



July 27, 2009

LED Tube Light

SPECIFICATION



cULus Pending File #E321933

RoHS Compliant  

World-class optoelectronic device manufacturing facility since 1969
25 million products manufactured daily
ISO14001 / ISO9001 / TS16949 Certified
White Licensed



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Introduction

VaOpto's Light Emitting Diode (LED) Tube Light Series saves energy and lasts a long life.

Environmentally Conscious

Energy efficient, lead free, and long life means fewer lamp replacements vs. standard Tube Light and incandescent light sources.

Outstanding Energy Efficiency

Compare to standard Incandescent light sources, VaOpto's LED Tube Light Series are reducing energy consumption by 70%-80%. The lamps' optics concentrates light on the target, diminishing wasted extraneous light and increases the CBCP.

Long Life = Labor Savings

Delivers at least 70% of initial light output after at last 50,000 hours.

Various Tubes

T8 is our standard series. T5 and others are available depending on volume.

Various Colors

Cool White (5000-10000K)
Neutral White (3700-5000K)
Warm White (2600-3700K)

Excellent Color Rendering

Cool White: CRI > 70
Neutral White: CRI > 75
Warm White: CRI > 80

VO-SS-X-24T8-4B where X may be CW, NW, or WW

Features:

- High luminous efficiency
- Short response time
- White color: 2600K~10000K Color Temperature

Applications:

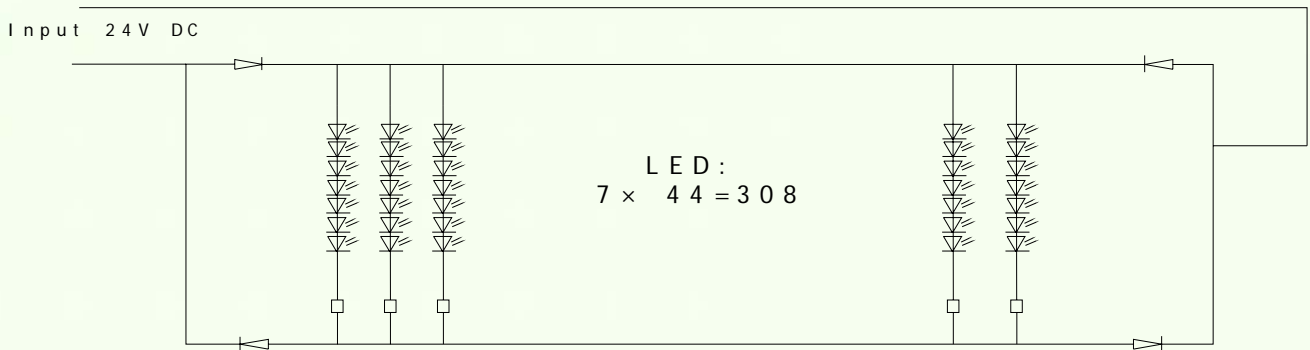
- General Illumination
- Commercial lighting
- Cool lighting
- Backlighting
- Sign and Decoration Lighting
- Shelf light



Technical Parameters							
Part Number	Color	Lumen (lm)	LED Quantity	Input Voltage	Power Consumption	Operation Temperature	Storage Temperature
VO-SS-CW-24T8-4B	Cool White	1850	308 pcs	24 V DC	18W	-20 - +85°C	0 - 55°C
VO-SS-NW-24T8-4B	Neutral White	1695					
VO-SS-WW-24T8-4B	Warm White	1540					

Packing Size	
Size of Box	1245mm × 220mm × 210mm
Net Weight / pc	0.4 kg
Net Weight / box	9.5 kg
Gross Weight / box	10.5 kg
Quantity / box	25 pcs
Length of Strip Lamp	1198mm × φ26mm

Diagram



44 LEDs connect in series, and then 7 group of series connect in parallel



Installation:

1. For new application, please use Class 2 cULus listed Power Supply between power source and this low voltage LED tube light. The standard T8 fixture holder is fixable.
2. For replacement application, please remove the ballast first. And then, please use Class 2 cULus listed Power Supply between power source and this low voltage LED tube light. The standard T8 fixture holder is fixable.
3. VaOpto whole fixture for this low voltage T8 Series is available.

- Notes:**
1. Cut off the electricity supply before installation.
 2. LED light can be installed directly onto T8 or T10's bracket (taking off the switch will do).
 3. LED light has to be used according to the instructions on specification.

VO-SS-X-120T8-2B where X may be CW, NW, or WW

Features:

- High luminous efficiency
- Short response time
- White color: 2600K~10000K Color Temperature

Applications:

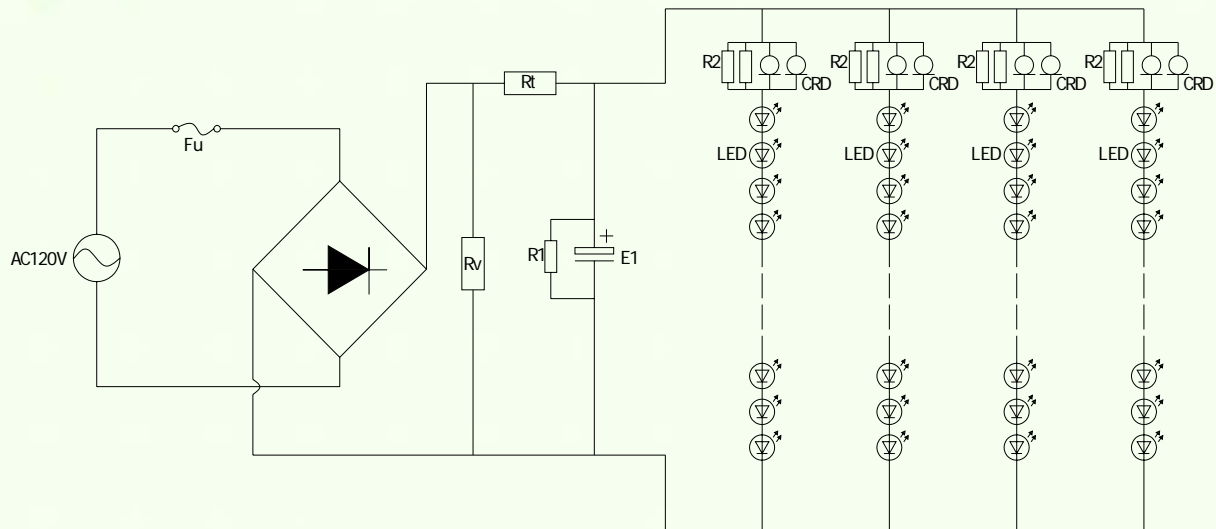
- General Illumination
- Commercial lighting
- Cool lighting
- Backlighting
- Sign and Decoration Lighting
- Shelf light



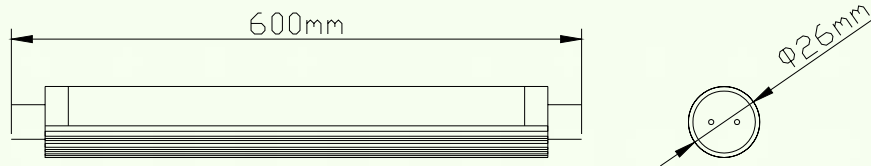
Technical Parameters							
Part Number	Color	Lumen (lm)	LED Quantity	Input Voltage	Power Consumption	Operation Temperature	Storage Temperature
VO-SS-CW-120T8-2B	Cool White	1040	172 pcs	120 V AC	12W	-20 - +85 °C	0 - 55 °C
VO-SS-NW-120T8-2B	Neutral White	940					
VO-SS-WW-120T8-2B	Warm White	860					

Packing Size	
Size of Box	645mm × 220mm × 210mm
Net Weight / pc	0.2 kg
Net Weight / box	6.5 kg
Gross Weight / box	7.5 kg
Quantity / box	50 pcs
Length of Strip Lamp	600mm × φ26mm

Diagram



43 LEDs connect in series, and then 4 group of series connect in parallel



Installation:

1. For new application, please use standard 120VAC T8 fixture without ballast.
2. For replacement application, please remove the ballast first. And then, please connect to this LED tube light directly. The standard T8 fixture holder is fixable.

Notes:

1. Cut off the electricity supply before installation.
2. LED light can be installed directly onto T8 or T10's bracket (taking off the switch will do).
3. LED light has to be used according to the instructions on specification.

VO-SS-X-120T8-4B where X may be CW, NW, or WW

Features:

- High luminous efficiency
- Short response time
- White color: 2600K~10000K Color Temperature

Applications:

- General Illumination
- Commercial lighting
- Cool lighting
- Backlighting
- Sign and Decoration Lighting
- Shelf light



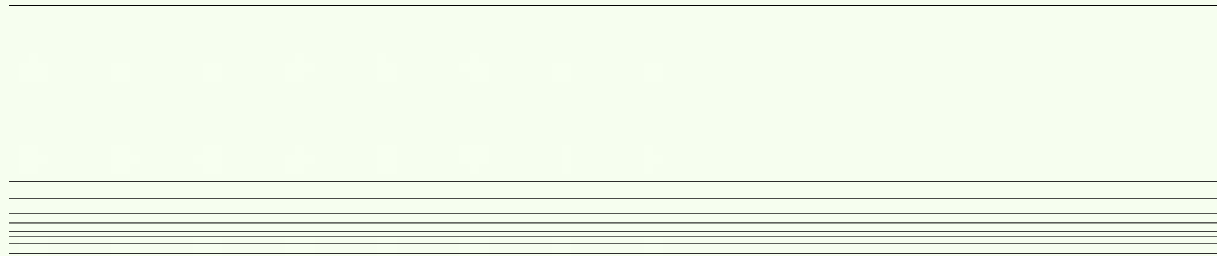
Technical Parameters

Part Number	Color	Lumen (lm)	LED Quantity	Input Voltage	Power Consumption	Operation Temperature	Storage Temperature
VO-SS-CW-120T8-4B	Cool White	1760	294 pcs	120 V AC	22W	-20 - +85 °C	0 - 55 °C
VO-SS-NW-120T8-4B	Neutral White	1600					
VO-SS-WW-120T8-4B	Warm White	1450					

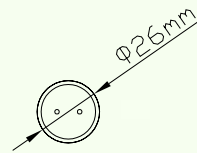
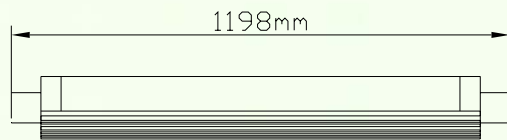
Packing Size

Size of Box	1245mm × 220mm × 210mm
Net Weight / pc	0.4 kg
Net Weight / box	9.5 kg
Gross Weight / box	10.5 kg
Quantity / box	20 pcs
Length of Strip Lamp	1198mm × φ26mm

Diagram



42 LEDs connect in series, and then 7 group of series connect in parallel



Installation:

1. For new application, please use standard 120VAC T8 fixture without ballast.
2. For replacement application, please remove the ballast first. And then, please connect to this LED tube light directly. The standard T8 fixture holder is fixable.

Notes:

1. Cut off the electricity supply before installation.
2. LED light can be installed directly onto T8 or T10's bracket (taking off the switch will do).
3. LED light has to be used according to the instructions on specification.

Precautions

- LEDs are static sensitive devices. Precautions should be taken to ensure that LEDs are well protected from ESD during handling.
- ESD protection for GaP and AlGaAS based chips is still necessary even though the chips are safe in low static-electric discharge events
- AllInGap, GaN and/or InGaN based chips are STATIC SENSITIVE devices and ESD protection must be taken into consideration in the initial design stages.
- Do not operate LEDs in reverse bias.

Warranty and Liability Information

- Two years limited warranty.
- The information contained herein is presented only as a guide for the applications of our products.
- No responsibility is assumed by VAOPTO for any infringements of intellectual property or other infringements of the rights of third parties that may result from its use.
- VAOPTO is committed to a process of continuous improvements of the quality and the features of its products and reserves the right to make changes that result in such improvements.
- VAOPTO products are not intended for use in applications where extraordinarily high reliability is required to prevent the loss of human life or where failure could result in bodily injury.
- VAOPTO limits the extent of our liability to the initial component cost and will, in the event of a failure, replace a failed component or refund the purchase price at VAOPTO option.

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