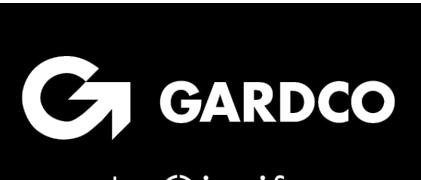




**Site & Area**  
PureForm  
LED bollard



**Wall Mount**  
PureForm  
LED wall sconce



**Site & Area**  
EcoForm  
ECF-S small area light



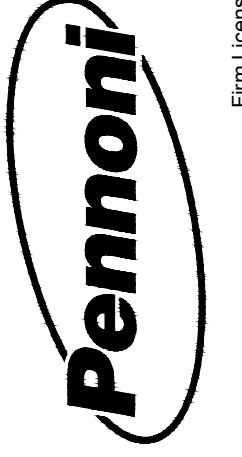
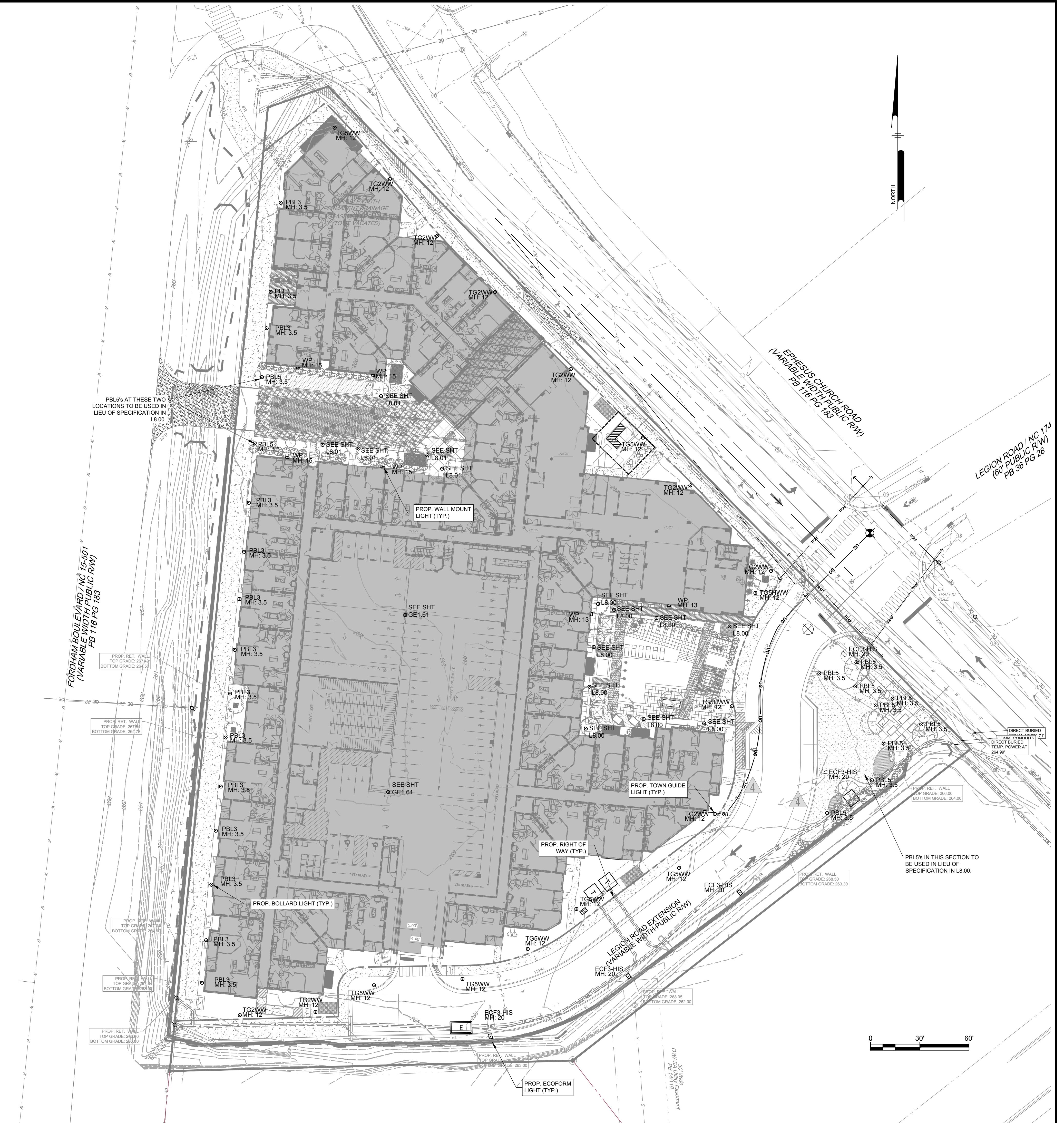
**Urban**  
TownGuide  
PBPD103  
Classic T Post Top



Schedule					
Symbol	Label	QTY	Manufacturer	Catalog	Input Power
▪	ECF3-HIS	5	GARDCO	ECF-S-32L-700-NW-G2-3-HIS	72.9
○	PBL3	14	GARDCO	PBL-14L-450-WW-G2-3-UNV	23.1
○	PBL5	12	GARDCO	PBL-14L-450-WW-G2-5-UNV	23.1
○	TG2WW	9	LUMEC	PBDP103-50W64LED3K-MP-PC-C-LE2	50.3
○	TG5WW	7	LUMEC	PBDP103-50W64LED3K-MP-PC-C-LE5	50.3
○	TG5HWW	2	LUMEC	PBDP103-95W128LED3K-MP-PC-C-LE5	95.5
□	WP	6	GARDCO	PWS-48L-300-WW-G2-4	46.8

#### GENERAL NOTES:

- REFER TO LANDSCAPE DRAWINGS FOR ADDITIONAL LANDSCAPE LIGHTING.
- REFER TO ELECTRICAL DRAWINGS FOR CIRCUITING ON FIXTURES A, G, GA, H2, WP.
- THERE ARE ADDITIONAL ARCHITECTURAL FIXTURES FOR EMERGENCY OR ENTRY LIGHTING, AND LOW VOLTAGE AMENITY LIGHTING THAT ARE NOT INCLUDED IN THIS PHOTOMETRIC ANALYSIS.
- SEE SHEET CS2202 FOR OVERALL SITE PHOTOMETRIC PLAN.



Firm License  
F-1267  
5430 Wade Park Boulevard, #106  
Raleigh, NC 27607  
T 919.929.1173 F 919.933.6548

**MILLENNIUM CHAPEL HILL**  
1301 FORDHAM BLVD  
CHAPEL HILL, NORTH CAROLINA

#### LIGHTING PLAN

MILLENNIUM CHAPEL HILL APARTMENTS, LLC  
3411 RICHMOND AVENUE, FIFTH FLOOR  
HOUSTON, TX 77046

DINCo20001

06/25/2021

1" = 30'

KNB

PCB

**CS2201**

SHEET 16 OF 40



by Signify

## Site &amp; Area

## PureForm

## LED bollard



Gardco PureForm LED bollard PBL integrates a sleek, low profile design, extraordinary light output, and energy savings into an innovative pedestrian scale luminaire. PureForm bollard features a high performance optical system designed to achieve wide spacings and full cutoff performance. Three heights available for a customized look. IP66 optics ensure dust or moisture will never interfere with performance.

Project: \_\_\_\_\_  
 Location: \_\_\_\_\_  
 Cat.No: \_\_\_\_\_  
 Type: \_\_\_\_\_  
 Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
 Notes: \_\_\_\_\_

## Ordering guide

example: PBL-42-14L-450-NW-G2-5-UNV

Prefix	Shaft Height	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage
<b>PBL</b>							
<b>PBL PureForm bollard</b>							
	36 Standard Shaft 36"	14L 14 LEDs (full ring)	100 100 mA	WW-G2 Warm White 3000K, 70CRI Generation 2	Type 3 3 Type 3	Leave blank for no battery	120 120V
	42 Standard Shaft 42"		200 200 mA			EBP Emergency battery <sup>2,8,11</sup>	208 208V
	60 Standard Shaft 60"		350 350 mA	NW-G2 Neutral White 4000K, 70CRI Generation 2	Type 5 5 Type 5		240 240V
			450 450 mA	CW-G2 Cool White 5000K, 70CRI Generation 2 <sup>1</sup>			277 277V
			600 600 mA				347 347V
			800 800 mA				480 480V
			1050 1050mA				UNV 120-277V (50/60Hz)
<b>Options</b>							
Dimming controls		Motion sensing		Photo-sensing		Electrical	
						Finish	
DD	O-10V External dimming (by others) <sup>4,5</sup>	IMRI	Integral infrared <sup>7,12</sup>	PCB	Photocontrol Button <sup>9,13</sup>	<b>Fusing</b>	
FAWS	Field Adjustable <sup>4,5</sup>					F1 Single (120, 277, 347VAC) <sup>9</sup>	Textured
SW	Interface module for SiteWise <sup>3,4,5,6</sup>					F2 Double (208, 240, 480VAC) <sup>9</sup>	BK Black
LLC	Wireless controls without PIR sensor <sup>4,5,6</sup>					F3 Canadian Double Pull (208, 240, 480VAC) <sup>9</sup>	WH White
BL	Bi-level functionary with motion sensor <sup>4,12</sup>						BZ Bronze
<b>DynaDimmer:</b> Automatic Profile Dimming <sup>4,5</sup>							DGY Dark Gray
CS50	Security 50% Dimming, 7 hours						MGY Medium Gray
CM50	Median 50% Dimming, 8 hours					<b>Customer specified</b>	
CS30	Security 30% Dimming, 7 hours					RAL Specify optional color or RAL (ex: RAL7024)	
CM30	Median 30% Dimming, 8 hours					CC Custom color (Must supply color chip for required factory quote)	

1. Extended lead times apply. Contact factory for details.

2. Not available in 100, 200 or 350mA.

3. Available in 120V or 277V only.

4. Not available with other control options.

5. Not available with motion sensor.

6. Not available with photocontrol.

7. Available only with BL dimming control.

8. Not available with SW, LLC, and CS/CM.

9. Must specify input voltage.

10. Available in 120V only.

11. Not available in 347 or 480V.

12. Not available in 100, 200, and 1050mA.

13. Not available with SW or LLC.





**Gardco PureForm LED wall sconce PWS** with precision optics offers a sleek, low profile design that will complement a range of architectural styles. PureForm wall sconce provides up to 21,800 lumens to accommodate multiple mounting heights, and is available with Type 2, 3, 4, as well as our back light control optics. A full range of control options is available for additional energy savings. Optional emergency battery backup option is available for path-of-egress and is integral to the luminaire.

Project: \_\_\_\_\_  
Location: \_\_\_\_\_  
Cat.No: \_\_\_\_\_  
Type: \_\_\_\_\_  
Lamps: \_\_\_\_\_ Qty: \_\_\_\_\_  
Notes: \_\_\_\_\_

**Ordering guide**
**example: PWS-48L-500-NW-G2-2-UNV-DGY**

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options					Finish
							Dimming controls			Motion-sensing lens	Photo-sensing	
<b>PWS</b> PureForm wall sconce	<b>48L</b> 48 LEDs 300mA <sup>1</sup>	300	<b>WW-G2</b> Warm White 3000K, 70 CRI Generation 2	2	EBPC Emergency Battery Pack	<b>UNV</b> 120-277V	DD 0-10V External dimming (controls by others) <sup>4</sup>	IMRI2 <sup>15</sup> Integral with #2 lens	PCB Photocontrol Button <sup>7,8,12</sup>	Fusing	Textured  BK Black WH White BZ Bronze DGY Dark Gray MGY Medium Gray  Customer specified  RAL Specify optional color or RAL (ex: RAL7024) CC Custom color (Must supply color chip for required factory quote)	
		400	400mA	3	Cold Weather 1,3,10	HVU 347-480V	DCC Dual Circuit Control <sup>4,5,6,9</sup>	IMRI3 <sup>15</sup> Integral with #3 lens		F1 Single (120, 277, 347VAC) <sup>8</sup>		
		500	500mA	4	Type 4		FAWS Field Adjustable Wattage Selector <sup>4,5</sup>			F2 Double (208, 240, 480VAC) <sup>8</sup>		
		600	600mA	BLC	Leave blank to omit an emergency option	120 208 240 240V	SW Interface Module for SiteWise <sup>3,4,6</sup>			F3 Canadian Double Pull (208, 240, 480VAC) <sup>8</sup>		
		700	700mA	CW-G2 Back light control			LCC Integral wireless module <sup>4,6,7,11,14</sup>			Surge Protection (10kA is standard)		
	<b>64L</b> 64 LEDs 600mA	500	NW-G2 Neutral White 4000K, 70 CRI Generation 2			208 240 240V	BL Bi-level functionality <sup>4,14</sup>		SP2 Increased 20kA			
		600	WY-G2 Warm Yellow 2700K, 80 CRI Generation 2 <sup>2</sup>			277 277V	CS50 Security 50% Dimming, 7 hours CM50 Median 50% Dimming, 8 hours					
		700	700mA			347 347V	CS30 Security 30% Dimming, 7 hours CM30 Median 30% Dimming, 8 hours					
		800	BW-G2 Balanced White 3500K, 80CRI Generation 2 <sup>2</sup>			480 480V						
		900	900mA	AM-G2 Direct Amber (590nm) Generation 2 <sup>2,13</sup>								

- 1. Only 300mA can be used with battery backup (EBPC) configuration.
- 2. Extended lead times apply. Contact factory for details.
- 3. Available only in 120 or 277V.
- 4. Not available with other dimming control options.
- 5. Not available with motion sensor.
- 6. Not available with photocontrol.
- 7. Not available in 347 or 480V.
- 8. Must specify input voltage.
- 9. Available with two modules per circuit (64L) at 600mA.
- 10. Not available with DCC, SW, and CS/CM.
- 11. Not available in 800 or 900mA.
- 12. Not available with 64L.
- 13. Must specify a motion sensor lens.
- 14. Limited to max. 600mA configurations
- 15. Not available with DD, DCC, and FAWS dimming control options.

by Signify

## EcoForm

### ECF-S small area light



Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 27,800 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project:		
Location:		
Cat.No:		
Type:		
Lamps:	Qty:	
Notes:		

### Ordering guide

example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Mounting	Distribution	Voltage	Options				Luminaire	Finish
							Dimming controls		Motion sensing lens	Photo-sensing		
<b>ECF-S</b>												
<b>ECF-S</b> EcoForm site and area, small	<b>32L</b> 32 LEDs (2 modules)	<b>365</b> 365mA	<b>WW-G2</b> Warm White 3000K, 70CRI Generation 2	<b>AR</b> Arm Mount (Standard) <sup>2</sup>	<b>Type 2</b> 2 Type 2 2-90 Rotated left 90°	<b>120</b> 120V <b>208</b> 208V <b>240</b> 240V <b>277</b> 277V <b>347</b> 347V <b>480</b> 480V <b>UNV</b> 120-277V (50/60Hz)	<b>DD</b> 0-10V External dimming (by others) <sup>4</sup> <b>DCC</b> Dual Circuit Control <sup>4,5,6</sup> <b>FAWS</b> Field Adjustable Wattage Selector <sup>4,5</sup> <b>SW</b> Interface module for SiteWise <sup>4,6,7</sup> <b>LLC</b> Integral wireless module <sup>4,6,8,17</sup> <b>BL</b> Bi-level functionality <sup>14,17</sup>	<b>IMR13</b> Integral with #3 lens <sup>15</sup> <b>IMR17</b> Integral with #7 lens <sup>16</sup>	<b>PCB</b> Photocontrol Button <sup>8,9</sup> <b>TLRD5</b> Twist Lock Receptacle 5 Pin <sup>10</sup> <b>TLRD7</b> Twist Lock Receptacle 7 Pin <sup>10</sup> <b>TLRPC</b> Twist Lock Receptacle w/ Photocell <sup>9,11</sup> <b>FP1</b> Single (120, 277, 347VAC) <sup>9</sup> <b>FP2</b> Double (208, 240, 480VAC) <sup>9</sup> <b>FP3</b> Canadian Double Pull (208, 240, 480VAC) <sup>9</sup> <b>Surge Protection</b> (10kA standard) <b>SP2</b> Increased 20kA	<b>Fusing</b> <b>F1</b> Single (120, 277, 347VAC) <sup>9</sup> <b>F2</b> Double (208, 240, 480VAC) <sup>9</sup> <b>Pole Mount Fusing</b> <b>FP1</b> Single (120, 277, 347VAC) <sup>9</sup> <b>FP2</b> Double (208, 240, 480VAC) <sup>9</sup> <b>FP3</b> Canadian Double Pull (208, 240, 480VAC) <sup>9</sup> <b>Surge Protection</b> (10kA standard) <b>SP2</b> Increased 20kA	Square Pole Adapter included in standard product	<b>Textured</b> <b>BK</b> Black <b>WH</b> White <b>BZ</b> Bronze <b>DGY</b> Dark Gray <b>MGY</b> Medium Gray
<b>48L</b> 48 LEDs (3 modules)	<b>900</b> 900 mA	<b>1A</b> 1050 mA	<b>NW-G2</b> Neutral White 4000K, 70CRI Generation 2	<b>The following mounting kits must be ordered separately (See accessories)</b>	<b>2-270</b> Rotated right 270°	<b>HVU</b> 347-480V (50/60Hz)						<b>Customer specified</b>
<b>64L</b> 64 LEDs (4 modules)	<b>900</b> 900 mA	<b>1A</b> 1050 mA	<b>CW-G2</b> Cool White 5000K, 70CRI Generation 2	<b>SF</b> Slip Fitter Mount <sup>3</sup> (fits to 2 3/8" O.D. tenon)	<b>3-90</b> Rotated left 90°		<b>DynaDimmer:</b> Automatic Profile Dimming					<b>RAL</b> Specify optional color or RAL (ex: RAL7024)
				<b>WS</b> Wall mount with surface conduit rear entry permitted	<b>3-270</b> Rotated right 270°		<b>CS50</b> Safety 50% Dimming, 7 hours <sup>4,8</sup> <b>CM50</b> Median 50% Dimming, 8 hours <sup>4,8</sup>					<b>CC</b> Custom color (Must supply color chip for required factory quote)
				<b>RAM</b> Retrofit arm mount kit <sup>2</sup>	<b>4-90</b> Rotated left 90°		<b>CS30</b> Safety 30% Dimming, 7 hours <sup>4,8</sup> <b>CM30</b> Median 30% Dimming, 8 hours <sup>4,8</sup>					
					<b>4-270</b> Rotated right 270°							
					<b>Type 5</b>							
					<b>5 Type 5</b>							
					<b>5W Type 5W</b>							
					<b>AFR</b>							
					<b>AFR-90</b>							
					<b>AFR-90</b>							
					<b>AFR-270</b>							
					<b>AFR-270</b>							

- 1. BL-IMR13/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
- 2. Mounts to a 4" round pole with adapter included for square poles.
- 3. Limited to a maximum of 45 degrees aiming above horizontal.
- 4. Not available with other dimming control options.
- 5. Not available with motion sensor.
- 6. Not available with photocontrol.
- 7. Available only in 120 or 277V.
- 8. Not available in 347 or 480V
- 9. Must specify input voltage.
- 10. Dimming will not be connected to NEMA receptacle if ordering with other control options.
- 11. Not available in 480V. Order photocell separately with TLRD5/7.
- 12. Not available with DCC.
- 13. Not available with SF and WS. RPAs provided with black finish standard.
- 14. HIS not available with Type 5 and 5W optics.
- 15. Not available with DD, DCC, and FAWS dimming control options.
- 16. Not available with DD, DCC, FAWS and LLC dimming control options.
- 17. Must specify a motion sensor lens.





Lumec **TownGuide** family is a functional outdoor LED lighting range for the lower post-top applications. **TownGuide** is most suitable for parks and recreation, city centers, pedestrian areas and bike paths, campuses, public areas and green projects.

Project:		
Location:		
Cat.No:		
Type:		
Lamps:	Qty:	
Notes:		

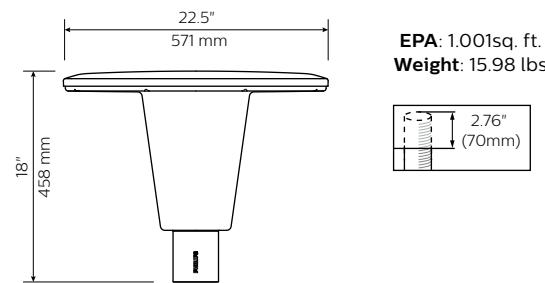
### Ordering guide

Example: PBDP103-101W128LED4K-MP-PC-C-LE5-UNV-CDMGM25-RCD-PH8-P120-12-GR

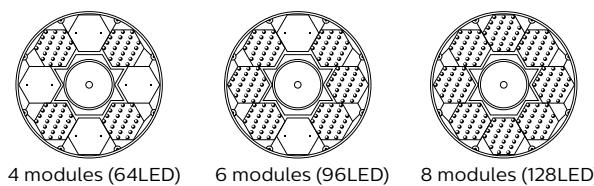
Series	Lamp	Lamp type	Globe material	Globe finish	Optical system	Voltage	Driver options	House Side Shield	Luminaire options	Luminaire accessory	Pole type & height	Finish
<b>PBDP103</b>	<b>3000K</b> <b>50W64LED3K</b> <b>61W64LED3K</b> <b>75W96LED3K</b> <b>95W128LED3K</b> <b>101W128LED3K</b>	<b>MP</b>	<b>PC</b> <b>FO</b>	<b>C</b>	<b>LE2</b> <b>LE3</b> <b>LE5</b>	<b>UNV</b> <b>HVU</b>		<b>HS</b>	<b>N</b> <b>RCD7<sup>1</sup></b>	<b>PH8</b> <b>PH9</b>	<b>P120-8</b> <b>P120-10</b> <b>P120-12</b> <b>P120-14</b> <b>P150-8</b> <b>P150-10</b>	<b>BKST</b> <b>BRST</b> <b>GR</b> <b>MGY</b> <b>WHST</b>
<b>PBDP103</b> <b>Classic T</b>	<b>4000K</b> <b>50W64LED4K</b> <b>61W64LED4K</b> <b>75W96LED4K</b> <b>95W128LED4K</b> <b>101W128LED4K</b>	<b>MP</b>	<b>PC</b> <b>FO</b>		<b>LE2</b> <b>LE3</b> <b>LE5</b>		<b>UNV</b> <b>HVU</b>					

1. Use of Luminaire accessory **PH8** or **PH9** is required to ensure proper illumination.

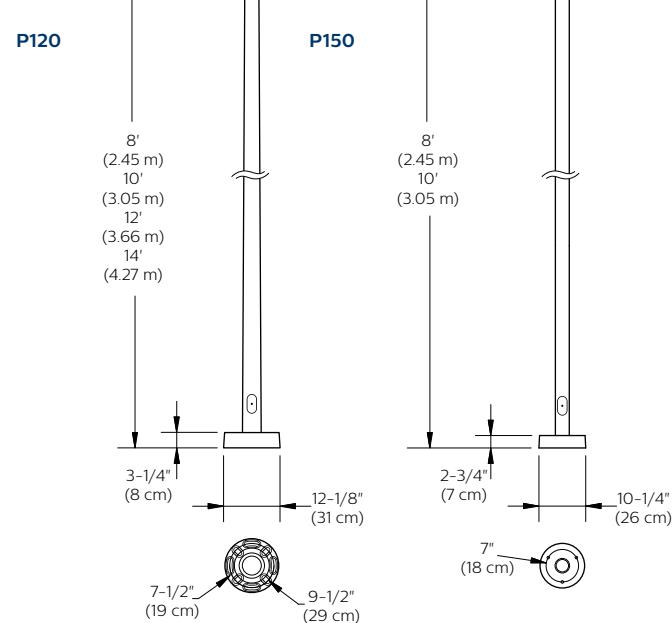
### Luminaire



**Arrangement of the LED modules in the luminaire, viewed from the road axis.**



### Poles





Lumec TownGuide family is a functional outdoor LED lighting range for the lower post-top applications. TownGuide is most suitable for parks and recreation, city centers, pedestrian areas and bike paths, campuses, public areas and green projects.

Project:		
Location:		
Cat.No:		
Type:		
Lamps:	Qty:	
Notes:		

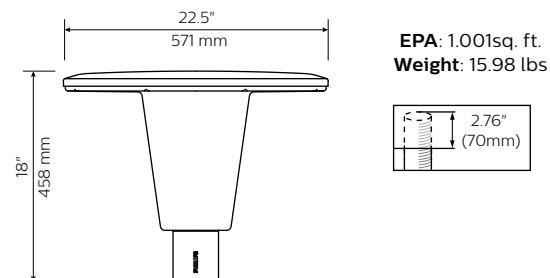
#### Ordering guide

Example: PBDP103-101W128LED4K-MP-PC-C-LE5-UNV-CDMGM25-RCD-PH8-P120-12-GR

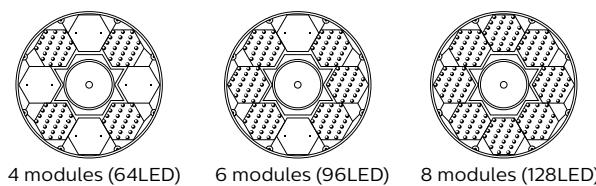
Series	Lamp	Lamp type	Globe material	Globe finish	Optical system	Voltage	Driver options	House Side Shield	Luminaire options	Luminaire accessory	Pole type & height	Finish
<b>PBDP103</b>	<b>3000K</b> <b>50W64LED3K</b> <b>61W64LED3K</b> <b>75W96LED3K</b> <b>95W128LED3K</b> <b>101W128LED3K</b>	<b>MP</b>	<b>PC</b> <b>FO</b>	<b>C</b>	<b>LE2</b> <b>LE3</b> <b>LE5</b>	<b>UNV</b> <b>HVU</b>		<b>HS</b>	<b>N</b> <b>RCD7<sup>1</sup></b>	<b>PH8</b> <b>PH9</b>	<b>P120-8</b> <b>P120-10</b> <b>P120-12</b> <b>P120-14</b> <b>P150-8</b> <b>P150-10</b>	<b>BKST</b> <b>BRST</b> <b>GR</b> <b>MGY</b> <b>WHST</b>
<b>PBDP103</b> <b>Classic T</b>	<b>4000K</b> <b>50W64LED4K</b> <b>61W64LED4K</b> <b>75W96LED4K</b> <b>95W128LED4K</b> <b>101W128LED4K</b>	<b>MP</b>	<b>PC</b> <b>FO</b>		<b>LE2</b> <b>LE3</b> <b>LE5</b>		<b>UNV</b> <b>HVU</b>					

1. Use of Luminaire accessory **PH8** or **PH9** is required to ensure proper illumination.

#### Luminaire



Arrangement of the LED modules in the luminaire, viewed from the road axis.



#### Poles

