

## DESCRIPTION

8-inch LED recessed retrofit converts existing 8, 9 and 10-inch HID, incandescent, compact fluorescent downlights to energy saving LED. Simple below ceiling installation without removing the existing fixture available with narrow beam, medium beam, wide beam reflectors. Standard 0-10V combined with trailing edge driver allows dimming without additional wiring. Two stage reflector system produces smooth distribution with excellent light control and low aperture brightness. Lumen packages include 1,000-15,000 lumens with color temperatures of 2700K, 3000K, 3500K and 4000K in 80 or 90 CRI. Available with dim-to-warm technology – similar to halogen at full power, the 3000K LED warms smoothly as dimmed to 1850K creating a rich warm glow within the space.

## SPECIFICATION FEATURES

### Lower Shielding Reflector

Self-flanged, spun .060" thick aluminum lower reflector in combination with a lensed upper optical chamber provides superior lumen output with minimal source brightness. Available in all Portfolio Alzak® finishes.

### Trim Retention

Lower reflector is retained with two torsion springs holding the flange tightly to the finished ceiling surface.

### Retrofit ring

Galvanized steel ring installs with 4 mouse trap springs for secure installation and accommodates up to 2" ceiling or plaster frame lip thickness. Installs in ceiling openings from 8.7" to 10" with optional adapter ring. Pre-wired flexible conduit with snap in connector installs into 1/2" knockout on the existing junction box.

### Thermal

Forged aluminum heat sink conducts heat away from the LED module for improved performance and longer life.

### LED

LED system contains a plurality of high brightness white LED's combined with a high reflectance upper reflector and convex transitional lens producing even distribution with no pixilation. Rated for 50,000 hours at 70% lumen maintenance. Color variation within 3-step MacAdam ellipses. Flexible disconnect allows for tool-less replacement of LED engine from below ceiling. Available in 80 or 90 CRI. D2W™ – dim-to-warm shifts CCT from 3000K to 1850K as fixture dims mimicking halogen sources.

### Driver

Combination 0-10V/trailing edge driver provides flicker free dimming from 100% to 10%. Optional 1% 0-10V, Fifth Light, DMX or Lutron® Ecosystem. Driver can be serviced from above or through the aperture. 1000 - 4000 lumen utilize one driver. 5000-10,000 utilize two drivers, 12,000 and 15,000 utilizes three drivers.

### Code Compliance

Thermally protected and cULus Classified protected wet

Catalog #		Type
Project		
Comments		Date
Prepared by		

locations with covered ceiling for downlights. Wall wash are cULus Classified for damp locations.. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/ RFI emissions per FCC 47CFR Part 18 Class B consumer limits. Non-IC rated - Insulation must be kept 3" from top and sides of housing. RoHS Compliant. Photometric testing completed in accordance with IES LM 79 standards. LED life testing completed in accordance with LM 80 standards. 8000 lumen and above are marked spacing and must follow spacing requirements.

### Warranty

5-year warranty.

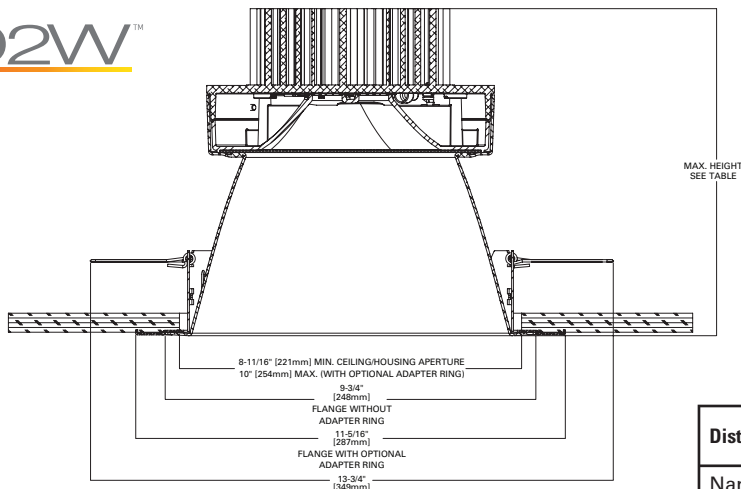


## LD8ART ER8A 8LN, 8LM, 8LW

1,000-15,000 Lumen LED

8-Inch

D2W™



Distribution	Max Height
Narrow	9.06"
Medium	8.60"
Wide	7.92"

Showerlight



Refer to ENERGY STAR® Qualified Products List.

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fifthlight  
technology



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EXAMPLE: LD8ART501D010TE ER8A50835 8LM0LI=8" LED Medium Beam Reflector, 5000 Lumen 3,500 K Color with 120V Driver

Housing	Lumens <sup>1</sup>	Voltage	Driver	Options <sup>2</sup>	Power Module	Lumens	CRI	Color
<b>LD8ART</b> =8" Aperture LED Downlight Retrofit	<b>1</b> =120V <b>2</b> =277V <b>Blank</b> =120-277V 1000 - 4000 lumen only		<b>1000, 1500, 2000, 3000, 4000, 5000, 6000, 8000, 9000 10,000<sup>5</sup>, 12,000 AND 15,000 LUMEN</b> <b>D010TE</b> =0-10V 10% Dimming or Trailing Edge Dimming <sup>3</sup> <b>1000, 1500, 2000, 3000, 4000, 5000, 6000 AND 8000 LUMEN</b> <b>D5LT</b> =Fifth Light® DALI 0% Dimming <b>DMX</b> =DMX 0% Dimming <b>DE010</b> =0-10V 0% Dimming <b>1000, 1500, 2000, 3000, 4000, 5000 AND 6000 LUMEN</b> <b>DL3</b> =1% Lutron® Hi-Lume 3-Wire or Ecosystem <b>D010TR</b> =0-10V 10% Dimming or Leading Edge <sup>3</sup> <b>6500 LUMEN</b> <b>D010</b> =0-10V 10% Dimming <b>DE010</b> =0-10V 1% Dimming	<b>EMBOD</b> =7W Bodine® Emergency Module with Remote Test Switch <b>EM7</b> =7W Emergency Module with Remote Test Switch <sup>7</sup> <b>EM14</b> =14W Emergency Module with Remote Test Switch <sup>7</sup>	<b>ER8A</b> =8" Module <b>ER8ACP</b> =8" Module, Chicago Plenum	<b>10</b> =1000 Lumens <b>15</b> =1500 Lumens <b>20</b> =2000 Lumens <b>S30</b> =3000 Lumens <b>S40</b> =4000 Lumens <b>50</b> =5000 Lumens <b>60</b> =6000 Lumens <b>65</b> =6500 Lumens <b>80</b> =8000 Lumens <sup>4</sup> <b>90</b> =9000 Lumens <sup>4</sup> <b>100</b> =10000 Lumens <sup>4</sup> <b>120</b> =12000 Lumens <sup>4</sup> <b>150</b> =15000 Lumens <sup>4</sup>	<b>8</b> =80 CRI <b>9</b> =90 CRI	<b>27</b> =2700° K <b>30</b> =3000° K <b>35</b> =3500° K <b>40</b> =4000° K <b>30D2W</b> = Dim to warm 3000° K to 1850° K (2000 lumen and below, 90 CRI)

Reflector <sup>8</sup>	Finish	Options	Accessories
<b>8LW0</b> =75° Wide Beam Reflector with White Polymer Trim Ring <b>8LW1</b> =75° Wide Beam Reflector with Self Flange <b>8LM0</b> =50° Medium Beam Reflector with White Polymer Trim Ring <b>8LM1</b> =50° Medium Beam Reflector with Self Flange <b>8LN0</b> =25° Narrow Beam Reflector with White Polymer Trim Ring <b>8LN1</b> =25° Narrow Beam Reflector with Self Flange <b>8LW110</b> =Wall Wash Reflector with Polymer Trim Ring <sup>6</sup> <b>8LW111</b> =Wall Wash Reflector with Self Flange <sup>6</sup>	<b>LI</b> =Specular Clear <b>H</b> =Semi-Specular Clear <b>WMH</b> =Warm Haze <b>G</b> =Specular Gold <b>WH</b> =Wheat <b>WHH</b> =Wheat Haze <b>GP</b> =Graphite <b>GPH</b> =Graphite Haze	<b>B</b> =Specular Black <b>W</b> =Gloss White  <b>8LM0 Only</b> <b>BB</b> =Black Baffle <b>WB</b> =White Baffle	<b>Self-flanged Only</b> <b>WF</b> =White Painted Flange  <b>LGSKT8IP65</b> =IP65 Gasket Kit <b>ABR10P</b> =Oversize Trim Ring for max 10" Ceiling Opening - 11.300 Flange <b>PORLWTPD1</b> =LumaWatt Pro Wireless Sensor Kit (0-10V only)

- Notes:** 1. Nominal Lumens will vary depending on selected color, driver and reflector finish.  
2. Not available with Chicago Plenum.  
3. Trailing edge and leading edge 120V only.  
4. Product is marked spacing and must be installed with the following minimum spacing:  
Center to Center of adjacent luminaires : 36"  
Center of Luminaire to Side of Building Member : 18"  
Minimum Overhead Clearance: 9"  
5. 0-10V recommended  
6. Damp location listed.  
7. Not CSA approved.  
8. Distribution with LI finish.

## See Portfolio LED New Construction (LD8A Series) Specification Sheets for Photometric Data.

## ENERGY DATA

ENERGY DATA	ENERGY DATA	ENERGY DATA	ENERGY DATA
Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90	Sound Rating: Class A standards (Values at non-dimming line voltage) Minimum Starting Temperature: -20°C (-4°F) Power Factor: >0.90
<b>1000 Lumen D010TE</b> 120V Input Power: 15W 277V Input Power: 16W 120V Input Current: 0.13A 277V Input Current: 0.06A Inrush 120 (Ap): 0.486 Inrush 277 (Ap): 0.848 Duration 120 (ms): 0.4 Duration 277 (ms): 0.182 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	<b>4000 Lumen D010TE</b> 120V Input Power: 46W 277V Input Power: 45W 120V Input Current: .39A 277V Input Current: .17A THD 120V: <13% THD 277V: <20%  <b>5000 Lumen D010TE</b> EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 62W THD: <17% 120V Input Current: .52A 277V Input Current: .22A Inrush 120 (Ap): 0.787 Inrush 277 (Ap): 1.09 Duration 120 (ms): 1.16 Duration 277 (ms): 1.75 Input Frequency: 50-60Hz	<b>8000 Lumen D010TE</b> 120V Input Power: 96W 277V Input Power: 96W 120V Input Current: .79A 277V Input Current: .36A Inrush 120 (Ap): 1.09 Inrush 277 (Ap): 1.23 Duration 120 (ms): 0.3 Duration 277 (ms): 0.294 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	<b>15,000 Lumen D010TE</b> 120V Input Power: 161W 277V Input Power: 159W 120V Input Current: 1.33A 277V Input Current: 0.58A Inrush 120 (Ap): 0.48 Inrush 277 (Ap): 1.316 Duration 120 (ms): 0.1 Duration 277 (ms): 0.52 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz
<b>1500 Lumen D010TE</b> 120V Input Power: 23W 277V Input Power: 24W 120V Input Current: 0.19A 277V Input Current: 0.09A Inrush 120 (Ap): 0.717 Inrush 277 (Ap): 0.531 Duration 120 (ms): 1.58 Duration 277 (ms): 1.24 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	<b>6000 Lumen D010TE</b> EMI/RFI: FCC Title 47 CFR, Part 15, Class B (Consumer) Input Power: 77W THD: <17% 120V Input Current: .84A 277V Input Current: .28A Inrush 120 (Ap): 0.87 Inrush 277 (Ap): 0.96 Duration 120 (ms): 0.39 Duration 277 (ms): 0.31 Input Frequency: 50-60Hz	<b>9000 Lumen D010TE</b> 120V Input Power: 108W 277V Input Power: 107W 120V Input Current: .89A 277V Input Current: .39A Inrush 120 (Ap): 0.48 Inrush 277 (Ap): 1.316 Duration 120 (ms): 0.1 Duration 277 (ms): 0.52 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	
<b>2000 Lumen D010TE</b> 120V Input Power: 23W 277V Input Power: 24W 120V Input Current: 0.19A 277V Input Current: 0.09A Inrush 120 (Ap): 0.717 Inrush 277 (Ap): 0.531 Duration 120 (ms): 1.58 Duration 277 (ms): 1.24 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	<b>6500 Lumen D010</b> Input Power: 84W THD: <17% 120V Input Current: .70A 277V Input Current: .30A Inrush 120 (Ap): 2.88 Inrush 277 (Ap): 3.68 Duration 120 (ms): 0.815 Duration 277 (ms): 1.29 Input Frequency: 50-60Hz	<b>10,000 Lumen D010TE</b> 120V Input Power: 126W 277V Input Power: 123W 120V Input Current: 1.05A 277V Input Current: .47A Inrush 120 (Ap): 1.312 Inrush 277 (Ap): 1.856 Duration 120 (ms): 0.05 Duration 277 (ms): 0.1 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	
<b>3000 Lumen D010TE</b> 120V Input Power: 35W 277V Input Power: 34W 120V Input Current: .30A 277V Input Current: .13A THD 120V: <10% THD 277V: <20%		<b>12,000 Lumen D010TE</b> 120V Input Power: 140W 277V Input Power: 141W 120V Input Current: 1.17A 277V Input Current: 0.51A Inrush 120 (Ap): 1.09 Inrush 277 (Ap): 1.23 Duration 120 (ms): 0.3 Duration 277 (ms): 0.294 THDi 120V: <13% THDi 277V: <20% Input Frequency: 50-60Hz	

## HOUSING COMPATIBILITY

Manufr.	Series	Nom. Size	Housing Aperture	Housing Catalog #	Ceiling Aperture	Retrofit Kit	Oversize Trim Ring
Cooper	Portfolio	8	8.730	C8	8.73" MIN 9" MAX	LD8ART	None
Philips	Lightolier Calculite	8	8.750	S8			
Philips	Capri	8	8.875	CM8			
Cooper	PDS	8	8.875	PD8			
Juno		9	8.938	C9H			
Juno	Indy Performance Series (Elate)	9	9.000	C9 and M9			
Philips	Capri	10	9.625	CM10	8.73" MIN 10.3" MAX	LD8ART	ABR10 (accessory)
Philips	Omega	10	9.813	OM10 and S10			
Juno	Indy Performance Series (Elate)	10	9.875	M10			
Cooper	Portfolio	9	10.000	C9			
Lithonia	Gotham	10	10.125	GRSF			
Lithonia	Gotham	10	10.125	AF, LGF, LGH, AH, A			
Lithonia	Gotham	10	10.250	GRSH			

## EM MULTIPLIER DATA

LUMENS	EM MULTIPLIER	
	7	14
1000	0.47	0.93
1500	0.30	0.61
2000	0.30	0.61
3000	0.17	0.33
4000	0.12	0.24
5000	0.11	0.23
6000	0.09	0.18
6500		0.17
8000		0.15
9000		0.13
10000		0.11
120000		0.09
150000		0.08