



HH6-6501
Flanged Downlight

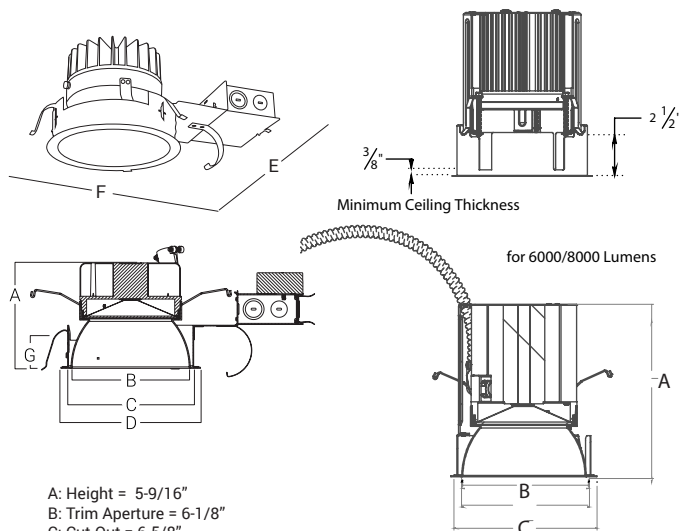


HH6-6507
Flanged Wall Wash



HH6-6577
Flanged Double Wall Wash

REFLECTOR/
FLANGE COLORS



A: Height = 5-9/16"
B: Trim Aperture = 6-1/8"
C: Cut-Out = 6-5/8"
D: Trim Outside Dia = 7-5/16"
E: Width = 7-3/16"
F: Length = 14-3/8"
G: Flange = 3-1/4"

A: Height = 8-5/8"
B: Cut-Out = 6-3/4"
C: Trim Outside Dia = 7-3/8"

NOMINAL LUMENS	DELIVERED LUMENS	WATTAGE
8000	7772	90 W
6000	6696	72 W
5000	5625	61 W
4000	4649	46 W
3000	3339	36 W
2000	2252	22 W
1500	1785	20 W
1200	1422	16 W
900	1065	12 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

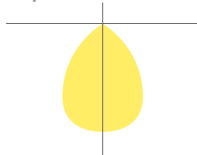
The reflector has a 45° visual cutoff, and is shipped standard with a Solite lens in a smooth frosted finish. Spun from 0.05" thick aluminum, with a 1-step anodized finish, and available in different colors or custom RAL finishes. Reflector flange options include self-flanged and white painted flange.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

LUMENS	900, 1200, 1500, 2000, 3000, 4000, 5000* 1 6000, 8000(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	WD (Wide Distribution), MD (Medium Distribution) and ND (Narrow Distribution)
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, LUTFB, LUT2W, ELDO10.1, ELDDMX.1, ELDDALI.1, DIMTR
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

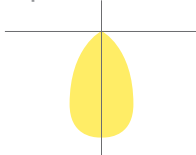
* 5000 Lumens is not ENERGY STAR certified

* Only Available on 85+ CRI

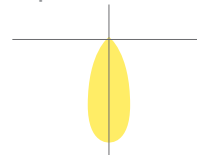
WD: Wide
Candlepower Distribution Curve



MD: Medium
Candlepower Distribution Curve



ND: Narrow
Candlepower Distribution Curve



Reference IES files for additional distribution curve information.



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 fast and easy installation in existing plaster or mechanical ceiling thickness from 1/2" to 1-3/4", with four remodel clips that are easily retractable for luminaire removal, if necessary.

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. Available on all luminaires up to 3000 lumens.

LUTH - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology. Available on all luminaires up to 3000 lumens.

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.

ELD010.1 - 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.

WARRANTY

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

LED DYNAMIC PLATFORM OPTIONS



 Tunable White with Smart White Technology utilizing the Lumenix 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 Lumenitix 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](#))

LISTINGS

c-UL-us - Listed for Wet Location if used with HH6-6501 Trim.

c-UL-us - Listed for Feed Through Wiring.

U.S. Patent No. - D685.118S

Energy Star and California Title 24 compliant

Optional Black color trim is not ENERGYSTAR certified and won't meet the requirement.

Example: **HHR6-LED-4000L-DIM10-MVOLT-MD-40K-90-HH6-6501-CL-WH**

SERIES	LUMENS	DRIVER	VOLTAGE	CCT	EMERGENCY	TRIM TYPE	REFLECTOR/FLANGE COLORS
HHR6-LED	900L 1200L 1500L 2000L 3000L 4000L 5000L⁷ 6000L 8000L	DIM10 DIMTR^{1 5} LUTH^{5 2} LUT2W^{1 5} LUTFTB⁶ ELD010-.1² ELDODALI-.1² ELDODMX-.1²	120 277 MVOLT 347 (DIM10 only)	27K 30K 35K 40K 50K³	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	HH6-6501 Flanged Downlight HH6-6507 Flanged Wall Wash HH6-6577 Flanged Double Wall Wash HH6-6535 Polycarbonate "Dead Front" Trim with Tempered Albalite Lens HH6-6534 Polycarbonate "Dead Front" Trim with Polycarbonate ClearLens	CL-WH CL-SCH SHZ-WH SHZ-SHZ WT-WH WH-WH MB-WH* CL-BK MB-BK* * Black color trim is not ENERGYSTAR certified

¹ **DIMTR** and **LUT2W** are available in 120V only

² LUTH, ELD010-1, ELD0DALI-1, and ELD0DMX-1 are available in 120V and 277V

³ **50K** series are available with 85+ CRI only

⁴ **98+** CRI is available in 27K, 30K and 40K only

⁵ **LUTH** and **LUT2W**, **DIMTR** Available for luminaires up to 4000L

⁶ **LUTFTB** Available for luminaires up to 1500L

⁷ 5000 Lumens is not energy Star certified

-Reference last page for Control Options

HHR6-LED-4000L-DIM10-MVOLT-ND-40K-90-HH6-6501-CL-WH

TEST NO.: **EL1218130**

INPUT WATTS: **46.2**

LUMENS: **4649**

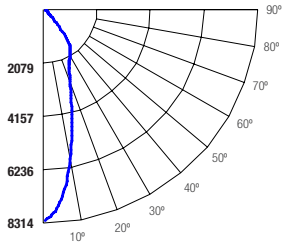
CRI: **90**

EFFICACY: **101**

CCT: **4000K**

SPACING CRITERIA: **0.60**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1918.37	N.A.	41.30
0-30	3045.18	N.A.	65.50
0-40	4085.62	N.A.	87.90
0-60	4618.13	N.A.	99.30
0-80	4646.95	N.A.	100.00
0-90	4649.1	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	20041	53864	48600
55	6940	10524	10384
65	827	3528	5155
75	489	956	995
85	302	1986	2206

Lumens Per Zone

Zone	Lumens
0-10	680.61
10-20	1237.76
20-30	1126.81
30-40	1040.44
40-50	442.60
50-60	89.91
60-70	24.89
70-80	3.93
80-90	2.16

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
8307.41	7519.75	4249.07	2353.57	1799.30	258.74	72.68	6.38	2.31	0.48
0.19									

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

Cone of Light				
2	4	6	8	10
2077	519	231	130	83.1
1.1	2.2	3.4	4.5	5.6
1.2	2.4	3.6	4.8	6
6.7	7.1			
(FT.) Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread	(FT.) Beam Horiz. Spread

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

RC	70%	80%	70%	50%	30%	10%	50%	30%	10%	30%	10%	50%	30%	10%	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	113	111	108	106	111	109	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	80	95	88	83	79	86	82	78	84	80	77	82	79	76	75
5	92	84	78	73	90	83	77	73	81	76	72	79	75	72	78	74	71	70
6	87	79	73	68	86	78	72	68	76	71	68	75	70	67	74	70	67	65
7	83	74	68	64	82	73	68	63	72	67	63	71	66	63	70	66	62	61
8	79	70	64	60	78	69	63	59	68	63	59	67	62	59	66	62	59	57
9	76	66	60	56	74	65	60	56	64	59	56	64	59	56	63	59	55	54
10	72	63	57	53	71	62	57	53	61	56	53	60	56	53	60	55	52	51

RC - Ceiling Cavity Reflectance

RW - Wall Reflectance

HHR6-LED-4000L-DIM10-MVOLT-MD-40K-90-HH6-6501-CL-WH

TEST NO.: **EL1218126**

INPUT WATTS: **46.2**

LUMENS: **4393**

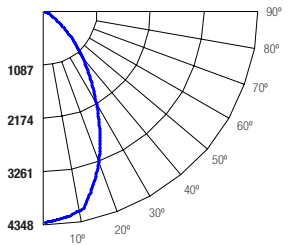
CRI: **90**

EFFICACY: **95**

CCT: **4000K**

SPACING CRITERIA: **0.92**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1489.95	N.A.	33.90
0-30	2726.91	N.A.	62.10
0-40	3722.28	N.A.	84.70
0-60	4355.2	N.A.	99.10
0-80	4391.19	N.A.	100.00
0-90	4393.23	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	41339	57536	56466
55	9497	17462	17670
65	859	3690	8453
75	493	956	976
85	302	1835	2011

Lumens Per Zone

Zone	Lumens
0-10	407.28
10-20	1082.67
20-30	1236.96
30-40	995.37
40-50	505.62
50-60	127.30
60-70	31.99
70-80	4.00
80-90	2.04

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
4298.60	4257.74	3902.42	2658.34	1596.48	533.72	99.46	6.63	2.33	0.48
0.21									

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

Cone of Light				
2	4	6	8	10
1075	269	119	67.2	43
2.2	4.4	6.6	8.9	11.1
2.2	4.5	6.7	9	11.2
13.3	13.5			
(FT.) Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread	(FT.) Beam Horiz. Spread

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

RC	70%	80%	70%	50%	30%	10%	50%	30%	10%	30%	10%	50%	30%	10%	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	113	110	108	105	111	108	106	104	104	102	100	100	99	97	97	96	95	93
2	107	102	98	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	81	77	94	86	81	77	84	79	76	82	78	75	80	77	74	72
5	90	81	75	70	89	80	74	70	78	73	69	77	72	69	75	71	68	67
6	85	76	69	65	84	75	69	65	73	68	64	72	67	64	71	66	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	55	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	54	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

HHR6-LED-4000L-DIM10-MVOLT-WD-40K-90-HH6-6501-CL-WH

TEST NO.: **EL1218125**

INPUT WATTS: **46.3**

LUMENS: **4048**

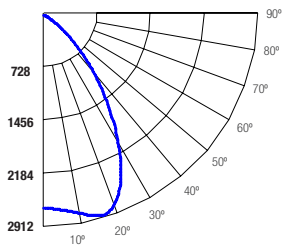
CRI: **90**

EFFICACY: **87**

CCT: **4000K**

SPACING CRITERIA: **1.10**

Candle Power Distribution (Candelas)



Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	1061.46	N.A.	26.20
0-30	2201.23	N.A.	54.40
0-40	3195.67	N.A.	79.00
0-60	3993.78	N.A.	98.70
0-80	4045.66	N.A.	100.00
0-90	4047.62	N.A.	100.00

Luminance (Average candela/M²)

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	67380	63901	57366
55	31338	23228	14462
65	14644	4217	861
75	969	969	476
85	1848	1672	245

Lumens Per Zone

Zone	Lumens
0-10	261.13
10-20	800.34
20-30	1139.76
30-40	994.45
40-50	599.02
50-60	199.09
60-70	47.60
70-80	4.28
80-90	1.95

Candela Tabulation

0	1	2	3	4	5	6	7	8	9
2682.23	2718.78	2842.40	2532.55	1738.20	869.93	328.19	113.00	4.58	2.94
0.21									

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

Cone of Light				
2	4	6	8	10
671	168	74.5	41.9	26.8
2.7	5.4	8.2	10.9	13.6
2.8	5.7	8.5	11.3	14.2
16.3	17			
(FT.) Distance to Plane	(FC.) Initial Footcandle at Nadir	(FT.) Beam Vert. Spread	(FT.) Beam Horiz. Spread	(FT.) Beam Horiz. Spread

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

	RC	80%				70%				50%				30%				10%				0%
	RW	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	70%	50%	30%	10%	0%
ROOM CAVITY RATIO	0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	106	102	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	100	96	92	104	99	95	91	95	92	89	92	90	87	90	87	85	83			
	3	100	92	87	82	98	91	86	81	88	84	80	86	82	79	83	80	77	76			
	4	94	85	74	74	92	84	78	73	89	76	72	78	75	71	77	74	71	69			
	5	88	78	72		86	77	71	66	75	70	66	74	69	65	72	68	64	63			
	6	83	72	65	61	81	71	65	60	70	64	60	68	63	59	67	63	59	57			
	7	78	67	60	55	76	66	60	55	65	59	55	64	58	55	62	58	54	53			
	8	73	62	56	51	72	62	55	51	61	55	50	59	54	50	58	54	50	48			
	9	68	58	51		68	58	51	47	51	47	43	50	46	43	50	46	43	41			
10	65	54	48	43	64	54	48	43	53	47	43	52	47	43	51	46	43	41				

- 1- Luminaire will be shipped with Powerpacks pre-installed, ready to be integrated to designated control 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	☐ FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminaire is shipped Vive Enabled) ¹⁴	☐ CU-4E-FMH Fixture Mount Control Unit ¹⁵	☐ ZL027 –NOW Intellect Power Control Module ¹⁶	☐ EN-WCM2-ZB-DR Wireless Control Module ¹⁷	☐ SBR -BS Xitanium SR Bridge ¹⁸	☐ LMFC-011 ON/OFF/0-10V dimming fixture controller ¹⁹
	☐ LEDDU LED Zone Controller 0-10V ¹	☐ FCJS-ECO Lutron Vive Eco-system Pow Pak (Luminaire is shipped Vive Enabled) ¹⁴		☐ ZL027 –NOW Intellect Power Control Module ¹⁶	☐ EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module ¹⁷		
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 -TOW Intellect Intelligent Fixture Control System ³ (Must be specified with ZL027 –NOW 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
ACCESSORIES	N/A	N/A	☐ TMC-SU-5E Tile Mount Carrier ☐ CBL-5E-CU4-30N 30 inch Sensor Cable for CU-4 and IoT Ready™ drivers ☐ CBL-5E-CU4-7F 7 foot Sensor Cable for CU-4 and IoT Ready™ drivers	N/A	N/A	N/A	N/A
NOTES	N/A	4- Luminaire will be compatible with Lutron LRF2-OCR2B-P-WH Ceiling mount 360° 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 compatible with DLM Room control system LMPB-100. DLM control system must be orderd through Legrand.