SERIES
3838|140|14.4
Colour Changing
RGB

LINEAR LUX
LED LIGHTING SOLUTIONS

Technical Data
LED Flexible Strip Light
3838 RGB|14.4W
Issue: V1.0

Features

- Very high performance 3838 RGB LEDs
- Low visible dot design (140 LEDs per metre)
- Efficient heat design, requires no heat-sink
- Ultra flexible substrate
- Safe low voltage
- Pre-wired at both ends
- Double sided tape mounting

Electrical Data

Voltage	24.0 VDC
Wattage per metre	14.4 W
Current per metre	0.6 A / 24 V

LED Data

LED type	3838 RGB
Manufacturer	Sanan
Quantity of chips per LED	3
Quantity of LEDs per metre	140
LED pitch	8.33 mm

Photometric Data

Colour temperature	See figure 2
Colour redering index Ra	N/A
Luminous flux per metre +/- **10%**	112 lm Red
	296 lm Green
	64 lm Blue
Beam angle	120°
Dimmable	1 ~ 100%

Construction / Protection Data

Substrate	Double layer FPCB
Thickness of FPCB	3 oz
Mounting	Double sided tape 3M
IP rating	See figure 3
Operating temperature	-20 ~ +70 C°
Storage temperature	-20 ~ +50 C°

Dimensions

Cutting increments	6 LEDs / 50mm (24V)
	See figure 1
Length	5000mm
Width	10.0mm
Height	1.8mm

Lifetime

Lifespan (L70)	>70,000 hours

Testing environment temperature = 25°C ±2.0°

Figure 1.

Cutting Increments

24V

50mm

10mm
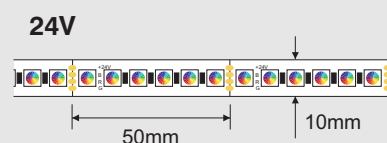
Figure 2.

Colour Temperatures

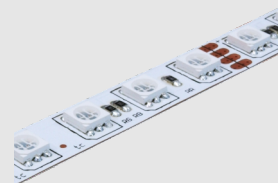**RGB**

Figure 3.

IP Protection Ratings

IP20   **IP65**   **IP67**

FPCB
Silicone Gel
Double-sided tape 3M 9080 (indoor)
Double-sided tape 3M 300LSE (outdoor)

Dimensions

IP20	10.0mm	1.8mm
IP65	10.0mm	2.2mm
IP67	14.0mm	5.0mm
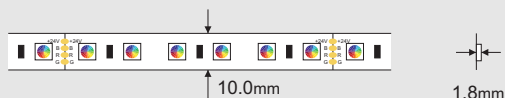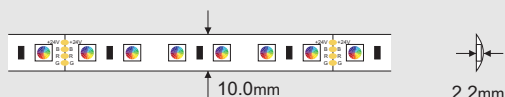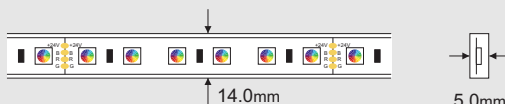
Ordering Information

LL 38	140	24	RGB	IP20	5M	14.4W
LED Type	**LEDs / m**	**Voltage**	**Colour**	**IP Rating**	**Length**	**Wattage**
5050	84	24	RGB	20	5m	14.4W
				65	20m	24W
				67		

Installation

- The mounting surface must be clean, dry and free from dust or grease.
- Carefully unroll the LED strip from the reel.
- Measure and cut the LED strip to the required length (only cut at the predefined cut interval).
- Remove the 3M self-adhesive backing tape from the LED strip carefully. ***Do not remove all the backing at once*** *otherwise the LED strip may become entangled.*
- Stick down the LED strip to the mounting surface by pressing down gently on the LED strip. ***Do not apply excessive force to the LED strip,*** *otherwise the LEDs and components may become damaged.*
- Once the LED strip has been mounted, it is then ready to be wired and powered.

For more detailed instruction on installation & wiring please see the product page on our website.

Notes

- It is <u>not recommended</u> to power a continuous length longer than **[5m** for **12V]** or **[10m** for **24V]** LED strip due to voltage drop.
- **Do not exceed the rated input voltage**, always ensure a regulated power supply is used.

Further information

Photometric Data

Installation and Wiring Instructions

LED Binning

IES File

LED Strip Light Selection Guide