

CATALOG #: _____

TYPE: _____

PROJECT: _____



FEATURES

- Multiple distribution options provide effective, application specific lighting performance
- Smooth surface doorframe and lens materials simplify cleaning
- Optional green circuit provides enhanced visual clarity for operating room staff and reduces eye fatigue during videoscopic surgical procedures
- Designed exclusively for hospitals and medical facilities utilizing 15/16", 1-1/2", and 2" face T-bars
- Anti-microbial white finish standard
- Provides auxiliary illumination from the perimeter of the surgery or exam area
- Reduces intense contrast between surgical and preparatory work areas
- Supplies uniform ambient illumination for the remainder of the surgery room
- Optional triple gasket protects against contaminant ingress
- Available with BIOS® SkyBlue® technology to support proper daytime circadian stimulus
- Made Right Here® in the USA

SPECIFICATIONS

- HOUSING** – 20-gauge die-formed C.R.S.
- DOOR FRAME** – .050" extruded aluminum, flat with mitered corners. Fully enclosed spring-loaded cam latches and T-type hinges. Door frame and lens are grounded to the fixture housing.
- SHIELDING** – One-piece frosted acrylic, pattern #12, .125" thick.
- FINISH** – 92% minimum average reflective white anti-microbial powder coating 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 boards. Rated for 50,000 hours at 70% lumen maintenance (L70)
- MOUNTING** – NEMA Type "G" 15/16" or 1-1/2" grid standard. (4) Earthquake clips provided. Drywall flange type available.
- LISTINGS** –
 - cCSAus certified as luminaire suitable for dry or damp locations.
 - City of Chicago Environmental Air approved when specified with CP option.
 - Available with BIOS® consult factory
 - Complies with the Buy American Act and other federal regulations. Request certification at hew.com/baa.
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: MDSG - 24 - L32/GRN/L147/840 - SYM - OPTIONS - DRV - UNV

ORDERING INFO

| SERIES | CEILING TYPE | WIDTH | LENGTH | LUMENS ^[1] | CRI | CCT |
|--------|-------------------------|-------------------------|-------------------|-----------------------|---------------------|----------|
| MDS | G 15/16" or 1-1/2" grid | 1' ^[3] | 2' ^[4] | 1x4 | 8 80 | 30 3000K |
| | | F Flange ^[2] | 2' 2' | L70 | 9 90 ^[5] | 35 3500K |
| | | | | L100 | | 40 4000K |
| | | | | 2x2 | | 50 5000K |
| | | | | L54 | | |
| | | | | L100 | | |
| | | | | L14/GRN/L36 | | |
| | | | | L14/GRN/L67 | | |
| | | | | 2x4 | | |
| | | | | L116 | | |
| | | | | L220 | | |
| | | | | L32/GRN/L77 | | |
| | | | | L32/GRN/L147 | | |

SHIELDING

SYM Symmetric
SYM/ASY Symmetric/asymmetric ^[6]

OPTIONS

EM/10W 10-watt emergency battery
GLR Fuse, fast blow (specify voltage), one per driver
(L__) Additional lower lumen packages available.
Example: 13,500 nominal lumens = MDSG-24-L220/840-(L135) ^[7]
CP Chicago plenum (CCEA)
TG Triple gasket ^[8]
2C Two circuit wiring ^[9]

CONTROL ^[10]

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

NOTES

- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
- See page 3 for CROSS SECTIONS.
- 4' length only.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- Reduces fixture output up to 5%.

- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Field-installed. See page 3 for GASKETING DETAILS.
- Inboard-outboard wiring. Allows for independent dimming of each circuit when ordered with DIM driver. Fixture is wired as two circuit by default when specified with green circuit.
- See page 4 for ADDITIONAL CONTROL OPTIONS.



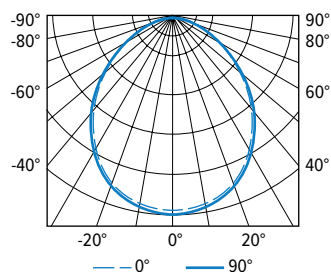
FIXTURE PERFORMANCE DATA

| | | | | SYMMETRIC | | | | SYMMETRIC/ASYMMETRIC | | | |
|-------------|----------|-------|------------------|-----------|-----------------|-------|------------------|----------------------|-----------------|-------|----|
| LED PACKAGE | WATTAGE | | DELIVERED LUMENS | | EFFICACY (lm/W) | | DELIVERED LUMENS | | EFFICACY (lm/W) | | |
| | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | |
| WHITE | | | | | | | | | | | |
| 1x4 | L70 | 62 | – | 7105 | – | 115 | – | 6598 | – | 106 | – |
| | L100 | 86 | – | 10304 | – | 120 | – | 9745 | – | 113 | – |
| 2x2 | L54 | 42 | – | 5439 | – | 130 | – | 5318 | – | 127 | – |
| | L100 | 79 | – | 10089 | – | 128 | – | 9864 | – | 125 | – |
| 2x4 | L116 | 94 | – | 11626 | – | 124 | – | 11368 | – | 121 | – |
| | L220 | 171 | – | 22120 | – | 129 | – | 21680 | – | 127 | – |
| GREEN/WHITE | | | | | | | | | | | |
| 2x2 | L14/L36 | 28 | 31 | 3622 | 1334 | 129 | 43 | 3542 | 1173 | 127 | 38 |
| | L14/L67 | 53 | 31 | 6720 | 1334 | 127 | 43 | 6569 | 1173 | 124 | 38 |
| 2x4 | L32/L77 | 63 | 62 | 7743 | 3156 | 123 | 51 | 7571 | 2799 | 120 | 45 |
| | L32/L147 | 114 | 62 | 14731 | 3156 | 129 | 51 | 14439 | 2799 | 127 | 45 |

- Photometrics tested in accordance with IESNA LM-79. Results based on 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.
- Use multiplier table to calculate additional options.

PHOTOMETRY

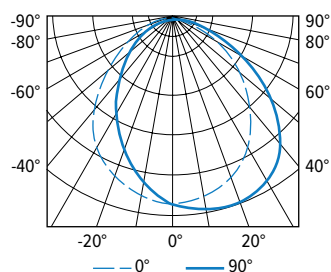
MDSG-24-L220/840-SYM Total Luminaire Output: 22120 lumens; 171 Watts | Efficacy: 129 lm/W | 80 CRI; 4000K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | | | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|------|------|--------------|
| | | 0° | 45° | 90° | 135° | 180° | |
| | 0 | 9327 | 9327 | 9327 | 9327 | 9327 | |
| | 5 | 9357 | 9244 | 9233 | 9244 | 9357 | 880 |
| | 15 | 8890 | 8796 | 8796 | 8796 | 8890 | 2485 |
| | 25 | 7980 | 7890 | 7888 | 7890 | 7980 | 3640 |
| | 35 | 6694 | 6588 | 6574 | 6588 | 6694 | 4126 |
| | 45 | 5101 | 4990 | 4942 | 4990 | 5101 | 3857 |
| | 55 | 3480 | 3368 | 3318 | 3368 | 3480 | 3033 |
| | 65 | 2122 | 2036 | 2052 | 2036 | 2122 | 2059 |
| | 75 | 1140 | 1123 | 1214 | 1123 | 1140 | 1223 |
| | 85 | 400 | 414 | 484 | 414 | 400 | 460 |
| | 90 | 11 | 47 | 62 | 47 | 11 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|----------|--------|-----------|
| | 90 - 120 | 7005 | 32 |
| | 90 - 130 | 11131 | 51 |
| | 90 - 150 | 18021 | 83 |
| | 90 - 180 | 21764 | 100 |
| | 0 - 180 | 21764 | 100 |

MDSG-24-L220/840-SYM/ASY Total Luminaire Output: 21680 lumens; 171 Watts | Efficacy: 127 lm/W | 80 CRI; 4000K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | | | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|------|------|--------------|
| | | 0° | 45° | 90° | 135° | 180° | |
| | 0 | 8686 | 8686 | 8686 | 8686 | 8686 | |
| | 5 | 8977 | 8861 | 8701 | 8370 | 8288 | 820 |
| | 15 | 9264 | 8947 | 8300 | 7517 | 7237 | 2325 |
| | 25 | 9047 | 8550 | 7515 | 6334 | 5892 | 3436 |
| | 35 | 8309 | 7679 | 6377 | 4961 | 4432 | 3961 |
| | 45 | 6860 | 6217 | 4939 | 3606 | 3144 | 3803 |
| | 55 | 4849 | 4400 | 3438 | 2438 | 2135 | 3077 |
| | 65 | 2908 | 2660 | 2124 | 1535 | 1392 | 2107 |
| | 75 | 1508 | 1341 | 1117 | 881 | 844 | 1201 |
| | 85 | 481 | 405 | 367 | 325 | 343 | 412 |
| | 90 | 34 | 21 | 12 | 49 | 64 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 6582 | 31 |
| | 0 - 40 | 10543 | 50 |
| | 0 - 60 | 17423 | 82 |
| | 0 - 90 | 21143 | 100 |
| | 0 - 180 | 21143 | 100 |



CROSS SECTIONS

SYM

GREEN/WHITE LED

SYM/ASY

F CEILING TYPE INSTALLATION

| | ROUGH-IN | FINISH TRIM SIZE |
|-----|-------------------|---------------------|
| 1x4 | 12-3/8" x 48-3/8" | 13-5/16" x 49-5/16" |
| 2x2 | 24-3/8" x 24-3/8" | 25-5/16" x 25-5/16" |
| 2x4 | 24-3/8" x 48-3/8" | 25-5/16" x 49-5/16" |

For continuous row mounting, add finish trim size for each additional fixture.

MDSF fixtures can be field converted to work with 1-1/2" or 2" NEMA Type "G" ceiling systems.

FIXTURE DETAILS

1x4

2x2

2x4

WHITE ONLY

GREEN/WHITE

GASKETING DETAILS

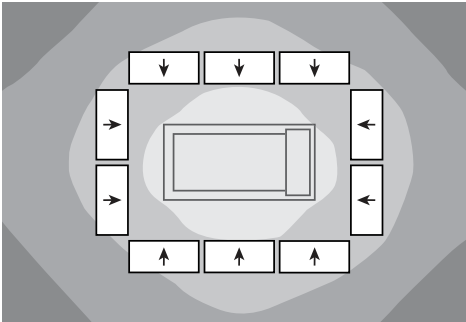
DOUBLE GASKETING (STANDARD)

TRIPLE GASKETING (TG OPTION)

T-bar

Drywall

TYPICAL SURGICAL SUITE LAYOUT



ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at 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 LED driver |