L3I Linear Pendant

PRODUCT DESCRIPTION

Ketra's L3I indirect pendant offers intimate up-lighting for commercial and hospitality applications.
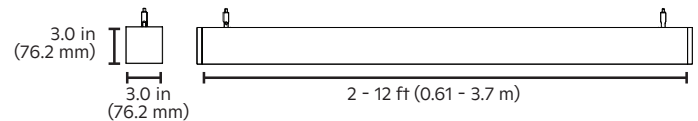
FEATURES

High Def Palette—covers a wide range of 16.7 million colors, including pastels, saturated colors and high CRI whites spanning from 1,400K to 10,000K.
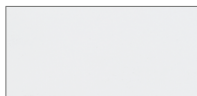
Dynamic Spectrum—precisely tunes the amount of energy across the visible spectrum to produce Natural Light, Natural Dimming and Vibrancy.

TruBeam—produces uniform color across any available beam angle.

Color Lock—maintains your desired color point at a one-step MacAdam Ellipse across all Ketra product families and over each product's lifetime.

3.0 in (76.2 mm)

3.0 in (76.2 mm)

2 – 12 ft (0.61 – 3.7 m)

Finish

White

Black

SPECIFICATIONS[1]

Optical Performance

Delivered Lumens[2]	L3I.04	400 lm/ft
	L3I.06	600 lm/ft
	L3I.08	800 lm/ft
	L3I.10	1000 lm/ft

CRI (Ra)[3]	>90 (R9 >90)
Lumen Maintenance[3]	50,000 hours to L70 @ 25°C Ambient
Color Spatial Uniformity	One-step MacAdam Ellipse over product lifetime
Color Point Range	1400 – 10000 K, Pastel and Saturate colors
Dimming Range	0.1-100%
Current	82 mA Max

Environmental

Ambient Temperature	0 to 50 °C
Humidity	0 – 95%, Non-condensing
Certification	UL, cUL, RoHS, FCC Class B UL2043 rated for use in air handling plenums
Location	UL Damp Location, IP20, not for use in outdoor applications
Outdoor/Indoor	Not for use in outdoor applications
Warranty	5 year fixture, LED, and dimming warranty

Mechanical

Fixture Weight	2.5 lbs/ft (1.13 kg/ft)
Housing Material	Powder Coated Aluminum, Corrosion Protected Steel
Lens Material	UL F1 outdoor rating for UV and water contact PMMA

Dimensions

Fixture Length	See Length Charts on page 3
Fixture Width	3 in (76.2 mm)
Fixture Height	3 in (76.2 mm) 4.5 in (114.3 mm) with mounting points
Default Aircraft Cable Length	36 in (91.44 cm)
Default Canopy Size	5 in (12.7 cm)

Electrical

Power Consumption	L3I.04	7.7 W/ft
	L3I.06	10 W/ft
	L3I.08	12.4 W/ft
	L3I.10	15.5 W/ft

Power Factor	>0.9	
Delivered Efficacy	L3I.04	51.9 lm/W
	L3I.06	60 lm/W
	L3I.08	64.5 lm/W
	L3I.10	64.5 lm/W

Surge Protection	2.5 KV	
Voltage	120 V∼ 60 Hz, 277 V∼ 60 Hz	
Emergency Lighting	Evaluated by UL® for use in emergency lighting systems in accordance with standard UL® 924 and CSA C22.2 No. 141 when paired with the LVS™ model LUT-SHUNT-A-TD (UL® file E206507) and Ketra N3 Satellite[4].	
Max. qty of fixture length per N3 power feed	40 ft (12.19 m)[5]	
Max total run length, including cable, per N3	100 ft (30.48 m)[5]	

[1] All performance measurements taken at 3000 K, 25 °C ambient, 100% power input, unless otherwise stated, within CCT range of 2700 – 5000 K.
[2] Lumen measurement complies with IES LM-79-08 testing procedures.
[3] Lumen maintenance values calculated in accordance to TM-21 procedures based on LM-80 compliant measurement data.
[4] See Lutron Application Note 106 (P/N 048106) at www.lutron.com for wiring details. This is only applicable to CCX fixtures used in an Athena system.
[5] The maximum number of N3 systems within a 20 ft (6.1 m) radius is four systems. For additional limitations when multiple N3 links are in close proximity, please see the "Lutron Residential and Commercial Systems Rules" spec (P/N 369821) at www.lutron.com. Wiring within an N3 system requires either the Lutron provided cables or wiring should be installed in a metal armored cable or metal conduit.

ORDERING GUIDE

Please download this PDF to use the full functionality of the ordering guide.

	L3I		GT	DL					
Product Line	Model	Lumens/ft	Control System	Lens Option	Region / Voltage	Mounting	Housing Finish	Configuration	Fixture Length

Order code: _____

Product Line	Code
Commercial (Athena compatible)	**CM**
Residential (HomeWorks compatible)	**HW-**

Model	
Linear 3 in (76.2 mm) aWide Indirect Pendant	**L3I**

Lumens/ft	
400	**04**
600	**06**
800	**08**
1000	**10**

Control System	
CCX (Clear Connect–Type X)	**GT**

Lens Options	
Dust Lens	**DL**

Region / Voltage	Code
North America, 120 V∼ 60 Hz	**11**
North America, 277 V∼ 60 Hz	**12**

Mounting (see page 3 mounting details)	
Hard Ceiling	**C1**
T–Bar	**C2**

Housing Finish	
White	**WWW**
Black	**BBB**
White Fixt, White Cable, Black Can	**WWB**
White Fixt, Black Cable, Black Can	**WBB**
Black Fixt, Black Cable, White Can	**BBW**
Black Fixt, White Cable, White Can	**BWW**

Configuration	Code
Power Input Only	**PR1**
Power Input and Output	**PR2**
Segment Start Power Input	**SS1**
Segment End Power Output	**SE2**
Segment End	**SEN**
Segment Middle Power Input	**SM1**
Segment Middle	**SMN**

Fixture Length	
Continuous length, available in 1 ft increments >6 ft	**--**
3 ft (0.914 m)	**0003**
4 ft (1.219 m)	**0004**
6 ft (1.828 m)	**0006**
8 ft (2.438 m)	**0008**
10 ft (3.048 m)	**0010**
12 ft (3.657 m)	**0012**

OPTIONAL HARDWARE ORDERING GUIDE

Replacement Canopy[1]

UN	PC		
Product Line	Part	Canopy Type	Housing Finish

Order code: _____

Product Line	Code
Universal	**UN**

Part	
Pendant Canopy	**PC**

Canopy Type	
5 in (12.7 cm) Power Feed (Ships Default)	**5P**
5 in (12.7 cm) non-powered point (Ships Default)	**5N**
2 in (5.08 cm) (non-powered point)	**2N**

Housing Finish	
White	**WHT**
Black	**BLK**

Replacement Mounting Hardware[2]

UN-	PM			
Product Line	Part	Mounting Type	Point Type	AC Length

Order code: _____

Product Line	Code
Universal	**UN-**

Mounting	
Pendant Mounting	**PM**

Ceiling Type	
Hard Ceiling	**C1**
T-Bar	**C2**

Point Type	
Powered Point	**PWR**
Non-Powered Point	**NPR**

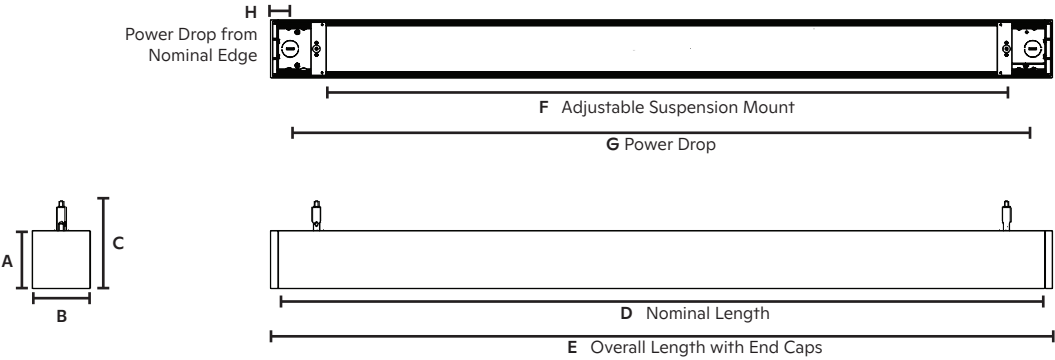| Aircraft Cable Length	
36 in (91.44cm) (Ships Default)	**036**
72 in (182.88cm)	**072**

[1] 5 in (12.7 cm) Canopy ships default with pendant, Replacement order code allows for replacement canopies, or 2 in (5.08 cm) non-standard canopies for non-powered points
[2] 36 in (91.44 cm) Aircraft Cable ships default with pendant.
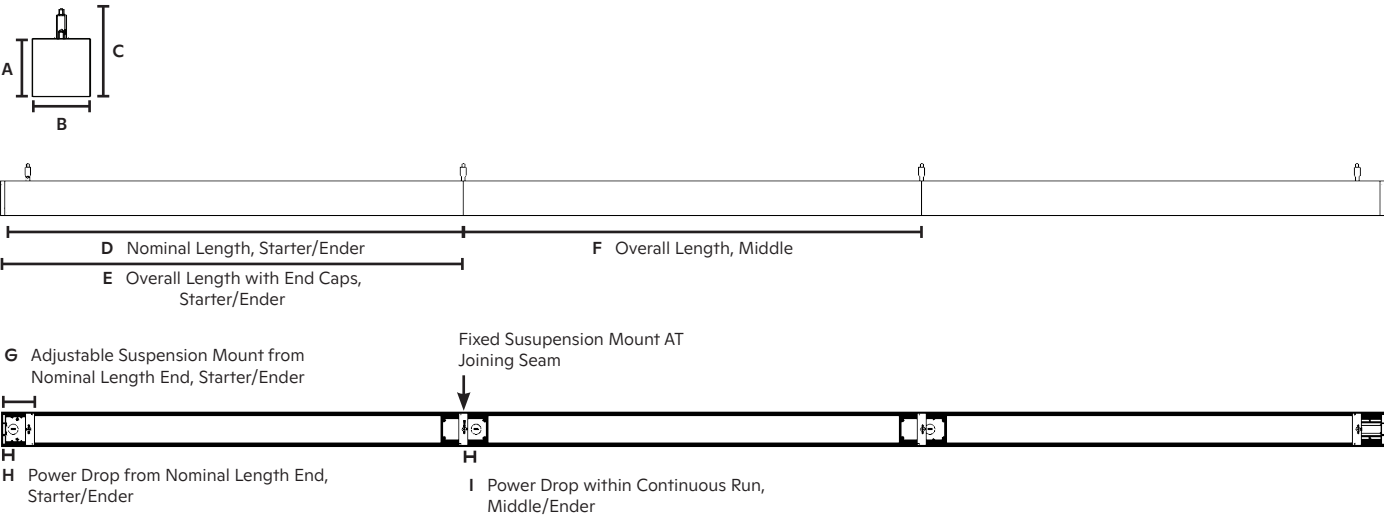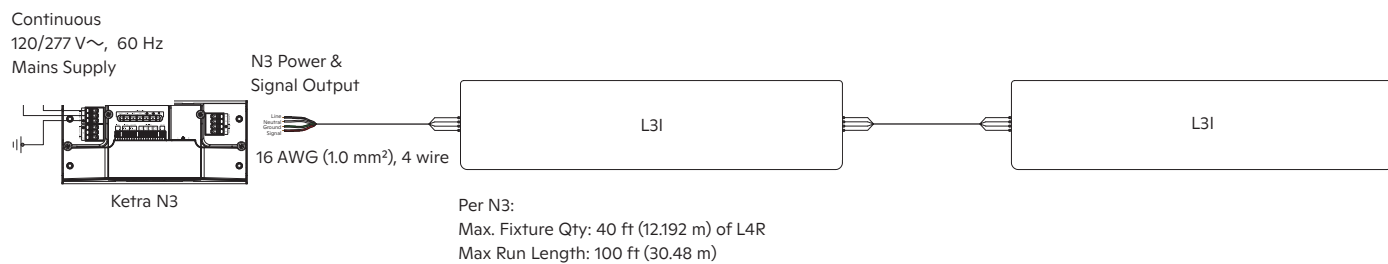
PRODUCT DIMENSIONS

Fixture

Standalone

Fixture Length	A		B		C		D		E		F				G				H			
											Max		Min		Max		Min		Max		Min	
FT	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM	IN	MM
3	3.0	76.2	3.0	76.2	4.5	114.3	40	1016	40.8	1036	40	1016	20	508	37.5	953	38.75	984	1.25	31.9	0.625	15.9
4							52	1321	52.8	1341	52	1321	26	660	52	1321	52	1321				
6							76	1930	76.8	1950	76	1930	38	965	76	1930	76	1930				
8							96	2438	96.8	2458	96	2438	48	1219	96	2438	96	2438				
10							120	3048	120.8	3068	120	3048	60	1524	120	3048	120	3048				
12							144	3658	144.8	3678	144	3658	72	1829	144	3658	144	3658				

Continuous Runs

Fixture Length	A		B		C		D		E		F		G				H				I	
													Max		Min		Max		Min			
ft	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm
3	3.0	76.2	3.0	76.2	4.5	114.3	40	1016	40.4	1026	40	1016	10	1016	0	0	1.25	31.9	0.625	15.9	1	26
4							52	1321	52.4	1331	52	1321	13	1321	0	0						
6							76	1930	76.4	1940	76	1930	19	1930	0	0						
8							96	2438	96.4	2448	96	2438	24	2438	0	0						
10							120	3048	120.4	3058	120	3048	30	3048	0	0						
12							144	3658	144.4	3668	144	3658	36	3658	0	0						

WIRING DIAGRAM

Continuous
120/277 V∼, 60 Hz
Mains Supply

N3 Power &
Signal Output

Line
Neutral
Ground
Signal

16 AWG (1.0 mm²), 4 wire

L3I

L3I

Ketra N3

Per N3:
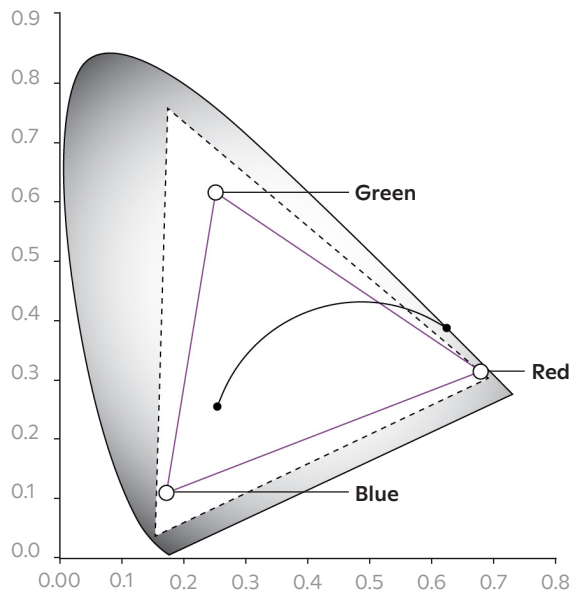Max. Fixture Qty: 40 ft (12.192 m) of L4R
Max Run Length: 100 ft (30.48 m)

Install in accordance with all local and national electrical codes. If the Lutron provided cable is not used, wiring should be installed in a metal armored cable or metal conduit.

WIDE GAMUT

CIE 1931 Color Chart

Ketra's L3I Linear Pendant can easily be commissioned into Lutron HomeWorks or Athena systems. The product can reproduce any color point within the triangle shaped gamut indicated in the chart to the left. With Ketra's Color Lock tool, the color point is maintained to an accuracy of one-step MacAdam Ellipse over the lifetime of the product and across operating temperature range.

—— **Color Lock**—Color point is maintained to an accuracy of one-step MacAdam Ellipse over the lifetime of the product and across operating temperature range.

----- **Expanded Gamut**—Color lock not guaranteed such that each product produces the most saturated color of which it is capable.

General Specifications

Color Point Maintenance: Employ closed loop optical and thermal feedback capable of maintaining color point accuracy at a one-step MacAdam ellipse over product lifetime[1].

Wireless Capability: LED light source shall have an integrated wireless control on board.

Color Rendering Index (CRI): Capable of CRI greater than 90 at any point along the Black Body Curve from 2,700K to 5,000K.

Single Source Multi-Die Modular Emitter/LED Module Design: Employ a single source multi-die modular emitter/LED module consisting of both monochromatic and phosphor converted blue LED die.

LED Estimated Useful Life: Minimum of 50,000 hours at 70 percent lumen maintenance, calculated based on IES LM-80 test data.

Diagnostic reporting capability[2]: Clear Connect-Type X (CCX) light sources provide diagnostics and built-in technology to check input voltage and wireless connectivity.

Warranty: Ketra's light source is warrantied to be free from material defects in material and workmanship for five (5) years or 25,000 hours from date of shipment, whichever is less.

Lighting System Capable of the Following Dimming Functionality:

1. Automatically mimicking natural daylight by shifting Correlated Color Temperature (CCT) and intensity based on time-of-day.

2. Shifting from high CCT at high intensity to low CCT at low intensity, mimicking dimming curve of an incandescent lamp.

3. Changing intensity while maintaining full color spectrum or CCT.

4. Changing full color spectrum or CCT while maintaining intensity.

Spectral Power Distribution Manipulation: Light system capable of manipulating the Spectral Power Distribution (SPD) by automatically adjusting distributions of color intensity while maintaining the same Correlated Color Temperature (CCT).

Dimming Range: Dimmable from 100 to 0.1 percent measured luminous flux.

Color Point Range: Single light source capable of producing 16.7 million colors and white from 1,400K to 10,000K Correlated Color Temperature (CCT).

[1] Color point maintenance not guaranteed in the expanded gamut or while operating at ambient temperatures between -13 to 32 °F (-25 to 0 °C).
[2] For diagnostics support or more information, please contact Lighting Technical Support at lightingsupport@lutron.com or 1.844.LUTRON1 (1.844.588.7661).