

PRODUCT SPECIFICATIONS

LED Light Engine Fixture to fixture color consistency within a 2-step MacAdam ellipse • 2700K, 3000K, 3500K, or 4000K color temperatures are available with 80 CRI minimum • 2700K and 3000K are also available with 90 CRI minimum.

Modular Optics 45° cutoff to source and source image • Available with field interchangeable optics in 15°, 24°, 35° and 45° distributions • Additional distributions of 20°, 30°, 40°, 50°, 55°, 60°, 60° x 20° FWHM can be achieved with the use of the diffusing films and spot primary optic.

Adjustability Patented Acu-Aim™ precision geared hot-aiming achieves 365° rotation, 40° tilt with any ceiling thickness from ½" to 1" • Acu-Aim™ translates light engine forward as it is aimed off nadir, ensuring maximum light and low brightness • Black aiming mechanism preserves dark aperture.

Reflector Die cast reflector in clear diffuse, black diffuse, wheat diffuse, or white finish provides 50° cut-off • Black shield prevents visibility into housing.

Trim Style Self Flanged and Flangeless styles (drywall only) are available

LED Driver Choice of two drivers to accommodate voltages from 120-277 volts AC at 50/60Hz • Dims as low as 1% with most incandescent and electronic low voltage dimmers or 0-10V dimmers • For a list of compatible dimmers, refer to [ACLXLED2-DIM](#) • Power Factor > 0.9 • Field replaceable from above or below ceiling.

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

Codes/Labels UL and cUL listed for damp or wet locations • ENERGY STAR® certified with select trims and housings • Union made.

Remodel Installation Fixture installs from below the ceiling and secured to remodel ring.

Wiring Includes (2) ½" knockouts equipped with pryout slots and are compatible with flexible electrical supply only • Supplied with quick connect electrical connectors.

Ceiling Thickness ½" – 1½" ceiling standard.

Buy American Act This product is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to www.acuitybrands.com/buy-american for additional information.

Warranty 5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

NOTE: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25°C. Specifications subject to change without notice.

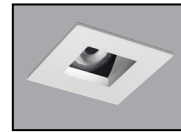
**2" LED UNIVERSAL RECESSED
ADJUSTABLE/DOWNLIGHT/WALL WASH**



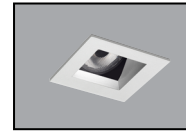
800/1200/1500 LUMEN
SQUARE ANGLE-CUT REFLECTOR

REMODEL

AX2SQ AR with 2SQA Trim



Self-Flanged



Flangeless



AX2SQ AR

ORDERING INFORMATION

Example: AX2SQ AR G2 08LM 30K 80CRI 24D FPC 120 2SQA W SF

HOUSING OPTIONS

Series / Housing Style	Lumens	CCT	CRI	Beam	Driver	Voltage ²	Options
AX2SQ AR G2 Remodel Universal ADJ/DL/WW	08LM 800 Lumens	27K 2700K	80CRI	15D 15° beam	FPC Phase cut dimming, 1% dim ZT 0-10V Dimming, 1% dim	120 MVOLT (120-277)	NLIGHT ³ nLight dimming pack controls (must be remote mounted)
	12LM 1200 Lumens	30K 3000K	90CRI ¹	24D 24° beam			
	15LM 1500 Lumens	35K 3500K		35D 35° beam			
		40K 4000K		45D 45° beam			

TRIM OPTIONS

Square Trim Style	Reflector Finish	Flange Style / Finish	Environment	Ceiling Installation
ADJUSTABLE	BD Black Diffuse	SELF FLANGED	WET Wet location	SELF-FLANGED
2SQA Angle-Cut Reflector	CD Clear Diffuse	SF Flange is same finish as reflector		_____ Ceiling 0.5" - 1.5"
	W White Paint	WHSF White, flanged		
	WTD Wheat Diffuse	FLANGELESS ⁴		FLANGELESS, GYPSUM
		FM Flangeless		FMA2SQR Ceiling 0.5" - 1.5"

NOTES

Ordering Notes
¹ 90CRI available on 27K and 30K only. ⁴ Flangeless trims in drywall ceiling must be specified with Flangeless ceiling installation (FMA2SQR).
² MVOLT standard on ZT. 120 Standard on FPC.
³ NLIGHT compatible with ZT only.

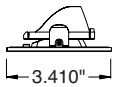
2" LED UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH 800/1200/1500 LUMEN SQUARE ANGLE-CUT REFLECTOR REMODEL AX2SQ AR with 2SQA Trim

TRIM SELECTION

2SQA Square Angle-Cut Reflector



Self-Flanged



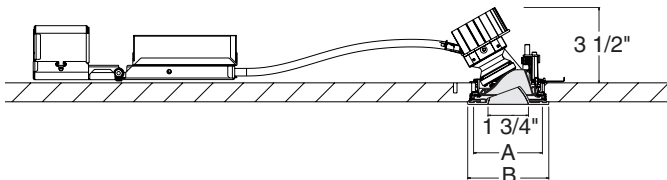
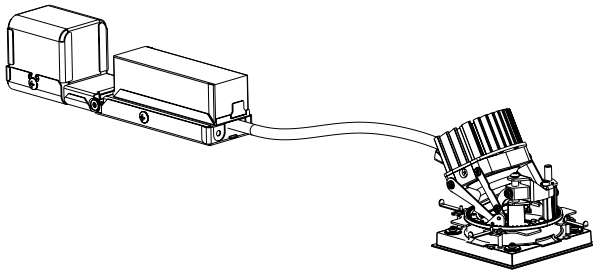
Flangeless



	CCT/CRI:	80CRI 27K, 30K, 35K, 40K; 90CRI 27K, 30K
	Optic:	15D, 24D, 35D, 45D
	Trim Finish:	CD, WTD, BD, W

* With WET option

DIMENSIONS REMODEL



Trim Style	Cutout Size (A)	Flange Dimension (B)
Self Flanged Trims	3.044" x 3.044"	3.410"
Flangeless Trims (Drywall Ceiling)	3.044" x 3.044"	2.875"

ACCESSORIES

Cat. #	Description
2AXG2OPT/15D	15° Spot Optic
2AXG2OPT/24D	24° Narrow Flood Optic
2AXG2OPT/35D	35° Flood Optic
2AXG2OPT/45D	45° Wide Flood Optic
AF2/10	10° Film (Use with 15D Optic)
AF2/20	20° Film (Use with 15D Optic)
AF2/30	30° Film (Use with 15D Optic)
AF2/40	40° Film (Use with 15D Optic)
AF2/50	50° Film (Use with 15D Optic)
AF2/60	60° Film (Use with 15D Optic)
AF2/90x1	90°x1° Film (Use with 15D Optic)
IIS 35 HE	Up to 35W Remote Mount Micro Inverter (AX2SQ 2A G2 15LM and AX2SQ 3A G2 12LM Excluded)

To order, specify catalog number.

DIFFUSING FILMS

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

Desired FWHM	Primary Optic	Film
15°	15D	-
20°	15D	AF2/10
24°	24D	-
30°	15D	AF2/20
35°	35D	-
40°	15D	AF2/30
45°	45D	-
50°	15D	AF2/40
55°	15D	AF2/50
60°	15D	AF2/60
60°x20°	15D	AF2/90x1

ELECTRICAL DATA

Lumen Package	08LM			12LM			15LM		
	Driver Option	FPC	ZT	FPC	ZT	FPC	ZT	FPC	ZT
Voltage	120	120	277	120	120	277	120	120	277
Input Power	10.0	9.9	10.1	14.7	14.3	14.3	17.3	16.5	16.4
Input Current	0.08	0.08	0.04	0.12	0.12	0.06	0.14	0.14	0.06
Frequency	50/60Hz			50/60Hz			50/60Hz		
Power Factor	0.99	0.99	0.9	0.99	0.99	0.92	0.99	0.99	0.92

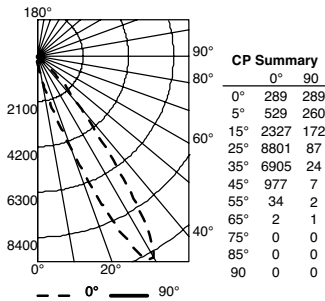
2" LED UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH 800/1200/1500 LUMEN SQUARE ANGLE-CUT REFLECTOR REMODEL AX2SQ AR with 2SQA Trim

PHOTOMETRICS

AX2SQ AR G2 15LM 30K 80CRI 15D FPC 120 2SQA CD

3000K LEDs, input watts: 17.3, delivered lumens: 1355, LM/W = 78, test no. PT07172830R, tested in accordance to IESNA LM-79

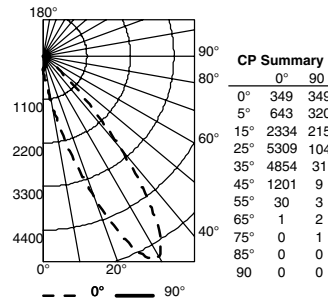
Beam Spread: 15D



AX2SQ AR G2 15LM 30K 80CRI 24D FPC 120 2SQA CD

3000K LEDs, input watts: 17.3, delivered lumens: 1254, LM/W = 73, test no. PT07172837R, tested in accordance to IESNA LM-79

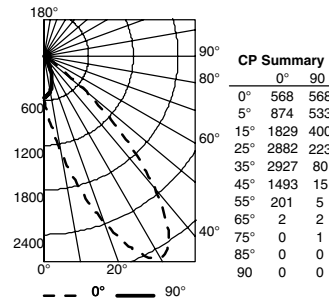
Beam Spread: 24D



AX2SQ AR G2 15LM 30K 80CRI 35D FPC 120 2SQA CD

3000K LEDs, input watts: 17.3, delivered lumens: 1224, LM/W = 71, test no. PT07172901R, tested in accordance to IESNA LM-79

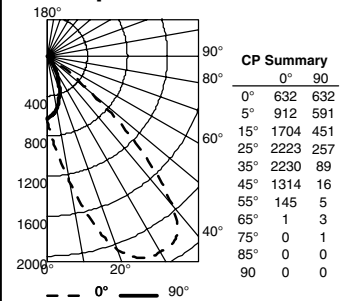
Beam Spread: 35D



AX2SQ AR G2 15LM 30K 80CRI 45D FPC 120 2SQA CD

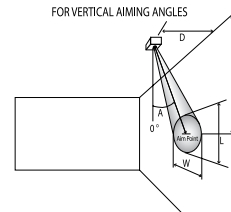
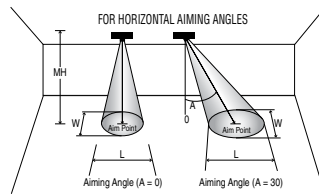
3000K LEDs, input watts: 17.3, delivered lumens: 1165, LM/W = 67, test no. PT07172908R, tested in accordance to IESNA LM-79

Beam Spread: 45D



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	Horizontal Aiming Angles						Vertical Aiming Angles									
		0°		30°		30°		30°		45°		45°					
		MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W
15°	10789	4	674	1.1	1.1	438	1.5	1.3	2	337	3.5	2.4	1.1	716	2.4	1.4	0.9
		6	300	1.7	1.7	195	2.3	1.9	3	150	5.2	3.6	1.7	318	3.6	2.1	1.3
		8	169	2.2	2.2	109	3.0	2.6	4	84	6.9	4.8	2.2	179	4.8	2.8	1.7
		10	108	2.8	2.8	70	3.8	3.2	5	54	8.7	6.0	2.8	115	6.0	3.5	2.2
		12	75	3.4	3.4	49	4.5	3.9	6	37	10.4	7.2	3.4	80	7.2	4.2	2.6
24°	5837	4	365	1.6	1.6	237	2.2	1.9	2	182	3.5	3.8	1.6	388	2.4	2.1	1.3
		6	162	2.5	2.5	105	3.3	2.9	3	81	5.2	5.7	2.5	172	3.6	3.2	1.9
		8	91	3.3	3.3	59	4.5	3.8	4	46	6.9	7.6	3.3	97	4.8	4.2	2.6
		10	58	4.1	4.1	38	5.6	4.8	5	29	8.7	9.5	4.1	62	6.0	5.3	3.2
		12	41	4.9	4.9	26	6.7	5.7	6	20	10.4	11.3	4.9	43	7.2	6.4	3.8
35°	3127	4	195	2.5	2.5	127	3.5	2.9	2	98	3.5	7.3	2.5	208	2.4	3.6	2.0
		6	87	3.8	3.8	56	5.3	4.4	3	43	5.2	11.0	3.8	92	3.6	5.4	3.0
		8	49	5.1	5.1	32	7.0	5.9	4	24	6.9	14.6	5.1	52	4.8	7.2	4.0
		10	31	6.4	6.4	20	8.8	7.3	5	16	8.7	18.3	6.4	33	6.0	9.0	4.9
		12	22	7.6	7.6	14	10.5	8.8	6	11	10.4	21.9	7.6	23	7.2	10.8	5.9
45°	2261	4	141	3.1	3.1	92	4.4	3.6	2	71	3.5	11.7	3.1	150	2.4	4.9	2.4
		6	63	4.7	4.7	41	6.6	5.4	3	31	5.2	17.6	4.7	67	3.6	7.3	3.7
		8	35	6.3	6.3	23	8.8	7.3	4	18	6.9	23.4	6.3	38	4.8	9.7	4.9
		10	23	7.9	7.9	15	11.0	9.1	5	11	8.7	29.3	7.9	24	6.0	12.2	6.1
		12	16	9.4	9.4	10	13.3	10.9	6	8	10.4	35.1	9.4	17	7.2	14.6	7.3

LUMEN OUTPUT MULTIPLIERS

Color Temperature	CRI	Multiplier
2700K	80	0.95
3000K	80	1.00
3500K	80	1.05
4000K	80	1.10

Color Temperature	CRI	Multiplier
2700K	90	0.83
3000K	90	0.87

Lumen Package	Multiplier
800	0.58
1200	0.86
1500	1.00

2" LED UNIVERSAL RECESSED ADJUSTABLE/DOWNLIGHT/WALL WASH

800/1200/1500 LUMEN

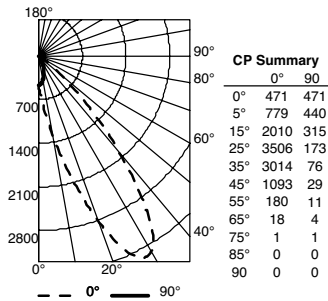
SQUARE ANGLE-CUT REFLECTOR REMODEL

AX2SQ AR with 2SQA Trim with WET option

PHOTOMETRICS

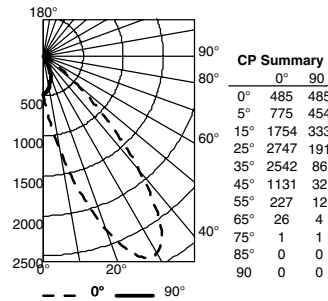
AX2SQ AR G2 15LM 30K 80CRI 15D FPC 120 2SQA CD WET
3000K LEDs, input watts: 17.3, delivered lumens: 1139, LM/W = 66, test no. PT07172833R, tested in accordance to IESNA LM-79

Beam Spread: 15D



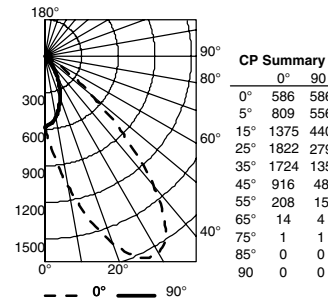
AX2SQ AR G2 15LM 30K 80CRI 24D FPC 120 2SQA CD WET
3000K LEDs, input watts: 17.3, delivered lumens: 1095, LM/W = 63, test no. PT07172840R, tested in accordance to IESNA LM-79

Beam Spread: 24D



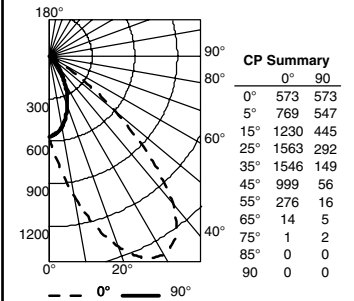
AX2SQ AR G2 15LM 30K 80CRI 35D FPC 120 2SQA CD WET
3000K LEDs, input watts: 17.3, delivered lumens: 1020, LM/W = 59, test no. PT07172904R, tested in accordance to IESNA LM-79

Beam Spread: 35D



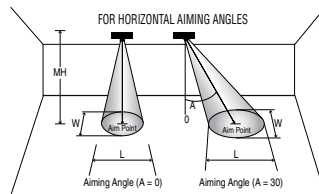
AX2SQ AR G2 15LM 30K 80CRI 45D FPC 120 2SQA CD WET
3000K LEDs, input watts: 17.3, delivered lumens: 1022, LM/W = 59, test no. PT07172911R, tested in accordance to IESNA LM-79

Beam Spread: 45D

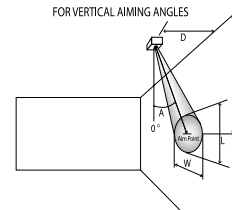


CBCP • Centerbeam candlepower
FC • Footcandles at beam center (aim point)

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	Horizontal Aiming Angles						Vertical Aiming Angles									
		0°		30°		FC		30°		45°		FC		45°			
		MH	FC	L	W	FC	L	W	D	FC	X	L	W	FC	X	L	W
15°	3610	4	226	1.9	1.9	147	2.6	2.2	2	113	3.5	4.7	1.9	240	2.4	2.6	1.5
		6	100	2.9	2.9	65	4.0	3.4	3	50	5.2	7.1	2.9	107	3.6	3.8	2.3
		8	56	3.9	3.9	37	5.3	4.5	4	28	6.9	9.4	3.9	60	4.8	5.1	3.0
		10	36	4.9	4.9	23	6.6	5.6	5	18	8.7	11.8	4.9	38	6.0	6.4	3.8
		12	25	5.8	5.8	16	7.9	6.7	6	13	10.4	14.2	5.8	27	7.2	7.7	4.5
24°	2847	4	178	2.2	2.2	116	3.0	2.6	2	89	3.5	5.8	2.2	189	2.4	3.0	1.7
		6	79	3.3	3.3	51	4.6	3.8	3	40	5.2	8.7	3.3	84	3.6	4.5	2.6
		8	44	4.4	4.4	29	6.1	5.1	4	22	6.9	11.5	4.4	47	4.8	6.0	3.5
		10	28	5.5	5.5	18	7.6	6.4	5	14	8.7	14.4	5.5	30	6.0	7.5	4.3
		12	20	6.7	6.7	13	9.1	7.7	6	10	10.4	17.3	6.7	21	7.2	9.0	5.2
35°	1862	4	116	2.7	2.7	76	3.8	3.1	2	58	3.5	8.3	2.7	124	2.4	3.9	2.1
		6	52	4.1	4.1	34	5.7	4.7	3	26	5.2	12.5	4.1	55	3.6	5.9	3.2
		8	29	5.4	5.4	19	7.6	6.3	4	15	6.9	16.7	5.4	31	4.8	7.9	4.2
		10	19	6.8	6.8	12	9.4	7.9	5	9	8.7	20.9	6.8	20	6.0	9.9	5.3
		12	13	8.2	8.2	8	11.3	9.4	6	6	10.4	25.0	8.2	14	7.2	11.8	6.4
45°	1607	4	100	3.3	3.3	65	4.7	3.8	2	50	3.5	13.7	3.3	107	2.4	5.3	2.6
		6	45	5.0	5.0	29	7.0	5.7	3	22	5.2	20.5	5.0	47	3.6	8.0	3.9
		8	25	6.6	6.6	16	9.4	7.7	4	13	6.9	27.3	6.6	27	4.8	10.6	5.2
		10	16	8.3	8.3	10	11.7	9.6	5	8	8.7	34.1	8.3	17	6.0	13.3	6.4
		12	11	9.9	9.9	7	14.1	11.5	6	6	10.4	41.0	9.9	12	7.2	15.9	7.7

LUMEN OUTPUT MULTIPLIERS

Color Temperature	CRI	Multiplier
2700K	80	0.95
3000K	80	1.00
3500K	80	1.05
4000K	80	1.10

Color Temperature	CRI	Multiplier
2700K	90	0.83
3000K	90	0.87

Lumen Package	Multiplier
800	0.58
1200	0.86
1500	1.00