



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

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

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

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

# 5" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC20LED (G4 14LM), RECESSED HOUSING

**HYPERBOLIC TRIMS**

## PRODUCT DESCRIPTION

Dedicated LED, Air-Loc® sealed new construction housing with integral light engine • Housing allows for fit in 2 x 8 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 120W PAR38, BR40 incandescent or 32W compact fluorescent

## 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 • NMCT™ 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.

**Aesthetic Trim Selections** Hyperbolic reflector available in clear Alzak®, haze, wheat haze, black Alzak® 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](#)

**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 and 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 (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 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.

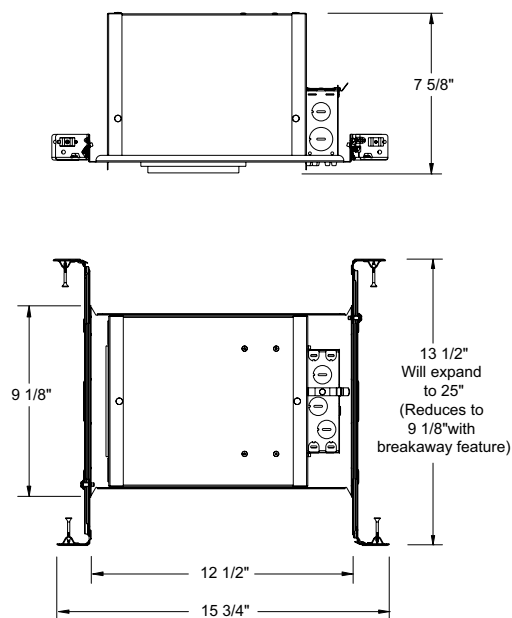
**Mounting Frame** 22-gauge die-formed galvanized steel mounting frame

- Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

**Real Nail 3 Bar Hangers** 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.



## DIMENSIONS



5 5/8" CEILING CUTOUT

# 5" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

## IC20LED (G4 14LM), RECESSED HOUSING HYPERBOLIC TRIMS

### ELECTRICAL DATA

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

120V	
Input Power	17.4W (+/-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	15.6W (+/-5%)	16.3W (+/-5%)	15.6W (+/-5%)	16.3W (+/-5%)
Input Current	0.13A	0.06A	0.13A	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: IC20LED G4 14LM 30K 90CRI 120 FRPC

Series	Generation	Lumens	Color Temperature	CRI	Voltage/Driver
IC20LED 5" LED IC New Construction Downlight	G4 Generation 4	14LM 1400 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



A+ Capable options indicated by this color background

### Trim/Description



<b>204HYP3 BWH</b>	5" Hyperbolic Cone Trim - Black Cone, White Trim Ring
<b>204HYP3 CWH</b>	5" Hyperbolic Cone Trim - Clear Alzak® Cone, White Trim Ring
<b>204HYP3 HZWH<sup>3</sup></b>	5" Hyperbolic Cone Trim - Haze Cone, White Trim Ring
<b>204HYP3 WHZABZ<sup>1</sup></b>	5" Hyperbolic Cone Trim - Wheat Haze Cone, Classic Aged Bronze Trim Ring
<b>204HYP3 WHZWH<sup>1</sup></b>	5" Hyperbolic Cone Trim - Wheat Haze Cone, White Trim Ring
<b>204HYP3 WWH<sup>2</sup></b>	5" Hyperbolic Cone Trim - White Cone, White Trim Ring

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

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

<sup>3</sup> MVOLT: ENERGY STAR®-Certified and T24 certified @ 35K, 41K only

### Accessories (ordered separately)

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

To order, specify catalog number.

Trim Size: 6 1/4" O.D.

Alzak® is a registered trademark of Alcoa Corp.

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

# 5" IC 1400 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

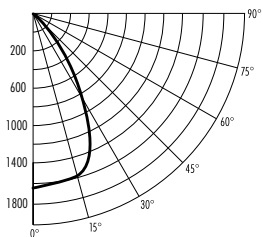
IC20LED (G4 14LM), RECESSED HOUSING  
HYPERBOLIC TRIMS

## PHOTOMETRIC REPORT

Test Report #: PT10141706R  
Catalog No: IC20LED G4 14LM 35K  
with 204HYP3 CWH Trim  
and standard nano mixing  
chamber

Luminaire Spacing Criterion: 0.92

Luminaire LPW: 86



## CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1658
5	1634
15	1496
25	1074
35	522
45	127
55	0
65	0
75	0
85	0
90	0

Multiplier: 27K - 0.93  
30K - 0.97  
40K - 1.02

## AVERAGE INITIAL FOOTCANDLES

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

Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	104	90	78
5.0'	66	57	50
6.0'	46	40	35
7.0'	37	32	28
8.0'	29	25	22
9.0'	23	19	17
10.0'	17	14	13

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	1060	N/A	71.1
0-40°	1388	N/A	93.0
0-60°	1492	N/A	100.0
0-90°	1492	N/A	100.0

## INITIAL FOOTCANDLES

(One Unit, 17.4W, 59.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	103.6	4.6'
6	46.1	6.9'
8	25.9	9.2'
10	16.6	11.5'

## LUMINANCE (Average cd/m²)

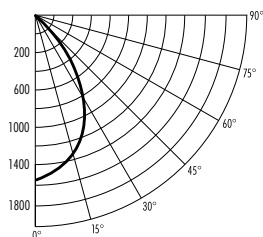
Degrees	Average 0° Luminance
45	16972
55	0
65	0
75	0
85	0

## PHOTOMETRIC REPORT

Test Report #: PT10141704R  
Catalog No: IC20LED G4 14LM 35K  
with 204HYP3 HZWH Trim  
and standard nano mixing  
chamber

Luminaire Spacing Criterion: 0.90

Luminaire LPW: 81



## CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1571
5	1532
15	1298
25	1008
35	534
45	124
55	2
65	0
75	0
85	0
90	0

Multiplier: 27K - 0.93  
30K - 0.97  
40K - 1.02

## AVERAGE INITIAL FOOTCANDLES

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

Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	98	85	74
5.0'	63	54	47
6.0'	43	38	33
7.0'	35	30	27
8.0'	28	24	21
9.0'	21	18	16
10.0'	16	14	12

## ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	967	N/A	68.6
0-40°	1299	N/A	92.2
0-60°	1409	N/A	100.0
0-90°	1409	N/A	100.0

## INITIAL FOOTCANDLES

(One Unit, 17.4W, 61.3° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	98.2	4.7'
6	43.6	7.1'
8	24.5	9.5'
10	15.7	11.9'

## LUMINANCE (Average cd/m²)

Degrees	Average 0° Luminance
45	16666
55	361
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.