

# 4" IC 600 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

## IC1 LEDG4 RECESSED HOUSING

## OPEN TRIMS



### PRODUCT DESCRIPTION

Dedicated LED, Air-Loc® sealed new construction housing with integral light engine • Double wall, shallow housing construction allows for fit in 2 x 6 construction • Can be completely covered with insulation • Fully sealed housing stops infiltration and exfiltration of air, reducing heating and air cooling costs without the use of additional gaskets • LED housing is designed to provide 50,000 hours of life and is compatible with many standard Juno trims • 5 year limited warranty on LED components.

### ENVIRONMENTALLY FRIENDLY, ENERGY EFFICIENT

- No harmful ultraviolet or infrared wavelengths
- No lead or mercury, RoHS compliant
- Comparable light output to 65W incandescent

### PRODUCT SPECIFICATIONS

**LED Light Engine** LED array attached to high purity aluminum, thermally conductive inner housing provides superior heat transfer to ensure long life of the LED • Replaceable light engine mounts directly to inner housing assembly and incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step MacAdam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K, or 4100K color temperatures available • 90 CRI minimum.

**Optical System** Computer-optimized reflector design with high reflectance finish coupled with a high transmission diffusing lens conceals the LEDs and produces uniform aperture luminance • Deep regression of lens produces a low glare, efficient system that can produce over 600 lumens with select trims (see page 2 for details) using less than 12W\*.

**Aesthetic Trim Selections** Compatible with wide selection of existing Juno trims • Shadow free, knife edge design blends seamlessly into ceiling.

**LED Driver** Choice of dedicated 120 volt driver or universal voltage driver that accommodates input voltages from 120-277 volts AC at 50/60Hz • Power factor > 0.9 at 120V input • 120 volt only driver is dimmable with the use of most incandescent, magnetic low voltage and electronic low voltage wall box dimmers • Universal voltage driver is dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see [www.cree.com](#) Mounted inside housing for easy access from below ceiling.

**Life** Rated for 50,000 hours at 70% lumen maintenance.

**Labels** ENERGY STAR® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 with select trims • UL listed for U.S. and Canada through-branch wiring, damp locations • Union made • UL and cUL.

**Testing** All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

### HOUSING FEATURES

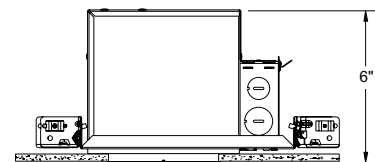
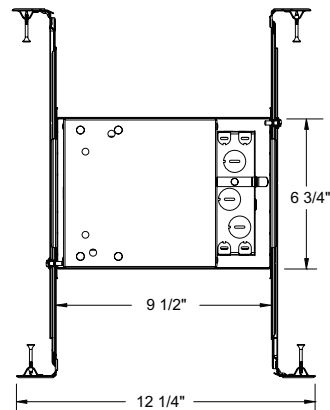
**Housing** Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness.

**Junction Box** Pre-wired junction box provided with (6) 1/2" and (1) 3/4" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum 6 #12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

**Mounting Frame** 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

**Real Nail 3 Bar Hangers** Telescoping Real Nail 3® system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip for suspended ceilings • Design covered under Patents US5,505,419 and D552,969.

### DIMENSIONS



4 1/2" CEILING CUTOUT

### ELECTRICAL DATA

#### Dedicated 120V Only Driver Option

##### 120V

Input Power	11.7W (+/-5%)
Input Current	0.10A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

### ELECTRICAL DATA

#### Universal Voltage

	120V	277V
Input Power	12.5W (+/-5%)	12.6W (+/-5%)
Input Current	0.11A	0.05A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (non-consumer)	FCC Title 47 CFR, Part 15, Class A (non-consumer)
Minimum starting temp	-40°C	-40°C
















\* Nominal input wattage @ 120-volt operation with dedicated 120-volt driver under stable operating conditions.

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## OPEN TRIMS

**ORDERING INFORMATION:** Housing and trim each ordered separately.

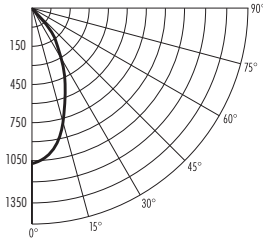
Example: IC1LEDG4-3K-1			Example: 14W-WH		
Housing	Color Temperature	Input Voltage	Trim/Description		
IC1LEDG4	<b>27K</b> 2700K <b>3K</b> 3000K <b>35K</b> 3500K <b>41K</b> 4100K	<b>1</b> Dedicated 120V Only (Forward Phase + ELV dimmable)  <b>U</b> Universal Voltage, 120-277V (0-10V dimmable)	 <b>13-WH</b> 2" Pinhole with Integral Shield	 <b>4103FROST-WH'</b> Beveled Cylinder <b>4103FROST-SC'</b>	
			 <b>14B-WH'</b> Black Baffle <b>14B-SC'</b> Black Baffle  <b>14B-ABZ'</b> Black Baffle  <b>14B-BL'</b> Black Baffle <b>14W-WH</b> White Baffle	 <b>4104HZ-SC</b> Beveled Cone - Haze <b>4104WHZ-ABZ</b> Beveled Cone - Wheat Haze	
			 <b>17C-WH</b> Cone - Clear Alzak®  <b>17G-WH</b> Cone - Gold Alzak®  <b>17B-WH</b> Cone - Black Alzak®  <b>17PT-SC</b> Cone - Pewter Alzak®  <b>17W-WH</b> Cone - Gloss White  <b>17HZ-WH</b> Cone - Haze  <b>17WHZ-WH</b> Cone - Wheat Haze  <b>17WHZ-ABZ</b> Cone - Wheat Haze	 <b>4150MESH-SC</b> Cylinder	Trim Size: 5" O.D. Trim Finish: ABZ - Classic Aged Bronze, BL - Black, SC - Satin Chrome, WH - White. Alzak is a registered trademark of Alcoa Corp. Note: In Canada when insulation is present, Type IC fixtures must be used.

<sup>1</sup> Universal Voltage: T24 @ 3K, 35K and 41K only

### PHOTOMETRIC REPORT

Test Report #: PTO2141303R  
 Catalog No: IC1LEDG4-35K-1  
 with 14W-WH Trim

Luminaire Spacing Criterion: 0.72  
 Luminaire LPW: 56



### CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1055
5	1026
15	791
25	425
35	146
45	38
55	16
65	7
75	5
85	0
90	0

Multiplier: 27K - 0.89  
 3K - 0.94  
 41K - 1.03

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)  
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	46	40	35
5.0'	29	26	23
6.0'	20	18	16
7.0'	17	14	13
8.0'	13	11	10
9.0'	10	9	8
10.0'	7	6	6

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	507	N/A	76.5
0-40°	603	N/A	91.0
0-60°	649	N/A	98.0
0-90°	663	N/A	100.0

### INITIAL FOOTCANDLES (One Unit, 11.8W, 44.2° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	65.9	3.2'
6	29.3	4.9'
8	16.5	6.5'
10	10.6	8.1'

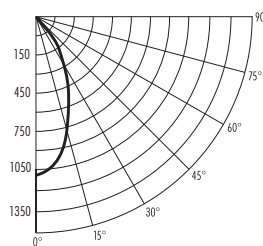
### LUMINANCE (Average cd/m<sup>2</sup>)

Degrees	Average Luminance
45	8859
55	4517
65	2855
75	2880
85	1425

### PHOTOMETRIC REPORT

Test Report #: LTL26327R  
 Catalog No: IC1LEDG4-35K-1  
 with 17C-WH Trim

Luminaire Spacing Criterion: 0.70  
 Luminaire LPW: 59



### CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1072
5	1054
15	785
25	441
35	181
45	59
55	18
65	0
75	0
85	0
90	0

Multiplier: 27K - 0.89  
 3K - 0.94  
 41K - 1.03

### AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)  
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	48	42	37
5.0'	31	27	24
6.0'	22	19	16
7.0'	17	15	13
8.0'	14	12	11
9.0'	11	9	8
10.0'	8	7	6

### ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	516	N/A	73.9
0-40°	631	N/A	90.5
0-60°	695	N/A	99.6
0-90°	698	N/A	100.0

### INITIAL FOOTCANDLES (One Unit, 11.8W, 43.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	67.0	3.2'
6	29.8	4.8'
8	16.8	6.4'
10	10.7	8.1'

### LUMINANCE (Average cd/m<sup>2</sup>)

Degrees	Average Luminance
45	13321
55	5080
65	766
75	0
85	0

Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.