

**FIELD MEASUREMENTS
OF
RADIO FREQUENCY
ELECTROMAGNETIC FIELD
STRENGTH**

**RADIO STATION KUHI
BIG ISLAND BROADCASTING, INC.**

FEBRUARY 20, 2008

**COMPILED BY
BYRON McCANN
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Honolulu, Hawaii 96813**

**808-589-1994
Fax: 808-589-1995**

Scope of Project:

Big Island Broadcasting, Inc. has been granted a Construction Permit for the operation of KUHJ-(FM). One of the special conditions of the permit was to make proper measurements of radiofrequency electromagnetic fields at the transmitter site.

This report addresses the radio frequency electromagnetic field strength levels at the Big Island Broadcasting, Inc. site, Ulapalakua Ranch Land, Island of Maui. These measurements were performed in compliance with OET Bulletin No. 65 guidelines.

Measurement Methodology:

The field measurements were performed at the Big Island Broadcasting, Inc. facilities after the KUHJ transmitter was added to the existing antenna system and combiner modifications were completed. Measurements were performed on the applicant's property perimeter as well as adjacent properties. Measurements were also performed inside the transmitter and combiner shelters as well as the tower base and parking area. Standard engineering practices were employed to take consistent measurements.

Measurements for "Hot Spots" and re-radiation from fence materials and other conductive material was performed. None were found.

Instrumentation:

All measurements were performed with a Holaday Industries Broadband Isotropic Electric Field Probe Model # HI-4433-MSE. This probe has a flat frequency response from 500 kHz - 5 GHz. This probe has a 3 Axis sensor probe, providing full X-Y-Z axis measurements for its full spectrum.

The probe is attached to a handheld Holaday Model HI-4460 graphical data interface. The instrument was set up to acquire 4 samples per second for the duration of the measurements. The HI-4460 samples and stores the measurements in a spreadsheet format. The spreadsheet data is then uploaded onto a laptop computer and converted to a Microsoft Excel spreadsheet file for data analysis. A copy of the instrument calibration report is attached with this report.

Measurements:

Field measurements were performed at the subject site after the KUHI transmitter was installed, new combining filters were installed and all other transmitters at the site were operating at normal power levels. The KUHI transmitter was operated at 7.2 KW output power, which produces a 69 KW ERP level from the transmitting antenna.

RF Levels never exceeded the FCC OET Bulletin No. 65 levels. The average levels were less than 16 % of the MPE levels.

Measurements for "Hot Spots" and re-radiation from fence materials and other conductive material were performed. None were found.

Recommendations:

The Site is within Ulupalakua Ranch Land. It is not accessible to the public. The applicant has installed a protective fence around the entire tower base property line restricting access to the public.

Conclusions:

The field measurements show that this new FM broadcast site is in compliance of the FCC OET Bulletin No. 65 Guidelines for the Human Exposure to Radiofrequency Electromagnetic Fields. At no location in the controlled access area does radiation exceed the 20% occupational limits.

Certification:

The above stated measurements and attached data were performed under the direct supervision of, Byron L. McCann; the attached exhibits were prepared by Mr. McCann. They show a true and accurate representation of the RF levels at the Ulupalakua Ranch Land site. These readings are true and accurate to the best of my ability.

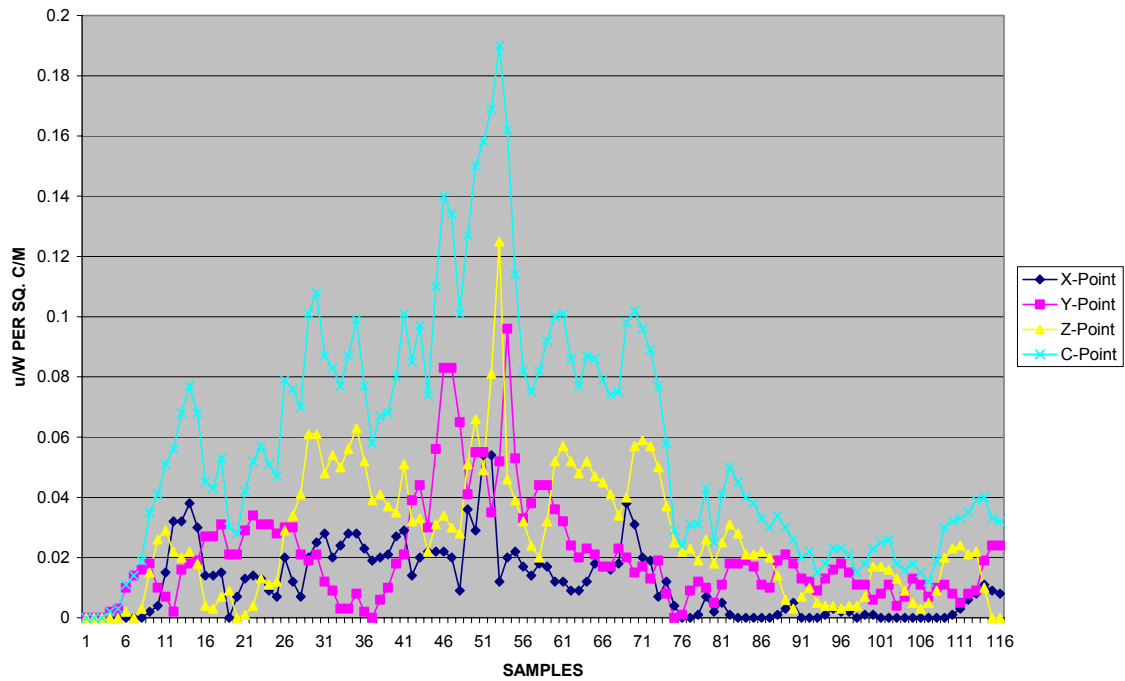
Respectfully Submitted,

February 20, 2008

Signed Byron L. McCann

Byron L. McCann
McCann & Associates, Inc.
Honolulu, Hawaii

PERIMETER FENCE

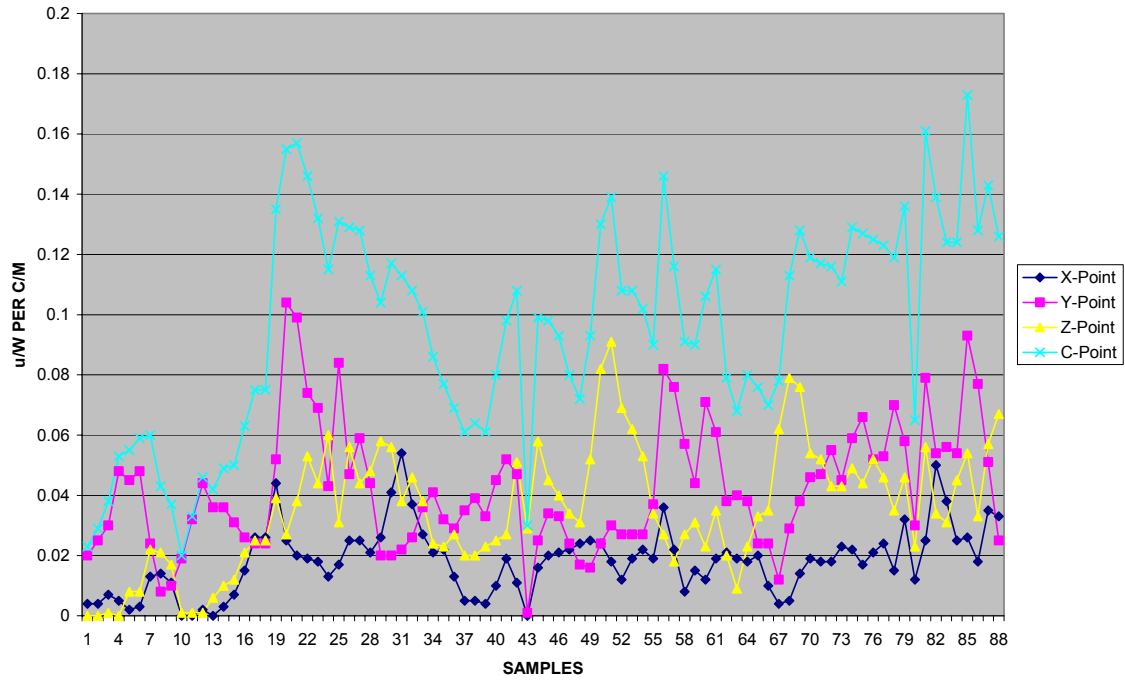


Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe HI-4433MSE	Units	% OF ANSI STANDARD
2/18/2008	2:22:02 PM	0	0	0	0		mW/cm²	0
2/18/2008	2:22:03 PM	0	0	0	0		mW/cm²	0
2/18/2008	2:22:04 PM	0	0	0	0		mW/cm²	0
2/18/2008	2:22:05 PM	0	0.002	0	0.002		mW/cm²	0.2
2/18/2008	2:22:06 PM	0	0.003	0	0.003		mW/cm²	0.3
2/18/2008	2:22:07 PM	0	0.01	0.002	0.011		mW/cm²	1.1
2/18/2008	2:22:08 PM	0	0.014	0	0.014		mW/cm²	1.4
2/18/2008	2:22:09 PM	0	0.016	0.003	0.019		mW/cm²	1.9
2/18/2008	2:22:10 PM	0.002	0.018	0.015	0.035		mW/cm²	3.5
2/18/2008	2:22:11 PM	0.004	0.01	0.026	0.041		mW/cm²	4.1
2/18/2008	2:22:12 PM	0.015	0.007	0.029	0.051		mW/cm²	5.1
2/18/2008	2:22:13 PM	0.032	0.002	0.022	0.056		mW/cm²	5.6
2/18/2008	2:22:14 PM	0.032	0.016	0.02	0.068		mW/cm²	6.8
2/18/2008	2:22:15 PM	0.038	0.018	0.022	0.077		mW/cm²	7.7
2/18/2008	2:22:16 PM	0.03	0.019	0.018	0.068		mW/cm²	6.8
2/18/2008	2:22:17 PM	0.014	0.027	0.004	0.045		mW/cm²	4.5
2/18/2008	2:22:18 PM	0.014	0.027	0.003	0.043		mW/cm²	4.3
2/18/2008	2:22:19 PM	0.015	0.031	0.007	0.053		mW/cm²	5.3
2/18/2008	2:22:20 PM	0	0.021	0.009	0.03		mW/cm²	3
2/18/2008	2:22:21 PM	0.007	0.021	0	0.028		mW/cm²	2.8
2/18/2008	2:22:22 PM	0.013	0.029	0.001	0.042		mW/cm²	4.2
2/18/2008	2:22:23 PM	0.014	0.034	0.004	0.052		mW/cm²	5.2
2/18/2008	2:22:24 PM	0.013	0.031	0.013	0.057		mW/cm²	5.7

2/18/2008	2:22:25 PM	0.009	0.031	0.011	0.051	mW/cm ²	5.1
2/18/2008	2:22:26 PM	0.007	0.028	0.012	0.047	mW/cm ²	4.7
2/18/2008	2:22:27 PM	0.02	0.03	0.029	0.079	mW/cm ²	7.9
2/18/2008	2:22:28 PM	0.012	0.03	0.034	0.076	mW/cm ²	7.6
2/18/2008	2:22:29 PM	0.007	0.021	0.041	0.07	mW/cm ²	7
2/18/2008	2:22:30 PM	0.02	0.019	0.061	0.101	mW/cm ²	10.1
2/18/2008	2:22:31 PM	0.025	0.021	0.061	0.108	mW/cm ²	10.8
2/18/2008	2:22:32 PM	0.028	0.012	0.048	0.087	mW/cm ²	8.7
2/18/2008	2:22:33 PM	0.02	0.009	0.054	0.083	mW/cm ²	8.3
2/18/2008	2:22:34 PM	0.024	0.003	0.05	0.077	mW/cm ²	7.7
2/18/2008	2:22:35 PM	0.028	0.003	0.056	0.087	mW/cm ²	8.7
2/18/2008	2:22:36 PM	0.028	0.008	0.063	0.099	mW/cm ²	9.9
2/18/2008	2:22:37 PM	0.023	0.002	0.052	0.077	mW/cm ²	7.7
2/18/2008	2:22:38 PM	0.019	0	0.039	0.058	mW/cm ²	5.8
2/18/2008	2:22:39 PM	0.02	0.006	0.041	0.067	mW/cm ²	6.7
2/18/2008	2:22:40 PM	0.021	0.01	0.037	0.068	mW/cm ²	6.8
2/18/2008	2:22:41 PM	0.027	0.018	0.035	0.08	mW/cm ²	8
2/18/2008	2:22:42 PM	0.029	0.021	0.051	0.101	mW/cm ²	10.1
2/18/2008	2:22:43 PM	0.014	0.039	0.032	0.085	mW/cm ²	8.5
2/18/2008	2:22:44 PM	0.02	0.044	0.033	0.097	mW/cm ²	9.7
2/18/2008	2:22:45 PM	0.022	0.03	0.022	0.074	mW/cm ²	7.4
2/18/2008	2:22:46 PM	0.022	0.056	0.031	0.11	mW/cm ²	11
2/18/2008	2:22:47 PM	0.022	0.083	0.034	0.14	mW/cm ²	14
2/18/2008	2:22:48 PM	0.02	0.083	0.03	0.134	mW/cm ²	13.4
2/18/2008	2:22:49 PM	0.009	0.065	0.028	0.101	mW/cm ²	10.1
2/18/2008	2:22:50 PM	0.036	0.041	0.051	0.127	mW/cm ²	12.7
2/18/2008	2:22:51 PM	0.029	0.055	0.066	0.15	mW/cm ²	15
2/18/2008	2:22:52 PM	0.054	0.055	0.049	0.158	mW/cm ²	15.8
2/18/2008	2:22:53 PM	0.054	0.035	0.081	0.169	mW/cm ²	16.9
2/18/2008	2:22:54 PM	0.012	0.052	0.125	0.19	mW/cm ²	19
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2/18/2008	2:22:57 PM	0.022	0.053	0.039	0.114	mW/cm ²	11.4
2/18/2008	2:22:58 PM	0.017	0.033	0.032	0.082	mW/cm ²	8.2
2/18/2008	2:22:59 PM	0.014	0.038	0.024	0.075	mW/cm ²	7.5
2/18/2008	2:23:00 PM	0.018	0.044	0.02	0.082	mW/cm ²	8.2
2/18/2008	2:23:01 PM	0.017	0.044	0.032	0.092	mW/cm ²	9.2
2/18/2008	2:23:02 PM	0.012	0.036	0.052	0.1	mW/cm ²	10
2/18/2008	2:23:03 PM	0.012	0.032	0.057	0.101	mW/cm ²	10.1
2/18/2008	2:23:04 PM	0.009	0.024	0.052	0.086	mW/cm ²	8.6
2/18/2008	2:23:05 PM	0.009	0.02	0.048	0.077	mW/cm ²	7.7
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2/18/2008	2:23:24 PM	0.001	0.018	0.031	0.05	mW/cm ²	5
2/18/2008	2:23:25 PM	0	0.018	0.028	0.045	mW/cm ²	4.5
2/18/2008	2:23:26 PM	0	0.019	0.021	0.04	mW/cm ²	4
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2/18/2008	2:23:32 PM	0.005	0.018	0.003	0.026	mW/cm ²	2.6
2/18/2008	2:23:33 PM	0	0.013	0.007	0.02	mW/cm ²	2
2/18/2008	2:23:34 PM	0	0.012	0.01	0.022	mW/cm ²	2.2
2/18/2008	2:23:35 PM	0	0.009	0.005	0.015	mW/cm ²	1.5
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2/18/2008	2:23:43 PM	0	0.008	0.017	0.025	mW/cm ²	2.5
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2/18/2008	2:23:48 PM	0	0.011	0.003	0.015	mW/cm ²	1.5
2/18/2008	2:23:49 PM	0	0.007	0.005	0.012	mW/cm ²	1.2
2/18/2008	2:23:50 PM	0	0.01	0.009	0.019	mW/cm ²	1.9
2/18/2008	2:23:51 PM	0	0.011	0.02	0.03	mW/cm ²	3
2/18/2008	2:23:52 PM	0.001	0.008	0.023	0.032	mW/cm ²	3.2
2/18/2008	2:23:53 PM	0.003	0.005	0.024	0.033	mW/cm ²	3.3
2/18/2008	2:23:54 PM	0.006	0.008	0.021	0.035	mW/cm ²	3.5
2/18/2008	2:23:55 PM	0.008	0.009	0.022	0.039	mW/cm ²	3.9
2/18/2008	2:23:56 PM	0.011	0.019	0.01	0.04	mW/cm ²	4
2/18/2008	2:23:57 PM	0.009	0.024	0	0.033	mW/cm ²	3.3
2/18/2008	2:23:58 PM	0.008	0.024	0	0.032	mW/cm ²	3.2

TOWER BASE

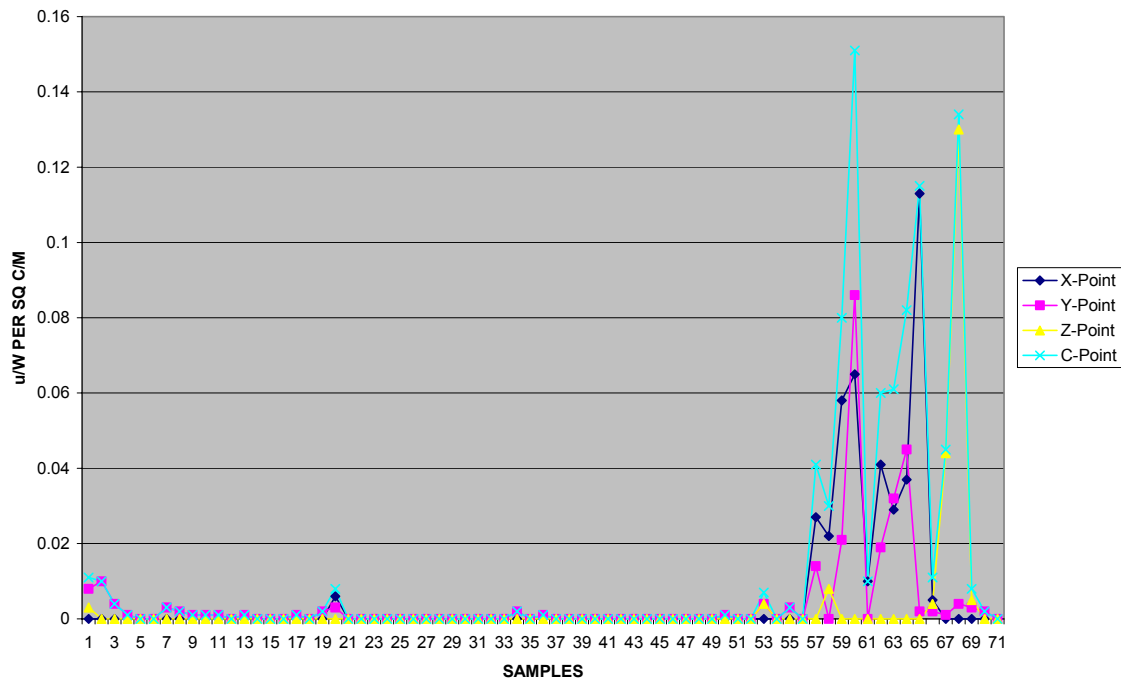


Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe	Units	% OF ANSI STANDARD
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2/18/2008	2:24:14 PM	0.004	0.025	0	0.029		mW/cm ²	2.9
2/18/2008	2:24:15 PM	0.007	0.03	0.001	0.038		mW/cm ²	3.8
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2/18/2008	2:24:18 PM	0.003	0.048	0.008	0.059		mW/cm ²	5.9
2/18/2008	2:24:19 PM	0.013	0.024	0.022	0.06		mW/cm ²	6
2/18/2008	2:24:20 PM	0.014	0.008	0.021	0.043		mW/cm ²	4.3
2/18/2008	2:24:21 PM	0.011	0.01	0.017	0.037		mW/cm ²	3.7
2/18/2008	2:24:22 PM	0	0.019	0.001	0.02		mW/cm ²	2
2/18/2008	2:24:23 PM	0	0.032	0.001	0.033		mW/cm ²	3.3
2/18/2008	2:24:24 PM	0.002	0.044	0.001	0.046		mW/cm ²	4.6
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2/18/2008	2:24:27 PM	0.007	0.031	0.012	0.05		mW/cm ²	5
2/18/2008	2:24:28 PM	0.015	0.026	0.021	0.063		mW/cm ²	6.3
2/18/2008	2:24:29 PM	0.026	0.024	0.025	0.075		mW/cm ²	7.5
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2/18/2008	2:24:34 PM	0.019	0.074	0.053	0.146	mW/cm ²	14.6
2/18/2008	2:24:35 PM	0.018	0.069	0.044	0.132	mW/cm ²	13.2
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2/18/2008	2:25:00 PM	0.024	0.017	0.031	0.072	mW/cm ²	7.2
2/18/2008	2:25:01 PM	0.025	0.016	0.052	0.093	mW/cm ²	9.3
2/18/2008	2:25:02 PM	0.024	0.024	0.082	0.13	mW/cm ²	13
2/18/2008	2:25:03 PM	0.018	0.03	0.091	0.139	mW/cm ²	13.9
2/18/2008	2:25:04 PM	0.012	0.027	0.069	0.108	mW/cm ²	10.8
2/18/2008	2:25:05 PM	0.019	0.027	0.062	0.108	mW/cm ²	10.8
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2/18/2008	2:25:07 PM	0.019	0.037	0.034	0.09	mW/cm ²	9
2/18/2008	2:25:08 PM	0.036	0.082	0.027	0.146	mW/cm ²	14.6
2/18/2008	2:25:09 PM	0.022	0.076	0.018	0.116	mW/cm ²	11.6
2/18/2008	2:25:10 PM	0.008	0.057	0.027	0.091	mW/cm ²	9.1
2/18/2008	2:25:11 PM	0.015	0.044	0.031	0.09	mW/cm ²	9
2/18/2008	2:25:12 PM	0.012	0.071	0.023	0.106	mW/cm ²	10.6
2/18/2008	2:25:13 PM	0.019	0.061	0.035	0.115	mW/cm ²	11.5
2/18/2008	2:25:14 PM	0.021	0.038	0.02	0.079	mW/cm ²	7.9
2/18/2008	2:25:15 PM	0.019	0.04	0.009	0.068	mW/cm ²	6.8
2/18/2008	2:25:16 PM	0.018	0.038	0.023	0.08	mW/cm ²	8
2/18/2008	2:25:17 PM	0.02	0.024	0.033	0.076	mW/cm ²	7.6
2/18/2008	2:25:18 PM	0.01	0.024	0.035	0.07	mW/cm ²	7
2/18/2008	2:25:19 PM	0.004	0.012	0.062	0.078	mW/cm ²	7.8
2/18/2008	2:25:20 PM	0.005	0.029	0.079	0.113	mW/cm ²	11.3
2/18/2008	2:25:21 PM	0.014	0.038	0.076	0.128	mW/cm ²	12.8

2/18/2008	2:25:22 PM	0.019	0.046	0.054	0.119	mW/cm ²	11.9
2/18/2008	2:25:23 PM	0.018	0.047	0.052	0.117	mW/cm ²	11.7
2/18/2008	2:25:24 PM	0.018	0.055	0.043	0.116	mW/cm ²	11.6
2/18/2008	2:25:25 PM	0.023	0.045	0.043	0.111	mW/cm ²	11.1
2/18/2008	2:25:26 PM	0.022	0.059	0.049	0.129	mW/cm ²	12.9
2/18/2008	2:25:27 PM	0.017	0.066	0.044	0.127	mW/cm ²	12.7
2/18/2008	2:25:28 PM	0.021	0.052	0.052	0.125	mW/cm ²	12.5
2/18/2008	2:25:29 PM	0.024	0.053	0.046	0.123	mW/cm ²	12.3
2/18/2008	2:25:30 PM	0.015	0.07	0.035	0.119	mW/cm ²	11.9
2/18/2008	2:25:33 PM	0.032	0.058	0.046	0.136	mW/cm ²	13.6
2/18/2008	2:25:34 PM	0.012	0.03	0.023	0.065	mW/cm ²	6.5
2/18/2008	2:25:35 PM	0.025	0.079	0.056	0.161	mW/cm ²	16.1
2/18/2008	2:25:36 PM	0.05	0.054	0.034	0.139	mW/cm ²	13.9
2/18/2008	2:25:37 PM	0.038	0.056	0.031	0.124	mW/cm ²	12.4
2/18/2008	2:25:38 PM	0.025	0.054	0.045	0.124	mW/cm ²	12.4
2/18/2008	2:25:39 PM	0.026	0.093	0.054	0.173	mW/cm ²	17.3
2/18/2008	2:25:40 PM	0.018	0.077	0.033	0.128	mW/cm ²	12.8
2/18/2008	2:25:41 PM	0.035	0.051	0.057	0.143	mW/cm ²	14.3
2/18/2008	2:25:42 PM	0.033	0.025	0.067	0.126	mW/cm ²	12.6

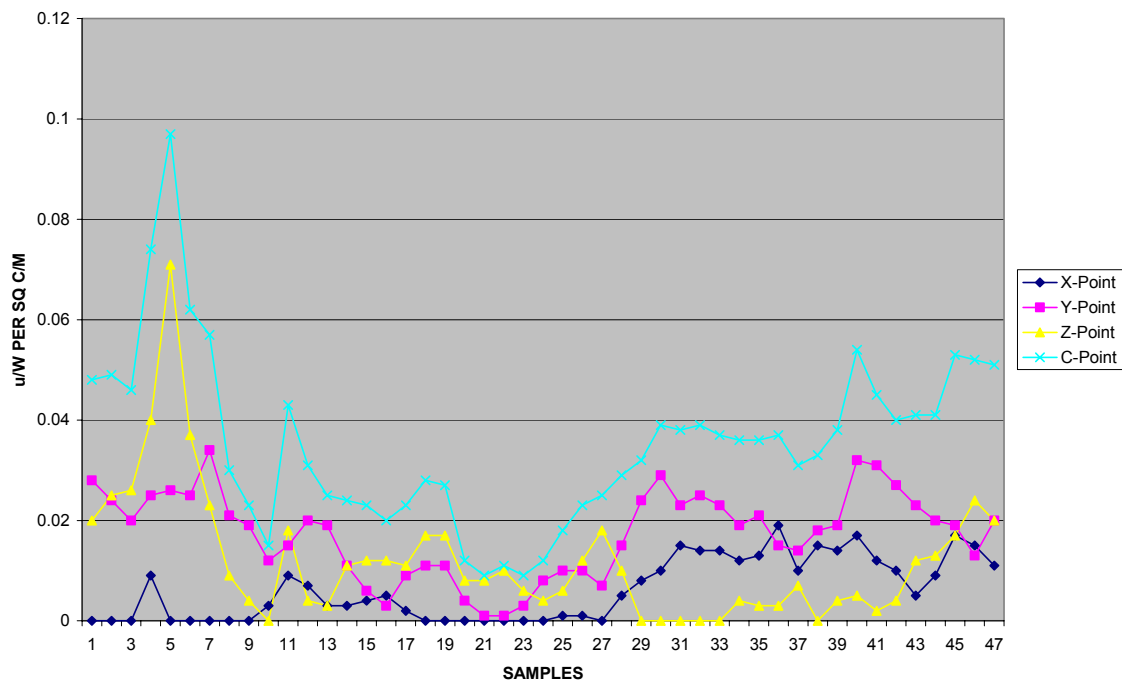
TRANSMITTER ISHELTER INSIDE



Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe	Units	% OF ANSI STANDARD
2/18/2008	2:26:56 PM	0	0.008	0.003	0.011	HI-4433MSE	mW/cm ²	1.1
2/18/2008	2:26:57 PM	0	0.01	0	0.01		mW/cm ²	1
2/18/2008	2:26:58 PM	0	0.004	0	0.004		mW/cm ²	0.4
2/18/2008	2:26:59 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:00 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:01 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:02 PM	0	0.003	0	0.003		mW/cm ²	0.3
2/18/2008	2:27:03 PM	0	0.002	0	0.002		mW/cm ²	0.2
2/18/2008	2:27:04 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:05 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:06 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:07 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:08 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:09 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:10 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:11 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:12 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:13 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:14 PM	0	0.002	0	0.002		mW/cm ²	0.2
2/18/2008	2:27:15 PM	0.006	0.003	0	0.008		mW/cm ²	0.8
2/18/2008	2:27:16 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:17 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:18 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:19 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:20 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:21 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:22 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:23 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:24 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:25 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:26 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:27 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:28 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:29 PM	0	0.002	0	0.002		mW/cm ²	0.2
2/18/2008	2:27:30 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:31 PM	0	0.001	0	0.001		mW/cm ²	0.1
2/18/2008	2:27:32 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:33 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:34 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:35 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:36 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:37 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:38 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:39 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:40 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:41 PM	0	0	0	0		mW/cm ²	0
2/18/2008	2:27:42 PM	0	0	0	0		mW/cm ²	0

2/18/2008	2:27:43 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:44 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:45 PM	0	0.001	0	0.001	mW/cm ²	0.1
2/18/2008	2:27:46 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:47 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:48 PM	0	0.004	0.004	0.007	mW/cm ²	0.7
2/18/2008	2:27:49 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:50 PM	0	0.003	0	0.003	mW/cm ²	0.3
2/18/2008	2:27:51 PM	0	0	0	0	mW/cm ²	0
2/18/2008	2:27:52 PM	0.027	0.014	0	0.041	mW/cm ²	4.1
2/18/2008	2:27:53 PM	0.022	0	0.008	0.03	mW/cm ²	3
2/18/2008	2:27:54 PM	0.058	0.021	0	0.08	mW/cm ²	8
2/18/2008	2:27:55 PM	0.065	0.086	0	0.151	mW/cm ²	15.1
2/18/2008	2:27:56 PM	0.01	0	0	0.01	mW/cm ²	1
2/18/2008	2:27:57 PM	0.041	0.019	0	0.06	mW/cm ²	6
2/18/2008	2:27:58 PM	0.029	0.032	0	0.061	mW/cm ²	6.1
2/18/2008	2:27:59 PM	0.037	0.045	0	0.082	mW/cm ²	8.2
2/18/2008	2:28:00 PM	0.113	0.002	0	0.115	mW/cm ²	11.5
2/18/2008	2:28:01 PM	0.005	0.002	0.004	0.011	mW/cm ²	1.1
2/18/2008	2:28:02 PM	0	0.001	0.044	0.045	mW/cm ²	4.5
2/18/2008	2:28:03 PM	0	0.004	0.13	0.134	mW/cm ²	13.4
2/18/2008	2:28:04 PM	0	0.003	0.005	0.008	mW/cm ²	0.8
2/18/2008	2:28:05 PM	0	0.002	0	0.002	mW/cm ²	0.2
2/18/2008	2:28:06 PM	0	0	0	0	mW/cm ²	0

SITE SWEEP



Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe	Units	% OF ANSI STANDARD
2/19/2008	12:07:05 PM	0	0.028	0.02	0.048	HI-4433MSE	mW/cm ²	4.8
2/19/2008	12:07:06 PM	0	0.024	0.025	0.049		mW/cm ²	4.9
2/19/2008	12:07:07 PM	0	0.02	0.026	0.046		mW/cm ²	4.6
2/19/2008	12:07:08 PM	0.009	0.025	0.04	0.074		mW/cm ²	7.4
2/19/2008	12:07:09 PM	0	0.026	0.071	0.097		mW/cm ²	9.7
2/19/2008	12:07:10 PM	0	0.025	0.037	0.062		mW/cm ²	6.2
2/19/2008	12:07:11 PM	0	0.034	0.023	0.057		mW/cm ²	5.7
2/19/2008	12:07:12 PM	0	0.021	0.009	0.03		mW/cm ²	3
2/19/2008	12:07:13 PM	0	0.019	0.004	0.023		mW/cm ²	2.3
2/19/2008	12:07:14 PM	0.003	0.012	0	0.015		mW/cm ²	1.5
2/19/2008	12:07:15 PM	0.009	0.015	0.018	0.043		mW/cm ²	4.3
2/19/2008	12:07:16 PM	0.007	0.02	0.004	0.031		mW/cm ²	3.1
2/19/2008	12:07:17 PM	0.003	0.019	0.003	0.025		mW/cm ²	2.5
2/19/2008	12:07:18 PM	0.003	0.011	0.011	0.024		mW/cm ²	2.4
2/19/2008	12:07:19 PM	0.004	0.006	0.012	0.023		mW/cm ²	2.3
2/19/2008	12:07:20 PM	0.005	0.003	0.012	0.02		mW/cm ²	2
2/19/2008	12:07:21 PM	0.002	0.009	0.011	0.023		mW/cm ²	2.3
2/19/2008	12:07:22 PM	0	0.011	0.017	0.028		mW/cm ²	2.8
2/19/2008	12:07:23 PM	0	0.011	0.017	0.027		mW/cm ²	2.7
2/19/2008	12:07:24 PM	0	0.004	0.008	0.012		mW/cm ²	1.2
2/19/2008	12:07:25 PM	0	0.001	0.008	0.009		mW/cm ²	0.9
2/19/2008	12:07:26 PM	0	0.001	0.01	0.011		mW/cm ²	1.1
2/19/2008	12:07:27 PM	0	0.003	0.006	0.009		mW/cm ²	0.9
2/19/2008	12:07:28 PM	0	0.008	0.004	0.012		mW/cm ²	1.2
2/19/2008	12:07:29 PM	0.001	0.01	0.006	0.018		mW/cm ²	1.8
2/19/2008	12:07:30 PM	0.001	0.01	0.012	0.023		mW/cm ²	2.3
2/19/2008	12:07:31 PM	0	0.007	0.018	0.025		mW/cm ²	2.5
2/19/2008	12:07:32 PM	0.005	0.015	0.01	0.029		mW/cm ²	2.9
2/19/2008	12:07:33 PM	0.008	0.024	0	0.032		mW/cm ²	3.2
2/19/2008	12:07:34 PM	0.01	0.029	0	0.039		mW/cm ²	3.9
2/19/2008	12:07:35 PM	0.015	0.023	0	0.038		mW/cm ²	3.8
2/19/2008	12:07:36 PM	0.014	0.025	0	0.039		mW/cm ²	3.9
2/19/2008	12:07:37 PM	0.014	0.023	0	0.037		mW/cm ²	3.7
2/19/2008	12:07:38 PM	0.012	0.019	0.004	0.036		mW/cm ²	3.6
2/19/2008	12:07:39 PM	0.013	0.021	0.003	0.036		mW/cm ²	3.6
2/19/2008	12:07:40 PM	0.019	0.015	0.003	0.037		mW/cm ²	3.7
2/19/2008	12:07:41 PM	0.01	0.014	0.007	0.031		mW/cm ²	3.1
2/19/2008	12:07:42 PM	0.015	0.018	0	0.033		mW/cm ²	3.3
2/19/2008	12:07:43 PM	0.014	0.019	0.004	0.038		mW/cm ²	3.8
2/19/2008	12:07:44 PM	0.017	0.032	0.005	0.054		mW/cm ²	5.4
2/19/2008	12:07:45 PM	0.012	0.031	0.002	0.045		mW/cm ²	4.5
2/19/2008	12:07:46 PM	0.01	0.027	0.004	0.04		mW/cm ²	4
2/19/2008	12:07:47 PM	0.005	0.023	0.012	0.041		mW/cm ²	4.1
2/19/2008	12:07:48 PM	0.009	0.02	0.013	0.041		mW/cm ²	4.1
2/19/2008	12:07:49 PM	0.017	0.019	0.017	0.053		mW/cm ²	5.3
2/19/2008	12:07:50 PM	0.015	0.013	0.024	0.052		mW/cm ²	5.2

2/19/2008	12:07:51 PM	0.011	0.02	0.02	0.051	mW/cm ²	5.1
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Certificate of Calibration Conformance

Page 1 of 1

The instrument listed below has been individually calibrated in compliance with the following standard(s):
IEEE 1309-1996, Institute of Electrical and Electronics Engineers, Standard for Calibration of Electromagnetic Field
Sensors and Probes, Excluding Antennas from 9 kHz to 40 GHz.

Environment: Laboratory MTE is maintained in a temperature controlled environment with ambient conditions from 18 to 28 degrees C,
relative humidity less than 90%. The instrument under test has been calibrated in an environment which is conducive to accurate and
reliable measurements.

Manufacturer: Holaday**Operating Range:** 500kHz - 5.0 GHz
10 - 1000 V/m**Model Number:** HI-4433-MSE**Instrument Type:** Electric Field Probe**Serial Number:** 104628**Alternate ID:****Tracking #:** S011395**Customer:** B.L. McCann & Associates
(HI)**Date Completed:** 17-Oct-07**Condition of Instrument:****Test Type:** Standard Field**Upon Receipt** **Upon Release**
In Tolerance In Tolerance**Calibration Uncertainty:**
(95% Confidence Level)**CALIBRATION DATA**



Freq.	Applied Field	Range	Correction Factor			Average Indicated Field	Deviation
			$E_{\text{Applied}}/E_{\text{Indicated}}$				
MHz	V/m	V/m	X	Y	Z	V/m	dB
1	20	31.6	1.14	1.26	1.19	16.72	-1.55
27.12	20	31.6	0.96	0.97	0.96	20.70	0.30
915	20	31.6	1.17	1.08	1.10	17.93	-0.95

Correction Factors to be applied to readings in V/m only.

Comments:

Calibration Traceability: All Measuring and Test Equipment (MTE) identified below are traceable to the National Institute for Standards and Technology (NIST).
Calibration Laboratory and Quality System are compliant with ISO/IEC 17025-1999.

Instrument	Model	S/N	Due Date
HP Power Meter	437B	3110A03972	9 Feb 08
HP Power Sensor	8482H	1926A01854	23 May 08


Calibration Completed by:
Calibration Technician:
Attested and Issued on: 3-Oct-07
Calibration Manager:

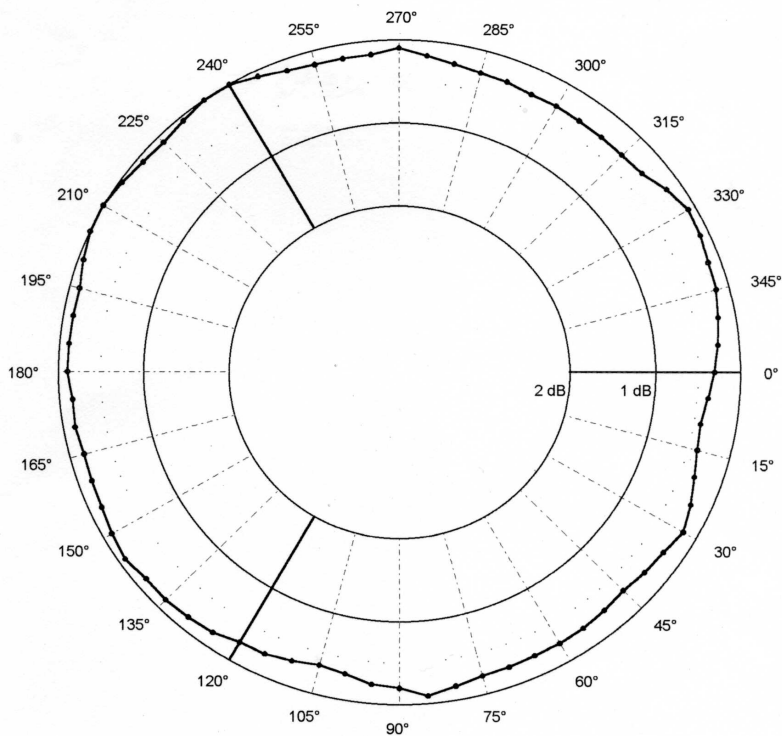
This document provides traceability to recognized national standards using controlled processes at the ETS-Lindgren Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Tech Note 1297. This certificate and/or report may not be reproduced except in full without the written approval of ETS-Lindgren Calibration Laboratory in accordance with ISO/IEC 17025-1999.



An ESCO Technologies Company

PROBE ROTATIONAL RESPONSE

Model HI-4433-MSE
S/N 104628
Date 17-Oct-2007
Time 07:33:38
Variation 0.42 dB
File HI-4433-MSE_104628.rtn



• Isotropic response measured in a 20 V/m field at 400 MHz