

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

T4A			
HOUSING	CRI, CCT & OUTPUT ^{QS} ₁	LENGTH ²	MOUNTING
T4A - Tesa with Satine lens ^{QS} <i>(10% Direct / 90% Indirect)</i>	_27_ - 2700K _30_ - 3000K _35_ - 3500K _40_ - 4000K CL - Custom Lumens CW - Custom Watts <i>Lumen Output pg. 2</i> <i>Example: 830HO is 8 = 80 CRI; 30 = 3000K; HO = High Output; Blank = Standard Output</i>	_ - Individual Fixture ^{QS} _ - Continuous Row ^{QS} <i>Length and Pattern pg. 2</i>	AC_G - AC to Grid ^{QS} AC_JB - AC to J Box ^{QS} AC_ST - AC to Structure ^{QS} 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. 3</i>
VOLTAGE	DRIVER	CIRCUITING	BATTERY & EMERGENCY ³
U - Universal ^{QS} <i>(120 thru 277V)</i> 1 - 120V ^{QS} 2 - 277V ^{QS} 3 - 347V <i>Voltage pg. 3</i>	FSD - Factory Select Driver (1%, 0-10v) ^{QS} PL2 - Advance Xitanium (1%, 0-10v) ^{QS} OL4 - Osram 347v (1%, 0-10v) LH1 - Lutron Hi-lume (1%, EcoSystem) ^{QS} OL2 - Osram (1%, 0-10v) ^{QS} <i>Driver pg. 3</i>	1 - Single Circuit ^{QS} M - Multi Circuit E - Emergency <i>(entire fixture)</i> ^{QS} N - Night Light <i>(entire fixture)</i> ^{QS} L - Life Safety <i>(entire fixture)</i> <i>Circuiting pg. 3</i>	0 - No Battery ^{QS} FSG - Factory Select ALCR GI - Iota ETS DR GB - Bodine GTD PR - Bodine 10W <i>(remote)</i> PRH - Bodine 20W <i>(remote)</i> IR - Iota 10W <i>(remote)</i> ^{QS} IHR - Iota 20W <i>(remote)</i> ILL - Iota 10w Integral PLL - Bodine 10w Integral Lithium <i>Battery and Emergency pg. 3</i>
FINISH	FIXTURE OPTIONS ⁴		
W - White ^{QS} S - Metallic Silver ^{QS} BL - Textured Black BR - Bronze GR - Graphite CC - Custom Color <i>Finish pg. 4</i>	QS - QuickShip ^{QS} <i>Fixture Options pg. 4</i>		

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

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CRI, CCT & 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. CL835500)

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	Lumens per foot	Shielding ¹	
			A Satine LPW	Watts/ft
830LO	3000K	400	100.6	4.0
830MO	3000K	750	106.0	7.1
830HO	3000K	1000	107.2	9.3
830VHO	3000K	1250	106.6	11.7
835LO	3500K	400	105.3	3.8
835MO	3500K	750	107.1	7.0
835HO	3500K	1000	111.1	9.0
835VHO	3500K	1250	108.7	11.5
840LO	4000K	400	111.1	3.6
840MO	4000K	750	108.7	6.9
840HO	4000K	1000	111.1	9.0
840VHO	4000K	1250	111.6	11.2

90 CRI

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

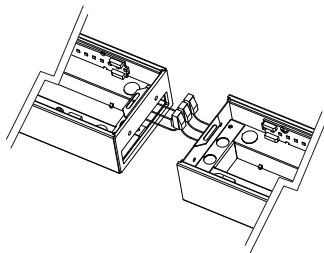
Length

- 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

4	8	—
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



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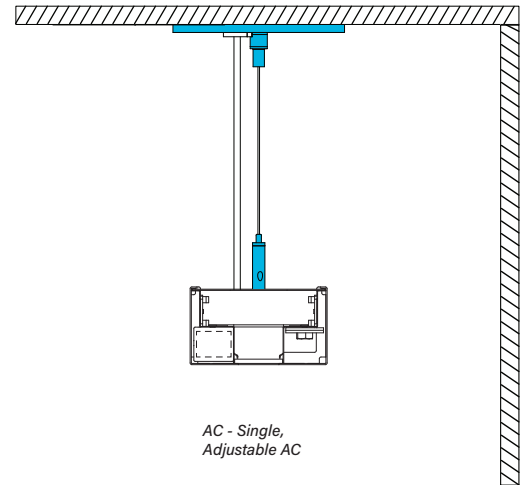
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Mounting

- 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

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

U	Universal (120-277)
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
- Some Tesa 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

DALI Drivers

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

Circuiting

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

1	Single Circuit
M	Multi Circuit
E	Emergency Circuit only
N	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

0	No battery
FSG	Factory Select ALCR, Automatic Load Control Relay
GI	Iota ETS DR, Emergency Lighting Control Device
GB	Bodine GTD, Emergency Lighting Control Device
PR	Bodine 10w Remote
PRH	Bodine 20w Remote
PLL	Bodine 10w Integral Lithium (self testing)
IR	Iota 10w Remote
IHR	Iota 10w Remote
ILL	Iota 10w integral (self testing)
IHR	Iota 10w Remote

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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)
CC	Custom Color (white cord/color match canopy)

Fixture Options

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

QS QuickShip

Quick Ship

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

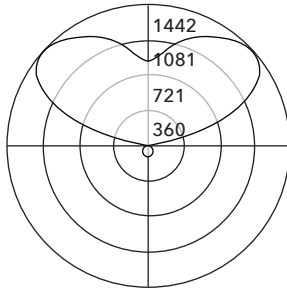
A	80 CRI, all color temperatures, all lumen packages See pg 2	AC48G_ AC48JB AC48ST	(M)AC to Grid (M)AC to J-BOX (M)AC to Structure	U Universal (120-277) 1 120V 2 277V	FSD Factory Select Driver (1%, 0-10v) PL2 Advance Xitanium 0-10v, 1% LH1 Lutron LDE1 OL2 Osram 0-10v, 1%	1 Single Circuit E Emergency N Night Light	0 None	W White S Silver
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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%. 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. 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. 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 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 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.

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