

Note: This product has been discontinued and replaced with the PBL G2v HD.



Project: _____
 Location: _____
 Cat. #: _____
 Type: _____
 Quantity: _____

LED

PBL 2W HD | LED Heavy Duty High Bay

Features:

- High performance LED technology
- 0-10V dimming drivers standard on all models - dimmable to <10% on all models, with most dimmable to 1%
- DALI drivers available based on configuration
- Field replaceable LED boards and drivers through Re-boardABILITY (more info on Page 3)
- Frosted diffusers available to help minimize glare and improve aesthetics
- A wide variety of lumen packages allows for flexibility in design and helps maximize energy savings
- Multiple controls options available

Applications:

- Suitable for most commercial, industrial and institutional applications
- Gymnasiums
 - Recreation Centers
 - Manufacturing
 - Warehouse
 - Cold/Frozen Storage

Ambient Operating Temp.:

- -30°C to 40°C

Predicted L70 Lifetime:

- Up to 189,000 hrs (calculated)
(L70 information for specific configurations available upon request)
- For BAA compliant configurations - up to 189,000 hrs (calculated)



10 YEAR
 EXTENDED
 WARRANTY
 AVAILABLE ON
 CERTAIN MODELS

Construction:

- Housing is precision brake formed from heavy duty 0.063" 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 www.LumenFocus.com 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 2W MD UV FR 850 HDW PM ST(18") OS WG

| Series | Length | Output | Performance | Voltage | Shielding | CRI/CCT | Gauge | Hanging | Controls | Options | Finish |
|--------|----------|-------------------|-----------------------|---------------------------|------------------------------------|---------------------|---|--|---|--|-----------------------|
| PBL | 2W | | | | | | HDW | | | | |
| PBL | 2W 2' | MH Medium High | Blank Standard | UV 120-277 | Blank No Lenses | 835 80 CRI/3500K | HDW Heavy Duty 0.063" Aluminum Wide-Body Housing | Blank None | Blank No Controls | Blank No Options | Blank White |
| | | HI High | HE High Efficiency | 34 347V ⁽¹⁾ | FR Frosted Acrylic Diffusers | 840 80 CRI/4000K | | QC 10' Quick Hang Cable Kit | ZOS Occupancy Sensor (On/Off) | EXT10 10-Year Extended Warranty ⁽⁵⁾ | BK Matte Black |
| | | | | 48 480V ⁽¹⁾ | | 850 80 CRI/5000K | | QC20 20' Quick Hang Cable Kit | ZOSD Occupancy Sensor (On/Off/Dim) | C6 6' Single Circuit Cord | SL Metallic Silver |
| | | | | | | | PM Pendant Mount | Z221BL_ Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) ⁽²⁾ | C65W 6' Single Circuit Cord with Low Voltage Connections | | |
| | | | | | | | ST(x) 3/4" Stem (Specify Length) | Z321BL_ Wattstopper Bluetooth- enabled Programmable Photo/Motion Multi- Voltage Sensor (high/low/off) ⁽²⁾ | C10 10' Single Circuit Cord | | |
| | | | | | | | | ZPC Photocell | C105W 10' Single Circuit Cord with Low Voltage Connections | | |
| | | | | | | | | ZFMS Douglas FMS Sensor with Dimming/Occupancy/ Daylight Harvesting with Nework Capabilities ⁽³⁾ | D6 6' Dual Circuit Cord | | |
| | | | | | | | | ZENLO Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted One System ⁽⁴⁾ | D10 10' Dual Circuit Cord | | |
| | | | | | | | | ZENLC Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted Connected System ⁽⁴⁾ | P(NEMA) Plug (Specify NEMA configuration) | | |
| | | | | | | | | ZENLI Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted IoT System ⁽⁴⁾ | WG Wire Guard | | |
| | | | | | | | | | WGE Extended Wire Guard for End-Mounted Sensor | | |
| | | | | | | | | | SC Safety Cable | | |
| | | | | | | | | | F Fuse | | |
| | | | | | | | | | EM2 Emergency Pack ⁽⁶⁾ | | |
| | | | | | | | | | SDT(480V) 480V to 277V Step Down Transformer | | |
| | | | | | | | | | CC Conformal Coating | | |
| | | | | | | | | | LVL 0-10V Dimming Leads for Easy Field Access | | |
| | | | | | | | | | BAA Buy American Act Compliant | | |

Notes

- ⁽¹⁾ PBL 2W MH and PBL 2W MH HE currently only available in 120-277V, or with step-down transformer in an application where 347V-480V is needed.
- ⁽²⁾ " _ " = lens type. See Page 6 for lens descriptions.
- ⁽³⁾ Max ceiling height for Douglas FMS sensor: 40 feet. See Page 5 for more details on advanced controls.
- ⁽⁴⁾ Max ceiling height for Enlighted Ruggedized sensor 50 feet. See Page 5 for more details on advanced controls.
- ⁽⁵⁾ Not available on all models. Certain conditions apply. Consult factory or sales representative for details.
- ⁽⁶⁾ EM2 - Up to 16W. 120-277V / 0°C-50°C ambient.

Controls Accessories (order separately)



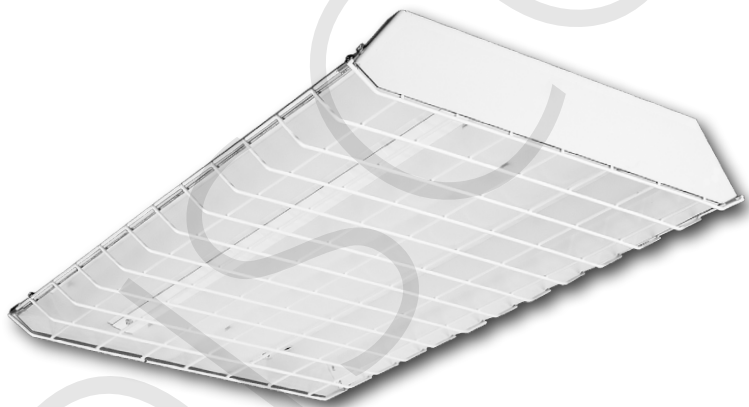
For Douglas Controls

- BT-DMSW-U-A Bluetooth 1 Zone Dimmer
- BT-4BTSW-U-A Bluetooth 4-Button Wall Station
- BT-8BTSW-U-A Bluetooth 8-Button Wall Station

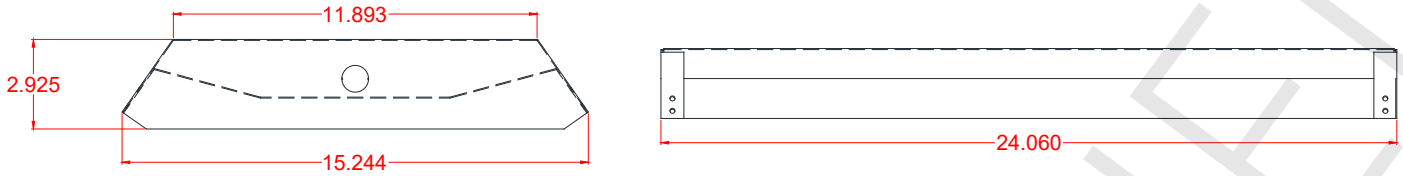


For Enlighted Controls

- WS-2-00 Enlighted Remote Control Wall Switch (for Enlighted Connected & IoT)
- WS-2-00-IL Enlighted Remote Control Wall Switch (for Enlighted One)



Schematic:



Performance Chart:

| Catalog # | Lumens | Watts | LPW | Catalog # | Lumens | Watts | LPW | Catalog # | Lumens | Watts | LPW |
|---------------------|--------|-------|-------|---------------------|--------|-------|-------|---------------------|--------|-------|-------|
| PBL 2W MH HE UV 835 | 13766 | 100 | 137.7 | PBL 2W MH HE UV 840 | 14221 | 100 | 142.2 | PBL 2W MH HE UV 850 | 14648 | 100 | 146.5 |
| PBL 2W HI HE UV 835 | 17003 | 106 | 160.4 | PBL 2W HI HE UV 840 | 17475 | 106 | 164.9 | PBL 2W HI HE UV 850 | 17947 | 106 | 169.3 |
| PBL 2W MH UV 835 | 13432 | 104 | 129.2 | PBL 2W MH UV 840 | 13876 | 104 | 133.4 | PBL 2W MH UV 850 | 14292 | 104 | 137.4 |
| PBL 2W HI UV 835 | 17889 | 119 | 150.3 | PBL 2W HI UV 840 | 18385 | 119 | 154.4 | PBL 2W HI UV 850 | 18881 | 119 | 158.2 |

Lumen Adjustment Factors: FR lens: 0.93
 WG: 0.90
 FR w/ WG: 0.85

LUMENFOCUS
 Re-boardABILITY

The PBL 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.](#)



[Click here for a video demonstration of the re-boarding process on a PBL.](#)

Note: Exact time varies depending on the model.



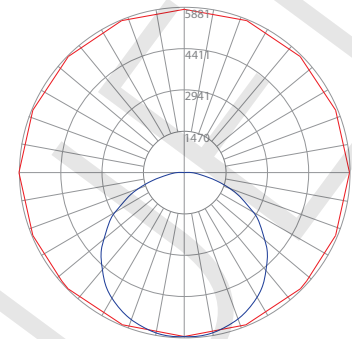
Photometric Data:

PBL 2W HI UV 835

Test No.: LLIA000621-001
 Luminaire Lumens: 17,053 lm
 Luminaire Watts: 130.2W
 Efficacy: 131.0 LPW
 Spacing Criterion (0-180): 1.32
 Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

| Angle In Degrees | Average 0-Deg | Average 45-Deg | Average 90-Deg |
|------------------|---------------|----------------|----------------|
| 45 | 25441 | 24725 | 24763 |
| 55 | 24834 | 24268 | 24498 |
| 65 | 23361 | 23138 | 21381 |
| 75 | 19268 | 14947 | 16254 |
| 85 | 9579 | 6721 | 7667 |



— Vert. Plane
 — Horiz. Cone

Coefficients Of Utilization - Zonal Cavity Method
 Effective Floor Cavity Reflectance 0.20

| RC | 80 | | | | 70 | | | | 50 | | | | 30 | | | |
|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|
| | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | | |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | | |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 83 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | | |
| 3 | 90 | 80 | 71 | 65 | 88 | 78 | 70 | 64 | 75 | 69 | 63 | 72 | 67 | 62 | | |
| 4 | 82 | 70 | 62 | 55 | 80 | 69 | 61 | 54 | 67 | 59 | 54 | 64 | 58 | 53 | | |
| 5 | 76 | 63 | 54 | 47 | 74 | 62 | 53 | 47 | 60 | 52 | 46 | 58 | 51 | 46 | | |
| 6 | 70 | 56 | 47 | 41 | 68 | 55 | 47 | 41 | 54 | 46 | 40 | 52 | 45 | 40 | | |
| 7 | 65 | 51 | 42 | 36 | 63 | 50 | 42 | 36 | 49 | 41 | 36 | 47 | 40 | 35 | | |
| 8 | 60 | 47 | 38 | 32 | 59 | 46 | 38 | 32 | 45 | 37 | 32 | 43 | 37 | 32 | | |
| 9 | 56 | 43 | 34 | 29 | 55 | 42 | 34 | 29 | 41 | 34 | 29 | 40 | 33 | 28 | | |
| 10 | 53 | 39 | 31 | 26 | 51 | 39 | 31 | 26 | 38 | 31 | 26 | 37 | 30 | 26 | | |

Zonal Lumen Summary

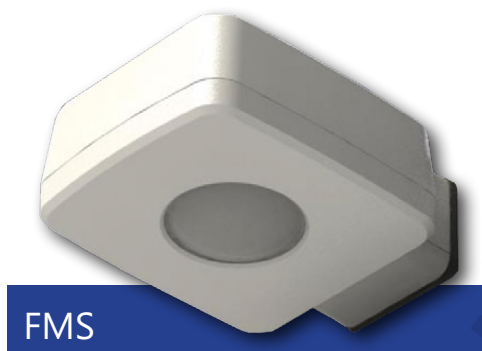
| Zone | Lumens | %Fixt |
|--------|----------|--------|
| 0-20 | 2136.96 | 12.50 |
| 0-30 | 4565.59 | 26.80 |
| 0-40 | 7540.00 | 44.20 |
| 0-60 | 13587.73 | 79.70 |
| 0-80 | 16853.12 | 98.80 |
| 0-90 | 17053.36 | 100.00 |
| 90-120 | 0.00 | 0.00 |
| 90-130 | 0.00 | 0.00 |
| 90-150 | 0.00 | 0.00 |
| 90-180 | 0.00 | 0.00 |
| 0-180 | 17053.36 | 100.00 |

Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

Douglas Lighting Controls, Inc.: Cloud-based controls

The PBL HD can be equipped with the Douglas FMS sensor, which is designed for high bay applications.

With a max sensor height up to 40 feet, the FMS is ideal for applications like warehouses and manufacturing facilities. It can be installed for on/off control or bi-level light functionality. The daylight sensor provides additional savings by dimming the lights to work with the amount of natural available daylight.



- Configuration from the floor via smartphone app
- Bluetooth mesh network is created between devices for control over a group of Douglas sensors
- Occupancy and daylight sensing
- IP65-rated
- 0-10V dimming
- 150 feet clear line of site, 50 feet through standard walls (distances may vary based on location and environment)

CheckLight® Energy Management System

Douglas controls can be integrated with the CheckLight® Energy Management system. This system can help you uncover energy conversion opportunities, create conservation strategies, analyze lighting load inefficiencies, and make configuration changes from anywhere with Douglas' user-friendly interface. You can get measurements, reports, and control your system from a web-based application.

- CheckLight® has the capability to look at different facilities within a portfolio and use data benchmarks to compare building performances.
- Find energy conservation opportunities
 - Create energy saving strategies
 - Analyze load inefficiencies
 - Optimize energy management

Enlighted: All-in-one sensors, upgradeable systems

Enlighted's IP65-rated Ruggedized Sensor is an all-in-one 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.

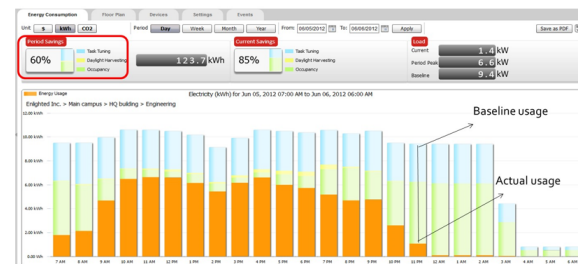
| Enlighted Capabilities* | Enlighted One (ZENLO) | Enlighted Connected (ZENLC) | Enlighted IoT (ZENLI) |
|--|-----------------------|-----------------------------|-----------------------|
| Motion and Switch Groups | ✓ | ✓ | ✓ |
| Daylight Harvesting | ✓ | ✓ | ✓ |
| Schedule Lighting | | ✓ | ✓ |
| Energy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



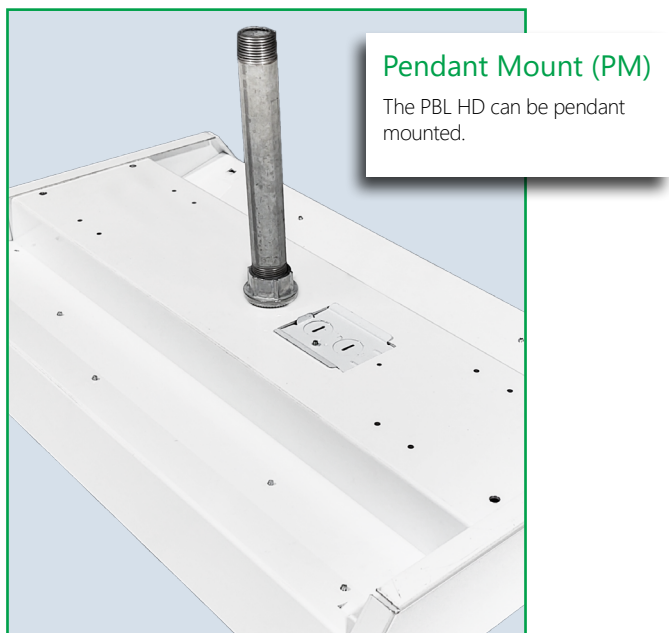
Learn more about our available advanced controls options here:
www.lumenfocus.com/controls-overview

© 2022 Enlighted for all Enlighted content and images.

© 2022 Douglas Lighting Controls, Inc. for all Douglas content and images. The Bluetooth® word, mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Douglas Lighting Controls is under license. Other trademarks and trade names are those of their respective owners.

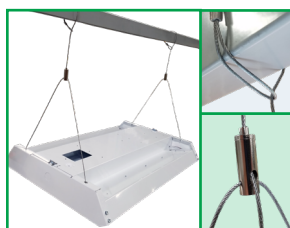
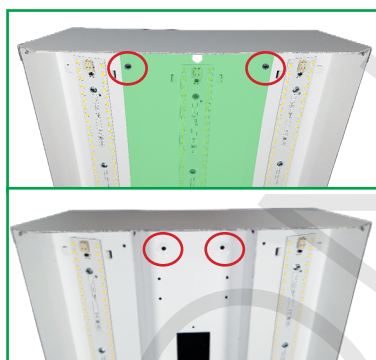


Hanging Options Available:



Surface Mount

The PBL HD is designed to be easily mounted to any sturdy surface. Simply remove the hex head screws holding the driver cover (top picture, in green) to access the bottom of the housing below. The housing can be mounted to the surface from the four holes in each corner of the channel (bottom picture, circled).



Cable Mount (QC, QC20)

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. A mechanically fastened safety cable (SC) is also optional.

Wireguard and shielding

Add an optional wireguard for added stability and protection - ideal for gymnasiums or other areas where the luminaire may be struck. Optional frosted acrylic diffuser lenses minimize glare and improve aesthetics.

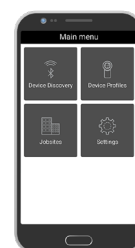


Other controls available:



Dimming Sensors (Z221B/Z321B)

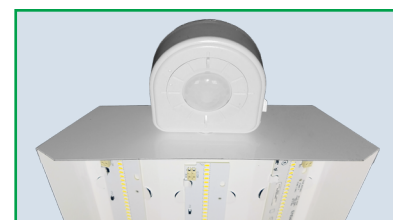
- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters for Bluetooth-enabled Z321B adjustable via phone app - iOS or Android
- Parameters for Z221B adjustable via wireless configuration 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



Phone app interface for Z321B

On/Off Occupancy Sensors (ZOS)

An occupancy sensor controls individual fixtures on or off based on occupancy in detection zone. Sensor used: Leviton OSFHU-ITW (pictured), or equivalent.



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.

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

