



# RATIO IP

LED STRIP STR-RATIO IP





The Ratio IP LED Strip is one of our most versatile and elegant products yet. It is offered in a broad range of optical configurations and colour temperatures.

The flexibility of the Ratio IP continues with the availability of 2 wattages (11W and 23W) and various lengths. With no compromise on aesthetic it is easy to customise the perfect lighting effect for the most demanding of lighting projects.

#### POWER

#### LUMINOUS FLUX

##### 11W

11W / metre



SC • 830 lm / metre

##### 23W

23W / metre



SC • 1,668 lm / metre

#### COLOUR TEMPERATURE

2700K

3000K

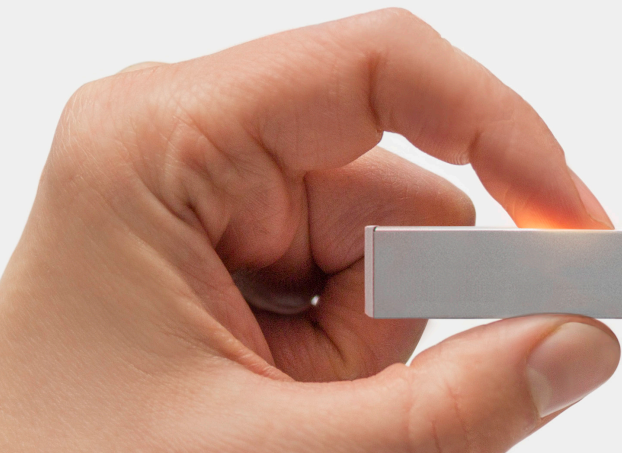
3500K

4000K



## COMPACT SIZE

Reduced form factor can provide much freedom and simplicity to a designer. At only 20x22.5mm the Ratio IP is the smallest LED strip/profile offered with optical control.



## ELEGANT ENCAPSULATION

Ratio IP utilises Coolon's encapsulation technology to deliver a truly extraordinary outdoor luminaire. IP65, IK08, shock and abrasion resistance, thermal protection, and dashing good looks, all in one.



L90

### LONG OPERATING LIFE

Coolon products use world's most reputable LED manufacturers and the latest available standard to adequately report luminaire lumen maintenance.

We strive to drive LEDs under their nominal current and use state of the art heat dissipation methods, leading to durable electronics.



### VARIOUS CCT & COLOUR BINNING CONSISTENCY

Product is offered in various Colour Temperatures using tighter bins.

5  
YEARS

### 5 YEARS WARRANTY

Coolon Luminaires are covered by a solid comprehensive manufacturer's warranty that covers a range of possible defects and performance parameters throughout the duration of the warranty period.



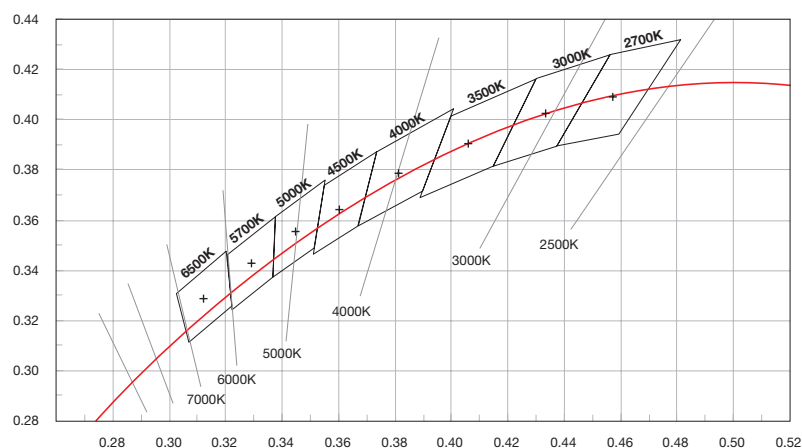
### PROUDLY MADE IN AUSTRALIA

Our products are designed and manufactured in Australia. Engineered to perfection, using only the highest quality components and highly skilled labour, each luminaire is assembled and thoroughly tested to ensure that it exceeds the highest standards.

## TECHNICAL SPECIFICATIONS

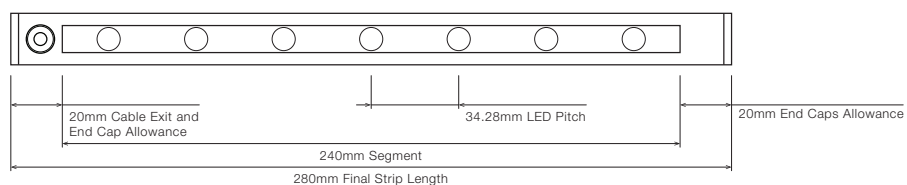
	11W VERSION	23W VERSION
Product Code	STR-RATIO IP	
Description	Ratio IP Medium Power Beam Control LED Strip	
Segment Length (S)	240mm	
Segment Width	10.50mm	
LED Pitch	34.28mm	
LEDs Per Segment	7	
Operating Voltage	24VDC	
Typical Power Consumption per Segment	2.5W per 240mm Segment	5.3W per 240mm Segment
Typical Power Consumption per Metre	11W per metre	23W per metre
Typical Current	115mA per 240mm Segment	230mA per 240mm Segment
Colour Rendering Index (CRI)	90+	
Dimmable	Through CTR-DALILOGIC or CTR-DIMMERLOGIC (sold separately)	
Effective Beam Angle	Varies with optics (30° – 110°)	
External Heatsink Required	No	
Ambient Operating Temp	Ta -10°C to 50°C	
Thermal Operating	Yes (Active)	
Reported Lumen Maintenance TM21-11 (@ Ts = 85°C, If = 700mA)	L70 (17K) > 103,000 hours L90 (17K) > 103,000 hours Ratio IP max. operating values (@ Ts = 40°C, If = 230mA)	
IP Rating	IP66	
IK Rating	IK06 – IK08 (Standard)	
	<ul style="list-style-type: none"> <li>IK Rating of IK06 passed without marks to the extrusion and polyurethane material</li> <li>IK Rating of IK07 and IK08 passed with minor marks to the extrusion and polyurethane material</li> <li>Cable exit / entry not part of the IK Rating test</li> </ul>	
Max Continuous Connection Length	Please refer to installation limitations (Page 08)	
Luminous Flux per Metre (lm/M)		
SC 3000K CRI	L25 Optics	830 lm / metre
4000K CRI	O209 Optics	1,668 lm / metre
		840 lm / metre
		1,700 lm / metre
	<ul style="list-style-type: none"> <li>Specific lumen output and IES files available on request</li> </ul>	

## COLOUR BINNING

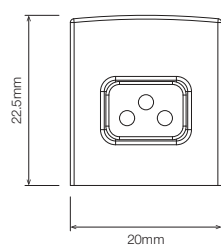


## DIMENSIONS

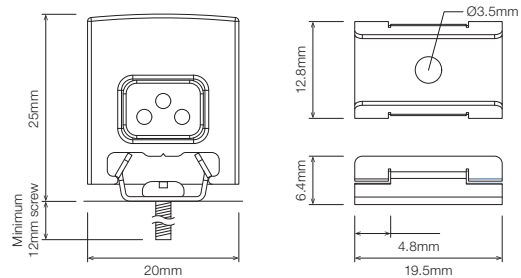
For final strip lengths please refer to the "Product Length" table (Page 06).



### STANDARD PROFILE



### WITH STAINLESS STEEL C-CLIP



## ■ PRODUCT LENGTH

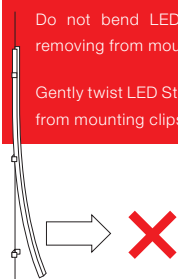
FULL SEGMENTS (S)	EXACT STRIP LENGTH	END CAP ALLOWANCE	FINAL LENGTH
1	240mm	add 40mm	280mm
2	480mm	add 40mm	520mm
3	720mm	add 40mm	760mm
4	960mm	add 40mm	1,000mm
5	1,200mm	add 40mm	1,240mm
6	1,440mm	add 40mm	1,480mm
7	1,680mm	add 40mm	1,720mm
8	1,920mm	add 40mm	1,960mm
9	2,160mm	add 40mm	2,200mm
10	2,400mm	add 40mm	2,440mm
11	2,640mm	add 40mm	2,680mm
12	2,880mm	add 40mm	2,920mm

<sup>1</sup> Custom lengths - contact Coolon LED for more information.

### ⚠ WARNING

Do not bend LED strip when removing from mounting clips.

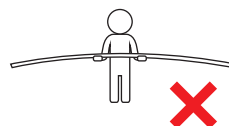
Gently twist LED Strip to remove from mounting clips.



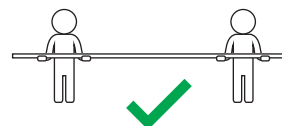
### ⚠ WARNING

PLEASE HANDLE LONG LED STRIPS WITH CARE.

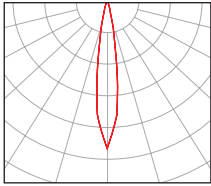
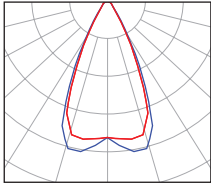
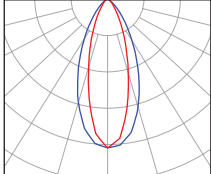
LED Strips must not be bent.



When handling LED Strips, please ensure that they are kept straight.



## ■ POLAR DISTRIBUTION

OPTIC	BEAM ANGLE	POLAR DISTRIBUTION
L15	25° – 30° Beam	
L25	42° – 50° Beam	
O209	Oval 40° x 18° Beam	

## ■ DIFFUSER / LOUVRE

**SC** • No Louvre



## ■ PROFILE COLOUR

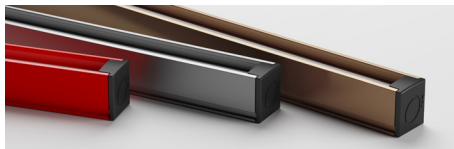
**BLK** • Black (Standard)



**WHT** • White



**CST** • Custom Colour <sup>1</sup>



<sup>1</sup> Custom colours available on request.

## ■ WIRING CONFIGURATION

CONNECTOR TYPE	DRAWING	MALE	FEMALE
OC2.1MO Connector 2+1 pin Male Only			
OC2.1MF Connector 2+1 pin Male + Female			
SMPLC.1 Sample Type Connector 2.5mm			

- Please consult Coolon for details on extension cable between LED fittings, drivers and power supplies.

WIRING COLOUR CODE	
Red	+ VDC
Black	GND
White	PWM Control

## ■ WIRING POSITION

**WS** - Wire from Side



Ideal for fittings installed individually or vertically.

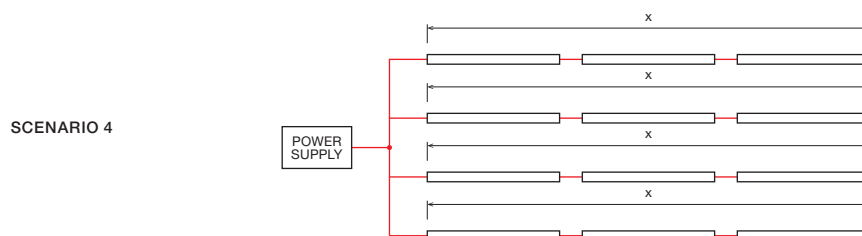
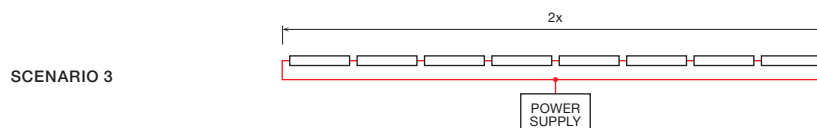
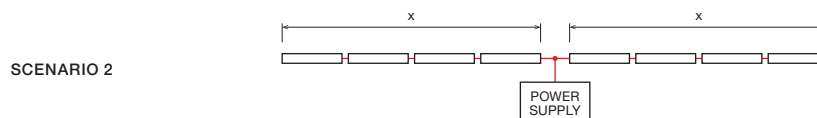
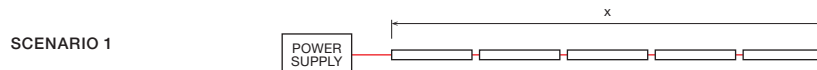
## ■ IP RATING

**IP66**

Fully protected against dust.  
Protected against wave-like  
water jets from all directions.



## ■ INSTALLATION LIMITS



### 11W VERSION

MAX. CONTINUOUS CONNECTION LENGTH (X)	CONNECTOR TYPE
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5,500 mm

With 2+1 pin connectors (OC2.1MO / OC2.1MF / SMPLC.1)

- Please consult Coolon for details on extension cable between LED fittings, drivers and power supplies.

### 23W VERSION

MAX. CONTINUOUS CONNECTION LENGTH (X)	CONNECTOR TYPE
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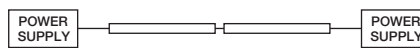
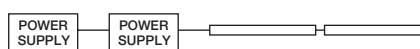
2,500 mm

With 2+1 pin connectors (OC2.1MO / OC2.1MF / SMPLC.1)

- Please consult Coolon for details on extension cable between LED fittings, drivers and power supplies.

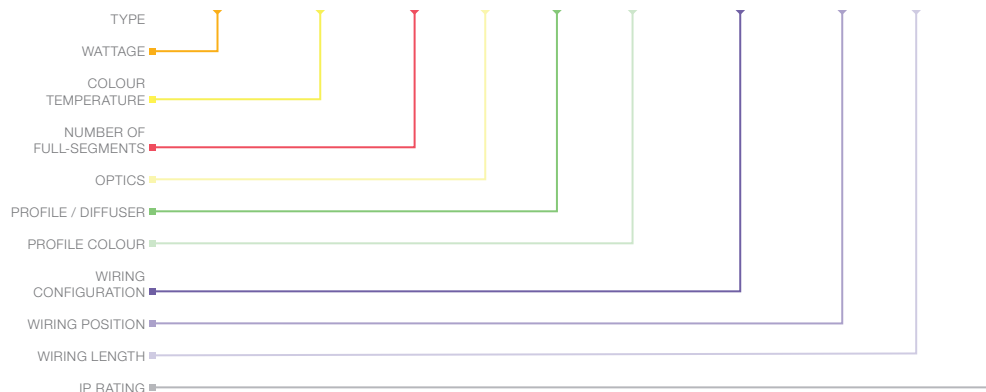
## ⚠ WARNING

Avoid connecting multiple power supplies into a single circuit, unless they are specifically designed to do so.



## ORDERING EXAMPLE

**STR - RATIO IP - 23W - 3.0KCRI - S2 - L25 - SC - BLK - OC2.1MF - WS - 100 - IP66**



### WATTAGE

11W	10.5W per metre
23W	23W per metre

### COLOUR TEMPERATURE <sup>1</sup> PAGE 04

2.7KCRI	2700K CRI 90
3.0KCRI	3000K CRI 90
3.5KCRI	3500K CRI 90
4.0KCRI	4000K CRI 90

### PRODUCT LENGTH PAGE 05

S1	280mm
S2	520mm
S3	760mm
S4	1,000mm
S5	1,240mm
S6	1,480mm
S7	1,720mm
S8	1,960mm
S9	2,200mm
S10	2,440mm
S11	2,680mm
S12	2,920mm

### OPTICS PAGE 06

L15	25° – 30° Beam
L25	42° – 50° Beam
O209	Oval 40° x 18° Beam

### PROFILE / LOUVRE PAGE 06

SC	No Louvre
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### PROFILE COLOUR <sup>2</sup> PAGE 06

BLK	Black (Standard)
WHT	White
CST	Custom Colour

### WIRING CONFIGURATION PAGE 07

OC2.1MO	Outdoor Connector 2+1 pin Male Only
OC2.1MF	Outdoor Connector 2+1 pin Male + Female
SMPLC.1	Sample Type Connector 2.5mm

### WIRING POSITION PAGE 07

WS	Wire from Side
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### WIRING LENGTH PAGE 07

100	100mm
250	250mm

### IP RATING PAGE 07

IP66	Outdoor Use
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<sup>1</sup> Other CCT subject to availability.

<sup>2</sup> Custom colours available on request.

## ■ ACCESSORIES

	PRODUCT CODE	DESCRIPTION
MOUNTING		



MC-CCLIP20

Stainless Steel C-Clip for P20 Profile

<sup>1</sup> Recommended spacing between Mounting Clips is maximum 300mm.

### POWER SUPPLY FOR OUTDOOR USE (IP67)



PWR-HLG-60H-24AU

Mean Well Power Supply HLG 60W 24V IP67

PWR-HLG-150H-24AU

Mean Well Power Supply HLG 150W 24V IP67

PWR-HLG-240H-24AU

Mean Well Power Supply HLG 240W 24V IP67

PWR-HLG-320H-24AU

Mean Well Power Supply HLG 320W 24V IP67