

BLACK BODY DIMMING & TUNABLE WHITE 1000 LUMEN ADJUSTABLE, DOWNLIGHT AND WALL WASH LED

PRODUCT DESCRIPTION

Recessed LED luminaire compatible with adjustable, downlight and wall wash trims, features both Black Body Dimming and Tunable White technology in a single fixture and delivers up to 1000 lumens. 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

Black Body Dimming When commissioned for Black Body Dimming, the luminaire duplicates halogen, with CCT shifting from 3000K at 100% to 1800K at less than 1% • Superb color consistency within 2 SDCM of the Black Body curve over dimming range.

Tunable White Mode When commissioned for Tunable White mode, the user has independent control of intensity and CCT from 4350K to 2000K • Superb color consistency within 2 SDCM of the Black Body curve over CCT range.

Color Rendering Accurate color rendition with 90 CRI and 70 R9 at 3000K • Minimum 85 CRI and 50 R9 at all other CCTs.

Control Compatibility Compatible with most 0-10V dimming systems or DMX512/RDM • Refer to installation instruction P6160 for detailed wiring schematics.

Modular Optics Field interchangeable optics available with 20° Very Narrow Flood, 26° Narrow Flood, or 35° Flood distributions
• Additional distributions of 30°, 40°, 45°, 55° FWHM can be achieved with the use of diffusing films
• Patented (US Patent 8,950,911) 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.

Adjustability Acu-Aim™ precision geared hot-aiming achieves 370° rotation, 45° tilt • Optimized center beam optics translates light engine forward as it is aimed off nadir

Trims Style Self Flanged and Flush Mount reflectors available ● Self Flanged reflectors with polished or optional white painted flange ● For flush mount installations in drywall ceilings use the FMASQ4 flush mount adapter ● For flush mount installations in wood, stone, or tile ceilings the FMASQ4-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, damp or wet locations depending on trim • Meets energy code Air Leakage requirements per ASTM E283 • Union made.

Mounting Non-IC fixtures feature Patented (US Patent 8,038,113) Pro-VI™ bar hanger system, permitting quick placement of housing with 24" on-center joists or suspended ceilings, and vertically adjustable mounting brackets (butterfly brackets) ● IC fixtures feature bar hangers only.

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 ½" – ½" ceiling standard • For thicker ceilings, order CTA4SQ-125 [½"-1 ¼"], CTA4SQ-163 (1 ¼"-1 ½") or CTA4SQ-200 (1 ½"-2") • CTA4SQ not required for wood, stone, or tile flush mount applications.

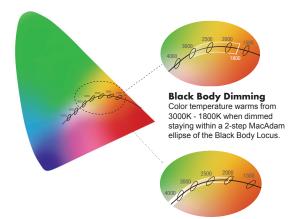
ELECTRICAL DATA

LLEGIKICAL DAIA					
Housing	IC41	OTSQ	TC410TSQ		
Voltage	120	277	120	277	
Input Power (W)	18.9	19.4	20.9	21.4	
Input Current (A)	0.16	0.08	0.16	0.08	
Frequency	50/	50/60Hz		60Hz	
Power Factor	0.99	0.92	0.99	0.92	

SQUARE APERTURE

IC410TSQ, TC410TSQ

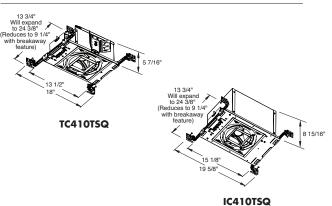
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D		
Project:		
Notes:		



Tunable White

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

DIMENSIONS



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



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SQUARE APERTURE

IC410TSQ, TC410TSQ

Ordering Information Housing, trim and accessories each ordered separately										
Example: TC410TSQ-W-N-U1										
Н	ousing		Tunable V	Vhite Range		Beam Spread		Dimming	Voltage	Options
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IC410TSQ	1000 Lumen, IC Rated	١	N 4350	K - 2000K	٧	20° Very Narrow Flood	U	0-10V Dimming DMX512/RDM	IC Housing: Blank 120-277V	CP* Chicago Plenum
TC410TSQ	1000 Lumen, Non-IC Rated				N	26° Narrow Flood	М	DMAST2/RDM	Non-IC Housing: 1 120V	*Available on TC410TSQ only
					F	35° Flood			2 277V	

Desired FWHM	Primary Optic	Film
20°	V	-
26°	N	-
30°	N	AF3-10
35°	F	-
40°	N	AF3-30
45°	N	AF3-40
55°	N	AF3-50
50°x20°	N	AF3-60x1

Flush Mount Adapters				
Cat. #	Description			
FMASQ4	Drywall Ceiling Adapter			
FMASQ4-SC100-WH	Wood, Stone, Tile, 1/2"-1" Thick Ceiling, Adapter, White			
FMASQ4-SC100-BL	Wood, Stone, Tile, 1/2"-1" Thick Ceiling, Adapter, Black			
FMASQ4-SC138-WH	Wood, Stone, Tile, 1"-1 3/8" Thick Ceiling, Adapter, White			
FMASQ4-SC138-BL	Wood, Stone, Tile, 1"-1 3/8" Thick Ceiling, Adapter, Black			
FMASQ4-SC175-WH	Wood, Stone, Tile, 1 3/8"-1 3/4" Thick Ceiling, Adapter, White			
FMASQ4-SC175-BL	Wood, Stone, Tile, 1 3/8"-1 3/4" Thick Ceiling, Adapter, Black			

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Optical	Acces	sories

Cat. #	Description	Cat. #	Description
TIR-TW-V	20° Spot Optic	T746	Med. Green Color Filter
TIR-TW-N	26° Narrow Flood Optic	T7401	Red Dichroic Lens
TIR-TW-F	35° Flood Optic	T7403	Med. Green Dichroic Lens
AF3-10	10° Film*	T7404	Med. Blue Dichroic Lens
AF3-20	20° Film*	T7405	Yellow Dichroic Lens
AF3-30	30° Film*	T7406	Magenta Dichroic Lens
AF3-40	40° Film*	T7411	Blue Green Dichroic Lens
AF3-50	50° Film*	T7416	Daylight Blue Correction Lens
AF3-60×1	60°x1° Film*	T7420	Diffuse Spread Lens
T741	Med. Pink Color Filter	T7422	UV Filter Lens
T742	Warm Red Color Filter	T7477	Prismatic Lens
T743	Daylight Blue Color Filter	T7478	Linear Spread Lens
T744	Med. Blue Color Filter	T7459BL	Hexcell Louver
T745	Med. Amber Color Filter		

^{*}For best results, use with narrow flood optic.

Misc. Accessories

Description		
1 1/4" Thick Ceiling Adapter		
1 5/8" Thick Ceiling Adapter		
2" Thick Ceiling Adapter		
(2) Real Nail 3 Bar Hangers		
(2) 26" C-Channel Bar Hangers		
(2) 50" C-Channel Bar Hangers		
(2) 27" Linear Bar Hangers		
20W Emergency Lighting Inverter		
To order, specify catalog number.		



BLACK BODY DIMMING & TUNABLE WHITE 700/1000 LUMEN ADJUSTABLE LED IC(9)43TSQ, IC49TSQ, TC(9)49TSQ

Downlight

Deep Downlight Reflector









Self Flanged¹ 437SQBHZ-SF 437SQW-SF 437SQHZ-SF 437SQWHZ-SF Flush Mount² 437SQBHZ-FM 437SQW-FM 437SQWHZ-FM Description Black Haze Reflector White Reflector Wheat Haze Reflector

Downlight 1 1/4" Pinhole









Self Flanged¹ 4337SQ-WH 4337SQ-BL

Flush Mount² 4337SQ-WH-FM 4337SQ-BL-FM

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Downlight Regressed 1 3/4" Pinhole









Self Flanged¹ 4307SQ-WH 43075Q-BL

Flush Mount² 4307SQ-WH-FM 4307SQ-BL-FM

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Lensed

Downlight Lensed Trim











Self Flanged¹ 432SQBHZ-SF 432SQW-SF 432SQWHZ-SF

Flush Mount² 432SQBHZ-FM 432SQW-FM

432SQWHZ-FM

Description Rlack Haze Reflector White Haze Reflector Haze Reflector Wheat Haze Reflector

Angle-Cut Lensed Trim











Self Flanged¹ 431SQBHZ-SF 431SQW-SF 431SQWHZ-SF Flush Mount² 431SQBHZ-FM 431SQW-FM 431SQHZ-FM 431SQWHZ-FM

Description Black Haze Reflector White Haze Reflector Haze Reflector Wheat Haze Reflector

Self Flanged: For self flanged reflector with optional white painted flange, replace "-SF" suffix with

²Flush Mount: Flush Mount trims must be used with Flush Mount Adapter, ordered separately.



BLACK BODY DIMMING & TUNABLE WHITE 700/1000 LUMEN ADJUSTABLE LED IC(9)43TSQ, IC49TSQ, TC(9)49TSQ

Lensed (continued)

Downlight 1 1/4" Pinhole with Uniformity Lens











Self Flanged 43325Q-WH 4332SQ-BL

Flush Mount² 4332SQ-WH-FM 4332SQ-BL-FM

White Trim, Black Alzak® Reflector

Black Trim, Black Alzak® Reflector

Adjustable 1 1/4" Pinhole with Uniformity Lens











Self Flanged¹ 43315Q-WH 4331SQ-BL

Flush Mount² 4331SQ-WH-FM 4331SQ-BL-FM

Description

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Downlight Regressed 1 3/4" Pinhole with Uniformity Lens











Self Flanged¹ 4302SQ-WH 4302SQ-BL

Flush Mount² 4302SQ-WH-FM 4302SQ-BL-FM

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Adjustable Regressed 1 3/4" Pinhole with Uniformity Lens











Self Flanged¹ 4301SQ-WH 4301SQ-BL

Flush Mount² 4301SQ-WH-FM 4301SQ-BL-FM

Description White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

¹Self Flanged: For self flanged reflector with optional white painted flange, replace "-SF" suffix with

²Flush Mount: Flush Mount trims must be used with Flush Mount Adapter, ordered separately.



BLACK BODY DIMMING & TUNABLE WHITE 700/1000 LUMEN ADJUSTABLE LED IC(9)43T, IC49T, TC(9)49T

Adjustable Accent

Angle-Cut Reflector









Self Flanged¹ 438SQBHZ-SF 438SQW-SF 438SQHZ-SF 438SQWHZ-SF

Flush Mount² 438SQBHZ-FM 438SQW-FM 438SQHZ-FM 438SQWHZ-FM

Description Black Haze Reflector White Reflector Haze Reflector Wheat Haze Reflector

Adjustable 1 1/4" Pinhole









Self Flanged¹ 433SQ-WH 433SQ-BL

Flush Mount² 433SQ-WH-FM 433SQ-BL-FM

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Adjustable Regressed 1 3/4" Pinhole









Self Flanged¹ 43085Q-WH 43085Q-BL

Flush Mount² 4308SQ-WH-FM 4308SQ-BL-FM

Description

White Trim, Black Alzak® Reflector Black Trim, Black Alzak® Reflector

Wall Wash

Lensed Wall Wash











Self Flanged¹ 439SQBHZ-SF 439SQW-SF 439SQWHZ-SF

Flush Mount² 439SQBHZ-FM 439SQW-FM 439SQWHZ-FM

Description Black Haze Reflector White Haze Reflector Haze Reflector Wheat Haze Reflector

¹Self Flanged: For self flanged reflector with optional white painted flange, replace "-SF" suffix with "-<u>SFWH</u>".

²Flush Mount: Flush Mount trims must be used with Flush Mount Adapter, ordered separately.