

TAXIWAY LIGHTING

Enhanced ITCF-L

LED In-pavement Taxiway Centerline Light

STYLE 3, MEDIUM-INTENSITY



L-852A-D



L-852J/K

Compliance with Standards

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

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

Use of two LED modules allows the option of separate control of each module in bi-directional applications.

Operating Conditions

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

Features

- Uses enhanced electronics ensure the power supply PCB does not need to change in case the LED becomes obsolete.
- 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)
- L-852A/B/C(L) use a single LED per side. L-852D/J/K(L) use two LEDs per side. LED life of more than 200,000 hours for L-852A/B/C(L) and more than 150,000 hours for L-852D/J/K(L) under typical operating conditions, which significantly reduces ongoing maintenance costs and periodic re-lamping expenses, resulting in lower life cycle costs.
- FAA Style 3-Low protrusion above ground of ≤ 0.25 inch reduces vibrations caused by aircraft landing gear, increasing lamp life
- Operates on either 3- or 5-step ferroresonant or thyristor CCRs that are designed in compliance with IEC or FAA requirements
- 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.
- Offers longer maintenance intervals and requires fewer spare parts, resulting in lower life cycle cost
- Use of LED light source eliminates filter replacement and color shifts when viewed at various angles or CCR step settings
- LED photometric performance will be maintained longer due to a cleaner lens. Lower lens temperature prevents the "baking effect" that causes contaminants to stick to the lens surface.
- Smart electronics control current to LED, so light output matches existing incandescent fixtures.
- 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
- 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.
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

TAXIWAY LIGHTING

Enhanced ITCF-L

Ordering Code

ITCF- X X 0 X X X

Series

- A = L-852A(L)
- B = L-852B(L)
- C = L-852C(L)
- D = L-852D(L)
- J = L-852J(L)
- K = L-852K(L)

LED Color

- 1 = Yellow/Yellow
- 2 = Green/Green
- 3 = Yellow/Green²
- 5 = Green/Obscure
- 6 = Yellow/Obscure
- 8 = Red/Green²
- 0 = White/White (L-852D only)
- A = Green Left/Yellow Right (J/K only)^{1,3}
- B = Yellow Left/Green Right (J/K only)^{1,3}
- C = Green Left/Obscured Right (J/K only)³
- D = Obscured Left/Green Right (J/K only)³
- E = Yellow Left/Obscured Right (J/K only)³
- F = Obscured Left/Yellow Right (J/K only)³
- G = White/Yellow (L-852D only)
- H = Green/White²
- I = Red/White²
- J = Red/Yellow²

0

Mounting and Cord Set

- 1 = Two L-823 cord sets, L-868B (12") standard base^{5,6}
- 3 = One L-823 cord set, L-868B (12") standard base
- 5 = One L-823 cord set, L-868A (10")^{4,5}
- 6 = Two L-823 cord sets, L-868A (10")^{4,5,6}

Arctic Option

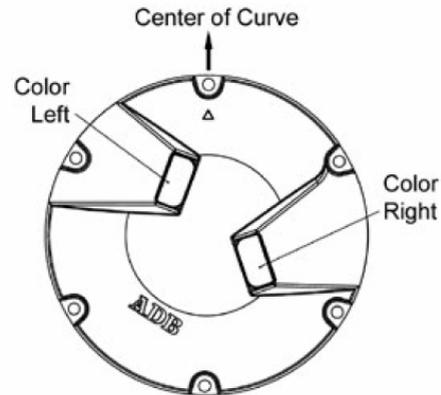
- 0 = Without arctic option
- 1 = With arctic option

Power

- 2 = 60 Hz
- 3 = 50 Hz⁵
- 4 = 50/60 Hz (two cord sets)⁵

Notes

- Contact the Sales Department for availability of ITCF -L (ICAO straight) and ITCF-M (ICAO curved) options.
- ¹ Color options not recognized by the FAA.
- ² Color options 3, 8, H, I, and J are not recognized by the FAA for L-852B(L), L-852D(L), L-852J(L) and L-852K(L) fixtures.
- ³ See graphic below for L-852J/K(L) color selection guidelines.
- ⁴ Refers to older style 10-inch L-868A base can compliant to AC 150/5345-42C. 10-inch base cans are no longer specified in the current FAA Advisory Circular.
- ⁵ Not ETL Certified.
- ⁶ Use Power option 4 for fixtures with two cord sets or as directed by ADB SAFEGATE.



Color selection guidelines for L-852J/K(L) fixtures

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)

Enhanced ITCF-L

Electrical Supply

ITCF LED F-Range 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.

ITCF Fixture	Fixture Load ¹	Isolation Transformer
L-852D(L), L-852K(L)		
Unidirectional w/out heater	21 VA	20/25 W
Bidirectional w/out heater ²	27 VA	30/45 W
Bidirectional w/out heater ³	25 VA per side (50 VA total)	20/25 W per side
Unidirectional with heater	56 VA	65 W
Bidirectional with heater ²	58 VA	65 W
Bidirectional with heater ³	45 VA (90 VA total)	30/45 W per side
L-852C(L), L-852J(L)		
Unidirectional w/out heater	14 VA	10/15 W
Bidirectional w/out heater ²	17 VA	20/25 W
Bidirectional w/out heater ³	14 VA per side (28 VA total)	10/15 W per side
Unidirectional with heater	46 VA	30/45 W
Bidirectional with heater ²	56 VA	65 W
Bidirectional with heater ³	34 VA (68 VA total)	30/45 W per side
L-852A(L), L-852B(L)		
Unidirectional w/out heater	12 VA	10/15 W
Bidirectional w/out heater ²	16 VA	10/15 W
Unidirectional with heater	42 VA	30/45 W
Bidirectional with heater ²	46 VA	30/45 W

Notes

- ¹ Fixture load does not include isolation transformer load
- ² One cord set
- ³ One cord set per side (2 total)



2-piece fixture with snow-plow ring with 4-bolts

Two-piece Ordering Code^{1,2}

ITCF- X X 0 X X X

Series

- A = L-852A(L)
- B = L-852B(L)
- C = L-852C(L)
- D = L-852D(L)

LED Color

- 1 = Yellow/Yellow
- 2 = Green/Green
- 3 = Yellow/Green³
- 5 = Green/Obsecure
- 6 = Yellow/Obsecure
- 8 = Red/Green³
- 0 = White/White
- G = White/Yellow
- H = Green/White
- I = Red/White³

0

Mounting and Cord Set

- 7 = One L-823 cord set, L-868B (12") standard base with 4 bolts⁴
- 8 = Two L-823 cord sets, L-868B (12") standard base with 4 bolts⁴

Arctic Option

- 0 = Without arctic option
- 1 = With arctic option

Power

- 2 = 60 Hz
- 3 = 50 Hz

Notes

- ¹ Not available for L-852J(L) and L-852K(L).
- ² Not ETL Certified.
- ³ Color options not recognized by the FAA.
- ⁴ Fixture with snowplow ring is shipped with 4 bolts and 2 optional pin inserts, allowing a field modification to a 2-bolt/2-pin configuration.