

CATALOG #: _____

TYPE: _____

PROJECT: _____

FEATURES

- 625nm Red LEDs provide safe lighting for spectrally-sensitive applications
- Red and white LED circuits are optimized for vivarium, biosafety, and pharmaceutical applications
- Seam-welded fixture housing and doorframe are designed for infection controlled environments
- 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
- Optimized for hospitals, medical facilities and containment sensitive manufacturing facilities that utilize 15/16" and 1-1/2" face T-bars
- Made Right Here™ in the USA

ORDERING EXAMPLE: MCTG - 24 - L28/RED/L74/835 - CS - SAF12125 - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS ⁽¹⁾	CRI ⁽²⁾	CCT	
MCT	G NEMA Type "G"	1 1'	2 2' ⁽⁴⁾	1x4	8 80	30 3000K	
		F NEMA Type "F" ⁽³⁾	2 2'	4 4'	L6/RED 600lm red only	9 90	35 3500K
	2x2	L12/RED			1,200lm red only		
						40 4000K	50 5000K
		L11/RED			1,100lm red only		
		L19/RED			1,900lm red only		
		L6/RED/L68			600lm red/6,800lm white		
		L13/RED/L36			1,300lm red/3,600lm white		
	2x4	L24/RED			2,400lm red only		
		L41/RED			4,100lm red only		
		L14/RED/L134			1,400lm red/13,400lm white		
		L28/RED/L74			2,800lm red/7,400lm white		

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 acrylic 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). Available with red LEDs only, or red and white LEDs. Dedicated driver for each color included to allow dimming of the two circuits individually.
- 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.

HOUSING

- CS 20-gauge C.R.S.
- AL Flat white aluminum
- ST Stainless steel ⁽⁵⁾

DOOR FRAME

- S Flat white steel
- F Flat white aluminum
- W White stainless steel ⁽⁶⁾
- B Brushed stainless steel ⁽⁷⁾

SHIELDING

- AF12125 Pattern #12, .125" thick with acrylic underlay
- AF125 .125" thick with acrylic underlay
- AF19156 Pattern #19, .156" thick with acrylic underlay
- AF12125/PC Pattern #12, .125" thick with polycarbonate
- AF125/PC .125" thick with polycarbonate
- AF19156/PC Pattern #19, .156" thick with polycarbonate

OPTIONS

- EM/10W 10-watt emergency battery ⁽⁸⁾
- EM/10WLP Low-profile 10-watt emergency battery ⁽⁹⁾
- EQCLIPS Earthquake clips ⁽¹⁰⁾
- MIL Complies with MIL-STD-461G specifications
- TG Triple gasket ⁽¹¹⁾
- NSWH Fixture provided without seam-welded housing ⁽¹²⁾
- TP Tamper resistant stainless steel, Torx T-25 screws
- 2C Two circuit wiring ⁽¹³⁾

DRIVER

- DRV Driver prewired for non-dimming applications
- DIM Dimming driver ⁽¹⁴⁾

VOLTAGE

- UNV 120-277V
- 347 347V ⁽¹⁵⁾

NOTES

- Nominal lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- Specify for fixtures with white LEDs only.
- See page 2 for details.
- 2' width only
- Contact factory for availability.
- Contact factory for availability.
- Contact factory for availability.
- 120V-277V only; 2x2, 2x4 only, connected to white circuit if applicable.
- 120V-277V only; 1x4 only, connected to white circuit if applicable.
- 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. Fixture is wired as two circuit by default when specified with the "amber circuit" and does not require that the "2C" option be specified.
- Dimming driver prewired for 0-10V low voltage applications
- Not available with MIL or EM options.



FIXTURE PERFORMANCE DATA

AF12125 SHIELDING							AF125 SHIELDING				
LED PACKAGE	WATTAGE		DELIVERED LUMENS		EFFICACY (lm/W)		DELIVERED LUMENS		EFFICACY (lm/W)		
	RED	WHITE	RED	WHITE	RED	WHITE	RED	WHITE	RED	WHITE	
RED/WHITE							RED/WHITE				
2x2	L6/RED/L68	15.5	61.2	628	6786	40.5	110.9	561	6059	36.2	99.0
	L13/RED/L36	30.3	32.9	1256	3611	41.4	109.8	1121	3224	37.0	98.0
2x4	L14/RED/L134	30.3	104.2	1375	13418	45.4	128.8	1241	12106	40.9	116.2
	L28/RED/L74	59.1	61.2	2751	7432	46.5	121.4	2482	6705	42.0	109.6
RED ONLY							RED ONLY				
1x4	L6/RED	14.7	-	649	-	44.2	-	577	-	39.3	-
	L12/RED	30.3	-	1211	-	40.0	-	1076	-	35.5	-
2x2	L11/RED	24.0	-	1104	-	46.0	-	986	-	41.1	-
	L19/RED	44.7	-	1884	-	42.1	-	1682	-	37.6	-
2x4	L24/RED	46.6	-	2419	-	51.9	-	2182	-	46.8	-
	L41/RED	87.8	-	4126	-	47.0	-	3722	-	42.4	-

MULTIPLIER TABLES

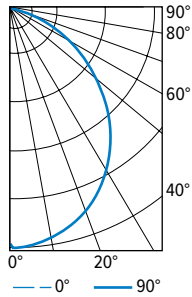
COLOR TEMPERATURE	
CCT	CONVERSION FACTOR
2700K	0.97
3000K	0.99
3500K	1.00
4000K	1.03
5000K	1.06

COLOR TEMPERATURE	
CCT	CONVERSION FACTOR
2700K	0.80
3000K	0.82
3500K	0.83
4000K	0.86
5000K	0.89

- 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

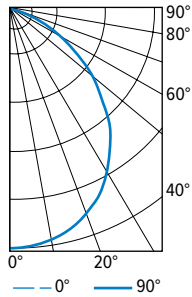
MCTG-22-L13/RED/L36/835-SAF12125 (Red Only) Total Luminaire Output: 1256 lumens; 30.3 Watts | Efficacy: 41.5 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	532	532	532	
5	538	526	526	50
15	513	503	504	142
25	463	455	457	210
35	393	386	389	242
45	305	300	302	232
55	210	208	209	187
65	124	122	125	123
75	52	53	57	58
85	7	8	10	11
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	403	32
	0 - 40	645	51
	0 - 60	1064	85
	0 - 90	1256	100
	0 - 180	1256	100

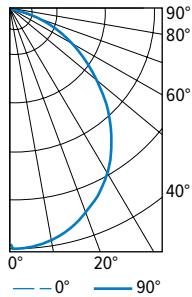
MCTG-22-L13/RED/L36/835-SAF12125 (White Only) Total Luminaire Output: 3611 lumens; 32.9 Watts | Efficacy: 109.8 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1605	1605	1605	
5	1601	1600	1596	152
15	1531	1537	1537	434
25	1390	1409	1408	647
35	1167	1196	1184	740
45	883	880	893	680
55	570	559	561	505
65	311	294	294	303
75	128	110	113	129
85	14	8	14	21
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1232	34
	0 - 40	1973	55
	0 - 60	3158	88
	0 - 90	3611	100
	0 - 180	3611	100

MCTG-24-L28/RED/L74/835-SAF125 (Red Only) Total Luminaire Output: 2751 lumens; 59.1 Watts | Efficacy: 46.5 lm/W | 80 CRI; 3500K CCT



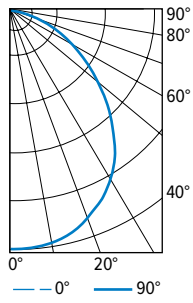
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1165	1165	1165	
5	1179	1152	1151	110
15	1124	1101	1104	312
25	1015	996	1002	461
35	861	846	852	531
45	667	658	662	509
55	461	455	458	409
65	271	268	273	268
75	115	117	125	127
85	16	18	21	24
90	0	1	1	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	883	32
	0 - 40	1414	51
	0 - 60	2331	85
	0 - 90	2751	100
	0 - 180	2751	100



MCT Red LED Medical Clean Room Troffer

MCTG-24-L28/RED/L74/835-SAF125 (White Only) Total Luminaire Output: 7432 lumens; 61.2 Watts | Efficacy: 121.4 lm/W | 80 CRI; 3500K CCT



CANDLEPOWER DISTRIBUTION	VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
		0°	45°	90°	
	0	3238	3238	3238	
	5	3254	3214	3208	306
	15	3126	3100	3092	874
	25	2856	2841	2830	1305
	35	2436	2410	2388	1501
	45	1858	1848	1798	1412
	55	1246	1222	1153	1074
	65	666	658	610	643
	75	243	250	248	273
	85	18	25	25	45
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2485	33
	0 - 40	3986	54
	0 - 60	6472	87
	0 - 90	7432	100
	0 - 180	7432	100

FIXTURE DETAILS

1x4
Recommended Ceiling Opening: 10-7/8" x 46-3/4"

47-13/16"

ø7/8" KO

2x2
Recommended Ceiling Opening: 22-7/8" x 22-3/4"

23-13/16"

ø7/8" KO

2x4
Recommended Ceiling Opening: 22-7/8" x 46-3/4"

47-13/16"

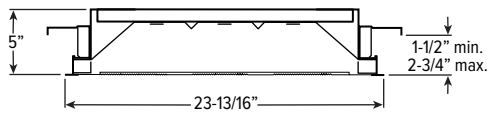
ø7/8" KO

1x4 cross-section

5"

11-13/16"

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.

RED LED DETAILS

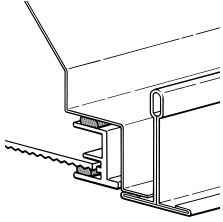
2x2: L6/RED/L68
2x4: L14/RED/L134

2x2: L13/RED/L36
2x4: L28/RED/L74

Red Only

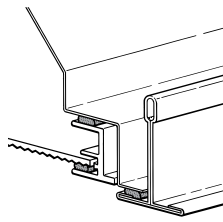
GASKETING DETAILS

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.

