LED LUMINAIRE SERIES™

EPCO's LED Luminaires are available in nineteen (19) configurations that are vapor tight, provide unparalleled performance, improved efficacy, more lumens per watt, and are the reliable, sustainable solid-state illumination system solution.

These energy efficient luminaires provide significant energy savings and improved thermal dissipation that translates into optimized lumen output suitable for operating in indoor, outdoor, and "wet" location environments.

With a minimum life expectancy of 200,000 hours, these luminaires consume less than half the wattage output of a 4-foot luminaire using two (2) or three (3) 32-Watt T8 fluorescent lamps.

EPCO's LED Luminaires are shipped ready for immediate installation.

Industry Standard Illumination Solutions and Warranty

EPCO's LED Luminaires are ETL listed and meet UL 1598 Standards. We back our LED Luminaires with a 5-year warranty.

Meets the requirements of the 2017 National Electrical Code: Articles 410.10(A), 410.104(A), 410.130(G)(1), 547.5(C)(1) and (2), and 547.8(A) and (B).

> **Note:** EPCO LED Luminaires do not meet provisions for:
> • Class I Locations — where flammable vapors and gasses may be present.
> • Class II Locations — where combustible dust may be found, or
> • Class III Locations — hazardous because of the presence of ignitable fibers.

*DesignLights Consortium (DLC V4.0) Approved: The Qualified Products List (QPL) from DLC is a resource for Electric Utilities and Regional Electric Cooperatives (RECs) Program Administrators to help them select what solid-state illumination products will be included in their Energy Efficiency Programs.

RoHS | NEMA® 4X | c ETL us LISTED | DLC QPL LISTED | IP65 CERTIFIED | IP66 CERTIFIED | IP67 CERTIFIED | LM79 | LM80 | 5 YEARS WARRANTY

** Certain chemicals that may exist in end-user locations release airborne contaminants that can impact the integrity and safety of key luminaire components that contain acrylic or polycarbonate material.

The Chemical Resistance of Plastics Chart (posted on EPCO's website) provides an overview of those chemical compounds where this LED Luminaire should not be installed!

FOR STANDARD ILLUMINATION APPLICATIONS

TYPICAL APPLICATIONS:

- Parking Garages and Parking Canopies (DLC Approved)*
- Food Processing Facilities
- Commercial Kitchens
- Refrigerators and Freezers
- Warehouses**
- Industrial Facilities**
- Commercial Buildings
- Elevator Shafts
- Outdoor Shopping Centers
- Storage Buildings
- Pedestrian and Road Tunnels
- Car Washes**
- Laundries
- Locker Rooms
- Saunas
- And more...

SPECIFICATIONS

Environmental	Suitable for indoor, outdoor, and wet locations
Ambient Operating Temperature	• -20°F to 122°F (-30°C to 50°C) Suitable for elevated ambient temperatures • 0ºF to 113ºF (-17ºC to 45ºC) Battery Backup Option
Operating Voltage	120V - 277 @ 50/60 Hz
Power Factor	.9 or Higher
Total Harmonic Distortion	Less than 20%
LED Driver Efficiency	83% (typical) @ 120VAC — Full Load
	83% (typical) @ 220VAC — Full Load
Ingress Protection Rating	IP65, IP66, IP67 / NEMA 4X
Dimming Control	10%-100%; Requires 0-10V Luminaire Control Switch/Device
Industry Certifications	ETL Listed (per UL 1598/8750); RoHS Compliant; LM-79** and LM-80 Reports
Diffuser	Frosted Smooth Diffuser standard on all LED Luminaires

epco ® **ENGINEERED PRODUCTS CO.**

LED LUMINAIRE SERIES

STANDARD LED LUMINAIRES									
Lamp Equivalent	**Luminaire Model**	**Luminaire Length**	**Luminaire Type**	**Luminaire Designation** FX = New Fixture	**Luminaire Application** S = Standard	**Correlated Color Temperature (CCT)***	**Color Rendering Index (CRI)**	**Total Luminaire Wattage**	**Lumens** (Brightness)	**Luminous Efficacy** (Energy Efficiency)
(3) F17T8	G2LED-FX-S3528	G2	LED	FX	S	3500K	80 min.	27	2693	100
(3) F17T8	G2LED-FX-S4128	G2	LED	FX	S	4100K	80 min.	27	2746	101
(3) F17T8	G2LED-FX-S5028	G2	LED	FX	S	5000K	80 min.	27	2801	103
(2) F32T8	G4LED-FX-S3034	G4	LED	FX	S	3000K	80 min.	31	3538	114
(2) F32T8	G4LED-FX-S3534	G4	LED	FX	S	3500K	80 min.	31	3609	116
(2) F32T8	G4LED-FX-S4134	G4	LED	FX	S	4100K	80 min.	31	3681	118
(2) F32T8	G4LED-FX-S5034	G4	LED	FX	S	5000K	80 min.	31	3755	121
(3) F32T8	G4LED-FX-S3051	G4	LED	FX	S	3000K	80 min.	49	6219	126
(3) F32T8	G4LED-FX-S3551	G4	LED	FX	S	3500K	80 min.	49	6343	129
(3) F32T8	G4LED-FX-S4151	G4	LED	FX	S	4100K	80 min.	49	6469	132
(3) F32T8	G4LED-FX-S5051	G4	LED	FX	S	5000K	80 min.	49	6599	134
(4) F32T8	G8LED-FX-S3068	G8	LED	FX	S	3000K	80 min.	62	7077	114
(4) F32T8	G8LED-FX-S3568	G8	LED	FX	S	3500K	80 min.	62	7219	116
(4) F32T8	G8LED-FX-S4168	G8	LED	FX	S	4100K	80 min.	62	7363	118
(4) F32T8	G8LED-FX-S5068	G8	LED	FX	S	5000K	80 min.	62	7510	121
(6) F32T8	G8LED-FX-S30102	G8	LED	FX	S	3000K	80 min.	98	12437	126
(6) F32T8	G8LED-FX-S35102	G8	LED	FX	S	3500K	80 min.	98	12686	129
(6) F32T8	G8LED-FX-S41102	G8	LED	FX	S	4100K	80 min.	98	12939	132
(6) F32T8	G8LED-FX-S50102	G8	LED	FX	S	5000K	80 min.	98	13198	134

Daylight 5000K **Bright White 4100K** **Warm White 3500K** **Extra Warm White 3000K**
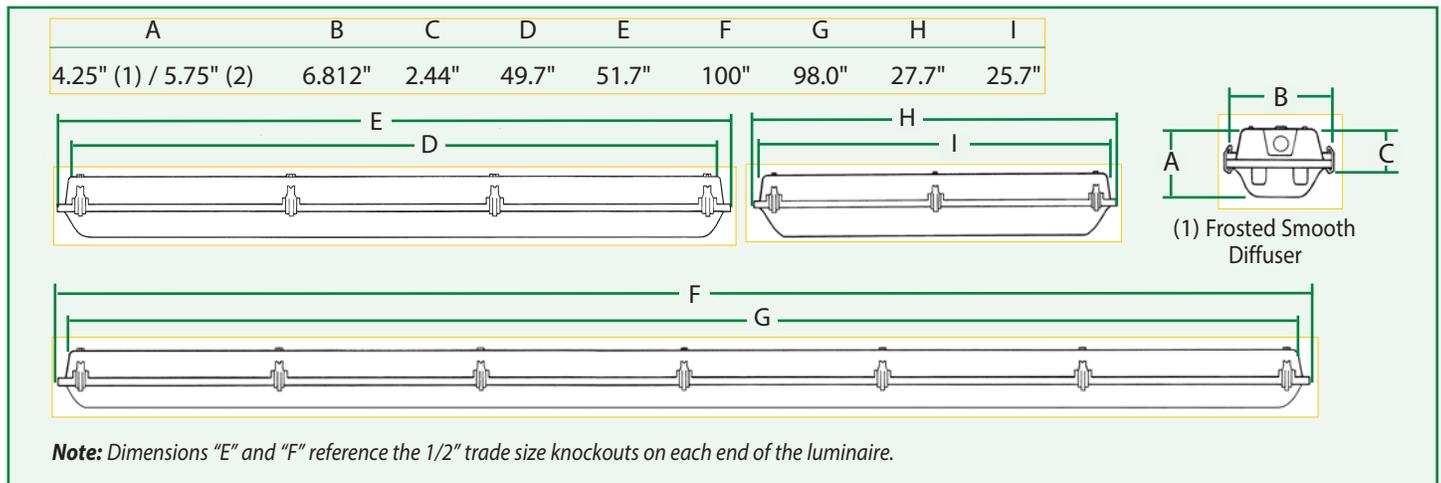
Note: Nominal color designation in units of Kelvin

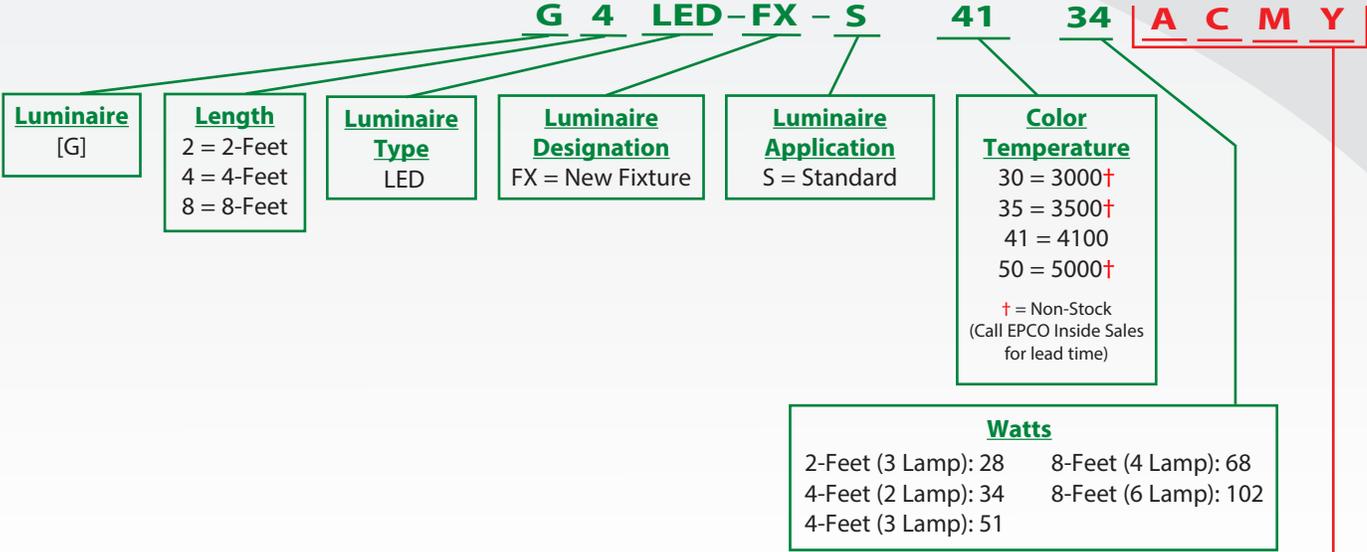**SHIP WEIGHT (APPROXIMATE):**
- 2-Foot LED Luminaire: 8 lbs. (3.62kg)
- 4-Foot LED Luminaire: 13 lbs. (4.98kg)
- 8-Foot LED Luminaire: 21 lbs. (8.61kg)

Note: Bulk packaging is available for the Standard LED Luminaire Series that eliminates individual carton packaging — Select "Option Z" in the Ordering Information Example (25 or 50 per skid).

A	B	C	D	E	F	G	H	I
4.25" (1) / 5.75" (2)	6.812"	2.44"	49.7"	51.7"	100"	98.0"	27.7"	25.7"

(1) Frosted Smooth Diffuser

Note: *Dimensions "E" and "F" reference the 1/2" trade size knockouts on each end of the luminaire.*

Specifications subject to change without prior notice.

ORDERING EXAMPLE

G 4 LED – FX – S 41 34 | A C M Y |

Luminaire	Length	Luminaire Type	Luminaire Designation	Luminaire Application	Color Temperature
[G]	2 = 2-Feet 4 = 4-Feet 8 = 8-Feet	LED	FX = New Fixture	S = Standard	30 = 3000† 35 = 3500† 41 = 4100 50 = 5000† † = Non-Stock (Call EPCO Inside Sales for lead time)

Watts

2-Feet (3 Lamp): 28	8-Feet (4 Lamp): 68
4-Feet (2 Lamp): 34	8-Feet (6 Lamp): 102
4-Feet (3 Lamp): 51	

LED Luminaire Series Options

The Standard LED Luminaire can be built to your specifications by adding options as "part" of your part number.

Option	Notes	
A. 6-Foot Power Cord (PSS6)	Straight Plug, 13 AMP	
A1. 6-Foot Twist Lock Power Cord	L5-15P, 120V	
A2. 6-Foot Twist Lock Power Cord	L7-15P, 277V	
C. Acetal (Plastic) Latches	<u>Not</u> recommended for the following applications: Swimming Pools because of the chlorine; Car Washes because of the chemicals used; Food Processing because of the cleaning chemicals; Agriculture because of the ammonia gas.	
E. Emergency LED Backup Driver	Non-Stock — Call EPCO Inside Sales for lead time	
F. One (1) 1/2" Water Resistant Hub	Required for Pendant Mounting a 2-foot or 4-foot luminaire.	When adding the Water Resistant Hubs the UL listing changes from a "wet" location to a "damp" location luminaire.
G. Two (2) 1/2" Water Resistant Hubs	Required for Pendant Mounting an 8-foot luminaire.	
H. One (1) 3/4" Water Resistant Hub	Required for Pendant Mounting a 2-foot or 4-foot luminaire.	
M. Ceiling and Wall Mount Mounting Hardware	Powder Coated, Standard (Not NSF approved for food service applications)	
M1. Ceiling and Wall Mount Mounting Hardware	Stainless Steel (National Sanitation Foundation approved)	
M2. Wall Mount Stainless Steel Mounting Hardware	45º Angle (National Sanitation Foundation approved)	
P. Clear Ribbed Diffuser		
P1. Frosted Ribbed Diffuser		
R1. PIR Occupancy Sensor *(for dry locations)* **R2.** PIR Occupancy Sensor *(for dry locations/cold locations)* **R3.** PIR Occupancy Sensor *(for wet locations)* **R4.** Microwave Occupancy Sensor *(On/Off Only)* **R5.** Microwave Occupancy Sensor *(0-10V Dimming 30%)* **R6.** Microwave Occupancy Sensor *(0-10V Dimming 50%)*	Two Occupancy Sensors are available: A. **High/Medium Bay Passive Infrared (PIR) Occupancy Sensors:** Recommended for ceiling heights 15-feet or higher. PIR sensors function as an automatic lighting control in high and medium bay applications. B. **Microwave Sensors:** Recommended for ceiling heights 15-feet or lower. The microwave sensor detects the slightest movement in the occupancy zone. Detection is sensed through doors, glass, or thin walls.	
S. Stainless Steel Latches		
Y. Surface Mount Bracket	EPCO will pre-drill a hole in the luminaire housing to facilitate pulling the supply conductors from the junction box and into the luminaire housing.	
Z. Bulk Packaging	25 or 50 per skid (eliminates individual carton packaging on the job site). When entering Bulk Packaging orders, do not include Mounting Hardware or Tamper Resistant Screws in your part number.	

Specifications subject to change without prior notice.

LED LUMINAIRE SERIES

LED RETROFIT CONVERSION KITS FOR VAPOR TIGHT LUMINAIRES

LED RetroFit Conversion Kits for Vapor Tight Luminaires feature a single row of LEDs mounted to a gear tray.

These kits can easily be field installed by a qualified electrician and include:

- High efficacy, long-life LED circuit board mounted directly to the gear tray for maximum thermal dissipation.
- Modular wiring to simplify and expedite supply line connections to the existing lighting system.
- LED Driver includes:
  — Auto-compensate feature to ensure "fail safe" operation.
  — Inputs for dimmable lighting control.
- Frosted Smooth Diffuser mitigates glare and provides color-rendering index of 81 and above.

LED RETROFIT KIT FOR VAPOR TIGHT LUMINAIRES
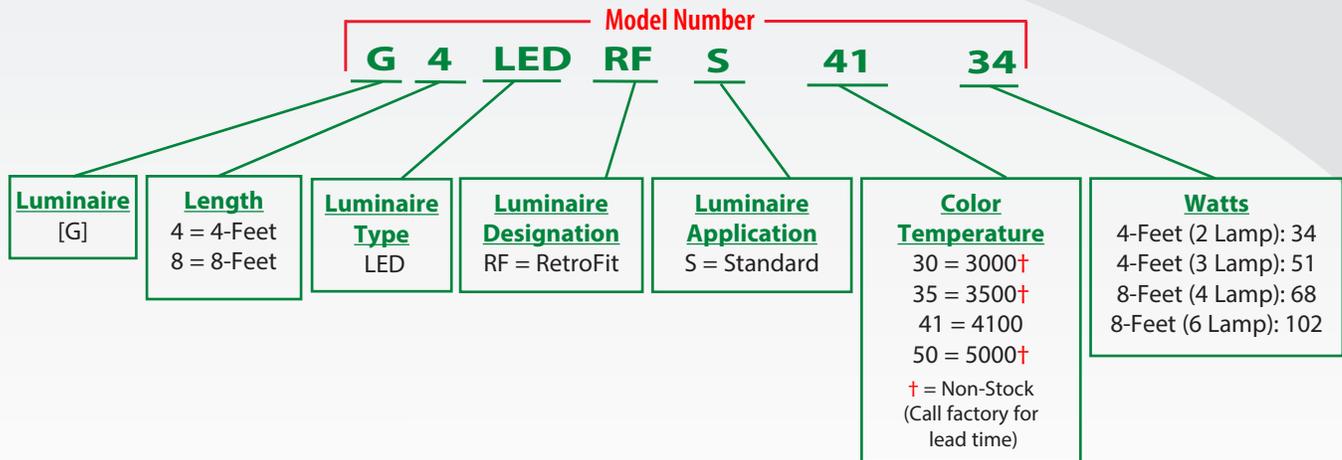
6 Latches

8 Latches

Note: *If the luminaire housing you want to retrofit has six (6) latches (4-foot) or twelve (12) latches (8-foot) total, EPCO's LED RetroFit Kit will not fit! Contact our Inside Sales Department (800.336.1976 or sales@engproducts.com) for more information.*

SPECIFICATIONS

Environmental	Suitable for indoor, outdoor, and wet locations
Ambient Operating Temperature	• -20°F to 122°F (-30°C to 50°C) Suitable for elevated ambient temperatures • 0°F to 113°F (-17°C to 45°C) Battery Backup Option
Operating Voltage	120V - 277 @ 50/60 Hz
Power Factor	.9 or Higher
Total Harmonic Distortion	Less than 20%
LED Driver Efficiency	83% (typical) @ 120VAC — Full Load
	83% (typical) @ 220VAC — Full Load
Ingress Protection Rating	IP65, IP66, IP67 / NEMA 4X when used with EPCO's Luminaire Housing
Dimming Control	10%-100%; Requires 0-10V Luminaire Control Switch/Device
Industry Certifications	ETL Classified (per UL 1598/8750); RoHS Compliant; LM-79** and LM-80 Reports
Diffuser	Frosted Smooth Diffuser standard on LED RetroFit Kits for Vapor Tight Luminaires

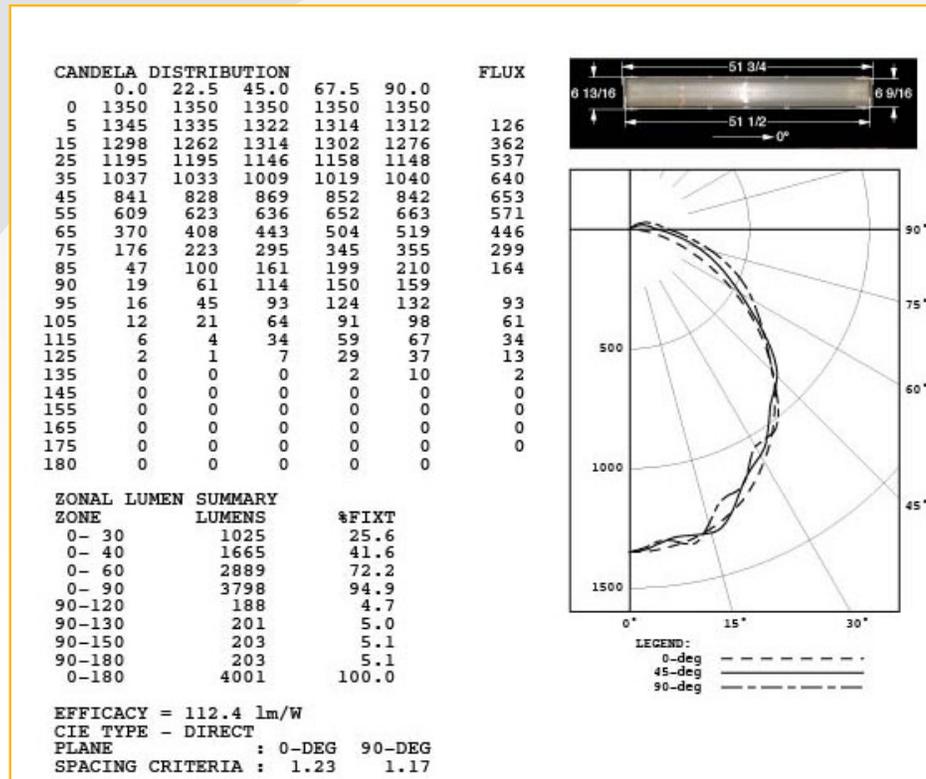Specifications subject to change without prior notice.

ORDERING CHART

Model Number

| G | 4 | LED | RF | S | 41 | 34 |

| **Luminaire**
[G] | **Length**
4 = 4-Feet
8 = 8-Feet | **Luminaire Type**
LED | **Luminaire Designation**
RF = RetroFit | **Luminaire Application**
S = Standard | **Color Temperature**
30 = 3000†
35 = 3500†
41 = 4100
50 = 5000†

† = Non-Stock
(Call factory for lead time) | **Watts**
4-Feet (2 Lamp): 34
4-Feet (3 Lamp): 51
8-Feet (4 Lamp): 68
8-Feet (6 Lamp): 102 |

RETROFIT LED LUMINAIRES

Lamp Equivalent	Luminaire Length	Luminaire Type	Luminaire Designation RF = RETROFIT	Luminaire Application S = Standard	Correlated Color Temperature (CCT)*	Color Rendering Index (CRI)	Total Luminaire Wattage	Lumens (Brightness)	Luminous Efficacy (Energy Efficiency)
(2) F32T8	G4	LED	RF	S	3000K	80 min.	31	3538	114
(2) F32T8	G4	LED	RF	S	3500K	80 min.	31	3609	116
(2) F32T8	G4	LED	RF	S	4100K	80 min.	31	3681	118
(2) F32T8	G4	LED	RF	S	5000K	80 min.	31	3755	121
(3) F32T8	G4	LED	RF	S	3000K	80 min.	49	6219	126
(3) F32T8	G4	LED	RF	S	3500K	80 min.	49	6343	129
(3) F32T8	G4	LED	RF	S	4100K	80 min.	49	6469	132
(3) F32T8	G4	LED	RF	S	5000K	80 min.	49	6599	134
(4) F32T8	G8	LED	RF	S	3000K	80 min.	62	7077	114
(4) F32T8	G8	LED	RF	S	3500K	80 min.	62	7219	116
(4) F32T8	G8	LED	RF	S	4100K	80 min.	62	7363	118
(4) F32T8	G8	LED	RF	S	5000K	80 min.	62	7510	121
(6) F32T8	G8	LED	RF	S	3000K	80 min.	98	12437	126
(6) F32T8	G8	LED	RF	S	3500K	80 min.	98	12686	129
(6) F32T8	G8	LED	RF	S	4100K	80 min.	98	12939	132
(6) F32T8	G8	LED	RF	S	5000K	80 min.	98	13198	134

Specifications subject to change without prior notice.

LED LUMINAIRE SERIES

PHOTOMETRICS FOR LED LUMINAIRES

Standard LED Luminaire - P/N: G4LED-FX-S4134

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CANDELA DISTRIBUTION                    FLUX
        0.0   22.5   45.0   67.5   90.0
   0   1350   1350   1350   1350   1350
   5   1345   1335   1322   1314   1312     126
  15   1298   1262   1314   1302   1276     362
  25   1195   1195   1146   1158   1148     537
  35   1037   1033   1009   1019   1040     640
  45    841    828    869    852    842     653
  55    609    623    636    652    663     571
  65    370    408    443    504    519     446
  75    176    223    295    345    355     299
  85     47    100    161    199    210     164
  90     19     61    114    150    159
  95     16     45     93    124    132      93
 105     12     21     64     91     98      61
 115      6      4     34     59     67      34
 125      2      1      7     29     37      13
 135      0      0      0      2     10       2
 145      0      0      0      0      0       0
 155      0      0      0      0      0       0
 165      0      0      0      0      0       0
 175      0      0      0      0      0       0
 180      0      0      0      0      0       0

   ZONAL LUMEN SUMMARY
   ZONE        LUMENS        %FIXT
   0- 30        1025         25.6
   0- 40        1665         41.6
   0- 60        2889         72.2
   0- 90        3798         94.9
  90-120         188          4.7
  90-130         201          5.0
  90-150         203          5.1
  90-180         203          5.1
   0-180        4001        100.0

EFFICACY = 112.4 lm/W
CIE TYPE - DIRECT
PLANE            : 0-DEG   90-DEG
SPACING CRITERIA :  1.23     1.17
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LEGEND:
0-deg — — — — —
45-deg ————————
90-deg — — — — —

Luminaire Quality Metrics
LM-79 Report

EPCO's LM-79 Report captures the LED Luminaire's overall electrical characteristics and photometric measurements (lumen output) performance. This report is a snapshot of spatial distribution of light and color attributes under specified operating conditions. This report does not address lifetime ratings for these LED Luminaires, or changing performance over time (e.g., lumen maintenance), or the LED Luminaire housing internal temperature.

Most important, EPCO's LM-79 data is intended to provide you with objective luminaire product evaluation comparisons relative to the Standard LED Luminaire's performance requirements, and is required by voluntary labeling programs such as the DesignLights Consortium (DLC).

LIMITED WARRANTY

Engineered Products Company (herein known as EPCO) warrants at its sole option, after a failure is confirmed as a true defect in materials or workmanship, EPCO will replace or refund, any of the following LED Luminaire Products for a period of five (5) years from original purchase. This warranty statement applies to the original purchaser and is not transferable. If the product fails before the 5-year period expires, please return this product with your original invoice to: *Engineered Products Company, Attention: Return Materials Department, 5401 Smetana Drive, Minnetonka, Minnesota 55343.*

This Limited Warranty does not apply to any of the following:

- Disassembly of LED Driver, LED Strip, or Luminaire Housing by the end-user or the end-user's agent.
- Severe damage or deformation to the appearance of the LED Driver, LED Strip, or Luminaire.
- Damage to the LED Driver or LED Strip input (+) or output (-) conductors.
- LED Driver or Luminaire identification codes and/or other serial numbers that have been erased, altered, modified, or damaged.
- Damage to the LED Driver, LED Strip, or Luminaire caused by natural disasters.
- Must be installed per installation instructions and local building code.
- Any Luminaire or Luminaire Housing that was incorrectly installed by drilling holes, puncturing, piercing or any other means that will alter the product's integrity.
- Damage caused by the use of parts, components, and/or other equipment(s) that is not compatible, suitable, or unauthorized by EPCO for use with any Luminaire.
- Damage resulting from the use of any Luminaire in what EPCO, at its sole discretion, considers extreme applications.
- Product damage as determined by EPCO to be caused by a crash, impact, or obvious signs of abuse to any Luminaire.
- The Chemical Resistance of Plastics Chart (posted on EPCO's website) provides an overview of those chemical compounds where these luminaires should not be installed.
- There are no charge-backs for any type of labor allowance required to remove, re-install, or re-power any Luminaire and/or the replacement with a new luminaire.

ENGINEERED PRODUCTS CO.