

Contact/Phone:

# Project: Fixture Type: Location:

# **5" IC 900 LUMEN** LED DOWNLIGHT **NEW CONSTRUCTION**

IC20LED (G4 09LM), RECESSED HOUSING







## **HYPERBOLIC TRIMS**

## 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 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
- 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.

Hyperbolic Optical System Unique hyperbolic reflector shape optimized for small, directional LED source provides unique aperture appearance with reduced brightness • NMC<sup>TM</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 alare, efficient system

Aesthetic Trim Selections Hyperbolic reflector available in clear Alzake, haze, wheat haze, black Alzáko and white • Shadow free, knife edge design blends seamlessly into ceiling • Installs with torsion 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 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 trims • Certified to the high efficacy requirements of California T24 JA8-2016 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. 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) ½" and (1) ¾" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire

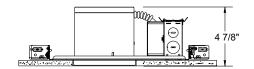
• UL listed and cUL listed for through-branch wiring, maximum 8,#12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

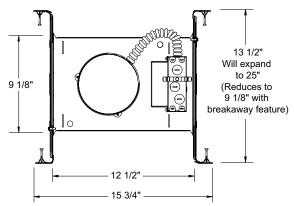
Mounting Frame 22-gauge die-formed galvanized steel mounting frame Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

**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**





5 5/8" CEILING CUTOUT

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## **HYPERBOLIC TRIMS**

## **ELECTRICAL DATA**

#### Dedicated 120V Only Driver Option (120 FRPC) 120V 11.5W (+/-5%) Input Power 0.10A Input Current Frequency 50/60Hz FCC Title 47 CFR, Part 15, EMI/RFI Class B (residential) Minimum starting temp -25°C

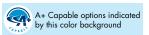
## **ELECTRICAL DATA**

Universal Volte	age				
	MVOLT EZ	10 and EZ1	MVOLT ZT10 and ZT1		
	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: IC20LED G4 09LM 30K 90CRI 120 FRPC

Series		Gene	ration	Lumens		Color	Temperature	CRI		Voltage/Drive	er
IC20LED	5" LED IC 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







204HYP3 HZWH <sup>4</sup> 204HYP3 WHZABZ 1

204HYP3 BWH 1

204HYP3 CWH <sup>3</sup>

204HYP3 WHZWH 1

204HYP3 WWH <sup>2</sup>

5" Hyperbolic Cone Trim - Black Cone, White Trim Ring

5" Hyperbolic Cone Trim - Clear Alzak® Cone, White Trim Ring

 $5^{\prime\prime}$  Hyperbolic Cone Trim - Haze Cone , White Trim Ring

5" Hyperbolic Cone Trim - Wheat Haze Cone, Classic Aged Bronze Trim Ring

5" Hyperbolic Cone Trim - Wheat Haze Cone, White Trim Ring

5" Hyperbolic Cone Trim - White Cone, White Trim Ring

Not ENERGY STAR- Certified or T24 Certified

<sup>2</sup> MVOLT: Not ENERGY STAR® Certified or T24 certified 3 MVOLT: ENERGY STAR® Certified and T24

certified @ 35K, 40K only 4 MVOLT: ENERGY STAR® Certified and T24 certified @ 40K only

## Accessories (ordered separately)

Catalog Number	Description
TR5 ABZ	5" Trim Ring - Classic Aged Bronze
TR5 BL	5" Trim Ring - Black
TR5 SC	5" Trim Ring - Satin Chrome
TR5 WH	5" Trim Ring - White

To order, specify catalog number

Trim Size: 61/4" O.D.

Alzak® is a registered trademark of Alcoa Corp.

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

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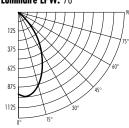
## **HYPERBOLIC TRIMS**

## PHOTOMETRIC REPORT

Test Report #: PT03140404 Catalog No: IC20LED G4 09LM 35K with 204HYP3 CWH Trim

and standard nano mixing

**Luminaire Spacing Criterion: 0.94** Luminaire LPW: 76



## **CANDLEPOWER DISTRIBUTION**

(Candelas)				
Degrees				
Vertical	0°			
0	960			
5	990			
15	893			
25	644			
35	303			
45	61			
55	0			
65	0			
75	0			
0.0	۸			

## **AVERAGE INITIAL FOOTCANDLES**

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

20g 20/0 1 all 20/0 1 lest 20/0				
Spacing	RCR1	RCR3	RCR5	
4.0′	61	53	47	
5.0´	39	34	30	
6.0′	27	24	21	
7.0´	22	19	17	
8.0′	17	15	13	
9.0′	13	12	10	
10.0′	10	9	7	

₹5	Distuille
7	
0	
1	
7	
3	
0	

# **INITIAL FOOTCANDLES**

(One Unit, 11.5W, 59.8° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	60.0	4.6′
6	26.7	6.9'
8	15.0	9.2'
10	9.6	11.5′

ZONAL LUMEN SUMMAKT				
Zone	Lumens	%Lamp	%Fixture	
0 - 30°	635	N/A	72.1	
0 - 40°	827	N/A	93.9	
0-60°	880	N/A	100.0	
0 - 90°	880	N/A	100.0	

## LUMINANCE (Average cd/m²)

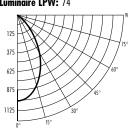
Average 0°				
Degrees	Luminance			
45	8200			
55	16			
65	0			
75	0			
85	0			

#### PHOTOMETRIC REPORT

Test Report #: PT03140405 Catalog No: IC20LED G4 09LM 35K with 204HYP3 HZWH Trim

and standard nano mixing chamber

Luminaire Spacing Criterion: 0.88 Luminaire LPW: 74



## **CANDLEPOWER DISTRIBUTION**

27K - 0 93 30K - 0.99 40K - 1.01

(Candelas)

90

Degrees	
Vertical	0°
0	1011
5	993
15	839
25	618
35	296
45	108
55	1
65	0
75	0
85	0
90	0

30K - 0.99 40K - 1.01

## **AVERAGE INITIAL FOOTCANDLES**

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

Spacing	RCR1	RCR3	RCR5
4.0′	59	51	45
5.0′	38	33	29
6.0′	26	23	20
7.0′	21	18	16
8.0′	17	15	13
9.0′	13	11	10
10.0′	9	8	7

## **INITIAL FOOTCANDLES**

(One Unit, 11.5W, 59.8° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	63.2	4.6'
6	28.1	6.9'
8	15.8	9.2'
10	10.1	11.5′

## **ZONAL LUMEN SUMMARY**

-	ZONAL LOMEN SOMMAKI			
	Zone	Lumens	%Lamp	%Fixture
Ī	0-30°	608	N/A	71.4
	0 - 40°	795	N/A	93.3
Ξ	0-60°	852	N/A	100.0
	0 - 90°	852	N/A	100.0

## LUMINANCE (Average cd/m²)

Average 0°			
Degrees	Luminance		
45	8727		
55	93		
65	0		
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.