

# LCAT

FAMILY



LED CONTEMPORARY ARCHITECTURAL TROFFER

LCAT LED Contemporary Architectural Troffer provides both aesthetics and value with an architectural appearance, LED technology, a full family of sizes and a wide range of options.

### LENS

High efficiency acrylic center lens features linear prisms for superior performance without LED pixelation.

### EASY INSTALLATION

Electrical components are fully accessible from below the ceiling for true sustainability, maintenance and upgrades.

### CRI

83 CRI standard and optional 90 CRI for color sensitive applications.

### DESIGNLIGHTS CONSORTIUM®

Qualified with many configurations qualifying for DLC Premium; see [www.designlights.org](http://www.designlights.org)



### HOUSING

Lightweight housing is cleverly designed for structural integrity and durability.

### OPTIONS

Wide choice of sizes and lumen packages to maximize design flexibility.

### REFLECTORS

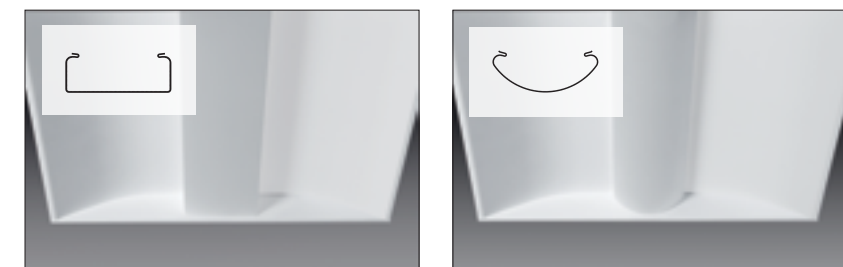
Curved interior reflectors provide comfortable, soft illumination and reduce contrast across the fixture face.

### FINISH

Architectural matte white finish standard.

### MULTIPLE SHIELDING OPTIONS

Two attractive lens options to enhance any installation type.



### A FULL FAMILY OF ARCHITECTURAL SIZES

DLC qualified; see [www.designlights.org](http://www.designlights.org)

#### 1' x 2'

A small scale, attractive option for corridors, conference rooms, reception desks and architectural insets.

##### 1' x 2' PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS	WATTS	LUMENS PER WATT
12	VW	1519-1730	13	114-130
	MW	1744-1986	18	99-113
	LW	2676-3047	23	118-135
	ML	3331-3794	29	116-132
	HL	3584-4083	32	113-129



#### 2' x 2'

Add quiet elegance to commercial spaces with the simplicity and modularity of this popular form.

##### 2' x 2' PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS	WATTS	LUMENS PER WATT
22	VW	1567-1785	14	115-131
	VWHE	1530-1743	13	121-138
	MW	2049-2334	18	114-130
	MWHE	2010-2289	17	122-139
	LW	2689-3063	23	119-136
	ML	3320-3781	29	116-132
	MLHE	3392-3751	28	119-136
	HL	3599-4099	32	113-129
	HLHE	3497-3769	27	126-136
	VL	4270-4863	39	111-126
	VLHE	4257-4649	35	123-134

#### 1' x 4'

This sleek shape integrates seamlessly into architectural designs.

##### 1' x 4' PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS	WATTS	LUMENS PER WATT
14	XW	2299-2478	19	119-128
	XWHE	2457-2648	19	127-136
	VW	3147-3584	28	114-130
	VWHE	3083-3511	24	128-146
	MW	3656-4164	32	113-129
	MWHE	3820-4351	31	125-142
	LW	4376-4985	36	122-138
	ML	4689-5341	38	122-139
	HL	5405-6156	44	123-140
	VL	6793-7738	58	118-135



#### 2' x 4'

Replace existing luminaires or design for new installations with this appealing, graceful architectural troffer.

##### 2' x 4' PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS	WATTS	LUMENS PER WATT
24	XW	2341-2524	19	123-132
	XWHE	2458-2650	19	129-139
	VW	3124-3558	28	113-129
	VWHE	3310-3770	27	123-140
	MW	3363-3831	30	111-127
	MWHE	3717-4234	31	121-138
	LW	4268-4861	36	118-135
	ML	4771-5434	39	123-140
	HL	5443-6200	44	124-141
	VL	6999-7972	59	119-135
	XL	8168-9304	74	111-126

NOTE: Nominal lumen range represents 3000K through 5000K. Lumens vary according to color temperatures and other factors. See specific photometric test(s).



### DESIGNED FOR DIVERSITY

Meets a wide range of installation needs while maintaining a consistent luminaire appearance.

#### Flange Kit

Recessed hard ceilings are simple and straightforward with the FK (flange kit) accessory available on all sizes. Continuous row (CR) also available on most configurations.

#### SLK Troffer Conversion Kit

For retrofit opportunities where existing luminaire housings can be utilized, SLK LED troffer conversion kit matches the appearance of LCAT24 and LCAT22.



#### Surface & Cable Mount

LCAT offers an optional surface mount for areas where a recessed ceiling is not available. A cable mount option is offered for high or obstructed ceilings where a matching suspended luminaire is optimal.

#### Optional Air Return

Slots along the housing edge allow air return to the HVAC when this option is specified. Air return is available in all sizes.



### PRACTICAL OPTIONS

Practical options for pragmatic illumination.

#### LED drivers

A wide range of drivers make LCAT flexible and controls friendly. Choose from 0-10V dimming, 0-10V dimming to 1%, Lutron Series 5, Lutron H, fixed output and stepped output.

#### Color Temperatures

3000K, 3500K, 4000K and 5000K corrected color temperatures are well suited to office, education, health care and retail applications. For color consistency across the ceiling plane, LCAT maintains a 3-Step MacAdam ellipse within the fixture, from fixture-fixture, and over time.

#### Egress

Life safety compatibility for security and code compliance:

- Integral LED NiCAD battery or
- Remote mounted Dual-Lite inverter systems

#### Controls

In addition to controllable drivers, LCAT luminaires can also be controlled individually with integral sensors or tied into a Hubbell Control Solutions system.



Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with three distinct SpectraSync™ Color Tuning Technologies.



#### Dim to Warm

Dim to Warm mimics the familiar warming effect that occurs with traditional incandescent sources as they are dimmed. (Available with 2200K-3000K)



#### Tunable White

Tunable White offers you the ability to tailor correlated color temperature (CCT) to your personal preference, enhancing task visibility, material and colors and the aesthetics of the space. (Available with 2700K-5000K or 2700K-6500K)



#### Scheduled White

Scheduled White creates an environment that mimics the rhythm of natural light or follows an alternative user-defined schedule throughout the day, enhancing an occupant's mood and well-being. (Available with 2700K-5000K or 2700K-6500K)

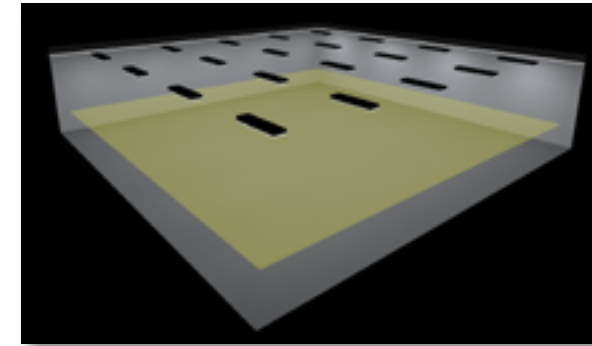
### PERFORMANCE

#### LCAT 1' x 4'

LCAT14 Performance	
Room Size (L x W)	40' x 40'
Number of Luminaires	20
Workplane, Horizontal	2.5'
Reflectances	80/50/20
Light Loss Factors	1.0/0.90/0.90

Mounting Height	OC Spacing	Lumen Package	Fixture Lumens 3500K CCT	Avg fc 2.5'	Max/Min	Avg/Min	Fixture Watts	LPD
9'	8' x 8'	XW	2375	23 fc	2.0	1.9	19.4	0.24
		VW	3239	32 fc	2.0	2.7	27.5	0.34
		MW	3764	38 fc	2.0	2.7	32.3	0.40
		LW	4506	44 fc	2.0	2.6	36.0	0.45
		ML	4828	47 fc	2.0	2.6	38.3	0.48
14'	8' x 10'	HL	5563	46 fc	1.8	2.2	43.9	0.55
25'		VL	6993	40 fc	1.6	2.0	57.5	0.72

Data provided utilizing 80+ CRI and curve lens.

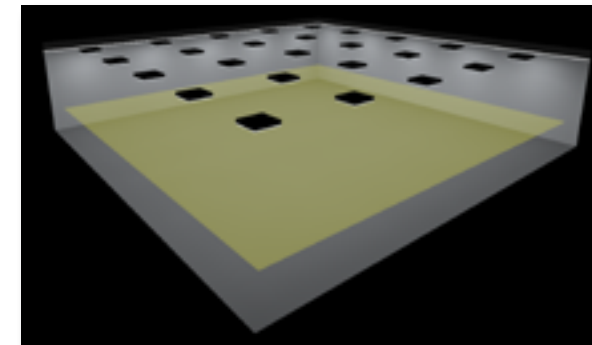


#### LCAT 2' x 2'

LCAT24 Performance	
Room Size (L x W)	40' x 40'
Number of Luminaires	25
Workplane, Horizontal	2.5'
Reflectances	80/50/20
Light Loss Factors	1.0/0.90/0.90

Mounting Height	OC Spacing	Lumen Package	Fixture Lumens 3500K CCT	Avg fc 2.5'	Max/Min	Avg/Min	Fixture Watts	LPD
8'	8' x 8'	VW	1614	20 fc	2.6	2.0	13.6	0.21
9'		MW	2109	25 fc	2.4	1.9	18.0	0.28
		LW	2768	33 fc	2.4	1.9	22.6	0.35
10'		ML	3418	40 fc	2.4	1.9	28.7	0.45
12'		HL	3705	40 fc	2.2	1.9	31.8	0.50
16'		VL	4396	41 fc	2.2	1.8	38.6	0.60

Data provided utilizing 80+ CRI and curve lens.

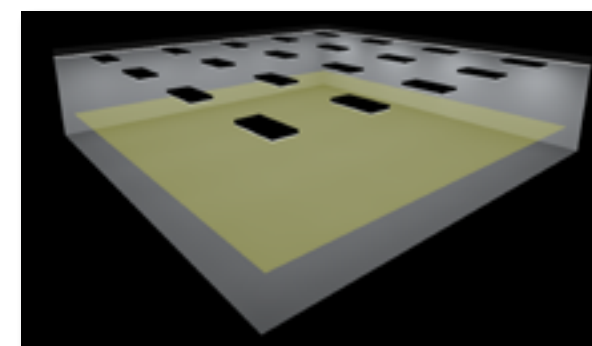


#### LCAT 2' x 4'

LCAT24 Performance	
Room Size (L x W)	40' x 40'
Number of Luminaires	20
Workplane, Horizontal	2.5'
Reflectances	80/50/20
Light Loss Factors	1.0/0.90/0.90

Mounting Height	Spacing	Lumen Package	Fixture Lumens 3500K CCT	Avg fc 2.5'	Max/Min	Avg/Min	Fixture Watts	LPD
9'	8' x 10'	XW	2420	23 fc	2.6	2.0	19.1	0.24
		VW	3216	30 fc	2.6	2.0	27.6	0.35
		MW	3462	33 fc	2.6	2.0	30.2	0.38
		LW	4394	42 fc	2.6	2.0	36.4	0.46
		ML	4912	46 fc	2.6	2.0	38.8	0.49
14'	8' x 10'	HL	5604	45 fc	2.1	1.7	44.0	0.55
20'		VL	7205	47 fc	2.1	1.7	59.0	0.74
25'		XL	8408	47 fc	2.0	1.6	73.8	0.92

Data provided utilizing 80+ CRI and curve lens.



### CORRIDOR PERFORMANCE

LCAT Corridor Performance				
Room Size (L x W)	40' x 6' x 9'			
Workplane, Horizontal	0' (Floor)			
Reflectances	80/50/20			
Light Loss Factors	1.0/0.90/0.90			
LCAT Size	1x2	2x2	1x4	2x4
Lumen Designation	ML	ML	MW	LW
Nominal Fixture Lumens 3500K CCT	3051	3418	3764	4394
# of Fixtures	5	5	4	4
Avg fc	21 fc	23 fc	22 fc	24 fc
Max/Min	1.90	1.70	1.90	1.80
Avg/Min	1.60	1.60	1.60	1.60
Fixture Watts	28.90	28.40	32.30	36.10
LPD	0.60	0.60	0.54	0.60

Data provided utilizing 80+ CRI and curve lens.

NOTE: Rendered using LitePro DLX application software.

### LONG-LIFE. LOW MAINTENANCE. RELIABLE.

#### Long Life LEDs – Low Facility Maintenance Over Time

- Tested in accordance with the rigorous standards of IESNA TM-21
- 60,000 hours rated life with 80% lumen maintenance (L80)
- Over 150,000 hours projected life

#### Replaceable Components with Below-Ceiling Access

LCAT LED boards and drivers are replaceable and accessible from below the ceiling plane for truly sustainable design.

#### Snap-Fit Center Lens

LCAT's attractive center lens installs or removes with a simple, secure, snap-fit attachment.

#### Controls Compatible

Optional occupancy and daylight sensors are available for factory installed controls, or pair LCAT with external controls for enhanced energy savings and code compliance.

#### Air Return Option Available

For applications where HVAC return air is desired through the luminaire.

#### Hubbell Control Solutions

NX Distributed Intelligence™ supports indoor and outdoor applications, wired and wireless and hybrid networked NX lighting control deployments, and enables emerging applications such as Hubbell Lighting's SpectraSync™ color tuning technology.

#### Warranty

Standard with 5 year warranty.

#### DLC Qualified

DesignLights Consortium® (DLC) Qualified with many configurations qualifying for DLC Premium; see [www.designlights.org](http://www.designlights.org).



#### QR Code Traceability

Each LCAT ships with a QR code affixed to the housing. The QR code contains detailed product information for future traceability.


#### Readily Available

LCAT products are available for standard and quick-turn project needs.



- Stocked in popular configurations throughout the continental USA
- Quick-ship configurations available for over 128 combinations of features and options
- Less common, Made-To-Order configurations ship with responsive lead times for project customization


#### Simple Fluorescent Replacement



Replace (2) 4' T8 lamps with LCAT LW for

**36% energy savings**


per fixture.



Replace (3) 4' T8 lamps with LCAT VL for

**30% energy savings**


per fixture.



Replace (4) 4' T8 lamps with LCAT XL for

**33% energy savings**

per fixture.



Replace 2 U-Bent lamps with LCAT22 HL for

**45% energy savings**

per fixture.

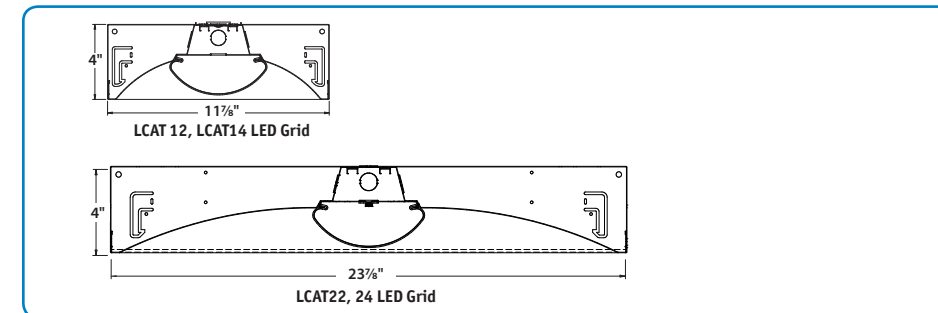
### ORDERING INFORMATION

LCAT	MODEL	CRI	COLOR TEMP	CEILING TYPE	AIR FUNCTION	VOLTAGE	OPTIONS
	LED Contemporary Architectural Troffer	Blank >80 9 >90 <sup>1</sup>	30 3000K 35 3500K 40 4000K 50 5000K 2750T 2700K-5000K SpectraSync™ Tunable White <sup>2</sup> 2765T 2700K-6500K SpectraSync™ Tunable White <sup>2</sup>	G Grid Lay-in <sup>3</sup> SM Surface Mount <sup>4, 18</sup> CM Cable/Suspended Mount <sup>4, 5</sup>	Blank Static A Air Return Side Slots	U 120V-277V 347 347V <sup>16</sup>	ELL14 Emergency Battery Pack, 1400 Lumens <sup>7, 8, 17</sup> C388 3-Wire Flex C488 4-Wire Flex C588 5-Wire Flex GLR Fast Blow Fuse NYC NYC Compliant EOR End of Row (SM and CM only. Provides end wiring access for continuous row mounting.) <sup>4</sup> INT Intermediate (SM and CM only. Provides end wiring access for continuous row mounting.) <sup>4</sup> CP Chicago Plenum
		<b>SIZE</b>		<b>SHIELDING</b>	<b>DRIVER</b>		
		12 1' x 2' 14 1' x 4' 22 2' x 2' 24 2' x 4'		Blank Curve R Rectangular	E Fixed Output <sup>15</sup> ED 0-10V Dimming ED1 0-10V 1% Dimming EDD 0-10V Dim-to-Dark <sup>15</sup> ESD Step Dimming <sup>6, 9, 15</sup> LUTH Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology <sup>6, 8, 15</sup> LUT5 5-Series EcoSystem LED driver <sup>6, 8, 15</sup>		
		<b>ACCESSORIES (ORDER SEPARATELY)</b>					<b>CONTROL OPTIONS</b>
		FK12 1' x 2' Single Flange Kit FK14 1' x 4' Flange Kit FK22 2' x 2' Flange Kit FK24 2' x 4' Flange Kit CM48Y2SC3F-KIT 48" Cable Mount Kit for 2' wide Cable Mount fixtures, 3-Wire CM48Y1SC3F-KIT 48" Cable Mount Kit for 1' wide Cable Mount fixtures, 3-Wire					NXS NX, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>14, 15, 16, 17</sup> NXSW NX Wireless, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>14, 15, 16, 17, 18</sup> NXWE NX Wireless Enabled <sup>14, 15, 16, 17, 18</sup> NXE NX Enabled, Dual SmartPorts <sup>14, 15, 16, 17</sup> NXES NX Enabled, PIR Occupancy Sensor, Dimming Daylight Harvesting <sup>14, 15, 16, 17</sup> ODP Occupancy and Daylight Sensors, Philips <sup>8, 9, 14</sup> ZRE ControlScope® compatible <sup>10</sup> LV Lutron Vive Enabled, 0-10V <sup>11, 12, 13</sup>
					<b>LUMEN OUTPUT</b>		
					XW Extra Low Watt XWHE Extra Low Watt High Efficacy VW Very Low Watt VWHE Very Low Watt High Efficacy MW Medium Low Watt MWHE Medium Low Watt High Efficacy LW Low Watt ML Medium Lumen MLHE Medium Lumen High Efficacy HL High Lumen HLHE High Lumen High Efficacy VL Very High Lumen VLHE Very High Lumen High Efficacy XL Extra High Lumen		

<sup>1</sup> Not available with HE lumen output.  
<sup>2</sup> Available with ED driver and 80 CRI only, N/A with HE, VL (2x2) XL (2x4) lumen outputs.  
<sup>3</sup> For drywall, order G with Flange Kit Accessory.  
<sup>4</sup> Not available with Air Return (A) air function.  
<sup>5</sup> Order hanger accessories separately.  
<sup>6</sup> Limitations apply based on product size and lumen packages; see individual spec sheets.  
<sup>7</sup> For compatibility with Dual-Lite LiteGear(R) inverters, contact Hubbell Lighting Representative.  
<sup>8</sup> Not available in 347V.  
<sup>9</sup> Only available with 0-10V Dimming (ED) Driver Option.  
<sup>10</sup> Registered trademark of Daintree Networks, used by permission.  
<sup>11</sup> Not available with ESD, LUTH or LUT5.  
<sup>12</sup> VIVE is a trademark of Lutron Electronics Co., Inc.  
<sup>13</sup> Installations controlled solely by the Lutron Pico controller require accessing the LV (Lutron FCJS) module for commissioning after the circuit has been energized.  
 For questions about configuration options, contact Hubbell Representative.  
<sup>14</sup> NX controls can only be used with NX Sensor options.  
<sup>15</sup> NX is available with ED and ED1 drivers only.  
<sup>16</sup> NX is not available with 347V.  
<sup>17</sup> NX is not available with ELL14.  
<sup>18</sup> NXSW and NXWE cannot be used with surface mount versions.  
<sup>19</sup> Dimensions shown with curve lens option.  
 For questions about configuration options, contact Hubbell Representative.

See Product Availability Table below.

#### Cross Sections<sup>19</sup>



#### PRODUCT AVAILABILITY

SIZE	LUMEN PACKAGE	NOMINAL LUMENS	NOMINAL WATTS	LUMENS PER WATT
12	VW	1519-1730	13	114-130
	MW	1744-1986	18	99-113
	LW	2676-3047	23	118-135
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	HLHE	3497-3769	27	126-136
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24	VLHE	4257-4649	35	123-134
	XW	2341-2524	19	123-132
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ALERA LIGHTING  
ARCHITECTURAL AREA LIGHTING  
BEACON PRODUCTS  
COLUMBIA LIGHTING  
COMPASS  
DUAL-LITE  
HUBBELL CONTROL SOLUTIONS  
HUBBELL INDUSTRIAL LIGHTING  
HUBBELL OUTDOOR LIGHTING  
KIM LIGHTING  
KURT VERSEN  
LITECONTROL  
PRESCOLITE  
WHITEWAY

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LIGHTING

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