KEYSTONE
SINCE 1945
LIGHT MADE EASY™

DIRECTDRIVE LED
LINE VOLTAGE T8 TUBES

KT-LED7T8-24GC-840-D-VDIM
T8 LED LAMP

DESCRIPTION

7W T8 LED I 4000 I >83 CRI I
High-Efficiency I Single-Ended Wiring

LAMP TYPE:	Linear
BULB TYPE:	T8 LED
BASE TYPE:	G13 (Medium Bi-Pin)
WATTAGE:	7W
COLOR TEMPERATURE:	4000K
COLOR RENDERING INDEX (CRI):	>83
WARRANTY:	5 Years

PRODUCT FEATURES

- Replacement for conventional F17T8 fluorescent lamp
- Single-ended wiring
- Instant startup
- Frosted lens eliminates pixelation
- Improved lamp durability with shatterproof coated glass
- Integral driver (isolated) eliminates the need for external driver or ballast
- Approximately 40% more energy efficient than standard F17T8 lamps
- ETL Sanitation Listed NSF/ANSI Standard 2—Food equipment
- 0–10V dimming to below 10%
- Environmentally friendly: No mercury used
- Operating temperature: –20ºC/–4ºF to 45ºC/113ºF
- 50,000+ hour lifetime
- UL Classified
- DLC Listing; Meets DLC 5.1 requirements

PERFORMANCE SPECIFICATIONS

Catalog Number	Input Voltage	Input Current	Wattage	Color Temperature	Lumen Output	Efficacy	CRI	Power Factor
KT-LED7T8-24GC-840-D-VDIM	120–277V	0.12A @ 120V; 0.05A @ 277V	7W	4000K	1000	143 lm/W	>83	>0.9

OPERATING SPECIFICATIONS

PHOTOMETRIC CHARACTERISTICS

Beam Angle	161.0º	**Visible Light Area**	325º

MECHANICAL CHARACTERISTICS

Length	24"	**Wiring**	Single-ended	**Rated Life (L70)**	50,000 hours

SPECTRAL DISTRIBUTION

Flux (W/nm) 4000K
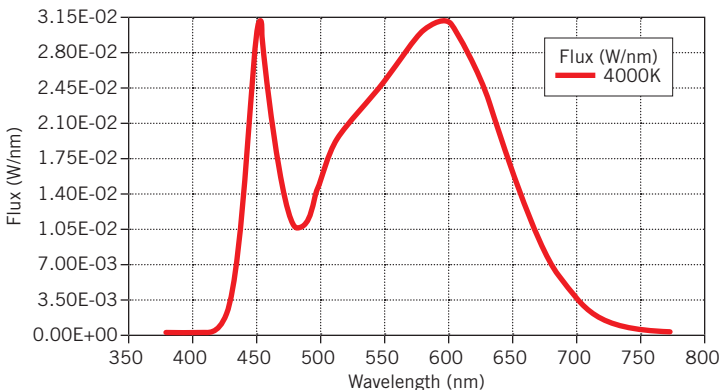
POLAR CANDELA DISTRIBUTION

Unit = cd
C 0–110: 110.0
C 30–210: 125.5
C 60–240: 190.8
C 90–270: 214.5

Average Beam Angle (50%): 161.0º

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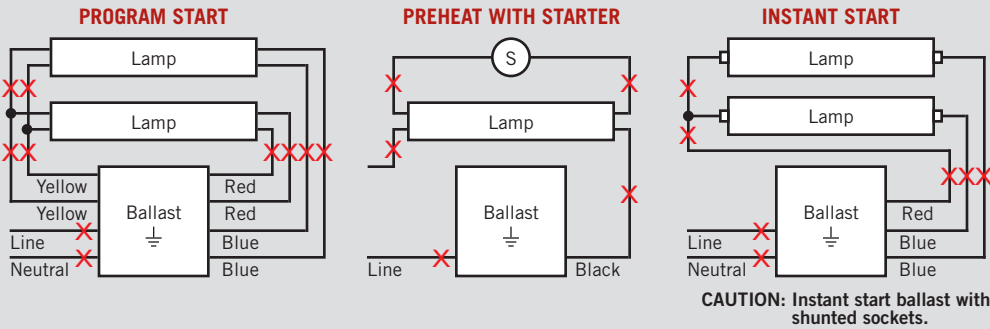LINE VOLTAGE T8 TUBES
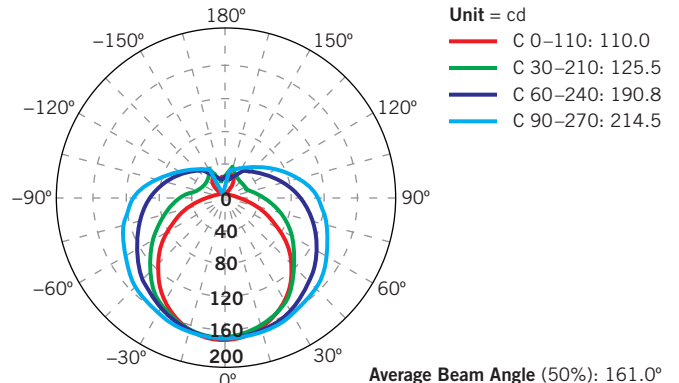
KT-LED7T8-24GC-840-D-VDIM
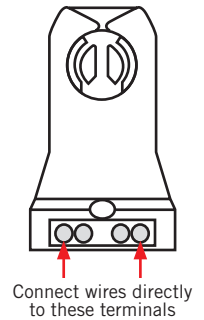## T8 LED LAMP

WIRING DIAGRAMS

Cut all existing connections to ballast as shown below and remove ballast.
Note: Both single-ended wiring wthout dimming and single-ended wiring wth dimming require non-shunted lampholders.

Typical Ballast Configurations

PROGRAM START

| Lamp |
| Lamp |

Yellow	Ballast	Red
Yellow		Red
Line		Blue
Neutral		Blue

PREHEAT WITH STARTER

S

Lamp

| | Ballast | |
| Line | | Black |

INSTANT START

| Lamp |
| Lamp |

Line	Ballast	Red
Neutral		Blue
		Blue

CAUTION: Instant start ballast with shunted sockets.

TYPICAL NON-SHUNTED LAMPHOLDER

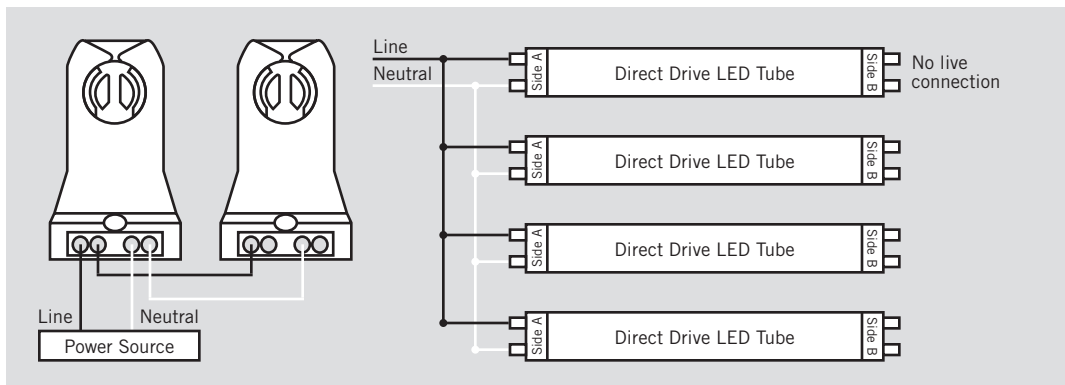Connect wires directly to these terminals
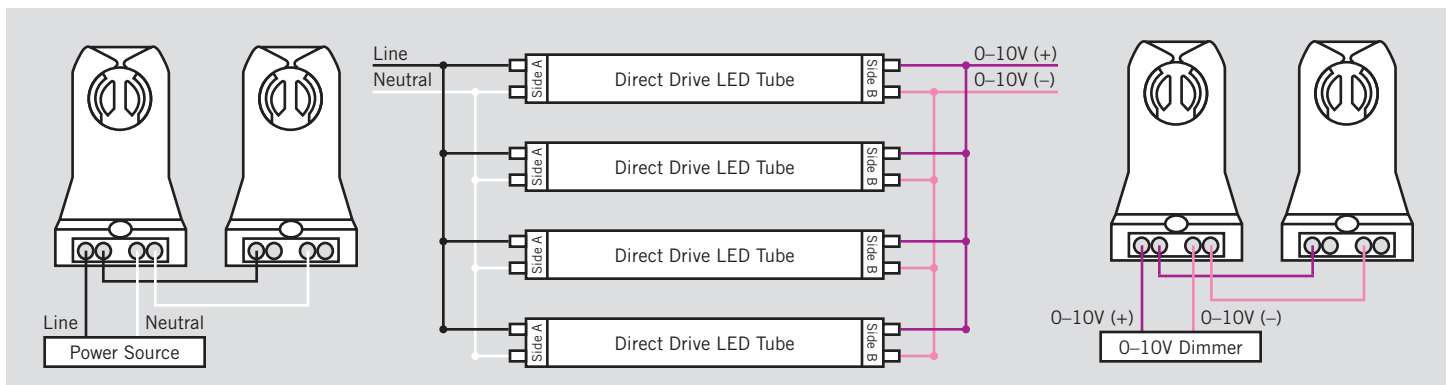
CAUTION: USE *ONLY* NON-SHUNTED LAMPHOLDERS.

Do not install product in a fixture with shunted lampholders (found in all fixtures using instant start ballasts). If the current lampholders are shunted, remove them and replace them with non-shunted lampholders. Make new connections directly to terminals as indicated in wiring diagrams.

Keystone can provide any style replacement lampholders.

Call us at 800-464-2680.

Single-ended wiring without dimming: Re-wire fixture as shown below.

Line
Neutral

Side A	Direct Drive LED Tube	Side B	No live connection
Side A	Direct Drive LED Tube	Side B
Side A	Direct Drive LED Tube	Side B
Side A	Direct Drive LED Tube	Side B

Line   Neutral
Power Source

Single-ended wiring with dimming: Re-wire fixture as shown below.

Line
Neutral

Side A	Direct Drive LED Tube	Side B	0–10V (+)
			0–10V (–)
Side A	Direct Drive LED Tube	Side B
Side A	Direct Drive LED Tube	Side B
Side A	Direct Drive LED Tube	Side B

Line   Neutral
Power Source

0–10V (+)   0–10V (–)
0–10V Dimmer

Note: **There should not be any exposed wires at the end of installation.**

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PHYSICAL CHARACTERISTICS
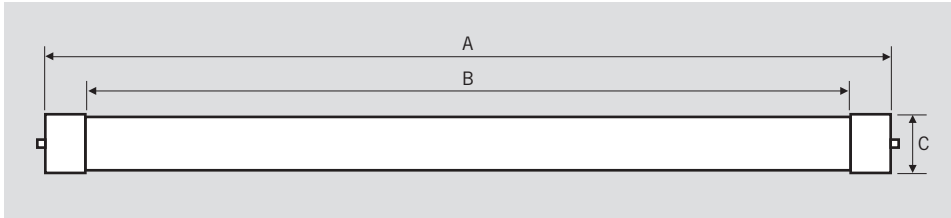
LAMP DIMENSIONS

A (Body Length)	23.19"
B (Illuminated Length)	20.96"
C (Diameter)	1.10"

NOMINAL LENGTH: 24"
BASE TYPE: G13 (Medium Bi-Pin)

ORDERING INFORMATION

ORDER CODE	CARTON QUANTITY	UPC	EASY CODE
KT-LED7T8-24GC-840-D-VDIM	25	843654136417	NAT-91

CATALOG NUMBER BREAKDOWN

KT-LED7T8-24GC-840-D-VDIM
1 2 3 4 5 6 7 8 9 10

1 **Keystone Technologies**
2 **LED Lamp**
3 **Wattage**
4 **Lamp Type**
5 **Nominal Length (Inches)**
6 **Coated Glass**
7 **>80 CRI**
8 **Color Temperature**
9 **Direct Drive Series**
10 **0–10V Dimming**