EXHIBIT 8
Test Report

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Certificate of Compliance

Applicant:	LESTER ELECTRICAL
Applicant's Address:	625 "A" Street. Lincoln Nebraska 68522-1794
Model:	Temperature Sender Module #22250
Serial Number:	N/A
Project Number:	01386-10
Test Dates:	March 30, 2001

I, Jeffrey A. Lenk, for Professional Testing (EMI), Inc., being familiar with the FCC rules and test procedures have reviewed the test setup, measured data and this report. I believe them to be true and accurate.

The **LESTER ELECTRICAL Temperature Sender Module #22250** was tested to and found to be in compliance with FCC Part 15 Subpart C for an Intentional Radiator.

The highest emissions generated by the above equipment are listed below:

	Frequency (MHz)	Level (dBµV/m)	Limit (dBµV/m)	Margin (dB)
Fundamental	916.631	78.3	94	-15.7

Occupied Bandwidth

105 KHz measured at –26 dBC. Fundamental frequency is 916.631 MHz. In the 902– 928 MHz Band.

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Jeffrey A. Lenk
President

1.0 EUT Description

The Equipment Under Test (EUT) is the **LESTER ELECTRICAL Temperature Sender Module #22250**. The **Temperature Sender Module #22250** is a 3 by 4 ¾ inch potted module with no external connections. It is powered from a 1-ampere hour 3-volt lithium battery attached to the backside of the printed circuit. The temperature sender senses the temperature of what it is attached to and transmits an ID number and temperature reading (less than twenty bytes of data) once every 5 to 15minutes. The transmission takes approximately 250 milliseconds to accomplish. It transmits a pulsed signal at nominally 916.5 MHz. The EUT operates at 916.56 MHz and is designed for compliance with 47 CFR 15.249 of the FCC rules. Specific test requirements for this device include the following:

47 CFR 15.249	Fundamental Transmit Power
47 CFR 15.249 & 15.205	Spurious Radiated Power
47 CFR 15.249 & 2.1049&15.215	Occupied Bandwidth (ANSI C63.4 used as Procedural Reference)
47 CFR 15.203	Antenna Requirement

The system tested consisted of the following:

Manufacturer & Model	**Serial #**	**FCC ID #**	**Description**
LESTER ELECTRICAL, Temperature Sender Module #22250	001	#22250	Temperature Sender Module

1.1 EUT Operation

The **Temperature Sender Module #22250** was placed into operation which caused continuous transmitting.

2.0 Electromagnetic Emissions Testing

Professional Testing (EMI), Inc. (PTI), follows the guidelines of NIST for all uncertainty calculations, estimates and expressions thereof for EMC testing.

Radiated emission measurements were made of the Fundamental and Spurious Emission levels for the **Temperature Sender Module #22250**. Measurements of the occupied bandwidth were also made for the equipment.

Measurements of the maximum emission levels for the fundamental and the spurious/harmonic emissions of the **Temperature Sender Module #22250** were made at the Professional Testing "Open Field" Site #3, located in Round Rock, Texas to determine the radio noise radiated from the EUT. A “Description of Measurement Facilities” has been submitted to the FCC and approved pursuant to Section 2.948 of CFR 47 of the FCC rules.

Tests of the fundamental emissions for the device were performed to determine the worst case polarization of the device. The fundamental emissions of the device were measured with the device in its position of use and the measurement antenna was changed to both vertical and horizontal polarity to record the signal of highest intensity.

2.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the ground plane. The table was centered on a motorized turntable which allows 360 degree rotation. For measurements of the fundamental signal, a measurement antenna was positioned at a distance of 3 meters as measured from the closest point of the EUT. For spurious/harmonic measurements above 1 GHz, the measurement antenna was placed 1 meter from the EUT. The radiated emissions were maximized by configuring the EUT, by rotating the EUT, and by raising and lowering the antenna from 1 to 4 meters.

A Spectrum Analyzer with peak detection was used to find the maximums of the radiated emissions during the variability testing. A drawing showing the test setup is given as Figure 1.

2.2 Test Criteria

The table below shows FCC Part 15.249 radiated limits for an intentional radiator operating at 902 - 928 MHz band. In addition to these requirements, the EUT must meet the restricted emission band requirements of §15.205. For this frequency range, the unintentional radiated emission limits of §15.249 for 916 MHz radiator is the same as the restricted band limits of §15.205. The limit of §15.205 was used for the spurious emission test. The spurious measurements of the harmonic were performed to the 10th harmonic of the fundamental. The reference distance for each limit is also shown in this table.

	Test Distance	Field Strength	
Signal Type	(Meters)	(µV/m)	(dBµV/m)
Fundamental (916.29 MHz)	3	50,000	94
2nd Harmonic (1832.6 MHz)	1	1500	63.5
3rd Harmonic (2749.6 MHz)	1	1500	63.5

2.3 Test Results

The radiated test data for the fundamental is included in Appendix A. Quasi-Peak detector has been used during the test. The radiated emission test data for the harmonics is included in Appendix B. The emissions were maximized at each frequency and the highest emissions identified were measured using peak detection. The radiated emissions generated by the **Temperature Sender Module #22250** are below the FCC Part 15.249 and FCC Part 15.205 maximum emission criteria.

3.0 Occupied Bandwidth Measurements

Measurements of the occupied bandwidth of the fundamental emission was performed to show compliance with 47 CFR section 2.1049 FCC Part 15.249. The test procedure of ANSI C63.4 was utilized. All measurements were made in a controlled indoor environment in a configuration which did not present measurement distortion or ambient interference.

3.1 Test Procedure

The EUT was placed on a non-conductive table 0.8 meters above the floor. The table was rotated to an angle which presented the highest signal level. Peak detection was used for all tests. The occupied bandwidth was based on a –26dBC criteria (26 dB down either side of the emission from the nominal center of the emission). A drawing showing the test setup is given as Figure 1.

3.2 Test Criteria

Measurement of the occupied bandwidth was performed to verify that the emission remained within the 902 to 928 MHz band.

3.3 Test Results

The occupied bandwidth test data is included in Appendix C. The measured occupied bandwidth for the fundamental frequency (916.59 MHz) is 105Hz is typical for the **Temperature Sender Module #22250**.

The intended center frequency for the EUT was centered at 916.59 MHz. The center frequency is within the allowed band. The fundamental signal generated by the **Temperature Sender Module #22250** is within the band allowed under FCC Part 15.231 emission band criteria.

4.0 Antenna Requirement

An analysis of the **Temperature Sender Module #22250** was performed to determine compliance with Section 15.203 of the Rules. This section requires specific handling and control of antennas used for devices subject to regulations under the Intentional Radiator portions of Part 15.

4.1 Evaluation Procedure

The structure and application of the **Temperature Sender Module #22250** were analyzed with respect to the rules. The antenna for this unit is an internal antenna, which is soldered on to the main board and is not accessible by the user. An auxiliary antenna port is not present.

4.2 Evaluation Criteria

Section 15.203 of the rules states that the subject device must meet at least one of the following criteria:

(a) Antenna is permanently attached to the unit.

(b) Antenna must use a unique type of connector to attach to the EUT.

(c) Unit must be professionally installed. Installer shall be responsible for verifying that the correct antenna is employed with the unit.

4.3 Evaluation Results

The **Temperature Sender Module #22250** meets the criteria of this rule by virtue of having an internal antenna as part of the unit. The EUT is therefore compliant with §15.203.

5.0 Modifications to Equipment

There were no modifications made on the **Temperature Sender Module #22250** during the performance of the test program in order to meet the FCC criteria.

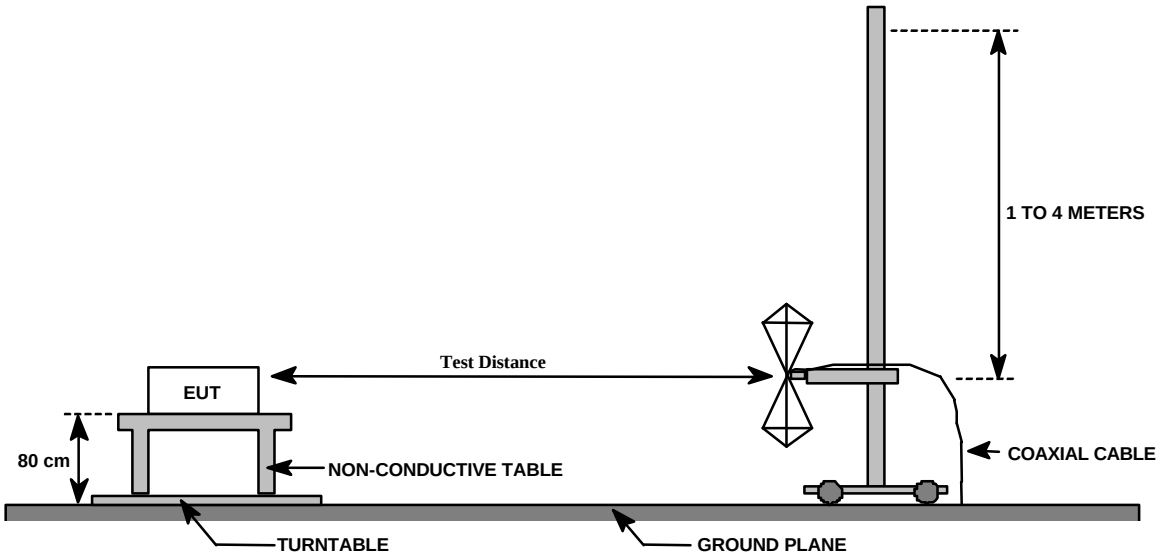
6.0 List of Test Equipment

A list of the test equipment utilized to perform the testing is given below. The date of calibration is given for each.

Electromagnetic Emissions Test Equipment

Device	Description	Calibration Due
Advantest R3265	Spectrum Analyzer	November 2001
MITEQ ZKL1500-1	Preamp	November 2001
TEKTRONIX 2706	Preselector	December 2001
Site 3 Cables	RF Cables	August 2001
Compliance Design B-100	Biconical Antenna	December 2001
EMCO 3146	Log Antenna	December 2001
EMCO 3115	Microwave Antenna	July 2001
SMT ICY83	High Pass Filter	August 2001
MITEQ 1238	Preamp	July 2001
WL GORE	Microwave Cable	August 2001

FIGURE 1: Radiated Emissions Test Setup



Appendix A

Radiated Emissions Data Sheets

Radiated Data Sheet
LESTER ELECTRICAL
Temperature Sender Module #22250

SERIAL #: 001
DATE: March 30, 2001

MEASUREMENT DISTANCE (m): 3
PROJECT #: 01386-10

Antenna Horizontal

Freq. (MHz)	EUT Dir. (Deg.)	Antenna Elevation Meters	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (db/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
916.631	0.0	1.4	44.9	0.0	22.6	10.8	78.3	94	-15.7

Antenna Vertical

Freq. (MHz)	EUT Dir. (Deg.)	Antenna Elevation Meters	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (db/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
916.631	0.0	1.5	38.8	0.0	22.6	10.8	72.2	94.0	-21.8

Corrected Level = Recorded Level + Antenna Factor + Cable Loss

TEST ENGINEER: Bob Ripley

Radiated Data Sheet
LESTER ELECTRICAL
Temperature Sender Module #22250

SERIAL #: 001
DATE: March 30, 2001
PROJECT #: 01386-10

MEASUREMENT DISTANCE (m): 1
PROJECT #: 01386-10

Antenna Horizontal

Freq. (MHz)	EUT Dir. (Deg.)	Antenna Elevation Meters	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (db/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1833.00	0.0	1.0	30.5	23.0	27.1	2.4	37.0	63.5	-26.5

Antenna Vertical

Freq. (MHz)	EUT Dir. (Deg.)	Antenna Elevation Meters	Recorded Level (dBuV)	Amplifier Gain (dB)	Antenna Factor (db/m)	Cable Loss (dB)	Corrected Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)
1833.00	0.0	1.0	24.8	23.0	17.0	2.4	31.3	63.5	-32.2
4582.00	0.0	1.0	28.8	23.5	32.9	4.1	42.3	63.5	-21.2
8248.00	0.0	1.0	29.3	22.1	37.2	5.3	49.8	63.5	-13.7

TEST ENGINEER: Bob Ripley