





# PBL U G2 2 | LED Lensed High Bay

#### **Features:**

- High performance LED technology
- 0-10V dimming drivers standard on all models
- Field replaceable LED boards and drivers through Re-boardABILITY (more info on Page 3)
- Multiple shielding options available to help minimize glare and improve aesthetics
- Multiple controls options available
- 90+ CRI standard
- Buy American Act compliant (All base luminaires are BAA compliant. Addition of options may change eligibility. Contact factory for details.)

# Applications:

Suitable for most commercial, industrial and institutional applications

- Retail
- Warehouse
- Manufacturing
- Gymnasiums

#### Predicted Lifetime:

- L70  $\geq$  131,000 hrs (calculated)
- L90  $\geq$  40,000 hrs (reported) (based on LM-80, TM-21 and in-situ laboratory testing)

#### Construction:

- Housing and LED tray is precision brake formed from aluminum
- Pre-painted with a highly durable, highly reflective white finish

#### Certifications:

 UL 1598 listed for US and Canada, suitable for damp locations



# Warranty:

- 5 year limited system warranty see <u>www.LumenFocus.com</u> for complete warranty terms and conditions
- 10 year warranty option available on specific models

(Not available on all models. Certain conditions apply. Consult factory or sales representative for details.)













# Ordering Guide:

example: PBL U G2 2 MD UV A23F 940 QC20 C6

Order	example: PBL U G2 2 MD UV A23F 940 QC20									10 QC20
Series	Version	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options	Finish
PBLU	<b>G</b> 2	2								
PBL U	<b>G2</b> Gen 2	<b>2</b> 2'	<b>LW</b> Low	<b>UV</b> 120-277	A23 High Efficiency 23	930 90 CRI/3000K	Blank None	<b>Blank</b> No Controls	<b>Blank</b> No Options	Blank White
			MD Medium	<b>34</b> 347V	Pattern Acrylic  A23F  High Efficiency 23	935 90 CRI/3500K	QC 10' Quick Hang Cable Kit	<b>ZOS</b> Occupancy Sensor (On/Off)	EXT10 10-Year Extended Warranty <sup>(5)</sup>	BK Matte Blac
			<b>HI</b> High	<b>48</b> 480V	Pattern Acrylic, Frosted	940 90 CRI/4000K	QC20 20' Quick Hang	<b>ZOSD</b> Occupancy Sensor	<b>C6</b> 6' Single Circuit Cord	SL Metallic Silv
					L118 0.118" Impact Resistant Lexan	950 90 CRI/5000K	Cable Kit	(On/Off/Dim)  ZOFD1	C65W 6' Single Circuit Cord with Low Voltage Connections	
								Leviton Bluetooth-enabled Programmable Dimming/	C10	
Maria								Occupancy/Daylight Harvesting Sensor with Grouping	10' Single Circuit Cord  C105W	
Notes  (1) For 8' to		na heiahts	See Page 5	for more de	etails			(120-277V) <sup>(1)</sup>	10' Single Circuit Cord with Low Voltage Connections	
(2) "_" = lens	s type. See F / Only. Max	Page 5 for le	ens descripti ght is 50 fee	ons.				Leviton Bluetooth-enabled Programmable Dimming/	<b>D6</b> 6' Dual Circuit Cord	
(4) Max ceilir See Page	ng height fo e 6 for more	details on	Ruggedized advanced co	ontrols.	feet.			Occupancy/Daylight Harvesting Sensor with Grouping, Scheduling (120- 480V) <sup>(1)</sup>	<b>D10</b> 10' Dual Circuit Cord	
Consult f	actory or sa	ales represe	tain condition ntative for d o estimate lur	etails.	in			Z221BL_	P(NEMA) Plug (Specify NEMA	
emergend of the lum	cy mode, mu ninaire it is ins	ıltiply EM wa stalled in.	ittage by the $\pm M14 \rightarrow 141.6$	Lumens per	Watt			Wattstopper Programmable Photo/Motion Multi-Voltage Sensor (high/low/off) <sup>(2)</sup>	configuration)  WG  Wire Guard	
	02 2 IVID 0 V	7 AZ31 340 L	_IVII4 → I41.0	LI VV X 14VV				<b>Z321BL_</b> Wattstopper Bluetooth-	WGE	
			es (orde	er separ	ately)			enabled Programmable Dimming/Occupancy/ Daylight Harvesting Multi-	Extended Wire Guard for End-Mounted Sensor	
	or Enlighted S-2-00	Enlighted I	Remote Con		vitch			Voltage Sensor <sup>(2)</sup> <b>ZOSMHB</b>	<b>SC</b> Safety Cable	
	S-2-00-IL		ted Connect Remote Cor ted One)		vitch			Leviton High Bay Microwave 0-10V Multi-Level	<b>F</b> Fuse	
	or Z221BL_ :	Sensor						Occupancy Sensor with Photocell <sup>(3)</sup>	<b>EM6</b> 6.5W Emergency Pack <sup>(6)</sup>	
FS FS	IR-100	Wireless C	onfiguration	Tool				<b>ZPC</b> Photocell	EM10	
Fo.	or ZOSMHB							<b>ZENLO</b> Enlighted Ruggedized	10W Emergency Pack <sup>(6)</sup> <b>EM14</b>	
2L	SOR	Wireless C	onfiguration	Tool				Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted One System <sup>(4)</sup>	14W Emergency Pack <sup>(6)</sup> <b>EM20</b> 20W Emergency Pack <sup>(6)</sup>	
								ZENLC Enlighted Ruggedized	SDT(480V) 480V to 277V Step Down	
								Sensor with Dimming/ Occupancy/Daylight	Transformer	
								Harvesting and Enlighted Connected System <sup>(4)</sup>	CC Conformal Coating	
								ZENLI Enlighted Ruggedized	LVL	



Enlighted Ruggedized

Sensor with Dimming/

Occupancy/Daylight

Harvesting and Enlighted IoT System<sup>(4)</sup> 0-10V Dimming Leads for Easy

Field Access

BAA

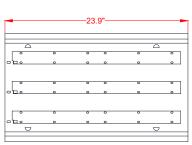
Buy American Act Compliant



#### Schematic:

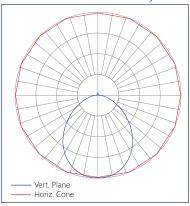






#### Photometric Data:

Relative Luminous Intensity



#### **Performance Chart:**

Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
PBL U G2 2 LW UV A23F 9xx	57.4	7968.2	138.8	8001.8	139.4	8191.9	142.7	8191.9	142.7
PBL U G2 2 MD UV A23F 9xx	85.8	11820.7	137.7	11870.5	138.3	12152.5	141.6	12152.5	141.6
PBL U G2 2 HI UV A23F 9xx	111.7	15666.7	140.3	15732.7	140.9	16106.4	144.2	16106.4	144.2

Lumen Adjustment Factors: WG: 0.95



The PBL U G2 features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. Learn more about Re-boardABILITY here.





<u>Click here for a video demonstration of the re-boarding process on a PBL.</u>

Note: Exact time varies depending on the model.



#### **Controls Summary:**

Control Code	Туре	Capabilities	Communication		
zos	Motion (PIR)	On/Off	Wired		
ZOSD	Motion (PIR), Photosensor	On/Low/Off	Wired 1-10V		
ZOFD1	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)		
ZOFDU	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)		
Z221BLx	Motion (PIR), Photosensor	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via IR remote (sold separately)		
Z321BLx	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim	Wired 0-10V, Programmable via Bluetooth App (iOS, Android)		
ZOSMHB	Motion (Microwave), Photosensor	On/Low/Off	Wired 0-10V, Programmable via ZLSOR IR remote (sold separately)		
ZPC	Photosensor	On/Off	Wired		
ZENLO	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Upgradable to Connected (ZENLC) or IoT (ZENLI)	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted Room Controller WS-2-00-IL (sold separately)		
ZENLC	Motion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, Upgradable to IoT (ZENLI), LLLC (Enlighted IoT)*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software		
ZENLI	MoMotion (PIR), Daylight Harvesting	High/Low/Off, High-End Trim, Grouping, Scheduling*, Energy Monitoring*, BMS Integration*, LLLC (Enlighted IoT)*, Space - Building Utilization*, Where - Real Time Location Services*	Wireless Bluetooth Low Energy Mesh, Programmable via Enlighted IoT Software		

LLLC = Luminaire Level Lighting Control

# **Programmable Dimming Sensors:**

#### **ZOFDx Sensor Option**

- Leviton Smart IP66 passive infrared (PIR) sensors
- Features mesh grouping (16 devices per group), occupancy sensing, daylight harvesting, scheduling (for ZOSFDU only), single-level switching
- · Comes pre-installed on the end cap
- Rated for cold locations
- Configurable through the Leviton Smart Sensor App using a smartphone or other Bluetooth-enabled iOS or Android device



The ZOFD option includes four sensor lenses that can easily be installed or swapped out in the field. From left: the high bay lens (20'-40' mounting), the high bay lens with aisleway mask, the low bay lens (8'-20' mounting), and the low bay lens with aisleway mask.



# Z221B, Z321B Sensor Options

- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- · Rated for cold locations
- Parameters for Bluetooth-enabled Z321B adjustable via phone app - iOS or Android
- Parameters for Z221B adjustable via wireless configuration tool (FSIR-100 - sold separately)
- Three lenses available, tailored for the ideal detection area and mounting height:
  - **L2:** 360° lens, maximum coverage 48′, diameter from 8′ height
  - L3: 360° lens, maximum coverage 40′, diameter from 20′ height
  - L7: 360° lens, maximum coverage 100′, diameter from 40′ height





Left: Phone app interface for Z321B

# **ZOSMHB Sensor Option**

- Provides occupancy detection and multi-level control with adjustable time-outs
- Tri-level dimming control
- Comes pre-installed on the end cap
- Suitable for cold storage locations
- Built-in photocell reads brightness values. Sensor does not switch luminaire on if there is suffcient ambient light
- Control parameters selected manually via DIP switches, or using the optional ZLSOR remote (sold separately) adjustable parameters include sensitivity, hold time, lux level, stand-by light level, stand-by hold time
- Maximum mounting height of 50 feet, with adjustable coverage radius up to 30 feet





<sup>\*</sup> Additional equipment required. Contact LumenFocus representative for details



## **Enlighted**: All-in-one sensors, upgradeable systems

Enlighted's IP65-rated Ruggedized Sensor is an all-inone unit: task tuning, high-end trimming, daylight harvesting, and occupancy/vacancy detection. Max installation height is 50 feet.

Enlighted sensors come standard with the Enlighted
One system (the "ZENLO" option). Enlighted
Connected ("ZENLC") offers even more options.
The Enlighted IoT ("ZENLI") option allows the full
implementation of Enlighted's services. Each system
can be fully upgraded to the next tier in the future. So if
you start with Enlighted One but want to add energy reporting
or building management systems integration in the future, you can.

Enlighted Capabilities*	Enlighted One (ZENLO)	Enlighted Connected (ZENLC)	Enlighted IoT (ZENLI)
Motion and Switch Groups	✓	✓	✓
Daylight Harvesting	✓	✓	✓
Schedule Lighting		✓	✓
Energy Reporting & Optimization		✓	✓
Environment Data & Lighting Controls API		✓	✓
Building Management System Integration		✓	✓
Where & Space Applications			✓
Location & Occupancy APIs & Beaconing			✓
Future App & API Ready			✓

Note: Additional equipment required for ZENLC and ZENLI

# Real-time data analytics

Enlighted's control units compile data in real-time, which can be viewed via the Energy Manager. The Energy Manager is part of the Enlighted Connected and Enlighted IoT configurations.

- Real-time measurements and verification of energy savings
- Space analytics data can be compiled into motion trails and heat maps
- Analyze traffic density and congestion in a space



Learn more about our available advanced controls options here:

www.lumenfocus.com/controls-overview

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# Other Options:



Cords are available in single circuit or dual circuit, 6' or 10'. Standard plug is optional, as are other NEMA configurations if specified.



**Shielding** Available in a high efficiency 23 pattern acrylic lens (frosted or clear), and an impact resistant clear lexan lens



Conformal coating Grants LED boards added protection from moisture and corrosion in more hazardous environments



Hanging The QC hanging kit from ALP comes in 10' or 20'.
Cables are pre-looped for easy installation and designed for easy fixture height adjustment. QCs come boxed with each fixture.

