

# Specification

## T8 LEDs Tube

Series	<u>T8 Tube</u>
Version	<u>1.2</u>
Date	<u>2011/12/29</u>

## Introduction

QT-Brighttek™ T8 LED Tube Light is enclosing LEDs into the plastic tube housing to emit light like the conventional T series fluorescent light. It is general illumination for using in RVs, Buses, Trains, Task Lighting, Store Displays, Warehouse Illumination and Under Cabinets.



## Features

- Housing Material : Plastic casing and aluminum
- Base Type : G13
- Input Power : 9Watts (for 2ft) and 18Watts (for 4ft)
- Input Voltage : 90-265VAC
- Beam Spread : 180°
- Length : 48" (1198+/- 3mm) and 24" ( 598+/-3mm)
- Diameter : 1-1/8" (28.8 +/- 0.2mm)
- Luminous Flux : 650 lm until 1,320 lm ( based on ordering options )
- Light Colors Available: (3000K) Warm White/ (4200K) Natural White/ (6000K) Cool White
- Bulb Life : 50,000 hours

## Specification

### Frosted Lens

Part Number	TUET806009WH00	TUET806009NH00	TUET806009CH00	TUET812018WH00	TUET812018NH00	TUET812018CH00
Options	2ft (600mm) Frosted Lens			4ft (1200mm) Frosted Lens		
Input Voltage	AC 90 ~ 265 V			AC 90 ~ 265 V		
Power Factor	>0.9			>0.9		
Total Power	9W			18W		
Quantity of Leds	120Pcs LEDs			240Pcs LEDs		
CCT (Typ.)	3000K	4200K	6000K	3000K	4200K	6000K
Total Flux	550 Lm	620 Lm	650 Lm	1100 Lm	1250 Lm	1300 Lm
CRI	65 Ra	70 Ra	75 Ra	65 Ra	70 Ra	75 Ra
Life	40,000hr			40,000hr		
View Angle	180°			180°		
Length	590mm			1198mm		
Diameter	Φ26			Φ26		
Connector Type	G13			G13		
Construction	Frost Lens + AL Housing + FR4			Frost Lens + AL Housing + FR4		
Case Temperature	52°C (25°C - Ambient Temperature)			52°C (25°C - Ambient Temperature)		

### Clear Lens

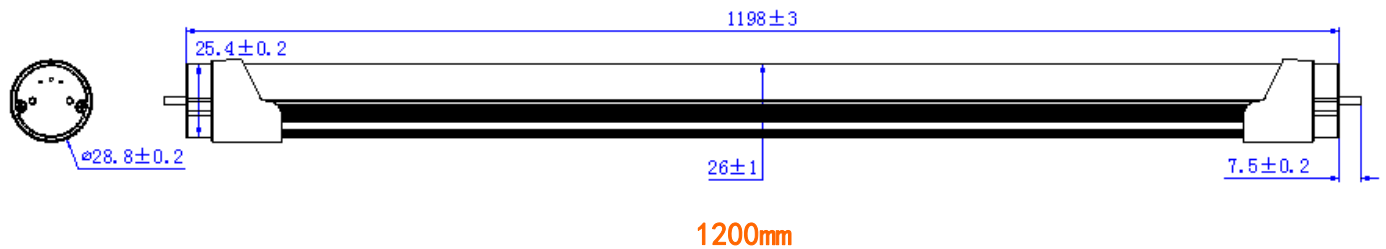
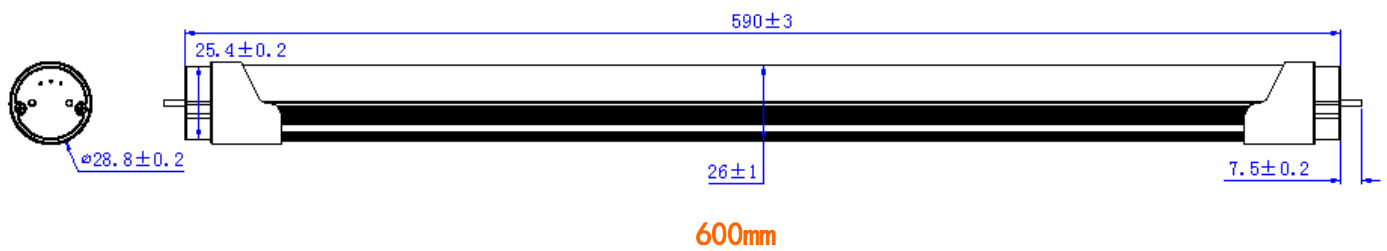
Part Number	TUET806009WH02	TUET806009NH02	TUET806009CH02	TUET812018WH02	TUET812018NH02	TUET812018CH02
Options	0.6 m Clear Lens			1.2m Clear Lens		
Input Voltage	AC 90 ~ 265 V			AC 90 ~ 265 V		
Power Factor	>0.9			>0.9		
Total Power	9W			18W		
Quantity of Leds	120 Pcs LEDs			240 Pcs LEDs		
CCT (Typ )	3000K	4200K	6000K	3000K	4200K	6000K
Total Flux (Typ)	600 Lm	720 Lm	760 Lm	1220 Lm	1350 Lm	1400 Lm
CRI	65 Ra	70 Ra	75 Ra	65 Ra	70 Ra	75 Ra
Life	50,000hr			50,000hr		
View Angle	180°			180°		
Length	590mm			1198mm		
Diameter	Φ26			Φ26		
Connector Type	G13			G13		
Construction	Frost Lens + AL Housing + FR4			Frost Lens + AL Housing + FR4		
Case Temperature	52°C (25°C Ambient Temperature)			52°C (25°C Ambient Temperature)		

## Maximum Rating

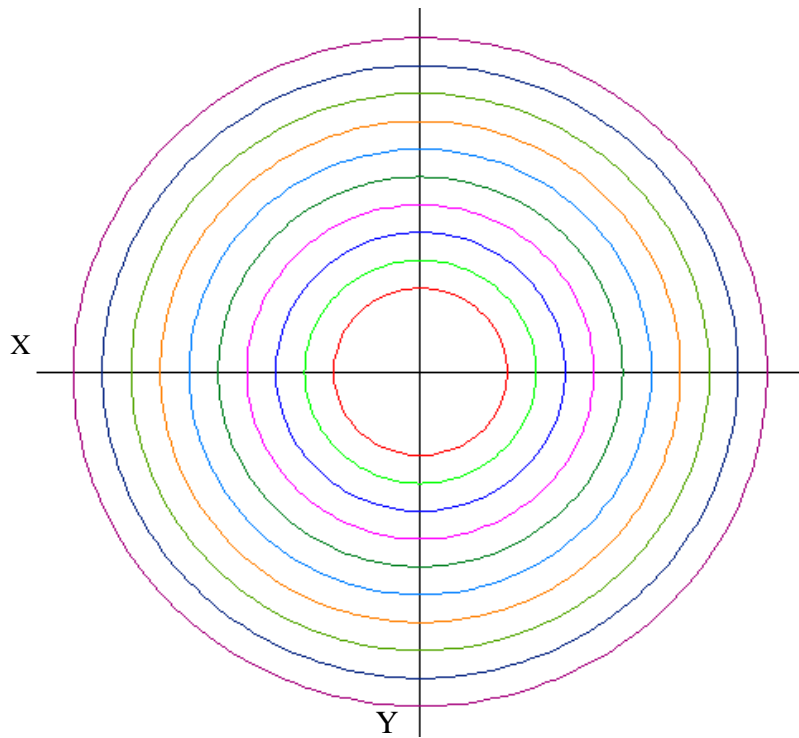
Maximum Rating for T8 based on  $T_a = 25^{\circ}\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Units
Operating voltage (AC 50/60Hz)	V	90	110/220	265	V
Operating temperature	Topr	-20		+55	$^{\circ}\text{C}$
Rated Life		50000			H

## Dimension



**Light Distribution ( Distance from Source=1.2m)**



**Frosted Lens 9W**

CCT	Center	300mm	400mm	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm
6000K	44.0	43.2	43.0	42.9	42.1	42.0	41.0	40.8	40.0	39.7	39.7
4200K	48.0	47.2	47.0	46.3	45.8	44.7	44.5	43.3	42.9	42.0	42.0
3000K	52.8	52.2	52.0	51.4	50.3	50.0	49.0	48.5	47.3	46.7	45.9

**Units: LUX**

**Frosted Lens 18W**

CCT	Center	300mm	400mm	500mm	600mm	700mm	800mm	900mm	1000mm	1100mm	1200mm
6000K	80.4	80.0	79.9	79.4	78.8	77.7	76.7	75.2	74.1	73.0	69.6
4200K	85.0	83.4	82.7	81.8	80.5	79.5	77.8	76.2	73.7	73.5	72.8
3000K	92.7	91.6	90.6	89.7	88.3	87.0	85.5	84.0	82.2	80.6	79.7

**Units: LUX**

**Clear Lens 9W**

CCT	Center	■ 300mm	■ 400mm	■ 500mm	■ 600mm	■ 700mm	■ 800mm	■ 900mm	■ 1000mm	■ 1100mm	■ 1200mm
6000K	49.8	48.6	48.4	47.7	47.5	47.1	46.6	45.7	45.4	44.9	44.3
4200K	53.5	52.7	52.0	51.3	50.6	49.8	49.4	48.3	47.9	47.6	47.2
3000K	57.8	57.3	57.0	56.6	55.4	55.1	54.5	53.7	53.4	51.7	50.8

**Units: LUX**
**Clear Lens 18W**

CCT	Center	■ 300mm	■ 400mm	■ 500mm	■ 600mm	■ 700mm	■ 800mm	■ 900mm	■ 1000mm	■ 1100mm	■ 1200mm
6000K	85.8	85.2	84.8	84.3	83.6	82.8	81.5	80.4	79.6	78.0	74.3
4200K	90.2	88.6	87.8	86.6	85.4	84.5	82.2	81.3	78.7	78.3	77.1
3000K	97.7	96.5	95.9	94.6	93.8	93.2	90.6	89.4	87.9	87.2	84.3

**Units: LUX**

## Installation Instruction

### HOW TO INSTALL QT-Brightek LED T8 RETROFIT TUBES

#### STEP 1: Unpack the Product:

- a) Unpack and carefully examine the product from top to bottom.
- b) Report any damage and save all packing materials, if any part was damaged during transport.
- c) Do not attempt to use this product, if it is damaged.

#### STEP 2: Planning the Installation:

- a) This device installation requires planning to ensure successful installation with minimal complications and down time.

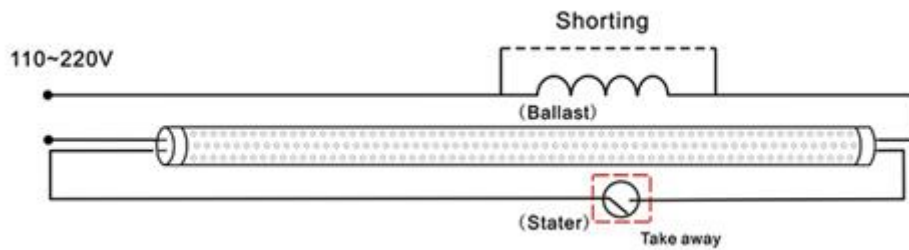
#### STEP 3: User Responsibilities:

It is the responsibility of the contractor, installer, purchaser, owner, and user to install, maintain, and operate the device in such a manner as to comply with all state and local laws, ordinances, and regulations.

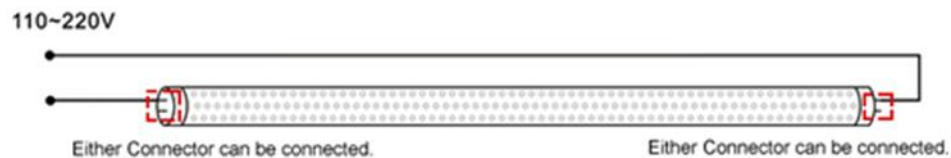
#### STEP 4: T8 Installation Procedure:

- 1) Disconnect power to fixture at source. **DO NOT SIMPLY SWITCH OFF FIXTURE.**
- 2) Remove existing fluorescent tubes and safely set aside.
- 3) Disconnect (cut) wires to ballast leaving enough wire to be tied off with wire nuts.
- 4) Tie-off remaining wires attached to ballast with wire nuts.
- 5) See wiring diagram as below for installation QT-Brightek T8 leds Tube and re-wire fixture.

## Schematic Diagram before Modification



## Schematic Diagram after removing the Ballast



- 6) Install QT-Brighttek T8 leds Tube into fixture.
- 7) Affix included warning labels to fixtures near lamp connection/sockets of fixture so they are visible to bulb installers.
- 8) Re-connect power supply and turn on switch. Tube will light.

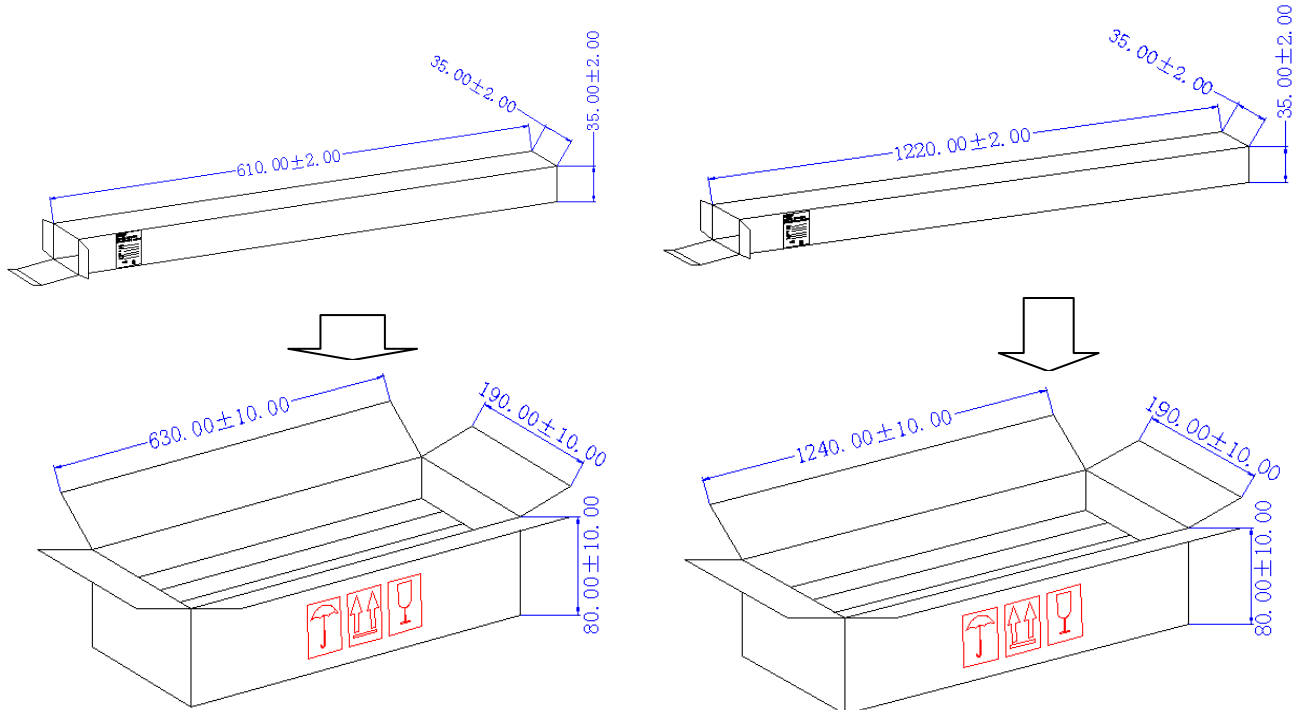
Risk of fire or electric shock.

**Install the QT-Brighttek T8 retrofit LED tube(s) only in luminaires that have the construction features and dimensions shown in the drawings shown on this sheet.**



## Packaging Specification

In 1 box contains 10 units of the T8 for the 2ft and 4ft



Dimension:     Units (mm)

Net Weight:   235g X 10 PCS (600MM)

                  425g X 10 PCS (1200MM)

Total Weight including the packing box: 3300g (600mm) ; 5500g (1200mm)