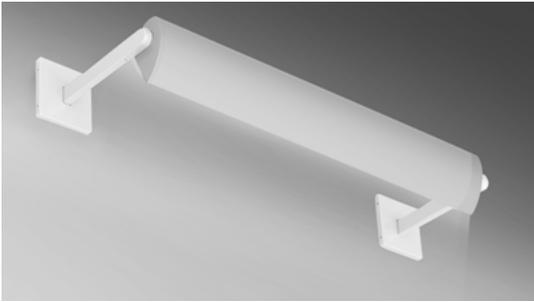# AXLE LED

WALL ASYMMETRIC DIRECT

5 YEARS WARRANTY

DESCRIPTION

Axle is an elegant and compact LED linear accent luminaire providing efficient asymmetric light distribution. Softly curved, Axle measures just 2 11/16" by 3 11/16". With adjustable optics, light output from 350 to 1200 lumens per foot (nominal), and efficacy up to 126 LPW, Axle delivers smooth, effective direct illumination. Highly flexible, Axle can be installed as individual luminaires (up to 8') or in continuous runs. LED boards and on-board driver are accessible without removing the luminaire.

PROJECT: _____

TYPE: _____

NOTES: _____

ORDER GUIDE

up to 126 lm/w performance

| AXLWAD			LED			
LUMINAIRE ID	**OPTICS**		**LIGHT SOURCE**	**CRI**	**LUMEN PACKAGES**	**COLOR TEMP.**
AXLWAD - Axle wall asymmetric direct	**APO** - Ajustable Asymmetric Projecting Optic **BAF** - white baffles overlay		**LED** - high performance LED	**80** - 80CRI **90** - 90CRI	**350** - min. eco low output 350lm/ft **550** - low output 550lm/ft **750** - medium output 750lm/ft **950** - high output 950lm/ft **1200** - max. ultra high output 1200lm/ft **####** - other required lm/ft	**27** - 2700k **30** - 3000k **35** - 3500k **40** - 4000k

LUMINAIRE LENGTH	**VOLTAGE**	**DRIVER**	**ELECTRICAL**
Standard sections - 2', 3', 4', 5' & 8' For all other specify length **#FT** - nominal length in feet **#IN** - length in inches	**120** - 120V **277** - 277V **UNV** - 120V-277V **347** - 347V (not available with Lutron)	**D1** - 1% dimming 0-10V **DA** - Dali **LTEA2W** - Lutron 1% - 2 wire FF 120V **LDE1** - Lutron Hi-lume 1% Eco **LDE5** - Lutron 5% EcoSystem	**1** - 1 circuit **+#EB** - emergency battery (min 4' fixture, except Lutron) **+#EM** - emergency light circuit **+#NL** - night light circuit

See page 2 for ordering code detailed information

MOUNTING	**MOUNTING PLATE**	**FINISH**	**OPTIONS**
ARM6 - Cantilever arm 6" **ARM12** - Cantilever arm 12" **ARM18** - Cantilever arm 18" **ARM##** - Cantilever arm custom length (max 24")	**55W** - 5" by 5" white plate **55AL** - 5" by 5" aluminum plate	**W** - matte white **AL** - aluminum **CF#** - custom finish specify RAL#	**CU** - custom

CROSS SECTION

6"

2 11/16"

3 11/16"
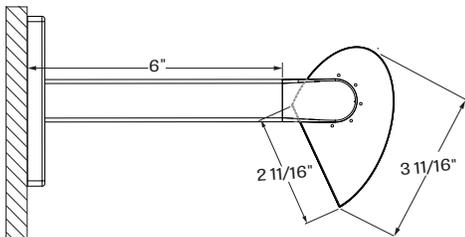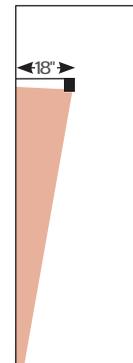
AXLWAD - 6" cantilever arm

OPTICS

APO - Asymmetric Projecting Optics

LIGHT DISTRIBUTION

18"

With an 18" arm

ETL Listed
Intertek

OPTICS

ASYMMETRIC PROJECTING OPTIC (APO) - Cartridge-mounted, linear LED arrays are paired with precisely formed \semi-specular reflector for smooth light distribution and a 95⁰ beam spread. The LED array is protected by a clear acrylic cover. In a direct orientation, peak intensity occurs at 30° below nadir with a peak-to-zenith intensity ratio of 5.2:1.
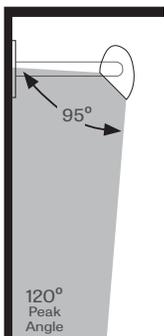
OPTIONAL BAFFLES (BAF) - Optional die-formed sheet metal white baffle with blades spaced 0.5" apart provides lateral shielding and can be field-installed .

Field-Adjustable Aiming (15 options)
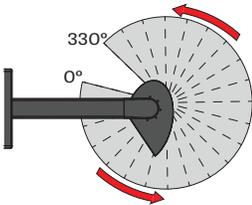
The Axle housing can be field-rotated to provide either indirect (ceiling) or direct illumination. Detents in 15° increments permit precise aiming.

LIGHT SOURCE - LED

Custom linear array of mid-flux LED's are cartridge-mounted 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 are maintained to within 3 SDCM. LEDs operate 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 - APO

| LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
eco low output	4000K	11	1400	125
low output	4000K	17.5	2200	126
medium output	4000K	24.5	3000	123
high output	4000K	31.4	3800	121
ultra high output	4000K	40.5	4800	119

LIGHT DISTRIBUTION

←18"→
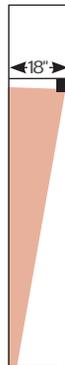
AXLWAD-APO-LED-80-350-40-20FT
Luminaire Watts = 58W (for 20Ft)
Ceiling Height = 10ft
Length of Wall = 20ft
Arm Bracket = 18 inches

Foot Candles on 20' length wall

13.7	14.6	15.3	14.6	14.6	14.6	14.6	15.2	14.4	12.9
74.3	85.3	87.2	86.8	86.8	86.8	86.8	87.1	85.1	73.4
34.5	41.6	43.7	44.1	44.2	44.2	44.1	43.6	41.5	33.5
9.9	11.5	12.4	12.8	12.9	12.9	12.8	12.4	11.4	9.5
4.5	5.1	5.5	5.8	5.8	5.8	5.7	5.5	5.0	4.3

LUMINAIRE LENGTH

Axle is available in individual lengths up to 8'. The mounting hub provides connections for installation in continuous rows, allowing each luminaire to be aimed independently.
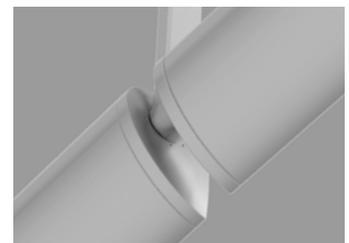
ELECTRICAL

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), DMX (RDM compatible) and DALI protocol drivers. All of our standard 0-10V drivers are NEMA 410 compliant.

MOUNTING

Axle is wall mounted using fixed steel arms, 6", 12", or 18" long. Arm mounting provides concealed wiring and connects to outlet boxes using 4" square and round mounting plates and 4"x 2" plates are also available.

6   12   18
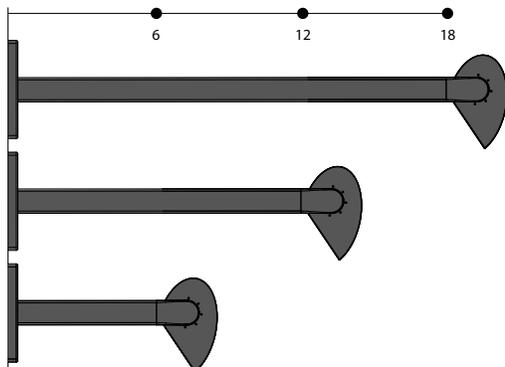
MOUNTING PLATES

5" x 5"

FINISH

Interior - Natural aluminium inner extrusion and 95%, reflective white brackets
Exterior - White or aluminum powder coating.

EMERGENCY

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

CONSTRUCTION

Housing - extruded aluminum 0.090" nominal thickness
Reflector - semi-specular anodised aluminum sheet 0.020"
Reflector bracket - extruded aluminum 0.090" nominal thickness / Natural finish)
Lens - Extruded Clear Acrylic 0.050" nominal thickness
Interior Brackets - 22 GA CRS / Painted White
End-caps - die-cast aluminum
Joiner - die-cast aluminum
Cantilever - rectangular cold rolled steel tube with welded mounting plate
Baffles - white sheet metal

MAINTENANCE

LED boards are removable from the cartridge for easy replacement. Both cartridge and driver are accessible without removing the luminaire.

WEIGHT
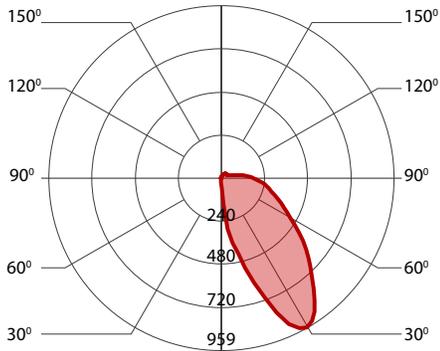
AXLE 4ft - 3.2Kg - 7lb
AXLE 8ft - 6.3Kg - 14lb

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.

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AXLE LED

WALL ASYMMETRIC DIRECT

LUMENWERX
W W W . L U M E N W E R X . C O M

350 LUMEN AT 80CRI - ECO LOW OUTPUT

PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
eco low output	2700K	11	1400	127
eco low output	3000K	12	1400	117
eco low output	3500K	11.5	1400	121
eco low output	4000K	11	1400	125

550 LUMEN AT 80CRI - LOW OUTPUT
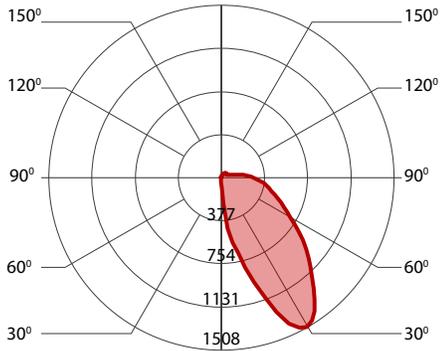
PERFORMANCE PER 4'

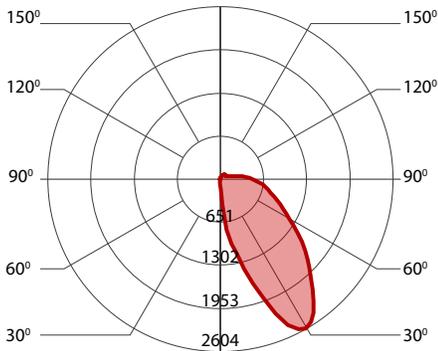| LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
low output	2700K	18	2200	123
low output	3000K	18.5	2200	118
low output	3500K	18	2200	122
low output	4000K	17.5	2200	126

750 LUMEN AT 80CRI - MEDIUM OUTPUT
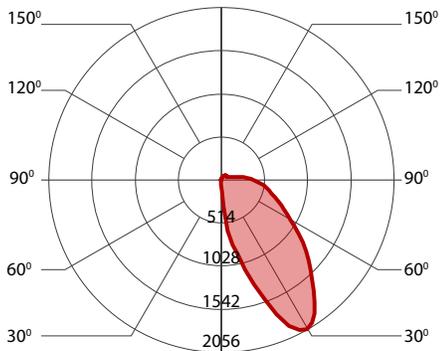
PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
medium output	2700K	24	3000	126
medium output	3000K	26	3000	115
medium output	3500K	25	3000	119
medium output	4000K	24.5	3000	123

ETL
Intertek

AXLE LED

WALL ASYMMETRIC DIRECT

950 LUMEN AT 80CRI - HIGH OUTPUT

PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
high output	2700K	31	3800	123
high output	3000K	33.5	3800	113
high output	3500K	32.5	3800	117
high output	4000K	31.4	3800	121

1200 LUMEN AT 80CRI - ULTRA HIGH OUTPUT
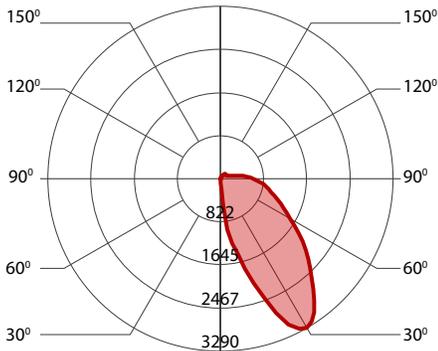
PERFORMANCE PER 4'

LED output	Color Temp	Watts	Nominal Delivered Lumens	Efficacy LPW
ultra high output	2700K	39.5	4800	121
ultra high output	3000K	43	4800	111
ultra high output	3500K	41.5	4800	115
ultra high output	4000K	40.5	4800	119

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