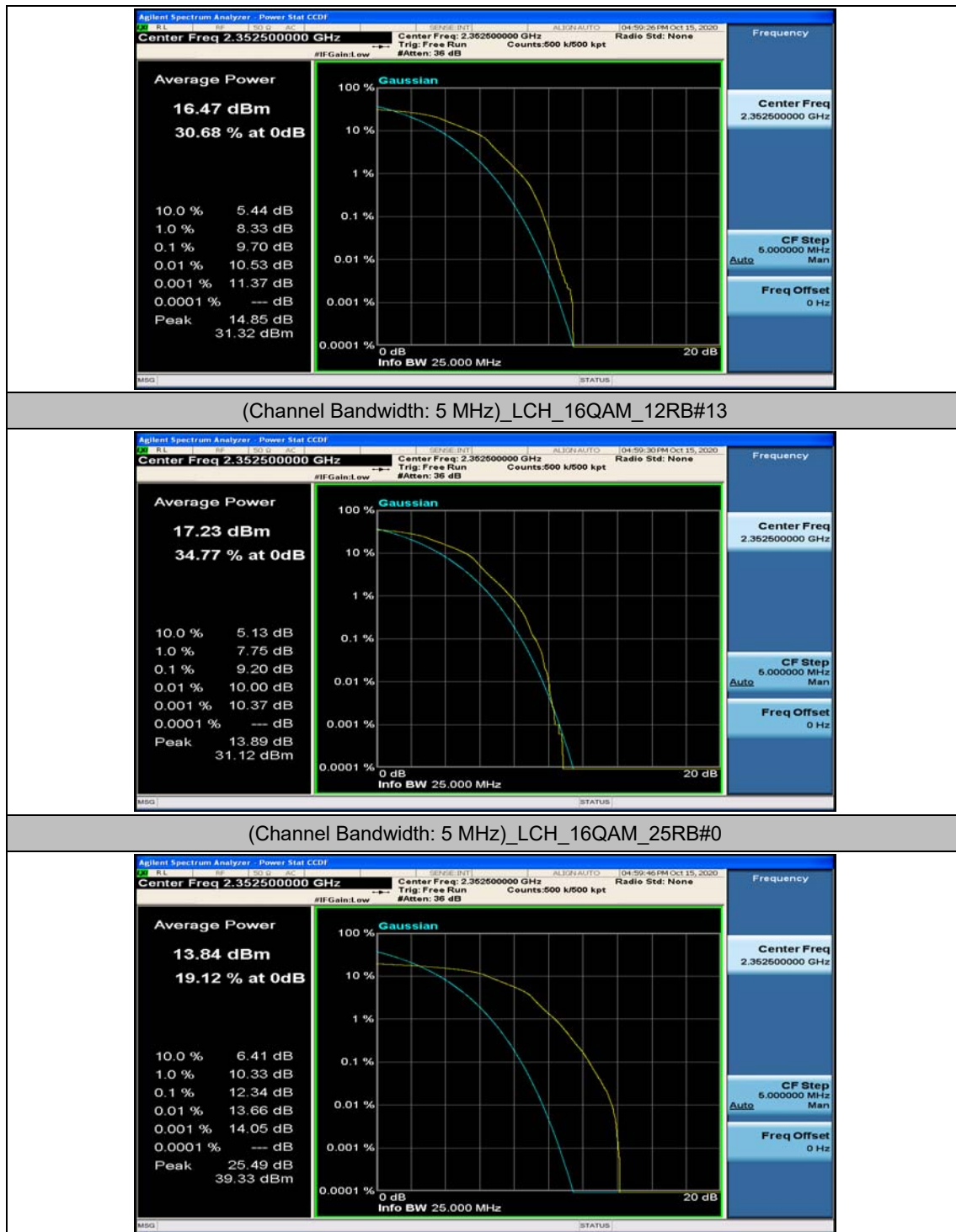


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24









(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



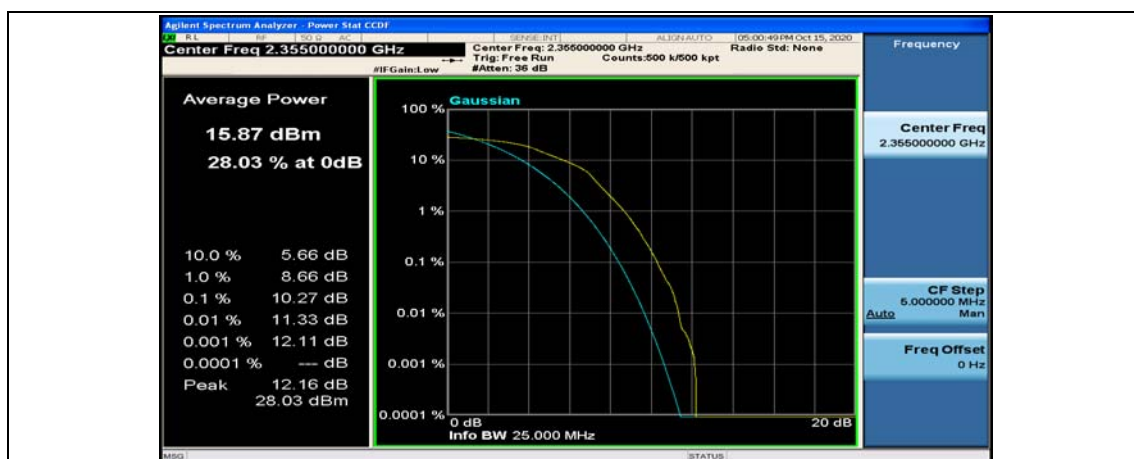
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24



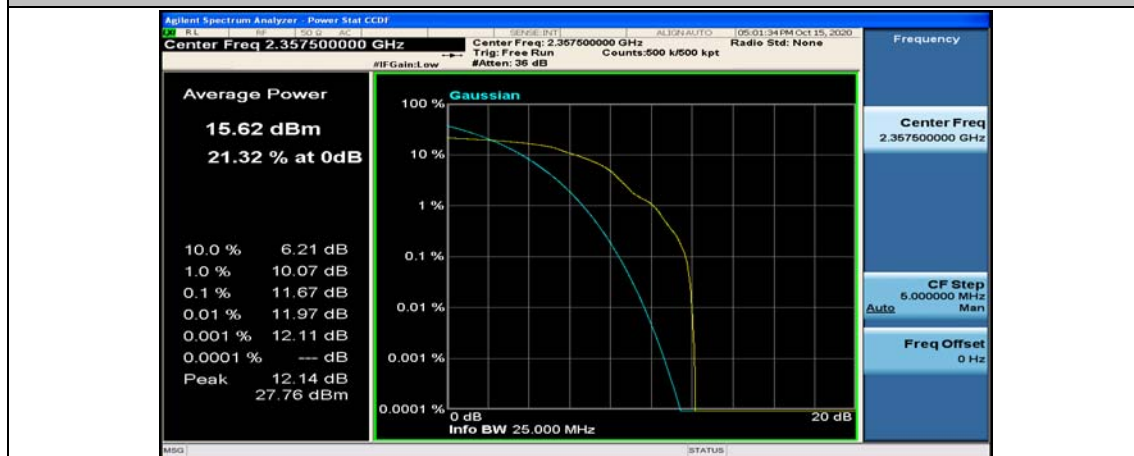
(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#6



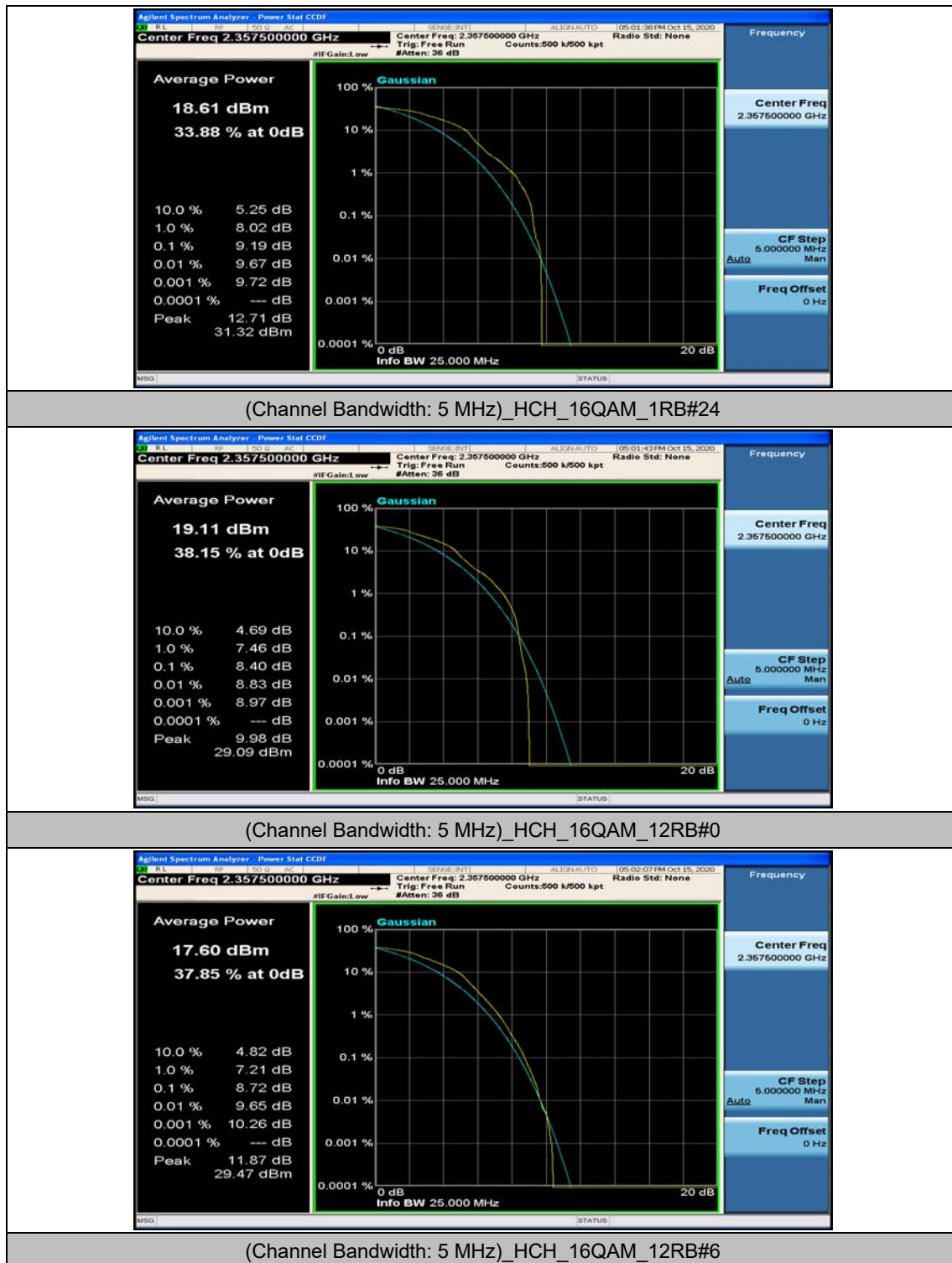
(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#13

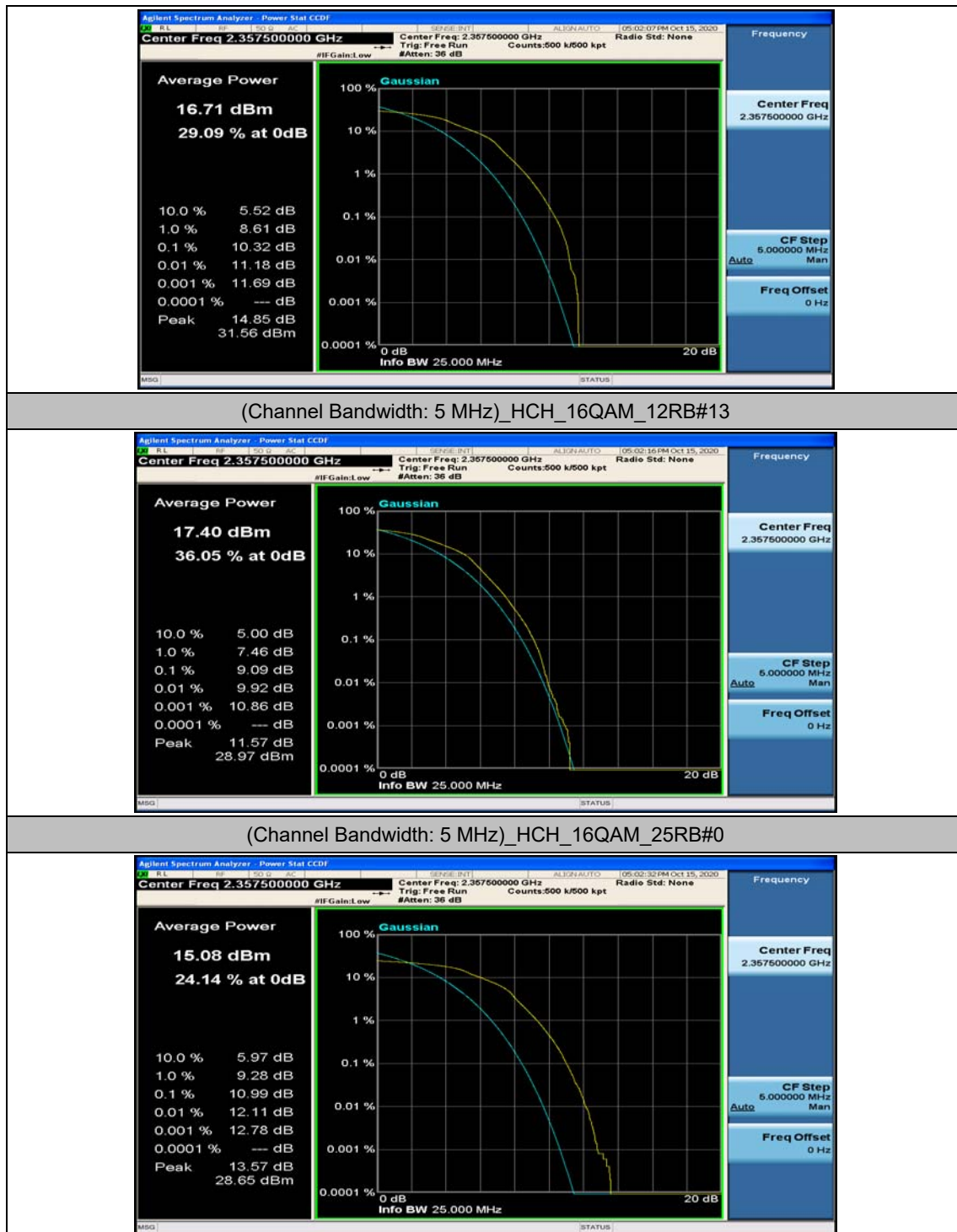


(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#0



(Channel Bandwidth: 5 MHz)_HCH_16QAM_1RB#12





Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



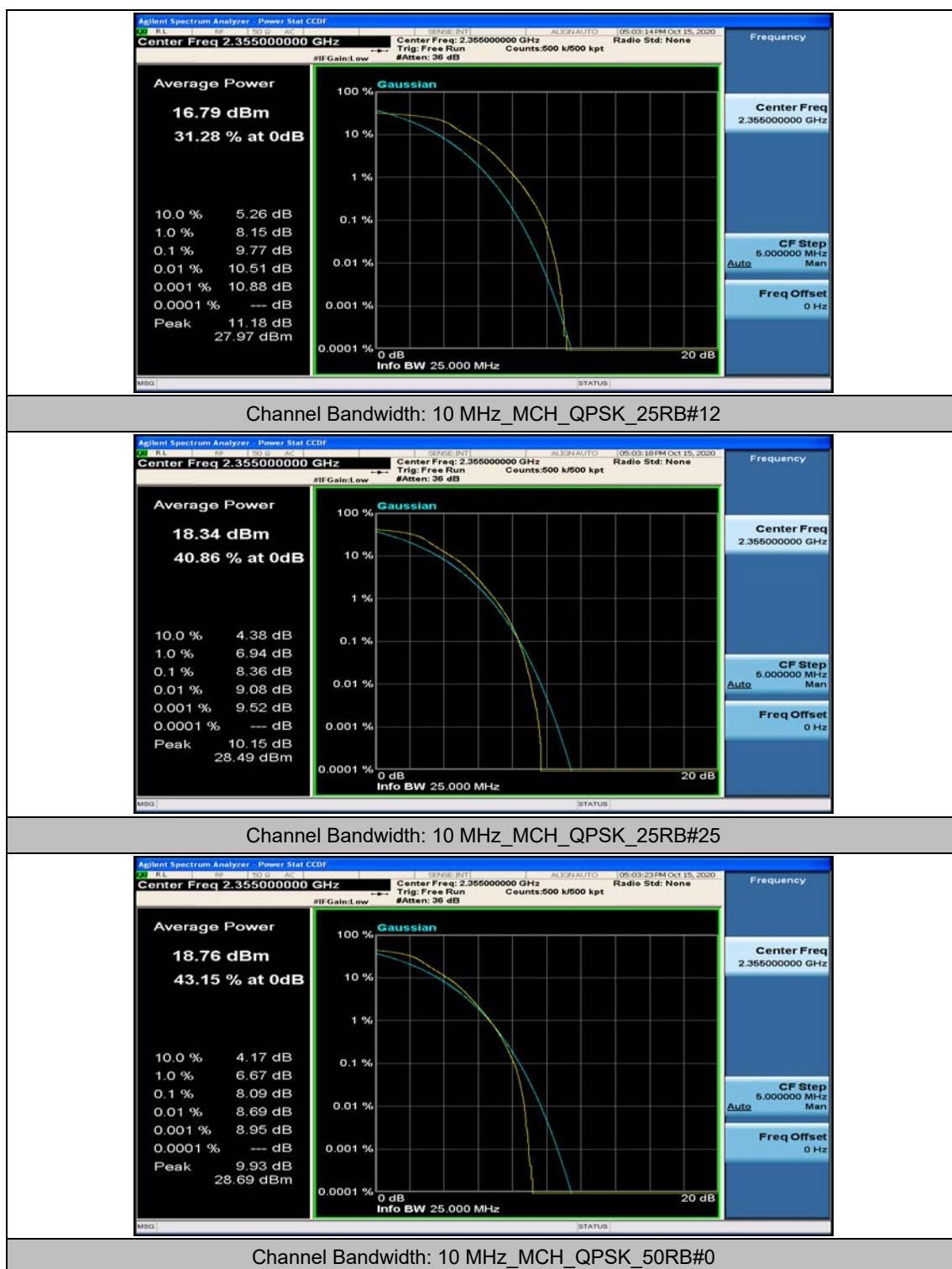
Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#49



Channel Bandwidth: 10 MHz_MCH_QPSK_25RB#0





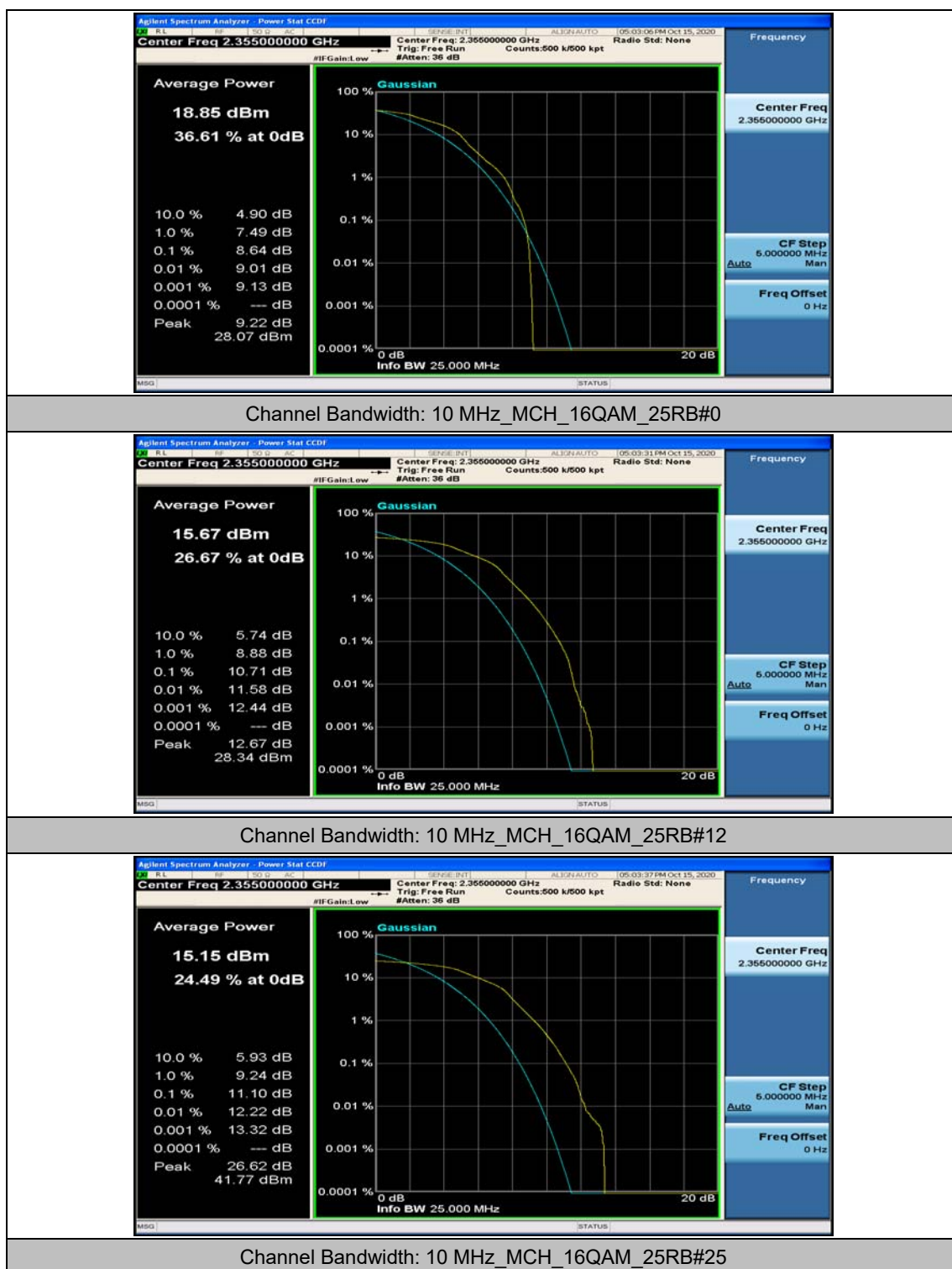
Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#0

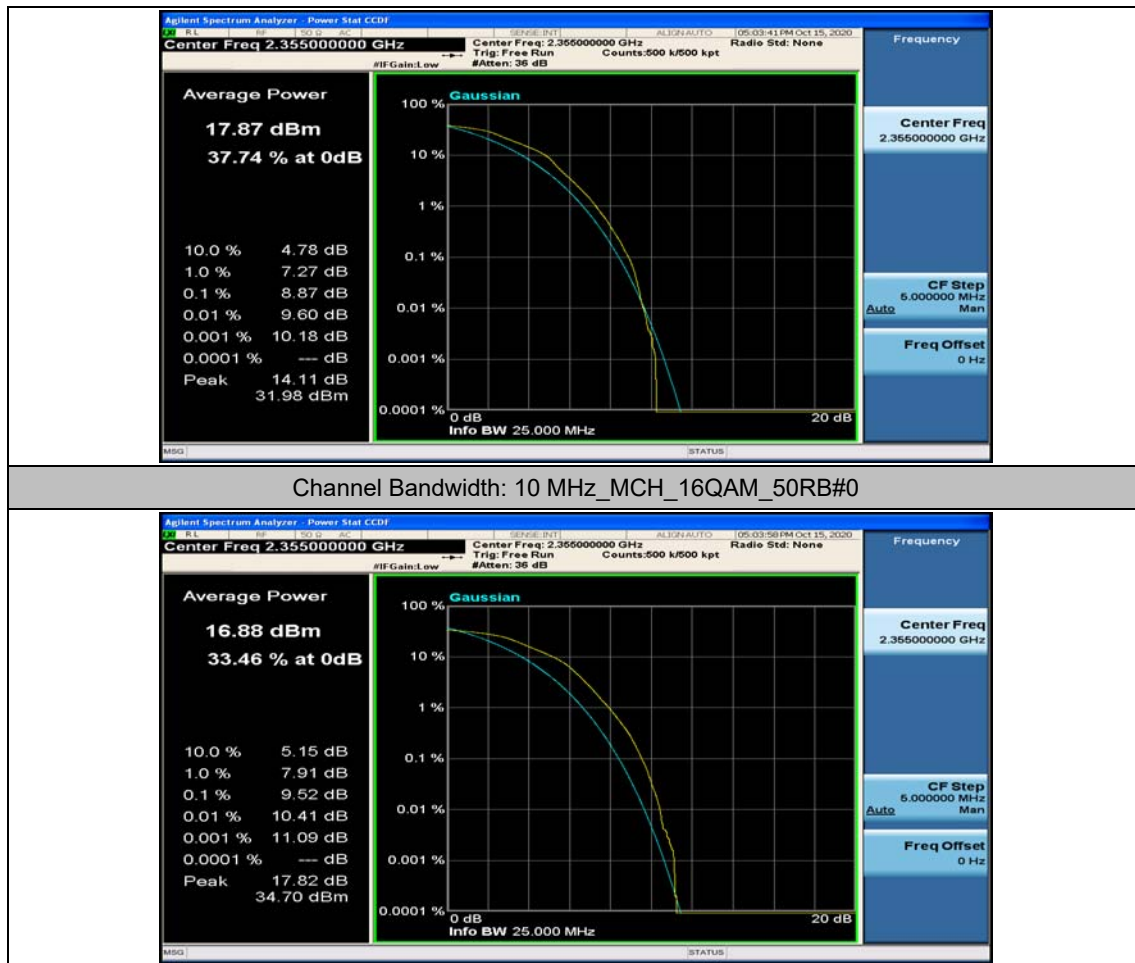


Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#24



Channel Bandwidth: 10 MHz_MCH_16QAM_1RB#49





Appendix C: 26dB Bandwidth and Occupied Bandwidth

Test Result

Channel Bandwidth: 5 MHz

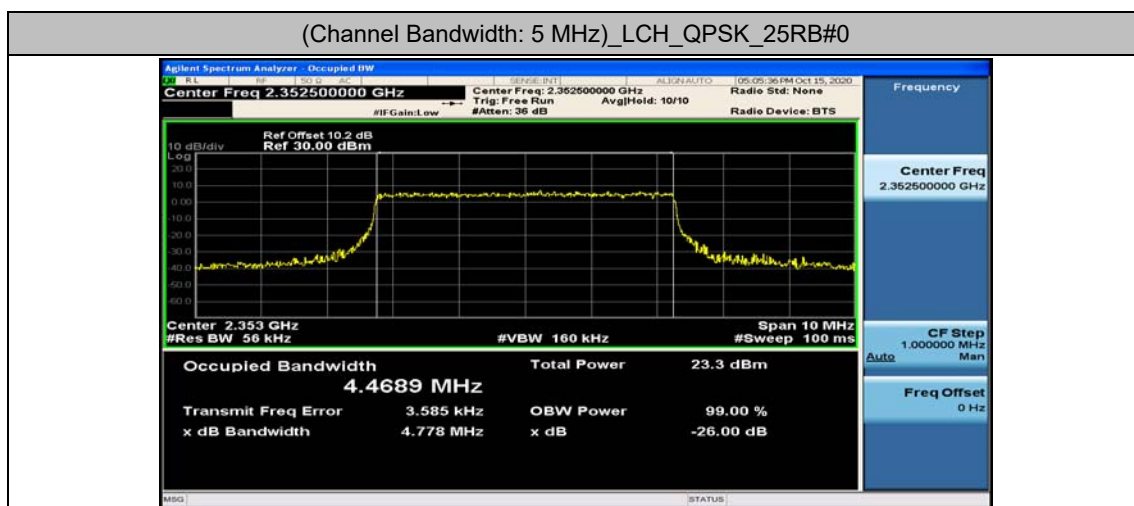
Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4689	4.778	PASS
	MCH	25	0	4.4691	4.762	PASS
	HCH	25	0	4.4747	4.889	PASS
16QAM	LCH	25	0	4.4773	4.827	PASS
	MCH	25	0	4.4624	4.792	PASS
	HCH	25	0	4.4712	4.784	PASS

Channel Bandwidth: 10 MHz

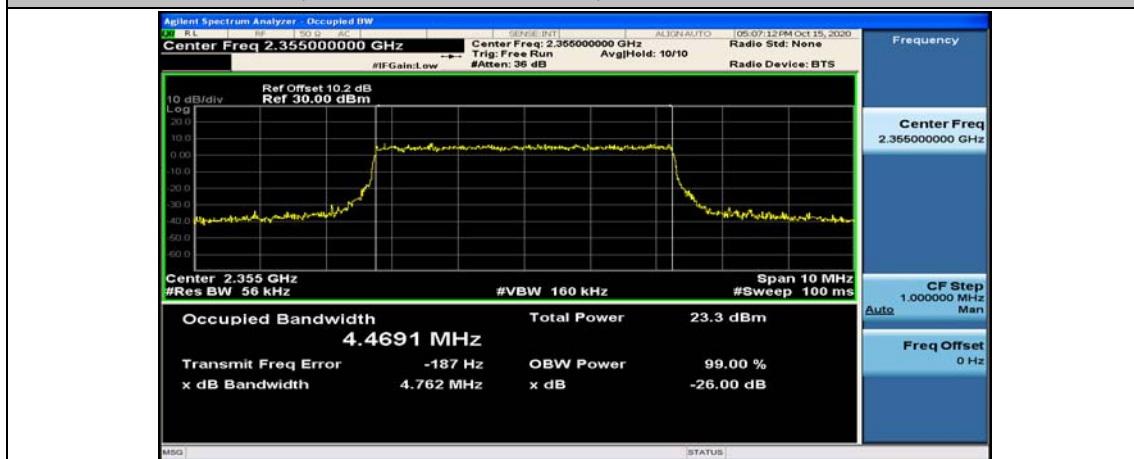
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	MCH	50	0	8.9360	9.439	PASS
16QAM	MCH	50	0	8.9523	9.406	PASS

Test Graphs

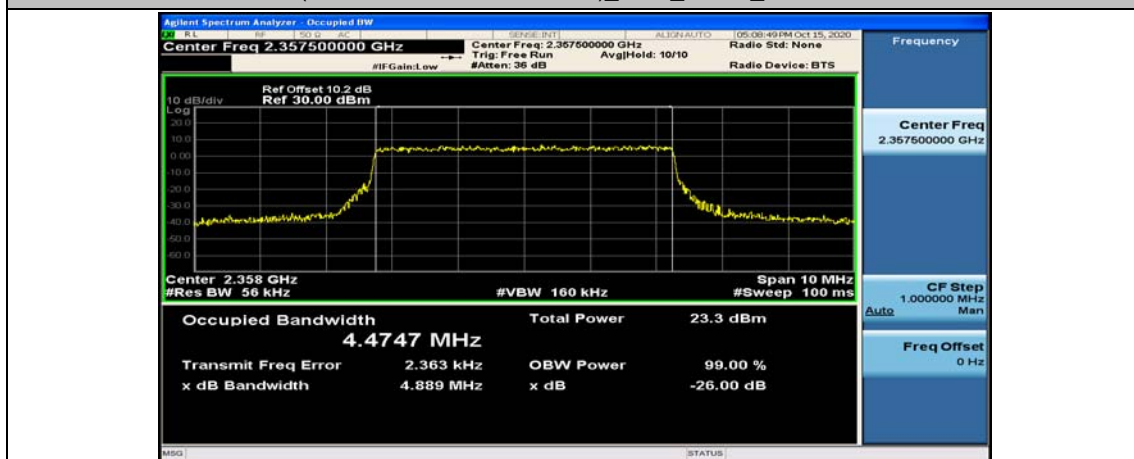
Channel Bandwidth: 5 MHz



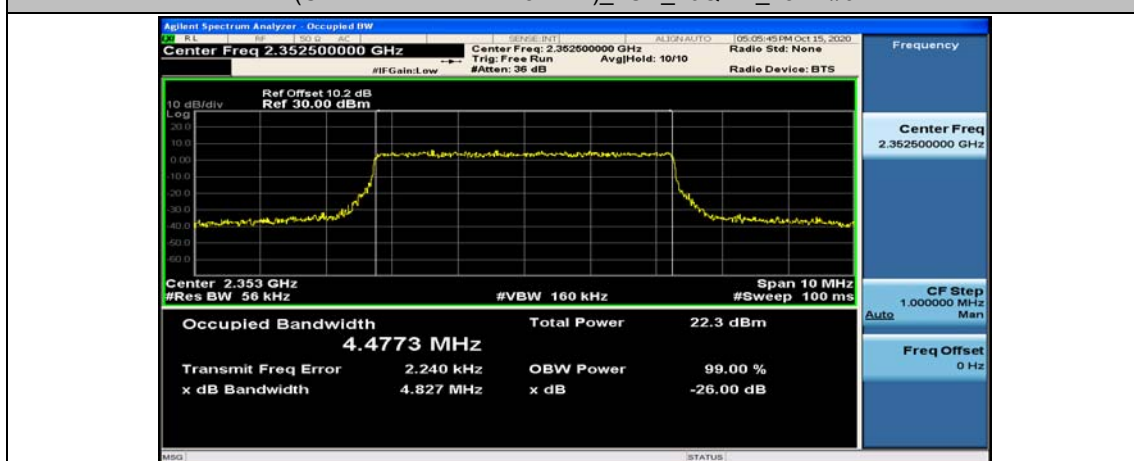
(Channel Bandwidth: 5 MHz)_MCH_QPSK_25RB#0



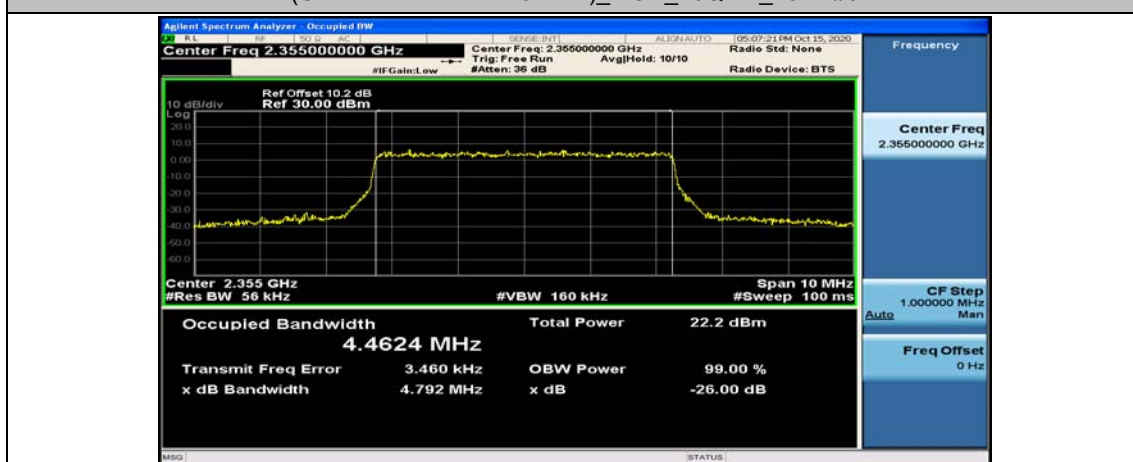
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0



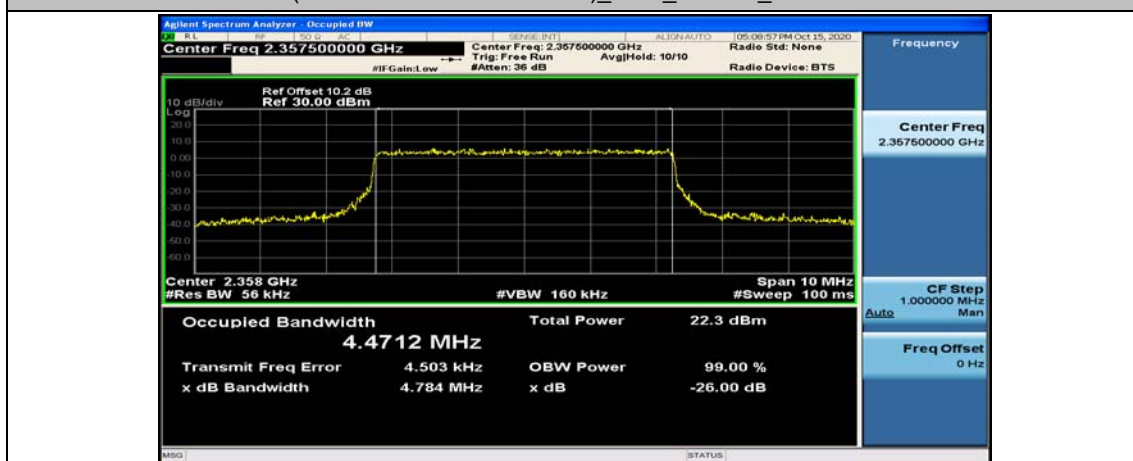
(Channel Bandwidth: 5 MHz)_LCH_16QAM_25RB#0



(Channel Bandwidth: 5 MHz)_MCH_16QAM_25RB#0

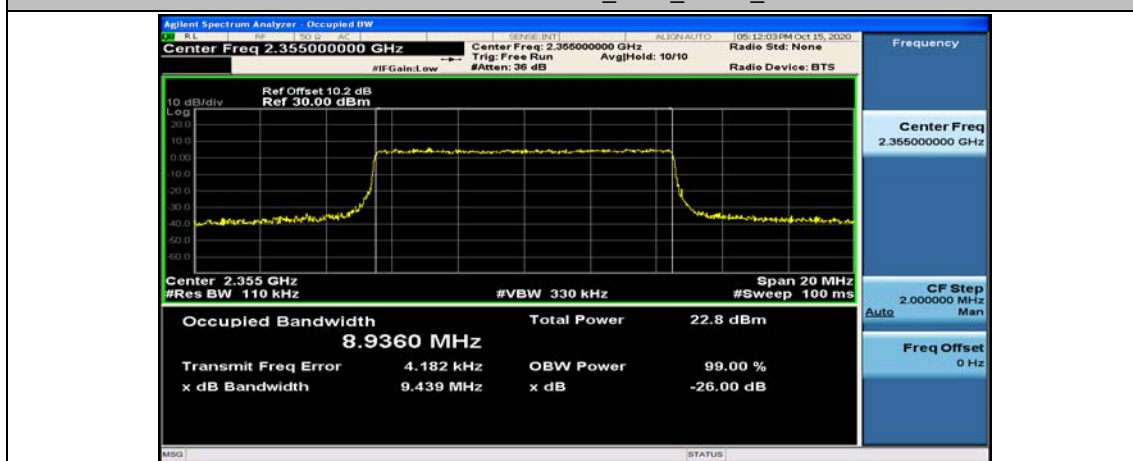


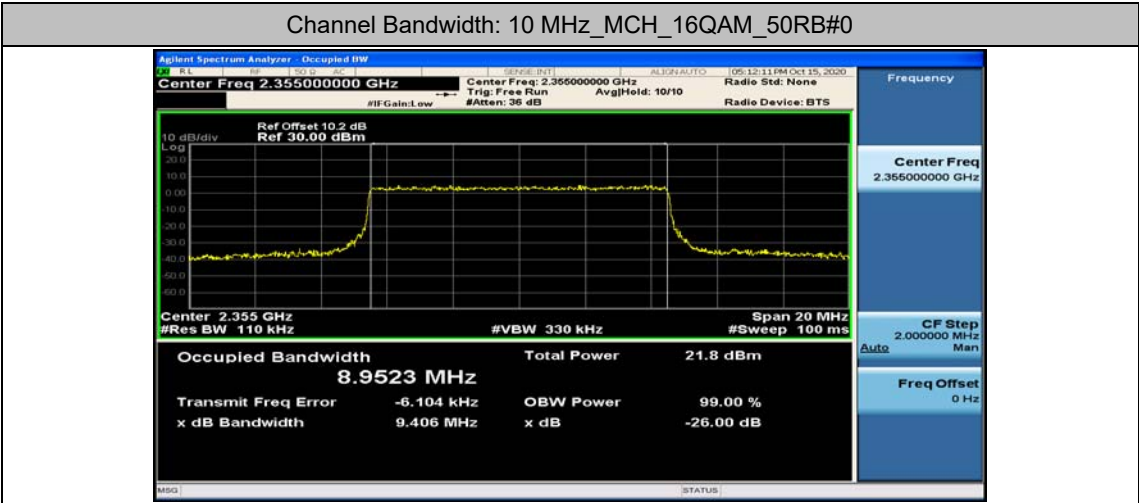
(Channel Bandwidth: 5 MHz)_HCH_16QAM_25RB#0



Channel Bandwidth: 10 MHz

Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0





Appendix D: Band Edge

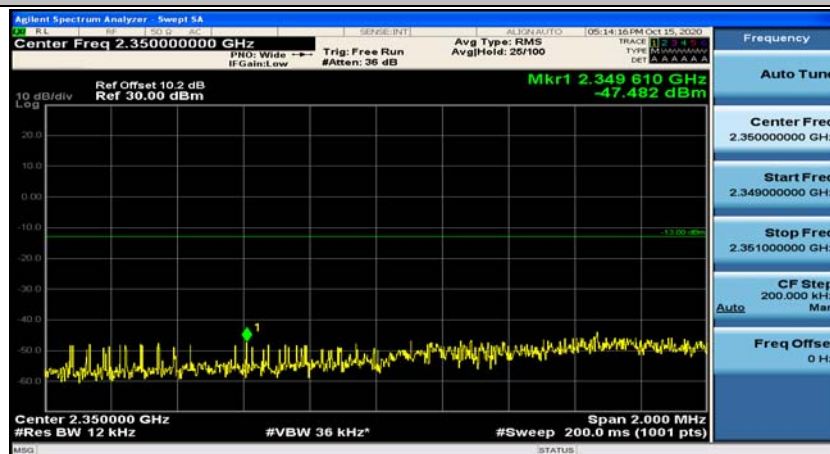
Test Graphs

Channel Bandwidth: 5 MHz

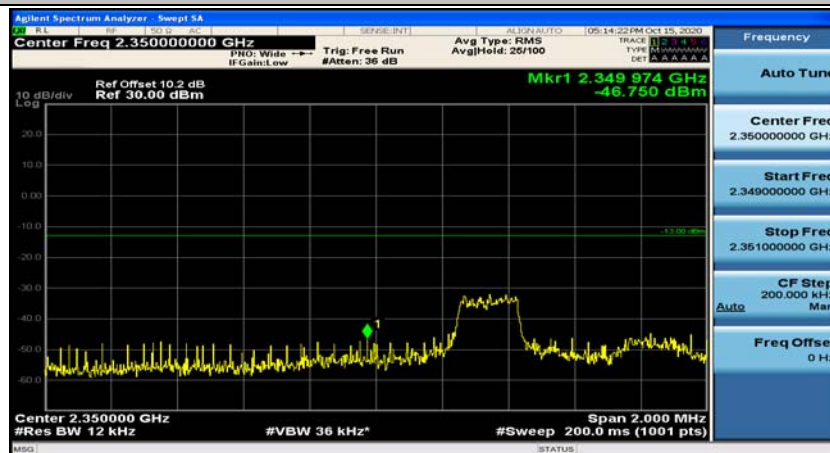
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#0



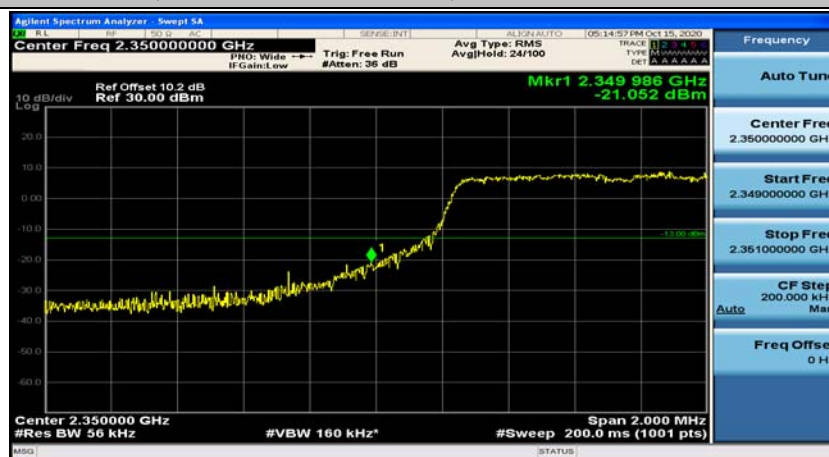
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#12



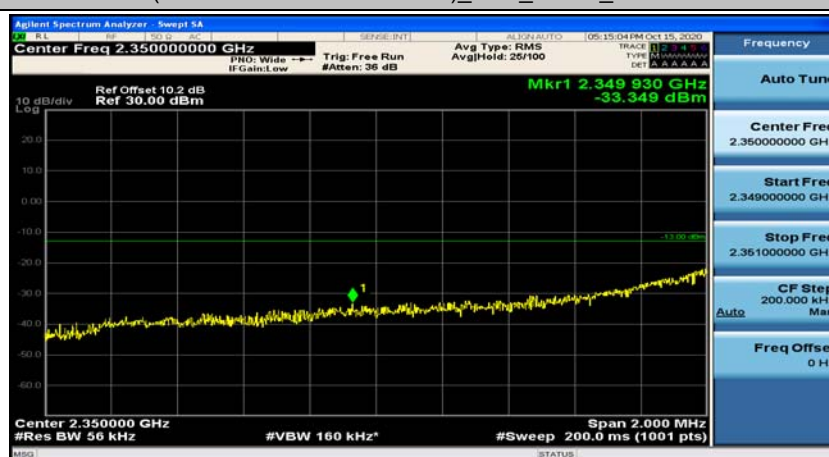
(Channel Bandwidth: 5 MHz)_LCH_QPSK_1RB#24



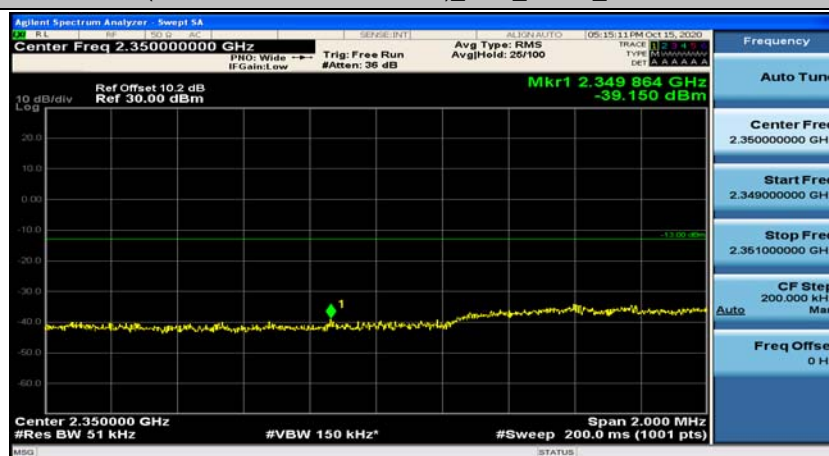
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#0



(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#6



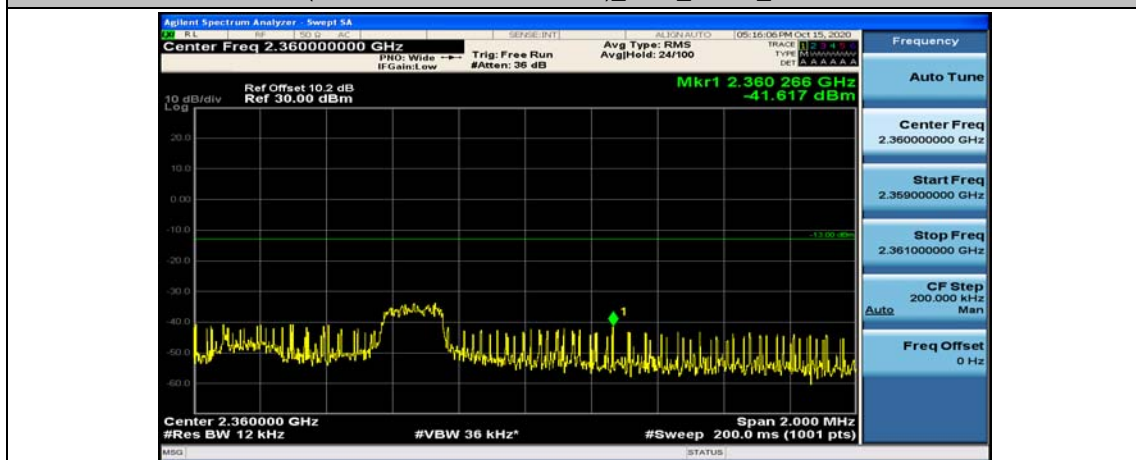
(Channel Bandwidth: 5 MHz)_LCH_QPSK_12RB#13



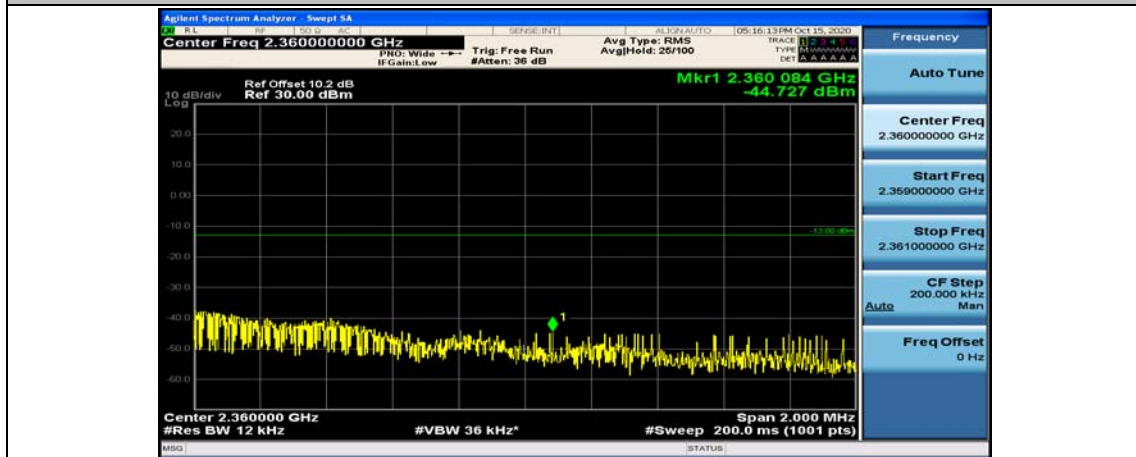
(Channel Bandwidth: 5 MHz)_LCH_QPSK_25RB#0



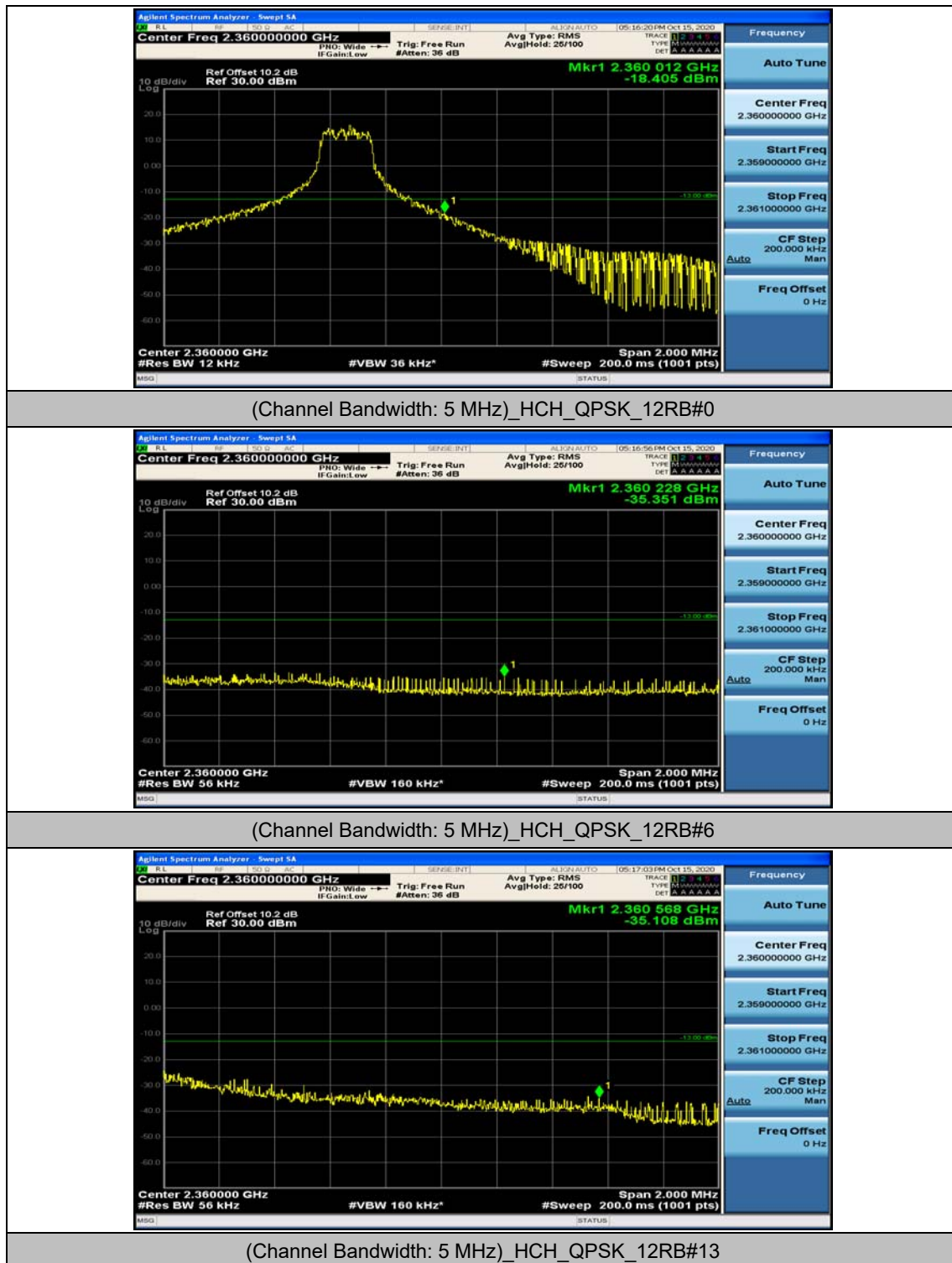
(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#0

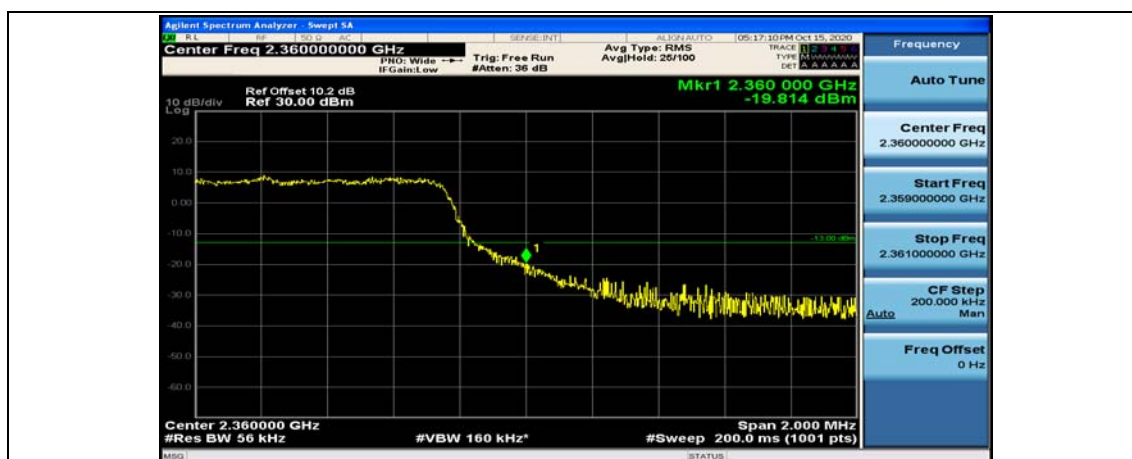


(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#12



(Channel Bandwidth: 5 MHz)_HCH_QPSK_1RB#24

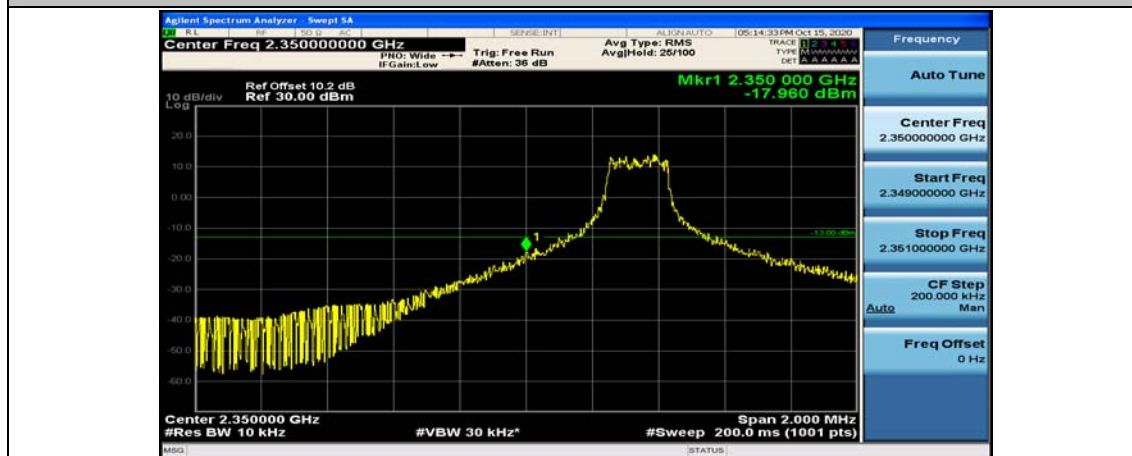




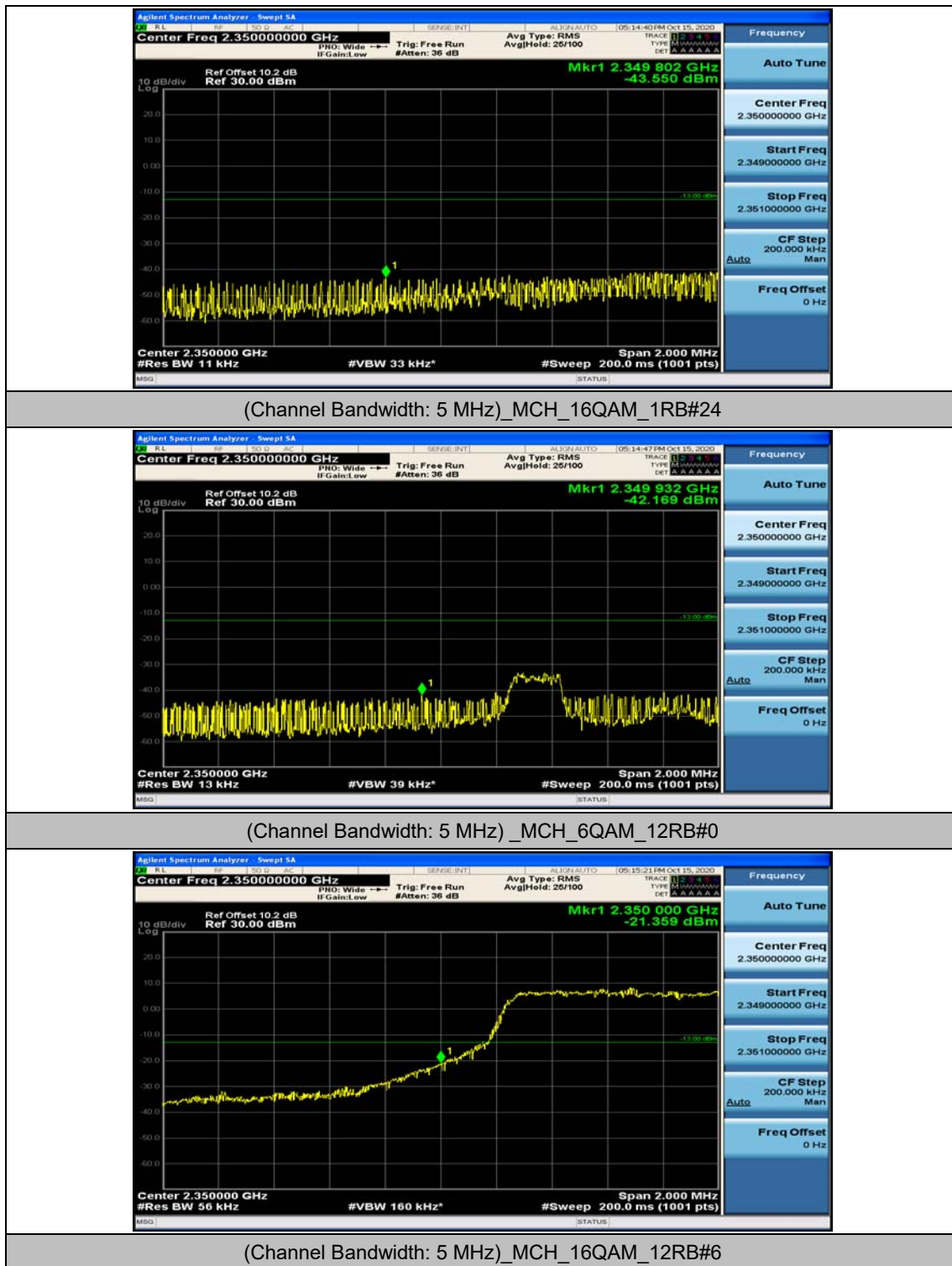
(Channel Bandwidth: 5 MHz)_HCH_QPSK_25RB#0

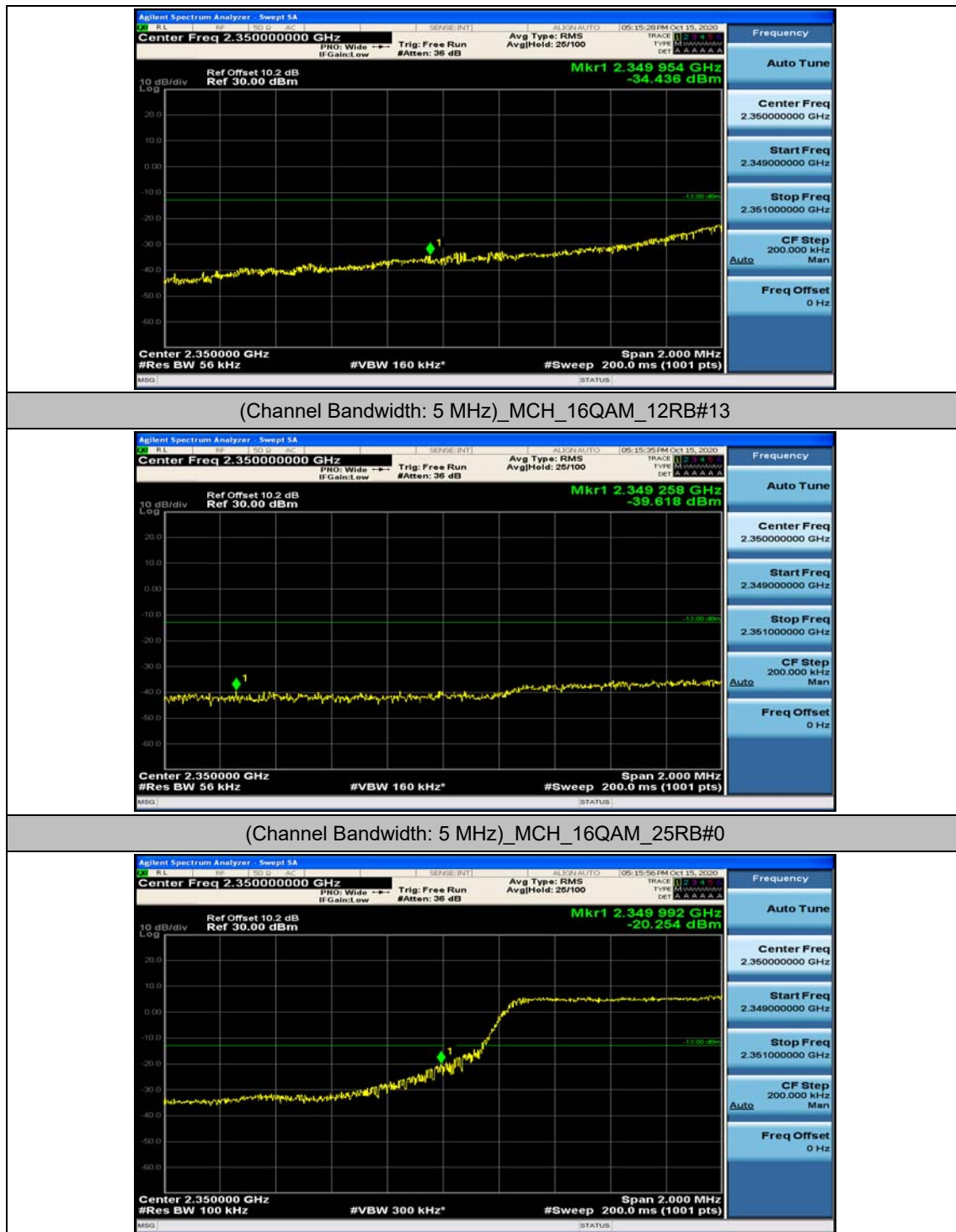


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0

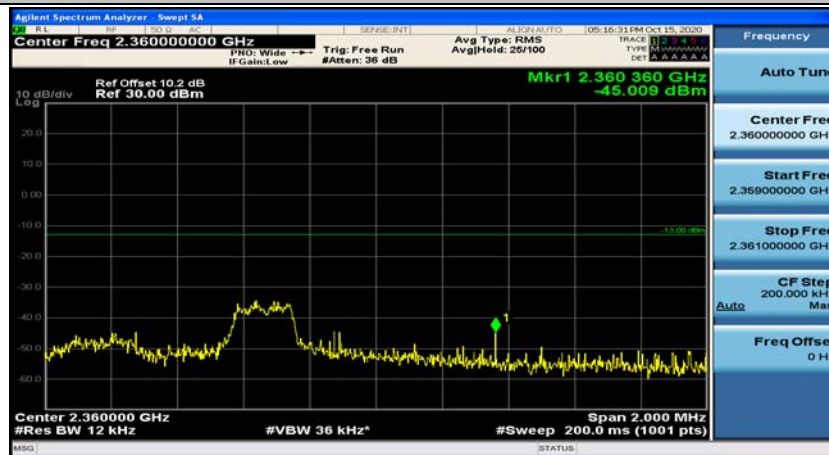


(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12

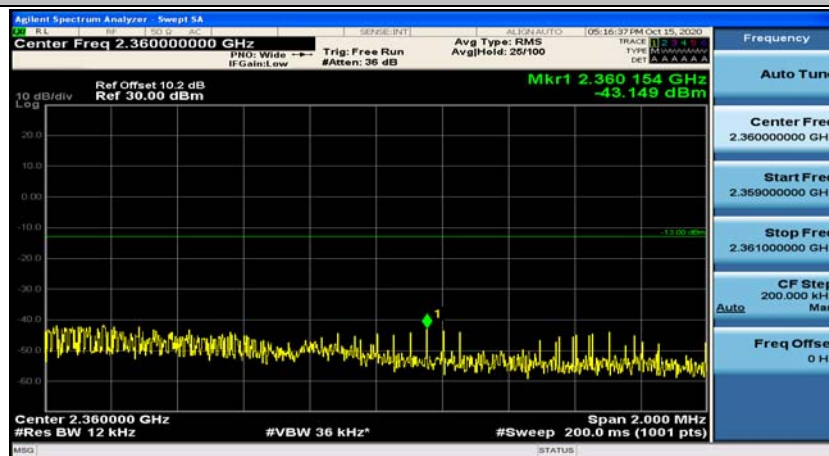




(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#0



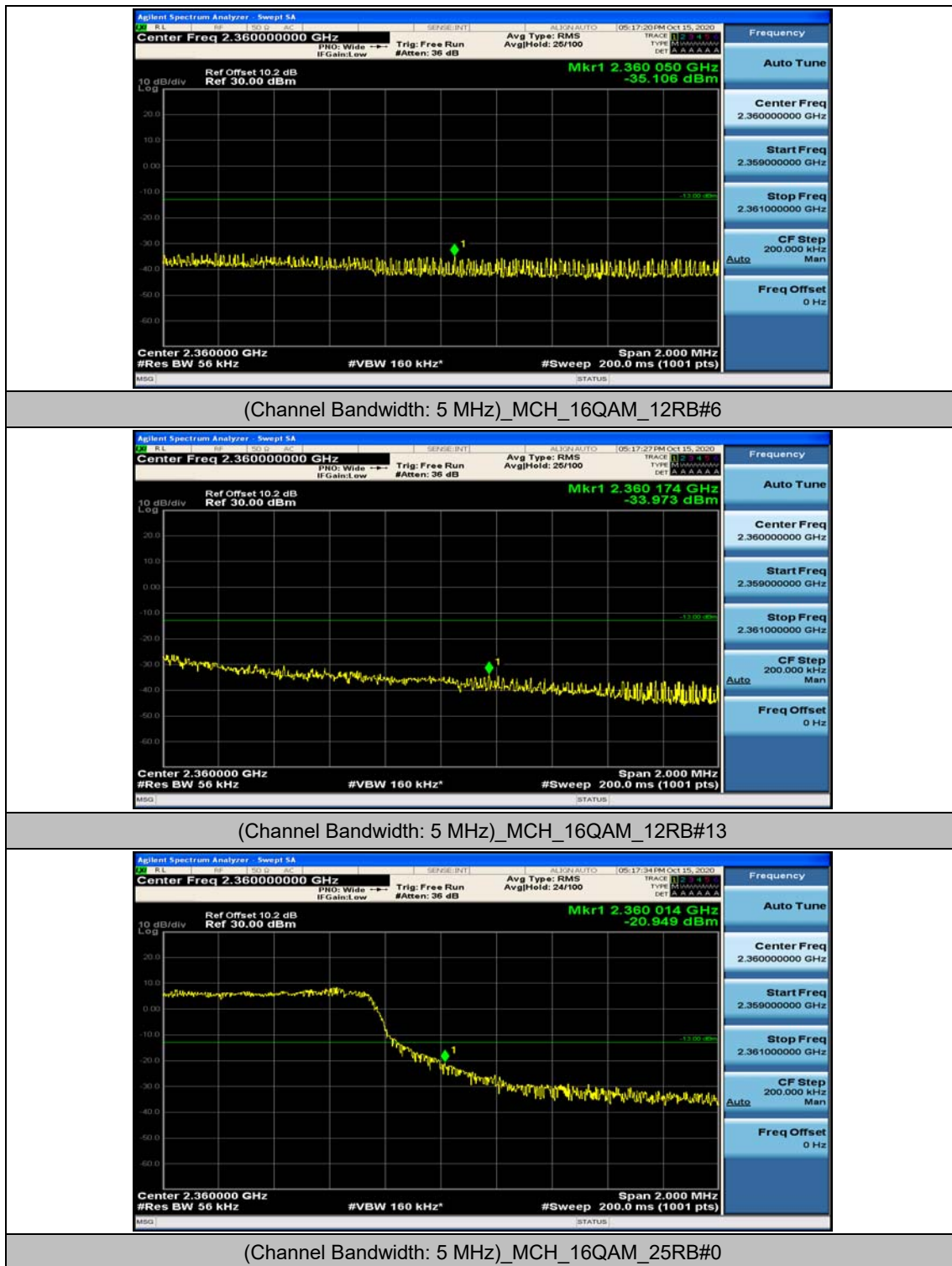
(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#12



(Channel Bandwidth: 5 MHz)_MCH_16QAM_1RB#24

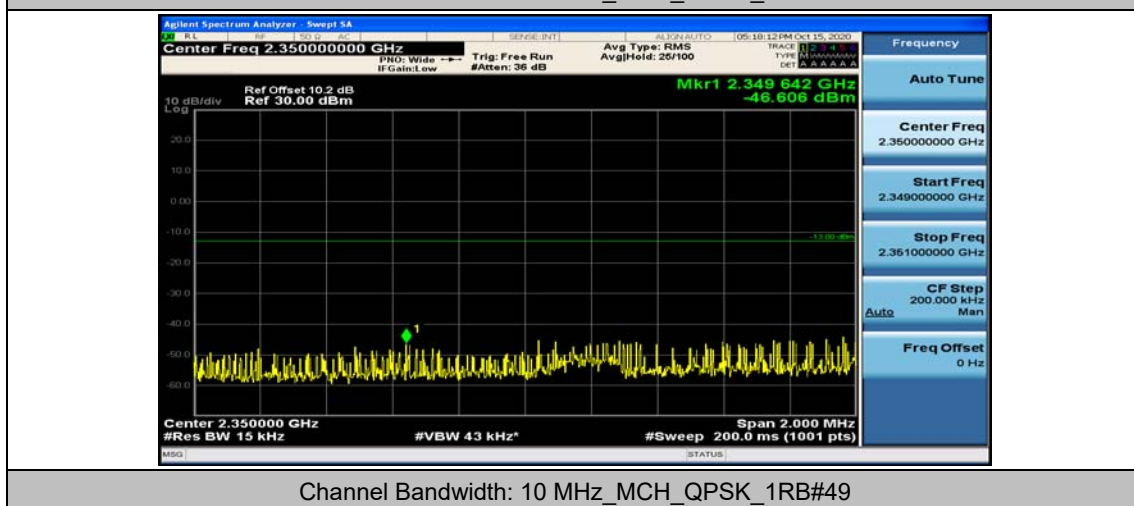
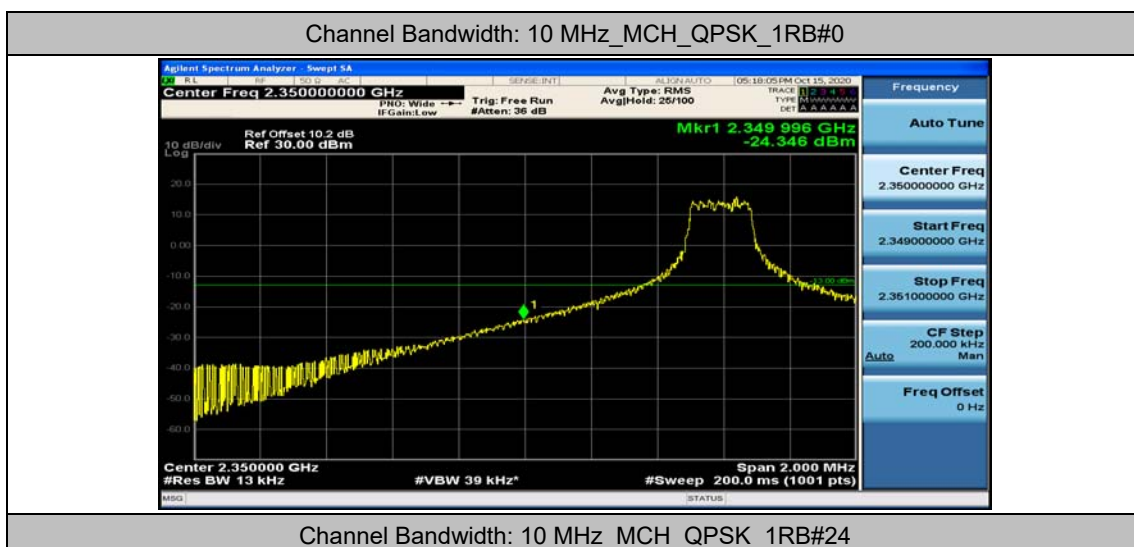


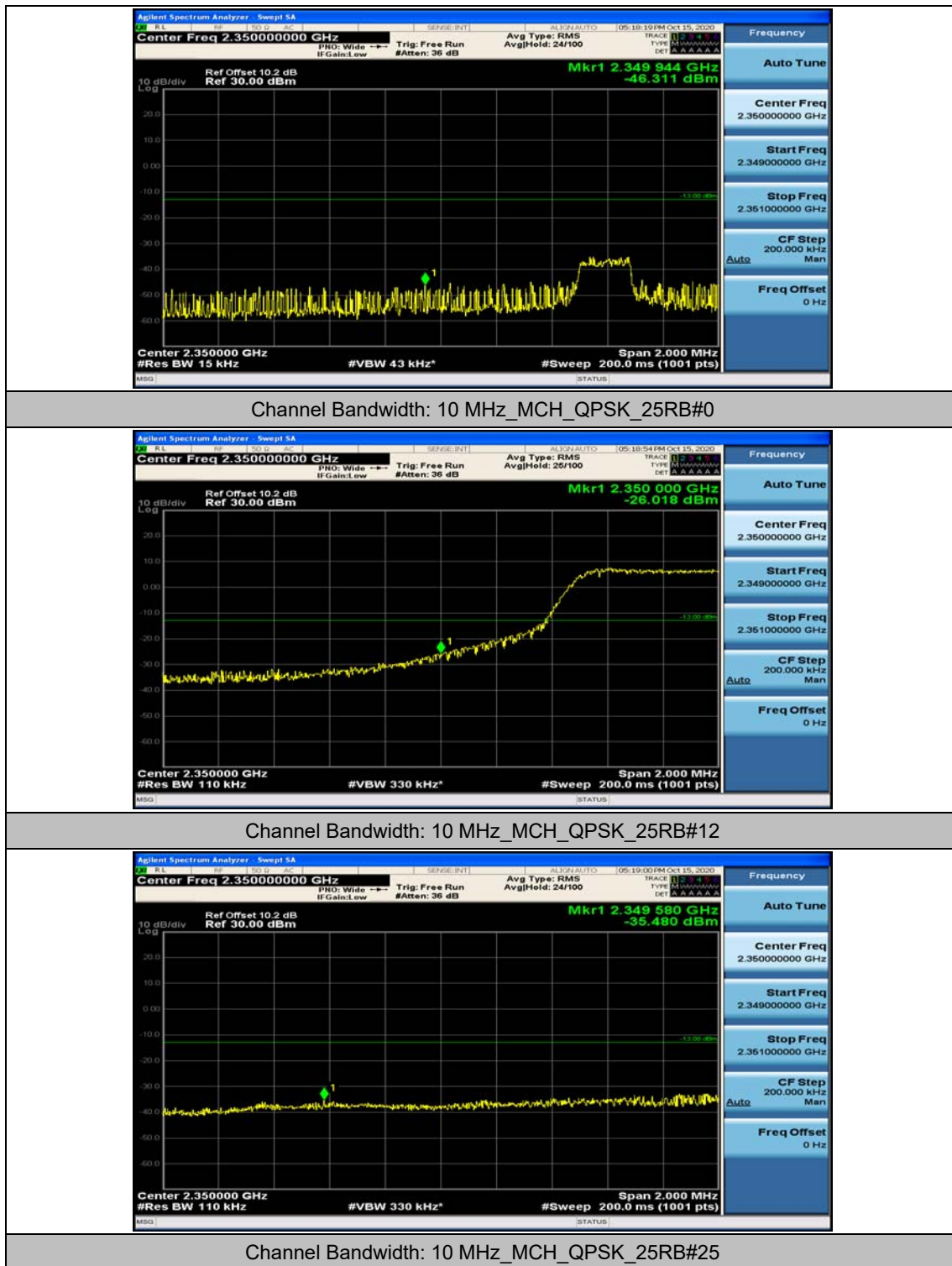
(Channel Bandwidth: 5 MHz)_MCH_16QAM_12RB#0

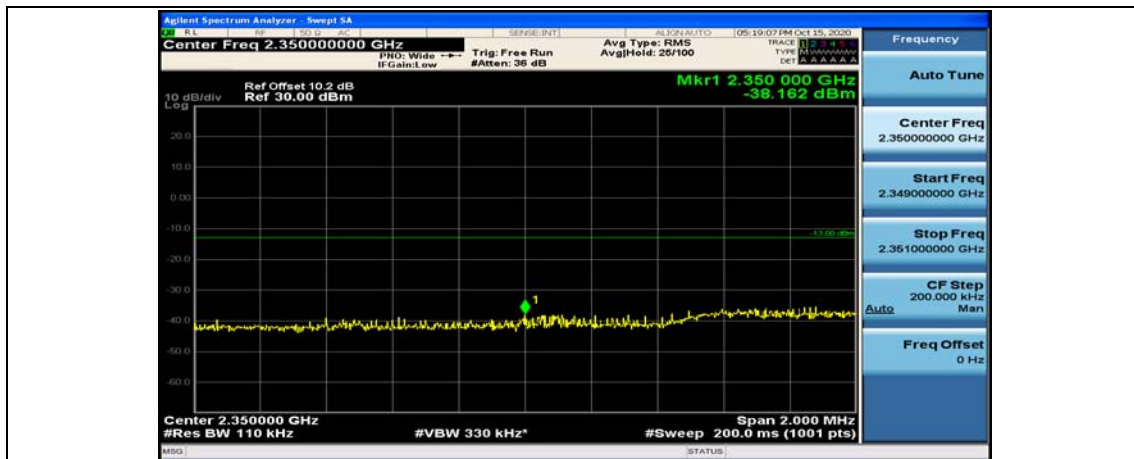




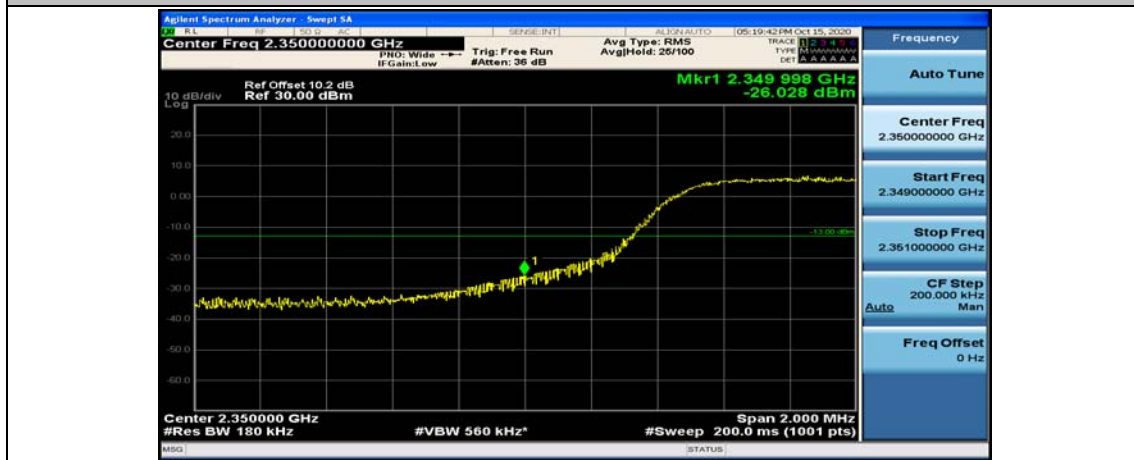
Channel Bandwidth: 10 MHz



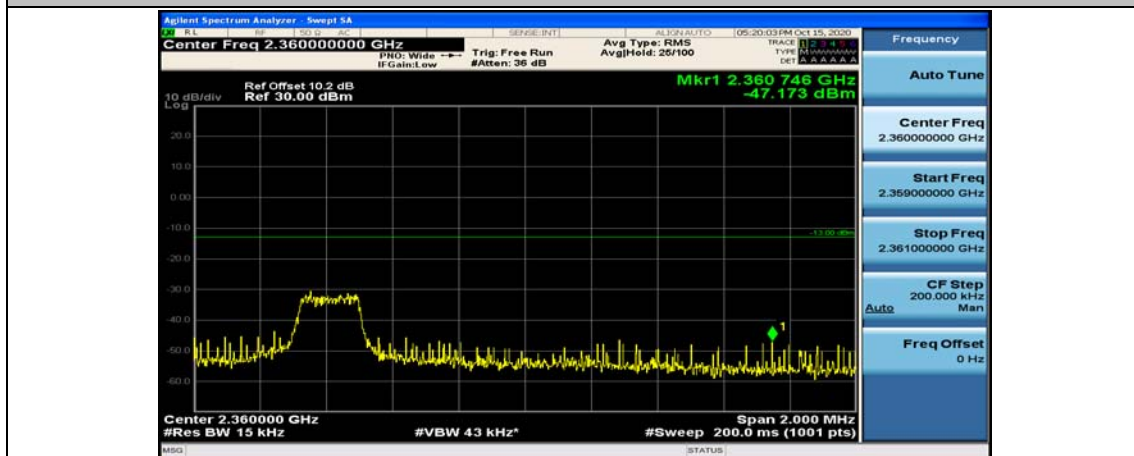




Channel Bandwidth: 10 MHz_MCH_QPSK_50RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#0



Channel Bandwidth: 10 MHz_MCH_QPSK_1RB#24

