

RETRO-Passive® 150

150W Incandescent Replacement LED Engine
120V • CSA

Energy efficient LED Light Engine

Designed to retrofit directly into existing fixtures.

The RETRO-Passive 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-Passive 150 delivers more light than most 150 watt incandescent bulbs it replaces with only a 17 watt load.

**10 Year
LED Array
Warranty**



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

- 17 Watts (17.5)
- Lumens 2103 @ 2700K
- Power Factor (PF) .9886
- Lumens per Watt: 120.17
- LM 70: >50,000 Hours
- CRI@2700K: 81.83, R9+3
- 1 lbs 8.3-9.4 oz w/Reflector

Applications

- 9 feet to 20 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
- Concert halls

Base Types

E26- Edison

E11- Mini Candelabra
(Unavailable for the 700 Series)

Par Ring/Bare Wire

Bi Pin

Custom Options

CCT Lumen Output

2700K: 2103 Lumens

3000K: 2217 Lumens

3500K: 2261 Lumens

4000K: 2314 Lumens

5000K: 2354 Lumens

Fixture Lenses

Tall 11 Degrees

Tall 20 Degrees

Tall 47 Degrees

Short 15 Degree

Short 28 Degree

Short 56 Degrees

Short 74 Degrees

None 120 Degrees

Color Temp

2700K -

3000K - Standard

3500K -

4000K -

5000K -

Order Guide

R150

Base Type

EB- Edison (E26)

MC- Mini Candelabra (E11)

Par Ring /Bare Wire

Custom

Length of Stem

Lift Plate (1/2")

E11 **E26**

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 11

Tall 20

Tall 47

Short 15

Short 28

Short 56

Short 74

NONE- 120 Degrees

Accessories/Par Ring

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

+4

+5

+6

+7

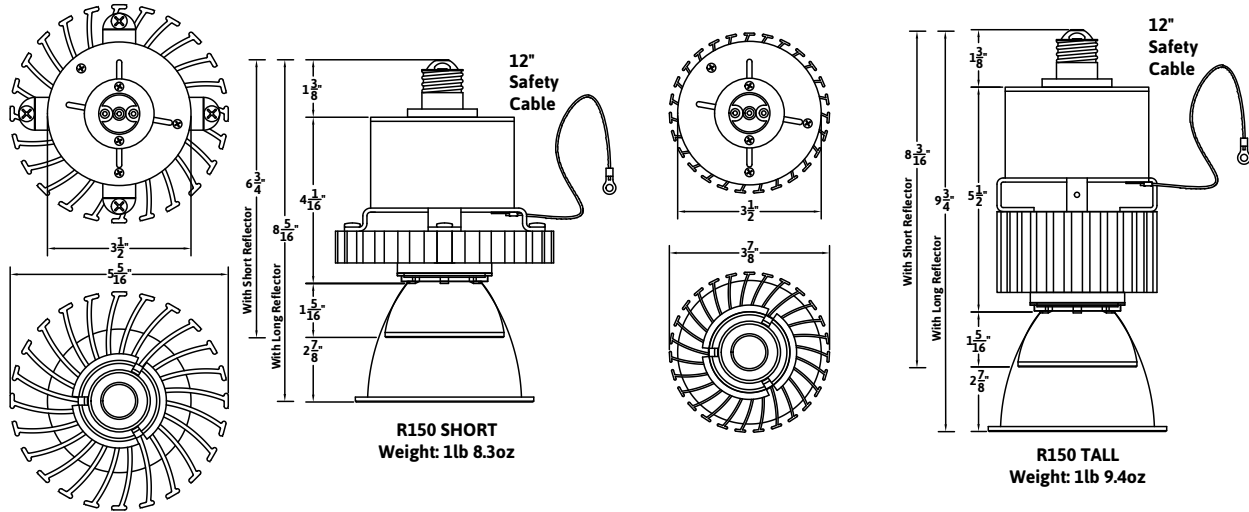
* Chips with a CRI greater than 80 are an additional 6 weeks beyond standard delivery



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Fixture Drawing



Photometrics (R150) 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 0.4617 Distance	15° Diameter	Peak Output 12,338fc Foot Candles	Mult. Factor 0.7279 Distance	28° Diameter	Peak Output 4,610fc Foot Candles	Mult. Factor 1.1315 Distance	56° Diameter	Peak Output 2,134fc Foot Candles	Mult. Factor 1.4004 Distance	74° Diameter	Peak Output 1,134fc Foot Candles
8'	2'	214	8'	4'	79	8'	9'	36	8'	11'	23
10'	3'	129	10'	5'	50	10'	11'	22	10'	14'	15
20'	5'	30	20'	10'	11	20'	21'	5	20'	28'	3
30'	8'	13	30'	15'	5	30'	32'	2	30'	42'	1
40'	11'	7	40'	20'	2	40'	42'	1	40'	56'	.1
Mult. Factor .1926 Distance	11° Diameter	Peak Output 23,360fc Foot Candles	Mult. Factor 0.4069 Distance	20° Diameter	Peak Output 11,313fc Foot Candles	Mult. Factor .8489 Distance	47° Diameter	Peak Output 2,864fc Foot Candles	Mult. Factor 3.4641 Distance	120° Diameter	Peak Output 1,134fc Foot Candles
8'	1.5'	365	8'	3'	206	8'	7'	52	8'	28'	14
10'	2'	233	10'	4'	127	10'	9'	34	9'	31'	11
20'	4'	58	20'	7'	26	20'	17'	7	10'	35'	9
30'	6'	26	30'	11'	12	30'	25'	3	12'	42'	6
40'	8'	14	40'	14'	6	40'	34'	1	15'	52'	4
									20'	69'	2

Contact your local representative or dealer for IES files.