

A 900L to 4000L: Height = 9"  
A 6000L to 8000L: Height = 12"  
B: Trim Aperture = 9-5/8"  
C: Cut-Out = 10-1/2"  
D: Trim Outside Dia = 11"  
E: Width = 17-1/2"  
F: Length = 16-1/2"

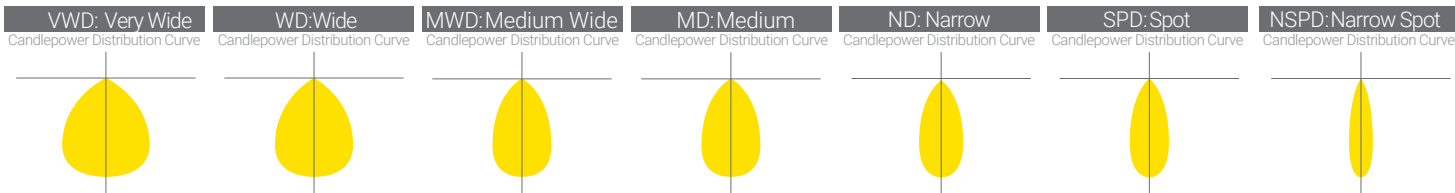
NOMINAL LUMENS	WATTAGE
2000	34 W
1500	24 W
1200	18 W
900	13 W

Based on 3000K, 90+CRI with semi-specular chrome reflector.  
Actual wattage may vary +/-5%

#### DYNAMIC PLATFORM

SMART DIM - Dims to Warm with Smart Dim technology simulates traditional incandescent halogen lighting through dimming, while providing the energy efficiency, high performance and longevity of LED luminaires. When the luminaire dims to warm, it makes a smooth transition across the black body radiator curve. Starting with a 100% lumen output at 3000K, down to a 1% lumen output at 1800K, and maintaining a constant CRI of 90+. It results in rich amber tones as the light dims, encouraging relaxation. An ideal source for hospitality, residential, and assisted living applications.

LUMENS	900, 1200, 1500, 2000
DIMS TO WARM PLATFORMS	100% lumen output at 3000K, down to a 1% lumen output at 1800K
CRI	90+ Standard
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 DIMTR, ELD010-.1, ELDODALI-.1 ELDODMX-.1
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



Reference IES files for additional distribution curve information.





## 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.

## 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 & BRACKET

The downlight mounting frame is a fabricated assembly constructed of 16-gauge steel, with C-channel mounting brackets, included. The versatility of the mounting bracket allows for an adjustability of up to 28" horizontally, and 2-3/4" vertically, locking into place. With the added die-formed construction of the mounting frame, it provides maximum heat dissipation and rust protection.

## DRIVER ELECTRICAL INFORMATION

The LED driver is rated for 50 to 60Hz at 120V/277V 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.

**LUTH** - Lutron LDE1 Hi-Lume Eco System. 1% dimming with Soft in Fade to Black dimming technology.

**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)

## 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



Example: **HH10-LED-WDM-30K-18K-900L-DIM10-120-MD-HH10-1501-CL-WH**

SERIES	LUMENS	DRIVER	VOLTAGE		EMERGENCY	TRIM TYPE	REFLECTOR/TRIM- FINISH
HH10-LED-WDM-30K-18K	<div><input type="checkbox"/> 900L</div> <div><input type="checkbox"/> 1200L</div> <div><input type="checkbox"/> 1500L</div> <div><input type="checkbox"/> 2000L</div>	<div><input type="checkbox"/> DIMTR <sup>1</sup></div> <div><input type="checkbox"/> DIM10</div> <div><input type="checkbox"/> LUTH <sup>2</sup></div> <div><input type="checkbox"/> ELD010-1 <sup>2</sup></div> <div><input type="checkbox"/> ELDODALI-1 <sup>2</sup></div> <div><input type="checkbox"/> ELDODMX-1 <sup>2</sup></div>	<div><input type="checkbox"/> 120</div> <div><input type="checkbox"/> 277</div> <div><input type="checkbox"/> MVOLT</div>		<div><input type="checkbox"/> EMG-LED-10W</div> <div><input type="checkbox"/> EMG-LED-20W</div> <div>Typical lumen output of the luminaire is up to 1000L with EMG-LED-10W option &amp; 2000L with EMG-LED-20W option in emergency mode. Contact the factory for details.</div> <div>Remote mounted installation</div>	<div><input type="checkbox"/> HH10-1501</div> Flanged Downlight	<div><input type="checkbox"/> CL-WH</div> <div><input type="checkbox"/> CL-SCH</div> <div><input type="checkbox"/> SHZ-WH</div> <div><input type="checkbox"/> SHZ-SHZ</div> <div><input type="checkbox"/> WT-WH</div> <div><input type="checkbox"/> WH-WH</div> <div><input type="checkbox"/> MB-WH</div> <div><input type="checkbox"/> CL-BK</div> <div><input type="checkbox"/> MB-BK</div>
						<div><input type="checkbox"/> HH10-1507</div> Flanged Wall Wash	
			<div><input type="checkbox"/> HH10-1577</div> Flanged Double Wall Wash				
			<div>OPTICS</div> <div><input type="checkbox"/> VWD 70°</div> <div><input type="checkbox"/> WD 60°</div> <div><input type="checkbox"/> MWD 52°</div> <div><input type="checkbox"/> MD 36°</div> <div><input type="checkbox"/> ND 30°</div> <div><input type="checkbox"/> SPD 24°</div> <div><input type="checkbox"/> NSPD 15°</div>	<div>CRI</div> <div><input type="checkbox"/> 90+</div>		<div>TRIMLESS</div> <div><input type="checkbox"/> HH10-TL-1501</div> Trimless Downlight-	<div><input type="checkbox"/> SHZ</div> <div><input type="checkbox"/> CL</div>
						<div><input type="checkbox"/> HH10-TL-1507</div> Trimless Wall Wash	

<sup>1</sup> DIMTR is available in 120V only

<sup>2</sup> LUTH, ELD010-1, ELDODALI-1, and ELDODMX-1 are available in 120V and 277V

-Reference last page for Control Options



**HH10-LED-WDM-30K-18K-2000L-MD-HH10-1501-CL-WH**

TEST NO.: **EL031637**

INPUT WATTS: **34.6**

LUMENS: **2103**

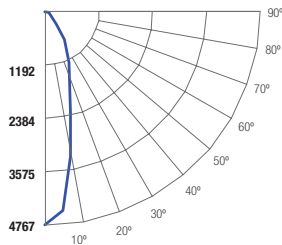
CRI: **90+**

EFFICACY: **61**

CCT: **3000K**

SPACING CRITERIA: **0.54**

**Candle Power Distribution (Candelas)**



Cone of Light		
4.0	298	2.0 ft
8.0	74.5	4.0 ft
12.0	33.1	6.0 ft
16.0	18.6	8.0 ft
20.0	11.9	10.0 ft
24.0	8.28	12.0 ft
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	955.36	46.20	45.40
0-30	1498.75	72.40	71.30
0-40	1902.14	91.90	90.50
0-60	2093.87	101.20	99.60
0-80	2101.89	101.50	100.00
0-90	2102.89	101.60	100.00

**Luminance (Average candela/M²)**

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	3903	2532	7392
55	641	647	1205
65	129	179	629
75	84	151	182
85	52	322	401

**Lumens Per Zone**

Zone	Lumens
0-10	356.12
10-20	599.23
20-30	543.39
30-40	403.39
40-50	162.97
50-60	28.77
60-70	6.29
70-80	1.73
80-90	0.99

**Candela Tabulation**

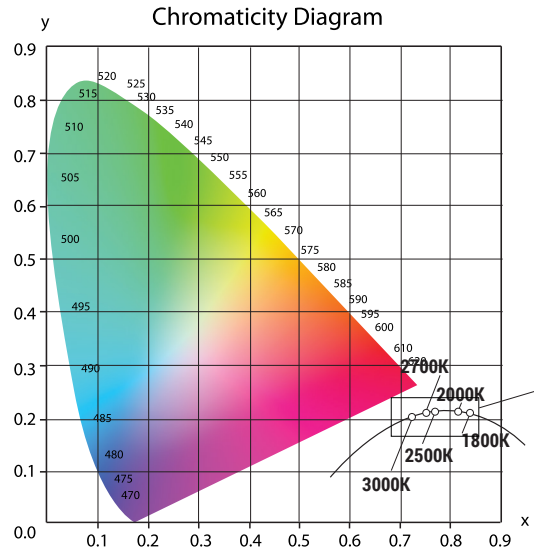
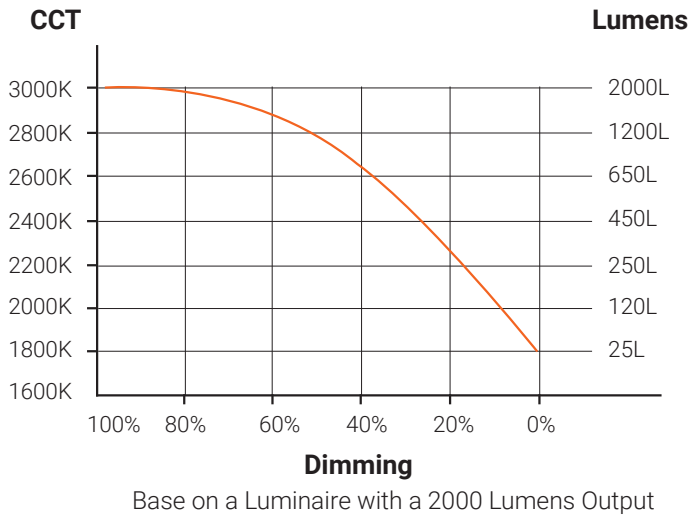
Q	
0	4767.32
5	4477.71
15	2200.10
25	1216.25
35	721.84
45	138.85
55	18.51
65	2.74
75	1.09
85	0.23
90	0.05

**Coefficients of Utilization - Zonal Cavity Method**

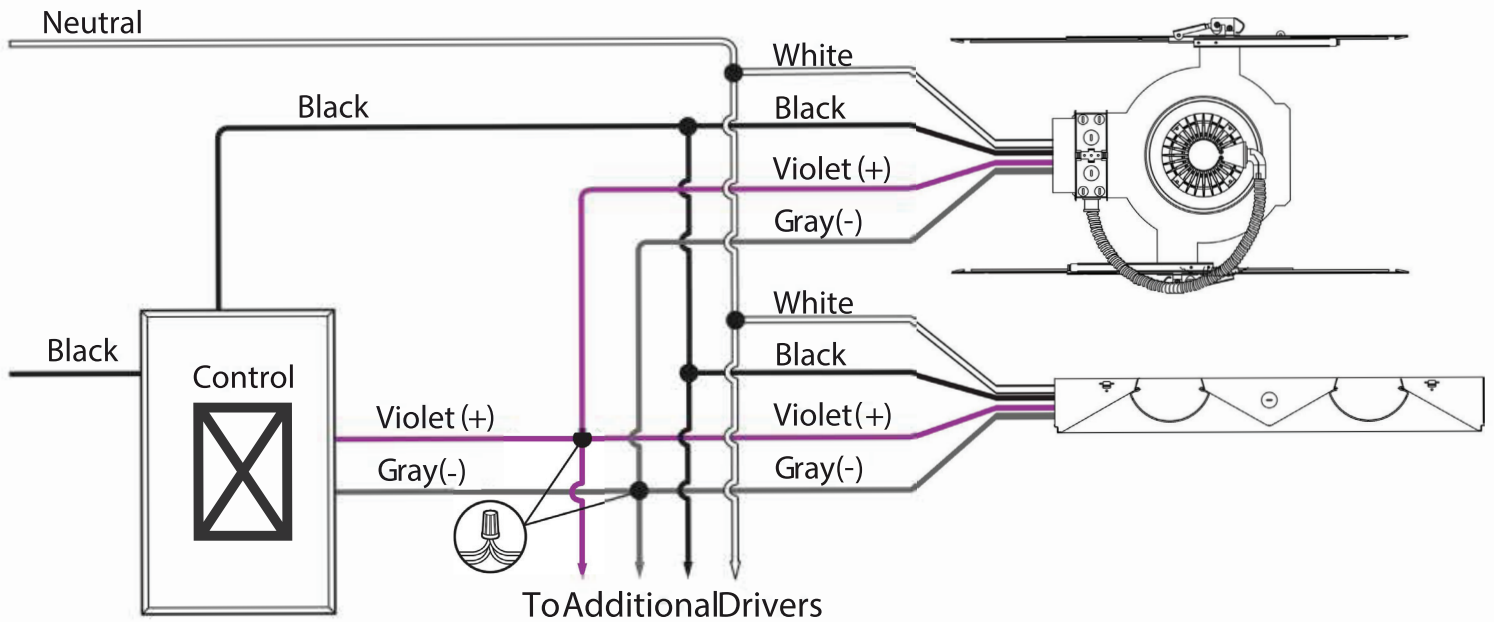
Effective Floor Cavity Reflectance 0.20

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%	50%	30%	10%	50%	30%	10%
0	121	121	121	121	118	118	118	118	113	113	113	108	108	108	104	104	104	102	103	101	100	99	98	97
1	116	113	110	108	113	111	108	106	106	106	105	103	97	95	93	94	93	91	97	95	93	94	93	91
2	110	105	101	98	108	104	100	97	100	97	95	92	89	86	85	82	79	78	92	89	86	90	87	85
3	105	98	94	90	103	97	93	89	94	91	88	87	83	80	78	75	73	72	87	83	80	85	82	79
4	100	92	87	83	98	91	86	82	89	85	81	84	79	76	74	71	69	68	82	78	75	81	77	75
5	95	87	81	77	93	86	81	77	84	79	76	82	78	75	73	70	68	67	78	74	71	77	73	70
6	91	82	76	72	89	81	76	72	80	75	71	78	74	71	68	66	65	64	74	70	67	73	69	66
7	86	77	72	67	85	77	71	67	75	70	67	74	70	67	64	62	61	60	71	66	63	70	66	63
8	83	73	68	64	81	73	67	63	72	67	63	71	66	63	60	58	57	56	67	63	60	66	62	59
9	79	70	64	60	78	69	64	60	68	63	60	67	63	60	57	55	54	53	64	60	57	64	59	56
10	76	66	61	57	75	66	60	57	65	60	57	64	60	57	54	52	51	50	61	57	54	61	56	53

RC - Ceiling Cavity Reflectance RW - Wall Reflectance



## WDM-30K-18K



- 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 <sup>®</sup>	OSRAM	PHILIPS EasySense	legrand <sup>®</sup>
CONTROL UNIT	<input type="checkbox"/> LEDRU LED Relay Zone Controller 0-10V <sup>1</sup>	<input type="checkbox"/> FCJS-010 Lutron Vive 0-10V Individual Pow Pak (Luminare is shipped Vive Enabled) <sup>14</sup>	<input type="checkbox"/> CU-4E-FMH Fixture Mount Control Unit <sup>15</sup>	<input type="checkbox"/> ZL027 -NOW Intellect Power Control Module <sup>16</sup>	<input type="checkbox"/> EN-WCM2-ZB-DR Wireless Control Module <sup>17</sup>	<input type="checkbox"/> SBR -BS Xitanium SR Bridge <sup>18</sup>	<input type="checkbox"/> LMFC-011 ON/OFF/0-10V dimming fixture controller <sup>19</sup>
	<input type="checkbox"/> LEDDU LED Zone Controller 0-10V <sup>1</sup>	<input type="checkbox"/> FCJS-ECO Lutron Vive Eco-system Pow Pak (Luminare is shipped Vive Enabled) <sup>14</sup>		<input type="checkbox"/> ZL027 -NOW Intellect Power Control Module <sup>16</sup>	<input type="checkbox"/> EN- ALC-ZB-BK-DR Wireless Area Lighting Control Module <sup>17</sup>		
INTEGRAT SENSOR	N/A	N/A	N/A	N/A	N/A	N/A	N/A
*WIRELESS OCCUPANCY SENSOR	<input type="checkbox"/> EOSCU-W-EO Occupancy Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) <sup>3</sup>	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/> LMDC-100 Dual technology PIR Ceiling Mount Occupancy Sensor <sup>3</sup>
*WIRELESS DAYLIGHT SENSOR	<input type="checkbox"/> ELLSU-W-EO Light Level Sensor - Ceiling Mounted (Must be specified with LEDRU or LEDDU control unit) <sup>3</sup>	N/A	N/A	N/A	N/A	N/A	<input type="checkbox"/> LMLS-400 Single zone switching and dimming digital photosensor <sup>3</sup>
*WIRELESS OCCUPANCY & DAYLIGHT SENSOR	N/A	N/A	<input type="checkbox"/> SU-5E-IoT IoT Node Micro Sensor <sup>3</sup> <input type="checkbox"/> SU-5E-CL Connected Lighting Micro Sensor <sup>3</sup> <input type="checkbox"/> SU-5E-IL Independent Lighting / Enlighted One Micro Sensor <sup>3</sup> <input type="checkbox"/> SU-5S-H-(IoT/CL/IL) Surface Mount Sensor <sup>3</sup>  (Must be specified with CU- 4E-FMH Control Unit)	<input type="checkbox"/> ZL00J -TOW Intellect Intelligent Fixture Control System <sup>3</sup>  (Must be specified with ZL027 -NOW Control Unit)	<input type="checkbox"/> EN-CLM-PIR-DD-ZB SensiLUM™ Wireless Integrated Sensor <input type="checkbox"/> EN-SCPPH-1500-ZB Wireless Passive Infrared Occupancy and Photo Sensors <sup>3</sup>  (Must be specified with EN-WCM2-ZB-DR or EN- ALC-ZB-BK-DR Control Unit)	<input type="checkbox"/> SNS200- CMP SNS200 for grouping <sup>3</sup>	N/A
ACCESORIES	N/A	N/A	<input type="checkbox"/> TMC-SU-5E Tile Mount Carrier <input type="checkbox"/> CBL-5E-CU4-30N 30 inch Sensor Cable for CU-4 and IoT Ready™ drivers <input type="checkbox"/> 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.