

# RETRO-Fusion™ 500

500W Incandescent Replacement LED Engine  
120V • 277V • 240VAC • CSA

## Energy efficient LED Light Engine

Designed to retrofit directly into existing fixtures.

The RETRO-Fusion is a CSA listed, Energy Star 2.0 retrofit kit that rapidly transforms existing inefficient incandescent fixtures into energy efficient LED fixtures. Our patented technology allows the fixture to smoothly dim from 0-100% utilizing existing dimming technology. Retrofit kits are available with a variety of options for both recessed and pendant style fixtures. Installation is as easy as changing a light bulb. Our LED technology creates even fields and delivers consistent color. The RETRO-Fusion 500 delivers more light than most 500 watt incandescent bulbs it replaces with only a 49 watt load.



### What the RETRO IS

- More cost effective than fixture replacement
- Large lumen output for this section of the market
- Listed for screw in replacement
- Energy Star certified 2.0
- Dims on existing dimming systems with no additional installation of control system
- 0-100% dimming without flicker, pulse, or stepping
- 80+ High CRI

### Electrical Data

- 49 Watts (49.07)
- Power Factor (PF) .9955
- Lumens: 5676 @ 2700K
- Lumens per watt: 115.67
- LM 70: >50,000 Hours
- CRI@2700K: 82,R9+4.9
- 1 lb 12.9 oz - 15.1 w/ Reflector

### Applications

- 9 feet to 50 feet high ceilings
- Where dimming is a key concern
- Where there is no desire or budget to replace existing fixtures
- Where access is limited
- Where Energy Star is required
- Where a custom solution is required
- Where the ceiling cannot be disturbed

### Typical Installations

- Auditoriums
- Houses of worship
- Arenas
- Lobbies
- Museums
- Educational facilities
- Convention centers

### Base Types

E26- Edison  
E11- Mini Candelabra

### CCT Lumen Output

2700K: 5676 Lumens  
3000K: 6024 Lumens  
3500K: 6239 Lumens  
4000K: 6309 Lumens  
5000K: 6372 Lumens

### Fixture Lenses

Tall 15 Degrees  
Tall 23 Degrees  
Tall 46 Degrees  
Short 26 Degree  
Short 40 Degree  
Short 59 Degrees  
Short 70 Degrees  
None 120 Degrees

### Color Temp

2700K -  
3000K - Standard  
3500K -  
4000K -  
5000K -

## Order Guide

R500

#### Base Type

EB- Edison (E26)  
MC- Mini Candelabra (E11)  
BW- Bare Wire

#### Length of Stem

Lift Plate (1/2")

**E11**  
1 3/4" 1"  
2 3/4" 1 1/2"  
4" 2 1/2"

Custom Bare Wire Include Length

#### Color Temp

2700K  
3000K  
3500K  
4000K  
5000K

#### CRI\*

80 is standard  
80, 90, 97  
80, 90, 97  
80, 90  
80, 90, 97  
80, 90

#### Optics

Tall 15  
Tall 23  
Tall 46  
Short 26  
Short 40  
Short 59  
Short 70  
NONE- 120 Degrees

#### Accessories

PAR46 Ring  
PAR56 Ring  
PAR64 Ring  
Diffuser  
(E39) Mogul Adaptor for E26  
BA15D  
E26 Extender  
Adjustable Par Ring (56)(64)  
Custom - Include .dwg or .pdf

#### Warranty

10 Year LED Array  
3 Year Standard  
+1  
+2  
+3

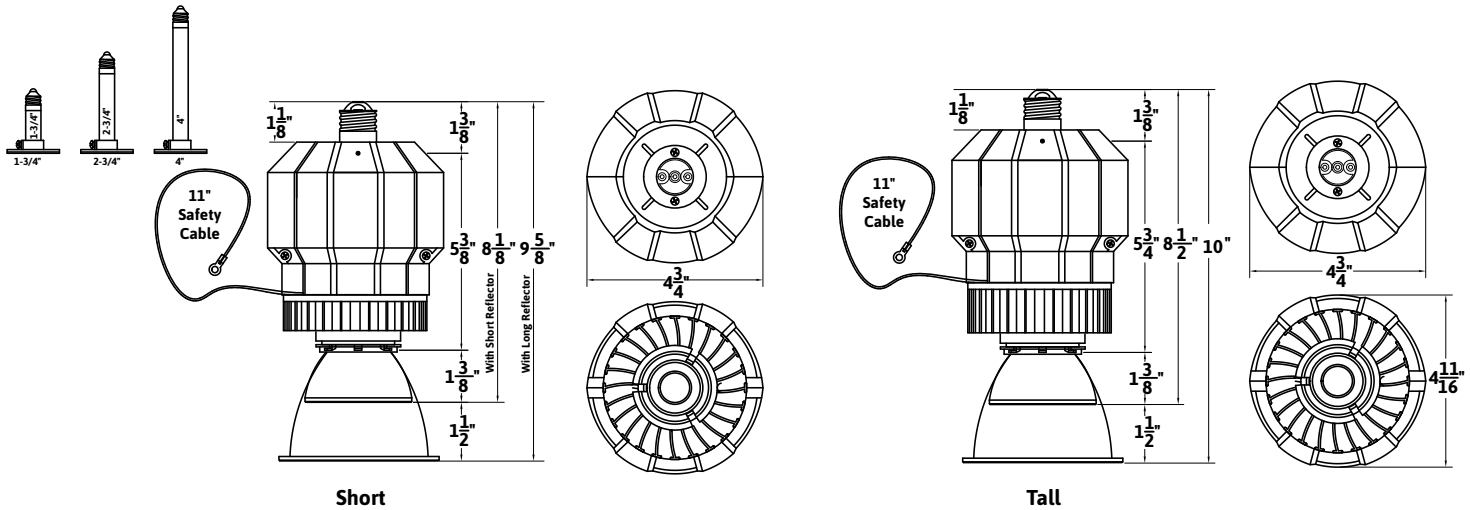
\* Chips with a CRI greater than 80 are an additional 6 weeks beyond standard delivery

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**CANTOUSA**  
INNOVATIVE LIGHTING PRODUCTS

## Fixture Drawing



Short

Weight: 1lb 12.9oz w/Reflector

Tall

Weight: 1lb 15.1oz w/Reflector

## Photometrics (R500) 3,000K

Multiplication Factor for Color Temperature

- to convert to 2,700 Kelvin - fc X .9488
- to convert to 3,500 Kelvin - fc X 1.0196
- to convert to 4,000 Kelvin - fc X 1.0439
- to convert to 5,000 Kelvin - fc X 1.0617

To Solve Footcandles  
Over A Distance

To Solve Area Over A  
Distance

Peak Output  
(Distance X Distance)

Distance X Mult.Factor

| Mult. Factor<br>0.4617<br>Distance | 26°<br>Diameter | Peak Output<br>10,817fc<br>Foot Candles | Mult. Factor<br>0.7279<br>Distance | 40°<br>Diameter | Peak Output<br>7,086fc<br>Foot Candles  | Mult. Factor<br>1.1315<br>Distance | 59°<br>Diameter | Peak Output<br>4,386c<br>Foot Candles  | Mult. Factor<br>1.4004<br>Distance | 70°<br>Diameter  | Peak Output<br>2,568c<br>Foot Candles  |
|------------------------------------|-----------------|---|------------------------------------|-----------------|---|------------------------------------|-----------------|--|------------------------------------|------------------|--|
| 8'                                 | 4'              | 172                                     | 8'                                 | 6'              | 109                                     | 8'                                 | 9'              | 69                                     | 8'                                 | 11'              | 43                                     |
| 10'                                | 5'              | 109                                     | 10'                                | 7'              | 70                                      | 10'                                | 11'             | 44                                     | 10'                                | 14'              | 25                                     |
| 20'                                | 9'              | 26                                      | 20'                                | 15'             | 17                                      | 20'                                | 23'             | 10                                     | 20'                                | 28'              | 7                                      |
| 30'                                | 14'             | 12                                      | 30'                                | 22'             | 8                                       | 30'                                | 34'             | 5                                      | 30'                                | 42'              | 3                                      |
| 40'                                | 18'             | 7                                       | 40'                                | 29'             | 5                                       | 40'                                | 45'             | 3                                      | 40'                                | 56'              | 1                                      |
| Mult. Factor<br>0.2633<br>Distance | 15°<br>Diameter | Peak Output<br>20,965fc<br>Foot Candles | Mult. Factor<br>0.4069<br>Distance | 23°<br>Diameter | Peak Output<br>11,313fc<br>Foot Candles | Mult. Factor<br>.8489<br>Distance  | 46°<br>Diameter | Peak Output<br>5,115fc<br>Foot Candles | Mult. Factor<br>3.4641<br>Distance | 120°<br>Diameter | Peak Output<br>1,637fc<br>Foot Candles |
| 8'                                 | 2'              | 328                                     | 8'                                 | 3'              | 262                                     | 8'                                 | 7'              | 80                                     | 8'                                 | 28'              | 26                                     |
| 10'                                | 3'              | 210                                     | 10'                                | 4'              | 168                                     | 10'                                | 8'              | 51                                     | 9'                                 | 31'              | 20                                     |
| 20'                                | 5'              | 52                                      | 20'                                | 8'              | 42                                      | 20'                                | 17'             | 13                                     | 10'                                | 35'              | 16                                     |
| 30'                                | 8'              | 23                                      | 30'                                | 12'             | 19                                      | 30'                                | 25'             | 6                                      | 12'                                | 42'              | 11                                     |
| 40'                                | 11'             | 13                                      | 40'                                | 16'             | 10                                      | 40'                                | 34'             | 3                                      | 15'                                | 52'              | 7                                      |
|                                    |                 |   |                                    |                 |   |                                    |                 |  | 20'                                | 69'              | 4                                      |

Contact your local representative or dealer for IES files.