

Project

Type



Date

Product Code

Designer

WAFER SQUARE/3 AA

recessed shallow LED accent light

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




FEATURES

- **WAFER SQUARE/3 AA is a 3" aperture, square LED downlight** with a recess depth of only 3 3/4".
- **Luminaire provides 365° rotation and 0°-30° angular adjustment.** Once focused, adjustment may be locked by a lever and a thumb nut.
- **Luminaire employs an internal 'twist and lock' lens** to produce an initial beam-spread of either 12°, 20° or 36°. To allow beamspread to be changed in installed luminaires, internal lenses are available as accessories.
- **Luminaire may be ordered with its external reflector capped** with a clear glass (-GLS) for maximum efficacy or a prismatic lens (-PRS) to widen beam distribution.
- **Luminaire is powered by one of a number of Cree Chip on board LED's.** See below for wattages and efficacies.
- **Luminaire accepts one of a number of Optical Accessories** including lenses and color filters.
- **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 AA 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.



ENERGY STAR
Energy Star qualified under Luminaires Specification V2.0. See Energy Star website for model numbers included in listing. The following options are not qualified: L08H, L15S, 12D, 20D, and ZG0MAG. On orders which require Energy Star labelling, add "-ESL" to the specified Product Code.

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

PRODUCT CODE

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

Basic Unit WS3-CIT-AA

Internal Lens *Choose one.*

12° initial beamspread - 12D
20° initial beamspread - 20D
36° initial beamspread - 36D

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 - ZG0MAG

Light Color

2700 K - 27K
3000 K - 30K
3500 K - 35K
4000 K - 40K

External Reflector Color & Trim	GLS Clear Glass	PRS Prismatic Lens
Slightly diffuse clear	GLS-VOL	PRS-VOL
Champagne Gold	GLS-GOL	PRS-GOL
White	GLS-WOL	PRS-WOL
Black	GLS-BOL	PRS-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; *not available with residential housing (-RI)*. - RX
Energy Star labelling available on some models; see the Energy Star info 'box' on this page - ESL

EXTRA INTERNAL LENSES *Specify as separate line items.*

12° internal lens CIT-LENS12-50
20° internal lens CIT-LENS20-50
36° internal lens CIT-LENS36-50

OPTICAL ACCESSORIES ▼ *See next page*



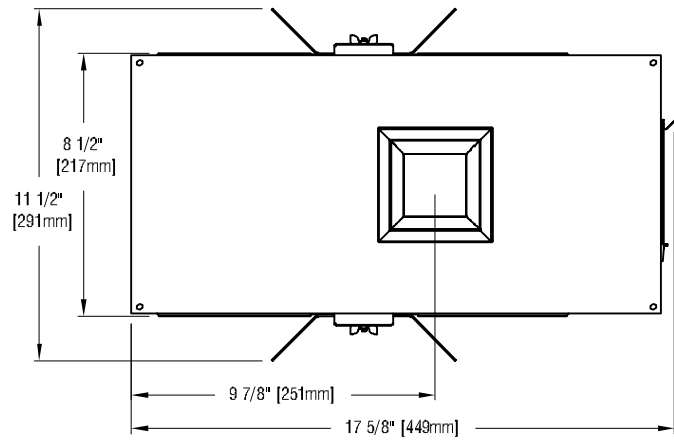
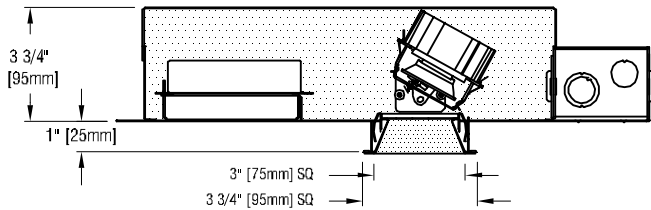
OPTICAL ACCESSORIES *Specify as separate line*

All are 2 3/4" (70mm) diameter. Lenses and filters are glass; screens are aluminum.

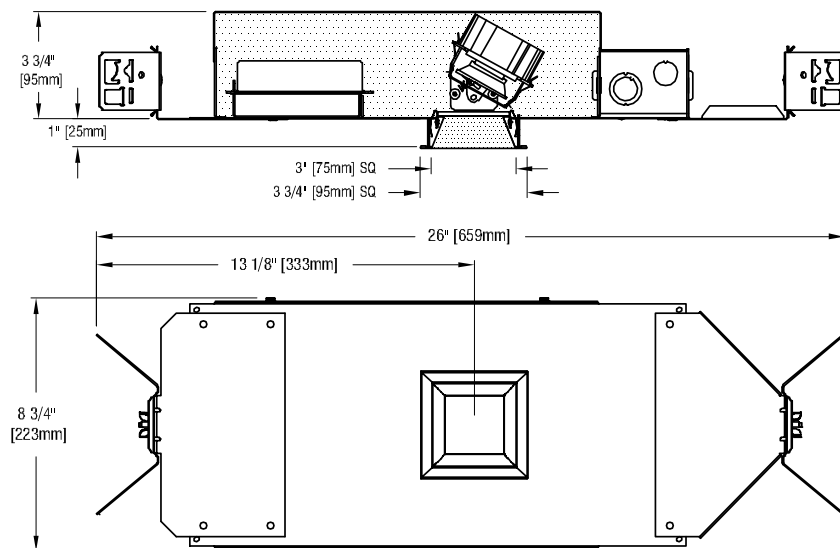
diffuse glass	DGS/2.375
prismatic lens (Solite)	PLS/2.375
55° spread lens	LENS/2.375
40° x 70° spread lens	LENS/2.375-4070
beam smoother	CLR/2.375
33% light reduction screen	SCR33/2.375
50% light reduction screen	SCR50/2.375
color filters	
surprise pink	PNK/2.375
daylight blue	DAY/2.375
amber	AMB/2.375
blue	BLU/2.375
green	GRN/2.375
red	RED/2.375

STANDARD INSTALLATION DESIGN

Requires ceiling opening of 3 5/16" (84mm) square.



RESIDENTIAL INSTALLATION DESIGN (-RI)



EXTERNAL REFLECTOR TRIM DETAILS

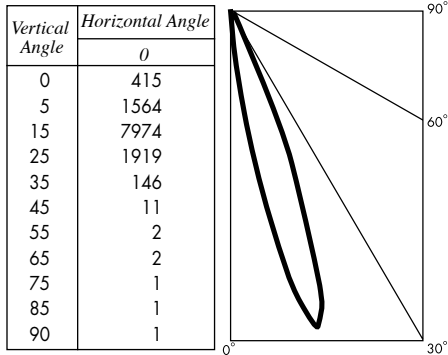


PHOTOMETRIC REPORT with 12° internal lens and clear glass (GLS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.01. Original test report furnished upon request.

Luminairerecessed LED square accent light with semi-specular clear aluminum reflector and clear glass, LED aimed at 15° above vertical.+
Light SourceCree CXB1310 LED with 12° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	489*	6698*	55*	9	320*
1000 Lumens 90 CRI	582	7974	55	10	320*
1200 Lumens 90 CRI	716*	9808*	55*	13	320*
1000 Lumens 80 CRI	605*	8293*	67*	9	390*
1200 Lumens 80 CRI	722*	9888*	72*	10	390*
1500 Lumens 80 CRI	890*	12,200*	68*	13	390*

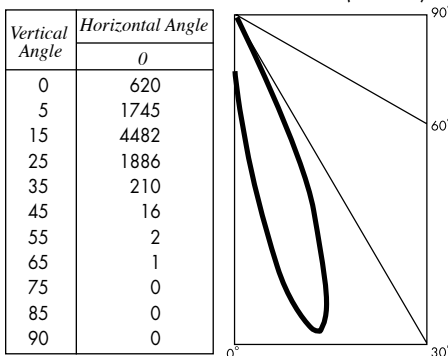
*estimated values

PHOTOMETRIC REPORT with 12° internal lens and prismatic lens (PRS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.02. Original test report furnished upon request.

Luminaire recessed LED square accent light with semi-specular clear aluminum reflector and prismatic lens, LED aimed at 15° above vertical.+
Light Source Cree CXB1310 LED with 12° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	474*	3765*	55*	9	310*
1000 Lumens 90 CRI	564	4482	54	10	310*
1200 Lumens 90 CRI	694*	5513*	53*	13	310*
1000 Lumens 80 CRI	587*	4661*	65*	9	378*
1200 Lumens 80 CRI	699*	5558*	70*	10	378*
1500 Lumens 80 CRI	863*	6857*	66*	13	378*

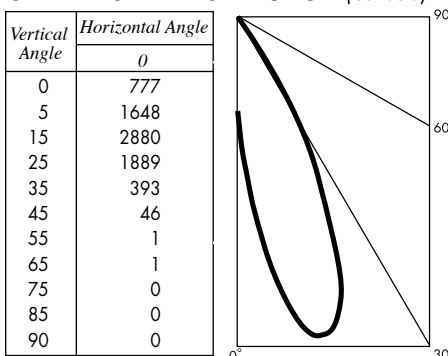
*estimated values

PHOTOMETRIC REPORT with 20° internal lens and clear glass (GLS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.03. Original test report furnished upon request.

Luminaire recessed LED square accent light with semi-specular clear aluminum reflector and clear glass, LED aimed at 15° above vertical.+
Light Source Cree CXB1310 LED with 20° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	491*	2419*	55*	9	321*
1000 Lumens 90 CRI	584	2880	56	10	321*
1200 Lumens 90 CRI	718*	3542*	55*	13	321*
1000 Lumens 80 CRI	607*	2995*	67*	9	391*
1200 Lumens 80 CRI	724*	3571*	72*	10	391*
1500 Lumens 80 CRI	894*	4406*	69*	13	391*

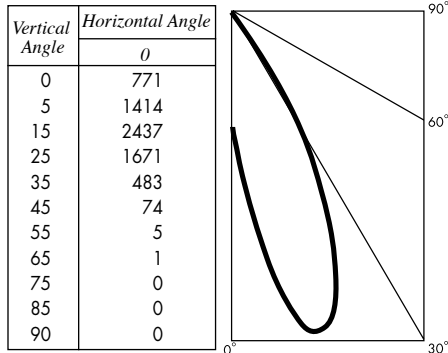
*estimated values

PHOTOMETRIC REPORT with 20° internal lens and prismatic lens (PRS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.04. Original test report furnished upon request.

Luminaire recessed LED square accent light with semi-specular clear aluminum reflector and prismatic lens, LED aimed at 15° above vertical.+
Light Source Cree CXB1310 LED with 20° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	486*	2047*	54*	9	318*
1000 Lumens 90 CRI	579	2437	55	10	318*
1200 Lumens 90 CRI	712*	2998*	55*	13	318*
1000 Lumens 80 CRI	602*	2534*	67*	9	388*
1200 Lumens 80 CRI	718*	3022*	72*	10	388*
1500 Lumens 80 CRI	886*	3729*	68*	13	388*

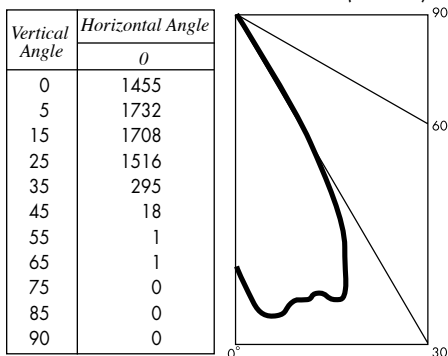
*estimated values

PHOTOMETRIC REPORT with 36° internal lens and clear glass (GLS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.05. Original test report furnished upon request.

Luminaire recessed LED square accent light with semi-specular clear aluminum reflector and clear glass, LED aimed at 15° above vertical.+
Light Source Cree CXB1310 LED with 36° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	542*	1511*	60*	9	355*
1000 Lumens 90 CRI	645	1799	62	10	355*
1200 Lumens 90 CRI	793*	2213*	61*	13	355*
1000 Lumens 80 CRI	671*	1871*	75*	9	432*
1200 Lumens 80 CRI	800*	2231*	80*	10	432*
1500 Lumens 80 CRI	987*	2752*	76*	13	432*

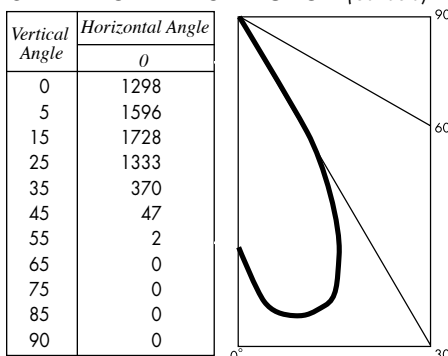
*estimated values

PHOTOMETRIC REPORT with 36° internal lens and prismatic lens (PRS) (tested per IESNA LM-79-2008)

Prorated from Verification Services Report No. 12269958.06. Original test report furnished upon request.

Luminaire recessed LED square accent light with semi-specular clear aluminum reflector and prismatic lens, LED aimed at 15° above vertical.+
Light Source Cree CXB1310 LED with 36° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens

CANDLEPOWER DISTRIBUTION (Candela)



LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire CBCP	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min run)
800 Lumens 90 CRI	538*	1457*	60*	9	352*
1000 Lumens 90 CRI	640	1735	61	10	352*
1200 Lumens 90 CRI	787*	2134*	61*	13	352*
1000 Lumens 80 CRI	666*	1804*	74*	9	429*
1200 Lumens 80 CRI	794*	2151*	79*	10	429*
1500 Lumens 80 CRI	979*	2655*	75*	13	429*

*estimated values

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

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

REFLECTOR COLOR MULTIPLIERS

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