



CERTIFICATION FOR INTENTIONAL RADIATOR

per
FCC Part 15 Subpart C
(CFR 47, 15.201, - 15.209 & 15.249)
and
Industry Canada
RSS-210

Transmitter
Model No. MKU915A
903-927 MHz

PREPARED FOR APPLICANT:

Cattron Theimeg, Inc.
58 West Shenango Street
Sharpsville, PA 16150-1198
FRN: 0008766842

PREPARED BY:
DNB ENGINEERING, INC.
5969 Robinson Avenue
Riverside, CA 92503-8620
(951) 637-2630

TRANSMITTAL SUMMARY

Unit tested: Remote Transmitter
Model #: MKU915A
FCC ID: CN2MKU915A
Industry Canada ID: 1007BMKU915A
Specifications: ANSI C63.4 1992 and CFR 47 FCC part 15 Subpart C

Purpose of Report: This report was prepared to document the status of the Remote Transmitter (903-927 MHz) with requirements of the standards listed above.

Requirements not applicable to EUT Part 15.37 - Not applicable
Emergency Broadcast System - Not applicable
Spread Spectrum Exhibit - Not applicable
Scanning Receiver - Not applicable

Test Summary The EUT's compliance status according to the tests performed is as follows.

REQUIREMENTS	STATUS
FCC part 15 Subpart C	
per 15.201-, 15.209 & 15.249	COMPLIANT
Industry Canada – RSS-210	COMPLIANT

The report shall not be reproduced, except in full, without the written approval of DNB ENGINEERING, INC. Results contained in this report relate only to the item tested.

The Remote Transmitter M/N MKU915A met all the criteria pertaining to standards called out for testing.

DOCUMENT HISTORY

Revision Letter	Number of Pages	Page No. of Rev.	Description	Date
-001	45		Document Release	28 Dec 2006
-002	All	All	Clarify Readings	8 Mar 2007

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1.0 ADMINISTRATIVE DATA

Certifications and Qualifications

I certify that DNB Engineering, Inc conducted the tests performed in order to obtain the technical data presented in this application. Also, based on the results of the enclosed data, I have concluded that the equipment tested meets or exceeds the requirements of the Rules and Regulations governing this application.

NEMKO EMC Laboratory Authorization No.: ELA 115

NVLAP Lab Code: 200587-0

NVLAP CAB : US-0152 (Canada) IC# 4738

Measurement Repeatability Information

The test data presented in this report has been acquired using the guidelines set forth in FCC Part 15 Subpart C (CFR 47, 15.201 – 15.209 and 15.249) and to Industry Canada RSS-210. The test results presented in this document are valid only for the equipment identified herein under the test conditions described. Repeatability of these test results will only be achieved with identical measurement conditions. These conditions include: The same test distance, EUT Height, Measurement Site Characteristics, and the same EUT System Components. The system must have the same Interconnecting Cables arranged in identical placement to that in the test set-up, with the system and/or EUT functioning in the identical mode of operation (i.e. software and so on) as on the date of the test. Any deviation from the test conditions and the environment on the date of the test may result in measurement repeatability difficulties.

All changes made to the EUT during the course of testing as identified in this test report must be incorporated into the EUT or identical models to ensure compliance with the FCC regulations.



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1.1.1 Request for Certification Per 2.1033(b)1:

Applicant: Catttron Theimeg Inc.
58 West Shenango Street
Sharpsville, PA 16150
FRN: 0008766842

Contact: Laurent Beaulieu
Phone: (514) 908-1659 x63151

Equipment Under Test: Remote Control Transmitter

FCC ID: CN2MKU915A
Industry Canada ID: 1007BMKU915A

1.2 Related Submittals/Grants

None.

1.3 Purpose of Tests

The purpose of this series of tests was to demonstrate the Electromagnetic Compatibility (EMC) characteristics of the EUT. The following tests were performed:

REQUIREMENTS	STATUS
FCC part 15 Subpart C	
Per 15.201- 15.209 & 15.249	COMPLIANT
Industry Canada – RSS-210	COMPLIANT

2. TEST DESCRIPTION

2.1 Test Configuration

Configuration	Unit Name - Processor, Monitor Printer, Cable, etc. (indent for features of a unit)	Style/Model/ Part No.	Comments/ FCC ID# / Industry Canada #
A	Remote –Low Channel (903 MHz)	MKU915A	CN2MKU915A 1007BMKU915A
B	Remote –Mid Channel (915 MHz)	MKU915A	CN2MKU915A 1007BMKU915A
C	Remote –High Channel (927 MHz)	MKU915A	CN2MKU915A 1007BMKU915A

2.2 Equipment Description

The CATTRON® MK Unity Beta Series OCU is a lightweight palm sized, extremely rugged customizable radio control transmitter for use with any CATTRON® Unity based PRC System.

2.3 Mode of Operation

EUT was placed in both horizontal and vertical position with the antenna in both horizontal and vertical polarities to determine worst case emissions. Fresh batteries were used for final measurements.

2.4 Antenna Requirement - per 15.203

The antenna is internally fixed.

2.5 Circuit Description - per 2.1033(b)4

Please see Owners Manual – Separate attachment

2.6 Schematics

Separate attachment

2.7 Block Diagram

Separate attachment

2.8 Photographs of EUT - per 2.1033(b)(7)

External



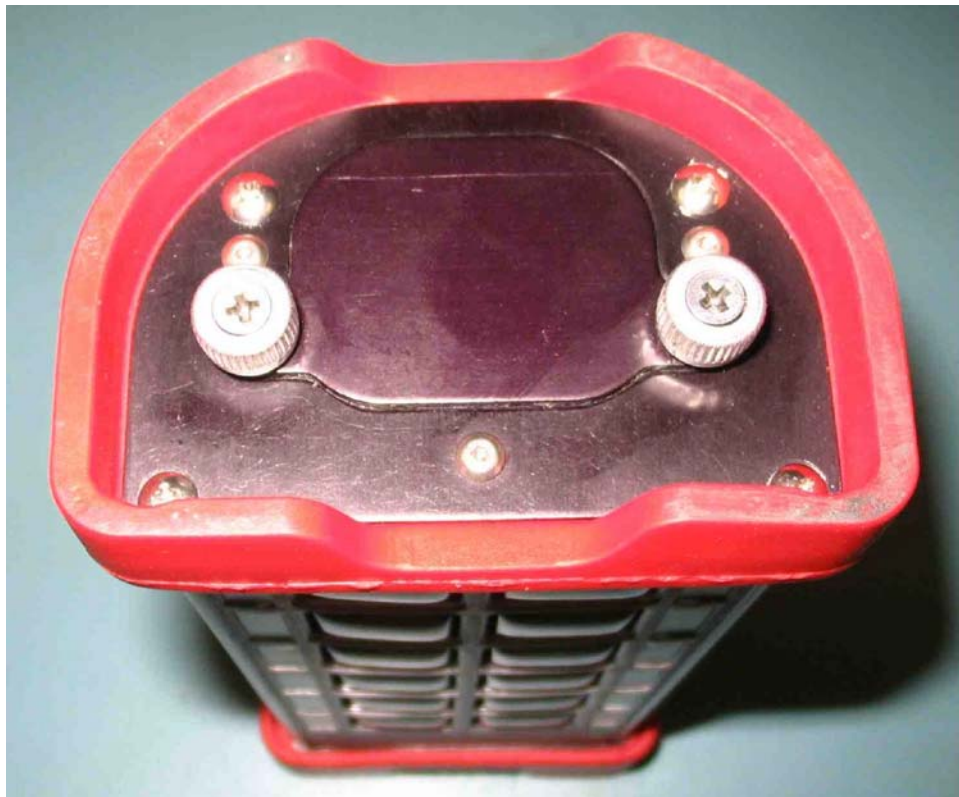
Photographs of EUT - per 2.1033(b)(7) continued
External



Photographs of EUT - per 2.1033(b)(7) continued
External



Photographs of EUT - per 2.1033(b)(7) continued
External



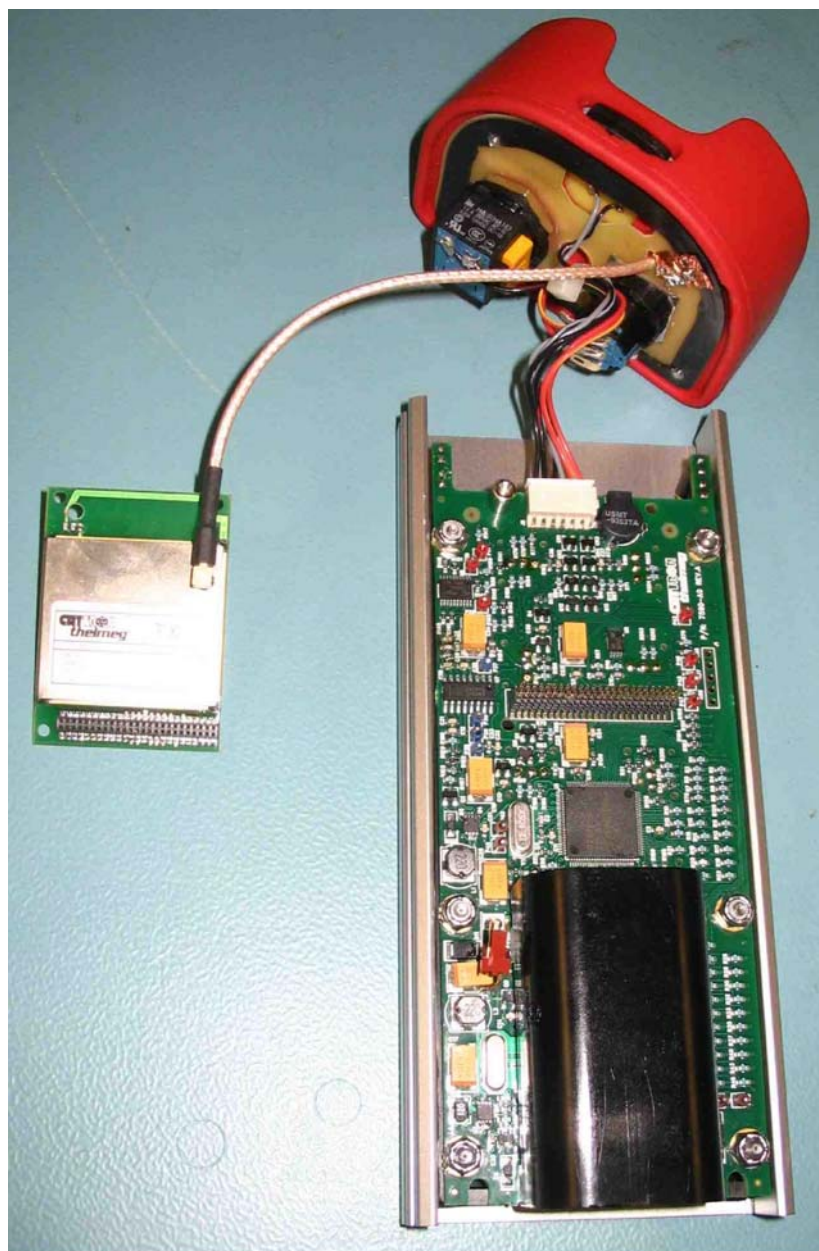
Photographs of EUT - per 2.1033(b)(7) continued
Internal



Photographs of EUT - per 2.1033(b)(7) continued
Internal



Photographs of EUT - per 2.1033(b)(7) continued
Internal



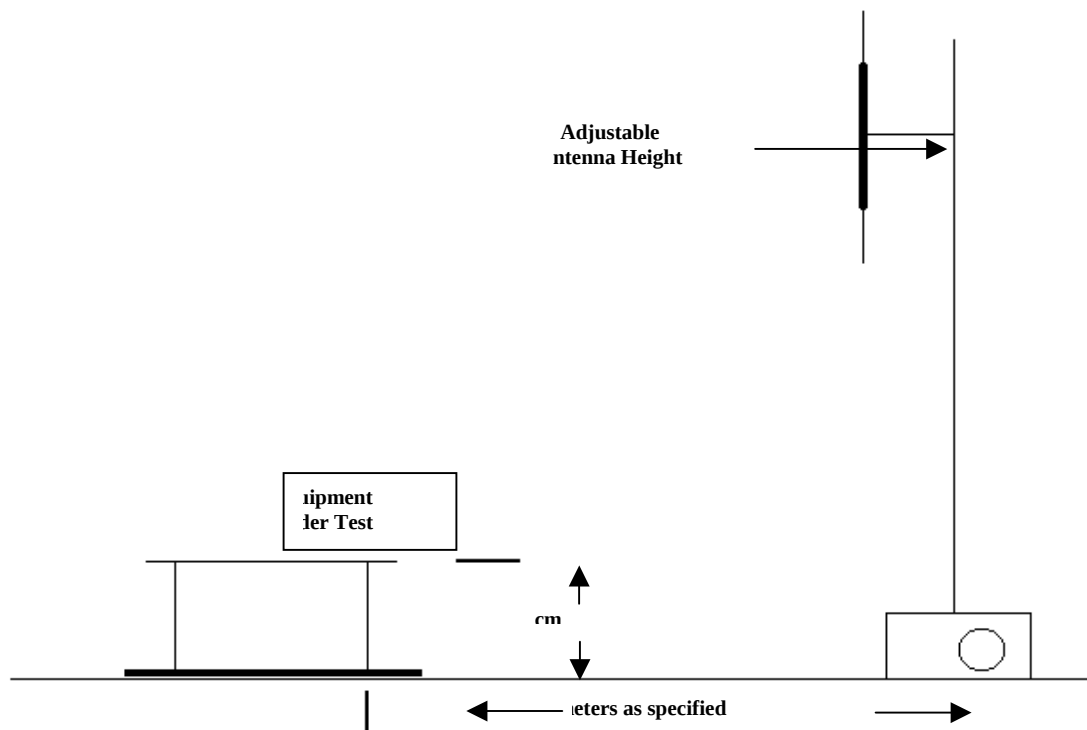
EMISSIONS

Per FCC Part 15 Subpart C – Industry Canada RSS-210

2.9 Radiated Emissions Test Setup and Procedure - Per 2.1033(b)(6) Per 2.947(a)

The EUT was placed on a wooden table 1 meter wide and 1.5 meters long, which rests on a in ground turntable 3 meter open area test site test site. The top of the table is 80 cm above the ground plane. The turntable can be rotated 360 degrees. Measuring antenna is set at the prescribed distance. (Measurements are made with broad band antennas that have been correlated with tuned dipole antennas). The mast is 6 meters high and is self-supporting. The height of the antenna can be varied from 1 to 4 meters. Positioning of the antenna is controlled remotely.

2.9.1 Spurious Radiation Test Site Per 2.1033(b)6



Radiated Test Setup and Procedure - cont'd

The EUT is put into the operational test mode as stated in Section 2.2.1 is then started.

The spectrum analyzer is setup to store the peak emission over the band of the antenna. Peak EUT and ambient emissions are stored while the turntable is rotated 360°. Peak spectrum analyzer trace is then recorded with the addition of antenna and cable correction factors. The limit is recorded on the same graph. A receiver with CISPR Quasi Peak capabilities is then used on the frequencies identified as the highest with respect to the plotted limit. Ambience is noted on the graph along with EUT emissions. The highest EUT frequencies, with respect to the limit, are maximized.

To maximize emissions levels, the turntable is rotated and the antenna is raised and lowered to determine the point of maximum emanations. The cables are then manipulated at that point to maximize emissions. Measurements are made with the antennas in each horizontal and vertical polarization separately. The data obtained from these tests is corrected with the proper cable, preamplifier and antenna factors. The results are then transcribed onto tables that show the maximum emission levels. The highest emissions are listed in a Radiated Emissions Summary table.

If no emissions can be found, the lowest harmonics of the EUT clocks within the bands of the standard are tuned into with the receiver. If no emissions are found, the noise floor will be entered into the table and noted. A minimum of six frequencies will be logged. Summary results will reflect only actual emissions from the EUT.

The field intensity measurements are made using standard techniques with a spectrum analyzer or EMI receiver as the calibrated Field Intensity Meter (FIM). Preamplifiers and filters are used when required.

When using the Hewlett Packard Model 8566B Spectrum Analyzer as the FIM, the Analyzer is calibrated to read signal level in dBm. Where:

$$0 \text{ dBm (50 ohms)} = 107 \text{ dBuV (50 ohms)}$$

The signal level (dBuV) = indicated signal level (dBm) + 107 dB. To obtain the signal level in dBuV/m it is necessary to add the antenna factor in dB.

2.9.2 Example Of Typical Calculation Per 2.1033(b)6

Measurement Distance = 3 Meter			
Reading @ 915 MHz		→	88.8 dBuV
Antenna Factor	+25.2 DB		
Cable Loss	+5.6 DB		
Preamplifier	-25.2 DB		
Duty Cycle Correction	-15.1 DB		
	-9.5 DB	→	-9.5 dBuV
Field Strength dBuV/m at 3 Meter =		→	79.3 dBuV

The Following FCC and Industry Canada limits for acceptance were used:

Limit 915 MHz (Field Strength of Fundamental):

$$50,000 \mu\text{V/M} = 20 \log (50,000) \text{ dB}\mu\text{V/M} = 93.98 \text{ dB}\mu\text{V/M @ 3 Meters}$$

Limit 915 MHz (Field Strength of Spurious Emissions):

$$500 \mu\text{V/M} = 20 \log (500) \text{ dB}\mu\text{V/M} = 53.98 \text{ dB}\mu\text{V/M @ 3 Meters}$$

Limit 30 to 230 MHz: (per IEC 55022 @ 10 meters)

$$32 \mu\text{V/M} = 20 \log (32) \text{ dB}\mu\text{V/M} = 30.0 \text{ dB}\mu\text{V/M @ 10 Meters}$$

Limit 230 to 1000 MHz: (Not at the Carrier Frequency)

$$71 \mu\text{V/M} = 20 \log (71) \text{ dB}\mu\text{V/M} = 37.0 \text{ dB}\mu\text{V/M @ 10 Meters}$$

Limit >1000 MHz:

$$158 \mu\text{V/M} = 20 \log (158) \text{ dB}\mu\text{V/M} = 44.0 \text{ dB}\mu\text{V/M @ 10 Meters}$$

2.9.3 Field Strength of Fundamental

Test results are provided on pages 25 & 26.

2.9.4 Harmonic Radiated Emissions

Test results are provided on pages 25 & 26.

3.1.5 Spurious Emissions Not Associated With Fundamental

Per FCC Part 15 Subpart C, 15.209 @ 3meters and Table 3 of RSS-210.

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		CFR 47 Subpart C Worksheet											
DNB Job Number:		78059				Date: 6 Dec 2006				Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210					
Customer:		Cattron Theimeg													
Model Number:		MKU915A													
Description:		Remote Control Transmitter Low Channel													
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>															
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Drg = Electro-Metrics 3115 Double Ridge Guide Antenna S/N 2280 (1-18 GHz Mhz) Cbl = Cable Loss Amp = Preamplifier Gain Dcf = Duty Cycle Correction Typ = Type of reading PK = Peak reading QP = Quasi-peak reading AV = Average reading Pol = Antenna polarity V = Vertical H = Horizontal Pol = EUT V = Vertical H = Horizontal															
NOTES: Readings greater than 3 rd harmonic are ground floor readings Fundamentals are in BOLD with a yellow background															
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
903	88.88	25.20	0.00	5.60	-25.20	-15.09	79.39	93.98	-14.59	9322	50000	-40678	PK	H	H
1806	32.2	0.00	26.70	8.60	-19.30	-15.09	33.11	53.98	-20.87	45	500	-455	PK	H	H
2709	34.6	0.00	29.70	11.30	-20.50	-15.09	40.01	53.98	-13.97	100	500	-400	PK	H	H
3612	36.1	0.00	31.90	13.50	-24.40	-15.09	42.01	53.98	-11.97	126	500	-374	PK	H	H
4515	36.9	0.00	32.50	15.70	-25.10	-15.09	44.91	53.98	-9.07	176	500	-324	PK	H	H
5418	37.3	0.00	34.20	17.50	-25.60	-15.09	48.31	53.98	-5.67	260	500	-240	PK	H	H
6321	37.4	0.00	34.70	19.10	-24.30	-15.09	51.81	53.98	-2.17	389	500	-111	PK	H	H
7214	23.8	0.00	36.20	21.10	-25.00	-15.09	41.01	53.98	-12.97	112	500	-388	AV	H	H
8127	24.6	0.00	37.30	22.90	-24.20	-15.09	45.51	53.98	-8.47	189	500	-311	AV	H	H
9030	25.3	0.00	37.70	24.70	-24.30	-15.09	48.31	53.98	-5.67	260	500	-240	AV	H	H
903	81.43	25.20	0.00	5.60	-25.20	-15.09	71.94	93.98	-22.04	3954	50000	-46046	PK	V	H
1806	33.8	0.00	26.70	8.60	-19.30	-15.09	34.71	53.98	-19.27	54	500	-446	PK	V	H
2709	34.4	0.00	29.70	11.30	-20.50	-15.09	39.81	53.98	-14.17	98	500	-402	PK	V	H
3612	37.1	0.00	31.90	13.50	-24.40	-15.09	43.01	53.98	-10.97	141	500	-359	PK	V	H
4515	36.5	0.00	32.50	15.70	-25.10	-15.09	44.51	53.98	-9.47	168	500	-332	PK	V	H
5418	36.7	0.00	34.20	17.50	-25.60	-15.09	47.71	53.98	-6.27	243	500	-257	PK	V	H
6321	23.4	0.00	34.70	19.10	-24.30	-15.09	37.81	53.98	-16.17	78	500	-422	AV	V	H
7224	25.7	0.00	36.20	21.10	-25.00	-15.09	42.91	53.98	-11.07	140	500	-360	AV	V	H
8127	24.8	0.00	37.30	22.90	-24.20	-15.09	45.71	53.98	-8.27	193	500	-307	AV	V	H
9030	25.2	0.00	37.70	24.70	-24.30	-15.09	48.21	53.98	-5.77	257	500	-243	AV	V	H

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Model Number:		MKU915A													
Description:		Remote Control Transmitter Low Channel													
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FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
903	84.18	25.20	0.00	5.60	-25.20	-15.09	74.69	93.98	-19.29	5426	50000	-44574	PK	H	V
1806	34.5	0.00	26.70	8.60	-19.30	-15.09	35.41	53.98	-18.57	59	500	-441	PK	H	V
2709	34.3	0.00	29.70	11.30	-20.50	-15.09	39.71	53.98	-14.27	97	500	-403	PK	H	V
3612	38.7	0.00	31.90	13.50	-24.40	-15.09	44.61	53.98	-9.37	170	500	-330	PK	H	V
4515	23.1	0.00	32.50	15.70	-25.10	-15.09	31.11	53.98	-22.87	36	500	-464	AV	H	V
5418	23.2	0.00	34.20	17.50	-25.60	-15.09	34.21	53.98	-19.77	51	500	-449	AV	H	V
6321	23.7	0.00	34.70	19.10	-24.30	-15.09	38.11	53.98	-15.87	80	500	-420	AV	H	V
7224	25.5	0.00	36.20	21.10	-25.00	-15.09	42.71	53.98	-11.27	137	500	-363	AV	H	V
8127	24.8	0.00	37.30	22.90	-24.20	-15.09	45.71	53.98	-8.27	193	500	-307	AV	H	V
9030	25.2	0.00	37.70	24.70	-24.30	-15.09	48.21	53.98	-5.77	257	500	-243	AV	H	V
903	87.62	25.20	0.00	5.60	-25.20	-15.09	78.13	93.98	-15.85	8063	50000	-41937	PK	V	V
1806	33.8	0.00	26.70	8.60	-19.30	-15.09	34.71	53.98	-19.27	54	500	-446	PK	V	V
2709	34.6	0.00	29.70	11.30	-20.50	-15.09	40.01	53.98	-13.97	100	500	-400	PK	V	V
3612	37.9	0.00	31.90	13.50	-24.40	-15.09	43.81	53.98	-10.17	155	500	-345	PK	V	V
4515	35.8	0.00	32.50	15.70	-25.10	-15.09	43.81	53.98	-10.17	155	500	-345	PK	V	V
5418	23.4	0.00	34.20	17.50	-25.60	-15.09	34.41	53.98	-19.57	53	500	-447	AV	V	V
6321	23.5	0.00	34.70	19.10	-24.30	-15.09	37.91	53.98	-16.07	79	500	-421	AV	V	V
7224	25.8	0.00	36.20	21.10	-25.00	-15.09	43.01	53.98	-10.97	141	500	-359	AV	V	V
8127	24.5	0.00	37.30	22.90	-24.20	-15.09	45.41	53.98	-8.57	186	500	-314	AV	V	V
9030	25.2	0.00	37.70	24.70	-24.30	-15.09	48.21	53.98	-5.77	257	500	-243	AV	V	V

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NOTES: Readings greater than 3 rd harmonic are ground floor readings Fundamentals are in BOLD with a yellow background															
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
915	84.22	25.20	0.00	5.60	-25.20	-15.09	74.73	93.98	-19.25	5451	50000	-44549	PK	H	H
1830	33.50	0.00	26.80	8.60	-19.20	-15.09	34.61	53.98	-19.37	54	500	-446	PK	H	H
2745	34.50	0.00	29.80	11.40	-20.60	-15.09	40.01	53.98	-13.97	100	500	-400	PK	H	H
3660	37.30	0.00	32.00	13.60	-24.50	-15.09	43.31	53.98	-10.67	146	500	-354	PK	H	H
4575	35.00	0.00	32.60	15.80	-25.10	-15.09	43.21	53.98	-10.77	145	500	-355	PK	H	H
5490	34.90	0.00	34.40	17.60	-25.50	-15.09	46.31	53.98	-7.67	207	500	-293	PK	H	H
6405	23.30	0.00	34.70	19.30	-24.20	-15.09	38.01	53.98	-15.97	80	500	-420	AV	H	H
7320	25.30	0.00	36.50	21.30	-25.00	-15.09	43.01	53.98	-10.97	141	500	-359	AV	H	H
8235	25.20	0.00	37.40	23.10	-23.90	-15.09	46.71	53.98	-7.27	217	500	-283	AV	H	H
9150	25.40	0.00	37.70	25.20	-24.40	-15.09	48.81	53.98	-5.17	276	500	-224	AV	H	H
915	84.90	25.20	0.00	5.60	-25.20	-15.09	75.41	93.98	-18.57	5895	50000	-44105	PK	V	H
1830	33.70	0.00	26.80	8.60	-19.20	-15.09	34.81	53.98	-19.17	55	500	-445	PK	V	H
2745	34.60	0.00	29.80	11.40	-20.60	-15.09	40.11	53.98	-13.87	101	500	-399	PK	V	H
3660	37.40	0.00	32.00	13.60	-24.50	-15.09	43.41	53.98	-10.57	148	500	-352	PK	V	H
4575	36.70	0.00	32.60	15.80	-25.10	-15.09	44.91	53.98	-9.07	176	500	-324	PK	V	H
5490	23.40	0.00	34.40	17.60	-25.50	-15.09	34.81	53.98	-19.17	55	500	-445	AV	V	H
6405	23.50	0.00	34.70	19.30	-24.20	-15.09	38.21	53.98	-15.77	81	500	-419	AV	V	H
7320	25.20	0.00	36.50	21.30	-25.00	-15.09	42.91	53.98	-11.07	140	500	-360	AV	V	H
8235	25.30	0.00	37.40	23.10	-23.90	-15.09	46.81	53.98	-7.17	219	500	-281	AV	V	H
9150	25.60	0.00	37.70	25.20	-24.40	-15.09	49.01	53.98	-4.97	282	500	-218	AV	V	H

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		CFR 47 Subpart C Worksheet											
DNB Job Number:		78059				Date: 6 Dec 2006				Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210					
Customer:		Cattron Theimeg													
Model Number:		MKU915A													
Description:		Remote Control Transmitter Mid Channel													
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>															
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Drg = Electro-Metrics 3115 Double Ridge Guide Antenna S/N 2280 (1-18 GHz Mhz) Cbl = Cable Loss Amp = Preamplifier Gain Dcf = Duty Cycle Correction Typ = Type of reading PK = Peak reading QP = Quasi-peak reading AV = Average reading Pol = Antenna polarity V = Vertical H = Horizontal Pol = EUT V = Vertical H = Horizontal															
NOTES: Readings greater than 3 rd harmonic are ground floor readings Fundamentals are in BOLD with a yellow background															
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
915	82.17	25.20	0.00	5.60	-25.20	-15.09	72.68	93.98	-21.30	4305	50000	-45695	PK	H	V
1830	41.00	0.00	26.80	8.60	-19.20	-15.09	42.11	53.98	-11.87	127	500	-373	PK	H	V
2745	35.00	0.00	29.80	11.40	-20.60	-15.09	40.51	53.98	-13.47	106	500	-394	PK	H	V
3660	37.30	0.00	32.00	13.60	-24.50	-15.09	43.31	53.98	-10.67	146	500	-354	PK	H	V
4575	37.60	0.00	32.60	15.80	-25.10	-15.09	45.81	53.98	-8.17	195	500	-305	PK	H	V
5490	23.50	0.00	34.40	17.60	-25.50	-15.09	34.91	53.98	-19.07	56	500	-444	AV	H	V
6405	23.50	0.00	34.70	19.30	-24.20	-15.09	38.21	53.98	-15.77	81	500	-419	AV	H	V
7320	25.80	0.00	36.50	21.30	-25.00	-15.09	43.51	53.98	-10.47	150	500	-350	AV	H	V
8235	24.90	0.00	37.40	23.10	-23.90	-15.09	46.41	53.98	-7.57	209	500	-291	AV	H	V
9150	25.40	0.00	37.70	25.20	-24.40	-15.09	48.81	53.98	-5.17	276	500	-224	AV	H	V
915	85.76	25.20	0.00	5.60	-25.20	-15.09	76.27	93.98	-17.71	6509	50000	-43491	PK	V	V
1830	35.40	0.00	26.80	8.60	-19.20	-15.09	36.51	53.98	-17.47	67	500	-433	PK	V	V
2745	31.90	0.00	29.80	11.40	-20.60	-15.09	37.41	53.98	-16.57	74	500	-426	PK	V	V
3660	37.40	0.00	32.00	13.60	-24.50	-15.09	43.41	53.98	-10.57	148	500	-352	PK	V	V
4575	36.80	0.00	32.60	15.80	-25.10	-15.09	45.01	53.98	-8.97	178	500	-322	PK	V	V
5490	23.40	0.00	34.40	17.60	-25.50	-15.09	34.81	53.98	-19.17	55	500	-445	AV	V	V
6405	23.50	0.00	34.70	19.30	-24.20	-15.09	38.21	53.98	-15.77	81	500	-419	AV	V	V
7320	25.80	0.00	36.50	21.30	-25.00	-15.09	43.51	53.98	-10.47	150	500	-350	AV	V	V
8235	25.20	0.00	37.40	23.10	-23.90	-15.09	46.71	53.98	-7.27	217	500	-283	AV	V	V
9150	25.70	0.00	37.70	25.20	-24.40	-15.09	49.11	53.98	-4.87	285	500	-215	AV	V	V

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		CFR 47 Subpart C Worksheet											
DNB Job Number:		78059		Date: 6 Dec 2006		Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210									
Customer:		Cattron Theimeg													
Model Number:		MKU915A													
Description:		Remote Control Transmitter													
		Hi Channel													
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>															
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Drg = Electro-Metrics 3115 Double Ridge Guide Antenna S/N 2280 (1-18 GHz Mhz) Cbl = Cable Loss Amp = Preamplifier Gain Dcf = Duty Cycle Correction Typ = Type of reading PK = Peak reading QP = Quasi-peak reading AV = Average reading Pol = Antenna polarity V = Vertical H = Horizontal Pol = EUT V = Vertical H = Horizontal															
NOTES: Readings greater than 3 rd harmonic are ground floor readings Fundamentals are in BOLD with a yellow background															
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
927	96.67	25.20	0.00	5.60	-25.20	-15.09	87.18	93.98	-6.80	22856	50000	-27144	PK	H	H
1854	40.60	0.00	26.90	8.70	-19.20	-15.09	41.91	53.98	-12.07	125	500	-375	PK	H	H
2781	34.70	0.00	29.90	11.50	-20.90	-15.09	40.11	53.98	-13.87	101	500	-399	PK	H	H
3708	37.00	0.00	32.10	13.70	-24.60	-15.09	43.11	53.98	-10.87	143	500	-357	PK	H	H
4635	38.70	0.00	32.80	16.00	-25.20	-15.09	47.21	53.98	-6.77	229	500	-271	PK	H	H
5562	23.70	0.00	34.40	17.70	-25.40	-15.09	35.31	53.98	-18.67	58	500	-442	AV	H	H
6489	23.60	0.00	34.70	19.50	-24.00	-15.09	38.71	53.98	-15.27	86	500	-414	AV	H	H
7416	25.60	0.00	36.80	21.50	-25.10	-15.09	43.71	53.98	-10.27	153	500	-347	AV	H	H
8343	25.40	0.00	37.50	23.30	-23.90	-15.09	47.21	53.98	-6.77	229	500	-271	AV	H	H
9270	25.50	0.00	37.70	25.80	-24.30	-15.09	49.61	53.98	-4.37	302	500	-198	AV	H	H
927	81.16	25.20	0.00	5.60	-25.20	-15.09	71.67	93.98	-22.31	3833	50000	-46167	PK	V	H
1854	42.60	0.00	26.90	8.70	-19.20	-15.09	43.91	53.98	-10.07	157	500	-343	PK	V	H
2781	34.50	0.00	29.90	11.50	-20.90	-15.09	39.91	53.98	-14.07	99	500	-401	PK	V	H
3708	37.70	0.00	32.10	13.70	-24.60	-15.09	43.81	53.98	-10.17	155	500	-345	PK	V	H
4635	37.70	0.00	32.80	16.00	-25.20	-15.09	46.21	53.98	-7.77	204	500	-296	PK	V	H
5562	23.50	0.00	34.40	17.70	-25.40	-15.09	35.11	53.98	-18.87	57	500	-443	AV	V	H
6489	25.80	0.00	34.70	19.50	-24.00	-15.09	40.91	53.98	-13.07	111	500	-389	AV	V	H
7416	25.90	0.00	36.80	21.50	-25.10	-15.09	44.01	53.98	-9.97	159	500	-341	AV	V	H
8343	25.20	0.00	37.50	23.30	-23.90	-15.09	47.01	53.98	-6.97	224	500	-276	AV	V	H
9270	25.40	0.00	37.70	25.80	-24.30	-15.09	49.51	53.98	-4.47	299	500	-201	AV	V	H

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		CFR 47 Subpart C Worksheet											
DNB Job Number:		78059				Date: 6 Dec 2006				Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210					
Customer:		Cattron Theimeg													
Model Number:		MKU915A													
Description:		Remote Control Transmitter Hi Channel													
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>															
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Drg = Electro-Metrics 3115 Double Ridge Guide Antenna S/N 2280 (1-18 GHz Mhz) Cbl = Cable Loss Amp = Preamplifier Gain Dcf = Duty Cycle Correction Typ = Type of reading PK = Peak reading QP = Quasi-peak reading AV = Average reading Pol = Antenna polarity V = Vertical H = Horizontal Pol = EUT V = Vertical H = Horizontal															
NOTES: Readings greater than 3 rd harmonic are ground floor readings Fundamentals are in BOLD with a yellow background															
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions		
		Log	Drg	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Pol	EUT
927	82.55	25.20	0.00	5.60	-25.20	-15.09	73.06	93.98	-20.92	4498	50000	-45502	PK	H	V
1854	39.10	0.00	26.90	8.70	-19.20	-15.09	40.41	53.98	-13.57	105	500	-395	PK	H	V
2781	34.20	0.00	29.90	11.50	-20.90	-15.09	39.61	53.98	-14.37	96	500	-404	PK	H	V
3708	37.50	0.00	32.10	13.70	-24.60	-15.09	43.61	53.98	-10.37	152	500	-348	PK	H	V
4635	36.30	0.00	32.80	16.00	-25.20	-15.09	44.81	53.98	-9.17	174	500	-326	PK	H	V
5562	23.40	0.00	34.40	17.70	-25.40	-15.09	35.01	53.98	-18.97	56	500	-444	AV	H	V
6489	23.40	0.00	34.70	19.50	-24.00	-15.09	38.51	53.98	-15.47	84	500	-416	AV	H	V
7416	25.30	0.00	36.80	21.50	-25.10	-15.09	43.41	53.98	-10.57	148	500	-352	AV	H	V
8343	25.30	0.00	37.50	23.30	-23.90	-15.09	47.11	53.98	-6.87	227	500	-273	AV	H	V
9270	25.40	0.00	37.70	25.80	-24.30	-15.09	49.51	53.98	-4.47	299	500	-201	AV	H	V
927	85.12	25.20	0.00	5.60	-25.20	-15.09	75.63	93.98	-18.35	6046	50000	-43954	PK	V	V
1854	35.00	0.00	26.90	8.70	-19.20	-15.09	36.31	53.98	-17.67	65	500	-435	PK	V	V
2781	34.20	0.00	29.90	11.50	-20.90	-15.09	39.61	53.98	-14.37	96	500	-404	PK	V	V
3708	38.10	0.00	32.10	13.70	-24.60	-15.09	44.21	53.98	-9.77	162	500	-338	PK	V	V
4635	37.90	0.00	32.80	16.00	-25.20	-15.09	46.41	53.98	-7.57	209	500	-291	PK	V	V
5562	23.50	0.00	34.40	17.70	-25.40	-15.09	35.11	53.98	-18.87	57	500	-443	AV	V	V
6489	23.70	0.00	34.70	19.50	-24.00	-15.09	38.81	53.98	-15.17	87	500	-413	AV	V	V
7416	25.50	0.00	36.80	21.50	-25.10	-15.09	43.61	53.98	-10.37	152	500	-348	AV	V	V
8343	25.30	0.00	37.50	23.30	-23.90	-15.09	47.11	53.98	-6.87	227	500	-273	AV	V	V
9270	25.40	0.00	37.70	25.80	-24.30	-15.09	49.51	53.98	-4.47	299	500	-201	AV	V	V

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions Datasheet												
DNB Job Number:		78059				Date: 6 Dec 2006				Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210						
Customer:		Cattron Theimeg														
Model Number:		MKU915A														
Description:		Remote Control Transmitter														
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>																
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Dcf = Distance Correction Factor = 20*LOG ₁₀ (Test Distance/Specification Distance) Typ = Type of reading PK = Peak reading QP = Quasi-peak reading								Cbl = Cable Loss Amp = Preamplifier Gain Pl = Antenna polarity V = Vertical H = Horizontal "*" = Readings taken with a res bandwidth of 10KHz do to nearby ambient signal								
NOTES: EUT placed vertically on table																
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions			
		Bcn	Log	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt
201.015	29.5	0.0	10.9	2.2	-23.7	-10.0	8.9	30.0	-21.1	3	32	-29	PK	360	H	1.92
500.636	33.3	0.0	19.3	3.6	-24.7	-10.0	21.5	37.0	-15.5	12	71	-59	PK	310	H	1.73
991.352	27.6	0.0	24.2	5.1	-24.7	-10.0	22.2	37.0	-14.8	13	71	-58	PK	216	H	1.84
32.975	34.0	13.6	0.0	0.8	-23.9	-10.0	14.5	30.0	-15.5	5	32	-27	PK	234	V	1.80
111.701	35.5	9.8	0.0	1.6	-23.7	-10.0	13.2	30.0	-16.8	5	32	-27	PK	201	V	1.52
197.994	37.5	15.2	0.0	2.2	-23.7	-10.0	21.2	30.0	-8.8	11	32	-21	PK	225	V	1.32
201.256	28.7	0.0	10.9	2.2	-23.7	-10.0	8.1	30.0	-21.9	3	32	-29	PK	360	V	1.41
501.166	35.1	0.0	19.3	3.6	-24.7	-10.0	23.3	37.0	-13.7	15	71	-56	PK	114	V	1.27
992.786	29.6	0.0	24.2	5.1	-24.7	-10.0	24.2	37.0	-12.8	16	71	-55	PK	300	V	1.57

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Radiated Emissions Datasheet												
DNB Job Number:		78059		Date: 6 Dec 2006		Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210										
Customer:		Cattron Theimeg														
Model Number:		MKU915A														
Description:		Remote Control Transmitter														
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>																
Bcn = A.H. Systems SAS-200/540 Biconical Antenna S/N 138 (30-200 Mhz) Log = EMCO 3146 Log-Periodic Antenna S/N 1284 (200-1000 Mhz) Dcf = Distance Correction Factor = 20*LOG ₁₀ (Test Distance/Specification Distance) Typ = Type of reading PK = Peak reading QP = Quasi-peak reading								Cbl = Cable Loss Amp = Preamplifier Gain Pl = Antenna polarity V = Vertical H = Horizontal *** = Readings taken with a res bandwidth of 10KHz do to nearby ambient signal								
NOTES: EUT placed horizontally on table																
FREQ.	Meter	Correction Factors					dBuV/m			uV/m			Positions			
		Bcn	Log	Cbl	Amp	Dcf	Corr	Lim	Delta	Corr	Lim	Delta	Typ	Tbl	Pl	Hgt
121.193	33.1	10.5	0.0	1.7	-23.7	-10.0	11.6	30.0	-18.4	4	32	-28	PK	250	V	1.22
197.984	36.8	15.2	0.0	2.2	-23.7	-10.0	20.5	30.0	-9.5	11	32	-21	PK	360	V	1.22
31.275	22.6	14.3	0.0	0.8	-23.9	-10.0	3.8	30.0	-26.2	2	32	-30	PK	360	H	1.72
52.202	32.3	11.1	0.0	0.9	-23.7	-10.0	10.6	30.0	-19.4	3	32	-29	PK	194	H	1.72
109.702	30.7	9.7	0.0	1.6	-23.7	-10.0	8.3	30.0	-21.7	3	32	-29	PK	59	H	2.03
198.750	24.3	15.3	0.0	2.2	-23.7	-10.0	8.1	30.0	-21.9	3	32	-29	PK	0	H	2.03
202.182	27.0	0.0	10.9	2.2	-23.7	-10.0	6.4	30.0	-23.6	2	32	-30	PK	0	H	1.88
501.116	26.3	0.0	19.3	3.6	-24.7	-10.0	14.5	37.0	-22.5	5	71	-66	PK	155	H	1.88
997.205	25.7	0.0	24.1	5.1	-24.7	-10.0	20.2	37.0	-16.8	10	71	-61	PK	217	H	1.88
202.937	28.7	0.0	10.9	2.2	-23.8	-10.0	8.0	30.0	-22.0	3	32	-29	PK	217	V	1.88
501.041	26.1	0.0	19.3	3.6	-24.7	-10.0	14.3	37.0	-22.7	5	71	-66	PK	106	V	1.29
992.718	27.9	0.0	24.2	5.1	-24.7	-10.0	22.5	37.0	-14.5	13	71	-58	PK	106	V	1.29

3.1.6 Duty Cycle Correction (ref DA:04-3946 and ANSI C63.4 13.1.4.2)

Part 15 of the FCC Rules provides for the operation of low power communication devices without an individual license (e.g., intrusion detectors, pulsed water tank level gauges, etc.), subject to certain requirements. Some of these devices use extremely narrow pulses to generate wideband emissions, which are measured to determine compliance with the rules. These measurements are typically performed with a receiver or spectrum analyzer. Depending on a number of factors (e.g., resolution bandwidth, pulsewidth, etc.), the spectrum analyzer may not always display the true peak value of the measured emission. This effect, called “pulse desensitization,” relates to the capabilities of the measuring instrument. For the measurement and reporting of the true peak of pulsed emissions, it may be necessary to apply a “pulse desensitization correction factor” (PDCF) to the measured value, pursuant to 47 CFR 15.35(a).

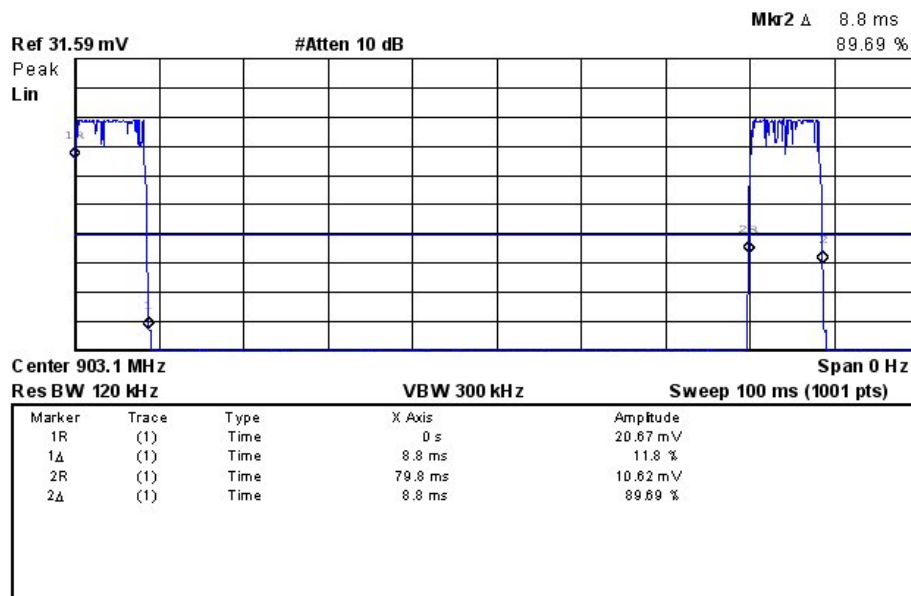
(PDCF) Duty cycle correction is determined by counting the number of pulses on over a 100 ms period.

Pulse width / Time = Duty Cycle

Duty cycle correction factor = 20 log (duty cycle)

		Time in ms	
Total on time per 100 ms		17.6	
Total off time per 100 ms		82.4	
Total duty cycle correction in dB		-15.09	

Plots showing modulation characteristics



3.1.7 Occupied Bandwidth

The transmitter's occupied bandwidth at (903 MHz and 927MHz) was measured with respect to the 26dB down point of the center frequency. Part 15.249 (c) stipulates that emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in § 15.209, whichever is the lesser attenuation. Part 15.209 (a) specifies that the emissions from an intentional radiator shall not exceed the field strength levels in the 216 to 960 MHz band of 200 uV/m (46 dBuV/m).

When transmitting at 903 MHz (Low Channel), emissions measured at the band edge of 902 MHz were 29.7 dBuV/m (< 46 dBuV/m).

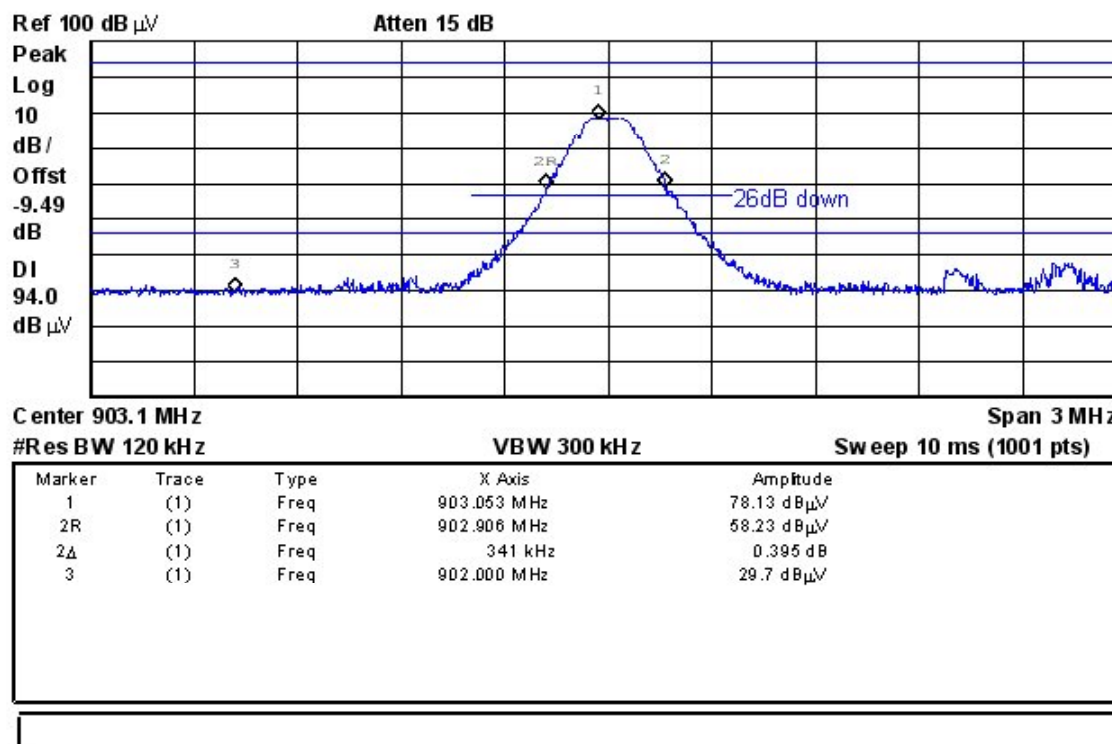
Lower band edge 902MHz = 29.7dBuV/m

When transmitting at 927 MHz (High Channel), emissions measured at the band edge of 928 MHz were 31.55 dBuV/m (< 46 dBuV/m).

Plots showing the occupied bandwidth are provided on page 22-24

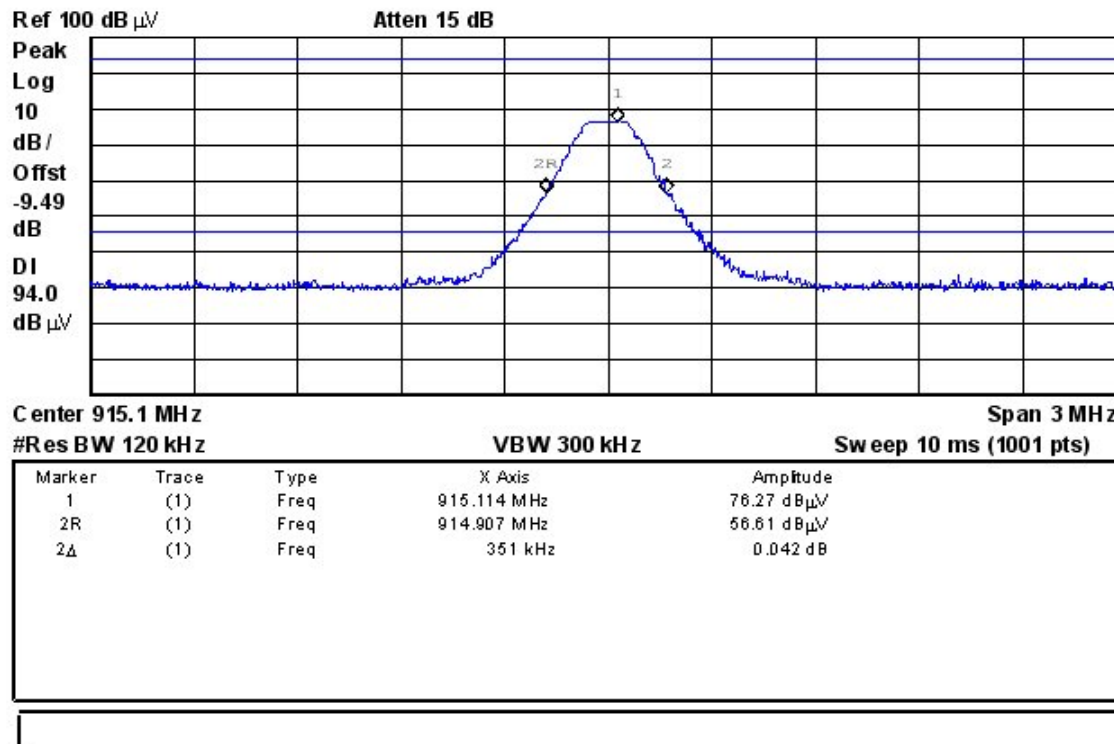
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Occupied Bandwidth Datasheet	
DNB Job Number: 78059		Date: 7 Dec 2006			
Customer: Catttron Theimeg		Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210			
Model Number: MKU915A					
Description: Remote Control Transmitter Low Channel					
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>					

Agilent 08:30:42 Dec 7, 2006



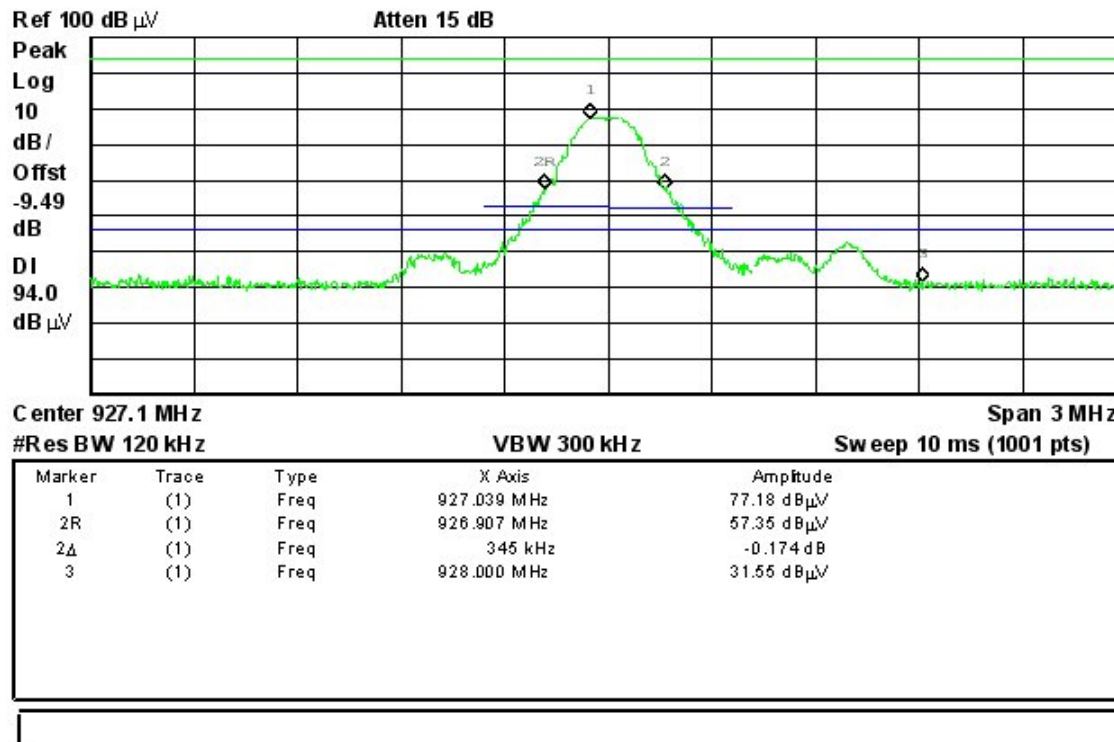
		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Occupied Bandwidth Datasheet	
DNB Job Number: 78059		Date: 7 Dec 2006			
Customer: Catttron Theimeg		Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210			
Model Number: MKU915A					
Description: Remote Control Transmitter Mid Channel					
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>					

Agilent 09:21:13 Dec 7, 2006



		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Occupied Bandwidth Datasheet	
DNB Job Number: 78059		Date: 7 Dec 2006			
Customer: Catttron Theimeg				Specification [X] FCC Part 15 Subpart C paragraph 15.209 paragraph 15.249 [X] IC RSS-210	
Model Number: MKU915A					
Description: Remote Control Transmitter High Channel					
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Tom Elders</i>					

Agilent 09:52:56 Dec 7, 2006



	5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704	Frequency Stability	
DNB Job Number:	78059	Date: 6 Dec 2006	Specification [X] FCC Part 15 Subpart C paragraph 15.249 [X] IC RSS-210
Customer:	Cattron Theimeg		
Model Number:	MKU915A		
Description:	Remote Control Transmitter		
	Low Channel		
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Les Payne</i>			
EUT was tested between -20 degrees C and + 50 degrees C and no frequency drift was observed. EUT Power was reduced until either frequency instability was observed or until the signal ceased to transmit. No frequency instability was observed.			
Temp (C)	Voltage	Frequency (MHz)	Deviation (kHz)
-20.0	3.0	903.046	+6
-10.0	3.0	903.044	-8
0.0	3.0	903.044	-8
+10.0	3.0	903.052	0
+20.0	3.0	903.052	0
+30.0	3.0	903.044	-8
+40.0	3.0	903.038	-14
+50.0	3.0	903.036	-16
Temp (C)	Voltage	Frequency (MHz)	Deviation (kHz)
+25	2.55	903.052	0
+25	3.00	903.052	0
+25	3.45	903.052	0

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Frequency Stability	
DNB Job Number:		78059		Date: 6 Dec 2006	
Customer:		Cattron Theimeg		Specification [X] FCC Part 15 Subpart C paragraph 15.249 [X] IC RSS-210	
Model Number:		MKU915A			
Description:		Remote Control Transmitter Mid Channel			
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Les Payne</i>					
EUT was tested between -20 degrees C and + 50 degrees C and no frequency drift was observed. EUT Power was reduced until either frequency instability was observed or until the signal ceased to transmit. No frequency instability was observed.					
Temp (C)		Voltage		Frequency (MHz)	
-20.0		3.0		915.038	
-10.0		3.0		915.046	
0.0		3.0		915.110	
+10.0		3.0		915.130	
+20.0		3.0		915.102	
+30.0		3.0		915.120	
+40.0		3.0		915.124	
+50.0		3.0		915.118	
Temp (C)		Voltage		Frequency (MHz)	
+25		2.55		915.102	
+25		3.00		915.102	
+25		3.45		915.102	
Deviation (kHz)		Deviation (kHz)		Deviation (kHz)	
-64		-56		+8	
+28		0		+18	
+22		+16		0	

		5969 Robinson Avenue Riverside, CA 92503 (951) 637-2630 FAX (951) 637-2704		Frequency Stability	
DNB Job Number:		78059		Date: 6 Dec 2006	
Customer:		Cattron Theimeg		Specification [X] FCC Part 15 Subpart C paragraph 15.249 [X] IC RSS-210	
Model Number:		MKU915A			
Description:		Remote Control Transmitter High Channel			
EUT performed within the requirements of the applicable Standard(s) [X] YES [] NO Signed <i>Les Payne</i>					
EUT was tested between -20 degrees C and + 50 degrees C and no frequency drift was observed. EUT Power was reduced until either frequency instability was observed or until the signal ceased to transmit. No frequency instability was observed.					
Temp (C)		Voltage		Frequency (MHz)	
-20.0		3.0		927.050	
-10.0		3.0		927.038	
0.0		3.0		927.116	
+10.0		3.0		927.054	
+20.0		3.0		927.036	
+30.0		3.0		924.046	
+40.0		3.0		927.062	
+50.0		3.0		927.048	
Temp (C)		Voltage		Frequency (MHz)	
+25		2.55		927.036	
+25		3.00		927.036	
+25		3.45		927.036	

3.1.8 Photographs of Test Setups – per 2.1033(b)(7)

Radiated Emissions – 30-200MHz



Photographs of Test Setups – continued - per 2.1033(b)(7)

Radiated Emissions – 200-1000 MHz



Photographs of Test Setups - continued – per 2.1033(b)(7)

Radiated Emissions – 1000-18,000 MHz



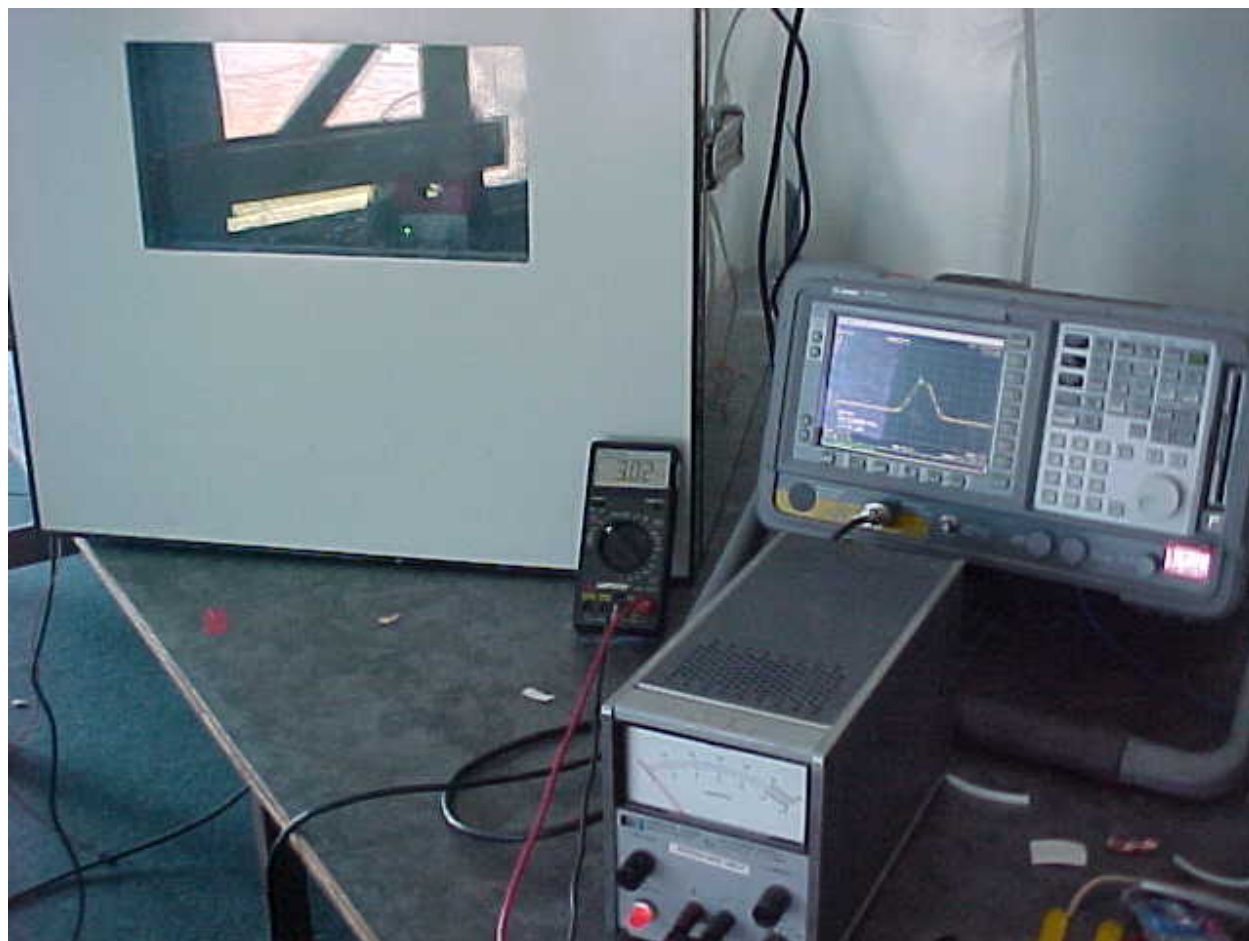
Photographs of Test Setups – continued – per 2.1033(b)(7)

Frequency Stability – Temperature



Photographs of Test Setups - continued – per 2.1033(b)(7)

Frequency Stability – Voltage Variations



3. LABELING REQUIREMENTS - PER 2.1033(B)(7)

MATERIAL .010 THICK MATTE FINISH POLYCARBONATE FILM WITH 3M #486 MP PSA

All information on the label will be etched or screened. All methods will exceed the expected lifetime of the equipment.

The label will be large enough to allow all information to be readily legible.

3.1 Additional Label Required

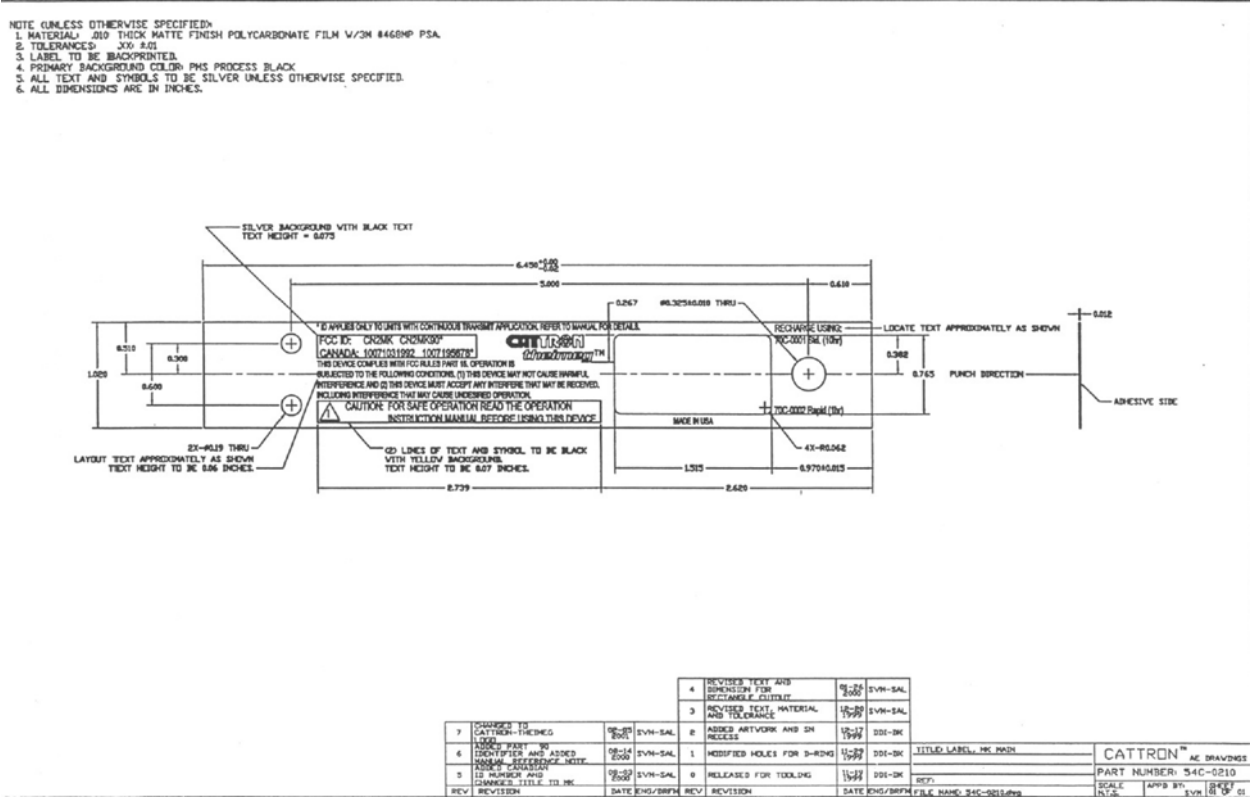
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Shown above is a copy of the label with the Part 15.19 Compliance Statement, Location of required information is checked “below”.

The label will be placed in a conspicuous location on the device.

3.2 Photograph of Label Placement and Contents

Because of the small size of this device the information in 4.1 may be placed in the documentation provided to the user. The FCC ID shall be placed upon the unit. This is in accordance with FCC Part 15.19 (a) (5).



UNCERTAINTY TOLERANCE

DNB Engineering's Riverside Facility (3 and 10 meter Open Area Test Sites) are within acceptable uncertainty tolerances per ANSI C63.4 (1992) sections 5.4.6.1 and 5.4.6.2.

ANSI C63.4 (1992)

5.4.6.1 Site Attenuation. A measurement site shall be considered acceptable for radiated electromagnetic field measurements if the horizontal and vertical NSA derived from measurements, i.e., the "measured NSA," are within ± 4 dB of the theoretical NSA (5.4.6.3) for an ideal site.

5.4.6.1 NSA Tolerance. The ± 4 dB tolerance in 5.4.6.1 includes instrumentation calibration errors, measurement technique errors, and errors due to site anomalies. These errors are analyzed in ANSI C63.6-1988 [3], wherein it is shown that the performance of a well-built site contributes only 1 dB of the total allowable tolerance.

**INFORMATION PERTAINING TO EQUIPMENT MANUFACTURED
AFTER COMPLIANCE TESTING**

It is prudent that manufacturers have an established Quality Assurance program to spot check their products on a periodic basis, either based upon time or quantities produced. Obviously, a change in the engineering design should be sufficient justification for a re-test.

The Quality assurance test need not be formal Verification or Certification such as required during the initial production of the product. However, it should be sufficient in scope to assure that the EMI characteristics of the product have not changed to the degree that the product exceeds the FCC limits. If a new model of a product is produced, it must undergo full Verification or Certification testing and, in case of Certification, be filed with the FCC.

It is expected that the FCC will place greater emphasis and resources in spot checking commercially available products. If a product is found not to be compliant with the Limits specified in Part 15, Subpart B, the manufacturer will be subject to the appropriate penalties imposed by the Commission. The initial Certification or Verification is sufficient to justify initial production. The additional quality assurance testing performed is the manufacturer's responsibility to assure continued compliance.

Test Equipment Log

Asset	Description	Manufacturer	M/N	S/N	Cal On	Cal Due
11	Antenna	Emco	3115	2281	05-Oct-06	05-Oct-07
31	Antenna	Emco	3146	1284	21-Dec-04	21-Dec-06
51	Pre-Amp	Mini-Circuits	zhl-2-8	41185-2	28-Oct-06	28-Oct-07
364	Pre-Amp	Miteq	afd304008040	121391	28-Oct-06	28-Oct-07
387	Pre-Amp	H/P	10855A	1250-0212	28-Oct-06	28-Oct-07
550	Pre-Amp	DNB	TF10010	550	28-Oct-06	28-Oct-07
551	Pre-Amp	DNB	TF10010	551	28-Oct-06	28-Oct-07
552	Pre-Amp	Avantek	UTA-8751M	20	28-Oct-06	28-Oct-07
703	Pre-Amp	DNB	TF10010	7003	28-Oct-06	28-Oct-07
952	Meter	Amprobe	AM-1250	330224	17-Oct-06	17-Oct-07
1698	Pre-Amp	Miteq	AFS4-08001800-35-LN	378064	12-Sep-06	12-Sep-07
1758	Antenna	AH Systems	SAS-200/540	524	03-Nov-06	03-Nov-07
1760	Pre-Amp	Mini-Circuits	ZFL-2000	8350	05-Oct-06	05-Oct-07
1762	Antenna	Comp Design	Antenna Kit	NSN	12-Dec-05	12-Dec-08
1763	Antenna	Comp Design	Antenna Kit	NSN	12-Dec-05	12-Dec-08
1920	Weather Station	Davis	7400	MC20725A20	28-Nov-06	28-Nov-07
1921	Antenna Mast	DNB	AM200	11921	28-Oct-06	28-Oct-07
1922	Turn Table	DNB	TP1100	11922	28-Oct-06	28-Oct-07
2005	Meter	Fluke	179	83500008	17-Jun-06	17-Jun-07
2027	DMM	SGC	92-08	12027	03-Aug-05	03-Aug-06
2264	Spectrum Analyzer	Agilent	E4407B	MY45103462	25-Aug-06	25-Aug-07
2287	OATS	Industry Canada	Industry Canada	12287	01-Nov-06	01-Nov-09

Appendix A
Additional Information
See Attachments

END of REPORT