



# CLEANROOM FCR220

CLASS 100 FLANGED CLEANROOM LUMINAIRE

JOB	
TYPE	
DATE	

## Recessed Flanged



2' x 4'

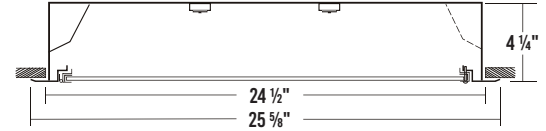
Overall dimensions including flange: 25 5/8" x 50"  
Required ceiling opening: 24 1/2" x 48 1/2"



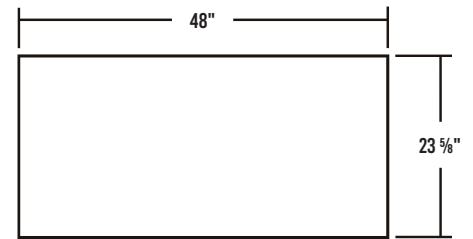
2' x 2'

Overall dimensions including flange: 25 5/8" x 26"  
Required ceiling opening: 24 1/2" x 24 1/2"

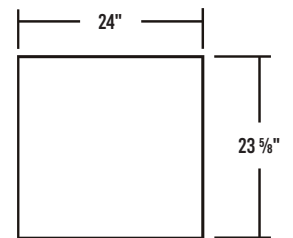
## CROSS SECTION



## 4' BACKPLATE



## 2' BACKPLATE



\* No Unused Holes or KOs on Backplates

## 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

- Baked white polyester finish
- Painted after fabrication
- 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



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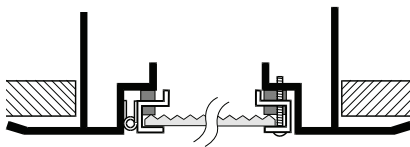


ORDERING INFORMATION: Additional Options Available. Visit [www.lalighting.com/resources](http://www.lalighting.com/resources) for more information

EXAMPLE: FCR220-4-4L-FSW-PA2-BPL1.5-DRDM-UNV-2/840											
SERIES	NOMINAL LED LUMENS	NOMINAL LENGTH	FINISH	DOOR FRAME	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROWS	CRI / CCT
<b>FCR220</b>										<b>2</b>	
<b>FCR220</b> • Class 100 Flanged Cleanroom Luminaire	2 - 2000 lm 4 - 4000 lm 6 - 6000 lm 8 - 8000 lm 12 - 12000 lm  <b>High Efficacy</b> 2HE - 2000 lm 4HE - 4000 lm 6HE - 6000 lm 8HE - 8000 lm	<b>2L</b> • 2'  <b>4L</b> • 4'	<b>AMF</b> • Antimicrobial Finish  *Leave blank if not specified	<b>FSW</b> • Flat Steel White Enamel Door Frame	<b>PA2</b> • Clear Prismatic Acrylic 0.125"  <b>FPA2</b> • Frosted Prismatic Acrylic 0.125"  <b>DRP8</b> • High-Impact Clear Prismatic Acrylic 0.187"  <b>FFWA</b> • Flat Frosted White Acrylic	<b>WL</b> • Wet Location  <b>TP</b> • Tamper Proof Screws (Hex Socket with Post)  <b>GSKN3</b> • Three-Way Gasket  *Leave blank if not specified	<b>BPL1.5</b> • 1500 lm emergency battery pack  *Leave blank if not specified	<b>DRDM</b> • 0-10V Dimming Driver	<b>UNV</b> • 120V-277V	<b>2</b> • Two LED Rows	<b>827</b> • 80+CRI / 2700K  <b>830</b> • 80+CRI / 3000K  <b>835</b> • 80+CRI / 3500K  <b>840</b> • 80+CRI / 4000K  <b>850</b> • 80+CRI / 5000K  <b>865</b> • 80+CRI / 6500K  <b>8TW</b> • 80+CRI Tunable White 2700K-6500K  <b>AM8<sup>1</sup></b> • PC Yellow 575 nm - 590 nm  <b>AM9<sup>1</sup></b> • PC Amber 586 nm - 593 nm  <b>AMT<sup>1</sup></b> • True Amber 585 nm - 595 nm
Standard options for FCR220 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit <a href="http://www.lalighting.com/resources">www.lalighting.com/resources</a> or contact customer service.											<b>90CRI Also available</b>  Contact customer service for additional CRI/CCT packages.
<sup>1</sup> 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 FCR220 - 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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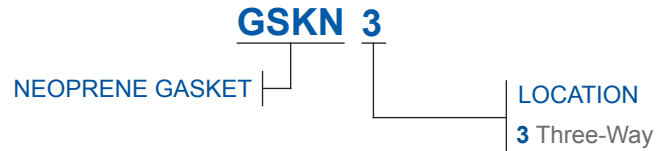
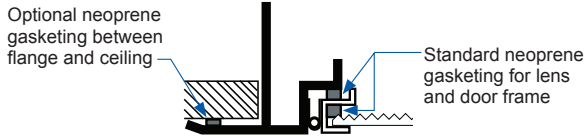
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## NEOPRENE GASKET

### 3-WAY

Additional gasket between flange and ceiling.

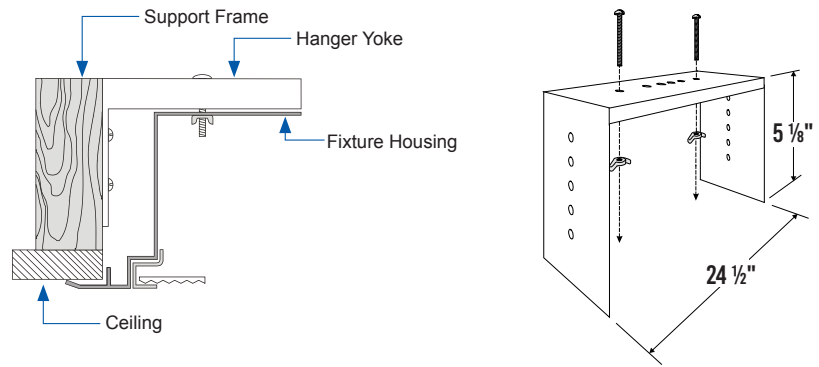


## MOUNTING HARDWARE

### HANGER YOKES: HS-24\_1/2

- 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.



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

Normal Temp	2'	LED LUMEN PACKAGE	NORMAL AMBIENT TEMPERATURE PRODUCT CODE	DELIVERED LUMENS	SYSTEM WATTS	LUMINAIRE EFFICACY	AMBIENT TEMP.	FLUORESCENT EQUIVALENT	IES FILES
		2000 Lumens (Nominal)	FCR220-2-2L-FSW-PA2-DRDM-UNV-2/840	1548	12.5	124.2 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F24T5HO 2x F17T8	*
		4000 Lumens (Nominal)	FCR220-4-2L-FSW-PA2-DRDM-UNV-2/840	3039	25.5	119.0 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F24T5HO 4x F17T8	*
		6000 Lumens (Nominal)	FCR220-6-2L-FSW-PA2-DRDM-UNV-2/840	4443	39.1	113.7 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F24T5HO 6x F17T8	*
		8000 Lumens (Nominal)	FCR220-8-2L-FSW-PA2-DRDM-UNV-2/840	5889	53.1	111.0 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F54T5HO 4x F24T5HO	*
		12000 Lumens (Nominal)	FCR220-12-2L-FSW-PA2-DRDM-UNV-2/840	8880	78.0	113.8 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F54T5HO 6x F24T5HO	*

Normal Temp High Efficacy	2'	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)	FCR220-2HE-2L-FSW-PA2-DRDM-UNV-2/840	1574	12.3	128.0 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F24T5HO 2x F17T8	*
		4000 Lumens (Nominal)	FCR220-4HE-2L-FSW-PA2-DRDM-UNV-2/840	3097	24.9	124.5 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F24T5HO 4x F17T8	*
		6000 Lumens (Nominal)	FCR220-6HE-2L-FSW-PA2-DRDM-UNV-2/840	4598	37.8	121.7 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F24T5HO 6x F17T8	*
		8000 Lumens (Nominal)	FCR220-8HE-2L-FSW-PA2-DRDM-UNV-2/840	6162	50.9	121.0 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F54T5HO 4x F24T5HO	*



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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)	FCR220-2-4L-FSW-PA2-DRDM-UNV-2/840	1682	12.4	136.2 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F32T8	*
	4000 Lumens (Nominal)	FCR220-4-4L-FSW-PA2-DRDM-UNV-2/840	3353.2	24.9	134.4 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F54T5HO 2x F32T8	*
	6000 Lumens (Nominal)	FCR220-6-4L-FSW-PA2-DRDM-UNV-2/840	4978	37.8	131.8 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F32T8	*
	8000 Lumens (Nominal)	FCR220-8-4L-FSW-PA2-DRDM-UNV-2/840	6581	50.9	129.2 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F54T5HO 4x F32T8	*
	12000 Lumens (Nominal)	FCR220-12-4L-FSW-PA2-DRDM-UNV-2/840	9599	78.0	123.1 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)	FCR220-2HE-4L-FSW-PA2-DRDM-UNV-2/840	1741	12.2	142.3 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F32T8	*
	4000 Lumens (Nominal)	FCR220-4HE-4L-FSW-PA2-DRDM-UNV-2/840	3407	24.6	138.6 lm/W	-20°C / 35°C (-4°F / 95°F)	1x F54T5HO 2x F32T8	*
	6000 Lumens (Nominal)	FCR220-6HE-4L-FSW-PA2-DRDM-UNV-2/840	4732	34.6	136.8 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F32T8	*
	8000 Lumens (Nominal)	FCR220-8HE-4L-FSW-PA2-DRDM-UNV-2/840	6377	47.2	135.2 lm/W	-20°C / 35°C (-4°F / 95°F)	2x F54T5HO 4x F32T8	*
	12000 Lumens (Nominal)	FCR220-12HE-4L-FSW-PA2-DRDM-UNV-2/840	9512	72.8	130.6 lm/W	-20°C / 35°C (-4°F / 95°F)	3x F54T5HO 6x F32T8	*

NOTE:

System data as of 1/7/25 (K-Boards).  
Luminaire efficiency: 2x2 - 72.6%, 2x4 - 78.6%  
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.



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