emLITE

PROJECT:

TYPE:

CATALOG #:

OVERVIEW

The CTB Series contemporary center lens design delivers a soft natural glow with even illumination and minimized glare making it an attractive general-purpose ambient lighting solution. The optional factory-installed Signtex Emergency Lighting Control option ensures full emergency code compliance at the lowest possible cost.

SPECIAL FEATURES

- **Emergency lighting from 1,250 Lm to 2,100 Lm with adjustable Emergency Lighting Control (ELC), powered from a Signtex low-voltage central battery system. See Page 3 for details.**
- Available with factory-installed UL Listed Emergency Lighting Control (ELC), for connection to a Signtex central battery, DC emergency power system.
- Available in 3500k (warm/neutral white), 4000k (neutral white) & 5000k (cool white) color temperatures.
- Long life LEDs provide at least 144,000 hours of operation with at least 70% of initial lumen output (L70).**
- Provides 3,096 3,212 lumens and 130 135 lumens per watt (LPW)
- Uniform illumination with no visible LED pixilation.
- Universal 120 277 AC voltage (50 60Hz) is standard.
- 0 10vdc, continuous dimming capability is standard.
- Power factor > 0.90.
- Total harmonic distortion < 20%.
- Color rendering index (R a) 80.
- Steel housing and PMMA lens.
- Easy installation in new construction or retrofit. Fits in standard 2' x 2' or 2' x 4' grid ceilings.
- Built in earthquake clips provide secure installation in grid ceilings.
- Standard mounting options include recessed mounting in grid ceilings, or suspended mounting using earthquake clips. For other mounting options, see Mounting Means.

* Contact factory for other color temperatures and lumen packages.

** L70 hours are IES TM-21-11 calculated hours.

WARRANTY & LISTINGS

- cULus listed for damp locations and insulated ceiling in ambient temperatures from 2020°C to 50°C (44°F to 122 122°F).
- UL listed for maximum of 4, 12 AWG through branch circuit conductor.
- Inherently protected.
- Type IC rated for insulated ceilings.
- DLC 5.1 premium approved.
- Low risk of flicker (per IEEE1789 2015) at 100% light output level.
- Complies with FCC Part 15, class B.
- Complies with IEEE C.62.41 1991, Class A input transient surge protection (2.5kV).
- View Signtex Warranty for further details

FIXTURE ORDERING INFORMATION *EXAMPLE:* CTB-24-5L-MV-4K-ELC10P2

CTB

SERIES	SIZE		LUMENS[2]		VOLTAGE		COLOR TEMP		OPTIONS[1]	
CTB	22	2"x2"	3L	3000Lm	MV	120-277VAC	35K	3500K	ELCPXX	Emergency Lighting Control
	24	2"x4"	5L	5000Lm			4K	4000K	EMXX/ECXX	Emergency Driver
							5K	5000K	OS	Occupancy Sensor Passive Infared
									ODS	Occupancy Sensor Microwave
									SMKXX	Surface Mount Kit
									PMX	Pendant Mount Kit
									CMS	Cable Mount Kit

*"XX"= VARIES WITH FIXTURE SIZE AND POWER. SEE OPTIONS TABLE FOR COMPLETE PART NUMBER.

[1] See Option Detail Tables
[2] Nominal vales. See Electrical Data for specific values.

Signtex Inc LIGHTING
INTELLIGENT EMERGENCY LIGHTING SYSTEMS

emLITE

Center Basket
Series CTB

REV #: 09.21.01

ELECTRICAL DATA

MODEL	COLOR TEMP.	CRI[1]	LUMINAIRE LUMENS	LUMINAIRE WATTS	LUMENS/ WATT	INPUT VOLTAGE[2]	INPUT CURRENT (A)			POWER FACTOR	THD[3]	L[70] HOURS[4]
							120V	240V	277V			
CTB-22-35K-PRM	3500K	>80	3,096	24	130	120-277	0.20	0.10	0.09	> 90%	< 20%	144,000
CTB-22-4K-PRM	4000K	>80	3,192	24	134	120-277	0.20	0.10	0.09	> 90%	< 20%	144,000
CTB-22-5K-PRM	5000K	>80	3,212	24	135	120-277	0.20	0.10	0.09	> 90%	< 20%	144,000
CTB-24-35K-PRM	3500K	>80	4,538	33	137	120-277	0.28	0.14	0.12	> 90%	< 20%	144,000
CTB-24-4K-PRM	4000K	>80	4,562	33	138	120-277	0.28	0.14	0.12	> 90%	< 20%	144,000
CTB-24-5K-PRM	5000K	>80	4,605	33	139	120-277	0.28	0.14	0.12	> 90%	< 20%	144,000

[1] Color rendering index.
[2] All 50-60Hz.
[3] Total harmonic distortion.
[4] L_{70} refers to the number of hours at which lumen output declines to 70% of the initial level. L_{70} hours are IES TM-21-11 calculated hours.

PHOTOMETRIC DATA

• IES Files and Zonal Lumen Summaries and Polar Diagrams

OPTIONS

EMERGENCY LIGHTING CONTROLS (ELC) *For use with Central Battery Systems (purchased separately)*

MODEL	OPTION CODE	
	ELC10P1	ELC14P1
	EM Lumens[1]	EM Lumens[2]
CTB22	1250	1750
CTB24	1500	2100

[1] Minimum [2] Maximum
Note: Lumen output is factory adjustable. Contact factory for specific values.
Learn more about ELC's on our website, www.signtexinc.com.

Emergency Lighting with ELC

The following Point-to-Point sample shows typical performance in the medium power range for both fixture and ELC, based on IES files and using a light loss factor (LLF) calculated as follows:

LIGHT LOSS FACTOR = ELC Emergency Power (Watts)*/ Fixture Normal Power (Watts)
LLF = ELC Emergency Power* (Watts)   *Power value and ELC Type are given in the OPTION CODE above.
      Fixture Normal Power (Watts)   Example: ELC10P1 = 10 Watts Emergency Power for 90 mins: Package Type P1

The calculation is based on illumination values given in NFPA 101 and NEC 70, which stipulate an initial minimum average of 1 Fc at floor level, a minimum of 0.1 Fc at any point, and a uniformity ratio no higher than 40:1. NOTE, values are allowed to decrease 40% after 90 minutes, but ELC is a constant power device so emergency illumination does NOT decrease.
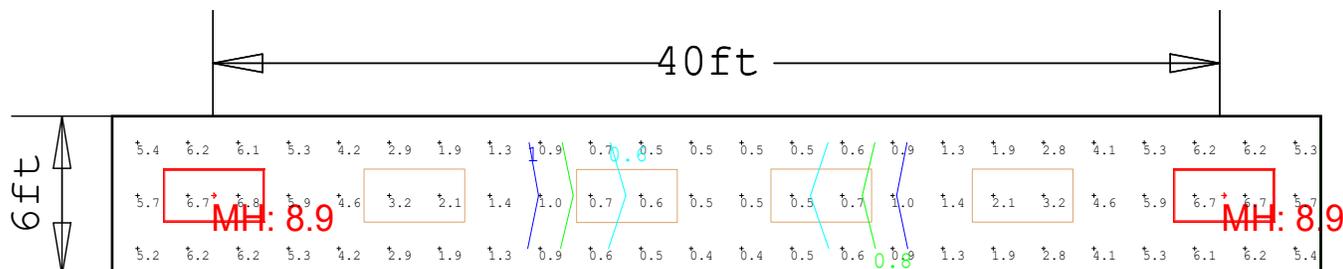
MODEL	ELC OPTION #	ELC POWER	EMERGENCY LUMENS	LLF	MOUNT HEIGHT	AVG. LUMENS ON PATHWAY	MAX/MIN UNIFORMITY
CTB24	ELC10P1	10 Watts	1383	0.30	12 FT	3.07 Fc	17.00

EMERGENCY DRIVERS *With integral batteries*

MODEL	OPTION CODE[12]				
	EM8/EC8	**EM12/EC12**	**EM16/EC16**	**EM20/EC20**	**EM24/EC24**
	LUMENS	**LUMENS**	**LUMENS**	**LUMENS**	**LUMENS**
CTB-22	650	1020	1390	1780	2210
CTB-24					

COMPATIBLE DIMMERS

MANUFACTURE	MODEL NO.	DIMMING RANGE	LOAD SWITCHING CAPACITY
Lutron	DVSTV	10% - 100%	450W
Leviton	IP710-LFZ	10% - 100%	120W
General Protecht	DMD-LED3-102	10% - 100%	600W

[1] Emergency drivers available for 120/277VAC only [2] EC Drivers are California Emergency Commission (CEC) Listed
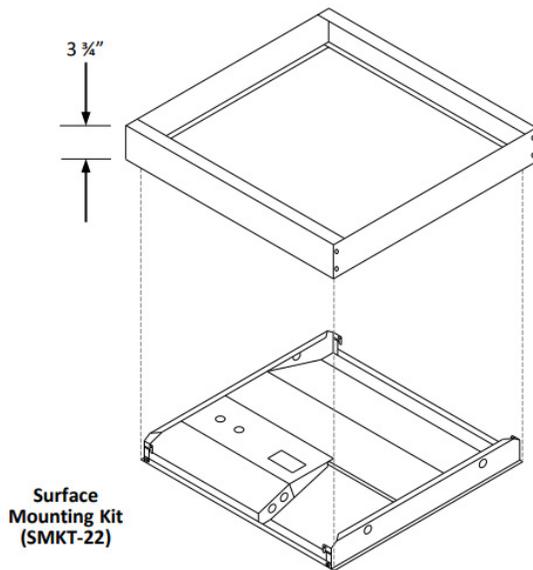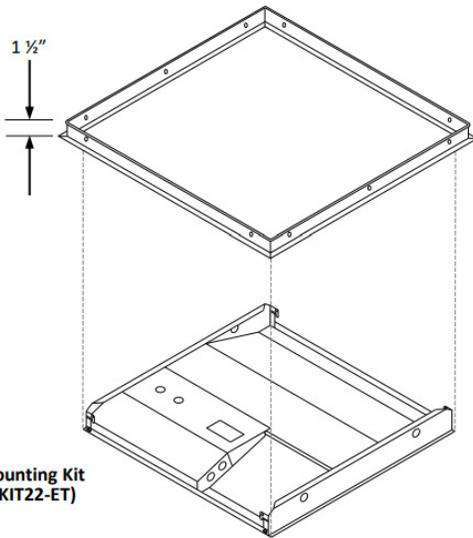
DIMENSIONS

2x2
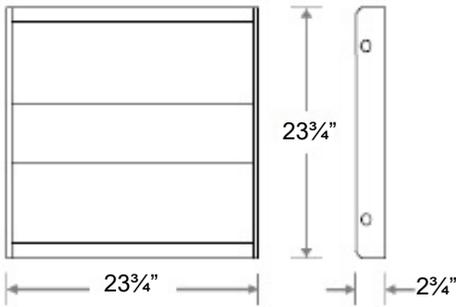
2x4
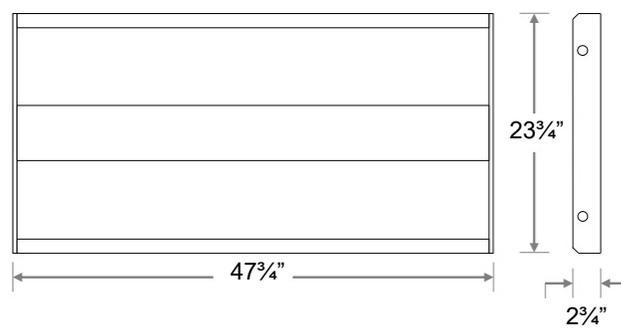
MOUNTING MEANS (Order Separately)

▪ Optional surface mounting kits (SMKT-22, SMKT-24) mounts below the ceiling.
▪ Optional flange mounting kits provide for recessed installation on plaster or other hard ceilings. Attach Flange Mount Kit (FLANGEKIT22-ET) to ceiling joists or other stationary structures, and the panel is mounted flush to the ceiling.
▪ Optional cable mounting kits provide additional security, as well as suspended mounting. Attach one end of the Cable Mount Kit (LEDPNL-CMK) to luminaire earthquake clips using spring clips, and attach the other end to stationary structures using the adjustable, locking ceiling attachment.
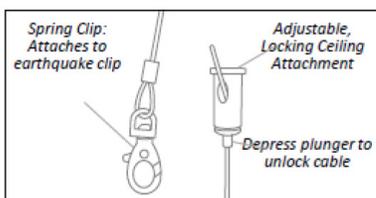
Center Basket 2x2

1 ½"

**Flange Mounting Kit
(FLANGEKIT22-ET)**

3 ¾"

**Surface
Mounting Kit
(SMKT-22)**

Center Basket 2x4

1 ½"

**Flange Mounting Kit
(FLANGEKIT24-ET)**

3 ¾"

**Surface
Mounting Kit
(SMKT-24)**
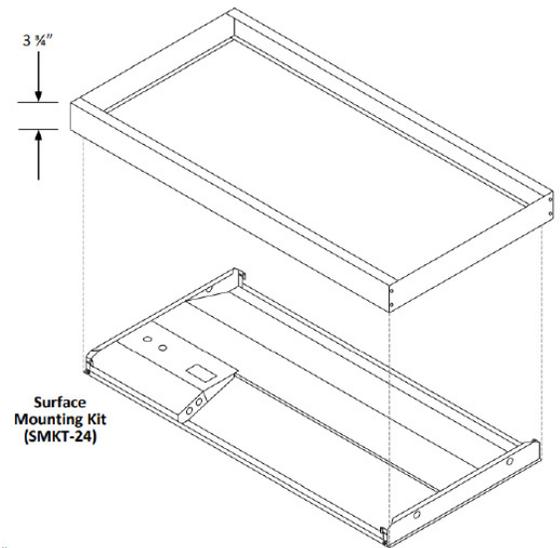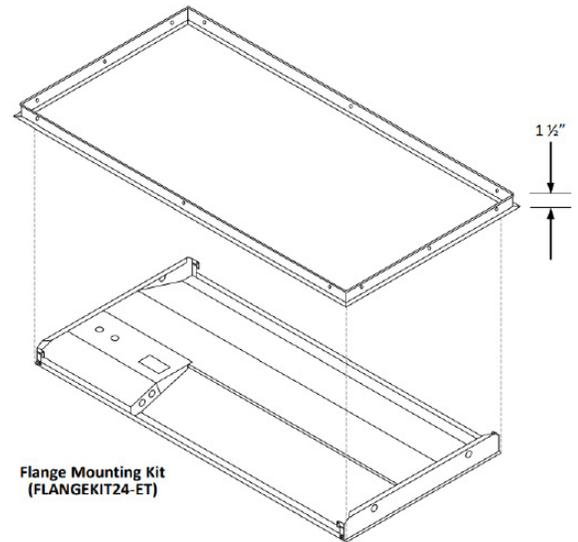
Cable Mounting Kit (LEDPNL-CMK)

Spring Clip:
Attaches to
earthquake clip

Adjustable,
Locking Ceiling
Attachment

Depress plunger to
unlock cable

Cable Mount Kit:
• *Spring Clip*
• *Adjustable, locking ceiling attachment*