

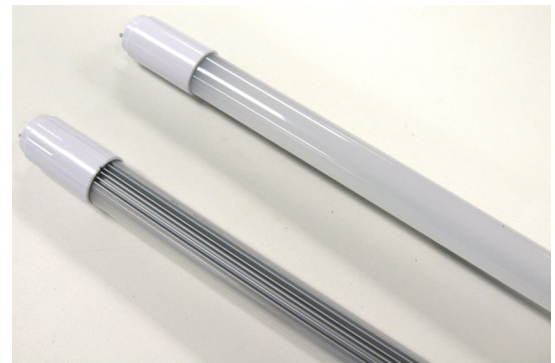
# 4 FOOT LED T8/T12 REPLACEMENT TUBE

LED T8/T12 replacement tube for all fixtures that use 4' florescent tubes. This tube works without the ballast (direct wired). The LED tube uses less power than your standard T8 tubes. Based on L70 standards the LED lamp will last up to and beyond 50,000 hours. The aluminum heat sink has cooling fins that help extend the life time of the lamp. The lamp has an internal isolated driver. No external driver to mount in your fixture.

PROJECT NAME
MODEL NUMBER
NOTES
FIXTURE TYPE
ROOM

## CONSTRUCTION

Acrylic diffuser provides an even distribution of light with very little break-age compared to fluorescent lamps. The body is made from aluminum for maximum heat dissipation to extend the lifetime of the lamp. The pins are standard G13 to make retrofit installation a simple process.



## FEATURES

- |                  |                         |
|------------------|-------------------------|
| 18 watts         | No RF Interference      |
| 2400 Lumens      | No hazardous materials  |
| Power Factor >.9 | 50,000 + hours lifespan |
| 100-277 vac      | Easy to retrofit        |
|                  | 2 sided power           |

Example: TL-4-18-4000-FR

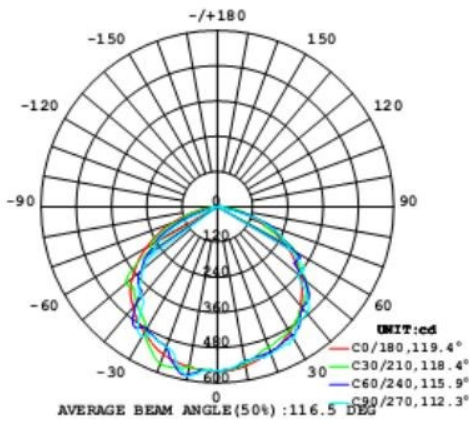
MODEL NUMBER	WATTS	COLOR TEMP	LENS

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TL-4	18	4000k	FROSTED
		5000k	

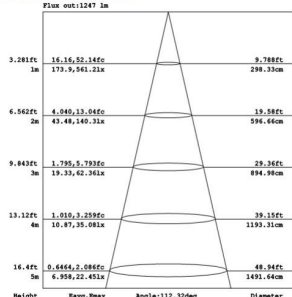
TUBE WATTAGE	LUMENS	Voltage	LIFE	PACK TYPE	CASE PACK
18	2400	100-277Vac	>50,000 Hrs	Box	30/36

# SPECIFICATIONS

Item	Specification	18 Watt
General Performance	Color Temperature	5000k
	Lumens	2400
	Efficacy	>130LM/W
	Color Consistency	Proprietary LED Binning
	Lumen Maintenance (L70)	>50,000 hours
Electrical	Power Factor	>90%
	Input Voltage	120 - 277 Vac 50/60 Hz
	Power Consumption	18 Watts
Physical	Dimensions	47.24" Length 1.02" Dia
	Weight	.81 lbs
	Housing	Aluminum
	Optics	Light Refraction/ Acrylic Diffusion
	Mounting	Fits standard 4' fixtures
	Operating Temperature	-20°F - +A21Certifications130°F
Certifications	Certification	UL / CE / RoHS / DLC
	Environment	Indoor Use
	LED Class	L70 rated to >50,000 hours



Illuminance Photo-Goniophotometer Method



ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	704	704	704	704	704	
5	700	698	707	710	709	68
15	678	680	687	685	684	193
25	634	639	643	648	648	296
35	566	566	583	603	604	365
45	481	488	516	511	503	385
55	370	383	395	411	411	352
65	239	267	287	266	254	263
75	100	134	141	158	160	147
85	8	35	16	10	10	31
90	0	3	6	7	7	
95	0	3	5	5	6	5
105	0	1	3	5	6	3
115	0	0	2	3	4	2
125	0	0	0	2	3	1
135	0	0	0	1	1	0
145	0	0	0	0	0	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	0

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LUMINAIRE
0-30	557	26.39
0-40	921	43.67
0-60	1659	78.63
0-90	2099	99.50
40-90	1178	55.83
60-90	440	20.88
90-180	10	0.50
0-180	2110	100.00

EFFICACY (LUMENS PER WATT): 121.2

\*\*\* THIS IS AN ABSOLUTE TEST \*\*\*

FIVE (5) YEAR WARRANTY: LED LUMINA USA, LLC. warrants to the original purchaser that all LED Lumina bulbs/fixtures shall be free from defects of material and workmanship for a period of five (5) years from date of purchase. LED LUMINA USA will, at its discretion, repair or replace without charge a defective LED lam that has not been misused, handled carelessly, installed improperly, or due to electrical power surges. Repair or replacement, as stated shall constitute the original purchases exclusive warranty remedy, which will not include any labor cost for removal/installation, or any other contingent liability expenses.

LED LUMINA USA

www.ledluminausa.com

gduffy@Ledluminausa.com