

PRODUCT SPECIFICATIONS

WarmDim® When commissioned for WarmDim®, 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 45° cutoff to source and source image • 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.

Reflector .040" aluminum parabolic reflector in clear specular, black specular, clear diffuse, or wheat diffuse Alzak finish provides 45° lamp and lamp image cut-off.

Trims Style Self Flanged and Flangeless reflectors available • Self Flanged reflectors with polished or optional white painted flange • For flangeless installations in drywall ceilings use the FMA3SQ flangeless adapter • For flangeless installations in wood, stone, or tile ceilings the SFM3SQ*** must be used (specify ceiling thickness and adapter finish).

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

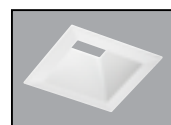
• Meets energy code Air Leakage requirements per ASTM E283 • Union made.

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) • ICAT fixtures feature bar hangers only.

Junction Box ICAT 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.

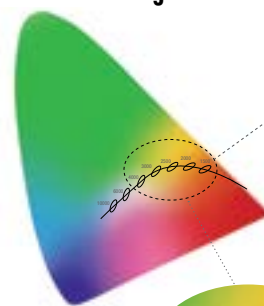
WARMDIM® & TUNABLE WHITE ADJUSTABLE/DOWNLIGHT/WALL WASH 1000 LUMEN LED 3" SQUARE DOWNLIGHT REFLECTOR AX3SQ WDTW with 3SQD Trim



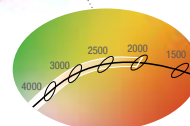
Self-Flanged



Flangeless

Warm
DimmingTunable
White**WarmDim®**

Color temperature warms from 3000K - 1800K when dimmed staying within a 2-step MacAdam ellipse of the Black Body Locus.

**Tunable White**

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



AX3SQ A



AX3SQ A (ICAT Option)

Ceiling Thickness ½" - 7/8" ceiling standard • For thicker ceilings, order CTA3SQ/125 (7/8"-1 ¼"), CTA3SQ/163 (1 ¼"-1 5/8") or CTA3SQ/200 (1 5/8"-2") • CTA3SQ not required for wood, stone, or tile flangeless applications.

Specifications subject to change without notice.

ORDERING INFORMATION

Example: AX3SQ A 10LM WDTW 90CRI 26D ZT 120 3SQD W SF

Series / Housing Style	Lumens	Dynamic Feature	CRI	Beam	Control	Voltage ¹	Options
AX3SQ A New Const. Universal ADJ/DL/WW	10LM 1000 Lumens	WDTW WarmDim® (1800K-3000K) Tunable White (2000K-4350K)	90CRI	20D 20° beam 26D 26° beam 35D 35° beam	DMXR DMX, RDM Driver, 1% dim ZT 0-10V Dimming	120 277 MVOLT (120-277)	CP Chicago Plenum ICAT IC, Air-Tight

HOUSING OPTIONS

Square Trim Style	Reflector Finish	Flange Style / Finish	Environment	Ceiling Installation
DOWNLIGHT	BD Black Diffuse	SELF FLANGED	WET Wet location	SELF-FLANGED FLANGELESS, WOOD/STONE/TILE ²
3SQD 3" Square Downlight Reflector	CD Clear Diffuse	SF Flange is same finish as reflector		CEILING ≤ .875" SFM3SQ/100 (B,W) Ceiling ≤ 1.00"
	W White Paint	WHF White painted flange		CTA3SQ/125 Ceiling 0.875" - 1.25" SFM3SQ/138 (B,W) Ceiling 1.00" - 1.375"
	WTD Wheat Diffuse	FLANGELESS ³		CTA3SQ/163 Ceiling 1.25" - 1.625" SFM3SQ/163 (B,W) Ceiling 1.375" - 1.625"
		FM Flangeless		FLANGELESS, GYPSUM
				FMA3SQ/087 Ceiling ≤ .875"
				FMA3SQ/125 Ceiling 0.875" - 1.25"
				FMA3SQ/163 Ceiling 1.25" - 1.625"

TRIM OPTIONS

Ordering Notes

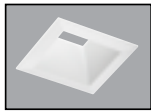
¹ MVOLT standard on DMXR

² Specify finish : B=Black, W=White

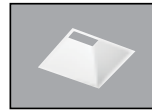
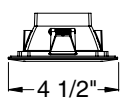
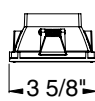
³ Flangeless trims must be used with Flangeless Adapter, ordered separately

NOTES

WARMDIM® & TUNABLE WHITE
ADJUSTABLE/DOWNLIGHT/WALL WASH
1000 LUMEN LED
3" SQUARE DOWNLIGHT REFLECTOR
AX3SQ WDTW with 3SQD Trim

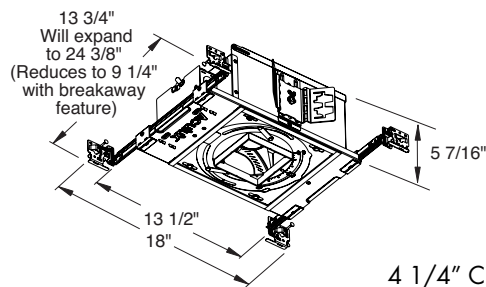
TRIM SELECTION**3SQD 3" Square Downlight Reflector****Self-Flanged**

* With WET option

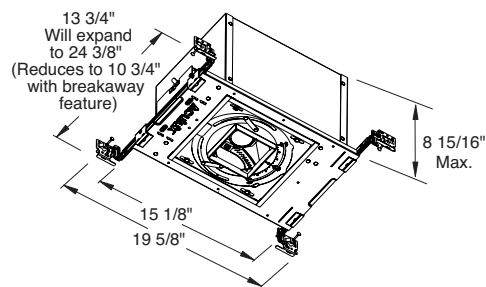
**Flangeless****ACCESSORIES**

Cat. #	Description
3AXOPTTW/20D	20° Very Narrow Flood Optic
3AXOPTTW/26D	26° Narrow Flood Optic
3AXOPTTW/35D	35° Flood Optic
AF3/10	10° Film (Use with Spot Optic)
AF3/20	20° Film (Use with Spot Optic)
AF3/30	30° Film (Use with Spot Optic)
AF3/40	40° Film (Use with Spot Optic)
AF3/50	50° Film (Use with Spot Optic)
AF3/60x1	60°x1° Film (Use with Spot Optic)
T7420	Diffuse Spread Lens
T7421	Uniformity Lens
T7422	UV Filter Lens
T7477	Prismatic Lens
T7478	Linear Spread Lens
T7459BL	Hexcell Louver
HB1	(2) Real Nail 3 Bar Hangers
HB26	(2) 26" C-Channel Bar Hangers
HB50	(2) 50" C-Channel Bar Hangers
LB27	(2) 27" Linear Bar Hangers
EMI20	20W Emergency Lighting Inverter

To order, specify catalog number.

DIMENSIONS**NEW CONSTRUCTION****AX3SQ A**

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

**AX3SQ A
(ICAT Option)****DIFFUSING FILMS**

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

Desired FWHM	Primary Optic	Film
20°	20D	-
26°	24D	-
30°	24D	AF3/10
35°	35D	-
40°	24D	AF3/30
45°	24D	AF3/40
55°	24D	AF3/50
55°x20°	24D	AF3/60x1

ELECTRICAL DATA

Housing	AX3SQ A 10LM WDTW (ICAT option)		AX3SQ A 10LM WDTW	
Voltage	120	277	120	277
Input Power	18.9W	19.4W	20.9W	21.4W
Input Current	0.16	0.08	0.16	0.08
Frequency	50/60Hz		50/60Hz	
Power Factor	0.99	0.92	0.99	0.92

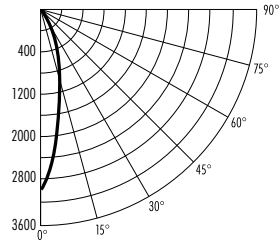
WARMDIM® & TUNABLE WHITE
ADJUSTABLE/DOWNLIGHT/WALL WASH
1000 LUMEN LED
3" SQUARE DOWNLIGHT REFLECTOR
AX3SQ WDTW with 3SQD Trim

PHOTOMETRICS

**FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132504R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 35D ZT MVOLT ICAT
 3SQD W SF

Luminaire Spacing Criterion: 0.40
 Luminaire LPW: 36



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees Vertical	0°
0	3096
5	2699
15	1001
25	244
35	53
45	14
55	4
65	2
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	50	46	42
5.0'	32	29	27
6.0'	22	20	19
7.0'	18	17	15
8.0'	14	13	12
9.0'	11	10	9
10.0'	8	7	7

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30°	640	88.9
0-40°	698	97.0
0-60°	716	99.6
0-90°	719	100.0

INITIAL FOOTCANDLES

(One Unit, 19.8W, 23.2° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	86.0	2.5'
8	48.4	3.3'
10	31.0	4.1'
12	21.5	4.9'

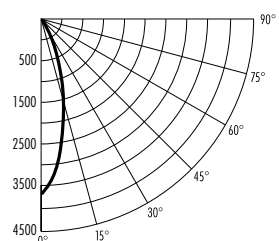
LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	2636
55	957
65	649
75	424
85	157

**NARROW FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132807R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 26D ZT MVOLT ICAT
 3SQD W SF

Luminaire Spacing Criterion: 0.48
 Luminaire LPW: 50



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees Vertical	0°
0	3718
5	3424
15	1571
25	387
35	37
45	8
55	3
65	2
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	70	63	58
5.0'	45	40	37
6.0'	31	28	26
7.0'	25	23	21
8.0'	20	18	16
9.0'	15	14	13
10.0'	11	10	9

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30°	931	94.3
0-40°	974	98.6
0-60°	985	99.8
0-90°	987	100.0

INITIAL FOOTCANDLES

(One Unit, 19.8W, 27.4° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	103.3	2.9'
8	58.1	3.9'
10	37.2	4.9'
12	25.8	5.9'

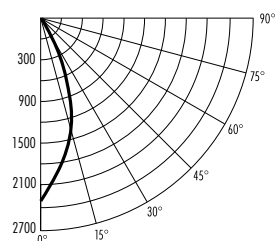
LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	1455
55	598
65	454
75	318
85	315

**VERY NARROW FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132801R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 20D ZT MVOLT ICAT
 3SQD W SF

Luminaire Spacing Criterion: 0.58
 Luminaire LPW: 46



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees Vertical	0°
0	2365
5	2239
15	1412
25	498
35	52
45	9
55	3
65	2
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	64	57	52
5.0'	41	37	33
6.0'	28	26	25
7.0'	23	21	19
8.0'	18	16	15
9.0'	14	12	11
10.0'	10	9	8

ZONAL LUMEN SUMMARY

Zone	Lumens	%Fixture
0-30°	825	90.8
0-40°	892	98.2
0-60°	906	99.7
0-90°	909	100.0

INITIAL FOOTCANDLES

(One Unit, 19.8W, 34.5° Beam)

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	147.8	2.5'
6	65.7	3.7'
8	37.0	5.0'
10	16.4	6.2'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	1804
55	670
65	519
75	424
85	157

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. Photometry is at 3000K CCT.

WARMDIM® & TUNABLE WHITE
ADJUSTABLE/DOWNLIGHT/WALL WASH
1000 LUMEN LED

3" SQUARE DOWNLIGHT REFLECTOR

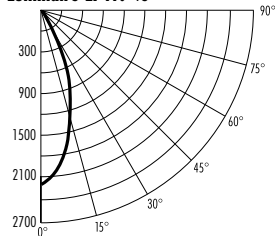
AX3SQ WDTW with 3SQD Trim with WET option

PHOTOMETRICS

**FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132804R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 35D ZT MVOLT ICAT
 3SQD W SF WET

Luminaire Spacing Criterion: 0.58
 Luminaire LPW: 43



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees	
Vertical	0°
0	2172
5	2054
15	1303
25	470
35	59
45	12
55	3
65	2
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	60	53	49
5.0'	38	34	31
6.0'	27	24	22
7.0'	22	19	17
8.0'	17	15	14
9.0'	13	12	11
10.0'	10	9	8

**INITIAL FOOTCANDLES
(One Unit, 19.8W, 34.6° Beam)**

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
4	135.8	2.5'
6	60.3	3.7'
8	33.9	5.0'
10	21.7	6.2'

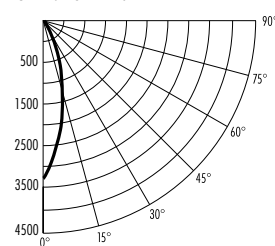
LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	2231
55	765
65	519
75	318
85	0

**NARROW FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132810R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 26D ZT MVOLT ICAT
 3SQD W SF WET

Luminaire Spacing Criterion: 0.48
 Luminaire LPW: 47



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees	
Vertical	0°
0	3398
5	3130
15	1447
25	371
35	44
45	9
55	3
65	0
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	65	59	54
5.0'	42	38	35
6.0'	29	26	24
7.0'	23	21	20
8.0'	19	17	15
9.0'	14	13	12
10.0'	10	9	9

**INITIAL FOOTCANDLES
(One Unit, 19.8W, 27.5° Beam)**

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	94.4	2.9'
8	53.1	3.9'
10	34.0	4.9'
12	23.6	5.9'

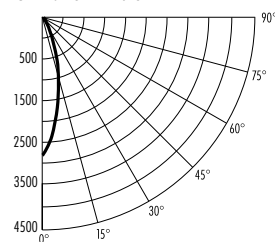
LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	1823
55	670
65	454
75	371
85	157

**VERY NARROW FLOOD
PHOTOMETRIC REPORT**

Test Report #: PT10132507R
 Catalog No: AX3SQ A 10LM WDTW
 90CRI 20D ZT MVOLT ICAT
 3SQD W SF WET

Luminaire Spacing Criterion: 0.40
 Luminaire LPW: 34



**CANDLEPOWER
DISTRIBUTION
(Candelas)**

Degrees	
Vertical	0°
0	2836
5	2472
15	931
25	235
35	56
45	15
55	4
65	2
75	0
85	0
90	0

AVERAGE INITIAL FOOTCANDLES

Multiple Units (Square Array, 60'x60' room)
 Ceiling 80% Wall 50% Floor 20%

Spacing	RCR1	RCR3	RCR5
4.0'	47	42	39
5.0'	30	27	25
6.0'	21	19	17
7.0'	17	15	14
8.0'	13	12	11
9.0'	10	9	9
10.0'	8	7	6

**INITIAL FOOTCANDLES
(One Unit, 19.8W, 23.1° Beam)**

Distance to Illuminated Plane (Feet)	Footcandles Beam Center	Beam Diameter
6	78.8	2.5'
8	44.3	3.3'
10	28.4	4.1'
12	19.7	4.9'

LUMINANCE (Average cd/m²)

Degrees	Average Luminance
45	2871
55	909
65	649
75	477
85	157

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