BOREALIS℠
INNOVATIVE LED LIGHTING

PRODUCT CATALOG
PROFESSIONAL LIGHTING

2019 V2

UV-05012019

BOREALIS℠
INNOVATIVE **LED** LIGHTING
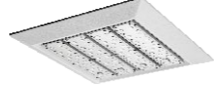
Company

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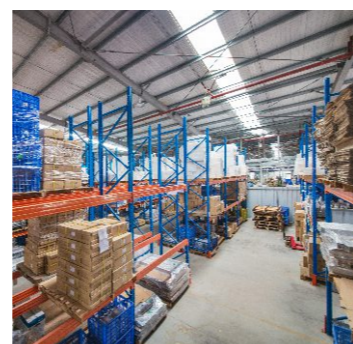
Since its founding in 1995 Polybrite International has committed itself to designing advance LED lighting products for commercial and consumer applications. featuring a combination of advance Polymer technology , patented driver circuits, advanced thermal management. Sold and marketed under the Borealis℠ name Polybrite lighting solutions deliver outstanding energy reduction, superior lighting quality and performance, and years of maintenance-free operation. Borealis℠ award winning products provide excellent illumination, significant energy savings and long life, while helping to protect the environment.

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PRODUCT	STREET LIGHT	STREET LIGHT	STREET LIGHT	STREET LIGHT	FLOOD LIGHT
SERIES	SL4/5 Series	SL6-1/2 Series	SL9 Series	STA/B Series	CLFA/B-L Series
DESRIPTION	The SL4/5 series is an ideal solution for street lighting, available in multiple drive currents and optical distributions. Combining it with our optional motion sensor allows for even greater energy savings.	Employing a mix of traditional exterior design elements with modern power-saving technologies, the SL6-1/2 series offers exceptional energy efficiency for faster ROI while providing an aesthetic appeal.	Designed for durability and ease of installation, the sleek external design prevents build-up of dust or potentially damaging airborne material on the fitting.	The STA/B Series luminaire is designed with industryleading LED technology in accordance to DOT standards. It provides unmatched illumination performance and significant energy saving.	The CLFA/B-L series offers exacting illumination performance featuring advanced LED optical design and multiple light distribution options.
POWER	30~320W	20-120W	20-100W	30-240W	30-320W
INPUT	120-277VAC or 220-240VAC or 347-480VAC or 12-24VDC	120-277VAC or 220-240VAC or 12-24VDC	120-277VAC or 220-240VAC or 12-24VDC	120-277VAC or 220-240VAC or 347-480VAC or 12-24VDC	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95	>0.95	>0.95	>0.95	>0.95
THD	<20%	<20%	<20%	<20%	<20%
L70/L90	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H
OPERATING TEMPERATURE	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃
EFFICACY	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K
MIN CRI	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90
IP RATING	IP67	IP65	IP67	IP67	IP67
SPD	10KA* or 20KA	10KA* or 20KA	10KA* or 20KA	10KA* or 20KA	Optional
DALI	Optional	/	Optional	Optional	Optional
1-10V	Optional	Optional	Optional	Optional	Optional
PHOTOCELL	Optional	Optional	Optional	Optional	Optional
SMART CONTROL	Optional	Optional	Optional	Optional	Optional
OPTIC (IESNA)	Type I, Type II, Type III, Type IV,	Type II, Type III, Type IV, Type V	Type II, Type III, Type IV, Type V	Type II, Type III, Type IV, Type V	Type I, Type II, Type III, Type IV,
COLOR OPTIONS	Grey/Black/Bronze/White	Grey	Grey/Black/Bronze/White	Grey/Black/Bronze/White	Grey/Black/Bronze/White

PRODUCT	AREA LIGHT	AREA LIGHT	FLOOD LIGHT	FLOOD LIGHT	FLOOD LIGHT
SERIES	CLFA/B-T Series	CLFLE-L Series	CLFA/B-U Series	CLFA/B-C Series	CLFLE-U Series
DESRIPTION	CLFA/B-T is highly suitable for carparks and shop fronts where direct lighting is required. A simple yet functional modular design, combined with the right lens type, will improve lighting proficiency.	CLFLE-L series area light is perfect for outdoor area lighting, providing significant energy and maintenance savings while improving illumination performance.	The CLFA/B-U fixture is a versatile LED solution with Full360degreerotation,Provid ingexacting illumination performance, available in a wide range of power levels to suit your requirements.	The CLFA/B-C provides great flexibility with trunnion mount bracket, offering unrivalled reliability and performance with advanced LED technology.	As the name implies, the CLFLE-U series is a truly high lumen output solution designed to produce the same illumination performance of existing metal halide lamps at a fraction of the energy cost.
POWER	30~320W	450-900W	30-320W	30-320W	450-900W
INPUT	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95	>0.95	>0.95	>0.95	>0.95
THD	<20%	<20%	<20%	<20%	<20%
L70/90	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H
OPERATING TEMPERATURE	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃	-40℃ ~ +50℃
EFFICACY	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K
MIN CRI	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90
IP RATING	IP67	IP67	IP67	IP67	IP67
SPD	Optional	Optional	Optional	Optional	Optional
DALI	Optional	Optional	Optional	Optional	Optional
1-10V	Optional	Optional	Optional	Optional	Optional
PHOTOCELL	Optional	Optional	Optional	Optional	Optional
SMART CONTROL	Optional	Optional	Optional	Optional	Optional
OPTIC (IESNA)	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,
COLOR OPTIONS	Grey/Black/Bronze/White	Grey/Black/Bronze/White	Grey/Black/Bronze/White	Grey/Black/Bronze/White	Grey/Black/Bronze/White

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PRODUCT	WALL PACK	WALL PACK	CANOPY LIGHT	CANOPY LIGHT	CANOPY LIGHT
SERIES	CLFA/B-W Series	CLW Series	CLFA/B-D Series	CLRA Series	CLSA/B-F Series
DESRIPTION	Providing unmatched illumination performance and energy efficiency, the CLFA/B-W series is a compact yet easy-to-install product with a robust operational life.	Preserving the traditional wall pack appearance, the CLW luminaire is an ideal solution for site lighting Application, providing exacting illumination performance and precise optical control.	CLFA/B-D is an ideal solution for surface mount or suspended installations with modular and a lowprofile design delivering high-efficacy lighting.	When compared to similar LED solutions in a canopy application, the CLRA fixture stands out from the crowd with its unique design which significantly reduces labor and maintenance cost.	The CLSA/B-F Series, featuring its patented, innovative installation and flush-mount design, is perfectly suitable for gas station lighting or other applicable mounting.
POWER	30-160W	30-80W	30-320W	60-160W	120/160W
INPUT	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95	>0.95	>0.95	>0.95	>0.95
THD	<20%	<20%	<20%	<20%	<20%
L70/L90	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H	>200,000H/>60,000H
OPERATING TEMPERATURE	-40°C ~ +50°C	-40°C ~ +50°C	-40°C ~ +50°C	-40°C ~ +50°C	-40°C ~ +50°C
EFFICACY	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K	3000K/4000K/5000K/5700K
MIN CRI	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90	70* or 80 or 90
IP RATING	IP67	IP65	IP67	IP54	IP67
SPD	Optional	Optional	Optional	Optional	Optional
DALI	Optional	Optional	Optional	Optional	Optional
1-10V	Optional	Optional	Optional	Optional	Optional
PHOTOCELL	Optional	Optional	Optional	/	/
SMART CONTROL	/	Optional	Optional	/	/
OPTIC (IESNA)	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,	Type I, Type II, Type III, Type IV,
COLOR OPTIONS	Grey/Black/Bronze/White	Grey/Black/Bronze/White	Grey/Black/Bronze/White	White	White

PRODUCT	CANOPY LIGHT	BAY LIGHT	LINEAR LIGHT	LINEAR LIGHT	LINEAR LIGHT
SERIES	CLSA/B-D Series	CLBC Series	CLLC Series	CLLA Series	CLLB Series
DESRIPTION	The CLSA/B-D modernizes the traditional box style utility lights predominately used in undercover carparks and transitional spaces.	A modern yet functional take on the widely popular high bay light for warehouses and food processing plants. The CLBC is a versatile and rugged designed light for use in environmentally demanding applications.	The CLLC series redefines how you think about LED linear lighting. It provides unmatched illumination performance and significant energy savings coupled with modern design elements.	CLLA is designed to replace up to 400W HPS lamps. Traditional in appearance while providing unmatched overhead lighting performance and energy savings.	The CLLB fixture is an ideal LED solution to replace existing fluorescent troffers with multiple mounting options, available in different power range.
POWER	120/160W	150/200W	60-150W	120/160/200W	40/60/90W
INPUT	120-277VAC or 220-240VAC or 347-480VAC	90-305 VAC	120-277VAC or 220-240VAC or 347-480 VAC	90-305 VAC	90-305 VAC
PF	>0.95	>0.95	>0.95	>0.95	>0.95
THD	<20%	<15%	<20%	<15%	<15%
L70/L90	>200,000H/>60,000H	>50,000H	>200,000H/>60,000H	>50,000H	>50,000H
OPERATING TEMPERATURE	-40°C ~ +40°C	-40°C ~ +50°C	-40°C ~ +50°C	-40°C ~ +50°C	-40°C ~ +50°C
EFFICACY	120-160lm/W	140-160lm/W	120-160lm/W	110-130lm/W	110-130lm/W
ANSI CCT	3000K/4000K/5000K/5700K	4000K/5000K	3000K/4000K/5000K/5700K	4000K/5000K	4000K/5000K
MIN CRI	70* or 80 or 90	70* or 80	70* or 80 or 90	80*	80*
IP RATING	IP20	IP67	IP67	IP43	IP20
SPD	Optional	Optional	Optional	Optional	Optional
DALI	Optional	/	Optional	/	Optional
1-10V	Optional	Optional	Optional	Optional	Optional
PHOTOCELL	/	/	/	/	/
SMART CONTROL	/	/	/	/	/
OPTIC (IESNA)	Type I, Type II, Type III, Type IV,	Type V	Type I, Type II, Type III, Type IV,	Type V	Type V
COLOR OPTIONS	White	Grey	Grey/Black	White	White

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SL4/5 Series

The SL4/5 series is an ideal solution for street lighting, available in multiple drive currents and optical distributions. Combining it with our optional motion sensor allows for even greater energy savings.
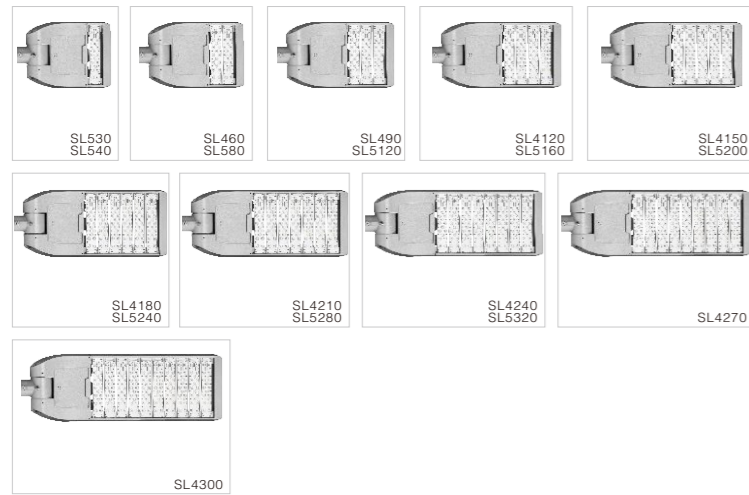

| SL530 SL540 | SL460 SL580 | SL490 SL5120 | SL4120 SL5160 | SL4150 SL5200 |

| SL4180 SL5240 | SL4210 SL5280 | SL4240 SL5320 | SL4270 |

SL4300

FEATURES & BENEFITS

- Die cast aluminum housing.
- Modular design allows for easy installation, replacement and maintenance. This design also creates achimney effect which provides exceptional thermal management.
- Tool-less entry to driver compartment.
- Meets 3G vibration per ANSI C136.31-2010.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Over 15 optical lenses are available for virtually any application.
- Slipfitter with +/- 20 degree of adjustment for leveling.
- Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
- 10 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ SAA/ ENEC / CB/ CE/ ErP/ RoHS/ PSE/ Ik08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC or 12-24VDC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	10KA* or 20KA
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : SL430-T2M-50K-GR-03

MODEL (Norminal Power)		OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module) 347-480VAC					
SL430 SL460 SL490 SL4120 SL4150 SL4180 SL4210 SL4240 SL4270 SL4300	SLB40 SLB80 SLB120 SLB160 SLB200 SLB240 SLB280 SLB320	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ GR BK BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Adaptor Bracket Bird Spike 3/5/7-pin NEMA Receptacle 20KA Surge Protection Device Back Light Shield Safety Cable

∗ DALI & Motion sensor unavailable   ∗∗ 1-10V dimming & DALI & Motion sensor unavailable   ★ Regularly stocked item

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SL6 Series

Employing a mix of traditional exterior design elements with modern power-saving technologies, the SL6 series offers exceptional energy efficiency for faster ROI while providing an aesthetic appeal.

SL6-1

SL6-2

FEATURES & BENEFITS

- Single-cast aluminum housing enables passive heat dissipation along the entire length of the luminaire.
- Modular design allows for easy installation, replacement and maintenance.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Class II isolation protection.
- 0 and +5 degree of tilting angle adjustment.
- Adjustable for 1 5/8-2 3/8"(42mm-60mm) O.D. tenon.
- Multiple smart lighting control options are available, e.g. photocell, 1-10V.
- 5 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ CB/ CE/ RoHS
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	20~120W
Input	120-277VAC or 220-240VAC or 12-24VDC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP65
SPD	10KA* or 20KA
DALI	/
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type II, Type III, Type IV, Type V
Color Options	Grey

* Standard

ORDERING INFORMATION

Example : SL6-1-60-T2M-50K-GR-05

MODEL (Norminal Power)		OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC	120-277VAC or 220-240VAC					
SL6-1-16 SL6-1-25 SL6-1-40 SL6-1-60	SL6-1-60 SL6-1-80 SL6-1-90 SL6-1-120	T2M T3L T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ GR	00 Not required 01 Photocell 05 1~10V dimming	Adaptor Bracket 3/5/7-pin NEMA Receptacle 20KA Surge Protection Device Safety Cable

∗ 1-10V dimming unavailable   ★ Regularly stocked item

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SL9 Series

Designed for durability and ease of installation, the sleek external design prevents build-up of dust or potentially damaging airborne material on the fitting.
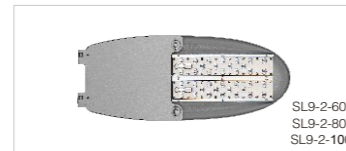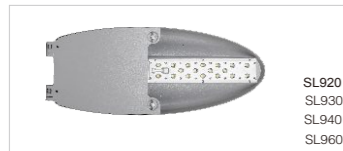
SL920
SL930
SL940
SL960

SL9-2-60
SL9-2-80
SL9-2-100

FEATURES & BENEFITS

● Compact & sleek design.
● Tool-less entry to driver compartment.
● Meets 3G vibration per ANSI C136.31-2010.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Adjustable for 1 5/8-2 3/8"(42mm-60mm) O.D. tenon.
● Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
● 10 years limited warranty available.
● UL/ CUL/ DLC/ LM79 / CB/ CE/ ENEC/ RoHS/ IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	20-100W
Input	120-277VAC or 220-240VAC or 12-24VDC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	10KA* or 20KA
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : SL930-T2M-50K-GR-00

MODEL (Norminal Power) 120-277VAC or 220-240VAC	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
SL920 SL930 SL940 SL960 SL9-2-60 SL9-5-80 SL9-2-100	T2M T3L T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ GR BK BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Adaptor Bracket 3/5/7-pin NEMA Receptacle 20KA Surge Protection Device Safety Cable Knife Switch Emergency Power Supply (EPS)

∗ DALI unavailable ★ Regularly stocked item

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STA/B Series

FEATURES & BENEFITS

● Die cast aluminum housing.
● Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which provides exceptional thermal management.
● Tool-less entry to driver compartment.
● Meets 3G vibration per ANSI C136.31-2010.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Over 15 optical lenses are available for virtually any application.
● 0, +/-2.5, +/-5 degree of titling angle adjustment.
● Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
● UL/ CUL /DLC/ LM79 / CB/ CE/ RoHS/ IK08
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The STA/B Series luminaire is designed with industry-leading LED technology in accordance to DOT standards. It provides unmatched illumination performance and significant energy saving.
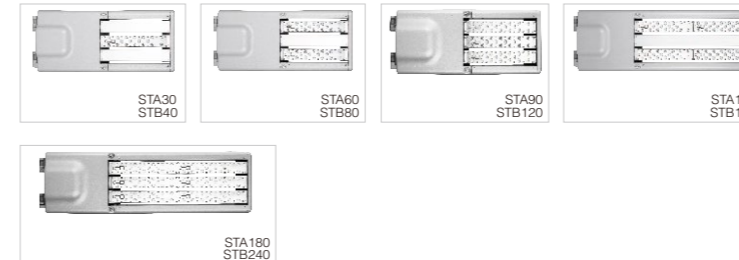
STA30 STB40

STA60 STB80

STA90 STB120

STA120 STB160

STA180 STB240

TECHNICAL PARAMETERS

Power	30~240W
Input	120-277VAC or 220-240VAC or 347-480VAC or 12-24VDC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	10KA* or 20KA
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : STA60-T2M-50K-BZ-05

MODEL (Norminal Power) 120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
STA30 STA60 STA90 STA120 STA180	STB40 STB80 STB120 STB160 STB240	T2M T3L T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ GR BK BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Adaptor Bracket Bird Spike 3/5/7-pin NEMA Receptacle Safety Cable Knife Switch 20KA Surge Protection Device

∗ DALI & Motion sensor unavailable ∗∗ 1-10V dimming & DALI & Motion sensor unavailable ★ Regularly stocked item

FLOOD LIGHT

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CLFA/B-L Series

The CLFA/B-L series offers exacting illumination performance featuring advanced LED optical design and multiple light distribution options.
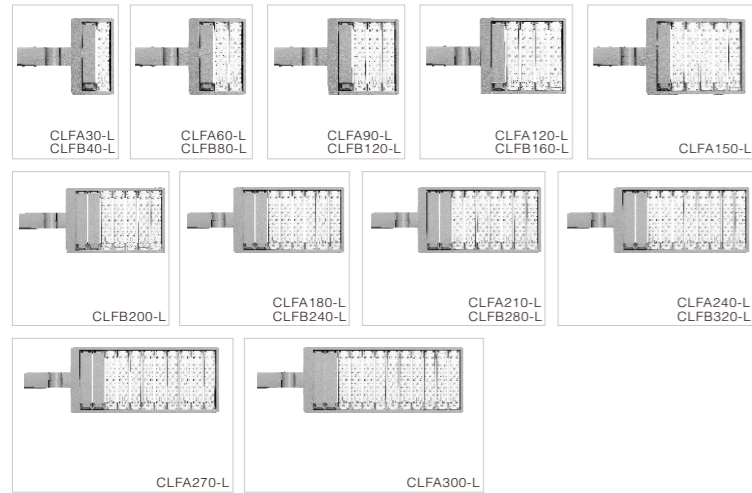
FEATURES & BENEFITS

- Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which provides exceptional thermal management.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Over 15 optical lenses are available for virtually any application.
- Slipfitter with +/- 90 degree of adjustment for leveling.
- Interchangeable with the other GAMA Series with a bracket change.
- Multiple lighting control options are available, e.g. DALI, 1-10V.
- 10 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ SAA/ ENEC/ CB/ CE/ ErP/ RoHS/ IK08

Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFA30-L
CLFB40-L

CLFA60-L
CLFB80-L

CLFA90-L
CLFB120-L

CLFA120-L
CLFB160-L

CLFA150-L

CLFB200-L

CLFA180-L
CLFB240-L

CLFA210-L
CLFB280-L

CLFA240-L
CLFB320-L

CLFA270-L

CLFA300-L

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFA30-L-T5S-50K-BK-00

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30 CLFA60 CLFA90 CLFA120 CLFA150 CLFA180 CLFA210 CLFA240 CLFA270 CLFA300	CLFB40 CLFB80 CLFB120 CLFB160 CLFB200 CLFB240 CLFB280 CLFB320	L	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ BK GR BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Bird Spike 10KA/20KA Surge Protection Device Back Light Shield Safety Cable

∗ DALI & Motion sensor unavailable ★ Regularly stocked item

05

UV-05012019

AREA LIGHT

BOREALIS℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFA/B-T Series

CLFA/B-T is highly suitable for carparks and shop fronts where direct lighting is required. A simple yet functional modular design, combined with the right lens type, will improve lighting proficiency.

FEATURES & BENEFITS

- Shoe box appearance with advanced LED system.
- Modular design allows for easy installation, replacement and maintenance.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Interchangeable with the other GAMA Series with a bracket change.
- Multiple lighting control options are available, e.g. DALI, 1-10V.
- 10 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ SAA/ ENEC / CB/ CE/ ErP/ RoHS/ IK08

Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFA30-T
CLFB40-T

CLFA60-T
CLFB80-T

CLFA90-T
CLFB120-T

CLFA120-T
CLFB160-T

CLFA150-T

CLFB200-T

CLFA180-T
CLFB240-T

CLFA210-T
CLFB280-T

CLFA240-T
CLFB320-T

CLFA270-T

CLFA300-T

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Black/Grey/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFA30-T-T5S-50K-BK-00

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30 CLFA60 CLFA90 CLFA120 CLFA150 CLFA180 CLFA210 CLFA240 CLFA270 CLFA300	CLFB40 CLFB80 CLFB120 CLFB160 CLFB200 CLFB240 CLFB280 CLFB320	T	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ BK GR BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Adaptor Bracket 3/5/7-pin NEMA Receptacle 10KA/20KA Surge Protection Device Safety Cable

∗ DALI & Motion sensor unavailable ★ Regularly stocked item

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UV-05012019

AREA LIGHT

BOREALIS℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFLE-L Series

CLFLE-L series area light is perfect for outdoor area lighting, providing significant energy and maintenance savings while improving illumination performance.
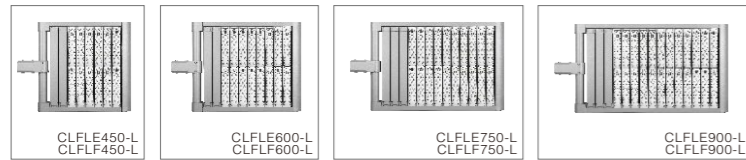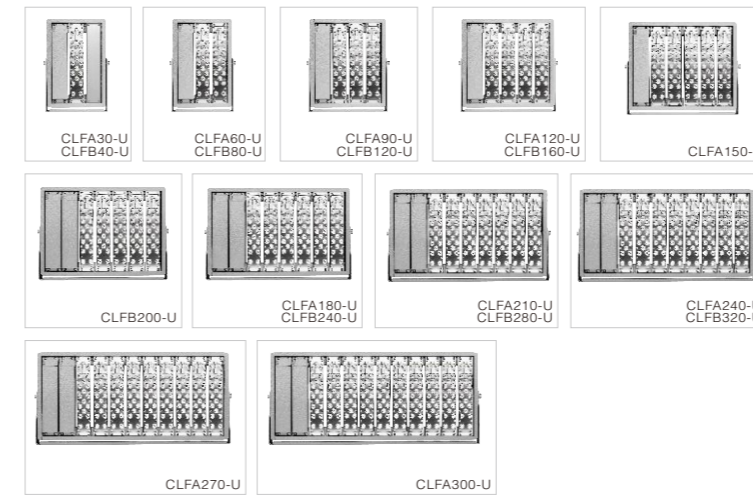
FEATURES & BENEFITS

● High lumen output and high mounting height solution.
● Slim & low profile design that minimizes wind load.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Over 15 optical lenses are available for virtually any application.
● Adjustable arm that mounts to a horizontal or vertical 2 3/8" (60mm) O.D. tenon.
● Tenon length must be a minimum of 4.72" (120mm).
● -60~+30 degree or -90~+0 degree of adjustment for leveling when horizontally mounted.
● 10 years limited warranty available.
● UL/ CUL/ DLC/ LM79/ SAA/ CB/ CE/ RoHS/ IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	450~900W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

CLFLE450-L
CLFLF450-L

CLFLE600-L
CLFLF600-L

CLFLE750-L
CLFLF750-L

CLFLE900-L
CLFLF900-L

ORDERING INFORMATION

Example :CLFLE900-L-T5S-50K-GR-00

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (75W/module)	347-480VAC (75W/module)						
CLFLE450 CLFLE600 CLFLE750 CLFLE900	CLFLF450* CLFLF600* CLFLF750* CLFLF900*	L	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ BK GR BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Bird Spike 10KA/20KA Surge Protection Device Back Light Shield Safety Cable

∗ DALI & Motion sensor unavailable ★ Regularly stocked item

UV-05012019

FLOOD LIGHT

BOREALIS℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFA/B-U Series

The -U fixture is a versatile LED solution with full 360 degree rotation, providing exacting illumination performance, available in a wide range of power levels to suit your requirements.

FEATURES & BENEFITS

● Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which provides exceptional thermal management.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Over 15 optical lenses are available for virtually any application.
● Extremely flexible with full 360 degree rotation.
● Interchangeable with the other GAMA Series with a bracket change.
● Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
● UL/ CUL/ DLC/ LM79/ SAA/ ENEC/ CB/ CE/ ErP/ RoHS / IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFA30-U
CLFB40-U

CLFA60-U
CLFB80-U

CLFA90-U
CLFB120-U

CLFA120-U
CLFB160-U

CLFA150-U

CLFB200-U

CLFA180-U
CLFB240-U

CLFA210-U
CLFB280-U

CLFA240-U
CLFB320-U

CLFA270-U

CLFA300-U

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFA30-U-T2M-50K-GR-03

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30 CLFA60 CLFA90 CLFA120 CLFA150 CLFA180 CLFA210 CLFA240 CLFA270 CLFA300	CLFB40 CLFB80 CLFB120 CLFB160 CLFB200 CLFB240 CLFB280 CLFB320	U	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ BK GR BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell + Motion Sensor 04 DALI 05 1~10V dimming	Bird Spike 10KA/20KA Surge Protection Device Back Light Shield Safety Cable

∗ DALI & Motion sensor unavailable ★ Regularly stocked item

UV-05012019

BOREALISSM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFA-C Series

The CLFA-C provides great flexibility with trunnion mount bracket, offering unrivalled reliability and performance with advanced LED technology.
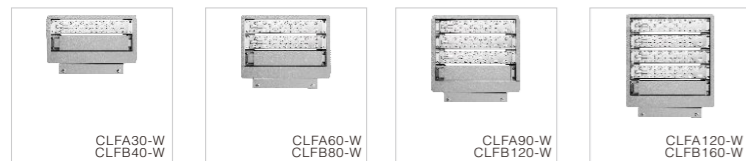
FEATURES & BENEFITS

- Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which provides exceptional thermal management.
- Die cast aluminum housing.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Over 15 optical lenses are available for virtually any application.
- Interchangeable with the other GAMA Series with a bracket change.
- Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
- UL/ CUL/ DLC/ LM79/ SAA/ ENEC/ CB/ CE/ ErP/ RoHS / IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFA30-C / CLFB40-C
CLFA60-C / CLFB80-C
CLFA90-C / CLFB120-C
CLFA120-C / CLFB160-C
CLFA150-C
CLFB200-C
CLFA180-C / CLFB240-C
CLFA210-C / CLFB280-C
CLFA240-C / CLFB320-C
CLFA270-C
CLFA300-C

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFA30-C-T2M-50K-GR-03

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30	CLFB40	C	T1M	30K	★ BK	00 Not required	Bird Spike
CLFA60	CLFB80		T2M	★ 40K	GR		
CLFA90	CLFB120		T3M	★ 50K	BZ	01 Photocell	10KA/20KA Surge Protection Device
CLFA120	CLFB160		T3L	57K	WH		
CLFA150	CLFB200		T4S			02 Motion Sensor	Back Light Shield
CLFA180	CLFB240		T4M				
CLFA210	CLFB280		T5U			03 Photocell + Motion Sensor	Safety Cable
CLFA240	CLFB320		T5V				
CLFA270			T5W				
CLFA300			T5S			04 DALI	
			T5M				
			T5L			05 1-10V dimming	
			T5X				
			T5D				

✳ DALI & Motion sensor unavailable　　★ Regularly stocked item

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UV-05012019

BOREALISSM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFLE-U Series

As the name implies, the CLFLE-U series is a truly high lumen output solution designed to produce the same illumination performance of existing metal halide lamps at a fraction of the energy cost.

FEATURES & BENEFITS

- Slim & low profile design that minimizes wind load.
- Ideal alternative to traditional 1000/2000/4000W Metal Halide light.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Over 15 optical lenses are available for virtually any application.
- The trunnion mount bracket allows for great mounting flexibility.
- 10 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ SAA/ CB/ CE/ RoHS / IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFLE450-U
CLFLE600-U
CLFLE750-U
CLFLE900-U
CLFLE450-UM
CLFLE600-UM
CLFLE750-UM
CLFLE900-UM

TECHNICAL PARAMETERS

Power	450~900W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFLE900-U-T5S-50K-GR-00

MODEL (Norminal Power)	MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (75W/module)						
CLFLE450	U	T1M	30K	★ BK	00 Not required	Bird Spike
CLFLE600	✳ UM	T2M	★ 40K	GR		
CLFLE750		T3M	★ 50K	BZ	01 Photocell	10KA/20KA Surge Protection Device
CLFLE900		T3L	57K	WH		
		T4S			02 Motion Sensor	Back Light Shield
		T4M				
		T5U			03 Photocell + Motion Sensor	Safety Cable
		T5V				
		T5W				
		T5S			04 DALI	
		T5M				
		T5L			05 1-10V dimming	
		T5X				
		T5D				

✳ DALI & Motion sensor unavailable　　★ Regularly stocked item　　✳ Customization is available

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UV-05012019

B0REALIS SM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLFA/B-W Series

FEATURES & BENEFITS

● Modular design allows for easy installation, replacement and maintenance. This design also creates a chimney effect which provides exceptional thermal management.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Over 15 optical lenses are available for virtually any application.
● Interchangeable with the other GAMA Series with a bracket change.
● High quality LEDs, driver and components, e.g. MOLEX, WAGO connectors.
● Multiple lighting control options are available, e.g. DALI, 1-10V.
● 10 years limited warranty available.
● UL/ CUL/ DLC/ LM79/ SAA/ ENEC / CB/ CE/ ErP/ RoHS/ IK08
  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

Providing unmatched illumination performance and energy efficiency, the CLFA/B-W series is a compact yet easy-to-install product with a robust operational life.

TECHNICAL PARAMETERS

Power	30–160W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	/
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

CLFA30-W / CLFB40-W   CLFA60-W / CLFB80-W   CLFA90-W / CLFB120-W   CLFA120-W / CLFB160-W

ORDERING INFORMATION

Example : CLFA30-W-T3L-50K-GR-00

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30 CLFA60 CLFA90 CLFA120	CLFB40 CLFB80 CLFB120 CLFB160	W	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★40K ★50K 57K	★ BK GR BZ WH	00 Not required 01 Photocell 02 Motion Sensor 03 Photocell 04 DALI 05 1–10V dimming	Bird Spike 10KA/20KA Surge Protection Device Back Light Shield Safety Cable

● DALI unavailable   ★ Regularly stocked item

UV-05012019

B0REALIS SM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

CLW Series

FEATURES & BENEFITS

● Traditional wall pack appearance with advanced LED system.
● Corrosion resistant polyester powder painted 100μm thickness.
● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
● Over 15 optical lenses are available for virtually any application.
● High quality LEDs, driver and components, e.g. MOLEX, WAGO connectors.
● Multiple lighting control options are available, e.g. DALI, 1-10V.
● Emergency Power Supply (EPS) available.
● 10 years limited warranty available.
● UL/ CUL/ DLC/ LM79/ SAA/ CB/ CE/ ErP/ RoHS/ IK08
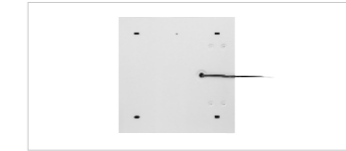 Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

Preserving the traditional wall pack appearance, the CLW luminaire is an ideal solution for site lighting application, providing exacting illumination performance and precise optical control.

TECHNICAL PARAMETERS

Power	30–80W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP65
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Black/Grey/Bronze/White

* Standard

CLWA30 / CLWB40   CLWA60 / CLWB80

ORDERING INFORMATION

Example : CLWB80-T5S-50K-GR-00

MODEL (Norminal Power)	MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC						
CLWA30 CLWB40 CLWA60 CLWB80	/	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★40K ★50K 57K	★ BZ GR BK WH	00 Not required 01 Photocell 04 DALI 05 1–10V dimming	10KA/20KA Surge Protection Device Back Light Shield Safety Cable Emergency Power Supply (EPS)

● DALI unavailable   ●● 1-10V dimming & DALI & Motion sensor unavailable   ★ Regularly stocked item

UV-05012019

CLFA/B-D Series

CLFA/B-D is an ideal solution for surface mount or suspended installations with modular and a low-profile design delivering high-efficacy lighting.

FEATURES & BENEFITS

- Modular design allows for easy installation, replacement and maintenance.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Over 15 optical lenses are available for virtually any application.
- Surface mount.
- 3/4" pendent rod option available.
- Interchangeable with the other GAMA Series with a bracket change.
- Multiple smart lighting control options are available, e.g. photocell, motion sensor, DALI, 1-10V.
- 10 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ SAA/ ENEC / CB/ CE/ ErP/ RoHS/ PSE/ IK08

  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

CLFA30-D / CLFB40-D, CLFA60-D / CLFB80-D, CLFA90-D / CLFB120-D, CLFA120-D / CLFB160-D, CLFA150-D, CLFB200-D, CLFA180-D / CLFB240-D, CLFA210-D / CLFB280-D, CLFA240-D / CLFB320-D, CLFA270-D, CLFA300-D

TECHNICAL PARAMETERS

Power	30~320W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	Optional
Smart Control	Optional
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Grey/Black/Bronze/White

* Standard

ORDERING INFORMATION

Example : CLFA30-D-T3L-50K-GR-00

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLFA30	CLFB40	D	T1M	30K	★ BK	00 Not required	G3/4 Pendant Rod
CLFA60	CLFB80		T2M	★ 40K	GR		10KA/20KA Surge Protection Device
CLFA90	CLFB120		T3M	★ 50K	BZ	01 Photocell	
CLFA120	CLFB160		T3L	57K	WH		Back Light Shield
CLFA150	CLFB200		T4S			02 Motion Sensor	
CLFA180	CLFB240		T4M				Safety Cable
CLFA210	CLFB280		T5U			03 Photocell + Motion Sensor	
CLFA240	CLFB320		T5V				Emergency Power Supply (EPS)
CLFA270			T5W				
CLFA300			T5S			04 DALI	
			T5M				
			T5L			05 1~10V dimming	
			T5X				
			T5D				

∗ DALI & Motion sensor unavailable   ★ Regularly stocked item

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CLR Series

When compared to similar LED solutions in a canopy application, the CLR fixture stands out from the crowd with its unique design which significantly reduces labor and maintenance cost.

FEATURES & BENEFITS

- Die cast aluminum housing.
- Modular design allows for easy installation, replacement and maintenance.
- Corrosion resistant polyester powder painted 100μm thickness.
- Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.
- Precision lens system provides optimized illumination for intended area.
- High quality LEDs, driver and components, e.g. MOLEX, WAGO connectors.
- Multiple lighting control options are available, e.g. DALI, 1-10V.
- 10 years limited warranty available.
- CB/ CE/ IK08

CLRA60 / CLRB80, CLRA90 / CLRB120, CLRA120 / CLRB160, CLRA150

TECHNICAL PARAMETERS

Power	60~160W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP54
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	White

* Standard

ORDERING INFORMATION

Example : CLRA90-T5S-50K-WH-05

MODEL (Norminal Power)		MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
120-277VAC or 220-240VAC (30W/module)	120-277VAC or 220-240VAC (40W/module)						
CLRA60	CLRB80	-	T1M	30K	★ WH	00 Not required	10KA/20KA Surge Protection Device
CLRA90	CLRB120		T2M	★ 40K			
CLRA120	CLRB160		T3M	★ 50K		04 DALI	Back Light Shield
CLRA150			T3L	57K			
			T4S			05 1~10V dimming	Emergency Power Supply (EPS)
			T4M				
			T5U				
			T5V				
			T5W				
			T5S				
			T5M				
			T5L				
			T5X				
			T5D				

∗ DALI & Motion sensor unavailable   ★ Regularly stocked item

CANOPY LIGHT

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CANOPY LIGHT

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CLSA/B-F Series

FEATURES & BENEFITS

● Ideal solution for gas station lighting application.

● Slim appearance with 25mm thickness.

● Modular design allows for easy installation, replacement and maintenance.

● Precision lens system provides optimized illumination for intended area.

● Flush mount to ceiling to prevent the build-up of dust on the fitting.

● Multiple lighting control options are available, e.g. DALI, 1-10V.

● 10 years limited warranty available.

● UL/ CUL/ DLC/ LM79/ CB/ CE/ RoHS/ IK08

Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

The CLSA/B-F Series, featuring its patented, innovative installation and flush-mount design, is perfectly suitable for gas station lighting or other applicable mounting.

CLSA-F120
CLSB-F160

TECHNICAL PARAMETERS

Power	120/160W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type I, Type I, Type II, Type III, Type IV, Type V
Color Options	White

* Standard

ORDERING INFORMATION

Example : CLSA-F120-T5S-50K-WH-00

MODEL (Norminal Power) 120-277VAC or 220-240VAC	MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
CLSA-F120 CLSB-F160	-	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ WH	00 Not required 04 DALI 05 1–10V dimming	10KA/20KA Surge Protection Device Back Light Shield

✴ DALI unavailable   ★ Regularly stocked item

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CLS-D Series

FEATURES & BENEFITS

● LED flush mount fixture in square

● Modular design allows for easy installation and maintenance

● Precision lens system provides optimized illumination for intended area

● Multiple lighting control options available, e.g. DALI, 1-10V

● 10 years limited warranty

● UL/ CUL/ DLC/ LM79/ CB/ CE/ SAA/ RoHS

Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

The CLS-D modernizes the traditional box style utility lights predominately used in undercover carparks and transitional spaces.

CLSA120-D
CLSB160-D

TECHNICAL PARAMETERS

Power	120/160W
Input	120-277VAC or 220-240VAC or 347-480VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +40℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP20
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	White

* Standard

ORDERING INFORMATION

Example : CLSA120-D-T5S-50K-WH-00

MODEL (Norminal Power) 120-277VAC or 220-240VAC	MOUNTING	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
CLSA120 CLSB160	D	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ WH	00 Not required 04 DALI 05 1–10V dimming	10KA/20KA Surge Protection Device Back Light Shield

✴ DALI unavailable   ★ Regularly stocked item

16

CLBC Series

FEATURES & BENEFITS

● Streamlined design allows prevention of build-up of dust and foreign material

  on the fitting

● Glass cover allows easy cleaning

● Ideal for applications demanding high corrosion resistance

● Unique heat dissipation design

● IP67 rated

● 10 years limited warranty

● UL/ CUL/ LM79/ CE/ RoHS

A modern yet functional take on the widely popular high bay light for warehouses and food processing plants. The CLBC is a versatile and rugged designed light for use in environmentally demanding applications.

CLBC150

CLBC200

TECHNICAL PARAMETERS

Power	150/200W
Input	90-305 VAC
PF	>0.95
THD	<15%
L70	>50,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	140-160lm/W
ANSI CCT	4000K/5000K
Min CRI	70* or 80
IP Rating	IP67
SPD	Optional
DALI	/
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type V
Color Options	Grey

* Standard

ORDERING INFORMATION

Example : CLBC200-T5G-50K-GR-00

MODEL (Norminal Power) 90-305VAC	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
CLBC150 CLBC200	T5G	40K ★ 50K	GR	00 Not required 05 1~10V dimming	10KA/20KA Surge Protection Device

★ Regularly stocked item

CLLC Series

FEATURES & BENEFITS

● Rugged extruded aluminum housing.

● Modular design allows for easy installation, replacement and maintenance.

● Corrosion resistant polyester powder painted 100μm thickness.

● Meets a 1000-hour salt spray certification per ASTM B117/ ISO 9227:2012.

● Over 15 optical lenses are available for virtually any application.

● Surface mount and suspension mount available.

● Multiple units are linkable.

● Multiple lighting control options are available, e.g. motion sensor, DALI, 1-10V.

● 10 years limited warranty available.

● UL/ CUL/ DLC/ LM79/ CB/ CE/ SAA/ RoHS / IK08

  Not all products are qualified on the DLC QPL. To view our DLC qualified

  products please consult the DLC Qualified Product List at www.designlights.org

The CLLC series redefines how you think about LED linear lighting. It provides unmatched illumination performance and significant energy savings coupled with modern design elements.

CLLC60   CLLC90   CLLC120

CLLC150

Surface Mount   Suspension Mount

TECHNICAL PARAMETERS

Power	60-150W
Input	120-277VAC or 220-240VAC or 347-480 VAC
PF	>0.95
THD	<20%
L70/L90	>200,000H/>60,000H
Operating Temperature	-40℃ ~ +50℃
Efficacy	120-160lm/W
ANSI CCT	3000K/4000K/5000K/5700K
Min CRI	70* or 80 or 90
IP Rating	IP67
SPD	Optional
DALI	Optional
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type I, Type II, Type III, Type IV, Type V
Color Options	Black / Grey

* Standard

ORDERING INFORMATION

Example : CLLC60-T2M-30K-BK-00

MODEL (Norminal Power) 120-277VAC or 220-240VAC	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
CLLC60 CLLC90 CLLC120 CLLC150	T1M T2M T3M T3L T4S T4M T5U T5V T5W T5S T5M T5L T5X T5D	30K ★ 40K ★ 50K 57K	★ BK GR	00 Not required 02 Motion Sensor 04 DALI 05 1~10V dimming	Emergency Power Supply (EPS) 10KA/20KA Surge Protection Device

✳ 1-10V dimming & DALI & Motion sensor unavailable   ★ Regularly stocked item

CLLA Series

CLLA is designed to replace up to 400W HPS lamps. Traditional in appearance while providing unmatched overhead lighting performance and energy savings.

Surface Mount
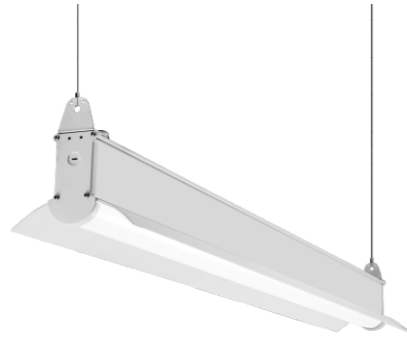
Suspension Mount

FEATURES & BENEFITS

- Rugged extruded aluminum housing.
- Double wings enlarge heat dissipation area which provides exceptional thermal management.
- Corrosion resistant polyester powder painted 100μm thickness.
- Surface mount and suspension mount available.
- High quality LEDs, driver and components, e.g. MOLEX, WAGO connectors.
- Multiple lighting control options are available, e.g. motion sensor, 1-10V.
- 5 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ CE/ RoHS

  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	120/160/200W
Input	90-305 VAC
PF	>0.95
THD	<15%
L70	>50,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	110-130lm/W
ANSI CCT	3000K/4000K/5000K
Min CRI	80*
IP Rating	IP43
SPD	Optional
DALI	/
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type V
Color Options	White

* Standard

ORDERING INFORMATION

Example : CLLA120-T5D-50K-WH-00

MODEL (Norminal Power) 90-305VAC	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL
CLLA120 CLLA160 CLLA200	T5D	30K 40K ★ 50K	★ WH	00 Not required 02 Motion Sensor 05 1~10V dimming

★ Regularly stocked item

CLLB Series

The CLLB fixture is an ideal LED solution to replace existing fluorescent troffers with multiple mounting options, available in different power range.

Surface Mount

Suspension Mount

FEATURES & BENEFITS

- Compact and sleek design.
- Rugged extruded aluminum housing.
- Corrosion resistant polyester powder painted 100μm thickness.
- Surface mount and suspension mount available.
- Multiple units are linkable.
- Multiple lighting control options are available, e.g. motion sensor, 1-10V.
- Emergency Power Supply (EPS) available.
- 5 years limited warranty available.
- UL/ CUL/ DLC/ LM79/ CE/ RoHS

  Not all products are qualified on the DLC QPL. To view our DLC qualified products please consult the DLC Qualified Product List at www.designlights.org

TECHNICAL PARAMETERS

Power	40/60/90W
Input	90-305 VAC
PF	>0.95
THD	<15%
L70	>50,000H
Operating Temperature	-40°C ~ +50°C
Efficacy	110-130lm/W
ANSI CCT	3000K/4000K/5000K
Min CRI	80*
IP Rating	IP20
SPD	Optional
DALI	/
1-10V	Optional
Photocell	/
Smart Control	/
Optic (IESNA)	Type V
Color Options	White

* Standard

ORDERING INFORMATION

Example : CLLB40-T5D-40K-WH-00

MODEL (Norminal Power) 90-305VAC	OPTIC LENS	CCT (ANSI)	OPTIONAL COLOR	LIGHTING CONTROL	ACCESSORY INFO
CLLB40 CLLB60 CLLB90	T5D	30K 40K ★ 50K	★ WH	00 Not required 02 Motion Sensor 05 1~10V dimming	Emergency Power Supply (EPS)

★ Regularly stocked item

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OPTICS

Arrlux offers industry-leading optimized optical control; more than 15 optical distributions are available for virtually any application, providing exacting illumination performance.

FEATURES

- Optical types: 15+ options
- Material: High transmittance PC
- Lighting Distribution Type: Symmetric, Asymmetric, Narrow Beam, Medium beam and Wide beam, complying with IESNA Type I, II, III, IV,V.
- Backlight shielding is optional

T1M1

T2M1
T3M1
T3L1
T4S1
T4M1

T2M2
T3L2
T4M2

T5D1

T5W1
T5S1
T5M1
T5L1
T5X1

T5U1
T5V1

ISO Plot	Polar Curve	ISO Plot	Polar Curve	ISO Plot	Polar Curve

T1M Type I Medium

T2M Type II Medium

T3M Type III Medium

T3L Type III Long

T4S Type IV Short

T4M Type IV Medium

T5U Average beam angle 10°

T5V Average beam angle 25°

T5W Average beam angle 40°

T5S Average beam angle 60°

T5M Average beam angle 90°

T5L Average beam angle 120°

T5X Average beam angle 150°

T5D Diffuser

T5G Tempered Glass

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BOREALIS ℠
INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

ADAPTOR BRACKET (Size & Dimension can be customized base on customer's requirement.)

Product Specifications			Product Specifications		
Part No.	Image	Dimensional Drawing	Part No.	Image	Dimensional Drawing
AD1		1.49kg (3.28lbs)	AD7		2.66kg (5.86lbs)
AD2		4.98kg (10.979lbs)	AD8		3.84kg (8.69lbs)
AD3		7.10kg (15.653lbs)	AD9		6.15kg (13.56lbs)
AD4		1.16kg (2.56lbs)	AD10		3.91kg (8.62lbs)
AD5		2.52kg (5.55lbs)	AD11		2.08kg (4.59lbs)
AD6		1.89kg (4.17lbs)	AD12	Applicable for GAMA Series	2.13kg (4.7lbs)

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by PolyBrite International, Inc.

MICROWAVE MOTION SENSOR

INTRODUCTION

Designed to optimize energy saving, Arrlux Lighting Control Solutions allow lighting to be comprehensively managed. The benefits include reduced energy consumption, longer lamp life, reduced maintenance and lower costs. MSB347 and MSC277 models are built-in type of motion sensor while MSD277 is an external type, ideal for indoor and outdoor applications such as parking lot, warehouse and etc.

MSB347

- Rated Input Voltage 120/277/347Vac.
- North Amercian Version.
- On/Off, Step Dimming Function.
- 15m Max. Mounting Height.
- Stand-by Power: <1.0W.
- 1-10V & Synchronous Control Interface.
- Fuctions such as detection area, hold time,stand-by level, stand-by dim level etc can be set via DIP.
- 5 Year Guarantee.

DIP Switch Configuration

a) Detection Area
b) Hold Time
c) Stand-by Period
d) Daylight sensor
e) Stand-by Dimming Level

MSC277

- Automatic switching or dimming when used in combination with 1-10V dimmable LED drivers or ballasts.
- Built-in daylight sensor.
- Compact size makes it suitable to fix within most luminaires.
- Detection area, time delay and daylight threshold can be precisely set via DIP switch.
- Wide detection area, range up to 16m in diameter.
- Support higher mounting height 15m Max.
- Optional surface mounting and base mounting.
- IP20 rated.

DIP Switch Configuration

a) Detection Area
b) Hold Time
c) Stand-by Period
d) Daylight sensor
e) Stand-by Dimming Level

MSD277

- Automatic dimming when used in combination with 1-10V dimmable LED drivers or ballasts
- Built-in adjustable daylight sensor
- Detection area, time delay and daylight threshold can be precisely set via DIP switch
- Wide detection area, range up to 16m in diameter and mounting height 15M Max suitable for warehouse use
- Special clip for installation easy to be fixed with high bay
- Three kinds of installation
- IP65 rated.

DIP Switch Configuration

a) Detection Area
b) Hold Time
c) Stand-by Period
d) Stand-by Dimming Level
e) Daylight sensor

TECHNICAL PARAMETRS

Model No.	MSB347	MSC277	MSD277
Operating voltage	108-382VAC, 50/60Hz	120-277VAC, 50/60Hz	120-277VAC, 50/60Hz
Rated load	3A@120V, 3A@277V,3A@347V	120V@400W;220-240V@800W;277V@1000W	400W@120VAC, 800W@220-277VAC (inductive) 800W@120VAC, 1200W@220-277VAC (resistive)
HF system	5.8GHz±75MHz, ISM wave band	5.8GHz±75MHz, ISM wave band	5.8GHz±75MHz, ISM wave band
Transmitting power	<0.5mW	<0.5mW	<0.5mW
Power consumption	≤0.5W(standby), <1W(operation)	≤0.5W(standby), <1W(operation)	≤0.8W(standby), <1.5W(operation)
Detection zone	Max.(D x H): 16m x 15m	Max.(D x H): 16m x 15m	Max.(D x H): 16m x 15m
Detection sensitivity	25% / 50% / 75% / 100%	10% / 50% / 75% / 100%	100% / 50%
Hold time	5s / 30s / 90s / 3min / 20min / +∞	5s / 30s / 90s / 3min / 20min / 30min	5s / 30s / 90s / 3min / 20min / 30min
Daylight sensor	2lux/5lux / 10lux / 25lux /50lux / 100lux / Disable	2lux/5lux / 10lux / 25lux /50lux / 100lux / Disable	50lux / 100lux / 200lux / Disable
Stand-by period	0s /5s / 5min / 10min / 30min / 1h / +∞	0s /5s / 5min / 10min / 30min / 1h / +∞	5s / 5min / 10min / 30min / 1h / + ∞
Stand-by dimming level	10% / 20% / 30% / 50%	10% / 20% / 30% / 50%	10% / 20% / 30% / 50%
Mounting height	15m Max.	15m Max.	15m Max.
Motion detection	0.5~3m/s	0.5~3m/s	0.5~3m/s
Detection angle	150°(wall installation), 360°(ceiling installation)	150°(wall installation), 360°(ceiling installation)	150°(wall installation), 360°(ceiling installation)
Operating temperature	−35℃~70℃	−35℃~70℃	−35℃~70℃

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SURGE PROTECTION DEVICE

FEATURES

Adapted to SSL outdoor lighting, the SPD277and SPD480 surge protection device provides single phase protection for line/neutral, line/ground and neutral/ground in accordance with IEEE C62.41 2002C High.The SPD277 and SPD480 small size corresponds to the current design requirements for the new technology luminaires, like a LED light engine in outdoor lighting.

ELECTRICAL DIAGRAM
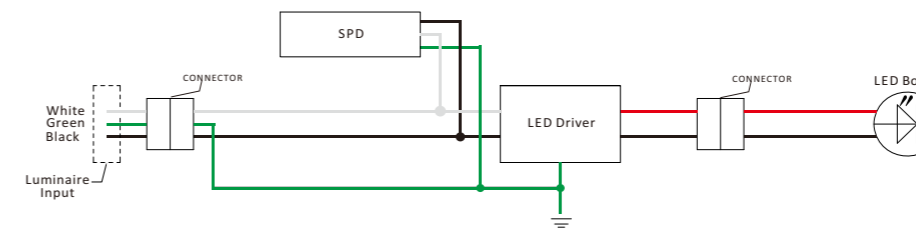
DIMENSIONAL DRAWING
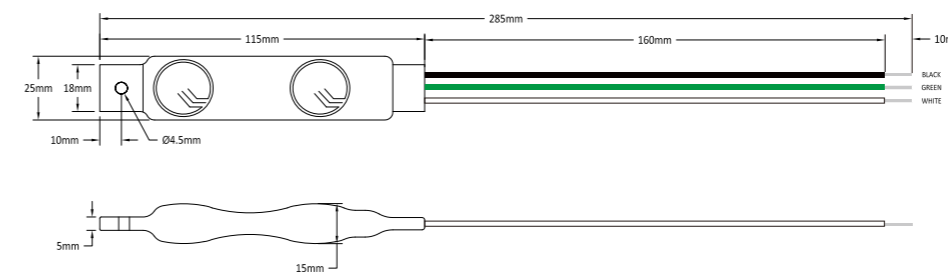
BRIEF SPECIFICATIONS

Model No.	SPD277-10	SPD277-20	SPD480-10	SPD480-20
Voltage Input:	120-277VAC (+/- 5%)		347-480VAC (+/- 5%)	
Frequency:	50/60Hz		50/60Hz	
Clamping Voltage:	320V		625V	
Maximum Energy:	430 Joules	850 Joules	630 Joules	1260 Joules
Maximum Peak Current:	10kA (8/20μs standard wave)	22kA (8/20μs standard wave)	10kA (8/20μs standard wave)	22kA (8/20μs standard wave)
Wiring:	14 Gauges stranded wires, 200℃, 600V			
Wire Connections:	Black and white: 10mm skinned and thin platted Green: 10mm skinned with terminal malt			
Mounting hole:	Φ5mm			

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ACCESSORIES

BOREALIS SM
INNOVATIVE LED LIGHTING
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ACCESSORIES

BOREALIS SM
INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

PHOTOCELL

PHOTOCELL(PCC)

- High reliability,versatile,and long-life
- Multi-Volt Operation
- High-temperature housing and components
- 545 Joule MOV Standard
- Meets or exceeds ANSI C136.10

PHOTOCONTROLLER
RECEPTACLE
Black
White
Red
LOAD
Netural
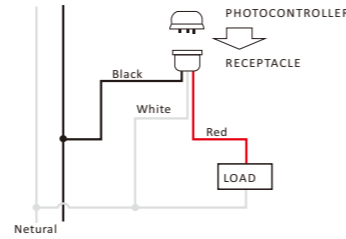
PHOTOCELL(PCD)

- Up to 360 Joule Surge Prtection
- Heavy-Duty Thermal Bi-Metal Switch
- 30-45 Second Time Delay
- ANSI C136.10 Compliant
- Fail Mode is ON

1.98in [50mm]
2.93in [74mm]
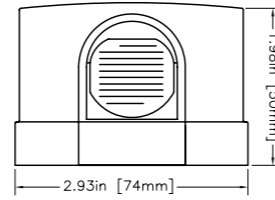
PHOTOCELL-mini(PCE)

- 3/4in long threaded nipple
- 30-45second time delay
- UL and CSA Listed
- Durable polycarbonate housing
- 1800 and 1200 watt load rating
- Fail mode is ON

M16mm(0.6")
42mm(1.7")
52.5mm(2.1")
29mm(1.1")
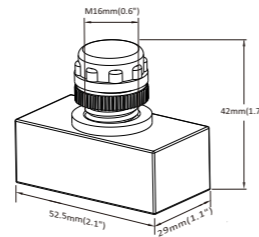
FEATURES & BENEFITS

- Adopt products from American brand TE which are known for its high reliability and long lifetime.

- UL and CSA certified.

- Widely used for indoor and outdoor applications such as roadway and parking lots.
  For more details of the product please refer to TE specification sheet.

TECHNICAL DATA

Model NO.	PCC277	PCD347	PCD480	PCE120	PCE277
Nominal Rated Voltage	105-305VAC	310-380VAC	420-530VAC	105-130VAC	185-305VAC
Rated Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Rated Loading	1000 Watt Tungsten 1800 VA	1000 Watt Tungsten 1800 VA	1000 Watt Tungsten 1800 VA	1100 Watt Tungsten	1100 Watt Tungsten
Power Consumption	less than 0.5 watts at 120 VAC	less than 0.9watts at 120 VAC	less than 0.9watts at 120 VAC	less than 0.9watts at 120 VAC	less than 0.9watts at 120 VAC
Standard Operate Level	1.5±0.5 Fc on, 2.25±0.5 Fc off	1.5 Fc on, 7.5Fc off	1.5 Fc on, 7.5Fc off	1.5 Fc on, 7.5Fc off	1.5 Fc on, 7.5Fc off
Ambient Temperature	Minus 40 to plus 65 @96% RH	Minus 40 to plus 65 @96% RH	Minus 40 to plus 65 @96% RH	Minus 40 to plus 65 @96% RH	Minus 40 to plus 65 @96% RH
Rated Life	Exceeds 11000 ON/OFF operations	Exceeds 5000 ON/OFF operations	Exceeds 5000 ON/OFF operations	Exceeds 7500 ON/OFF operations	Exceeds 7500 ON/OFF operations
Overall Dimensions (mm)	Φ74*53mm	Φ74*50mm	Φ74*50mm	L52*W29*H42mm	L52*W29*H42mm
Enclosure Color	Bule	Grey	Yellow	Black	Black
**Clear Enclosure (Null)	ANSI C136.10	ANSI C136.10	ANSI C136.10	ANSI C136.24,UL773A	ANSI C136.24,UL773A
Weight Approx.	0.118KG	0.089KG	0.089KG	0.055KG	0.055KG

Materials: Enclosure & Lens – High impact UV stabilized Polycarbonate
        Base – High impact Polybutylene terephthalate

EMERGENCY POWER SUPPLY

MODEL:EPS16F

FEATURES

The EPS16F is a UL924 recognized constant current LED driver module emergency lighting system. Under normal usage conditions, connecting the driver to power mains automatically charges the backup battery.
Connected in normal configuration the LED driver can provide the required power output according to the wiring diagram. This system can be configured to provide a wide range of lumen output and power dissipation runtimes.

MECHANICAL DATA

1.18"[30mm]
0.75"[19mm]
R0.09"[R2.25mm]
8.5"[216mm]
8.9"[226mm]
9.5"[241.3mm]
1"[25.4mm]
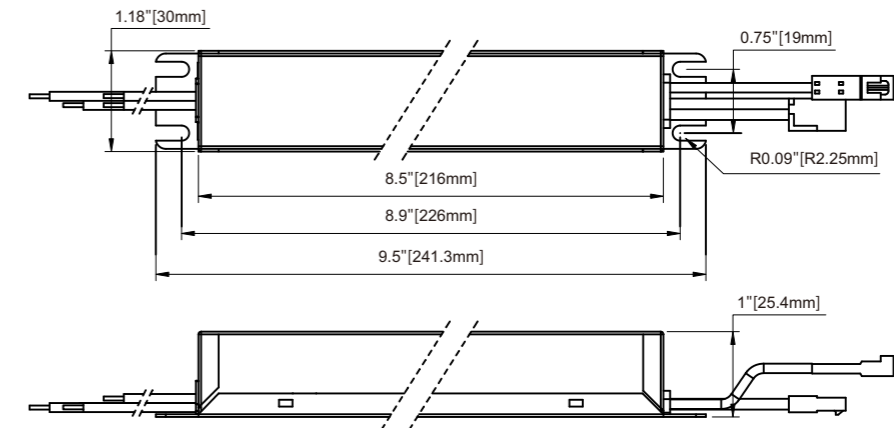
Where : L=Length, W=Width, H=Height, Tolerance= ±0.02"

TECHNICAL DATA

Input Voltage	100-277VAC±10%, 50/60Hz
Input Current	43mA Max.
Input Power	2.82W Max.
Red Lead	3A, 60V Max.
White/Black Lead	100W Max.
Output Current	100-700mA
Output Working Voltage	11-56VDC
Recharge Time Required	32Hours
Battery Type	LiFePO4 9.6VDC
Battery Capacity Available	3Ah

Illumination Time	90Minutes Min.
Total LED Powered	16W
Output Classification	UL1310/Class 2
Surge Protection	ANSI/IEEE C62.41 CLASS A
Input Protection	FUSE
Output Short Circuit Protection	Self Resetting PTC
Open Circuit Protection	YES
Ambient Temperature	10°C-50°C LiFePO4, -20°C-50°C (FHSBATCC3-3)
Approvals/Class	Urus, Dry and Damp Locations, CE
Emergency LED Driver & LiFePo4 Batteries	RoHS

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BASIC LIGHTING KONWLEDGE

❶ Lumen (lm)

Lumen is the international(SI) unit of luminous flux, a measure of overall light emitted by a light source.

Lumious flux
Unit: lumen (lm)
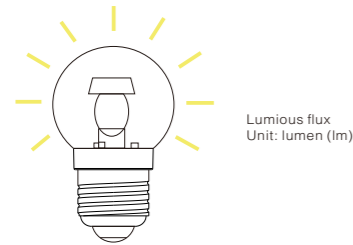
❷ Candela (cd)

Candela is the international(SI) unit of luminous intensity, a measure of light emitted by a light souce in a particular direction. Any given light source will have different luminous intensities in different directions considered.
[candela = lumen/solid angle]

[candela = lumen/solid angle]

Lumious intensity
Unit: candela(cd)
[candela - lumen / solid angle]

a unit solid angle
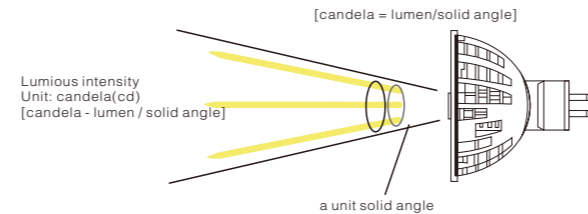
❸ Beam Angle [Unit : degree]

Beam angle is the angle between two directions for which the luminous intensity is 50% of the maximum intensity as measured in a plan through the nominal beam centerline. The beam angle of a lamp gives an idea of how the light beam spread away form the beam center.

50% cd Value
cd distribution
ΦBeam angle
100% cd Value
50% cd Value
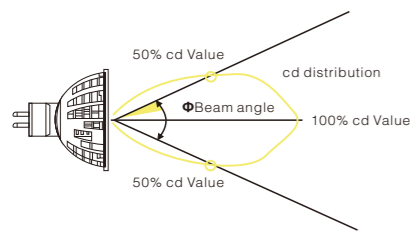
❹ LUX (lx)

Lux is the international(SI) unit of illuminance, a measure of light arriving at a surface, 1 lumen per square foot equals 1 footcandle, while 1 lumen per square meter equals 1 lux.
[lux = lumen/m2]

unit surface area

lumen

illuminance
unit: lux (lx)
[lux = lumen / m²]
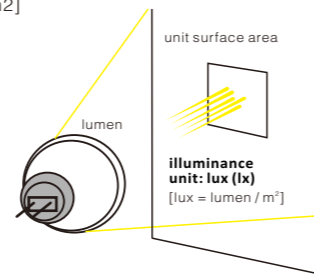
❺ Color Temperature / Correlated Color Temperature (CCT)

A black-Body radiator will have different color when it is heated up to different temperature(in kelvin). The temperature at which the heated black-body radiator matches the color of the light source is the color temperature of the light source.

| 1800K | 4000K | 5500K | 8000K | 12000K | 16000K |
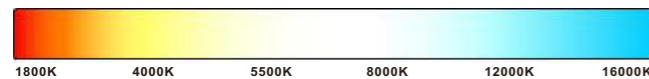
❻ Color Rendering Index (CRI)

Color rendering index, ranged from 0-100, measures a light source's ability to reproduce the color of various objects being lit by reference light source, black body radiator (CRI=100)

❼ Efficacy (lm/W)

Efficacy is the effciency of a light source to convert electricity power to light expressed in lumen output per unit power input (watt)
[Efficacy = lumen / wattage]

❽ Life Time Designed

Design life time is the average life of lighting product when it is operated at nominal lamp voltage, current and controlled working environment. Actual lamp life time varies because of difference from those rating condition.

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CERTIFICATION & STANDARDS

Certification	Standards	Remark
CE-LVD Low Voltage Directive (2014/35/EC)	EN 60598-2-3/A1:2011	Applicable for Street Light
	EN 60598-2-5:1998	Applicable for Flood Light
	EN 60598-1:2008/A11:2009	
	EN 62471:2008	
	EN 62493:2010	
CE-EMC Electromagnetic Compatibility Directive (2014/30/EU)	EN 55015:2013	
	EN 61547:2009	
	EN 61000-3-2:2014	
	EN 61000-3-3:2013	
CE-ErP Energy-Related Products Directive (2009/125/EU)	EU 1194/2012:2012-12-12	
	EC 244/2009:2009-03-18	
	EU 859/2009:2009-09-18	
CE-RoHS Directive (2011/65/EU)	EN 62321:2009	
CB	IEC 60598-2-3/A1:2011	Applicable for Street Light
	IEC 60598-2-5:1998	Applicable for Flood Light
	IEC 60598-1:2008	
	IEC 62471:2006	
	IEC 62471-2:2009	
ENEC	EN 60598-2-3/A1:2011	Applicable for Street Light
	EN 60598-2-5:1998	Applicable for Flood Light
	EN 60598-1/A11:2009	
	EN 62471:2008	
	EN 62493:2010	
SAA	AS/NZS 60598.2.3:2015	
	AS/NZS 60598.1:2017	
ATEX ATEX 95 Equipment Directive(94/9/EC)	EN 60079-0:12	
	EN 60079-11:12	
	EN 60529:1989+A1:1999	
UL	UL1598	
	UL8750	
	CSA C22.2 No. 250.0-08	
	CSA C22.2 No. 250.13-14	
FCC	Title 47 CFR Part 15	
PSE	日本電気用品安全法省令別表第八(Safety)	
	日本電気用品安全法省令別表第十(EMC)	
Photobiological Safety	EN 62471:2008	
	IEC 62471:2006	
Vibration test	ANSI C136.31-2010	Applicable for Street Light
	IEC/EN 60598-2-5 clause 5.6.7	Applicable for Flood Light
Salt spray test	ISO 9227:2012	
	ASTM B117	
IK08 Impact resistance test	IEC 62262:2002	
IP65 or IP67 test	IEC/EN 60598-1:2015 clause 9.2.2 and clause 9.2.6 or clause 9.2.8	
Photometric and Integrating Sphere test	IES LM-79-2008	
	ANSI C82.77-2002	
	ANSI C78.377-2011	
	CIE 13.3-1995	
	CIE 15-2004	
	IES TM-15-11	
	IES LM-63-2002	
LED Module	IEC/EN 62031:2008+A1:2013	
LED Lamps	IES LM-80-2008	
	ANSI C78.377-2011	
	JESD22 A108	
	JESD22 A101C	
	JESD22 A105	
	JESD22 B104	
	JESD22 A114	
LED Driver	EN 61347-1:2008	
	EN 61347-2-13:2006	
	EN 62384:2006+A1:2009	
	EN 55015:2006+A1:2007+A2:2009	
	EN 61000-3-2:2006+A1:2009+A2:2009	
	EN 61000-3-3:2008	
	EN 61547:2009	
	IEC 62386 Part 102 and Part 207	Applicable for DALI
	UL1012 UL879 UL935	
	FCC Title 47 CFR Part 15 Class A	
Surge Protection Device	ANSI/IEEE C62.41.2-2002	
	UL1449	
Receptacle	ANSI C136.10-2010	
Dimming Receptacle	ANSI C136.41-2013	

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INNOVATIVE LED LIGHTING

by PolyBrite International, Inc.

LED Bullet Flood Light

DLC Premium Model Numbers

4BF30L30X1DW	4BF30L30X1DDW
4BF30L35X1DW	4BF30L35X1DDW
4BF30L40X1DW	4BF30L40X1DDW
4BF30L45X1DW	4BF30L45X1DDW
4BF30L50X1DW	4BF30L50X1DDW

Remarks: "X" short for B,W,BK optional.

DESCRIPTION

PolyBrite's LED Bullet Flood light provides energy-efficient, directional lighting for landscape, facade, outdoor signs, and accent lighting, and many other commercial and residential applications. It's IP65 rated, sealed to prevent dirt, bugs and moisture. The product is constructed with precise die-casting aluminum housing, tempered and shatter-resistant glass for durability.

Replacing up to a 150-watt metal halide, the bullet flood is offered with 3000K, 3500K, 4000K, 4500K,5000K temperatures, and is available with 4 distributions. 12W and 30W are qualified by DLC and backed with 5 years warranty. It can be mounted to electrical boxes or posts, and features a locking swivel arm for angle adjustment.

COMPLIANCE

● UL/cUL(E352762) listed
● LM79 / LM80 / IES available
● DLC premium listed (E.G. 4BF30L30X1DW)

FEATURES

● High quality Nichia chips deliver over 116.92 lumens per watt.
● UL/cUL high quality driver.
● UL 1598 listed for wet locations.
● Universal voltage:120 - 277-Volt.
● Precise die-casting aluminum housing with integral cooling Fin.
● Superior Architectural Bronze Powder Coat Finish.
● Available in 4 distribution angles.
● Waterproof & Durable High-temperature Silicone Gaskets.
● 100,000+ hours lifespan, top quality with 5 years warranty.
● UL/cUL certificate (E352762), DLC Premium.

Φ5.16 inch

7.77 inch

5.35 inch

8.13 inch

8.41 inch
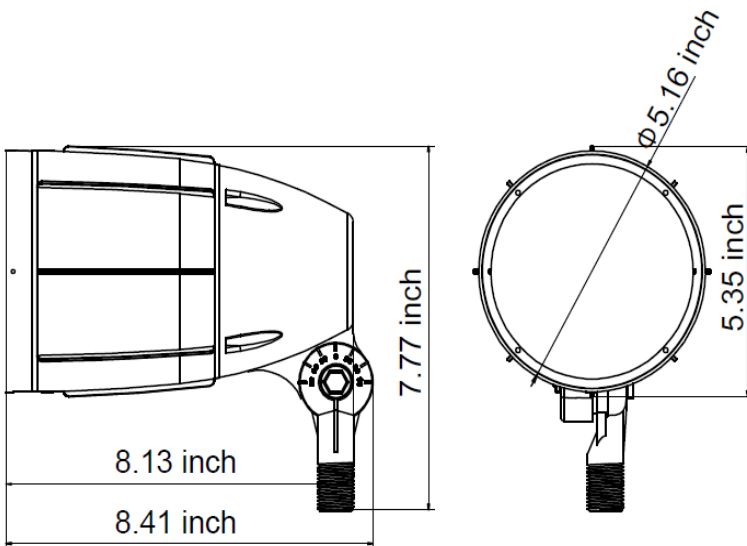
* This product, or selected versions of this product, meet the standards listed below. Please consult factory for your specific requirements.

c UL us
E352762

LM79
LM80

6 Years Warranty

NICHIA

ISO 9001:2008 REGISTERED

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

LED Bullet Flood Light

SPECIFICATIONS

Items	Details
Model No.	4BF30L50X1DW
Input Power	30W
Input Voltage	AC100~277V
Luminous Flux	3193.1 lm @5000K
Efficiency	116.92 lm/W
LED Source	Nichia LED
Color Temp	3000K/3500K/4000K/4500K/5000K
Beam Angle	60°
CRI	≥76.4
Driver	UL/cUL Listed Driver
Power Factor	≥0.909
Fixture Material	Aluminium + Tempered glass
Fixture Surface	Bronze
IP Rating	IP65
Operating Temp	﹣30°C to 45°C
Replacement	100W MH/HPS
Dimension	8.41" L x 5.35" W x 7.77" H
Weight	1.3kg
Testing Reports	LM79, LM80, IES available
Warranty	6 years
Qualifications	UL/cUL(E352762), DLC premium listed (E.G. 4BF30L30X1DW)

Ordering Guide   EXAMPLE: 4BF30L50B1DW

Light type	Wattage	Voltage	CCT	Finish	Driver	Dimming	Distribution	Shroud
4BF=LED bullet flood	30=30W	L=100-277V H=347-480V	30=3000K 35=3500K 40=4000K 45=4500K 50=5000K	B=Bronze W=White BK=Black	1=UL driver	D=Dimmable Blank=Non dimmable	DT=Distribution Tight DN=Distribution Narrow DM=Distribution Medium DW=Distribution Wide	Z=With Shroud Blank=Non Shroud

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LED Bullet Flood Light

SAFETY INFORMATION

WARNING

ONLY QUALIFIED PERSONNEL SHOULD PERFORM INSTALLATION. TO AVOID ELECTRICAL SHOCK OR COMPONENT DAMAGE, DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OF THE FIXTURES.

PRIOR TO INSTALLATION

Before installing fixtures, read and understand all cautions, warnings, instructions, and product labels. Failure to do so could result in injury and/or void the warranty.

MAINTENANCE

The unit is designed for years with minimum care. For optimum performance, periodically clean the reflector and lens with a mild, non-abrasive glass cleaner and soft cloth. Do NOT use solvents or cleaners containing abrasive agents. When cleaning the fixture, make sure you have the power turned off and do not spray liquid cleaner directly onto the LED, socket, or wiring.

Shoe Box Family Tree
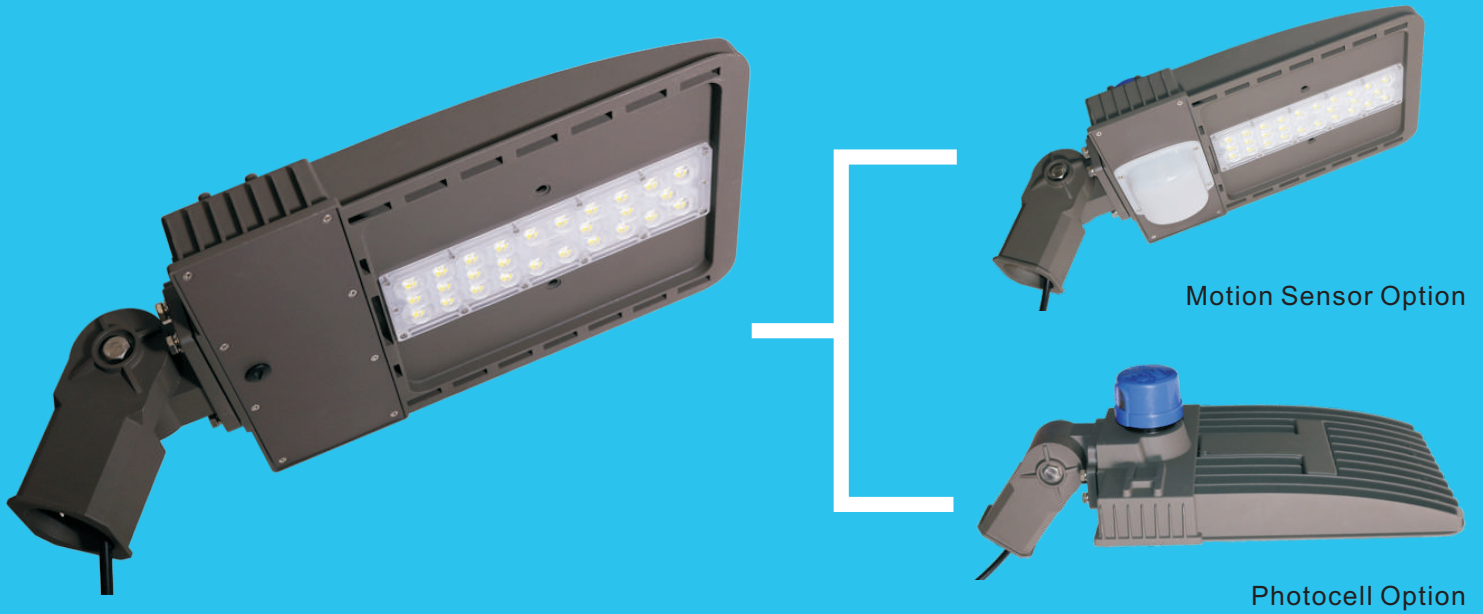
Motion Sensor Option

Photocell Option

300W

80~100W

150~200W

UL LISTED
c ® us

LED Shoe Box Light

Technical Details and Photometric

Product Number	Power Consumption (W)	Dimensions (Inch)	Color Temperature (K)	System Luminous Flux(lm)	System Efficacy (Lm/W)
SB-80W A1XYZ	80	11.8"*12.6"*8.4"	3000K-6500K	10,400	130
SB-100W A1XYZ	100	11.8"*12.6"*8.4"	3000K-6500K	13,000	130
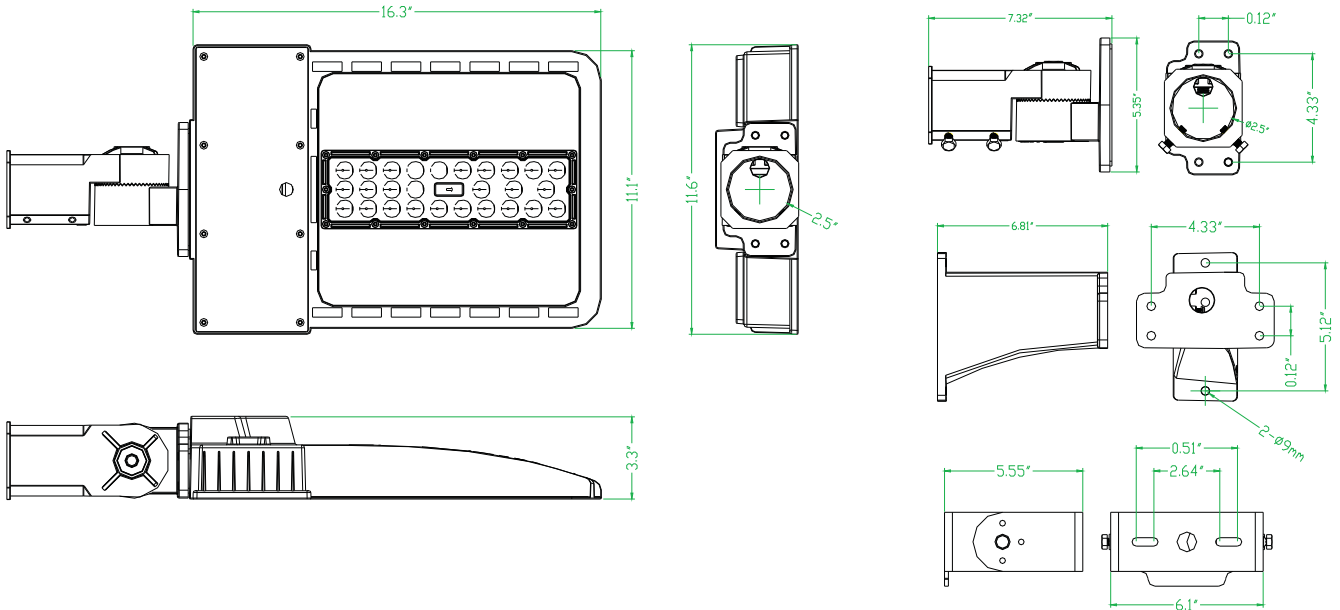
Photometric Data

Rated Power	80/100W
Input Voltage	100-277/200-480VAC
Frequency	50 / 60 Hz
Power Factor	>0.9
Beam Angle	120°
CRI	≧ 80
Dimming Function	0 - 10 V
Operating Temperature	-30°C to 45°C
Beam Angle	Type III

Polar Candela Distribution

- 0° H
- 90° H
- 22.5° H
- 45° H
- 67.5° H

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LED Shoe Box Light

Technical Details and Photometric
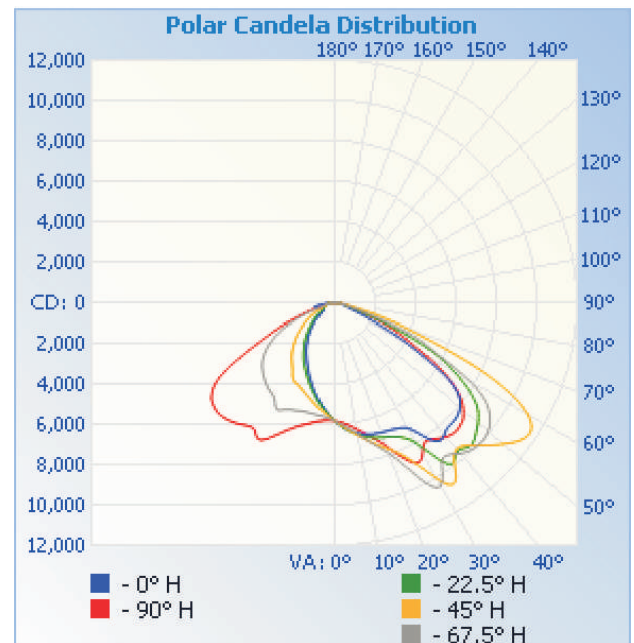
Product Number	Power Consumption (W)	Dimensions (Inch)	Color Temperature (K)	System Luminous Flux(lm)	System Efficacy (Lm/W)
SB-150W A2XYZ	150	23.9"*12.6"*8.4"	3000K-6500K	19,500	130
SB-200W A2XYZ	200	23.9"*12.6"*8.4"	3000K-6500K	26,000	130

Dimensions
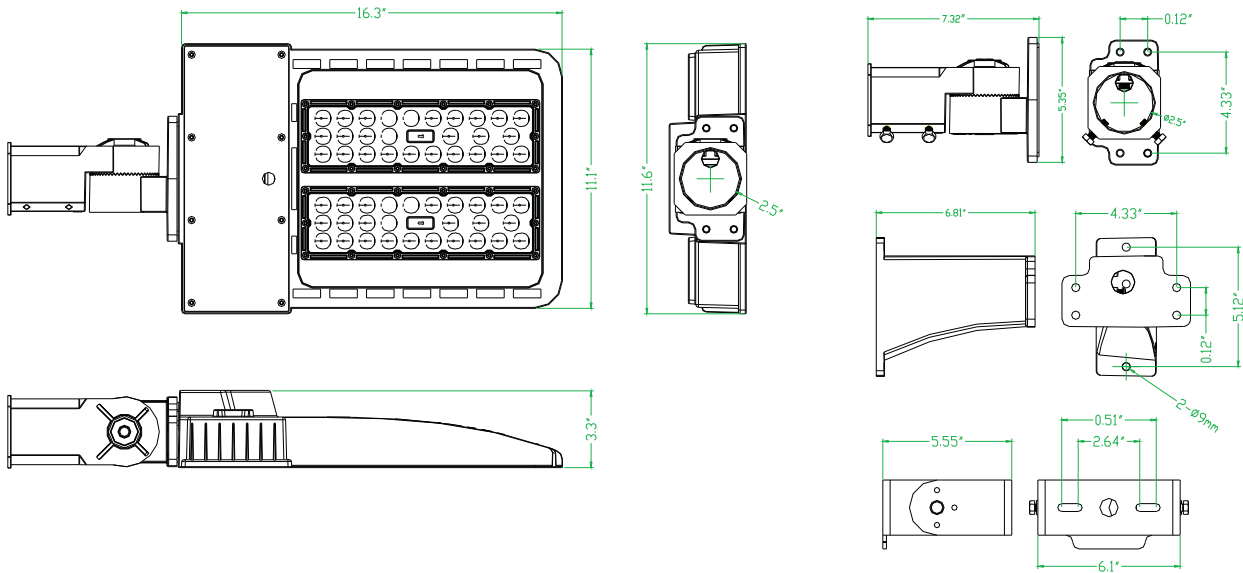
Photometric Data

Rated Power	150/200W
Input Voltage	100-277/200-480VAC
Frequency	50 / 60 Hz
Power Factor	>0.9
Beam Angle	120°
CRI	≥ 80
Dimming Function	0 - 10 V
Operating Temperature	-30°C to 45°C
Beam Angle	Type III

Polar Candela Distribution

- 0° H
- 90° H
- 22.5° H
- 45° H
- 67.5° H

2/5 Page

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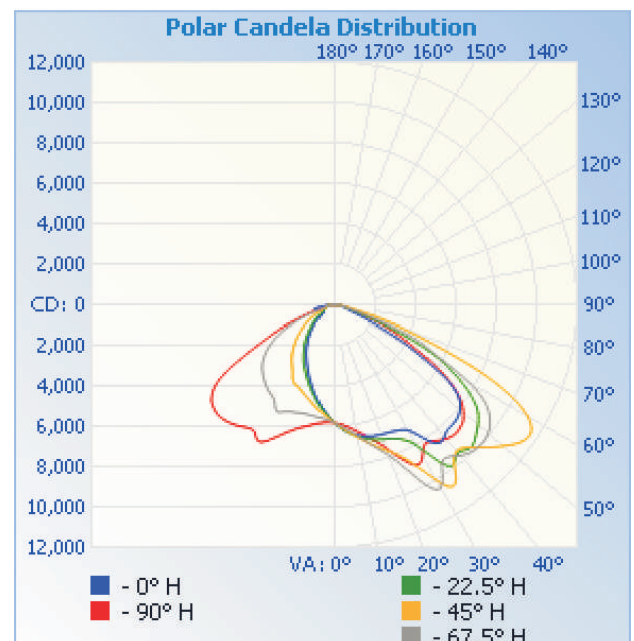
LED Shoe Box Light

Product Number	Power Consumption (W)	Dimensions (Inch)	Color Temperature (K)	System Luminous Flux(lm)	System Efficacy (Lm/W)
SB-300W A3XYZ	300	29.4"*12.6"*8.6"	3000K-6500K	39,000	130

Dimensions
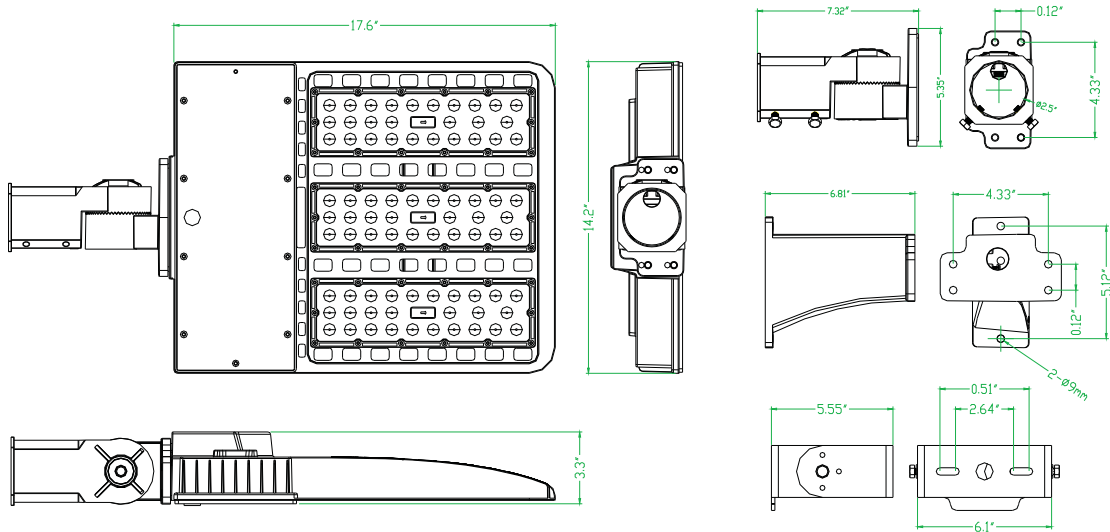
Photometric Data

Rated Power	300W
Input Voltage	100-277/200-480VAC
Frequency	50 / 60 Hz
Power Factor	>0.9
Beam Angle	120°
CRI	≥ 80
Dimming Function	0 - 10 V
Operating Temperature	-30°C to 45°C
Beam Angle	Type III

Polar Candela Distribution

- 0° H
- 90° H
- 22.5° H
- 45° H
- 67.5° H

UV-05012019
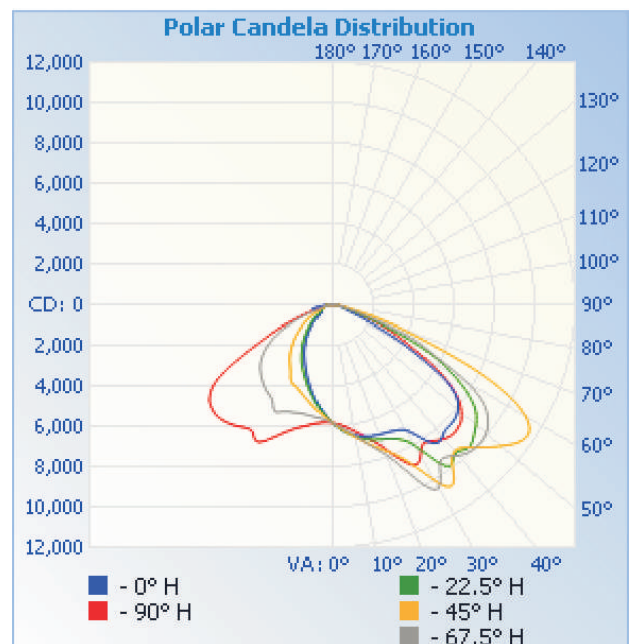
LED Shoe Box Light

Applications

Ordering Guide

SB	80/100/120/150/200/300W	AiXYZ
Shoe Box light	Wattage	**i**=1,2,3 modules X=N,D(Non-dim or Dim) Y=27,30…65(CCT) Z=T3(Type III beam angle)

Mounting Option

Arm Mounted
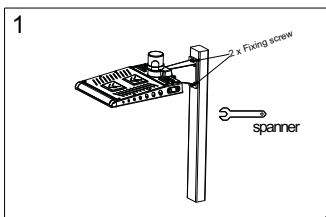
1. Tighten 2 x Fixing screw by spanner, ensure to add star washer avoid the screw will loose.
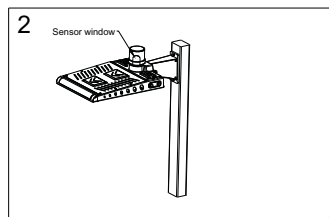
2. Turn on the power to test shoe box light, however you need to cover the sensor window if there is sunshine.

Slip Mount
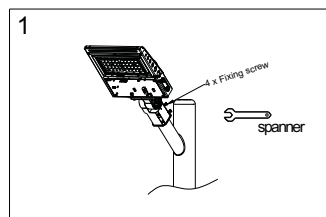
1. Tighten 2 x Fixing screw by spanner, ensure to add star washer avoid the screw will loose.
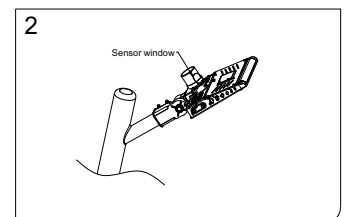
2. Turn on the power to test shoe box light, however you need to cover the sensor window if there is sunshine.

Trunnion Mounted
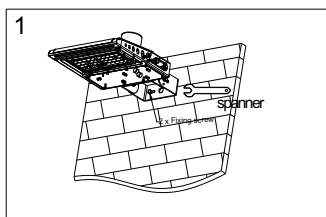
1. Tighten 2 x Fixing screw by spanner, ensure to add star washer avoid the screw will loose.

2. Turn on the power to test shoe box light, however you need to cover the sensor window if there is sunshine.

Arm mounting Kit-A	Arm mounting Kit-B
Slip Fitter Mounting Kit	Trunnion Mounting Kit

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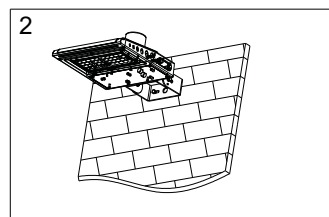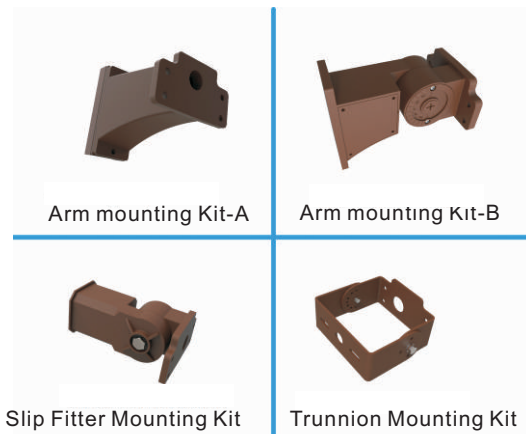
- **Garden Park**
- **Street and Roadway**
- **Pork**
- **Veranda**
- **Gas Station Road**
- **Sports Court Lighting**
- **Outdoor Packing Lot Areal**

Suitable Locations

Lumen Output up to 140 lumens per watt

CRI more than 80

Dimmable driver

Input voltage is AC100-277/200-480V

Reduces energy consumption up to 60%.

5 years warranty

Surface mounting installation

Suitable for wet location(IP65)

UL, cUL

Special outdoor luminaire design

Photocell sensor, motion sensor option

Advantage

Excellent Design

Our Compact Model LED Parking Lot Light uses new Phillips Luxeon LED modules that produce up to 130 Lumens per watt - Save even more by using a lower watt unit and still getting the light you need. Focus on your lumen needs, not on watts. This LED area light only uses Premium grade LED components. High strength housing make this an industrial grade LED Parking lot or Shoe Box light.

Brighter Light

250 Watt LED puts out 32,500 Lumens and can replace a 1,000 watt Metal halide MH or HPS/HID light. 5000K light color ensures a bright clear light. Light can be used as Parking Lot Lights, Sports Court Lights, Street Lights, walkways, roadways or any other use.

Photocell Included and Easy Adjustable Mount

Unit also has photocell for dusk to dawn usage. Can be removed if not needed. Unit comes with an adjustable slip mount designed to fit on standard circular poles. Inner diameter is 2 3/8 inches, so pole can be 2 - 2.4inches. With slip mount the LED Parking Lot light can be angled up or down depending on if you are mounting vertical or horizontal. The most versatile mount option. Arm mount and Trunnion mount options can match more locations.

IES Classification

The Type III distribution is ideal for roadway, general parking and other area lighting applications where a larger pool of lighting is required. It has greater street side (transverse) throw, allowing the light to project outward and fill the area.

Product Description

E27/E40 LED Round Retrofit Kit

Features

1. Beam angle:120 degrees.

2. Aluminum fins heat sinks and active air exchanging cooling system in order to speed up heat dissipation.

3. It's major to replace the CFL/MH/HID/HPS.

4. Green, energy saving, long and reliable life of 50,000 hours.

5. No RF interference, No IR/UV radiation ,no mercury pollution.

6. Wide colour availability in degrees Kelvin(K),2700-6700K.

7. Streamline exterior design, beautiful appearance.

8. Environment friendly ,energy saving (70~80%).

9. Special circuit design, each LED work separately, avoiding the single broken LED influence problem.

10. New temperature protection module.

Benefits

1. MH/HPS/HID/MHL/CFL lamp retrofit
2. Screw Base Direct Install by bypass ballast
3. 100% Die Casting Heat Sink
4. Universal Base E26/E27/E39/E40
5. ETL CETL CE ROHS listed

Application

1. Area Light/Shoesbox Light.
2. Wall Pack Light/Sports Light/Post Top Light.
3. Canopy Light/Garage Light/Ceiling Light.
4. Flood Light/Pole Light.
5. High/Low Bay Light.
6. Roadway Light/Street Light/Billboard Light.

Led Retrofit Kit Lamp Type D1

temperature sensor
if temp rise it dims the led
to keep the heat in control

5 Years Warranty

DLC QPL LISTED

ETL LISTED US
Intertek
4010207

100W/ 150W 300W DLC QPL listed

Item No.	Input Voltage	Watts±5%	Size	Lumens	Replacement of HPS, MH, HID	Driver (Meanwell)	Chip	CRI	Beam Angle
BB-SDD-60WD1	AC100-277V	60w	265*150*70mm 10.43*5.91*2.76in	7800 lm±5%	175-250W	MeanWell HLG Driver 7 years warranty driver	Phlips	85	120deg
BB-SDD-80WD1	AC100-277V	80W		9600lm±5%	250-300W				
BB-SDD-100WD1	AC100-277V	100W		13000 lm±5%	300-350W				
BB-SDD-120WD1	AC100-277V	120W	280*165*65mm 11.02*6.5*2.56in	15600 lm ±5%	350-400w				
BB-SDD-150WD1	AC100-277V	150W		18000lm±5%	400-500w				
BB-SDD-150WD1-HV	AC200-480V	150W		18000lm±5%	400-500w				
BB-SDD-240WD1	AC100-277V	240W	∅300*165mm 11.81*6.5in	28800 lm±5%	800-1000w				
BB-SDD-300WD1	AC100-277V	300W		39000 lm ±5%	1000w				
BB-SDD-300WD1-HV	AC200-480V	300W		39000 lm ±5%	1000w				
BB-SDD-370W-D1	AC100-277V	370W	∅365*340mm 14.37*13.39in	44400lm±5%	1000W				
BB-SDD-480W-D1	AC100-277V	480W		57600lm±5%	2000W				

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INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

Specifications

Model No.	Dimension(mm)	Input Voltage(V)	Wattage(W)	CRI	Lumen(Lm)	Beam Angle(°)	Certificate
HD-SP300WVCT-AXX	L380XH478	AC100-277 AC240-480	300	70Ra	39,000	15°/25°/30°/ 40°/60°/90°/ 120°	UL/CUL/ENEC /CE/DLC/SAA
HD-SP400WVCT-AXX	L380XH478		400		52,000		
HD-SP500WVCT-AXX	L380XH478		500		65,000		
HD-SP600WVCT-AXX	L533XH582		600		78,000		
HD-SP750WVCT-AXX	L533XH582		750		97,500		
HD-SP1000WVCT-AXX	L533XH582		1000		130,000		
HD-SP1200WVCT-AXX	L533XH582		1200		156,000		

MW meanwell
OSRAM
CREE

Product Features:
Professional optical design
Long life of the product
Durability in harsh environments
Remote control on working status of each fixtures available
Fixture lumens up to 160 lm/w
Seamless link of aerometal materials
Ensures the stability of light system
One-time forming technology" on heat sink
240° Adjustable beam angle
Patent No.: 201730488627.0

DLC 4.2 130lm/w

Function Options

1-10V Dimming Control	Sensor Control	DALI Control	Zigbee Control	Occupancy Control

Dimension

478

380

582

533

Installation

Adjustable angle:240°
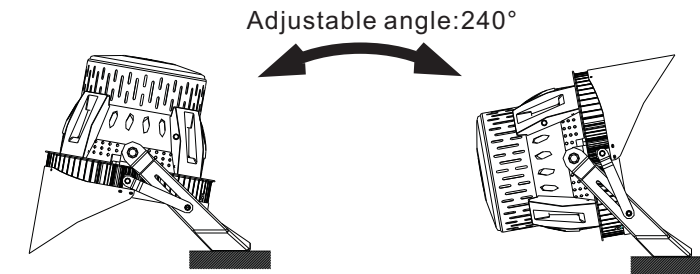
Photometric Diagrams
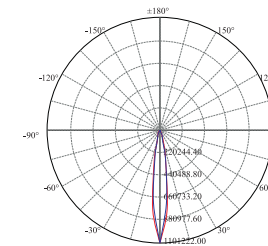
NEMA 2		
Height	Mac FC	Beam Diameter
40 ft	721	20 ft
80 ft	180	41 ft
120 ft	80	61 ft
160 ft	46	82 ft
200 ft	30	102 ft
Beam Angle = 14.9 ° , Field Angle = 32 °		

NEMA 5		
Height	Mac FC	Beam Diameter
40 ft	91	67 ft
80 ft	21	134 ft
120 ft	9	201 ft
160 ft	6	268 ft
200 ft	4	336 ft
Beam Angle = 40 ° , Field Angle = 80 °		

c(UL)us LISTED LUMINAIRE E481931   DLC   FC   GS   RCM   CB   CE   ERP   RoHS

BOREALIS℠
INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

2019

Indoor Catalog

Industry Leader in LED Lighting
Borealis® by PolyBrite

PolyBrite International manufactures its LED lighting products under its registered trademark Borealis. PolyBrite has been in the development, design and manufacturing of LED lighting products for nearly 3 decades and remains as one of the very few pioneers in the industry. When you see the name Borealis, you can trust it is a quality LED light. Contact us to speak to one of our lighting experts.

LED TYPE A
Plug and Play Tube

BOREALIS ℠
INNOVATIVE **LED** LIGHTING

by PolyBrite International, Inc.

The LED MagicFit tube can work with specific T8 instant-start, rapid-start, programmed-start, dimming-start ballasts and existing emergency battery backup equipment.

-Aluminum & Plastic (available with standard frosted lens or custom clear lens)

-Nano All Plastic Lens

DIMENSIONS

1"

1"

0.5"

24"/36"/48"

CERTIFICATIONS

DLC QPL LISTED ™

c UL us LISTED E358956

RoHS COMPLIANT

FCC

NSF®

LED lighting facts
LED Product Partner
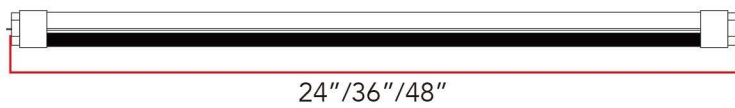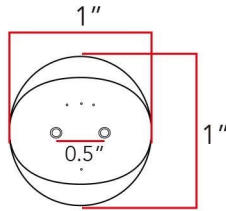
FEATURES

- Fantastic direct replacement "plug and play" tube
- Compatible with over 90% of all North American electronic ballasts
- Glass-free for use in food areas and refrigerated food displays
- Suitable for damp or dry environments
- Minimize labor and recycling costs
- Stable lumen output for different ballast brands with different ballast factors
- UL Type A
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K to 5000K
Beam Angle	240° (Aluminum/PC) 320° (Nano Plastic)
Color Consistency	4 Steps
CRI	>80
Operation Temperature	-30°C to 40°C
Efficiency with ballast	120 LPW (Aluminum) 140 LPW (Nano Plastic)
Input Voltage with ballast	100-277VAC, 347 V
Frequency	50-60Hz
Power Factor	More than 0.99
Rated Life	50,000 hrs.
LED Type	SMT 2835
Housing	Aluminum/PC Nano All Plastic Lens

WARRANTY

UV-05012019

LED Type A T8 tubes
Plug and Play Tube

BOREALIS^{SM}
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

PRODUCT SPECIFICATION

Product Number	Housing	Length (inch)	Color	Bare Lamp (Watt)	Lumens	QTY/CTN	Average System Watt (W)			Average System Lumens		
							Low Ballast Factor (0.78)	Norm Ballast Factor (0.88)	High Ballast Factor (1.10)	Low Ballast Factor (0.78)	Norm Ballast Factor (0.88)	High Ballast Factor (1.10)
BT812W4FT	Aluminum & Plastic	48"	3000K-5000K	12W	1620	42pcs/CTN	13.5	14.5	16.5	1765	1885	2145
BT8P12W4FT	Nano All Plastic Lens											
BT814W4FT	Aluminum & Plastic	48"	3000K-5000K	14W	1890	42pcs/CTN	15.5	16.5	18.5	2015	2145	2402
BT8P14W4FT	Nano All Plastic Lens											
BT816W4FT	Aluminum & Plastic	48"	3000K-5000K	16W	2160	42pcs/CTN	17.5	18.5	19.5	2275	2405	2535

* All stock lamps have frosted lens.
* Clear lens lamps are custom order.

ORDERING GUIDE

B	T8/T8P	12W/14W/16W	2FT/3FT/4FT	3000K-5000K
Company Code	Housing Type	Wattage	Length	CCT

INSTALLATION INSTRUCTIONS

Direct Replacement Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes (A) and dispose of these properly as they may contain mercury.
4. Put LED tube (B) into the lighting fixture and ensure the pins are firmly seated in lamp holders.
5. Install the LED tubes and close the diffuser.
6. Switch ON power to the fixture at the breaker panel

(A)

AC100-277V/347V
N
L
BALLAST
Fluorescent Tube

(B)

AC100-277V/347V
N
L
BALLAST
LED Tube

CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label.
- These lamps are intended for use with emergency exists.
- These lamps are to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- This lamp only operates on electronic ballasts. If lamp does not light when the luminaire is energized, remove this lamp from luminaire and contact manufacturer.
- Check the ballast installed in the field and make sure the ballast is in manufacturer's ballast list. If the ballast out of the list, a test must needed before mass installation.
- Do not make mass installation before sample testing.

LED TYPE "B" T8 TUBE

AC Direct Line Voltage

BOREALIS™
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

The LED T8 Tube with internal driver is used for general illumination for homes, offices, restaurants, hotels, malls, buses, trains, warehouses, parking lots, or wherever accent lighting is required.

-Aluminum & Plastic (Clear/Frosted Available)

-Nano All Plastic Lens

DIMENSIONS

1"

1"

0.5"

24"/36"/48"

CERTIFICATIONS

c(UL)us
LISTED
E358956

CLASSIFIED
c(UL)us
E358903

NSF®

LED lighting facts
LED Product Partner

FEATURES

- Energy savings up to 70%
- No infrared rays, no ultraviolet radiation. and no thermal effect
- Works only on non-shunted sockets
- Soft and wide light emitting
- Minimize labor and recycling costs
- Special circuit design, avoiding the single broken LED influence problem
- UL Type B
- Instant start without flickering, humming, or RF interference
- High efficiency constant current drive system
- Heat protection system allows performance under unstable voltage
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K to 5000K
Beam Angle	120º (Aluminum) 320º (Nano Plastic)
CRI	>80
Operation Temperature	-20ºC to 50ºC
Lumen efficiency	140 LPW
Input Voltage	AC100-277V / AC100-347V
Frequency	50-60Hz
Power Supply Efficiency	90%
Rated Life	50,000 hrs.
Power Factor	More than 0.99
LED Type	SMD 2835
Housing	Aluminum Nano All Plastic Lens

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. PolyBrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. Polybrite reserves the right to alter specifications without prior notice.

UV-05012019

LED TYPE "B" T8 TUBE

AC Direct Line Voltage

BOREALISSM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

PRODUCT SPECIFICATION

Model Number	Housing	Length	Wattage	Color	Lumens	Input Voltage
ZY-T8-10W600 BINS	Aluminum & Plastic	24"	10W	3000K-5000K	1250	AC100-277V/100-347V
ZY-T8-10W900 BINS	Aluminum & Plastic	36"	10W	3000K-5000K	1250	AC100-277V/100-347V
ZY-T8-12W1200 BINS	Aluminum & Plastic	48"	12W	3000K-5000K	1500	AC100-277V/100-347V
ZY-T8-15W1200 BINS	Aluminum & Plastic	48"	15W	3000K-5000K	1875	AC100-277V/100-347V
ZY-T8-18W1200 BINS	Aluminum & Plastic	48"	18W	3000K-5000K	2250	AC100-277V/100-347V
ZY-T8-22W1200 BINS	Aluminum & Plastic	48"	22W	3000K-5000K	2750	AC100-277V/100-347V
ZY-T8-22W1500 BINS	Aluminum & Plastic	60"	22W	3000K-5000K	2750	AC100-277V/100-347V
ZY-T8-31W1800 BINS	Aluminum & Plastic	72"	31W	3000K-5000K	3875	AC100-277V/100-347V
ZY-T8-31W2400 BINS	Aluminum & Plastic	96"	31W	3000K-5000K	3875	AC100-277V/100-347V
ZY-T8-40W2400 BINS	Aluminum & Plastic	96"	40W	3000K-5000K	5000	AC100-277V/100-347V

ORDERING GUIDE

ZY	T8/T8P		600/900/1200	B	I	NS	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	Internal Driver	Input Type	CCT

INSTALLATION INSTRUCTIONS

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Cut wires as shown on diagram (A).
5. Make new wire connection to the branch circuit as shown on diagram (B).
6. Replace the cover over the wiring channel.
7. Install the LED tubes and close the diffuser.
8. Switch ON power to the fixture at the breaker panel

(A)

(B)

CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label.
- These lamps are not intended for use with emergency exist fixtures, emergency exit lights or battery backup devices.
- LED tube is powered from one end (Single-ended power); the other end is NOT live and only serves to secure and mount LED tube in the sockets.
- These lamps are not to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- Do not install an LED tube into luminaire containing a ballast and/or starter- they must be removed prior to installation.
- Do not make mass installation before sample testing.

LED A&B TUBE

Works with or without a ballast

BOREALISSM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

The LED A&B Tube serves as a special energy efficient replacement for all traditional fluorescent T8 lamps. Designed to operate on all existing rapid-start, instant-start, program-start, and emergency fixture ballasts... or simply **no ballast** at all.

DIMENSIONS

1.2"

1.5"

0.5"

24"/36"/48"

CERTIFICATIONS

c(UL)us LISTED E358956

CLASSIFIED c(UL)us E358903

RoHS COMPLIANT

FC

NSF

LED lighting facts
LED Product Partner
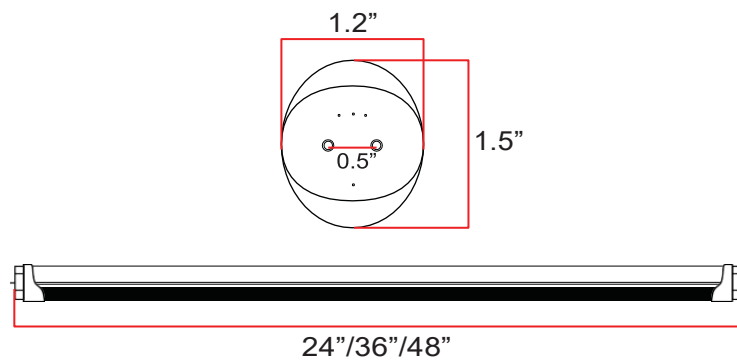
FEATURES

- Works both with or without a ballast
- Works both with shunted or non-shunted sockets
- Fantastic replacement "plug and play" tube or retrofit kit
- Compatible with over 90% of all North American electronic ballasts
- Versatility supports massive projects with different types of ballasts
- Suitable for damp or dry environments
- Minimize labor and recycling costs
- Stable lumen output for different ballast brands with different ballast factors
- UL Type A & B
- Globally patented technology
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	2700K to 5000K
Beam Angle	120 Degrees
Color Consistency	4 Steps
CRI	> 80
Operation Temperature	-30ºC to 40ºC
Efficiency with ballast	More than 110 LPW
Efficiency without ballast	More than 125 LPW
Input Voltage with ballast	100-277VAC, 347 V
Input Voltage without ballast	100-277VAC
Frequency	50-60Hz
Power Factor	More than 0.99
Rated Life	50,000 hours
LED Type	SMT2835
Housing	Aluminum/PC

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. Polybrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. Polybrite reserves the right to alter specifications without prior notice.

LED TUBE

Works with or without a ballast

PRODUCT SPECIFICATION

Product Number	Length (inch)	Color	Bare Lamp (Watt)	Lumens	Average System Watts (W)			Average System Initial Lumens		
					Low Ballast Factor (0.78)	Norm Ballast Factor	High Ballast Factor (1.10)	Low Ballast Factor (0.78)	Norm Ballast Factor	High Ballast Factor (1.110)
ZY-T8-10W600 BIXX	24"	3500K-5000K	10W	1400	11.5	12.5	13.5	1437	1550	1680
ZY-T8-15W600 BIXX	24"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-15W900 BIXX	36"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-12W1200 BIXX	48"	3500K-5000K	12W	1680	13.5	16.5	17.5	1680	2069	2180
ZY-T8-15W1200 BIXX	48"	3500K-5000K	15W	2100	16.5	17.5	20.5	2069	2180	2560
ZY-T8-18W1200 BIXX	48"	3500K-5000K	18W	2520	19.5	21.5	22.5	2430	2680	2810
ZY-T8-20W1200 BIXX	48"	3500K-5000K	20W	2700	21.5	22.5	23.5	2687	2805	2935

ORDERING GUIDE

ZY	T8	12W/15W/18W/20W	600/900/1200	B	I	XX	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	Internal Driver	Input Type	CCT

INSTALLATION INSTRUCTIONS

Direct Replacement Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.

3. Remove the fluorescent tubes (A) and dispose of these properly as they may contain mercury.
4. Put LED tube (B) into the lighting fixture and ensure the pins are firmly seated in lamp holders.
5. Install the LED tubes and close the diffuser.
6. Switch ON power to the fixture at the breaker panel

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.

3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Cut wires and remove (A).
5. Make new wire connection to the branch circuit as shown on diagram (B) below.
6. Replace the cover over the wiring channel.
7. Install the LED tubes and close the diffuser.
8. Switch ON power to the fixture at the breaker panel
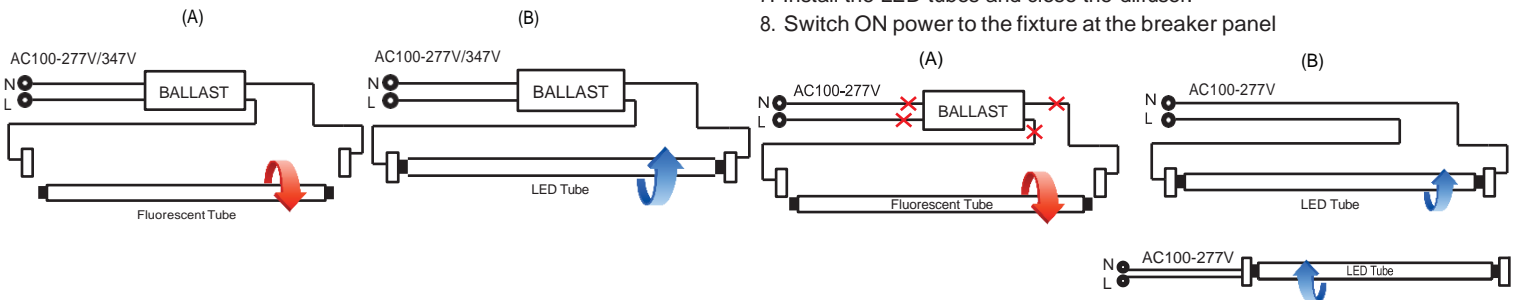
CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label or as a retrofit kit.
- These lamps are not intended for use with emergency exists.
- These lamps are not to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- This lamp only operates on electronic ballasts. If lamp does not light when the luminaire is energized, remove this lamp from luminaire and contact manufacturer.
- Check the ballast installed in the field and make sure the ballast is in manufacturer's ballast list. If the ballast out of the list, a test must needed before mass installation.
- Do not make mass installation before sample testing.

UV-05012019

LED 8FT TUBE
8FT AC Direct T8 Tube

The LED 8FT Tube with internal driver is used for general illumination for homes, offices, restaurants, hotels, malls, buses, trains, warehouses, parking lots, or wherever accent lighting is required.
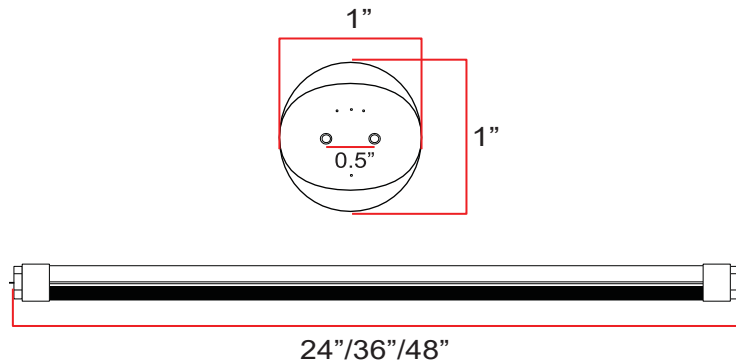
DIMENSIONS

1"

1"

93.35"

CERTIFICATIONS

CLASSIFIED c(UL)us E358903

FC

NSF

RoHS COMPLIANT
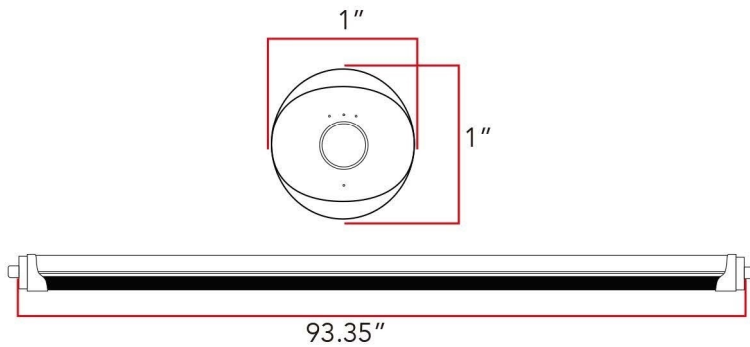
FEATURES

- Comes standard single pin
- Soft and wide light emitting
- Special circuit design, avoiding the single broken LED influence problem
- High efficiency constant current drive system with heat protection system
- Suitable for damp or dry environments
- Minimize labor and recycling costs
- No infrared rays, no ultraviolet radiation, and no thermal effect
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K-5000K
Beam Angle	120 degrees
CRI	>80
Operation Temperature	-20°C to 50°C
Efficiency	More than 130 LPW
Input Voltage	AC100-277V
Frequency	50-60Hz
Power Factor	More than 0.99
Rated Life	50,000 hours
LED Type	SMD 2835
Housing	Aluminum

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. PolyBrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. PolyBrite reserves the right to alter specifications without prior notice.

LED 8FT TUBE
8FT AC Direct T8 Tube

B⊕REALIS℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

PRODUCT SPECIFICATION

Product Number	Wattage	Length (FT)	Color	Lumens	Input Voltage	Wire Input	QTY/CTN
ZY-T8-30W2400 BINT	30W	8FT	3000K-5000K	4150	AC100-277V	Two End	20pcs/CTN
ZY-T8-40W2400 BINT	40W	8FT	3000K-5000K	5320	AC100-277V	Two End	20pcs/CTN

ORDERING GUIDE

| ZY	T8	30W	2400	B	I	NT	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	Internal Driver	Input Type	CCT

INSTALLATION INSTRUCTIONS

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Cut wires as shown on diagram (A).
5. Make new wire connection to the branch circuit as shown on diagram (B).
6. Replace the cover over the wiring channel.
7. Install the LED tubes and close the diffuser.
8. Switch ON power to the fixture at the breaker panel

(A)

AC100-277V
N
L
BALLAST
Fluorescent Tube

(B)

AC100-277V
N
L
LED Tube

CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label.
- These lamps are not intended for use with emergency exist fixtures, emergency exit lights or battery backup devices.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- Do not install an LED tube into luminaire containing a ballast and/or starter- they must be removed prior to installation.
- Do not make mass installation before sample testing.

LED T8 TUBE
AC Direct Line Voltage

B **REALIS** SM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

The LED T8 Tube with internal driver is used for general illumination for homes, offices, restaurants, hotels, malls, buses, trains, warehouses, parking lots, or wherever accent lighting is required.

-Aluminum & Plastic (Clear/Frosted Available)

-Nano All Plastic Lens

DIMENSIONS

1"
1"
0.5"

24"/36"/48"

CERTIFICATIONS

c **UL** us
LISTED
E358956

CLASSIFIED
c **UL** us
E358903

NSF

LED
lighting
facts
LED Product Partner

FEATURES

- Energy savings up to 70%
- No infrared rays, no ultraviolet radiation. and no thermal effect
- Works only on non-shunted sockets
- Soft and wide light emitting
- Minimize labor and recycling costs
- Special circuit design, avoiding the single broken LED influence problem
- UL Type B
- Instant start without flickering, humming, or RF interference
- High efficiency constant current drive system
- Heat protection system allows performance under unstable voltage
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K to 5000K
Beam Angle	120º (Aluminum) 320º (Nano Plastic)
CRI	>80
Operation Temperature	-20ºC to 50ºC
Lumen efficiency	140 LPW
Input Voltage	AC100-277V / AC100-347V
Frequency	50-60Hz
Power Supply Efficiency	90%
Rated Life	50,000 hrs.
Power Factor	More than 0.99
LED Type	SMD 2835
Housing	Aluminum Nano All Plastic Lens

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. PolyBrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. Polybrite reserves the right to alter specifications without prior notice.

UV-05012019

LED T8 TUBE
AC Direct Line Voltage

BOREALIS ℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

PRODUCT SPECIFICATION

Model Number	Housing	Length	Wattage	Color	Lumens	Input Voltage
ZY-T8-10W600 BINS	Aluminum & Plastic	24"	10W	3000K-5000K	1250	AC100-277V/100-347V
ZY-T8-10W900 BINS	Aluminum & Plastic	36"	10W	3000K-5000K	1250	AC100-277V/100-347V
ZY-T8-12W1200 BINS	Aluminum & Plastic	48"	12W	3000K-5000K	1500	AC100-277V/100-347V
ZY-T8-15W1200 BINS	Aluminum & Plastic	48"	15W	3000K-5000K	1875	AC100-277V/100-347V
ZY-T8-18W1200 BINS	Aluminum & Plastic	48"	18W	3000K-5000K	2250	AC100-277V/100-347V
ZY-T8-22W1200 BINS	Aluminum & Plastic	48"	22W	3000K-5000K	2750	AC100-277V/100-347V
ZY-T8-22W1500 BINS	Aluminum & Plastic	60"	22W	3000K-5000K	2750	AC100-277V/100-347V
ZY-T8-31W1800 BINS	Aluminum & Plastic	72"	31W	3000K-5000K	3875	AC100-277V/100-347V
ZY-T8-31W2400 BINS	Aluminum & Plastic	96"	31W	3000K-5000K	3875	AC100-277V/100-347V
ZY-T8-40W2400 BINS	Aluminum & Plastic	96"	40W	3000K-5000K	5000	AC100-277V/100-347V

ORDERING GUIDE

ZY	T8/T8P		600/900/1200	B	I	NS	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	Internal Driver	Input Type	CCT

INSTALLATION INSTRUCTIONS

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Cut wires as shown on diagram (A).
5. Make new wire connection to the branch circuit as shown on diagram (B).
6. Replace the cover over the wiring channel.
7. Install the LED tubes and close the diffuser.
8. Switch ON power to the fixture at the breaker panel

(A)

(B)

CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label.
- These lamps are not intended for use with emergency exist fixtures, emergency exit lights or battery backup devices.
- LED tube is powered from one end (Single-ended power); the other end is NOT live and only serves to secure and mount LED tube in the sockets.
- These lamps are not to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- Do not install an LED tube into luminaire containing a ballast and/or starter- they must be removed prior to installation.
- Do not make mass installation before sample testing.

LED EXTERNAL DRIVE TUBE

T8 Tube w/ External Driver System   **C**

The LED External Tube w/ external driver system can dramatically reduce energy usage up to 70% providing significantly lower operating costs. One driver for 1, 2, 3 or 4 LED tubes available.

-Aluminum & Plastic

-Nano All Plastic Lens

DIMENSIONS

1"

1"

0.5"

24"/36"/48"

CERTIFICATIONS

CLASSIFIED
c(UL)us
E358903

NSF

LED lighting facts
LED Product Partner

c(RU)US
E360175
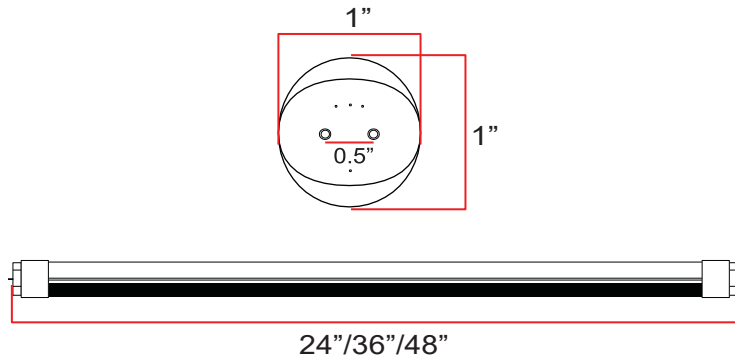
FEATURES

- Can be dimmable or non dimmable
- Special circuit design, avoids single failed LED issue
- External Class 2 Driver System
- Soft and wide distribution light emission
- Ultra slim design and various dimensions available
- Minimize labor and recycling costs
- No infrared rays, no ultraviolet radiation, and no thermal effect
- UL Type C
- 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K-5000K
Beam Angle	120º (Aluminum/PC)
	320º (Nano Plastic)
CRI	>80
Operation Temperature	-20ºC to 50ºC
Efficiency	140 LPW
Input Voltage	AC100-277V
Frequency	50-60Hz
Power Supply Efficiency	90%
Rated Life	50,000 hours
Power Factor	More than 0.90
LED Type	SMD 2835
Housing	Aluminum/PC
	Nano All Plastic Lens

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. Polybrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. PolyBrite reserves the right to alter specifications without prior notice.

UV-05012019

LED EXTERNAL TUBE
T8 Tube w/ External Driver System

BOREALIS SM
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

PRODUCT SPECIFICATION

Model Number	Dimmable/ Non-Dimmable	Length (FT)	Wattage	Color	Lumens	Multiple Driving Type	Driver	Wire Input
ZY-T8(P)-10W600 BONT	Non-Dimmable	2FT	10W	3000K-5000K	1210	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-10W600 BODT	Dimmable							
ZY-T8(P)-10W900 BONT	Non-Dimmable	3FT	10W	3000K-5000K	1210	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-10W900 BODT	Dimmable							
ZY-T8(P)-12W1200 BONT	Non-Dimmable	4FT	12W	3000K-5000K	1700	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-12W1200 BODT	Dimmable							
ZY-T8(P)-15W1200 BONT	Non-Dimmable	4FT	15W	3000K-5000K	1800	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-15W1200 BODT	Dimmable							
ZY-T8(P)-18W1200 BONT	Non-Dimmable	4FT	18W	3000K-5000K	2240	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-18W1200 BODT	Dimmable							
ZY-T8(P)-22W1200 BONT	Non-Dimmable	4FT	22W	3000K-5000K	2640	One driver for 1, 2, 3 or 4 tubes	External	Two End
ZY-T8(P)-22W1200 BODT	Dimmable							

ORDERING GUIDE

ZY	T8/T8P	10W/12W/ 15W/18W/22W	600/900/1200	B	O	DT/NT	3000K-5000K
Company Code	Housing Type	Wattage	Length	2835 LED	External Driver	Input Type	CCT

INSTALLATION INSTRUCTIONS

Direct Replacement Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Make the new wire connection (A) to the branch circuit and.
5. Install the LED tubes ensure the pins are firmly seated in lamp holders and close the diffuser.
6. Switch ON power to the fixture at the breaker panel.

(A)

AC100-277V
AC L
AC N

EXTERNAL DRIVER

+ DC 0-10V
DIMMER

V-   LED EXTERNAL TUBE   V+
V-   LED EXTERNAL TUBE   V+
V-   LED EXTERNAL TUBE   V+
V-   LED EXTERNAL TUBE   V+
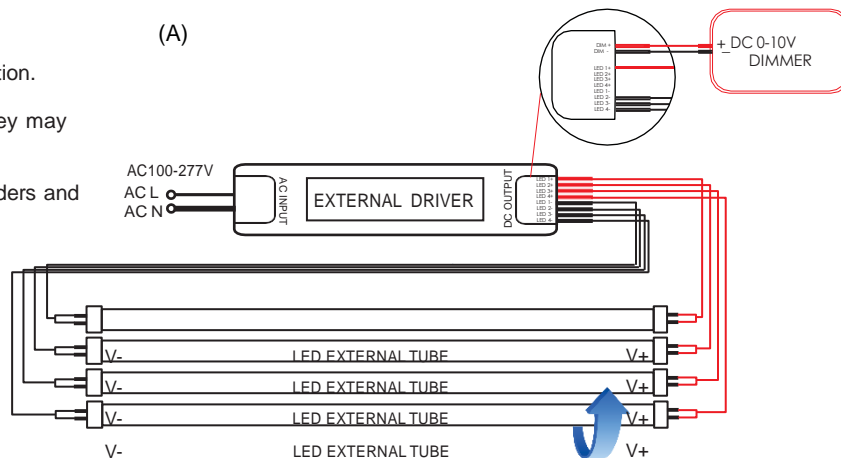
* Image shown is one driver for 4 pieces of tubes

CAUTION

- Risk of fire- do not install this lamp in a pre-heated luminaire.
- Loose or damaged end caps and/or lamp holders need to be replaced before installation.
- Risk of electric shock- make installation with gloves.
- Use only in place of fluorescent lamps specified on label.
- These lamps are intended for use with emergency exists.
- These lamps are to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power and remove the lamp from luminaire and contact manufacturer.
- Not suitable for wet locations.
- Do not make mass installation before sample testing.

LED EXTERNAL TUBE
T8 Tube w/ External Driver System

B⊕REALIS^{SM}
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

DRIVER SPECIFICATION

Product Code	Dimmable	Input Voltage	DC Voltage	DC Currency	Luminaire Information		
					Quantity of Tube	Wattage of each Tube	Tube Model
ZY-DR-WG01-3	Non-Dimmable	AC100-277V	28-40V	300mA	1	10W	ZY-T8-10W600 BONT
ZY-DR-WG-1-3	Non-Dimmable	AC100-277V	28-40V	300mA	1	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG01-1	Non-Dimmable	AC100-277V	28-40V	380mA	1	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT
ZY-DR-WG01-2	Non-Dimmable	AC100-277V	28-40V	540mA	1	18W	ZY-T8-18W1200 BONT
ZY-DR-WG01-2	Non-Dimmable	AC100-277V	28-40V	540mA	1	20W	ZY-T8-22W1200 BONT
ZY-DR-WG02-3	Non-Dimmable	AC100-277V	28-40V	650mA	2	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG02-1	Non-Dimmable	AC100-277V	28-40V	700mA	2	15W	ZY-T8-15W1200 BONT
ZY-DR-WG17-2	Non-Dimmable	AC100-277V	24-34V	1100mA	2	18W	ZY-T8-18W1200 BONT
ZY-DR-WG17-2	Non-Dimmable	AC100-277V	24-34V	1100mA	2	20W	ZY-T8-22W1200 BONT
ZY-DR-WG02-1	Non-Dimmable	AC100-277V	28-40V	900mA	3	10W	ZY-T8-10W600 BONT
ZY-DR-WG17-4	Non-Dimmable	AC100-277V	28-40V	900mA	3	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG17-2	Non-Dimmable	AC100-277V	24-34V	1100mA	3	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT
ZY-DR-WG18-2	Non-Dimmable	AC100-277V	28-40V	1680mA	3	18W	ZY-T8-18W1200 BONT
ZY-DR-WG18-3	Non-Dimmable	AC100-277V	28-40V	1470mA	3	18W	ZY-T8-18W1200 BONT
ZY-DR-WG18-3	Non-Dimmable	AC100-277V	28-40V	1470mA	3	20W	ZY-T8-22W1200 BONT
ZY-DR-WG17-2	Non-Dimmable	AC100-277V	24-34V	1100mA	4	10W	ZY-T8-10W600 BONT; ZY-T8-10W600 BONT
ZY-DR-WG18-4	Non-Dimmable	AC100-277V	24-34V	1470mA	4	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG18-4	Non-Dimmable	AC100-277V	28-40V	1470mA	4	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT

Product Code	Dimmable	Input Voltage	DC Voltage	DC Currency	Luminaire Information		
					Quantity of Tube	Wattage of each Tube	Tube Model
ZY-DR-WG10-1	Dimmable	AC100-277V	28-40V	300mA	1	10W	ZY-T8-10W600 BONT
ZY-DR-WG10-1	Dimmable	AC100-277V	28-40V	300mA	1	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG10-2	Dimmable	AC100-277V	28-40V	380mA	1	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT
ZY-DR-WG10-3	Dimmable	AC100-277V	28-40V	540mA	1	18W	ZY-T8-18W1200 BONT
ZY-DR-WG10-3	Dimmable	AC100-277V	28-40V	540mA	1	20W	ZY-T8-22W1200 BONT
ZY-DR-WG10-3	Dimmable	AC100-277V	28-40V	600mA	2	10W	ZY-T8-22W1200 BONT
ZY-DR-WG11-2	Dimmable	AC100-277V	28-40V	600mA	2	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG11-1	Dimmable	AC100-277V	28-40V	700mA	2	15W	ZY-T8-15W1200 BONT
ZY-DR-WG21-1	Dimmable	AC100-277V	28-40V	1100mA	2	18W	ZY-T8-18W1200 BONT
ZY-DR-WG21-1	Dimmable	AC100-277V	28-40V	1100mA	2	20W	ZY-T8-22W1200 BONT
ZY-DR-WG11-1	Dimmable	AC100-277V	28-40V	900mA	3	10W	ZY-T8-10W600 BONT
ZY-DR-WG21-1	Dimmable	AC100-277V	28-40V	1100mA	3	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG21-1	Dimmable	AC100-277V	28-40V	1100mA	3	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT
ZY-DR-WG19-5	Dimmable	AC100-277V	28-40V	1680mA	3	18W	ZY-T8-18W1200 BONT
ZY-DR-WG19-5	Dimmable	AC100-277V	28-40V	1500mA	3	18W	ZY-T8-18W1200 BONT
ZY-DR-WG19-6	Dimmable	AC100-277V	28-40V	1500mA	3	20W	ZY-T8-22W1200 BONT
ZY-DR-WG21-1	Dimmable	AC100-277V	28-40V	1100mA	4	10W	ZY-T8-10W600 BONT; ZY-T8-10W600 BONT
ZY-DR-WG19-6	Dimmable	AC100-277V	28-40V	1470mA	4	12W	ZY-T8-12W600 BONT; ZY-T8-12W1200 BONT
ZY-DR-WG19-6	Dimmable	AC100-277V	28-40V	1470mA	4	15W	ZY-T8-15W600 BONT; ZY-T8-15W1200 BONT

LED Linear High Bay

BOREALIS ℠
INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

Brief Description

This led linear high bay is a brand new replacement solution for fluorescent linear high bay in warehouse, garage locations and any other commercial and industrial applications.

Advantages

Lumen Output more than 130 lumens per watt

CRI more than 80

Dimmable driver.

Input voltage can be AC100-277V

Reduces energy consumption up to 60%.

5 years lifespan

Surface mounting installation

Suitable for damp location

UL and DLC

Glass-free

Mounting Options

V-Clips for dual point chain or cable hanging (Standard)

Installation Clips

Pendant hanger

Performance Data

Model	Wattage	Lumens	LxWxD inch
ZY-H2-110W XDZ	110	15100	23.8"x12.6"x3.62"
ZY-H3-110W XDZ	220	15100	45.9"x12.6"x3.62"
ZY-H3-165W XDZ	165	21450	45.9"x12.6"x3.62"
ZY-H3-220W XDZ	220	28500	45.9"x12.6"x3.62"
ZY-H3-225W XDZ	225	29300	45.9"x12.6"x3.62"
ZY-H5-160W XDZ	160	19200	23.8"x17.3"x3.62"
ZY-H5-165W XDZ	165	21450	23.8"x17.3"x3.62"
ZY-H6-320W XDZ	320	44500	45.9"x17.3"x3.62"
ZY-H6-325W XDZ	325	45300	45.9"x17.3"x3.62"

Ordering Guide

ZY	Hx	110W/160W/165W/220W/225W/320W/325W	XDZ/XNZ
Company Code	Housing Type	Wattage	Dimmable/ Non Dimmable

LED Strip Light

BOREALIS^{SM}
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

Brief Description

This strip light is mainly for commercial use.It can be used in warehouse, office, garage display shops and other commercial applications.

Advantage

Lumen Output more than 130 lumens per watt

CRI more than 80

Espend dimmable driver.

Input voltage can be AC100-277V

Reduces energy consumption up to 60%.

5 years lifespan

Surface mounting installation

Suitable for damp location

UL and DLC

Glass-free

Mounting Option

A- Keyhole Slots for Surface Mounting

B- Wiring Knockouts

C- T-Bar Clip Mounting Hole

D- V-Hook Openings for Chain Mouting

Performance Data

Model	Wattage	Lumens	LxWxD inch
ZY-ST4FT24	24W	3120	48"x3.35"x3.56"
ZY-ST4FT30	30W	3900	48"x3.35"x3.56"
ZY-ST4FT40	40W	5200	48"x3.35"x3.56"
ZY-ST8FT60	60W	7800	95.9"x3.35"x3.56"
ZY-ST8FT68	68W	8840	95.9"x3.35"x3.56"
ZY-ST8FT80	80W	10400	95.9"x3.35"x3.56"

End Cap

Dimming Connection

L — BLACK — **DRIVER**

N — WHITE

BLUE(-) — Strip Light
RED(+)

VIOLET DIM (+) — 0-10V dimmer
GRAY DIM (-)
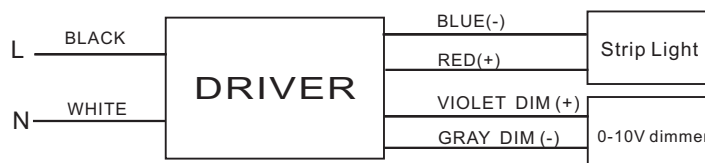
Ordering Guide

ZY	ST	4FT/8FT	24/30/40/60/68/80
Company Code	Product Type	Length	Wattage

LED VAPOR TIGHT

The LED Vapor Tight fixture is ideally used as utility lighting in parking garages, stairwells, and harsh environments. Perfect for dry or wet location applications.

DIMENSIONS

*Note: See *Product Specification* for exact dimensions.

26.3"/48.5"/50"

CERTIFICATIONS

c(UL)us LISTED
E481307

FC

LED lighting facts
LED Product Partner

FEATURES

- Stainless steelclips
- Optional 100% DR lens additive for impact resistance
- Built-in Constant Current LED Driver with High Efficient LED Module
- Suitable for ceiling mount or suspended mount
- Suitable for damp or dry environments
- Minimize labor and recycling costs
- Excellent light distribution and uniformity
- *Rated IP65*
- 5 Year Manufacturer's Warranty

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. Polybrite does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. Polybrite reserves the right to alter specifications without prior notice.

COMMON TECHNICAL DATA

Color Temperature	3000K-5000K
Beam Angle	120º degrees
CRI	>80
Operation Temperature	-30ºC to 40ºC
Lumen Efficiency	More than 135 LPW
Input Voltage	100-277VAC
Frequency	50-60Hz
Power Supply Efficiency	90%
Rated Life	50,000 hours
Power Factor	More than 0.99
LED Type	SMT 2835
Housing	Aluminum & Plastic

UV-05012019

LED VAPOR TIGHT

PRODUCT SPECIFICATION

Product Number	Wattage	CCT	Lumens	Housing	Length x Width x Height
ZY-STP8132-24W	24W	3000K-5000K	3500	Plastic	50"x 4"x4.5"
ZY-STP8232-48W	48W	3000K-5000K	6830	Plastic	50"x 6.5"x 4.5"
ZY-STP8332-72W	72W	3000K-5000K	10200	Plastic	50"x10.5"x 4.5"
ZY-STP8232-35W	35W	3000K-5000K	4550	Plastic	50"x 6.5"x 4.5"
ZY-STP8432-95W	95W	3000K-5000K	13250	Plastic	50"x 17.4"x 4.5"
ZY-STPA124-24W	24W	3000K-5000K	3500	Aluminum & Plastic	48.5"x 3.4"x 2.8"
ZY-STPA224-50W	50W	3000K-5000K	6840	Aluminum & Plastic	48.5"x 4.1"x 3"

ORDERING GUIDE

ZY	STPA/STP	8132-24W/8232-48W/8332-72W/8417-48W/8432-95W/124-24W/224-50W
Company Code	Housing Type	Wattage

MOUNTING OPTIONS

Stainless Steel Clip-on Brackets

WIRING CONNECTION

L BLACK

N WHITE

UV-05012019

LED UFO HIGH BAY

BOREALIS ℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.
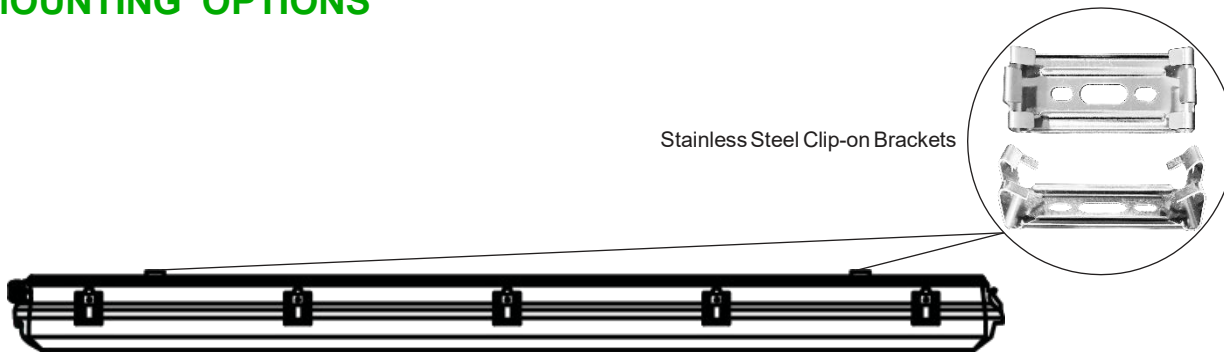
Advantages

- Suitable for surface Mounting
- Ideal for Harsh Environment Applications.
- 130 lumens per watt help to reduce pay back period of energy saving.
- Excellent light distribution and uniformity.
- Special design for best heat disspation and longer lifespan.
- 50000 hours working time and 5 years warranty.
- Optional 100% DR lens additive for impact resistance.
- Ideal for high moisture areas subject to the possibility of abuse.
- Built-in Constant Current LED Driver with High Efficient LED Module.
- Specilized on the rebate program in North American.

c(UL)us
E481307
LISTED

Common Technical Data

Color Temperature	2700K to 5000K	Input Voltage with ballast	100-277V/200-480V
Viewing Angle	120 degree	Frequency	50/60Hz
Color Consistency	4 steps	Power Factor	More than 0.99
CRI	More than 80	Rated Life	5 years
Operation Temperature	-20-45°C	LED Type	SMT LED
Efficiency	More than 130 LPW	Housing	Aluminum
Ip65 Wet Location		UL, cUL and FCC certified	

Ordering Guide

ZY	U	80W/100W/150W/200W	BDZ
Company Code	Product Code	Wattage	Housing option and dimming function

UV-05012019

Common Technical Data

Model	ZY-U80W BDZ	ZY-U100W BDZ	ZY-U150W BDZ	ZY-U200W BDZ
Power	80W	100W	150W	200W
Lumens	10800	13500	20250	27000
Size(inch)(D:WxH)	Diameter:15.01'x8.84'	Diameter:15.01'x8.84'	Diameter:15.01'x8.84'	Diameter:15.01'x8.84'
Color Temp	3000K,4000K, 5000K, 5700K			
Housing	AL and PC			
Operation Temp	-30°C to 45°C			
Life Span	50, 000 hours			
Driver	High efficiency driver			
Voltage range	AC100−277V or AC200-480V			
Frequency	50/60Hz			
Viewing Angle	120 degree			
CRI	>80			
PF	≥0. 99			
Power Efficiency	≥90%			

Dimensions

8.84'

15.01'

UV-05012019
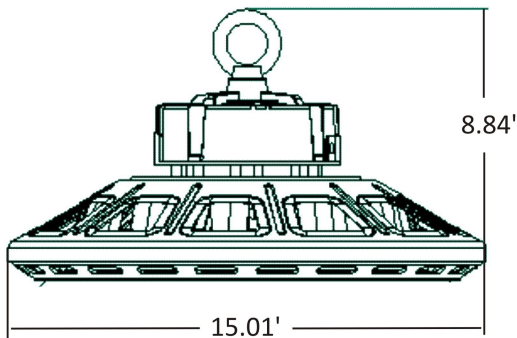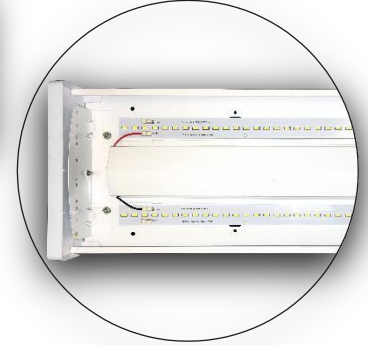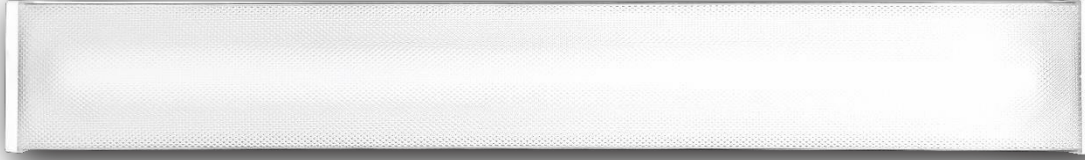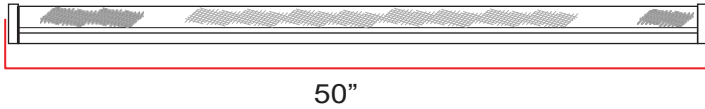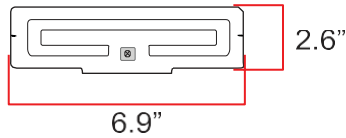
LED WRAP LIGHT
Wrap Light Fixture

The LED Wrap Light is the ideal replacement for existing fluorescent wrap lights. The Wrap Light offers an exceptional illumination perfect for a variety of settings such as shopping malls, offices, hospitals and classrooms.

DIMENSIONS

2.6"

6.9"

50"

CERTIFICATIONS

c(UL)us LISTED E481307   FC   LED lighting facts — LED Product Partner

FEATURES

• Suitable for ceiling mount or suspended mount
• Ideal for harsh environment applications
• 0-10V Dimmable Driver
• Special wrap diffuser design
• Minimize labor and recycling costs
• Excellent light distribution and uniformity
• 5 Year Manufacturer's Warranty

COMMON TECHNICAL DATA

Color Temperature	3000K-5000K
Beam Angle	120º degrees
CRI	>80
Operation Temperature	-30ºC to 40ºC
Lumen Efficiency	More than 120 LPW
Input Voltage	100-277VAC
Frequency	50-60Hz
Power Supply Efficiency	90%
Rated Life	50,000 hours
Power Factor	More than 0.99
LED Type	SMT 2835
Housing	Aluminum & Plastic

WARRANTY

UV-05012019

LED Wrap Light
Wrap Light Fixture

PRODUCT SPECIFICATION

Model Number	Length (FT)	Wattage	Color	Lumens	Input Voltage
ZY-STAP4FTLW	4FT	40W	4000-5000K	5200 lm	100-277 VAC

ORDERING GUIDE

ZY	STAP	4FT	LW
Company Code	Housing Type	Length	Wattage

MOUNTING OPTIONS

*Ceiling Mount or Suspended Mount
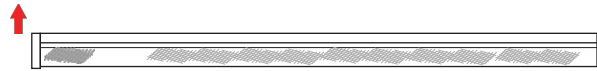
WIRING CONNECTION

Before connection: Please open cover, discard packaging materials, then secure shut cover.

L BLACK

N WHITE

Styrofoam Packaging
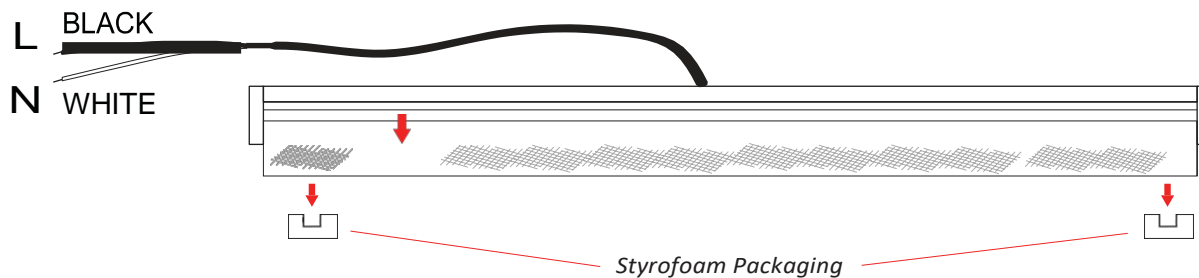
UV-05012019

LED Corn Lamps 80W - 140W

80W   100W   120W   140W

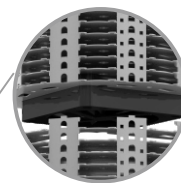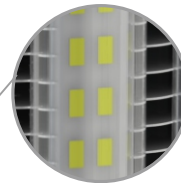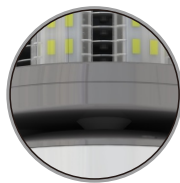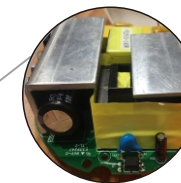| LED LG 5630 | SMD 2835 | Max. 1.6KG light and safe | Enclosed | LM 80 | c UL us LISTED | CE | RoHS COMPLIANT | Warranty 5 years |

Features
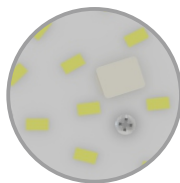
TE connector

Built-in Sunon fan
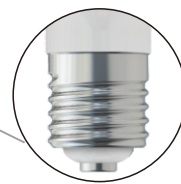
5630 SMD whole lamp 135LM/W
2835 SMD whole lamp 120LM/W

driver-lighter isolated design,
better for heat dissipation

High quality driver components：
SHINDENGEN IC, MOS and diodes (Japan)
Rubycon capacitors (Japan)
Operating temperature -35-60℃.
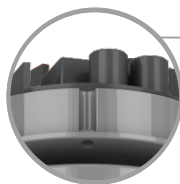
No flickering IP65 driver
Surge protection :4KV

E40/E39/EX39

Specifications(5630)

Model	Color	CCT	Lumen (lm) (±10%)	Power(w) (±10%)	Base	Voltage
QR39-080-AW-W-YH	White	5000K	11080	80	E39/EX39/E40	100-277V AC
QR39-080-AW-NW-YH	Neutral white	4000K	10550	80	E39/EX39/E40	100-277V AC
QR39-080-AW-WW-YH	Warm white	3000K	9820	80	E39/EX39/E40	100-277V AC
QR39-100-AW-W-YH	White	5000K	14030	100	E39/EX39/E40	100-277V AC
QR39-100-AW-NW-YH	Neutral white	4000K	13360	100	E39/EX39/E40	100-277V AC
QR39-100-AW-WW-YH	Warm white	3000K	12420	100	E39/EX39/E40	100-277V AC
QR39-120-AW-W-YH	White	5000K	16720	120	E39/EX39/E40	100-277V AC
QR39-120-AW-NW-YH	Neutral white	4000K	15920	120	E39/EX39/E40	100-277V AC
QR39-120-AW-WW-YH	Warm white	3000K	14810	120	E39/EX39/E40	100-277V AC
QR39-140-AW-W-YH	White	5000K	19460	140	E39/EX39/E40	100-277V AC
QR39-140-AW-NW-YH	Neutral white	4000K	18540	140	E39/EX39/E40	100-277V AC
QR39-140-AW-WW-YH	Warm white	3000K	17240	140	E39/EX39/E40	100-277V AC

Specifications(2835)

Model	Color	CCT	Lumen (lm) (±10%)	Power(w) (±10%)	Base	Voltage
QR39-080-AW-W-Y	White	5000K	9670	80	E39/EX39/E40	100-277V AC
QR39-080-AW-NW-Y	Neutral white	4000K	9210	80	E39/EX39/E40	100-277V AC
QR39-080-AW-WW-Y	Warm white	3000K	8470	80	E39/EX39/E40	100-277V AC
QR39-100-AW-W-Y	White	5000K	11920	100	E39/EX39/E40	100-277V AC
QR39-100-AW-NW-Y	Neutral white	4000K	11360	100	E39/EX39/E40	100-277V AC
QR39-100-AW-WW-Y	Warm white	3000K	10450	100	E39/EX39/E40	100-277V AC
QR39-120-AW-W-Y	White	5000K	14310	120	E39/EX39/E40	100-277V AC
QR39-120-AW-NW-Y	Neutral white	4000K	13630	120	E39/EX39/E40	100-277V AC
QR39-120-AW-WW-Y	Warm white	3000K	12530	120	E39/EX39/E40	100-277V AC
QR39-140-AW-W-Y	White	5000K	16880	140	E39/EX39/E40	100-277V AC
QR39-140-AW-NW-Y	Neutral white	4000K	16080	140	E39/EX39/E40	100-277V AC
QR39-140-AW-WW-Y	Warm white	3000K	14790	140	E39/EX39/E40	100-277V AC

Dimensions (Unit: mm)
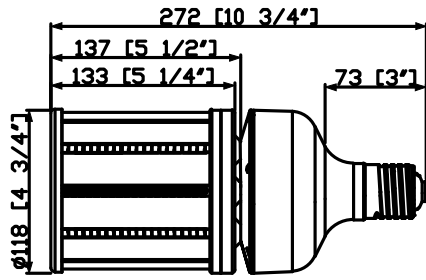
QR39-080-AW
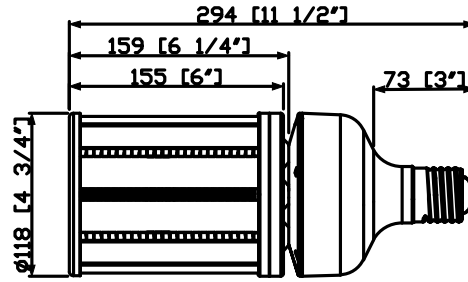
QR39-100-AW
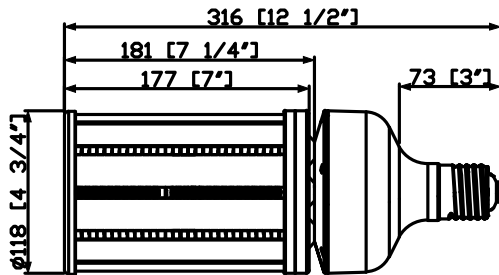
QR39-120-AW
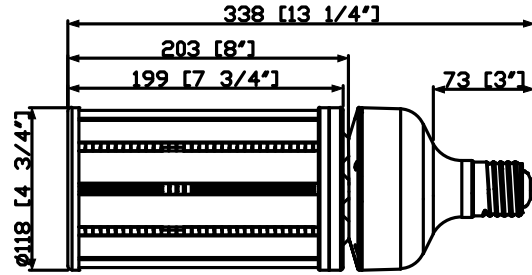
QR39-140-AW

Luminous Intensity Distribution Dragram

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

UNIT:cd
C0/180,295.0
C90/270,295.6
AVERAGE BEAM ANGLE(50%):295.3 DEG

QR39-080-AW-NW

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

UNIT:cd
C0/180,294.0
C90/270,296.2
AVERAGE BEAM ANGLE(50%):295.1 DEG

QR39-100-AW-NW

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

UNIT:cd
C0/180,295.9
C90/270,293.3
AVERAGE BEAM ANGLE(50%):294.6 DEG

QR39-120-AW-NW

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

UNIT:cd
C0/180,296.0
C90/270,293.8
AVERAGE BEAM ANGLE(50%):294.9 DEG
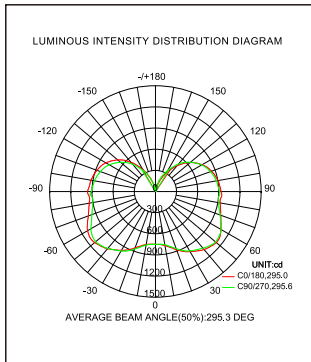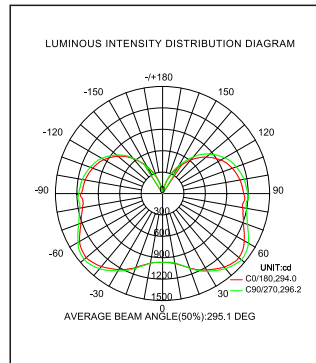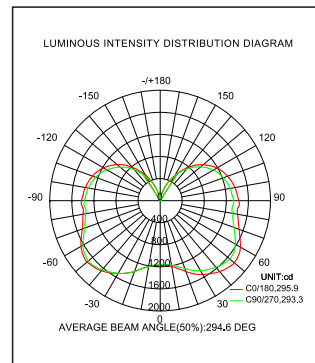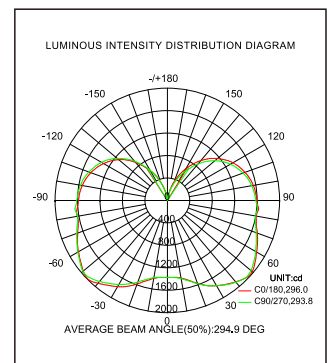
QR39-140-AW-NW

Installation

Replace CFL

L
100-277V AC
N
CFL

L
100-277V AC
N
LED Lamp

Replace HPS

L
100-277V AC
N
Ballast
Capacitor
Ignitor
HPS

L
100-277V AC
N
Ballast
Capacitor
Ignitor
LED Lamp
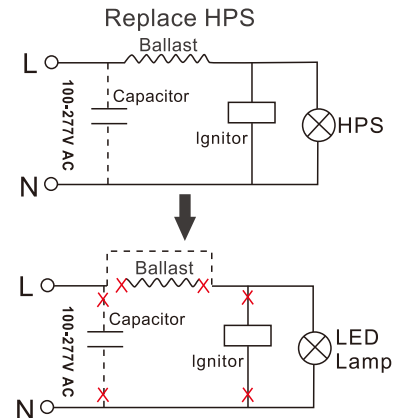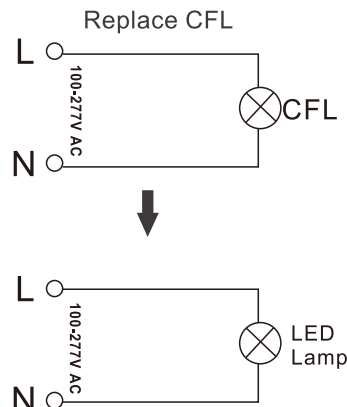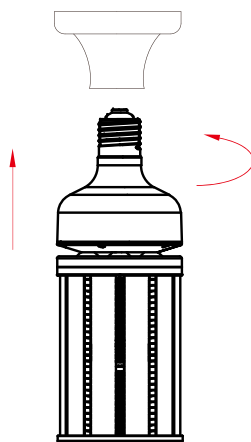
Main Applications

Widely use in slow lane, narrow lane, residential area, scenic spot, park, square and other public places for indoor or outdoor lighting and replace traditional sodium lamp and energy-saving lamp.

Packing information

Specifications	Packing qty.	Inner box dimension	carton dimension	Net weight	Gross weight
80W	12PCS	150*150*300mm	620*470*330mm	1.3KG	18KG
100W	12PCS	150*150*320mm	620*470*350mm	1.4KG	19KG
120W	12PCS	150*150*340mm	620*470*370mm	1.5KG	20KG
140W	12PCS	150*150*360mm	620*470*390mm	1.6KG	21KG

⚠ Notice

1. Please read the specification first, to make sure the service environment matches the condition in the specification before using.
2. Please confirm the applicable power supply before using.
3. Make sure the switch of product is off before connect to the power supply to prevent electric shock.
4. Operation against rules may damage your property even harm to your personal safety.
5. Dangerous high voltage, Non-professionals are not allowed to maintain the products.

LED Corn Lamp 12W - 54W

12W

20W

27W

36W

45W

54W

LM 80   cULus   CE   RoHS COMPLIANT   Warranty 5 years
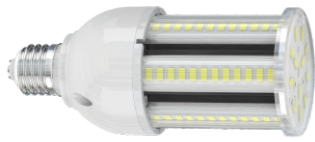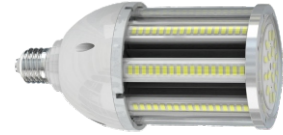
Features

1. 150lm/W. Use Brand LED LG 5630.

2. Pure Aluminum 1070, better heat dissipation .

3. Driver sealed with thermal paste, lower working temperature and waterproof.

4. Cove and holes surrounded for water flowing away

5. Transparent PC cover to protect LED.

6. IP64

7. Flame redartant material.

8. Replace HPS,MHL,HQL,HID,CFL Lamps, applicable in enclosed illuminares

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Specifications

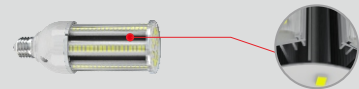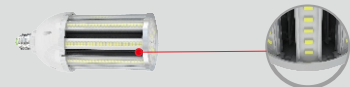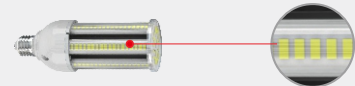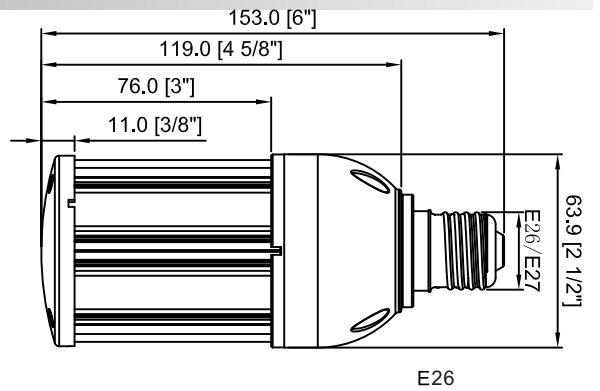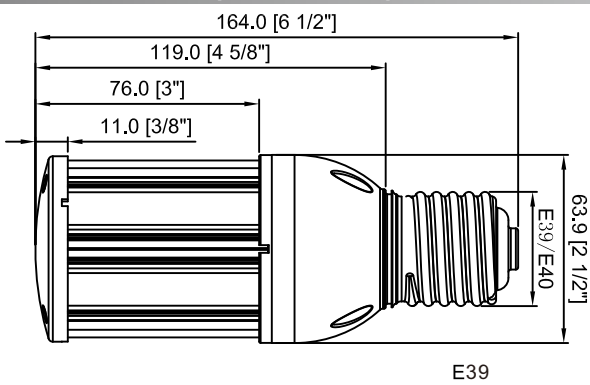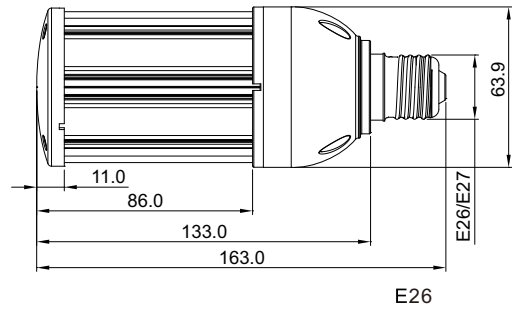| Model	Color	CCT	Lumen (lm) (±10%)	Power(w) (±10%)	Base	Voltage
LPLC-12W-50K-277V-E26	White	5000K	1850	12	E26	100-277V AC
LPLC-12W-40K-277V-E26	Neutral white	4000K	1800	12	E26	100-277V AC
LPLC-12W-30K-277V-E26	Warm white	3000K	1650	12	E26	100-277V AC
LPLC-12W-50K-277V-E39	White	5000K	1850	12	E39	100-277V AC
LPLC-12W-40K-277V-E39	Neutral white	4000K	1800	12	E39	100-277V AC
LPLC-12W-30K-277V-E39	Warm white	3000K	1750	12	E39	100-277V AC
LPLC-16W-65K-277V-E26	White	6500K	2250	16	E26	100-277V AC
LPLC-16W-40K-277V-E26	Neutral white	4000K	2200	16	E26	100-277V AC
LPLC-16W-30K-277V-E26	Warm white	3000K	2150	16	E26	100-277V AC
LPLC-16W-65K-277V-E39	White	6500K	2250	16	E39	100-277V AC
LPLC-16W-40K-277V-E26	Neutral white	4000K	2200	16	E39	100-277V AC
LPLC-16W-30K-277V-E26	Warm white	3000K	2150	16	E39	100-277V AC
LPLC-20W-50K-277V-E26	White	5000K	3050	20	E26	100-277V AC
LPLC-20W-40K-277V-E26	Neutral white	4000K	3000	20	E26	100-277V AC
LPLC-20W-30K-277V-E26	Warm white	3000K	2920	20	E26	100-277V AC
LPLC-20W-50K-277V-E39	White	5000K	3050	20	E39	100-277V AC
LPLC-20W-40K-277V-E39	Neutral white	4000K	3000	20	E39	100-277V AC
LPLC-20W-30K-277V-E39	Warm white	3000K	2920	20	E39	100-277V AC
LPLC-27W-50K-277V-E26	White	5000K	4100	27	E26	100-277V AC
LPLC-27W-40K-277V-E26	Neutral white	4000K	4050	27	E26	100-277V AC
LPLC-27W-30K-277V-E26	Warm white	3000K	3900	27	E26	100-277V AC
LPLC-27W-50K-277V-E39	White	5000K	4100	27	E39	100-277V AC
LPLC-27W-40K-277V-E39	Neutral white	4000K	4050	27	E39	100-277V AC
LPLC-27W-30K-277V-E39	Warm white	3000K	3900	27	E39	100-277V AC
LPLC-36W-50K-277V-E26	White	5000K	5470	36	E26	100-277V AC
LPLC-36W-40K-277V-E26	Neutral white	4000K	5400	36	E26	100-277V AC
LPLC-36W-30K-277V-E26	Warm white	3000K	5250	36	E26	100-277V AC
LPLC-36W-50K-277V-E39	White	5000K	5470	36	E39	100-277V AC
LPLC-36W-40K-277V-E39	Neutral white	4000K	5400	36	E39	100-277V AC
LPLC-36W-30K-277V-E39	Warm white	3000K	5250	36	E39	100-277V AC
LPLC-45W-50K-277V-E26	White	5000K	6960	45	E26	100-277V AC
LPLC-45W-40K-277V-E26	Neutral white	4000K	6750	45	E26	100-277V AC
LPLC-45W-30K-277V-E26	Warm white	3000K	6570	45	E26	100-277V AC
LPLC-45W-50K-277V-E39	White	5000K	6960	45	E39	100-277V AC
LPLC-45W-40K-277V-E39	Neutral white	4000K	6750	45	E39	100-277V AC
LPLC-45W-30K-277V-E39	Warm white	3000K	6570	45	E39	100-277V AC

LPLC-54W-50K-277V-E26	White	5000K	8375	54	E26	100-277V AC
LPLC-54W-40K-277V-E26	Neutral white	4000K	8230	54	E26	100-277V AC
LPLC-54W-30K-277V-E26	Warm white	3000K	7730	54	E26	100-277V AC
LPLC-54W-50K-277V-E39	White	5000K	8375	54	E39	100-277V AC
LPLC-54W-40K-277V-E39	Neutral white	4000K	8230	54	E39	100-277V AC
LPLC-54W-30K-277V-E39	Warm white	3000K	7730	54	E39	100-277V AC

Dimensions (Unit: mm)

LPLC-12W-XXK-277V-E39
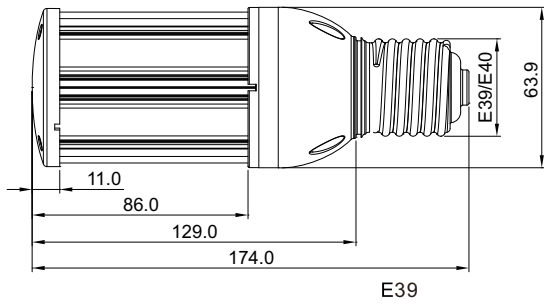
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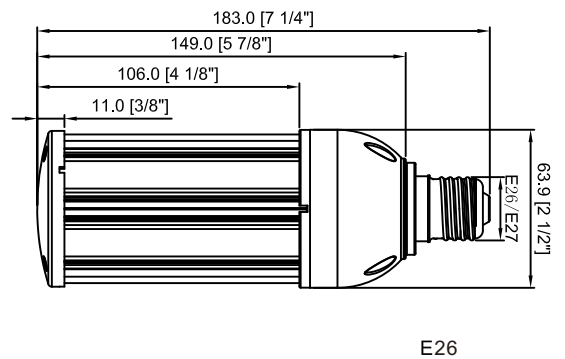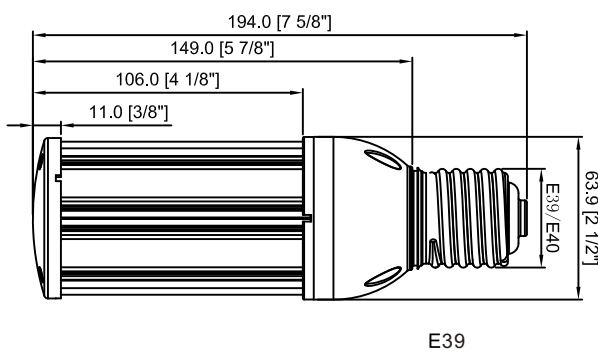
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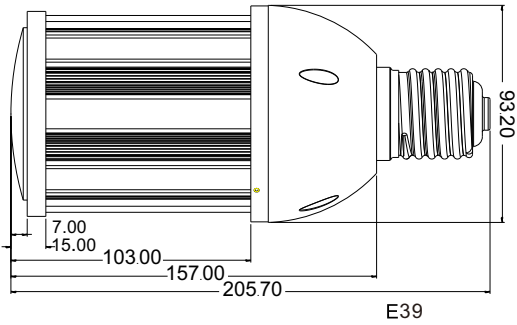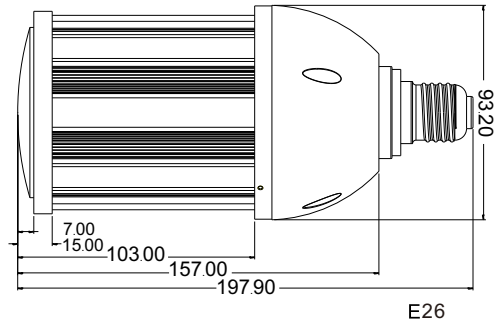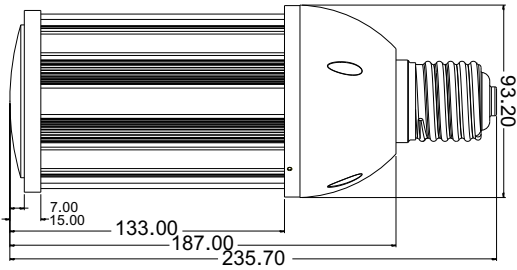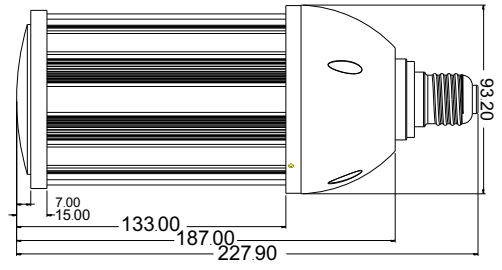
UV-05012019

93.20

7.00
15.00
103.00
157.00
205.70
E39

LPLC-27W-XXK-277V-E39

93.20

7.00
15.00
103.00
157.00
197.90
E26

93.20

7.00
15.00
133.00
187.00
235.70
E39

LPLC-36W-XXK-277V-E39

93.20

7.00
15.00
133.00
187.00
227.90
E26

93.20

7.00
15.00
164.00
218.00
266.70
E40

LPLC-45W-XXK-277V-E39

93.20

7.00
15.00
164.00
218.00
258.90
E27

93.20

7.00
15.00
164.00
218.00
266.70
E40

LPLC-54W-XXK-277V-E39

93.20

7.00
15.00
164.00
218.00
258.90
E27

Installation

Replace CFL

L — AC100-250V — ⊗CFL
N —

⬇

L — AC100-250V — ⊗LED Lamp
N —

Replace HPS

L — Ballast — Capacitor — Ignitor — ⊗HPS
N — AC100-250V

⬇

L — Ballast — Capacitor — Ignitor — ⊗LED Lamp
N — AC100-250V
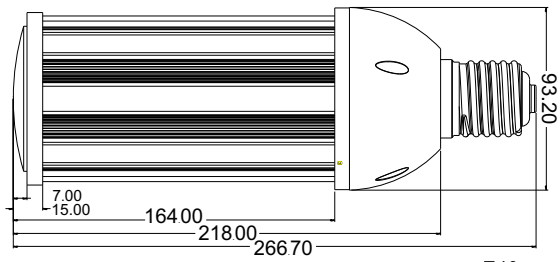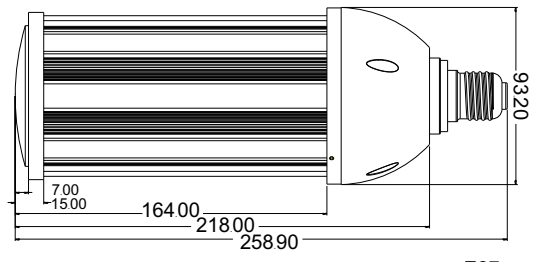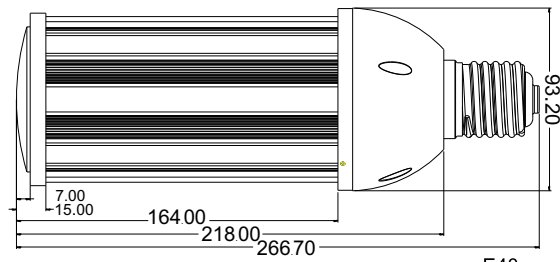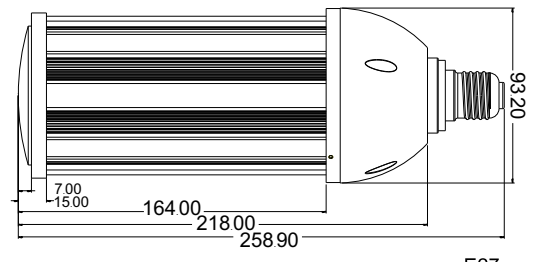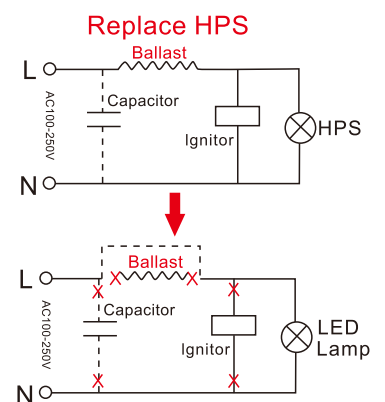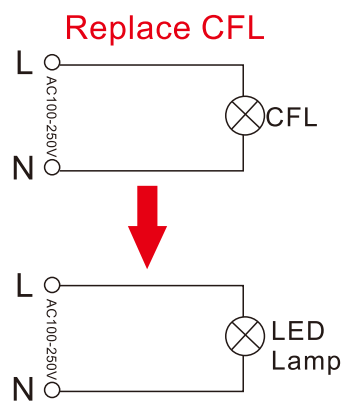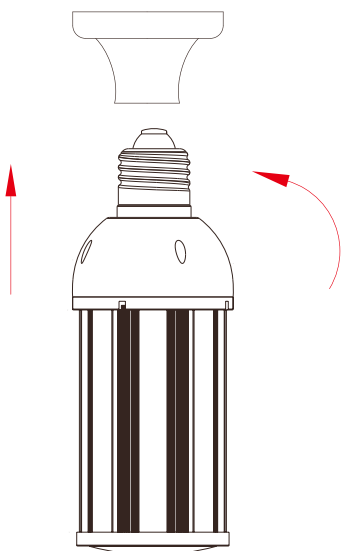
2017-2018/LED by PolyBrite

BOREALIS ℠
INNOVATIVE **LED** LIGHTING
by PolyBrite International, Inc.

DLC V4.2
T5-type B
Line Voltage

Double ended

Model	Voltage (V)	Lumens (lm)	Ref.Power (W)	CRI	CAP	Rated Life (hrs)
■ T5-4ft-3500lm-25W- BP	–	3500	25	83	G5	50,000
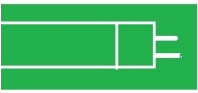
■ DLC V4.2 listed
● Available CCT: 3000K/3500K/4000K/5000K/6500K

UV-05012019

BOREALIS℠

INNOVATIVE **LED** LIGHTING

by PolyBrite International, Inc.

DLC V4.2
T5-Type A
Ballast Compatible
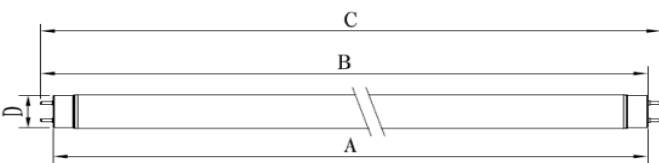
Dimension	Min	Max	Unit
A	/	1149.0	
B	1153.7	1156.1	
C	/	1163.2	mm
D	15.5	16.0	
Cap		G5	

Feature:

* Designed with thermal switch

* Compatible with mainstream electronic Ballasts

* Superior diffusion coating: durable, uniform, non-yellowing

Model	Voltage (V)	Lumens (lm)	Ref.Power (W)	CRI	CAP	Rated Life (hrs)
■ T5–4ft–3500lm–25W–DR	—	3500	25	83	G5	50,000

■ DLC V4.2 listed
● Available CCT: 3000K/3500K/4000K/5000K/6500K

Specifications

Model#	APS-40W-600-RFK-1/APS-26W-600-RFK-1
Description	2x2Ft LED Troffer Retrofit Kit
Power	40W/26W
Voltage Input	AC120~277V 50~60HZ
Lumen output	5400lm/3510lm
Color Temperature	4000K
CRI	Ra>80
Housing Finish	Steel base with white powder coating
Application	Indoor Only
Lens	Frosted diffuse PC lens
Operating Temp.	-20℃～55℃
IP Rating	IP20
Certificates	ETL/cETL(file# 4007551), DLC
warranty	5 years
Life Span	50,000 hours
Dimmable	0~10V dimmable
Item Weight	4.1 Kg (9.02 lbs)
Product Dimension	For 2'X2' troffer (533.4 x 533.4mm)
Pack Size	1pc
Packaging Dimension	24.4"L x 24.4"W x 3"H (619.76x619.76x76.2 mm)

Features

Quick Installation for each retrofit kit which only takes five minutes. 0-10V dimmable function helps to reduce operation cost.
135 lumens per watt helps to reduce pay back period of energy saving.
50000 hours working time and 5 years warranty
California T24 compliant

Order Information

Item Number	Description	Power	Voltage Input	Dimmable	CCT	Lumen Output	Certificates
APS-40W-600-RFK-1 APS-26W-600-RFK-1	2x2Ft LED Troffer Retrofit Kit 2x2Ft LED Troffer Retrofit Kit	40W 26W	120~277Vac 120 to 277Vac	Optional Optional	3000k 4000k 5000k	5400lm 3510lm	ETL/cETL, DLC

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Dimensions and Pictures

21"(533.4mm)

21"(533.4mm)

2.28"(57.94mm)   2.75"(69.85mm)

Accessories (optional)

part 1   part 2   part 3

Accessories package List

Part	Description	Quantity
1	Toggle Nut	2
2	Screw	2
3	Wire Nuts	*1or3

Note:
3 wire nuts for dimmable version,
1 wire nut for non-dimmable version.

LM79
LM80

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INNOVATIVE **LED** LIGHTING

2X4 Ft LED Troffer Retrofit Kit
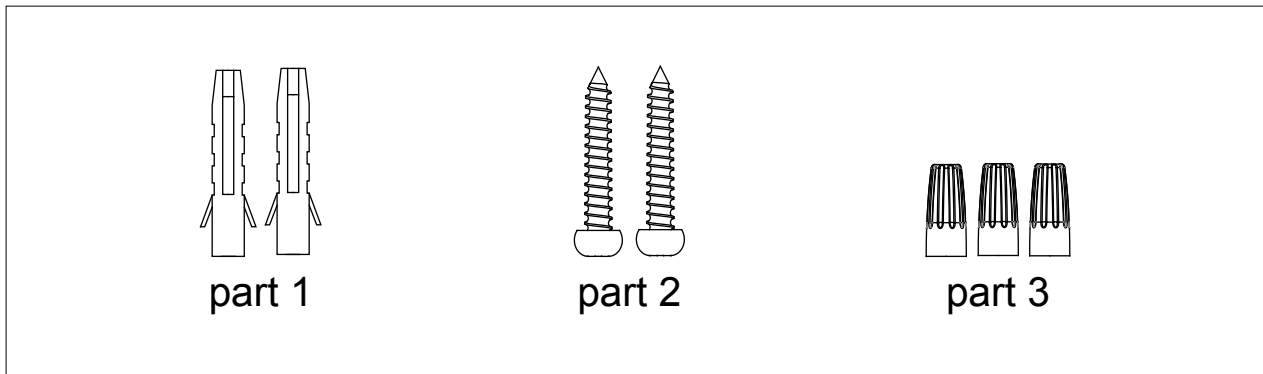
by PolyBrite International, Inc.

Specifications

Model#	APS-40W-600-RFK-1 or APS-52W-RFK-1
Description	2x4Ft LED Troffer Retrofit Kit
Power	40W/52W
Voltage Input	AC120~277V 50~60HZ
Lumen output	3800lm/5200lm
Color Temperature	4000K
CRI	Ra>80
Housing Finish	Steel base with white powder coating
Application	Indoor Only
Lens	Frosted diffuse PC lens
Operating Temp.	-20℃ ~ 55℃
IP Rating	IP20
Certificates	ETL/cETL(file# 4007551), DLC
warranty	5 years
Life Span	50,000 hours
Dimmable	0~10V dimmable
Item Weight	6.8 Kg (14.96 lbs)
Product Dimension	For 2'X4' troffer (533.4 x 1185 mm)
Pack Size	1pc
Packaging Dimension	48.4"L x 24.4"W x 3"H (1229.36 x 619.76 x 76.2 mm)

Features

- Quick Installation for each retrofit kit which only takes five minutes. 0-10V dimmable function
- helps to reduce operation cost.
- 135 lumens per watt helps to reduce pay back period of energy saving.
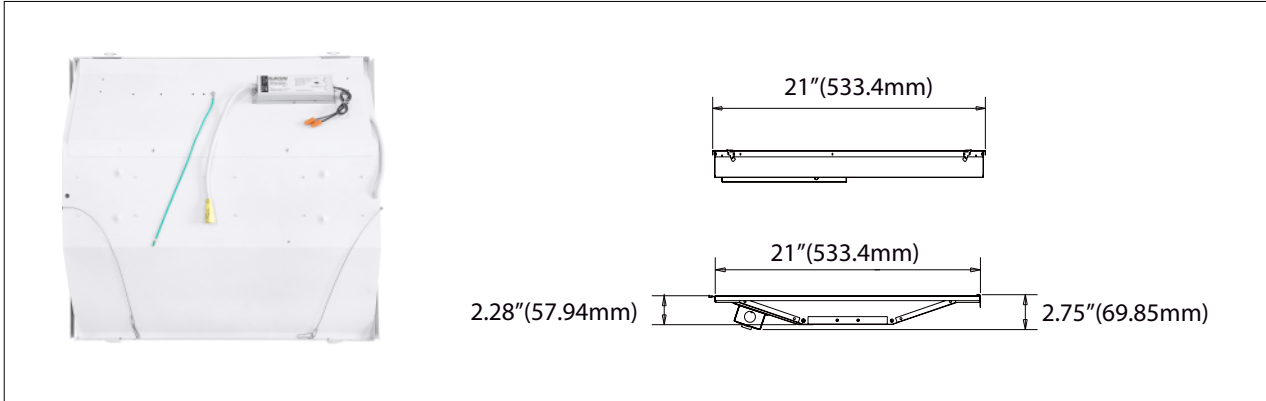- 50000 hours working time and 5 years warranty
- California T24 compliant

Order Information

Item Number	Description	Power	Voltage Input	Dimmable	CCT	Lumen Output	Certificates
APS-40W-1200-RFK-1 APS-40W-1200-RFK-1	2x4Ft LED Troffer Retrofit Kit	40W 52W	120~277Vac	Optional	3000k 4000k 5000k	3800lm 5200lm	ETL/cETL, DLC

LM79
LM80
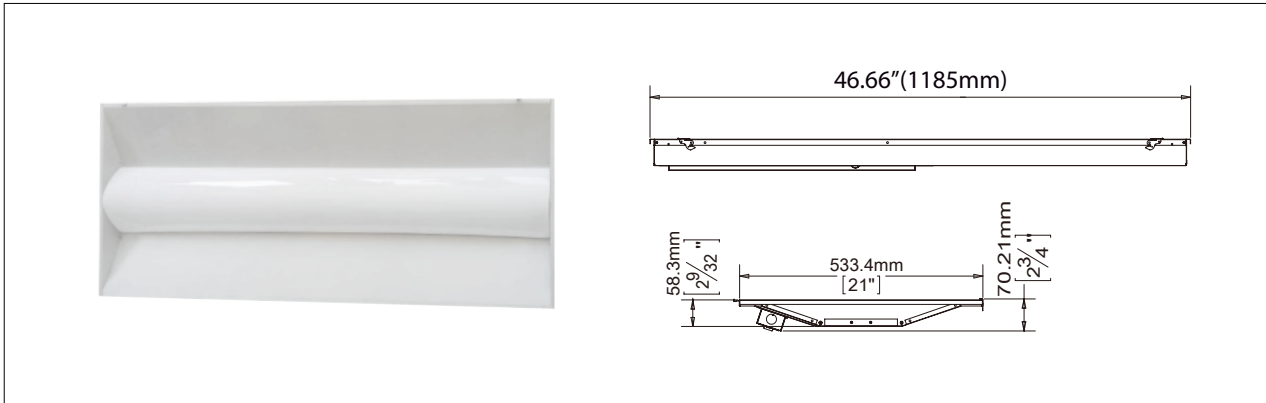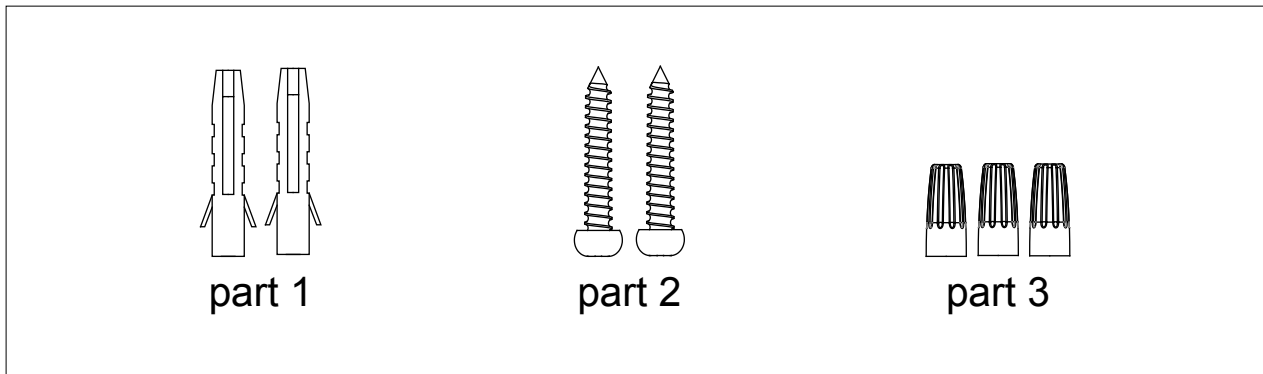
UV-05012019

Dimensions and Pictures

46.66″(1185mm)

58.3mm [2 9/32 "]   533.4mm [21"]   70.21mm [2 3/4]

Accessories (optional)

part 1

part 2

part 3

Accessories package List

Part	Description	Quantity
1	Toggle Nut	2
2	Screw	2
3	Wire Nuts	*1or3

Note:
3 wire nuts for dimmable version,
1 wire nut for non-dimmable version.

LM79
LM80

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Packaging

1pc/CTN   G.W.: 9.36 kg Dimension: 48.4"L x 24.4"W x 3"H (1229.36 x 619.76 x 76.2 mm)

24.4" (619.76mm)

3" (76.2mm)

48.4" (1229.36mm)
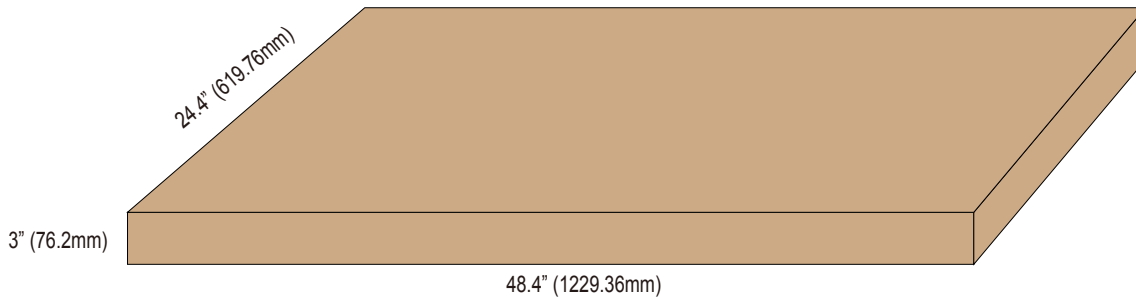
Container Loading QTY
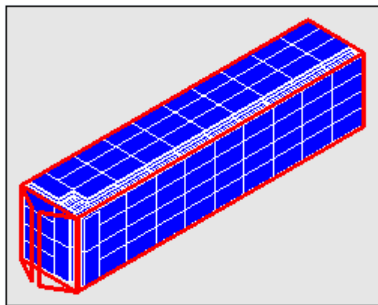
Size	Carton QTY	Product QTY	Volume	G.W.
40'hq	1098 ctn	1098 pcs	72.91m³	10277.28kg
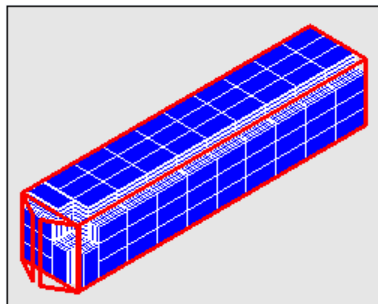
Size	Carton QTY	Product QTY	Volume	G.W.
40'gp	941 ctn	941 pcs	62.48 m³	8807.76 kg
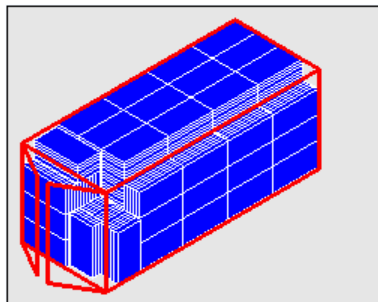
Size	Carton QTY	Product QTY	Volume	G.W.
20'gp	450 ctn	450 pcs	29.88m³	4212kg

LM79
LM80

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Troffer Retrofit Kits

Features

— DesignLights Consortium Listed (DLC)
— High lumen efficiency and high CRI
— Environmentally friendly with no mercury
— Utilizes magnets for easy install

— LED life 50,000 hours
— UL/cUL Listed, File number: E468047
— 5 years limited warranty
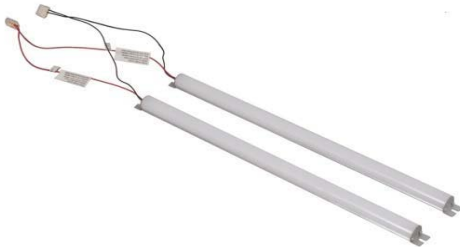
Specifications

Troffer Type	Product Model	Wattag	Color	CRI	Lumens	Retrofit	PF	THD
2x2-2L(4000K)	ZY-10W600 BONS	20W	4000K	> 80	2600	2 strips - 2'x2' troffers	>0.9	<20%
2x2-2L(5000K)	ZY-10W600 BONS	20W	5000K	> 80	2600	2 strips - 2'x2' troffers	>0.9	<20%
2x2-3L(4000K)	ZY-10W600 BONS	30W	4000K	> 80	3900	3 strips - 2'x2' troffers	>0.9	<20%
2x2-3L(5000K)	ZY-10W600 BONS	30W	5000K	>80	3900	3 strips - 2'x2' troffers	>0.9	<20%
2x4-2L(4000K)	ZY-20W1200 BONS	40W	4000K	> 80	5200	2 strips - 2'x4' troffers	>0.9	<20%
2x4-2L(5000K)	ZY-20W1200 BONS	40W	5000K	> 80	5200	2 strips - 2'x4' troffers	>0.9	<20%
2x4-3L(4000K)	ZY-20W1200 BONS	60W	4000K	> 80	7800	3 strips - 2'x4' troffers	>0.9	<20%
2x4-3L(5000K)	ZY-20W1200 BONS	60W	5000K	>80	7800	3 strips - 2'x4' troffers	>0.9	<20%

*nominal lumen output

UL LED Troffer Light(0-10V Dimming)

PF >0.9 | CRI >80 | DLC DLC LISTED | c(UL)us | Warranty 5 years

Features

1.Visual uniformity
The back-lit LED troffer produces a very soft natural light and gives a comfortable lighting environment with a radian cover.

2.LED efficiency
high lumen LED efficacy,100lm/w(DLC 4.2 standard version)&125LM/W(DLC 4.2 premium version) for option.   .

3.Luminaire construction
Powder coat painted die-rolling iron housing,with fireproof junction box on the back for electronic connection,PC cover with milky color for lighting distribution.

4.Driver
Universal voltage 100-277VAC with integral 0-10V dimming system,no flicker. For non-dimming requirements,do not connect to dimming control during installation.

5.Cost and energy saving
-50% or more energy saving than fluorescent tubes
-low heat generation,extra energy savings through reduction of HVAC load.
-Easy installation: only 3 steps in 2 minutes, labor cost saving

6.long life time
more than 50,000 hours life time and 5 years warranty.

Specifications

Model	CCT	SIZE (feet)	Color	LED Type	Lumen(lm) (±10%)	CRI	Beam angle	Power(W) (±10%)	Voltage (V)	Dimmer	Current (A)	PF
APS-40W-600-50K-4	5000K	2*2	cool white		4200 lm	≥80	110°					
APS-40W-600-40K-4	4000K	2*2	natural white	2835	4140 lm	≥80	110°	40W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-40W-600-30K-4	3000K	2*2	warm white		4040 lm	≥80	110°					
APS-30W-600-50K-4	5000K	2*2	cool white		3810 lm	≥80	110°					
APS-30W-600-40K-4	4000K	2*2	natural white	2835	3750 lm	≥80	110°	30W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-30W-600-30K-4	3000K	2*2	warm white		3720 lm	≥80	110°					
APS-40W-600-50K-5	5000K	2*2	cool white		5200 lm	≥80	110°					
APS-40W-600-40K-5	4000K	2*2	natural white	2835	5080 lm	≥80	110°	40W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-40W-600-30K-5	3000K	2*2	warm white		5040 lm	≥80	110°					
APS-50W-1200-50K-4	5000K	2*4	cool white		5200 lm	≥80	110°					
APS-50W-1200-40K-4	4000K	2*4	natural white	2835	5100 lm	≥80	110°	50W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-50W-1200-30K-4	3000K	2*4	warm white		5000lm	≥80	110°					
APS-40W-1200-50K-4	5000K	2*4	cool white		5080 lm	≥80	110°					
APS-40W-1200-40K-4	4000K	2*4	natural white	2835	5040 lm	≥80	110°	40W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-40W-1200-30K-4	3000K	2*4	warm white		5000 lm	≥80	110°					
APS-50W-1200-50K-5	5000K	2*4	cool white		6350 lm	≥80	110°					
APS-50W-1200-40K-5	4000K	2*4	natural white	2835	6300 lm	≥80	110°	50W	AC100-277V 50/60Hz	0-10V	0.5	>0.95
APS-50W-1200-30K-5	3000K	2*4	warm white		6250 lm	≥80	110°					

Applications

General lighting such as offices,hotels,home,shops,hospitals,schools.

Dimensions (Unit: feet)

2*2feet
23.74"
23.74"
3.58"

2*4feet
47.72"
23.74"
3.58"
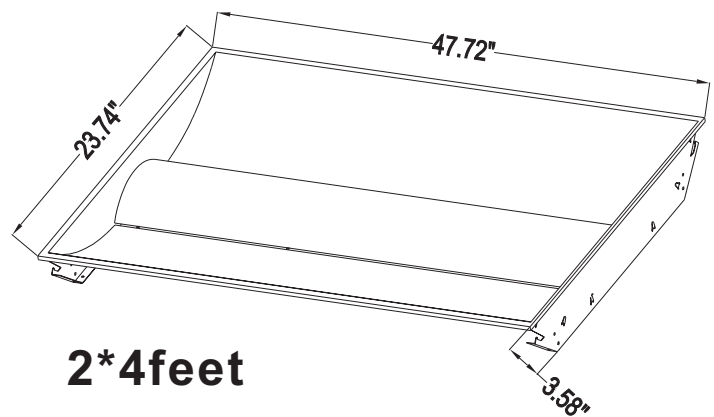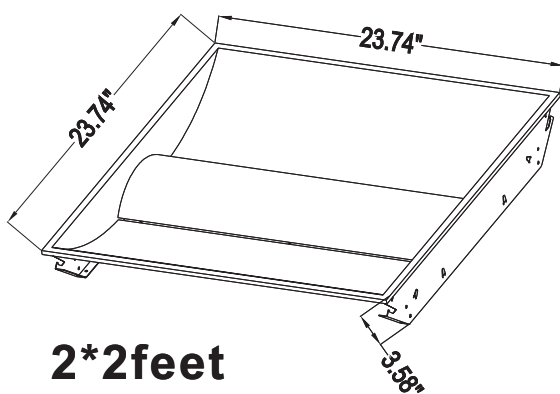
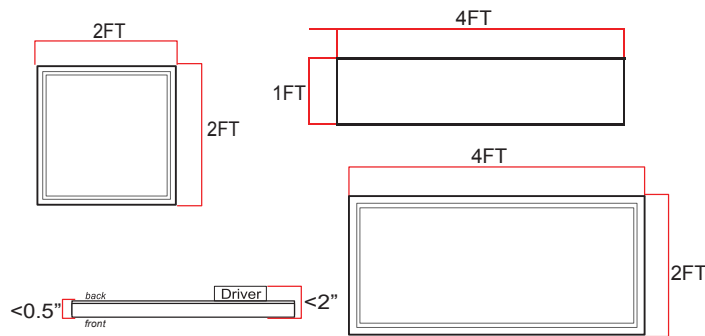All dimension tolerances is +0.5mm unless otherwise noted.

LED PANEL
Advanced Edge Lit Flat Panel

The LED Advanced Panel is typically used to replace 1x4, 2x2 and 2x4 fluorescent troffers. The panels are designed to lay in drop ceilings in offices, schools, showrooms, airports, retail locations, and healthcare facilities. Ultra modern design with an industry leading 130 lumens per watt, the Advanced Panel is the ideal fluorescent lay-in replacement.

DIMENSIONS

2FT | 2FT
4FT | 1FT
4FT | 2FT
<0.5" | back | Driver | <2" | front

CERTIFICATIONS

c(UL)us LISTED E358956 · c(UL)us CLASSIFIED E358902 · RoHS COMPLIANT

FC · TÜVRheinland® · LED lighting facts LED Product Partner · DLC QPL LISTED PREMIUM

FEATURES

- Edge-lit LED array with translucent diffuser provides uniform illumination
- Ultra-slim Aluminum Frame <0.5"
- External UL Listed Class-2 Constant Current Driver
- Multiple mounting options
- Suitable for damp locations
- Minimize labor and recycling costs
- Ease of installation and maintenance
- 0-10V dimming
- 5 Year Manufacturer's Warranty
- Emergency Battery option available

COMMON TECHNICAL DATA

Color Temperature	3000K to 5000K
Beam Angle	120 Degrees
CRI	> 80
Operation Temperature	-20ºC to 50ºC
Efficiency	More than 125 LPW
Input Voltage	100-277VAC, *347V Available
Input Frequency	50/60Hz
Power Factor	More than 0.99
Rated Life	50,000 hours
LED Type	SMD 2835
Housing	Aluminum
Dimming	0-10V

WARRANTY

This product has a warranty for a period of 5 years from the date of purchase. The warranty is invalid in the case of improper installation, tampering, or removal of the Q.C. date label. Installation in an improper working environment or installation not according to the current edition of the National Electric Code also invalidates the warranty. Should this product fail during the warranty period, it will be replaced free of charge, subject to correct installation and return of the faulty unit. PolyBrite® does not accept responsibility for any installation costs associated with the replacement of this product. This warranty is in addition to the statutory rights in the country of purchase. PolyBrite® reserves the right to alter specifications without prior notice.

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INNOVATIVE LED LIGHTING
by PolyBrite International, Inc.

LED PANEL
Advanced Edge Lit Flat Panel

PRODUCT SPECIFICATION

| Product Number	Length (FT)	Wattage	Color	Lumens	Dimmable	Input Voltage
ZY-P1-40W XDZ ADVANCED Premium Driver	1'x4'	40W	3000K-5000K	5000 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P4-30W XDZ ADVANCED Premium Driver	2'x2'	30W	3000K-5000K	3900 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P4-40W XDZ ADVANCED Premium Driver	2'x2'	40W	3000K-5000K	5000 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P4-60W XDZ ADVANCED Premium Driver	2'x2'	60W	3000K-5000K	7500 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P7-40W XDZ ADVANCED Premium Driver	2'x4'	40W	3000K-5000K	5000 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P7-50W XDZ ADVANCED Premium Driver	2'x4'	50W	3000K-5000K	6250 lm	0-10V Dimming	AC100-277V / 100-382V
ZY-P7-75W XDZ ADVANCED Premium Driver	2x4'	75W	3000K-5000K	9375 lm	0-10V Dimming	AC100-277V / 100-382V

ORDERING GUIDE

ZY	P1/P4/P7	30W/40W/60W/50W/75W	XDZ	3000K-5000K	Advanced
Company Code	Panel Size	Wattage	Dimming	CCT	Driver

INSTALLATION INSTRUCTIONS

Retrofit Procedure:

1. Turn OFF power to the fixture at the breaker panel before installation.
2. Open the diffuser from the light fixture.
3. Remove the fluorescent tubes and dispose of these properly as they may contain mercury.
4. Remove the ballast cover and disconnect host fixture ballast from main.
5. Remove the fixture (A).
6. Open Driver box and connect AC wires and dimming wire (B).
7. Lay-in Panel into the ceiling (C).
8. Switch ON power to the fixture at the breaker panel

(A)

(B) Driver Box

ACL (BLACK)
ACL (WHITE)
~ AC INPUT
DIM- DIM+
0-10V Dimming

(C) Driver
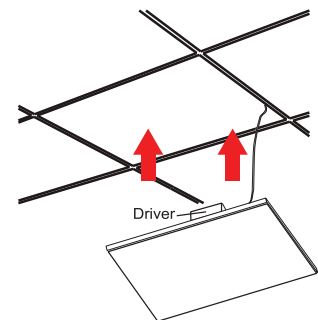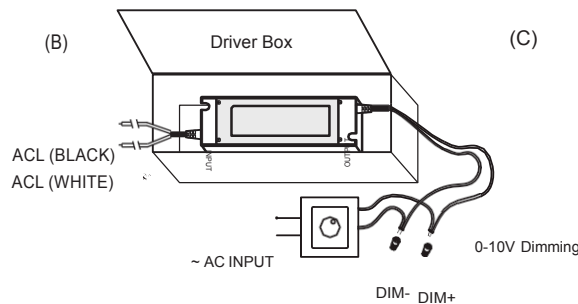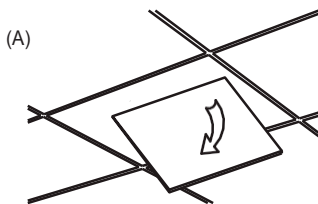
CAUTION

- Risk of electric shock- perform installation with gloves.
- Access above ceiling required. DO NOT cover fixture with insulation liner or similar material.
- These lamps are to be used with a light dimmer.
- If the lamp or luminaire exhibits undesirable operation (i.e. buzzing, flickering, etc.), immediately turn off power remove the lamp from luminaire and contact manufacturer.
- Do not make mass installation before sample testing.
- Risk of fire, DO NOT install this lamp in pre heated luminaire