# **JUNO**®

Project:	
Fixture Type:	
Location:	
Contact/Phone:	

# 6" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC22LED (G4 09LM) RECESSED HOUSING







### **PRODUCT DESCRIPTION**

Dedicated LED, Air-Loc® sealed new construction housing with integral light engine • Shallow housing allows for fit in 2 x 6 construction • Can be completely covered with insulation • Fully sealed housing stops infiltration and exhiltration 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
- Comparable light output to 75W PAR30 incandescent

### **PRODUCT SPECIFICATIONS**

**LED Light Engine** LED array integrated to thermally conductive housing provides uninterrupted heat transfer to ensure long life of the LED ● Replaceable light engine mounts directly to housing 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 white 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 produces 900 lumens typical with select trims • Wide flood distribution (>70°) shipped as standard with optional optic accessories available and sold separately.

**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 <u>JUNOICLED-DIM</u> • Mounted between the j-box and housing for easy access and cool operation.

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

Labels ENERGY STAR® Certified when used with select baffle and cone trims 
■ Certified to the high efficacy requirements of California T24 JA8-2019 with select trims 
■ UL listed for U.S. and Canada through-branch wiring, damp locations 
■ UL and cUL.

**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 2" ceiling thickness.

**Junction Box** Pre-wired junction box provided with (5) 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 8 #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.

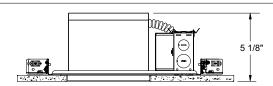
**Mounting Frame** 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

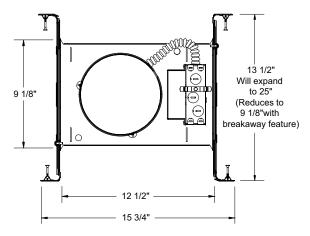
**Real Nail 3 Bar Hangers** Telescoping Real Nail® 3 system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction

• Integral T-bar notch and clip for suspended ceilings • Design covered under US Patent D552,969.



### **DIMENSIONS**





67/8" CEILING CUTOUT

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## **OPEN TRIMS**

### **ELECTRICAL DATA**

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

	120V	
Input Power	11.5W (+/-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**

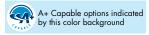
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	MVOLT EZ	IO and EZI	MVOLT ZT	IO and ZTI
	120V	277V	120V	277V
Input Power	10.8W (+/-5%)	11.8W (+/-5%)	10.8W (+/-5%)	11.8W (+/-5%)
Input Current	0.09A	0.05A	0.09A	0.05A
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class 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: IC22LED G4 09LM 27K 90CRI 120 FRPC

Series		Gener	ration	Lumens		Color	Temperature	CRI		Voltage/Drive	r
IC22LED	6" LED New Construction Downlight	G4	Generation 4	09LM	900 Nominal Lumens	27K	2700K	90CRI	90+ CRI	120 FRPC	120V Forward/Reverse Phase Cut, 5% dim
						30K	3000K			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



24 BBRZ 1,3 24 BBL 1,3 24 BSC 1,3



6" Downlight Tapered Black Baffle, Bronze Trim Ring 6" Downlight Tapered Black Baffle, Black Trim Ring 6" Downlight Tapered Black Baffle, Satin Chrome Trim Ring

6" Downlight Tapered Black Baffle, White Trim Ring

6" Downlight Tapered White Baffle, White Trim Ring

27 GWH <sup>4</sup> 27 HZWH 4

27 BWH 1,5 6" Downlight Tapered Black Cone, White Trim Ring 27 CWH 4 6" Downlight Tapered Clear Cone Alzak®, White Trim Ring 6" Downlight Tapered Gold Cone, White Trim Ring 6" Downlight Tapered Haze Cone, White Trim Ring **27 PTSC** <sup>2</sup> 6" Downlight Tapered Pewter Cone, Satin Chrome Trim Ring

27 WHZBRZ 4 6" Downlight Tapered Wheat Haze Cone, Bronze Trim Ring 27 WHZWH 4 6" Downlight Tapered Wheat Haze Cone, White Trim Ring **27 WWH** <sup>2</sup> 6" Downlight Tapered White Cone, White Trim Ring

Trim Size: 24, 27 - 75/8" 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> Not ENERGY STAR® Certified
- <sup>2</sup> Multi-Volt: T24 @ 35K, 40K only
- 3 120V: T24 @ 30K, 35K, 40K only
- 4 Multi-Volt: T24 @ 30K, 35K, 40K only
- 5 120V only: T24 certified

### Accessories (ordered separately)

Catalog Number	Description
LEDOPTICG3 MFL	Medium Flood Optic (50°)
LEDOPTICG3 NFL	Narrow Flood Optic (37°)
LEDOPTICG3 SP Spot Optic (10°)	

Catalog Number	Description
TR6 BRZ	6" Trim Ring - Bronze
TR6 BL	6" Trim Ring - Black
TR6 SC	6" Trim Ring - Satin Chrome
TR6 WH	6" Trim Ring - White

To order, specify catalog number.

\*TR6 available for 24 and 27 trim series only

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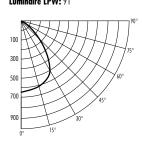
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## **OPEN TRIMS**

#### **PHOTOMETRICS**

### PHOTOMETRIC REPORT

Test Report#: PT02141401R
Catalog No: IC22LED G4 09LM 35K with
24 WWH Trim and standard wide flood optic
Luminaire Spacing Criteria: 1.16
Luminaire LPW: 91



## CANDLEPOWER DISTRIBUTION

(Candelas)	
Degrees Vertical	0°
0	655
5	649
15	610
25	545
35	427
45	194
55	85
65	42
75	24
85	6
90	0
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Multipliers: 27K - 0.90 30K - 0.97 40K - 1.04

## AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)

Ceiling 80%	, Wall 50%,	Floor 20%	
Spacing	RCR1	RCR3	RCR5
4.0′	71	59	49
5.0′	45	37	31
6.0	32	26	22
7.0′	26	21	18
8.0	20	17	14
9.0	15	13	11
10.0′	11	9	8

### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixture
0 - 30°	484	N/A	46.0
0 - 40°	745	N/A	70.8
0 - 60°	978	N/A	92.9
0 - 90°	1052	N/A	100.0

### **INITIAL FOOTCANDLES**

(One Unit, 11.5W, 78.8° Beam)

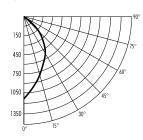
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	40.9	6.6'
6	18.2	9.9'
8	10.2	13.1′
10	6.6	16.4′

### LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	14990
55	8113
65	5412
75	5150
85	3529

### PHOTOMETRIC REPORT

Test Report#: 25975R
Catalog No: IC22LED G4 09LM 35K with
24 CWH Trim and standard wide flood optic
Luminaire Spacing Criteria: 0.78
Luminaire LPW: 101



# CANDLEPOWER DISTRIBUTION

(Candelas)	
Degrees Vertical	0°
0	1152
5	1081
15	821
25	644
35	460
45	220
55	70
65	14
75	0
85	0
90	0
11 la la 0.711 0.00	

Multipliers: 27K - 0.90 30K - 0.97 40K - 1.04

# AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling 80%, Wall 50%, Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0′	80	67	57
5.0′	51	43	37
6.0	35	30	25
7.0′	29	24	21
8.0′	23	19	16
9.0	17	15	12
10.0′	13	11	9

#### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixture
0 - 30°	625	N/A	53.9
0 - 40°	909	N/A	78.3
0 - 60°	1145	N/A	98.7
0 - 90°	1160	N/A	100.0

### **INITIAL FOOTCANDLES**

(One Unit, 11.5W, 58.1° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	72.0	4.4'
6	32.0	6.7'
8	18.0	8.9'
10	11.5	11.1′

### LUMINANCE (Average cd/m²)

	Degrees	Average Luminance
	45	18537
	55	7239
ĺ	65	2007
	75	0
	85	0

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