Evolve™ LED Area Light

N Series (EANB)



current powered by GE

Product Features

The next generation of the GE Evolve™ LED Area Light is an exciting solution to efficiently illuminate site and area applications. The smaller form design of the EANB fixture provides superior illuminance at impressive site ROIs. The exclusive optical ring design effectively directs the light and produces impressive vertical illuminance and glare control. Additionally, the Evolve LED Area Light provides significant operating cost benefits over the life of each fixture with reduced energy consumption and a long rated life that virtually eliminates ongoing maintenance expenses.

Applications

- Site, area, roadway and general lighting applications utilizing advanced LED optical system providing high uniformity, excellent vertical light distribution, reduced offsite visibility, reduced on-site glare and effective security light levels.
- Obtain a truly optimized and efficient parking space with dimming and occupancy sensing features.

Housing

- Die-cast aluminum housing.
- Slim architectural design incorporates an integral heat sink and light engine, ensuring maximum heat transfer, long LED life, and a reduced Effective Projected Area (EPA).
- Meets 2G vibration level per ANSI C136.31-2010.

LED & Optical Assembly

- Structured LED arrays for optimized area light photometric distribution.
- Evolve light engine with directional reflectors designed to optimize application efficiency and on-site glare.
- Utilizes high brightness LEDs. 70 CRI at 3000K, 4000K and 5000K typical.

Lumen Maintenance

- Projected L86>50,000 hours per IES TM-21
- Projected Lux per IES TM-21 at 25°C for reference:

5KLY	5 YEARS OPERATION	10 YEARS OPERATION	25 YEARS OPERATION
EANB	>96	>91	≥90

NOTES: 1. Projected L86 calculations at 40,000 hrs (Ta=25°C). 2. Lighting fixtures for Outdoor Testing Tolerances apply as per Testing Tolerances for Photometric Data.

Lumen Ambient Temperature Factors:

AMBIENT TEMPERATURE (°C)	LUMEN CORRECTION FACTOR
10	1.02
20	1.01
25	1.00
30	0.99
40	0.98
50	0.97

Ratings

- cULus listed; suitable for wet locations.
- IP66 rated optical enclosure per ANSI C136.25-2009.
- Temperature rated at -40° to 50°C.
- Upward Light Output Ratio (ULOR) = 0.
- Title 24 compliant with "M" motion sensor option.
- Compliant with the material restriction requirements of RoHS.

Mounting

Options

- 10-inch (254mm) mounting arm for square pole prewired with 24-inch (610mm) leads.

Options

- 24-inch (254mm) mounting arm for round pole prewired with 24-inch (610mm) leads.

Options

- Slipfitter mounting for 2 3/8-inch (60mm) O.D. pipe prewired with 24-inch (610mm) leads.

Option D

- 10-inch (254mm) mounting arm for round or square pole prewired with 24-inch (610mm) leads.

Finish

- Corrosion resistant polyester powder painted. minimum 2.0 mil. thickness.
- Standard colors: Black & Dark Bronze.
- RAL & custom colors available.

Electrical

- 120-277 VAC and 347-480 VAC available.
- System power factor be >90% and THD <20%.
- ANSI C136.41 7-pin dimming receptacle, standard.
- Universal voltage (120-277VAC) available for all voltages. Light Grid compatible.
- Dimming/Occupancy
  - Wired 0-10V continuous dimming
  - DALI digital dimming. Contact manufacturer for availability.
  - Standalone motion sensor based dimming using "m" option code.
- Surge Protection per ANSI C136.2-2015.
  - 6kV/3kA "Basic" surge protection, standard.
  - 10kV/5kA "Enhanced" surge protection optional.

Accessories

- PE Accessories - See Page 3

DLC DLC Standard qualified models available. Please refer to http://www.designlights.org/QPL for complete information.

Ordering Number Logic

Evolve™ LED Area Light N Series (EANB)

EAN B — — — — ? — — —

(MSO)	(P)	(O)	(CCT)	(VOLTAGE)	(OPTIONS)	(MOUNTING)	(FINISH)	(OPTICS)
• 4 lines • 4+1 (opt.) • None (•)	B = Wattage = 8 to 320 W Series "B"	• 1 = 1 LED • 2 = 2 LED • 3 = 3 LED • 4 = 4 LED • 6 = 6 LED • 8 = 8 LED • 12 = 12 LED • "N" = "No Light" * For controller options see Evolve Controls & Sensors catalogue page	5 = 5000K	7 = 70 watt	• Blank = Standard • A = ANSI C136.41 Dimming (5-pin) • B = ANSI C136.41 Dimming (7-pin) • D = Dual Circuiting (Requires 2 Drivers) • E = Emergency Battery Backup (Requires Emergency Driver) • F = Field Adjustable Output (Requires Programming Tool) • H = High Ambient (50°C) • L = Left Side Service • R = Right Side Service • T = Tool-less Entry • W = Wireless Enabled (Requires Wireless Node) • "N" = "None"	A = 10" Arm for Square Pole Mounting (Option A) B = 10" Arm For Round Pole Mounting (Option B) C = 10" Arm For Square Pole Mount or Round Pole Mount (Option C) D = Universal Mounting (with Included Slipfitter) • Blank = Included • N = Not Included • "N" = Not Any of the Above Slipfitter/Tenon Mounting Adapter Options (Sold Separately) SMA = Square Pole Adapter RMA = Round Pole Adapter * Only available for selected configurations. Consult factory for availability.	• Blank = Standard Finish • "N" = Any of the Above	• Blank = Standard • "N" = Any of the Above

(CONTROLS)	(OTHER)	(TYPICAL SYSTEM WATTAGE)	(TYPICAL SYSTEM LUMENS)	(ELECTRICAL SYSTEM VOLTAGE)	(MOUNTING)	(FINISH)
N = Non-Dimming A = 0-10V Dimming, 5 wire B = 0-10V Dimming, 7 wire D = Dual Circuiting E = Emergency Battery Backup F = Field Adjustable Output H = High Ambient L = Left Side Service R = Right Side Service T = Tool-less Entry W = Wireless Enabled "N" = "None"	N = None "N" = Any of the Above	8 = 8W 12 = 12W 16 = 16W 20 = 20W 24 = 24W 28 = 28W 32 = 32W 36 = 36W 40 = 40W 44 = 44W 48 = 48W 52 = 52W 56 = 56W 60 = 60W 64 = 64W 68 = 68W 72 = 72W 76 = 76W 80 = 80W 84 = 84W 88 = 88W 92 = 92W 96 = 96W 100 = 100W 104 = 104W 108 = 108W 112 = 112W 116 = 116W 120 = 120W 124 = 124W 128 = 128W 132 = 132W 136 = 136W 140 = 140W 144 = 144W 148 = 148W 152 = 152W 156 = 156W 160 = 160W 164 = 164W 168 = 168W 172 = 172W 176 = 176W 180 = 180W 184 = 184W 188 = 188W 192 = 192W 196 = 196W 200 = 200W 204 = 204W 208 = 208W 212 = 212W 216 = 216W 220 = 220W 224 = 224W 228 = 228W 232 = 232W 236 = 236W 240 = 240W 244 = 244W 248 = 248W 252 = 252W 256 = 256W 260 = 260W 264 = 264W 268 = 268W 272 = 272W 276 = 276W 280 = 280W 284 = 284W 288 = 288W 292 = 292W 296 = 296W 300 = 300W 304 = 304W 308 = 308W 312 = 312W 316 = 316W 320 = 320W	1 = 120 VAC 2 = 208 VAC 3 = 240 VAC 4 = 277 VAC 5 = 347 VAC 6 = 480 VAC 7 = 120-277 VAC 8 = 347-480 VAC	• Blank = Standard • "N" = Any of the Above	• Blank = Standard • "N" = Any of the Above

PE Accessories (to be ordered separately)

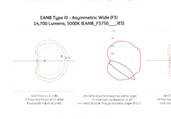
Part Number	Description
9360927	PE2-PH-120-7
9360928	PE2-TWH-120-7
9360929	PE2-480V-ETL-7

Part Number	Description
PE2-PH-120-7	ANSI C136.41 Dimming PE, 120-277V
PE2-TWH-120-7	ANSI C136.41 Dimming PE, 347V
PE2-480V-ETL-7	ANSI C136.41 Dimming PE, 480V

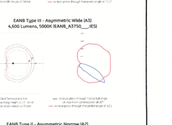
Qty	Part Number	Description
26299	PE2SR	STANDARD 120-277V
26296	PE2SRL	STANDARD 480V
85428	PE2SPL	STANDARD 347V
75293	SCU-PE2C	Shorting cap

Photometrics

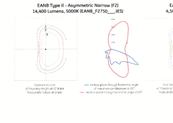
EANB Type IV - Asymmetric Forward (F4)
13,700 Lumens, 5000K (EANB_F4750_ _ _IES)



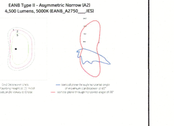
EANB Type IV - Asymmetric Forward (A4)
4,500 Lumens, 5000K (EANB_A4750_ _ _IES)



EANB Type III - Asymmetric Wide (F3)
14,700 Lumens, 5000K (EANB_F3750_ _ _IES)



EANB Type III - Asymmetric Wide (A3)
4,600 Lumens, 5000K (EANB_A3750_ _ _IES)



EANB Type II - Asymmetric Narrow (F2)
14,400 Lumens, 5000K (EANB_F2750_ _ _IES)



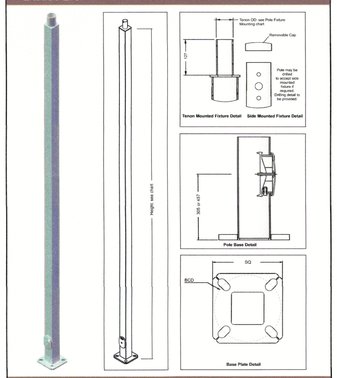
EANB Type II - Asymmetric Narrow (A2)
4,500 Lumens, 5000K (EANB_A2750_ _ _IES)

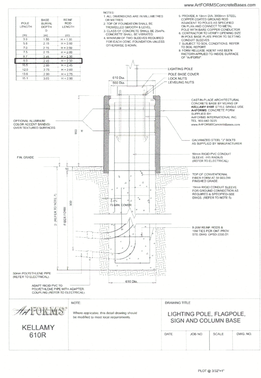


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SQUARE STRAIGHT POLES

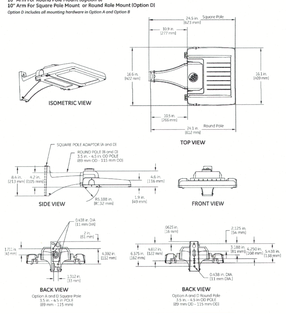
valmont WEST COAST ENGINEERING





Product Dimensions

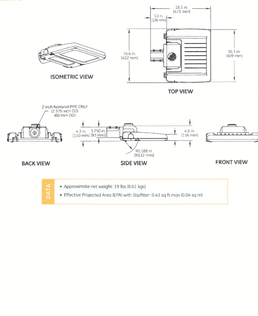
10" Arm For Square Pole Mount (Option A)
10" Arm For Round Pole Mount (Option B)
10" Arm For Square Pole Mount or Round Pole Mount (Option C)
Option D includes all mounting hardware in Option A and Option B



DATA
- Approximate net weight: 20 lbs (9.07 kgs)
- Effective Projected Area (EPA) with 12" Mounting Arm: 0.67 sq ft max (0.06 sq m)

Product Dimensions

Slipfitter Arm Mount
Option D



DATA
- Approximate net weight: 19 lbs (8.61 kgs)
- Effective Projected Area (EPA) with Slipfitter: 0.43 sq ft max (0.04 sq m)

H-Motion Sensing Option:



- Intended for high mounting applications, between 15-30ft (4.57-9.14m). For mounting heights exceeding 30ft, pole mounted sensors are recommended.
- Provides a coverage area radius for walking motion of 15-20ft (4.57- 6.10m).
- Provides 270° of coverage (–90° is blocked by the pole).
- Comes standard with 50% dimmed light output with no occupancy, and full power at occupancy.
- Comes standard with photocell function. Note: If is not necessary to also purchase PE receptacle or control.
- Comes standard with a 5 minute occupancy time delay and a 5 minute ramp-down to the 50% dimmed level.
- Must order with decorative mounting arm options "A" or "B".
- Fixture power increase of 1W when used with sensor option.

Note: Standard options may be reprogrammed in the field. Reprogramming instructions included in product shipment.

Sensor Pattern:

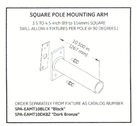


Sensing Pattern Area Fixture Up to 30 ft.

Mounting Information

Mounting Arms for Slipfitter
Order separately with Mounting Option C (Pinned Slipfitter)

SQUARE POLE MOUNTING ARM
3.5 TO 4.5-inch (89 to 114mm) OD
SMSL-ALUM-1 FIXTURES PER POLE @ 90 DEGREES



ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
SMA-EAMT1SBLCX "Black"
SMA-EAMT1SDKBZ "Dark Bronze"

ROUND POLE MOUNTING ARM
3.5 TO 4.5-inch (89 to 114mm) OD
RMSL-ALUM-1 FIXTURES PER POLE @ 90 DEGREES

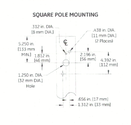


ORDER SEPARATELY FROM FIXTURE AS CATALOG NUMBER
RMA-EAMT1SBLCX "Black"
RMA-EAMT1SDKBZ "Dark Bronze"

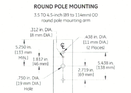
Other mounting patterns are available for retrofit installations. Contact manufacturing for other available mounting patterns.

Drilling Templates for Slipfitter Arms & Arm Mount

SQUARE POLE MOUNTING



ROUND POLE MOUNTING



Sensor Fixture Mounting Options Chart

Suffix x =	Description
0.0	Top cap only
0.1	Top cap with one side mounted fixture
0.2	Top cap with two side mounted fixtures
0.3	Top cap with three side mounted fixtures
0.4	Top cap with four side mounted fixtures
2.0	Top tenon, 60mm O.D.
2.5	Top tenon, 73mm O.D.
3.0	Top tenon, 89mm O.D.
3.5	Top tenon, 102mm O.D.
4.0	Top tenon, 114mm O.D.

SQUARE STRAIGHT POLES

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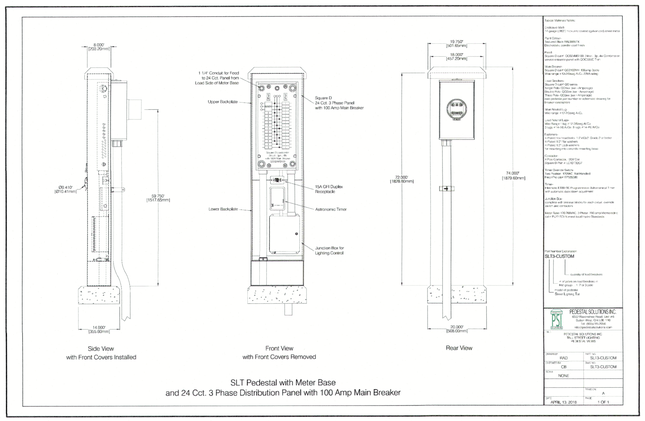
Surface Finish Codes	
00	Bare Metal
02	Finish Paint
03	Powder Coat
04	Galvanize
07	Galvanize & Powder Coat
08	Special Request

Valmont WCE 5" Square Straight Poles

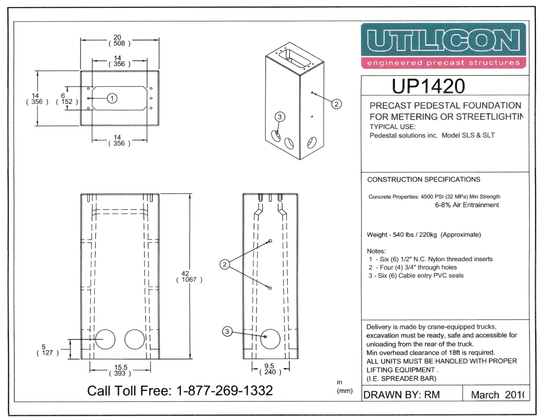
Height	Catalogue Number	Weight (Kg)	SQ (mm)	B.C.D. (mm)	Anchor Bolt: A (Diameter mm)	Anchor Bolt: B (Length mm)	Anchor Bolt: Projection (mm)	Anchor Bolt: Template (mm)	Max.EPA (m²): 0 - <145 Km/h	145 - <160 Km/h	160 - <177 Km/h	177 - <193 Km/h
5" Square Straight Poles												
30'	SSS-19-4.x	86	280	267	1	36	61	111	1.77	1.52	1.16	0.83	0.74	0.62
25'	SSS-20-4.x	104	280	267	1	36	61	111	1.47	0.98	0.69	0.51	0.35	0.26
24'	SSS-24-4.x	122	280	267	1	36	61	111	0.74	0.56	0.33	0.16	0.05	0.00
30'	SSS-30-4.x	149	280	267	1	36	61	111	0.24	0.11	0.00	0.00	0.00	0.00
5" Square Straight Heavy Duty Poles												
25'	SSH-20-4.x	127	280	267	1	36	61	111	2.00	1.72	1.30	1.04	0.81	0.68
25'	SSH-24-4.x	156	280	267	1	36	61	111	1.42	1.25	0.85	0.62	0.44	0.32
30'	SSH-30-4.x	193	280	267	1	36	61	111	0.79	0.60	0.32	0.14	0.00	0.00
35'	SSH-35-4.x	210	280	267	1	36	61	111	0.36	0.20	0.00	0.00	0.00	0.00

Conversion Factor: to convert EPA from Square Metres to Square Feet multiply Square Metres by 10.76

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SLT Pedestal with Meter Base
and 24 Cct. 3 Phase Distribution Panel with 100 Amp Main Breaker



LEGEND

100W — PROPOSED STREETLIGHT: 30' (9.14m) SQUARE STRAIGHT BASE MOUNTED POLE (CAT#5SH–30–0.1–03). 100W EVOLVE AREA LIGHT LED TYPE IV (CAT# EANB_E4730___), 10" ARM, IN BLACK FINISH, PHOTOCELL AND CONCRETE FOOTING AS PER KELLAMY 610R

100W — PROPOSED STREETLIGHT: 30' (9.14m) SQUARE STRAIGHT BASE MOUNTED POLE (CAT#5SH–30–0.2–03). 2 x 100W EVOLVE AREA LIGHT LED TYPE IV (CAT# EANB_E4730___),10" ARM, IN BLACK FINISH, PHOTOCELL AND CONCRETE FOOTING AS PER KELLAMY 610R

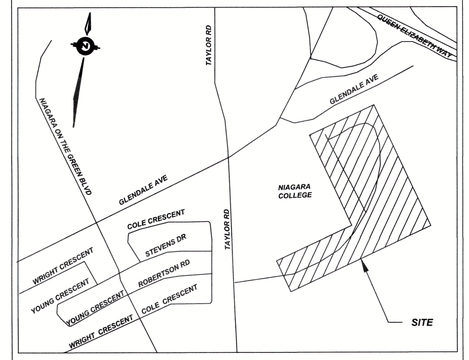
70W — PROPOSED STREETLIGHT: 30' (9.14m) SQUARE STRAIGHT BASE MOUNTED POLE (CAT#5SH–30–0.1–03). 70W EVOLVE AREA LIGHT LED TYPE III (CAT# EANB_E3730___), 10"ARM, IN BLACK FINISH, PHOTOCELL AND CONCRETE FOOTING AS PER KELLAMY 610R

M PX — PROPOSED STREET LIGHT METERED PEDESTAL BY PEDESTAL SOLUTIONS INC. C/W PRECAST CONCRETE BASE & PL27–TCV METERBASE MOUNTED ON THE BACK, SLT MODEL, 22KA RATING, 3P–100A, 120/208V MAIN BREAKER AND FOUR (1P–40A) BRANCH CIRCUIT BREAKERS.

STREETLIGHT CABLE: 2–#2 CU. RW90 & 1–#2 RW90 CU. (GREEN). CABLE SHALL BE IN DIRECT BURIED 100mm PVC TYPE II DUCT AT 900mm BELOW FINISHED GRADE.

PEDESTAL FEED CABLE: 2 RUNS OF 3–#2/0 AWG CU RW90 XLPEI. CABLE SHALL BE IN DIRECT BURIED 100mm PVC TYPE II DUCT AT 900mm BELOW FINISHED GRADE

GROUND ROD.



KEY PLAN
N.T.S.

REVISIONS

No.	DESCRIPTION	DATE	BY	APPROVED
2.	RE–ISSUED FOR TENDER PRICING	MAR.27/19	SK	SD
1.	ISSUED FOR TENDER PRICING	JUNE.27/18	AS	SD

DETAILS & STANDARDS

NIAGARA COLLEGE
NIAGARA ON THE LAKE CAMPUS

REGISTERED PROFESSIONAL ENGINEER
M. A. IOZZO
03/27/19
PROVINCE OF ONTARIO

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F 905.597.7271
E–mail: info@dpmenergy.com
www.dpmenergy.com

DATE : JUNE 12, 2018	DRAWN BY : AS	PROJECT No.	255A 17 121
SCALE : 1:500	DESIGNED BY : AS	DRAWING No.	SL–5
	CHECKED BY : SD		