HM4DR LED
4.5″ Cleanroom Medical Downlight – Round

Williams®

L10 - L30: 5-3/4″
L40: 6-1/2″

ø4-1/4″

1/2″ min
2-1/4″ max

15″

CATALOG #: _____

TYPE: _____

PROJECT: _____

BUY AMERICAN ACT COMPLIANT · CCEA Approved · IP65 Rated · ISO 5 Class 100 · WET/CC · NSF COMPONENT · TrimLock®

FEATURES

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- Designed to meet the demanding requirements of controlled environments
- Smooth surface trim and lens materials simplify cleaning and maintenance
- NSF-approved gasketing meets all required testing criteria for ISO 5, Class 100 certification
- Anti-microbial finish suppresses the spread of dangerous micro-organisms, mold, and bacterial growth
- Beam angles ranging from 25º narrow to 50º wide for tailored performance
- Easily adjust mounting arms below ceiling to adapt to a range of ceiling thicknesses

SPECIFICATIONS

- HOUSING – Die-cast aluminum trim housing with forged aluminum heat sink. Galvanized steel splice compartment with driver mounting plate/enclosure. Swing-out mounting arms field adjust for ceiling thickness from 1/2″ – 2-1/4″.
- TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- DIE-CAST FINISH – Textured anti-microbial matte white or black polyester TGIC powder coat bonded to phosphate-free, multi-stage pretreated metal.
- ELECTRICAL – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to driver. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours. 50/60 Hz constant current driver.
- MOUNTING – Recessed. 20 ga. galvanized steel mounting pan. Minimum 24″ O.C. marked spacing required for L30 and L40 lumen packages.
- LISTINGS –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for wet locations under covered ceiling. LED light assembly conforms to UL 2108 for remote installation.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - IP65 rated
  - ISO 5, Class 100 rated
  - NSF/ANSI 2
  - City of Chicago Environmental Air approved when specified with CP option. [18]
  - Complies with ASTM-E283 when specified with ATH option.
  - RoHS compliant.
  - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: HM4DR - TL - L20/835 - OPTIONS - DIM - UNV - LW - OF - WH - TRIM OPTIONS - N - F1

← HOUSING → ← TRIM → MOUNT.

HOUSING

SERIES	LUMENS [1]	CRI	CCT	OPTIONS		CONTROL [2]		VOLTAGE
HM4DR - TL TrimLock	L10 1,000lm	8 80	27 2700K	ATH	Airtight construction	DIM	Dimming driver, 0-10V	UNV 120-277V
	L15 1,500lm	9 90	30 3000K	F	Fuse	DIM1	1% Dimming driver, 0-10V	
	L20 2,000lm		35 3500K	EM/7W	7-watt emergency battery [3]			
	L30 3,000lm		40 4000K	EM/10W	10-watt emergency battery [4]			
	L40 4,000lm		50 5000K	CP	Chicago plenum (CCEA) [5]			

TRIM

TRIM TYPE	DISTRIBUTION [6]	FLANGE TYPE	REFLECTOR FINISH		TRIM OPTIONS	
L Flush lens	W Wide	OF 1/2″ standard flange	WH	White texture powder coat	AD	Diffuse acrylic lens [10]
R Regressed lens	50° Flush 50° Regressed		BL	Black texture powder coat	PD	Diffuse 1/8″ polycarbonate lens [11]
	M Medium [7] 35° Flush 30° Regressed		MB	Black texture splay with white flange [9]		
	N Narrow [8] 25° Flush 25° Regressed					

MOUNTING

MOUNTING TYPE [12]

N Open pan for new construction
I IC-rated enclosure for new construction [14]

MOUNTING HARDWARE [13]

F1 Integral 2-position fixed pan bracket, universal bar hanger included [15]
BA1 Adjustable butterfly pan bracket, bar hanger not included [16]
CA1 Adjustable caterpillar pan bracket, universal bar hanger included [17]

NOTES

1. Lumen output based on L Trim Type, W Distribution and WH Reflector Finish, 80 CRI/3500K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2. See page 2 for ADDITIONAL CONTROL OPTIONS.
3. Not IP65 rated. Specify CEC in the option code when California Energy Commission regulations are required.
4. Not IP65 rated. Specify CEC in the option code when California Energy Commission regulations are required.
5. I Mounting Type required. Not NSF approved.
6. Beam angle based on WH Reflector Finish.
7. L30 lumen package max when specified with M or N Distribution.
8. L30 lumen package max when specified with M or N Distribution.
9. R Trim Type only.
10. W Distribution only. Includes smooth clear polycarbonate underlay.
11. W Distribution only. Includes smooth clear polycarbonate underlay.
12. Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 3 for MOUNTING TYPE DETAILS.
13. Additional mounting hardware options available. See page 4 for MOUNTING HARDWARE DETAILS.
14. L15 lumen package max. L20 available, W Distribution only.
15. I Mounting requires external brackets.
16. N Mounting Type only.
17. N Mounting Type only.
18. Not NSF approved.

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FIXTURE PERFORMANCE DATA

	DISTRIBUTION	WATTAGE	FLUSH LENS TRIM TYPE		REGRESSED LENS TRIM TYPE	
			DELIVERED LUMENS	EFFICACY (lm/W)	DELIVERED LUMENS	EFFICACY (lm/W)
L10	W	14.5	992	68	972	67
L10	M	14.5	1317	91	1319	91
L10	N	14.5	1345	93	1299	90
L15	W	22.1	1472	67	1441	65
L15	M	22.1	1953	88	1955	89
L15	N	22.1	1995	90	1927	87
L20	W	26.9	1967	73	1927	72
L20	M	26.9	2610	97	2614	97
L20	N	26.9	2667	99	2576	96
L30	W	41.4	2813	68	2755	67
L30	M	41.4	3732	90	3738	90
L30	N	41.4	3813	92	3683	89
L40	W	55.4	3889	70	3810	69
L40	M	—	—	—	—	—
L40	N	—	—	—	—	—

MULTIPLIER TABLES

COLOR TEMPERATURE

	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
80 CRI	3000K	0.98
80 CRI	3500K	1.00
80 CRI	4000K	1.01
80 CRI	5000K	1.02
90 CRI	2700K	0.76
90 CRI	3000K	0.79
90 CRI	3500K	0.82
90 CRI	4000K	0.84
90 CRI	5000K	0.88

TRIM OPTIONS

CATALOG NUMBER	CONVERSION FACTOR
AD	0.77
PD	0.77

REGRESSED TRIM FINISH

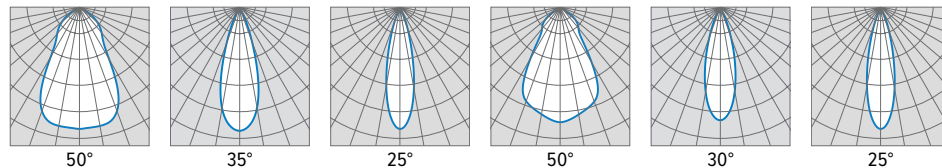| CATALOG NUMBER	CONVERSION FACTOR
WH	1.00
BL	0.79

- Photometrics tested in accordance with IESNA LM-79. Results based on L Trim Type, W Distribution, WH Reflector Finish, 80 CRI/3500K CCT, wattage for 120V through 277V input, and 25ºC ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier tables to calculate additional options.

PHOTOMETRY

HM4DR-TL-L40/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 3889 lumens; 55.4 Watts | Efficacy: 70 lm/W | 80 CRI; 3500K CCT

CANDLEPOWER DISTRIBUTION

— – 0°   —— 90°

VERTICAL ANGLE	HORIZONTAL ANGLE 0º	ZONAL LUMENS
0	2732	
5	2713	259
15	2661	745
25	2076	921
35	967	628
45	695	535
55	463	414
65	250	250
75	106	114
85	19	24
90	1	

LUMEN SUMMARY

ZONE	LUMENS	% FIXTURE
0 - 30	1925	50
0 - 40	2552	66
0 - 60	3501	90
0 - 90	3889	100
0 - 180	3889	100

FLUSH

50°   35°   25°

REGRESSED

50°   30°   25°
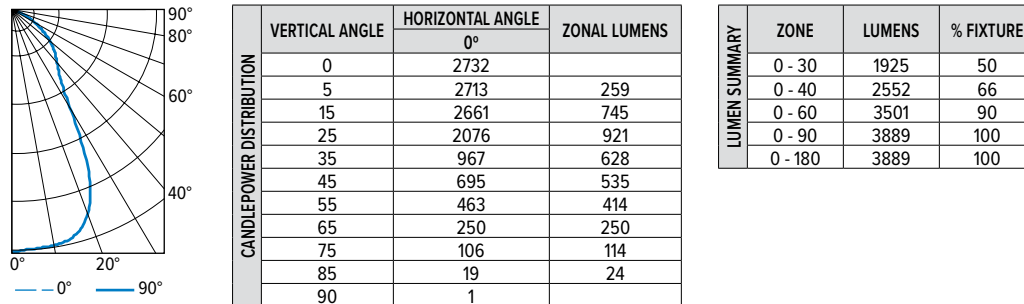
ADDITIONAL CONTROL OPTIONS

Lumen restrictions apply: L15 minimum for DIM LINE driver. I Mounting Type not available with Lutron controls.

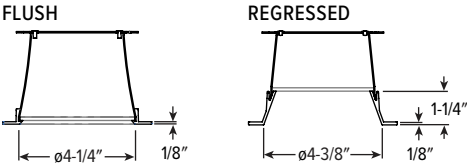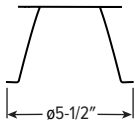| CATALOG NUMBER	DESCRIPTION
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible at 120V only)
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and digital link interface, for use with Lutron Hi-lume 1% EcoSystem dimming LED driver
FCJS/DIM	Lutron Vive PowPak wireless fixture control with dimming driver
FCJS/DIM1	Lutron Vive PowPak wireless fixture control with 1% dimming driver

TRIMLOCK DETAILS

TWIST

PULL

RELEASE

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TRIM TYPE DETAILS

FLUSH

ø4-1/4″ 1/8″

REGRESSED

1-1/4″
ø4-3/8″ 1/8″

FLANGE TYPE DETAILS

ø5-1/2″

Ceiling Cutout: ø5″

REFLECTOR FINISH DETAILS

WH
White

BL
Black

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

4-1/4″
ø5″
6″
12″
15″

IC-RATED

A
C
B
E
ø5″
F
D

	LENGTH					
LUMENS	A	B	C	D	E	F
L10 - L15	15-3/16″	16″	6-3/8″	12-1/8″	9-1/2″	6-1/16″
L20	16-5/8″	17-1/2″	7-7/8″	14″	10-1/4″	7″
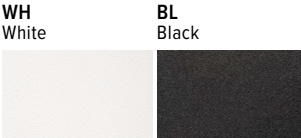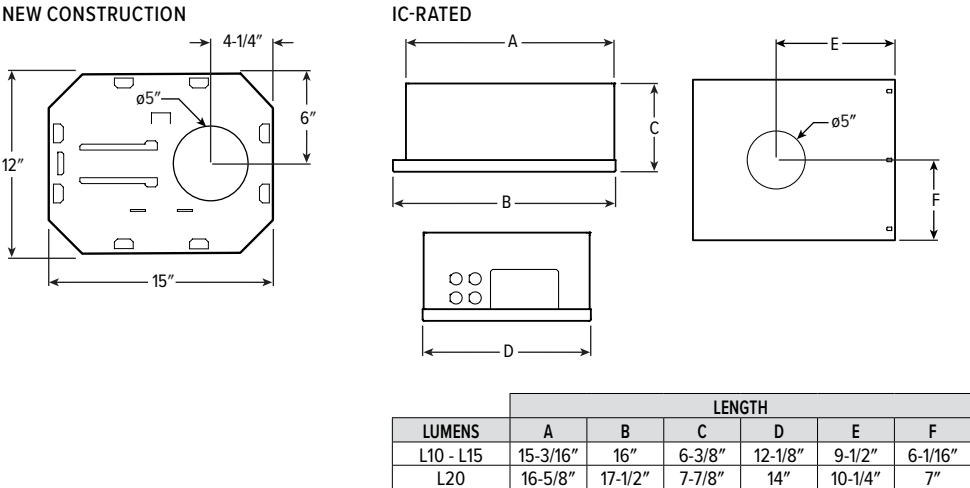
SEE NEXT PAGE FOR MOUNTING HARDWARE DETAILS.

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MOUNTING HARDWARE DETAILS

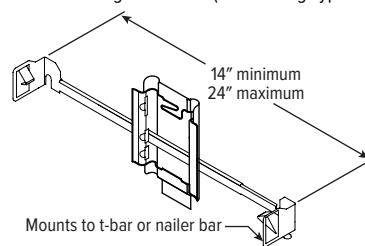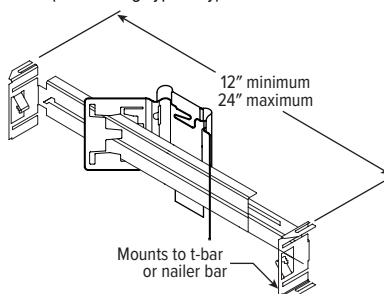**F1**   Integral 2-position fixed pan bracket, universal bar hanger included

14″ minimum
24″ maximum

Mounts to t-bar
or nailer bar

14″ minimum
24″ maximum

Mounts to t-bar
or nailer bar
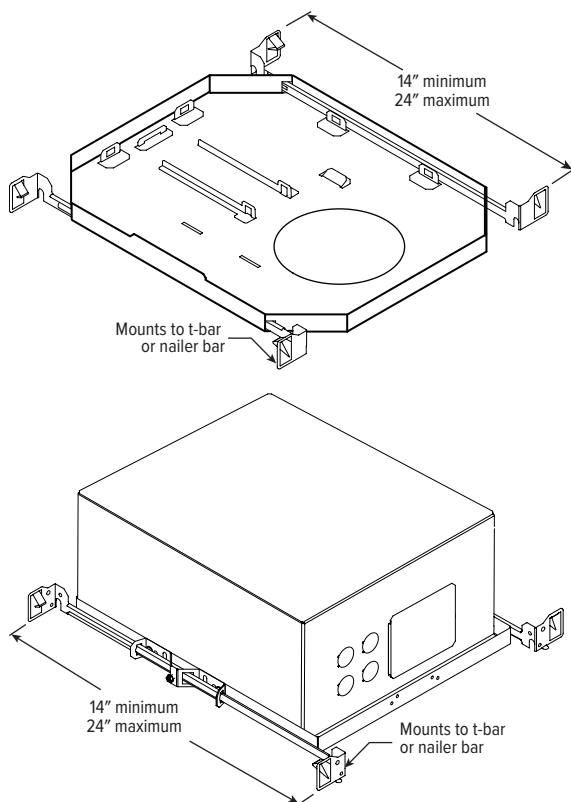
F1 with I Mounting Type

BA1   Adjustable butterfly pan bracket, bar hanger not included (N Mounting Type only)
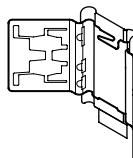
BA2   Adjustable butterfly pan bracket, heavy-duty universal bar hanger included (N Mounting Type only)

12″ minimum
24″ maximum

Mounts to t-bar
or nailer bar

CA1   Adjustable caterpillar pan bracket, universal bar hanger included (N Mounting Type only)

14″ minimum
24″ maximum

Mounts to t-bar or nailer bar

CA2   Adjustable caterpillar pan bracket, t-bar hanger included (N Mounting Type only)

11″ minimum
26″ maximum

Mounts to t-bar