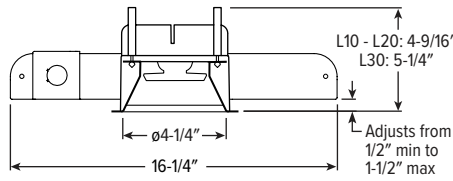


# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round



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

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

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

## FEATURES

### TrimLock®

- Innovative TrimLock reflector retention system ensures trim remains flush with ceiling plane
- 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
- 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, 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 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:** M4PR - TL - L20/835 - OPTIONS - LW - OF - WH - TRIM OPTIONS - N - F1M

HOUSING
TRIM
Mount

## HOUSING

SERIES	LUMENS <sup>(1)</sup>	CRI	CCT	OPTIONS
M4PR - TL	L10 1,000lm	8 80	27 2700K	ATH Airtight construction
TrimLock	L15 1,500lm	9 90 <sup>(2)</sup>	30 3000K	CP Chicago plenum (CCEA) <sup>(3)</sup>
	L20 2,000lm		35 3500K	
	L30 3,000lm		40 4000K	
			50 5000K	

## TRIM<sup>(4)</sup>

TRIM TYPE	DISTRIBUTION <sup>(5)</sup>	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W 65° Wide M 35° Medium N 25° Narrow	OF 1/2" standard flange SF 1/4" mud-in flange <sup>(6)</sup>	CS Clear semi-specular powder coat WH White texture powder coat BL Black texture powder coat	IP IP65 rated trim AD Diffuse acrylic lens <sup>(7)</sup> PD Diffuse 1/8" polycarbonate lens <sup>(8)</sup> WET/CC Wet location, covered ceiling listed <sup>(9)</sup> AM Anti-microbial <sup>(10)</sup>

## MOUNTING

MOUNTING TYPE <sup>(11)</sup>	MOUNTING HARDWARE <sup>(12)</sup>
N Open pan for new construction	F1M Factory-installed 2-position fixed pan bracket, universal bar hanger included <sup>(14)</sup>
I IC-rated enclosure for new construction <sup>(13)</sup>	BA1M Adjustable butterfly pan bracket, aluminum, bar hanger not included <sup>(15)</sup> CA1M Adjustable caterpillar pan bracket, aluminum, universal bar hanger included <sup>(16)</sup>

## REMOTE DRIVER ENCLOSURE (ORDERED SEPARATELY)<sup>(17)</sup>

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

SERIES	DRIVER BOX	DRIVER QTY.	LUMENS	OPTIONS	DRIVER <sup>(18)</sup>	VOLTAGE
M4PR	RDB Remote driver enclosure	1 7 2 8 3 9 4 10 5 11 6 12	L10 1,000lm L15 1,500lm L20 2,000lm L30 3,000lm	EM/10W 10-watt emergency battery <sup>(19)</sup> EM/7W 7-watt emergency battery F Fuse kit SDT Stepdown transformer <sup>(20)</sup>	DIM Dimming driver, 0-10V DIM1 1% Dimming driver, 0-10V	UNV 120-277V 347 347V <sup>(21)</sup>

## NOTES

- Nominal lumen output based on N distribution and WH finish, 3500K/80CRI. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- Extended lead times may apply. Consult factory for availability.
- I Mounting Type required.
- Trim ships separately.
- 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 or IP options.
- Wide distribution only.
- Wide distribution only.
- Not available with PD trim option.
- WH and BL Reflector Finishes only.
- 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.
- Universal bar hanger ships uninstalled.
- N Mounting Type only.
- I Mounting Type only.
- Required. Ordered as a separate catalog number, ships separately. See page 4 for REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY).
- All drivers dimmed by single control signal. See page 3 for ADDITIONAL DRIVER OPTIONS.
- Available with RDB1 only. Not available with L10 lumen package.
- May be required for 347V, see product builder at [hew.com](http://hew.com).
- Not available with EM batteries or DMX controls.

# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round

## FIXTURE PERFORMANCE DATA

	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

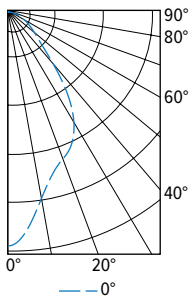
	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	2700K	0.92
	3000K	0.98
	3500K	1.00
	4000K	1.01
90 CRI	2700K	0.76
	3000K	0.79
	3500K	0.82
	4000K	0.84
	5000K	0.88

TRIM	
CATALOG NUMBER	CONVERSION FACTOR
AD	0.85
PD	0.85

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C 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

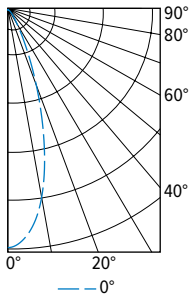
M4PR-TL-L20/835-DIM-UNV-LW-OF-WH Total Luminaire Output: 1830 lumens; 22.8 Watts | Efficacy: 80.4 lm/W | 82.7 CRI; 3565K CCT



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

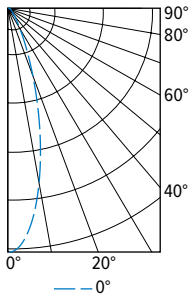
M4PR-TL-L20/835-DIM-UNV-LM-OF-WH Total Luminaire Output: 2130 lumens; 22.8 Watts | Efficacy: 93.6 lm/W | 82.7 CRI; 3560K CCT



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

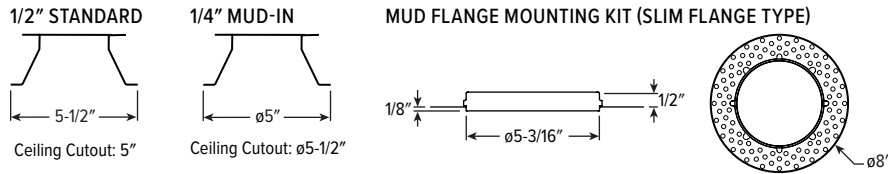


# M4PR<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Round

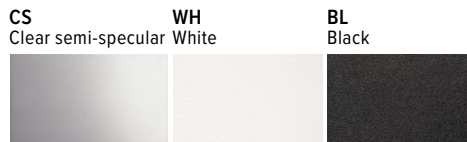
## TRIMLOCK DETAILS



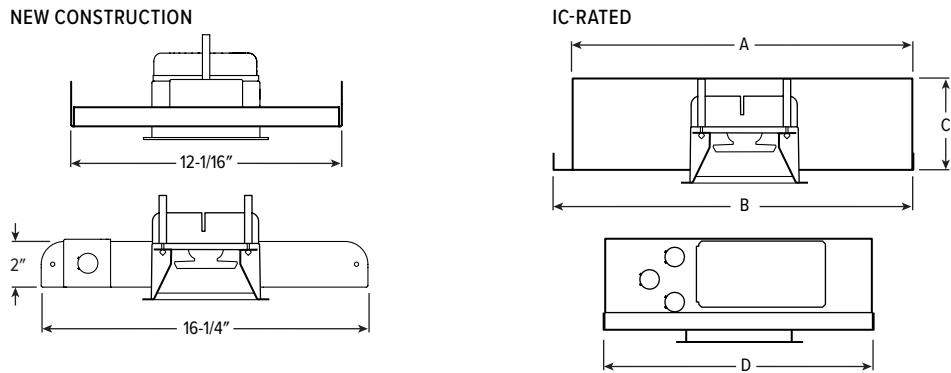
## FLANGE TYPE DETAILS



## 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

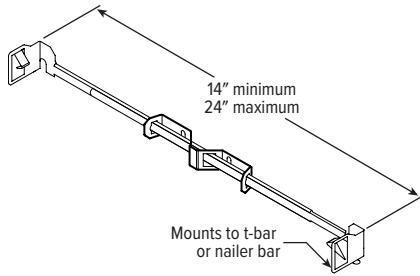
Lumen restrictions apply: L20 max for DMX driver, L20 max for Lutron drivers. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder). I Mounting Type not available with Lutron controls.

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

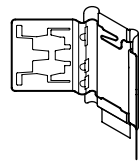
# M4PR LED 4.5" MRI Shallow Plenum Downlight – Round

## MOUNTING HARDWARE DETAILS

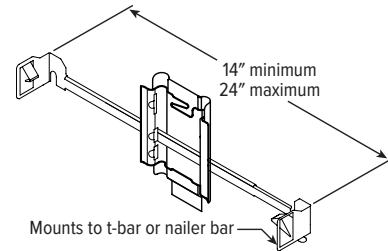
**F1M** Factory-installed 2-position fixed pan bracket, universal bar hanger included



**BA1M** Adjustable butterfly pan bracket, aluminum, bar hanger not included (N Mounting Type only)

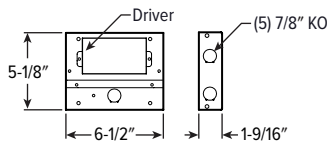


**CA1M** Adjustable caterpillar pan bracket, aluminum, universal bar hanger included (N Mounting Type only)

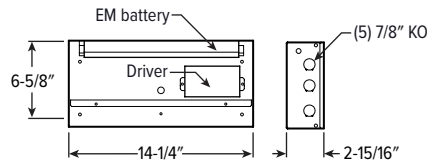


## REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY)

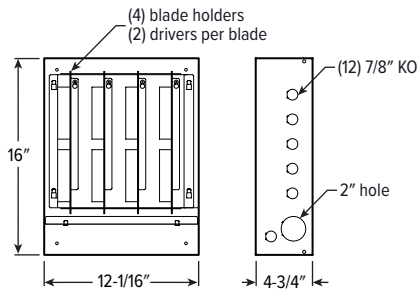
REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE



REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE WITH EMERGENCY BATTERY



REMOTE DRIVER ENCLOSURE FOR 2 - 8 FIXTURES



REMOTE DRIVER ENCLOSURE FOR 9 - 12 FIXTURES

