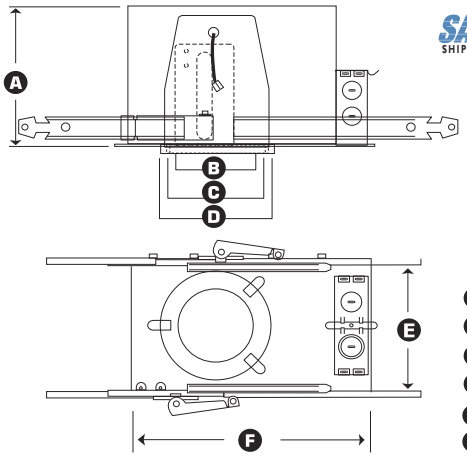
Catalog Number	H-LED2-4IC
Project Name	Type

H-LED2-4IC

4" ARCHITECTURAL NEW CONSTRUCTION IC LED DOWNLIGHT



SAME DAY SHIPPING AVAILABLE

- A Height = 7-1/4"
- B Trim Aperture = 4"
- C Cut-out = 4-3/8"
- D Trim Outside Dia. = 4-7/8"
- E Width = 5-7/8"
- F Length = 12-1/4"

IC RATED

600 LUMENS

INPUT VOLT.	INPUT FREQ.	INPUT CUR.	THD	POWER FACTOR	INPUT POWER	LUMENS
120/277	50/60Hz	91mA/40mA	<20%	>0.9	11W(+/-5%)	600

DESCRIPTION - 4" LED dedicated Architectural New Construction IC housing with the driver installed on the junction box. Designed for new construction installations and suitable for use in insulation covered ceilings. The excellent color rendering index of 85+ and realistic color temperature of 3,000 degrees Kelvin confirms that the MAXILUME LED luminaires are ideally suited for use in hospitality, health care, commercial, retail and residential applications. Producing over 600 usable lumens, the lighting is smooth and comfortable while using nearly 80% less energy than the equivalent 50W BR20/PAR20 or MR16 80% less and 50% less than the common 13W CFL. Plus, the eco-friendly Elite LED system features 70% lumen maintenance at 50,000hrs life.

FEATURES - Greater light output than a 50W BR20/PAR20, MR16 80% &13W CFL 13W CFL. Available in Spot and Flood distribution ideal for task lighting applications.

PROUDLY ASSEMBLED in AMERICA

c UL us LISTED

LED

4"

DURABILITY - Without proper heat management, any LED luminaire will fail. Our die-cast system pulls the heat from the LED chip, allowing continued cool operation for years. Life tests have shown MAXILUME LED output will be maintained at 70% of initial lumens at 50,000hrs of operation.

DRIVER - Our LED driver is rated for 50 to 60 Hz, produces less than 20% THD, has a power factor between 0.90 and 1.00 and is thermally protected for additional safety. MAXILUMEs driver is installed on the junction box cover, it is easily accessible for service from below the ceiling. Additionally, a 277V option is available.

REPEATABLE - Repeatability means quality. From our chip selection process, to our driver, to the thermal management, MAXILUME LED is engineered for quality. Our superior design allows for installation in construction that requires the MAXILUME Air-Shut™ system. All MAXILUME LED luminaries are rated at 90+ CRI and tested to LM-79 and LM-80 standards by a certified laboratory , and meets the California Title-24 compliance standards.

DIMMABLE - The MAXILUME LED system is fully dimmable down to 10% of initial light output with a Triac & Electronic Low Voltage dimmer when ordered with the following options (DIMTR-120). Fixtures can be shipped with an Lutron Hi-lume A series Driver which can be dimmed with Lutron Dimming Systems when ordered with the following options (LUTH-120, LUTH-277). A 277V NON-Dimming option is also available.

HOUSING - Housing is IC rated for direct contact with insulation. May be installed in 2" x 8" joist construction. • Outer Die-formed aluminum construction for maximum heat dissipating air chamber on top of the housing. Junction box could be accessed from inside & outside housing. • Inner - deep-drawn single piece aluminum construction for maximum heat dissipation & rust protection. Adjusts vertically in plaster frame to accommodate 1/2" to 1-3/8" ceiling.

JUNCTION BOX - UL Listed for through-branch circuit wiring, provided with four ½" knockouts, one ¾" knockout and four Romex knockouts with integral strain clamps, all knockouts have true pry-out slots. J-box is designed for straight through conduit runs. Driver is installed on the junction box cover so it may be serviced from below the ceiling.

THERMAL PROTECTION - Standard thermal protection device guards against improper installation and misuse of insulation material.

MOUNTING BRACKET - Constructed from 16 gauge steel and is supplied with C-channels that are adjustable up to 28". Mounting brackets may be adjusted up to 2-3/4" vertically from inside the housing.

OUR WORD - The MAXILUME LED lighting system carries a five-year carefree warranty for parts and components. (Labor not included.)

LISTING

c-UL-us Listed

For Damp location. For feed Through Wiring. For Direct Contact With Insulation.

LM79 / LM80

DIMMING INFORMATION

DIMTR (Triac & Electronic Low Voltage Dimming)

LUTH (Lutron® Hi-lume® Dimming)

Refer to page 147 for Trim options

Example: **H-LED2-4IC-600L-DIMTR-120-AT/LED2-1401-600L-ND-30K-W-WH**

H-LED2-4IC

TYPE	600L SERIES	
H-LED2-4IC	☐ 600L-DIMTR-120	☐ 600L-LUTH-277
	☐ 600L-LUTH-120	☐ 600L-DIM10-MVOLT

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1401 (BAFFLE)	☐ 600L	☐ ND Narrow	☐ 27K ☐ 30K	☐ 85+ ☐ 90+	☐ W-WH ☐ SN-SN ☐ CP-CP ☐ P-WH ☐ P-BK ☐ BZ-BZ
☐ LED2-1405 (LENSED BAFFLE)	☐ 600L	☐ MD Medium	☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)		
☐ LED2-1416 (WALL WASH)	☐ 600L	☐ MD Medium			

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1402 (REFLECTOR)	☐ 600L	☐ ND Narrow	☐ 27K ☐ 30K	☐ 85+ ☐ 90+	☐ CL-WH ☐ CL-CH ☐ W-WH ☐ CP-CP ☐ BZ-BZ ☐ SN-SN ☐ RG-WH ☐ CL-SN ☐ MB-WH ☐ MB-BK
☐ LED2-1428 (LENSED REFLECTOR)	☐ 600L	☐ MD Medium	☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)		
☐ LED2-1407 (WALL WASH)	☐ 600L	☐ MD Medium			

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1462 ☐ LED2-1437 (SHOWER TRIM)	☐ 600L	☐ MD Medium	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)	☐ 85+ ☐ 90+	☐ CL-CP ☐ CL-BZ ☐ CL-BK ☐ CL-WH ☐ CL-SN ☐ CL-CH

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1406 (ADJUSTABLE)	☐ 600L	☐ WD(Narrow) ☐ MD(Medium) ☐ ND(Wide)	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)	☐ 85+ ☐ 90+	☐ CP ☐ WH ☐ BZ ☐ SN ☐ BK ☐ CH

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1414 (PINHOLE) ☐	☐ 600L	☐ ND Narrow	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)	☐ 85+ ☐ 90+	☐ WH

TRIM TYPE	SERIES	CCT	CRI	FINISH
☐ LED2-1403 (SLOT APERTURE) ☐	☐ 600L	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)	☐ 85+ ☐ 90+	☐ WH

TRIM TYPE	SERIES	OPTICS	CCT	CRI	FINISH
☐ LED2-1496 (SQUARE BAFFLE)	☐ 600L	☐ MD (Medium)	☐ 27K ☐ 30K ☐ 35K ☐ 40K ☐ 50K (85+ CRI ONLY)	☐ 85+ ☐ 90+	☐ W-WH ☐ P-BK ☐ SN-SN ☐ P-WH ☐ CP-CP ☐ BZ-BZ

4 INCH ARCHITECTURAL LED DOWNLIGHT

BAFFLE WITH NARROW LIGHT DISTRIBUTION

LED2-1401-600L-ND-(A)__-W-WH

Photometric Multiplier 1.0

LED2-1401-600L-ND-(A)__-P-WH

Photometric Multiplier .75

LED2-1401-600L-ND-(A)__-SN-SN

Photometric Multiplier .92

LED2-1401-600L-ND-(A)__-CP-CP

Photometric Multiplier .87

LED2-1401-600L-ND-(A)__-P-BK

Photometric Multiplier .75

LED2-1401-600L-ND-(A)__-BZ-BZ

Photometric Multiplier .85

Example: **LED2-1401-600L-ND-30K-W-WH**

TYPE (BAFFLE)	SERIES	OPTICS	(A) CCT		CRI	FINISH	
LED2-1401	❑ 600L	❑ ND (Narrow)	❑ 27K ❑ 30K ❑ 35K	❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ W-WH ❑ P-WH ❑ SN-SN	❑ CP-CP ❑ BZ-BZ ❑ P-BK

LENSED BAFFLE WITH MEDIUM LIGHT DOSTRIBUTION

LED2-1405-600L-MD-(A)__-W-WH

Photometric Multiplier 1.0

LED2-1405-600L-MD-(A)__-P-WH

Photometric Multiplier .75

LED2-1405-600L-MD-(A)__-SN-SN

Photometric Multiplier .92

LED2-1405-600L-MD-(A)__-CP-CP

Photometric Multiplier .87

LED2-1405-600L-MD-(A)__-P-BK

Photometric Multiplier .75

LED2-1405-600L-MD-(A)__-BZ-BZ

Photometric Multiplier .85

Example: **LED2-1405-600L-MD-30K-W-WH**

TYPE (LENSED BAFFLE)	SERIES	OPTICS	(A) CCT		CRI	FINISH	
LED2-1405 FOR WET LOCATION	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 30K ❑ 35K	❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ W-WH ❑ P-WH ❑ SN-SN	❑ CP-CP ❑ BZ-BZ ❑ P-BK

BAFFLE FINISH:

BZ	CP	WH	P	SN
BRONZE	COPPER	WHITE	BLACK	SATIN NICKEL

TRIM/RING FINISH:

BK	WH	CH	CP	BZ	PB	SN
BLACK	WHITE	CHROME	COPPER	BRONZE	POLISH BRASS	SATIN NICKEL

SAME DAY SHIPPING AVAILABLE

REFLECTOR WITH NARROW LIGHT DISTRIBUTION

LED2-1402-600L-ND-(A)-CL-WH

Photometric Multiplier 1.0

LED2-1402-600L-ND-(A)-BZ-BZ

Photometric Multiplier .87

LED2-1402-600L-ND-(A)-W-WH

Photometric Multiplier .95

LED2-1402-600L-ND-(A)-CL-CH

Photometric Multiplier 1.0

LED2-1402-600L-ND-(A)-CP-CP

Photometric Multiplier .90

LED2-1402-600L-ND-(A)-SN-SN

Photometric Multiplier .87

LED2-1402-600L-ND-(A)-CL-SN

Photometric Multiplier 1.0

LED2-1402-600L-ND-(A)-RG-WH

Photometric Multiplier .90

LED2-1402-600L-ND-(A)-MB-WH

Photometric Multiplier .77

LED2-1402-600L-ND-(A)-MB-BK

Photometric Multiplier .77

Example: **LED2-1402-600L-ND-30K-W-WH**

TYPE (REFLECTOR)	SERIES	OPTICS	(A) CCT		CRI	FINISH	
LED2-1402	❑ 600L	❑ ND (Narrow)	❑ 27K ❑ 30K ❑ 35K	❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ CP-WH ❑ MB-BK ❑ W-WH ❑ BZ-BZ ❑ RG-WH	❑ MB-WH ❑ CL-CH ❑ CP-CP ❑ CL-SN ❑ SN-SN

LENSED REFLECTOR WITH MEDIUM LIGHT DISTRIBUTION

LED2-1428-600L-MD-(A)-CL-WH

Photometric Multiplier 1.0

LED2-1428-600L-MD-(A)-BZ-BZ

Photometric Multiplier .87

LED2-1428-600L-MD-(A)-W-WH

Photometric Multiplier .95

LED2-1428-600L-MD-(A)-CL-CH

Photometric Multiplier 1.0

LED2-1428-600L-MD-(A)-CP-CP

Photometric Multiplier .90

LED2-1428-600L-MD-(A)-SN-SN

Photometric Multiplier .87

LED2-1428-600L-MD-(A)-CL-SN

Photometric Multiplier 1.0

LED2-1428-600L-MD-(A)-RG-WH

Photometric Multiplier .90

LED2-1428-600L-MD-(A)-MB-WH

Photometric Multiplier .77

LED2-1428-600L-MD-(A)-MB-BK

Photometric Multiplier .77

Example: **LED2-1428-600L-MD-30K-W-WH**

TYPE (LENSED REFLECTOR)	SERIES	OPTICS	(A) CCT	CRI	FINISH
LED2-1428 FOR WET LOCATION	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 40K ❑ 30K ❑ 50K (85+ CRI only) ❑ 35K	❑ 85+ ❑ 90+	❑ CP-WH ❑ MB-WH ❑ MB-BK ❑ CL-CH ❑ W-WH ❑ CP-CP ❑ BZ-BZ ❑ CL-SN ❑ RG-WH ❑ SN-SN

PINHOLE WITH NARROW LIGHT DISTRIBUTION

LED2-1414-600L-ND-(A)-WH

Example: **LED2-1414-600L-ND-30K-WH**

TYPE	SERIES	OPTICS	(A) CCT	CRI	FINISH
LED2-1414 (PINHOLE)	❑ 600L	❑ ND (Narrow)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ WH

ONE PIECE SLOT APERTURE

LED2-1403-600L-(A)-WH

Example: **LED2-1403-600L-30K-WH**

TYPE	SERIES	(A) CCT	CRI	FINISH
LED2-1403 (ONE PIECE SLOT APERTURE)	❑ 600L	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ WH

SMOOTH FROST SHOWER LITE WITH MEDIUM LIGHT DISTRIBUTION

FOR WET LOCATION

LED2-1437-600L-MD-(A)-(B)

Example: **LED2-1437-600L-MD-30K-CL-WH**

TYPE	SERIES	OPTICS	(A) CCT	CRI	(B) FINISH
LED2-1437 (SMOOTH FROST SHOWER LITE)	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ BZ ❑ CH ❑ WH ❑ BK ❑ CP ❑ SN

SEMI-FROSTED SHOWER TRIM WITH MEDIUM LIGHT DISTRIBUTION

FOR WET LOCATION

LED2-1462-600L-MD-(A)-(B)

Example: **LED2-1462-600L-MD-30K-CL-WH**

TYPE	SERIES	OPTICS	(A) CCT	CRI	(B) FINISH
LED2-1462 (SEMI-FROSTED SHOWER TRIM)	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ CL-BZ ❑ CL-WH ❑ CL-CP ❑ CL-CH ❑ CL-BK ❑ CL-SN

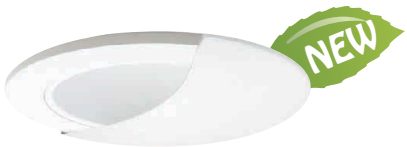
BAFFLE WALL WASH WITH MEDIUM LIGHT DISTRIBUTION

LED2-1416-600L-MD-(A)-(B)

Example: **LED2-1416-600L-MD-30K-W-W-WH**

TYPE	SERIES	OPTICS	(A) CCT	CRI	(B) FINISH	
LED2-1416 (BAFFLE WALL WASH)	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ W-W-WH ❑ P-W-WH ❑ SN-SN-WH	❑ CP-CP-WH ❑ BZ-BZ-WH ❑ P-BK-WH

REFLECTOR WALL WASH WITH MEDIUM LIGHT DISTRIBUTION



LED2-1407-600L-MD-(A)-(B)

Example: **LED2-1407-600L-MD-30K-W-W-WH**

TYPE	SERIES	OPTICS	(A) CCT	CRI	(B) FINISH	
LED2-1407 (REFLECTOR WALL WASH)	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K (85+ CRI only)	❑ 85+ ❑ 90+	❑ CP-W-WH ❑ MB-BK-WH ❑ RG-W-WH ❑ RG-PB-WH ❑ CP-CP-WH ❑ CL-SN-WH	❑ BZ-BZ-WH ❑ W-W-WH ❑ MB-W-WH ❑ CL-CH-WH ❑ SN-SN-WH

SURFACE ADJUSTABLE (90º TILT, 359º ROTATION)

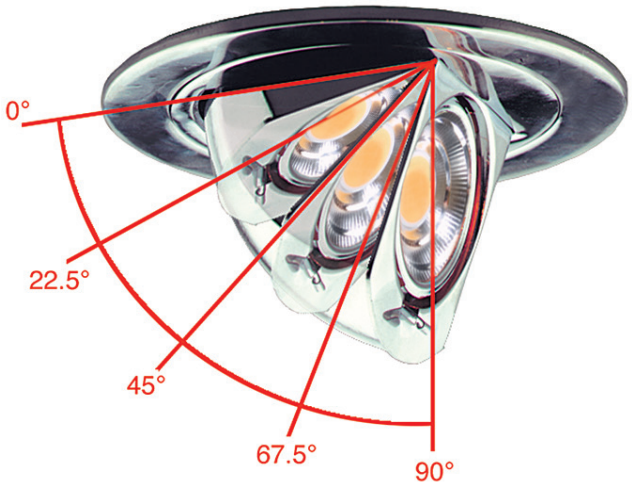
Description:

- Fixture adjusts 90º and rotates 359º.
- All die-cast construction is for functional and aesthetic use
- Can be used to accentuate an artwork or a particular object

ND: Narrow DIstribution

MD: Medium Distribution

WD: Wide Distribution



NEW

LED2-1406-600L-(A)-(B)-BK

LED2-1406-600L-(A)-(B)-SN

LED2-1406-600L-(A)-(B)-CH

LED2-1406-600L-(A)-(B)-CP

LED2-1406-600L-(A)-(B)-BZ

LED2-1406-600L-(A)-(B)-WH

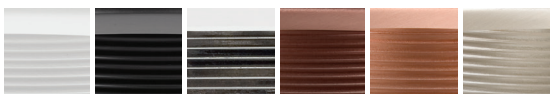
Example: **LED2-1406-600L-ND-30K-WH**

TYPE	600L SERIES	(A) OPTICS	(B) CCT	CRI	FINISH
LED2-1406 (ADJUSTABLE)	❑ 600L	❑ ND 25º ❑ MD 36º ❑ WD 60º	❑ 27K ❑ 40K ❑ 30K ❑ 50K (85+ CRI ONLY) ❑ 35K	❑ 85+ ❑ 90+	❑ BK ❑ SN ❑ CH ❑ CP ❑ BZ ❑ WH

SQUARE BAFFLE W/ SQUARE TRIM RING

Example: **LED2-1496-600L-MD-30K-WH**

TYPE	600L SERIES	OPTICS	CCT	CRI	FINISH
LED2-1496 (SQUARE BAFFLE)	❑ 600L	❑ MD (Medium)	❑ 27K ❑ 40K ❑ 30K ❑ 50K (85+ CRI ONLY) ❑ 35K	❑ 85+ ❑ 90+	❑ W-WH ❑ P-WH ❑ P-BK ❑ CP-CP ❑ SN-SN ❑ BZ-BZ



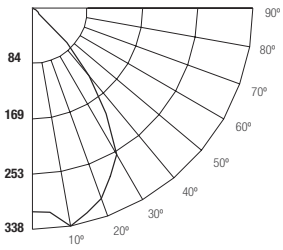
W-WH White White | P-BK Black Black | P-WH Black Black | BZ-BZ Bronze Bronze | CP-CP Copper Copper | SN-SN Satin Nickel

H-LED2-4-600L-DIMTR-LED2-1406-600L-MD-40K-W-WH

TEST NO.: **EL-071326**

INPUT WATTS: **10.5** LUMENS: **451** CRI: **85+** EFFICACY: **43** CCT: **4000K** SPACING CRITERIA: **1.20**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	19.43	9.0'
8.0	4.86	18.0'
12.0	2.16	27.0'
16.0	1.21	36.0'
20.0	0.78	45.0'
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	122.15	N.A.	27.10
0-30	252.82	N.A.	56.10
0-40	375.18	N.A.	83.30
0-60	441.65	N.A.	98.00
0-80	449.54	N.A.	99.80
0-90	450.54	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	51789	51789	51789
55	9321	9321	9321
65	6482	6482	6482
75	4287	4287	4287
85	5126	5126	5126

Lumens Per Zone

Zone	Lumens
0-10	30.76
10-20	91.39
20-30	130.66
30-40	122.36
40-50	56.73
50-60	9.73
60-70	5.51
70-80	2.38
80-90	0.99

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	310
5	313
15	323
25	283
35	196
45	74
55	10
65	5.5
75	2
85	0.9
90	0.2

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	113	110	107	104	110	107	105	103	103	101	99	100	98	96	96	95	94	92
	2	106	101	96	92	104	99	95	91	96	92	89	93	90	87	90	88	85	84
	3	100	93	87	83	98	91	86	82	89	84	81	86	82	79	84	81	78	76
	4	94	86	79	75	92	84	79	74	82	77	73	80	76	72	78	74	71	70
	5	88	79	73	68	87	78	72	67	76	71	67	74	70	66	73	69	66	64
	6	83	73	67	62	82	72	66	62	71	65	61	69	64	61	68	64	60	59
	7	78	68	61	57	77	67	61	57	66	60	56	65	60	56	64	59	56	54
	8	74	63	57	52	73	63	56	52	62	56	52	61	55	52	60	55	51	50
	9	70	59	53	48	69	59	52	48	58	52	48	57	52	48	56	51	48	46
	10	66	55	49	45	65	55	49	45	54	48	45	53	48	44	53	48	44	43

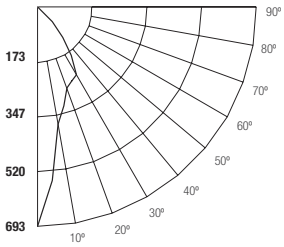
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

H-LED2-4-600L-DIMTR-LED2-1406-600L-ND-40K-CL-WH

TEST NO.: **EL-071327**

INPUT WATTS: **10.5** LUMENS: **433** CRI: **85+** EFFICACY: **41** CCT: **4000K** SPACING CRITERIA: **0.76**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	43.3	7.9'
8.0	10.8	15.8'
12.0	4.8	23.7'
16.0	2.7	31.7'
20.0	1.7	39.6'
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	138.61	N.A.	32.00
0-30	258.19	N.A.	59.70
0-40	373.89	N.A.	86.40
0-60	427.58	N.A.	98.80
0-80	431.91	N.A.	99.80
0-90	432.60	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	45498	45498	45498
55	3792	3792	3792
65	3218	3218	3218
75	2845	2845	2845
85	3549	3549	3549

Lumens Per Zone

Zone	Lumens
0-10	47.98
10-20	90.62
20-30	119.58
30-40	115.70
40-50	49.73
50-60	3.96
60-70	2.74
70-80	1.59
80-90	0.69

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	693
5	549
15	323
25	258
35	186
45	65
55	4
65	2.7
75	1.5
85	0.6
90	0.2

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	113	110	107	105	110	108	106	103	104	102	100	100	99	97	97	95	94	93
	2	107	102	97	94	105	100	96	93	97	94	91	94	91	89	91	89	87	85
	3	101	94	89	85	99	93	88	84	90	86	83	88	84	81	85	83	80	78
	4	95	87	82	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72
	5	90	81	75	71	89	80	75	70	79	73	70	77	72	69	75	71	68	67
	6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	67	63	62
	7	81	71	64	60	79	70	64	60	69	63	59	68	63	59	66	62	59	57
	8	76	66	60	56	75	66	60	56	65	59	55	64	59	55	63	58	55	53
	9	73	62	56	52	71	62	56	52	61	55	52	60	55	51	59	55	51	50
	10	69	59	53	48	68	58	52	48	57	52	48	57	52	48	56	51	48	47

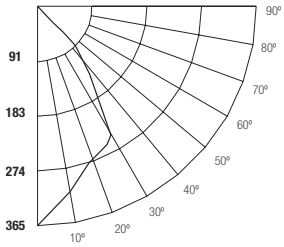
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

H-LED2-4-600L-DIMTR-LED2-1401-600L-MD-40K-W-WH

TEST NO.: **EL-081312**

INPUT WATTS: **12.2** LUMENS: **466** CRI: **85+** EFFICACY: **38.19** CCT: **4000K** SPACING CRITERIA: **1.04**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	22.8	9.3'
8.0	5.7	18.6'
12.0	2.5	27.8'
16.0	1.4	37.1'
20.0	0.9	46.4'
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	112.85	N.A.	24.20
0-30	230.83	N.A.	49.60
0-40	346.93	N.A.	74.50
0-60	431.23	N.A.	92.60
0-80	461.06	N.A.	99.00
0-90	465.74	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	14422	14422	14422
55	5478	5478	5478
65	5394	5394	5394
75	5460	5460	5460
85	6203	6203	6203

Lumens Per Zone

Zone	Lumens
0-10	31.29
10-20	81.56
20-30	117.98
30-40	116.10
40-50	61.92
50-60	22.38
60-70	17.96
70-80	11.87
80-90	4.68

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	365
5	334
15	289
25	255
35	186
45	81
55	24
65	18
75	11
85	4
90	0.8

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	112	108	105	102	109	106	103	100	102	99	97	98	96	94	94	93	91	90
	2	104	98	93	89	102	96	92	88	93	89	86	90	87	84	87	84	82	80
	3	97	89	83	78	95	88	82	78	85	80	76	83	78	75	80	77	74	72
	4	91	82	75	70	89	81	74	69	78	73	68	76	71	68	74	70	67	65
	5	85	75	68	63	84	74	68	63	72	66	62	71	65	61	69	64	61	59
	6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	56	54
	7	75	64	57	52	74	64	57	52	62	56	52	61	55	51	60	55	51	49
	8	71	60	53	48	70	59	52	48	58	52	47	57	51	47	56	51	47	45
	9	67	56	49	44	66	55	48	44	54	48	44	53	48	44	52	47	43	42
	10	63	52	45	41	62	52	45	41	51	45	41	50	44	40	49	44	40	39

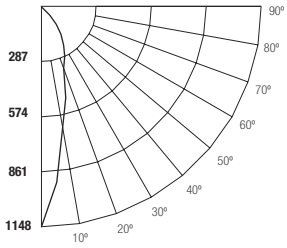
***RC** - Ceiling Cavity Reflectance* ***RW** - Wall Reflectance*

H-LED2-4-600L-DIMTR-LED2-1402-600L-ND-40K-CL-WH

TEST NO.: **EL-081312**

INPUT WATTS: **12.2** LUMENS: **518** CRI: **85+** EFFICACY: **42.2** CCT: **4000K** SPACING CRITERIA: **0.52**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	71.8	6.8'
8.0	17.9	13.7'
12.0	8.0	20.5'
16.0	4.5	27.3'
20.0	2.9	34.1'
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	217.07	N.A.	41.90
0-30	349.05	N.A.	67.40
0-40	459.28	N.A.	88.70
0-60	511.71	N.A.	98.80
0-80	516.37	N.A.	99.70
0-90	517.80	N.A.	100.00

Luminance (Average candela/M^2)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	11225	11225	11225
55	1103	1103	1103
65	869	869	869
75	816	816	816
85	1890	1890	1890

Lumens Per Zone

Zone	Lumens
0-10	80.77
10-20	136.30
20-30	131.98
30-40	110.23
40-50	47.93
50-60	4.50
60-70	2.89
70-80	1.78
80-90	1.43

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	1148
5	920
15	493
25	287
35	177
45	63
55	5
65	2
75	1.6
85	1.3
90	1.1

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	113	111	108	106	111	108	106	104	104	103	101	101	99	98	97	96	95	93
	2	108	103	99	95	106	101	97	94	98	95	92	95	92	90	92	90	88	87
	3	102	96	91	87	100	95	90	86	92	88	85	90	86	84	87	85	82	81
	4	97	90	84	80	95	89	83	80	86	82	79	84	81	78	83	79	77	75
	5	92	84	78	74	91	83	78	74	81	77	73	80	76	72	78	75	72	70
	6	88	79	73	69	86	78	73	69	77	72	68	75	71	68	74	70	67	66
	7	84	75	69	64	82	74	68	64	73	68	64	71	67	64	70	66	63	62
	8	80	70	65	60	79	70	64	60	69	64	60	68	63	60	67	63	60	58
	9	76	67	61	57	75	66	61	57	65	60	57	64	60	56	64	59	56	55
	10	73	63	58	54	72	63	57	54	62	57	54	61	57	53	61	56	53	52

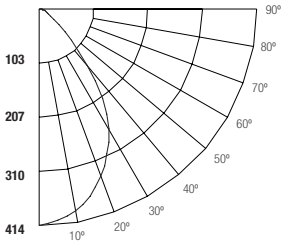
RC - Ceiling Cavity Reflectance *RW - Wall Reflectance*

H-LED2-4-600L-DIMTR-120-LED2-600L-1405-MD-40K-W-WH

TEST NO.: **LLI-1204**

INPUT WATTS: **11.1** LUMENS: **547** CRI: 85+ EFFICACY: **49.7** CCT: **4000K** SPACING CRITERIA: **1.04**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	25.8	12.2'
6.0	6.5	24.5'
8.0	2.9	36.7'
10.0	1.6	49.0'
12.0	1.0	61.2'
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	137.73	28.20	28.10
0-30	265.25	54.30	54.20
0-40	376.47	77.00	76.90
0-60	468.91	95.90	95.80
0-80	487.77	99.80	99.70
0-90	489.42	100.10	100.00

Luminance (Average candela/M^2)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	18419	18218	15012
55	9289	8163	5343
65	6311	4216	4055
75	0	3378	3068
85	0	0	71

Lumens Per Zone

Zone	Lumens
0-10	38.54
10-20	104.35
20-30	139.55
30-40	130.10
40-50	79.55
50-60	33.44
60-70	16.69
70-80	4.92
80-90	0.31

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	413
5	407
15	368
25	300
35	208
45	105
55	43
65	21
75	0
85	0
90	0

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	112	109	106	104	110	107	104	102	103	101	99	99	97	96	96	94	93	91
	2	105	100	95	91	103	98	93	90	94	91	88	91	88	86	89	86	84	82
	3	99	91	85	80	97	90	84	80	87	82	78	84	80	77	82	79	76	74
	4	93	83	77	72	91	82	76	71	80	75	70	78	73	70	76	72	69	67
	5	87	77	70	65	85	76	69	64	74	68	64	72	67	63	70	66	63	61
	6	81	71	64	59	80	70	63	59	68	63	58	67	62	58	66	61	57	56
	7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51
	8	72	61	54	49	71	60	54	49	59	53	49	58	53	49	57	52	48	47
	9	68	57	50	46	67	56	50	45	55	49	45	54	49	45	53	49	45	43
	10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

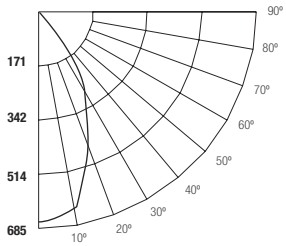
RC - Ceiling Cavity Reflectance *RW - Wall Reflectance*

H-LED2-4-600L-DIMTR-120-LED2-1428-600L-MD-40K-CL-WH

TEST NO.: **LLI-1205**

INPUT WATTS: **10.9** LUMENS: **642** CRI: 85+ EFFICACY: **59** CCT: **4000K** SPACING CRITERIA: **0.88**

Candle Power Distribution (Candelas)



Cone of Light		
4.0	42.3	8.9'
6.0	10.6	17.9'
8.0	4.7	26.8'
10.0	2.6	35.7'
12.0	1.7	44.7'
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	218.90	34.20	34.10
0-30	390.70	61.00	60.90
0-40	530.84	82.90	82.70
0-60	632.63	98.80	98.60
0-80	641.60	100.20	100.00
0-90	641.62	100.20	100.00

Luminance (Average candela/M^2)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	18700	17518	16111
55	7229	6189	4045
65	3839	1738	1560
75	0	577	67
85	0	0	28

Lumens Per Zone

Zone	Lumens
0-10	62.20
10-20	156.70
20-30	171.80
30-40	140.13
40-50	77.13
50-60	24.66
60-70	8.00
70-80	0.98
80-90	0.02

Candela Tabulation

Vertical Angel	Candela at Horizontal Angel 0
0	676
5	643
15	543
25	379
35	233
45	107
55	33
65	13
75	0
85	0
90	0

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	107	107	107	102	102	102	100
	1	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	94	93
	2	107	102	97	94	105	100	96	93	97	93	91	94	91	89	91	89	87	85
	3	101	94	89	84	99	93	88	84	90	86	82	87	84	81	85	82	80	78
	4	95	87	81	76	93	86	80	76	84	79	75	82	78	74	80	76	73	72
	5	90	81	75	70	88	80	74	70	78	73	69	76	72	68	75	71	68	66
	6	85	75	69	64	83	75	68	64	73	68	64	72	67	63	70	66	63	61
	7	80	70	64	59	79	70	64	59	68	63	59	67	62	59	66	62	58	57
	8	76	66	60	55	75	65	59	55	64	59	55	63	58	54	62	58	54	53
	9	72	62	56	51	71	61	55	51	60	55	51	60	54	51	59	54	51	49
	10	69	58	52	48	68	58	52	48	57	52	48	56	51	48	55	51	48	46

RC - Ceiling Cavity Reflectance *RW - Wall Reflectance*