

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

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

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



## FEATURES

- Designed to meet the demanding requirements of controlled environments
- Specify green circuit to enhance visual clarity for the surgical team
- Seam-welded housing and door frame for infection-controlled environments
- Optimized lensing reduces shadowing and glare
- Multiple distribution options provide effective, application specific lighting performance
- Smooth surface doorframe and lens materials simplify cleaning and maintenance
- NSF approved closed cell foam gasketing seals the fixture for particle sensitive environments
- Designed to accommodate 2" tall T-bar
- Complies with MIL-STD-461G conducted emission regulations
- Made Right Here® in the USA

## SPECIFICATIONS

- HOUSING** – 20-gauge die-formed, seam-welded C.R.S. Aluminum and stainless steel options available.
- DOOR FRAME** – One-piece 20-gauge seam-welded C.R.S. Hinged from one side with stainless steel safety cables. Attached to fixture using captive, stainless steel screws.
- SHIELDING** – Frosted Acrylic .125 thick Pattern #12 with clear acrylic underlay.
- 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. Rated for 50,000 hours at 70% lumen maintenance (L70).
- MOUNTING** – NEMA Type "G" 15/16" or 1-1/2" grid standard. Drywall flange type available.
- LISTINGS** –
  - cCSAus certified as luminaire suitable for wet location under covered ceiling.
  - IP65 rated
  - ISO 5, Class 100 rated
  - NSF/ANSI 2
  - Complies with MIL-STD-461G with DIM or DRV drivers.
  - City of Chicago Environmental Air approved (not available when specified with NSWH).
  - Complies with the Buy American Act and other federal regulations. Request certification at [hew.com/baa](http://hew.com/baa).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

ORDERING EXAMPLE: MSTG - 24 - L32/GRN/L121/840 - CS - SSYM - OPTIONS - DRV - 120

## ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT
MST	G 15/16" or 1-1/2" grid	1 1' <sup>[3]</sup>	2 2' <sup>[4]</sup>	1x4	8 80	30 3000K
		2 2'	4 4'	L75	9 90 <sup>[5]</sup>	35 3500K
	F Flange <sup>[2]</sup>	2 2'	4 4'	L37/GRN	9 90 <sup>[5]</sup>	40 4000K
				L36/GRN/L53		50 5000K
				2x2	9 90 <sup>[5]</sup>	35 3500K
				L96		
				L14/GRN/L57		
				L58/GRN		
				2x4	9 90 <sup>[5]</sup>	35 3500K
				L210		
				L32/GRN/L121		
				L114/GRN	9 90 <sup>[5]</sup>	35 3500K

HOUSING <sup>[6]</sup>	DOOR FRAME <sup>[7]</sup>	DISTRIBUTION
CS 20-gauge C.R.S.	S Flat white steel	SYM Symmetric
AL Flat white aluminum	F Flat white aluminum	SYM/ASY Symmetric/asymmetric <sup>[8]</sup>

OPTIONS	CONTROL <sup>[9]</sup>	VOLTAGE
EM/10W 10-watt emergency battery <sup>[10]</sup>	DRV Non-dimming driver	120 120V
EM/10WLP Low-profile 10-watt emergency battery <sup>[11]</sup>	DIM Dimming driver	277 277V
GLR Fuse, fast blow (specify voltage), one per driver		
(L___) Additional lower lumen packages available. Example: 12,000 nominal lumens = MSTG-24-L210/840-(L120) <sup>[12]</sup>		
EQCLIPS Earthquake clips <sup>[13]</sup>		
TG Triple gasket <sup>[14]</sup>		
NSWH Fixture provided without seam-welded housing <sup>[15]</sup>		
TP Tamper resistant stainless steel, Torx T-25 screws <sup>[16]</sup>		
2C Two circuit wiring <sup>[17]</sup>		

## ACCESSORIES

TPTX-25 TOOL Tamper-resistant tool for Torx T-25 screws. <sup>[18]</sup>

## NOTES

- Lumen output based on 80 CRI/4000K CCT. Actual performance may vary +/-5%. See page 2 for FIXTURE PERFORMANCE DATA. Additional lumen packages available, see Options.
- See page 3 for F CEILING TYPE INSTALLATION.
- 1' length only.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- Stainless steel options available, consult factory.
- Stainless steel options available, consult factory.
- Reduces fixture output up to 5%.
- See page 4 for ADDITIONAL CONTROL OPTIONS.
- 2x2, 2x4 only.
- 1x4 only.

- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- G Ceiling Type only. 4 per fixture.
- Field-installed. See page 4 for GASKETING DETAILS.
- NSWH option does not affect NSF, ISO, IP65, or MIL-STD461G listings. Fixture is not City of Chicago Environmental Air approved when specified with NSWH.
- Requires a tamper-resistant tool, see Accessories. When TP option is specified, fixture is not NSF/ANSI 2 certified.
- Inboard-outboard wiring. Allows for independent dimming of each circuit when ordered with DIM driver. Fixture is wired as two circuit by default when specified with green/white.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.



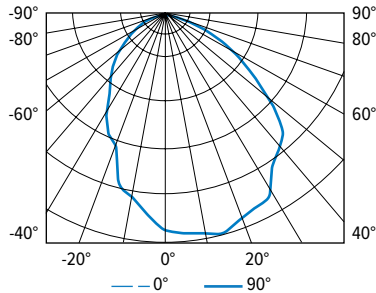
## FIXTURE PERFORMANCE DATA

				SYMMETRIC				SYMMETRIC/ASYMMETRIC				TOTAL AMP DRAW	
LED PACKAGE	WATTAGE		DELIVERED LUMENS		EFFICACY (lm/W)		DELIVERED LUMENS		EFFICACY (lm/W)		120V	277V	
	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN	WHITE	GREEN			
WHITE												WHITE	
1x4	L75	61	—	7509	—	123	—	7156	—	117	—	0.54	0.30
2x2	L96	74	—	9687	—	131	—	9377	—	127	—	0.65	0.35
2x4	L210	154	—	21154	—	137	—	20541	—	133	—	1.36	0.65
GREEN/WHITE												GREEN/WHITE	
1x4	L36/L53	41	43	5346	3572	130	83	5082	3395	124	79	0.80	0.39
2x2	L14/L57	55	70	5713	1444	104	21	5524	1269	100	18	0.72	0.52
2x4	L32/L121	88	134	12210	3250	139	24	11807	2883	134	22	1.15	0.90
GREEN												GREEN	
1x4	L37	—	44	—	3766	—	86	—	3581	—	81	0.42	0.22
2x2	L58	—	70	—	5906	—	84	—	5717	—	82	0.62	0.32
2x4	L114	—	134	—	11466	—	86	—	11088	—	83	1.18	0.50

- Photometrics tested in accordance with IESNA LM-79. Results based on 80 CRI/4000K CCT, wattage for 120V input, and 25°C ambient temperature. Actual performance may vary +/-5%.
- To calculate lumen output in emergency mode, multiply the battery wattage by the efficacy.
- Use multiplier table to calculate additional options.

## PHOTOMETRY

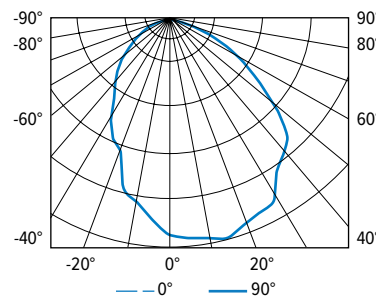
**MSTG-24-L210/840-CS-SSYM/ASY-DIM-120** Total Luminaire Output: 20541 lumens; 154 Watts | Efficacy: 133 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	9333	9333	9333	9333	9333	
5	9490	9324	9041	8801	8671	860
15	9854	9546	8824	8044	7700	2414
25	9241	8736	7548	6216	5711	3447
35	8096	7518	6128	4632	4153	3888
45	7243	6599	5097	3509	3173	3872
55	4849	4410	3365	2263	2085	3050
65	2742	2537	1972	1328	1284	1946
75	1101	992	810	566	592	880
85	192	174	135	91	108	186
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	6721	33
	0 - 60	17530	85
	0 - 90	20541	100
	0 - 180	20541	100

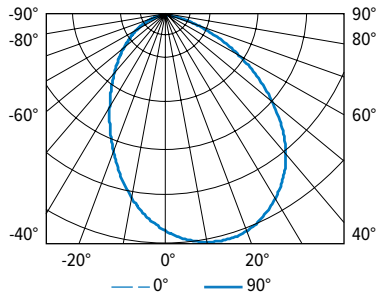
**MSTG-24-L32/GRN/L121/840-CS-SSYM/ASY-DIM-120** White Only Total Luminaire Output: 11807 lumens; 88 Watts | Efficacy: 134 lm/W | 80 CRI; 4000K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	5365	5365	5365	5365	5365	
5	5455	5359	5196	5059	4984	495
15	5664	5487	5072	4624	4426	1387
25	5312	5022	4338	3573	3282	1981
35	4654	4321	3523	2662	2387	2235
45	4164	3793	2930	2017	1824	2226
55	2787	2535	1934	1301	1199	1753
65	1576	1458	1133	763	738	1118
75	633	570	465	325	340	506
85	110	100	77	53	62	107
90	0	0	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	3863	33
	0 - 60	10077	85
	0 - 90	11807	100
	0 - 180	11807	100

**MSTG-24-L32/GRN/L121/840-CS-SSYM/ASY-DIM-120** Green Only Total Luminaire Output: 2883 lumens; 134 Watts | Efficacy: 22 lm/W | 80 CRI; 4000K CCT

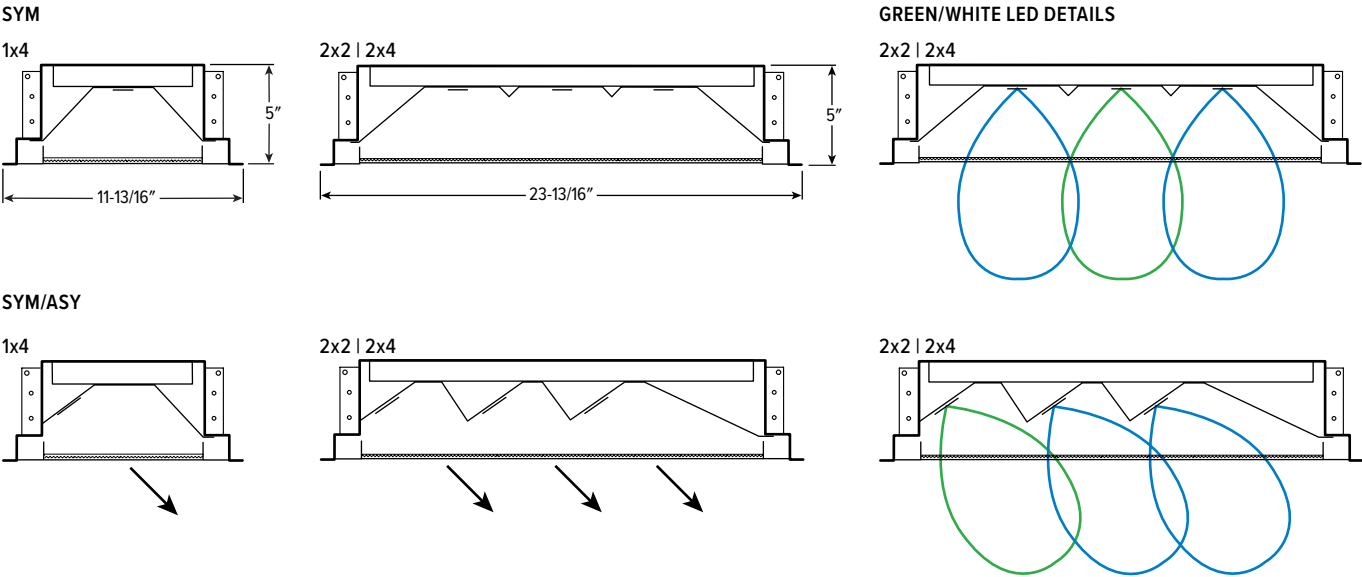


VERTICAL ANGLE	HORIZONTAL ANGLE					ZONAL LUMENS
	0°	45°	90°	135°	180°	
0	1259	1259	1259	1259	1259	
5	1314	1293	1257	1204	1189	119
15	1361	1311	1198	1052	988	333
25	1317	1245	1080	853	759	485
35	1190	1108	917	655	557	554
45	978	893	714	475	398	532
55	686	624	497	323	272	429
65	391	358	295	196	170	280
75	158	143	126	91	81	128
85	21	18	18	14	12	23
90	0	0	0	1	0	

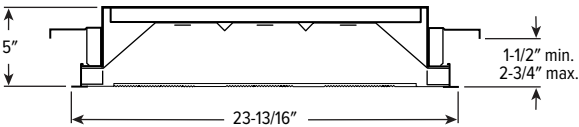
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	937	33
	0 - 60	2452	85
	0 - 90	2883	100
	0 - 180	2883	100



CROSS SECTIONS

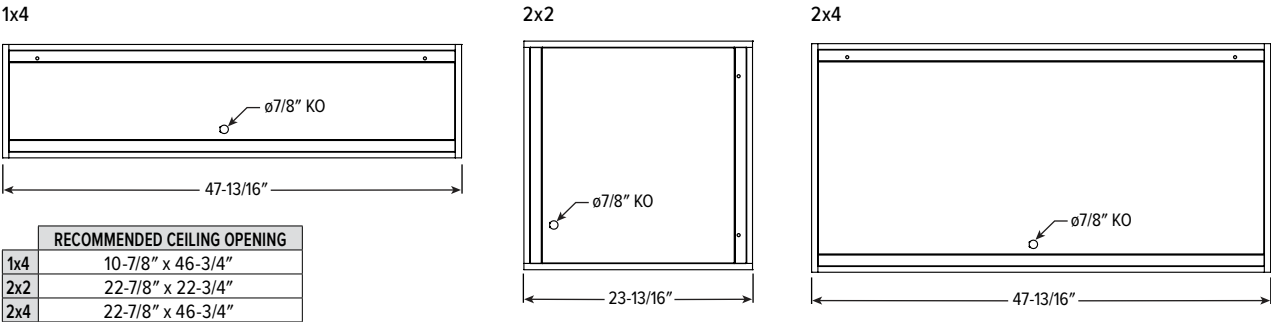


F CEILING TYPE INSTALLATION



For continuous row mounting, add 47-13/16" for each additional fixture to obtain ceiling opening. 3/4" between end plates.

FIXTURE DETAILS



WHITE ONLY



GREEN/WHITE



GREEN ONLY

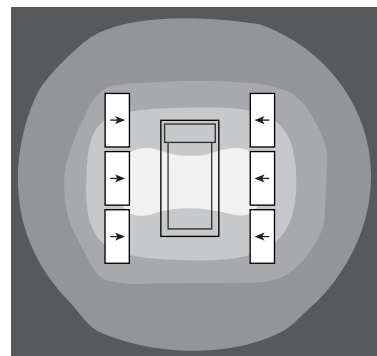


TYPICAL SURGICAL SUITE LAYOUT

625 sq. ft. | Ceiling/Mounting: 14'-0" AFF | Light Loss Factor: 0.90 LLF | Room Reflectance Values: 50/70/10 | Calculation Grids: 3'-0" AFF | Reference IESNA RP-29-20

Suite 1

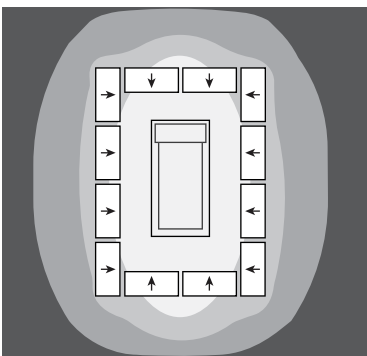
MST-24-L210/840-SYM/ASY



AVERAGE FOOTCANDLES			
ZONE 1	ZONE 2	ZONE 3	ZONE 4
400	300	200	100

Suite 2

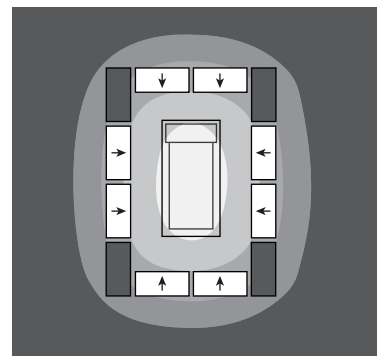
MST-24-L32/GRN/L121/840-SYM/ASY  
White only



AVERAGE FOOTCANDLES		
ZONE 1	ZONE 2	ZONE 3
300	200	100

Suite 3

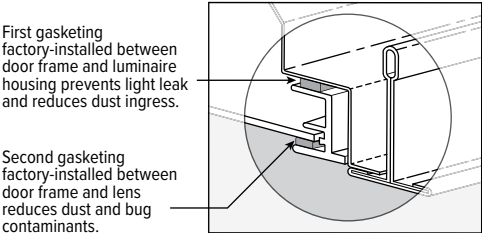
MST-24-L32/GRN/L121/840-SYM/ASY  
Green only



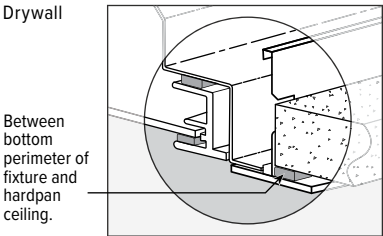
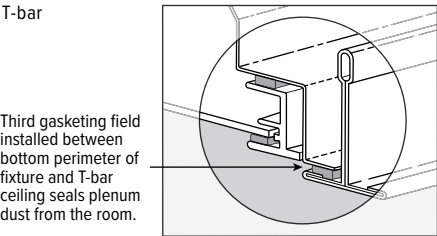
AVERAGE FOOTCANDLES			
ZONE 1	ZONE 2	ZONE 3	ZONE 4
50	40	30	10

GASKETING DETAILS

DOUBLE GASKETING (STANDARD)



TRIPLE GASKETING (TG OPTION)



ADDITIONAL CONTROL OPTIONS

DIM, DIM1 and DRV only for MIL-STD-461G compliance  
Note: Lumen restrictions apply, consult product builder at [hew.com/product-builder](http://hew.com/product-builder).

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver

