

Project

Type



MADE IN USA

Click Here

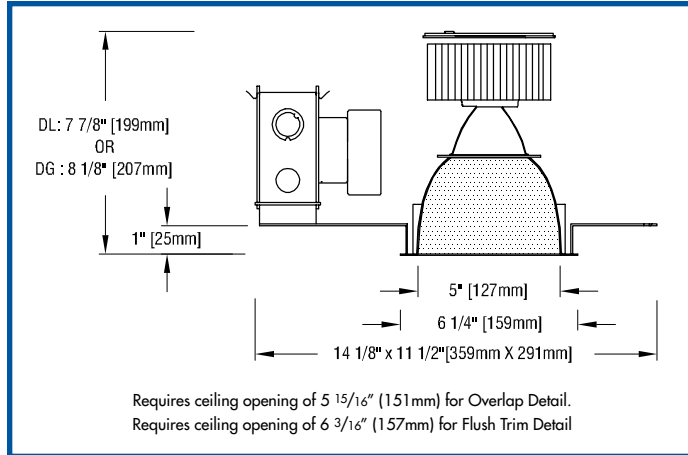
Date

Product Code

Designer

# FIVE HI CZS DL recessed LED downlight

HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT - HIGH OUTPUT



## FEATURES

- **FIVE HI CZS DL is a 5" aperture LED downlight capable of 31° to 56° beam spreads.** Luminaire is powered by Citizen chip-on-board LED's providing CRI's of 80+, 90+ or 97. See tables below for wattages and efficacies.
- **Luminaire employs an internal 'twist and lock' reflector** to produce an initial beamspread of 31°, 40° or 56°. To allow beamspread to be changed in installed luminaires, internal reflectors are available as accessories.
- **Precise external reflector design minimizes aperture brightness** and provides a shielding angle of 40°. A thin, highly efficient plastic diffuser is included to obscure the LED module from view from below.
- **External reflectors are available in clear natural aluminum finishes** — semi-specular (C), slightly diffuse (V) or fully diffuse (EC) — as well as champagne gold, black Alzak® or white. Other finishes available on special order.
- **An optional integral holder (DG)** permits the use of one or two of a number of **Optical Accessories** including lenses and color filters. A complimentary prismatic lens is included with this option.
- **Luminaire includes a pair of mounting bars** (3/4" x 27" C channel). Specialty bars for wood joists and T-bar installations are also available.
- **For more information, [click here](#).**

## APPLICATIONS

Luminaire is listed for Damp Location. Fixture is prewired with an insulation detecting thermal protector. Luminaire is approved for eight #12 wire 90° C branch circuit pull through wiring. Removal of the external reflector allows



### Warranty Detail

Our 5-year warranty does not include the provision of scaffolding, man-lifts, 'cherry pickers' or other extraordinary means of access to a product requiring maintenance.

## PRODUCT CODE

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

<b>Basic Unit</b>	
no lens holder; 7 7/8" depth	FH-CZS2-DL-5
with lens holder; 8 1/8" depth	FH-CZS2-DG-5

<b>Internal Reflector</b>	
31° initial beam spread	31D
40° initial beam spread	40D
56° initial beam spread	56D

<b>Driver</b>	
dimable to 1% by a 0-10V dimmer on 120 or 277-volt service	DMV
dimable to 5% by either an incandescent or ELV dimmer;	
120-volt service only	DMP
dimable to 1% by a 2-wire Lutron compatible dimmer	DMHU
dimable 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 on 120 or 277-volt service	DVOELG
eldoLED 0-10V (Linear) driver dimmable to 0.1% with a 0-10V dimmer on 120 or 277-volt service	DVOELN
eldoLED driver dimmable to 0.1%, compatible with DAU control system	DA0-EL
Moon's driver dimmable to 0.1%, compatible with DMX controllers	DX0-MN
Magnitude (Logarithmic) driver dimmable to 0.1% by a Zigbee Wireless Network; wireless range 50' through standard walls	ZG0MAG

<b>Light Source Output (Lumens)</b>		
1500L / CRI 97	2700K & 3000K only	L15A
2100L	2700K & 3000K only	L21A
2800L	2700K & 3000K only	L28A
3000L	2700K & 3000K only	L30A
3900L	2700K & 3000K only	L39A
1700L / CRI 90+	2700K & 3000K only	L17H
2300L	2700K & 3000K only	L23H
3100L	2700K & 3000K only	L31H
3400L	2700K & 3000K only	L34H
4400L	2700K & 3000K only	L44H
1900L / CRI 80+	2700K & 3000K only	L19S
2700L		L27S
3600L		L36S
4000L		L40S
5100L		L51S

<b>Light Color</b>		
2700 K	27K	
3000 K	30K	
3500 K	not available in CRI 90+ and CRI 97	35K
4000 K	not available in CRI 90+ and CRI 97	40K
5000 K	not available in CRI 90+ and CRI 97	50K

<b>Voltage</b>	120 volt service	- 120	277 volt service	- 277
----------------	------------------	-------	------------------	-------

<b>External Reflector Color and Detail</b>	<b>Overlap</b>	<b>Trim Flush*</b>
Semi-specular Clear	COL	CTF
Slightly diffuse Clear	VOL	VTF
Fully diffuse Clear	ECOL	ECTF
Champagne Gold	GOL	GTF
Black	BOL	BTF
White	WOL	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).

▶ Reflectors detailed for metal or wood ceilings available on special order.

## OPTIONS Specify by adding to the basic unit.

<b>Box Housing</b> construction for fire rated ceilings; 8 1/2" depth, 14 1/8" x 11 1/2" footprint; see drawing below	- FC
<b>Emergency battery pack</b> ; not available with Box Housing. Fixture depth increases to 9"; footprint increases to 17 7/8" x 10"	- EM

## ACCESSORIES Specify as separate line item.

<b>Plaster ring</b> allows use of 5 7/8" OD Trim Flush (TF) reflector in sheetrock ceiling; 6 3/16" dia hole required	- TF RING/5
---	-------------

## EXTRA REFLECTORS Specify as separate line items.

<b>31° initial beam spread</b>	CZS-REF31
<b>40° initial beam spread</b>	CZS-REF40
<b>56° initial beam spread</b>	CZS-REF56



41-50 22<sup>ND</sup> STREET, LIC NY 11101 TEL 718.685.0700 FAX 718.786.8530 www.epl.com

©Copyright, Edison Price Lighting 2019

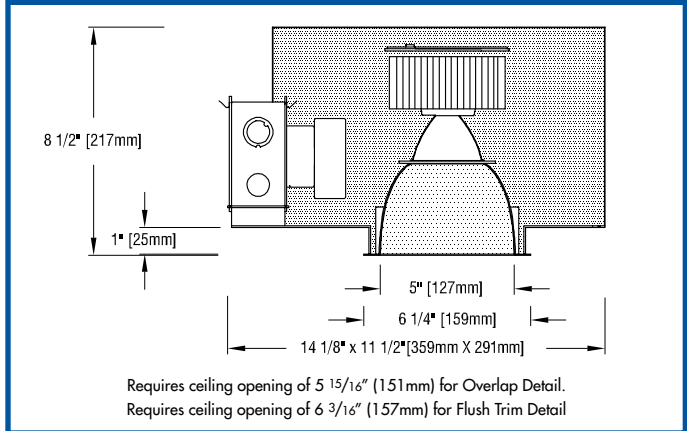
LED 0055.5 6:19

## OPTICAL ACCESSORIES Specify as separate line

For use only with the "lens holder" fixture model; see Product Code / Basic Unit above.  
All are 3 3/4" (95mm) diameter. Lenses and filters are glass; screens are aluminum.

<b>prismatic lens</b> (Solite) .....	PLS/3.75
<b>55° spread lens</b> .....	LENS/3.75
<b>40° x 70° spread lens</b> .....	LENS/3.75-4070
<b>33% light reduction screen</b> .....	SCR33/3.75
<b>50% light reduction screen</b> .....	SCR50/3.75
<b>color filters</b>	
surprise pink .....	PNK/3.75
daylight blue .....	DAY/3.75
amber .....	AMB/3.75
blue .....	BLU/3.75
green .....	GRN/3.75
red .....	RED/3.75

## BOX HOUSING OPTION (FC)

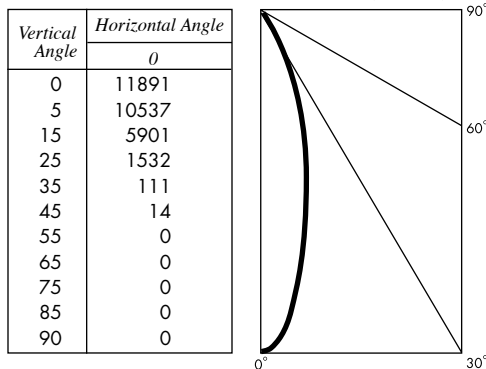


## PHOTOMETRIC REPORT with 31° reflector (TESTED PER IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18070007-01a. Original test report furnished upon request.

Luminaire ..... recessed LED round downlight with semi-specular clear aluminum reflector  
Lamp ..... Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 31° beam spread integral reflector and DIF15 diffuser  
Lamp Life ..... rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished upon request  
Spacing Criteria ..... 0.5

## CANDLEPOWER DISTRIBUTION (Candela)



## LUMINAIRE LIGHT OUTPUT AND EFFICACY

(3000K LED, 31° beam spread integral reflector)

LED Light Engine	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
1500 Lumens 97 CRI (L15A)	992*	62*	16	376*
2100 Lumens 97 CRI (L21A)	1369*	65*	21	376*
2800 Lumens 97 CRI (L28A)	1848*	64*	30	376*
3000 Lumens 97 CRI (L30A)	2053*	62*	34	376*
3900 Lumens 97 CRI (L39A)	2635*	55*	48	376*
1700 Lumens 90 CRI (L17H)	1129*	71*	16	411*
2300 Lumens 90 CRI (L23H)	1540*	73*	21	411*
3100 Lumens 90 CRI (L31H)	2053*	68*	30	411*
3400 Lumens 90CRI (L34H)	2293*	67*	34	411*
4400 Lumens 90 CRI (L44H)	2943*	61*	48	411*
1900 Lumens 80 CRI (L19S)	1300*	81*	16	479*
2700 Lumens 80 CRI (L27S)	1814*	86*	21	479*
3600 Lumens 80 CRI (L36S)	2430*	81*	30	479*
4000 Lumens 80 CRI (L40S)	2669*	79*	34	479*
5100 Lumens 80 CRI (L51S)	3422	71	48	479*

\*estimated values

## LUMINANCE DATA

Vertical Angle	Candelam <sup>2</sup>
45	4738
55	0
65	0
75	0
85	0

## ZONAL LUMEN SUMMARY

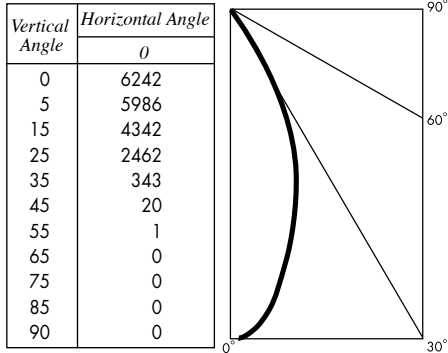
Zone	Lumens	% Fixture
0 - 40°	3386	99.0
0 - 60°	3399	99.3
0 - 90°	3405	99.5
90-180°	16	0.5

## PHOTOMETRIC REPORT with 40° reflector (tested per IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18070007-02a. Original test report furnished upon request.

Luminaire ..... recessed LED round downlight with semi-specular clear aluminum reflector  
 Light Source ..... Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 40° beam spread integral reflector and DIF30 diffuser  
 Lamp Life ..... rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished upon request  
 Spacing Criteria ..... 0.72

### CANDLEPOWER DISTRIBUTION (Candela)



### LUMINAIRE LIGHT OUTPUT AND EFFICACY

(3000K LED, 40° beam spread integral reflector)

	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
LED Light Engine				
1500 Lumens 97 CRI (L15A)	924*	58*	16	350*
2100 Lumens 97 CRI (L21A)	1274*	61*	21	350*
2800 Lumens 97 CRI (L28A)	1720*	57*	30	350*
3000 Lumens 97 CRI (L30A)	1912*	56*	34	350*
3900 Lumens 97 CRI (L39A)	2453*	51*	48	350*
1700 Lumens 90 CRI (L17H)	1051*	66*	16	382*
2300 Lumens 90 CRI (L23H)	1434*	68*	21	382*
3100 Lumens 90 CRI (L31H)	1912*	64*	30	382*
3400 Lumens 90CRI (L34H)	2135*	63*	34	382*
4400 Lumens 90 CRI (L44H)	2740*	57*	48	382*
1900 Lumens 80 CRI (L19S)	1211*	76*	16	446*
2700 Lumens 80 CRI (L27S)	1689*	80*	21	446*
3600 Lumens 80 CRI (L36S)	2262*	75*	30	446*
4000 Lumens 80 CRI (L40S)	2485*	73*	34	446*
5100 Lumens 80 CRI (L51S)	3186	67	48	446*

\*estimated values

### LUMINANCE DATA

Vertical Angle	Candelam <sup>2</sup>
45	6769
55	417
65	0
75	0
85	0

### ZONAL LUMEN SUMMARY

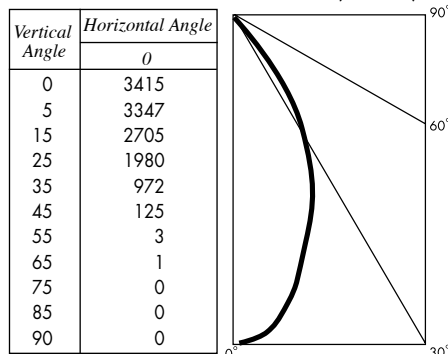
Zone	Lumens	% Fixture
0 - 40°	3125	98.1
0 - 60°	3147	98.8
0 - 90°	3150	98.9
90 - 180°	36	1.1

## PHOTOMETRIC REPORT with 56° reflector (tested per IESNA LM-79-2008)

Leading Testing Laboratories Report No. UT18070007-03a. Original test report furnished upon request.

Luminaire ..... recessed LED round downlight with semi-specular clear aluminum reflector  
 Light Source ..... Citizen LED, 5100 lumens, 3000K CCT, 80 CRI, with 56° beam spread integral reflector and DIF80 diffuser  
 Lamp Life ..... rated 50,000 hours based on L70/B50 criteria. LM80 report by LED manufacturer furnished upon request  
 Spacing Criteria ..... 0.84

### CANDLEPOWER DISTRIBUTION (Candela)



### LUMINAIRE LIGHT OUTPUT AND EFFICACY

(3000K LED, 56° beam spread integral reflector)

	Luminaire Light Output	Luminaire Efficacy (lms/watt)	System Wattage	EM Light Output (90 min. run)
LED Light Engine				
1500 Lumens 97 CRI (L15A)	792*	50*	16	301*
2100 Lumens 97 CRI (L21A)	1093*	52*	21	301*
2800 Lumens 97 CRI (L28A)	1475*	49*	30	301*
3000 Lumens 97 CRI (L30A)	1639*	48*	34	301*
3900 Lumens 97 CRI (L39A)	2104*	44*	48	301*
1700 Lumens 90 CRI (L17H)	902*	56*	16	328*
2300 Lumens 90 CRI (L23H)	1229*	59*	21	328*
3100 Lumens 90 CRI (L31H)	1639*	55*	30	328*
3400 Lumens 90CRI (L34H)	1830*	54*	34	328*
4400 Lumens 90 CRI (L44H)	2350*	49*	48	328*
1900 Lumens 80 CRI (L19S)	1038*	65*	16	382*
2700 Lumens 80 CRI (L27S)	1448*	69*	21	382*
3600 Lumens 80 CRI (L36S)	1940*	65*	30	382*
4000 Lumens 80 CRI (L40S)	2131*	63*	34	382*
5100 Lumens 80 CRI (L51S)	2732	57	48	382*

\*estimated values

### LUMINANCE DATA

Vertical Angle	Candelam <sup>2</sup>
45	42303
55	1252
65	566
75	4623
85	2746

### ZONAL LUMEN SUMMARY

Zone	Lumens	% Fixture
0 - 40°	2580	94.4
0 - 60°	2718	99.5
0 - 90°	2728	99.8
90 - 180°	4	0.2

## LIGHT OUTPUT MULTIPLIER (based on 5100 lumens, 3000K LED)

LED Light Engine	Light Output Multiplier	REM Light Output Multiplier (90-minute run)
1500 Lumens 97 CRI (L15A)	0.29*	0.11*
2100 Lumens 97 CRI (L21A)	0.4*	0.11*
2800 Lumens 97 CRI (L28A)	0.54*	0.11*
3000 Lumens 97 CRI (L30A)	0.6*	0.11*
3900 Lumens 97 CRI (L39A)	0.77*	0.11*
1700 Lumens 90 CRI (L17H)	0.33*	0.12*
2300 Lumens 90 CRI (L23H)	0.45*	0.12*
3100 Lumens 90 CRI (L31H)	0.6*	0.12*
3400 Lumens 90CRI (L34H)	0.67*	0.12*
4400 Lumens 90 CRI (L44H)	0.86*	0.12*
1900 Lumens 80 CRI (L19S)	0.38*	0.14*
2700 Lumens 80 CRI (L27S)	0.53*	0.14*
3600 Lumens 80 CRI (L36S)	0.71*	0.14*
4000 Lumens 80 CRI (L40S)	0.78*	0.14*
5100 Lumens 80 CRI (L51S)	1	0.14*

\*estimated values

## STANDARD (0-10V DIMMING) DRIVER INFORMATION

UL Class 2, dry and damp location

Voltage	120	277
Input Watts (L15A/L21A/L28A/L30A/L39A/ L17H/L23H/L31H/L34H/L44H/ L19S/L27S/L36S/L40S/L51S lumens)	16/21/30/34/48	16/21/30/34/48
Input Current (A) (L15A/L21A/L28A/L30A/L39A/ L17H/L23H/L31H/L34H/L44H/ L19S/L27S/L36S/L40S/L51S lumens)	.13/.18/.25/.28/.40	.06/.08/.11/.12/.17
Output Current (mA)	350-1100	350-1100
Min. Power Factor	>0.9	>0.9
Operating Temperature Range (F)	-4 to 122	-4 to 122

## REFLECTOR COLOR MULTIPLIERS

Semi-specular clear (C)	1
Slightly diffuse clear (V)	.95
Fully diffuse clear (EC)	.88
Champagne gold clear (G)	.95
Black (B)	.49

## LED CCT MULTIPLIERS

2700K	.96
3000K	1
3500K	1.02
4000K	1.03
5000K	1.04