RAYCOS LIGHTING

PROJECT NAME _____ DATE _____

NOTE _____

BACKLIT FLAT PANEL SERIES

# 2 × 4 LED BACKLIT FLAT PANEL

SELECTABLE OUTPUT · SELECTABLE COLOR · THREE FACTORY VERSIONS

## 2 × 4 BACKLIT PANEL

Low-profile general illumination for commercial interiors

- Backlit optical system for even, low-glare light distribution
- Up to 130 lm/W with 30 / 40 / 50 W selectable output
- 3000 / 4000 / 5000 K selectable color temperature
- 0-10 V dimming with flicker-free operation
- Recessed, surface-mount, or suspended installation



| STANDARD | MOTION | EMERGENCY |
|---|---|---|
| Core fixture | Sensor version | 8 W / 15 W |

## APPLICATION

Offices · schools · showrooms · airports · retail · healthcare



### CLEAN, UNIFORM CEILING LIGHT

The backlit construction delivers broad distribution in standard 2 × 4 ceiling grids. Use the dedicated sensor version for occupancy control or the emergency version where backup illumination is required.

## ORDERING GUIDE

Standard · motion sensor · emergency

| Model | Version | Power | Lumen | CCT | Control / backup |
|---|---|---|---|---|---|
| RY-PBO3-2X4PZ1-H-TWCCT | Standard | 30 / 40 / 50 W | 3,900 / 5,200 / 6,500 lm | 3000 / 4000 / 5000 K | 0-10 V dimming |
| RY-PBO3-2X4PZ1-H-TWCCT-MS | Motion sensor | 30 / 40 / 50 W | 3,900 / 5,200 / 6,500 lm | 3000 / 4000 / 5000 K | Integrated sensor |
| RY-PBO3-2X4PZ1-H-TWCCT-EM | Emergency | 30 / 40 / 50 W | 3,900 / 5,200 / 6,500 lm | 3000 / 4000 / 5000 K | 8 W or 15 W backup |

## PERFORMANCE AT A GLANCE

| INPUT | POWER | LUMENS | CCT | CONTROLS |
|---|---|---|---|---|
| 120-277 VAC | 30 / 40 / 50 W | 3900 / 5200 / 6500 | 3000 / 4000 / 5000 K | 0-10 V · sensor · EM |

DLC PREMIUM · CCT Tunable 3000K/4000K/5000K · Wattage Adjustable · Dimmable · Emergency LED Driver · JA8 Compliance · Motion Sensor · UL LISTED

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# TECHNICAL DATA + PHOTOMETRICS

## PRODUCT DIMENSIONS

Inches shown first · millimeters secondary

### 2 × 4 FRONT VIEW




### SIDE VIEW




**FORMAT**
2 × 4 ft

**DEPTH**
1.58"

**MOUNTING**
3 methods

## ELECTRICAL + OPTICAL SPECIFICATIONS

| | |
|---|---|
| **Input voltage** | 120-277 VAC |
| **Dimming** | 0-10 V dimmable |
| **Protection** | IP20 · indoor use |
| **Power factor** | > 0.90 |
| **Beam angle** | 110° |
| **CRI** | > 80 |
| **Efficacy** | Up to 130 lm/W |
| **Rated life** | > 50,000 hours · L70 |
| **Operating** | -13°F to +113°F (-25°C to +45°C) |
| **Certifications** | ETL · DLC Premium · JA8 |

### VERSION NOTES

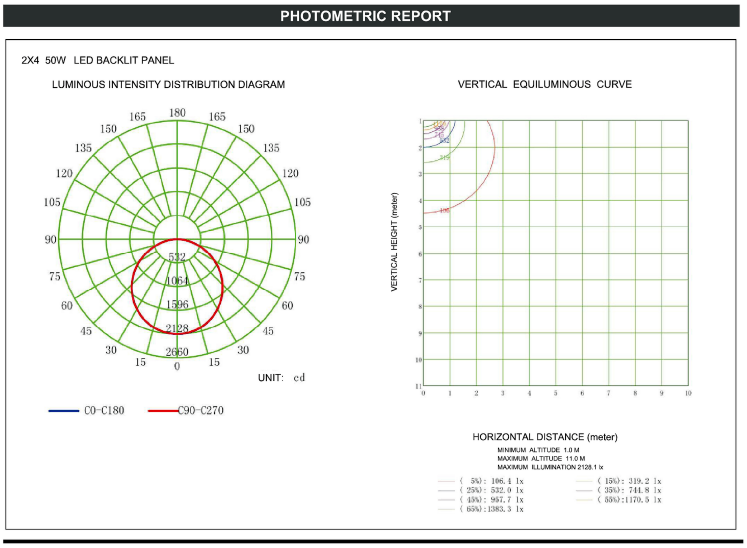
**STANDARD**
Selectable wattage and CCT with 0-10 V dimming.

**MOTION SENSOR**
Factory motion-sensor version for automatic occupancy control.

**EMERGENCY**
Factory emergency version; backup output available in 8 W or 15 W.

## PHOTOMETRIC REPORT

2 × 4 · 50 W test configuration



RAYCOS LIGHTING

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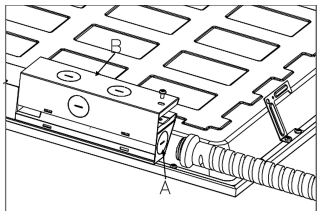
BACKLIT FLAT PANEL SERIES

# WIRING + RECESSED INSTALLATION

## WIRING + SELECTABLE SETTINGS

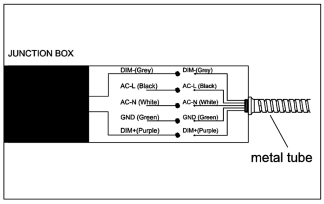
De-energize the branch circuit before work

### 1 OPEN DRIVER BOX



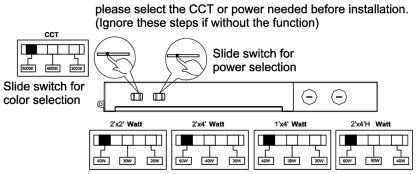

Remove the knockout, open the cover, and route the supply conduit into the junction box.

### 2 CONNECT CONDUCTORS




Connect line, neutral, ground, DIM+ and DIM− to the corresponding fixture leads.

### 3 SELECT + CLOSE




Set the required wattage and CCT before installation, then reinstall and tighten the driver cover.

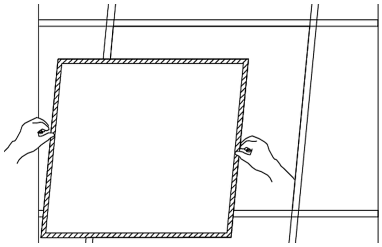
**PRE-INSTALLATION CHECK**

Place the panel on a clean, flat surface and press opposite corners in sequence so all four corners sit flat before mounting.

## RECESSED GRID INSTALLATION

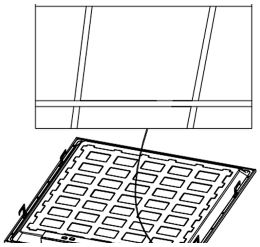
Use qualified personnel and approved wiring methods

### 1 OPEN CEILING GRID



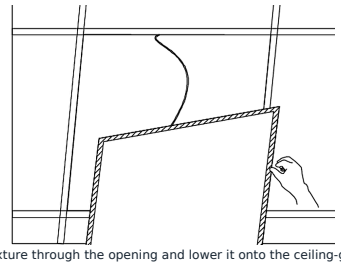
Remove the ceiling tile at the selected location.

### 2 MAKE ELECTRICAL CONNECTION



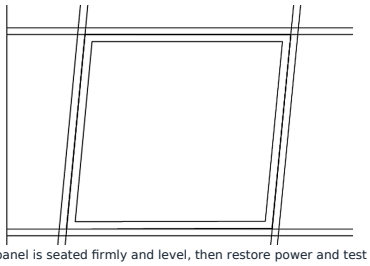
Feed the branch-circuit conductors into the driver terminal box and complete the wiring.

### 3 PLACE PANEL



Angle the fixture through the opening and lower it onto the ceiling-grid flanges.

### 4 VERIFY + ENERGIZE



Confirm the panel is seated firmly and level, then restore power and test operation.

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**PROJECT NAME** _____ **DATE** _____

**NOTE** _____

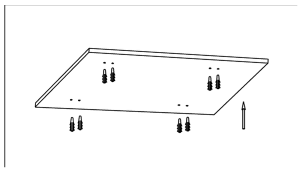
BACKLIT FLAT PANEL SERIES

# ALTERNATE MOUNTING METHODS

## SUSPENDED INSTALLATION

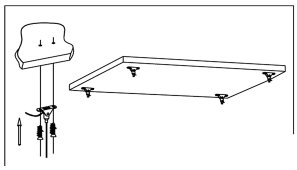
Suspension kit required

**1**



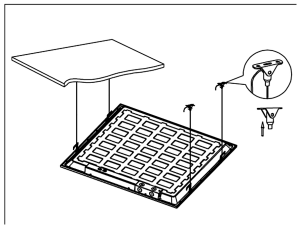
Mark anchor points and install approved ceiling anchors.

**2**



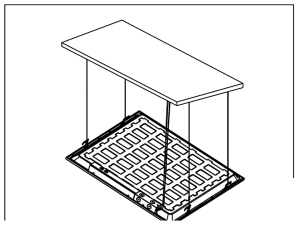
Attach the four suspension mounts to the fixture.

**3**



Connect the cables and adjust each cable to equal length.

**4**

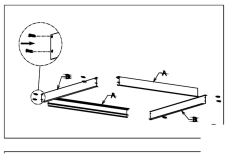


Level the panel, complete wiring, and restore power.

## SURFACE-MOUNT FRAME

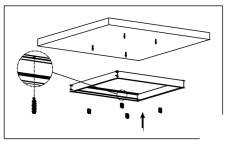
Surface frame accessory required

**1**



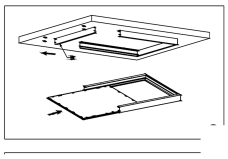
Assemble frame

**2**



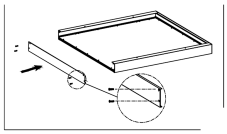
Anchor frame

**3**



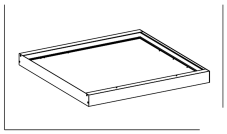
Insert panel

**4**



Replace side rail

**5**

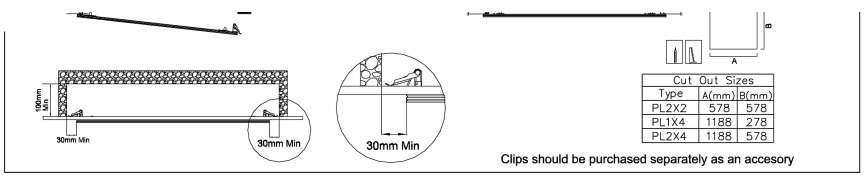


Verify + test

Assemble and anchor the surface frame. Remove one side rail, connect the panel, slide it into the frame, reinstall the side rail, verify all fasteners, and test operation.

## RECESSED CLIP MOUNTING

Clips are purchased separately




| Cut Out Sizes | | |
|---|---|---|
| Type | A(mm) | B(mm) |
| PL2X2 | 578 | 578 |
| PL1X4 | 1188 | 278 |
| PL2X4 | 1188 | 578 |

Clips should be purchased separately as an accesory

**2 × 4 CUT-OUT**

**46.77 × 22.76 in**

1188 × 578 mm

**MINIMUM CLEARANCE**

**1.18 in sides**

3.94 in above fixture

**WIRE SIZE: ≥ 0.75 mm²** Improper installation may void warranty.