

At only 1.1" (28 mm) wide, the Generation 2, Linealux L1 mini grazer provides enormous creative lighting potential, in a very small package. Packed with features including EasyGlow™ visual comfort, CoolDrive™ thermal management and **PowerSync™** communication technologies. PowerSync allows for highly granular digital control via DMX/RDM, with no additional

Unique and flexible designer optics allow wide end-to-end spacing while maintaining excellent uniformity and superb color-over-angle and blending consistency even at close grazing distances.

Available in a range of standard lengths from 1 ft (300 mm) to 5 ft (1500 mm), the Linealux L1 Generation 2 provides excellent installation flexibility. Using the Linealux L1 Generation 2 in your lighting project, imagination really is the

#### Performance

Static White & Color <sup>1</sup>	Lumen Output (Im)	Efficacy (lm/W)	
2,700 K (80 CRI)	1,620	61	
3,000 K (80 CRI)	1,740	66	
☐ 3,500 K (80 CRI)	1,740	66	
4,000 K (80 CRI)	2,020	77	
5,000 K (70 CRI)	1,880	71	

<sup>&</sup>lt;sup>1</sup> Lumen output values are based on 7 W/ft, 4 ft luminaire, 20° x 80° lens.

Dynamic Color <sup>2</sup>	Lumen Output (Im)	Efficacy (Im/W)		
■RGBA	1,180	44		
RGBW (4,000 K) with Royal Blue*	1,100	41		

<sup>&</sup>lt;sup>2</sup> Lumen output values are based on 7 W/ft, 4 ft luminaire, 20° x 80° lens.

Tunable White <sup>3</sup>	Lumen Output (Im)	Efficacy (lm/W)
2,700 K - 6,500 K	1,750	66

<sup>&</sup>lt;sup>3</sup> Lumen output values are based on 7 W/ft, 4 ft luminaire, 20° x 80° lens.

Beam Angles	20° x 80°, 30° x 80°, 40° x 80°, Asymmetric

#### \* NOTE:

The default RGBW colors have recently changed to the RGBW with Royal Blue (4BW code). These colors will not match existing products with the earlier RGBW with Mid-Blue (4CW code). Contact Lumascape for custom LED Colors.











Products and specifications are subject to change without notice.



# Electrical

Power Consumption	7 W/ft, 5 W/ft	
Lifetime	>60,000 hrs (B10, L70, TM21 Reported)	
Input Voltage	Low Voltage 30-48 Vdc	
Thermal Management	CoolDrive™ onboard thermal monitoring and control	

#### Control

Interface	Lumascape PowerSync®
Protocols <sup>1</sup>	DMX/RDM, Artnet <sup>1</sup> , 0 - 10 V (sink or source) <sup>2</sup>
PWM Frequency	10 kHz flicker-free dimming to 0.1%
Control Resolution	$^{3}\!4$ " (19 mm), 3.0" (75 mm), 6.0" (150 mm), 12.0" (300 mm) and full luminaire Configurable via RDM
RDM Functionality	PowerSync enabled Lumascape luminaires are shipped with a default RDM personality which provides smooth dimming control. For different dimming characteristics or to enable other special functionalities, the default personality can be changed through industry standard DMX/RDM.
Systems	Range of third-party controllers

 $<sup>^{1}</sup>$  Some protocols require additional hardware. For more information and other available protocols contact Lumascape.

# **Physical**

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Housing	Marine-grade extruded aluminum with tempered OptiClear™ glass lens			
Finish	Superior 9-step powder-coating process, including marine-grade anodizing and polyester top coat			
Installation	Surface-mounted			
Adjustable A range of mounting options available				
Ambient Operating Temperature	-40 °F to 122 °F (-40 °C to 50 °C)			
Surface Temperature	≤95 °F (35 °C)			
Weight 3.8 lb (1.7kg) for 4 ft section				
Effective Projected Area 0.5 ft <sup>2</sup> (0.4 m <sup>2</sup> ) for 4 ft section				

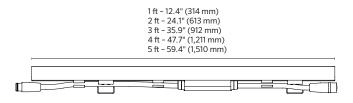
# Certification & Compliance

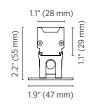
IP Rating	IP66 / IP67 (Passes IP68 Tests)
IK Rating	IK6
Vibration Resistance	3G Rating (ANSI C136.31)
Environment	Dry, Damp, Wet locations
Certifications	ETL, CE, UKCA, RCM, CCC

<sup>&</sup>lt;sup>2</sup> Not available for color-changing or tunable white

#### **Dimensions**

# Body Type S: Without Integral Micro-Louver



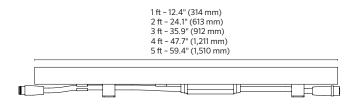


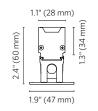


**Fixed Bracket** 

Adjustable Bracket

#### Body Type L: With Integral Micro-Louver





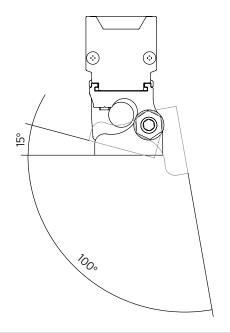


Fixed Bracket

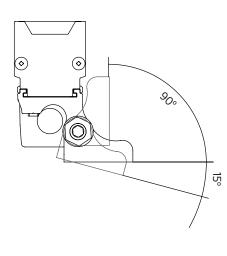
Adjustable Bracket

#### **Luminaire Rotation**

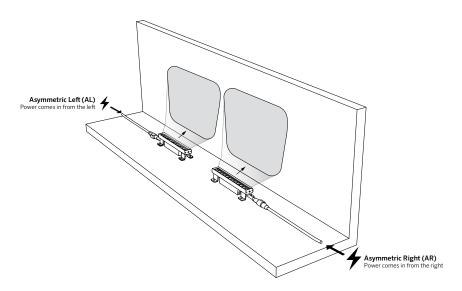
#### Adjustable Bracket



# Adjustable Bracket Installed In Alternate Orientation

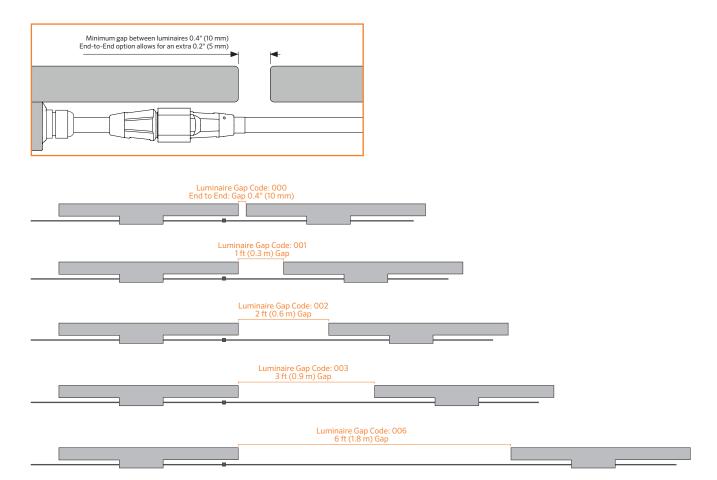


# **Asymmetric Optics**

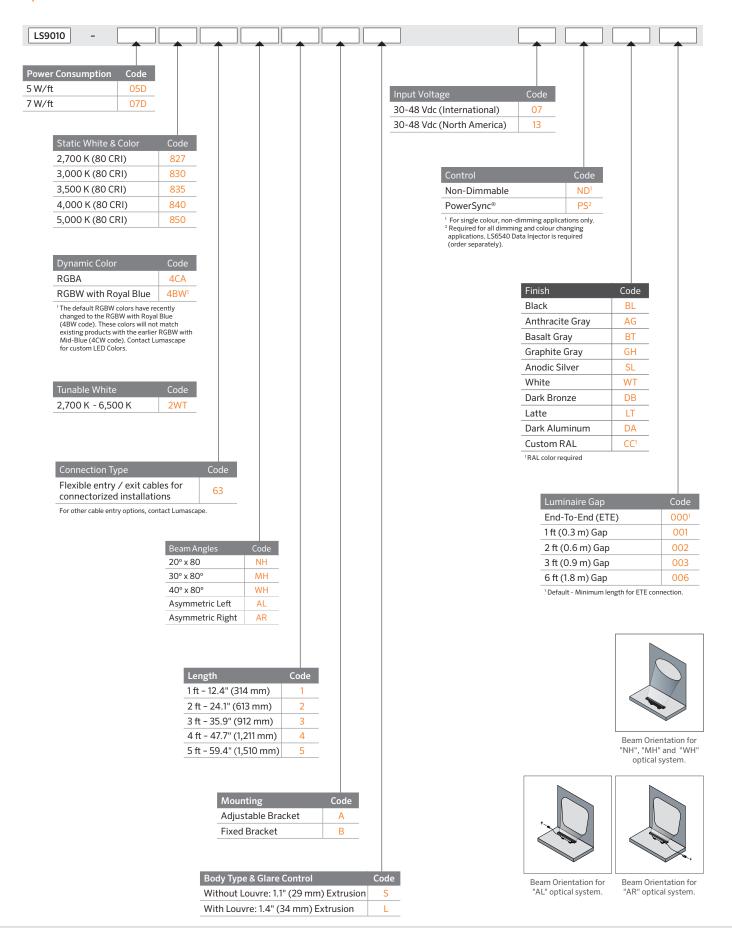


#### Luminaire Gap

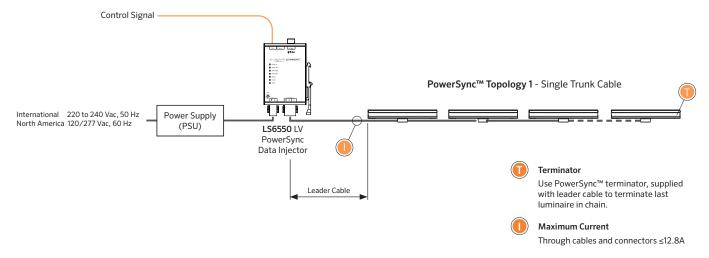
We define the Gap being where the luminaire ends to where the start of the next luminaire. To be able to create the gap, cable length is added to the input connector side. A minimum gap of 0.4" (10 mm) must be applied to cope with thermal expansion.



# **Specification Matrix**



# Network Topology - Low Voltage 30-48 Vdc Dimmable and Color-Changing via PowerSync4™



Up to 24 luminaires per 48 V PowerSync circuit / LS6550 Low Voltage PowerSync Injector

Maximum Circuit Loading - Single Run									
D	Max Leader Cable Length from		Feet of Linear luminaire per 48 V Power Supply						
Power	LS6550 to first fitting	120 W	240 W	320 W	480 W	600 W			
	50' (15 m)	20	44	56	80	96			
5 W/ft	98' (30 m)	20	44	56	76	88			
	164' (50 m)	20	40	52	64	72			
	50' (15 m)	14	28	36	56	64			
7 W/ft	98' (30 m)	14	28	36	48	56			
	164' (50 m)	14	26	34	44	48			

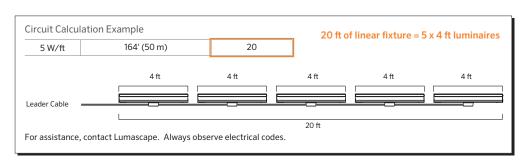
Values in the above table show the maximum circuit loading per 48 V circuit.

Values are based on end to end spacing (ETE). Extended luminaire cables, inclusion of jumper cables, or longer leader cable will effect loading Circuits can be made up of up to 24 luminaires in any length, up to the maximum circuit loading in the table above.

Circuits are limited to maximum 12.8 A.

For non-continuous runs, contact Lumascape for more information.

To calculate the maximum number of interconnected luminaires per run / circuit, see example below.



#### **Control Resolution**

DMX Channel Allocation															
RGBA / RGBW							Single Colour				Tunable White				
Pixel Size	1 ft	2 ft	3 ft	4 ft	5 ft	1 ft	2 ft	3 ft	4 ft	5 ft	1 ft	2 ft	3 ft	4 ft	5 ft
Full Fixture	4	4	4	4	4	1	1	1	1	1	2	2	2	2	2
12.0" (300 mm)	4	8	12	16	20	1	2	3	4	5	2	4	6	8	10
6.0" (150 mm)	8	16	24	32	40	2	4	6	8	10	4	8	12	16	20
3.0" (75 mm)	16	32	48	64	80	4	8	12	16	20	8	16	24	32	40
¾" (19 mm)	64	128	192	256	320	16	32	48	64	80	32	64	96	128	160

Extra channels required when enabling optional Advanced Control Modes.

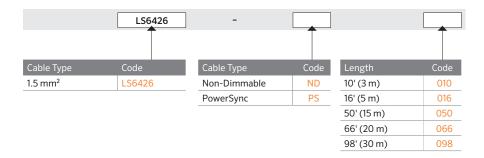
Variable Dimming Smoothness Mode - requires 1 extra channel per luminaire

Variable Dimming Smoothness + Strobe Mode - requires 3 extra channels per luminaire

# Connectorized Accessories - Low Voltage 30-48 Vdc

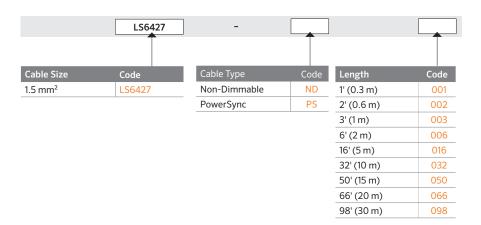
#### Leader Cables - PowerSync Extra Low Voltage (For Connection Type 63)

3-core 16 AWG / 1.5mm² for use in CE/CCC and UL installations. Compatible with all luminaires with Type 63 connectorized supply cable option. Supplied fitted with an IP68 connector for pairing with the first connectorized luminaire in a Powersync™4, Low Voltage circuit. Comes complete with a matching End of Circuit, Powersync™4, extra low voltage terminator plug.



#### Jumper Cables - PowerSync Extra Low Voltage (For Connection Type 63)

3-core 16 AWG / 1.5 mm² for use in CE/CCC and UL installations. Compatible with all Luminaires with Type 63 connectorized supply cable option. Supplied fitted with IP68 connectors for joining between connectorized luminaires in a Powersync™4, extra low voltage circuit.



#### **Connectorized Accessories**

#### **Terminators**

Product	Code			
DMX Terminator Hardwired	LS6407			
PowerSync Terminator Hardwired, Line Voltage 220 to 240 Vac				
PowerSync Terminator Hardwired, Line Voltage 120/277 Vac				
PowerSync Terminator Connectorized, Line Voltage 220 to 240 Vac, 120/277 Vac				

#### \* NOTE:

- DMX Terminators ship with PowerSync Data Injectors.
- Terminators for hardwired PowerSync installations ship with PowerSync Data Injectors.
- Terminators for connectorized PowerSync installations ship with Leader Cables.
- Order separately for spares only.

#### PowerSync Low Voltage 30-48 Vdc Data Injector

Translates control signals into a digital format, delivering integral power and data to intelligent LED luminaires. This allows highly-granular addressing and high-speed digital control of every luminaire, using only three wires. The data injector is DIN rail mountable designed to be installed in a switchboard, next to the power supply and circuit breaker that is supplying power to the controlled lighting circuit. Accepts a growing list of standard protocols (0-10 V, DMX/RDM) for simple integration with a wide selection of control systems using these industry standard protocols.



# Product Code Control Code Data Injector PS4 LS6550 DMX/RDM, 0-10 V Input 2D

#### NOTE:

PowerSync Data Injector ships with three (3) hardwired terminators and one (1) hardwired DMX terminator.

# Luminaire Wire Colors & Designations

#### Low Voltage 30 to 48 Vdc

Designation	Color	
+ DC	Red	
- DC	Black	
Data	Orange	