

Exhibit 6B

Test Report2

Parts 21/74

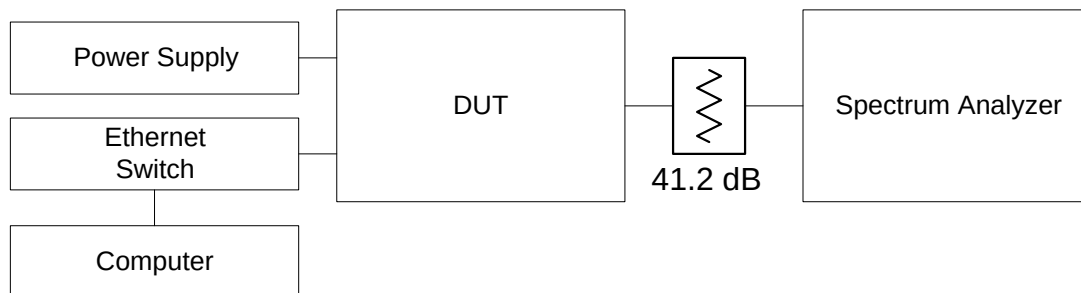
RF Power Output

Rule Part Number: 2.1046, 21.909(g)(2), 21.909(n), 74.939(g)(2), 74.939(p)
Tx Power < 2 watts
EIRP < 18 dBW

Test Procedure: The RF output power is measured with a spectrum analyzer. The RF output is applied to an attenuator that is connected to the spectrum analyzer RF input port. The transmitter is enabled in test mode with the attached computer. The attenuation of the attenuators and coax has been measured and is included in the spectrum analyzer offset level. Measurements are performed at three frequencies across the band, for each of the modulation formats available (4 QAM, 16 QAM, and 64 QAM).

Test Conditions: Frequency = 2503, 2593, 2683 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

Test Set-Up:



Test Results Summary:

Pass Tx power at antenna connector (≤ 2 watts) across frequency band and modulation format.

RF Power Output

Test Equipment:

DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Spectrum Analyzer	Agilent E4440A S/N: MY44022791 Calibrated on: 05/30/2004 Cal due: 05/30/2006
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
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: B205335003175
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04

Test Results: 14.29 % transmit duty cycle

Tx Power: (maximum)

Minimum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	-0.14	0.00097	-0.07	0.00098	-0.11	0.00097
2593	-0.07	0.00098	-0.08	0.00098	-0.08	0.00098
2683	0.24	0.00106	0.28	0.00107	0.29	0.00107
Maximum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	32.88	1.94089	32.88	1.94089	32.86	1.93197
2593	32.58	1.81134	32.57	1.80717	32.61	1.82390
2683	32.82	1.91426	32.79	1.90108	32.82	1.91426

RF Power Output

Test Conclusions:

Vertically Polarized Antenna

RF Power Output [P] = 33 dBm = 2 Watts

Vertical Antenna Gain (Isotropic) = 14.5 dBi

Maximum Transmitter Duty Cycle = 14.29 %

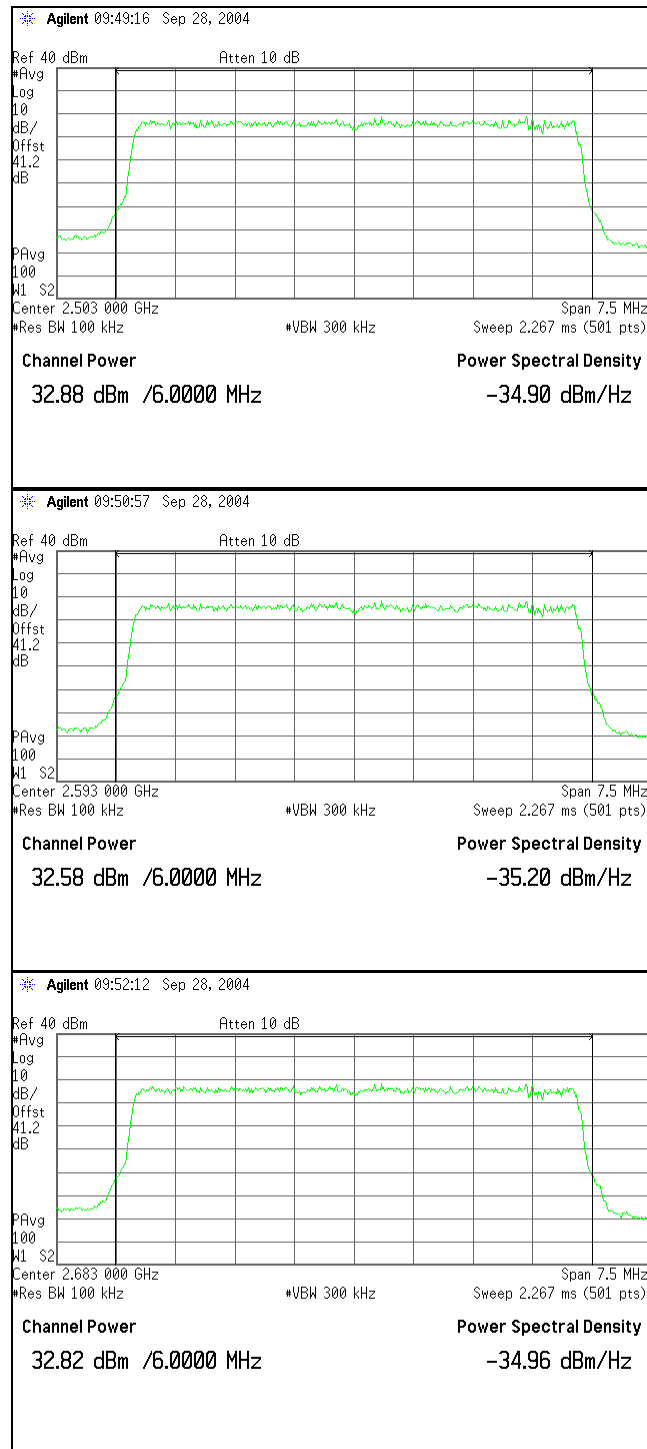
$EIRP = 10 \cdot \log[P(W)] + \text{Antenna Gain(dBi)} + 10 \cdot \log(\text{Duty Cycle})$

$EIRP = 10 \cdot \log(2) + 14.5 \text{dBi} + 10 \cdot \log(.1429)$

$EIRP = 3.01 \text{ dBW} + 14.5 \text{ dBi} + (-8.45 \text{dB}) = 9.06 \text{ dBiW} < 18 \text{ dBW}$

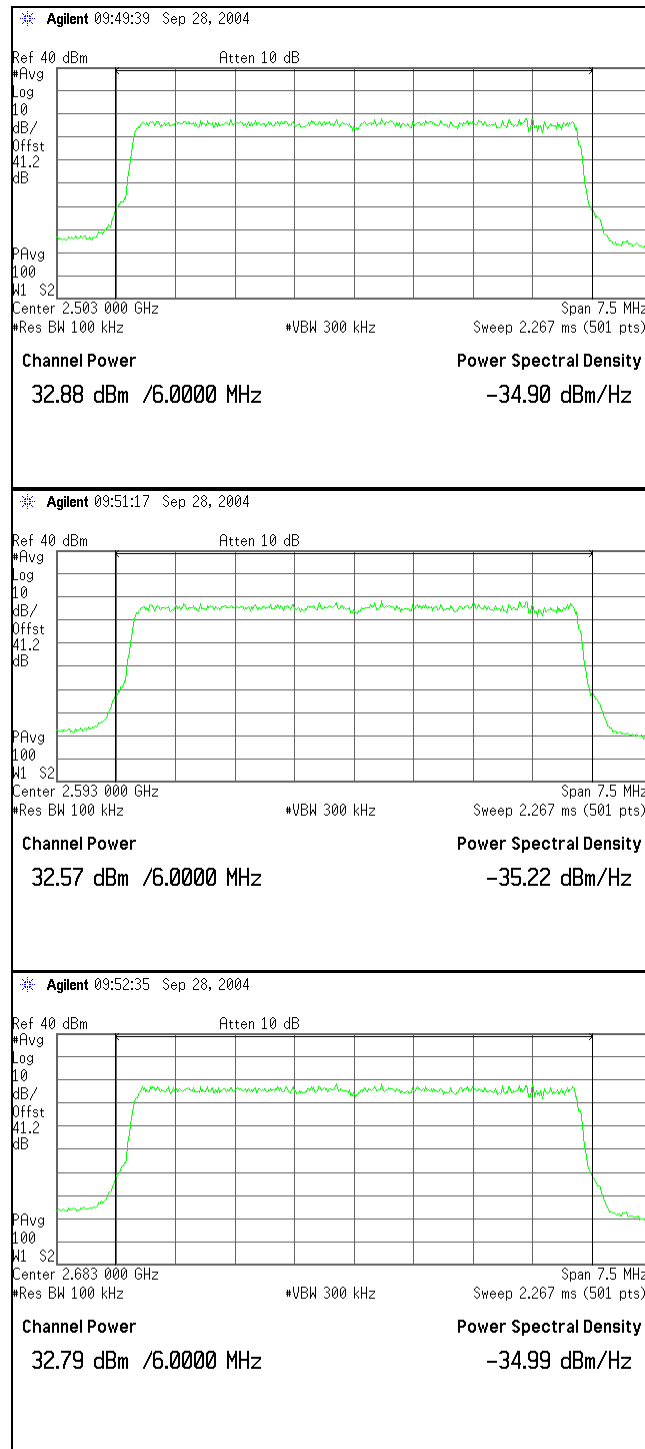
Pass: Transmitted Power Output Requirement for Vertically Polarized Antenna for user installation

RF Power Output (maximum)



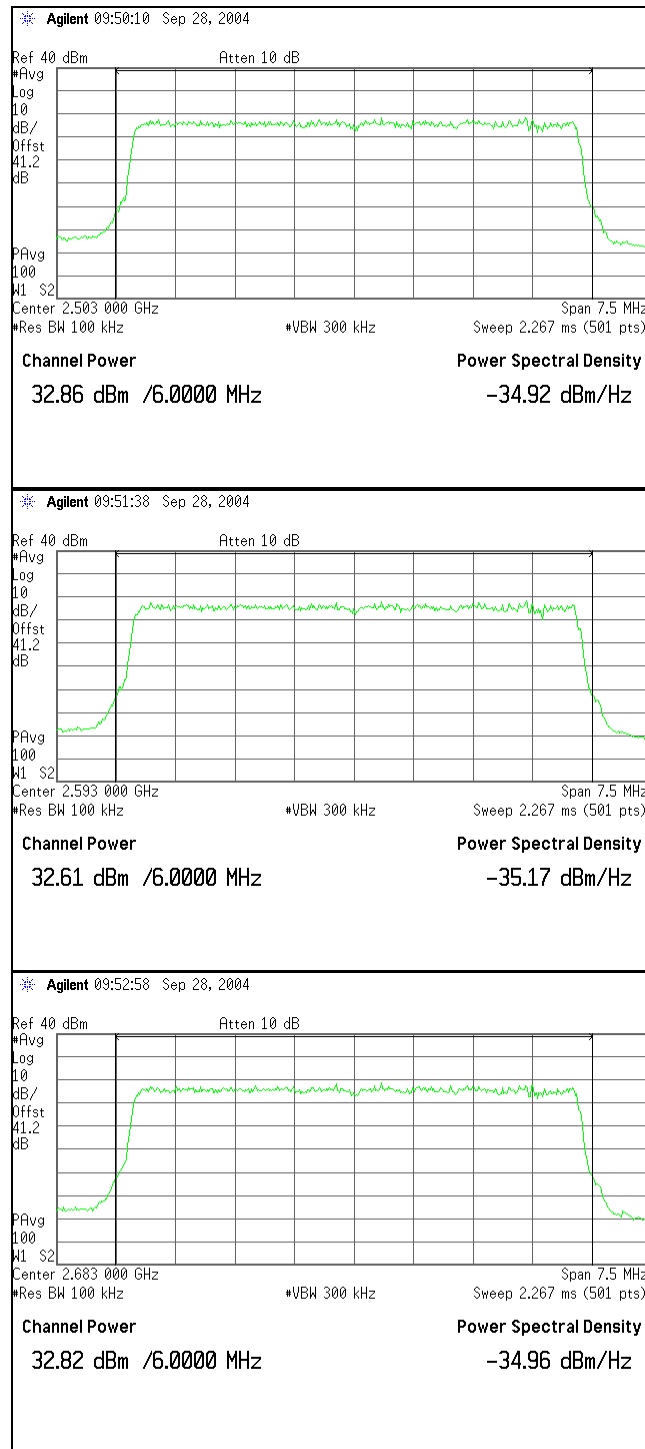
4-QAM

RF Power Output (maximum)



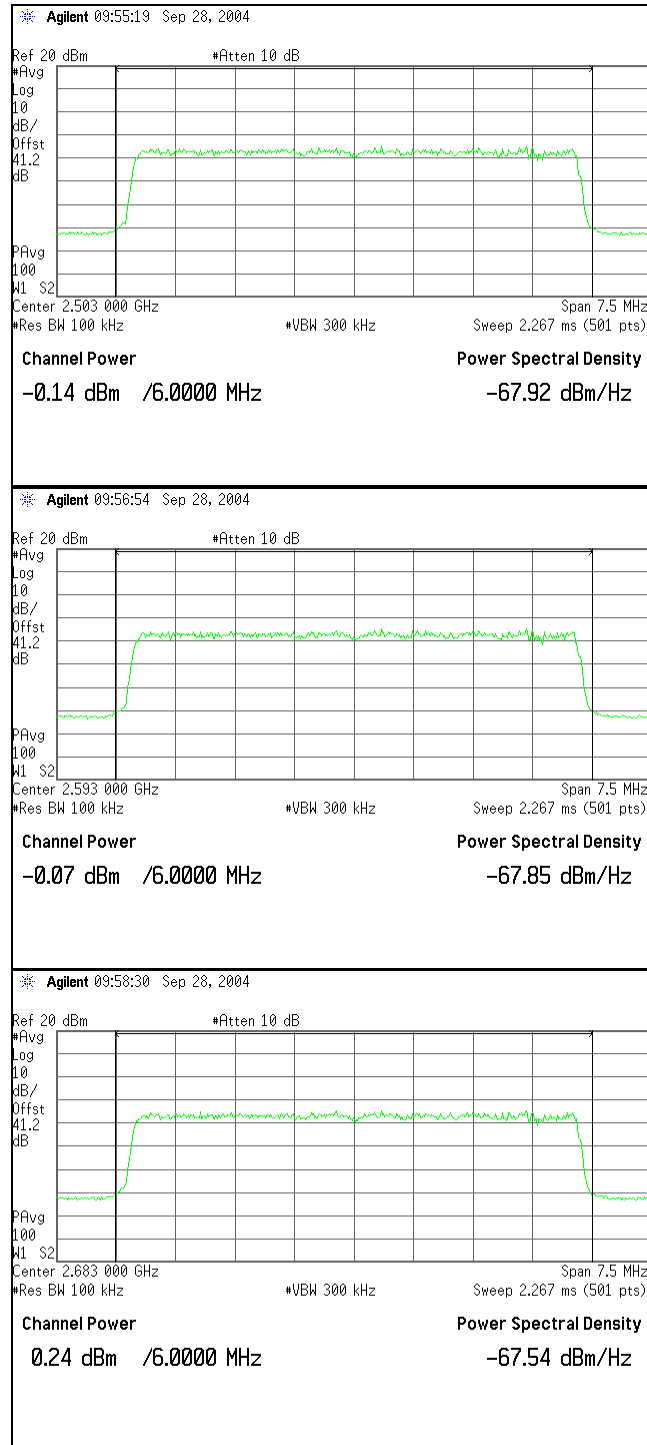
16-QAM

RF Power Output (maximum)



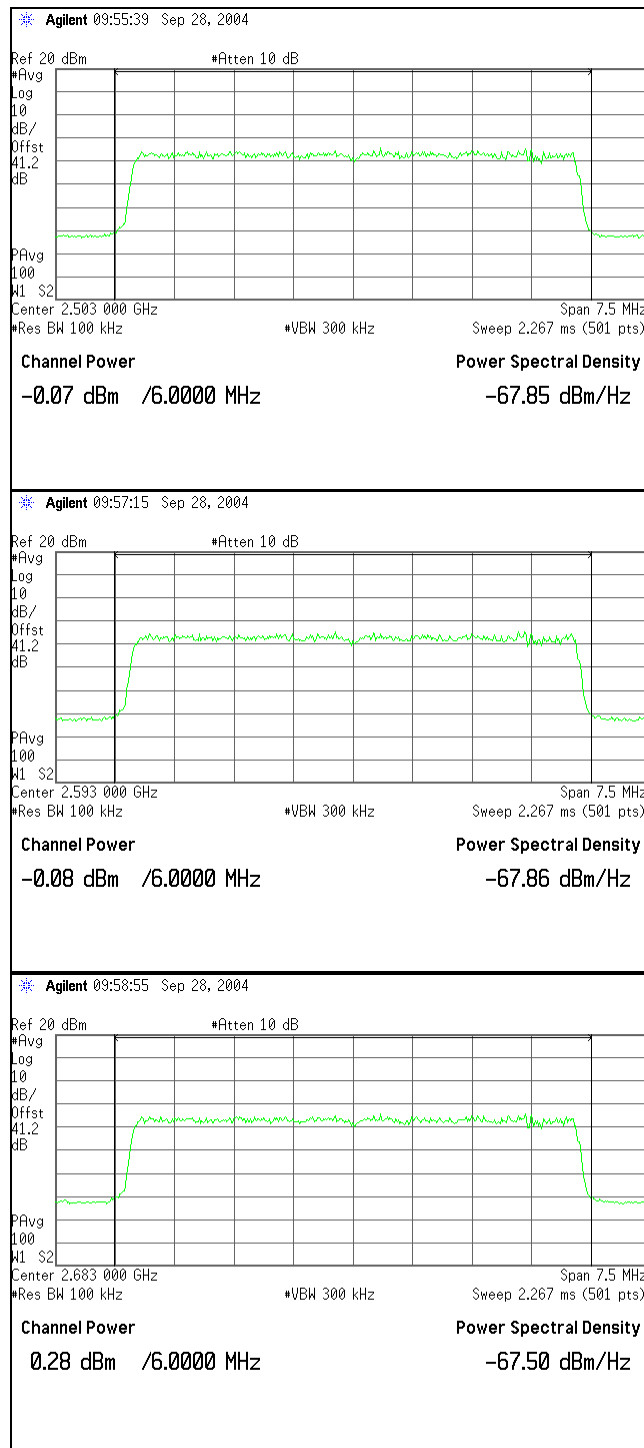
64-QAM

RF Power Output (minimum)



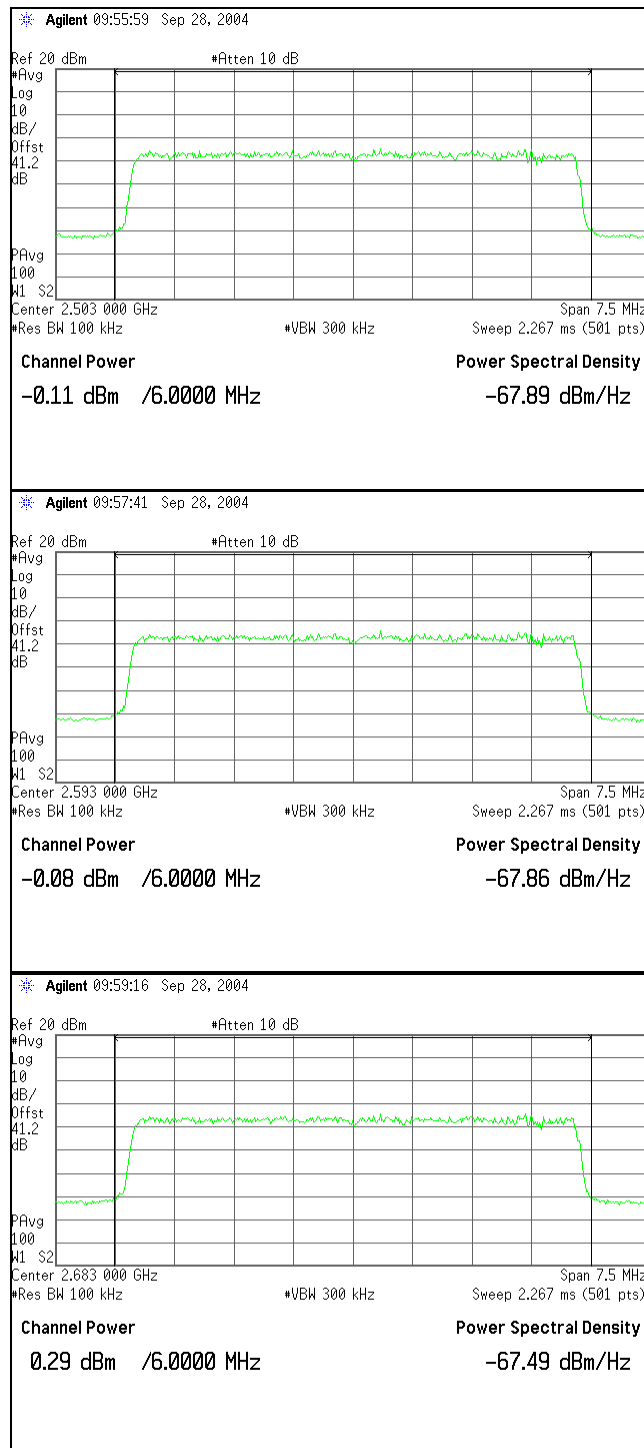
4-QAM

RF Power Output (minimum)



16-QAM

RF Power Output (minimum)



64-QAM

Modulation Characteristics

Rule Parts:

2.1047(d), 21.905(b), 21.908(d), 21.908(e), 74.936(a), 74.936(f)

Modulation Characteristics = OFDM

21.905(b) Quadrature amplitude modulation (QAM), digital vestigial sideband modulation (VSB), quadrature phase shift key modulation (QPSK), code division multiple access (CDMA), and orthogonal frequency division multiplex (OFDM) emissions may be employed, subject to compliance with the policies set forth in the Declaratory Ruling and Order, 11 FCC Rcd 18839 (1996). Use of OFDM also is subject to the subsequent Declaratory Ruling and Order, DA 99-554 (Mass Med. Bur. rel. Mar. 19, 1999).

21.908(d) The maximum out-of-band power of an MDS response station using all or part of a 6 MHz channel, employing digital modulation and transmitting with an EIRP greater than -6 dBW per 6 MHz channel shall be attenuated (as measured in accordance with paragraph (e) of this section) at the 6 MHz channel edges at least 25 dB relative to the average 6 MHz channel power level, then attenuated along a linear slope to at least 40 dB at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB at all other frequencies.

21.908(e) In measuring compliance with the out-of-band emissions limitations, the licensee shall employ one of two methods in each instance: (1) absolute power measurement of the average signal power with one instrument, with measurement of the spectral attenuation on a separate instrument; or (2) relative measurement of both the average power and the spectral attenuation on a single instrument. The formula for absolute power measurements is to be used when the average signal power is found using a separate instrument, such as a power meter; the formula gives the amount by which the measured power value is to be attenuated to find the absolute power value to be used on the spectrum analyzer or equivalent instrument at the spectral point of concern. The formula for relative power measurements is to be used when the average signal power is found using the same instrument as used to measure the attenuation at the specified spectral points, and allows different resolution bandwidths to be applied to the two parts of the measurement; the formula gives the required amplitude separation (in dB) between the flat top of the (digital) signal and the point of concern.

Modulation Characteristics

For absolute power measurements:

Attenuation in dB (below channel power) = $A + 10\log(CBW / RBW)$

For relative power measurements:

Attenuation in dB (below flat top) = $A + 10\log(RBW1 / RBW2)$

Where:

A = Attenuation specified for spectral point (e.g., 25, 35, 40, 60 dB)

CBW = Channel bandwidth (for absolute power measurements)

RBW = Resolution bandwidth (for absolute power measurements)

$RBW1$ = Resolution bandwidth for flat top measurement (relative)

$RBW2$ = Resolution bandwidth for spectral point measurement (relative)

74.936(a) An ITFS station may employ amplitude modulation (C3F) for the transmission of the visual signal and frequency modulation (F3E) or (G3E) for the transmission of the aural signal when transmitting a standard analog television signal. Quadrature amplitude modulation (QAM), digital vestigial sideband modulation (VSB), quadrature phase shift key modulation (QPSK), code division multiple access (CDMA) and orthogonal frequency division multiplex (OFDM) emissions may be employed, subject to compliance with the policies set forth in the *Declaratory Ruling and Order*, 11 FCC Rcd 18839 (1996). Use of OFDM also is subject to the subsequently *Digital Declaratory Ruling and Order*, DA 99-554 (Mass Med. Bur. rel. Mar. 19, 1999).

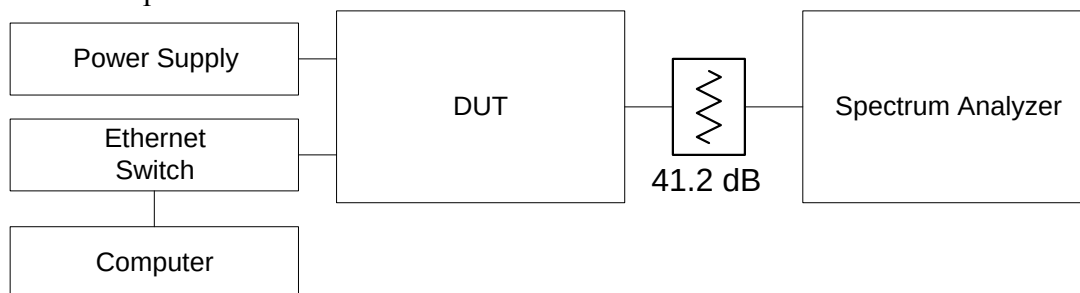
74.936(f) The maximum out-of-band power of an ITFS response station using all or part of a 6 MHz channel, employing digital modulation and transmitting with an EIRP greater than -6 dBW per 6 MHz channel shall be attenuated (as measured in accordance with §21.908(e)) at the 6 MHz channel edges at least 25 dB relative to the average 6 MHz channel power level, then attenuated along a linear slope to at least 40 dB at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB at all other frequencies. The maximum out-of-band power of an ITFS response station using all or part of a 6 MHz channel, employing digital modulation and transmitting with an EIRP no greater than -6 dBW per 6 MHz channel shall be attenuated (as measured in accordance with §21.908(e)) at the channel edges at least 25 dB relative to the average 6 MHz channel transmitter output power level (P), then attenuated along a linear slope to at least 40 dB or $33+10\log(P)$ dB, whichever is the lesser attenuation, at 250 kHz beyond the nearest channel edge, then attenuated along a linear slope from that level to at least 60 dB or $43+10\log(P)$ dB, whichever is the lesser attenuation, at 3 MHz above the upper and below the lower licensed channel edges, and attenuated at least 60 dB or $43+10\log(P)$ dB, whichever is the lesser attenuation, at all other frequencies.

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. The Spectrum Analyzer is time gated, to capture the transmission during the burst. An RMS detector is used to measure the average power of the transmission. The resolution bandwidth of the flat top measurement is equal to the resolution bandwidth of the spectral point measurement thereby setting the $10\log(RBW1 / RBW2) = 0$ for the relative power measurement method. The transmitter is enabled in test mode with the attached computer. The attenuation of the attenuators and coax has been measured and is noted in the block diagram below. The attenuation value external to the spectrum analyzer is used for this measurement since the test is a relative measurement for mask compliance. The spectrum analyzer offset level is adjusted to place the mask in a desired location on the display for measurement purposes. Measurements are performed at three frequencies across the band, for each of the modulation formats available (4 QAM, 16 QAM, and 64 QAM).

Test Conditions: Frequencies = 2503, 2593, 2683 MHz
Temperature = 25 °C
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

Test Set-Up:



Modulation Characteristics

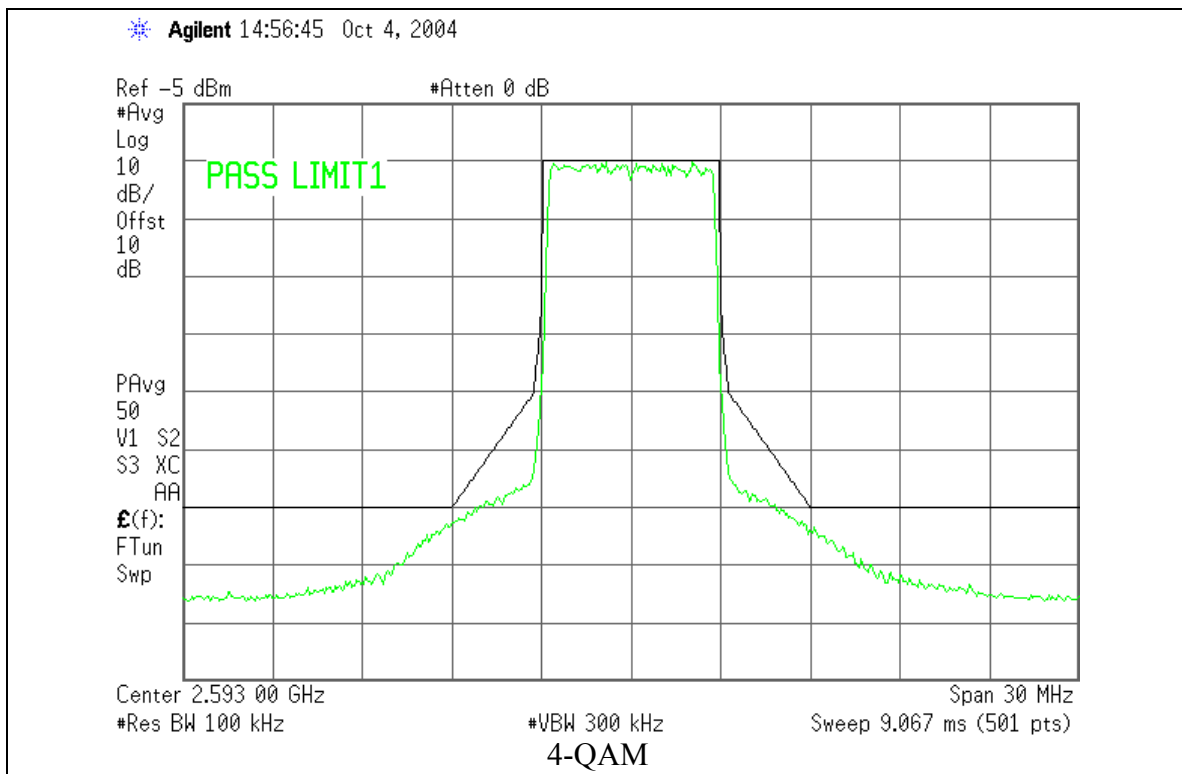
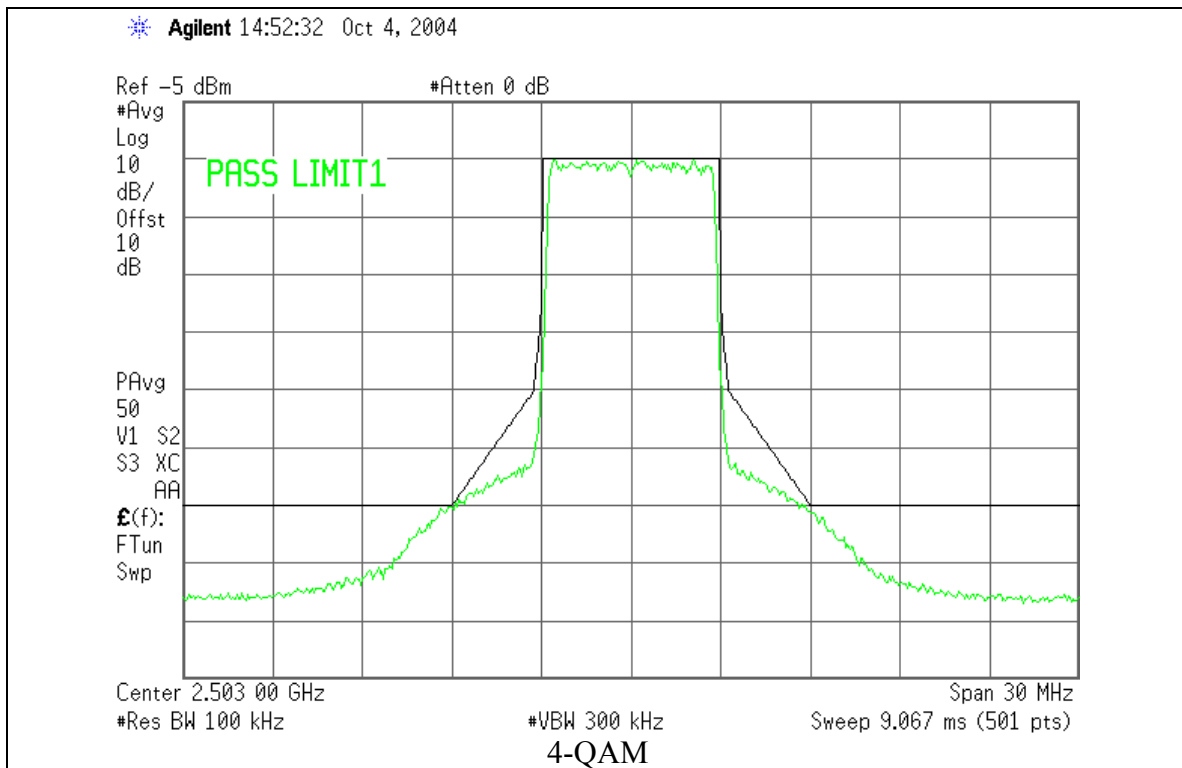
Test Equipment:

DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Spectrum Analyzer	Agilent E4440A S/N: MY44022791 Calibrated on: 05/30/2004 Cal due: 05/30/2006
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
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: B205335003175
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04

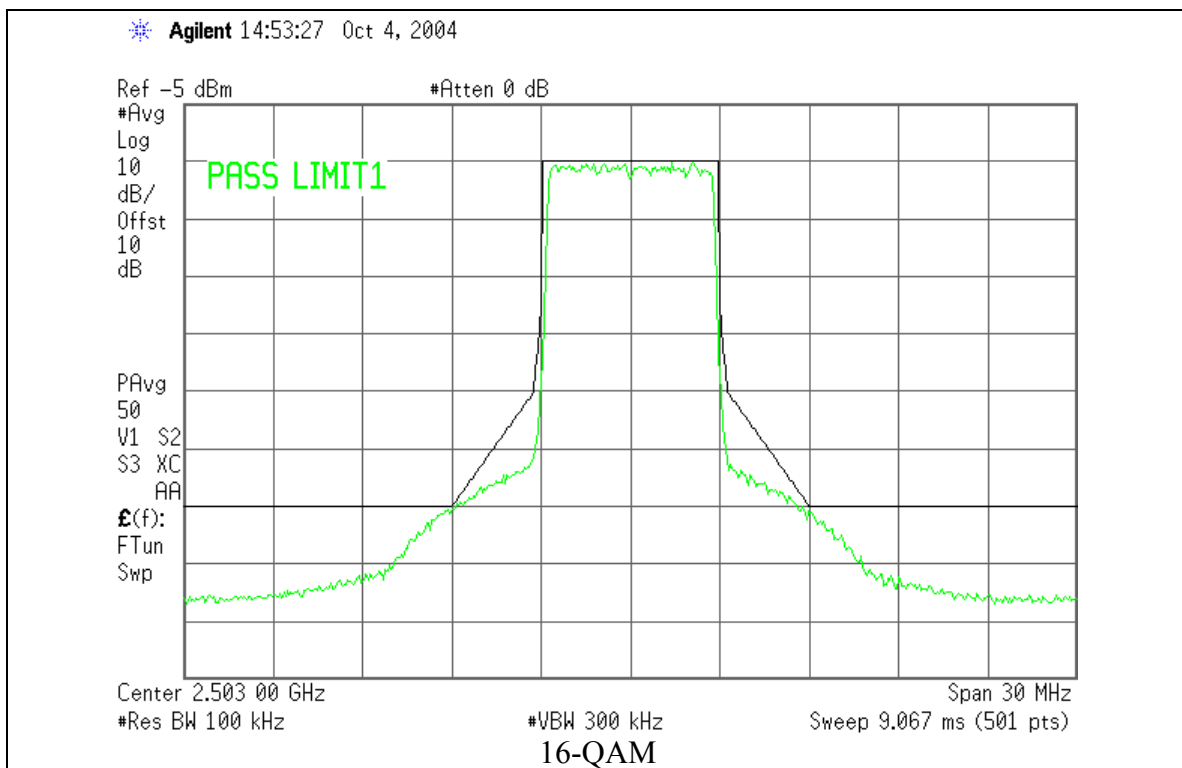
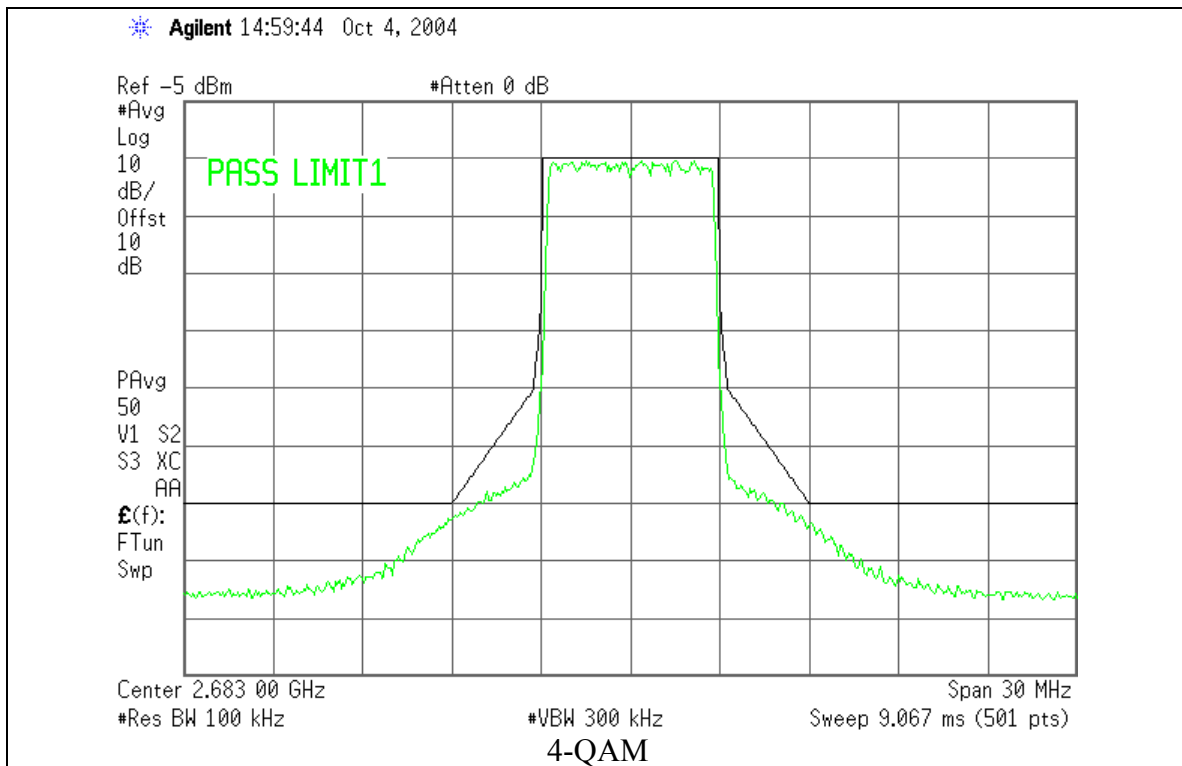
Test Results Summary:

Pass modulation characteristics across frequency band and modulation format.

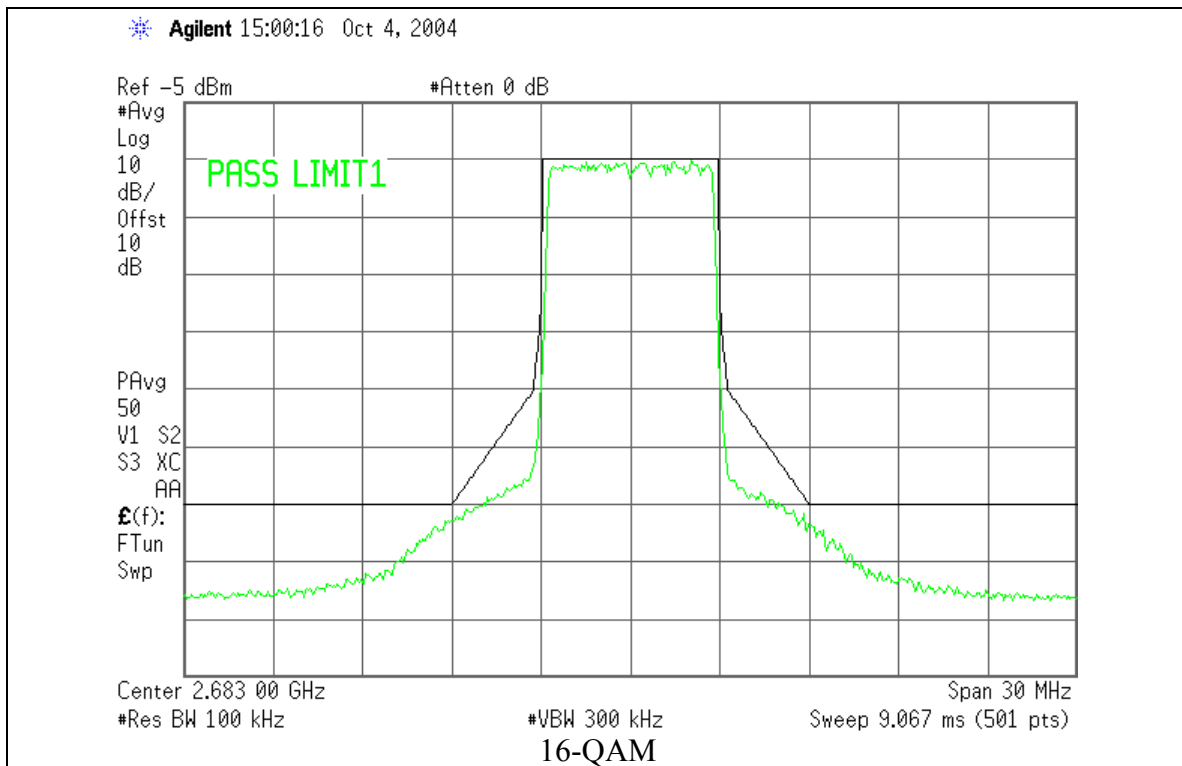
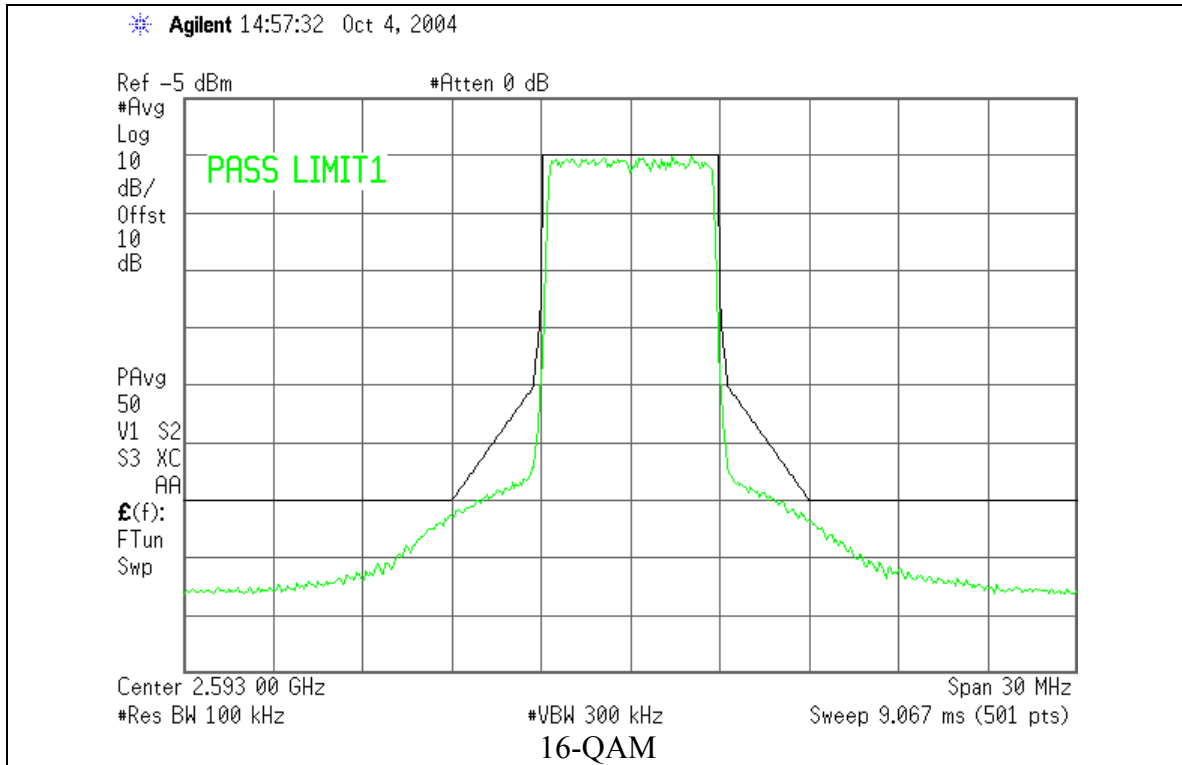
Modulation Characteristics



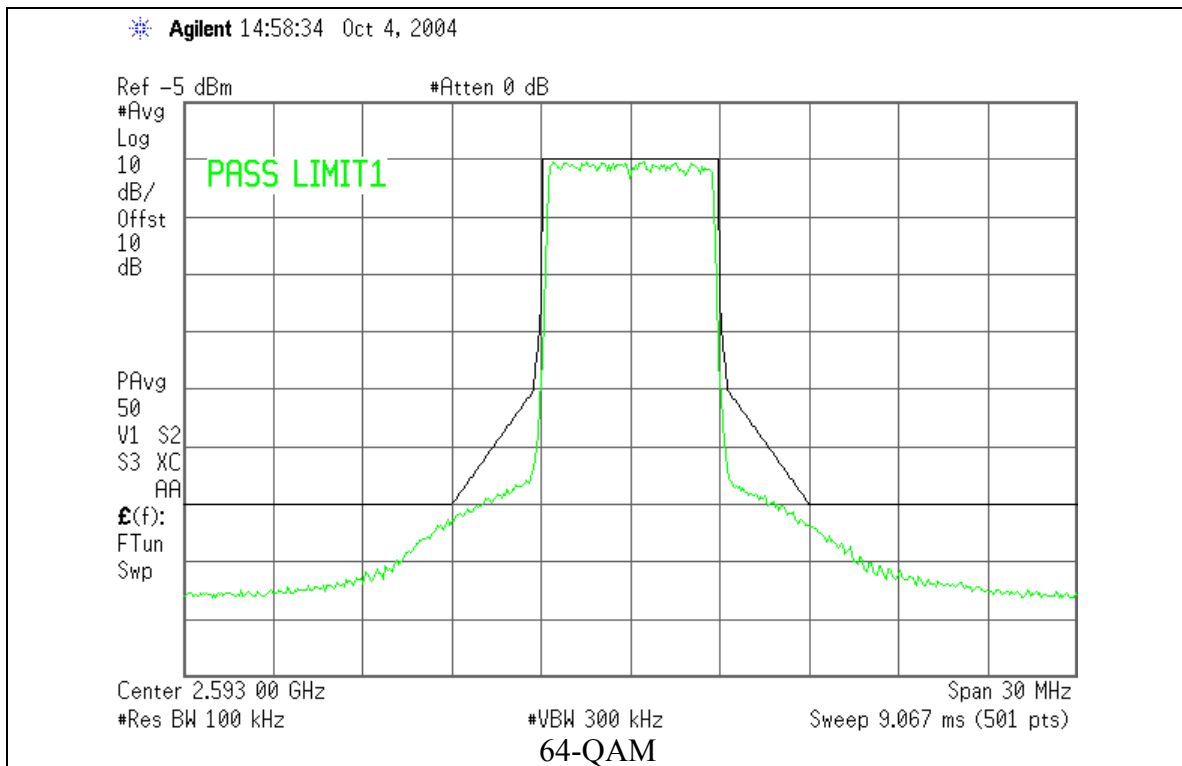
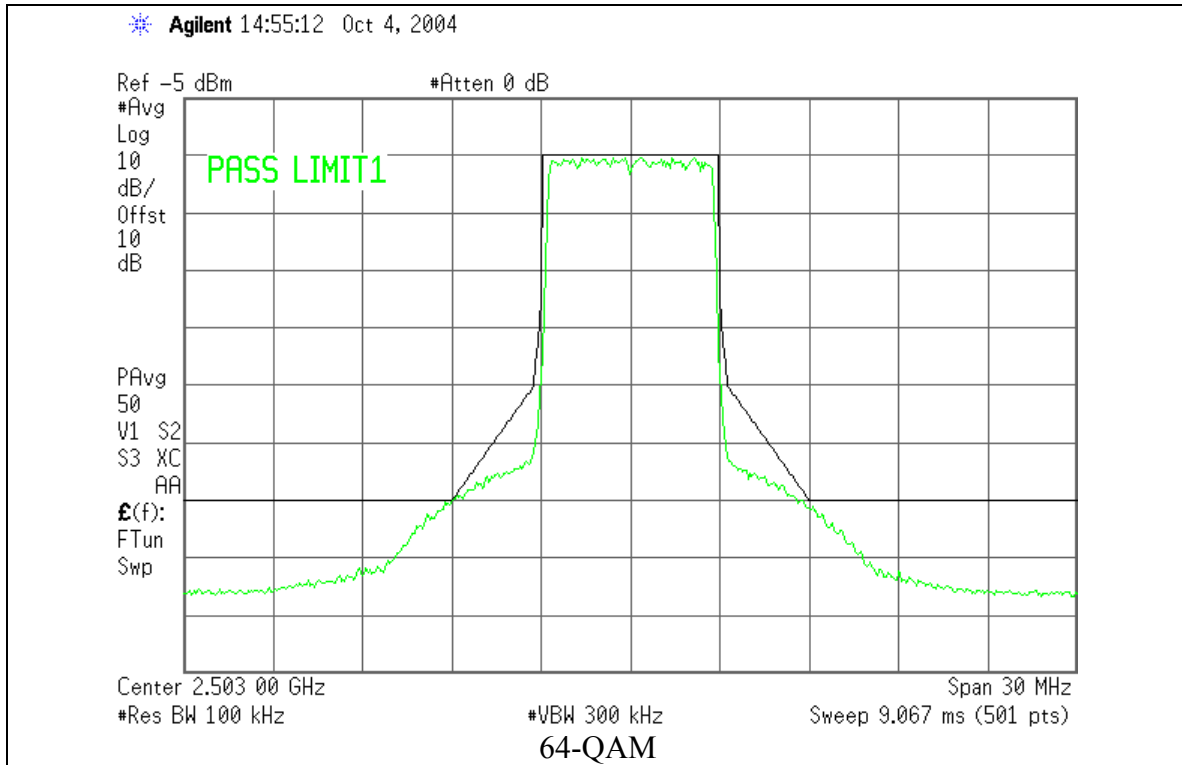
Modulation Characteristics



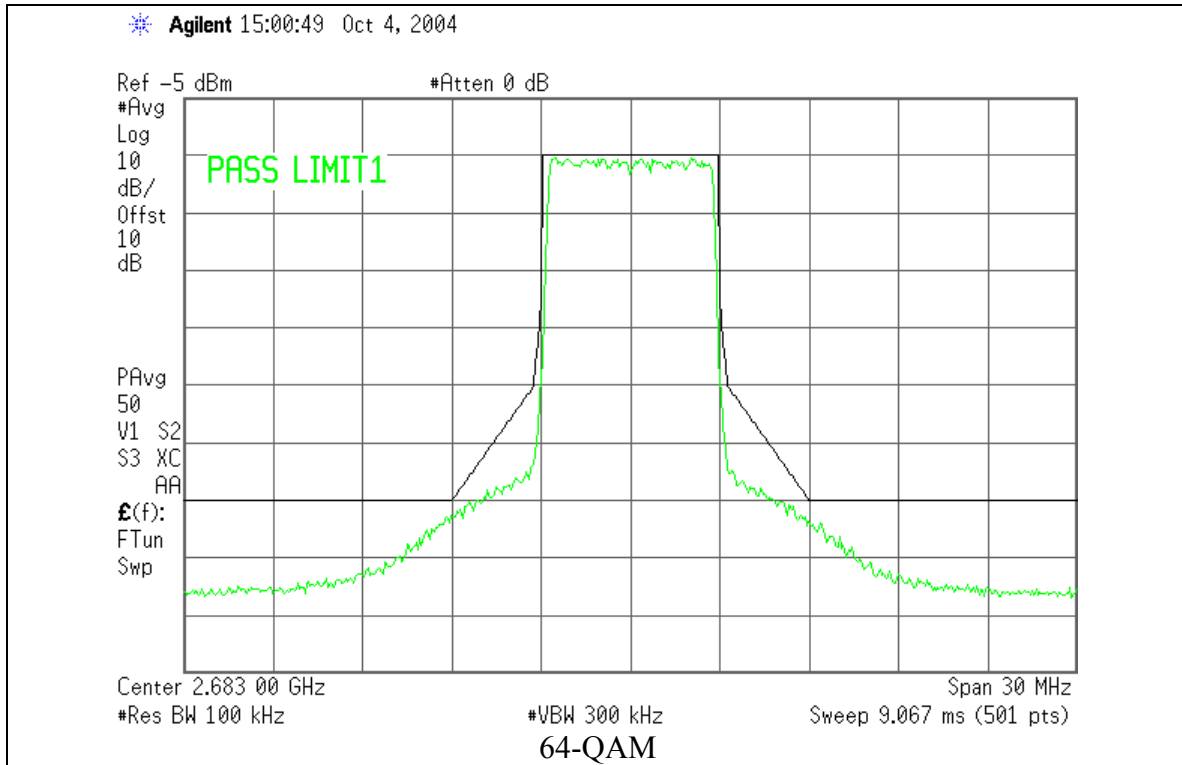
Modulation Characteristics



Modulation Characteristics



Modulation Characteristics



Occupied Bandwidth

Rule Part Number: 2.1049(h), 21.105

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.

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 Spectrum Analyzer is time gated, to capture the transmission during the burst. The occupied bandwidth of the test unit is recorded by measuring the 99 % modulation bandwidth with the built in measurement function in the spectrum analyzer. The transmitter is enabled in test mode with the attached computer. The attenuation of the attenuators and coax has been measured and is included in the spectrum analyzer offset level. Measurements are performed at three frequencies across the band, for each of the modulation formats available (4 QAM, 16 QAM, and 64 QAM).

Test Conditions: Frequency = 2503, 2593, 2683 MHz
Temperature = 25 °C
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

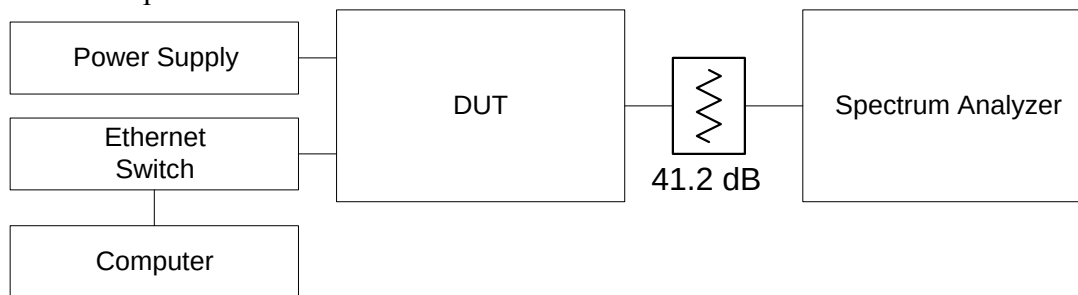
Test Results Summary:

99.0 % Occupied Bandwidth (MHz)

Freq (MHz)	Modulation Type		
	4-QAM	16-QAM	64-QAM
2503	5.4875	5.4844	5.4844
2593	5.4828	5.4884	5.4855
2683	5.4869	5.4896	5.4783

Occupied Bandwidth

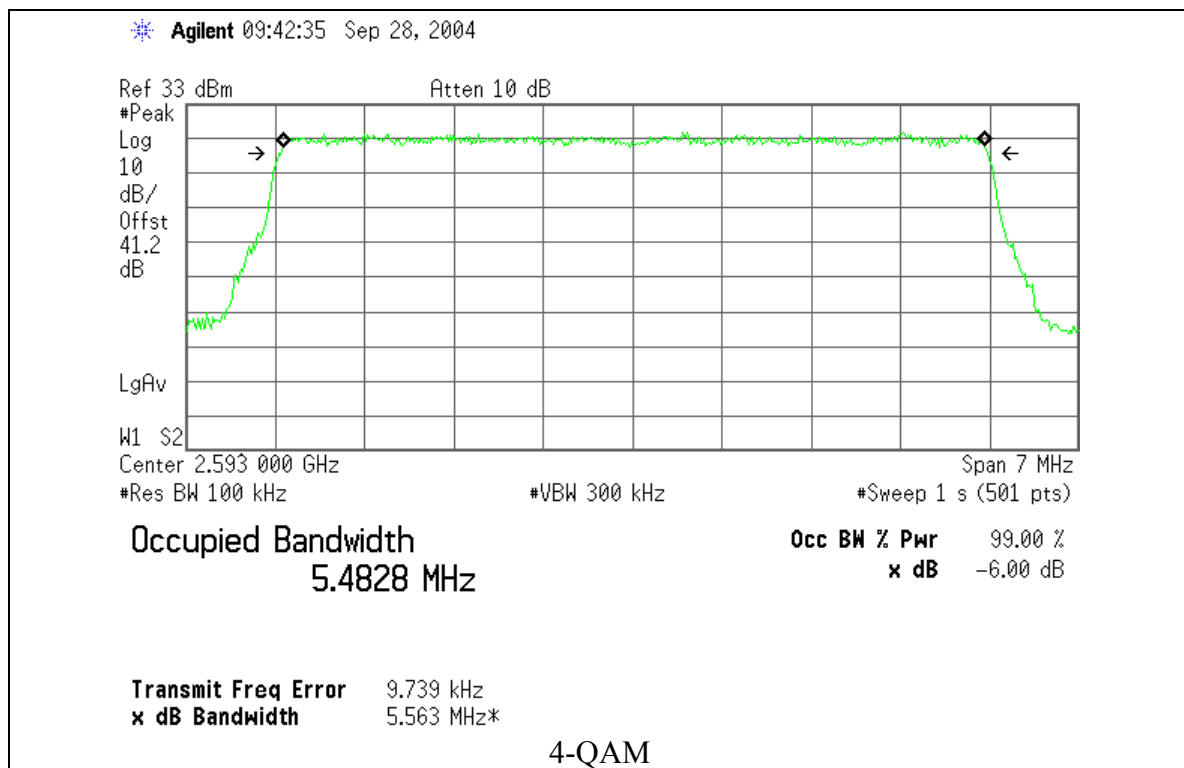
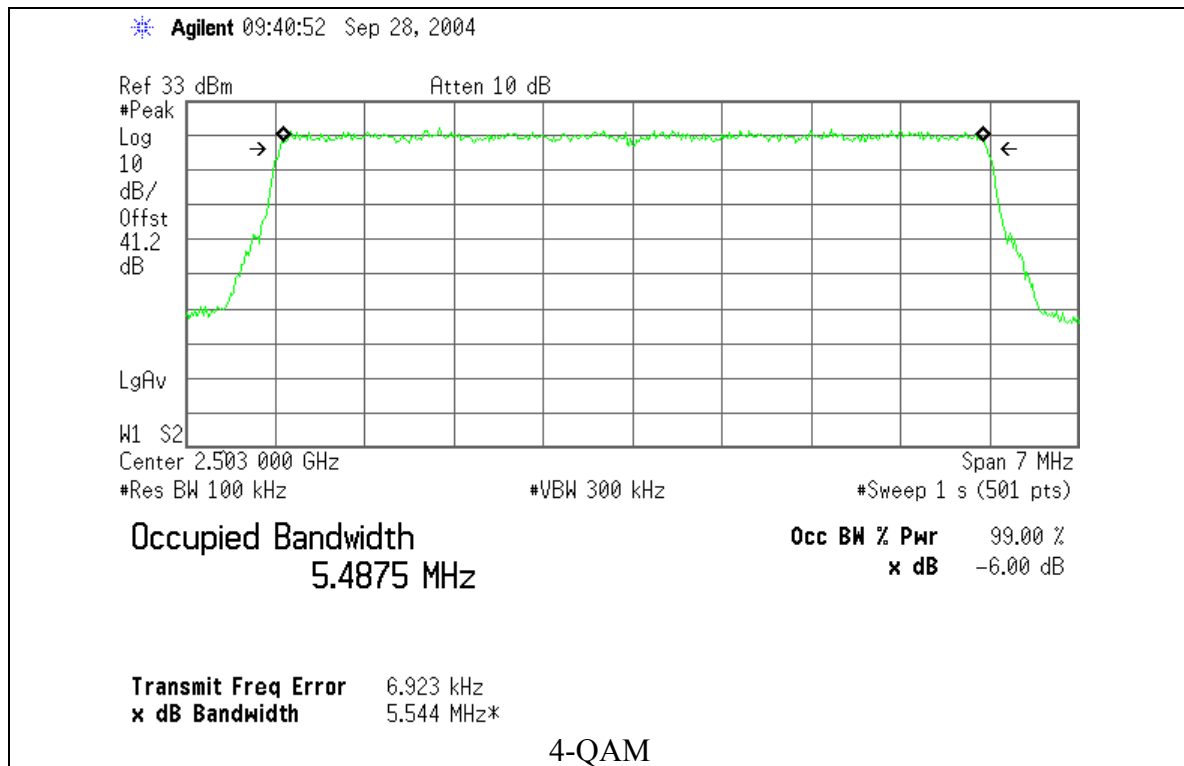
Test Set-Up:



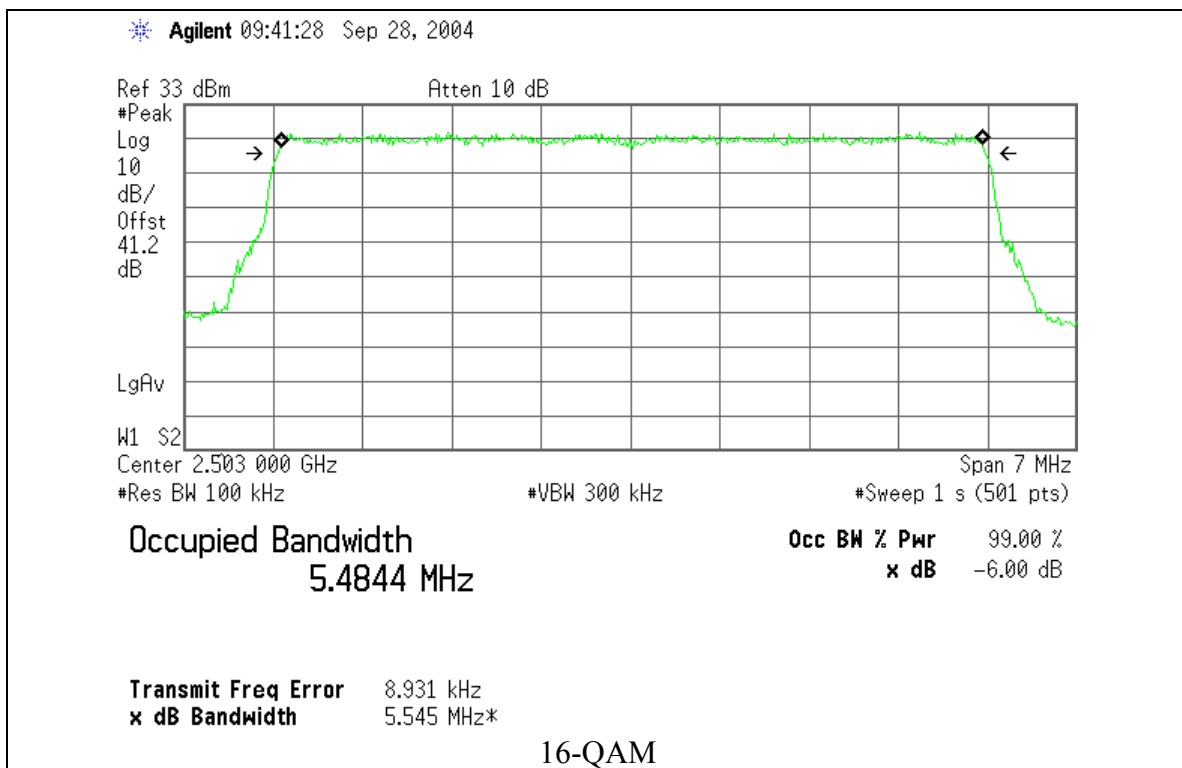
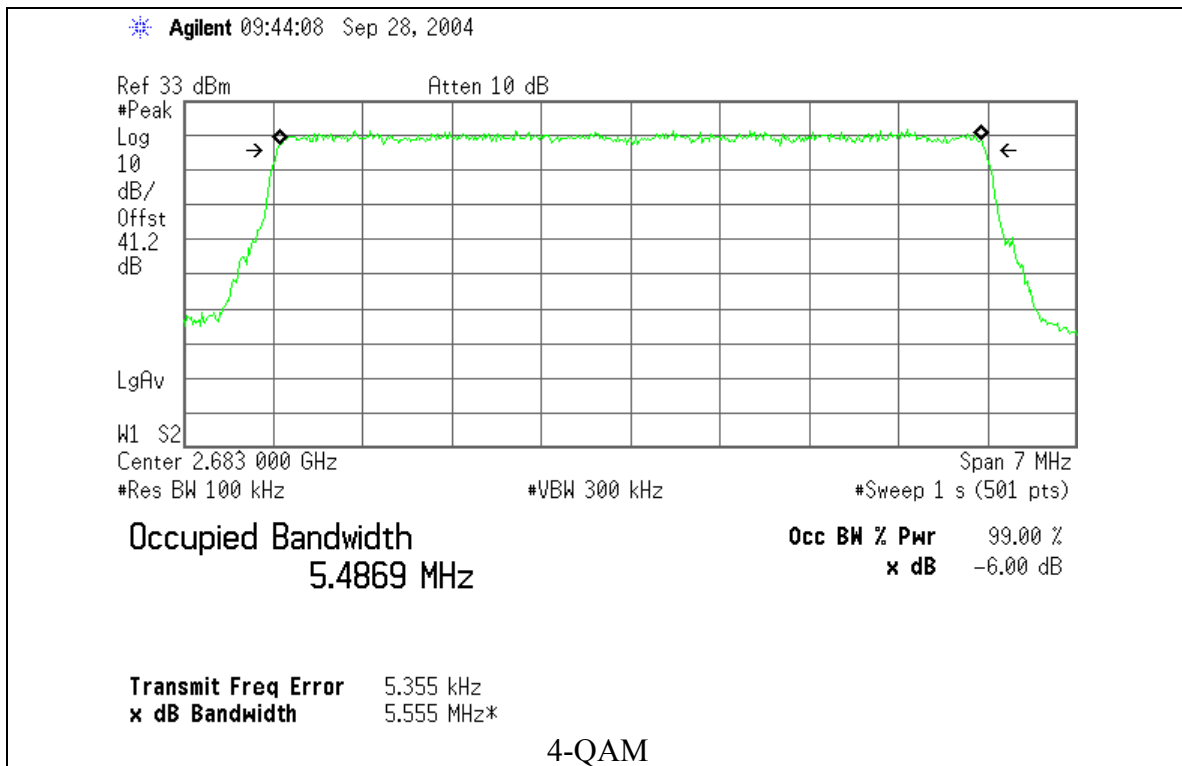
Test Equipment:

DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Spectrum Analyzer	Agilent E4440A S/N: MY44022791 Calibrated on: 05/30/2004 Cal due: 05/30/2006
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
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: B205335003175
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04

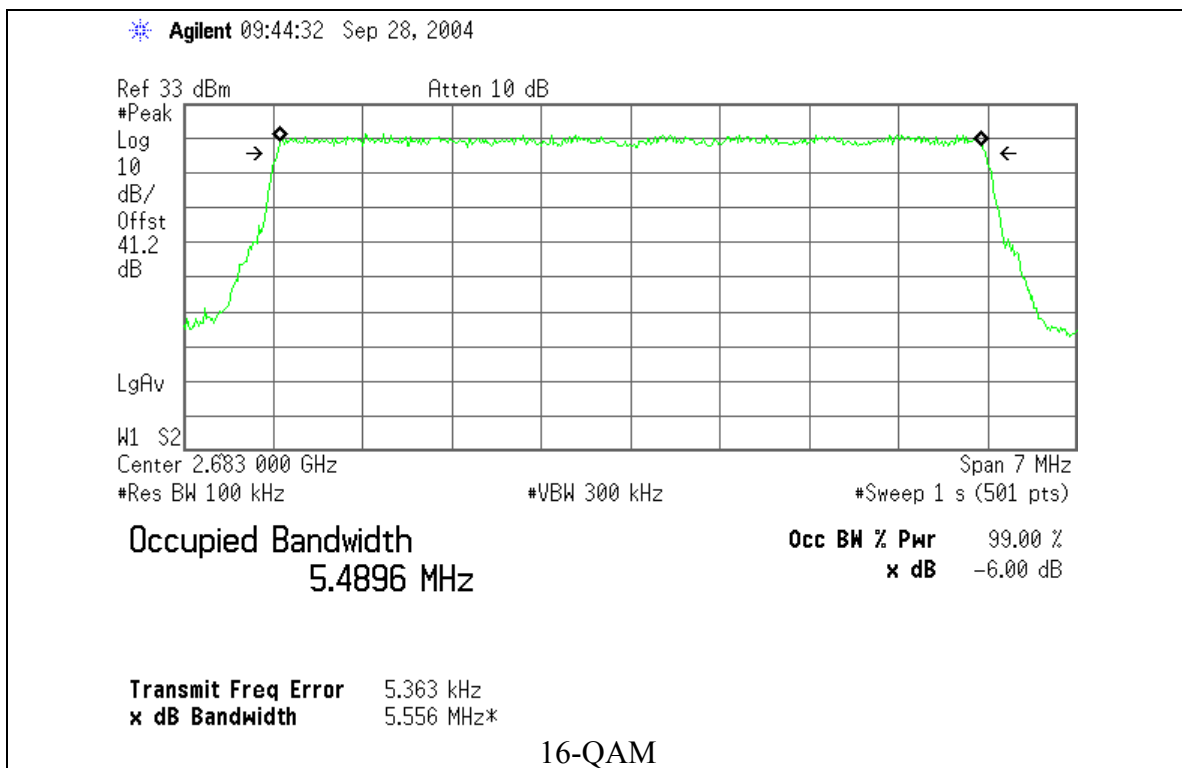
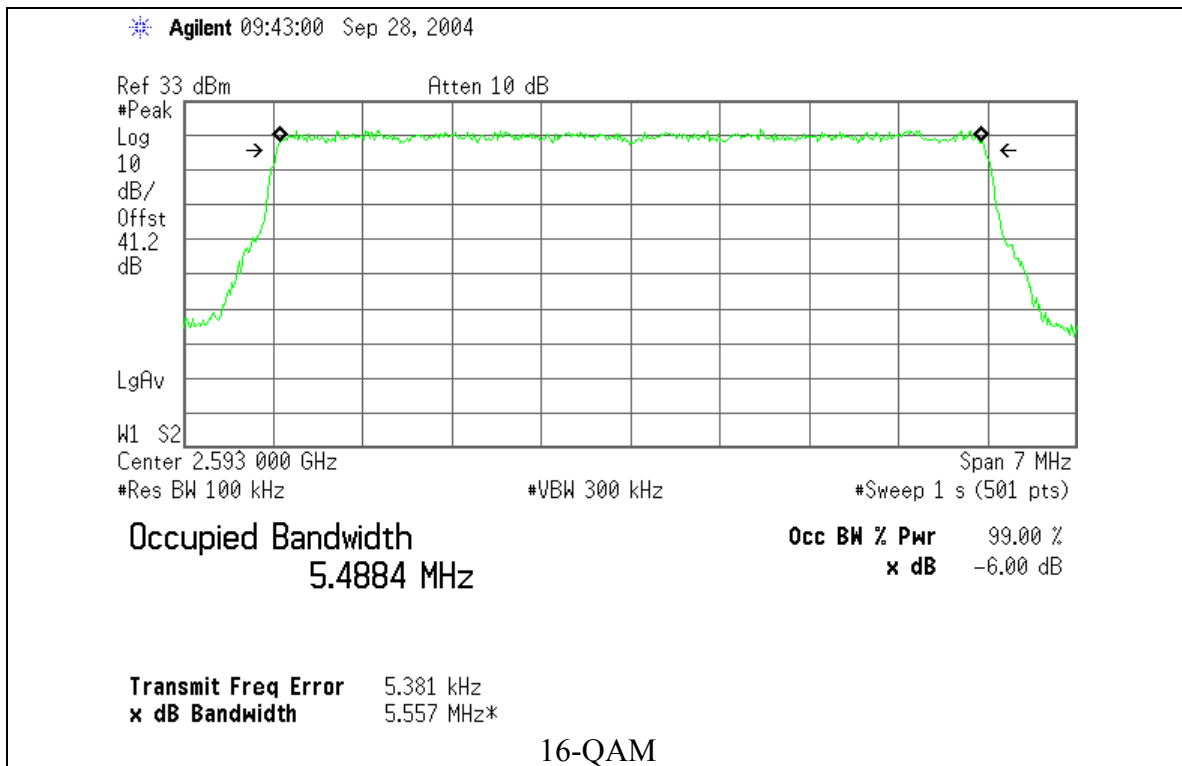
Occupied Bandwidth



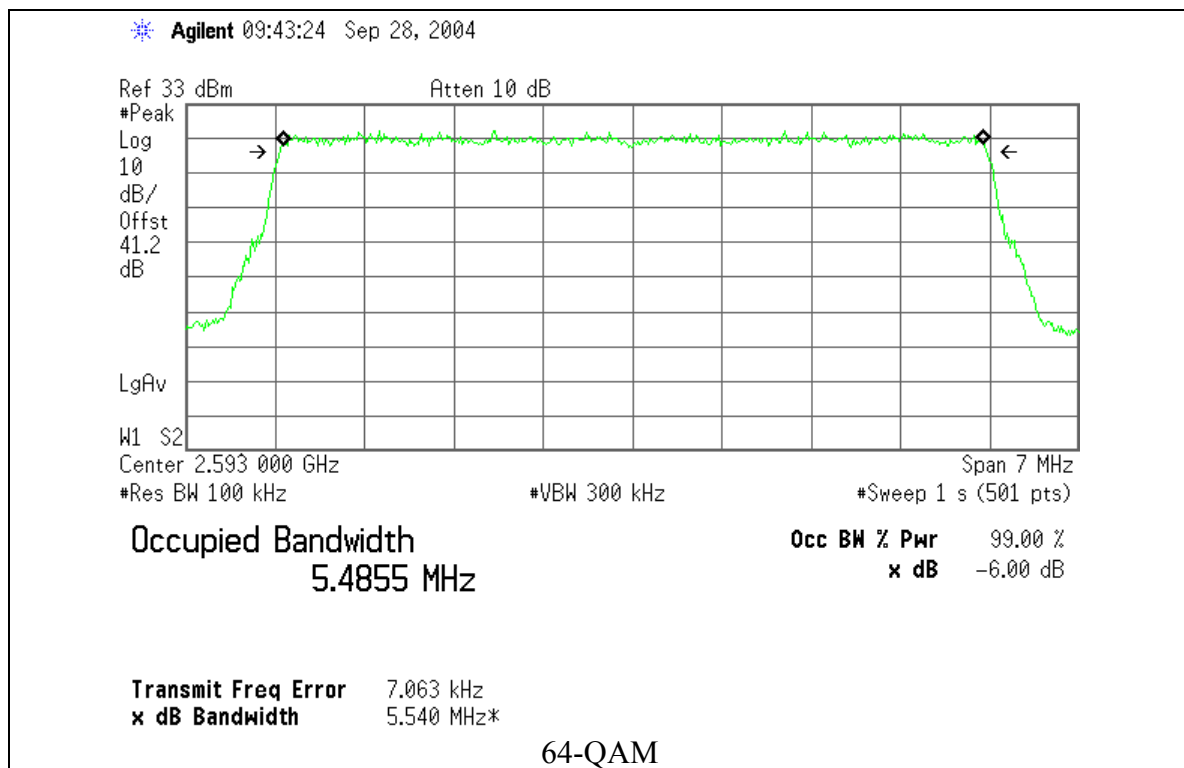
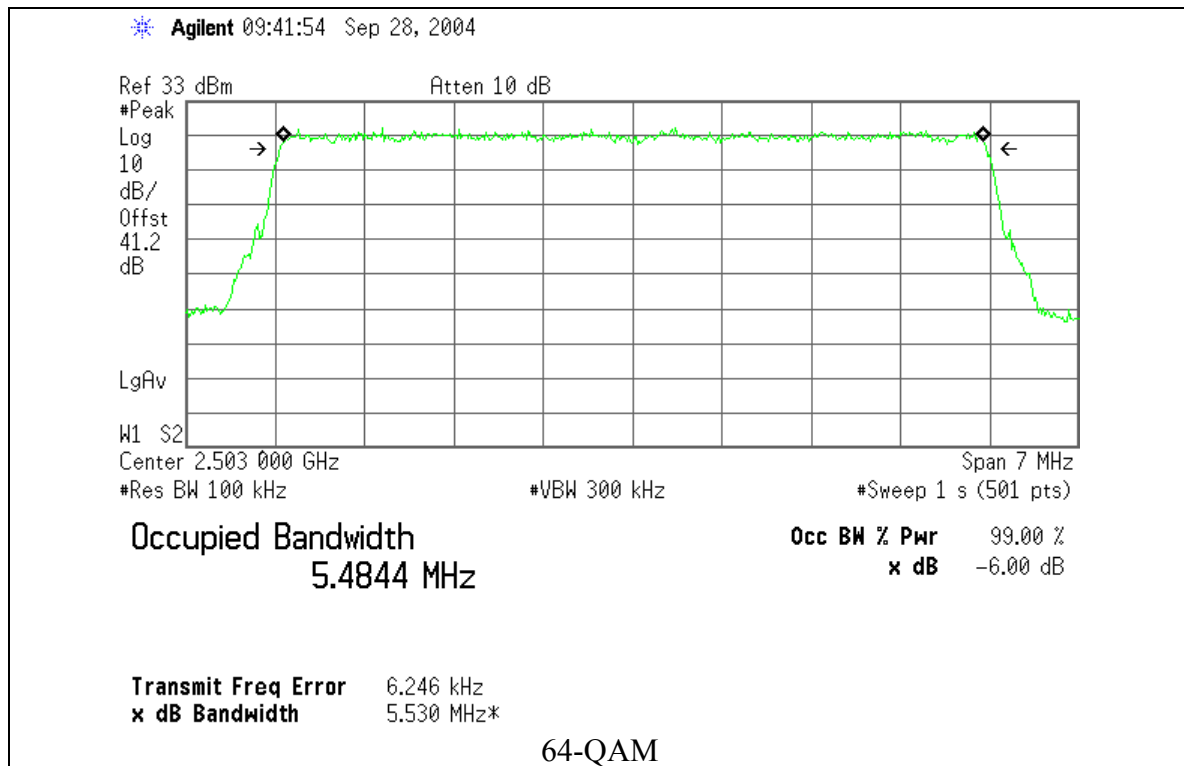
Occupied Bandwidth



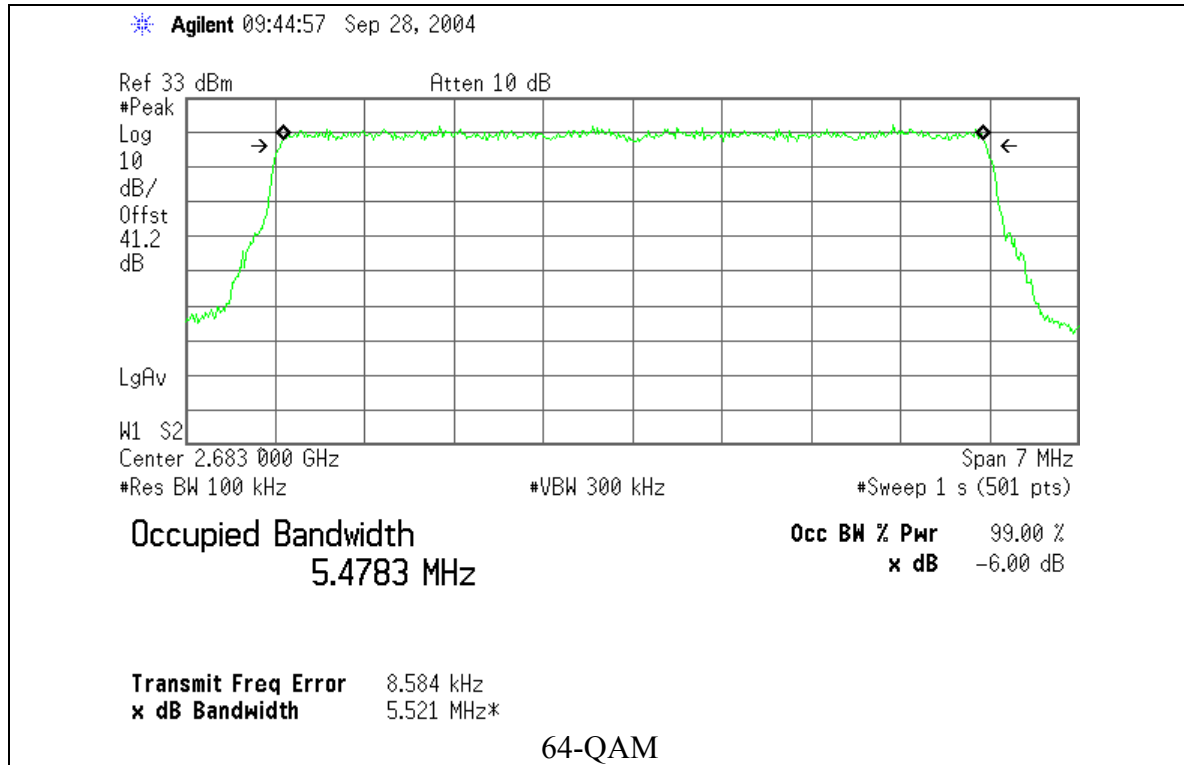
Occupied Bandwidth



Occupied Bandwidth



Occupied Bandwidth



Spurious emissions at antenna terminals

Rule Part Number: 2.1051, 2.1049, 2.1057

Frequency Range = 9 kHz to 26.86 GHz

Attenuation (dB) below the power (W) supplied to the antenna transmission line

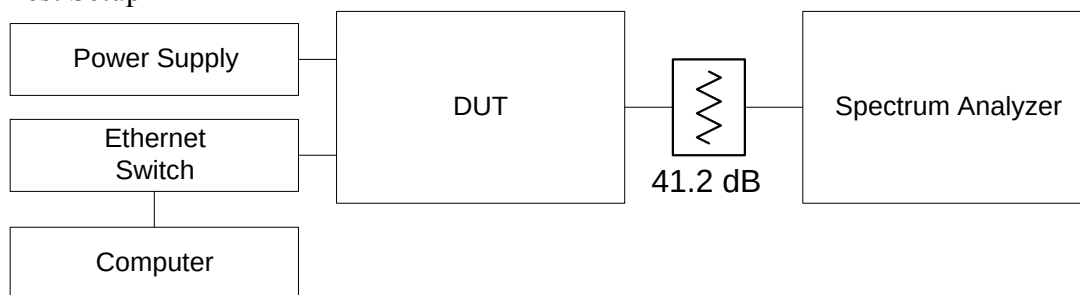
Attenuation = $43 + 10 \log P$, or 70 dBc, whichever is less stringent

Attenuation = $43 + 10 \log(2) = 46$ dBc 2 watt transmit level

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 thru 40 dB of attenuation. The transmission is recorded from 9 kHz to 26.5 GHz. The transmitter is enabled in test mode with the attached computer. The attenuation of the attenuators and coax has been measured and is included in the spectrum analyzer offset level. Measurements are recorded at the low, mid, and high frequencies. All measurements utilized 4-QAM modulation.

Test Conditions: Frequency = 2503, 2593, 2683 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

Test Setup



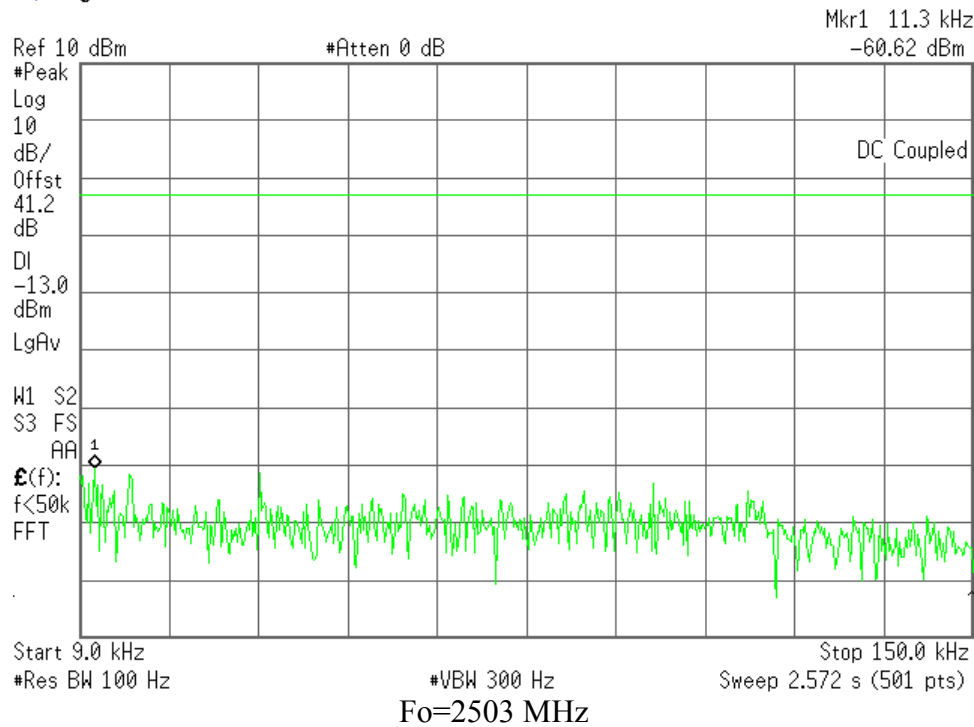
Spurious emissions at antenna terminals

Test Equipment:

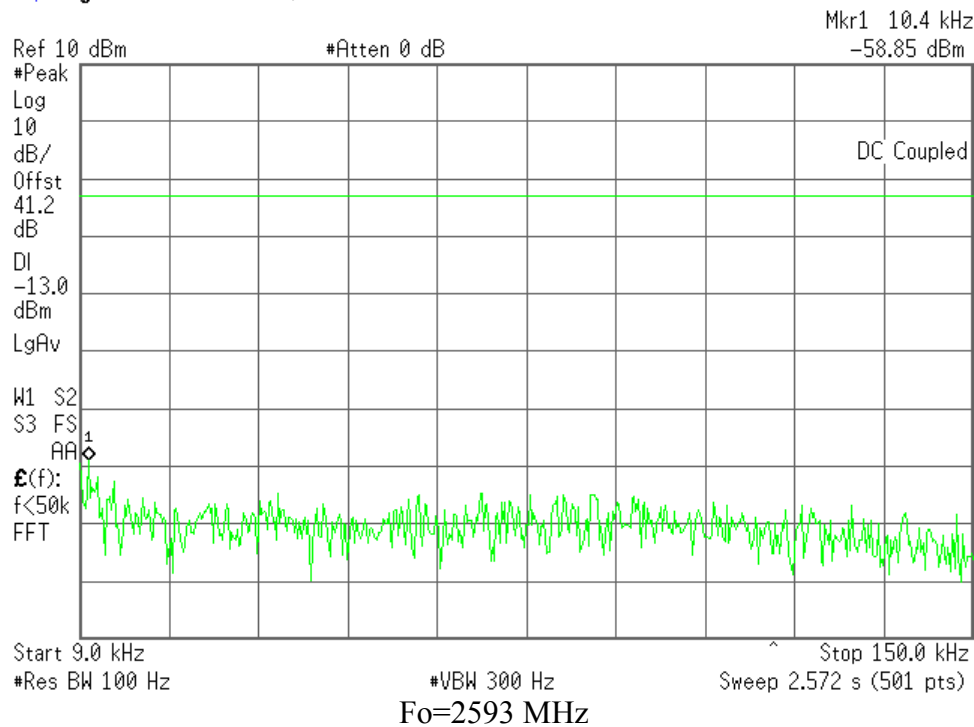
DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Spectrum Analyzer	Agilent E4440A S/N: MY44022791 Calibrated on: 05/30/2004 Cal due: 05/30/2006
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
Computer	Dell Inspiron 5000 Model: PPM S/N: 000832RM-12961-04R-0441
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003175
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04

Spurious emissions at antenna terminals

Agilent 15:13:13 Oct 4, 2004

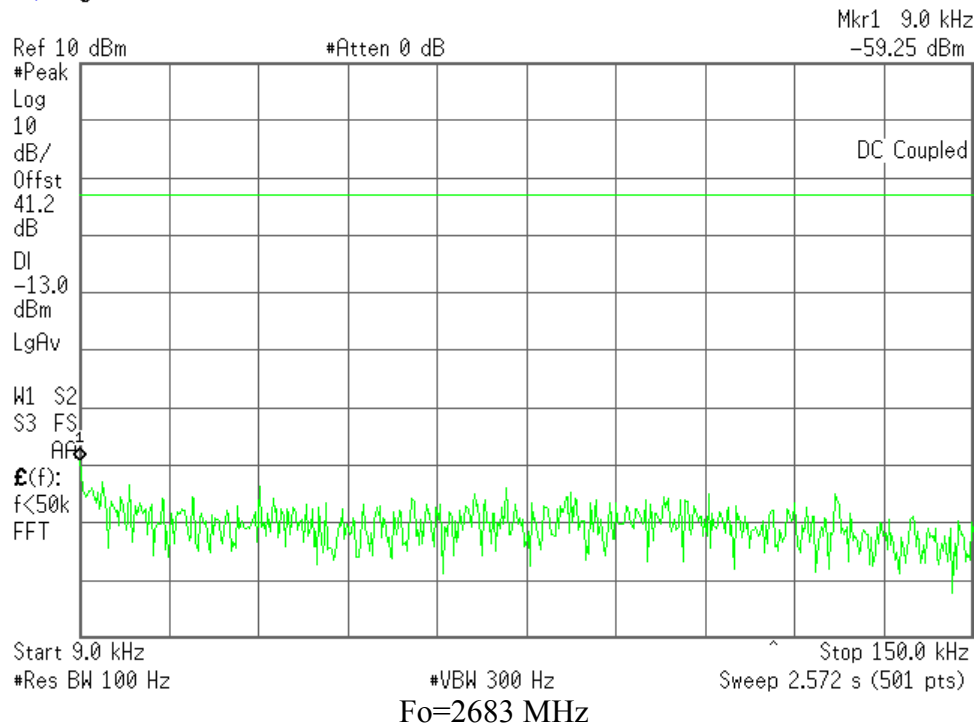


Agilent 15:13:32 Oct 4, 2004

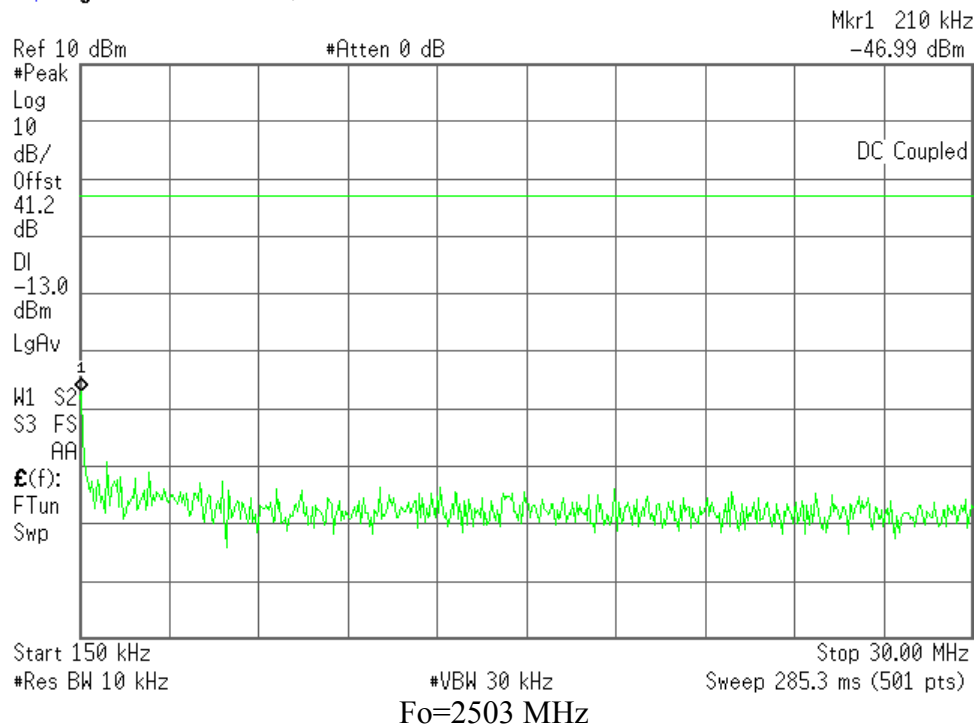


Spurious emissions at antenna terminals

Agilent 15:13:50 Oct 4, 2004

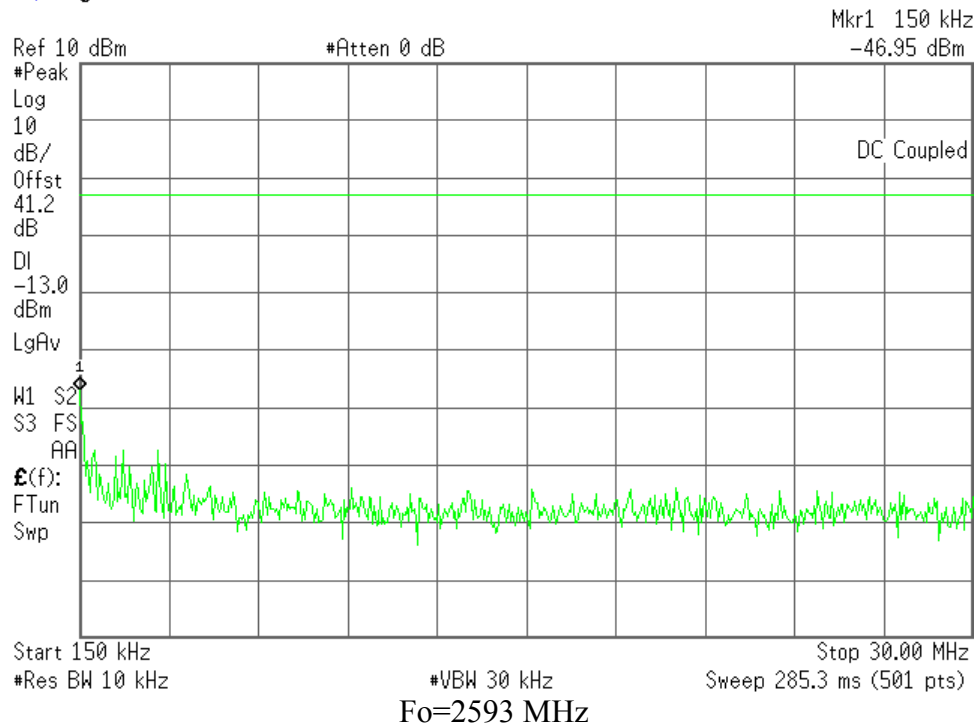


Agilent 15:11:22 Oct 4, 2004

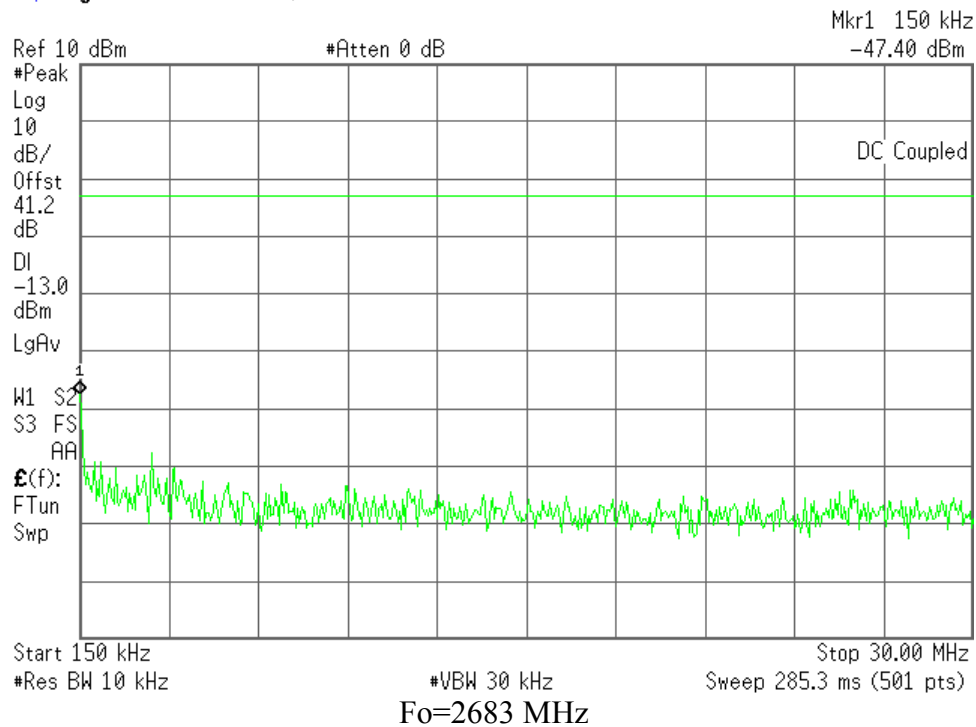


Spurious emissions at antenna terminals

Agilent 15:11:57 Oct 4, 2004

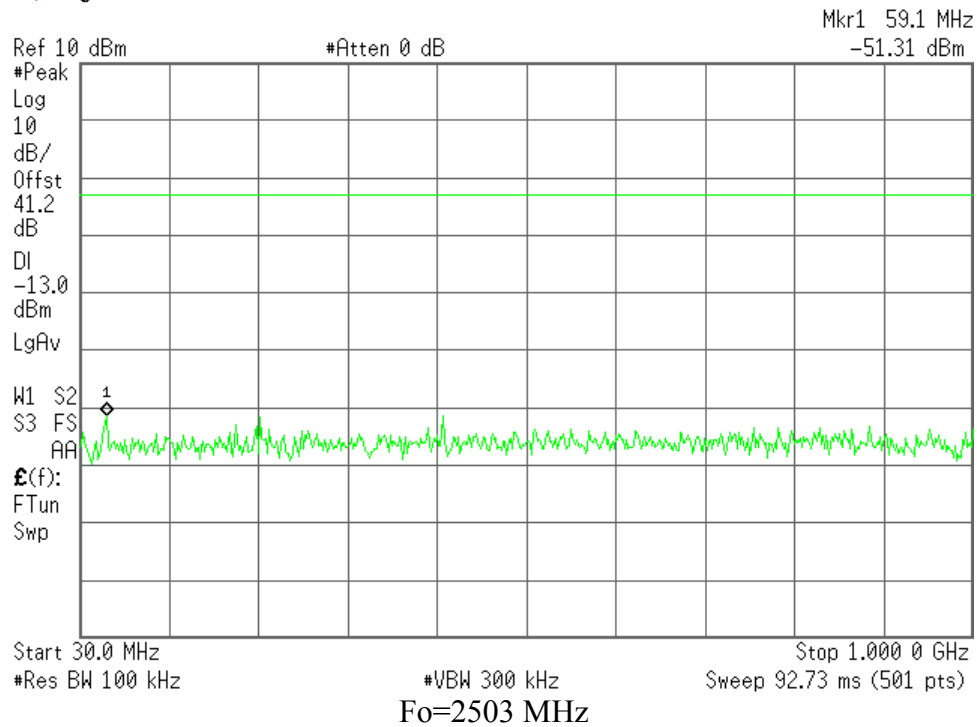


Agilent 15:12:18 Oct 4, 2004

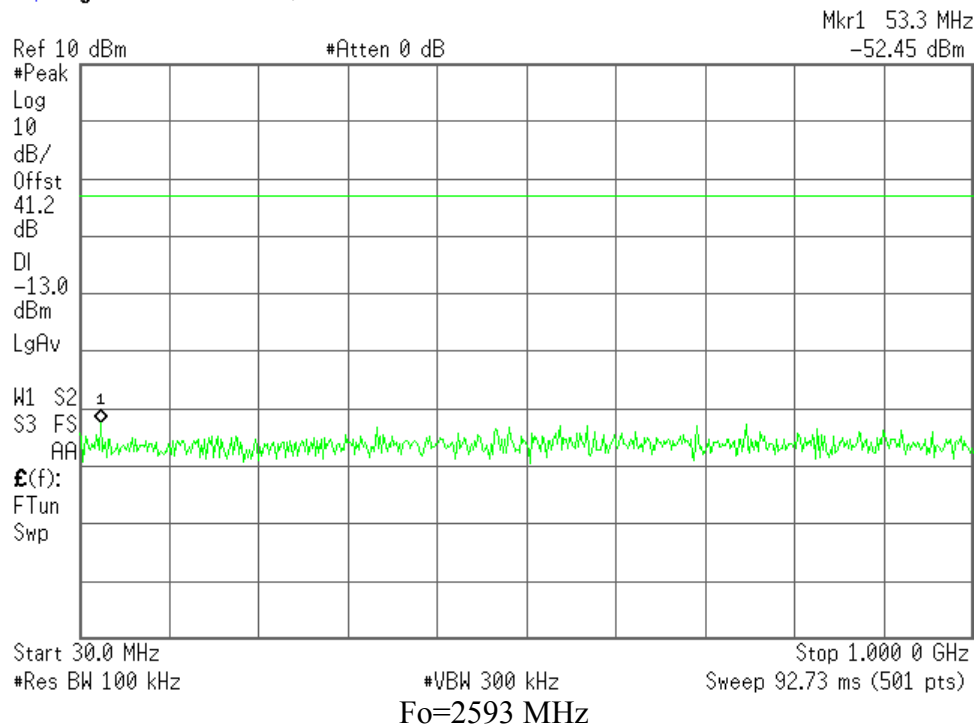


Spurious emissions at antenna terminals

Agilent 15:14:44 Oct 4, 2004

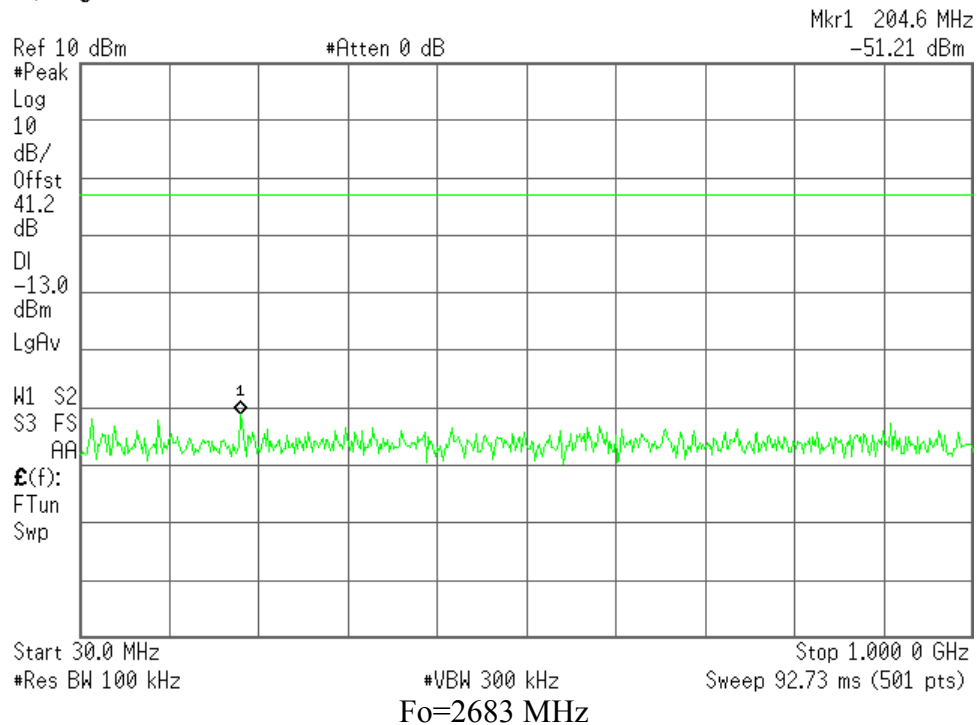


Agilent 15:15:10 Oct 4, 2004

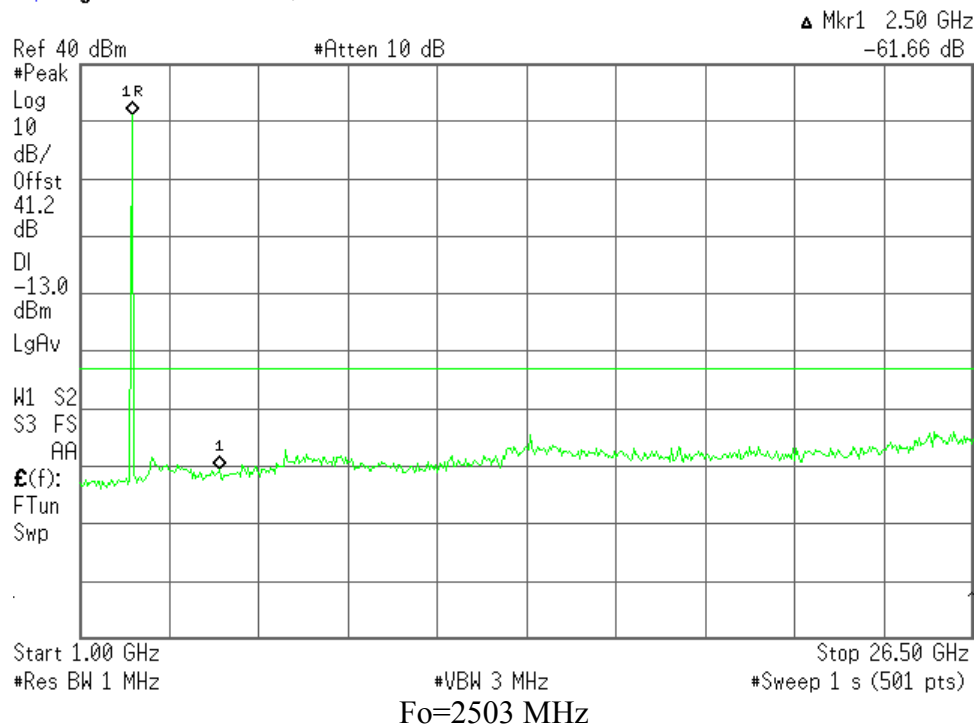


Spurious emissions at antenna terminals

Agilent 15:15:30 Oct 4, 2004

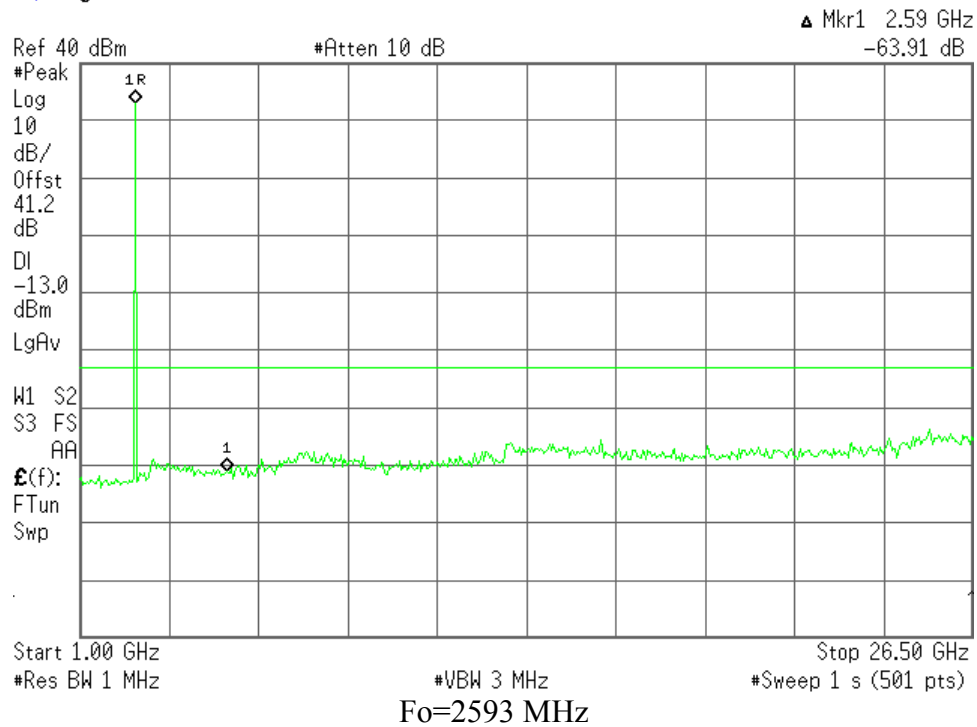


Agilent 15:22:16 Oct 4, 2004

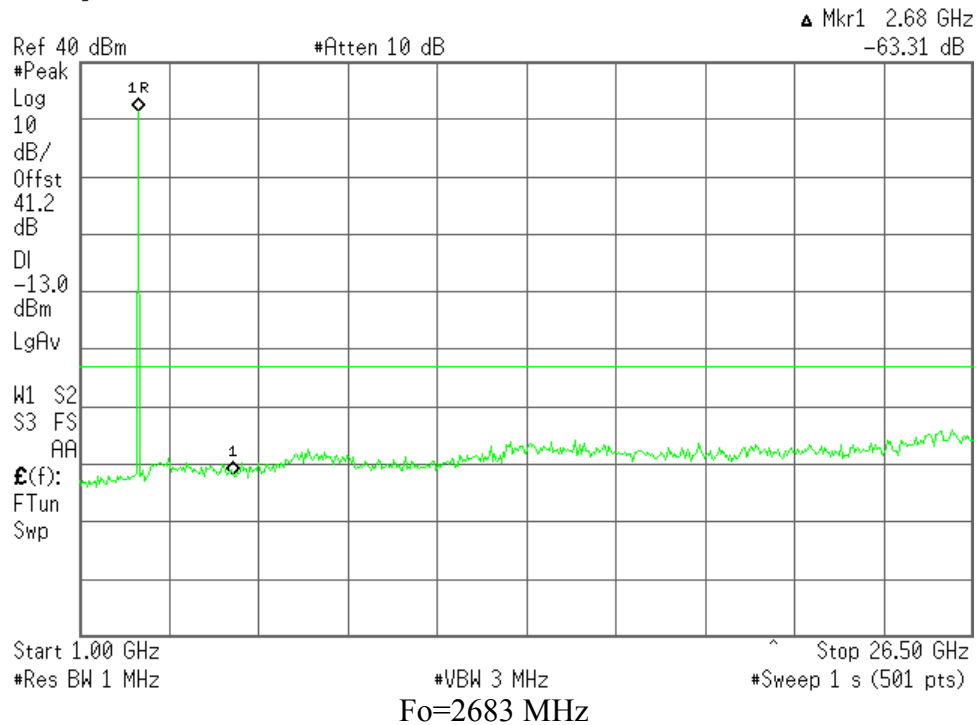


Spurious emissions at antenna terminals

Agilent 15:25:25 Oct 4, 2004



Agilent 15:26:08 Oct 4, 2004



Field strength of spurious radiation

Rule Part Number: 2.1053, 2.1049, 2.1057

Frequency Range = 30 MHz to 26.86 GHz
Case Radiation Attenuation = $43+10\log P = -13$ dBm maximum

Test Procedure: The field strength of spurious radiation was measured at an open area test site with applicable measurement antennas, low noise amplifiers, and spectrum analyzers. Measurements were performed by TUV Product Service Inc – Taylors Falls on September 9th and 10th, 2004. Spurious signals were maximized for peak level by rotation of the test unit and elevation of the measurement antenna. Verification of compliance to the emissions limit was accomplished by antenna substitution. Test methods used complied with TIA-603-B.

Test Conditions: Frequency = 2593 MHz
Temperature = 25 °C
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

Test Equipment: NextNet Wireless, Inc.

DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
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: B205335003175
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04

Field strength of spurious radiation

Test Equipment: TUV Product Services



Emissions Test Conditions: RADIATED EMISSIONS (Electric Field)

The *RADIATED EMISSIONS (ELECTRIC FIELD)* measurements, in the frequency range of 30 MHz-1000 MHz, were tested in a horizontal and vertical polarization at the following test location:

☐ - Test not applicable

- ☒ - Wild River Lab Large Test Site (Open Area Test Site) – NSA measurements made 2-03, due 2-05.
- ☐ - Wild River Lab Small Test Site (Open Area Test Site)
- ☐ - Oakwood Lab (Open Area Test Site)

at a test distance of :

- ☒ - 3 meters
- ☐ - 10 meters
- ☐ - 30 meters

Test equipment used :

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
☒ - 3204	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	24-Oct-04
☒ - 8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115a00853	14-Aug-05
☒ - 8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	14-Aug-05
☒ - 2682	85650A	Hewlett-Packard	Quasi-Peak Adapter	2811A01127	14-Aug-05
☒ - 3962	ZHL-1042J	Mini-Circuits	Preamplifier	D120403-2	Code B

Cal Code B = Calibration verification performed internally.

Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

Emissions Test Conditions: INTERFERENCE POWER

The *INTERFERENCE POWER* measurements were performed by using the absorbing clamp on the mains and interface cables in the frequency range 30 MHz - 300 MHz at the following test location:

☒ - Test not applicable

- ☐ - Wild River Lab Large Test Site (Open Area Test Site)
- ☐ - Wild River Lab Small Test Site (Open Area Test Site)
- ☐ - Oakwood Lab (Open Area Test Site)
- ☐ - Wild River Lab Screen Room
- ☐ - New Brighton Lab Shielded Room

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TÜV PRODUCT SERVICE INC

19333 Wild Mountain Road

Taylors Falls MN 55084-1758

Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Field strength of spurious radiation

Test Equipment: TUV Product Services



Emissions Test Conditions: RADIATED EMISSIONS (Electric Field)

The *EQUIVALENT RADIATED EMISSIONS* measurements in the frequency range 1 GHz – 26 GHz were performed in a horizontal and vertical polarization at the following test location:

☐ - Test not applicable

- ☒ - Wild River Lab Large Test Site (Open Area Test Site)
- ☐ - Wild River Lab Small Test Site (Open Area Test Site)
- ☐ - Oakwood Lab (Open Area Test Site)
- ☐ - Wild River Lab Screen Room

at a test distance of:

- ☐ - 1 meters
- ☒ - 3 meters
- ☐ - 10 meters

Test equipment used :

TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ - 8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115a00853	14-Aug-05
■ - 8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	14-Aug-05
■ - 3957	SL18B4020	Phase One Microwave	Preamplifier 1 – 18 GHz	0001	Code B
■ - 2075	3115	Electro-Mechanics (EMCO)	Ridge Guide Ant. 1-18 GHz	9001-3275	19-Nov-04
■ - 2127	11975A	Hewlett Packard	Amplifier 2- 8 GHz	2738A01200	Code B
■ - 2662	11970K	Hewlett-Packard	Harm Mixer – 18-26.5 GHz	2332A01170	7-11-06
■ - 2788	3116	Electro-Mechanics (EMCO)	Ridge Guide Ant 18-40 GHz	2005	9-11-04

Cal Code B = Calibration verification performed internally.

Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

File No. WC404172 Rev 2, Page 8 of 13

TÜV PRODUCT SERVICE INC

19333 Wild Mountain Road

Taylors Falls MN 55084-1758

Tel: 851 638 0297 Fax: 851 638 0298 Rev.No 1.0

NextNet Wireless, Inc
9555 James Ave. South Suite 270
Bloomington, MN 55431

10/28/2004

Field strength of spurious radiation

Test Setup: TUV Product Services

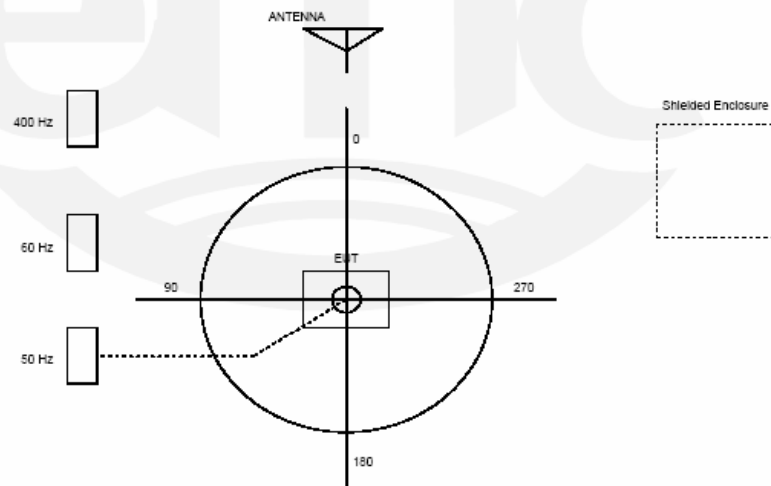


TEST SETUP FOR EMISSIONS TESTING

WILD RIVER LAB
Large Test Site

Notes:

1. Items shown in dotted lines are located on the floor below the test area. It is 5 meters vertically from the ground floor to the test area.
2. 50 Hz, 60 Hz, and 400 Hz are power panels for alternating current.
3. The antenna may be positioned horizontally 3, 10 or 30 meters from the center of the turntable.
4. The circle is a 6.7 meter diameter turntable.
5. A ground plane is in the plane of this sheet.
6. The test sample is shown in the azimuthal position representing zero degrees.



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TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Field strength of spurious radiation

RADIATED EMISSIONS



Test Report #:	WC404172 Run 2	Test Area:	LTS
EUT Model #:	OSU-2400-AV	Date:	9/9/04
EUT Serial #:		EUT Power:	60 Hz / 110 VAC
Test Method:	FCC Part 2.1053	Temperature:	22.0 °C
Customer:	NextNet	Air Pressure:	99.0 kPa
		Rel. Humidity:	48.0 %
EUT Description:	ISM/MMDS Outdoor Customer Premise Equipment		
Notes:	EUT in transmit mode:		
Data File Name:	4172.dat	Page:	1 of 2

Substitution performed at 115 MHz. Final level of 42.29 dBuV/m matches -48.5 dBm.
Matching dBm level - (cable loss) + (antenna gain) = Final ERP.
-48.5 - (.8) + (-6.2) = -55.5 dBm

Limit is -13 dBm. Minimum passing margin is 33 dB at 4808.0 MHz with a level of -46.37 dBm.

Measurement summary for limit1: FCC Part 2.1053					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBm)	POL / HGT / AZ (m)(DEG)	DELTA1 (Limit is -13 dBm)
4.808 GHz	53.85 Pk	6.33 / 34.56 / 44.11 / 0.79	-46.37	H / 1.00 / 180	-33
7.212 GHz	49.25 Pk	8.1 / 37.22 / 44.1 / 0.58	-46.73	V / 1.00 / 180	-33
5.186 GHz	51.0 Pk	6.61 / 35.4 / 44.0 / 0.47	-48.31	V / 1.00 / 0	-35
7.779 GHz	43.4 Pk	8.25 / 37.63 / 43.71 / 0.7	-51.52	H / 1.00 / 0	-38
4.88 GHz	45.0 Pk	6.39 / 34.76 / 44.04 / 0.38	-55.3	H / 1.00 / 0	-42
7.32 GHz	41.95 Pk	8.1 / 37.44 / 44.06 / 0.63	-55.73	V / 1.00 / 0	-42
4.952 GHz	39.55 Pk	6.46 / 34.97 / 44.0 / 0.4	-60.42	V / 1.00 / 0	-47
7.428 GHz	40.25 Pk	8.12 / 37.66 / 44.01 / 0.67	-55.11	V / 1.00 / 0	-42
168.0 MHz	57.55 Qp	1.07 / 9.1 / 26.05 / 0.0	-56.12	V / 1.00 / 10	-43
308.002 MHz	54.85 Qp	1.5 / 13.9 / 26.62 / 0.0	-54.16	H / 1.00 / 90	-41
180.384 MHz	54.0 Qp	1.1 / 9.51 / 26.15 / 0.0	-59.33	H / 1.00 / 180	-46
180.63 MHz	53.95 Qp	1.1 / 9.54 / 26.15 / 0.0	-59.36	H / 1.00 / 180	-46
179.364 MHz	53.6 Qp	1.1 / 9.43 / 26.14 / 0.0	-59.81	H / 1.00 / 180	-46
224.0 MHz	54.35 Qp	1.28 / 11.1 / 26.3 / 0.0	-57.36	H / 1.00 / 90	-44
90.314 MHz	52.8 Qp	0.8 / 7.85 / 25.85 / 0.0	-62.19	V / 1.00 / 270	-49
89.702 MHz	51.6 Qp	0.8 / 7.74 / 25.84 / 0.0	-63.49	H / 3.00 / 270	-50

Tested by: J. C. Sausen

Printed

J C Sausen

Signature

Reviewed by: TKS

Printed

Thomas K. Swanson

Signature

File No. WC404172 Rev 2, Page A27 of A28

Field strength of spurious radiation

RADIATED EMISSIONS



Test Report #: WC404172 Run 2 Test Area: LTS
EUT Model #: OSU-2400-AV Date: 9/9/04
EUT Serial #: EUT Power: 60 Hz / 110 VAC Temperature: 22.0 °C
Test Method: FCC Part 2.1053 Air Pressure: 99.0 kPa
Customer: NextNet Rel. Humidity: 48.0 %
EUT Description: ISM/MMDS Outdoor Customer Premise Equipment
Notes: EUT in transmit mode:
Data File Name: 4172.dat Page: 2 of 2

Measurement summary for limit1: FCC Part 2.1053					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBm)	POL / HGT / AZ (m)(DEG)	DELTA1 (Limit is -13 dBm)
140.0 MHz	49.6 Qp	1.0 / 9.26 / 26.02 / 0.0	-63.94	V / 1.00 / 10	-50
335.998 MHz	46.3 Qp	1.57 / 14.27 / 26.7 / 0.0	-62.35	V / 1.00 / 180	-49
269.08 MHz	46.2 Qp	1.45 / 12.41 / 26.43 / 0.0	-64.16	V / 1.00 / 180	-51
269.374 MHz	46.05 Qp	1.45 / 12.4 / 26.43 / 0.0	-64.32	V / 1.00 / 180	-51
270.994 MHz	44.8 Qp	1.46 / 12.4 / 26.44 / 0.0	-65.57	V / 1.00 / 180	-52
217.319 MHz	41.7 Qp	1.24 / 11.0 / 26.3 / 0.0	-70.15	V / 1.00 / 10	-57
289.439 MHz	35.9 Qp	1.5 / 13.17 / 26.53 / 0.0	-74.75	H / 1.00 / 90	-61
290.206 MHz	35.5 Qp	1.5 / 13.21 / 26.54 / 0.0	-74.11	H / 1.00 / 90	-61
335.998 MHz	46.0 Pk	1.57 / 14.27 / 26.7 / 0.0	-62.65	V / 1.00 / 180	-49

Tested by: J. C. Sausen

Printed

Signature

Reviewed by: TKS

Printed

Signature

File No. WC404172 Rev 2, Page A28 of A28

Field strength of spurious radiation



DETAILS OF TEST PROCEDURES

General Standard Information

The test methods used comply with TIA-603-B.

Conducted Emissions

Conducted emissions on the 60 Hz power interface of the EUT are measured in the frequency range of 450 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak detection, and a Line Impedance Stabilization Network (LISN), with 50 Ω /50 μ H (CISPR 16) characteristics. Table top equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. In some cases, a pre-scan using a spectrum analyzer is initially performed on the units comprising the system under test to locate the highest emissions. If the minimum passing margin appears to be less than 20 dB with a peak mode measurement, the emissions are re-measured using a tuned receiver or spectrum analyzer with quasi-peak and average detection and recorded on the data sheets.

Radiated Emissions

Radiated emissions from the EUT are measured in the frequency range of 30 to 26000 MHz using a spectrum analyzer and appropriate broadband linearly polarized antennas. Table top equipment is placed on a 1.0 X 1.5 meter non-conducting table 80 centimeters above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna is positioned 3 meters horizontally from the EUT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT are rotated 360 degrees. The EUT is then replaced with a tuned dipole antenna (below 1 GHz) or horn antenna (above 1 GHz). The substitute antenna was placed in the same polarization as the test antenna. A signal generator was used to generate a signal level that matched the level measured from the EUT. The signal level minus the cable loss from the signal generator to the substitute antenna plus the substitute antenna gain equals the spurious power level.

SUBSTITUTION ANTENNA

The substitution antenna is used to replace the EUT for tests in which a transmitting parameter (i.e. frequency error, effective radiated power, spurious emissions and adjacent channel power) is being measured. The substitution antenna is connected to a calibrated signal generator. The frequency of the calibrated signal generator is set to the frequency of the emission component detected. The test antenna is raised and lowered through the specified range of height to ensure the maximum signal is received. The input signal to the substitution antenna shall be adjusted to the level that produces a level detected by the measuring receiver, that is equal to the level noted while the emission component was measured, corrected for any change of input attenuator setting of the measuring receiver. The input level to the substitution antenna is recorded as power level, corrected for any change of input attenuator setting of the measuring receiver.

File No. WC404172 Rev 2, Page C2 of C2

TÜV PRODUCT SERVICE INC

19333 Wild Mountain Road

Taylors Falls MN 55084-1758

Tel: 851 638 0297 Fax: 851 638 0298 Rev.No 1.0

Frequency Stability

Rule Part Number: 2.1055, 21.101(a), 74.961(a)

Stability Requirements: 0.001 % or 10 ppm

Test Procedure: The local oscillator signal that drives the transmit modulator was lightly coupled onto an RF probe and applied to a spectrum analyzer. The frequency of the RF VCO was monitored and recorded for changes due to temperature change and input voltage.

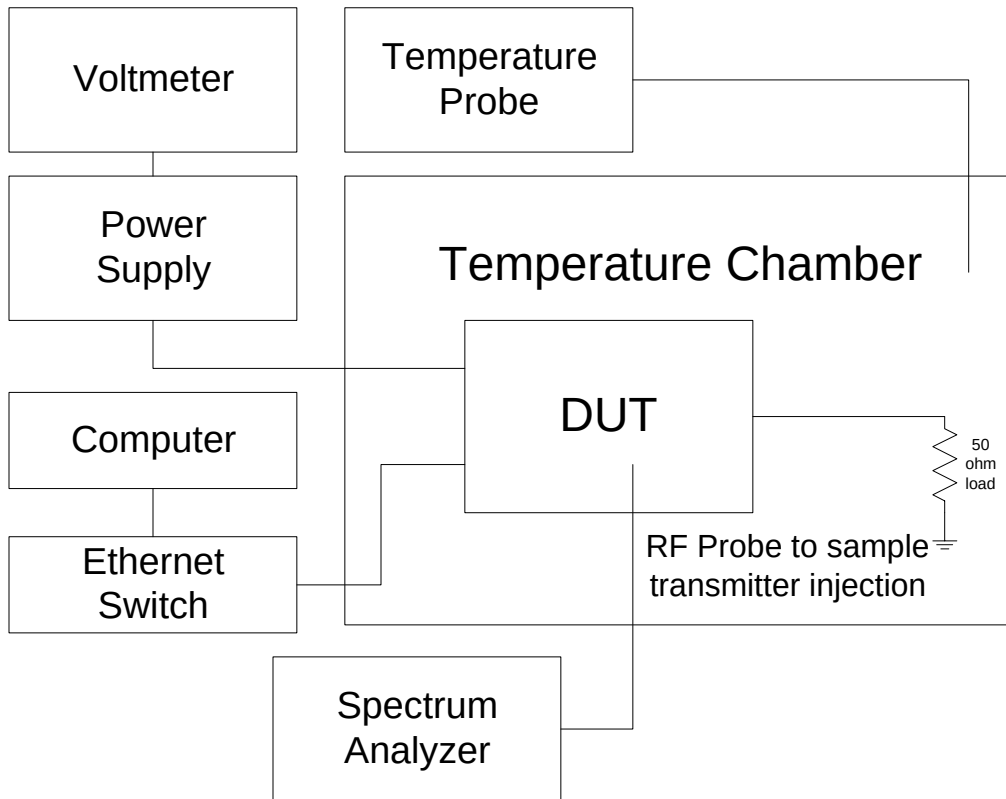
Test Conditions: Standard Test Conditions

Test Equipment:

DUT	NextNet Wireless CPE (OSU-2400-AV) # 2008693
Spectrum Analyzer	Hewlett Packard HP8563E S/N: 3221A00143 Cal Date: 10-16-2003 Cal Due: 10-16-2005
Attenuator(s) 2 x 20 dB	Pasternak Corporation Model: PE7005-20 (20 dB) Calibrated by user
Computer	Dell Inspiron 5000 Model: PPM S/N: 000332RM-12561-93N-3144
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003172
Power Supply	Globetek Model: GT-21097-5024-4.5 19.5 Vdc / 2.56 A Limited Power Source S/N: 008988 23/04
Multimeter	Fluke 87 III Voltmeter Calibration verified with HP 34401A Multimeter Cal Date: 08-03-2004 Cal Due: 08-03-06 S/N: 3146A58949

Frequency Stability

Test Set-Up:



Frequency Stability

Test Conditions: Frequency = 2593 MHz
Supply Voltage = 120 Vac / 60 Hz (19.5 VDC to OSU-2400-AV)

2.1055(a) The frequency stability shall be measured with variation of ambient temperature as follows:

(1) From -30° to $+50^{\circ}$ centigrade for all equipment except that specified in paragraphs (a) (2) and (3) of this section.

2.1055(b) Frequency measurements shall be made at the extremes of the specified temperature range and at intervals of not more than 10° centigrade through the range.

Test Results: Temperature Variation

Fo(Hz)=	2593000000			
Temp (°C)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
-30	2592995725	-4275	-0.000165	-1.65
-20	2592997558	-2442	-0.000094	-0.94
-10	2592998125	-1875	-0.000072	-0.72
0	2592998742	-1258	-0.000049	-0.49
10	2592999217	-783	-0.000030	-0.30
20	2592999550	-450	-0.000017	-0.17
30	2592999742	-258	-0.000010	-0.10
40	2593000133	133	0.000005	0.05
50	2593000942	942	0.000036	0.36
60	2593001933	1933	0.000075	0.75

Frequency Stability

Test Conditions: Frequency = 2593 MHz
Temperature = 20 °C

(d) The frequency stability shall be measured with variation of primary supply voltage as follows:

(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment.

Test Results: Supply Voltage Variation

Source Input

Voltage Specification: 120 Vac

Test Voltage Range = $0.85 * 120 = 102$ Vac lower limit

$1.15 * 120 = 138$ Vac upper limit

Fo(Hz)=	2593000000			
Source Voltage (VAC)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
102.0	2592999467	-533	-0.000021	-0.206
106.5	2592999467	-533	-0.000021	-0.206
111.0	2592999467	-533	-0.000021	-0.206
115.5	2592999467	-533	-0.000021	-0.206
120.0	2592999467	-533	-0.000021	-0.206
124.5	2592999467	-533	-0.000021	-0.206
129.0	2592999467	-533	-0.000021	-0.206
133.5	2592999467	-533	-0.000021	-0.206
138.0	2592999467	-533	-0.000021	-0.206