



*September 11, 2001
We Will Remember*

Eagle Sirens, Inc.

P.O. Box 80705, Lansing, MI 48908-0705

(O) 517-627-0702 Fax: 517-627-3702

E-Mail: eaglesirens@comcast.net

**Electro-Mechanical Sirens
for Emergency Vehicles**

November 10, 2006

SUBJECT: SAE J1849 Certification
NFPA 1901 2003 Standard

TO WHOM IT MAY CONCERN:

Attached please find test results for SAE J1849 Certification of the Screaming Eagle Siren. Referencing the **Conclusion** on page 4 of Intertek ETL Semko's Test Report, the siren samples provided by Eagle Sirens, Inc. meet the acoustical, durability and reliability criteria as specified in SAE J1849 and, thus, meets the NFPA 1901 2003 Standard.

Eagle Sirens, Inc., hereby certifies the Screaming Eagle Siren in compliance with SAE J1849 and the NFPA 1901 2003: Chapter 13.9.1.1 Standard.

Sincerely,

Victor C. Hilbert
President

Attachments

Test Report for:

Eagle Sirens, Inc.
Attn: Vic Hilbert

**SAE J1849 Acoustical Test
(1) Electromechanical Siren
SAE J1849 Reliability Tests
(3) Electromechanical Sirens**

Client P.O. No.: 911092 & 911094

ISO 17025

AEMCLAP



James Zaremski
Program Manager



Rich Byczek
Engineering Manager

August 10, 2006 (Revised 11/09/06)
Report No.: 06-0808702R

Page 1

Attn: Vic Hilbert
Eagle Sirens, Inc.
P.O. Box 80705
Lansing, MI 48908-0705
Phone: 517-627-0702

DATE RECEIVED: 08/09/06
DATES TESTED: 08/09/06 through 08/10/06

WORK REQUESTED / APPLICABLE DOCUMENTS:

In accordance with Intertek quotation 0608031264.1, and client-supplied excerpt of SAE J1849, perform acoustic output measurements on one (1) siren.

In accordance with Intertek quotation 0610052315.2, SAE J1849 JUL2002, SAE J575 JUN1992, and SAE J994 AUG1993, perform Reliability testing on three (3) sirens.

DESCRIPTION OF TEST SAMPLES:

One (1) electromechanical siren assembly for Acoustic Test
Three (3) electromechanical siren assemblies for Reliability Tests

EQUIPMENT LIST:

Asset #	EQUIPMENT DESCRIPTION	Manufacturer	Model #	Serial #
160249	SOUND LEVEL CALIBRATOR	SIMPSON	890-2	066659
165067	MULTICHANNEL DATA ACQUISITION	RACAL-HEIM	SQLABII	022754-022002
165067S	SCSI SOFTWARE	ADAPTEC	EZ-SCSI 4.0	
165067.1	MICROPHONE INPUT MODULE	RACAL-HEIM	MIC20	020425-052001
165068	POWER SUPPLY	ELEKTRO-AUTOMATIK	EA-3022 SMX S05	2001121005
165069	COMPUTER, LAPTOP	HP	COMPAQ NC6000	CNU447F270
162228	POWER SUPPLY	HEWLETT PACKARD	6031A-2	US38310915
165067.7S	ARTEMIS 7.0	HEAD ACOUSTICS	ARTEMIS 7.0.100	46002729
160816	CURRENT SHUNT	SIMPSON ELECTRIC CO.	200 AMP 50mV	N/A
160434	MULTIMETER	JOHN FLUKE MFG. CO. INC.	77 SERIES II	68811849
160632	DATA ACQUISITION / SWITCH UNIT	AGILENT TECHNOLOGIES	34970A	US37033774
162209	ACOUSTIC SEMI-ANECHOIC ROOM	INDUSTRIAL ACOUSTICS COMPANY		



EQUIPMENT LIST (cont'd):

Asset #	EQUIPMENT DESCRIPTION	Manufacturer	Model #	Serial #
160063	SHAKER	UNHOLTZ-DICKIE	TC 208	427
160064	POWER AMPLIFIER	UNHOLTZ-DICKIE	TA115	
160119	ACCELEROMETER	PCB PIEZOTRONICS	J353B02	5611
160349	DUST CHAMBER	ENTECLA	GM9110P	001
160349.1	PLC	AUTOMATION DIRECT	DL05	1
160362	PRESSURE GAGE	H O TRERICE CO	52-2872	
160434	MULTIMETER	JOHN FLUKE MFG. CO. INC.	77 SERIER II	68811849
160703C	ISO FINE TEST DUST	POWDER TECHNOLOGY INC.	12103-1, A2	N/A
160739	pH/TEMP/mV/ISE METER WITH PROBE	VWR SCIENTIFIC PRODUCTS	9200	1025
160791	HIGH PRESSURE WASHER	BLASTER CLEANING SYSTEMS	3801K29	63833
160994C	CULINOX 999	MORTON THIOKOL INC	CULINOX 999	
161131	VIBRATION CONTROLLER	VIBRATION RESEARCH	8500	0a14ce
161131.1	COMPUTER	HP	COMPAQ dc 500 SFF	2UA449087S
161146C	BUFFER SOLUTION	THERMO ELECTRON CORPORATION	PH 7.00 BUFFER SOLUTION ORION 910107	
162188	CONTROLLER	ENVIROTRONICS	SYSTEM PLUS SPRMTD	D11570303
162188P	ENVIRONMENTAL CHAMBER	ENVIROTRONICS	SSH32c-ac	01046091
162189	CONTROLLER	WATLOW	F-40HKKKK-21RG	002623 0045
162189P	ENVIRONMENTAL CHAMBER	THERMOTRON	F62-CHV-25-25	12818
162193	STOP WATCH	SPORTLINE	240 BASIC SERIES	
162224	POWER SUPPLY	HEWLETT PACKARD	6031A-3	US38310887
162228	POWER SUPPLY	HEWLETT PACKARD	6031A-2	US38310915
162230	COMPUTER, LAPTOP	HEWLETT PACKARD	NX9110	CND4220S44
162244S	PROGRAMMING SOFTWARE	AUTOMATION DIRECT	DIRECTSOFT 32	
162303	PROGRAMMABLE LOGIC CONTROLLER	KOYO	DO-05DR	053A

EQUIPMENT LIST (cont'd:)

Asset #	EQUIPMENT DESCRIPTION	Manufacturer	Model #	Serial #
162314	PLC	AUTOMATION DIRECT	DL05	4
161179	SALT SPRAY CABINET	ATLAS	130 CU FT/3680 LITRE	19341
161179.1	RTD	ATLAS		
162312	PLC	AUTOMATION DIRECT	DL06	2A

CONCLUSION:

The device tested produces an A-weighted SPL output of 122.2 decibels measured on-axis. Further, the off-axis A-weighted SPL output does not fall below the limits given in SAE J1849 Table 1. Average steady-state current draw for all measurements was 47.88 amperes.

The samples tested meet the durability and reliability criteria as specified in SAE J1849.



REVISIONS:

09/15/2006: Added data for additional testing on 08/31/06 and 09/12/06

11/08/2006: Added data for durability/reliability testing from 10/18/2006 through 11/8/2006



Intertek ETL SEMKO

13200 Levan Road, Livonia, MI 48150-1234

Telephone: 734-591-9161 * Fax: 734-432-0555 * Web: www.intertek-etlsemko.com/automotive