




Nemko Test Report: 11672RUS1rev2

Applicant: Cirronet
3079 Premiere Parkway
Duluth, Georgia 30097
USA

**Equipment Under Test:
(E.U.T.)** DNT500P

In Accordance With: **FCC Part 15, Subpart C, 15.247**
Frequency Hopping Transmitters

Tested By: Nemko USA Inc.
802 N. Kealy
Lewisville, Texas 75057-3136

TESTED BY: 

David Light, Senior Wireless Engineer **DATE:** 12 March 2008

APPROVED BY: 

Mike Cantwell, Frontline Manager **DATE:** 24 March, 2008

Total Number of Pages: 31

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Section 1. Summary of Test Results

Manufacturer: Cirronet

Model No.: DNT500P

Serial No.: 19

General: **All measurements are traceable to national standards.**

These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15, Subpart C, Paragraph 15.247 for Frequency Hopping Spread Spectrum devices. Radiated tests were conducted in accordance with ANSI C63.4-2003. Radiated emissions are made on an open area test site.

A description of the test facility is on file with the FCC.

- | | | | |
|-------------------------------------|----------------------------|-------------------------------------|---------------------|
| <input checked="" type="checkbox"/> | New Submission | <input checked="" type="checkbox"/> | Production Unit |
| <input type="checkbox"/> | Class II Permissive Change | <input type="checkbox"/> | Pre-Production Unit |

THIS TEST REPORT RELATES ONLY TO THE ITEM(S) TESTED.

THE FOLLOWING DEVIATIONS FROM, ADDITIONS TO, OR EXCLUSIONS FROM THE TEST SPECIFICATIONS HAVE BEEN MADE.

See " Summary of Test Data".



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Summary Of Test Data

NAME OF TEST	PARA. NO.	RESULT
Powerline Conducted Emissions	15.207(a)	Complies
Channel Separation	15.247(a)(1)	Complies
Time of Occupancy	15.247(a)(1)	Complies
20 dB Occupied Bandwidth	15.247(a)(1)	Complies
Peak Power Output	15.247(b)	Complies
Spurious Emissions (Antenna Conducted)	15.247(d)	Complies
Spurious Emissions (Radiated)	15.247(d)	Complies

Footnotes:

The EUT is not powered off the AC mains. The module may be installed in any device that provides 3.3 to 5 Vcd via external means. The device is listed as “Modular Approval”

Section 2. Equipment Under Test (E.U.T.)

General Equipment Information

Frequency Band: 902 – 928 MHz
 2400 – 2483.5 MHz
 5725 – 5850 MHz

Operating Frequency Range: 902.75 to 927.25 MHz

Standard Input Voltage: 5 Vdc

Data Rate: 200 kbps

Number of Channels: 50

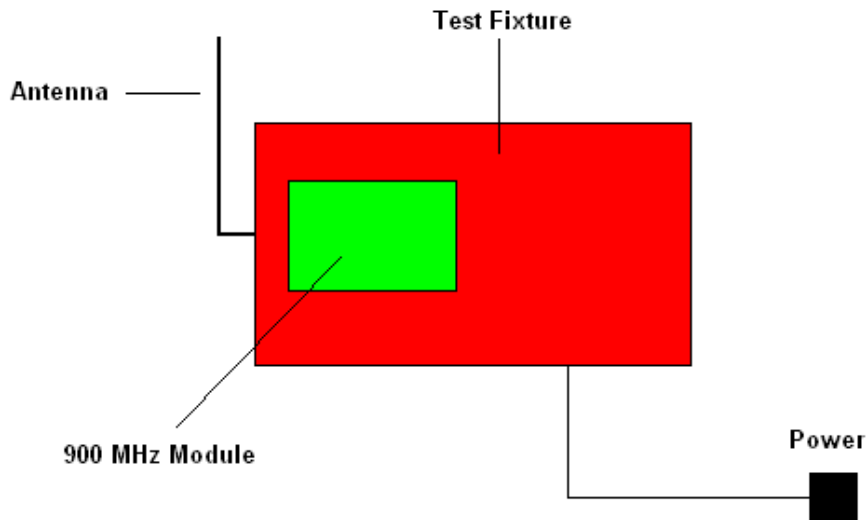
Channel Spacing: 500 kHz

User Frequency Adjustment: Software controlled

Description of EUT

900 MHz transceiver module utilizing either frequency hopping spread spectrum or digital transmission technology. Power Supply manufactured by PHIHONG, model number PSA05A-050, Input 100-240V~ 0.2A, 50-60 Hz, Max total output power 5W, Serial number M01313501A2.

System Diagram



Section 3. Channel Separation

NAME OF TEST: Channel Separation	PARA. NO.: 15.247(a)(1)
TESTED BY: David Light	DATE: 11 March 2008

Test Results: Complies.

Measurement Data: See 20 dB BW plot

Measured 20 dB bandwidth: 417 kHz
Channel Separation: 500 kHz

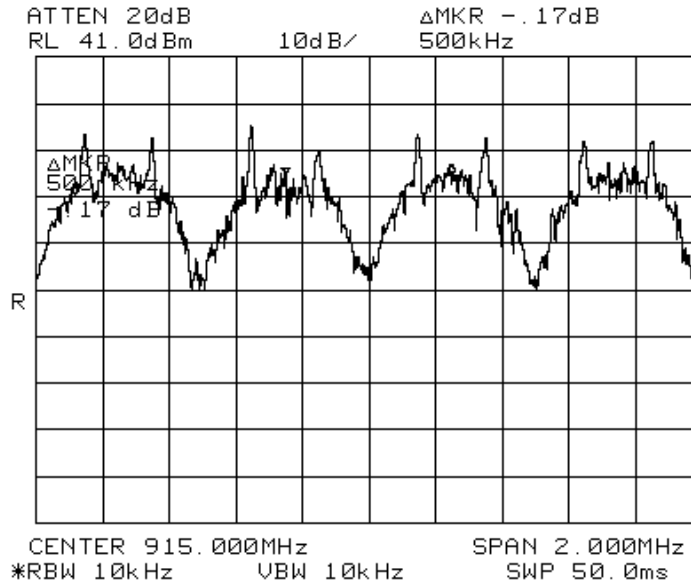
Equipment Used: 1464-1082-1469-1472

Measurement Uncertainty: $\frac{1 \times 10^{-7}}{\text{---}}$ ppm

Temperature: 20 °C

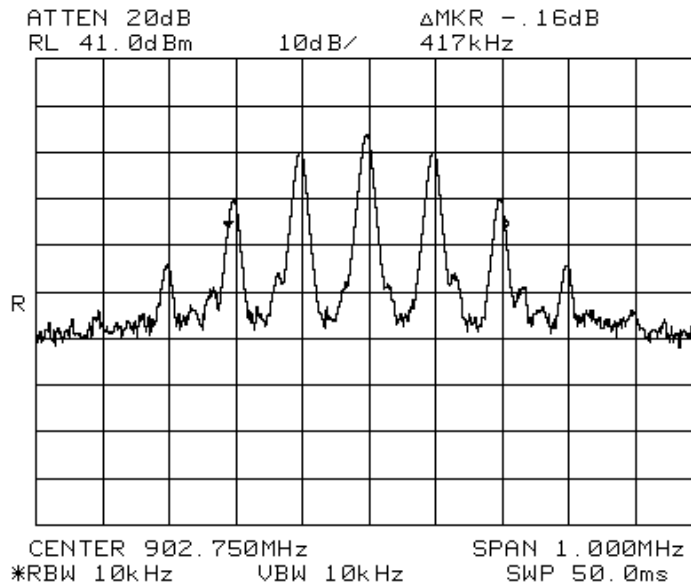
Relative Humidity: 30 %

Test Data – Channel Separation



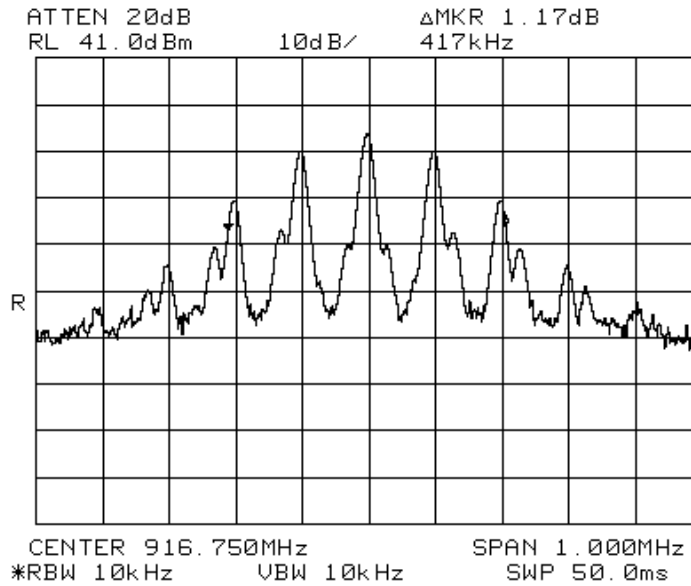
Test Data – 20 dB Bandwidth

Low Channel

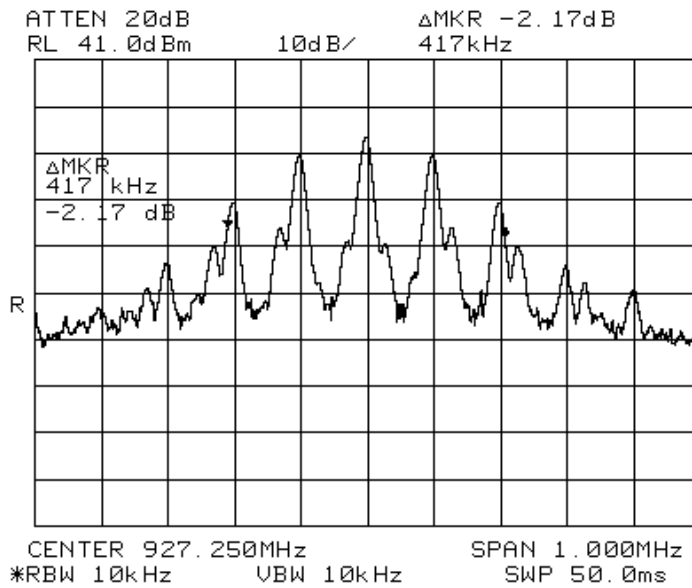


Test Data – 20 dB Bandwidth

Mid Channel



High Channel



Section 4. Time of Occupancy

NAME OF TEST: Time of Occupancy	PARA. NO.: 15.247(a)(1)
TESTED BY: David Light	DATE: 11 March 2008

Test Results: Complies.

Measurement Data:

Maximum Dwell Time On Any Channel: 68.66 mS in 10 seconds

Equipment Used: 1464-1082-1472-1469

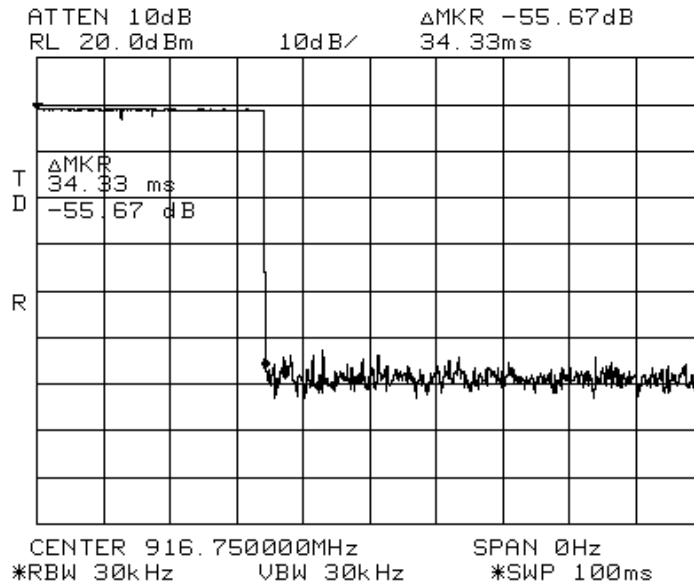
Measurement Uncertainty: $\frac{1 \times 10^{-7}}{\text{---}}$ ppm

Temperature: 20 °C

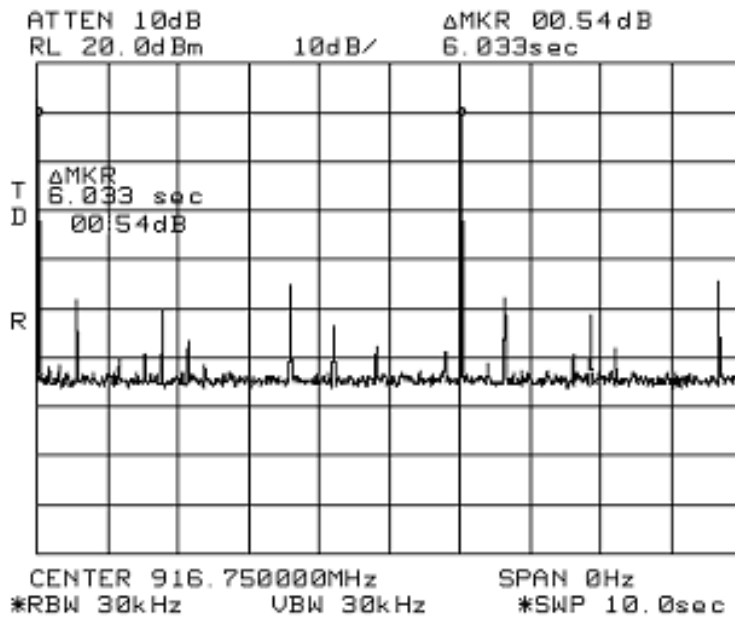
Relative Humidity: 30 %

Test Data – Time of Occupancy

Pulse Width



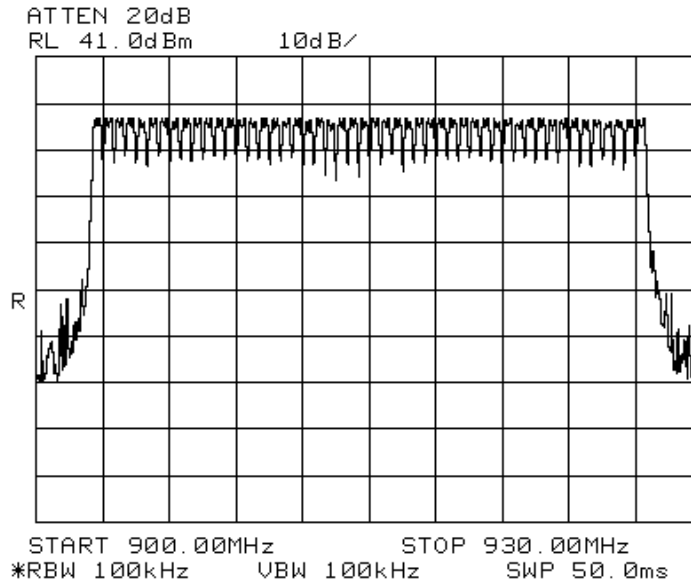
Duty cycle = $20 \log (34.33/100) = -9.3 \text{ dB}$



68.66 mS in 10 seconds

Test Data – Time of Occupancy

Number of hopping channels = 50



Section 6. Peak Power Output

NAME OF TEST: Peak Power Output	PARA. NO.: 15.247 (b)
TESTED BY: David Light	DATE: 11 March 2008

Test Results: Complies.

Measurement Data:

Detachable antenna? Yes No
 If yes, state the type of non-standard connector used: R-SMA

Frequency (MHz)	Peak Power (dBm)	Peak Power (mW)	Antenna Type	Gain (dBi)	E.I.R.P. (dBm)	E.I.R.P. (mW)
902.75	27.67	584.8	Dipole	2	29.67	926.8
916.75	27.33	540.8	Dipole	2	29.33	857.0
927.25	27.41	550.8	Dipole	2	29.41	873.0
Maximum EIRP (W): 0.927						

This device was tested at 3.3 and 5.75 Vdc input power per 15.31(e), with no variation in output power.

The device was tested on three channels per 15.31(l).

Equipment Used: 1464-1472-1082-1469

Measurement Uncertainty: 1.7 dB

Temperature: 20 °C

Relative Humidity: 30 %

Analyzer Settings: RBW=VBW=1 MHz
Peak detector

Section 6. Spurious Emissions (Antenna Conducted)

NAME OF TEST: Spurious Emissions (Antenna Conducted)	PARA. NO.: 15.247(d)
TESTED BY: David Light	DATE: 11 March 2008

Test Results: Complies.

Measurement Data: See attached plots.

Equipment Used: 1464-1472-1469-1082

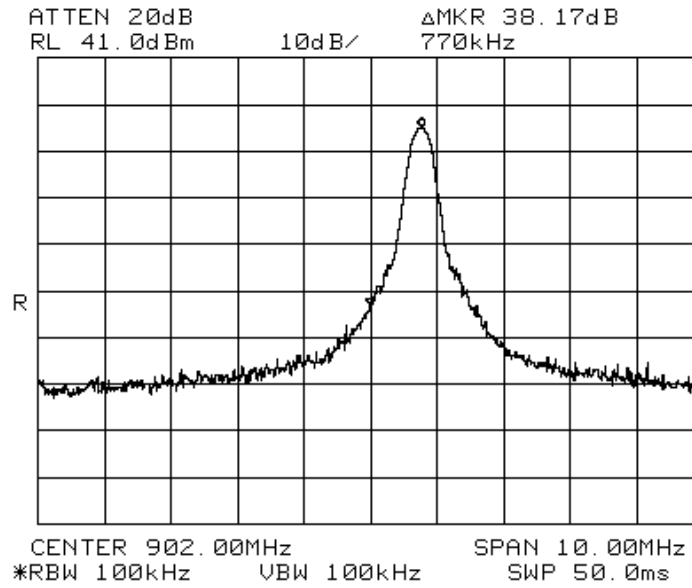
Measurement Uncertainty: $\frac{1 \times 10^{-7}}{\text{---}}$ ppm

Temperature: 20 °C

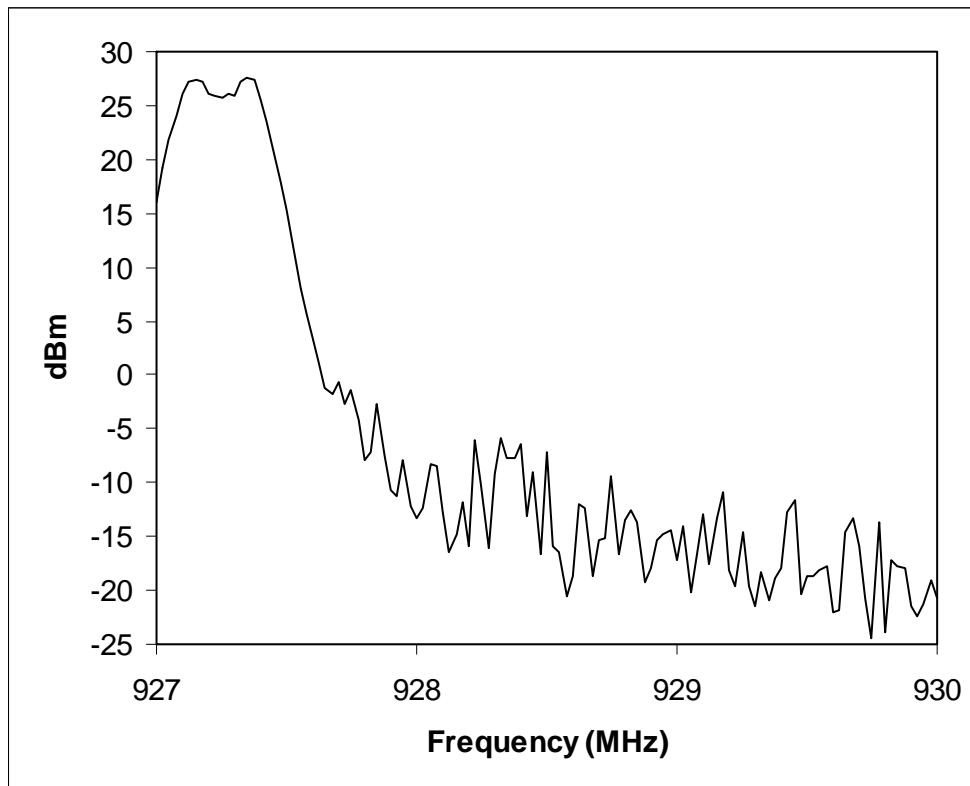
Relative Humidity: 30 %

Test Data – Spurious Emissions at Antenna Terminals

Lower Band Edge

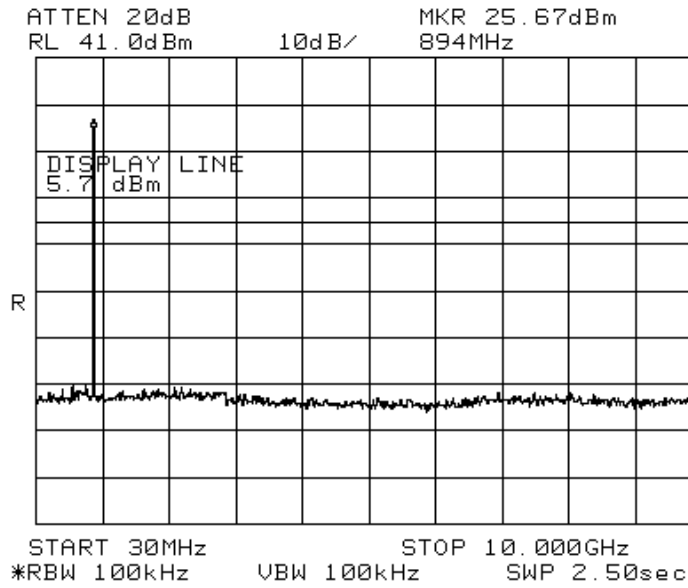


Upper Band Edge

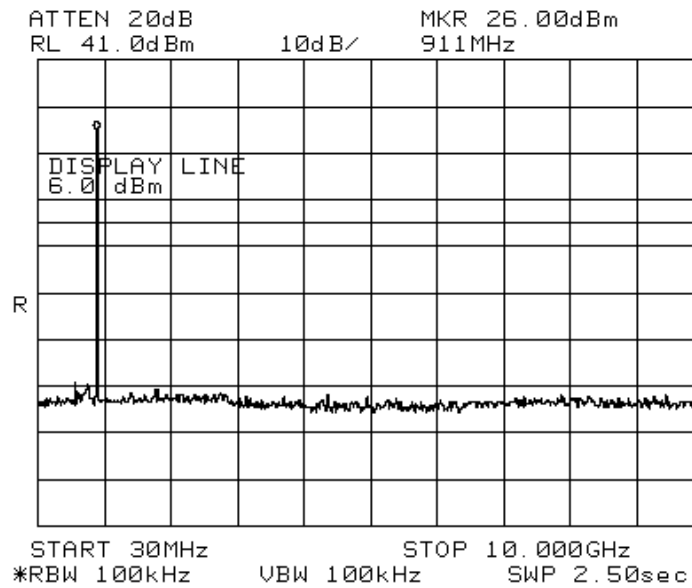


Test Data – Spurious Emissions at Antenna Terminals

Spurs – Low Channel



Spurs – Mid Channel



Section 7. Spurious Emissions (Radiated)

NAME OF TEST: Spurious Emissions (Radiated)	PARA. NO.: 15.247(d)
TESTED BY: David Light	DATE: 11 March 2008

Test Results: Complies. The worst case emission was 53.2 dBµV/m at 2708.25 MHz. This is 0.8 dB below the average specification limit of 54.0 dBµV/m.

Measurement Data: See attached table.

Duty Cycle Calculation:

Duty Cycle correction factor(dB) = 20 log (rf_{ON} in ms/100ms)

Notes:

- For handheld devices, the EUT was tested on three orthogonal axis'
- The device was tested from 30 MHz to the tenth harmonic of the highest fundamental frequency per 15.33
- The device was tested on three channels per 15.31(l).
- No emissions were detected within 20 dB of the specification limit therefore none are reported per 15.31(o). Band edge data is presented below.

Equipment Used: 1464-1484-1485-1016-993-759-1195-791

Measurement Uncertainty: +/-3.6 dB

Temperature: 20 °C

Relative Humidity: 30 %

Test Data - Radiated Emissions

Freq MHz	Rdng dBµV	Cable Duty dB	Cable dB	Horn dB	Pre-A dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
2708.25	62.3	+0.8	+2.8	+29.3	-32.7	+0.0	62.5	74.0	-11.5	Vert
Peak		+0.0						Low Channel		
2708.25	62.3	+0.8	+2.8	+29.3	-32.7	+0.0	53.2	54.0	-0.8	Vert
Average		-9.3						Low Channel		
3611.00	59.3	+0.8	+2.8	+30.3	-32.4	+0.0	60.8	74.0	-13.2	Vert
Peak		+0.0						Low Channel		
3611.00	59.3	+0.8	+2.8	+30.3	-32.4	+0.0	51.5	54.0	-2.5	Vert
Average		-9.3						Low Channel		
4513.75	52.8	+1.0	+3.1	+32.1	-31.6	+0.0	57.4	74.0	-16.6	Vert
Peak		+0.0						Low Channel		
4513.75	52.8	+1.0	+3.1	+32.1	-31.6	+0.0	48.1	54.0	-5.9	Vert
Average		-9.3						Low Channel		
2708.25	58.0	+0.8	+2.8	+29.3	-32.7	+0.0	58.2	74.0	-15.8	Horiz
Peak		+0.0						Low Channel		
2708.25	58.0	+0.8	+2.8	+29.3	-32.7	+0.0	48.9	54.0	-5.1	Horiz
Average		-9.3						Low Channel		
3611.00	48.3	+0.8	+2.8	+30.3	-32.4	+0.0	49.8	74.0	-24.2	Horiz
Peak		+0.0						Low Channel		
3611.00	48.3	+0.8	+2.8	+30.3	-32.4	+0.0	40.5	54.0	-13.5	Horiz
Average		-9.3						Low Channel		
4513.75	49.8	+1.0	+3.1	+32.1	-31.6	+0.0	54.4	74.0	-19.6	Horiz
Peak		+0.0						Low Channel		
4513.75	49.8	+1.0	+3.1	+32.1	-31.6	+0.0	45.1	54.0	-8.9	Horiz
Average		-9.3						Low Channel		
2750.25	57.8	+0.8	+2.9	+29.4	-32.7	+0.0	58.2	74.0	-15.8	Horiz
Peak		+0.0						Mid Channel		
2750.25	57.8	+0.8	+2.9	+29.4	-32.7	+0.0	48.9	54.0	-5.1	Horiz
Average		-9.3						Mid Channel		
3667.00	49.5	+0.8	+2.8	+30.5	-32.3	+0.0	42.0	54.0	-12.0	Horiz
Average		-9.3						Mid Channel		
4583.75	47.8	+1.0	+3.1	+32.3	-31.8	+0.0	43.1	54.0	-10.9	Horiz
Average		-9.3						Mid Channel		
6417.25	43.8	+1.3	+3.9	+35.1	-30.9	+0.0	43.9	54.0	-10.1	Horiz
Average		-9.3						Mid Channel		
7334.00	42.5	+1.2	+4.0	+35.8	-32.3	+0.0	41.9	54.0	-12.1	Horiz
Average		-9.3						Mid Channel		
2750.25	61.8	+0.8	+2.9	+29.4	-32.7	+0.0	62.2	74.0	-11.8	Vert
Peak		+0.0						Mid Channel		
2750.25	61.8	+0.8	+2.9	+29.4	-32.7	+0.0	52.9	54.0	-1.1	Vert
Average		-9.3						Mid Channel		

Test Data - Radiated Emissions

Freq MHz	Rdng dBμV	Cable Duty dB	Cable dB	Horn dB	Pre-A dB	Dist Table	Corr dBμV/m	Spec dBμV/m	Margin dB	Polar Ant
3667.00	58.8	+0.8	+2.8	+30.5	-32.3	+0.0	60.6	74.0	-13.4	Vert
Peak		+0.0						Mid Channel		
3667.00	58.8	+0.8	+2.8	+30.5	-32.3	+0.0	51.3	54.0	-2.7	Vert
Average		-9.3						Mid Channel		
4583.75	52.3	+1.0	+3.1	+32.3	-31.8	+0.0	56.9	74.0	-17.1	Vert
Peak		+0.0						Mid Channel		
4583.75	52.3	+1.0	+3.1	+32.3	-31.8	+0.0	47.6	54.0	-6.4	Vert
Average		-9.3						Mid Channel		
6417.25	44.5	+1.3	+3.9	+35.1	-30.9	+0.0	44.6	54.0	-9.4	Vert
Average		-9.3						Mid Channel		
2781.75	62.0	+0.8	+2.9	+29.4	-32.7	+0.0	62.4	74.0	-11.6	Vert
Peak		+0.0						High Channel		
2781.75	62.0	+0.8	+2.9	+29.4	-32.7	+0.0	53.1	54.0	-0.9	Vert
Average		-9.3						High Channel		
3709.00	58.8	+0.8	+2.8	+30.6	-32.2	+0.0	60.8	74.0	-13.2	Vert
Peak		+0.0						High Channel		
3709.00	58.8	+0.8	+2.8	+30.6	-32.2	+0.0	51.5	54.0	-2.5	Vert
Average		-9.3						High Channel		
4636.25	52.7	+1.0	+3.2	+32.5	-32.1	+0.0	57.3	74.0	-16.7	Vert
Peak		+0.0						High Channel		
4636.25	52.7	+1.0	+3.2	+32.5	-32.1	+0.0	48.0	54.0	-6.0	Vert
Average		-9.3						High Channel		
6490.75	45.8	+1.3	+4.0	+35.2	-31.1	+0.0	55.2	74.0	-18.8	Vert
Peak		+0.0						High Channel		
6490.75	45.8	+1.3	+4.0	+35.2	-31.1	+0.0	45.9	54.0	-8.1	Vert
Average		-9.3						High Channel		
7418.00	43.8	+1.2	+4.1	+35.9	-32.5	+0.0	43.2	54.0	-10.8	Vert
Average		-9.3						High Channel		
2781.75	57.3	+0.8	+2.9	+29.4	-32.7	+0.0	57.7	74.0	-16.3	Horiz
Peak		+0.0						High Channel		
2781.75	57.3	+0.8	+2.9	+29.4	-32.7	+0.0	48.4	54.0	-5.6	Horiz
Average		-9.3						High Channel		
3709.00	51.3	+0.8	+2.8	+30.6	-32.2	+0.0	44.0	54.0	-10.0	Horiz
Average		-9.3						High Channel		
4636.25	47.3	+1.0	+3.2	+32.5	-32.1	+0.0	42.6	54.0	-11.4	Horiz
Average		-9.3						High Channel		
6490.75	44.0	+1.3	+4.0	+35.2	-31.1	+0.0	44.1	54.0	-9.9	Horiz
Average		-9.3						High Channel		

Peak Measurement = Reading + AF + Cable Loss – PreAmp

Average Measurement = Reading + AF + Cable Loss – PreAmp – Duty Cycle

RBW=VBW=1 MHz

All measurements within 20 dB of limit reported.

Section 8. Powerline Conducted Emissions

NAME OF TEST: Powerline Conducted Emissions	PARA. NO.: 15.207(a)
TESTED BY:	DATE:

Test Results: Complies. The worst case emission was 50.52 dB μ V at 197.6 kHz. This is 3.2 dB below the quasi-peak specification limit of 53.7 dB μ V. This is a peak measurement.

Test Data: Refer to attached plots

Equipment Used: 674-1663-1548-1555-1258

Measurement Uncertainty: +/- 1.7 dB

Temperature: 22 °C

Relative Humidity: 35 %

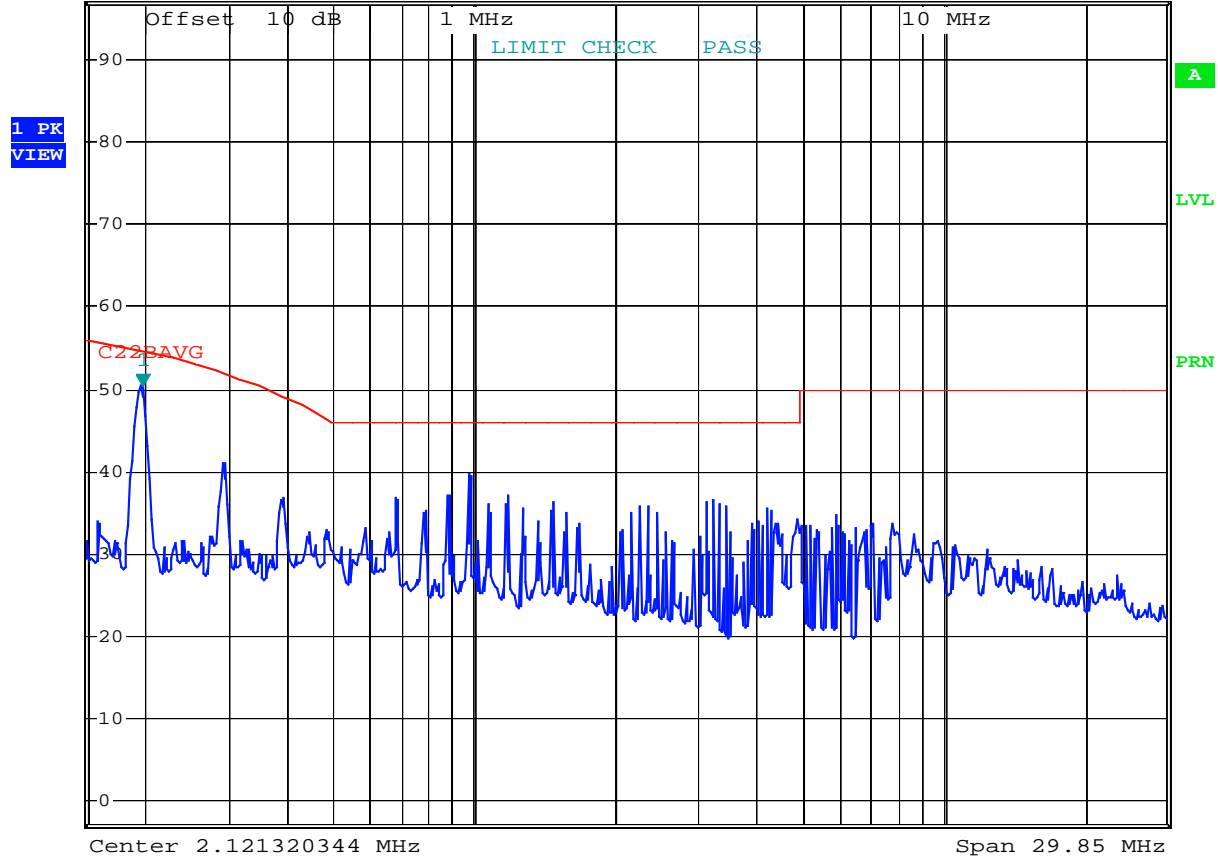
Test Data – Powerline Conducted Emissions

L1



*RBW 10 kHz Marker 1 [T1]
VBW 30 kHz 50.52 dBµV
SWT 300 ms 197.580836070 kHz

Ref 97 dBµV Att 10 dB



Date: 10.JUN.2008 11:27:13

Section 9. Test Equipment List

Nemko ID	Description	Manufacturer Model Number	Serial Number	Calibration Date	Calibration Due
1464	Spectrum analyzer	Hewlett Packard 8563E	3551A04428	01/24/07	01/24/09
1082	CABLE 2m	Astrolab 32027-2-29094-72TC	N/A	CBU	N/A
1472	20db Attenuator DC 18 Ghz	Omni Spectra 20600-20db	NONE	CBU	N/A
1469	10 db Attenuator DC 18 Ghz	MCL Inc. BW-S10W2 10db-2WDC	NONE	CBU	N/A
1484	Cable	Storm PR90-010-072	N/A	05/02/07	05/01/08
1485	Cable	Storm PR90-010-216	N/A	05/02/07	05/01/08
1016	Pre-Amp	HEWLETT PACKARD 8449A	2749A00159	05/01/07	04/30/08
791	PREAMP, 25dB	Nemko USA, Inc. LNA25	398	05/01/07	04/30/08
993	Horn antenna	A.H. Systems SAS-200/571	XXX	08/31/07	08/30/08
759	ANTENNA, LOG PERIODIC	A.H. SYSTEMS SAS-200/510	556	03/30/07	03/29/08
1195	ANTENNA,BICONICAL	A.H. SYSTEMS SAS-200/542	235	03/30/07	03/29/08
674	LIMITER	HP 11947A	3107A02200	CBU	NA
1663	Spectrum Analyzer	Rhode & Schwarz FSP3	100073	07/23/07	07/22/08
1548	CABLE .8m	Nemko USA, Inc. RG214	N/A	12/13/07	12/12/08
1555	Filter high pass 5KHz	Solar Electronics 7930-5.0	933125	01/14/08	01/14/09
1258	LISN .15mhz-30mhz	EMCO 3825/2	1305	06/20/07	06/19/08

ANNEX A - TEST DETAILS

NAME OF TEST: Channel Separation	PARA. NO.: 15.247(a)(1)
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Minimum Standard:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

NAME OF TEST: Time of Occupancy	PARA. NO.: 15.247(a)(1)
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Minimum Standard:

Frequency Band (MHz)	20 dB Bandwidth	No. of Hopping Channels	Average Time of Occupancy
902 - 928	<250 kHz	50	=<0.4 sec. in 20 sec.
902 - 928	=>250 kHz	25	=<0.4 sec. in 10 sec.
2400 - 2483.5	-----	75	=<0.4 sec. in 0.4 seconds multiplied by the number of hopping channels employed.
5725 - 5850	-----	75	=<0.4 sec. in 30 sec.

Method Of Measurement:

The spectrum analyzer is set as follows:

- RBW: 1 MHz
- VBW: = RBW
- Span: 0 Hz
- LOG dB/div.: 10 dB
- Sweep: Sufficient to see one hop time sequence.
- Trigger: Video

The occupancy time of one hop is measured as above. The average time of occupancy is calculated over the appropriate period of time from above table

Avg. time of occupancy = (period from table/duration of one hop)/no. of channels multiplied by the duration of one hop.

For instance:

If a 2.4 GHz system has a measured hop duration time of 1 msec. and uses 75 channels, then the average time of occupancy would be:

$$(30 \text{ sec.}/.001 \text{ sec.})/75 \text{ chan.} = 400 \times 1 \text{ msec.} = 400 \text{ msec. or } 0.4 \text{ sec. in } 30 \text{ sec.}$$

NAME OF TEST: Occupied Bandwidth	PARA. NO.: 15.247(a)(1)
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Minimum Standard:

Frequency Band (MHz)	Maximum 20 dB Bandwidth
902 - 928	500 kHz
2400 – 2483.5	Not defined
5725 – 5850	1 MHz

Method Of Measurement:

The spectrum analyzer is set as follows:

RBW: At least 1% of span/div.

VBW: >RBW

Span: Sufficient to display 20 dB bandwidth

LOG dB/div.: 10 dB

Sweep: Auto

Number of channels tested:

Tuning range	Number of channels tested	Channel location in band
1 MHz or less	1	middle
1 to 10 MHz	2	top and bottom
more than 10 MHz	3	top, middle, bottom

NAME OF TEST: Peak Power Output	PARA. NO.: 15.247(b)
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Minimum Standard:

Frequency Band (MHz)	No. of Hopping Channels	Maximum Peak Power Output at Antenna Port
902 - 928	at least 50	1 watt
902 – 928	25 - 49	0.25 watts
2400 – 2483.5	75	1 watt
5725 – 5850	75	1 watt

If transmitting antennas of directional gain greater than 6 dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Systems operating in the 2400-2483.5 MHz band that are used exclusively for fixed, point to point operation may employ transmitting antennas with directional gain greater than 6 dBi provided the maximum peak output power is reduced by 1 dB for every 3 dB that the directional gain of the antenna exceed 6 dBi.

Systems operating in the 5725 – 5850 MHz band that are used exclusively for fixed, point-to-point operation may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter peak output power.

Direct Measurement Method For Detachable Antennas:

If the antenna is detachable, a peak power meter is used to measure the power output with the transmitter operating into a 50 ohm load. The dBi gain of the antenna(s) employed shall be reported.

Calculation Of EIRP For Integral Antenna:

If the antenna is not detachable from the circuit then the Peak Power Output is derived from the peak radiated field strength of the fundamental emission by using the plane wave relation $GP/4\pi R^2 = E^2/120\pi$ and proceeding as follows:

$$P = \frac{E^2 R^2}{30G} = \frac{E^2 3^2}{30G}$$

where,

P = the equivalent isotropic radiated power in watts

E = the maximum measured field strength in V/m

R = the measurement range (3 meters)

G = the numeric gain of the transmit antenna in relation to an isotropic radiator

The RBW of the spectrum analyzer shall be set to a value greater than the measured 20 dB occupied bandwidth of the E.U.T.

Number of channels tested:

Tuning range	Number of channels tested	Channel location in band
1 MHz or less	1	middle
1 to 10 MHz	2	top and bottom
more than 10 MHz	3	top, middle, bottom

NAME OF TEST: Spurious Emissions at Antenna Terminals PARA. NO.: 15.247(d)

Minimum Standard: In any 100kHz bandwidth outside the frequency band in which the transmitter is operating, emissions shall be at least 20 dB below the fundamental emission or shall not exceed the following field strength limits. Emissions falling in the restricted bands of 15.205 shall not exceed the following field strength limits:

Frequency (MHz)	Field Strength (µV/m @ 3m)	Field Strength (dB @ 3m)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

THE SPECTRUM WAS SEARCHED TO THE 10th HARMONIC

Method Of Measurement:

30 MHz - 10th harmonic plot

RBW: 100 kHz

VBW: 300 kHz

Sweep: Auto

Display line: -20 dBc

Lower Band Edge

RBW: At least 1% of span/div.

VBW: >RBW

Span: As necessary to display any spurious at band edge.

Sweep: Auto

Center Frequency: 902 MHz, 2400 MHz, or 5725 MHz

Marker: Peak of fundamental emission

Marker Δ: Peak of highest spurious level below center frequency.

Upper Band Edge

RBW: At least 1% of span/div.

VBW: >RBW

Span: As necessary to display any spurious at band edge.

Sweep: Auto

Center Frequency: 928 MHz, 2483.5 MHz, or 5850 MHz

Marker: Peak of fundamental emission

Marker Δ: Peak of highest spurious level above center frequency.

Number of channels tested:

Tuning range	Number of channels tested	Channel location in band
1 MHz or less	1	middle
1 to 10 MHz	2	top and bottom
more than 10 MHz	3	top, middle, bottom

NAME OF TEST: Radiated Spurious Emissions	PARA. NO.: 15.247(d)
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Minimum Standard: In any 100kHz bandwidth outside the frequency band in which the transmitter is operating, emissions shall be at least 20 dB below the fundamental emission or shall not exceed the following field strength limits:

Emissions falling in the restricted bands of 15.205 shall not exceed the following field strength limits:

Frequency (MHz)	Field Strength (µV/m @ 3m)	Field Strength (dB @ 3m)
30 - 88	100	40.0
88 - 216	150	43.5
216 - 960	200	46.0
Above 960	500	54.0

THE SPECTRUM WAS SEARCHED TO THE 10th HARMONIC

15.205 Restricted Bands

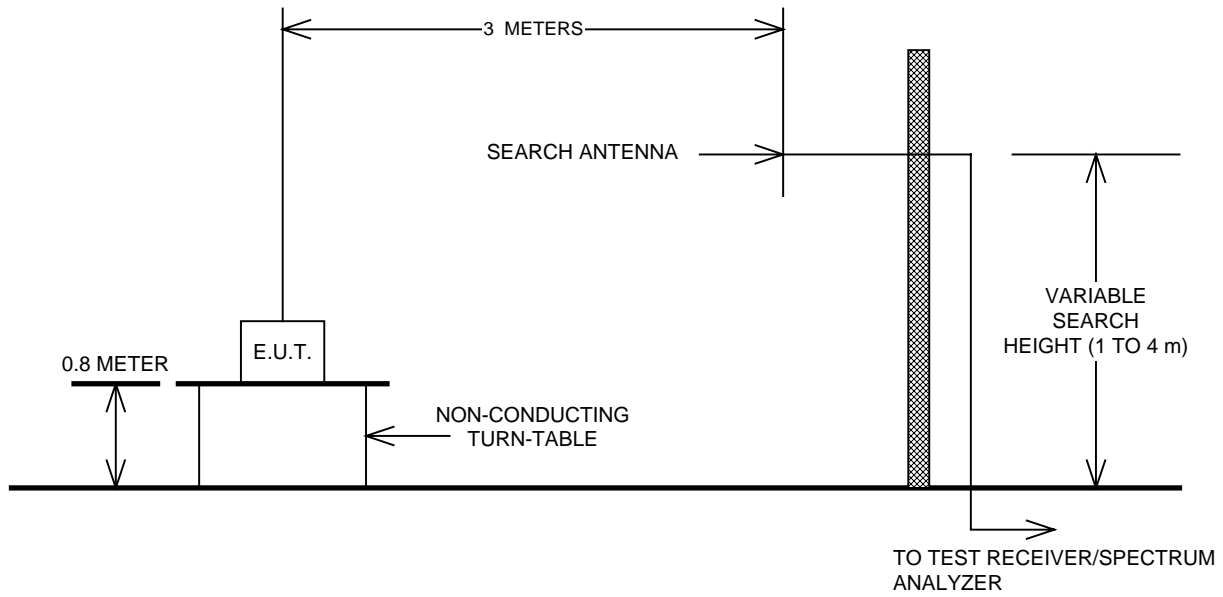
MHz	MHz	MHz	GHz
0.09-0.11	16.42-16.423	399.9-410	4.5-5.25
0.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.125-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	Above 38.6
13.36-13.41	1718		

Number of channels tested:

Tuning range	Number of channels tested	Channel location in band
1 MHz or less	1	middle
1 to 10 MHz	2	top and bottom
more than 10 MHz	3	top, middle, bottom

ANNEX B - TEST DIAGRAMS

Test Site For Radiated Emissions



Peak Power at Antenna Terminals

