



# LED Instant Start T8 Tubes

Product Specifications  
Type A



## Reasons to choose the LED Instant Start T8 Tubes from TCP

- Over 50% energy savings compared to fluorescent alternatives
- 50,000 hour life minimizes the need for replacements and labor costs
- Compatible with Instant Start ballasts
- No rewiring of fixture necessary
- Instant on/off
- No mercury – great for all environments
- Rated for enclosed fixtures
- 4' options available
- No UV

## Ideal Applications

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



5 YEAR WARRANTY

To view our DLC qualified products, please consult the DLC Qualified Products List at [www.designlights.org/qpl](http://www.designlights.org/qpl).

## Specifications

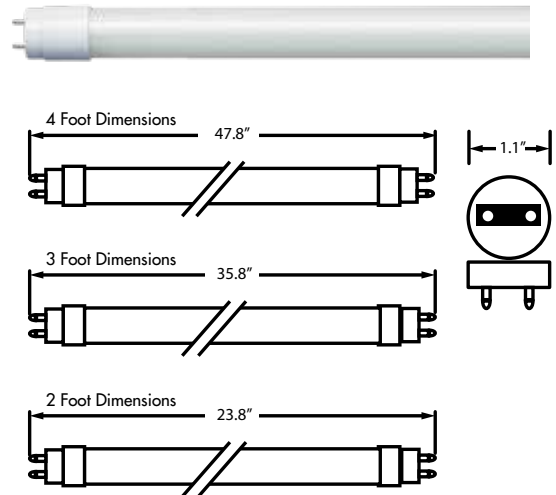
### Listing

Damp location rated  
Approved for open and enclosed fixtures  
cULus/cETLus Listed

### Warranty

50,000 hour rated life  
Five years against defects in manufacturing

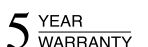
LED T8 Tube  
T80430 4 Foot



Item #	Min Starting Temp	Max Operating Temp	Voltage	NSF 2 Rated	Beam Angle	Field Angle*	PF	THD**
L12T8	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
LS4T8	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
LPT809HO	-20°C / -4°F	45°C / 113°F	120-277V	Yes	190°	310°	> .99	< 8%
LT818A	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
L11T83	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
L9T8	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
L11T8	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
T80430	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
L12T8-95	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%
LPT815A	-20°C / -4°F	45°C / 113°F	120-277V	No	190°	310°	> .99	< 8%

\*Calculated \*\*At 120V, ballast dependent

**Note:** All Type A Tubes are double-end wired construction. Use only G13 sockets.



## LED DirecT8™ Instant Start

Item#	Description	DLC Model #	LED Watts	LBF System Watts	NBF System Watts	HBF System Watts	LBF Lumens	NBF Lumens	HBF Lumens	NBF LPW	Color Temp	CRI	Repl. Fluor. Watts
<b>LED 12 WATT T8 TUBE</b>													
L12T8D5030K	LED 12W 4' T8 IS 30K	T8042530E	12	13.0	14.9	21.5	1260	1700	2280	114.1	3000K	80	32
L12T8D5035K	LED 12W 4' T8 IS 35K	T8042535E	12	13.0	14.9	21.5	1300	1750	2340	117.4	3500K	80	32
L12T8D5041K	LED 12W 4' T8 IS 41K	T8042541E	12	13.0	14.9	21.5	1340	1800	2400	120.8	4100K	80	32
L12T8D5050K	LED 12W 4' T8 IS 50K	T8042550E	12	13.0	14.9	21.5	1380	1850	2480	124.2	5000K	80	32
<b>LED 12 WATT 4' TUBE</b>													
LS4T815IS41K	LED 15W 4' T8 IS 41K		15	14.8	17	24.5	1225	1650	2200	97.1	4100K	80	32
<b>LED 12 WATT 4' TUBE - PET COATED</b>													
LPT815A41K	LED 12W 4' T8 IS SC 41K		12	13	14.9	21.5	1260	1800	2280	120.8	4100K	80	32
<b>LED HIGH OUTPUT 9.5 WATT 4' TUBE - PET COATED GLASS NSF2 RATED</b>													
LPT809HOA41K	LED 9.5W 4' T8 HO A 41K SC	T8049241E	9.5	11.3	13	18.8	1400	1900	2500	146.2	4100K	80	32
LPT809HOA50K	LED 9.5W 4' T8 HO A 50K SC	T8049250E	9.5	11.3	13	18.8	1480	2000	2660	153.8	5000K	80	32
<b>LED 15 WATT 4' TUBE</b>													
LT818A30K	LED 18W 4' T8 IS 30K	T8043330E	15	15.4	17.5	25.7	2000	2300	3380	131.4	3000K	80	32
LT818A35K	LED 18W 4' T8 IS 35K	T8043335E	15	15.4	17.5	25.7	2050	2350	3450	134.3	3500K	80	32
LT818A41K	LED 18W 4' T8 IS 41K	T8043341E	15	15.4	17.5	25.7	2050	2350	3450	134.3	4100K	80	32
LT818A50K	LED 18W 4' T8 IS 50K	T8043350E	15	15.4	17.5	25.7	2100	2400	3525	137.1	5000K	80	32
<b>LED 11 WATT 3' TUBE</b>													
L11T83D5027K	LED 11W 3' T8 IS 27K		11	11.6	13.5	19.2	950	1300	1730	96.3	2700K	80	25
L11T83D5030K	LED 11W 3' T8 IS 30K		11	11.6	13.5	19.2	1040	1400	1870	103.7	3000K	80	25
L11T83D5035K	LED 11W 3' T8 IS 35K		11	11.6	13.5	19.2	1080	1450	1940	107.4	3500K	80	25
L11T83D5041K	LED 11W 3' T8 IS 41K		11	11.6	13.5	19.2	1110	1500	2000	111.1	4100K	80	25
L11T83D5050K	LED 11W 3' T8 IS 50K		11	11.6	13.5	19.2	1150	1550	2070	114.8	5000K	80	25
<b>LED 9 WATT T8 TUBE 2' TUBE</b>													
L9T8D5027K	LED 9W 2' T8 IS 27K		9	8.5	9.5	14.2	800	1100	1470	115.8	3000K	80	17
L9T8D5030K	LED 9W 2' T8 IS 30K		9	8.5	9.5	14.2	850	1150	1540	121.1	3000K	80	17
L9T8D5035K	LED 9W 2' T8 IS 35K		9	8.5	9.5	14.2	870	1175	1575	123.7	3500K	80	17
L9T8D5041K	LED 9W 2' T8 IS 41K		9	8.5	9.5	14.2	890	1200	1600	126.3	4100K	80	17
L9T8D5050K	LED 9W 2' T8 IS 50K		9	8.5	9.5	14.2	910	1225	1640	128.9	5000K	80	17
<b>LED 11 WATT HIGH EFFICACY 4' TUBE</b>													
L11T8D5030K	LED 11W 4' T8 HE IS 30K		11	11.3	13.6	18.5	1340	1800	2410	132.4	3000K	80	32
L11T8D5035K	LED 11W 4' T8 HE IS 35K		11	11.3	13.6	18.5	1380	1850	2480	136	3500K	80	32
L11T8D5041K	LED 11W 4' T8 HE IS 41K		11	11.3	13.6	18.5	1410	1900	2540	139.7	4100K	80	32
L11T8D5050K	LED 11W 4' T8 HE IS 50K		11	11.3	13.6	18.5	1450	1950	2610	143.4	5000K	80	32
<b>LED 10 WATT HIGH EFFICACY 4' TUBE</b>													
T8043040EBP	LED 10W 4' T8 HE IS 41K		10	11.6	13.2	19.4	1625	1850	2700	140.2	4100K	80	32
<b>LED 12 WATT 4' TUBE</b>													
L12T8D5027K95	LED 12W 4' T8 IS/RS 27K 95		12	13	14.9	21.5	1300	1750	2340	117.4	2700K	90	32
L12T8D5030K95	LED 12W 4' T8 IS/RS 30K 95		12	13	14.9	21.5	1340	1800	2400	120.8	3000K	90	32
L12T8D5035K95	LED 12W 4' T8 IS/RS 35K 95		12	13	14.9	21.5	1340	1800	2400	120.8	3500K	90	32
L12T8D5041K95	LED 12W 4' T8 IS/RS 41K 95		12	13	14.9	21.5	1360	1825	2425	122.5	4100K	90	32
L12T8D5050K95	LED 12W 4' T8 IS/RS 50K 95		12	13	14.9	21.5	1380	1850	2480	124.2	5000K	90	32

\* 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)



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# LED Instant Start DirecT8™ Ballast Guides

## Instant Start Ballasts Compatible with LED DirecT8™

Manufacturer	Model #	Voltage
ESPEN	VE2P32MVHIPE	UNV
	VE4P32MVHIPE	UNV
GE	GE132MAXL/ULTRA	UNV
	GE132MAXPN/ULTRA	UNV
	GE232MAX347-N	347
	GE232MAXN/ULTRA	UNV
	GE232MAXG-N	UNV
	GE232MAXPN/ULTRA	UNV
	GE232MAXH/ULTRA	UNV
	GE232MAXPH/ULTRA	UNV
	GE232MAXPL/ULTRA	UNV
	GE332MAXL/ULTRA	UNV
	GE332MAXN/ULTRA	UNV
	GE332MAXPN/ULTRA	UNV
	GE332MAXG-N	UNV
	GE332MAXH/ULTRA	UNV
	GE432MAXPL/ULTRA	UNV
	GE432MAXG-N	UNV
	GE432MAXN/ULTRA	UNV
	GE432MAXH/ULTRA	UNV
GE432MAXPH/ULTRA	UNV	
Osram/Sylvania	QHE2X32T8/UNV ISN-SC	UNV
	QHE2X32T8/UNV ISL-SC	UNV
	QHE2X32T8/UNV ISH-SC	UNV
	QHE2X32T8/347 ISN-SC	347
	QHE4X32T8/UNV ISN-SC	UNV
	QHE4X32T8/UNV ISL-SC	UNV
	QHE4X32T8/UNV ISH-SC	UNV
	QHE4X32T8/UNV ISH	UNV
	QTP2X32T8/UNV ISN-SC	UNV
	QTP3X32T8/UNV ISN-SC	UNV
	QTP2X32T8/UNV ISL-SC	UNV
	QTP3X32T8/UNV ISL-SC	UNV
QTP2X32T8/UNV ISH-SC	UNV	
QTP3X32T8/UNV ISH-SC	UNV	
QTP4X32T8/UNV ISN SC	UNV	
Philips/Advance	IOPA-2P32-LW-N	UNV
	IOPA-3P32-LW-N	UNV
	IOPA-4P32-LW-N	UNV
	IOPA-4P32-N	UNV
	IOPA-2P32-HL-N	UNV
	IOPA-3P32-HL-N	UNV
	IOPA-2P32-LW-SC	UNV
	IOPA-4P32-LW-SC	UNV
	IOP-2P32-LW-N	UNV
	IOP-3P32-LW-N	UNV
IOP-4P32-LW-N	UNV	
IOP-3P32-N	UNV	

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.

Manufacturer	Model #	Voltage
Philips/Advance (cont.)	ICN-1P32-N	UNV
	ICN-2P32-N	UNV
	ICN-3P32-N	UNV
	ICN-2P32-SC	UNV
	ICN-4P32-N	UNV
	GOPA-2P32-SC	347
	GOPA-4P32-SC	347
	REL-2P32-SC	UNV
	REL-2P32-RH-TP	UNV
	VEL-2P32-SC	UNV
	VEL-4P32-SC	UNV
	IOP-3P32-HL-90L-SC	UNV
	VOP-2P32-LW	277
	GEL-2P32-SC	347
	GEL-3P32-SC	347
	IOPA-3P32-N	UNV
	IOPA-2P32-N	UNV
	ICN-3P32-SC	UNV
	GEL-3P32-RH-TP	UNV
	GOPA-2P32-N	347
Standard	E432T8IS120/N/AS	UNV
	E232T8IS120/N/AS	UNV
	E432P1347GO/347	347
	E232T8IS347/H/90C	347
E432T8IS347/H/90C	347	
TCP	E2P32ISUNVE	UNV
	E2P32ISUNVHE	UNV
	E2P32ISUNVLE	UNV
	E3P32ISUNVE	UNV
	E3P32ISUNVHE	UNV
	E3P32ISUNVLE	UNV
	E4P32ISUNVE	UNV
	E4P32ISUNVHE	UNV
E4P32ISUNVLE	UNV	
E2P32IS120RES	UNV	
Universal	B132IUNVHP-N	UNV
	B232IUNVHP-N	UNV
	B232IUNVEL-A rev D	UNV
	B232I277RHA	277
	B232IUNVHP-N	UNV
	B332IUNVHP-A	UNV
	B4321277RHA	277
	B432I120RHA	UNV
	B232I120RHA*	UNV
	B432I1UNVHP-A	UNV
B23IUNVHP-N010C	UNV	
B232IUNVEL-A	UNV	
Keystone	KTEB-432-UVIS-LP	UNV
	KTEB-332-UVIS-LP	UNV
	KTEB-232-UVIS-LP	UNV
	KTEB-432-UVIS-NP	UNV
	KTEB-332-UVIS-NP	UNV
KTEB-232-UVIS-NP	UNV	

\*Requires 5 minutes of warm up time

## Emergency Ballasts Compatible with LED DirecT8™

Manufacturer	Model #	Voltage
IOTA	I-320	I-320
Bodine	B-30	B-30
	B-50	B-50

## Philips/Advance Type C Drivers Compatible with LED DirecT8

Manufacturer	Model #	Voltage
Philips/Advance	ICN-2P16-TLED-N	UNV
	ICN-3P16-TLED-N	UNV
	ICN-4P16-TLED-N	UNV
	ICN-4P-16-TLED-HL-N	UNV
	ICN-2P-16-TLED-HL-N	UNV
	IZT-2P16-TLED-SC	UNV
	IZT-4P16-TLED-SC	UNV

Instant Start Ballasts Not Recommended for use with LED DirecT8 include:

Philips/Advance: IOP-3P32-LW-SC, IOP-2P32-LW-SC



5 YEAR WARRANTY

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