# CLEANROOM
## FCR210
**LED**

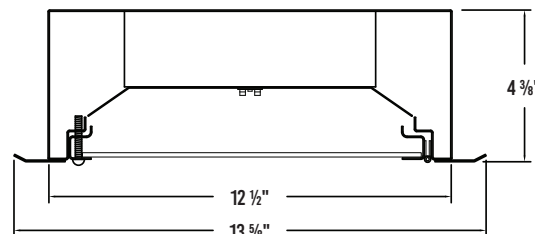### CLASS 100 FLANGED CLEANROOM LUMINAIRE

| JOB | |
|---|---|
| TYPE | |
| DATE | |

## Recessed Flanged

*Overall dimensions including flange: 13 5/8" x 50"*
*Required ceiling opening: 12 1/2 " x 48 1/2"*

**CROSS SECTION**

4 3/8"
12 1/2"
13 5/8"

\* No Unused Holes or KOs on Backplates

**BACKPLATE**

47 7/8"
11 5/8"
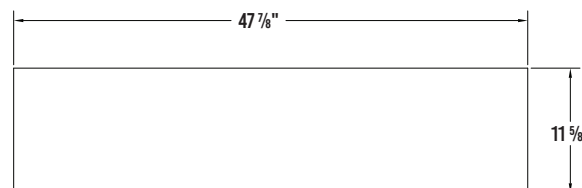
## SPECIFICATIONS

### Construction
• Class 100 / ISO Class 5 equivalent
• 22 gauge cold-rolled steel welded housing
• 20 gauge cold-rolled steel door frame secured by full length piano hinge and 2 captive screws
• Door frame and lens sealed with closed cell neoprene gasket
• 18 gauge cold-rolled steel trim flange
• All parts fitted and sealed, no unused holes or knockouts

### Finish
• Painted after fabrication
• Baked white powder-coated finish
• Minimum reflectance 90%

### Optical
• Inverted clear prismatic acrylic lens (nominal 0.125" thickness)

### Electrical
• High efficiency drivers coupled with long-life LEDs
• Service life greater than 50,000 hours (L70)
• Universal voltage 120V through 277V (347V / 480V available)
• Power Factor (PF) ≥ 0.9
• Total Harmonic Distortion (THD) ≤ 20%

### Listing
• UL USA and Canada listed / suitable for damp locations

### Warranty
• 5-Year limited warranty standard. 10-Year limited warranty also available

## APPLICATIONS
• Cleanroom, Sealed Ceiling Areas, Commercial

## FEATURES
• 0-10V dimming driver standard
• Supports California Title 24 compliance

## OPTIONS
• Range of lumen packages and color temperatures
• Tunable white (2700K - 6500K)
• Colored LEDs, including True/Native Amber
• Sensors and controls
• Lens options
• Antimicrobial finish
• Wet location
• Emergency battery pack
• Tamper-proof screws
• Hanger yokes
• Customization available upon request

RoHS COMPLIANT
UL CERTIFIED

Revised: 1/21/25
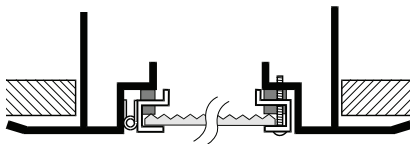
MADE IN THE USA
BAA Compliant

## ORDERING INFORMATION: Additional Options Available. Visit www.lalighting.com/resources for more information

**EXAMPLE: FCR210-4-4L-FSW-PA2-BPL1.5-DRDM-UNV-1/840**

| SERIES | NOMINAL LED LUMENS | NOMINAL LENGTH | FINISH | DOOR FRAME | OPTICAL | MECHANICAL | ELECTRICAL | DRIVER | VOLTAGE | # OF LED ROWS | CRI / CCT |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **FCR210** | | **4L** | | | | | | | | **1** | |
| FCR210<br>• Class 100 Flanged Cleanroom Luminaire | **2** - 2000 lm<br>**4** - 4000 lm<br>**6** - 6000 lm<br>**8** - 8000 lm<br>**12** - 12000 lm<br><br>**High Efficacy**<br>**2HE** - 2000 lm<br>**4HE** - 4000 lm<br>**6HE** - 6000 lm | **4L**<br>• 4' | **AMF**<br>• Antimicrobial Finish<br><br>*Leave blank if not specified | **FSW**<br>• Flat Steel White Enamel Door Frame | **PA2**<br>• Clear Prismatic Acrylic 0.125"<br><br>**FPA2**<br>• Frosted Prismatic Acrylic 0.125"<br><br>**DRP8**<br>• High-Impact Clear Prismatic Acrylic 0.187"<br><br>**FFWA**<br>• Flat Frosted White Acrylic | **WL**<br>• Wet Location<br><br>**TP**<br>• Tamper Proof Screws (Hex Socket with Post)<br><br>**GSKN3**<br>• Three-Way Gasket<br><br>*Leave blank if not specified | **BPL1.5**<br>• 1500 lm emergency battery pack<br><br>*Leave blank if not specified | **DRDM**<br>• 0-10V Dimming Driver<br><br>**DRDM2C**<br>• 2-Channel 0-10V Dimming Driver (for Color Tunable White)<br><br>**DRSD**<br>• Step Dimming Driver<br><br>**DR2W**<br>• 120V 2-Wire Phase Dimming Driver (Must Specify 120V in Voltage Column) | **UNV**<br>• 120V-277V | **1**<br>• One LED Row | **827**<br>• 80+CRI / 2700K<br><br>**830**<br>• 80+CRI / 3000K<br><br>**835**<br>• 80+CRI / 3500K<br><br>**840**<br>• 80+CRI / 4000K<br><br>**850**<br>• 80+CRI / 5000K<br><br>**865**<br>• 80+CRI / 6500K<br><br>**8TW**<br>• 80+CRI Tunable White 2700K-6500K Requires DRDM2C driver<br><br>**AM8**[1]<br>• PC Yellow 575 nm - 590 nm<br><br>**AM9**[1]<br>• PC Amber 586 nm - 593 nm<br><br>**AMT**[1]<br>• True Amber 585 nm - 595 nm |

Standard options for FCR210 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit www.lalighting.com/resources or contact customer service.

**90CRI Also available**

Contact customer service for additional CRI/CCT packages.

**1** For amber and other color LEDs, available lumen packages vary. Contact customer service for more information.

## DOOR FRAME

### CROSS SECTION



**FEATURES**
• Full Length Piano Hinge
• Inverted Lens
• Two 10-24 Captive Machine Screws
• Sealed with Closed Cell Neoprene Gasket

**FS  W**

**FINISHES**
**W** White Enamel
**B** Black Enamel

**STYLES**
**FS** Flat Steel

## OPTICAL OPTIONS

### STANDARD LENSES FOR FCR210 - Prismatic lenses are inverted to position the flat side facing down.

**PA2** Clear Prismatic Acrylic, Nom. 0.125" OA Thickness, Female Prisms 3/16" Square Base, Pattern 12

**FPA2** Frosted Prismatic Acrylic, Nom. 0.125" OA Thickness, Female Prisms 3/16" Square Base, Pattern 12

**DRP8** High-Impact Clear Prismatic Acrylic, Nom. 0.187" OA Thickness, Female Prisms 3/16" Square Base, Pattern 12

**FFWA** Flat Frosted White Acrylic, No Thickness Specified

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# NEOPRENE GASKET

### 3-WAY
Additional gasket between flange and ceiling.

Optional neoprene gasketing between flange and ceiling

Standard neoprene gasketing for lens and door frame

## GSKN 3

NEOPRENE GASKET

LOCATION
3 Three-Way
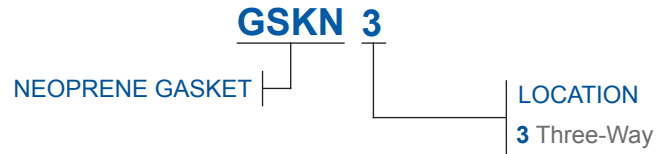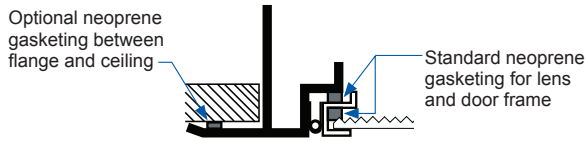
# MOUNTING HARDWARE

## HANGER YOKES: HS-12
- Used to secure recessed flanged fixtures to support frame in hard ceilings
- Provided screws secure hanger yoke to fixture
- Two hanger yokes required for each 4' fixture.

Note: Housing does not have knockouts for hanger yokes. Installer must drill required holes, staying clear of electrical components. Suitable caulking compound must be used to seal holes after installation.

Support Frame

Hanger Yoke

Fixture Housing

Ceiling

5 ⅛"

12"
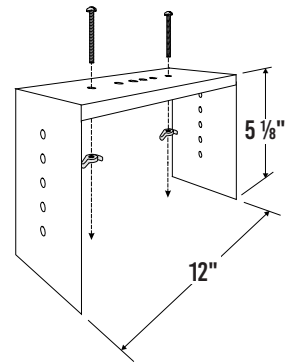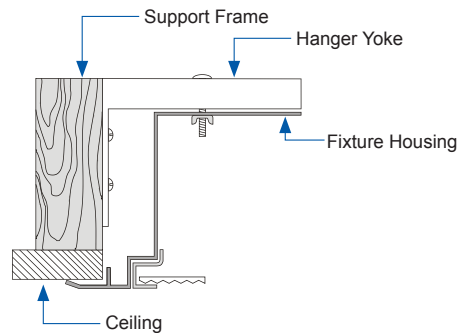
# SYSTEM DATA: Additional Lumen Packages Available. Contact Customer Service for More Information

| **Normal Temp** 4' | LED LUMEN PACKAGE | NORMAL AMBIENT TEMPERATURE PRODUCT CODE | DELIVERED LUMENS | SYSTEM WATTS | LUMINAIRE EFFICACY | AMBIENT TEMP. | FLUORESCENT EQUIVALENT | IES FILES |
|---|---|---|---|---|---|---|---|---|
| | 2000 Lumens (Nominal) | FCR210-2-4L-FSW-PA2-DRDM-UNV-1/840 | 1478 | 12.5 | 118.5 lm/W | -20°C / 35°C (-4°F / 95°F) | 1x F32T8 | * |
| | 4000 Lumens (Nominal) | FCR210-4-4L-FSW-PA2-DRDM-UNV-1/840 | 2901 | 25.5 | 113.6 lm/W | -20°C / 35°C (-4°F / 95°F) | 1x F54T5HO 2x F32T8 | * |
| | 6000 Lumens (Nominal) | FCR210-6-4L-FSW-PA2-DRDM-UNV-1/840 | 4282 | 39.1 | 109.6 lm/W | -20°C / 35°C (-4°F / 95°F) | 3x F32T8 | * |
| | 8000 Lumens (Nominal) | FCR210-8-4L-FSW-PA2-DRDM-UNV-1/840 | 5622 | 53.1 | 106.0 lm/W | -20°C / 35°C (-4°F / 95°F) | 2x F54T5HO 4x F32T8 | * |
| | 12000 Lumens (Nominal) | FCR210-12-4L-FSW-PA2-DRDM-UNV-1/840 | 8563 | 78.0 | 109.8 lm/W | -20°C / 35°C (-4°F / 95°F) | 3x F54T5HO 6x F32T8 | * |

| **Normal Temp High Efficacy** 4' | LED LUMEN PACKAGE | NORMAL AMBIENT TEMPERATURE (HIGH EFFICACY) PRODUCT CODE | DELIVERED LUMENS | SYSTEM WATTS | LUMINAIRE EFFICACY | AMBIENT TEMP. | FLUORESCENT EQUIVALENT | IES FILES |
|---|---|---|---|---|---|---|---|---|
| | 2000 Lumens (Nominal) | FCR210-2HE-4L-FSW-PA2-DRDM-UNV-1/840 | 1502 | 12.4 | 121.6 lm/W | -20°C / 35°C (-4°F / 95°F) | 1x F32T8 | * |
| | 4000 Lumens (Nominal) | FCR210-4HE-4L-FSW-PA2-DRDM-UNV-1/840 | 2955 | 24.9 | 118.5 lm/W | -20°C / 35°C (-4°F / 95°F) | 1x F54T5HO 2x F32T8 | * |
| | 6000 Lumens (Nominal) | FCR210-6HE-4L-FSW-PA2-DRDM-UNV-1/840 | 4388 | 37.8 | 116.2 lm/W | -20°C / 35°C (-4°F / 95°F) | 3x F32T8 | * |

*NOTE:*
*System data as of 1/29/25 (K-Boards).*
*Luminaire efficiency: 1x4 - 69.3%*
*Subject to change without notice.*

*System data is based on 120V input voltage. Actual performance may differ as a result of end-user environment and application. This fixture has been tested and listed in accordance with UL Standards. L.A. Lighting certifies that it will operate safely when installed properly, and within an ambient temperature range noted in the system data table.*

*Additional lumen packages and color temperatures available.*

**Los Angeles Lighting Mfg. Co.**
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