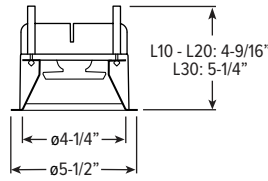


# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round



Pan Size: 12-1/16" x 16-1/4"

CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

## FEATURES

### TrimLock™

- Williams TrimLock reflector retention system eliminates trim sag
- 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 25° narrow to 65° wide for tailored performance
- 4 inch aperture is unobtrusive in small scale spaces
- Contemporary design provides glare-free illumination for a soft ceiling appearance
- Industry-leading efficacies as high as 100 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".
- TRIMLOCK** – Innovative TrimLock reflector retention system ensures the trim remains flush with the ceiling plane.
- LENSED TRIM** – Die-cast aluminum frame with micro-prismatic, tempered glass 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.
- MOUNTING** – Recessed. Aluminum mounting pan for new construction or IC-rated enclosure. Minimum 24" O.C. marked spacing required for L30 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.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE:<sup>[1]</sup> **M4PR - TL - L20/835 - OPTIONS** - **LW - OF - WH - TRIM OPTIONS** - **N - F1M**  
 HOUSING TRIM MOUNT.

## HOUSING

SERIES	LUMENS <sup>[2]</sup>	CRI	CCT	OPTIONS
<b>M4PR - TL</b>	<b>L10</b> 1,000lm	<b>8</b> 80	<b>27</b> 2700K	<b>ATH</b> Airtight construction <sup>[3]</sup>
TrimLock	<b>L15</b> 1,500lm	<b>9</b> 90	<b>30</b> 3000K	<b>CP</b> Chicago plenum (CCEA) <sup>[4]</sup>
	<b>L20</b> 2,000lm		<b>35</b> 3500K	
	<b>L30</b> 3,000lm		<b>40</b> 4000K	

## TRIM

TRIM TYPE	DISTRIBUTION <sup>[5]</sup>	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	<b>W</b> 65° Wide <b>M</b> 35° Medium <b>N</b> 25° Narrow	<b>OF</b> 1/2" standard flange <b>SF</b> 1/4" mud-in flange <sup>[6]</sup>	<b>CS</b> Clear semi-specular powder coat <b>WH</b> White texture powder coat <b>BL</b> Black texture powder coat	<b>IP</b> IP65 rated trim <b>AD</b> Diffuse acrylic lens <sup>[7]</sup> <b>PD</b> Diffuse 1/8" polycarbonate lens <sup>[8]</sup> <b>WET/CC</b> Wet location, covered ceiling listed <sup>[9]</sup>

## MOUNTING

MOUNTING TYPE <sup>[10]</sup>	MOUNTING HARDWARE <sup>[11]</sup>
<b>N</b> Open pan for new construction	<b>F1M</b> 2-Position fixed pan bracket, aluminum, universal bar hanger included
<b>I</b> IC-rated enclosure for new construction <sup>[12]</sup>	<b>BA1M</b> Adjustable butterfly pan bracket, aluminum, bar hanger not included <sup>[13]</sup>
	<b>CA1M</b> Adjustable caterpillar pan bracket, aluminum, universal bar hanger included

## REMOTE DRIVER ENCLOSURE (ORDERED SEPARATELY)<sup>[14]</sup>

ORDERING EXAMPLE: **M4PR - RDB1 - L20 - OPTIONS - DIM - UNV**

SERIES	DRIVER BOX	DRIVER QTY.	LUMENS	OPTIONS	DRIVER <sup>[15]</sup>	VOLTAGE
<b>M4PR</b>	<b>RDB</b> Remote driver enclosure	<b>1</b> <b>7</b>	<b>L10</b> 1,000lm	<b>EM/12W</b> 12-watt emergency battery <sup>[16]</sup>	<b>DIM</b> Dimming driver, 0-10V <b>DIM1</b> 1% Dimming driver, 0-10V	<b>UNV</b> 120-277V <b>347</b> 347V <sup>[18]</sup>
		<b>2</b> <b>8</b>	<b>L15</b> 1,500lm			
		<b>3</b> <b>9</b>	<b>L20</b> 2,000lm	<b>F</b> Fuse kit <b>SDT</b> Stepdown transformer <sup>[17]</sup>		
		<b>4</b> <b>10</b>	<b>L30</b> 3,000lm			
		<b>5</b> <b>11</b>				
		<b>6</b> <b>12</b>				

## NOTES

- Housing, trim, and mounting ship separately.
- Nominal lumen output based on N distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- I Mounting Type required.
- I Mounting Type required.
- Beam angle based on WH reflector finish.
- 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, CP or IP options.
- Wide distribution only.
- Wide distribution only.
- Reduces lumen output, use .85 multiplier.
- Mounting hardware required, ordered separately, see MOUNTING HARDWARE ordering info. See page 3 for MOUNTING TYPE DETAILS.
- See page 4 for MOUNTING HARDWARE DETAILS.
- L20 lumen package max.
- N Mounting Type only.
- Required. Ordered as a separate catalog number, ships separately. See page 4 for REMOTE DRIVER ENCLOSURE DETAILS.
- All drivers dimmed by single control signal. See page 3 for ADDITIONAL DRIVER OPTIONS.
- Available with RDB1 only.
- May be required for 347V, see product builder at [hew.com](http://hew.com).
- Not available with EM batteries.



# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round

## FIXTURE PERFORMANCE DATA

LED PACKAGE	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	921	10.7	85.9
	M	1072	10.7	100.0
	N	1064	10.7	99.2
L15	W	1405	16.7	84.1
	M	1636	16.7	97.9
	N	1624	16.7	97.1
L20	W	1830	22.8	80.4
	M	2130	22.8	93.6
	N	2114	22.8	92.9
L30	W	3127	46.6	67.1
	M	3538	46.6	75.9
	N	3516	46.6	75.5

## MULTIPLIER TABLES

COLOR TEMPERATURE	
CCT	CONVERSION FACTOR
2700K	0.95
3000K	0.96
3500K	1.00
4000K	1.01

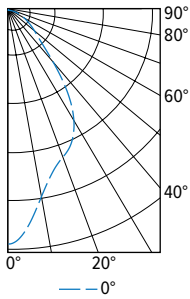
  

80 CRI	2700K	0.74
	3000K	0.85
	3500K	0.90
	4000K	0.91

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is based on 120V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

## PHOTOMETRY

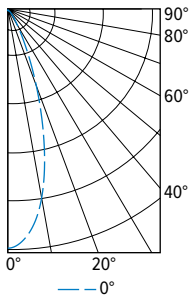
**M4PR-TL-L20/835-DIM-UNV-LW-OF-WH** Total Luminaire Output: 1830 lumens; 22.8 Watts | Efficacy: 80.4 lm/W | 82.7 CRI; 3565K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	1465	
	5	1365	91
	15	1057	167
	25	926	222
	35	663	187
	45	304	10
	55	178	73
	65	104	45
	75	52	22
	85	13	4
	90	2	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1253	69
	0 - 60	1656	91
	0 - 90	1830	100
	0-180	1830	100

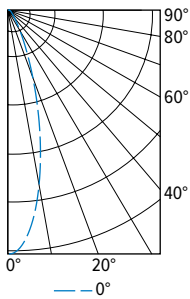
**M4PR-TL-L20/835-DIM-UNV-LM-OF-WH** Total Luminaire Output: 2130 lumens; 22.8 Watts | Efficacy: 93.6 lm/W | 82.7 CRI; 3560K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	5004	
	5	4751	315
	15	2968	390
	25	1007	187
	35	302	79
	45	125	42
	55	64	26
	65	37	16
	75	19	8
	85	5	2
	90	1	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1910	90
	0 - 60	2067	97
	0 - 90	2130	100
	0-180	2130	100

**M4PR-TL-L20/835-DIM-UNV-LN-OF-WH** Total Luminaire Output: 2114 lumens; 22.8Watts | Efficacy: 92.9 lm/W | 82.6 CRI; 3545K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE	ZONAL LUMENS
		0°	
	0	7096	
	5	6408	398
	15	3003	366
	25	802	144
	35	222	59
	45	105	37
	55	63	26
	65	38	17
	75	19	8
	85	4	1
	90	1	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 40	1912	90
	0 - 60	2051	97
	0 - 90	2114	100
	0-180	2114	100

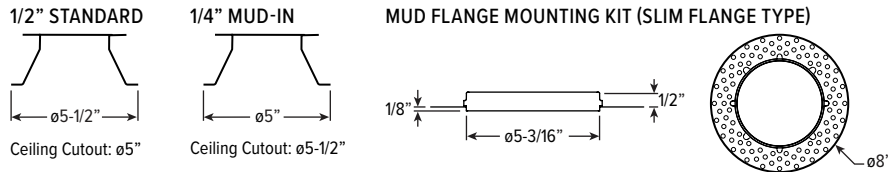


# M4PR<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Round

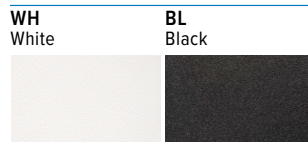
## TRIMLOCK DETAILS



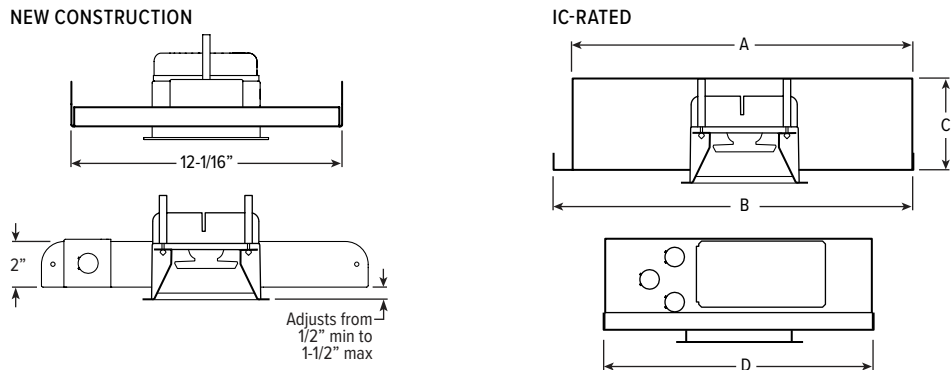
## FLANGE TYPE DETAILS



## REFLECTOR FINISH DETAILS



## MOUNTING TYPE DETAILS



LUMENS	LENGTH			
	A	B	C	D
L10 - L20	15-3/16"	16"	4-1/8"	12-1/8"

## ADDITIONAL DRIVER OPTIONS

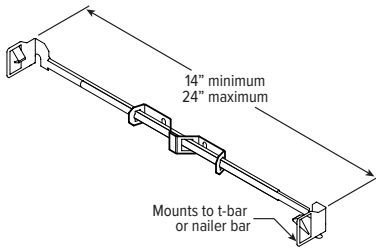
Lumen restrictions apply: L20 max for DMX driver, L20 max for Lutron drivers. 347V may require stepdown transformer, see product builder at [hew.com](http://hew.com).

CATALOG NUMBER	DESCRIPTION
<b>DIM</b>	Dimming driver prewired for 0-10V low voltage applications
<b>DIM1</b>	1% dimming driver prewired for 0-10V low voltage applications
<b>DMX</b>	0.1% dimming driver for DMX controls
<b>LTE LINE</b>	Lutron Hi-Lume® A-Series 1% dimming driver for forward phase line voltage controls (120V only)
<b>LDE1</b>	Lutron EcoSystem® H-Series 1% dimming driver for EcoSystem® controls
<b>LDE5</b>	Lutron EcoSystem® 5-Series 5% dimming driver for EcoSystem® controls
<b>ELDO SOLOB</b>	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
<b>ELDO SOLOB DALI</b>	EldoLED Solodrive, 0.1% dimming driver for DALI controls
<b>ELDO ECO1</b>	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
<b>ELDO ECO1 DALI</b>	EldoLED Ecodrive, 1% dimming driver for DALI controls

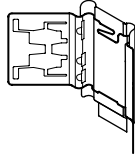
# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round

## MOUNTING HARDWARE DETAILS

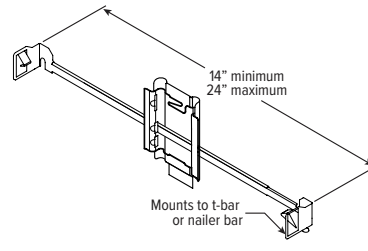
**F1M** 2-Position fixed pan bracket, aluminum, universal bar hanger included



**BA1M** Adjustable butterfly pan bracket, aluminum, bar hanger not included

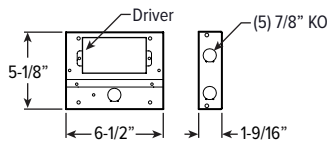


**CA1M** Adjustable caterpillar pan bracket, aluminum, universal bar hanger included

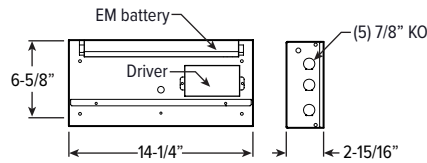


## REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY)

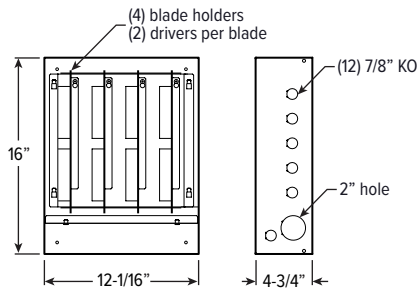
Remote driver enclosure for single fixture



Remote driver enclosure for single fixture with EM/12W



Remote driver enclosure for 2 - 8 fixtures



Remote driver enclosure for 9 - 12 fixtures

