

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.

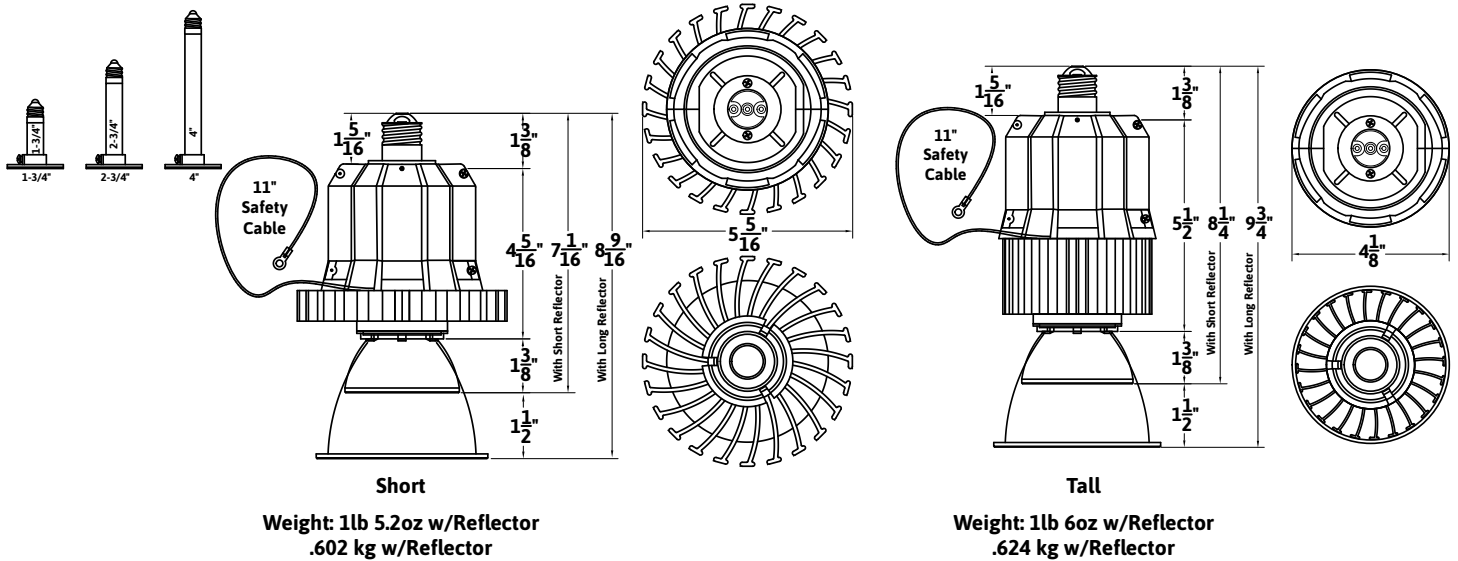
* Chips with a CRI greater than 80 are an additional 6 weeks beyond standard delivery



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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

Peak Output ÷ (Distance X Distance)

To Solve Area Over A
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

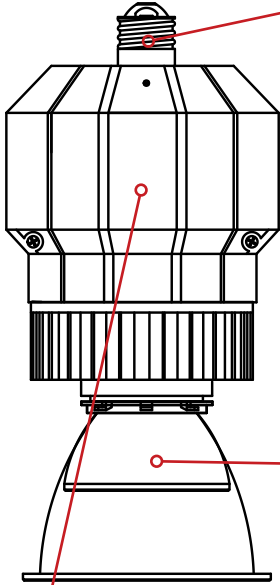
Contact your local representative or dealer for IES files.



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CANTOUSA
INNOVATIVE LIGHTING PRODUCTS



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	X (Standard)	2.7K	80
	230			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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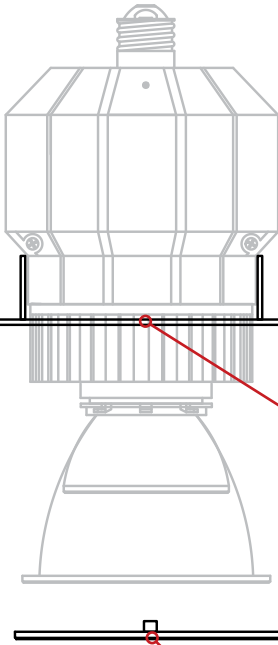


ADAPTER & EXTENDER OPTIONS

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		
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**

