Amber Helm Development L.C.
92723 Michigan Hwy-152
Sister Lakes, MI 49047

EMC Test Report

#0901293FX
Issued 3/02/10

Regarding the FCC Part 15, SubPart B testing

Model Number: Cat Caller TX

Category: 2.4 GHz Intentional Transmitting Device

Judgments: FCC Article 15.249, FCC Part 15 Class B – Compliant
FCC Equipment Class P1D, IC Class P1DBN

NVLAP LAB CODE 200129-0

Prepared for:

Edward T. Schmitt
Buztronics
4343 West 62nd Street
Indianapolis, Indiana, 46268

Test Date(s): 9/14/09-02/17/10

Report prepared by:

David J. Miller, NCE

Report reviewed by

Gordon L. Helm, NCE

Data recorded by:

Gordon L. Helm, NCE

Test Engineer, AHD

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Statements concerning this report

NVLAP Accreditation: NVLAP Lab Code 200129-0
The scope of AHD accreditation are the test methods of:

IEC/CISPR 22:	Limits and methods measurement of radio disturbance characteristics of information technology equipment.
FCC Method – 47 CFT Part 15:	Digital Devices.
AS/NZS 3548:	Electromagnetic Interference – Limits and Methods of Measurement of Information Technology Equipment.
IEC61000-4-2 and Amend.1:	Electrostatic Discharge Immunity
IEC61000-4-5:	Surge Immunity

Test Data:
This test report contains data included in the scope of NVLAP accreditation.

Subcontracted Testing:
This report does not contain data produced under subcontract.

Test Traceability:
The calibration of all measuring and test equipment and the measured data using this equipment are traceable to the National Institute for Standards and Technology (NIST).

Limitations on results:
The test results contained in this report relate only to the Item(s) tested. Any electrical or mechanical modification made to the test item subsequent to the test date shall invalidate the data presented in this report. Any electrical or mechanical modification made to the test item subsequent to this test date shall require an evaluation to verify continued compliance.

Limitations on copying:
This report shall not be reproduced, except in full, without the written approval of AHD.

Limitations of the report:
This report shall not be used to claim product endorsement by NVLAP, FCC, or any agency of the US Government.

Statement of Test Results Uncertainty:
Following the guidelines of NAMAS publication NIS81 and NIST Technical Note 1297, the Measurement Uncertainty at a 95% confidence level is determined to be: ± 1.4 dB

Retention of Records:
For equipment verified to comply with FCC regulations, the manufacturer is obliged to retain this report with the product records for ten years following the manufacture of the equipment that was tested.

For equipment verified to comply with RSS-210, the manufacturer is obliged to retain this report with the product records for as long as the model is being marketed in Canada.

FCC Required user statements:

Applies to: [Class A or B Digital Devices or Peripheral].

For products satisfying the FCC Part 15 Class A or Class B requirements the following are to be satisfied:

1. The following statement is required to be labeled on the product or, if the device is too small, in the user's manual:

   This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

2. A statement is required to be placed in the User's Manual shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

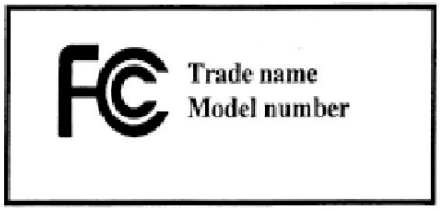
Additionally, for products satisfying the FCC Part 15 Class B requirements the following are to be satisfied:

1. The User's Manual shall include this or similar statement:

   NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

   i. Reorient or relocate the receiving antenna.
   ii. Increase the separation between the equipment and receiver.
   iii. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
   iv. Consult the dealer or an experienced radio/TV technician for help.

2. For products certified using the Declaration of Conformity approach,
   a. The FCC conformity LOGO is to be placed on the Class B Digital Device.



   b. The FCC requires a Compliance Information statement (Declaration of Conformity) to accompany each product to the end user.

Industry Canada Required user statements:

Applies to: [Category II Equipment]

1. For products satisfying the ICES-003, RSS-Gen and RSS-210 Issue 7 requirements the following are to be satisfied:

   User manuals for license-exempt LPDs shall contain the following or equivalent statements in a conspicuous position:

   "Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

   If the antenna is detachable (i.e. selectable by the user), see the user manual requirement in Section 7.1.4. The following instructions in the user manual are also required:

   "To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropic radiated power (e.i.r.p.) is not more than that permitted for successful communication."

   The above statements may be placed on the device instead of the manual.

2. User Manual:

   User manual shall also contain text declaring compliance to the limits found in this Standard in both English and French.

3. Equipment Labels:

   Equipment subject to certification under the applicable RSS's, shall be permanently labeled on each item, or as an inseparable combination. The label must contain the following information for full compliance:

   (a) the certification number, prefixed by the term "IC:";
   (b) the manufacturer's name, trade name or brand name; and
   (c) a model name or number.

   Equipment for which a certificate has been issued is not considered certified if it is not properly labeled.

   The information on the Canadian label can be combined with the manufacturer's other labeling requirements.

   If the device size is too small to put a label, the label can be included in the user's manual, upon agreement with Industry Canada.

Summary of Results

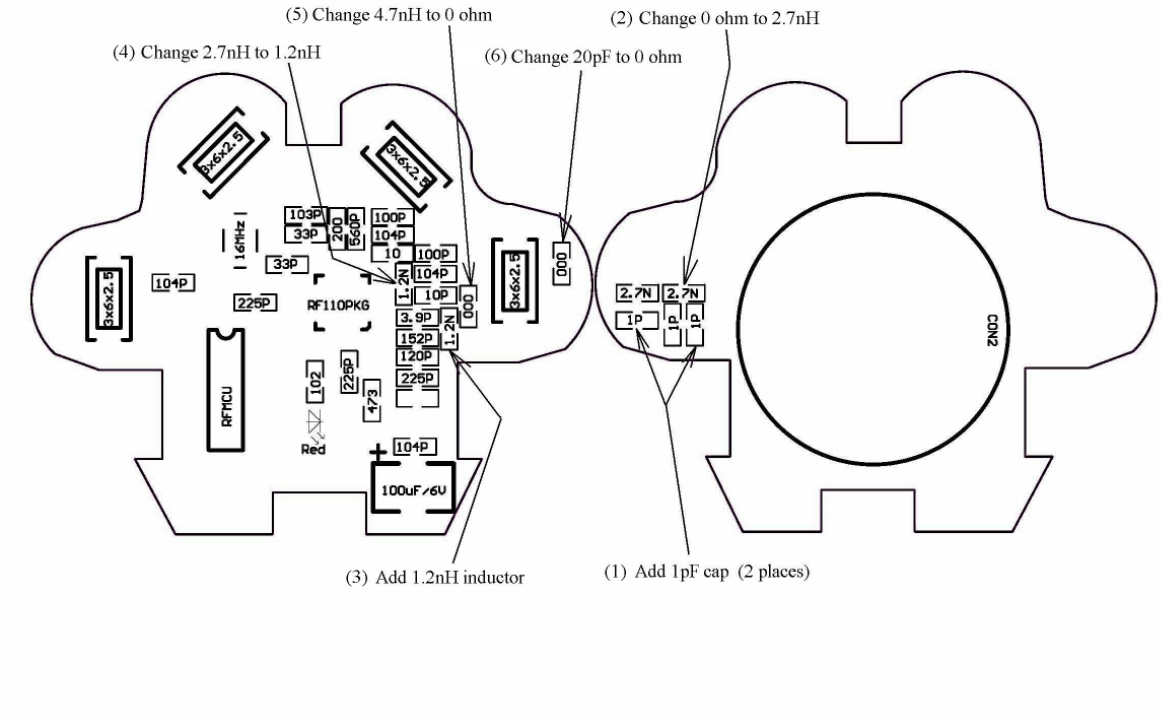
1. The device model number Cat Caller TX was tested for compliance with FCC Regulations, Part 15 SubPart C. These tests were performed at AHD EMC Laboratory following the procedures outlined in ANSI C63.4.
2. The test results apply to model Cat Caller TX.
3. The devices tested is compliant to the requirements of CFR 47, FCC Part 15, SubPart C for operation in the 2400-2483.5 MHz frequency band, (Part 15.249).
4. The equipment under test was received on 9/14/2009 and this test series commenced on 9/14/2009.
5. Prescan of spurious radiated emission levels indicated no measurable spurious radiated signals.
6. Radiated fundamental signals are within the FCC 15.249 band limits of 2.4 GHz and 2.483 GHz.
7. A peak detector mode was used to measure transmit power, therefore a correction factor corresponding to the normal operational duty cycle is required to correlate peak measurements to the limits expressed in terms of average detection. The width of a transmitted packet was measured to be 0.937 mSec. The time period from one packet to the next was measured to be 16.6 mSec. Over the FCC 15.35c specified 100 mSec period, the packet width represents a 5.64% duty cycle, or –24.97 dB. This exceeds the maximum allowed peak to average limit of 20 dB (FCC 15.35b), so a -20 dB correction factor is used to calculate average values from peak measurements.
8. The radiated fundamental transmit emission level nearest the limit occurred at 2410 MHz. The field strength level of the fundamental was observed to be 33.93 below the average limit of 94dBuV/m. The EUT was positioned on the END orientation and the receive antenna oriented in the vertical polarization.
9. The worst case average transmit measurement at 2410 MHz of 60.07dB minus 50dB equals 10.07dB. This represents greater attenuation than the spurious limit of 54 dB. Therefore the spurious limit of 54dB is used for determining compliance of band edge signals to the FCC 15.249d standard.
10. The transmitter EIRP measurement at 2410 MHz was 29.97 dB below the Industry Canada RSS-102 Issue 3 limit for requiring SAR evaluation. For this reason IC SAR testing is not required on this product.
11. The radiated second harmonic transmit emission level nearest the limit occurred at 4820 MHz. The field strength level was observed to be 10.91dB below the average limit of 54 dBuV/m (500uV/m). The EUT was positioned on the FLAT orientation and the receive antenna oriented in the Horizontal polarization.
12. The radiated upper level harmonic transmit emission level nearest the limit occurred at 9640 MHz. The field strength level was observed to be 10.1 dB below the average limit of 54 dBuV/m (500uV/m).

13. FCC (20 dB below peak) bandwidth was recorded at 3.1 MHz, and Industry Canada (99% Occupied BW per RSS-Gen Issue 2 section 4.5.1) bandwidth was measured at 3.35 MHz. The minimum and maxumum measured FCC frequencies are 2407.8 MHz and 2410.9 MHz respectively.

Changes Made to Achieve Compliance:

1. Two 0603 1pF capacitors added to PCB rear per attached diagram.
2. Change 0603 0 ohm resistor to one 0603 2.7nH inductor on PCB rear per attached diagram.
3. One 0603 1.2nH inductor added to PCB front per attached diagram.
4. Changed 0603 2.7nH inductor to 0603 1.2nH inductor on PCB front per attached diagram.
5. Changed 0603 4.7nH inductor to 0603 0 ohm resistor on PCB front per attached diagram.
6. Changed 0603 20 pF capacitor to 0603 0 ohm resistor on PCB front per attached diagram.

PCB Modification Diagram



EUT Descriptions

Model: Cat Caller 2.4 GHz intentional Transmitter

Model number: Cat Caller TX

Serial/ID No: AHD25

Description: 2.4 GHz Intentionally Radiating Device. The device digitally addresses up to 3 receiving devices, which are attached to the collars of cats. When the transmitter is activated, multi-tone audio is produced by the addressed receiver.

Antenna: Integrated on PCB

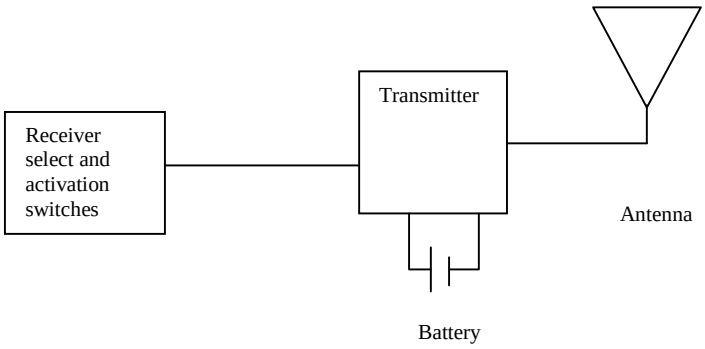
Specifications:

Input Power: CR2032 3.3V Battery

Outputs Signals: 2.4 GHz Digital Transmission

Input Signals: Activation and Receiver Selection Switches

EUT Block Diagram:



EUT Pictures

Exterior Top View

Exterior Bottom View

Interior PCB Top View

Interior PCB Bottom View

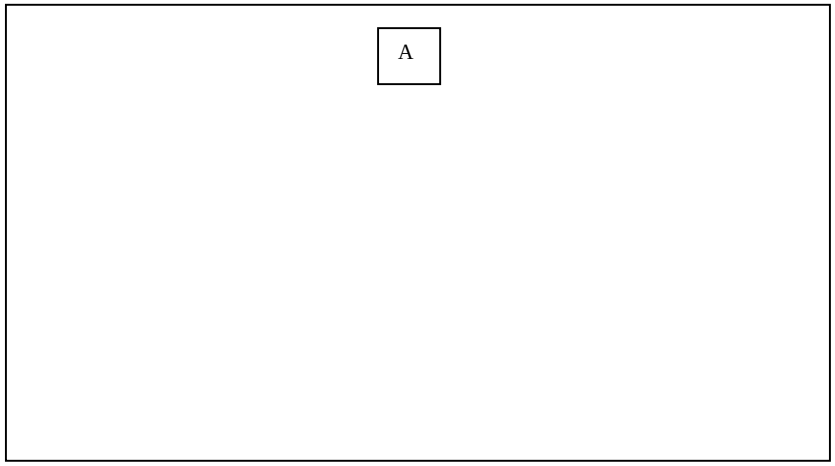
Associated Device View

Equipment Test Setup:

Support Equipment & Cabling

Setup Diagram Legend	Description	Model	Serial No. / Part No.	EMC Consideration
A	EUT – Cat Caller RT	Cat Caller TX	AHD 25	2.4 GHz Digital Transmitter

Block Diagram

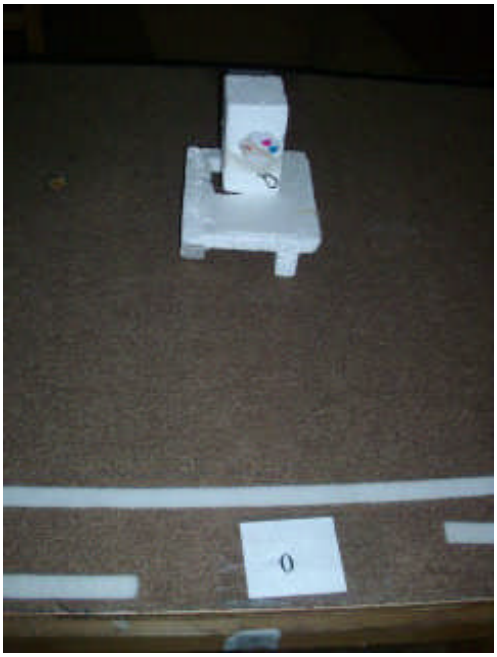


Setup Pictures

Radiated Prescreen Setup

Transmit Setup – Switch Activation View

Transmit Setup – Flat Orientation



Transmit Setup – Side Orientation

Transmit Setup – End Orientation

Measurement Report

Standards Applied to Test

ANSI C63.4 – 2003
CFR47 FCC Part 15, SubPart B, Class B limits
AHD/SEI test procedures TP0101LC, TP0102RA

Equipment Configuration

For the testing, the placement of the EUT and the support equipment was selected to –

- Be a representation of a configuration typical of user installation, and
- Comply with the minimum system configuration of ANSI C63.4.

Test Methodology

Radiated:

Spurious radiated testing was performed at a 3 meter open field test site, and completed according to the procedures in FCC 15, SubPart B with supporting instructions from ANSI C63.4. Please reference Appendix A for further details on Test Methodology.

A scan of the EUT was made in a shielded room to study the emission profile of this EUT. This scan indicated no measurable spurious emissions from the unit.

Measurements were performed at a distance of 3 meters from the receive antenna.

For transmit signal strength measurement, the EUT was configured to operate in a maximized packet rate mode and measurements were taken at the mid-range fundamental and second harmonic frequencies (2442, 4884 MHz) in two polarizations (horizontal, vertical) and three orientations (flat, side, and end.) This was done to determine the EUT orientation that maximized emissions.

Band edge (2400 and 2483 MHz) measurements were also taken to ensure compliance with FCC 15.249d requirements.

Because peak detection was utilized to test the device, zero span (time scale) measurements were taken to determine PWM duty cycle attenuation. Based on these findings, the maximized data rate mode (peak) measurements were then compensated –20dB to provide average transmit signal strength for comparison to FCC limits.

For the purpose of evaluating Industry Canada SAR requirements, EIRP was calculated from the peak measured power using the formula P=(E*D)^2/(30*G), with a value of 1 used for G as a worst case condition.

Bandwidth measurements were taken using FCC (20 dB below peak) and Industry Canada (99% Occupied BW per RSS-Gen Issue 2 section 4.5.1) standards.

Upper level harmonics were measured to10 harmonics (24 GHz) over the total range of operating frequencies. Worst case signal conditions were recorded at harmonics of the low, mid, and high operating range frequencies.

Tx Harmonics over 6 GHz were measured at the U of M test Site (see Appendix.)

The EUT was exercised as follows:

1. Device was powered via battery.
2. The device was placed in a mode that maximized data output, addressing the maximum three receivers.
3. The device was activated using nonconductive clamping to activate the transmitter.
4. Device operation was demonstrated by associated receive devices emitting a multi-tone audio chirp, indicating device operation.

The EUT under test was placed per ANSI C63.4

The cables were manipulated to produce the highest signal level relative to the limit.

The pictures, in the preceding pages, show the position of the equipment and cabling that produced the maximum signal level.

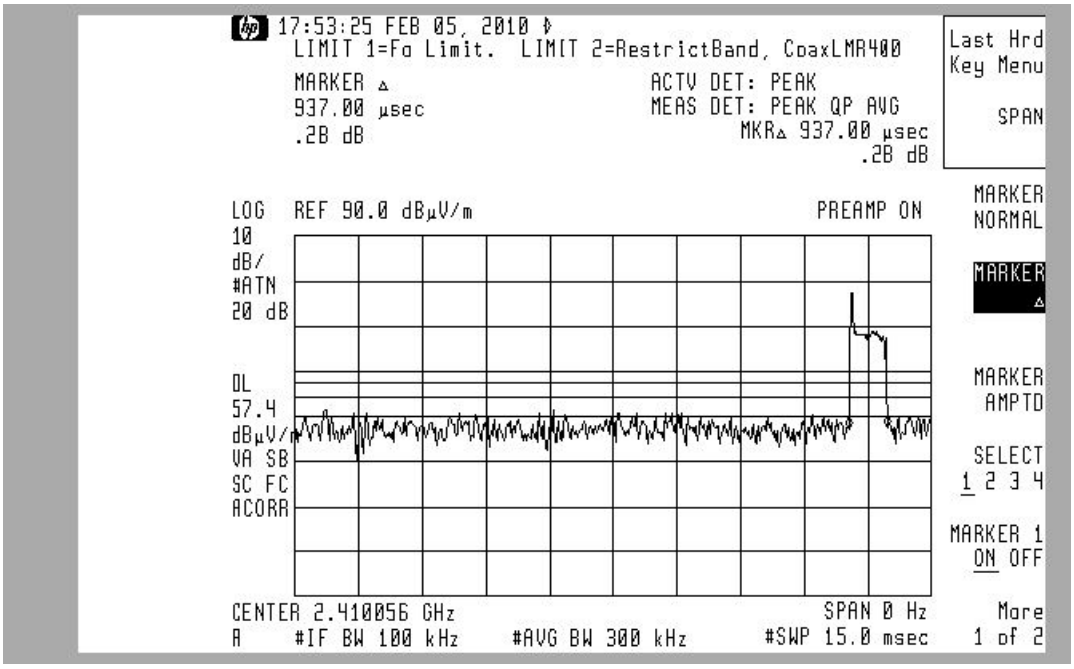
Variance from Test Procedure:

None

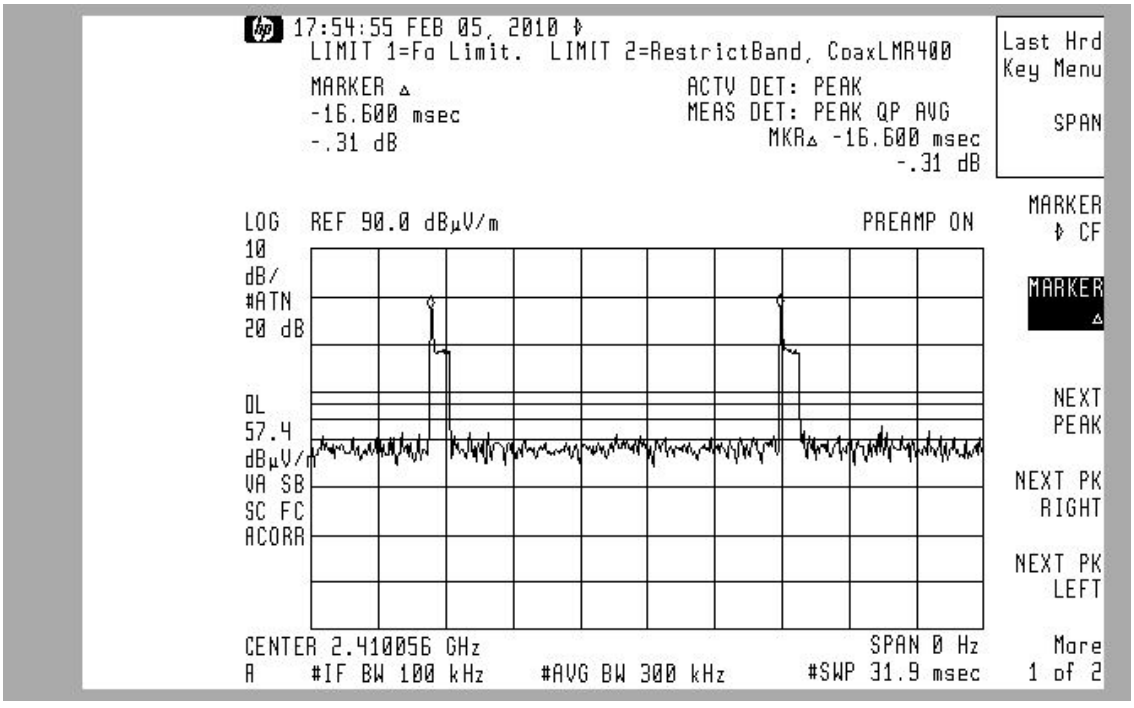
Test Data

Radiated Spurious Emissions

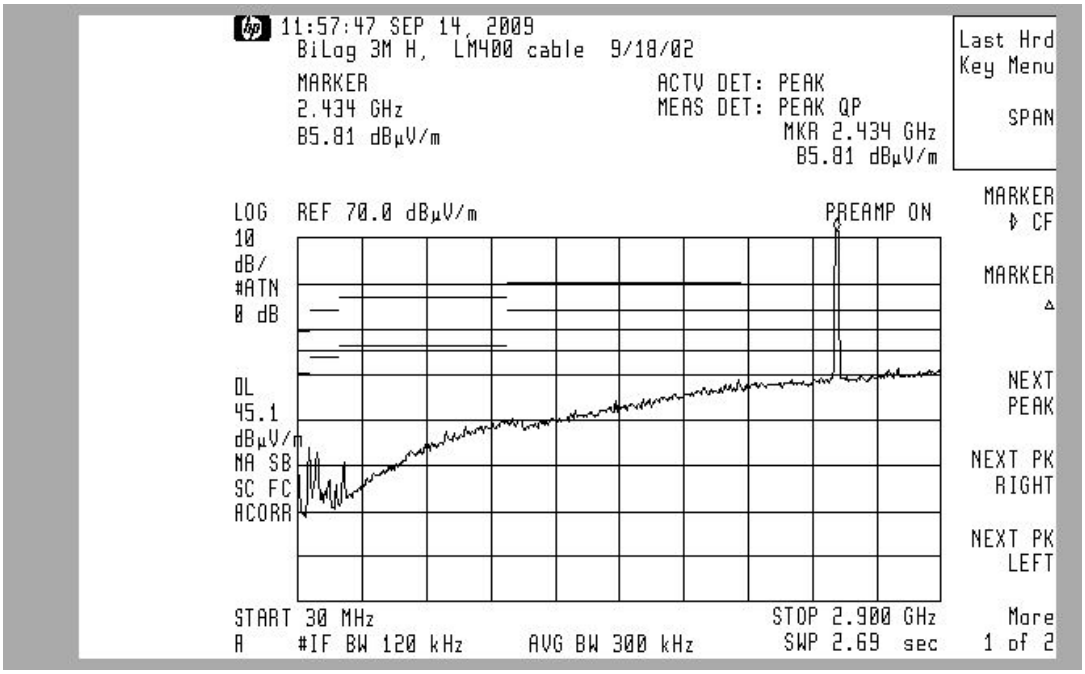
Transmit Duty Cycle Pulse Width Plot



Transmit Duty Cycle Period Plot



Class B Graph of Pre-Scan Spurious Measurements



Radiated Transmit Emissions

Fundamental and Second Harmonic Vertical
Tabulated Transmit Measurements

Frequency	Corrected Peak Measurement	Compensated Average Measurement	EUT orientation	Turntable Azimuth	Antenna Height	Average FCC 15.249 limit	Margin Class B
MHz	dBuV/m	dBuV/m		deg	Mtr		dBuV/m
2410.20	**63.48**	**43.48**	**flat**	**10**	**1.0**	**94.0**	**50.52**
2410.37	**77.78**	**57.78**	**side**	**130**	**1.3**	**94.0**	**36.22**
2410.07	**80.07**	**60.07**	**end**	**270**	**1.2**	**94.0**	**33.93**
4819.65	**57.40**	**37.40**	**flat**	**240**	**1.2**	**54.0**	**16.60**
4819.78	**62.08**	**42.08**	**side**	**260**	**1.3**	**54.0**	**11.92**
4820.50	**61.70**	**41.70**	**end**	**10**	**1.1**	**54.0**	**12.30**

Fundamental and Second Harmonic Horizontal Tabulated Transmit Measurements

Frequency	Corrected Peak Measurement	Compensated Average Measurement	EUT orientation	Turntable Azimuth	Antenna Height	Average FCC 15.249 limit	Margin Class B
MHz	dBuV/m	dBuV/m		deg	Mtr		dBuV/m
2410.05	**79.84**	**59.84**	**flat**	**190**	**2.1**	**94.0**	**34.16**
2410.21	**77.47**	**57.47**	**side**	**280**	**1.6**	**94.0**	**36.53**
2409.77	**73.12**	**53.12**	**end**	**240**	**1.9**	**94.0**	**40.88**
4819.68	**63.09**	**43.09**	**flat**	**170**	**1,4**	**54.0**	**10.91**
4819.62	**62.00**	**42.00**	**side**	**290**	**1.4**	**54.0**	**12.00**
4819.64	**62.08**	**42.08**	**end**	**50**	**1.0**	**54.0**	**11.92**

Tabulated Peak Transmit Power (For IC SAR Measurement)

Frequency	Corrected Peak Measurement	EUT orientation	V/m	EIRP	Turntable Azimuth	Antenna Height	IC SAR Limit	Margin
MHz	dBuV/m		V/m	mW	deg	Mtr	mW	mW
2410.00	**80.07**	**v-end**	**0.01**	**0.03**	**270**	**1.2**	**30.0**	**29.97**

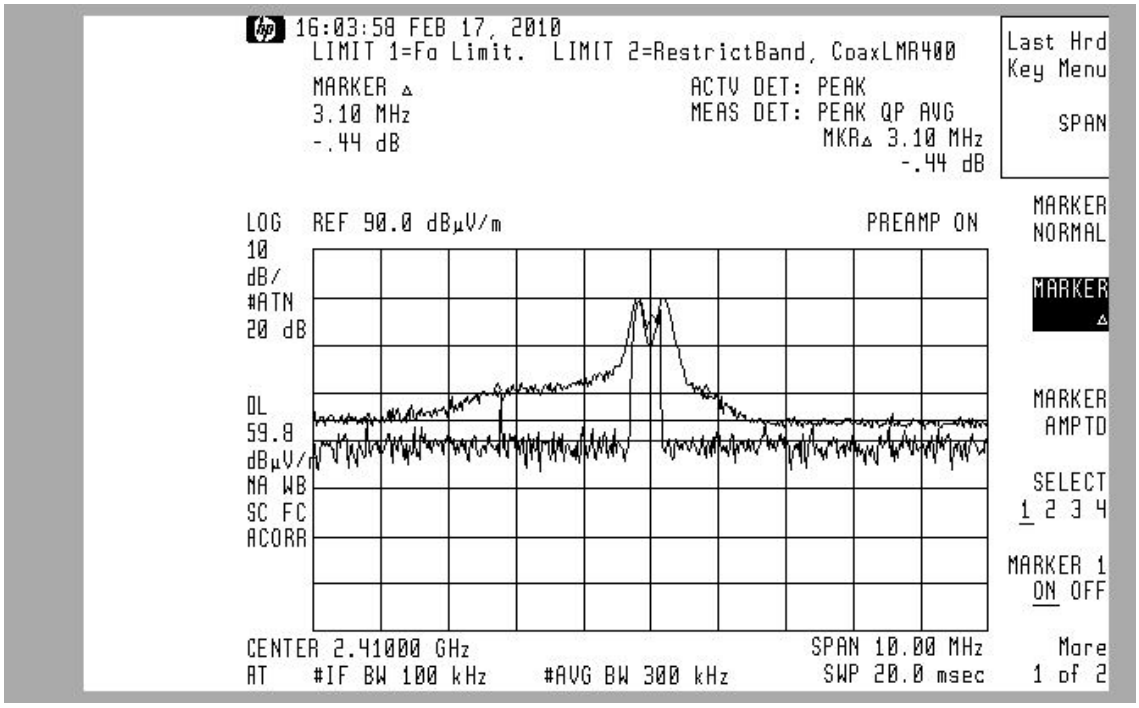
Upper Harmonic Tabulated Transmit Measurements

Frequency	Corrected Peak Measurement	Compensated Average Measurement	Average FCC 15.249 limit	Margin Class B
MHz	dBuV/m	dBuV/m	dBuV/m	dBuV/m
7230.00	**52.30**	**32.30**	**54.0**	**21.70**
9640.0	**63.90**	**43.90**	**54.0**	**10.10**
12050.0	**47.70**	**27.70**	**54.0**	**26.30**
14460.0	**8.50**	**-11.50**	**54.0**	**65.50**
16870.0	**8.10**	**-11.90**	**54.0**	**65.90**
19280.0	**5.70**	**-14.30**	**54.0**	**68.30**
21690.0	**5.30**	**-14.70**	**54.0**	**68.70**
24100.0	**6.20**	**-13.80**	**54.0**	**67.80**

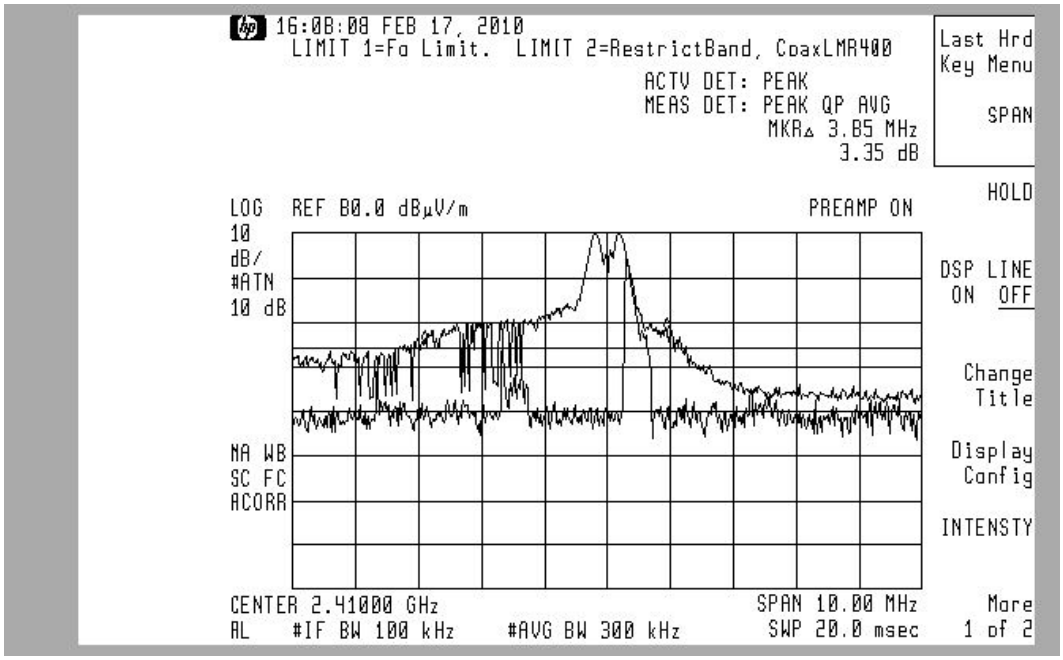
Band Edge Tabulated Transmit Measurements

Frequency	Corrected Peak Measurement	Compensated Average Measurement	EUT orientation	Turntable Azimuth	Antenna Height	Average FCC 15.249 limit	Margin Class B
MHz	dBuV/m	dBuV/m		deg	Mtr		dBuV/m
2400.06	**36.66**	**16.66**	**h flat**	**190**	**2.1**	**54.0**	**37.34**
2483.74	**34.60**	**14.60**	**h flat**	**240**	**1.9**	**54.0**	**39.40**

FCC 20dB Bandwidth



IC 99% Bandwidth



Tabulated Bandwidth Measurements

Frequency	Standard	Bandwidth Measurement	EUT orientation	Turntable Azimuth	Antenna Height	Standard Limit	Margin
MHz		dBuV/m		deg	Mtr		dBuV/m
2410.00	**IC 99% BW**	**3.85 MHz**	**h flat**	**100**	**1.2**	**NA**	**NA**
2410.00	**FCC 20dB BW**	**3.10 MHz**	**h flat**	**100**	**1.2**	**NA**	**NA**

Environment

The test was performed with the equipment under test, and measurement equipment inside the all-weather enclosure. Ambient temperature was 60 deg F, the relative humidity 39%.

APPENDIX A

Measurement Procedures

Line Conducted

The system was placed upon a 1 x 1.5 meter non-metallic table 80cm from the ground floor and 40cm from the vertical conducting plane in the prescribed setup per ANSI C63.4. This table is housed in a shielded enclosure to prevent the detection of unwanted ambients.

The EUT, or host unit if applicable, was connected to the LISN being monitored by the EMI Receiver. The remaining support devices requiring mains power were connected to a second LISN.

The EUT was continuously exercised by methods supplied by the manufacturer.

While monitoring the display of the EMI Receiver, via remote video monitor, the cables were manipulated to determine a position that maximized the emissions being observed. Once the highest amplitude relative to the limit was determined for the Phase current carrying line the procedure was repeated for the Neutral current carrying line.

The configuration that created an emission closest to the limit was used during the course of taking final measurements. Pictures of this final configuration are recorded in this report.

The principal settings of the EMI Receiver for line conducted testing include:

Bandwidth = 9KHz
Detector Function: scanning and signal search = Peak Detection Mode
measurements = Quasi Peak Detection and Average Detection

The cable losses of the coax used in line conducted testing are charted in this appendix.

Radiated

The system was placed upon a 1 x 1.5 meter non-metallic table 80cm from the open field site ground plane in the prescribed setup per ANSI C63.4, Figure 9(c).

The table sits upon a remote controlled turntable. The receiving antenna, located at the appropriate standards distance of 3 or 10 meters from the table center, is also remote controlled.

The EUT was continuously exercised by software supplied by the manufacturer.

Preliminary tests were done at the 3 meter open field test site. The final tests are done at the appropriate standards distance of 3 or 10 meters. The "Biconical/Log Periodic" broadband antenna connected to an EMI Receiver, meeting CISPR 16, is used throughout the testing.

During the preliminary scans and while monitoring the display of the EMI Receiver, the turntable was rotated 360 degrees and the receiving antenna height varied from 1 to 4 meters to search out the highest emissions. At the significant emissions, the cables were manipulated to determine a position that maximized the emissions being observed. Once the cable position was determined that presented the highest amplitude relative to the limit for Vertical polarized emissions the procedure was repeated for the Horizontal polarization.

The configuration that created an emission closest to the limit was used during the course of taking final measurements. Pictures of this final configuration are recorded in this report.
The principal settings of the EMI Receiver for radiated testing include:

Bandwidth:	120kHz
Detector Function:	scanning and signal search = Peak Mode
	measurements = Quasi Peak Mode.
Search Range:	30MHz to 1000MHz or to 2GHz as appropriate

The cable loss of the coax used in radiated scanning is charted in this appendix.
The antenna factors, for the test distance used, are charted in this appendix.

The resultant Field Strength (FS) is a summation in decibels (dB) of the Indicated Receiver Level (RF), the Antenna Correction Factor (AF), and the Cable Loss Factor (CF). If a PreAmplifier (PA) is used, its gain (dB) is subtracted from the above sum.

Formula 1: FS(dBuV/m) = RF(dBuV) + AF(dB/m) +CF(dB) - PA(dB)
To convert the Field Strength dBuV/m term to uV/m, the dBuV/m is first divided by 20. The Base 10 AntiLog is taken of this quotient. The result is the Field Strength value in uV/m terms.

Formula 2: FS(uV/m) = AntiLog[(FS(dBuV/m))/20]

Measurement Facilities & Equipment

Test Site

The AHD test facility is centered on 9 acres of rural property near Sister Lakes, Michigan. The mailing address is 92723 Michigan Hwy152, Sister Lakes, 49047. This test facility is NVLAP accredited (LabCode 200129-0). It has been fully described in a report filed with the FCC (No.90413) and Industry Canada (file:IC3161).

Measurement Equipment Used

Equipment	Model	S/N	Last Cal Date	Calibration Interval
HP EMI Receiver system	HP 8546A			
RF Filter Section	HP-85460A	3448A00283	25 July-09	12 months
RF Receiver Section	HP-85462A	3625A00342	25 July-09	12 months
EMCO BiconiLog Antenna	3142	1069	27-July-09	12 months
Solar LISN	8012-50-R-24-BNC	962137	3-Aug-09	12 months
Solar LISN	8012-50-R-24-BNC	962138	23-July-09	12 months
(LCI) Double shielded 50ohm Coax	RG58/U	920809	11-Mar-09	12 months
(3-m) LMR-400 Ultra Flex	LMR400	C090804	4-Dec-09	6 months
(3-m) CS-3227 RG8	CS-3227	C060914	4-Dec-09	6 months
(10-m) Amelco 50ohm Coax	RG213U	9903-10ab	4-Dec-09	6 months
Double Ridged Horn	ONO91202-2	A00329	27-July-09	12 months
Keytek Surge	711B	8511854	05-Jan-09	12 months
Schaffner ESD	NSG432	01027	04-Jan-09	12 months
Schaffner EFT	NSG600/641	0113	05-Jan-09	12 months

Test Site 2

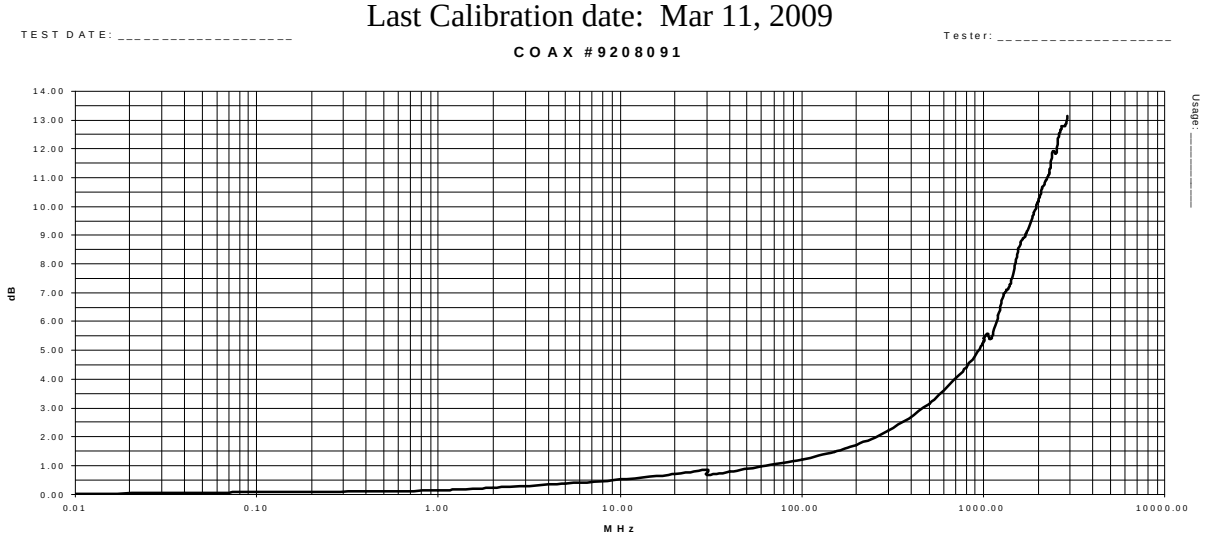
The University of Michigan test facility is located at 8501 Beck Road, Belleville, Michigan 48111. This test facility has been fully described and accepted by the FCC and Industry Canada.
This facility was utilized to measure emissions occurring at frequencies greater than 6GHz.

Measurement Equipment Used

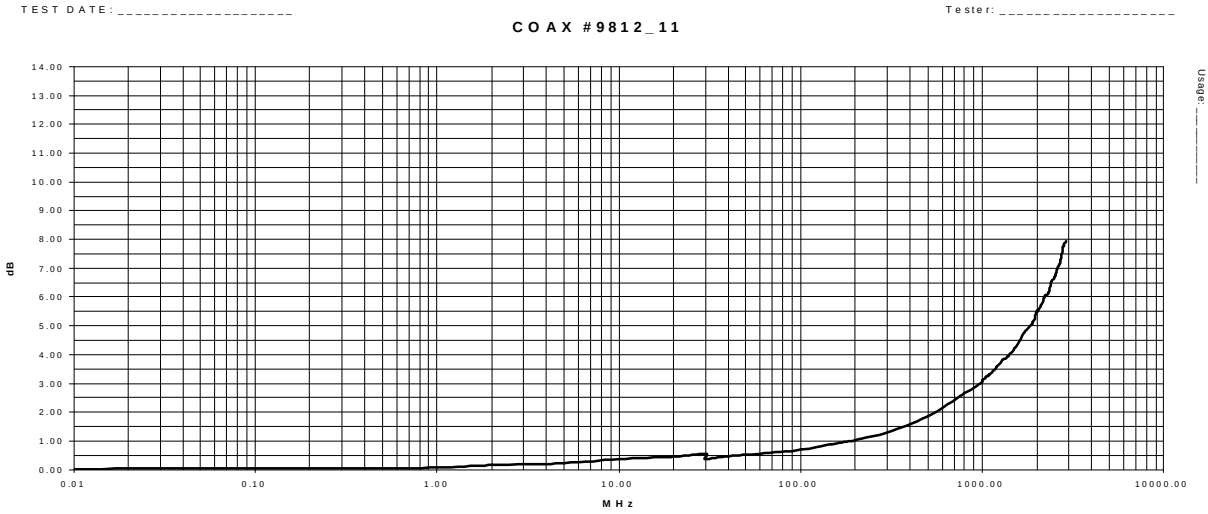
Equipment	Model	S/N	Last Cal Date	Calibration Interval
C-Band Std. Gain Horn	UM NRL design		calibration by design & physical inspection.	
XN-Band Std. Gain Horn	UM NRL design		calibration by design & physical inspection.	
X-Band Std. Gain Horn	SA 12-8.2	730	calibration by design & physical inspection.	
Avantek RF amplifier	AFT-12665		28-July-09	12 months
3ft LowLoss coax	RG142	-	with Avantek amp	
Spectrum Analyzer	HP 8593E	3412A01131	2-June-09	12 months

Cable Loss

Line Conducted 150KHz through 30MHz, Coax #920809
Last Calibration date: Mar 11, 2009

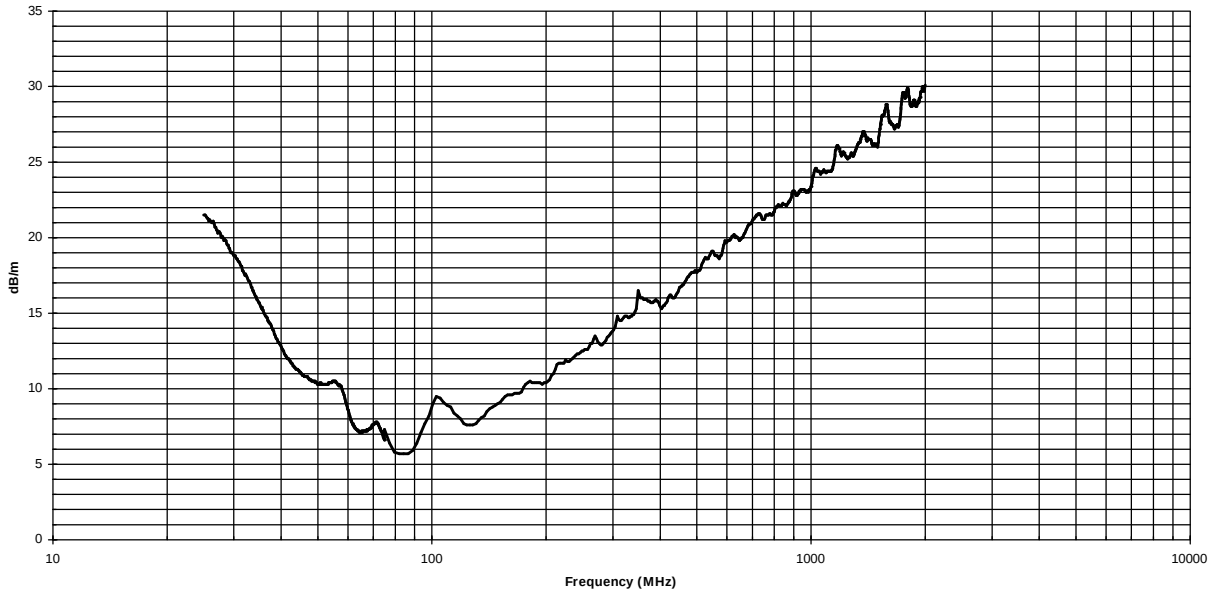


Radiated at 3 meters; 30MHz through 3000MHz, Coax #C090804
Last Calibration date: Dec 04, 2009

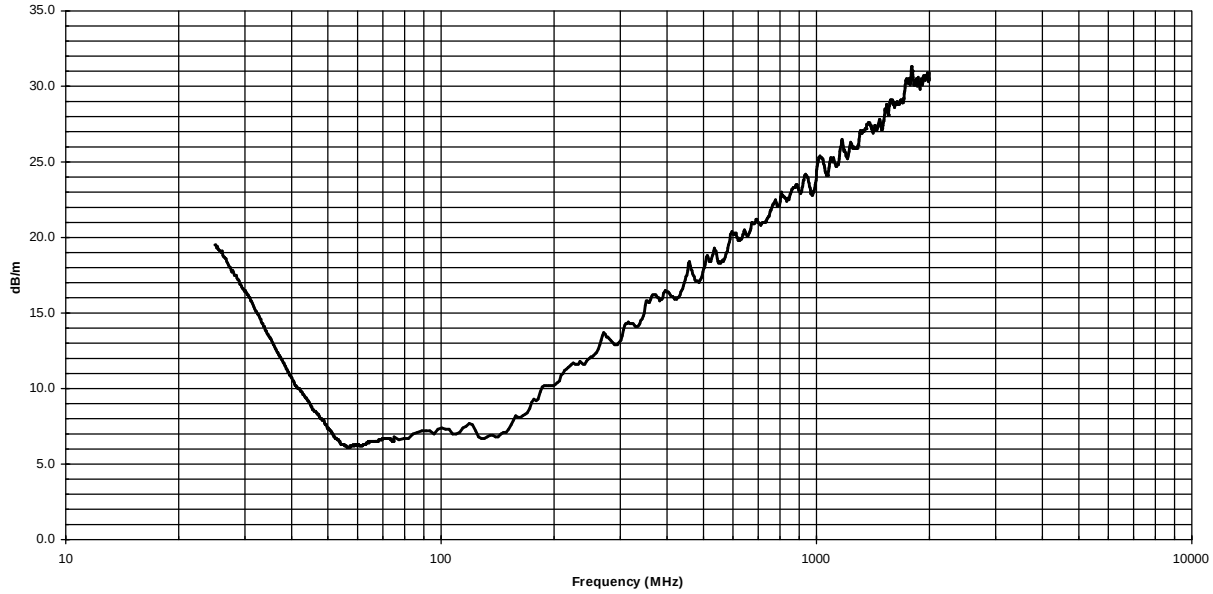


Antenna Factors

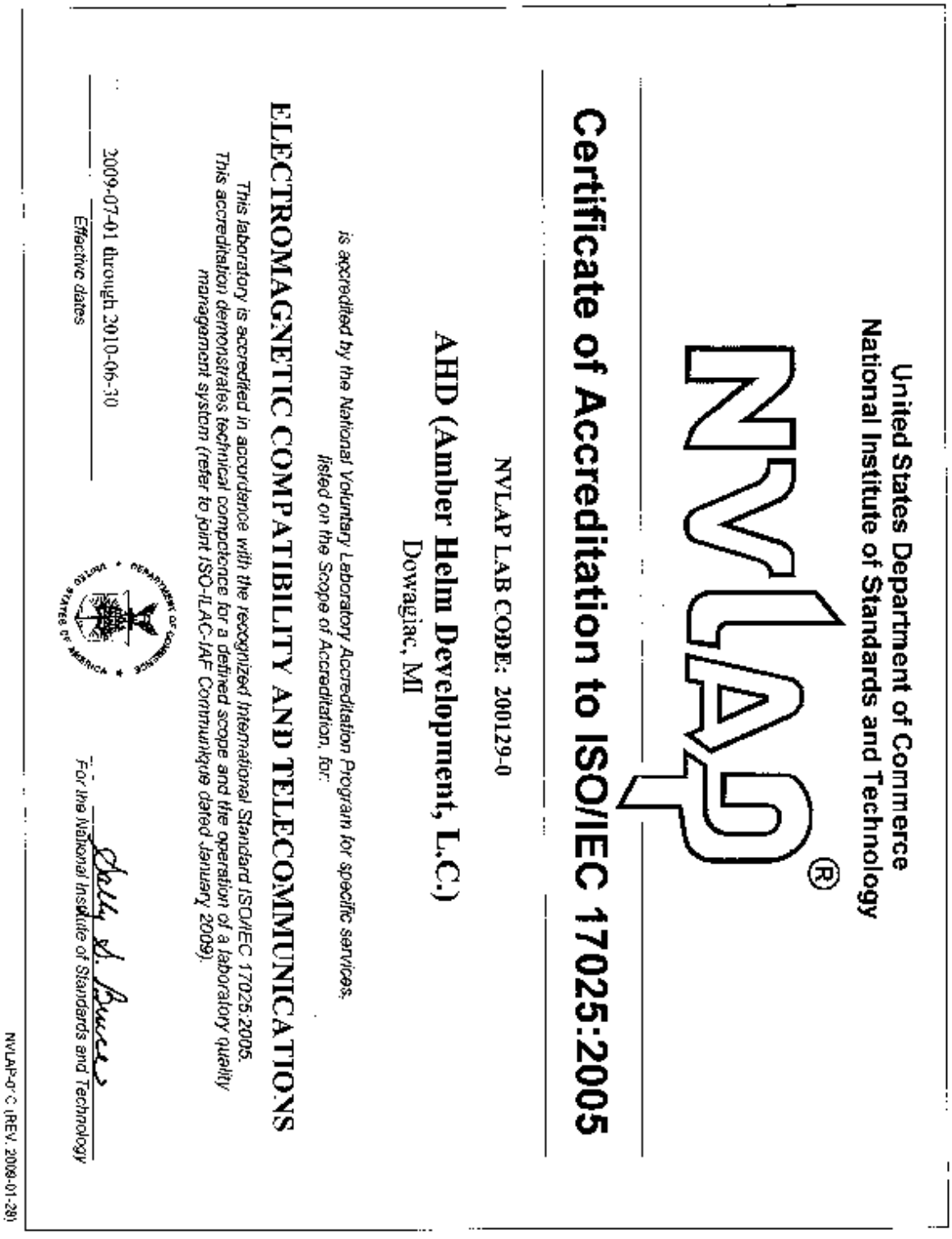
EMCO Model 3142 Antenna #1069
Last Calibration Date; 27-July-09
3 Meter Distance Factors



10 Meter Distance Factors



AHD Accreditation



United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:2005

NVLAP LAB CODE: 200129-0

AHD (Amber Helm Development, L.C.)
Dowagiac, MI

is accredited by the National Voluntary Laboratory Accreditation Program for specific services, listed on the Scope of Accreditation, for:

ELECTROMAGNETIC COMPATIBILITY AND TELECOMMUNICATIONS

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated January 2009).

2009-07-01 through 2010-06-30
Effective dates

For the National Institute of Standards and Technology

NVLAP-07-C (REV. 2008-01-28)

FEDERAL COMMUNICATIONS COMMISSION

Laboratory Division
7435 Oakland Mills Road
Columbia, MD 21046

April 16, 2008

Registration Number: 90413

AHD EMC Laboratory
92723 M-152,
Dowagiac, MI 49047

Attention: Gordon Helm

Re: Measurement facility located at Sister Lakes
3 & 10 meter site
Date of Renewal: April 16, 2008

Dear Sir or Madam:

Your request for renewal of the registration of the subject measurement facility has been received. The information submitted has been placed in your file and the registration has been renewed. The name of your organization will remain on the list of facilities whose measurement data will be accepted in conjunction with applications for Certification under Parts 15 or 18 of the Commission's Rules. Please note that the file must be updated for any changes made to the facility and the registration must be renewed at least every three years.

Measurement facilities that have indicated that they are available to the public to perform measurement services on a fee basis may be found on the FCC website www.fcc.gov under E-Filing OET Equipment Authorization Electronic Filing, Test Firms.

Sincerely,

Phyllis Parrish
Industry Analyst

NARTE Seal