

# 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

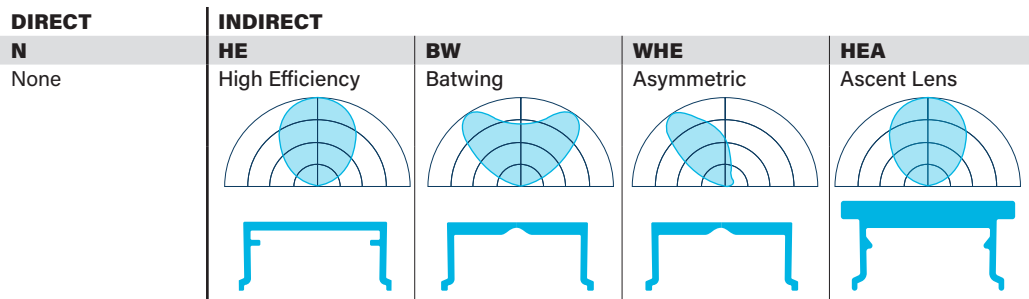
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<b>DIRECT SHIELDING</b>	<b>INDIRECT SHIELDING</b>	<b>SOURCE<sup>1</sup></b>	<b>LENGTH OR PATTERN<sup>2</sup></b>
<b>N</b> - None <i>Shielding pg. 2</i>	<b>HE</b> - High Efficiency <b>BW</b> - Batwing <b>WHE</b> - Asymmetric <b>HEA</b> - Ascent Lens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

<sup>1</sup>When 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. <sup>2</sup>Individual 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'. <sup>3</sup>Specify 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.

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## 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

<b>CL</b> _____	Specify CRI, CCT and desired lumens (i.e. CL835700)	Specify lumens between standard offering listed below. Lumens are specified per color temp
<b>CW</b> _____	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
<b>830</b>	3000K	Standard	4.5	469	104.1	461	102.5	275	61.2	447	99.3
<b>830HO</b>	3000K	High	8.6	857	99.7	854	99.3	509	59.2	826	96.0
<b>835</b>	3500K	Standard	4.5	482	107.1	475	105.5	283	62.9	460	102.2
<b>835HO</b>	3500K	High	8.6	882	102.5	878	102.1	523	60.9	850	98.8
<b>840</b>	4000K	Standard	4.5	491	109.2	484	107.6	289	64.1	469	104.2
<b>840HO</b>	4000K	High	8.6	899	104.6	895	104.1	533	62.0	866	100.7

### 90 CRI

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

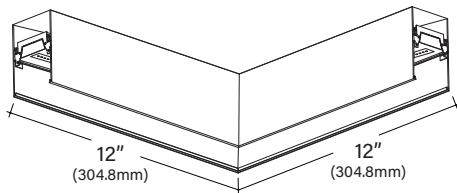


## Length

- 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

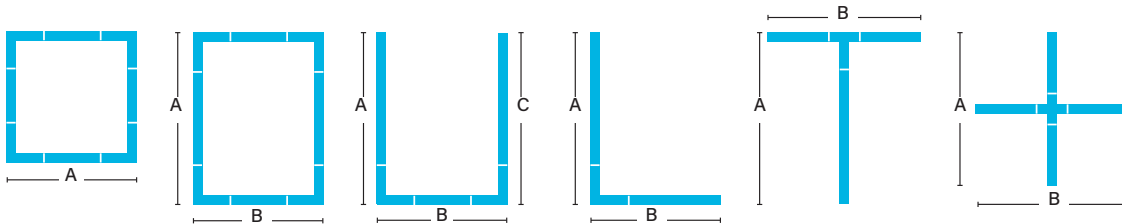
2	3	4	5	6	7	8	—
Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Cont. Run Specify nominal overall row length to the 1'
24" (609.6mm)	36" (914.4mm)	48" (1219.2mm)	60" (1524mm)	72" (1828.8mm)	84" (2133.6mm)	96" (2438.4mm)	
							Specify to the 1'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

## Pattern

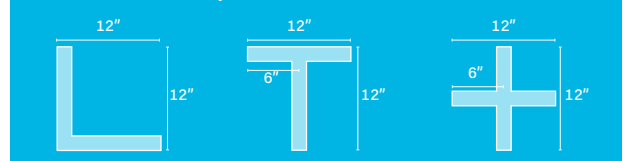


- Specify pattern shape and overall dimensions (includes corner dimensions)
- Refer to dimensions table below for available standard lengths
- All connectors are direct only
- 90 degree horizontal corners are 12"x12" (overall, outside dimension)
- Angles and shapes not shown require Mod Pattern; consult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

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

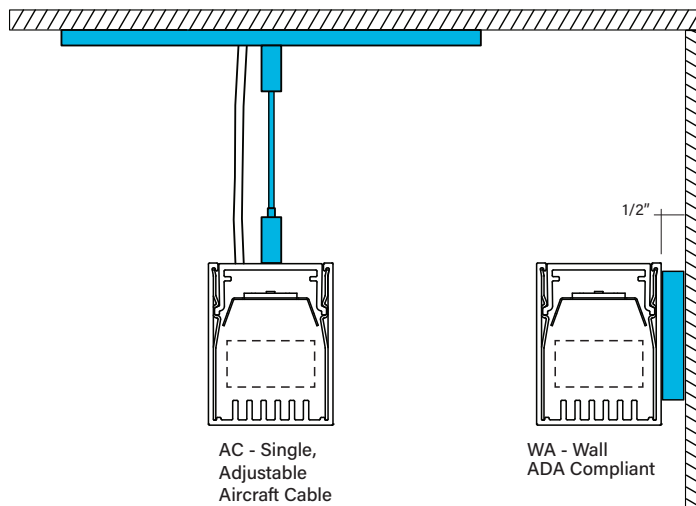


## Mounting

- 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

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

<b>U</b>	Universal
<b>1</b>	120 volt
<b>2</b>	277 volt
<b>3</b>	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

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

### DALI Drivers

<b>EE3</b>	eldoLED SOLOdrive .1%, DALI (logarithmic)
<b>EE4</b>	eldoLED SOLOdrive .1%, DALI (linear)
<b>OD1</b>	Osram Optotronic 1%, DEXAL
<b>OD2</b>	Osram Optotronic 1%, DALI 2 Channel

### Lutron Drivers

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

### Alternate Drivers

<b>PS1</b>	Signify Advance Xitanium Step Dimming 50%/100%
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## 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

<b>1</b>	Single Circuit
<b>M</b>	Multi Circuit
<b>E</b>	Emergency Circuit only
<b>N</b>	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

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

<b>_FSG</b>	Factory Select ALCR, Automatic Load Control Relay
<b>_GI</b>	Iota ETS DR, Emergency Lighting Control Device
<b>_GB</b>	Bodine GTD, Emergency Lighting Control Device
<b>_E</b>	Emergency circuit section
<b>_N</b>	Night Light circuit section
<b>_L</b>	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

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

### Controls

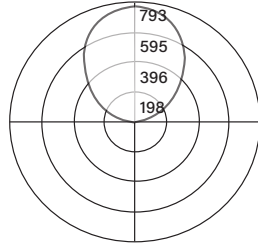
- Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.



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](http://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](http://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.

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