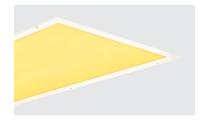
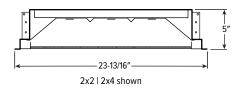
# Amber LED Medical Clean Room Troffer









#### **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, seamwelded C.R.S. Aluminum and stainless steel ontions 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.
- IC-rated for direct contact with insulation. [19]
- IP65 rated
- ISO 5, Class 100 rated
- NSF/ANSL2
- Complies with MIL-STD-461G with DIM or DRV drivers.
- 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 - L61/AMB/L134/835 - 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 27 2700K 9 90 [5] F NEMA Type "F" [3] L29/AMB 30 3000K 2 2' 4 4' 2,900lm amber only L54/AMB 5,400lm amber only 35 3500K L29/AMB/L45 2,900lm amber/4,500lm white **40** 4000K 2x2 **50** 5000K L52/AMB 5,200lm amber only 182/AMB 8,200lm amber only

L28/AMB/L68 2,800lm amber/6,800lm white L56/AMB/L36 5,600lm amber/3,600lm white 2x4

11,400lm amber only L114/AMB L176/AMB 17.600lm amber only L60/AMB/L134 6,000lm amber/13,400lm white L98/AMB/L74 9,800lm amber/7,400lm white

HOUSING DOOR FRAME SHIELDING

S Flat white steel AF12125 CS 20-gauge C.R.S. AL Flat white Flat white aluminum White stainless steel [7] aluminum w ST Stainless steel [6] B Brushed stainless steel [8]

Pattern #12, .125" thick with acrylic underlay AF125 .125" thick with acrylic underlay AF19156

CONTROL

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

DRV Driver prewired for non-

**DIM** Dimming driver [16]

dimming applications

OPTIONS

10-watt emergency battery [9] FM/10W EM/10WLP Low-profile 10-watt emergency battery [10]

Earthquake clips [11] **FOCLIPS** Complies with MIL-STD-461G specifications MIL

Triple gasket [12] TG

Fixture provided without seam-welded housing [13] NSWH Tamper resistant stainless steel, Torx T-25 screws [14] TP

2C Two circuit wiring [15]

# **ACCESSORIES**

TPTX-25 TOOL Tamper-resistant tool for Torx T-25 screws. [18]

#### 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 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.
- 12 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.

VOLTAGE

IINV 120-277V

347 347V [17]

- Requires a tamper-resistant tool, see Accessories. 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.

  16 Dimming driver prewired for 0-10V low voltage applications
- Not available with MIL or EM options.
- Tamper-resistant tool must be ordered separately. Please specify quantity required per project.
- Only available with 1x4: L29/AMB, 2x2: L52/AMB, L28/AMB/L68, 2x4: L114/AMB, L60/AMB/L134.



#### FIXTURE PERFORMANCE DATA

	AF12125 SHIELDING							AF125 SH	IIFI DING		
			TAGE		D LUMENS	EFFICAC	Y (Im/W)	DELIVERE	D LUMENS	EFFICAC	Y (Im/W)
	LED PACKAGE	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE	AMBER	WHITE
			AMBI	R/WHITE					AMBER	/WHITE	
<del>*</del>	L29/AMB/L45	31.7	39.1	2970	4546	93.7	116.2	2673	4091	84.3	104.6
2x2	L28/AMB/L68	44.7	59.6	2787	6859	62.3	115.1	2506	6166	56.1	103.5
â	L56/AMB/L36	86.9	33.3	5575	3677	64.1	110.5	5012	3306	57.6	99.4
2x4	L60/AMB/L134	89.4	101.7	5850	13496	65.4	132.7	5259	12133	58.8	119.3
ã	L98/AMB/L74	108.1	62.4	9886	7459	91.4	119.6	8888	6706	82.2	107.5
			AMB	ER ONLY					AMBER	ONLY	
1×4	L29/AMB	32.3	-	2970	-	91.9	_	2670	-	82.6	-
~	L54/AMB	86.9	-	5437	-	62.5	_	4888	-	56.2	-
2x2	L52/AMB	55.4	_	5210	-	94.0	-	4684	-	84.5	-
â	L82/AMB	126.5	_	8271	-	65.4	-	7436	-	58.8	_
2x4	L114/AMB	118.2	-	11542	-	97.6	_	10376	-	87.8	-
â	L176/AMB	270.6	_	17550	-	64.9	-	15777	-	58.3	_

#### **MULTIPLIER TABLES**

4000K

5000K

	COLOR TEMPERATURE					
	ССТ	CONVERSION FACTOR				
	2700K	0.97				
-	3000K	0.99				
80 CRI	3500K	1.00				
Θ	4000K	1.03				
	5000K	1.06				
	2700K	0.80				
=	3000K	0.82				
몽	3500K	0.83				

0.86

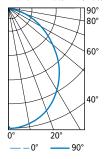
0.89

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on  $25^{\circ}$ 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**

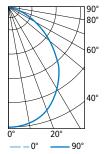
MCTG-22-L56/AMB/L36/835-SAF12125 (Amber Only) Total Luminaire Output: 5574 lumens; 86.9 Watts | Efficacy: 64.1 lm/W | 80 CRI; 3500K CCT



	VERTICAL ANGLE	НО	ZONAL LUMENS		
	VERTICAL ANGLE	0°	45°	90°	ZUNAL LUMENS
8	0	2360	2360	2360	
DISTRIBUTION	5	2390	2335	2334	223
뭂	15	2277	2231	2236	632
S	25	2056	2019	2030	934
곮	35	1745	1715	1727	1076
8	45	1352	1333	1341	1031
CANDLEPOWER	55	934	921	928	828
ᅙ	65	548	542	554	544
2	75	233	236	253	257
	85	33	36	43	49
	90	1	2	2	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
Σ	0 - 30	1789	32
S	0 - 40	2865	51
핕	0 - 60	4724	85
	0 - 90	5574	100
	0 - 180	5574	100

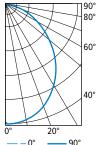
#### MCTG-22-L56/AMB/L36/835-SAF12125 (White Only) Total Luminaire Output: 3677 lumens; 33.3 Watts | Efficacy: 110.5 lm/W | 80 CRI; 3500K CCT



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

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

# MCTG-24-L98/AMB/L74/835-SAF125 (Amber Only) Total Luminaire Output: 8888 lumens; 108.1 Watts | Efficacy: 82.2 lm/W | 80 CRI; 3500K CCT

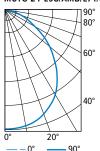


	VERTICAL ANGLE	НО	ZONAL LUMENS		
	VERTICAL ANGLE	0°	45°	90°	ZUNAL LUMENS
CANDLEPOWER DISTRIBUTION	0	3863	3863	3863	
5	5	3888	3825	3820	364
물	15	3689	3639	3639	1028
S	25	3326	3276	3291	1514
곮	35	2790	2760	2782	1733
<u>₹</u>	45	2168	2145	2166	1662
Ĭ.	55	1509	1486	1497	1336
ᅙ	65	855	852	857	852
정	75	313	321	313	351
	85	25	25	23	49
	90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
Σ	0 - 30	2906	33
SU	0 - 40	4639	52
EN I	0 - 60	7636	86
È	0 - 90	8888	100
	0 - 180	8888	100

# Amber LED Medical Clean Room Troffer

MCTG-24-L98/AMB/L74/835-SAF125 (White Only) Total Luminaire Output: 6706 lumens; 62.4 Watts | Efficacy: 107.5 lm/W | 80 CRI; 3500K CCT



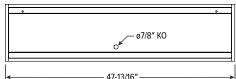
	VERTICAL ANGLE	HO	ZONAL LUMENS		
	VERTICAL ANGLE	0°	45°	90°	ZUNAL LUMENS
CANDLEPOWER DISTRIBUTION	0	2900	2900	2900	
5	5	2911	2878	2869	274
문	15	2775	2742	2733	775
S	25	2509	2480	2469	1142
곮	35	2130	2093	2065	1309
8	45	1662	1609	1591	1251
Œ,	55	1154	1126	1091	1005
₫	65	687	644	613	644
S	75	252	246	231	269
	85	18	20	17	37
	90	0	0	0	

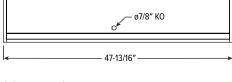
LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
Σ	0 - 30	2191	33
돐	0 - 40	3500	52
핇	0 - 60	5756	86
⋛	0 - 90	6706	100
	0 - 180	6706	100

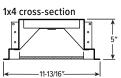
# **FIXTURE DETAILS**

1x4

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

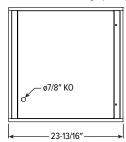






2x2

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

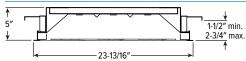


2x4

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



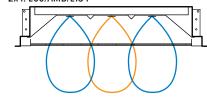
#### **NEMA TYPE "F" INSTALLATION**



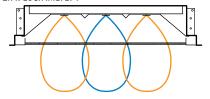
For continuous row mounting, add 47-13/16" for each additional fixture to obtain ceiling opening. 3/4" between end plates.

## **AMBER LED DETAILS**

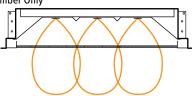
2x2: L28/AMB/L68 2x4: L60/AMB/L134



2x2: L56/AMB/L36 2x4: L98/AMB/L74



Amber Only





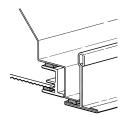
## **GASKETING DETAILS**

# 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.