

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- Create scalable, highly functioning smart buildings with Platformatics Power over Ethernet controls
- Multiple distribution options provide effective, application specific lighting
- 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
- Reduces intense contrast between surgical and preparatory work areas
- Made Right Here® in the USA

ORDERING EXAMPLE: MDSG - 24 - P21/GRN/P91/840 - SYM - OPTIONS - POE PR

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 | 30 3000K | |
| | | | | P30 | 3,000lm white only | 9 90 ^[5] | 35 3500K |
| | F NEMA Type "F" ^[2] | 2 2' | 4 4' | P66 | 6,600lm white only | | 40 4000K |
| | | | | 2x2 | | | 50 5000K |
| | | | | P34 | 3,400lm white only | | |
| | | | | P71 | 7,100lm white only | | |
| | | | | P6/GRN/P23 | 600lm green/2,300lm white | | |
| | | | | P10/GRN/P47 | 1,000lm green/4,700lm white | | |
| | | | | 2x4 | | | |
| | | | | P71 | 7,100lm white only | | |
| | | | | P141 | 14,100lm white only | | |
| | | | | P12/GRN/P47 | 1,200lm green/4,700lm white | | |
| P21/GRN/P91 | 2,100lm green/9,100lm white | | | | | | |

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 –
 - Symmetric: one-piece frosted acrylic, pattern #12, .125" thick
 - Symmetric/Asymmetric: one-piece frosted acrylic, pattern #12, .125" thick
 - Asymmetric: one-piece clear acrylic asymmetric/symmetric lens with radio suppression grid (KSH-34RF), nominal .150" 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 board. L70 > 60,000 hours per IES TM-21. Low-voltage DC fixture, to be fed by Class 2 power supply.
- MOUNTING – NEMA Type "G" for 15/16", 1-1/2", and grid ceiling systems. NEMA Type "F" available. Four (4) earthquake clips standard.
- LISTINGS –
 - cCSAus certified as luminaire suitable for dry or damp locations.
- WARRANTY – 5-year limited warranty, see hew.com/warranty.

SHIELDING

- SYM Symmetric
- SYM/ASY Symmetric/asymmetric ^[7]
- ASY Asymmetric ^[8]

OPTIONS

- TG Triple gasket ^[9]

CONTROL ^[6]

- POE PR Power over Ethernet, Platformatics-ready

SYSTEM REQUIREMENTS

- PoE-ready luminaires are connected to building power systems through network integration and require other components for complete PoE lighting system
- For additional PoE info, see hew.com/poe
- Consult factory for design support

NOTES

- ¹ Lumens based on 80 CRI/4000 CCT. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- ² See page 4 for NEMA TYPE "F" INSTALLATION.
- ³ 4' length only.
- ⁴ 2' width only.
- ⁵ Available in 4000K and 5000K only. Extended lead times may apply. Consult factory for availability.

⁶ See page 3 for NODE CONNECTION DETAILS. For additional PoE info, see hew.com/poe.

⁷ Reduces fixture output up to 5%.

⁸ Reduces fixture output up to 23%.

⁹ See page 4 for GASKETING DETAILS.



FIXTURE PERFORMANCE DATA

| LED PACKAGE | WATTAGE | | SYMMETRIC | | | | SYMMETRIC/ASYMMETRIC | | | | ASYMMETRIC | | | | |
|--------------------|---------|-------|------------------|-------|-----------------|-------|----------------------|-------|-----------------|-------|------------------|-------|-----------------|-------|----|
| | | | DELIVERED LUMENS | | EFFICACY (lm/W) | | DELIVERED LUMENS | | EFFICACY (lm/W) | | DELIVERED LUMENS | | EFFICACY (lm/W) | | |
| | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | WHITE | GREEN | |
| WHITE | | | | | | | | | | | | | | | |
| 1x4 | P30 | 25 | - | 3022 | - | 122 | - | 2950 | - | 119 | - | 2627 | - | 106 | - |
| | P66 | 50 | - | 6595 | - | 133 | - | 6438 | - | 129 | - | 5420 | - | 109 | - |
| 2x2 | P34 | 25 | - | 3403 | - | 138 | - | 3327 | - | 135 | - | 3289 | - | 133 | - |
| | P71 | 50 | - | 7080 | - | 143 | - | 6923 | - | 140 | - | 6844 | - | 138 | - |
| 2x4 | P71 | 50 | - | 7111 | - | 144 | - | 6953 | - | 141 | - | 6321 | - | 128 | - |
| | P141 | 99 | - | 14161 | - | 143 | - | 13846 | - | 140 | - | 12587 | - | 127 | - |
| GREEN/WHITE | | | | | | | | | | | | | | | |
| 2x2 | P6/P23 | 17 | 8 | 2330 | 611 | 130 | 76 | 2278 | 598 | 136 | 75 | 2252 | 590 | 91 | 74 |
| | P10/P47 | 34 | 16 | 4720 | 972 | 127 | 61 | 4615 | 950 | 137 | 59 | 4563 | 940 | 92 | 59 |
| 2x4 | P12/P47 | 34 | 16 | 4700 | 1222 | 140 | 76 | 4615 | 1195 | 138 | 75 | 4000 | 978 | 81 | 61 |
| | P21/P91 | 65 | 35 | 9084 | 2126 | 140 | 61 | 8882 | 2078 | 137 | 59 | 8075 | 1888 | 81 | 54 |

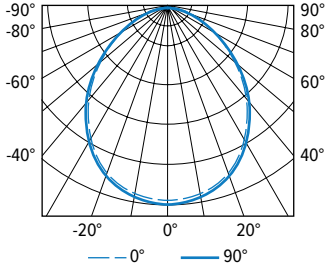
MULTIPLIER TABLES

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

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Results based on 4000K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

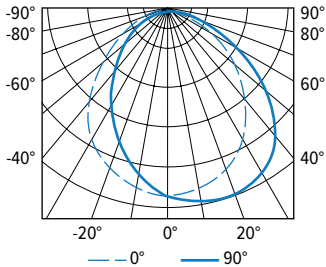
MDSG-24-P141/840-SYM Total Luminaire Output: 14161 lumens; 99 Watts | Efficacy:143 lm/W | 80 CRI; 4000K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|--------------|
| | | 0° | 45° | 90° | |
| | 0 | 6069 | 6069 | 6069 | |
| | 5 | 6089 | 6015 | 6008 | 572 |
| | 15 | 5785 | 5723 | 5723 | 1617 |
| | 25 | 5193 | 5134 | 5133 | 2368 |
| | 35 | 4356 | 4287 | 4278 | 2685 |
| | 45 | 3319 | 3247 | 3216 | 2509 |
| | 55 | 2264 | 2192 | 2159 | 1974 |
| | 65 | 1381 | 1325 | 1335 | 1340 |
| | 75 | 742 | 731 | 790 | 796 |
| | 85 | 260 | 269 | 315 | 300 |
| | 90 | 7 | 30 | 40 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 4557 | 32 |
| | 0 - 40 | 7242 | 51 |
| | 0 - 60 | 11725 | 83 |
| | 0 - 90 | 14161 | 100 |
| | 0 - 180 | 14161 | 100 |

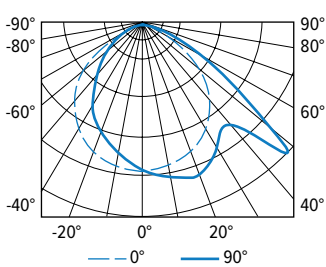
MDSG-24-P141/840-SYM/ASY Total Luminaire Output: 13846 lumens; 99 Watts | Efficacy: 140 lm/W | 80 CRI; 4000K CCT



| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | | | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|------|------|--------------|
| | | 0° | 45° | 90° | 135° | 180° | |
| | 0 | 5688 | 5688 | 5688 | 5688 | 5688 | |
| | 5 | 5879 | 5803 | 5698 | 5481 | 5428 | 537 |
| | 15 | 6067 | 5859 | 5435 | 4923 | 4739 | 1523 |
| | 25 | 5925 | 5599 | 4921 | 4148 | 3859 | 2250 |
| | 35 | 5441 | 5029 | 4176 | 3249 | 2902 | 2594 |
| | 45 | 4492 | 4071 | 3234 | 2361 | 2059 | 2490 |
| | 55 | 3175 | 2881 | 2251 | 1597 | 1398 | 2015 |
| | 65 | 1904 | 1742 | 1391 | 1005 | 912 | 1380 |
| | 75 | 988 | 878 | 731 | 577 | 552 | 786 |
| | 85 | 315 | 265 | 241 | 213 | 225 | 270 |
| | 90 | 22 | 14 | 8 | 32 | 42 | |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 4310 | 31 |
| | 0 - 40 | 6904 | 50 |
| | 0 - 60 | 11409 | 82 |
| | 0 - 90 | 13846 | 100 |
| | 0 - 180 | 13846 | 100 |

MDSG-24-P141/840-ASY Total Luminaire Output: 12587 lumens; 99 Watts | Efficacy: 127 lm/W | 80 CRI; 4000K CCT



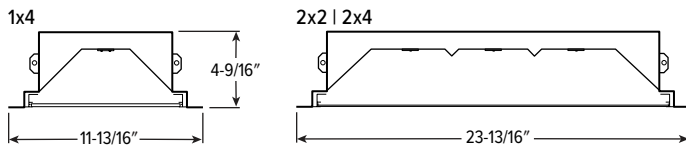
| CANDLEPOWER DISTRIBUTION | VERTICAL ANGLE | HORIZONTAL ANGLE | | | | ZONAL LUMENS |
|--------------------------|----------------|------------------|------|------|------|--------------|
| | | 0° | 45° | 90° | 180° | |
| | 0 | 5172 | 5172 | 5172 | 5172 | |
| | 5 | 5326 | 5263 | 5189 | 4996 | 488 |
| | 15 | 5677 | 5386 | 4945 | 4468 | 4311 |
| | 25 | 5385 | 5218 | 4492 | 3848 | 3672 |
| | 35 | 4579 | 4497 | 3872 | 3144 | 2849 |
| | 45 | 6216 | 3402 | 3040 | 2231 | 1970 |
| | 55 | 3688 | 3530 | 1884 | 1351 | 1215 |
| | 65 | 1423 | 1607 | 887 | 871 | 670 |
| | 75 | 685 | 608 | 370 | 371 | 371 |
| | 85 | 267 | 174 | 83 | 109 | 108 |
| | 90 | 75 | 18 | 3 | 4 | 2 |

| LUMEN SUMMARY | ZONE | LUMENS | % FIXTURE |
|---------------|---------|--------|-----------|
| | 0 - 30 | 3958 | 31 |
| | 0 - 40 | 6335 | 50 |
| | 0 - 60 | 10781 | 86 |
| | 0 - 90 | 12587 | 100 |
| | 0 - 180 | 12587 | 100 |

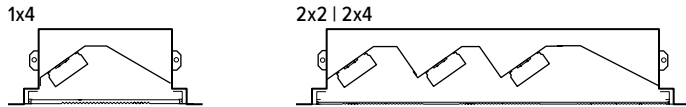


FIXTURE DETAILS

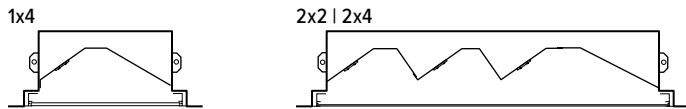
SYM



ASY

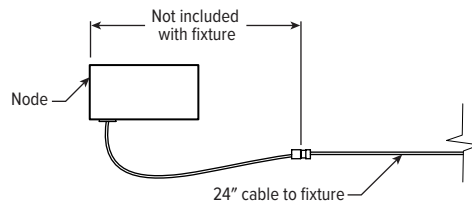


SYM/ASY



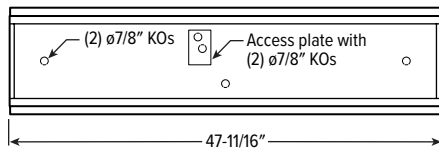
NODE CONNECTION DETAILS

Includes 24" cable with 4-position mating connector for Platformatics POE-LN2 node. See node spec sheet for details: platformatics.com/product/poe-ln2

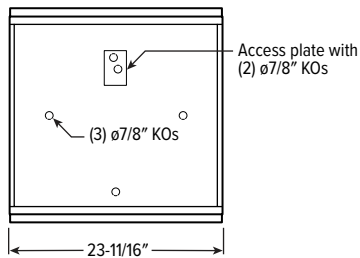


BACK VIEW DETAILS

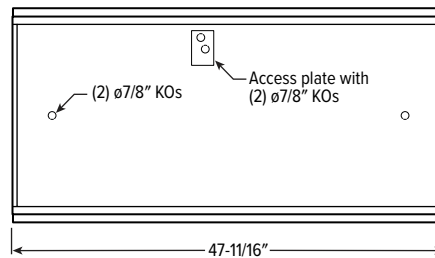
1x4



2x2

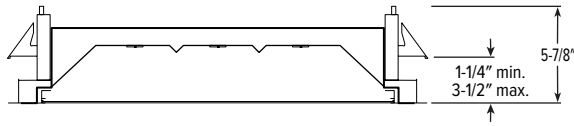


2x4



MDS PoE Medical/Surgical Troffer – Wide Grid

NEMA TYPE “F” INSTALLATION

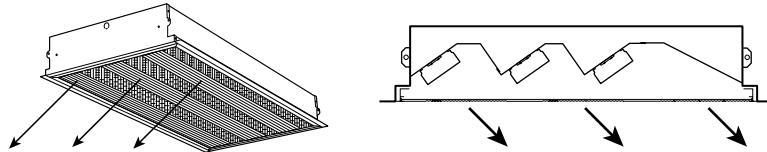


| | ROUGH-IN | FINISH TRIM SIZE |
|-----|-------------------|---------------------|
| 1x4 | 12-3/8" x 48-3/8" | 13-5/16" x 49-5/16" |
| 2x2 | 24-3/8" x 24-3/8" | 25-5/16" x 25-5/16" |
| 2x4 | 24-3/8" x 48-3/8" | 25-5/16" x 49-5/16" |

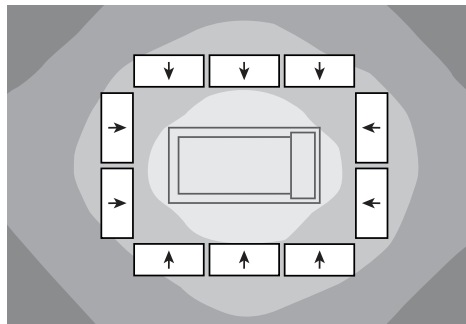
For continuous row mounting, add finish trim size for each additional fixture.

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

DIRECTIONAL LENS DETAILS

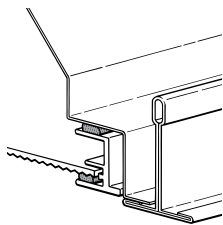


TYPICAL SURGICAL SUITE LAYOUT



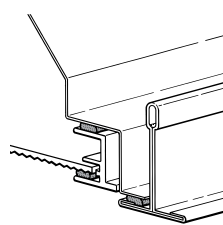
GASKETING DETAILS

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.

