

# BLACK BODY DIMMING & TUNABLE WHITE 700/1000 LUMEN WALL WASH LED

### PRODUCT DESCRIPTION

Recessed lensed wall wash LED luminaire features both Black Body Dimming and Tunable White technology in a single fixture. In Black Body Dimming mode, the luminaire duplicates halogen dimming, creating a natural warm glow as the CCT shifts from 3000K to less than 1800K when dimmed. In Tunable White mode, the CCT can be adjusted anywhere along the Planckian locus from 2000K through 4350K independent of dimming. Aculux Black Body Dimming and Tunable White luminaires feature a sealed Air-Loc® housing and is available in both IC and Non-IC rated configurations.

### PRODUCT SPECIFICATIONS

**LED Light Engine** With single dimmer connected, the light engine duplicates halogen, with the CCT shifting from 3000K at 100% to 1800K when dimmed to 1% ● Connect a second dimmer to engage Tunable White mode, featuring independent dimming and CCT tuning from 2000K through 4350K ● Superb color consistency within 2 SDCM of the Planckian locus over CCT range ● Accurate color rendition with 90 CRI at 3000K, and 85 CRI/70 R9 throughout CCT range.

**Dimming and CCT Control** Black Body Dimming and CCT Tuning are compatible with most 0-10V protocol dimmers • IC rated housings are rated for 120-277V input • For Non-IC housings, specify 120V or 277V. Refer to installation instructions for detailed wiring schematics.

Modular Optics Field interchangeable optics available with 21° Very Narrow Flood, 27° Narrow Flood, or 36° Flood distributions

• Patent pending auto-adjusting optic holder maximizes luminaire efficiency by maintaining optimal LED optic position relative to trim

• Accommodates up to three (3) beam control lenses and/or filters.

**Reflector** .040" aluminum angle-cut reflector in clear, gold, black, haze, or wheat haze Alzak finish provides 50° lamp and lamp image cut-off • Specular clear kicker reflector directs light toward wall surface.

Trims Style Trim Ring, Self Flanged and Flush Mount reflectors available ● 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).

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 Available with either Patented (US Patent 8,038,113) Pro-VI™ bar hanger system, permitting quick placement of housing with 24" on-center joists or suspended ceilings, or with vertically adjustable mounting brackets (butterfly brackets). Specify mounting style when ordering.

**Junction Box** IC housings are rated for 4 No. 12 AWG 90°C through branch circuit conductors. • Non-IC housings are rated for 8 No. 12 AWG 90°C through branch circuit conductors. • Includes (5) ½″, (1) ¾″, and (4) Non-metallic sheathed cable knock-outs. • Push-in electrical connectors for field connections.

Housing/Mounting Frame Housing painted black 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**  $\frac{1}{2}$ "  $-\frac{7}{8}$ " ceiling standard • For thicker ceilings, order CTA4N-125  $\left[\frac{7}{8}\right]$ " -1  $\left[\frac{1}{4}\right]$ ", CTA4N-163  $\left[1\right]$ " $\left[1\right]$ " or CTA4N-200  $\left[1\right]$ " -2") • CTA4N not required for wood, stone, or tile flush mount applications.

# **ELECTRICAL DATA**

Housing	IC(9	)43T	IC4	19T	TC(9	)49T
Voltage	120	277	120	277	120	277
Input Power (W)	13.0	14.3	20.5	21.6	22.5	23.6
Input Current (A)	0.11	0.06	0.17	0.09	0.18	0.09
Frequency	50/	50/60Hz		60Hz	50/	60Hz
Power Factor	0.99	0.92	0.99	0.92	0.99	0.92

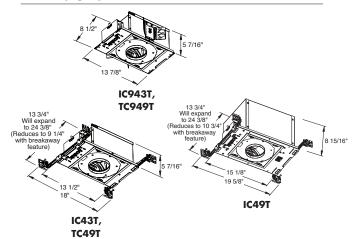
3-1/4" LENSED WALL WASH

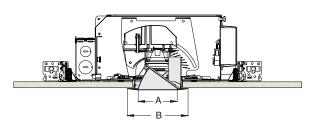


# IC(9)43T-439N, IC49T-439N, TC(9)49T-439N

	Туре	Cat. No.
Project:		
Notes:_		

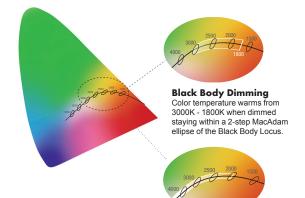
# **DIMENSIONS**





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"



Tunable White
Color temperature can be tuned
from 4350K - 2000K while staying
within a 2-step MacAdam ellipse
of the Black Body Locus.



# **BLACK BODY DIMMING & TUNABLE WHITE** 700/1000 LUMEN WALL WASH LED

3-1/4" LENSED WALL WASH

IC(9)43T-439N, IC49T-439N, TC(9)49T-439N

#### Ordering Information Housing, trim and accessories each ordered separately Example: TC949T-W-N-U1 Tunable White Range Voltage/Dimming<sup>1</sup> Options Housing Beam Spread w 700 Lumen, Bar Hangers (IC) 21° Very Narrow Flood 120-277V, 0-10V Dimming **w** 4350K - 2000K IC43T CP\* Chicago Plenum 700 Lumen, Butterfly Brackets (IC) 27° Narrow Flood 120V, 0-10V Dimming **U2** 277V, 0-10V Dimming 36° Flood 1000 Lumen, Bar Hangers (IC) 1000 Lumen, Bar Hangers (Non-IC) **TC949T** 1000 Lumen, Butterfly Brackets (Non-IC) \*Not available on IC49T Housing. ¹ IC is Universal voltage. Specify voltage for Non-IC products.

# Example: 439NB-WH

### Trim







Trim Ring <sup>1</sup>	Self Flanged <sup>2</sup>	Flush Mount <sup>3</sup>	Description
439NB-WH	439NB-SF	439NB-FM	Black Haze Reflector
439NC-WH	439NC-SF	439NC-FM	Clear Reflector
439NG-WH	439NG-SF	439NG-FM	Gold Reflector
439NW-WH	439NW-SF	439NW-FM	White Painted Reflector
439NHZ-SC	-	-	Haze Reflector
439NHZ-WH	439NHZ-SF	439NHZ-FM	Haze Reflector, White Ring
439NWHZ-ABZ	-	-	Wheat Haze Reflector
439NWHZ-WH	439NWHZ-SF	439NWHZ-FM	Wheat Haze Reflector, White Ring

<sup>1</sup>Trim Ring Finish: ABZ - Classic Aged Bronze, SC - Satin Chrome, WH - White. <sup>2</sup>For self flanged reflector with optional white painted flange, replace "-SF" suffix with "-SFWH".

<sup>3</sup>Flush Mount trims must be used with Flush Mount Adapter, ordered separately. Product specifications subject to change without notice.

# 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

# Ontical Accessories

Opincai i	46663301163		
Cat. #	Description	Cat. #	Description
TIR-TW-V	21° Very Narrow Flood Optic	T7403	Med. Green Dichroic Lens
TIR-TW-N	27° Narrow Flood Optic	T7404	Med. Blue Dichroic Lens
TIR-TW-F	36° Flood Optic	T7405	Yellow Dichroic Lens
AF3-50DEG	50° Optic Film	T7406	Magenta Dichroic Lens
	(Use with 27° 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, specify catalog number.



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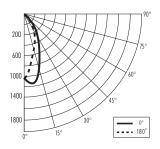
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### PHOTOMETRIC REPORT

Test Report #: PT10131817R Catalog No: IC49T-W-N-U with 439NC-WH trim

Luminaire Spacing Criterion @ 90°: 0.68 Luminaire: 3-1/4" IC LED Downlight with Clear Alzak®, Lensed Angle Cut Wall Wash Trim



# CANDLEPOWER DISTRIBUTION

(Candelas)	
Degrees	

Degrees	0	180
Vertical	Wall Wash	Downlight
0	1043	1043
5	1140	870
10	1109	680
15	960	505
20	763	367
25	567	264
30	392	193
35	226	124
40	121	79
45	76	41
50	53	11
55	41	0
60	32	0
65	25	0
70	18	0
75	10	0
80	4	0
85	0	0
90	0	0

# **ZONAL LUMEN SUMMARY**

Zone	Lumens	%Fixture	
0 - 30°	490	70.8	
0 - 40°	612	88.4	
0 - 60°	681	98.4	
0 - 90°	692	100.0	
90 - 180°	0	0.0	
0 - 180°	692	100.0	

# LUMINANCE (Average cd/m²)

	Average 180°	
Degrees	Downlight Luminance	
45	16301	
55	5620	
65	1156	
75	189	
85	0	

# **FOOTCANDLES ON WALL FROM MULTIPLE FIXTURES**

Fixture Distance to Wall		1	8"	2	24"
Fixture	e Centers (spacing)	<b>₫ 18″</b> Å	<b>≜</b> 24″ <b>≜</b>	₫ 18″ ₾	₾ 24" ₾
Ŋ	1′	11 11 11	9 8 9	7 7 7	5 5 5
$\leq$	2'	23 23 23	20 17 20	14 14 14	11 11 11
CEILIN	3′	37 37 37	29 28 29	21 21 21	17 17 17
<b>∀</b>	4'	36 36 36	28 28 28	29 29 29	22 22 22
FRO	5'	30 30 30	23 23 23	28 28 28	22 22 22
Ш	6'	24 24 24	19 19 19	25 25 25	20 20 20
3	7'	19 19 19	16 16 16	21 21 21	17 17 17
Æ	8'	16 16 16	13 13 13	18 18 18	15 15 15
IST	9′	12 12 12	10 10 10	14 14 14	12 12 12

Fc/Lumen Multipliers: IC(9)43T - 0.70 IC49T - 1.00

TC(9)49T - 1.00

Photometry is at 3000K CCT

