

Flat Panel

Back-lit LED | CCT & Wattage Adjustable | Emergency



OKT Lighting's back-lit LED panel offers the built-in led emergency driver to provide critical illumination when normal power fails for any reason. Designed to deliver an unprecedented uniformity and functionality, it features a compact yet sturdy aluminum construction designed to blend into modern architectural spaces. Featuring a low profile form factor, it is ideal for buildings with a low plenum space and is suitable for all standard 2x2, 1X4 or 2x4 grid ceilings. This creates a soft and comfortable lighting experience for commercial and institutional spaces including open offices, classrooms, retail and healthcare facilities.



*DesignLights Consortium Qualified and classified for DLC standard/premium, refer to www.designlights.org for details

FEATURE

- Low profile design
- Uniform and soft illumination with back-lit technology
- CCT adjustable from 3500k,4000k and 5000k
- Wattage selectable, 110lm/W DLC standard or 125lm/w DLC premium *
- Save your shipping cost.
Longer driver box with built-in LED emergency driver with the same package as standard.
- Save your labor cost with simple wiring.
- More secure with code-required testing

PERFORMANCE

| Size | Wattage Selectable | Efficacy | CCT Adjustable | Emergency Performance | | | |
|-------|--------------------|--------------------|-------------------|-----------------------|----------------|----------|---------------------|
| | | | | Output Power | Output Voltage | Recharge | Emergency Operation |
| 2'x2' | 35W/30W/25W | 110lm/w or 125lm/w | 3500K/4000K/5000K | 6W | 30-54VDC | 24 Hrs | ≥90 Minutes |
| 1'x4' | 35W/30W/25W | 110lm/w or 125lm/w | 3500K/4000K/5000K | | | | |
| 2'x4' | 50W/40W/30W | 110lm/w or 125lm/w | 3500K/4000K/5000K | | | | |

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

► Finish

Extruded aluminum housing with powder coat white finish provides 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 driver is UL recognized and available for 110-277V or 110-347V* AC. |

► LED System

| | |
|--------------------|--|
| CRI | Minimum 80 color rendering index |
| CCT | CCT Adjustable from 3500K, 4000K and 5000K 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 -0°C~50°C. |

► Mounting

Recessed

► Approvals

- cULus listed for damp locations
- Tested to IESNA LM-79 and LM-80
- DesignLights Consortium Qualified and classified for DLC standard/premium, refer to www.designlights.org for details
- 5 years limited warranty

► 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.

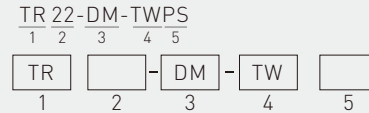
• Monthly Self-Test

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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PRODUCT ORDERING GUIDE

Sample



1. Base Model

TR

2. Size

- 22 2'X2'
- 14 1'X4' *
- 24 2'X4'

3. Dimming

DM 1-10V Dimming

4. CCT

TW CCT Adjustable 3500K / 4000K / 5000K

5. Efficacy

- PS 110lm/w DLC Standard
- PP 125lm/w DLC Premium *

OPTIONAL ORDERING GUIDE

Optional Functions

Emergency

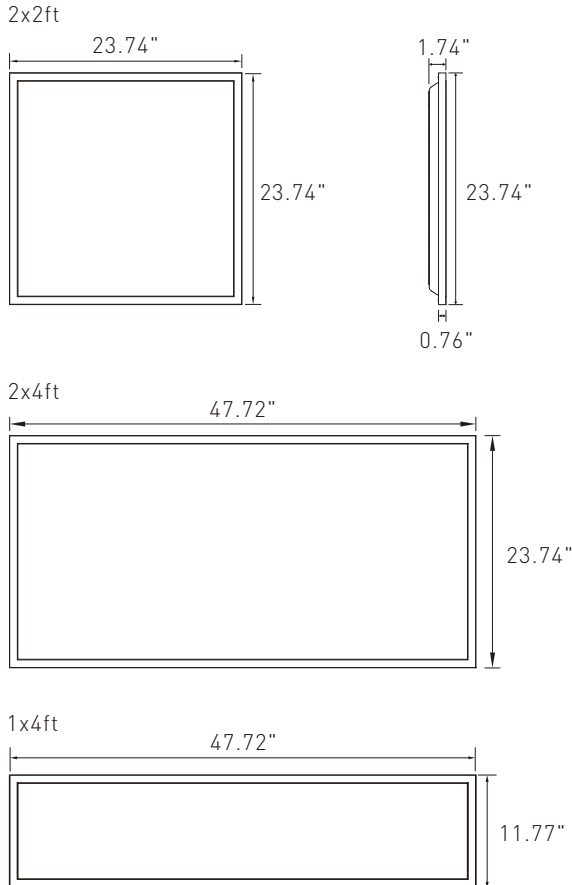
*Additional cost and/or lead time on customized fixtures may apply. Some fixtures require an MOQ. Please contact your sales rep for more information.

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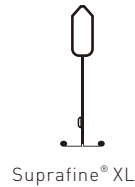
DIMENSION



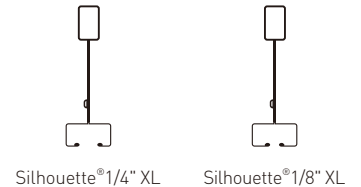
T-GRIDS CEILING COMPATIBILITY

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.

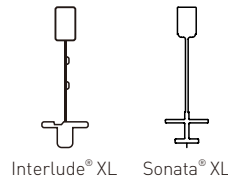
9/16" Flat



9/16" Slot



9/16" Interlude



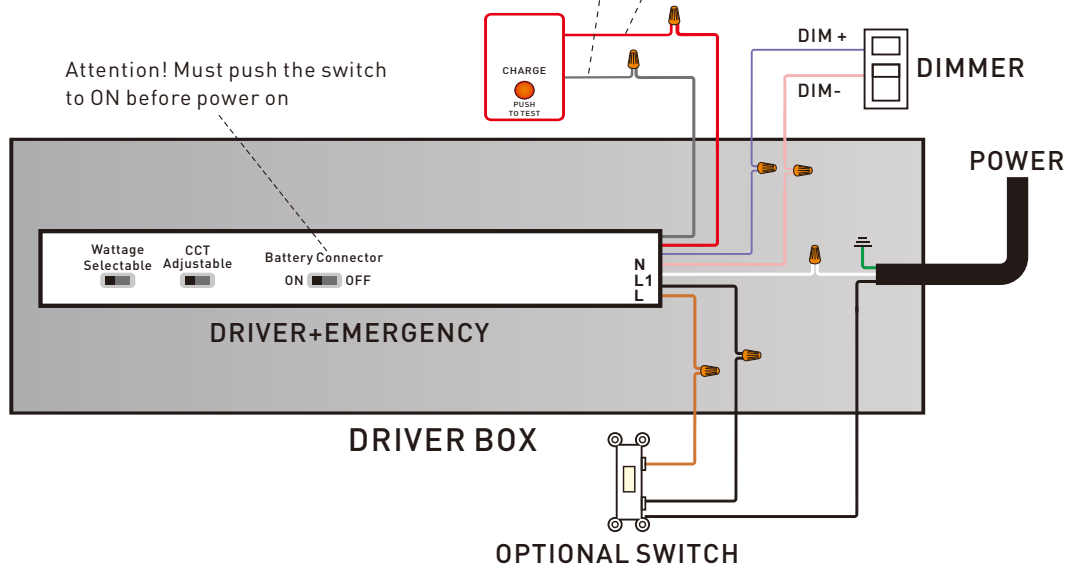
15/16" Flat



*Please verify compatibility with factory.

WIRING

Connect the indicator if there are two wires in the junction box. (Connect the indicator to the LED luminaire if without these two wires)



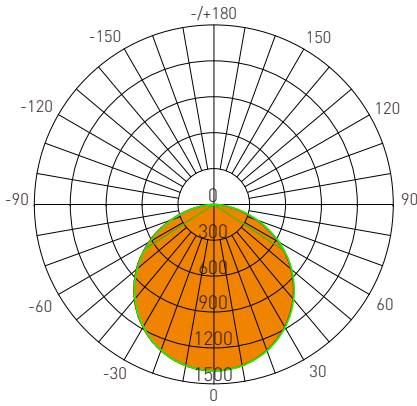
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DISTRIBUTION DIAGRAM

2'X2' / 3500K



Test Number: TR22-DM-TWPS UNIT: cd
 Lumens: 4013.3 Lm — C0/180, 113.8°
 Watts: 33.94 W — C30/270, 113.7°
 LPW: 118.24 Lm/W
 CCT: 3500K

Zonal Flux Diagram

| τ | C0 | C45 | C90 | C135 | C180 |
|-----|-----------------------|--------|--------|--------|--------|
| 10 | 1366 | 1367 | 1368 | 1368 | 1368 |
| 20 | 1297 | 1298 | 1300 | 1299 | 1299 |
| 30 | 1183 | 1186 | 1188 | 1187 | 1186 |
| 40 | 1030 | 1034 | 1036 | 1036 | 1033 |
| 50 | 841.1 | 847.6 | 848.8 | 850.5 | 846.0 |
| 60 | 621.6 | 629.5 | 628.2 | 633.3 | 627.7 |
| 70 | 379.4 | 387.7 | 388.3 | 391.6 | 387.0 |
| 80 | 142.9 | 150.2 | 156.7 | 154.6 | 149.9 |
| 90 | 0.0014 | 0.0844 | 0.0842 | 0.2041 | 0 |
| 100 | 0.1674 | 0.0878 | 0 | 0 | 0 |
| 110 | 0.5039 | 0.3689 | 0.0844 | 0.3705 | 0.1662 |
| 120 | 1.347 | 0.9283 | 0.4783 | 0.7703 | 0.6749 |
| 130 | 1.335 | 0.9984 | 1.255 | 0.7183 | 1.264 |
| 140 | 1.302 | 0.2535 | 1.201 | 0.4218 | 1.433 |
| 150 | 1.269 | 0 | 1.114 | 0 | 1.433 |
| 160 | 1.134 | 0 | 1.043 | 0 | 1.433 |
| 170 | 1.369 | 0 | 1.093 | 0 | 1.433 |
| 180 | 1.433 | 0.2531 | 1.266 | 0 | 1.433 |
| DEG | LUMINOUS INTENSITY:cd | | | | |

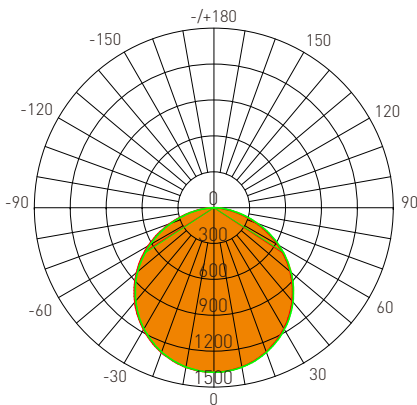
Zonal Lumens

| τ | φ total |
|----------|---------|
| 0-10 | 131.6 |
| 10-20 | 509.1 |
| 20-30 | 1083 |
| 30-40 | 1779 |
| 40-50 | 2506 |
| 50-60 | 3165 |
| 60-70 | 3666 |
| 70-80 | 3945 |
| 80-90 | 4010 |
| 90-100 | 4010 |
| 100-110 | 4010 |
| 110-120 | 4010 |
| 120-130 | 4011 |
| 130-140 | 4012 |
| 140-150 | 4013 |
| 150-160 | 4013 |
| 160-170 | 4013 |
| 170-180 | 4013 |
| UNIT: lm | |

Luminance cd/(m2)

| G(DEG) | C0/180 | C90/270 |
|--------|--------|---------|
| 85 | 5710 | 6959 |
| 80 | 8237 | 9024 |
| 75 | 9886 | 10364 |
| 70 | 11104 | 11353 |
| 65 | 11904 | 12049 |
| 60 | 12443 | 12564 |
| 55 | 12825 | 12951 |
| 50 | 13097 | 13207 |
| 45 | 13302 | 13388 |

1'X4' / 3500K



Test Number: TR14-DM-TWPS UNIT: cd
 Lumens: 3990.5 Lm — C0/180, 114.3°
 Watts: 34.55 W — C30/270, 114.0°
 LPW: 115.49 Lm/W
 CCT: 3500K

Zonal Flux Diagram

| τ | C0 | C45 | C90 | C135 | C180 |
|-----|-----------------------|--------|--------|--------|--------|
| 10 | 1351 | 1358 | 1354 | 1354 | 1354 |
| 20 | 1281 | 1292 | 1286 | 1286 | 1287 |
| 30 | 1169 | 1181 | 1177 | 1176 | 1178 |
| 40 | 1017 | 1028 | 1028 | 1026 | 1030 |
| 50 | 830.9 | 840.8 | 841.5 | 842.5 | 847.1 |
| 60 | 612.8 | 623.2 | 626.8 | 630.5 | 633.6 |
| 70 | 372.2 | 383.8 | 392.4 | 394.6 | 395.0 |
| 80 | 138.2 | 149.9 | 161.7 | 161.5 | 162.0 |
| 90 | 0 | 0.0331 | 0.6591 | 0.0620 | 0 |
| 100 | 0 | 0 | 0.5908 | 0 | 0 |
| 110 | 0 | 0 | 0.5158 | 0 | 0 |
| 120 | 0 | 0.2073 | 0 | 0.0848 | 0.0059 |
| 130 | 0 | 0.4226 | 0 | 0.3418 | 0.2402 |
| 140 | 0 | 0.5277 | 0 | 0.5738 | 0.5204 |
| 150 | 0 | 0.7773 | 0 | 0.5253 | 0.6219 |
| 160 | 0 | 1.271 | 0 | 1.286 | 0.7974 |
| 170 | 1.299 | 2.162 | 0 | 1.954 | 1.301 |
| 180 | 1.386 | 2.508 | 0 | 2.232 | 1.473 |
| DEG | LUMINOUS INTENSITY:cd | | | | |

Zonal Lumens

| τ | φ total |
|----------|---------|
| 0-10 | 130.2 |
| 10-20 | 504.1 |
| 20-30 | 1073 |
| 30-40 | 1763 |
| 40-50 | 2484 |
| 50-60 | 3138 |
| 60-70 | 3638 |
| 70-80 | 3919 |
| 80-90 | 3988 |
| 90-100 | 3988 |
| 100-110 | 3988 |
| 110-120 | 3988 |
| 120-130 | 3989 |
| 130-140 | 3989 |
| 140-150 | 3990 |
| 150-160 | 3990 |
| 160-170 | 3990 |
| 170-180 | 3990 |
| UNIT: lm | |

Luminance cd/(m2)

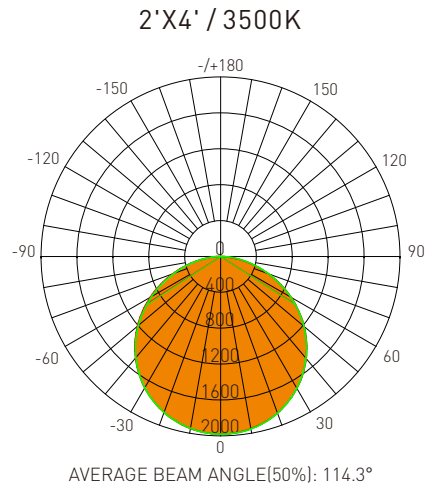
| G(DEG) | C0/180 | C90/270 |
|--------|--------|---------|
| 85 | 5493 | 7431 |
| 80 | 7963 | 9312 |
| 75 | 9731 | 10582 |
| 70 | 10893 | 11473 |
| 65 | 11695 | 12099 |
| 60 | 12268 | 12534 |
| 55 | 12661 | 12846 |
| 50 | 12939 | 13091 |
| 45 | 13141 | 13271 |

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DISTRIBUTION DIAGRAM



Test Number: TR24-DM-TWPS UNIT: cd
 Lumens: 5801.4 Lm — CD/180, 114.7°
 Watts: 49.23 W — C30/270, 114.0°
 LPW: 117.85 Lm/W
 CCT: 3500K

Zonal Flux Diagram

| τ | C0 | C45 | C90 | C135 | C180 |
|-----|-----------------------|--------|--------|--------|--------|
| 10 | 1949 | 1959 | 1952 | 1946 | 1946 |
| 20 | 1856 | 1870 | 1857 | 1848 | 1849 |
| 30 | 1699 | 1713 | 1698 | 1688 | 1692 |
| 40 | 1483 | 1496 | 1481 | 1470 | 1477 |
| 50 | 1215 | 1226 | 1211 | 1204 | 1211 |
| 60 | 904.3 | 913.2 | 900.7 | 897.6 | 903.8 |
| 70 | 570.0 | 577.5 | 570.1 | 568.0 | 572.8 |
| 80 | 235.3 | 248.8 | 251.8 | 247.7 | 247.6 |
| 90 | 0.2569 | 0.6989 | 1.349 | 6.798 | 0 |
| 100 | 0 | 0.4724 | 1.151 | 2.045 | 0 |
| 110 | 0 | 0.4982 | 1.137 | 0.7072 | 0.2640 |
| 120 | 0.6089 | 0.6486 | 0 | 0.5700 | 0.6816 |
| 130 | 0.8588 | 0.6124 | 0 | 0.6712 | 0.8550 |
| 140 | 0.8223 | 0 | 0 | 0 | 0.9294 |
| 150 | 0.7007 | 0 | 0 | 0 | 1.004 |
| 160 | 0.4954 | 0 | 0.0904 | 0 | 1.162 |
| 170 | 0.6586 | 0.0877 | 0.1390 | 0 | 1.237 |
| 180 | 0.6998 | 0.0877 | 0.1730 | 0 | 1.225 |
| DEG | LUMINOUS INTENSITY:cd | | | | |

Zonal Lumens

| τ | φ total |
|---------|----------|
| 0-10 | 187.5 |
| 10-20 | 726.2 |
| 20-30 | 1547 |
| 30-40 | 2544 |
| 40-50 | 3585 |
| 50-60 | 4530 |
| 60-70 | 5257 |
| 70-80 | 5683 |
| 80-90 | 5798 |
| 90-100 | 5799 |
| 100-110 | 5800 |
| 110-120 | 5800 |
| 120-130 | 5801 |
| 130-140 | 5801 |
| 140-150 | 5801 |
| 150-160 | 5801 |
| 160-170 | 5801 |
| 170-180 | 5801 |
| | UNIT: lm |

Luminance cd/(m2)

| G(DEG) | C0/180 | C90/270 |
|--------|--------|---------|
| 85 | 10468 | 12586 |
| 80 | 13573 | 14498 |
| 75 | 15495 | 15700 |
| 70 | 16691 | 16666 |
| 65 | 17496 | 17408 |
| 60 | 18115 | 18012 |
| 55 | 18587 | 18470 |
| 50 | 18938 | 18834 |
| 45 | 19204 | 19112 |