

WALO - PATTERNS

WALL DIRECT/INDIRECT

LUMENWERX
WWW.LUMENWERX.COM



LEVO - Leveled outside corner

DESCRIPTION

Walo is a linear luminaire that casts light to either side, reflecting off of the adjacent surface. The resulting parallel bands of brightness – whether up-and-down or side-to-side – define and delineate walls and pathways. A full suite of on-board driver, battery pack and electrical options makes WALO a practical approach for lighting circulation areas. WALO can be used individually or in patterns, installing vertically or horizontally. Lighted joiner elements enable WALO to turn inside and outside corners.

PROJECT: _____

TYPE: _____

NOTES: _____

EXTRA SHALLOW



ORDER GUIDE

up to 130 lm/w performance

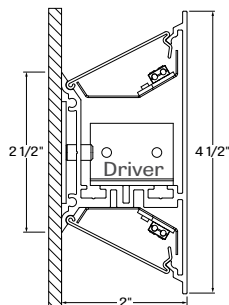
WALWDIPAT	HLO	LED			
LUMINAIRE ID	OPTICS	LIGHT SOURCE	CRI	DIR/IND LUMEN PACKAGES	COLOR TEMP.
WALWDIPAT - Walo wall direct/indirect pattern	HLO - High-Efficiency Lambertian Optic	LED - High performance LED	80 - 80CRI 90 - 90CRI	500 - Min. low output 500lm/ft 700 - Medium output 700lm/ft 1000 - Max. high output 1000lm/ft #### - Other required lm/ft	30 - 3000K 35 - 3500K 40 - 4000K

PATTERN LENGTH	CORNER TYPE	CORNER DEGREE	VOLTAGE	DRIVER
#FT - Nominal length in feet #IN - Length in inches Continuous Run - for luminaires over 12'	LEVI - Level inside corner LEVO - Level outside corner	90(#) - 90 degrees, specify number of corners (#) #(#) - Other degrees, specify the angle degree #, followed by the number of corners (#)	120 - 120V 277 - 277V UNV - 120V-277V 347 - 347V (not available with Lutron)	D1 - 1% 0-10V DA - DALI LTEA2W - Lutron 1% - 2 wire FP 120V LDE1 - Lutron Hi-lume 1% Eco LDE5 - Lutron 5% EcoSystem

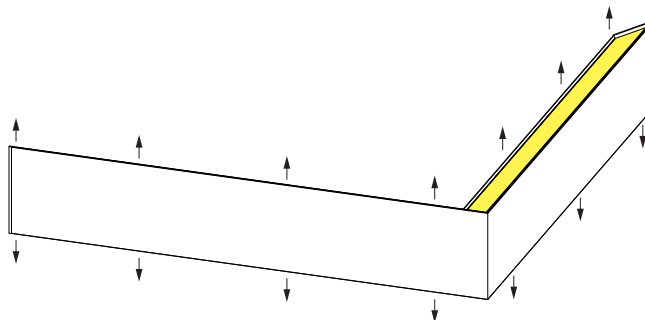
ELECTRICAL	DMB	MOUNTING	FINISH	CONTROLS	OPTIONS
1 - 1 circuit +#EB - Emergency battery (min 4' fixture, except Lutron) +#EM - Emergency light circuit +#NL - Night light circuit +GTD - Generator transfer device	DMB - Drywall mounting bracket	W - Matte white AL - Aluminum CF# - Custom finish specify RAL#	CONNECTED CONTROLS CCS() - LU-Lutron, EN-Enlighted, OS -Osram, CR -Crestron. To specify see information on page 3	FU - Fuse CU - Custom	

See page 3 for ordering code detailed information

CROSS SECTION



3D VIEW



WALWDIPAT - wall direct/indirect

LEVO - leveled outside corner with end caps



LEVELED CORNERS

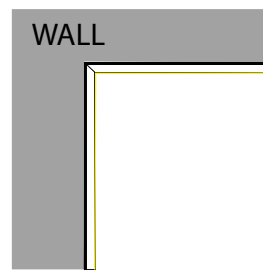


HOW TO SPECIFY A PATTERN?

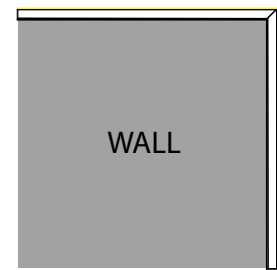
Please follow these steps when specifying in order to be as precise as possible.

- (1) We require a drawing illustrating the pattern you are trying to achieve - anything from a simple line drawing to elaborate architectural drawings will suffice.
- (2) Under **PATTERN LENGTH**, enter the overall length of your pattern - either in feet or inches.
- (3) Under **CORNER TYPE**, please enter LEVI for level inside corners, or LEVO for level outside corners.
- (4) Under **CORNER DEGREE**, please enter the angle in degrees of each corner required to complete your pattern, followed by the number of corners.

PATTERN LENGTH	CORNER TYPE	CORNERS DEGREE
#FT - nominal length in feet	LEVI - Level inside corner	90(#) - 90 degrees, specify number of corners (#)
#IN - length in inches	LEVO - Level outside corner	#(°) - Other degrees, specify the angle degree #, followed by the number of corners (#)
Continuous Run - for luminaires over 12'		



LEVI - Level inside corner



LEVO - Level outside corner

OPTICS

HIGH EFFICIENCY LAMBERTIAN OPTIC (HLO) - matte white side reflectors combined with High-Efficiency Lambertian Optic (HLO) shielding of diffusing 0.075" thick acrylic with up to 88% transmission and good source obscuration. Luminaire brightness is controlled by the flux-to-shielding area ratio.

LIGHT SOURCE - LED

Custom linear array of mid-flux LED's are cartridge-mounted with quick-connect wiring to facilitate service and thermal management. Available in 3000K, 3500K and 4000K with a minimum 80 CRI and an option for 90 CRI with elevated R9 value. Color consistency maintained to within 3 SDCM. LEDs operated at reduced drive current to optimize efficacy and lumen maintenance.

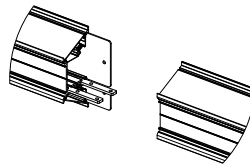
All LEDs have been tested in accordance with IESNA LM-80-08 and the results have shown L80 lumen maintenance greater than 60,000 hours. Absolute product photometry is measured and presented in accordance with IESNA LM-79, unless otherwise indicated.

PERFORMANCE PER 4' AT 4000K

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	4000K	15.5	2000	127
medium output	4000K	21.5	2800	129
high output	4000K	31	4000	130

PATTERN LENGTH

All individual sections are joined together onsite using the joiner kits provided. Lumenwerx offers joiner kits that are extremely simple to work with in the field and result in a fixture that appears virtually seamless with no light leak at any connection.



joining system for Walo
Direct/Indirect

ELECTRICAL

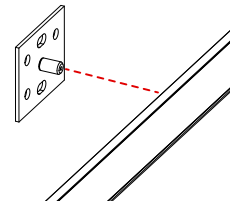
Factory-set, adjustable output current LED driver with universal (120-277VAC) input. Dimmable from 100% to 1% with 0-10V dimming control. Rated life (90% survivorship) of 50,000 hours at 50°C max. ambient (and 70°C max. case) temperature. At maximum driver load: Efficiency>84%, PF>0.9, THD<20%. Other specifiable options include Lutron Hi-Lume 1% (specify 2-wire, or Ecosystem Dim-to-Off), Lutron 5-Series (5% Ecosystem), and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

EMERGENCY

Factory installed long life high temperature recyclable Ni-Cad battery pack with test switch and charge indicator, minimum of 90 minutes operation, up to 1000 lumens per 4ft (25°C) emergency lighting output. Recharge time of 24 hours.

MOUNTING OPTIONS

Fixtures may be horizontally or vertically mounted to the wall using a bracket. For long runs, a minimum of 6" from adjacent walls is required.



Wall bracket

CONTROLS

LumenWerx offers several options for integrating occupancy and daylight harvesting controls in our luminaires.

CONNECTED CONTROLS

With Connected Controls, sensors or nodes installed in the luminaire form part of a larger control system infrastructure from manufacturers such as: Lutron*, Enlighted, Osram ENCELIUM, Acuity nLight, Crestron and others. These connected controls allow for a scalable system providing features like occupancy and daylight control, manual control, scheduling and configuration of various zones and scenes. Energy reporting and system monitoring are also possible. Specific capabilities depend on the control system being used.

LumenWerx installs the components (sensors, nodes, power packs, etc) which may be supplied to us by a third party, or procured directly by LumenWerx, depending on the control system manufacturer.

LumenWerx is solely responsible for the installation of specified components; the controls manufacturer is responsible for performance of the control system.

To indicate a LumenWerx luminaire with Connected Controls, identify the specific onsite control system to be integrated into the luminaires using the ordering code. Due to the diversity of components, you must contact controls@lumenwerx.com to assure complete compatibility with intended control system and to fully specify the luminaire.

Complete control specifications, sensor/node/power pack layout, and narrative for the control system are required for LumenWerx to create shop drawings and submittals.

* Lumenwerx offers a Lutron Vive-Enabled fixture option using either the DFCSJ-OEM-OCC (OCS Option) or DFCSJ-OEM-RF (wireless only, no sensor) Integral Fixture Modules and a DALI or EcoSystem LED driver based on customer dimming requirements.

Please contact our controls department at controls@lumenwerx.com for further assistance.

FINISH

Interior - 95%, reflective matte powder coated white paint

Exterior - matte white or aluminum powder coating.

Custom finishes are also available.

CONSTRUCTION

Housing - Extruded Aluminum (0.07" nominal) up to 90% Recycled Content

Interior brackets - Die formed cold rolled sheet steel 16 gauge thick

Joining system - Cold rolled steel

Reflectors - Cold rolled steel 0.024" thick precisely die formed, 95% reflective matte white painted

End caps - Aluminum plate 0.125" thickness

WEIGHT

WALO 4ft - 7.63lbs - 3.46kg

WALO 8ft - 13.78lbs - 6.25kg

WALO 12ft - 21lbs - 9.53kg

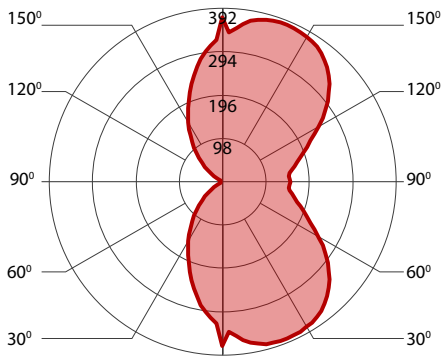
CERTIFICATIONS

ETL - Rated for Indoor Dry/Damp locations. Conforms to UL Standard 1598 and certified to CAN/CSA Standard C22.2 No. 250.0.

WARRANTY

LumenWerx provides a five-year limited warranty of electrical and mechanical performance of the luminaires, including the LED boards, drivers, and auxiliary electronics. LumenWerx will repair or replace defective luminaires or components at our discretion, provided they have been installed and operated in accordance with our specifications. Other limitations apply, please refer to the full warranty on our website.

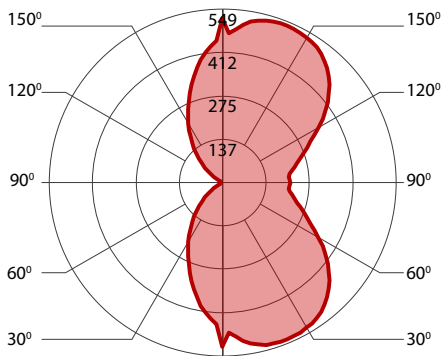
500 LUMEN AT 80CRI - LOW OUTPUT



PERFORMANCE

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	2700K	17	2000	117
low output	3000K	16.5	2000	121
low output	3500K	16.5	2000	123
low output	4000K	15.5	2000	127

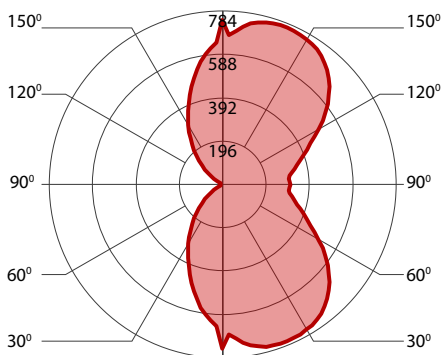
700 LUMEN AT 80CRI - MEDIUM OUTPUT



PERFORMANCE

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
medium output	2700K	23.5	2800	119
medium output	3000K	23	2800	123
medium output	3500K	22.5	2800	125
medium output	4000K	21.5	2800	129

1000 LUMEN AT 80CRI - HIGH OUTPUT



PERFORMANCE

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
high output	2700K	33.5	4000	120
high output	3000K	32.5	4000	124
high output	3500K	31.5	4000	126
high output	4000K	31	4000	130