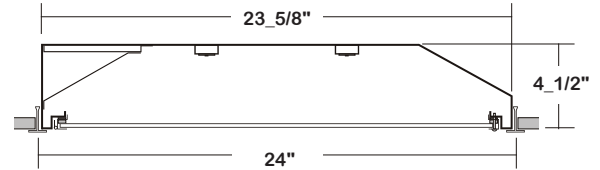
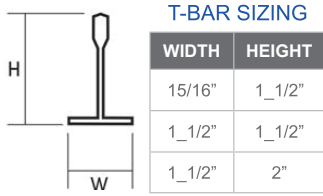


## GCR221 (2X4) SERIES (2X2 AVAILABLE)

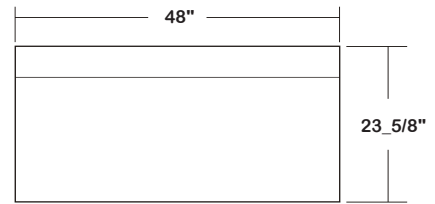
CLASS 100 CLEAN ROOM GRID LUMINAIRE

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

#### DIMENSIONS



\*No Unused Holes And KO's On Backplate.



#### APPLICATIONS

- Class 100 Clean Room, Sealed Ceiling Areas, Commercial

#### FEATURES

- Class 100 / ISO Class 5 equivalent
- 0-10V dimming driver standard
- 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
- Wireless control options available
- Variety of lenses available
- Emergency battery pack available
- Antimicrobial finished housing and door frame available
- Tamper proof screws available

#### SPECIFICATIONS

##### CONSTRUCTION

- 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 stainless steel piano hinge and 2 stainless steel 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 tested at 50,000-51,000 hours (L70)
- Universal voltage 120V through 277V (347V / 480V available)
- Power Factor (PF)  $\geq 0.9$
- 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:** GCR221-4-4L-FSW-PA2-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
<b>GCR221</b>			<b>4L</b>						<b>DRDM</b>	<b>UNV</b>	<b>2</b>	
<b>GCR221</b> Class 100 Clean Room Grid LED Luminaire	2 Nom. 2000 Lumens 4 Nom. 4000 Lumens 6 Nom. 6000 Lumens 8 Nom. 8000 Lumens 12 Nom. 12000 Lumens  <b>*Additional Lumen Packages Available</b>	(Blank) Standard  <b>HE</b> High Efficacy	<b>4L</b> 2' x 4'	<b>AMF</b> Antimicrobial Finished Housing and Door Frame  *Leave Blank if Not Specified	<b>FSW</b> Flat Steel White Enamel Door Frame	<b>PA2</b> Clear Prismatic Acrylic 0.125 Nominal  <b>DRP8</b> High Impact Clear Prismatic Acrylic 0.187 Nominal  <b>FPA2</b> Frosted Prismatic Acrylic 0.125 Nominal	<b>WL</b> Wet Location  <b>TP</b> Tamper Proof Screws (Hex Socket with Post)  *Leave Blank if Not Specified  <u>Additional Mechanical Options</u>	<b>BPL1.5</b> 1500lm Emergency Battery Pack  <b>WLC(LED RU)</b> EnOcean Wireless Control  *Leave Blank if Not Specified  <u>Additional Electrical Options</u>	<b>DRDM</b> 0-10V Dimming Driver	<b>UNV</b> 120V-277V	<b>2</b> Two LED Rows	<b>830</b> 80+CRI / 3000K Color Temp.  <b>835</b> 80+CRI / 3500K Color Temp.  <b>840</b> 80+CRI / 4000K Color Temp.  <b>850</b> 80+CRI / 5000K Color Temp.  *Additional Color Temp. Available
<p>Standard options for GCR221 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit <a href="http://www.lighting.com/resources">www.lighting.com/resources</a> or contact customer service.</p>												

**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)	GCR221-2-4L-FSW-PA2-DRDM-UNV-2/840	1820 lm	15.2 W	119.8 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	GCR221-4-4L-FSW-PA2-DRDM-UNV-2/840	3561 lm	31.4 W	113.2 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	*
6000 Lumens (Nominal)	GCR221-6-4L-FSW-PA2-DRDM-UNV-2/840 *	5752 lm	47.5 W	121.09 lm/W	-20°C / 35°C	3-F32T8	<a href="#">LA-T3340</a>
8000 Lumens (Nominal)	GCR221-8-4L-FSW-PA2-DRDM-UNV-2/840	6802 lm	64.8 W	105 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	<a href="#">LA-T3099</a>
12000 Lumens (Nominal)	GCR221-12-4L-FSW-PA2-DRDM-UNV-2/840	9724 lm	104.6 W	92.9 lm/W	-20°C / 35°C	6-F32T8	*

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)	GCR221-2HE-4L-FSW-PA2-DRDM-UNV-2/840	1669 lm	12.6 W	132.9 lm/W	-20°C / 35°C	1-F32T8	*
4000 Lumens (Nominal)	GCR221-4HE-4L-FSW-PA2-DRDM-UNV-2/840	3378 lm	25.4 W	133.0 lm/W	-20°C / 35°C	2-F32T8, 1-F54T5HO	*
6000 Lumens (Nominal)	GCR221-6HE-4L-FSW-PA2-DRDM-UNV-2/840	5063 lm	38.5 W	131.5 lm/W	-20°C / 35°C	3-F32T8	*
8000 Lumens (Nominal)	GCR221-8HE-4L-FSW-PA2-DRDM-UNV-2/840	6724 lm	51.8 W	127.9 lm/W	-20°C / 35°C	4-F32T8, 2-F54T5HO	*
12000 Lumens (Nominal)	GCR221-12HE-4L-FSW-PA2-DRDM-UNV-2/ 840	9975 lm	79.3 W	125.8 lm/W	-20°C / 35°C	6-F32T8	*

**NOTE:**  
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.

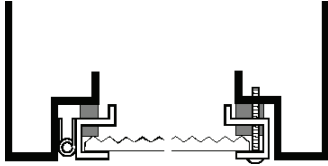
**OPTICAL OPTIONS**

**STANDARD LENSES FOR GCR221**

<b>PA2</b>	Clear Prismatic Acrylic, Nom. 0.125 OA Thickness, Female Prisms 3/16 Square Base
<b>DRP8</b>	High Impact Clear Prismatic Acrylic, Nom. 0.187 OA Thickness, Female Prisms 3/16 Square Base
<b>FPA2</b>	Frosted Prismatic Acrylic, Nom. 0.125 OA Thickness

**DOOR FRAME**

**CROSS SECTION**



**FEATURES**

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

**FS W**

**FINISHES**

- W** White Enamel
- B** Black Enamel

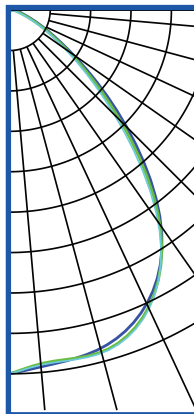
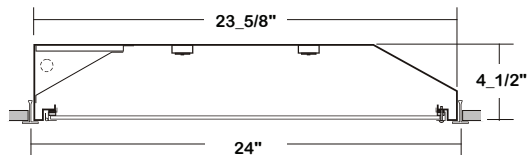
**STYLES**

- FS** Flat Steel

# PHOTOMETRIC DATA - GCR221 SERIES

## GCR221-8-4L-FSW-PA2-DRDM-UNV-2/840

TEST NO.= LA-T3099  
 LED TYPE=48 LED MODULE  
 NO. OF MODULE=4  
 SYSTEM WATT (W)=64.8  
 CRI ≥ 80  
 L70(Hrs.) ≥ 50,000  
 PHOTOMETRY TYPE=C



## CANDLEPOWER

ANGLE	END	45	CROSS
0	3619	3619	3619
5	3563	3532	3545
15	3486	3522	3534
25	3225	3265	3280
35	2627	2605	2573
45	1645	1556	1471
55	763	711	666
65	307	274	244
75	126	101	73
85	73	45	11
90	30	14	2
95	18	10	2
105	23	10	1
115	23	10	2
125	20	10	2
135	16	8	2
145	10	7	1
155	6	7	0
165	7	4	0
175	1	0	0
180	0	0	0

## ZONAL LUMEN SUMMARY

DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2844	33.2	41.8
0-40	4479	52.3	65.8
0-60	6324	73.8	93
0-90	6743	78.7	99.1
90-120	35.5	0.4	0.5
90-150	55	0.7	0.8
90-180	59	0.7	0.9
0-180	6802	79.4	100

Luminaire Output= 6802.3 lm  
 Luminaire Efficacy = 105 lm/W

## SPACING CRITERION

ALONG	ACROSS
1.19	1.19

This Space is intentionally left blank.

This Space is intentionally left blank.

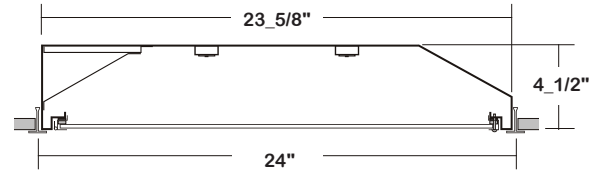
This Space is intentionally left blank.

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

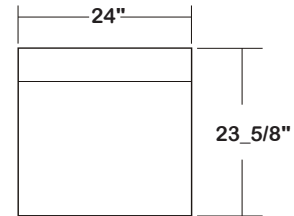
#### DIMENSIONS

T-BAR SIZING

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



\*No Unused Holes And KO's On Backplate.



#### APPLICATIONS

- Clean Room, Sealed Ceiling Areas, Commercial

#### FEATURES

- 0-10V dimming driver standard
- 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
- Wireless control options available
- Variety of lenses available
- Emergency battery pack available
- 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 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)  $\geq 0.9$
- 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: GCR221-4-2L-FSW-PA2-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
GCR221			2L		FSW				DRDM	UNV	2	
GCR221 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  <b>*Additional Lumen Packages Available</b>	(Blank) Standard  HE High Efficacy (Only 2000 / 3000 / 4000 / 6000 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  DRP8 High Impact Clear Prismatic Acrylic 0.187 Nominal  FPA2 Frosted Prismatic Acrylic 0.125 Nominal	WL Wet Location  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	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
<p>Standard options for GCR221 shown above. For additional options, including lumen packages, controls, lenses, switches, finishes, and more, visit <a href="http://www.lighting.com/resources">www.lighting.com/resources</a> or contact customer service.</p>												

**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	1732 lm	15.7 W	110.1 lm/W	2-F17T8, 1-F24T5HO, 1-BX40	*
	2000HE lm	PA2	840	1642 lm	12.7 W	129.4 lm/W	2-F17T8, 1-F24T5HO, 1-BX40	*
	3000 lm	PA2	840	2539 lm	24.3 W	104.4 lm/W	3-F17T8, 1-BX55	*
	3000HE lm	PA2	840	2462 lm	19.2 W	127.9 lm/W	3-F17T8, 1-BX55	*
	4000 lm	PA2	840	3308 lm	33.1 W	99.9 lm/W	4-F17T8, 2-F24T5HO, 100 W (MH), 2-BX40	<a href="#">LA-T3221</a>
	4000HE lm	PA2	840	3269 lm	25.9 W	126.1 lm/W	4-F17T8, 2-F24T5HO, 100 W (MH), 2-BX40	*
	6000 lm	PA2	840	4730 lm	51.1 W	106.4 lm/W	6-F17T8, 3-F24T5HO, 2-BX55	<a href="#">LA-T3316</a>
	6000HE lm	PA2	840	4850 lm	39.6 W	122.4 lm/W	6-F17T8, 3-F24T5HO, 2-BX55	*
8000 lm	PA2	840	6247 lm	52.4 W	119.0 lm/W	4-F24T5HO, 175 W (MH), 4-BX40	<a href="#">LA-T3317</a>	

**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 GCR221

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

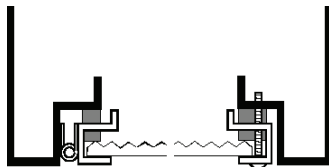
FWA	Flat White Acrylic, No Thickness Specified, Stippled Finish	FWA2	Flat White Acrylic, Nom. 0.125 Thickness, Stippled Finish
FFA	Frosted Flat Acrylic, No Thickness Specified	FFA2	Frosted Flat Acrylic, Nom. 0.125 Thickness
CA8	Clear Acrylic, Nom. 0.187 OA Thickness	CA	Clear Acrylic, No Thickness Specified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

## FS W

## FINISHES

- W White Enamel
- B Black Enamel

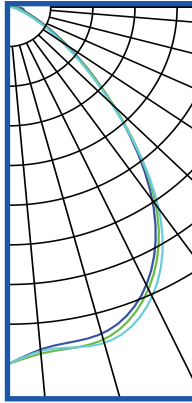
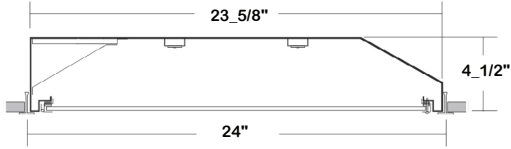
## STYLES

- FS Flat Steel

**PHOTOMETRIC DATA - GCR221 SERIES - 2'**

**GCR221-4-2L-FSW-PA2-DRDM-UNV-2/840**

TEST NO. = LA-T3221  
 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	1822	1822	1822
5	1755	1776	1764
15	1727	1758	1776
25	1566	1590	1631
35	1204	1234	1258
45	711	717	699
55	342	327	312
65	151	133	114
75	78	61	35
85	56	37	8
90	21	13	2
95	28	10	2
115	15	9	1
125	18	10	3
135	15	8	3
145	11	6	2
155	6	7	1
165	8	6	0
175	3	1	0
180	0	0	0

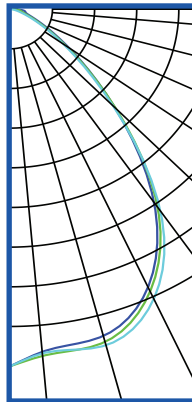
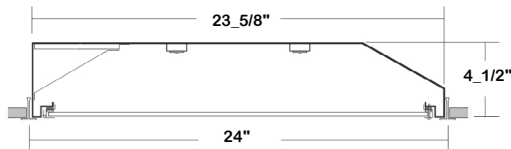
ZONAL LUMEN SUMMARY			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	1404	32.7	42.4
0-40	2179	50.8	65.8
0-60	3023	70.5	91.4
0-90	3250	75.8	98.2
90-120	33.1	0.7	1.0
90-150	53.2	1.2	1.6
90-180	57.2	1.3	1.7
0-180	3308	77.2	100.00

Luminaire Output= 3308 lumens  
 Luminaire Efficacy = 99.9 lm/W

SPACING CRITERION	
ALONG	ACROSS
1.14	1.18

**GCR221-6-2L-FSW-PA2-DRDM-UNV-2/840**

TEST NO. = LA-T3316  
 LED TYPE = 48 LED MODULE  
 NO. OF MODULE = 2  
 SYSTEM WATT (W) = 51.1  
**CRI ≥ 80**  
**L70(Hrs.) ≥ 50,000**  
 PHOTOMETRY TYPE = C



CANDLEPOWER			
ANGLE	END	45	CROSS
0	2658	2658	2658
5	2552	2558	2574
15	2480	2510	2520
25	2236	2277	2338
35	1724	1766	1797
45	1023	1021	997
55	488	468	447
65	214	191	165
75	113	86	51
85	80	53	13
90	29	19	3
95	40	15	2
115	28	14	3
125	26	14	3
135	21	12	4
145	15	10	3
155	8	10	2
165	13	9	1
175	5	2	0
180	0	0	0

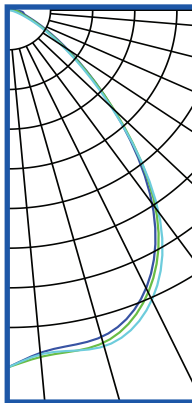
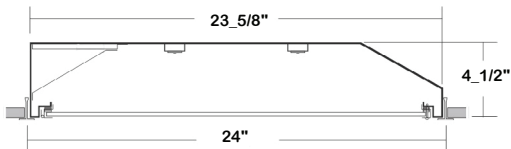
ZONAL LUMEN SUMMARY			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2011	32.8	42.5
0-40	3119	50.9	65.9
0-60	4325	70.6	91.4
0-90	4648	75.9	98.3
90-120	47.5	0.8	1.0
90-150	53.2	1.2	1.6
90-180	81.8	1.3	1.7
0-180	4730	77.2	100.00

Luminaire Output = 4730 lumens  
 Luminaire Efficacy = 92.56 lm/W

SPACING CRITERION	
ALONG	ACROSS
1.14	1.18

**GCR221-8-2L-FSW-PA2-DRDM-UNV-2/840**

TEST NO. = LA-T3317  
 LED TYPE = 48 LED MODULE  
 NO. OF MODULE = 2  
 SYSTEM WATT (W) = 52.4  
**CRI ≥ 80**  
**L70(Hrs.) ≥ 50,000**  
 PHOTOMETRY TYPE = C



CANDLEPOWER			
ANGLE	END	45	CROSS
0	3432	3432	3432
5	3392	3364	3328
15	3299	3312	3340
25	2971	3027	3065
35	2270	2324	2364
45	1346	1340	1321
55	645	621	594
65	283	254	219
75	146	115	70
85	106	71	17
90	39	26	4
95	53	19	4
115	37	19	3
125	34	18	5
135	28	16	6
145	21	13	5
155	11	14	3
165	16	11	1
175	5	2	0
180	0	0	0

ZONAL LUMEN SUMMARY			
DEGREES	LUMENS	% LAMP	% FIXTURE
0-30	2660	32.9	42.6
0-40	4118	50.9	65.9
0-60	5710	70.6	91.4
0-90	6139	75.9	98.3
90-120	63.1	0.8	1.0
90-150	53.2	1.2	1.6
90-180	108.5	1.3	1.7
0-180	6247	77.2	100.00

Luminaire Output = 6247.3 lumens  
 Luminaire Efficacy = 119.22 lm/W

SPACING CRITERION	
ALONG	ACROSS
1.14	1.18