



# LED T5 Tubes

## Product Specifications



TCP's Direct5 tubes are the perfect replacement for old fluorescent lighting. Remove the existing T5 fluorescent and replace with Direct5 Type A plug and play tubes. These tubes feature multiple ballast compatibility.

### Reasons to choose the LED T5 Tubes from TCP

- >50% energy savings over fluorescent alternative
- 50,000 hour life minimizes the need for replacements and labor costs
- Compatible with multiple ballasts
- Instant on/off
- No mercury – great for all environments
- Rated for enclosed fixtures
- No UV

### Ideal Applications

- Offices
- Restaurants
- Retail Stores
- Lobbies
- Schools
- Hospitals

## Specifications

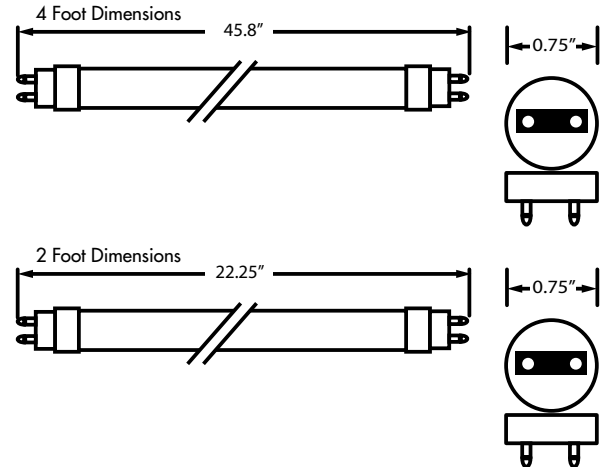
### Listing

UL/cUL Listed – damp location rated  
Approved for open and enclosed fixtures

### Warranty

Five years against defects in manufacturing

LED T5 Tube  
4 foot



Item #	Min Starting Temp	Max Operating Temp	Voltage	NSF 2 Rated	Beam Angle	Field Angle*	PF	THD**
L25T5	-20°C	45°C	120-277, 347V	Yes	160°	240°	> .99	< 5%
L13T5	-20°C	45°C	120-277, 347V	Yes	160°	240°	> .99	< 5%
L9T5	-20°C	45°C	120-277, 347V	Yes	160°	240°	> .99	< 5%
L6T5	-20°C	45°C	120-277, 347V	Yes	160°	240°	> .99	< 5%

\*\*Calculated at 120V, ballast dependent

## LED DirecT5™ Tubes

Item#	Description	DLC QPL*	Lamp Watts	Equiv Watts	System Watts	System Lumens	CCT	CRI	Base	Master Pack
<b>LED T5 HO - PET COATED GLASS - 50,000 HOURS</b>										
<b>DLC# LOOK-UP L25T5D50XXK</b>										
L25T5D5030K	LED 25W 4' T5 IS/RS SC 30K	L25T5D5030K	25.5W	54W	28W	3150	3000K	80	G5	25
L25T5D5035K	LED 25W 4' T5 IS/RS SC 35K	L25T5D5035K	25.5W	54W	28W	3150	3500K	80	G5	25
L25T5D5041K	LED 25W 4' T5 IS/RS SC 41K	L25T5D5041K	25.5W	54W	28W	3190	4100K	80	G5	25
L25T5D5050K	LED 25W 4' T5 IS/RS SC 50K	L25T5D5050K	25.5W	54W	28W	3280	5000K	80	G5	25
L9T5D5041K	LED 9W 2' T5HO IS/RS SC 41K		9W	24W	12W	1200	4100K	80	G5	25
L9T5D5050K	LED 9W 2' T5HO IS/RS SC 50K		9W	24W	12W	1200	5000K	80	G5	25
<b>LED T5 HE - PET COATED GLASS - 50,000 HOURS</b>										
<b>DLC# LOOK-UP L13T5D50XXK</b>										
L13T5D5030K	LED 13W 4' T5 IS/RS SC 30K	L13T5D5030K	13W	28W	16W	1800	3000K	80	G5	25
L13T5D5035K	LED 13W 4' T5 IS/RS SC 35K	L13T5D5035K	13W	28W	16W	1800	3500K	80	G5	25
L13T5D5041K	LED 13W 4' T5 IS/RS SC 41K	L13T5D5041K	13W	28W	16W	1850	4100K	80	G5	25
L13T5D5050K	LED 13W 4' T5 IS/RS SC 50K	L13T5D5050K	13W	28W	16W	1900	5000K	80	G5	25
L6T5D5041K	LED 6W 2' T5HE IS/RS SC 41K		6W	14W	9W	1000	4100K	80	G5	25
L6T5D5050K	LED 6W 2' T5HE IS/RS SC 50K		6W	14W	9W	1000	5000K	80	G5	25

\* DLC qualified product at time of printing, consult [designlights.org](http://designlights.org) for the most up-to-date listing.  
For the most up-to-date specs and warranty information, please visit [www.tcp.com](http://www.tcp.com)

## Electronic Ballasts Compatible with 25.5W LED DirecT5™

25.5W ELECTRONIC BALLAST COMPATIBILITY LIST										
Brand	Model #	Number of Lamps	1 Lamp Load		2 Lamp Load		3 Lamp Load		4 Lamp Load	
			Input Voltage		Input Voltage		Input Voltage		Input Voltage	
			120V	277V	120V	277V	120V	277V	120V	277V
AC	AC-A2/54T5XS-W	2	Y	Y	Y	Y	-	-	-	-
ADVANCE	EL1/254A26	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54-D	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54-N	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54-T	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54-90C	2	Y	Y	Y	Y	-	-	-	-
	ICN-2S54-90C-N	2	Y	Y	Y	Y	-	-	-	-
	IOP-2PSP54-SC	2	N	N	N	N	-	-	-	-
	IZT-2S54-D	2	-	-	Y	Y	-	-	-	-
	ICN-4S54-90C-2LS-G	4	-	-	Y	Y	Y	Y	Y	Y
	ICN-4S54-2LS-H	4	Y	Y	Y	Y	Y	Y	Y	Y
	IOP-4PSP54-2LS-G	4	-	-	-	-	N	N	N	N
DAMAR	26947A	2	Y	Y	Y	Y	-	-	-	-
ESPEN	VE454MVHRP	4	-	-	Y	Y	Y	Y	Y	Y
FULHAM	RHA-UNV-254-LT5	2	Y	Y	Y	Y	-	-	-	-
	RHA-UNV-454-LT5	4	N	N	N	N	N	N	N	N
	WH5-120L	2	-	-	Y	-	-	-	-	-
FUSION	FB254T5MVE	2	Y	Y	Y	Y	-	-	-	-
	FB454T5MVE	4	-	-	-	-	Y	Y	Y	Y
GE	GE254MVPS-D	2	N	N	N	N	-	-	-	-
	GE254MVPS-D-1	2	Y	Y	Y	Y	-	-	-	-
	GE254MVPS90-A	2	N	N	N	N	-	-	-	-
	GE454MVPS90-F	4	N	N	N	N	N	N	Y	Y
HALCO	EP254HO/PS/MV/MC	2	Y	Y	Y	Y	-	-	-	-
	EP454HO/PS/MV	4	-	-	Y	Y	Y	Y	Y	Y
HEP	SI 254-58 UNI	2	-	-	N	N	-	-	-	-
	SD 254-58 UNI	2	-	-	Y	Y	-	-	-	-
HUAFENG	ENP-T5-54-S2MC	2	Y	Y	Y	Y	-	-	-	-
	ENP-T5-54-S4LC	4	-	-	Y	Y	N	N	Y	Y
KEYSTONE	KTEB-254HO-UV-PS/A	2	Y	Y	Y	Y	-	-	-	-
	KTEB-254HO-UV-PS-SL	2	Y	N	Y	Y	-	-	-	-
	KTEB-454HO-UV-PS	4	Y	Y	Y	Y	Y	Y	Y	Y
LIYUAN	LYEB5812	2	N	N	Y	Y	-	-	-	-
LUMA	BIF254-U	2	Y	Y	Y	Y	-	-	-	-
MAXLITE	SKEU542HOP/SC	2	Y	Y	Y	Y	-	-	-	-

## Electronic Ballasts Compatible with 25.5W LED DirecT5™

25.5W ELECTRONIC BALLAST COMPATIBILITY LIST CONTINUED										
Brand	Model #	Number of Lamps	1 Lamp Load		2 Lamp Load		3 Lamp Load		4 Lamp Load	
			Input Voltage		Input Voltage		Input Voltage		Input Voltage	
			120V	277V	120V	277V	120V	277V	120V	277V
OSRAM	QHE 2x54T5HO/UNV PSN	2	Y	Y	Y	Y	-	-	-	-
	QT 2x54/120PHO-DIM	2	-	-	N	-	-	-	-	-
	QTP 2x54T5HO/UNV PSN	2	Y	Y	Y	Y	-	-	-	-
	QTP 2x54T5HO/UNV PSN HT	2	Y	Y	Y	Y	-	-	-	-
	QTP 2x54T5HO/UNV PSN 80-SC	2	Y	Y	Y	Y	-	-	-	-
	QHE 4x54T5HO/UNV PSN HT SCL	4	Y	Y	Y	Y	Y	Y	Y	Y
	QHE 4x54T5HO/UNV PSN HT SCL [DOE]	4	Y	Y	Y	Y	Y	Y	Y	Y
PACIFIC	EB-254PRS-U	2	Y	Y	Y	Y	-	-	-	-
	PQL 70195	4	Y	N	Y	Y	Y	N	Y	Y
ROBERTSON	PSL 254T5MV	2	Y	N	Y	Y	-	-	-	-
	PSV 254T5VCD	2	-	-	Y	Y	-	-	-	-
	PSB454T5MV	4	Y	Y	Y	Y	Y	Y	Y	Y
SUNPARK	U-2/54T5HO	2	Y	Y	Y	Y	-	-	-	-
SYMBAN	SIFE-254 T5HO-120MV-90C	2	Y	Y	Y	Y	-	-	-	-
	SIFE-454 T5HO-120MV-90C	4	Y	Y	Y	Y	Y	Y	Y	Y
STANDARD	E154T5PS120-277/N/HO	1	Y	Y	-	-	-	-	-	-
	E245T5HOPS120-277/N/XTRM	2	Y	Y	Y	Y	-	-	-	-
	E454T5HOPS120-277/N/XTRM	4	Y	Y	Y	Y	Y	Y	Y	Y
ULTRASAVE	ER254120MHTFW	2	Y	Y	Y	Y	-	-	-	-
	ER454120MHTFW	4	-	-	-	-	Y	Y	Y	Y
UNIVERSAL	B254PUNVHB-D	2	Y	Y	Y	Y	-	-	-	-
	B254PUNVD	2	Y	Y	Y	Y	-	-	-	-
	B454PUNVE	4	Y	Y	Y	Y	Y	Y	Y	Y
	B454PUNVHBE	4	Y	Y	Y	Y	Y	Y	Y	Y

## Electronic Ballasts Compatible with 25.5W LED DirecT5™

25.5W ELECTRONIC BALLAST COMPATIBILITY LIST										
Brand	Model #	Number of Lamps	1 Lamp Load		2 Lamp Load		3 Lamp Load		4 Lamp Load	
			Input Voltage		Input Voltage		Input Voltage		Input Voltage	
			347V	480V	347V	480V	347V	480V	347V	480V
ADVANCE	HCN-2S54-90C-WL	2	Y	Y	Y	Y	-	-	-	-
	HCN-4S54-2LSH	4	-	-	-	-	N	N	N	N
	HCN-4S54-90C-2LSG	4	Y	Y	Y	Y	Y	Y	Y	Y
FUSION	FB254347T5E	2	Y	-	Y	-	-	-	-	-
	FB454347T5E	4	-	-	-	-	Y	-	Y	-
GE	GE254PS347/480-F	2	N	N	N	N	-	-	-	-
	GE454PS347/480-F	4	N	N	N	N	N	N	N	N
LUTRON	EHD554C347210	2	-	-	Y	-	-	-	-	-
OSRAM	QHE 2x54T5HO/347-480PSN HT	2	Y	Y	Y	Y	-	-	-	-
	QHE 4x54T5HO/347-480PSN HT SCL	4	N	N	N	N	N	N	N	N
	QTP 2x54T5HO/347-480 PSN HT	2	Y	Y	Y	Y	-	-	-	-
SYMBAN	SIFE-254 T5HO-347V-90C	2	Y	-	Y	-	-	-	-	-
	SIFE-454 T5HO-347V-90C	2	Y	-	Y	-	Y	-	Y	-
STANDARD	E254T5HOPS347/N/XTRM	2	Y	-	Y	-	-	-	-	-
	E254T5PS347/N/HO/XTRM	2	N	-	Y	-	-	-	-	-
	E454T5HOPS347/N/XTRM	4	Y	-	Y	-	Y	-	Y	-
ULTRASAVE	ER254347HFW	2	Y	-	Y	-	-	-	-	-
	ER454347HFW	4	-	-	Y	-	Y	-	Y	-

## Electronic Ballasts Compatible with 6W LED Direct5™

6W ELECTRONIC BALLAST COMPATIBILITY LIST						
Brand	Model #	Number of Lamps	1 Lamp Load		2 Lamp Load	
			Input Voltage		Input Voltage	
			120V	277V	120V	277V
KEYSTONE	KTEB-228HE-UVPS-SL	2	Y	Y	Y	Y
ADVANCE	ICN-2S28	2	Y	Y	Y	Y
	ICN-2S28-N	2	Y	Y	Y	Y
GE	GE21T5-120-RES	1	Y	Y	Y	Y
	GE228MVPS-A	2	N	N	N	N
OSRAM	QHE 2x28T5/UNV PSN	2	Y	Y	Y	Y
	QS 2x28T5/UNV PS95-SC	2	-	-	N	N
UNIVERSAL	B228PU95S50D	2	N	N	Y	Y

## Electronic Ballasts Compatible with 9W LED Direct5™

6W ELECTRONIC BALLAST COMPATIBILITY LIST						
Brand	Model #	Number of Lamps	1 Lamp Load		2 Lamp Load	
			Input Voltage		Input Voltage	
			120V	277V	120V	277V
KEYSTONE	KTEB-139HO-1-TP	2	Y	N	N	N
	KTEB-224HO-UVPS-SL	2	Y	Y	Y	Y
	KTEB-239HO-UVPS-SL	2	Y	Y	Y	Y
ADVANCE	ICN-2S24-N	2	Y	Y	Y	Y
	ICN-2S24-T	2	Y	Y	Y	Y
	ICN-2S39-T	2	Y	Y	Y	Y
FULHAM	RHA-UNV-224-IT5	2	Y	Y	Y	Y
GE	GE224MVPS-N	2	Y	Y	Y	Y
OSRAM	QHE 2x39-24T5HO/UNV PSN	2	Y	Y	Y	Y
PROLUME	EP239HO/PS/MV	2	Y	Y	Y	Y
ROBERTSON	PSA239T5MV	2	Y	Y	Y	Y
UNIVERSAL	B224PUNVC	2	Y	Y	Y	N
	B239PUNVD	2	Y	N	Y	Y

## Electronic Ballasts Compatible with 13W LED DirecT5™

BALLAST for TWO LAMPS			
Brand	Model #	Two Lamp	One Lamp
GE	GE 228 MVPSHA	Y	Y
KEYSTONE	KTEB-221PS-1-TP/A	Y	Y
	KTEB-228HE-UV	Y	Y
OSRAM/SYLVANIA	QHE 2x25T5/UNV PSN	Y	Y
	QHT 2x28T5/UNV PSN	Y	Y
PHILIPS/ADVANCE	ICN-2828-N	Y	Y
	ICN-2S28-N	Y	Y
	ICN-2S28-T	Y	Y
	ISN-2S28-N	Y	Y
RACEHORSE	RHA-UNV-228-L T5	Y	Y
ROBERTSON	PROFESSIONALQTP52x54	Y	Y
UNIVERSAL	B228PU9S5SOD	Y	Y
	B228PUNVC	Y	Y
	B228PUNVN	Y	Y
	D228PUNVC	Y	Y

## T5 Lamps LED lamps

Tested with ballast: Advance ICN - 2S54-N

EMERGENCY BALLAST	
Brand	Model #
TCP	20LP550
	20B50
	20B60
	20B30
IOTA	I-320

Ballast compatibility tests are performed under a controlled lab environment. Field conditions may vary from this type of environment. Ballasts may differ by age and could have undergone revisions under the same item number affecting compatibility. Compatibility may also extend beyond this list. TCP recommends trying a few ballast-lamp combinations in an on-site test to ensure compatibility and performance before a major installation.

# TECHNOLOGY CAST IN A BEAUTIFUL LIGHT

For over 20 years, TCP has been designing, developing and delivering energy-efficient lighting into the market. Thanks to our cutting-edge technology and manufacturing expertise, we have shipped billions of high-quality lighting products. With TCP, you can count on a lighting product that is designed to meet the needs of the market - that transforms your surroundings and envelopes you in warmth - lighting that generates beauty with every flip of the switch.



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Sales:

Date:

Model:

Project:

Rep:

Catalog Number:

Type:

Notes:



For more information on the quality and care TCP can deliver, call us at **800.324.1496** or visit [tcp.com](http://tcp.com)

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