



A low-power architectural grade luminaire that combines technology and performance in a stylish low profile form factor. Packed with features including **EasyGlow™** visual comfort and **CoolDrive™** thermal management technologies. **PowerSync™** allows for highly granular digital control via common protocols. Unique and flexible optics allow wide end-to-end spacing while maintaining excellent uniformity. Lighting professionals now have greater creative flexibility with the choice of a designer lens option, which provides superb color-over-angle consistency and blending of colors even at close blending distances. Standard LED options are also available for exceptional reach.

Performance

Static White & Color <sup>1</sup>	Lumen Output (lm)	Efficacy (lm/W)
● 2,700 K (80 CRI)	990	71
● 3,000 K (80 CRI)	1,080	77
○ 3,500 K (80 CRI)	990	71
● 4,000 K (80 CRI)	1,080	77
● 5,000 K (70 CRI)	1,080	77
● Red	300	22
● Green	560	40
● Royal Blue	150	11

<sup>1</sup> Static white lumen output values are based on 4 W/ft, 4 ft luminaire with 30° x 80° lens.

Dynamic Color <sup>2</sup>	Lumen Output (lm)	Efficacy (lm/W)
● RGBA	600	42
● RGBW	650	46
● RGBW with Royal Blue	610	44

<sup>2</sup> Dynamic Color lumen output values are based on 4 W/ft, 4 ft luminaire with 30° x 80° lens.

Tunable White	Lumen Output (lm)	Efficacy (lm/W)
● 2,700 K - 6,500 K	990	71

Beam Angles	20° x 80°, 30° x 80°, 40° x 80°
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**Electrical**

<b>LED Power</b>	4 W/ft
<b>Power Consumption</b>	≤5 W/ft
<b>Lifetime (L70)</b>	> 60,000 hrs (B10, L70, TM21)
<b>Input Voltage</b>	Low Voltage 30-48 Vdc
<b>Thermal Management</b>	<b>CoolDrive™</b> onboard thermal monitoring and control

**Control**

<b>Interface</b>	Lumascape <b>PowerSync™</b>
<b>Protocols<sup>1</sup></b>	DMX/RDM, Artnet, PWM <sup>2</sup> , 0-10 V (sink or source) <sup>2</sup>
<b>PWM Frequency</b>	1.6 kHz flicker-free dimming to 0.1%
<b>Control Resolution</b>	25 mm (1.0"), 75 mm (3.0"), 150 mm (6.0"), 300 mm (12.0") and full luminaire. Configurable via RDM
<b>Systems</b>	Range of third-party controllers

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

<sup>2</sup> Not available for color-changing or tunable white.

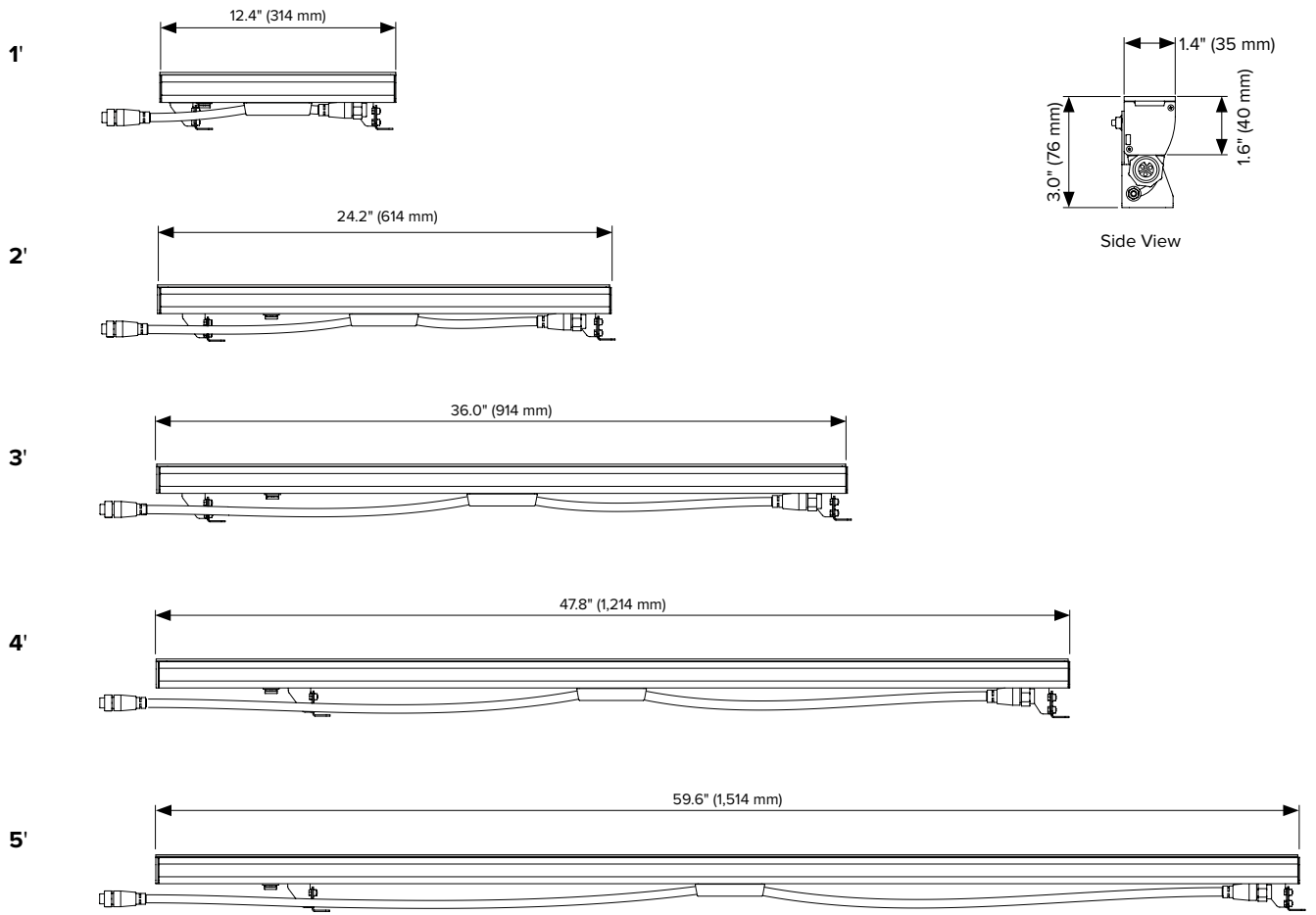
**Physical**

<b>Housing</b>	Marine-grade extruded aluminum with tempered glass lens
<b>Finish</b>	Anodized aluminum or superior 9-step powder-coating process, including marine-grade epoxy undercoat and polyester top coat
<b>Installation</b>	Surface-mounted
<b>Adjustable</b>	Multi-positional
<b>Ambient Operating Temperature</b>	-40 °F to 122 °F (-40 °C to 50 °C)
<b>Surface Temperature</b>	≤95 °F (35 °C)
<b>Weight</b>	4.2 lbs (1.9 kg) for 4 ft section
<b>Effective Projected Area</b>	0.6 ft <sup>2</sup> (509 cm <sup>2</sup> ) for 4 ft section

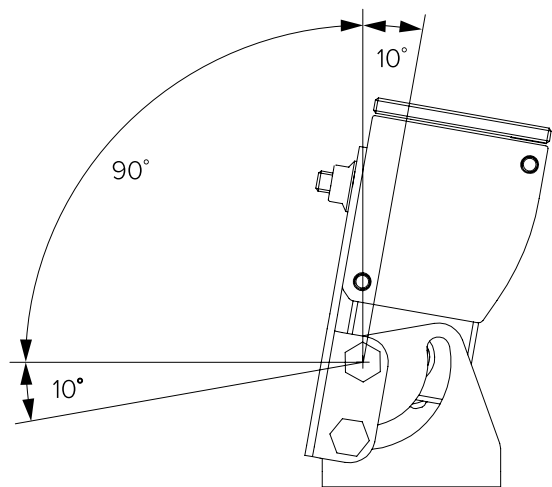
**Certification & Compliance**

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

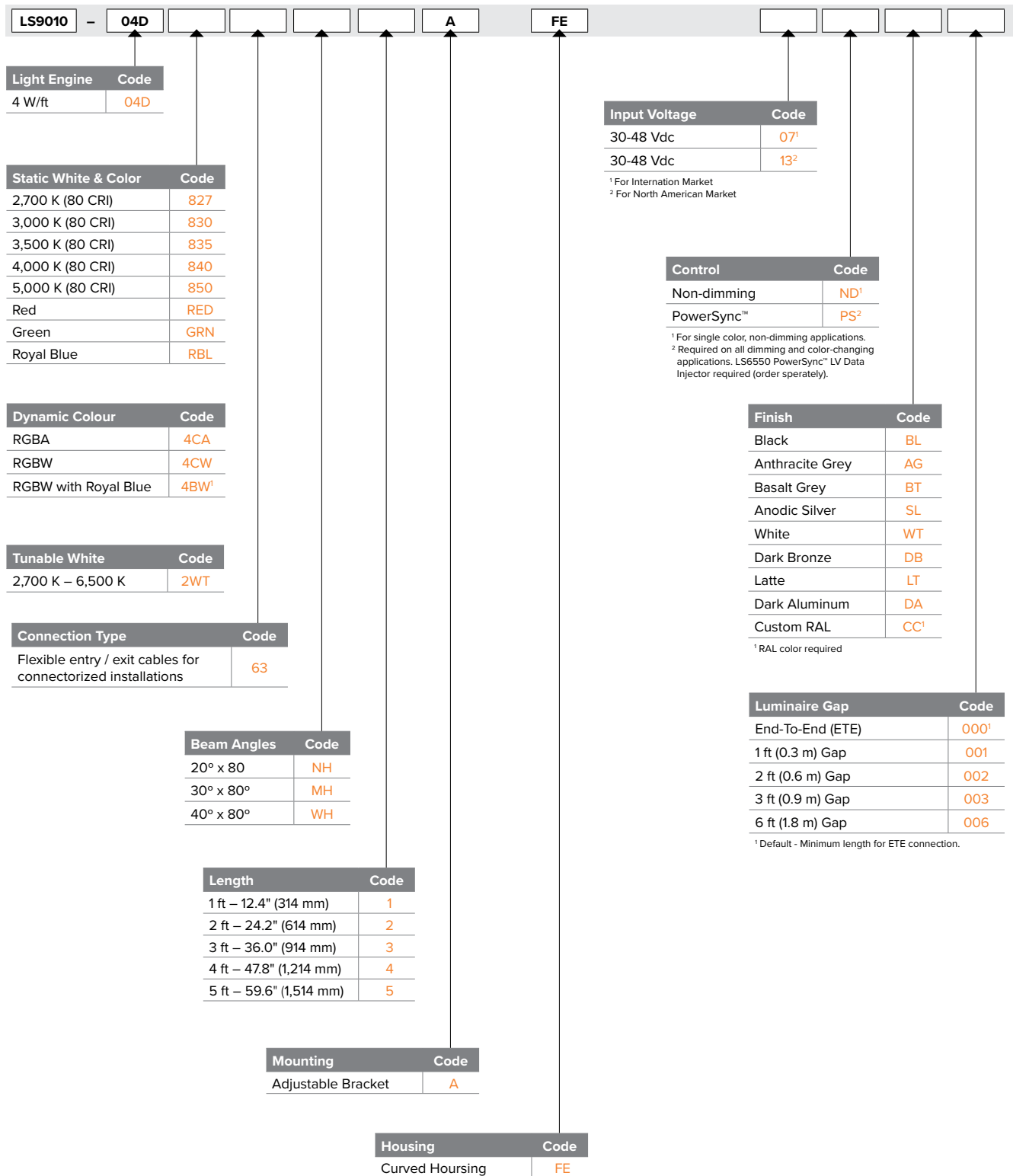
Dimensions



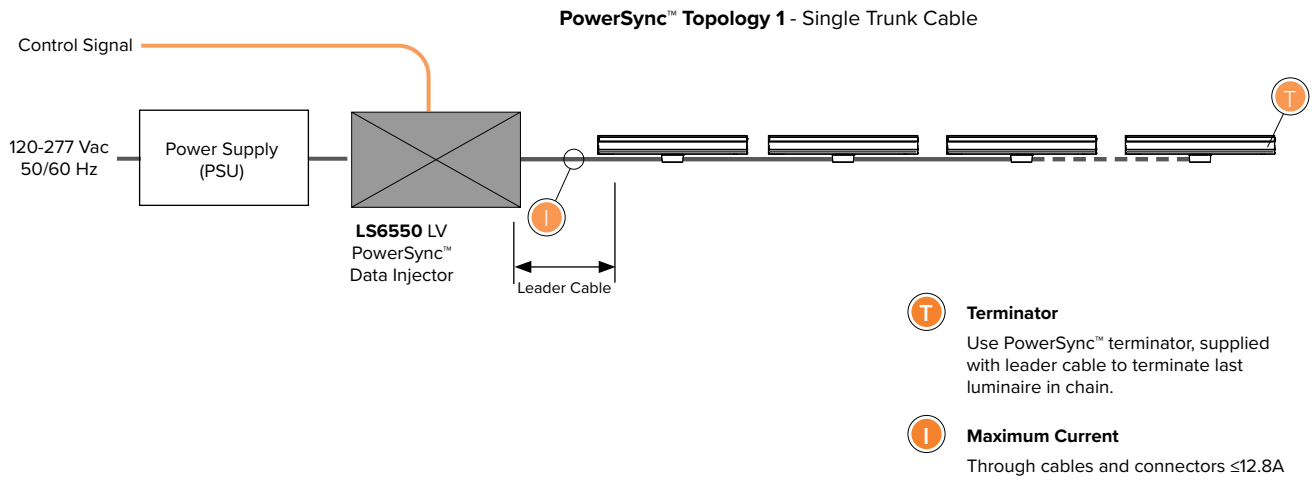
Luminaire Rotation



Specification Matrix



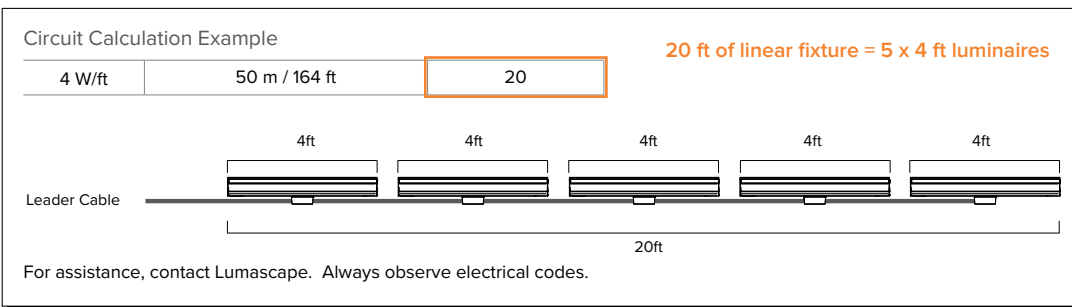
Network Topology – Low Voltage PowerSync™



Up to 24 luminaires per 48V PowerSync™ circuit / LS6550

Maximum Circuit Loading - Single Run						
LED Power	Max Leader Cable Length from LS6550 to first fitting	Feet of Linear luminaire per 48 V Power Supply				
		120 W	240 W	320 W	480 W	600 W
4 W/ft	15 m / 50 ft	20	44	56	80	96
	30 m / 98 ft	20	44	56	76	88
	50 m / 164 ft	20	40	52	64	72

Values in the above table show the maximum circuit loading per 48 V circuit. Values are based on end to end spacing (ETE). Extended fixture cables, inclusion of jumper cables, or longer leader cable will effect loading. Circuits can be made up of up to 24 fixtures in any length, up to the maximum circuit loading in the table above. Circuits are limited to maximum 12.8A. For non-continuous runs, contact Lumascape for details. To calculate the maximum number of interconnected luminaires per run / circuit, see example below.



Control Resolution


Pixel Size	DMX Channel Allocation														
	RGBA / RGBW					Single Colour					Tunable White				
	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
1.0" / 25 mm	48	96	144	192	240	12	24	36	48	60	24	48	72	96	120

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

PowerSync™ Connectorized Accessories

**Leader Cables – PowerSync™ Low Voltage (For Connection Type 63 or 67 Only)**

3-core 16 AWG / 1.5mm<sup>2</sup> for use in CE/CCC and UL installations. Compatible with all luminaires with Type 63 or 67 connectorized supply cable options. 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, low voltage terminator plug.




Cable Type	Code	Length	Code
1.5 mm <sup>2</sup>	LS6426	10 ft (3 m)	010
		16 ft (5 m)	016
		50 ft (15 m)	050
		66 ft (20 m)	066
		98 ft (30 m)	098

**Please Note:**  
Leader cable ships with 1 x connectorized PowerSync™ terminator.

**Jumper Cables – PowerSync™ Low Voltage (For Connection Type 63 or 67 Only)**

3-core 16 AWG / 1.5 mm<sup>2</sup> for use in CE/CCC and UL installations. Compatible with all Luminaires with Type 63 or 67 connectorized supply cable options. Supplied fitted with an IP68 connectors for joining between connectorized luminaires in a Powersync™4, low voltage circuit.



Cable Type	Code	Length	Code
1.5 mm <sup>2</sup>	LS6427	1 ft (0.3 m)	001
		2 ft (0.6 m)	002
		3 ft (1 m)	003
		6 ft (2 m)	006
		16 ft (5 m)	016
		33 ft (10 m)	033
		50 ft (15 m)	050
		66 ft (20 m)	066
		98 ft (30 m)	098

PowerSync™ Connectorized Accessories

**Terminator (Hardwired Installation)**

Used in hardwired PowerSync™ installations.

Terminator	Code
PowerSync™ Terminator Connectorized, Extra Low Voltage (CCC, CE, UL)	LS6437

**Please Note:**  
Terminator ships with every LS6550. Order separately for spare parts only.

**PowerSync™ 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
Data Injector PS4	LS6550

↑

LS6540



Wire Colours & Designations

**Low Voltage**

Designation	Colour
Positive	Red
Negative	Black
Data	Orange

