

Project

Date

Product Code

Type

Designer



WAFER/2 DL

recessed shallow LED downlight

FULLY SUSTAINABLE – FULLY SUSTAINABLE



FEATURES

- **WAFER/2 DL is a 2" aperture, high efficacy, LED downlight** with an overall depth of 3 1/2" (housing depth of 2 1/2" plus a 1" throat).
- **Luminaire employs an internal 'twist and lock' lens** to produce an initial beam-spread of either 32° or 60°. To allow beam-spread to be changed in installed luminaires, internal lenses are available as accessories.
- Luminaire is available with **three kinds of LightPlate trim**:
 - **standard (- DP)** for maximum efficacy – or –
 - **with a diffuser (- DHG)** for a soft glow appearance – or –
 - **with a prismatic lens (- PRG)** for maximum spacing ratio.
- **Luminaire is powered by one of a number of Cree Chip on board LED's.** See below for wattages and efficacies.
- **LightPlate trim with white finish** standard. Custom color finish available on special order.
- **Optional housing design for residential installation** in wood joist ceilings (- RI).
- **WAFER/2 DL 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.

PRODUCT CODE

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

Basic Unit standard installation design..... W2-CLT-DL

Internal Lens Choose one.

32° initial beamspread - 32D

60° initial beamspread - 60D

Light Source Output (Lumens)

800 lumens / CRI 90+ 4000K not available - L08H

1000 lumens 4000K not available - L10H

1200 lumens 4000K not available - L12H

1000 lumens / CRI 80+ - L10S

1200 lumens - L12S

1500 lumens - L15S

Driver

dimmmable to 1% by a 0-10V dimmer on 120 or 277-volt service - DMV

dimmmable to 5% by either an incandescent or electronic low voltage dimmer only; 120-volt service only - DMP

dimmmable to 1% by a Lutron 2-wire compatible dimmer - DM1U

dimmmable to 1% SoftOn/FadeToBlack by a Lutron EcoSystem control .. - ECO-LU

eldoLED 0-10V (Logarithmic) driver dimmmable to 0.1% with a 0-10V dimmer - DVOELG

eldoLED 0-10V (Linear) driver dimmmable to 0.1% with a 0-10V dimmer - DVOELN

eldoLED driver dimmmable to 0.1% with DALI control system - DA0-EL

dimmmable 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

LightPlate	Overlap (OL)	Trim Flush (TF)*
no lens.....	LP-OL.....	LP-TF
with diffuser lens.....	LP-DHG-OL.....	LP-DHG-TF
with prismatic lens.....	LP-PRS-OL.....	LP-PRS-TF

Standard LightPlate white finish. Add – CC for custom color.
*Trim Flush LightPlate requires the use of a **plaster ring** Accessory (see below).

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

Millwork trim detail consists of an aperture collar (see below) and a Trim Flush (TF) external reflector (see above).

milled aluminum aperture collar..... - M

white aperture collar..... - MWH

black aperture collar..... - MBL

custom color aperture collar - MCC

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

EXTRA INTERNAL LENSES

Specify as separate line items.

32° internal lens CLT-LENS32-70

60° internal lens CLT-LENS60-70

ACCESSORIES

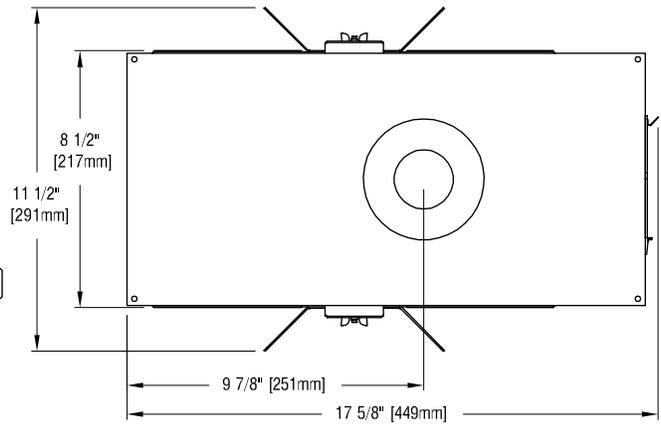
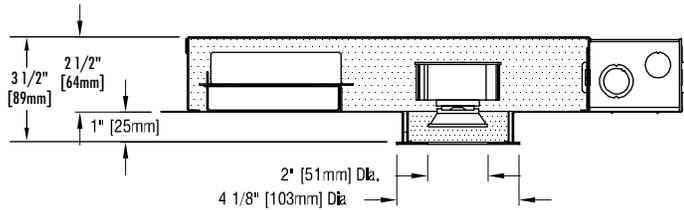
Specify as a separate line item.

Plaster ring allows use of 3 3/4" OD Trim Flush (-TF) reflector in sheetrock ceiling; 4" dia hole required..... TF RING/3

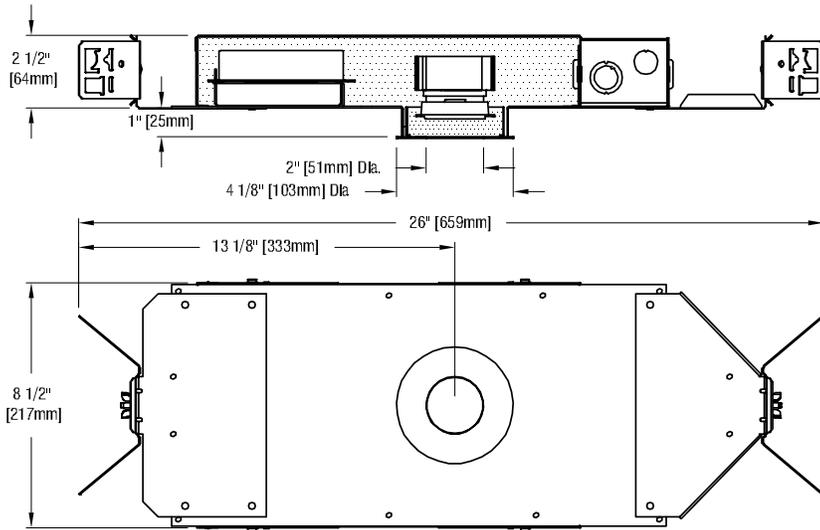


STANDARD INSTALLATION DESIGN

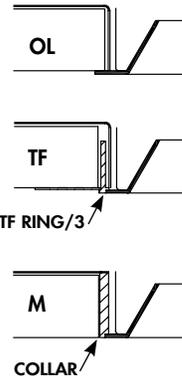
Requires ceiling opening of 3 3/4" (95mm) for Overlap Detail.
 Requires ceiling opening of 4" (102mm) for Trim Flush Detail.
 Requires minimum ceiling opening of 3.90" (99mm) for Millwork Trim Detail.



RESIDENTIAL INSTALLATION DESIGN (-RI)



EXTERNAL REFLECTOR TRIM DETAILS



– see below for photometric reports –

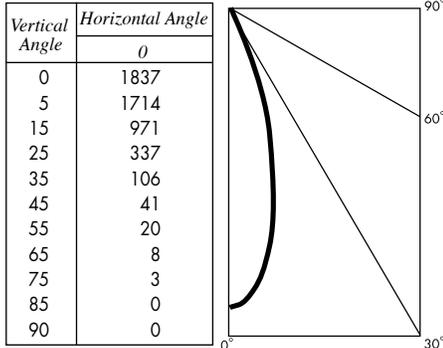


PHOTOMETRIC REPORT with 32° lens (tested per IESNA LM-79-2008)

UL Verification Services Report No. 11863545.05. Original test report furnished upon request.

Luminaire recessed LED round downlight with plate trim and prismatic lens
 Light Source Cree CXB1310 LED with 32° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens
 Spacing Criteria 0.5

CANDLEPOWER DISTRIBUTION (Candela)



LUMINANCE DATA

Vertical Angle	Candela/m²
45	12600
55	7534
65	4370
75	2309
85	1255

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 40°	646	91.2
0 - 60°	697	98.3
0 - 90°	709	100.0
90 - 180°	0	0.0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min. run)
800 Lumens 90 CRI	595*	66*	9	390*
1000 Lumens 90 CRI	709	70	10	390*
1200 Lumens 90 CRI	871*	67*	13	390*
1000 Lumens 80 CRI	737*	82*	9	475*
1200 Lumens 80 CRI	879*	88*	10	475*
1500 Lumens 80 CRI	1084*	83*	13	475*

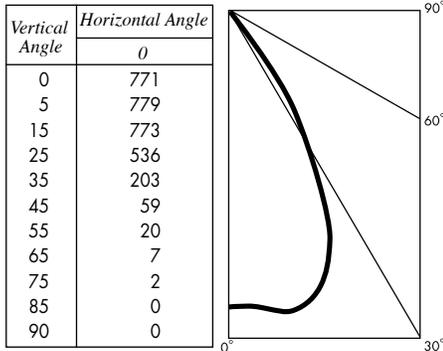
*estimated values

PHOTOMETRIC REPORT with 60° lens (tested per IESNA LM-79-2008)

UL Verification Services Report No. 11863545.04. Original test report furnished upon request.

Luminaire recessed LED round downlight with plate trim and prismatic lens
 Light Source Cree CXB1310 LED with 60° beam spread integral lens, 2700K CCT, 90 CRI, 1000 lumens
 Spacing Criteria 1.0

CANDLEPOWER DISTRIBUTION (Candela)



LUMINANCE DATA

Vertical Angle	Candela/m²
45	18420
55	7513
65	3712
75	1957
85	1029

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 40°	661	89.6
0 - 60°	728	98.6
0 - 90°	738	100.0
90 - 180°	0	0.0

LUMINAIRE LIGHT OUTPUT AND EFFICACY

LED Light Engine	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	RX Light Output (90 min. run)
800 Lumens 90 CRI	620*	69*	9	406*
1000 Lumens 90 CRI	738	73	10	406*
1200 Lumens 90 CRI	907*	70*	13	406*
1000 Lumens 80 CRI	767*	85*	9	494*
1200 Lumens 80 CRI	915*	91*	10	494*
1500 Lumens 80 CRI	1129*	87*	13	494*

*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)	350-700	350-700
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*	.55
1000 Lumens 90 CRI	1	.55
1200 Lumens 90 CRI	1.23*	.55
1000 Lumens 80 CRI	1.04*	.67
1200 Lumens 80 CRI	1.24*	.67
1500 Lumens 80 CRI	1.53*	.67

*estimated values

REFLECTOR COLOR MULTIPLIERS

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