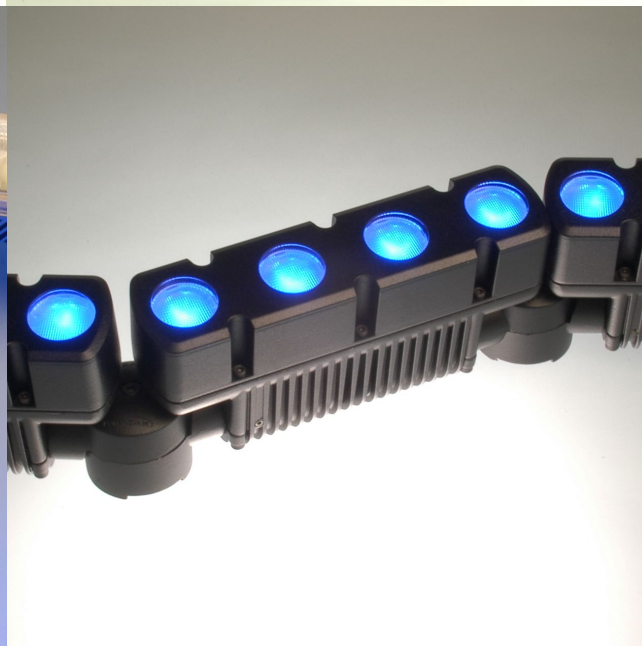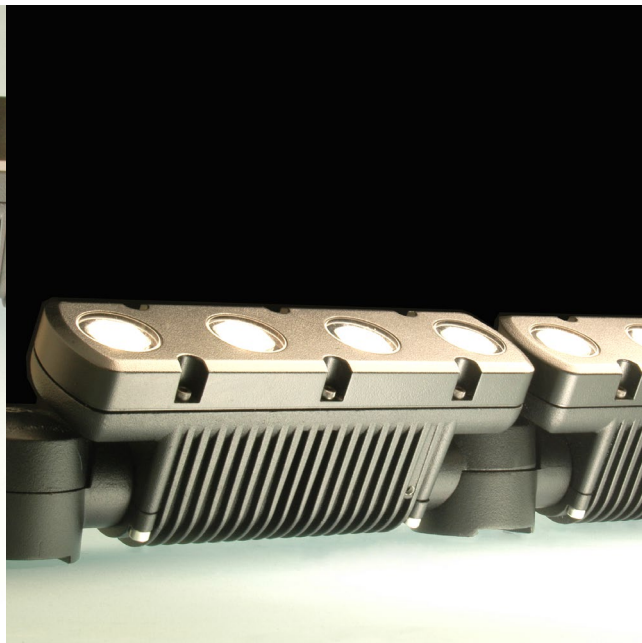# Serpentine System

IP65 LED linear lighting system

RADIANT

Serpentine
IP 65 LED linear lighting system

The Radiant Serpentine exterior LED linear system is the first system of its type to be hand bendable on-site, and to offer adjustment in both the axial and vertical planes.

The Serpentine system is designed to be used in a wide variety of exterior building façade lighting, wall-grazing, landscape and other exterior architectural lighting applications.

The individual LED lighting modules can rotate through 30 degrees around the axis of the system and 30 degrees between the joints allowing the system to be curved to follow building profiles and architectural details and for the light output to be aimed to give optimum grazing or feature lighting.

The Serpentine Flex version is adjustable in three dimensions to follow any complex building profile. All versions of the Serpentine system can be locked after aiming with the use of an Allen key.

Continuous lengths of linear lighting up to 5 metres can be powered from a single external 30 Volt - 48 Volt DC power supply. The Serpentine system is normally supplied in lengths of 8 x 200mm modules which plug together on site for ease of handling.

High efficiency lenses and reflectors in a variety of beam angles and beam profiles can be fitted to the Serpentine system.
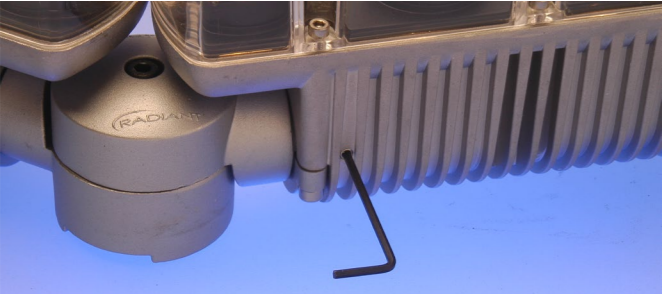
RIBA 2010 award winner
Client TFL
Architect: Julian Cowie
Urban and lighting design: Burns and Nice
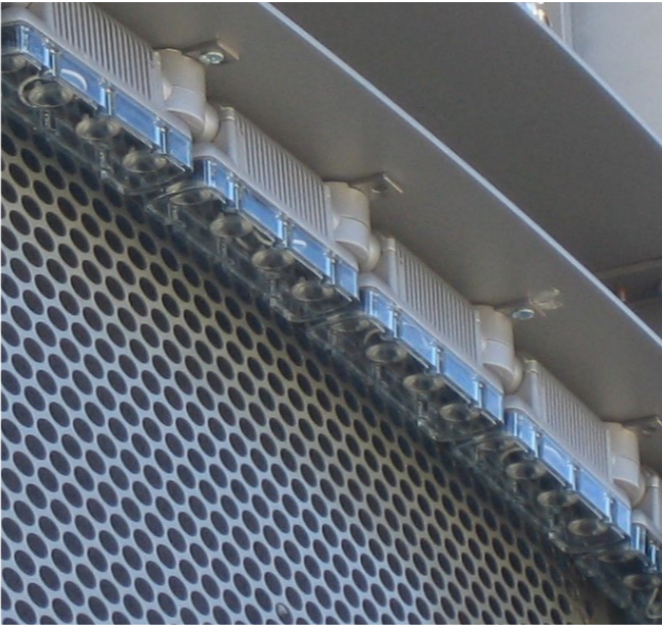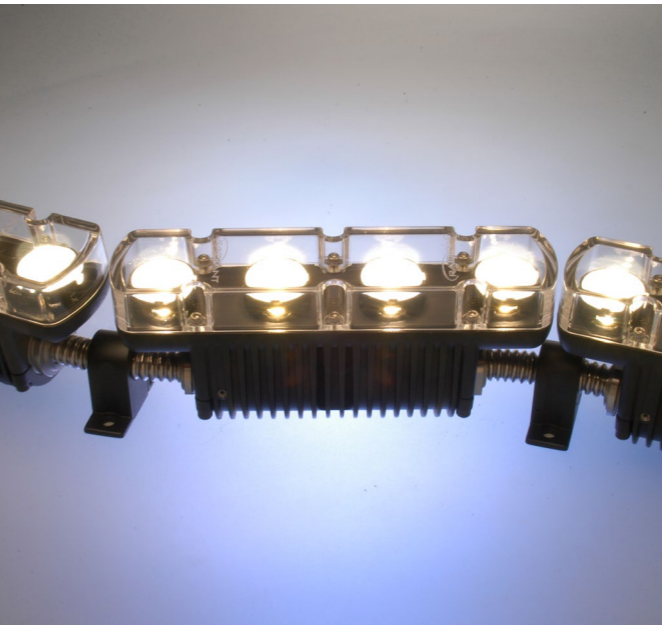
Serpentine
IP 65 LED linear lighting system

The Serpentine system incorporates high efficiency constant current driver circuits running up to 8 high power white or RGB LEDs with a total power rating of up to 15 Watts per module depending on LED type.

DC LED modules incorporate Cree XPE LEDs while the AC LED modules use the Seoul Semiconductor Acriche LED array. The RGBW versions utilise Cree MC E multi die LEDs or Luxeon Z LEDs.

The Serpentine modules and joints are pressure die cast in marine grade aluminium that has a chromate pre treatment prior to being painted with a high quality exterior grade polyester powder coat system.

This will ensure many years of corrosion free life. All fixings are stainless steel protected, where necessary, with coatings or barriers to prevent galvanic corrosion with the aluminium.

Lenses, reflectors and anti-glare accessories can be changed on site with some versions.

Serpentine with UV stop glass windows
4 x 3.5W Citizen or Sharp COB LEDs with reflectors

RAD LSERP C

Integral LV constant current driver
Integral driver
30 Volt to 48 Volt DC power supply
Silver finish

Serpentine with PC cover
4 x 2.4W Cree XPE LEDs with lenses
RAD LSERP F

Integral LV constant current driver
Integral driver
30 Volt to 48 Volt DC power supply
Silver finish

Serpentine Acriche 2
4 x 2W Acriche 2 LEDs
RAD LSERP A

No Driver or power supply.
Direct mains supply at 230 V AC.
Silver finish

Serpentine RGBW
4 x 3W Cree MC E RGBW LEDs or Luxeon Z LEDs

RAD LSERP RGB

Integral RGBW DMX driver controller
24 Volt DC supply

Serpentine Flex
4 x 3W Cree XPE LEDs or
4 x 3W Cree MC E RGBW LEDs
4 x Sharp or Citizen COB
Other LED types can be used

RAD FLEX

Integral LV constant current driver or RGBW DMX driver / controller
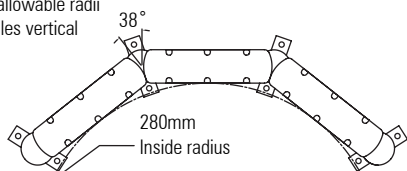30 Volt to 48 Volt DC power supply

Serpentine lenses

Asymmetrical   - add A
Elliptical   - add E
Wide   - add W
Wide frosted   - add WF
Medium   - add M
Medium frosted - add MF
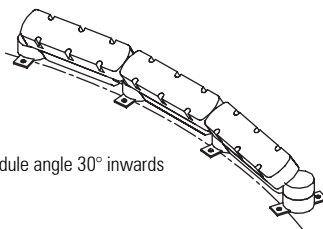Narrow   - add N
Narrow frosted - add NF

Flex version is adjustable in three dimensions

72 200 200 25

50
86
49
91

50
92
49
91
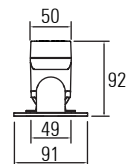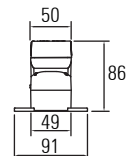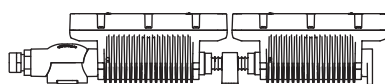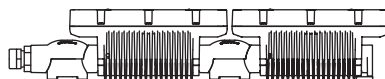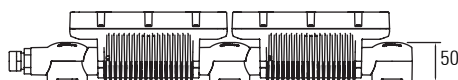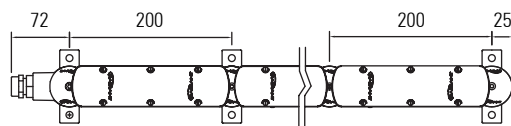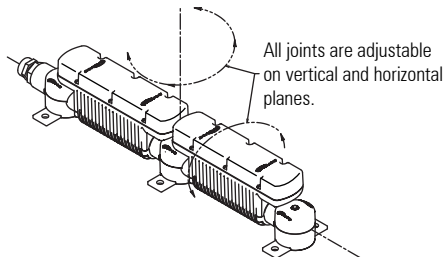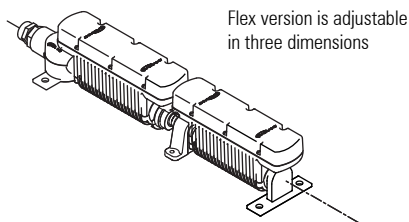
Typical bend radii

Minimum allowable radii with modules vertical

38°
280mm
Inside radius
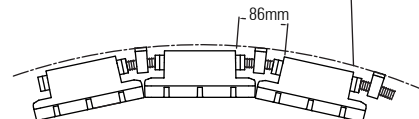
All joints are adjustable on vertical and horizontal planes.
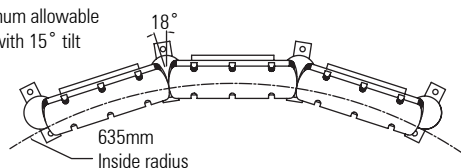
Module angle 30° inwards

Flex version with 86mm spacing bends to 1000mm

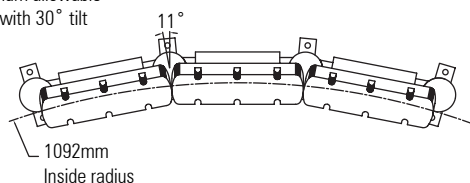1000mm Outside radius

86mm

Minimum allowable radii with 15° tilt

18°
635mm
Inside radius

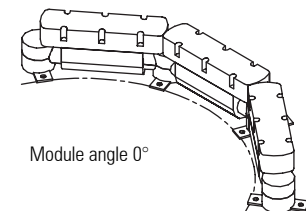Module angle 15° inwards
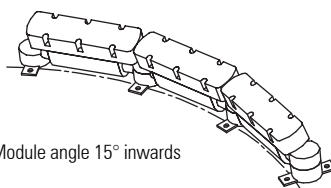
Minimum allowable radii with 30° tilt

11°
1092mm
Inside radius

Module angle 0°

1000mm Inside radius

79mm
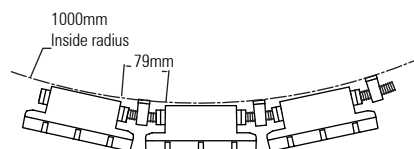
Elliptical X Elliptical Y Wide Medium Narrow

Create an order-code by selecting one option from each column in the table below.
eg. SERPENTINE . IP65 . 4 . 200mm . 40K . CRI 80 . E . Adjustable . Clear. End . Black .

Product Code	IP	No. of LEDs per module	Length (mm)	Colour Temp. (K)	CRI	Optics	Cover	Bracket Type	Feed	Finish

SERPENTINE
 	
SERPENTINE REMOTE - DRIVER
	65	4=25mm
		
		2=50mm
		
		LED spacing
			200mm to 1800mm
			
			Increments of 200mm
				27 =2,700K
				30 =3,000k
				35 =3,500k
				40 =4,000k
				45 =4,500k
				50 =5,000k
				RGBW
				RGBA
				RGB
				Dynamic white
					80
					90
						A = asymmetrical
						E = elliptical
						W = wide
						WF = wide frosted
						M = medium
						MF = medium
						     frosted
						N = narrow
						NF = narrow
						     frosted
							Clear
							Filter
								Direct fixing side
								Direct fixing end
								Adjustable
								Spring Clip
								Flexible -
								connector
									End
									Side
									Back
										Black
										White
										Any RAL-
										colour

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