

EDGE EX1D

1" Suspended Direct Linear

Key Features

- 6063-T5 Extruded aluminum housing
- Highly reflective die-formed white painted reflector
- Room-Side Maintenance for LED System
- Wiring access available through bottom 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 #: EX1D-HE-N-830HO-26'-AC48G1-U-FSD-1-0-W



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DIRECT SHIELDING	INDIRECT SHIELDING	SOURCE ¹	LENGTH OR PATTERN ²
A - Satine Lens HE - High Efficiency Lens BW - Batwing Insert WHE - Asymmetric Insert HED - Descent Lens P - Parabolic Louver <i>Shielding pg. 2</i>	N - None <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>	_ _ - 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 S - Surface 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) OL2 - eldoLED (1%, 0-10v) OL4 - eldoLED 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%) MOD - Mod options available <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	FIXTURE OPTIONS	CONTROLS
0 - None FBS - Factory Select Battery FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD PLL - Bodine 10W E - Emergency Section N - Night Light Section L - Life Safety Section <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>	TC - Indirect Top Cover (ac mounting only) DSP - Customer supplied Batter/Driver/Sensor	<i>Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.</i>

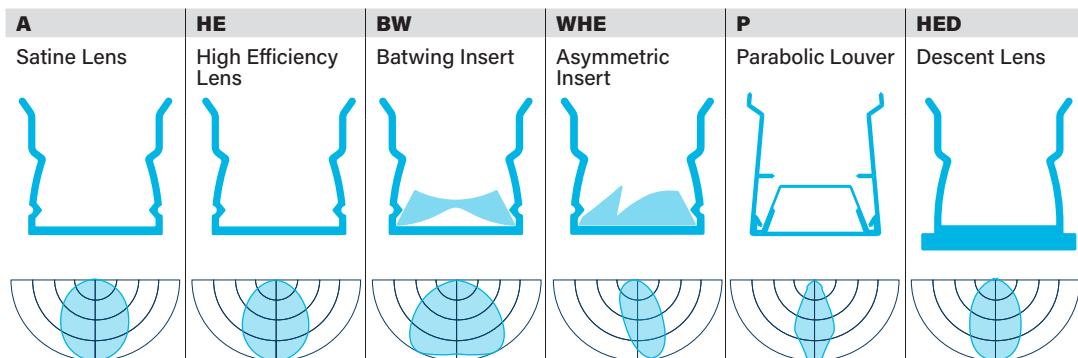
¹When specifying CRI, CCT & OUTPUT the first _ is for specifying either **8** - 80CRI or **9** - 90CRI. The ending _ _ are for specifying output, example **HO** - High Output. See output charts for more information. ²Individual fixtures come in 2', 3', 4', 5', 6', 7', & 8' lengths. Continuous row come 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

DIRECT



INDIRECT

N
None

Output

- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory.
- 90 CRI = R9≥50

Custom Output - Lumens OR Wattage

CL _____	Specify CRI, CCT and desired lumens (i.e. CL835600)	Specify lumens between standard offering listed below. Lumens are specified per color temp
CW _____	Specify CRI, CCT and desired wattage (i.e. CW9407)	Specify lumens between standard offering listed below. Lumens are specified per color temp

Direct 80 CRI

	Color	Lumens per foot	Shielding		HE		BW		WHE		P		HED	
			A		High Efficiency		Batwing		Asymmetric		Louver		Descent	
			LPW	Watts/ft	LPW	Watts/ft	LPW	Watts/ft	LPW	Watts/ft	LPW	Watts/ft	LPW	Watts/ft
830	3000K	500	92	5.4	116	4.3	84	5.9	101	4.9	73	6.9	102	4.9
830HO	3000K	750	94	8.0	115	6.5	86	8.7	103	7.3	73	10.3	101	7.4
830VHO	3000K	1000	93	10.7	118	8.5	84	11.9	105	9.5	70	14.3	103	9.7
835	3500K	500	95	5.2	119	4.2	87	5.8	105	4.8	73	6.8	103	4.9
835HO	3500K	750	97	7.7	119	6.3	88	8.5	107	7.0	75	10.0	105	7.2
835VHO	3500K	1000	97	10.4	122	8.2	87	11.5	107	9.3	73	13.8	106	9.4
840	4000K	500	95	5.2	119	4.2	87	5.8	105	4.8	73	6.8	103	4.9
840HO	4000K	750	97	7.7	119	6.3	88	8.5	107	7.0	75	10.0	105	7.2
840VHO	4000K	1000	97	10.4	122	8.2	87	11.5	107	9.3	73	13.8	106	9.4

Direct 90 CRI

927	2700K	500	74	6.7	96	5.2	70	7.2	84	6.0	60	8.4	82	6.1
927HO	2700K	750	77	9.8	97	7.7	70	10.7	86	8.8	58	12.9	84	9.0
927VHO	2700K	1000	74	13.5	97	10.3	68	14.6	84	12.0	N/A		82	12.2
930	3000K	500	81	6.1	102	4.9	74	6.7	91	5.5	65	7.7	89	5.6
930HO	3000K	750	83	9.0	104	7.2	77	9.8	93	8.1	64	11.8	91	8.2
930VHO	3000K	1000	81	12.3	106	9.4	74	13.5	93	10.8	63	16.0	91	11.0
935	3500K	500	81	6.2	102	4.9	74	6.8	91	5.5	65	7.7	89	5.6
935HO	3500K	750	83	9.1	104	7.2	76	9.8	93	8.1	63	11.8	91	8.3
935VHO	3500K	1000	81	12.4	106	9.5	74	13.6	92	10.8	62	16.1	90	11.1
940	4000K	500	81	6.2	102	4.9	74	6.8	91	5.5	65	7.7	89	5.6
940HO	4000K	750	83	9.1	104	7.2	76	9.8	93	8.1	63	11.8	91	8.3
940VHO	4000K	1000	81	12.4	106	9.5	74	13.6	92	10.8	62	16.1	90	11.1

Direct Source: 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 TIR Optics

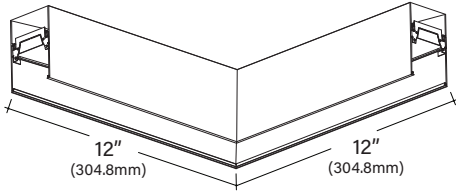


Length

- All individual units cannot be joined, end plates are factory installed and cannot be removed
- For Continuous Runs, add 1/4" (6.4mm) for each end plate or 1/2" (12.7mm) to the overall length of the row
- For patterns, refer to Pattern section on next page

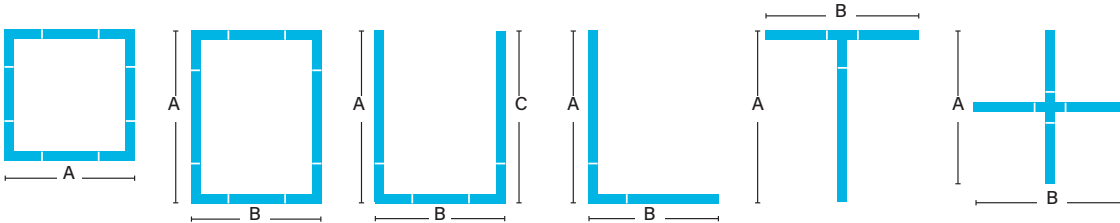
2	3	4	5	6	7	8	—
Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Indiv. Fixture	Cont. Run <i>Specify nominal overall row length to the 1'</i>
24" (609.6mm)							
	36" (914.4mm)						
		48" (1219.2mm)					
			60" (1524mm)				
				72" (1828.8mm)			
					84" (2133.6mm)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

Pattern

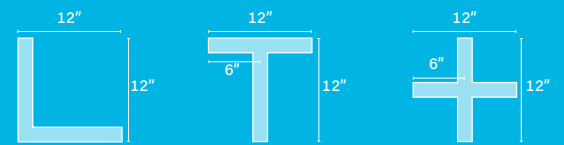


- Specify pattern shape and overall dimensions (includes corner dimensions)
- Refer to dimensions table below for available standard lengths
- All connectors are direct only
- 90 degree horizontal corners are 12"x12" (overall, outside dimension)
- Angles and shapes not shown require Mod Pattern; consult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

S_	R_x	U_x x	L_x	T_x	X_x
Square <i>Provide A dimension</i> Example: S4' Minimum Length-4'x4'	Rectangle <i>Provide AxB dimensions</i> Example: R4'x4' Minimum Length-4'x4'	U-Shape <i>Provide AxBxC dimensions</i> Example: U3'x4'x3' Minimum Length-3'x4'x3'	L-Shape <i>Provide AxB dimensions</i> Example: L3'x3' Minimum Length-3'x3'	T-Shape <i>Provide AxB dimensions</i> Example: T3'x5' Minimum Length-3'x5'	X-Shape <i>Provide AxB dimensions</i> 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
	45- 180 degree angles
	Single-piece welded housings up to 4' x 4'

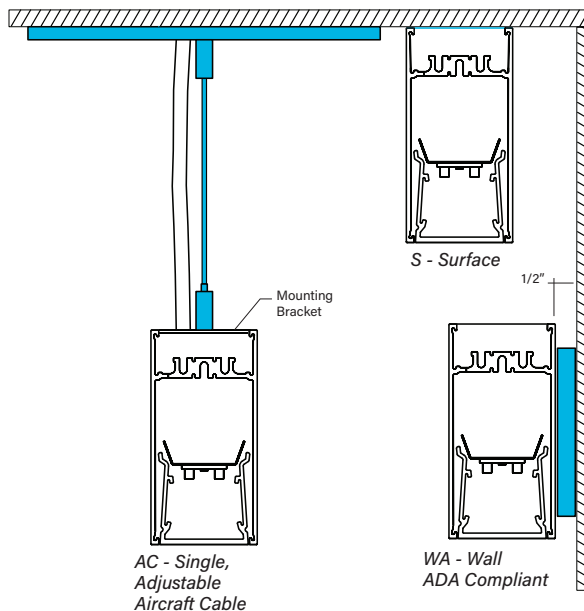


Mounting

- 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

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
S	Surface Mount

- Canopies and pendants match fixture finish, power cords are white, grey, or black 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
- Top Cover is optional on AC mounting fixtures, Top Cover is standard on others



Voltage

- Some EX1D 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 EX1D 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	eldoLED Optotronic, 1%, 0-10v
OL4	eldoLED 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	eldoLED Optotronic 1%, DEXAL

Lutron Drivers

LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
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Alternate Drivers

PS1	Signify Advance Xitanium Step Dimming 50%/100%
EH1	ELV 120v only, 0-10v universal

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EX1D_LED_SPEC_DEC2023



How to specify Circuiting, Battery and Emergency

- 1**
- Select fixture circuiting from options below
 - Some EX1D 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 EX1D 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
_FSB	Factory Select Battery 10w, Integral Lithium
_FSBST	Factory Select Battery 10w, Integral Lithium, Self Testing
_PLL	Bodine 10w Integral Lithium, Self Testing
_ILL	Iota 10w Integral Lithium, Self Testing
_PRH	Bodine 20w Remote, Single conduit flex
_IRH	Iota 20w Remote, Dual conduit flex

For Approximate Battery Lumen Output

- Multiply battery wattage X fixture LPW shown on Lumen Table
- 92.3 (LPW) x 10 (watts) = 923 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, Emergency Control Device, UNV
_GI	Iota ETS-DR, Emergency Transfer Switch, UNV
_GB	Bodine GTD, Generator Transfer Device, 120v or 277v
_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>

Fixture Options

- Additional options to enhance the fixture and finish of the product

TC	Indirect Top Cover <i>(ac mounting only)</i>
DSP	Customer supplied Battery/Driver/Sensor

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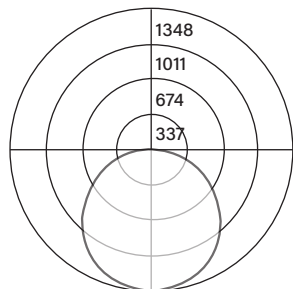
Controls

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

Photometrics

High Efficiency Lens

Test #	KPL2015-57
Catalog #	EX1D-A-840VHO-4
Lumens	3819
Watts	39.7
Efficacy	96 LPW



Candela Distribution

Vert Angle	Horizontal Angle				
	0	22.5	45	67.5	90
0	1337	1337	1337	1337	1337
5	1325	1337	1328	1330	1329
10	1308	1320	1310	1312	1311
15	1279	1290	1280	1281	1280
20	1239	1249	1240	1240	1239
25	1189	1197	1189	1186	1186
30	1128	1136	1128	1123	1122
35	1059	1068	1057	1053	1052
40	983	986	978	972	970
45	899	899	892	883	881
50	806	805	796	789	769
55	704	705	696	687	685
60	599	597	590	580	581
65	491	488	477	470	470
70	375	373	365	359	357
75	258	258	250	247	245
80	153	150	146	143	145
85	66	64	61	59	58
90	0	0	0	0	0

Luminance Data (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	28469	28277	27921
55	27516	27172	26738
65	26044	25293	24939
75	22355	21618	21227
85	17058	15632	14873

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 with matte finish, removable for maintenance.

Mounting: Aircraft cable, wall and surface mount available. The aircraft cable that 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. 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. Lifetime Projection L70 = 254,800 hours and L90 = 80,200 hours. MacAdam 3-Step Ellipses. For all available IES files, please visit our website at pinnacle-ltg.com.

CRI, CCT & Output: Not all lumen packages available. Three lumen packages available. Standard, High (HO) and Very High (VHO). 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. 90 CRI = R9≥50.

Voltage: Universal (U), 120 volt (1), 277 volt (2) and 347 volt (3) options available. Must specify PL4 or OL4 in Driver section when 347 volt (3) is selected. Some EDGE configurations will not accommodate all voltage options; consult with factory.

Driver: Standard Driver Option is Factory Select Driver 0-10V, 1% = FSD. 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: -20°F/-30°C to 115°F/46°C. For more driver options, see Pinnacle Resource Guide. Some EDGE 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, textured black, graphite 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: Mod options available, consult with factory.

Labels: UL and cUL 1598 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.