M4PS LED
4.5" MRI Shallow Plenum Downlight – Square

Williams

L10 - L30: 3-3/4″
L40: 5-1/4″

4-1/4″
16-1/4″

Adjusts from 1/2″ min to 1-1/2″ max

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

BUY AMERICAN ACT COMPLIANT

- Designed with non-ferrous materials for MRI imaging suites
- IP65-rated die-cast trim includes easy-to-clean flush lens
- Slim 5″ depth for minimal plenum space applications
- Beam angles ranging from 30º narrow to 75º wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- Square shape accentuates architectural styles
- Spring clip retention system eliminates trim sag
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Industry-leading efficacies as high as 99 lm/W
- Fully room-side accessible

SPECIFICATIONS

- HOUSING – Spun housing with forged aluminum heat sink. Aluminum splice compartment. Trim housing adjusts for ceiling thickness from 1/2″ - 1-1/2″.
- LENSED TRIM – Die-cast aluminum frame with micro-prismatic, acrylic lens.
- ELECTRICAL – High-performance Class 2 C.O.B. LED array. Modular quick-connect plug for easy field-connection of LED light assembly to splice compartment. Reported L70>55,000 hours. Reported L90>55,000 hours. Estimated L70 = 200,000 hours. Remote mounted driver box must be located outside MRI room, RF filter required, provided by others.
- MOUNTING – Recessed. Aluminum mounting pan for new construction or IC-rated enclosure. Minimum 24″ O.C. marked spacing required for L40 lumen package. Remote mounted driver enclosure required, ordered separately, must be located outside MRI room.
- LISTINGS –
  - cCSAus conforms to UL STD 1598; Certified to CAN/CSA STD C22.2 No. 250.0 for damp locations. LED light assembly conforms to UL 2108 for remote installation.
  - Suitable for wet location under covered ceiling when specified with WET/CC option.
  - IC-rated for direct contact with insulation when specified with I Mounting Type.
  - City of Chicago Environmental Air approved when specified with CP option.
  - 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: M4PS - L40/835 - OPTIONS - LW - OF - WH - TRIM OPTIONS - N - F1M
— HOUSING — — TRIM — MOUNT.

HOUSING

SERIES	LUMENS [1]		CRI		CCT		OPTIONS	
M4PS	L10	1,000lm	8	80	27	2700K	ATH	Airtight construction
	L15	1,500lm	9	90 [2]	30	3000K	CP	Chicago plenum (CCEA) [3]
	L20	2,000lm			35	3500K		
	L30	3,000lm			40	4000K		
	L40	4,000lm			50	5000K		

TRIM [4]

TRIM TYPE	DISTRIBUTION [5]		FLANGE TYPE		REFLECTOR FINISH		TRIM OPTIONS	
L Flush lens	W	75° Wide	OF	1/2″ standard flange	CS	Clear semi-specular powder coat	IP	IP65 rated trim
	M	35° Medium			WH	White texture powder coat	AD	Diffuse acrylic lens [7]
	N	30° Narrow	SF	1/4″ mud-in flange [6]	BL	Black texture powder coat	PD	Diffuse 1/8″ polycarbonate lens [8]
							WET/CC	Wet location, covered ceiling listed [9]
							AM	Anti-microbial [10]

MOUNTING

MOUNTING TYPE [11]

N Open pan for new construction
I IC-rated enclosure for new construction [13]

MOUNTING HARDWARE [12]

F1M Factory-installed 2-position fixed pan bracket, universal bar hanger included [14]
BA1M Adjustable butterfly pan bracket, aluminum, bar hanger not included [15]
CA1M Adjustable caterpillar pan bracket, aluminum, universal bar hanger included [16]

REMOTE DRIVER ENCLOSURE (ORDERED SEPARATELY) [17]

ORDERING EXAMPLE: M4PS - RDB1 - L20 - OPTIONS - DIM - UNV

SERIES	DRIVER BOX	DRIVER QTY.		LUMENS		OPTIONS		DRIVER [18]		VOLTAGE	
M4PS	RDB Remote driver enclosure	1	7	L10	1,000lm	EM/10W	10-watt emergency battery [19]	DIM	Dimming driver, 0-10V	UNV	120-277V
		2	8	L15	1,500lm			DIM1	1% Dimming driver, 0-10V	347	347V [22]
		3	9	L20	2,000lm	EM/7W	7-watt emergency battery [20]				
		4	10	L30	3,000lm						
		5	11	L40	4,000lm	F	Fuse kit				
		6	12			SDT	Stepdown transformer [21]				

NOTES

1. Lumen output based on W distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
2. Extended lead times may apply. Consult factory for availability.
3. I Mounting Type required.
4. Trim ships separately.
5. Beam angle based on WH reflector finish.
6. For use with mud-in plaster construction only, supplied with mud flange installation kit. See page 3 for FLANGE TYPE DETAILS. Not available with ATH or IP options.
7. Wide distribution only.
8. Wide distribution only.
9. Not available with PD trim option.
10. WH and BL Reflector Finishes only.
11. Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 3 for MOUNTING TYPE DETAILS.
12. See page 4 for MOUNTING HARDWARE DETAILS.
13. L30 lumen package max.
14. Universal bar hanger ships uninstalled.
15. N Mounting Type only.
16. N Mounting Type only.
17. Required. Ordered as a separate catalog number, ships separately. See page 4 for REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY).
18. All drivers dimmed by single control signal. See page 3 for ADDITIONAL DRIVER OPTIONS.
19. Available with RDB1 only. Not available with L10 lumen package. Specify CEC in the option code when California Energy Commission regulations are required.
20. Specify CEC in the option code when California Energy Commission regulations are required.
21. May be required for 347V, see product builder at hew.com/product-builder.
22. Not available with EM batteries or DMX controls.

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M4PS LED
4.5" MRI Shallow Plenum Downlight – Square

FIXTURE PERFORMANCE DATA

DISTRIBUTION		DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1029	10.7	96
L10	M	1064	10.7	99
L10	N	1030	10.7	96
L15	W	1581	17.2	92
L15	M	1634	17.2	95
L15	N	1581	17.2	92
L20	W	2058	23.5	88
L20	M	2127	23.5	91
L20	N	2059	23.5	88
L30	W	3087	33.2	93
L30	M	3191	33.2	96
L30	N	3088	33.2	93
L40	W	4116	44.7	92
L40	M	4261	44.7	95
L40	N	4122	44.7	92

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

CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25ºC ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, actual lumens 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

M4PS-L40/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 4116 lumens; 44.7 Watts | Efficacy: 92.0 lm/W | 80 CRI; 3500K CCT
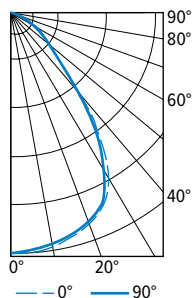
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2316	2316	2316	
5	2315	2303	2302	220
15	2232	2221	2065	629
25	2087	2092	2065	964
35	1483	1764	1441	1016
45	667	1028	644	620
55	382	429	367	358
65	208	205	203	205
75	88	87	87	93
85	13	12	10	12
90	0	0	0	

| ZONE	LUMENS	% FIXTURE
0 - 30	1813	44
0 - 40	2829	69
0 - 60	3806	93
0 - 90	4116	100
0 - 180	4116	100

M4PS-L40/835-DIM-UNV-LM-OF-WH Total Luminaire Output: 4261 lumens; 44.7 Watts | Efficacy: 95.3 lm/W | 80 CRI; 3500K CCT
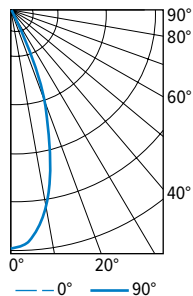
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	9143	9143	9143	
5	8842	8817	8847	842
15	6053	6054	6011	1714
25	2094	2085	2088	967
35	611	616	649	388
45	226	244	238	182
55	100	111	103	93
65	48	52	52	50
75	21	21	24	22
85	1	3	2	2
90	0	0	0	

ZONE	LUMENS	% FIXTURE
0 - 30	3523	83
0 - 40	3911	92
0 - 60	4186	98
0 - 90	4261	100
0 - 180	4261	100

M4PS-L40/835-DIM-UNV-LN-OF-WH Total Luminaire Output: 4122 lumens; 44.7Watts | Efficacy: 92.2 lm/W | 80 CRI; 3500K CCT
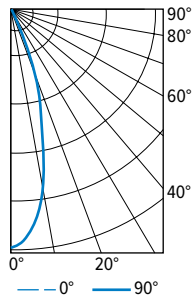
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	10746	10746	10746	
5	10121	10033	10007	958
15	5673	5741	5643	1618
25	1750	1904	1859	850
35	485	522	550	324
45	208	221	228	170
55	118	129	125	112
65	57	67	63	63
75	22	26	26	26
85	0	2	3	2
90	0	0	0	

ZONE	LUMENS	% FIXTURE
0 - 30	3425	83
0 - 40	3750	91
0 - 60	4031	98
0 - 90	4122	100
0 - 180	4122	100

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M4PS LED
4.5" MRI Shallow Plenum Downlight – Square

FLANGE TYPE DETAILS

1/2" STANDARD

5-1/2"

Ceiling Cutout: 5"

1/4" MUD-IN

5"

Ceiling Cutout: 5-1/2"

MUD FLANGE MOUNTING KIT (SLIM FLANGE TYPE)

1/8"   1/2"

5-3/16"

8"
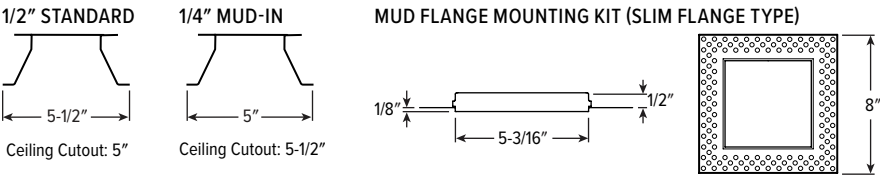
REFLECTOR FINISH DETAILS

CS
Clear semi-specular

WH
White

BL
Black

MOUNTING TYPE DETAILS

NEW CONSTRUCTION

12-1/16"

2"

16-1/4"

IC-RATED

A

C

B

D

	LENGTH			
LUMENS	**A**	**B**	**C**	**D**
L10 - L20	15-3/16"	16"	4-1/8"	12-1/8"
L30	15-3/16"	16"	5-7/8"	12-1/8"
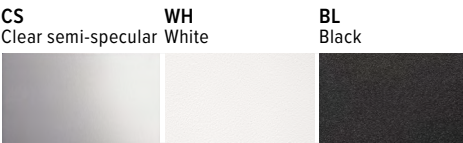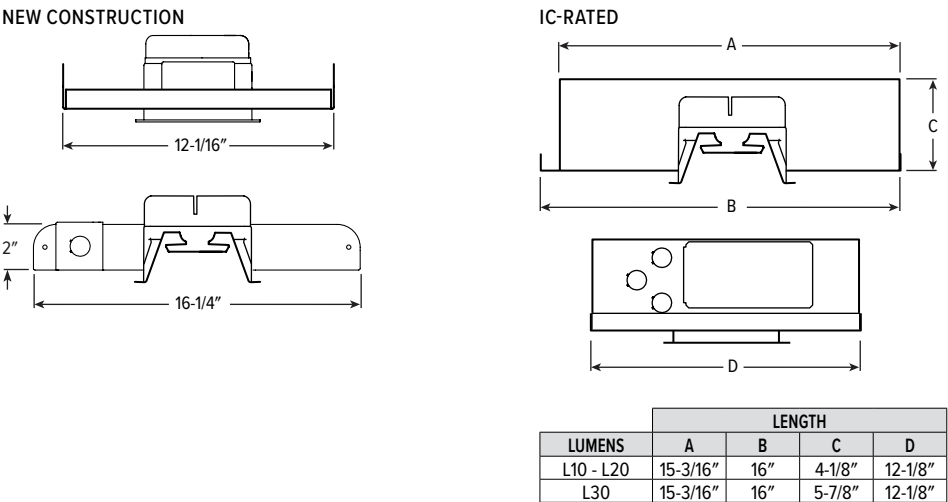
ADDITIONAL DRIVER OPTIONS

Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers. 347V may require stepdown transformer, see product builder at hew.com/product-builder. 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
DA	Dimming driver with 12V auxiliary
DMX	0.1% dimming driver for DMX controls
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

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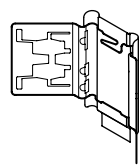REV.06/07/23.LA

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M4PS LED
4.5" MRI Shallow Plenum Downlight – Square

MOUNTING HARDWARE DETAILS

F1M Factory-installed 2-position fixed pan bracket, universal bar hanger included

14" minimum
24" maximum

Mounts to t-bar or nailer bar
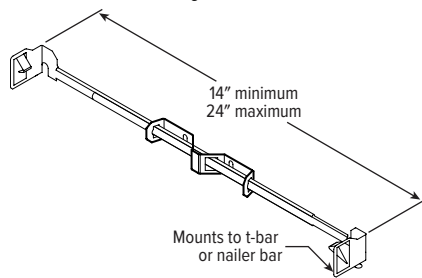
BA1M Adjustable butterfly pan bracket, aluminum, bar hanger not included (N Mounting Type only)

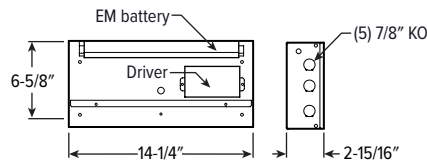**CA1M** Adjustable caterpillar pan bracket, aluminum, universal bar hanger included (N Mounting Type only)

14" minimum
24" maximum

Mounts to t-bar or nailer bar
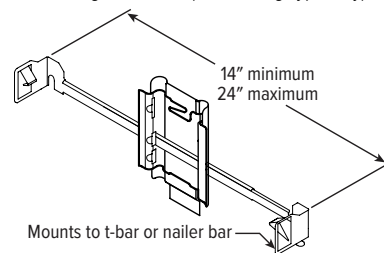
REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY)

REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE

Driver
(5) 7/8" KO
5-1/8"
6-1/2"
1-9/16"
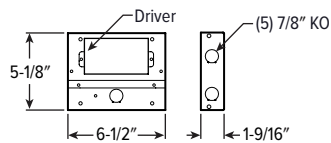
REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE WITH EMERGENCY BATTERY

EM battery
(5) 7/8" KO
Driver
6-5/8"
14-1/4"
2-15/16"

REMOTE DRIVER ENCLOSURE FOR 2 - 8 FIXTURES

(4) blade holders
(2) drivers per blade
(12) 7/8" KO
16"
2" hole
12-1/16"
4-3/4"
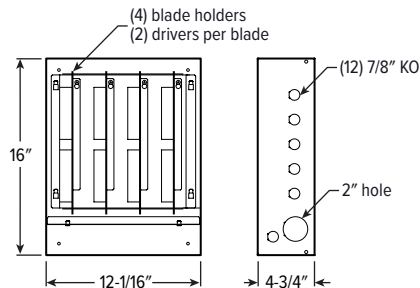
REMOTE DRIVER ENCLOSURE FOR 9 - 12 FIXTURES

(6) blade holders
(2) drivers per blade
(16) 7/8" KO
16"
2" hole
18-1/16"
4-3/4"

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