



A high-output linear in-ground brings together the best technology in a simple yet stylish linear form factor with bezel-less edge-to-edge glass finish. With a  $\pm 15^\circ$  tilt adjustment, the Terraluz TE5 is a versatile, high-performance luminaire. Packed with features including **EasyGlow™** visual comfort and **CoolDrive™** thermal management technologies. **PowerSync™** suits both highly granular DMX/RDM control requirements and standard white light dimming via common protocols. Fixtures can be installed end-to-end for continuous linear lighting. Available in white, color-changing and tunable white light engines.

Performance

Static White & Color <sup>1</sup>	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K (80 CRI)	6,543	75	279,100
● 3,000 K (80 CRI)	7,167	82	302,100
○ 3,500 K (80 CRI)	7,872	90	331,300
● 4,000 K (80 CRI)	7,785	88	323,951
● 5,000 K (70 CRI)	6,980	81	292,300
● Red	2,096	–	–
● Green	7,564	87	267,000
● Blue	1,898	21	70,800

<sup>1</sup> Static white lumen output values are based on a 16 W/ft, 4 ft luminaire with 6° lens.

Dynamic Color <sup>2</sup>	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● RGBA	4,498	53	152,900
● RGBW	5,307	63	201,825
● RGBW with Royal Blue	–	–	–

<sup>2</sup> Dynamic color lumen output values are based on a 16 W/ft, 4 ft luminaire with 6° lens.

Tunable White	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K – 6,500 K	6,904	78	287,300

<sup>3</sup> Tunable white lumen output values based on 16 W/ft, 4 ft luminaire with 6° designer lens with all channels at 100%.

Beam Angles	6°, 15°, 30°, 45°, 60°, 10° x 40°, 10° x 60°, 20° x 40°, 20° x 60°
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**Electrical**

<b>LED Power</b>	12 W/ft, 16 W/ft
<b>Power Consumption</b>	19 W/ft, 24 W/ft
<b>Lifetime (L70)</b>	>60,000 hrs (B10, L70, TM21)
<b>Input Voltage</b>	120-277 Vac, 50/60 Hz
<b>Earth Leakage</b>	0.6 mA @ 220 V
<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> , Phase Dimming <sup>2</sup>
<b>PWM Frequency</b>	2 kHz flicker-free dimming to 0.1%
<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

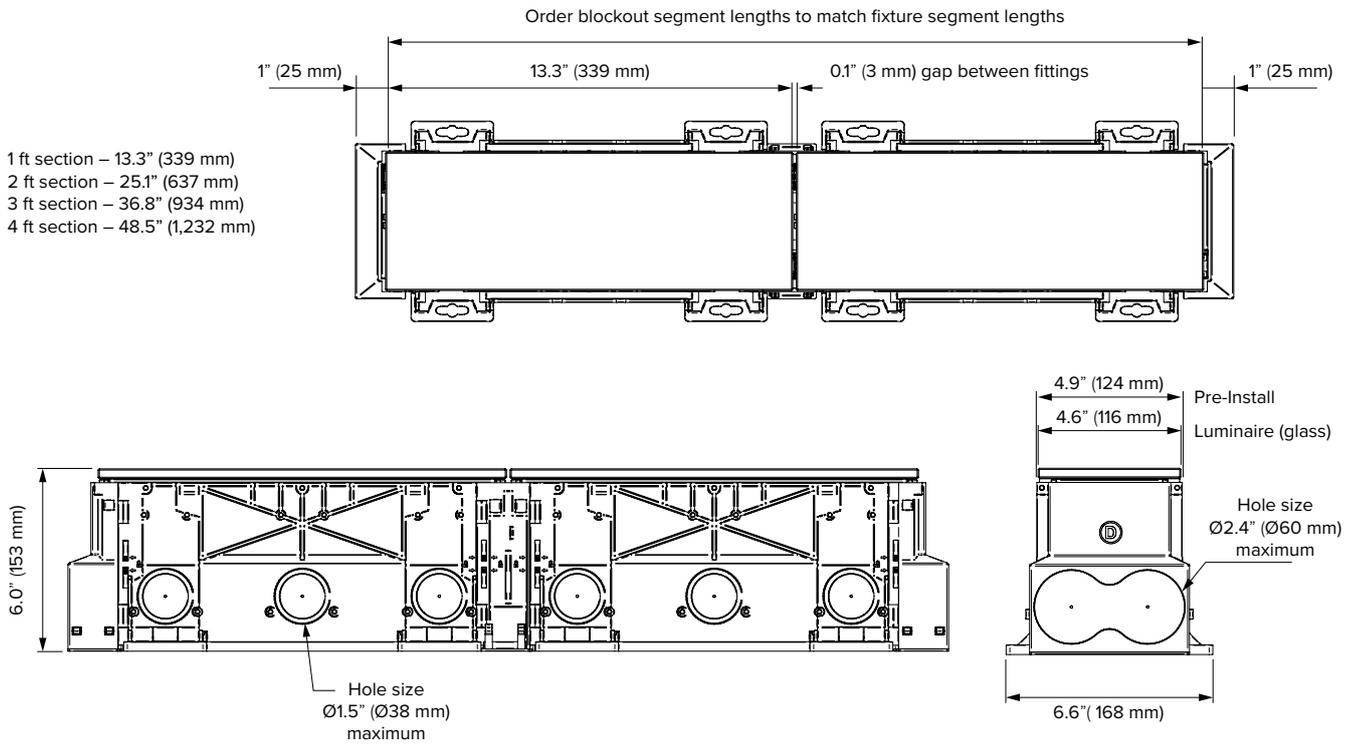
**Physical**

<b>Housing</b>	Marine-grade extruded aluminium with tempered glass lens
<b>Finish</b>	Superior 9-step powder-coating process, including marine-grade epoxy undercoat and polyester top coat
<b>Installation</b>	Pre-installation
<b>Adjustable</b>	±15° tilt
<b>Ambient Operating Temperature</b>	-40 °F to 122 °F (-40 °C to 50 °C)
<b>Surface Temperature</b>	≤122 °F (50 °C)
<b>Weight</b>	14.8 lbs (6.7 kg) for 4 ft section
<b>Effective Projected Area</b>	

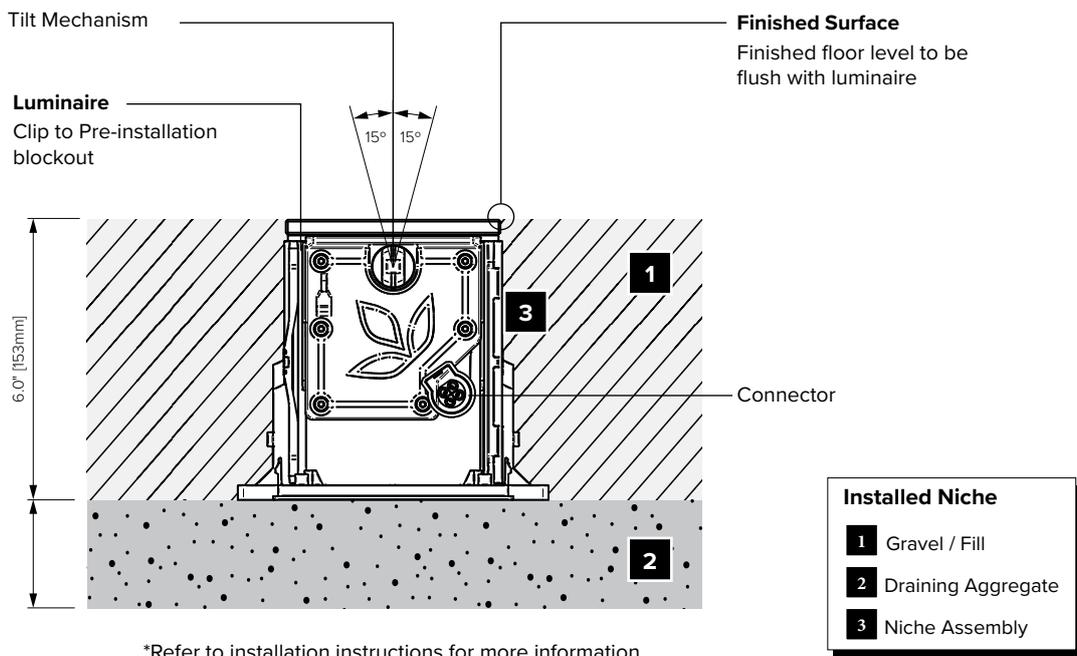
**Certification & Compliance**

<b>IP Rating</b>	IP66 / IP67 (IP68 tested)
<b>IK Rating</b>	IK9
<b>Environment</b>	Dry, Damp, Wet locations (not suitable for underwater applications)
<b>Certifications</b>	ETL, CE, CCC

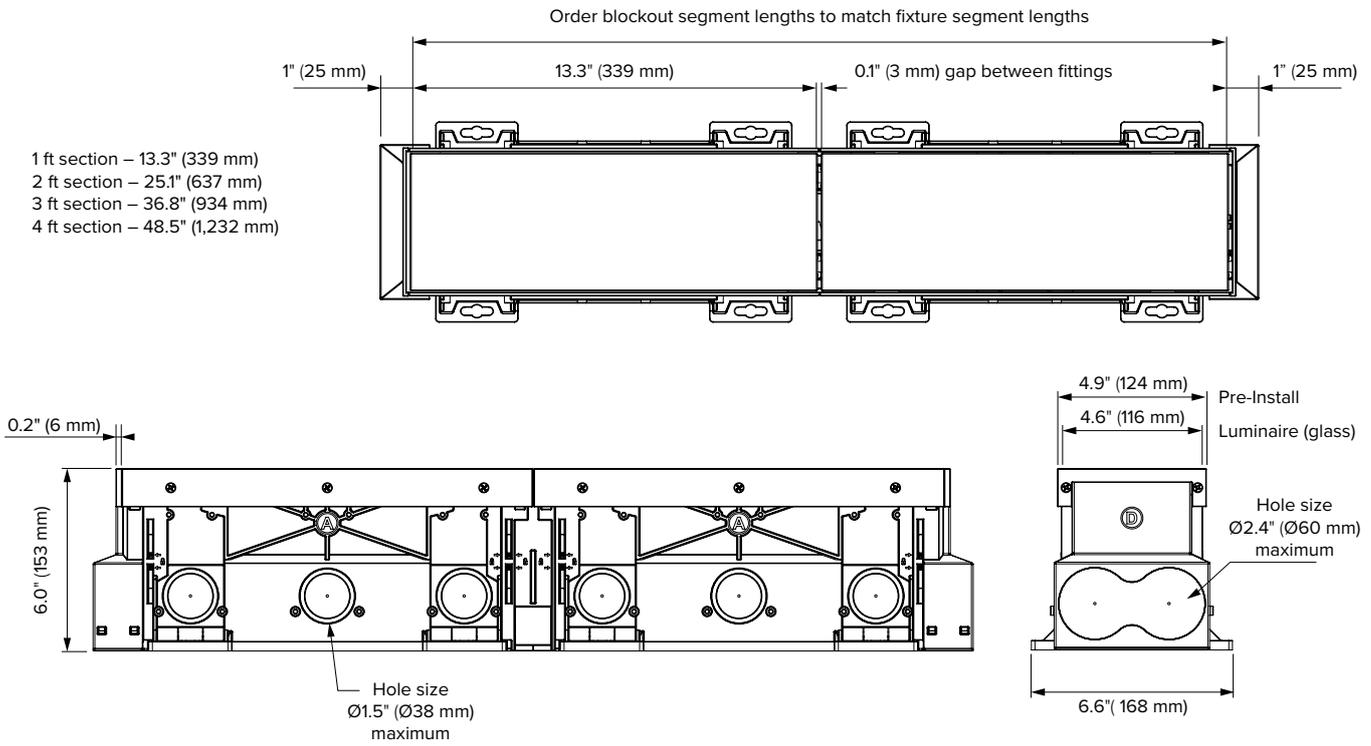
Dimensions – No Stainless Steel Trim



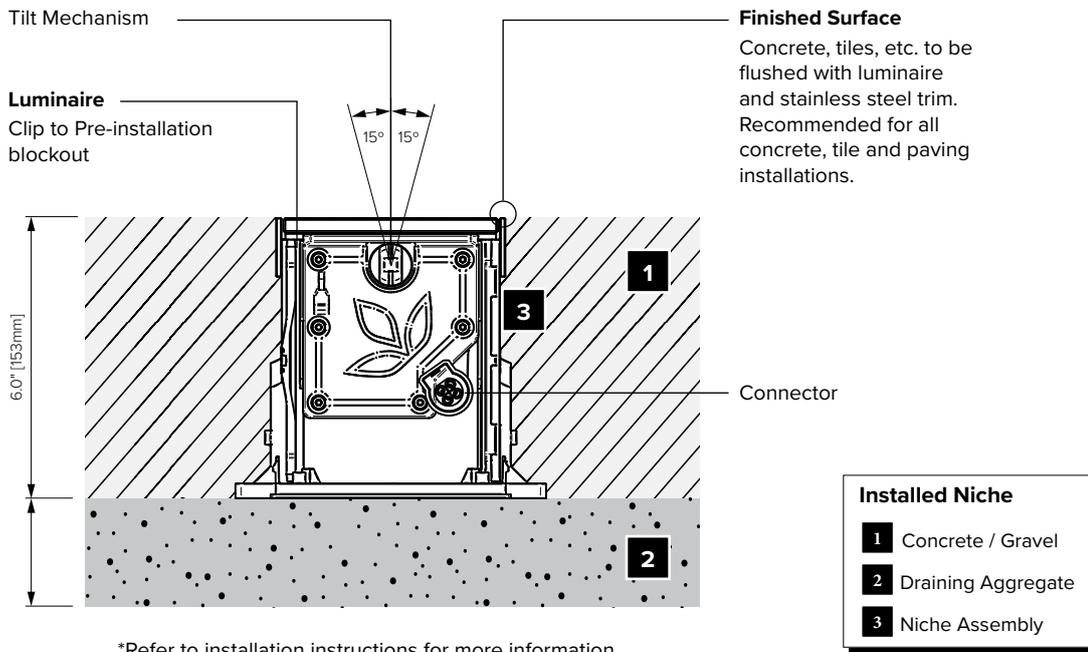
Installation



Dimensions – With Stainless Steel Trim



Installation



Specification Matrix

Light Engine		Code
12W		12W
16W		16W

Static White & Color		Code
2,700 K (80 CRI)		827
3,000 K (80 CRI)		830
3,500 K (80 CRI)		835
4,000 K (80 CRI)		840
5,000 K (70 CRI)		750
Red		RED
Green		GRN
Blue		BLU

Dynamic Color		Code
RGBA		4CA
RGBW		4CW
RGBW with Royal Blue		4BW

Tunable White		Code
2,700 K - 6,500 K		2WT

Beam Angle		Code
6°		VN
15°		NM
30°		ME
45°		WD
65°		WF
10° x 60°		LH
10° x 40°		NH
20° x 40°		MH
20° x 60°		WH

Length		Code
1 ft – 339 mm (13.3")		1
2 ft – 637 mm (25.7")		2
3 ft – 934 mm (36.8")		3
4 ft – 1,232 mm (48.5")		4

Internal Shielding		Code
Full Pitch		F <sup>1</sup>
Half Pitch		H <sup>1</sup>
None		N

<sup>1</sup> Not recommended for color-changing options.

Lens		Code
OptiClear™		A
GripGlass™		G

Input Voltage		Code
110-240 Vac, 50/60 Hz		01 <sup>1</sup>
120-277 Vac, 50/60 Hz		09 <sup>2</sup>

<sup>1</sup> International market  
<sup>2</sup> North American market

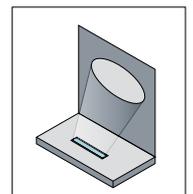
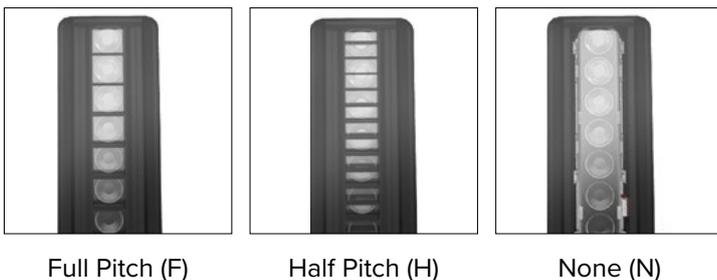
Connection Type		Code
Flexible, single entry cable for connectorized installations		77
Flexible entry / exit cable for connectorized installations		73

Control		Code
Non-dimming		ND <sup>1</sup>
PowerSync™		PS <sup>2</sup>

<sup>1</sup> For single color, non-dimming applications.  
<sup>2</sup> Required on all dimming and color-changing applications LS6540 Data Injector required (order separately).

Internal Shielding Options



Beam Orientation for the "LH" and "MH" optical system

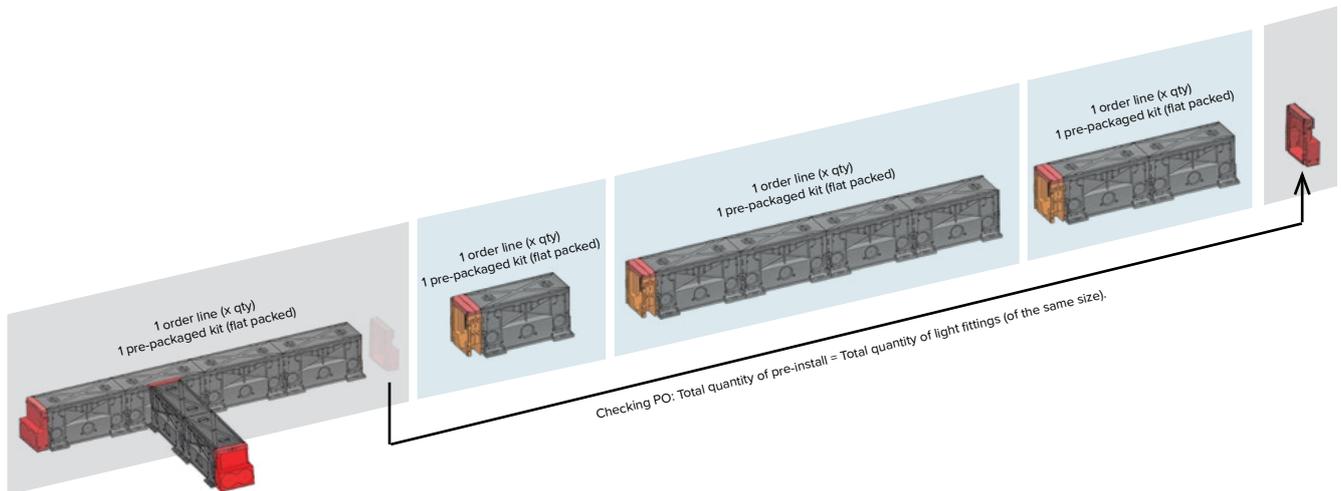
Component Overview

**Start / Stand-Alone Section**

- Plain LS6312-1  
SS LS6312-1SS
- Plain LS6312-2  
SS LS6312-2SS
- Plain LS6312-3  
SS LS6312-3SS
- Plain LS6312-4  
SS LS6312-4SS

**Middle / End Section**

- Plain LS6313-1  
SS LS6313-1SS
- Plain LS6313-2  
SS LS6313-2SS
- Plain LS6313-3  
SS LS6313-3SS
- Plain LS6313-4  
SS LS6313-4SS



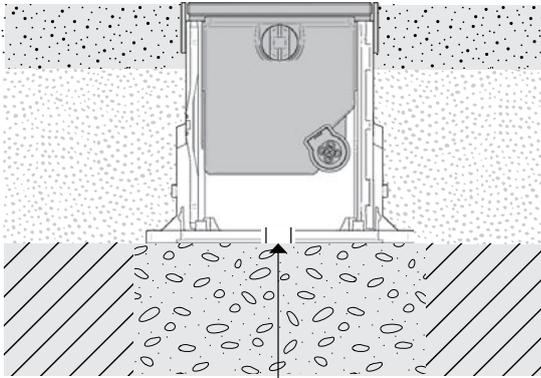
**"T" or "L" Joiner**

- Plain LS6314-1  
SS LS6314-1SS
- Plain LS6314-2  
SS LS6314-2SS
- Plain LS6314-3  
SS LS6314-3SS
- Plain LS6314-4  
SS LS6314-4SS

Use a 'T' or 'L' joiner kit to run a second run of luminaires perpendicular to the original run. Runs can be extended using a 'Middle / End Section' kit.

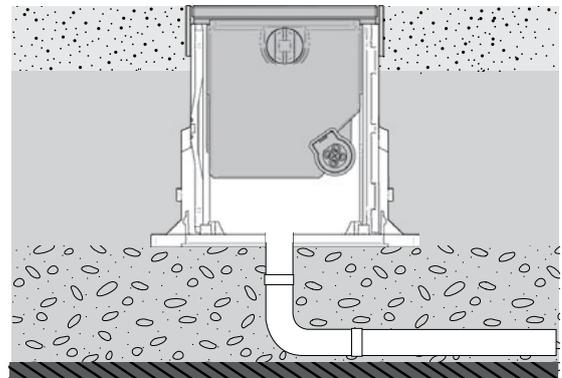
Drainage Requirements and Other Restrictions

**Paver/Stonework**



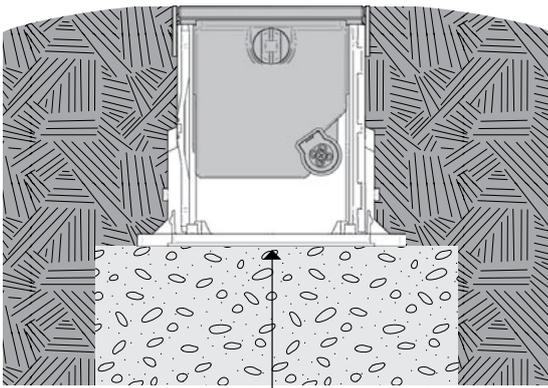
3/4" hole, minimum 1 per 4' (cut on site)

**Above Waterproofing**



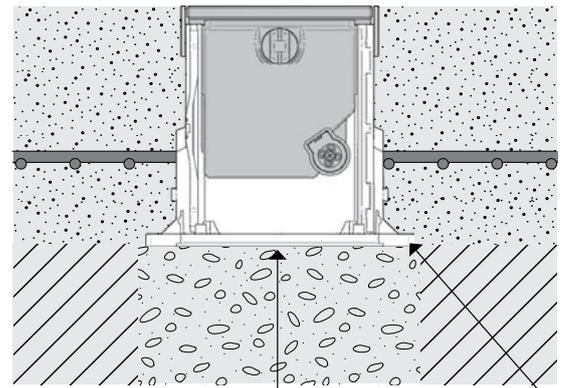
Piped drainage required for locations not able to freely drain through gravel (above waterproofing, clay base, etc).

**Landscape/Softscape**



3/4" hole, minimum 1 per 4' (cut on site)

**Concrete**



3/4" hole, minimum 1 per 4' (cut on site)

Rebar Tie Points

**Key**

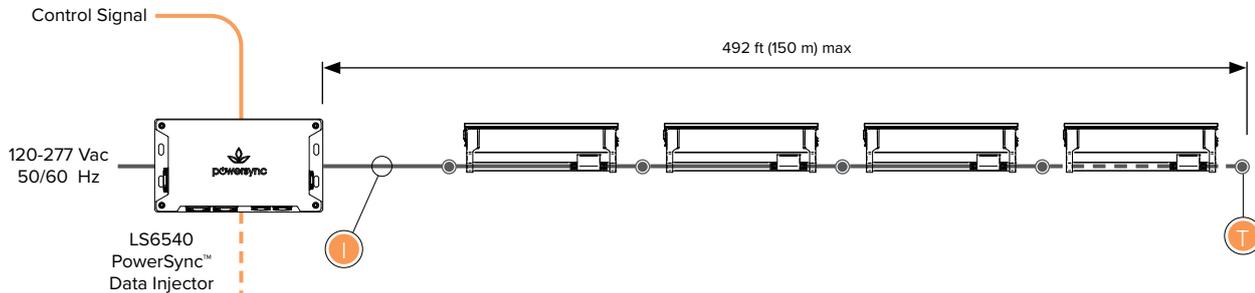
-  Concrete Slab
-  Pea / Drainage
-  Poured Concrete
-  Sand
-  Soil / Earth
-  Waterproofing Layer

**Important Information**

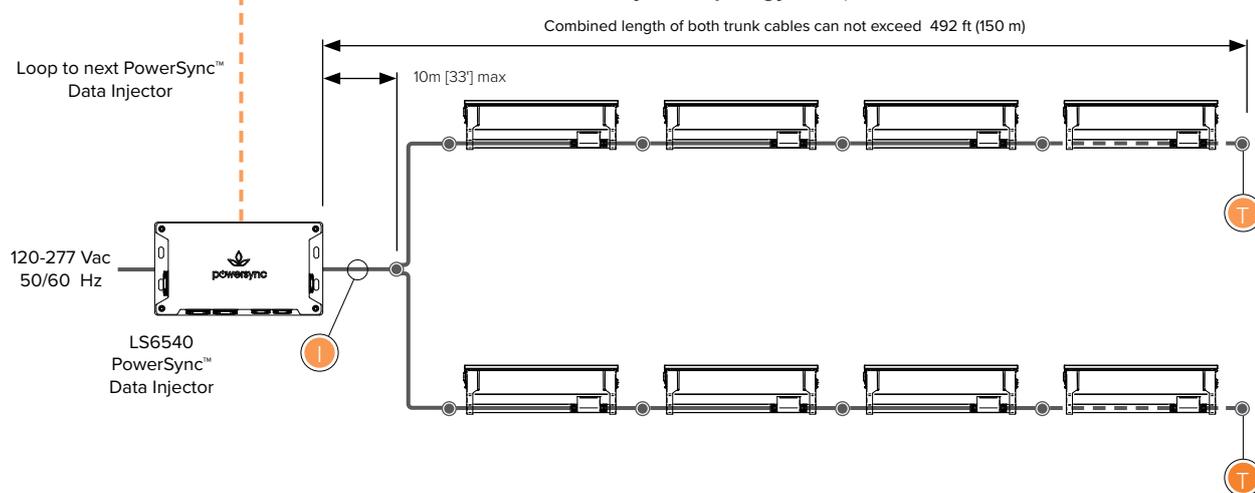
- Fill luminaire block-out with water to test drainage effects. Water must drain entirely.
- To prevent water accumulation, do not install at a location where site is hollow.
- Do not use fertilizer or corrosive chemicals adjacent to luminaire.
- Not suitable for drive-over.

**Network Topology – Dimmable and Color-Changing via PowerSync™**

**PowerSync™ Topology 1 - Single Trunk Cable**



**PowerSync™ Topology 2 - Split Trunk Cable**



**Up to 45 luminaires per run under the following conditions:**

- Max total cable run length 492 ft (150 m) in up to two trunk cables
- For run lengths in excess of 100 ft (30 m), the data wire gauge cannot exceed 14 AWG (2.5 mm<sup>2</sup>)
- For run lengths up to 100 ft (30 m), the data wire gauge is not governed
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations



**Terminator**

Use PowerSync™ terminator, supplied with leader cable to terminate last luminaire in chain.



**Maximum Current**

Maximum current through cables and connectors supplied by Lumascope:  
 ≤12.8 A – Installations in North American Market (UL, ETL)  
 ≤16 A – Installations in International Market (CE, CCC)



**Connection Type**

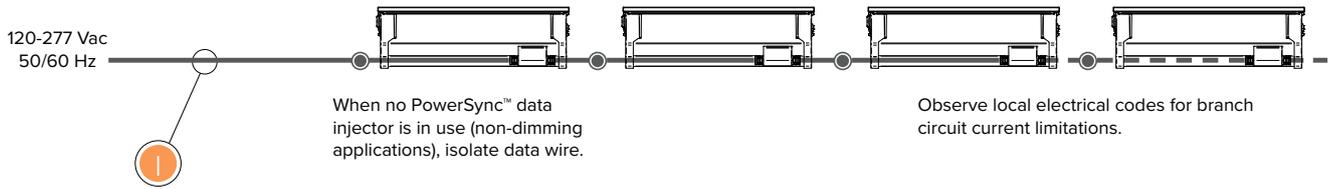
Circuits can be configured as either connectorized or hardwired. For details refer to installation instructions and comply with local electrical codes.

**Maximum Circuit Load**

Maximum Number of Fixtures per Circuit		120 V		240 V		277 V	
Luminaire Length	LED Power	Maximum Current					
		12.8 A	16 A	12.8 A	16 A	12.8 A	16 A
1 ft (339 mm)	16 W	45	45	45	45	45	45
2 ft (637 mm)		25	32	45	45	45	45
3 ft (934 mm)		17	21	34	42	39	45
4 ft (1,232 mm)		12	16	25	32	29	36

Refer to PowerSync™ installation instructions for maximum distance information and topology options.  
 All connectorized options in North America are limited to 12.8A branch circuit load.  
 Above circuit loading limits are based on maximum circuit current capacity and PowerSync™ control capacity. Cumulative earth leakage and voltage drop may need to be calculated.  
 For non-continuous runs contact factory for details.  
 Local wiring rules and requirements may limit circuit loadings refer to relevant electrical parameters to calculate.

**Network Topology – Non-Dimmable**



**Up to 45 luminaires per run under the following conditions:**

- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations

**1 Maximum Current**  
 Maximum current through cables and connectors supplied by Lumascape:  
 ≤12.8 A – Installations in North American Market (UL, ETL)  
 ≤16 A – Installations in International Market (CE, CCC)

**Maximum Circuit Load**

Maximum Number of Fixtures per Circuit		120 V		240 V		277 V	
Luminaire Length	LED Power	Maximum Current					
		12.8 A	16 A	12.8 A	16 A	12.8 A	16 A
1 ft (339 mm)	16 W	45	45	45	45	45	45
2 ft (637 mm)		32	40	45	45	45	45
3 ft (934 mm)		21	26	43	45	45	45
4 ft (1,232 mm)		16	20	32	40	37	45

All connectorized options in North America are limited to 12.8A branch circuit load.  
 Cumulative earth leakage and voltage drop may need to be calculated.  
 For non-continuous runs contact Lumascape for details.  
 Local wiring rules and requirements may limit circuit loadings refer to relevant electrical parameters to calculate.

**2 Connection Type**  
 Circuits are configured as connectorized.  
 For details refer to installation instructions and comply with local electrical codes.

PowerSync™ Connectorized Accessories

**Leader Cables – PowerSync™ Line Voltage (For Connection Type 77 Only)**

4-core 1.5 mm<sup>2</sup> or 2.5 mm<sup>2</sup> cable for use in CE/CCC installations. Compatible with all Luminaires with Type 73 or 77 connectorized supply cable options. Supplied fitted with an IP68 connector for pairing with the first connectorized luminaire in a Powersync4, Line Voltage circuit. Comes complete with a matching End of Circuit, Powersync4, Line Voltage, Terminator Plug.



Cable Type	Code	Length	Code
1.5 mm <sup>2</sup>	LS6402C	3 m / 10 ft	010
2.5 mm <sup>2</sup>	LS6402C-2.5	10 m / 33 ft	032
		15 m / 50 ft	050

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

**Leader Cables – PowerSync™ Line Voltage Hook-Up Wire (For Connection Type 73 or 77 Only)**

4 conductors 14 AWG Hook-Up wires for use in UL installations. Compatible with Type 73 or 77 connectorized supply cable options. Supplied fitted with an IP68 connector for pairing with the first connectorized luminaire in a Powersync4, Line Voltage circuit. Comes complete with a matching End of Circuit, Powersync4, Line Voltage, Terminator Plug.

*For use in North America ONLY*



Cable Type	Code	Length	Code
14 AWG 1.5 mm <sup>2</sup>	LS6435	6 ft / 2 m	006
		10 ft / 3 m	010
		16 ft / 5 m	016
		50 ft / 15 m	050

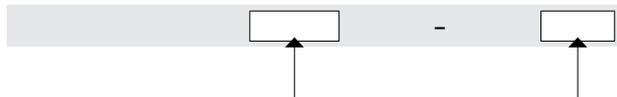
**Please Note:**  
Leader cable ships with 1 x connectorized PowerSync™ terminator.

PowerSync™ Connectorized Accessories

**Jumper Cables – PowerSync™ Line Voltage (For Connection Type 73 or 77 Only)**

4-core 1.5 mm<sup>2</sup> or 2.5 mm<sup>2</sup> cable for use in CE/CCC installations. Compatible with all Luminaires with Type 73 or 77 connectorized supply cable options. Supplied fitted with an IP68 connector for extending between luminaires in a Powersync4, Line Voltage circuit where the input and output cables on a luminaire are not sufficient for placement of the luminaires.

*Not suitable for use in North America*

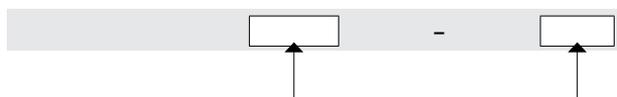


Cable Type	Code	Length	Code
1.5 mm <sup>2</sup>	LS6404C	0.3 m / 1 ft	001
2.5 mm <sup>2</sup>	LS6404C-2.5	0.6 m / 2 ft	002
		1 m / 3 ft	003
		1.2 m / 4 ft	004
		2 m / 6 ft	006
		3 m / 10 ft	010
		5 m / 16 ft	016
		8 m / 26 ft	026
		10 m / 33 ft	032
		15 m / 50 ft	050

**Jumper Cables – PowerSync™ Line Voltage (For Connection Type 73 or 77 Only)**

4-core 16 WAG for use in UL installations. Compatible with all Luminaires with Type 73 or 77 connectorized supply cable options. Supplied fitted with an IP68 connector for extending between luminaires luminaire in a Powersync4, Line Voltage circuit where the input and output cables on a luminaire are not sufficient for placement of the luminaires.

*For use in North America*



Cable Type	Code	Length	Code
16 AWG	LS6404U	1 ft / 0.3 m	001
		2 ft / 0.6 m	002
		3 ft / 1 m	003
		4 ft / 1.2 m	004
		6 ft / 2 m	006
		10 ft / 3 m	010
		16 ft / 5 m	016
		26 ft / 8 m	026
		33 ft / 10 m	032
		50 ft / 15 m	050

PowerSync™ Connectorized Accessories

**Terminator (Hardwired Installation)**

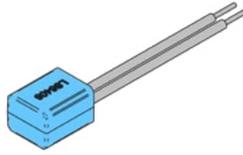
Used in hardwired PowerSync™ installations.

**Please Note:**  
Terminator ships with every LS6540. Order separately for spare parts only.



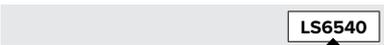
Input Voltage	Code
110-240 Vac, 50/60 Hz	01 <sup>1</sup>
120-277 Vac, 50/60 Hz	09 <sup>2</sup>

<sup>1</sup> International Market  
<sup>2</sup> North American Market only



**PowerSync™ Data Injector**

Combines the convenience of standard wiring methods to translate control signals into a digital format that can be transmitted over standard copper wire. This allows highly granular addressing and high-speed digital control of every luminaire, using only four wires and accepts a growing list of standard protocols (0-10V, DMX / RDM), for simple integration with a wide selection of control systems using these industry standard protocols



Product	Code
Data Injector PS4	LS6540



Wire Colors & Designations

**Mains Voltage – International Market**

Designation	Color
Active	Brown
Neutral	Blue
Earth	Green / Yellow
Data	Black



**Mains Voltage – North American Market**

Designation	Color
Active	Black
Neutral	White
Earth	Green / Yellow
Data	Grey or Orange

