

P1.4.3

PRODUCT DESCRIPTION

Recessed downlight 20W LED luminaire with 31/4" lensed downlight produces up to 900 fixture lumens and approximates the performance of a 75W MR16 lamp. Fixture has 50° visual cutoff and features precision geared hot-aiming. Sealed Air-Loc® housing ensures maximum energy savings and controls plenum sound transmission. Low profile Non-IC rated housing for use in non-insulated areas or where insulation is spaced at least 3" from housing.

PRODUCT SPECIFICATIONS

LED Light Engine Consistent fixture to fixture color consistency within 3-step MacAdam ellipse • 2700K, 3000K, 3500K, or 4000K color temperatures are available with 85 CRI typical • 3000K also available with 93 CRI typical and R9 >80.

Modular Optics Available with 12° Spot, 24° Narrow Flood, or 35° Flood field interchangeable optics • 50° distribution is available when AF3-50DEG accessory lens is used with 12° Spot optic • Patent pending auto-adjusting optic holder maximizes luminaire efficiency by maintaining optimal LED optic position • Accommodates up to three (3) additional beam control lenses and/or filters.

Reflector .040" aluminum parabolic reflector in clear, gold, black, haze, or wheat haze Alzak finish provides 50° lamp and lamp image cut-off.

Trims Style Trim Ring, Self Flanged and Flush Mount reflectors utilize torsion spring retention for tight, secure fit to ceiling • Trim ring features beveled knife edge for clean ceiling interface • Self Flanged reflectors with polished or optional white painted flange • For flush mount installations in drywall ceilings use the FMA4 flush mount adapter • For flush mount installations in wood, stone, or tile ceilings the FMA4-SC*** must be used (specify ceiling thickness and adapter finish).

LED Driver Choice of four drivers to accommodate voltages from 120-277 volts AC • Dedicated 120V (-1) driver is dimmable with most incandescent, magnetic low voltage, and electronic low voltage dimmers • Universal Voltage (-U) driver is dimmable with most 0-10V protocol dimmers • Lutron Hi-Lume® A Series 3-wire (-L) driver is dimmable with 3-wire fluorescent controls and compatible with EcoSystem® • Lutron Hi-Lume® A Series 2-wire (-D) driver is dimmable with 2-wire forward phase dimmers containing a neutral wire • For a list of compatible dimmers, refer to <u>ACLXLED-DIM</u> • Power Factor > 0.9 • Field replaceable from below or above ceiling.

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

Warranty 5 years from date of purchase on LED components • Standard Juno Lighting Group product guarantee terms and conditions apply.

Codes/Labels UL and cUL listed for through branch wiring, wet locations • Meets energy code Air Leakage requirements per ASTM E283 • Union made.

Mounting TC49L features Patented (US Patent 8,038,113) Pro-VI™ Bar Hanger System with locking set screws, permitting quick placement of housing within 24" O.C. joists or suspended ceilings • Robust bar eliminates flexing regardless of fixture position • Integral T-bar notch with locking tabs secures housing to suspended ceiling grid • Captive bugle-headed ring shank nail for quick one-step installation • Bar Hanger foot aligns to bottom of construction joist and breaks away for use in suspended ceilings.

TC949L is equipped with vertically adjustable mounting brackets that accept ½" conduit, "C" channels (HB-26 or HB-50), linear flat bars (LB-27) or 26" telescoping Real Nail bar hangers (HB-1).

Junction Box Rated for 8 No. 12 AWG 90° C through branch circuit conductors and includes (6) $\frac{1}{2}$ ", (1) $\frac{3}{4}$ ", and (4) Non-metallic sheathed cable knock-outs • Push-in electrical connectors for field connections.

Housing/Mounting Frame Black steel plaster frame and housing painted for visually dark interior ● V-Notch in plaster frame and Patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- ½″ translation aids fixture alignment after installation, prior to drywall.

Ceiling Thickness 1/2" – 7/8" ceiling standard • For thicker ceilings, order CTA4N-125 (7/8"-1 1/4"), CTA4N-163 (1 1/4"-1 5/8") or CTA4N-200 (1 5/8"-2") • CTA4N not required for wood, stone, or tile flush mount applications.

LED RECESSED DOWNLIGHT 3-1/4" LENSED DOWNLIGHT Non-IC Rated, 1000 LUMEN TC49L-432N, TC949L-432N

Project:

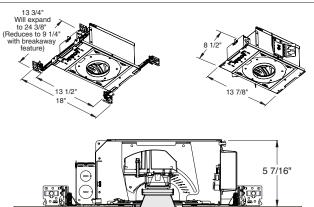
Fixture Type:

Location:

Contact/Phone:



DIMENSIONS



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4 1/4" CEILING CUTOUT (REFER TO INSTRUCTION SHEET FOR FLUSH MOUNT CEILING CUTOUT)

	Α	В
Trim Ring	3 1/4″	5″
Self Flanged	3 3/8″	4 5/8″
Flush Mount	3 3/8″	3 7/8″

ELECTRICAL DATA

Driver Option	Dedicated 120V (-1)	Universal Voltage (-U)	Lutron 3-wire (-L)	Lutron 2-wire (-D)
Voltage	120	120 277	120 277	120
Input Power	18.7	20.6 22.1	19.7 21.1	20.0
Input Current	0.16	0.17 0.08	0.16 0.08	0.17
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz
Power Factor	0.98	0.99 0.90	0.99 0.94	0.98



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LED RECESSED DOWNLIGHT 3-1/4" LENSED DOWNLIGHT Non-IC Rated, 1000 LUMEN TC49L-432N, TC949L-432N

Ordering Information Housing, trim and accessories each ordered separately

Example: TC	49L-8	30-N-U		-					Example: 432NC	-WH		
Housings		I/Color perature		Beam Optics	_	Drivers		Options		Trim/D	escription	
TC49L TC949L	827 830	85CRI	N	12° Spot 24° Narrow Flood	-	120V, Forward & Reverse Phase Dimming	CP	Chicago Plenum				
	835	3500K, 85CRI	F	35° Flood	U	120-277V, 0-10V			Trim Ring ¹ 432NB-WH	Self Flanged ² 432NB-SF	Flush Mount ³ 432NB-FM	Description Black Cone
	840	4000K, 85CRI			L	Dimming 120-277V,			432NC-WH 432NG-WH 432NHZ-SC	432NC-SF 432NG-SF	432NC-FM 432NG-FM	Clear Cone Gold Cone Haze Cone
	930	3000K, 93CRI				Lutron Hi-Lume 3-wire Dimming,			432NHZ-WH 432NWHZ-ABZ 432NWHZ-WH	432NHZ-SF - 432NWHZ-SF	432NHZ-FM - 432NWHZ-FM	Haze Cone, White Ring Wheat Haze Cone Wheat Haze Cone, White Ring
						Ecosystem Compatible			Ũ	BZ - Classic Aged Br		
					D	120V, Lutron Hi-Lume 2-wire Dimming			with "- <u>SFWH</u> ". ³ Flush Mount trims i	flector with optional v must be used with Flu ons subject to change	sh Mount Adapter, c	

Flush Mount Adapters

Cat. #	Description
FMA4	Drywall Ceiling Adapter
FMA4-SC087-WH	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, White
FMA4-SC087-BL	Wood, Stone, Tile, 1/2"-7/8" Thick Ceiling, Adapter, Black
FMA4-SC125-WH	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, White
FMA4-SC125-BL	Wood, Stone, Tile, 7/8"-1 1/4" Thick Ceiling, Adapter, Black
FMA4-SC163-WH	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, White
FMA4-SC163-BL	Wood, Stone, Tile, 1 1/4"-1 5/8" Thick Ceiling, Adapter, Black

Optical Accessories

Cat. #	Description	Cat. #	Description
TIR-1-SP	12° Spot Optic	T7403	Med. Green Dichroic Lens
TIR-1-NFL	24° Narrow Flood Optic	T7404	Med. Blue Dichroic Lens
TIR-1-FL	35° Flood Optic	T7405	Yellow Dichroic Lens
AF3-50DEG	50° Optic Film	T7406	Magenta Dichroic Lens
	(Use with 12° Optic)	T7411	Blue Green Dichroic Lens
T741	Med. Pink Color Filter	T7416	Daylight Blue Correction Lens
T742	Warm Red Color Filter	T7420	Diffuse Spread Lens
T743	Daylight Blue Color Filter	T7422	UV Filter Lens
T744	Med. Blue Color Filter	T7477	Prismatic Lens
T745	Med. Amber Color Filter	T7478	Linear Spread Lens
T746	Med. Green Color Filter	T7459BL	Hexcell Louver
T7401	Red Dichroic Lens		

Misc. Accessories

Cat. #	Description
CTA4N-125	1 1/4" Thick Ceiling Adapter
CTA4N-163	1 5/8" Thick Ceiling Adapter
CTA4N-200	2" Thick Ceiling Adapter
HB-1	(2) Real Nail 3 Bar Hangers
HB-26	(2) 26" C-Channel Bar Hangers
HB-50	(2) 50" C-Channel Bar Hangers
LB-27	(2) 27" Linear Bar Hangers
EMI-20	20W Emergency Lighting Inverter
To order, spec	ify catalog number.

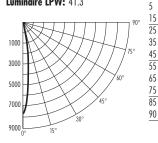


LED RECESSED DOWNLIGHT 3-1/4" LENSED DOWNLIGHT Non-IC Rated, 1000 LUMEN TC49L-432N, TC949L-432N

PHOTOMETRIC REPORT

Test Report #: PT05121604 Catalog No: TC49L-830-S-U with 432NC-WH Trim

Luminaire Spacing Criterion: 0.29 Lumingire LPW: 41.3



CANDLEPOWER DISTRIBUTION

0°

7826

5388

918

21

0

0

0

0

0

0

0°

4271

3597

1368

257

38

3

0

0

0

0

0

(Candelas)

(Candelas)

Degrees

Vertical

0

Degrees

Vertical

0

AVERAGE INITIAL FOOTCANDLES Multiple Units (Square Array, 60'x60' room)

Ceiling	80% Wall	50% Floo	r 20%
Spaci	ng RCR1	RCR3	RCR5
4.01	59	55	52
5.01	38	35	33
6.01	26	24	23
7.0	21	20	19
8.01	17	16	15
9.01	13	12	11
10.01	9	9	8

ZONAL LUMEN SUMMARY

Z	one	Lumens	%Fixture	
0	- 30°	810	98.2	
0	- 40°	824	99.9	
0	- 60°	825	100.0	
0	- 90°	825	100.0	

INITIAL FOOTCANDLES (One Unit, 20.0W, 14.5° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	217.4	1.5′
8	122.3	2.0′
10	78.3	2.5′
12	54.3	3.1′

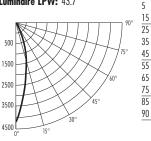
LUMINANCE (Average cd/m²)

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

PHOTOMETRIC REPORT

Test Report #: PT05121702 Catalog No: TC49L-830-N-U with 432NC-WH Trim

Luminaire Spacing Criterion: 0.39 Lumingire LPW: 437



CANDLEPOWER **AVERAGE INITIAL FOOTCANDLES** DISTRIBUTION

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

Ceiling 80%	6 Wall 5	0% Floor 2	0%
Spacing	RCR1	RCR3	RCR5
4.0′	62	56	52
5.0´	40	36	34
6.01	27	25	23
7.0′	22	20	19
8.01	18	16	15
9.01	13	12	11
10.01	10	9	8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
$0 - 30^{\circ}$	841	96.2
0-40°	871	99.7
0-60°	874	100.0
0-90°	874	100.0

AVERAGE INITIAL FOOTCANDLES

INITIAL FOOTCANDLES (One Unit, 20.0W, 23.1° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	118.6	2.5′
8	66.7	3.3′
10	42.7	4.1′
12	29.7	4.9′

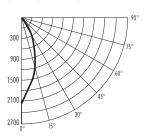
LUMINANCE (Average cd/m²)

	Average	
Degrees	Luminance	
45	640	
55	0	
65	0	
75	0	
85	0	

PHOTOMETRIC REPORT

Test Report #: PT05121704 Catalog No: TC49L-830-F-U with 432NC-WH Trim

Luminaire Spacing Criterion: 0.57 Luminaire LPW: 44.6



CANDLEPOWER

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

	Ceiling 80	% Wall 50	0% Floor 2	0%
-	Spacing	RCR 1	RCR3	
	4.0´	62	56	
_	5.0´	40	36	
	6.01	28	25	
	7.0´	22	20	
-	8.01	18	16	
	9.01	14	12	
	10.0´	10	9	
_				

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture	
0 - 30°	790	88.5	
0 - 40°	878	98.4	
0 - 60°	892	100.0	
0 - 90°	892	100.0	

INITIAL FOOTCANDLES (One Unit, 20.0W, 35.1° Beam)

12

Distance to Illuminated Plane (Feet) Footcandles Beam Center Beam Diameter 60.5 3.8' 6 34.0 5.1 8 10 21.8 6.3

7.6

LUMINANCE (Average cd/m²)

	Average Luminance	
Degrees	Luminance	
45	3522	
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.

Multipliers: 827 - 0.92 930 - 0.92 835 - 1.01

033 -	1.0
840 -	1.0

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Degrees

Vertical

5

15

25

35

45

55

65

75

85

90

DISTRIBUTION (Candelas

0

0

0

0

1S)	Ceiling 80%	6 VVall 3
	Spacing	RCR1
0°	4.0'	62
2178	5.0 ^r	40
1875	6.01	28
1282	7.0′	22
565	8.01	18
120	9.01	14
16	10.0′	10
0		

18 14

RCR5

50

32

22

11

8