Columbia LIGHTING

LSER24
2' × 4', Serrano® LED Architectural Luminaire

createchange

FEATURES

- Architecturally enhanced triple lens design
- Up to 138 lumens per watt
- Long-life, 60,000 hour LEDs at L80 (80% lumen maintenance) reduce life cycle maintenance costs
- Four LED Color Choices
- Eight Lumen packages
- Superior color consistency within a 3-step MacAdam ellipse and greater than 80 CRI
- Rigorous testing and QR code record
- Lens design and materials provide uniform appearance without pixelation
- Hinged optical system allows easy access to lamps and electrical from below the ceiling
- Lenses interlock for structural integrity
- Two optional lens aesthetics
- Most configurations produce low W/ft² to meet the most restrictive lighting power density codes
- DLC® (DesignLights Consortium) Qualified - see www.designlights.org
- Five year warranty (Terms and Conditions apply).

CONSTRUCTION
Housing is constructed of heavy gauge steel, die formed for extra rigidity. Four T-bar clips integral to housing. Optical system hinges and latches from either side for easy access to LED module and electrical components. Mechanical light trap prevents light leaks. Latches are spring loaded.

FINISH
All visible parts are custom formulated soft, non-glare high reflectance white powder coat finish, painted after fabrication.

SHIELDING
Lenses are high transmission extruded acrylic with an interlocking design for structural integrity and ease of maintenance.

INSTALLATION
An access plate or mounting collar is furnished with luminaire for fast wiring connections without the necessity to open the fixture or wireway.

CEILING COMPATIBILITY
Designed for recessed installation in standard inverted tee grid ceilings (G), recessed installation in hard ceilings (G with FK accessory), Surface mount at ceiling plane (SM) or cable mount suspension below ceiling plane (CM). For compatibility with specific ceilings contact your Hubbell Lighting representative.

CERTIFICATION
All luminaires are built to UL 1598 and 2108 standards, and bear appropriate CSA labels. UL Sanitation Certified per NSF Standards. Damp location labeling is standard. CSA certified to UL 924 standards with battery pack or DTS (Dimming Bypass Module) options. Adheres to LM79, LM80 and TM21 standards. IC rating is standard on all models (does not apply to thru-wiring). DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org. The DTS, Dimming Bypass Module, is for emergency circuit control loads including sensors and wireless systems CSA certified to UL 924. See page 4 for wiring diagram. Link to Dimming Bypass Module Specification sheet.

WARRANTY
Five year warranty (Terms and Conditions apply).

ORDERING INFORMATION

EXAMPLE LSER24-35HLG-C-EU

LSER 24 – — – — – — – —

MODEL		COLOR TEMP		CEILING TYPE		SHIELDING		DRIVER		VOLTAGE		OPTIONS	
LSER	Serrano® LED Architectural Luminaire	30	3000K	G	Grid[1]	C	Contour	E	Fixed Output	U	120V-277V	ELL14	Emergency Battery Pack Installed, 1400 Lumens[6]
		35	3500K	SM	Surface Mount	R	Rail	ED	0-10V Dimming	347	347V	C388	3-Wire Flex
		40	4000K	CM	Cable Mount[2]			ED1	0-10V Dimming to 1%			C488	4-Wire Flex
		50	5000K					EDD	0-10V Dimming, Dim to Dark[3,4]			C588	5-Wire Flex
								ESD	Step Dimming[3]			GLR	Fast Blow Fuse
								LUTH	Hi-lume 1% EcoSystem LED driver with Soft-on, Fade-to-Black dimming technology[3,5]			GTD	Generator Transfer Device[7]
								LUT5	5-Series EcoSystem LED driver[3,5]			DTS	Dimming Bypass Module[8]

SIZE		LUMEN OUTPUT	
24	2' × 4'	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

OPTIONS (continued):
- **EOR** End of Row (SM and CM only)[9]
- **INT** Intermediate (SM and CM only)[9]
- **CP** Chicago Plenum

[1] For drywall, order G with Flange Kit Accessory
[2] Order hanger accessories separately
[3] Not available in 347V
[4] Not available with HL, VL and XL
[5] Not available on VL or XL
[6] For compatibility with Dual-Lite LiteGear® inverters in lieu of installed Battery Pack, contact Hubbell Lighting Representative
[7] GTD available for E (fixed output) driver option only
[8] 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 page 4 for wiring diagram
[9] Provides ends with wiring access for continuous row mounting

Damp Label - standard

ACCESSORIES (ORDER SEPARATELY)	
FK24	2' × 4' Flange Kit, Single Mounting (for rows add FKCR)
FKCR	Flange Kit Row Adaptor
CM 48Y2SC3F-KIT	48" Cable Mount Kit for 2' wide Cable Mount Fixtures, 3-Wire

HUBBELL Lighting

Product Availability			
Lumen Package	**Lumens**	**Watts**	**Efficacy**
LSER24-30XWG-C-EU	2328	19.2	121
LSER24-35XWG-C-EU	2398	19.2	125
LSER24-40XWG-C-EU	2436	19.2	127
LSER24-50XWG-C-EU	2652	19.2	138
LSER24-30VWG-C-EU	3157	26.8	118
LSER24-35VWG-C-EU	3252	26.8	121
LSER24-40VWG-C-EU	3303	26.8	123
LSER24-50VWG-C-EU	3596	26.8	134
LSER24-30MWG-C-EU	3567	30.7	116
LSER24-35MWG-C-EU	3674	30.7	120
LSER24-40MWG-C-EU	3731	30.7	122
LSER24-50MWG-C-EU	4062	30.7	132
LSER24-30LWG-C-EU	3915	34.1	115
LSER24-35LWG-C-EU	4033	34.1	118
LSER24-40LWG-C-EU	4095	34.1	120
LSER24-50LWG-C-EU	4460	34.1	131
LSER24-30MLG-C-EU	4656	41.6	112
LSER24-35MLG-C-EU	4795	41.6	115
LSER24-40MLG-C-EU	4870	41.6	117
LSER24-50MLG-C-EU	5303	41.6	128
LSER24-30HLG-C-EU	5451	50.3	108
LSER24-35HLG-C-EU	5615	50.3	112
LSER24-40HLG-C-EU	5702	50.3	113
LSER24-50HLG-C-EU	6209	50.3	123
LSER24-30VLG-C-EU	6789	58.8	116
LSER24-35VLG-C-EU	6992	58.8	119
LSER24-40VLG-C-EU	7101	58.8	121
LSER24-50VLG-C-EU	7732	58.8	132
LSER24-30XLG-C-EU	8035	72.4	111
LSER24-35XLG-C-EU	8276	72.4	114
LSER24-40XLG-C-EU	8405	72.4	116
LSER24-50XLG-C-EU	9152	72.4	126

HUBBELL Lighting

PHOTOMETRIC DATA

LUMINAIRE DATA

Luminaire	LSER24-35LWG-C-EU
	LSER Serrano LED, Recessed Architectural
	2 x 4 led with Contour center lens and linear prismed side lenses
Ballast	**XI040C110V05054BST1**
Ballast Factor	**1.00**
Lamp	**LED**
Fixture Lumens	**4033**
Watts	**34.10**
Mounting	**Recessed**
Shielding Angle	**0º = 90 90º = 90**
Spacing Criterion	**0º = 1.15 90º = 1.37**
Luminous Opening in Feet	**Length: 3.83**
	Width: 1.83
	Height: 0.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1132	28.1	28.1
0-40	1873	46.5	46.5
0-60	3259	80.8	80.8
0-90	4033	100.0	100.0
0-180	4033	100.0	100.0

AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle		0.0	22.5	45.0	67.5	90.0
	0	2122	2122	2122	2122	2122
	30	1947	2030	2304	2474	2493
	40	1802	1945	2283	2366	2366
	45	1716	1887	2217	2287	2287
	50	1632	1818	2136	2198	2193
	55	1537	1732	2032	2094	2064
	60	1441	1640	1923	1975	1944
	65	1348	1534	1813	1853	1806
	70	1239	1423	1688	1724	1670
	75	1127	1294	1555	1578	1507
	80	991	1159	1406	1167	1044
	85	740	952	811	617	476

INDOOR CANDELA PLOT

Horiz 0-180

0.0 —— 45.0 —— 90.0 ——
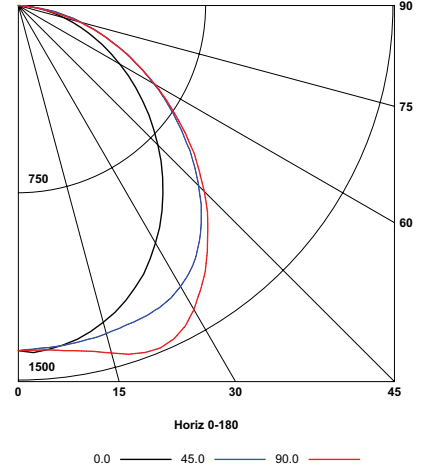
LUMINAIRE DATA

Luminaire	LSER24-35HLG-C-EU
	LSER Serrano LED, Recessed Architectural
	2 x 4 LED with Contour center lens and linear prismed side lenses
Ballast	**XI054C150V054BST1**
Ballast Factor	**1.00**
Lamp	**LED**
Fixture Lumens	**5615**
Watts	**50.30**
Mounting	**Recessed**
Shielding Angle	**0º = 90 90º = 90**
Spacing Criterion	**0º = 1.19 90º = 1.43**
Luminous Opening in Feet	**Length: 3.83**
	Width: 1.3
	Height: 0.00

ZONAL LUMEN SUMMARY

Zone	Lumens	% Lamp	% Fixt.
0-30	1574	28.0	28.0
0-40	2606	46.4	46.4
0-60	4533	80.7	80.7
0-90	5615	100.0	100.0
0-180	5615	100.0	100.0

AVG. LUMINANCE (Candela/Sq. M.)

Average Luminance Angle		0.0	22.5	45.0	67.5	90.0
	0	2950	2950	2950	2950	2950
	30	2713	2823	3212	3435	3465
	40	2508	2700	3178	3290	3292
	45	2389	2624	3091	3177	3184
	50	2265	2523	2967	3049	3044
	55	2142	2412	2827	2916	2881
	60	2009	2285	2681	2749	2718
	65	1868	2140	2529	2580	2518
	70	1729	1976	2357	2411	2344
	75	1584	1816	2195	2207	2118
	80	1371	1627	1946	1627	1450
	85	1075	1286	1163	934	722

INDOOR CANDELA PLOT

Horiz 0-180

0.0 —— 45.0 —— 90.0 ——

HUBBELL Lighting

Columbia LIGHTING

LSER24
2' × 4', Serrano® LED Architectural Luminaire

DIMENSIONAL DATA - GRID

4⁵⁄₁₆"
24"
24"
48"

CEILING COMPATIBILITY

Type G
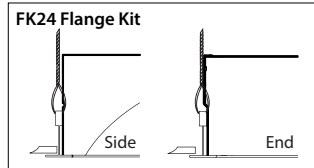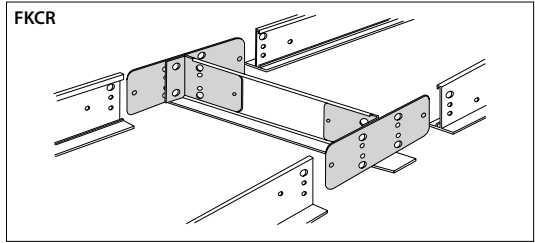

Side   End
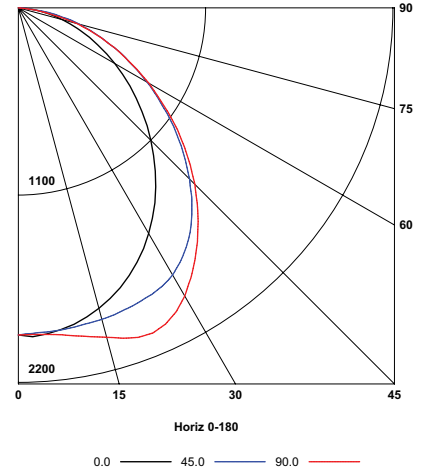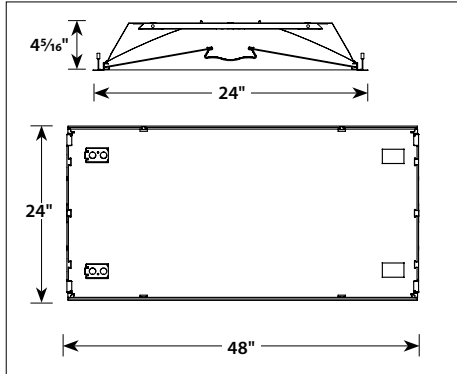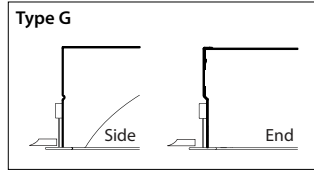
For lay-in installation in exposed grid ceilings. Maximum tee widths of 1" and maximum tee heights of 2" allowed.

FK24 Flange Kit

Side   End

For hard ceiling applications, order FK24 flange kit. Flange kit wires directly into concealed ceiling opening for a clean, finished appearance.
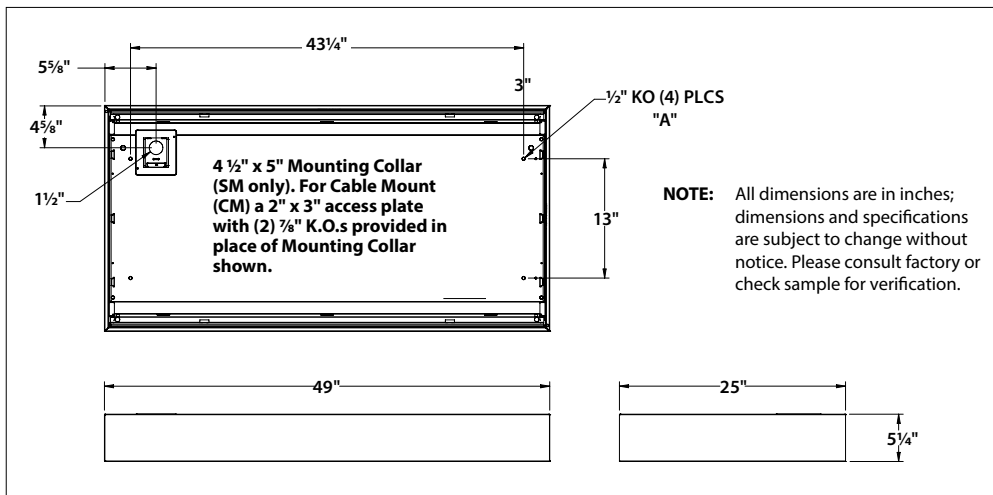
FKCR

For flanged fixtures in row configurations, the FKCR adapter bracket kit is required in addition to the FK24 kit. Order one less FKCR than the total number of fixtures in row. (Example: Row of two, order (2) FK24 & (1) FKCR)

Row cut out dimensions using FK24s & FKCR adapters:
Width 24⅜", Length [48" × (# in row)] + ⅜".
Example: (48" × 2) + ⅜" = 96⅜"

Flange kit cut out dimension for single unit only: 24⅜" × 48⅜"

DIMENSIONAL DATA - SURFACE MOUNT

43¼"
5⅝"
3"
½" KO (4) PLCS "A"
4⅝"
1½"
13"

4 ½" x 5" Mounting Collar (SM only). For Cable Mount (CM) a 2" x 3" access plate with (2) ⅞" K.O.s provided in place of Mounting Collar shown.

NOTE: All dimensions are in inches; dimensions and specifications are subject to change without notice. Please consult factory or check sample for verification.
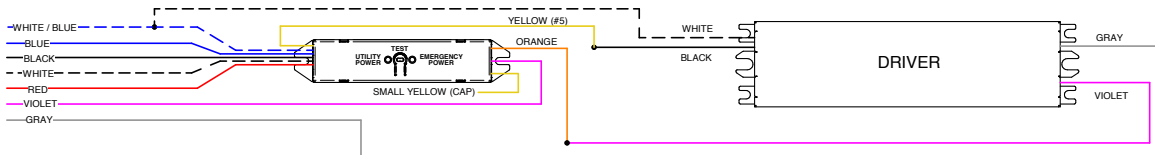
49"
25"
5¼"

SURFACE MOUNT

Order SM ceiling type. Mounting collar required for surface mounting. (4) Mounting knock outs, ¼" to ½" provided as shown, marked "A".

CABLE MOUNT

Order CM ceiling type. Access plate supplied for cable mounting or suspension. Use CM48Y2C3F-KIT 48" cable mount kit. Includes 3-wire feed cord. For other wiring needs, contact Hubbell representative. Mounting knock-outs, ¼" to ½", provided as shown, marked "A".

DTS WIRING DIAGRAM (0–10V DIMMING DRIVER SHOWN)

WHITE / BLUE
BLUE
BLACK
WHITE
RED
VIOLET
GRAY

YELLOW (#5)
ORANGE
UTILITY POWER   TEST   EMERGENCY POWER
SMALL YELLOW (CAP)

WHITE
BLACK
DRIVER
GRAY
VIOLET

WHITE/BLUE	Emergency Neutral
BLUE	Emergency Line
BLACK	Utility Line (Unswitched Hot)
WHITE	Utility Neutral
RED	Switched Hot
VIOLET	Dimming
GRAY	Dimming

HUBBELL Lighting

DTS Integration Guide