

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

RADIO STATION KPMW

**REY-CEL
BROADCASTING, INC.**

MARCH 24, 2004

**COMPILED BY
BYRON McCANN
B. L MCCANN & Associates, Inc.
875 Waimanu St. Suite #605
Honolulu, Hawaii 96813**

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

Scope of Project:

Rey-Cel Broadcasting, Inc. has been granted a Construction Permit for the re-location and operation of KPMW-FM. One of the special conditions of the permit was to make proper measurements of radio frequency electromagnetic fields at the transmitter site.

This report address's the radio frequency electromagnetic field strength levels at the Rey-Cel Broadcasting, Inc. Site, Upper Kula, Island of Maui. These measurements were performed in compliance with OET Bulletin No. 65 guidelines.

Measurement Methodology:

The field measurements were performed at the Rey-Cel Broadcasting, Inc. facilities after the KPMW transmitter was re-located and a new antenna system. was installed at the site. Measurements were performed on the applicant's property perimeter as well as adjacent properties. Measurements were also performed inside the transmitter shelter, as well as, 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.

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 KPMW transmitter was re-located, and new directional transmitting antenna was installed. The KPMW transmitter was operated at 2.5 KW output power, which produces a 7 KW ERP level from the transmitting antenna.

RF Levels never exceeded the FCC OET Bulletin No. 65 levels. The average levels were less than 3 % of the MPE levels, near the Antenna Perimeter fence. All other locations were less than 1 % of the MPE levels.

No location on or near the Upper Kula transmitter site is a danger to workers or public exposure of humans to RF fields in excess of the FCC Guidelines, (OET Bulletin No. 65, edition 97-01).

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

Recommendations:

The Site is on private property and 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. In addition the entire property is fenced off from 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. No additional measures are necessary.

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 KPMW Upper Kula transmitter site. These readings are true and accurate to the best of my ability.

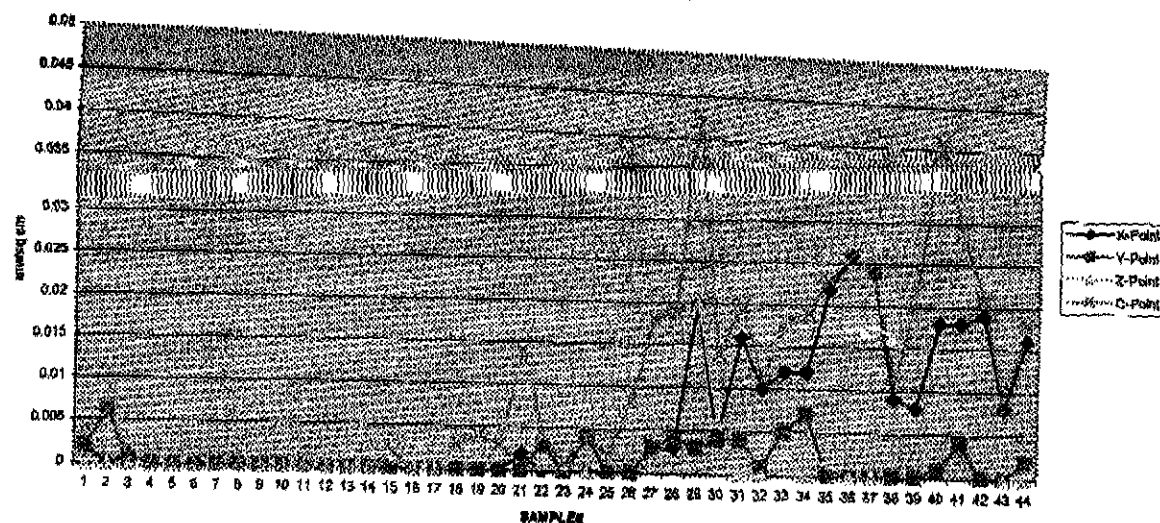
Respectfully Submitted,

March 24, 2004

Signed Byron L. McCann

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

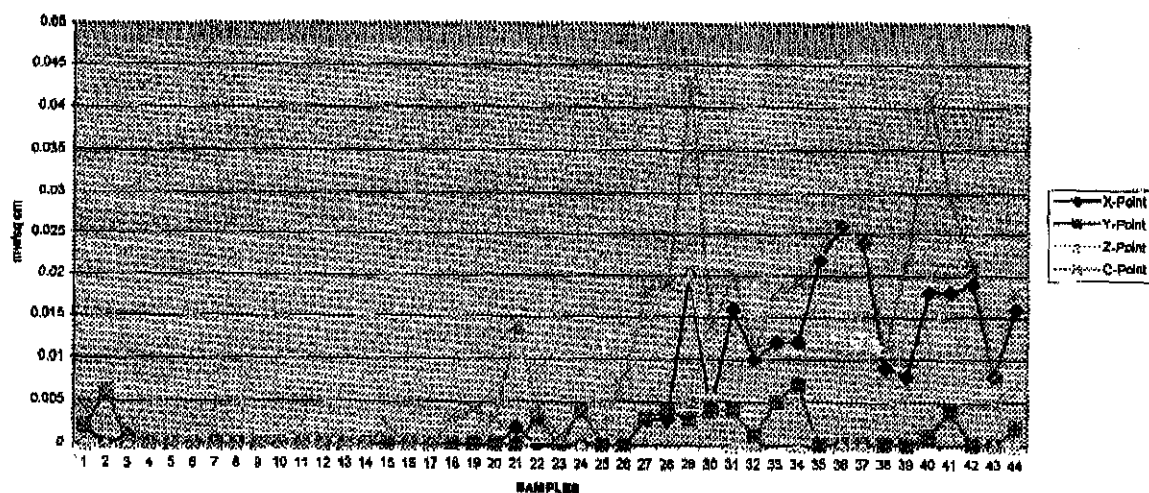
KPMW KULA SITE #1



PERIMETER Fence 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe	Units	% of ANSI Standard
3/18/2004	10:33:42 AM	0.002	0.002	0	0.004	HI-4433MSE	mW/cm²	0.40%
3/18/2004	10:33:44 AM	0	0.006	0	0.006		mW/cm²	0.60%
3/18/2004	10:33:46 AM	0.001	0	0	0.001		mW/cm²	0.10%
3/18/2004	10:33:48 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:50 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:52 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:54 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:56 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:58 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:00 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:02 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:04 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:06 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:08 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:10 AM	0	0	0.002	0.002		mW/cm²	0.20%
3/18/2004	10:34:12 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:14 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:16 AM	0	0	0.003	0.003		mW/cm²	0.30%
3/18/2004	10:34:18 AM	0	0	0.004	0.004		mW/cm²	0.40%
3/18/2004	10:34:20 AM	0	0	0.003	0.003		mW/cm²	0.30%

KPMW KULA SITE #1

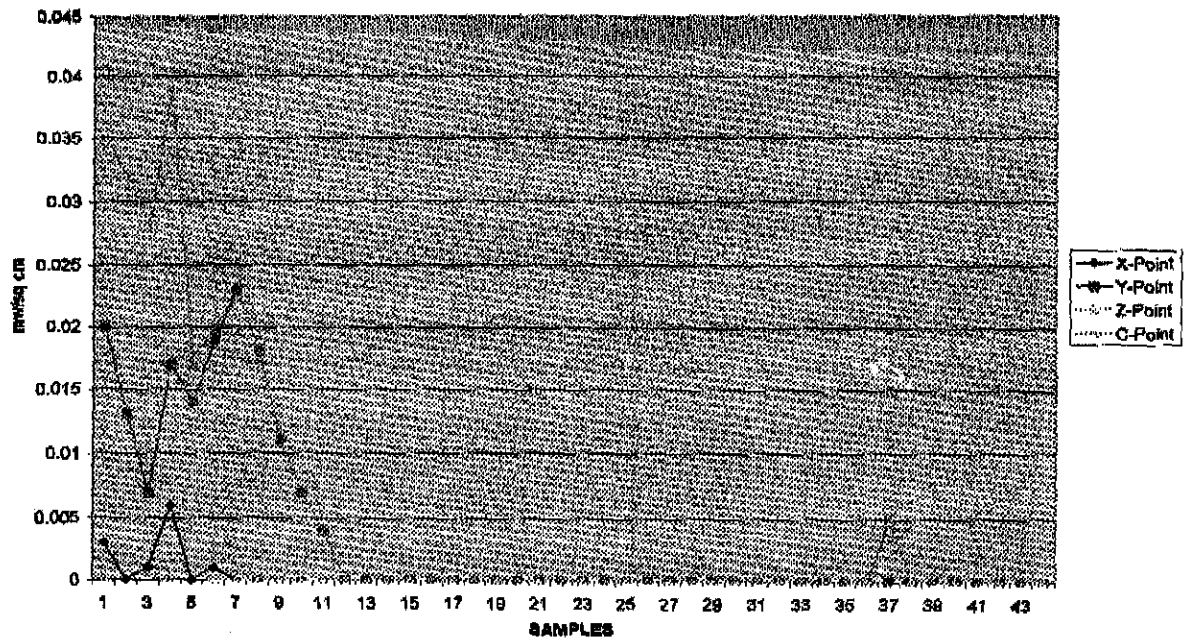


PERIMETER Fence 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe	Units	% of ANSI Standard
3/18/2004	10:33:42 AM	0.002	0.002	0	0.004	HI-4433MSE	mW/cm²	0.40%
3/18/2004	10:33:44 AM	0	0.008	0	0.008		mW/cm²	0.60%
3/18/2004	10:33:46 AM	0.001	0	0	0.001		mW/cm²	0.10%
3/18/2004	10:33:48 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:50 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:52 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:54 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:56 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:33:58 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:00 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:02 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:04 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:06 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:08 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:10 AM	0	0	0.002	0.002		mW/cm²	0.20%
3/18/2004	10:34:12 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:14 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:34:16 AM	0	0	0.003	0.003		mW/cm²	0.30%
3/18/2004	10:34:18 AM	0	0	0.004	0.004		mW/cm²	0.40%
3/18/2004	10:34:20 AM	0	0	0.003	0.003		mW/cm²	0.30%

3/18/2004	10:34:22 AM	0.002	0	0.012	0.014	mW/cm ²	1.40%
3/18/2004	10:34:24 AM	0	0.003	0.001	0.004	mW/cm ²	0.40%
3/18/2004	10:34:26 AM	0	0	0.001	0.001	mW/cm ²	0.10%
3/18/2004	10:34:28 AM	0	0.004	0	0.004	mW/cm ²	0.40%
3/18/2004	10:34:30 AM	0	0	0.002	0.002	mW/cm ²	0.20%
3/18/2004	10:34:32 AM	0	0	0.008	0.008	mW/cm ²	0.80%
3/18/2004	10:34:34 AM	0.003	0.003	0.012	0.018	mW/cm ²	1.80%
3/18/2004	10:34:36 AM	0.003	0.004	0.013	0.019	mW/cm ²	1.90%
3/18/2004	10:34:38 AM	0.02	0.003	0.02	0.043	mW/cm ²	4.30%
3/18/2004	10:34:40 AM	0.004	0.004	0.008	0.014	mW/cm ²	1.40%
3/18/2004	10:34:42 AM	0.016	0.004	0	0.02	mW/cm ²	2.00%
3/18/2004	10:34:44 AM	0.01	0.001	0	0.011	mW/cm ²	1.10%
3/18/2004	10:34:46 AM	0.012	0.005	0.001	0.018	mW/cm ²	1.80%
3/18/2004	10:34:48 AM	0.012	0.007	0	0.019	mW/cm ²	1.90%
3/18/2004	10:34:50 AM	0.022	0	0.002	0.023	mW/cm ²	2.30%
3/18/2004	10:34:52 AM	0.026	0	0	0.026	mW/cm ²	2.60%
3/18/2004	10:34:54 AM	0.024	0	0	0.024	mW/cm ²	2.40%
3/18/2004	10:34:56 AM	0.009	0	0.002	0.011	mW/cm ²	1.10%
3/18/2004	10:34:58 AM	0.008	0	0.014	0.022	mW/cm ²	2.20%
3/18/2004	10:35:00 AM	0.018	0.001	0.021	0.041	mW/cm ²	4.10%
3/18/2004	10:35:02 AM	0.018	0.004	0.007	0.029	mW/cm ²	2.90%
3/18/2004	10:35:04 AM	0.019	0	0.002	0.021	mW/cm ²	2.10%
3/18/2004	10:35:06 AM	0.008	0	0	0.008	mW/cm ²	0.80%
3/18/2004	10:35:08 AM	0.016	0.002	0	0.018	mW/cm ²	1.80%

KPMW KULA SITE # 2

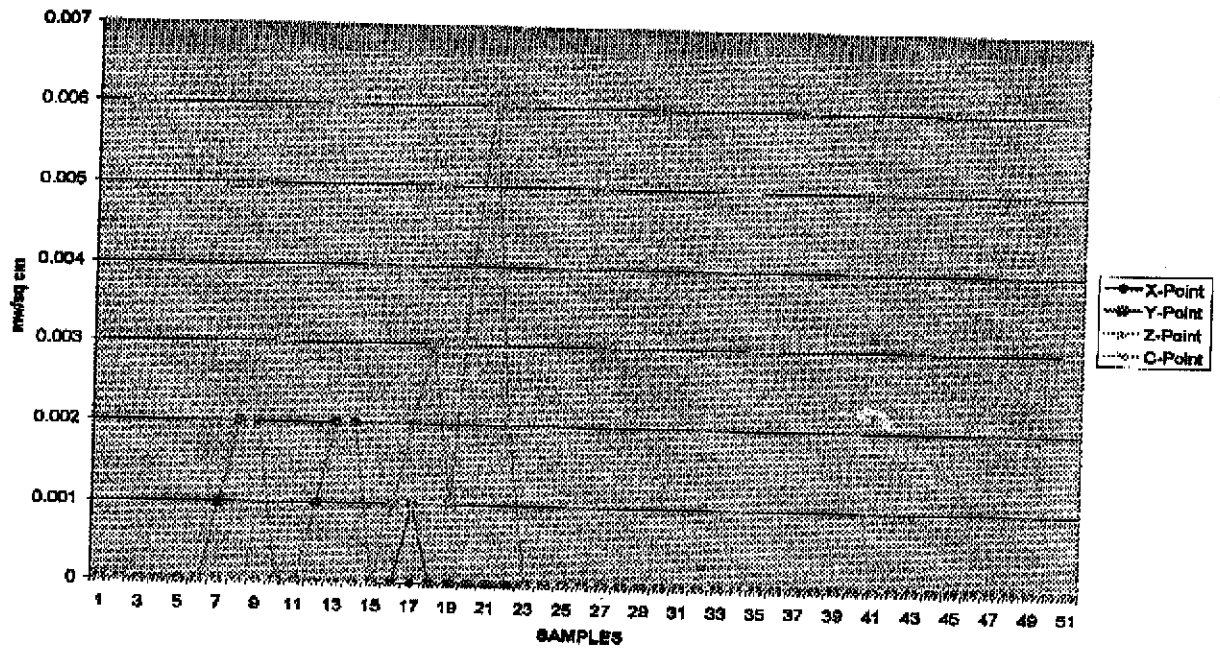


Area Near Transmitter Shelter 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe HI-	Units	% of ANSI Standard
3/18/2004	10:36:08 AM	0.003	0.02	0.011	0.035	4433MSE	mW/cm²	3.50%
3/18/2004	10:36:10 AM	0	0.013	0.018	0.032		mW/cm²	3.20%
3/18/2004	10:36:12 AM	0.001	0.007	0.019	0.028		mW/cm²	2.80%
3/18/2004	10:36:14 AM	0.008	0.017	0.016	0.039		mW/cm²	3.90%
3/18/2004	10:36:16 AM	0	0.014	0.003	0.017		mW/cm²	1.70%
3/18/2004	10:36:18 AM	0.001	0.019	0	0.02		mW/cm²	2.00%
3/18/2004	10:36:20 AM	0	0.023	0	0.023		mW/cm²	2.30%
3/18/2004	10:36:22 AM	0	0.018	0	0.018		mW/cm²	1.80%
3/18/2004	10:36:24 AM	0	0.011	0	0.011		mW/cm²	1.10%

3/18/2004	10:36:26 AM	0	0.007	0	0.007	mW/cm ²	0.70%
3/18/2004	10:36:28 AM	0	0.004	0	0.004	mW/cm ²	0.40%
3/18/2004	10:36:30 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:32 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:34 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:36 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:38 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:40 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:42 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:44 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:46 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:48 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:50 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:52 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:54 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:56 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:36:58 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:00 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:02 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:04 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:06 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:08 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:10 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:12 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:14 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:16 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:18 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:20 AM	0	0	0.005	0.005	mW/cm ²	0.50%
3/18/2004	10:37:22 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:24 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:26 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:28 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:30 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:32 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:37:34 AM	0	0	0	0	mW/cm ²	0.00%

KPMW KULA SITE #3

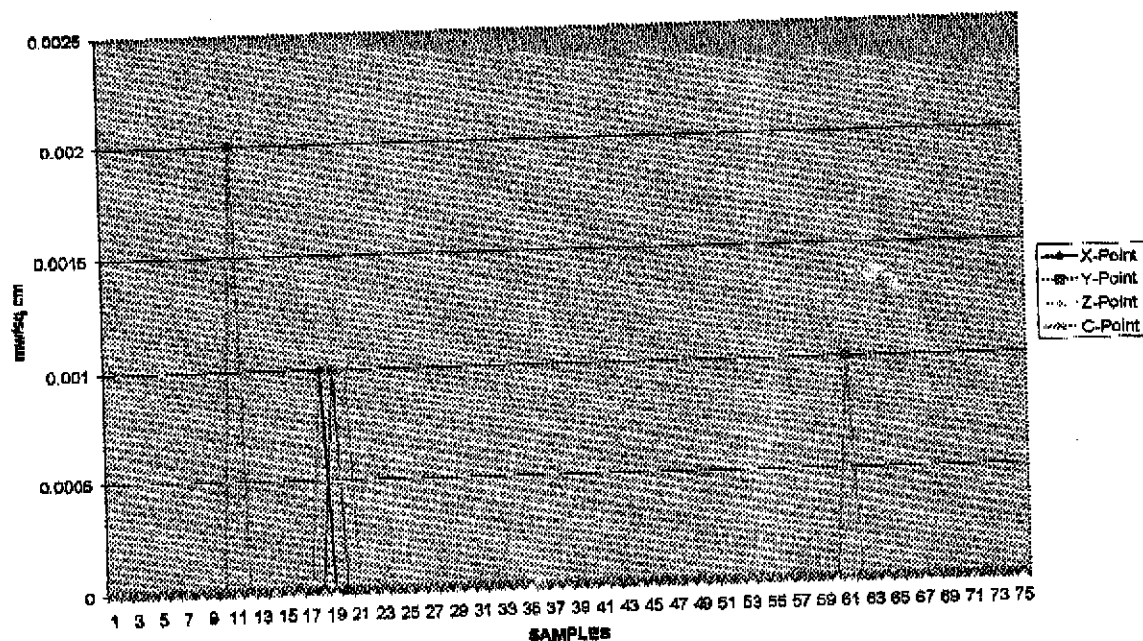


Area Near Adjacent House 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe HI-4433MSE	Units	% of ANSI Standard
3/18/2004	10:38:58 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:00 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:02 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:04 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:06 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:08 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:10 AM	0	0.001	0	0.001		mW/cm²	0.10%
3/18/2004	10:39:12 AM	0	0.002	0	0.002		mW/cm²	0.20%
3/18/2004	10:39:14 AM	0	0.002	0	0.002		mW/cm²	0.20%
3/18/2004	10:39:16 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:18 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:20 AM	0	0.001	0	0.001		mW/cm²	0.10%
3/18/2004	10:39:22 AM	0	0.002	0	0.002		mW/cm²	0.20%
3/18/2004	10:39:24 AM	0	0.002	0	0.002		mW/cm²	0.20%
3/18/2004	10:39:26 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:39:28 AM	0	0	0.001	0.001		mW/cm²	0.10%
3/18/2004	10:39:30 AM	0	0.001	0.001	0.002		mW/cm²	0.20%

3/18/2004	10:39:32 AM	0	0	0.003	0.003	mW/cm ²	0.30%
3/18/2004	10:39:34 AM	0	0	0.001	0.001	mW/cm ²	0.10%
3/18/2004	10:39:36 AM	0	0	0.004	0.004	mW/cm ²	0.40%
3/18/2004	10:39:38 AM	0	0	0.008	0.008	mW/cm ²	0.80%
3/18/2004	10:39:40 AM	0	0	0.002	0.002	mW/cm ²	0.20%
3/18/2004	10:39:42 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:44 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:46 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:48 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:50 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:52 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:54 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:56 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:39:58 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:00 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:02 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:04 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:06 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:08 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:10 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:12 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:14 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:16 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:18 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:20 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:22 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:24 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:26 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:28 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:30 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:32 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:34 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:36 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:40:38 AM	0	0	0	0	mW/cm ²	0.00%

KPMW KULA SITE #4



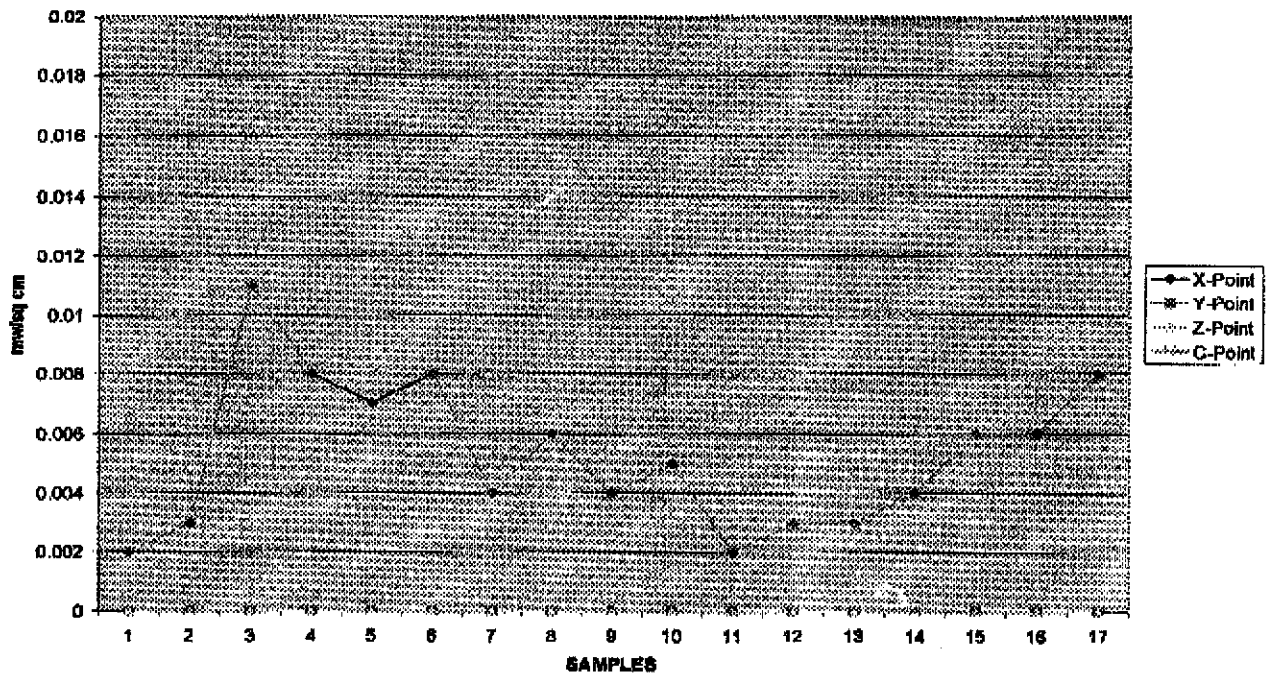
Area Near Master House 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe HI-	Units	% of ANSI Standard
3/18/2004	10:43:13 AM	0	0	0	0	4433MSE	mW/cm²	0.00%
3/18/2004	10:43:15 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:17 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:19 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:21 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:23 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:25 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:27 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:29 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:31 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:33 AM	0.002	0	0	0.002		mW/cm²	0.20%
3/18/2004	10:43:35 AM	0	0	0	0		mW/cm²	0.00%
3/18/2004	10:43:37 AM	0	0	0	0		mW/cm²	0.00%

3/18/2004	10:43:39 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:41 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:43 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:45 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:47 AM	0.001	0	0	0.001	mW/cm ²	0.10%
3/18/2004	10:43:49 AM	0	0.001	0	0.001	mW/cm ²	0.10%
3/18/2004	10:43:51 AM	0	0	0.001	0.001	mW/cm ²	0.10%
3/18/2004	10:43:53 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:55 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:57 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:43:59 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:01 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:03 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:05 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:07 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:09 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:11 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:13 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:15 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:17 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:19 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:21 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:23 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:25 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:27 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:29 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:31 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:33 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:35 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:37 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:39 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:41 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:43 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:45 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:47 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:49 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:51 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:53 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:55 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:57 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:44:59 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:01 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:03 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:05 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:07 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:09 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:11 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:13 AM	0	0.001	0	0.001	mW/cm ²	0.10%
3/18/2004	10:45:15 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:17 AM	0	0	0	0	mW/cm ²	0.00%

3/18/2004	10:45:19 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:21 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:23 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:25 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:27 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:29 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:31 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:33 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:35 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:37 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:39 AM	0	0	0	0	mW/cm ²	0.00%
3/18/2004	10:45:41 AM	0	0	0	0	mW/cm ²	0.00%

KPMW KULA SITE #5



Near Parking Turning Area 03-18-2004
KPMW 7 KW ERP

Date	Time	X-Point	Y-Point	Z-Point	C-Point	Probe HI-	Units	% of ANSI Standard
3/18/2004	10:49:08 AM	0.002	0	0	0.002	4433MSE	mW/cm ²	0.20%
3/18/2004	10:49:10 AM	0.003	0	0	0.003		mW/cm ²	0.30%
3/18/2004	10:49:12 AM	0.011	0	0	0.011		mW/cm ²	1.10%

3/18/2004	10:49:14 AM	0.008	0	0	0.008	mW/cm ²	0.80%
3/18/2004	10:49:16 AM	0.007	0	0	0.008	mW/cm ²	0.80%
3/18/2004	10:49:18 AM	0.008	0	0	0.008	mW/cm ²	0.80%
3/18/2004	10:49:20 AM	0.004	0	0	0.004	mW/cm ²	0.40%
3/18/2004	10:49:22 AM	0.006	0	0	0.006	mW/cm ²	0.60%
3/18/2004	10:49:24 AM	0.004	0	0	0.004	mW/cm ²	0.40%
3/18/2004	10:49:26 AM	0.005	0	0	0.005	mW/cm ²	0.50%
3/18/2004	10:49:28 AM	0.002	0	0	0.002	mW/cm ²	0.20%
3/18/2004	10:49:30 AM	0.003	0	0	0.003	mW/cm ²	0.30%
3/18/2004	10:49:32 AM	0.003	0	0	0.003	mW/cm ²	0.30%
3/18/2004	10:49:34 AM	0.004	0	0	0.004	mW/cm ²	0.40%
3/18/2004	10:49:36 AM	0.006	0	0	0.006	mW/cm ²	0.60%
3/18/2004	10:49:38 AM	0.006	0	0	0.006	mW/cm ²	0.60%
3/18/2004	10:49:40 AM	0.006	0	0	0.008	mW/cm ²	0.80%



An EBCO Technologies Company

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:	800kHz - 5.0 GHz
Model Number:	HI-4433-MSE	Instrument Type:	10 - 1000 V/m Electric Field Probe
Serial Number:	104626	Alternate ID:	
Tracking #:	0000891	Customer:	B.L. MacCann and Associates (HI)
Date Completed:	15-Jan-04	Condition of Instrument:	
Test Type:	Standard Field	Upon Receipt	Upon Release
Calibration Uncertainty:		In Tolerance	In Tolerance
(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	1.18	1.27	1.21	19.47	-1.69
27.12	20	31.6	1.00	1.00	1.00	20.00	0.00
916	20	31.6	1.06	1.02	1.04	19.17	-0.37

Correction Factors to be applied to readings in Vivo 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	3125U17245	6 Aug 04
HP Power Sensor	8482H	1925AC3677	18 Apr 04

Mayra del Kerch
 Calibration Completed by:
 Calibration Technician:

[Signature]
 Attested and Issued on: 15-Jan-04
 Calibration Supervisor:

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 1287.

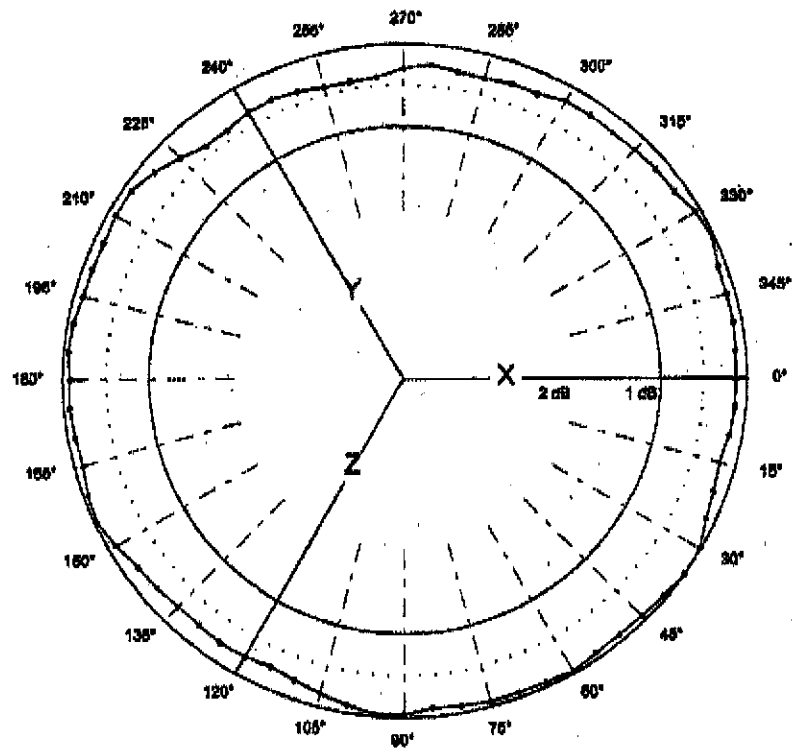
1301 Arrow Point Drive • Cedar Park, Texas 78613 • Phone 512.531.5400 • Fax 512.531.6500
 info@ets-lindgren.com • www.ets-lindgren.com



An ESCO Technologies Company

PROBE ROTATIONAL RESPONSE

Model	HI-4433-MSE
S/N	104628
Date	01-16-2004
Time	12:49:09
Variation	0.41 dB
File	HI-4433-MSE_104628.rtn



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



An ESDO Technologies Company

Certificate of Test Conformance

Page 1 of 1

The instrument listed below has been tested and verified to manufacturers specifications. Equipment used during testing is controlled by laboratory compliance with ISO/IEC 17025-1999 using ETS-Lindgren Test Systems Quality Management System Internal procedures

Environment: Laboratory MTE is maintained in a temperature controlled environment with ambient conditions from 18 to 28 degrees C, relative humidity less than 60%. The instrument under test has been maintained in an environment which is conducive to accurate and reliable measurements.

Manufacturer:	Holaday	Instrument Type:	Graphic Readout
Model Number:	HI-8460	Alternate ID:	N/A
Serial Number:	105032	Customer:	B.L. McCann & Associates (HI)
Tracking ID:	9000981		
Date Completed:	23-Jan-04	Condition of Instrument:	
Test Type:	Test and Check	Upon Receipt	
		Other	
		Upon Release	
		In Tolerance	

Comments:

Battery would not take a charge/ error message 404. Replaced battery and reset Flash EEPROM.

I would like to take this opportunity to express our appreciation for using ETS-Lindgren Test Systems for your testing needs and I look forward to continued business with your organization. Please feel free to contact our offices at (942) 931-0400, if you have any questions regarding this report.


 Authorized and Issued by:
 Calibration Supervisor

23-Jan-04

This document provides traceability to recognized national standards using controlled processes at the ETS-Lindgren Test Systems Calibration Laboratory. Uncertainties listed are derived from the methods described by NIST Test Note 1287. This certificate and/or report may not be reproduced except in full without the written approval of ETS-Lindgren Test Systems Calibration Laboratory in accordance with ISO/IEC 17025-1999.

1301 Arrow Point Drive • Cedar Park, Texas 78613 • Phone 512.531.8400 • Fax 512.531.8500
 info@ets-lindgren.com • www.ets-lindgren.com