

JUNO®

Project: _____

Fixture Type: _____

Location: _____

Contact/Phone: _____



4" IC 600 LUMEN LED RECESSED GIMBAL REMODEL

IC1RALED 440LED (G4N 06LM)

PRODUCT DESCRIPTION

Dedicated LED, Air-Loc® remodel housing with adjustable accent light engine trim module • Shallow housing allows for fit in 2 x 6 construction • IC remodel housing for remodel application where back side of ceiling is not accessible • Installs through an opening in the ceiling from below • Secured in place by factory installed remodel springs • Can be completely covered with insulation • LED light engine module is designed to provide 50,000 hours of life • 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 Trim Module LED array attached to die cast trim provides superior heat transfer to ensure long life of the LED • Replaceable light engine incorporates the latest generation, high lumen output LED array • LEDs are binned within a 3-step Mac Adam Ellipse exceeding ENERGY STAR® requirements for superior fixture to fixture color uniformity • 2700K, 3000K, 3500K and 4000K color temperatures with 90 CRI minimum • 440LED G4N Light engine module features a plug-in connector for easy installation with IC1RALED G4N housing.

Optics Three field interchangeable TIR optics available in 18°, 30° and 40° beam angles • Light engine trim module is supplied with a 30° optic installed • Module can accommodate one 2-inch diameter beam control lens or filter • Gimbal provides up to 35° tilt adjustment.

Trim Die cast adjustable gimbal trim features shadow free knife edge to blend seamlessly into ceiling • Available in multiple finishes - White, Black, Satin Chrome and Aged Bronze.

LED Driver Choice of dedicated 120 volt driver or universal voltage 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 on the j-box for easy access and cool operation.

Life Rated for 50,000 hours at 70% lumen maintenance.

Labels ENERGY STAR® Certified • Certified to the high efficiency requirements of California T24 JA8-2016 • 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.

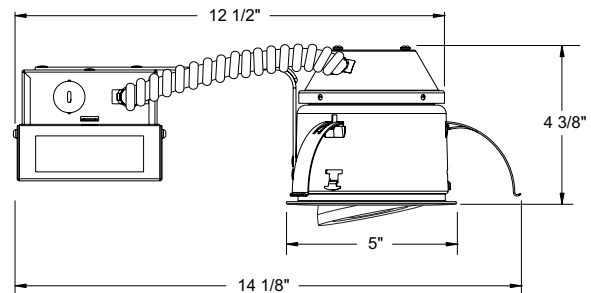
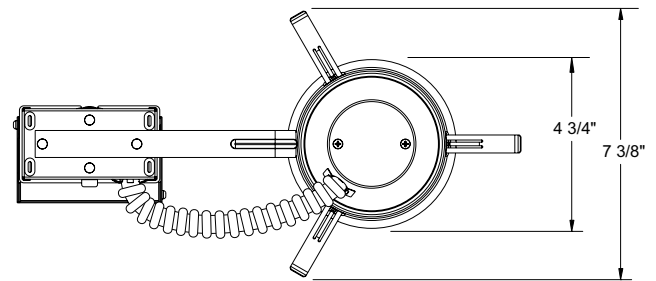
Specifications subject to change without notice.

HOUSING FEATURES

Housing Designed for use in IC (insulated ceiling) or non-IC construction • Aluminum housing sealed for Air-Loc • Remodel springs accommodate up to 1 1/2" ceiling thickness.

Junction Box Pre-wired junction box provided with (5) 1/2" knockouts, (4) knockouts for 12/2 or 14/2 NM cable and ground wire • Knockouts equipped with pryout slots • Quick connect electrical connectors supplied as standard for fast, secure installation.

DIMENSIONS



4 3/8" CEILING CUTOUT

4" IC 600 LUMEN LED RECESSED GIMBAL REMODEL

IC1RALED 440LED (G4N 06LM)

ELECTRICAL DATA

Dedicated 120V Only Driver Option (120 FRPC)

120V	
Input Power	8.75W (+/-5%)
Input Current	0.08A
Frequency	50/60Hz
EMI/RFI	FCC Title 47 CFR, Part 15, Class B (residential)
Minimum starting temp	-40°C

ELECTRICAL DATA

Universal Voltage

	MVOLT EZ10 and EZ1		MVOLT ZT10 and ZT1	
	120V	277V	120V	277V
Input Power	8.1W (+/-5%)	8.8W (+/-5%)	8.1W (+/-5%)	8.8W (+/-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)	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: IC1RALED 440LED G4N 06LM 27K 90CRI 120 FRPC ABZ

Series	Trim Series	Generation	Lumens	Color Temperature	CRI	Voltage/Driver	Trim Finish
IC1RALED	4" LED Adjustable Remodel Housing	G4N	600 Nominal Lumens	27K 2700K 30K 3000K 35K 3500K 40K 4000K	90+ CRI	120 FRPC 120V Forward/Reverse Phase Cut, 5% dim MVOLT ZT10 Multi-Volt (120-277), 0-10V, 10% dim MVOLT ZT1 Multi-Volt (120-277), 0-10V, 1% dim MVOLT EZ10 Multi-Volt (120-277), eldoLED 0-10V, 10% dim MVOLT EZ1 Multi-Volt (120-277), eldoLED 0-10V, 1% dim	ABZ Classic Aged Bronze BL Black SC Satin Chrome WH White

Accessories

Catalog Number	Description
CFG 200 MPINK	Color Glass Filter - Medium Pink
CGF 200 WRED	Color Glass Filter - Warm Red
CGF 200 DLTBLUE	Color Glass Filter - Daylight Blue
CGF 200 MBLU	Color Glass Filter - Medium Blue
CGF 200 MAMB	Color Glass Filter - Medium Amber
CGF 200 MGRN	Color Glass Filter - Medium Green
DGF 200 DRED	Dichroic Glass Filter - Red
DGF 200 MGRN	Dichroic Glass Filter - Medium Green
DGF 200 MBLU	Dichroic Glass Filter - Medium Blue
DGF 200 DYEL	Dichroic Glass Filter - Yellow (Dichroic)
DGF 200 MAGEN	Dichroic Glass Filter - Magenta
DGF 200 CYAN	Dichroic Glass Filter - Cyan
DCCF 200 HL4250	Dichroic Color Correction Filter - Halogen-to-Daylight
DIFF 200	Diffusion Glass Lens
UVF 200	UV Filter Lens
HCLBL 200	Hexagonal Cell Louver - Black
ISPREAD 200	Linear Spread Glass Lens
PRISM 200	Prismatic Glass Lens
TIR2 SPT	Trac-Master TIR Optic - Spot
TIR2 NFLD	Trac-Master TIR Optic - Narrow Flood
TIR2 FLD	Trac-Master TIR Optic - Flood

To order, specify catalog number.



A+ Capable options indicated by this color background

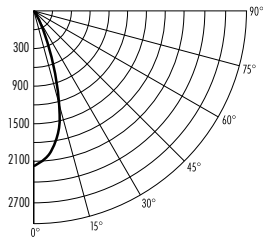
4" IC 600 LUMEN LED RECESSED GIMBAL REMODEL

IC1RALED 440LED (G4N 06LM)

PHOTOMETRICS

PHOTOMETRIC REPORT

Test Report #: PT10161204
Catalog No: IC1RALED 440LED G4N 06LM
30K 120 BL, 30° Narrow Flood Optic
Luminaire Spacing Criterion: 0.5
Luminaire LPW: 83



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	2182
5	2085
15	1243
25	208
35	54
45	18
55	7
65	2
75	0
85	0
90	0

Multiplier:
27K - 0.96 35K - 1.03
30K - 1.00 40K - 1.06

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	49	44	40
5.0'	31	28	26
6.0'	22	20	18
7.0'	18	16	14
8.0'	14	12	11
9.0'	11	10	9
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0 - 30°	628	N/A	91.6
0 - 40°	663	N/A	96.7
0 - 60°	684	N/A	99.7
0 - 90°	686	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 8.2W, 32.2° Beam)

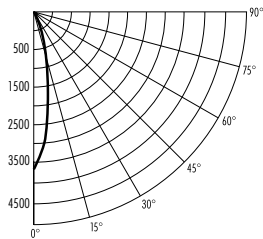
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	136.4	2.3'
6	60.6	3.5'
8	34.1	4.6'
10	21.8	5.8'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	13144
55	5763
65	2073
75	0
85	0

PHOTOMETRIC REPORT

Test Report #: PT10161205
Catalog No: IC1RALED 440LED G4N 06LM
30K 120 BL, 18° Spot Optic
Luminaire Spacing Criterion: 0.3
Luminaire LPW: 82



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	3710
5	3053
15	873
25	226
35	59
45	22
55	9
65	3
75	0
85	0
90	0

Multiplier:
27K - 0.96 35K - 1.03
30K - 1.00 40K - 1.06

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	48	43	40
5.0'	31	28	26
6.0'	21	19	18
7.0'	17	16	14
8.0'	14	12	11
9.0'	10	9	9
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0 - 30°	608	N/A	89.9
0 - 40°	647	N/A	95.7
0 - 60°	673	N/A	99.5
0 - 90°	676	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 8.2W, 19.4° Beam)

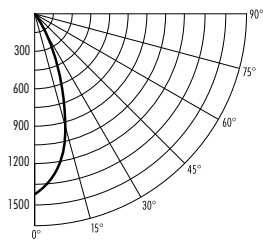
Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	231.9	1.4'
6	103.1	2.1'
8	58.0	2.7'
10	37.1	3.4'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	15744
55	7966
65	3719
75	85
85	0

PHOTOMETRIC REPORT

Test Report #: PT10161206
Catalog No: IC1RALED 440LED G4N 06LM
30K 120 BL, 40° Flood Optic
Luminaire Spacing Criterion: 0.6
Luminaire LPW: 84



CANDLEPOWER DISTRIBUTION (Candelas)

Degrees Vertical	0°
0	1410
5	1353
15	963
25	430
35	114
45	30
55	9
65	2
75	0
85	0
90	0

Multiplier:
27K - 0.96 35K - 1.03
30K - 1.00 40K - 1.06

AVERAGE INITIAL FOOTCANDLES

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

Spacing	RCR1	RCR3	RCR5
4.0'	49	43	39
5.0'	31	28	25
6.0'	22	19	17
7.0'	18	16	14
8.0'	14	12	11
9.0'	11	9	8
10.0'	8	7	6

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixture
0 - 30°	583	N/A	84.0
0 - 40°	659	N/A	94.9
0 - 60°	691	N/A	99.6
0 - 90°	694	N/A	100.0

INITIAL FOOTCANDLES

(One Unit, 8.2W, 39.2° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	88.1	2.8'
6	39.2	4.3'
8	22.0	5.7'
10	14.1	7.1'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	21483
55	7772
65	2704
75	134
85	0

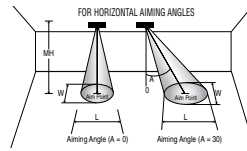
Fixtures tested to IES recommended standard for solid state lighting per LM-79-08. Photometric performance on a single unit represents a baseline of performance for the fixture. Results may vary in the field.

4" IC 600 LUMEN LED RECESSED GIMBAL REMODEL

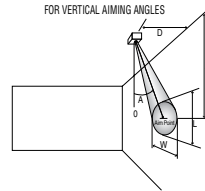
IC1RALED 440LED (G4N 06LM)

CBCP • Centerbeam candlepower
FC • Footcandles at beam center (aim point)

In vertical aiming applications, aim point (X) is determined by dividing distance from the wall (D) by the tangent of the desired aim angle (A) (0.5774 for 30°).



Horizontal Aiming Angles



Vertical Aiming Angles



Beam Type	Beam Spread°	Rated Life	CBCP	0°			30°			30°					
				MH	FC	L	W	FC	L	W	D	FC	X	L	W
IC1RALED G4N Flood Optic	40°	50000	1410	3	157	2.2	2.2	102	3.0	2.5	1	176	1.7	4.8	1.5
				4	88	2.9	2.9	57	4.1	3.4	2	44	3.5	9.7	2.9
				5	56	3.6	3.6	37	5.1	4.2	3	20	5.2	14.5	4.4
				6	39	4.4	4.4	25	6.1	5.0	4	11	6.9	19.3	5.8
				7	29	5.1	5.1	19	7.1	5.9	5	7	8.7	24.2	7.3
IC1RALED G4N Narrow Flood Optic	30°	50000	2182	3	242	1.6	1.6	157	2.2	1.9	1	273	1.7	2.7	1.1
				4	136	2.1	2.1	89	2.9	2.5	2	68	3.5	5.5	2.1
				5	87	2.7	2.7	57	3.7	3.1	3	30	5.2	8.2	3.2
				6	61	3.2	3.2	39	4.4	3.7	4	17	6.9	10.9	4.3
				7	45	3.8	3.8	29	5.1	4.3	5	11	8.7	13.7	5.4
IC1RALED G4N Spot Optic	18°	50000	3710	4	232	1.3	1.3	151	1.7	1.5	2	116	3.5	2.7	1.3
				5	148	1.6	1.6	96	2.1	1.8	3	52	5.2	4.1	1.9
				6	103	1.9	1.9	67	2.6	2.2	4	29	6.9	5.5	2.5
				7	76	2.2	2.2	49	3.0	2.6	5	19	8.7	6.9	3.2
				8	58	2.5	2.5	38	3.4	2.9	6	13	10.4	8.2	3.8

For 2700K fixtures, use 0.96 multiplier; for 3000K fixtures, use 1.00 multiplier; for 3500K fixtures, use 1.03 multiplier; for 4000K fixtures, use 1.06 multiplier.