

## Field-Adjustable T8 LED Tube

## T8-L48-G13MB-16HE-PC850x

This field-adjustable LED tube from ConNexTube® enables luminaire manufacturers or electrical contractors to upgrade linear fluorescent fixtures to LED lighting in a few minutes, either in the factory or field installation. And further, people can field-adjust the light levels of luminaires easily by using our patented ConnSet® technology. This versatility allows OEMs and distributors to meet orders faster and more confidently while reducing costs and inventory.



These LED tubes operate with our dedicated Connected-Ready LED ballasts, which feature Dim-to-Off capability and 12V-always-On auxiliary power to provide lighting control and wireless connectivity for LED fixtures at the lowest cost. That results in a simpler, less expensive but powerful LED fixture that can enable every fixture to become a wireless node. The resulting advantages enable Networked Lighting Control with greater installation flexibility, good scalability, and lowest labor installation cost, suitable for many applications but particularly hard-to-wire applications.

### SPECIFICATIONS

General	
Lamp Size	T8 LED Tube
Lamp Length	4-Foot
Lamp Base	G13 (Medium Bi-Pin)
Lamp Material	Plastic
UL Type	Type C

Electrical Technical	
Lamp Power (Nom)	16W
System Input Voltage	120 ~ 347Vac
Power Factor	> 0.95
THD	< 10%
Dimming Range	100% ~ 1%

Light Technical	
Output Lumens (Adj.)	2700 lm ~ 1200 lm
Bare Lamp Efficacy (Nom)	168 lm/W
CCT (Nom)	5000 K
CRI (Nom)	≥ 82
Beam Angle (Nom)	> 190°

Safety and Reliability	
Anti-arcing Protection	Yes
Anti-shock Protection	Yes
RoHS Compliant	Yes
Lamp Category	HE
TM-21 Reported L70	> 60,000 hrs

UL Certified	FCC Certified	DLC Certified
UL1993, UL1598C	FCC Part15 Class A Non-consumer	DLC 5.1

## Field-Adjustable T8 LED Tube T8-L48-G13MB-16HE-PC850x

### Field Adjustable Light Output

LED Tube Model No.	LED Ballast Model No.	CONNSET® Model No.	Bare Lamp Lumen	Num. of Lamp	System Input Power	System Output Lumens	System Lumens Efficacy	Power Factor
<b>T8-L48-G13MB-16HE-PC850A</b>	<b>6-Lamps Ballast: LB-WLD0-100-6P16</b>	Default	2700 lm	6	106.6 W	16,200 lm	152 LPW	0.99
		CS1-823	2500 lm	6	98.7 W	15,000 lm	152 LPW	0.97
		CS1-303	2200 lm	6	85.7 W	13,200 lm	154 LPW	0.98
		CS1-203	2000 lm	6	76.9 W	12,000 lm	156 LPW	0.98
		CS1-153	1800 lm	6	69.7 W	10,800 lm	155 LPW	0.97
		CS1-133	1600 lm	6	61.5 W	9,600 lm	156 LPW	0.96
		CS1-912	1400 lm	6	54.9 W	8,400 lm	153 LPW	0.96
	<b>4-Lamps Ballast: LB-WLD0-065-4P16</b>	Default	2700 lm	4	71.5 W	10,800 lm	151 LPW	0.98
		CS1-473	2500 lm	4	65.4 W	10,000 lm	153 LPW	0.98
		CS1-333	2300 lm	4	59.7 W	9,200 lm	154 LPW	0.98
		CS1-223	2200 lm	4	56.4 W	8,800 lm	156 LPW	0.98
		CS1-183	2000 lm	4	51.3 W	8,000 lm	156 LPW	0.98
		CS1-133	1900 lm	4	48.7 W	7,600 lm	156 LPW	0.97
		CS1-103	1700 lm	4	43.9 W	6,800 lm	155 LPW	0.97
		CS1-822	1600 lm	4	40.5 W	6,400 lm	158 LPW	0.96
		CS1-622	1400 lm	4	36.6 W	5,600 lm	153 LPW	0.96
	<b>3-Lamps Ballast: LB-WLD0-050-3P16</b>	Default	2700 lm	3	53.4 W	8,100 lm	151 LPW	0.99
		CS1-823	2500 lm	3	49.7 W	7,500 lm	151 LPW	0.99
		CS1-303	2200 lm	3	43.1 W	6,600 lm	153 LPW	0.98
		CS1-203	2000 lm	3	39.2 W	6,000 lm	153 LPW	0.98
		CS1-153	1800 lm	3	35.3 W	5,400 lm	153 LPW	0.98
		CS1-133	1600 lm	3	31.6 W	4,800 lm	152 LPW	0.97
		CS1-912	1400 lm	3	27.6 W	4,200 lm	152 LPW	0.97

Notes: Only partial products are listed here. Please feel free to contact us if more products are needed.

## Field-Adjustable T8 LED Tube T8-L48-G13MB-16HE-PC850x

### Field Adjustable Light Output

LED Tube Model No.	LED Ballast Model No.	CONNSET® Model No.	Bare Lamp Lumen	Num. of Lamp	System Input Power	System Output Lumens	System Lumens Efficacy	Power Factor
T8-L48-G13MB-16HE-PC850A	2-Lamps Ballast: LB-WLD0-035-2P16	Default	2700 lm	2	36.0 W	5,400 lm	150 LPW	0.98
		CS1-473	2500 lm	2	33.8 W	5,000 lm	148 LPW	0.98
		CS1-333	2400 lm	2	32.2 W	4,800 lm	149 LPW	0.98
		CS1-183	2200 lm	2	29.5 W	4,400 lm	149 LPW	0.98
		CS1-133	2000 lm	2	26.8 W	4,000 lm	149 LPW	0.97
		CS1-103	1800 lm	2	24.1 W	3,600 lm	149 LPW	0.97
		CS1-822	1600 lm	2	21.6 W	3,200 lm	148 LPW	0.96
		CS1-622	1400 lm	2	19.2 W	2,800 lm	146 LPW	0.95

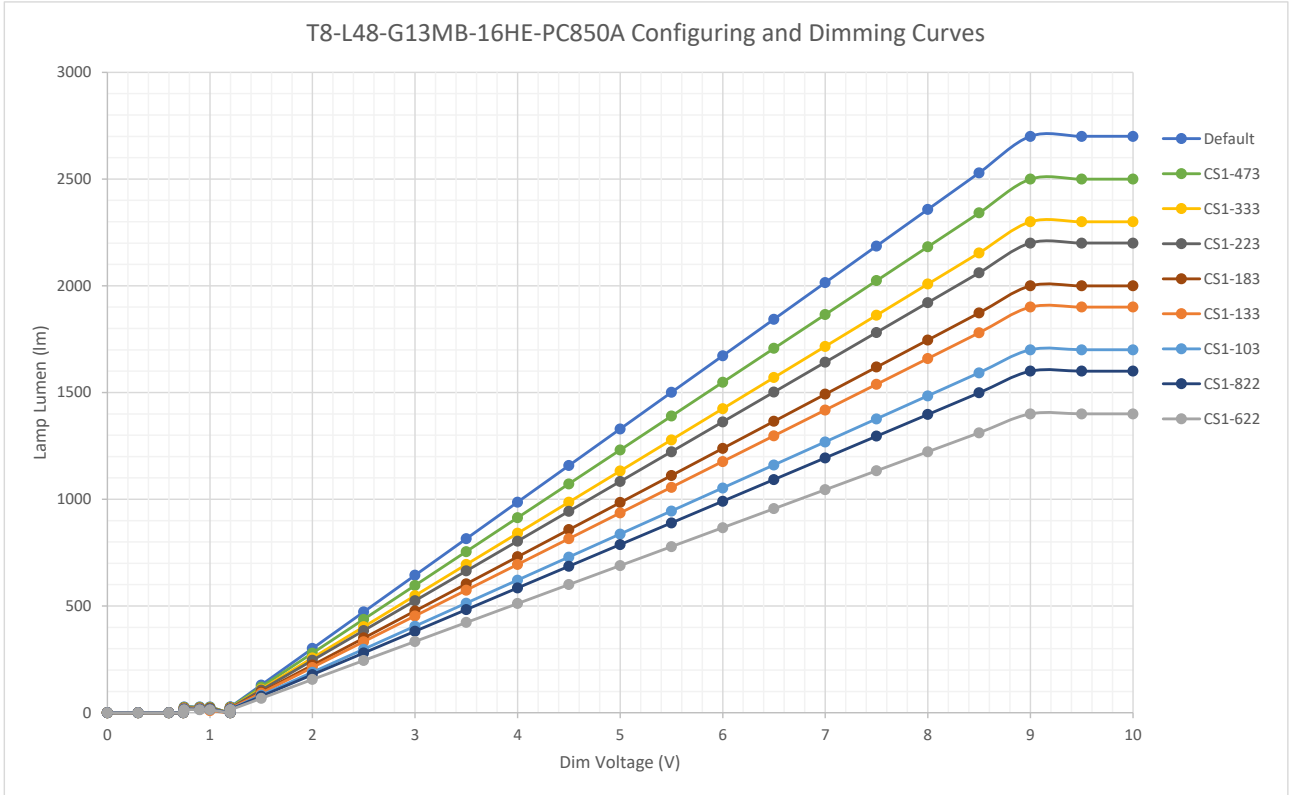
Notes: Only partial products are listed here. Please feel free to contact us if more products are needed.

### De-lamping Performance

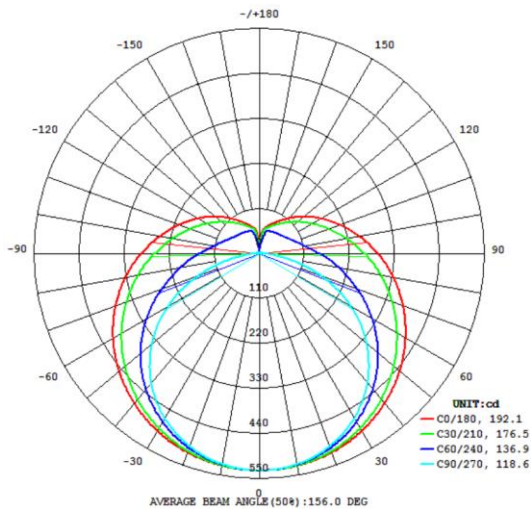
Ballasts	Num. of Lamp	System Output Lumens	System Input Power	#1 Lamp Lumen	#2 Lamp Lumen	#3 Lamp Lumen	#4 Lamp Lumen	#5 Lamp Lumen	#6 Lamp Lumen
6-lamps Ballast	6	16,200 lm	107 W	2700 lm	2700 lm	2700 lm	2700 lm	2700 lm	2700 lm
	5	13,500 lm	90 W	2700 lm	2700 lm	2700 lm	2700 lm	2700 lm	0
	4	10,800 lm	73 W	2700 lm	2700 lm	2700 lm	2700 lm	0	0
	3	8,100 lm	57 W	2700 lm	2700 lm	2700 lm	0	0	0
	2	5,400 lm	40 W	2700 lm	2700 lm	0	0	0	0
	1	2,700 lm	24 W	2700 lm	0	0	0	0	0
4-lamps Ballast	4	10,800 lm	72 W	2700 lm	2700 lm	2700 lm	2700 lm	NA	NA
	3	8,100 lm	55 W	2700 lm	2700 lm	2700 lm	0	NA	NA
	2	5,400 lm	39 W	2700 lm	2700 lm	0	0	NA	NA
	1	2,700 lm	23 W	2700 lm	0	0	0	NA	NA
3-lamps Ballast	3	8,100 lm	53 W	2700 lm	2700 lm	2700 lm	NA	NA	NA
	2	5,400 lm	38 W	2700 lm	2700 lm	0	NA	NA	NA
	1	2,700 lm	22 W	2700 lm	0	0	NA	NA	NA
2-lamps Ballast	2	5,400 lm	36 W	2700 lm	2700 lm	NA	NA	NA	NA
	1	2,700 lm	20 W	2700 lm	0	NA	NA	NA	NA

Notes: Operate with ConNexTube dedicated LED ballasts only

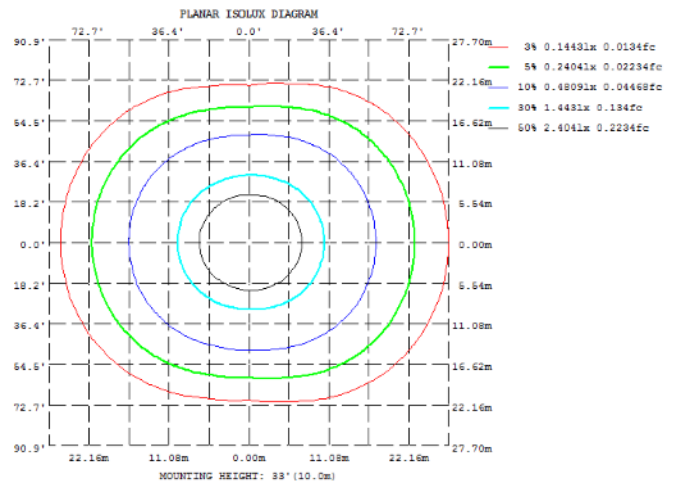
### Dimming Curves



### Zonal Lumen Distribution

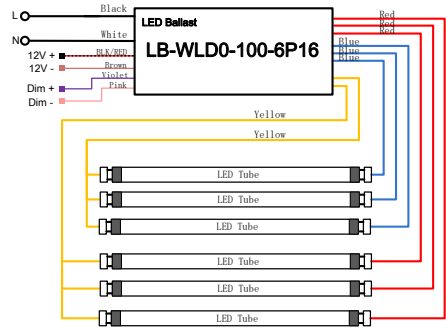
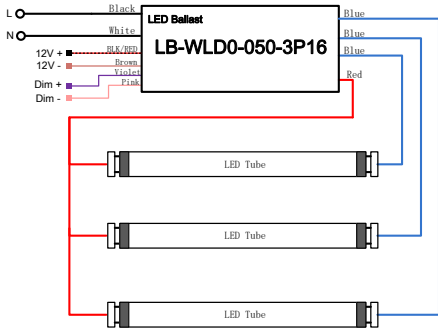
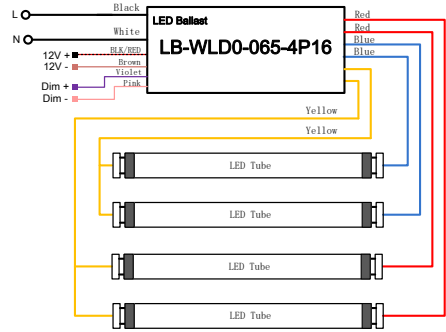
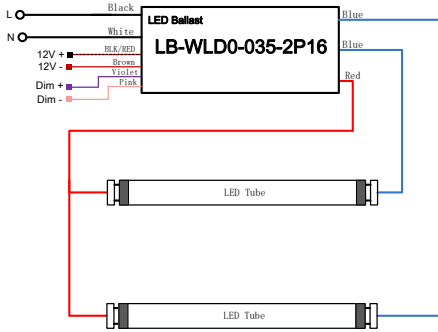


### ISOLUX Plot



## Field-Adjustable T8 LED Tube T8-L48-G13MB-16HE-PC850x

### Wiring Diagrams



### Product Naming

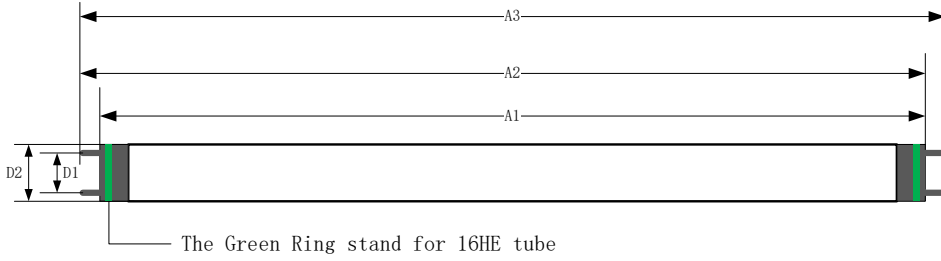
T8 - L48 - G13MB - 16HE - PC850A

①      ②      ③      ④      ⑤ ⑥ ⑦ ⑧

Number	Meaning	Options
①	Lamp Size	<b>T5</b> stand for T5 tube lamp; <b>T8</b> stand for T8 tube lamp; <b>T12</b> stand for T12 tube lamp
②	Lamp Length	<b>L24</b> stand for 2Ft; <b>L36</b> stand for 3Ft; <b>L48</b> stand for 4Ft; <b>L96</b> stand for 8Ft
③	Lamp Base	<b>G5MNB</b> stand for G5 Miniature Bi-Pin; <b>G13MB</b> stand for G13 Medium Bi-Pin; <b>FA8SG</b> stand for FA8 Single Pin; <b>R17DC</b> stand for Recessed Double Contact
④	Light Output	<b>16HE</b> stand for 16W High Efficiency; <b>26HO</b> stand for 26W High Output
⑤	Tube Material	<b>GL</b> stand for Glass tube; <b>PC</b> stand for Plastic tube
⑥	CRI	<b>8</b> stand for CRI>80; <b>9</b> stand for CRI>90
⑦	CCT	<b>35</b> stand for CCT 3500K; <b>40</b> stand for CCT 4000K; <b>50</b> stand for CCT 5000K
⑧	Product Version	Letter <b>A, B, C</b> stand for product version

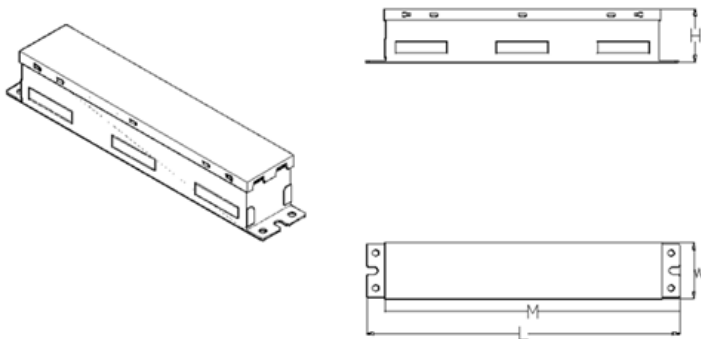
## Field-Adjustable T8 LED Tube T8-L48-G13MB-16HE-PC850x

### LED Tube Profile and Installation Dimensions



Items	Dimension (mm)
A1	1198
A2	1205
A3	1212
D1	12.0
D2	25.4

### LED Ballast Profile and Installation Dimensions



Dimension	Unit (mm)	Unit (inch)
Length (L)	241.3	9.5
Width (W)	43.2	1.7
Height (H)	30.5	1.2
Mounting (M)	229.0	9.0

## Revision History

Change Date	Version	Description of Change		
		Item	From	To
2022-10-31	V1.0	Datasheet Release	/	/
2022-10-16	V2.0	Publish datasheets per CCT		
2023-04-12	V3.0	Add De-lamping data		



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