

# RETRO-Passive® 2.0 300

300W Incandescent Replacement LED Engine  
120V • 230V • 240VAC

## Energy efficient LED Light Engine

Designed to retrofit directly into existing fixtures.

The RETRO-Passive 2.0 is a CSA listed 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 2.0 300 delivers more light than most 300 watt incandescent bulbs it replaces with only a 30 watt load.

**10 Year  
LED Array  
Warranty**



Fairfax High School, Fairfax, Virginia  
105 RETRO 500s at 3000K  
Installed by Artistic Concepts Group

## What the Fusion 2.0 IS

- More cost effective than fixture replacement
- Large lumen output for this market
- Listed for screw in replacement
- Field swappable tops
- Serviceable safety cable
- Dims on existing dimming systems with no additional installation of control system
- 0-100% dimming without flicker, pulse, or stepping
- 80+ High CRI
- Standard 5 Year Limited Warranty. An extended warranty of up to 5 additional years can be added at the time of purchase

## Electrical Data

- 30 Watts (30.61)
- Lumens 3237 @ 2700K
- Power Factor (PF) .9936
- Lumens per watt: 105.74
- LM 70: >50,000 Hours
- CRI@2700K: 81.73, R9+2.6
- 3 lbs 1.2oz w/Reflector (1.4 kg)

## Applications

- 9 feet to 40 feet high ceilings (2.75 - 12.25 meter high ceilings)
- Where dimming is a key concern
- Where there is no desire or budget to replace existing fixtures
- Where access is limited
- Where a custom solution is required
- Where the ceiling cannot be disturbed

## Typical Installations

- Auditoriums
- Churches and houses of worship
- Arenas
- Lobbies
- Museums
- Educational facilities
- Convention centers

## Top Types

E26 - Edison  
E11 - Mini Candelabra  
E39 - Mogul \*  
BA15D \*  
Par Ring/Bare Wire  
Bi-Pin  
Custom Options

## CCT Lumen Output

2700K: 3237 Lumens  
3000K: 3416 Lumens  
3500K: 3481 Lumens  
4000K: 3563 Lumens  
5000K: 3624 Lumens

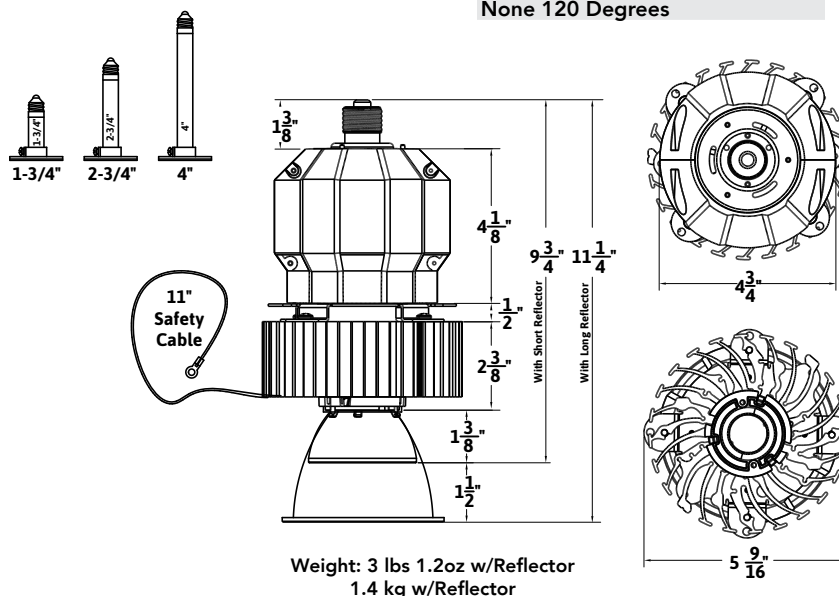
## Fixture Reflectors

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 -

## Fixture Drawing



**ATTENTION:** If your space has been designed with multiple RETRO models, please contact the factory to discuss fade and dimming options for your space.

# RETRO-Passive® 2.0 300

300W Incandescent Replacement LED Engine  
120V • 230V • 240VAC

## Order Guide

### 1. RETRO

|       |            |              |              |                                      |                  |  |
|-------|------------|--------------|--------------|--------------------------------------|------------------|--|
| 00    | P2         |              | 300          |                                      |                  |  |
| LIGHT | VOLTAGE    | FIXTURE TYPE | SINK SIZE    | COLOR TEMP                           | CRI              |  |
| P2    | 120<br>230 | 300          | X (Standard) | 2.7K<br>3.0K<br>3.5K<br>4.0K<br>5.0K | 80<br>*90<br>*97 |  |

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

### 2. TOPS

|     |                |                                      |  |
|-----|----------------|--------------------------------------|--|
| 00  | TOP            |                                      |  |
| TOP | TYPE           | LENGTH                               |  |
| TOP | E26            | → 1.35" or *CCC                      |  |
|     | E11            | → 1.75", 2.75", 4.00" or *CCC        |  |
|     | BW (Bare Wire) | → 12" min, increase in 6" increments |  |

\*Custom height in inches to the nearest 1/4" from the top to the plate to the tip.

### 3. REFLECTOR

|             |        |      |  |
|-------------|--------|------|--|
| 00          |        |      |  |
| REFLECTOR   | DEGREE | SIZE |  |
| REF         | 15     | → T  |  |
|             | 23     | → T  |  |
|             | 46     | → T  |  |
|             | 26     | → S  |  |
|             | 40     | → S  |  |
|             | 59     | → S  |  |
|             | 70     | → S  |  |
| ZOR (ZORYA) | 25     |      |  |

### 4. ADAPTER & EXTENDER OPTIONS

|      |                       |  |
|------|-----------------------|--|
| 00   |                       |  |
| TYPE | TYPE                  |  |
| ADP  | → *BAYONET (BA15D)    |  |
| ADP  | → *MOGUL (E39 TO E26) |  |
| EXT  | → 1.25" or 2.5"       |  |

\*E39 and BA15D require an E26 top with adapters used to make this unit compatible with these top types.

### 5. DIFFUSERS

|          |                            |  |
|----------|----------------------------|--|
| 00       | DIF                        |  |
| DIFFUSER | TYPE                       |  |
|          | SMALL (For Shorts)         |  |
|          | LARGE (For Talls)          |  |
|          | KIT (For Shorts and Talls) |  |

## Photometrics (R300) 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

$$\text{Peak Output} \div (\text{Distance} \times \text{Distance})$$

To Solve Area Over A  
Distance

$$\text{Distance} \times \text{Mult. Factor}$$

|                                                                                                        |                                                                                                         |                                                                                                        |                                                                                                         |
|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>15°</b><br>Mult. Factor<br>0.4617<br>Distance<br>Diameter<br>Peak Output<br>2,203fc<br>Foot Candles | <b>28°</b><br>Mult. Factor<br>0.7279<br>Distance<br>Diameter<br>Peak Output<br>4,610fc<br>Foot Candles  | <b>56°</b><br>Mult. Factor<br>1.1315<br>Distance<br>Diameter<br>Peak Output<br>2,134fc<br>Foot Candles | <b>74°</b><br>Mult. Factor<br>1.4004<br>Distance<br>Diameter<br>Peak Output<br>1,134fc<br>Foot Candles  |
| 8' 2' 360<br>10' 3' 222<br>20' 5' 49<br>30' 8' 21<br>40' 11' 11                                        | 8' 4' 141<br>10' 5' 85<br>20' 10' 18<br>30' 15' 8<br>40' 20' 5                                          | 8' 9' 61<br>10' 11' 37<br>20' 21' 8<br>30' 32' 4<br>40' 42' 1                                          | 8' 11' 41<br>10' 14' 25<br>20' 28' 5<br>30' 42' 2<br>40' 56' .1                                         |
| <b>11°</b><br>Mult. Factor<br>.1926<br>Distance<br>Diameter<br>Peak Output<br>26,920fc<br>Foot Candles | <b>20°</b><br>Mult. Factor<br>0.4069<br>Distance<br>Diameter<br>Peak Output<br>19,252fc<br>Foot Candles | <b>47°</b><br>Mult. Factor<br>.8489<br>Distance<br>Diameter<br>Peak Output<br>5,253fc<br>Foot Candles  | <b>120°</b><br>Mult. Factor<br>3.4641<br>Distance<br>Diameter<br>Peak Output<br>1,134fc<br>Foot Candles |
| 8' 1.5' 405<br>10' 2' 259<br>20' 4' 65<br>30' 6' 29<br>40' 8' 16                                       | 8' 3' 347<br>10' 4' 210<br>20' 7' 44<br>30' 11' 18<br>40' 14' 10                                        | 8' 7' 92<br>10' 9' 57<br>20' 17' 12<br>30' 25' 5<br>40' 34' 3                                          | 8' 28' 24<br>9' 31' 19<br>10' 35' 15<br>12' 42' 10<br>15' 52' 6<br>20' 69' 3                            |

Contact your local representative or dealer for IES files.

**ATTENTION:** If your space has been designed with multiple RETRO models, please contact the factory to discuss fade and dimming options for your space.