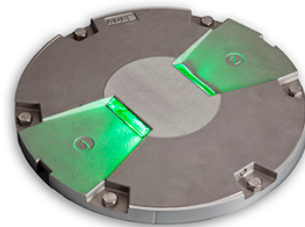


# TAXIWAY LIGHTING

## ITCL-LP

### FAA LED In-pavement Taxiway Centerline Light

#### STYLE 3, MEDIUM-INTENSITY



12" Fixture



8" Fixture with Snow Plow Ring

#### Compliance with Standards

**FAA:** L-852(L) Series AC 150/5345-46 (Current Edition) and FAA Engineering Brief No. 67 (Current Edition).

#### Uses

##### FAA L-852A(L)

- Taxiway centerline on straight sections and clearance bar in category I and II applications,  $\geq 1,200$  ft RVR

##### FAA L-852B(L)

- Taxiway centerline on curved sections in category I and II applications,  $\geq 1,200$  ft RVR

##### FAA L-852C(L)

- Taxiway centerline on straight section and clearance bar in category III applications,  $< 1,200$  ft RVR

##### FAA L-852D(L)

- Taxiway centerline on curved sections in category III applications,  $< 1,200$  ft RVR
- White/white or white/yellow used on MIRL runway edge for intersections where runway edge spacing  $> 400$  ft (122 m)

##### FAA L-852J(L)

- Taxiway centerline on curved sections in category I and II applications,  $\geq 1,200$  ft RVR

##### FAA L-852K(L)

- Taxiway centerline on curved sections in category III applications,  $< 1,200$  ft RVR

#### Features

- Use of L-852K(L) fixture allows fixtures to be reduced by half for curved centerlines where the radius is 75 ft (23 m) to 399 ft (121 m).
- Style 3 - Low protrusion above ground of  $\leq 0.25$  in (6.3 mm) reduces vibrations caused by aircraft landing gear, increasing fixture life.
- Greatly reduced maintenance: MTBF of 56,000 hours at 6.6 A.
- Increased traffic efficiency and availability of the runways due to the reduction of maintenance.
- Optimum and homogeneous light distribution along the lights installed on the same runway.

- Fully dimmable lights, respecting the response curve of traditional halogen lights. Operates on the full range of 2.8 A to 6.6 A.
- High discrimination between functions due to the saturated colors, crisp white light, their stability at the different brightness steps and under all viewing angles.
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements.
- Full compatibility with existing airfield lighting series circuits. No need to replace the CCRs, series transformers, or cables.
- Installation on the same bases as 8- or 12-inch tungsten-halogen lights for a straightforward replacement. Optional snow plow rings are available.
- Substantial investment reduction for new installations using smaller CCR size and series transformers due to a lower installed load.
- Very low working temperature, ensuring longer component life.
- Rugged lightning protection complies with ANSI/IEEE C62.41-1991 Location Category C2 given in FAA Eng. Brief 67. Category C2 is defined as a  $1.2/50\mu\text{s} - 8/20\mu\text{s}$  combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.
- When turned on, light rise time is low. The light is perfectly adapted for any incursion protection system.
- Optional monitoring function of the individual light source. In case of a defect, the LED light automatically disconnects from the secondary side of the isolation transformer, resulting in an open circuit condition.
- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output.
- Environment-friendly, precision-cast aluminum alloy top, intermediate and bottom covers.
- Corrosion-resistant stainless steel hardware. Use of Torx screws ensures ease of maintenance.
- For FAA applications, includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

# TAXIWAY LIGHTING

## ITCL-LP

### Features (Continued)

ITCL-LP lights are part of a complete range of LED in-pavement lights, featuring innovative characteristics, as a leverage for:

#### Reliability

- Additional water-tightness barriers, protecting both the electronics and the LEDs in case of accidental water ingress along the prism or the gaskets as well as along the cables.

#### Low protrusion without negative slope

- Limited height above pavement of 6.33 mm (0.25 in) reduces the risk of damage during winter operations
- Despite the low protrusion, no part of the prism is below ground level, avoiding loss of photometry during rainfall and sedimentation on the bottom of the prism.

#### Maintenance friendliness

- Maintenance-friendly: components subject to wear or damage like prisms and cables can easily be replaced. Neither sealing compounds nor resin are required.
- Innovative design of the cable entry, permitting replacement without the need to open the light. This eliminates the risk of water leakage due to a pinched cable.
- Reduced number of components for maintenance simplicity.
- Pressure-release plug for water-tightness testing of fixture after overhaul.

#### Optional scratch-resistant prisms

- A higher hardness protective layer can be applied to the prism (see Winter Options in ordering code), making it much more resistant to scratches and sand-blasting.

### Dimensions

12" Fixture	
Outside diameter	303.3 mm (11.94 in)
Bolt-circle diameter	285.8 mm (11.25 in)
Overall height	78.4 mm (3.1 in)
8" Fixture	
Outside diameter	202 mm (7.97 in)
Bolt-circle diameter	184 mm (7.24 in)
Overall height	78.4 mm (3.1 in)

### Power Supply

6.6 A through one or two series transformer(s). ITCL-LP lights have been designed to work with any IEC- or FAA-compliant transformer

up to 100 W without affecting the performance or the lifetime of the light or transformer. However, use of a non-matched transformer will reduce its efficiency. See data sheet 3033 for more details on recommended isolation transformers.

Fixture Type	Fixture Load <sup>1</sup>	Isolation Transformer	Isol. XF Load	Primary CCR Load
<b>L-852A(L), L-852C(L) - No heater</b>				
Unidirectional	5 VA	10/15 W	10 VA	15 VA
Bidirectional <sup>2</sup>	7 VA	10/15 W	9 VA	16 VA
Bidirectional (x2) <sup>3</sup>	5 VA	10/15 W	10 VA	15 VA
<b>L-852A(L), L-852C(L) - With heater</b>				
Unidirectional	30 VA	30/45 W	6 VA	36 VA
Bidirectional <sup>2</sup>	32 VA	30/45 W	6 VA	38 VA
Bidirectional (x2) <sup>3</sup>	30 VA	30/45 W	6 VA	36 VA
<b>L-852B(L), L-852J(L) - No heater</b>				
Unidirectional	7 VA	10/15 W	9 VA	16 VA
Bidirectional <sup>2</sup>	8 VA	10/15 W	9 VA	17 VA
Bidirectional (x2) <sup>3</sup>	7 VA	10/15 W	9 VA	16 VA
<b>L-852B(L), L-852J(L) - With heater</b>				
Unidirectional	31 VA	30/45 W	6 VA	37 VA
Bidirectional <sup>2</sup>	59 VA	65 W	13 VA	72 VA
Bidirectional (x2) <sup>3</sup>	31 VA	30/45 W	6 VA	37 VA
<b>L-852D(L), L-852K(L) - No heater</b>				
Unidirectional	12 VA	20/25 W	8 VA	20 VA
Bidirectional <sup>2</sup>	18 VA	20/25 W	11 VA	29 VA
Bidirectional (x2) <sup>3</sup>	12 VA	20/25 W	8 VA	20 VA
<b>L-852D(L), L-852K(L) - With heater</b>				
Unidirectional	31 VA	30/45 W	6 VA	37 VA
Bidirectional <sup>2</sup>	59 VA	65 W	13 VA	72 VA
Bidirectional (x2) <sup>3</sup>	31 VA	30/45 W	6 VA	37 VA

#### Notes

<sup>1</sup> Fixture load varies depending on color(s). The maximum fixture load is provided. Fixture load does not include isolation transformer load.

<sup>2</sup> One cord set

<sup>3</sup> One cord set per side (2 total)

**Ordering Code**

D = AD light

**Application**

- 2A = FAA L-852A
- 2B = FAA L-852B
- 2C = FAA L-852C
- 2D = FAA L-852D<sup>1</sup>
- 2J = FAA L-852J
- 2K = FAA L-852K

**Cord Set Style and Length**

J = Style 1 (2-pin) SO jacketed cable, 18" long

**Cable and Connector**

- 2 = 1 plug (2-pin)
- 3 = 2 plugs (2-pin)

**LED Color 1 – Left**

- R = Red
- G = Green
- W = White
- Y = Yellow
- N = Obscure/Blank (no light)

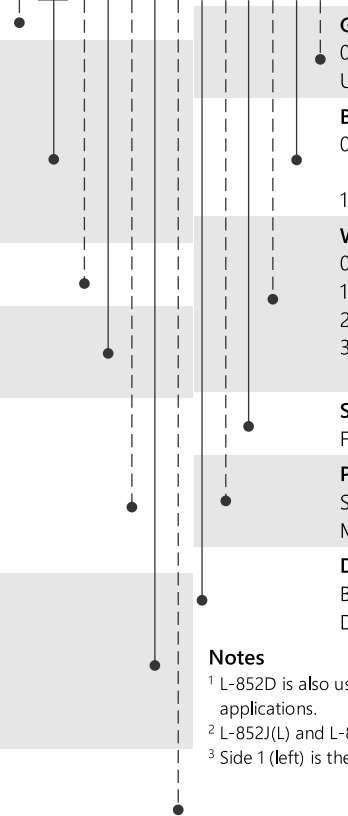
**LED Color 2 – Right**

- R = Red
- G = Green
- W = White<sup>1</sup>
- Y = Yellow
- N = Obscure/Blank (no light)

**Toe-in**

- 0 = No toe-in
- 3 = Left/Right<sup>2</sup>
- 4 = Toed Left<sup>2,3</sup>
- 5 = Toed Right<sup>2,3</sup>

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**Ground Lug Options**

- 0 = Without ground lug
- U = With UL 467 ground lug (FAA standard)

**Bolt Holes/Fixation Options**

- 0 = Standard (6 bolts for 12" fixture; 2 bolts/2 fixing pins for 8" fixture)
- 1 = 4 bolts (8" fixtures)

**Winter Options**

- 0 = None
- 1 = Arctic kit
- 2 = Heavy-duty abrasion-resistant lens coating
- 3 = Arctic kit and heavy-duty abrasion-resistant lens coating

**Standards**

F = FAA

**Power Supply and Monitoring**

- S = Current driven, 50/60Hz, w/out monitoring
- M = Current driven, 50/60Hz, with monitoring

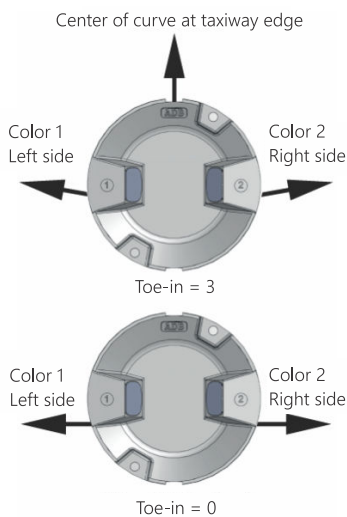
**Dimensions**

- B = 8" diameter, 1/4" protrusion
- D = 12" diameter, 1/4" protrusion

**Notes**

- <sup>1</sup> L-852D is also used for FAA medium-intensity runway edge and threshold applications.
- <sup>2</sup> L-852J(L) and L-852K(L) only
- <sup>3</sup> Side 1 (left) is the only side populated when unidirectional.

**Toe-in Color Coding**



**Packaging**

12" Fixture	
In cardboard box	7 × 13 × 13 in
Weight with packing	13.15 lb
Weight without packing	11.95 lb
8" Fixture	
In cardboard box	7 × 13 × 13 in
Weight with packing	9.8 lb
Weight without packing	8.6 lb
8" Fixture with Snow Plow Ring <sup>1</sup>	
In cardboard box	7 × 13 × 13 in
Weight with packing	42 lb
Weight without packing	40.8 lb

**Notes**

- <sup>1</sup> Use L-868B 12" adapter AW5008ADB1E (unidirectional) / AW5008ADB11E (bidirectional) snow plow rings for mounting on L-868B base can.

# TAXIWAY LIGHTING

## ITCL-LP