

PRODUCT SPECIFICATIONS

LED Light Engine 2-step MacAdam ellipse binning • 2700K, 3000K, 3500K, or 4000K CCTs available with 80 CRI minimum • 2700K and 3000K also available with 90 CRI and 95 CRI minimum (R9>90).

Quiet, Glare-free Ceiling 45° visual cutoff to source and source image.

Modular Optics Available with 12°, 24°, 35° and 50° field interchangeable optics • 20°, 30°, 40°, 45° and 60° FWHM can be achieved with diffusing films and 12° optic • Patented (US Patent 8,950,911) auto-adjusting optic holder maximizes efficiency by maintaining optimal LED optic position. • AX3SQ A accommodates three (3) beam control lenses and/or filters • AX3SQ LPA accepts two (2) 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, ensuring maximum light and low brightness.

Reflector .040" aluminum angle-cut reflector in black specular Alzak finish shields housing interior.

Trims Styles Self Flanged and flangeless reflectors are available • Must specify FMA3SQ (gypsum) or SFM3SQ (wood/stone/tile) option for flangeless installations.

LED Driver Accommodates 120-277V input and multiple control protocols • For a list of compatible dimmers, refer to [ACULUX LED3-DIM](#) • Power Factor > 0.9 • Field replaceable from below ceiling.

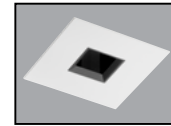
Life Rated for 50,000 hrs at 70% lumen maintenance.

Warranty - 5YR 5-year limited warranty. Complete warranty terms located at: http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

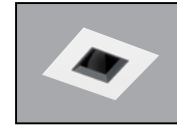
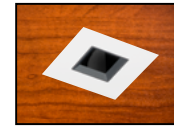
Codes/Labels UL and cUL listed for through branch wiring, damp locations • Wet location listed with WET option • Meets energy code Air Leakage requirements per ASTM E283 • ICAT housings are rated for direct contact with insulation • AX3SQ 08LM/12LM/15LM (ICAT option) are compatible with spray foam insulation with an R-Value of 3.7 per inch or less • Union made.

New Construction Mounting Features patented (US Patent 8,038,113) Pro-VI™ bar hanger system • All fixtures except for 25LM ICAT also feature vertically adjustable mounting brackets (butterfly brackets) • Centerline indicators on plaster frame and patented (US Patent 8,277,090) Tru-Line™ Platform featuring +/- 1/2" translation and +/- 45° aperture rotation aids fixture alignment after installation, prior to drywall.

3" LED RECESSED ADJUSTABLE NEW CONSTRUCTION 1-1/4" PINHOLE AX3SQ/3SQAPIN 800 - 3000 LUMEN



Self-Flanged

Flangeless
(Gypsum)Flangeless
(Wood/Stone/Tile)

Housing Styles Universal housings are compatible with downlight, adjustable, and wall wash trims.

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

Ceiling Thickness 1/2" – 1 5/8" ceiling
Specifications subject to change without notice.



A+ Capable options indicated
by this color background.



Design2Ship Quick Ship Program:

Options in green text qualify for Design2Ship — 5 business days from order entry to ship. Refer to Design2Ship Brochure for complete program details.
Maximum Order Quantity: 50 units for housings; 25 units for trims.

ORDERING INFORMATION

Example: AX3SQ A G4 20LM 30K 80CRI 24D FPC 120 ICAT 3SQAPIN BS WHSF

HOUSING OPTIONS	Housing Style		Lumens		CCT		CRI		Beam		Driver		Voltage ³		Options	
	AX3SQ A G4	New Construction Universal ADJ/DL/WW	08LM	800 Lumens	27K	2700K	80CRI	12D	12° beam	GZ1	0-10V, 1% dim	120	CP ⁴	Chicago Plenum		
		AX3SQ LPA G4	Low Profile Universal ADJ/DL/WW	12LM	1200 Lumens	30K	3000K	90CRI ²	24D	24° beam	EZ1	elddLED 0-10V, 1% dim	277	ICAT ⁵	IC, Air-Tight	
				15LM	1500 Lumens	35K	3500K	95CRI ²	35D	35° beam	EZB	elddLED 0-10V, <1% dim	MVOLT (120-277)	NLIGHT ⁶	nLight dimming pack controls	
				20LM	2000 Lumens	40K	4000K		50D	50° beam	FPC	Phase cut dimming, 5% dim				
25LM	2500 Lumens								ECOS2	Lutron Hi-Lume 2-wire forward phase, 1% dim						
	30LM ¹	3000 Lumens							ECOD	Lutron Hi-Lume EcoSystem, 1% dim						
									DMXR	DMX,RDM Driver, 1% dim						
									DALI	DALI Driver, 1% dim						

TRIM OPTIONS	Square Trim Style		Reflector Finish		Flange Style / Finish		Environment		Ceiling Installation	
	3SQAPIN	1-1/4" Adjustable Pinhole	BS	Black Specular	SELF FLANGED		WET	Wet location (Solite Lens)	SELF-FLANGED	
					BLSF	Black painted Trim				Ceiling ≤ .875"
					WHSF	White painted Trim			CTA3SQ/125	Ceiling 0.875" - 1.25"
					FLANGELESS ⁷				CTA3SQ/163	Ceiling 1.25" - 1.625"
					BLFM	Black Flangeless			FLANGELESS, GYPSUM	
					WHFM	White Flangeless			FMA3SQ/087	Ceiling ≤ .875"
									FMA3SQ/125	Ceiling 0.875" - 1.25"
									FMA3SQ/163	Ceiling 1.25" - 1.625"
									FLANGELESS, WOOD/STONE/TILE ⁸	
									SFM3SQ/100 (B,W)	Ceiling ≤ 1.00"
									SFM3SQ/138 (B,W)	Ceiling 1.00" - 1.375"
									SFM3SQ/163 (B,W)	Ceiling 1.375" - 1.625"

Ordering Notes

¹ 30LM not available with LPA.

² 90CRI and 95CRI available on 27K and 30K only.

³ MVOLT standard on GZ1, EZ1, EZB, ECOD, DMXR, DALI. 120 standard for FPC or ECOS2.

⁴ CP available up to 20LM for LPA; available up to 25LM for A.

⁵ ICAT not available with LPA at 25LM; not available with A at 30LM.

⁶ Must specify 120 or 277 volts. Available on EZ1 or EZB only.

⁷ Must specify flangeless ceiling installation (FMA3SQ or SFM3SQ).

⁸ Specify finish: B=Black, W=White.

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ACCESSORIES

Accessories			
3AXOPT/12D	12° Optic	CGF 200 MPINK	Med. Pink Color Filter
3AXOPT/24D	24° Optic	CGF 200 WRED	Warm Red Color Filter
3AXOPT/35D	35° Optic	CGF 200 DLTBLUE	Daylight Blue Color Filter
3AXOPT/50D	50° Optic	CGF 200 MBLU	Med. Blue Color Filter
AF3/10	10° Diffusing Film	CGF 200 MAMB	Med. Amber Color Filter
AF3/20	20° Diffusing Film	CGF 200 MGRN	Med. Green Color Filter
AF3/30	30° Diffusing Film	DGF 200 DRED	Red Dichroic Lens
AF3/40	40° Diffusing Film	DGF 200 MGRN	Med. Green Dichroic Lens
AF3/50	50° Diffusing Film	DGF 200 MBLU	Med. Blue Dichroic Lens
AF3/60x1	60°x1° Diffusing Film	DGF 200 DYEL	Yellow Dichroic Lens
HB1	Real Nail 3 Bar Hangers	DGF 200 MAGEN	Magenta Dichroic Lens
HB26	26" C-Channel Bar Hangers	DGF 200 CYAN	Blue Green Dichroic Lens
HB50	50" C-Channel Bar Hangers	DCCF 200 HL4250	Daylight Blue Correction Lens
LB27	27" Linear Bar Hangers	DIFF 200	Diffuse Spread Lens
EMI20	20W Remote Mount Emergency Inverter (Compatible with 20LM max)	SOLITE 200	Uniformity Lens
		UVF 200	UV Filter Lens
		PRISM 200	Prismatic Lens
		LSPREAD 200	Linear Spread Lens
		HCLBL 200	Hexcell Louver

DIFFUSING FILMS

Desired FWHM	Primary Optic	Film
12°	12D	-
20°	12D	AF3/10
24°	24D	-
30°	12D	AF3/20
35°	35D	-
40°	12D	AF3/30
45°	12D	AF3/40
50°	50D	-
60°	12D	AF3/50
20°x60°	12D	AF3/60x1

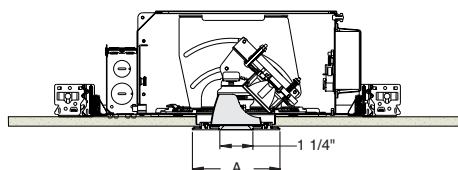
To achieve the desired beam angle (FWHM), specify the following primary LED optic on the luminaire and order the diffusing film from the table below

ELECTRICAL DATA

Lumen Package	08LM		12LM		15LM		20LM		25LM		30LM	
Voltage	120	277	120	277	120	277	120	277	120	277	120	277
Input Power	7.0	7.6	11.0	12.0	13.8	14.6	19.7	20.2	25.8	26.3	32.9	33.3
Input Current	0.03	0.06	0.09	0.05	0.12	0.06	0.17	0.08	0.22	0.1	0.28	0.13
Frequency	50/60Hz		50/60Hz		50/60Hz		50/60Hz		50/60Hz		50/60Hz	
Power Factor	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9	>0.9

	Construction:	ICAT
	CCT/CRI:	90CRI 27K, 30K
	Optic:	24D, 35D
	Reflector Finish:	BS

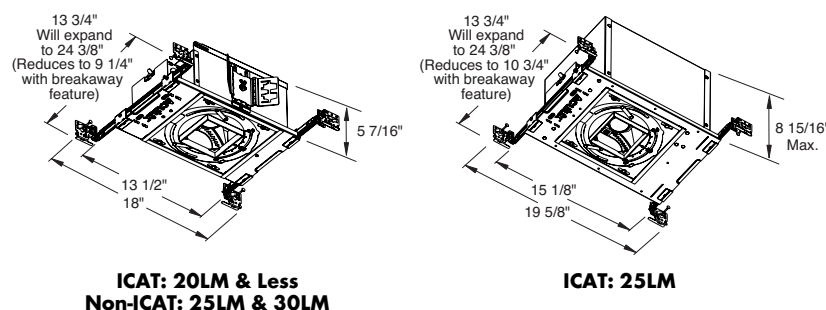
DIMENSIONS



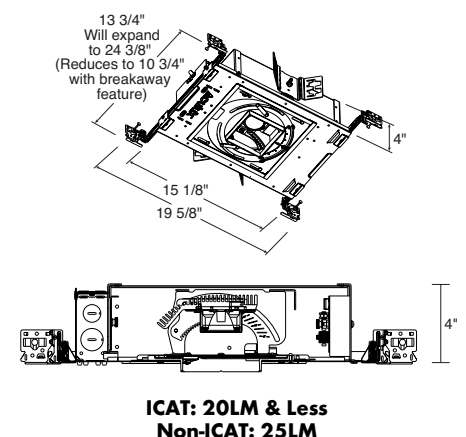
	A
Self Flanged	4 1/2"
Flangeless	3 5/8"

4 1/8" CEILING CUTOUT
(REFER TO INSTRUCTION SHEET FOR
FLANGELESS CEILING CUTOUT)

NEW CONSTRUCTION UNIVERSAL (AX3SQ A)



LOW PROFILE UNIVERSAL (AX3SQ LPA)



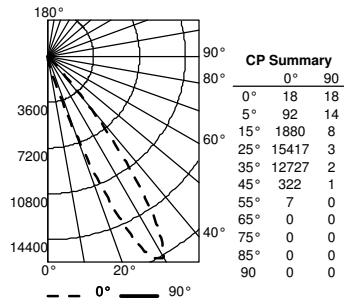
3" LED RECESSED ADJUSTABLE NEW CONSTRUCTION 1-1/4" PINHOLE AX3SQ/3SQAPIN 800 - 3000 LUMEN

PHOTOMETRICS

AX3SQ A G4 30LM 30K 80CRI 12D EZI MVOLT 3SQAPIN BS

3000K LEDs, input watts: 32.6,
delivered lumens: 1528, LM/W = 47,
test no. PT03181203,
tested in accordance to IESNA LM-79

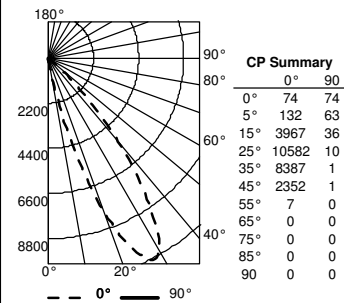
Beam Spread: 12D



AX3SQ A G4 30LM 30K 80CRI 24D EZI MVOLT 3SQAPIN BS

3000K LEDs, input watts: 32.6,
delivered lumens: 1792, LM/W = 55,
test no. PT03182103,
tested in accordance to IESNA LM-79

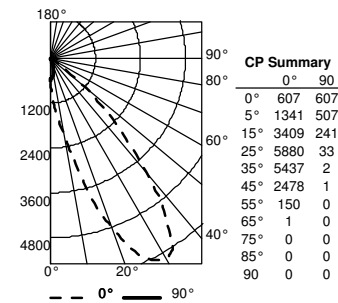
Beam Spread: 24D



AX3SQ A G4 30LM 30K 80CRI 35D EZI MVOLT 3SQAPIN BS

3000K LEDs, input watts: 32.6,
delivered lumens: 1898, LM/W = 58,
test no. PT03182109,
tested in accordance to IESNA LM-79

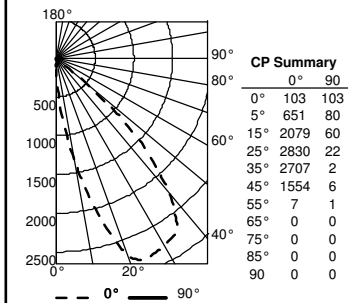
Beam Spread: 35D



AX3SQ A G4 30LM 30K 80CRI 50D EZI MVOLT 3SQAPIN BS

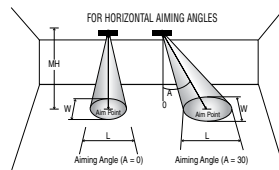
3000K LEDs, input watts: 32.6,
delivered lumens: 1087, LM/W = 33,
test no. PT03182115,
tested in accordance to IESNA LM-79

Beam Spread: 50D

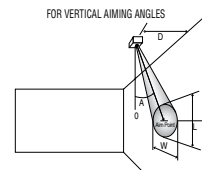


CBCP • Centerbeam candlepower
FC • Footcandles at beam center (aim point)

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°, 1.0 for 45°).



Horizontal Aiming Angles



Vertical Aiming Angles

Beam Spread CBCP		0°						30°						30°						45°					
		MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W								
12° 	18146	6	504	1.7	1.7	327	2.2	1.9	3	252	5.2	3.6	1.7	713	3.0	1.7	1.2								
		8	284	2.2	2.2	184	3.0	2.6	4	142	6.9	4.7	2.2	401	4.0	2.3	1.6								
		10	181	2.8	2.8	118	3.7	3.2	5	91	8.7	5.9	2.8	257	5.0	2.8	2.0								
		12	126	3.4	3.4	82	4.5	3.9	6	63	10.4	7.1	3.4	178	6.0	3.4	2.4								
		14	93	3.9	3.9	60	5.2	4.5	7	46	12.1	8.3	3.9	131	7.0	4.0	2.8								
24° 	10843	4	678	1.6	1.6	440	2.2	1.9	2	339	3.5	3.7	1.6	958	2.0	1.7	1.1								
		6	301	2.4	2.4	196	3.3	2.8	3	151	5.2	5.5	2.4	426	3.0	2.5	1.7								
		8	169	3.2	3.2	110	4.3	3.7	4	85	6.9	7.3	3.2	240	4.0	3.3	2.3								
		10	108	4.0	4.0	70	5.4	4.6	5	54	8.7	9.1	4.0	153	5.0	4.2	2.8								
		12	75	4.8	4.8	49	6.5	5.6	6	38	10.4	11.0	4.8	106	6.0	5.0	3.4								
35° 	6174	4	386	2.0	2.0	251	2.8	2.4	2	193	3.5	5.1	2.0	546	2.0	2.2	1.4								
		6	172	3.1	3.1	111	4.2	3.5	3	86	5.2	7.6	3.1	243	3.0	3.3	2.2								
		8	96	4.1	4.1	63	5.6	4.7	4	48	6.9	10.1	4.1	136	4.0	4.4	2.9								
		10	62	5.1	5.1	40	6.9	5.9	5	31	8.7	12.7	5.1	87	5.0	5.5	3.6								
		12	43	6.1	6.1	28	8.3	7.1	6	21	10.4	15.2	6.1	61	6.0	6.5	4.3								
50° 	2830	4	177	2.5	2.5	115	3.5	2.9	2	88	3.5	7.3	2.5	250	2.0	2.8	1.8								
		6	79	3.8	3.8	51	5.3	4.4	3	39	5.2	10.9	3.8	111	3.0	4.2	2.7								
		8	44	5.1	5.1	29	7.0	5.9	4	22	6.9	14.5	5.1	63	4.0	5.6	3.6								
		10	28	6.3	6.3	18	8.8	7.3	5	14	8.7	18.2	6.3	40	5.0	7.1	4.5								
		12	20	7.6	7.6	13	10.5	8.8	6	10	10.4	21.8	7.6	28	6.0	8.5	5.4								

LUMEN OUTPUT MULTIPLIERS

CCT/CRI	Multiplier		
	80CRI	90CRI	95CRI
2700K	100%	86%	65%
3000K	100%	88%	69%
3500K	105%		
4000K	107%		

Lumens	Multiplier
30LM	100%
25LM	87%
20LM	70%
15LM	50%
12LM	40%
08LM	27%