

Floating Air Troffer

CCT & Wattage Adjustable With Built-in Emergency Version



The indirect LED troffer offers a traditional modern design with the latest lighting technology. Transparent optics engineered specifically for LED sources are integrated with minimalist design and architectural materials to create a broad range of solutions with superior optical and energy performance. High performing optics allows for maximum energy savings and optimal illumination in a ultra-minimalistic shallow recessed fixture, provides a unique translucent appearance without sacrificing performance.

It is architectural recessed lighting solution that compatible for commercial and institutional environments, including office building, medical, health, educational, retail, hotel, airport, hospitality, etc.



Feature

- Build-in LED emergency driver
- Available in 2x2 and 2x4 sizes
- Transparent Optics
- Wattage selectable, 110lm/w
- CCT adjustable from 3000K, 3500K and 4000K
- Recessed form factor fits most T-grid systems

US PATENT
US D921,955 S



PERFORMANCE

Model NO.	Dimension	Wattage Adjustable	Lumen Output			Emergency Performance			
			High	Medium	Low	Output Power	Output Voltage	Recharge	Emergency Operation
TT22-DM-04W	2'x2'	40W/30W/20W	4400lm	3300lm	2200lm	8W	15-54VDC	24 Hrs	>90 Minutes
TT24-DM-04W	2'x4'	50W/40W/30W	5500lm	4400lm	3300lm	8W	15-54VDC	24 Hrs	>90 Minutes

All efficacy is ±5% base on different CCT and wattage. Check the IES file to gain the accurate data .

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PRODUCT PERFORMANCE

▶ Optics

It offers unique transparent optics to enhance the fixture aesthetic. fully- uniform transparent optics provide uniform, low-glare illumination for a clean, modern, upgraded look, creating direct and indirect light distribution.



▶ Construction

Extruded aluminum housing.

▶ Finish

Powder coat white finish provides uniform finish providing long term performance and superior aesthetic.

▶ Electrical

LED Driver It is powered by Class 2 high efficiency LED driver, with a standard 1-10V dimming which continuous dims to 10% that works with many types of controls. Tested Dimmers: Lutron @ Diva-Dvtv, Leviton @ IP-710-DL.

THD <20%

Power Factor >0.9

Input Voltage Standard electronic drivers are cULus recognized and available for 110-277V AC.

▶ LED System

CRI Minimum 80 color rendering index

CCT CCT adjustable from 3000K, 3500K and 4000K with a great color consistency

LED Life Minimum 50,000h with 87.8% of lumen maintenance in 25°C ambient temperature, in compliance with IES LM-80 testing measurements.

Thermal Management Aluminum housing acting as the heat sink to maximize life.

Environment Damp rated in operating ambient temperatures of -20°C-40°C .

▶ Mounting

Recessed

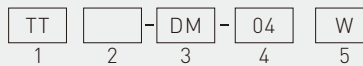
▶ Approvals

- US Patent (US D921,955 S)
- cULus listed for damp locations
- Tested to IESNA LM-79 and LM-80
- DesignLights Consortium Qualified and classified for DLC Standard, refer to www.designlights.org for details
- 5-year Limited Warranty

PRODUCT ORDERING GUIDE

Sample

TT 22 - DM - 04 W
1 2 3 4 5



1. Base Model

TT LED Troffer

2. Size

22 2'X2' 24 2'X4'

3. Dimming

DM 1-10V Dimming

4. CCT

04 CCT Adjustable 3000K/3500K/4000K

5. Wattage

W Wattage Selectable

OPTIONAL ORDERING GUIDE

Optional Function

LED Emergency Driver (Order Separated)

Sensor *

*Additional cost and/or lead time on customized fixtures may apply. Some fixtures require an MOQ. Please contact your sales rep for more information.

Specification For LED Emergency Driver

Output Power	8 Watts
Output Voltage	15-54V DC
Input Current	70 mA (Max)
Input Power	3.2 Watts (Max)
Input Voltage	110-277VAC, 50-60Hz
Emergency Operation	>90 Minutes
Standby Power	< 0.4W
Operating Temp	0°C to 50°C
Battery	Lithium
Recharge	24 Hrs
Compatible LED Luminaire	LED Driver Output Current: 5A Max
Dimensions	Driver: L5.08"xW2.05"xH0.99", Battery: L3.47"xW2.33"xH0.97"
Certificate	UL , CEC
Output Class	UL LELV [Output protection self-resetting]

▶ Code-Required Testing

• Initial Self-Test After Installation

It will perform a functional test in 3 seconds after the driver installed to check the wiring and battery output when work. The indicator LED will be off or flicker in case of a failure or an error.

• Second Self-Test In 120 Minutes

It will perform second test in 120 minutes to check again. Upgrade in Gen 3: Repeat 4 times in every 120 minutes if fail in the second test.

• Monthly Self-Test

It will automatically perform a test every 30 days with a duration of 3 seconds, in which the wiring and battery output are checked. In case of a failure or an error, the indicator LED will be off or flicker.

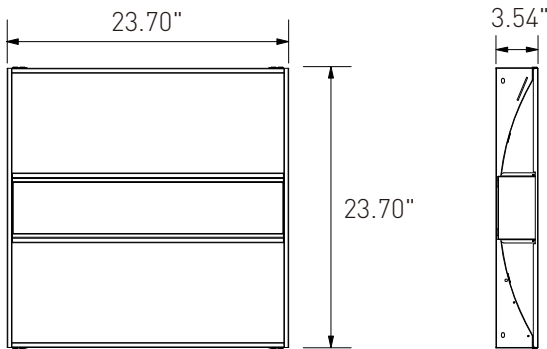
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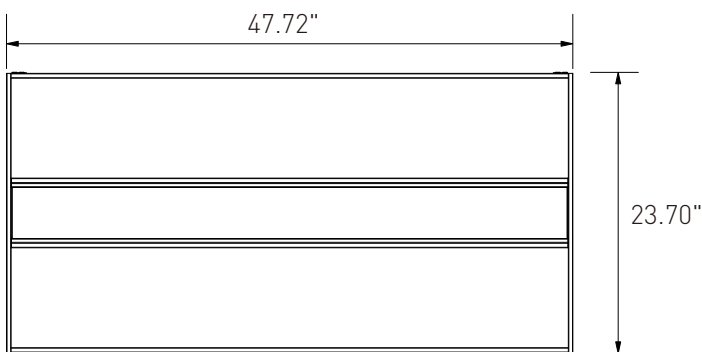


DIMENSION

2x2ft



2x4ft



T-GRIDS CEILING COMPATIBILITY

It is architectural recessed lighting solution that compatible with most 15/16" and 9/16" t-grid systems for commercial and institutional environment. The following are only as some common examples to show.

9/16" Flat



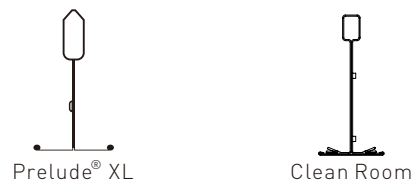
9/16" Slot



9/16" Interlude



15/16" Flat



*Please verify compatibility with factory.

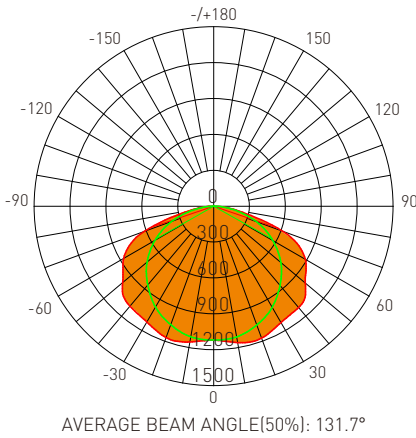
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DISTRIBUTION DIAGRAM

2'x2' / 3500K



Test Number: TT22-DM-04W
 Lumens: 4176.3 Lm
 Watts: 37.54 W
 LPW: 111.25 Lm/W
 CCT: 3500K

UNIT: cd
 — C0/180,142.4
 — C90/270,120.9

Zonal Flux Diagram						
τ	C0	C45	C90	C135	C180	
10	1157	1135	1109	1132	1152	
20	1173	1137	1056	1130	1168	
30	1124	1084	977.9	1075	1118	
40	1105	998.6	863.3	985.1	1090	
50	999.8	923.2	733.5	902.0	992.9	
60	883.4	772.7	570.2	758.8	868.6	
70	615.3	567.1	381.9	552.9	618.6	
80	191.9	213.5	168.0	217.0	190.9	
90	1.700	1.859	1.366	1.957	2.187	
100	2.024	1.918	1.081	1.844	1.101	
110	3.018	2.687	1.908	2.654	1.854	
120	3.523	2.799	2.082	2.732	1.920	
130	3.279	2.414	2.692	2.378	1.938	
140	2.295	1.607	2.463	1.499	1.956	
150	2.206	0.8639	2.039	0.9721	1.678	
160	1.662	0.8615	2.106	1.014	1.721	
170	1.850	1.026	2.062	1.154	1.711	
180	1.683	1.091	2.463	1.269	1.680	
DEG	LUMINOUS INTENSITY:cd					

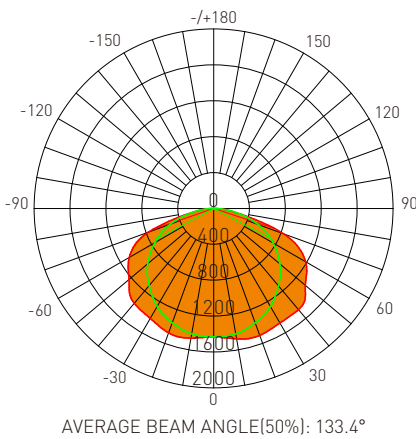
Zonal Lumens

τ	φ total
0-10	107.6
10-20	428.0
20-30	935.2
30-40	1579
40-50	2310
50-60	3044
60-70	3686
70-80	4070
80-90	4164
90-100	4166
100-110	4168
110-120	4170
120-130	4172
130-140	4174
140-150	4175
150-160	4176
160-170	4176
170-180	4176
DEG	UNIT: lm

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	10615	8417
80	11061	9663
75	14172	10589
70	18004	11156
65	18637	11393
60	17682	11393
55	16434	11394
50	15566	11400
45	15284	11333

2'x4' / 3500K



Test Number: TT24-DM-04W
 Lumens: 5460.4 Lm
 Watts: 48.81 W
 LPW: 111.87 Lm/W
 CCT: 3500K

UNIT: cd
 — C0/180,142.8
 — C90/270,124.1

Zonal Flux Diagram						
τ	C0	C45	C90	C135	C180	
10	1476	1453	1419	1442	1467	
20	1506	1462	1356	1431	1475	
30	1475	1412	1264	1363	1415	
40	1472	1332	1124	1261	1380	
50	1334	1257	965.4	1162	1233	
60	1183	1052	764.1	969.1	1087	
70	829.5	785.9	526.3	724.8	776.3	
80	233.4	277.8	238.8	270.1	223.4	
90	1.578	2.350	14.28	2.462	1.629	
100	1.451	2.109	2.911	2.214	1.815	
110	2.116	2.843	2.507	2.676	2.042	
120	2.355	2.863	1.316	2.762	2.115	
130	2.238	2.051	1.134	1.924	1.950	
140	1.839	1.085	0.9668	0.8426	1.870	
150	1.415	0.7827	0.9557	0.7437	1.752	
160	1.088	0.7829	1.002	0.7228	1.633	
170	1.312	0.8800	1.262	0.9410	1.667	
180	1.390	0.9644	1.314	1.081	1.632	
DEG	LUMINOUS INTENSITY:cd					

Zonal Lumens

τ	φ total
0-10	137.5
10-20	546.5
20-30	1197
30-40	2032
40-50	2987
50-60	3952
60-70	4807
70-80	5325
80-90	5448
90-100	5451
100-110	5454
110-120	5456
120-130	5458
130-140	5459
140-150	5459
150-160	5460
160-170	5460
170-180	5460
DEG	UNIT: lm

Luminance cd/(m2)

G(DEG)	C0/180	C90/270
85	11179	12390
80	13456	13747
75	18946	14805
70	24285	15384
65	24922	15466
60	23686	15279
55	22066	15111
50	20773	15016
45	20368	14854