

Exhibit 6

Text Report

RF Power Output

Rule Part Number: 2.1046, 21.904(a)(b), 74.935(a)(b)
EIRP = 33 dBW+10log(X/6) dBW+10log(360/beamwidth) dBW
X = 6 for this filing
 $10\log(360/\text{beamwidth}) \leq 6\text{dB}$
beamwidth maximum = 360°
EIRP maximum = 33 dBW = 1995 W EIRP

Test Procedure: The RF output power is measured with a power meter. The RF output is applied to an attenuator that is connected to the power sensor of the power meter. The transmitter is enabled in test mode with the attached computer. Measurements are performed for each of the modulation formats available, 4 QAM, 16 QAM, and 64 QAM. The Tx power for 2 the watt setting is measured at the end of the coax that is used in a base station cabinet. The Tx power for the 5 watt enabled transmitter is measured at the output of the channel filter which is connected to the coax that is used in the base station cabinet.

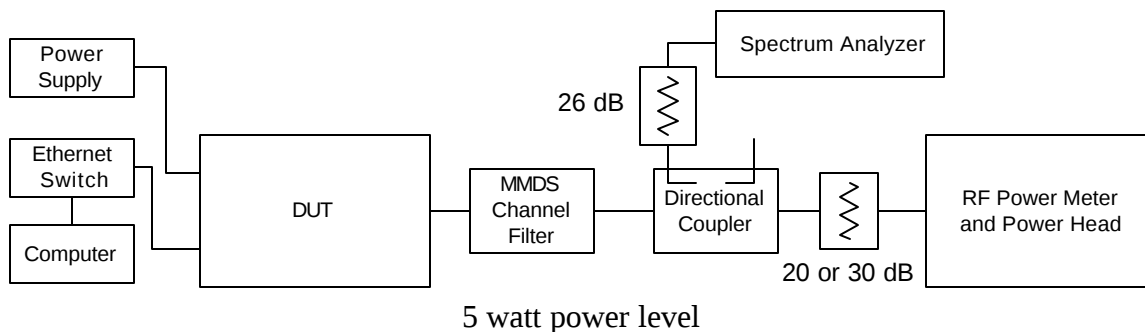
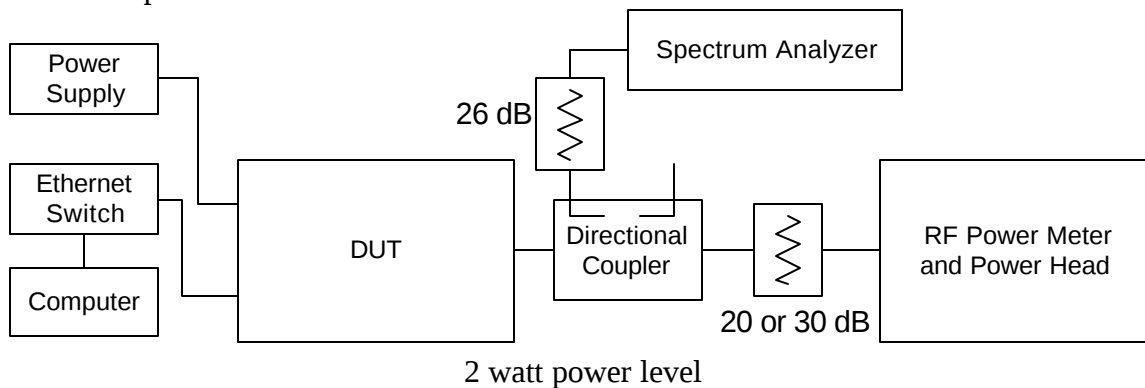
Test Conditions: Frequency = 2503, 2593, 2683 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz

Test Equipment:

Spectrum Analyzer	Rohde&Schwarz Model: FSEB S/N: 826407 Cal Date: 07-19-2002 Cal Due: 07-18-2004
Power Meter	Agilent E4418B S/N: GB41299360 Cal Date: 08-28-2002 Due Date: 08-28-2004
Power Head	HP8481A S/N: 1550A08915 Cal date: 05-15-2003 Due Date: 05-15-2005
Directional Coupler	Dual Directional Coupler Model: HP777D S/N: 01772 Calibrated by user

Attenuators (20 and 30dB)	Weinschel Model: 37-20-34 (S/N BM6195) Model: 37-30-34 (S/N BM6212) Calibrated by user
Attenuators (6 and 20 dB)	Pasternak Corporation Model: PE7005-6 (6 dB) Model: PE7005-20 (20 dB) Calibrated by user
Computer	Dell Inspiron 3500 Model: TS30T S/N: 9021946BY11687A
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
Power Supply	Cherokee International, LLC Model: CRP500L1H-1A

Test Set-Up:



Test Results: 100 % transmit duty cycle

Tx Power: 2 watt setting

Minimum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	-0.20	0.00095	-0.15	0.00097	-0.14	0.00097
2593	0.63	0.00116	0.51	0.00112	0.42	0.00110
2683	-0.21	0.00095	-0.36	0.00092	-0.51	0.00089

Maximum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	32.09	1.61808	32.13	1.63305	32.20	1.65959
2593	32.76	1.88799	32.68	1.85353	32.63	1.83231
2683	32.59	1.81552	32.70	1.86209	32.56	1.80302

Tx Power: 5 watt setting (with channel filter)

Minimum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	-0.43	0.00091	-0.53	0.00089	-0.58	0.00087
2593	-0.08	0.00098	0.06	0.00101	0.10	0.00102
2683	-0.21	0.00095	-0.43	0.00091	-0.63	0.00086

Maximum Power setting						
	QPSK		16 QAM		64 QAM	
Freq (MHz)	(dBm)	(Watts)	(dBm)	(Watts)	(dBm)	(Watts)
2503	36.63	4.60257	36.60	4.57088	36.57	4.53942
2593	36.85	4.84172	36.93	4.93174	36.91	4.90908
2683	36.94	4.94311	36.86	4.85289	36.88	4.87528

RF Power Output

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

Pass: Transmitted Power Output Requirement at 2 watt setting

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

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

Pass: Transmitted Power Output Requirement at 5 watt setting

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

Pass: Transmitted Power Output Requirement at 5 watt setting

Modulation Characteristics

Rule Parts:

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

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(a) The maximum out-of-band power of an MDS station transmitter or booster transmitting on a single 6 MHz channel or a portion thereof with an EIRP in excess of -9 dBW (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) employing digital modulation shall be attenuated at the 6 MHz channel edges at least 25 dB relative to the licensed 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(c) The maximum out-of-band power of an ITFS station transmitter or booster transmitting on a single 6 MHz channel or a portion thereof with an EIRP in excess of -9 dBW (or, when subchannels are used, the appropriately adjusted value based upon the ratio of the channel-to-subchannel bandwidths) employing digital modulation shall be attenuated at the 6 MHz channel edges at least 25 dB relative to the licensed 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.

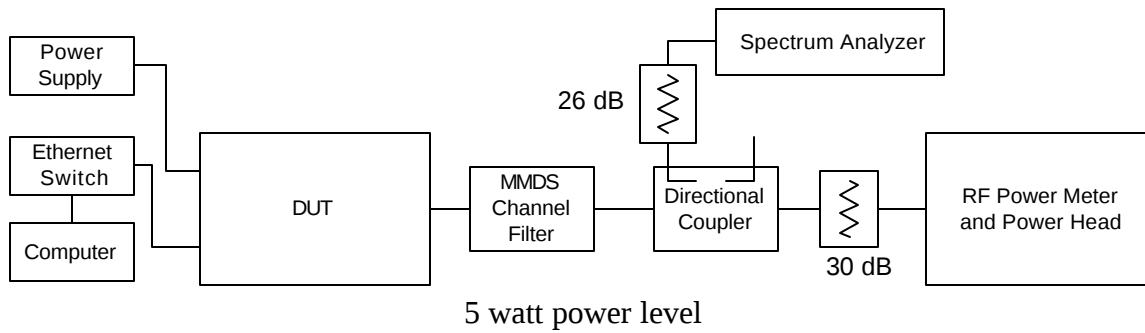
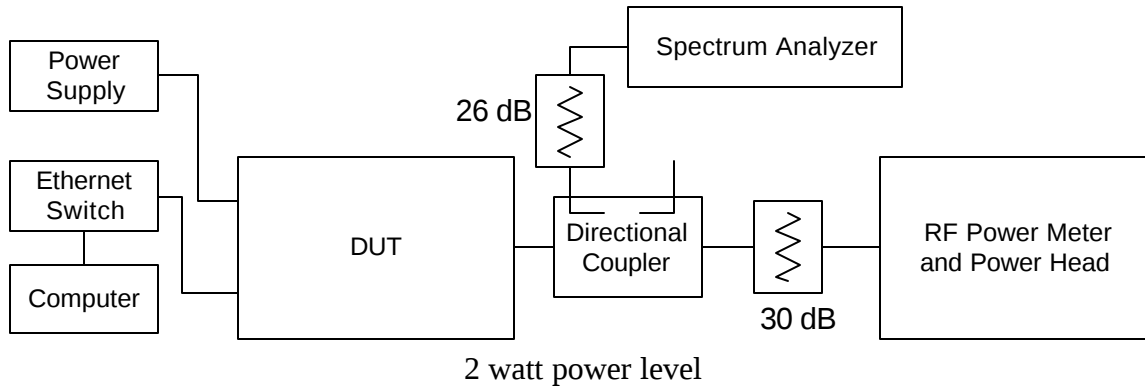
Modulation Characteristics

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 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. Measurements are performed for each of the modulation formats available, 4 QAM, 16 QAM, and 64 QAM. Measurements completed at the 2 watt level are without an MMDS channel filter. Measurements completed at the 5 watt power level include an MMDS channel filter which will be required for spectral compliance.

Test Conditions: Frequencies = 2503, 2593, 2683 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz

Modulation Characteristics

Test Set-Up:



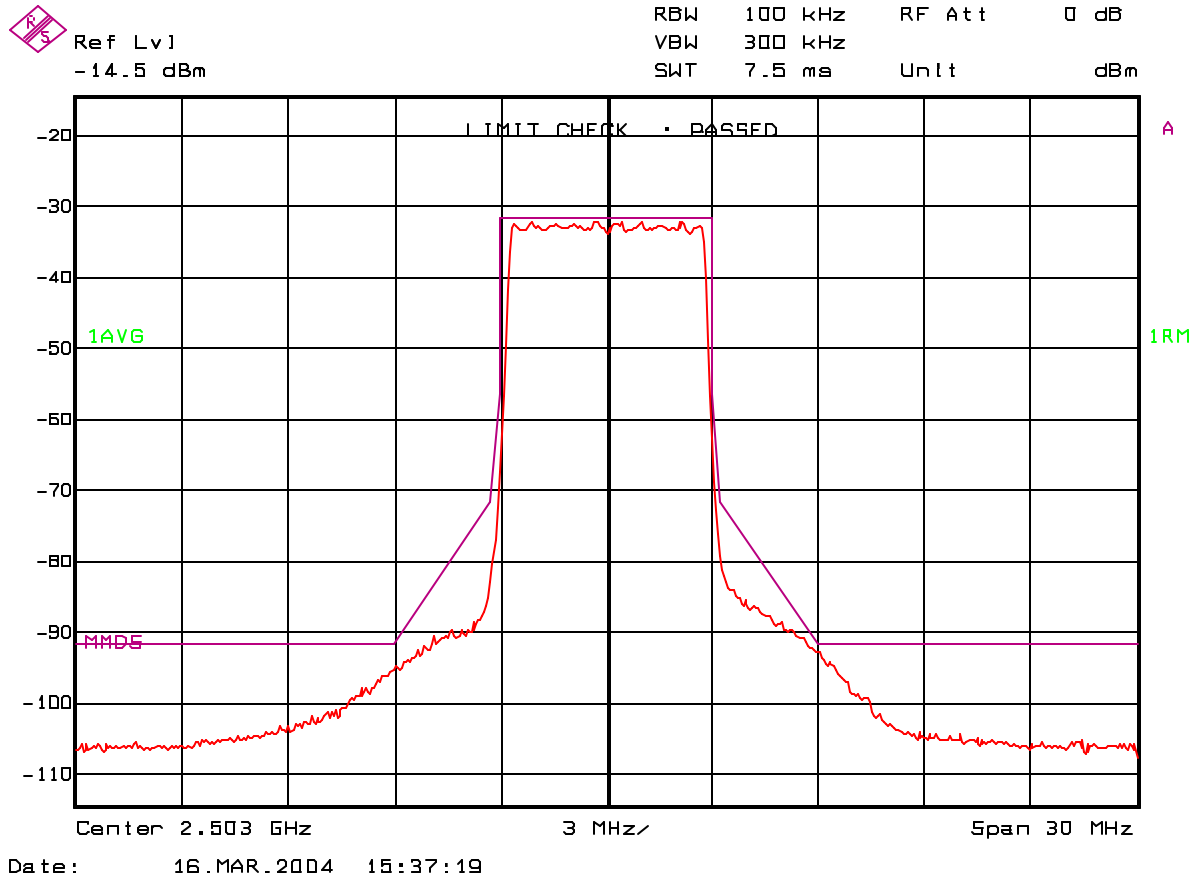
Modulation Characteristics

Test Equipment:

Spectrum Analyzer	Rohde&Schwarz Model: FSEB S/N: 826407 Cal Date: 07-19-2002 Cal Due: 07-18-2004
Directional Coupler	Dual Directional Coupler Model: HP777D S/N: 01772 Calibrated by user
Attenuators (6 and 20 dB)	Pasternak Corporation Model: PE7005-6 (6 dB) Model: PE7005-20 (20 dB) Calibrated by user
Attenuator (30dB)	Weinschel Model: 37-30-34 (S/N BM6212) Calibrated by user
Computer	Dell Inspiron 3500 Model: TS30T S/N: 9021946BY11687A
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
Power Supply	Cherokee International, LLC Model: CRP500L1H-1A

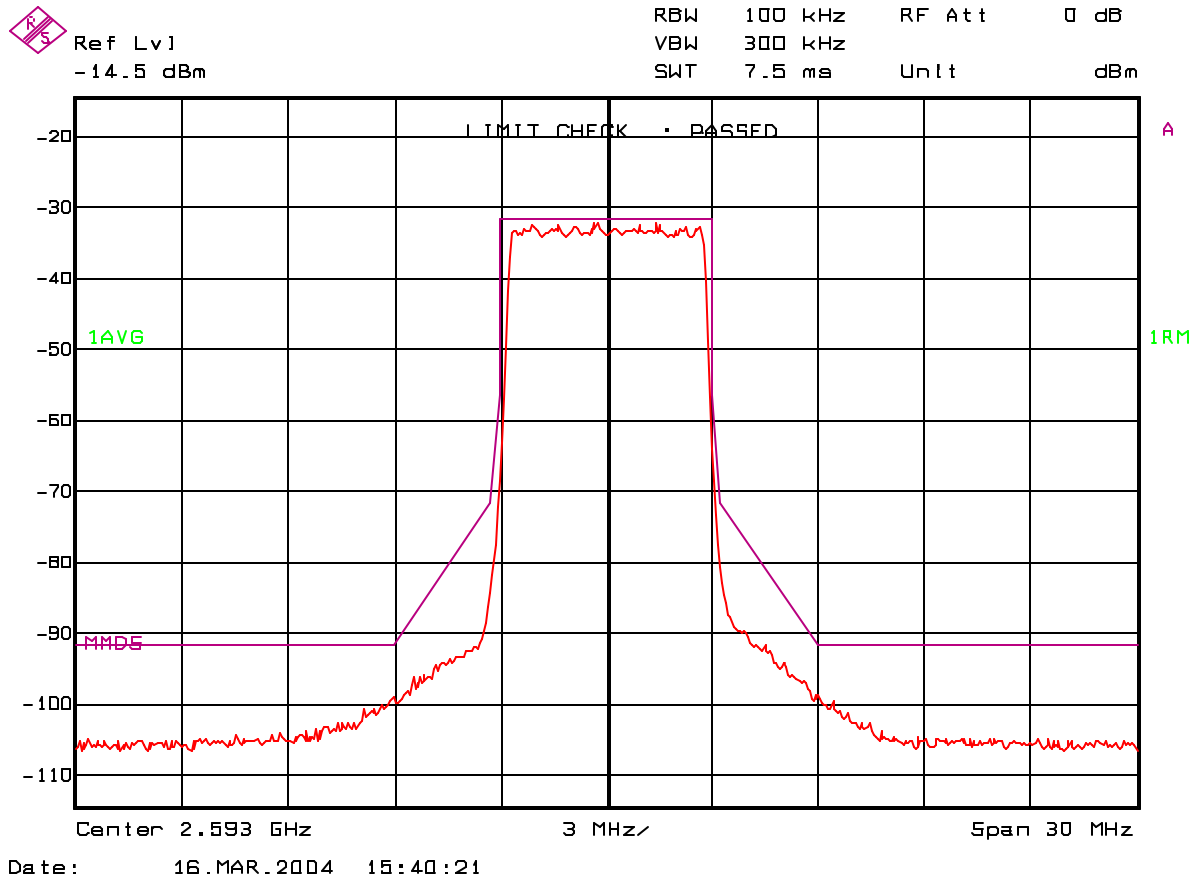
Modulation Characteristics

Test Results: Channel 1, 2503 MHz
33dBm / 2W
4 QAM



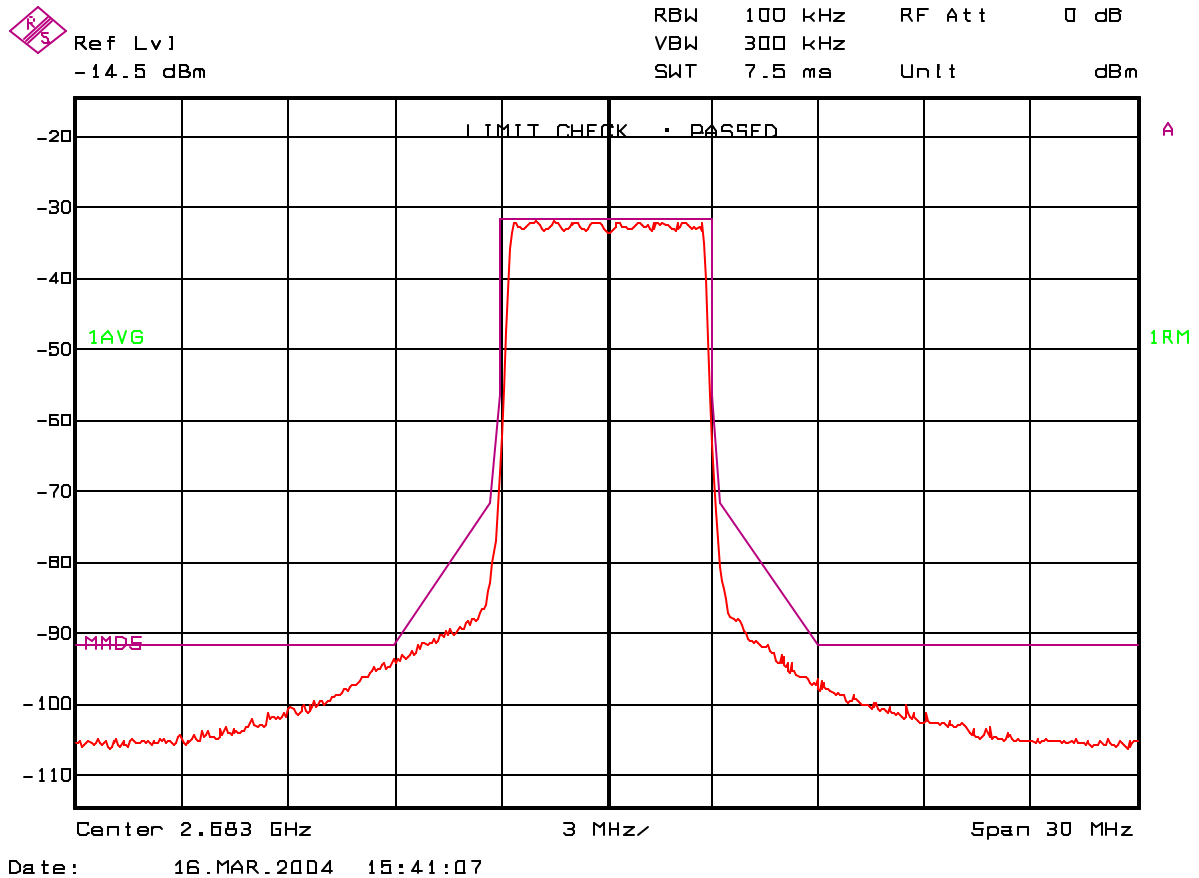
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
33dBm / 2W
4 QAM



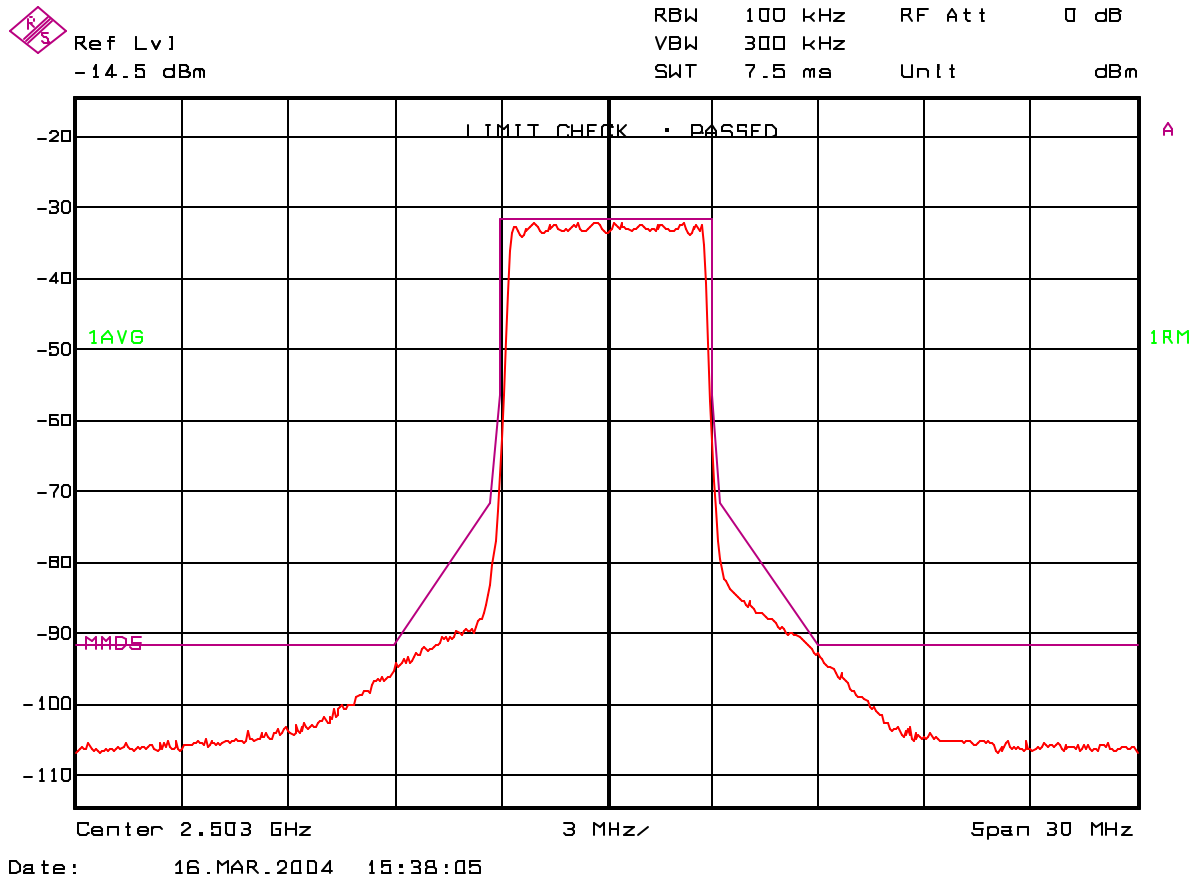
Modulation Characteristics

Test Results: Channel 31, 2683 MHz
33dBm / 2W
4 QAM



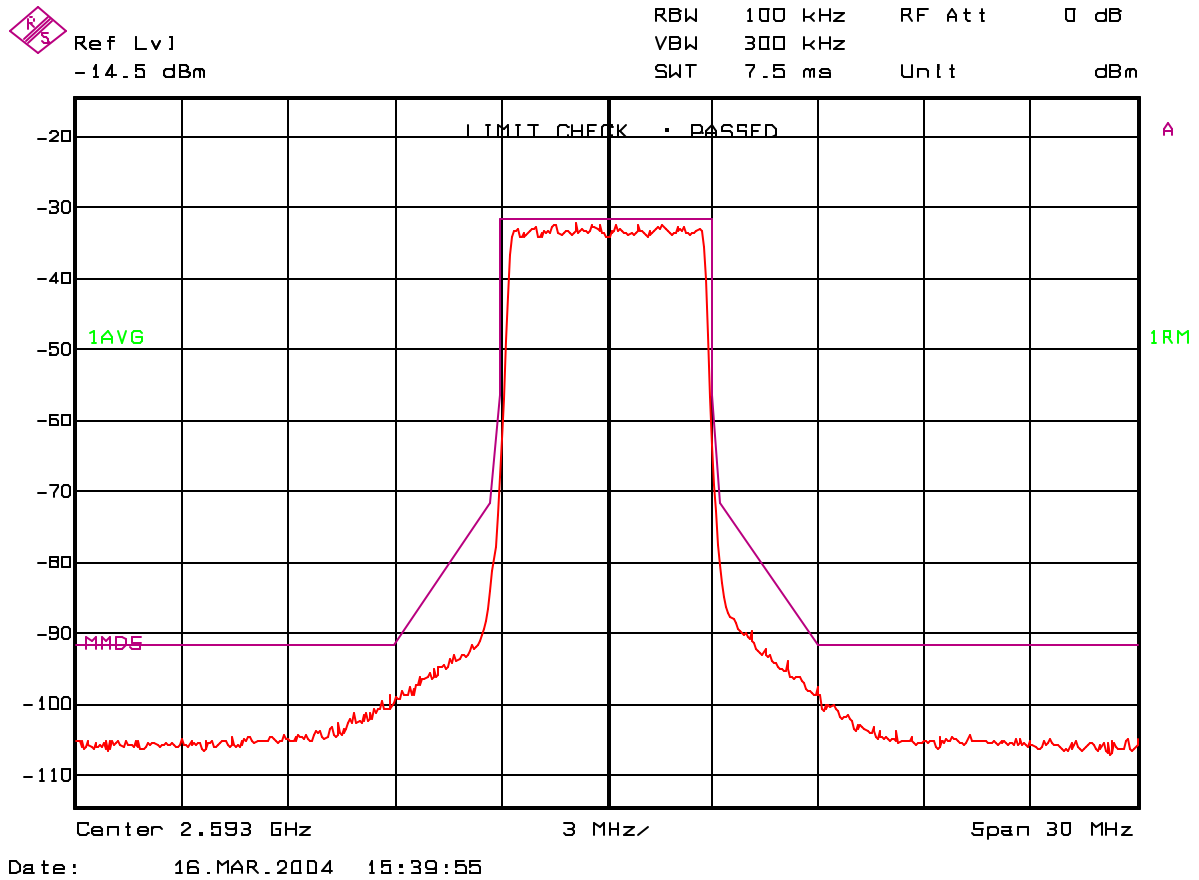
Modulation Characteristics

Test Results: Channel 1, 2503 MHz
33dBm / 2W
16 QAM



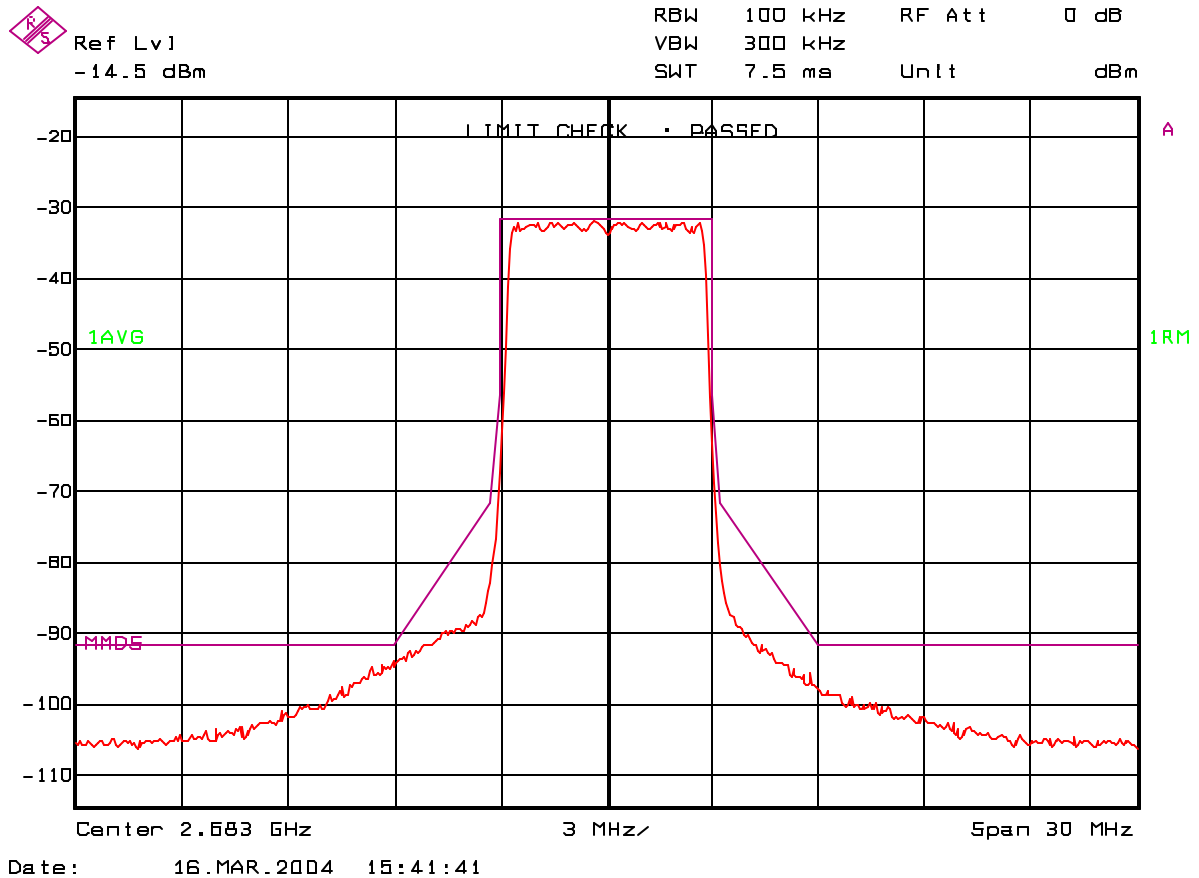
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
33dBm / 2W
16 QAM



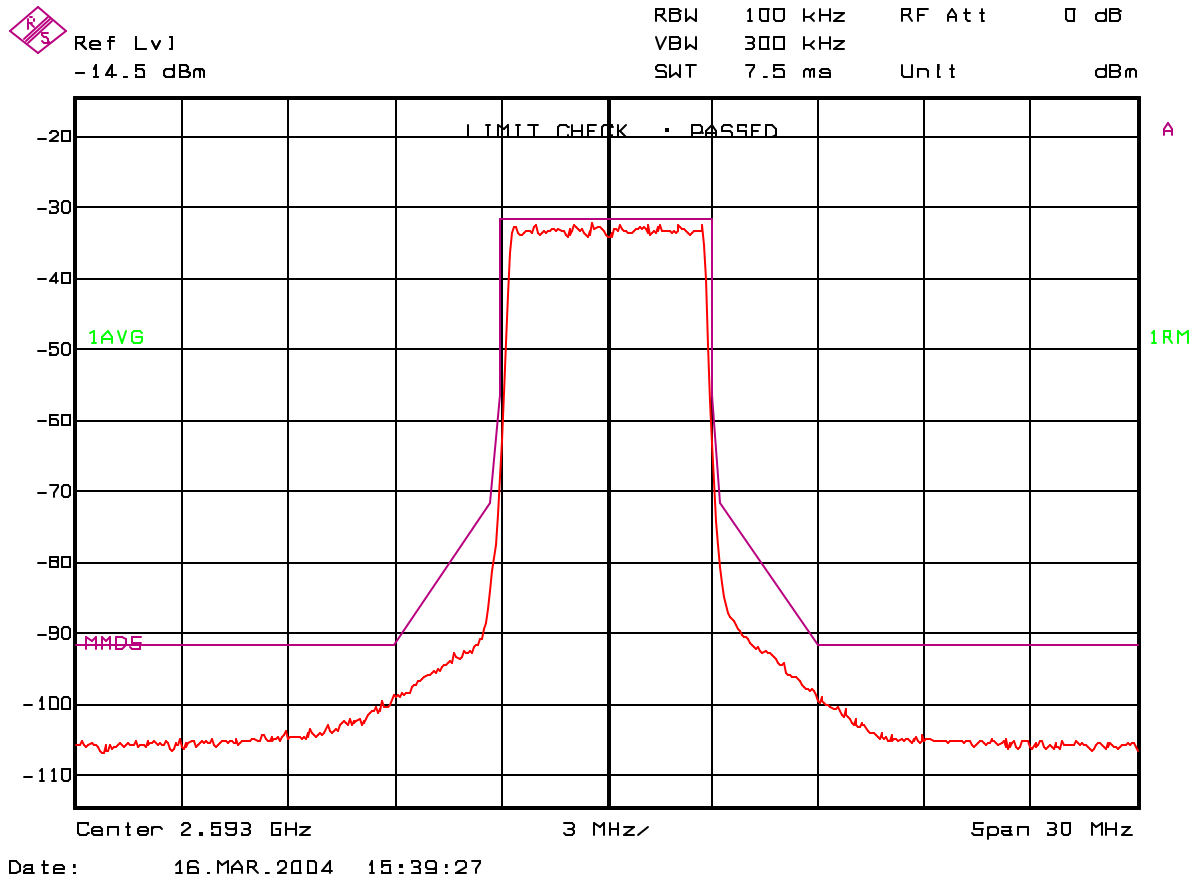
Modulation Characteristics

Test Results: Channel 31, 2683 MHz
33dBm / 2W
16 QAM



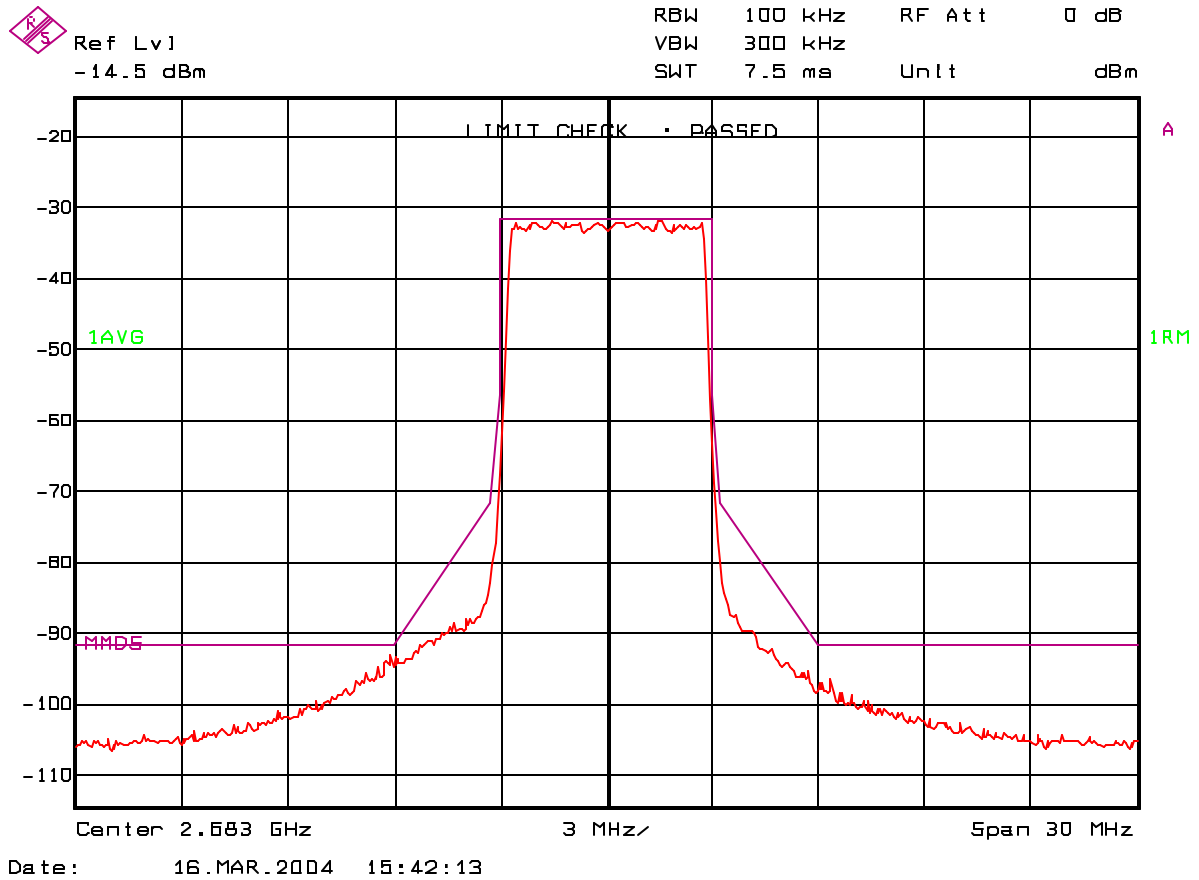
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
33dBm / 2W
64 QAM



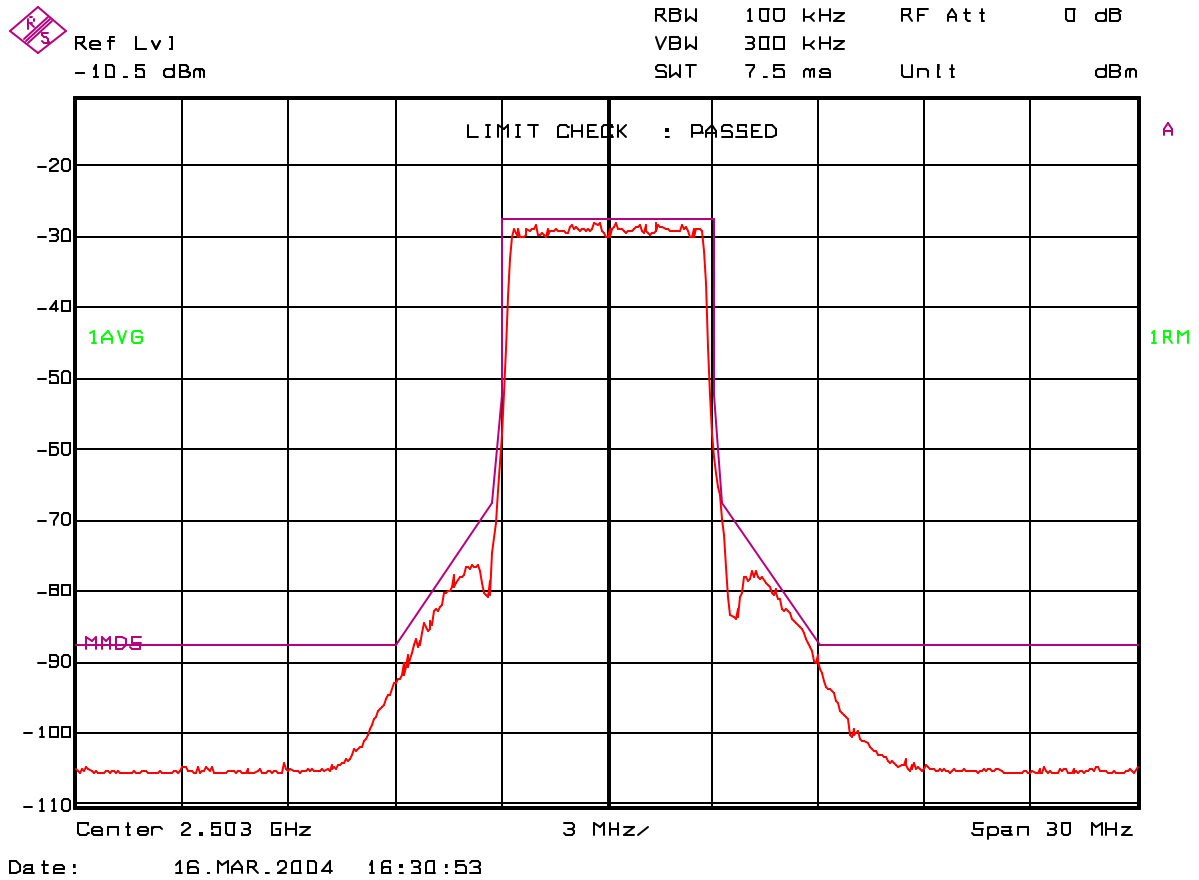
Modulation Characteristics

Test Results: Channel 31, 2683 MHz
33dBm / 2W
64 QAM



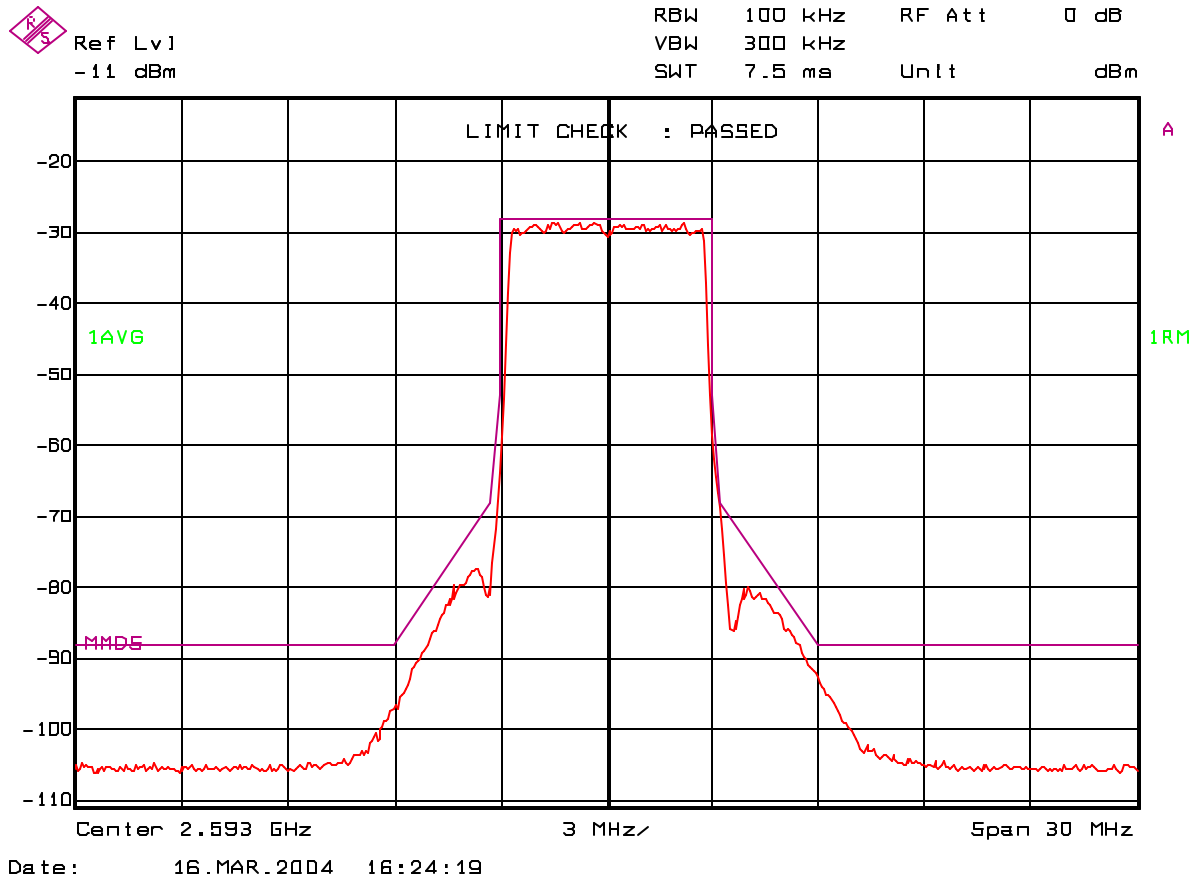
Modulation Characteristics

Test Results: Channel 1, 2503 MHz
37dBm / 5W
4 QAM



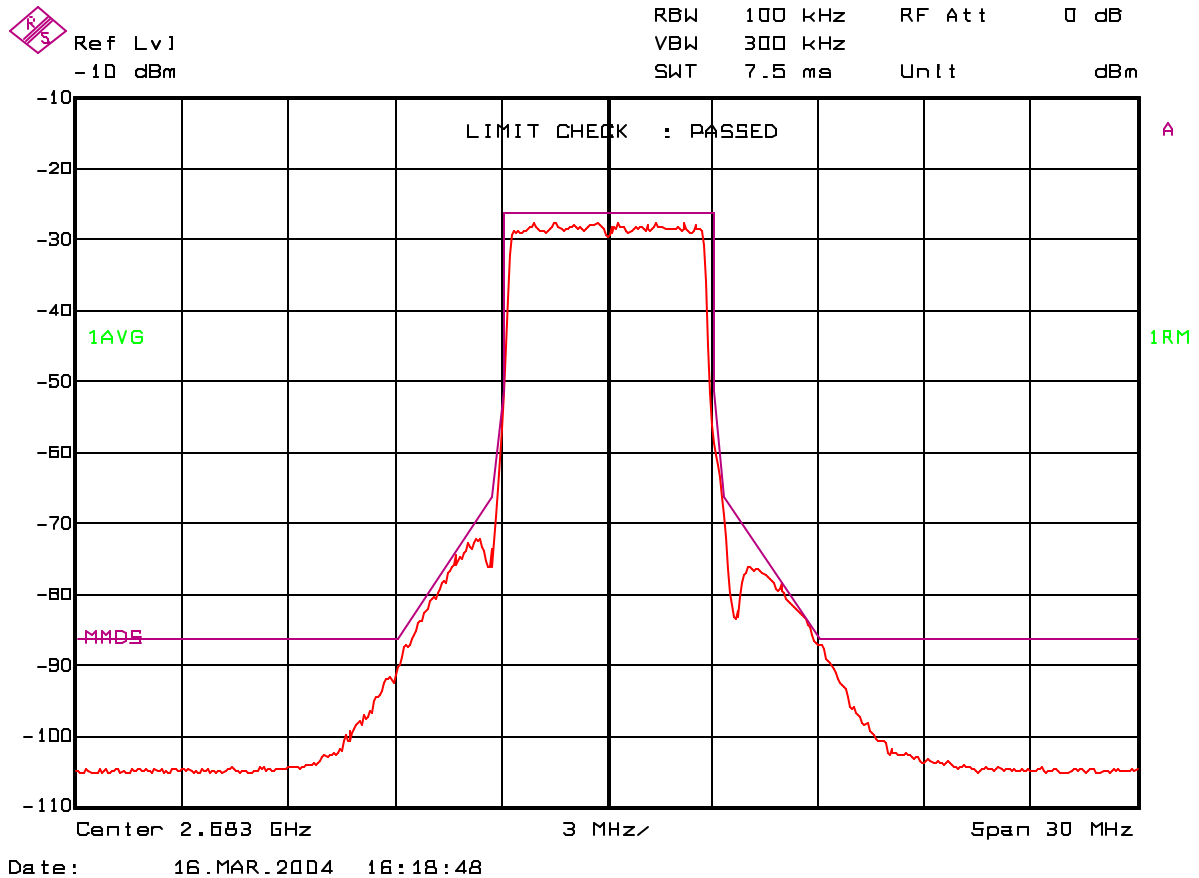
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
37dBm / 5W
4 QAM



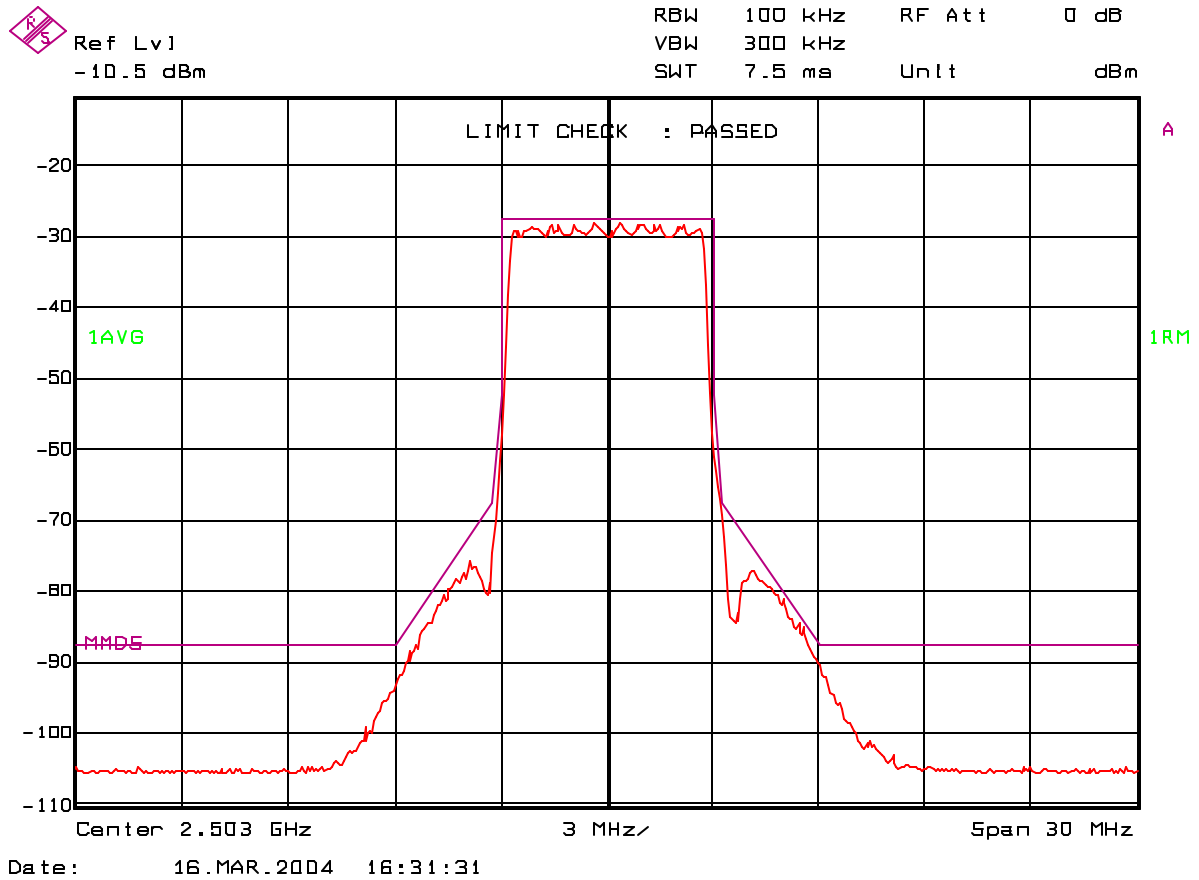
Modulation Characteristics

Test Results: Channel 31, 2683 MHz
37dBm / 5W
4 QAM



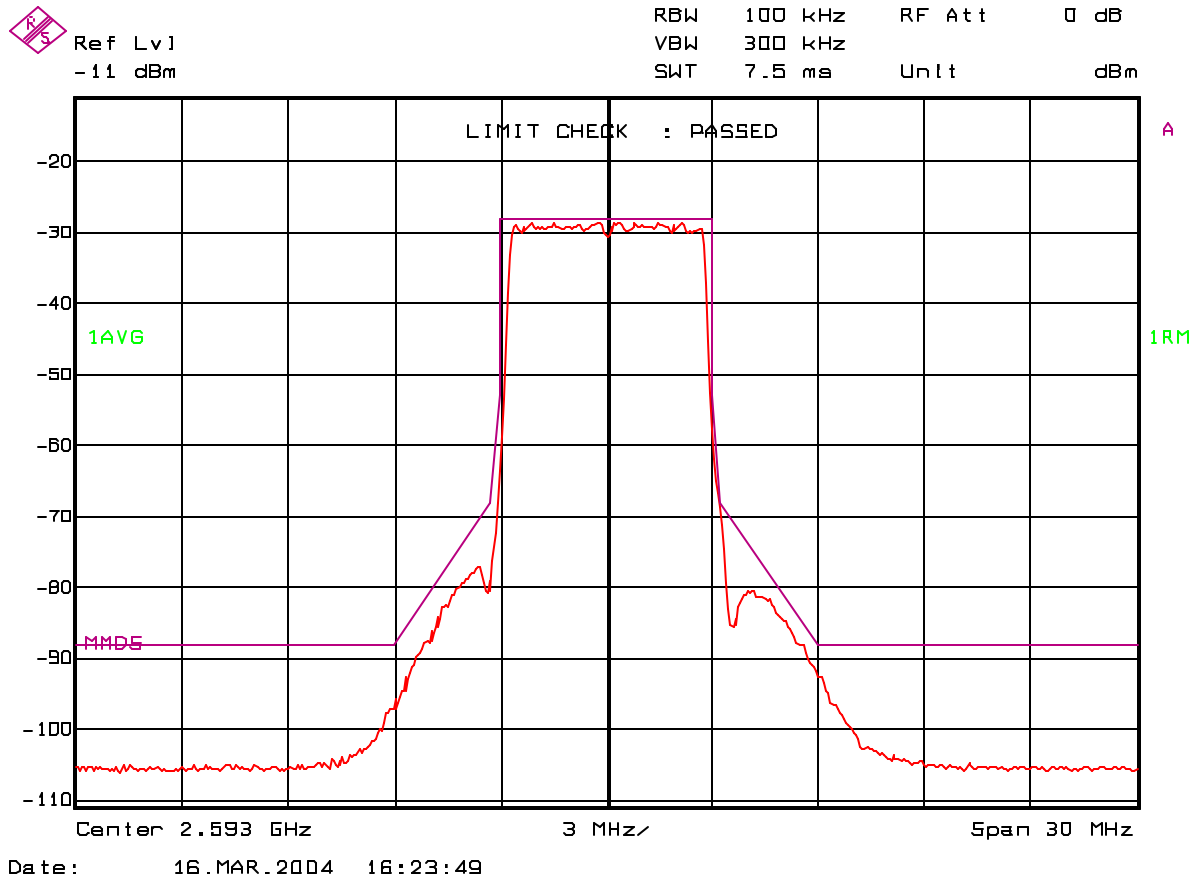
Modulation Characteristics

Test Results: Channel 1, 2503 MHz
37dBm / 5W
16 QAM



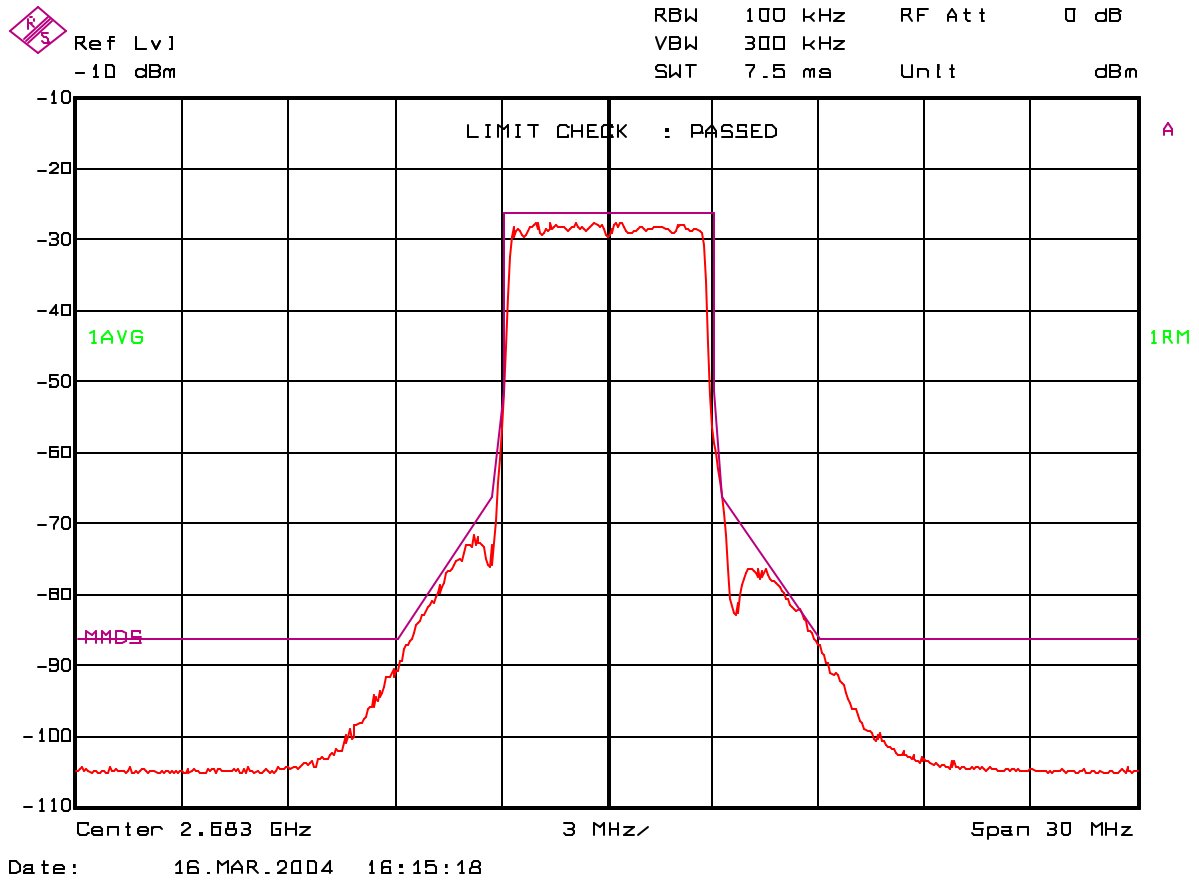
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
37dBm / 5W
16 QAM



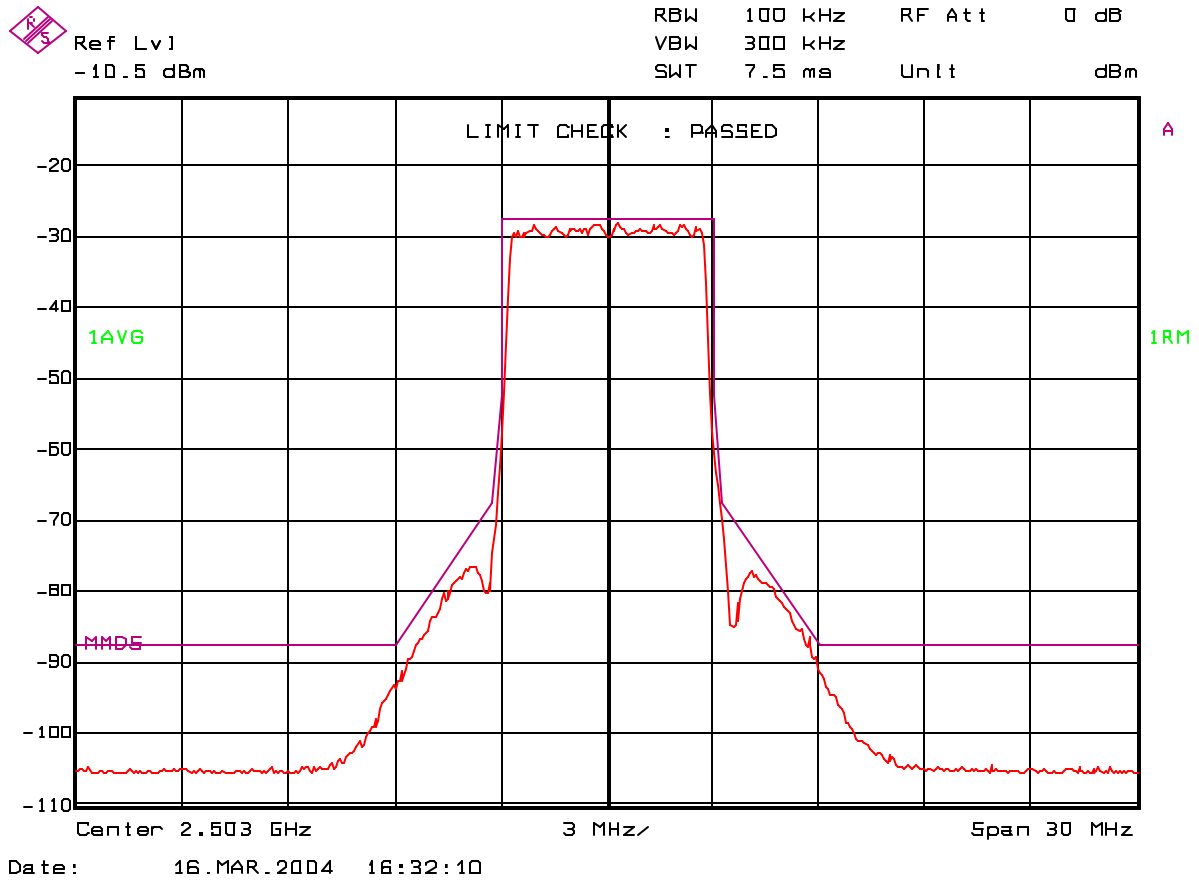
Modulation Characteristics

Test Results: Channel 31, 2683 MHz
37dBm / 5W
16 QAM



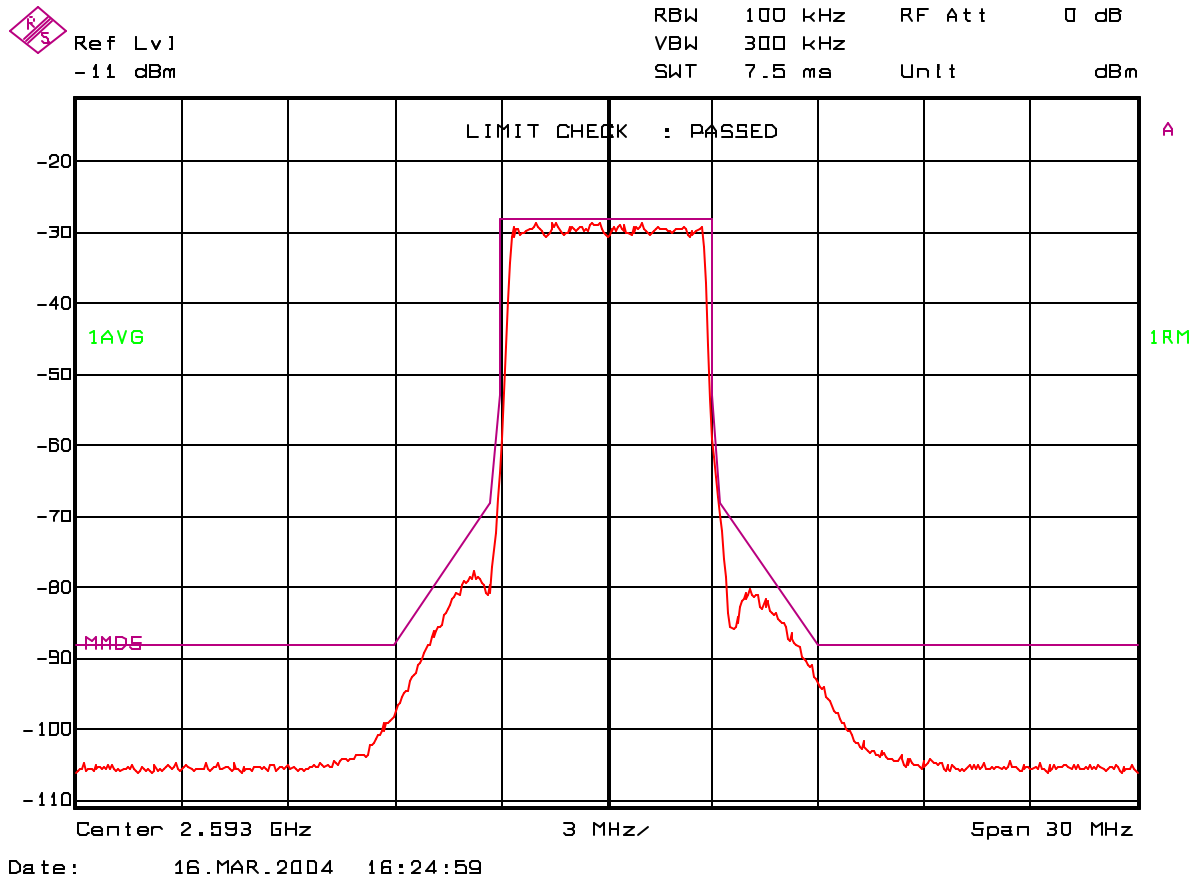
Modulation Characteristics

Test Results: Channel 1, 2503 MHz
37dBm / 5W
64 QAM



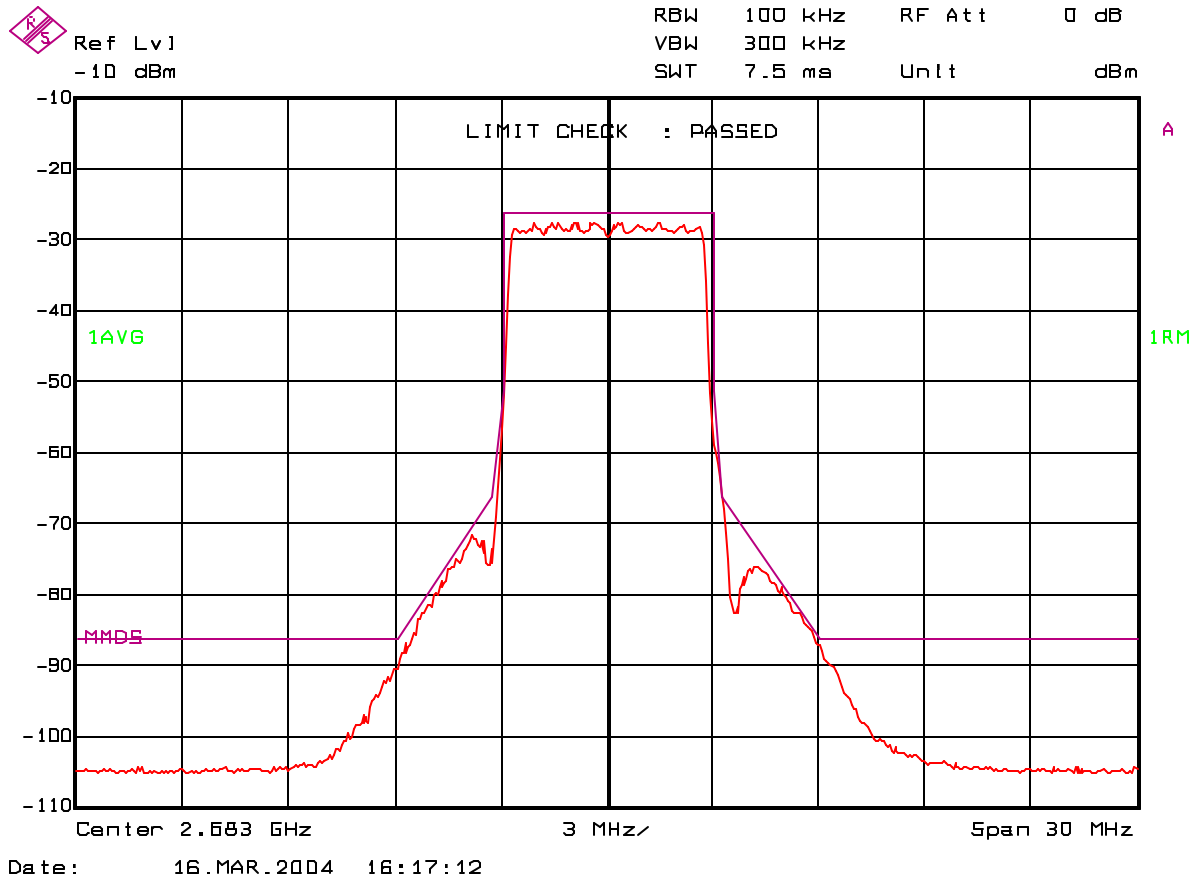
Modulation Characteristics

Test Results: Channel 16, 2593 MHz
37dBm / 5W
64 QAM



Modulation Characteristics

Test Results: Channel 31, 2683 MHz
37dBm / 5W
64 QAM



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 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. Measurements are performed 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

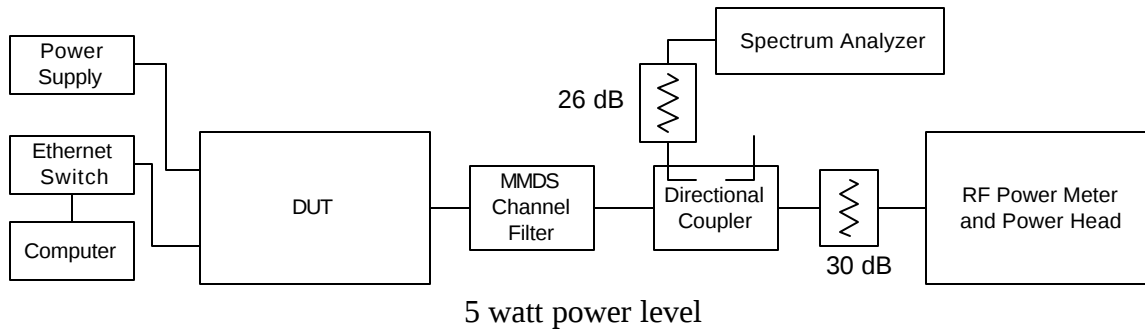
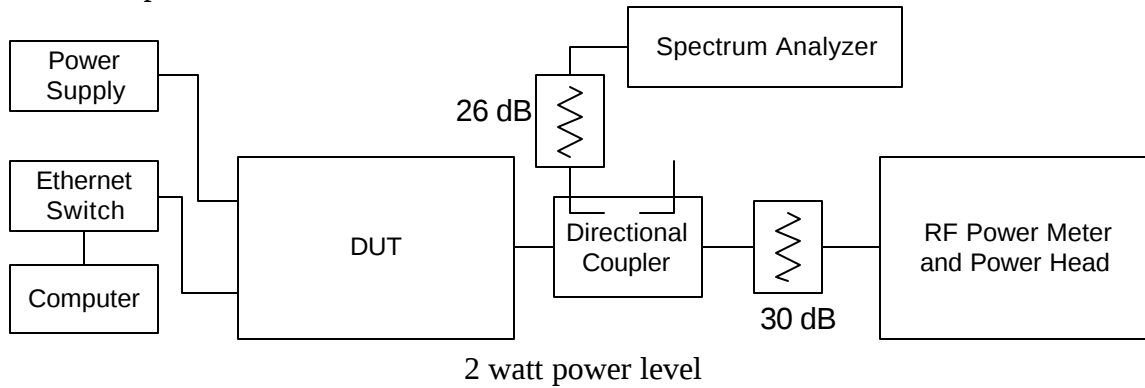
Test Results Summary:

99 % Occupied Bandwidth (2 watt power level)			
(MHz)	Modulation Type		
Channel	4 QAM	16 QAM	64 QAM
1	5.51603206	5.51603206	5.51603206
16	5.51603206	5.51603206	5.51603206
31	5.51603206	5.51603206	5.51603206

99 % Occupied Bandwidth (5 watt power level)			
(MHz)	Modulation Type		
Channel	4 QAM	16 QAM	64 QAM
1	5.50100200	5.51603206	5.50100200
16	5.50100200	5.51603206	5.51603206
31	5.50100200	5.51603206	5.50100200

Occupied Bandwidth

Test Set-Up:



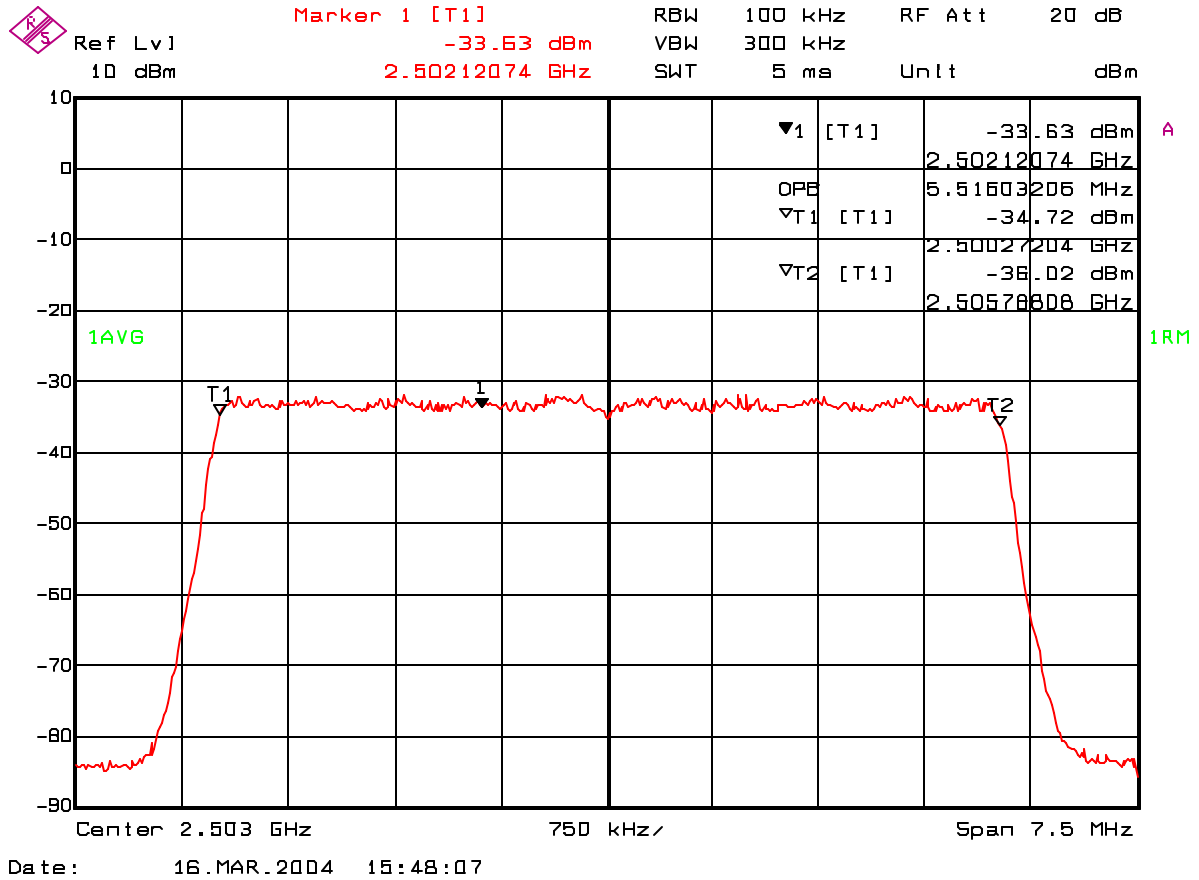
Occupied Bandwidth

Test Equipment:

Spectrum Analyzer	Rohde&Schwarz Model: FSEB S/N: 826407 Cal Date: 07-19-2002 Cal Due: 07-18-2004
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Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
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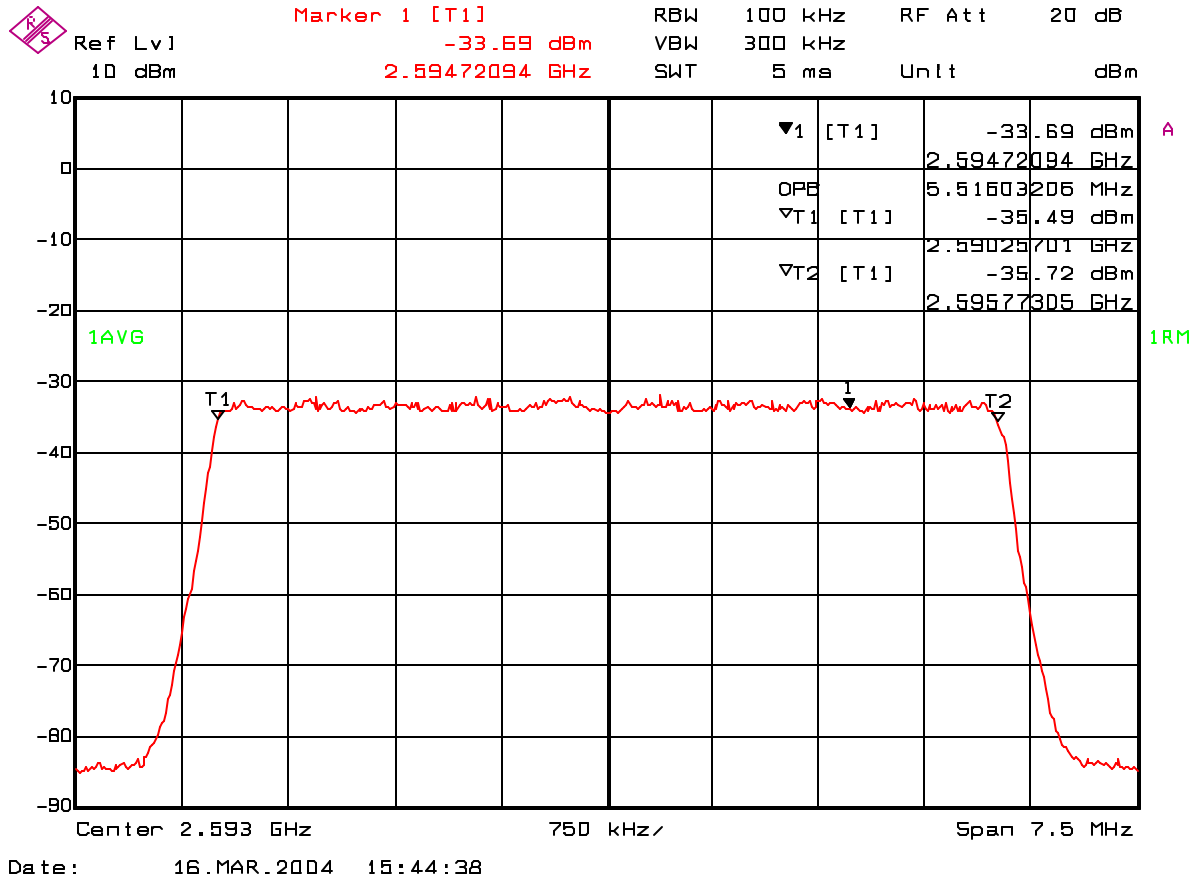
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
4 QAM
33 dBm / 2 watt



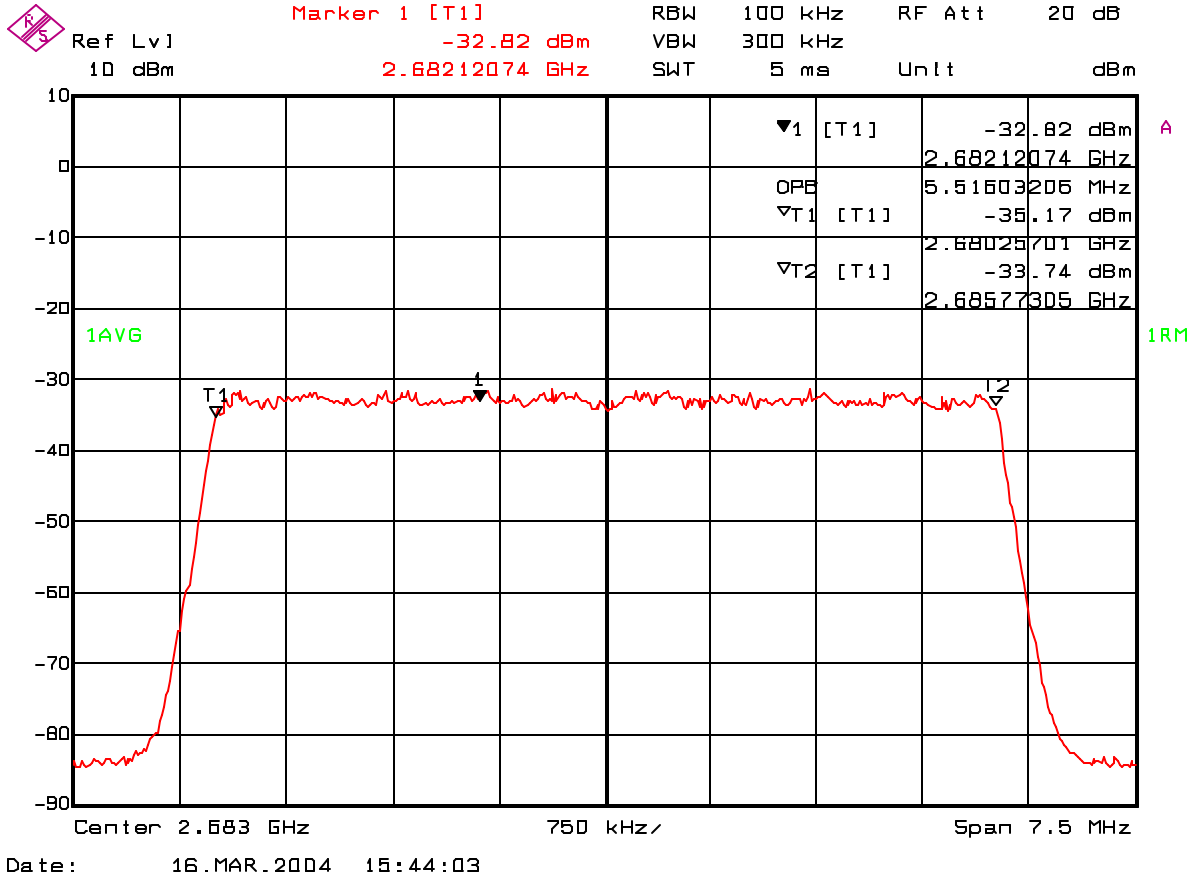
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
4 QAM
33 dBm / 2 watt



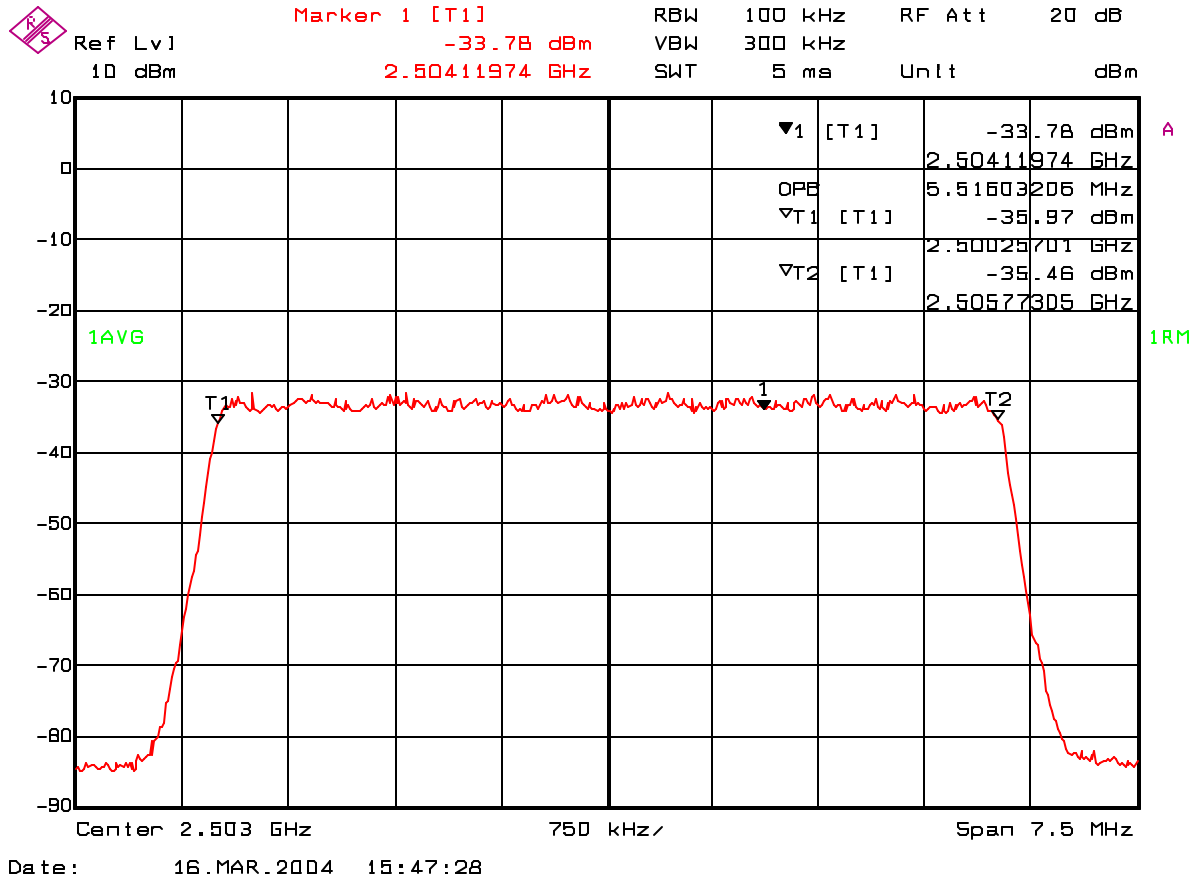
Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
4 QAM
33 dBm / 2 watt



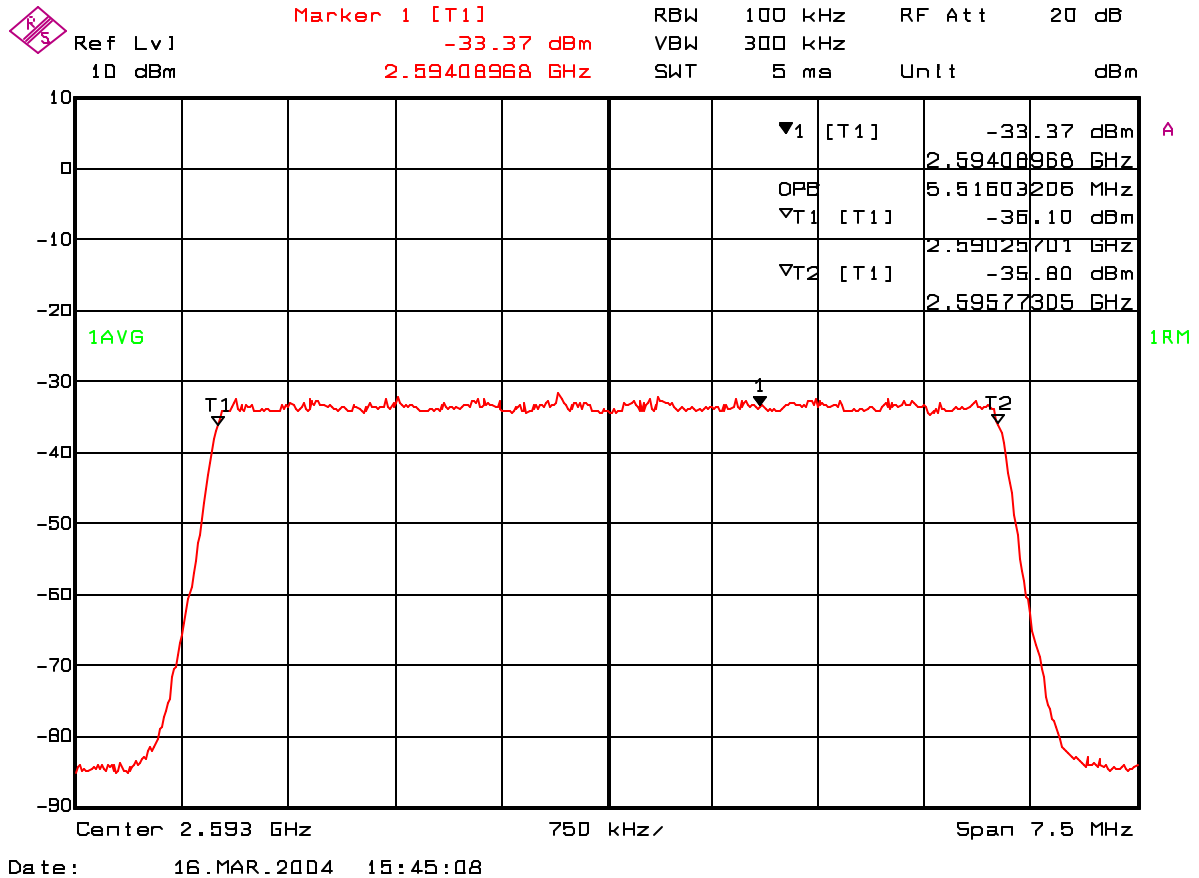
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
16 QAM
33 dBm / 2 watt



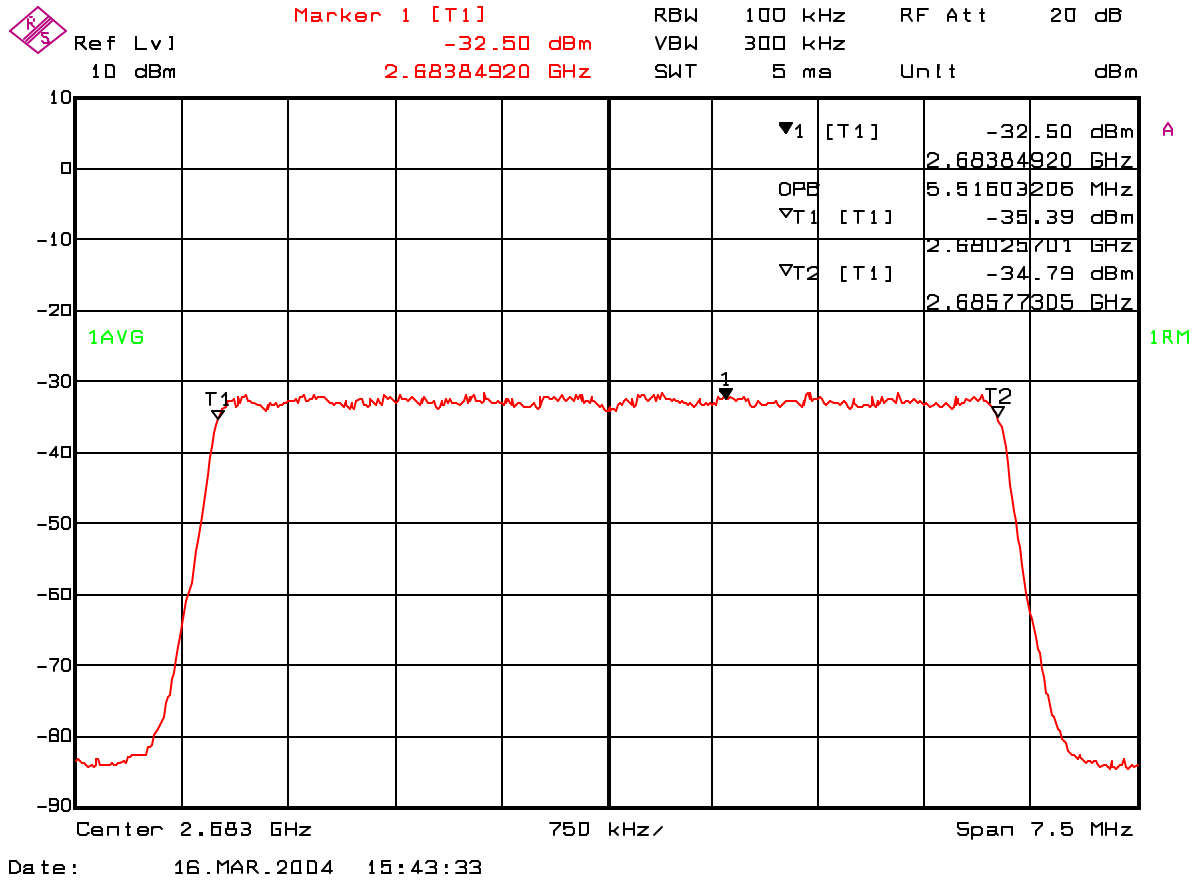
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
16 QAM
33 dBm / 2 watt



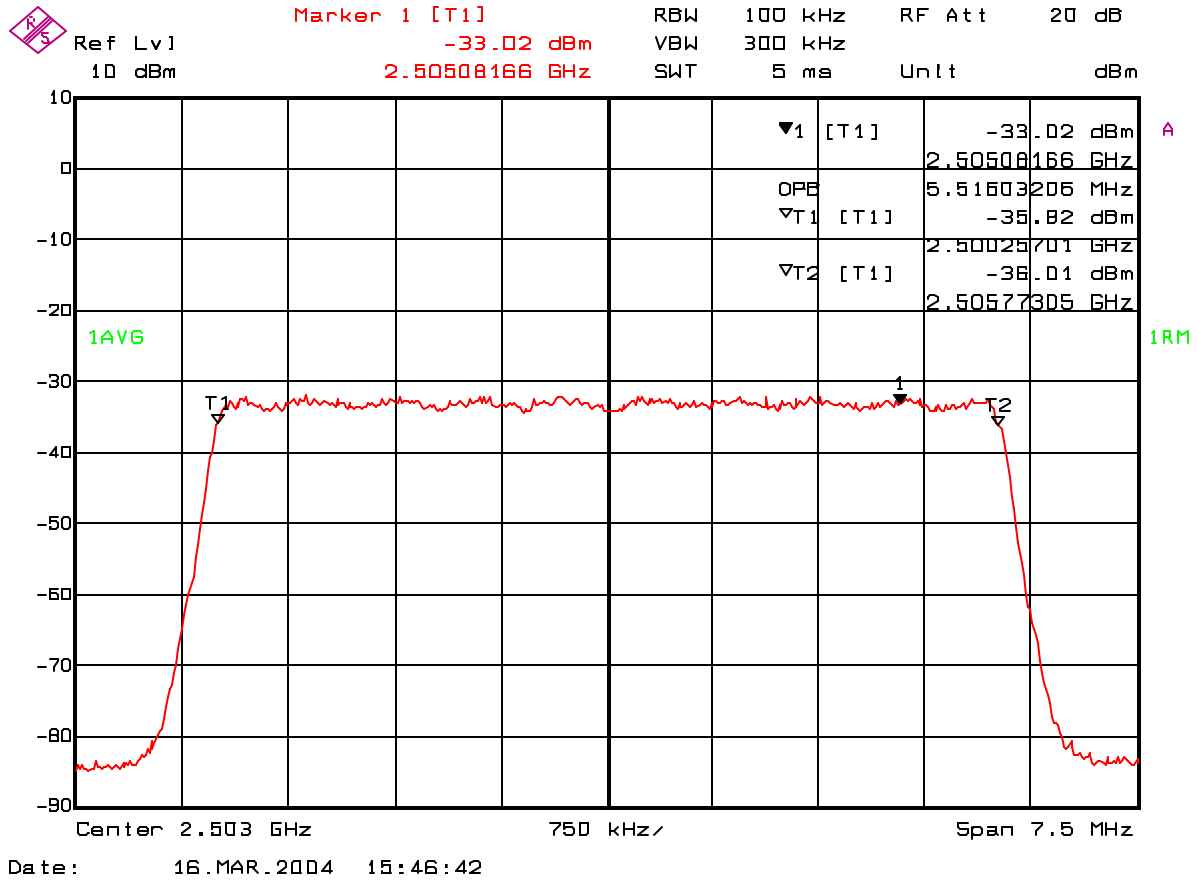
Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
16 QAM
33 dBm / 2 watt



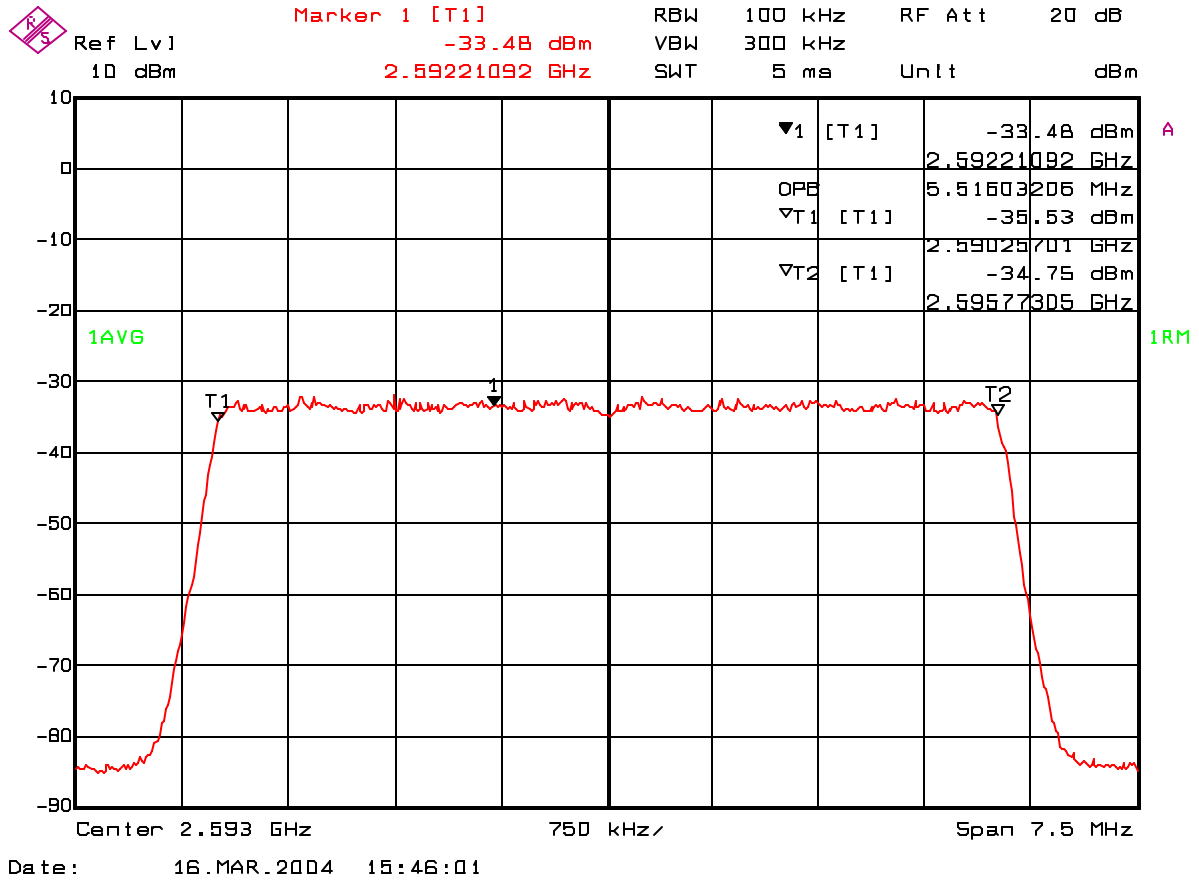
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
64 QAM
33 dBm / 2 watt



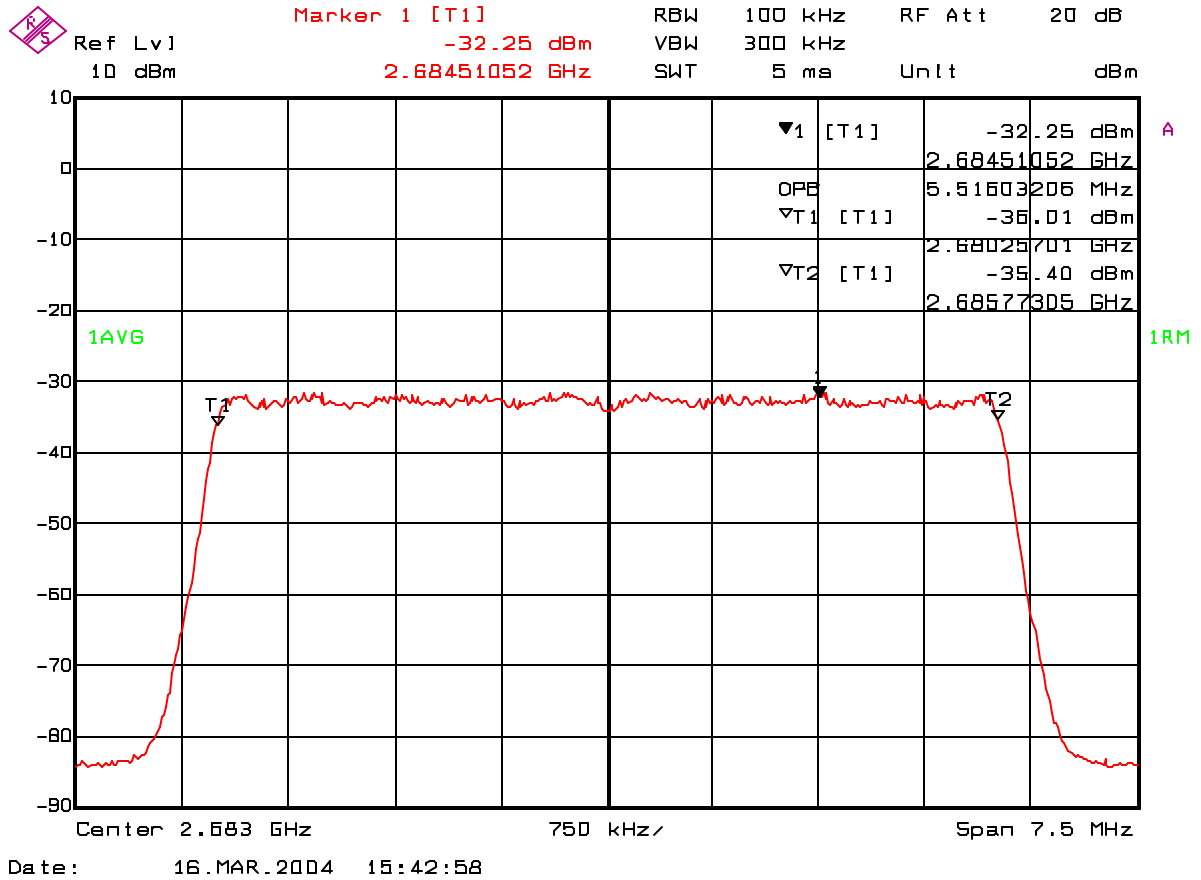
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
64 QAM
33 dBm / 2 watt



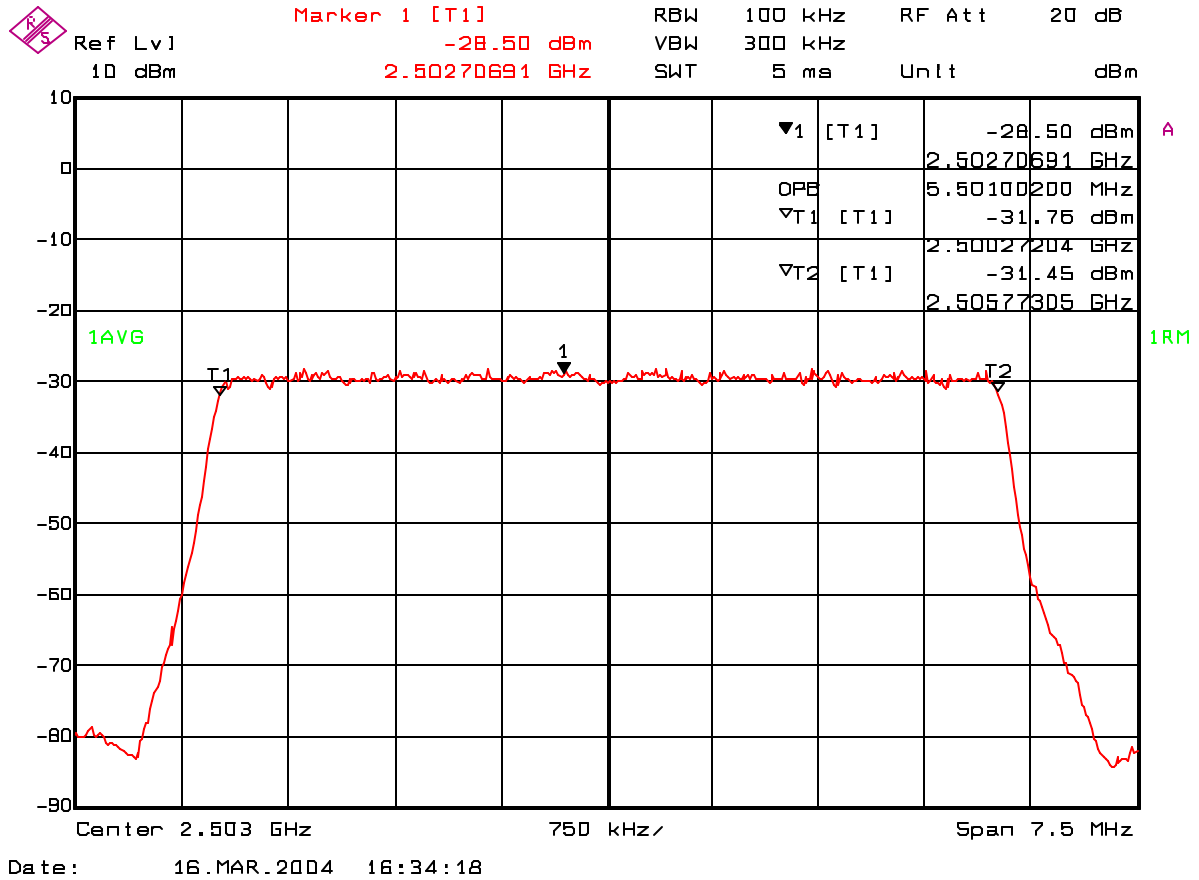
Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
64 QAM
33 dBm / 2 watt



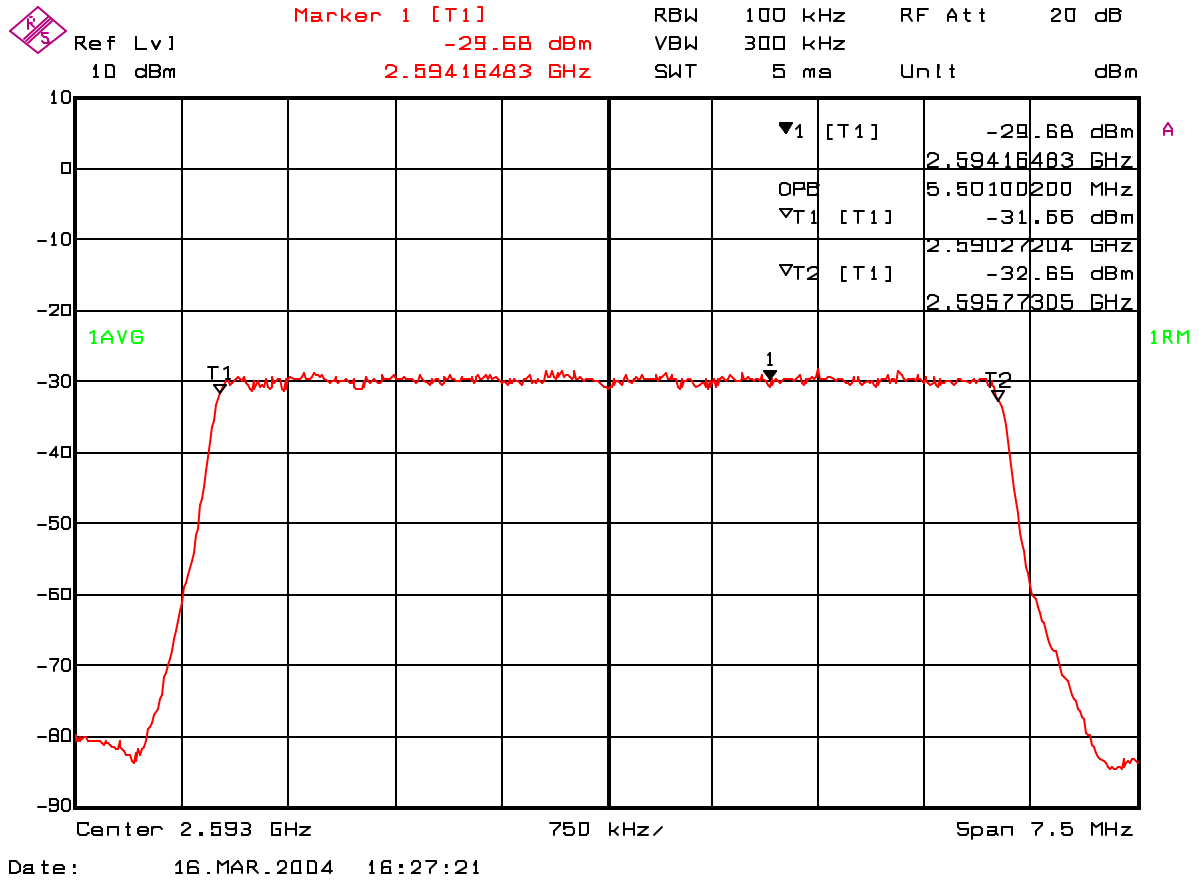
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
4 QAM
37 dBm / 5 watt



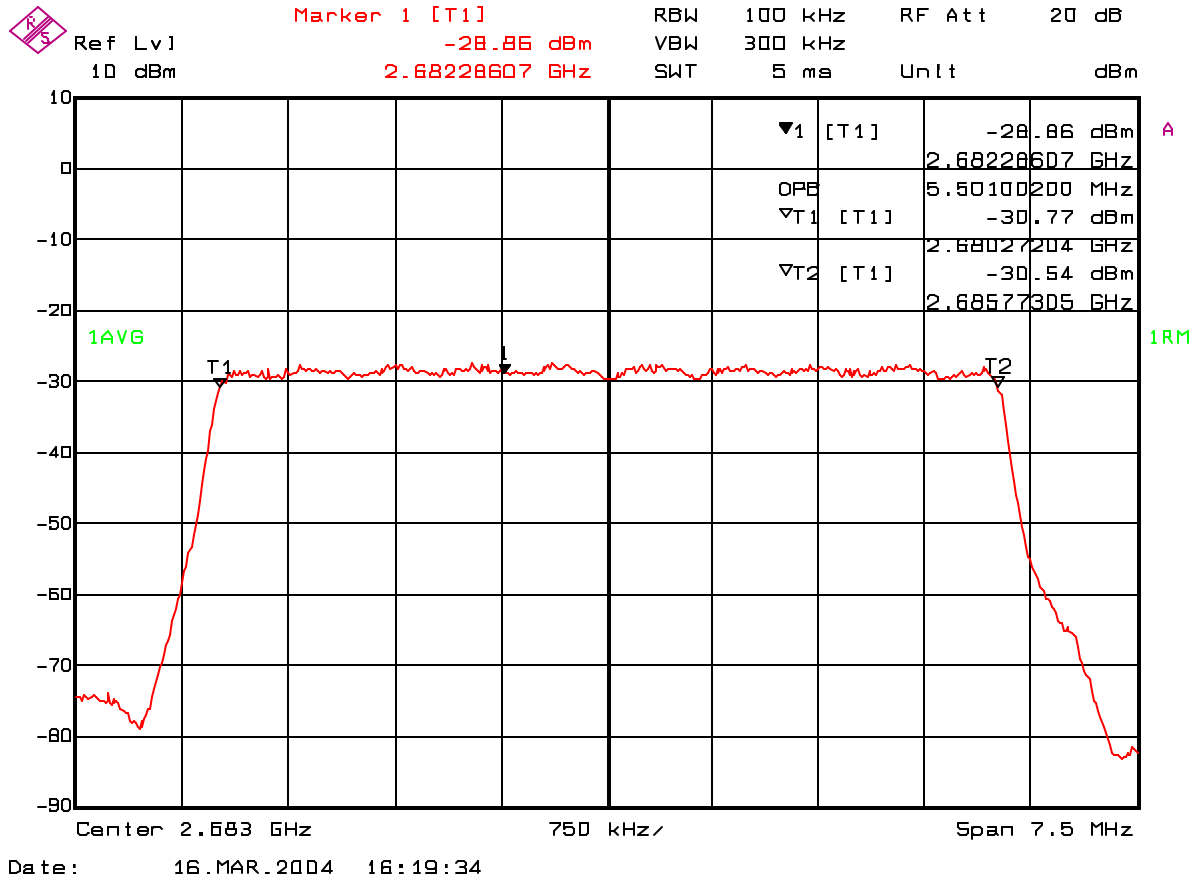
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
4 QAM
37 dBm / 5 watt



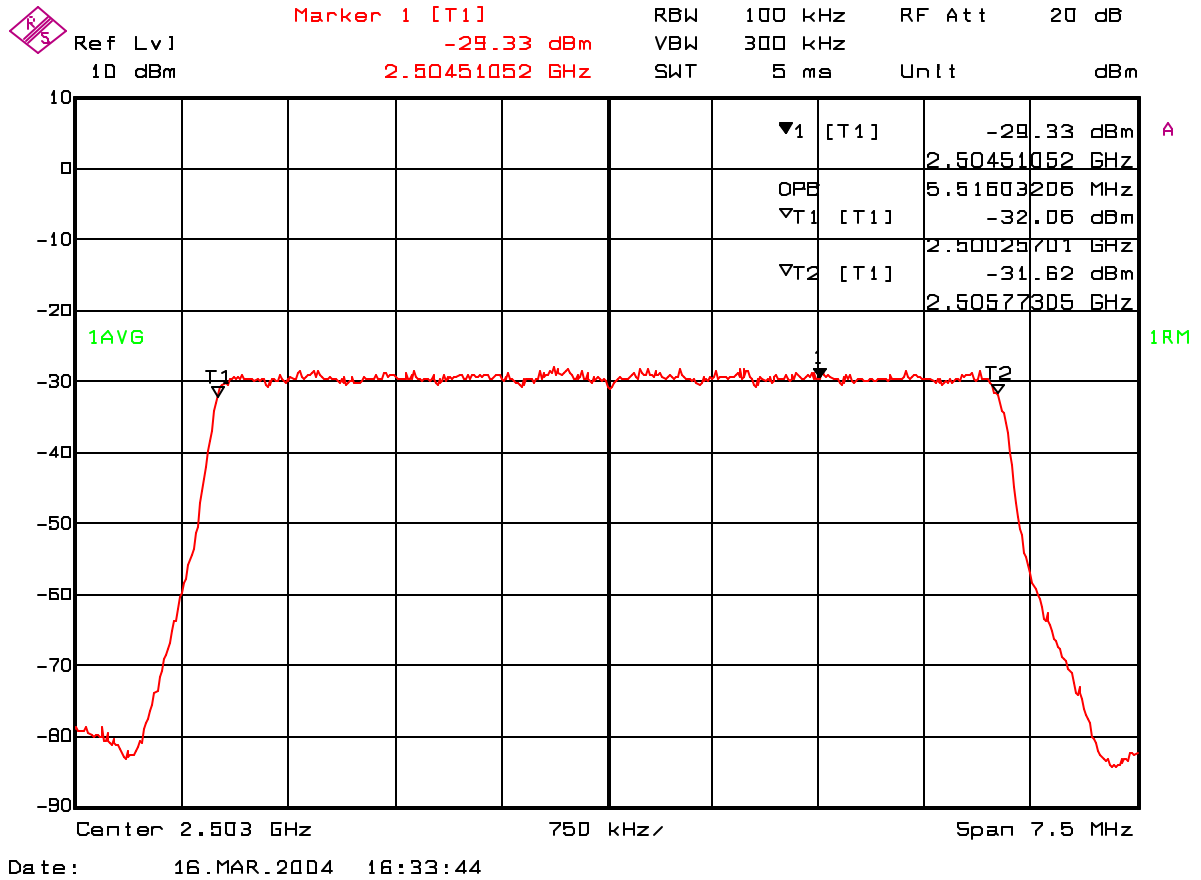
Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
4 QAM
37 dBm / 5 watt



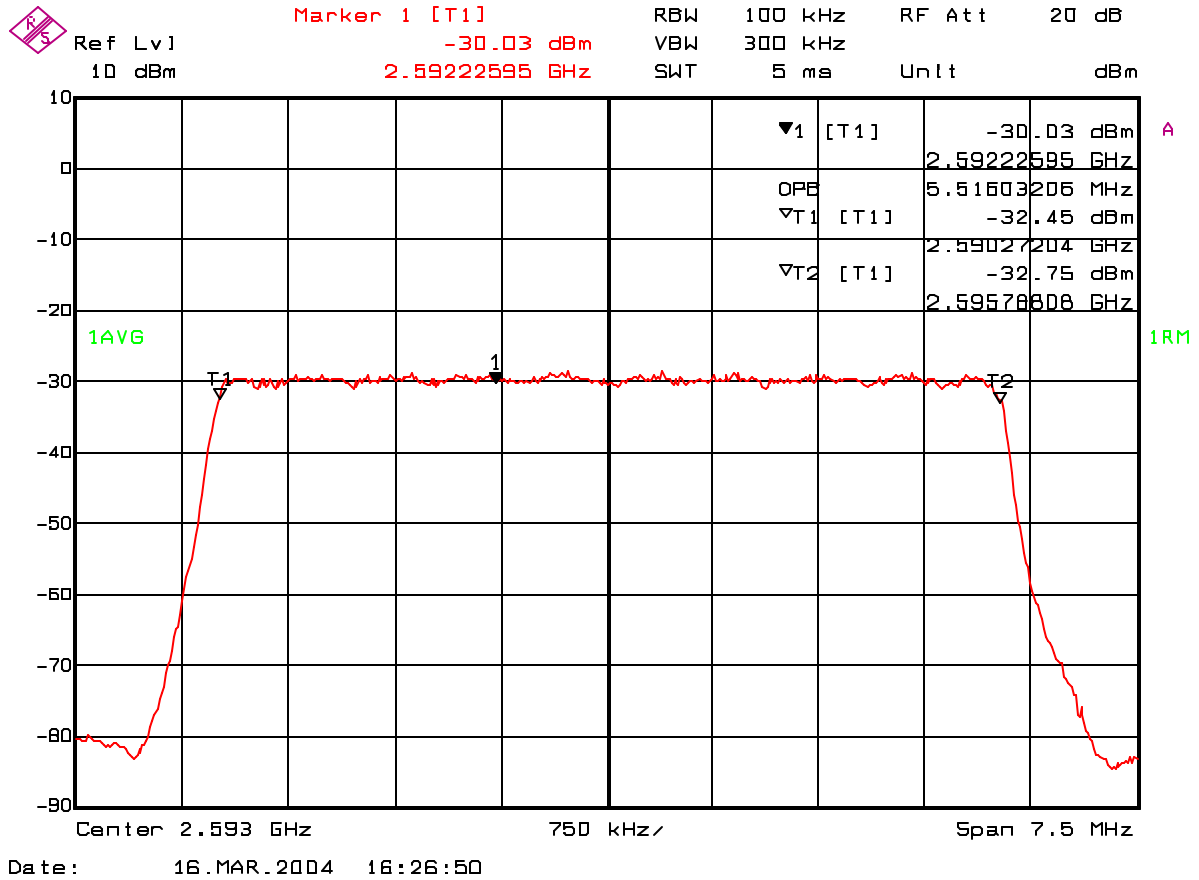
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
16 QAM
37 dBm / 5 watt



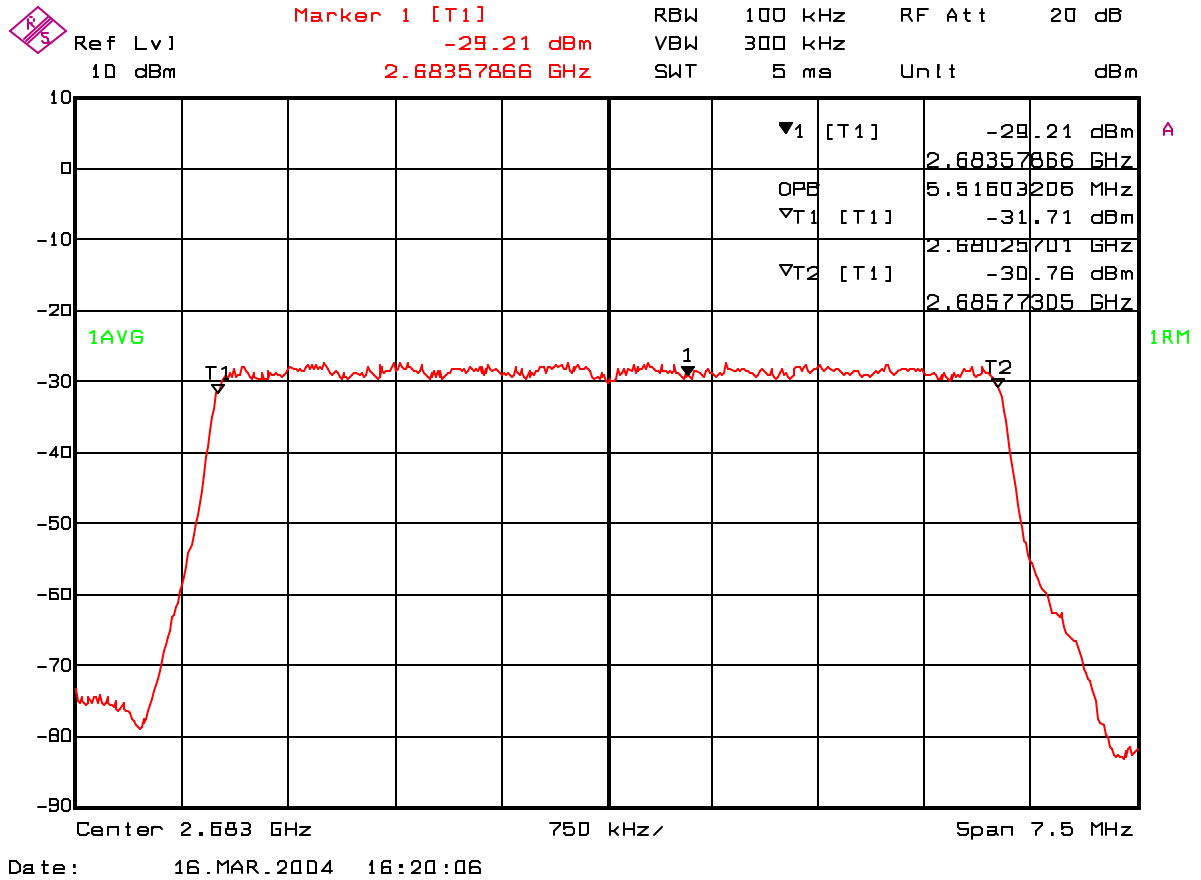
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
16 QAM
37 dBm / 5 watt



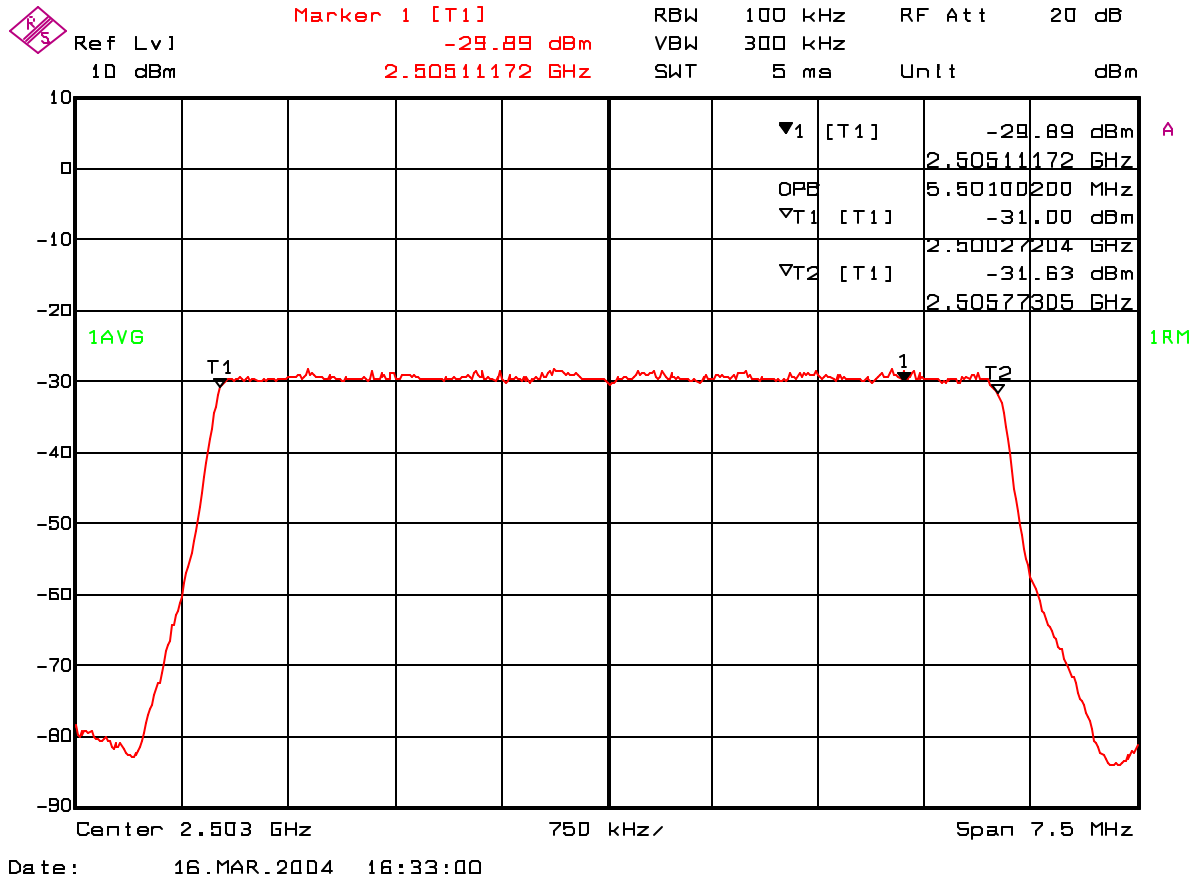
Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
16 QAM
37 dBm / 5 watt



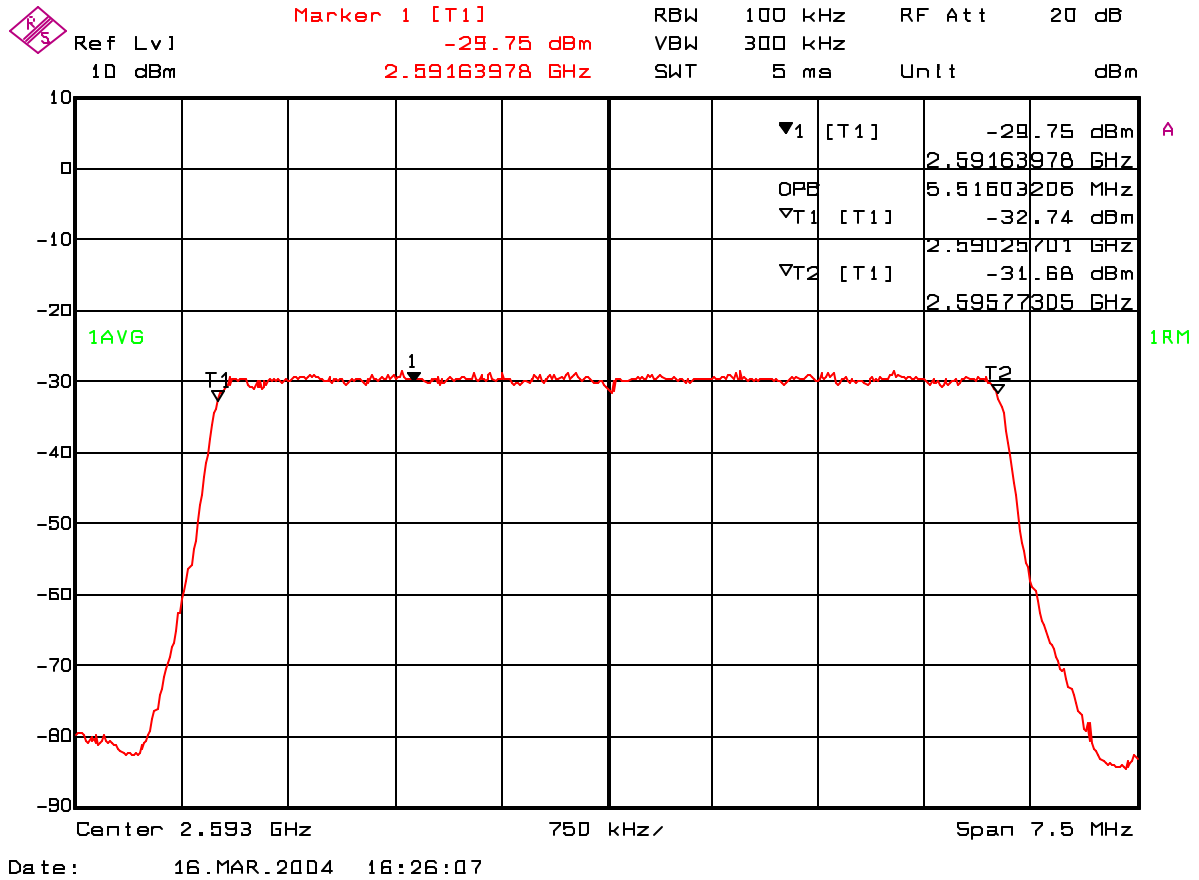
Occupied Bandwidth

Test Results: Channel 1, 2503 MHz
64 QAM
37 dBm / 5 watt



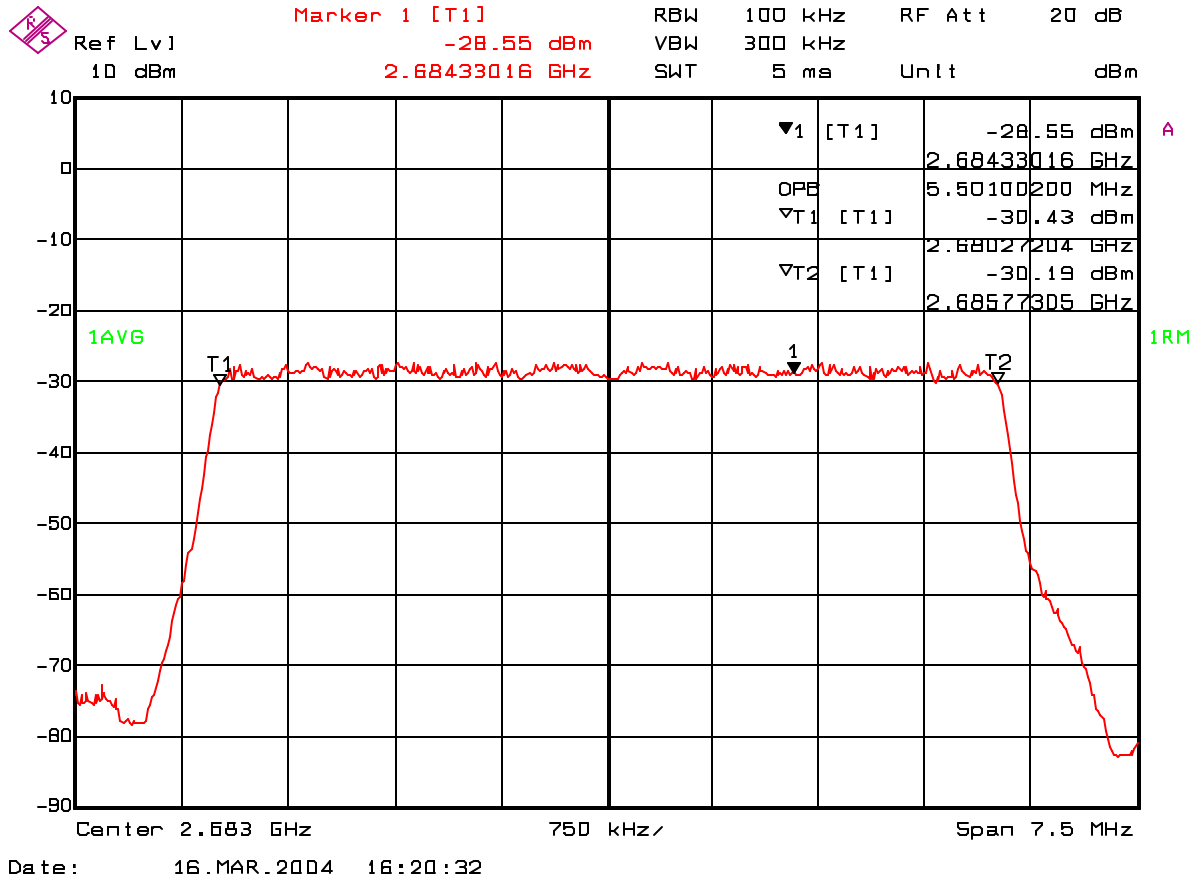
Occupied Bandwidth

Test Results: Channel 16, 2593 MHz
64 QAM
37 dBm / 5 watt



Occupied Bandwidth

Test Results: Channel 31, 2683 MHz
64 QAM
37 dBm / 5 watt



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 (33 dBm) Tx level

Absolute level (dBm) = $33 - 46 = -13$ dBm

Attenuation = $43 + 10 \log(5) = 50$ dBc, 5 watt (37 dBm) Tx level

Absolute level (dBm) = $37 - 50 = -13$ dBm

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 30 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.

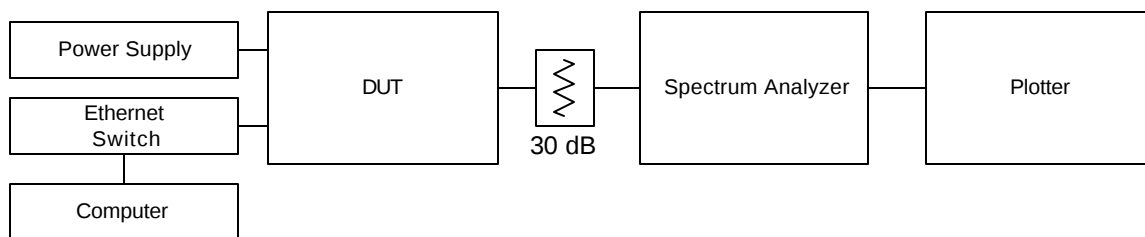
Test Conditions: Frequency = 2593 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz

Spurious emissions at antenna terminals

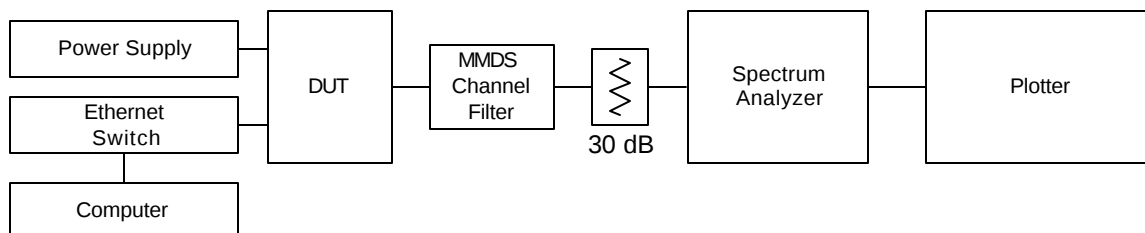
Test Equipment:

Attenuator (30dB)	Weinschel Model: 37-30-34 (S/N BM6212) Calibrated by user
Spectrum Analyzer	Hewlett Packard HP8563E S/N: 3221A00143 Cal Date: 10-16-2003 Cal Due: 10-16-2005
Computer	Dell Inspiron 3500 Model: TS30T S/N: 9021946BY11687A
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
Power Supply	Cherokee International, LLC Model: CRP500L1H-1A

Test Setup



2 watt power level

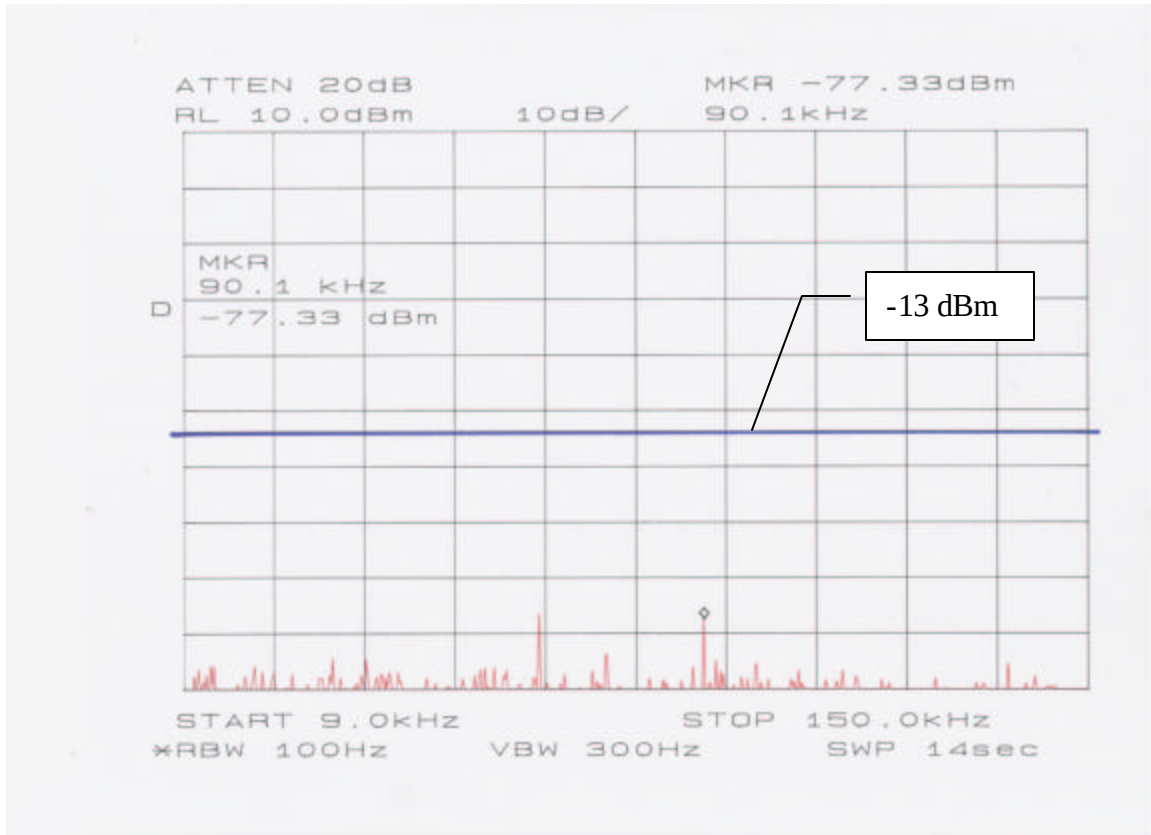


5 watt power level

Spurious emissions at antenna terminals

Test Results: The spectral measurement from 9 kHz to 150 kHz resulted in two observed spurious signals with the 64.5 kHz signal being internal to the spectrum analyzer.

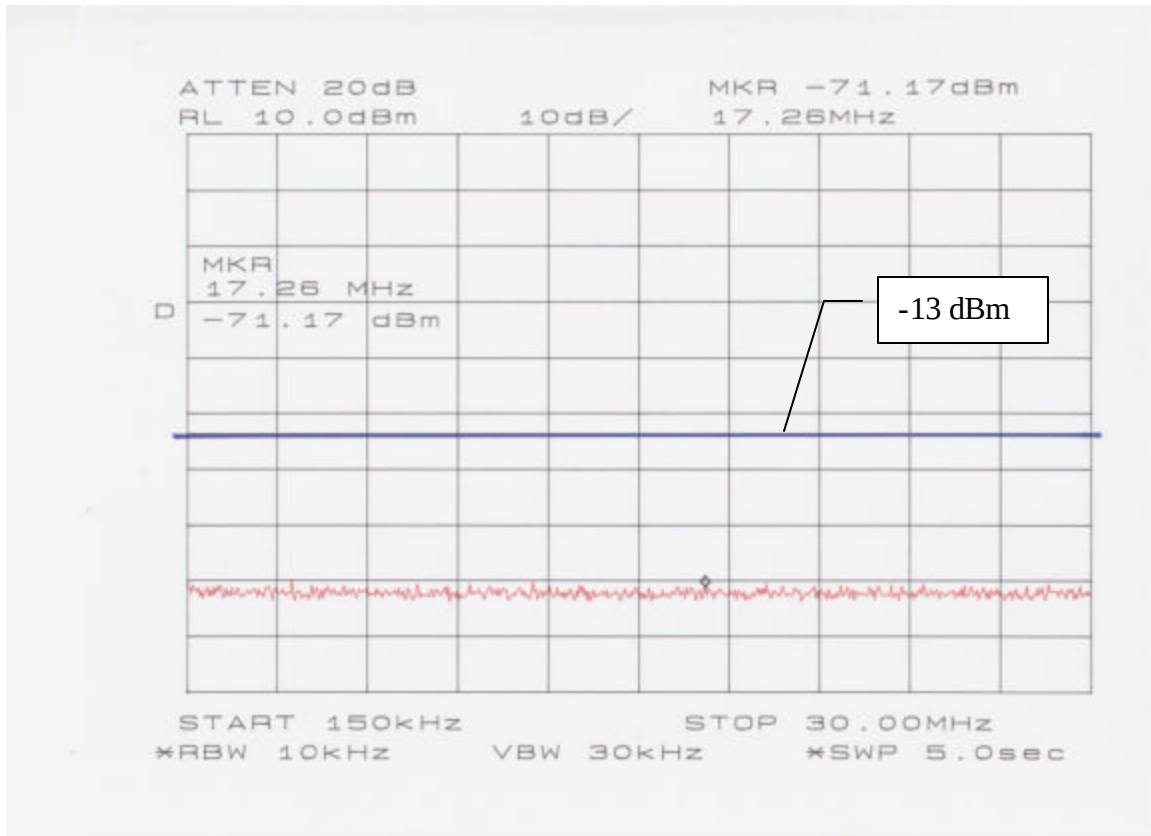
Channel 16, 2593 MHz (33 dBm / 2 Watts)
9 KHz – 150 KHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 150 kHz to 30 MHz resulted in no observed spurious signals.

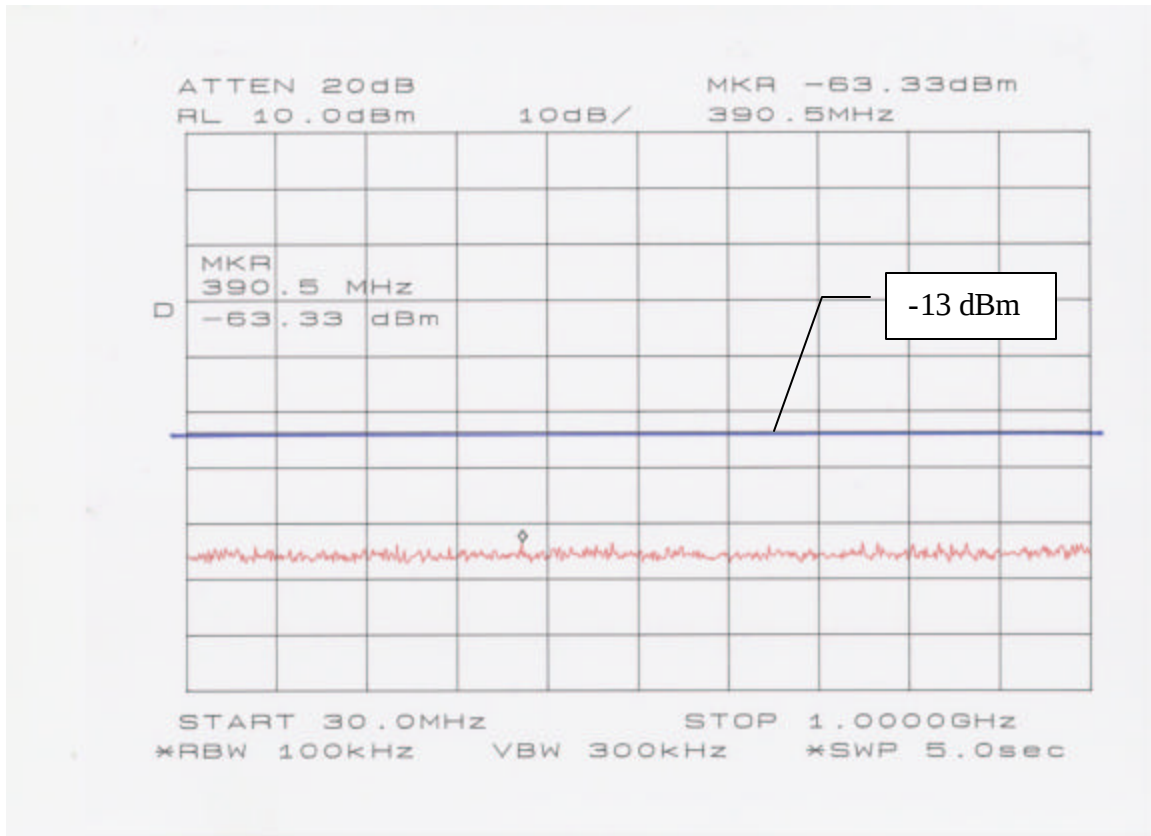
Channel 16, 2593 MHz (33 dBm / 2 Watts)
150 KHz – 30 MHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 30 MHz to 1 GHz resulted in no observed spurious signals.

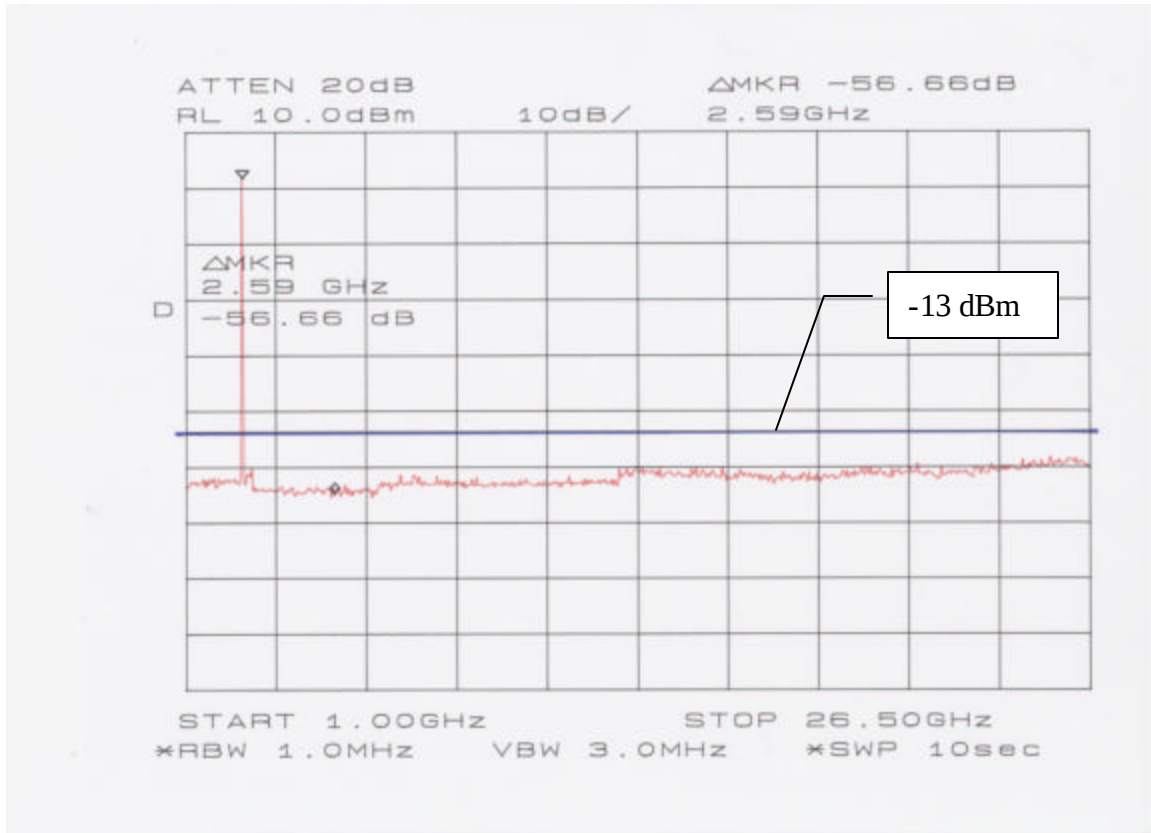
Channel 16, 2593 MHz (33 dBm / 2 Watts)
30 MHz – 1 GHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 1 GHz to 26.5 GHz resulted in no observed spurious signals.

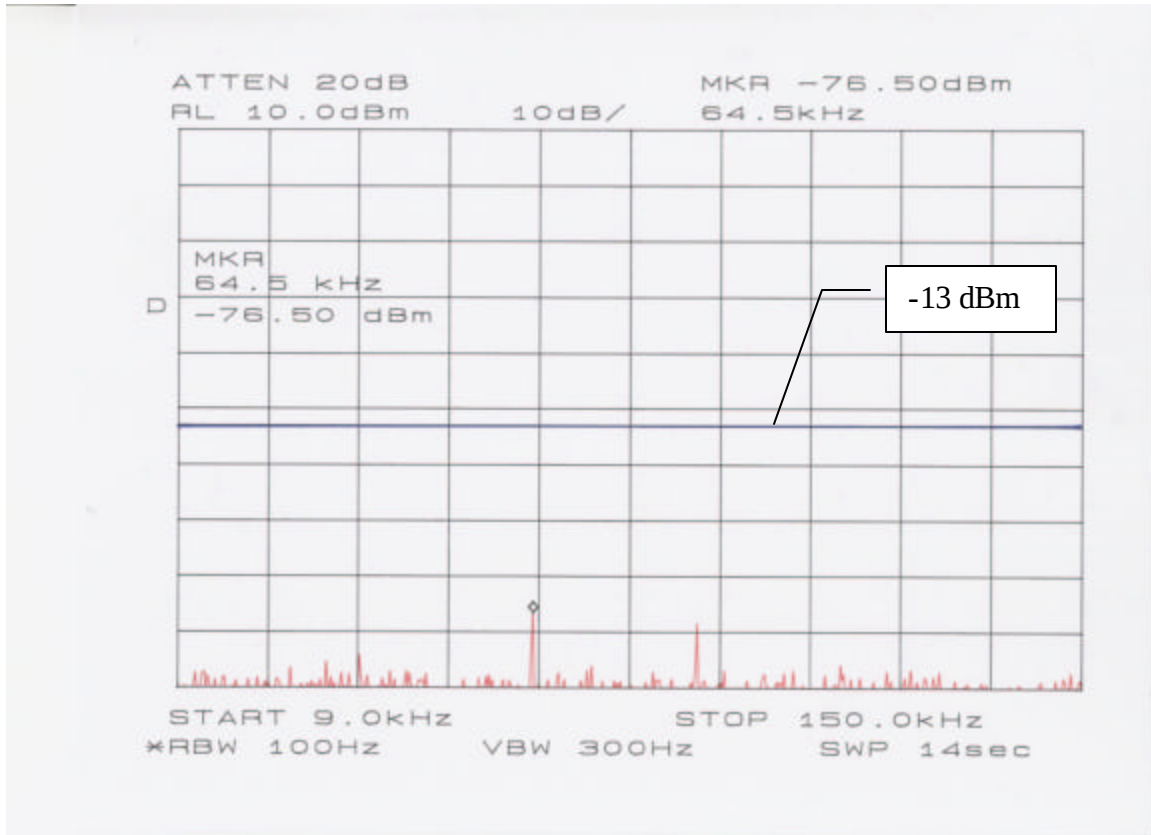
Channel 16, 2593 MHz (33 dBm / 2 Watts)
1 GHz – 26.5 GHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 9 kHz to 150 kHz resulted in two observed spurious signals with the 64.5 kHz signal being internal to the spectrum analyzer.

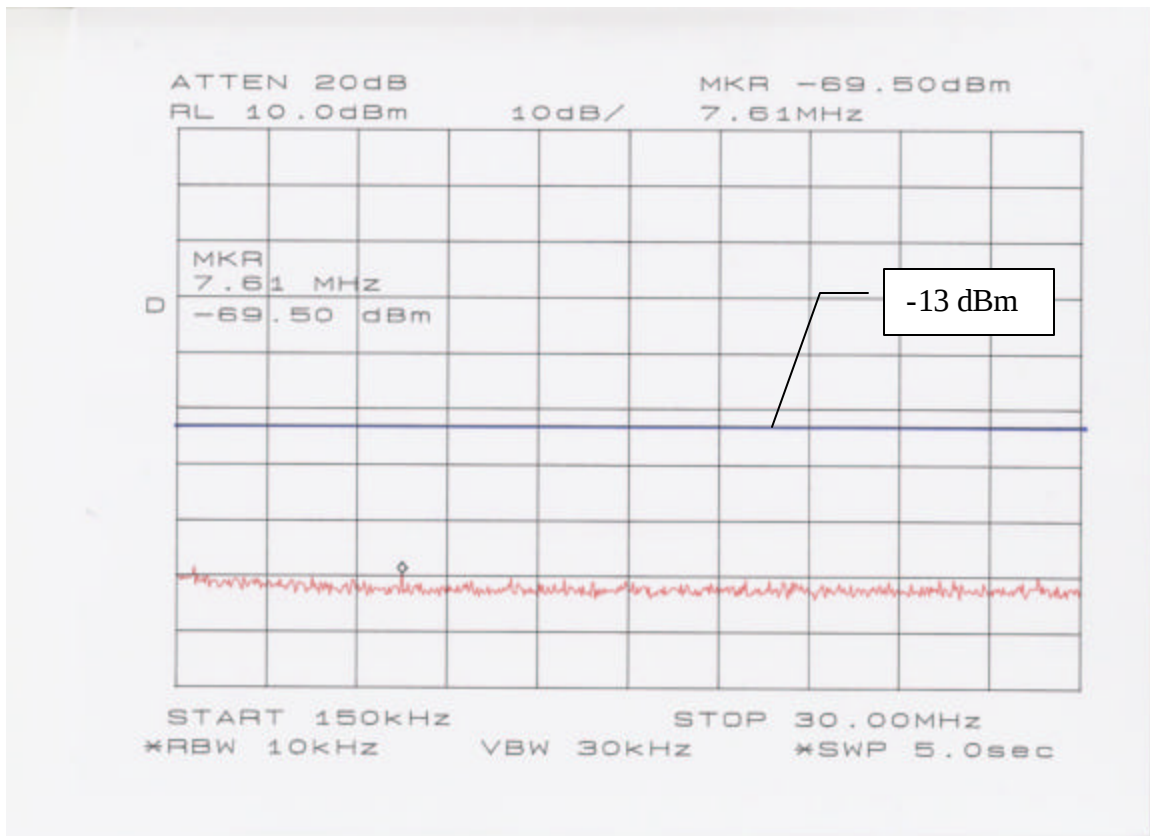
Channel 16, 2593 MHz (37 dBm / 5 Watts)
9 KHz – 150 KHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 150 kHz to 30 MHz resulted in no observed spurious signals.

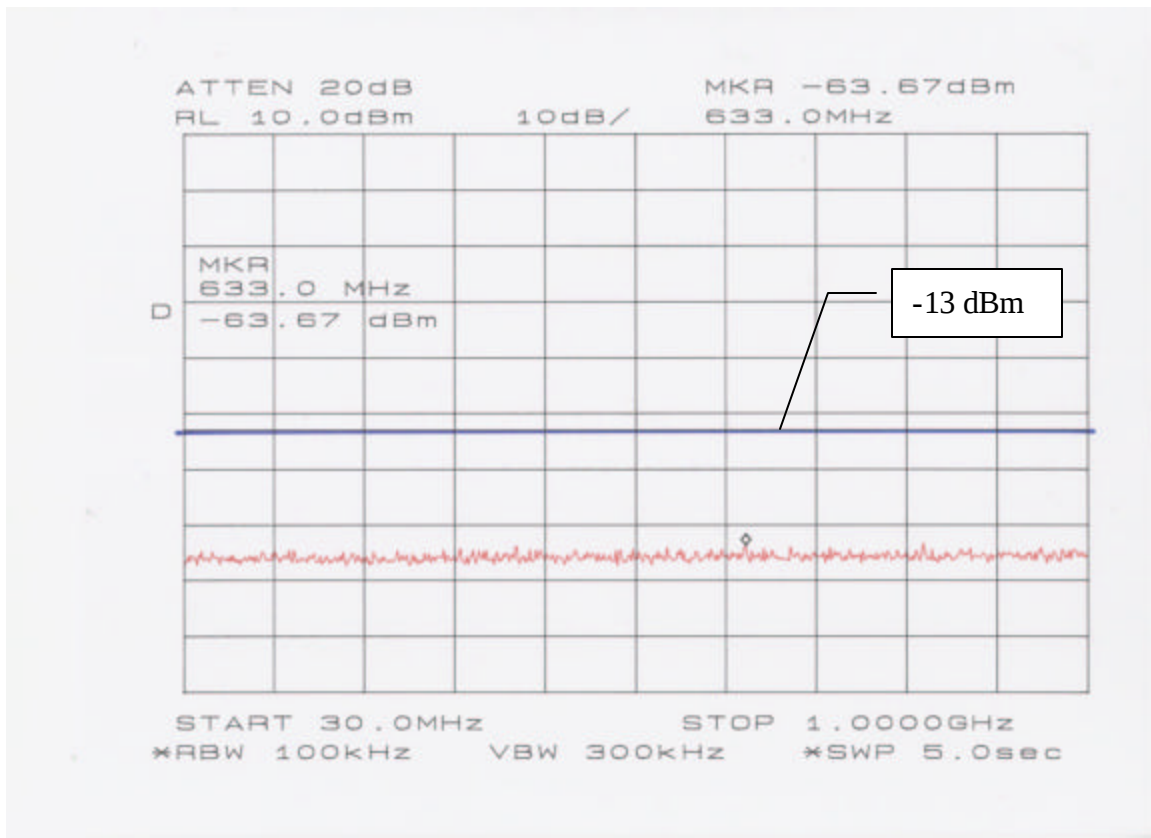
Channel 16, 2593 MHz (37 dBm / 5 Watts)
150 KHz – 30 MHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 30 MHz to 1 GHz resulted in no observed spurious signals.

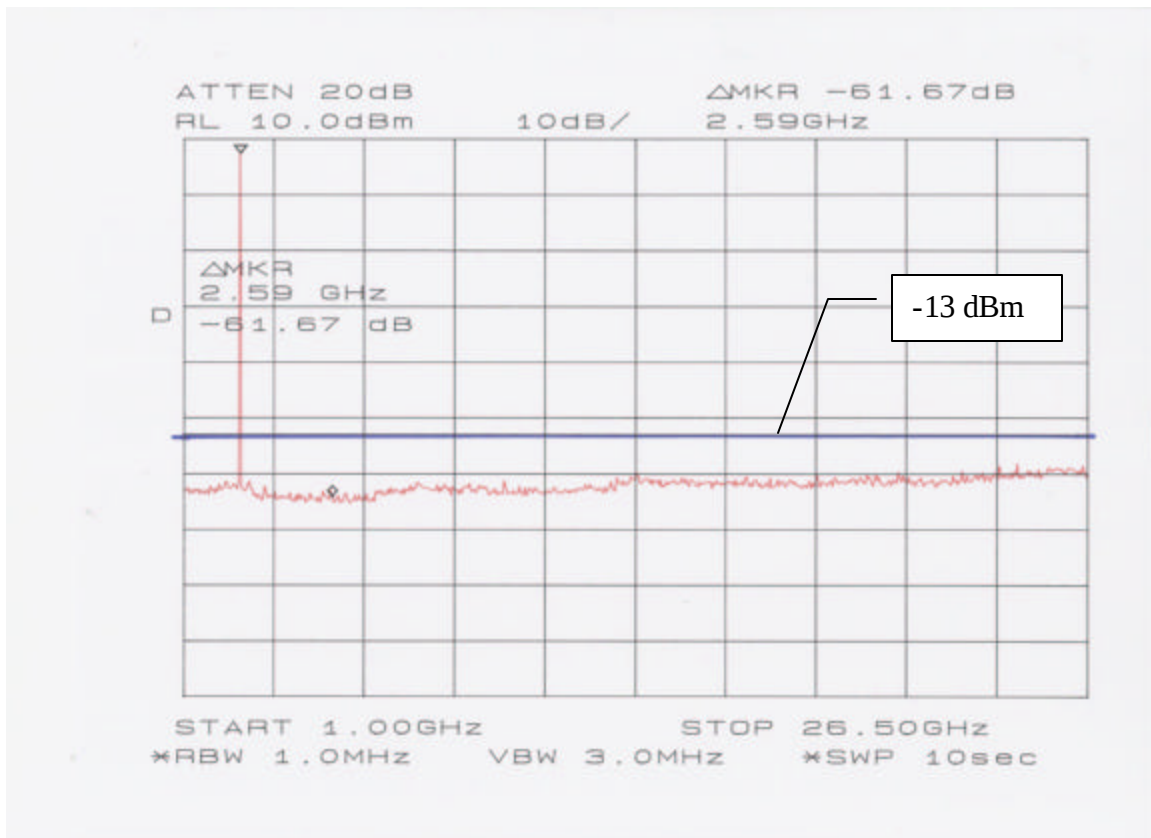
Channel 16, 2593 MHz (37 dBm / 5 Watts)
30 MHz – 1 GHz



Spurious emissions at antenna terminals

Test Results: The spectral measurement from 1 GHz to 26.5 GHz resulted in no observed spurious signals.

Channel 16, 2593 MHz (37 dBm / 5 Watts)
1 GHz – 26.5 GHz



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 April 6th, 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. Identified spurious signals between 30 MHz and 1000 MHz are measured with a 120 kHz/6 dB bandwidth and quasi-peak detection. Spurious signals above 1000 MHz are measured with a 1 MHz / 6 dB bandwidth and peak detection.

Test Conditions: Channels 1, 5, 9, 13, 16, 21, 26, and 31
Tx power set for 5 watts
Frequencies = 2503, 2527, 2551, 2575, 2593, 2623, 2653, and 2683 MHz
Temperature = 25°C
Supply Voltage = 120 Vac / 60 Hz

Test Equipment: NextNet Wireless, Inc.

Ethernet Switch (2)	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003051 S/N: B205335003173
Power Supply	Cherokee International, LLC Model: CRP500L1H-1A
Transmitter Loads (8)	Weinschel Model: 37-30-34 Calibrated by user

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	Biconicallog Periodic	102	10-24-04
☒ - 8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115a00853	10-17-04
☒ - 8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	10-17-04
☒ - 2682	85650A	Hewlett-Packard	Quasi-Peak Adapter	2811A01127	2-23-05
☒ - 2668	8447D	Electro-Mechanics (EMCO)	Preamplifier	1937A02209	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

File No. WC401607, Page 6 of 12

TUV 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 - 11 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
■ - 3204	EM-8917B	Electro-Metrics	Biconicalog Periodic	102	10-24-04
■ - 8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115a00853	10-17-04
■ - 8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	10-17-04
■ - 2882	85650A	Hewlett-Packard	Quasi-Peak Adapter	2811A01127	2-23-05
■ - 3957	SL18B4020	Phase One Microwave	Preamplifier 1 - 18 GHz	0001	Code B
■ - 2075	3115	Electro-Mechanics (EMCO)	Ridge Guide Ant. 1-18 GHz	8001-3275	11-19-04

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.

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TUV PRODUCT SERVICE INC

19333 Wild Mountain Road

Taylors Falls MN 55084-1758

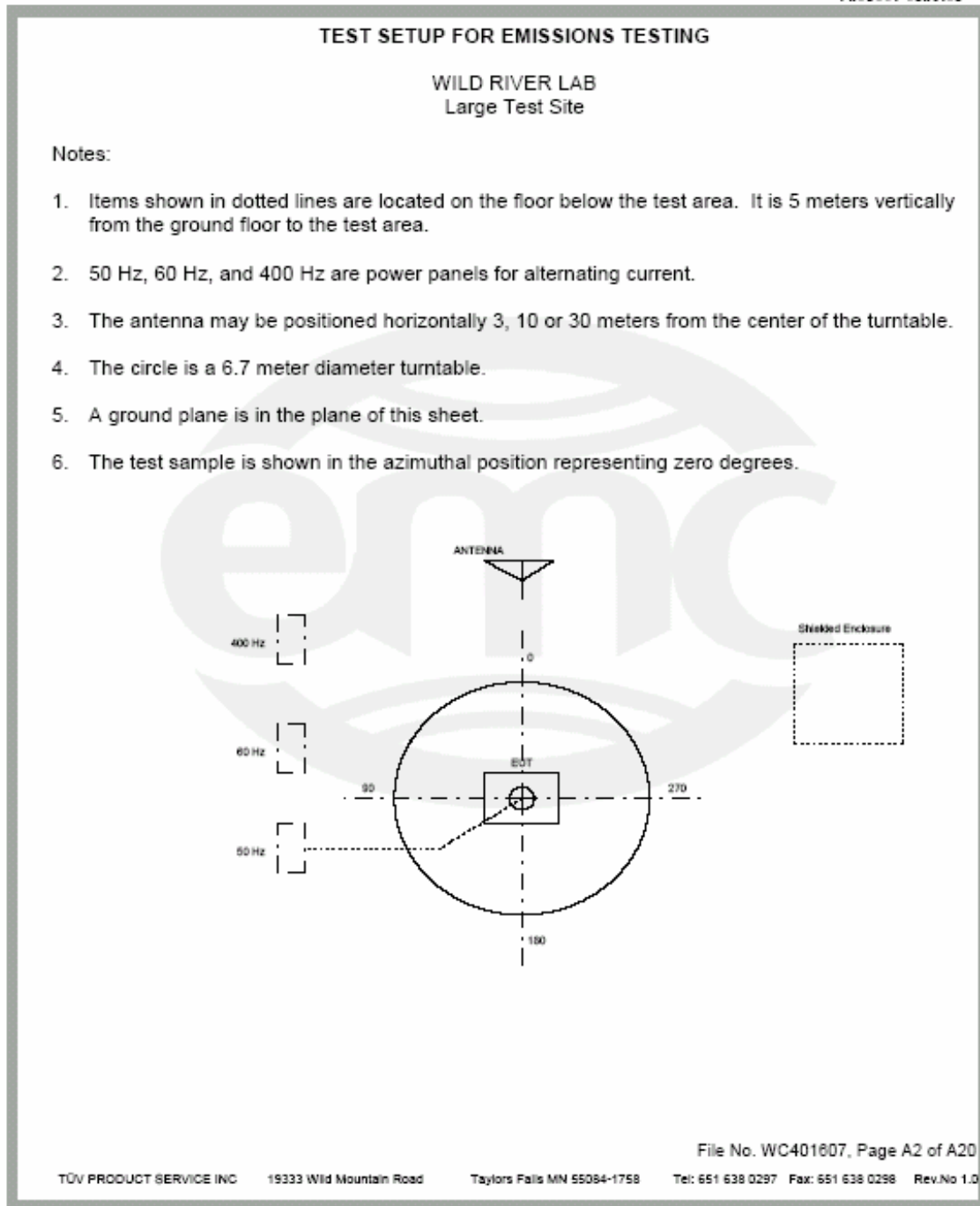
Tel: 651 638 0297

Fax: 651 638 0298

Rev.No 1.0

Field strength of spurious radiation

Test Setup: TUV Product Services



File No. WC401607, Page A2 of A20

TÜV PRODUCT SERVICE INC

19333 Wild Mountain Road

Taylor's Falls MN 55084-1758

Tel: 651 638 0297 Fax: 651 638 0298

Rev.No 1.0

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

4/13/2004

Field strength of spurious radiation

RADIATED EMISSIONS



Test Report #:	WC401607 Run 2	Test Area:	LTS
EUT Model #:	900-0160-1XXX (8 EACH)	Date:	4/8/04
EUT Serial #:	1,2,3,4,5,6,7,&8	EUT Power:	60HZ/110VAC
Test Method:	FCC PART 21 & 74	Temperature:	21.0 °C
Customer:	NEXNET WIRELESS	Air Pressure:	98.0 kPa
EUT Description:	8 (2.5GHz) TRANSMITTERS IN A RACK	Rel. Humidity:	25.0 %
Notes: Substitution at 420 MHz. 41.17 dBuV/m = -46 (sig gen level) - 3.5 (cable) - 6.2 (ant. Gain) = -55.7 dBm			
Data File Name:	1607.dat	Page:	5 of 8

Measurement summary for limit1: FCC Pt. 2.1053 (Qp)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBm)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC Pt. 2.1053
420.0 MHz	49.41 Qp	1.7 / 16.84 / 26.77 / -96.87	-55.69	V / 1.00 / 0	-42.69
475.994 MHz	48.5 Qp	1.87 / 17.28 / 27.0 / -96.87	-56.22	V / 1.00 / 0	-43.22
700.0 MHz	42.9 Qp	2.3 / 21.03 / 26.88 / -96.87	-57.52	H / 1.00 / 0	-44.52
198.0 MHz	52.55 Qp	1.19 / 11.33 / 26.27 / -96.87	-58.07	V / 1.00 / 0	-45.07
644.0 MHz	43.7 Qp	2.12 / 19.9 / 27.03 / -96.87	-58.18	V / 1.00 / 180	-45.18
168.0 MHz	52.85 Qp	1.07 / 8.1 / 26.05 / -96.87	-58.9	V / 1.00 / 0	-45.9
924.0 MHz	37.05 Qp	2.63 / 23.5 / 26.66 / -96.87	-60.37	H / 1.00 / 180	-47.37
124.55 MHz	52.15 Qp	0.94 / 8.97 / 26.02 / -96.87	-60.83	V / 1.00 / 0	-47.83
127.322 MHz	52.4 Qp	0.97 / 8.67 / 26.05 / -96.87	-60.87	V / 1.00 / 0	-47.87
532.0 MHz	41.65 Qp	1.93 / 18.6 / 26.91 / -96.87	-61.6	H / 1.00 / 180	-48.6
560.0 MHz	40.95 Qp	2.01 / 18.97 / 26.98 / -96.87	-61.92	V / 1.00 / 0	-48.92
588.0 MHz	39.5 Qp	2.08 / 19.7 / 27.11 / -96.87	-62.7	V / 1.00 / 180	-49.7
504.0 MHz	40.7 Qp	1.9 / 18.15 / 27.03 / -96.87	-63.15	V / 1.00 / 0	-50.15
131.368 MHz	50.4 Qp	1.0 / 8.4 / 26.09 / -96.87	-63.16	V / 1.00 / 0	-50.16
262.0 MHz	46.5 Qp	1.35 / 12.16 / 26.33 / -96.87	-63.19	H / 1.00 / 90	-50.19
224.0 MHz	47.0 Qp	1.28 / 11.1 / 26.3 / -96.87	-63.79	H / 1.00 / 90	-50.79
140.0 MHz	48.4 Qp	1.0 / 9.26 / 26.02 / -96.87	-64.22	V / 1.00 / 0	-51.22
308.0 MHz	43.8 Qp	1.5 / 13.9 / 26.62 / -96.87	-64.29	H / 1.00 / 90	-51.29
174.999 MHz	48.3 Qp	1.1 / 9.25 / 26.11 / -96.87	-64.33	V / 1.00 / 0	-51.33
97.952 MHz	48.4 Qp	0.89 / 8.89 / 25.9 / -96.87	-64.59	V / 1.00 / 90	-51.59
300.02 MHz	43.5 Qp	1.5 / 13.73 / 26.58 / -96.87	-64.72	H / 1.00 / 180	-51.72
756.0 MHz	34.2 Qp	2.34 / 22.0 / 26.62 / -96.87	-64.95	V / 1.00 / 180	-51.95
500.0 MHz	39.05 Qp	1.9 / 17.96 / 27.06 / -96.87	-65.02	V / 1.00 / 0	-52.02
448.0 MHz	39.75 Qp	1.78 / 17.03 / 26.86 / -96.87	-65.17	V / 1.00 / 0	-52.17

Tested by: RMJ

Printed

Signature

Reviewed by: TKS

Printed

Signature

File No. WC401607, Page A19 of A20

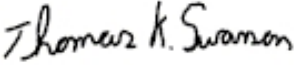
Field strength of spurious radiation

RADIATED EMISSIONS



Test Report #:	WC401607 Run 2	Test Area:	LTS
EUT Model #:	900-0160-1XXX (8 EACH)	Date:	4/6/04
EUT Serial #:	1,2,3,4,5,6,7,8	EUT Power:	60HZ/110VAC
Test Method:	FCC PART 21 & 74	Temperature:	21.0 °C
Customer:	NEXTNET WIRELESS	Air Pressure:	98.0 kPa
EUT Description:	8 (2.5GHz) TRANSMITTERS IN A RACK	Rel. Humidity:	25.0 %
Notes: Substitution at 420 MHz. 41.17 dBuV/m = -46 (sig gen level) - 3.5 (cable) - 6.2 (ant. Gain) = -55.7 dBm			
Data File Name:	1607.dat	Page:	6 of 6

Measurement summary for limit1: FCC Pt. 2.1053 (Qp)					
FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBm)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC Pt. 2.1053
364.0 MHz	41.25 Qp	1.6 / 15.4 / 26.64 / -96.87	-65.26	V / 1.00 / 0	-52.26
313.96 MHz	42.4 Qp	1.5 / 13.93 / 26.65 / -96.87	-65.69	H / 1.00 / 90	-52.69
80.514 MHz	48.55 Qp	0.8 / 7.52 / 25.8 / -96.87	-65.8	V / 1.00 / 90	-52.8
980.0 MHz	30.25 Qp	2.71 / 24.14 / 26.42 / -96.87	-66.19	H / 1.00 / 180	-53.19
139.108 MHz	46.2 Qp	1.0 / 9.09 / 26.02 / -96.87	-66.61	V / 1.00 / 0	-53.61
812.0 MHz	32.3 Qp	2.44 / 22.17 / 26.7 / -96.87	-66.66	V / 1.00 / 0	-53.66
400.021 MHz	38.85 Qp	1.7 / 16.3 / 26.7 / -96.87	-66.72	V / 1.00 / 0	-53.72
200.0 MHz	43.35 Qp	1.2 / 11.39 / 26.3 / -96.87	-67.23	H / 1.00 / 90	-54.23
403.613 MHz	38.3 Qp	1.7 / 16.3 / 26.71 / -96.87	-67.28	V / 1.00 / 0	-54.28
672.0 MHz	34.1 Qp	2.24 / 20.13 / 26.95 / -96.87	-67.35	H / 1.00 / 180	-54.35
280.0 MHz	41.6 Qp	1.5 / 12.66 / 26.48 / -96.87	-67.59	H / 1.00 / 90	-54.59
952.0 MHz	29.75 Qp	2.67 / 23.3 / 26.55 / -96.87	-67.7	V / 1.00 / 0	-54.7
64.0 MHz	46.85 Qp	0.8 / 7.31 / 25.8 / -96.87	-67.71	V / 1.00 / 90	-54.71
728.0 MHz	32.0 Qp	2.3 / 21.54 / 26.71 / -96.87	-67.74	V / 1.00 / 0	-54.74
868.0 MHz	30.6 Qp	2.54 / 22.59 / 26.7 / -96.87	-67.84	V / 1.00 / 0	-54.84
225.0 MHz	42.4 Qp	1.29 / 11.1 / 26.3 / -96.87	-68.38	H / 1.00 / 90	-55.38
392.0 MHz	37.0 Qp	1.69 / 16.0 / 26.67 / -96.87	-68.85	V / 1.00 / 0	-55.85
784.0 MHz	29.0 Qp	2.39 / 22.2 / 26.67 / -96.87	-69.95	H / 1.00 / 0	-56.95
896.0 MHz	27.6 Qp	2.58 / 23.3 / 26.7 / -96.87	-70.09	V / 1.00 / 0	-57.09
111.38 MHz	42.1 Qp	0.88 / 9.57 / 25.95 / -96.87	-70.27	H / 1.00 / 180	-57.27
840.0 MHz	28.5 Qp	2.49 / 22.28 / 26.7 / -96.87	-70.3	V / 1.00 / 0	-57.3
112.0 MHz	41.15 Qp	0.88 / 9.6 / 25.94 / -96.87	-71.17	H / 1.00 / 180	-58.17
240.021 MHz	38.65 Qp	1.3 / 11.76 / 26.3 / -96.87	-71.46	H / 1.00 / 90	-58.46
616.0 MHz	29.6 Qp	2.1 / 20.21 / 27.16 / -96.87	-72.12	V / 1.00 / 180	-58.12

Tested by:	RMJ	
	Printed	Signature
Reviewed by:	TKS	
	Printed	Signature

File No. WC401607, Page A20 of A20

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.

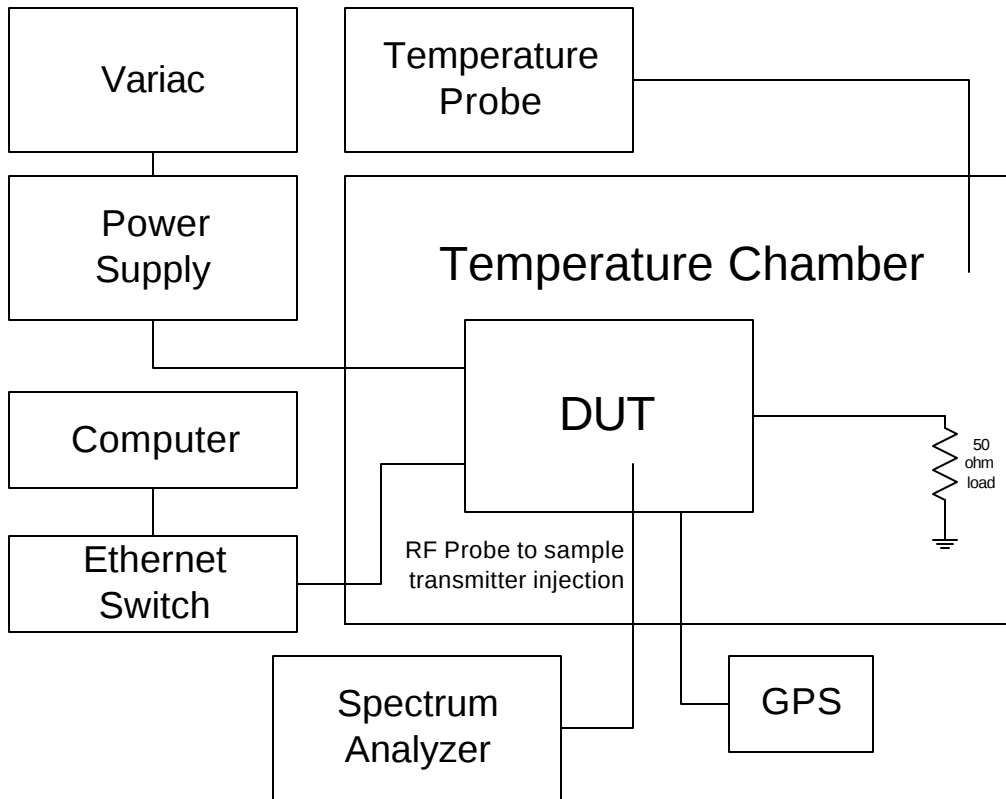
Test Conditions: Standard Test Conditions

Test Equipment:

DVM	Fluke 87 III
Spectrum Analyzer	Hewlett Packard HP8563E S/N: 3221A00143 Cal Date: 10-16-2003 Cal Due: 10-16-2005
GPS	Trimble Acutime 2000 S/N: 12002702
Temperature Chamber	Test Equity 1000 Series
Temperature Sensor	Fluke 89 IV True RMS Multimeter K-Type thermocouple
Computer	Dell Inspiron 3500 Model: TS30T S/N: 9021946BY11687A
Ethernet Switch	D-Link Model: DSS-5+ 5 port 10/100Mbps S/N: B205335003173
Power Supply	Cherokee International, LLC Model: CRP500L1H-1A
Variac	Lafayette Radio Electronics Corp. NO. TR-115

Frequency Stability

Test Set-Up:



Frequency Stability

Test Conditions: Frequency = 2593 MHz
Supply Voltage = 120 Vac / 60 Hz

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

(1) From -30° to +50° 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

Without GPS				
Temperature (°C)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
-30	2592993350	-6650	-0.000256	-2.565
-20	2592995375	-4625	-0.000178	-1.784
-10	2592996225	-3775	-0.000146	-1.456
0	2592996991	-3009	-0.000116	-1.160
10	2592997408	-2592	-0.000100	-1.000
20	2592997508	-2492	-0.000096	-0.961
30	2592997491	-2509	-0.000097	-0.968
40	2592997725	-2275	-0.000088	-0.877
50	2592997916	-2084	-0.000080	-0.804
60	2592998591	-1409	-0.000054	-0.543

With GPS				
Temperature (°C)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
-30	2593000083	83	0.000003	0.032
-20	2593000092	92	0.000004	0.035
-10	2593000100	100	0.000004	0.039
0	2593000108	108	0.000004	0.042
10	2593000108	108	0.000004	0.042
20	2593000108	108	0.000004	0.042
30	2593000100	100	0.000004	0.039
40	2593000117	117	0.000005	0.045
50	2593000117	117	0.000005	0.045
60	2593000108	108	0.000004	0.042

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 / 60 Hz

Without GPS				
Source Voltage (VAC)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
102.0	2592997558	-2442	-0.000094	-0.942
106.5	2592997558	-2442	-0.000094	-0.942
111.0	2592997558	-2442	-0.000094	-0.942
115.5	2592997558	-2442	-0.000094	-0.942
120.0	2592997558	-2442	-0.000094	-0.942
124.5	2592997558	-2442	-0.000094	-0.942
129.0	2592997558	-2442	-0.000094	-0.942
133.5	2592997558	-2442	-0.000094	-0.942
138.0	2592997558	-2442	-0.000094	-0.942

With GPS				
Source Voltage (VAC)	Frequency (Hz)	Frequency Error (Hz)	Frequency Error (%)	Frequency Error (ppm)
102.0	2593000108	108	0.000004	0.042
106.5	2593000108	108	0.000004	0.042
111.0	2593000108	108	0.000004	0.042
115.5	2593000108	108	0.000004	0.042
120.0	2593000108	108	0.000004	0.042
124.5	2593000108	108	0.000004	0.042
129.0	2593000108	108	0.000004	0.042
133.5	2593000108	108	0.000004	0.042
138.0	2593000108	108	0.000004	0.042