

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

Type: \_\_\_\_\_

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



## FEATURES

- Specify as a single fixture or in pairs to customize ambient, exam, and reading light output
- Illuminate exam surfaces asymmetrically when installed in pairs and meet IESNA guidelines
- Fixtures can be installed to allow maintenance access without working directly over patient beds
- Optional low-voltage controller allows for bedside lighting control
- Double-gasketed sani-shield protects fixture from dust, bugs and other contaminants while simplifying maintenance and cleaning
- Anti-microbial white finish standard
- Quick-wire access plate in back of fixture housing for easy attachment of incoming power supply
- Available with BIOS® SkyBlue® technology to support proper daytime circadian stimulus
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING** – 20-gauge die-formed and welded C.R.S.
- DOOR FRAME** – .050" extruded regressed aluminum frame with curved diffuse acrylic lens and clear acrylic sani-shield. Fully enclosed spring-loaded cam latches.
- SHIELDING** – Internal curved diffuse ribbed acrylic with external clear, non-prismatic sani-shield lens.
- FINISH** – 92% minimum average reflective white anti-microbial powder coat, bonded to phosphate-free, multi-stage pretreated metal. Salt spray tested, 1,000 hours (ASTM B117). All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High-quality mid-power LED board. Rated for 50,000 hours at 70% lumen maintenance (L70). 25°C maximum ambient operating temperature.
- MOUNTING** – NEMA Type "G" 15/16" or 1" grid standard. For NEMA Type "NFG" and "SG" 9/16" grid installations, specify EQCLIPS option. Drywall flange kit available, shipped separately, see options. Fixture must be installed prior to Drywall Kit.
- LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/baa](http://hew.com/baa).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

## ORDERING EXAMPLE: MD4+4AEG - 4 - L52/L132/840 - A - OPTIONS - DIM - UNV

### ORDERING INFO

SERIES	STYLE	CEILING TYPE	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT	SHIELDING
MD	See table below	G 9/16", 15/16", or 1" grid <sup>[2]</sup>	4 4'	See table below	8 80 9 90 <sup>[3]</sup>	30 3000K 35 3500K 40 4000K 50 5000K	A   A/PC080

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

GLR	Fuse, fast blow <sup>[6]</sup>
EM/10W	10-watt emergency battery
EQCLIPS	Earthquake clips <sup>[7]</sup>
TG	Triple gasket <sup>[8]</sup>
(___E)	Color temperature in Exam (E) light compartment different than Ambient or Reading. Example: MD4AEG-4-L21/835-A-(840E). <sup>[9]</sup>
DFK-0848AMW	Drywall kit, 8" x 48", anti-microbial white <sup>[10]</sup>
TP	Tamper resistant tri-groove screws <sup>[11]</sup>

### CONTROL <sup>[5]</sup>

DRV	Non-dimming driver	120 120V
DIM	Dimming driver	277 277V UNV 120-277V

## ACCESSORIES

TPTG TOOL Tamper-resistant tool for tri-groove screws. <sup>[12]</sup>

## CONFIGURATIONS <sup>[13]</sup>

STYLE	DESCRIPTION	AMBIENT LUMENS	EXAM LUMENS	READING LUMENS	CONFIGURATION
4A	Single fixture, ambient only			—	
4AR	Single fixture, ambient & reading Specify fixture direction: <b>L</b> for Left and <b>R</b> for Right	L55 5,500	—	900	
4E	Single fixture, exam only	—	L80 8,000	—	
4ER	Single fixture, exam & reading Specify fixture direction: <b>L</b> for Left and <b>R</b> for Right	—	L80 8,000	900	
4AE	Single fixture, ambient & exam	L22 2,200	L52 5,200	—	
4AER	Single fixture, ambient, exam & reading Specify fixture direction: <b>L</b> for Left and <b>R</b> for Right	L26 2,600	L66 6,600	900	
4+4A	Pair of fixtures, ambient only	L110 11,000	—	—	
4+4AR	Pair of fixtures, ambient & reading	L110 11,000	—	1,900	
4+4E	Pair of fixtures, exam only	—	L160 16,000	—	
4+4ER	Pair of fixtures, exam & reading	—	L160 16,000	1,900	
4+4AE	Pair of fixtures, ambient & exam	L44 4,400	L104 10,400	—	
4+4AER	Pair of fixtures, ambient, exam & reading	L52 5,200	L132 13,200	1,900	

## NOTES

- Lumens based on A shielding, 80 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- Must specify EQCLIPS option when 9/16" grid mounting.
- Extended lead times may apply. Consult factory for availability.
- Low-voltage controllers available, see page 4 for LOW-VOLTAGE CONTROLLER.
- Additional drivers available, See page 3 for ADDITIONAL CONTROL OPTIONS.
- Specify voltage, one fuse required per driver.
- 2 clips per fixture. Optional for 1" grid installations. Required for 9/16" grid mounting.
- Field-installed. See page 4 for GASKETING DETAILS.
- Must specify CRI (80 or 90) and color temperature (30, 35, 40, or 50).
- 2 kits required for 4+4 style fixtures. Fixture must be installed prior to Drywall Kit. See page 4 for DRYWALL KIT (DFK) OPTIONS.
- Requires a tamper-resistant tool, see Accessories.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.
- For additional lumen packages or configurations, consult factory.



# MD4<sup>LED</sup> Architectural Multi-Function Medical

## FIXTURE PERFORMANCE DATA

	STYLE	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	SYSTEM WATTAGE	SYSTEM EFFICACY
MD4A	A	L55	5,594	61.0	92	61.0	92
	R	—	938	10.1	93	—	—
MD4+4A	A	L110	11,188	121.9	92	121.9	92
	R	—	1,875	20.2	93	—	—
MD4AE	A	L22/L52	2,311	23.1	100	71.3	107
	E		5,303	48.2	110		
	A	L22/L66	2,311	23.1	100	80.5	111
	E		6,606	57.4	115		
	A	L26/L52	2,645	26.2	101	74.4	107
	E		5,303	48.2	110		
	A	L26/L66	2,645	26.2	101	83.6	111
	E		6,606	57.4	115		
	R	—	938	10.1	93	—	—
	MD4+4AE	A	L44/L104	4,622	46.2	100	142.7
E		10,607		96.5	110		
A		L44/L132	4,622	46.2	100	161.1	111
E			13,212	114.9	115		
A		L52/L104	5,290	52.4	101	148.9	107
E			10,607	96.5	110		
A		L52/L132	5,290	52.4	101	167.3	111
E			13,212	114.9	115		
R		—	1,875	20.2	93	—	—
MD4E		E	L80	8,061	71.8	112	71.8
	R	—	938	10.1	93	—	—
MD4+4E	E	L160	16,123	143.7	112	143.7	112
	R	—	1,875	20.2	93	—	—

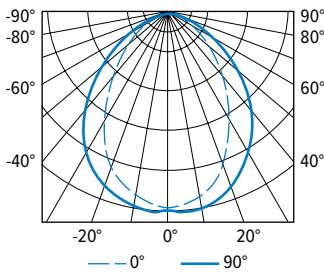
## MULTIPLIER TABLES

COLOR TEMPERATURE		
	CCT	CONVERSION FACTOR
80 CRI	3000K	0.96
	3500K	0.97
	4000K	1.00
	5000K	1.03
90 CRI	3000K	0.79
	3500K	0.80
	4000K	0.83
	5000K	0.86

- Photometrics tested in accordance with IESNA LM-79. Results based on A shielding, 80 CRI/4000K CCT, average wattage for 120V through 277V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- When specifying fixtures with Reading compartment, add R wattage to system wattage to find total fixture wattage.
- Use multiplier table to calculate additional options.

## PHOTOMETRY

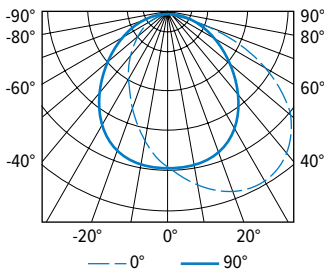
**MD4AEG-4-L22/L52/840-A-DIM-UNV Ambient Only** Total Luminaire Output: 2311 lumens; 23.1 Watts | Efficacy: 100 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1199	1199	1199	1199	1199	
5	1179	1200	1218	1192	1182	114
15	1083	1144	1180	1122	1095	319
25	884	1011	1066	980	904	453
35	655	823	902	747	647	485
45	458	601	665	493	404	425
55	294	388	412	261	213	304
65	122	198	216	109	66	160
75	28	49	79	15	12	48
85	0	2	6	1	1	4
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	885	38
	0 - 60	2099	91
	0 - 90	2311	100
	0 - 180	2311	100

**MD4AEG-4-L22/L52/840-A-DIM-UNV Exam Only** Total Luminaire Output: 5303 lumens; 48.2 Watts | Efficacy: 110 lm/W | 80 CRI; 4000K CCT



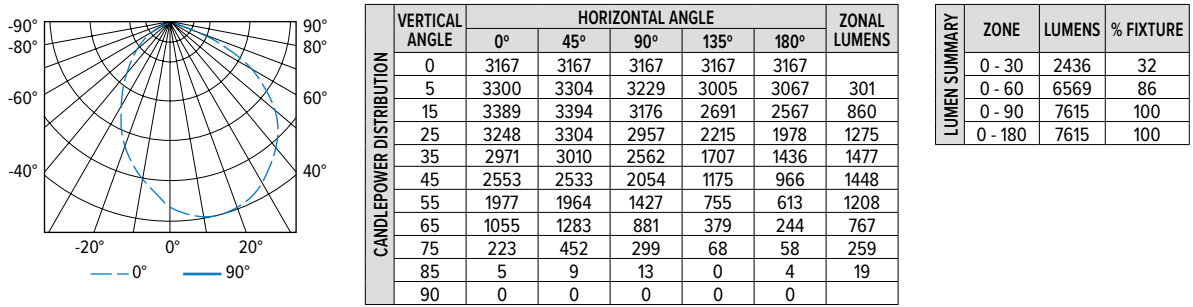
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	2037	2037	2037	2037	2037	
5	2184	2152	2066	1876	1939	193
15	2420	2326	2008	1557	1543	552
25	2538	2376	1856	1216	1138	839
35	2499	2289	1607	930	816	1015
45	2280	2012	1295	669	561	1045
55	1771	1560	888	420	382	895
65	870	978	503	223	189	562
75	180	292	173	55	55	189
85	0	3	3	2	3	13
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1584	30
	0 - 60	4538	86
	0 - 90	5303	100
	0 - 180	5303	100

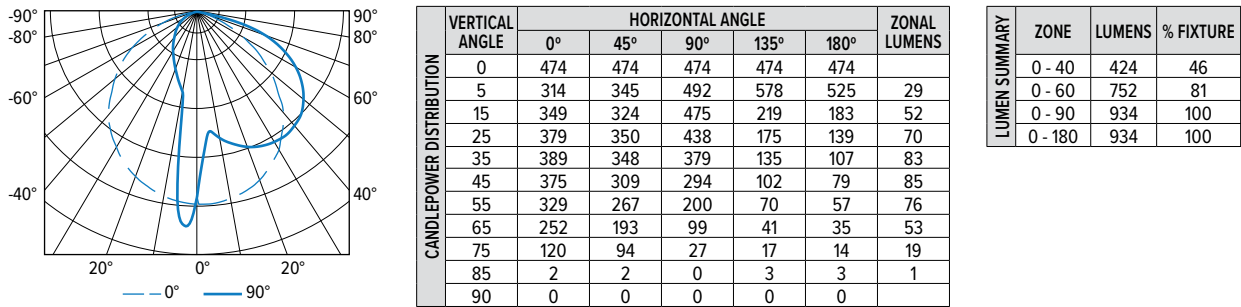


# MD4<sup>LED</sup> Architectural Multi-Function Medical

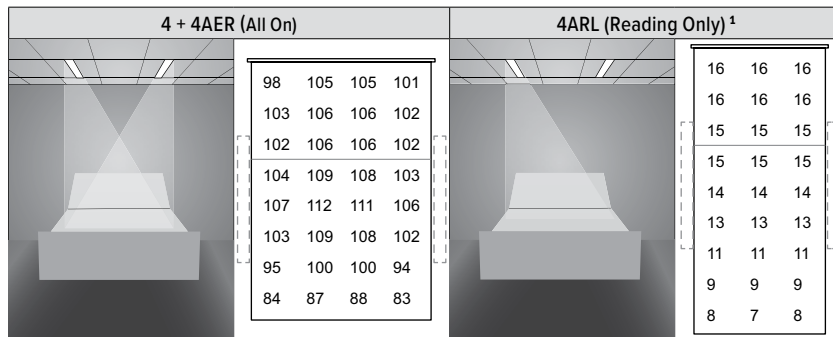
MD4AEG-4-L22/L52/840-A-DIM-UNV Ambient & Exam Total Luminaire Output: 7615 lumens; 71.4 Watts | Efficacy: 107 lm/W | 80 CRI; 4000K CCT



MD4AERRG-4-L26/L66/840-A Reading Only Report #: 13362267.01; 05/27/20 | Total Luminaire Output: 933.5 lumens; 10.7 Watts | Efficacy: 87.3 lm/W | 80 CRI; 4000K CCT



## FOOTCANDLE ESTIMATOR & DISTRIBUTION



<sup>1</sup> Left side shown. 4ARR is opposite.

Footcandle calculations based on standard reflectance of 90/60/30 and a light loss factor of 1.0. Fixtures spaced 3' 6" O.C. over 3' wide bed. Values are for bed surface.

## ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at [hew.com/product-builder](http://hew.com/product-builder).

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
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, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming driver

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## LOW-VOLTAGE CONTROLLER

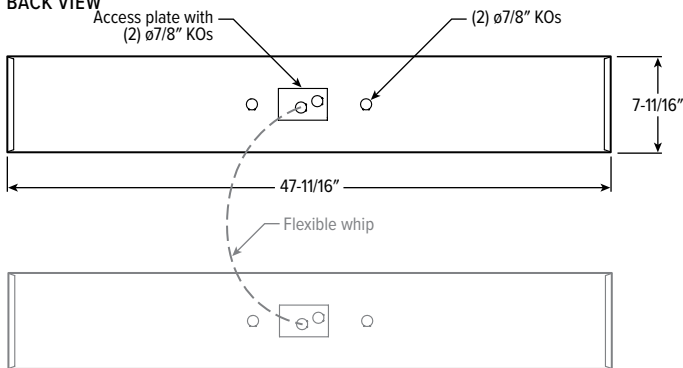
LVC wall plate accessories available, see [hew.com](http://hew.com) for details.

EXAMPLE: LVC2A/E			
CONTROLLER	LOAD 1	LOAD 2	LOAD 3
LVC1 1-circuit	A Ambient R Reading E Exam		
LVC2 2-circuit	A/ Ambient R/ Reading	R Reading E Exam	
LVC3 3-circuit or dimming control	A/ Ambient R/ Reading DIMA/ Ambient, 0-10 dimming <sup>1</sup> DIMR/ Reading, 0-10 dimming <sup>1</sup>	A/ Ambient R/ Reading E/ Exam	E Exam
	DIMA/DIMR Ambient and reading, 0-10 dimming <sup>1</sup> SEQAR/ Ambient and reading, sequential switching <sup>2</sup>		

- <sup>1</sup> Smooth dimming of the load utilizing a single, dry contact, momentary, normally open switch which will dim from 25% up to 100% while holding down the switch.
- <sup>2</sup> Alternating off and on of (2) loads with multiple cycles of one switch.

## FIXTURE DETAILS

### BACK VIEW



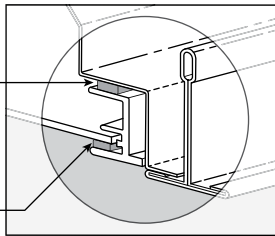
4 + 4 combinations supplied with 9' master/satellite flexible whip between fixtures.

## GASKETING DETAILS

### DOUBLE GASKETING (STANDARD)

First gasketing factory-installed between door frame and luminaire housing prevents light leak and reduces dust ingress.

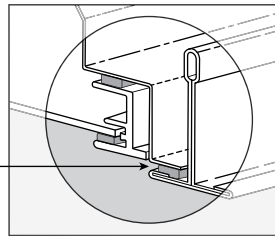
Second gasketing factory-installed between door frame and lens reduces dust and bug contaminants.



### TRIPLE GASKETING (TG OPTION)

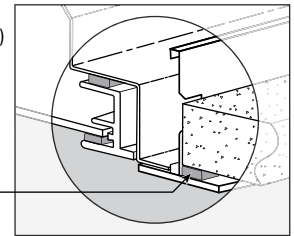
T-bar

Third gasketing field installed between bottom perimeter of fixture and T-bar ceiling seals plenum dust from the room.



Drywall (DFK option)

Between bottom perimeter of fixture and hardpan ceiling.



## DRYWALL KIT (DFK) OPTIONS

### ORDERING INFO

EXAMPLE: DFK - 08 48 W			
SERIES	WIDTH	LENGTH	FINISH
DFK Drywall kit	08 8"	48 4'	W White AMW Anti-microbial white

### INSTALLATION DIMENSIONS

NOMINAL SIZE	ROUGH-IN		FINISH TRIM SIZE	
	WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
8" x 4'	8-3/8"	48-3/8"	9-5/16"	49-5/16"

### TYPICAL INSTALLATION

Refer to table for dimensions.

