

RETRO-Passive® 2.0 150

150W 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, 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 2.0 150 delivers more light than most 150 watt incandescent bulbs it replaces with only a 17 watt load.



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

What the Passive 2.0 IS

- More cost effective than fixture replacement
- Large lumen output for this section of the market
- Listed for screw in replacement
- Field swappable bases
- Removable safety cable
- 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 lb 5.2 oz - 6 oz w/Reflector (.602 - .624 kg)

Applications

- 9 feet to 20 feet high ceilings (2.75 to 6 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 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
E39 - Mogul *
BA15D *
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 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 -

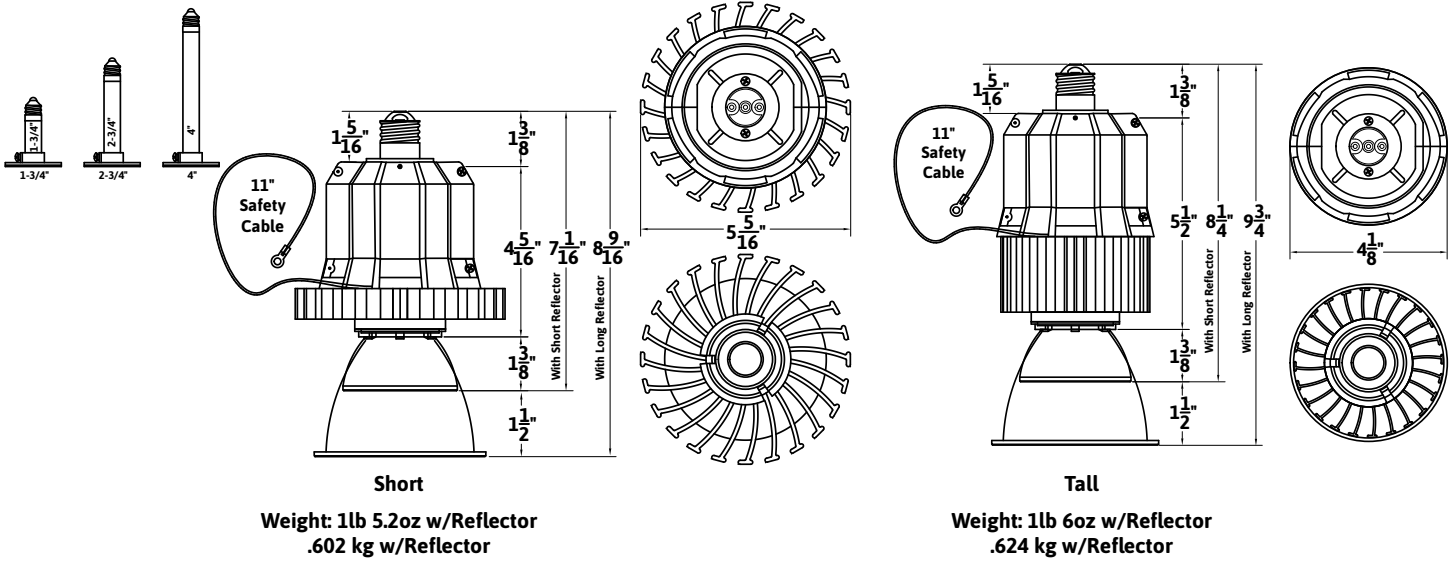
*E39 and BA15D require an E26 base with adaptors used to make this unit compatible with these base types.

* 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

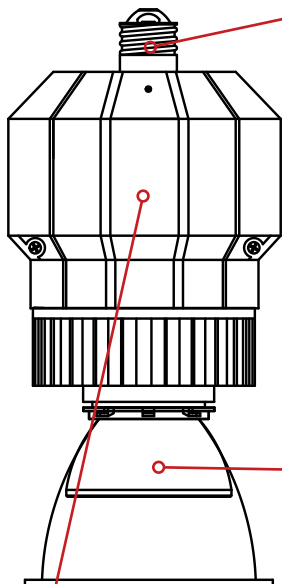
Mult. Factor Distance	15° Diameter	Peak Output Foot Candles	Mult. Factor Distance	28° Diameter	Peak Output Foot Candles	Mult. Factor Distance	56° Diameter	Peak Output Foot Candles	Mult. Factor Distance	74° Diameter	Peak Output Foot Candles
8'	2'	214	8'	4'	79	8'	9'	36	8'	11'	23
10'	3'	129	10'	5'	50	10'	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 Distance	11° Diameter	Peak Output Foot Candles	Mult. Factor Distance	20° Diameter	Peak Output Foot Candles	Mult. Factor Distance	47° Diameter	Peak Output Foot Candles	Mult. Factor Distance	120° Diameter	Peak Output 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.



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TOPS

TOP	TYPE	LENGTH
TOP _ _	E26	1.35"min, 1.5"+ increase in 1/4" increments
TOP _ _	E11	1.75", 2.75" or 4"
TOP _ _	BW (Bare Wire)	12" min, increase in 6" increments
TOP _ _	PP (Par Plug)	10" standard unless specified
TOP _ _	JB (JBox)	0.00" (Flush mount)

____ + _ + _____ + _ + _____
TOP TYPE LENGTH

PART NUMBER EXAMPLE: **TOP_E26_4.25** OR **TOP_PP_10**

REFLECTORS

REFLECTOR	DEGREE	REFLECTOR HEIGHT S = SHORT OR T = TALL
REF _ _	15	T
REF _ _	23	T
REF _ _	26	S
REF _ _	40	S
REF _ _	46	T
REF _ _	59	S
REF _ _	70	S
REF _ _	WW	S

____ + _ + _____ + _ + _____
REFLECTOR DEGREE REFLECTOR HEIGHT

PART NUMBER EXAMPLE: **REF_15_T** OR **REF_59_S**

RETRO

LIGHT	VOLTAGE	DRIVER WATTAGE	SINK SIZE	COLOR TEMP	CRI
P2 _ _	120	150	S (Short)	2.7K	80
_ _	230	_	T (Tall)	3.0K	90
_ _	_	_	_	3.5K	97
_ _	_	_	_	4.0K	_
_ _	_	_	_	5.0K	_

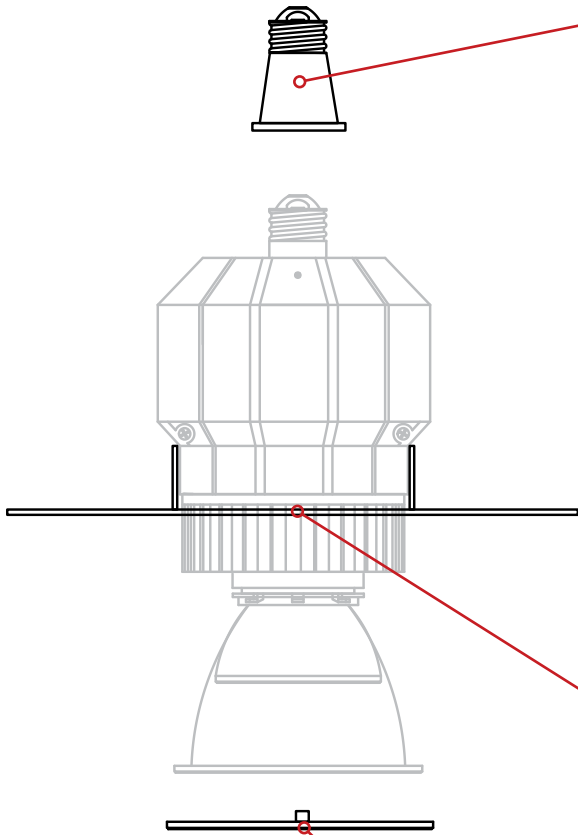
____ + _ + _____ + _ + _____ + _ + _____ + _ + _____ + _ + _____
LIGHT VOLTAGE DRIVER WATTAGE SINK SIZE COLOR TEMP CRI

PART NUMBER EXAMPLE: **P2_110_1000X_2.7K_80** OR **P2_230_1000X_4.0K_90**



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ADAPTER & EXTENDER OPTIONS

ADAPTER OR EXTENSION	TYPE	DESCRIPTION
ADP	BAYONET	Adapter BA15D Double Bayonet
ADP	MOGUL	Adapter E39 To E26 Mogul
EXT	1.25	Extender 1.25 Inch E26 To E26
EXT	2.5	Extender 2.50 Inch E26 To E26

_____ + _____ + _____
ADP or EXT TYPE

PART NUMBER EXAMPLE: **ADP_BAYONET** OR **EXT_1.25**

PAR RING OPTIONS

RING SIZE	P2 TYPE	FIXED OR ADJUSTABLE	KIT
PAR46	3571	FIXED	KIT
PAR56	3571	ADJUST	KIT
PAR64	3571	ADJUST	KIT
PAR46	150T	FIXED	KIT
PAR56	150T	ADJUST	KIT
PAR64	150T	ADJUST	KIT

_____ + _____ + _____ + _____ + _____ + _____ + _____ + _____ + _____ + _____
RING SIZE P2 TYPE FIXED OR ADJUSTABLE KIT

PART NUMBER EXAMPLE: **PAR56_3571_ADJUST_KIT** OR **PAR46_150T_FIXED_KIT**

DIFFUSERS

DIFFUSER	SIZE/TYPE	KIT (IF APPLICABLE)
DIF	SMALL	
DIF	LARGE	
DIF	ZORYA	
DIF	SMALL	KIT
DIF	LARGE	KIT

_____ + _____ + _____ + _____ + _____ + _____ + _____ + _____ + _____ + _____
DIFFUSER SIZE/TYPE KIT (IF APPLICABLE)

PART NUMBER EXAMPLE: **DIF_ZORYA** OR **DIF_LARGE_KIT**

