

## PRODUCT DESCRIPTION

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.

## PRODUCT SPECIFICATIONS

### • 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.

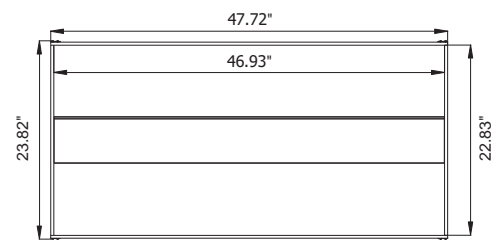
### • Construction:

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.

### • Optical System

Central lens door enables convenience of PCBA's replacing.  
 With double diffusion material, surface brightness even.  
 With a mask to prevent glare.  
 High optical grade lens providing good efficiency and impact resistance.

# 2'X4' LED TROFFER



## ORDER INFORMATION

EXAMPLE: TR24-DM-40E

Product category	Size	Dimming	Fixture wattage	CCT	CRI
TR	24=2'X4'	D=0-10v Dimming	M=40W H=62W	30=3000k 35=3500K 40=4000k 50=5000k	E=80 CRI

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

## PERFORMANCE SUMMARY

- Efficacy: 100LPW
- Delivered Light Output: 4000lm
- Input Power: 40Watts
- CRI: Ra>80
- DLC CCT: 4000K/5000K
- Input Voltage: 100-277 VAC
- Input current: 0.14 -0.4A
- THD:<20%(at 277V)
- Power Factor: >0.9(277V)
- Diver output: DC36V 1A
- Standard Warranty: 5 Years
- Standard Lifetime: Designed to L70 minimum 50,000 hours
- Mounting: Recessed
- 0-10V dimming (20%-100% smooth dimming)
- Optional Function: Motion Sensor Available
- Signal Current: 0.38mA
- Dimensions: L 47.7" x W 23.8" x H 3.9"
- Recommended Dimmers: DIVA-DVTV(LUTRON),NOVA T NTSTV-DV(LUTRON)
- Fixture measurement and weight are estimated. Contact your James Representative for exact data.

## REGULATORY & VOLUNTARY QUALIFICATIONS

- ETL Listed Yes
- cUL US Listed E360437
- DLC Qualifications Yes
- LM79 Report Yes
- Damp Rated Yes

## 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	1582	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
DEG	LUMINOUS INTENSITY:cd							

## COEFFICIENTS OF UTILIZATION

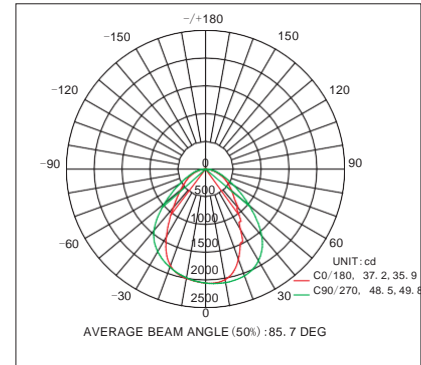
ppc	80%			70%			50%			30%			10%			0
	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	
pw																
pf																
RCR	RCR:Room Cavity Ratio (CU)															
0.0	113	113	113	111	111	111	106	106	106	101	101	101	97	97	97	95
1.0	101	97	94	99	95	93	95	92	90	91	89	87	88	86	84	82
2.0	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

## PHOTOMETRY

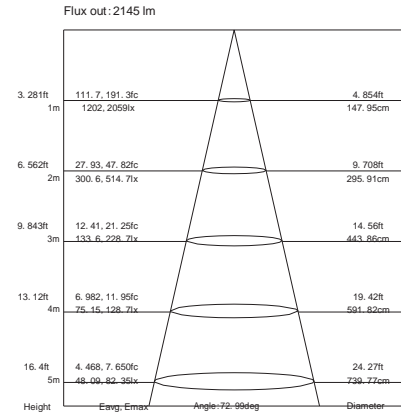
Fixture photometry has been conducted accredited testing laboratory in accordance with IESNA LM-79-08. IESNA LM-79-08 specifies the entire luminaire as the source resulting in a fixture efficiency of 100%.Result may vary per actual order.

## LUMINOUS INTENSITY DISTRIBUTION DIAGRAM

T7D-40W-XXX



## AVERAGE ILLUMINANCE CURVE



Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

## 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		



## PERFORMANCE SUMMARY

- Efficacy: 110LPW
- Delivered Light Output: 6820lm
- Input Power: 62Watts
- CRI: Ra>80
- DLC CCT: 4000K 5000K (DLC Premium V3.1)  
3000K 3500K (DLC V2.1)
- Input Voltage: 100-277 VAC
- Input current: 0.23 -0.65A
- THD:<20%(at 277V)
- Power Factor: >0.9(277V)
- Diver output: DC36V 1.6A
- Standard Warranty: 5 Years
- Standard Lifetime: Designed to L70 minimum 50,000 hours
- Mounting: Recessed
- 0-10V dimming (20%-100% smooth dimming)
- Signal Current: 1.19mA
- Dimensions: L 47.7" x W 23.8" x H 3.9"
- Recommended Dimmers: DIVA-DVTV(LUTRON),NOVA T NTSTV-DV(LUTRON),

### IP710-DL(LUTRON)

Fixture measurement and weight are estimated. Contact your James Representative for exact data.

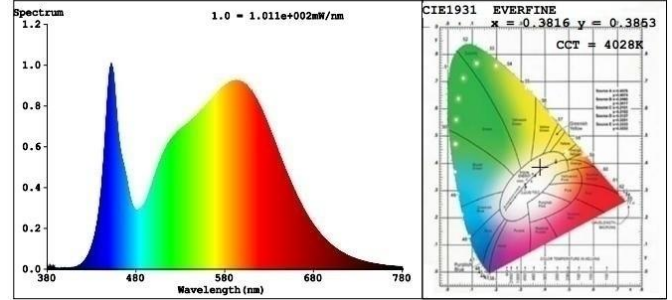
## REGULATORY & VOLUNTARY QUALIFICATIONS

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- DLC Qualifications Yes
- LM79 Report Yes
- Damp Rated Yes

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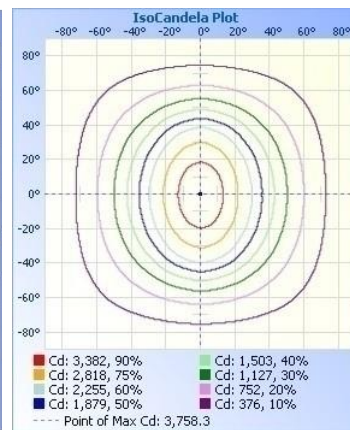
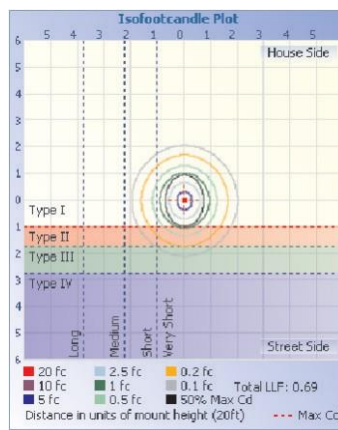
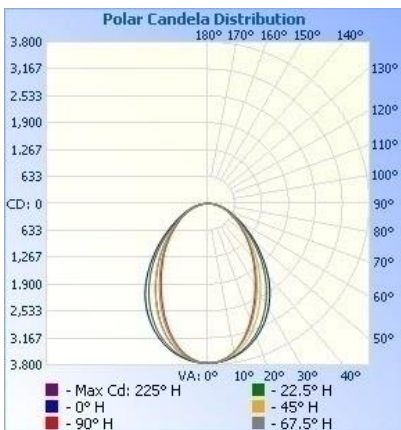
## SPECTRAL POWER DISTRIBUTION & CHROMATICITY DIAGRAM



## 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%

## PHOTOMETRIC DATA



Center Beam fc	Beam Width	
	Beam Width	Beam Width
17.0ft	13.00 fc	33.3 ft 24.2 ft
34.0ft	3.25 fc	66.7 ft 48.5 ft
51.0ft	1.44 fc	100.0 ft 72.7 ft
68.0ft	0.81 fc	133.4 ft 97.0 ft
85.0ft	0.52 fc	166.7 ft 121.2 ft
102.0ft	0.36 fc	200.0 ft 145.5 ft

Vert. Spread: 88.9°  
Horiz. Spread: 71.0°

## PERFORMANCE SUMMARY

Efficacy: 100LPW
Delivered Light Output: 4000lm
Input Power: 40Watts
CRI: Ra>80
CCT Options: 3000K/4000K/5000K
Input Voltage:120-347 VAC
Input current: 0.5A
THD:<20%(at 480V)
Power Factor: >0.9(480V)
Diver output: DC36V 1.08A
Standard Warranty: 5 Years
Standard Lifetime: Designed to L70 minimum 50,000 hours
Mounting: Recessed
0-10V dimming (20%-100% smooth dimming)
Signal Current: 1.5mA
Dimensions: L 47.7" x W 23.8" x H 3.9"
Recommended Dimmers: DIVA-DVTV(LUTRON),IP710-DL(LEVITON)
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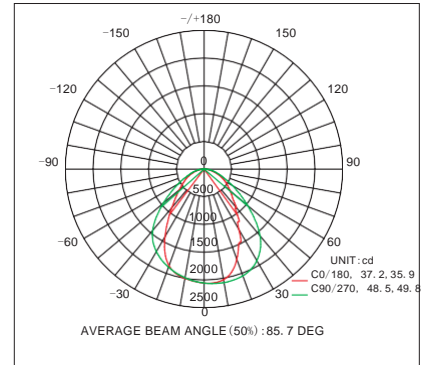
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	pw	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%
pfc	20%															0
RCR	RCR:Room Cavity Ratio (CU)															0
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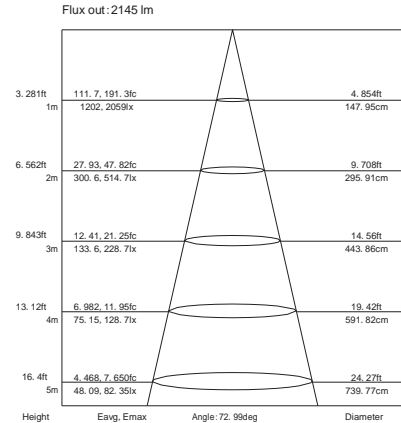
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UNIT:lm			