

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

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

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

**FEATURES**

- Tunable white from 3000K to 5000K CCT, minimum 80 CRI
- 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

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

**ORDERING INFO**

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS <sup>(1)</sup>	COLOR
MDS	G NEMA Type "G"	1 1' <sup>(3)</sup>	2 2' <sup>(4)</sup>	1x4	8TW Tunable white (80 CRI, 3000K-5000K)
	F NEMA Type "F" <sup>(2)</sup>	2 2'	4 4'	L72 7,200lm	
				L75 7,500lm	
				L155 15,500lm	

**SHIELDING**

<b>SYM</b>	Symmetric
<b>SYM/ASY</b>	Symmetric/asymmetric <sup>(5)</sup>
<b>ASY</b>	Asymmetric <sup>(6)</sup>

**OPTIONS**

<b>EM/10W</b>	10-watt emergency battery <sup>(7)</sup>
<b>GLR</b>	Fuse, fast blow (specify voltage), one per driver
<b>(L__)</b>	Additional lower lumen packages available. <b>Example:</b> 11,500 nominal lumens = MDSG-24-L155/8TW-(L115) <sup>(8)</sup>
<b>CP</b>	Chicago plenum (CCEA)
<b>TG</b>	Triple gasket <sup>(9)</sup>

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

**CONTROL <sup>(10)</sup>**

<b>DALI</b>	Driver prewired for DALI applications
<b>DIM</b>	(1) 0-10V signal to control dimming (1) 0-10V signal to control CCT
<b>DMX</b>	Driver prewired for DMX applications

**VOLTAGE**

<b>120</b>	120V
<b>277</b>	277V
<b>UNV</b>	120-277V

**NOTES**

- <sup>1</sup> 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.
- <sup>2</sup> See page 3 for NEMA TYPE "F" INSTALLATION.
- <sup>3</sup> 4' length only.
- <sup>4</sup> 2' width only.
- <sup>5</sup> Reduces fixture output up to 5%.
- <sup>6</sup> Reduces fixture output up to 23%.
- <sup>7</sup> 120V-277V only.
- <sup>8</sup> Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- <sup>9</sup> See page 4 for GASKETING DETAILS.



## FIXTURE PERFORMANCE DATA

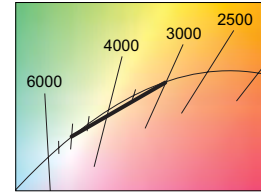
### TUNABLE WHITE

	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.

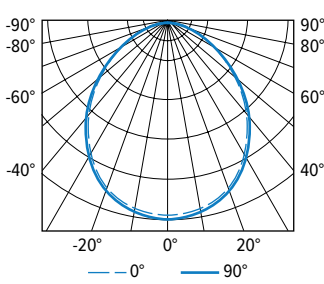
### MULTIPLIER TABLE

CCT	CONVERSION FACTOR	
	LUMENS	WATTAGE
3000K	0.95	1.04
3500K	0.98	1.02
4000K	1.00	1.00
5000K	0.96	1.04



## PHOTOMETRY

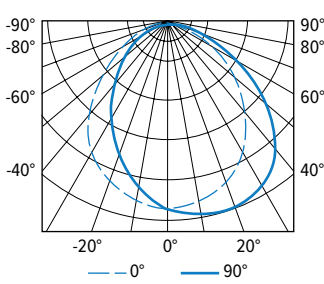
MDSG-24-L155/8TW-SYM-DALI Total Luminaire Output: 15569 lumens; 127 Watts | Efficacy: 123 lm/W



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	

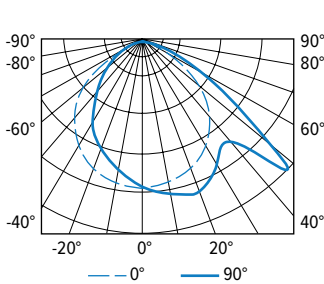
MDSG-24-L155/8TW-SYM-ASY-DALI Total Luminaire Output: 15223 lumens; 127 Watts | Efficacy: 120 lm/W



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	

MDSG-24-L155/8TW-ASY-DALI Total Luminaire Output: 13839 lumens; 127 Watts | Efficacy: 109 lm/W



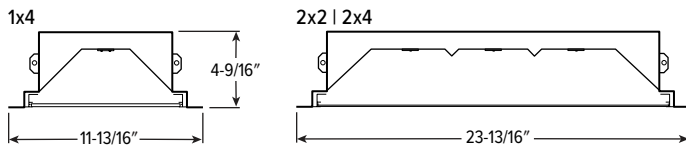
VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	5686	5686	5686	5686	5686	
5	5856	5786	5706	5493	5420	537
15	6242	5922	5437	4913	4740	1534
25	5920	5737	4939	4231	4037	2282
35	5035	4945	4257	3457	3132	2613
45	6835	3740	3342	2453	2166	2714
55	4055	3882	2072	1485	1336	2174
65	1565	1767	976	957	736	1235
75	753	669	407	408	408	573
85	294	191	91	120	119	177
90	82	20	3	4	2	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	4352	31
0 - 40	6965	50	
0 - 60	11853	86	
0 - 90	13838	100	
0 - 180	13839	100	

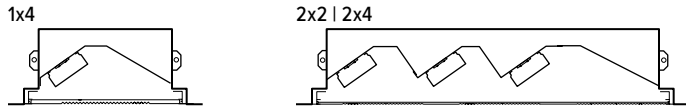


## FIXTURE DETAILS

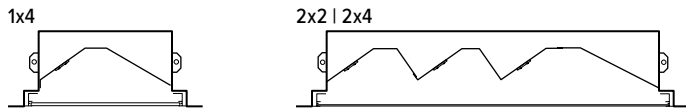
### SYM



### ASY

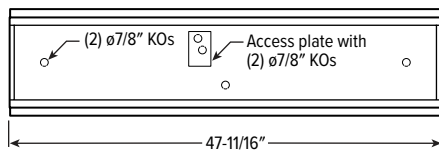


### SYM/ASY

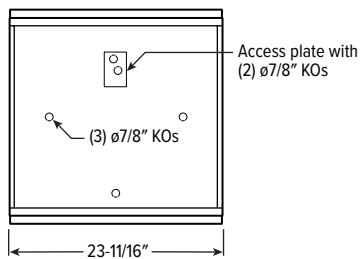


## BACK VIEW DETAILS

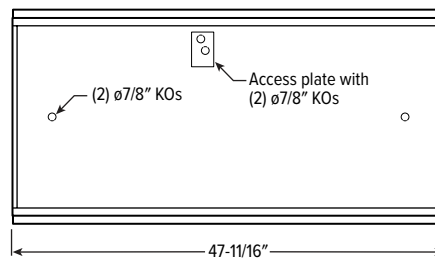
### 1x4



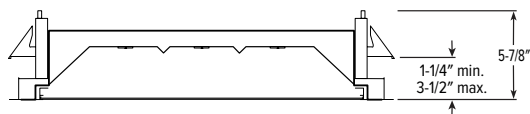
### 2x2



### 2x4



## NEMA TYPE "F" INSTALLATION



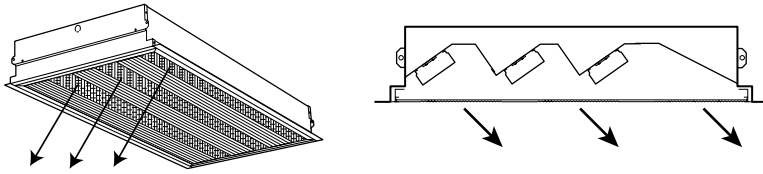
	ROUGH-IN	FINISH TRIM SIZE
1x4	12-3/8" x 48-3/8"	13-5/16" x 49-5/16"
2x2	24-3/8" x 24-3/8"	25-5/16" x 25-5/16"
2x4	24-3/8" x 48-3/8"	25-5/16" x 49-5/16"

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

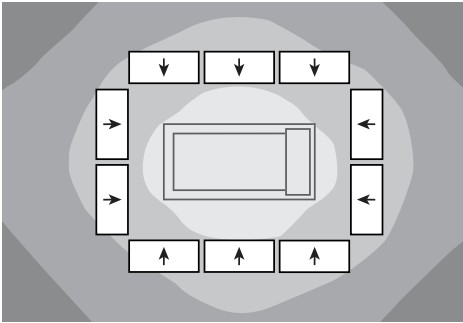
MDSF fixtures can be field converted to work with 1-1/2" or 2" NEMA Type "G" ceiling systems.



**DIRECTIONAL LENS DETAILS**

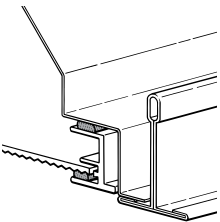


**TYPICAL SURGICAL SUITE LAYOUT**



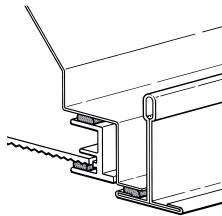
**GASKETING DETAILS**

**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.