



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

LED

ULB G2 HD-2 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
- 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

Applications:

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

Ambient Operating Temp:

- -30°C to 50°C

Predicted Lifetime:

- L70 > 188,000 hrs (calculated)
 - L90 > 60,000 hrs (reported)
- (based on LM-80, TM-21 and in-situ laboratory testing)

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
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) <http://designlights.org/>

Warranty:

- 5 year limited system warranty - see www.UnamiLighting.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.)

10 YEAR
EXTENDED
WARRANTY
 AVAILABLE ON
 CERTAIN MODELS



ULB G2 HD-2 LED Heavy Duty High Bay

Ordering Guide:

example: ULB G2 2 MD UV 850-HDW-PM OSD WGE

Series	Length	Output	Voltage	Shielding	CRI/CCT	Gauge	Hanging	Controls	Options	Finish
ULB G2	2					HDW				
ULB G2	2 2'	MD Medium	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
		MH Medium High	34 347V	FR Frosted Acrylic Diffusers	840 80 CRI/4000K			ZOS Occupancy Sensor (On/Off)	EXT10 10-Year Extended Warranty ⁽⁴⁾	BK Matte Black
			48 480V		850 80 CRI/5000K			ZOSD Occupancy Sensor (On/Off/Dim)	C6 6' Single Circuit Cord	SL Metallic Silver
							QC 10' Quick Hang Cable Kit	Z221BL_ Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) ⁽¹⁾	C65W 6' Single Circuit Cord with Low Voltage Connections	
							QC20 20' Quick Hang Cable Kit	Z321BL_ Wattstopper Bluetooth- enabled Programmable Photo/Motion Multi- Voltage Sensor (high/low/off) ⁽¹⁾	C10 10' Single Circuit Cord	
							PM Pendant Mount		C105W 10' Single Circuit Cord with Low Voltage Connections	
							ST(x) 3/4" Stem (Specify Length)		D6 6' Dual Circuit Cord	
								ZPC Photocell	D10 10' Dual Circuit Cord	
								ZFMS Douglas FMS Sensor with Dimming/Occupancy/ Daylight Harvesting with Network Capabilities ⁽²⁾	P(NEMA) Plug (Specify NEMA configuration)	
								ZENLO Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted One System ⁽³⁾	WG Wire Guard	
								ZENLC Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted Connected System ⁽³⁾	WGE Extended Wire Guard to Protect End-Mounted Sensor	
								ZENLI Enlighted Ruggedized Sensor with Dimming/ Occupancy/Daylight Harvesting and Enlighted IoT System ⁽³⁾	SC Safety Cable	
									F Fuse	
									EM2 Emergency Pack ⁽⁵⁾	
									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⁾ " _ " = lens type. See Page 6 for lens descriptions.
- ⁽²⁾ Max ceiling height for Douglas FMS sensor: 40 feet. See Page 5 for more details on advanced controls.
- ⁽³⁾ Max ceiling height for Enlighted Ruggedized sensor 50 feet. See Page 5 for more details on advanced controls.
- ⁽⁴⁾ Not available on all models. Certain conditions apply. Consult factory or sales representative for details.
- ⁽⁵⁾ 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

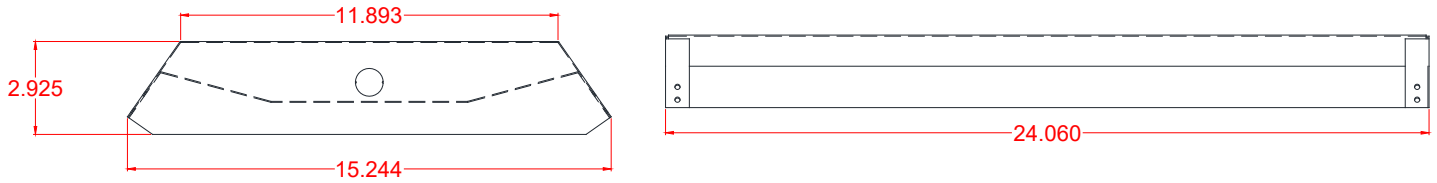


For Enlighted Controls

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

ULB G2 HD-2 LED Heavy Duty High Bay

Schematic:



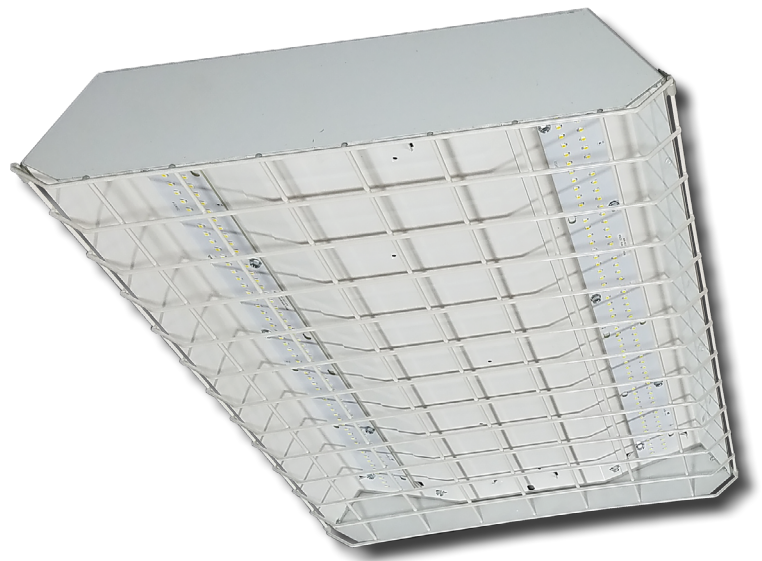
Performance Chart:

Catalog #	QPL/UL Reference #	Lumens	Watts	LPW
ULB G2 2 MD UV 835	PBL G2 2 MD UV 835	11706	71	164.2
ULB G2 2 MH UV 835	PBL G2 2 MH UV 835	13674	85	160.7
ULB G2 2 MD UV FR 835	PBL G2 2 MD UV FR 835	11005	71	154.3
ULB G2 2 MH UV FR 835	PBL G2 2 MH UV FR 835	12789	85	150.5

Catalog #	QPL/UL Reference #	Lumens	Watts	LPW
ULB G2 2 MD UV 840	PBL G2 2 MD UV 840	12126	71	170.1
ULB G2 2 MH UV 840	PBL G2 2 MH UV 840	14164	85	166.5
ULB G2 2 MD UV FR 840	PBL G2 2 MD UV FR 840	11399	71	159.9
ULB G2 2 MH UV FR 840	PBL G2 2 MH UV FR 840	13247	85	155.9

Catalog #	QPL/UL Reference #	Lumens	Watts	LPW
ULB G2 2 MD UV 850	PBL G2 2 MD UV 850	12126	71	170.1
ULB G2 2 MH UV 850	PBL G2 2 MH UV 850	14164	85	166.5
ULB G2 2 MD UV FR 850	PBL G2 2 MD UV FR 850	11399	71	159.9
ULB G2 2 MH UV FR 850	PBL G2 2 MH UV FR 850	13247	85	155.9

Lumen Adjustment Factors: WG: 0.95



ULB G2 HD-2 LED Heavy Duty High Bay

Photometric Data:

ULB G2 2 MH UV 835

Test No.: LLIA001249-009-R01

Luminaire Lumens: 13,674 lm

Luminaire Watts: 85.1W

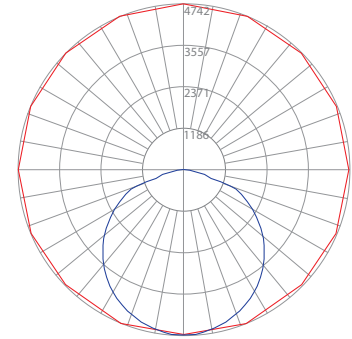
Efficacy: 160.7 LPW

Spacing Criterion (0-180): 1.30

Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	27663	27058	27033
55	26763	26395	26671
65	24655	24988	26403
75	19869	21636	16470
85	7602	4777	5786



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1729.2	12.6
0-30	3686.1	27.0
0-40	6078.9	44.5
0-60	10908.7	79.8
0-80	13544.3	99.0
0-90	13670.3	100.0
90-120	3.9	0.0
90-130	3.9	0.0
90-150	3.9	0.0
90-180	3.9	0.0
0-180	13674.2	100.0

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

RC	80				70				50				30			
RW	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	97	106	102	98	95	98	95	92	94	92	89		
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74		
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46		
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40		
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36		
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32		
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29		
10	53	39	32	26	51	39	31	26	38	31	26	37	30	26		

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

ULB G2 2 MH UV FR 835

Test No.: LLIA001249-007A

Luminaire Lumens: 12,789 lm

Luminaire Watts: 85.0W

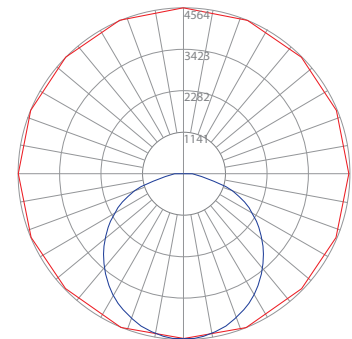
Efficacy: 150.5 LPW

Spacing Criterion (0-180): 1.24

Spacing Criterion (90-270): 1.28

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	23385	24877	25922
55	20405	23973	25803
65	16649	22990	26028
75	12551	21409	18759
85	7535	16214	14061



— Vert. Plane
— Horiz. Cone

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20	1661.5	13.0
0-30	3523.7	27.6
0-40	5759.9	45.0
0-60	10112.5	79.1
0-80	12549.2	98.1
0-90	12785.2	100.0
90-120	3.9	0.0
90-130	3.9	0.0
90-150	3.9	0.0
90-180	3.9	0.0
0-180	12789.0	100.0

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

RC	80				70				50				30			
RW	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	94	97	94	91	94	91	88		
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74		
3	90	80	71	65	88	78	70	64	75	68	63	72	67	62		
4	83	70	62	55	80	69	61	55	67	59	54	64	58	53		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46		
6	70	57	48	41	68	56	47	41	54	46	41	52	45	40		
7	65	51	43	36	63	51	42	36	49	41	36	48	41	36		
8	60	47	38	32	59	46	38	32	45	37	32	44	37	32		
9	56	43	35	29	55	42	35	29	41	34	29	40	34	29		
10	53	40	32	26	52	39	32	26	38	31	26	37	31	26		

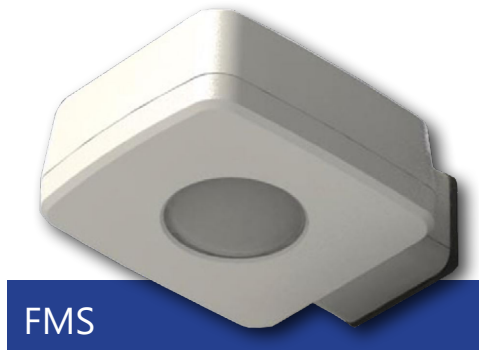
Tested in accordance with IES standards utilizing absolute photometry per LM-79-08

ULB G2 HD-2 LED Heavy Duty High Bay

Douglas Lighting Controls, Inc.: Cloud-based controls

The ULB G2 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.



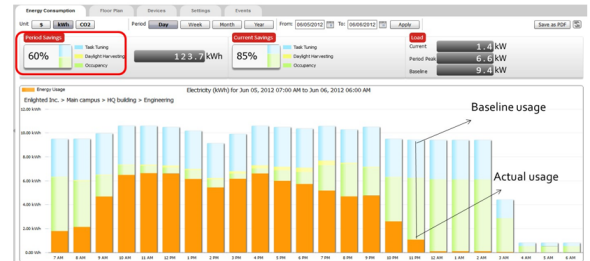
Real-time data analytics

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

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

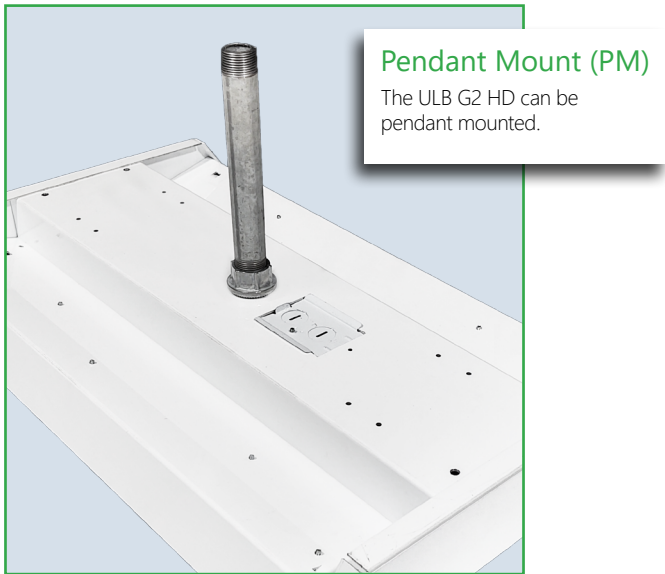


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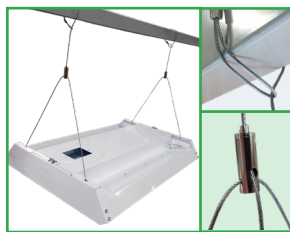
ULB G2 HD-2 LED Heavy Duty High Bay

Hanging Options Available:



Surface Mount

The ULB G2 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.

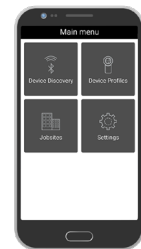


Other controls available:



Dimming Sensors (Z221B/Z321B)

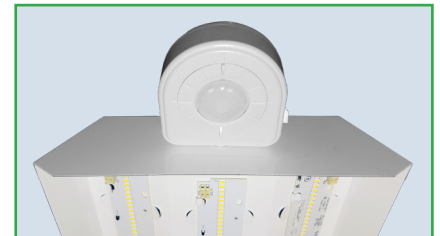
- The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
- Comes pre-installed on the end cap
- Rated for cold locations
- Parameters for Bluetooth-enabled Z321B adjustable via phone app - iOS or Android
- Parameters for Z221B adjustable via wireless configuration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

