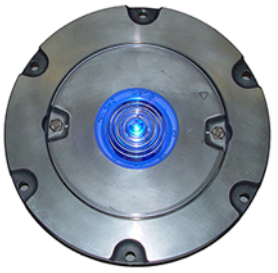
TAXIWAY LIGHTING

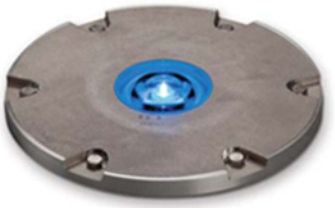
ITEL-L

LED In-pavement Taxiway Edge Light

STYLE 3, MEDIUM-INTENSITY



8-in ITEL-L
with adapter ring



12-in ITEL-L

Compliance with Standards

FAA: L-852T(L) AC 150/5345-46 (Current Edition) and the FAA Engineering Brief No. 67. ETL Certified.

ICAO: Annex 14, Vol. I, Ed. 6, para. 5.3.18.

CE: Complies with the requirement of the EMC Directive 2004/108/EC.

Uses

FAA L-852T(L)

- Taxiway edge
- Heliports

Features

- Low wattage: Single LED with only 19.5 VA fixture load on a 30/45 W isolation transformer on highest step, making the L-852T(L) LED more than twice as efficient as traditional 45 W fixtures
- Average LED life of 100,000 hours under high-intensity conditions and more than 200,000 hours under typical operating conditions, resulting in significant reduction or even elimination of ongoing maintenance costs and periodic re-lamping expenses
- FAA Style 3–Low protrusion above ground of ≤0.25 inch reduces vibrations caused by aircraft landing gear in both the light fixture and the landing gear, increasing lamp life
- Can be installed on existing 6.6 A or 20 A series circuits with no modifications to existing CCR or isolation transformer
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs designed in compliance with IEC or FAA requirements
- Thermostatically controlled heater (U.S. Patent 7192155 B2) cycles on and off when temperature drops below freezing, reducing overall energy consumption
- Very low power rating for LED lights contributes to a lower life cycle cost. Limits cost for supporting equipment such as isolation transformers and CCRs to strict minimum.
- LED photometric performance will be maintained longer due to a cleaner lens. The lower temperature of the lens prevents the ";baking effect" that causes contaminants to stick to the surface of the lens.
- When quartz-incandescent fixtures are replaced with LED fixtures, airport staff can add more lights without increasing CCR size
- "Smart electronics" control current to LED, so light output matches existing incandescent fixtures at all brightness levels without sacrificing any light characteristics. Actual light output is determined based on a continuous light output curve. Therefore, light output truly represents input current, even if series circuit input current is not within FAA specification limits. Allows for a low cost and progressive evolution of the airfield lighting toward new LED-based technology.
- Offers longer maintenance intervals and requires fewer spare parts, resulting in lower life cycle costs
- Designed and built with simplicity and ease of maintenance in mind
- Fixture is available in five formats:
  - 8-inch fixture with an L-868B adapter ring or snow plow ring for an 11.25-inch bolt circle
  - 8-inch fixture with an L-867B adapter ring for a 10.25-inch bolt circle, bottom mounted
  - 12-inch fixture for 11.25-inch L-868B bolt circle
  - 12-inch fixture for 10.25-inch L-867B bolt circle
  - 8-inch fixture with an 11-inch adapter ring and an 8.875-inch bolt circle
- Monitoring option is available that provides a contact closure via a separate cable in case of LED or internal PCB failure. This allows external monitoring equipment to report the status and failure location of each fixture.
- Fixture uses aluminum alloy cover, inner cover, and optical assembly, stainless steel hardware, and a hardened optical glass lens
- Low-temperature lights. Temperature rise at center of top cover remains below FAA-specified limit of 320 °F (160 °C).
- 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 1.2/50µS – 8/20 µS combination wave, with a peak voltage of 10,000 V and a peak current of 5,000 A.
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

Operating Conditions

Temperature:	-40 °F to +131 °F (-40 °C to +55 °C)
Altitude:	Sea level to 10,000 feet (3000 m)
Relative Humidity:	Up to 100%

ITEL-L

Electrical Supply

6.6 A through an L-830-1 (for 60 Hz) or L-831-1 (for 50 Hz) 30/45 W isolation transformer or an L-830-17 20/25 W isolation transformer. The ITEL fixture is designed to work with any IEC- or FAA-compliant transformer up to 100 W without affecting the performance or lifetime of the light fixture or transformer. See data sheet 3033 for more details on recommended isolation transformers specified below.

The total CCR load shown in the following table represents the total VA load imposed on the regulator and accounts for power factor and transformer load.

ITEL Fixture	Fixture Load	Isolation Trans-former	Heater On/Off	Trans-former Load	Total CCR Load
With arctic option	19.5 VA 44 VA	30/45 W 30/45 W	Off On	6 VA 9 VA	25.5 VA 53 VA
Without arctic option	19.5 VA	20/25 W	N/A	5 VA	24.5 VA

Dimensions

Outside diameter:	11.94 in (30.33 cm)
Bolt-circle diameter (L-868B):	11.25 in (28.58 cm)
Bolt-circle diameter (L-867B):	10.25 in (26.04 cm)
Bottom cover depth:	2.36 in (5.99 cm)

Note: Use caution during snowplow conditions. A rubber tipped blade is recommended.

Ordering Code

ITEL - X X X X

LED Color
8 = Yellow
9 = White
A = Green
B = Red
C = L-852T(L) Aviation Blue[1]

Mounting
1 = 12-inch fixture for standard L-868B light base[1]
2 = 12-inch fixture for standard L-867B light base[1]
3 = 8-inch fixture for ICAO light base
4 = 8-inch fixture with L-868B adapter ring
6 = 8-inch fixture with L-867B adapter ring, bottom mounted
7 = 8-inch fixture with L868B snow plow ring
8 = 8-inch fixture with 11-inch adapter ring

Power
1 = 60 Hz[1]
2 = 50 Hz[2]
3 = 60 Hz with monitoring
4 = 50 Hz with monitoring[2]

Arctic Option
0 = Without arctic option
1 = With arctic option

Notes
[1] ETL Certified
[2] Any 50 Hz option carries the CE Mark

Packaging

In cardboard box:	7 × 13 × 13 in (17.8 × 33 × 33 cm)
Weight with packing:	15.3 lb (6.94 kg)
Weight without packing:	12.3 lb (5.58 kg)