

# DUAL-FUNCTION MEDICAL BED LIGHT

# MD4

tunable **WHITE**

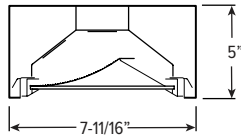


CATALOG #:	TYPE:
PROJECT:	NOTES:

**EXAMPLE** MD 4+4AE G - 4 - L40/L80/8TW - A - OPTIONS - DALI - UNV

SERIES    STYLE    CEILING TYPE    NOMINAL LENGTH    LUMEN PACKAGE    CRI & CCT    SHIELDING    OPTIONS/ACCESSORIES    CONTROL    VOLTAGE

## CROSS SECTION



## ORDERING INFORMATION

**SERIES**  
**MD** Dual-Function Medical Bed Light – Tunable White

**STYLE**  
See table below.

**CEILING TYPE**  
When using in NEMA Type “SG” or “NFG” applications, must specify EQCLIPS option.  
For flange installations use the Drywall Kit (DFK), see Accessories.  
**G** NEMA Type “G”, “SG”, and “NFG”

**NOMINAL LENGTH**  
4      4'

**LED PACKAGE**  
See table below for LED packages.

**CRI & CCT**  
**8TW** Tunable white (80 CRI, 3000K–5000K)

**SHIELDING**  
**A** Curved diffuse ribbed acrylic with clear, acrylic lens

**OPTIONS**  
Low-voltage controllers available, see page 3 for details.  
**GLR** Fuse, fast blow (specify voltage), requires one per driver  
**EM/10W** 10-watt emergency battery (120-277V only)  
**EQCLIPS** Earthquake clips (2 per fixture)  
**TG** Triple gasket (field installed)  
**(L\_\_)** Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.  
Example: 3,500 nominal lumens = MD4AG-4-L45/8TW-A-(L35).

**ACCESSORIES** (Must be ordered separately)  
Fixture must be installed prior to Drywall Kit (DFK).  
**DFK-0848AMW** Drywall kit, 8” x 48”, anti-microbial white

**CONTROL**  
See page 3 for details.  
**DALI** Driver prewired for DALI applications  
**DIM** (1) 0-10V signal to control dimming  
(1) 0-10V signal to control CCT  
**DMX** Driver prewired for DMX applications

**VOLTAGE**  
**120** 120V  
**277** 277V  
**UNV** 120-277V

## FEATURES

- ▶ Tunable white from 3000K to 5000K CCT, minimum 80 CRI.
- ▶ Designed for use in pairs to asymmetrically illuminate patient beds.
- ▶ 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.
- ▶ This fixture is proudly made in the USA.

## CONFIGURATIONS

STYLE	DESCRIPTION	CONFIGURATION	LUMENS		TOTAL WATTAGE
			AMBIENT	EXAM	
<b>AMBIENT ONLY – EXAMPLE: L90/8TW</b>					
4A	Single fixture, ambient only		L45/ = 4,500	–	53
4 + 4A	Pair of fixtures, ambient only		L90/ = 9,000	–	105
<b>AMBIENT &amp; EXAM – EXAMPLE: L40/L80/8TW</b>					
4AE	Single fixture, ambient & exam		L20/ = 2,000	L50/ = 5,000	72
4 + 4AE	Pair of fixtures, ambient & exam		L40/ = 4,000	L80 = 8,000	145

Nominal lumen output based on 4000K CCT. Actual lumens may vary +/-5%, see fixture performance data. Additional LED lumen packages available, see options.

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## DUAL FUNCTION MEDICAL BED LIGHT

### 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. T-slot steel hinge allows reversible hinging and latching. 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. L70 > 50,000 hours per IES TM-21. Tunable White products use LEDs of multiple CCTs and may produce a perceptibly different shade of white from single-CCT products at the same CCT. All CCTs are within 3 MacAdam ellipses.

**Mounting** – NEMA Type "G" standard. For flange installations use the Drywall Kit (DFK), ordered separately. Fixture must be installed prior to Drywall Kit (DFK). Accommodates "NFG" and "SG" without modification (earthquake clips required).

**Labels** – cCSAus certified as luminaire suitable for dry or damp locations.

**Warranty** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

### IMPORTANT:

Electrostatic sensitive unit. Observe precautions when handling.

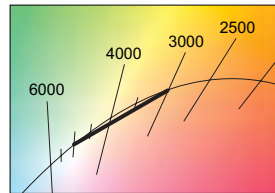
### FIXTURE PERFORMANCE DATA

STYLE	LED PACKAGE	TOTAL DELIVERED LUMENS	TOTAL WATTAGE	EFFICACY (lm/W)
4A	L45	4528	52.7	86.0
4 + 4A	L90	9056	105.4	86.0
4AE	L20/L50	7051	72.3	97.5
4 + 4AE	L40/L80	14102	144.6	97.5

- 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.

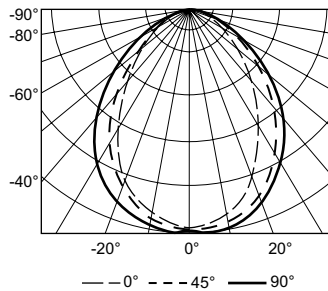
### MULTIPLIER TABLE

CCT	CONVERSION FACTOR	
	LUMENS	WATTAGE
3000K	0.95	1.04
3500K	0.98	1.02
4000K	1.00	1.00
5000K	0.96	1.04



### PHOTOMETRY

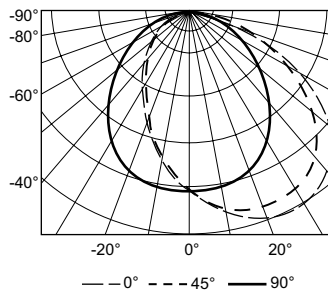
**MD4AEG-L20/L50/8TW-A-DALI Ambient only** Report #: 20051.0; 09/26/17  
Total Luminaire Output: 2025 lumens; 21 Watts | Efficacy: 96 lm/W | 87.5 CRI; 5021K CCT



Vertical Angle	Horizontal Angle						Zonal Lumens
	0°	45°	90°	135°	180°		
0	1051	1051	1051	1051	1051	1051	100
5	1033	1052	1067	1045	1036	100	100
15	949	1002	1034	983	960	279	100
25	775	886	934	859	792	397	100
35	574	721	790	655	567	425	100
45	402	526	583	432	354	373	100
55	257	340	361	229	187	266	100
65	107	173	189	96	58	140	100
75	25	43	69	13	11	42	100
85	0	2	5	1	1	4	100
90	0	0	0	0	0	0	100

LUMEN SUMMARY	Zone	Lumens	% Fixture
	0 - 30	775	38
	0 - 60	1839	91
	0 - 90	2025	100
	0 - 180	2025	100

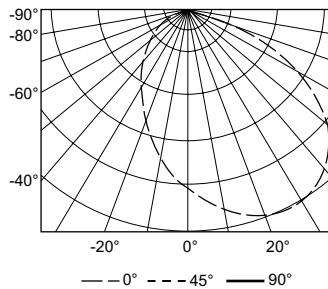
**MD4AEG-L20/L50/8TW-A-DALI Exam only** Report #: 20050.0; 09/26/17  
Total Luminaire Output: 5026 lumens; 51.3 Watts | Efficacy: 98 lm/W | 86.4 CRI; 4994K CCT



Vertical Angle	Horizontal Angle						Zonal Lumens
	0°	45°	90°	135°	180°		
0	1931	1931	1931	1931	1931	1931	100
5	2070	2040	1958	1778	1837	183	100
15	2294	2204	1903	1476	1463	523	100
25	2406	2252	1759	1153	1079	795	100
35	2369	2169	1523	881	773	962	100
45	2161	1907	1227	634	532	990	100
55	1679	1478	842	398	362	848	100
65	825	927	476	211	180	533	100
75	171	277	164	53	52	179	100
85	0	3	3	2	3	13	100
90	0	0	0	0	0	0	100

LUMEN SUMMARY	Zone	Lumens	% Fixture
	0 - 30	1501	30
	0 - 60	4301	86
	0 - 90	5026	100
	0 - 180	5026	100

**MD4AEG-L20/L50/8TW-A-DALI Ambient & Exam** Total Luminaire Output: 7052 lumens; 72.3 Watts | Efficacy: 98 lm/W  
90 CRI; 5000K CCT



Vertical Angle	Horizontal Angle						Zonal Lumens
	0°	45°	90°	135°	180°		
0	2933	2933	2933	2933	2933	2933	100
5	3056	3059	2990	2783	2840	279	100
15	3138	3143	2941	2492	2377	796	100
25	3008	3059	2738	2051	1832	1180	100
35	2751	2787	2372	1581	1330	1367	100
45	2364	2345	1902	1088	895	1341	100
55	1830	1819	1322	699	568	1119	100
65	977	1188	816	351	226	710	100
75	206	419	277	63	54	240	100
85	5	8	12	0	4	18	100
90	0	0	0	0	0	0	100

LUMEN SUMMARY	Zone	Lumens	% Fixture
	0 - 30	2256	32
	0 - 60	6083	86
	0 - 90	7052	100
	0 - 180	7052	100



## LOW-VOLTAGE CONTROLLER (DIM only, 120V or 277V only)

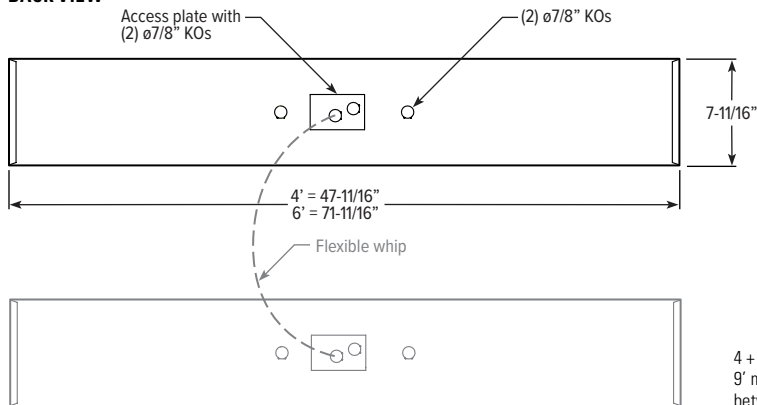
Bedside switch used to control dimming only, color tuning performed by alternate 0-10V control source.

EXAMPLE: LVC2U/D		
Controller	Load 1	Load 2
LVC1 = 1-circuit	A = Ambient E = Exam	
LVC2 = 2-circuit	A/ = Ambient	E = Exam
LVC3 = dimming control	DIMA/ = Ambient, 0-10 dimming <sup>1</sup> DIME/ = Exam, 0-10 dimming <sup>1</sup>	A = Ambient E = Exam
	DIMA/DIME = Ambient and exam, 0-10 dimming <sup>1</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.

## FIXTURE DETAILS

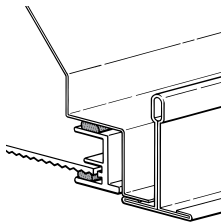
### BACK VIEW



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

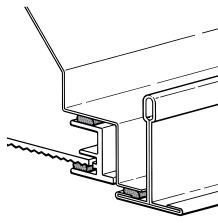
## GASKETING DETAILS

### 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 field-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.

