LUMENFOCUS

LED

WVL G2 4 | LED Vaportight High Bay

Features:
- High performance LED technology
- 90+ CRI standard
- 0-10V dimming drivers standard
- DALI drivers available
- Field replaceable LED boards and drivers
- Heat management system helps maximize efficacy and system life
- Multiple hanging options, including surface, chain, and aircraft cable, for easy installation
- Durable materials and craftsmanship allows the WVL to withstand some of the harshest environments

Applications:
Most industrial, retail, and recreational low bay and high bay applications
- Warehouse
- Manufacturing Facility
- Food Processing
- Gymnasium
- Parking Garage
- Car Wash
- Cold/Frozen Storage *(cold temperature rules apply. Refer to warranty document at www.lumenfocus.com/support for details)*

Predicted Lifetime:
- L70 ≥ 129,000 hrs (calculated)
- L80 ≥ 81,000 hrs (calculated)
- L90 ≥ 39,000 hrs (reported)
- 85% lumen maintenance @ 60,000 hrs *(based on LM-80, TM-21 and in-situ laboratory testing)*

Construction:
- UL 5VA fiberglass housing (will not melt or burn)
- Impact resistant acrylic and UV stabilized polycarbonate lenses
- Pre-painted cold rolled steel board trays
- Acetal copolymer secure locking plastic latches (stainless steel latches optional)
- Stainless steel mounting hardware

Certifications:
- UL 1598 listed for US and Canada, suitable for wet locations
- DesignLights Consortium qualified on specific configurations (refer to DLC qualified products list for exact model numbers) http://designlights.org/
- IP65
- IP66
- IP67
- NEMA 4X
- NSF
- PSI 1500
- RoHS

Warranty:
- 5 year limited system warranty - see www.LumenFocus.com for complete warranty terms and conditions

90+ CRI

MADE IN USA
USING DOMESTIC AND FOREIGN COMPONENTS

Ambient Operating Temp.:

Output	Surface Mount	Suspended
VL	-30°C to 40°C	-30°C to 40°C
LW	-30°C to 40°C	-30°C to 40°C
MD	-30°C to 40°C	-30°C to 40°C
HI	-30°C to 40°C	-30°C to 40°C
VH	-30°C to 35°C	-30°C to 40°C
SH	-30°C to 30°C	-30°C to 40°C

© 2023 LumenFocus, LLC.
LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

www.lumenfocus.com
880 Facet Rd. | Henderson, NC 27537
252-430-6970

WVL_G2_4_LED_v1.5
Page 1 of 6

Ordering Guide:

example: WVL G2 4 HI UV FA 940 RBS C6

Series	Length	Output	Voltage	Shielding	CRI/CCT	Hanging	Controls	Options
WVL G2	4							
WVL G2 Gen 2	**4** 4'	**VL** Very Low	**UV** 120-277	**CP** Clear Polycarbonate with Frosted Ends	**930** 90 CRI/3000K	**Blank** V-Hook (For Chain or Cable Mount)	**Blank** No Controls	**Blank** No Options
		LW Low	**34** 347V	**CA** Clear Acrylic with Frosted Ends	**935** 90 CRI/3500K	**RBS** Rigid Mounting Beam - Stainless Steel	**ZOS** Occupancy Sensor (On/Off) [1]	**C6** 6' Single Circuit Cord
		MD Medium	**48** 480V	**FA** Frosted Acrylic	**940** 90 CRI/4000K	**RBZ** Rigid Mounting Beam - Zinc Plated	**ZOSMD** Microwave Photo/Motion Sensor With Step-Dimming (High/Low/Off) [1]	**C6(LVL)** C6 With Integrated Dimming Leads
		HI High			**950** 90 CRI/5000K	**FCM** Flexible Ceiling Mount	**ZOFD1** Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping (120-277V) [1]	**C10** 10' Single Circuit Cord
		VH Very High				**QC** 10' Quick Hang Cable Kit	**ZOFDU** Leviton Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Sensor with Grouping, Scheduling (120-480V) [1]	**C10(LVL)** C10 With Integrated Dimming Leads
		SH Super High				**QC20** 20' Quick Hang Cable Kit	**Z221BL_** Wattstopper Programmable Photo/ Motion Multi-Voltage Sensor (high/low/off) [2]	**D6** 6' Dual Circuit Cord
							Z321BL_ Wattstopper Bluetooth-enabled Programmable Dimming/ Occupancy/Daylight Harvesting Multi-Voltage Sensor [2]	**D10** 10' Dual Circuit Cord
							ZPC Photocell	**P(NEMA)** Plug (Specify NEMA configuration)
							ZENLO Enlighted Ruggedized Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted One System [3]	**EM1** Emergency Pack - Up To 8W [4]
							ZENLC Enlighted Ruggedized Sensor with Dimming/Occupancy/ Daylight Harvesting and Enlighted Connected System [3]	**EM1C** Emergency Pack - Up To 14W [5]
							ZENLI Enlighted Ruggedized Sensor with Dimming/Occupancy/Daylight Harvesting and Enlighted IoT System [3]	**EM2** Emergency Pack - Up To 16W [6]
								SCL Stainless Steel Captive Latches
								LT Lens Tether
								F Fuse
								SDT(480V) 480V To 277V Step Down Transformer
								LVL 0-10V Dimming Leads for Easy Field Access
								BAA Buy American Act Compliant

Notes

[1] Max mounting height 40'. See Page 4 for more details
[2] "_" = lens type. Max mounting height 40'. See Page 4 for more details.
[3] Max mounting height 50'. See Page 5 for more details on advanced controls.
[4] EM1 - 120-277V / 10°C-50°C ambient.
[5] EM1C - 120-277V / -20°C-50°C ambient. Adds 30W to system wattage.
[6] EM2 - 120-277V / 0°C-50°C ambient.

Controls Accessories *(order separately)*

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)

For WattStopper Controls

FSIR-100   Wireless IR Programming Tool (For Z221Lx)

© 2023 LumenFocus, LLC.
LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

www.lumenfocus.com
880 Facet Rd. | Henderson, NC 27537
252-430-6970

WVL_G2_4_LED_v1.5
Page 2 of 6

Performance Chart:

Catalog #	Watts	Lumens (930)	LPW (930)	Lumens (935)	LPW (935)	Lumens (940)	LPW (940)	Lumens (950)	LPW (950)
WVL G2 4 VL UV FA 9xx	112.5	15818.2	140.6	15884.9	141.2	16262.1	144.5	16262.1	144.5
WVL G2 4 LW UV FA 9xx	138.0	19660.8	142.5	19743.6	143.1	20212.6	146.5	20212.6	146.5
WVL G2 4 MD UV FA 9xx	171.7	23588.0	137.4	23687.4	137.9	24250.0	141.2	24250.0	141.2
WVL G2 4 HI UV FA 9xx	189.2	27424.3	144.9	27539.9	145.5	28194.0	149.0	28194.0	149.0
WVL G2 4 VH UV FA 9xx	222.6	31396.2	141.0	31528.6	141.6	32277.4	145.0	32277.4	145.0
WVL G2 4 SH UV FA 9xx	244.3	35286.9	144.5	35435.6	145.1	36277.3	148.5	36277.3	148.5
WVL G2 4 VL UV CA 9xx	112.5	16081.9	142.9	16149.7	143.5	16533.2	146.9	16533.2	146.9
WVL G2 4 LW UV CA 9xx	138.0	19988.5	144.8	20072.8	145.4	20549.5	148.9	20549.5	148.9
WVL G2 4 MD UV CA 9xx	171.7	23981.2	139.6	24082.2	140.2	24654.2	143.6	24654.2	143.6
WVL G2 4 HI UV CA 9xx	189.2	27881.5	147.3	27999.0	147.9	28664.0	151.5	28664.0	151.5
WVL G2 4 VH UV CA 9xx	222.6	31919.6	143.4	32054.1	144.0	32815.5	147.4	32815.5	147.4
WVL G2 4 SH UV CA 9xx	244.3	35875.1	146.9	36026.3	147.5	36882.0	151.0	36882.0	151.0
WVL G2 4 VL UV CP 9xx	112.5	15642.4	139.0	15708.4	139.6	16081.5	142.9	16081.5	142.9
WVL G2 4 LW UV CP 9xx	138.0	19442.3	140.9	19524.3	141.5	19988.0	144.8	19988.0	144.8
WVL G2 4 MD UV CP 9xx	171.7	23325.9	135.8	23424.2	136.4	23980.6	139.6	23980.6	139.6
WVL G2 4 HI UV CP 9xx	189.2	27119.7	143.3	27234.0	143.9	27880.8	147.3	27880.8	147.3
WVL G2 4 VH UV CP 9xx	222.6	31047.4	139.5	31178.3	140.0	31918.8	143.4	31918.8	143.4
WVL G2 4 SH UV CP 9xx	244.3	34894.9	142.9	35041.9	143.5	35874.2	146.9	35874.2	146.9

Photometric Data:

Relative Luminous Intensity with CP lens

- Vert. Plane
- Horiz. Cone
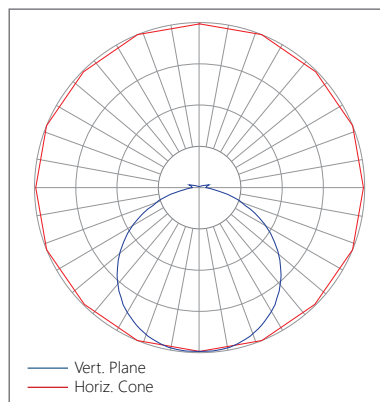
Relative Luminous Intensity with CA lens

- Vert. Plane
- Horiz. Cone
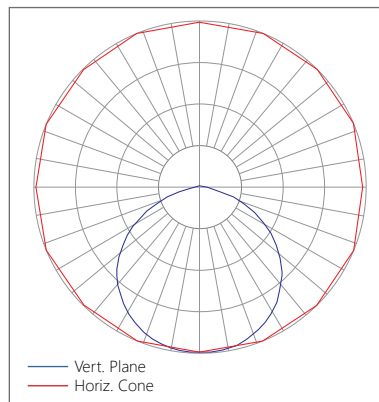
Relative Luminous Intensity with FA lens

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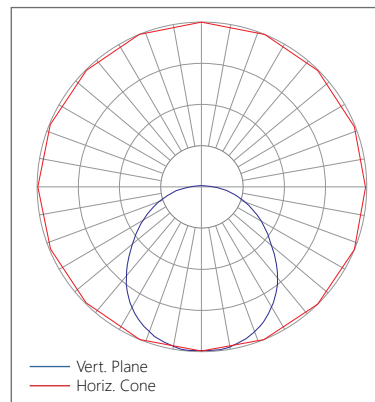
The WVL G2 features field replaceable boards and drivers. This allows you to upgrade to more efficient technology in the future. Or, in the rare event of a failure, you can rapidly replace defective components. Re-boardABILITY helps to ensure you won't get stuck with an obsolete light fixture. Learn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

© 2023 LumenFocus, LLC.
LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

www.lumenfocus.com
880 Facet Rd. | Henderson, NC 27537
252-430-6970

WVL_G2_4_LED_v1.5
Page 3 of 6

Controls Summary:

Control Code	Type	Capabilities	Communication
ZOS	Motion (PIR)	On/Off	Wired
ZOSMD	Motion (Microwave), 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)
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	Motion (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
* Additional equipment required. Contact LumenFocus representative for details

On/Off Occupancy Sensor (ZOS)

The Leviton OSFHL-CTW (or equivalent) is an end mounted PIR On/Off motion sensor. It comes with two interchangeable lenses: Low Bay (8-25' heights), High Bay (20-40' heights), as well as an aisle mask.
• IP65 rated

Microwave Occupancy Sensor (ZOSMD)

The Leviton OSM3D-DDW (or equivalent) detects motion through low density materials using high frequency electromagnetic waves. This means it can sit discretely behind the WVL's lens. The high frequency waves offer less interference and false tripping than traditional sensing technology for reliable occupancy applications. The ZOSMD features automatic switching or dimming based on motion. The ZOSMD option adds step-dimming functionality - standby dimming level 10% / 20% / 30% / 50%. Max mounting height is 40 feet.

Programmable Dimming Sensors:

ZOFDx Sensors

The ZOFDx 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.

• 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

Z221B/Z321B Sensors

• The Wattstopper FSP sensor provides multi-level control based on motion and/or daylight contribution
• 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

1) The Wattstopper FSP sensor. 2) The phone app interface for the Z321B. 3) The FSIR-100 wireless configuration tool.

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.
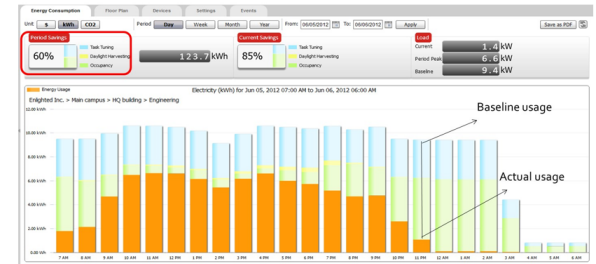
Enlighted sensors come standard with the Enlighted One system (the "ZENLO" option). Enlighted Connected ("ZENLC") offers even more options. The Enlighted IoT ("ZENLI") option allows the full implementation of Enlighted's services. Each system can be fully upgraded to the next tier in the future. So if 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 & 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
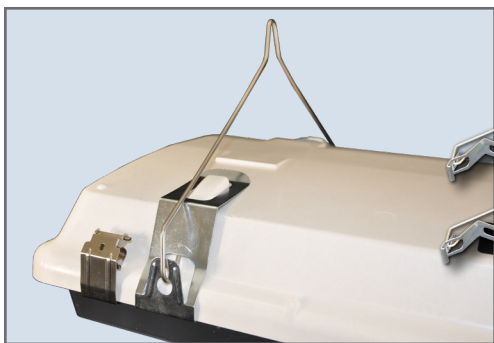• Analyze traffic density and congestion in a space

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

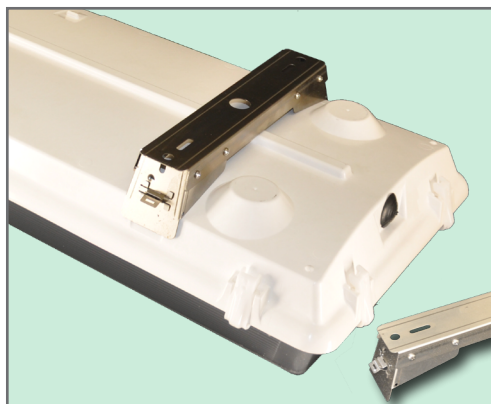*© 2023 Enlighted for all Enlighted content and images.*

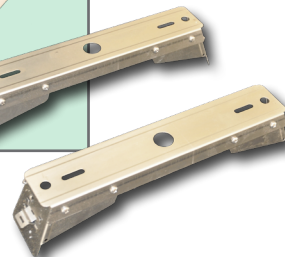© 2023 LumenFocus, LLC.
LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

www.lumenfocus.com
880 Facet Rd. | Henderson, NC 27537
252-430-6970

WVL_G2_4_LED_v1.5
Page 5 of 6

Mounting:

V-Hook   For chain or cable mount (comes standard)

FCM   Flexible Ceiling Mount

RBS/RBZ   Rigid Mounting Beam
(RBS = stainless steel;
RBZ = zinc-plated)

Schematic:

© 2023 LumenFocus, LLC.
LumenFocus reserves the right to change specifications without notice. Consult factory for most up to date specifications.

www.lumenfocus.com
880 Facet Rd. | Henderson, NC 27537
252-430-6970

WVL_G2_4_LED_v1.5
Page 6 of 6