

# **Exhibit L: Band Edge Compliance**

**FCC ID: HN2MPCI3A-20**

**Justification**

The individuals and/or the organization requesting the test provided the modes, configurations and settings available to evaluate. While scanning the radiated emissions, all of the EUT parameters listed below were investigated. This includes, but may not be limited to, antennas, tuned transmit frequency ranges, operating modes, and data rates.

**Channels in Specified Band Investigated:**

Low

Mid

High

**Operating Modes Investigated:**

Typical

**Data Rates Investigated:**

Maximum

**Output Power Setting(s) Investigated:**

Maximum

**Power Input Settings Investigated:**

DC from E-net

**Software\Firmware Applied During Test**

Exercise software	AP Monitor	Version	V5.97
Description			
A notebook PC controls the radio through a serial port connection on the WA22 access point. Hyper Terminal running in Windows 98 address the AP monitor commands for setting the transmit channel and data rate.			

**Equipment Modifications**

No EMI suppression devices were added or modified. The EUT was tested as delivered.

**EUT and Peripherals**

Description	Manufacturer	Model/Part Number	Serial Number
EUT – 802.11(b) radio module installed in WA22 Access Point	Intermec	MPCI3A-20	022-026
Power bridge	Intermec	071579	U01156281006901
Laptop PC	Panasonic	CF-35	7KHSA02247

## Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
Serial cable	Yes	1.5	No	Access Point	Laptop
Ethernet cable	No	7.5	No	Power Bridge	Access Point
AC power	No	1.9	No	Power Bridge	AC mains

PA = Cable is permanently attached to the device. Shielding and/or presence of ferrite may be unknown.

## Measurement Equipment

Description	Manufacturer	Model	Identifier	Last Cal	Interval
Spectrum Analyzer	Tektronix	2784	AAO	03/08/2001	24 mo

## Test Description

**Requirement:** Per 47 CFR 15.247(c), in any 100 kHz bandwidth outside the authorized band, the maximum level of radio frequency power must be at least 20dB down from the highest emission level within the authorized band. The measurement is made with the spectrum analyzer's resolution bandwidth set to 100 kHz, and the video bandwidth set to greater than or equal to the resolution bandwidth.

**Configuration:** The spurious RF conducted emissions at the edges of the authorized band were measured with the EUT set to low and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and the spectrum analyzer. The EUT was transmitting at its maximum data rate using direct sequence modulation. The channels closest to the band edges were selected. The spectrum was scanned across each band edge from 25 MHz below the band edge to 25 MHz above the band edge.

Completed by:



EUT: MPC13A-20	Work Order: INMC0023
Serial Number: 002-026	Date: 07/23/02
Customer: Intermec Corporation	Temperature: 26 degrees C
Attendees: None	Humidity: 43% RH
Customer Ref. No.: N/A	Power: DC from E-net
Tested by: Greg Kiemel	Job Site: EV06

TEST SPECIFICATIONS			
Specification: 47 CFR 15.247(c)	Year: Most Current	Method: FCC 97-114, ANSI C63.4	Year: 1992

SAMPLE CALCULATIONS

**COMMENTS**

Tested in WA22 Access Point

**EUT OPERATING MODES**

Modulated by PRBS at maximum data rate, maximum output power

**DEVIATIONS FROM TEST STANDARD**


None

**REQUIREMENTS**

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental

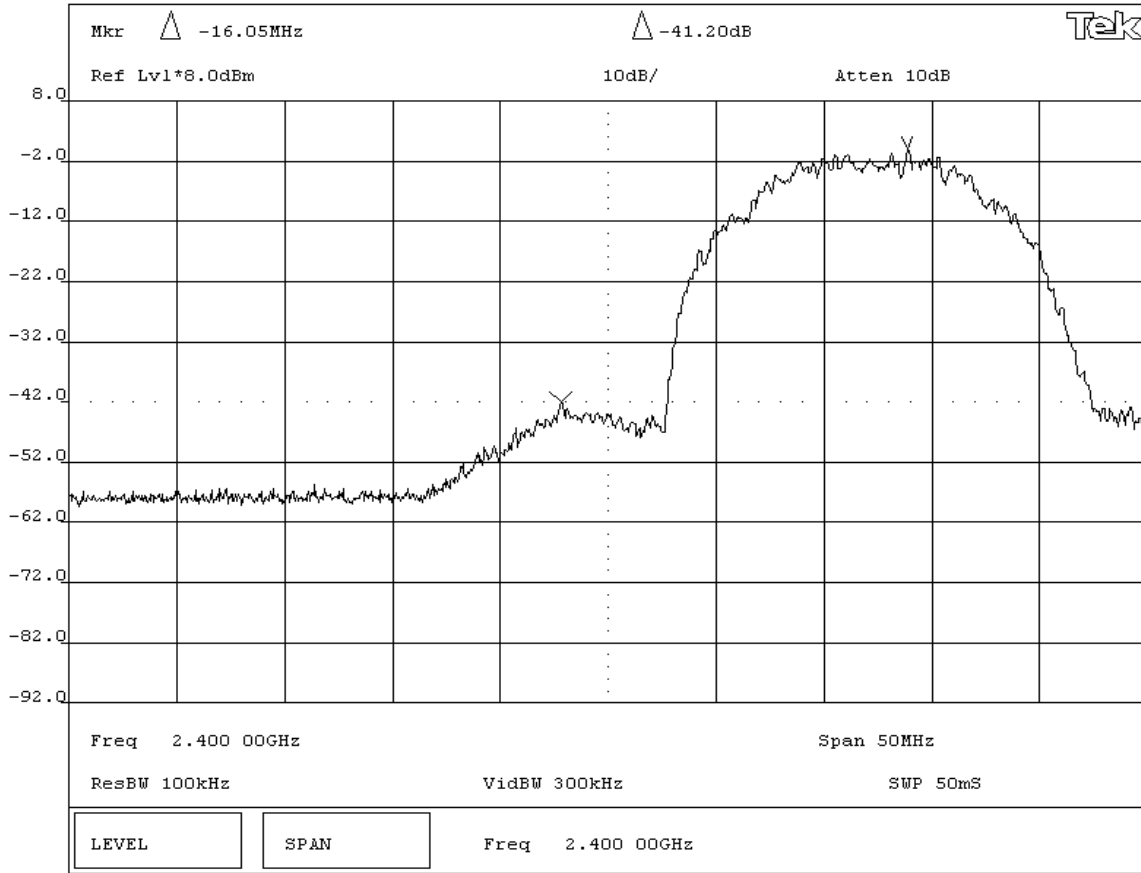
RESULTS	AMPLITUDE
Pass	-41.2 dB

**SIGNATURE**

Tested By: 

**DESCRIPTION OF TEST**

## Band Edge Compliance - Low Channel



**NORTHWEST EMC EMISSIONS DATA SHEET** Rev BETA 01/30/01

EUT: MPC13A-20	Work Order: INMC0023
Serial Number: 002-026	Date: 07/23/02
Customer: Intermec Corporation	Temperature: 26 degrees C
Attendees: None	Humidity: 43% RH
Customer Ref. No.: N/A	Power: DC from E-net
Tested by: Greg Kiemel	Job Site: EV06

<b>TEST SPECIFICATIONS</b>			
Specification: 47 CFR 15.247(c)	Year: Most Current	Method: FCC 97-114, ANSI C63.4	Year: 1992

**SAMPLE CALCULATIONS**

**COMMENTS**

Tested in WA22 Access Point

**EUT OPERATING MODES**

Modulated by PRBS at maximum data rate, maximum output power

**DEVIATIONS FROM TEST STANDARD**

None

**REQUIREMENTS**

Maximum level of any spurious emission at the edge of the authorized band is 20 dB down from the fundamental

**RESULTS**

Pass	AMPLITUDE
	-55.2 dB

**SIGNATURE**

Tested By: *Greg Kiemel*

**DESCRIPTION OF TEST**

**Band Edge Compliance - High Channel**

