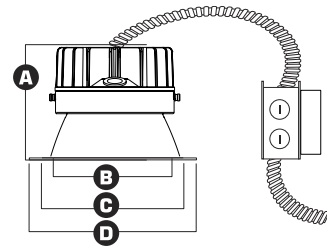


HHJ5-LED 5" ARCHITECTURAL HIGH LUMEN LED RETROFIT DOWNLIGHT



- A Height = 5-3/4"
- B Trim Aperture = 5"
- C Cut-out = 5-1/2"
- D Trim Outside Dia. = 6-3/8"

2000 LUMENS

INPUT VOLT.	INPUT FREQ.	INPUT CUR.	INPUT POWER	THD	POWER FACTOR	LUMENS
120/277	50/60Hz	266mA/115mA	32W(+/-5%)	<20%	>0.9	2000
120/277	50/60Hz	200mA/86mA	24W(+/-5%)	<20%	>0.9	1200
120/277	50/60Hz	150mA/65mA	16W(+/-5%)	<20%	>0.9	900

DESCRIPTION - 5" LED dedicated Architectural Retrofit Module with integral LED heat management casting and driver (installed on junction box). Available in 900 lumens (16W), 1200 lumens (24W) & 2000 lumens (32W). Lighting is smooth and comfortable while using 25% less energy than the common CFL downlight. Plus the eco-friendly Maxilume LED system features 70% lumen maintenance at 50,000 hours life, with Energy Star and California Title-24 (compliances pending).

FEATURES - Maxilume LED Retrofit luminaires are ideally suited for use in hospitality, health care, commercial, institutions, retail and other architectural applications. Our retrofit was designed to replace the existing electrical components found in traditional Incandescent or CFL downlights with energy efficient LED technology.



OPTICS - MAXILUME LED Optilux technology combines unmatched performance with visual comfort. Spun 0.05" thick reflector has been designed to gather the light scattered by the LED chip and shape it into functional beams that minimize brightness and glare, while eliminating lamp image. Reflector offers a 55 degree cutoff and smooth frost acrylic diffuser distributes light even throughout the workplace.

LED DRIVER/JUNCTION BOX - The LED driver is rated for 50 to 60Hz at 120V /277V input, produces less than 20%THD, and has a power factor between 90% and 100% and is thermally protected for additional safety. MAXILUME's LED driver is installed on the junction box cover so it may be serviced from below the ceiling. UL Listed for through-branch circuit wiring, provided with four 1/2" knockouts, one 3/4" knockout and four Romex knockouts with true pryout slots and strain clamps. Designed for straight through conduit runs.

PERFORMANCE - Operating system delivers 900 lumens (16W), 1200 lumens (24W) & 2000 lumens (32W) with a 4000K color temperature. All MAXILUME LED luminaires are rated at 85+ CRI Our stringent chip specifications require only those Chips that produce no ultra violet and virtually no infrared. All LED luminaires are rated and tested to LM-79 and LM-80 standards by an independent laboratory.

MOUNTING - Our retrofit is designed to install into an existing downlights mounting frame and convert them into energy efficient LED downlights. Flex is designed to attach into existing junction box.

THERMAL MANAGEMENT SYSTEM - Using a proprietary coolLED Advanced Thermodynamic Design, Die-cast aluminum heat management system are engineered for extremely long life and service period. Heat sink is attached to top of reflector. The LED light engine is attached to the die-cast heat sink and is easily replaceable and upgradable. Life tests have shown the MAXILUME light engine output will be maintained at 70% of initial at 50,000 hours of operation.

OUR WORD - The MAXILUME LED lighting system is warranted for 5 years. As a system, we stand behind the entire MAXILUME product.

DIMMABLE - The MAXILUME LED system is fully dimmable down to 10% of initial light output with a 0-10 Volt dimmer when ordered with the following options (DIM10-120, DIM10-277). Fixtures can be shipped with a Lutron Hi-lume A series Driver which can be dimmed with Lutron Dimming Systems when ordered with the following options (LUTH-120, LUTH-277). Consult Factory for details.

LISTING

c-UL-us / c-ETL-us - listed for Damp location.
c-UL-us / c-ETL-us - listed for feed Through Wiring.
LM79 / LM80

DIMMING INFORMATION

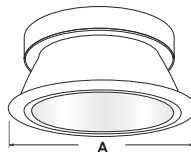
DIM10 (0-10V Dimming)
LUTH (Lutron® Hi-lume® Dimming)

Example: HHJ5-LED-900L-DIM10-120-FL-30K-HH5-5501-CL-WH

TYPE	16 WATT	24 WATT	32 WATT	OPTICS	COLOR	EMERGENCY	TRIM TYPE	REFLECTOR/ RING FINISH	DISC	
HHJ5-LED	<input type="checkbox"/> 900L-LUTH-120 <input type="checkbox"/> 900L-LUTH-277 <input type="checkbox"/> 900L-DIM10-120 <input type="checkbox"/> 900L-DIM10-277	<input type="checkbox"/> 1200L-LUTH-120 <input type="checkbox"/> 1200L-LUTH-277 <input type="checkbox"/> 1200L-DIM10-120 <input type="checkbox"/> 1200L-DIM10-277	<input type="checkbox"/> 2000L-LUTH-120 <input type="checkbox"/> 2000L-LUTH-277 <input type="checkbox"/> 2000L-DIM10-120 <input type="checkbox"/> 2000L-DIM10-277	<input type="checkbox"/> FL	<input type="checkbox"/> 30K <input type="checkbox"/> 35K <input type="checkbox"/> 40K	<input type="checkbox"/> EMG-LED	<input type="checkbox"/> HH5-5501 <input type="checkbox"/> HH5-5507 <input type="checkbox"/> HH5-5510 <input type="checkbox"/> HH5-5511	<input type="checkbox"/> CL-WH <input type="checkbox"/> CL-SCH <input type="checkbox"/> SHZ-SHZ <input type="checkbox"/> SHZ-WH	<input type="checkbox"/> W-WH <input type="checkbox"/> MB-WH <input type="checkbox"/> WT-WH	<input type="checkbox"/> BLUE <input type="checkbox"/> RED <input type="checkbox"/> GREEN <input type="checkbox"/> FROST <input type="checkbox"/> AL <input type="checkbox"/> BZ <input type="checkbox"/> WH

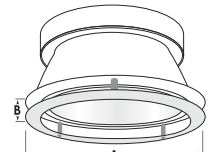


FOR
WET
LOCATION



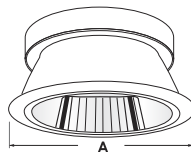
A = 6-3/8"

EXAMPLE: HH5-5501-CL-WH
HH5-5501 - REFLECTOR
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH



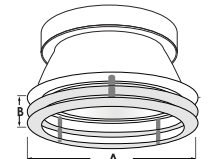
A = 6-3/8"
 B = 1-1/4"

EXAMPLE: HH5-5509-CL-WH
HH5-5509 - DECO GLASS REFLECTOR
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH
GLASS FINISH:
 BLUE, RED, GREEN, FROST



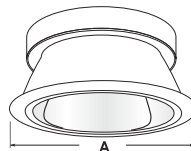
A = 6-3/8"

EXAMPLE: HH5-5507-CL-WH
HH5-5507 - WALL WASH REFLECTOR
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH



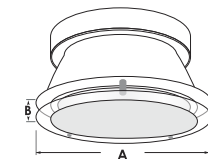
A = 6-3/8"
 B = 1-1/4"

EXAMPLE: HH5-5510-CL-WH
HH5-5510 - DOUBLE RING GLASS
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH
GLASS FINISH:
 BLUE, RED, GREEN, FROST



A = 6-3/8"

EXAMPLE: HH5-5577-CL-WH
HH5-5577 - DOUBLE WALL WASH REFLECTOR
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH



A = 6-3/8"
 B = 1"

EXAMPLE: HH5-5525-CL-WH
HH5-5525 - CENTRAL ETCHED FLOAT GLASS
REFLECTOR/ RING FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH



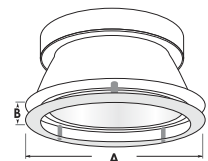
ALUMINIUM
DISC



HH5-5528-CL-W-WH



HH5-5528-CL-WH-BZ



A = 6-3/8"
 B = 1-1/4"

EXAMPLE: HH5-5528-CL-WH-AL
HH5-5528 - REFLECTOR WITH ALUMINIUM DISC AND DIFFUSE LENS
REFLECTOR FINISH:
 CL-WH CL-SCH WT-WH SHZ-WH W-WH SHZ-SHZ MB-WH
DISC FINISH:
 AL, WH, BZ

HH5-LED 16W

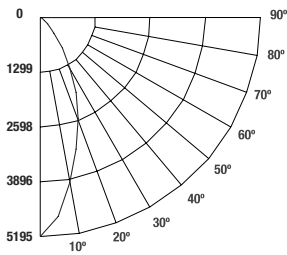
TOTAL LUMINAIRE EFFICACY = 58.4 LPW

HH5-LED-900L-120-DIM10-FL-40K-HH5-5501-CL-WH

TEST NO.: ELT-HH5-0010

INPUT WATTS: 16 LUMENS: 934 CRI: 85+ EFFICACY: 58.4 LPW CCT: 4000K SPACING CRITERIA: 0.7

Candle Power Distribution Curve (Candela)



Candela Distribution

Beam Angle	Candela
0	0
5	5170
15	3722
25	825
35	561
45	296
55	32
65	12
75	3
85	1
90	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	738.63	79.1%	79.1%
0-40	883.95	94.6%	94.6%
0-60	931.46	99.7%	99.7%
0-90	934.12	100%	100%

Lumens Per Zone

Zone	Lumens
0-10	241.34
10-20	253.73
20-30	243.56
30-40	145.32
40-50	36.23
50-60	11.27
60-70	1.94
70-80	0.66
80-90	0.07

Luminance (Average Candela/M²)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	2512	2574	2472
55°	1184	1305	1203
65°	240	297	214
75°	162	160	119
85°	0	0	6

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RCC	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%					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	114	112	109	107	112	110	108	106	106	104	103	102	101	99	98	98	97	95						
2	109	105	101	98	107	103	100	97	100	98	95	97	95	93	95	93	91	90						
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85						
4	100	94	89	85	99	93	88	85	91	87	84	89	85	83	87	84	82	80						
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76						
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73						
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69						
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66						
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63						
10	79	71	66	63	78	70	66	62	70	65	62	69	65	62	68	65	62	61						

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

Cone of Light		
4.0'	323.1	1.3'
8.0'	80.8	2.5'
12.0'	35.9	3.8'
16.0'	20.2	5.0'
20.0'	12.9	6.3'
Distance to Plane	Initial Footcandles at Nadir	Beam Diameter

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

*Note: Lumen output and input wattage vary depending on driver and reflector type. Listed values may vary +/-10%.

HH5-LED 24W

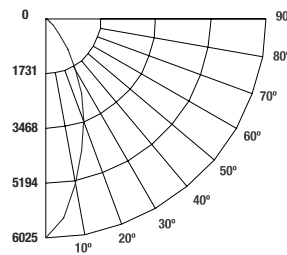
TOTAL LUMINAIRE EFFICACY = 51.9 LPW

HH5-LED-1200L-120-DIM10-FL-40K-HH5-5501-CL-WH

TEST NO.: ELT-HH5-0011

INPUT WATTS: 24 LUMENS: 1245 CRI: 85+ EFFICACY: 51.9 LPW CCT: 4000K SPACING CRITERIA: 0.7

Candle Power Distribution Curve (Candela)



Candela Distribution

Beam Angle	Candela
0	6892
5	4961
15	1100
25	747
35	395
45	43
55	17
65	2
75	1
85	0
90	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	984.58	79.1%	79.1%
0-40	1,178.29	94.6%	94.6%
0-60	1,241.61	99.7%	99.7%
0-90	1,245.17	100%	100%

Lumens Per Zone

Zone	Lumens
0-10	321.7
10-20	338.22
20-30	324.65
30-40	193.71
40-50	48.29
50-60	15.03
60-70	2.58
70-80	0.87
80-90	0.09

Luminance (Average Candela/M²)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	3348	3431	3295
55°	1579	1739	1604
65°	319	395	286
75°	216	213	158
85°	0	0	8

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RCC	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%					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						
1	114	112	109	107	112	110	108	106	106	104	103	102	101	99	98	98	97	95						
2	109	105	101	98	107	103	100	97	100	98	95	97	95	93	95	93	91	90						
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85						
4	100	94	89	85	99	93	88	85	91	87	84	89	85	83	87	84	82	80						
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76						
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73						
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69						
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66						
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63						
10	79	71	66	63	78	70	66	62	70	65	62	69	65	62	68	65	62	61						

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

Cone of Light		
4.0'	430.7	1.3'
8.0'	107.7	2.5'
12.0'	47.9	3.8'
16.0'	26.9	5.0'
20.0'	17.2	6.3'
Distance to Plane	Initial Footcandles at Nadir	Beam Diameter

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

*Note: Lumen output and input wattage vary depending on driver and reflector type. Listed values may vary +/-10%.

HH5-LED 32W

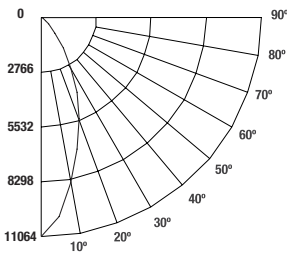
TOTAL LUMINAIRE EFFICACY = 62.2 LPW

HH5-LED-2000L-DIM10-120-FL-40K-HH5-5501-CL-WH

TEST NO.: **ELT-HH5-0013**

INPUT WATTS: **32** LUMENS: **1989** CRI: **85+** EFFICACY: **62.2 LPW** CCT: **4000K** SPACING CRITERIA: **0.7**

Candle Power Distribution Curve (Candela)



Candela Distribution

Beam Angle	Candela
0	11010
5	7926
15	1758
25	1194
35	631
45	69
55	26
65	4
75	2
85	0
90	0

Zonal Lumen Summary

Zone	Lumens	%Lamp	%Fixture
0-30	1,572.95	79.1%	79.1%
0-40	1,882.42	94.6%	94.6%
0-60	1,983.59	99.7%	99.7%
0-90	1,989.26	100%	100%

Lumens Per Zone

Zone	Lumens
0-10	513.95
10-20	540.34
20-30	518.66
30-40	309.47
40-50	77.15
50-60	24.01
60-70	4.13
70-80	1.40
80-90	0.15

Luminance (Average Candela/M²)

Angle In Degrees	Average 0°	Average 45°	Average 90°
45°	5349	5481	5264
55°	2522	2779	2562
65°	510	632	456
75°	345	341	252
85°	0	0	134

Coefficients of Utilization - Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

RCC	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%					
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100					
1	114	112	109	107	112	110	108	106	106	106	104	103	102	101	99	98	98	97	95					
2	109	105	101	98	107	103	100	97	100	98	95	97	95	93	95	93	91	90	85					
3	105	99	95	91	103	98	94	90	95	92	89	93	90	88	91	88	86	85	80					
4	100	94	89	85	99	93	88	85	91	87	84	89	85	83	87	84	82	80	76					
5	96	89	84	80	95	88	83	80	86	82	79	85	81	78	83	80	78	76	73					
6	92	85	79	76	91	84	79	75	82	78	75	81	77	74	80	77	74	73	69					
7	89	81	75	72	87	80	75	72	79	74	71	78	74	71	77	73	71	69	66					
8	85	77	72	68	84	77	72	68	76	71	68	75	71	68	74	70	67	66	63					
9	82	74	69	65	81	73	68	65	72	68	65	72	68	65	71	67	65	63	61					
10	79	71	66	63	78	70	66	62	70	65	62	69	65	62	68	65	62	61	61					

RC - Ceiling Cavity Reflectance RW - Wall Reflectance

Cone of Light		
4.0'	688.1	1.3'
8.0'	172.0	2.5'
12.0'	76.5	3.8'
16.0'	43.0	5.0'
20.0'	27.5	6.3'
Distance to Plane	Initial FootCandles at Nadir	Beam Diameter

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

*Note: Lumen output and input wattage vary depending on driver and reflector type. Listed values may vary +/-10%.