



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC 1 LED (G4 09LM) RECESSED HOUSING

SQUARE 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

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.

Optical System Computer-optimized reflector design with high reflectance 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.

Aesthetic Trim Selections Die cast aluminum square downlight, pinhole and lensed trim options • Downlight and pinhole trims feature black insert to minimize glare at the aperture.

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.

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 • 12SQ trim listed for wet location (covered ceiling) • 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 1 1/2" ceiling thickness.

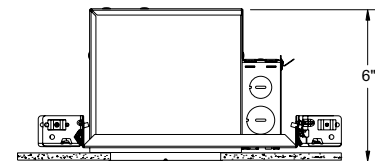
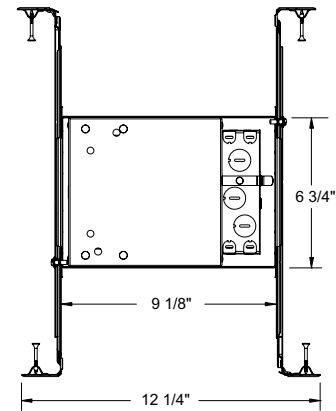
Junction Box Pre-wired junction box provided with (6) 1/2" and (1) 3/4" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • UL listed and cUL listed for through-branch wiring, maximum 4 #12 branch circuit conductors • Junction box provided with removable access plates • Knockouts equipped 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

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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

ELECTRICAL DATA

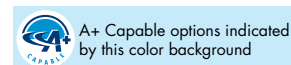
	MVOLT EZ10 and EZ1		MVOLT ZT10 and ZT1	
	120V	277V	120V	277V
Input Power	11.2W (+/-5%)	12.2W (+/-5%)	11.2W (+/-5%)	12.2W (+/-5%)
Input Current	0.10A	0.05A	0.10A	0.05A
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)	FCC Title 47 CFR, Part 15, Class B (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: IC1LED G4 09LM 27K 90CRI 120 FRPC

Series	Generation	Lumens	Color Temperature	CRI	Voltage/Driver	Territory
IC1LED 4" 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	CP Chicago Plenum
			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), eidoLED 0-10V, 10% dim	
					MVOLT EZ1 Multi-Volt (120-277), eidoLED 0-10V, 1% dim	



Trim/Description



175Q BWH³ 4" Square Downlight Trim - Black, White Trim Flange

175Q HZWH² 4" Square Downlight Trim - Haze, White Trim Flange

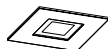


175Q WHZWH² 4" Square Downlight Trim - Wheat Haze, White Trim Flange

175Q WWH¹ 4" Square Downlight Trim - White, White Trim Flange



135Q WH 4" Square Pinhole Trim - White



125Q WWH 4" Square Frosted Lens with Clear Center Trim - White, White Trim Flange



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.

¹ ENERGY STAR[®] Certified and T24 certified with 120 driver for 30K, 35K and 40K

² ENERGY STAR[®] Certified with 120 driver for 30K, 35K and 40K

³ Not ENERGY STAR[®] Certified or T24 certified

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC1LED (G4 09LM) RECESSED HOUSING
SQUARE TRIMS

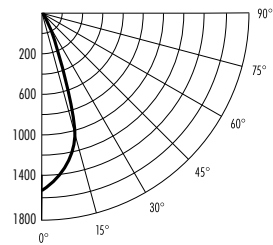
PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report #: PT03141204R
Catalog No: IC1LED G4 09LM 35K
90CRI 120 with 17SQ HZWH Trim

Luminaire Spacing Criterion: 0.62

Luminaire LPW: 62



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees	Vertical	0°
0	1543	
5	1486	
15	1015	
25	355	
35	85	
45	31	
55	13	
65	3	
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% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	50	44	40
5.0'	32	28	25
6.0'	22	20	18
7.0'	18	16	14
8.0'	14	13	11
9.0'	11	10	9
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	610	N/A	85.2
0-40°	675	N/A	94.2
0-60°	712	N/A	99.5
0-90°	716	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.6W, 37° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	96.4	2.7'
6	42.9	4.0'
8	24.1	5.4'
10	15.4	6.7'

LUMINANCE (Average cd/m²)

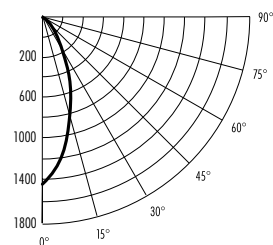
Degrees	Average Luminance
45	10600
55	5395
65	1708
75	266
85	395

PHOTOMETRIC REPORT

Test Report #: PT03141206R
Catalog No: IC1LED G4 09LM 35K
90CRI 120 with 12SQ WWH Trim

Luminaire Spacing Criterion: 0.58

Luminaire LPW: 65



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees	Vertical	0°
0	1471	
5	1403	
15	870	
25	331	
35	131	
45	66	
55	37	
65	22	
75	12	
85	5	
90	0	

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

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	52	45	39
5.0'	33	29	25
6.0'	23	20	17
7.0'	19	16	14
8.0'	15	13	11
9.0'	11	10	9
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	539	N/A	71.3
0-40°	627	N/A	83.0
0-60°	715	N/A	94.6
0-90°	755	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 11.6W, 34.1° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	92.0	2.5'
6	40.9	3.7'
8	23.0	4.9'
10	14.7	6.1'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	22708
55	15825
65	12610
75	11425
85	14597

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.