# JUNO

Contact/Phone:

# Project: Fixture Type: Location:

# **5" IC 600 LUMEN** LED DOWNLIGHT **NEW CONSTRUCTION**

IC20LED (G4 06LM), RECESSED HOUSING





# OPEN 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 65W BR30 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 can produce over 600 lumens with select trims (see page 2 for details) using less than 9W\* • Wide flood (>70°) distribution 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 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 baffle and cone 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)  $\frac{1}{2}$ " and (1)  $\frac{3}{4}$ " 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.

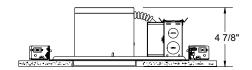
Mounting Frame 22-gauge die-formed galvanized steel mounting frame Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

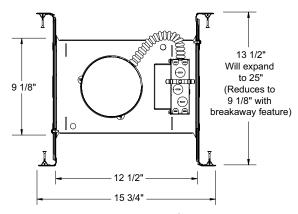
**Real Nail 3 Bar Hangers** Telescoping Real Nail® 3 system permits quick placement of housing anywhere within 24" O.C. joists or suspended ceilings • Includes removable nail for repositioning of fixture in wood joist construction • Integral T-bar notch and clip for suspended ceilings • Design covered under US Patent D552,969.

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



#### **DIMENSIONS**





5 5/8" CEILING CUTOUT

# **5" IC 600 LUMEN** LED DOWNLIGHT **NEW CONSTRUCTION**

IC20LED (G4 06LM), RECESSED HOUSING

# **OPEN TRIMS**

## **ELECTRICAL DATA**

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

	120V	
Input Power	8.6W (+/-5%)	
Input Current	0.07A	
Frequency	50/60Hz	
EMI/RFI	FCC Title 47 CFR, Part 15,	
	Class B (residential)	
Minimum starting temp	-25°C	

## **ELECTRICAL DATA**

#### **Universal Voltage**

	MVOLT EZ	EZ10 and EZ1 MVOLT		ZT10 and ZT1		
	120V	277V	120V	277V		
Input Power	8.3W (+/-5%)	8.9W (+/-5%)	8.3W (+/-5%)	8.9W (+/-5%)		
Input Current	0.07A	0.03A	0.07A	0.03A		
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: IC20LED G4 06LM 30K 90CRI 120 FRPC

Series		Gener	ation	Lumens		Color	Temperature	CRI		Voltage/Drive	er
IC20LED	5" LED IC New Construction Downlight	G4	Generation 4	06LM	600 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



205 BABZ1 5" Downlight Baffle Trim - Black Baffle, Classic Aged Bronze Trim Ring 1 Not ENERGY STAR® Certifed or T24 certified 205 BSC1 5" Downlight Baffle Trim -Black Baffle, Satin Chrome Trim Ring



5" Downlight Baffle Trim -Black Baffle, White Trim Ring 205 BWH1 5" Downlight Baffle Trim -White Baffle, White Trim Ring 205 WWH



5" Downlight Cone Trim -Black Alzak® Cone, White Trim Ring 204 BWH1 204 CWH 5" Downlight Cone Trim -Clear Alzak® Cone, White Trim Ring 204 GWH 5" Downlight Cone Trim -Gold Alzak® Cone, White Trim Ring



204 HZWH 5" Downlight Cone Trim -Haze Cone, White Trim Ring



204 PTSC 5" Downlight Cone Trim -Pewter Alzak® Cone, Satin Chrome Trim Ring 204 WHZABZ 5" Downlight Cone Trim -Wheat Haze Cone, Classic Aged Bronze Trim Ring

204 WHZWH 5" Downlight Cone Trim -Wheat Haze Cone, White Trim Ring 5" Downlight Cone Trim -White Cone, White Trim Ring 204 WWH

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.

## Accessories (ordered separately)

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

To order, specify catalog number.

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.

# **5" IC 600 LUMEN** LED DOWNLIGHT **NEW CONSTRUCTION**

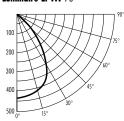
IC20LED (G4 06LM), RECESSED HOUSING

# **OPEN TRIMS**

#### PHOTOMETRIC REPORT

**Test Report #:** PT02141404 Catalog No: IC20LED G4 06LM 35K with 205 WWH Trim and standard wide flood optic

**Luminaire Spacing Criterion: 1.10 Luminaire LPW:** 78



PHOTOMETRIC REPORT

Catalog No: IC20LED G4 06LM 35K

**Luminaire Spacing Criterion:** 1.26

with 204 CWH Trim

and standard wide flood optic

Test Report #: LTL25981R

Lumingire LPW: 89

## **CANDLEPOWER DISTRIBUTION**

(Candelas) Degrees Vertical

0	445
5	442
15	421
25	361
35	241
45	105
55	58
65	34
75	20
85	4
90	0

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

(Candelas)

Degrees

Vertical

# **AVERAGE INITIAL FOOTCANDLES**

	Ceiling	80%	W
	Spacin	g	RC
	4.0′		
_	5.0′		- ;
	/ 0'		_

	•
0	410
5	407
15	392
25	370
35	303
45	164
55	85
65	39
75	7
85	0
90	0
Multiplier: 27	K - 0.89

0	0	
Aultiplier: 27K - 0.89 30K - 0.94 40K - 1.03		
401 - 1.03		

# **AVERAGE INITIAL FOOTCANDLES**

Multiple Units (Square Array, 60'x60' room)					
Ceiling 80% Wall 50% Floor 20%					
Spacing	RCR1	RCR3	RCR		
4.0′	50	41	34		
5.0′	37	26	22		

Spacing	KCK I	KCKS	KCKJ
4.0′	50	41	34
5.0′	32	26	22
6.0	22	18	15
7.0′	18	15	12
8.0′	14	12	10
9.0′	11	9	7
10.0′	8	6	5

### ZONAL LUMEN SUMMARY

LOIVAL	LOMEIA	30 MIN	MKI	
Zone	Lumens	%Lamp	%Fixture	
0-30°	325	N/A	48.6	
0 - 40°	473	N/A	70.7	
0-60°	610	N/A	91.1	
0-90°	669	N/A	100.0	

### **INITIAL FOOTCANDLES**

(One Unit, 8.6W, 72° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	27.8	5.8′
6	12.4	8.7'
8	7.0	11.6′
10	4.5	14.5′

# LUMINANCE (Average cd/m²)

	Average	
Degrees	Luminance	
45	14013	
55	9638	
65	7516	
75	7291	
85	4569	

#### **CANDLEPOWER** DISTRIBUTION

Multiple Units (Square Array, 60'x60' room) /all 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0′	57	46	38
5.0´	36	30	24
6.0´	25	21	17
7.0′	20	17	14
8.0°	16	13	11
9.0′	12	10	8
10.0′	9	7	6

### **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixture
0-30°	320	N/A	42.0
0 - 40°	505	N/A	66.4
0-60°	711	N/A	93.3
0-90°	762	N/A	100.0
	0-30° 0-40° 0-60°	0-30° 320 0-40° 505 0-60° 711	0·30° 320 N/A 0·40° 505 N/A 0·60° 711 N/A

## **INITIAL FOOTCANDLES**

(One Unit, 8.6W, 83.8° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	25.6	7.2′
6	11.4	10.8′
8	6.4	14.4′
10	2.8	17.9′

# LUMINANCE (Average cd/m²)

	Average	
Degrees	Luminance	
45	22627	
55	14361	
65	9328	
75	2686	
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.