

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

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.
 - IC-rated for direct contact with insulation.^[1]
 - 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 - L28/RED/L74/835 - CS - SAF12125 - OPTIONS - DRV - UNV

ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS ^[2]	CRI ^[3]	CCT	
MCT	G NEMA Type "G"	1 1'	2 2' ^[5]	1x4	8 80	30 3000K	
		F NEMA Type "F" ^[4]	2 2'	4 4'	9 90 ^[6]	35 3500K	
	2x2	L6/RED			600lm red only	40	4000K
					1,200lm red only		
					1,200lm red/4,500lm white		
		L12/RED/L45			1,200lm red/3,600lm white		
					1,100lm red only		
					1,800lm red only		
	2x4	L6/RED/L68			600lm red/6,800lm white	50	5000K
					1,200lm red/3,600lm white		
					2,400lm red only		
		L12/RED/L36			3,800lm red only		
			1,400lm red/13,400lm white				
			2,800lm red/7,400lm white				

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 ^[7]	W White stainless steel ^[8]	AF19156 Pattern #19, .156" thick with acrylic underlay
	B Brushed stainless steel ^[9]	AF12125/PC Pattern #12, .125" thick with polycarbonate
		AF125/PC .125" thick with polycarbonate
		AF19156/PC Pattern #19, .156" thick with polycarbonate

OPTIONS	CONTROL	VOLTAGE
EM/10W 10-watt emergency battery ^[10]	DRV Driver prewired for non-dimming applications	UNV 120-277V
EM/10WLP Low-profile 10-watt emergency battery ^[11]		347 347V ^[17]
EQCLIPS Earthquake clips ^[12]	DIM Dimming driver ^[16]	
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

- Only available with 1x4: L6/RED, 2x2: L11/RED, L6/RED/L68, 2x4: L24/RED, L14/RED/L134.
- 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 3 for NEMA TYPE "F" INSTALLATION.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- 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.
- NEMA Type "G" 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.
- 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				
1x4	L12/RED/L45	30.5	39.1	1181	4546	38.8	116.2	1063	4091	34.9	104.6
	L6/RED/L68	15.7	59.6	605	6859	38.6	115.1	544	6166	34.7	103.5
2x2	L12/RED/L36	30.3	33.3	1211	3677	39.9	110.5	1089	3306	35.9	99.4
2x4	L14/RED/L134	30.3	101.7	1375	13496	45.3	132.7	1236	12133	40.8	119.3
	L28/RED/L74	59.0	62.4	2738	7459	46.4	119.6	2461	6706	41.7	107.5
RED ONLY							RED ONLY				
1x4	L6/RED	14.0	-	603	-	43.0	-	542	-	38.7	-
	L12/RED	30.3	-	1181	-	38.9	-	1062	-	35.0	-
2x2	L11/RED	25.6	-	1124	-	43.9	-	1010	-	39.4	-
	L18/RED	44.6	-	1816	-	40.7	-	1633	-	36.6	-
2x4	L24/RED	51.4	-	2421	-	47.1	-	2176	-	42.3	-
	L38/RED	87.8	-	3812	-	43.4	-	3427	-	39.0	-

- 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.

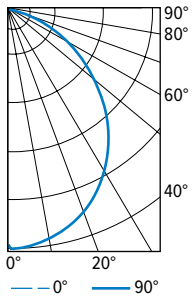
MULTIPLIER TABLES

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

80 CRI	
CCT	CONVERSION FACTOR
2700K	0.80
3000K	0.82
3500K	0.83
4000K	0.86
5000K	0.89

PHOTOMETRY

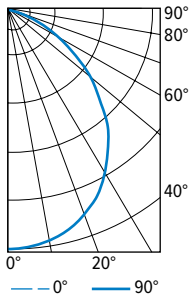
MCTG-22-L12/RED/L36/835-SAF12125 (Red Only) Total Luminaire Output: 1211 lumens; 30.3 Watts | Efficacy: 39.9 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	513	513	513	
5	519	507	507	48
15	495	485	486	137
25	447	439	441	203
35	379	372	375	234
45	294	290	291	224
55	203	200	201	180
65	119	118	120	118
75	51	51	55	56
85	7	8	9	11
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	389	32
	0 - 40	622	51
	0 - 60	1026	85
	0 - 90	1211	100
	0 - 180	1211	100

MCTG-22-L12/RED/L36/835-SAF12125 (White Only) Total Luminaire Output: 3677 lumens; 33.3 Watts | Efficacy: 110.5 lm/W | 80 CRI; 3500K CCT



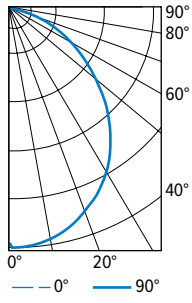
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1635	1635	1635	
5	1631	1629	1626	155
15	1559	1565	1565	441
25	1415	1434	1433	659
35	1188	1218	1206	754
45	899	896	909	692
55	580	569	572	515
65	316	299	299	308
75	130	112	115	132
85	14	8	14	21
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1255	34
	0 - 40	2009	55
	0 - 60	3215	88
	0 - 90	3677	100
	0 - 180	3677	100



MCT Red LED Medical Clean Room Troffer

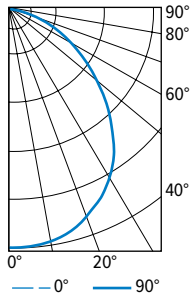
MCTG-24-L28/RED/L74/835-SAF125 (Red Only) Total Luminaire Output: 2462 lumens; 59 Watts | Efficacy: 42 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1070	1070	1070	
5	1077	1060	1058	101
15	1022	1008	1008	285
25	921	908	912	419
35	773	765	771	480
45	601	594	600	460
55	418	412	415	370
65	237	236	237	236
75	87	89	87	97
85	7	7	6	13
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	805	33
	0 - 40	1285	52
	0 - 60	2116	86
	0 - 90	2462	100
	0 - 180	2462	100

MCTG-24-L28/RED/L74/835-SAF125 (White Only) Total Luminaire Output: 6706 lumens; 62.4 Watts | Efficacy: 107.5 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2900	2900	2900	
5	2911	2878	2869	274
15	2775	2742	2733	775
25	2509	2480	2469	1142
35	2130	2093	2065	1309
45	1662	1609	1591	1251
55	1154	1126	1091	1005
65	687	644	613	644
75	252	246	231	269
85	18	20	17	37
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2191	33
	0 - 40	3500	52
	0 - 60	5756	86
	0 - 90	6706	100
	0 - 180	6706	100

FIXTURE DETAILS

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

47-13/16"

1x4 cross-section
11-13/16" x 5"

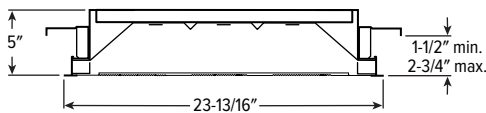
2x2
Recommended Ceiling Opening: 22-7/8" x 22-3/4"

23-13/16"

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

47-13/16"

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

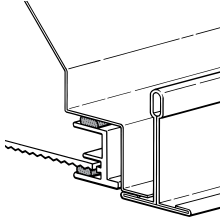
2x2: L6/RED/L68
2x4: L14/RED/L134

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

Red Only

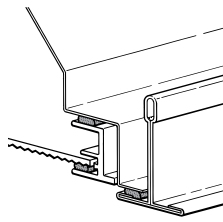
GASKETING DETAILS

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.

