Exhibit O: Spurious Radiated Emissions

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

Antennas Investigated: Dipole, Gemtek EA153

Data Rates Investigated: Maximum

Output Power Setting(s) Investigated: Maximum

Power Input Settings Investigated:

120 VAC, 60 Hz.

Frequency Range Investigated									
Start Frequency	30	Stop Frequency	25 GHz						

Software\Firmware Applied During Test										
Exercise software	Standard Production Software	Version	2.1.0.104-4400							
Description	Description									
The system was tested us device during the testing.	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
EUT	Intel Corporation	AnyPoint Networking Gateway 1400	0007E90366E7
EUT Power Supply	CUI Stack	TEAD-48-121200UT	0210

Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
DC Power	No	1.5	No	EUT Power Supply	EUT
AC Power	No	1.8	No	EUT Power Supply	AC Mains
CAT 5 E-net	No	1.0	No	EUT	Unterminated
CAT 5 E-net	No	1.0	No	EUT	Unterminated
Telecom	No	1.7	No	EUT	600 ohm termination

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	8566B	AAL	03/19/2002	12 mo
Quasi-Peak Adapter	Hewlett-Packard	85650A	AQF	03/19/2002	12 mo
Antenna, Biconilog	EMCO	3141	AXE	12/31/2001	12 mo
Pre-Amplifier	Amplifier Research	LN1000A	APS	12/03/2001	12 mo
Antenna, Horn	EMCO	3115	AHC	08/24/2001	12 mo
Pre-Amplifier	Miteq	AMF-4D-005180-24-10P	APC	11/26/2001	12 mo
Spectrum Analyzer	Tektronix	2784	AAO	03/08/2001	24 mo
Pre-Amplifier	Miteq	JSD4-18002600-26-8P	APU	01/17/2000	36 mo
Antenna, Horn	EMCO	3160-09	AHG	01/15/2000	36 mo
High Pass Filter	RLC Electronics	F-100-4000-5-R (HPF>	HFF	02/04/2002	12 mo



Test Description

Requirement: The field strength of any spurious emissions or modulation products that fall in a restricted band, as defined in 47 CFR 15.205, is measured. The peak level must comply with the limits specified in 47 CFR 15.35(b). The average level (taken with a 10Hz VBW) must comply with the limits specified in 15.209.

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. Both configurations were tested. Each antenna to be used with the EUT was tested. The EUT was configured for low, mid, and high band transmit frequencies. For each configuration, the spectrum was scanned throughout the specified range. In addition, measurements were made in the restricted bands to verify compliance. While scanning, emissions from the EUT were maximized by rotating the EUT and adjusting the measurement antenna height and polarization (per ANSI C63.4:1992). A preamp and high pass filter were used for this test in order to provide sufficient measurement sensitivity.

Bandwidths Used for Measurements

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 – 0.15	1.0	0.2	0.2
0.15 – 30.0	10.0	9.0	9.0
30.0 – 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0
Measurements were m	ade using the bandwidth	s and detectors specified. No	video filter was used

Completed by:



V-Horn

V-Horn

V-Horn

V-Horn

0.0

0.0

0.0

0.0

ΡK

ΡK

PK

ΡK

49.9

49.5

49.3

48.8

0.0

0.0

0.0

0.0

74.0

74.0

74.0

74.0

-24.1

-24.5

-24.7

-25.2

4125.458

4923.915

4824.037

4175.506

45.1

42.9

43.3

44.0

206.0

356.0

165.0

338.0

1.0

1.2

1.0

1.2

3.0

3.0

3.0

3.0

4.8

6.6

6.0

4.8

N	ORTHWEST					TS D	ΔΤΔ	SH	EET				REV df2.02
	EMC	E alut P		1100								1504	05/20/2002
s	EU1: erial Number:	AnyPoint D 0007E9036	SL Gatew 749	ay 4400							Nork Order: Date:	INTE4561 5/31/02 13	-05
-	Customer:	Intel Corpo	ration							Т	emperature:	72	
	Attendees:	Mike Espig	, Rich Rice	e							Humidity:	45%	
C	Just. Ref. No.:	Pod Pelog	in			,	Power:	420 V/60	47	Barometi	ric Pressure	30.12	
TEST	SPECIFICATI	ONS					Power.	120 9/60	Π2		JOD Site.	EVUI	
	Specification:	FCC Part 1	5.247 Clas	is B							Year:	2001	
	Method:	ANSI C63.4									Year:	1992	
SAMP	LE CALCULA	Field Strength	= Measured L	evel + Antenna	a Factor + Cat	e Factor - An	nnlifier Gain + [Distance Ad	iustment Factor	r + External Atte	equation		
Condu	ucted Emissions:	Adjusted Level	= Measured	Level + Transd	lucer Factor +	Cable Attenua	ation Factor + E	External Atte	nuator	· External / cite			
COMM	ENTS												
High Cri	annel, Modulated	d by stream or	1010101	' data at maxii	num data rau), maximuni c	output power.	WL-350F III	stalled in EU i	-			
EUT O	PERATING M	ODES											
DEVIA	TIONS FROM	I TEST STA	NDARD										
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Other									1 0		0		
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							External			Distance	T		Compared to
	Freq	Amplitude (dBu)/)	Factor (dB)	Azimuth (degrees)	Height (meters)	Distance (meters)	Attenuation (dB)	Polarity	Detector	Adjustment (dB)	Adjusted	Spec. Limit	Spec.
	2462.750	85.5	-1.0	(degrees) 58.0	(1.8	(ineters)	20.0	V-Horn	AV	0.0	104.5	54.0	50.5
	2462.850	84.9	-1.0	66.0	1.7	3.0	20.0	V-Horn	AV	0.0	103.9	54.0	49.9
	2462.750	80.9	-1.0	353.0	1.7	3.0	20.0	H-Horn	AV	0.0	99.9	54.0	45.9
	2486.730	36.1	-0.9	58.0	1.8	3.0	20.0	V-Horn	AV	0.0	55.2	54.0	1.2
	2462.750	89.8	-0.9	58.0	1.7	3.0	20.0	V-Horn	PK	0.0	108.8	74.0	34.8
	2462.850	89.3	-1.0	66.0	1.7	3.0	20.0	V-Horn	PK	0.0	108.3	74.0	34.3
	2462.750	85.0	-1.0	353.0	1.7	3.0	20.0	H-Horn	PK	0.0	104.0	74.0	30.0
	2491.750	44.8 41.0	-0.9	58.0 66.0	1.8 1 7	3.0	20.0	V-Horn V-Horn	PK PK	0.0	63.9	74.0 74.0	-10.1

_													
	NORTHWEST				OA	TS D	ΑΤΑ	SH	EET				REV df2.02
	EUT:	AnyPoint N	letworking	Gateway 1	400					V	Nork Order:	INTE4561	05/20/2002
	Serial Number:	0007E9036	6E7	,							Date:	5/31/02 13:	43
	Customer:	Intel Corpo	ration							Te	mperature:	72	
	Attendees: Cust. Ref. No.:	RICH RICE								Barometr	ic Pressure	45% 30.12	
	Tested by:	Rod Peloq	uin				Power:	120 V/60	Hz	24.0.104	Job Site:	EV01	
TEST	SPECIFICATI	ONS	5.047.01									0004	
	Specification: Method:	ANSI C63 4	5.247 Clas	s B							Year: Year:	2001	
SAM	PLE CALCULA	TIONS									rour.	1002	
Ra	diated Emissions:	Field Strength	= Measured L	evel + Antenna	a Factor + Cat	le Factor - Am	nplifier Gain + [Distance Adj	ustment Facto	r + External Atte	nuation		
COM	MENTS	Adjusted Level	= Measured I	Level + Transd	ucer Factor +	Cable Attenua	ation Factor + E	xternal Atte	nuator				
High C	hannel, Modulate	d by stream of	i ""FFFF"" da	ita at maximui	m data rate, n	naximum outp	put power. WL	-350F insta	lled in EUT.				
EUT (OPERATING M	ODES											
		TEOTOTA											
DEVI/ No dev	ations FROM	TESTSTA	NDARD										
RESU	ILTS									Test Dista	nce (m)	Run #	
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Other	•										0		
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	From	Amanlituda	Fastar	Aminouth	Lloight	Distance	External	Delerity	Detector	Distance	Adjusted	Case Limit	Compared to
	(MHz)	(dBuV)	(dB)	(degrees)	(meters)	(meters)	(dB)	Folding	Delector	(dB)	dBuV/m	dBuV/m	(dB)
	2463.350	84.6	-1.0	12.0	1.1	3.0	20.0	V-Horn	AV	0.0	103.6	54.0	49.6
	2464.190	79.9	-1.0	185.0	2.1	3.0	20.0	H-Horn	AV	0.0	98.9	54.0	44.9
	2488.875 2491.750	34.8 28.9	-0.9 -0.9	12.0 185.0	2.1	3.0 3.0	20.0 20.0	v-Horn H-Horn	AV	0.0	53.9 48.0	54.0 54.0	-0.1
	2463.350	88.9	-1.0	12.0	1.1	3.0	20.0	V-Horn	PK	0.0	107.9	74.0	33.9
	2464.190	84.3	-1.0	185.0	2.1	3.0	20.0	H-Horn	PK	0.0	103.3	74.0	29.3
	2491.750	43.5 40.5	-0.9 -0.9	12.0	1.1 2.1	3.0 3.0	20.0 20.0	v-Horn H-Horn	PK PK	0.0	62.6 59.6	74.0 74.0	-11.4 -14.4

N	IORTHWEST				OA	TS D	ΑΤΑ	SH	ET				REV df2.02 05/20/2002
	EUT:	AnyPoint N	letworking	Gateway 1	400					V	Vork Order:	INTE4561	
S	Serial Number:	0007E9036	6E7								Date:	5/31/02 16:	15
	Customer:	Intel Corpo	oration							Te	mperature:	72 45%	
	Attendees: Cust Ref No :	RICH RICE								Barometr	ic Pressure	45% 30 12	
,	Tested by:	Rod Peloa	uin				Power:	120 V/60 H	lz	Barometi	Job Site:	EV01	
TEST	SPECIFICAT	ONS									000 01101		
	Specification:	FCC Part 1	5.247 Clas	s B							Year:	2001	
	Method:	ANSI C63.4	ļ								Year:	1992	
SAMP	LE CALCULA	TIONS											
Rad	liated Emissions:	Field Strength	= Measured L	evel + Antenna	a Factor + Cab	le Factor - Am	iplifier Gain + L	Distance Adju	stment Factor	+ External Atter	nuation		
COMM	IENTS	Adjusted Level	I = Measured I		ucer Factor +	Cable Allenua	LION FACIOI + E	xternal Atten	Jaloi				
Modulat	ted by stream of	""1010101"" d	lata at maxim	um data rate,	maximum ou	tput power. W	/L-350F instal	led in EUT.					
EUT O	PERATING N	NODES											
	TIONS FROM	I TEST STA	NDARD										
RESU	LTS									Test Dista	nce (m)	Run #	
Pass										3	3	7	
Other									Roglin	In Ren	leman		
									0	4	1		
									-	Teste	ed By:		
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							MHz						
	Freq	Amplitude	Factor	∆zimuth	Height	Distance	External Attenuation	Polarity	Detector	Distance Adjustment	Adjusted	Spec Limit	Compared to Spec
	(MHz)	(dBuV)	(dB)	(degrees)	(meters)	(meters)	(dB)	rolanty	Delector	(dB)	dBuV/m	dBuV/m	(dB)
	4175.450	44.7	4.8	268.0	1.2	3.0	0.0	V-Horn	AV	0.0	49.5	54.0	-4.5
	4175.450	44.5	4.8	299.0	1.5	3.0	0.0	H-Horn	AV	0.0	49.3	54.0	-4.7
1	4125.458	43.8	4.8	262.0	2.0	3.0	0.0	V-Horn	AV	0.0	48.6	54.0	-5.4
	4125.458	43.2	4.8	288.0	1.5	3.0	0.0	H-Horn	AV	0.0	48.0	54.0	-6.0
	4075.486	41.4	4.7	265.0	1.1	3.0	0.0	V-Horn	AV	0.0	46.1	54.0	-7.9
<u> </u>	40/5.486	39.8	4.7	200.0	2.5	3.0	0.0	H-Horn	AV pr	0.0	44.5 52 6	54.0	-9.5
	4175450	47.8 47.4	4.8 4.8	299.0 268.0	1.5	3.U 3.0	0.0	U-Horp	PK	0.0	52.0 52.2	74.0 74.0	-21.4 _21.9
1	4075 486	46.8	4.0	265.0	1.2	3.0	0.0	V-Horn	PK	0.0	51.5	74.0	-21.0
1	4125.458	46.6	4.8	262.0	2.0	3.0	0.0	V-Horn	PK	0.0	51.4	74.0	-22.6
	4125.458	46.3	4.8	288.0	1.5	3.0	0.0	H-Horn	PK	0.0	51.1	74.0	-22.9
	4075.486	45.7	4.7	6.0	2.5	3.0	0.0	H-Horn	PK	0.0	50.4	74.0	-23.6