

CLEAN ROOM LED

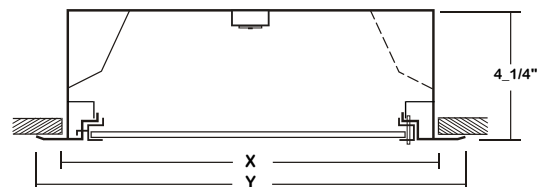
FCR710 (1X4) SERIES

CLASS 1000/10000 TRIM FLANGE CLEAN ROOM LUMINAIRE



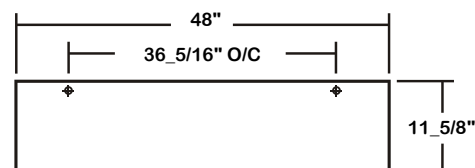
CLASS 1000/10000 RECESSED MOUNTED LED LUMINAIRE

DIMENSIONS



Ceiling Opening: X - 12_1/2" x 48_1/2"
Overall Width By Length: Y - 13_5/8" x 50"

⌀ 7/8" K.O.



APPLICATIONS

- Clean Room, Sealed Ceiling Areas, Commercial

FEATURES

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

OPTIONS

- Full customization available upon request
- Additional lumen packages and color temperatures available
- Controls and sensors available
- Wireless control options available
- Variety of lenses available
- Emergency battery pack available
- Antimicrobial finished housing and door frame available
- Tamper proof screws available
- Hanger yokes available

SPECIFICATIONS

CONSTRUCTION

- Class 1000/10000 / ISO Class 6 equivalent / ISO Class 7 equivalent
- 22 ga. cold rolled steel welded housing
- All parts fitted and sealed
- 20 ga. cold rolled steel door frame secured by T-hinges and positive spring loaded latches
- Door frame sealed with neoprene gasket

FINISH

- Baked white powder coated finish / welded and painted after fabrication / minimum reflectance 90%

OPTICAL

- Inverted clear prismatic acrylic lens (nominal 0.125) standard

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) $\leq 20\%$

LISTING

- UL USA and Canada listed / suitable for damp locations

WARRANTY

- 5-year limited warranty

ORDERING INFORMATION

EXAMPLE: FCR710-4-4L-FSW-PA2-TP-BPL1.5-DRDM-UNV-1/840

SERIES	LED LUMEN PACKAGE	EFFICACY	NOMINAL LENGTH	FINISH	DOOR FRAME	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT
FCR710			4L		FSW				DRDM	UNV		
FCR710 Class 1000 / 10000 Trim Flange Clean Room LED Luminaire	2 Nom. 2000 Lumens 4 Nom. 4000 Lumens 6 Nom. 6000 Lumens 8 Nom. 8000 Lumens 12 Nom. 12000 Lumens <i>*Additional Lumen Packages Available</i>	(Blank) Standard HE High Efficacy (Only 2000 / 4000 / 6000 / 12000 lumens Systems)	4L 1' x 4'	AMF Antimicrobial Finished Housing and Door Frame <i>*Leave Blank if Not Specified</i>	FSW Flat Steel White Enamel Door Frame	PA2 Clear Prismatic Acrylic 0.125 Nominal FPA2 Frosted Prismatic Acrylic 0.125 Nominal	TP Tamper Proof Screws (Hex Socket with Post) <i>*Leave Blank if Not Specified</i> <u>Additional Mechanical Options</u>	BPL1.5 1500lm Emergency Battery Pack MSxx Motion Sensor WLC(LED RU) Wireless Control <i>*Leave Blank if Not Specified</i> <u>Additional Electrical Options</u>	DRDM 0-10V Dimming Driver	UNV 120V-277V	1 One LED Row (Only 2000 / 4000 / 6000 / 8000 lumens Systems) 2 Two LED Rows (Only 12000 lumens System)	830 80+CRI / 3000K Color Temp. 835 80+CRI / 3500K Color Temp. 840 80+CRI / 4000K Color Temp. 850 80+CRI / 5000K Color Temp. <i>*Additional Color Temp. Available</i>
Standard options for FCR710 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit www.lalighting.com/resources or contact customer service.												

SYSTEM DATA

THESE ARE THE MOST POPULAR LUMEN PACKAGES. PLEASE CONSULT FACTORY FOR ADDITIONAL SYSTEM DATA.

NOMINAL SIZE	LED LUMEN PACKAGE	OPTICAL OPTION	CRI / CCT	DELIVERED LUMENS	SYSTEM WATTS	LUMINAIRE EFFICACY	FLUORESCENT / CFL EQUIVALENT	IES FILES
1' x 4'	2000 lm	PA2	840	2036 lm	15.7 W	129.5 lm/W	1-F32T8	*
	2000HE lm	PA2	840	1932 lm	12.7 W	152.2 lm/W	1-F32T8	*
	4000 lm	PA2	840	2926 lm	33.1 W	88.4 lm/W	2-F32T8, 1-F54T5HO	LA-T3173-3
	4000HE lm	PA2	840	3845 lm	25.9 W	148.3 lm/W	2-F32T8, 1-F54T5HO	*
	6000 lm	PA2	840	5559 lm	52.3 W	106.2 lm/W	3-F32T8	*
	6000HE lm	PA2	840	5705 lm	39.6 W	143.9 lm/W	3-F32T8	*
	8000 lm	PA2	840	7509 lm	53.8 W	139.6 lm/W	4-F32T8, 2-F54T5HO	*
	12000 lm	PA2	840	11081 lm	104.6 W	105.9 lm/W	6-F32T8, 3-F54T5HO	*
	12000HE lm	PA2	840	11371 lm	79.3 W	143.5 lm/W	6-F32T8, 3-F54T5HO	*

NOTE:

System data above 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 from -20°C to 35°C.

Additional lumen packages and color temperatures available.

OPTICAL OPTIONS

STANDARD LENSES FOR FCR710

PA2	Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
FPA2	Frosted Prismatic Acrylic, Nom. 0.125 OA Thickness

ADDITIONAL AVAILABLE LENSES

(Not all optics suitable for fixture. Please consult factory to ensure selected optical option suits fixture. Please consult factory regarding any optical options not shown)

EXTRUDED PRISMATIC PATTERNS

PA	Clear Prismatic Acrylic, No Thickness Specified, Female Prisms 3/16 Square Base
PA3	Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
PA8	Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
P15	Clear Prismatic Acrylic, Nom. 0.200 OA Thickness, Female Prisms 3/8 Square Base
P195	Clear Prismatic Acrylic, Nom. 0.150 OA Thickness, Male Conical Prisms 3/16 Square Base
P198	Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Male Conical Prisms 3/16 Square Base
PWA2	White Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
P3E	3E Batwing Pattern Lens
P195RF	Clear Prismatic Acrylic, 19 Shunts Radio Frequencies To Ground, Nom. 0.150 OA Thickness
PA2UV	Clear Prismatic Acrylic, UV Blocking, Nom. 0.125 OA Thickness

FLAT DIFFUSERS

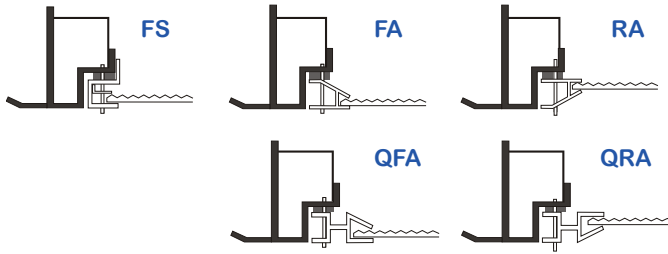
FWA	Flat White Acrylic, No Thickness Specified, Stippled Finish	FWA2	Flat White Acrylic, Nom. 0.125 Thickness, Stippled Finish
FFA	Frosted Flat Acrylic, No Thickness Specified	FFA2	Frosted Flat Acrylic, Nom. 0.125 Thickness
CA8	Clear Acrylic, Nom. 0.187 OA Thickness	CA	Clear Acrylic, No Thickness Specified
		CA2	Clear Acrylic, Nom. 0.125 OA Thickness

HIGH IMPACT

VL25	Clear Polycarbonate, Nom. 0.125 Thickness with 0.125 Clear Prismatic Acrylic Overlay
VL37	Clear Polycarbonate, Nom. 0.250 Thickness with 0.125 Clear Prismatic Acrylic Overlay
CPC2	Clear Polycarbonate, Nom. 0.125 OA Thickness
CPC8	Clear Polycarbonate, Nom. 0.187 OA Thickness
PPC8	Clear Prismatic Polycarbonate, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
DRP3	High Impact Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
DRP2	High Impact Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
DRP8	High Impact Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
PPC2	Clear Prismatic Polycarbonate, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base

DOOR FRAME

CROSS SECTION



FEATURES

- Inverted Lens
- T-Hinges with Positive Spring Loaded Latches
- Sealed with Neoprene Gasket
- Light Stop Covers Installed
- Internal Frame Rail

FS W

FINISHES

- W** White Enamel
- B** Black Enamel
- N** Natural Anodized Aluminum
(Only FA / RA / QFA / QRA styles)

STYLES

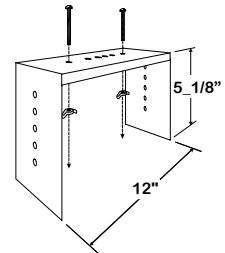
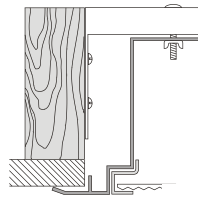
- FS** Flat Steel (with internal frame rail)
- FA** Flat Extruded Aluminum
- RA** 5/8" Regressed Extruded Aluminum
- QFA** Flat Extruded Aluminum-Black Reveal
- QRA** 1/2" Regressed Extruded Aluminum-Black Reveal

ACCESSORIES

HS-12

- Hanger Yokes
- Compatible with all types of recessed flanged fixtures
- 1/4 - 20 x 3" machine screws locate into knockout on back of fixture housing
- Two (2) per fixture

Note: Must drill own holes. Caulking compound should be used to seal the holes.



CLEAN ROOM LED

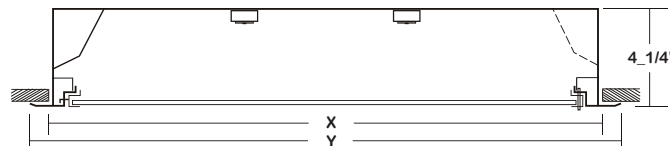
FCR720 (2X4) SERIES (2X2 AVAILABLE)

CLASS 1000/10000 TRIM FLANGE CLEAN ROOM LUMINAIRE

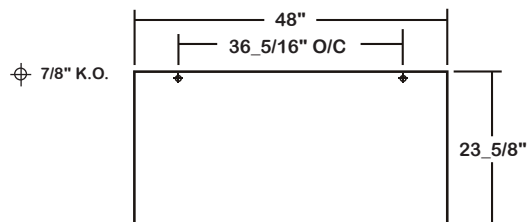


CLASS 1000/10000 RECESSED MOUNTED LED LUMINAIRE

DIMENSIONS



Ceiling Opening X - 24_1/2" X 48_1/2"
Overall Width By Length Y - 25_5/8" X 50"



APPLICATIONS

- Clean Room, Sealed Ceiling Areas, Commercial

FEATURES

- 0-10V dimming driver standard (See [DRIVER OPTIONS](#) for other dimming types)
- Supports California Title 24 compliance

OPTIONS

- Full customization available upon request
- Additional lumen packages and color temperatures available
- Controls and sensors available (See [SENSOR OPTIONS](#) for controls and sensors)
- Wireless control options available (See [SENSOR OPTIONS](#) for wireless controls)
- Variety of lenses available (See [OPTICAL OPTIONS](#) for lenses)
- Emergency battery pack available (See [BATTERY PACK OPTIONS](#) for battery pack options)
- Antimicrobial finished housing and door frame available
- Tamper proof screws available
- Hanger yokes available (See [ACCESSORIES](#) for details)

SPECIFICATIONS

CONSTRUCTION

- Class 1000/10000 / ISO Class 6 equivalent / ISO Class 7 equivalent
- 22 ga. cold rolled steel welded housing
- All parts fitted and sealed
- 20 ga. cold rolled steel door frame secured by T-hinges and positive spring loaded latches
- Door frame sealed with neoprene gasket

FINISH

- Baked white powder coated finish / welded and painted after fabrication / minimum reflectance 90%

OPTICAL

- Inverted clear prismatic acrylic lens (nominal 0.125) standard

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) $\leq 20\%$

LISTING

- UL USA and Canada listed / suitable for damp locations

WARRANTY

- 5-year limited warranty 10-year limited warranty available

ORDERING INFORMATION

EXAMPLE: FCR720-4-4L-FSW-PA2-TP-BPL1.5-DRDM-UNV-2/840

SERIES	LED LUMEN PACKAGE	EFFICACY	NOMINAL LENGTH	FINISH	DOOR FRAME	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT
FCR720			4L		FSW				DRDM	UNV	2	
FCR720 Class 1000 / 10000 Trim Flange Clean Room LED Luminaire	2 Nom. 2000 Lumens 4 Nom. 4000 Lumens 6 Nom. 6000 Lumens 8 Nom. 8000 Lumens 12 Nom. 12000 Lumens *Additional Lumen Packages Available	(Blank) Standard HE High Efficacy (Only 2000 / 4000 / 6000 / 12000 lumens Systems)	4L 2' x 4'	AMF Antimicrobial Finished Housing and Door Frame *Leave Blank if Not Specified	FSW Flat Steel White Enamel Door Frame See DOOR FRAME for Options	PA2 Clear Prismatic Acrylic 0.125 Nominal FPA2 Frosted Prismatic Acrylic 0.125 Nominal See OPTICAL OPTIONS for Options	TP Tamper Proof Screws (Hex Socket with Post) *Leave Blank if Not Specified Additional Mechanical Options	BPL1.5 Emergency Battery Pack, Nom. 1500 lm See BATTERY PACK OPTIONS for Options MSxx Motion Sensor WLC(LED RU) Wireless Control See SENSOR OPTIONS for Options *Leave Blank if Not Specified Additional Electrical Options	DRDM 0-10V Dimming Driver See DRIVER OPTIONS for Options	UNV 120V-277V See DRIVER OPTIONS for Options	2 Two LED Rows	830 80+CRI / 3000K Color Temp. 835 80+CRI / 3500K Color Temp. 840 80+CRI / 4000K Color Temp. 850 80+CRI / 5000K Color Temp. *Additional CRI & Color Temp

SYSTEM DATA

THESE ARE THE MOST POPULAR LUMEN PACKAGES. PLEASE CONSULT FACTORY FOR ADDITIONAL SYSTEM DATA.

LED LUMEN PACKAGE	NORMAL AMBIENT TEMPERATURE PRODUCT CODE	DELIVERED LUMENS	SYSTEM WATTS	LUMINAIRE EFFICACY	AMBIENT TEMP.	FLUORESCENT EQUIVALENT	IES FILES
2000 Lumens (Nominal)	FCR720-2-4L-FSW-PA2-DRDM-UNV-2/840	1763 lm	15.2 W	116.0 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	FCR720-4-4L-FSW-PA2-DRDM-UNV-2/840	3447 lm	31.3 W	110.1 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	LA-T3174-3
6000 Lumens (Nominal)	FCR720-6-4L-FSW-PA2-DRDM-UNV-2/840	4903 lm	45.5 W	107.9 lm/W	-20°C / 35°C	3-F32T8	LA-T3395-3
8000 Lumens (Nominal)	FCR720-8-4L-FSW-PA2-DRDM-UNV-2/840	6587 lm	66.7 W	98.8 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	*
12000 Lumens (Nominal)	FCR720-12-4L-FSW-PA2-DRDM-UNV-2/840	9419 lm	104.1 W	90.0 lm/W	-20°C / 35°C	6-F32T8, 3-F54T5HO	*

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)	FCR720-2HE-4L-FSW-PA2-DRDM-UNV-2/840	1616 lm	12.6 W	128.7 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	FCR720-4HE-4L-FSW-PA2-DRDM-UNV-2/840	3272 lm	25.4 W	128.9 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	*
6000 Lumens (Nominal)	FCR720-6HE-4L-FSW-PA2-DRDM-UNV-2/840	4904 lm	38.5 W	127.4 lm/W	-20°C / 35°C	3-F32T8	*
8000 Lumens (Nominal)	FCR720-8HE-4L-FSW-PA2-DRDM-UNV-2/840	6513 lm	51.8 W	125.6 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	*
12000 Lumens (Nominal)	FCR720-12HE-4L-FSW-PA2-DRDM-UNV-2/840	9663 lm	79.3 W	121.9 lm/W	-20°C / 35°C	6-F32T8, 3-F54T5HO	*

NOTE:

System data above 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 from -20°C to 35°C.

Additional lumen packages and color temperatures available.

OPTICAL OPTIONS

STANDARD LENSES FOR FCR720

PA2	Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
FPA2	Frosted Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base

ADDITIONAL AVAILABLE LENSES

(Not all optics suitable for fixture. Please consult factory to ensure selected optical option suits fixture. Please consult factory regarding any optical options not shown)

EXTRUDED PRISMATIC PATTERNS - *Please consult factory for availability and suitability for selected fixture type.*

* FPA2	Frosted Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
* PA	Clear Prismatic Acrylic, No Thickness Specified, Female Prisms 3/16 Square Base
* PA2	Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
* PA3	Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
* PA8	Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
P15	Clear Prismatic Acrylic, Nom. 0.200 OA Thickness, Female Prisms 3/8 Square Base
P195	Clear Prismatic Acrylic, Nom. 0.150 OA Thickness, Male Conical Prisms 3/16 Square Base
P3E	3E Batwing Pattern Lens
P195RF	Clear Prismatic Acrylic, 19 Shunts Radio Frequencies to Ground, Nom. 0.150 OA Thickness
PA2RF	Clear Prismatic Acrylic, 12 Shunts Radio Frequencies to Ground, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base

* Normal stock item

FLAT SMOOTH LENSES - *Please consult factory for availability and suitability for selected fixture type.*

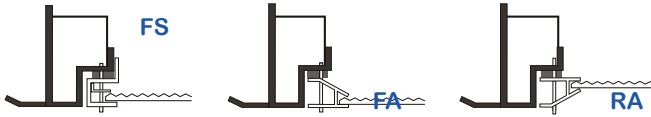
* FFA	Frosted Flat White Acrylic, No Thickness Specified	CA	Clear Acrylic, No Thickness Specified
FFA2	Frosted Flat Acrylic, Nom. 0.125 Thickness	CA2	Clear Acrylic, Nom. 0.125 OA Thickness
FWA	Frosted White Stipple Finish, Nom. 0.080 Thickness	CA8	Clear Acrylic, Nom. 0.187 OA Thickness

* Normal stock item

HIGH IMPACT - *Please consult factory for availability and suitability for selected fixture type.*

VL25	Clear Polycarbonate, Nom. 0.125 Thickness with 0.125 Clear Prismatic Acrylic Overlay
VL37	Clear Polycarbonate, Nom. 0.250 Thickness with 0.125 Clear Prismatic Acrylic Overlay
CPC2	Clear Polycarbonate, Nom. 0.125 OA Thickness
CPC8	Clear Polycarbonate, Nom. 0.187 OA Thickness
PPC2	Clear Prismatic Polycarbonate, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
PPC8	Clear Prismatic Polycarbonate, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
* DRP2	High Impact Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
DRP3	High Impact Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
* DRP8	High Impact Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base

* Normal stock item

DOOR FRAME**CROSS SECTION****FEATURES**

- Inverted Lens
- T-Hinges with Positive Spring Loaded Latches
- Sealed with Neoprene Gasket
- Light Stop Covers Installed
- Internal Frame Rail

FS W**FINISHES**

- W** White Enamel
- B** Black Enamel
- N** Natural Anodized Aluminum (Only FA / RA styles)

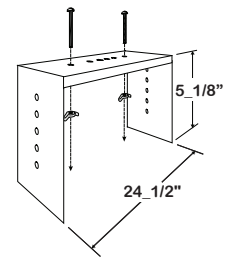
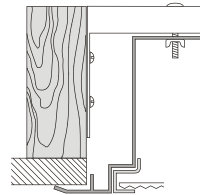
STYLES

- FS** Flat Steel (with internal frame rail)
- FA** Flat Extruded Aluminum
- RA** 5/8" Regressed Extruded Aluminum

ACCESSORIES**HS-24_1/2**

- Hanger Yokes
- Compatible with all types of recessed flanged fixtures
- 1/4 - 20 x 3" machine screws locate into knockout on back of fixture housing
- Two (2) per fixture

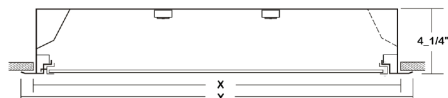
Note: Must drill own holes. Caulking compound should be used to seal the holes.



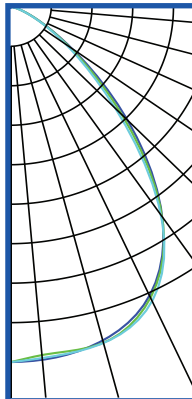
PHOTOMETRIC DATA - FCR720 SERIES

FCR720-4-4L-FSW-PA2-DRDM-UNV-2/840

TEST NO. = LA-T3174-3
 LED TYPE = 48 LED MODULE
 NO. OF MODULE = 4
 SYSTEM WATT (W) = 31.3
 CRI ≥ 80
 L70(Hrs.) ≥ 50,000
 PHOTOMETRY TYPE = C



2 X 4
 Ceiling Opening X - 24_1/2" X 48_1/2"
 Overall Width By Length Y - 25_5/8" X 50"



CANDLEPOWER

ANGLE	END	45	CROSS
0	1872	1872	1872
5	1867	1841	1857
15	1820	1832	1833
25	1679	1691	1710
35	1350	1349	1339
45	845	804	757
55	380	363	346
65	134	131	126
75	37	36	36
85	5	5	5
90	0	0	0
95	0	0	0
115	0	0	0
125	0	0	0
135	0	0	0
145	0	0	0
155	0	0	0
165	0	0	0
175	0	0	0
180	0	0	0

ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1479	32.9	42.9
0-40	2325	51.8	67.4
0-60	3273	73.0	94.9
0-90	3447	76.8	100.0
90-120	.04	0.0	0.0
90-150	.04	0.0	0.0
90-180	.04	0.0	0.0
0-180	3447	76.8	100.00

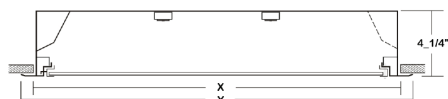
Luminaire Output= 3447 lumens
 Luminaire Efficacy = 110.1 lm/W

SPACING CRITERION

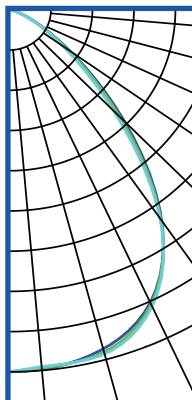
ALONG	ACROSS
1.19	1.20

FCR720-6-4L-FSW-PA2-DRDM-UNV-2/840

TEST NO. = LA-T3395-1
 LED TYPE = 48 LED MODULE
 NO. OF MODULE = 4
 SYSTEM WATT (W) = 45.5
 CRI ≥ 80
 L70(Hrs.) ≥ 50,000
 PHOTOMETRY TYPE = C



2 X 4
 Ceiling Opening X - 24_1/2" X 48_1/2"
 Overall Width By Length Y - 25_5/8" X 50"



CANDLEPOWER

ANGLE	END	45	CROSS
0	2707	2707	2707
5	2698	2689	2679
15	2625	2650	2664
25	2416	2430	2447
35	1924	1914	1906
45	1178	1133	1071
55	533	505	478
65	190	183	176
75	52	52	50
85	7	7	6
90	0	0	0
95	0	0	0
115	0	0	0
125	0	0	0
135	0	0	0
145	0	0	0
155	0	0	0
165	0	0	0
175	0	0	0
180	0	0	0

ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2132	34	43
0-40	3335	53	68
0-60	4662	75	95
0-90	4904	79	100
90-120	0	0	0
90-150	0	0	0
90-180	0	0	0
0-180	4904	79	100

Luminaire Output= 4903.7 lumens
 Luminaire Efficacy = 107.8 lm/W

SPACING CRITERION

ALONG	ACROSS
1.19	1.19

CLEAN ROOM LED

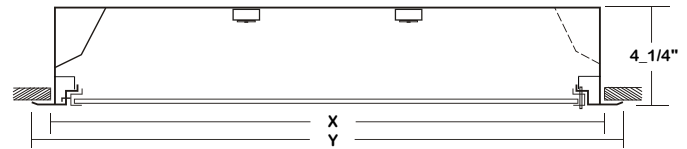
FCR720 (2X2) SERIES (2X4 AVAILABLE)

CLASS 1000/10000 TRIM FLANGE CLEAN ROOM LUMINAIRE

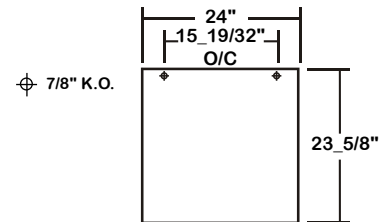


CLASS 1000/10000 RECESSED MOUNTED LED LUMINAIRE

DIMENSIONS



Ceiling Opening X - 24_1/2" X 24_1/2"
Overall Width By Length Y - 25_5/8" X 26"



APPLICATIONS

- Clean Room, Sealed Ceiling Areas, Commercial

FEATURES

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

OPTIONS

- Full customization available upon request
- Additional lumen packages and color temperatures available
- Controls and sensors available
- Wireless control options available
- Variety of lenses available
- Emergency battery pack available
- Antimicrobial finished housing and door frame available
- Tamper proof screws available
- Hanger yokes available

SPECIFICATIONS

CONSTRUCTION

- Class 1000/10000 / ISO Class 6 equivalent / ISO Class 7 equivalent
- 22 ga. cold rolled steel welded housing
- All parts fitted and sealed
- 20 ga. cold rolled steel door frame secured by T-hinges and positive spring loaded latches
- Door frame sealed with neoprene gasket

FINISH

- Baked white powder coated finish / welded and painted after fabrication / minimum reflectance 90%

OPTICAL

- Inverted clear prismatic acrylic lens (nominal 0.125) standard

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) $\leq 20\%$

LISTING

- UL USA and Canada listed / suitable for damp locations

WARRANTY

- 5-Year limited warranty standard. 10-Year limited warranty also available

ORDERING INFORMATION

EXAMPLE: FCR720-4-2L-FSW-PA2-TP-BPL1.5-DRDM-UNV-2/840

SERIES	LED LUMEN PACKAGE	EFFICACY	NOMINAL LENGTH	FINISH	DOOR FRAME	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT
FCR720			2L		FSW				DRDM	UNV		
FCR720 Class 1000 / 10000 Trim Flange Clean Room LED Luminaire	2 Nom. 2000 Lumens 3 Nom. 3000 Lumens 4 Nom. 4000 Lumens 6 Nom. 6000 Lumens 8 Nom. 8000 Lumens 12 Nom. 12000 Lumens *Additional Lumen Packages Available	(Blank) Standard HE High Efficacy (Only 2000 / 3000 / 4000 / 6000 / 12000 lumens Systems)	2L 2' x 2'	AMF Antimicrobial Finished Housing and Door Frame *Leave Blank if Not Specified	FSW Flat Steel White Enamel Door Frame	PA2 Clear Prismatic Acrylic 0.125 Nominal FPA2 Frosted Prismatic Acrylic 0.125 Nominal	TP Tamper Proof Screws (Hex Socket with Post) *Leave Blank if Not Specified <u>Additional Mechanical Options</u>	BPL1.5 1500lm Emergency Battery Pack MSxx Motion Sensor WLC(LED RU) Wireless Control *Leave Blank if Not Specified <u>Additional Electrical Options</u>	DRDM 0-10V Dimming Driver	UNV 120V-277V	2 Two LED Rows (Only 2000 / 3000 / 4000 / 6000 / 8000 lumens Systems) 4 Four LED Rows (Only 12000 lumens System)	830 80+CRI / 3000K Color Temp. 835 80+CRI / 3500K Color Temp. 840 80+CRI / 4000K Color Temp. 850 80+CRI / 5000K Color Temp. *Additional Color Temp. Available
Standard options for FCR720 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit www.lalighting.com/resources or contact customer service.												

SYSTEM DATA

THESE ARE THE MOST POPULAR LUMEN PACKAGES. PLEASE CONSULT FACTORY FOR ADDITIONAL SYSTEM DATA.

NOMINAL SIZE	LED LUMEN PACKAGE	OPTICAL OPTION	CRI / CCT	DELIVERED LUMENS	SYSTEM WATTS	LUMINAIRE EFFICACY	FLUORESCENT / HID / CFL EQUIVALENT	IES FILES
2' x 2'	2000 lm	PA2	840	1627 lm	15.7 W	103.5 lm/W	2-F17T8, 1-F24T5HO, 1-BX40	*
	2000HE lm	PA2	840	1544 lm	12.7 W	121.6 lm/W	2-F17T8, 1-F24T5HO, 1-BX40	*
	3000 lm	PA2	840	2386 lm	24.3 W	98.1 lm/W	3-F17T8, 1-BX55	*
	3000HE lm	PA2	840	2314 lm	19.2 W	120.2 lm/W	3-F17T8, 1-BX55	*
	4000 lm	PA2	840	3108 lm	33.1 W	93.9 lm/W	4-F17T8, 2-F24T5HO, 100 W (MH), 2-BX40	LA-T3176-3
	4000HE lm	PA2	840	3073 lm	25.9 W	118.5 lm/W	4-F17T8, 2-F24T5HO, 100 W (MH), 2-BX40	*
	6000 lm	PA2	840	4444 lm	52.3 W	84.9 lm/W	6-F17T8, 3-F24T5HO, 2-BX55	*
	6000HE lm	PA2	840	4559 lm	39.6 W	115.0 lm/W	6-F17T8, 3-F24T5HO, 2-BX55	*
	8000 lm	PA2	840	6001 lm	53.8 W	111.6 lm/W	4-F24T5HO, 175 W (MH), 4-BX40	*
	12000 lm	PA2	840	9122 lm	79.3 W	115.1 lm/W	6-F24T5HO, 250 W (MH), 4-BX55	*
	12000HE lm	PA2	840	8892 lm	104.6 W	85.0 lm/W	6-F24T5HO, 250 W (MH), 4-BX55	*

NOTE:

System data above 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 from -20°C to 35°C.

Additional lumen packages and color temperatures available.

OPTICAL OPTIONS

STANDARD LENSES FOR FCR720

PA2	Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
FPA2	Frosted Prismatic Acrylic, Nom. 0.125 OA Thickness

ADDITIONAL AVAILABLE LENSES

(Not all optics suitable for fixture. Please consult factory to ensure selected optical option suits fixture. Please consult factory regarding any optical options not shown)

EXTRUDED PRISMATIC PATTERNS

PA	Clear Prismatic Acrylic, No Thickness Specified, Female Prisms 3/16 Square Base
PA3	Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
PA8	Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
P15	Clear Prismatic Acrylic, Nom. 0.200 OA Thickness, Female Prisms 3/8 Square Base
P195	Clear Prismatic Acrylic, Nom. 0.150 OA Thickness, Male Conical Prisms 3/16 Square Base
P198	Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Male Conical Prisms 3/16 Square Base
PWA2	White Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
P3E	3E Batwing Pattern Lens
P195RF	Clear Prismatic Acrylic, 19 Shunts Radio Frequencies To Ground, Nom. 0.150 OA Thickness
PA2UV	Clear Prismatic Acrylic, UV Blocking, Nom. 0.125 OA Thickness

FLAT DIFFUSERS

FWA	Flat White Acrylic, No Thickness Specified, Stippled Finish	FWA2	Flat White Acrylic, Nom. 0.125 Thickness, Stippled Finish
FFA	Frosted Flat Acrylic, No Thickness Specified	FFA2	Frosted Flat Acrylic, Nom. 0.125 Thickness
CA8	Clear Acrylic, Nom. 0.187 OA Thickness	CA	Clear Acrylic, No Thickness Specified
		CA2	Clear Acrylic, Nom. 0.125 OA Thickness

HIGH IMPACT

VL25	Clear Polycarbonate, Nom. 0.125 Thickness with 0.125 Clear Prismatic Acrylic Overlay
VL37	Clear Polycarbonate, Nom. 0.250 Thickness with 0.125 Clear Prismatic Acrylic Overlay
CPC2	Clear Polycarbonate, Nom. 0.125 OA Thickness
CPC8	Clear Polycarbonate, Nom. 0.187 OA Thickness
PPC8	Clear Prismatic Polycarbonate, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
DRP3	High Impact Clear Prismatic Acrylic, Min. 0.125 OA Thickness, Female Prisms 3/16 Square Base
DRP2	High Impact Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
DRP8	High Impact Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
PPC2	Clear Prismatic Polycarbonate, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base

DOOR FRAME

CROSS SECTION



FEATURES

- Inverted Lens
- T-Hinges with Positive Spring Loaded Latches
- Sealed with Neoprene Gasket
- Light Stop Covers Installed
- Internal Frame Rail

FS W

FINISHES

- W** White Enamel
- B** Black Enamel
- N** Natural Anodized Aluminum (Only FA / RA styles)

STYLES

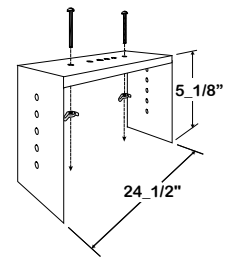
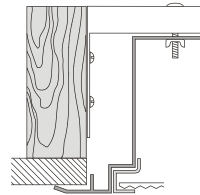
- FS** Flat Steel (with internal frame rail)
- FA** Flat Extruded Aluminum
- RA** 5/8" Regressed Extruded Aluminum

ACCESSORIES

HS-24_1/2

- Hanger Yokes
- Compatible with all types of recessed flanged fixtures
- 1/4 - 20 x 3" machine screws locate into knockout on back of fixture housing
- Two (2) per fixture

Note: Must drill own holes. Caulking compound should be used to seal the holes.



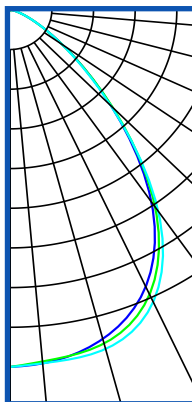
PHOTOMETRIC DATA - FCR720 SERIES

FCR720-4-2L-PA2-DRDM-UNV-2/840

TEST NO.=LA-T3176-3
 LED TYPE=48 LED MODULE
 NO. OF MODULE=2
 SYSTEM WATT (W)=33.1
 CRI ≥ 80
 L70(Hrs.) ≥ 50,000
 PHOTOMETRY TYPE=C



2 X 2
 Ceiling Opening X - 24_1/2" X 24_1/2"
 Overall Width By Length Y - 25_5/8" X 26"



CANDLEPOWER

ANGLE	END	45	CROSS
0	1797	1797	1797
5	1787	1777	1786
15	1715	1738	1767
25	1537	1581	1622
35	1181	1211	1237
45	686	695	683
55	307	304	301
65	109	110	110
75	31	30	31
85	4	4	4
90	0	0	0
95	0	0	0
115	0	0	0
125	0	0	0
135	0	0	0
145	0	0	0
155	0	0	0
165	0	0	0
175	0	0	0
180	0	0	0

ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1395	32.5	44.8
0-40	2155	50.3	69.3
0-60	2963	69.1	95.3
0-90	3108	72.5	100.0
90-120	.03	0.0	0.0
90-150	.03	0.0	0.0
90-180	.03	0.0	0.0
0-180	3108	72.5	100.00

Luminaire Output= 3108 lumens

Luminaire Efficacy = 93.9 lm/W

SPACING CRITERION

ALONG	ACROSS
1.13	1.18