



CLEAN ROOM LED

GCR220 (2X2) SERIES (2X4 AVAILABLE)

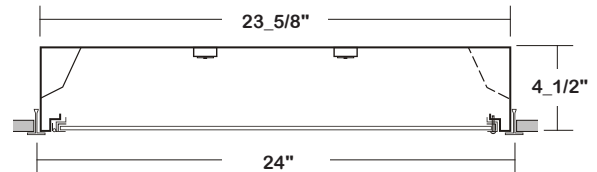
CLASS 100 CLEAN ROOM GRID LUMINAIRE

DATE	
JOB	

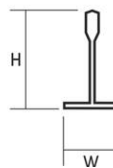
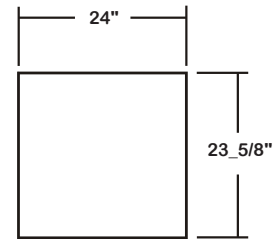
WWW.LALIGHTING.COM
626-454-8300

CLASS 100 GRID MOUNTED LED LUMINAIRE FOR 1" OR 1_1/2" WIDE INVERTED T-BAR CEILINGS

DIMENSIONS



*No Unused Holes And KO's On Backplate.



T-BAR SIZING

WIDTH	HEIGHT
15/16"	1_1/2"
1_1/2"	1_1/2"

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

- Wet location available (UL listed with sprinkler test)
- 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

SPECIFICATIONS

CONSTRUCTION

- Class 100 / ISO Class 5 equivalent
- 22 ga. cold rolled steel welded housing
- All parts fitted and sealed, no unused holes or knockouts
- 20 ga. 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

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



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Revised 08-06-18

ORDERING INFORMATION

EXAMPLE: GCR220-4-2L-FSW-PA2-WL-BPL10-1DRDM-UNV-2/840

SERIES	LED LUMEN PACKAGE	EFFICACY	NOMINAL LENGTH	FINISH	DOOR FRAME	OPTICAL	MECHANICAL	ELECTRICAL	DRIVER	VOLTAGE	# OF LED ROW	CRI / CCT
GCR220			2L		FSW				1DRDM	UNV		
GCR220 Class 100 Clean Room Grid 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 See DOOR FRAME for Options	PA2 Clear Prismatic Acrylic 0.125 Nominal DRP8 High Impact Clear Prismatic Acrylic 0.187 Nominal FPA2 Frosted Prismatic Acrylic 0.125 Nominal See OPTICAL OPTIONS for Options	WL Wet Location TP Tamper Proof Screws (Hex Socket with Post) *Leave Blank if Not Specified Additional Mechanical Options	BPL10 Emergency Battery Pack, Constant 10W 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	1DRDM 0-10V One Dimming Driver See DRIVER OPTIONS for Options	UNV 120V-277V See DRIVER OPTIONS for Options	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

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
	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.

PERFORMANCE DATA

[VIEW PHOTOMETRICS](#)



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SENSOR OPTIONS

HIGH FREQUENCY - INTERNALLY MOUNTED BEHIND FIXTURE LENS

MSHPC - Motion Sensor High Frequency (Microwave) with Photocell Option

- Super high frequency motion sensor (also known as microwave sensor) which detects movement when installed behind low density fixture materials, such as polycarbonate, acrylic and glass diffusers
- Holds lights OFF when sufficient daylight is present regardless of motion detection
- Selectable sensitivity and detection area
- Universal Voltage (120V-277V)
- Photocell is disabled by default

MSH - Motion Sensor High Frequency (Microwave)

- Super high frequency motion sensor (also known as microwave sensor) which detects movement when installed behind low density fixture materials, such as polycarbonate, acrylic and glass diffusers
- Turns light ON/OFF based on motion detection
- Universal Voltage (120V-277V)



CONTROLS AND SENSORS

WLC(LED RU) - EnOcean® LED Relay Zone Controller

- Supports a single LED fixture or multiple daisy chained LED fixtures
- Module installed inside lighting fixture

ESRPU-W-EO - EnOcean® Rocker Switch – Single – Surface Mount

- Wireless single rocker switch with mounting plate
- No batteries needed

ESDRPU-W-EO - EnOcean® Rocker Switch – Double – Surface Mount

- Wireless double rocker switch with mounting plate
- No batteries needed

S3054-N30 - EnOcean® Navigan NWC 300U – Commissioning Tool

- Navigan Wireless Commissioner is used to configure EnOcean controllers & sensors
- It can be used to define link tables, change parameters/settings, and to edit & store projects
- Configuration settings can be saved and cloned to enable quick configuration
- Connectivity is through the NWC 300U USB Stick

EOSWU-W-EO - EnOcean® Occupancy Sensor – Wall Mount

- Wireless wall mounted occupancy sensor
- Solar powered - no batteries needed (coin battery operated in low light conditions)
- PIR motion sensor with both wide angle (50') and long range (100') options
- Mounting height: 6-8 feet

EOSCU-W-EO - EnOcean® Occupancy Sensor – Ceiling Mount

- Wireless ceiling mounted occupancy sensor
- Solar powered - no batteries needed (coin battery operated in low light conditions)
- PIR motion sensor with 360 degree viewing angle lens (34' diameter)
- Mounting height: 7-10 feet

EOSCU-W-EO - EnOcean® Light Level Sensor

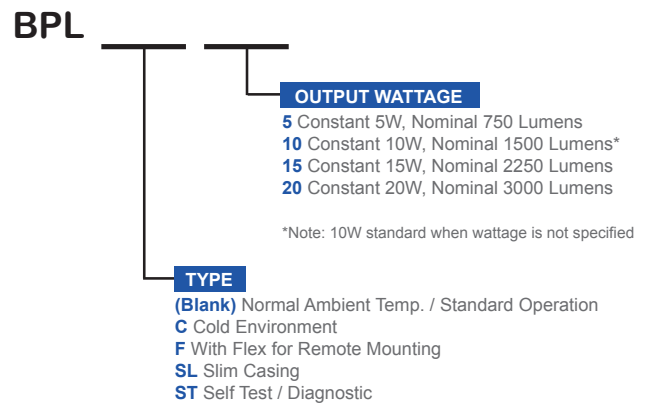
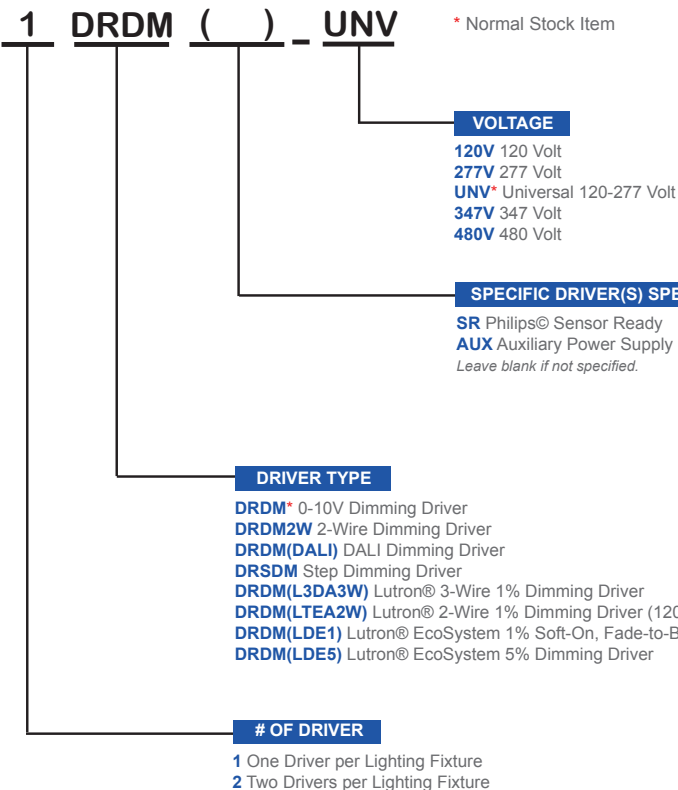
- Light Level sensor that measures and reports the level of available natural light
- Solar powered - no batteries needed (coin battery operated in low light conditions)
- Enables implementation of daylight harvesting control systems
- Mounting position: At the ceiling, close to ambient light source

DRIVER OPTIONS

PLEASE CONSULT FACTORY TO SEE IF YOUR SELECTED DRIVER OPTION WORKS WITH THIS FIXTURE.

BATTERY PACK OPTIONS

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OPTICAL OPTIONS

STANDARD LENSES FOR GCR220

PA2	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
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

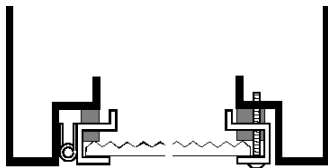
FWA	Flat White Acrylic, No Thickness Specified, Stippled Finish	FWA2	Flat White Acrylic, Nom. 0.125 Thickness, Stippled Finish
FFA	Frosted Flat Acrylic, No Thickness Specified	FFA2	Frosted Flat Acrylic, Nom. 0.125 Thickness
CA8	Clear Acrylic, Nom. 0.187 OA Thickness	CA	Clear Acrylic, No Thickness Specified
		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
PPC2	Clear Prismatic Polycarbonate, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base

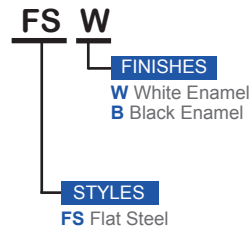
DOOR FRAME

CROSS SECTION



FEATURES

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



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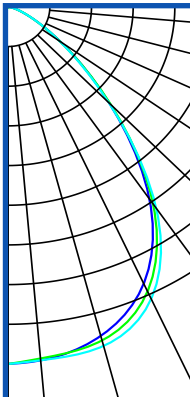
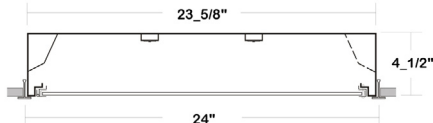


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PHOTOMETRIC DATA - GCR220 SERIES

GCR220-4-2L-FSW-PA2-1DRDM-UNV-2/840

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



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

