MAXILUME ARCHITECTURAL LIGHTING
By Elite Lighting

HHJ10-LED 10”

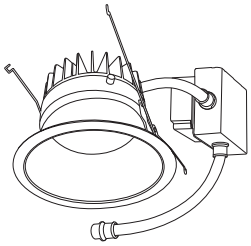
10” Architectural High Lumen LED Downlight - Retrofit

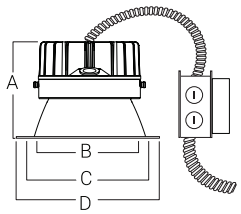
HH10-1501
Flanged Downlight

HH10-1507
Flanged Wall Wash

HH10-1577
Flanged Double Wall Wash

REFLECTOR/ FLANGE COLORS





A: Height = 9-1/8”
B: Trim Aperture = 9-5/8”
C: Cut-Out = 10-5/8”
D: Trim Outside Dia = 11-5/32”

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
5000	5365	51 W
4000	4793	40 W
3000	3512	35 W
2000	2382	21 W
1500	1773	15 W
1200	1439	12 W
900	1091	9 W

Based on 4000K, 90+CRI with semi-specular chrome reflector.
Actual wattage may vary +/-5%

FEATURES

A highly sustainable and ultra-efficient architectural LED downlight that provides even, glare-free illumination. Available in a range of finishes, distributions, and lumen packages, it is ideally suited for use in corporate office space, hospitality, healthcare, commercial, academic, churches and retail.

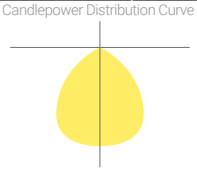
OPTICS AND REFLECTOR

The reflector has a 45° visual cutoff, and is shipped standard with a Solite lens in a smooth frosted finish. Spun from 0.05” thick aluminum, with a 1-step anodized finish, and available in different colors or custom RAL finishes. Reflector flange options include self-flanged and white painted flange. Various distribution options are available, and all optics are field changeable.

LUMENS	900, 1200, 1500, 2000, 3000, 4000, 5000* (Custom lumen packages available)
CCT & DYNAMIC PLATFORMS	27K, 30K, 35K, 40K, 50K, Tunable White, Dims to Warm, RGB + White
CRI	90+ Standard, 98+ Optional
COLOR QUALITY	2 Step MacAdam Ellipse
DISTRIBUTIONS	VWD, WD, MWD, MD, ND, SPD, NSPD
TRIM OPTIONS	Downlight, Wall Wash, Double Wall Wash, Wet Location
REFLECTOR COLORS	CL (Semi-Specular Chrome), SHZ (Low Iridescent Satin Haze), WT (Wheat), WH (White), MB (Black)
FLANGE COLORS	Self-Flanged WH (White), SCH (Semi-Specular Chrome), SHZ (Low Iridescent Satin Haze), BK (Black)
DIMMING	0-10V Flicker Free 1% Dimming Standard (DIM10), LUTH, LUTFTB, LUT2W, ELDO10.1, ELDODMX.1, ELDODALI.1, DIMTR, BLE
EMERGENCY	10W - Up to 1000L Output (Bodine BSL310) 20W - Up to 2000L Output (Bodine BSL20)
LIFETIME	L70 at 102,000 Hours
PHOTOMETRIC TESTS	In Accordance with IES LM79-08, LM80 and TM-30, TM-21

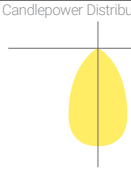
* Only Available on 85+ CRI

VWD: Very Wide Candlepower Distribution Curve

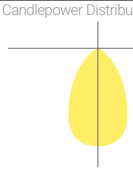


WD:Wide Candlepower Distribution Curve

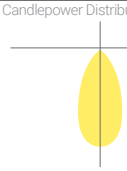
MWD:Medium Wide Candlepower Distribution Curve



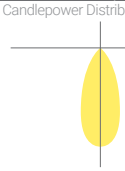
MD:Medium Candlepower Distribution Curve



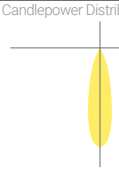
ND: Narrow Candlepower Distribution Curve



SPD:Spot Candlepower Distribution Curve



NSPD:Narrow Spot Candlepower Distribution Curve



Reference IES files for additional distribution curve information.

Due to the changes of constant improvement in LED technology, all details are subject to change without notice. Consult factory for up to date information.
RS190627/NS190711/ BB190711/AS210316

THERMAL MANAGEMENT SYSTEM

Passive cooling Diecast Aluminum Heat Sink, LED light engine and driver are replaceable, upgradeable, and can be accessed from below the ceiling. The consistency in the quality of light is delivered with precision performance by the use of a unique locking mechanism that aligns the reflector with the light engine.

MOUNTING FRAME & BRACKETS

Designed for easy installation into an existing incandescent or CFL downlight mounting frame, converting the luminaire into an energy efficient LED downlight. Flex is designed to attach into the existing junction box, with additional brackets available for up to a 2-1/2” ceiling thickness.

DRIVER ELECTRICAL INFORMATION

The LED driver is rated for 50 to 60Hz at 120V/277V, also available in 347V input, produces less than 20%THD, has a power factor between 90% and 100%, and is thermally protected for additional safety. Junction box and Driver can be accessed from below the ceiling and above the ceiling. Junction Box is Listed for through branch circuit wiring.

DIMMING & DRIVER INFORMATION

DIM10 - 0-10V dimming on either MVOLT 120, 277 or 347V. Dimmable down to 1% of initial lumens, standard.
DIMTR - Triac & Electronic low voltage dimming. Available in 120V, and up to 4000 lumens only.
LUT2W - Lutron LTEA2W Hi-Lume 1%. 2-wire LED Driver Forward Phase Control, 1% dimming in 120V only.
LUTH - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology.
LUTFB - Lutron PEQ0 Hi-Lume Premier Eco System. 0.1% dimming with Soft in Fade to Black dimming technology. Available on all luminaires up to 1500 lumens.
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.
BLE - Luminaires may be controlled, grouped, scheduled or placed in scenes and or zones Via Cassambi Bluetooth 4.0 App.

LED DYNAMIC PLATFORM OPTIONS

Tunable White with Smart White Technology utilizing the Lumenetix Platform allows you to color tune the luminaire via various controls. Create the perfect environment for the desired use of the space, while maintaining a CRI of 90+ across the tunable range of 8000 to 1650K. (Click here for more details)

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)

RGB+White with Smart Hue Technology provides full color mixing of RGB and white colors. Utilizing the Lumenetix Platform allows you to choose from unlimited RGB color options, via various controls. Ideal for Circadian Rhythm applications or to create the perfect human centric environment. (Click here for more details)

OPTICAL

Modular Optics Available with 15°, 24°, 30°, 36°, 52°, 60° and 70° field interchangeable optics design with 45° cutoff to source.
Top-down flash characteristic for superior glare control. The optics attached directly the light engine to the Trim for complete optical alignment and sufficient efficacy.

WARRANTY

Five-year warranty for parts and components. (Labor not included)

LISTINGS

c-UL-us - Listed for Wet Location if used with HH10-1501 Trim.
c-UL-us - Listed for Feed Through Wiring.

U.S Patent No. - D685,118S
CP-City of Chicago environmental air (CCEA) marking for plenum applications.
Energy Star and California Title 24 compliant
Optional Black color trim is not ENERGYSTAR certified and won’t meet the requirement.

Example: **HHJ10-LED-4000L-DIM10-MVOLT-MD-40K-90-HH10-1501-CL-WH**

SERIES	LUMENS	DRIVER	VOLTAGE	CCT	EMERGENCY	TRIM TYPE	REFLECTOR/FLANGE COLORS
HHJ10-LED	❑ 900L ❑ 1200L ❑ 1500L ❑ 2000L ❑ 3000L ❑ 4000L ❑ 5000L	❑ DIM10 ❑ DIMTR [1] [4] ❑ LUTH [2] [4] ❑ LUT2W [1] [4] ❑ LUTFTB [5] ❑ ELDO10-.1 ❑ ELDODALI-.1 ❑ ELDODMX-.1 ❑ BLE	❑ 120 ❑ 277 ❑ MVOLT ❑ 347 (DIM10 only)	❑ 27K ❑ 30K ❑ 35K ❑ 40K ❑ 50K [2]	❑ EMG-LED-10W ❑ EMG-LED-20W Typical lumen output of the luminaire is up to 1000L with EMG-LED-10W option & 2000L with EMG-LED-20W option in emergency mode. Contact the factory for details. Remote mounted installation	❑ HH10-1501 Flanged Downlight ❑ HH10-1507 Flanged Wall Wash ❑ HH10-1577 Flanged Double Wall Wash	❑ CL-WH ❑ CL-SCH ❑ SHZ-WH ❑ SHZ-SHZ ❑ WT-WH ❑ WH-WH ❑ MB-WH ❑ CL-BK ❑ MB-BK
			OPTICS	**CRI**			
			❑ VWD 70º ❑ WD 60º ❑ MWD 52º ❑ MD 36º ❑ ND 30º ❑ SPD 24º ❑ NSPD 15º	❑ 90+ ❑ 98+[3]			

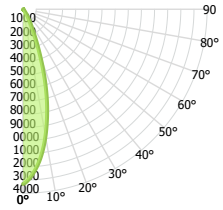
[1] **DIMTR** and **LUT2W** are available in 120V only [2] **50K** series are available with 85+ CRI only [3] **98+ CRI** is available in 27K, 30K and 40K only
[4] **DIMTR** and **LUTH**, **LUT2W** Available for luminaires up to 4000L [5] **LUTFTB** Available for luminaires up to 1500L -**Reference last page for Control Options**

Due to the changes of constant improvement in LED technology, all details are subject to change without notice. Consult factory for up to date information.

HHJ10-LED-4000L-DIM10-MVOLT-MD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **40.8** LUMENS: **4760** EFFICACY: **117** BEAM ANGLE: **34** SPACING CRITERIA: **0.51**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	13289	13289
10°	9799	9908
20°	3837	3977
30°	814	815
40°	163	158
50°	25	27
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	284582	284582
45.00°	2689	2571
55.00°	150	165
65.00°	60	60
75.00°	36	36
85.00°	17	17

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	1130
10° - 20°	2104
20° - 30°	1103
30° - 40°	324
40° - 50°	85
50° - 60°	11
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3233	68%
0° - 30°	4337	91%
0° - 40°	4660	97%
0° - 60°	4756	100%
0° - 80°	4758	100%
0° - 90°	4758	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	369.2 fc	3.6 ft	3.6 ft
8.0 ft	207.6 fc	4.8 ft	4.8 ft
10.0 ft	132.9 fc	6.0 ft	6.1 ft
12.0 ft	92.3 fc	7.2 ft	7.3 ft
14.0 ft	67.8 fc	8.5 ft	8.5 ft
16.0 ft	51.9 fc	9.7 ft	9.7 ft
18.0 ft	41.0 fc	10.9 ft	10.9 ft
20.0 ft	33.2 fc	12.1 ft	12.1 ft

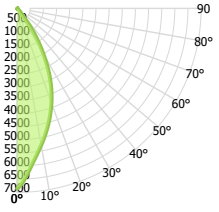
INDOOR COEFFICIENTS OF UTILIZATION

ρf																			
																			0%
ρc		80%				70%				50%				30%			10%		0%
ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	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	89	87	85	84	
5	99	92	87	84	97	91	87	84	89	86	83	88	85	82	86	84	82	80	
6	95	88	83	80	94	87	83	80	86	82	79	85	81	79	83	81	78	77	
7	92	85	80	76	91	84	79	76	83	79	76	82	78	76	81	78	75	74	
8	89	81	77	73	88	81	76	73	80	76	73	79	75	73	78	75	72	71	
9	86	78	74	70	85	78	73	70	77	73	70	76	73	70	75	72	70	69	
10	83	75	71	68	82	75	71	68	74	70	68	74	70	67	73	70	67	66	

HHJ10-LED-4000L-DIM10-MVOLT-MWD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **40.8** LUMENS: **4279** EFFICACY: **105** BEAM ANGLE: **47** SPACING CRITERIA: **0.67**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	6855	6855
10°	5279	5214
20°	3820	3782
30°	1998	1953
40°	256	240
50°	24	29
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	146785	146785
45.00°	3367	3157
55.00°	179	187
65.00°	90	90
75.00°	58	59
85.00°	27	25

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	573
10° - 20°	1326
20° - 30°	1456
30° - 40°	790
40° - 50°	118
50° - 60°	11
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	1899	44%
0° - 30°	3355	78%
0° - 40°	4145	97%
0° - 60°	4274	100%
0° - 80°	4277	100%
0° - 90°	4277	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	190.4 fc	5.2 ft	5.2 ft
8.0 ft	107.1 fc	7.0 ft	6.9 ft
10.0 ft	68.5 fc	8.7 ft	8.6 ft
12.0 ft	47.6 fc	10.5 ft	10.4 ft
14.0 ft	35.0 fc	12.2 ft	12.1 ft
16.0 ft	26.8 fc	13.9 ft	13.8 ft
18.0 ft	21.2 fc	15.7 ft	15.5 ft
20.0 ft	17.1 fc	17.4 ft	17.3 ft

INDOOR COEFFICIENTS OF UTILIZATION

ρf																			
																			0%
ρc		80%				70%				50%				30%			10%		0%
ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	94	
2	109	104	100	97	106	102	99	96	99	96	94	96	94	92	94	92	90	88	
3	104	98	93	89	102	96	92	89	94	90	87	91	88	86	89	87	85	83	
4	99	92	87	83	97	91	86	82	89	85	81	87	83	80	85	82	79	78	
5	94	87	81	77	93	86	81	77	84	79	76	82	78	75	81	77	75	73	
6	90	82	76	72	89	81	76	72	79	75	71	78	74	71	77	73	70	69	
7	86	77	72	68	85	77	71	67	75	71	67	74	70	67	73	69	66	65	
8	82	73	68	64	81	73	67	64	72	67	63	71	66	63	70	66	63	62	
9	78	69	64	60	77	69	64	60	68	63	60	67	63	60	66	62	59	58	
10	75	66	61	57	74	66	60	57	65	60	57	64	60	57	63	59	56	55	

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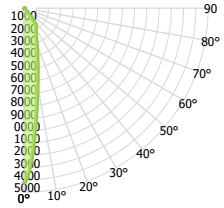
HHJ10-LED-4000L-DIM10-MVOLT-NSPD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **41.1** LUMENS: **4623** EFFICACY: **112** BEAM ANGLE: **19** SPACING CRITERIA: **0.29 x 0.29**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	14248	14248
10°	6340	6305
20°	3009	3005
30°	1923	1912
40°	348	404
50°	63	65
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	305111	305111
45.00°	3804	3776
55.00°	817	895
65.00°	268	263
75.00°	146	145
85.00°	52	34

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	954
10° - 20°	1336
20° - 30°	1148
30° - 40°	978
40° - 50°	165
50° - 60°	31
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	2291	50%
0° - 30°	3438	74%
0° - 40°	4416	98%
0° - 60°	4612	100%
0° - 80°	4620	100%
0° - 90°	4621	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	395.8 fc	2.0 ft	2.1 ft
8.0 ft	222.6 fc	2.7 ft	2.7 ft
10.0 ft	142.5 fc	3.4 ft	3.4 ft
12.0 ft	98.9 fc	4.1 ft	4.1 ft
14.0 ft	72.7 fc	4.7 ft	4.8 ft
16.0 ft	55.7 fc	5.4 ft	5.5 ft
18.0 ft	44.0 fc	6.1 ft	6.2 ft
20.0 ft	35.6 fc	6.8 ft	6.9 ft

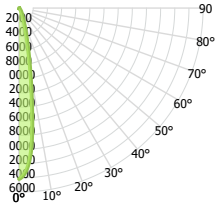
INDOOR COEFFICIENTS OF UTILIZATION

ρf									20%									0%
ρc		80%				70%				50%			30%			10%		0%
ρw	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	111	109	107	111	109	107	105	105	104	102	101	100	99	98	97	96	94
2	109	104	101	98	107	103	99	97	99	97	94	97	94	92	94	92	90	89
3	104	98	94	90	102	97	93	89	94	91	88	92	89	86	90	87	85	84
4	99	93	87	84	98	91	87	83	89	85	82	87	84	81	86	83	80	79
5	95	87	82	78	93	86	82	78	85	80	77	83	79	76	82	78	76	74
6	91	83	77	73	89	82	77	73	81	76	73	79	75	72	78	74	72	70
7	87	79	73	69	86	78	73	69	77	72	69	76	71	68	75	71	68	67
8	83	75	69	66	82	74	69	65	73	69	65	72	68	65	71	68	65	63
9	80	71	66	62	79	71	66	62	70	65	62	69	65	62	68	64	62	60
10	77	68	63	59	76	68	63	59	67	62	59	66	62	59	66	62	59	58

HHJ10-LED-4000L-DIM10-MVOLT-SPD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **41.0** LUMENS: **4184** EFFICACY: **102** BEAM ANGLE: **25** SPACING CRITERIA: **0.28**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	24139	24139
10°	9150	9564
20°	1889	1962
30°	638	664
40°	148	155
50°	24	27
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	516915	516915
45.00°	2241	2201
55.00°	145	152
65.00°	52	52
75.00°	31	31
85.00°	17	15

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	1746
10° - 20°	1484
20° - 30°	592
30° - 40°	275
40° - 50°	74
50° - 60°	10
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3230	77%
0° - 30°	3822	91%
0° - 40°	4097	98%
0° - 60°	4180	100%
0° - 80°	4182	100%
0° - 90°	4182	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	670.5 fc	2.1 ft	2.1 ft
8.0 ft	377.2 fc	2.8 ft	2.8 ft
10.0 ft	241.4 fc	3.4 ft	3.4 ft
12.0 ft	167.6 fc	4.1 ft	4.1 ft
14.0 ft	123.2 fc	4.8 ft	4.8 ft
16.0 ft	94.3 fc	5.5 ft	5.5 ft
18.0 ft	74.5 fc	6.2 ft	6.2 ft
20.0 ft	60.3 fc	6.9 ft	6.9 ft

INDOOR COEFFICIENTS OF UTILIZATION

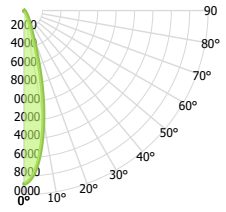
ρf									20%									0%
ρc		80%				70%				50%			30%			10%		0%
ρw	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	97
2	111	108	105	102	109	106	103	101	103	101	99	100	98	97	97	96	95	93
3	108	103	99	97	106	102	98	96	99	97	94	97	95	93	95	93	92	90
4	104	99	95	92	103	98	94	92	96	93	91	94	92	90	92	90	89	87
5	101	95	91	88	100	95	91	88	93	90	87	92	89	87	90	88	86	85
6	98	92	88	85	97	92	88	85	90	87	84	89	86	84	88	85	83	82
7	96	89	85	82	95	89	85	82	88	84	82	87	84	81	86	83	81	80
8	93	87	83	80	92	86	82	80	85	82	79	84	81	79	84	81	79	78
9	91	84	80	78	90	84	80	77	83	80	77	82	79	77	82	79	77	76
10	89	82	78	76	88	82	78	75	81	78	75	80	77	75	80	77	75	74

Due to the changes of constant improvement in LED technology, all details are subject to change without notice. Consult factory for up to date information.

HHJ10-LED-4000L-DIM10-MVOLT-ND-40K-90-HH8-8501-CL-WH

INPUT WATTS: **40.9** LUMENS: **4793** EFFICACY: **117** BEAM ANGLE: **30** SPACING CRITERIA: **0.42**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	18830	18830
10°	12053	12706
20°	2468	2830
30°	746	735
40°	175	170
50°	28	30
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	403217	403217
45.00°	2805	2737
55.00°	166	172
65.00°	63	63
75.00°	37	38
85.00°	20	17

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	1530
10° - 20°	2101
20° - 30°	739
30° - 40°	317
40° - 50°	90
50° - 60°	11
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	3631	76%
0° - 30°	4370	91%
0° - 40°	4687	98%
0° - 60°	4788	100%
0° - 80°	4790	100%
0° - 90°	4790	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	523.0 fc	2.9 ft	2.9 ft
8.0 ft	294.2 fc	3.9 ft	3.8 ft
10.0 ft	188.3 fc	4.9 ft	4.8 ft
12.0 ft	130.8 fc	5.8 ft	5.8 ft
14.0 ft	96.1 fc	6.8 ft	6.7 ft
16.0 ft	73.6 fc	7.8 ft	7.7 ft
18.0 ft	58.1 fc	8.8 ft	8.7 ft
20.0 ft	47.1 fc	9.7 ft	9.6 ft

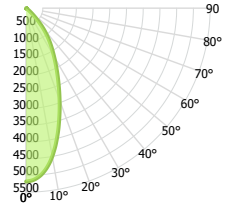
INDOOR COEFFICIENTS OF UTILIZATION

ρf								20%											0%
ρc		80%				70%				50%				30%				10%	0%
ρw	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	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96	
2	111	107	104	101	109	105	103	100	102	100	98	99	98	96	97	95	94	92	
3	107	102	98	95	105	101	97	95	98	95	93	96	94	92	94	92	90	89	
4	103	98	94	91	102	97	93	90	95	92	89	93	90	88	91	89	87	86	
5	100	94	90	86	99	93	89	86	91	88	85	90	87	85	89	86	84	83	
6	97	90	86	83	96	90	86	83	88	85	82	87	84	82	86	83	81	80	
7	94	87	83	80	93	87	83	80	86	82	79	84	81	79	83	81	78	77	
8	91	84	80	77	90	84	80	77	83	79	77	82	79	76	81	78	76	75	
9	89	82	77	74	88	81	77	74	80	77	74	80	76	74	79	76	74	73	
10	86	79	75	72	85	79	75	72	78	74	72	77	74	72	77	74	72	71	

HHJ10-LED-4000L-DIM10-MVOLT-VWD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **41.0** LUMENS: **3990** EFFICACY: **97** BEAM ANGLE: **70** SPACING CRITERIA: **0.69 x 0.69**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	5182	5182
10°	4498	4477
20°	2922	2958
30°	1670	1707
40°	807	850
50°	126	140
60°	0	0
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	110978	110978
45.00°	11801	13149
55.00°	740	1065
65.00°	261	262
75.00°	139	141
85.00°	54	44

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	470
10° - 20°	1090
20° - 30°	1120
30° - 40°	851
40° - 50°	398
50° - 60°	50
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	1560	39%
0° - 30°	2681	67%
0° - 40°	3532	89%
0° - 60°	3979	100%
0° - 80°	3988	100%
0° - 90°	3988	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	144.0 fc	5.3 ft	5.3 ft
8.0 ft	81.0 fc	7.1 ft	7.1 ft
10.0 ft	51.8 fc	8.8 ft	8.8 ft
12.0 ft	36.0 fc	10.6 ft	10.6 ft
14.0 ft	26.4 fc	12.4 ft	12.3 ft
16.0 ft	20.2 fc	14.1 ft	14.1 ft
18.0 ft	16.0 fc	15.9 ft	15.9 ft
20.0 ft	13.0 fc	17.7 ft	17.6 ft

INDOOR COEFFICIENTS OF UTILIZATION

ρf								20%											0%
ρc		80%				70%				50%				30%				10%	0%
ρw	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	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	94	90	86	92	88	85	89	86	83	87	84	82	80	
4	97	89	84	79	95	88	83	79	86	82	78	84	80	77	82	79	76	75	
5	92	83	78	73	90	83	77	73	81	76	72	79	75	72	77	74	71	69	
6	87	78	72	68	86	77	72	68	76	71	67	75	70	67	73	69	66	65	
7	83	73	67	63	82	73	67	63	72	66	63	70	66	62	69	65	62	61	
8	79	69	63	59	78	69	63	59	68	62	59	66	62	58	66	61	58	57	
9	75	65	59	55	74	65	59	55	64	59	55	63	58	55	62	58	55	53	
10	72	62	56	52	71	61	56	52	61	55	52	60	55	52	59	55	52	50	

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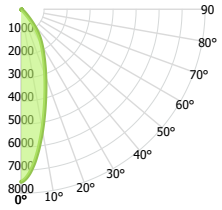
HHJ10-LED-4000L-DIM10-MVOLT-WD-40K-90-HH8-8501-CL-WH

INPUT WATTS: **40.9** LUMENS: **4241** EFFICACY: **104** BEAM ANGLE: **55** SPACING CRITERIA: **0.52**

CANDELA DISTRIBUTION



CANDELA TABLE

	0°	90°
0°	7501	7501
10°	5307	5235
20°	3071	3055
30°	1786	1785
40°	702	725
50°	100	102
60°	8	8
70°	0	0
80°	0	0
90°	0	0

LUMINANCE (cd/sq.m)

	0.00°	90.00°
0.00°	160631	160631
45.00°	8282	9142
55.00°	763	936
65.00°	261	262
75.00°	139	143
85.00°	49	44

LUMENS PER ZONE

ZONE	LUMENS
0° - 10°	620
10° - 20°	1211
20° - 30°	1168
30° - 40°	878
40° - 50°	313
50° - 60°	41
60° - 70°	0
70° - 80°	0
80° - 90°	0

ZONAL LUMEN SUMMARY

ZONE	UMENS	% LUMINAIRE
0° - 20°	1831	43%
0° - 30°	2999	71%
0° - 40°	3877	91%
0° - 60°	4230	100%
0° - 80°	4238	100%
0° - 90°	4239	100%

CONE OF LIGHT

MOUNTING HEIGHT	FC AT BEAM CENTER	BEAM DIA. 0°-180°	BEAM DIA. 90°-270°
6.0 ft	208.4 fc	3.8 ft	3.8 ft
8.0 ft	117.2 fc	5.0 ft	5.1 ft
10.0 ft	75.0 fc	6.3 ft	6.3 ft
12.0 ft	52.1 fc	7.5 ft	7.6 ft
14.0 ft	38.3 fc	8.8 ft	8.8 ft
16.0 ft	29.3 fc	10.1 ft	10.1 ft
18.0 ft	23.2 fc	11.3 ft	11.4 ft
20.0 ft	18.8 fc	12.6 ft	12.6 ft

INDOOR COEFFICIENTS OF UTILIZATION

ρf																				
					20%															0%
ρc		80%				70%				50%			30%				10%			0%
ρw	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	102	102	100
1	114	111	109	106	111	109	107	105	105	103	101	101	100	98	98	97	96	94	94	94	94
2	108	103	100	96	106	102	98	95	99	96	93	96	93	91	93	91	89	88	88	88	88
3	103	97	92	88	101	95	91	87	93	89	86	90	87	85	88	85	83	82	82	82	82
4	98	91	85	81	96	89	84	81	87	83	80	85	82	79	83	80	78	76	76	76	76
5	93	85	79	75	92	84	79	75	82	78	74	81	77	74	79	76	73	71	71	71	71
6	89	80	74	70	87	79	74	70	78	73	69	76	72	69	75	71	68	67	67	67	67
7	84	75	70	66	83	75	69	65	74	69	65	72	68	65	71	67	64	63	63	63	63
8	81	71	66	62	79	71	65	61	70	65	61	69	64	61	68	64	61	59	59	59	59
9	77	68	62	58	76	67	62	58	66	61	58	65	61	58	65	60	57	56	56	56	56
10	74	64	59	55	73	64	58	55	63	58	55	62	58	54	62	57	54	53	53	53	53

Due to the changes of constant improvement in LED technology, all details are subject to change without notice. Consult factory for up to date information.

1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated contol systems
2- Luminaire will be shipped with Sensors installed on the luminaire, allowing for individual luminaire control. Luminaires will be ready to be integrated with designated control systems
3- Luminaire will be shipped with Sensors to be remotely installed on the ceiling. Luminaires will be ready to be integrated with designated control systems

BRAND	EASYFIT by EnOcean	LUTRON	enlighted	LEVITON	OSRAM	PHILIPS EasySense	legrand®
CONTROL UNIT	❏ LEDRU LED Relay Zone Controller 0-10V [1] ❏ LEDDU LED Zone Controller 0-10V [1]	❏ FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminare is shipped Vive Enabled) [14] ❏ A-WN-D01-RF-WH Athena wireless node (RF only)	❏ CU-4E-FMH Fixture Mount Control Unit [15]	❏ ZL027 –N0W Intellect Power Control Module [16] ❏ ZL027 –N0W Intellect Power Control Module [16]	❏ EN-WCM2-ZB-DR Wireless Control Module[17] ❏ EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module [17] ❏ ZBHA-CLM-DIM-ENC Connected Lighting Module DIM [17]	❏ SBR -BS Xitanium SR Bridge [18]	❏ LMFC-011 ON/OFF/0-10V dimming fixture controller [19]
INTEGRAT SENSOR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*WIRELESS OCCUPANCY SENSOR	❏ EOSCU-W-EO Occupancy Sensor - Ceiling Mounted **(Must be specified with LEDRU or LEDDU control unit)** [3]	N/A	N/A	N/A	N/A	N/A	❏ LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor [3]
*WIRELESS DAYLIGHT SENSOR	❏ ELLSU-W-EO Light Level Sensor - Ceiling Mounted **(Must be specified with LEDRU or LEDDU control unit)** [3]	N/A	N/A	N/A	N/A	N/A	❏ LMLS-400 Single zone switching and dimming digital photosensor [3]
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR	N/A	N/A	❏ SU-5E-IoT IoT Node Micro Sensor [3] ❏ SU-5E-CL Connected Lighting Micro Sensor [3] ❏ SU-5E-IL Independent Lighting / Enlighted One Micro Sensor [3] ❏ SU-5S-H-(IoT/CL/IL) Surface Mount Sensor [3] **(Must be specified with CU-4E-FMH Control Unit)**	❏ ZL00J -T0W Intellect Intelligent Fixture Control System [3] **(Must be specified with ZL027 –N0W Control Unit)**	❏ EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor ❏ EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors [3] **(Must be specified with EN-WCM2-ZB-DR or EN-ALC-ZB-BK-DR Control Unit)**	❏ SNS200-CMP SNS200 for grouping [3]	N/A
ACCESORIES	N/A	N/A	❏ TMC-SU-5E Tile Mount Carrier ❏ CBL-5E-CU4-30N 30 inch Sensor Cable for CU-4 and IoT ReadyTM drivers ❏ CBL-5E-CU4-7F 7 foot Sensor Cable for CU-4 and IoT ReadyTM drivers	N/A	N/A	N/A	N/A
NOTES	N/A	4- Luminaire will be compatible with Lutron LRF2-OCR2B-P-WH Ceiling mount360° occupancy/vacancy sensor & LRF2-DCRB-WH Ceiling-mount daylight sensor. Sensors must be ordered through Lutron.	5- Luminaire will be compatible with ENLIGHTED SU-5E-IoT, SU-5E-CL, SU-5E-IL, SU-5S-H, Sensors.	6-Luminaire will be compatible with Leviton Intellect App & Keypad Room Controller	7-Luminaire will be compatible with EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors	8-Luminaire will be compatible with Philips field and wireless switch.	9-Luminaire will be compatiable with DLM Room control system LMPB-100. DLM control system must be orderd through Legrand.

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