

A3-LED

LED FLANGED OR TRIM-LESS RECESSED

NON-IC/ IC DOWNLIGHTING

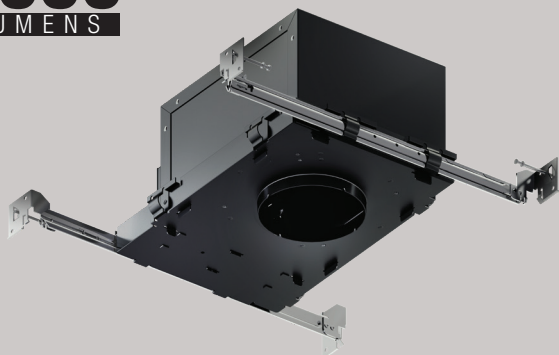
Catalog Number:

Project Name:

Note:

Type:

UPTO
2000
LUMENS



DESCRIPTION:

Achieve all of your lighting application objectives with only one universal high-performance architectural housing. The Fusion A3-LED is a 3" LED Universal Downlight that can accept, Round and Square Trims for both trim and trim-less applications (using an A3S-TL for round or A3R-TL for square trim-less mud ring). The universal functionality and fully adjustable of the A3 Downlight can be utilized as a Recessed directional, accent, wet location shower, and downlight. The Fusion A3 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.

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:

A3 offers a medium distribution option to achieve any prescribed design. A3 offers field changeable optics for a downlight application.

COLLAR BRACKET:

Adjusts vertically and can accommodate any ceiling from 1/2" 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 luminaries 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, 12 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.

LABELS:

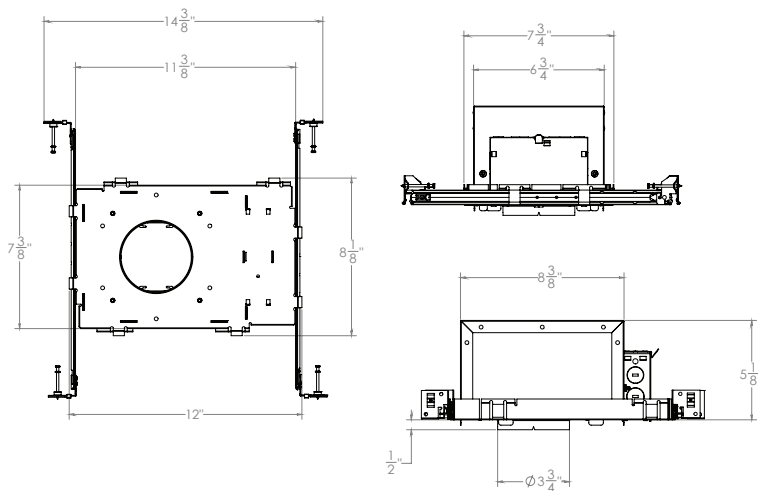
c-UL-us listed for damp location.
c-UL-us listed for feed Through Wiring.
c-UL-us listed for direct contact with insulation.

WARRANTY:

Fusion A3 Recessed luminaries are covered by Fusion's 5 year limited warranty. As a system, we stand behind our entire products from housing to bar hangers.

ELECTRICAL INFORMATION

INPUT VOLT.	INPUT FREQ.	INPUT POWER	THD	POWER FACTOR	LUMENS
120/277	50/60Hz	20W(+/-5%)	<20%	>0.9	2000
120/277	50/60Hz	18W(+/-5%)	<20%	>0.9	1500
120/277	50/60Hz	14W(+/-5%)	<20%	>0.9	1200
120/277	50/60Hz	10W(+/-5%)	<20%	>0.9	900



DIMMING INFORMATION FOR FUSION HIGH PERFORMANCE / SMART DIM:

DIM10 (0-10V 1% Dimming Standard)

LUTH (Lutron® Hi-Lume A-Series 3-Wire or Eco System 1% Dimming)

LUT2W (Lutron® Hi-Lume A-Series 2-Wire Forward Phase Control 1% Dimming in 120V only)

ELD010-1- (EldoLed 0-10V .1% Dimming driver option)

ELDODALI-1- (EldoLed DALI .1% Dimming driver options)

ELDODMX-1- (EldoLed DMX .1% Dimming driver options/ Consult Factory for Details)

DIMTR (Triac & Electronic Low Voltage Dimming in 120V only)

Submittal form is available @ www.iuseelite.com
Tel: 323-888-1973 • Fax: 323-888-1977

Specifications and Dimensions
subject to change without notice.

Issued-H0618-Rev. 1



A3-LED

LED FLANGED OR TRIM-LESS RECESSED

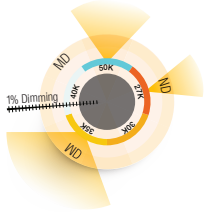
NON-IC/ IC DOWNLIGHTING

Catalog Number:

Project Name:

Note:

Type:



High Performance

HIGH PERFORMANCE - Operating system delivers 900, 1200, 1500, 2000 lumens. All Fusion LED luminaires are rated at 90+ CRI, and are binned to within 2 MacAdam ellipses. Fusion's highly selective LED chips produce zero ultraviolet and virtually no infrared light. All LED luminaires are rated and tested to LM-79 and LM-80 standards by an independent laboratory.



Smart Dim

SMART DIM - Dims to Warm with Smart Dim technology mimics traditional incandescent halogen lighting through dimming. Using Warm Dim, luminaires dim smoothly from 3000K to 1800K. Dims to Warm shifts smoothly over the black body radiator curve as the light dims you move into the rich amber tones that encourages relaxation. It is ideal for hospitality, architectural as well as residential applications, all while maintaining high lumen output for the most stringent energy codes today's legislation requires. Dims to Warm comes paired with high CRI of 90+ and superior lumen output.

LED SOURCE

	LUMENS	CRI	CCT	DIMMING CONTROL POWER SUPPLY	DIMMING	MACADAMS	DISTRIBUTIONS	VOLTAGE
HIGH PERFORMANCE	2000L 1500L 1200L 900L	90+	2700K 3000K 3500K 4000K 5000K	DIM10 0-10V. DIMTR- Triac LUTRON HILUME LUTRON ECO SYSTEM 2 WIRE ELDOLED-0.1 ELDOLED10-0.1 DMX DALI	1% / 0.1%	2 step MacAdam Ellipse Scale	ND-Narrow MD-Medium WD-Wide	120V 277V 347V* MVOLT* Consult factory
DIMS TO WARM	1500L 1200L 900L	90+	From 3000K to 1800K	DIM10 0-10V. DIMTR- Triac LUTRON HILUME LUTRON ECO SYSTEM 2 WIRE ELDOLED-0.1 ELDOLED10-0.1 DMX DALI	0-10%	2 step MacAdam Ellipse Scale	ND-Narrow MD-Medium WD-Wide	120V 277V 347V* Consult Factory

A3-LED

LED FLANGED OR TRIM-LESS RECESSED
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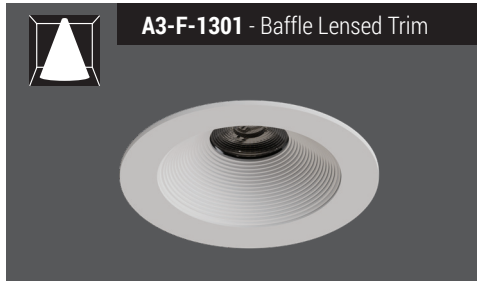
Round Flanged Trims



A3-F-1302 - Round Reflector

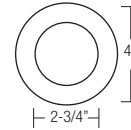


A3-F-1301 - Baffle Lensed Trim



TRIM OPTION:

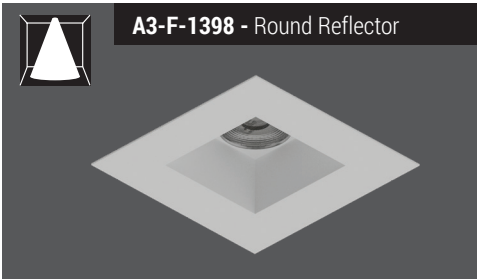
Post painted powder coated Die-Cast trim available in white and custom colors. Please consult factory for custom paint color options. Trims attach to the housing with piano springs for snug fit and zero light leakage.



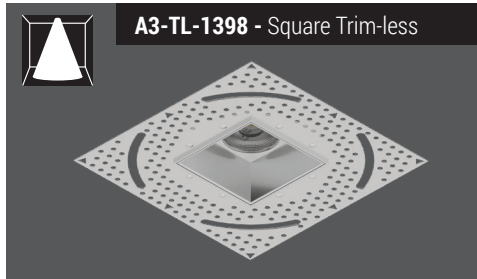
Square Flanged Trims and Trim-less



A3-F-1398 - Round Reflector

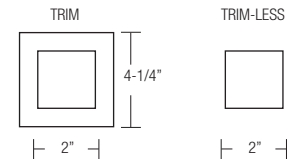


A3-TL-1398 - Square Trim-less



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.



A3-LED

LED FLANGED OR TRIM-LESS RECESSED

NON-IC/ IC DOWNLIGHTING

Catalog Number:

Project Name:

Note:

Type:

HOUSING

	TYPE				VOLTAGE	EMERGENCY OPTIONS	MOUNTING OPTIONS	
	SERIES	900L SERIES	1200L SERIES	1500L SERIES				2000L SERIES
HIGH PERFORMANCE	A3-LED	<input type="checkbox"/> 900L-DIM10 <input type="checkbox"/> 900L-DIMTR <input type="checkbox"/> 900L-LUTTH <input type="checkbox"/> 900L-LUT2W ² <input type="checkbox"/> 900L-ELD010-.1 <input type="checkbox"/> 900L-ELDODALI -.1 <input type="checkbox"/> 900L-ELDODMX -.1	<input type="checkbox"/> 1200L-DIM10 <input type="checkbox"/> 1200L-DIMTR <input type="checkbox"/> 1200L-LUTTH <input type="checkbox"/> 1200L-LUT2W ² <input type="checkbox"/> 1200L-ELD010 -.1 <input type="checkbox"/> 1200L-ELDODALI -.1 <input type="checkbox"/> 1200L-ELDODMX -.1	<input type="checkbox"/> 1500L-DIM10 <input type="checkbox"/> 1500L-DIMTR <input type="checkbox"/> 1500L-LUTTH <input type="checkbox"/> 1500L-LUT2W ² <input type="checkbox"/> 1500L-ELD010 -.1 <input type="checkbox"/> 1500L-ELDODALI -.1 <input type="checkbox"/> 1500L-ELDODMX -.1	<input type="checkbox"/> 2000L-DIM10 <input type="checkbox"/> 2000L-DIMTR <input type="checkbox"/> 2000L-LUTTH <input type="checkbox"/> 2000L-LUT2W ² <input type="checkbox"/> 2000L-ELD010 <input type="checkbox"/> 2000L-ELDODALI <input type="checkbox"/> 2000L-ELDODMX	<input type="checkbox"/> 120 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> MVOLT (DIM10 only)	<input type="checkbox"/> EMG-LED Typical lumen output of the fixture is up to 1000L in emergency mode. Contact the factory for details.	<input type="checkbox"/> Blank-Standard bar hangers (included) <input type="checkbox"/> BP31 - 27" C-channel bar hangers. <input type="checkbox"/> RIF - RIF filter.
	A3-LED-IC	<input type="checkbox"/> 900L-DIM10 <input type="checkbox"/> 900L-DIMTR <input type="checkbox"/> 900L-LUTTH <input type="checkbox"/> 900L-LUT2W ² <input type="checkbox"/> 900L-ELD010-.1 <input type="checkbox"/> 900L-ELDODALI -.1 <input type="checkbox"/> 900L-ELDODMX -.1						

TRIM OPTIONS

ROUND TRIM	LUMENS	OPTICS	CCT	FINISH
<input type="checkbox"/> A3-F-1302 (Reflector trim) <input type="checkbox"/> A3-F-1301 (Baffle trim)	<input type="checkbox"/> 900L <input type="checkbox"/> 1200L <input type="checkbox"/> 1500L <input type="checkbox"/> 2000L	<input type="checkbox"/> MD <input type="checkbox"/> ND	<input type="checkbox"/> 27K-90 <input type="checkbox"/> 30K-90 <input type="checkbox"/> 35K-90 <input type="checkbox"/> 40K-90 <input type="checkbox"/> 50K-85	<input type="checkbox"/> W-WH
SQUARE TRIM				
<input type="checkbox"/> A3-F-1398 (Reflector Trim) <input type="checkbox"/> A3-TL-1398 (Reflector Trim-less)	<input type="checkbox"/> 900L <input type="checkbox"/> 1200L <input type="checkbox"/> 1500L <input type="checkbox"/> 2000L	<input type="checkbox"/> MD <input type="checkbox"/> ND	<input type="checkbox"/> 27K-90 <input type="checkbox"/> 30K-90 <input type="checkbox"/> 35K-90 <input type="checkbox"/> 40K-90 <input type="checkbox"/> 50K-85	<input type="checkbox"/> WH

	TYPE				VOLTAGE	EMERGENCY OPTIONS	MOUNTING OPTIONS
	SERIES	900L SERIES	1200L SERIES	1500L SERIES			
SMART DIMMING	A3-LED	<input type="checkbox"/> 900L-DIM10 <input type="checkbox"/> 900L-DIMTR <input type="checkbox"/> 900L-LUTTH <input type="checkbox"/> 900L-LUT2W ² <input type="checkbox"/> 900L-ELD010-.1 <input type="checkbox"/> 900L-ELDODALI -.1 <input type="checkbox"/> 900L-ELDODMX -.1 Delivered Lumens depends on actual Trim specified. Please View IES files for details.	<input type="checkbox"/> 1200L-DIM10 <input type="checkbox"/> 1200L-DIMTR <input type="checkbox"/> 1200L-LUTTH <input type="checkbox"/> 1200L-LUT2W ² <input type="checkbox"/> 1200L-ELD010 -.1 <input type="checkbox"/> 1200L-ELDODALI -.1 <input type="checkbox"/> 1200L-ELDODMX -.1	<input type="checkbox"/> 1500L-DIM10 <input type="checkbox"/> 1500L-DIMTR <input type="checkbox"/> 1500L-LUTTH <input type="checkbox"/> 1500L-LUT2W ² <input type="checkbox"/> 1500L-ELD010 -.1 <input type="checkbox"/> 1500L-ELDODALI -.1 <input type="checkbox"/> 1500L-ELDODMX -.1	<input type="checkbox"/> 120 <input type="checkbox"/> 277 <input type="checkbox"/> 347 <input type="checkbox"/> (DIM10 only)	<input type="checkbox"/> EMG-LED Typical lumen output of the fixture is up to 1000L in emergency mode. Contact the factory for details.	<input type="checkbox"/> Blank-Standard bar hangers (included) <input type="checkbox"/> BP31 - 27" C-channel bar hangers. <input type="checkbox"/> RIF - RIF filter.
	A3-LED-IC	<input type="checkbox"/> 900L-DIM10 <input type="checkbox"/> 900L-DIMTR <input type="checkbox"/> 900L-LUTTH <input type="checkbox"/> 900L-LUT2W ² <input type="checkbox"/> 900L-ELD010-.1 <input type="checkbox"/> 900L-ELDODALI -.1 <input type="checkbox"/> 900L-ELDODMX -.1 Delivered Lumens depends on actual Trim specified. Please View IES files for details.					

ROUND TRIM	LUMENS	OPTICS	CCT	FINISH
<input type="checkbox"/> A3-F-1302 (Reflector trim) <input type="checkbox"/> A3-F-1301 (Baffle trim)	<input type="checkbox"/> 900L <input type="checkbox"/> 1200L <input type="checkbox"/> 1500L	<input type="checkbox"/> ND <input type="checkbox"/> MD <input type="checkbox"/> WD	<input type="checkbox"/> WDM (30K-18K) (3000K at 100% Light out put and 1800K at 1% Light Output)	<input type="checkbox"/> W-WH
SQUARE TRIM				
<input type="checkbox"/> A3-F-1398 (Reflector Trim) <input type="checkbox"/> A3-TL-1398 (Reflector Trim-less)	<input type="checkbox"/> 900L <input type="checkbox"/> 1200L <input type="checkbox"/> 1500L	<input type="checkbox"/> ND <input type="checkbox"/> MD <input type="checkbox"/> WD	<input type="checkbox"/> WDM (30K-18K) (3000K at 100% Light out put and 1800K at 1% Light Output)	<input type="checkbox"/> WH

ORDERING GUIDE

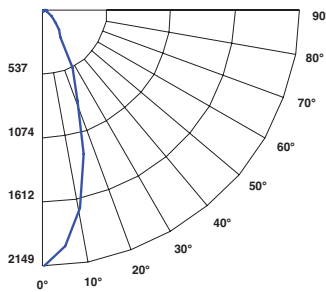


A3-LED LED FLANGED OR TRIM-LESS RECESSED NON-IC/ IC DOWNLIGHTING

A3-F-1301-900L-MD-40K-90W-WH

WATTAGE: **10.9** LUMENS: **1016** CCT: **4000K** TOTAL LUMINAIRE EFFICACY: **93** SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	815.14	81.40	80.20
0-40°	942.71	94.10	92.80
0-60°	1005.34	100.40	98.90
0-90°	1016.19	101.50	100.00
0-180°	1016.19	101.50	100.00

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	24699	11538	8415
55°	4942	4534	3277
65°	3504	3012	3338
75°	2472	2235	2057
85°	3569	3142	1508

Candela Tabulation

	0	45	90
0	2148.67	2148.67	2148.67
5	1994.54	1997.84	2044.10
15	1251.21	1223.20	1276.90
25	541.97	471.79	495.77
35	207.10	145.43	154.69
45	79.72	37.24	27.16
55	12.94	11.87	8.58
65	6.76	5.81	6.44
75	2.92	2.64	2.43
85	1.42	1.25	0.60
90	0.67	0.63	0.08

Spacing Criteria

0-180 : **0.56**
 90-270 : **0.58**
 Diagonal : **0.60**

EFFICACY: 93 LM/W

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

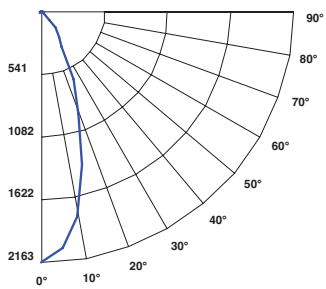
RC RW	80%				70%				50%				30%				10%				0%			
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	104	104	104	101	101		
1	116	113	111	108	113	111	109	107	107	105	103	103	102	100	99	98	97	96	96	96	96	96		
2	110	106	102	99	108	104	101	98	101	98	96	96	96	94	95	93	92	90	90	90	90	90		
3	106	100	95	91	104	98	94	91	96	92	89	93	90	88	91	89	86	85	85	85	85	85		
4	101	94	89	85	99	93	88	84	91	87	84	89	85	83	87	84	82	81	81	81	81	81		
5	97	89	84	80	95	88	83	79	86	82	79	85	81	78	83	80	77	76	76	76	76	76		
6	93	84	79	75	91	84	78	75	82	78	74	81	77	74	79	76	73	72	72	72	72	72		
7	89	80	75	71	87	80	74	71	78	74	70	77	73	70	76	72	70	68	68	68	68	68		
8	85	76	71	67	84	76	71	67	75	70	67	74	70	67	73	69	66	65	65	65	65	65		
9	82	73	68	64	81	73	67	64	72	67	64	71	67	64	70	66	63	62	62	62	62	62		
10	79	70	65	61	78	69	64	61	69	64	61	68	64	61	67	63	61	59	59	59	59	59		

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

A3-F-1302-900L-MD-40K-90W-WH

WATTAGE: **10.9** LUMENS: **1036** CCT: **4000K** TOTAL LUMINAIRE EFFICACY: **95** SPACING CRITERIA: **0.62**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	833.62	81.70	80.50
0-40°	969.19	95.00	93.60
0-60°	1030.06	100.90	99.50
0-90°	1035.52	101.50	100.00
0-180°	1035.52	101.50	100.00

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	31326	21229	15234
55°	4935	5110	2162
65°	2680	1389	1726
75°	965	1100	846
85°	2061	2111	1533

Candela Tabulation

	0	45	90
0	2163.17	2163.17	2163.17
5	2048.43	2095.17	2134.20
15	1366.73	1483.63	1530.35
25	647.86	682.58	683.24
35	269.77	243.92	233.29
45	101.11	68.52	49.17
55	12.92	13.38	5.66
65	5.17	2.68	3.33
75	1.14	1.30	1.00
85	0.82	0.84	0.61
90	0.66	0.63	0.06

Spacing Criteria

0-180 : **0.60**
 90-270 : **0.66**
 Diagonal : **0.62**

EFFICACY: 95 LM/W

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

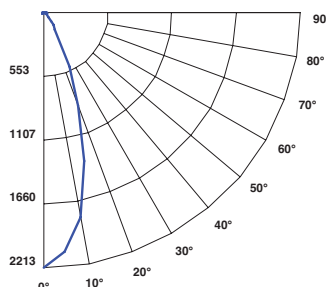
RC RW	80%				70%				50%				30%				10%				0%			
	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%			
0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	104	104	104	101	101		
1	116	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96	96	96	96	96		
2	111	106	102	99	108	104	101	98	101	98	96	96	96	94	95	94	92	90	90	90	90	90		
3	106	100	95	92	104	98	94	91	96	92	89	93	91	88	91	89	87	85	85	85	85	85		
4	101	94	89	85	99	93	88	85	91	87	84	89	86	83	87	84	82	81	81	81	81	81		
5	97	89	84	80	95	88	83	80	87	82	79	85	81	78	83	80	76	76	76	76	76	76		
6	93	85	79	75	91	84	79	75	82	78	75	81	77	74	80	76	74	72	72	72	72	72		
7	89	80	75	71	88	80	75	71	79	74	71	77	73	70	76	73	70	69	69	69	69	69		
8	85	77	71	67	84	76	71	67	75	70	67	74	70	67	73	69	67	65	65	65	65	65		
9	82	73	68	64	81	73	68	64	72	67	64	71	67	64	70	66	63	62	62	62	62	62		
10	79	70	65	61	78	70	65	61	69	64	61	68	64	61	67	63	61	59	59	59	59	59		

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

A3-F-1398-900L-MD-40K-90W-WH

WATTAGE: **10.9** LUMENS: **982** CCT: **4000K** TOTAL LUMINAIRE EFFICACY: **90** SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-30°	805.96	83.40	82.10
0-40°	888.91	91.90	90.50
0-60°	947.04	98.00	96.40
0-90°	982.12	101.60	100.00
0-180°	982.12	101.60	100.00

Luminaire Data (cd/sq.m)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	19128	13282	7454
55°	8334	9724	8525
65°	9253	9294	9787
75°	10233	9142	9091
85°	11336	10004	4927

Candela Tabulation

	0	45	90
0	2213.39	2213.39	2213.39
5	2082.97	2111.09	2144.35
15	1334.48	1420.02	1465.32
25	520.10	580.40	520.81
35	137.61	151.56	63.38
45	61.74	42.87	24.06
55	21.82	25.46	22.32
65	17.85	17.93	18.88
75	12.09	10.80	10.74
85	4.51	3.98	1.96
90	0.73	0.66	0.11

Spacing Criteria

0-180 : **0.58**
 90-270 : **0.62**
 Diagonal : **0.60**

EFFICACY: 90 LM/W

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 20% = PF

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%			
0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	104	104	104	101	101		
1	115	113	110	108	113	110	108	106	106	105	103	103	101	100	99	98	97	95	95	95	95	95		
2	110	105	101	98	108	104	100	97	100	97	95	97	95	93	95	93	91	89	89	89	89	89		
3	105	99	94	91	103	98	93	90	95	91	88	93	90	87	90	88	86	84	84	84	84	84		