### G1.7.39

# JUNO

Project:

Fixture Type:

Location:

Contact/Phone:

### 4" IC 900 LUMEN LED DOWNLIGH **NEW CONSTRUCTION** IC1LED (G4 09LM) RECESSED HOUSING HYPERBOLIC 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 75W 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.

Hyperbolic Optical System Patented (U.S. Patent No. 10,670,227 B2) hyperbolic reflector shape optimized for small, directional LED source provides unique aperture appearance with reduced brightness • NMC<sup>™</sup> nano mixing chamber (provided with trim) with high reflectance white finish coupled with a high transmission diffusing lens conceals the LED and integrates with the hyperbolic trim to create a low glare, efficient system producing 900 lumens using less than 12W\*.

Aesthetic Trim Selections Patented (U.S. Patent No. 10,670,227 B2) hyperbolic reflector available in clear Alzak®, haze, wheat haze, black Alzak® and white • Shadow free, knife edge design blends seamlessly into ceiling Installs with push-in springs.

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. 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 throughbranch 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 1½" ceiling thickness.

Junction Box Pre-wired junction box provided with (6) ½" and (1) ¾" 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.

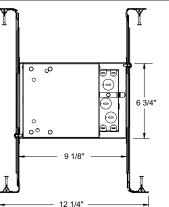
Mounting Frame 22-gauge die-formed galvanized steel mounting frame
 Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

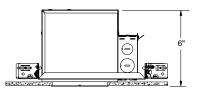
**Real Nail 3 Bar Hangers** Patented (US Patent D552,969) Real Nail® 3 bar hangers: telescoping system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and 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 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION IC 1 LED (G4 09LM) RECESSED HOUSING

### **HYPERBOLIC TRIMS**

A+ Capable options indicated by this color background

### **ELECTRICAL DATA**

### **ELECTRICAL DATA**

Dedicated 120V Only Driver Option (120 FRPC)					
	120V				
Input Power	11.6W (+/-5%)				
Input Current	0.10A				
Frequency	50/60Hz				
EMI/RFI	FCC Title 47 CFR, Part 15,				
,	Class B (residential)				
Minimum starting temp	-25°C				

Universal Vol	tage				
	MVOLT EZ	10 and EZ1	MVOLT ZT10 and ZT1		
	120V	277V	120V	277V	
Input Power	11.2W (+/-5%)	12.2W (+/-5%)	11.2W (+/-5%)	12.2W (+/-5%)	
Input Current	0.10A	0.05A	0.10A	0.05A	
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	
EMI/RFI	FCC Title 47 CFR, Part 15,				
	Class B (residential)	Class B (residential)	Class B (residential)	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: ICILED G4 09LM 27K 90CRI 120 FRPC

Series		Gen	eration	Lumens		Color	Temperature	CRI		Voltage/Driv	er	Terri	tory
IC1LED	4" LED IC New Construction	G4	Generation 4	09LM	900 Nominal	27K	2700K	90CRI	90+ CRI	120 FRPC	120V Forward/Reverse Phase Cut, 5% dim	CP	Chicago Plenum
	Downlight				Lumens	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



17HYP2 BWH<sup>1</sup> 17HYP2 CWH 17HYP2 HZWH 17HYP2 WHZBRZ<sup>1</sup>

- 4" Hyperbolic Cone Trim Black Cone, White Trim Ring
- 4" Hyperbolic Cone Trim Clear Alzak® Cone, White Trim Ring
- 4" Hyperbolic Cone Trim Haze Cone, White Trim Ring
- 4" Hyperbolic Cone Trim Wheat Haze Cone, Bronze Trim Ring
- 4" Hyperbolic Cone Trim Wheat Haze, White Trim Ring 4" Hyperbolic Cone Trim - White, 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.

17HYP2 WHZWH<sup>1</sup>

17HYP2 WWH<sup>2</sup>

<sup>1</sup> Not ENERGY STAR<sup>®</sup> Certified or T24 certified

<sup>2</sup> ENERGY STAR® Certified and T24 certified @ 30K with 120 driver and @ 35K, 40K with all drivers

## 4" IC 900 LUMEN LED DOWNLIGHT **NEW CONSTRUCTION** IC1LED (G4 09LM) RECESSED HOUSING

RCR5

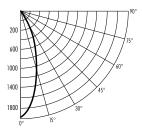
## HYPERBOLIC TRIMS

### **PHOTOMETRICS**

### PHOTOMETRIC REPORT

Test Report #: PT06140404R Catalog No: ICILED G4 09LM 35K 90CRI 120 with 17HYP2 HZWH Trim and standard nano mixing chamber

Luminaire Spacing Criterion: 0.62 Luminaire LPW: 70



#### DISTRIBUTION (Candelas) Degrees Vertical 0° 0 1873

5

CANDLEPOWER

FOOTCA		<b>L</b>	
Multiple Unit	s (Square A	rray, 60'x60	)′ room)
Ceiling 80	% Wall 50	0% Floor 2	20%
Spacing	RCR 1	RCR3	RCR5
1.01	67	<b>C</b> 1	

4.0´	57	51	46
5.0´	36	32	29
6.0´	25	23	20
7.0´	20	18	17
8.0´	16	14	13
9.0´	12	11	10
10.0´	9	8	7

ZONAL LUMEN SUMMARY
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Zone	Lumens	%Lamp	%Fixture
$0 - 30^{\circ}$	751	N/A	92.8
0-40°	805	N/A	99.4
0-60°	810	N/A	100.0
0-90°	810	N/A	100.0

### **INITIAL FOOTCANDLES** (One Unit, 11.6W, 38.3° Beam)

Footcandles Beam Center	Beam Diameter
117.1	2.8′
52.1	4.2′
29.3	5.6′
18.7	6.9′
	52.1 29.3

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

	Average	
Degrees	Luminance	
45	974	
55	46	
65	0	
75	0	
85	0	

#### **PHOTOMETRIC REPORT**

Test Report #: PT06140402R Catalog No: ICILED G4 09LM 35K 90CRI 120 with 17HYP2 CWH Trim and standard nano mixing chamber Luminaire Spacing Criterion: 0.56 Luminaire LPW: 72

300 900 1500 2100 2700

#### CANDLEPOWER DISTRIBUTION

(Candelas) Degrees Vertical 0°

0	2294						
5	2054						
15	1294						
25	618						
35	37						
45	1						
55	0						
65	0						
75	0						
85	0						
90	0						
Multiplier: 27K - 0.89							
	30K - 0.94						
40K - 1.03							

#### **AVERAGE INITIAL** FOOTCANDLES

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

Ceiling 80	% vvali 50	J% Floor 2	0%
Spacing	RCR 1	RCR3	RCR5
4.01	60	54	49
5.0´	38	34	31
6.0´	27	24	22
7.0´	21	19	18
8.0´	17	15	14
9.0´	13	12	11
10.0´	10	9	8

ZONAL LUMEN SUMMARY							
Zone	Lumens	%Lamp	%Fixture				
0 - 30°	811	N/A	95.0				
0 - 40°	852	N/A	99.9				
0 - 60°	853	N/A	100.0				
0 - 90°	853	N/A	100.0				

### **INITIAL FOOTCANDLES**

(One Unit, 11.6W , 34.2° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	143.4	2.5′
6	63.7	3.7′
8	35.8	4.9′
10	22.9	6.2′

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

Average		
Degrees	Luminance	
45	300	
55	0	
65	0	
75	0	
85	0	

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