

# TESA

Suspended Linear

## Key Features

- 20 gauge steel housing
- Highly reflective die-formed white painted steel reflector
- 14 gauge steel end caps are fastened with concealed hardware
- 5-year limited warranty that covers LED, driver and fixture
- UL and cUL Listed
- Approved for dry/damp location
- Maximum fixture weight is 15 lbs per standard 4' fixture
- Room-Side Maintenance for LED system
- Buy American Act compliant



Example Part #: T4A-835VHO-16'-AC48G1-U-OL2-1-0-W

T4A									
HOUSING	CRI, CCT & OUTPUT	LENGTH	MOUNTING	VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY	FINISH	FIXTURE OPTIONS

<b>T4A</b>	-----	-----	-----
<b>HOUSING</b>	<b>CRI, CCT &amp; OUTPUT</b> <i>QS</i> <sup>1</sup>	<b>LENGTH</b> <sup>2</sup>	<b>MOUNTING</b>
<b>T4A</b> - Tesa with Satine lens <i>QS</i> <i>(10% Direct / 90% Indirect)</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 <i>Lumen Output pg. 2</i>  <i>Example: 830HO is 8 = 80 CRI; 30 = 3000K;  HO = High Output; Blank = Standard Output</i>	<b>_</b> - Individual Fixture <i>QS</i> <b>_</b> - Continuous Row <i>QS</i> <i>Length and Pattern pg. 2</i>	<b>AC_G</b> - AC to Grid <i>QS</i> <b>AC_JB</b> - AC to J Box <i>QS</i> <b>AC_ST</b> - AC to Structure <i>QS</i> <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. 3</i>
-----	---	---	---
<b>VOLTAGE</b>	<b>DRIVER</b>	<b>CIRCUITING</b>	<b>BATTERY &amp; EMERGENCY</b> <sup>3</sup>
<b>U</b> - Universal <i>QS</i> <i>(120 thru 277V)</i> <b>1</b> - 120V <i>QS</i> <b>2</b> - 277V <i>QS</i> <b>3</b> - 347V <i>Voltage pg. 3</i>	<b>FSD</b> - Factory Select Driver <i>(1%, 0-10v)</i> <i>QS</i> <b>PL2</b> - Advance Xitanium <i>(1%, 0-10v)</i> <i>QS</i> <b>OL2</b> - Osram <i>(1%, 0-10v)</i> <i>QS</i> <b>OL4</b> - Osram 347V <i>(1%, 0-10v)</i> <b>LH1</b> - Lutron Hi-lume <i>(1%, EcoSystem)</i> <i>Driver pg. 3</i>	<b>1</b> - Single Circuit <i>QS</i> <b>M</b> - Multi Circuit <b>E</b> - Emergency <i>(entire fixture)</i> <i>QS</i> <b>N</b> - Night Light <i>(entire fixture)</i> <i>QS</i> <b>L</b> - Life Safety <i>(entire fixture)</i> <i>Circuiting pg. 3</i>	<b>0</b> - No Battery <i>QS</i> <b>PLL</b> - Bodine 10w Integral Lithium <b>PRD</b> - Bodine 10W <i>(remote)</i> <b>PRH</b> - Bodine 20W <i>(remote)</i> <b>IRC</b> - Iota 10W <i>(remote)</i> <b>IRH</b> - Iota 20W <i>(remote)</i> <i>Battery and Emergency pg. 3</i>
-----	---		
<b>FINISH</b>	<b>FIXTURE OPTIONS</b> <sup>4</sup>		
<b>W</b> - White <i>QS</i> <b>S</b> - Metallic Silver <i>QS</i> <b>BL</b> - Textured Black <b>BR</b> - Bronze <b>GR</b> - Graphite <b>CC</b> - Custom Color <i>Finish pg. 4</i>	<b>QS</b> - QuickShip <i>QS</i> <b>DSP</b> - Customer Supplied Battery/Driver/ Sensor <i>Fixture Options pg. 4</i>		

<sup>1</sup>For Quickship CRI, CCT & Output see chart on page 4 <sup>2</sup>Individual fixtures come in 4' and 8' lengths. Specify continous rows in 4' increments. <sup>3</sup>Remote Battery must be installed within 16' of driver. <sup>4</sup>QS must be used in fixture options section of part number to qualify.

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.



## CRI, CCT & 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

<b>CL</b> _____	Specify CRI, CCT and desired lumens (i.e. CL835500)	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	Lumens per foot	Shielding¹	
			A Satine LPW	Watts/ft
<b>830LO</b>	3000K	400	100.6	4.0
<b>830MO</b>	3000K	750	106.0	7.1
<b>830HO</b>	3000K	1000	107.2	9.3
<b>830VHO</b>	3000K	1250	106.6	11.7
<b>835LO</b>	3500K	400	105.3	3.8
<b>835MO</b>	3500K	750	107.1	7.0
<b>835HO</b>	3500K	1000	111.1	9.0
<b>835VHO</b>	3500K	1250	108.7	11.5
<b>840LO</b>	4000K	400	111.1	3.6
<b>840MO</b>	4000K	750	108.7	6.9
<b>840HO</b>	4000K	1000	111.1	9.0
<b>840VHO</b>	4000K	1250	111.6	11.2

### 90 CRI

<b>927LO</b>	2700K	400	78.8	5.1
<b>927MO</b>	2700K	750	85.2	8.8
<b>927HO</b>	2700K	1000	83.9	11.9
<b>927VHO</b>	2700K	1250	80.1	15.6
<b>930LO</b>	3000K	400	83.3	4.8
<b>930MO</b>	3000K	750	90.4	8.3
<b>930HO</b>	3000K	1000	88.7	11.3
<b>930VHO</b>	3000K	1250	85.5	14.6
<b>935LO</b>	3500K	400	86.0	4.7
<b>935MO</b>	3500K	750	89.8	8.4
<b>935HO</b>	3500K	1000	92.0	10.9
<b>935VHO</b>	3500K	1250	88.3	14.2
<b>940LO</b>	4000K	400	85.1	4.7
<b>940MO</b>	4000K	750	88.8	8.5
<b>940HO</b>	4000K	1000	90.7	11.0
<b>940VHO</b>	4000K	1250	87.1	14.4

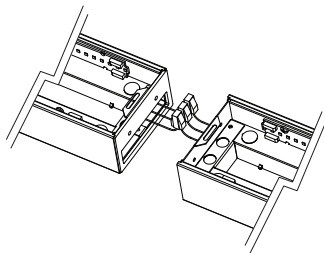
## Length

- All individual units cannot be joined, end trims are factory installed and cannot be removed
- Add 1/16" for each end cap or 1/8" to the overall length of the row
- Choose fixture length for Individual or Continuous Row length

<b>4</b>	<b>8</b>	—
Individual Fixture	Individual Fixture	Continuous Run
48" (1219.2mm)		Specify nominal overall row length to the 4'
	96" (2438.4mm)	

Specify in 4' increments

## Connection Detail



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.

Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568

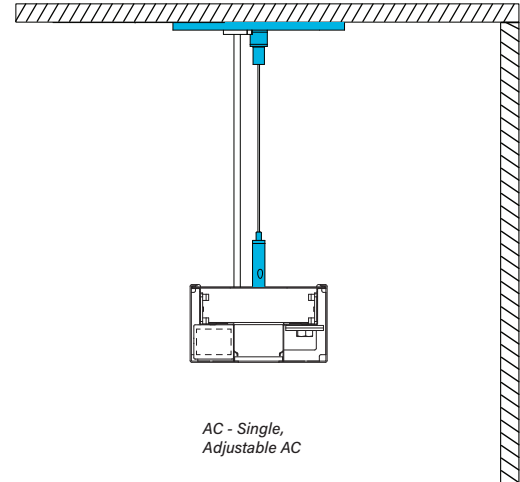
TESA\_LED\_SPEC\_MAY2023



## Mounting

- Specify cable length in ordering code (AC48G1)
- Standard 48" adjustable cable. Specify up to 350"
- Adjustable aircraft cable mounts on 4'-0" (1219.2mm) and 8'-0" (3438.4mm) centers
- End trims and power cord attached at factory
- Aircraft Cable supplied with 5" (127mm) power and 2" (50.8mm) non-power canopies
- Canopies, hubs, 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 15 lbs. per 4' fixture

<b>AC_G1</b>	1" (15/16") T-Bar
<b>AC_G9</b>	9/16" T-Bar
<b>AC_GS</b>	Slotted T-Bar <i>Works with screw slot and bolt slot grid ceiling types</i>
<b>AC_JB</b>	Junction Box
<b>AC_ST</b>	Structure
<b>AC5_G</b>	5" (127mm) Non-Power Canopy <i>Replaces standard 2" canopy</i>
<b>AC5_JB</b>	5" (127mm) Non-Power Canopy <i>Replaces standard 2" canopy</i>
<b>SQ_G</b>	5" (127mm) Square Canopy <i>Replaces round canopies with 5" square canopies</i>
<b>SQ_JB</b>	5" (127mm) Square Canopy <i>Replaces round canopies with 5" square canopies</i>



## Voltage

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

<b>U</b>	Universal (120-277)
<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
- Some Tesa 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

### DALI Drivers

<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

## Circuiting

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

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

## Battery

- Select battery section type if required, indicate total QTY. *Example 2BRH*
- 90 minute battery runtime; test button is remote
- Entire fixture is on battery for 4' lengths
- Half of fixture is on battery for 8' housing lengths
- Battery requires additional power drop

<b>0</b>	No Battery
<b>1PLL</b>	Bodine 10w Integral Lithium, Self Testing
<b>1PRD</b>	Bodine 10w Remote, Dual Flex
<b>1PRH</b>	Bodine 20w Remote
<b>1IRC</b>	Iota 10w Remote
<b>1IRH</b>	Iota 20w Remote

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.

Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568

TESA\_LED\_SPEC\_MAY2023



## 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> )

## Fixture Options

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

<b>QS</b>	Quick Ship
<b>DSP</b>	Customer Supplied Battery/Driver/Sensor

## Quick Ship

Shielding	CRI, CCT & Output	Mounting	Voltage	Driver	Circuiting	Battery	Finish
-----------	-------------------	----------	---------	--------	------------	---------	--------

## 10-Day

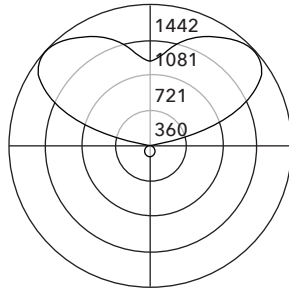
<b>A</b>	80 CRI, all color temperatures, all lumen packages <i>See pg 2</i>	<b>AC48G_</b> <b>AC48JB</b> <b>AC48ST</b>	(M)AC to Grid (M)AC to J-BOX (M)AC to Structure	<b>U</b> Universal (120-277) <b>1</b> 120V <b>2</b> 277V	<b>FSD</b> Factory Select Driver (1%, 0-10v) <b>PL2</b> Advance Xitanium 0-10v, 1% <b>OL2</b> Osram 0-10v, 1%	<b>1</b> Single Circuit <b>E</b> Emergency <b>N</b> Night Light	<b>0</b> None	<b>W</b> White <b>S</b> Silver
----------	---	---	---	---	---	---	---------------	-----------------------------------

All lengths and continuous rows up to 1,000 ft OR 150 individual fixtures. Consult factory for larger projects.

## Photometrics

### Satine Lens

Test #	Scaled from ITL90271
Catalog #	T4A-840VHO-4
Lumens	5000 lm
Watts	44.8 w
Efficacy	111.6 lm/w



### Candela Distribution

Vert Angle	Horizontal Angle					
	0	22.5	45	67.5	90	
0	127	127	127	127	127	
5	127	127	127	127	127	
15	122	122	123	123	122	
25	114	113	114	114	113	
35	103	102	102	102	101	
45	86	86	86	86	85	
55	67	67	67	66	66	
65	47	47	47	46	46	
75	24	25	24	24	24	
85	5	6	6	6	6	
90	0	0	0	0	0	
95	29	57	70	66	65	
105	169	343	477	497	525	
115	341	619	920	1047	1105	
125	496	771	1116	1332	1403	
135	622	856	1154	1355	1429	
145	719	892	1135	1293	1346	
155	789	896	1074	1185	1223	
165	832	880	974	1040	1064	
175	851	858	873	886	891	
180	853	853	853	853	853	

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	3450	3450	3410
55	3335	3335	3286
65	3148	3148	3083
75	2677	2677	2677
85	1590	1908	1908

## Approvals & Certifications

**Construction:** One piece die-formed 20 gauge steel housing in a 4" (101.6mm) by 2-1/4" (57.7mm) profile Standard 4'-0" (1219.2mm) and 8'-0" (3438.4mm) fixtures can be joined to create continuous runs. Standard high reflectance die-formed white painted aluminum.

**Shielding:** White satine lens with matte finish. Clear dust guard is standard with fixture.

**Mounting:** Adjustable aircraft cable mounts on 4'-0" (1219.2mm) and 8'-0" (3438.4mm) centers. Available in single or dual aircraft cable. Refer to installation instructions for appropriate ceiling detail. Maximum fixture weight is 15 lbs. per 4' fixture.

**LED:** 25°C test environment. Lumen output/wattage has a margin of +/- 5%. 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. MacAdam 3-Step Ellipses. 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. 90 CRI = R9≥50.

**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 Tesa 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 35% Direct: -20°F/-30°C to 106°F/41°C.

Ambient operating range 75% Direct: -20°F/-30°C to 124°F/51°C. Ambient operating range 100% Direct: -20°F/-30°C to 122°F/50°C. For more driver options, see Pinnacle Resource Guide. Some Tesa configurations will not accommodate all driver options.

**Circuiting:** Select from single circuit (1), Multi circuit (M), Emergency circuit (E), Night Light circuit (N) or Life Safety (L). 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 Tesa 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 integral 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.

**Labels:** UL and cUL 1598 listed. Approved for dry/damp location unless otherwise noted.

**Fixture Weight:** Maximum fixture weight is 15 lbs (per 4' fixture).

**Buy American Act Compliant**

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

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.

Designed in Denver, CO • USA | pinnacle-ltg.com | O: 303-322-5570 F: 303-322-5568

TESA\_LED\_SPEC\_MAY2023