

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- Designed to meet the demanding requirements of controlled environments
- Seam-welded fixture housing and doorframe are designed for infection controlled environments
- Smooth surface doorframe and lens materials simplify cleaning and maintenance
- Optional MIL-STD-461G for environments requiring conducted emission mitigation
- NSF approved closed cell foam gasketing meets all required testing criteria for ISO 5, Class 100 certification
- Anti-microbial white finish is standard
- Suitable for grid or flange installations
- Optimized for hospitals, medical facilities and containment sensitive manufacturing facilities utilizing 15/16" and 1-1/2" face T-bars
- Narrow-spectrum color LEDs available for vivarium and manufacturing applications, consult factory
- 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** – Choice of frosted lens with smooth clear acrylic or polycarbonate 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" for 15/16" and 1-1/2" systems. NEMA Type "F" 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 when specified with MIL option
 - City of Chicago Environmental Air approved (not available when specified with NSWH)
- WARRANTY** – 5-year limited fixture warranty, see hew.com/warranty.

ORDERING EXAMPLE: MCTG - 24 - L208/835 - CS - SAF12125 - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS ⁽¹⁾	CRI	CCT
MCT	G NEMA Type "G"	1 1' ⁽³⁾	2 2' ⁽⁴⁾	1x4	8 80	30 3000K
		F NEMA Type "F" ⁽²⁾	2 2'	4 4'	L40 4,000lm	9 90 ⁽⁵⁾
				L79 7,900lm		40 4000K
						50 5000K
				2x2		
				L34 3,400lm		
				L65 6,500lm		
				L95 9,500lm		
				2x4		
				L60 6,000lm		
				L121 12,100lm		
				L208 20,800lm		

HOUSING	DOOR FRAME	SHIELDING
CS 20-gauge C.R.S.	S Flat white steel	AF12125 Pattern #12, .125" thick with acrylic underlay
AL Flat white aluminum	F Flat white aluminum	AF125 .125" thick with acrylic underlay
ST Stainless steel ⁽⁶⁾	W White stainless steel ⁽⁷⁾	AF19156 Pattern #19, .156" thick with acrylic underlay
	B Brushed stainless steel ⁽⁸⁾	AF12125/PC Pattern #12, .125" thick with polycarbonate underlay
		AF125/PC .125" thick with polycarbonate underlay
		AF19156/PC Pattern #19, .156" thick with polycarbonate underlay

OPTIONS	DRIVER ⁽⁹⁾	VOLTAGE
EM/10W 10-watt emergency battery ⁽¹⁰⁾	DRV Non-dimming driver	UNV 120-277V
EM/10WLP Low-profile 10-watt emergency battery ⁽¹¹⁾	DIM Dimming driver	347 347V ⁽¹⁶⁾
(L___) Additional lower lumen packages available. Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package. Example: 15,000 nominal lumens = MCTG-24-L208/835-(L150)		
EQCLIPS Earthquake clips ⁽¹²⁾		
MIL Complies with MIL-STD-461G specifications		
TG Triple gasket ⁽¹³⁾		
NSWH Fixture provided without seam-welded housing ⁽¹⁴⁾		
TP Tamper resistant stainless steel, Torx T-25 screws		
2C Two circuit wiring ⁽¹⁵⁾		

NOTES

- Nominal lumen output based on 3500 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.
- 4000K and 5000K only.
- Contact factory for availability.
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- Contact factory for availability.
- See page 3 for ADDITIONAL DRIVER OPTIONS.
- 120V-277V only; 2x2, 2x4 only.
- 120V-277V only; 1x4 only.

- 4 per fixture.
- Field installed, see page 3 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.
- Inboard-outboard wiring where applicable unless specified otherwise. Allows for independent dimming of each circuit when ordered with DIM driver configuration. Consult factory for additional wiring configurations.
- Not available with MIL or EM options.



FIXTURE PERFORMANCE DATA

	LED PACKAGE	AF12125 SHIELDING			AF125 SHIELDING		
		DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
1x4	L40	3957	40	99	3517	40	88
	L79	7929	90	88	7048	90	78
2x2	L34	3392	32	106	3117	32	97
	L65	6470	61	106	5776	61	95
	L95	9542	91	105	8519	91	94
2x4	L60	6032	50	121	5441	50	109
	L121	12140	105	116	10952	105	104
	L208	20820	184	113	18734	184	102

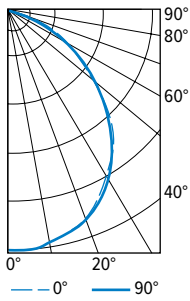
MULTIPLIER TABLES

	COLOR TEMPERATURE	
	CCT	CONVERSION FACTOR
80 CRI	3000K	0.99
	3500K	1.00
	4000K	1.03
90 CRI	4000K	0.86
	5000K	0.90

- 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 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

PHOTOMETRY

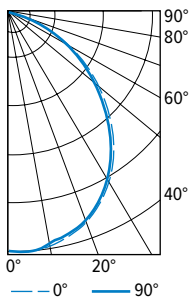
MCTG-22-L95/835-SAF12125-DRV-UNV Report#: 19833; 05/23/17 | Total Luminaire Output: 9542 lumens; 90.8 Watts | Efficacy: 105.1 lm/W | 82.8 CRI; 3536K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	4242	4242	4242	
	5	4231	4227	4218	403.3
	15	4045	4060	4062	1151.2
	25	3672	3722	3719	1721.2
	35	3083	3160	3129	1971.7
	45	2332	2326	2359	1805.2
	55	1505	1476	1483	1332.0
	65	821	777	776	791.1
	75	338	290	298	331.5
	85	37	22	36	34.8
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	3276	34.3
	0 - 40	5247	55.0
	0 - 60	8385	87.9
	0 - 90	9542	100.0
	0 - 180	9542	100.0

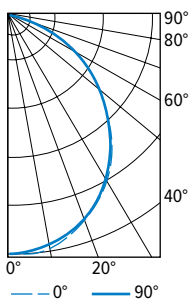
MCTG-24-L208/835-SAF12125-DRV-UNV Report#: 19835; 05/23/17 | Total Luminaire Output: 20820 lumens; 183.3 Watts | Efficacy: 113.6 lm/W | 82.8 CRI; 3536K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	9070	9070	9070	
	5	9115	9005	8986	861.4
	15	8758	8685	8661	2461.3
	25	8001	7960	7929	3678.6
	35	6824	6751	6691	4233.6
	45	5206	5178	5037	3982.8
	55	3491	3422	3230	3009.1
	65	1865	1843	1710	1778.7
	75	680	700	694	736.6
	85	50	69	71	78.3
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	7001	33.6
	0 - 40	11235	54.0
	0 - 60	18227	87.5
	0 - 90	20820	100.0
	0 - 180	20820	100.0

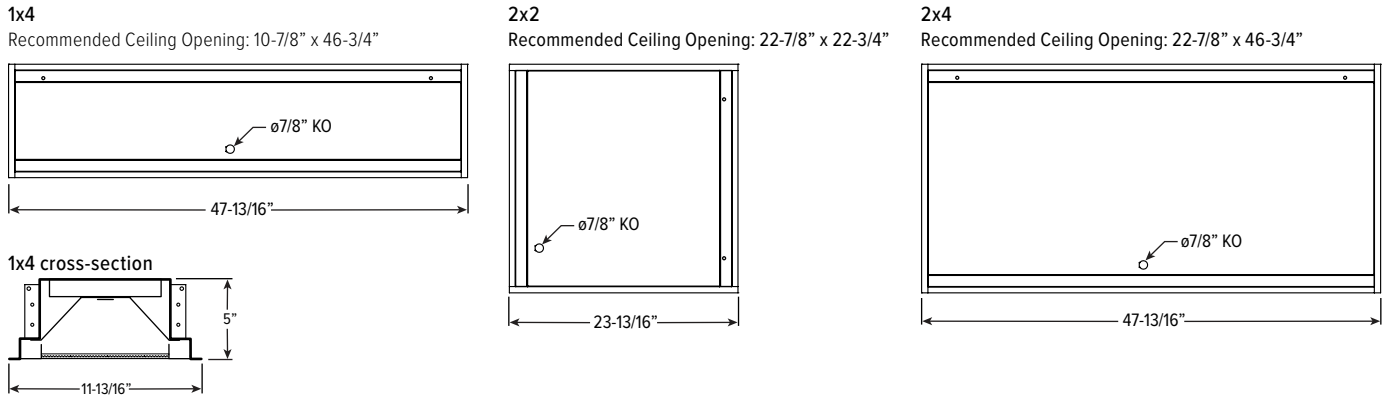
MCTG-24-L208/835-SAF125-DRV-UNV Report#: 19834; 05/23/17 | Total Luminaire Output: 18734 lumens; 183.4 Watts | Efficacy: 102.2 lm/W | 83.5 CRI; 3530K CCT



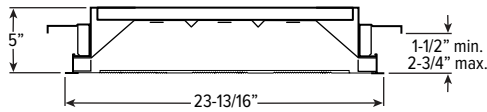
CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	7974	7974	7974	
	5	8006	7914	7897	756.9
	15	7636	7583	7541	2148.8
	25	6889	6864	6837	3173.7
	35	5825	5790	5777	3638.8
	45	4537	4551	4555	3515.2
	55	3222	3136	3196	2835.3
	65	1840	1794	1852	1825.1
	75	721	747	691	754.6
	85	48	91	74	85.3
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	6079	32.5
	0 - 40	9718	51.9
	0 - 60	16069	85.8
	0 - 90	18734	100.0
	0 - 180	18734	100.0

FIXTURE DETAILS



NEMA TYPE "F" INSTALLATION



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

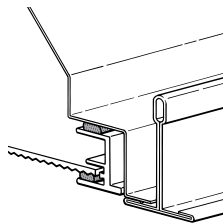
ADDITIONAL DRIVER OPTIONS

Note: Lumen restrictions apply, consult factory.

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 (Must specify 120V or 277V only)
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume® A-Series 1% dimming driver for forward phase line voltage controls (120V only)
LDE1	Lutron EcoSystem® H-Series 1% dimming driver for EcoSystem® controls
LDE5	Lutron EcoSystem® 5-Series 5% dimming driver for EcoSystem® controls
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

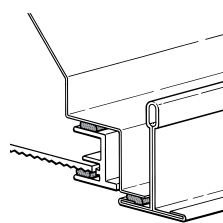
GASKETING DETAILS

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.