

Tunable White

6" Architectural High Lumen LED Downlight - Remodel















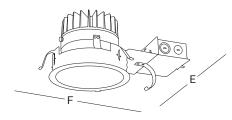


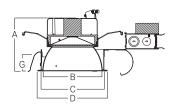












- A: Height = 5-9/16"
- B: Trim Aperture = 6-1/8"
- C: Cut-Out = 6-5/8"
- D: Trim Outside Dia = 7-5/16" E: Width = 7-3/16"
- F: Length = 14-3/8"
- G: Flange = 3-1/4"

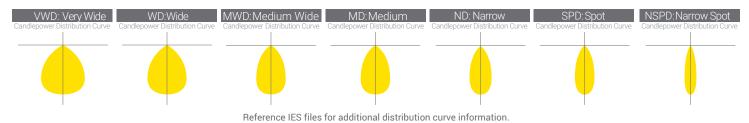
LUMENS	WATTAGES
2500L	30 W
2000L	24 W
1500L	18 W
1200L	14 W
900L	10 W

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

DYNAMIC PLATFORM

SMART WHITE - Tunable White with Smart White technology allows the tuning of luminaires to mimic the natural color patterns throughout the day, enhancing interior office spaces, hospitality, and architectural elements. Tuning of intensity and color in classrooms enables a diversification in student activities, while the use of tunable white technology in healthcare stimulates circadian rhythm, accelerating the healing process. Complementing colors and textures in retail merchandising also has an impact on sales, utilizing the technology to adjust colors throughout the season. A CRI of 90+ is standard, and available on all three platforms. Elite Platform (50K-27K).

LUMENS	Elite Platform: 900, 1200, 1500, 2000 & 2500
TUNABLE WHITE PLATFORM	TWH-50K-27K (50K to 27K) TWH-65K-27K (65K to 27K)
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), MB (Black)
DIMMING	1% Dimming Standard, 0-10V (DIM10), DMX-512 DMX-RDM, BLE, LUTH, DALI
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

















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

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 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

SMART WHITE High Performance platform with a tuning range of 5000K to 2700K (TWH-50K-27K).

Control via DIM10 (0-10V), ELITE-CONNECT 0-10V, LUTRON, DMX512-RDM, DALI

Control via DIM10, ELITE-CONNECT 0 10V, DMX512, DMX-RDM, BLE, DALI Junction box and Driver can be accessed from below the ceiling and above the ceiling. Junction Box is Listed for through branch circuit wiring.

WARRANTY

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

LISTINGS

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

 $\hbox{c-UL-us-Listed for Feed Through Wiring}.\\$

All LED luminaires are rated and tested to LM-79 and LM-80 standards by an! independent laboratory.

U.S Patent No. - D685,118S



Example: HHR6-LED-TWH-50K-27K-900L-DIM10-120-MD-90-HH6-6501-CL-WH

SERIES	LUMENS	DRIVER	VOLTAGE	EMERGENCY	TRIM TYPE	REFLECTOR/TRIM- FINISH	WALL MOUNT CONTROLLER
HHR6-LED-TWH-50K-27K HHR6-LED-TWH-65K-27K	□ 900L □ 1200L □ 1500L □ 2000L □ 2500L	□ DIM10* □ DMX-512 □ DMX-RDM □ DALI □ BLE □ LUTH 2	□ 120 □ 277 □ MVOLT	☐ 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	□ CL-WH □ CL-SCH □ SHZ-WH □ SHZ-SHZ □ WT-WH □ WH-WH □ MB-WH	□ EC-WC-TWH-HW-MVOLT ¹
			OPTICS CRI □ VWD 70° □ 90+ □ WD 60° □ MWD 52° □ MD 36° □ ND 30° □ SPD 24° □ NSPD 15°				

** For D etails Consult Factory

¹ Compatible with Elite 0-10V Platform and LED Engin 0-10V Platform ² (Lutron T Series 2 Channel Tunable White)



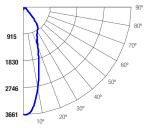
^{*}For 0-10V driver you must dedicate two control inputs, one for the Dimming Control and another for CCT Tuning.



HHR6-LED-TWH-50K-27K-2000L-ND-HH6-6501-CL-WH

INPUT WATTS: 24.8 LUMENS: 2110 EFFICACY: 85 CCT: 4000K SPACING CRITERIA: 0.62

Candle Power Distribution (Candelas)



Cone of Light										
4.0	229	2.4 ft.								
8.0	57.2	4.7 ft.								
12.0	25.4	7.1 ft.								
16.0	14.3	9.5 ft.								
20.0	9.14	11.9 ft.								
24.0	6.35	14.2 ft.								
Distance to Plane	Initial Footcandle at Nadir	Beam diameter								

Zonal Lumens Summary

Zone	Lumens	%Lamp	%Fixt
0-20	843.00	40.00	40.00
0-30	1355.88	64.30	64.30
0-40	1830.06	86.80	86.80
0-60	2090.36	99.10	99.10
0-80	2107.89	99.90	99.90
0-90	2109.51	100.00	100.00

Angle in Degrees	Average 0°	Average 45°	Average 90°
45	10370	22078	22113
55	3384	4790	5351
65	574	1608	2788
75	341	658	762
85	195	1791	1458

Lumens Pe	er Zone	Cande	la Tabulation
Zone	Lumens		<u>0</u>
0-10 10-20 20-30 30-40 40-50 50-60 60-70 70-80 80-90	294.08 548.92 512.88 474.18 212.44 47.87 14.41 3.12 1.62	0 5 15 25 35 45 55 65 75 85	3657.84 3428.30 1967.05 1044.02 807.61 133.88 35.44 4.43 1.61 0.31

Coefficients of Utilization - Zonal Cavity Method

Ellective Floor	Cavity Reflectance 0.20	'
RC	80%	70%

	RC			80%		70%	0			50%	, D		30%	6		10%	6		0%	
	RW	70%	50%	30%	10%	70%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0%	
ROOM CAVITY RATIO	0 1 2 3 4 5 6 7 8 9	0 1 2 3 4 5 6 7 8 9 10	119 113 108 102 97 92 87 83 79 75 71	119 111 103 95 89 83 78 73 69 65 62	119 108 98 90 83 77 72 67 63 59	119 106 95 86 79 73 67 63 59 55	116 111 105 100 95 90 85 81 77 74 70	116 108 101 94 88 82 77 73 68 65 61	116 106 97 89 82 77 71 67 63 59	116 104 94 85 78 72 67 63 59 55 52	111 104 98 91 86 80 76 71 67 64	111 102 94 87 81 75 70 66 62 58	111 101 92 84 77 72 67 62 58 55 52	106 101 95 89 84 79 74 70 66 63 60	106 99 92 86 80 74 70 65 62 58 55	106 98 90 83 77 71 66 62 58 55	102 97 92 87 82 77 73 69 65 62 59	102 96 90 84 78 73 69 65 61 58	102 95 88 82 76 70 66 62 58 54	100 93 86 80 74 69 64 60 56 53 50

RC - Ceiling Cavity Reflectance RW - Wall Reflectance



Tunable White

HHR6-LED 6" Architectural High Lumen LED Downlight - Remodel

CONTROL OPTIONS

With the integration of controls, Elite Lighting now offers its products with controls-ready performance that increases energy efficiency, smarter space planning, and the enhancement of safety and productivity in the workplace. By utilizing these controls, Elite Lighting luminaires enable your customer's facility to run smarter, with the use of an easily controlled system through any platform.

CONTROL PROTOCOLS	SMARTWHITE	LEDENGIN
DELITE-CONNECT (EC-WC-TWH-HW-MVOLT) - Hardwired, 0-10V, 120/277V wall mounted controller for CCT Tuning and Intensity Dimming through Simple Touch screen pad, provided by Elite Lighting. Programmable for up to 3-scenes, with a dimming range down to 1%. Applicable for office spaces, hospitality, educational, healthcare, and retail merchandising.	✓	~
□ DIM10 (0-10V 1% Dimming Standard) In order to Control the Color Tuning and dimming option with 0-10V driver you must dedicate two control inputs, one for the Dimming Control and another for CCT Tuning. Can be dimmed and tuned with 2 wall box dimmers and compatible with most control systems and/or daylight harvesting systems. □ DIM10-LUTRON Compatible with Lutron GRAFIK Eye QS or GRAFIK Eye 3000 by using two GRX-TVI Lutron 0-10V Dimming interfaces; one to tune and another to control dimming. Also compatible with Lutron VIVE system by using two FCJS-010 PowPak or FCJS-ECO EcoSystem PowPak modules per fixture; one to tune and one to control dimming.	*	✓
□ DMX (Available on Elite, LED Engin) - Compatible with Digital Multiplex Controller, Available with two options: DMX-512: Standard DMX Controller and DMX-RDM: DMX Controller with Remote Device Management.	~	~
□ LUTECO Compatible with Lutron EcoSystem. Compatible with Lutron GRAFIK Eye EcoSystem, Lutron Energi Saver node EcoSystem, or Lutron Quantum systems.	~	N/A
□ DALI Compatible with Digital Addressable Lighting Interface, available with two options: DT6 and DT8.	~	*

