

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

TYPE: \_\_\_\_\_

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

## FEATURES

- Williams turn-key Power over Ethernet (PoE) solution provides plug-and-play networked lighting and control.
- Efficacies up to 144 lm/W.
- Multiple distribution options provide effective, application specific lighting
- 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
- Optional triple gasket protects against contaminant ingress
- Made Right Here® in the USA

## SYSTEM REQUIREMENTS

- Lighting system (site software)
- Gateway or alternate server (runs software)
- PoE switches or Ethernet switches and mid-span power injectors
- See [hew.com/poe](http://hew.com/poe) for details

## 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](http://hew.com/warranty).

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

### ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS <sup>(1)</sup>	CRI	CCT
MDS	G NEMA Type "G"	1 1' <sup>(3)</sup>	2 2' <sup>(4)</sup>	1x4	8 80	30 3000K
	F NEMA Type "F" <sup>(2)</sup>	2 2'	4 4'	P30 3,000lm white only P66 6,600lm white only	9 90 <sup>(5)</sup>	35 3500K 40 4000K 50 5000K
				2x2		
				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		

### SHIELDING

- SYM Symmetric
- SYM/ASY Symmetric/asymmetric <sup>(8)</sup>
- ASY Asymmetric <sup>(9)</sup>

### OPTIONS <sup>(6)</sup>

- EM/CP12 Remote mount 12-watt Iota emergency LED battery, controls ambient compartment only <sup>(10)</sup>
- TG Triple gasket <sup>(11)</sup>

### CONTROL <sup>(7)</sup>

- POE N Power over Ethernet network node
- POE D Power over Ethernet device node

## NOTES

- Nominal lumen output based on 4000 CCT. Actual lumens may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- See page 3 for NEMA TYPE "F" INSTALLATION.
- 4' length only.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- See [hew.com/poe](http://hew.com/poe) for compatible sensors & switches.
- See page 3 for REMOTE MOUNT DETAILS. For additional PoE info, see [hew.com/poe](http://hew.com/poe).
- Reduces fixture output up to 5%.
- Reduces fixture output up to 23%.
- Requires one additional category cable run to switch. See page 3 for REMOTE MOUNT DETAILS.
- 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	
<b>WHITE</b>															
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	-
<b>GREEN/WHITE</b>															
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

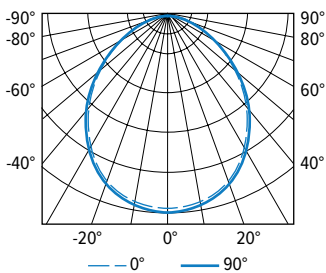
## MULTIPLIER TABLES

	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

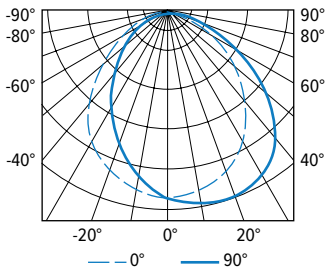
**MDSG-24-P141/840-SYM** Total Luminaire Output: 14161 lumens; 99 Watts | Efficacy:143 lm/W | 82 CRI; 4000K CCT



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

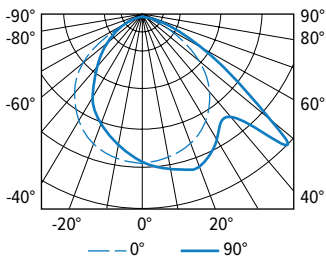
**MDSG-24-P141/840-SYM/ASY** Total Luminaire Output: 13846 lumens; 99 Watts | Efficacy: 140 lm/W | 82 CRI; 4000K CCT



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 | 82 CRI; 4000K CCT



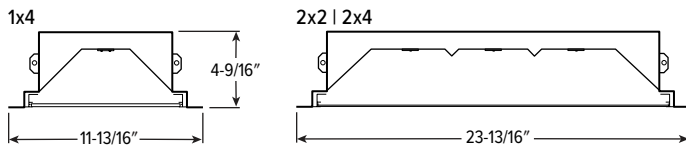
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE				ZONAL LUMENS
		0°	45°	90°	180°	
	0	5172	5172	5172	5172	
	5	5326	5263	5189	4996	488
	15	5677	5386	4945	4468	4311
	25	5385	5218	4492	3848	3672
	35	4579	4497	3872	3144	2849
	45	6216	3402	3040	2231	1970
	55	3688	3530	1884	1351	1215
	65	1423	1607	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

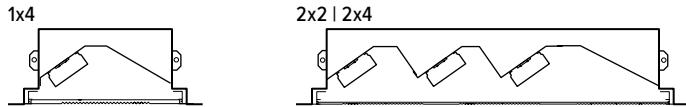


## FIXTURE DETAILS

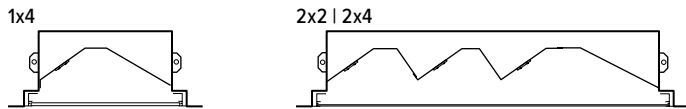
### SYM



### ASY



### SYM/ASY

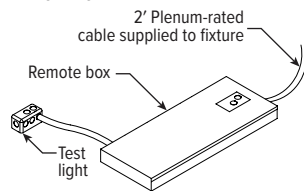


## REMOTE MOUNT DETAILS

Includes 2' plenum-rated 18ga. solid cable. Remote box can be installed in:

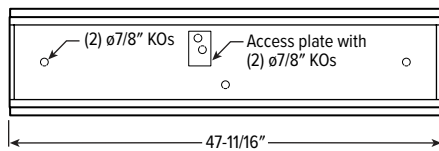
- Above ceiling grid
- Remote closet (within 100ft)
- Surface below ceiling

### EM OPTION

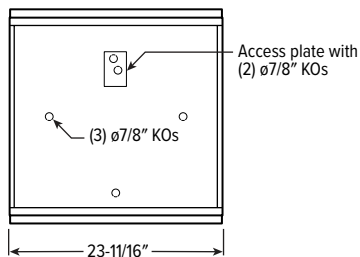


## BACK VIEW DETAILS

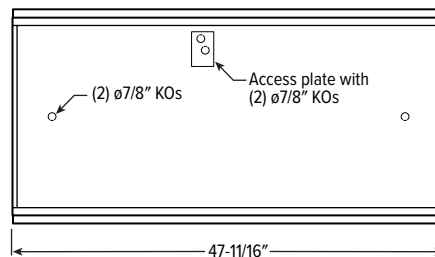
### 1x4



### 2x2

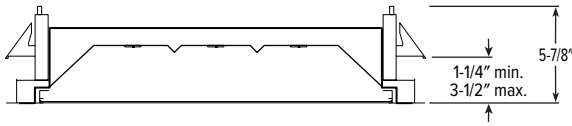


### 2x4



# MDS<sup>PoE</sup> Medical/Surgical Troffer – Wide Grid

## NEMA TYPE “F” INSTALLATION

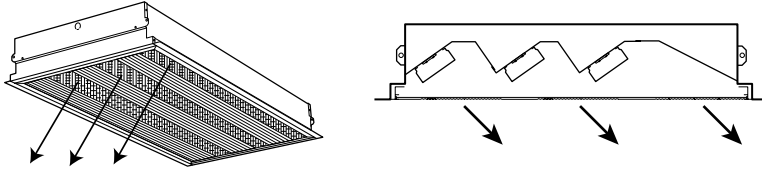


	ROUGH-IN	FINISH TRIM SIZE
1x4	12-3/8" x 48-3/8"	13-5/16" x 49-5/16"
2x2	24-3/8" x 24-3/8"	25-5/16" x 25-5/16"
2x4	24-3/8" x 48-3/8"	25-5/16" x 49-5/16"

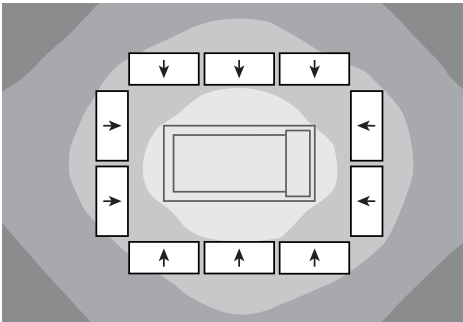
For continuous row mounting, add finish trim size for each additional fixture.

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

## DIRECTIONAL LENS DETAILS

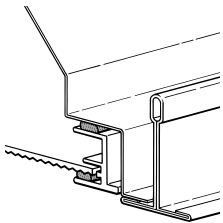


## TYPICAL SURGICAL SUITE LAYOUT



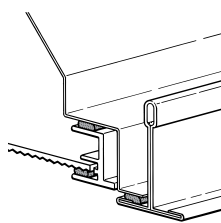
## GASKETING DETAILS

### 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.

