

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- Support human-centric design with adaptive, individualized lighting using tunable white light
- Multiple distribution options provide effective, application specific lighting performance
- Smooth surface doorframe and lens materials simplify cleaning and maintenance
- 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
- 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
- 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. L70 > 60,000 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" for 15/16", 1-1/2", and 2" grid ceiling systems. NEMA Type "F" available. Four (4) earthquake clips standard.
- LISTINGS** –
 - CCSAUs certified as luminaire suitable for dry or damp locations.
 - City of Chicago Environmental Air approved when specified with CP option.
- WARRANTY** – 5-year limited warranty, see hew.com/warranty.

ORDERING EXAMPLE: MDSG - 24 - L155/8TW - SYM - OPTIONS - DALI - UNV

ORDERING INFO

| SERIES | CEILING TYPE | WIDTH | LENGTH | LUMENS ⁽¹⁾ | CRI | CCT |
|--------|--------------------------------|---------------------|---------------------|-----------------------|---------|---------------------------------|
| MDS | G NEMA Type "G" | 1 1' ⁽³⁾ | 2 2' ⁽⁴⁾ | 1x4 | 8 80 | TW Tunable white (3000K-5000K) |
| | F NEMA Type "F" ⁽²⁾ | 2 2' | 4 4' | L72 | 7,200lm | 9 90 ⁽⁵⁾ |
| | | | | 2x2 | 7,500lm | TW2 Tunable white (2700K-6500K) |
| | | | | L75 | | |
| 2x4 | 15,500lm | | | | | |

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: 11,500 nominal lumens = MDSG-24-L155/8TW-(L115) ⁽⁷⁾
- CP** Chicago plenum (CEEA)
- TG** Triple gasket ⁽⁸⁾

CONTROL ⁽⁹⁾

- 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
- PSQ** Lutron T-Series 2-channel tunable white 1%.

VOLTAGE

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

NOTES

- Nominal lumen output based on 4000 CCT. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see options.
- See page 3 for NEMA TYPE "F" INSTALLATION.
- 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.
- See page 4 for GASKETING DETAILS.



FIXTURE PERFORMANCE DATA

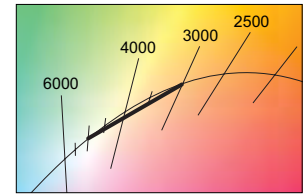
| | LED PACKAGE | DELIVERED LUMENS | WATTAGE | EFFICACY (lm/W) |
|-----|-------------|------------------|---------|-----------------|
| 1x4 | L72 | 7202 | 65 | 111 |
| 2x2 | L75 | 7512 | 61 | 123 |
| 2x4 | L155 | 15569 | 127 | 123 |

- 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.

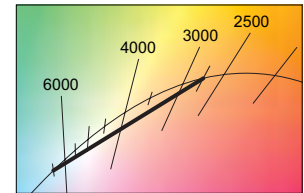
MULTIPLIER TABLE

| CCT | COLOR TEMPERATURE | | | | |
|--------|-------------------|---------|--------|---------|------|
| | TW | | TW2 | | |
| | LUMENS | WATTAGE | LUMENS | WATTAGE | |
| 80 CRI | 2700K | - | - | 0.93 | 1.02 |
| | 3000K | 0.95 | 1.04 | 0.95 | 1.01 |
| | 3500K | 0.98 | 1.02 | 0.98 | 1.00 |
| | 4000K | 1.00 | 1.00 | 1.00 | 1.00 |
| | 5000K | 0.96 | 1.04 | 1.02 | 1.00 |
| | 6500K | - | - | 1.01 | 1.04 |
| 90 CRI | 2700K | - | - | 0.93 | 1.02 |
| | 3000K | 0.91 | 1.03 | 0.95 | 1.01 |
| | 3500K | 0.96 | 1.01 | 0.98 | 1.00 |
| | 4000K | 1.00 | 1.00 | 1.00 | 1.00 |
| | 5000K | 1.03 | 1.03 | 1.03 | 1.00 |
| | 6500K | - | - | 1.02 | 1.04 |

TW

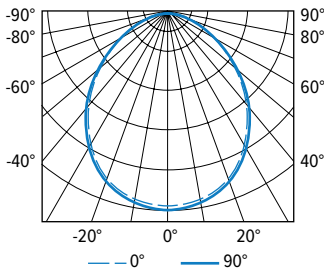


TW2



PHOTOMETRY

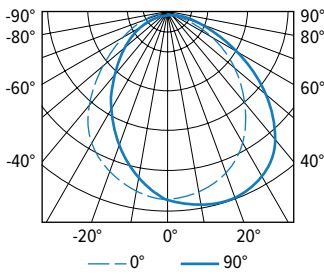
MDSG-24-L155/8TW-SYM-DALI Total Luminaire Output: 15569 lumens; 127 Watts | Efficacy: 123 lm/W



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|----------------|------------------|------|------|--------------|
| | 0° | 45° | 90° | |
| 0 | 6672 | 6672 | 6672 | |
| 5 | 6694 | 6613 | 6605 | 629 |
| 15 | 6360 | 6293 | 6293 | 1777 |
| 25 | 5709 | 5644 | 5643 | 2604 |
| 35 | 4789 | 4713 | 4703 | 2952 |
| 45 | 3649 | 3570 | 3535 | 2759 |
| 55 | 2490 | 2409 | 2374 | 2170 |
| 65 | 1518 | 1457 | 1468 | 1473 |
| 75 | 816 | 803 | 868 | 875 |
| 85 | 286 | 296 | 346 | 330 |
| 90 | 8 | 33 | 44 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 5010 | 32 |
| | 0 - 40 | 7962 | 51 |
| | 0 - 60 | 12891 | 83 |
| | 0 - 90 | 15568 | 100 |
| | 0 - 180 | 15569 | 100 |

MDSG-24-L155/8TW-SYM/ASY-DALI Total Luminaire Output: 15223 lumens; 127 Watts | Efficacy: 120 lm/W



| VERTICAL ANGLE | HORIZONTAL ANGLE | | | | | ZONAL LUMENS |
|----------------|------------------|------|------|------|------|--------------|
| | 0° | 45° | 90° | 135° | 180° | |
| 0 | 6254 | 6254 | 6254 | 6254 | 6254 | |
| 5 | 6463 | 6380 | 6265 | 6026 | 5967 | 590 |
| 15 | 6670 | 6442 | 5976 | 5412 | 5211 | 1674 |
| 25 | 6514 | 6156 | 5411 | 4560 | 4242 | 2474 |
| 35 | 5982 | 5529 | 4591 | 3572 | 3191 | 2852 |
| 45 | 4939 | 4476 | 3556 | 2596 | 2264 | 2738 |
| 55 | 3491 | 3168 | 2475 | 1755 | 1537 | 2216 |
| 65 | 2094 | 1915 | 1529 | 1105 | 1002 | 1517 |
| 75 | 1086 | 966 | 804 | 634 | 607 | 865 |
| 85 | 346 | 291 | 264 | 234 | 247 | 297 |
| 90 | 24 | 15 | 9 | 35 | 46 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 4738 | 31 |
| | 0 - 40 | 7590 | 50 |
| | 0 - 60 | 12544 | 82 |
| | 0 - 90 | 15223 | 100 |
| | 0 - 180 | 15223 | 100 |

CONTROL DETAILS

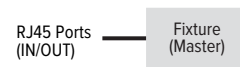
DIM



DALI



DMX

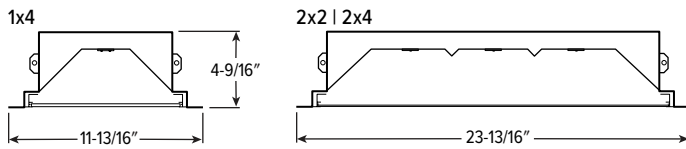


LUTRON T-SERIES

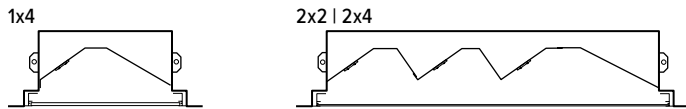


FIXTURE DETAILS

SYM

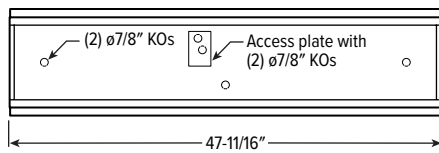


SYM/ASY

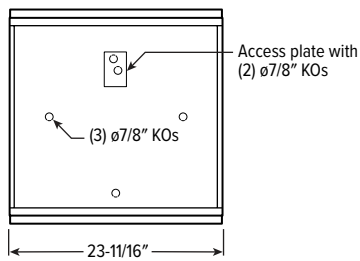


BACK VIEW DETAILS

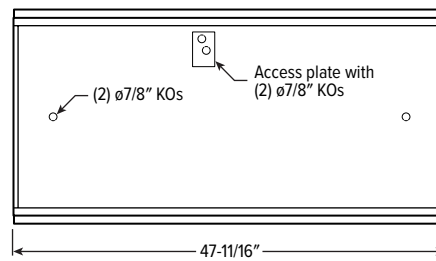
1x4



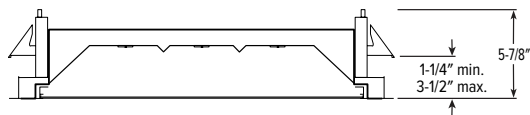
2x2



2x4



NEMA TYPE "F" INSTALLATION



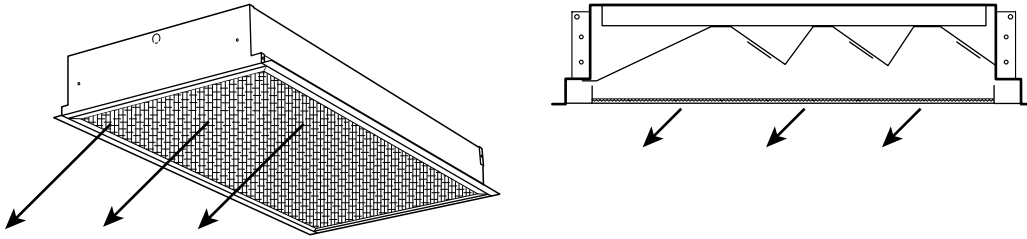
| | ROUGH-IN | FINISH TRIM SIZE |
|-----|-------------------|---------------------|
| 1x4 | 12-3/8" x 48-3/8" | 13-5/16" x 49-5/16" |
| 2x2 | 24-3/8" x 24-3/8" | 25-5/16" x 25-5/16" |
| 2x4 | 24-3/8" x 48-3/8" | 25-5/16" x 49-5/16" |

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

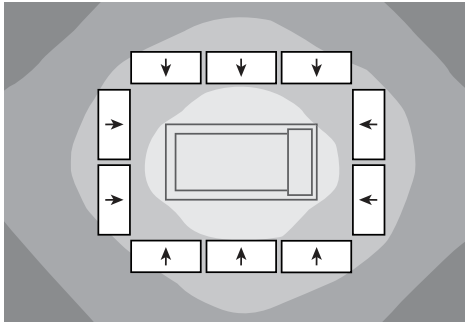
MDSF fixtures can be field converted to work with 1-1/2" or 2" NEMA Type "G" ceiling systems.



DIRECTIONAL LENS DETAILS

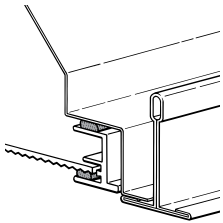


TYPICAL SURGICAL SUITE LAYOUT



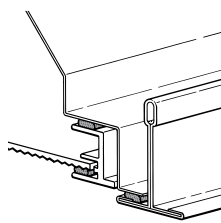
GASKETING DETAILS

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.