# PHILIPS

## LEDALITE

### Recessed

#### PureFX

2'x2', 4400 lm
3000/3500/4000K

**LED**

Using Ledalite's revolutionary MesoOptics technology, PureFX offers the perfect blend of brightness, control and energy efficiency.

## Ordering guide

| Product Type | Version | Configuration | Light Source * | CRI/CCT | Lumens * | Housing | Wiring † | Voltage | Driver |
|---|---|---|---|---|---|---|---|---|---|
| 9422 | | | L | | 44 | | | | |
| PureFX 2'x2' | D1 Standard T Grid<br>D2 Slot T Grid<br>A1 Air Return on Standard T Grid<br>A2 Air Return on Slot T Grid | ST Standalone<br>CR Continuous Row | L LED | A 4000K<br>B 3500K<br>C 3000K | 36 3600 lumens<br>44 4400 lumens | S Standard<br>C Chicago Plenum | 7 1cct Dimming<br>N 1cct Dimming + EM Batt. Pack<br>T 1cct Step Dimming | 1 120V<br>2 277V<br>3 347V | E Philips Advance 0-10V (1% dim) |

\* Nominal values within a range. Consult photometry data for CRI, color temp, lumens & distribution of chosen configuration.
† Not all wiring types are available with all configurations. Consult Philips Ledalite for a complete list of available options.

**Upgrades & Accessories** Please indicate with check mark.

☐ Flex Whip (6' length)

☐ Drywall Kit

**Integrated Controls** Please indicate with check mark.

☐ Response Daylight Single Zone (DS)

mesoOptics RESPONSE

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## Optical System

The optical frame assembly consists of an acrylic panel with a layer of protected MesoOptics film which efficiently provides a luminous, controlled, low glare 3-dimensional batwing distribution. The optical frame ends are constructed from die-formed cold-rolled steel assembled together with extruded aluminum profiles in a sturdy frame. The frame is hinged to allow easy access to the inside of the fixture. Maintenance can be performed from below the ceiling.

## Housing

Die-formed, post-painted, 22 gauge cold-rolled steel housing. Multiple wire entrances are available (top or side) to allow continuous row mounting of fixtures. Optional frame restraint is available to provide additional safety support.

## Mounting

Compatible with lay-in acoustical ceilings using an exposed 9/16", 15/16" or slot T-grid suspension system (NEMA types G, NFG & NFGS). Integral mounting tabs are provided which handle different T-grid heights.

## Finish

Housing and Frame: Post-painted, high quality powder coat. Available in white only.

## Weight

Maximum 25lb .

## Electrical

LED boards are easily field replaceable. Fixtures are factory pre-wired and tested for all circuits. Driver access from below the ceiling. Optional armored cable flex whips are supplied in 6' lengths.

## Standard Driver

Philips Advance Xitanium 0-10V, 1-100%. Class 2 rated output. Consult Philips Ledalite for other available drivers.

## Standard Battery Pack

Philips Bodine, 90 min, 10W, Class 2 rated output, Emergency lumen output = 10W x luminaire efficacy x 1.1. Typical output: 900lm.

## Lumen Maintenance

LEDs have been tested by the manufacturer in accordance with IESNA LM-80-08. At an ambient temperature of 25℃, the LED lumen maintenance expectation according to IES TM-21-11 is: **Reported** methodology is $L_{70}$ (12k) >52,000 hrs.

## Source Color

LEDs rated for standard color rendering CRI >80, R9 >0 and fixture to fixture color accuracy within 3 SDCM.

## Controls

Available with integrated Response Daylight sensor, which dims the luminaire when daylight is present. Contact Philips Ledalite for additional functionality.

## Approvals

Certified to UL, IES & CSA Standards. City of Chicago Approved CCEA (housing option C). Type IC Rated.

## Warranty

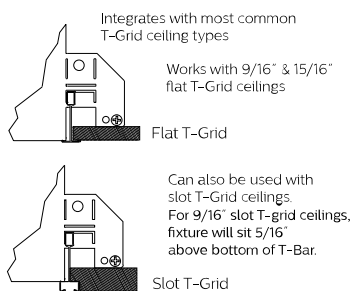Five-year luminaire limited warranty including LED boards and driver. www.philips.com/warranties.

## Environment

Rated for dry or damp locations in operating ambient temperatures of 0-25℃ (32-77℉). Many luminaire components, such as reflectors, refractors, lenses, and LEDs are made from various types of plastics which can be adversely affected by airborne contaminants. If sulfur based chemicals, petroleum based products, cleaning solutions, or other contaminants are expected in the intended area of use, consult factory for compatibility. Damage caused by sulfur, chlorine, petroleum based solution or other contaminants are not covered under warranty. Not suitable for natatorium environments.
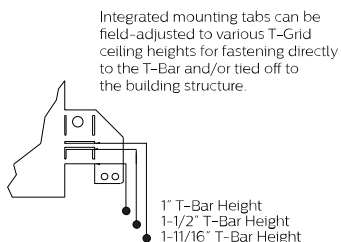
Due to continuing product improvements, Philips Ledalite reserves the right to change the specifications without notice.
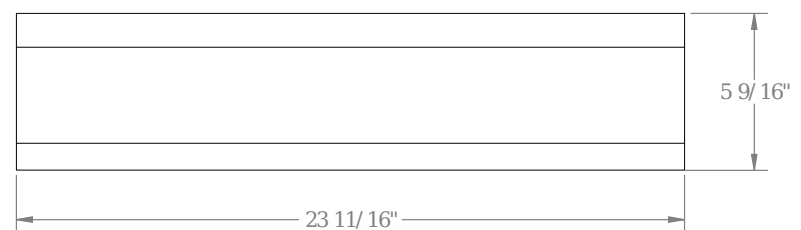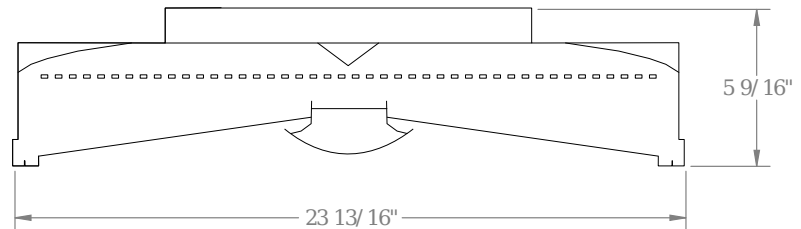
## Options and Details

### Mounting



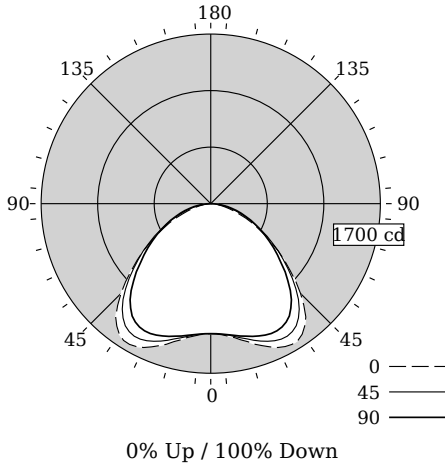Integrates with most common T-Grid ceiling types

Works with 9/16" & 15/16" flat T-Grid ceilings

Flat T-Grid

Can also be used with slot T-Grid ceilings. For 9/16" slot T-grid ceilings, fixture will sit 5/16" above bottom of T-Bar.

Slot T-Grid

**Ceiling types**

Integrated mounting tabs can be field-adjusted to various T-Grid ceiling heights for fastening directly to the T-Bar and/or tied off to the building structure.

1" T-Bar Height
1-1/2" T-Bar Height
1-11/16" T-Bar Height

### Cross Section



5 9/ 16"

23 13/ 16"

5 9/ 16"

23 11/ 16"

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## Photometry @ CRI>80, 3500K



1700 cd

| | |
|---|---|
| 0 | - - - |
| 45 | —— |
| 90 | —— |

0% Up / 100% Down

### Candela Distribution

| Vertical Angle | Horizontal Angle | | | | | Zonal Lumens |
|---|---|---|---|---|---|---|
| | 0 | 22.5 | 45 | 67.5 | 90 | |
| 0 | 1303 | 1303 | 1303 | 1303 | 1303 | 0 |
| 5 | 1320 | 1315 | 1316 | 1312 | 1313 | 127 |
| 15 | 1432 | 1424 | 1403 | 1384 | 1375 | 400 |
| 25 | 1591 | 1566 | 1516 | 1458 | 1436 | 699 |
| 35 | 1598 | 1572 | 1494 | 1408 | 1374 | 925 |
| 45 | 1273 | 1259 | 1207 | 1132 | 1093 | 920 |
| 55 | 825 | 835 | 827 | 796 | 768 | 728 |
| 65 | 458 | 474 | 493 | 499 | 492 | 485 |
| 75 | 187 | 212 | 241 | 263 | 268 | 253 |
| 85 | 37 | 53 | 66 | 75 | 75 | 72 |
| 90 | 0 | 0 | 0 | 0 | 0 | 0 |
| 95 | 0 | 0 | 0 | 0 | 0 | 0 |
| 105 | 0 | 0 | 0 | 0 | 0 | 0 |
| 115 | 0 | 0 | 0 | 0 | 0 | 0 |
| 125 | 0 | 0 | 0 | 0 | 0 | 0 |
| 135 | 0 | 0 | 0 | 0 | 0 | 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 |

Fixture photometry has been conducted in accordance with IESNA LM-79-08

IES files for this and other photometric options can be downloaded online at www.lightingproducts.philips.com

### Coefficients of Utilization (%)

| RCR | Ceiling: 80 | | | | 70 | | | | 50 | | | 0 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Wall: | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 50 | 30 | 10 | 0 | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 111 | 111 | 111 | 100 |
| 1 | 109 | 105 | 100 | 97 | 106 | 102 | 99 | 98 | 95 | 92 | 85 |
| 2 | 100 | 92 | 85 | 79 | 97 | 90 | 84 | 86 | 81 | 77 | 71 |
| 3 | 91 | 81 | 73 | 66 | 88 | 79 | 72 | 76 | 70 | 64 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 68 | 61 | 55 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 61 | 53 | 47 | 44 |
| 6 | 71 | 57 | 48 | 42 | 69 | 56 | 48 | 55 | 47 | 41 | 39 |
| 7 | 65 | 52 | 43 | 37 | 64 | 51 | 43 | 49 | 42 | 37 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 46 | 38 | 45 | 38 | 32 | 30 |
| 9 | 57 | 43 | 35 | 29 | 55 | 43 | 35 | 41 | 34 | 29 | 27 |
| 10 | 53 | 40 | 32 | 26 | 52 | 39 | 32 | 38 | 31 | 26 | 24 |

### Avg. Luminance (cd/m2)

| Vertical Angle | Horizontal Angle | | |
|---|---|---|---|
| | 0 | 45 | 90 |
| 55 | 4605 | 4616 | 4287 |
| 65 | 3470 | 3735 | 3727 |
| 75 | 2313 | 2981 | 3315 |
| 85 | 1359 | 2425 | 2755 |

## Distribution Summary

| Hemisphere | 0% Up / 100% Down |
|---|---|
| Spacing Along (0°) | 1.7 |
| Spacing Across (90°) | 1.55 |

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## Optical Performance

| Flux (lm) | 4571 | 4608 | 4358 |
|---|---|---|---|
| Efficacy (lm/W) | 83.0 | 83.3 | 79.2 |
| Power (W) | 55.1 | 55.3 | 55.0 |
| CCT (K) | 3985 | 3470 | 3071 |
| CRI | 83 | 83 | 83 |
| R9 | 24 | 22 | 20 |
| x | 0.3837 | 0.4108 | 0.4356 |
| y | 0.3866 | 0.4017 | 0.4103 |
| Duv | 0.0040 | 0.0040 | 0.0030 |

## Electrical Performance @ CRI>80, 3500K

| Input Voltage | 120V | 347V |
|---|---|---|
| Input Power | 55.3W | 47.2W |
| Input Current | 0.46A | 0.14A |
| Power Factor | 0.994 | 0.980 |
| Total Harm. Distortion | | 7.0% |

Tested values – contact technical support for rated values.
Off-state power zero unless certain controls are specified.