

JUNO®

Project: _____

Fixture Type: _____

Location: _____

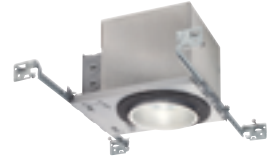
Contact/Phone: _____

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91LEDG4 RECESSED HOUSING



OPEN 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 4100K 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 that can produce over 900 lumens with select trims (see page 2 for details) using less than 15W*

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 driver or universal voltage driver that accommodates 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 driver is 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® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 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.

Product specifications subject to change without notice.

HOUSING FEATURES

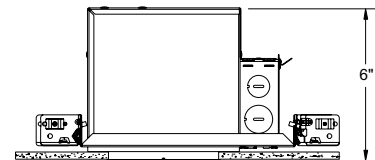
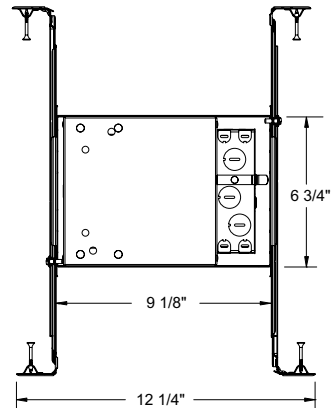
Housing Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness.

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.

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option

120V

Input Power	14.9W (+/-5%)
Input Current	0.13A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

ELECTRICAL DATA

Universal Voltage

	120V	277V
Input Power	15.6W (+/-5%)	15.6W (+/-5%)
Input Current	0.14A	0.08A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (non-consumer)	FCC Title 47 CFR, Part 15, Class A (non-consumer)
Minimum starting temp	-40°C	-40°C

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



















4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91LEDG4 RECESSED HOUSING

OPEN TRIMS

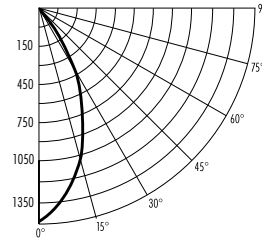
ORDERING INFORMATION: Housing and trim each ordered separately.

Example: IC91LEDG4-3K-1			Example: 14W-WH		
Housing	Color Temperature	Input Voltage	Trim/Description		
IC91LEDG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	1 Dedicated 120V Only (Forward Phase + ELV dimmable) U Universal Voltage, 120-277V (0-10V dimmable)	 13-WH 2" Pinhole with Integral Shield	 4103FROST-WH Beveled Cylinder 4103FROST-SC	
			 14B-WH Black Baffle 14B-SC Black Baffle  14B-ABZ Black Baffle  14B-BL Black Baffle 14W-WH White Baffle	 4104HZ-SC Beveled Cone - Haze  4104WHZ-ABZ Beveled Cone - Wheat Haze	
			 17C-WH Cone - Clear Alzak®  17G-WH Cone - Gold Alzak®  17B-WH Cone - Black Alzak®  17PT-SC Cone - Pewter Alzak®  17W-WH Cone - Gloss White  17HZ-WH Cone - Haze  17WHZ-WH Cone - Wheat Haze  17WHZ-ABZ Cone - Wheat Haze	 4150MESH-SC Cylinder	

Trim Size: 5" O.D.
Trim Finish: ABZ - Classic Aged Bronze, BL - Black, SC - Satin Chrome, WH - White.
Alzak is a registered trademark of Alcoa Corp.
Note: In Canada when insulation is present, Type IC fixtures must be used.

PHOTOMETRIC REPORT

Test Report #: PTO2141303R
Catalog No: IC91LEDG4-35K-1
with 14W-WH Trim
Luminaire Spacing Criterion: 0.72
Luminaire LPW: 62



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1491
5	1449
15	1118
25	600
35	206
45	54
55	22
65	10
75	6
85	1
90	0

Multiplier: 27K - 0.89
3K - 0.94
41K - 1.03

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	65	57	50
5.0'	42	36	32
6.0'	29	25	22
7.0'	23	20	18
8.0'	18	16	14
9.0'	14	12	11
10.0'	10	9	8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	717	N/A	76.5
0-40°	852	N/A	91.0
0-60°	917	N/A	98.0
0-90°	936	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 15W, 44.2° Beam)

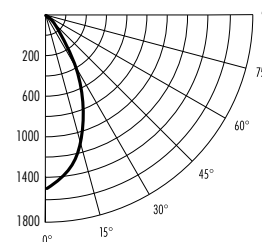
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	93.2	3.2'
6	41.4	4.9'
8	23.3	6.5'
10	14.9	8.1'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	12517
55	6382
65	4034
75	4069
85	2014

PHOTOMETRIC REPORT

Test Report #: LTL26327R
Catalog No: IC91LEDG4-35K-1
with 17C-WH Trim
Luminaire Spacing Criterion: 0.70
Luminaire LPW: 65



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1508
5	1482
15	1104
25	620
35	254
45	82
55	26
65	3
75	0
85	0
90	0

Multiplier: 27K - 0.89
3K - 0.94
41K - 1.03

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	68	59	52
5.0'	44	38	33
6.0'	30	26	23
7.0'	25	21	19
8.0'	19	17	15
9.0'	15	13	11
10.0'	11	10	8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	725	N/A	73.9
0-40°	887	N/A	90.5
0-60°	977	N/A	99.6
0-90°	981	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 15W, 43.9° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	94.3	3.2'
6	41.9	4.8'
8	23.6	6.4'
10	15.1	8.1'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	18733
55	7144
65	1077
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.



JUNO®

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____



4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91 LEDG4 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 4100K color temperatures available • 90 CRI minimum.

Hyperbolic Optical System Patent pending 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 producing 900 lumens using less than 15W*.

Aesthetic Trim Selections Patent pending 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 driver or universal voltage driver that accommodates 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 driver is 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® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 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.

Product 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.

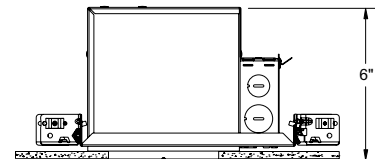
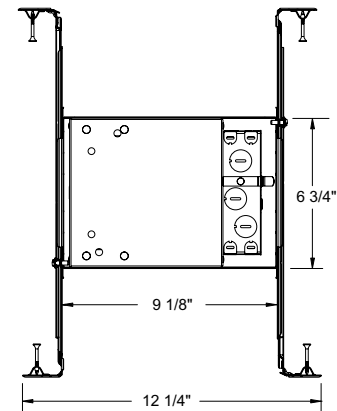
Mounting Frame 22-gauge die-formed galvanized steel mounting frame • Rough-in section (junction box, mounting frame, housing and bar hangers) fully assembled for ease of installation.

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.

REV-3/15

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option

120V	
Input Power	14.9W (+/-5%)
Input Current	0.13A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

ELECTRICAL DATA

Universal Voltage

	120V	277V
Input Power	15.6W (+/-5%)	15.6W (+/-5%)
Input Current	0.14A	0.08A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (non-consumer)	FCC Title 47 CFR, Part 15, Class A (non-consumer)
Minimum starting temp	-40°C	-40°C

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION


IC91LEDG4 RECESSED HOUSING HYPERBOLIC TRIMS

ORDERING INFORMATION: Housing and trim each ordered separately.

Example: **IC91LEDG4-3K-1**

Housing	Color Temperature	Input Voltage
IC91LEDG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	1 Dedicated 120V Only (Forward Phase + ELV dimmable) U Universal Voltage, 120-277V (0-10V dimmable)

Example: **17HYP2-HZ-WH**

Trim/Description	
	17HYP2-C-WH Clear Alzak® 17HYP2-B-WH¹ Black Alzak® 17HYP2-W-WH White 17HYP2-HZ-WH Haze 17HYP2-WHZ-WH¹ Wheat Haze 17HYP2-WHZ-ABZ¹ Wheat Haze

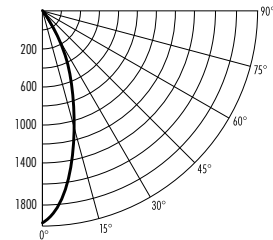
¹ Not ENERGY STAR® Qualified or T24 certified

Trim Size: 5" O.D.
Trim Finish: ABZ - Classic Aged Bronze, WH - White.
Alzak is a registered trademark of Alcoa Corp.
Note: In Canada when insulation is present, Type IC fixtures must be used.

PHOTOMETRIC REPORT

Test Report #: PT06140402R
Catalog No: IC91LEDG4-35K-1
with 17HYP2-HZ-WH Trim
and standard nano mixing
chamber

Luminaire Spacing Criterion: 0.62
Luminaire LPW: 54



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1873
5	1739
15	1165
25	624
35	62
45	4
55	0
65	0
75	0
85	0
90	0

Multiplier: 27K - 0.89
3K - 0.94
41K - 1.03

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
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

Zone	Lumens	%Lamp	%Fixture
0-30°	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, 15W, 38.3° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	117.1	2.8'
6	52.1	4.2'
8	29.3	5.6'
10	18.7	6.9'

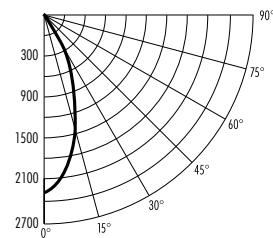
LUMINANCE (Average cd/m²)

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

PHOTOMETRIC REPORT

Test Report #: PT06140402R
Catalog No: IC91LEDG4-35K-1
with 17HYP2-C-WH Trim
and standard nano mixing
chamber

Luminaire Spacing Criterion: 0.56
Luminaire LPW: 57



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
3K - 0.94
41K - 1.03

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	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, 15W, 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/m²)

Degrees	Average Luminance
45	300
55	0
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.



JUNO

Project: _____

Fixture Type: _____

Location: _____

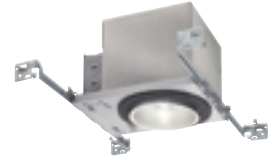
Contact/Phone: _____

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91 LEDG4 RECESSED HOUSING



LENSED 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 4100K 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.

Aesthetic Trim Selections Compatible with wide selection of existing Juno trims • Shadow free, knife edge design blends seamlessly into ceiling.
• Trims are wet location approved for covered ceiling applications.

LED Driver Choice of dedicated 120 volt driver or universal voltage driver that accommodates 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 driver is 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® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 with select trims • UL listed for U.S. and Canada through-branch wiring, wet locations (covered ceilings)
• Union made • UL and cUL.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

HOUSING FEATURES

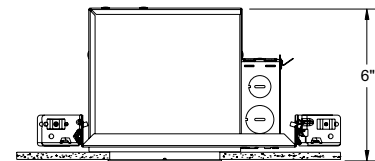
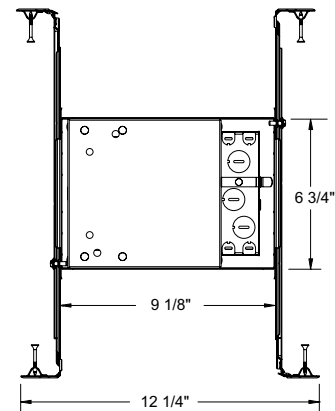
Housing Designed for use in IC (insulated ceiling) or non-IC construction
• Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness.

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.

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option

120V	
Input Power	14.9W (+/-5%)
Input Current	0.13A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

ELECTRICAL DATA











Universal Voltage

	120V	277V
Input Power	15.6W (+/-5%)	15.6W (+/-5%)
Input Current	0.14A	0.08A
Frequency	50/60Hz	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class A (commercial)	FCC Title 47 CFR, Part 15, Class A (commercial)
Minimum starting temp	-40°C	-40°C

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91LEDG4 RECESSED HOUSING LENSED TRIMS

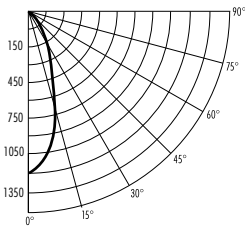
ORDERING INFORMATION: Housing and trim each ordered separately.

Example: IC91LEDG4-3K-1			Example: 12W-WH		
Housing	Color Temperature	Input Voltage	Trim/Description		
IC91LEDG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	I Dedicated 120V Only (Forward Phase + ELV dimmable) U Universal Voltage, 120-277V (0-10V dimmable)	 11-WH Drop Opal  12W-WH Shower Trim, frosted perimeter lens  12W-SC  12W-ABZ	 4101-ABZ  4101-SC  4101-WH  4102-ABZ  4102-SC  4102-WH	Beveled Dome - Shower Beveled Shower

UL Listed for use in wet location.
 Trim Size: 5" O.D.
 Trim Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White
 Note: In Canada when insulation is present, Type IC fixtures must be used.

PHOTOMETRIC REPORT

Test Report #: PT08111601R
 Catalog No: IC91LEDG4-35K
 with 12W-WH Trim
 Luminaire Spacing Criterion: 0.58
 Luminaire LPW: 48



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees	Vertical	0°
0	1195	
5	1100	
15	703	
25	352	
35	161	
45	80	
55	44	
65	28	
75	15	
85	3	
90	0	

Multiplier: 27K - 0.89
 3K - 0.94
 41K - 1.03

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	49	42	36
5.0'	31	27	23
6.0'	22	19	16
7.0'	18	15	13
8.0'	14	12	10
9.0'	11	9	8
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	461	N/A	64.3
0-40°	565	N/A	78.8
0-60°	669	N/A	93.4
0-90°	717	N/A	100.0

INITIAL FOOTCANDLES (One Unit, 15W, 35.5° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	74.7	2.6'
6	33.2	3.8'
8	18.7	5.1'
10	12.0	6.4'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	18089
55	12473
65	10772
75	9214
85	4975

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.



Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____



4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91 LEDG4 RECESSED HOUSING

WALL WASH 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 4100K color temperatures available • 90 CRI minimum.

Optical System Angle-cut aluminum reflector and specular clear kicker reflector directs light toward wall for uniform illumination on vertical surfaces while concealing LED optic assembly and minimizing glare • LEDs are concealed by high transmission diffusing lens.

Aesthetic Trim Selections Recessed lensed wall wash trim • Shadow free, knife edge design blends seamlessly into ceiling • Reflector finishes include clear, haze, wheat haze and white paint.

LED Driver Choice of dedicated 120 volt driver or universal voltage driver that accommodates 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 driver is 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® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 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.

Product specifications subject to change without notice.

HOUSING FEATURES

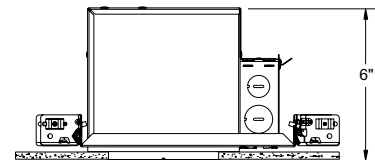
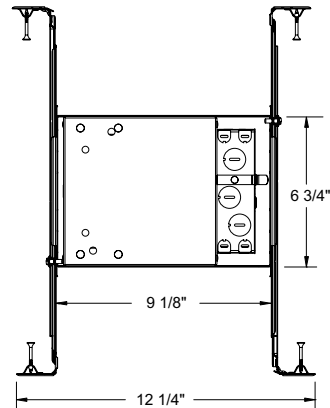
Housing Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness.

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.

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option 120V

Input Power	14.9W (+/-5%)
Input Current	0.13A
Frequency	50/60Hz
EM/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

ELECTRICAL DATA

Universal Voltage



	120V	277V
Input Power	15.6W (+/-5%)	15.6W (+/-5%)
Input Current	0.14A	0.08A
Frequency	50/60Hz	50/60Hz
EM/RFI	FCC Title 47 CFR, Part 15, Class A (non-consumer)	FCC Title 47 CFR, Part 15, Class A (non-consumer)
Minimum starting temp	-40°C	-40°C

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

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91LEDG4 RECESSED HOUSING WALL WASH TRIM

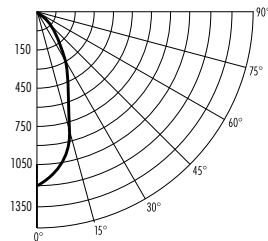
ORDERING INFORMATION: Housing and trim each ordered separately.

Example: IC91LEDG4-3K-1			Example: 39C-WH	
Housing	Color Temperature	Input Voltage	Trim/Description	
IC91LEDG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	1 Dedicated 120V Only (Forward Phase + ELV dimmable) U Universal Voltage, 120-277V (0-10V dimmable)	 39C-WH Lensed Wall Wash - Clear Alzak® 39W-WH Lensed Wall Wash - Gloss White 39HZ-WH Lensed Wall Wash - Haze 39WHZ-WH Lensed Wall Wash - Wheat Haze	 Trim Size: 5" O.D. Trim Finish: WH - White. Alzak is a registered trademark of Alcoa Corp. Note: In Canada when insulation is present, Type IC fixtures must be used.

PHOTOMETRIC REPORT

Test Report #: PT10142305R
 Catalog No: IC91LEDG4-35K-1
 with 39C-WH Trim

Luminaire Spacing Criterion: 0.70
 Luminaire LPW: 57



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees	Candelas
Vertical	0°
0	1200
5	1179
15	886
25	468
35	164
45	66
55	38
65	21
75	8
85	0
90	0

Multiplier: 27K - 0.89
 3K - 0.94
 41K - 1.03

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0-30°	586	N/A	68.30
0-40°	736	N/A	85.70
0-60°	843	N/A	98.20
0-90°	858	N/A	100.0

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	17565
55	12328
65	9525
75	6139
85	0

FOOTCANDLES ON WALL FROM MULTIPLE FIXTURES

Fixture Distance to Wall	2'			3'		
	2'	3'	4'	3'	4'	5'
1'	5 5 5	4 4 4	3 3 3	2 2 2		
2'	11 11 11	9 8 9	5 5 5	4 4 4		
3'	15 15 15	12 10 12	7 7 7	5 5 5		
4'	19 20 19	14 13 14	8 8 8	6 6 6		
5'	20 20 20	14 14 14	9 9 9	8 7 8		
6'	19 19 19	14 14 14	11 11 11	9 8 9		
7'	17 17 17	12 13 12	11 11 11	9 9 9		
8'	15 15 15	11 11 11	11 11 11	8 9 8		
9'	13 13 13	9 9 9	10 10 10	7 7 7		

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.



JUNO

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91 LEDG4 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 4100K 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 driver or universal voltage driver that accommodates 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 driver is 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® Qualified when used with select trims • Certified to the high efficacy requirements of California T24 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.

Testing All reports are based on published industry procedures; field performance may differ from laboratory performance.

Product specifications subject to change without notice.

HOUSING FEATURES

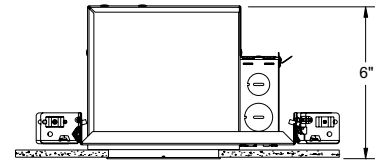
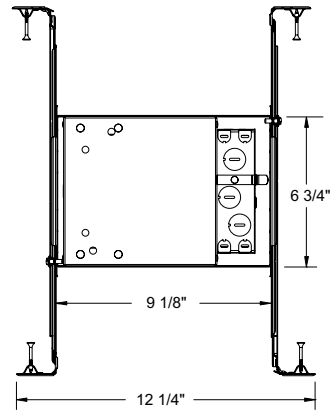
Housing Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc® compliance • Housing is vertically adjustable to accommodate up to a 1 1/2" ceiling thickness.

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.

DIMENSIONS



4 1/2" CEILING CUTOUT

ELECTRICAL DATA

Dedicated 120V Only Driver Option

120V	
Input Power	14.9W (+/-5%)
Input Current	0.13A
Frequency	50/60Hz
EM/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-25°C

ELECTRICAL DATA

Universal Voltage







	120V	277V
Input Power	15.6W (+/-5%)	15.6W (+/-5%)
Input Current	0.14A	0.08A
Frequency	50/60Hz	50/60Hz
EM/RFI	FCC Title 47 CFR, Part 15, Class A (non-consumer)	FCC Title 47 CFR, Part 15, Class A (non-consumer)
Minimum starting temp	-40°C	-40°C

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

4" IC 900 LUMEN LED DOWNLIGHT NEW CONSTRUCTION

IC91LEDG4 RECESSED HOUSING SQUARE TRIMS

ORDERING INFORMATION: Housing and trim each ordered separately.

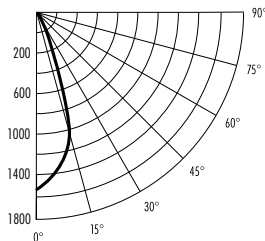
Example: IC91LEDG4-3K-1			Example: 175Q-HZ-WH	
Housing	Color Temperature	Input Voltage	Trim/Description	
IC91LEDG4	27K 2700K 3K 3000K 35K 3500K 41K 4100K	1 Dedicated 120V Only (Forward Phase + ELV dimmable) U Universal Voltage, 120-277V (0-10V dimmable)	 175Q-HZ-WH ²  175Q-W-WH ¹  175Q-B-WH ²  175Q-WHZ-WH ²	Square Downlight - Haze Reflector Square Downlight - White Reflector Square Downlight - Black Alzak Reflector Square Downlight - Wheat Haze Reflector
			 135Q-WH  125Q-W-WH	Square Pinhole Square Frosted Lens with Clear Center

Trim Size: 5" O.D.
Trim Finish: WH - White.
Alzak is a registered trademark of Alcoa Corp.
Note: In Canada when insulation is present, Type IC fixtures must be used.

¹ Universal voltage: ENERGY STAR® and T24 at 3K, 35K and 41K only
² Not ENERGY STAR® Qualified or T24 certified

PHOTOMETRIC REPORT

Test Report #: PTO3141204R
Catalog No: IC91LEDG4-35K-1
with 175Q-HZ-WH Trim
Luminaire Spacing Criterion: 0.62
Luminaire LPW: 48



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
3K - 0.94
41K - 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, 15W, 37° Beam)

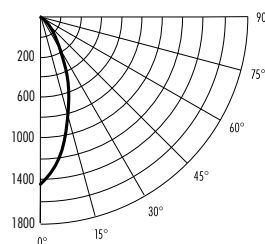
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	96.4	2.7'
6	42.9	4.0'
8	24.1	5.4'
10	15.4	6.7'

LUMINANCE (Average cd/m²)

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

PHOTOMETRIC REPORT

Test Report #: PTO3141206R
Catalog No: IC91LEDG4-35K-1
with 125Q-W-WH Trim
Luminaire Spacing Criterion: 0.58
Luminaire LPW: 50



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
3K - 0.94
41K - 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, 15W, 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.

