

Project

Type



Date

Product Code

Designer

CHP WAFER/4 DL

recessed shallow Chicago Plenum LED downlight

FULLY SUSTAINABLE - FULLY SUSTAINABLE - FULLY SUSTAINABLE - FULLY SUSTAINABLE - FULLY SUSTAINABLE - FULLY SUSTAINABLE - FULLY SUSTAINABLE



FEATURES

- **CHP WAFER/4 DL is a 4" aperture, high efficacy, LED downlight** with a recess depth of only 4 1/8".
- **Luminaire** is detailed for use in a 'Chicago Plenum' ceiling.
- **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 may be ordered standard (- DL) for maximum efficacy and spacing ratio - or - with a plastic diffuser (- DG),** mounted atop reflector, to maximize beam uniformity and obscure appearance of LED.
- **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 three clear natural aluminum colors** – semi-specular (C), slightly diffuse (V) or fully diffuse (EC) – as well as champagne gold, black Alzak® and specular white enamel. Other finishes are available on special order.
- **CHP WAFER/4 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 and is additionally listed for City of Chicago Environmental Air (CCEA). 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	
no diffuser	W4CHP-CLT-DL
with diffuser	W4CHP-CLT-DG

Internal Lens Choose one.	
32° initial beamspread	- 32D
60° initial beamspread	- 60D

Light Source Output (Lumens)	
800 lumens / CRI 90+ 2700K & 3000K only.....	- L08H
1000 lumens 2700K & 3000K only.....	- L10H
1200 lumens 2700K & 3000K only.....	- L12H
1500 lumens 2700K & 3000K only.....	- L15H
1000 lumens / CRI 80+	- L10S
1200 lumens	- L12S
1500 lumens	- L15S
1800 lumens	- L18S

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	- DMH-U
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	- DV0ELG
eldoLED 0-10V (Linear) driver dimmable to 0.1% with a 0-10V dimmer	- DV0ELN
eldoLED driver dimmable to 0.1% with DALI control system	- DA0-EL
Moons' driver dimmable to 0.1% by DMX controllers	- DX0-MN

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

External Reflector Color & Trim	DL Model (no diffuser)		DG Model (with diffuser)	
	Overlap	Trim Flush*	Overlap	Trim Flush*
Semi-specular Clear	DL-COL	DL-CTF	DG-COL	DG-CTF
Slightly diffuse Clear	DL-VOL	DL-VTF	DG-VOL	DG-VTF
Fully diffuse Clear	DL-ECOL	DL-ECTF	DG-ECOL	DG-ECTF
Champagne Gold	DL-GOL	DL-GTF	DG-GOL	DG-GTF
Black	DL-BOL	DL-BTF	DG-BOL	DG-BTF
White	DL-WOL	DL-WTF	DG-WOL	DG-WTF

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).
*Trim Flush reflector trim requires the use of a **plaster ring** Accessory (see below).

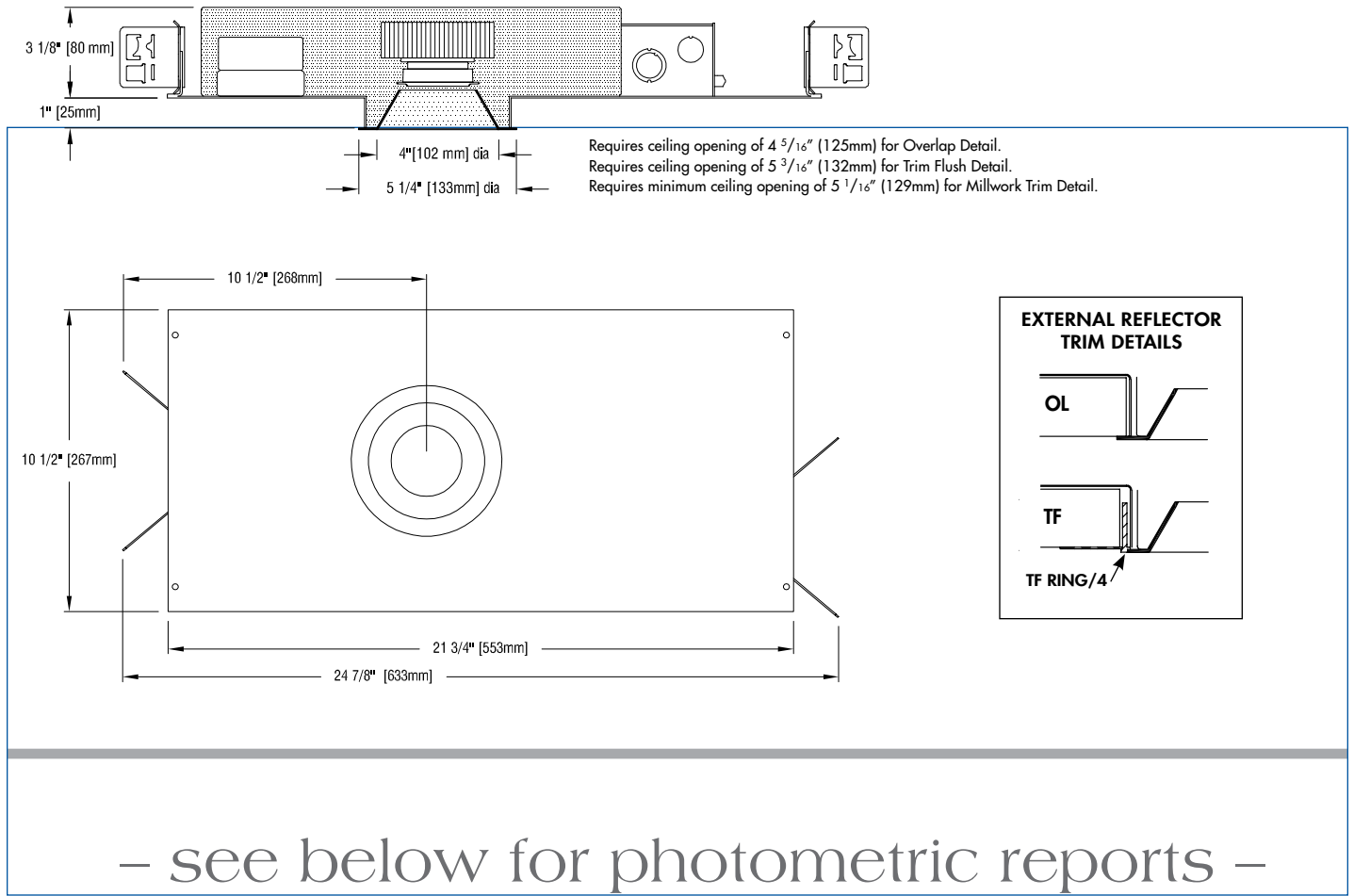
EXTRA INTERNAL LENSES Specify as separate line items.

32° internal lens	CLT-LENS32-70
60° internal lens	CLT-LENS60-70

ACCESSORIES Specify as a separate line item.

Plaster ring allows use of 4 7/8" OD Trim Flush (-TF) reflector in sheetrock ceiling; 5 3/16" dia hole required	TF RING/4
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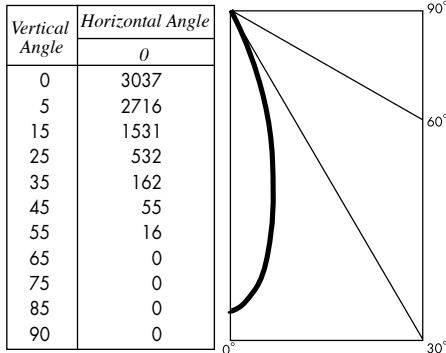


PHOTOMETRIC REPORT with 32° lens (tested per IESNA LM-79-2008)

UL Verification Services Report No. 11827425.10. Original test report furnished upon request.

Luminaire recessed LED round downlight with semi-specular clear aluminum external reflector (NO DIFFUSER)
 Light Source Cree CXB1310 LED with 32° beam spread integral lens, 2700K CCT, 90 CRI, 1200 lumens
 Spacing Criteria 0.5

CANDLEPOWER DISTRIBUTION (Candela)



LUMINANCE DATA

Vertical Angle	Candelalm ²
45	9591
55	3427
65	32
75	0
85	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 40°	1018	94.2
0 - 60°	1081	100.0
0 - 90°	1082	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	703*	78*	9	454*
1000 Lumens 90 CRI	843*	84*	10	454*
1200 Lumens 90 CRI	1081	83	13	454*
1500 Lumens 90 CRI	1265*	74*	17	454*
1000 Lumens 80 CRI	876*	97*	9	551*
1200 Lumens 80 CRI	1038*	104*	10	551*
1500 Lumens 80 CRI	1297*	100*	13	551*
1800 Lumens 80 CRI	1557*	92*	17	551*

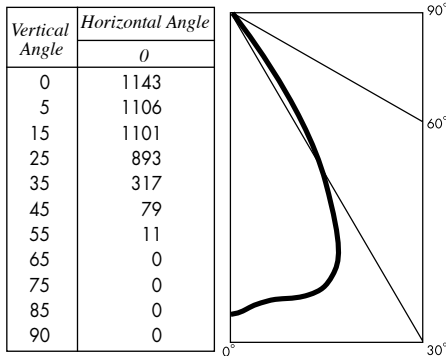
*estimated values

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

UL Verification Services Report No. 11827425.09. Original test report furnished upon request.

Luminaire recessed LED round downlight with semi-specular clear aluminum external reflector (NO DIFFUSER)
 Light Source Cree CXB1310 LED with 60° beam spread integral lens, 2700K CCT, 90 CRI, 1200 lumens
 Spacing Criteria 1.0

CANDLEPOWER DISTRIBUTION (Candela)



LUMINANCE DATA

Vertical Angle	Candelalm ²
45	13830
55	2267
65	13
75	0
85	0

ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 40°	1017	93.0
0 - 60°	1093	100.0
0 - 90°	1093	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	710*	79*	9	459*
1000 Lumens 90 CRI	853*	85*	10	459*
1200 Lumens 90 CRI	1093	84	13	459*
1500 Lumens 90 CRI	1279*	75*	17	459*
1000 Lumens 80 CRI	885*	98*	9	557*
1200 Lumens 80 CRI	1049*	105*	10	557*
1500 Lumens 80 CRI	1312*	101*	13	557*
1800 Lumens 80 CRI	1574*	93*	17	557*

*estimated values

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

Voltage	120	277
Input Watts (I108H/I110H/I12H/I15H/I10S/I12S/I15S/I18S)	9/10/13/17/9/10/13/17	9/10/13/17/9/10/13/17
Input Current (A) (I108H/I110H/I12H/I15H/I10S/I12S/I15S/I18S)	08/08/11/14/08/08/11/14	03/04/05/06/03/04/05/06
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
800 Lumens 90 CRI	0.65*
1000 Lumens 90 CRI	0.78*
1200 Lumens 90 CRI	1
1500 Lumens 90 CRI	1.17*
1000 Lumens 80 CRI	0.81*
1200 Lumens 80 CRI	0.96*
1500 Lumens 80 CRI	1.20*
1800 Lumens 80 CRI	1.44*

*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