

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

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

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

## FEATURES

- 590nm Amber LEDs provide safe lighting for photosensitive applications
- 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
- 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 amber LEDs only, or amber 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](http://hew.com/warranty).

## ORDERING EXAMPLE: MCTG - 24 - L61/AMB/L134/835 - CS - SAF12125 - OPTIONS - DRV - UNV

### ORDERING INFO

SERIES	CEILING TYPE	WIDTH	LENGTH	LUMENS <sup>[1]</sup>	CRI <sup>[2]</sup>	CCT
MCT	G NEMA Type "G"	1 1'	2 2' <sup>[4]</sup>	<b>1x4</b>	8 80	27 2700K
	F NEMA Type "F" <sup>[3]</sup>	2 2'	4 4'	<b>L29/AMB</b> 2,900lm amber only <b>L54/AMB</b> 5,400lm amber only	9 90	30 3000K 35 3500K
				<b>2x2</b>		40 4000K 50 5000K
				<b>L52/AMB</b> 5,200lm amber only <b>L82/AMB</b> 8,200lm amber only		
				<b>L29/AMB/L68</b> 2,900lm amber/6,800lm white <b>L56/AMB/L36</b> 5,600lm amber/3,600lm white		
				<b>2x4</b>		
				<b>L114/AMB</b> 11,400lm amber only <b>L180/AMB</b> 18,000lm amber only		
				<b>L61/AMB/L134</b> 6,100lm amber/13,400lm white <b>L105/AMB/L74</b> 10,500lm amber/7,400lm white		

### HOUSING

- CS** 20-gauge C.R.S.
- AL** Flat white aluminum
- ST** Stainless steel <sup>[5]</sup>

### DOOR FRAME

- S** Flat white steel
- F** Flat white aluminum
- W** White stainless steel <sup>[6]</sup>
- B** Brushed stainless steel <sup>[7]</sup>

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

### DRIVER

- DRV** Driver prewired for non-dimming applications
- DIM** Dimming driver <sup>[14]</sup>

### VOLTAGE

- UNV 120-277V** 347 347V <sup>[15]</sup>

## 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)		
	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE	
<b>AMBER/WHITE</b>							<b>AMBER/WHITE</b>				
2x2	L29/AMB/L68	44.7	61.2	2891	6786	64.7	110.9	2581	6059	57.7	99.0
	L56/AMB/L36	75.4	32.9	5593	3611	74.2	109.8	4994	3224	66.2	98.0
2x4	L61/AMB/L134	75.4	104.2	6126	13418	81.2	128.8	5527	12106	73.3	116.2
	L105/AMB/L74	104.5	61.2	10492	7432	100.4	121.4	9466	6705	90.6	109.6
<b>AMBER ONLY</b>							<b>AMBER ONLY</b>				
1x4	L29/AMB	31.1	-	2945	-	94.7	-	2618	-	84.2	-
	L54/AMB	75.4	-	5393	-	71.5	-	4794	-	63.6	-
2x2	L52/AMB	53.6	-	5200	-	97.0	-	4643	-	86.6	-
	L82/AMB	104.4	-	8201	-	78.6	-	7322	-	70.1	-
2x4	L114/AMB	104.7	-	11391	-	108.8	-	10276	-	98.1	-
	L180/AMB	208.7	-	17965	-	86.1	-	16207	-	77.7	-

## MULTIPLIER TABLES

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

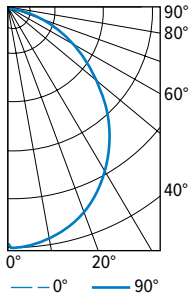
  

COLOR TEMPERATURE	
CCT	CONVERSION FACTOR
2700K	0.80
3000K	0.82
3500K	0.83
4000K	0.86
5000K	0.89

- 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

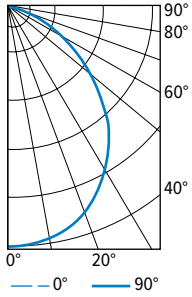
**MCTG-22-L56/AMB/L36/835-SAF12125 (Amber Only)** Total Luminaire Output: 5592 lumens; 75.4 Watts | Efficacy: 74.2 lm/W | 80 CRI; 3500K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	2368	2368	2368	
5	2398	2343	2341	224
15	2284	2238	2244	634
25	2063	2026	2036	937
35	1750	1720	1732	1079
45	1357	1337	1346	1035
55	937	924	931	831
65	550	544	555	545
75	234	237	254	258
85	33	37	43	50
90	1	2	2	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1794	32
	0 - 40	2874	51
	0 - 60	4739	85
	0 - 90	5592	100
	0 - 180	5592	100

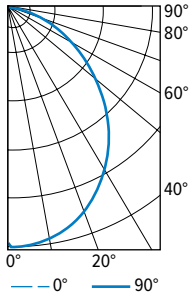
**MCTG-22-L56/AMB/L36/835-SAF12125 (White Only)** Total Luminaire Output: 3611 lumens; 32.9 Watts | Efficacy: 109.8 lm/W | 80 CRI; 3500K CCT



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-L105/AMB/L74/835-SAF125 (Amber Only)** Total Luminaire Output: 10490 lumens; 104.5 Watts | Efficacy: 100.4 lm/W | 80 CRI; 3500K CCT



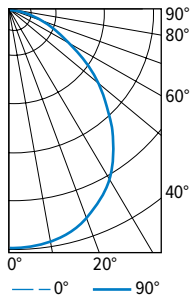
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	4441	4441	4441	
5	4498	4395	4392	419
15	4285	4199	4209	1189
25	3870	3800	3820	1757
35	3284	3227	3250	2025
45	2545	2509	2525	1941
55	1758	1734	1746	1559
65	1032	1021	1042	1023
75	438	444	476	484
85	61	68	81	93
90	2	3	3	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	3366	32
	0 - 40	5391	51
	0 - 60	8890	85
	0 - 90	10490	100
	0 - 180	10490	100



# MCT Amber LED Medical Clean Room Troffer

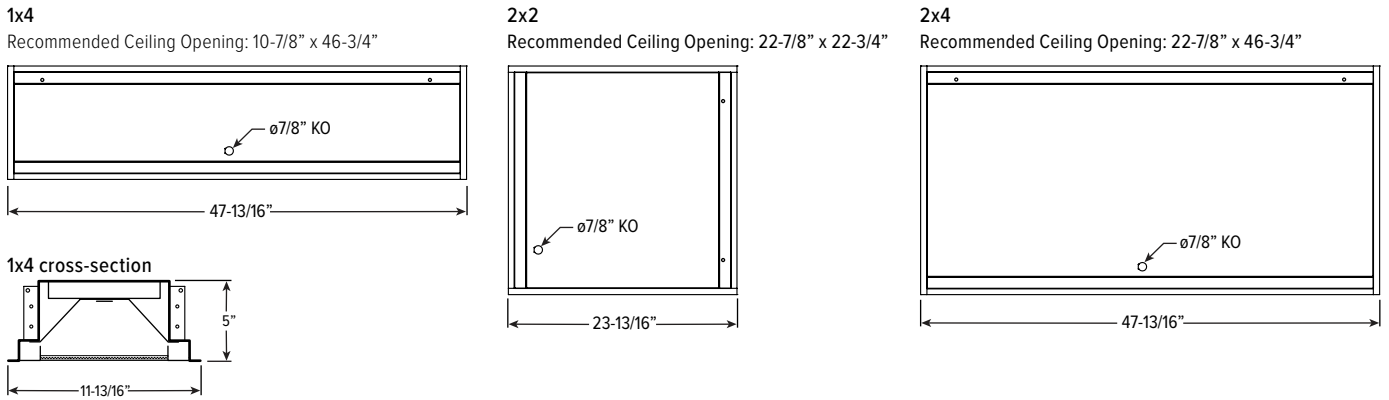
MCTG-24-L105/AMB/L74/835-SAF125 (White Only) Total Luminaire Output: 7432 lumens; 61.2 Watts | Efficacy: 121.4 lm/W | 80 CRI; 3500K CCT



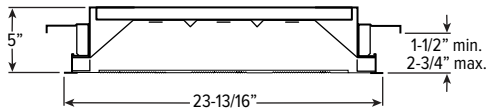
VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	3238	3238	3238	
5	3254	3214	3208	306
15	3126	3100	3092	874
25	2856	2841	2830	1305
35	2436	2410	2388	1501
45	1858	1848	1798	1412
55	1246	1222	1153	1074
65	666	658	610	643
75	243	250	248	273
85	18	25	25	45
90	0	0	0	

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

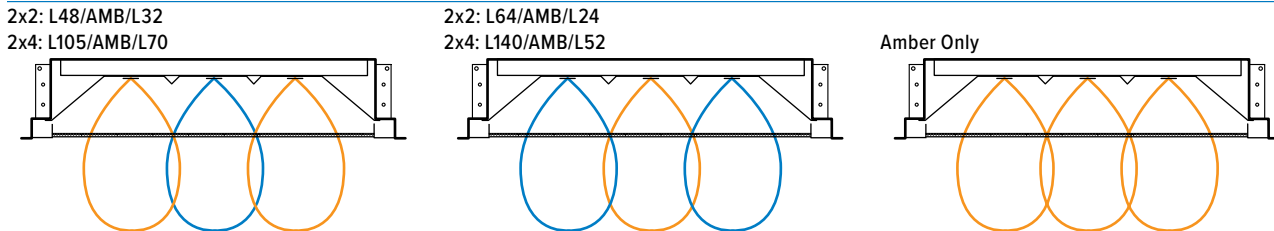


## NEMA TYPE "F" INSTALLATION



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

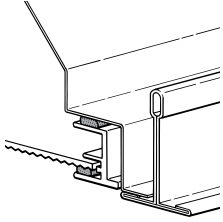
## AMBER LED DETAILS



## GASKETING DETAILS

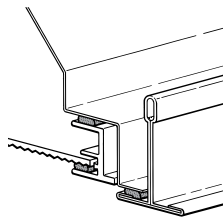
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### DOUBLE GASKETING (STANDARD)



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.

