

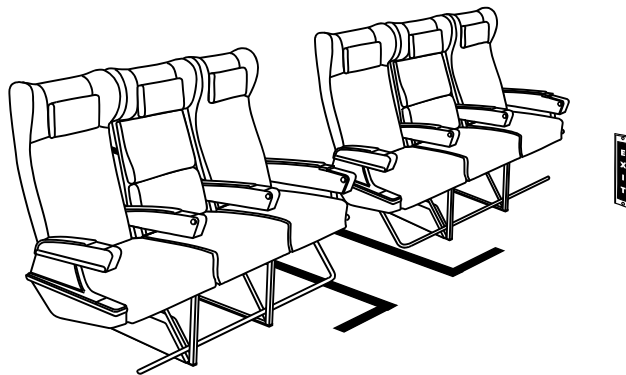
**SYSTEM MAINTENANCE and INSTALLATION MANUAL**

**with**

**ILLUSTRATED PARTS LIST**

**Floor Mounted Photoluminescent**

**Emergency Egress Lighting (PLEEL) System**



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**V32890**

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**HIGHLIGHTS**

This document represents the System Maintenance and Installation Manual for the LSI Photoluminescent Emergency Egress Lighting (PLEEL) System providing floor mounted Floor Proximity Escape Path Marking in fixed wing aircraft.

This revision has been updated to clarify cleaning and storage intervals, and to include updated parts in the illustrated parts list.

This System Maintenance and Installation Manual employs the philosophy that the system is composed of a number of Line Replaceable Units.

The System Maintenance and Installation Manual covers all items of the system.

When wishing to provide a hybrid system including additional electrical powered components, you may refer to following document:

33-50-01 SMIM, EEL System, Floor Mounted Track System  
33-50-03 IPC, Exit Markers

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## DESCRIPTION & OPERATION

### 1. Introduction

As part of the Federal Aviation Administration's (FAA) continuing efforts to upgrade aircraft cabin safety and improve occupant survivability in aircraft accidents, the provisions of Part 25 of the Federal Aviation Regulation (FAR) requiring Floor Proximity Emergency Escape Path Marking (FPEEPM) were established. Guidelines were issued in FAA AC25.812-2 to include photoluminescent FPEEPM as an alternative to powered systems.

### 2. PLEEL Design Concept

Floor path marking based on photoluminescent (PL) phosphors will survive a crash without losing its ability to light up, even with loss of power. As it provides a continuous line of light it provides passengers the best orientation possible to help find the exits.

In order to meet requirements for ease of installation and maintain a level of high reliability for both airframe manufacturers and retrofitting airlines, LSI developed its Photoluminescent Emergency Egress Lighting (PLEEL) System with a number of very important goals in mind including:

- Electroluminescent (EL) exit markers whose EL lamps are cold, solid state, very low current devices
- Capability of receiving damage and still remaining operational
- No fragile parts
- Very easy and straight forward installation
- Light weight

In addition, the system has to offer the following advantages to airlines:

- Short installation time: ± 50-60 man hours on typical single aisle aircraft, ±80-200 man hours on typical multiple aisle, single level aircraft
- Modularity, to allow easy re-configuration
- High durability
- Virtually no maintenance requirements from D-check to D-check
- Low cost of ownership
- Minimal delays

### 3. Photoluminescence

Photoluminescence (PL) is the phenomenon whereby phosphor particles (the photoluminescent material) absorbs mainly invisible light energy (photons) in the presence of a light source, and re-emits the stored energy as visible green light when the light source is removed.

As the process is a direct conversion of energy to light, PL is a cold light source operating at ambient temperature. Light is emitted from the entire area of the PL.

In addition, PL lights are solid state. They withstand shock and vibration, thermal cycling and further thermal processing without breakage, providing extreme ruggedness and reliability. Other major advantages include weight savings and freedom from catastrophic failure.

### 4. System Description

A basic PLEEL system consists of the following components:

- aisle lighting with PL track
- galley/aisle lighting with fiber glass encapsulated PL
- exit markers with EL lamps

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- A. Aisle Lighting with PL Track  
The main part of the floor lighting system is located in the aisle(s) of the aircraft cabin (Figure 1). The PL phosphor material is housed in a durable LEXAN® track enclosure which is cut to size.

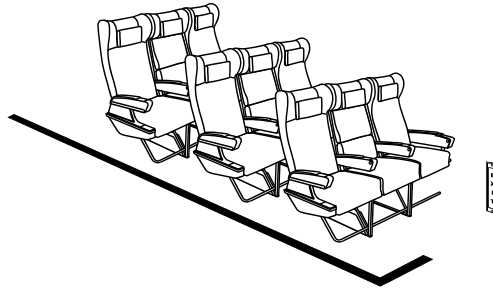


Figure 1: Location of PLEEL System in Cabin Aisle

Variants of the aisle lighting are available which allow accenting one way escape paths. Accessory items, end caps and corner pieces, are available for optional use as cosmetic improvements.

- B. Aisle/Galley Lighting with Fiber Glass Encapsulated PL  
For those sections of the aisle lighting extending into the galley area, LSI can provide a unique PL marker light that is very thin (same thickness as non-textile flooring in galley) and at the same time very durable (Figure 2). The PL phosphor material is housed in durable fiber glass which can be cut to size at discrete lengths.

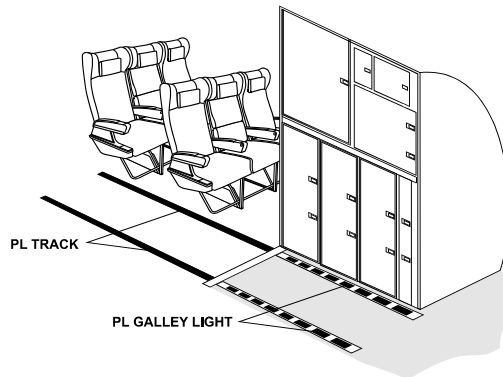


Figure 2: Location of PLEEL System in Galley Aisle

- C. Exit Markers  
All exits are identified by an exit marker. Typically an exit marker with an integral electrical DC to AC inverter, for example the LSI 8015 series, is used. This series provides a green electroluminescent lit background for the exit nomenclature. It has its own integral inverter, and interfaces with the aircraft 6V DC emergency lighting supply.

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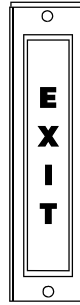


Figure 3: 8015 LEXAN® Exit marker

NOTE: There are a wide variety of exit markers and power supplies available.  
Refer to SMIM 33-50-01 for further information.

5. PLEEL System Operation

The photoluminescent strips are charged before and during flight by exposing them to ambient cabin lighting. In darkness, they will emit their light with no command function required. The exit markers are normally connected to the emergency lighting system batteries, and operate under the same control laws as the emergency lighting.

6. PLEEL Layout Design - Preparation

A. General

The layout of a PLEEL system for any aircraft type is dependent of the aircraft configuration.

Based on the size of the aircraft, its cabin features, available power source location and type, the components (for a complete overview, see IPL) can be configured to provide an optimal system.

The following sections describe how the layout design for a PLEEL system can be accomplished in accordance with the current regulations. They also include recommendations with respect to choice of components.

B. Regulations

Floor Proximity Emergency Escape Path Marking is called for in 14 CFR 25.812.

Guidance is provided in FAA Advisory Circular 25.812-1A, Floor Proximity Emergency Escape Path Marking, and in FAA Advisory Circular 25.812-2, Floor Proximity Emergency Escape Path Marking Systems Incorporating Photoluminescent Elements.

LSI recommends consultation with relevant authorities to ensure proper and complete guidance is received.

C. Aircraft Floor Plan

In order to know the aircraft's cabin layout, a detailed floor plan with all pertinent information is essential (Figure 4). This information should include at least:

- (1) aircraft manufacturer and type
- (2) exit locations
- (3) galley locations
- (4) power source location
- (5) cabin class(es) and number of rows per class
- (6) seat pitch
- (7) carpet type (stitched or non-stitched)
- (8) carpet thickness
- (9) station locations of all the above properly marked

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- D. PLEEL Components Overview  
Figure 4 shows the typical components.

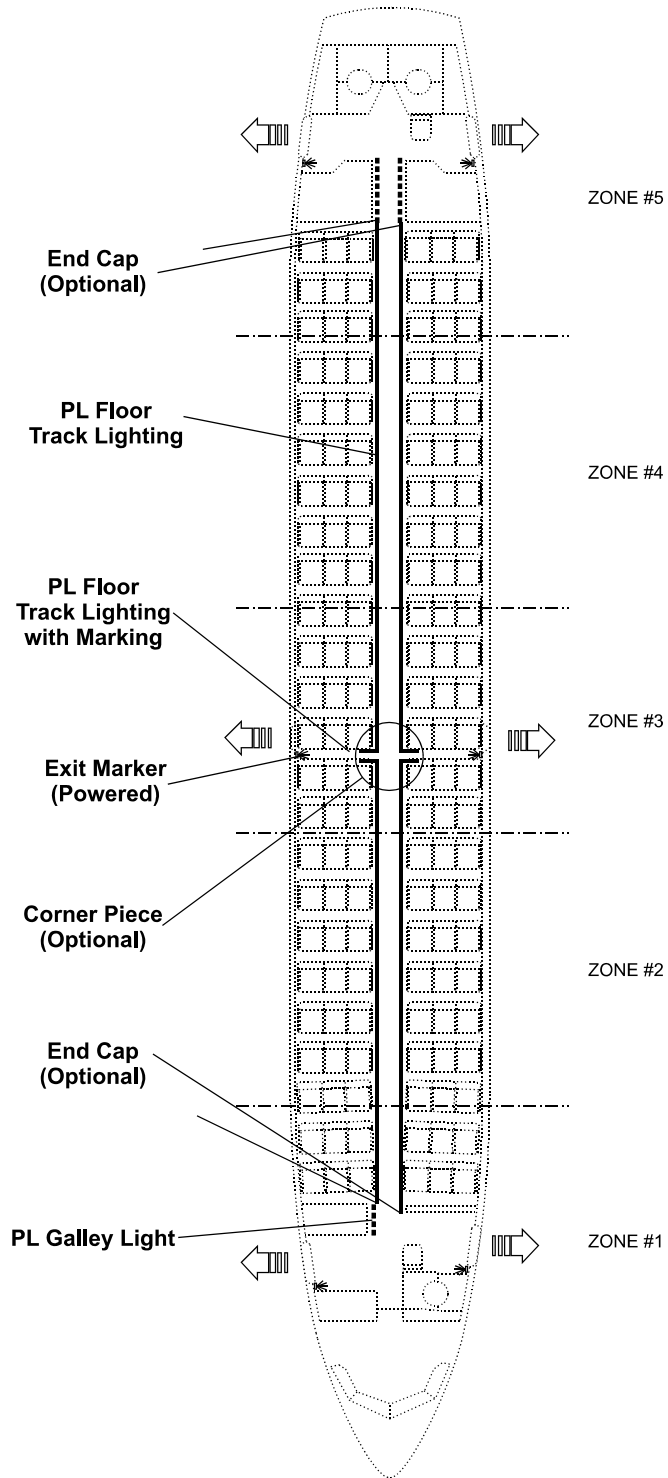


Figure 4: Aircraft Floor Plan with PLEEL System Layout



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7. PLEEL Layout Design

Starting from the aircraft floor plan (Figure 4), the PLEEL system layout design sequence described in the following sections can be followed.

A. Determine Exit Locations

- (1) Regulations: FAR 25.812(e)(2)
- (2) Each emergency exit should be marked with an exit marker located below 4 ft (1.2 m). To meet CAA regulations, the exit marker should be mounted at least 1.5 ft (0.45 m) above the floor.

B. Layout Aisle and Galley Lighting

- (1) Regulations: FAR/JAR 25.812(e)(1) and (2), CAA AWN 56 §2.2 and §2.7.2.
- (2) The PL track must be installed on both sides of the aisle(s).
- (3) Placement of the PL track should be such that it is fully visible up to 4 feet above the floor and in such a way that charging by the overhead cabin lighting is not impeded.
- (4) Determine where the FPEEPMS will be located and mark the floor plan.
- (5) Galley lights are much thinner and have better mechanical resistance to damage than the floor track. They should be used:
  - wherever there is heavy traffic or moisture present (lavatories, galleys, entry ways or doors).
  - on non-textile flooring.

NOTE: Avoid designing aisle lighting with the track system where trolleys may ride over the system. When unavoidable always specify fiberglass galley lights for these locations.

NOTE: PL Galley light should not be installed on top of carpet.

- (6) Aisle Cues for Overwing Exits  
In order to indicate exits along the cabin aisle, such as overwing exits, the FAA requires a PL track section of minimum 9 inches (230 mm) to be added, at a right angle turn towards the cabin wall. Other authorities may require the strip to lead from the aisle up to the cabin wall.
- (7) Aisle Cues for Dead Ends: FAA and CAA require red/orange overlay arrows to indicate that there are no exits to be found in the direction opposite to the arrows (typically in dead ends).
- (8) Mark the sections on the floor plan that have red arrows.
- (9) Specify PL galley lights on the floor plan in galley and non-textile floor areas.
- (10) Locate end caps and corner pieces where desired.

8. PLEEL Layout Design: Summary

- A. Obtain a detailed aircraft floor plan with the cabin layout.
- B. Determine exit locations and mark with exit marker.
- C. Determine FPEEPMS location and lengths of areas to be lit.
- D. Specify PL track in the cabin aisle.
- E. Galley/Lavatory areas: use encapsulated PL galley lights (not for cross-aisle).
- F. Specify PL track with orange/red overlay for aisle cues at overwing exits and end-of-cabin.
- G. Specify PL track with orange/red arrows for aisle cues in one way areas.

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## **TESTING AND FAULT ISOLATION**

1. General  
The PLEEL System is made up of line replaceable units.  
The PL Strips, Indicators, Galley Lights, Corners and End Caps are all passive devices.  
The Exit Markers are active, electrically powered devices.
2. System Testing and Fault Isolation  
The troubleshooting charts provide a systematic way to locate and subsequently solve faults/errors that could occur. They can be used for Line Maintenance Repair.

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SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
A. Exit marker will not light	No power to assembly Wrong cabin switch position Wiring problem. Fault within assembly.	Check aircraft power supply. Check aircraft switch positions. Check connections. Remove and Replace.
B. Exit marker too dim	Less than full power to assembly Defective aircraft power source. Defective aircraft wiring. Fault within assembly.	Check aircraft power source. Check aircraft power source. Check connections. Remove and Replace.
C. Passive component (PL) does not work.	Component missing  Component dislodged  Component too dim due to Inadequate charging.  Component degradation.	Replace.  Remove and re-install as per original installation. Charge with cabin lighting.  Remove and replace.

Table 101: PLEEL System Troubleshooting

**AUTOMATIC TEST REQUIREMENTS**

1. General  
Not applicable.

Automatic test requirements do not apply to the LSI PLEEL system.

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## DISASSEMBLY

1. General  
Disassembly of the PLEEL system can be accomplished with normal tools.
2. Disassemble/Remove PL Track Housing
  - A. Remove PL Track.
    - (1) Take hold of the PL track at one end and pull it away from the floor.
    - (2) Remove remaining double-sided carpet tape from the floor panels and PL track.
3. Disassemble/Remove Exit marker
  - A. Remove LEXAN® or Fiber Glass Exit marker attached with Fasteners.
    - (1) Remove fasteners.
    - (2) Take hold of exit marker connector and disconnect from aircraft wire harness connector.
4. Disassemble/Remove PL Galley Light

CAUTION: DO NOT TO DAMAGE THE FIBER GLASS LAMINATE OF THE GALLEY LIGHT.

  - A. Remove Fiber Glass PL Galley Light.
    - (1) Put a screwdriver in the gap between the PL galley light and aircraft floor panels.
    - (2) Lift the galley light.
    - (3) Gently pull the galley light away from the floor panels.

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## CLEANING

1. General

Cleaning of the PLEEL system is straightforward and industry accepted practices should be used. This section highlights the special care that needs to be taken with respect to fragile parts and the materials used during cleaning.

CAUTION: DO NOT ALLOW ISOPROPYL ALCOHOL TO COME IN CONTACT WITH ANY OF THE LEXAN® COMPONENTS, INCLUDING THE PL TRACK AND EXIT MARKER HOUSINGS. SUCH CONTACT MAY PERMANENTLY DAMAGE LEXAN®, INCLUDING A DULLING OF THE TRANSPARENT COMPONENTS (SEE TABLE 401).

CAUTION: DO NOT USE HARSH CLEANING COMPOUND OR SOLVENTS AS THEY MAY FOG THE TRANSPARENT LENS OR LEAD TO CRYSTALLIZATION AND STRESS CRACKING OF THE LEXAN® COMPONENTS (SEE TABLE 401).

CAUTION: DO NOT USE HIGHLY ALKALINE SOLUTIONS AS THESE MAY CAUSE THE LEXAN COMPONENTS TO DEGRADE;

2. Clean LEXAN® PL Track Components

Clean these parts with a mild soap solution, applying with a slightly damp, clean, soft lint-free cloth every A-check or at intervals of 30 days or sooner. Avoid excess moisture.

The LEXAN® parts include PL track, exit marker, and exit marker lens. Refer to Table 401 for compatibility.

3. Clean LEXAN® Exit Marker Components

Clean these parts with a mild soap solution, applying with a slightly damp, clean, soft lint-free cloth every B-check or at intervals of 6 months or sooner. Avoid excess moisture.

Refer to Table 401 for compatibility.

4. Clean Fiber Glass Encapsulated Components

Clean all fiber glass components with a mild soap solution, applying with a slightly damp, clean, soft lint-free cloth every A-check or at intervals of 30 days or sooner.

The fiber glass encapsulated components are galley lights and exit markers.

5. Ultrasonic Cleaning

CAUTION: PROLONGED OR UNCONTROLLED EXPOSURE OF ELECTRONIC SUB-ASSEMBLIES AND/OR SEMICONDUCTOR COMPONENTS TO ULTRASONICS CAN RESULT IN DAMAGE TO, OR DESTRUCTION OF SENSITIVE ELEMENTS.

Exposure of complete assemblies, individual component assemblies and/or semiconductor devices, such as the encapsulated inverter found in some assemblies, to ultrasonic cleaning is not recommended.

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CHEMICAL CLASS	EFFECT
ACIDS (Mineral)	No effect under most conditions of concentration and temperature. Generally compatible.
ALKALIS	Acceptable at low concentration and temperature. Higher concentrations and temperatures result in etching and attack, evidenced by decomposition.
ALIPHATIC HYDROCARBONS	Generally compatible.
AMINES	Avoid the use of this material. Surface crystallization and chemical attack.
AROMATIC HYDROCARBONS	Avoid the use of this material. Partial solvents and severe stress cracking agents.
DETERGENTS and CLEANERS	Mild soap solutions are compatible. Strong alkaline materials should be avoided.
ESTERS	Avoid the use of this material. Causes severe crystallization. Partial solvents.
GREASES and OILS	Pure petroleum types generally compatible. Many additives used with them are not. Thus, materials containing additives should be tested.
HALOGENATED HYDROCARBONS	Solvents. Avoid the use of this material.
KETONES	Avoid the use of this material. Causes severe crystallization and stress cracking. Partial solvents.
SILICONE OILS and GREASES	Generally compatible up to 85 °C (185 °F). Fluids should be tested, as some contain aromatic hydrocarbons.

Table 401: General Chemical Resistance of LEXAN® Polycarbonate Resins

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**CHECK**

1. General

Checking the PLEEL system consists of both individual parts inspection as well as inspection on the system level.

2. Regular Check Interval

Unless otherwise specified, the system shall be checked every A-check, or 30 days or sooner.

A. Exit Marker Check

Check EI lamp.

Check EI lamp inside exit marker for operation.

Replace exit markers which do not function properly.

B. PL Aisle Strips and Galley Lights Check

Check the PL track for any evidence of breakage or other damage.

Replace broken or Severely delaminated PL floor track.

C. PL Galley Light Check

Check PL fiberglass galley light laminate for delaminating.

Replace severely delaminated galley light.

3. Long Term Check Interval

An overall systems check should be performed every D-check, or 36 months.

A. PLEEL System Check

The PLEEL system check can be accomplished by charging the PL components with cabin lighting and subsequently examining the FPEEPMS with cabin lights extinguished and window blinds closed. Correct operation of the electrically powered components (exit markers) is accomplished by switching the cockpit ON/ARM/OFF switch to the "ON" position at regular intervals (determined by the airline operating the aircraft). See applicable aircraft manuals and checklist.

B. Exit Marker Check

Check exit marker wires.

Check for damage of the wire insulating material, repair any damaged or cut wires.

Replace exit marker if wire is broken just after the exit marker button.

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**REPAIR**

1. General  
The PLEEL system components are Line Replaceable Units (LRU), which are not line or shop repairable.

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## ASSEMBLY AND INSTALLATION

1. General

The PLEEL system is a custom installed system within all aircraft types. The components can be fitted together to form a complete emergency lighting system.

The following paragraphs describe the basic installation sequence of the PLEEL system.

2. Install PL Floor Track Assembly - Preparation

A. Carpet

Cut carpet or mat one inch (25 mm) wide directly below the seat armrest on both sides of the aisle.

B. Attach double-sided carpet tape to the floor panels where the PL track will be fitted.

3. Install PL Track

**CAUTION:** REMOVE ALL BURRS AND SHARP EDGES AFTER CUTTING THE TRACK TO AVOID INJURY.

A. Cut PL floor track to the desired length with a miter saw. Cut straight across.

**NOTE:** Make sure that adjacent tracks are tightly butted together without a gap.

**NOTE:** If end caps or corner pieces are to be used, be sure to allow for their lengths when cutting main strips.

B. Remove burrs and sharp edges present on the PL track ends and miters.

C. Attach the PL track to the double-sided carpet tape.

D. Install end caps and corner pieces simultaneously with the track. Lift end of track and slip tongue on end cap or corner piece in place beneath track.

4. Install Carpet

Procedure is straightforward.

5. Install PL Galley Lights

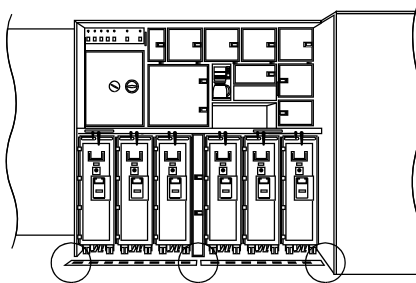


Figure 701: Location of Galley Light

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**CAUTION:** INSTALL PL GALLEY LIGHT IN A PROTECTED AREA IN THE GALLEY, THIS IS CLOSE TO MONUMENTS, AND OUTSIDE OF GALLEY CART PIVOT AND TRAFFIC AREAS.

A. Galley Light Location

In order to protect the PL galley light from direct damage, it should be located as close to the galley structure as practicable. If at all possible, it should not be placed in front of galley trolley stowage areas.

B. Clean area with a clean cloth.

C. Attach double-sided carpet tape to the floor panels where the galley light will be located.

**NOTE:** In galley areas better adhesion can be accomplished by applying high-bond aluminum aircraft tape to the galley floor before attaching the double-sided carpet tape.

D. Position galley light over double-sided carpet tape.

E. Press galley light down firmly for good adhesion.

F. Install non-textile floor covering.

G. Optional: seal galley light around the edges at joint with NTF with non-acetic acid curing RTV.

6. Install Exit markers

A. Connect wires or plug exit marker connector into aircraft wire harness connector.

B. Pass exit marker wires/connector through aircraft trim/bulkhead.

C. Install fasteners. Procedure is straightforward.

7. Check List for Proper System Installation

When the LSI PLEEL System is properly installed, there is minimal opportunity for damage caused by passenger traffic.

A. Floor Strips

- (1) Joints should be cut straight and smooth, free of rough edges.
- (2) Cuts should be made perpendicular to the mating part face.
- (3) Pieces of floor track shorter than 1 foot (300 mm) should not be used.

B. End Caps and Corner Pieces

- (1) End caps and corner pieces should be butted up to the floor track strips.
- (2) The end caps and corner pieces include thin tongues which should be inserted underneath the adjacent ends of the floor strip, and should also be installed with double sided tape.

C. Fiberglass Galley Lights

- (1) Galley lights should be installed in heavy traffic areas, galley, lavatory or entry areas where moisture can be present.



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8. Storage

A. PL Track

PL track storage parameters:

- (1) dark area
- (2) < 20% RH
- (3)  $21.0\text{ }^{\circ}\text{C} \pm 3.0\text{ }^{\circ}\text{C}$  ( $70\text{ }^{\circ}\text{F} \pm 5.0\text{ }^{\circ}\text{F}$ )

After two (2) years of storage under these conditions, PL track shall meet all LSI requirements for new parts.

B. Exit Markers

EL lamp storage parameters:

- (1) dark area
- (2) < 20% RH
- (3)  $21.0\text{ }^{\circ}\text{C} \pm 3.0\text{ }^{\circ}\text{C}$  ( $70\text{ }^{\circ}\text{F} \pm 5.0\text{ }^{\circ}\text{F}$ )

After two (2) years of storage under these conditions, EL lamps shall meet all LSI requirements for new parts.

C. Fiber glass encapsulated PL galley lights

Fiber glass encapsulated PL galley light storage parameters:

- (1) dark area
- (2) < 20% RH
- (3)  $21.0\text{ }^{\circ}\text{C} \pm 3.0\text{ }^{\circ}\text{C}$  ( $70\text{ }^{\circ}\text{F} \pm 5.0\text{ }^{\circ}\text{F}$ )

After two (2) years of storage under these conditions, the parts shall meet all LSI requirements for new parts.

D. PL Parts Life Limit

PL parts are to be replaced 6 years after the date of manufacture indicated on the PL parts.

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## **FITS AND CLEARANCES**

1. General

The fits and clearances data of the PL components are in the Illustrated Parts List (IPL) contained in this manual. Fits and Clearances for other items are in other IPC's referenced at the beginning of this manual (refer to Highlights).

The IPL references the weight, installation related dimensions and other characteristics of each component.

The weight data may be desired in order to obtain total system weight as installed in an aircraft, whereas the dimensions of each of component are necessary to:

- A. determine correct location of the aisle lighting components to meet regulations,
- B. foresee space for the exit markers in or on bulkheads.

2. In-service Wear

None of the parts described in this document show "in-service wear".

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**SPECIAL TOOLS, FIXTURES AND EQUIPMENT**

1. General  
 In addition to common hand tools and standard workshop equipment, some special tools and equipment are required for the disassembly, inspection, repair, replacement, and/or reassembly of some components.
2. Tool List  
 No special tools are required for equipment other than for connectors associated with the powered elements of the FPEEPM system. These tools are listed in IPC 33-50-12.
3. Fixtures List  
 No special fixtures are required.
4. Equipment List

<b>Type</b>	<b>Part Number</b>	<b>Manufacturer</b>
Multimeter Input Impedance: 10 MΩ DC Voltage: up to 1000VDC AC Voltage: up to 750VAC Resistance: up to 20 MΩ	8024-B or equivalent	John Fluke Mfg. Co., Inc. PO Box C-9090 Everett, WA 98206 USA
Digital Multimeter Sensitivity 1 μV up to 300V True RMS Bandwidth: 20Hz up to 100kHz DC Voltage: up to 300VDC AC Voltage: up to 300VAC Current: up to 3A	HP 3468A or equivalent	Hewlett Packard Co. 1820 Embarcadero Road Palo Alto, CA 94303 USA

Table 901: List of Equipment

**NOTE:** Consultation with local authorities would be necessary to determine whether any equipment to measure the optical output of the Photoluminescent Strips and galley lights would be required.

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**ILLUSTRATED PARTS LIST**

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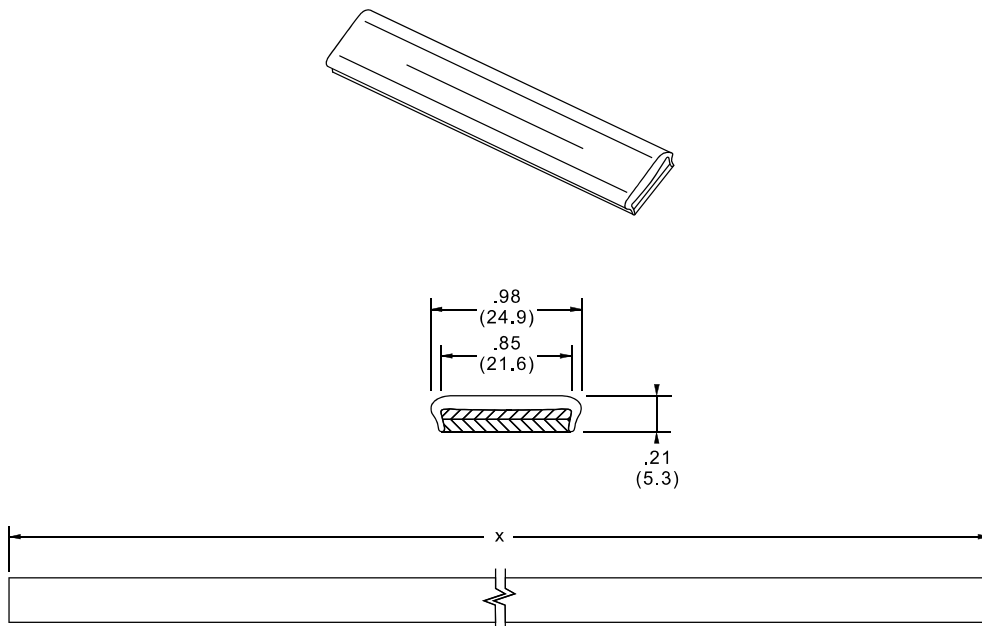


Figure 10001: Illustration for P/N 7983-X



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1. Photoluminescent Track

7983-4	Housing, Strip, Photoluminescent, 6 ft			
	Figure N°	10001		
	Size (L)	X = 6 ft (1.83 m)		
	Weight	2.1 oz/ft	193 g/m	

7983-5	Housing, Strip, Photoluminescent, 24 ft			
	Figure N°	10001		
	Size (L)	X = 24 ft (7.32 m)		
	Weight	2.1 oz/ft	193 g/m	
	Figure N°	10001		

7983-6	Housing, Strip, Photoluminescent, 12 ft			
	Figure N°	10001		
	Size (L)	X = 12 ft (3.66 m)		
	Weight	2.1 oz/ft	193 g/m	
	Figure N°	10001		

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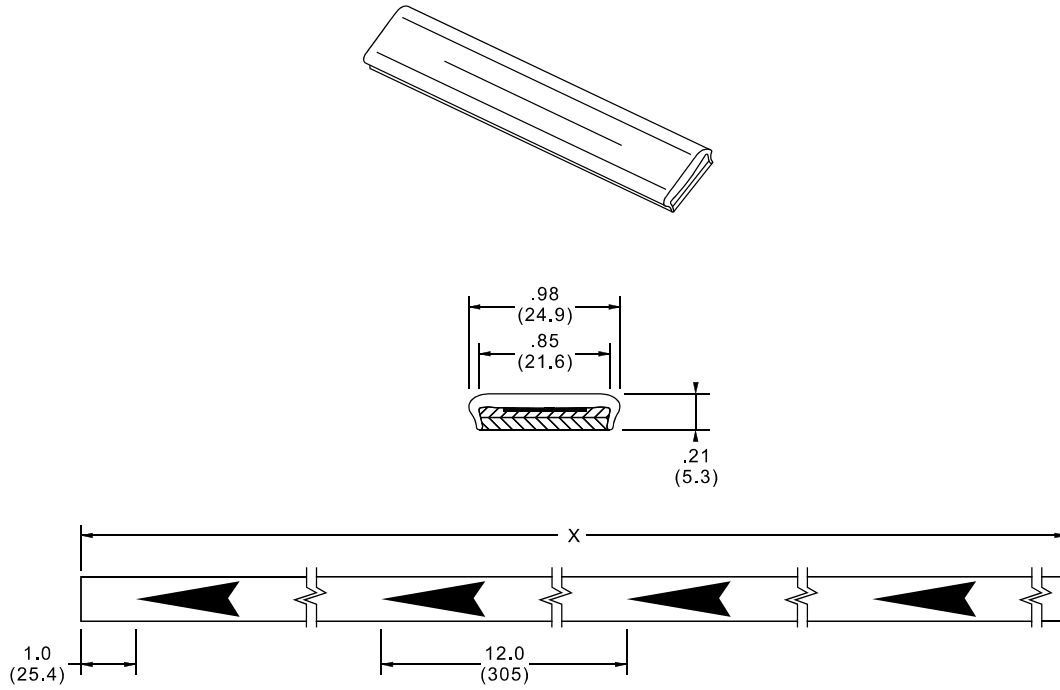


Figure 10002: Illustration for P/N 8086-X

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2. Photoluminescent Track with Marking

8086-1	Housing, Strip, Photoluminescent, One Way Arrows, 24 ft			
	Figure N°	10002		
	Size (L)	X = 24 ft (7.32 m)		
	Overlay	Color	Red	
		Arrows	Yes	
	Weight	1.68 oz/ft	156 g/m	

8086-2	Housing, Strip, Photoluminescent, One Way Arrows, 12 ft			
	Figure N°	10002		
	Size (L)	X = 12 ft (3.66 m)		
	Overlay	Color	Red	
		Arrows	Yes	
	Weight	1.68 oz/ft	156 g/m	
	PMA	Pending		

8086-3	Housing, Strip, Photoluminescent, One Way Arrows, 6 ft			
	Figure N°	10002		
	Size (L)	X = 6 ft (1.83 m)		
	Overlay	Color	Red	
		Arrows	Yes	
	Weight	1.68 oz/ft	156 g/m	

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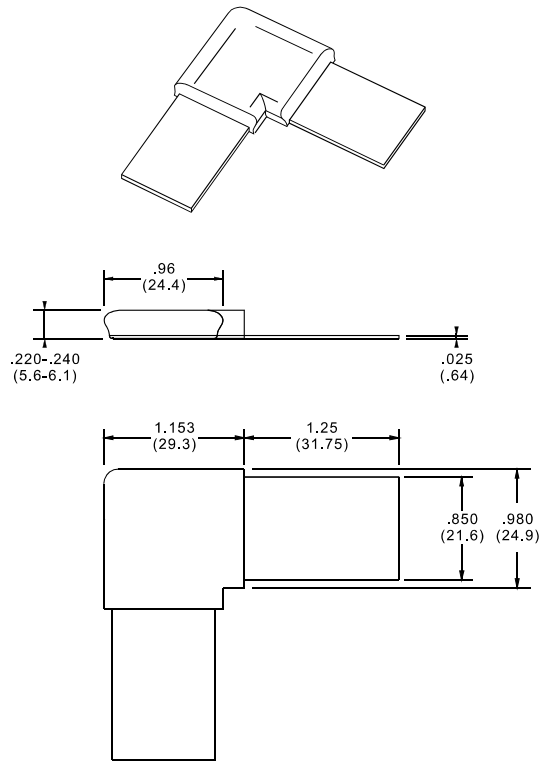


Figure 10003: Illustration for P/N 8065-1

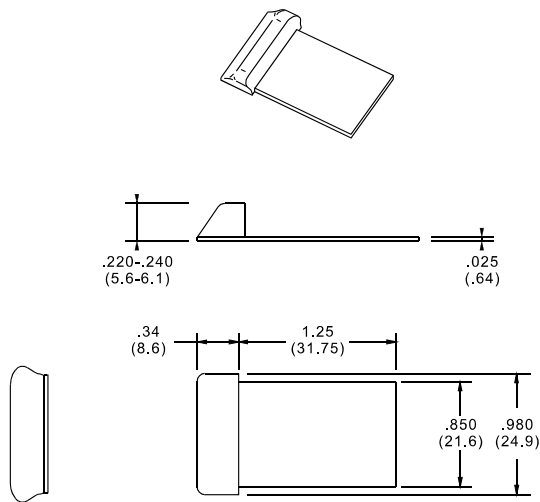


Figure 10004: Illustration for P/N 8066-1

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3. Accessories for Photoluminescent Track

8065-1	Corner, Photoluminescent			
	Figure N°	10003		
	Weight	.4 oz	12 g	

8066-1	End Cap, Photoluminescent			
	Figure N°	10004		
	Weight	.2 oz	6 g	

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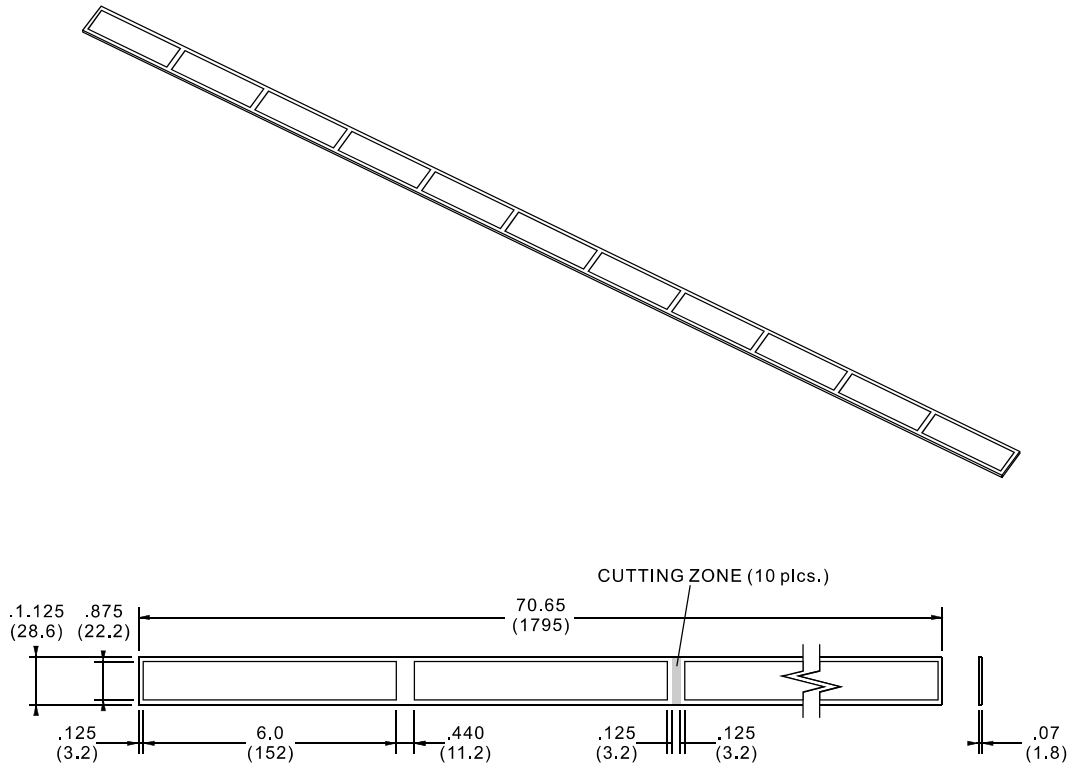


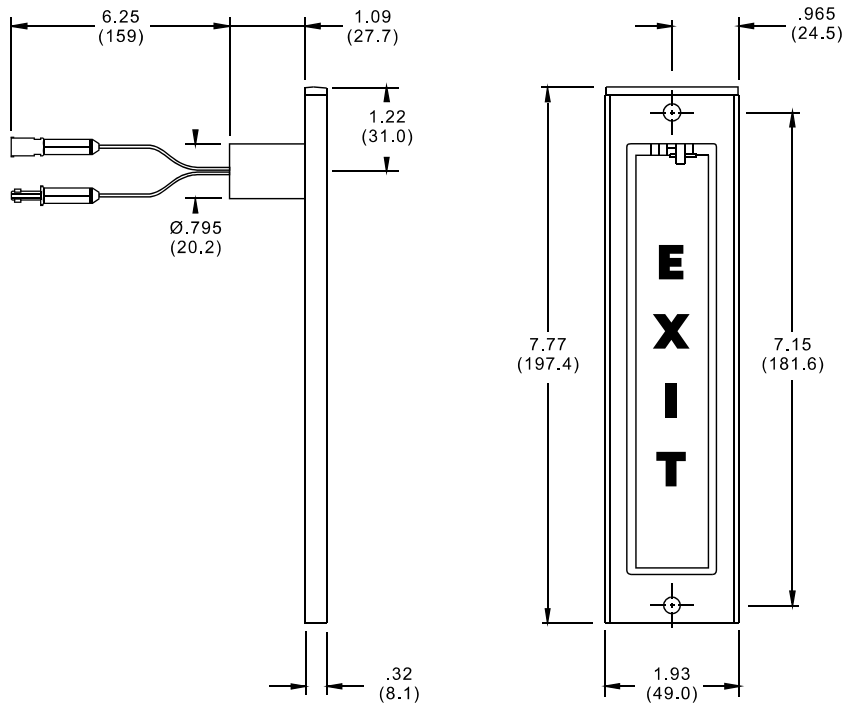
Figure 10005: Illustration for P/N 8011-2

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4. Photoluminescent Galley Light

8011-2	Galley Light, Photoluminescent, 11 Segments		
	Figure N°	10005	
	Size (L)	70.65 inch (1.795 m)	
	Weight	.90 oz/ft	84 g/m
	PMA	Pending	
	Note	Unit may be cut to discrete length by cutting within any cutting zone.	

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**ELECTRICAL SCHEMATIC**



Figure 10006: Illustration for P/N 8015-1



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5. Electroluminescent Exit Marker

8015-1	Marker, Exit, 6 VDC Input, ENG			
	Figure N°	10006		
	Material	Lexan®		
	Overlay	P/N	5836-3	
		Color	Red	
		Orientation	Vertical	
		Graphics	V/R/SL/-A0L-0R-, EXIT	
		Language	English	
		Termination	6.25" Round Wires (20 AWG)	
	Connector(s)	1 x LSI #60184	Housing, Plug	
		1 x LSI #60185	Housing, Receptacle	
	Size (HxWxD)	7.77"x1.93"x.32" (D = 1.41" incl. DC/AC inverter)		
	Lit Area Size	N/A		
	Curvature	None		
	Weight	3.35 oz	103 g	
	Input Voltage	6VDC	Typical	
	Input Current	230 mA Max.	@6VDC	
	Spare Parts	5758-1	Lens, Lexan® Exit Marker	
Comment	Refer to IPC 33-50-03 for more available types and overlays.			

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## **APPENDIX A: AOG PROCEDURES**

1. Requirement  
The ATA Airline Suppliers Guide requires that "suppliers make every effort to ship AIRCRAFT ON GROUND (AOG) material within 4 hours of request and to ship other critical material within 24 hours. For these purposes, suppliers will need to operate 24 hours a day, 7 days a week".

2. General Approach

- A. LSI has established a 24 hour telephone number to take any AOG call, or other emergency after office hours.

### **LSI AOG PHONE NUMBER: +1 802 295 0408**

The operator will take:

- (1) callers name
- (2) airline name
- (3) telephone number
- (4) any message that the caller wishes to leave.

The operator will then pass the message to the appropriate individual within LSI. It will be the responsibility of this individual to:

- (5) call the airline back
- (6) get all pertinent information (see list below)
- (7) take the necessary AOG action required to get the necessary parts shipped.

- B. LSI requires the following information from the caller for prompt and correct action:

- (1) callers name
- (2) airline name
- (3) telephone number
- (4) date and time of call
- (5) part number(s)
- (6) material quantity
- (7) aircraft type
- (8) purchase order n°
- (9) ship to address
- (10) bill to address
- (11) special instructions.

- C. AOG Shipment.

- (1) Federal Express (Fedex) is the best method of shipping from Lebanon, New Hampshire. Fedex:
  - (a) leaves Lebanon with packages received before 6:15 p.m.
  - (b) ships late packages the following evening
  - (c) provides no service out of either Lebanon, NH or Boston, MA on Sundays or holidays.
- (2) Local airlines offer counter to counter service which interconnect to major carriers. This service is available daily from Lebanon, NH at an extra service fee. Last drop off time at FedEx in Lebanon, NH is 6.15 pm.
- (3) Please specify clearly which shipping method is preferred.

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