

Project

Type



Date

Product Code

Designer

WAFER SQUARE/3 WL

recessed shallow LED wallwasher

FULLY SUSTAINABLE – FULLY SUSTAINABLE – FULLY SUSTAINABLE – FULLY SUSTAINABLE – FULLY SUSTAINABLE – FULLY SUSTAINABLE – FULLY SUSTAINABLE



FEATURES

- **WAFER SQUARE/3 WL is a 3" aperture square LED wallwasher** with a recess depth of only 3".
- **The optical assembly consists of an internal lens and a diffuser** capping the external reflector.
- **Luminaire is powered by one of a number of Cree Chip on board LED's.** See below for wattages and efficacies.
- **External reflectors are available in four colors:** a slightly diffuse clear natural aluminum (-VOL), champagne gold (-GOL), white (-WOL) or black (-BOL). Other finishes are available on special order.
- **Optional housing design for residential installation** in wood joist ceilings (-RI).
- **WAFER SQUARE/3 WL includes a pair of mounting bars** (3/4" x 27" C channel). Specialty bars for wood and T-bar installations are also available.
- **For more information, [click here](#).**

APPLICATIONS

Luminaire is listed as an inherently protected luminaire for Damp Location. Luminaire is RoHS compliant, is suitable for use in a fire rated ceiling. Removal of the external reflector allows access to the LED module and junction box.

For Trimless Square aperture, see [Wafer Prim Square/3 WL](#)
 For Round aperture, see [Wafer/3 WL](#)

PRODUCT CODE

For complete product code, list basic unit and select one item from each following box.

Basic Unit	WS3-CIT-WL
Light Source Output (Lumens)	
800 lumens / CRI 90+	2700K & 3000K only..... - L08H
1000 lumens	2700K & 3000K only..... - L10H
1200 lumens	2700K & 3000K only..... - L12H
1000 lumens / CRI 80+ - L10S
1200 lumens - L12S
1500 lumens - L15S

Driver	
dimmable to 1% by a 0-10V dimmer on 120 Or 277-volt service	- DMV
dimmable to 5% by either an incandescent or electronic low voltage dimmer only; 120-volt service only	- DMP
dimmable to 1% by a 2-wire Lutron compatible dimmer	- DMHU
dimmable to 1% SoftOn/FadeToBlack by a Lutron EcoSystem control ...	- ECO-LU
eldoLED 0-10V (Logarithmic) driver dimmable to 0.1% with a 0-10V dimmer	- DVOELG
eldoLED 0-10V (Linear) driver dimmable to 0.1% with a 0-10V dimmer	- DVOELN
eldoLED driver dimmable to 0.1% with DALI control system	- DA0-EL
dimmable to 0.1% by a Zigbee wireless network (Daintree, Encelium or Wink); wireless range 50' through standard walls; available with L12H or L15S models only	- ZGOMAG

Light Color	
2700 K.....	- 27K
3000 K.....	- 30K
3500 K.....	- 35K
4000 K.....	- 40K

External Reflector Color and Trim	<i>Overlap</i>
Slightly diffuse Clear	-VOL
Champagne Gold	-GOL
White	-WOL
Black	-BOL
Standard reflector flange continues reflector finish. White painted flanges and custom painted flanges are available on special order. Add WF (white flange) or CCF (custom color flange).	

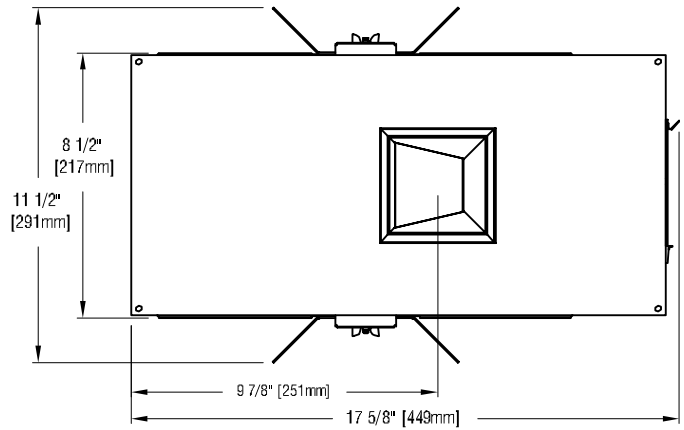
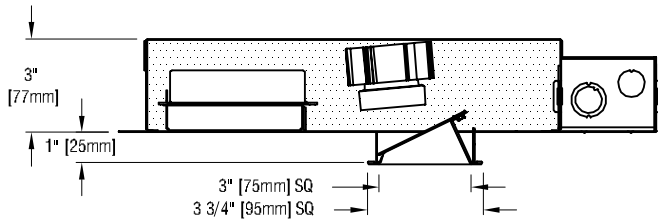
OPTIONS *Specify by adding to the basic unit.*

Housing designed for residential installation (see next page) including a pair of mounting bars (extendable to 20") for use between wood joists.	- RI
Remote emergency battery pack including two components – battery pack and plate with test switch and light – to be mounted adjacent to luminaire; for use in accessible ceilings; <i>not available with residential housing (-RI)</i>	- RX

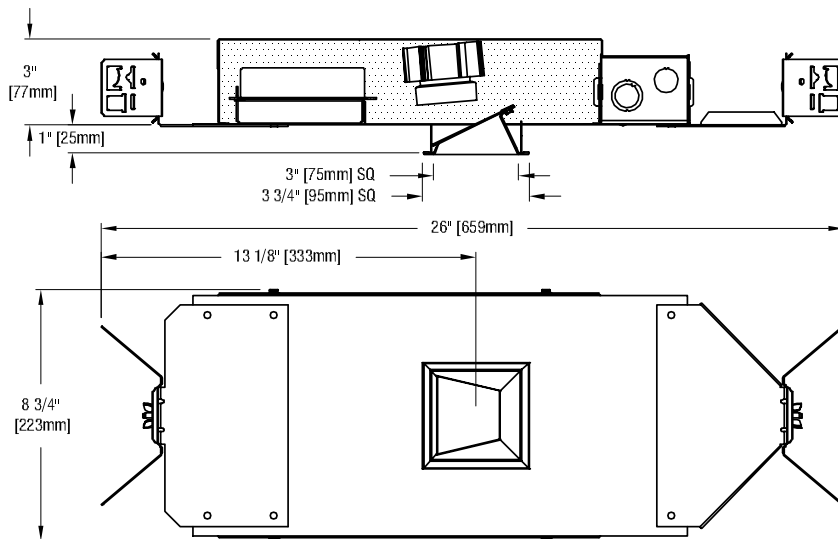


STANDARD INSTALLATION DESIGN

Requires ceiling opening of $3 \frac{5}{16}$ " (84mm) square.



RESIDENTIAL INSTALLATION DESIGN (-RI)



EXTERNAL REFLECTOR TRIM DETAILS



– see below for photometric reports –



PHOTOMETRIC REPORT (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12305658.01A. Original test report furnished upon request.

Luminaire recessed LED square lensed wallwasher with internal lens and semi-specular clear aluminum reflector
 Light Source Cree CXB1310 LED with spread integral lens, 2700K CCT, 90 CRI, 1000 lumens
 Lamp Life rated 50,000 hours based on L70/B50 criteria. LM80 report LED manufacturer furnished upon request

WALLWASH INFORMATION | 1000 LUMENS LED

Distance From Ceiling (Feet)	3' From Wall; 3' O.C.		3' 6" From Wall; 3' 6" O.C.	
	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures
1	1	1	1	1
2	9	9	4	5
3	15	14	10	10
4	14	14	11	11
5	12	11	10	10
6	9	9	8	8
7	7	7	7	7
8	6	6	5	5
9	4	4	4	4
10	4	4	4	4

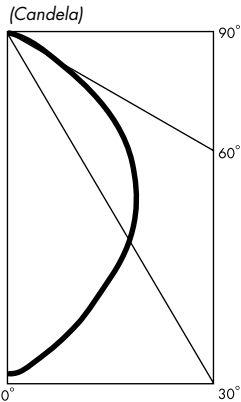
All vertical footcandles are initial values with no contribution from ceiling or floor reflectances. Computation performed with a total of ten wallwashers.

WALLWASH INFORMATION | 1500 LUMENS LED

Distance From Ceiling (Feet)	3' From Wall; 3' O.C.		3' 6" From Wall; 3' 6" O.C.	
	Below Fixture	Between Fixtures	Below Fixture	Between Fixtures
1	2	2	1	1
2	14	14	7	7
3	22	22	15	15
4	22	21	17	16
5	18	18	16	15
6	14	14	13	13
7	11	11	10	10
8	9	9	8	8
9	7	7	7	7
10	5	5	5	6

All vertical footcandles are initial values with no contribution from ceiling or floor reflectances. Computation performed with a total of six wallwashers.

CANDLEPOWER DISTRIBUTION



LUMINAIRE LIGHT OUTPUT AND EFFICACY

	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min. run)
LED Light Engine				
800 Lumens 90 CRI	428*	48*	9	280*
1000 Lumens 90 CRI	509	48	10	280*
1200 Lumens 90 CRI	626*	48*	13	280*
1000 Lumens 80 CRI	529*	59*	9	341*
1200 Lumens 80 CRI	631*	63*	10	341*
1500 Lumens 80 CRI	779*	60*	13	341*

*estimated values

REFLECTOR COLOR MULTIPLIERS

Slightly diffuse clear (V)	1
Fully diffuse clear (EC)	.90
Specular white (W)	.70
Black (B)	.40

STANDARD DMV DRIVER INFORMATION (UL Class 2, dry and damp location)

	120	277
Voltage	120	277
Input Watts (L08H/L10H/L12H/L10S/L12S/L15S)	9/10/13/9/10/13	9/10/13/9/10/13
Input Current (A) (L08H/L10H/L12H/L10S/L12S/L15S)	08/08/11/08/08/11	04/04/06/04/04/06
Output Current (mA)	220-350	220-350
Min. Power Factor	.99	.99
Operating Temperature Range (F)	-13 to 122	-13 to 122

LIGHT OUTPUT MULTIPLIER

LED Light Engine	Light Output Multiplier	RX Light Output Multiplier
800 Lumens 90 CRI	0.84*	0.55*
1000 Lumens 90 CRI	1	0.55*
1200 Lumens 90 CRI	1.23*	0.55*
1000 Lumens 80 CRI	1.04*	0.67*
1200 Lumens 80 CRI	1.24*	0.67*
1500 Lumens 80 CRI	1.53*	0.67*

*estimated values