

CATALOG #: _____

TYPE: _____

PROJECT: _____



FEATURES

- Deliver scalable, data-driven smart buildings with PoE-enabled fixtures and 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 15/16" or 1" grid	1 1' ^[3]	2 2' ^[4]	1x4	8 80	30 3000K
		F Flange ^[2]	2 2'	4 4'	P30	9 90 ^[5]
				P66		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 – 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. Salt spray tested, 1,000 hours (ASTM B117). 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" 15/16" or 1" grid standard. Drywall flange type available. Four (4) earthquake clips standard.
- LISTINGS –
 - cCSAus certified as luminaire suitable for dry or damp locations.
 - 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.

SHIELDING

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

OPTIONS

- TG Triple gasket ^[8]

CONTROL ^[6]

- POE PR Power over Ethernet-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.

NOTES

- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA.
- See page 3 for CROSS SECTIONS.
- 4' length only.
- 2' width only.

- Available in 4000K and 5000K only. Extended lead times may apply. Consult factory for availability.
- For additional PoE connection details, consult factory.
- Reduces fixture output up to 5%.
- Field-installed. See page 3 for GASKETING DETAILS.



FIXTURE PERFORMANCE DATA

LED PACKAGE	WATTAGE		SYMMETRIC				SYMMETRIC/ASYMMETRIC				
			DELIVERED LUMENS		EFFICACY (lm/W)		DELIVERED LUMENS		EFFICACY (lm/W)		
	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	
WHITE											
1x4	P30	25	-	3022	-	122	-	2950	-	119	-
	P66	50	-	6595	-	133	-	6438	-	129	-
	P34	25	-	3403	-	138	-	3327	-	135	-
2x2	P71	50	-	7080	-	143	-	6923	-	140	-
	P71	50	-	7111	-	144	-	6953	-	141	-
2x4	P141	99	-	14161	-	143	-	13846	-	140	-
	GREEN/WHITE										
2x2	P6/P23	17	8	2330	611	130	76	2278	598	136	75
	P10/P47	34	16	4720	972	127	61	4615	950	137	59
2x4	P12/P47	34	16	4700	1222	140	76	4615	1195	138	75
	P21/P91	65	35	9084	2126	140	61	8882	2078	137	59

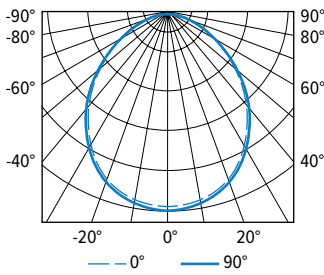
MULTIPLIER TABLE

	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 based on 80 CRI/4000K CCT and 25°C ambient temperature. Actual performance may vary +/-5%.
- Use multiplier table to calculate additional options.

PHOTOMETRY

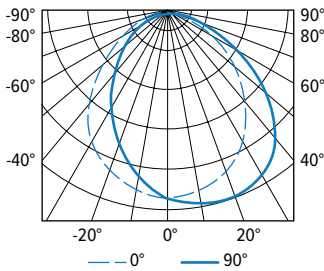
MDSG-24-P141/840-SYM Total Luminaire Output: 14161 lumens; 99 Watts | Efficacy:143 lm/W | 80 CRI; 4000K CCT



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

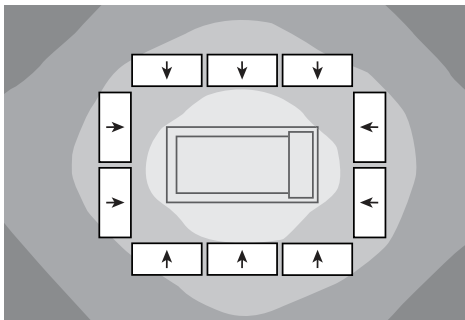
MDSG-24-P141/840-SYM/ASY Total Luminaire Output: 13846 lumens; 99 Watts | Efficacy: 140 lm/W | 80 CRI; 4000K CCT



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	

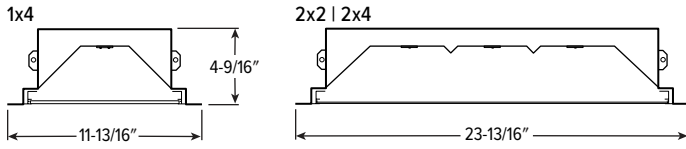
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	4310	31
	0 - 40	6904	50
	0 - 60	11409	82
	0 - 90	13846	100
	0 - 180	13846	100

TYPICAL SURGICAL SUITE LAYOUT

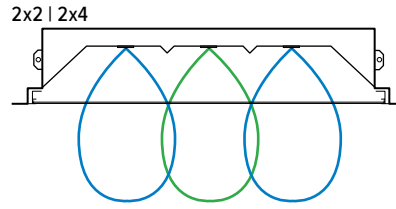


CROSS SECTIONS

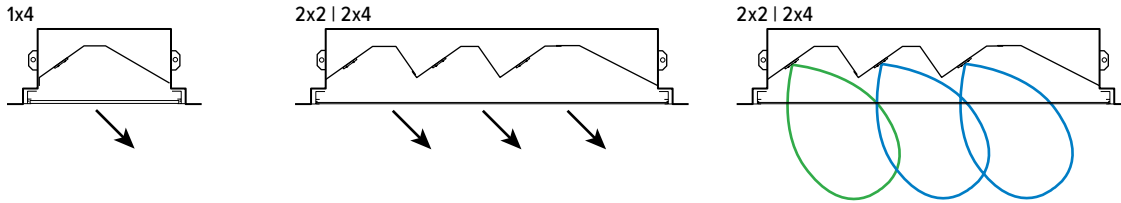
SYM



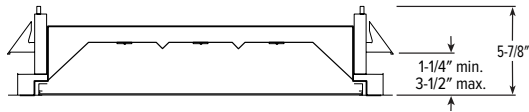
GREEN/WHITE LED



SYM/ASY



F CEILING TYPE INSTALLATION



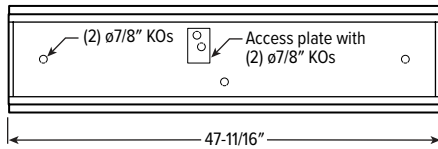
	ROUGH-IN	FINISH TRIM SIZE
1x4	12-3/8" x 48-3/8"	13-5/16" x 49-5/16"
2x2	24-3/8" x 24-3/8"	25-5/16" x 25-5/16"
2x4	24-3/8" x 48-3/8"	25-5/16" x 49-5/16"

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

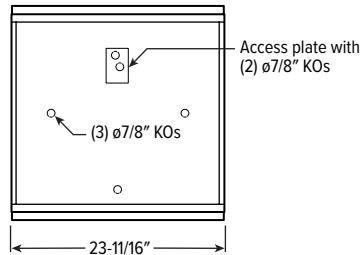
MDSF fixtures can be field converted to work with 1-1/2" or 2" NEMA Type "G" ceiling systems.

FIXTURE DETAILS

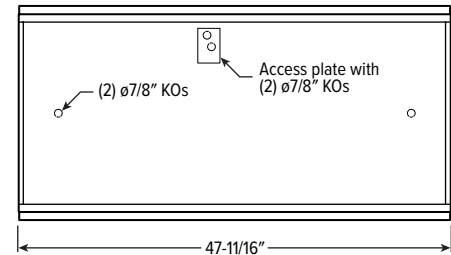
1x4



2x2



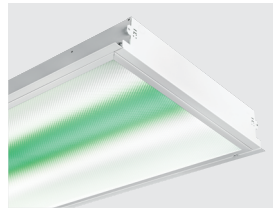
2x4



WHITE ONLY



GREEN/WHITE

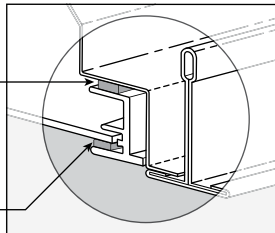


GASKETING DETAILS

DOUBLE GASKETING (STANDARD)

First gasketing factory-installed between door frame and luminaire housing prevents light leak and reduces dust ingress.

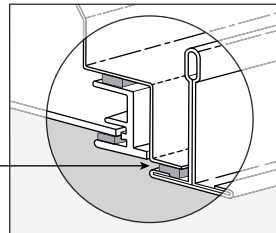
Second gasketing factory-installed between door frame and lens reduces dust and bug contaminants.



TRIPLE GASKETING (TG OPTION)

T-bar

Third gasketing field installed between bottom perimeter of fixture and T-bar ceiling seals plenum dust from the room.



Drywall

Between bottom perimeter of fixture and hardpan ceiling.

