

SPECIFICATION SHEET

Ardito LED - A4SFR

4" Series

Ultra-Thin Profile Square Regressed Trim

Project	
Notes	
Fixture Type	
Date	



WITH FLANGE

A4SFR-11AN - XXX (illustrated)



FLANGELESS TRIM

A4SFR-TRAN - XXX (illustrated)

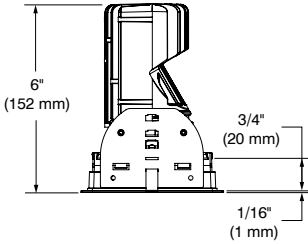
Aluminum square, 4" high efficiency regressed dimmable LED downlight trim. May be installed with a low profile ultra-thin flange or flangeless trim in configuration for insulated, non-insulated and remodel (non-IC) ceilings.



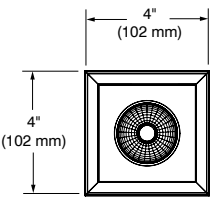
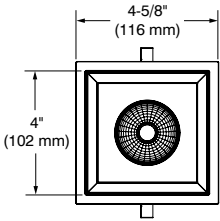
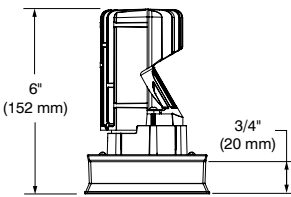
SPECIFICATIONS

TRIM DETAILS	Requires a 6-1/2" (165 mm) clearance beyond the ceiling level for standard using and 7" (178 mm) for Lumenetix option using. Perfect fit into ceiling Each part of the housing should be at LEAST 3" (76 mm) from insulation (non-IC configurations) Can fit in ceilings up to 1-1/2" (38 mm) thick Junction box is accessible from below the ceiling for ease of maintenance
HEAT SINK	High quality injection molded aluminum heat sink ensuring maximum heat dissipation for optimal performance.
CEILING CUTOUT	4-1/4" (108 mm) x 4-1/4" (108 mm) Included: Cardboard cutout template Optional: Reusable steel cutout template for square trim (TEMP-SQ)
CERTIFICATION	- cULus E343977 for damp locations - Certified under California Energy Commission according to reference joint Appendix 8 (JA8-2016) - Certified Air Tight ASTM E289
WARRANTY	1 year on components against manufacturing defects 5 years on LED arrays and drivers

WITH FLANGE



FLANGELESS TRIM



CONTRASTE

2018-03
Revision 1

PRINTED IN CANADA

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Ardito LED - A4SFR

4" Series

Ultra-Thin Profile Square Regressed Trim



SPECIFICATIONS (CONT'D)

LIGHT ENGINE

STANDARD (SOLID WHITE)

Lumileds Luxeon CoB 1205 GEN3 for Narrow Flood and Flood beams. Lumileds Luxeon CoB 1203 GEN3 for Spot beam.

L_{70} @ 50,000 hours of operation.

3-Step MacAdam ellipse (3 SDCM)

Color Temperatures: 2,700K - 3,000K - 3,500K - 4,000K

CRI: 90+ (93 typical)

R9: >50

Delivered Lumens: Performance 1 (14W) - 1,356 lumens @ 3,000K, 96 lm/W
Performance 2 (23W) - 1,923 lumens @ 3,000K, 81 lm/W

Power Supply: 120V / 277V (universal input)

One driver available in 2 performances (14W and 23W) and offering 2 dimming options within the same unit:

ELV: 120V only 0-10V: 120V / 277V

Consult housing specification sheet for more details.

WARM DIMMING (WD)

Lumenetix Araya DDM1 Dynamic Dimming Module. Delivers dimmable (100% - 1%) white light that warms as it dims, reproducing dimming conditions of a halogen lamp. It allows the user to change the color temperature from 3,050K to 1,800K at minimum intensity all this while ensuring a 90+ CRI over the full dimming range.

L_{70} @ 50,000 hours of operation.

2-Step MacAdam ellipse (2 SDCM)

Color Temperatures: 3,050K to 1,800K

CRI: 90+ (over the entire dimming range)

Delivered Lumens: Performance L (12.5W) - up to 700 lumens

Power Supply: 120V - 277V (universal input)

One driver available in one performance (12.5W) and offering one dimming option:

0-10V: 120V / 277V

Consult Lumenetix Website (www.lumenetix.com) and refer to the documentation for the DDM119 module for more information.

COLOR TUNING (CT)

Lumenetix Araya CTM1 Color Tuning Module. Delivers tunable and dimmable (100% - 1%) white light from 1,650K to 4,000K as well as millions of colors.

L_{70} @ 50,000 hours of operation.

2-Step MacAdam ellipse (2 SDCM)

Color Temperatures: 1,650K to 4,000K (adjustable)

CRI: 90+ (for all solid white)

Delivered Lumens: Performance L (12.5W) - up to 700 lumens

Power Supply: 120V - 277V (universal input)

One driver available in one performance (12.5W) and offering different control options:

DMX512-A: 4 channels - DIM (dim level) - CCT (correlated color temperature)
- SAT (saturation level) - HUE (color)

0-10V: One dimmer per channel (ex.: DIM and CCT)

"Araya 5" iOS App. (free): Allows programming of up to 5 scenes. The App. can be used to override the cabled system.

Consult Lumenetix Website (www.lumenetix.com) and refer to the documentation for the CTM119 module for more information.

SPECIFICATION SHEET

Ardito LED - A4SFR

4" Series

Ultra-Thin Profile Square Regressed Trim



SPECIFICATIONS (CONT'D)

COMPATIBLE
HOUSINGS

	Remodel Housing	New Construction Housing	Insulated Housing	IC	Insulated Air Tight Housing (Title 24)	IC AIR TIGHT T24	Ceiling thickness suggested for insulated housing as a using standard and Lumenetix option
Performance 1 (14W)	REA4V1	NWA4SV1	*ISA4SV1		*ICAT6S4-ARV1	JA8 LISTED	* Ceiling thickness must be at least 1/4" (6.4 mm) for insulated housing as a using standard. ** Ceiling thickness must be at least 3/4" (19 mm) for insulated housing with Lumenetix option.
Performance 2 (23W)	REA4V2	NWA4SV2	*ISA4SV2		*ICAT6S4-ARV2	JA8 LISTED	
Lumenetix (12.5W)	REA4VL	NWA4SVL	**ISA4SVL				

For dimming, please visit our Web site frequently to find our suggested compatible dimmers: www.contrastlighting.com

OPTIC SYSTEM

Interchangeable optional optical reflectors and lenses available to customize your lighting.

Choice of available lenses:

Stackable (up to 2) (also sold separately)

Clear (C)

Frosted (F)

Honeycomb (H): the honeycomb louver reduces glare

Linear (L): the linear lens directs the lamp beam to create a strip of light

Prismatic (P): the prismatic lens diffuses and spreads the light in an even overall pattern

Solite (S): the solite lens softens the light in an even overall pattern

Optical reflectors available: Spot, Narrow Flood, Flood

	Standard	Lumenetix
Spot (S)	15°	Not available
Narrow Flood (M)	32°	33°
Flood (L)	40°	44°

*** Average beams shown. Consult .ies files on our Website for more details.**

FLANGE FINISHES

Powder coat painted or plated aluminum.

Different finishes available:

24K Gold Plated **(-03)**, Chrome **(-04)**, Brushed Chrome **(-04BR)**, Matte White **(-11)**, Brushed Nickel **(-12BR)**, Satin Nickel **(-13)** and Matte Black **(-22)**

REFLECTOR
FINISHES**Painted**

Matte White **(11)**

Matte black **(22)**

Natural Anodized Aluminum **(AN)**

Black **(BK)**

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 separately.

Ordering code: MIPA4S

Consult housing specification sheet for more details.

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SPECIFICATION SHEET

Ardito LED - A4SFR

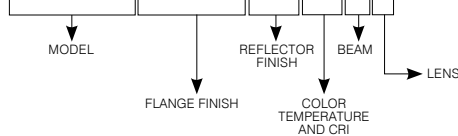
4" Series

Ultra-Thin Profile Square Regressed Trim



TRIM WITH FLANGE CODIFICATION EXAMPLE

A4SFR-04BRAN30SC

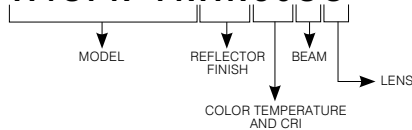


TRIM WITH FLANGE ORDERING CODES **A4SFR**

MODEL	FLANGE FINISHES	REFLECTOR FINISHES	COLOR TEMPERATURES AND CRI	BEAMS	LENSES
A4SFR					
A4SFR	-03 24K Gold Plated	PAINTED	27 2,700K (90+ CRI)	S Spot (15°)	C Clear
	-04 Chrome	11 Matte White	30 3,000K (90+ CRI)	(not available with CT and WD)	F Frosted
	-04BR Brushed Chrome	22 Matte Black	35 3,500K (90+ CRI)	M Narrow Flood (32°)	H Honeycomb
	-11 Matte White	AN Natural Anodized Aluminum	40 4,000K (90+ CRI)	L Flood (40°)	L Linear
	-12BR Brushed Nickel	BK Black	CT 1,650K to 4,000K (90+ CRI)		P Prismatic
	-13 Satin Nickel		WD 3,050K to 1,800K (90+ CRI)		S Solite
	-22 Matte Black				

FLANGELESS TRIM OPTION — CODIFICATION EXAMPLE

A4SFR-TRAN30SC



Mud-in-plate required for use
of flangeless trim
(see ordering code on next page)

FLANGELESS TRIM OPTION — ORDERING CODES **A4SFR-TR**

MODEL	REFLECTOR FINISHES	COLOR TEMPERATURES AND CRI	BEAMS	LENSES
A4SFR-TR				
A4SFR-TR	PAINTED	27 2,700K (90+ CRI)	S Spot (15°)	C Clear
	11 Matte White	30 3,000K (90+ CRI)	(not available with CT and WD)	F Frosted
	22 Matte Black	35 3,500K (90+ CRI)	M Narrow Flood (32°)	H Honeycomb
	AN Natural Anodized Aluminum	40 4,000K (90+ CRI)	L Flood (40°)	L Linear
	BK Black	CT 1,650K to 4,000K (90+ CRI)		P Prismatic
		WD 3,050K to 1,800K (90+ CRI)		S Solite

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Ardito LED - A4SFR

4" Series

Ultra-Thin Profile Square Regressed Trim



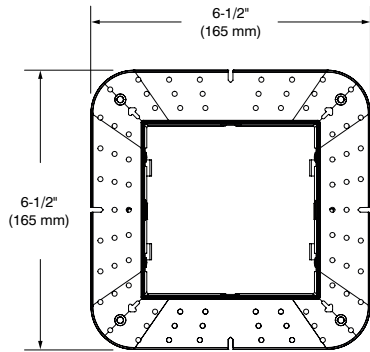
MUD-IN-PLATE

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



4-1/4" (108 mm) x 4-1/4" (108 mm)

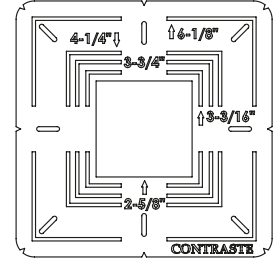
Code: MIPA4S



REUSABLE TEMPLATE OPTION

Reusable steel cutout template for square trim.

Code: TEMP-SQ



ORDERING CODES

for replacement lenses and reflectors

For future on-site modifications of the light distribution.

Lenses (to modify light diffusion)

Stackable (up to 2)

Clear (C): 104036

Frosted (F): 317240

Linear (L): 104037

Solite (S): 104038

Prismatic (P): 104039

Honeycomb (H): 104040

Reflectors (to modify the beam angle)

For a Spot: 103942

For a Narrow Flood: 103912

For a Flood: 103943

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Ardito LED - A4SFR

4" Series

Ultra-Thin Profile Square Regressed Trim

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.

WITH PERFORMANCE 1 HOUSING (14W)

	Spot (15°)		Narrow Flood (32°)		Flood (40°)	
2,700K with 90+ CRI	1,309 lm	93.5 lm/W	1,249 lm	89.2 lm/W	1,214 lm	86.7 lm/W
3,000K with 90+ CRI	1,356 lm	96.9 lm/W	1,294 lm	92.4 lm/W	1,258 lm	89.9 lm/W
3,500K with 90+ CRI	1,422 lm	101.6 lm/W	1,356 lm	96.9 lm/W	1,319 lm	94.2 lm/W
4,000K with 90+ CRI	1,458 lm	104.1 lm/W	1,391 lm	99.4 lm/W	1,353 lm	96.6 lm/W



WITH PERFORMANCE 2 HOUSING (23W)

	Spot (15°)		Narrow Flood (32°)		Flood (40°)	
2,700K with 90+ CRI	1,856 lm	80.7 lm/W	1,804 lm	78.4 lm/W	1,812 lm	78.8 lm/W
3,000K with 90+ CRI	1,923 lm	83.6 lm/W	1,869 lm	81.3 lm/W	1,878 lm	81.7 lm/W
3,500K with 90+ CRI	2,016 lm	87.7 lm/W	1,960 lm	85.2 lm/W	1,969 lm	85.6 lm/W
4,000K with 90+ CRI	2,068 lm	89.9 lm/W	2,010 lm	87.4 lm/W	2,019 lm	87.8 lm/W



WITH PERFORMANCE L HOUSING (12.5W)

	Narrow Flood (33°)		Flood (44°)	
Warm Dimming (WD) with 90+ CRI	668 lm	53.4 lm/W	649 lm	51.9 lm/W
Color Tuning (CT) with 90+ CRI	700 lm	56 lm/W	680 lm	54.4 lm/W

Lens Factors	
C	1
F	0.71
H	0.57

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SPECIFICATION SHEET

Ardito LED - A4SFR

4" Series

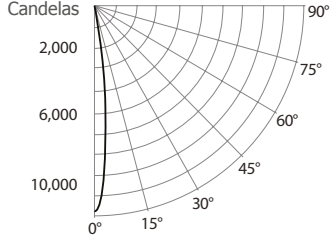
Ultra-Thin Profile Square Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Spot, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	326.5	1.6'
08'	183.6	2.1'
10'	117.5	2.6'
12'	81.6	3.2'
14'	59.9	3.7'
16'	45.9	4.2'

Beam: 15°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Spot
CBP / Lumens	11,753	1,356.2
Watts	120V	277V
	14W	14.5W
Operating AMPS	0.12A	0.052A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	96.9	
Spacing Criteria	0.26	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	109	106	104	102	101	99
	4	101	97	98	95	96	94
	6	95	91	93	90	92	89
	8	90	86	89	86	88	85
	10	86	82	85	82	84	81

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,327.6	97.9%
0-40	1,356.1	100%
0-60	1,356.2	100%
60-90	0.0	0%
0-90	1,356.2	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	69	0.59
6'	39	0.33
7'	27	0.23
8'	27	0.23
9'	17	0.15

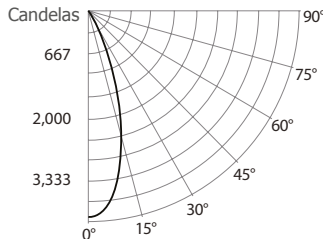
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	11,753	40	0
5	8,353	50	0
10	3,936	60	0
15	1,524	70	0
20	836	80	0
25	490	90	0
30	204		

3,000K, 90+ CRI, Narrow Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	109.4	3.4'
08'	61.6	4.6'
10'	39.4	5.7'
12'	27.4	6.9'
14'	20.1	8.0'
16'	15.4	9.2'

Beam: 32°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K	Narrow Flood
CBP / Lumens	3,940	1,294.3
Watts	120V	277V
	14W	14.5W
Operating AMPS	0.12A	0.052A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	92.5	
Spacing Criteria	0.55	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30		
Wall Reflect %	50	30	50	30	50	30	
RCR	0	119	119	111	111	106	106
	2	107	104	102	100	99	97
	4	97	93	94	91	93	90
	6	90	85	88	84	86	83
	8	83	79	82	78	81	78
	10	78	73	77	73	76	72

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,236.5	95.5%
0-40	1,294.2	100%
0-60	1,294.3	100%
60-90	0.0	0%
0-90	1,294.3	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	65	0.59
6'	36	0.33
7'	25	0.23
8'	25	0.23
9'	16	0.15

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

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	3,940	40	2
5	3,712	50	0
10	3,055	60	0
15	2,111	70	0
20	1,232	80	0
25	644	90	0
30	293		

CONTRASTE

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4" Series

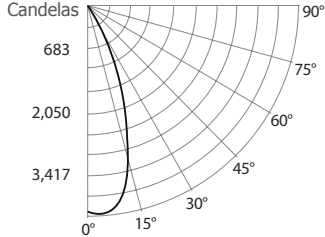
Ultra-Thin Profile Square Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Flood, Performance 1

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	74.8	4.3'
08'	42.1	5.7'
10'	26.9	7.1'
12'	18.7	8.5'
14'	13.7	10.0'
16'	10.5	11.4'

Beam: 40°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 1 LED	3,000K Flood	
CBCP / Lumens	2,692	/ 1,257.3
Watts	120V	277V
	14W	14.5W
Operating AMPS	0.12A	0.052A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	89.9	
Spacing Criteria	0.68	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30	
Wall Reflect %	50	30	50	30	50	30
RCR	0	119	119	111	111	106
	2	106	103	101	99	98
	4	96	91	93	89	91
	6	87	82	85	81	84
	8	80	75	78	74	78
	10	74	69	73	69	72

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,170.6	93.1%
0-40	1,255.4	99.9%
0-60	1,257.3	100%
60-90	0.0	0%
0-90	1,257.3	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	62	0.58
6'	35	0.33
7'	24	0.23
8'	24	0.23
9'	16	0.15

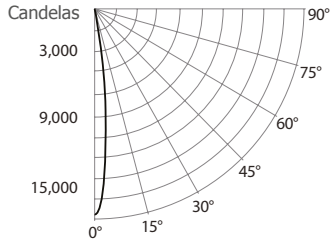
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	2,692	40	11
5	2,715	50	0
10	2,508	60	0
15	1,952	70	0
20	1,329	80	0
25	847	90	0
30	391		

3,000K, 90+ CRI, Spot, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	478.9	1.5'
08'	269.4	2.1'
10'	172.4	2.6'
12'	119.7	3.1'
14'	87.9	3.6'
16'	67.3	4.1'

Beam: 15°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K Spot	
CBCP / Lumens	17,240	/ 1,923
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.085A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	83.6	
Spacing Criteria	0.26	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30	
Wall Reflect %	50	30	50	30	50	30
RCR	0	121	121	113	113	108
	2	110	107	105	103	101
	4	103	99	100	97	98
	6	96	93	94	91	93
	8	91	88	90	87	89
	10	87	84	86	83	86

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,883.2	97.9%
0-40	1,922.6	100%
0-60	1,923.0	100%
60-90	0.0	0%
0-90	1,923.0	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	97	1.02
6'	55	0.57
7'	38	0.4
8'	38	0.4
9'	24	0.25

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

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	17,240	40	1
5	12,102	50	0
10	5,541	60	0
15	2,109	70	0
20	1,173	80	0
25	699	90	0
30	278		

CONTRASTE

SPECIFICATION SHEET

Ardito LED - A4SFR

4" Series

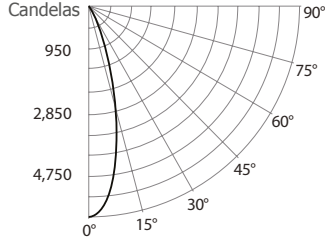
Ultra-Thin Profile Square Regressed Trim

PHOTOMETRIC DATA



3,000K, 90+ CRI, Narrow Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	158.3	3.4'
08'	89.04	4.6'
10'	56.9	5.7'
12'	39.6	6.9'
14'	29.1	8.0'
16'	22.3	9.2'

Beam: 32°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Narrow Flood
CBCP / Lumens	5,699	/ 1,868.7
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.085A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	81.2	
Spacing Criteria	0.55	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30	
Wall Reflect %	50	30	50	30	50	30
RCR	0	119	119	111	111	106
	2	107	104	102	100	99
	4	97	93	94	91	93
	6	90	85	88	84	86
	8	83	79	82	78	81
	10	78	73	77	73	76

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,785.1	95.5%
0-40	1,868.5	100%
0-60	1,868.7	100%
60-90	0.0	0%
0-90	1,868.7	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	93	1.01
6'	52	0.57
7'	36	0.39
8'	36	0.39
9'	23	0.25

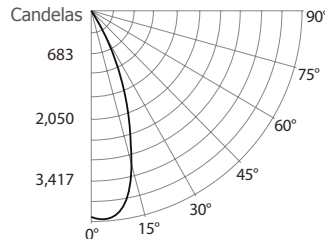
38' x 38' x 10' Room. Workplan located 2-1/2' (30").
Reflectance factor 80%/50%/30%

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	5,699	40	2
5	5,377	50	0
10	4,410	60	0
15	3,039	70	0
20	1,777	80	0
25	931	90	0
30	407		

3,000K, 90+ CRI, Flood, Performance 2

CANDLEPOWER DISTRIBUTION



LIGHT CONE

Distance	FC	DIA
06'	111.5	4.2'
08'	62.7	5.7'
10'	40.1	7.1'
12'	27.9	8.5'
14'	20.5	9.9'
16'	15.7	11.3'

Beam: 40°
Beam Edge defined as 50%
of Maximum Nadir Candle-power.

LUMINAIRE

Performance 2 LED	3,000K	Flood
CBCP / Lumens	4,012	/ 1,878.2
Watts	120V	277V
	23W	23.5W
Operating AMPS	0.19A	0.085A
Lumen Maintenance	L70 @ 50,000 Hrs	
CRI	90+	
Lumens/Watt	81.7	
Spacing Criteria	0.98	

COEFFICIENT OF UTILIZATION - %

Ceiling Reflect %	80		50		30	
Wall Reflect %	50	30	50	30	50	30
RCR	0	119	119	111	111	106
	2	106	103	101	99	98
	4	96	91	93	89	91
	6	87	82	85	81	84
	8	80	75	78	74	78
	10	74	69	73	69	72

Zonal Cavity Method

Effective Floor Cavity Reflectance 20%

ZONAL LUMEN SUMMARY

ZONE	LUMENS	%LUMINAIRE
0-30	1,747.1	93%
0-40	1,875.4	99.8%
0-60	1,878.2	100%
60-90	0.0	0%
0-90	1,878.2	100%

MULTIPLE UNIT DATA - (RCR 2)

SPACING ON CENTER	INITIAL FOOTCANDLES	WATTS/ SQ. FT.
5'	93	1.01
6'	52	0.57
7'	36	0.39
8'	36	0.39
9'	23	0.25

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

CANDELAS DISTRIBUTION

DEGREES/ VERTICAL	CANDELAS	DEGREES/ VERTICAL	CANDELAS
0	4,012	40	19
5	4,053	50	0
10	3,761	60	0
15	2,915	70	0
20	1,974	80	0
25	1,268	90	0
30	582		

CONTRASTE