

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

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

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

## FEATURES

- Available with BIOS® SkyBlue® technology to support proper daytime circadian stimulus
- 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
- 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. 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** – Designed for NEMA Type "G" 1" grid ceiling standard. For NEMA Type "NFG" and "SG" 9/16" grid installations, specify EQCLIPS option. Drywall kit accessories available for flange applications, shipped separately, see options. Fixture must be installed prior to Drywall Kit
- LISTINGS** – cCSAus certified as luminaire suitable for dry or damp locations.
- 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 <sup>[1]</sup>	LENGTH	LUMENS <sup>[2]</sup>	CRI	CCT	SHIELDING
MD	See table below	G NEMA Type "G", "SG", and "NFG"	4 4'	See table below	8 80 9 90 <sup>[3]</sup>	30 3000K 35 3500K 40 4000K 50 5000K	A Curved diffuse ribbed acrylic with clear, acrylic lens A/PC080 Clear, non-prismatic polycarbonate lens, .080" thick

### 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 277 277V
DIM	Dimming driver	UNV 120-277V

### VOLTAGE

## 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	L55 5,500	—	—	
4AR	Single fixture, ambient & reading Specify fixture direction: <b>L</b> for Left and <b>R</b> for Right			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			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			1,900	
4+4E	Pair of fixtures, exam only	—	L160 16,000	—	
4+4ER	Pair of fixtures, exam & reading			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

- When using in NEMA Type "SG" or "NFG" applications, must specify EQCLIPS option. For flange installations use the Drywall Kit (DFK), ordered separately, see page 5 for DRYWALL KIT (DFK) OPTIONS. Fixture must be installed prior to Drywall Kit (DFK).
- Lumens based on 4000 CCT. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- 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 5 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.



## FIXTURE PERFORMANCE DATA

	STYLE	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	SYSTEM WATTAGE	SYSTEM EFFICACY
MD4A	A	L55	5,594	61.0	91.8	61.0	91.8
	R	—	938	10.1	92.7	—	—
MD4+4A	A	L110	11,188	121.9	91.8	121.9	91.8
	R	—	1,875	20.2	92.6	—	—
MD4AE	A	L22/L52	2,311	23.1	100.0	71.4	106.7
	E		5,303	48.2	109.9		
	A	L22/L66	2,311	23.1	100.0	80.6	110.7
	E		6,606	57.4	115.0		
	A	L26/L52	2,645	26.2	100.9	74.5	106.7
	E		5,303	48.2	109.9		
	A	L26/L66	2,645	26.2	100.9	83.7	110.6
	E		6,606	57.4	115.0		
	R	—	938	10.1	92.7	—	—
	MD4+4AE	A	L44/L104	4,622	46.2	100.0	142.7
E		10,607		96.5	109.9		
A		L44/L132	4,622	46.2	100.0	161.1	110.7
E			13,212	114.9	115.0		
A		L52/L104	5,290	52.4	100.9	148.9	106.7
E			10,607	96.5	109.9		
A		L52/L132	5,290	52.4	100.9	167.3	110.6
E			13,212	114.9	115.0		
R		—	1,875	20.2	92.6	—	—
MD4E		E	L80	8,061	71.8	112.2	71.8
	R	—	938	10.1	92.7	—	—
MD4+4E	E	L160	16,123	143.7	112.2	143.7	112.2
	R	—	1,875	20.2	92.6	—	—

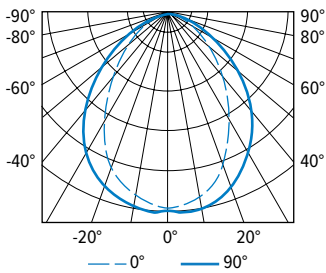
## MULTIPLIER TABLES

COLOR TEMPERATURE		
CRI	CCT	CONVERSION FACTOR
	80 CRI	3000K
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 shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 4000K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.
- When specifying fixtures with Reading compartment, add R wattage to system wattage to find total fixture wattage.

## PHOTOMETRY

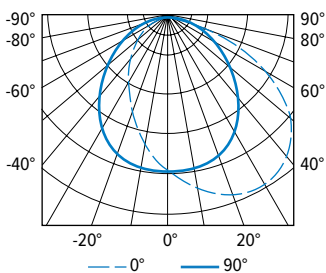
**MD4AEG-4-L22/L52/840-A-DIM-UNV Ambient Only** Total Luminaire Output: 2311 lumens; 23.1 Watts | Efficacy: 100 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1199	1199	1199	1199	1199	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	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



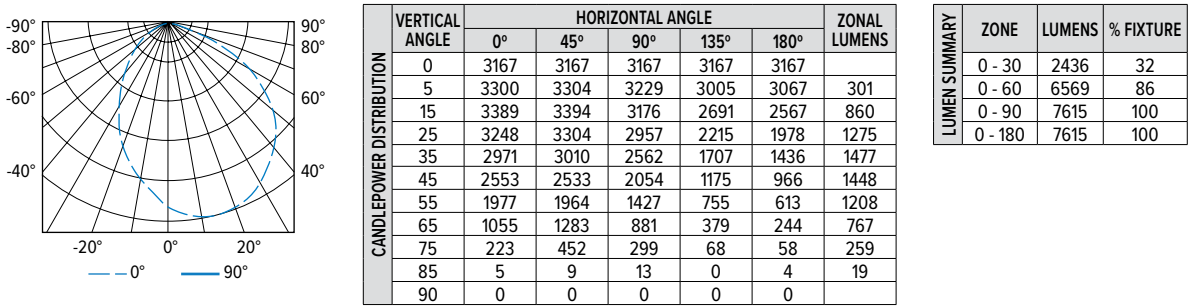
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	2037	2037	2037	2037	2037	2037
5	2184	2152	2066	1876	1939	193
15	2420	2326	2008	1557	1543	552
25	2538	2376	1856	1216	1138	839
35	2499	2289	1607	930	816	1015
45	2280	2012	1295	669	561	1045
55	1771	1560	888	420	382	895
65	870	978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

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

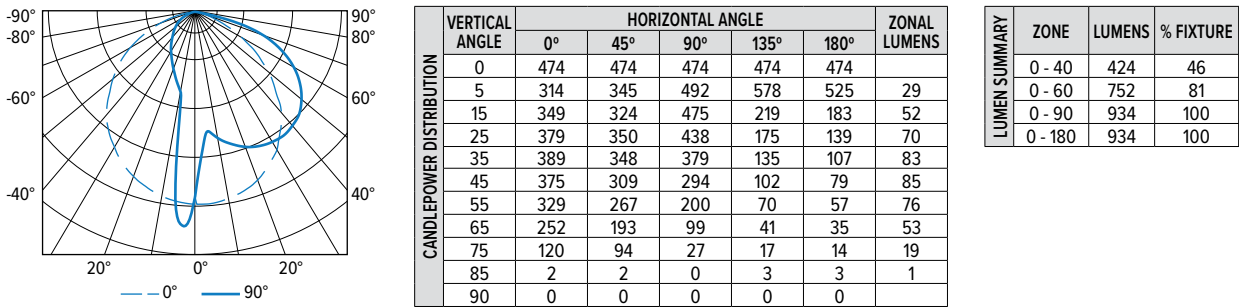


# MD4<sup>LED</sup> Architectural Multi-Function Medical

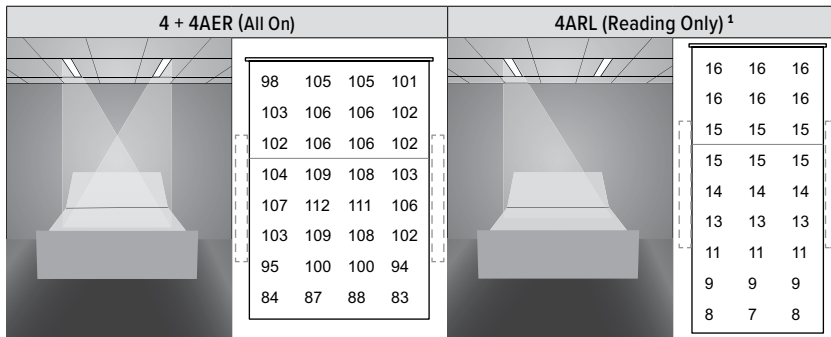
MD4AEG-4-L22/L52/840-A-DIM-UNV Ambient & Exam Total Luminaire Output: 7615 lumens; 71.4 Watts | Efficacy: 107 lm/W | 80 CRI; 4000K CCT



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
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls



## LOW-VOLTAGE CONTROLLER

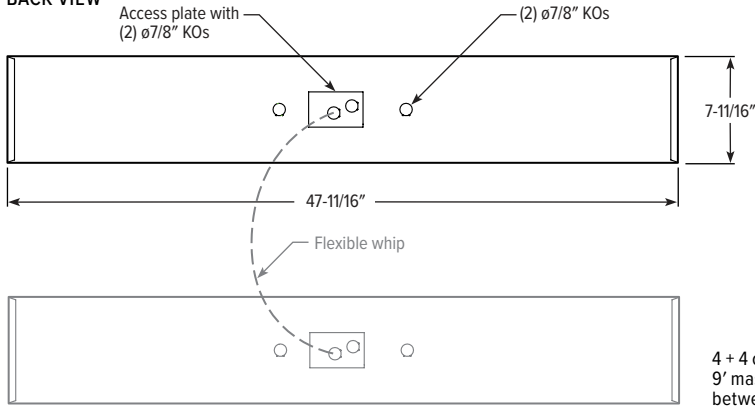
LVC wall plate accessories available, see [hew.com](http://hew.com) for details.

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.

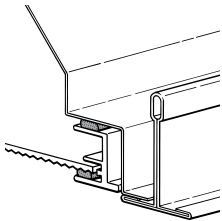
## FIXTURE DETAILS

### BACK VIEW



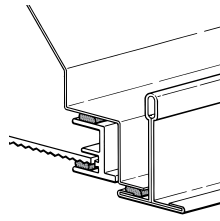
## GASKETING DETAILS

### DOUBLE GASKETING (STANDARD)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens.

### TRIPLE GASKETING (TG)



Gasketing is factory-installed continuously between door frame and luminaire housing; and between door frame and lens. Gasketing between bottom perimeter of unit (adjacent to T-bar or hardpan ceiling) is provided by factory and field installed.



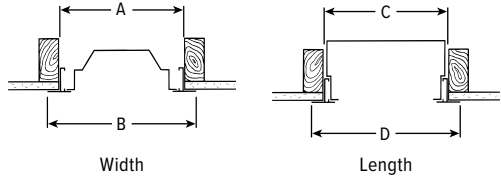
# MD4<sup>LED</sup> Architectural Multi-Function Medical

## DRYWALL KIT (DFK) OPTIONS

ORDERING EXAMPLE: DFK - 06 48 W			
SERIES	WIDTH	LENGTH	FINISH
DFK Drywall Kit	See table below	See table below	<b>W</b> White <b>AMW</b> Anti-microbial white

### TYPICAL INSTALLATION

Refer to table for dimensions.



CATALOG NUMBER	NOMINAL SIZE	ROUGH-IN		FINISH TRIM SIZE	
		WIDTH (A)	LENGTH (C)	WIDTH (B)	LENGTH (D)
DFK-0848	8" x 4'	8-3/8"	48-3/8"	9-5/16"	49-5/16"