

# DATA SHEET: LED Architectural Troffer Light

The 2X4FT LED troffers are delivering high Lumen of exceptional 80+ CRI light while achieve up to 110 lumens per watt. It is available in 3000k, 3500k, 4000k, 5000k CCT options and 0-10V dimming, which is perfect for new construction applications or retrofitting existing fluorescent troffer fixtures with recessed installation, widely used in office spaces, major retail stores, education, government, healthcare, and hospitality.

Our LED Architectural Troffer Lights are backed with our industry-leading 100,000-hour rated lamp life and 10-year warranty. See Ordering Model table below for our BAA compliant products. Contact us for pricing or more information.

## PRODUCT FEATURES

### LED Chip

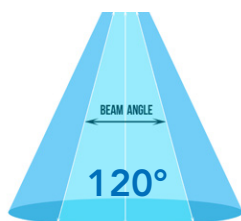
Use approved LM-80 SMD packing, Active color management maintains superior color consistency over time and temperature. Every fixture is tuned as a complete system to the optimal color point before shipment, ensuring fixture-to-fixture color consistency.

### Construction:

Steel, commercial quality paint coating.  
 Bigger size MCPCB for better thermal management, by separating heat dissipation to reduce the weight of the lamp heat sinking.  
 IP Rating: Ip20  
 Additional zhaga standard mounting hole.

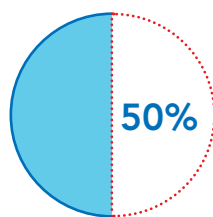


### BEAM ANGLE



Patriot LED Light Distribution

### CAN DECREASE ENERGY USAGE BY



vs. Similar Fluorescent Lamps

### WARRANTY



Our Industry-Leading 10-Year Limited Warranty Guarantees Unsurpassed Quality

### Optical System

Central lens door enables convenience of PCBA's repalcing. With double diffusion material, surface brightness even.

With a mask to prevent glare. High optical grade lens providing good efficiency and impact resistance.



## ORDERING MODEL

PRODUCT CATEGORY	SIZE	DIMMABLE	FIXTURE WATTAGE	CCT	CRI
PT-TR	24=2'X4'	D=0-10v Dimming	M=40W H=62W	30=3000k 35=3500K 40=4000k 50=5000k	E=80 CRI
Product Code: example					
PT-TR24-DM-40E					

120-347V input options  
 All models with emergency backup options

## PRODUCT SPECIFICATION

Product No.	BAA/TAA Option*	WATTAGE	Input Voltage	DLC CCT	Rated Lumens	Efficacy	CRI	THD	Rated Life (Hours)	Input current:	Power Factor
<b>40W PATRIOT ARCHITECTURAL TROFFER LIGHT</b>											
PT-T7D-40W-XXX	Yes	40W	100-277 VAC	4000K/5000K	4000lm	100LPW	Ra>80	<20%(at 277V)	100,000	0.14 -0.4A	>0.9(277V)

## PHYSICAL DATA

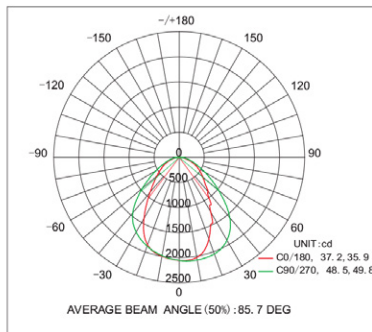
Product No.	Diver output	Dimmable	Certification	Standard Warranty	Standard Lifetime	Mounting	Optional Function	Dimensions
PT-T7D-40W-XXX	DC36V 1A	0-10V dimming (20%-100% smooth dimming)	DLC® Qualified, UL Classified, NSF	5 year (10 year optional)	Designed to L70 minimum 100,000 hours	Recessed	Motion Sensor Available	L 47.7" x W 23.8" x H 3.9"

## PHOTOMETRY

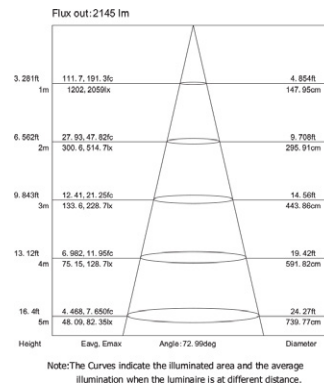
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

T7D-40W-XXX



## AVERAGE ILLUMINANCE CURVE



## ZONAL FLUX DIAGRAM

T	C0	C45	C90	C135	C180	C225	c270	c315
10	2024	2066	2077	2023	2000	1982	1988	2008
20	1728	1919	2047	1918	1853	1862	1881	1812
30	1253	1527	1904	1627	1412	1562	1721	1402
40	906.8	1075	1571	1129	903.9	1113	1440	951.5
50	615.6	757.0	1026	687.9	585.8	699.4	963.6	643.5
60	432.2	469.7	583.4	420.4	394.3	448.9	542.5	403.9
70	251.3	281.0	302.9	247.6	237.4	269.1	286.5	241.4
80	81.09	113.5	136.1	109.0	86.01	117.0	126.5	96.08
90	0	0	0.2106	0.0372	0.0528	0.1171	0.1146	0

LUMINOUS INTENSITY:cd

## ZONAL LUMEN SUMMARY

T	φ zone	φ total	lum. lamp
0-10	194.6	194.6	4.59
10-20	554.3	748.9	17.7
20-30	798.1	1547	36.5
30-40	843.8	2391	56.4
40-50	716.5	3107	73.4
50-60	530.3	3638	85.9
60-70	354.4	3992	94.3
70-80	194.4	4187	98.8
80-90	47.53	4234	100

UNIT:lm

## COEFFICIENTS OF UTILIZATION

ppc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
pfc	20%															0
RCR	RCR:Room Cavity Ratio (CU)															0
0.0	113	113	113	111	111	111	106	106	106	101	101	101	97	97	97	95
1.0	101	97	94	99	95	93	95	92	90	91	89	87	88	86	84	82
2.0	90	84	79	88	82	78	84	80	76	81	78	74	79	76	73	71
3.0	80	73	67	78	72	67	76	70	66	73	68	64	71	67	63	61
4.0	72	64	58	71	63	58	68	62	57	66	61	56	64	60	56	54
5.0	65	57	51	64	57	51	62	55	50	60	54	50	58	53	49	48
6.0	59	51	46	58	51	45	57	50	45	55	49	45	54	48	44	42
7.0	54	46	41	53	46	41	52	45	40	51	45	40	49	44	40	38
8.0	50	42	37	49	42	37	48	41	37	47	41	36	46	40	36	34
9.0	46	39	34	45	38	34	44	38	33	43	37	33	42	37	33	31
10.0	43	35	31	42	35	31	41	35	31	40	35	30	40	34	30	29



## PRODUCT SPECIFICATION

Product No.	BAA/TAA Option*	WATTAGE	Input Voltage	DLC CCT	Rated Lumens	Efficacy	CRI	THD	Rated Life (Hours)	Input current:	Power Factor
<b>62W PATRIOT ARCHITECTURAL TROFFER LIGHT</b>											
PT-T7D-62W-XXX	Yes	62W	100-277 VAC	4000K 5000K (DLC Premium V3.1) 3000K 3500K (DLC V2.1)	6820lm	110LPW	Ra>80	<20%(at 277V)	100,000	0.23 -0.65A	>0.9 (277V)

## PHYSICAL DATA

Product No.	Diver output	Dimmable	Certification	Standard Warranty	Standard Lifetime	Mounting	Signal Current	Dimensions
PT-T7D-62W-XXX	DC36V 1A	0-10V dimming (20%-100% smooth dimming)	DLC® Qualified, UL Classified, cULus Listed, ETL Listed	5 year (10 year optional)	Designed to L70 minimum 100,000 hours	Recessed	1.19mA	L 47.7" x W 23.8" x H 3.9"

Recommended Dimmers: DIVA-DVTV(LUTRON),NOVA T NTSTV-DV(LUTRON), IP710-DL(LUTRON)

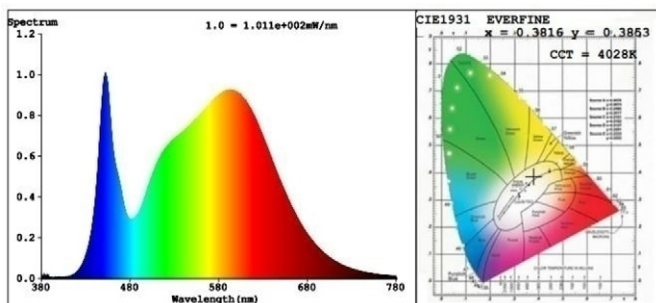
## PHOTOMETRY

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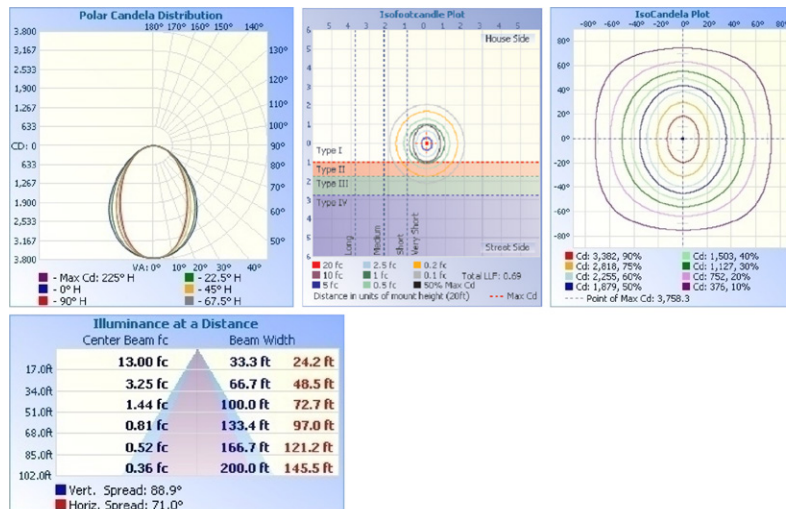
## ZONAL LUMEN TABULATION

Zonal Lumen Summary			Lumens Per Zone					
Zone	Lumens	% Luminaire	Zone	Lumens	% Total	Zone	Lumens	% Total
0-30	2,600.9	36.3%	0-10	350.9	4.9%	90-100	0.2	0%
0-40	3,964.1	55.3%	10-20	952.2	13.3%	100-110	0.3	0%
0-60	6,084.1	84.9%	20-30	1,297.8	18.1%	110-120	0.2	0%
60-90	1,080.5	15.1%	30-40	1,363.2	19.0%	120-130	0.2	0%
70-100	456.1	6.4%	40-50	1,203.4	16.8%	130-140	0.2	0%
90-120	0.7	0%	50-60	916.6	12.8%	140-150	0.3	0%
0-90	7,164.7	100%	60-70	624.6	8.7%	150-160	0.4	0%
90-180	2.1	0%	70-80	359.6	5.0%	160-170	0.3	0%
0-180	7,166.8	100%	80-90	96.3	1.3%	170-180	0.1	0%

## SPECTRAL POWER DISTRIBUTION & CHROMATICITY DIAGRAM



## PHOTOMETRIC DATA



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<b>40W PATRIOT ARCHITECTURAL TROFFER LIGHT</b>											
PT-T7D-40W-XXX	Yes	40W	120-347 VAC	3000K/4000K/5000K	4000lm	100LPW	Ra>80	<20% (at 480V)	100,000	0.5A	>0.9 (480V)

## PHYSICAL DATA

Product No.	Diver output	Dimmable	Certification	Standard Warranty	Standard Lifetime	Mounting	Signal Current	Dimensions
PT-T7D-40W-XXX	DC36V 1.08A	0-10V dimming (20%-100% smooth dimming)	DLC® Qualified, UL Classified, cULus Listed, ETL Listed	5 year (10 year optional)	Designed to L70 minimum 100,000 hours	Recessed	1.5mA	L 47.7" x W 23.8" x H 3.9"

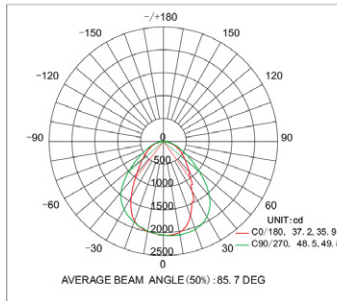
Recommended Dimmers: DIVA-DVTV(LUTRON),IP710-DL (LEVITON)

## PHOTOMETRY

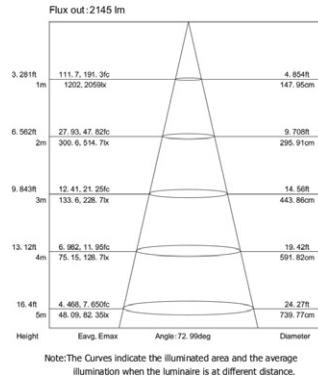
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pw	20%															0
pc	20%															0
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