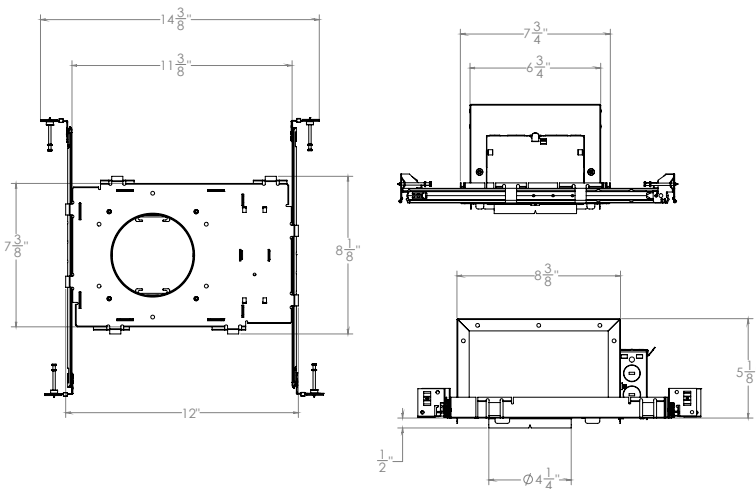
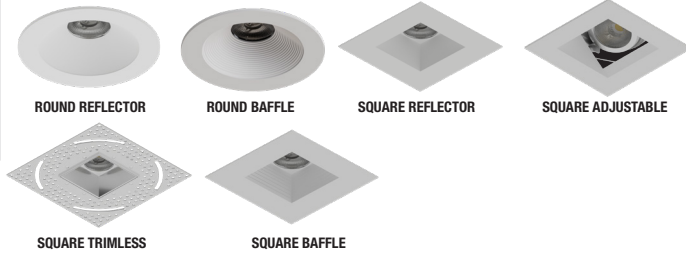




TRIM OPTIONS



NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
2000	1949	20.9 W
1500	1600	18 W
1200	1315	13.7 W
900	1082	10 W

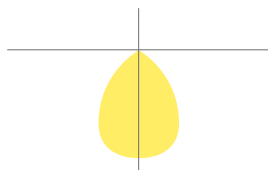
Delivered lumen varies base on trim and distribution options.
Based on 4000K, 90+ CRI. Actual wattage may vary +/- 5%

FEATURES

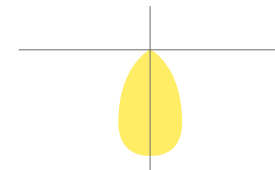
Achieve all of your lighting application objectives with only one universal high-performance architectural housing. The Fusion A4-LED is a 4" LED Universal Downlight that can accept, Round and Square Trims for both trim and trim-less applications (using an A4S-TL for round or A4R-TL for square trim-less mud ring). The universal functionality and fully adjustable of the A4 Downlight can be utilized as a Recessed directional, accent, wet location shower, and downlight. The Fusion A4 series is ideal for retail, hospitality, commercial, and high-end residential applications. Designed for new construction installations and suitable for use in IC and Non IC applications. Plus, the Eco-friendly Elite LED system features 70% lumen maintenance at 100,000 hours life, with Energy Star and California Title-24.

LUMENS	900, 1200, 1500, 2000 (Custom lumen packages available)
CCT & DYNAMIC PLATFORMS	27K, 30K, 35K, 40K, 50K Dims to Warm
CRI	90+ Standard
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTIONS	ND-Narrow(22°) MD-Medium(34°) WD-Wide(57°)
TRIM OPTIONS	Trim, Trimless, Baffle and Adjustable
REFLECTOR COLORS	WH (White)
FLANGE COLORS	WH (White)
DIMMING	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, ELDO10.1, ELDODMX.1, ELDODALI.1, DIMTR
EMERGENCY	10W - Bodine BSL310 20W - Bodine BSL20
LIFETIME	100,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

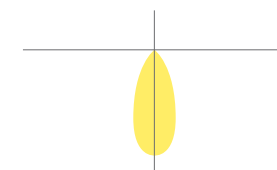
WD: WIDE
Candlepower Distribution Curve



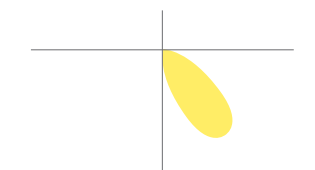
MD: MEDIUM
Candlepower Distribution Curve



ND: NARROW
Candlepower Distribution Curve



WALL WASH
Candlepower Distribution Curve



Reference IES files for additional distribution curve information.



HOUSING:

Thermally protected, specification grade adjustable recessed housing. For new construction insulated ceilings where housing will be in direct contact with insulation. Die-formed all aluminum construction matte black painted for maximum heat dissipation, rust protection and glare free illumination.

LED LIGHT ENGINE:

High color rendering of 90+ CRI and guaranteed color consistency with a binning of a 2 step MacAdam Ellipse Scale. Available in: 2700K, 3000K, 3500K, 4000K and 5000K CCT. Also Available in Dims to Warm (from 1800K to 3000K)

OPTICS:

A4 offers a narrow (ND) medium(MD) and Wide (WD) distribution options to achieve any prescribed design.

COLLAR BRACKET:

Adjusts vertically and can accommodate any ceiling from ½" up to 1" thickness. Please consult factory for custom or thicker ceiling applications. Integral laser beam slots allow the use of guide strings or leveling laser guns to ensure that all luminaires are installed in an level and straight plane.

ELECTRICAL/ TRANSFORMER:

Junction box and Driver can be accessed from below the ceiling and above the ceiling. Junction Box is Listed for through branch circuit wiring, 18 AWG 90° C supply Conductors, and has four 1/2" KOs, one 3/4" KO and four Romex knockouts with true pry-out slots and strain clamps.

MOUNTING:

Preinstalled bar hangers allow housing to be positioned and locked at any point within a 24" joist span. They can be positioned on either the long or short axis of the housing and can be shortened for 12" joists. They contain a double-headed real nail for secure attachment into the joist. Bar hanger nails are installed on a 20° downward angle for better contact, and the 90° pivoting mounting plate makes installation fast and accurate. Bar hangers can fit onto T-Bar spline with additional slots and holes for special mounting methods if necessary. Butterfly brackets are also provided and are constructed from 18-gauge steel and can be adjusted vertically. Butterfly brackets may be installed with 3/4" or 1-1/2" lathing channel, 1/2" EMT, or optional C-Channel mounting bars are available.

LED DYNAMIC PLATFORM OPTIONS



Dims to Warm with Smart Dimming Technology. At 100% full brightness the luminaire is at 3000K. When dimmed to 1%, the light transitions to 1800K, creating a warm ambiance within the space. (Click here for more details)

DIMMING & DRIVER INFORMATION

DIM10 - Flicker Free 1% Dimming Standard (DIM10) 0-10V dimming on either MVOLT 120, 277 or 347V.

LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED driver (120V forward phase only).

LUTH - Lutron LDE1 Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology.

ELDO10.1 - EldoLED SoloDrive 0-10V. Dimming down to 0.1%.

DALI - DALI DT6, DT8 dimming down to 1%.

ELDODMX - EldoLED PowerDrive dimming down to 0.1%.

Please see EldoLED website for wiring diagrams and a list of compatible DMX and DALI control systems.

DIMST - Step Dimming

LABELS:

c-UL-us listed for damp location.

c-UL-us listed for feed Through Wiring.

c-UL-us listed for direct contact with insulation.

WARRANTY:

Fusion A4 Recessed luminaires are covered by Fusion's 5 year limited warranty. As a system, we stand behind our entire products from housing to bar hangers.

HOUSING

	TYPE	LUMEN	DIMMING	VOLTAGE	EMERGENCY OPTIONS	MOUNTING OPTIONS
HIGH PERFORMANCE	A4-LED	☐ 900L ☐ 1200L ☐ 1500L ☐ 2000L	☐ DIM10 ☐ DIMTR ☐ LUTH ☐ LUT2W ☐ ELDO10.1 ☐ DALI .1 ☐ ELDODMX .1	☐ 120 ☐ 277 ☐ 347 ☐ MVOLT (DIM10 only)	☐ EMG-LED Typical lumen output of the fixture is up to 1000L in emergency mode. Contact the factory for details.	☐ Blank-Standard bar hangers (included) ☐ BP31 - 27" C-channel bar hangers. ☐ RIF - RIF filter.
	A4-LED-IC	☐ 900L				

TRIM OPTIONS

ROUND TRIM	LUMENS	OPTICS	CCT	FINISH
☐ A4-F-1402 (Reflector trim) ☐ A4-F-1401 (Baffle trim)	☐ 900L ☐ 1200L ☐ 1500L ☐ 2000L	☐ ND ☐ MD ☐ WD	☐ 27K-90 ☐ 30K-90 ☐ 35K-90 ☐ 40K-90 ☐ 50K-85	☐ W-WH ☐ SN-SN ☐ CL-WH ☐ BK-BK
SQUARE TRIM				
☐ A4-F-1498 (Reflector Trim) ☐ A4-F-1497 (Adjustable Trim) ☐ A4-TL-1498 (Reflector Trim-less) ☐ A4-F-1496 (Baffle)	☐ 900L ☐ 1200L ☐ 1500L ☐ 2000L	☐ ND ☐ MD ☐ WD	☐ 27K-90 ☐ 30K-90 ☐ 35K-90 ☐ 40K-90 ☐ 50K-85	TRIM ☐ W-WH ☐ SN-SN ☐ CL-WH ☐ BK-BK TRIMLESS ☐ WH ☐ SN ☐ CL ☐ BK

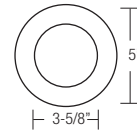
W-WH(White-White), SN-SN(Satin Nickel-Satin Nickel), CL-WH(Clear-White)
BK-BK(Black-Black)

Round Flanged Trims

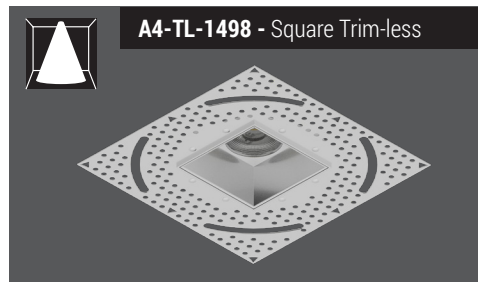
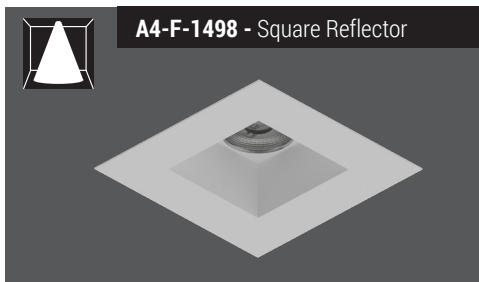


TRIM OPTION:

Post painted powder coated Die-Cast trim available in white and custom colors. Please consult factory for custom paint color options. Trims attach to the housing with piano springs for snug fit and zero light leakage.

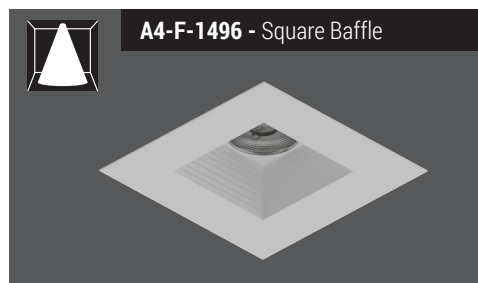
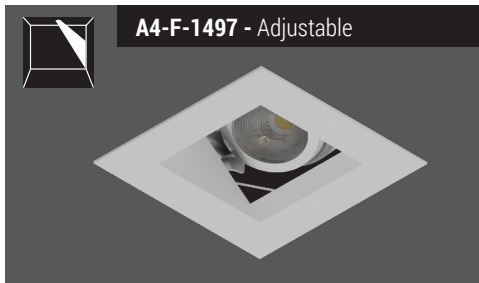
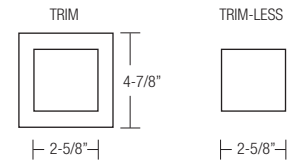


Square Flanged Trims and Trim-less



TRIM OPTION:

Post painted powder coated Die-Cast trim available in white and custom colors. Please consult factory for custom paint color options. Trims attach to the housing with piano springs for snug fit and zero light leakage.



A4-LED-900L-ND-DIMTR-40K-85-A4-F-1402

TEST NO.: **EL0718123**

INPUT WATTS: **9.9**

LUMENS: **1009**

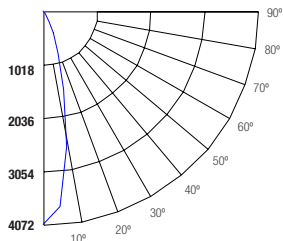
CRI: **85**

EFFICACY: **102**

CCT: **4000K**

SPACING CRITERIA: **0.44**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	14.1 fc	7.1 ft
8.0	3.52 fc	14.3 ft
12.0	1.57 fc	21.4 ft
16.0	0.88 fc	28.5 ft
20.0	0.56 fc	35.6 ft
24.0	0.39 fc	42.8 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	689.78	N.A.	68.40
0-30	888.35	N.A.	88.10
0-40	967.10	N.A.	95.90
0-60	1002.98	N.A.	99.50
0-80	1007.7	N.A.	99.90
0-90	1008.52	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	4804	7488	11401
55	1259	2402	1832
65	810	1155	1262
75	638	838	905
85	834	1782	1725

Lumens Per Zone

Zone	Lumens
0-10	294.60
10-20	395.18
20-30	198.57
30-40	78.76
40-50	28.96
50-60	6.91
60-70	3.17
70-80	1.55
80-90	0.83

Candela Tabulation

Q	
0	4072.106
5	3749.068
15	1540.129
25	463.550
35	125.440
45	27.019
55	5.743
65	2.724
75	1.313
85	0.578
90	0.020

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
	1	114	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			
	2	110	106	103	100	108	105	102	99	101	99	97	98	97	95	96	94	93	91			
	3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87			
	4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84			
	5	99	92	87	84	97	91	87	84	90	86	83	88	85	82	87	84	82	80			
	6	95	88	84	80	94	88	83	80	86	82	79	85	82	79	84	81	78	77			
	7	92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	74			
	8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72			
	9	86	79	74	71	85	78	74	71	78	74	71	77	73	71	76	73	70	69			
	10	84	76	72	69	83	76	72	69	75	71	68	74	71	68	74	71	68	67			

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

A4-LED-900L-ND-DIMTR-40K-85-A4-F-1498

TEST NO.: **EL0718137**

INPUT WATTS: **10**

LUMENS: **1082**

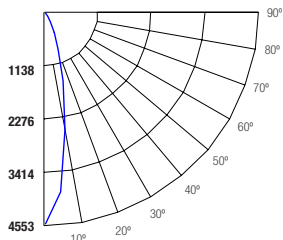
CRI: **85**

EFFICACY: **108**

CCT: **4000K**

SPACING CRITERIA: **0.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	15.8 fc	6.7 ft
8.0	3.94 fc	13.3 ft
12.0	1.75 fc	20 ft
16.0	0.98 fc	26.6 ft
20.0	0.63 fc	33.3 ft
24.0	0.44 fc	39.9 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	740.30	N.A.	68.40
0-30	959.87	N.A.	88.70
0-40	1036.48	N.A.	95.80
0-60	1071.05	N.A.	99.00
0-80	1080.54	N.A.	99.90
0-90	1082.01	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	1645	4913	7080
55	1458	1726	1365
65	1417	1427	1356
75	1234	1365	1436
85	1032	1954	2054

Lumens Per Zone

Zone	Lumens
0-10	316.24
10-20	424.06
20-30	219.57
30-40	76.61
40-50	25.97
50-60	8.60
60-70	5.87
70-80	3.62
80-90	1.47

Candela Tabulation

Q	
0	4552.531
5	3884.161
15	1513.110
25	461.149
35	75.930
45	11.780
55	8.467
65	6.066
75	3.234
85	0.911
90	0.029

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

ROOM CAVITY RATIO	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0		119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	100	100
1		114	112	110	108	112	110	108	105	106	105	103	102	101	100	99	98	98	97	96	96	96
2		110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	89	87	85
3		106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	90	89	87	85	84	84
4		102	96	92	88	101	95	91	88	93	90	87	91	88	86	89	87	85	84	84	84	84
5		99	92	87	84	97	91	87	84	89	86	83	88	85	82	87	84	82	80	78	77	77
6		95	88	84	80	94	88	83	80	86	82	79	85	82	79	84	81	78	76	74	72	71
7		92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	74	72	71	70
8		89	82	77	74	88	81	77	74	80	76	73	79	76	73	78	75	73	72	71	70	69
9		86	79	74	71	85	78	74	71	78	74	71	77	73	71	76	73	71	70	69	69	69
10		84	76	72	69	83	76	72	69	75	71	69	75	71	68	74	71	68	67	67	67	67

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

A4-LED-1200L-ND-DIMTR-40K-85-A4-F-1402

TEST NO.: **EL0718119**

INPUT WATTS: **13.7**

LUMENS: **1315**

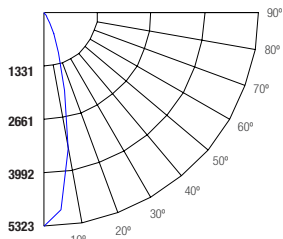
CRI: **85**

EFFICACY: **96**

CCT: **4000K**

SPACING CRITERIA: **0.44**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	18.4 fc	7.1 ft
8.0	4.6 fc	14.2 ft
12.0	2.05 fc	21.4 ft
16.0	1.15 fc	28.5 ft
20.0	0.74 fc	35.6 ft
24.0	0.51 fc	42.7 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

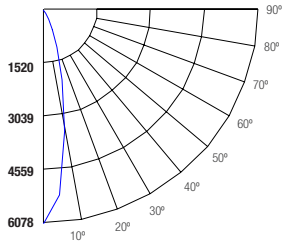
Zonal Lumens Summary

A4-LED-1200L-ND-DIMTR-40K-85-A4-F-1498

TEST NO.: **EL0718130**

INPUT WATTS: **13.9** LUMENS: **1433** CRI: **85** EFFICACY: **103** CCT: **4000K** SPACING CRITERIA: **0.42v**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	21 fc	6.7 ft
8.0	5.26 fc	13.3 ft
12.0	2.34 fc	20 ft
16.0	1.31 fc	26.7 ft
20.0	0.84 fc	33.4 ft
24.0	0.58 fc	40 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	983.87	N.A.	68.60
0-30	1272.08	N.A.	88.70
0-40	1373.09	N.A.	95.80
0-60	1418.94	N.A.	99.00
0-80	1431.45	N.A.	99.90
0-90	1433.47	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2314	6650	10133
55	1928	2305	1810
65	1894	1914	1807
75	1664	1881	1941
85	1432	3142	2910

Lumens Per Zone

Zone	Lumens
0-10	422.02
10-20	561.85
20-30	288.22
30-40	101.01
40-50	34.53
50-60	11.32
60-70	7.72
70-80	4.79
80-90	2.03

Candela Tabulation

Q	
0	6078.254
5	5277.731
15	2053.374
25	612.627
35	108.417
45	16.572
55	11.201
65	8.105
75	4.361
85	1.264
90	0.049

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	RW	80%				70%				50%				30%				10%				0%			
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%		50%	30%	10%		50%	30%	10%		50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100
	1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96	96	96	96	96	96	96
	2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91	91	91	91
	3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	91	89	87	87	87	87	87	87	87
	4	102	96	92	88	101	95	91	88	93	90	87	91	88	86	90	87	85	84	84	84	84	84	84	84
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	7	92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	75	75	75	75	75	75	75
	8	89	82	77	74	88	81	77	74	80	76	74	79	76	73	79	75	73	72	72	72	72	72	72	72
	9	86	79	74	71	86	79	74	71	78	74	71	77	73	71	76	73	71	70	70	70	70	70	70	70
	10	84	76	72	69	83	76	72	69	75	71	69	75	71	69	74	71	68	67	67	67	67	67	67	67

RC - Ceiling Cavity Reflectance

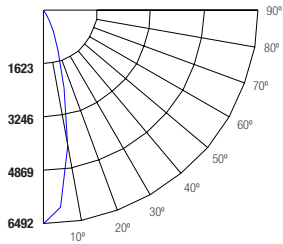
RW - Wall Reflectance

A4-LED1500L-ND-DIMTR-40K-85-A4-F-1402

TEST NO.: **EL0718116**

INPUT WATTS: **18** LUMENS: **1600** CRI: **85** EFFICACY: **89** CCT: **4000K** SPACING CRITERIA: **0.44**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	22.5 fc	7.1 ft
8.0	5.62 fc	14.2 ft
12.0	2.5 fc	21.3 ft
16.0	1.4 fc	28.4 ft
20.0	0.9 fc	35.6 ft
24.0	0.62 fc	42.7 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1096.19	N.A.	68.50
0-30	1409.17	N.A.	88.10
0-40	1534.08	N.A.	95.90
0-60	1591.37	N.A.	99.40
0-80	1598.93	N.A.	99.90
0-90	1600.25	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	6742	11823	18802
55	1991	3762	2879
65	1274	1843	2009
75	1000	1357	1466
85	1314	2842	2771

Lumens Per Zone

Zone	Lumens
0-10	469.51
10-20	626.67
20-30	312.98
30-40	124.91
40-50	46.21
50-60	11.08
60-70	5.07
70-80	2.49
80-90	1.32

Candela Tabulation

Q	
0	6492.353
5	6015.132
15	2452.146
25	702.356
35	181.545
45	37.916
55	9.085
65	4.283
75	2.058
85	0.911
90	0.039

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

RC	RW	80%				70%				50%				30%				10%				0%			
		70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%		50%	30%	10%		50%	30%	10%		50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96	96	96	96	96	96	96
	2	110	106	103	100	108	104	101	99	101	99	97	98	96	95	96	94	93	91	91	91	91	91	91	91
	3	106	101	97	94	104	100	96	93	97	94	91	95	92	90	93	91	89	87	87	87	87	87	87	87
	4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84	84	84	84	84	84	84
	5	99	92	88	84	97	91	87	84	90	86	83	88	85	82	87	84	82	80	80	80	80	80	80	80
	6	95	88	84	80	94	88	83	80	86	82	80	85	82	79	84	81	79	77	77	77	77	77	77	77
	7	92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	75	75	75	75	75	75	75
	8	89	82	77	74	88	81	77	74	80	76	74	79	76	73	79	75	73	72	72	72	72	72	72	72
	9	86	79	74	71	85	79	74	71	78	74	71	77	73	71	76	73	71	70	70	70	70	70	70	70
	10	84	76	72	69	83	76	72	69	75	71	69	75	71	68	74	71	68	67	67	67	67	67	67	67

RC - Ceiling Cavity Reflectance

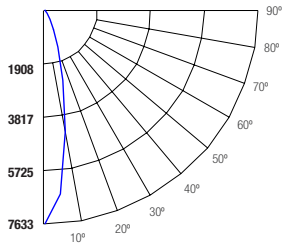
RW - Wall Reflectance

A4-LED-1500L-ND-DIMTR-40K-85-A4-F-1498

TEST NO.: **EL0718129**

INPUT WATTS: **18.5** LUMENS: **1790** CRI: **85** EFFICACY: **97** CCT: **4000K** SPACING CRITERIA: **0.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	26.4 fc	6.6 ft
8.0	6.6 fc	13.3 ft
12.0	2.93 fc	19.9 ft
16.0	1.65 fc	26.5 ft
20.0	1.06 fc	33.2 ft
24.0	0.73 fc	39.8 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1230.15	N.A.	68.70
0-30	1589.33	N.A.	88.80
0-40	1715.13	N.A.	95.80
0-60	1772.06	N.A.	99.00
0-80	1787.55	N.A.	99.90
0-90	1790.07	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2873	8224	12569
55	2386	2841	2236
65	2340	2365	2230
75	2060	2322	2397
85	1777	3898	3609

Lumens Per Zone

Zone	Lumens
0-10	528.12
10-20	702.02
20-30	359.18
30-40	125.80
40-50	42.91
50-60	14.02
60-70	9.56
70-80	5.94
80-90	2.52

Candela Tabulation

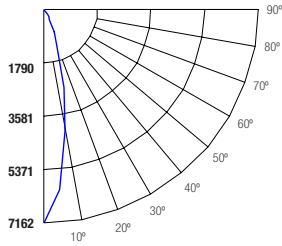
Q	
0	7633.122
5	6586.904
15	2583.584
25	769.721
35	133.476
45	20.570
55	13.857
65	10.016
75	5.400
85	1.568
90	0.049

A4-LED-2000L-ND-DIMTR-40K-85-A4-F-1402

TEST NO.: **EL0718113**

INPUT WATTS: **20.8** LUMENS: **1767** CRI: **85** EFFICACY: **85** CCT: **4000K** SPACING CRITERIA: **0.44**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	24.8 fc	7.1 ft
8.0	6.2 fc	14.2 ft
12.0	2.75 fc	21.3 ft
16.0	1.55 fc	28.4 ft
20.0	0.99 fc	35.5 ft
24.0	0.69 fc	42.6 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1207.66	N.A.	68.30
0-30	1554.5	N.A.	88.00
0-40	1693.55	N.A.	95.80
0-60	1757.45	N.A.	99.40
0-80	1765.97	N.A.	99.90
0-90	1767.45	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	18429	7937	4060
55	3059	2576	1985
65	2140	1644	1242
75	1561	1228	952
85	2913	2418	948

Lumens Per Zone

Zone	Lumens
0-10	517.22
10-20	690.44
20-30	346.83
30-40	139.06
40-50	51.42
50-60	12.48
60-70	5.72
70-80	2.80
80-90	1.48

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
0	7161.576	6087.398	2703.203	812.949	276.262	103.645	13.955	7.193	3.214
10	2.019	1.421							

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
	1	115	112	110	108	112	110	108	107	106	105	103	102	101	100	99	98	97	96			
	2	110	106	103	100	108	105	102	99	101	99	97	99	97	95	96	94	93	91			
	3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87			
	4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84			
	5	99	92	88	84	97	91	87	84	90	86	83	88	85	82	87	84	82	80			
	6	95	88	84	80	94	88	83	80	86	82	80	85	82	79	84	81	79	77			
	7	92	85	80	77	91	84	80	77	83	79	76	82	79	76	81	78	76	74			
	8	89	82	77	74	88	81	77	74	80	76	73	79	76	73	79	75	73	72			
	9	86	79	74	71	85	78	74	71	78	74	71	77	73	71	76	73	70	69			
10	84	76	72	69	83	76	72	69	75	71	69	74	71	68	74	71	68	67				

RC - Ceiling Cavity Reflectance

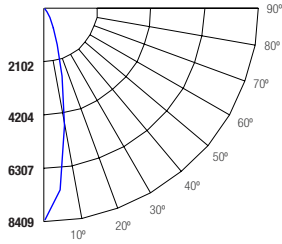
RW - Wall Reflectance

A4-LED-2000L-ND-DIMTR-40K-85-A4-F-1498

TEST NO.: **EL0718125**

INPUT WATTS: **20.9** LUMENS: **1949** CRI: **85** EFFICACY: **93** CCT: **4000K** SPACING CRITERIA: **0.42**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	29.1 fc	6.5 ft
8.0	7.27 fc	13 ft
12.0	3.23 fc	19.6 ft
16.0	1.82 fc	26.1 ft
20.0	1.16 fc	32.6 ft
24.0	0.81 fc	39.1 ft
Distance to Plane	Initial Footcandle at Nadir	Beam diameter

BEAM DIA. MEASURED AT 50% OF NADIR F.C.

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1343.45	N.A.	68.90
0-30	1731.65	N.A.	88.80
0-40	1867.87	N.A.	95.80
0-60	1929.36	N.A.	99.00
0-80	1946.24	N.A.	99.90
0-90	1949.00	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	2963	8819	12809
55	2592	3081	2413
65	2533	2553	2400
75	2225	2498	2569
85	1920	4131	3842

Lumens Per Zone

Zone	Lumens
0-10	579.45
10-20	764.00
20-30	388.19
30-40	136.23
40-50	46.25
50-60	15.23
60-70	10.41
70-80	6.47
80-90	2.76

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
0	8408.969	7245.179	2773.233	836.783	146.147	21.217	15.053	10.839	5.831
10	1.695	0.069							

Coefficients of Utilization - Zonal Cavity Method
Effective Floor Cavity Reflectance 0.20

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100			
	1	115	112	110	108	112	110	108	106	106	105	103	102	101	100	99	98	97	96			
	2	110	106	103	100	108	104	102	99	101	99	97	98	96	95	96	94	93	91			
	3	106	101	97	94	104	100	96	93	97	94	92	95	92	90	93	91	89	87			
	4	102	96	92	89	101	95	91	88	93	90	87	91	88	86	90	87	85	84			
	5	99	92	88	84	97	91	87	84	90	86	83	88	85	82	87	84	82	81			
	6	95	88	84	80	94	88	83	80	86	83	80	85	82	79	84	81	79	78			
	7	92	85	80	77	91	84	80	77	83	79	77	82	79	76	81	78	76	75			
	8	89	82	77	74	88	81	77	74	81	77	74	80	76	73	79	76	73	72			
	9	87	79	75	72	86	79	74	71	78	74	71	77	74	71	76	73	71	70			
10	84	77	72	69	83	76	72	69	75	72	69	75	71	69	74	71	69	68				

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance