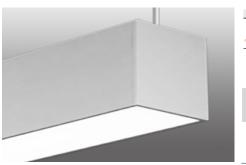
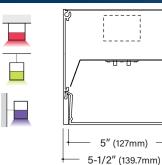
Туре

5-3/8"







LENGTH OR MOUNTING



# **Key Features**

EX<sub>6</sub>

- 6063-T5 Extruded aluminum housing

- Highly reflective die-formed white painted reflector Wiring access available through bottom of housing 5-year limited warranty covers LED, driver and fixture
- UL and cUL listed

DIRECT

Approved for dry/damp location unless otherwise noted

CRI, CCT &

Maximum weight is 25 lbs. for a standard 4' fixture

- N

INDIRECT

Buy American Act compliant









CONTROLS



Example Part #: EX6-A-N-830HO-26'-AC48G1-U-OL2-1-0-W

FIXTURE

SHIELDING SHIELDING OUTPL	JT PATTERN	EMERGENCY	OPTIONS
	N		
DIRECT SHIELDING	INDIRECT SHIELDING	CRI, CCT & OUTPUT <sup>1</sup>	LENGTH OR PATTERN <sup>2</sup>
A - Satine Lens AL - Drop Lens R - Flat Regress Shielding pg. 2	<b>N</b> - None Shielding pg. 2	27 2700K 30 3000K 35 3500K 40 4000K CL Custom Lumens CW Custom Watts Lumen Output pg. 2	Individual Fixture Continuous Row S Square R_ X Rectangle L_ X L Shape U_ X U-Shape M - Mod Layout Length and Pattern pg. 2-3

DRIVER

CIRCUITING

BATTERY &

VOLTAGE

	-		-
MOUNTING <sup>3</sup>	VOLTAGE	DRIVER	CIRCUITING
_ACG (M)AC to Grid _ACJB - (M)AC to J Box _ACST - (M)AC to Structure _AC5 G 5" Non-Power Canopy _AC5JB - 5" Non-Power Canopy _SQG 5" Square Canopy _SQJB - 5" Square Canopy WA - Wall Mount S - Surface Mount Mounting pg. 3	<b>U -</b> Universal (120 thru 277V) <b>1 -</b> 120V <b>2 -</b> 277V <b>3 -</b> 347V Voltage pg. 4	PL2 - Advance Xitanium (1%, 0-10v)  OL4 - Osram 347v (1%, 0-10v)  EE1 - eldoLED ECOdrive (1%, 0-10v)  ES1 - eldoLED SOLOdrive (0%, 0-10v)  LH1- Lutron Hi-lume (1%, EcoSystem)  PS1 - Advance Xitanium (50%/100%)  OL2 - Osram (1%, 0-10v)  ND - Non-Dimming  Driver pg. 4	1 - Single Circuit M - Multi Circuit E - Emergency (entire fixture) N - Night Light (entire fixture) Circuiting pg. 4

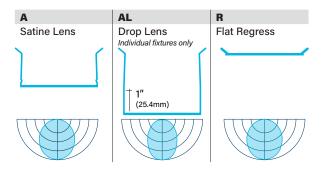
BATTERY & EMERGENCY⁴	FINISH	FIXTURE OPTIONS	CONTROLS
O - None _P - Bodine 10W _IC - lota 10W Integral (CEC Listed) _E - Emergency Section _N - Night Light Section _L - Life Safety Section _G - Bodine GTD Battery and Emergency pg. 4	W - White S - Metallic Silver BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color Finish pg. 5	MRF - Fixed MR16 (Halogen) LMRF - Fixed MR16 (LED) XLED - Fixed Xicato (LED) MRA - Adjustable MR16 (Halogen) LMRA - Adjustable MR16 (LED) Fixture Options pg. 5	Pinnacle is able to accommodate different control solutions from different manufacturers. Consult Factory for more information.

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. 2Individual fixtures come in 2', 3', 4', 5', 6' & 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'. Specify AC Cable: Standard single AC = AC or Movable AC = MAC; 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 2P.





# **Direct Shielding**



# **Indirect Shielding**

None

# Output

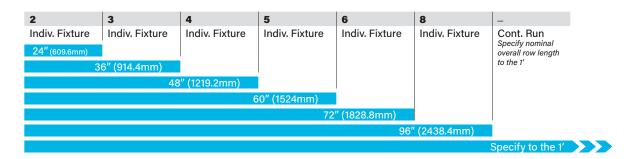
- Specify either 80 or 90 CRI
- Longer lead-time may apply for 90 CRI. Consult factory.

80 CRI = R9≥19 and 90 CRI = R9≥61

Custom	Output- I	_umens C	)R Watta	ae							
CL	om Output- Lumens OR Wattage  Specify CRI, CCT and desired lumens (i.e. CL835600)					Specify lumens between standard offering listed below. Lumens are specified per color temp					
CW				age (i.e. CW9		+	between standard			· · · · · · · · · · · · · · · · · · ·	
80 CRI											
	Color	Output	Watts per foot	Shielding  A  Satine  Lumens/ft	LPW	AL Drop	<i>LPW</i>	R Flat Regre	SS   <i>LPW</i>		
020	20001/	Ctondoud	4.6								
830	3000K	Standard	4.6	421	91.0	469	101.4	421	91.0		
830HO	3000K	High	8.5	779	91.4	866	101.5	779	91.4		
835	3500K	Standard	4.6	433	93.6	483	104.3	433	93.6		
835HO	3500K	High	8.5	801	94.0	890	104.4	801	94.0		
840	4000K	Standard	4.6	441	95.4	492	106.3	441	95.4		
840HO	4000K	High	8.5	817	95.8	907	106.4	817	95.8		
90 CRI											
927	2700K	Standard	4.6	332	71.8	371	80.1	332	71.8		
927HO	2700K	High	8.5	615	72.1	684	80.2	615	72.1		
930	3000K	Standard	4.6	388	83.9	432	93.4	388	83.9		
930HO	3000K	High	8.5	718	84.2	798	93.6	718	84.2		
935	3500K	Standard	4.6	390	84.3	434	93.8	390	84.3		
935HO	3500K	High	8.5	721	84.6	801	94.0	721	84.6		
940	4000K	Standard	4.6	394	85.2	439	94.9	394	85.2		
940HO	4000K	High	8.5	729	85.5	810	95.0	729	85.5		

# Length

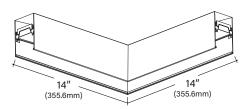
- All individual units cannot be joined, end plates are factory installed and cannot be removed For continuous runs, add 1/4" (6.4mm) for each end plate or 1/2" (12.7mm) to the overall length of the row
- For patterns, refer to Pattern section on next page



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## 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 14"x14" (overall, outside dimension)
- Angles and shapes not shown require Mod Pattern; consult factory
- Only available with "A" lens options
- Not all drivers available with all patterns; consult factory

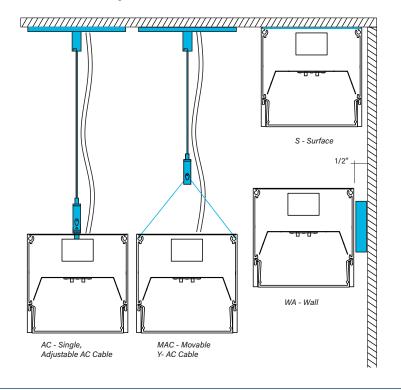
<b>S</b> _	R_x_	U_x_x_	L_x_	M
Square Provide A dimension Example: <b>S4'</b> Nominal Lengths 4'x4' Minimal Length- 4'4"x4'4"	Rectangle Provide AxB dimensions Example: <b>R4'x4'</b> Nominal Lengths 4'x4' Minimal Length- 4'4"x4'4"	U-Shape Provide AxBxC dimensions Example: <b>U3'x4'x2'</b> Nominal Lengths 3'x4'x3' Minimal Length- 4'4"x3'2"x3'2"	L-Shape Provide AxB dimensions Example: <b>L3'x3'</b> Nominal Lengths 3'x3' Minimal Length- 3'2"x3'2"	Mod Layout For patterns or lengths not shown or standard
A	A B	A C	A	

# Mounting

- Specify cable length in ordering code (AC48G1) Standard adjustable cable. Specify 48", 120", 240" or 350" End trims 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

ACG1	Aircraft Cable 1" (15/16") T-Bar
ACG9	Aircraft Cable 9/16" T-Bar
ACGS	Aircraft Cable Screw Slot T-Bar
ACJB	Aircraft Cable Junction Box
ACST	Aircraft Cable Structure
AC5G_	Aircraft Cable 5" (127mm) Non-Power Canopy
AC5_JB	Aircraft Cable 5" (127mm) Non-Power Canopy
SQG_	Aircraft Cable 5" (127mm) Square Canopy
SQJB	Aircraft Cable 5" (127mm) Square Canopy
MACG1	Moveable AC 1" (15/16") T-Bar
MACG9	Moveable AC 9/16" T-Bar
MACGS	Moveable AC Screw Slot T-Bar
MACJB	Moveable AC Junction Box
MACST	Moveable AC Structure
MAC5G_	Moveable AC 5" (127mm) Non-Power Canopy
MAC5_JB	Moveable AC 5" (127mm) Non-Power Canopy
MSQG_	Moveable AC 5" (127mm) Square Canopy
MSQJB	Moveable AC 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 25 lbs for a standard 4' fixture



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# Voltage

Some EX6 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 = PL2
- Driver Lifetime: 50,000 hours at 25°C ambient operating conditions
- For more driver options see Pinnacle Resource Guide
- Some EX6 configurations will not accommodate all driver options; consult with factory

PL2	Advance Xitanium 1%, 0-10v
OL4	Osram Optotronic 347v, 1%, 0-10v (requires 347v)
EE1	eldoLED ECOdrive 1%, 0-10v Logarithmic
EE2	eldoLED ECOdrive 1%, 0-10v Linear
ES1	eldoLED SOLOdrive 0%, 0-10v Logarithmic
ES2	eldoLED SOLOdrive 0%, 0-10v Linear
LH1	Lutron Hi-lume Soft-on, Fade-to-black 1%, EcoSystem, LDE1
PS1	Advance Xitanium Step Dimming 50%/100%
OL2	Osram Optotronic 1%, 0-10v, nominal 1% dimming range
ND	Non-Dimming

# How to specify Circuiting, Battery and Emergency



- Select fixture circuiting from options below
- Some EX6 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



- Battery and emergency section options are available in addition to fixture circuit
- Select battery and emergency section options below; factory shop drawing required Some EX6 configurations will not accommodate all circuiting options, consult with factory

## Battery and/or Emergency If Required

No battery or specific emergency section required

## **Battery**

- Select battery section type if required, indicate total QTY. Example 2P
- 90 minute battery runtime; test button is remote to fixture and requires an additional drop
- No battery option available for 2' lengths
- Entire direct fixture housing is on battery for lengths up to 5'
- Half of direct fixture is on battery for 6' or 8' housing lengths
- For more battery options available, see Pinnacle Resource Guide

0	No battery
_P	Bodine 10w Integral
_IC	lota 10w Integral CEC Listed

### Emergency

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

_E	Emergency circuit section
_N	Night Light circuit section
_L	Life Safety circuit section NO THROUGH WIRE
_G	Bodine GTD, Generator Transfer Device section

# 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

# **Battery OR Emergency Ordering Examples**

- Single circuit, 10w Integral Battery
- Emergency only, 10w Integral Battery
- Single circuit, GTD required

Ordering Code: 1-1P Ordering Code: E-1P Ordering Code: 1-1G

# **Combination Section Ordering Examples**

- Single circuit, (1) 10w battery, (1) emergency section
- Multi circuit, (2) 10w battery, (2) emergency sections
- Single circuit, (1) night light section

Ordering Code: 1-1P1E Ordering Code: M-2P2E Ordering Code: 1-1N

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## 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 (white cord/white canopy)
S	Metallic Silver (grey cord/silver canopy)
BL	Textured Black (black cord/black canopy)
BR	Bronze (white cord/bronze canopy)
GR	Graphite (white cord/graphite canopy)
СС	Custom Color (white cord/color match canopy)

## **Fixture Options**

- Additional options to enhance the fixture and finish of the product
- Consult factory for MR16 configurations
- Specify CC-C to match housing. If not specified, canopy will be standard matte white.

MRF	Fixed MR16 Halogen		
LMRF	Fixed MR16 LED		
XLED	Fixed Xicato LED		
MRA	Adjustable MR16 Halogen		
LMRA	Adjustable MR16 LED		

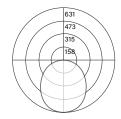
#### Controls

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

# **Photometrics**

#### Satine Lens

Test # ITL86802 Catalog # EX6A-840-4 Lumens 1724 lm Watts 18.5 W Efficacy 93 LPW



#### Candela Distribution Harizantal Angla

norizontal Angle					
0	22.5	45	67.5	90	
631	631	631	631	631	
627	627	627	627	627	
619	616	616	616	615	
602	598	599	599	596	
582	575	578	575	574	
553	546	548	545	543	
521	514	516	512	508	
483	476	477	473	470	
442	436	436	432	429	
399	393	393	389	386	
354	350	348	344	343	
308	304	303	300	298	
261	257	256	254	253	
213	211	209	207	207	
	165	163		162	
121	119	118	118	118	
78	77	76	75	75	
38	37	37	36	36	
0	0	0	0	0	
	0 631 627 619 602 582 553 521 483 442 399 354 261 213 167 78	0 22.5 631 631 627 627 619 616 602 598 582 575 553 546 521 514 442 436 399 393 308 304 476 442 2161 257 213 211 615 119 78 77 38 37	0 22.5 45 631 631 631 627 627 619 616 616 602 598 599 582 575 578 553 546 548 521 514 516 443 476 477 442 436 436 399 393 393 394 350 348 308 304 303 261 257 256 213 211 209 167 165 168	0 22.5 45 67.5 631 631 631 631 631 627 627 627 627 619 616 616 616 602 598 599 599 582 575 578 575 553 546 548 545 521 514 516 512 483 476 477 473 442 436 436 432 399 393 393 389 354 350 348 344 308 304 303 300 261 257 256 254 213 211 209 207 215 215 118 118 78 77 76 75 38 37 37 36	

#### Luminance Data (cd/sq.m)

Angle In	Average	Average	Average
Degrees	0-Deg	45-Deg	90-Deg
45	3722	3666	3599
55	3535	3477	3418
65	3321	3257	3225
75	3087	3009	3009
85	2851	2774	2697
	Degrees 45 55 65 75	Degrees         0-Deg           45         3722           55         3535           65         3321           75         3087	Degrees         0-Deg         45-Deg           45         3722         3666           55         3535         3477           65         3321         3257           75         3087         3009

For all available IES files, please visit our website at pinnacle-itg.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.

Mounting: Aircraft cable and wall mount available. Select from 2 aircraft cable options. Select the straight aircraft cable that mounts on 4'-0" (1219.2mm) and 8'-0" (2438.4mm) centers or the moveable adjustable Y-cable mount. The Y-Cable design allows for adjustable mounting locations. 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 24 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 = 136,200 hours and L90 = 41,100 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 & 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: -20°F/-30°C to 127°F/53°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, 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.

MR16: Ideal for conference rooms, corridors, wall washing, retail spaces and training facilities where accent lighting is required. Fully enclosed compartment eliminates light from entering into our fixture areas. For LED and Halogen lamps (lamps are not included). Consult factory for other lamp types. Standard 60 watt max LED electronic transformer (120v or 277v), 50 watt max halogen lamp transformer (120v or 277v), MR16 installed as an independent circuit. MR16 to match fixture voltage. 277v dimmer must be sourced. Consult factory for MR16 configurations. Pinnacle's MR16 applications are to be used with Soraa lamps with a maximum of 13 transformers on one circuit.

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 25 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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