TEST RESULT SUMMARY

FCC Part 15 Subpart C Section 15.249
Industry Canada RSS-210: Issue 5: 2001 Section 6.2.2(m2)

MANUFACTURER'S NAME	Hunt Technologies Inc
NAME OF EQUIPMENT	AirPoint Focus Transmitter
TYPE OF EQUIPMENT	Automatic Meter Reading Wireless Transmitter for Landis & Gyr Meter
MODEL NUMBER	FASY-0622-0001-NS
MANUFACTURER'S ADDRESS	6436 County Rd 11 Pequot Lakes, MN 56468
TEST REPORT NUMBER	WC502907 Rev A
TEST DATE	01, 06 June 2005

According to testing performed at TÜV Product Service Inc, the above-mentioned unit is in compliance with the electromagnetic compatibility requirements defined in FCC Part 15 Subpart C Section 15.249 and RSS-210, section 6.2.2(m2).

It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical characteristics. Any modifications necessary for compliance made during testing on the above mentioned date(s) must be implemented in all production units for compliance to be maintained.

TÜV Product Service Inc, as an independent testing laboratory, declares that the equipment tested as specified above conforms to the requirements of FCC Part 15 Subpart C Section 15.249 and RSS-210, section 6.2.2(m2).

Date: 09 September 2005

Location: Taylors Falls MN USA

G. S. Jakubowski
Test Technician

J. T. Schneider
Senior Engineer

Not Transferable

EMC EMISSION - TEST REPORT

Test Report File No.	:	**WC502907 Rev A**	Date of issue:	09 September 2005

Model / Serial No(s)	:	FASY-0622-0001-NS / 53000429
Product Name	:	AirPoint Focus Transmitter
Product Type	:	Automatic Meter Reading Wireless Transmitter for Landis & Gyr Meter
Applicant	:	Hunt Technologies Inc
Manufacturer	:	Hunt Technologies Inc
License holder	:	Hunt Technologies Inc
Address	:	6436 County Rd 11
	:	Pequot Lakes, MN 56468

Test Result	:	■ **Positive**	☐ **Negative**
Test Project Number Reference(s)	:	**WC502907 Rev A**	
Total pages including Appendices		32	

TÜV Product Service Inc is a subcontractor to TÜV Product Service, GmbH according to the principles outlined in ISO/IEC Guide 25 and EN 45001.

TÜV Product Service Inc reports apply only to the specific samples tested under stated test conditions. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. TÜV Product Service Inc shall have no liability for any deductions, inferences or generalizations drawn by the client or others from TÜV Product Service Inc issued reports.

This report is the confidential property of the client. As a mutual protection to our clients, the public and ourselves, extracts from the test report shall not be reproduced except in full without our written approval. The client shall not use this report to claim product endorsement by NVLAP or any agency of the US government.

TUV Product Service Inc and its professional staff hold government and professional organization certifications and are members of AAMI, ACIL, AEA, ANSI, IEEE, NVLAP, and VCCI

TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

REVISION RECORD

REVISION	TOTAL NUMBER OF PAGES	DATE	DESCRIPTION
	32	23 August 2005	Initial Release
A	32	23 August 2005	Revisions include: ▪ Added note regarding power supply system to page 5. ▪ Corrected calibration date on page 27 ▪ Corrected datasheets on page 31 – 34.

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Test data	Part 15 Section	RSS-210 Section	
Field Strength of Fundamental	15.249 (a)	6.2.2(m2)(1)	16 – 23
Field Strength of Harmonics	15.249 (a)	6.2.2(m2)(1)	16 – 24
Emissions radiated outside of specified frequency bands	15.249 (d)	6.2.2(m2)(3)	16 – 24
Band Edge Compliance	15.249 (d)	6.2.2(m2)(3)	25 – 26
Emission Bandwidth	N/A	5.9.1	27 – 29
AC Line Conducted Emissions	15.207	6.6	30 – 34

EMISSIONS TEST REGULATIONS :

The emissions tests were performed according to following regulations:

☐ - EN 50081-1 / 1991
☐ - EN 55011 / 1998 w/Amendment A1: 1999 ☐ - Group 1 ☐ - Group 2
☐ - Class A ☐ - Class B
☐ - EN 55013 / 1990
☐ - EN 55014 / 1987 ☐ - Household appliances and similar
☐ - Portable tools
☐ - Semiconductor devices
☐ - EN 55014 / A2: 1990
☐ - EN 55014 / 1993 ☐ - Household appliances and similar
☐ - Portable tools
☐ - Semiconductor devices
☐ - EN 55015 / 1987
☐ - EN 55015 / A1: 1990
☐ - EN 55015 / 1993
☐ - EN 55022 / 1987 ☐ - Class A ☐ - Class B
■ - FCC Part 15 Subpart C Section 15.249
■ - FCC Part 15 Subpart C Section 15.207 Conducted Emission Requirements
☐ - RSS-210, Issue 5, 2001 – Section 6.2.2(o)
■ - RSS-210, Issue 5, 2001 - Section 6.2.2(m2)

RF Exposure

The transmitter complies with the RF exposure limits for humans as called out in FCC 2.1091 (mobile >20 cm) or 2.1093 (portable <20 cm) and RSS-210 (14). The transmitter is used to send data to meter readers. It is exempt from RF Evaluation based on its operating frequency of 913.67-916.14 MHz, and ERP of 272 microwatts based on:
ERP (dBk) = E (dBuV/m) –106.92 + 20 log D (km) = 91.71 – 106.92 + (-50.45) = -65.66 dBk = 272 microwatts. This would be less than the 1.5 watts requirement for a mobile device and the 0.200 watts requirement for a portable device operating at 913.67-916.14 MHz.

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Emission Test Results:

Field Strength of Fundamental [FCC 15.249 (a)], [RSS-210 Section 6.2.2(m2)(1)]

The requirements are ■ - MET ☐ - NOT MET

Minimum margin of compliance for fundamental 2 dB at 913.67 MHz

Remarks: The maximum fundamental level at 3 meters was measured to be 91.7 dBμV/m (38.5 mV/m) at 913.67 MHz in quasi-peak mode compared to a quasi-peak limit of 94.0 dBμV/m (50 mV/m).

Field Strength of Harmonics [FCC 15.249 (a)], [RSS-210 Section 6.2.2(m2)(1)]

The requirements are ■ - MET ☐ - NOT MET

Minimum margin of compliance for harmonics (average) 0.5 dB at 1832.0 MHz

Remarks: The maximum harmonic emission level at 3 meters was measured to be 53.43 dBμV/m (469.4 μV/m) at 1832 MHz in average mode compared to an average limit of 54.0 dBμV/m (500 μV/m). The peak levels are greater than 20 dB below the peak limit. A duty cycle relaxation of 20 dB is used, as the duty cycle is less than 10%.

Field Strength of Spurious [FCC 15.249 (d)], [RSS-210 Section 6.2.2(m2)(3)]

The requirements are ■ - MET ☐ - NOT MET

Minimum margin of compliance for spurious >10 dB at _____ MHz

Remarks: No spurious emissions were detected from 30 to 9162 MHz within 10 dB of the limit. A plot that shows band edge compliance is included.

FCC 15.37(d) – not applicable

AC power line conducted emissions [FCC 15.207], [RSS-210 Section 6.6]

The requirements are ■ - MET ☐ - NOT MET

Minimum margin of compliance (average) 17 dB at 1.705 MHz

Remarks: The maximum conducted emission level was measured to be 28.28 dBμV at 1.705 MHz in average mode compared to an average limit of 46.0 dBμV/m (500 μV/m). The peak levels are greater than 20 dB below the peak limit.

Emission Bandwidth [RSS-210 Section 5.9.1]

The requirements are ■ - MET ☐ - NOT MET

Remarks: The low channel has a 99% bandwidth of 30 kHz, and the high channel has a 99% bandwidth of 45 kHz.

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MEASUREMENT PROTOCOL

GENERAL INFORMATION

Environmental conditions in the lab: TUV America Large Test Site

Actual
Temperature: 23 °C
Relative Humidity: 50 %
Atmospheric pressure: 98.0 kPa
Power supply system: 60 Hz, 220 VAC (See Note)

Note: The FCC guideline for measuring a device which draws its power from a device which connects to the AC mains, indicates that it must be demonstrated that it does not cause the device which connects to the AC mains to become non-compliant. If it can be demonstrated that it will be compliant in a representative host, it does not have to demonstrate compliance in every possible host. Thus, the testing proves the EUT's RF board, when connected to a compliant host connected to the AC mains, allows the host to remain compliant. The host that was provided for the testing operated at 60 Hz 220 VAC.

Test Methodology
Conducted and radiated emission testing is performed according to the procedures in ANSI C63.4-2003.

Measurement Uncertainty
The test system for conducted emissions is defined as the LISN, tuned receiver or spectrum analyzer, and coaxial cable. The test system has a measurement uncertainty of ±1.8 dB. The test system for radiated emissions is defined as the antenna, the pre-amplifier, the spectrum analyzer and the coaxial cable. The test system has a measurement uncertainty of ±4.8 dB. The equipment comprising the test systems is calibrated on an annual basis.

Justification
The Equipment Under Test (EUT) is configured in a typical user arrangement in accordance with the manufacturer's instructions. A cable is connected to each available port and either terminated with a peripheral into its characteristic impedance or left unterminated. When appropriate, the cables are manually manipulated with respect to each other to obtain maximum emissions from the unit.

CONDUCTED EMISSIONS
The final level, in dBμV, equals the EMI receiver level plus the cable loss and LISN factor.

RADIATED EMISSIONS
The final level, in dBμV/m, equals the reading from the spectrum analyzer (Level dBμV), adding the antenna correction factor and cable loss factor (Factor dB) to it, and subtracting the preamp gain (and duty cycle correction factor, if applicable). This result then has the limit subtracted from it to provide the Delta, which gives the tabular data as shown in the data sheets in Attachment A.

Example:

FREQ (MHz)	LEVEL (dBuV)		CABLE (dB)	ANT (dB/m)	PREAMP (dB)		FINAL (dBuV/m)	POL	HGT (m)	AZ (deg)	DELTA1
60.80	42.5Qp	+	1.2	+ 10.9	- 25.5	=	29.1	V	1.0	0.0	-10.9

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DETAILS OF TEST PROCEDURES

General Standard Information

The test methods used comply with ANSI C63.4-2003 - "Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz."

Conducted Emissions

Conducted emissions on the 60 Hz power mains of the EUT are measured in the frequency range of 150 kHz to 30 MHz. The measurements are performed using a receiver, which has CISPR characteristic bandwidth and quasi-peak and average detection, and a Line Impedance Stabilization Network (LISN), with 50 Ω/50 μH (CISPR 16) characteristics. Tabletop equipment is placed on a non-conducting table 80 centimeters above the floor and is positioned 40 centimeters from the vertical ground plane (wall) of the screen room. In some cases, a pre-scan using a spectrum analyzer is initially performed on the units comprising the system under test to locate the highest emissions. If the minimum passing margin appears to be less than 20 dB with a peak mode measurement, the emissions are re-measured using a tuned receiver or spectrum analyzer with quasi-peak and average detection and recorded on the data sheets.

Radiated Emissions

Radiated emissions from the EUT are measured in the frequency range of 30 to 9162 MHz using a spectrum analyzer and appropriate broadband linearly polarized antennas. Measurements between 30 MHz and 1000 MHz are made with 120 kHz/6 dB bandwidth and quasi-peak detection and measurements above 1000 MHz are made with a 1 MHz/6 dB bandwidth and peak and average detection. Tabletop equipment is placed on a 1.0 X 1.5 meter non-conducting table 80 centimeters above the ground plane. Floor standing equipment is placed directly on the turntable/ground plane. Interface cables that are closer than 40 centimeters to the ground plane are bundled in the center in a serpentine fashion so they are at least 40 centimeters from the ground plane. Cables to simulators/testers (if used in this test) are routed through the center of the table and to a screen room located outside the test area. The antenna is positioned 3, 10 or 30 meters horizontally from the EUT. To locate maximum emissions from the test sample the antenna is varied in height from 1 to 4 meters, measurement scans are made with both horizontal and vertical antenna polarizations and the EUT are rotated 360 degrees. The transmitter is rotated through 3 orthogonal axes in order to determine the maximum emission levels.

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DEVIATIONS FROM STANDARD:

None

GENERAL REMARKS:

SUMMARY:

The requirements according to the technical regulations are

■ - met.

☐ - **not** met.

The device under test does

■ - fulfill the general approval requirements mentioned on page 3.

☐ - **not** fulfill the general approval requirements mentioned on page 3.

Testing Start Date: 01 June 2005

Testing End Date: 06 June 2005

- TÜV PRODUCT SERVICE INC -

Reviewed By:
J. T. Schneider

Tested By:
G. S. Jakubowski

TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Constructional Data Form(s)

and/or

Product Information Form(s)

TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Form

EMC Test Plan and Constructional Data Form

PLEASE COMPLETE THIS DOCUMENT IN FULL, ENTERING N/A IF THE FIELD IS NOT APPLICABLE.

Applicant -- ***NOTE: This information will be input into your test report as shown below.***
Press the F1 key at any time to get HELP for the current field selected.

Company: Hunt Technologies

Address: 6436 County Rd 11

Pequot Lakes, MN 56468

Contact: Matt Karlgaard Position: RF Engineer

Phone: (218) 562-5198 Fax: (218) 562-5530

E-mail Address: mattk@turtletech.com

General Equipment Description -- ***NOTE: This information will be input into your test report as shown below.***

EUT Description: Automatic Meter Reading Wireless Transmitter for Landis & Gyr Meter

EUT Name: AirPoint for Landis & Gyr Meter

Model No.: FASY-0622-0001-NS Serial No.: 53000429

Product Options:

Configurations to be tested: Standalone with Landis & Gyr PCB

Test Objective

- ☐ EMC Directive 89/336/EEC (EMC)
  - Std:
- ☐ Machinery Directive 89/392/EEC (EMC
  - Std:
- ☐ Medical Device Directive 93/42/EEC (EMC)
  - Std:
- ☐ Vehicle Directive 72/245/EEC (EMC)
  - Std:
- ☐ FDA Reviewers Guidance for Premarket Notification Submissions (EMC)

- ☒ FCC: Class ☐ A ☐ B Part 15
- ☐ VCCI: Class ☐ A ☐ B
- ☐ BSMI: Class ☐ A ☐ B
- ☐ Canada: Class ☐ A ☐ B
- ☐ Australia: Class ☐ A ☐ B
- ☐ Other:

TÜV Product Service Certification Requested

- ☐ Attestation of Conformity (AoC)
- ☐ Certificate of Conformity (CoC)
- ☐ EMC Certification (used with Octagon Mark)
- ☐ Compliance Document

Protection Class (N/A for vehicles) ☐ Class I ☐ Class II ☐ Class III

EMC Test Plan and Constructional Data Form

(Press **F1** when field is selected to show additional information on Protection Class.)

Attendance

Test will be: ☒ Attended by the customer ☐ Unattended by the customer

Failure - *Complete this section if testing will not be attended by the customer.*

If a failure occurs, TUV Product Service should:

☐ Call contact listed above, if not available then stop testing. (After hrs phone): _____

☐ Continue testing to complete test series.

☐ Continue testing to define corrective action.

☐ Stop testing.

EUT Specifications and Requirements

Length: ~2" Width: ~5.2" Height: ~5.2" Weight: <1lb

Power Requirements

Regulations require testing to be performed at typical power ratings in the countries of intended use. (i.e., European power is typically 230 VAC 50 Hz or 400 VAC 50 Hz, single and three phase, respectively)

Voltage: 220VAC (If battery powered, make sure battery life is sufficient to complete testing.)

# of Phases: 1

Current (Amps/phase(max)): <1A Current (Amps/phase(nominal)): ~0.020

Other _____

Other Special Requirements

Typical Installation and/or Operating Environment

(ie. Hospital, Small Business, Industrial/Factory, etc.)
Installed in Electric meter

EUT Power Cable

☐ Permanent OR ☐ Removable Length (in meters): _____

☐ Shielded OR ☐ Unshielded

☐ Not Applicable

EMC Test Plan and Constructional Data Form

TÜV PRODUCT SERVICE

EUT Interface Ports and Cables

Interface Type	Analog	Digital	Qty	Shielding Yes	Shielding No	Shielding Type	Termination	Connector Type	Port Termination	Length (in meters)	Removable	Permanent
EXAMPLE: *RS232*	☐	☒	*2*	☒	☐	*Foil over braid*	*Coaxial*	*Metallized 9-pin D-Sub*	*Characteristic Impedance*	*6*	☒	☐
	☐	☐		☐	☐						☐	☐
	☐	☐		☐	☐						☐	☐
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	☐	☐		☐	☐						☐	☐

EMC Test Plan and Constructional Data Form

TÜV PRODUCT SERVICE

EUT Software.

Revision Level: 11

Description:

Equipment Under Test (EUT) Operating Modes to be Tested -- list the operating modes to be used during test. It is recommended the equipment be tested while operating in a typical operation mode. FCC testing of personal computers and/or peripherals requires that a simple program generate a complete line of upper case H's. Provide a general description of all software, firmware, and PLD algorithms used in the equipment. List all code modules as described above, with the revision level used during testing. Consult with your TÜV Product Service Representative if additional assistance is required.

1. Tested in standalone configuration only as per Joe Dichoso [Joe.Dichoso@fcc.gov]. It will be granted a limited modular approval. Limitation is that it is installed in a Landis & Gyr Focus meter.
2.
3.

Equipment Under Test (EUT) System Components -- List and describe all components which are part of the EUT. For FCC testing a minimum configuration is required. (ie. Mouse, Printer, Monitor, External Disk Drive, Motherboard, etc.)

Description	Model #	Serial #	FCC ID #

EMC Test Plan and Constructional Data Form

TÜV PRODUCT SERVICE

Support Equipment -- List and describe all support equipment which is not part of the EUT. (i.e. peripherals, simulators, etc)

Description	*Model #*	*Serial #*	*FCC ID #*

Oscillator Frequencies

Frequency	*Derived Frequency*	*Component # / Location*	*Description of Use*

Power Supply

Manufacturer	*Model #*	*Serial #*	*Type*
			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____
			☐ Switched-mode: (Frequency) _____ ☐ Linear ☐ Other: _____

Power Line Filters

Manufacturer	*Model #*	*Location in EUT*

EMC Test Plan and Constructional Data Form

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Critical EMI Components (Capacitors, ferrites, etc.)				
Description	***Manufacturer***	***Part # or Value***	***Qty***	***Component # / Location***

EMC Critical Detail -- Describe other EMC Design details used to reduce high frequency noise.

(PLEASE INSERT "**ELECTRONIC SIGNATURE**" BELOW IF POSSIBLE)

Authorization Signatures

Matt Karlgaard	6/14/05
Customer authorization to perform tests according to this test plan.	Date
Test Plan/CDF Prepared By (please print)	Date
Reviewed by TÜV Product Service Associate	Date

Test Data

TÜV PRODUCT SERVICE INC 19333 Wild Mountain Road Taylors Falls MN 55084-1758 Tel: 651 638 0297 Fax: 651 638 0298 Rev.No 1.0

Field Strength of Fundamental and Harmonics and Spurious Emissions

Specifications:
FCC Specification: Paragraph: 15.249 (a) and (d)
IC Specification: RSS-210, Paragraph: 6.2.2(m2)(1) and (3)

The *Field Strength* measurements were performed at the following test location:

☐ **- Test not applicable**

■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
☐ - Oakwood Lab (Open Area Test Site)
☐ - Wild River Lab Screen Room

at a test distance of:

☐ - 1 meters
■ - 3 meters
☐ - 10 meters

Test equipment used:

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ -	3204	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	21-Oct-05
■	2681	85650A	Hewlett-Packard	Quasi-Peak Adapter	2430A00562	03-Feb-06
■-	8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115A00853	24-Mar-06
■ -	8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	24-Mar-06
■-	3961	ZHL-1042J	Mini-Circuits	Preamplifier	D120403-1	Code B 08-Feb-06
■ -	2075	3115	Electro-Mechanics (EMCO)	Ridge Guide Ant. 1-18 GHz	9001-3275	24-Nov-05
■-	3958	SL18B4020	Phase One Microwave	Preamplifier 1 – 18 GHz	0002	Code B 17-May-06

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

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RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Notes:					
Data File Name:	2980.dat			Page:	1 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC 15.249 Fundamental	DELTA2 FCC 15.249 Harmonics w/20dB relax
High channel						
All measurements maximized						
BPF's used above 1GHz						
High channel						
1.832 GHz	69.82 Av	3.82 / 27.19 / 28.0 / 0.61	73.43	H / 1.31 / 308	n/a	-0.57
1.832 GHz	69.84 Pk	3.82 / 27.18 / 28.0 / 0.61	73.45	H / 1.31 / 308	n/a	-0.55*
Low channel						
1.827 GHz	69.35 Av	3.81 / 27.16 / 28.0 / 0.6	72.92	H / 1.31 / 308	n/a	-1.08
913.672 MHz	94.21 Qp	2.61 / 22.48 / 27.6 / 0.0	91.71	V / 1.04 / 349	-2.29	n/a
High channel						
916.138 MHz	93.88 Qp	2.62 / 22.53 / 27.6 / 0.0	91.43	V / 1.07 / 353	-2.57	n/a
2.749 GHz	46.25 Av	4.5 / 29.35 / 27.5 / 0.3	52.91	V / 1.83 / 16	n/a	-21.09
2.749 GHz	47.8 Pk	4.5 / 29.35 / 27.5 / 0.3	54.46	V / 1.83 / 16	n/a	-19.54*
3.665 GHz	56.99 Av	5.53 / 31.6 / 28.82 / 0.53	65.84	H / 1.41 / 323	n/a	-8.16
3.665 GHz	57.6 Pk	5.53 / 31.6 / 28.82 / 0.53	66.45	H / 1.41 / 323	n/a	-7.55*

Tested by: Greg Jakubowski

Printed | Signature

Reviewed by: Joel T. Schneider

Printed | Signature

RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Notes:					
Data File Name:	2980.dat			Page:	2 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC 15.249 Fundamental	DELTA2 FCC 15.249 Harmonics w/20dB relax
4.581 GHz	54.25 Av	6.18 / 32.47 / 25.9 / 0.0	67.0	V / 1.16 / 66	n/a	-7.0
4.581 GHz	54.95 Pk	6.18 / 32.47 / 25.9 / 0.0	67.7	V / 1.16 / 66	n/a	-6.3*
5.497 GHz	56.93 Av	6.8 / 34.08 / 44.61 / 0.0	53.2	V / 1.17 / 331	n/a	-20.8
5.497 GHz	58.65 Pk	6.8 / 34.08 / 44.61 / 0.0	54.92	V / 1.17 / 331	n/a	-19.08*
6.414 GHz	60.74 Av	7.68 / 34.49 / 45.69 / 0.0	57.22	V / 1.03 / 8	n/a	-16.78
6.414 GHz	61.55 Pk	7.68 / 34.49 / 45.69 / 0.0	58.03	V / 1.03 / 8	n/a	-15.97*
7.33 GHz	51.68 Av	8.1 / 36.18 / 45.76 / 0.0	50.2	H / 1.59 / 330	n/a	-23.8
7.33 GHz	56.2 Pk	8.1 / 36.18 / 45.76 / 0.0	54.72	H / 1.59 / 330	n/a	-19.28*
8.246 GHz	47.3 Av	8.82 / 37.13 / 45.56 / 0.0	47.7	H / 1.29 / 299	n/a	-26.3
8.246 GHz	54.3 Pk	8.82 / 37.13 / 45.56 / 0.0	54.7	H / 1.29 / 299	n/a	-19.3*
9.163 GHz	40.71 Av	9.33 / 37.44 / 44.33 / 0.0	43.15	H / 1.29 / 299	n/a	-30.85
9.163 GHz	47.6 Pk	9.33 / 37.44 / 44.33 / 0.0	50.04	H / 1.29 / 299	n/a	-23.96*
Low channel						
1.828 GHz	91.37 Av	3.81 / 27.16 / 49.73 / 0.0	72.61	H / 1.34 / 310	n/a	-1.39
1.828 GHz	91.38 Pk	3.81 / 27.16 / 49.73 / 0.0	72.62	H / 1.34 / 310	n/a	-1.38*
2.741 GHz	64.94 Av	4.5 / 29.33 / 48.26 / 0.0	50.51	V / 1.00 / 18	n/a	-23.49

Tested by: Greg Jakubowski

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RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Notes:					
Data File Name:	2980.dat			Page:	3 of 7

List of measurements for run #: 2

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	DELTA1 FCC 15.249 Fundamental	DELTA2 FCC 15.249 Harmonics w/20dB relax
2.741 GHz	66.2 Pk	4.5 / 29.33 / 48.26 / 0.0	51.77	V / 1.00 / 18	n/a	-22.23*
3.655 GHz	76.06 Av	5.53 / 31.58 / 46.98 / 0.0	66.19	H / 1.42 / 325	n/a	-7.81
3.655 GHz	76.2 Pk	5.53 / 31.58 / 46.98 / 0.0	66.33	H / 1.42 / 325	n/a	-7.67*
4.569 GHz	74.56 Av	6.17 / 32.45 / 45.22 / 0.0	67.95	V / 1.17 / 67	n/a	-6.05
4.569 GHz	74.75 Pk	6.17 / 32.45 / 45.22 / 0.0	68.14	V / 1.17 / 67	n/a	-5.86*
5.483 GHz	57.64 Av	6.79 / 34.06 / 44.64 / 0.0	53.85	V / 1.20 / 329	n/a	-20.15
5.483 GHz	59.4 Pk	6.79 / 34.06 / 44.64 / 0.0	55.61	V / 1.20 / 329	n/a	-18.39*
6.397 GHz	58.65 Av	7.65 / 34.49 / 45.68 / 0.0	55.11	V / 1.03 / 6	n/a	-18.89
6.396 GHz	60.9 Pk	7.65 / 34.49 / 45.69 / 0.0	57.35	V / 1.03 / 6	n/a	-16.65*
7.31 GHz	49.12 Av	8.1 / 36.13 / 45.92 / 0.0	47.43	H / 1.35 / 331	n/a	-26.57
7.31 GHz	53.55 Pk	8.1 / 36.13 / 45.92 / 0.0	51.86	H / 1.35 / 331	n/a	-22.14*
8.224 GHz	45.2 Av	8.79 / 37.11 / 45.64 / 0.0	45.46	H / 1.31 / 298	n/a	-28.54
8.224 GHz	51.5 Pk	8.79 / 37.11 / 45.64 / 0.0	51.76	H / 1.31 / 298	n/a	-22.24*
9.137 GHz	39.53 Av	9.32 / 37.42 / 44.59 / 0.0	41.69	H / 1.29 / 298	n/a	-32.31
9.137 GHz	47.55 Pk	9.32 / 37.42 / 44.59 / 0.0	49.71	H / 1.29 / 298	n/a	-24.29*

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Reviewed by: Joel T. Schneider

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RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS			
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005			
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0	°C
Test Method:	15.249			Air Pressure:	98.0	kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0	%
EUT Description:	Wireless Automatic Meter Reader					
Notes:						
Data File Name:	2980.dat			Page:	4 of 7	

Measurement summary for limit1: FCC 15.249 Fundamental (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	POL / HGT / AZ (m)(DEG)	Fundamental
913.672 MHz	94.21 Qp	2.61 / 22.48 / 27.6 / 0.0	91.71	V / 1.04 / 349	38.5 mV/m vs. 50 mV/m limit
916.138 MHz	93.88 Qp	2.62 / 22.53 / 27.6 / 0.0	91.43	V / 1.07 / 353	37.3 mV/m vs. 50 mV/m limit

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RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Notes:					
Data File Name:	2980.dat			Page:	5 of 7

Measurement summary for limit2: FCC 15.249 Harmonics w/20dB relax (Av)

FREQ	LEVEL (dBμV)	CABLE / ANT / PREAMP / ATTEN / DUTY CYCLE (dB)	FINAL (dBμV / m)	POL / HGT / AZ (m)(DEG)	Harmonics
1.832 GHz	69.82 Av	3.82 / 27.19 / 28.0 / 0.61 / 20	53.43	H / 1.31 / 308	469.4 μV/m vs. 500 μV/m limit
1.827 GHz	69.35 Av	3.81 / 27.16 / 28.0 / 0.6 / 20	52.92	H / 1.31 / 308	442.6 μV/m vs. 500 μV/m limit
4.569 GHz	74.56 Av	6.17 / 32.45 / 45.22 / 0.0 /20	47.95	V / 1.17 / 67	249.7 μV/m vs. 500 μV/m limit
4.581 GHz	54.25 Av	6.18 / 32.47 / 25.9 / 0.0 / 20	47.0	V / 1.16 / 66	223.9 μV/m vs. 500 μV/m limit
3.655 GHz	76.06 Av	5.53 / 31.58 / 46.98 / 0.0 / 20	46.19	H / 1.42 / 325	203.9 μV/m vs. 500 μV/m limit
3.665 GHz	56.99 Av	5.53 / 31.6 / 28.82 / 0.53 / 20	45.84	H / 1.41 / 323	195.9 μV/m vs. 500 μV/m limit
6.414 GHz	60.74 Av	7.68 / 34.49 / 45.69 / 0.0 / 20	37.22	V / 1.03 / 8	72.6 μV/m vs. 500 μV/m limit
6.397 GHz	58.65 Av	7.65 / 34.49 / 45.68 / 0.0 / 20	35.11	V / 1.03 / 6	57.0 μV/m vs. 500 μV/m limit
5.483 GHz	57.64 Av	6.79 / 34.06 / 44.64 / 0.0 / 20	33.85	V / 1.20 / 329	>20 dB vs. 500 μV/m limit
5.497 GHz	56.93 Av	6.8 / 34.08 / 44.61 / 0.0 / 20	33.2	V / 1.17 / 331	>20 dB vs. 500 μV/m limit
2.749 GHz	46.25 Av	4.5 / 29.35 / 27.5 / 0.3 / 20	32.91	V / 1.83 / 16	>20 dB vs. 500 μV/m limit
2.741 GHz	64.94 Av	4.5 / 29.33 / 48.26 / 0.0 / 20	30.51	V / 1.00 / 18	>20 dB vs. 500 μV/m limit
7.33 GHz	51.68 Av	8.1 / 36.18 / 45.76 / 0.0 / 20	30.2	H / 1.59 / 330	>20 dB vs. 500 μV/m limit
8.246 GHz	47.3 Av	8.82 / 37.13 / 45.56 / 0.0 / 20	27.7	H / 1.29 / 299	>20 dB vs. 500 μV/m limit
7.31 GHz	49.12 Av	8.1 / 36.13 / 45.92 / 0.0 / 20	27.43	H / 1.35 / 331	>20 dB vs. 500 μV/m limit
8.224 GHz	45.2 Av	8.79 / 37.11 / 45.64 / 0.0 / 20	25.46	H / 1.31 / 298	>20 dB vs. 500 μV/m limit
9.163 GHz	40.71 Av	9.33 / 37.44 / 44.33 / 0.0 / 20	23.15	H / 1.29 / 299	>20 dB vs. 500 μV/m limit
9.137 GHz	39.53 Av	9.32 / 37.42 / 44.59 / 0.0 / 20	21.69	H / 1.29 / 298	>20 dB vs. 500 μV/m limit
1.832 GHz	69.84 Pk	3.82 / 27.18 / 28.0 / 0.61 / 20	53.45	H / 1.31 / 308	>20 dB vs. 5 mV/m limit
2.749 GHz	47.8 Pk	4.5 / 29.35 / 27.5 / 0.3 / 20	34.46	V / 1.83 / 16	>20 dB vs. 5 mV/m limit

Tested by: Greg Jakubowski

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RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS			
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005			
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0	°C
Test Method:	15.249			Air Pressure:	98.0	kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0	%
EUT Description:	Wireless Automatic Meter Reader					
Notes:						
Data File Name:	2980.dat			Page:	6 of 7	

Measurement summary for limit2: FCC 15.249 Harmonics w/20dB relax (Av)

FREQ	LEVEL (dBµV)	CABLE / ANT / PREAMP / ATTEN / DUTY CYCLE (dB)	FINAL (dBµV / m)	POL / HGT / AZ (m)(DEG)	Harmonics
3.665 GHz	57.6 Pk	5.53 / 31.6 / 28.82 / 0.53 / 20	46.45	H / 1.41 / 323	>20 dB vs. 5 mV/m limit
4.581 GHz	54.95 Pk	6.18 / 32.47 / 25.9 / 0.0 / 20	47.7	V / 1.16 / 66	>20 dB vs. 5 mV/m limit
5.497 GHz	58.65 Pk	6.8 / 34.08 / 44.61 / 0.0 / 20	34.92	V / 1.17 / 331	>20 dB vs. 5 mV/m limit
6.414 GHz	61.55 Pk	7.68 / 34.49 / 45.69 / 0.0 / 20	38.03	V / 1.03 / 8	>20 dB vs. 5 mV/m limit
7.33 GHz	56.2 Pk	8.1 / 36.18 / 45.76 / 0.0 / 20	34.72	H / 1.59 / 330	>20 dB vs. 5 mV/m limit
8.246 GHz	54.3 Pk	8.82 / 37.13 / 45.56 / 0.0 / 20	34.7	H / 1.29 / 299	>20 dB vs. 5 mV/m limit
9.163 GHz	47.6 Pk	9.33 / 37.44 / 44.33 / 0.0 / 20	30.04	H / 1.29 / 299	>20 dB vs. 5 mV/m limit
1.828 GHz	91.38 Pk	3.81 / 27.16 / 49.73 / 0.0 / 20	52.62	H / 1.34 / 310	>20 dB vs. 5 mV/m limit
2.741 GHz	66.2 Pk	4.5 / 29.33 / 48.26 / 0.0 / 20	31.77	V / 1.00 / 18	>20 dB vs. 5 mV/m limit
3.655 GHz	76.2 Pk	5.53 / 31.58 / 46.98 / 0.0 / 20	46.33	H / 1.42 / 325	>20 dB vs. 5 mV/m limit
4.569 GHz	74.75 Pk	6.17 / 32.45 / 45.22 / 0.0 / 20	48.14	V / 1.17 / 67	>20 dB vs. 5 mV/m limit
5.483 GHz	59.4 Pk	6.79 / 34.06 / 44.64 / 0.0 / 20	35.61	V / 1.20 / 329	>20 dB vs. 5 mV/m limit
6.396 GHz	60.9 Pk	7.65 / 34.49 / 45.69 / 0.0 / 20	37.35	V / 1.03 / 6	>20 dB vs. 5 mV/m limit
7.31 GHz	53.55 Pk	8.1 / 36.13 / 45.92 / 0.0 / 20	31.86	H / 1.35 / 331	>20 dB vs. 5 mV/m limit
8.224 GHz	51.5 Pk	8.79 / 37.11 / 45.64 / 0.0 / 20	31.76	H / 1.31 / 298	>20 dB vs. 5 mV/m limit
9.137 GHz	47.55 Pk	9.32 / 37.42 / 44.59 / 0.0 / 20	29.71	H / 1.29 / 298	>20 dB vs. 5 mV/m limit

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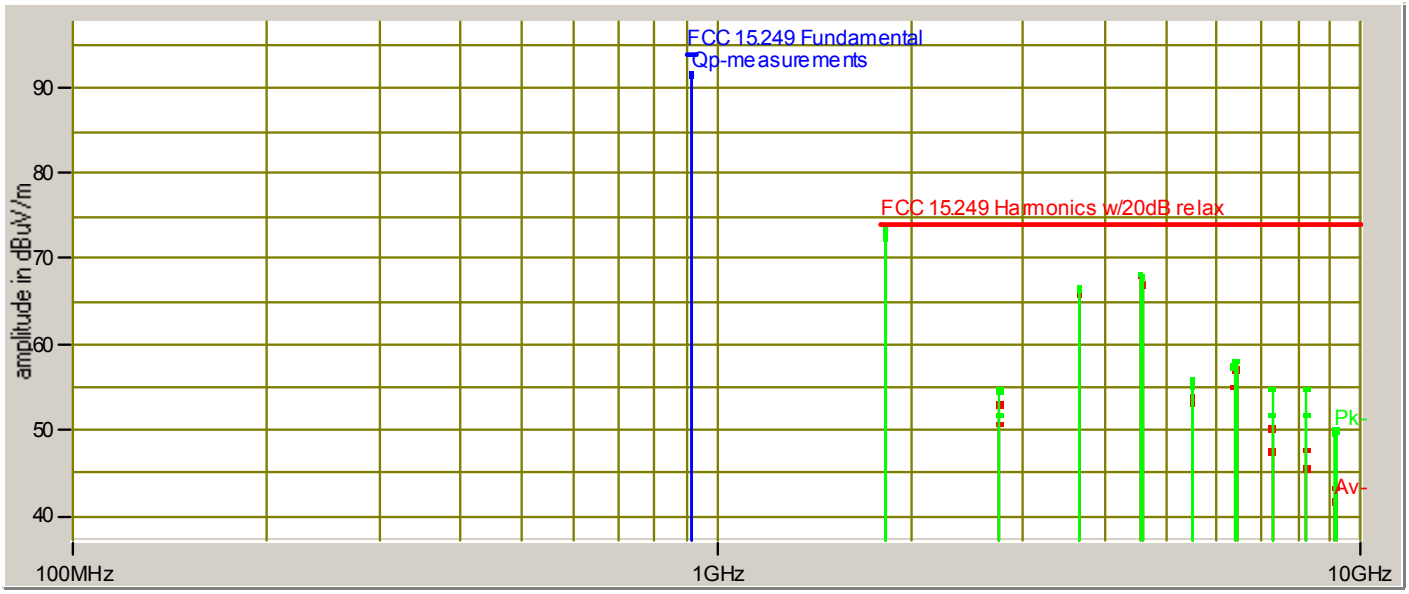
RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Notes:					
Data File Name:	2980.dat			Page:	7 of 7

Graph:



Tested by: Greg Jakubowski

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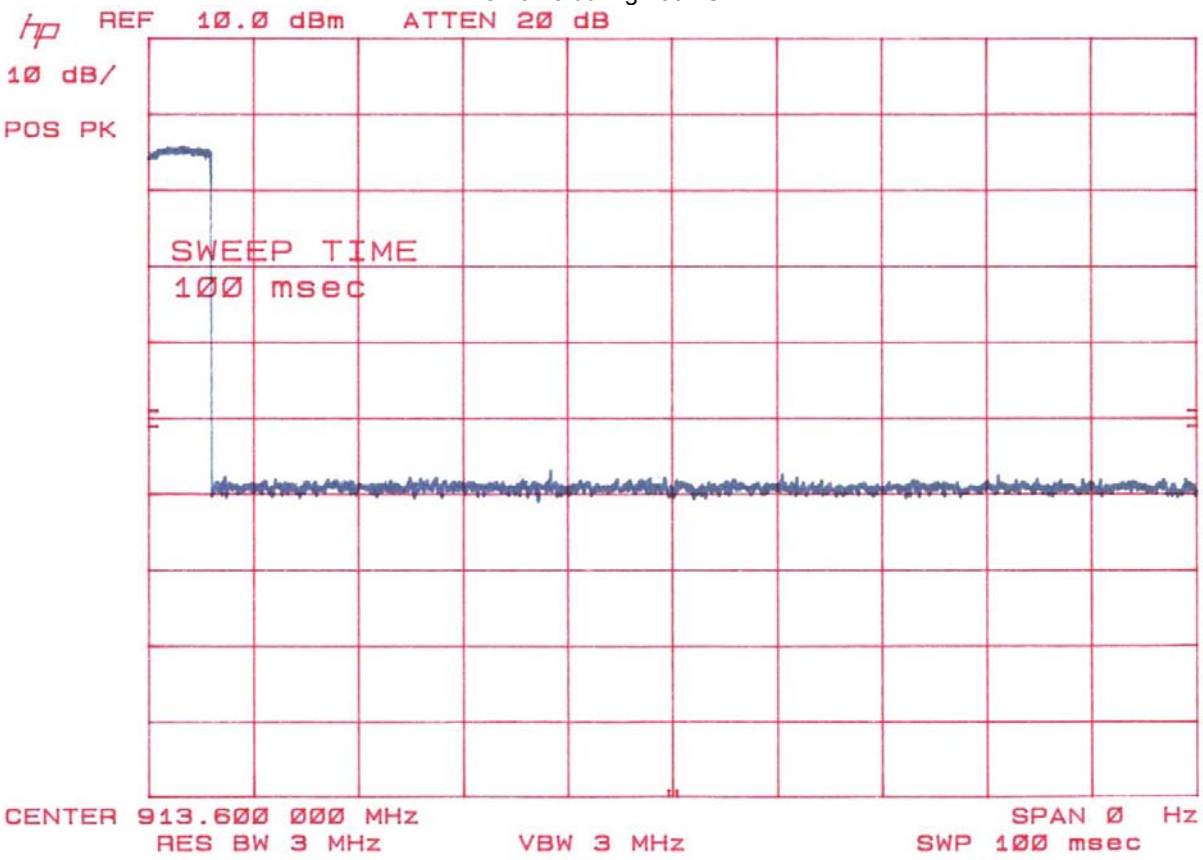
RADIATED EMISSIONS

Test Report #:	WC502980 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/6/2005		
EUT Serial #:	53000429	EUT Power:	220VAC / 60Hz	Temperature:	23.0 °C
Test Method:	15.249			Air Pressure:	98.0 kPa
Customer:	Hunt Technologies			Rel. Humidity:	50.0 %
EUT Description:	Wireless Automatic Meter Reader				
Data File Name:	2980.dat			Page:	1 of 1

On time during 100mS



Tested by: Greg Jakubowski

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Reviewed by: Joel T. Schneider

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Band Edge Compliance

Specifications:
FCC Specification: Paragraph: 15.249 (d)
IC Specification: RSS-210, Paragraph: 6.2.2(m2)(3)

The *Band Edge Compliance* measurements were performed at the following test location:

☐ **- Test not applicable**

■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
☐ - Oakwood Lab (Open Area Test Site)
☐ - Wild River Lab Screen Room

at a test distance of:

☐ - 1 meters
■ - 3 meters
☐ - 10 meters

Test equipment used :

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ -	3204	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	21-Oct-05
■	2681	85650A	Hewlett-Packard	Quasi-Peak Adapter	2430A00562	03-Feb-06
■-	8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115A00853	24-Mar-06
■ -	8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	24-Mar-06
■-	3961	ZHL-1042J	Mini-Circuits	Preamplifier	D120403-1	Code B 08-Feb-06

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

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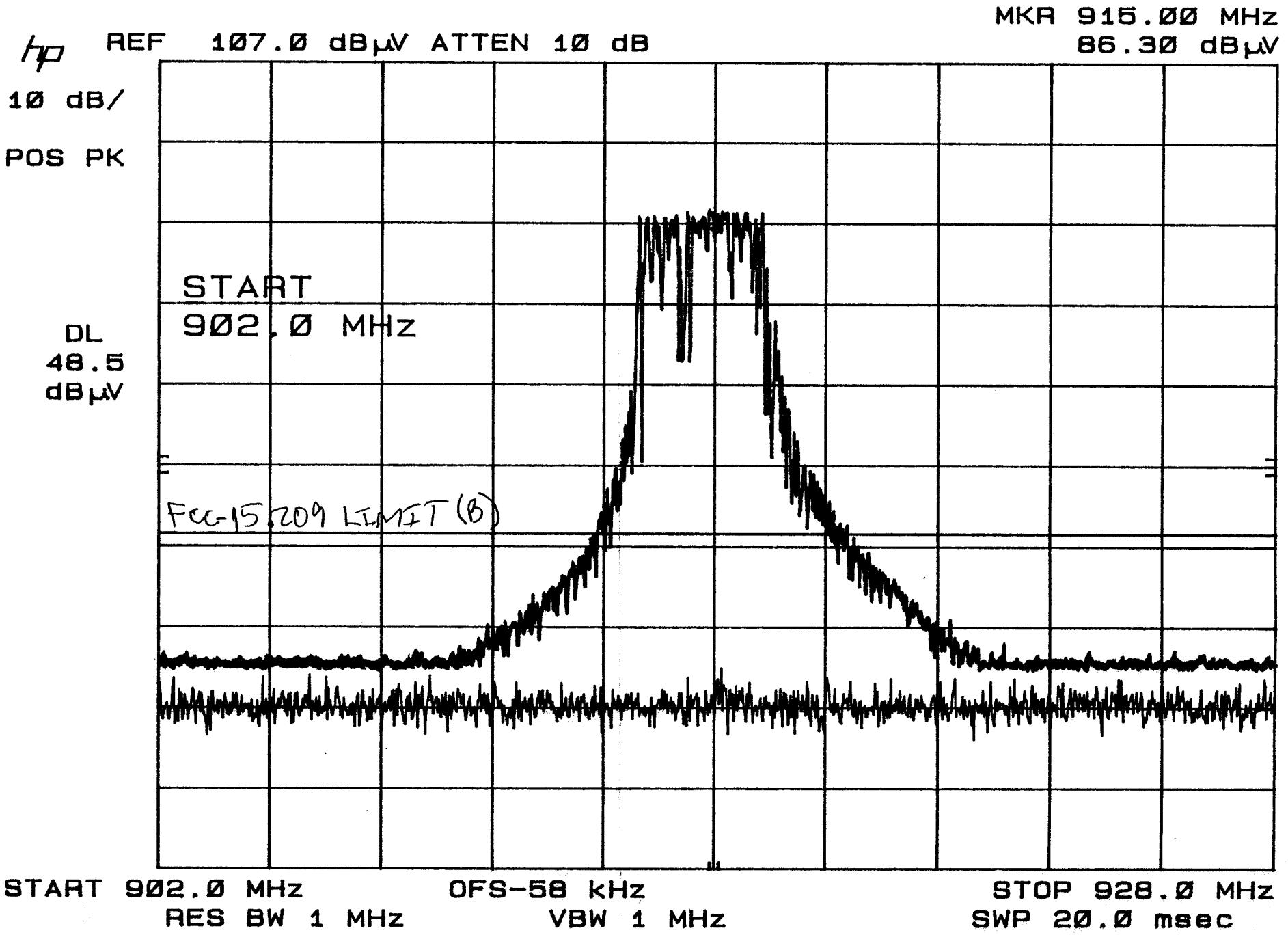
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86.30 dBµV
REF 107.0 dBµV ATTEN 10 dB
10 dB/
POS PK
START
902.0 MHz
DL
48.5
dBµV
FCC-15.209 LIMIT (B)
START 902.0 MHz
RES BW 1 MHz
OFS-58 kHz
VBW 1 MHz
STOP 928.0 MHz
SWP 20.0 msec

Emission Bandwidth

Specifications:
IC Specification: RSS-210, 5.9.1

The *Emission Bandwidth* measurements were performed at the following test location:

☐ **- Test not applicable**

■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
☐ - Oakwood Lab (Open Area Test Site)
☐ - Wild River Lab Screen Room

Test equipment used :

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ -	3204	EM-6917B	Electro-Metrics	Biconicalog Periodic	102	21-Oct-05
■	2681	85650A	Hewlett-Packard	Quasi-Peak Adapter	2430A00562	03-Feb-06
■-	8052	8566B	Hewlett-Packard	Spectrum Analyzer	2115A00853	24-Mar-06
■ -	8051	85662A	Hewlett-Packard	Analyzer Display	2112A02220	24-Mar-06
■-	3961	ZHL-1042J	Mini-Circuits	Preamplifier	D120403-1	Code B 08-Feb-06

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

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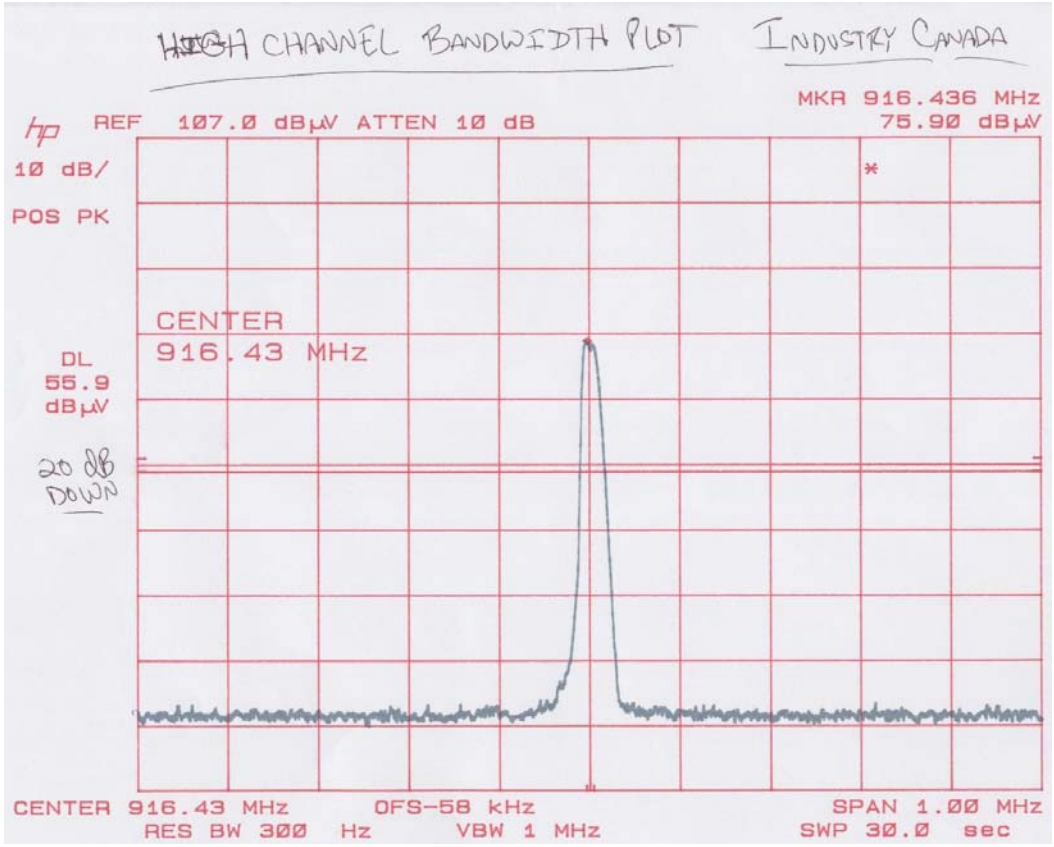
RADIATED EMISSIONS

Test Report #:	WC502907 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Data File Name:	2907.dat			Page:	1 of 2



20 dB bw = 30 kHz

Tested by: R. M. Johnson

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Reviewed by: J. T. Schneider

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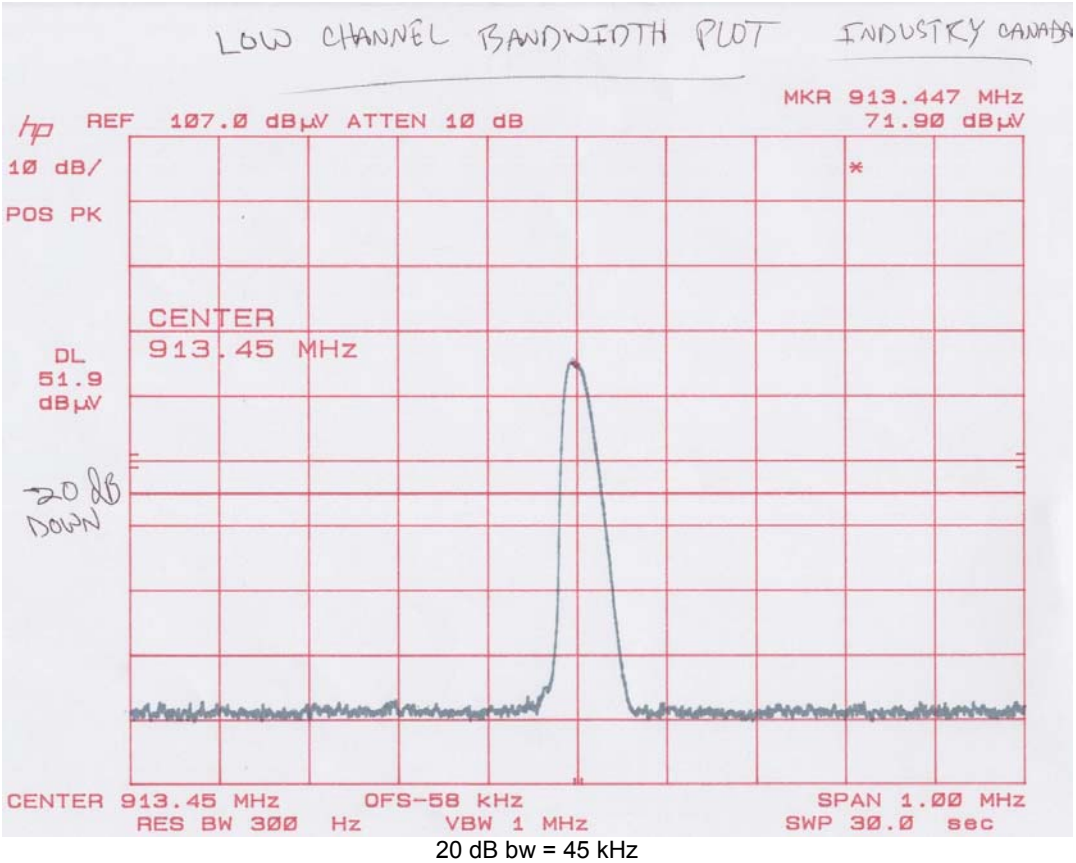
RADIATED EMISSIONS

Test Report #:	WC502907 Run 2	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Data File Name:	2907.dat			Page:	2 of 2



20 dB bw = 45 kHz

Tested by: R. M. Johnson

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Reviewed by: J. T. Schneider

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AC Line Conducted Emissions

Specifications:
FCC Part 15 Section 15.207
RSS-210 Section 6.6

The *AC Line Conducted Emission* measurements were performed at the following test location:

☐ **- Test not applicable**

■ - Wild River Lab Large Test Site (Open Area Test Site)
☐ - Wild River Lab Small Test Site (Open Area Test Site)
☐ - Oakwood Lab (Open Area Test Site)
☐ - Wild River Lab Screen Room

Test equipment used :

	TUV ID	Model Number	Manufacturer	Description	Serial Number	Cal Due
■ -	2416	3825/2	Electro-Mechanics (EMCO)	50 Ω LISN	8812-1437	Code B 05-Jan-06
■ -	3800	ESCS 30	Rhode & Schwarz	EMI Receiver	100312	18-Jan-06

Cal Code B = Calibration verification performed internally. Cal Code Y = Calibration not required when used with other calibrated equipment.

All measurement instrumentation is traceable to the National Institute of Standards and Technology (NIST) and is calibrated annually.

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CONDUCTED EMISSIONS

Test Report #:	WC502907 Run 3	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Notes:	STAND ALONE - S/N: 427 WITH R25 = 47 OHMS. R27 = 300 OHMS				
Data File Name:	2907.dat			Page:	1 of 4

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
245.0 kHz	17.23 Qp	0.1 / 1.78 / 0.0 / 0.0	19.11	L1	-42.82	n/a
330.0 kHz	19.07 Qp	0.1 / 1.35 / 0.0 / 0.0	20.52	L1	-38.93	n/a
460.0 kHz	23.29 Qp	0.1 / 0.85 / 0.0 / 0.0	24.24	L1	-32.45	n/a
1.705 MHz	27.95 Qp	0.2 / 0.5 / 0.0 / 0.0	28.65	L1	-27.35	n/a
13.8 MHz	22.77 Qp	0.83 / 0.6 / 0.0 / 0.0	24.19	L1	-35.81	n/a
19.66 MHz	26.93 Qp	0.98 / 0.74 / 0.0 / 0.0	28.65	L1	-31.35	n/a
245.0 kHz	12.0 Av	0.1 / 1.78 / 0.0 / 0.0	13.88	L1	n/a	-38.05
330.0 kHz	13.0 Av	0.1 / 1.35 / 0.0 / 0.0	14.45	L1	n/a	-35.0
460.0 kHz	14.0 Av	0.1 / 0.85 / 0.0 / 0.0	14.95	L1	n/a	-31.74
1.705 MHz	27.58 Av	0.2 / 0.5 / 0.0 / 0.0	28.28	L1	n/a	-17.72
13.8 MHz	16.22 Av	0.83 / 0.6 / 0.0 / 0.0	17.64	L1	n/a	-32.36
19.66 MHz	25.58 Av	0.98 / 0.74 / 0.0 / 0.0	27.3	L1	n/a	-22.7
19.66 MHz	25.73 Av	0.98 / 0.74 / 0.0 / 0.0	27.45	L1	n/a	-22.55
245.0 kHz	17.09 Qp	0.1 / 1.78 / 0.0 / 0.0	18.97	N	-42.96	n/a
330.0 kHz	19.19 Qp	0.1 / 1.35 / 0.0 / 0.0	20.64	N	-38.81	n/a
460.0 kHz	23.49 Qp	0.1 / 0.85 / 0.0 / 0.0	24.44	N	-32.25	n/a
1.705 MHz	26.25 Qp	0.2 / 0.5 / 0.0 / 0.0	26.95	N	-29.05	n/a
13.8 MHz	17.99 Qp	0.83 / 0.6 / 0.0 / 0.0	19.41	N	-40.59	n/a
19.66 MHz	7.09 Qp	0.98 / 0.74 / 0.0 / 0.0	8.81	N	-51.19	n/a
245.0 kHz	10.0 Av	0.1 / 1.78 / 0.0 / 0.0	11.88	N	n/a	-40.05
330.0 kHz	10.9 Av	0.1 / 1.35 / 0.0 / 0.0	12.35	N	n/a	-37.1
460.0 kHz	11.5 Av	0.1 / 0.85 / 0.0 / 0.0	12.45	N	n/a	-34.24

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CONDUCTED EMISSIONS

Test Report #:	WC502907 Run 3	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Notes:	STAND ALONE - S/N: 427 WITH R25 = 47 OHMS. R27 = 300 OHMS				
Data File Name:	2907.dat			Page:	2 of 4

List of measurements for run #: 3

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp	DELTA2 EN55022 B Avg
1.705 MHz	23.57 Av	0.2 / 0.5 / 0.0 / 0.0	24.27	N	n/a	-21.73
13.8 MHz	18.01 Av	0.83 / 0.6 / 0.0 / 0.0	19.43	N	n/a	-30.57
19.66 MHz	3.67 Av	0.98 / 0.74 / 0.0 / 0.0	5.39	N	n/a	-44.61
END OF SCAN.						

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CONDUCTED EMISSIONS

Test Report #:	WC502907 Run 3	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Notes:	STAND ALONE - S/N: 427 WITH R25 = 47 OHMS. R27 = 300 OHMS				
Data File Name:	2907.dat			Page:	3 of 4

Measurement summary for limit1: EN55022 B Qp (Qp)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA1 EN55022 B Qp
1.705 MHz	27.95 Qp	0.2 / 0.5 / 0.0 / 0.0	28.65	L1	-27.35
19.66 MHz	26.93 Qp	0.98 / 0.74 / 0.0 / 0.0	28.65	L1	-31.35
460.0 kHz	23.49 Qp	0.1 / 0.85 / 0.0 / 0.0	24.44	N	-32.25
13.8 MHz	22.77 Qp	0.83 / 0.6 / 0.0 / 0.0	24.19	L1	-35.81
330.0 kHz	19.19 Qp	0.1 / 1.35 / 0.0 / 0.0	20.64	N	-38.81
245.0 kHz	17.23 Qp	0.1 / 1.78 / 0.0 / 0.0	19.11	L1	-42.82

Measurement summary for limit2: EN55022 B Avg (Av)

FREQ	LEVEL (dBuV)	CABLE / ANT / PREAMP / ATTEN (dB)	FINAL (dBuV / m)	EUT Lead	DELTA2 EN55022 B Avg
1.705 MHz	27.58 Av	0.2 / 0.5 / 0.0 / 0.0	28.28	L1	-17.72
19.66 MHz	25.73 Av	0.98 / 0.74 / 0.0 / 0.0	27.45	L1	-22.55
13.8 MHz	18.01 Av	0.83 / 0.6 / 0.0 / 0.0	19.43	N	-30.57
460.0 kHz	14.0 Av	0.1 / 0.85 / 0.0 / 0.0	14.95	L1	-31.74
330.0 kHz	13.0 Av	0.1 / 1.35 / 0.0 / 0.0	14.45	L1	-35.0
245.0 kHz	12.0 Av	0.1 / 1.78 / 0.0 / 0.0	13.88	L1	-38.05

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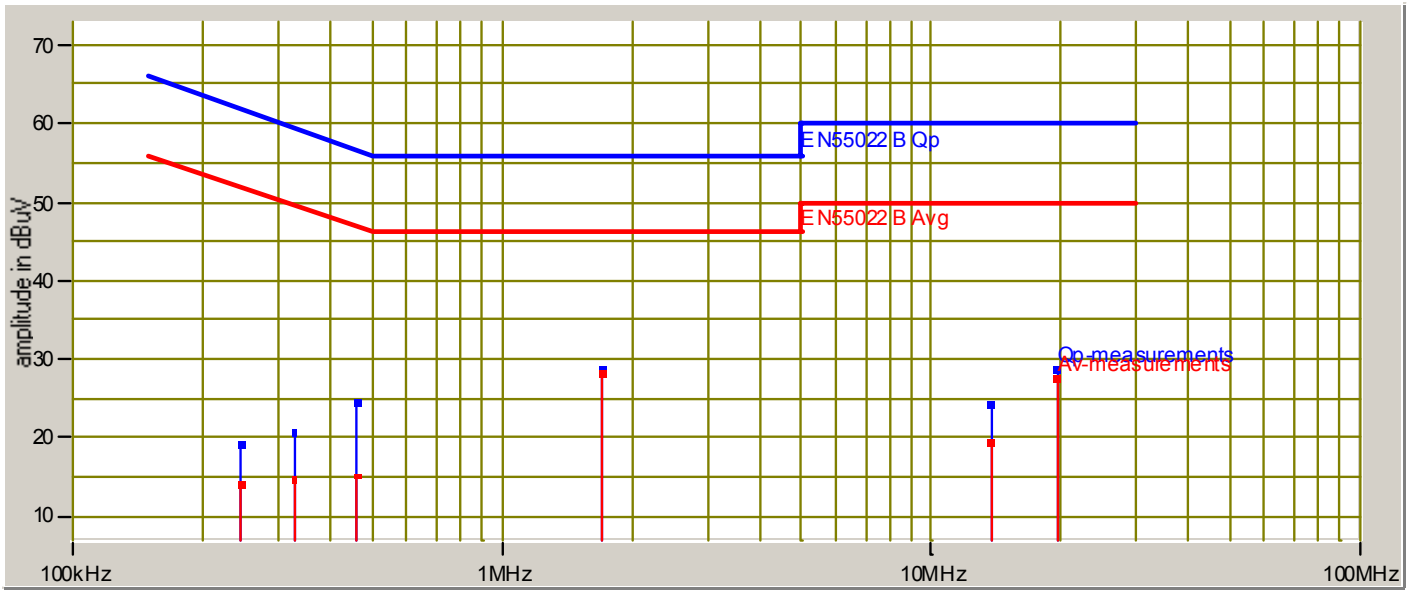
CONDUCTED EMISSIONS

Test Report #:	WC502907 Run 3	Test Area:	LTS		
EUT Model #:	FASY-0622-0001-NS	Date:	6/1/2005		
EUT Serial #:	53000427	EUT Power:	60Hz/220VAC	Temperature:	21.0 °C
Test Method:	FCC 15.249			Air Pressure:	98.0 kPa
Customer:	HUNT TECHNOLOGIES			Rel. Humidity:	25.0 %
EUT Description:	WIRELESS AUTOMATIC METER READER				
Notes:	STAND ALONE - S/N: 427 WITH R25 = 47 OHMS. R27 = 300 OHMS				
Data File Name:	2907.dat			Page:	4 of 4

Graph:



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