

## **Exhibit J: Peak Output Power**

**FCC ID: EJM-X400**

## 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:

High

Mid

Low

### Operating Modes Investigated:

Typical

### Data Rates Investigated:

Maximum

### Output Power Setting(s) Investigated:

Maximum

### Power Input Settings Investigated:

120 VAC, 60 Hz.

## Software\Firmware Applied During Test

Exercise software	Standard Production Software	Version	2.1.0.104-4400
Description			
The system was tested using standard operating production software to exercise the functions of the device during the testing. The software resides in Flash on the baseboard of the EUT.			

## 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
Radio Module	Intel Corporation	WL-350F V05	00904B0A83FD
EUT	Intel Corporation	AnyPoint DSL Gateway 4400	0007E9036749
PC	Dell	Inspiron 7000	9043346BY16251A
EUT Power Supply	CUI Stack	TEAD-48-121200UT	0210

## Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
CAT 5 E-net	No	2.0	No	EUT	PC
DC Power	No	1.5	No	EUT Power Supply	EUT
AC Power	No	1.8	No	EUT Power Supply	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	Hewlett-Packard	8593E	AAA	04/08/2002	12 mo

## Test Description

**Requirement:** Per 47 CFR 15.247(b)(1), the maximum peak output power must not exceed 1 Watt. The measurement is made using either a peak power meter, or a spectrum analyzer.

If a spectrum analyzer is used, the resolution bandwidth must be set to greater than the 6 dB bandwidth of the modulated carrier, and the video bandwidth set to greater than or equal to the resolution bandwidth. If the largest resolution bandwidth is less than the 6 dB bandwidth of the modulated carrier, the analyzer band power function can be used with these settings:

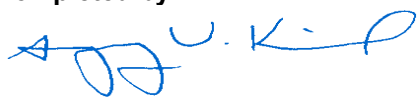
- Set RBW = VBW = Max
- Set Channel Bandwidth = Bandwidth of modulated carrier plus the resolution bandwidth
- Set Frequency Span just large enough to capture emission
- User peak detector only – set to max hold

(This alternate method was presented by Joe Dichoso of the FCC's OET Division at an FCC Workshop for TCBs, Feb 14, 2002)


**Configuration:** The 4400 and 1400 use the same radio module, antennas, power supply, base board layout, and enclosure. The difference is the 4400 has a DSL interface, and the 1400 has an Ethernet interface. Since the radio module is the same, the test was performed in a representative system: the 4400. The peak output power was measured with the EUT set to low, medium, and high transmit frequencies. The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer. The EUT was transmitting at its maximum data rate and maximum output power.

**De Facto EIRP Limit:** Per 47 CFR 15.247 (b)(1-3), the EUT meets the de facto EIRP limit of +36dBm.

Completed by:





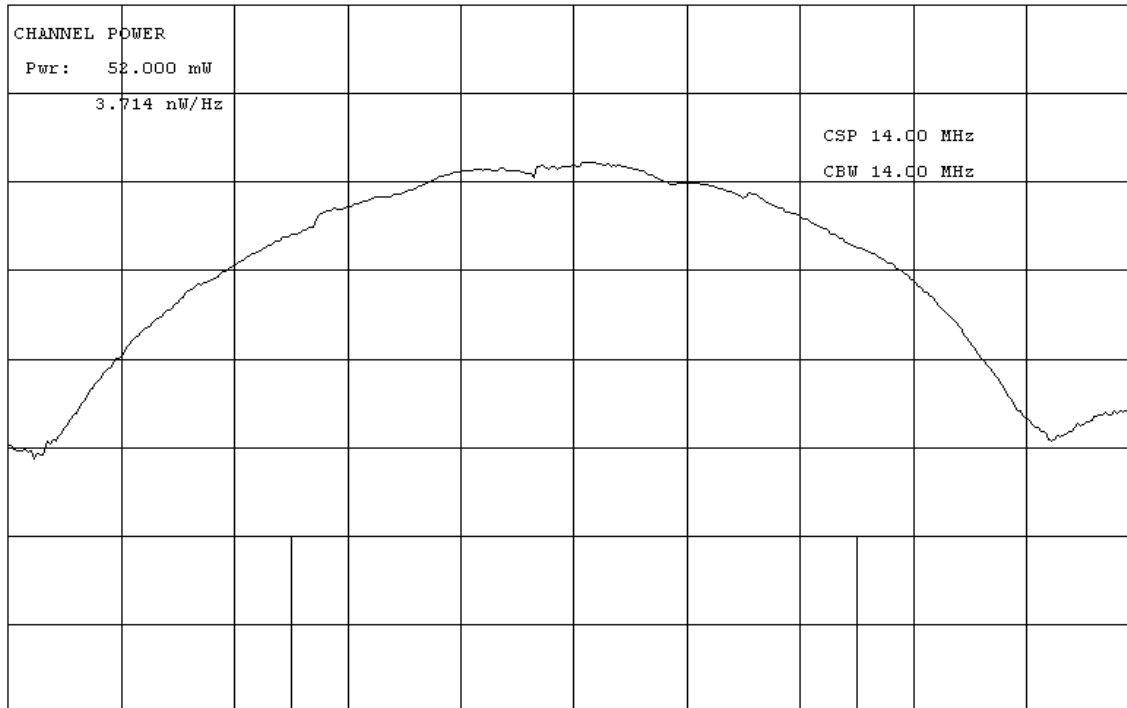
NORTHWEST <b>EMC</b>		<b>EMISSIONS DATA SHEET</b>		Rev BETA 01/30/01	
EUT: AnyPoint DSL Gateway 4400			Work Order: INTE4561		
Serial Number: 0007E9036749			Date: 05/21/02		
Customer: Intel Corporation			Temperature: 21 degrees C		
Attendees: Mike Espig		Tested by: Greg Kiemel		Humidity: 39% RH	
Customer Ref. No.: N/A		Power: 120V, 60 Hz		Job Site: EV06	
<b>TEST SPECIFICATIONS</b>					
Specification: 47 CFR 15.247(b)(1)		Year: Most Current		Method: FCC 97-114, ANSI C63.4	
				Year: 1992	
<b>SAMPLE CALCULATIONS</b>					
<b>COMMENTS</b>					
Maximum Output Power at Maximum Data Rate. WL-350F installed in EUT.					
<b>EUT OPERATING MODES</b>					
Modulated by PRBS at maximum data rate					
<b>DEVIATIONS FROM TEST STANDARD</b>					
None					
<b>REQUIREMENTS</b>					
Maximum peak conducted output power does not exceed 1 Watt					
<b>RESULTS</b>			<b>AMPLITUDE</b>		
Pass			52 mW		
<b>SIGNATURE</b>					
<div style="text-align: center;">             Tested By: _____         </div>					
<b>DESCRIPTION OF TEST</b>					
<b>Output Power - Mid Channel</b>					

09:33:05 MAY 21, 2002

REF 1.413 W AT 20 dB

No us:  
Me:

SMPL



LOG

10

dB/

OFFST

21.5

dB

MA SB

SC FC

CORR


CENTER 2.43800 GHz

SPAN 28.00 MHz

#RES BW 3.0 MHz

#VBW 3 MHz

SWP 20.0 msec

NORTHWEST <b>EMC</b>		<b>EMISSIONS DATA SHEET</b>		Rev BETA 01/30/01	
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				Year: 1992	
<b>SAMPLE CALCULATIONS</b>					
<b>COMMENTS</b>					
Maximum Output Power at Maximum Data Rate. WL-350F installed in EUT.					
<b>EUT OPERATING MODES</b>					
Modulated by stream of "1010101" data at maximum data rate, maximum output power					
<b>DEVIATIONS FROM TEST STANDARD</b>					
None					
<b>REQUIREMENTS</b>					
Maximum peak conducted output power does not exceed 1 Watt					
<b>RESULTS</b>			<b>AMPLITUDE</b>		
Pass			57.54 mW		
<b>SIGNATURE</b>					
<div style="text-align: center;">             Tested By: _____         </div>					
<b>DESCRIPTION OF TEST</b>					
<b>Output Power - High Channel</b>					

09:42:28 MAY 21, 2002

REF 1.413 W AT 20 dB

No us:  
Me:

SMPL

LOG

10

dB/

OFFST

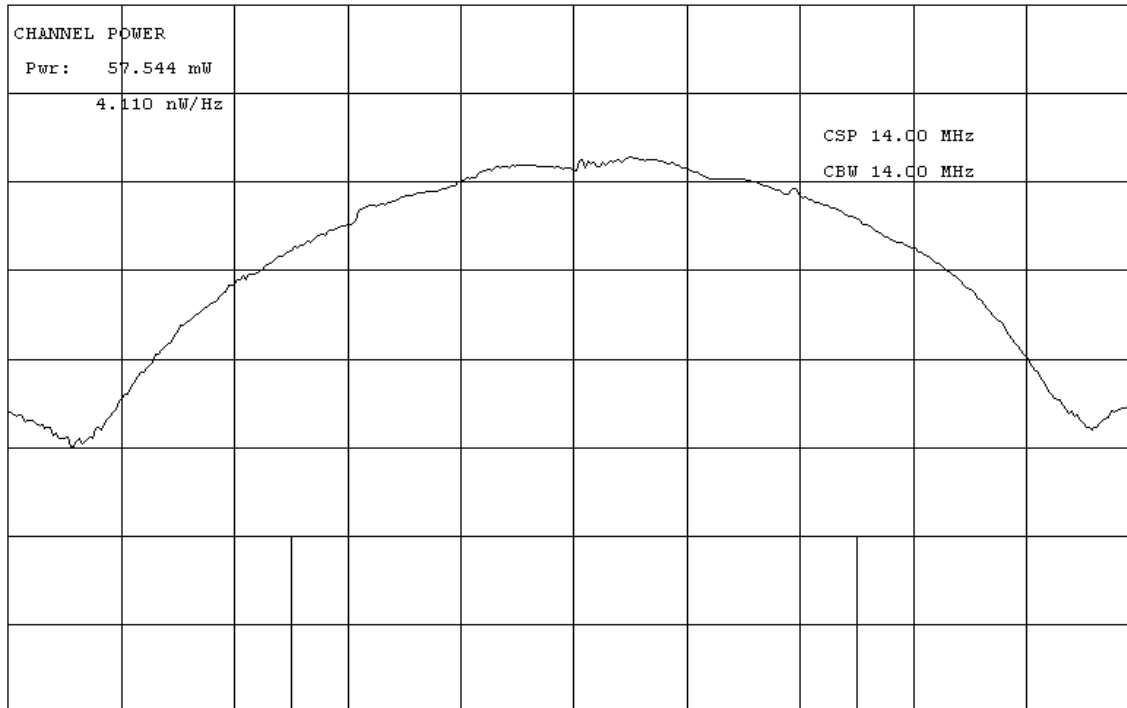
21.5

dB

MA SB

SC FC

CORR



CENTER 2.46200 GHz

SPAN 28.00 MHz

#RES BW 3.0 MHz

#VBW 3 MHz

SWP 20.0 msec