

EDGE EX12N

1" x 2" Suspended Indirect Linear

Key Features

- 6063-T5 Extruded aluminum housing
- Highly reflective die-formed white painted reflector
- Wiring access available through top of housing
- 5-year limited warranty covers LED, driver and fixture
- UL and cUL listed
- Approved for dry/damp location unless otherwise noted
- Maximum weight is 10 lbs. for a standard 4' fixture
- Buy American Act compliant



Example Part #: EX12-N-HE-830HO-26'-AC48G1-U-OL2-1-0-W

EX12 - N - DIRECT SHIELDING - INDIRECT SHIELDING - CRI, CCT & OUTPUT - LENGTH OR PATTERN - MOUNTING - VOLTAGE - DRIVER - CIRCUITING - BATTERY & EMERGENCY - FINISH

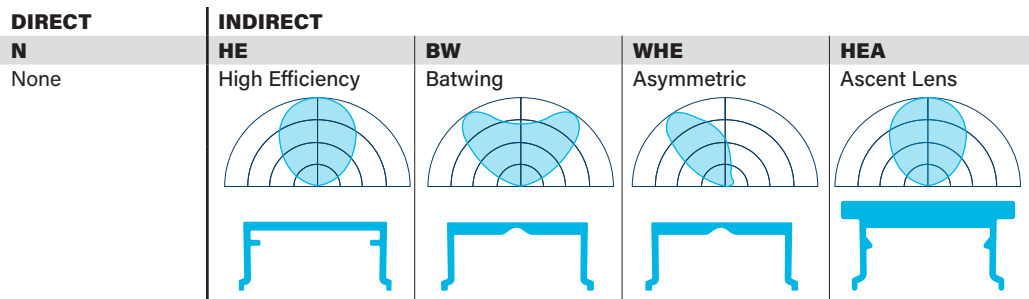
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DIRECT SHIELDING	INDIRECT SHIELDING	SOURCE ¹	LENGTH OR PATTERN ²
N - None <i>Shielding pg. 2</i>	HE - High Efficiency BW - Batwing WHE - Asymmetric HEA - Ascent Lens <i>Shielding pg. 2</i>	_27_ - 2700K _30_ - 3000K _35_ - 3500K _40_ - 4000K CL - Custom Lumens CW - Custom Watts MOD - Mod options available <i>Lumen Output pg. 2</i> <i>Example: 830HO is 8 = 80 CRI; 30 = 3000K;</i> <i>HO = High Output; Blank = Standard Output</i>	_ - Individual Fixture _ - Continuous Row S - Square R_X - Rectangle L_X - L Shape U_X_X - U-Shape T_X - T-Shape X_X - X-Shape MOD - Mod options available <i>Length and Pattern pg. 3</i>
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MOUNTING ³	VOLTAGE	DRIVER	CIRCUITING
AC_G - AC to Grid AC_JB - AC to J Box AC_ST - AC to Structure WA - Wall Mount AC5_G - 5" Non-Power Canopy AC5_JB - 5" Non-Power Canopy SQ_G - 5" Square Canopy SQ_JB - 5" Square Canopy <i>Mounting pg. 4</i>	U - Universal (120 thru 277V) 1 - 120V 2 - 277V 3 - 347V <i>Voltage pg. 4</i>	FSD - Factory Select Driver (1%, 0-10v) PL2 - Advance Xitanium (1%, 0-10v) OL4 - Osram 347V (1%, 0-10v) EE1 - eldoLED ECOdrive (1%, 0-10v) ES1 - eldoLED SOLOdrive (0.1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) PS1 - Advance Xitanium (50%/100%) OL2 - Osram (1%, 0-10v) ND - Non-Dimming <i>Driver pg. 4</i>	1 - Single Circuit M - Multi Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) <i>Circuiting pg. 5</i>
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BATTERY & EMERGENCY ⁴	FINISH	CONTROLS	
0 - None _FSG - Factory Select ALCR _GI - Iota ETS DR _GB - Bodine GTD _PLL - Bodine 10W (low profile) _E - Emergency Section _N - Night Light Section _L - Life Safety Section _ILL - Iota 10w Integral <i>Battery and Emergency pg. 5</i>	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color <i>Finish pg. 5</i>	<i>Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.</i>	

¹When specifying CRI- CCT & OUTPUT the first _ is for specifying either 8 - 80CRI or 9 - 90CRI. The ending _ are for specifying output, example HO - High Output. See output charts for more information. ²Individual fixtures come in 2', 3', 4', 5', 6', 7', & 8' lengths. Continuous row come in 1' increments. For Mod layouts Specify pattern shape and overall dimensions. Example: L6x4: L pattern that is 6'x4'. ³Specify AC length standard AC is 48"; Specify grid: G1=15/16", G9=9/16", GS=Screw Slot. Example: AC48G1. *Enter quantity for Battery and Emergency, Example 2PL.

Specifications and dimensions subject to change without notice. Specification sheets that appear on pinnacle-ltg.com are the most recent version and supersede all other previously printed or electronic versions.



Shielding



Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory.
- 80 CRI = R9≥19 and 90 CRI = R9≥61

Custom Output- Lumens OR Wattage

CL _____	Specify CRI, CCT and desired lumens (i.e. CL835700)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW _____	Specify CRI, CCT and desired wattage (i.e. CW9407)	Specify watts between standard offering listed below

80 CRI

	Color	Output	Watts per foot	Shielding HE High Efficiency		BW Batwing		WHE Asymmetric		HEA Ascent Lens	
				Lumens/ft	LPW	Lumens/ft	LPW	Lumens/ft	LPW	Lumens/ft	LPW
830	3000K	Standard	4.5	469	104.1	461	102.5	275	61.2	447	99.3
830HO	3000K	High	8.6	857	99.7	854	99.3	509	59.2	826	96.0
835	3500K	Standard	4.5	482	107.1	475	105.5	283	62.9	460	102.2
835HO	3500K	High	8.6	882	102.5	878	102.1	523	60.9	850	98.8
840	4000K	Standard	4.5	491	109.2	484	107.6	289	64.1	469	104.2
840HO	4000K	High	8.6	899	104.6	895	104.1	533	62.0	866	100.7

90 CRI

927	2700K	Standard	4.5	370	82.2	266	59.2	218	48.4	354	78.7
927HO	2700K	High	8.6	677	78.8	491	57.1	402	46.8	653	75.9
930	3000K	Standard	4.5	432	96.0	426	94.7	254	56.4	412	91.6
930HO	3000K	High	8.6	790	91.9	787	91.5	469	54.5	761	88.5
935	3500K	Standard	4.5	434	96.4	427	94.9	255	56.7	414	92.0
935HO	3500K	High	8.6	793	92.2	790	91.9	471	54.8	765	89.0
940	4000K	Standard	4.5	439	97.6	432	96.0	258	57.3	419	93.1
940HO	4000K	High	8.6	803	93.4	799	92.9	476	55.3	773	89.9

Direct Source: MOD Options

- Specify **MOD** in the part number for any of the below options
- All RGB_ Source Options will require specific driver and control
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD TIR Optics

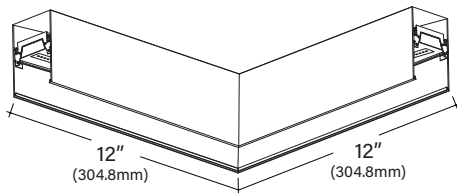


Length

- All individual units cannot be joined, end plates are factory installed and cannot be removed
- For Continuous Runs, 1/2" (12.7mm) to the overall length of the row to account for end caps
- For patterns, refer to Pattern section on next page

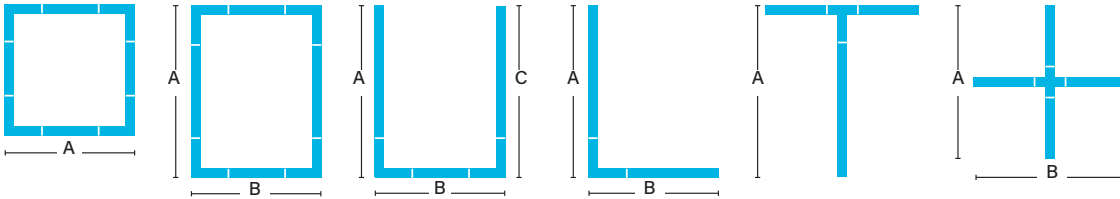
2	3	4	5	6	7	8	—
Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Cont. Run Specify nominal overall row length to the 1'
24" (609.6mm)	36" (914.4mm)	48" (1219.2mm)	60" (1524mm)	72" (1828.8mm)	84" (2133.6mm)	96" (2438.4mm)	
							Specify to the 1' >>>

Pattern

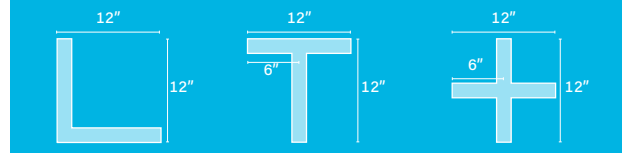


- Specify pattern shape and overall dimensions (includes corner dimensions)
- Refer to dimensions table below for available standard lengths
- All connectors are direct only
- 90 degree horizontal corners are 12"x12" (overall, outside dimension)
- Angles and shapes not shown require Mod Pattern; consult factory

S	R x	U x x	L x	T x	X x
Square Provide A dimension Example: S4' Minimum Length-4'x4'	Rectangle Provide AxB dimensions Example: R4'x4' Minimum Length-4'x4'	U-Shape Provide AxBxC dimensions Example: U3'x4'x3' Minimum Length-3'x4'x3'	L-Shape Provide AxB dimensions Example: L3'x3' Minimum Length-3'x3'	T-Shape Provide AxB dimensions Example: T3'x5' Minimum Length-3'x5'	X-Shape Provide AxB dimensions Example: X5'x5' Minimum Length-5'x5'



Horizontal Details: Every Connection is 12" x 12" in Overall Dimension



Length or Pattern: MOD Options

- Specify **MOD** in the part number for any of the below options
- Consult factory for **MOD** specification details, pricing, and lead-time information

MOD Specify MOD for patterns, lengths or angles not shown above
Hubs Connectors

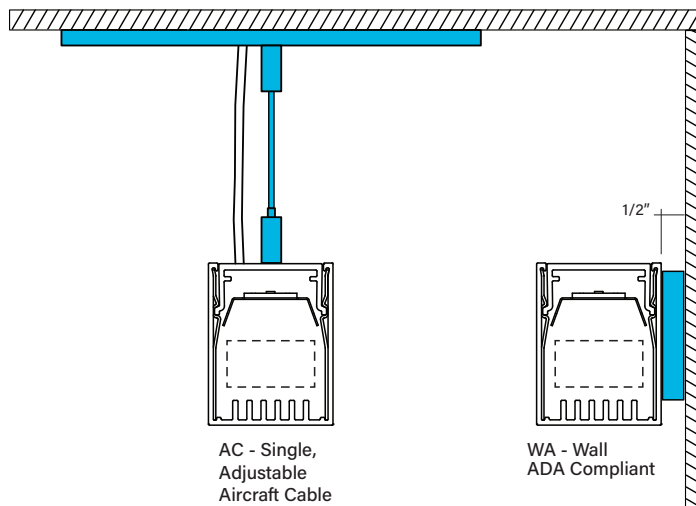


Mounting

- Specify cable length in ordering code (AC48G1)
- Standard adjustable cable. Specify 48", 120", 240" or 350"
- End plates and power cord attached at factory
- Aircraft cable (AC) mounts on 4' (1219.2mm) and 8' (2438.4mm) centers
- Aircraft Cable supplied with 5" (127mm) power and 2" (50.8mm) non-power canopies
- Canopies and pendants match fixture finish, power cords are white, grey, or black

AC_G1	Aircraft Cable 1" (15/16") T-Bar
AC_G9	Aircraft Cable 9/16" T-Bar
AC_GS	Aircraft Cable Screw Slot T-Bar
AC_JB	Aircraft Cable Junction Box
AC_ST	Aircraft Cable Structure
AC5_G	Aircraft Cable 5" (127mm) Non-Power Canopy
AC5_JB	Aircraft Cable 5" (127mm) Non-Power Canopy
SQ_G	Aircraft Cable 5" (127mm) Square Canopy
SQ_JB	Aircraft Cable 5" (127mm) Square Canopy
WA	Wall Mount

- depending on fixture finish. See Finish section for additional details.
- Approved for dry/damp location unless otherwise noted
- Refer to installation instructions during installation at the job site
- Maximum fixture weight is 10 lbs for a standard 4' fixture
- For a wall mounted fixture with an indirect asymmetric lens, light will be directed away from the wall as a standard



Voltage

- Some EX12N configurations will not accommodate all voltage options; consult with factory

U	Universal
1	120 volt
2	277 volt
3	347 volt

Driver

- Standard Driver Option = FSD
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options, see Pinnacle Resource Guide
- Some EX12N configurations will not accommodate all driver options; consult with factory

0-10V Drivers

FSD	Factory Select Driver 1%, 0-10v
PL2	Signify Advance Xitanium 1%, 0-10v
PL4	Advance Xitanium 347v 1%, 0-10v, requires 347v
OL2	Osram Optotronic, 1%, 0-10v
OL4	Osram Optotronic 347v, 1% 0-10v, requires 347v option
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic
EE2	eldoLED ECOdrive 1%, 0-10v Linear
ES1	eldoLED SOLOdrive 0-10v, 0.1% Logarithmic
ES2	eldoLED SOLOdrive 0-10v, 0% Linear

DALI Drivers

EE3	eldoLED ECOdrive .1%, DALI (logarithmic)
ES3	eldoLED SOLOdrive .1%, DALI (logarithmic)
OD1	Osram Optotronic 1%, DEXAL
OD2	Osram Optotronic 1%, DALI 2 Channel

Lutron Drivers

LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
LH4	Lutron Hi-Lume 1%, 2-wire, Lutron-LTEA2W, 120v only

Alternate Drivers

PS1	Signify Advance Xitanium Step Dimming 50%/100%
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EX12N_LED_SPEC_OCT2022



How to specify Circuiting, Battery and Emergency

- 1**
- Select fixture circuiting from options below
 - Some EX12N configurations will not accommodate all circuiting options, consult with factory

Circuiting

1	Single Circuit
M	Multi Circuit
E	Emergency Circuit only
N	Night Light Circuit only

- 2** + **3**
- Battery and emergency section options are available in addition to fixture circuit
 - Select battery and emergency section options below; factory shop drawing required
 - Some EX12N configurations will not accommodate all circuiting options, consult with factory

Battery and/or Emergency If Required

- 0** No battery or specific emergency section required

Battery

- Select battery section type if required, indicate total QTY. *Example 2PL*
- 90 minute battery runtime; test button is remote to fixture and requires an additional drop
- Battery not available for lengths under 4'
- Entire direct fixture housing is on battery for lengths up to 5'
- Half of direct fixture is on battery for 6', 7' or 8' housing lengths
- For more battery options available, see Pinnacle Resource Guide

0	No Battery
_ILL	Iota 10w Integral Lithium, Self Testing
_IRH	Iota 20w Remote
_PLL	Bodine 10w Integral Lithium, Self Testing
_PRH	Bodine 20w Remote

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- $92.3 \text{ (LPW)} \times 10 \text{ (watts)} = 923 \text{ battery lumen output}$

Emergency

- Select emergency section type if required, indicate total QTY. *Example 1E*
- Combine battery and emergency section ordering codes if both options are selected

_FSG	Factory Select ALCR, Automatic Load Control Relay
_GI	Iota ETS DR, Emergency Lighting Control Device
_GB	Bodine GTD, Emergency Lighting Control Device
_E	Emergency circuit section
_N	Night Light circuit section
_L	Life Safety circuit section NO THROUGH WIRE

Battery OR Emergency Ordering Examples

- Single circuit, 10w Integral Battery Ordering Code: 1-1PL
- Emergency only, 10w Integral Battery Ordering Code: E-1PL
- Single circuit, GTD required Ordering Code: 1-1G

Combination Section Ordering Examples

- Single circuit, (1) 10w battery, (1) emergency section Ordering Code: 1-1PL1E
- Multi circuit, (2) 10w battery, (2) emergency sections Ordering Code: M-2PL2E
- Single circuit, (1) night light section Ordering Code: 1-1N

Finish

- Standard powder-coat textured white, metallic silver, textured black, graphite or bronze painted finish; consult factory for chip of standard paint finishes
- Selecting a fixture finish other than white may impact lumen output; consult factory for more information

W	White (<i>white cord/white canopy</i>)
S	Metallic Silver (<i>grey cord/silver canopy</i>)
BL	Textured Black (<i>black cord/black canopy</i>)
BR	Bronze (<i>white cord/bronze canopy</i>)
GR	Graphite (<i>white cord/graphite canopy</i>)
CC	Custom Color (<i>white cord/color match canopy</i>)

Controls

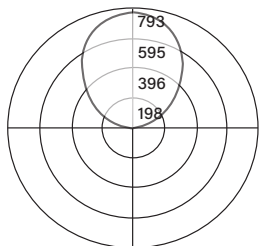
- Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.



Photometrics

High Efficiency Lens

Test #	ITL86999
Catalog #	EX12-N-HE-840-4
Lumens	1911 lm
Watts	19 W
Efficacy	101 LPW



Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
90	0	0	0	0	0
95	28	24	17	15	15
100	62	61	51	41	39
105	104	103	94	82	76
110	153	151	143	131	125
115	208	204	197	187	180
120	267	262	256	247	240
125	331	325	320	310	305
130	398	390	386	376	372
135	465	458	452	443	439
140	531	522	519	508	506
145	591	582	579	572	569
150	646	637	635	628	626
155	693	684	684	678	676
160	729	721	723	719	716
165	757	752	755	751	750
170	777	774	776	775	774
175	789	789	789	789	789
180	793	793	793	793	793

For all available IES files, please visit our website at pinnacle-ltg.com. Photometry testing in accordance to IESNA-LM-79-08 at an NVLAP accredited testing laboratory. Testing conducted at 25°C ambient conditions

Applications & Certificates

Construction: 6063-T5 Extruded aluminum housing. Highly reflective die-formed white painted reflector.

Shielding: Diffuse snap-in acrylic lens, removable for maintenance. Select from optional batwing, asymmetric and ascent shielding options.

Mounting: Aircraft cable and wall mount available. The aircraft cable mounts on 4'-0" (1219.2mm) and 8'-0" (2438.4mm) centers. Aircraft Cable supplied with 5" (127mm) power and 2" (50.8mm) non-power canopies. Refer to installation instructions for appropriate ceiling detail. Canopies are painted white unless otherwise specified. Maximum fixture weight is 10 lbs for a standard 4' fixture.

LED: 25°C test environment. Lumen output/wattage has a margin of +/- 5%; 2' or 3' lengths may have a greater wattage deviation. All luminaire configurations tested in accordance with IES LM-79. Diodes tested in accordance with IES LM-80. Lifetime calculated using IES TM-21. Minimum lifetime greater than 60,000 hours. L70 = 124,900 hours and L90 = 37,200 hours. MacAdam 3-Step Ellipses. Not all products are Lighting Facts listed. For all available IES files, please visit our website at pinnacle-ltg.com.

CRI, CCT & Lumen Output: Two lumen packages available. Standard and High (HO). Custom outputs are available. Specify custom lumens or watts between standard offering listed on CRI, CCT & Output page. 80 CRI is available for 3000K, 3500K, and 4000K. 90 CRI is available for 2700K, 3000K, 3500K, and 4000K. 80 CRI = R9≥19 and 90 CRI = R9≥61.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify OL4 in Driver section when 347 volt (3) is selected. Some EX configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Advance Xitanium 0-10V, 1% = PL2. Electronic driver,

Power factor is >0.9 with a THD <20%. Driver Lifetime: 50,000 hours at 25°C ambient operating conditions. Ambient operating range: Ambient operating range: -20°F/-30°C to 96°F/35°C. For more driver options, see Pinnacle Resource Guide. Some EX configurations will not accommodate all driver options.

Circuiting: Select from single circuit (1), Multi circuit (M), Emergency circuit (E) or Night Light circuit (N). For emergency circuiting situations that require no through wire or circuit separation, Life Safety Circuit should be selected. This will provide a separate power feed and only the Life Safety Circuit in that section. Some EX configurations will not accommodate all circuiting options; consult with factory.

Battery & Emergency: Select battery or emergency options if required. If battery or emergency option is not required, enter 0. Battery duration is 90 minutes as standard. Test button is remote to fixture. For more Battery options, see Pinnacle Resource Guide.

Finish: Standard powder-coat textured white, metallic silver, graphite, textured black or bronze painted finish; consult factory for chip of standard paint finishes. Canopies painted white unless specified differently in the options section of the part number. Contact factory for additional custom color and finish options.

Controls: Consult factory.

Labels: UL and cUL Listed. Standard and HO lumen packages are approved for dry/damp location unless otherwise noted.

Fixture Weight: Maximum fixture weight is 10 lbs for a standard 4' fixture.

Buy American Act Compliant

Warranty: EX LED offered with a 5-year limited warranty. Covers LED, driver and fixture.