2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim

Project
Notes
Fixture Type

Date

WITH FLANGE A2SAR-22XXX (illustrated) FLANGELESS TRIM

Ultra-Thin Profile Square Adjustable Regressed Trim, 2-1/2" high-efficiency dimmable LED downlight allowing up to 30° tilt adjustable from below ceiling. Offered in Remodel NON-IC (with optional mounting plate), new construction NON-IC and new construction IC configurations.

#### JA8 **SPECIFICATIONS** TRIM DETAILS Requires a 5" (127 mm) clearance beyond the ceiling Clearance beyond level when used with remodel or new construction the ceiling level NON-IC housings. When used with a flangeless configuration, the clearance beyond the ceiling level is 7" (178 mm). WITH FLANGE FLANGELESS TRIM Each part of the housing should be at LEAST 3" (76 mm) from insulation (non-IC configurations) Can fit in ceiling from 1/2" (12 mm) to 1-3/8" (35 mm) thick 30 Accessible from below the ceiling for ease of (178 mm) maintenance. 5-1/2" 5-1/2" (140 mm) (140 mm) ADJUSTABILITY 30° aiming (2 ways) 5" (127 mm) High-quality injection molded aluminum heat sink HEAT SINK ensuring maximum heat dissipation for optimal performance. 4-1/2 1/2 4-1/2 1/2" (114 mm (13 mm) (114 mm) (12 mm) TROU DE Flanged Trim PERÇAGE 2-5/8" (67 mm) x 2-5/8" (67 mm) 1/16" Flangeless Trim (1 mm) 3-3/16" (81 mm) x 3-3/16" (81 mm) 3 2-1/2 (76 mm) Included: Cardboard cutout template (62 mm) Optional: Reusable steel cutout template for square trim (TEMP-SQ) 3-1/8' 3' • cULus E343977 for damp locations CERTIFICATION (79 mm (76 mm Certified under California Energy Commission according to reference joint Appendix 8 (JA8-2016) · Air Tight when used with ICAT Housing WARRANTY 1 year on components against manufacturing defects 5 years on LED arrays and drivers

## **CONTRASTE**

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2018-03 Revision 1

2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim

SPECIFICATION COMPATIBLE				
HOUSINGS		Remodel Housing	New Construction Housing	(Title 24)
	Performance 1 (14W)	REA2V1	NWA2SV1	ICATOS2-ARV1
	For dimming, please visit ou	r Web site frequently to find	d our suggested compatible	dimmers: www.contrastlighting.com
LIGHT ENGINE	STANDARD (SOLID WHIT	-		
	Lumileds Luxeon CoB 1203			
	L <sub>70</sub> @ 50,000 hours of opera			
	3-Step MacAdam ellipse (3 Color Temperatures: 2,700K		<	
	CRI: 90+	,0001 0,0001 +,0001		
	R9: >50			
	Delivered Lumens: Performa	ance 1 (14W) up to 1,375 lu	mens (95 lm/W)	
	Power Supply: 120V / 277V			
	One driver available in perfo ELV: 120V only 0-10V: 120V / 277V	rmance 1 (14W) and offerir	ng 2 dimming options within	the same unit:
	Consult housing specification	on sheet for more details.		
OPTIC SYSTEM	Interchangeable optional op	tical reflectors and lenses a	available to customize your I	ighting.
	Choice of available lenses (also sold separately)	8:		
	Clear (C) JA8 Frosted (F)			
	Honeycomb (H): the honey	-		
	Linear (L): the linear lens di Prismatic (P): the prismatic			aattern
	Solite (S): the solite lens so			Jauon
	Optical reflectors availabl	e: Spot, Narrow Flood, Floo	od and Wide Flood	
		Standard		
	Spot <b>(S)</b>	15°		
	Narrow Flood (M)	24°		
	Flood (L)	36°		
	Wide Flood (V)			



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2-1/2" Series

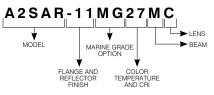
### Ultra-Thin Profile Square Adjustable Regressed Trim



#### SPECIFICATIONS (CONT'D)

FLANGE AND REFLECTOR FINISHES	Powder coat painted or plated die formed steel. Different finishes available: 24K Gold Plated (-03), Brushed Chrome (-04BR), Matte White (-11), Brushed Nickel (-12BR), Satin Nickel (-13), Matte Black (-22) and Polar Grey (-25)
FLANGELESS TRIMS (OPTION)	Perforated aluminum plate for flangeless product, allowing you to plaster up to the edge of the opening of the Ardito luminaire. Mud-in-plate sold separetely. Ordering code: MIPA2S Consult housing specification sheet for more details.

#### TRIM WITH FLANGE CODIFICATION EXAMPLE



#### TRIM WITH FLANGE ORDERING CODES A2SAR

MODEL	FLAN	IGE AND REFLECTOR FINISHES	Ν	MARINE GRADE	COI	OR TEMPERATURES AND CRI		BEAMS		LENSES
A2SAR										
A2SAR	-03	24K Gold Plated	MG	(optional)	27	2,700K (90+ CRI)	s	Spot (15°)	С	Clear JA8
	-04BR	Brushed Chrome		May be applied	30	3,000K (90+ CRI)	м	Narrow Flood (24°)	F	Frosted
	-11	Matte White		on finishes:	35	3,500K (90+ CRI)	L	Flood (36°)	н	Honeycomb
	-12BR	Brushed Nickel		11, 22 and 25	40	4,000K (90+ CRI)	v	Wide Flood (60°)	L	Linear
	-13	Satin Nickel							Р	Prismatic
	-22	Matte Black							S	Solite
	-25	Polar Grey								

#### MARINE GRADE

2-year warranty on finish

This option increases the painted finishes resistance by reducing and delaying apparition and propagation of oxidation (ex: rust and others).

MARINE GRADE treatment is recommended for damp to wet locations.

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Unless otherwise indicated, trims are for interior use. Also suitable for cold and exterior locations, as in soffits, where fixtures are not subject to direct rain or snow exposure.

WARNING – This option is not suitable for salt environments and/or highly corrosive areas such as soffits in coastal regions and natatoriums. Such usage would void warranty on the product.

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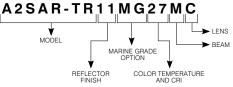
[**JA8**]

## Ardito LED - A2SAR

2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim





Mud-in-plate required for use of flangeless trim (see ordering code below)

### FLANGELESS TRIM OPTION — ORDERING CODES $\mbox{A2SAR-TR}$

MODEL	RE	FLECTOR FINISHES	N	IARINE GRADE	COL	OR TEMPERATURES AND CRI		BEAMS		LENSES
A2SAR-TR										
A2SAR-TR	03	24K Gold Plated	MG	(optional)	27	2,700K (90+ CRI)	s	Spot (15°)	С	Clear JA8
	04BR	Brushed Chrome		May be applied	30	3,000K (90+ CRI)	м	Narrow Flood (24°)	F	Frosted
	11	Matte White		on finishes:	35	3,500K (90+ CRI)	L	Flood (36°)	н	Honeycomb
	12BR	Brushed Nickel		11, 22 and 25	40	4,000K (90+ CRI)	v	Wide Flood (60°)	L	Linear
	13	Satin Nickel							Р	Prismatic
	22	Matte Black							S	Solite
	25	Polar Grey								

#### MARINE GRADE

2-year warranty on finish

This option increases the painted finishes resistance by reducing and delaying apparition and propagation of oxidation (ex. rust and others).

MARINE GRADE treatment is recommended for damp to wet locations.

Unless otherwise indicated, trims are for interior use. Also suitable for cold and exterior locations, as in soffits, where fixtures are not subject to direct rain or snow exposure.

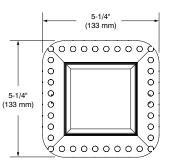
WARNING – This option is not suitable for salt environments and/or highly corrosive areas such as soffits in coastal regions and natatoriums. Such usage would void warranty on the product.

#### MUD-IN-PLATE

Required with the use of flangeless trims. Consult housing specification sheet for more details.



Code: MIPA2S



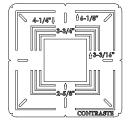
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#### REUSABLE TEMPLATE OPTION

Reusable steel cutout template for square trim.

#### Code: TEMP-SQ



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2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim

ORDERING CODES for replacement lenses and reflectors

For future on-site modifications of the light distribution.

Lenses (to modify light diffusion) Clear (C): 103584 Frosted (F): 316228 Honeycomb (H): 103089 Linear (L): 103092 Prismatic (P): 103095 Solite (S): 103098

**Reflectors (to modify the beam angle)** For a Spot (15°): For a Narrow Flood (24°): For a Flood (36°): For a Wide Flood (60°):

#### PHOTOMETRIC DATA

In order to obtain the accurate photometric data, multiply the lumens relative to your product selection by the applicable factor(s). Take note these factors also need to be implemented in the .ies files available on our website.

	Spot (15°)		Narrow Floo	od (24°)	Flood (36°)		Wide Flood	(60°)
2,700K with 90+ CRI	1,225 lm	85.1 lm/W	1,080 lm	75 lm/W	1,075 lm	74.6 lm/W	1,070 lm	74.3 lm/W
3,000K with 90+ CRI	1,270 lm	88.2 lm/W	1,115 lm	77.4 lm/W	1,110 lm	77.1 lm/W	1,105 lm	76.7 lm/W
3,500K with 90+ CRI	1,340 lm	93.1 lm/W	1,180 lm	81.9 lm/W	1,175 lm	81.6 lm/W	1,170 lm	81.3 lm/W
4,000K with 90+ CRI	1,375 lm	95.5 lm/W	1,210 lm	84 lm/W	1,205 lm	83.7 lm/W	1,200 lm	83.3 lm/W

Lei	ns Factors
С	1
F	0.71
н	0.57

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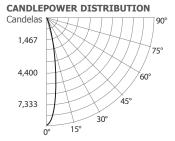
2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim

### PHOTOMETRIC DATA



#### 3,000K, 90+ CRI, Spot, performance 1



#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,114.8	94.8%
0-40	1,176.1	100%
0-60	1,176.1	100%
60-90	0.0	0%
0-180	1,176.1	100%

#### LIGHT CONE Distance FC DIA 06′ 242.1 1.7′ 08' 2.3' 136.2 10' 87.2 2.8′ 12′ 60.5 3.4′ 14' 44.5 4.0' 16′ 34.0 4.5' Beam: 16 Beam Edge defined as 50% of Maximum Nadir Candle-power.

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	59	0.64
6'	33	0.36
7'	23	0.25
8'	23	0.25
9'	15	0.16

LUMINAIRE

CBCP / Lumens

Operating AMPS

Lumens/Watt

Spacing Criteria

Lumen Maintenance

Watts

CRI

Performance 1 LED

3,000K Spot

L70 @ 50,000 Hrs

1.267.3 1

277V

14.9W

0.054A

8,715

120V

14.4W

0.12A

90+

88

0.07

Reflectance factor 80%/50%/30%

LUMINAIRE

#### **COEFFICIENT OF UTILIZATION - % Ceiling Reflect %** 80 50 30 Wall Reflect % 50 30 50 30 50 30 RCR 119 119 111 111 106 106 0 108 105 103 101 100 99 2 100 96 4 97 94 95 92

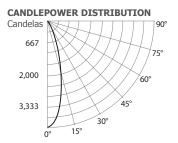
93 89 91 88 90 87 6 8 87 83 86 83 85 82 82 78 10 83 79 81 78

**Zonal Cavity Method** Effective Floor Cavity Reflectance 20%

### **CANDELAS DISTRIBUTION**

CANDELAS	DEGREES/ VERTICAL	CANDELAS
8,715	40	0
6,473	50	0
3,037	60	0
1,150	70	0
724	80	0
535	90	0
328		
	8,715 6,473 3,037 1,150 724 535	CANDELAS         VERTICAL           8,715         40           6,473         50           3,037         60           1,150         70           724         80           535         90

#### 3,000K, 90+ CRI, Narrow Flood, performance 1



#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,055.6	93.1%
0-40	1,130.2	99.7%
0-60	1,133.8	100%
60-90	0.0	0%
0-90	1,133.8	100%

LIGHT CONE				
Distance	FC	DIA		
06′	111	2.9′		
08′	62.5	3.9'		
10'	39.9	4.8′		

5.8′

67

7.7′

12'

14'

16′

Beam: 27°

27.8

20.4

15.6

Beam Edge defined as 50%

of Maximum Nadir Candle-power.

Performance 1 LED	3,000K Narrow Floor
CBCP / Lumens	3,997 / 1,133.8
	120V 277V
Watts	14.4W 14.9W
Operating AMPS	0.12A 0.054A
Lumen Maintenance	L70 @ 50,000 Hrs
CRI	90+
Lumens/Watt	78.7
Spacing Criteria	0.12

MULTIPLE UNIT DATA - (RCR 2)				
SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.		
5'	56	0.64		
6'	32	0.36		
7'	22	0.25		
8'	22	0.25		
9'	14	0.16		

38' x 38' x 10' Room. Workplan located 2-1/2' (30"). Reflectance factor 80%/50%/30%

#### 119 119 111 111 RCR 0 2 107 104 102 100 4 97 93 87 84 86 83 6 90 85 79 8 83 10 77 73 Zonal Cavity Method

**Ceiling Reflect %** 

Wall Reflect %

Effective Floor Cavity Reflectance 20%

**COEFFICIENT OF UTILIZATION - %** 

80

50 30

50

50 30

94 91

82 78

76 73

30

50 30

106 106

99 97

92 90

81 77

76 72

#### CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS		DEGREES/ VERTICAL	CANDELAS
0	3,997	-	40	14
5	3,654	-	50	1
10	2,742		60	0
15	1,699		70	0
20	944		80	0
25	570		90	0
30	337	_		

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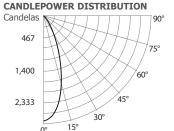
2-1/2" Series

### Ultra-Thin Profile Square Adjustable Regressed Trim

### PHOTOMETRIC DATA



#### 3,000K, 90+ CRI, Flood performance 1



#### ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	997.4	92%
0-40	1065.6	98.3%
0-60	1081.4	99.7%
60-90	2.9	0.3%
0-180	1084.3	100%

#### LIGHT CONE Distance FC DIA 06' 76.3 3.7′ 42.9 08' 5.0' 10' 27.5 6.2′ 12 19.1 7.5′ 14' 14 8.7' 16′ 10.7 10′ Beam: 35° Beam Edge defined as 50% of Maximum Nadir Candle-power.

SPACING ON CENTER	NIT DATA - (RCR INITIAL FOOTCANDLES	2) WATTS/ SQ. FT.	
5'	54	0.64	
6'	30	0.36	
7'	21	0.25	
8'	21	0.25	
9'	13	0.16	
38' x 38' x 10' Room. Workplan located 2-1/2' (30").			

LUMINAIRE

Performance 1 LED

CBCP / Lumens

Operating AMPS

Lumens/Watt

Spacing Criteria

Lumen Maintenance

Watts

CRI

3,000K Flood

L70 @ 50,000 Hrs

3.000K Wide Flood

L70 @ 50,000 Hrs

1 211 5 1

277V

14.9W

0.054A

1 285

120V

14.4W

0.12A

90+

84.1

0.25

1.084.3

277V

14.9W

0.054A

2.745

120V

14.4W

0.12A

90+

75.3

0.15

Reflectance factor 80%/50%/30%

LUMINAIRE

**CBCP / Lumens** 

**Operating AMPS** 

Lumens/Watt

**Spacing Criteria** 

Lumen Maintenance

Watts

CRI

Performance 1 LED

#### **COEFFICIENT OF UTILIZATION - % Ceiling Reflect %** 80 50 30 Wall Reflect % 50 30 50 30 50 30 RCR 119 119 111 111 106 106 0 98 96 2 106 103 101 99 4 96 91 93 89 91 88

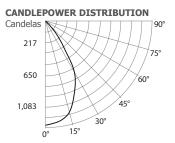
87 83 85 81 84 6 80 8 80 75 79 75 78 74 73 69 72 69 10 74 70

**Zonal Cavity Method** Effective Floor Cavity Reflectance 20%

#### **CANDELAS DISTRIBUTION**

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS	
0	2,745	40	22	_
5	2,612	50	8	
10	2,246	60	5	
15	1,659	70	1	
20	1,083	80	0	
25	677	90	0	_
30	338			_
10 15 20 25	2,246 1,659 1,083 677	60 70 80	5 1 0	-

#### 3,000K, 90+ CRI, Wide Flood, performance 1



ZONAL LUMEN	SUMMARY
-------------	---------

ZONE	LUMENS	%LUMINAIRE
0-30	829.0	68.4%
0-40	1,070.9	88.4%
0-60	1,206.8	99.6%
60-90	4.7	0.4%
0-90	1,211.5	100%

Distance	FC	DIA
06'	35.7	7.1'
08′	20.1	9.5'
10′	12.9	11.9′
12′	8.9	14.2′
14'	6.6	16.6'

16′ 19.0′ 5.0 Beam: 61° Beam Edge defined as 50%

LIGHT CONE

14'

of Maximum Nadir Candle-power.

MULTIPLE UN	MULTIPLE UNIT DATA - (RCR 2)				
SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.			
5'	58	0.64			
6'	33	0.36			
7'	23	0.25			
8'	23	0.25			
9'	15	0.16			
201 201 101 0					

x 38' x 10' Room. Workplan located 2-1/2' (30" Reflectance factor 80%/50%/30%

Wall Reflect % 50 30 119 119 RCR 0 2 103 98 4 89 83 6 78 71 8 68 62 10 61 55

Ceiling Reflect %

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

**COEFFICIENT OF UTILIZATION - %** 

80

50

50 30

111 111

98 95

75 70

67 61

60 54

85 81 30

50 30

106 106

95 92

83 80

74 69

66 61

59 54

CANDELAS	DISTRIBUTION
DECREES/	

DEGREES/ VERTICAL	CANDELAS		Degrees/ Vertical	CANDELAS
0	1,285		40	208
5	1,275		50	71
10	1,239		60	9
15	1,135		70	1
20	992		80	0
25	864	_	90	0
30	685			

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