Exhibit L: AC Powerline Conducted Emissions

FCC ID: HN2PC24-11



# 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:** 

Continuous transmit with modulation

# Data Rates Investigated:

Maximum

# Output Power Setting(s) Investigated:

Maximum

#### **Power Input Settings Investigated:**

5VDC input to module from AC Adapter attached to 120V/60Hz mains

Frequency Range Investigated												
Start Frequency	150 kHz	Stop Frequency	30 MHz									

Software\Firmware Applied During Test													
Exercise software	FCCTST24.BIN	Version	Unknown										
Description													
The system was tested using the FCCTST24.BIN software to exercise the functions of the device during													
the testing.	-												

#### **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-PCMCIA Card	INTERMEC	P24-11-FC/R	02UT34371446
Extender Card	Swart Interconnect	EXT-PCM-68-SM3	060501-212
Host Device	INTERMEC	2435	27300200205
5VDC Adapter	INTERMEC	0-302029-01	N/A
Antenna	INTERMEC	070143-001	N/A

## Cables

Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
5VDC power	No	1.9	PA	5VDC Adapter	EUT
			a		

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
LISN	Solar	9252-50-R-24-BNC	LIN	06/04/2002	12 mo
High Pass Filter	TTE	H97-100k-50-720B	HFC	12/11/2001	12 mo

#### **Test Description**

**<u>Requirement:</u>** Per 47 15.207(d), if the EUT is connected to the AC power line indirectly, obtaining its power from another device that is connected to the AC power line, then it should be tested to demonstrate compliance with the conducted limits of 15.207.

**Configuration:** The EUT will be powered from host equipment that could be connected to the AC power line. Therefore, the measurements were made on the 5VDC adapter used to power the EUT. The 5VDC adapter contained no EMC suppression devices. The AC power line conducted emissions were measured with the EUT operating at the lowest, the highest, and a middle channel in the operational band. The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.4-1992.

Completed by:

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:	Serial Nu	umber:	02UT34371	446									Date:	11/21	1/02		
	Cus	tomer:	INTERMEC	Corporat	ion							Te	emperature:	72			
	Atte	ndees:	None									Deverage	Humidity:	41%			
	Cust. Re	et. No.:	None Dan Haac						Bower			Barometi	Ic Pressure	30.12 EV/04	2		
TEST	SPECIE		ONS						Fower	. 3400			JOD Sile.		1		
	Specific	cation:	CISPR22 C	ass B									Year:	1997	,		
	M	ethod:	ANSI C63.4										Year:	1992			
SAMP	LE CAL	CULA	TIONS														
Ra	diated Em	issions:	Field Strength	= Measured I	Level + Antenn	a Factor	+ Cable	e Factor - An	plifier Gain +	Distance Adjus	stment Factor + I	External Attenu	uation				
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TEST	SPECIF	ICATI	ONS																	
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	М	ethod:	ANSI C63.4													Year	: 19	92		
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Ş	Serial Nurr	ber: 02UT3437	1446								Date:	11/21/	02	
	Custo	mer: INTERME	C Corporati	on						T	emperature:	72		
	Attend	ees: None									Humidity:	41%		
	Cust. Ref.	No.: None					Bower	5VDC		Baromet	ric Pressure	30.12 EV/04		
TEST	SPECIFIC						Power:	SVDC			Job Site:	EVUI		
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	Met	hod: ANSI C63.	4								Year:	1992		
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Speci	ification:	CISPR22 Class B								Year:	1997		
	Method:	ANSI C63.4								Year:	1992		
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Conducted E	Emissions:	Adjusted Level = Measure	ed Level + Transo	ducer Factor +	Cable Attenua	tion Factor + E	xternal Attenu	uator					
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	0.493	0.0		0.0	0.0	20.0		AV		20.0	4	6.1	-26.1
	0.282	20.2		0.0	0.0	20.0		QP		40.2	6	0.8	-20.6
	0.403	16.7		0.0	0.0	20.0		QP		36.7	5	7.8	-21.1
	0.493	14.6		0.0	0.0	20.0		QP		34.6	5	6.1	-21.5

