

L-850B Style 3 LED Touchdown Zone Light



Compliance with Standards

- FAA:** L-850B AC 150/5345-46 (Current Edition) and the FAA Engineering Brief No. 67 "Light Sources other than Incandescent and Xenon for Airport Lighting and Obstruction Lighting Fixtures." ETL Certified.
- ICAO:** Annex 14, Vol. 1, par. 5.3.13 and Appendix 2, Figure A2-5
- T/C:** Transport Canada TP 312E par. 5.3.14
- CE:** Complies with the requirements of the EMC Directive 2004/108/EC

Uses

- Touchdown zone lighting on category II and III runways

Features

- Average LED life of 56,000 hours under high-intensity conditions and more than 150,000 hours under actual 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 series circuits with no modifications to existing CCR or isolation transformer
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs that are designed in compliance with FAA requirements
- Very low power rating for LED lights contributes to a lower life cycle cost. Limits cost for supporting equipment, such as CCRs, to strict minimum.
- When quartz-incandescent fixtures are replaced with LED fixtures, airport staff can add more lights without increasing CCR size
- Offers longer maintenance intervals and requires fewer spare parts, resulting in lower life cycle cost
- "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.
- Includes provision for grounding fixture

Ordering Code

TDZL-XXXXX

Light Beam

- 1 = Straight
- 2 = Toe-in Right
- 3 = Toe-in Left

Monitoring

- 1 = No monitoring

Frequency

- 1 = 60Hz
- 2 = 50Hz¹

Arctic Kit

- 1 = No¹
- 2 = Yes

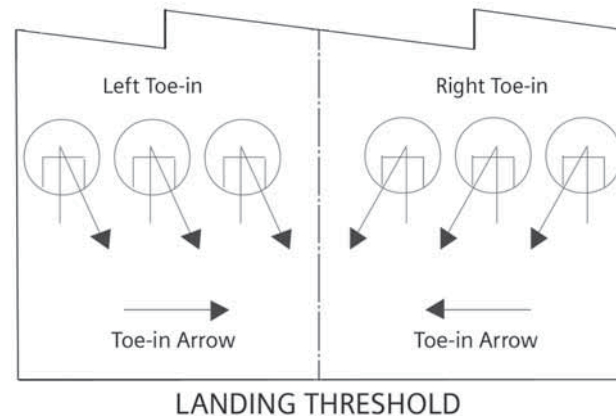
Specification

- 0 = FAA
- 1 = ICAO

Note

¹ L-850B LED 50Hz without heater carries the CE Mark

Touchdown Zone Toe-in Coding



Features (Continued)

- Low-temperature lights. Temperature rise at center of top cover remains well below the FAA-specified limit of 320°F (160°C).
- 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.

Features (Continued)

- 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 cover, optical support, and inner cover assembly with stainless steel hardware

Electrical Supply

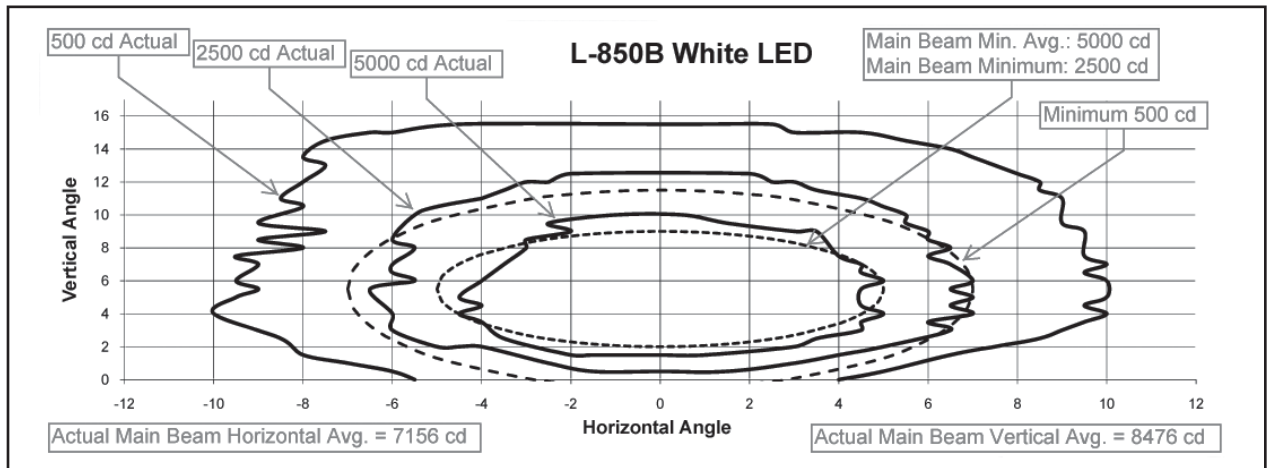
It is recommended that the L-850B LED fixture be powered from a dedicated CCR and that separate remote controls are available. TDZL LED lights have been designed to work with any FAA-compliant transformer up to 100W without affecting the performance or lifetime of the light fixture or transformer. See catalog sheet 1215 for more details on recommended isolation transformers specified below.

L-850B	Fixture Load	Isolation Transformer	Isol. XF Load	CCR Load
W/out heater	15VA	20/25W	3VA	18VA
With heater	30VA	30/45W	6VA	36VA

Dimensions

Outside diameter:	11.94 in (30.33 cm)
Bolt-circle diameter (L-868B):	11.25 in (28.58 cm)

FAA Photometric Data



Spare Components

Description	Part No.
Cable clamp	4071.50.090
Cord set, L-823	73A0136-23
Cord set grommet	63A1014
Cord set terminal, female	70A0329
LED light engine, L-850B, white (FAA)	48A0405-WHT
LED light engine, L-850B, white (ICAO)	48A0419-WHT
LED PCB, white	44A6970-3
O-ring, bottom cover seal	7080.90.335
O-ring, pressure release screw	63B0267-011
Pressure release screw	60A2602
Prism	63A1119-1
Prism gasket sleeve	61A0444
Prism clamp	60A4046
Prism flat seal	63A1120
Prism keeper plate	60A4047

Packaging

In cardboard box:	7 x 13 x 13 in (17.8 x 33 x 33 cm)
Weight with packing:	16.5 lb (7.48 kg)
Weight without packing:	13.25 lb (6 kg)

The information contained in this document is subject to change without notice. ADB reserves the right to make changes and improvements to its products and assumes no responsibility for making these modifications on any equipment previously sold.