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CERTIFICATION TEST REPORT

FOR THE

WIRELESS LAN PC CARD, WL-305

FCC PART 15 SUBPART C SECTIONS 15.247/15.207/15.209/15.109

COMPLIANCE

DATE OF ISSUE: NOVEMBER 10, 2000

PREPARED FOR:

3COM Corporation
5400 Bayfront Plaza Bldg 300 Dock E.
Santa Clara, CA 95052

P.O. No: 2300028832
W.O. No: 75448

Report No: FC00-105

PREPARED BY:

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Date of test: October 13-18 and November 9, 2000

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	October 13-18 and November 9, 2000
PURPOSE OF TEST:	To demonstrate the compliance of the Wireless LAN PC Card, WL-305, with the requirements for FCC Part 15 Subpart C Section 15.247/15.207/15.209/15.109 devices.
MANUFACTURER:	3COM Corporation 5400 Bayfront Plaza Bldg 300 Dock E. Santa Clara, CA 95052
REPRESENTATIVE:	T.G. Hien
TEST LOCATION:	CKC Laboratories, Inc. 1653 Los Viboras Road, Hollister, CA 95023 5473A Clouds Rest, Mariposa, CA 95338
TEST PERSONNEL:	Chuck Kendall, Art Rice & Randy Clark
TEST METHOD:	ANSI C63.4 1992 & FCC97-114
FREQUENCY RANGE TESTED:	450 kHz – 26.5 GHz
EQUIPMENT UNDER TEST:	**Wireless LAN PC Card** Manuf: 3COM Corporation Model: WL-305 Serial: 38 FCC ID: DF6-WL305 (Pending)

SUMMARY OF RESULTS

The 3COM Corporation Wireless LAN PC Card, WL-305, was tested in accordance with ANSI C63.4 1992 for compliance with FCC Part 15 Subpart C Section 15.247.

As received, the above equipment was found to be fully compliant with the limits of FCC Part 15 Subpart C Sections 15.247, 15.207, 15.209 & 15.109. The results in this report apply only to the items tested, as identified herein.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

WL-305 Wireless LAN PC Card.

The following model has been tested by CKC Laboratories: 3CRWE62092A (Engineering code name: Alpha 3). The following additional models are identical electrically to the one which was tested, or any differences between them do not affect their EMC characteristics, and therefore they comply to the level of testing equivalent to the tested models. Model name: **WL-305.** Equipment name**: 3Com Wireless LAN PC card.**

Spread Spectrum Method:	Direct Sequence
Tx/Rx Frequency Range:	2400-2483.5 MHz
Number Of Channels:	11

MEASUREMENT UNCERTAINTY

Associated with data in this report is a ±4dB measurement uncertainty.

TEMPERATURE AND HUMIDITY DURING TESTING

The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

PERIPHERAL DEVICES

The EUT was tested with the following peripheral device(s):

Host PC
Manuf: Dell
Model: PPI
Serial: H3L3T
FCC ID: DoC

AC Adapter for PC
Manuf: Dell
Model: PA-4
Serial: none
FCC ID: none

REPORT OF MEASUREMENTS

The following tables report the six highest worst case levels recorded during the tests performed on the Wireless LAN PC Card, WL-305. All readings taken are peak readings unless otherwise noted by a "Q" or "A". The data sheets from which these tables were compiled are contained in Appendix B.

Table 1: Six Highest Peak Output Power Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	Amp dB	Cable dB	Dist dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
2411.740	100.5	28.8	-34.5	12.8		107.6	137.0	-29.4	H
2412.800	104.3	28.8	-34.5	12.8		111.4	137.0	-25.6	V
2438.200	101.6	28.9	-34.5	13.2		109.2	137.0	-27.8	V
2438.220	100.0	28.9	-34.5	13.2		107.6	137.0	-29.4	H
2462.100	100.5	29.0	-34.5	13.6		108.6	137.0	-28.4	V
2463.320	97.7	29.0	-34.5	13.6		105.8	137.0	-31.2	H

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247(b)(1)
Test Distance: 3 Meters
Tested By: Randy Clark

H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated in the notes below. Channels 1, 6 & 11 tested.

Table 2: Six Highest Spurious Emission Levels 30-1000 MHz									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	Dist dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
195.515	44.2	17.4	-24.7	2.5		39.4	43.5	-4.1	VQ
228.060	43.7	17.0	-24.7	2.7		38.7	46.0	-7.3	VQ
333.376	42.6	19.6	-24.9	3.5		40.8	46.0	-5.2	VQ
366.946	44.8	17.9	-25.2	3.7		41.2	46.0	-4.8	V
390.909	44.6	16.8	-25.4	3.9		39.9	46.0	-6.1	VQ
456.095	44.4	17.0	-25.6	4.2		40.0	46.0	-6.0	VQ

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247/15.209
Test Distance: 3 Meters
Tested By: Chuck Kendall

H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. Used 120kHz resolution BW & 120 kHz video BW.
Measured spurious emissions with the transmitter set to Channels 1, 6 and 11.

Table 3: Four Highest Spurious Emission Levels 1-26.5 GHz									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	Dist dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
4824.153	35.9	33.2	-35.5	12.7	-10.0	36.3	54.0	-17.7	VA
4824.347	38.0	33.2	-35.5	12.7	0.0	48.4	54.0	-5.6	VA
4874.547	35.8	33.1	-35.6	12.8	-10.0	36.1	54.0	-17.9	VA
4924.177	33.2	33.1	-35.6	12.8	-10.0	33.5	54.0	-20.5	VA

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247/15.209
Test Distance: 1 & 3 Meters
Tested By: Randy Clark

H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below.

Tested Channels 1, 6 & 11.

Table 4: Six Highest Band Edge Delta Levels									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	Dist dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
2398.510	42.2	29.3	-38.4	11.9		45.0	54.0	-9.0	H
2400.010	39.1	29.3	-38.4	11.9		41.9	137.0	-95.1	H
2411.510	78.8	29.3	-38.3	11.9		81.7	137.0	-55.3	H
2461.480	75.9	29.6	-37.9	12.1		79.7	137.0	-57.3	H
2483.490	25.7	29.7	-37.7	12.2		29.9	137.0	-107.1	H
2485.470	27.1	29.7	-37.7	12.2		31.3	54.0	-22.7	H

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247(a)(2)
Test Distance: 3 Meters
Tested By: Art Rice

H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated. Measuring delta from transmit fundamental level to band edge. Used 30 kHz resolution BW & 30 kHz video BW.

Tested Channels 1, 6 & 11.

Table 5: Six Highest Conducted Emission Levels									
FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Lisn dB	dB	dB	dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
0.460040	37.5	0.7				38.2	48.0	-9.8	W
0.530317	38.2	0.7				38.9	48.0	-9.1	W
1.061581	37.7	0.7				38.4	48.0	-9.6	W
6.966460	35.3	3.5				38.8	48.0	-9.2	B
7.185047	34.8	3.4				38.2	48.0	-9.8	B
7.328495	34.8	3.3				38.1	48.0	-9.9	B

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247/15.207
Tested By: Randy Clark

Q = Quasi Peak Reading
A = Average Reading
B = Black Lead
W = White Lead

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 1.

Table 6: Six Highest Radiated Emission Levels Receiver Portion									
	METER	CORRECTION FACTORS				CORRECTED	SPEC		
FREQUENCY MHz	READING dBµV	Ant dB	Amp dB	Cable dB	Dist dB	READING dBµV/m	LIMIT dBµV/m	MARGIN DB	NOTES
122.955	34.8	0.0				34.8	43.5	-8.7	VQ
333.897	40.1	0.0				40.1	46.0	-5.9	VQ
366.515	38.6	0.0				38.6	46.0	-7.4	VQ
400.543	33.6	0.0				33.6	46.0	-12.4	V
466.370	36.1	0.0				36.1	46.0	-9.9	V
586.395	37.3	0.0				37.3	46.0	-8.7	V

Test Method: ANSI C63.4 1992
Spec Limit: FCC Part 15 Subpart C Section 15.247/15.109
Test Distance: 0-10 cm
Tested By: Randy Clark

H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading
A = Average Reading

COMMENTS: The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is set to receive on channel 1.

TABLE A
LIST OF TEST EQUIPMENT

Band Edge:

Function	S/N	Calibration Date	Cal Due Date
Preamp, HP83017A	3123A00283	05/09/2000	05/09/2001
Horn Ant, ARA DRG-118A	1064	02/08/2000	02/08/2001
Cable, 25 ft Andrews FSJ1P-50A-4A	hol-hf-025-06	09/29/2000	09/29/2001
Cable,100 ft Andrews FSJ1P-50A-4A	hol-hf-100-09	09/29/2000	09/29/2001
HP 85660B SA	2937A06153	09/25/2000	09/25/2001
HP 85662A Display	2848A18219	09/25/2000	09/25/2001

Spurious Emissions:

Function	S/N	Calibration Date	Cal Due Date
Spectrum Analyzer (Display)	2403A08241	09/07/2000	09/07/2001
Spectrum Analyzer (RF Section)	2209A01404	09/07/2000	09/07/2001
QP Adapter	2811A01267	09/07/2000	09/07/2001
PreAmp	1937A02604	04/03/2000	04/03/2001
Bicon Antenna	156	05/20/2000	05/20/2001
Log Antenna	154	04/20/2000	04/20/2001
Horn Antenna	4085	02/14/2000	02/14/2001

Peak Power Output:

Function	S/N	Calibration Date	Cal Due Date
Spectrum Analyzer (Display)	2403A08241	09/07/2000	09/07/2001
Spectrum Analyzer (RF Section)	2209A01404	09/07/2000	09/07/2001
QP Adapter	2811A01267	09/07/2000	09/07/2001
PreAmp	1937A02604	04/03/2000	04/03/2001
Bicon Antenna	156	05/20/2000	05/20/2001
Log Antenna	154	04/20/2000	04/20/2001

Conducted:

Function	S/N	Calibration Date	Cal Due Date
Spectrum Analyzer (Display)	2403A08241	09/07/2000	09/07/2001
Spectrum Analyzer (RF Section)	2209A01404	09/07/2000	09/07/2001
QP Adapter	2811A01267	09/07/2000	09/07/2001
LISNs	814493, 474	06/05/2000	06/05/2001

EUT SETUP: Radiated and Conducted Emissions

The equipment under test (EUT) and the peripheral(s) listed were set up in a manner that represented their normal use. Any special conditions required for the EUT to operate normally are identified in the comments that accompany Table 1 for peak output power emission levels, Table 2 for spurious emissions below 1000 MHz, Table 3 for spurious emissions above 1000 MHz, Table 4 for band edge emission levels, Table 5 for conducted emissions and Table 6 for radiated emission levels for the receiver portion.

During radiated emissions testing, the EUT was mounted on a nonconductive, rotating table 80 cm above the conductive grid. The nonconductive table dimensions were 1 meter by 1.5 meters. This configuration is typical for radiated emissions testing of table top devices.

During conducted emissions testing, the EUT was located 80 centimeters above the conducting ground plane on the same nonconducting table as was used for radiated testing. The metal plane was grounded to the earth through the green wire safety ground. Power to the EUT was provided via 3 meters of shielded power cable from a filter grounded to the metal plane to a LISN. The LISN was also grounded to the plane and attached to the LISN was a 4 ganged grounded outlet whose source was also shielded and 60 cm in length. All other objects were kept a minimum of 1 meter away from the EUT during the conducted test.

TESTING: Radiated Emissions

During the preliminary radiated scan, the Host PC was powered up and operating in its defined FCC test mode. The frequency range of 30 MHz - 88 MHz was then scanned with the biconical antenna located about 1.5 meter above the ground plane in the vertical configuration. During this scan, the turntable was rotated and all peaks which were at or near the limit were recorded. The frequency range of 100 - 300 MHz was scanned with the biconical antenna in the same manner, and the peaks recorded. Lastly, a scan of the FM band from 88 - 110 MHz was made, using a reduced resolution bandwidth and a reduced frequency span. The biconical antenna was changed to the horizontal polarity and the above steps were repeated. After changing to the log periodic antenna in the horizontal configuration, the frequency range of 300 - 1000 MHz was scanned. The log periodic antenna was changed to the vertical polarity and the frequency range of 300 - 1000 MHz was again scanned. The horn antenna was used for frequencies above 1000 MHz. For frequencies between 22-26.5 GHz, a frequency doubler was used. Care was taken to ensure that no frequencies were missed within the FM and TV bands. An analysis was performed to determine if the signals that were at or near the limit were caused by an ambient transmission. If unable to determine by analysis, the equipment was powered down to make the final determination if the EUT was the source of the emission.

For the final radiated scan, a thorough scan of all frequencies was manually made using a small frequency span, rotating the turntable as needed. Comparison with the previously recorded measurements was then made.

Using the peak readings from both scans as a guide, the test engineer then maximized the readings with respect to the table rotation, antenna height and configuration of the peripherals. Photographs showing the final worst case configuration of the EUT are contained in Appendix A.

Conducted Emissions

For conducted emissions testing, a 30 to 50 second sweep time was used for automated measurements in the frequency bands of 450 kHz to 1.705 MHz, 1.705 MHz to 3 MHz, and 3 MHz to 30 MHz. All readings within 20 dB of the limit were recorded. At frequencies where the recorded emissions were close to the limit, further investigation was performed manually at a slower sweep rate.

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Table A were used to collect both the radiated and conducted emissions data for the Wireless LAN PC Card, WL-305. For radiated measurements below 300 MHz, the biconical antenna was used. For frequencies from 300 to 1000 MHz, the log periodic antenna was used. The horn antenna and frequency doubler were used for frequencies above 1000 MHz. Antennas were located at a distances of 0-10 cm, 1 & 3 meters from the edge of the EUT. Conducted emissions tests required the use of the FCC type LISN's.

The HP spectrum analyzer was used for all measurements. Table B shows the analyzer bandwidth settings that were used in designated frequency bands. For conducted emissions, an appropriate reference level and a vertical scale size of 10 dB per division were used. A 10 dB external attenuator was also used during conducted tests, with internal offset correction in the analyzer. During radiated testing, the measurements were made with 0 dB of attenuation, a reference level of 97 dBµV, and a vertical scale of 10 dB per division.

TABLE B: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE

TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz
RADIATED EMISSIONS	1000 MHz	26.5 GHz	1 MHz

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in Tables 1 - 6 indicate the type of detector function used to obtain the given readings. Unless otherwise noted, all readings were made in the "Peak" mode. Whenever a "Quasi-Peak" or "Average" reading is listed as one of the six highest readings, this is indicated as a "Q" or an "A" in the appropriate table. The following paragraphs describe in more detail the detector functions and when they were used to obtain the emissions data for the Wireless LAN PC Card, WL-305.

Peak

In this mode, the Spectrum Analyzer or test engineer recorded all emissions at their peak value as the frequency band selected was scanned. By combining this function with another feature of the analyzer called "peak hold," the analyzer had the ability to measure transients or low duty cycle transient emission peak levels. In this mode the analyzer made a slow scan across the frequency band selected and measured the peak emission value found at each frequency across the band.

Quasi-Peak

When the true peak values exceeded or were within 2 dB of the specification limit, quasi-peak measurements were taken using the HP Quasi-Peak Adapter for the HP Spectrum Analyzer. The detailed procedure for making quasi peak measurements contained in the HP Quasi-Peak Adapter manual were followed.

Average

For certain frequencies, average measurements may be made using the spectrum analyzer. To make these measurements, the test engineer reduces the video bandwidth on the analyzer until the modulation of the signal is filtered out. At this point the analyzer is set into the linear mode and the scan time is reduced.

TEST METHODS

The radiated and conducted emissions data of the Wireless LAN PC Card, WL-305, was taken with the HP Spectrum Analyzer. Incorporating the applicable correction factors for distance, antenna, cable loss and amplifier gain, the data was reduced as shown in the "Sample Calculations". The corrected data was then compared to the FCC Part 15 Subpart C, Sections 15.247, 15.207, 15.209 & 15.109 emissions limits to determine compliance.

Preliminary and final measurements were taken in order to better ensure that all emissions from the EUT were found and maximized.

TRANSMITTER CHARACTERISTICS

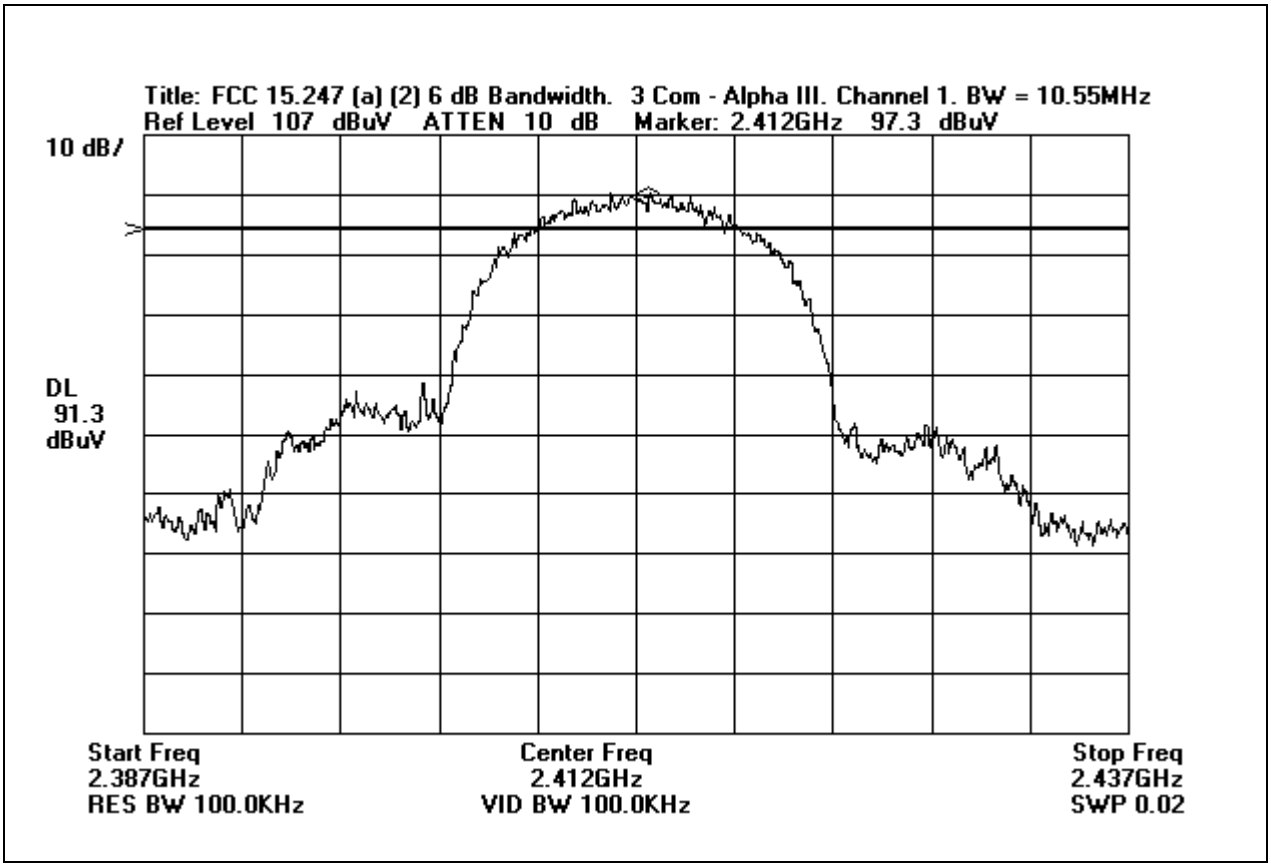
15.247(a)(2) Bandwidth Measurements (Direct Sequence)

The fundamental frequency was kept within the permitted band 2400-2483.5 MHz. The minimum 6dB bandwidth shall be at least 500 kHz. Refer to the bandwidth plots following this page.

List of Test Equipment Used for Bandwidth Test:

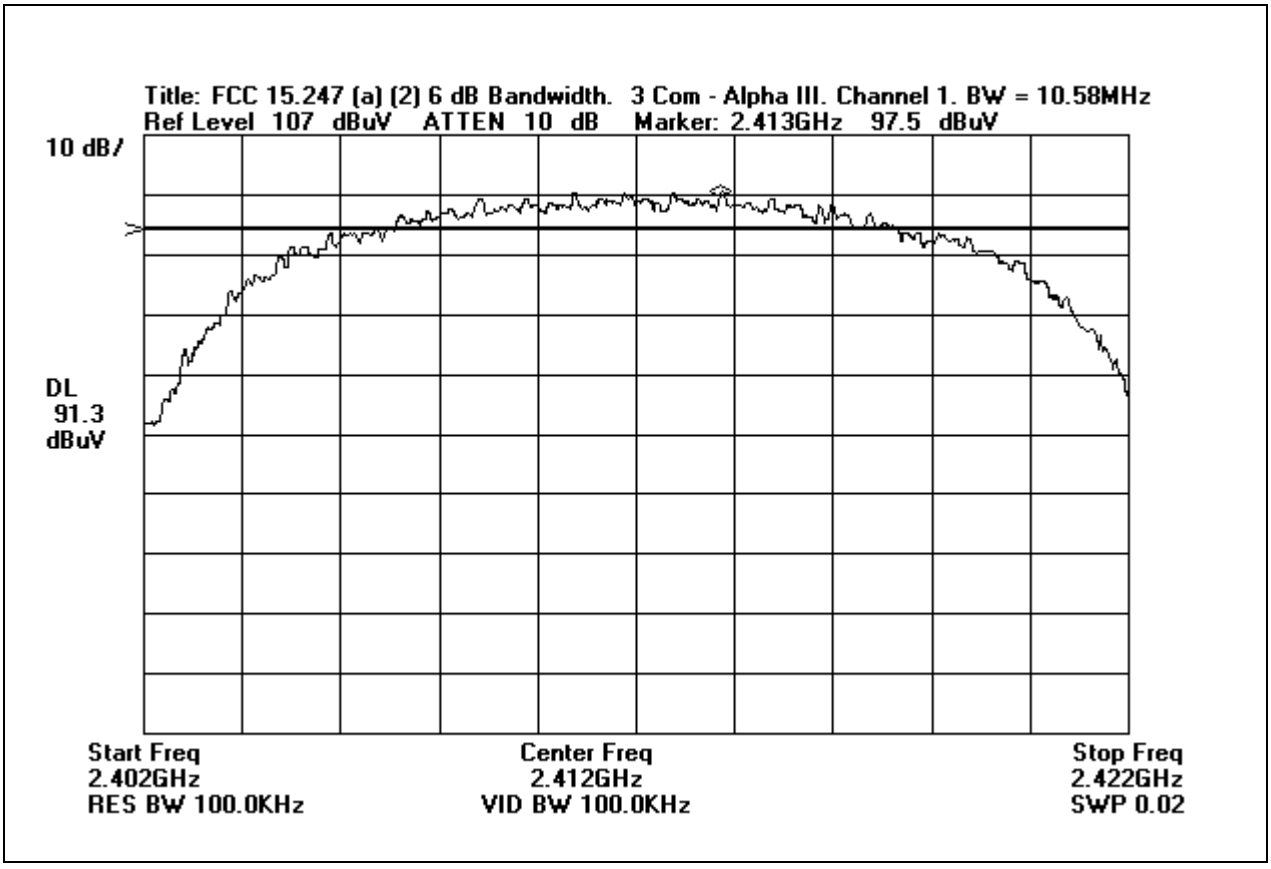
Function	Manufacturer	Model	Cal Date	Cal Due Date
QP Adapter	HP	85650A	7/7/2000	7/7/2001
SA Display Section	HP	8566B	7/7/2000	7/7/2001
SA RF Section	HP	8566B	7/7/2000	7/7/2001
Horn Antenna	EMCO	3115	10/20/2000	10/20/2001
Preamp	HP	8449B	10/13/2000	10/13/2001

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



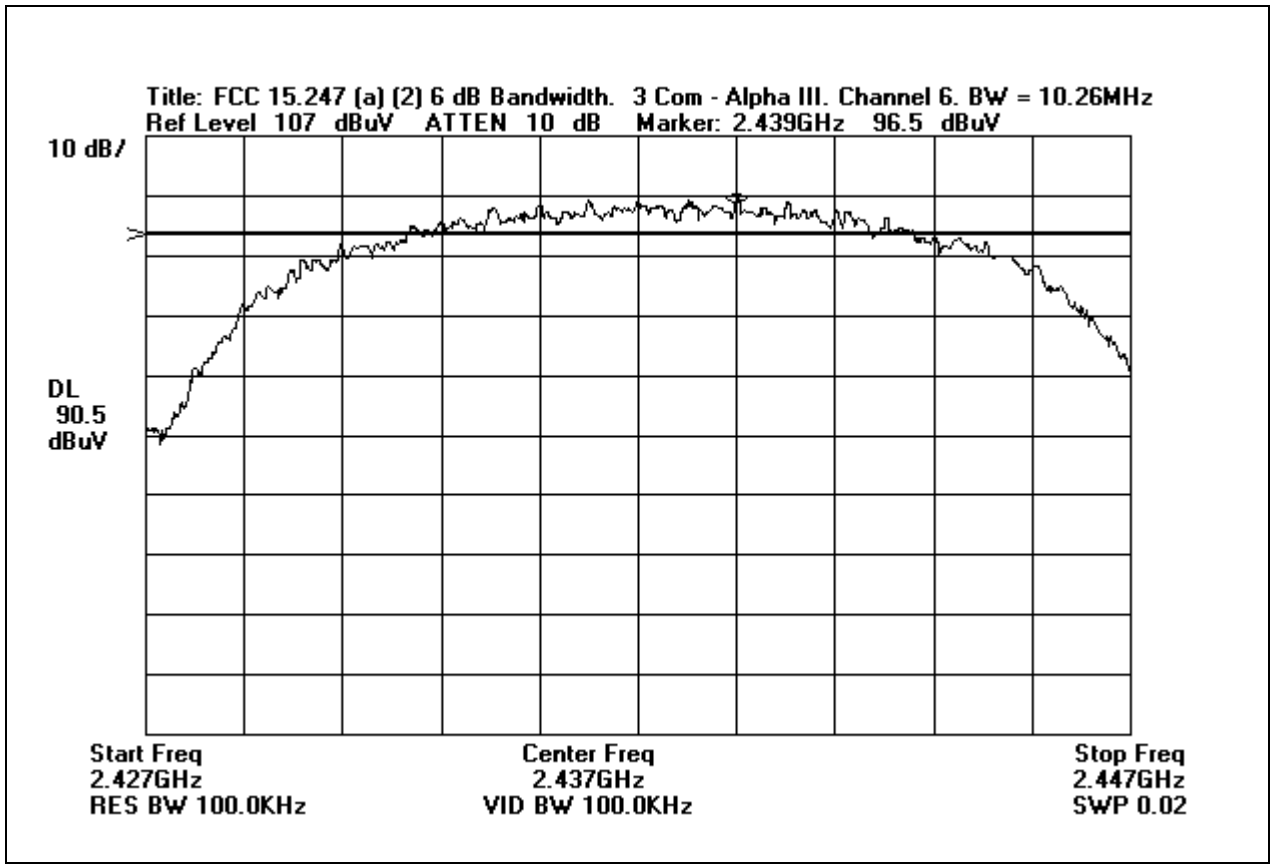
6dB Bandwidth Plot - Channel 1

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



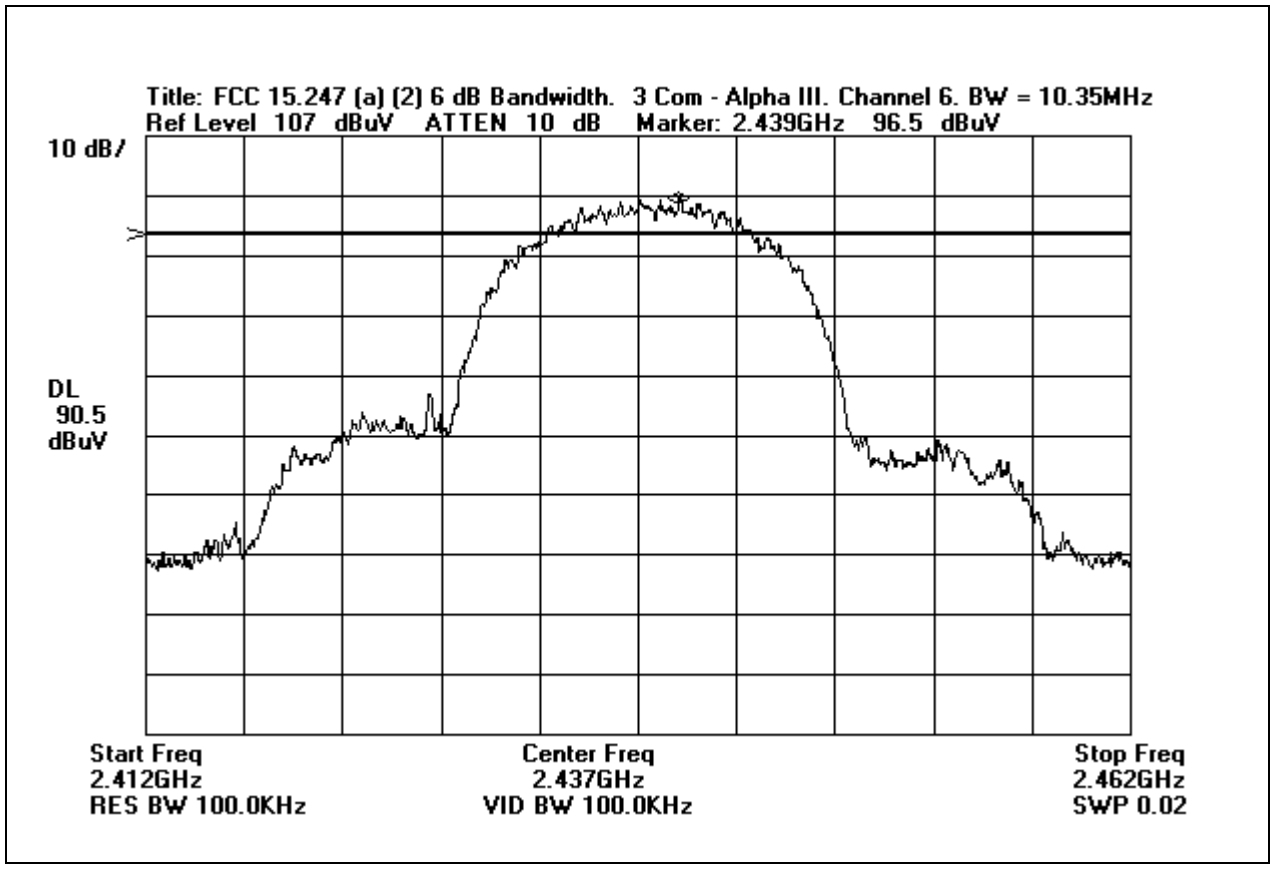
6dB Bandwidth Plot - Channel 1

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



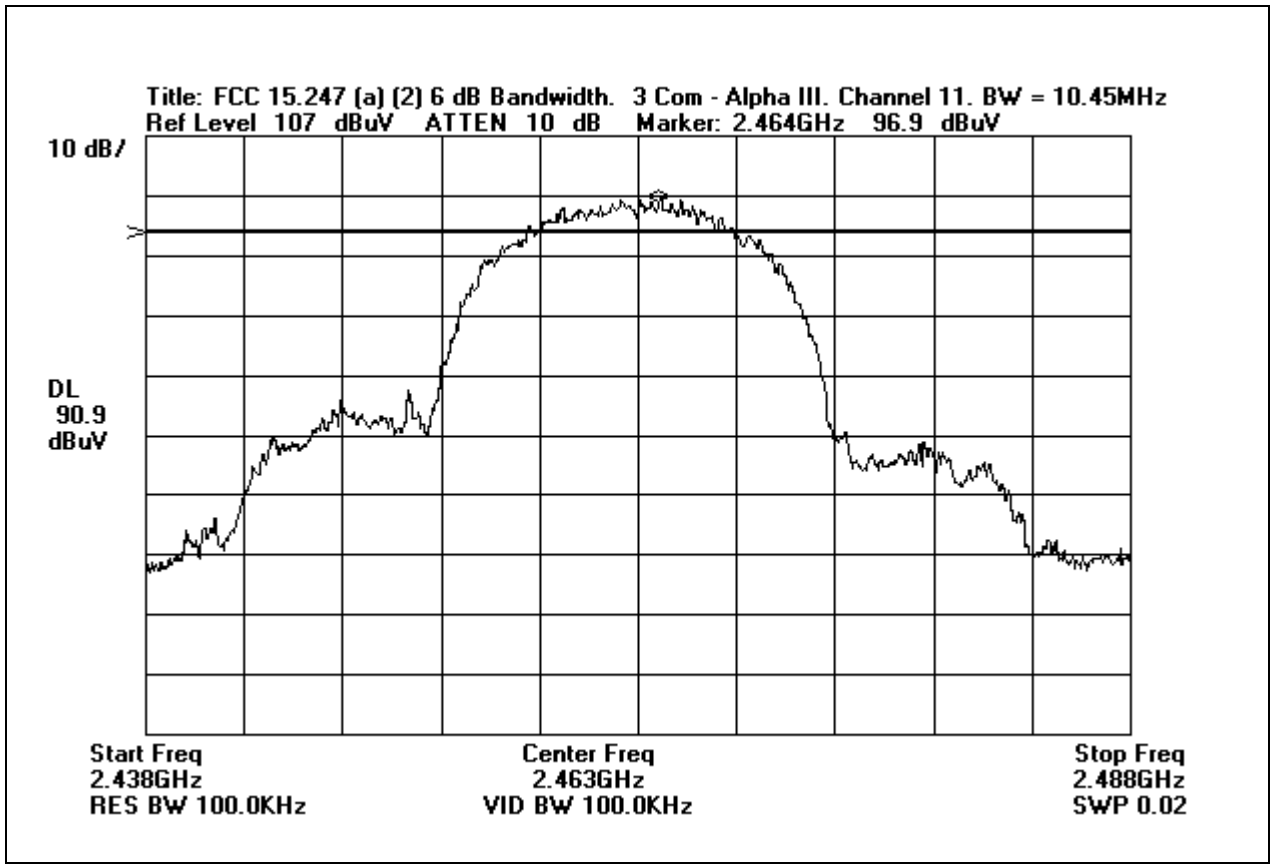
6 dB Bandwidth Plot - Channel 6

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



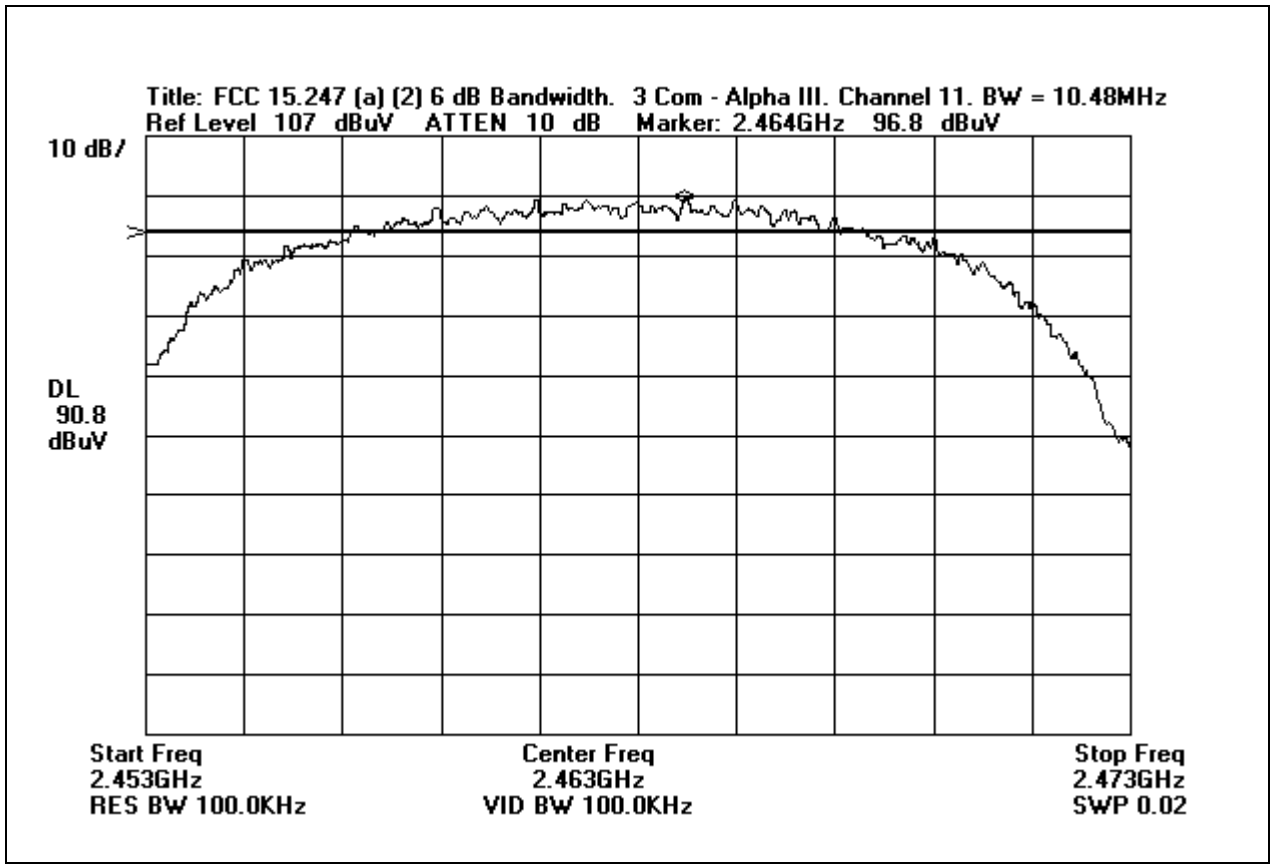
6dB Bandwidth Plot - Channel 6

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



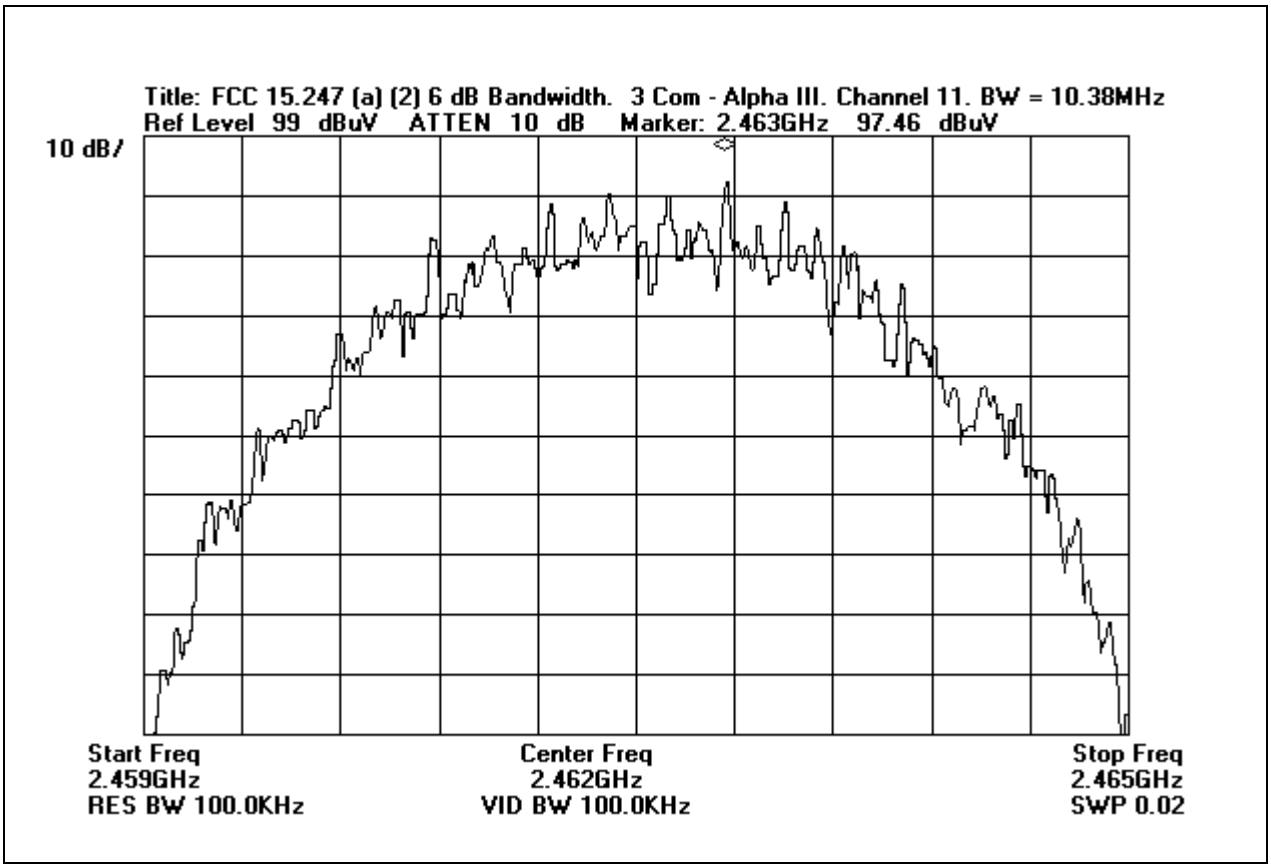
6dB Bandwidth Plot - Channel 11

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



6dB Bandwidth Plot - Channel 11

FCC Part 15.247(a)(2) Bandwidth Plot – Direct Sequence



6dB Bandwidth Plot - Channel 11

15.247(b)(1) Peak Output Power

Frequency of Transmitter: 2400-2483.5 MHz

The RF conducted test was measured using a direct connection between the antenna port of the transmitter and the spectrum analyzer, through suitable attenuation. The resolution bandwidth was adjusted to greater than the 6 dB bandwidth of the emissions.

Frequency MHz	Measurement in Volts	Measurement in W
2412.80	0.239883	0.027360
2438.20	0.371535	0.065633
2462.10	0.288403	0.039548
2438.22	0.239883	0.027360
2411.74	0.269153	0.034445
2463.32	0.194984	0.018077

- **15.247(b)(1)** The maximum peak output power of frequency hopping systems operating in the 2400-2483.5 or 5725-5850 band and for all direct sequences, shall not exceed 1 watt.

List of Test Equipment Used for Peak Output Power Test:

Function	Manufacturer	Model	Cal Date	Cal Due Date
QP Adapter	HP	85650A	7/7/2000	7/7/2001
SA Display Section	HP	8566B	7/7/2000	7/7/2001
SA RF Section	HP	8566B	7/7/2000	7/7/2001
Horn Antenna	EMCO	3115	2/14/2000	2/14/2001
Preamp	HP	8449B	10/13/2000	10/13/2001

Calculations:

FCC 15.247(b) EIRP Calculation						**Test Dist**	3
						dBi	-2
				EIRP=(Ed)^2/30G		**Numeric Gain**	**0.63096**
Ch / Pol	**Corr Reading (dBuV)**	**e in uVolts**	**e in Volts**	**EIRP (W)**	**Limit (W)**		
1 Hor	107.6	239883.29	0.239883	**0.027360**	1.00		
1 Vert	111.4	371535.23	0.371535	**0.065633**	1.00		
6 Vert	109.2	288403.15	0.288403	**0.039548**	1.00		
6 Hor	107.6	239883.29	0.239883	**0.027360**	1.00		
11 Vert	108.6	269153.48	0.269153	**0.034445**	1.00		
11 Hor	105.8	194984.46	0.194984	**0.018077**	1.00		

15.247(d) Peak Power Spectral Density

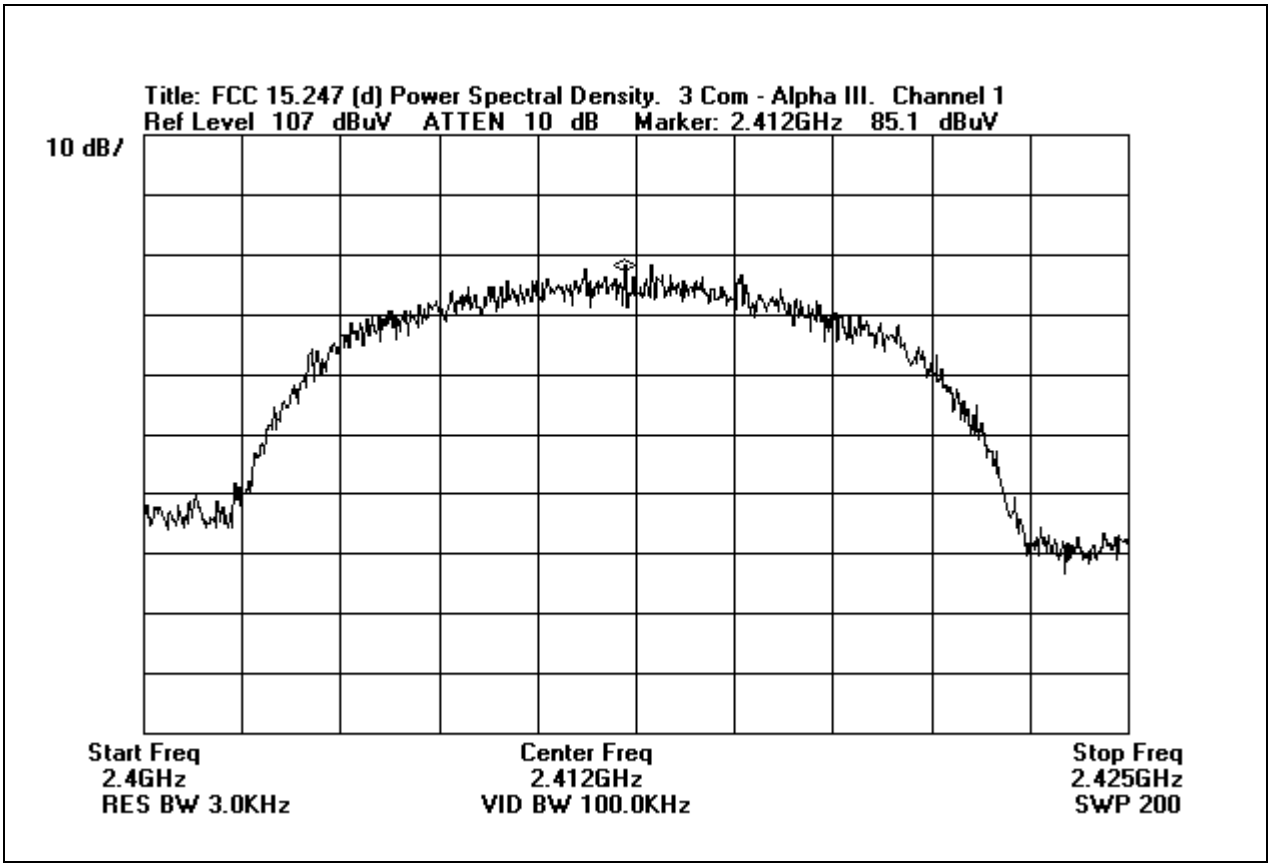
The peak power spectral density conducted from the EUT to the antenna was not greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Frequency (MHz)	Channel	Power Density (dBm)
2411.880	1	-14.1
2437.630	6	-14.4
2462.050	11	-14.8

List of Test Equipment Used for Peak Power Spectral Density Test:

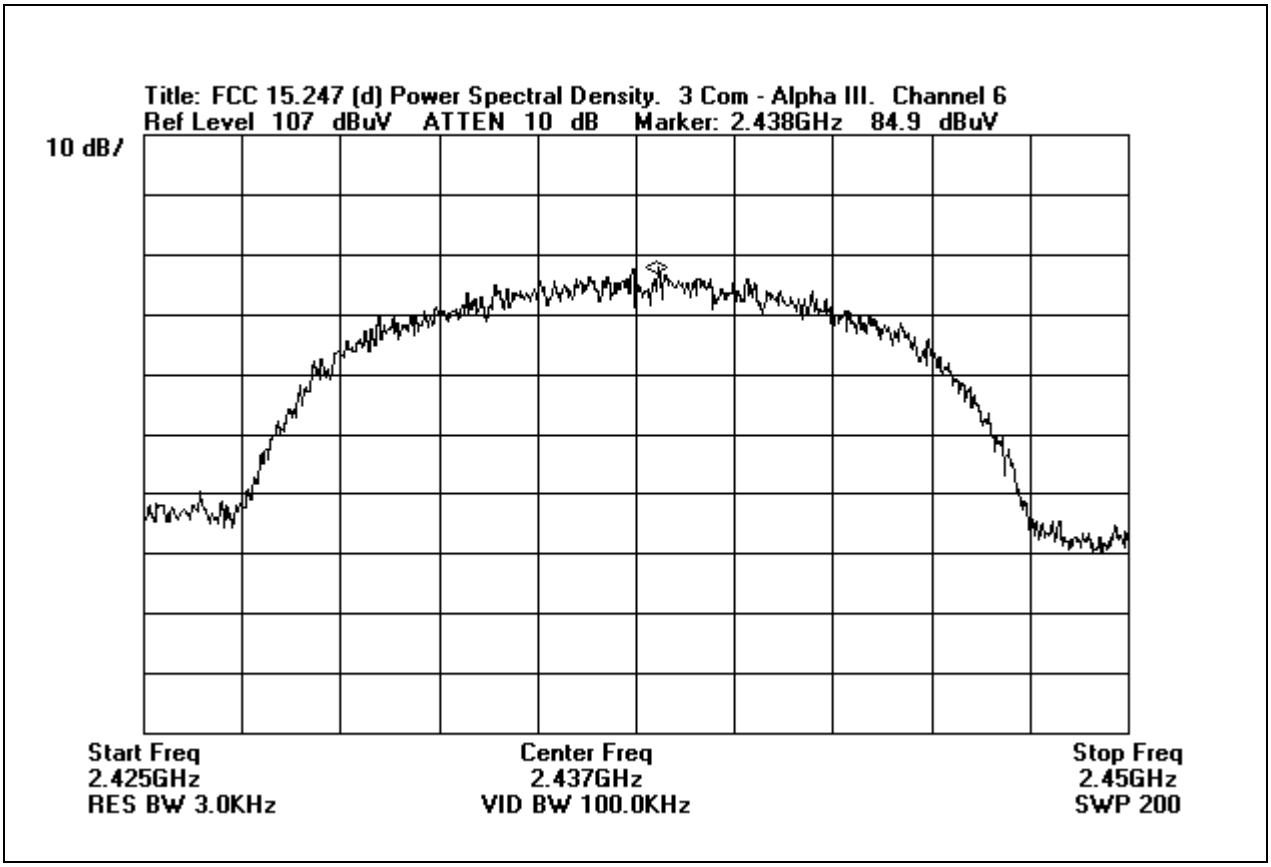
Function	Manufacturer	Model	Cal Date	Cal Due Date
QP Adapter	HP	85650A	7/7/2000	7/7/2001
SA Display Section	HP	8566B	7/7/2000	7/7/2001
SA RF Section	HP	8566B	7/7/2000	7/7/2001
Horn Antenna	EMCO	3115	10/20/2000	10/20/2001
Preamp	HP	8449B	10/13/2000	10/13/2001

Peak Power Spectral Density



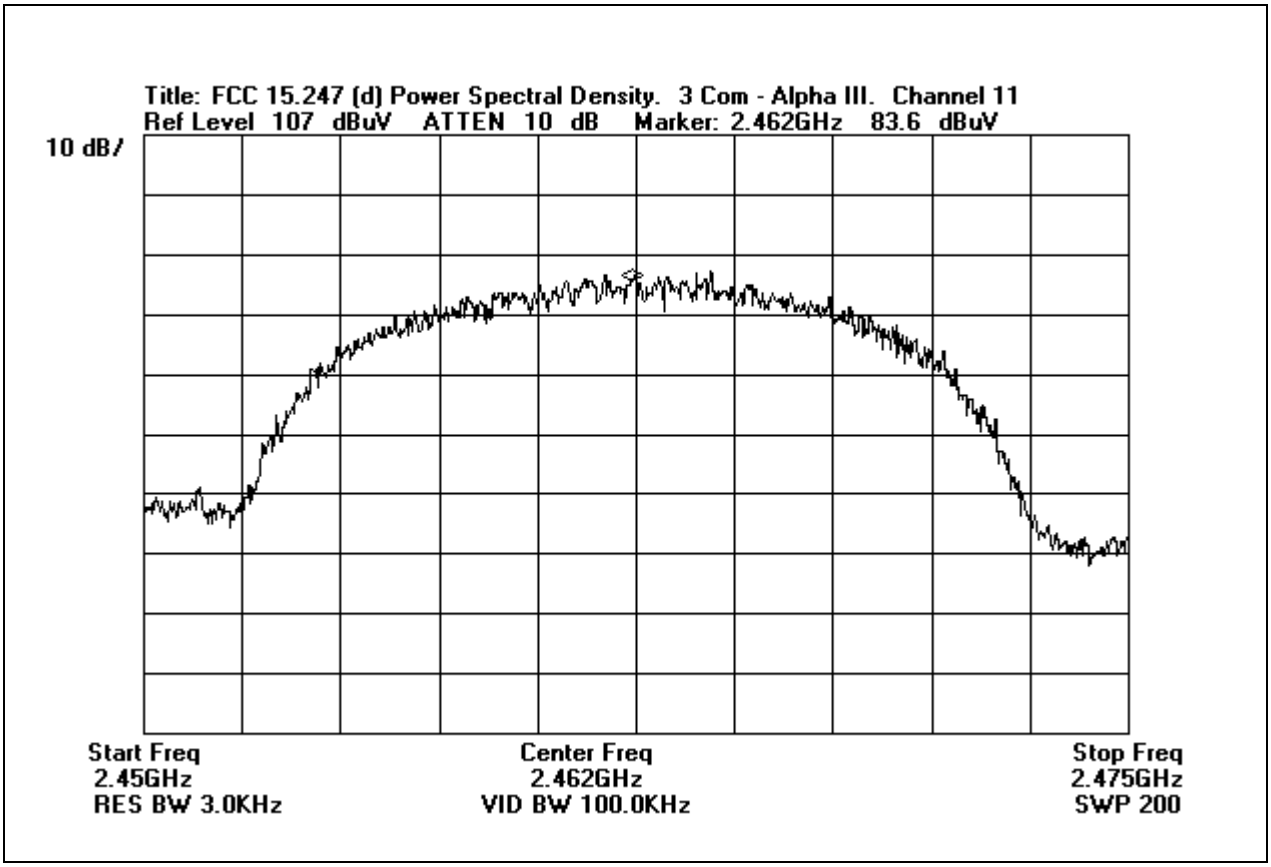
Peak Power Spectral Density - Channel 1

Peak Power Spectral Density



Peak Power Spectral Density - Channel 6

Peak Power Spectral Density



Peak Power Spectral Density - Channel 11

SAMPLE CALCULATIONS

The basic spectrum analyzer reading was converted using correction factors as shown in the six highest emissions readings in Tables 1 - 6. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula:

Meter reading (dBµV)
+ Antenna Factor (dB)
+ Cable Loss (dB)
- Distance Correction (dB)
- Pre-amplifier Gain (dB)

= Corrected Reading(dBµV/m)

This reading was then compared to the applicable specification limit to determine compliance.

A typical data sheet will display the following in column format:

#	Freq MHz	Rdng dBuV	Cable	Pream	GHz C	Bicon	Horn	Log	Dist	Corr dBuV/m	Spec	Margin	Polar

Amp_2	hol-h	Log 1	Barn

#	Reading number, order of frequencies listed by margin.
Freq MHz	Frequency in MHz of the obtained reading.
Rdng dBuV	Reading obtained on the spectrum analyzer in dBµV.
Pream & Amp_2	Preamplifier factor or gain in dB.
Barn, hol-h & GHz C	Cable loss in dB of the coaxial cable on the OATS.
Bicon	Biconical antenna factor in dB.
Log & Log 1	Log periodic antenna factor in dB.
Horn	Horn antenna factor in dB.
Dist	Distance factor in dB. It is used when testing at a different test distance than otherwise stated in the spec.
Corr dBµV/m	Corrected reading which is now in dBµV/m (field strength).
Spec	Specification limit (dB) stated in the appropriate standard.
Margin	Closeness to the specified limit in dB; + is over and - is under the limit.
Polar	Polarity of the antenna with respect to earth.

APPENDIX A

INFORMATION ABOUT THE EQUIPMENT UNDER TEST

INFORMATION ABOUT THE EQUIPMENT UNDER TEST	
Test Software/Firmware:	Not provided at this time.
CRT was displaying:	
Power Supply Manufacturer:	
Power Supply Part Number:	
AC Line Filter Manufacturer:	
AC Line Filter Part Number:	

I/O PORTS	
Type	#

CRYSTAL OSCILLATORS	
Type	Freq. In MHz

PRINTED CIRCUIT BOARDS				
Function	Model & Rev	Clocks, MHz	Layers	Location
Not provided at this time.				

REQUIRED EUT CHANGES TO COMPLY:
None

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View

Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View

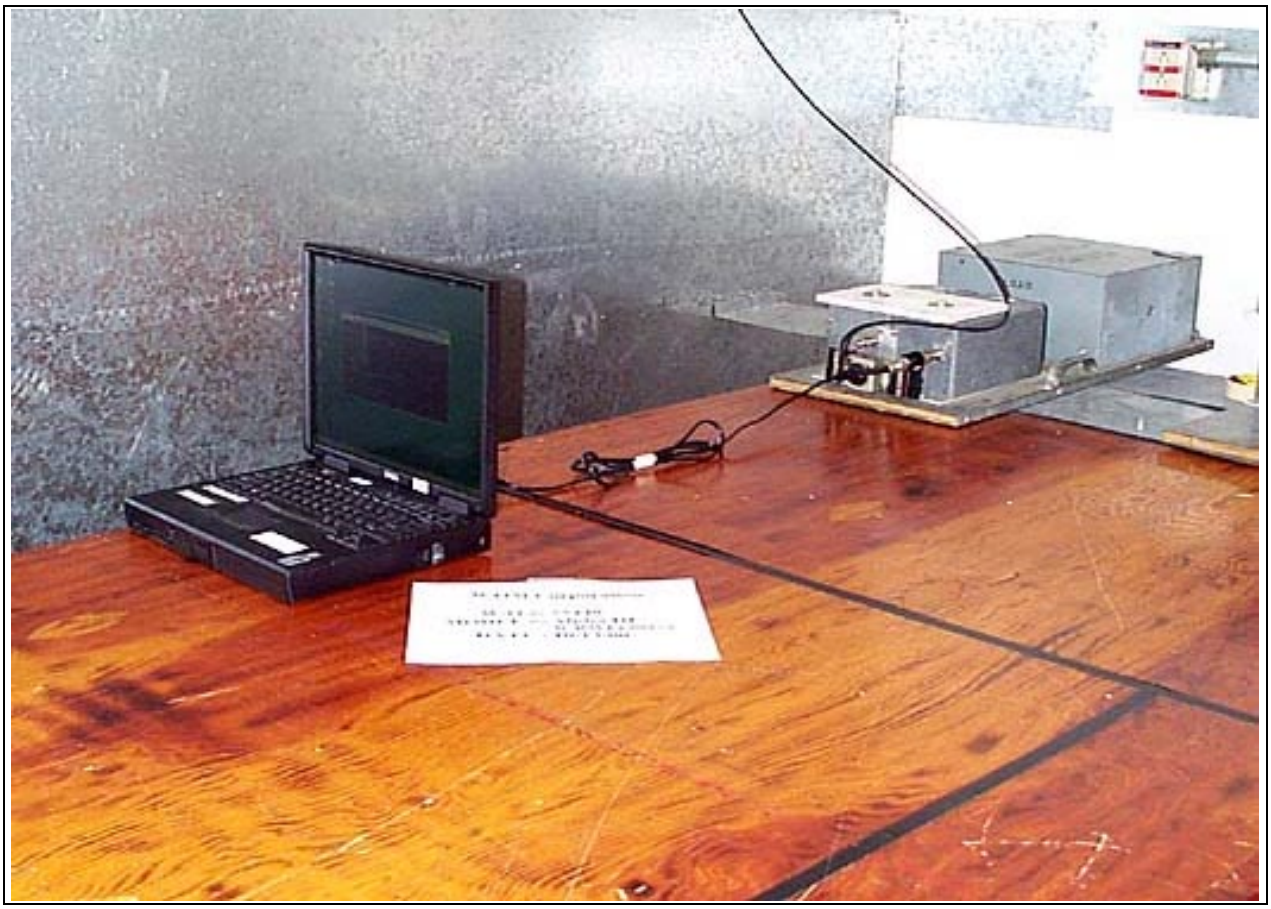
Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

PHOTOGRAPH SHOWING RADIATED EMISSIONS 18-26.5 GHz

Radiated Emissions - Front View

Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

PHOTOGRAPH SHOWING CONDUCTED EMISSIONS



Conducted Emissions - Front View

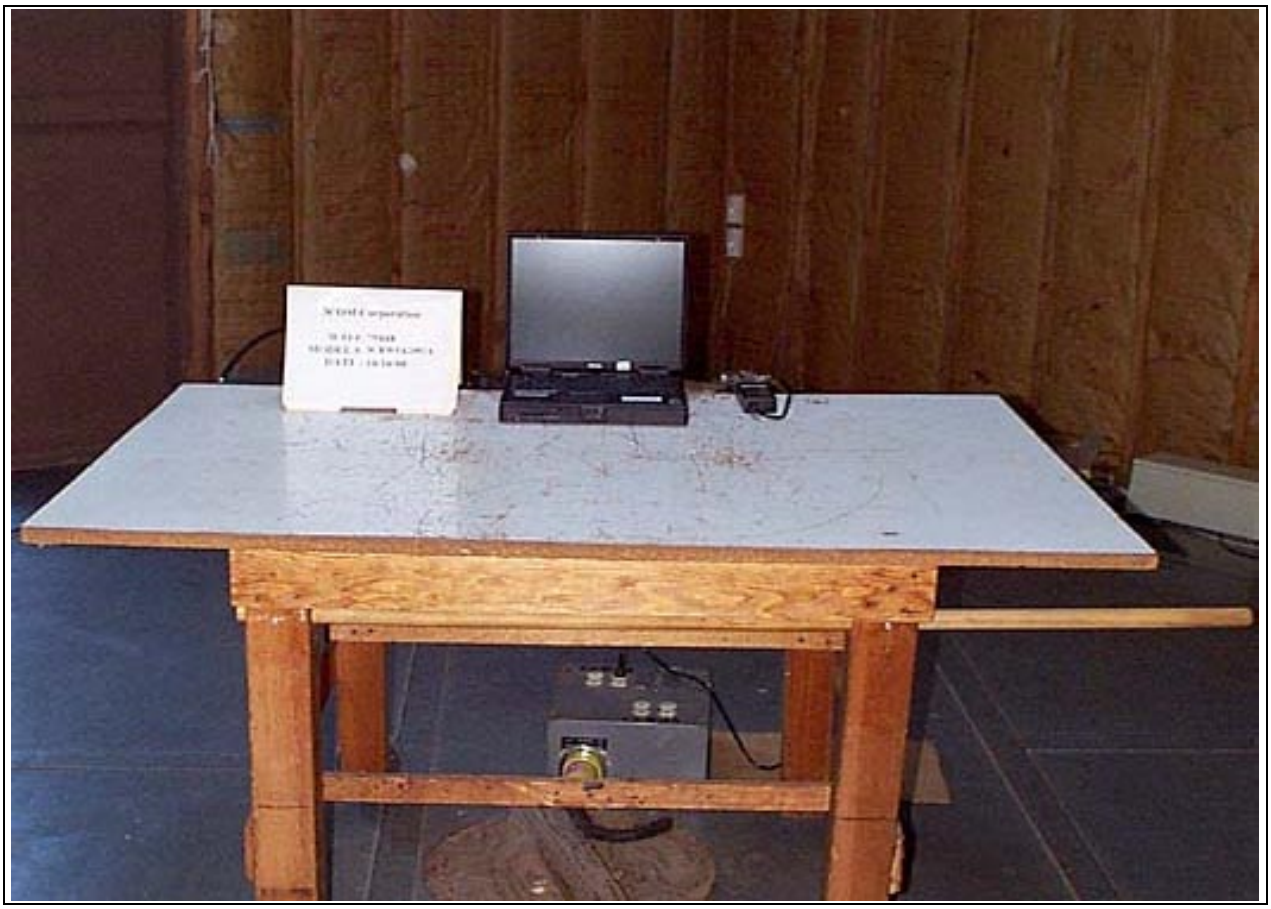
Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

PHOTOGRAPH SHOWING CONDUCTED EMISSIONS

Conducted Emissions - Side View

Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

PHOTOGRAPH SHOWING BANDEDGE PLOT SETUP



Bandedge Plot Setup - Front View

Note: The 3CRWE62092A (Engineering code name: Alpha III) is the 3COM Corporation Wireless LAN PC Card, Model WL-305.

APPENDIX B

RADIATED AND CONDUCTED DATA SHEETS

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **15.247(b)(1)**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Peak Power Output Emissions** Time: 16:20:48
Equipment: **Wireless LAN card** Sequence#: 13
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated in the notes below.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2412.800M	104.3	-34.5	+28.8	+7.6	+5.2	+0.0	111.4	137.0 Channel 1	-25.6	Vert
2	2438.200M	101.6	-34.5	+28.9	+7.8	+5.4	+0.0	109.2	137.0 Channel 6	-27.8	Vert
3	2462.100M	100.5	-34.5	+29.0	+8.0	+5.6	+0.0	108.6	137.0 Channel 11	-28.4	Vert
4	2438.220M	100.0	-34.5	+28.9	+7.8	+5.4	+0.0	107.6	137.0 Channel 6	-29.4	Horiz
5	2411.740M	100.5	-34.5	+28.8	+7.6	+5.2	+0.0	107.6	137.0 Channel 1	-29.4	Horiz
6	2463.320M	97.7	-34.5	+29.0	+8.0	+5.6	+0.0	105.8	137.0 Channel 11	-31.2	Horiz

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.247 / 15.209**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Maximized Emissions** Time: 12:21:46
Equipment: **Wireless LAN card** Sequence#: 11
Manufacturer: 3COM Corporation Tested By: Chuck Kendall
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. Measuring spurious emissions with the transmitter set to Channel 11. Used 120kHz resolution BW & 120 kHz video BW.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Pream Cable dB	Bicon dB	Log 1 dB	Barn dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	195.514M QP	43.3	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	38.5	43.5	-5.0	Vert
^	195.487M	45.0	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	40.2	43.5	-3.3	Vert
3	456.051M	44.3	-25.6 +2.2	+0.0	+17.0	+2.0	+0.0	39.9	46.0	-6.1	Vert
4	333.373M QP	40.4	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	38.6	46.0	-7.4	Vert
^	333.416M	42.9	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	41.1	46.0	-4.9	Vert
6	586.377M QP	40.1	-26.0 +2.6	+0.0	+19.2	+2.3	+0.0	38.2	46.0	-7.8	Vert
^	586.361M	43.0	-26.0 +2.6	+0.0	+19.2	+2.3	+0.0	41.1	46.0	-4.9	Vert
8	390.906M QP	42.8	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	38.1	46.0	-7.9	Vert
^	390.904M	47.3	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	42.6	46.0	-3.4	Vert
10	228.064M QP	42.0	-24.7 +1.4	+17.0	+0.0	+1.3	+0.0	37.0	46.0	-9.0	Vert
^	228.059M	51.2	-24.7 +1.4	+17.0	+0.0	+1.3	+0.0	46.2	46.0	+0.2	Vert

12	367.093M	40.5	-25.2 +2.0	+0.0	+17.9	+1.7	+0.0	36.9	46.0	-9.1	Vert
13	423.486M	41.5	-25.5 +2.1	+0.0	+16.7	+1.9	+0.0	36.7	46.0	-9.3	Vert
14	700.066M	33.2	-26.2 +2.9	+0.0	+20.6	+2.7	+0.0	33.2	46.0	-12.8	Vert
15	758.396M	31.8	-26.1 +3.1	+0.0	+21.3	+2.9	+0.0	33.0	46.0	-13.0	Vert
16	709.202M	31.9	-26.2 +2.9	+0.0	+20.7	+2.7	+0.0	32.0	46.0	-14.0	Vert
17	681.902M	30.8	-26.2 +2.8	+0.0	+20.4	+2.7	+0.0	30.5	46.0	-15.5	Vert
18	521.254M QP	31.5	-25.9 +2.3	+0.0	+18.0	+2.2	+0.0	28.1	46.0	-17.9	Vert
^	521.262M	45.0	-25.9 +2.3	+0.0	+18.0	+2.2	+0.0	41.6	46.0	-4.4	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.247 / 15.209**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Maximized Emissions** Time: 11:44:31
Equipment: **Wireless LAN card** Sequence#: 1
Manufacturer: 3COM Corporation Tested By: Chuck Kendall
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. Measuring spurious emissions with the transmitter set to Channel 6. level. Used 120kHz resolution BW & 120 kHz video BW.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Pream Cable dB	Bicon dB	Log 1 dB	Barn dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	333.376M QP	42.6	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	40.8	46.0	-5.2	Vert
^	333.384M	44.5	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	42.7	46.0 Within 15.205 restricted band.	-3.3	Vert
3	195.515M QP	43.1	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	38.3	43.5	-5.2	Vert
^	195.515M	46.2	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	41.4	43.5	-2.1	Vert
5	228.060M QP	43.7	-24.7 +1.4	+17.0	+0.0	+1.3	+0.0	38.7	46.0	-7.3	Vert
^	228.047M	52.6	-24.7 +1.4	+17.0	+0.0	+1.3	+0.0	47.6	46.0	+1.6	Vert
7	456.047M	42.4	-25.6 +2.2	+0.0	+17.0	+2.0	+0.0	38.0	46.0	-8.0	Vert
8	423.481M	42.1	-25.5 +2.1	+0.0	+16.7	+1.9	+0.0	37.3	46.0	-8.7	Vert
9	390.900M QP	41.8	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	37.1	46.0	-8.9	Vert
^	390.922M	45.7	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	41.0	46.0	-5.0	Vert
11	586.389M	38.0	-26.0 +2.6	+0.0	+19.2	+2.3	+0.0	36.1	46.0	-9.9	Vert

12	521.258M	38.9	-25.9 +2.3	+0.0	+18.0	+2.2	+0.0	35.5	46.0	-10.5	Vert
13	367.104M QP	37.9	-25.2 +2.0	+0.0	+17.9	+1.7	+0.0	34.3	46.0	-11.7	Vert
^	367.116M	43.6	-25.2 +2.0	+0.0	+17.9	+1.7	+0.0	40.0	46.0	-6.0	Vert
15	681.836M	34.0	-26.2 +2.8	+0.0	+20.4	+2.7	+0.0	33.7	46.0	-12.3	Vert
16	758.364M	32.2	-26.1 +3.1	+0.0	+21.3	+2.9	+0.0	33.4	46.0	-12.6	Vert
17	700.053M	33.3	-26.2 +2.9	+0.0	+20.6	+2.7	+0.0	33.3	46.0	-12.7	Vert
18	709.107M	32.3	-26.2 +2.9	+0.0	+20.7	+2.7	+0.0	32.4	46.0	-13.6	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.247 / 15.209**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Maximized Emissions** Time: 14:11:35
Equipment: **Wireless LAN card** Sequence#: 12
Manufacturer: 3COM Corporation Tested By: Chuck Kendall
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. Measuring spurious emissions with the transmitter set to transmit on Channel 1. Used 120kHz resolution BW & 120 kHz video BW.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Pream Cable dB	Bicon dB	Log 1 dB	Barn dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	195.515M QP	44.2	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	39.4	43.5	-4.1	Vert
^	195.464M	45.7	-24.7 +1.3	+17.4	+0.0	+1.2	+0.0	40.9	43.5	-2.6	Vert
3	366.946M	44.8	-25.2 +2.0	+0.0	+17.9	+1.7	+0.0	41.2	46.0	-4.8	Vert
4	456.095M QP	44.4	-25.6 +2.2	+0.0	+17.0	+2.0	+0.0	40.0	46.0	-6.0	Vert
^	456.037M	45.4	-25.6 +2.2	+0.0	+17.0	+2.0	+0.0	41.0	46.0	-5.0	Vert
6	390.909M QP	44.6	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	39.9	46.0	-6.1	Vert
^	390.922M	49.3	-25.4 +2.1	+0.0	+16.8	+1.8	+0.0	44.6	46.0	-1.4	Vert
8	333.372M QP	41.6	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	39.8	46.0	-6.2	Vert
^	333.370M	43.4	-24.9 +1.9	+0.0	+19.6	+1.6	+0.0	41.6	46.0	-4.4	Vert
10	586.381M QP	39.9	-26.0 +2.6	+0.0	+19.2	+2.3	+0.0	38.0	46.0	-8.0	Vert
^	586.375M	42.9	-26.0 +2.6	+0.0	+19.2	+2.3	+0.0	41.0	46.0	-5.0	Vert

12	521.226M	40.9	-25.9	+0.0	+18.0	+2.2	+0.0	37.5	46.0	-8.5	Vert
			+2.3								
13	423.471M	41.8	-25.5	+0.0	+16.7	+1.9	+0.0	37.0	46.0	-9.0	Vert
			+2.1								
14	228.059M	41.9	-24.7	+17.0	+0.0	+1.3	+0.0	36.9	46.0	-9.1	Vert
	QP		+1.4								
^	228.067M	50.8	-24.7	+17.0	+0.0	+1.3	+0.0	45.8	46.0	-0.2	Vert
			+1.4								
16	367.107M	39.1	-25.2	+0.0	+17.9	+1.7	+0.0	35.5	46.0	-10.5	Vert
	QP		+2.0								
17	700.051M	33.7	-26.2	+0.0	+20.6	+2.7	+0.0	33.7	46.0	-12.3	Vert
			+2.9								
18	681.938M	32.9	-26.2	+0.0	+20.4	+2.7	+0.0	32.6	46.0	-13.4	Vert
			+2.8								
19	758.432M	30.6	-26.1	+0.0	+21.3	+2.9	+0.0	31.8	46.0	-14.2	Vert
			+3.1								
20	709.109M	31.1	-26.2	+0.0	+20.7	+2.7	+0.0	31.2	46.0	-14.8	Vert
			+2.9								

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.247 / 15.209**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Maximized Emissions >1GHz** Time: 16:53:17
Equipment: **Wireless LAN card** Sequence#: 15
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 6

Measurement Data: Reading listed by margin. Test Distance: 1 Meter

#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	4874.547M Ave	35.8	-35.6	+33.1	+8.1	+4.7	-10.0	36.1	54.0 @ 1 meter	-17.9	Vert
^	4874.500M	49.7	-35.6	+33.1	+8.1	+4.7	-10.0	50.0	54.0 @ 1 meter	-4.0	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.247 / 15.209**
Work Order #: **75448** Date: 10/17/2000
Test Type: **Maximized Emissions >1GHz** Time: 16:39:18
Equipment: **Wireless LAN card** Sequence#: 14
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 1

Measurement Data: Reading listed by margin. Test Distance: 1 & 3 Meters

#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	4824.180M	48.4	-35.5	+33.2	+8.0	+4.7	+0.0	58.8	54.0 @ 3 meters	+4.8	Vert
2	4824.347M Ave	38.0	-35.5	+33.2	+8.0	+4.7	+0.0	48.4	54.0 @ 3 meters	-5.6	Vert
3	4824.153M Ave	35.9	-35.5	+33.2	+8.0	+4.7	-10.0	36.3	54.0 @ 1 meter	-17.7	Vert
^	4824.153M	49.2	-35.5	+33.2	+8.0	+4.7	-10.0	49.6	54.0 @ 1 meter	-4.4	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer:	**3COM Corporation**		
Specification:	**FCC 15.247 / 15.209**		
Work Order #:	**75448**	Date:	10/17/2000
Test Type:	**Maximized Emissions >1GHz**	Time:	16:56:21
Equipment:	**Wireless LAN card**	Sequence#:	16
Manufacturer:	3COM Corporation	Tested By:	Randal Clark
Model:	3CRWE62092A		
S/N:	38		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 11.

Measurement Data: Reading listed by margin. Test Distance: 1 Meter

#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	4924.177M Ave	33.2	-35.6	+33.1	+8.2	+4.6	-10.0	33.5	54.0 @ 1 meter	-20.5	Vert
^	4924.080M	46.4	-35.6	+33.1	+8.2	+4.6	-10.0	46.7	54.0 @ 1 meter	-7.3	Vert

Test Location: CKC Laboratories, Inc. • 1653 Los Viboras Road ,Site C • Hollister, CA 95023 • (831) 637-1051

Customer: **3COM Corporation**
Specification: **FCC15.247(2.4 GHz) & 15.209**
Work Order #: **75448** Date: 10/13/2000
Test Type: **Band edge delta** Time: 19:36:28
Equipment: **Wireless LAN card** Sequence#: 4
Manufacturer: 3COM Corporation Tested By: Art Rice
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. Measuring delta from transmit fundamental level to band edge. Used 30 kHz resolution BW & 30 kHz video BW.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Amp_2 dB	hol-h dB	hol-h dB	Horn dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2398.510M	42.2	-38.4	+2.9	+9.0	+29.3	+0.0	45.0	54.0	-9.0	Horiz
									Strongest signal within 2 MHz of lower band edge.		
2	2485.470M	27.1	-37.7	+3.0	+9.2	+29.7	+0.0	31.3	54.0	-22.7	Horiz
									Strongest signal within 2 MHz of upper band edge.		
3	2411.510M	78.8	-38.3	+2.9	+9.0	+29.3	+0.0	81.7	137.0	-55.3	Horiz
									Level of transmitter on channel 1.		
4	2461.480M	75.9	-37.9	+3.0	+9.1	+29.6	+0.0	79.7	137.0	-57.3	Horiz
									Level of transmitter on channel 11.		
5	2400.010M	39.1	-38.4	+2.9	+9.0	+29.3	+0.0	41.9	137.0	-95.1	Horiz
									Level at lower band edge.		
6	2483.490M	25.7	-37.7	+3.0	+9.2	+29.7	+0.0	29.9	137.0	-107.1	Horiz
									Level at upper band edge.		

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.207**
Work Order #: **75448** Date: 10/19/2000
Test Type: **Conducted Emissions** Time: 11:15:24
Equipment: **Wireless LAN card** Sequence#: 17
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

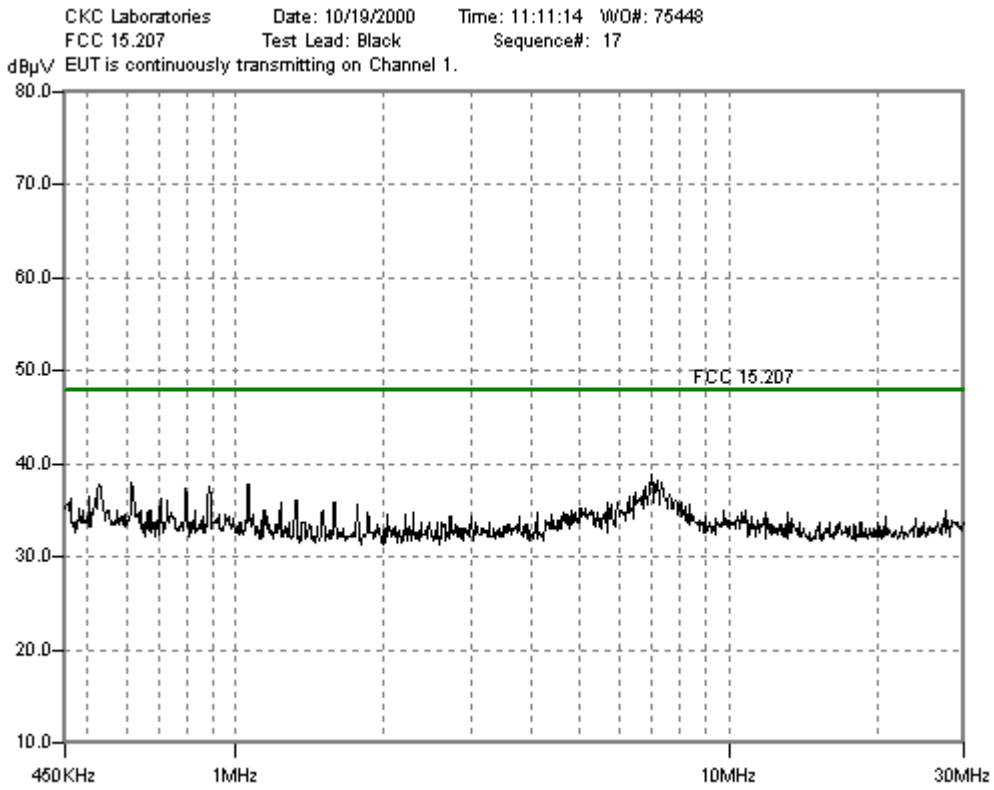
Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 1

Measurement Data: Reading listed by margin. Test Lead: Black

#	Freq MHz	Rdng dBµV	dB	493 L dB	LISN dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	6.966M	35.3		+3.3	+0.2		+0.0	38.8	48.0	-9.2	Black
2	7.185M	34.8		+3.2	+0.2		+0.0	38.2	48.0	-9.8	Black
3	7.328M	34.8		+3.1	+0.2		+0.0	38.1	48.0	-9.9	Black
4	615.654k	37.3		+0.6	+0.1		+0.0	38.0	48.0	-10.0	Black
5	526.971k	37.2		+0.6	+0.1		+0.0	37.9	48.0	-10.1	Black
6	1.062M	37.1		+0.6	+0.1		+0.0	37.8	48.0	-10.2	Black
7	7.103M	34.2		+3.3	+0.2		+0.0	37.7	48.0	-10.3	Black
8	6.775M	34.5		+2.9	+0.2		+0.0	37.6	48.0	-10.4	Black
9	885.051k	36.8		+0.6	+0.1		+0.0	37.5	48.0	-10.5	Black
10	794.694k	36.6		+0.6	+0.1		+0.0	37.3	48.0	-10.7	Black
11	6.488M	34.5		+2.2	+0.2		+0.0	36.9	48.0	-11.1	Black
12	7.609M	33.7		+2.8	+0.2		+0.0	36.7	48.0	-11.3	Black

13	6.666M	33.8	+2.6	+0.2	+0.0	36.6	48.0	-11.4	Black
14	6.297M	34.5	+1.7	+0.2	+0.0	36.4	48.0	-11.6	Black
15	506.891k	35.7	+0.6	+0.1	+0.0	36.4	48.0	-11.6	Black
16	519.441k	35.6	+0.6	+0.1	+0.0	36.3	48.0	-11.7	Black
17	463.386k	35.6	+0.6	+0.1	+0.0	36.3	48.0	-11.7	Black
18	706.011k	35.5	+0.6	+0.1	+0.0	36.2	48.0	-11.8	Black
19	7.807M	33.3	+2.6	+0.2	+0.0	36.1	48.0	-11.9	Black
20	727.763k	35.3	+0.6	+0.1	+0.0	36.0	48.0	-12.0	Black


CKC Laboratories Date: 10/19/2000 Time: 11:11:14 WO#: 75448
FCC 15.207 Test Lead: Black Sequence#: 17
dBµV EUT is continuously transmitting on Channel 1.
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
FCC 15.207
450KHz
1MHz
10MHz
30MHz

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC 15.207**
Work Order #: **75448** Date: 10/19/2000
Test Type: **Conducted Emissions** Time: 11:20:55
Equipment: **Wireless LAN card** Sequence#: 18
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

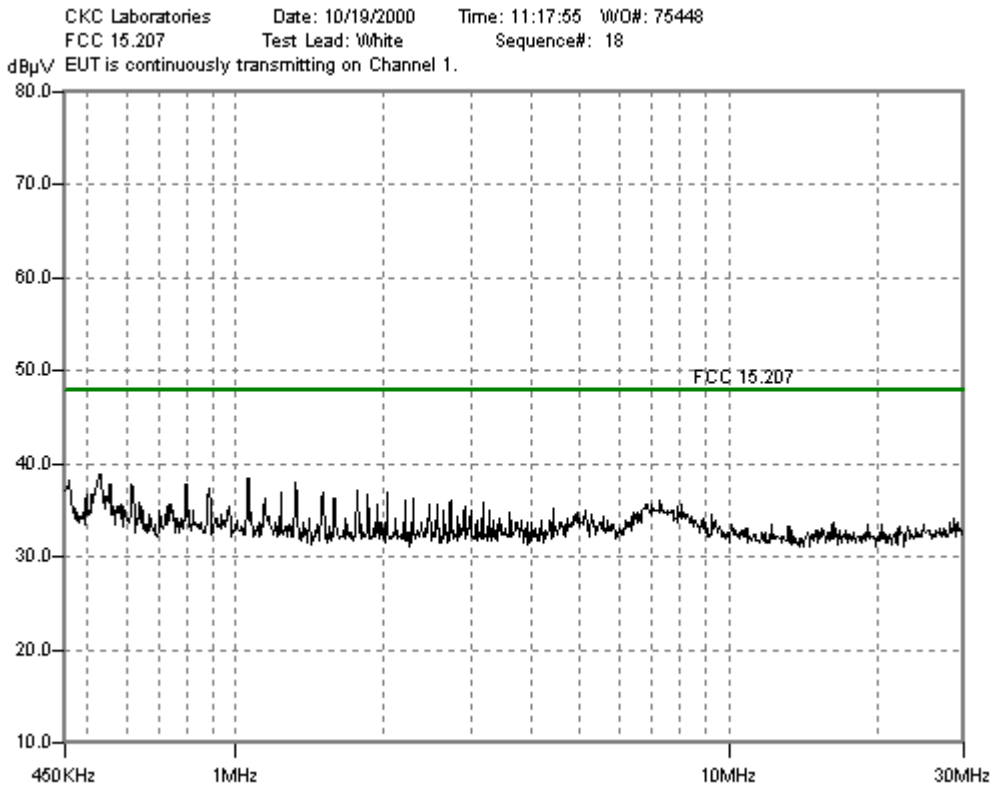
Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated below. TX: Channel 1

Measurement Data: Reading listed by margin. Test Lead: White

#	Freq MHz	Rdng dBµV		493 L dB	LISN dB		Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	530.317k	38.2		+0.6	+0.1		+0.0	38.9	48.0	-9.1	White
2	1.062M	37.7		+0.6	+0.1		+0.0	38.4	48.0	-9.6	White
3	460.040k	37.5		+0.6	+0.1		+0.0	38.2	48.0	-9.8	White
4	1.324M	37.4		+0.5	+0.1		+0.0	38.0	48.0	-10.0	White
5	793.021k	37.2		+0.6	+0.1		+0.0	37.9	48.0	-10.1	White
6	615.654k	37.0		+0.6	+0.1		+0.0	37.7	48.0	-10.3	White
7	556.253k	37.0		+0.6	+0.1		+0.0	37.7	48.0	-10.3	White
8	883.378k	36.7		+0.6	+0.1		+0.0	37.4	48.0	-10.6	White
9	463.386k	36.5		+0.6	+0.1		+0.0	37.2	48.0	-10.8	White
10	1.769M	36.6		+0.4	+0.1		+0.0	37.1	48.0	-10.9	White
11	2.032M	36.4		+0.4	+0.1		+0.0	36.9	48.0	-11.1	White
12	1.504M	36.3		+0.5	+0.1		+0.0	36.9	48.0	-11.1	White

13	1.238M	36.3	+0.5	+0.1	+0.0	36.9	48.0	-11.1	White
14	1.855M	36.3	+0.4	+0.1	+0.0	36.8	48.0	-11.2	White
15	498.525k	36.1	+0.6	+0.1	+0.0	36.8	48.0	-11.2	White
16	511.075k	36.0	+0.6	+0.1	+0.0	36.7	48.0	-11.3	White
17	545.377k	35.7	+0.6	+0.1	+0.0	36.4	48.0	-11.6	White
18	2.300M	35.8	+0.4	+0.1	+0.0	36.3	48.0	-11.7	White
19	1.590M	35.7	+0.5	+0.1	+0.0	36.3	48.0	-11.7	White
20	1.148M	35.6	+0.6	+0.1	+0.0	36.3	48.0	-11.7	White


CKC Laboratories Date: 10/19/2000 Time: 11:17:55 WO#: 75448
FCC 15.207 Test Lead: White Sequence#: 18
dBµV EUT is continuously transmitting on Channel 1.
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
FCC 15.207
450KHz
1MHz
10MHz
30MHz

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **FCC B RADIATED**
Work Order #: **75448** Date: 10/19/2000
Test Type: **Maximized Emissions (Receiver Portion)** Time: 12:47:20
Equipment: **Wireless LAN card** Sequence#: 19
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is set to receive on channel 1.

Measurement Data: Reading listed by margin. Test Distance: 0-10cm

#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	367.130M	44.1	+0.0	+0.0	+0.0	+0.0	+0.0	44.1	46.0	-1.9	Vert
2	334.093M	40.5	+0.0	+0.0	+0.0	+0.0	+0.0	40.5	46.0	-5.5	Vert
3	333.897M QP	40.1	+0.0	+0.0	+0.0	+0.0	+0.0	40.1	46.0	-5.9	Vert
^	333.892M	42.8	+0.0	+0.0	+0.0	+0.0	+0.0	42.8	46.0	-3.2	Vert
5	366.515M QP	38.6	+0.0	+0.0	+0.0	+0.0	+0.0	38.6	46.0	-7.4	Vert
6	586.395M	37.3	+0.0	+0.0	+0.0	+0.0	+0.0	37.3	46.0	-8.7	Vert
7	122.955M QP	34.8	+0.0	+0.0	+0.0	+0.0	+0.0	34.8	43.5	-8.7	Vert
^	122.925M	42.5	+0.0	+0.0	+0.0	+0.0	+0.0	42.5	43.5	-1.0	Vert
9	466.370M	36.1	+0.0	+0.0	+0.0	+0.0	+0.0	36.1	46.0	-9.9	Vert
10	400.543M	33.6	+0.0	+0.0	+0.0	+0.0	+0.0	33.6	46.0	-12.4	Vert

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer:	**3COM Corporation**		
Specification:	**15.247(b)(1)**		
Work Order #:	**75448**	Date:	11/09/2000
Test Type:	**Peak Power Spectral Density**	Time:	17:07:29
Equipment:	**Wireless LAN card**	Sequence#:	34
Manufacturer:	3COM Corporation	Tested By:	Randal Clark
Model:	3CRWE62092A		
S/N:	38		

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated in the notes below.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

#	Freq MHz	Rdng dBµV	Pream Horn dB	dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2437.630M	84.9	-34.5 +29.3		+7.8	+5.4	+0.0	92.9	127.0 PSD Channel 6.	-34.1	Horiz
2	2411.880M	85.1	-34.5 +29.2		+7.6	+5.2	+0.0	92.6	127.0 PSD Channel 1.	-34.4	Horiz
3	2462.050M	83.6	-34.5 +29.5		+8.0	+5.6	+0.0	92.2	127.0 PSD Channel 11.	-34.8	Horiz

Test Location: CKC Laboratories • 5473A Clouds Rest • Mariposa Ca, 95338 • 209-966-5240

Customer: **3COM Corporation**
Specification: **15.247(b)(1)**
Work Order #: **75448** Date: 11/09/2000
Test Type: **6dB Bandwidth** Time: 17:38:08
Equipment: **Wireless LAN card** Sequence#: 35
Manufacturer: 3COM Corporation Tested By: Randal Clark
Model: 3CRWE62092A
S/N: 38

***Equipment Under Test* (* = EUT):**

Function	Manufacturer	Model #	S/N
Wireless LAN card*	3COM Corporation	3CRWE62092A	38

Support Devices:

Function	Manufacturer	Model #	S/N
Host PC	Dell	PPI	H3L3T
AC Adapter for PC	Dell	PA-4	none

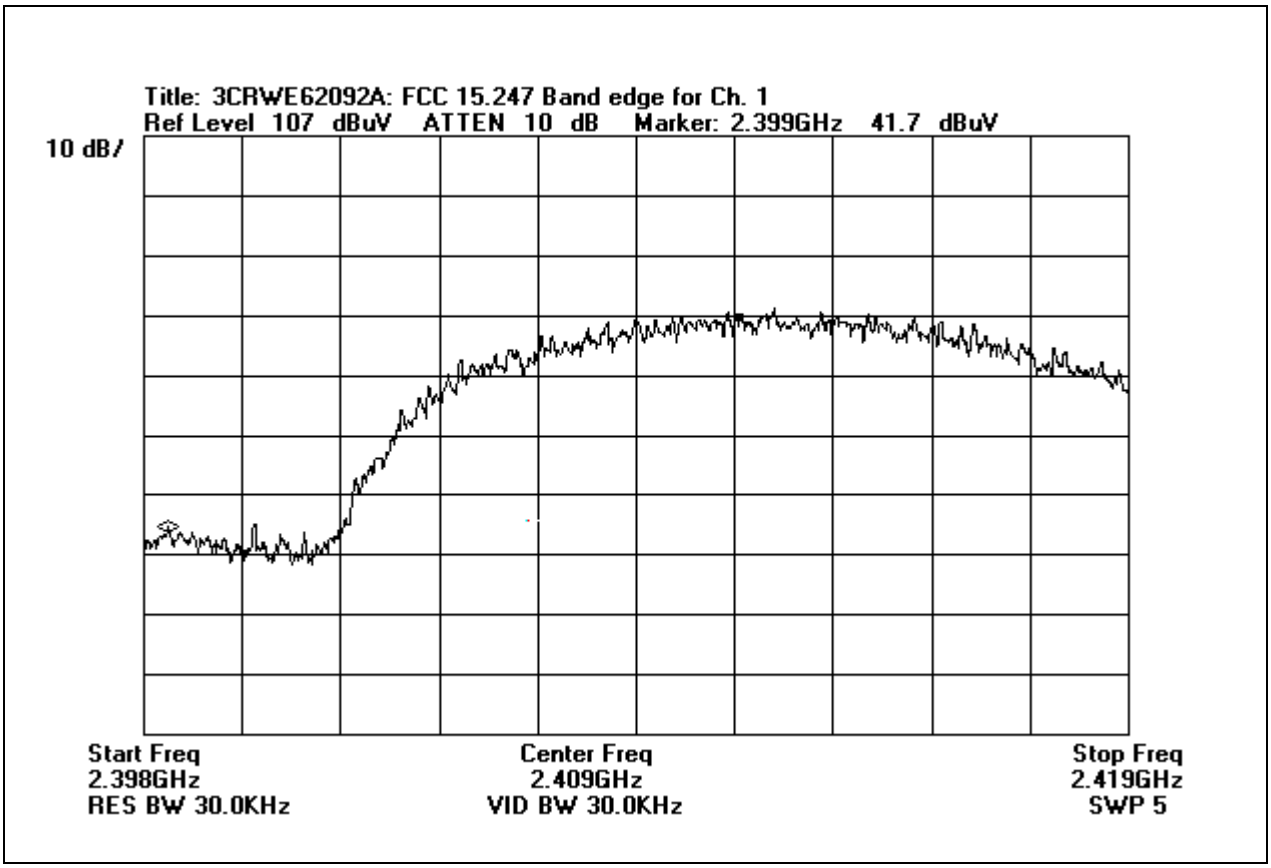
Test Conditions / Notes:

The EUT is a wireless LAN card for PCMCIA port of a computer. It operates in the 2400-2483.5 MHz band using DSSS. The EUT is installed in the Host PC. It is continuously transmitting on the channel indicated in the notes below.

Measurement Data: Reading listed by margin. Test Distance: 3 Meters

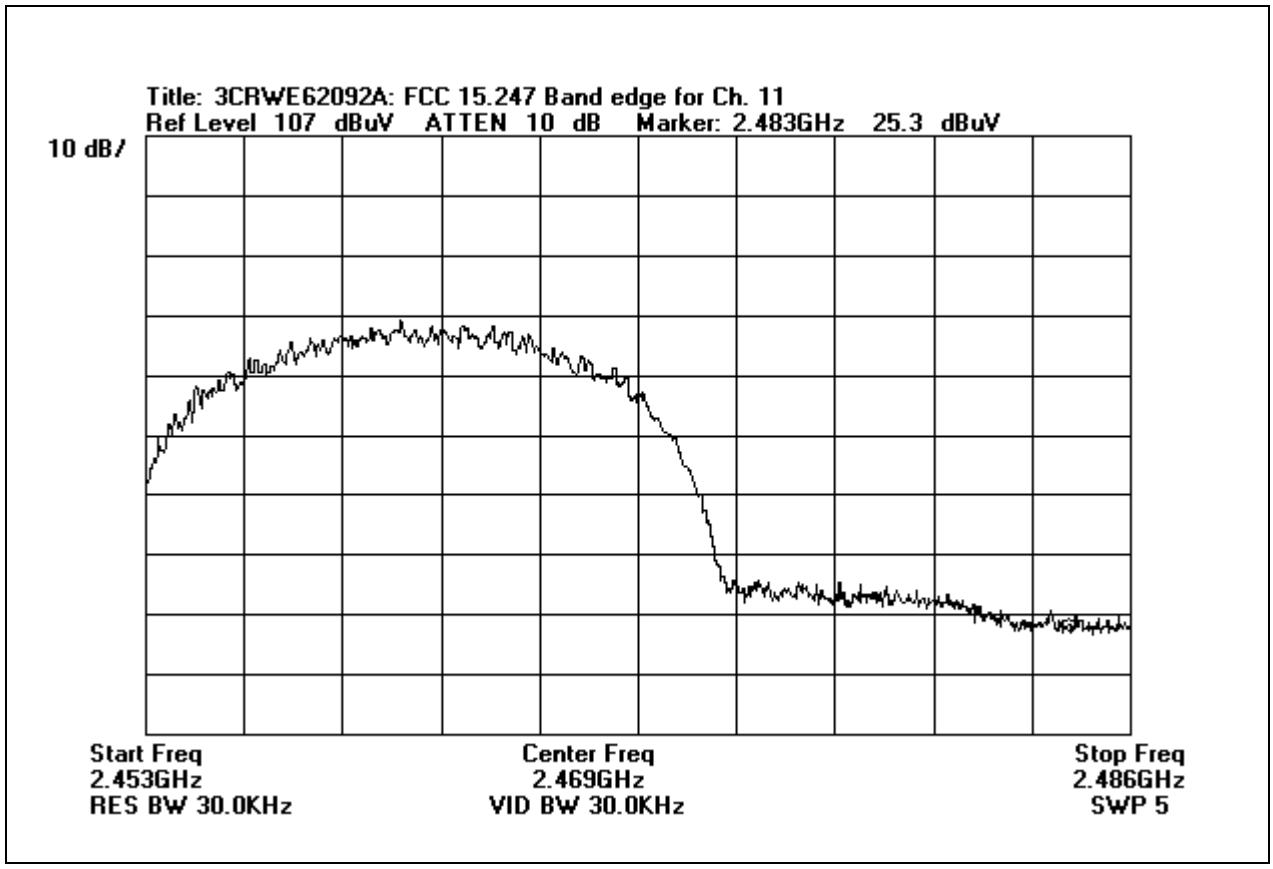
#	Freq MHz	Rdng dBµV	Pream dB	Horn dB	GHz C dB	GHz C dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	2463.670M	96.8	-34.5 +29.5		+8.0	+5.6	+0.0	105.4	127.0 6dB BW Channel 11.	-21.6	Horiz
2	2411.470M	97.3	-34.5 +29.2		+7.6	+5.2	+0.0	104.8	127.0 6dB BW. Channel 1.	-22.2	Horiz
3	2438.570M	96.5	-34.5 +29.3		+7.8	+5.4	+0.0	104.5	127.0 6dB BW Channel 6.	-22.5	Horiz

BAND EDGE MEASUREMENT



Band Edge - Channel 1

BAND EDGE MEASUREMENT



Band Edge - Channel 11