CKC LABORATORIES, INC. Testing the Future

ACCREDITED
Certicate Numbers
803.01, 803.02, 803.03
803.05 - 803.06
EMC

INTERNATIONAL ELECTRONICS INC. TEST REPORT

FOR THE

PROXIMITY CARD READER, ES ENROLLMENT STATION

FCC PART 15 SUBPART C SECTIONS 15.207 & 15.209

COMPLIANCE

DATE OF ISSUE: JUNE 27, 2005

PREPARED FOR:

International Electronics Inc.
427 Turnpike Street
Canton, MA 02021

P.O. No.: 30925
W.O. No.: 83756

PREPARED BY:

Mary Ellen Clayton
CKC Laboratories, Inc.
5046 Sierra Pines Drive
Mariposa, CA 95338

Date of test: June 22-23, 2005

Report No.: FC05-039

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ADMINISTRATIVE INFORMATION

DATE OF TEST:	June 22-23, 2005
DATE OF RECEIPT:	June 22, 2005
MANUFACTURER:	International Electronics Inc. 427 Turnpike Street Canton, MA 02021
REPRESENTATIVE:	Chris Hentschel
TEST LOCATION:	CKC Laboratories, Inc. 5046 Sierra Pines Drive Mariposa, CA 95338
TEST METHOD:	ANSI C63.4 (2003)
PURPOSE OF TEST:	To demonstrate the compliance of the Proximity Card Reader, ES Enrollment Station with the requirements for FCC Part 15 Subpart C Sections 15.207 & 15.209 devices.

FCC TO CANADA STANDARD CORRELATION MATRIX

Canadian Standard	Canadian Section	FCC Standard	FCC Section	Test Description
RSS 210	5.5	47CFR	15.203	Antenna Connector Requirements
RSS 210	6.2.1	47CFR	15.209	General Radiated Emissions Requirement
RSS 210	6.3	47CFR	15.205	Restricted Bands of Operation
RSS 210	6.6	47CFR	15.207	AC Mains Conducted Emissions Requirement
	IC 3082-D		784962	Site File No.

CONDITIONS FOR COMPLIANCE

No modifications to the EUT were necessary to comply.

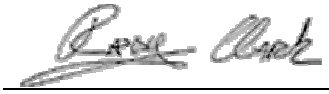
APPROVALS

Steve Behm, Director of Engineering Services

QUALITY ASSURANCE:

Joyce Walker, Quality Assurance Administrative Manager

TEST PERSONNEL:



Randy Clark, EMC Engineer

FCC 15.31(e) Voltage Variations
Voltage variations on AC mains were performed in accordance with 15.31(e). There was no detectable change in the RF output of the EUT at ±15% of nominal AC mains input voltage.

FCC 15.33(a) Frequency Ranges Tested
15.207 Conducted Emissions: 150kHz – 30MHz
15.209 Radiated Emissions: 9kHz – 1000MHz

FCC SECTION 15.35: ANALYZER BANDWIDTH SETTINGS PER FREQUENCY RANGE			
TEST	BEGINNING FREQUENCY	ENDING FREQUENCY	BANDWIDTH SETTING
CONDUCTED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	9 kHz	150 kHz	200 Hz
RADIATED EMISSIONS	150 kHz	30 MHz	9 kHz
RADIATED EMISSIONS	30 MHz	1000 MHz	120 kHz

FCC 15.203 Antenna Requirements
The antenna is non-removable; therefore the EUT complies with Section 15.203 of the FCC rules.

Eut Operating Frequency
The EUT was operating at 125kHz.

Temperature And Humidity During Testing
The temperature during testing was within +15°C and + 35°C.
The relative humidity was between 20% and 75%.

EQUIPMENT UNDER TEST (EUT) DESCRIPTION

The customer declares the EUT tested by CKC Laboratories was representative of a production unit.

EQUIPMENT UNDER TEST

Proximity Card Reader

Manuf:	IEI
Model:	ES Enrollment Station
Serial:	062205-001
FCC ID:	pending

EUT Power Supply

Manuf:	TRIAD
Model:	WDU12-300
Serial:	1004K
FCC ID:	NA

PERIPHERAL DEVICES

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

Printer

Manuf:	HP
Model:	C6410A
Serial:	MY97G1924Z

Printer Power Supply

Manuf:	Astec Power Inc.
Model:	C6409-60014
Serial:	9912 R00

Host PC

Manuf:	Toshiba
Model:	PS426U-0M151
Serial:	50683063U

Host PC Power Supply

Manuf:	Toshiba
Model:	PA3201U-1ACA
Serial:	2XE11354

REPORT OF MEASUREMENTS

The following tables report the worst case emissions levels recorded during the tests performed on the EUT. All readings taken were peak readings unless otherwise stated. The data sheets from which the emissions tables were compiled are contained in Appendix C.

Table 1: FCC 15.207 Six Highest Conducted Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Lisn dB	HPF dB	Cable dB	dB	CORRECTED READING dBµV	SPEC LIMIT dBµV	MARGIN dB	NOTES
0.333983	44.5	0.3	0.1	0.1		45.0	49.4	-4.4	W
0.333983	44.3	0.2	0.1	0.1		44.7	49.4	-4.7	B
0.579779	40.2	0.1	0.3	0.1		40.7	46.0	-5.3	B
0.661226	40.6	0.3	0.3	0.1		41.3	46.0	-4.7	W
0.664862	40.4	0.2	0.3	0.1		41.0	46.0	-5.0	B
0.746309	40.8	0.2	0.3	0.1		41.4	46.0	-4.6	B

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Section 15.207

NOTES: B = Black Lead
W = White Lead

COMMENTS: EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 150kHz to 30 MHz.

Table 2: FCC 15.209 Fundamental Emission Levels

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	dB	Cable dB	Corr dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
0.126	67.3	10.2		0.1	-80.0	-2.4	25.6	-28.0	V
0.126	66.1	10.2		0.1	-80.0	-3.6	25.6	-29.2	V
0.126	63.3	10.2		0.1	-80.0	-6.4	25.6	-32.0	H
0.126	63.2	10.2		0.1	-80.0	-6.5	25.6	-32.1	H
0.126	51.9	10.2		0.1	-80.0	-17.8	25.6	-43.4	V
0.126	37.0	10.2		0.1	-80.0	-32.7	25.6	-58.3	H

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Sections 15.209
Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
V = Vertical Polarization

COMMENTS: EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: Carrier. Test distance correction factor used in accordance with 15.31 to correct test data at 3 meters for comparison to the limit at 300 meters for compliance to 15.209. Voltage variations on AC mains were performed in accordance with 15.31(e). There was no detectable change in the RF output of the EUT at ±15% of nominal AC mains input voltage.

Table 3: FCC 15.209 Six Highest Radiated Emission Levels: 9kHz - 30MHz

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	dB	Cable dB	Corr dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
1.565	35.8	10.2		0.4	-40.0	6.4	23.6	-17.2	H
1.648	33.8	10.2		0.4	-40.0	4.4	23.2	-18.8	H
5.442	36.7	9.9		0.5	-40.0	7.1	29.5	-22.4	H
5.608	37.0	9.9		0.5	-40.0	7.4	29.5	-22.1	H
5.689	36.9	9.9		0.5	-40.0	7.3	29.5	-22.2	H
9.976	37.1	9.8		0.7	-40.0	7.6	29.5	-21.9	H

Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Section 15.209
Test Distance: 3 Meters

NOTES: H = Horizontal Polarization

COMMENTS: EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 9kHz to 30MHz. Test distance correction factor used in accordance with 15.31 to correct test data at 3 meters for comparison to the limit at 30 and 300 meters as appropriate for compliance to 15.209.

Table 4: FCC 15.209 Highest Radiated Emission Levels: 30-1000MHz

FREQUENCY MHz	METER READING dBµV	CORRECTION FACTORS Ant dB	Amp dB	Cable dB	dB	CORRECTED READING dBµV/m	SPEC LIMIT dBµV/m	MARGIN DB	NOTES
110.593	50.9	10.3	-26.8	2.4		36.8	43.5	-6.7	V
177.720	51.6	8.3	-26.7	3.0		36.2	43.5	-7.3	V
180.780	51.9	8.2	-26.7	3.1		36.5	43.5	-7.0	V
181.380	56.4	8.2	-26.6	3.1		41.1	43.5	-2.4	HQ
185.220	49.6	8.2	-26.6	3.1		34.3	43.5	-9.2	V

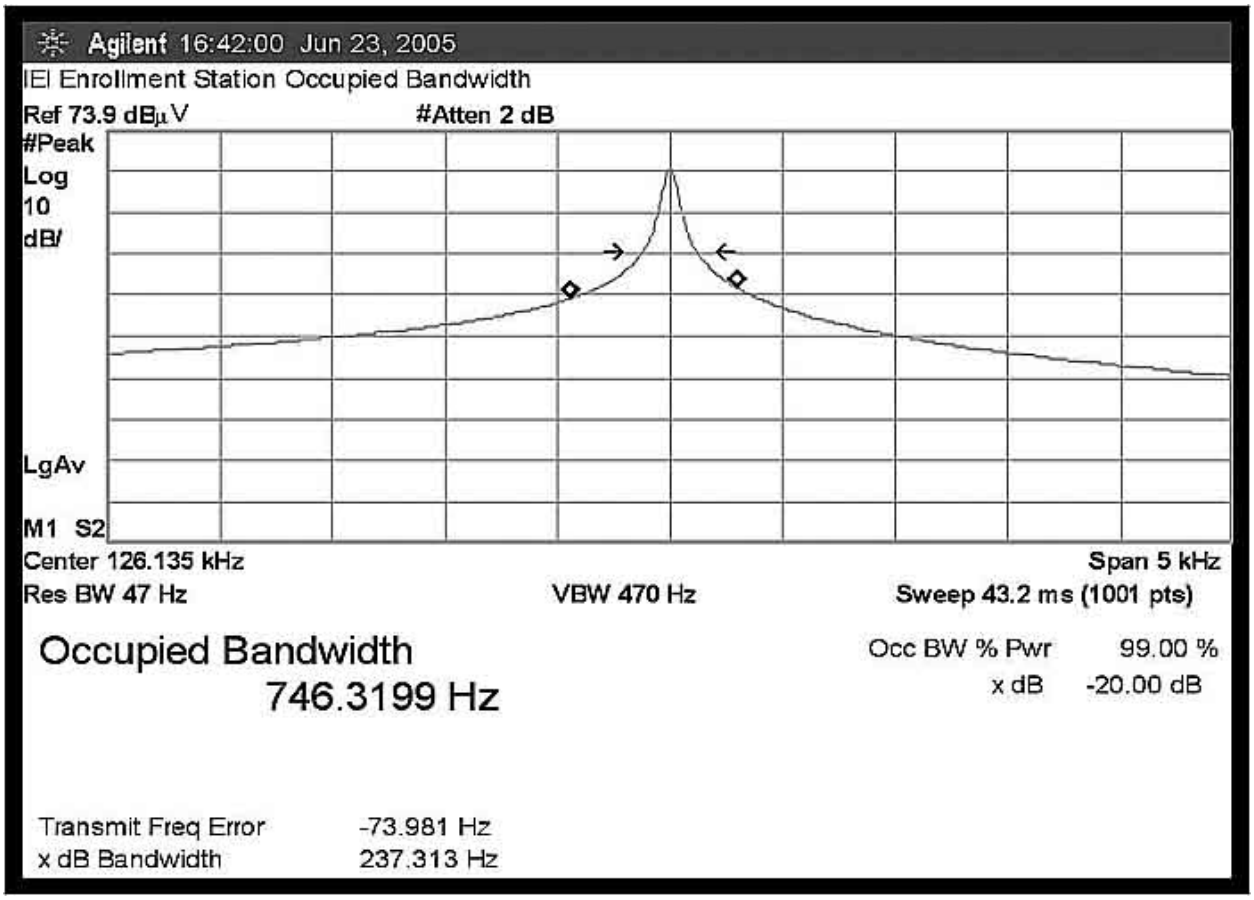
Test Method: ANSI C63.4 (2003)
Spec Limit: FCC Part 15 Subpart C Section 15.209
Test Distance: 3 Meters

NOTES: H = Horizontal Polarization
V = Vertical Polarization
Q = Quasi Peak Reading

COMMENTS: EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 30-1000 MHz.

RSS-210 OCCUPIED BANDWIDTH PLOT

Test Conditions: EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. EUT tested with the worst case orientation.



EUT SETUP

The equipment under test (EUT) was set up in a manner that represented its normal use, as shown in the photographs in Appendix A. Any special conditions required for the EUT to operate normally are identified in the comments that accompany the emissions tables. The corrected data was then compared to the applicable emission limits to determine compliance.

The cables were routed consistent with the typical application by varying the configuration of the test sample. Interface cables were connected to the available I/O ports of the test unit. The effect of varying the position of the cables was investigated to find the configuration that produced maximum emissions. I/O cables were of the type and length specified in the individual requirements. The length of cable that produced maximum emissions was selected.

The radiated and conducted emissions data of the EUT 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 Table A.

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

CORRECTION FACTORS

The basic spectrum analyzer reading was converted using correction factors as shown in the highest emissions readings in the tables. For radiated emissions in dBµV/m, the spectrum analyzer reading in dBµV was corrected by using the following formula in Table A. This reading was then compared to the applicable specification limit to determine compliance.

TABLE A: SAMPLE CALCULATIONS

	Meter reading	(dBµV)
+	Antenna Factor	(dB)
+	Cable Loss	(dB)
-	Distance Correction	(dB)
-	Preamplifier Gain	(dB)
=	Corrected Reading	(dBµV/m)

TEST INSTRUMENTATION AND ANALYZER SETTINGS

The test instrumentation and equipment listed in Appendix B were used to collect both the radiated and conducted emissions data. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. For radiated measurements below 300 MHz, the biconical antenna was used. For frequencies from 300 to 1000 MHz, the log periodic antenna was used. For frequencies from 30 to 1000 MHz, the biconilog antenna was used. The horn antenna was used for frequencies above 1000 MHz. Conducted emissions tests required the use of the FCC type LISNs.

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.

SPECTRUM ANALYZER DETECTOR FUNCTIONS

The notes that accompany the measurements contained in the Tables 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.

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.

EUT TESTING

Mains Conducted Emissions

During conducted emissions testing, the EUT was located on a wooden table measuring approximately 80 cm high, 1 meter deep, and 1.5 meters in length. One wall of the room where the EUT was located has a minimum 2 meter by 2 meter conductive plane. The EUT was mounted on the wooden table 40 cm away from the conductive plane, and 80 cm from any other conductive surface.

The vertical metal plane used for conducted emissions was grounded to the earth. Power to the EUT was provided through a LISN. The LISN was grounded to the ground plane. All other objects were kept a minimum of 80 cm away from the EUT during the conducted test.

The LISNs used were 50 µH-/+50 ohms. Above 150 kHz, a 0.15 µF series capacitor was added in-line prior to connecting the analyzer to restore the proper impedance for the range. A 30 to 50 second sweep time was used for automated measurements in the frequency bands of 150 kHz to 500 kHz, and 500 kHz to 30 MHz. All readings within 20 dB of the limit were recorded, and those within 6 dB of the limit were examined with additional measurements using a slower sweep time.

Radiated Emissions

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.

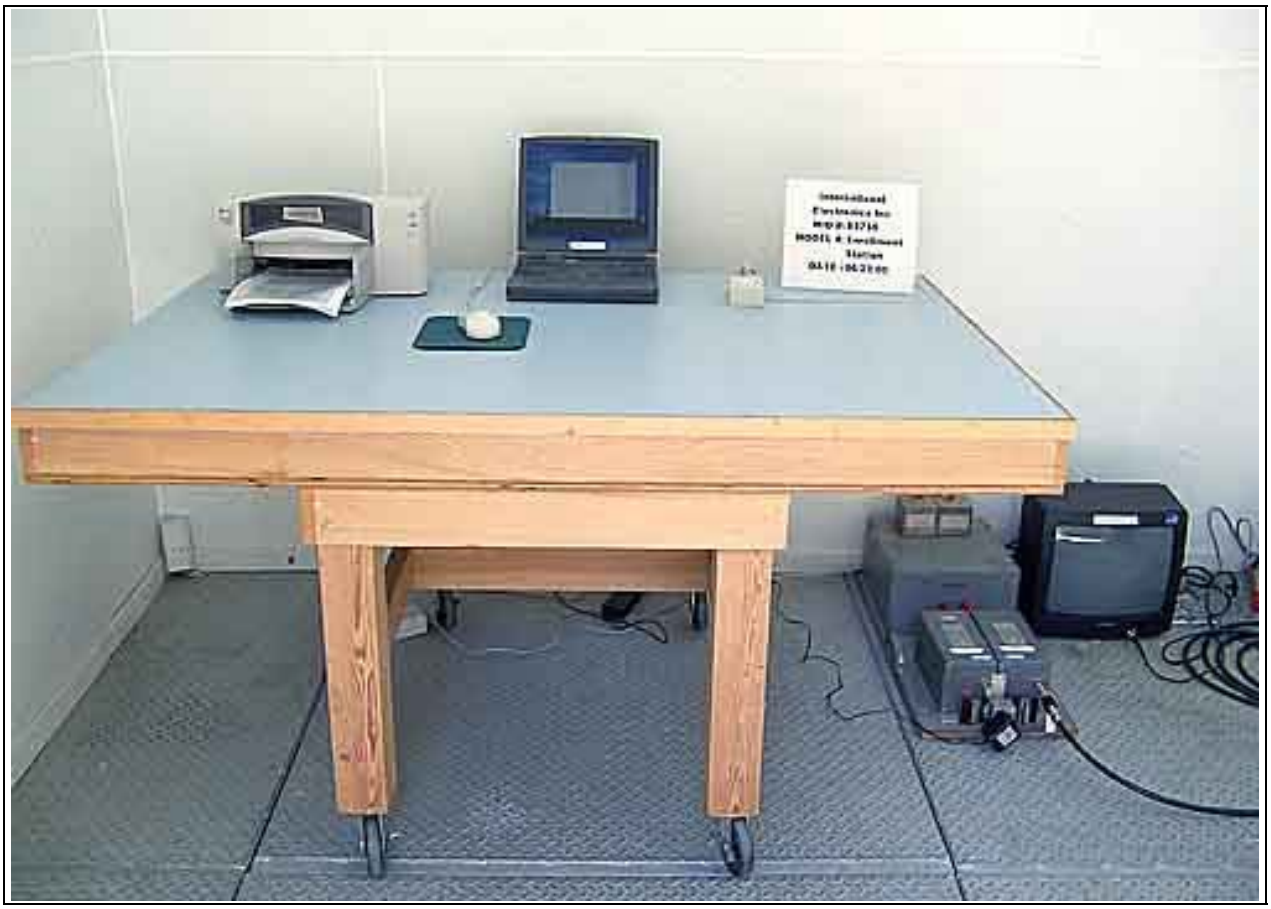
During the preliminary radiated scan, the EUT was powered up and operating in its defined FCC test mode. For radiated measurements from 9 kHz to 30 MHz, the magnetic loop antenna was used. The frequency range of 30 MHz to 1000 MHz was scanned with the biconilog antenna located about 1.5 meter above the ground plane in the vertical polarity. During this scan, the turntable was rotated and all peaks at or near the limit were recorded. A scan of the FM band from 88 to 110 MHz was then made using a reduced resolution bandwidth and frequency span. The biconilog antenna was changed to the horizontal polarity and the above steps were repeated. 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.

A thorough scan of all frequencies was made manually using a small frequency span, rotating the turntable and raising and lowering the antenna from one to four meters as needed. The test engineer maximized the readings with respect to the table rotation, antenna height, and configuration of EUT. Maximizing of the EUT was achieved by monitoring the spectrum analyzer on a closed circuit television monitor.

APPENDIX A

TEST SETUP PHOTOGRAPHS

PHOTOGRAPH SHOWING MAINS CONDUCTED EMISSIONS



Mains Conducted Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Front View

PHOTOGRAPH SHOWING RADIATED EMISSIONS

Radiated Emissions - Back View

APPENDIX B

TEST EQUIPMENT LIST

15.207

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/12/2005	01/12/2007	02660
150kHz HP Filter TTE	G7754	04/20/2004	04/20/2006	02608
LISN, 8028-50-TS-24-BNC	8379276, 280	06/03/2005	06/03/2007	1248

15.209 Fundamental, 9kHz-30MHz, and Occupied Bandwidth

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/12/2005	01/12/2007	02660
EMCO Loop Antenna	1074	05/13/2005	05/13/2007	00226

15.209 30-1000MHz

Function	S/N	Calibration Date	Cal Due Date	Asset #
Agilent E4446A SA	US44300407	01/12/2005	01/12/2007	02660
HP 8447D Preamp	1937A02604	03/11/2005	03/11/2007	00099
Chase CBL6111C Bilog	2456	06/26/2003	06/26/2005	01991

APPENDIX C:

MEASUREMENT DATA SHEETS

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **IEI**
Specification: **FCC 15.207 - AVE**
Work Order #: **83756** Date: 06/23/2005
Test Type: **Conducted Emissions** Time: 16:00:55
Equipment: **Proximity Card Reader** Sequence#: 6
Manufacturer: IEI Tested By: Randal Clark
Model: Enrollment Station 120V 60Hz
S/N: 062205-001

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

Function	Manufacturer	Model #	S/N
Proximity Card Reader*	IEI	Enrollment Station	062205-001
EUT Power Supply	TRIAD	WDU12-300	1004K

Support Devices:

Function	Manufacturer	Model #	S/N
Printer Power Supply	Astec Power Inc.	C6409-60014	9912 R00
Printer	HP	C6410A	MY97G1924Z
Host PC Power Supply	Toshiba	PA3201U-1ACA	2XE11354
Host PC	Toshiba	PS426U-0M151	50683063U

Test Conditions / Notes:

EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 150kHz to 30 MHz.

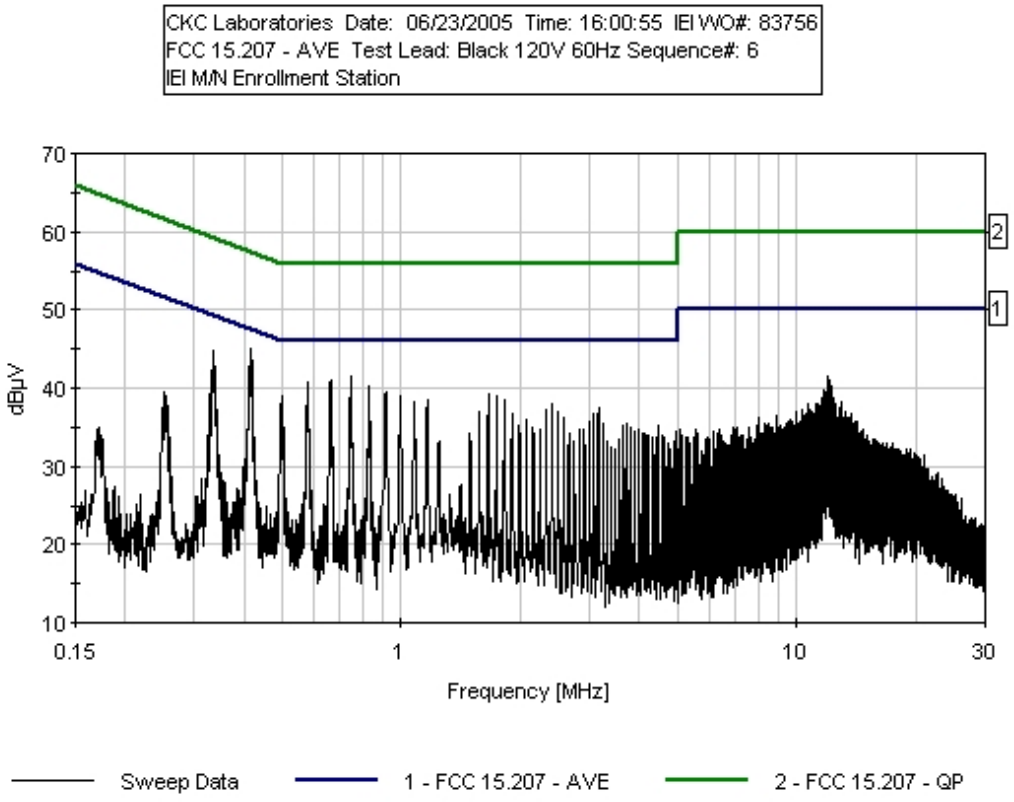
Transducer Legend:

T1=HP Filter AN02608 T2=LISN Insertion Loss s/n280
T3=Cable - Internal + cab

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

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	746.309k	40.8	+0.3	+0.2	+0.1		+0.0	41.4	46.0	-4.6	Black
2	333.983k	44.3	+0.1	+0.2	+0.1		+0.0	44.7	49.4	-4.7	Black
3	664.862k	40.4	+0.3	+0.2	+0.1		+0.0	41.0	46.0	-5.0	Black
4	579.779k	40.2	+0.2	+0.2	+0.1		+0.0	40.7	46.0	-5.3	Black
5	830.665k	39.7	+0.3	+0.2	+0.1		+0.0	40.3	46.0	-5.7	Black
6	582.688k	39.2	+0.2	+0.2	+0.1		+0.0	39.7	46.0	-6.3	Black
7	915.479k	38.9	+0.2	+0.2	+0.2		+0.0	39.5	46.0	-6.5	Black
8	1.660M	38.7	+0.1	+0.3	+0.2		+0.0	39.3	46.0	-6.7	Black

9	996.280k	38.3	+0.2	+0.3	+0.2	+0.0	39.0	46.0	-7.0	Black
10	498.332k	38.3	+0.2	+0.3	+0.1	+0.0	38.9	46.0	-7.1	Black
11	1.745M	38.3	+0.1	+0.3	+0.2	+0.0	38.9	46.0	-7.1	Black
12	1.162M	37.8	+0.2	+0.3	+0.2	+0.0	38.5	46.0	-7.5	Black
13	1.826M	37.9	+0.1	+0.3	+0.2	+0.0	38.5	46.0	-7.5	Black
14	414.720k Ave	32.5	+0.2	+0.3	+0.1	+0.0	33.1	47.6	-14.5	Black
^	416.157k	44.4	+0.2	+0.3	+0.1	+0.0	45.0	47.5	-2.5	Black
^	419.066k	42.9	+0.2	+0.3	+0.1	+0.0	43.5	47.5	-4.0	Black



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **IEI**
Specification: **FCC 15.207 - AVE**
Work Order #: **83756** Date: 06/23/2005
Test Type: **Conducted Emissions** Time: 16:02:49
Equipment: **Proximity Card Reader** Sequence#: 7
Manufacturer: IEI Tested By: Randal Clark
Model: Enrollment Station 120V 60Hz
S/N: 062205-001

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

Function	Manufacturer	Model #	S/N
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Host PC	Toshiba	PS426U-0M151	50683063U

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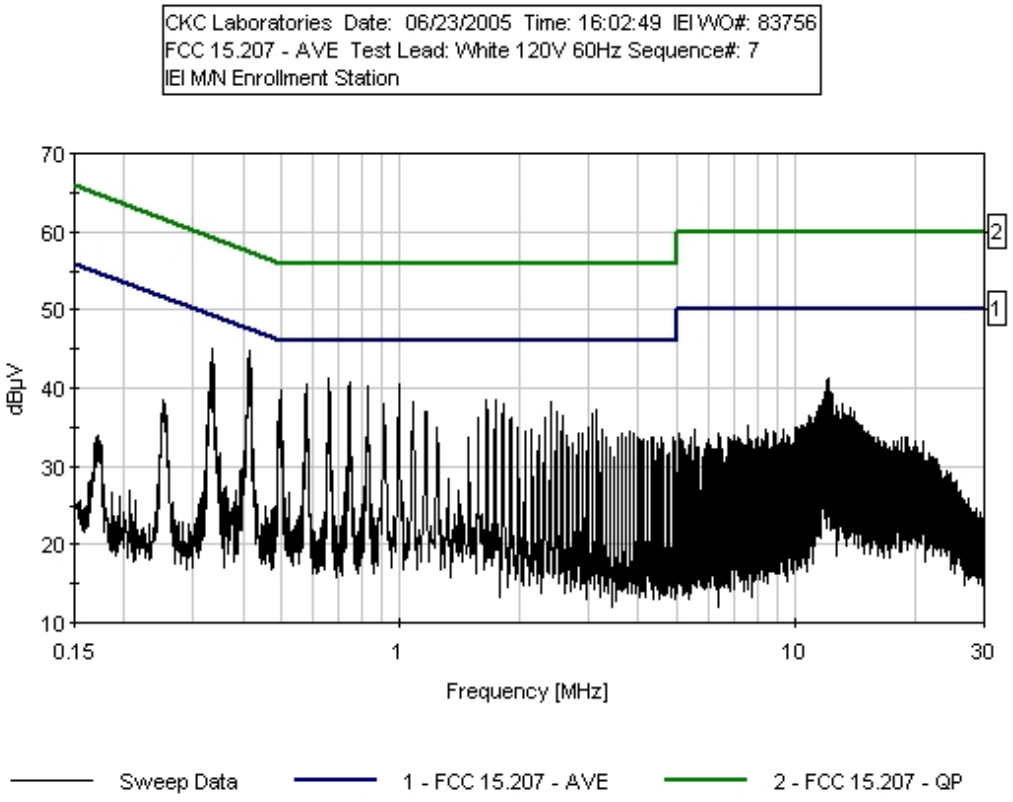
Transducer Legend:

T1=HP Filter AN02608 T2=LISN Insertion Loss s/n276
T3=Cable - Internal + cab

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

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV	Spec dBµV	Margin dB	Polar Ant
1	333.983k	44.5	+0.1	+0.3	+0.1		+0.0	45.0	49.4	-4.4	White
2	661.226k	40.6	+0.3	+0.3	+0.1		+0.0	41.3	46.0	-4.7	White
3	743.400k	40.0	+0.3	+0.3	+0.1		+0.0	40.7	46.0	-5.3	White
4	579.779k	40.0	+0.2	+0.3	+0.1		+0.0	40.6	46.0	-5.4	White
5	996.280k	39.8	+0.2	+0.3	+0.2		+0.0	40.5	46.0	-5.5	White
6	827.756k	39.6	+0.3	+0.2	+0.1		+0.0	40.2	46.0	-5.8	White
7	331.074k	42.9	+0.1	+0.3	+0.1		+0.0	43.4	49.4	-6.0	White
8	336.892k	42.5	+0.1	+0.3	+0.1		+0.0	43.0	49.3	-6.3	White

9	497.605k	39.1	+0.2	+0.3	+0.1	+0.0	39.7	46.0	-6.3	White
10	1.655M	37.9	+0.1	+0.4	+0.2	+0.0	38.6	46.0	-7.4	White
11	1.741M	37.9	+0.1	+0.4	+0.2	+0.0	38.6	46.0	-7.4	White
12	494.696k	37.8	+0.2	+0.3	+0.1	+0.0	38.4	46.1	-7.7	White
13	2.400M	37.4	+0.1	+0.4	+0.3	+0.0	38.2	46.0	-7.8	White
14	413.710k Ave	32.4	+0.2	+0.4	+0.1	+0.0	33.1	47.6	-14.5	White
^	415.430k	44.1	+0.2	+0.4	+0.1	+0.0	44.8	47.5	-2.7	White
^	413.249k	43.1	+0.2	+0.4	+0.1	+0.0	43.8	47.6	-3.8	White



Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **IEI**
Specification: **FCC 15.209**
Work Order #: **83756** Date: 06/23/2005
Test Type: **Maximized Emissions** Time: 14:45:11
Equipment: **Proximity Card Reader** Sequence#: 1
Manufacturer: IEI Tested By: Randal Clark
Model: Enrollment Station
S/N: 062205-001

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

Function	Manufacturer	Model #	S/N
Proximity Card Reader*	IEI	Enrollment Station	062205-001
EUT Power Supply	TRIAD	WDU12-300	1004K

Support Devices:

Function	Manufacturer	Model #	S/N
Printer Power Supply	Astec Power Inc.	C6409-60014	9912 R00
Printer	HP	C6410A	MY97G1924Z
Host PC Power Supply	Toshiba	PA3201U-1ACA	2XE11354
Host PC	Toshiba	PS426U-0M151	50683063U

Test Conditions / Notes:

EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: Carrier. Test distance correction factor used in accordance with 15.31 to correct test data at 3 meters for comparison to the limit at 300 meters for compliance to 15.209. Voltage variations on AC mains were performed in accordance with 15.31(e). There was no detectable change in the RF output of the EUT at ±15% of nominal AC mains input voltage.

Transducer Legend:

T1=Mag Loop - AN 00226 - 9kHz-30M T2=Cable - 10 Meter
T3=15.31 3m 40dB/Dec Correction

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

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	126.148k	67.3	+10.2	+0.1	-80.0		+0.0	-2.4	25.6	-28.0	Vert
									Carrier X-Axis		
2	126.150k	66.1	+10.2	+0.1	-80.0		+0.0	-3.6	25.6	-29.2	Vert
									Carrier Y-Axis		
3	126.148k	63.3	+10.2	+0.1	-80.0		+0.0	-6.4	25.6	-32.0	Horiz
									Carrier X-Axis		
4	126.152k	63.2	+10.2	+0.1	-80.0		+0.0	-6.5	25.6	-32.1	Horiz
									Carrier Z-Axis		
5	126.150k	51.9	+10.2	+0.1	-80.0		+0.0	-17.8	25.6	-43.4	Vert
									Carrier Z-Axis		
6	126.148k	37.0	+10.2	+0.1	-80.0		+0.0	-32.7	25.6	-58.3	Horiz
									Carrier Y-Axis		

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **IEI**
Specification: **FCC 15.209**
Work Order #: **83756** Date: 06/23/2005
Test Type: **Maximized Emissions** Time: 14:45:11
Equipment: **Proximity Card Reader** Sequence#: 1
Manufacturer: IEI Tested By: Randal Clark
Model: Enrollment Station
S/N: 062205-001

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

Function	Manufacturer	Model #	S/N
Proximity Card Reader*	IEI	Enrollment Station	062205-001
EUT Power Supply	TRIAD	WDU12-300	1004K

Support Devices:

Function	Manufacturer	Model #	S/N
Printer Power Supply	Astec Power Inc.	C6409-60014	9912 R00
Printer	HP	C6410A	MY97G1924Z
Host PC Power Supply	Toshiba	PA3201U-1ACA	2XE11354
Host PC	Toshiba	PS426U-0M151	50683063U

Test Conditions / Notes:

EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 9kHz to 30MHz. Test distance correction factor used in accordance with 15.31 to correct test data at 3 meters for comparison to the limit at 30 and 300 meters as appropriate for compliance to 15.209.

Transducer Legend:

T1=Mag Loop - AN 00226 - 9kHz-30M T2=Cable - 10 Meter
T3=15.31 3m 40dB/Dec Correction

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

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	1.565M	35.8	+10.2	+0.4	-40.0		+0.0	6.4	23.6	-17.2	Horiz
2	1.648M	33.8	+10.2	+0.4	-40.0		+0.0	4.4	23.2	-18.8	Horiz
3	9.976M	37.1	+9.8	+0.7	-40.0		+0.0	7.6	29.5	-21.9	Horiz
4	5.608M	37.0	+9.9	+0.5	-40.0		+0.0	7.4	29.5	-22.1	Horiz
5	5.689M	36.9	+9.9	+0.5	-40.0		+0.0	7.3	29.5	-22.2	Horiz
6	5.442M	36.7	+9.9	+0.5	-40.0		+0.0	7.1	29.5	-22.4	Horiz
7	4.701M	36.6	+9.9	+0.5	-40.0		+0.0	7.0	29.5	-22.5	Horiz

8	5.854M	36.2	+9.9	+0.5	-40.0	+0.0	6.6	29.5	-22.9	Horiz
9	5.194M	36.0	+9.9	+0.5	-40.0	+0.0	6.4	29.5	-23.1	Horiz
10	9.902M	35.8	+9.8	+0.7	-40.0	+0.0	6.3	29.5	-23.2	Horiz
11	3.791M	35.8	+10.0	+0.5	-40.0	+0.0	6.3	29.5	-23.2	Horiz
12	5.114M	35.8	+9.9	+0.5	-40.0	+0.0	6.2	29.5	-23.3	Horiz
13	1.812M	35.7	+10.1	+0.4	-40.0	+0.0	6.2	29.5	-23.3	Horiz
14	9.238M	35.5	+9.8	+0.7	-40.0	+0.0	6.0	29.5	-23.5	Horiz
15	5.525M	35.6	+9.9	+0.5	-40.0	+0.0	6.0	29.5	-23.5	Horiz
16	2.060M	35.3	+10.1	+0.4	-40.0	+0.0	5.8	29.5	-23.7	Horiz
17	1.730M	35.2	+10.2	+0.4	-40.0	+0.0	5.8	29.5	-23.7	Horiz
18	4.947M	35.3	+9.9	+0.5	-40.0	+0.0	5.7	29.5	-23.8	Horiz
19	4.532M	35.2	+9.9	+0.5	-40.0	+0.0	5.6	29.5	-23.9	Horiz
20	4.366M	35.1	+9.9	+0.5	-40.0	+0.0	5.5	29.5	-24.0	Horiz
21	4.038M	35.0	+10.0	+0.5	-40.0	+0.0	5.5	29.5	-24.0	Horiz
22	7.091M	34.9	+9.9	+0.6	-40.0	+0.0	5.4	29.5	-24.1	Horiz
23	6.842M	34.9	+9.9	+0.6	-40.0	+0.0	5.4	29.5	-24.1	Horiz
24	4.782M	35.0	+9.9	+0.5	-40.0	+0.0	5.4	29.5	-24.1	Horiz
25	2.224M	34.9	+10.1	+0.4	-40.0	+0.0	5.4	29.5	-24.1	Horiz
26	6.510M	34.8	+9.9	+0.6	-40.0	+0.0	5.3	29.5	-24.2	Horiz
27	4.615M	34.9	+9.9	+0.5	-40.0	+0.0	5.3	29.5	-24.2	Horiz
28	3.873M	34.8	+10.0	+0.5	-40.0	+0.0	5.3	29.5	-24.2	Horiz
29	6.676M	34.7	+9.9	+0.6	-40.0	+0.0	5.2	29.5	-24.3	Horiz
30	5.941M	34.8	+9.9	+0.5	-40.0	+0.0	5.2	29.5	-24.3	Horiz
31	8.989M	34.6	+9.8	+0.7	-40.0	+0.0	5.1	29.5	-24.4	Horiz
32	7.420M	34.7	+9.8	+0.6	-40.0	+0.0	5.1	29.5	-24.4	Horiz

33	2.885M	34.7	+10.0	+0.4	-40.0	+0.0	5.1	29.5	-24.4	Horiz
34	6.759M	34.5	+9.9	+0.6	-40.0	+0.0	5.0	29.5	-24.5	Horiz
35	4.865M	34.6	+9.9	+0.5	-40.0	+0.0	5.0	29.5	-24.5	Horiz
36	4.450M	34.6	+9.9	+0.5	-40.0	+0.0	5.0	29.5	-24.5	Horiz
37	4.284M	34.6	+9.9	+0.5	-40.0	+0.0	5.0	29.5	-24.5	Horiz
38	4.121M	34.6	+9.9	+0.5	-40.0	+0.0	5.0	29.5	-24.5	Horiz
39	9.567M	34.4	+9.8	+0.7	-40.0	+0.0	4.9	29.5	-24.6	Horiz
40	8.741M	34.4	+9.8	+0.7	-40.0	+0.0	4.9	29.5	-24.6	Horiz
41	7.914M	34.5	+9.8	+0.6	-40.0	+0.0	4.9	29.5	-24.6	Horiz
42	7.008M	34.4	+9.9	+0.6	-40.0	+0.0	4.9	29.5	-24.6	Horiz
43	6.431M	34.4	+9.9	+0.6	-40.0	+0.0	4.9	29.5	-24.6	Horiz
44	6.348M	34.4	+9.9	+0.6	-40.0	+0.0	4.9	29.5	-24.6	Horiz
45	5.277M	34.5	+9.9	+0.5	-40.0	+0.0	4.9	29.5	-24.6	Horiz
46	9.072M	34.3	+9.8	+0.7	-40.0	+0.0	4.8	29.5	-24.7	Horiz
47	8.244M	34.4	+9.8	+0.6	-40.0	+0.0	4.8	29.5	-24.7	Horiz
48	7.257M	34.3	+9.9	+0.6	-40.0	+0.0	4.8	29.5	-24.7	Horiz
49	5.030M	34.4	+9.9	+0.5	-40.0	+0.0	4.8	29.5	-24.7	Horiz
50	4.203M	34.4	+9.9	+0.5	-40.0	+0.0	4.8	29.5	-24.7	Horiz
51	3.954M	34.3	+10.0	+0.5	-40.0	+0.0	4.8	29.5	-24.7	Horiz
52	2.391M	34.3	+10.1	+0.4	-40.0	+0.0	4.8	29.5	-24.7	Horiz
53	2.307M	34.3	+10.1	+0.4	-40.0	+0.0	4.8	29.5	-24.7	Horiz
54	11.387M	34.3	+9.7	+0.7	-40.0	+0.0	4.7	29.5	-24.8	Horiz
55	2.635M	34.3	+10.0	+0.4	-40.0	+0.0	4.7	29.5	-24.8	Horiz
56	2.143M	34.2	+10.1	+0.4	-40.0	+0.0	4.7	29.5	-24.8	Horiz
57	11.304M	34.2	+9.7	+0.7	-40.0	+0.0	4.6	29.5	-24.9	Horiz

58	9.320M	34.1	+9.8	+0.7	-40.0	+0.0	4.6	29.5	-24.9	Horiz
59	7.340M	34.1	+9.9	+0.6	-40.0	+0.0	4.6	29.5	-24.9	Horiz
60	2.554M	34.2	+10.0	+0.4	-40.0	+0.0	4.6	29.5	-24.9	Horiz
61	10.225M	34.0	+9.8	+0.7	-40.0	+0.0	4.5	29.5	-25.0	Horiz
62	10.142M	34.0	+9.8	+0.7	-40.0	+0.0	4.5	29.5	-25.0	Horiz
63	7.503M	34.1	+9.8	+0.6	-40.0	+0.0	4.5	29.5	-25.0	Horiz
64	7.174M	34.0	+9.9	+0.6	-40.0	+0.0	4.5	29.5	-25.0	Horiz
65	6.593M	34.0	+9.9	+0.6	-40.0	+0.0	4.5	29.5	-25.0	Horiz
66	6.265M	34.0	+9.9	+0.6	-40.0	+0.0	4.5	29.5	-25.0	Horiz
67	5.360M	34.1	+9.9	+0.5	-40.0	+0.0	4.5	29.5	-25.0	Horiz
68	2.471M	34.0	+10.1	+0.4	-40.0	+0.0	4.5	29.5	-25.0	Horiz
69	1.977M	34.0	+10.1	+0.4	-40.0	+0.0	4.5	29.5	-25.0	Horiz
70	11.470M	34.0	+9.7	+0.7	-40.0	+0.0	4.4	29.5	-25.1	Horiz
71	8.659M	33.9	+9.8	+0.7	-40.0	+0.0	4.4	29.5	-25.1	Horiz
72	8.163M	34.0	+9.8	+0.6	-40.0	+0.0	4.4	29.5	-25.1	Horiz
73	7.997M	34.0	+9.8	+0.6	-40.0	+0.0	4.4	29.5	-25.1	Horiz
74	6.925M	33.9	+9.9	+0.6	-40.0	+0.0	4.4	29.5	-25.1	Horiz
75	9.650M	33.8	+9.8	+0.7	-40.0	+0.0	4.3	29.5	-25.2	Horiz
76	8.576M	33.8	+9.8	+0.7	-40.0	+0.0	4.3	29.5	-25.2	Horiz
77	8.327M	33.9	+9.8	+0.6	-40.0	+0.0	4.3	29.5	-25.2	Horiz
78	7.586M	33.9	+9.8	+0.6	-40.0	+0.0	4.3	29.5	-25.2	Horiz
79	8.410M	33.7	+9.8	+0.7	-40.0	+0.0	4.2	29.5	-25.3	Horiz
80	7.669M	33.8	+9.8	+0.6	-40.0	+0.0	4.2	29.5	-25.3	Horiz
81	9.816M	33.6	+9.8	+0.7	-40.0	+0.0	4.1	29.5	-25.4	Horiz
82	8.824M	33.6	+9.8	+0.7	-40.0	+0.0	4.1	29.5	-25.4	Horiz

83	10.474M	33.5	+9.8	+0.7	-40.0	+0.0	4.0	29.5	-25.5	Horiz
84	9.733M	33.5	+9.8	+0.7	-40.0	+0.0	4.0	29.5	-25.5	Horiz
85	9.403M	33.5	+9.8	+0.7	-40.0	+0.0	4.0	29.5	-25.5	Horiz
86	7.752M	33.6	+9.8	+0.6	-40.0	+0.0	4.0	29.5	-25.5	Horiz
87	10.640M	33.4	+9.8	+0.7	-40.0	+0.0	3.9	29.5	-25.6	Horiz
88	10.308M	33.4	+9.8	+0.7	-40.0	+0.0	3.9	29.5	-25.6	Horiz
89	3.131M	33.5	+10.0	+0.4	-40.0	+0.0	3.9	29.5	-25.6	Horiz
90	2.803M	33.5	+10.0	+0.4	-40.0	+0.0	3.9	29.5	-25.6	Horiz
91	10.391M	33.3	+9.8	+0.7	-40.0	+0.0	3.8	29.5	-25.7	Horiz
92	10.059M	33.3	+9.8	+0.7	-40.0	+0.0	3.8	29.5	-25.7	Horiz
93	9.155M	33.3	+9.8	+0.7	-40.0	+0.0	3.8	29.5	-25.7	Horiz
94	8.080M	33.4	+9.8	+0.6	-40.0	+0.0	3.8	29.5	-25.7	Horiz
95	9.485M	33.2	+9.8	+0.7	-40.0	+0.0	3.7	29.5	-25.8	Horiz
96	8.493M	33.1	+9.8	+0.7	-40.0	+0.0	3.6	29.5	-25.9	Horiz
97	3.214M	33.2	+10.0	+0.4	-40.0	+0.0	3.6	29.5	-25.9	Horiz
98	2.965M	33.1	+10.0	+0.4	-40.0	+0.0	3.5	29.5	-26.0	Horiz
99	6.018M	32.9	+9.9	+0.6	-40.0	+0.0	3.4	29.5	-26.1	Horiz
100	10.557M	32.8	+9.8	+0.7	-40.0	+0.0	3.3	29.5	-26.2	Horiz
101	10.723M	32.8	+9.7	+0.7	-40.0	+0.0	3.2	29.5	-26.3	Horiz
102	11.553M	32.7	+9.7	+0.7	-40.0	+0.0	3.1	29.5	-26.4	Horiz
103	11.221M	32.7	+9.7	+0.7	-40.0	+0.0	3.1	29.5	-26.4	Horiz
104	3.708M	32.6	+10.0	+0.5	-40.0	+0.0	3.1	29.5	-26.4	Horiz
105	3.049M	32.5	+10.0	+0.4	-40.0	+0.0	2.9	29.5	-26.6	Horiz
106	1.894M	32.4	+10.1	+0.4	-40.0	+0.0	2.9	29.5	-26.6	Horiz
107	3.460M	32.3	+10.0	+0.5	-40.0	+0.0	2.8	29.5	-26.7	Horiz

108	6.184M	32.2	+9.9	+0.6	-40.0	+0.0	2.7	29.5	-26.8	Horiz
109	2.717M	32.2	+10.0	+0.4	-40.0	+0.0	2.6	29.5	-26.9	Horiz
110	11.138M	32.1	+9.7	+0.7	-40.0	+0.0	2.5	29.5	-27.0	Horiz
111	11.802M	31.9	+9.7	+0.8	-40.0	+0.0	2.4	29.5	-27.1	Horiz
112	10.972M	31.9	+9.7	+0.7	-40.0	+0.0	2.3	29.5	-27.2	Horiz
113	10.889M	31.9	+9.7	+0.7	-40.0	+0.0	2.3	29.5	-27.2	Horiz
114	10.806M	31.9	+9.7	+0.7	-40.0	+0.0	2.3	29.5	-27.2	Horiz
115	5.772M	31.8	+9.9	+0.5	-40.0	+0.0	2.2	29.5	-27.3	Horiz
116	3.379M	31.7	+10.0	+0.5	-40.0	+0.0	2.2	29.5	-27.3	Horiz
117	11.967M	31.4	+9.7	+0.8	-40.0	+0.0	1.9	29.5	-27.6	Horiz
118	3.542M	31.4	+10.0	+0.5	-40.0	+0.0	1.9	29.5	-27.6	Horiz
119	12.967M	31.4	+9.6	+0.8	-40.0	+0.0	1.8	29.5	-27.7	Horiz
120	11.884M	31.2	+9.7	+0.8	-40.0	+0.0	1.7	29.5	-27.8	Horiz
121	11.719M	31.2	+9.7	+0.8	-40.0	+0.0	1.7	29.5	-27.8	Horiz
122	6.101M	31.2	+9.9	+0.6	-40.0	+0.0	1.7	29.5	-27.8	Horiz
123	3.296M	31.3	+10.0	+0.4	-40.0	+0.0	1.7	29.5	-27.8	Horiz
124	11.636M	31.2	+9.7	+0.7	-40.0	+0.0	1.6	29.5	-27.9	Horiz
125	3.626M	30.7	+10.0	+0.5	-40.0	+0.0	1.2	29.5	-28.3	Horiz
126	11.055M	30.3	+9.7	+0.7	-40.0	+0.0	0.7	29.5	-28.8	Horiz
127	12.050M	30.0	+9.7	+0.8	-40.0	+0.0	0.5	29.5	-29.0	Horiz
128	12.384M	30.0	+9.6	+0.8	-40.0	+0.0	0.4	29.5	-29.1	Horiz
129	12.218M	29.9	+9.7	+0.8	-40.0	+0.0	0.4	29.5	-29.1	Horiz
130	12.550M	29.8	+9.6	+0.8	-40.0	+0.0	0.2	29.5	-29.3	Horiz
131	12.633M	29.7	+9.6	+0.8	-40.0	+0.0	0.1	29.5	-29.4	Horiz
132	12.133M	29.6	+9.7	+0.8	-40.0	+0.0	0.1	29.5	-29.4	Horiz

133	12.799M	29.5	+9.6	+0.8	-40.0	+0.0	-0.1	29.5	-29.6	Horiz
134	12.716M	28.8	+9.6	+0.8	-40.0	+0.0	-0.8	29.5	-30.3	Horiz
135	12.301M	28.0	+9.6	+0.8	-40.0	+0.0	-1.6	29.5	-31.1	Horiz
136	12.882M	27.9	+9.6	+0.8	-40.0	+0.0	-1.7	29.5	-31.2	Horiz
137	12.467M	27.7	+9.6	+0.8	-40.0	+0.0	-1.9	29.5	-31.4	Horiz
138	252.300k	45.7	+10.2	+0.1	-80.0	+0.0	-24.0	19.6 Y-Axis	-43.6	Vert
139	252.300k	45.3	+10.2	+0.1	-80.0	+0.0	-24.4	19.6 Z-Axis	-44.0	Vert
140	252.240k	44.2	+10.2	+0.1	-80.0	+0.0	-25.5	19.6 X-Axis	-45.1	Vert
141	378.450k	39.2	+10.2	+0.2	-80.0	+0.0	-30.4	16.0 Z-Axis	-46.4	Vert
142	378.450k	39.0	+10.2	+0.2	-80.0	+0.0	-30.6	16.0 Y-Axis	-46.6	Vert
143	378.388k	37.7	+10.2	+0.2	-80.0	+0.0	-31.9	16.0 X-Axis	-47.9	Vert

Test Location: CKC Laboratories •5473A Clouds Rest • Mariposa, CA 95338 • 1-800-500-4EMC (4362)

Customer: **IEI**
Specification: **FCC 15.209**
Work Order #: **83756** Date: 06/23/2005
Test Type: **Maximized Emissions** Time: 15:27:19
Equipment: **Proximity Card Reader** Sequence#: 2
Manufacturer: IEI Tested By: Randal Clark
Model: Enrollment Station
S/N: 062205-001

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

Function	Manufacturer	Model #	S/N
Proximity Card Reader*	IEI	Enrollment Station	062205-001
EUT Power Supply	TRIAD	WDU12-300	1004K

Support Devices:

Function	Manufacturer	Model #	S/N
Printer Power Supply	Astec Power Inc.	C6409-60014	9912 R00
Printer	HP	C6410A	MY97G1924Z
Host PC Power Supply	Toshiba	PA3201U-1ACA	2XE11354
Host PC	Toshiba	PS426U-0M151	50683063U

Test Conditions / Notes:

EUT is an enrollment station for RFID tags operating on 125kHz. The device is a computer peripheral which is attached to a host computer. Host computer has all ports filled. EUT orientation tested on three orthogonal axes to determine maximized emissions. EUT power is provided via AC adapter. Serial communication from host PC to EUT is established via customer provided program entitled "Prox Enrollment Station Demo v0.1," pes_demo.exe. Frequency Range Investigated: 30-1000 MHz.

Transducer Legend:

T1=Amp - S/N 604	T2=Bilog Site D
T3=Cable - 10 Meter	

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

#	Freq MHz	Rdng dBµV	T1 dB	T2 dB	T3 dB	dB	Dist Table	Corr dBµV/m	Spec dBµV/m	Margin dB	Polar Ant
1	181.380M QP	56.4	-26.6	+8.2	+3.1		+0.0	41.1	43.5 BB	-2.4	Horiz 153
^	181.380M	58.5	-26.6	+8.2	+3.1		+0.0	43.2	43.5 BB	-0.3	Horiz 152
3	110.593M	50.9	-26.8	+10.3	+2.4		+0.0	36.8	43.5	-6.7	Verti 100
4	180.780M	51.9	-26.7	+8.2	+3.1		+0.0	36.5	43.5 BB	-7.0	Verti 100
5	177.720M	51.6	-26.7	+8.3	+3.0		+0.0	36.2	43.5 BB	-7.3	Verti 100
6	185.220M	49.6	-26.6	+8.2	+3.1		+0.0	34.3	43.5 BB	-9.2	Verti 100