

**JUNO**

Project: \_\_\_\_\_

Fixture Type: \_\_\_\_\_

Location: \_\_\_\_\_

Contact/Phone: \_\_\_\_\_

# 4" IC 1400L LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC1LED (G4 14LM) 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
- Exceeds performance of a 100W 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 4000K 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 • Standard optic is 45° narrow flood. Optional 60° wide flood offered (WFL option)

**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 (120) driver or universal voltage (MVOLT) drivers that accommodate 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 drivers are dimmable with the use of most 0-10V wall box dimmers • For a list of compatible dimmers, see [JUNOICLED-DIM](#) • Mounted inside housing for easy access from below ceiling.

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

**Labels** ENERGY STAR® Certified when used with select trims • Can be used to comply with 2019 Title 24, Part 6, JA8 high efficacy LED light source requirements with select trims • UL listed for U.S. and Canada through-branch wiring, damp locations • Union made • UL and cUL • CP option is compatible with spray foam insulation with an R-value of 3.2 per inch or less.

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

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 4 #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.

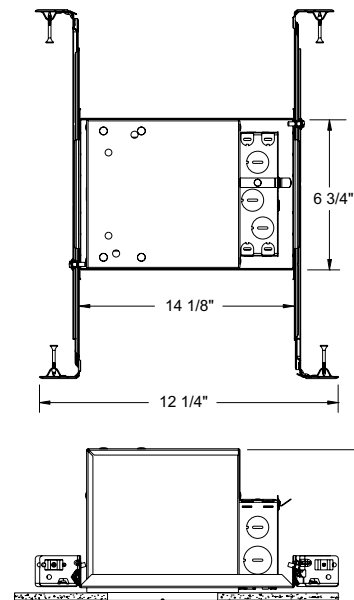
**Mounting Frame** 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

**Real Nail 3 Bar Hangers** Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping 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.

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



## DIMENSIONS



4 1/2" CEILING CUTOUT

# 4" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

## IC1LED (G4 14LM) RECESSED HOUSING OPEN TRIMS

### ELECTRICAL DATA

#### Dedicated 120V Only Driver Option (120 FRPC)

120V	
Input Power	17.3W (+/-5%)
Input Current	0.15A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

### ELECTRICAL DATA

#### Universal Voltage

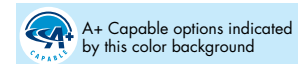
	MVOLT EZ10 and EZ1		MVOLT ZT10 and ZT1	
	120V	277V	120V	277V
Input Power	16W (+/-5%)	16.6W (+/-5%)	16W (+/-5%)	16.6W (+/-5%)
Input Current	0.14A	0.06A	0.14A	0.06A
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-20°C	-20°C	-20°C	-20°C

### ORDERING INFORMATION






Housing and trim can be ordered together or separate, but will always ship separately.

Example: IC1LED G4 14LM 27K 90CRI 120 FRPC

Series	Generation	Lumens	Color Temperature	CRI	Distribution	Voltage/Driver	Territory
IC1LED 4" LED IC New Construction Downlight	G4 Generation 4	14LM 1400 Nominal Lumens	27K 2700K	90CRI 90+ CRI	(blank) Medium Flood (45°)	120 FRPC 120V Forward/Reverse Phase Cut, 5% dim	CP Chicago Plenum
			30K 3000K		WFL Wide Flood (65°)	MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim	
			35K 3500K			MVOLT ZT1 Multi-Volt (120-277), 0-10V, 1% dim	
			40K 4000K			MVOLT EZ10 Multi-Volt (120-277), eLdoLED 0-10V, 10% dim	
						MVOLT EZ1 Multi-Volt (120-277), eLdoLED 0-10V, 1% dim	



### Trim/Description

	<b>13 WH</b>	4" Pinhole with Integral Shield - White
	<b>14 BBRZ<sup>1</sup></b>	4" Downlight Baffle Trim - Black Baffle, Bronze Trim Ring
	<b>14 BBL<sup>1</sup></b>	4" Downlight Baffle Trim - Black Baffle, Black Trim Ring
	<b>14 BSC<sup>1</sup></b>	4" Downlight Baffle Trim - Black Baffle, Satin Chrome Trim Ring
	<b>14 BWH<sup>1</sup></b>	4" Downlight Baffle Trim - Black Baffle, White Trim Ring
	<b>14 WWH</b>	4" Downlight Baffle Trim - White Baffle, White Trim Ring
	<b>17 BWH</b>	4" Downlight Cone Trim - Black Cone, White Trim Ring
	<b>17 CWH</b>	4" Downlight Cone Trim - Clear Alzak® Cone, White Trim Ring
	<b>17 HZWH</b>	4" Downlight Cone Trim - Haze Cone, White Trim
	<b>17 PTSC</b>	4" Downlight Cone Trim - Pewter Cone, Satin Chrome Trim
	<b>17 WHZBRZ</b>	4" Downlight Cone Trim - Wheat Haze Cone, Bronze Trim
	<b>17 WHZWH</b>	4" Downlight Cone Trim - Wheat Haze Cone, White Trim
	<b>17 WWH</b>	4" Downlight Cone Trim - White Cone, White Trim Ring

Trim Size: 5" O.D.

Alzak is a registered trademark of Alcoa Corp.

Note: In Canada when insulation is present, Type IC fixtures must be used.

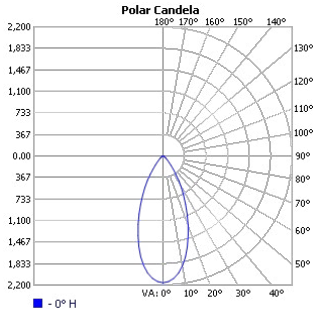
<sup>1</sup> Multi-Volt: T24 @ 30K, 35K, 40K only

# 4" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

## IC1LED (G4 14LM) RECESSED HOUSING OPEN TRIMS

### PHOTOMETRICS

**IC1LED G4 14LM 35K 90CRI 120 FRPC + 14 WWH, 3500K, input watts: 17.3, delivered lumens: 1482, LM/W=86, test no. 20-601-1P7**

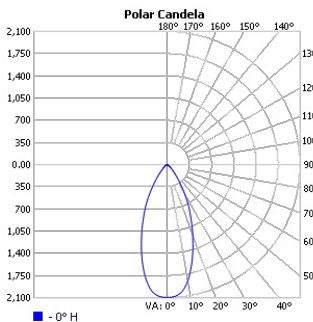


Multiplier: 27K - 0.89  
30K - 0.94  
40K - 1.03

Candela Table - Type C	
0	2158
5	2091
10	1898
15	1596
20	1242
25	904
30	622
35	378
40	208
45	119
50	75
55	52
60	37
65	26
70	21
75	17
80	12
85	5
90	0

Coefficients Of Utilization - Zonal Cavity Method													
RCC %:	80			70			50						
RW %:	70	50	30	0	70	50	30	0	50	30	20		
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11		
1	1.13	1.10	1.07	1.05	1.11	1.08	1.06	.93	1.04	1.02	1.00		
2	1.07	1.02	.98	.94	1.05	1.00	.96	.86	.97	.94	.91		
3	1.02	.95	.90	.86	1.00	.94	.89	.80	.91	.87	.84		
4	.96	.89	.83	.79	.95	.88	.82	.75	.85	.81	.77		
5	.92	.83	.77	.73	.90	.82	.77	.70	.80	.75	.72		
6	.87	.78	.72	.68	.86	.77	.72	.66	.76	.71	.67		
7	.83	.74	.68	.63	.82	.73	.67	.62	.72	.67	.63		
8	.79	.70	.64	.59	.78	.69	.63	.58	.68	.63	.59		
9	.76	.66	.60	.56	.74	.65	.60	.55	.64	.59	.56		
10	.72	.63	.57	.53	.71	.62	.57	.52	.61	.56	.53		
Average Luminance (Cd/m <sup>2</sup> )													
	0												
0	351730												
45	27427												
55	14665												
65	10082												
75	10786												
85	9904												
Zonal Lumen Summary													
Zone Lumens		% Luminaire											
0-30	1,046.0	70.6%											
0-40	1,287.3	86.8%											
0-60	1,431.9	96.6%											
60-90	50.5	3.4%											
0-90	1,482.4	100%											

**IC1LED G4 14LM 27K 90CRI 120 FRPC + 17 CWH, 3500K, input watts: 17.3, delivered lumens: 1362, LM/W=79, test no. 20-601-10P5**



Multiplier: 27K - 0.89  
30K - 0.94  
40K - 1.03

Candela Table - Type C	
0	2093
5	2058
10	1864
15	1532
20	1175
25	860
30	587
35	352
40	201
45	114
50	65
55	35
60	17
65	4
70	0
75	0
80	0
85	0
90	0

Coefficients Of Utilization - Zonal Cavity Method													
RCC %:	80			70			50						
RW %:	70	50	30	0	70	50	30	0	50	30	20		
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.00	1.11	1.11	1.11		
1	1.14	1.11	1.09	1.06	1.11	1.09	1.07	.94	1.05	1.03	1.01		
2	1.08	1.03	1.00	.96	1.06	1.02	.98	.88	.99	.96	.93		
3	1.03	.97	.92	.88	1.01	.95	.91	.83	.93	.89	.86		
4	.98	.91	.85	.81	.96	.90	.85	.78	.87	.83	.80		
5	.93	.85	.80	.75	.92	.84	.79	.73	.82	.78	.74		
6	.89	.80	.74	.70	.87	.79	.74	.68	.78	.73	.70		
7	.85	.76	.70	.66	.83	.75	.70	.65	.74	.69	.65		
8	.81	.72	.66	.62	.80	.71	.66	.61	.70	.65	.62		
9	.77	.68	.62	.58	.76	.68	.62	.58	.67	.62	.58		
10	.74	.65	.59	.55	.73	.64	.59	.55	.63	.59	.55		
Average Luminance (Cd/m <sup>2</sup> )													
	0												
0	341113												
45	26388												
55	10063												
65	1517												
75	0												
85	0												
Zonal Lumen Summary													
Zone Lumens		% Luminaire											
0-30	1,006.3	73.9%											
0-40	1,231.7	90.5%											
0-60	1,356.5	99.6%											
60-90	5.2	0.4%											
70-100	0.000	0%											
90-120	0.000	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.