

Exhibit 6

Test Report

Part 1

FCC Part 27

EXHIBIT 6, PART 1
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Test Equipment List

Test Equipment	Description
DUT	NextNet Wireless Base Transceiver Station Model No. BTS-2500-C RF Board P/N 123-0150-0100 Logic Board P/N 123-0150-0200 Logic Board S/N 0150-0200-4500-145
Spectrum Analyzer	Agilent E4440A S/N: MY44022791 Calibrated: 05/30/2004 Calibration due: 05/30/2006
Attenuator/Coaxial Cable (all applicable tests except harmonic frequencies)	Calibrated by user MCE/Weinshel Attenuator 30dB, 10W Model: 37-30-34, S/N. BN 9845
Notch Filter/Attenuator/ Coaxial Cable (harmonic frequency test only)	Filter and assembly calibrated by user MCE/Weinshel Attenuator 20dB, 10W Model: 23-20-34, S.N. BP4391
Computer	Dell Inspiron 5000 Model: PPM S/N: 000832RM-12961-04R-0441
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
Power Supply 48V (All Tests Except Frequency Stability)	Lambda Model JWS600-48 S/N VVG-158C02-0082W050
Power Supply (Frequency Stability Test Only)	Agilent 6544A 0-60VDC S/N: US36390304 Calibrated with voltmeter listed below.
Digital Voltmeter	HP 34401A S/N: MY45001201 Calibrated: 4-9-2005 Calibration due: 4-9-2007
Temperature Chamber	Test Equity 1000 Series
Temperature Sensor	Fluke 89 IV True RMS Multimeter K-Type Thermocouple
Radiation Hazard Meter	General Microwave Corporation RAHAM Model 3 Calibrated: 10-14-2003 Calibration due: 10-14-2005

RF Power Output

Rule Part Number: 2.1046, 27.50(h)(1)

(i) The maximum EIRP of a main, booster or base station shall not exceed $33 \text{ dBW} + 10 \log(X/Y) \text{ dBW}$, where X is the actual channel width in MHz and Y is either 6 MHz if prior to transition or the station is in the MBS following transition or 5.5 MHz if the station is in the LBS and UBS following transition, except as provided in paragraph (h)(1)(ii) of this section.

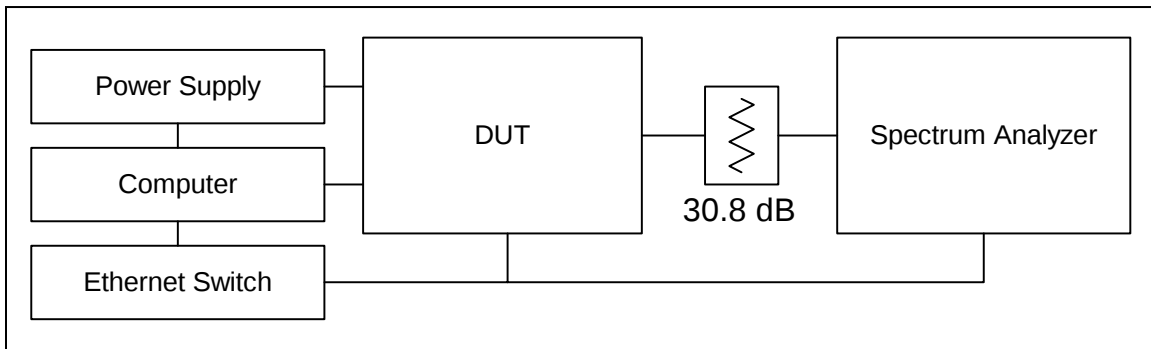
(ii) If a main or booster station sectorizes or otherwise uses one or more transmitting antennas with a non-omnidirectional horizontal plane radiation pattern, the maximum EIRP in dBW in a given direction shall be determined by the following formula: $\text{EIRP} = 33 \text{ dBW} + 10 \log(X/Y) \text{ dBW} + 10 \log(360/\text{beamwidth}) \text{ dBW}$, where X is the actual channel width in MHz, Y is either (i) 6 MHz if prior to transition or the station is in the MBS following transition or (ii) 5.5 MHz if the station is in the LBS and UBS following transition, and beamwidth is the total horizontal plane beamwidth of the individual transmitting antenna for the station or any sector measured at the half-power points.

Standard: TIA-603-B
TIA Standard, Land Mobile FM or PM Communications Equipment, Measurement and Performance Standards

Test Procedure: The radiated power of the base station is calculated from the maximum antenna gain and the conducted power available at the antenna port. The conducted RF output power was measured with a spectrum analyzer utilizing the power measurement function. The RF output is applied to an attenuator that is connected to the spectrum analyzer RF input port. An RMS detector is used to measure the average power during the transmission. The transmitter is enabled in test mode by the attached computer. The RF loss of the attenuators and coax has been measured and is included in the spectrum analyzer offset level and is noted on the block diagram. Measurements are performed at several frequencies across the band for each of the modulation formats available (4-, 16-, and 64-QAM) and channel bandwidths (5.5 MHz and 6.0 MHz). RF power is calibrated at the antenna port, the channel filter that is required for emissions compliance is not used for this test since the 5 watts is the power applied to the channel filter.

Test Conditions: 2-Watt Frequencies
 5.5 MHz channels: 2504.75, 2565.25, 2626.75, 2687.25 MHz
 6.0 MHz channels: 2499, 2575, and 2621 MHz

 5-Watt Frequencies
 5.5 and 6.0 MHz channels: 2503, 2593, and 2683 MHz
 Temperature = 25 °C
 Supply Voltage = 48.0 VDC Nominal to DUT



2W and 5W Conducted RF Power Test Setup

Conducted RF Output Test Results Summary (2W)

2W Minimum Conducted Power						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	dBm	Watts	dBm	Watts	dBm	Watts
2504.75	0.16	0.00104	0.12	0.00103	0.12	0.00103
2565.25	-0.40	0.00091	-0.39	0.00091	-0.38	0.00092
2626.75	0.24	0.00106	0.23	0.00105	0.23	0.00105
2687.25	0.18	0.00104	0.19	0.00104	0.20	0.00105
2499.00	0.12	0.00103	0.11	0.00103	0.11	0.00103
2575.00	-0.41	0.00091	-0.40	0.00091	-0.39	0.00091
2621.00	0.12	0.00103	0.12	0.00103	0.11	0.00103

2W Maximum Conducted Power						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2504.75	32.01	1.59	32.01	1.59	32.03	1.60
2565.25	32.26	1.68	32.26	1.68	32.26	1.68
2626.75	31.93	1.56	31.94	1.56	31.93	1.56
2687.25	32.92	1.96	32.91	1.95	32.91	1.95
2499.00	32.04	1.60	32.04	1.60	32.04	1.60
2575.00	32.81	1.91	32.81	1.91	32.82	1.91
2621.00	31.96	1.57	31.97	1.57	31.97	1.57

Conducted RF Output Test Results Summary (5W)

5W Minimum Conducted Power						
Freq/BW (MHz)	4 QAM		16 QAM		64 QAM	
	dBm	Watts	dBm	Watts	dBm	Watts
2503/5.5	-0.41	0.00091	-0.42	0.00091	-0.43	0.00091
2593/5.5	0.70	0.00117	0.69	0.00117	0.68	0.00117
2683/5.5	-0.05	0.00099	-0.06	0.00099	-0.07	0.00098
2503/6.0	-0.44	0.00090	-0.45	0.00090	-0.44	0.00090
2593/6.0	0.68	0.00117	0.28	0.00107	0.68	0.00117
2683/6.0	-0.12	0.00097	-0.13	0.00097	-0.13	0.00097

5W Maximum Conducted Power						
	4 QAM		16 QAM		64 QAM	
Freq/BW (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503/5.5	36.12	4.09	36.12	4.09	36.14	4.11
2593/5.5	36.75	4.73	36.79	4.78	36.78	4.76
2683/5.5	36.74	4.72	36.76	4.74	36.75	4.73
2503/6.0	36.75	4.73	36.75	4.73	36.78	4.76
2593/6.0	36.74	4.72	36.73	4.71	36.76	4.74
2683/6.0	36.12	4.09	36.14	4.11	36.14	4.11

RF Power Output (Cont'd)

Test Conclusions:

Vertically Polarized Antenna

RF Power Output = 33 dBm

Vertical Antenna Gain = 19 dBi

Transmitted Power = RF Power + Isotropic Antenna Gain

Transmitted Power = 33 + 19 = 52 dBm

Transmitted Power = $10 \cdot \log(2W) + 19 \text{ dBi} = 22 \text{ dBiW} < 33 \text{ dBiW}$

Horizontally Polarized Antenna

RF Power Output = 33 dBm

Horizontal Antenna Gain = 19 dBi

Transmitted Power = RF Power + Isotropic Antenna Gain

Transmitted Power = 33 + 19 = 52 dBm

Transmitted Power = $10 \cdot \log(2W) + 19 \text{ dBi} = 22 \text{ dBiW} < 33 \text{ dBiW}$

Pass: Transmitted Power Output Requirement at 2 watt setting

RF Power Output (Cont'd)

Test Conclusions:

Vertically Polarized Antenna

RF Power Output = 37 dBm

Vertical Antenna Gain = 19 dBi

Transmitted Power = RF Power + Isotropic Antenna Gain

Transmitted Power = 37 + 19 = 56 dBm

Transmitted Power = $10 \cdot \log(5W) + 19 \text{dBi} = 26 \text{ dBiW} < 33 \text{ dBiW}$

Horizontally Polarized Antenna

RF Power Output = 37 dBm

Horizontal Antenna Gain = 19 dBi

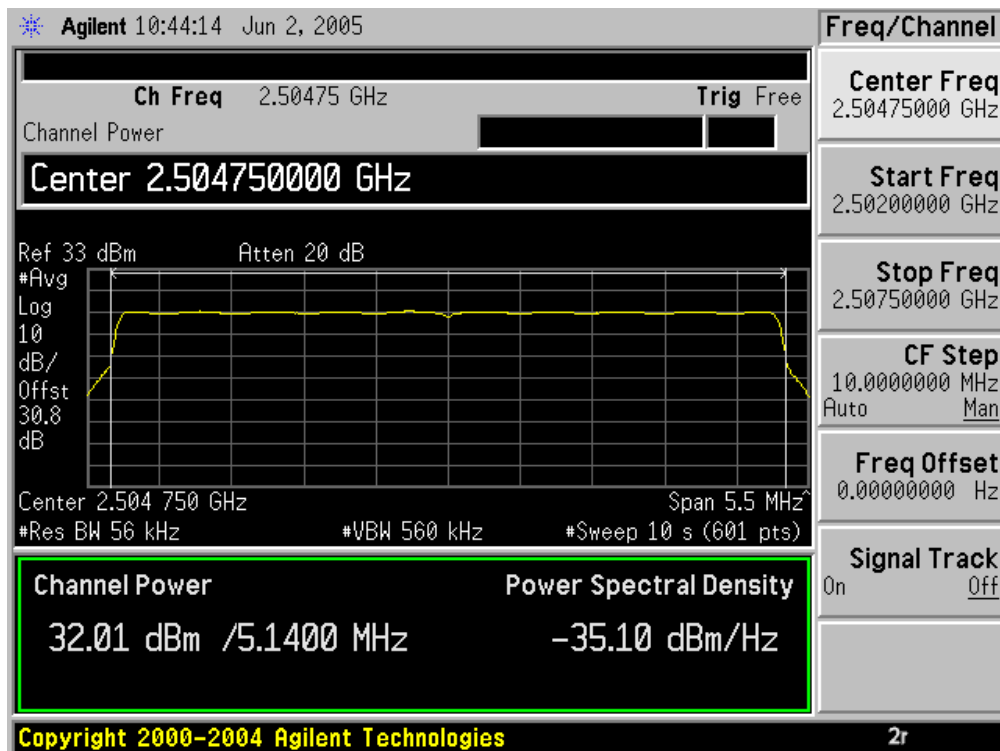
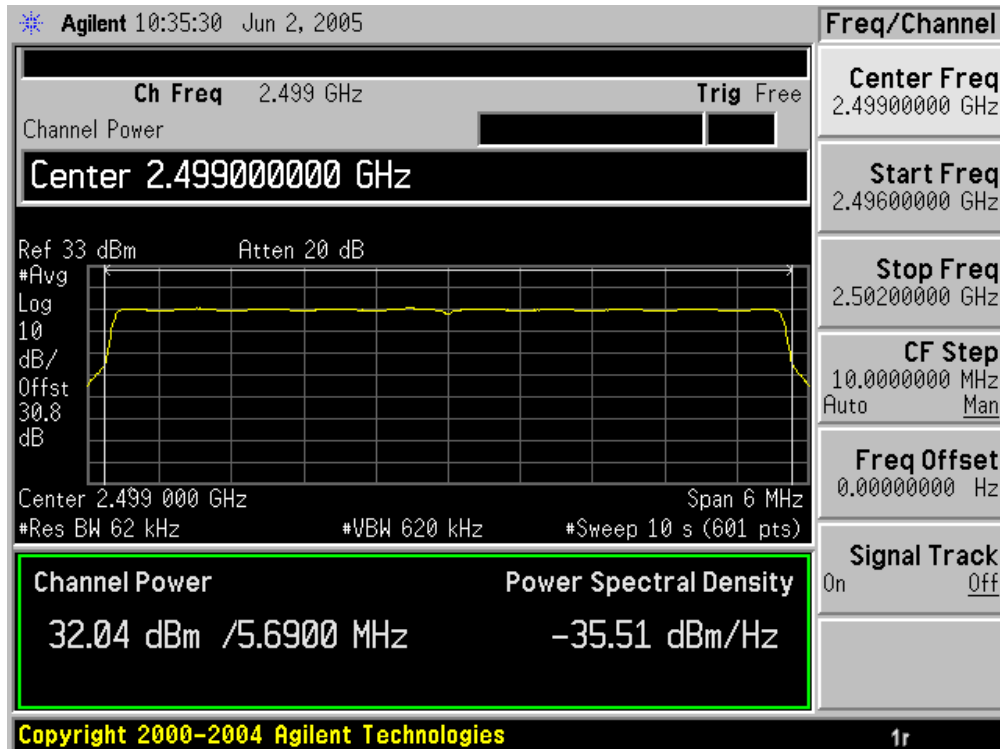
Transmitted Power = RF Power + Isotropic Antenna Gain

Transmitted Power = 37 + 19 = 56 dBm

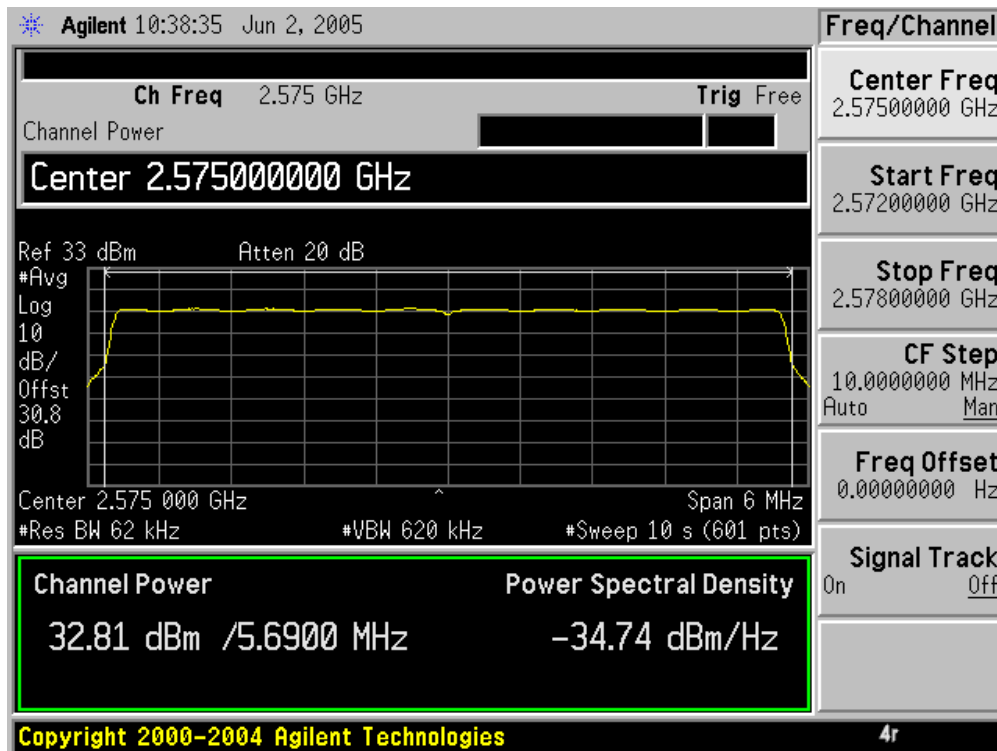
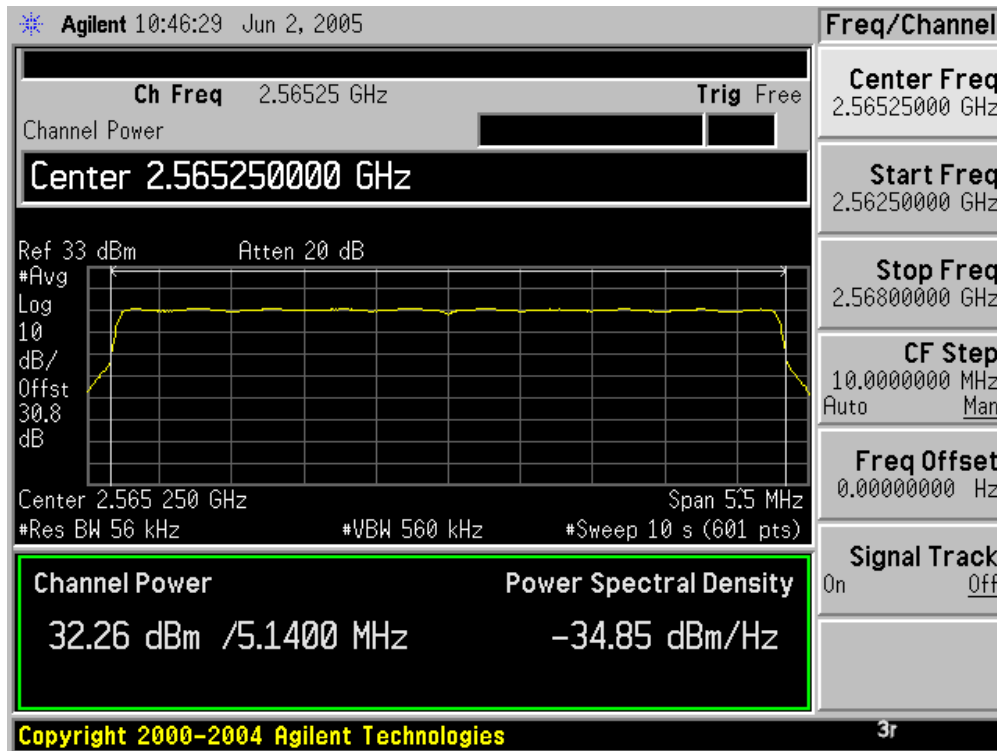
Transmitted Power = $10 \cdot \log(5W) + 19 \text{dBi} = 26 \text{ dBiW} < 33 \text{ dBiW}$

Pass: Transmitted Power Output Requirement at 5 watt setting

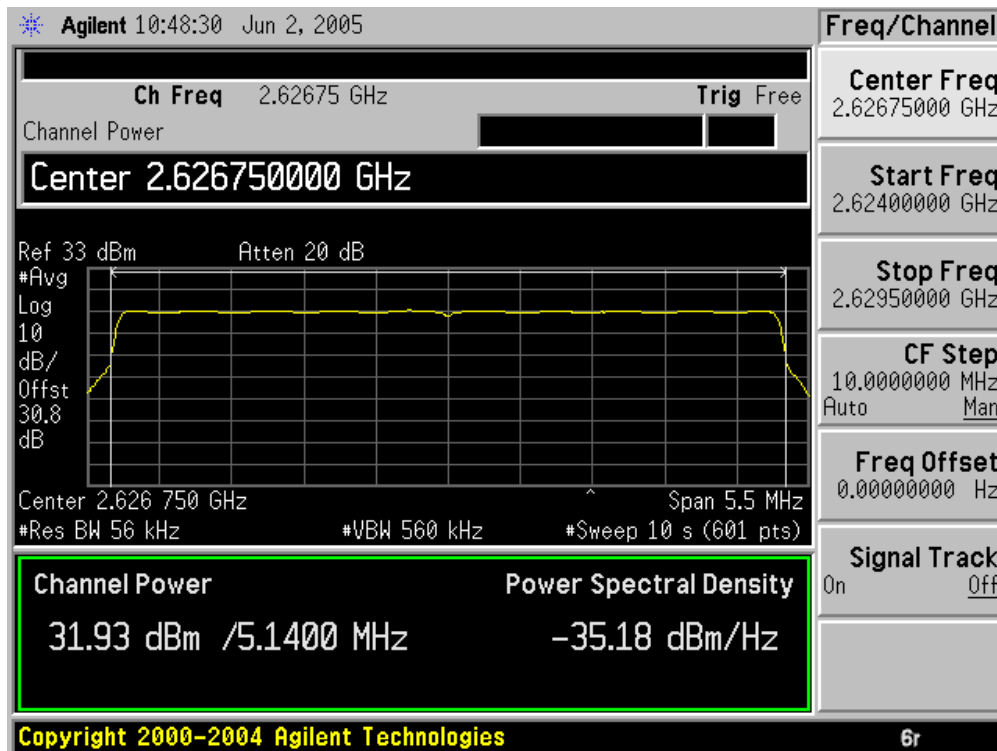
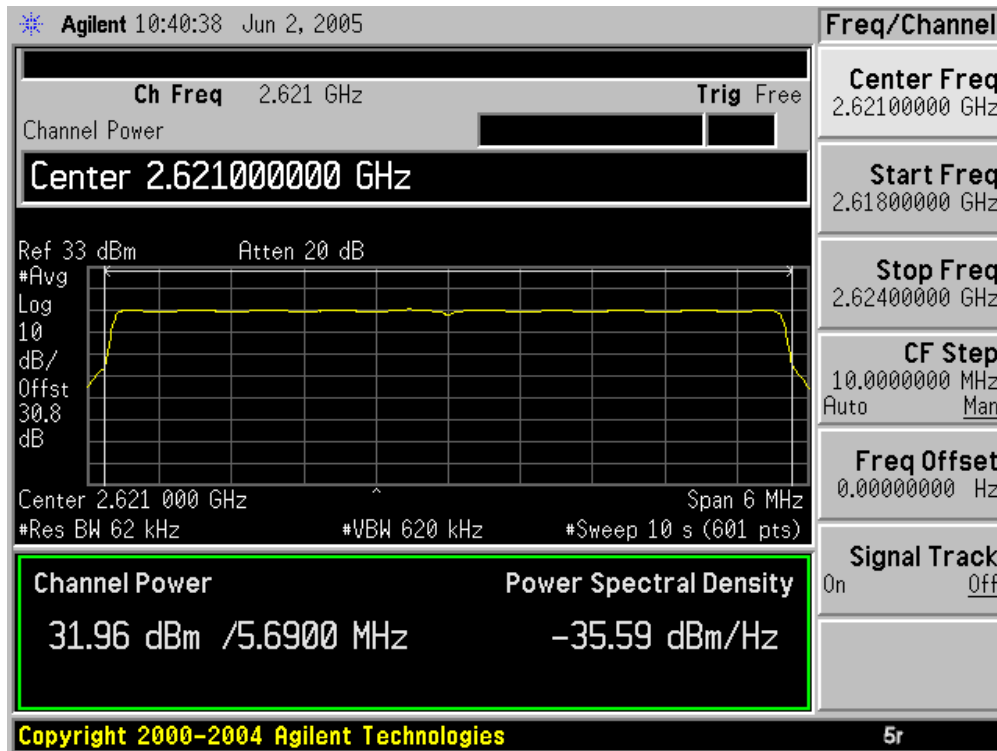
2W Conducted RF Power Output Spectrum Analyzer Plots 4-QAM (Maximum)



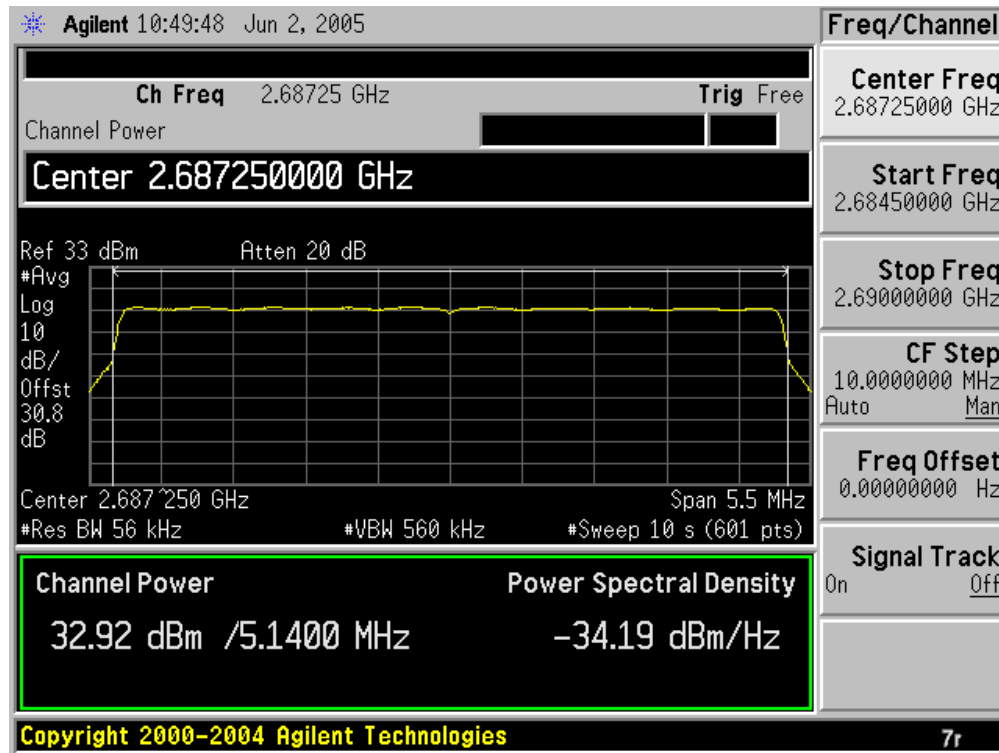
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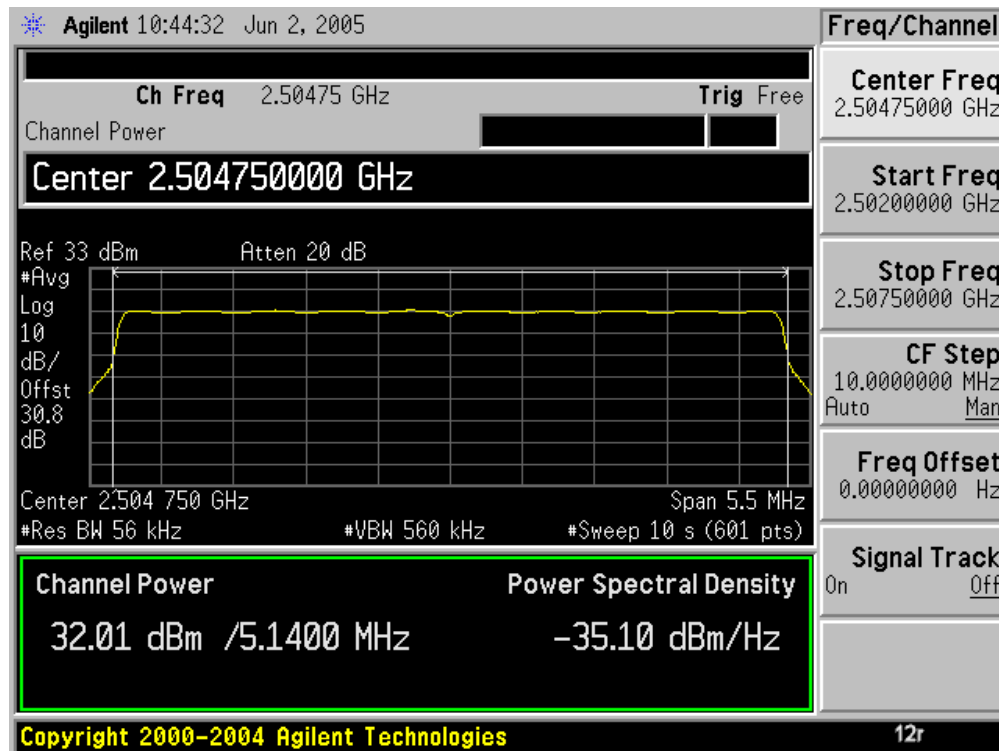
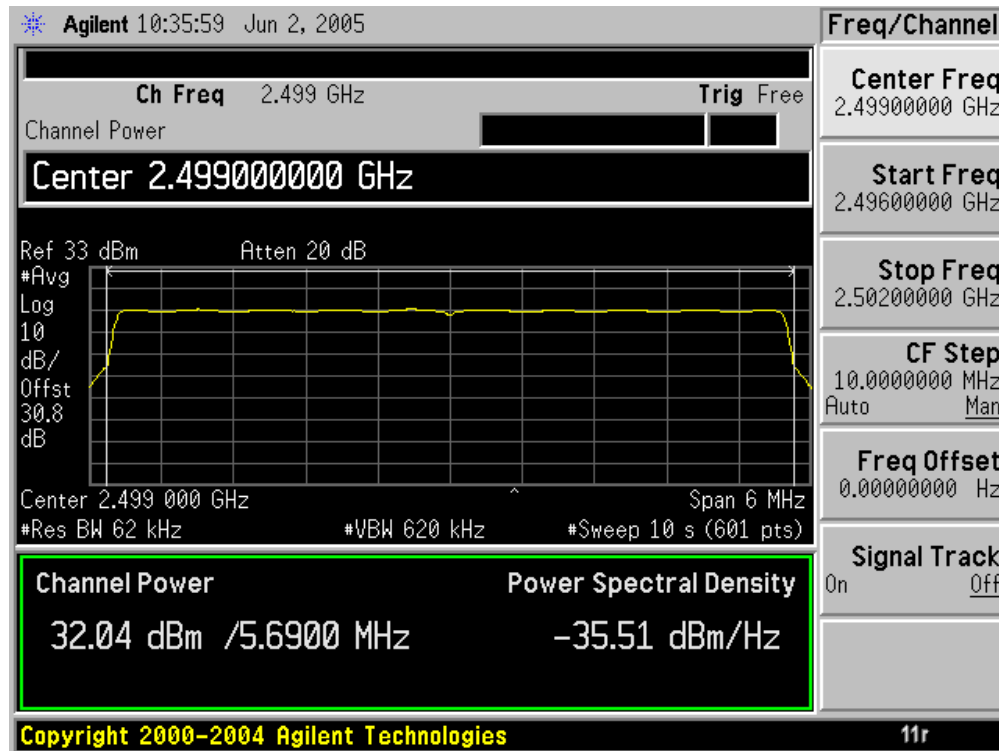
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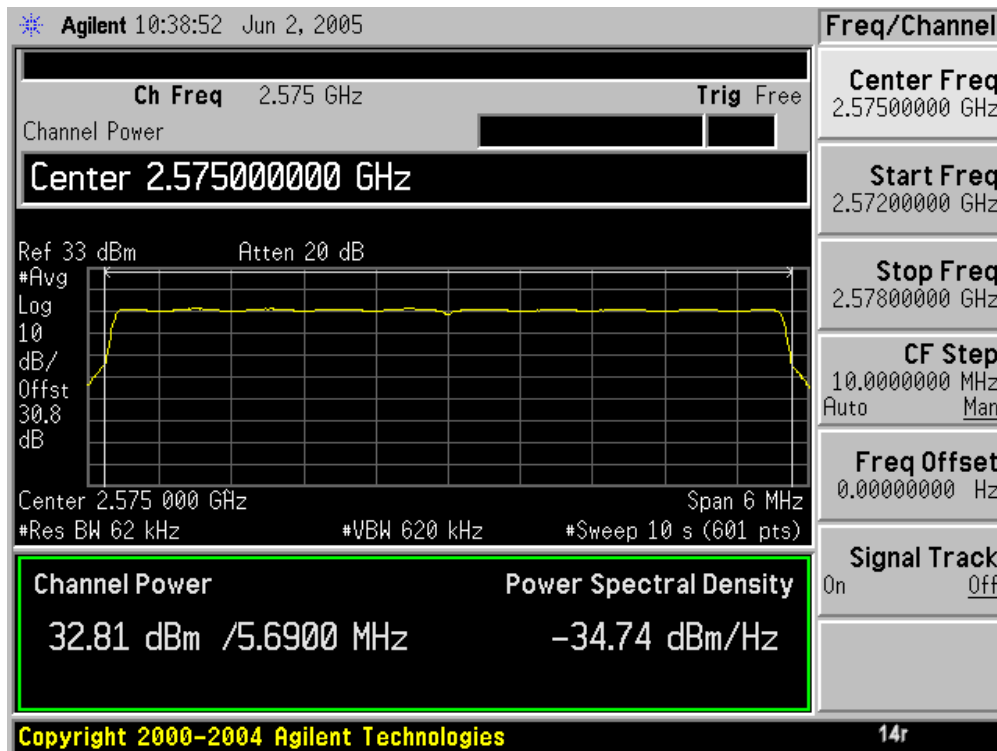
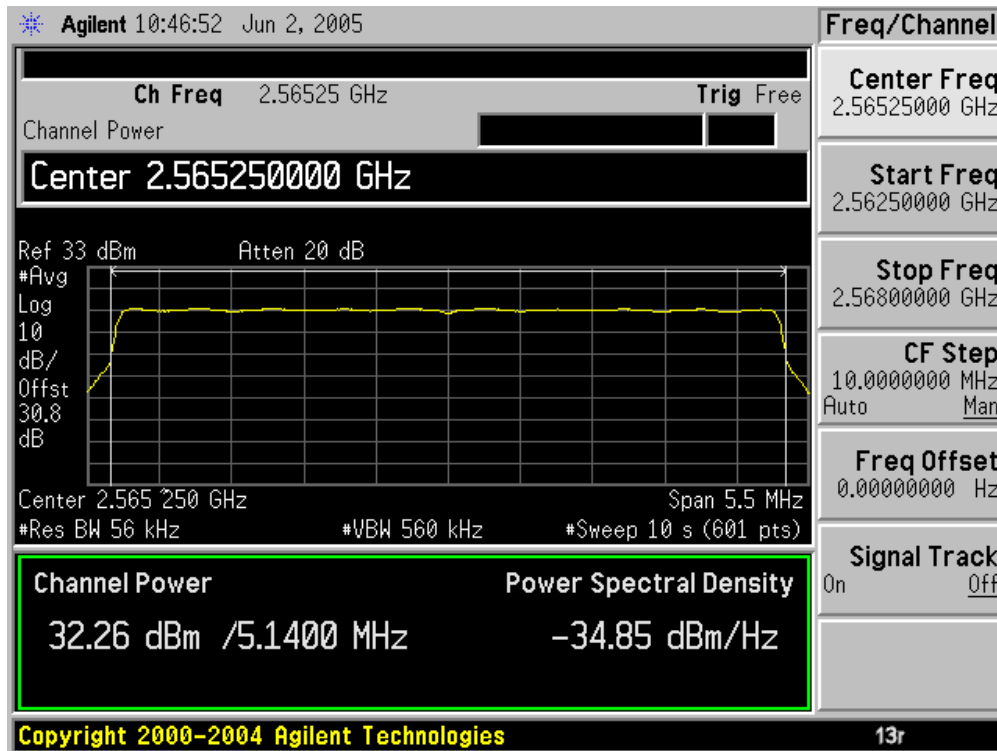
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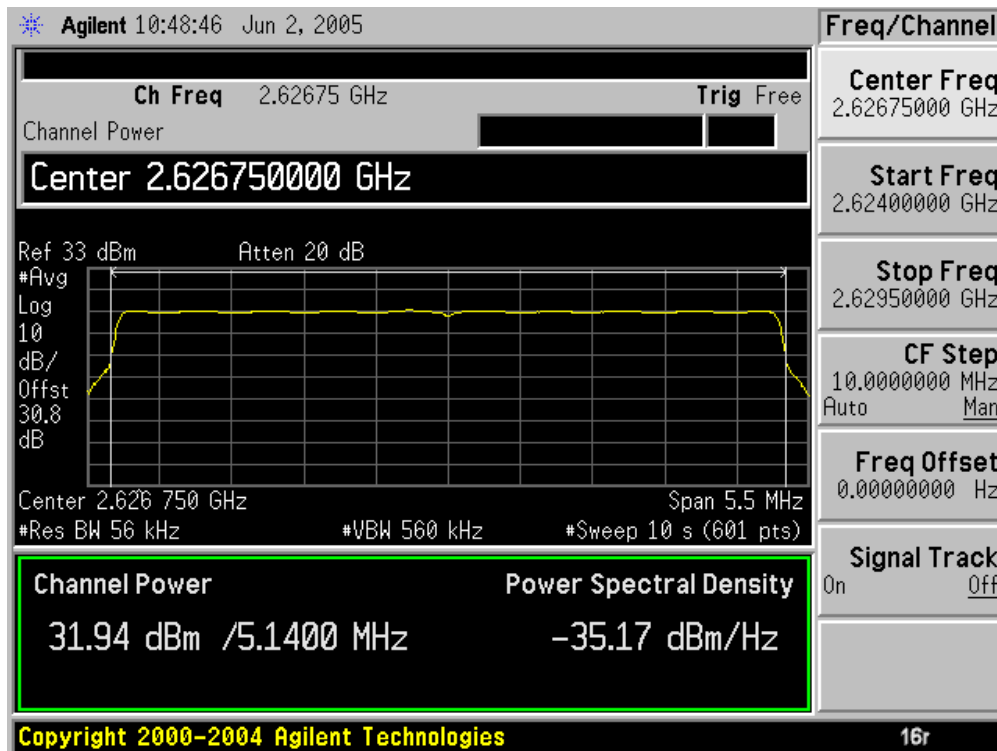
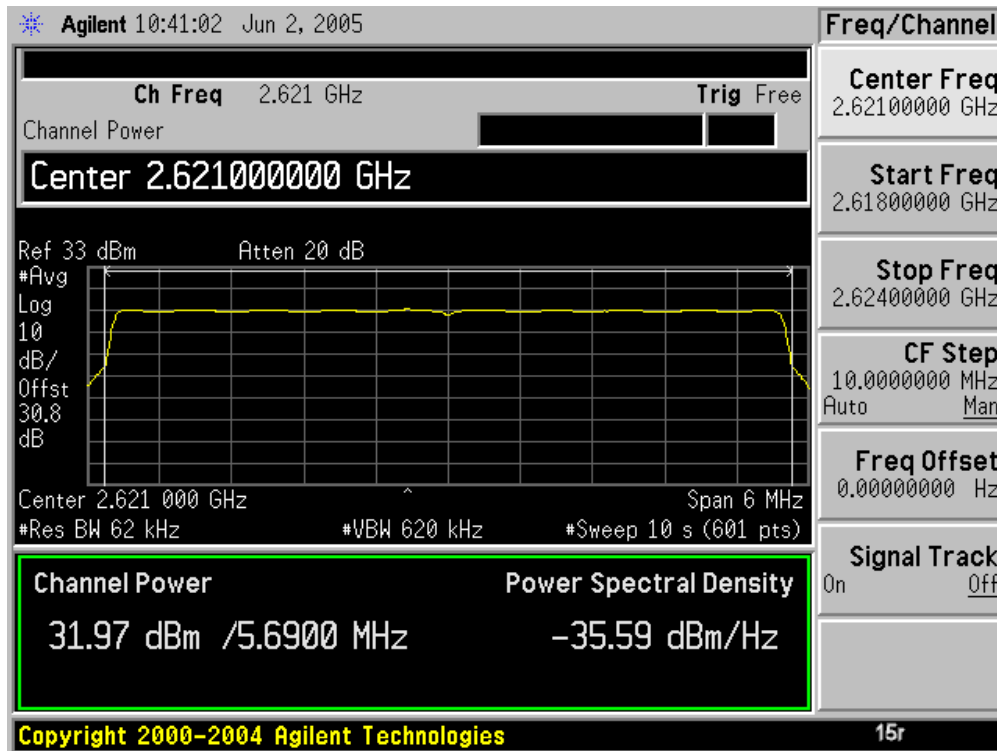
2W RF Power Output – Conducted (Maximum) 16-QAM



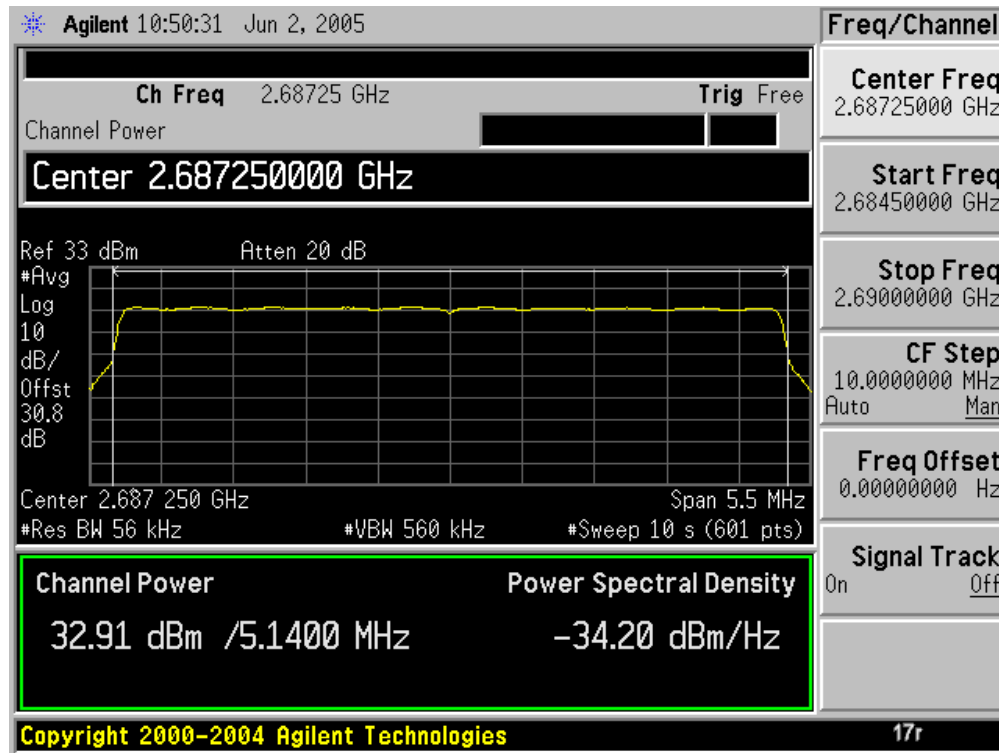
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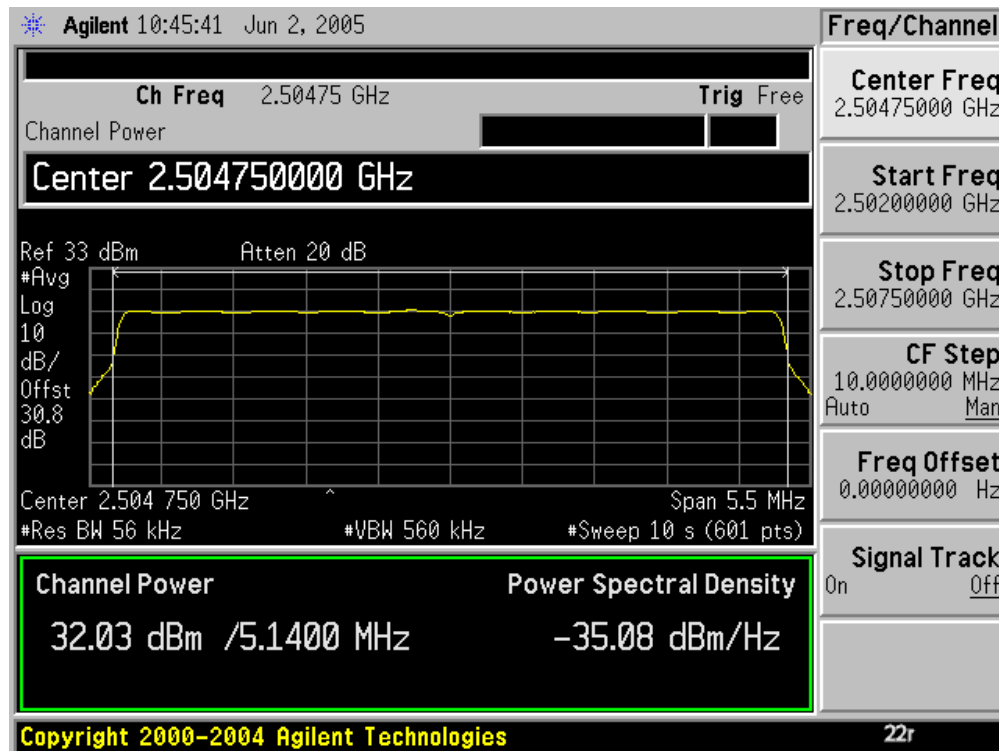
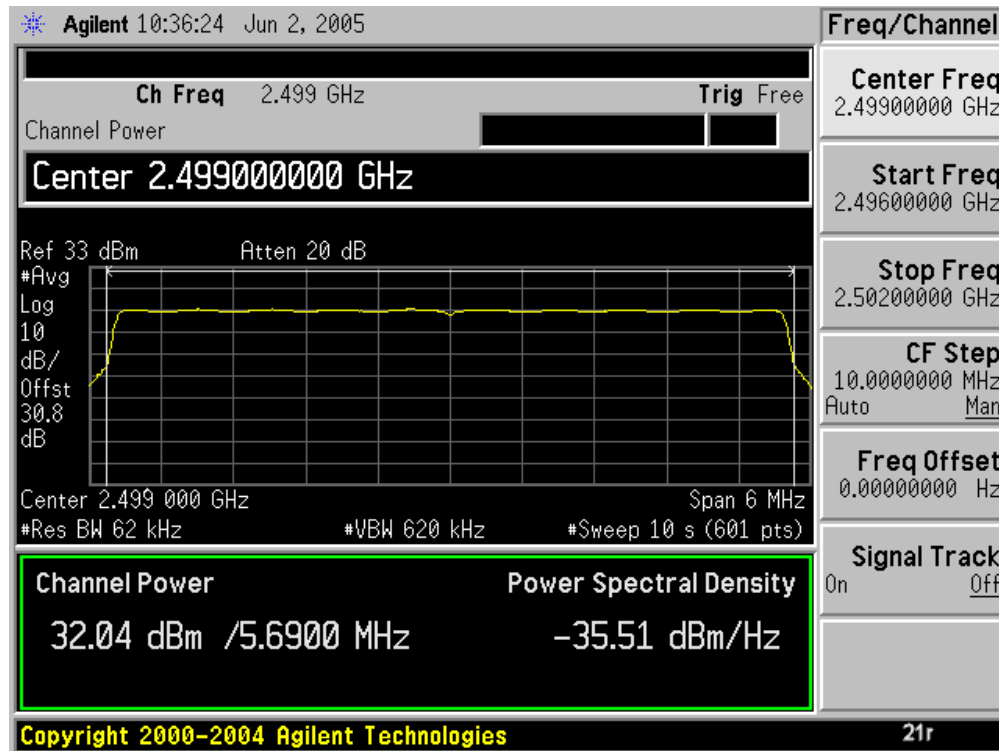
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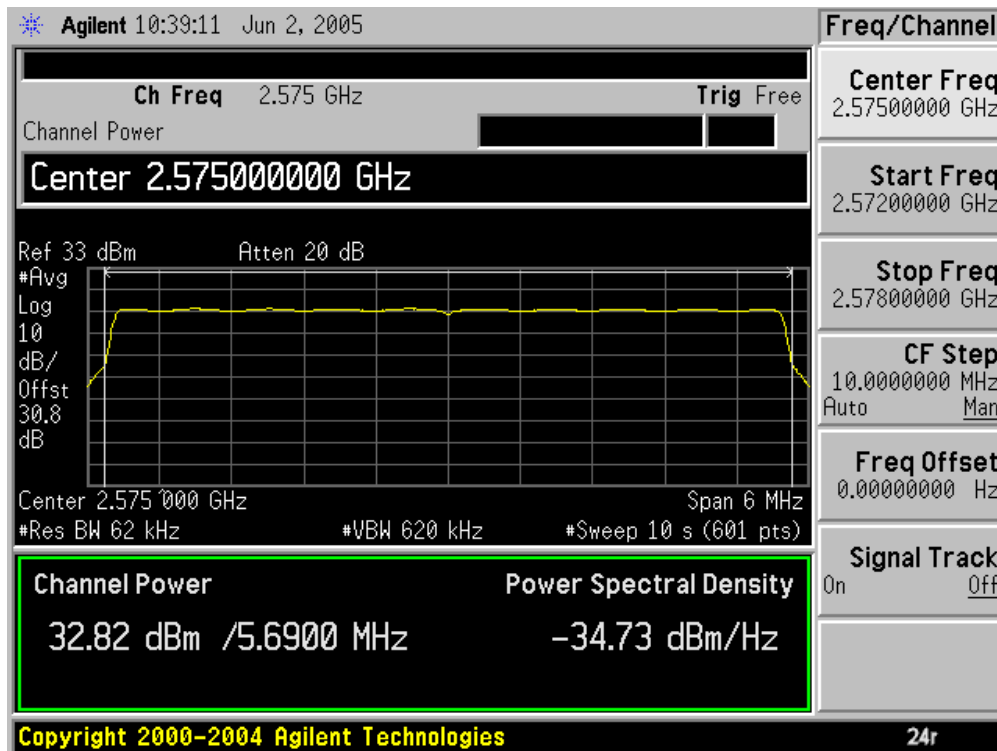
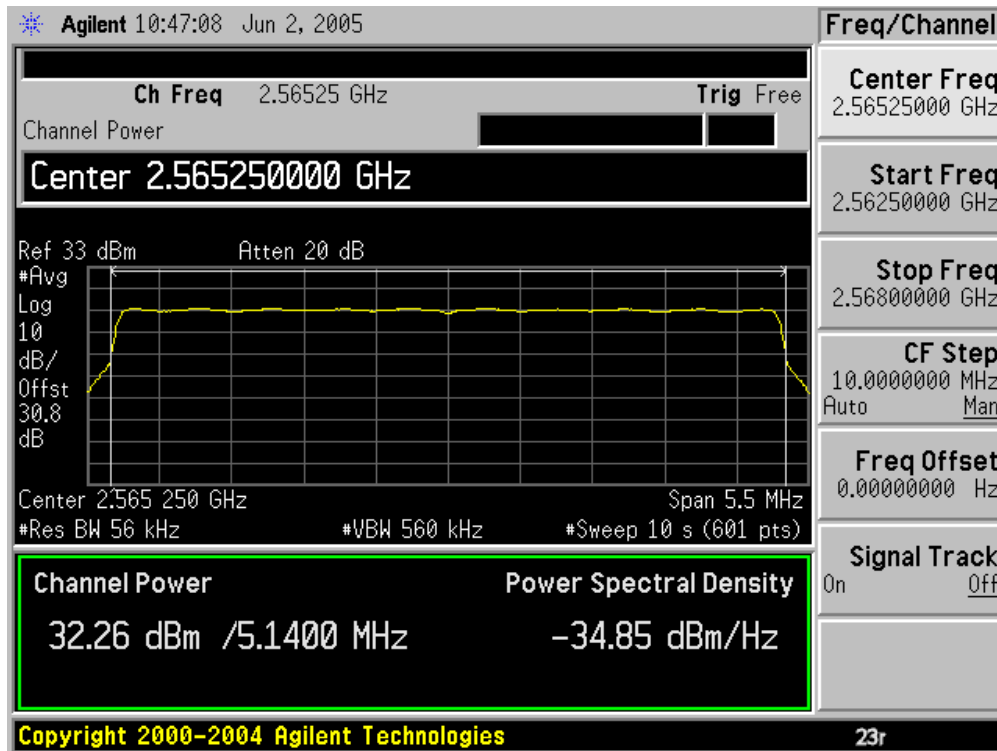
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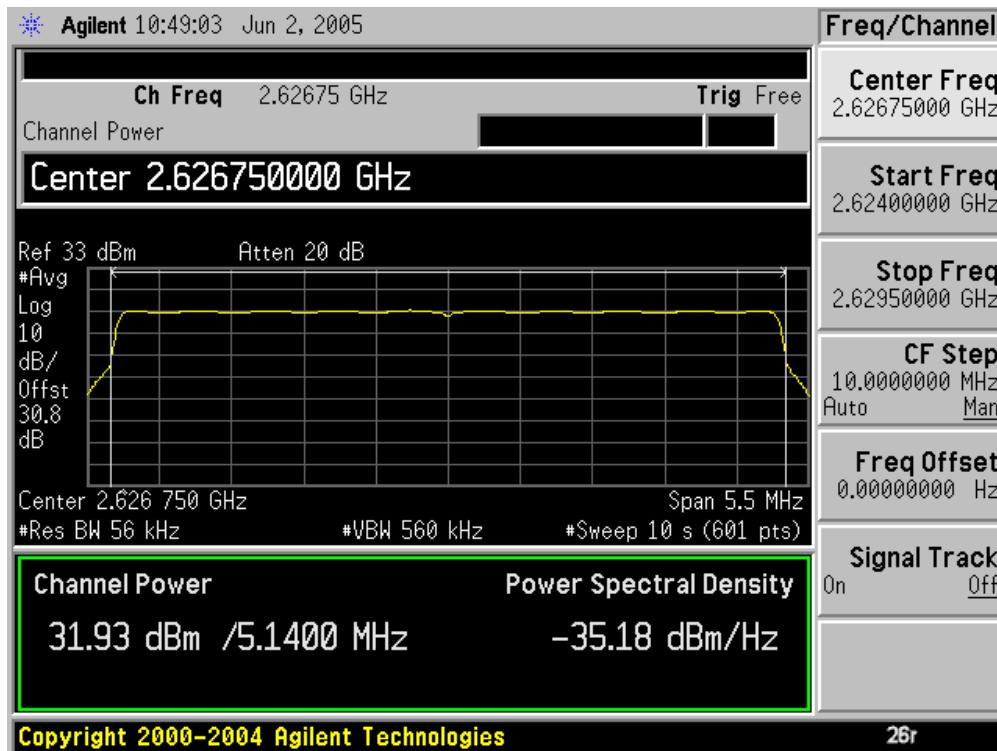
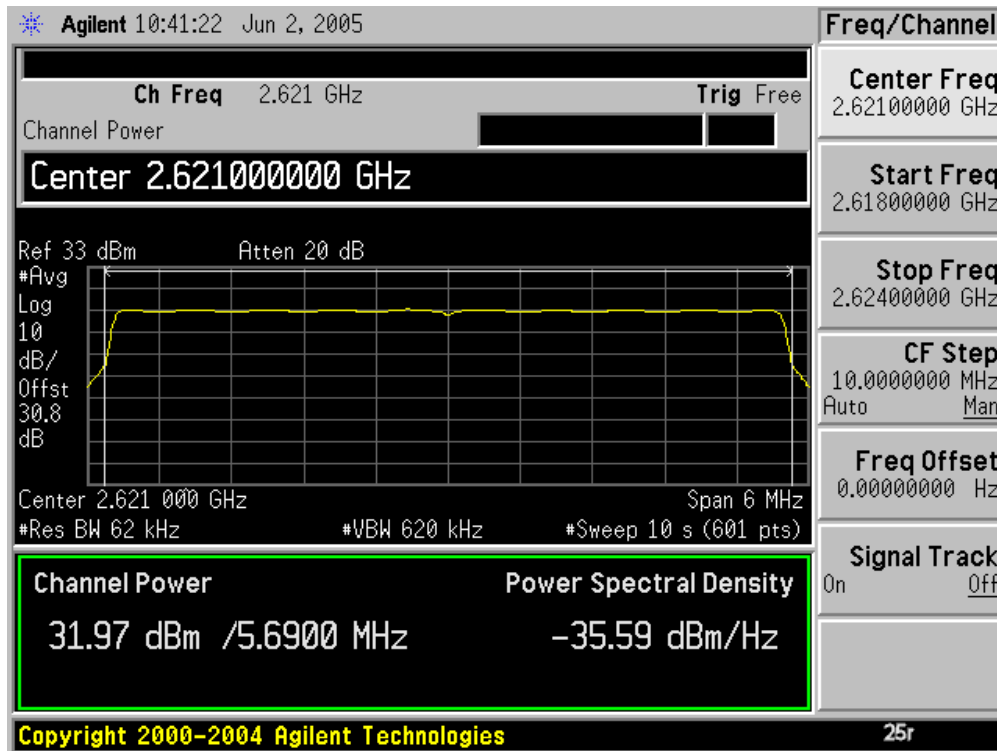
2W RF Power Output – Conducted (Maximum) 64-QAM



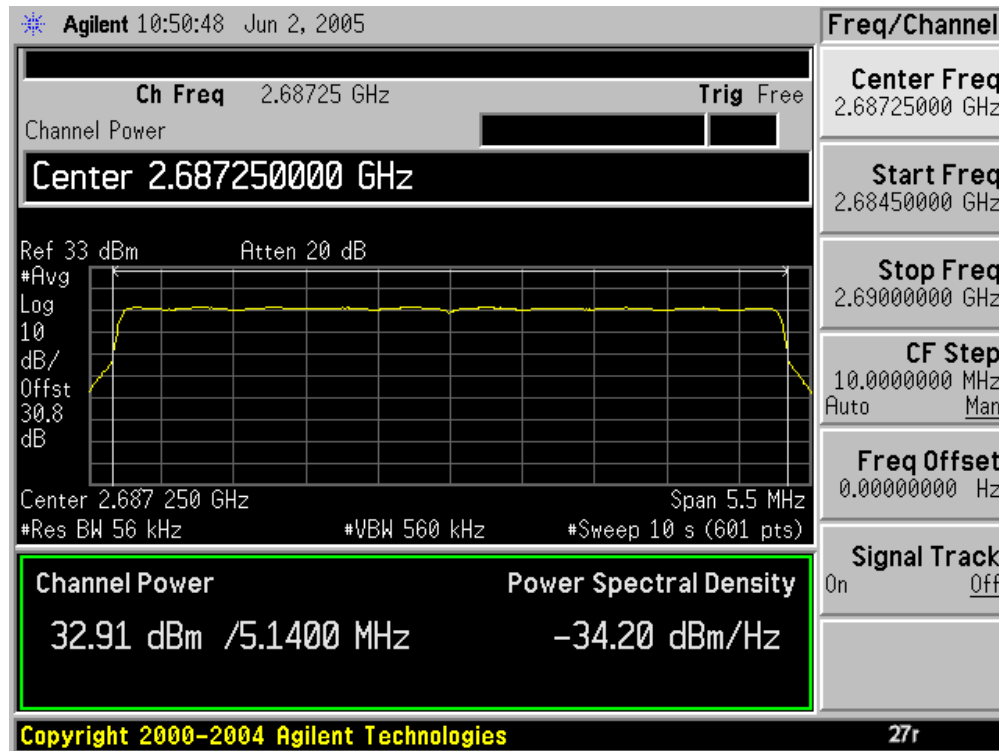
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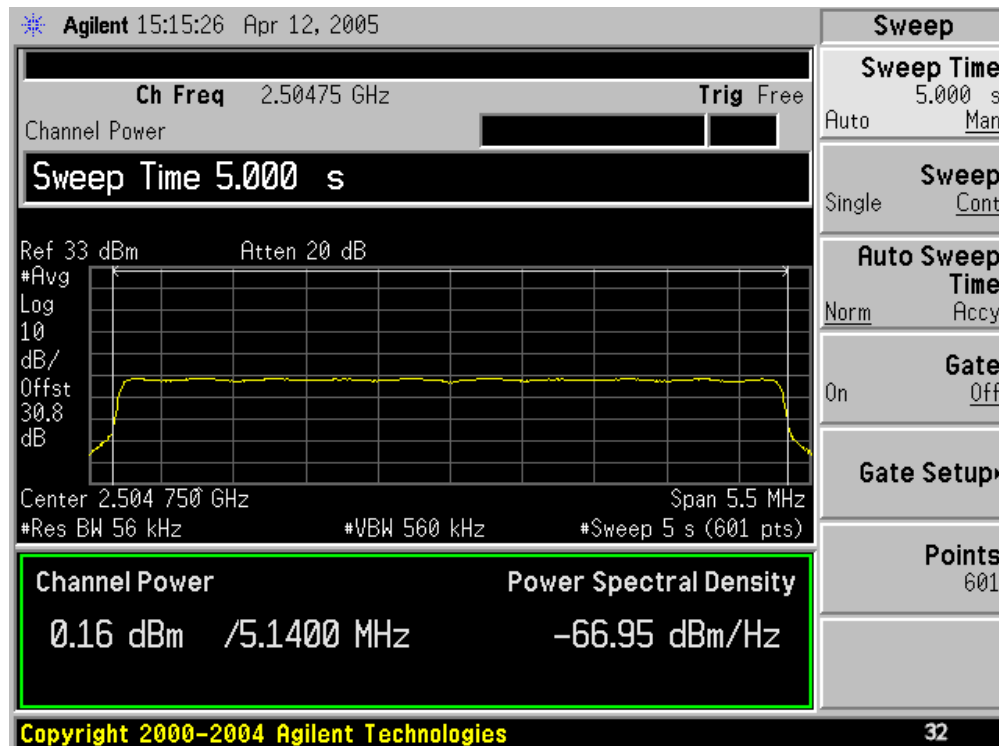
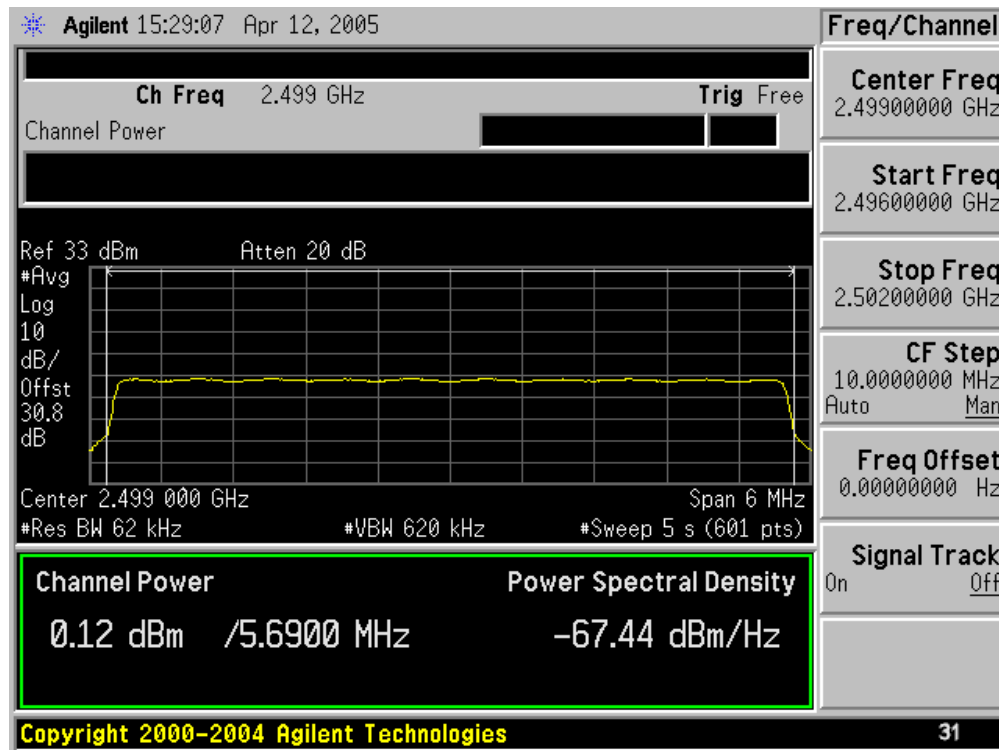
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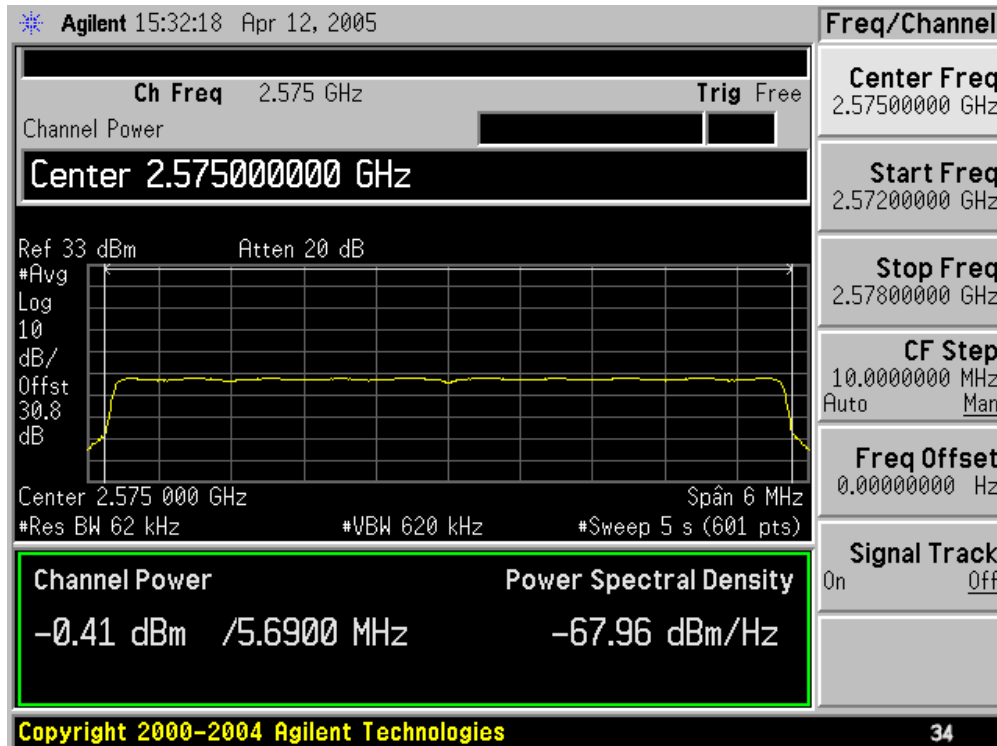
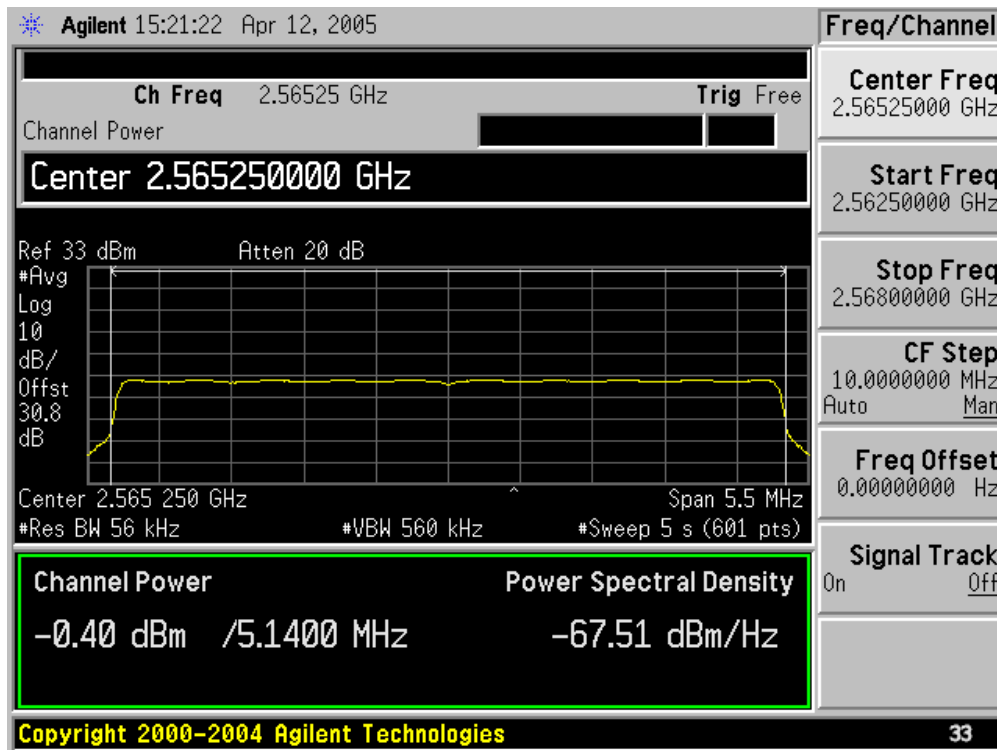
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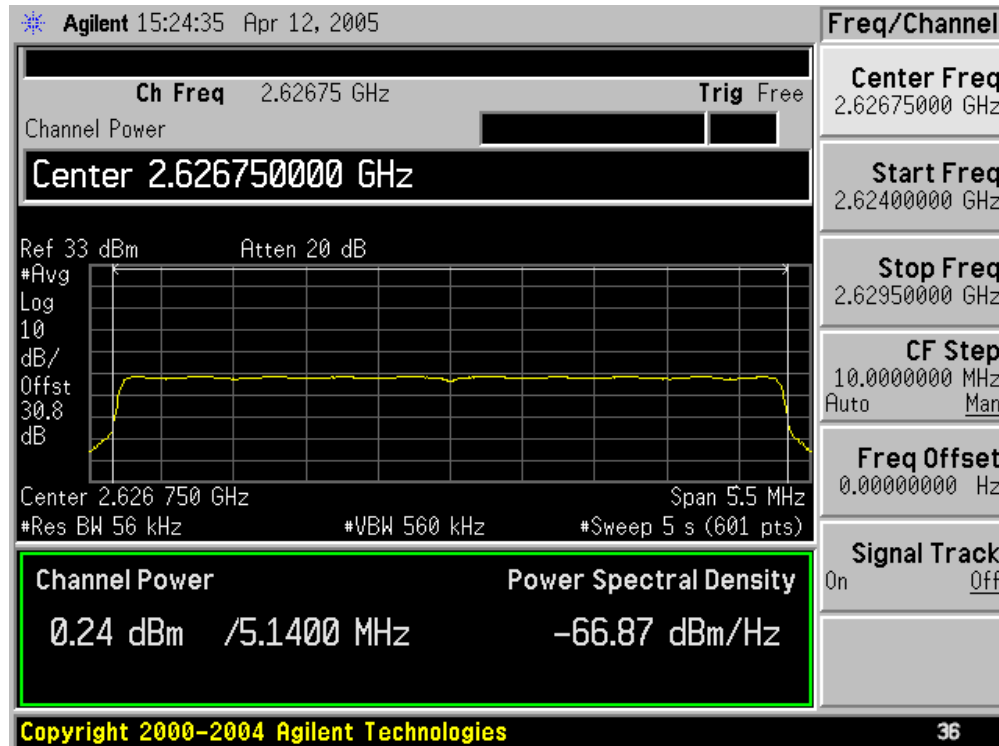
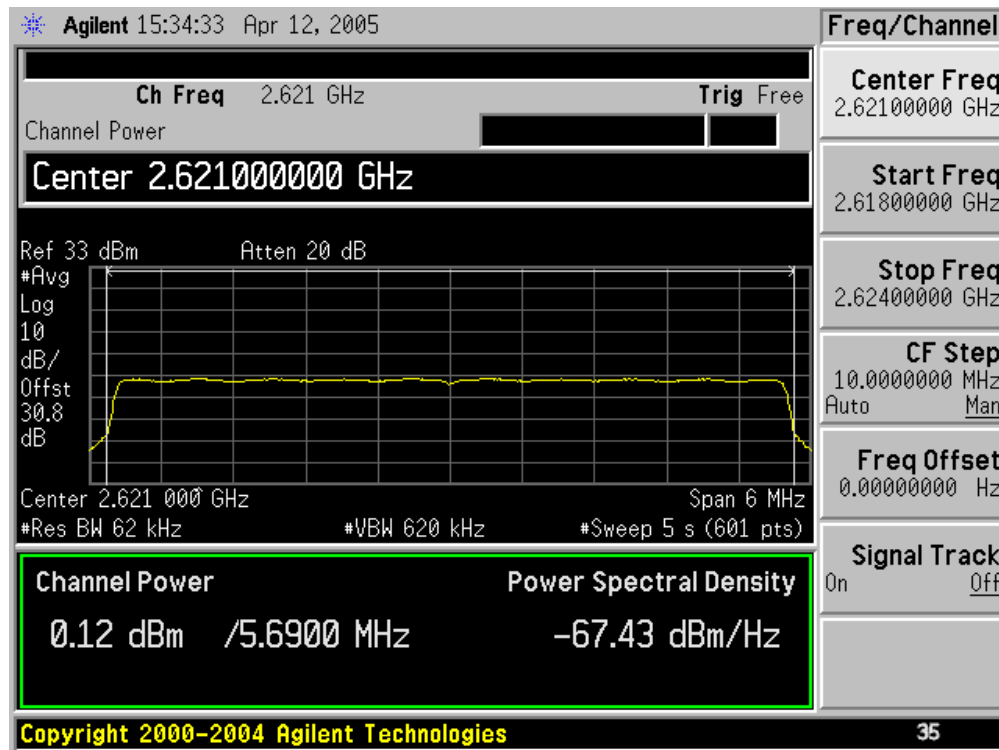
2W RF Power Output – Conducted (Minimum) 4-QAM



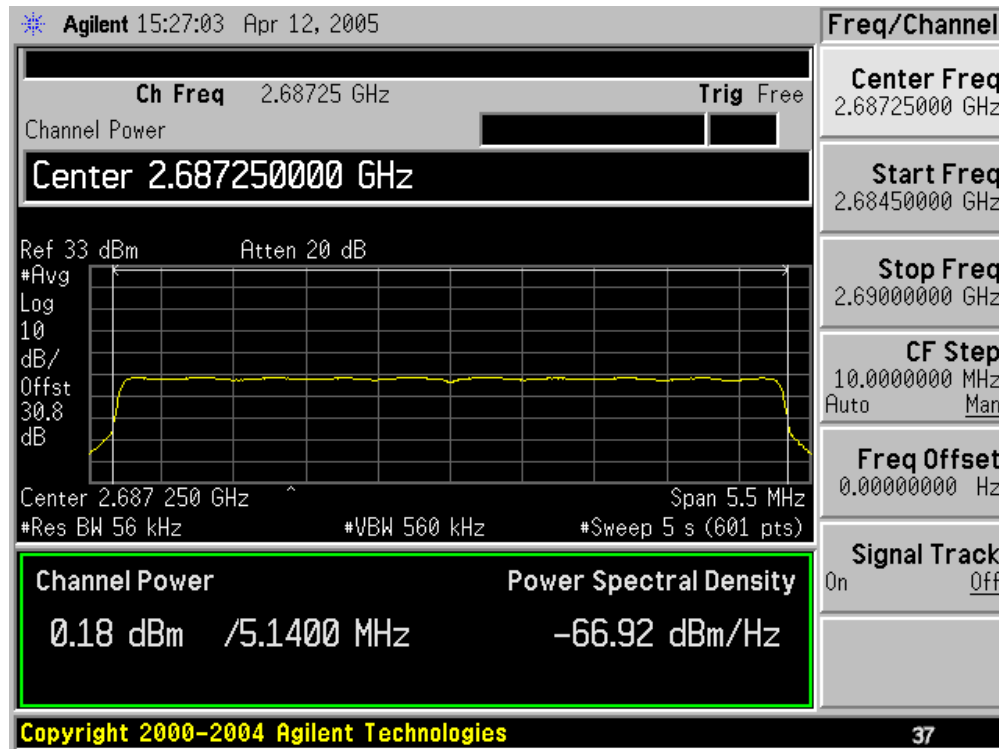
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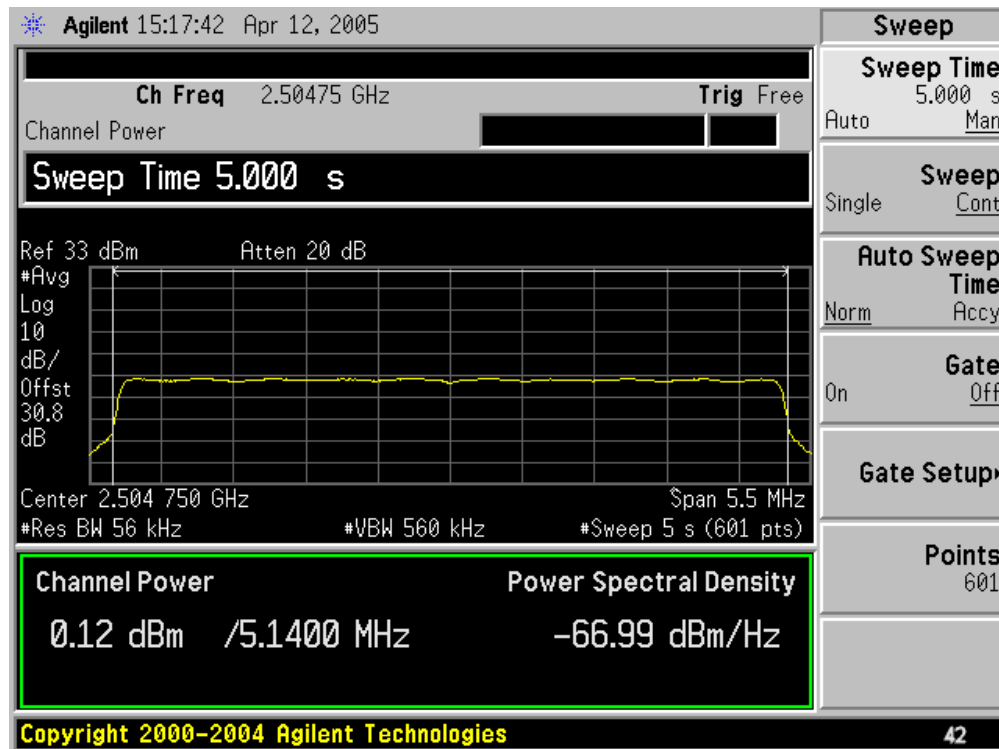
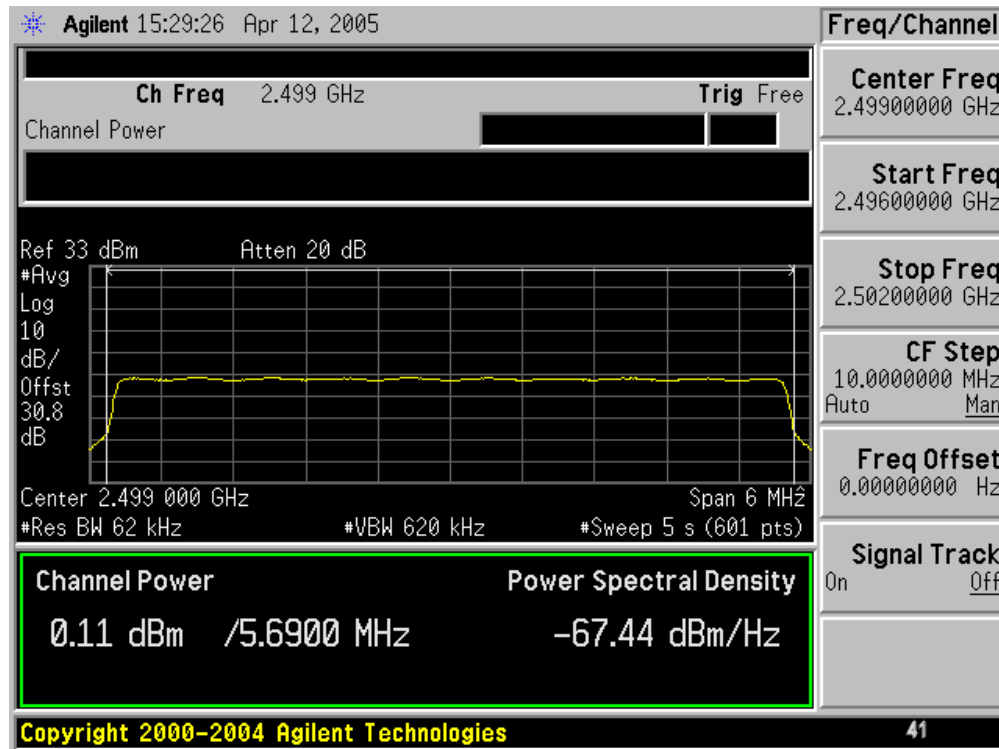
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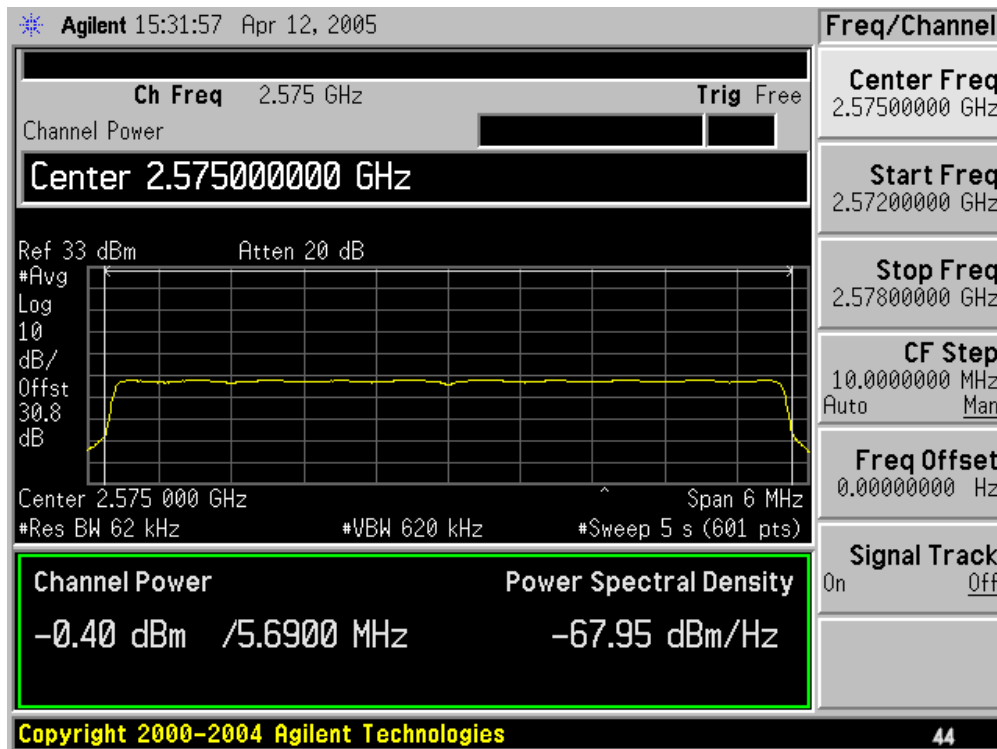
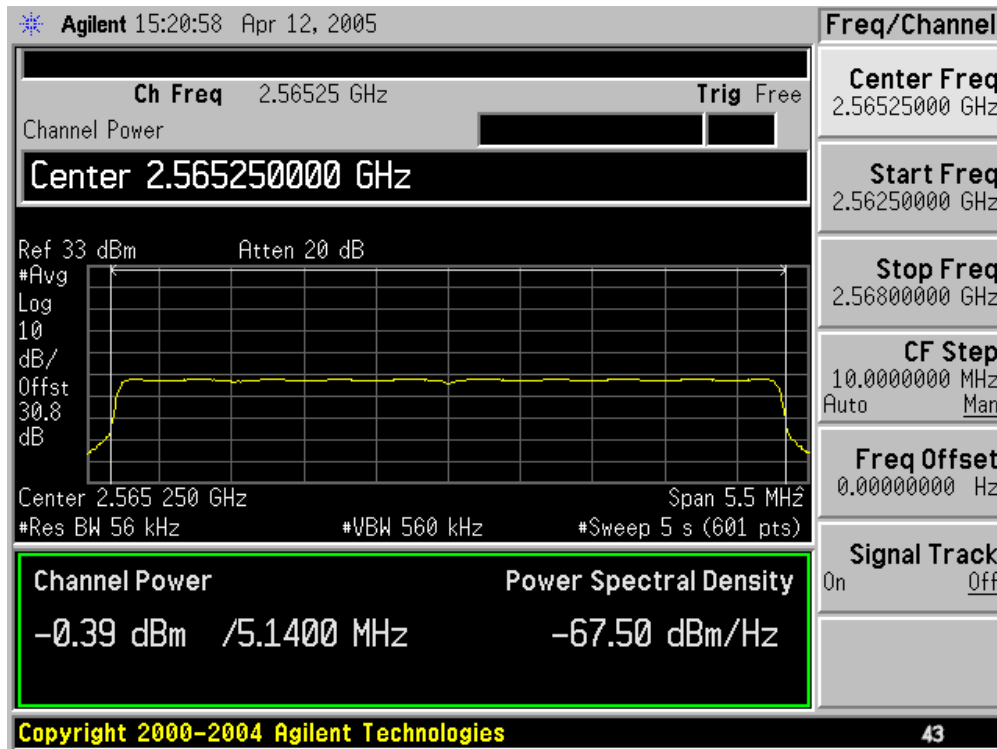
2W RF Power Output – Conducted (Minimum) 4-QAM (Cont'd)



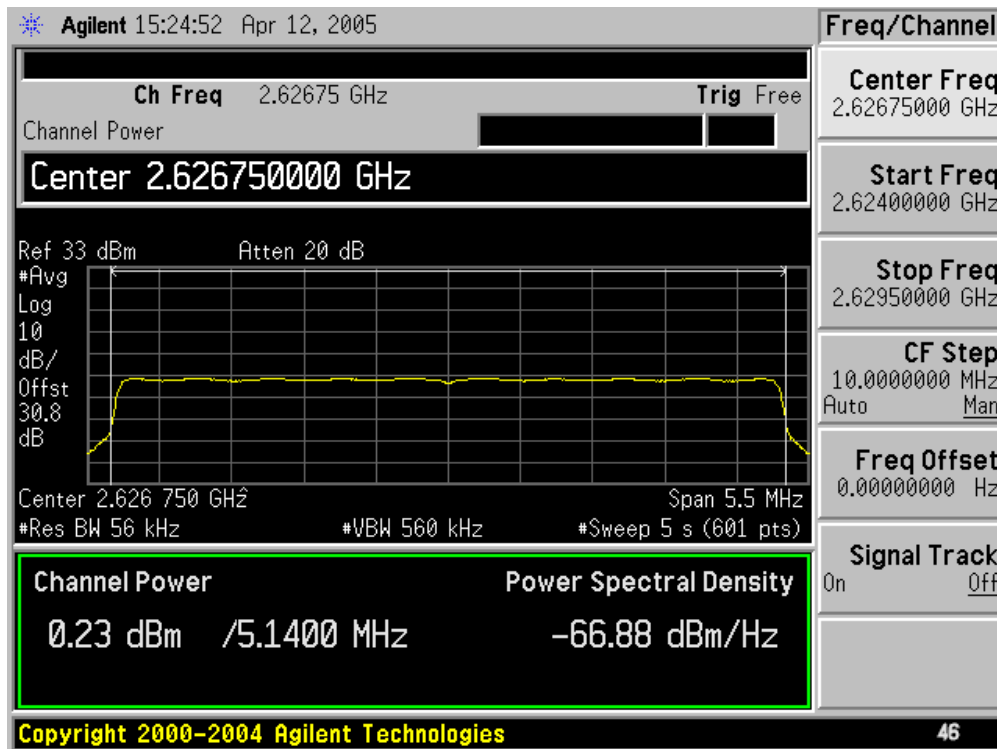
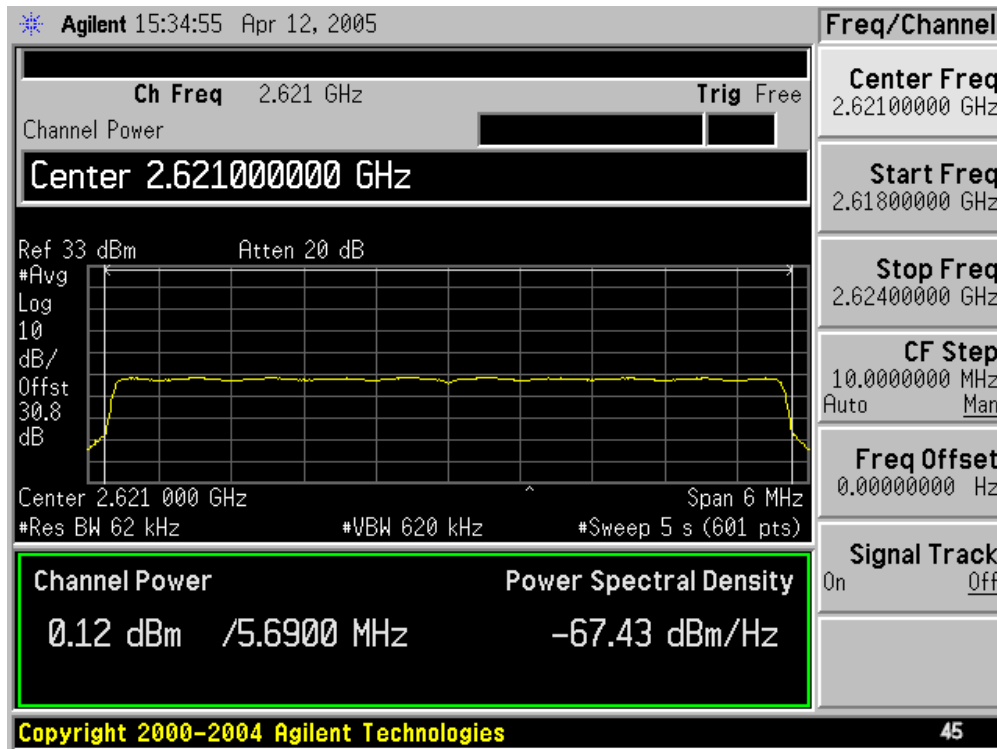
2W RF Power Output – Conducted (Minimum) 16-QAM



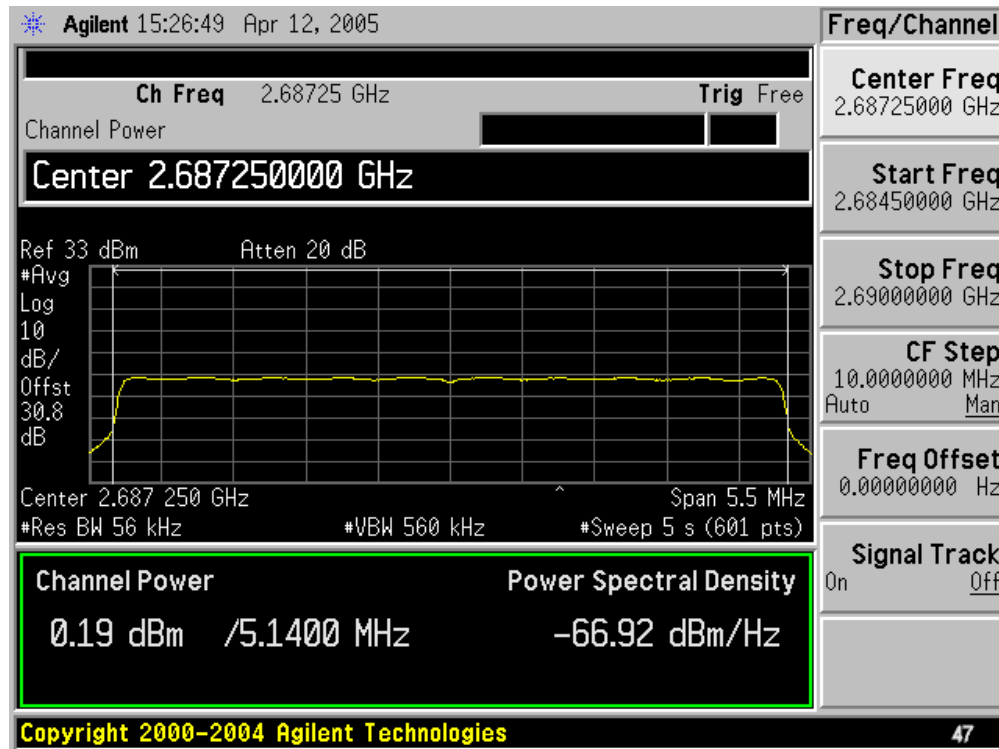
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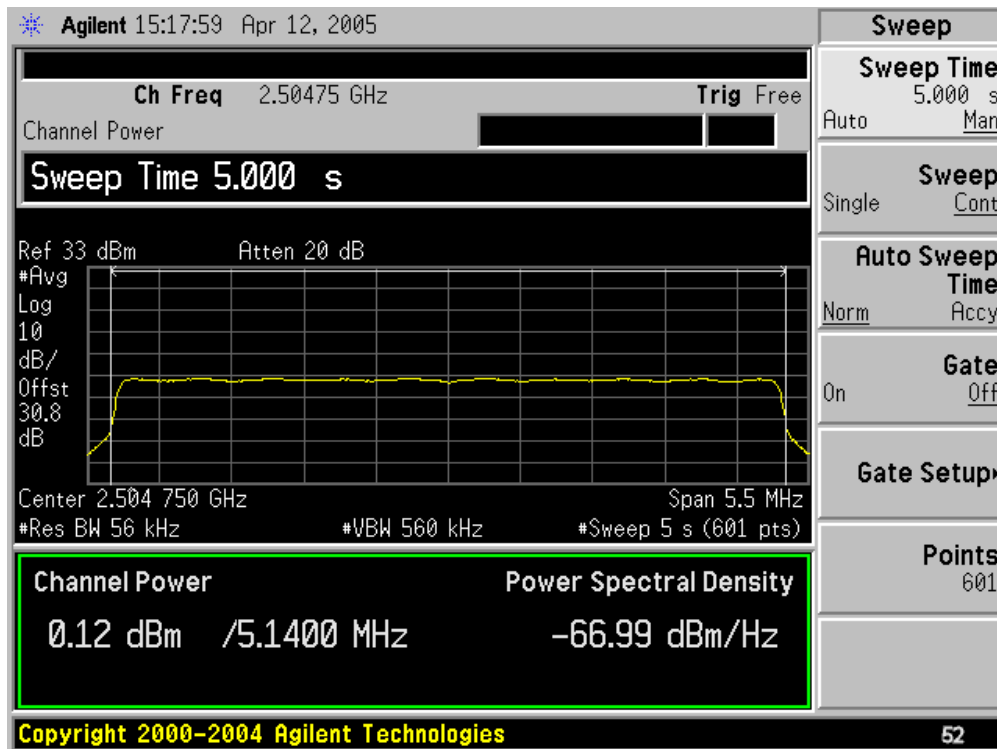
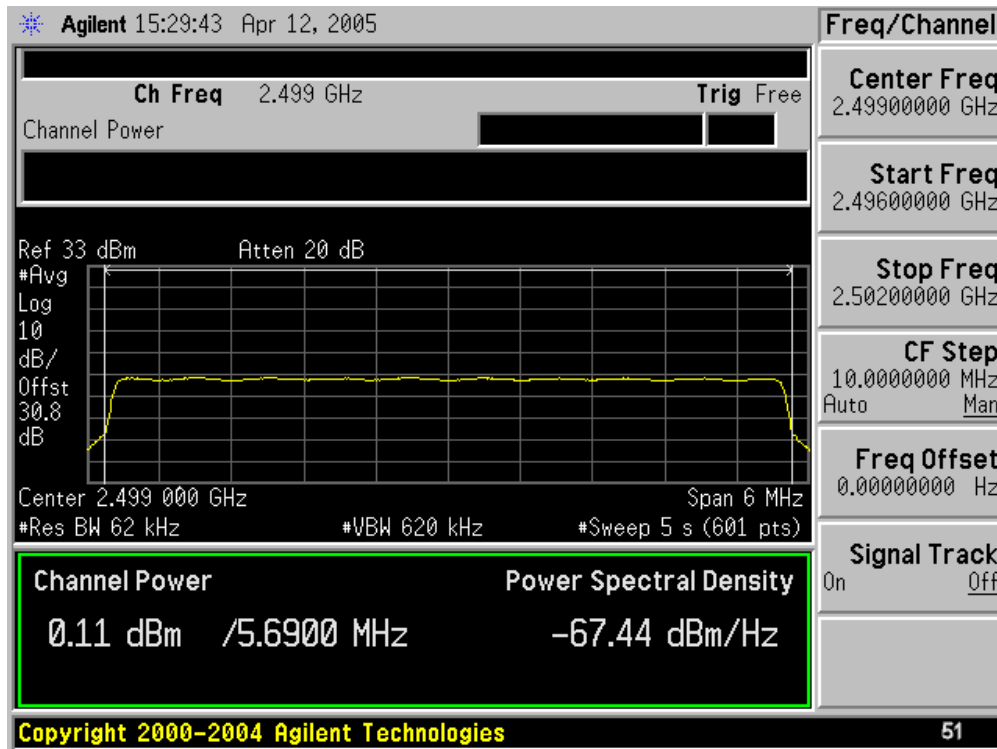
2W RF Power Output – Conducted (Minimum) 4-QAM (Cont'd)



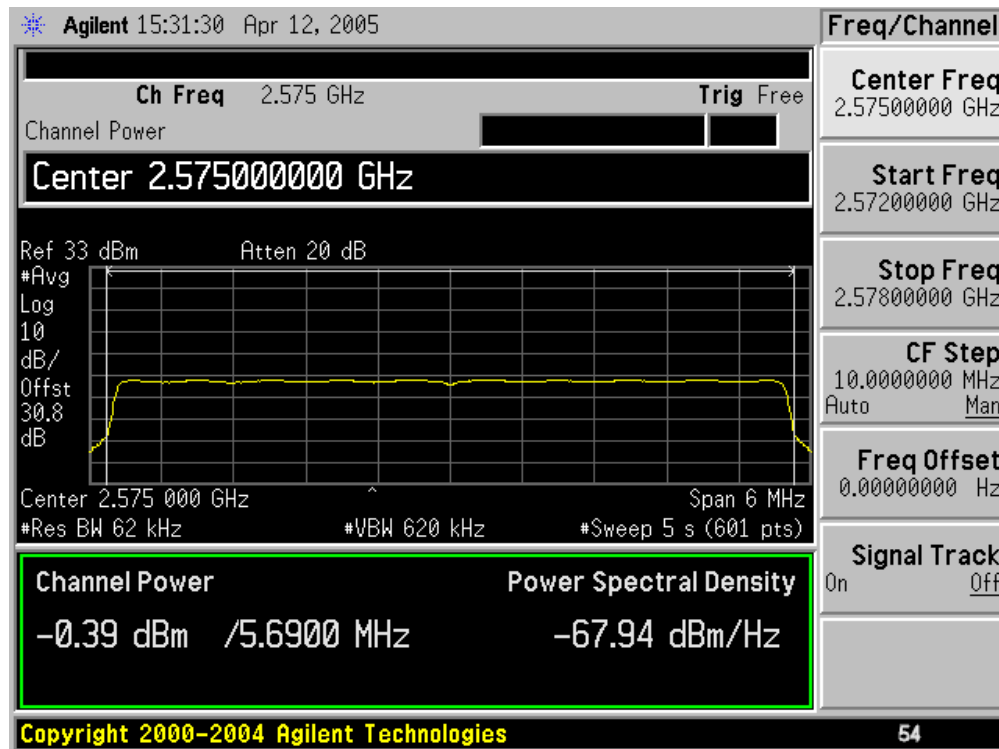
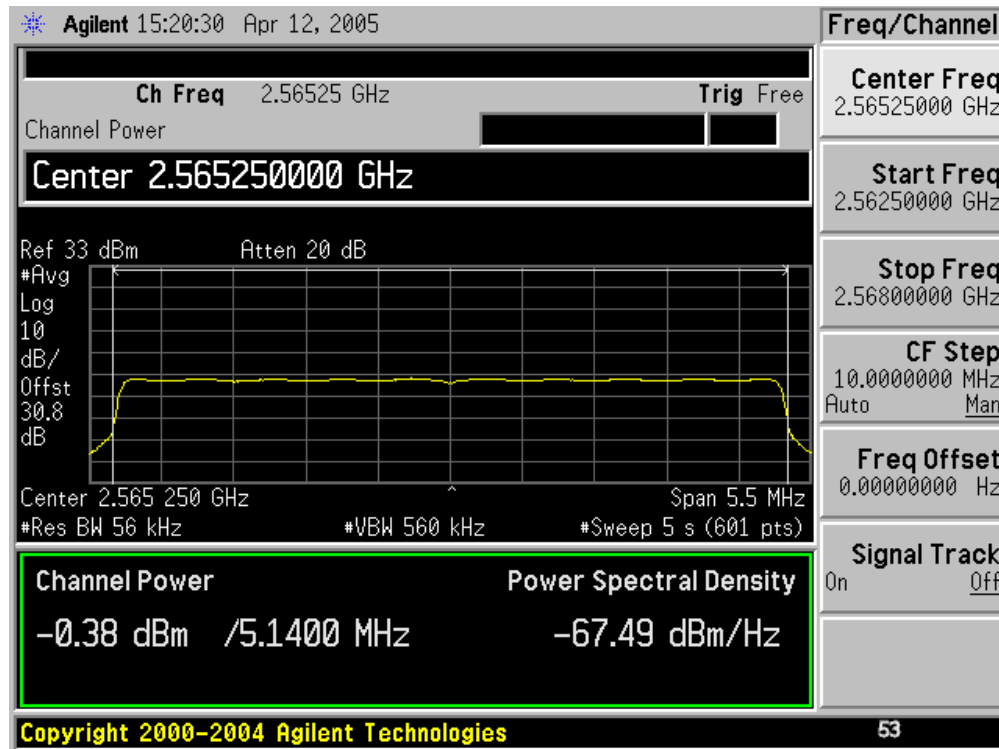
2W RF Power Output – Conducted (Minimum) 16-QAM (Cont'd)



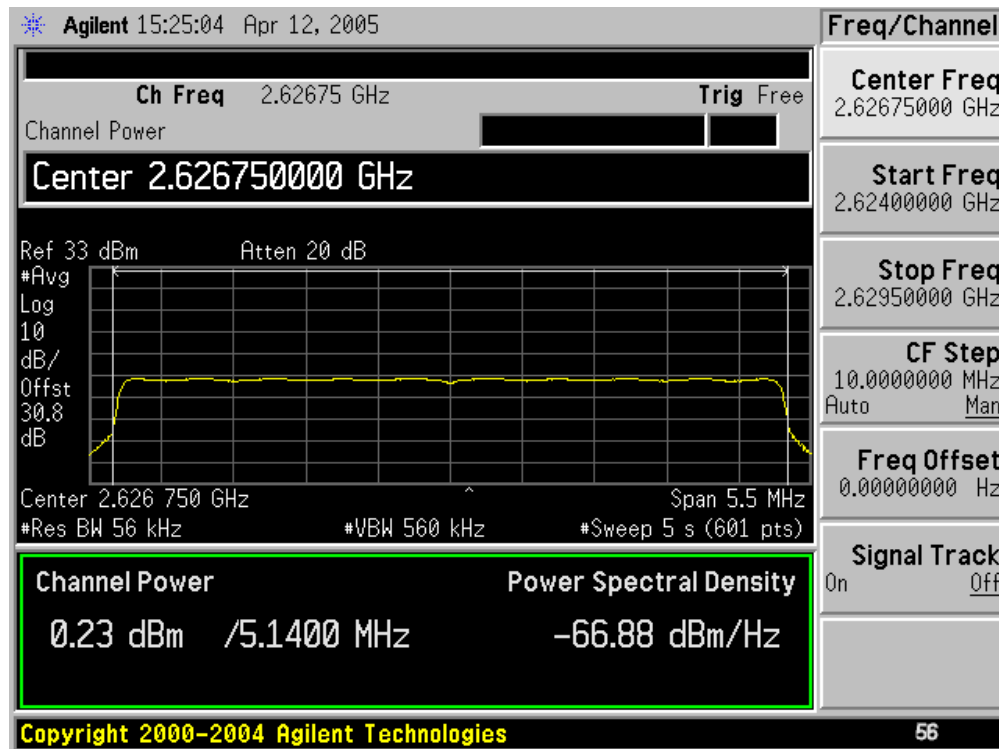
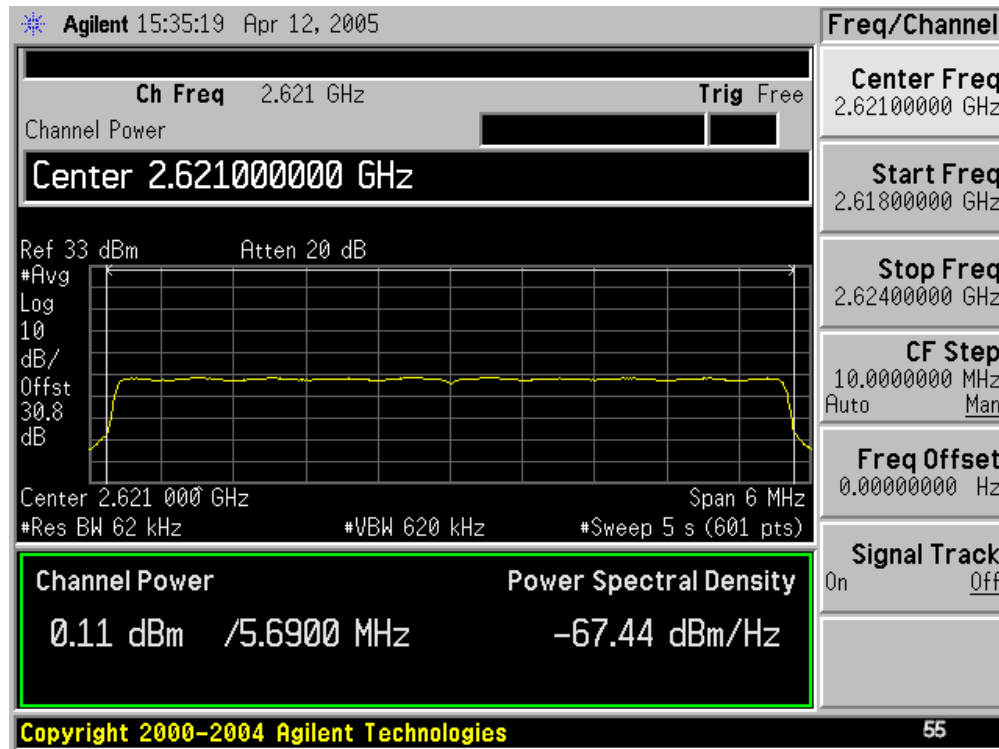
2W RF Power Output – Conducted (Minimum) 64-QAM



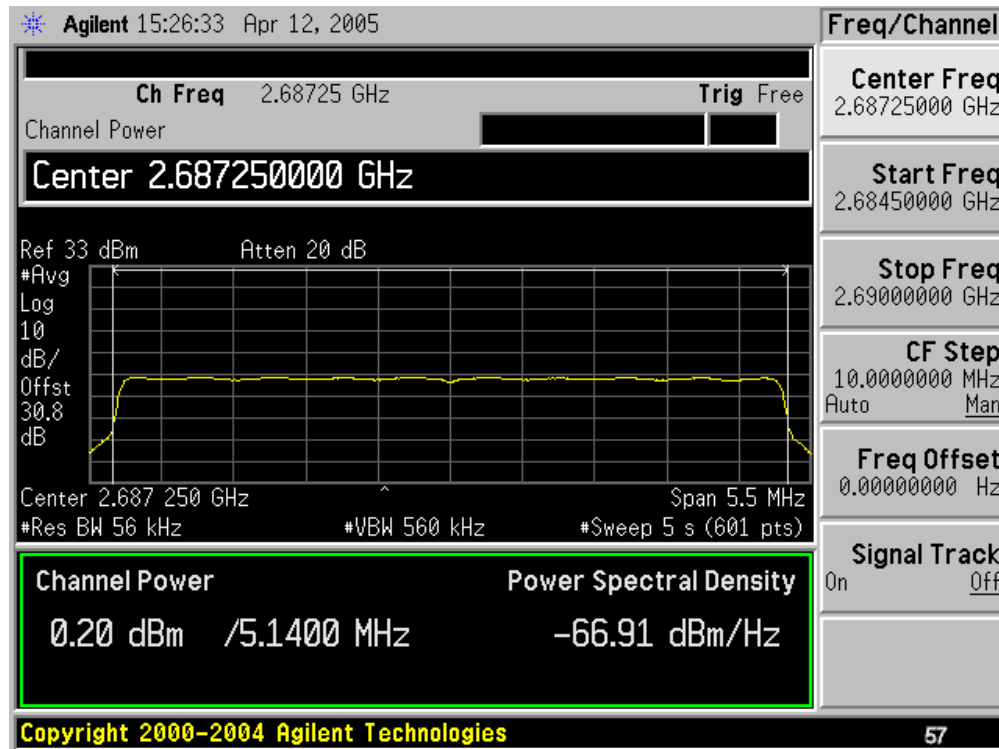
2W RF Power Output – Conducted (Minimum) 64-QAM (Cont'd)



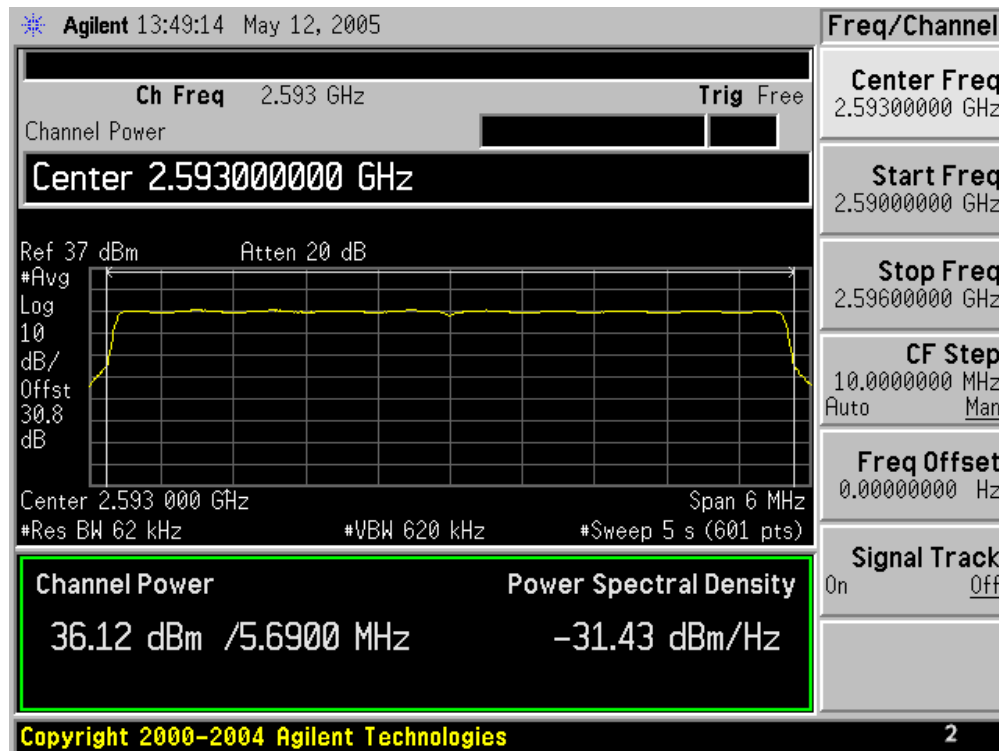
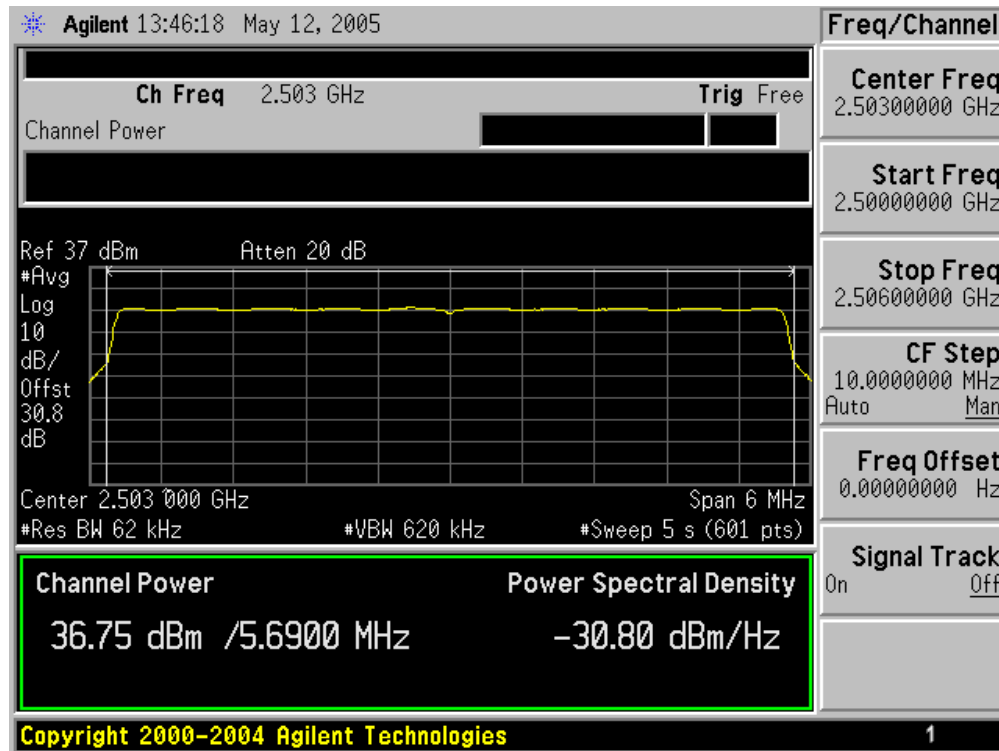
2W RF Power Output – Conducted (Minimum) 64-QAM (Cont'd)



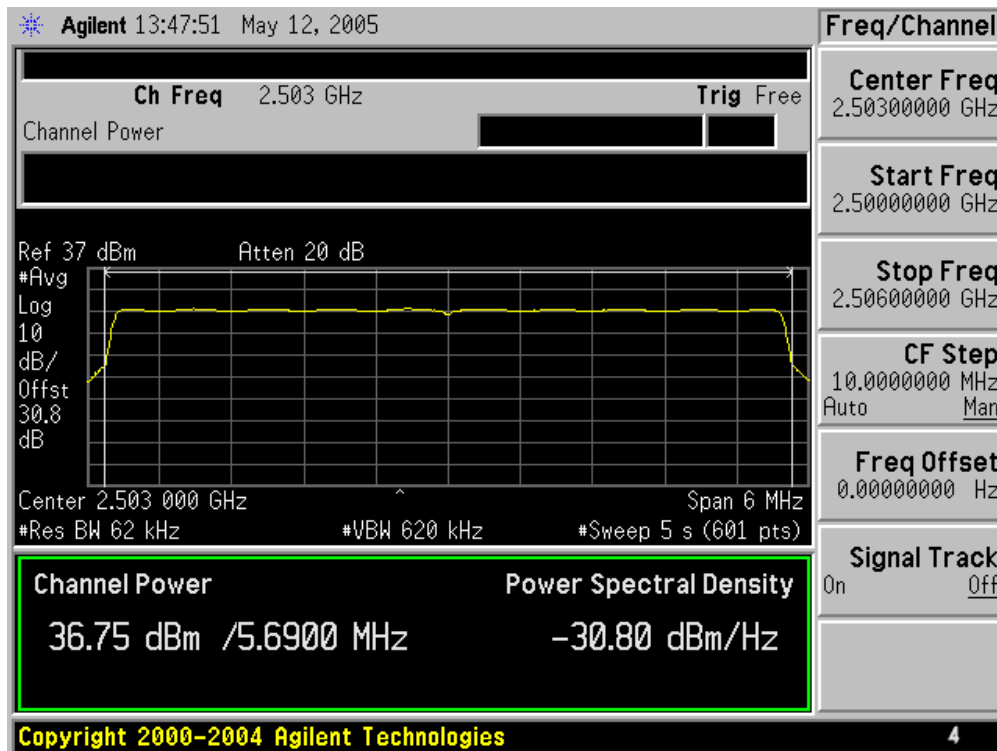
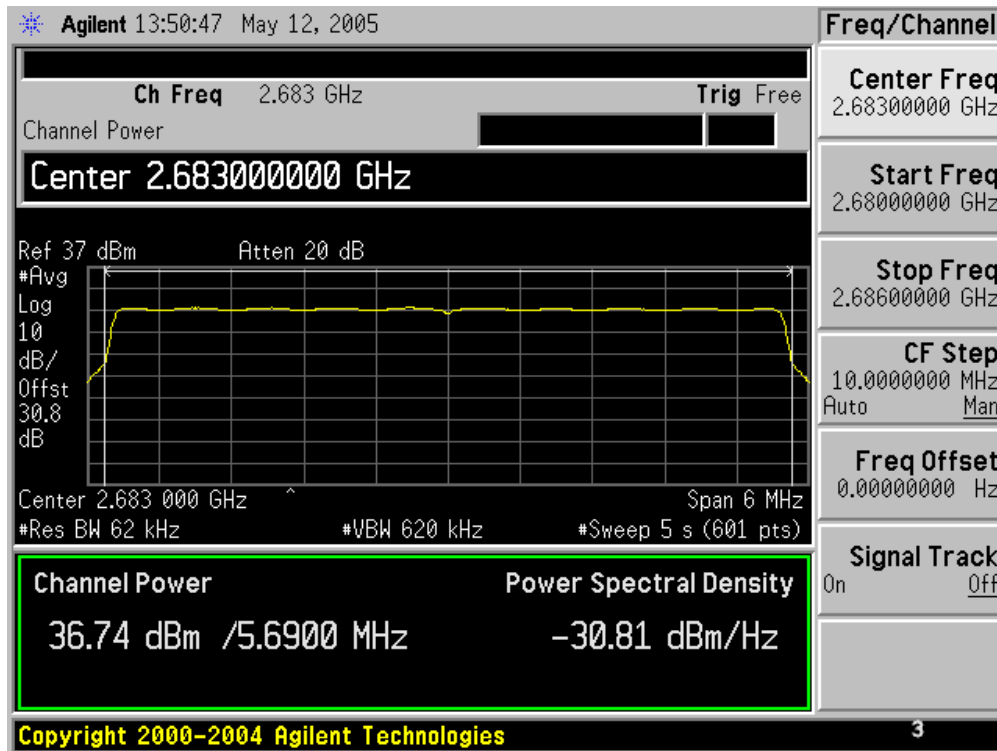
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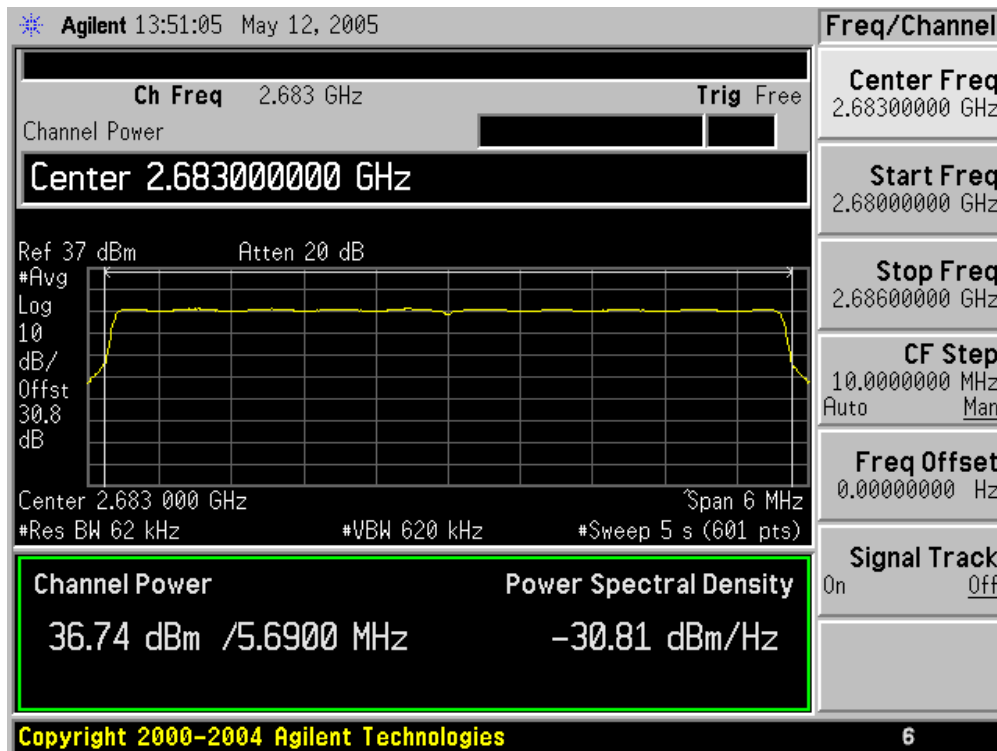
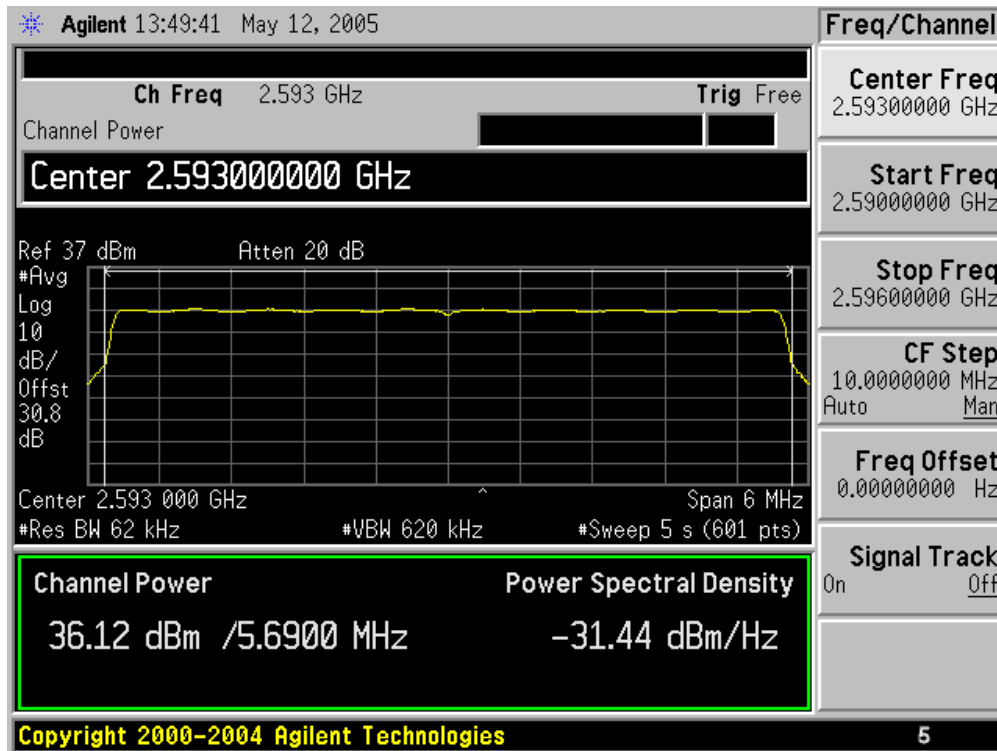
5W Conducted RF Power Output Spectrum Analyzer Plots 4-QAM (Maximum)



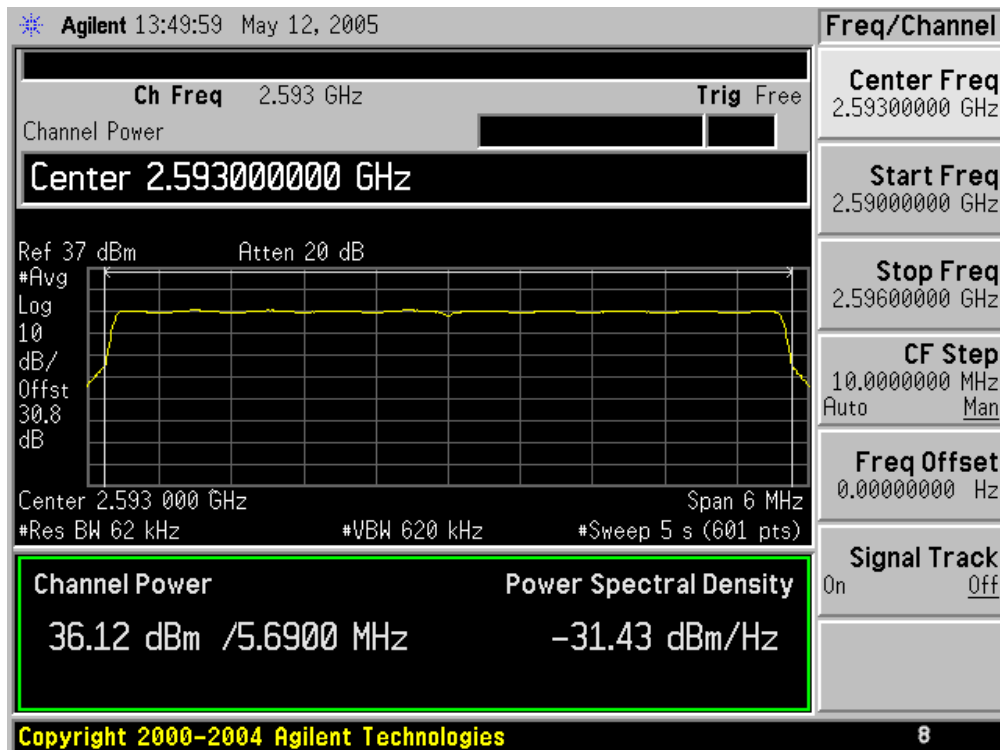
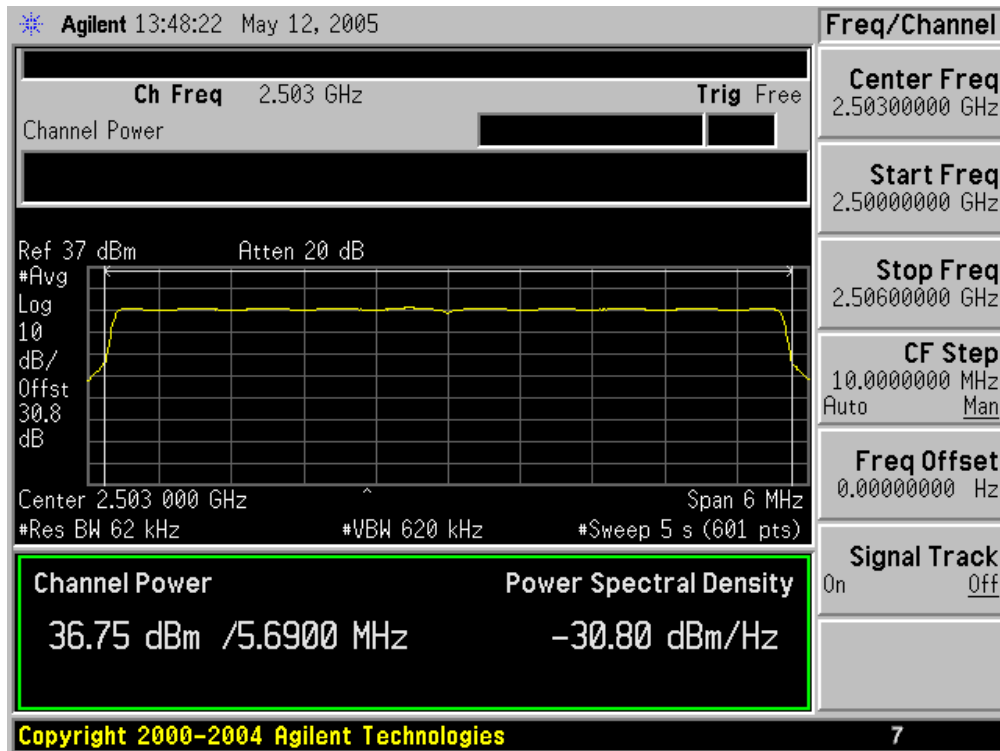
5W RF Power Output – Conducted (Maximum) 4-QAM (Cont'd)



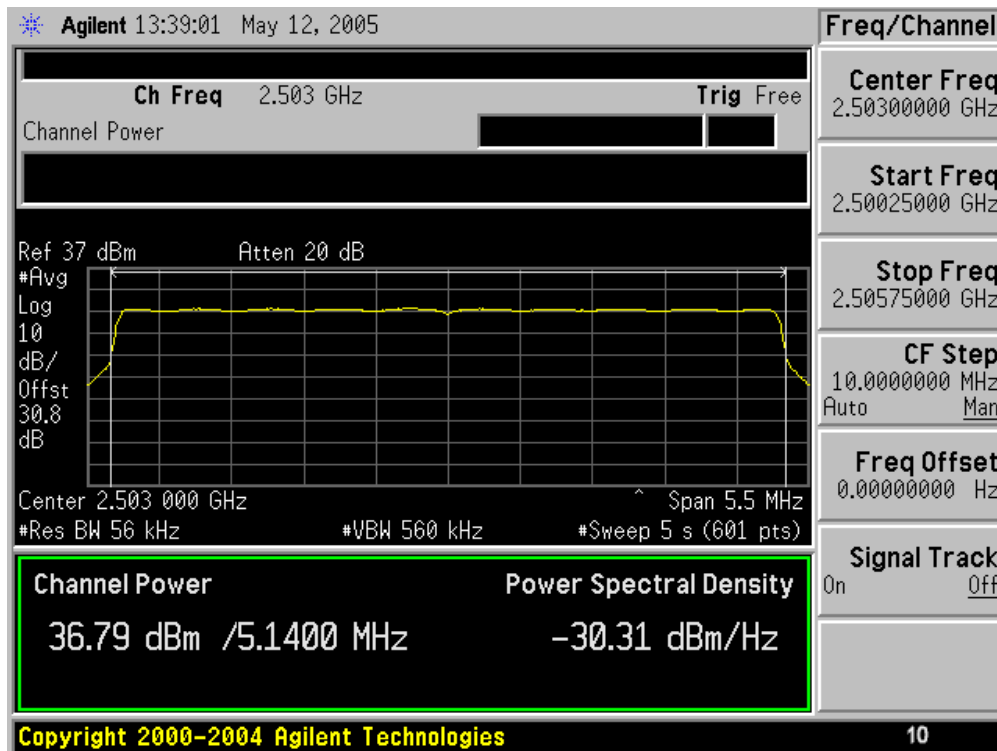
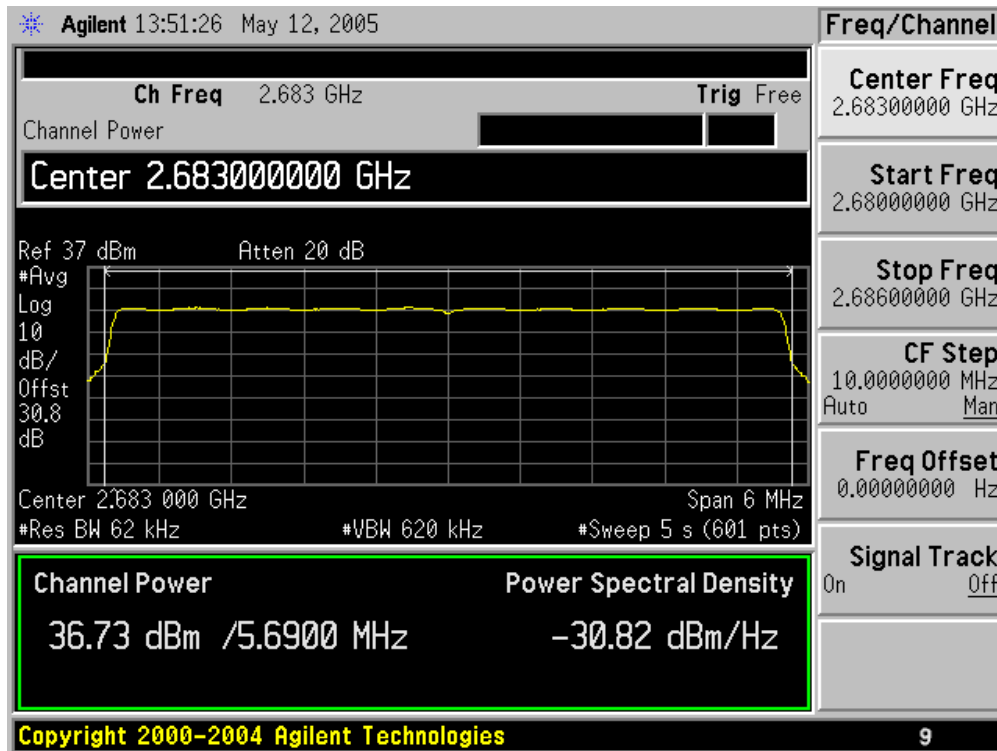
5W RF Power Output – Conducted (Maximum) 4-QAM (Cont'd)



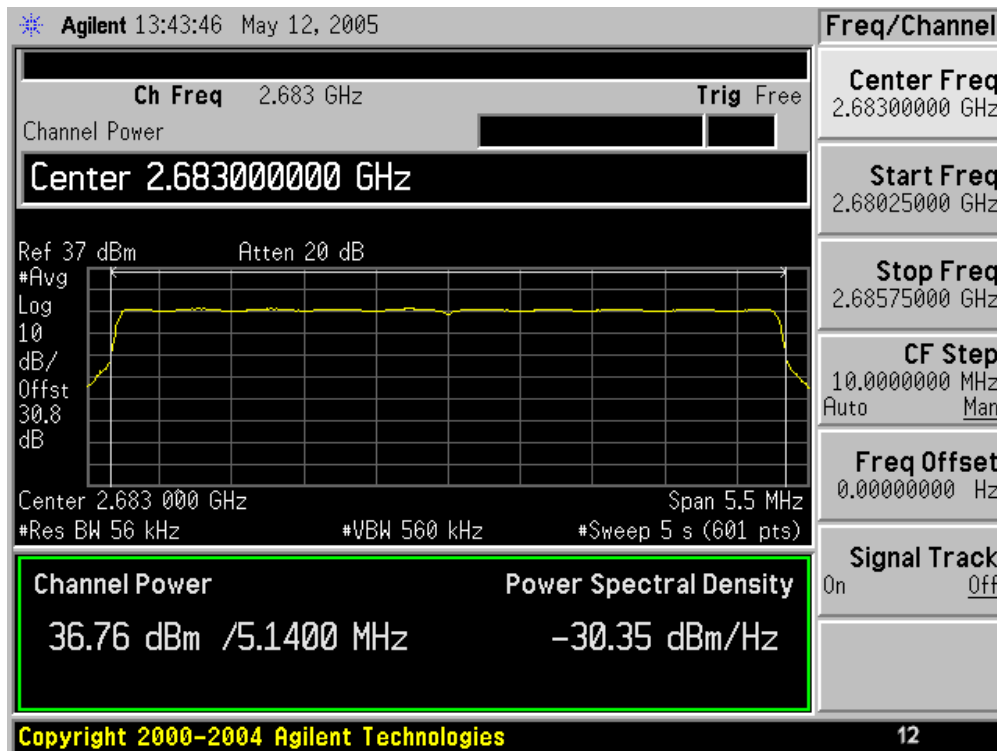
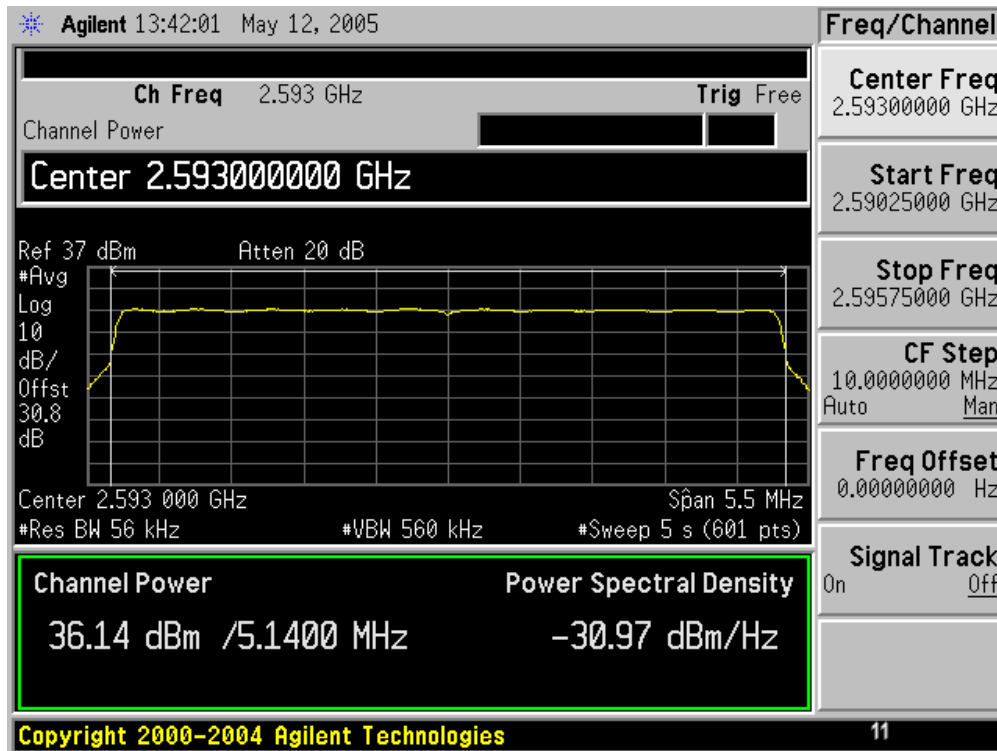
5W RF Power Output – Conducted (Maximum) 16-QAM



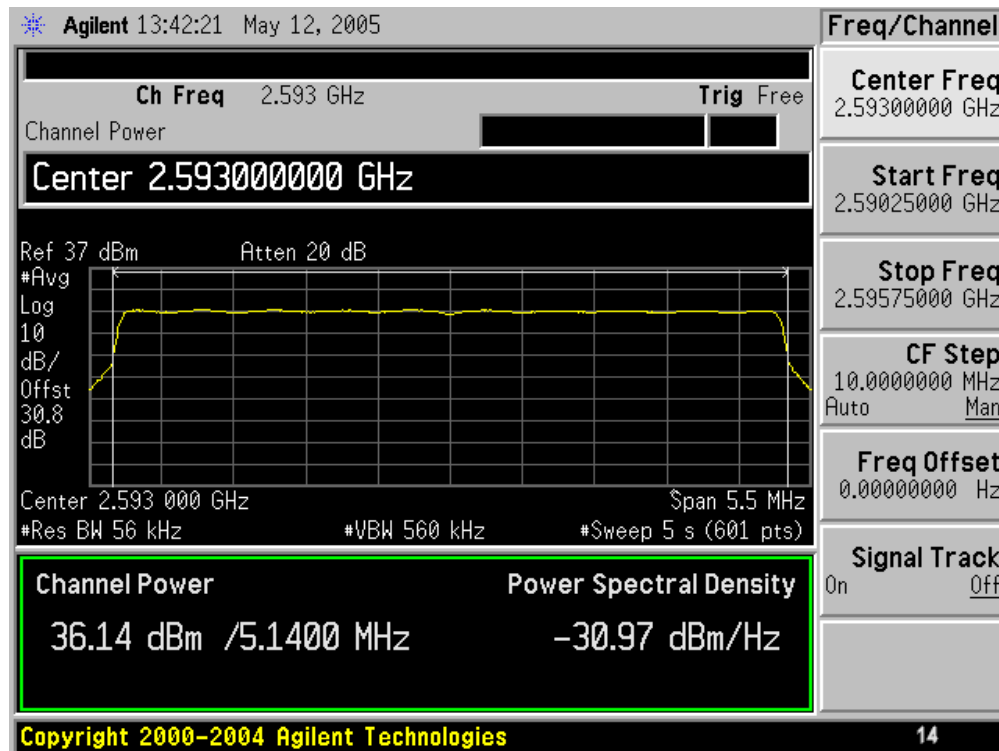
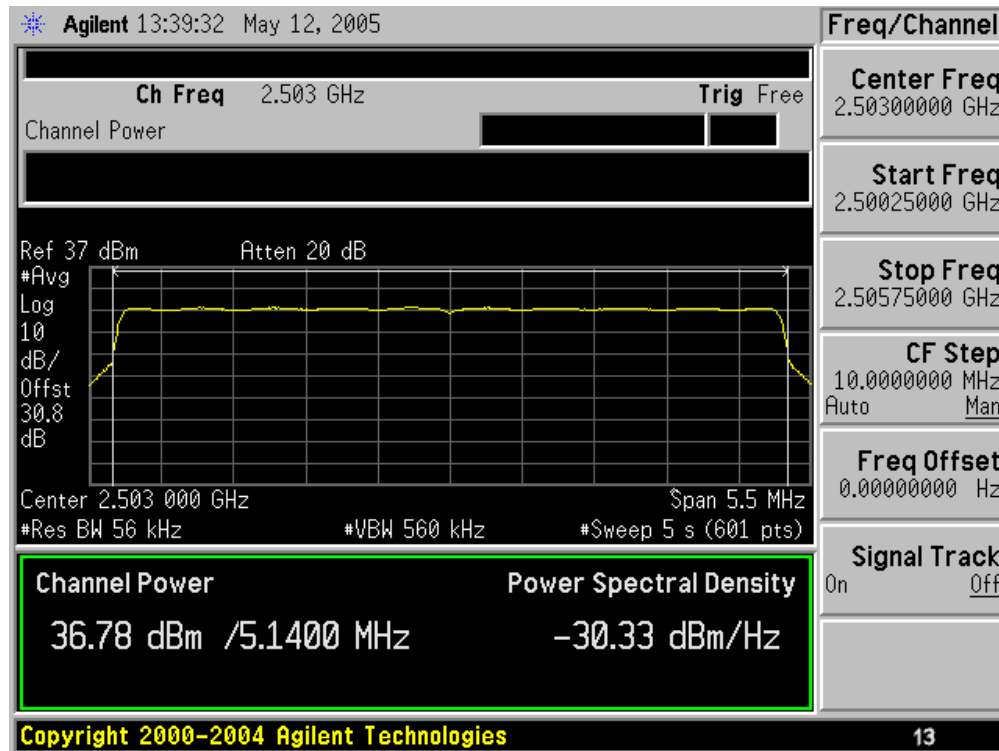
5W RF Power Output – Conducted (Maximum) 16-QAM (Cont'd)



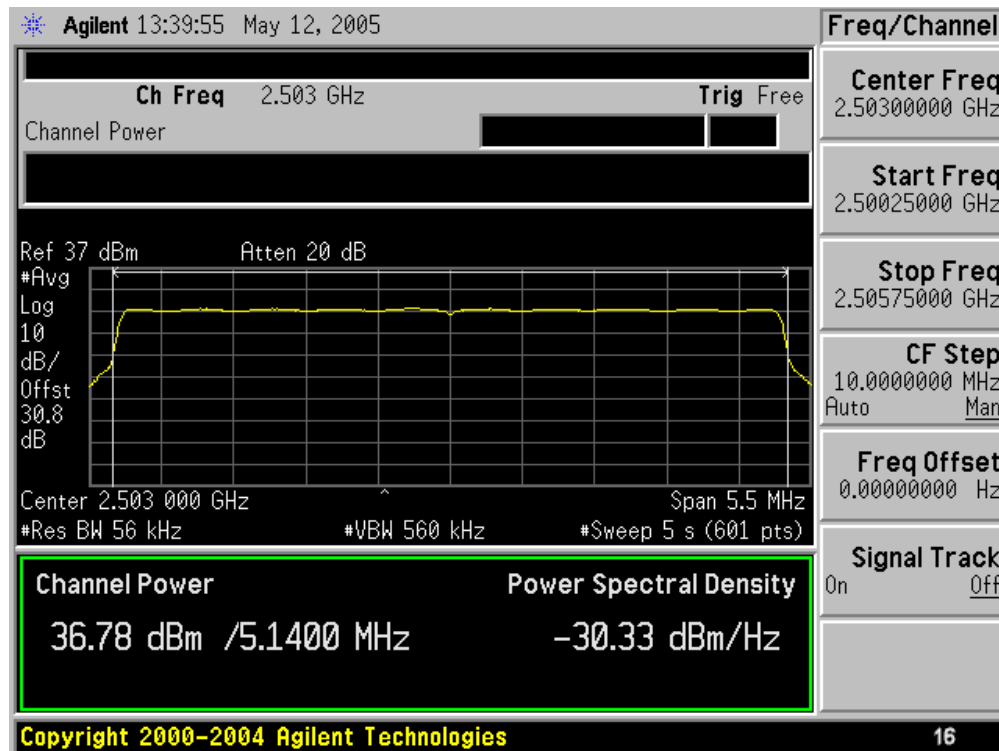
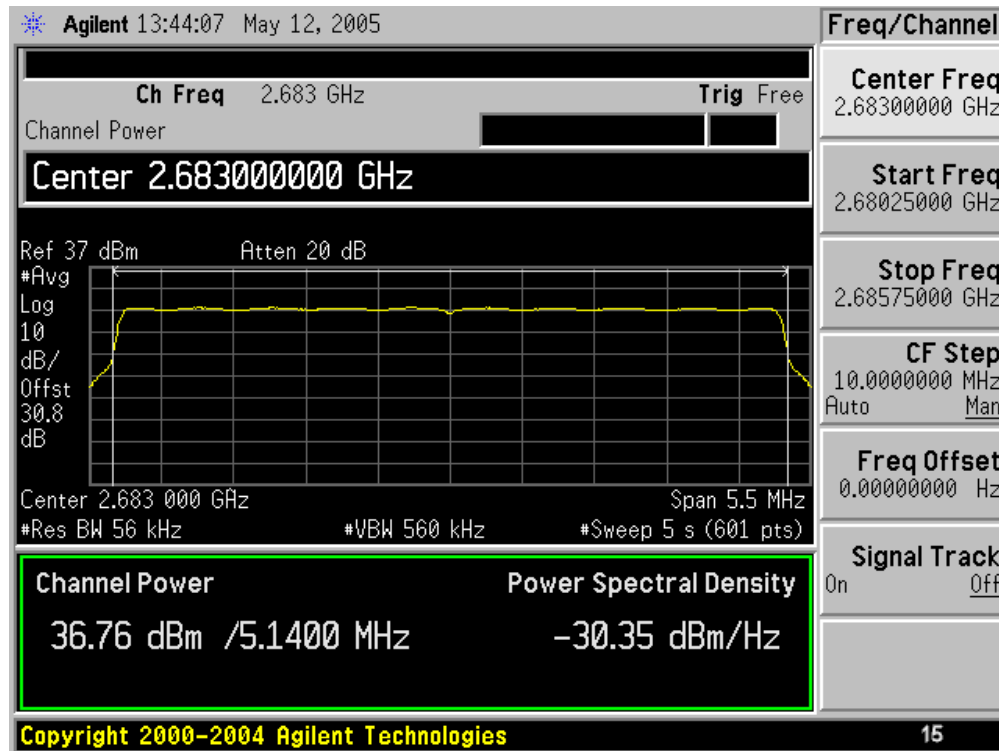
5W RF Power Output – Conducted (Maximum) 16-QAM (Cont'd)



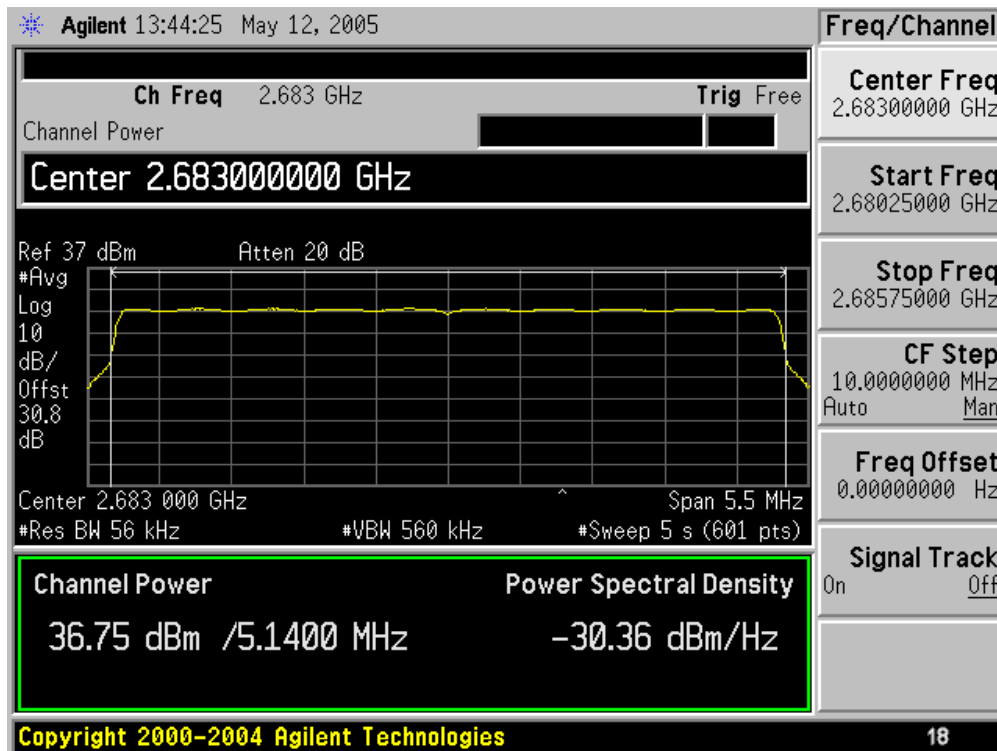
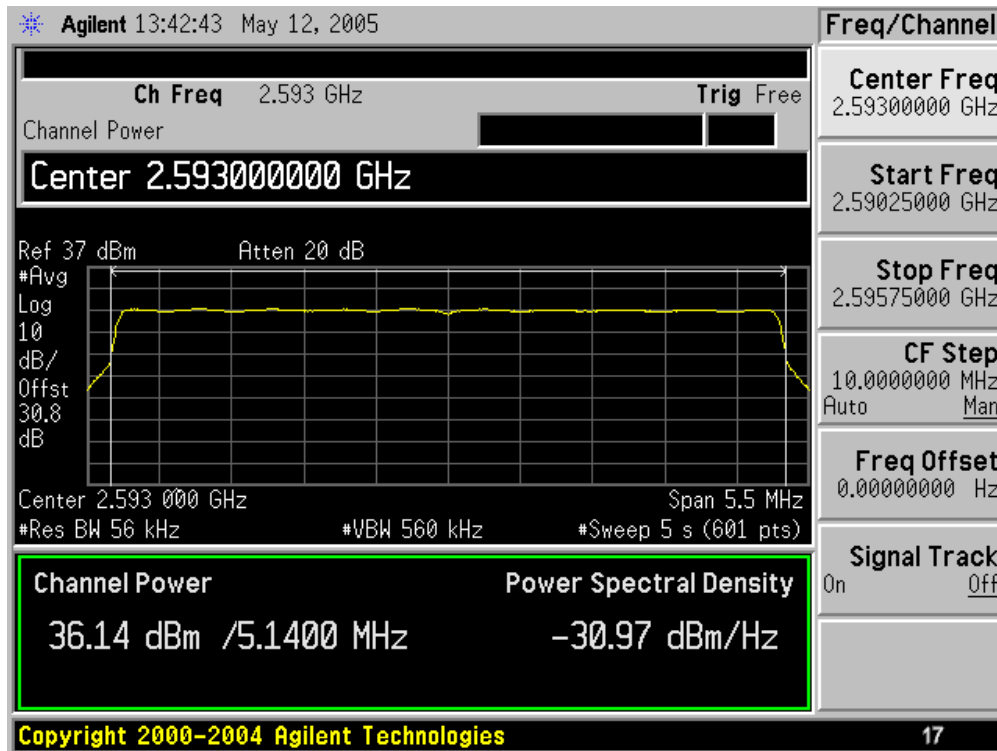
5W RF Power Output – Conducted (Maximum) 64-QAM



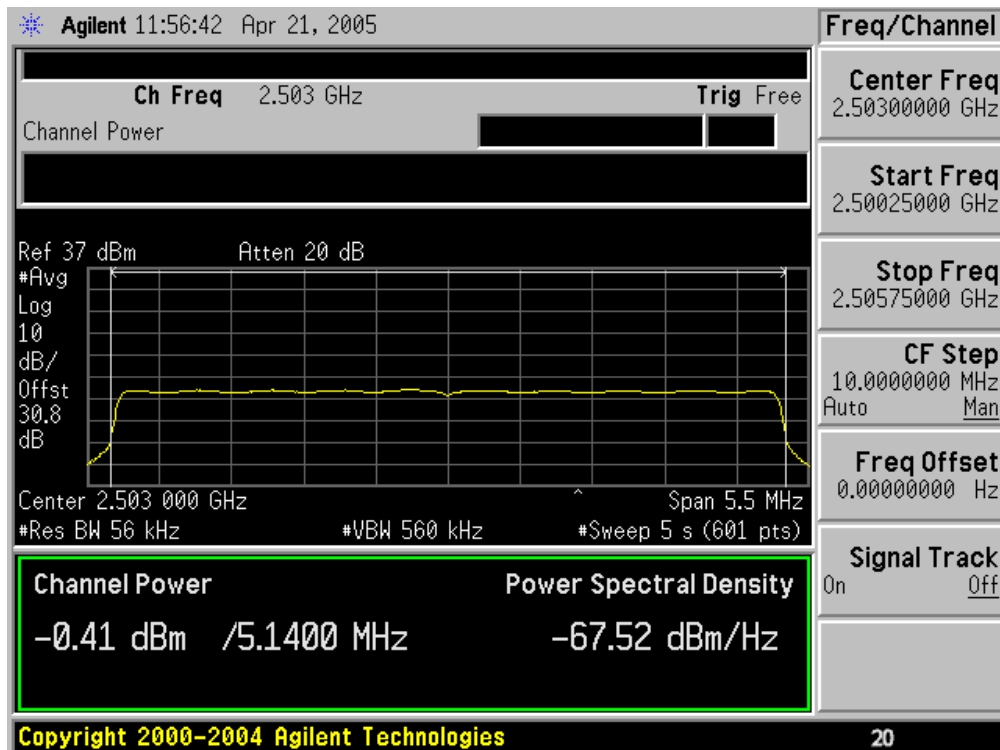
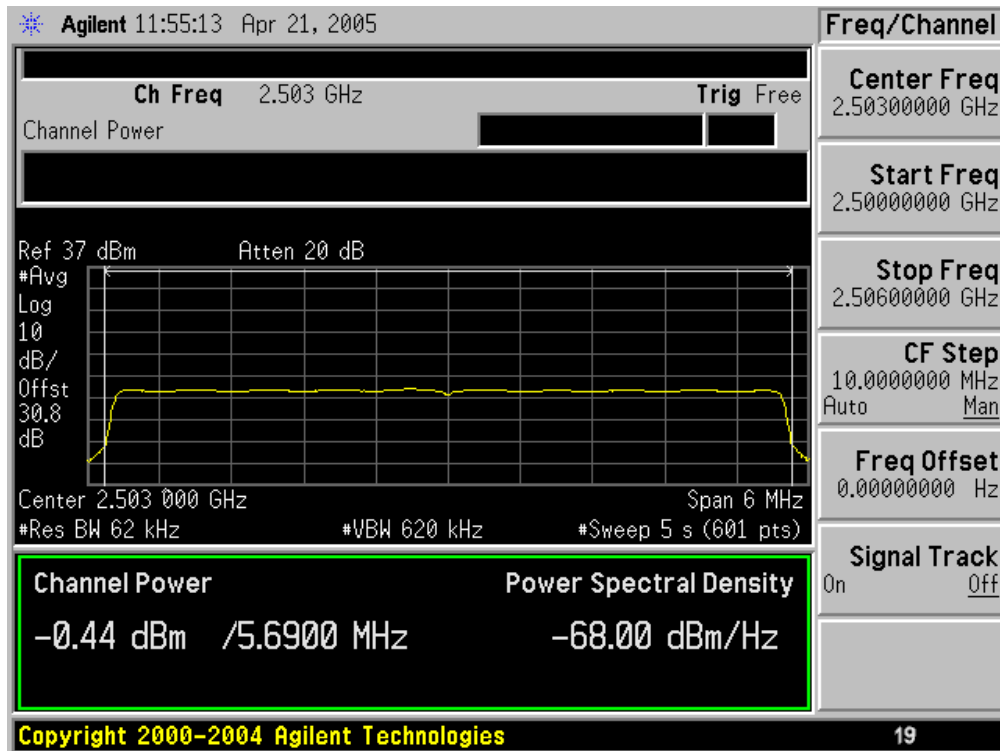
5W RF Power Output – Conducted (Maximum) 64-QAM (Cont'd)



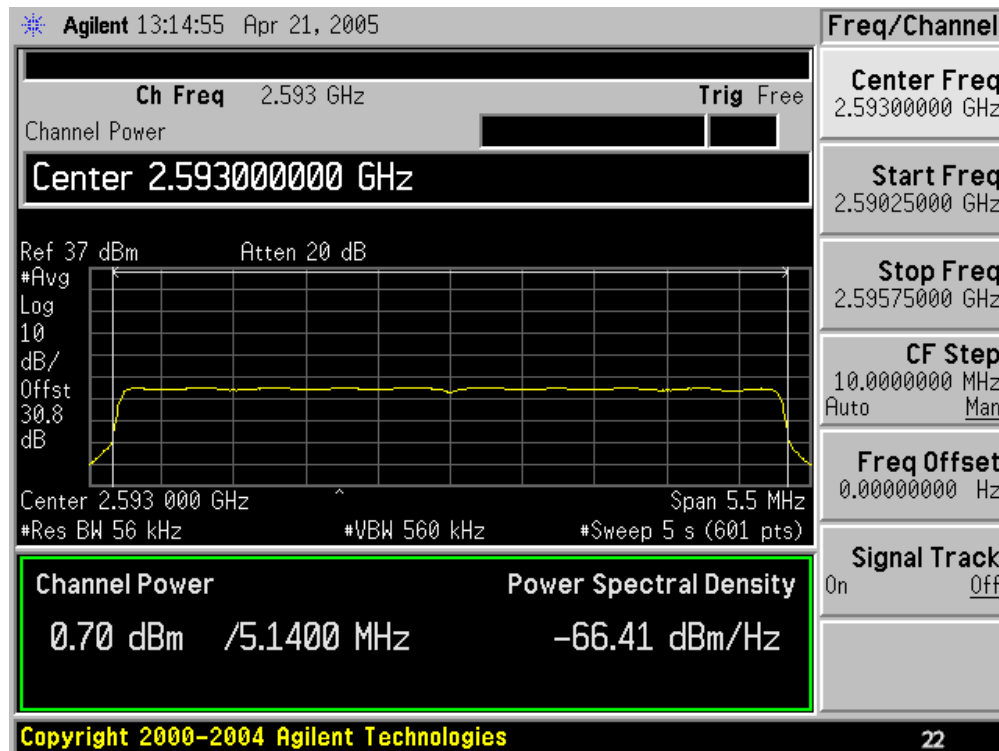
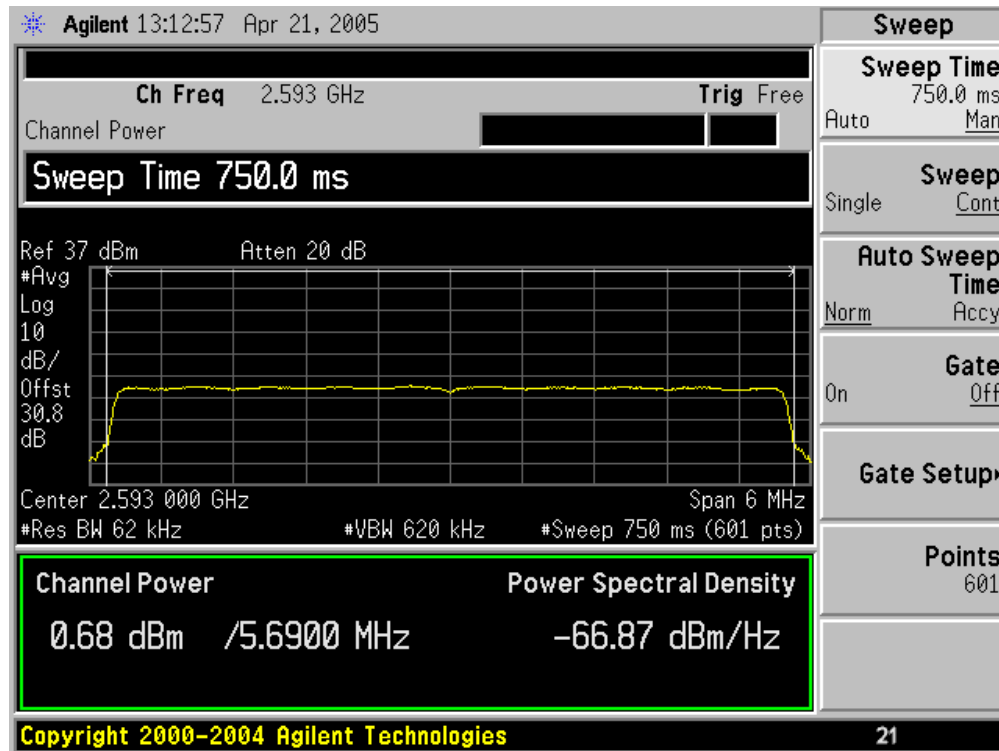
5W RF Power Output – Conducted (Maximum) 64-QAM (Cont'd)



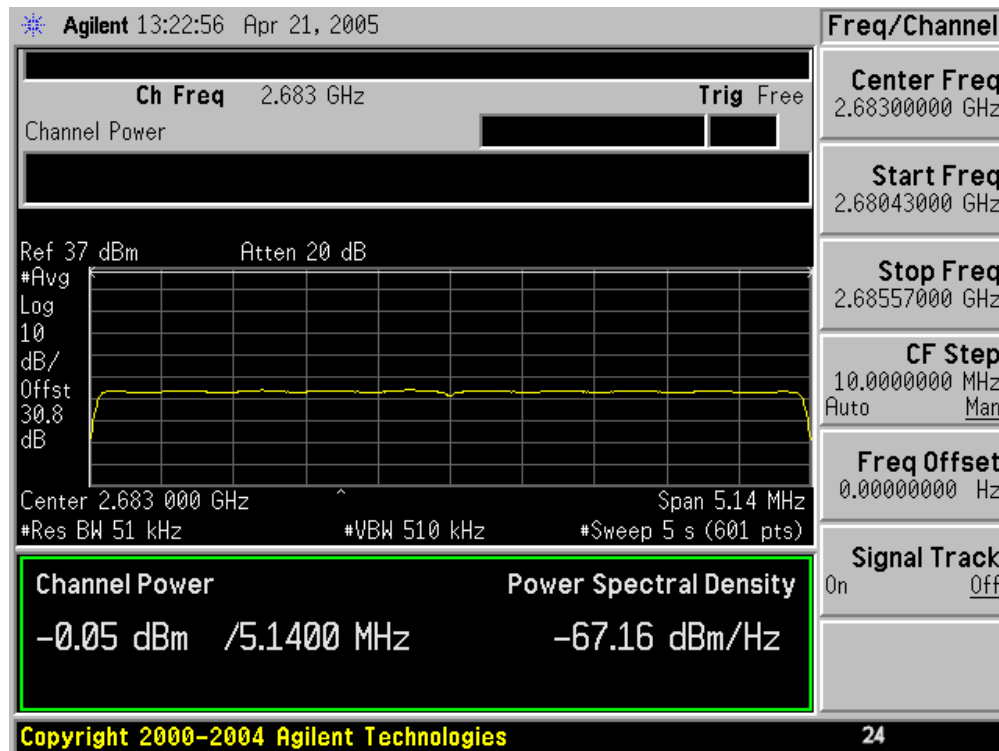
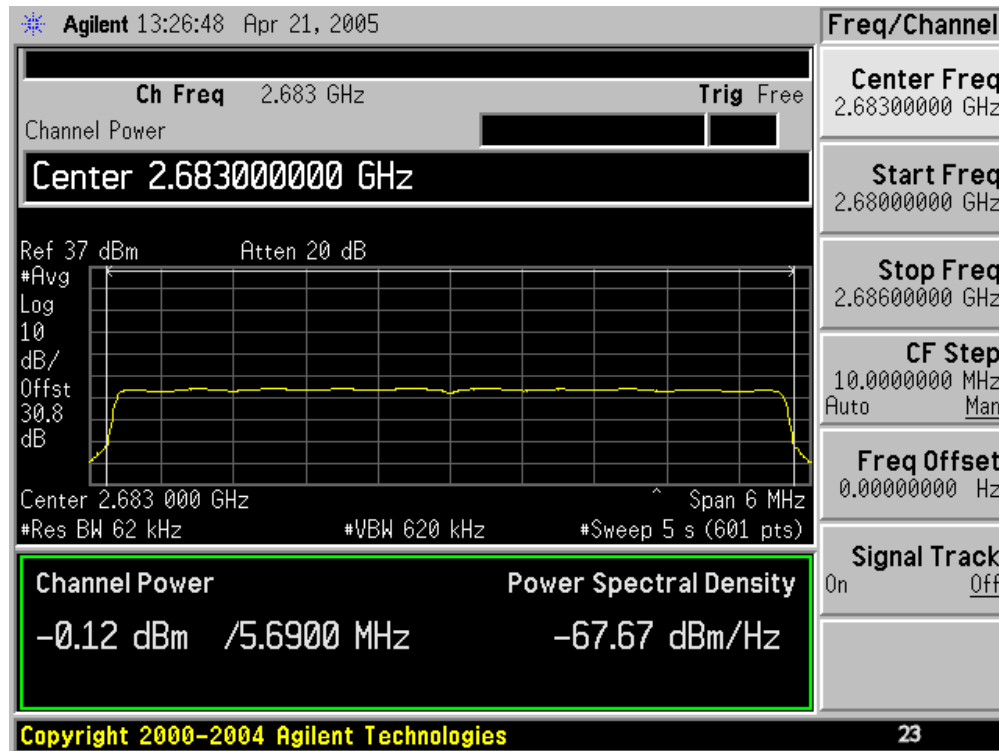
5W RF Power Output – Conducted (Minimum) 4-QAM



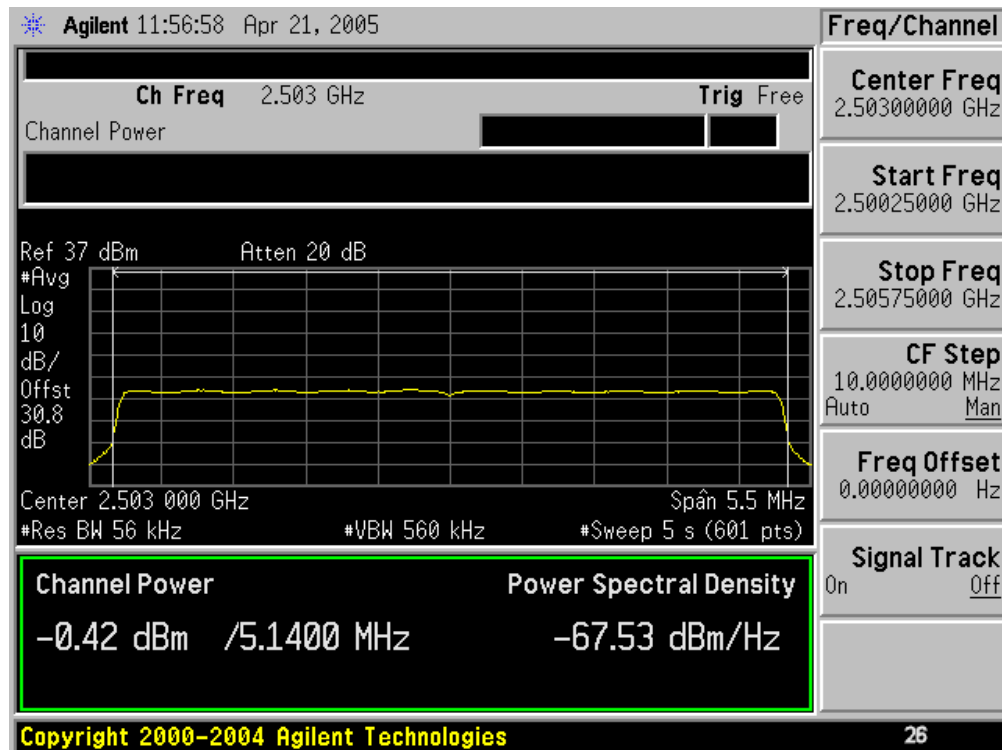
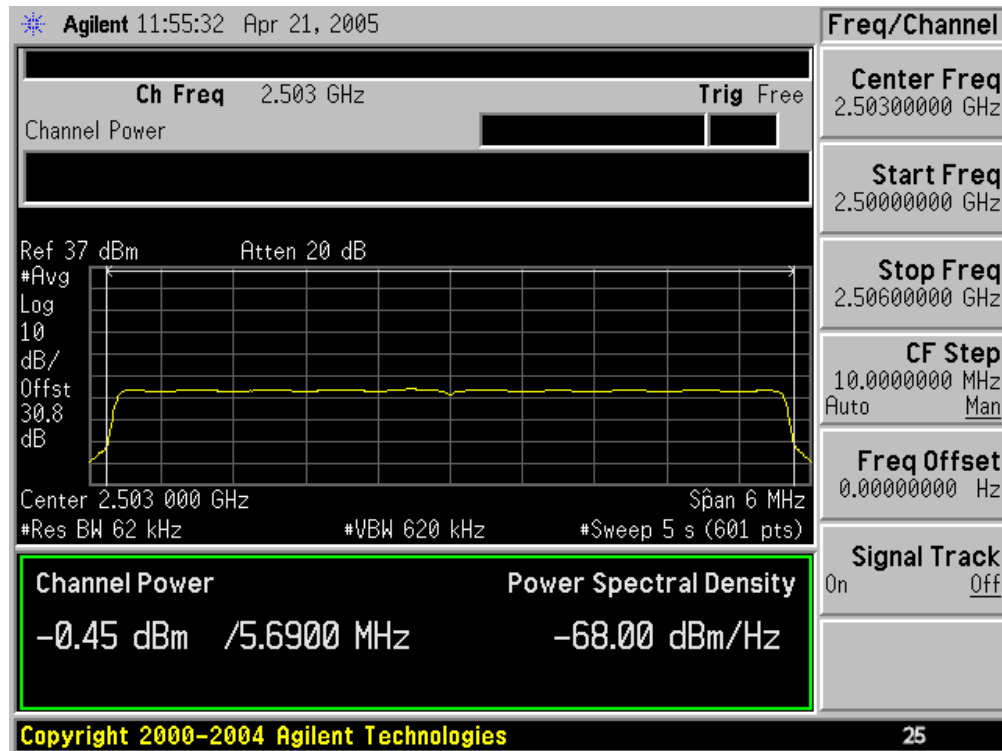
5W RF Power Output – Conducted (Minimum) 4-QAM (Cont'd)



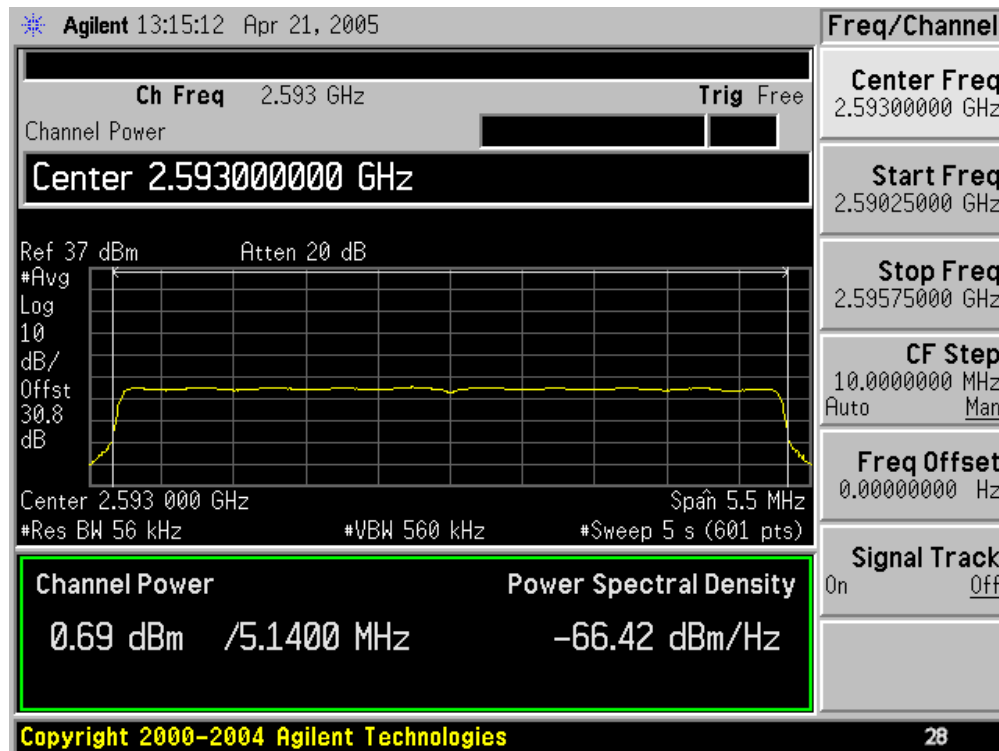
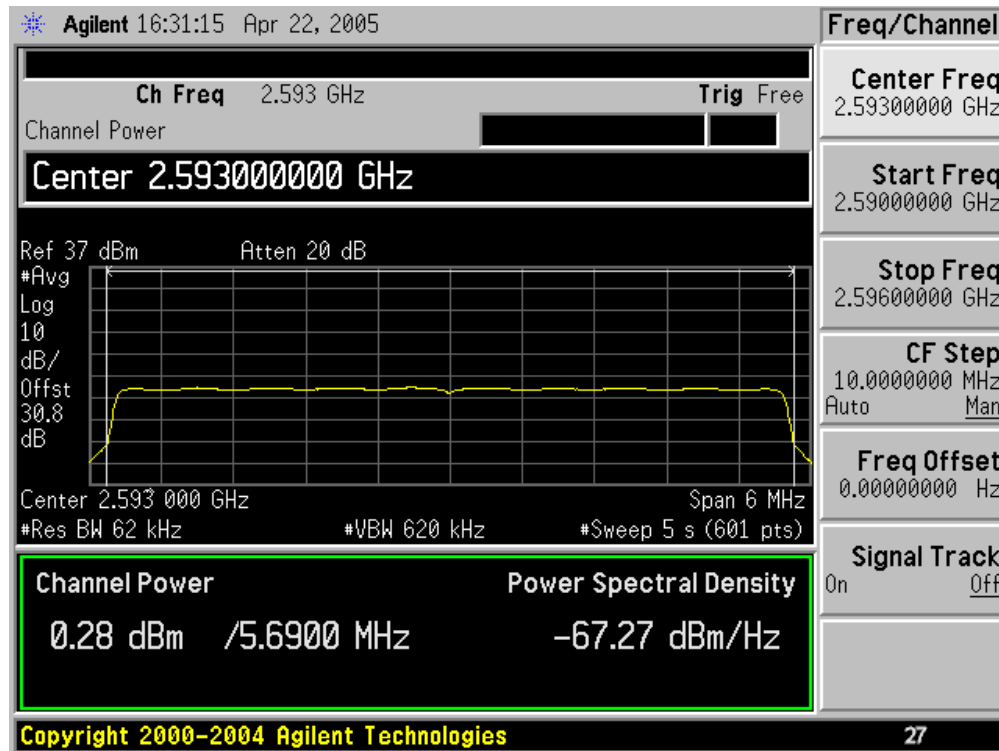
5W RF Power Output – Conducted (Minimum) 4-QAM (Cont'd)



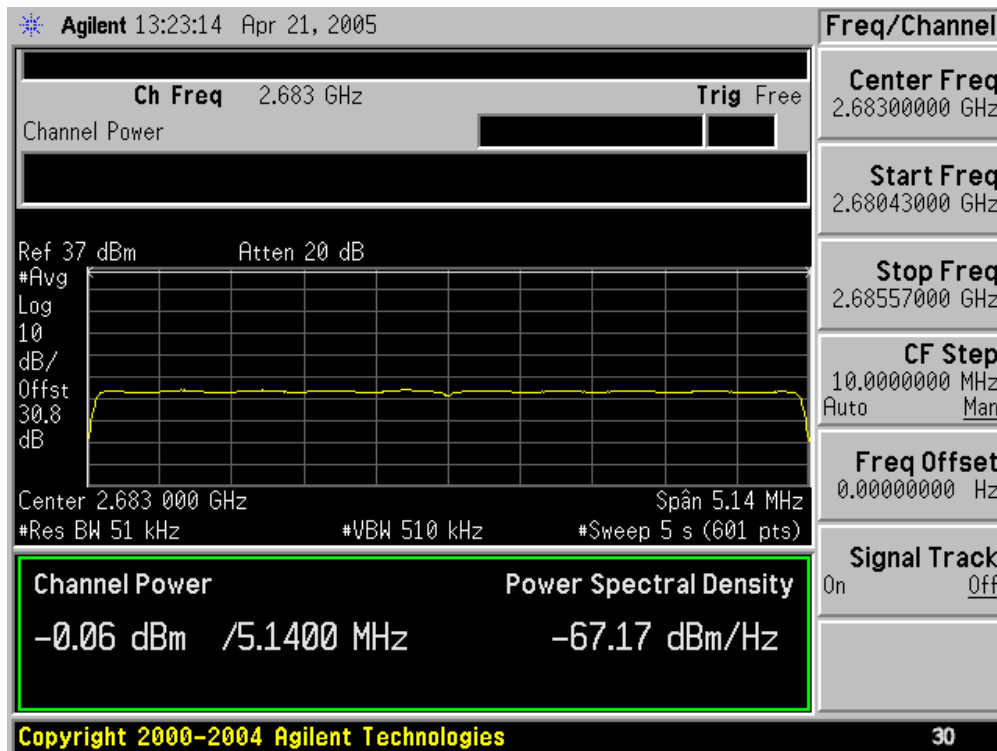
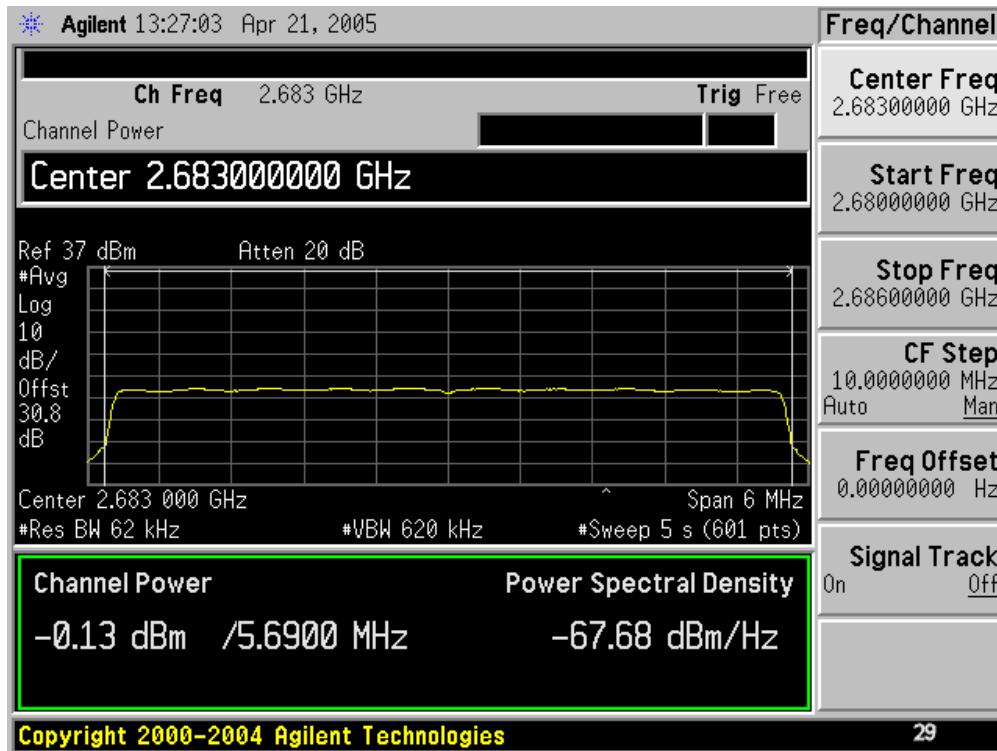
5W RF Power Output – Conducted (Minimum) 16-QAM



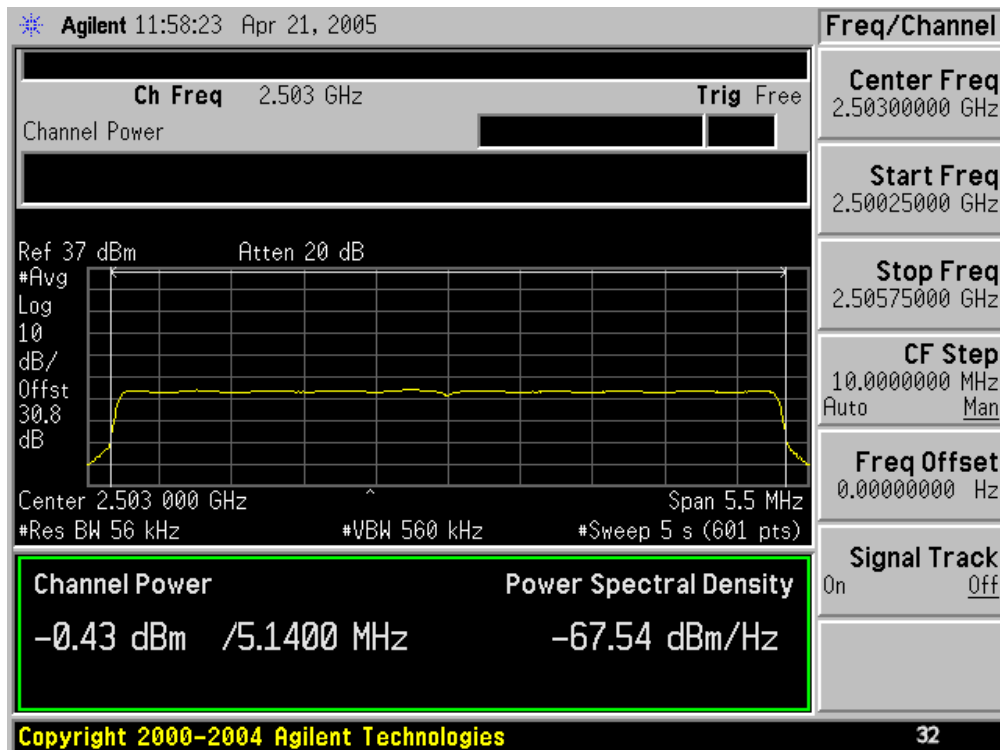
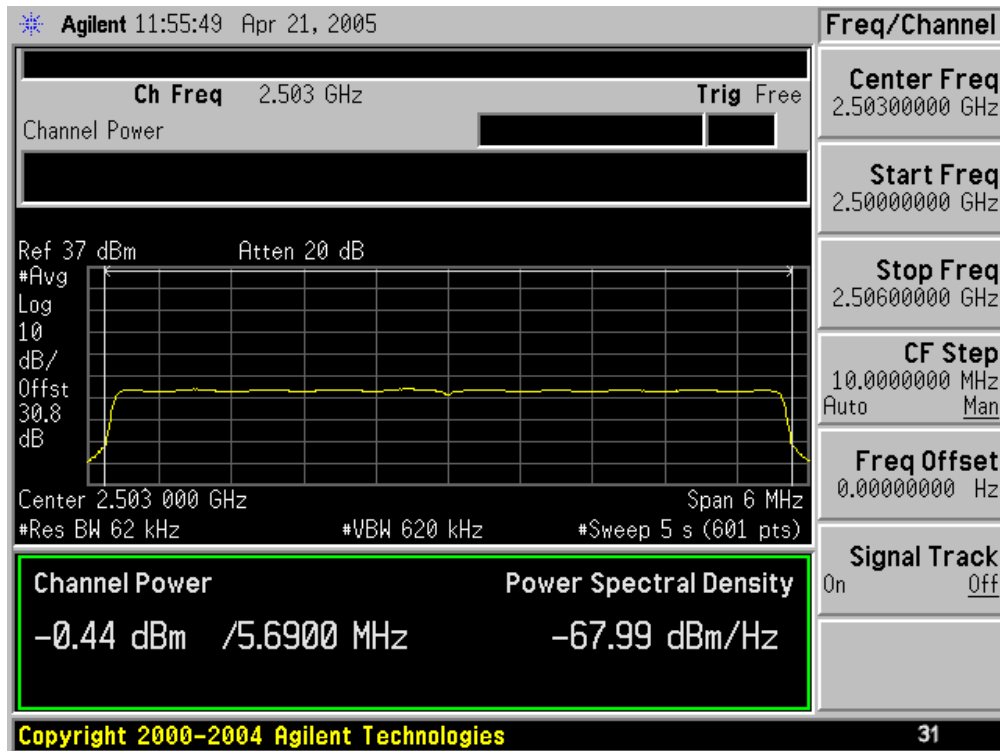
5W RF Power Output – Conducted (Minimum) 16-QAM (Cont'd)



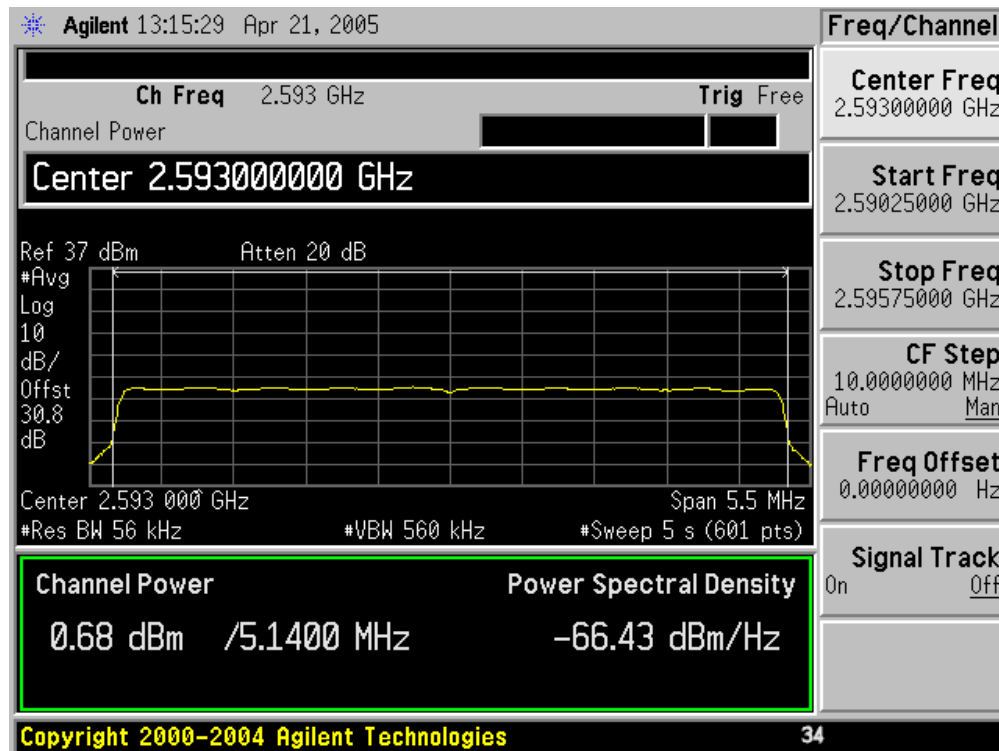
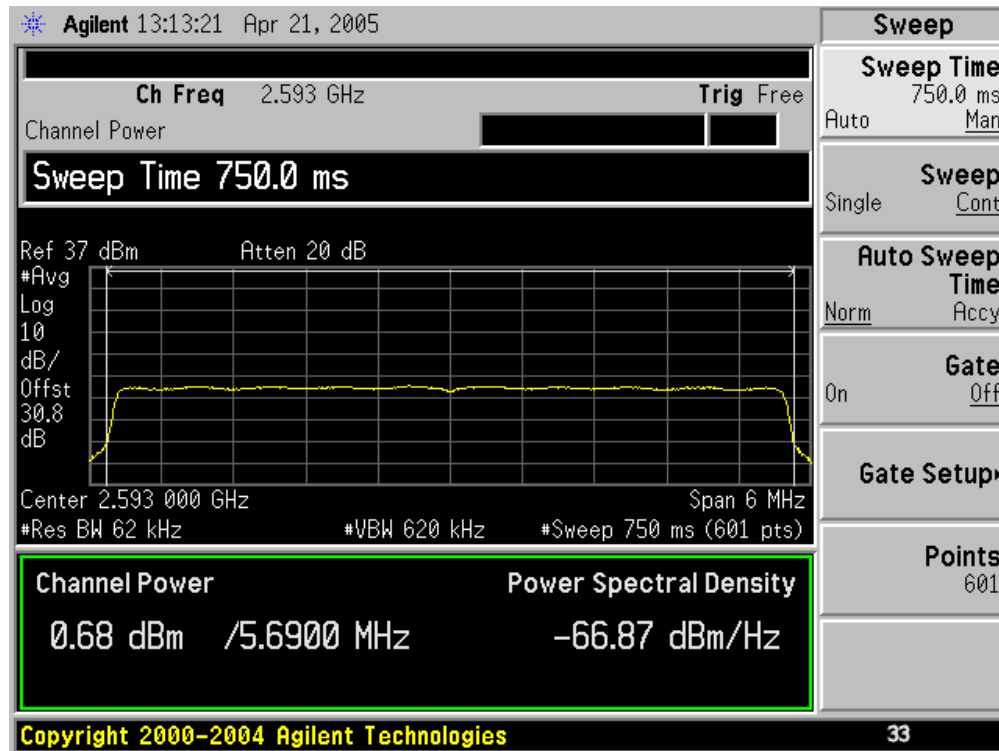
5W RF Power Output – Conducted (Minimum) 16-QAM (Cont'd)



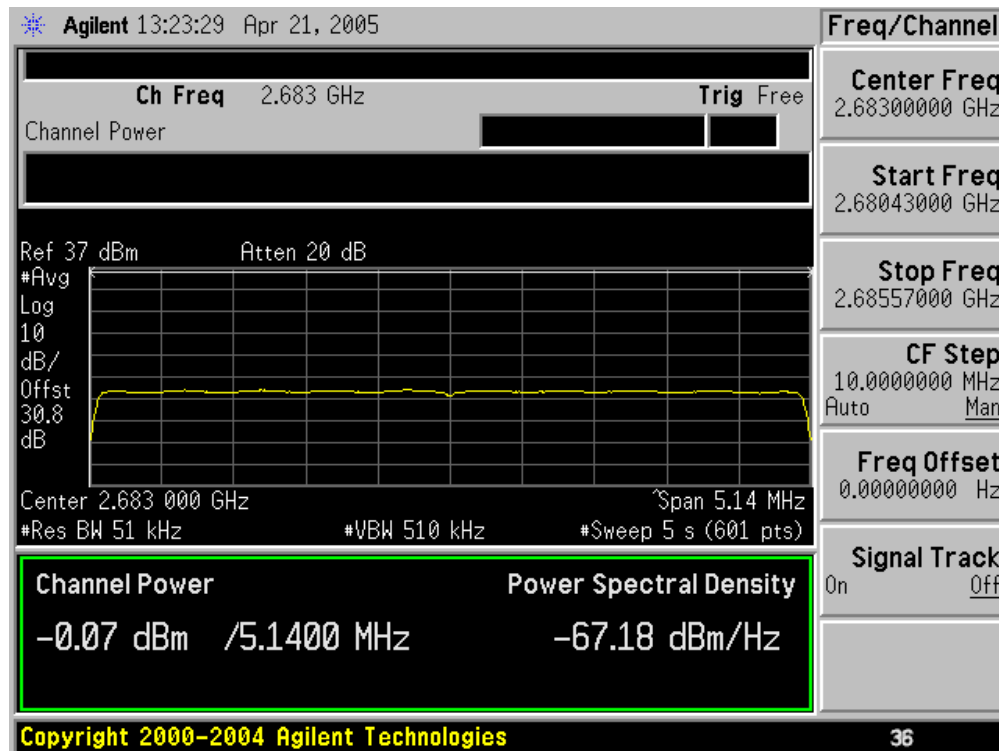
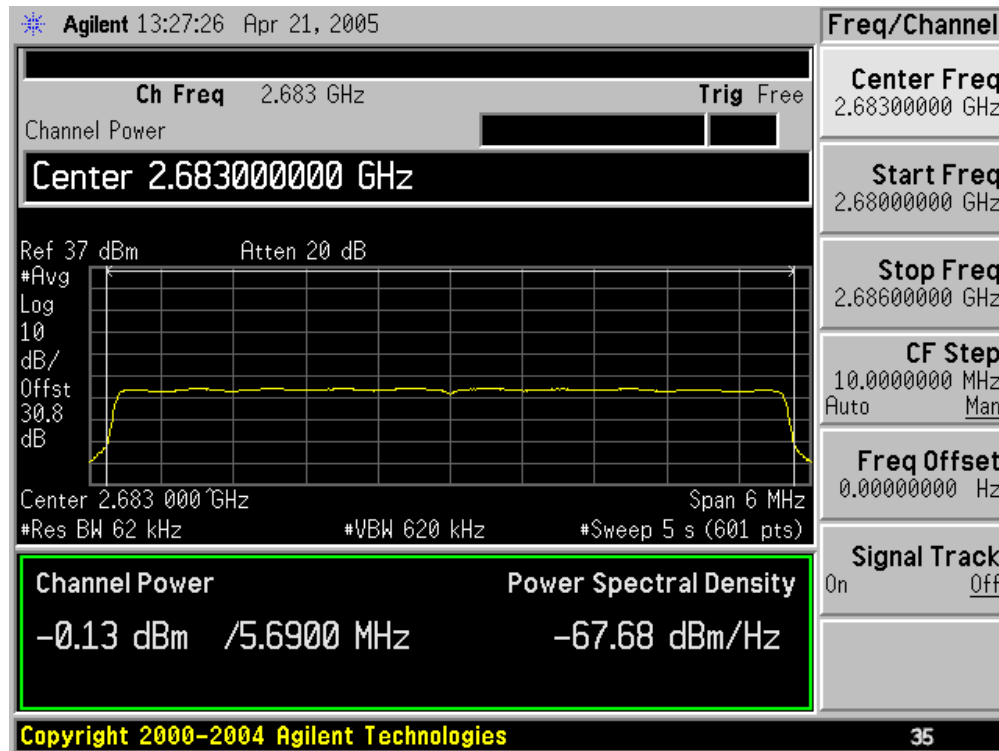
5W RF Power Output – Conducted (Minimum) 64-QAM



5W RF Power Output – Conducted (Minimum) 64-QAM (Cont'd)



5W RF Power Output – Conducted (Minimum) 64-QAM (Cont'd)



Modulation Characteristics

Rule Parts:

- 2.1047(d) *Other types of equipment.* A curve or equivalent data which shows that the equipment will meet the modulation requirements of the rules under which the equipment is to be licensed.
- 27.53(l)(2) (1) For BRS and EBS stations, the power of any emissions outside the licensee's frequency bands of operation shall be attenuated below the transmitter power (P) measured in watts.
(2) For fixed and temporary fixed digital stations, the attenuation shall be not less than $43 + 10 \log (P)$ dB
- 27.53(l)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

Specifications:

Attenuation at band edge = $43 + 10 \log(P)$, $P = 2$ watts
Attenuation at band edge = $43 + 10 \log(2) = 43 + 3$
Attenuation at band edge = 46 dB (equates to -13 dBm)

Attenuation at band edge = $43 + 10 \log(P)$, $P = 5$ watts
Attenuation at band edge = $43 + 10 \log(5) = 43 + 7$
Attenuation at band edge = 50 dB (equates to -13 dBm)

Compliance to the above requirements is verified by comparing the transmitter total power (P) to the integrated out of band power measured in 1 MHz bandwidths.

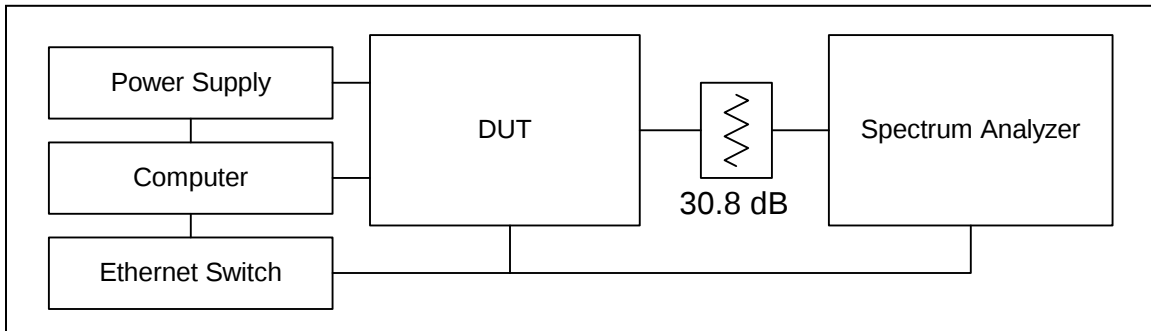
Standard: 47CFR27.53(l)(3)

Modulation Characteristics

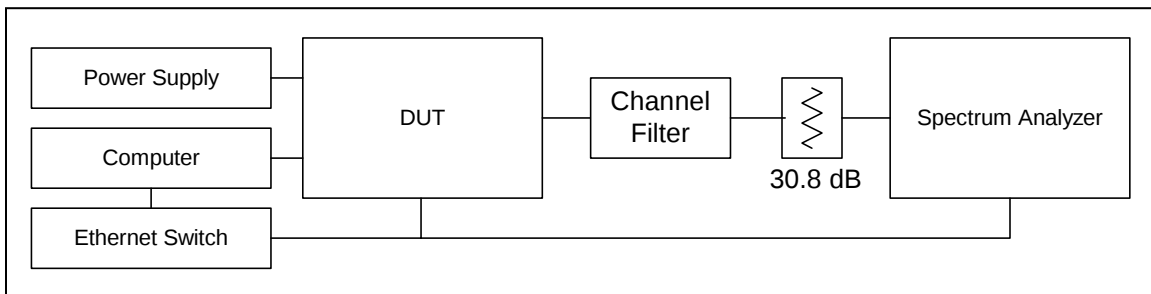
Test Procedure: The Orthogonal Frequency Division Multiplexing (OFDM) modulated Time Division Duplex (TDD) RF signal from the test unit is applied to a spectrum analyzer. An RMS detector is used to measure the average power of the transmission. The emission power is measured with the power measurement function in the spectrum analyzer which integrates all of the energy contained within the 1 MHz span of spectrum. The resolution bandwidth is set to 1 MHz for emissions beyond the first 1 MHz of the band edge. For measurements within the 1 MHz of the band edge, the resolution bandwidth is adjusted to 56 kHz or 62 kHz depending on the channel bandwidth. The transmitter is enabled in test mode with the attached computer. The RF loss of the attenuators and coax was measured and is noted in the block diagram below. Measurements are performed at frequencies across the band, for each of the modulation formats available (4-, 16-, and 64-QAM) and channel bandwidths (5.5 MHz and 6.0 MHz). Spectrum analyzer plots for the 2499 MHz 2-watt channel and 2503 MHz 5-watt channel are included after the complied data pages. All of the measurements on the other channels had similar results. Measurement of the emissions in the ± 1 to ± 2 MHz bins is done with both a 1% resolution bandwidth and a 1 MHz resolution bandwidth.

Test Conditions:

- 2-Watt Frequencies:
 - 5.5 MHz channels: 2504.75, 2565.25, 2626.75, 2687.25 MHz
 - 6.0 MHz channels: 2499, 2575, and 2621 MHz
- 5-Watt Frequencies:
 - Both 5.5 and 6.0 MHz channels: 2503, 2593, and 2683 MHz (these channels were tested at both bandwidths due to availability of channel filters)
- Temperature = 25 °C
- Supply Voltage = 48.0 VDC Nominal to DUT



2W Modulation Characteristics Test Setup



5W Modulation Characteristics Test Setup

Modulation Characteristics Test Results Summary (2W)

Pass modulation characteristics across frequency band and modulation format.

Modulation Characteristics Test Results Summary (5W)

Pass modulation characteristics across frequency band and modulation format.

There are 9 data points that appear to not comply to the mask when measured with a 1 MHz resolution bandwidth. One occurrence is depicted in the graphs contained on page 85 of this document. As is seen in these graphs, the 1 MHz resolution bandwidth is allowing energy from the edge of the transmitted spectrum into the measurement integration and distorting the true value of the ± 1 to ± 2 MHz bins. Reducing the resolution bandwidth and integrating the energy over the full 1 MHz bandwidth as allowed by 27.53(l)(6) produces an accurate representation for the measured value of this section of spectrum. All of the 1% resolution bandwidth measurements pass the -13 dBm requirement.

2499 MHz, 6.0 MHz 2W Channel, 4-QAM

		Channel Center Freq (MHz)		2499		4/13/2005		
		Channel BW (MHz)		6		48 VDC Nom		
		Channel Bandedge - Low (MHz)		2496		4-QAM		
		Channel Bandedge - High (MHz)		2502				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2490.5	2490	2491	-36.23	-13	-23.23	Complies
	- 5 MHz bin	2491.5	2491	2492	-33.62	-13	-20.62	Complies
	- 4 MHz bin	2492.5	2492	2493	-30.66	-13	-17.66	Complies
	- 3 MHz bin	2493.5	2493	2494	-28.16	-13	-15.16	Complies
	- 2 MHz bin	2494.5	2494	2495	-15.35	-13	-2.35	Complies
62	- 2 MHz bin	2494.5	2494	2495	-26.42	-13	-13.42	Complies
	- 1 MHz bin	2495.5	2495	2496	-20.3	-13	-7.3	Complies
62	+ 1 MHz bin	2502.5	2502	2503	-19.53	-13	-6.53	Complies
	+ 2 MHz bin	2503.5	2503	2504	-24.83	-13	-11.83	Complies
1000	+ 2 MHz bin	2503.5	2503	2504	-14.77	-13	-1.77	Complies
	+ 3 MHz bin	2504.5	2504	2505	-26.66	-13	-13.66	Complies
	+ 4 MHz bin	2505.5	2505	2506	-29.41	-13	-16.41	Complies
	+ 5 MHz bin	2506.5	2506	2507	-32.86	-13	-19.86	Complies
	+ 6 MHz bin	2507.5	2507	2508	-41.37	-13	-28.37	Complies

2499 MHz, 6.0 MHz 2W Channel, 16-QAM

		Channel Center Freq (MHz)		2499		4/13/2005		
		Channel BW (MHz)		6		48 VDC Nom		
		Channel Bandedge - Low (MHz)		2496		16-QAM		
		Channel Bandedge - High (MHz)		2502				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2490.5	2490	2491	-36.23	-13	-23.23	Complies
	- 5 MHz bin	2491.5	2491	2492	-33.56	-13	-20.56	Complies
	- 4 MHz bin	2492.5	2492	2493	-30.51	-13	-17.51	Complies
	- 3 MHz bin	2493.5	2493	2494	-27.89	-13	-14.89	Complies
	- 2 MHz bin	2494.5	2494	2495	-15.31	-13	-2.31	Complies
62	- 2 MHz bin	2494.5	2494	2495	-26.25	-13	-13.25	Complies
	- 1 MHz bin	2495.5	2495	2496	-20.28	-13	-7.28	Complies
62	+ 1 MHz bin	2502.5	2502	2503	-19.59	-13	-6.59	Complies
	+ 2 MHz bin	2503.5	2503	2504	-24.72	-13	-11.72	Complies
1000	+ 2 MHz bin	2503.5	2503	2504	-14.74	-13	-1.74	Complies
	+ 3 MHz bin	2504.5	2504	2505	-26.51	-13	-13.51	Complies
	+ 4 MHz bin	2505.5	2505	2506	-29.32	-13	-16.32	Complies
	+ 5 MHz bin	2506.5	2506	2507	-32.85	-13	-19.85	Complies
	+ 6 MHz bin	2507.5	2507	2508	-36.01	-13	-23.01	Complies

Modulation Characteristics

2499 MHz, 6.0 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)				2499		4/13/2005	
	Channel BW (MHz)				6		48 VDC Nom	
	Channel Bandedge - Low (MHz)				2496		64-QAM	
	Channel Bandedge - High (MHz)				2502			
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2490.5	2490	2491	-36.18	-13	-23.18	Complies
	- 5 MHz bin	2491.5	2491	2492	-33.48	-13	-20.48	Complies
	- 4 MHz bin	2492.5	2492	2493	-30.43	-13	-17.43	Complies
	- 3 MHz bin	2493.5	2493	2494	-34.03	-13	-21.03	Complies
	- 2 MHz bin	2494.5	2494	2495	-15.30	-13	-2.3	Complies
62	- 2 MHz bin	2494.5	2494	2495	-25.75	-13	-12.75	Complies
	- 1 MHz bin	2495.5	2495	2496	-20.42	-13	-7.42	Complies
62	+ 1 MHz bin	2502.5	2502	2503	-19.61	-13	-6.61	Complies
	+ 2 MHz bin	2503.5	2503	2504	-24.48	-13	-11.48	Complies
1000	+ 2 MHz bin	2503.5	2503	2504	-14.74	-13	-1.74	Complies
	+ 3 MHz bin	2504.5	2504	2505	-26.31	-13	-13.31	Complies
	+ 4 MHz bin	2505.5	2505	2506	-29.30	-13	-16.3	Complies
	+ 5 MHz bin	2506.5	2506	2507	-32.82	-13	-19.82	Complies
	+ 6 MHz bin	2507.5	2507	2508	-35.99	-13	-22.99	Complies

2504.750 MHz, 5.5 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)				2504.75		4/13/2005	
	Channel BW (MHz)				5.5		48 VDC Nom	
	Channel Bandedge - Low (MHz)				2502		4-QAM	
	Channel Bandedge - High (MHz)				2507.5			
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2496.5	2496	2497	-36.66	-13	-23.66	Complies
	- 5 MHz bin	2497.5	2497	2498	-34.06	-13	-21.06	Complies
	- 4 MHz bin	2498.5	2498	2499	-30.52	-13	-17.52	Complies
	- 3 MHz bin	2499.5	2499	2500	-27.07	-13	-14.07	Complies
	- 2 MHz bin	2500.5	2500	2501	-15.49	-13	-2.49	Complies
56	- 2 MHz bin	2500.5	2500	2501	-24.97	-13	-11.97	Complies
	- 1 MHz bin	2501.5	2501	2502	-21.32	-13	-8.32	Complies
56	+ 1 MHz bin	2508	2507.5	2508.5	-19.96	-13	-6.96	Complies
	+ 2 MHz bin	2509	2508.5	2509.5	-23.61	-13	-10.61	Complies
1000	+ 2 MHz bin	2509	2508.5	2509.5	-14.93	-13	-1.93	Complies
	+ 3 MHz bin	2510	2509.5	2510.5	-25.72	-13	-12.72	Complies
	+ 4 MHz bin	2511	2510.5	2511.5	-29.42	-13	-16.42	Complies
	+ 5 MHz bin	2512	2511.5	2512.5	-33.58	-13	-20.58	Complies
	+ 6 MHz bin	2513	2512.5	2513.5	-36.45	-13	-23.45	Complies

Modulation Characteristics

2504.750 MHz, 5.5 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)			2504.75		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2502		16-QAM		
	Channel Bandedge - High (MHz)			2507.5				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2496.5	2496	2497	-36.60	-13	-23.6	Complies
	- 5 MHz bin	2497.5	2497	2498	-33.98	-13	-20.98	Complies
	- 4 MHz bin	2498.5	2498	2499	-30.46	-13	-17.46	Complies
	- 3 MHz bin	2499.5	2499	2500	-27.33	-13	-14.33	Complies
	- 2 MHz bin	2500.5	2500	2501	-15.50	-13	-2.5	Complies
56	- 2 MHz bin	2500.5	2500	2501	-24.99	-13	-11.99	Complies
	- 1 MHz bin	2501.5	2501	2502	-21.52	-13	-8.52	Complies
56	+ 1 MHz bin	2508	2507.5	2508.5	-20.06	-13	-7.06	Complies
	+ 2 MHz bin	2509	2508.5	2509.5	-23.80	-13	-10.8	Complies
1000	+ 2 MHz bin	2509	2508.5	2509.5	-14.94	-13	-1.94	Complies
	+ 3 MHz bin	2510	2509.5	2510.5	-26.11	-13	-13.11	Complies
	+ 4 MHz bin	2511	2510.5	2511.5	-29.53	-13	-16.53	Complies
	+ 5 MHz bin	2512	2511.5	2512.5	-33.57	-13	-20.57	Complies
	+ 6 MHz bin	2513	2512.5	2513.5	-36.44	-13	-23.44	Complies

2504.750 MHz, 5.5 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)			2504.75		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2502		64-QAM		
	Channel Bandedge - High (MHz)			2507.5				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2496.5	2496	2497	-36.61	-13	-23.61	Complies
	- 5 MHz bin	2497.5	2497	2498	-33.97	-13	-20.97	Complies
	- 4 MHz bin	2498.5	2498	2499	-30.39	-13	-17.39	Complies
	- 3 MHz bin	2499.5	2499	2500	-26.89	-13	-13.89	Complies
	- 2 MHz bin	2500.5	2500	2501	-15.43	-13	-2.43	Complies
56	- 2 MHz bin	2500.5	2500	2501	-24.33	-13	-11.33	Complies
	- 1 MHz bin	2501.5	2501	2502	-21.27	-13	-8.27	Complies
56	+ 1 MHz bin	2508	2507.5	2508.5	-20.16	-13	-7.16	Complies
	+ 2 MHz bin	2509	2508.5	2509.5	-23.69	-13	-10.69	Complies
1000	+ 2 MHz bin	2509	2508.5	2509.5	-14.87	-13	-1.87	Complies
	+ 3 MHz bin	2510	2509.5	2510.5	-25.7	-13	-12.7	Complies
	+ 4 MHz bin	2511	2510.5	2511.5	-29.36	-13	-16.36	Complies
	+ 5 MHz bin	2512	2511.5	2512.5	-33.51	-13	-20.51	Complies
	+ 6 MHz bin	2513	2512.5	2513.5	-36.4	-13	-23.4	Complies

Modulation Characteristics

2565.250 MHz, 5.5 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)			2565.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2562.5		4-QAM		
	Channel Bandedge - High (MHz)			2568				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2557	2556.5	2557.5	-36.22	-13	-23.22	Complies
	- 5 MHz bin	2558	2557.5	2558.5	-33.37	-13	-20.37	Complies
	- 4 MHz bin	2559	2558.5	2559.5	-37.75	-13	-24.75	Complies
	- 3 MHz bin	2560	2559.5	2560.5	-26.81	-13	-13.81	Complies
	- 2 MHz bin	2561	2560.5	2561.5	-15.48	-13	-2.48	Complies
56	- 2 MHz bin	2561	2560.5	2561.5	-24.71	-13	-11.71	Complies
	- 1 MHz bin	2562	2561.5	2562.5	-21.49	-13	-8.49	Complies
56	+ 1 MHz bin	2568.5	2568	2569	-20.12	-13	-7.12	Complies
	+ 2 MHz bin	2569.5	2569	2570	-23.03	-13	-10.03	Complies
1000	+ 2 MHz bin	2569.5	2569	2570	-14.65	-13	-1.65	Complies
	+ 3 MHz bin	2570.5	2570	2571	-24.99	-13	-11.99	Complies
	+ 4 MHz bin	2571.5	2571	2572	-28.09	-13	-15.09	Complies
	+ 5 MHz bin	2572.5	2572	2573	-31.5	-13	-18.5	Complies
	+ 6 MHz bin	2573.5	2573	2574	-34.2	-13	-21.2	Complies

2565.250 MHz, 5.5 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)			2565.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2562.5		16-QAM		
	Channel Bandedge - High (MHz)			2568				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2557	2556.5	2557.5	-36.22	-13	-23.22	Complies
	- 5 MHz bin	2558	2557.5	2558.5	-33.34	-13	-20.34	Complies
	- 4 MHz bin	2559	2558.5	2559.5	-29.88	-13	-16.88	Complies
	- 3 MHz bin	2560	2559.5	2560.5	-26.76	-13	-13.76	Complies
	- 2 MHz bin	2561	2560.5	2561.5	-15.52	-13	-2.52	Complies
56	- 2 MHz bin	2561	2560.5	2561.5	-24.69	-13	-11.69	Complies
	- 1 MHz bin	2562	2561.5	2562.5	-21.1	-13	-8.1	Complies
56	+ 1 MHz bin	2568.5	2568	2569	-19.75	-13	-6.75	Complies
	+ 2 MHz bin	2569.5	2569	2570	-23	-13	-10	Complies
1000	+ 2 MHz bin	2569.5	2569	2570	-14.65	-13	-1.65	Complies
	+ 3 MHz bin	2570.5	2570	2571	-25.01	-13	-12.01	Complies
	+ 4 MHz bin	2571.5	2571	2572	-28.09	-13	-15.09	Complies
	+ 5 MHz bin	2572.5	2572	2573	-31.5	-13	-18.5	Complies
	+ 6 MHz bin	2573.5	2573	2574	-34.2	-13	-21.2	Complies

Modulation Characteristics

2565.250 MHz, 5.5 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)			2565.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2562.5		64-QAM		
	Channel Bandedge - High (MHz)			2568				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2557	2556.5	2557.5	-36.23	-13	-23.23	Complies
	- 5 MHz bin	2558	2557.5	2558.5	-33.37	-13	-20.37	Complies
	- 4 MHz bin	2559	2558.5	2559.5	-29.93	-13	-16.93	Complies
	- 3 MHz bin	2560	2559.5	2560.5	-26.95	-13	-13.95	Complies
	- 2 MHz bin	2561	2560.5	2561.5	-15.55	-13	-2.55	Complies
56	- 2 MHz bin	2561	2560.5	2561.5	-24.93	-13	-11.93	Complies
	- 1 MHz bin	2562	2561.5	2562.5	-21.2	-13	-8.2	Complies
56	+ 1 MHz bin	2568.5	2568	2569	-19.51	-13	-6.51	Complies
	+ 2 MHz bin	2569.5	2569	2570	-23.15	-13	-10.15	Complies
1000	+ 2 MHz bin	2569.5	2569	2570	-14.71	-13	-1.71	Complies
	+ 3 MHz bin	2570.5	2570	2571	-25.1	-13	-12.1	Complies
	+ 4 MHz bin	2571.5	2571	2572	-28.1	-13	-15.1	Complies
	+ 5 MHz bin	2572.5	2572	2573	-31.54	-13	-18.54	Complies
	+ 6 MHz bin	2573.5	2573	2574	-34.26	-13	-21.26	Complies

2575 MHz, 6.0 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)			2575		4/13/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2572		4-QAM		
	Channel Bandedge - High (MHz)			2578				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2566.5	2566	2567	-35.71	-13	-22.71	Complies
	- 5 MHz bin	2567.5	2567	2568	-33.29	-13	-20.29	Complies
	- 4 MHz bin	2568.5	2568	2569	-30.73	-13	-17.73	Complies
	- 3 MHz bin	2569.5	2569	2570	-28.45	-13	-15.45	Complies
	- 2 MHz bin	2570.5	2570	2571	-15.35	-13	-2.35	Complies
62	- 2 MHz bin	2570.5	2570	2571	-26.64	-13	-13.64	Complies
	- 1 MHz bin	2571.5	2571	2572	-20.38	-13	-7.38	Complies
62	+ 1 MHz bin	2578.5	2578	2579	-19.31	-13	-6.31	Complies
	+ 2 MHz bin	2579.5	2579	2580	-24.79	-13	-11.79	Complies
1000	+ 2 MHz bin	2579.5	2579	2580	-14.55	-13	-1.55	Complies
	+ 3 MHz bin	2580.5	2580	2581	-26.43	-13	-13.43	Complies
	+ 4 MHz bin	2581.5	2581	2582	-39.04	-13	-26.04	Complies
	+ 5 MHz bin	2582.5	2582	2583	-31.56	-13	-18.56	Complies
	+ 6 MHz bin	2583.5	2583	2584	-34.09	-13	-21.09	Complies

Modulation Characteristics

2575 MHz, 6.0 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)		2575		4/13/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Bandedge - Low (MHz)		2572		16-QAM			
	Channel Bandedge - High (MHz)		2578					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2566.5	2566	2567	-35.72	-13	-22.72	Complies
	- 5 MHz bin	2567.5	2567	2568	-33.24	-13	-20.24	Complies
	- 4 MHz bin	2568.5	2568	2569	-30.69	-13	-17.69	Complies
	- 3 MHz bin	2569.5	2569	2570	-28.44	-13	-15.44	Complies
	- 2 MHz bin	2570.5	2570	2571	-15.38	-13	-2.38	Complies
62	- 2 MHz bin	2570.5	2570	2571	-26.91	-13	-13.91	Complies
	- 1 MHz bin	2571.5	2571	2572	-20.67	-13	-7.67	Complies
62	+ 1 MHz bin	2578.5	2578	2579	-19.67	-13	-6.67	Complies
	+ 2 MHz bin	2579.5	2579	2580	-24.99	-13	-11.99	Complies
1000	+ 2 MHz bin	2579.5	2579	2580	-14.58	-13	-1.58	Complies
	+ 3 MHz bin	2580.5	2580	2581	-26.52	-13	-13.52	Complies
	+ 4 MHz bin	2581.5	2581	2582	-28.8	-13	-15.8	Complies
	+ 5 MHz bin	2582.5	2582	2583	-31.53	-13	-18.53	Complies
	+ 6 MHz bin	2583.5	2583	2584	-34.03	-13	-21.03	Complies

2575 MHz, 6.0 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)		2575		4/13/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Bandedge - Low (MHz)		2572		64-QAM			
	Channel Bandedge - High (MHz)		2578					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2566.5	2566	2567	-35.75	-13	-22.75	Complies
	- 5 MHz bin	2567.5	2567	2568	-33.35	-13	-20.35	Complies
	- 4 MHz bin	2568.5	2568	2569	-30.88	-13	-17.88	Complies
	- 3 MHz bin	2569.5	2569	2570	-28.6	-13	-15.6	Complies
	- 2 MHz bin	2570.5	2570	2571	-15.4	-13	-2.4	Complies
62	- 2 MHz bin	2570.5	2570	2571	-26.74	-13	-13.74	Complies
	- 1 MHz bin	2571.5	2571	2572	-20.75	-13	-7.75	Complies
62	+ 1 MHz bin	2578.5	2578	2579	-19.81	-13	-6.81	Complies
	+ 2 MHz bin	2579.5	2579	2580	-24.94	-13	-11.94	Complies
1000	+ 2 MHz bin	2579.5	2579	2580	-14.61	-13	-1.61	Complies
	+ 3 MHz bin	2580.5	2580	2581	-26.57	-13	-13.57	Complies
	+ 4 MHz bin	2581.5	2581	2582	-28.9	-13	-15.9	Complies
	+ 5 MHz bin	2582.5	2582	2583	-31.56	-13	-18.56	Complies
	+ 6 MHz bin	2583.5	2583	2584	-34.03	-13	-21.03	Complies

Modulation Characteristics

2621 MHz, 6.0 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)			2621		4/13/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2618		4-QAM		
	Channel Bandedge - High (MHz)			2624				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2612.5	2612	2613	-40.35	-13	-27.35	Complies
	- 5 MHz bin	2613.5	2613	2614	-39.09	-13	-26.09	Complies
	- 4 MHz bin	2614.5	2614	2615	-37.01	-13	-24.01	Complies
	- 3 MHz bin	2615.5	2615	2616	-34.08	-13	-21.08	Complies
	- 2 MHz bin	2616.5	2616	2617	-15.63	-13	-2.63	Complies
62	- 2 MHz bin	2616.5	2616	2617	-31.48	-13	-18.48	Complies
	- 1 MHz bin	2617.5	2617	2618	-21.92	-13	-8.92	Complies
62								
	+ 1 MHz bin	2624.5	2624	2625	-21.66	-13	-8.66	Complies
	+ 2 MHz bin	2625.5	2625	2626	-30.61	-13	-17.61	Complies
1000	+ 2 MHz bin	2625.5	2625	2626	-15.15	-13	-2.15	Complies
	+ 3 MHz bin	2626.5	2626	2627	-32.87	-13	-19.87	Complies
	+ 4 MHz bin	2627.5	2627	2628	-35.67	-13	-22.67	Complies
	+ 5 MHz bin	2628.5	2628	2629	-38.45	-13	-25.45	Complies
	+ 6 MHz bin	2629.5	2629	2630	-40.26	-13	-27.26	Complies

2621 MHz, 6.0 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)			2621		4/13/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2618		16-QAM		
	Channel Bandedge - High (MHz)			2624				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2612.5	2612	2613	-40.28	-13	-27.28	Complies
	- 5 MHz bin	2613.5	2613	2614	-39	-13	-26	Complies
	- 4 MHz bin	2614.5	2614	2615	-36.66	-13	-23.66	Complies
	- 3 MHz bin	2615.5	2615	2616	-32.94	-13	-19.94	Complies
	- 2 MHz bin	2616.5	2616	2617	-15.59	-13	-2.59	Complies
62	- 2 MHz bin	2616.5	2616	2617	-30.62	-13	-17.62	Complies
	- 1 MHz bin	2617.5	2617	2618	-21.79	-13	-8.79	Complies
62	+ 1 MHz bin	2624.5	2624	2625	-21.9	-13	-8.9	Complies
	+ 2 MHz bin	2625.5	2625	2626	-30.27	-13	-17.27	Complies
1000	+ 2 MHz bin	2625.5	2625	2626	-15.13	-13	-2.13	Complies
	+ 3 MHz bin	2626.5	2626	2627	-32.22	-13	-19.22	Complies
	+ 4 MHz bin	2627.5	2627	2628	-35.55	-13	-22.55	Complies
	+ 5 MHz bin	2628.5	2628	2629	-38.44	-13	-25.44	Complies
	+ 6 MHz bin	2629.5	2629	2630	-40.24	-13	-27.24	Complies

Modulation Characteristics

2621 MHz, 6.0 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)			2621		4/13/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2618		64-QAM		
	Channel Bandedge - High (MHz)			2624				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2612.5	2612	2613	-40.28	-13	-27.28	Complies
	- 5 MHz bin	2613.5	2613	2614	-38.25	-13	-25.25	Complies
	- 4 MHz bin	2614.5	2614	2615	-36.95	-13	-23.95	Complies
	- 3 MHz bin	2615.5	2615	2616	-32.6	-13	-19.6	Complies
	- 2 MHz bin	2616.5	2616	2617	-15.58	-13	-2.58	Complies
62	- 2 MHz bin	2616.5	2616	2617	-30.3	-13	-17.3	Complies
	- 1 MHz bin	2617.5	2617	2618	-22.01	-13	-9.01	Complies
62	+ 1 MHz bin	2624.5	2624	2625	-21.37	-13	-8.37	Complies
	+ 2 MHz bin	2625.5	2625	2626	-30.34	-13	-17.34	Complies
1000	+ 2 MHz bin	2625.5	2625	2626	-15.11	-13	-2.11	Complies
	+ 3 MHz bin	2626.5	2626	2627	-32.19	-13	-19.19	Complies
	+ 4 MHz bin	2627.5	2627	2628	-35.41	-13	-22.41	Complies
	+ 5 MHz bin	2628.5	2628	2629	-38.36	-13	-25.36	Complies
	+ 6 MHz bin	2629.5	2629	2630	-40.21	-13	-27.21	Complies

2626.750 MHz, 5.5 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)			2626.75		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2624		4-QAM		
	Channel Bandedge - High (MHz)			2629.5				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2618.5	2618	2619	-40.82	-13	-27.82	Complies
	- 5 MHz bin	2619.5	2619	2620	-39.57	-13	-26.57	Complies
	- 4 MHz bin	2620.5	2620	2621	-36.6	-13	-23.6	Complies
	- 3 MHz bin	2621.5	2621	2622	-31.2	-13	-18.2	Complies
	- 2 MHz bin	2622.5	2622	2623	-15.87	-13	-2.87	Complies
56	- 2 MHz bin	2622.5	2622	2623	-30.78	-13	-17.78	Complies
	- 1 MHz bin	2623.5	2623	2624	-24.65	-13	-11.65	Complies
56	+ 1 MHz bin	2630	2629.5	2630.5	-24.31	-13	-11.31	Complies
	+ 2 MHz bin	2631	2630.5	2631.5	-29.84	-13	-16.84	Complies
1000	+ 2 MHz bin	2631	2630.5	2631.5	-15.41	-13	-2.41	Complies
	+ 3 MHz bin	2632	2631.5	2632.5	-32.26	-13	-19.26	Complies
	+ 4 MHz bin	2633	2632.5	2633.5	-36.14	-13	-23.14	Complies
	+ 5 MHz bin	2634	2633.5	2634.5	-39.37	-13	-26.37	Complies
	+ 6 MHz bin	2635	2634.5	2635.5	-41.84	-13	-28.84	Complies

Modulation Characteristics

2626.750 MHz, 5.5 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)			2626.75		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2624		16-QAM		
	Channel Bandedge - High (MHz)			2629.5				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2618.5	2618	2619	-40.8	-13	-27.8	Complies
	- 5 MHz bin	2619.5	2619	2620	-39.55	-13	-26.55	Complies
	- 4 MHz bin	2620.5	2620	2621	-36.87	-13	-23.87	Complies
	- 3 MHz bin	2621.5	2621	2622	-32.17	-13	-19.17	Complies
	- 2 MHz bin	2622.5	2622	2623	-15.84	-13	-2.84	Complies
56	- 2 MHz bin	2622.5	2622	2623	-29.05	-13	-16.05	Complies
	- 1 MHz bin	2623.5	2623	2624	-24.49	-13	-11.49	Complies
56	+ 1 MHz bin	2630	2629.5	2630.5	-22.96	-13	-9.96	Complies
	+ 2 MHz bin	2631	2630.5	2631.5	-29.05	-13	-16.05	Complies
1000	+ 2 MHz bin	2631	2630.5	2631.5	-15.37	-13	-2.37	Complies
	+ 3 MHz bin	2632	2631.5	2632.5	-30.42	-13	-17.42	Complies
	+ 4 MHz bin	2633	2632.5	2633.5	-39.01	-13	-26.01	Complies
	+ 5 MHz bin	2634	2633.5	2634.5	-39.19	-13	-26.19	Complies
	+ 6 MHz bin	2635	2634.5	2635.5	-40.77	-13	-27.77	Complies

2626.750 MHz, 5.5 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)			2626.75		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2624		64-QAM		
	Channel Bandedge - High (MHz)			2629.5				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2618.5	2618	2619	-40.81	-13	-27.81	Complies
	- 5 MHz bin	2619.5	2619	2620	-39.59	-13	-26.59	Complies
	- 4 MHz bin	2620.5	2620	2621	-36.96	-13	-23.96	Complies
	- 3 MHz bin	2621.5	2621	2622	-32.32	-13	-19.32	Complies
	- 2 MHz bin	2622.5	2622	2623	-15.85	-13	-2.85	Complies
56	- 2 MHz bin	2622.5	2622	2623	-29.67	-13	-16.67	Complies
	- 1 MHz bin	2623.5	2623	2624	-24.67	-13	-11.67	Complies
56	+ 1 MHz bin	2630	2629.5	2630.5	-23.61	-13	-10.61	Complies
	+ 2 MHz bin	2631	2630.5	2631.5	-29.27	-13	-16.27	Complies
1000	+ 2 MHz bin	2631	2630.5	2631.5	-15.38	-13	-2.38	Complies
	+ 3 MHz bin	2632	2631.5	2632.5	-31.11	-13	-18.11	Complies
	+ 4 MHz bin	2633	2632.5	2633.5	-35.6	-13	-22.6	Complies
	+ 5 MHz bin	2634	2633.5	2634.5	-39.27	-13	-26.27	Complies
	+ 6 MHz bin	2635	2634.5	2635.5	-40.78	-13	-27.78	Complies

Modulation Characteristics

2687.250 MHz, 5.5 MHz 2W Channel, 4-QAM

	Channel Center Freq (MHz)			2687.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2684.5		4-QAM		
	Channel Bandedge - High (MHz)			2690				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2679	2678.5	2679.5	-36.81	-13	-23.81	Complies
	- 5 MHz bin	2680	2679.5	2680.5	-34.51	-13	-21.51	Complies
	- 4 MHz bin	2681	2680.5	2681.5	-31.92	-13	-18.92	Complies
	- 3 MHz bin	2682	2681.5	2682.5	-29.04	-13	-16.04	Complies
	- 2 MHz bin	2683	2682.5	2683.5	-14.62	-13	-1.62	Complies
56	- 2 MHz bin	2683	2682.5	2683.5	-26.81	-13	-13.81	Complies
	- 1 MHz bin	2684	2683.5	2684.5	-22.43	-13	-9.43	Complies
56	+ 1 MHz bin	2690.5	2690	2691	-21.38	-13	-8.38	Complies
	+ 2 MHz bin	2691.5	2691	2692	-25.85	-13	-12.85	Complies
1000	+ 2 MHz bin	2691.5	2691	2692	-14.15	-13	-1.15	Complies
	+ 3 MHz bin	2692.5	2692	2693	-27.74	-13	-14.74	Complies
	+ 4 MHz bin	2693.5	2693	2694	-30.88	-13	-17.88	Complies
	+ 5 MHz bin	2694.5	2694	2695	-33.87	-13	-20.87	Complies
	+ 6 MHz bin	2695.5	2695	2696	-36.12	-13	-23.12	Complies

2687.250 MHz, 5.5 MHz 2W Channel, 16-QAM

	Channel Center Freq (MHz)			2687.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2684.5		16-QAM		
	Channel Bandedge - High (MHz)			2690				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2679	2678.5	2679.5	-36.78	-13	-23.78	Complies
	- 5 MHz bin	2680	2679.5	2680.5	-34.45	-13	-21.45	Complies
	- 4 MHz bin	2681	2680.5	2681.5	-31.66	-13	-18.66	Complies
	- 3 MHz bin	2682	2681.5	2682.5	-28.28	-13	-15.28	Complies
	- 2 MHz bin	2683	2682.5	2683.5	-14.57	-13	-1.57	Complies
56	- 2 MHz bin	2683	2682.5	2683.5	-26.12	-13	-13.12	Complies
	- 1 MHz bin	2684	2683.5	2684.5	-22.12	-13	-9.12	Complies
56	+ 1 MHz bin	2690.5	2690	2691	-21.16	-13	-8.16	Complies
	+ 2 MHz bin	2691.5	2691	2692	-25.55	-13	-12.55	Complies
1000	+ 2 MHz bin	2691.5	2691	2692	-14.12	-13	-1.12	Complies
	+ 3 MHz bin	2692.5	2692	2693	-27.37	-13	-14.37	Complies
	+ 4 MHz bin	2693.5	2693	2694	-30.75	-13	-17.75	Complies
	+ 5 MHz bin	2694.5	2694	2695	-33.83	-13	-20.83	Complies
	+ 6 MHz bin	2695.5	2695	2696	-36.11	-13	-23.11	Complies

Modulation Characteristics

2687.250 MHz, 5.5 MHz 2W Channel, 64-QAM

	Channel Center Freq (MHz)			2687.25		4/13/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Bandedge - Low (MHz)			2684.5		64-QAM		
	Channel Bandedge - High (MHz)			2690				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 MHz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2679	2678.5	2679.5	-36.8	-13	-23.8	Complies
	- 5 MHz bin	2680	2679.5	2680.5	-34.47	-13	-21.47	Complies
	- 4 MHz bin	2681	2680.5	2681.5	-31.85	-13	-18.85	Complies
	- 3 MHz bin	2682	2681.5	2682.5	-28.96	-13	-15.96	Complies
	- 2 MHz bin	2683	2682.5	2683.5	-14.61	-13	-1.61	Complies
56	- 2 MHz bin	2683	2682.5	2683.5	-26.83	-13	-13.83	Complies
	- 1 MHz bin	2684	2683.5	2684.5	-22.2	-13	-9.2	Complies
56	+ 1 MHz bin	2690.5	2690	2691	-21.37	-13	-8.37	Complies
	+ 2 MHz bin	2691.5	2691	2692	-25.76	-13	-12.76	Complies
1000	+ 2 MHz bin	2691.5	2691	2692	-14.14	-13	-1.14	Complies
	+ 3 MHz bin	2692.5	2692	2693	-27.79	-13	-14.79	Complies
	+ 4 MHz bin	2693.5	2693	2694	-30.86	-13	-17.86	Complies
	+ 5 MHz bin	2694.5	2694	2695	-33.84	-13	-20.84	Complies
	+ 6 MHz bin	2695.5	2695	2696	-36.15	-13	-23.15	Complies

Modulation Characteristics Test Results Summary (5W)

Pass modulation characteristics across frequency band and modulation format.

2503 MHz, 6.0 MHz 5W Channel, 4-QAM

	Channel Center Freq (MHz)		2503		4/21/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2500		4-QAM			
	Channel Band Edge - High (MHz)		2506					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.5	2494	2495	-42.28	-13	-29.28	Complies
	- 5 MHz bin	2495.5	2495	2496	-41.89	-13	-28.89	Complies
	- 4 MHz bin	2496.5	2496	2497	-39.81	-13	-26.81	Complies
	- 3 MHz bin	2497.5	2497	2498	-34.76	-13	-21.76	Complies
	- 2 MHz bin	2498.5	2498	2499	-13.05	-13	-0.05	Complies
62	- 2 MHz bin	2498.5	2498	2499	-29.56	-13	-16.56	Complies
	- 1 MHz bin	2499.5	2499	2500	-17.99	-13	-4.99	Complies
62	+ 1 MHz bin	2506.5	2506	2507	-16.11	-13	-3.11	Complies
	+ 2 MHz bin	2507.5	2507	2508	-27.45	-13	-14.45	Complies
1000	+ 2 MHz bin	2507.5	2507	2508	-12.76	-13	0.24	
	+ 3 MHz bin	2508.5	2508	2509	-31.57	-13	-18.57	Complies
	+ 4 MHz bin	2509.5	2509	2510	-36.65	-13	-23.65	Complies
	+ 5 MHz bin	2510.5	2510	2511	-40.32	-13	-27.32	Complies
	+ 6 MHz bin	2511.5	2511	2512	-41.83	-13	-28.83	Complies

2503 MHz, 6.0 MHz 5W Channel, 16-QAM

	Channel Center Freq (MHz)		2503		4/21/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2500		16-QAM			
	Channel Band Edge - High (MHz)		2506					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.5	2494	2495	-42.34	-13	-29.34	Complies
	- 5 MHz bin	2495.5	2495	2496	-42.05	-13	-29.05	Complies
	- 4 MHz bin	2496.5	2496	2497	-40.34	-13	-27.34	Complies
	- 3 MHz bin	2497.5	2497	2498	-35.43	-13	-22.43	Complies
	- 2 MHz bin	2498.5	2498	2499	-13.16	-13	-0.16	Complies
62	- 2 MHz bin	2498.5	2498	2499	-30.23	-13	-17.23	Complies
	- 1 MHz bin	2499.5	2499	2500	-17.98	-13	-4.98	Complies
62	+ 1 MHz bin	2506.5	2506	2507	-16.31	-13	-3.31	Complies
	+ 2 MHz bin	2507.5	2507	2508	-27.67	-13	-14.67	Complies
1000	+ 2 MHz bin	2507.5	2507	2508	-12.79	-13	0.21	
	+ 3 MHz bin	2508.5	2508	2509	-31.63	-13	-18.63	Complies
	+ 4 MHz bin	2509.5	2509	2510	-36.72	-13	-23.72	Complies
	+ 5 MHz bin	2510.5	2510	2511	-40.34	-13	-27.34	Complies
	+ 6 MHz bin	2511.5	2511	2512	-41.84	-13	-28.84	Complies

Modulation Characteristics

2503 MHz, 6.0 MHz 5W Channel, 64-QAM

		Channel Center Freq (MHz)		2503		4/21/2005		
		Channel BW (MHz)		6		48 VDC Nom		
		Channel Band Edge - Low (MHz)		2500		64-QAM		
		Channel Band Edge - High (MHz)		2506				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.5	2494	2495	-42.34	-13	-29.34	Complies
	- 5 MHz bin	2495.5	2495	2496	-42.05	-13	-29.05	Complies
	- 4 MHz bin	2496.5	2496	2497	-40.36	-13	-27.36	Complies
	- 3 MHz bin	2497.5	2497	2498	-35.54	-13	-22.54	Complies
	- 2 MHz bin	2498.5	2498	2499	-13.18	-13	-0.18	Complies
62	- 2 MHz bin	2498.5	2498	2499	-30.33	-13	-17.33	Complies
	- 1 MHz bin	2499.5	2499	2500	-18.15	-13	-5.15	Complies
62	+ 1 MHz bin	2506.5	2506	2507	-16.42	-13	-3.42	Complies
	+ 2 MHz bin	2507.5	2507	2508	-27.84	-13	-14.84	Complies
1000	+ 2 MHz bin	2507.5	2507	2508	-12.84	-13	0.16	
	+ 3 MHz bin	2508.5	2508	2509	-31.89	-13	-18.89	Complies
	+ 4 MHz bin	2509.5	2509	2510	-36.93	-13	-23.93	Complies
	+ 5 MHz bin	2510.5	2510	2511	-40.46	-13	-27.46	Complies
	+ 6 MHz bin	2511.5	2511	2512	-41.88	-13	-28.88	Complies

2503 MHz, 5.5 MHz 5W Channel, 4-QAM

		Channel Center Freq (MHz)		2503		4/21/2005		
		Channel BW (MHz)		5.5		48 VDC Nom		
		Channel Band Edge - Low (MHz)		2500.25		4-QAM		
		Channel Band Edge - High (MHz)		2505.75				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.75	2494.25	2495.25	-42.3	-13	-29.3	Complies
	- 5 MHz bin	2495.75	2495.25	2496.25	-41.75	-13	-28.75	Complies
	- 4 MHz bin	2496.75	2496.25	2497.25	-38.87	-13	-25.87	Complies
	- 3 MHz bin	2497.75	2497.25	2498.25	-32.78	-13	-19.78	Complies
	- 2 MHz bin	2498.75	2498.25	2499.25	-12.75	-13	0.25	
56	- 2 MHz bin	2498.75	2498.25	2499.25	-28	-13	-15	Complies
	- 1 MHz bin	2499.75	2499.25	2500.25	-14.79	-13	-1.79	Complies
56	+ 1 MHz bin	2506.25	2505.75	2506.75	-13.17	-13	-0.17	Complies
	+ 2 MHz bin	2507.25	2506.75	2507.75	-25.99	-13	-12.99	Complies
1000	+ 2 MHz bin	2507.25	2506.75	2507.75	-12.56	-13	0.44	
	+ 3 MHz bin	2508.25	2507.75	2508.75	-29.99	-13	-16.99	Complies
	+ 4 MHz bin	2509.25	2508.75	2509.75	-35.74	-13	-22.74	Complies
	+ 5 MHz bin	2510.25	2509.75	2510.75	-40.16	-13	-27.16	Complies
	+ 6 MHz bin	2511.25	2510.75	2511.75	-41.81	-13	-28.81	Complies

Modulation Characteristics

2503 MHz, 5.5 MHz 5W Channel, 16-QAM

	Channel Center Freq (MHz)			2503		4/21/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2500.25		16-QAM		
	Channel Band Edge - High (MHz)			2505.75				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.75	2494.25	2495.25	-42.36	-13	-29.36	Complies
	- 5 MHz bin	2495.75	2495.25	2496.25	-42.00	-13	-29	Complies
	- 4 MHz bin	2496.75	2496.25	2497.25	-39.80	-13	-26.8	Complies
	- 3 MHz bin	2497.75	2497.25	2498.25	-34.14	-13	-21.14	Complies
	- 2 MHz bin	2498.75	2498.25	2499.25	-13.04	-13	-0.04	Complies
56	- 2 MHz bin	2498.75	2498.25	2499.25	-28.91	-13	-15.91	Complies
	- 1 MHz bin	2499.75	2499.25	2500.25	-15.65	-13	-2.65	Complies
56	+ 1 MHz bin	2506.25	2505.75	2506.75	-13.86	-13	-0.86	Complies
	+ 2 MHz bin	2507.25	2506.75	2507.75	-26.68	-13	-13.68	Complies
1000	+ 2 MHz bin	2507.25	2506.75	2507.75	-12.68	-13	0.32	
	+ 3 MHz bin	2508.25	2507.75	2508.75	-30.47	-13	-17.47	Complies
	+ 4 MHz bin	2509.25	2508.75	2509.75	-36.08	-13	-23.08	Complies
	+ 5 MHz bin	2510.25	2509.75	2510.75	-40.30	-13	-27.3	Complies
	+ 6 MHz bin	2511.25	2510.75	2511.75	-41.84	-13	-28.84	Complies

2503 MHz, 5.5 MHz 5W Channel, 64-QAM

	Channel Center Freq (MHz)			2503		4/21/2005		
	Channel BW (MHz)			5.5		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2500.25		64-QAM		
	Channel Band Edge - High (MHz)			2505.75				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2494.75	2494.25	2495.25	-42.37	-13	-29.37	Complies
	- 5 MHz bin	2495.75	2495.25	2496.25	-42.01	-13	-29.01	Complies
	- 4 MHz bin	2496.75	2496.25	2497.25	-39.83	-13	-26.83	Complies
	- 3 MHz bin	2497.75	2497.25	2498.25	-34.21	-13	-21.21	Complies
	- 2 MHz bin	2498.75	2498.25	2499.25	-13.07	-13	-0.07	Complies
56	- 2 MHz bin	2498.75	2498.25	2499.25	-29.12	-13	-16.12	Complies
	- 1 MHz bin	2499.75	2499.25	2500.25	-15.88	-13	-2.88	Complies
56	+ 1 MHz bin	2506.25	2505.75	2506.75	-14.26	-13	-1.26	Complies
	+ 2 MHz bin	2507.25	2506.75	2507.75	-27.09	-13	-14.09	Complies
1000	+ 2 MHz bin	2507.25	2506.75	2507.75	-12.82	-13	0.18	
	+ 3 MHz bin	2508.25	2507.75	2508.75	-30.89	-13	-17.89	Complies
	+ 4 MHz bin	2509.25	2508.75	2509.75	-36.52	-13	-23.52	Complies
	+ 5 MHz bin	2510.25	2509.75	2510.75	-40.49	-13	-27.49	Complies
	+ 6 MHz bin	2511.25	2510.75	2511.75	-41.91	-13	-28.91	Complies

Modulation Characteristics

2593 MHz, 6.0 MHz 5W Channel, 4-QAM

	Channel Center Freq (MHz)			2593		4/21/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2590		4-QAM		
	Channel Band Edge - High (MHz)			2596				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.5	2584	2585	-42.29	-13	-29.29	Complies
	- 5 MHz bin	2585.5	2585	2586	-41.96	-13	-28.96	Complies
	- 4 MHz bin	2586.5	2586	2587	-40.26	-13	-27.26	Complies
	- 3 MHz bin	2587.5	2587	2588	-35.71	-13	-22.71	Complies
	- 2 MHz bin	2588.5	2588	2589	-12.76	-13	0.24	
56	- 2 MHz bin	2588.5	2588	2589	-28.18	-13	-15.18	Complies
	- 1 MHz bin	2589.5	2589	2590	-19.52	-13	-6.52	Complies
56	+ 1 MHz bin	2596.5	2596	2597	-19.37	-13	-6.37	Complies
	+ 2 MHz bin	2597.5	2597	2598	-27.83	-13	-14.83	Complies
1000	+ 2 MHz bin	2597.5	2597	2598	-12.77	-13	0.23	
	+ 3 MHz bin	2598.5	2598	2599	-31.85	-13	-18.85	Complies
	+ 4 MHz bin	2599.5	2599	2600	-36.85	-13	-23.85	Complies
	+ 5 MHz bin	2600.5	2600	2601	-40.47	-13	-27.47	Complies
	+ 6 MHz bin	2601.5	2601	2602	-41.87	-13	-28.87	Complies

2593 MHz, 6.0 MHz 5W Channel, 16-QAM

	Channel Center Freq (MHz)			2593		4/21/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2590		16-QAM		
	Channel Band Edge - High (MHz)			2596				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.5	2584	2585	-42.40	-13	-29.4	Complies
	- 5 MHz bin	2585.5	2585	2586	-42.33	-13	-29.33	Complies
	- 4 MHz bin	2586.5	2586	2587	-41.91	-13	-28.91	Complies
	- 3 MHz bin	2587.5	2587	2588	-39.92	-13	-26.92	Complies
	- 2 MHz bin	2588.5	2588	2589	-14.16	-13	-1.16	Complies
56	- 2 MHz bin	2588.5	2588	2589	-37.10	-13	-24.1	Complies
	- 1 MHz bin	2589.5	2589	2590	-21.65	-13	-8.65	Complies
56	+ 1 MHz bin	2596.5	2596	2597	-22.33	-13	-9.33	Complies
	+ 2 MHz bin	2597.5	2597	2598	-35.59	-13	-22.59	Complies
1000	+ 2 MHz bin	2597.5	2597	2598	-14.14	-13	-1.14	Complies
	+ 3 MHz bin	2598.5	2598	2599	-38.05	-13	-25.05	Complies
	+ 4 MHz bin	2599.5	2599	2600	-40.96	-13	-27.96	Complies
	+ 5 MHz bin	2600.5	2600	2601	-42.03	-13	-29.03	Complies
	+ 6 MHz bin	2601.5	2601	2602	-42.33	-13	-29.33	Complies

Modulation Characteristics

2593 MHz, 6.0 MHz 5W Channel, 64-QAM

	Channel Center Freq (MHz)		2593		4/21/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2590		64-QAM			
	Channel Band Edge - High (MHz)		2596					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.5	2584	2585	-42.39	-13	-29.39	Complies
	- 5 MHz bin	2585.5	2585	2586	-42.32	-13	-29.32	Complies
	- 4 MHz bin	2586.5	2586	2587	-41.87	-13	-28.87	Complies
	- 3 MHz bin	2587.5	2587	2588	-39.76	-13	-26.76	Complies
	- 2 MHz bin	2588.5	2588	2589	-14.06	-13	-1.06	Complies
56	- 2 MHz bin	2588.5	2588	2589	-36.68	-13	-23.68	Complies
	- 1 MHz bin	2589.5	2589	2590	-21.54	-13	-8.54	Complies
56	+ 1 MHz bin	2596.5	2596	2597	-22.02	-13	-9.02	Complies
	+ 2 MHz bin	2597.5	2597	2598	-34.70	-13	-21.7	Complies
1000	+ 2 MHz bin	2597.5	2597	2598	-13.93	-13	-0.93	Complies
	+ 3 MHz bin	2598.5	2598	2599	-37.26	-13	-24.26	Complies
	+ 4 MHz bin	2599.5	2599	2600	-40.53	-13	-27.53	Complies
	+ 5 MHz bin	2600.5	2600	2601	-41.87	-13	-28.87	Complies
	+ 6 MHz bin	2601.5	2601	2602	-42.27	-13	-29.27	Complies

2593 MHz, 5.5 MHz 5W Channel, 4-QAM

	Channel Center Freq (MHz)		2593		4/21/2005			
	Channel BW (MHz)		5.5		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2590.25		4-QAM			
	Channel Band Edge - High (MHz)		2595.75					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.75	2584.25	2585.25	-42.42	-13	-29.42	Complies
	- 5 MHz bin	2585.75	2585.25	2586.25	-42.34	-13	-29.34	Complies
	- 4 MHz bin	2586.75	2586.25	2587.25	-41.89	-13	-28.89	Complies
	- 3 MHz bin	2587.75	2587.25	2588.25	-39.32	-13	-26.32	Complies
	- 2 MHz bin	2588.75	2588.25	2589.25	-14.42	-13	-1.42	Complies
62	- 2 MHz bin	2588.75	2588.25	2589.25	-36.29	-13	-23.29	Complies
	- 1 MHz bin	2589.75	2589.25	2590.25	-21.89	-13	-8.89	Complies
62	+ 1 MHz bin	2596.25	2595.75	2596.75	-22.09	-13	-9.09	Complies
	+ 2 MHz bin	2597.25	2596.75	2597.75	-35.59	-13	-22.59	Complies
1000	+ 2 MHz bin	2597.25	2596.75	2597.75	-14.22	-13	-1.22	Complies
	+ 3 MHz bin	2598.25	2597.75	2598.75	-37.32	-13	-24.32	Complies
	+ 4 MHz bin	2599.25	2598.75	2599.75	-40.84	-13	-27.84	Complies
	+ 5 MHz bin	2600.25	2599.75	2600.75	-42.04	-13	-29.04	Complies
	+ 6 MHz bin	2601.25	2600.75	2601.75	-42.32	-13	-29.32	Complies

Modulation Characteristics

2593 MHz, 5.5 MHz 5W Channel, 16-QAM

		Channel Center Freq (MHz)		2593		4/21/2005		
		Channel BW (MHz)		5.5		48 VDC Nom		
		Channel Band Edge - Low (MHz)		2590.25		16-QAM		
		Channel Band Edge - High (MHz)		2595.75				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.75	2584.25	2585.25	-42.41	-13	-29.41	Complies
	- 5 MHz bin	2585.75	2585.25	2586.25	-42.30	-13	-29.3	Complies
	- 4 MHz bin	2586.75	2586.25	2587.25	-41.73	-13	-28.73	Complies
	- 3 MHz bin	2587.75	2587.25	2588.25	-39.18	-13	-26.18	Complies
	- 2 MHz bin	2588.75	2588.25	2589.25	-14.11	-13	-1.11	Complies
62	- 2 MHz bin	2588.75	2588.25	2589.25	-36.00	-13	-23	Complies
	- 1 MHz bin	2589.75	2589.25	2590.25	-22.35	-13	-9.35	Complies
62	+ 1 MHz bin	2596.25	2595.75	2596.75	-22.18	-13	-9.18	Complies
	+ 2 MHz bin	2597.25	2596.75	2597.75	-35.18	-13	-22.18	Complies
1000	+ 2 MHz bin	2597.25	2596.75	2597.75	-14.10	-13	-1.1	Complies
	+ 3 MHz bin	2598.25	2597.75	2598.75	-37.41	-13	-24.41	Complies
	+ 4 MHz bin	2599.25	2598.75	2599.75	-40.78	-13	-27.78	Complies
	+ 5 MHz bin	2600.25	2599.75	2600.75	-42.01	-13	-29.01	Complies
	+ 6 MHz bin	2601.25	2600.75	2601.75	-42.32	-13	-29.32	Complies

2593 MHz, 5.5 MHz 5W Channel, 64-QAM

		Channel Center Freq (MHz)		2593		4/21/2005		
		Channel BW (MHz)		5.5		48 VDC Nom		
		Channel Band Edge - Low (MHz)		2590.25		64-QAM		
		Channel Band Edge - High (MHz)		2595.75				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2584.75	2584.25	2585.25	-42.41	-13	-29.41	Complies
	- 5 MHz bin	2585.75	2585.25	2586.25	-42.30	-13	-29.3	Complies
	- 4 MHz bin	2586.75	2586.25	2587.25	-41.70	-13	-28.7	Complies
	- 3 MHz bin	2587.75	2587.25	2588.25	-38.93	-13	-25.93	Complies
	- 2 MHz bin	2588.75	2588.25	2589.25	-14.07	-13	-1.07	Complies
62	- 2 MHz bin	2588.75	2588.25	2589.25	-35.51	-13	-22.51	Complies
	- 1 MHz bin	2589.75	2589.25	2590.25	-22.09	-13	-9.09	Complies
62	+ 1 MHz bin	2596.25	2595.75	2596.75	-21.41	-13	-8.41	Complies
	+ 2 MHz bin	2597.25	2596.75	2597.75	-34.55	-13	-21.55	Complies
1000	+ 2 MHz bin	2597.25	2596.75	2597.75	-13.94	-13	-0.94	Complies
	+ 3 MHz bin	2598.25	2597.75	2598.75	-36.64	-13	-23.64	Complies
	+ 4 MHz bin	2599.25	2598.75	2599.75	-40.38	-13	-27.38	Complies
	+ 5 MHz bin	2600.25	2599.75	2600.75	-36.64	-13	-23.64	Complies
	+ 6 MHz bin	2601.25	2600.75	2601.75	-40.37	-13	-27.37	Complies

Modulation Characteristics

2683 MHz, 6.0 MHz 5W Channel, 4-QAM

	Channel Center Freq (MHz)			2683		4/21/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2680		4-QAM		
	Channel Band Edge - High (MHz)			2686				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.5	2674	2675	-42.21	-13	-29.21	Complies
	- 5 MHz bin	2675.5	2675	2676	-41.93	-13	-28.93	Complies
	- 4 MHz bin	2676.5	2676	2677	-40.57	-13	-27.57	Complies
	- 3 MHz bin	2677.5	2677	2678	-36.57	-13	-23.57	Complies
	- 2 MHz bin	2678.5	2678	2679	-13.6	-13	-0.6	Complies
62	- 2 MHz bin	2678.5	2678	2679	-32.23	-13	-19.23	Complies
	- 1 MHz bin	2679.5	2679	2680	-20.88	-13	-7.88	Complies
62	+ 1 MHz bin	2686.5	2686	2687	-20.66	-13	-7.66	Complies
	+ 2 MHz bin	2687.5	2687	2688	-32.15	-13	-32.02	Complies
1000	+ 2 MHz bin	2687.5	2687	2688	-13.54	-13	-0.54	Complies
	+ 3 MHz bin	2688.5	2688	2689	-34.72	-13	-21.72	Complies
	+ 4 MHz bin	2689.5	2689	2690	-38.66	-13	-25.66	Complies
	+ 5 MHz bin	2690.5	2690	2691	-41.05	-13	-28.05	Complies
	+ 6 MHz bin	2691.5	2691	2692	-41.94	-13	-28.94	Complies

2683 MHz, 6.0 MHz 5W Channel, 16-QAM

	Channel Center Freq (MHz)			2683		4/21/2005		
	Channel BW (MHz)			6		48 VDC Nom		
	Channel Band Edge - Low (MHz)			2680		16-QAM		
	Channel Band Edge - High (MHz)			2686				
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.5	2674	2675	-42.21	-13	-29.21	Complies
	- 5 MHz bin	2675.5	2675	2676	-41.93	-13	-28.93	Complies
	- 4 MHz bin	2676.5	2676	2677	-40.61	-13	-27.61	Complies
	- 3 MHz bin	2677.5	2677	2678	-36.74	-13	-23.74	Complies
	- 2 MHz bin	2678.5	2678	2679	-13.64	-13	-0.64	Complies
62	- 2 MHz bin	2678.5	2678	2679	-32.44	-13	-19.44	Complies
	- 1 MHz bin	2679.5	2679	2680	-20.99	-13	-7.99	Complies
62	+ 1 MHz bin	2686.5	2686	2687	-20.68	-13	-7.68	Complies
	+ 2 MHz bin	2687.5	2687	2688	-32.25	-13	-19.25	Complies
1000	+ 2 MHz bin	2687.5	2687	2688	-13.56	-13	-0.56	Complies
	+ 3 MHz bin	2688.5	2688	2689	-34.82	-13	-21.82	Complies
	+ 4 MHz bin	2689.5	2689	2690	-38.70	-13	-25.7	Complies
	+ 5 MHz bin	2690.5	2690	2691	-41.06	-13	-28.06	Complies
	+ 6 MHz bin	2691.5	2691	2692	-41.94	-13	-28.94	Complies

Modulation Characteristics

2683 MHz, 6.0 MHz 5W Channel, 64-QAM

	Channel Center Freq (MHz)		2683		4/21/2005			
	Channel BW (MHz)		6		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2680		64-QAM			
	Channel Band Edge - High (MHz)		2686					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.5	2674	2675	-42.21	-13	-29.21	Complies
	- 5 MHz bin	2675.5	2675	2676	-41.93	-13	-28.93	Complies
	- 4 MHz bin	2676.5	2676	2677	-40.60	-13	-27.6	Complies
	- 3 MHz bin	2677.5	2677	2678	-36.72	-13	-23.72	Complies
	- 2 MHz bin	2678.5	2678	2679	-13.63	-13	-0.63	Complies
62	- 2 MHz bin	2678.5	2678	2679	-32.41	-13	-19.41	Complies
	- 1 MHz bin	2679.5	2679	2680	-20.73	-13	-7.73	Complies
62	+ 1 MHz bin	2686.5	2686	2687	-20.44	-13	-7.44	Complies
	+ 2 MHz bin	2687.5	2687	2688	-32.20	-13	-19.2	Complies
1000	+ 2 MHz bin	2687.5	2687	2688	-13.57	-13	-0.57	Complies
	+ 3 MHz bin	2688.5	2688	2689	-34.80	-13	-21.8	Complies
	+ 4 MHz bin	2689.5	2689	2690	-38.70	-13	-25.7	Complies
	+ 5 MHz bin	2690.5	2690	2691	-41.06	-13	-28.06	Complies
	+ 6 MHz bin	2691.5	2691	2692	-41.95	-13	-28.95	Complies

2683 MHz, 5.5 MHz 5W Channel, 4-QAM

	Channel Center Freq (MHz)		2683		4/21/2005			
	Channel BW (MHz)		5.5		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2680.25		4-QAM			
	Channel Band Edge - High (MHz)		2685.75					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.75	2674.25	2675.25	-42.16	-13	-29.16	Complies
	- 5 MHz bin	2675.75	2675.25	2676.25	-41.67	-13	-28.67	Complies
	- 4 MHz bin	2676.75	2676.25	2677.25	-39.42	-13	-26.42	Complies
	- 3 MHz bin	2677.75	2677.25	2678.25	-35.16	-13	-22.16	Complies
	- 2 MHz bin	2678.75	2678.25	2679.25	-13.3	-13	-0.3	Complies
62	- 2 MHz bin	2678.75	2678.25	2679.25	-29.87	-13	-16.87	Complies
	- 1 MHz bin	2679.75	2679.25	2680.25	-19.03	-13	-6.03	Complies
62	+ 1 MHz bin	2686.25	2685.75	2686.75	-18.32	-13	-5.32	Complies
	+ 2 MHz bin	2687.25	2686.75	2687.75	-31.18	-13	-18.18	Complies
1000	+ 2 MHz bin	2687.25	2686.75	2687.75	-13.36	-13	-0.36	Complies
	+ 3 MHz bin	2688.25	2687.75	2688.75	-33.43	-13	-20.43	Complies
	+ 4 MHz bin	2689.25	2688.75	2689.75	-37.87	-13	-24.87	Complies
	+ 5 MHz bin	2690.25	2689.75	2690.75	-40.86	-13	-27.86	Complies
	+ 6 MHz bin	2691.25	2690.75	2691.75	-41.92	-13	-28.92	Complies

Modulation Characteristics

2683 MHz, 5.5 MHz 5W Channel, 16-QAM

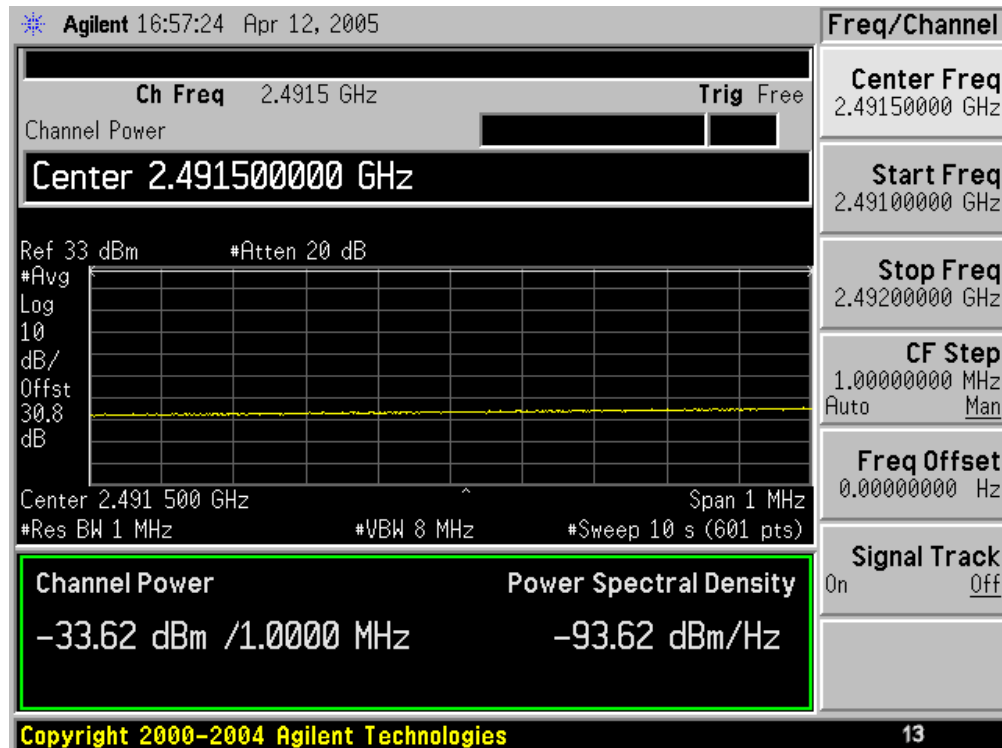
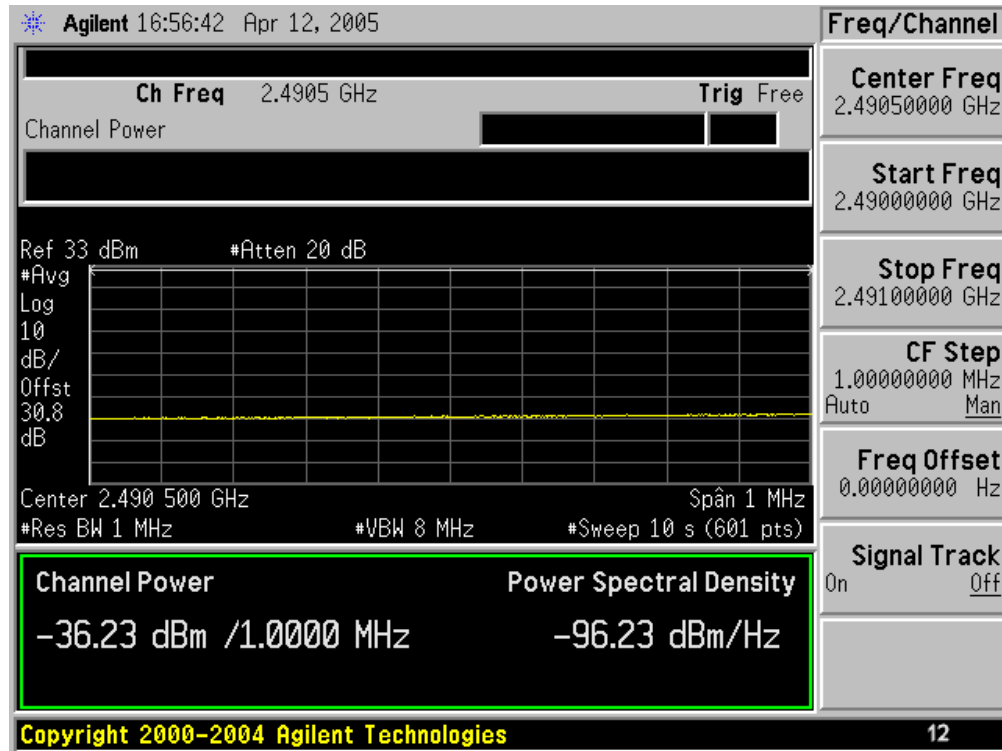
	Channel Center Freq (MHz)		2683		4/21/2005			
	Channel BW (MHz)		5.5		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2680.25		16-QAM			
	Channel Band Edge - High (MHz)		2685.75					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.75	2674.25	2675.25	-42.23	-13	-29.23	Complies
	- 5 MHz bin	2675.75	2675.25	2676.25	-41.85	-13	-28.85	Complies
	- 4 MHz bin	2676.75	2676.25	2677.25	-40.05	-13	-27.05	Complies
	- 3 MHz bin	2677.75	2677.25	2678.25	-35.30	-13	-22.3	Complies
	- 2 MHz bin	2678.75	2678.25	2679.25	-13.49	-13	-0.49	Complies
62	- 2 MHz bin	2678.75	2678.25	2679.25	-30.78	-13	-17.78	Complies
	- 1 MHz bin	2679.75	2679.25	2680.25	-19.55	-13	-6.55	Complies
62	+ 1 MHz bin	2686.25	2685.75	2686.75	-18.86	-13	-5.86	Complies
	+ 2 MHz bin	2687.25	2686.75	2687.75	-31.70	-13	-18.7	Complies
1000	+ 2 MHz bin	2687.25	2686.75	2687.75	-13.48	-13	-0.48	Complies
	+ 3 MHz bin	2688.25	2687.75	2688.75	-33.85	-13	-20.85	Complies
	+ 4 MHz bin	2689.25	2688.75	2689.75	-38.22	-13	-25.22	Complies
	+ 5 MHz bin	2690.25	2689.75	2690.75	-40.99	-13	-27.99	Complies
	+ 6 MHz bin	2691.25	2690.75	2691.75	-41.95	-13	-28.95	Complies

2683 MHz, 5.5 MHz 5W Channel, 64-QAM

	Channel Center Freq (MHz)		2683		4/21/2005			
	Channel BW (MHz)		5.5		48 VDC Nom			
	Channel Band Edge - Low (MHz)		2680.25		64-QAM			
	Channel Band Edge - High (MHz)		2685.75					
Resolution Bandwidth (kHz)		1 MHz Band Center Freq (MHz)	1 Mhz Band Low Freq (MHz)	1 MHz Band High Freq (MHz)	Emission Power in 1 MHz BW (dBm)	Spec (dBm/MHz)	Margin (dB)	Result
1000	- 6 MHz bin	2674.75	2674.25	2675.25	-42.23	-13	-29.23	Complies
	- 5 MHz bin	2675.75	2675.25	2676.25	-41.88	-13	-28.88	Complies
	- 4 MHz bin	2676.75	2676.25	2677.25	-40.16	-13	-27.16	Complies
	- 3 MHz bin	2677.75	2677.25	2678.25	-35.58	-13	-22.58	Complies
	- 2 MHz bin	2678.75	2678.25	2679.25	-13.55	-13	-0.55	Complies
62	- 2 MHz bin	2678.75	2678.25	2679.25	-31.13	-13	-18.13	Complies
	- 1 MHz bin	2679.75	2679.25	2680.25	-19.62	-13	-6.62	Complies
62	+ 1 MHz bin	2686.25	2685.75	2686.75	-19.17	-13	-6.17	Complies
	+ 2 MHz bin	2687.25	2686.75	2687.75	-31.94	-13	-18.94	Complies
1000	+ 2 MHz bin	2687.25	2686.75	2687.75	-13.50	-13	-0.5	Complies
	+ 3 MHz bin	2688.25	2687.75	2688.75	-34.00	-13	-21	Complies
	+ 4 MHz bin	2689.25	2688.75	2689.75	-38.29	-13	-25.29	Complies
	+ 5 MHz bin	2690.25	2689.75	2690.75	-41.02	-13	-28.02	Complies
	+ 6 MHz bin	2691.25	2690.75	2691.75	-41.95	-13	-28.95	Complies

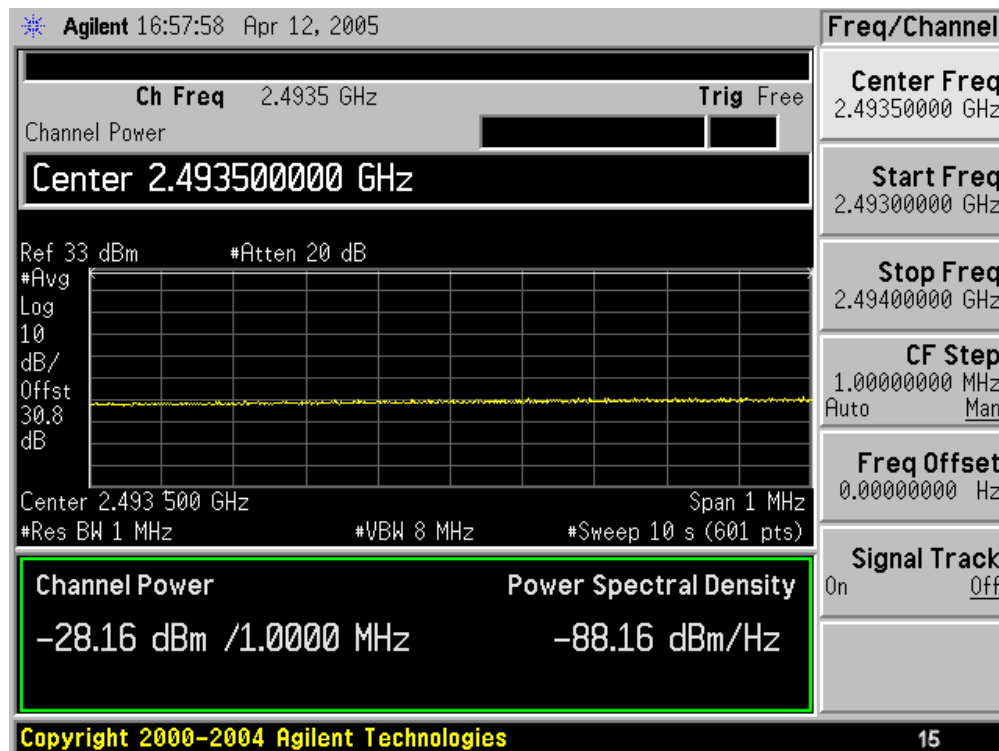
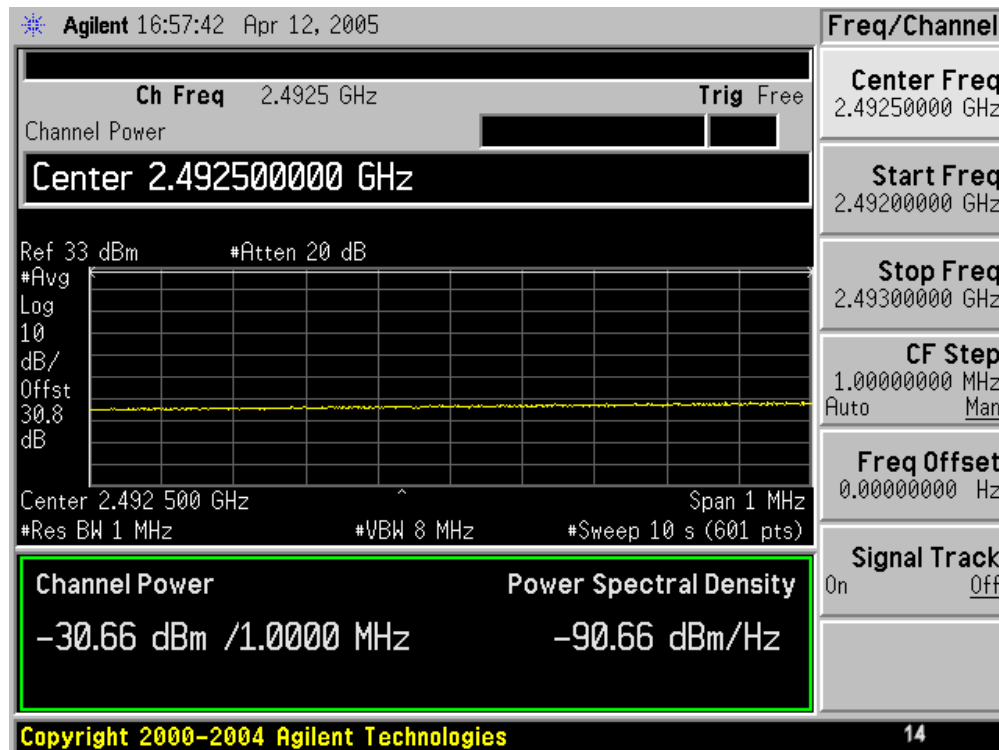
Modulation Characteristics Spectrum Analyzer Plots (2W)

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM



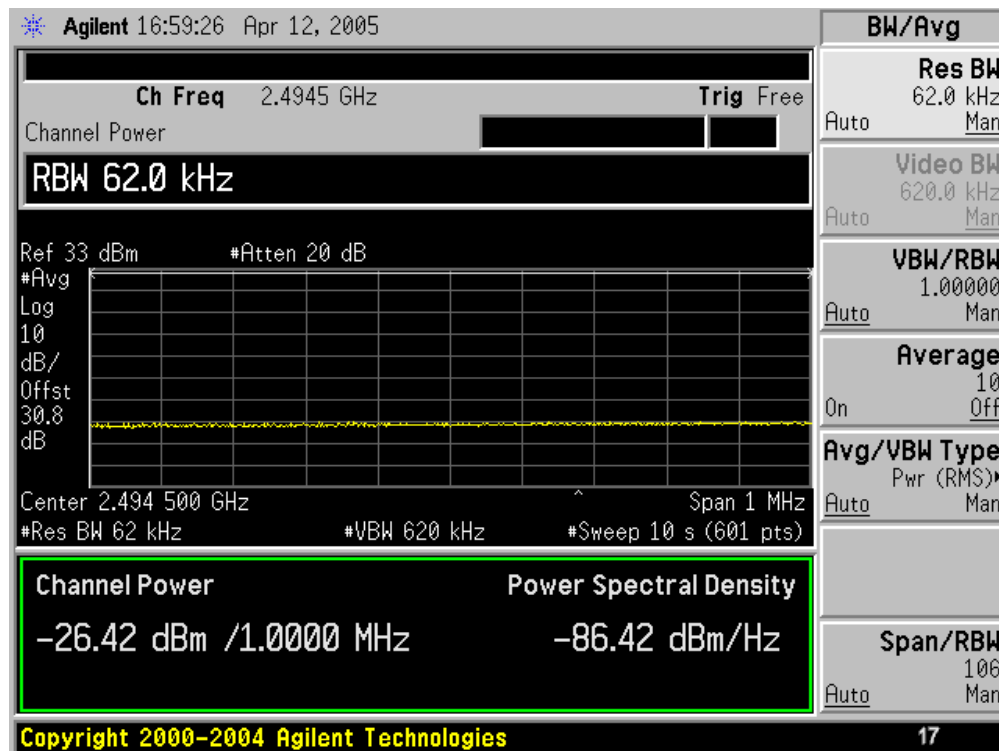
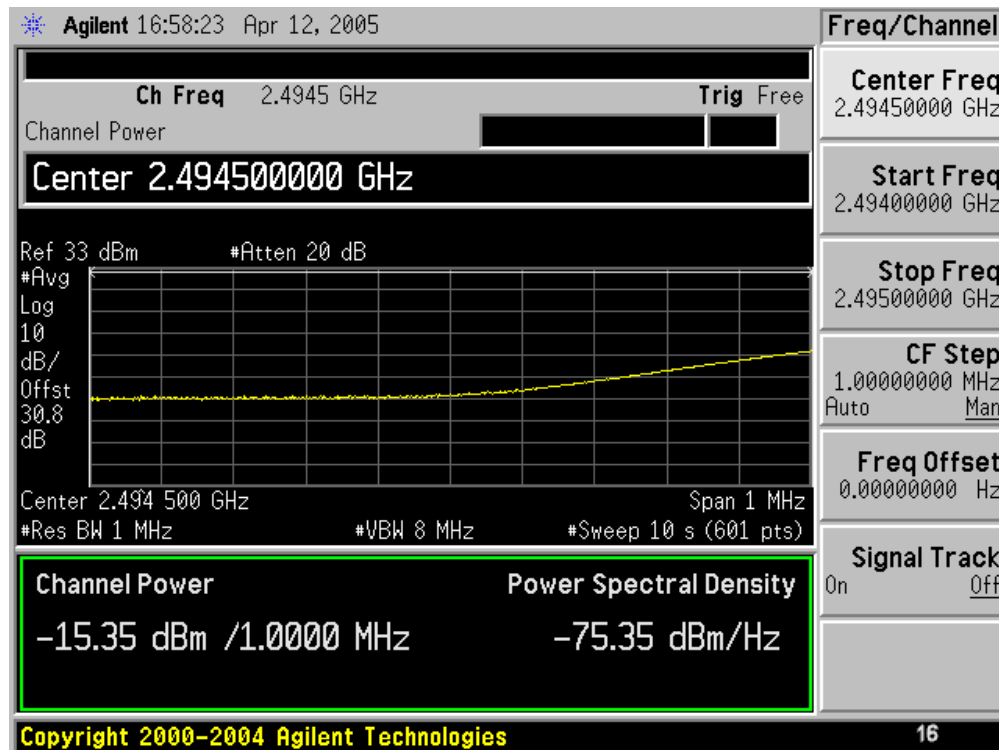
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



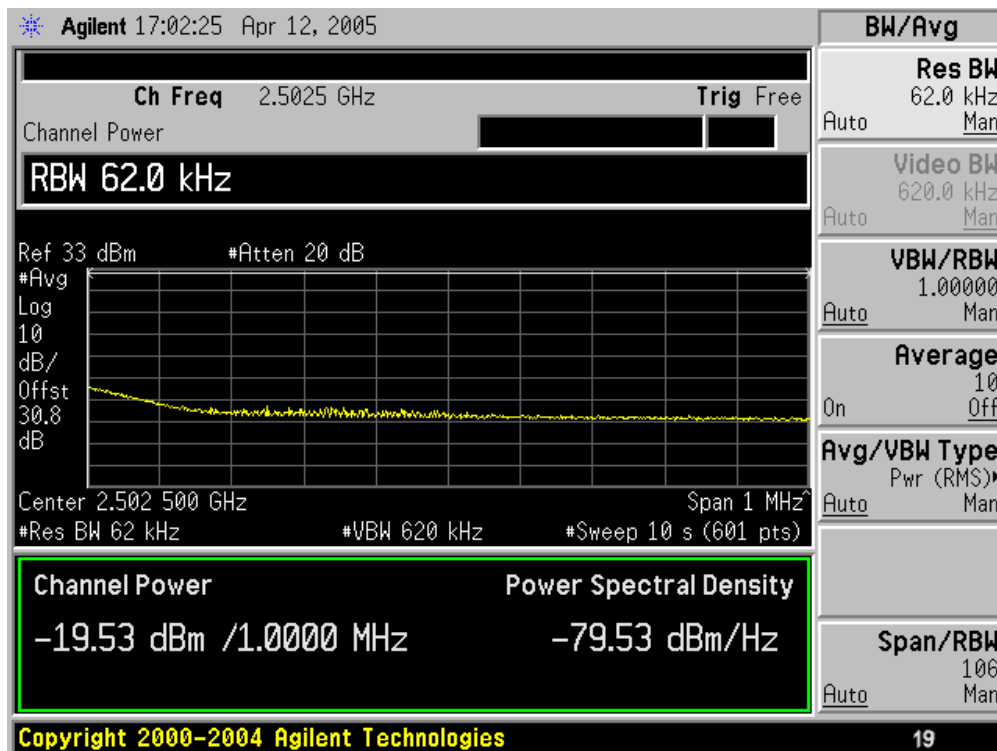
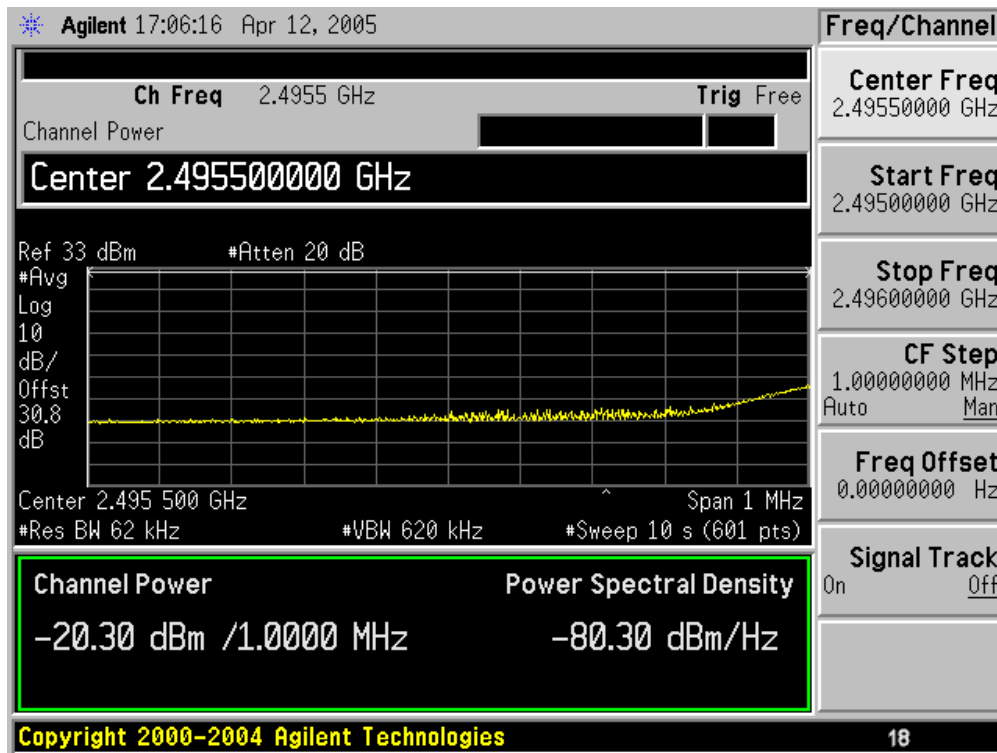
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



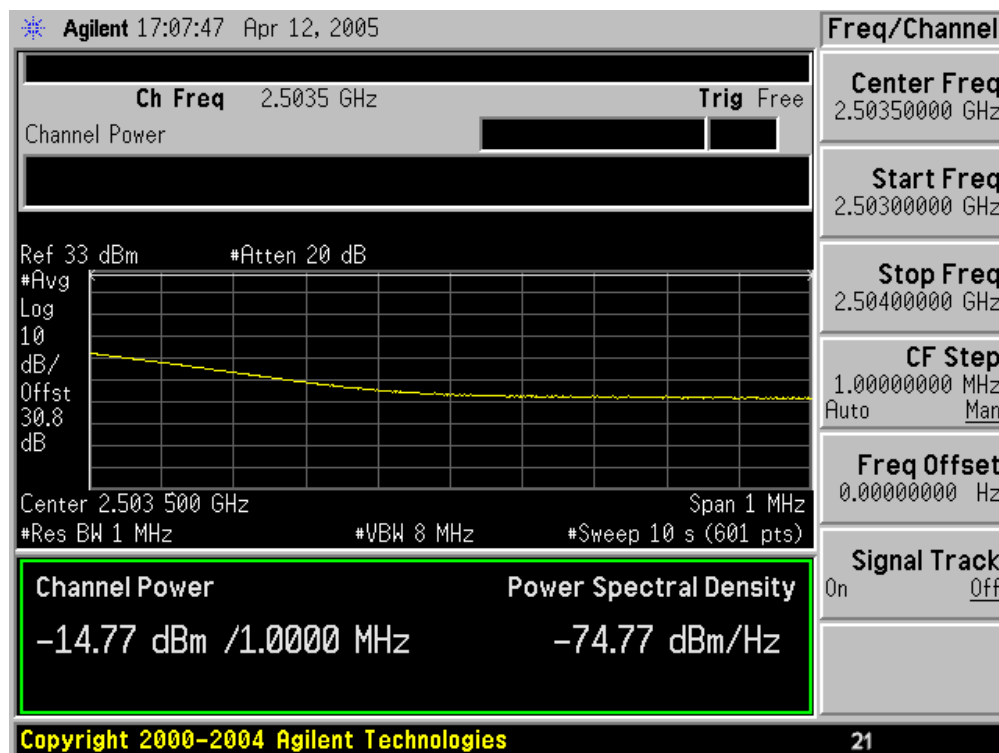
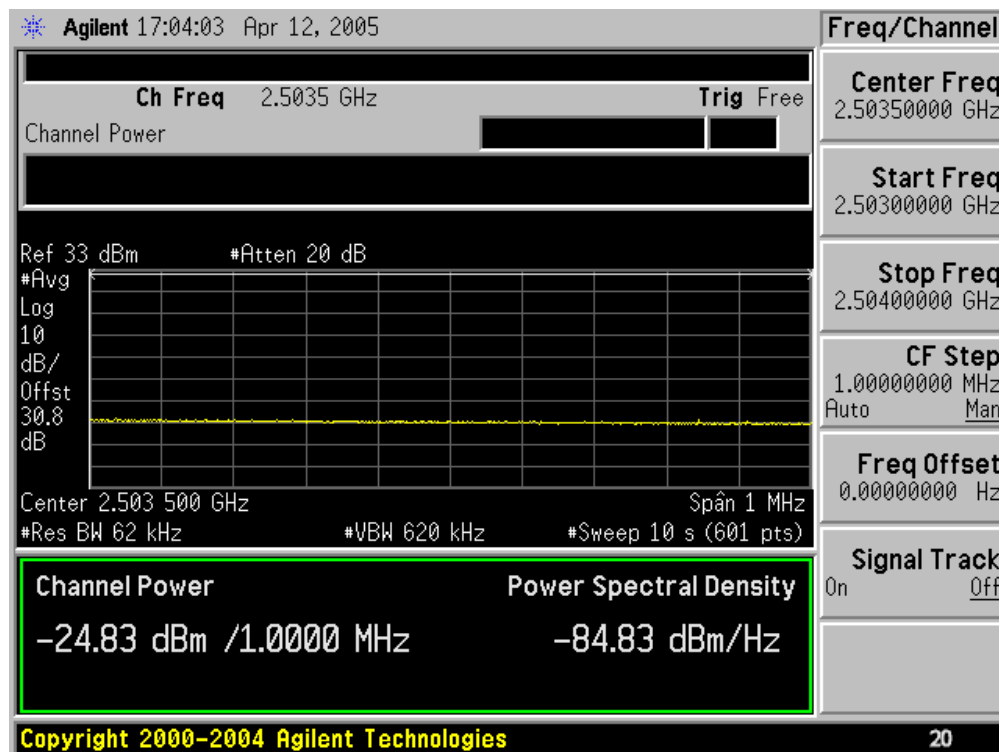
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



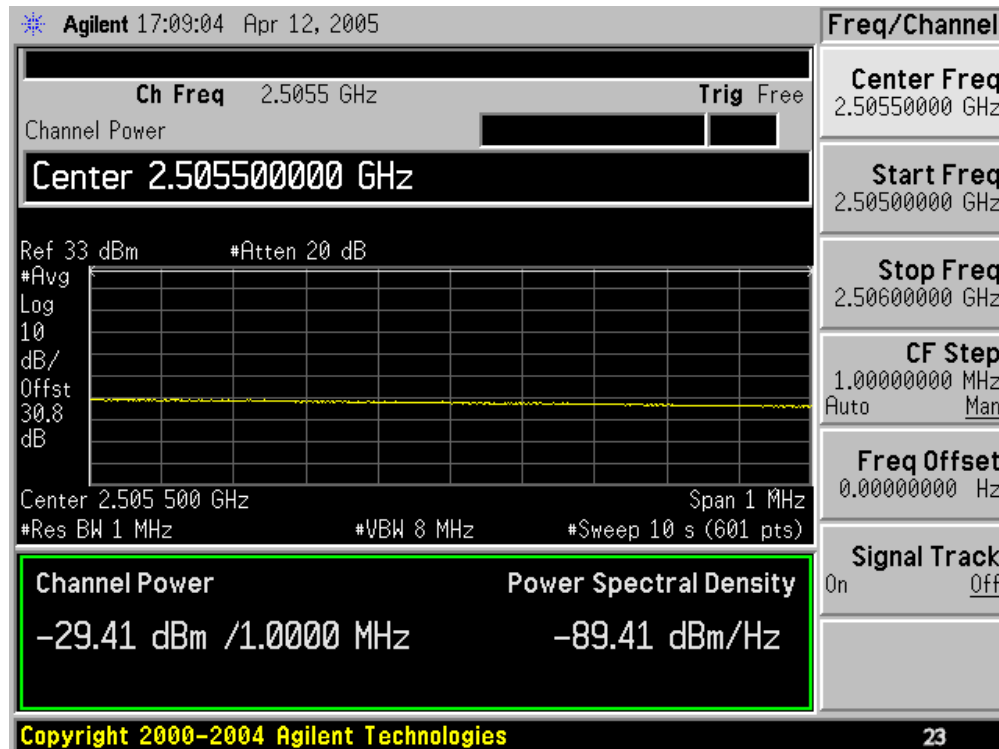
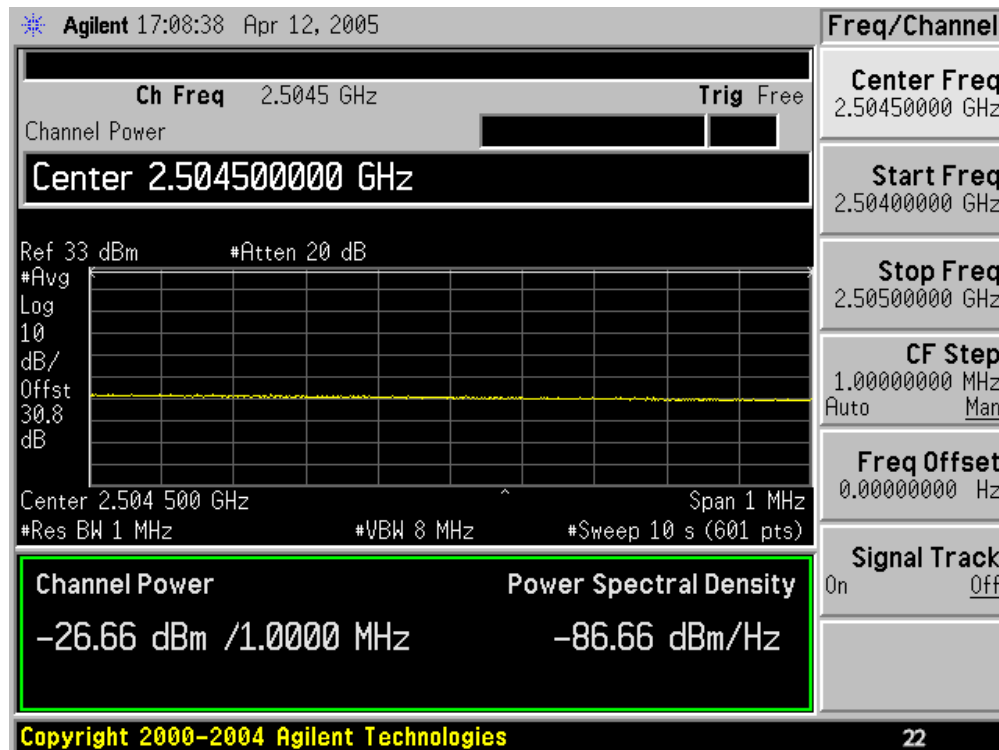
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



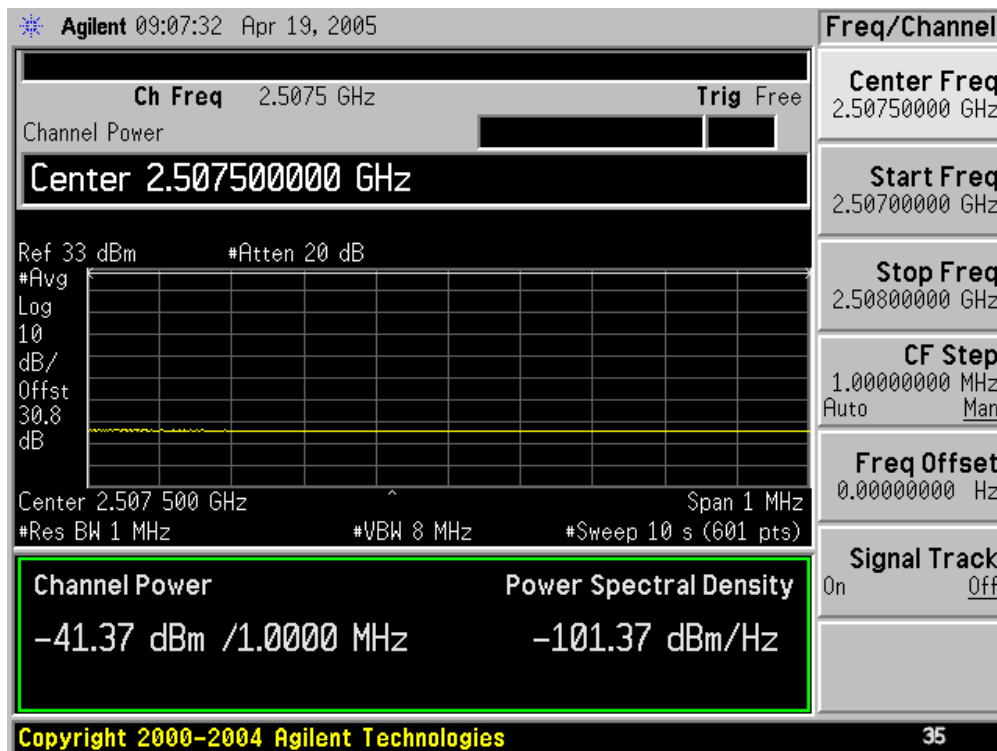
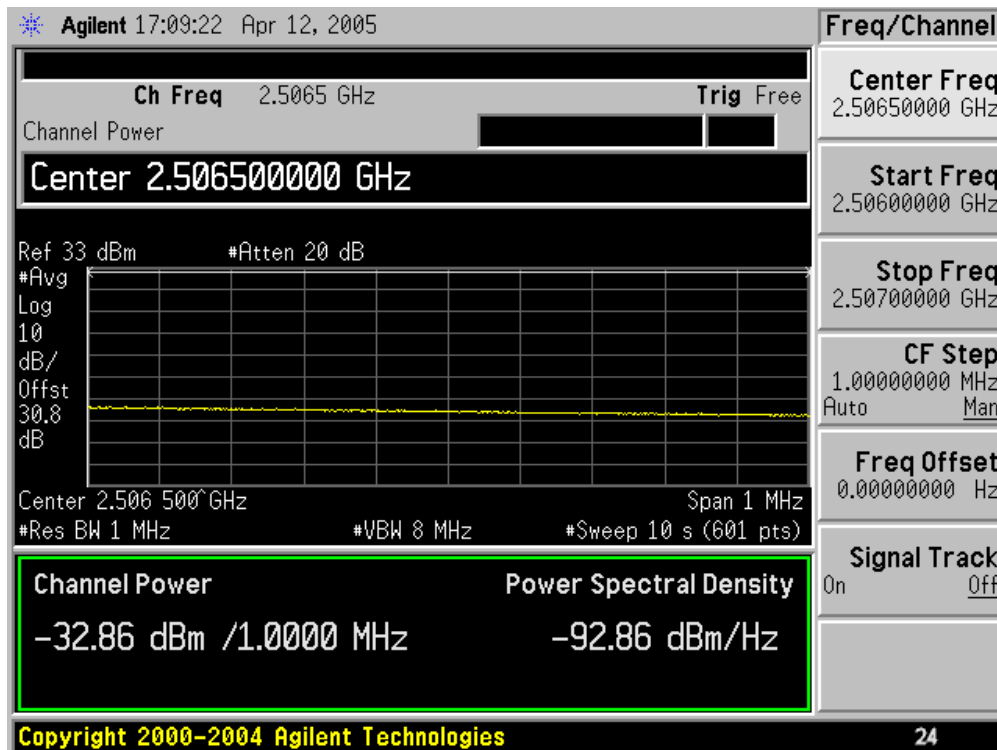
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



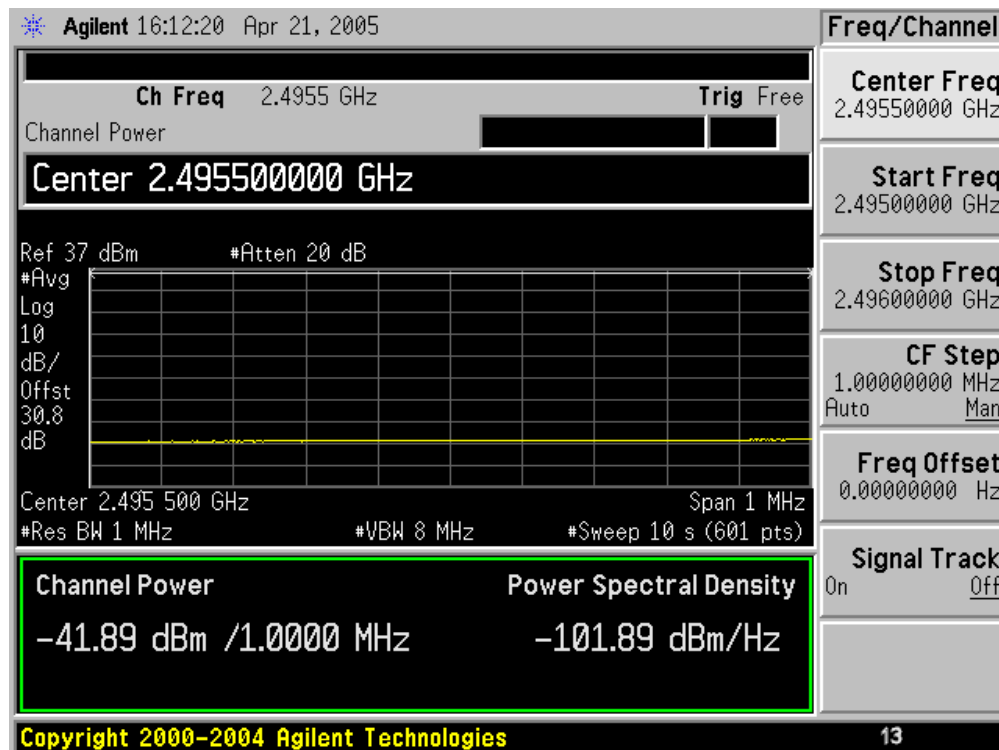
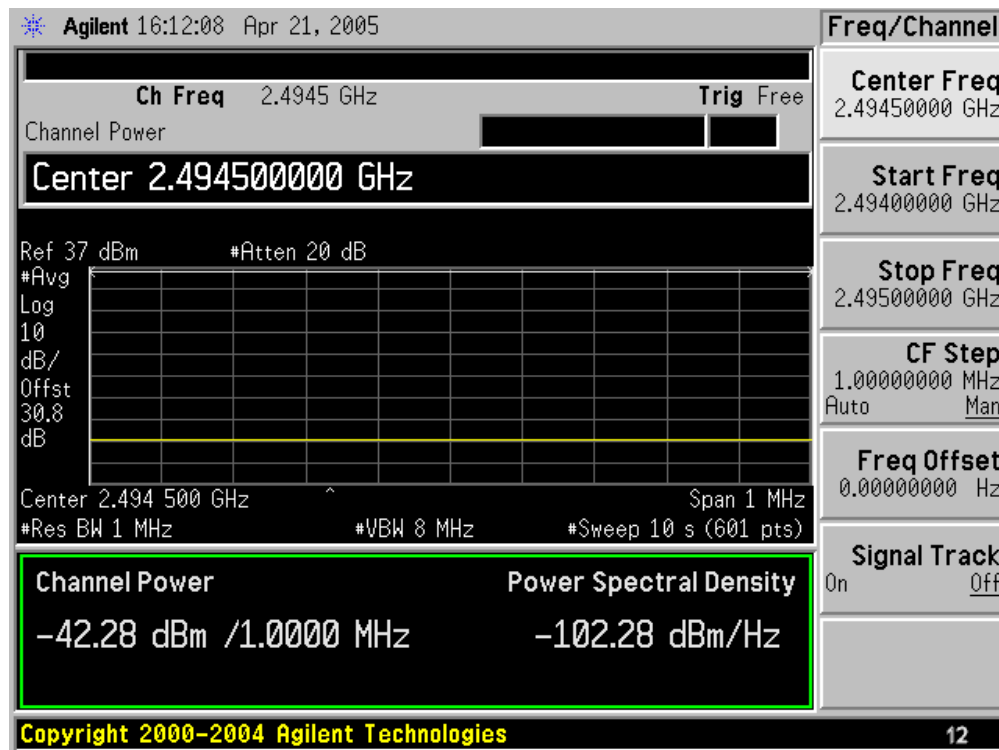
Modulation Characteristics

Emissions measurements for F=2499 MHz, 6.0 MHz 2W channel, 4-QAM (Cont'd)



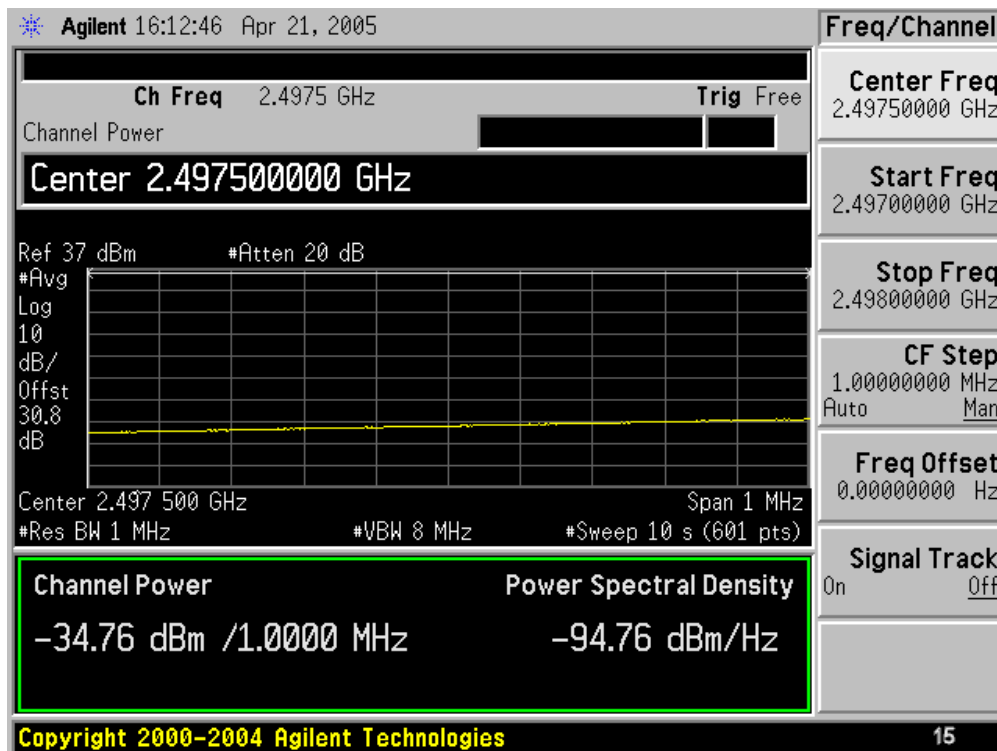
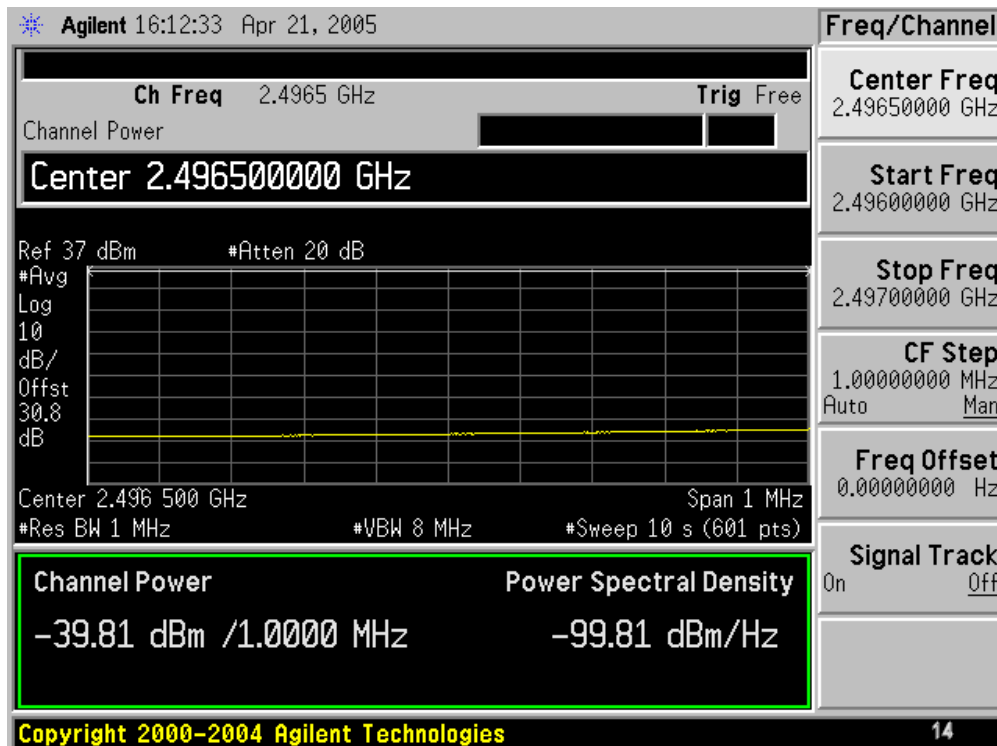
Modulation Characteristics Spectrum Analyzer Plots (5W)

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM



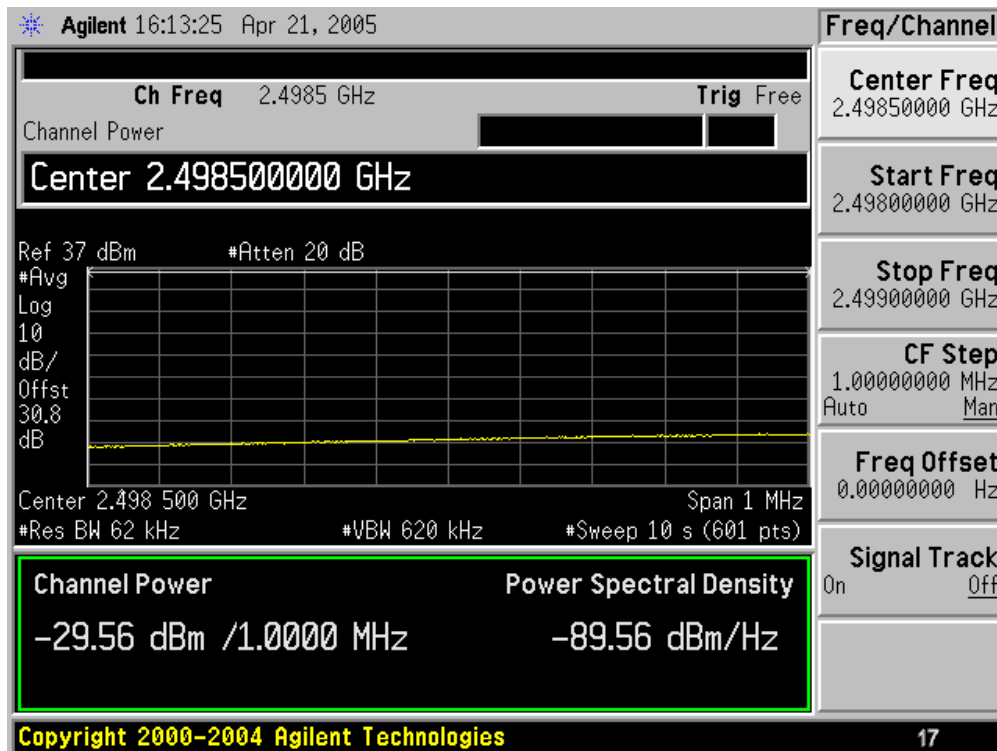
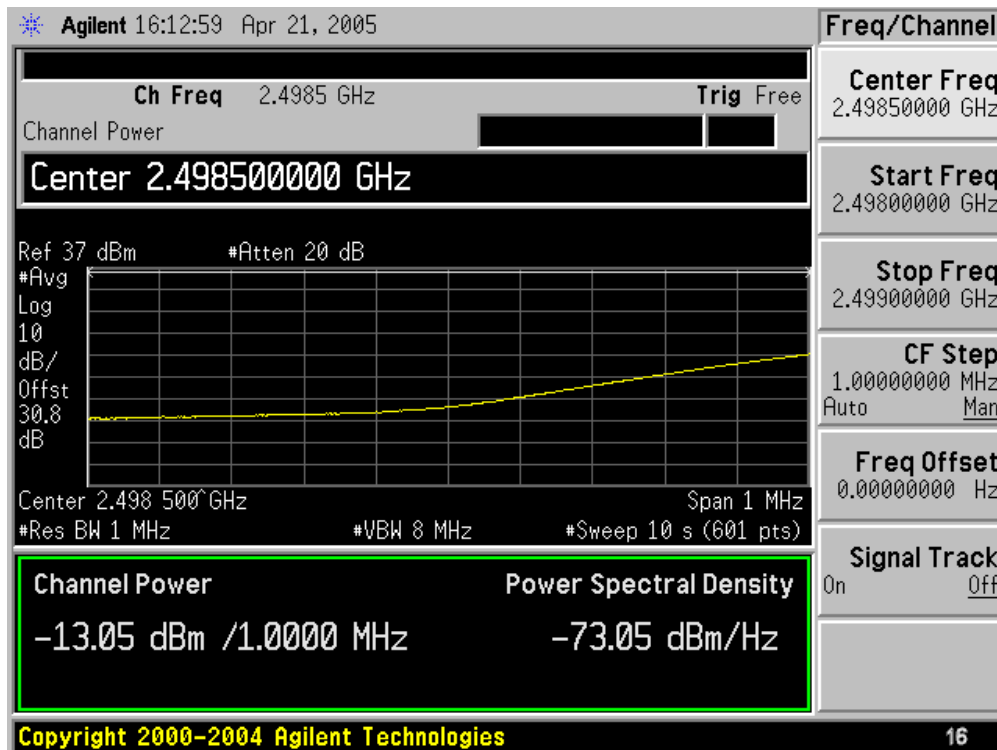
Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



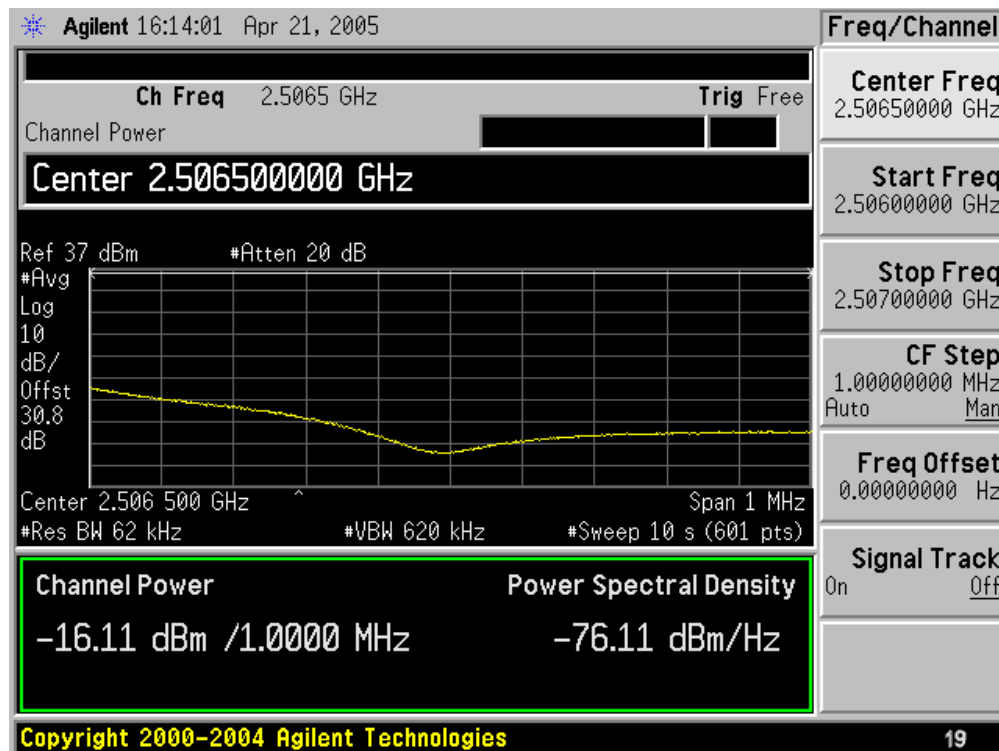
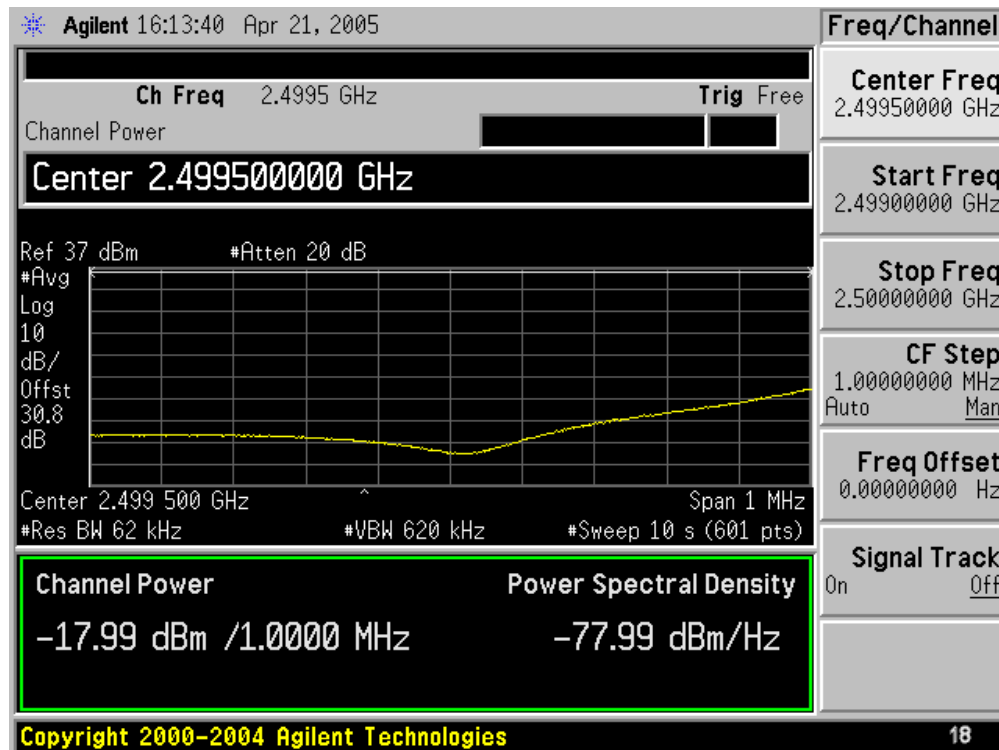
Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



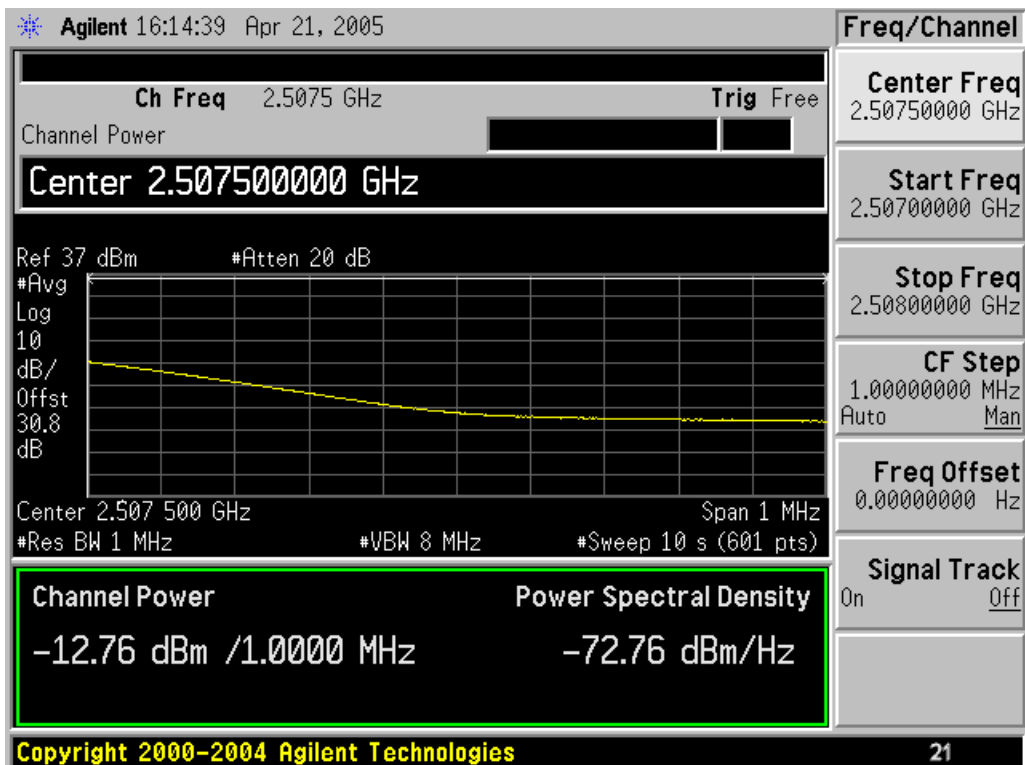
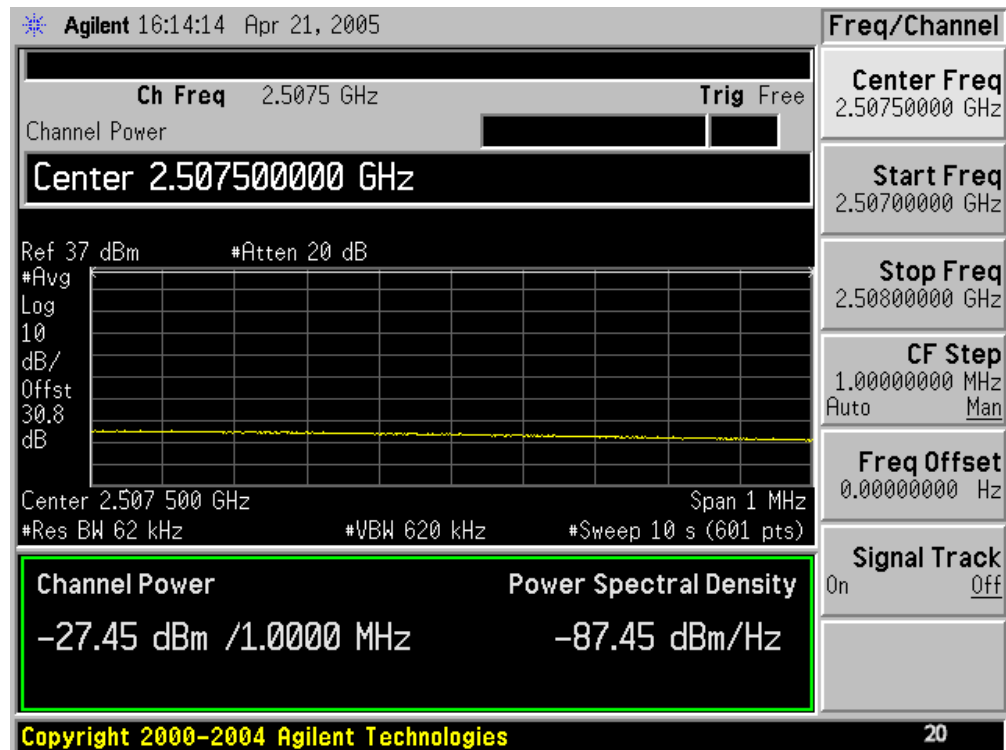
Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



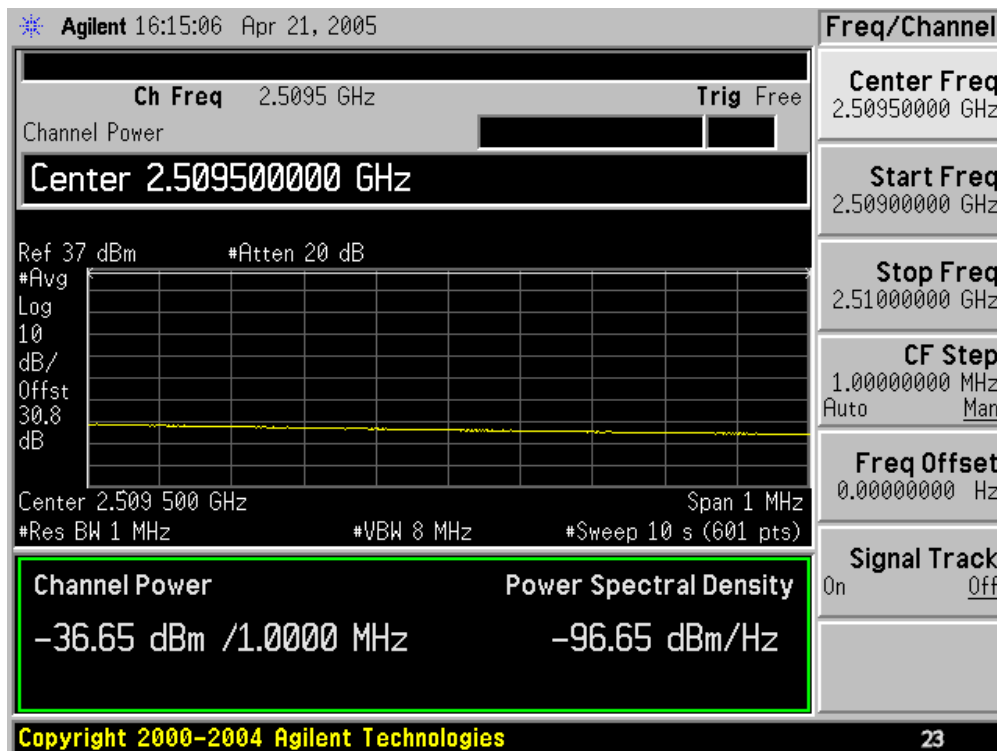
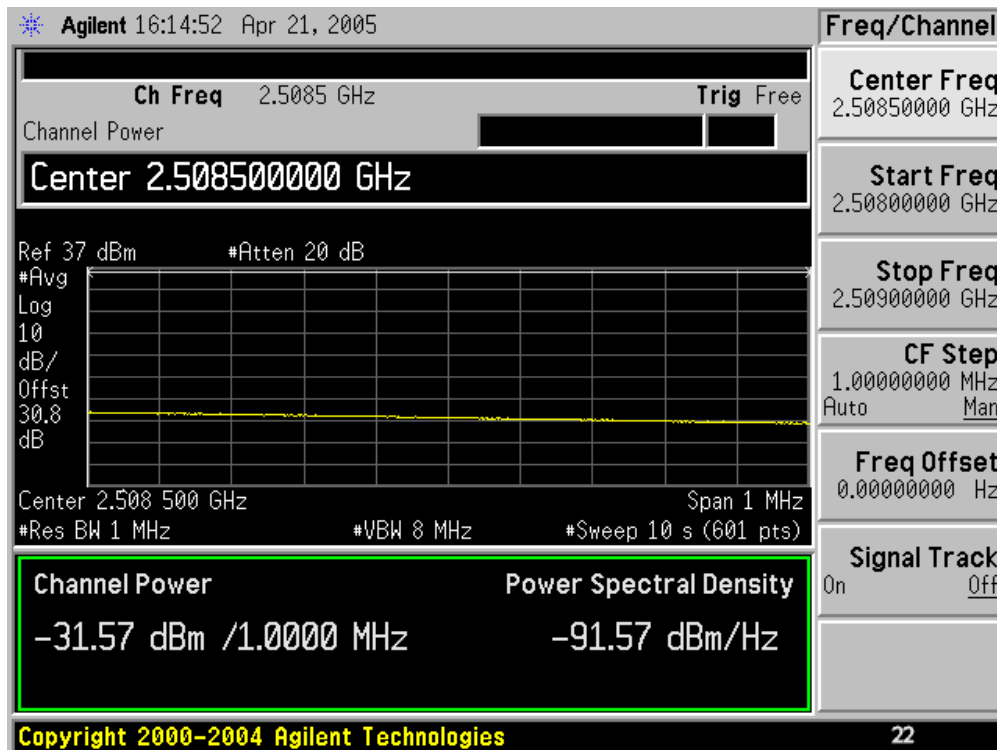
Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



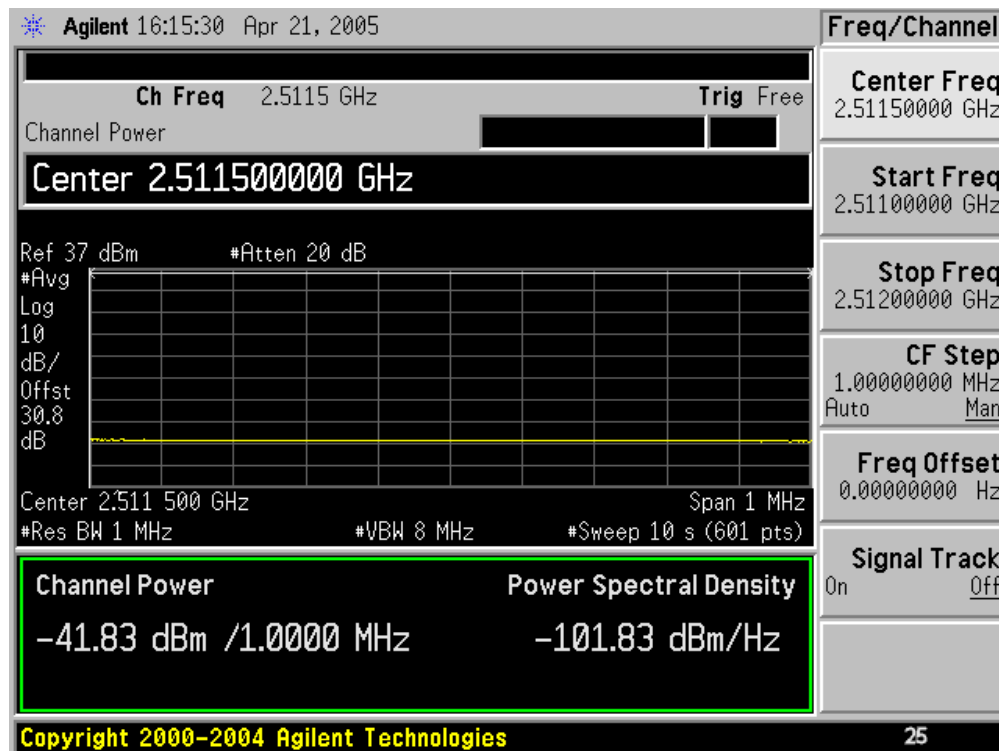
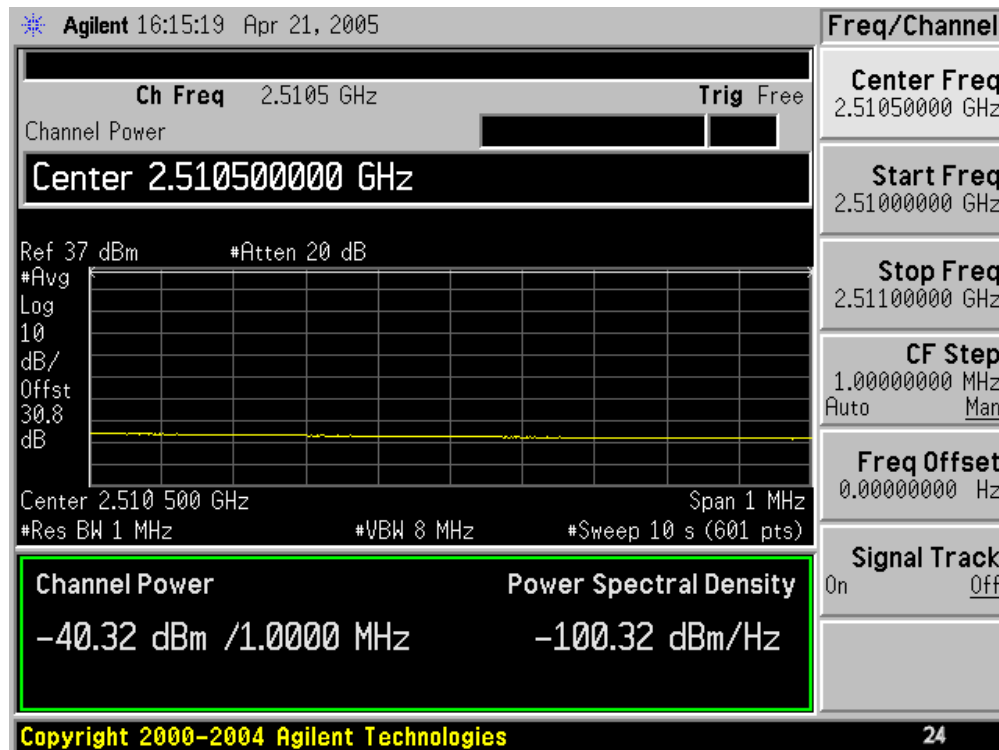
Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



Modulation Characteristics

Emissions measurements for F=2503 MHz, 6.0 MHz 5W channel, 4-QAM (Cont'd)



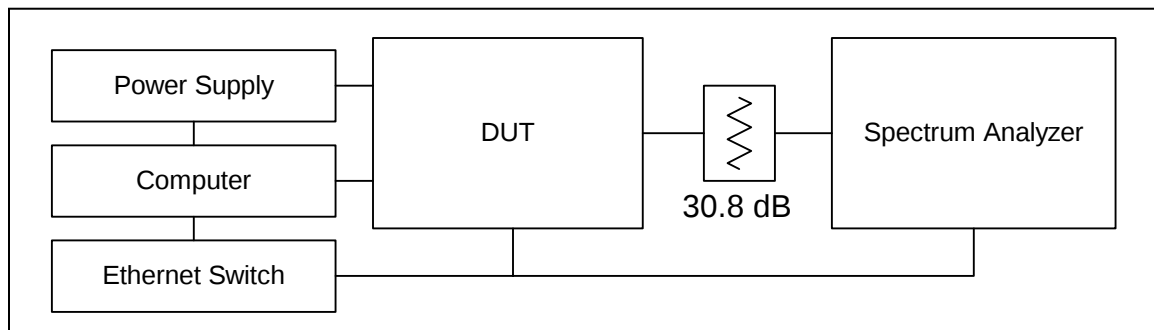
Occupied Bandwidth / Emission Bandwidth

Rule Part Number:

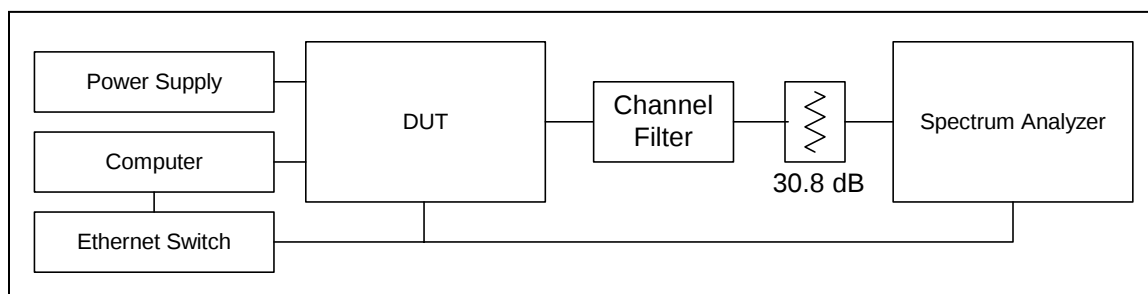
- 2.1049 The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:
- 2.1049(h) Each authorization issued pursuant to these rules will show, as the emission designator, a symbol representing the class of emission which shall be prefixed by a number specifying the necessary bandwidth. This figure does not necessarily indicate the bandwidth actually occupied by the emission at any instant. In those cases where part 2 of this chapter does not provide a formula for the computation of the necessary bandwidth, the occupied bandwidth may be used in the emission designator.
- 27.53(l)(6) Measurement procedure. Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 1 MHz or greater. However, in the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (i.e. 1 MHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power. With respect to television operations, measurements must be made of the separate visual and aural operating powers at sufficiently frequent intervals to ensure compliance with the rules.

Occupied Bandwidth / Emission Bandwidth

- Standard: ANSI C63.4-2003
American National Standard for Methods of Measurement of Radio- Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
- Test Procedure: The Orthogonal Frequency Division Multiplexing (OFDM) modulated Time Division Duplex (TDD) RF signal from the test unit is applied to a spectrum analyzer. The bandwidth of the signal is recorded by measuring the modulation bandwidth with the built in measurement function in the spectrum analyzer. The transmitter is enabled in test mode with the attached computer. The RF loss of the attenuators and coax has been measured and is included in the spectrum analyzer offset level. Measurements are performed at frequencies across the band, for each of the modulation formats available (4, 16, and 64-QAM) and channel bandwidths (5.5 MHz and 6 MHz).
- Test Conditions: 2-Watt Frequencies:
5.5 MHz channels: 2504.75, 2565.25, 2626.75, 2687.25 MHz
6.0 MHz channels: 2499, 2575, and 2621 MHz
- 5-Watt Frequencies:
Both 5.5 and 6.0 MHz channels: 2503, 2593, and 2683 MHz
(these channels were tested at both bandwidths due to availability of channel filters)
- Temperature = 25 °C
Supply Voltage = 48.0 VDC Nominal to DUT
- Test Setups:



2W Modulation Characteristics Test Setup



5W Modulation Characteristics Test Setup

Occupied and Emission Bandwidth Test Results Summary (2W)

2-WATT CHANNELS

Occupied Bandwidth (MHz) for 99.5 % (23 dB BW)				
Freq (MHz)	Channel BW (MHz)	4-QAM	16-QAM	64-QAM
2504.75	5.5	4.998	4.998	4.998
2565.25	5.5	4.995	4.995	4.995
2626.75	5.5	4.995	4.995	4.995
2687.25	5.5	4.995	4.995	4.995
2499	6.0	5.520	5.520	5.520
2575	6.0	5.520	5.520	5.520
2621	6.0	5.520	5.520	5.520

Emission Bandwidth (MHz) for 26 dB BW (99.75 %)				
Freq (MHz)	Channel BW (MHz)	4-QAM	16-QAM	64-QAM
2504.75	5.5	5.184	5.184	5.181
2565.25	5.5	5.180	5.182	5.182
2626.75	5.5	5.184	5.178	5.179
2687.25	5.5	5.183	5.183	5.179
2499	6.0	5.727	5.729	5.727
2575	6.0	5.723	5.725	5.724
2621	6.0	5.726	5.725	5.722

Occupied and Emission Bandwidth Test Results Summary (5W)

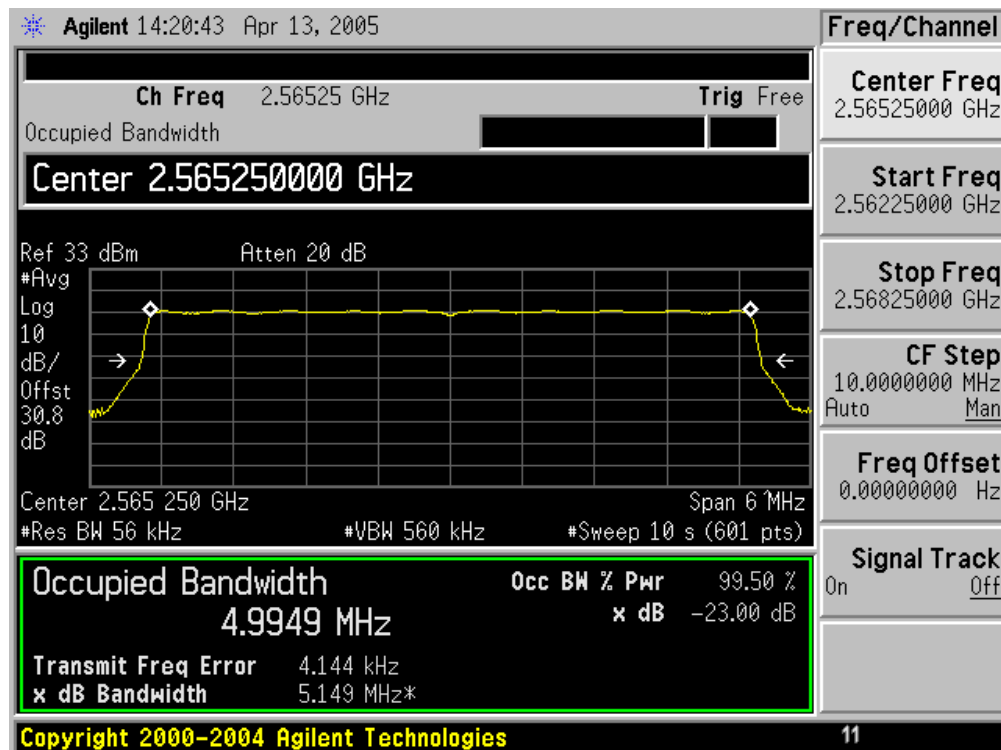
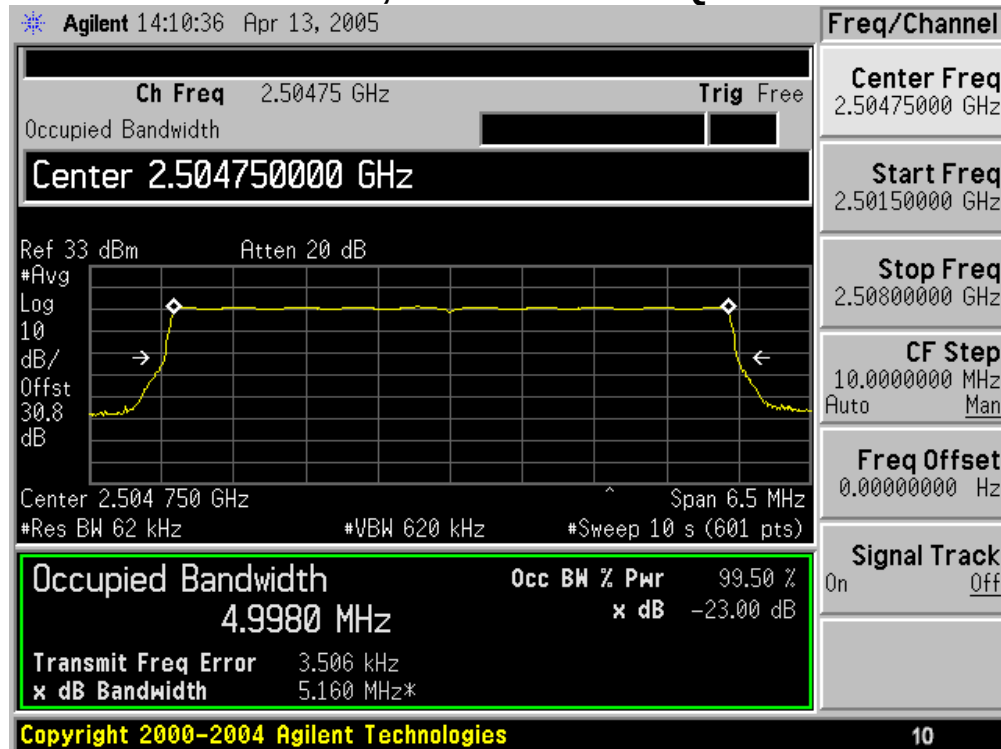
5-WATT CHANNELS

Occupied Bandwidth (MHz) for 99.5 % (23 dB BW)				
Freq (MHz)	Channel BW (MHz)	4-QAM	16-QAM	64-QAM
2503	5.5	4.995	4.995	4.995
2593	5.5	4.993	4.993	4.993
2683	5.5	4.992	4.992	4.992
2503	6.0	5.518	5.518	5.518
2593	6.0	5.515	5.515	5.515
2683	6.0	5.514	5.514	5.514

Emission Bandwidth (MHz) for 26 dB BW (99.75 %)				
Freq (MHz)	Channel BW (MHz)	4-QAM	16-QAM	64-QAM
2503	5.5	5.178	5.184	5.181
2593	5.5	5.178	5.177	5.174
2503	5.5	5.176	5.175	5.178
2503	6.0	5.723	5.723	5.717
2593	6.0	5.719	5.716	5.715
2683	6.0	5.712	5.715	5.713

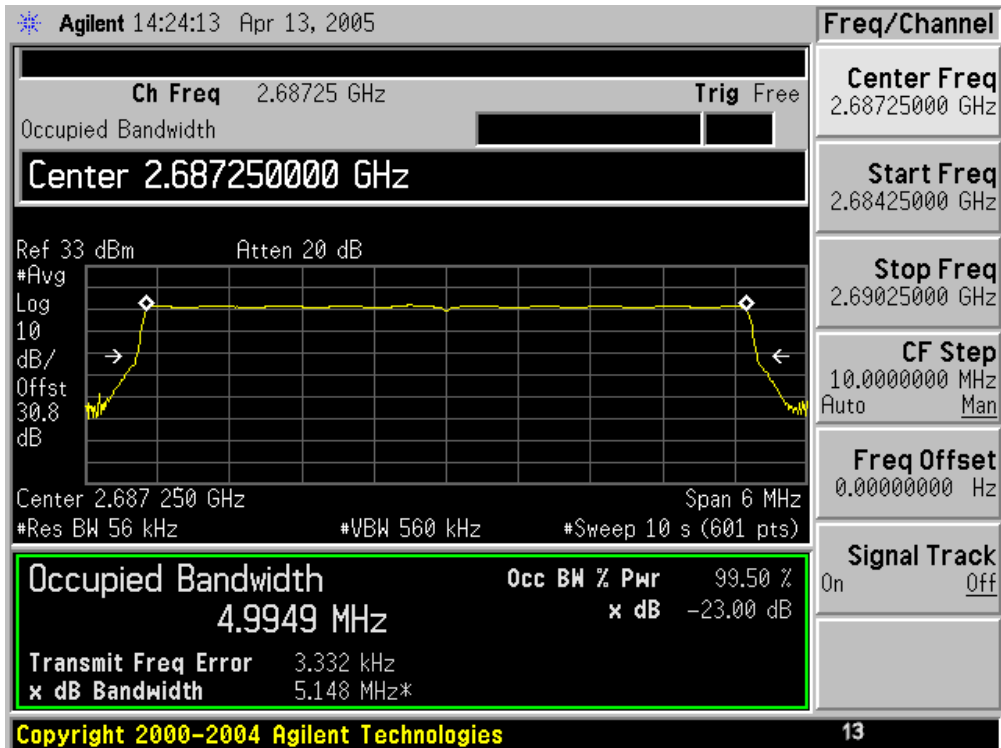
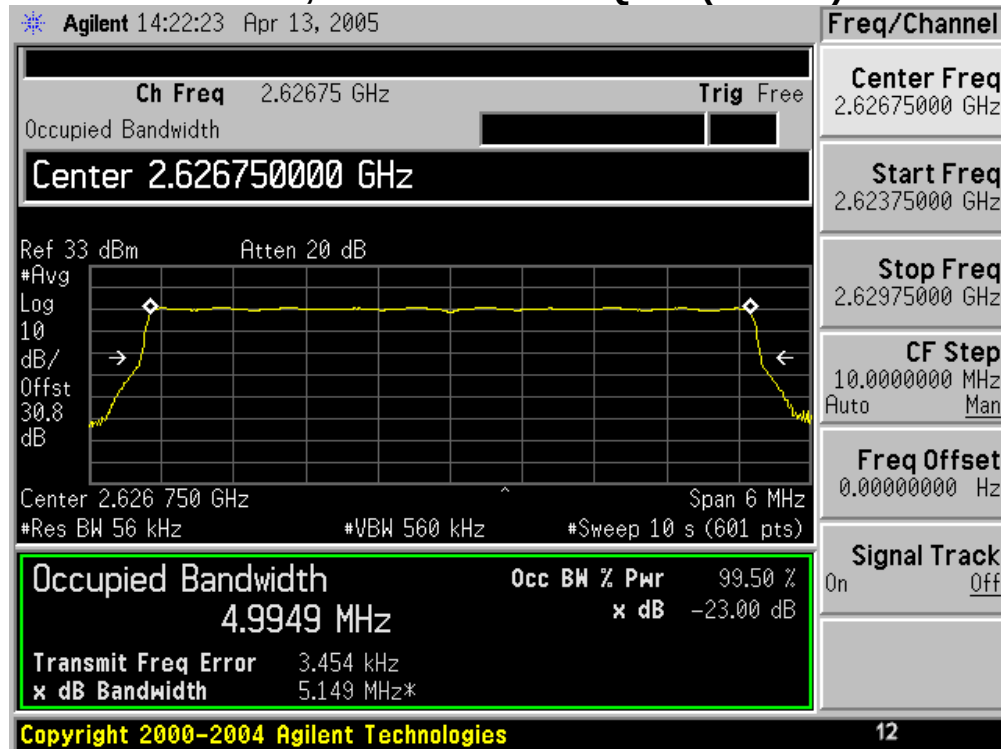
Occupied Bandwidth Spectrum Analyzer Plots (2W)

5.5 MHz, 2W Channels/4-QAM



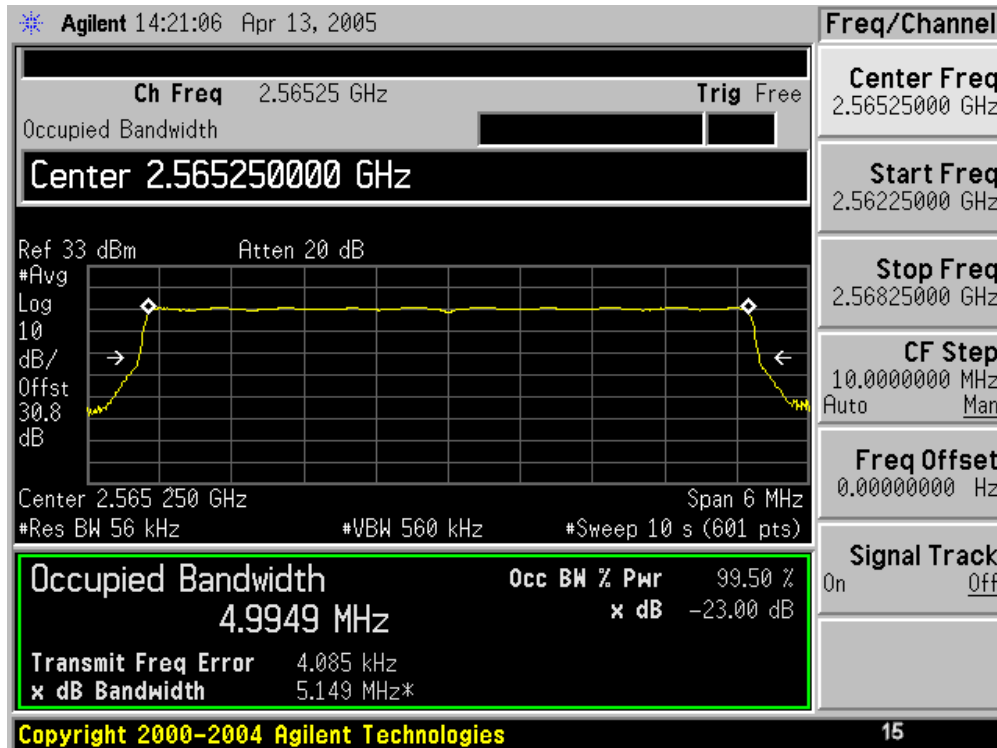
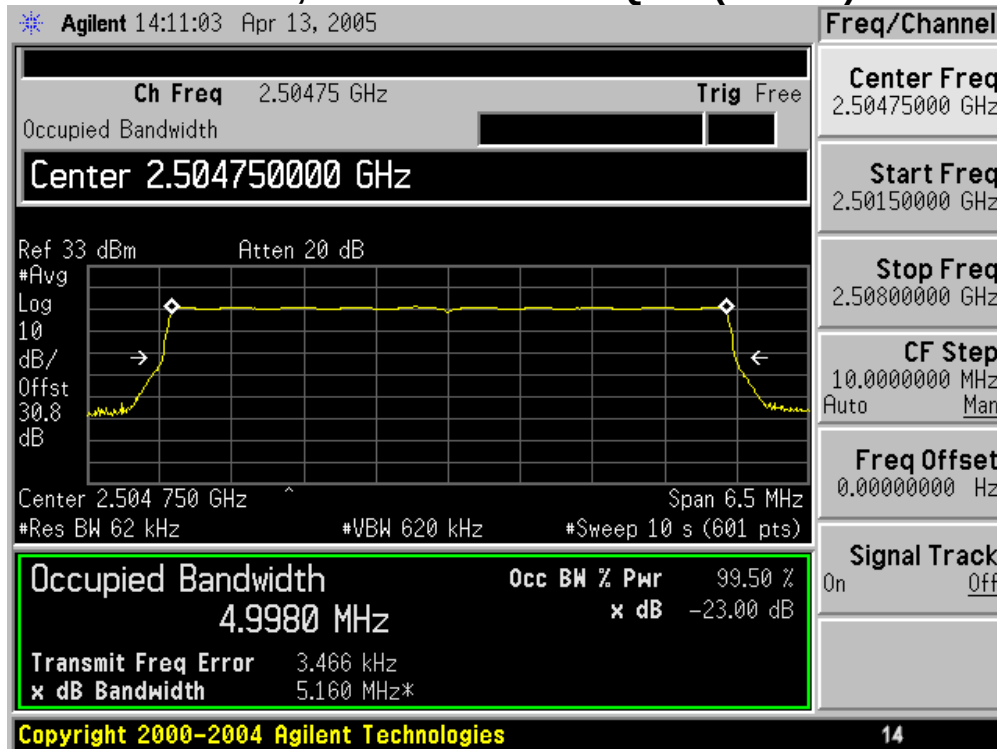
Occupied Bandwidth

5.5 MHz, 2W Channels/4-QAM (Cont'd)

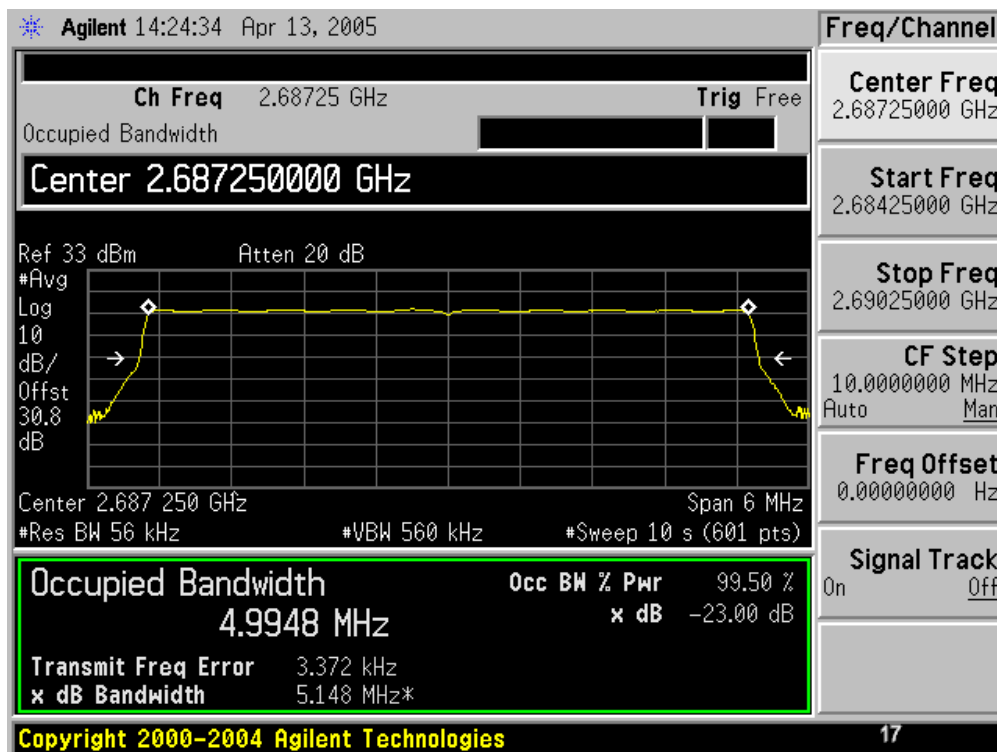
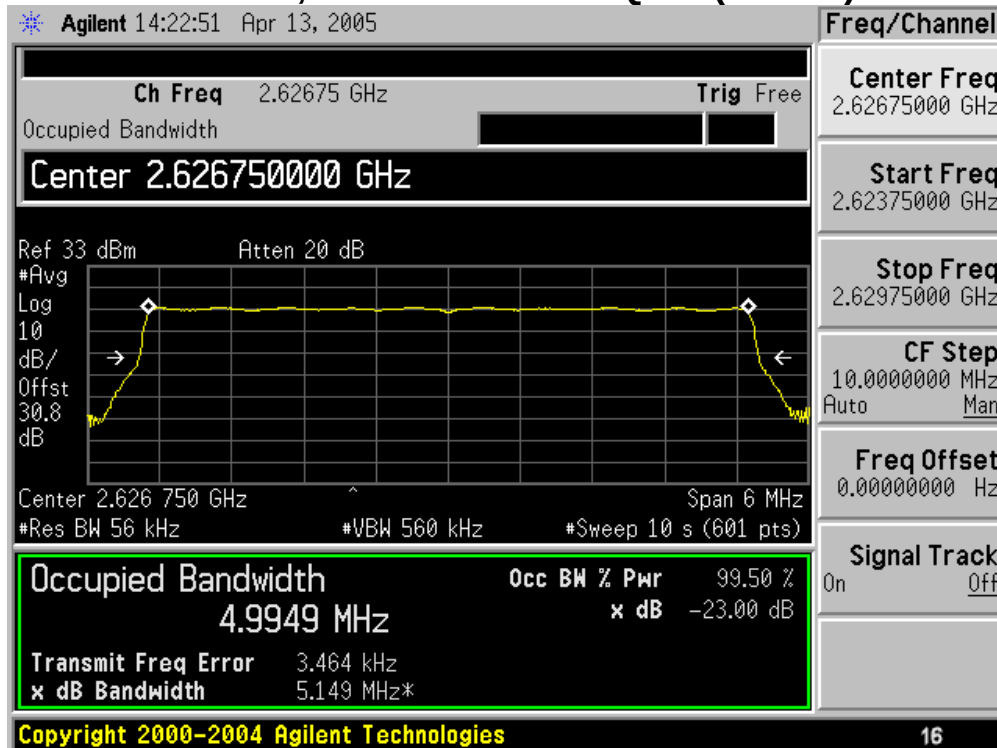


Occupied Bandwidth

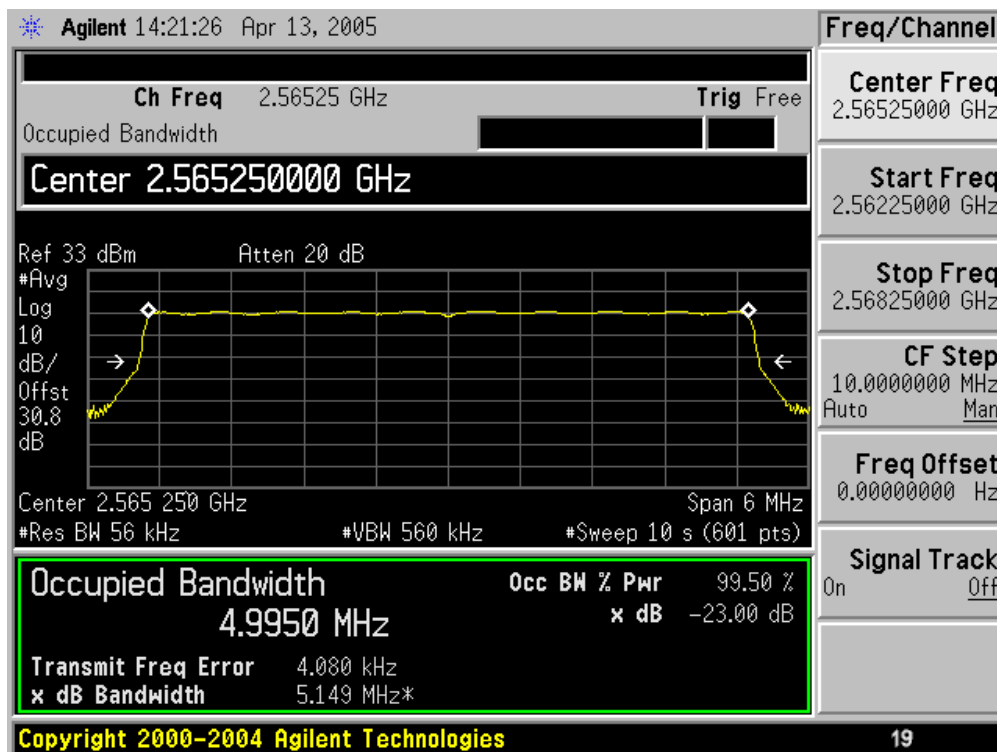
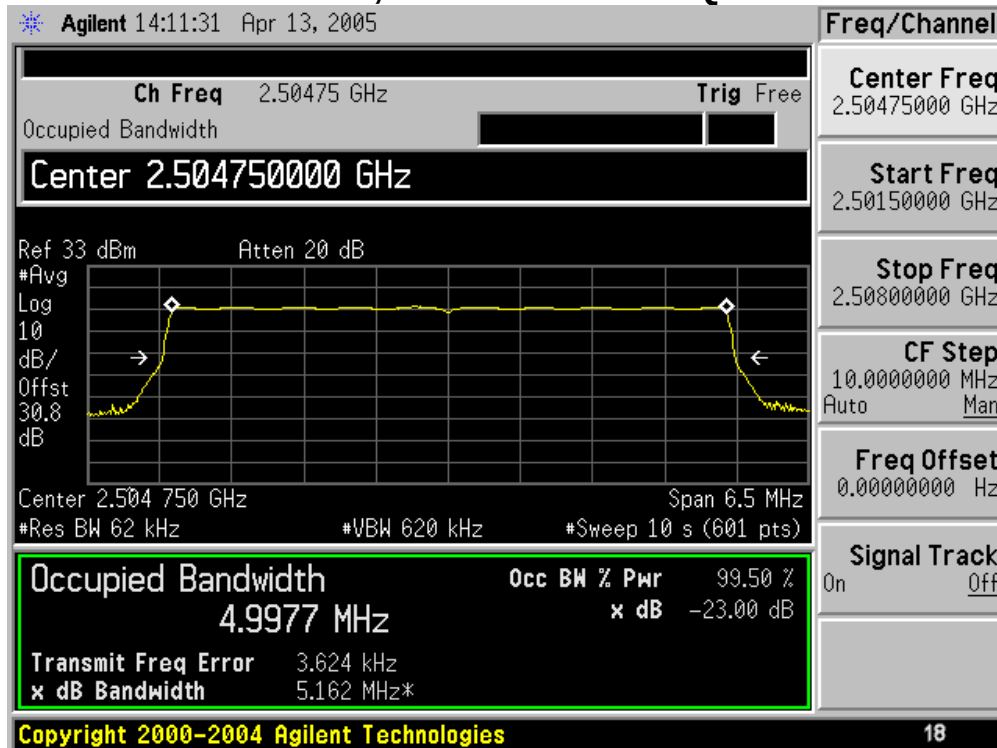
5.5 MHz, 2W Channels/16-QAM (Cont'd)



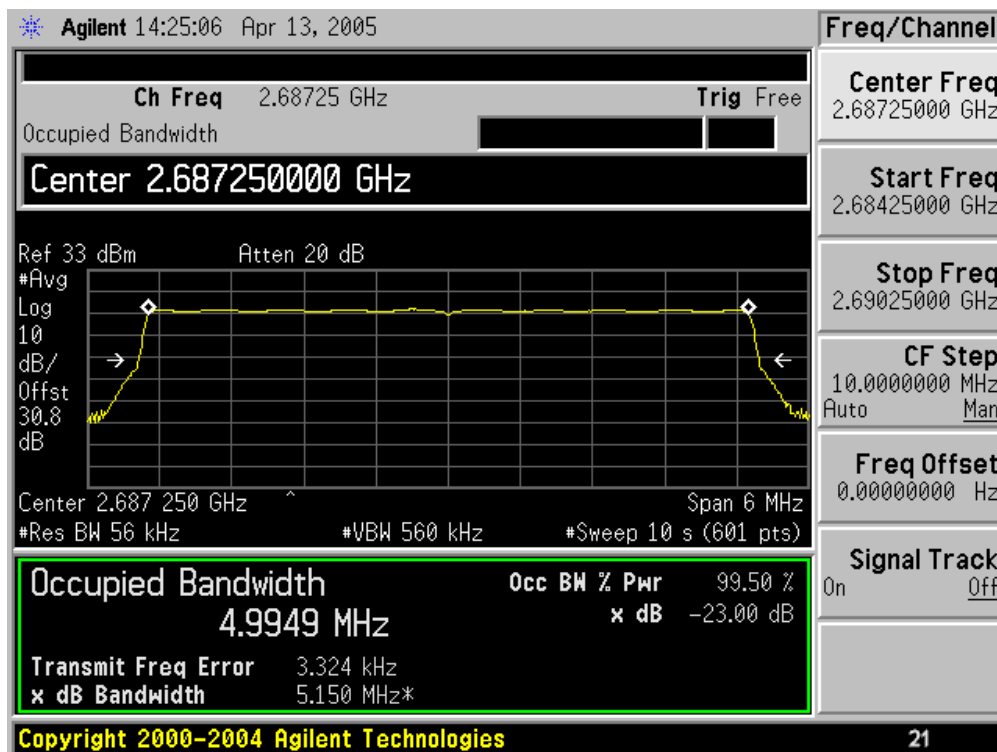
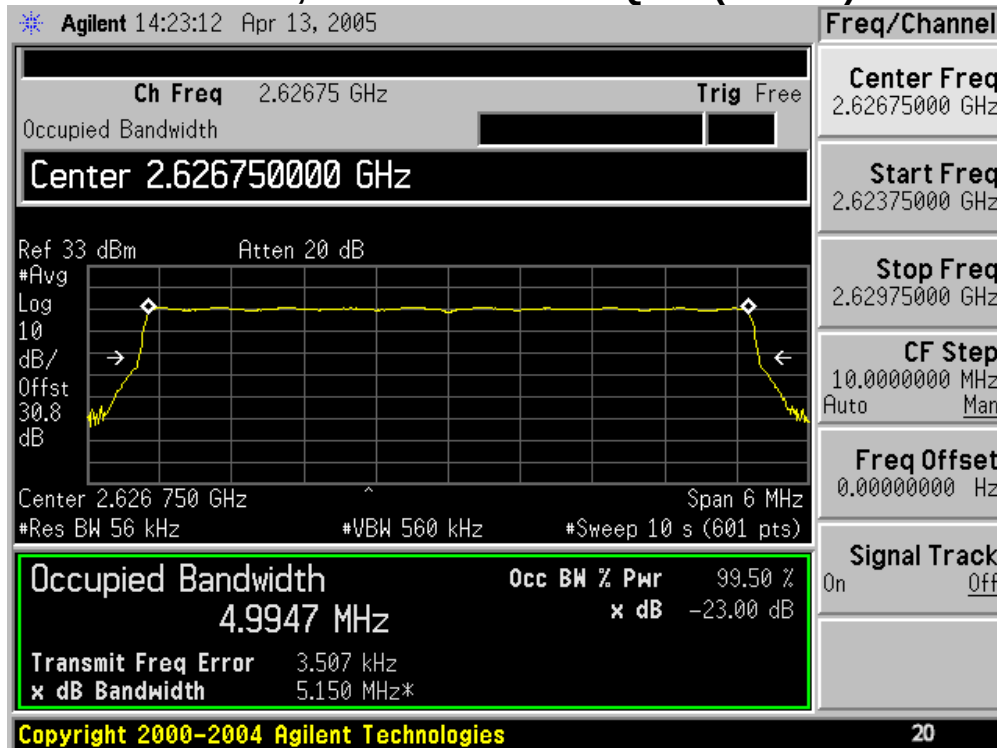
Occupied Bandwidth 5.5 MHz, 2W Channels/16-QAM (Cont'd)



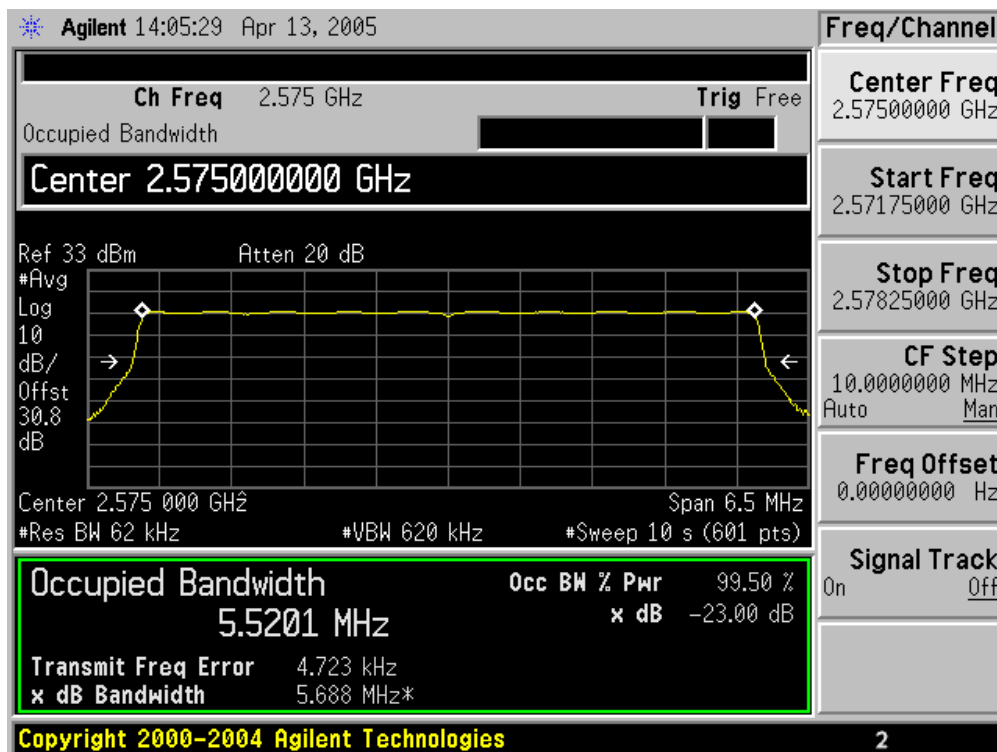
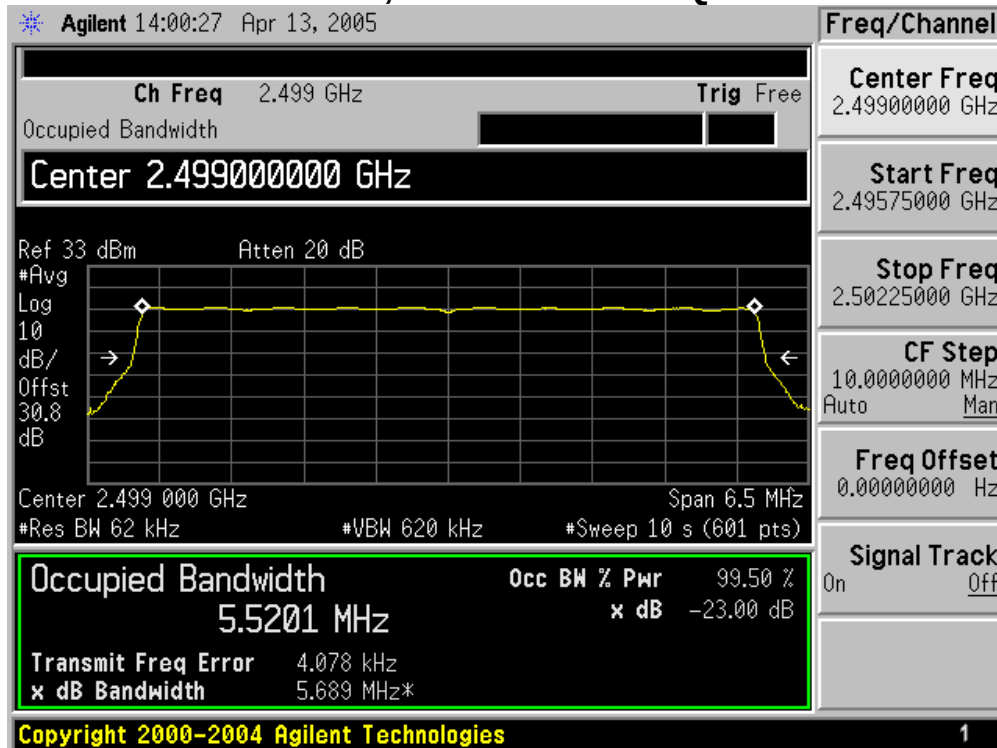
Occupied Bandwidth 5.5 MHz, 2W Channels/64-QAM



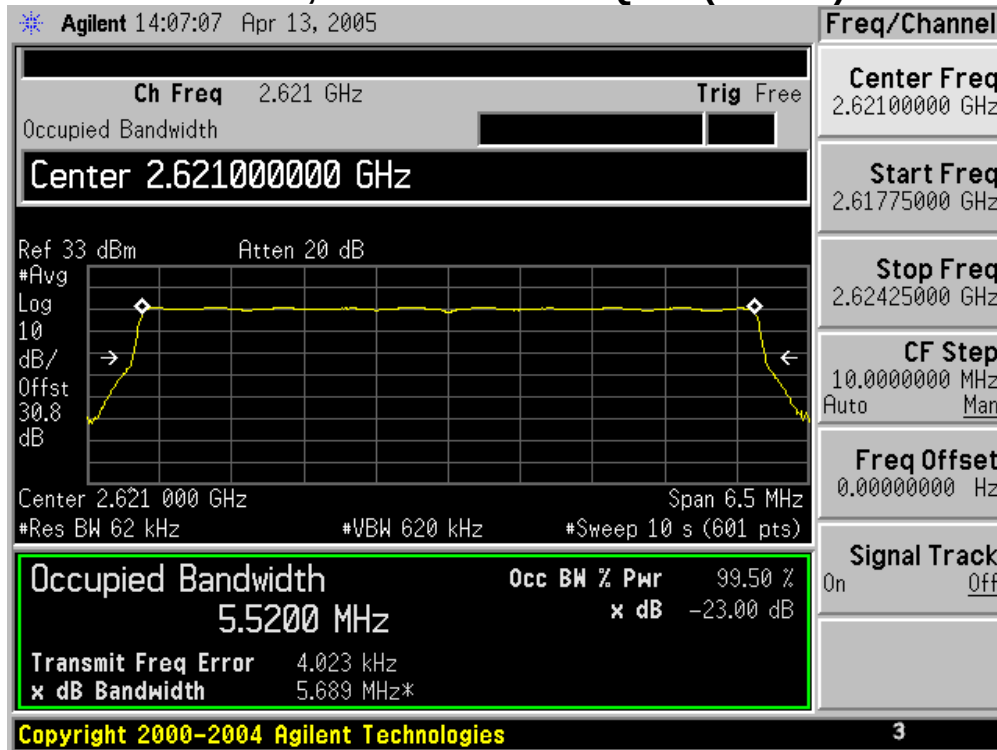
Occupied Bandwidth 5.5 MHz, 2W Channels/64-QAM (Cont'd)



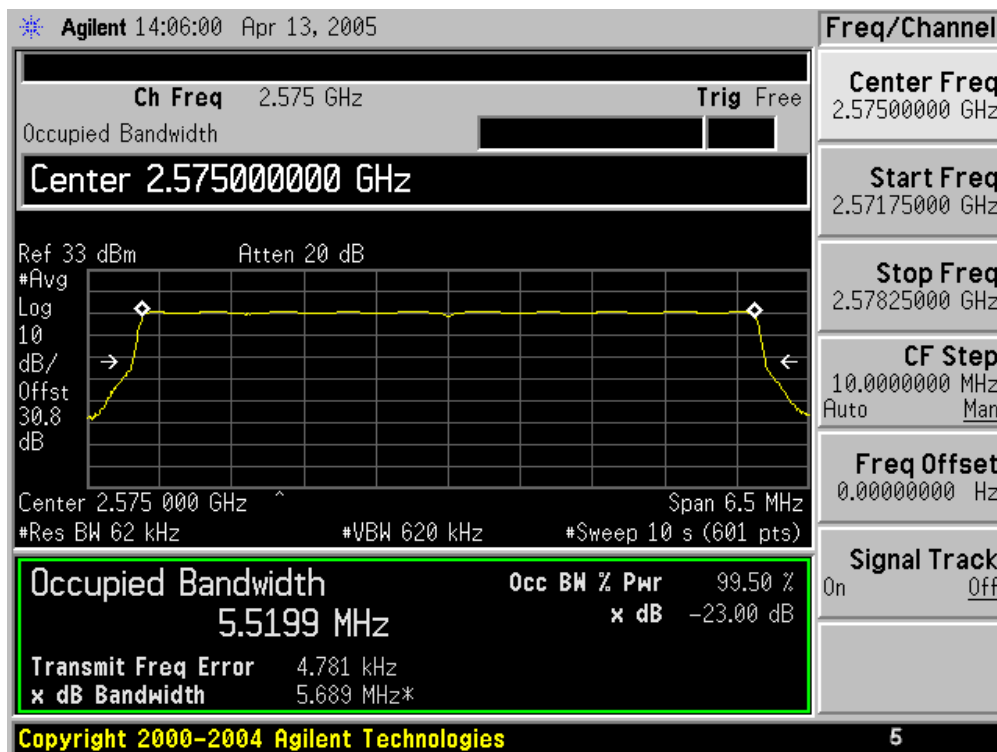
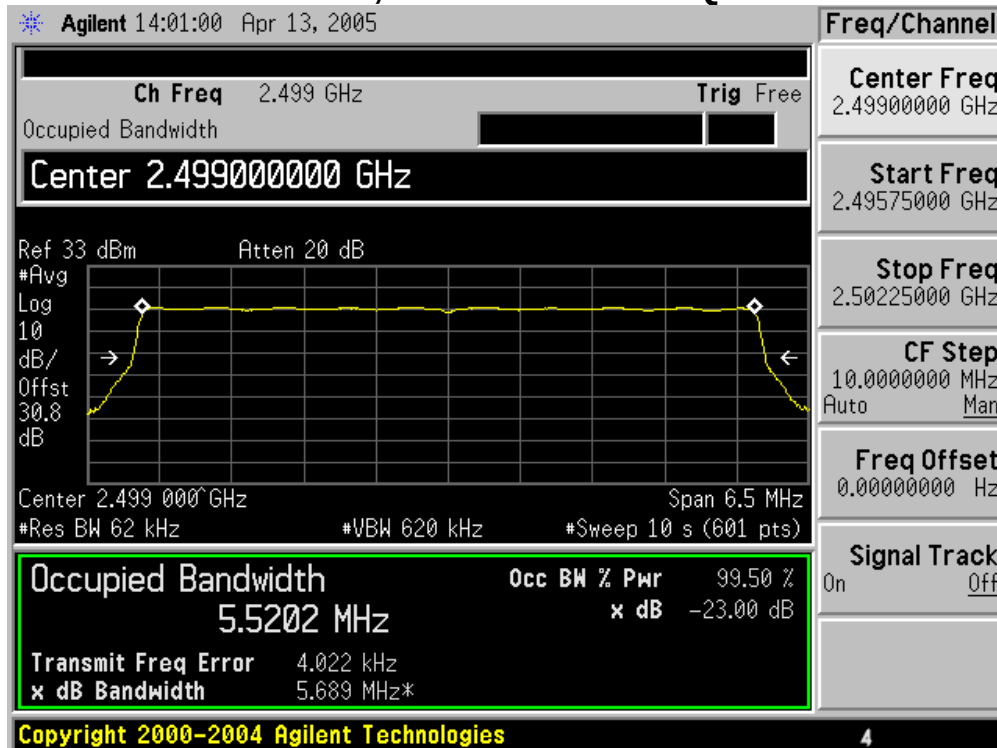
Occupied Bandwidth 6.0 MHz, 2W Channels/4-QAM



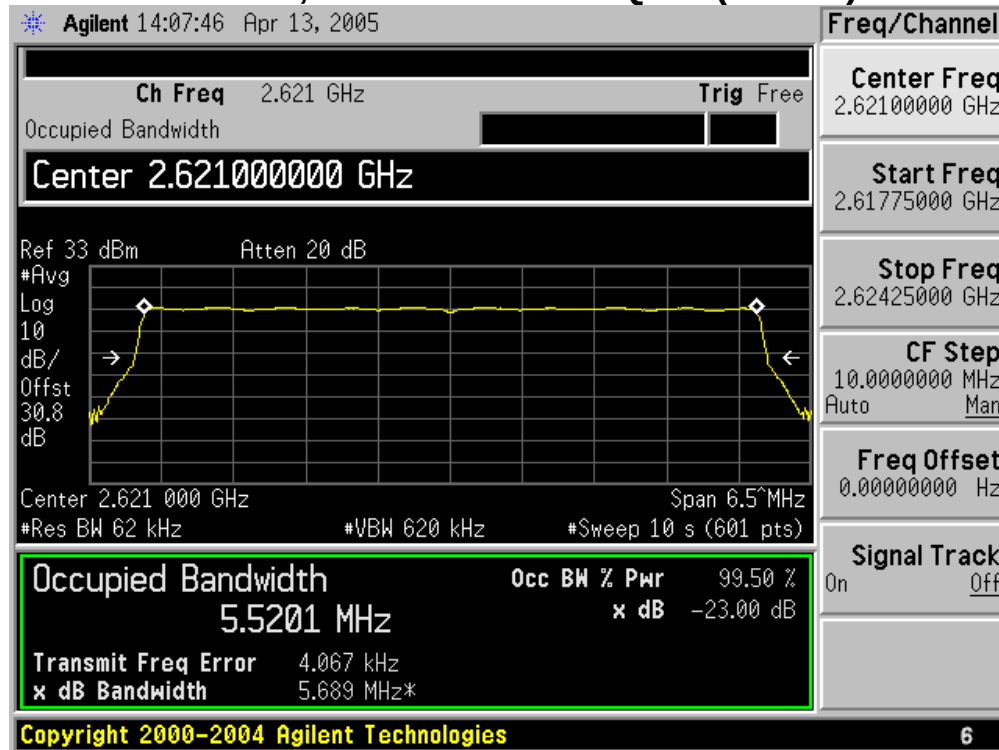
Occupied Bandwidth 6.0 MHz, 2W Channels/4-QAM (Cont'd)



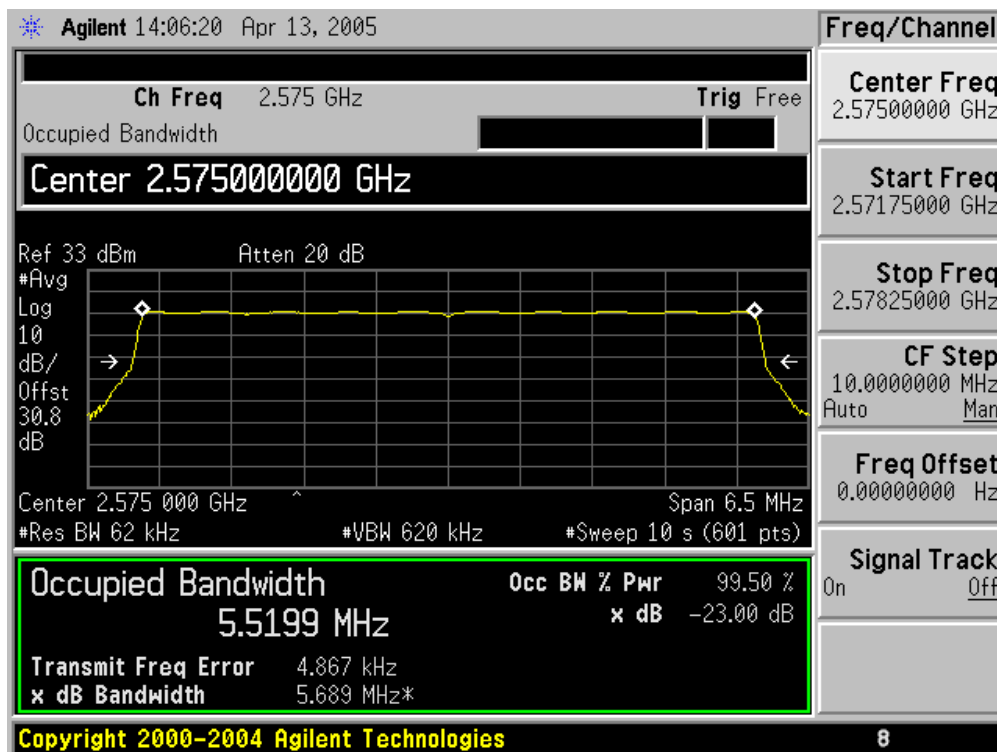
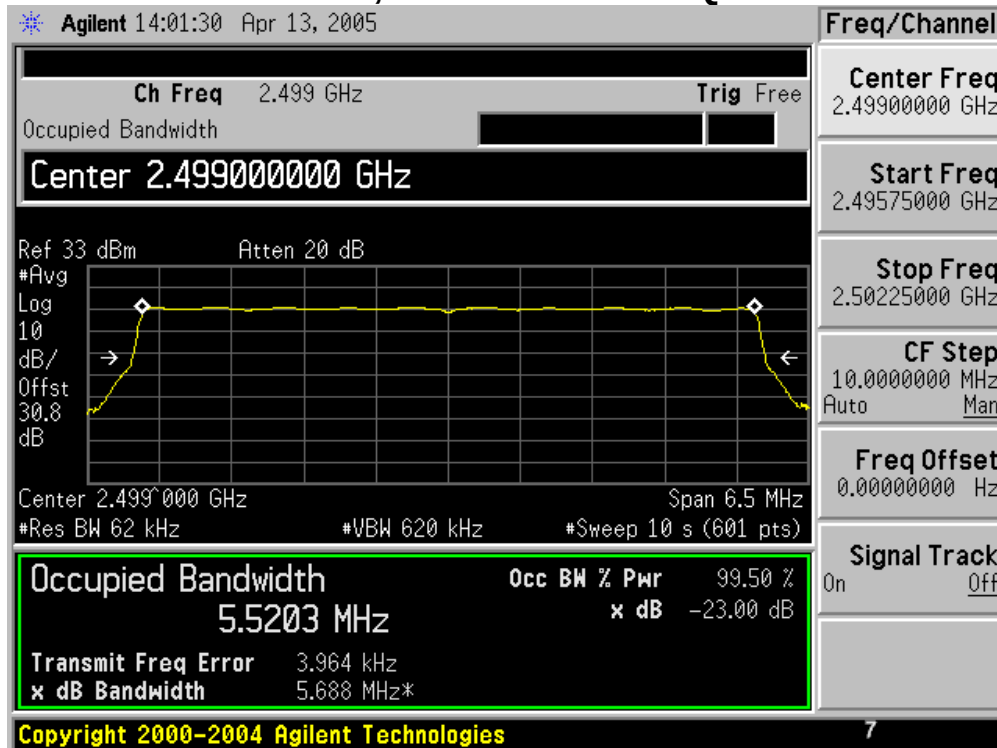
Occupied Bandwidth 6.0 MHz, 2W Channels/16-QAM



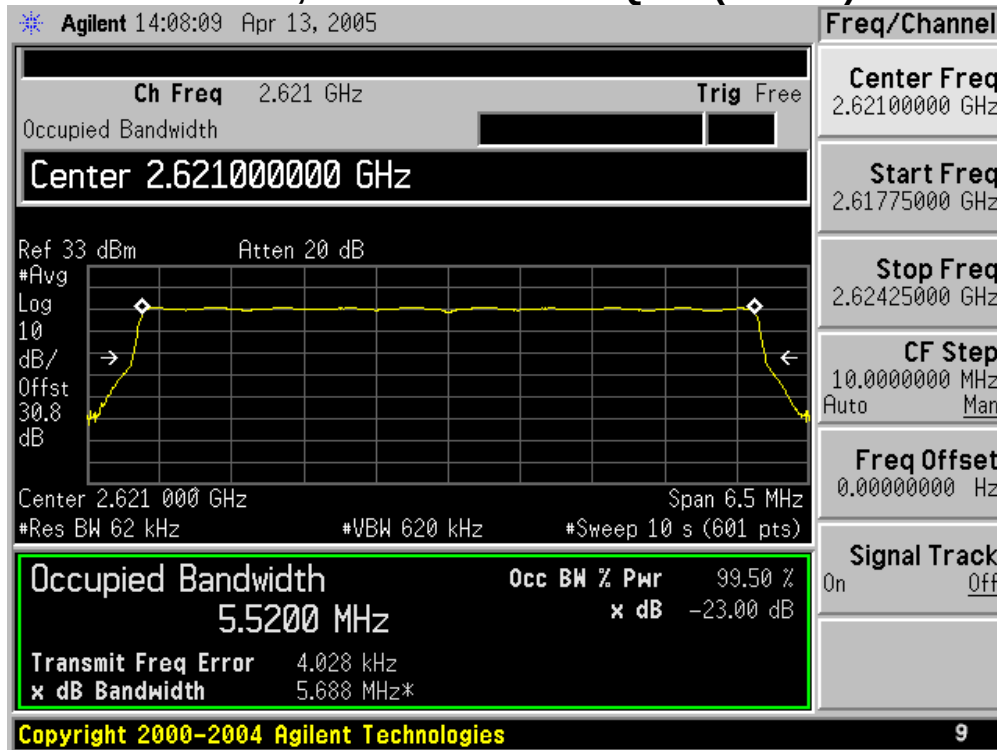
Occupied Bandwidth 6.0 MHz, 2W Channels/16-QAM (Cont'd)



Occupied Bandwidth 6.0 MHz, 2W Channels/64-QAM

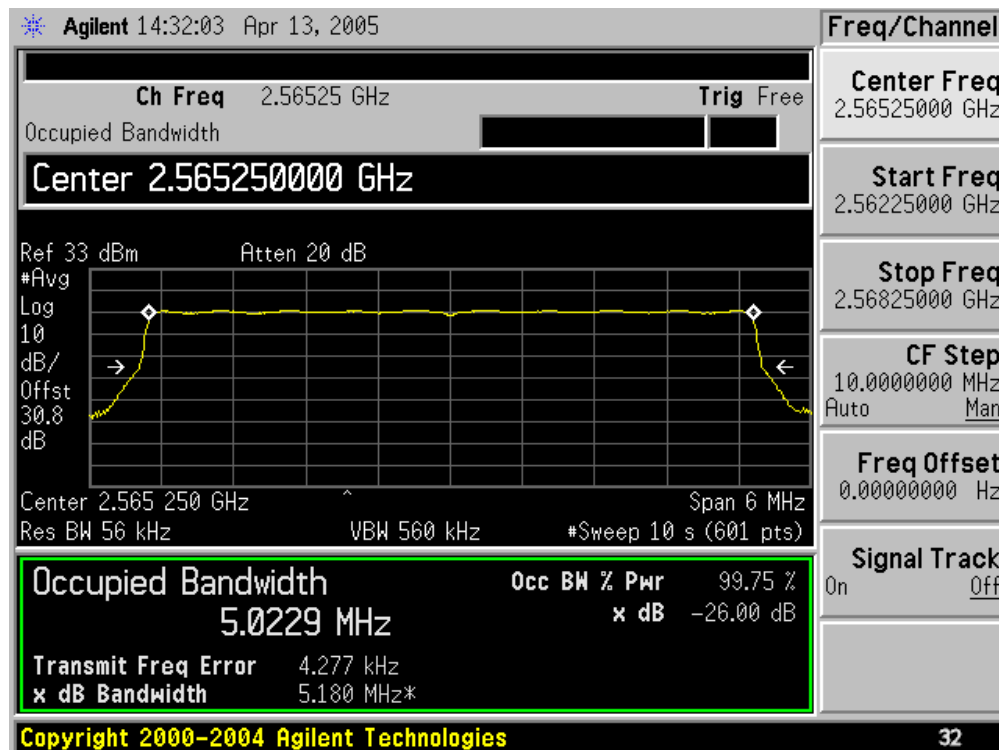
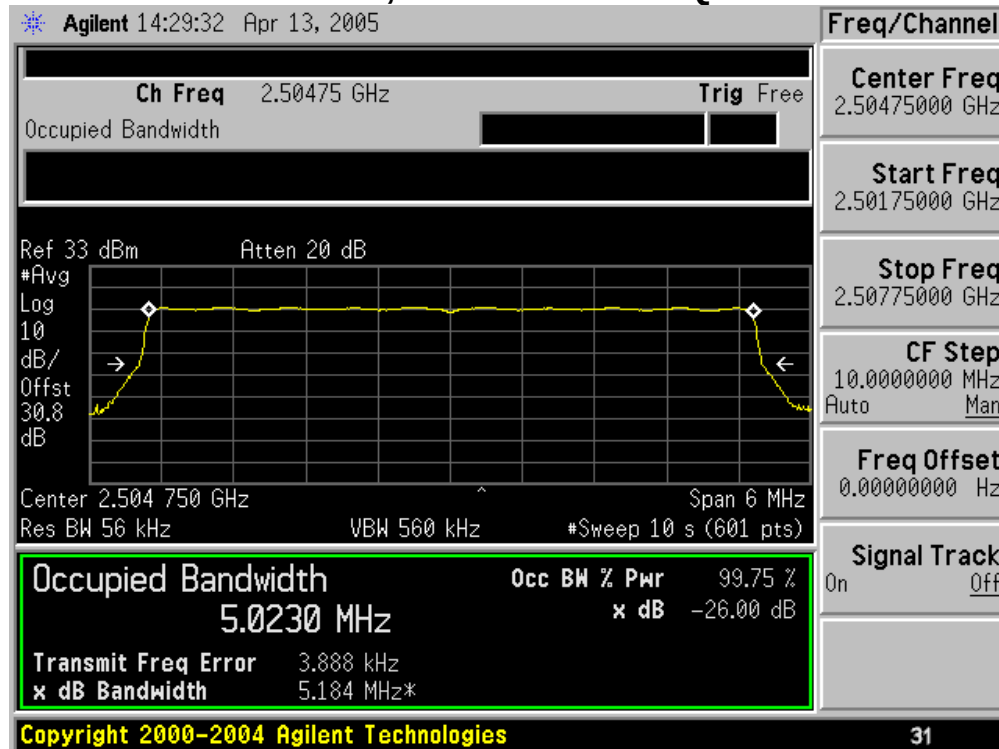


Occupied Bandwidth 6.0 MHz, 2W Channels/64-QAM (Cont'd)

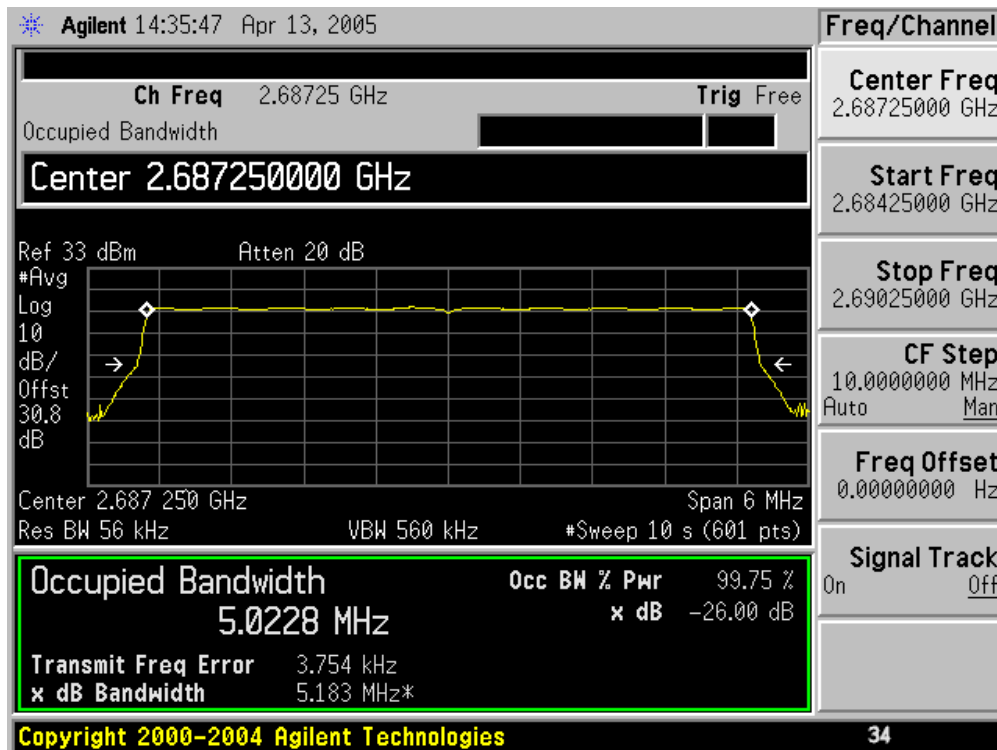
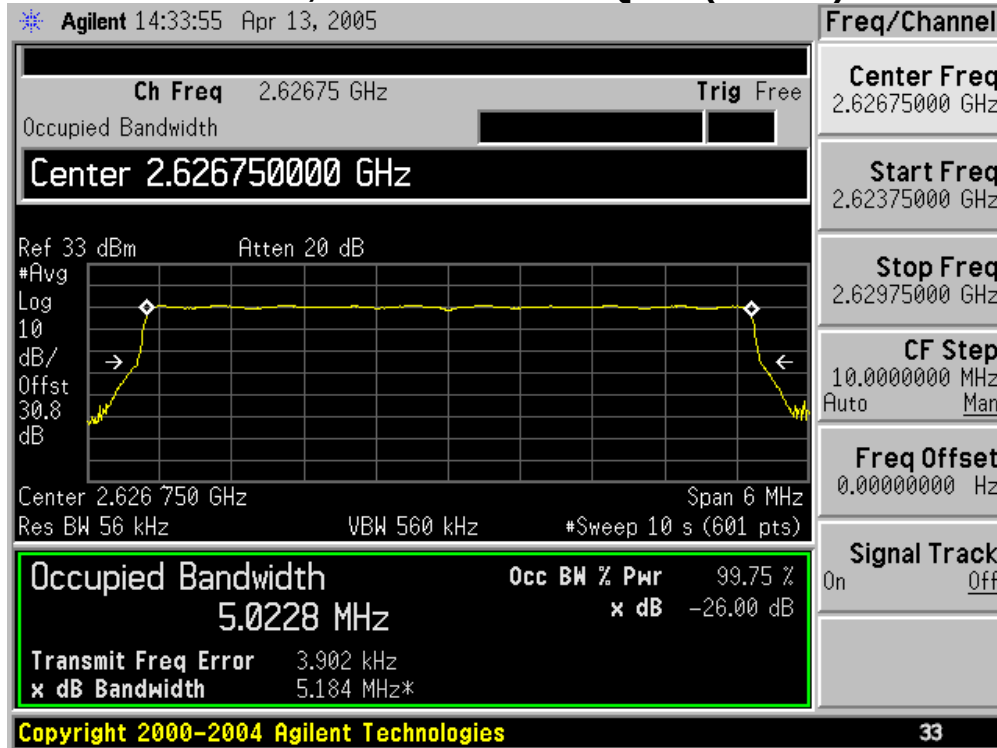


Emission Bandwidth Spectrum Analyzer Plots (2W)

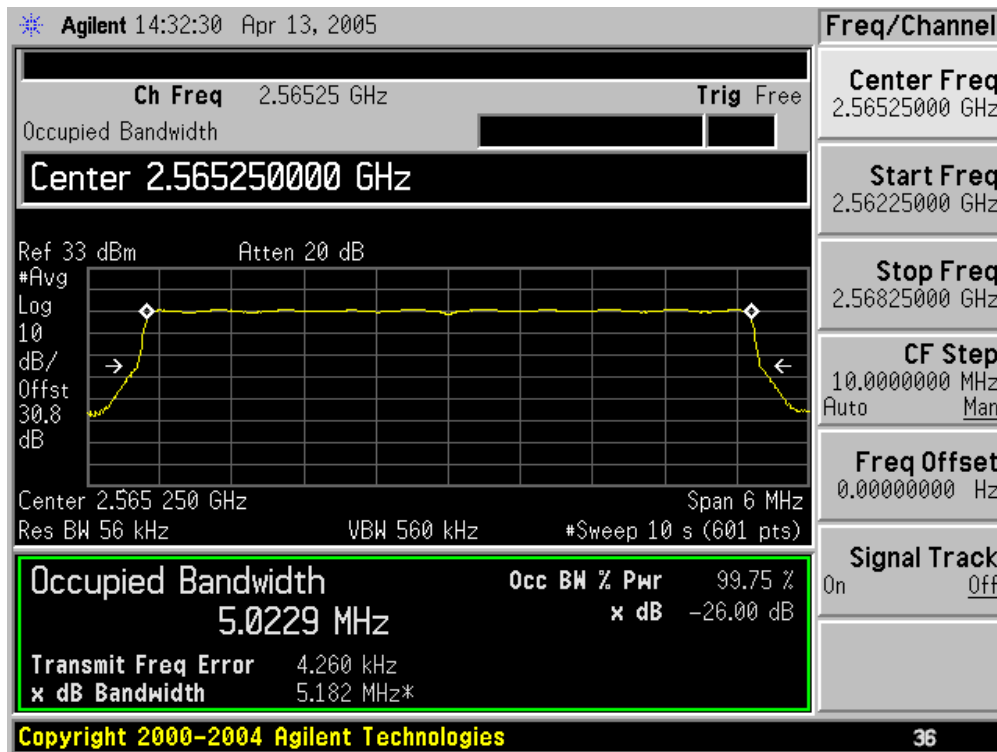
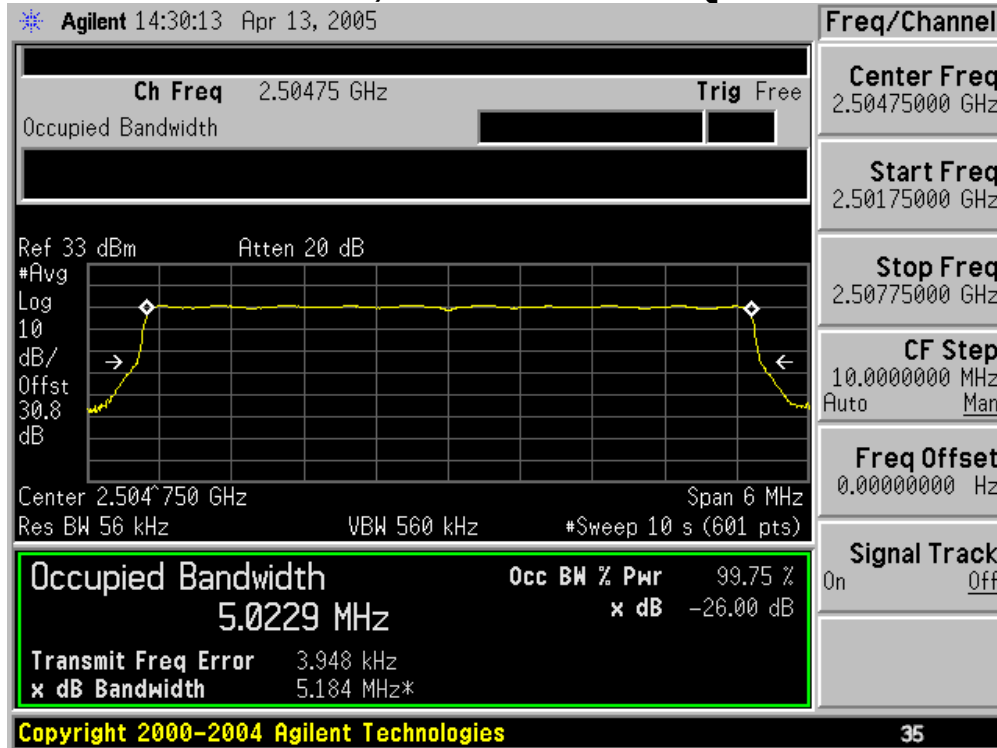
5.5 MHz, 2W Channels/4-QAM



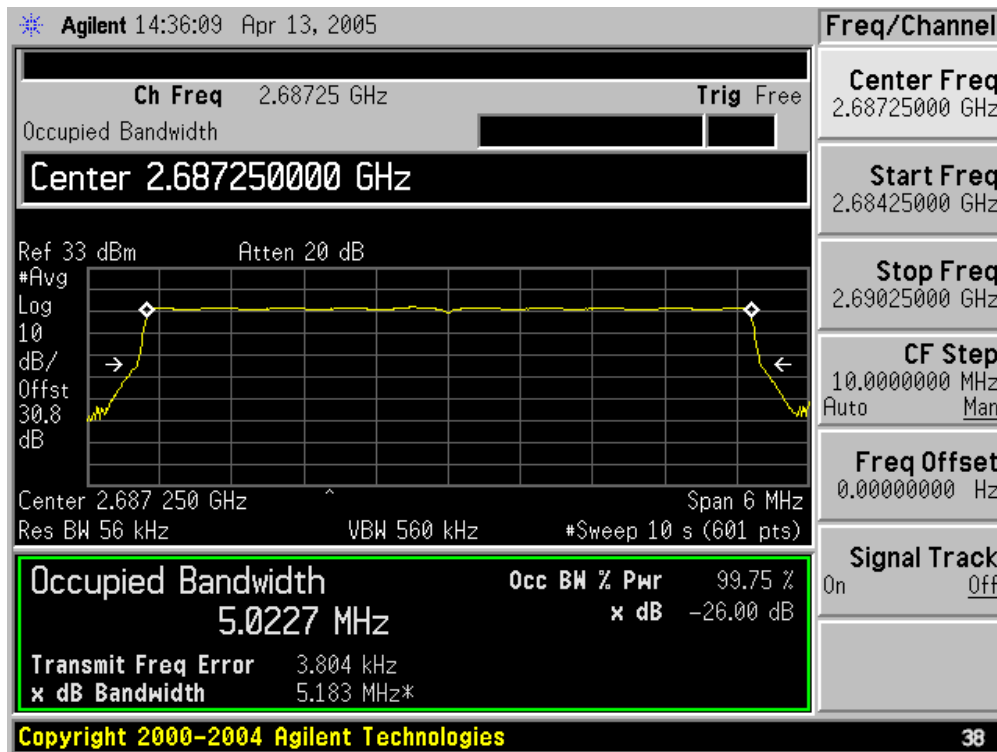
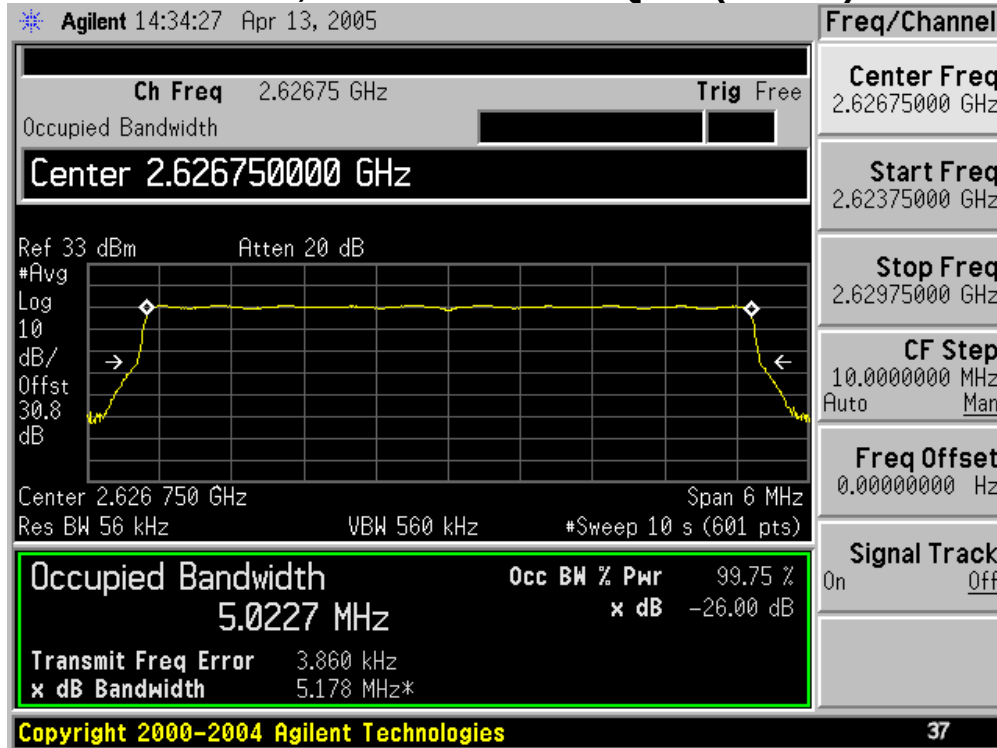
Emission Bandwidth 5.5 MHz, 2W Channels/4-QAM (Cont'd)



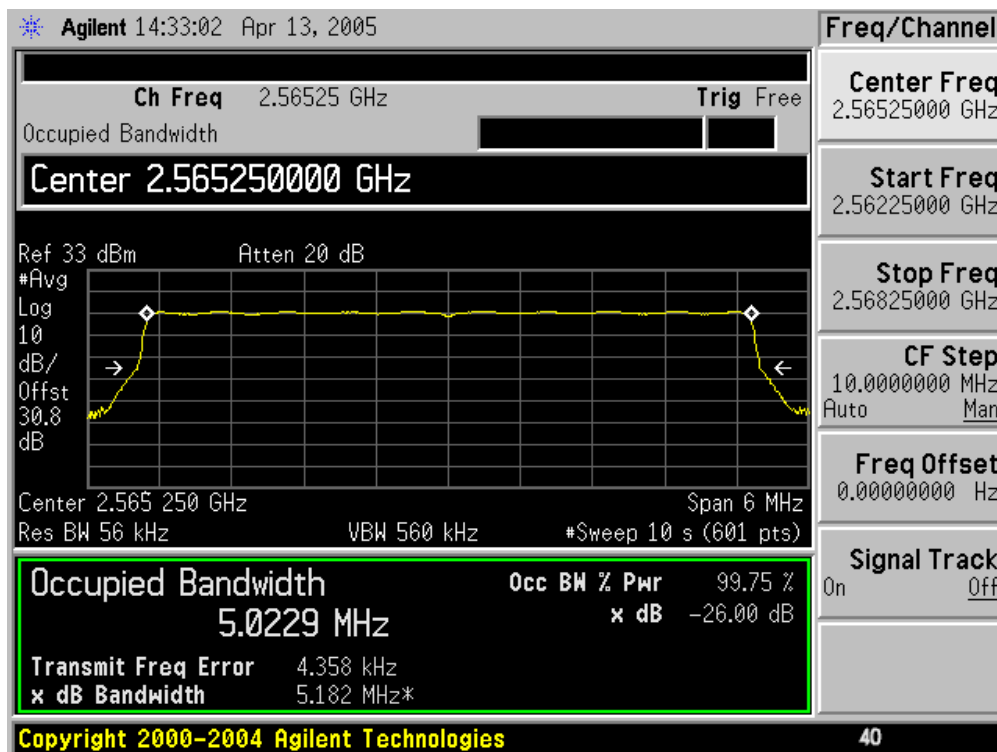
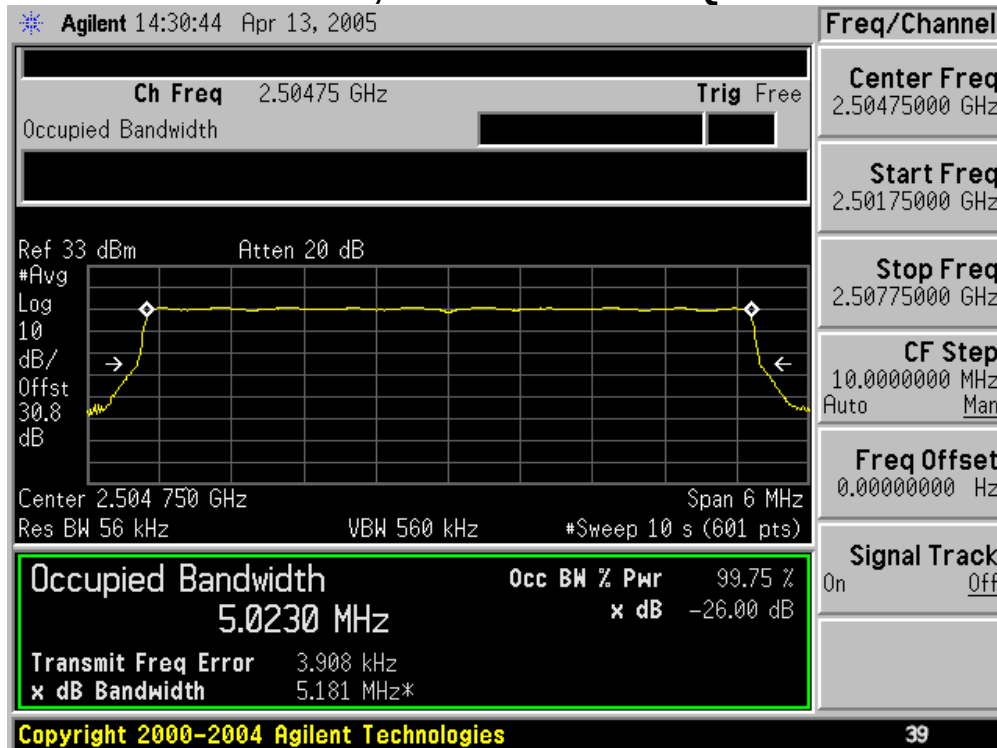
Emission Bandwidth 5.5 MHz, 2W Channels/16-QAM



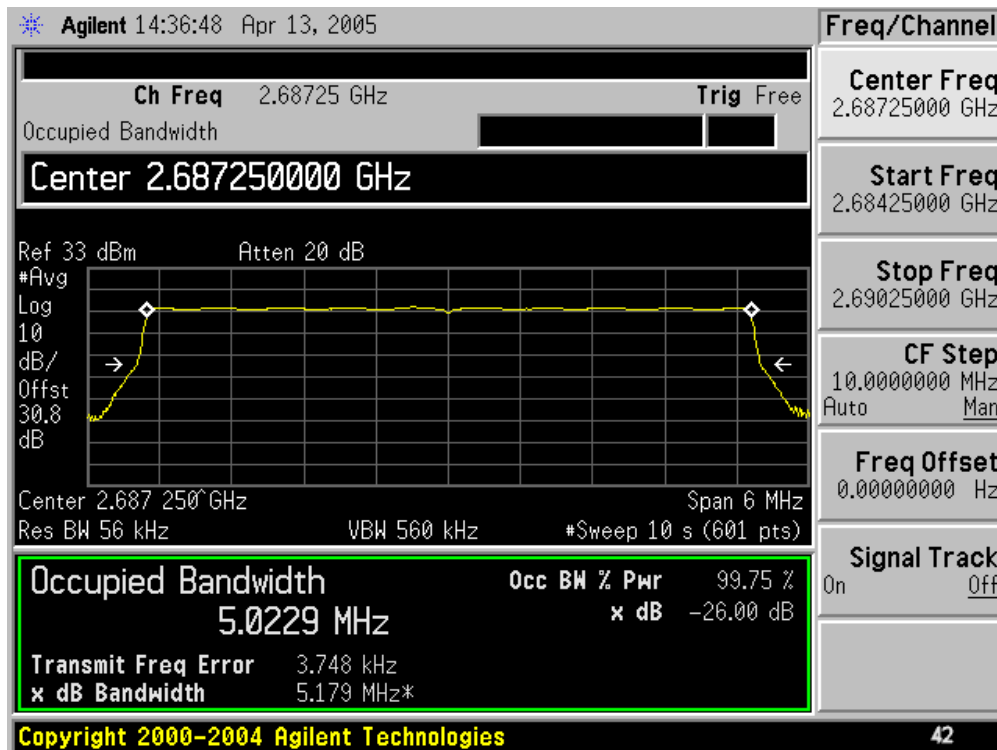
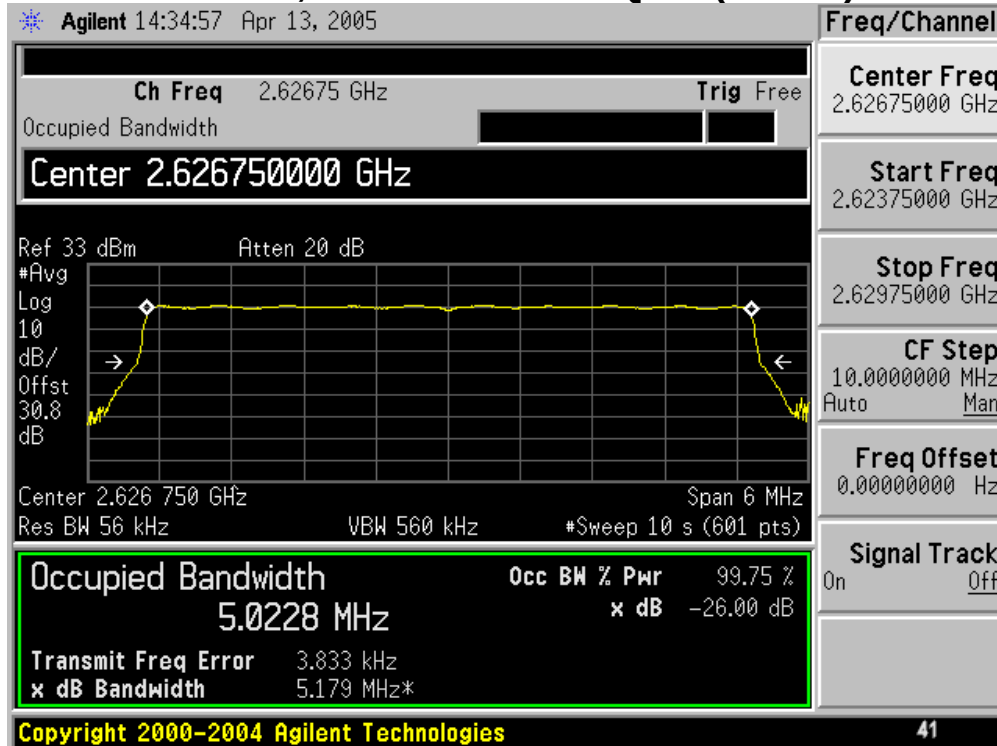
Emission Bandwidth 5.5 MHz, 2W Channels/16-QAM (Cont'd)



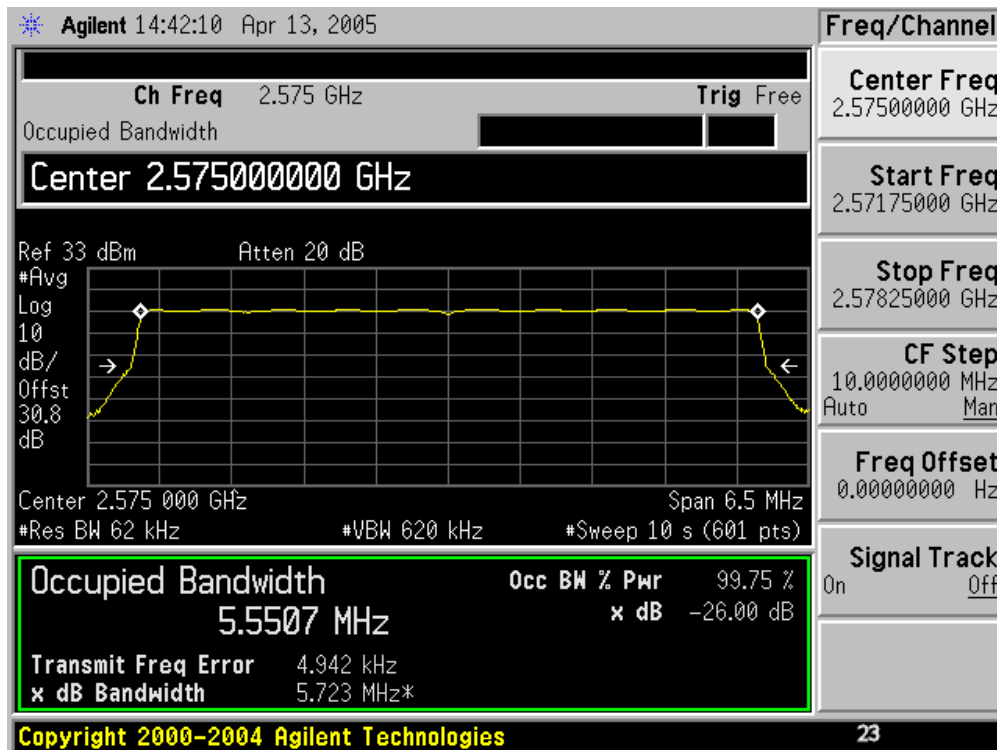
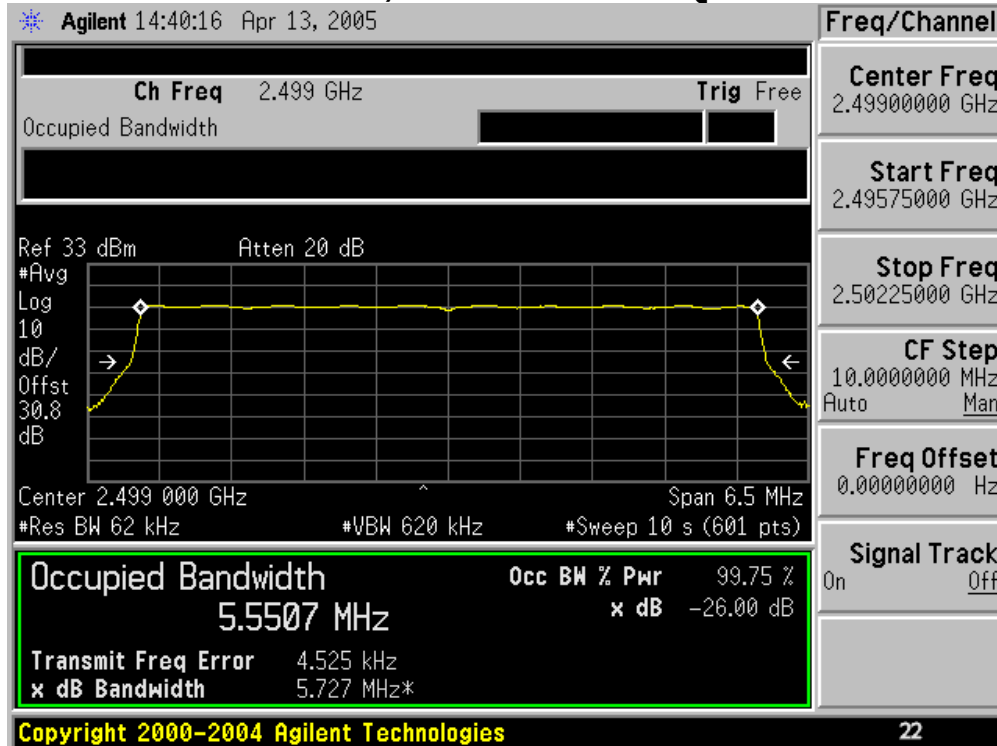
Emission Bandwidth 5.5 MHz, 2W Channels/64-QAM



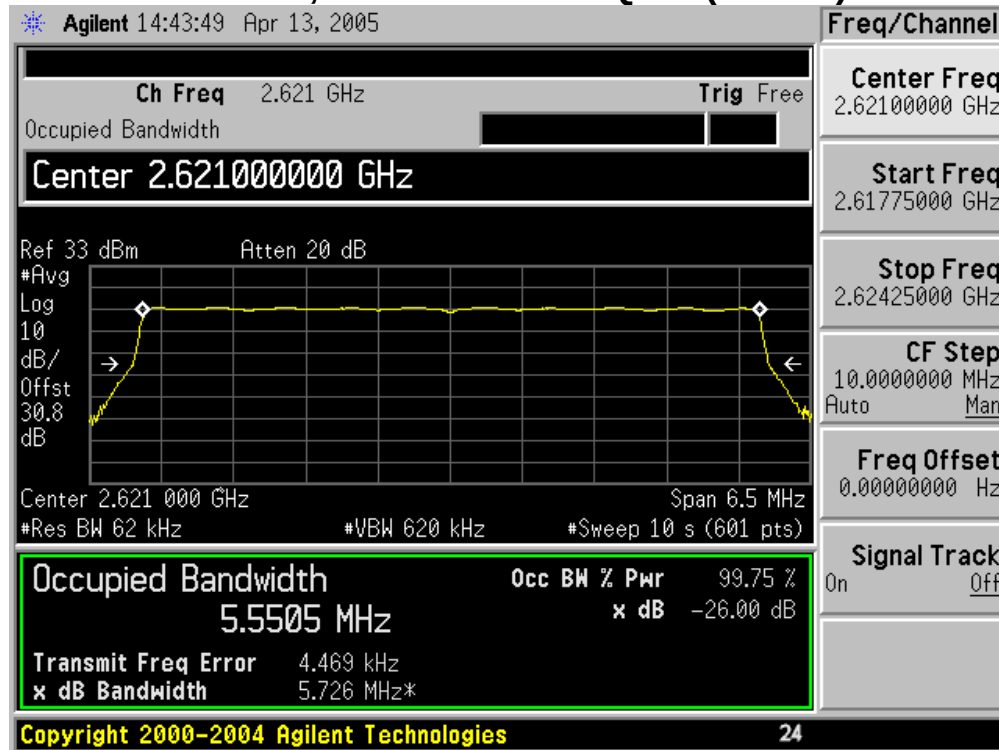
Emission Bandwidth 5.5 MHz, 2W Channels/64-QAM (Cont'd)



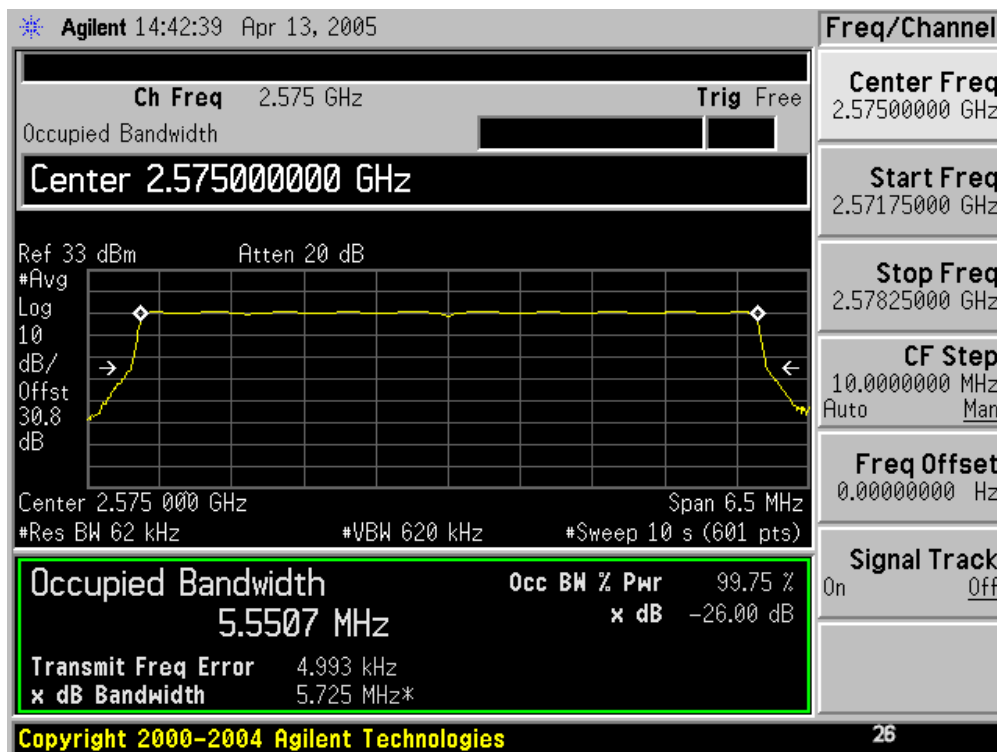
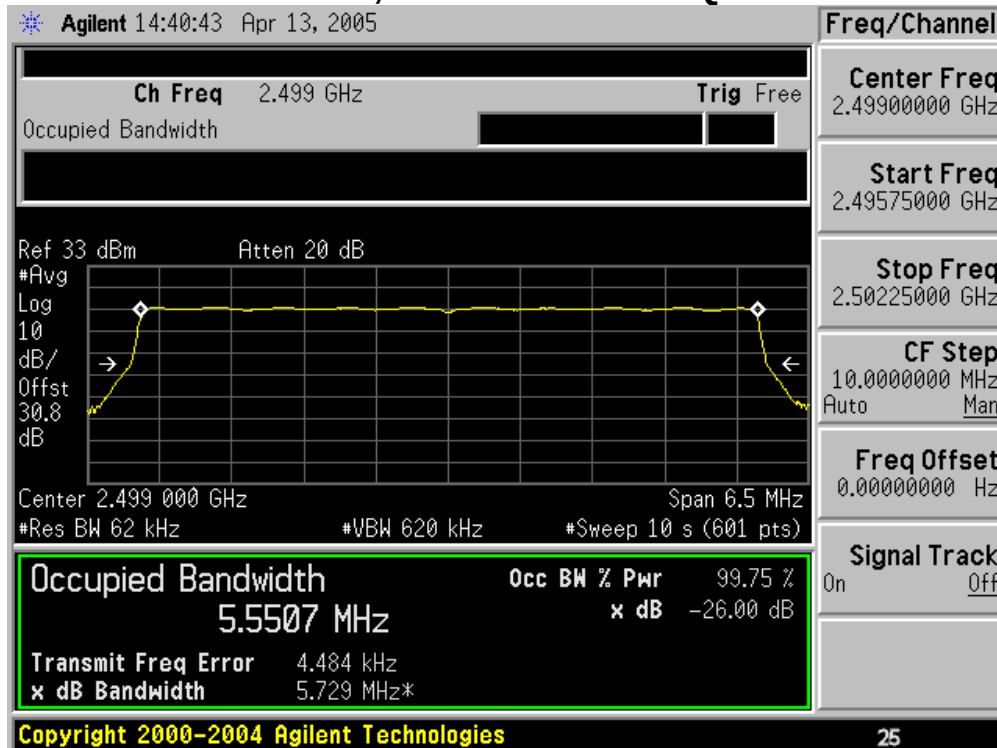
Emission Bandwidth 6.0 MHz, 2W Channels/4-QAM



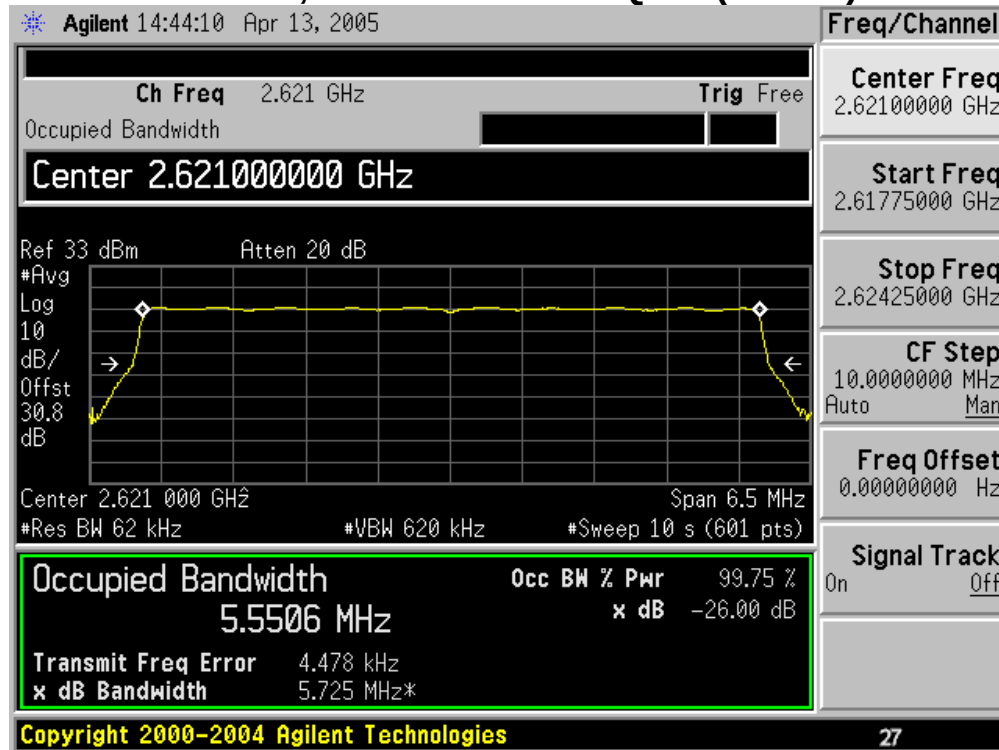
Emission Bandwidth 6.0 MHz, 2W Channels/4-QAM (Cont'd)



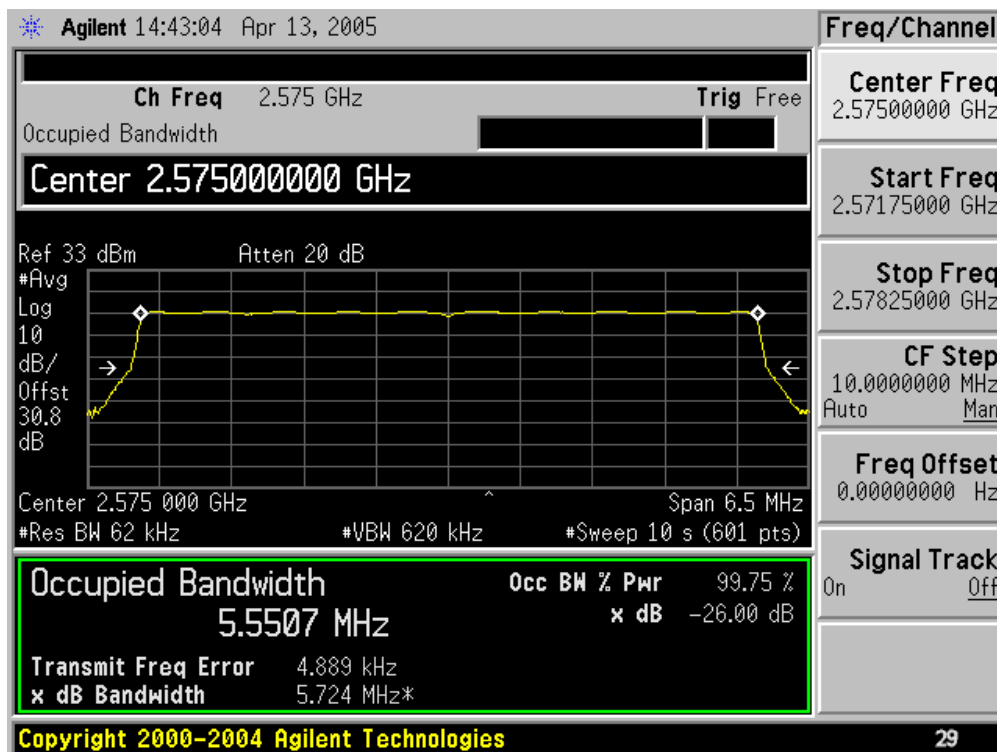
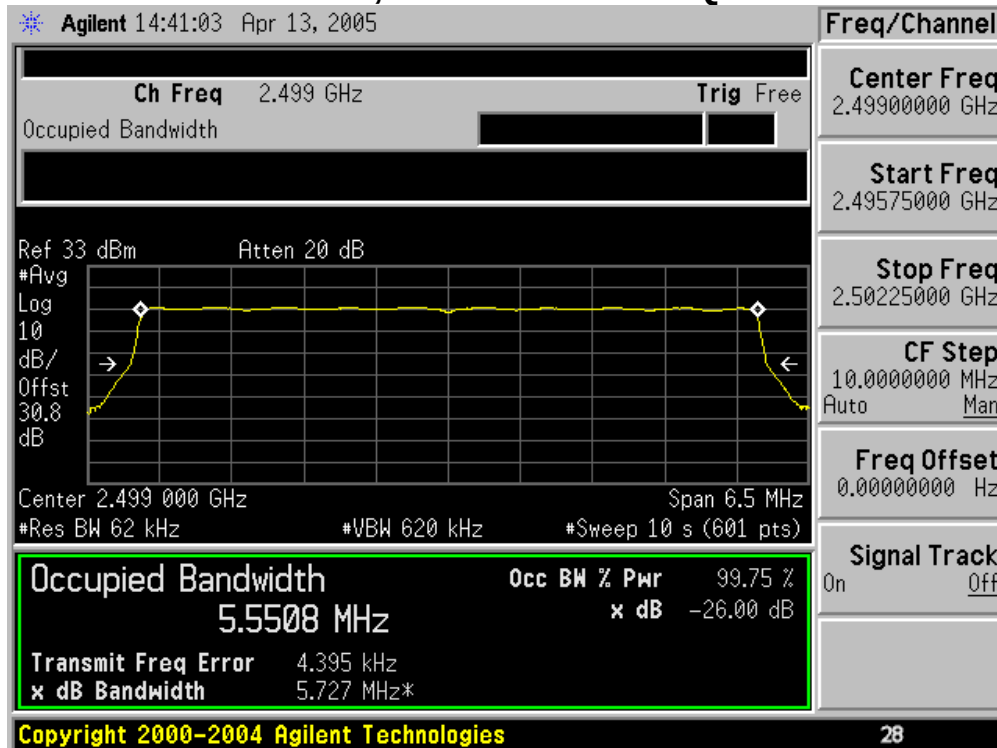
Emission Bandwidth 6.0 MHz, 2W Channels/16-QAM



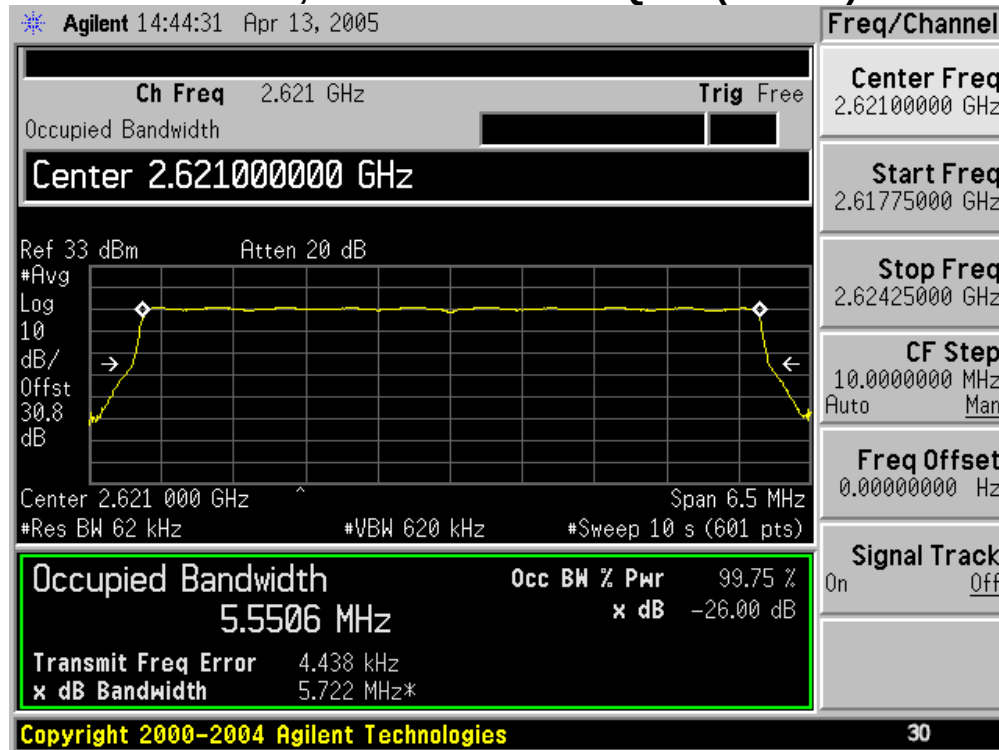
Emission Bandwidth 6.0 MHz, 2W Channels/16-QAM (Cont'd)



Emission Bandwidth 6.0 MHz, 2W Channels/64-QAM

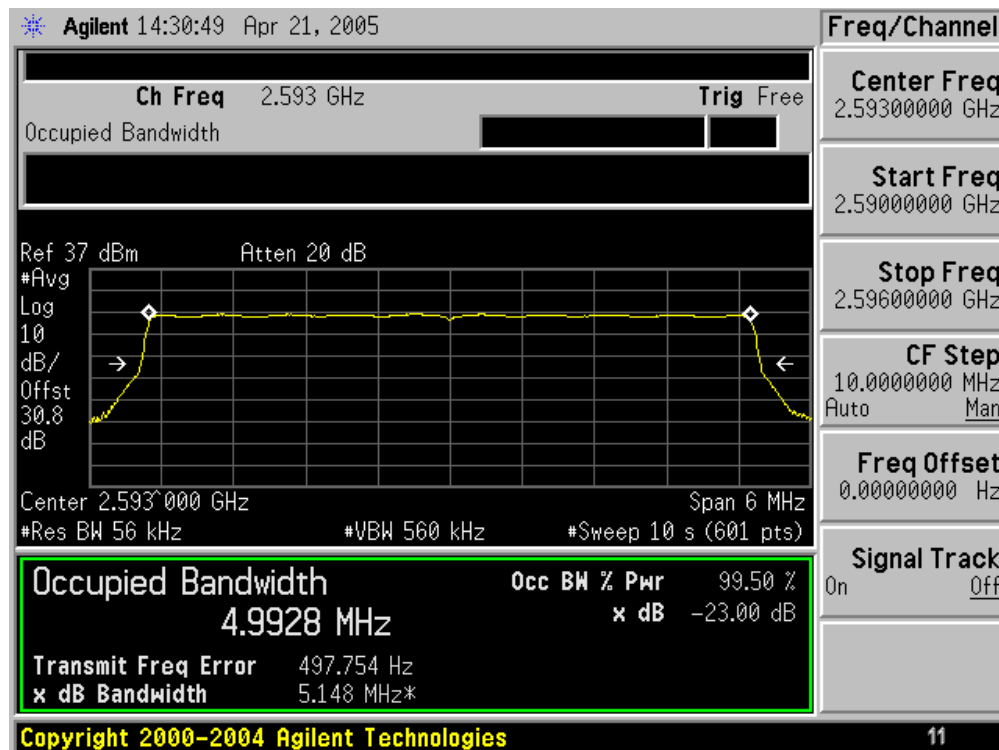
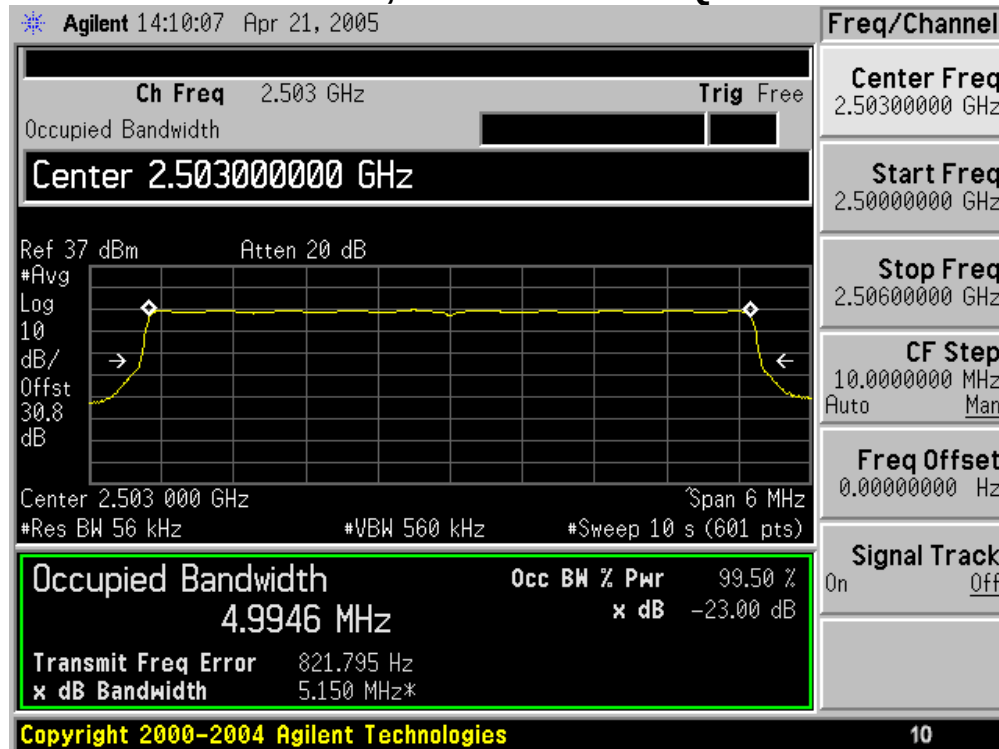


Emission Bandwidth 6.0 MHz, 2W Channels/64-QAM (Cont'd)



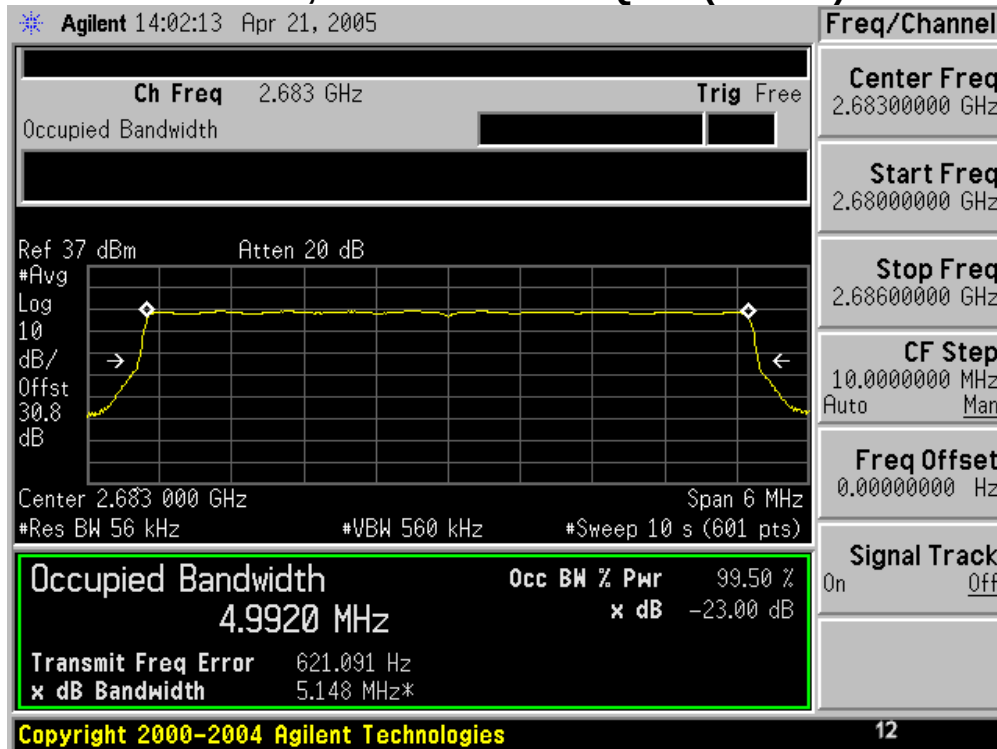
Occupied Bandwidth Spectrum Analyzer Plots (5W)

5.5 MHz, 5W Channels/4-QAM

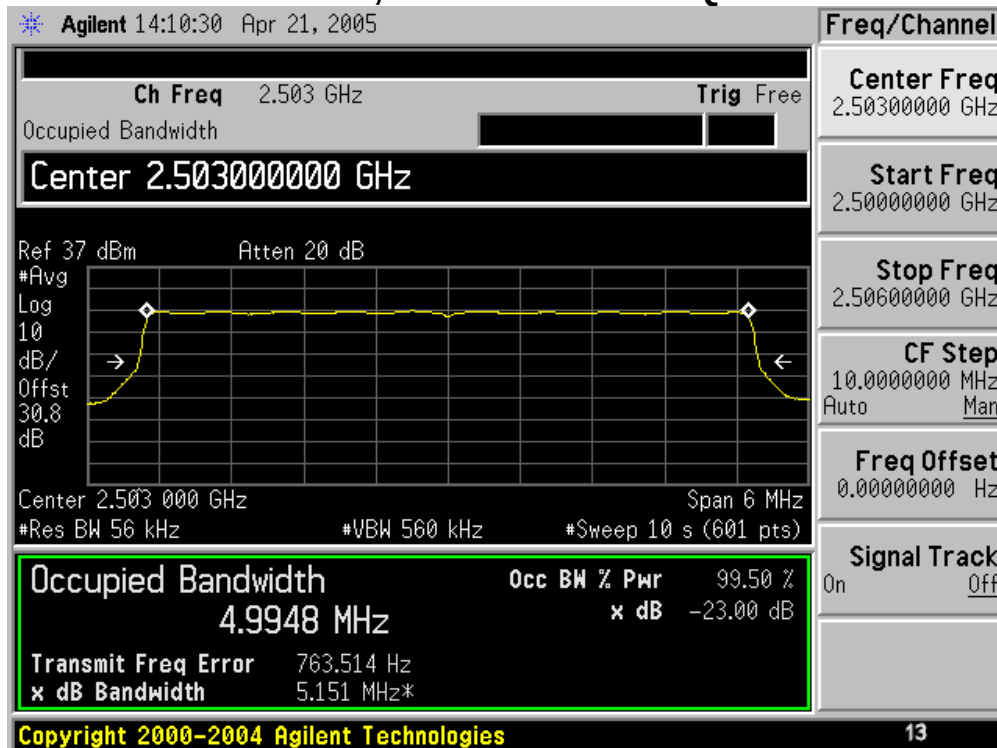


Occupied Bandwidth

5.5 MHz, 5W Channels/4-QAM (Cont'd)

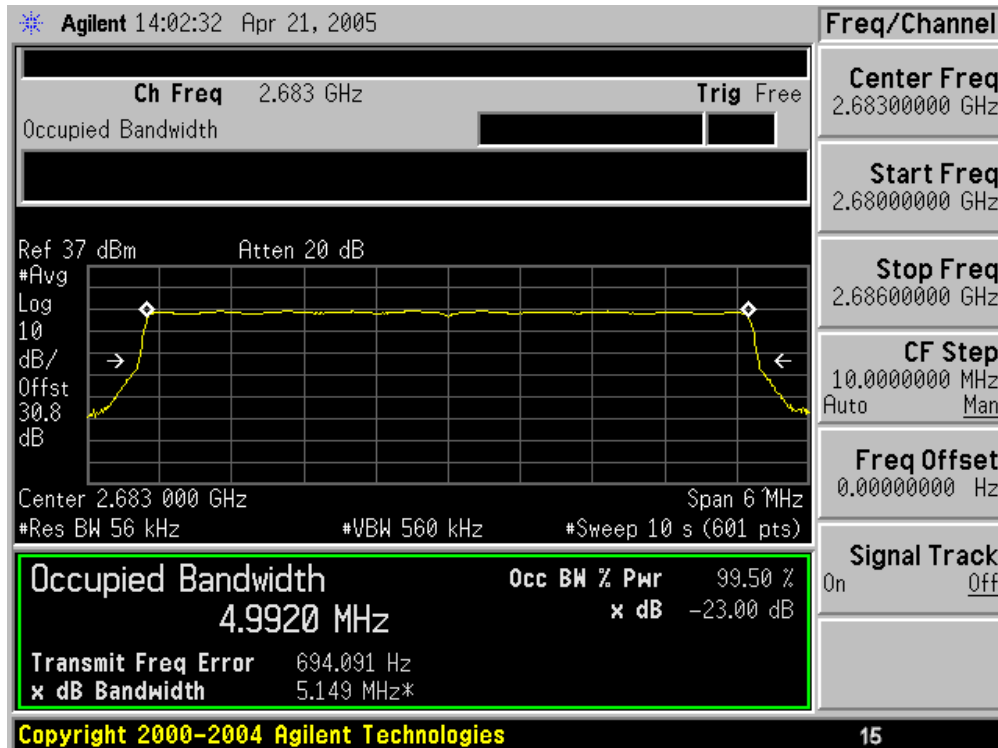
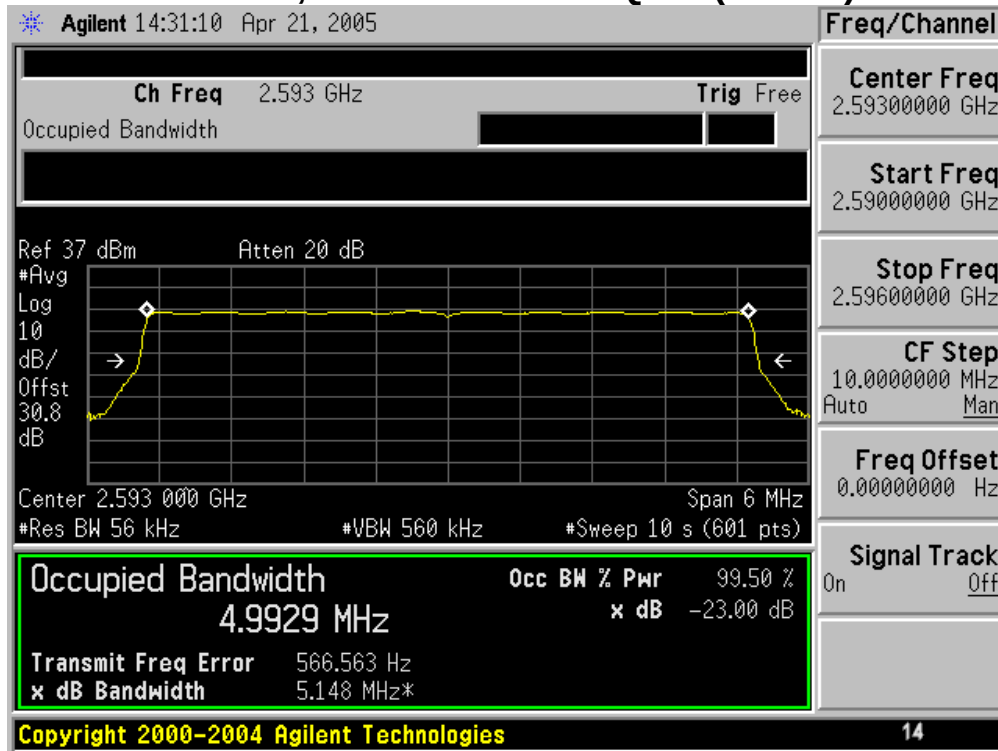


5.5 MHz, 5W Channels/16-QAM

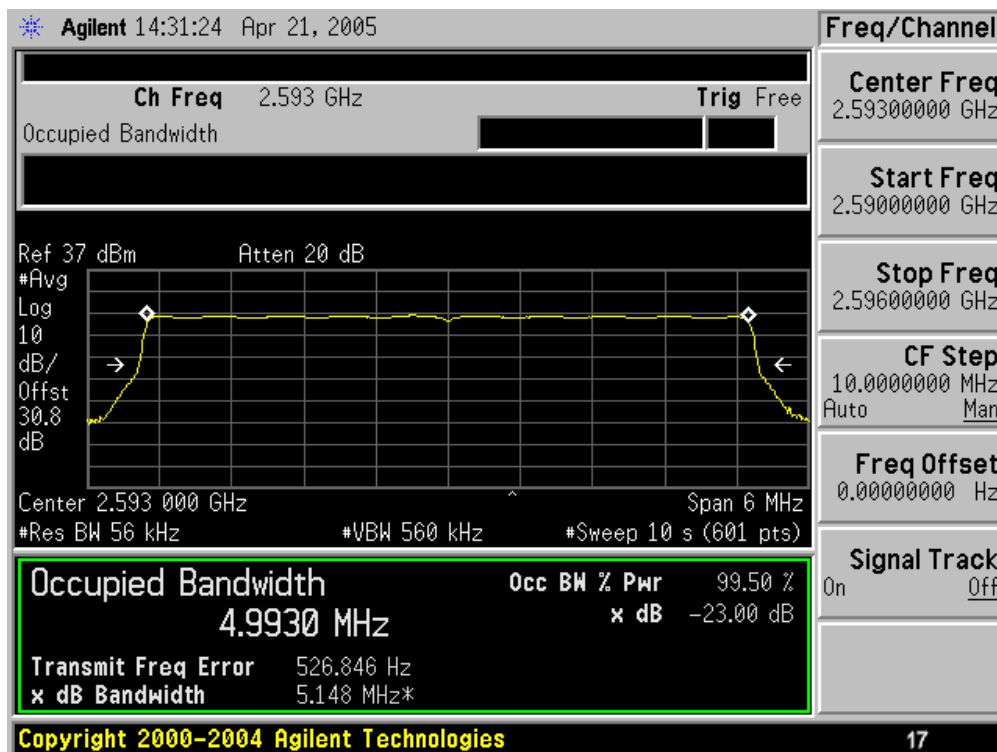
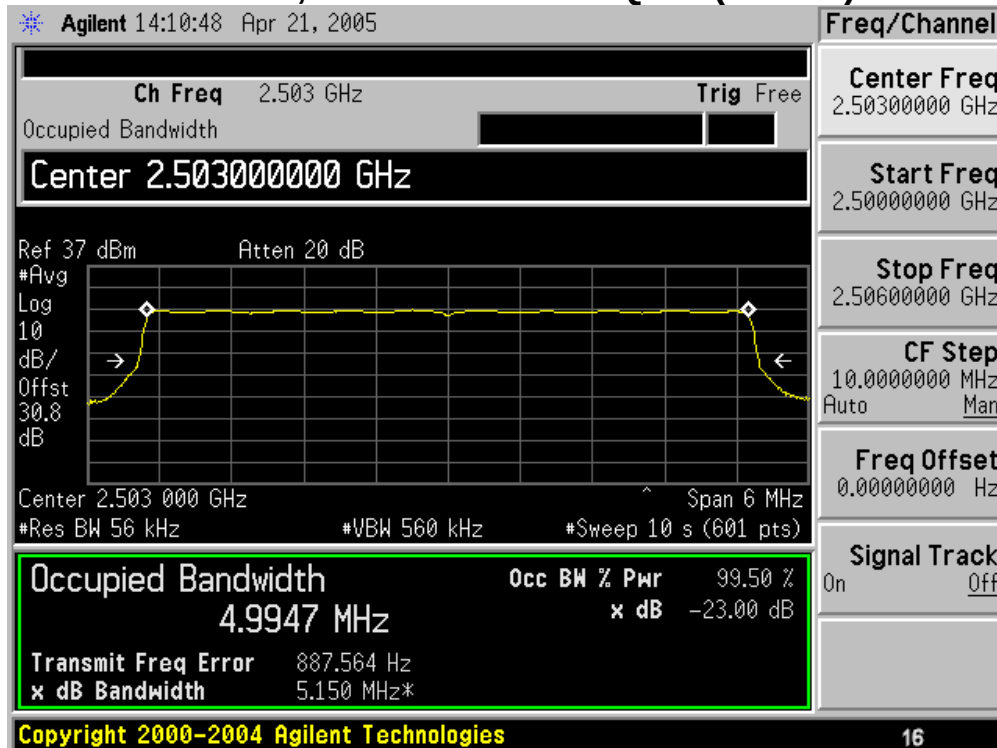


Occupied Bandwidth

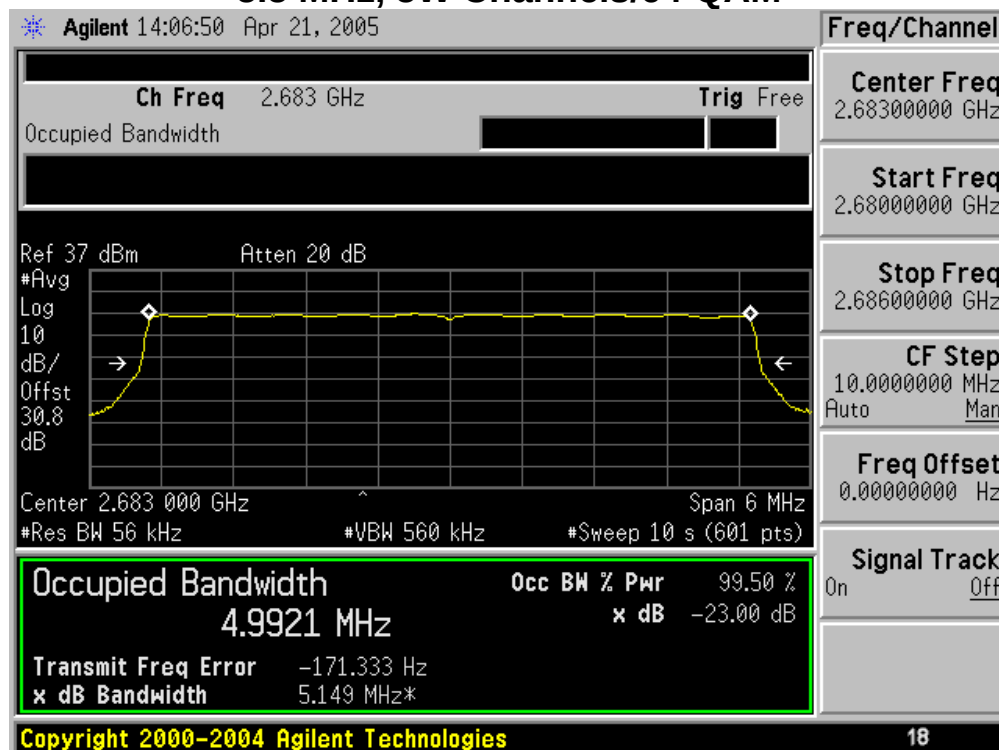
5.5 MHz, 5W Channels/16-QAM (Cont'd)



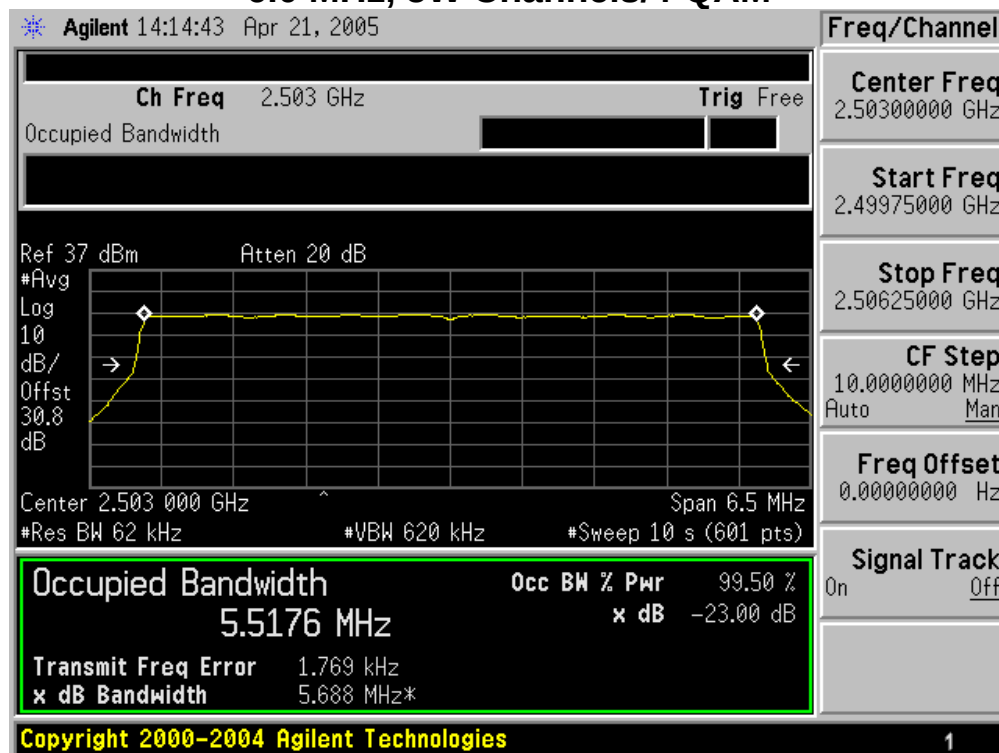
Occupied Bandwidth 5.5 MHz, 5W Channels/64-QAM (Cont'd)



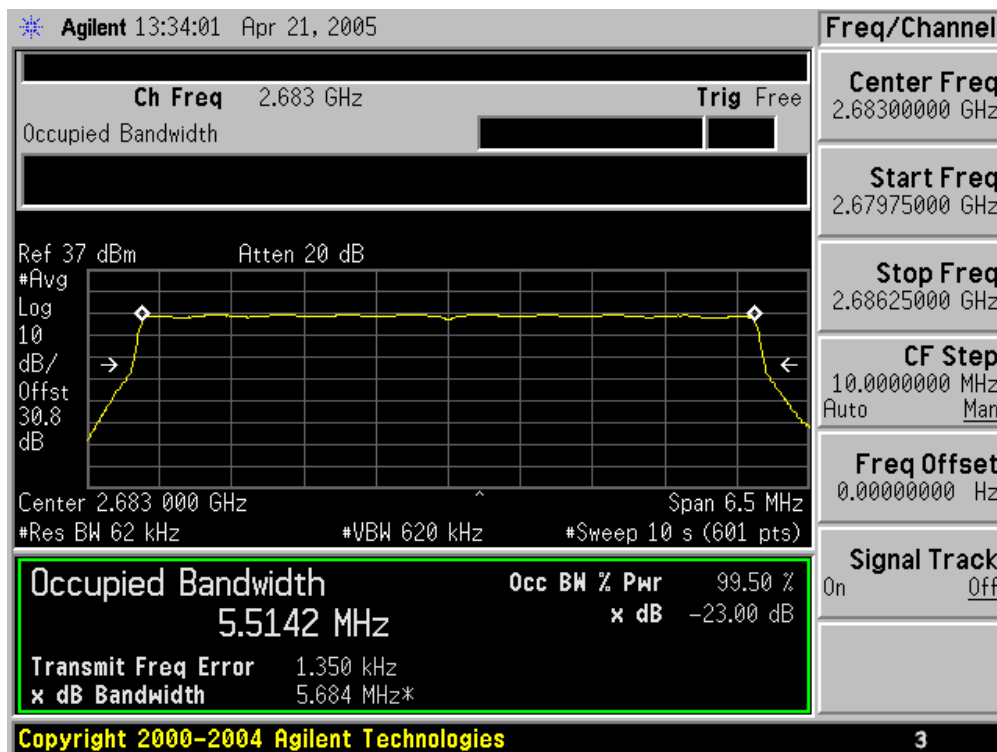
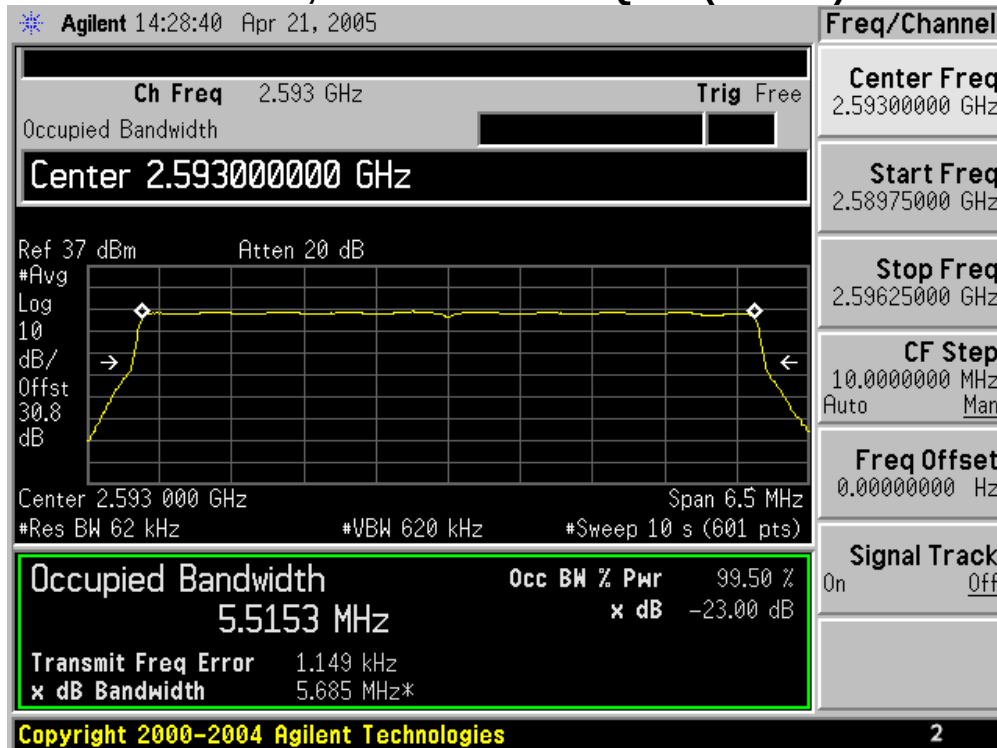
Occupied Bandwidth 5.5 MHz, 5W Channels/64-QAM



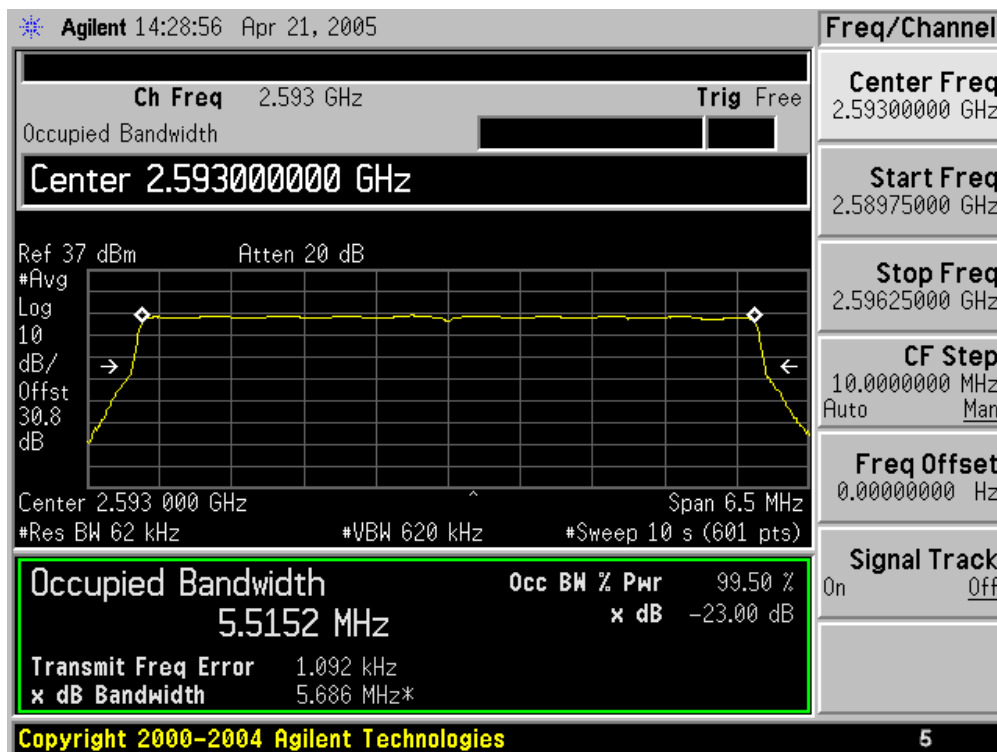
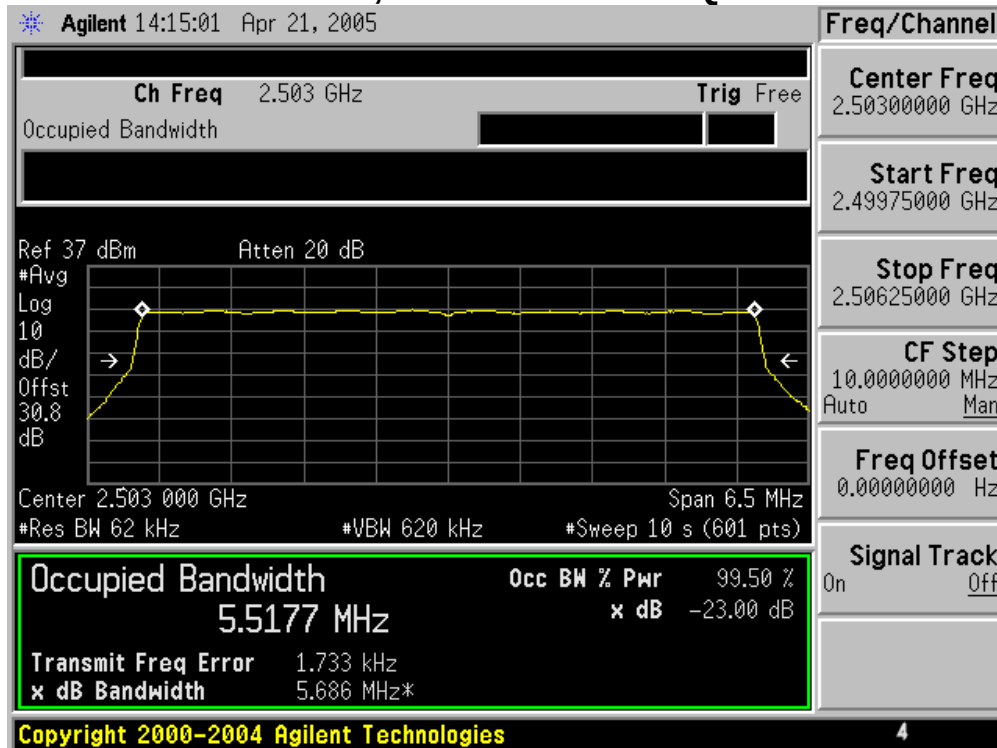
6.0 MHz, 5W Channels/4-QAM



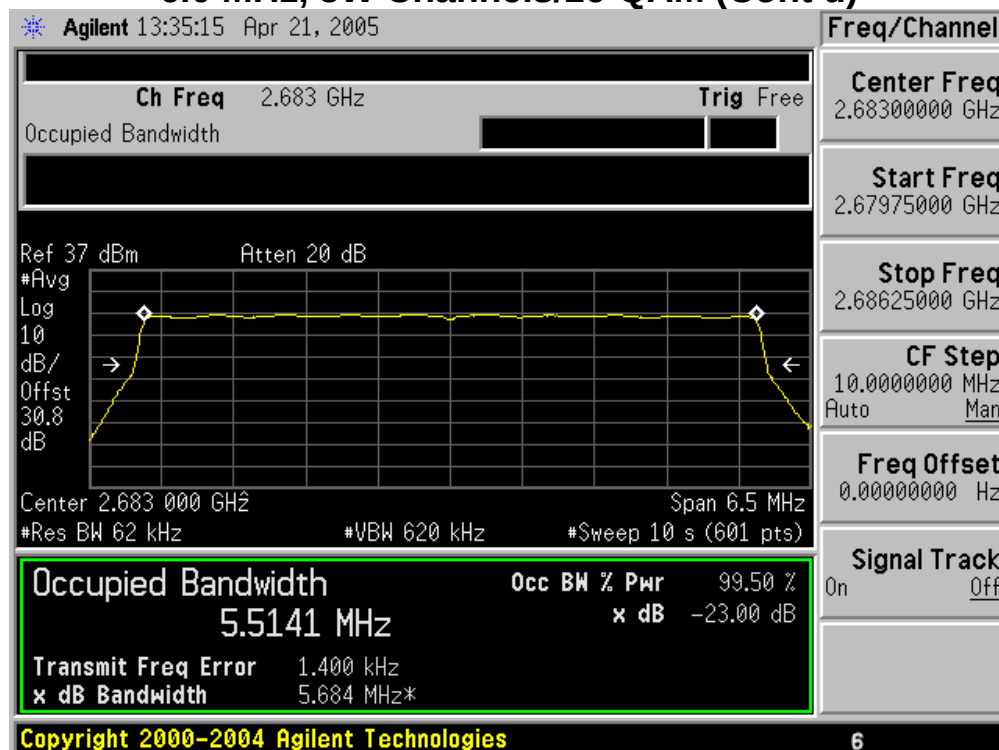
Occupied Bandwidth 6.0 MHz, 5W Channels/4-QAM (Cont'd)



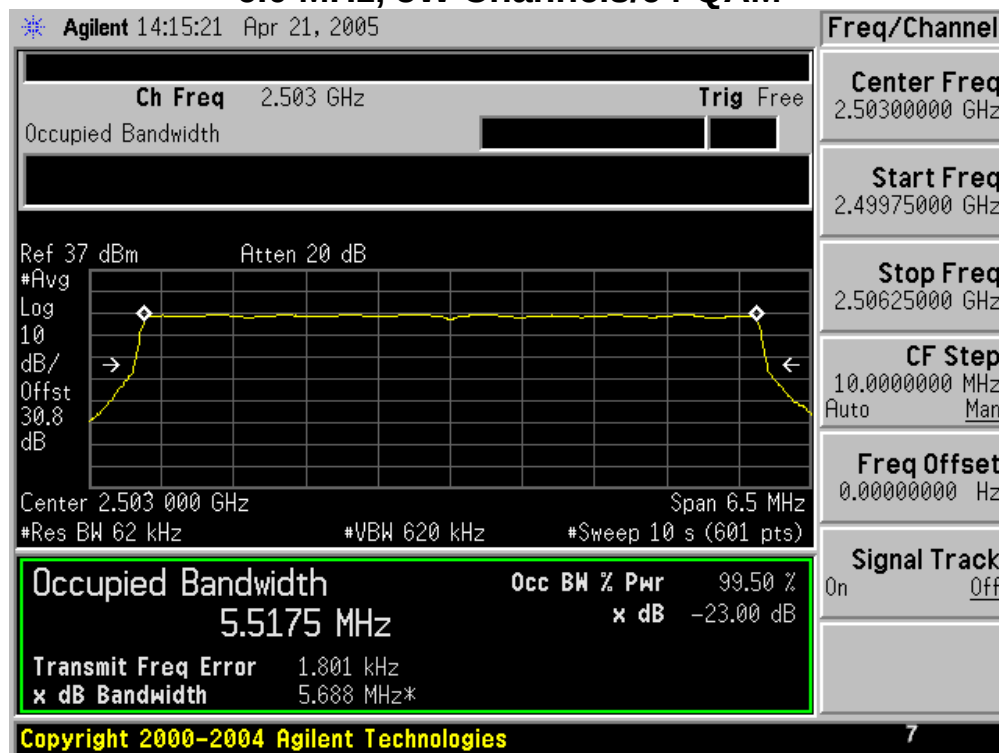
Occupied Bandwidth 6.0 MHz, 5W Channels/16-QAM



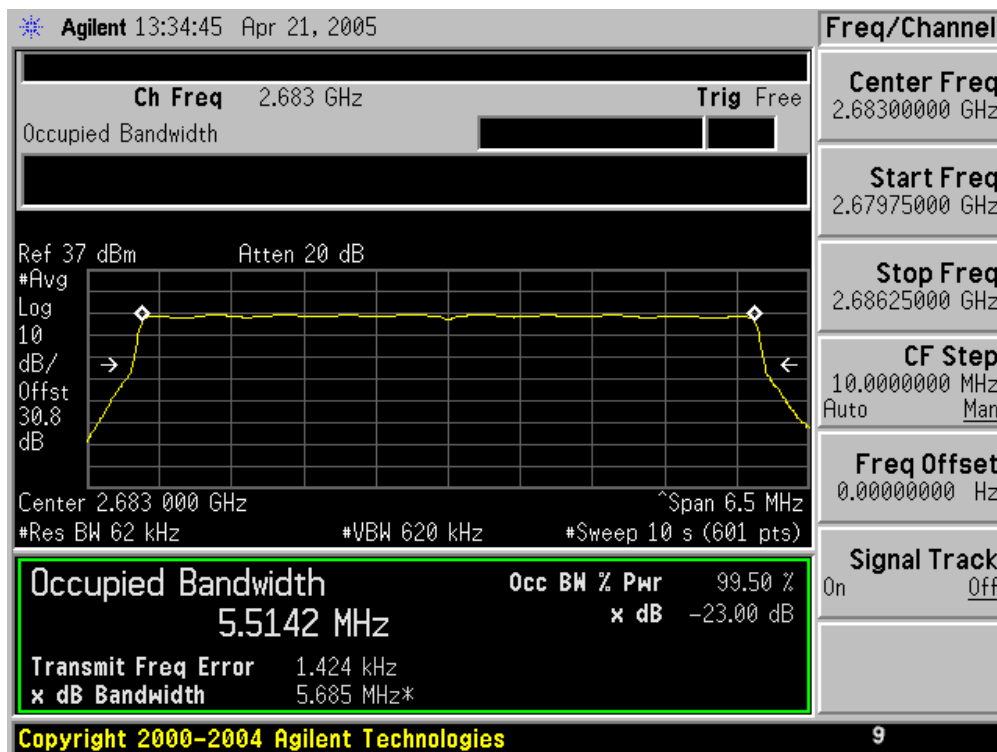
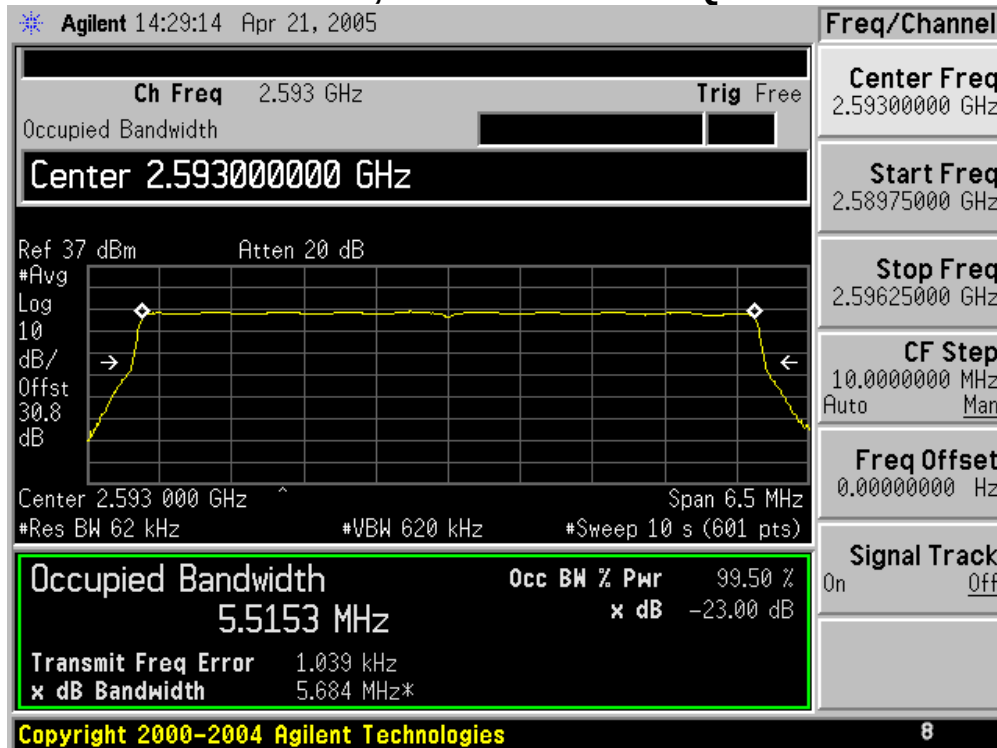
Occupied Bandwidth 6.0 MHz, 5W Channels/16-QAM (Cont'd)



6.0 MHz, 5W Channels/64-QAM

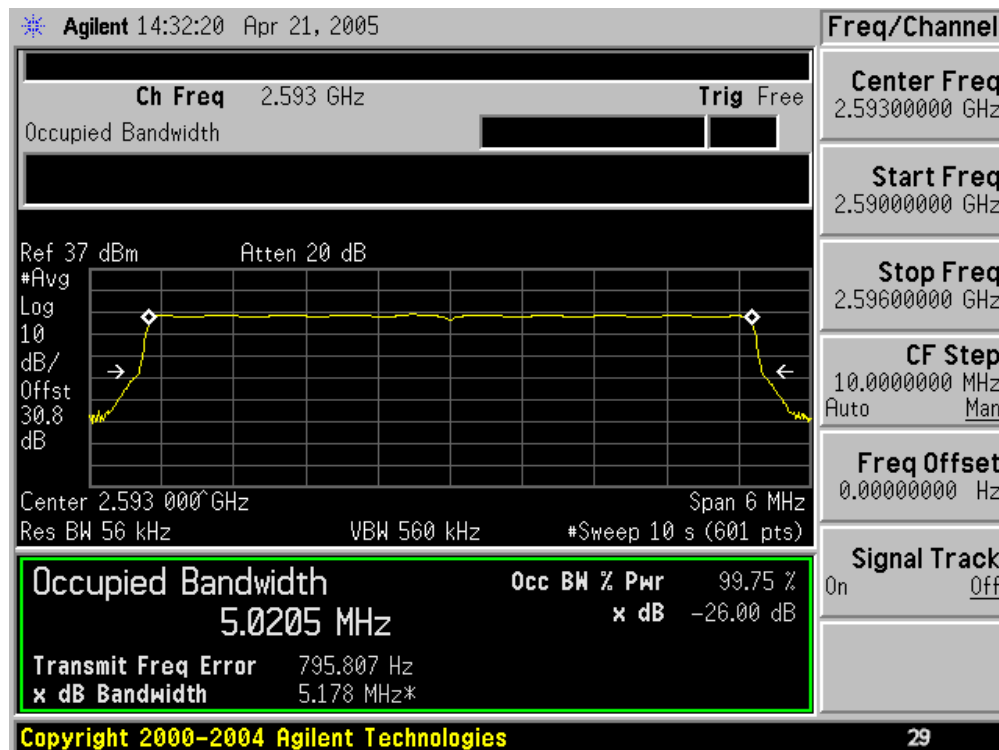
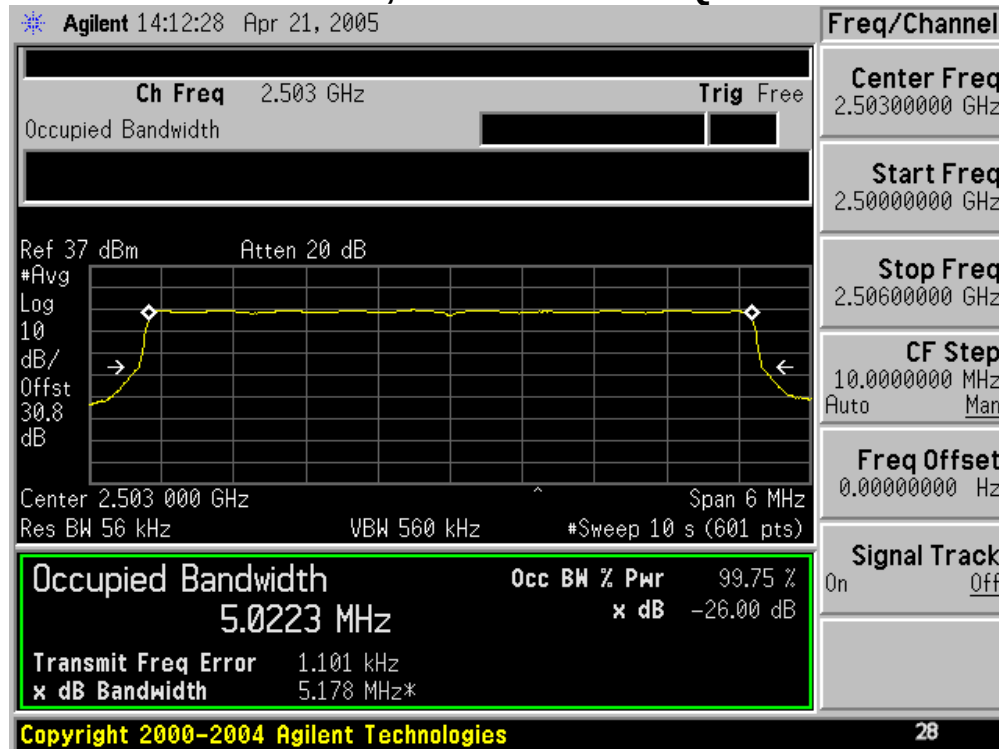


Occupied Bandwidth 6.0 MHz, 5W Channels/64-QAM



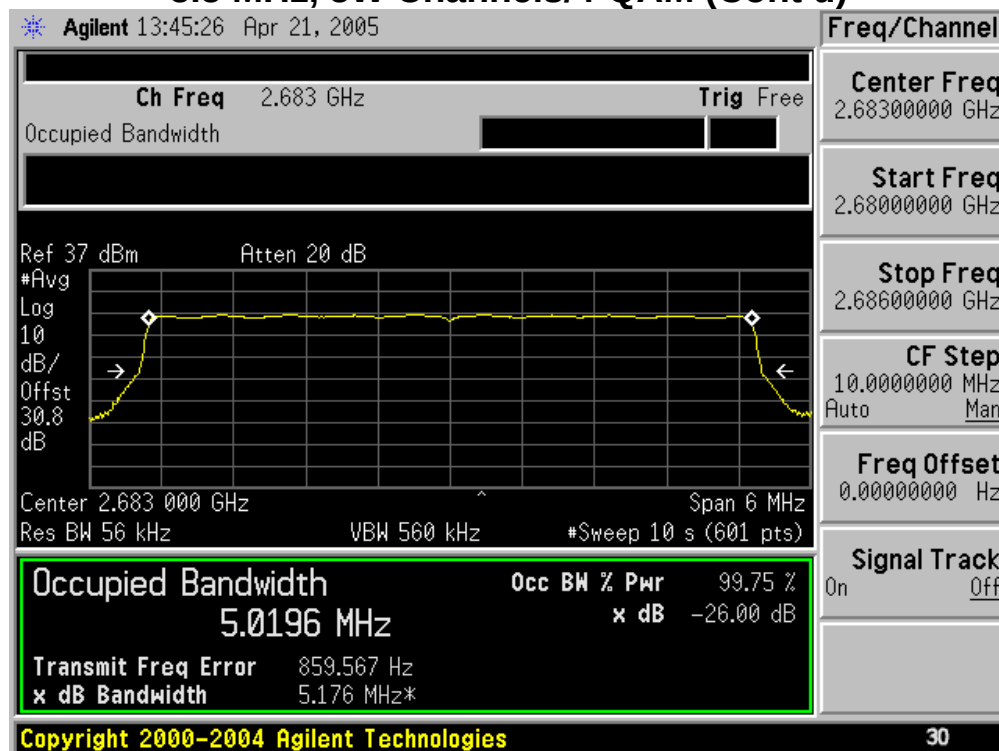
Emission Bandwidth Spectrum Analyzer Plots (5W)

5.5 MHz, 5W Channels/4-QAM

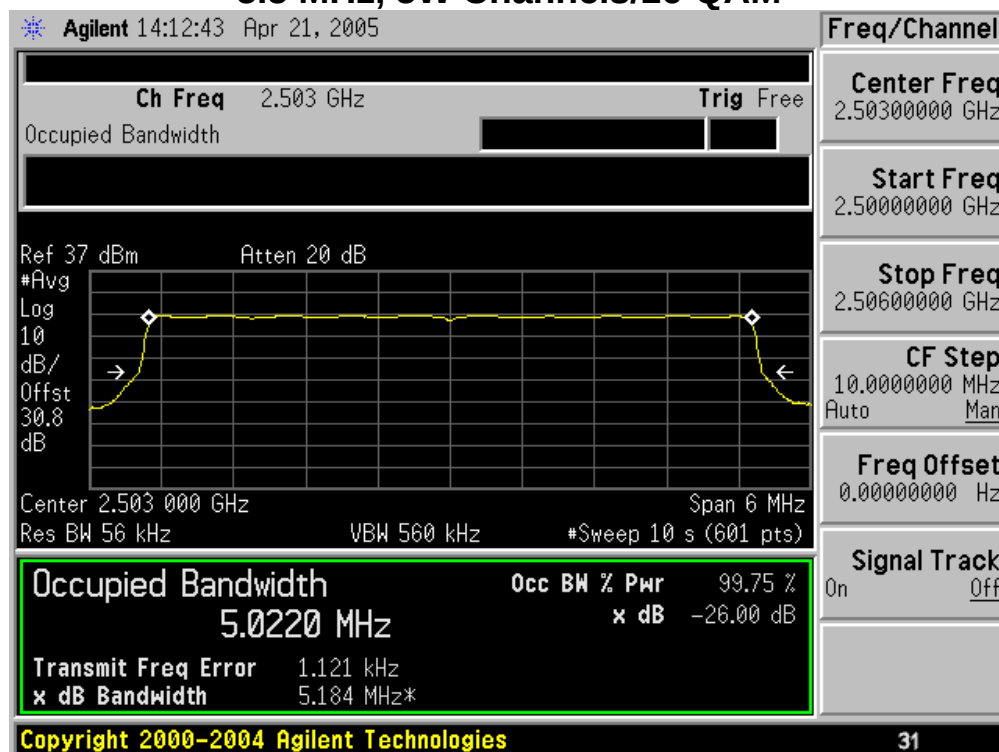


Emission Bandwidth

5.5 MHz, 5W Channels/4-QAM (Cont'd)

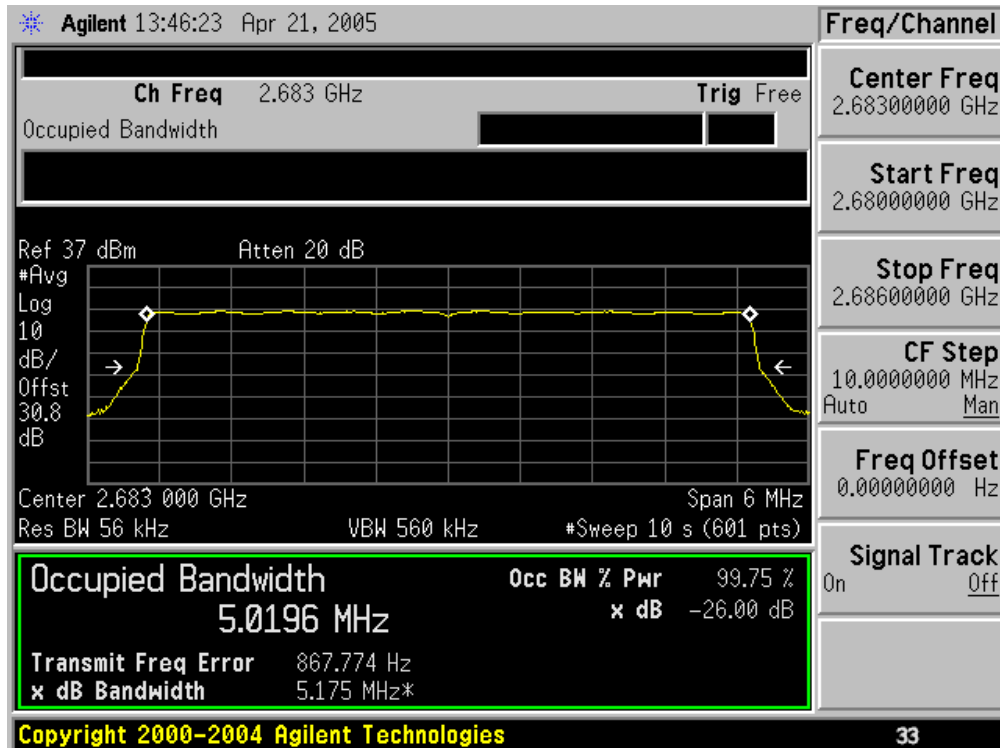
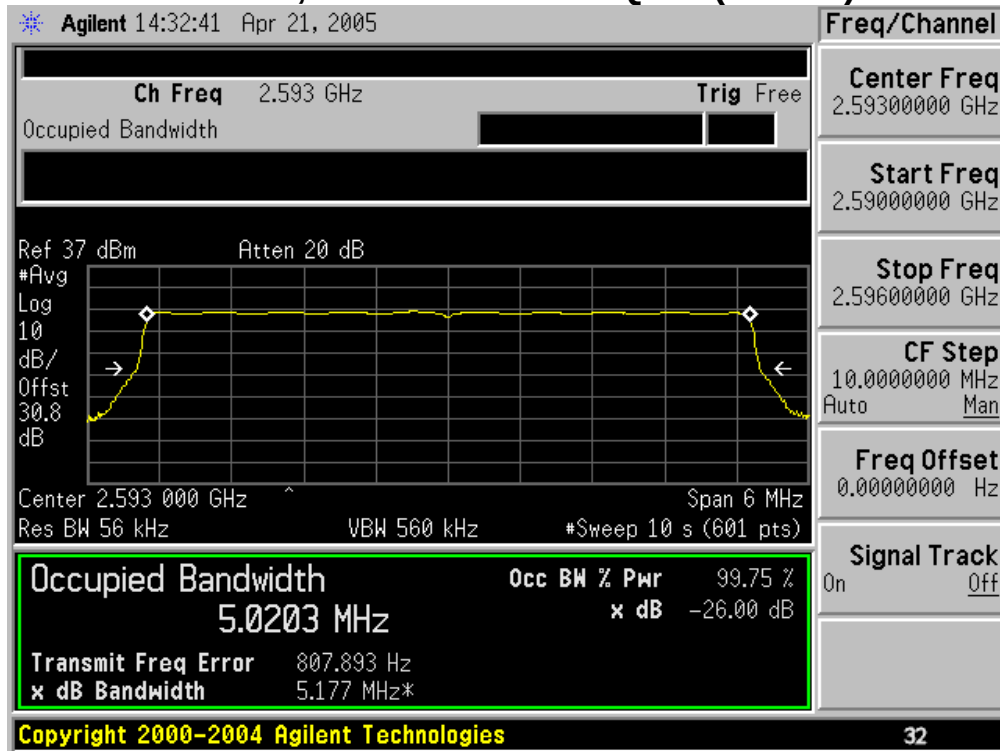


5.5 MHz, 5W Channels/16-QAM

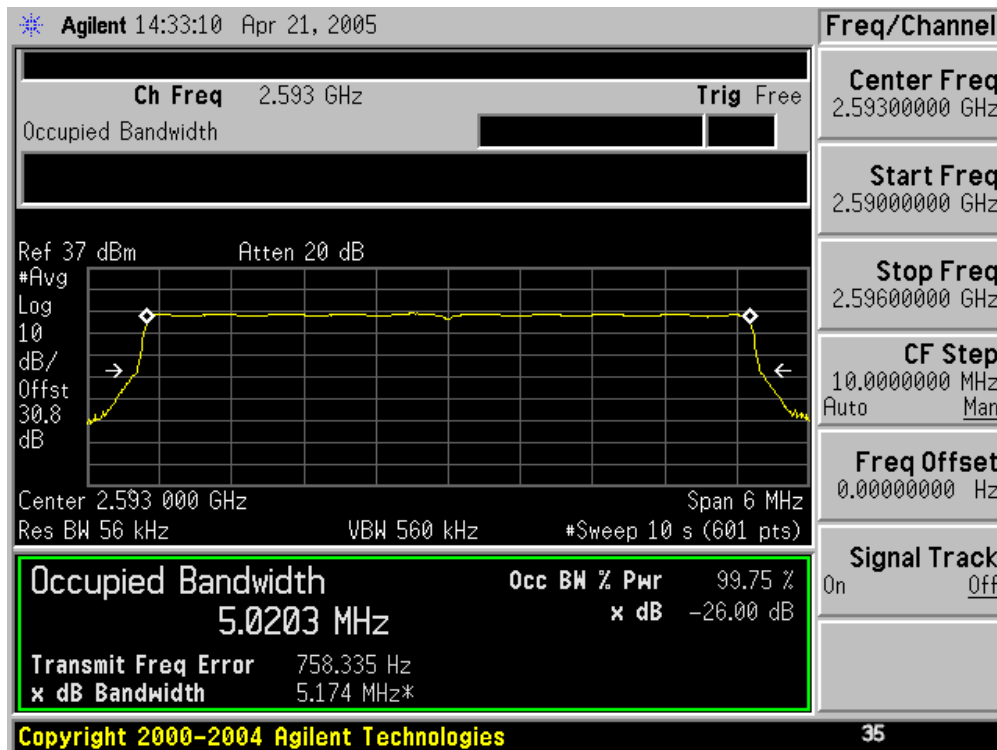
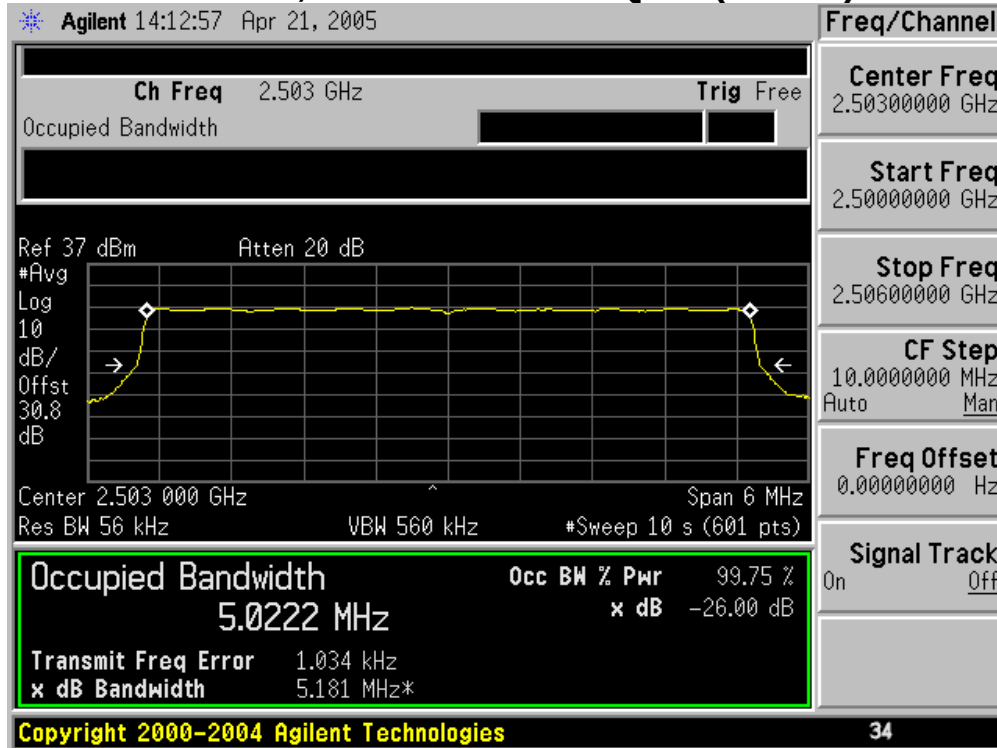


Emission Bandwidth

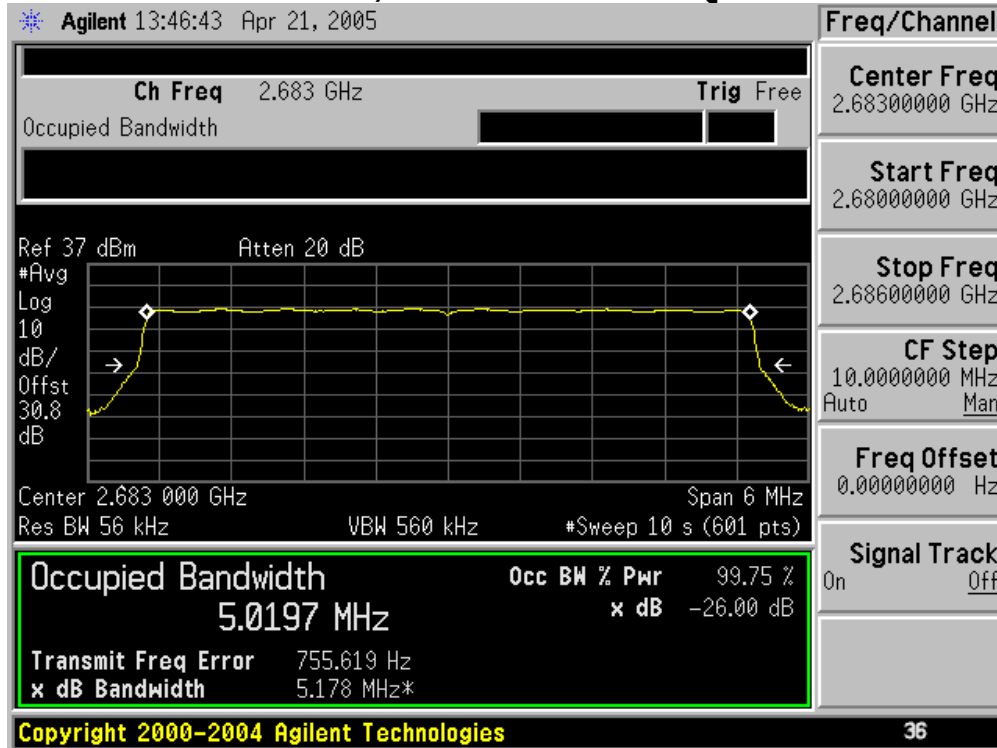
5.5 MHz, 5W Channels/16-QAM (Cont'd)



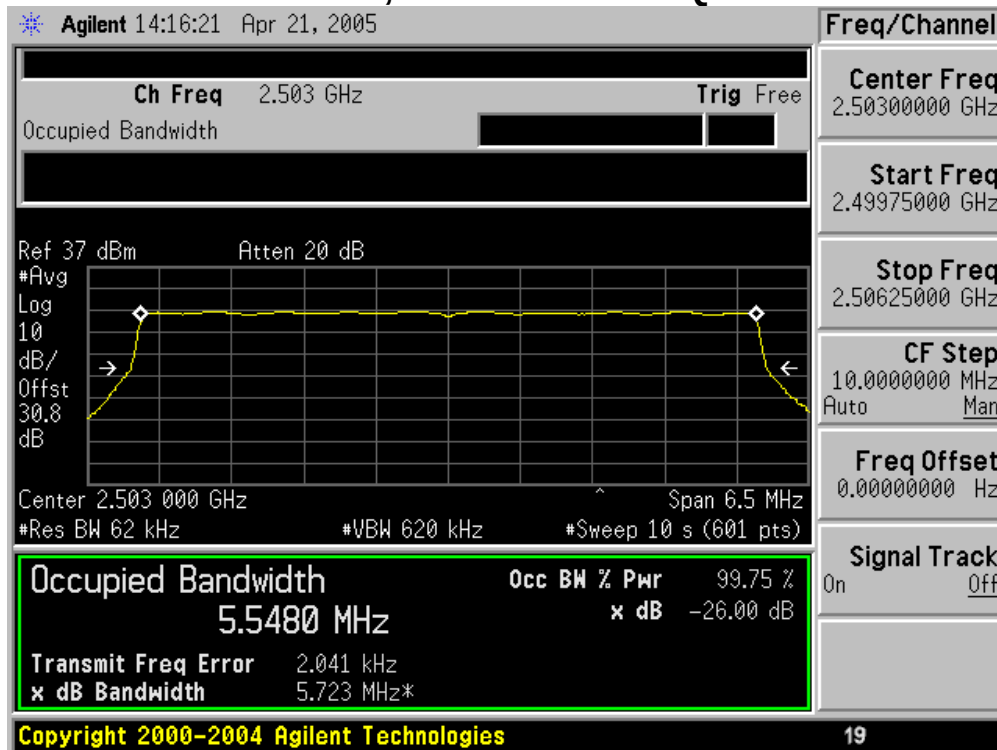
Emission Bandwidth 5.5 MHz, 5W Channels/64-QAM (Cont'd)



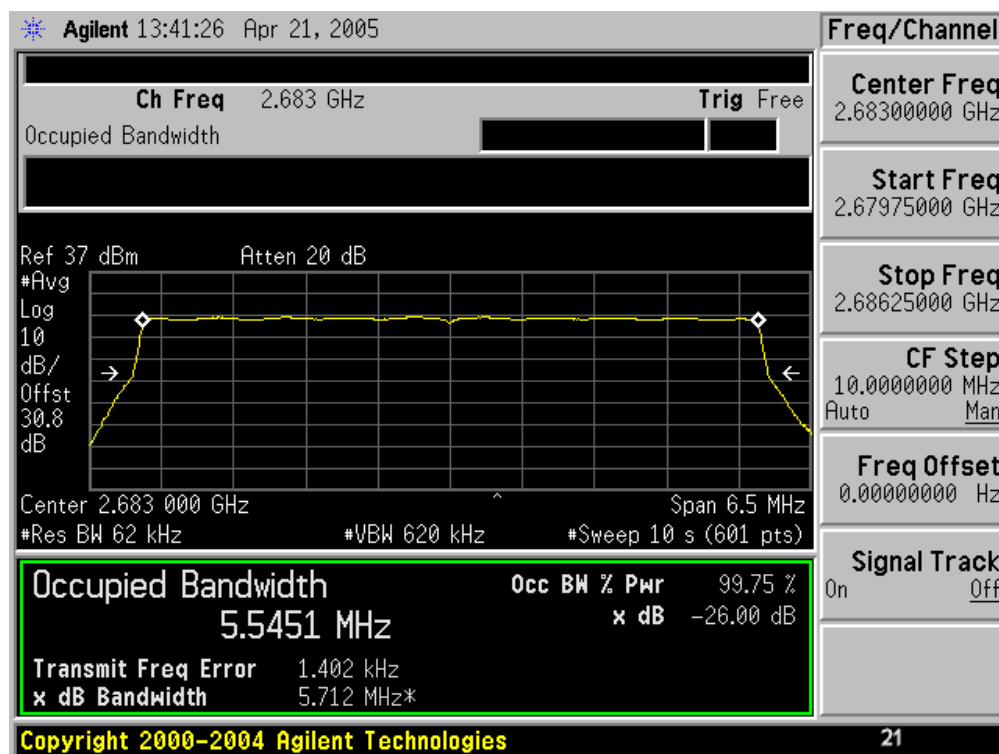
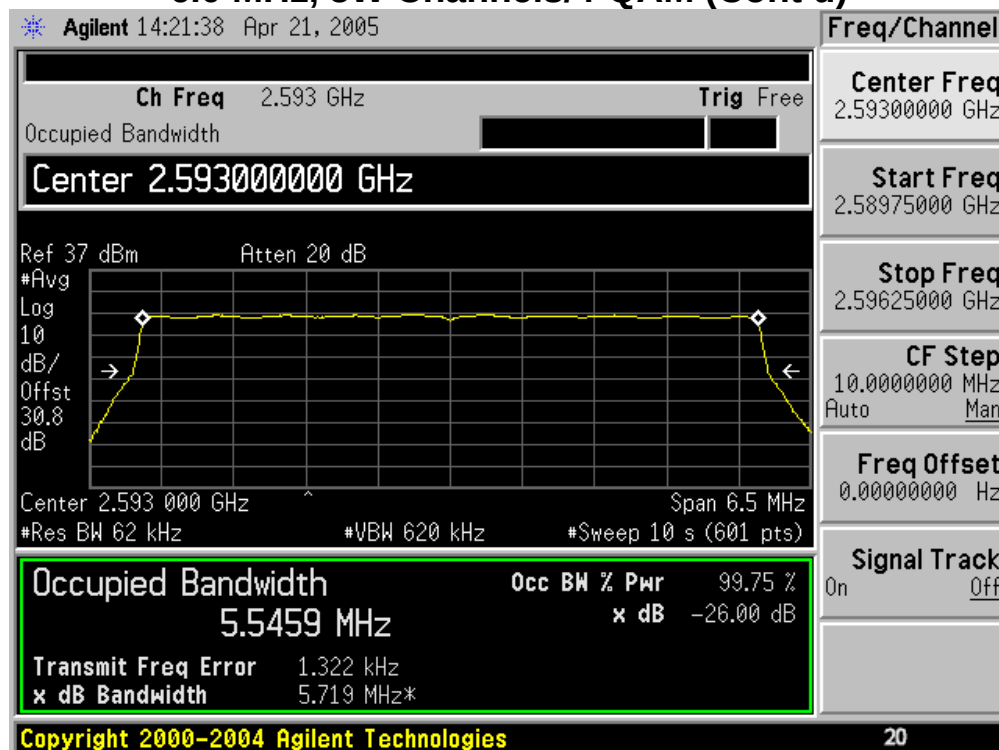
Emission Bandwidth 5.5 MHz, 5W Channels/64-QAM



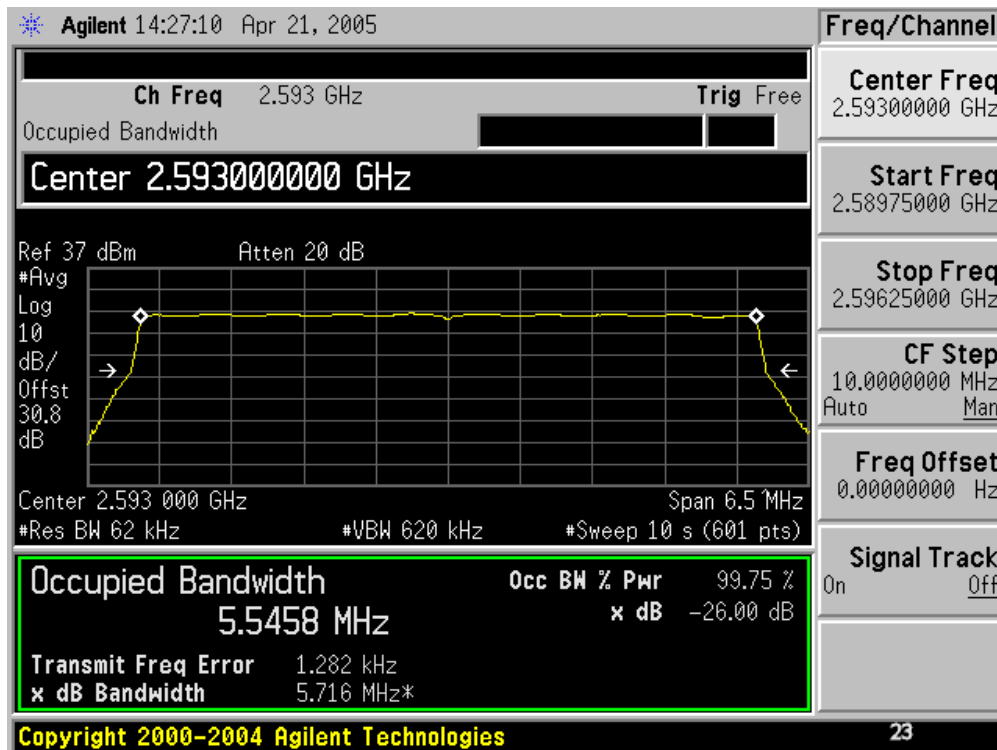
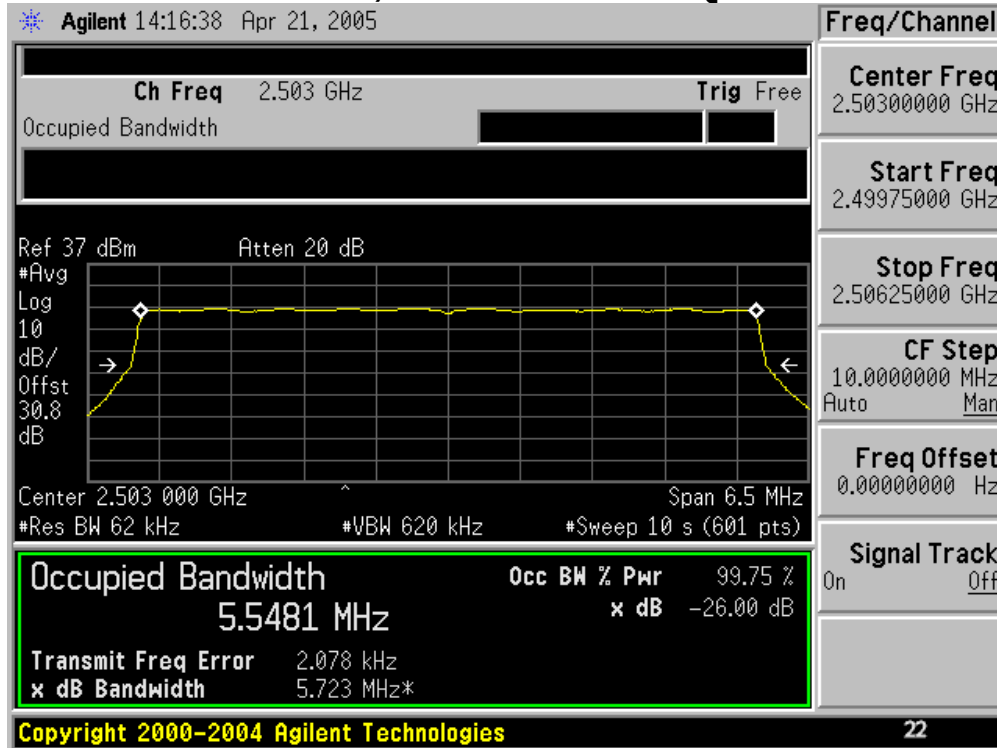
6.0 MHz, 5W Channels/4-QAM



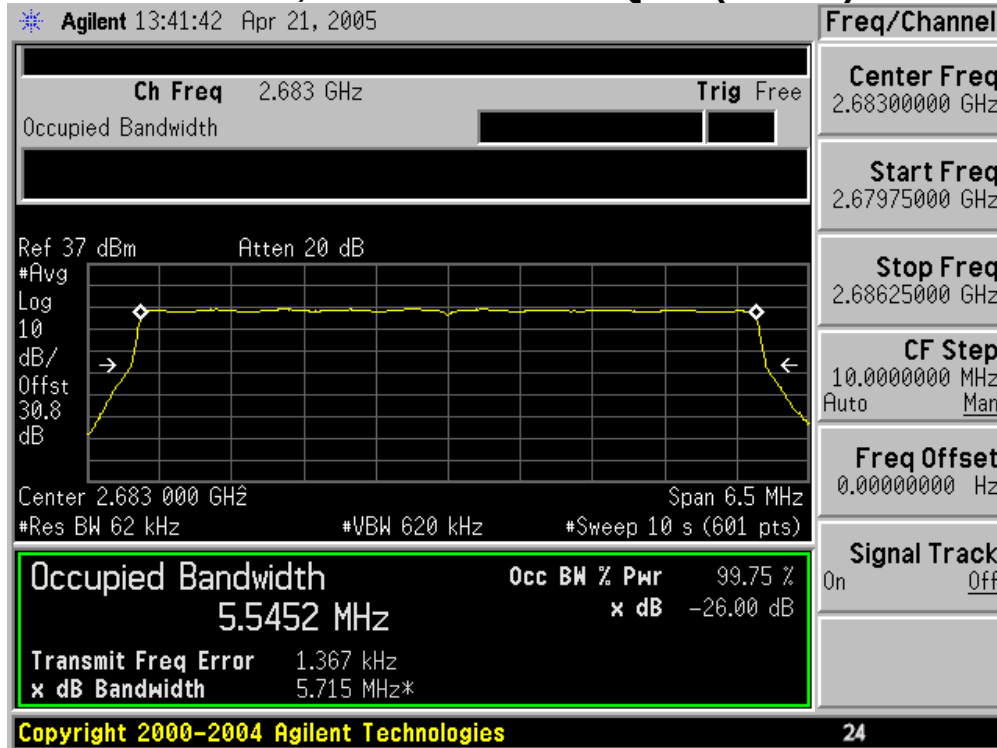
Emission Bandwidth 6.0 MHz, 5W Channels/4-QAM (Cont'd)



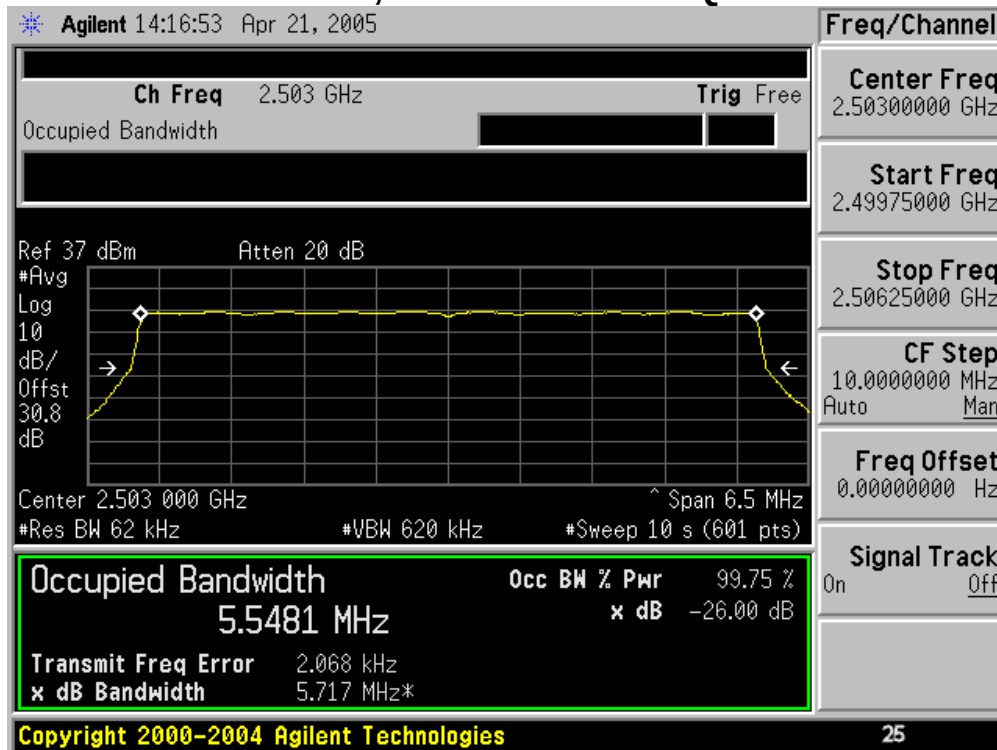
Emission Bandwidth 6.0 MHz, 5W Channels/16-QAM



Emission Bandwidth 6.0 MHz, 5W Channels/16-QAM (Cont'd)



6.0 MHz, 5W Channels/64-QAM



Emission Bandwidth 6.0 MHz, 5W Channels/64-QAM

