



LCAT

LED CONTEMPORARY
ARCHITECTURAL TROFFER

Columbia
LIGHTING

Current @



LCAT

LED CONTEMPORARY ARCHITECTURAL TROFFER

LCAT provides both aesthetics and value with an architectural appearance and LED technology. With a full family of sizes, LCAT offers a wide range of options for classrooms, offices, retail and healthcare applications. LCAT can be ordered from stock, through Quick-Ship, or made to order for additional customization.

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A Wide Choice of Sizes, Lumen Packages, & Options

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

Housing
Lightweight housing is cleverly designed for structural integrity and durability.

Finish
Architectural matte white finish standard.

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.

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

DLC
DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations - see www.designlights.org



Multiple Shielding Options
Two attractive lens options to enhance any installation type.



A Full Family of Architectural Sizes

1'x2'
A small scale, attractive option for corridors, conference rooms, reception desks and architectural insets.

Product Availability 80 CRI				
Size	Lumen Package	Nominal Lumens	Watts	LPW
12	VW	1520-1668	12	125-139
	MW	1912-2126	16	121-134
	LW	2591-2872	21	126-140
	ML	3449-3811	28	122-135
	HL	4627-5141	41	112-125

1'x4'
This sleek shape integrates seamlessly into architectural designs.

Product Availability 80 CRI				
Size	Lumen Package	Nominal Lumens	Watts	LPW
14	XW	2314-2651	19	123-143
	VW	2984-3312	25	122-135
	MW	3297-3662	28	121-134
	LW	4018-4500	32	124-139
	ML	4246-4748	33	130-146
	HL	4063-5669	40	128-142
	VL	6959-7749	57	122-136
	XL	7424-8294	63	118-133

2'x2'
Add quiet elegance to commercial spaces with the simplicity and modularity of this popular form.

Product Availability 80 CRI				
Size	Lumen Package	Nominal Lumens	Watts	LPW
22	VW	1510-1681	12	123-137
	MW	1998-2253	16	122-138
	LW	2581-2903	21	125-141
	ML	3141-3532	26	121-137
	HL	4056-4286	33	121-129
	VL	4253-4794	35	121-136

2'x4'
Replace existing luminaires or design for new installations with this appealing, graceful architectural troffer.

Product Availability 80 CRI				
Size	Lumen Package	Nominal Lumens	Watts	LPW
24	XW	2350-2560	19	126-137
	VW	2953-3339	24	122-138
	MW	3205-3626	27	121-137
	LW	4041-4617	32	125-144
	ML	4448-5026	36	123-140
	HL	5065-5786	40	127-146
	VL	6542-7440	53	123-141
	XL	7517-8367	63	119-133

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

Diverse Installation Options with a Consistent Look

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.

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.

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.

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.



Customize with Practical Options

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.

Egress

Life safety compatibility for security and code compliance:

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

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-to-fixture, and over time.

Controls

In addition to controllable drivers, LCAT luminaires can also be controlled individually with integral sensors or tied into a NX Lighting Controls system.



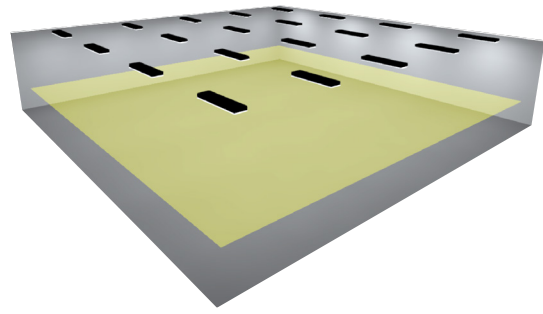
Control your space based on the needs of the application, specific activities throughout the day and preferences of the occupants with distinct SpectraSync™ Color Tuning Technologies.



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)

Performance

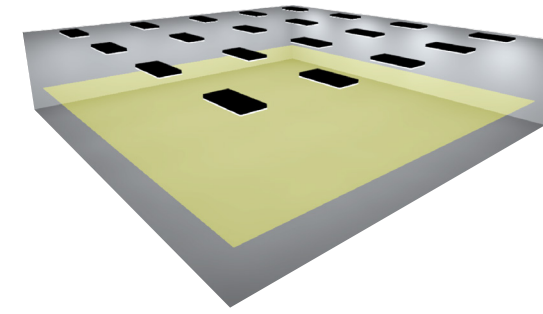


LCAT14 PERFORMANCE	
Room Size (L x W)	40' x 40'
Number of Luminaires	20
Workplane, Horizontal	2.5'
Reflectances	80/50/20
Light Loss Factors	1.0/0.90/0.90

Image rendered using LitePro DLX application software.

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
	8' x 10'	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
		HL	5563	46 fc	1.8	2.2	43.9	0.55
14'	8' x 10'	VL	6993	40 fc	1.6	2.0	57.5	0.72
25'								

Data provided utilizing 80+ CRI and curve lens.

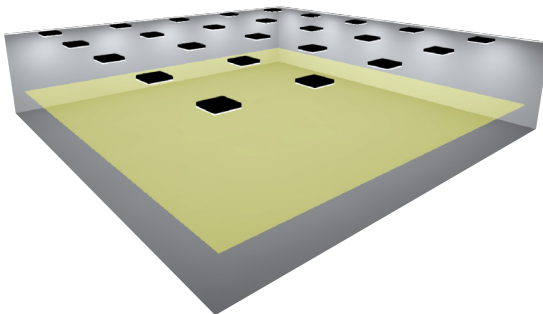


LCAT24 PERFORMANCE	
Room Size (L x W)	40' x 40'
Number of Luminaires	20
Workplane, Horizontal	2.5'
Reflectances	80/50/20
Light Loss Factors	1.0/0.90/0.90

Image rendered using LitePro DLX application software.

Mounting Height	OC 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	19.1	0.24
		VW	3216	30 fc	2.6	2	27.6	0.35
		MW	3462	33 fc	2.6	2	30.2	0.38
		LW	4394	42 fc	2.6	2	36.4	0.46
		ML	4912	46 fc	2.6	2	38.8	0.49
		HL	5604	45 fc	2.1	1.7	44	0.55
14'	8' x 10'	VL	7205	47 fc	2.1	1.7	59	0.74
20'		XL	8408	47 fc	2	1.6	73.8	0.92
25'								

Data provided utilizing 80+ CRI and curve lens.



LCAT22 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

Image rendered using LitePro DLX application software.

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	13.6	0.21
9'		MW	2109	25 fc	2.4	1.9	18	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	0.5
16'		VL	4396	41 fc	2.2	1.8	38.6	0.6

Data provided utilizing 80+ CRI and curve lens.



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	1.9	1.7	1.9	1.8
Avg/Min	1.6	1.6	1.6	1.6
Fixture Watts	28.9	28.4	32.3	36.1
LPD	0.6	0.6	0.54	0.6

Data provided utilizing 80+ CRI and curve lens.

Long Life, Low Maintenance & Reliable

<p>Long Life LEDs – Low Facility Maintenance Over Time</p> <p>Tested in according with the rigorous standards of IESNA TM-21</p> <ul style="list-style-type: none"> • 60,000 hours rated life with 80% lumen maintenance (L80) 	<p>Replaceable Components with Below-Ceiling Access</p> <p>LCAT LED boards and drivers are replaceable and accessible from below the ceiling plane for truly sustainable design.</p>
<p>Snap-Fit Center Lens</p> <p>LCAT's attractive center lens installs or removes with a simple, secure, snap-fit attachment.</p>	<p>Controls Compatible</p> <p>Optional occupancy and daylight sensors are available for factory installed controls, or pair LCAT with external controls for enhanced energy savings and code compliance.</p>
<p>DLC® Qualified</p> <p>DLC® (DesignLights Consortium) Qualified, with some Premium Qualified configurations - see www.designlights.org.</p> 	<p>QR Code Traceability</p> <p>Each LCAT ships with a QR code affixed to the housing. The QR code contains detailed product information for future traceability.</p>
<p>Warranty</p> <p>Standard with 5 year warranty.</p>	<p>Readily Available</p>  <p>LCAT products are available for standard and quick-turn project needs.</p> <ul style="list-style-type: none"> • 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
<p>NX Lighting Controls</p> <p>NX Lighting Controls supports indoor and outdoor applications, wired, wireless and hybrid networked NX lighting control deployments, and enables emerging applications such as Current's SpectraSync™ color tuning technology.</p>	

Ordering Information

LCAT		SIZE	CRI	COLOR TEMP	LUMEN OUTPUT	CEILING TYPE	SHIELDING	AIR FUNCTION
MODEL	LED Contemporary Architectural Troffer	12 1' x 2' 14 1' x 4' 22 2' x 2' 24 2' x 4'	Blank >80 9 >90	30 3000K 35 3500K 40 4000K 50 5000K 2750T 2700K-5000K SpectraSync™ Tunable White ¹ 2765T 2700K-6500K SpectraSync™ Tunable White ¹	XW Extra Low Watt VW Very Low Watt MW Medium Low Watt LW Low Watt ML Medium Lumen HL High Lumen VL Very High Lumen XL Extra High Lumen	G Grid Lay-in ² SM Surface Mount ^{3,11} CM Cable/Suspended Mount ^{3,4}	Blank Curve R Rectangular	Blank Static A Air Return Side Slots
DRIVER		VOLTAGE	OPTIONS		CONTROL OPTIONS			
E	Fixed Output	U 120V-277V	ELL14	Emergency Battery Pack, 1400 Lumens ^{6,7}	NX Networked – Wired			
ED	0-10V Dimming	347 347V ¹³	ELL14ST	Emergency Battery Pack, 1400 Lumens, Self Test ^{6,7}	NXE NX Wired Dual RJ45 SmartPORTS, without Sensor ^{13,14}			
ED1	0-10V 1% Dimming		ELL14HZ	Emergency Battery Pack, 2-Hour Run Time ^{6,7,8}	NXESM NX Wired Dual RJ45 SmartPORTS and Integral NX SMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming			
EDD	0-10V Dim-to-Dark		DTS	Dimming Bypass Module ^{6,9}	NXERM NX Wired Dual RJ45 SmartPORTS and Integral NX SMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{12,13}			
ESD	Step Dimming ^{5,6,12}		C388	3-Wire Flex ¹⁴	NX Networked – Wireless			
LUTH	Hi-Lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology ^{5,6,12}		C488	4-Wire Flex ¹⁴	NXW NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor ^{11,12,13}			
DALIP	DALI P driver ^{6,12,15}		C588	5-Wire Flex ¹⁴	NXWSM NX Networked Wireless Enabled Integral NX SMP2-SMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming			
			GLR	Fast Blow Fuse	NXWRM NX Networked Wireless Enabled Integral NX SMP2-LMI PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming ^{11,12,13}			
			EOR	End of Row (SM and CM only). Provides end wiring access for continuous row mounting ³	Third-Party Control Options			
			INT	Intermediate (SM and CM only). Provides end wiring access for continuous row mounting ³	ODPG ODPG Occupancy and Daylight Sensors w/ Grouping, Philips SNS200 ^{6, 15, 17}			
			CP	Chicago Plenum	LVR Lutron Vive Wireless DFCSJ-OEM-RF In-Fixture Control (RF only) ^{6, 15, 16, 17}			
					LVS Lutron Vive Wireless DFCSJ-OEM-OCC In-Fixture Control with Daylight and Occupancy Sensing ^{6, 15, 16, 17}			

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.

ACCESSORIES (ORDER SEPARATELY)	
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
CM48Y25C3F-KIT	48" Cable Mount Kit for 2" wide Cable Mount fixtures, 3-Wire
CM48Y15C3F-KIT	48" Cable Mount Kit for 1" wide Cable Mount fixtures, 3-Wire

Notes:

- ¹ Available with ED driver and 80 CRI only. N/A with VL or XL lumen outputs.
- ² For drywall, order G with Flange Kit Accessory.
- ³ Not available with Air Return (A) air function.
- ⁴ Order hanger accessories separately.
- ⁵ Limitations apply based on product size and lumen packages; see individual spec sheets.
- ⁶ Not available in 347V.
- ⁷ For compatibility with Dual-Lite LiteGear® inverters, contact representative.
- ⁸ Not available for use in Canada
- ⁹ For emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. Only available with 0-10V drivers. Universal voltage only. See spec sheets for wiring diagram
- ¹⁰ SpectraSync+NX can not be configured. Only available with NXE, NXWE or NXWD. Not available in 347V.

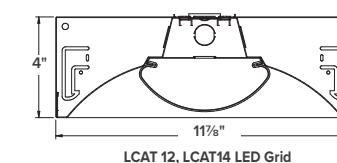
NX In-Fixture Control Options:

- ¹¹ NXSW, NXWE, NXSWD and NXWD cannot be used with surface mount versions.
- ¹² NX is not available with ESD, LUTH, or DALIP driver options.
- ¹³ NX combined with SpectraSync is not available in 347V.
- ¹⁴ For NX control and Flex Wire together, consult factory.

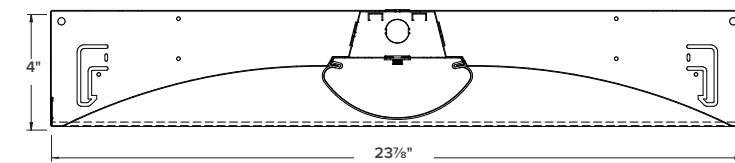
Third-Party Control Options:

- ¹⁵ LVS, LVR and ODPG only available with DALIP driver option.
 - ¹⁶ VIVE is a trademark of Lutron Electronics Co., Inc.
 - ¹⁷ Not available with SpectraSync (2750T or 2765T)
- For questions about configuration options, contact representative.

Dimensions shown with curve lens option.



LCAT 12, LCAT14 LED Grid



LCAT22, 24 LED Grid

Current

Current Lighting Solutions, LLC

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currentlighting.com/columbialighting

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