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

ETL Listed Intertek · DLC QPL Listed Premium · CCT Tunable 3000K/4000K/5000K · Wattage Adjustable · Dimmable · Emergency LED Driver · JA8 Compliance · Motion Sensor

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BACKLIT FLAT PANEL SERIES

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

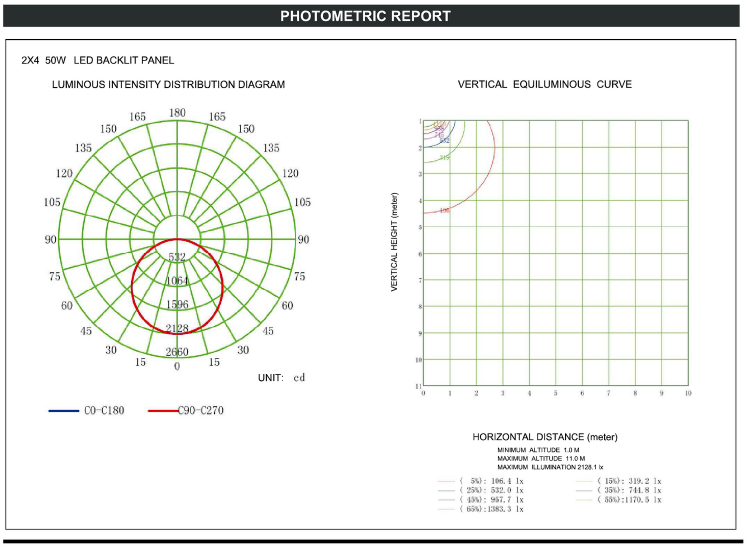
STANDARD
Selectable wattage and CCT with 0-10 V dimming.

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



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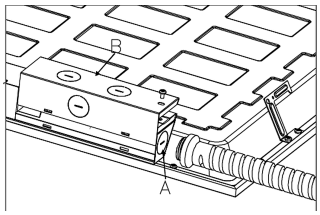
BACKLIT FLAT PANEL SERIES

WIRING + RECESSED INSTALLATION

WIRING + SELECTABLE SETTINGS

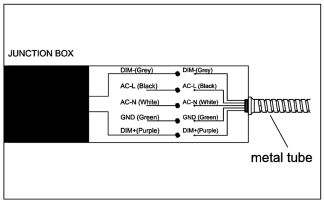
De-energize the branch circuit before work

1 OPEN DRIVER BOX



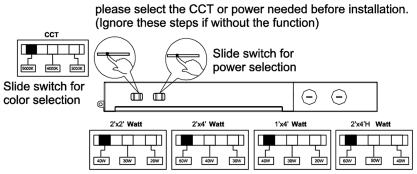
Remove the knockout, open the cover, and route the supply conduit into the junction box.

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.

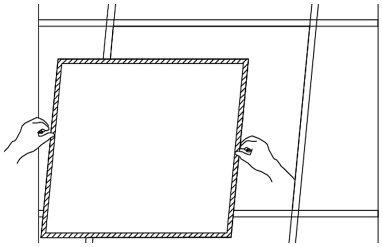
PRE-INSTALLATION CHECK

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

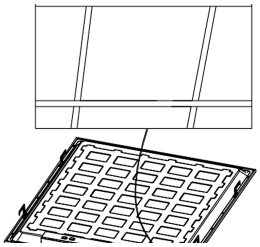
Use qualified personnel and approved wiring methods

1 OPEN CEILING GRID



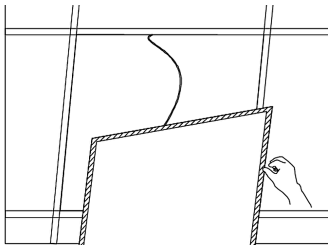
Remove the ceiling tile at the selected location.

2 MAKE ELECTRICAL CONNECTION



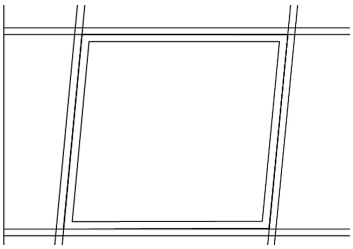
Feed the branch-circuit conductors into the driver terminal box and complete the wiring.

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.

RAYCOS LIGHTING

PROJECT NAME _____ **DATE** _____

NOTE _____

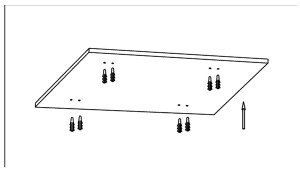
BACKLIT FLAT PANEL SERIES

ALTERNATE MOUNTING METHODS

SUSPENDED INSTALLATION

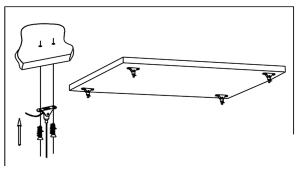
Suspension kit required

1



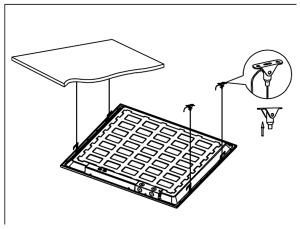
Mark anchor points and install approved ceiling anchors.

2



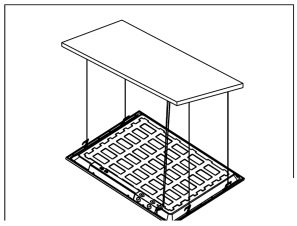
Attach the four suspension mounts to the fixture.

3



Connect the cables and adjust each cable to equal length.

4

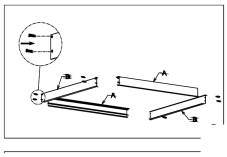


Level the panel, complete wiring, and restore power.

SURFACE-MOUNT FRAME

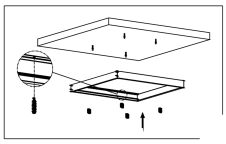
Surface frame accessory required

1



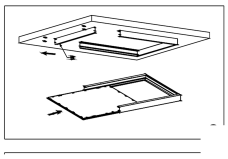
Assemble frame

2



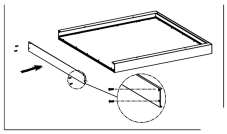
Anchor frame

3



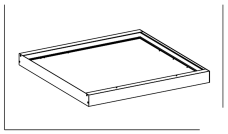
Insert panel

4



Replace side rail

5

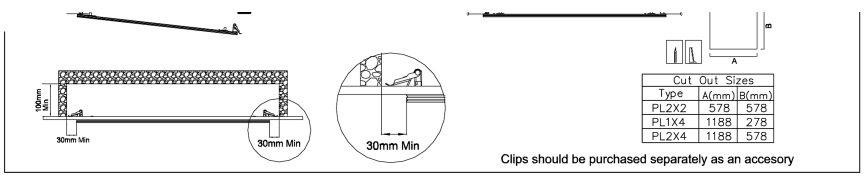


Verify + test

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



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.