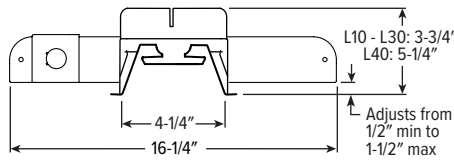
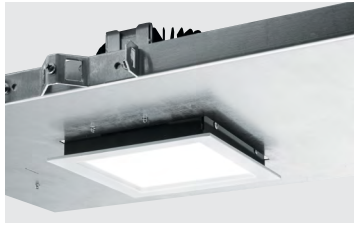


# M4PS<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Square



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

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

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

## FEATURES

- 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 30° narrow to 75° 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.
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE: **M4PS - L40/835 - OPTIONS - LW - OF - WH - TRIM OPTIONS - N - F1M**

## HOUSING

SERIES	LUMENS <sup>[1]</sup>	CRI	CCT	OPTIONS
M4PS	L10 1,000lm	8 80	27 2700K	ATH Airtight construction
	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	
	L40 4,000lm		50 5000K	

## TRIM<sup>[4]</sup>

TRIM TYPE	DISTRIBUTION <sup>[5]</sup>	FLANGE TYPE	REFLECTOR FINISH	TRIM OPTIONS
L Flush lens	W 75° Wide M 35° Medium N 30° 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>

- N Open pan for new construction
- I IC-rated enclosure for new construction<sup>[13]</sup>

### MOUNTING HARDWARE<sup>[12]</sup>

- F1M Factory-installed 2-position fixed pan bracket, universal bar hanger included<sup>[14]</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: **M4PS - RDB1 - L20 - OPTIONS - DIM - UNV**

SERIES	DRIVER BOX	DRIVER QTY.	LUMENS	OPTIONS	DRIVER <sup>[18]</sup>	VOLTAGE
M4PS	RDB Remote driver enclosure	1 7	L10 1,000lm	EM/10W 10-watt emergency battery <sup>[19]</sup> 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>
		2 8	L15 1,500lm			
		3 9	L20 2,000lm			
		4 10	L30 3,000lm			
		5 11	L40 4,000lm			
		6 12				

## NOTES

- Lumen output based on W 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.
- L30 lumen package max.
- Universal bar hanger ships uninstalled.
- N Mounting Type only.
- N 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.
- May be required for 347V, see product builder at [hew.com/product-builder](http://hew.com/product-builder).
- Not available with EM batteries or DMX controls.



# M4PS<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Square

## FIXTURE PERFORMANCE DATA

	DISTRIBUTION	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
L10	W	1029	10.7	96.0
	M	1064	10.7	99.2
	N	1030	10.7	96.0
L15	W	1581	17.2	91.8
	M	1634	17.2	94.8
	N	1581	17.2	91.8
L20	W	2058	23.5	87.7
	M	2127	23.5	90.6
	N	2059	23.5	87.7
L30	W	3087	33.2	92.9
	M	3191	33.2	96.1
	N	3088	33.2	93.0
L40	W	4116	44.7	92.0
	M	4254	44.7	95.3
	N	4117	44.7	92.2

## MULTIPLIER TABLES

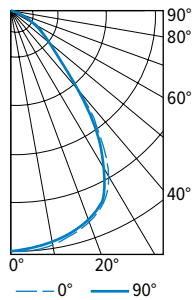
	COLOR TEMPERATURE		
	CCT	CONVERSION FACTOR	
80 CRI	2700K	0.92	
	3000K	0.98	
	3500K	1.00	
	4000K	1.01	
90 CRI	2700K	0.76	
	3000K	0.79	
	3500K	0.82	
	4000K	0.84	
		5000K	0.88

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%
- Use multiplier tables to calculate additional options.

## PHOTOMETRY

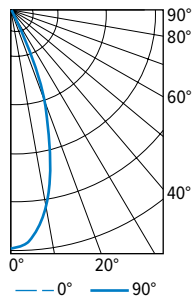
**M4PS-L40/835-DIM-UNV-LW-OF-WH** Total Luminaire Output: 4116 lumens; 44.7 Watts | Efficacy: 92.0 lm/W | 82.8 CRI; 3431K CCT



CANDLEPOWER DISTRIBUTION	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	

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

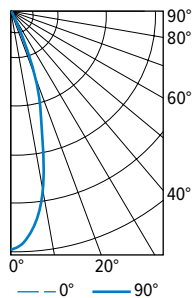
**M4PS-L40/835-DIM-UNV-LM-OF-WH** Total Luminaire Output: 4261 lumens; 44.7 Watts | Efficacy: 95.3 lm/W | 82.8 CRI; 3431K CCT



CANDLEPOWER DISTRIBUTION	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	

LUMEN SUMMARY	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 | 82.8 CRI; 3431K CCT



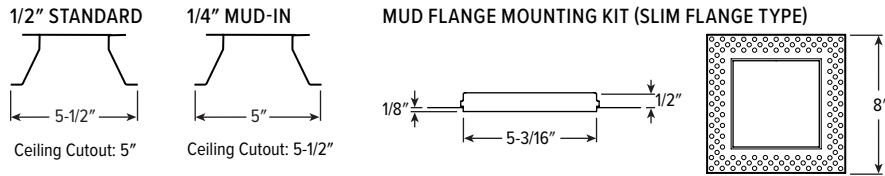
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	10746	10746	10746	
	5	10121	10033	10007	958
	15	5673	5741	5643	1618
	25	1750	1904	1859	850
	35	485	522	550	324
	45	208	221	228	170
	55	118	129	125	112
	65	57	67	63	63
	75	22	26	26	26
	85	0	2	3	2
	90	0	0	0	

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

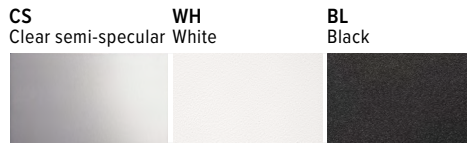


# M4PS<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Square

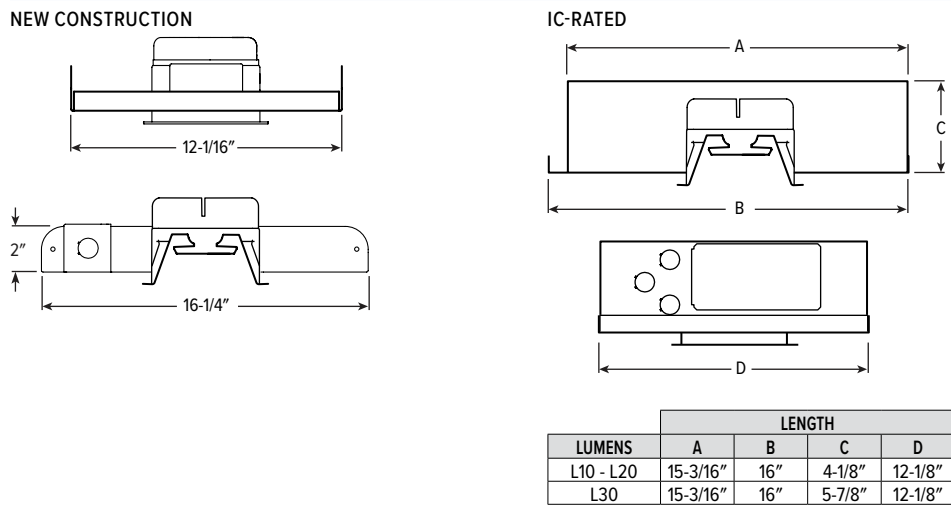
## FLANGE TYPE DETAILS



## REFLECTOR FINISH DETAILS



## MOUNTING TYPE DETAILS



## ADDITIONAL DRIVER OPTIONS

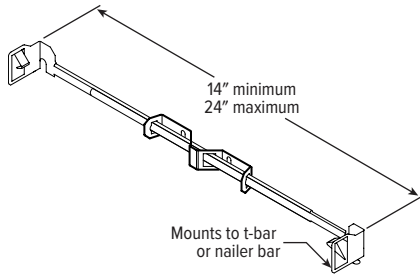
Lumen restrictions apply: L30 max for DMX driver, L30 max for Lutron drivers. 347V may require stepdown transformer, see product builder at [hew.com/product-builder](http://hew.com/product-builder). I Mounting Type not available with Lutron controls.

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 1% 2-wire dimming driver forward phase line voltage controls (120V only)
<b>LDE1</b>	Lutron Hi-lume 1% EcoSystem dimming LED driver
<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

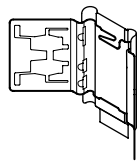
# M4PS<sup>LED</sup> 4.5" MRI Shallow Plenum Downlight – Square

## MOUNTING HARDWARE DETAILS

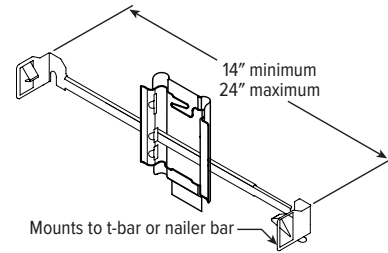
**F1M** Factory-installed 2-position fixed pan bracket, universal bar hanger included



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

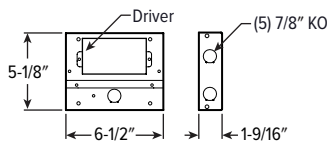


**CA1M** Adjustable caterpillar pan bracket, aluminum, universal bar hanger included (N Mounting Type only)

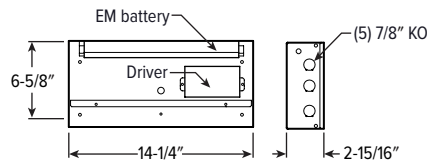


## REMOTE DRIVER ENCLOSURE DETAILS (ORDERED & SHIPPED SEPARATELY)

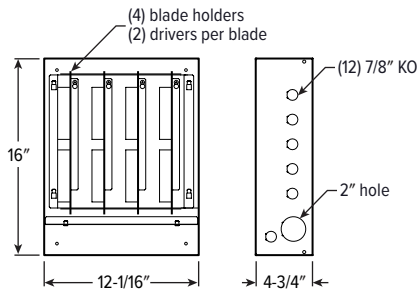
REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE



REMOTE DRIVER ENCLOSURE FOR SINGLE FIXTURE WITH EMERGENCY BATTERY



REMOTE DRIVER ENCLOSURE FOR 2 - 8 FIXTURES



REMOTE DRIVER ENCLOSURE FOR 9 - 12 FIXTURES

