

# RETRO-Passive® 2.0 700

700W 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 TUV 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 2.0 700 delivers more light than most 700 watt incandescent bulbs it replaces with only a 72 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

## Electrical Data

- 72 Watts (72.3)
- Power Factor (PF) .9955
- Lumens: 8107 @ 2700K
- Lumens per watt: 112.3
- LM 70: >50,000 Hours
- CRI@2700K: 81.11, R9+1.8
- 4 lbs 9.7oz w/Reflector (2.09 kg)

## Applications

- 10 feet to 60 feet high ceilings (3 to 18.5 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  
E39 - Mogul \*  
BA15D \*  
Par Ring/Bare Wire  
Bi-Pin  
Custom Options

## CCT Lumen Output

2700K: 8107 Lumens  
3000K: 8489 Lumens  
3500K: 8669 Lumens  
4000K: 8769 Lumens  
5000K: 8902 Lumens

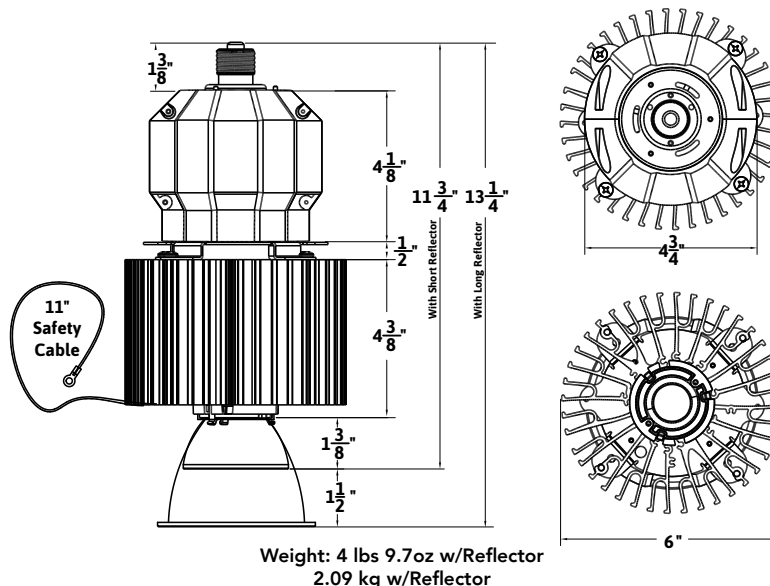
## Fixture Reflectors

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 -

## Fixture Drawing



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## Order Guide

### 1. RETRO

00	P2		700			
	LIGHT	VOLTAGE	FIXTURE TYPE	SINK SIZE	COLOR TEMP	CRI
	P2	120 230	700	X (Standard)	2.7K 3.0K 3.5K 4.0K 5.0K	80 *90 *95 *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 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.  
Note: E11 is unavailable for the 700 and 1000

### 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
	DIF	SMALL (For Shorts) LARGE (For Talls) KIT (For Shorts and Talls)

## Photometrics (R700) 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

Peak Output ÷ (Distance X Distance)

To Solve Area Over A  
Distance

Distance X Mult.Factor

Mult. Factor 0.4617 Distance	26° Diameter	Peak Output 20,738fc Foot Candles	Mult. Factor 0.7279 Distance	40° Diameter	Peak Output 12,936fc Foot Candles	Mult. Factor 1.1315 Distance	59° Diameter	Peak Output 8,341c Foot Candles	Mult. Factor 1.4004 Distance	70° Diameter	Peak Output 4,489c Foot Candles
8'	4'	331	8'	6'	204	8'	9'	130	8'	11'	73
10'	5'	216	10'	7'	134	10'	11'	85	10'	14'	48
20'	9'	51	20'	15'	32	20'	23'	21	20'	28'	11
30'	14'	22	30'	22'	14	30'	34'	9	30'	42'	5
40'	18'	12	40'	29'	7	40'	45'	5	40'	56'	2
Mult. Factor 0.2633 Distance	15° Diameter	Peak Output 37,197fc Foot Candles	Mult. Factor 0.4069 Distance	23° Diameter	Peak Output 24,838fc Foot Candles	Mult. Factor .8489 Distance	46° Diameter	Peak Output 8,872fc Foot Candles	Mult. Factor 3.4641 Distance	120° Diameter	Peak Output 2,962fc Foot Candles
8'	2'	600	8'	3'	400	8'	7'	142	8'	28'	46
10'	3'	310	10'	4'	262	10'	8'	100	9'	31'	38
20'	5'	90	20'	8'	61	20'	17'	21	10'	35'	30
30'	8'	39	30'	12'	26	30'	25'	10	12'	42'	21
40'	11'	22	40'	16'	14	40'	34'	5	15'	52'	13
									20'	69'	7

Contact your local representative or dealer for IES files.

