

# D2LED OPEN

2" LED OPEN DOWNLIGHT  
120/277V



DATE: \_\_\_\_\_ TYPE: \_\_\_\_\_

FIRM NAME: \_\_\_\_\_

PROJECT: \_\_\_\_\_



Ceiling Cutout: 2 7/8"  
Ceiling Thickness 1/2"-1 1/4"  
Not to Scale

### APPLICATIONS:

Architektür D2LED Series is a 2" specification grade LED downlight that combines superior brightness control with energy savings and low maintenance costs. Suitable for a variety of commercial, retail, and institutional applications with ambient temperatures up to 35°C (91) or 25°C (12L, 15L) during operation with free airflow around the fixture.

### J-TUBE ASSEMBLY:

Utilizing Prescolite's revolutionary J-Tube design and optimal thermal management, the D2LED eliminates the need for a traditional downlight housing. The J-Tube assembly combines the traditional J-Box and driver electronics into a compact form that can be installed and accessed from below the ceiling plane.

### REFLECTOR:

High purity spun aluminum self-flanged reflector with iridescence suppressed Alzak anodized finishes. Also available with Prescolite's American Matte™ (MFC), SoftSheen™ or Softglow® finishes. Painted reflectors are also available. Factory configurable optics provide 25°, 35°, or 45° optical distribution options for a variety of applications.

### LED LIGHT ENGINE:

Xicato LED Module has a fixture to fixture color consistency of less than 2 SDCM. Secured to an extruded aluminum heat sink for excellent thermal management providing optimal life and lumen maintenance (minimum 50,000 hours at 70% lumen maintenance).

### LED DRIVER:

Energy efficient electronic constant current driver with 50,000 hour minimum anticipated life. Meets UL Class 2, FCC 47CFR Part 15, Class B compliant, inherent short-circuit protection, self limited, overload protected.

### DIMMING:

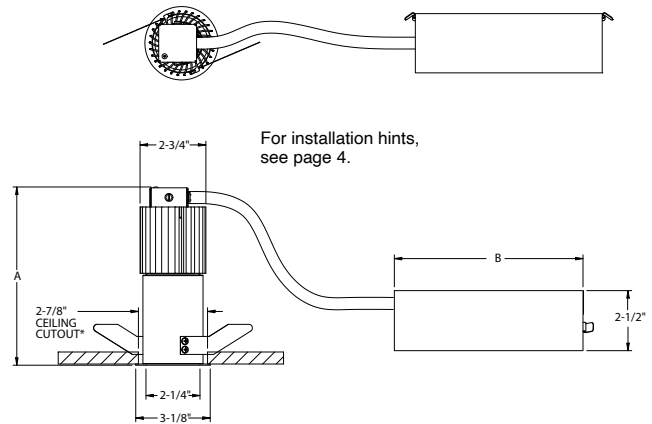
Comes standard with 0-10V dimming capability. Flicker-free dimming to 10%. For sizing control systems, the 0-10V control circuit will draw up to 1 mA. Also available with 0-10V to below 1%.

### CERTIFICATIONS:

CSA C/US certified to UL1598. Suitable for wet locations. Non-IC rated and 2IN/2OUT through branch wiring. For connection to flexible conduit only.

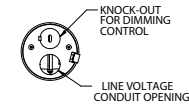
### WARRANTY:

5 Year Warranty.



REFLECTORS	
BEAM ANGLE	DIM "A"
WFL45	5-7/8"
FL35	6-3/4"
MD25	7-1/2"

J-TUBE		
OPTIONS		DIM "B"
STANDARD	12L, 80 CRI	7-3/4"
	ALL OTHERS	6-1/8"
DM01	ALL	10"



CATALOG NUMBER:

EXAMPLE: D2LED-2D9LED9L30K8WFL45

Order accessories separately

J-TUBE ASSEMBLY	VOLTAGE	LIGHT ENGINE	OUTPUT	LED COLOR	CRI	BEAM ANGLE	REFLECTOR FINISH	REFLECTOR COLOR	FLANGE OPTIONS	ACCESSORIES
<input type="checkbox"/> <b>D2LED</b> J-Tube Assembly with Standard 0-10V 10% Dimming	Standard 120/277V  <b>OPTIONS</b> Standard 0-10V 10% Dimming <input type="checkbox"/> <b>DM01</b> <sup>2</sup> eledoLED 0-10V dimming to less than 1%.	<input type="checkbox"/> <b>2D9LED</b> 2" Open Reflector/Light Engine Assembly with Xicato module	<input type="checkbox"/> <b>9L</b> 900 Delivered Lumens	<input type="checkbox"/> <b>27K</b> 2700 Kelvin	<input type="checkbox"/> <b>8</b> Nominal 80+ CRI	<input type="checkbox"/> <b>MD25</b> Nominal 25° cutoff	<input type="checkbox"/> <b>SS</b> Semi-Specular	<input type="checkbox"/> <b>CG</b> Champagne Gold Alzak	<input type="checkbox"/> <b>WT</b> White Trim Flange	<input type="checkbox"/> <b>FMR2</b> 2" Flush Mount Ring <input type="checkbox"/> <b>D2FRM</b> Mounting Frame <input type="checkbox"/> <b>D2ICAT</b> <sup>2</sup> IC Rated, Air Tight housing <input type="checkbox"/> <b>D2CPC</b> <sup>2</sup> CCEA compliant housing <input type="checkbox"/> <b>LiteGear</b> <sup>1</sup> Inverter, single phase central lighting, 125VA-250VA <input type="checkbox"/> <b>LPS Series</b> <sup>1</sup> LitePower micro-inverter, 20VA-55VA
			<input type="checkbox"/> <b>12L</b> 1200 Delivered Lumens	<input type="checkbox"/> <b>30K</b> 3000 Kelvin	<input type="checkbox"/> <b>9</b> <sup>3</sup> Nominal 95+ CRI	<input type="checkbox"/> <b>FL35</b> Nominal 35° cutoff	<input type="checkbox"/> <b>MFC</b> American Matte™	<input type="checkbox"/> <b>BL</b> Black Alzak	<input type="checkbox"/> <b>BT</b> Flat Black Trim Flange	
		<input type="checkbox"/> <b>15L</b> <sup>2</sup> 1500 Delivered Lumens	<input type="checkbox"/> <b>35K</b> 3500 Kelvin		<input type="checkbox"/> <b>WFL45</b> Nominal 45° cutoff	<input type="checkbox"/> <b>VS</b> Softglow®	<input type="checkbox"/> <b>LW</b> Light Wheat Alzak			
			<input type="checkbox"/> <b>40K</b> 4000 Kelvin			<input type="checkbox"/> <b>VSS</b> SoftSheen™	<input type="checkbox"/> <b>PW</b> Pewter Alzak			
							<input type="checkbox"/> <b>BC</b> Painted Flat Black Cone			
							<input type="checkbox"/> <b>WC</b> Painted White Cone			

<sup>1</sup> See Central Inverter compatibility note and web links on page 4

<sup>2</sup> DM01, and 15L models are not compatible with D2ICAT or D2CP. See additional notes on page 4 for important product life/warranty information when using D2ICAT or D2CP with 12L 95 CRI

<sup>3</sup> 15L with 95 CRI available only with DM01 driver option

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2" LED OPEN DOWNLIGHT  
120/277V

ELECTRICAL DATA	9L		12L		15L
	80+ CRI	95 CRI	80+ CRI	95 CRI	80+ CRI
Input Voltage	120 or 277V	120 or 277V	120 or 277V	120 or 277V	120 or 277V
Input Frequency	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Input Power (Watts)	12.6 W	19.0 W	15.7 W	23.4 W	21.1 W
Input Current (@120V)	0.106 A	0.160 A	0.132 A	0.190 A	0.180 A
Input Current (@277V)	0.046 A	0.069 A	0.057 A	0.085 A	0.077 A
Constant Current Output	610 mA	560 mA	500 mA	700 mA	700 mA
Power Factor	≥0.90	≥0.90	≥0.90	≥0.90	≥0.90
EMI Filtering (FCC 47CFR, Part 15)	Class B	Class B	Class B	Class B	Class B
Operating Temp	-30°C to 35°C	-30°C to 35°C	-30°C to 25°C	-30°C to 25°C	-30°C to 25°C

**Lumen Multipliers For Various Alzak Colors**

Clear Specular	1.00
Pewter Specular	0.94
Champagne Gold Specular	0.96
Light Wheat Specular	0.84
Black Specular	0.62

Note: These values are based upon the WFL45 Reflectors.

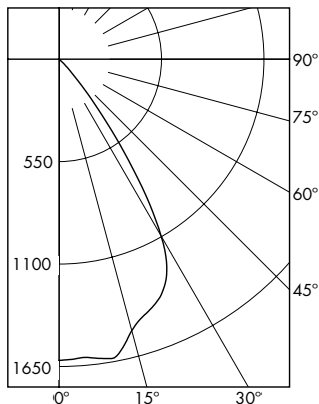
\*Data for standard 0-10V 10% dimming models. Electrical and photometric data may vary slightly with other dimming options.  
\*\*Short circuit, over-voltage, over-current protection.

**PERFORMANCE SUMMARY**

Model	Output	Beam Distribution	Delivered Lumens	Input Watts	Lumens Per Watt	Full Catalog Number
D2LED	9L	25°	727	12.6	57.7	D2LED-2D9LED9L30K8MD25
		35°	863	12.6	68.5	D2LED-2D9LED9L30K8FL35
		45°	921	12.6	73.1	D2LED-2D9LED9L30K8WFL45
	12L	25°	968	15.7	61.7	D2LED-2D9LED12L30K8MD25
		35°	1150	15.7	73.2	D2LED-2D9LED12L30K8FL35
		45°	1227	15.7	78.2	D2LED-2D9LED12L30K8WFL45
	15L	25°	1287	21.1	61.0	D2LED-2D9LED15L30K8MD25
		35°	1528	21.1	72.4	D2LED-2D9LED15L30K8FL35
		45°	1631	21.1	77.3	D2LED-2D9LED15L30K8WFL45

**D2LED-2D9LED15L30K8WFL45**

LED Light Engine: 3000K, 80 CRI  
System Wattage: 21.1  
Fixture delivered lumens: 1631  
Fixture Efficacy: 77.3  
Spacing Criteria: 0.96



**CANDELA DISTRIBUTION**

DEG	CANDELA
0	1617
5	1607
15	1509
25	1341
35	607
45	61
55	3
65	1
75	0
85	0
90	0

**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	%LUMINAIRE
0-30	1186	72.7
0-40	1570	96.2
0-60	1630	100.0
0-90	1631	100.0
0-180	1631	100.0

**LUMINANCE DATA IN CANDELA/SQ. METER**

Angle in Vertical	Average
45°	30183
55°	1830
65°	828
75°	0
85°	0

**COEFFICIENTS OF UTILIZATION** Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance																
	80%		70%		50%		30%		10%								
	70	50	30	10	70	50	30	10	50	30	10						
1	114	111	108	106	111	109	107	105	105	103	101	101	100	98	98	96	95
2	108	103	99	96	106	102	98	95	98	95	93	95	93	91	93	91	89
3	103	96	92	88	101	95	91	87	92	89	86	90	87	84	88	85	83
4	98	90	85	81	96	89	84	80	87	83	79	85	81	78	83	80	77
5	93	84	79	74	91	83	78	74	82	77	73	80	76	73	78	75	72
6	88	79	73	69	87	78	73	69	77	72	68	75	71	68	74	70	67
7	84	74	68	64	82	74	68	64	72	67	64	71	67	63	70	66	63
8	79	70	64	60	78	69	64	60	68	63	60	67	63	59	66	62	59
9	76	66	60	56	75	66	60	56	65	59	56	64	59	56	63	59	55
10	72	62	57	53	71	62	56	53	61	56	52	60	56	52	60	55	52

D2LED2D9LED15L30K8WFL45

Test No. 17.02640

Test No. 17.02640

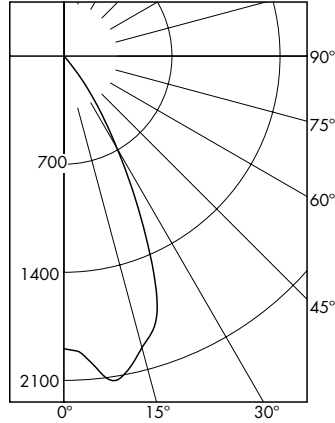
Tested at 25°C Ambient in accordance to IESNA LM-79-2008

**D2LED OPEN**

2" LED OPEN DOWNLIGHT  
120/277V

**D2LED-2D9LED15L30K8FL35**

LED Light Engine: 3000K, 80 CRI  
System Wattage: 21.1  
Fixture delivered lumens: 1528  
Fixture Efficacy: 72.4  
Spacing Criteria: 0.81



**CANDELA DISTRIBUTION**

DEG	CANDELA
0	1895
5	1988
15	1955
25	1219
35	329
45	11
55	2
65	1
75	0
85	0
90	0

**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	%LUMINAIRE
0-30	1297	84.9
0-40	1510	98.8
0-60	1527	100.0
0-90	1528	100.0
0-180	1528	100.0

**LUMINANCE DATA IN CANDELA/SQ. METER**

Angle in Vertical	Average
45°	5443
55°	1220
65°	828
75°	0.
85°	0.

**COEFFICIENTS OF UTILIZATION** Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance					20% Effective Floor Cavity Reflectance					% Wall Reflectance						
	80%		70%		50%	30%		10%		70		50		30		10	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	114	112	109	107	112	109	107	106	106	104	102	102	100	99	98	97	96
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	92	91
3	104	99	94	91	102	97	93	90	95	91	88	92	89	87	90	88	86
4	100	93	88	84	98	92	87	84	90	86	83	88	84	82	86	83	81
5	95	88	83	79	94	87	82	78	85	81	78	84	80	77	82	79	76
6	91	83	78	74	90	82	77	74	81	77	73	80	76	73	78	75	72
7	87	79	73	70	86	78	73	70	77	72	69	76	72	69	75	71	68
8	84	75	70	66	82	74	69	66	73	69	65	72	68	65	71	68	65
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62
10	77	68	63	59	76	68	62	59	67	62	59	66	62	59	65	61	59

D2LED-2D9LED15L30K8FL35

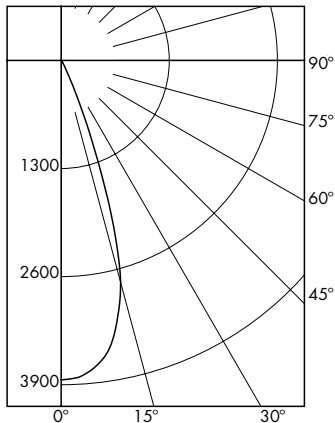
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Test No. 17.02641

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

**D2LED-2D9LED15L30K8MD25**

LED Light Engine: 3000K, 80 CRI  
System Wattage: 21.1  
Fixture delivered lumens: 1287  
Fixture Efficacy: 61.0  
Spacing Criteria: 0.53



**CANDELA DISTRIBUTION**

DEG	CANDELA
0	3842
5	3761
15	2760
25	302
35	33
45	9
55	4
65	1
75	1
85	0
90	0

**ZONAL LUMEN SUMMARY**

ZONE	LUMENS	%LUMINAIRE
0-30	1251	97.2
0-40	1274	99.0
0-60	1285	99.8
0-90	1287	100.0
0-180	1287	100.0

**LUMINANCE DATA IN CANDELA/SQ. METER**

Angle in Vertical	Average
45°	4453
55°	2440
65°	828
75°	1352
85°	0

**COEFFICIENTS OF UTILIZATION** Zonal Cavity Method

Room Cavity Ratio	% Effective Ceiling Cavity Reflectance					20% Effective Floor Cavity Reflectance					% Wall Reflectance						
	80%		70%		50%	30%		10%		70		50		30		10	
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	94	93	91
4	104	99	95	91	102	97	94	91	95	92	90	94	91	89	92	90	88
5	101	95	91	87	99	94	90	87	92	89	86	91	88	86	89	87	85
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82
7	95	88	84	81	94	88	84	81	87	83	80	85	82	80	85	82	80
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77
9	89	83	78	76	89	82	78	76	81	78	75	81	77	75	80	77	75
10	87	80	76	73	86	80	76	73	79	75	73	78	75	73	78	75	73

D2LED-2D9LED15L30K8MD25

Test No. 17.02642

Test No. 17.02642

Tested at 25°C Ambient in accordance to IESNA LM-79-2008

## D2LED OPEN

2" LED OPEN DOWNLIGHT

120/277V

### CENTRAL INVERTERS

For full fixture output in back-up mode, we recommend you visit the dual-lite website for your Central Lighting Inverter options.

Please contact your local Current representative for any assistance with proper sizing and loading of your inverter selection.

Central lighting inverters must be ordered separately.

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### INSTALLATION HINTS

#### **Daisy Chain:**

Often times through branch wiring (Daisy Chaining) will be desired for installation of the D2LED in an application. There is one knock out available in the J-tube for the line voltage, and one for the low voltage control wires. To accomplish 2in/2out through branch wiring. Prescolite suggests the use of an Arlington Duplex Connector (PN 4040AST).

#### **Ceiling Cut-out:**

Due to the discrete trim flange on the D2LED, the accuracy of the 2-7/8" ceiling cut-out is critical to achieving the best results.

Prescolite recommends making this cut-out with a 2-7/8" hole saw, such as one manufactured by the Morse Company (TAC46 and TACPD4).

#### **Ceiling Clearance:**

When no top access is available to the J-Tube, 8" of plenum clearance is recommended for the standard driver/J-Tube options.

For DM01 option, 10-1/2" plenum clearance is recommended.

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### DIMMING COMPATIBILITY

For more details and recommended dimmer list, see Dimming Compatibility Information at [www.currentlighting.com/prescolite](http://www.currentlighting.com/prescolite).

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### ADDITIONAL NOTES

\*Note: Use of the D2ICAT and D2CP can cause heat entrapment, which while safe to use, can shorten the expected life of this product from > 50,000 hours to 25,000 hours when used with the 12L or 95 CRI options. The product warranty in these applications will be 5 years, or 25,000 hours, which ever comes first.

\*Note: Ceiling thickness maximum when using D2ICAT or D2CP is 5/8". Ceiling thickness maximum when using D2FRM is 1".

Bar hangers not included, order B6 for ceiling joists up to 24" centers or B24 for T-bar ceilings.

\*Note: The standard product is designed and listed to be installed into most ceiling types without the use of an accessory frame.

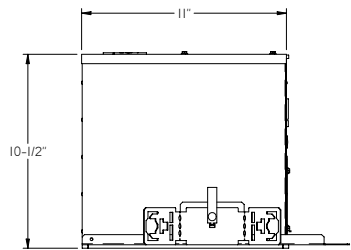
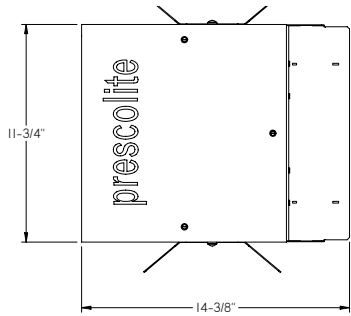
These frames are provided as an optional accessory to be used when desired by the end user to provide extra support or required by local code.

\*Note: CP versions require the use of the D2ICAT accessory modified with metal plate in place of polycarbonate.

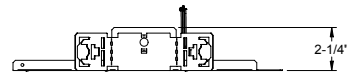
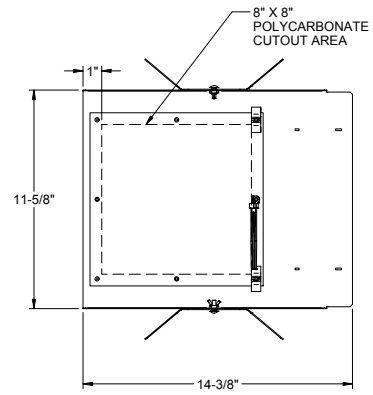
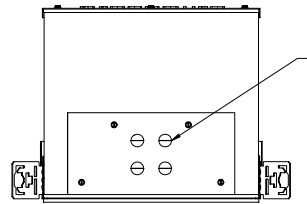
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2" LED OPEN DOWNLIGHT  
120/277V

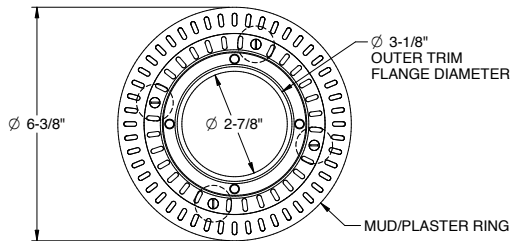
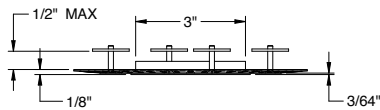
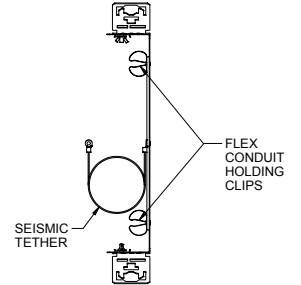
**ACCESSORIES**



**D2ICAT/D2CP**



**D2FRM**



**FMR2**