

# Fira

The small but mighty projector







## The small but powerful projector

With its elegant, geometric form and compact size, Fira is a highly versatile architectural luminaire, designed to enhance urban environments through precise illumination.

Developed as a joint collaboration between DW Windsor and Pulsar, the high performance range is available with a choice of dynamic and monochromatic LED light sources with multiple beam options from narrow spots to wide floods.

### Key advantages

- Three models: Fira, Fira Pro & Fira Ultra for ultimate choice
- 2700K, 3000K & 4000K for high performance (up to 117lm/W)
- RGBW, RGBA & Tunable White options for dynamic lighting schemes
- Multiple dimming protocols including bluetooth wireless control for easy adjustment
- Thermally optimised design to ensure consistent light performance
- IP66 rated with IK09 toughened glass for excellent impact protection
- Long-lasting 100,000 hour lifetime

### Applications



Feature lighting



Statues & monuments



Historic buildings



Town squares & plazas







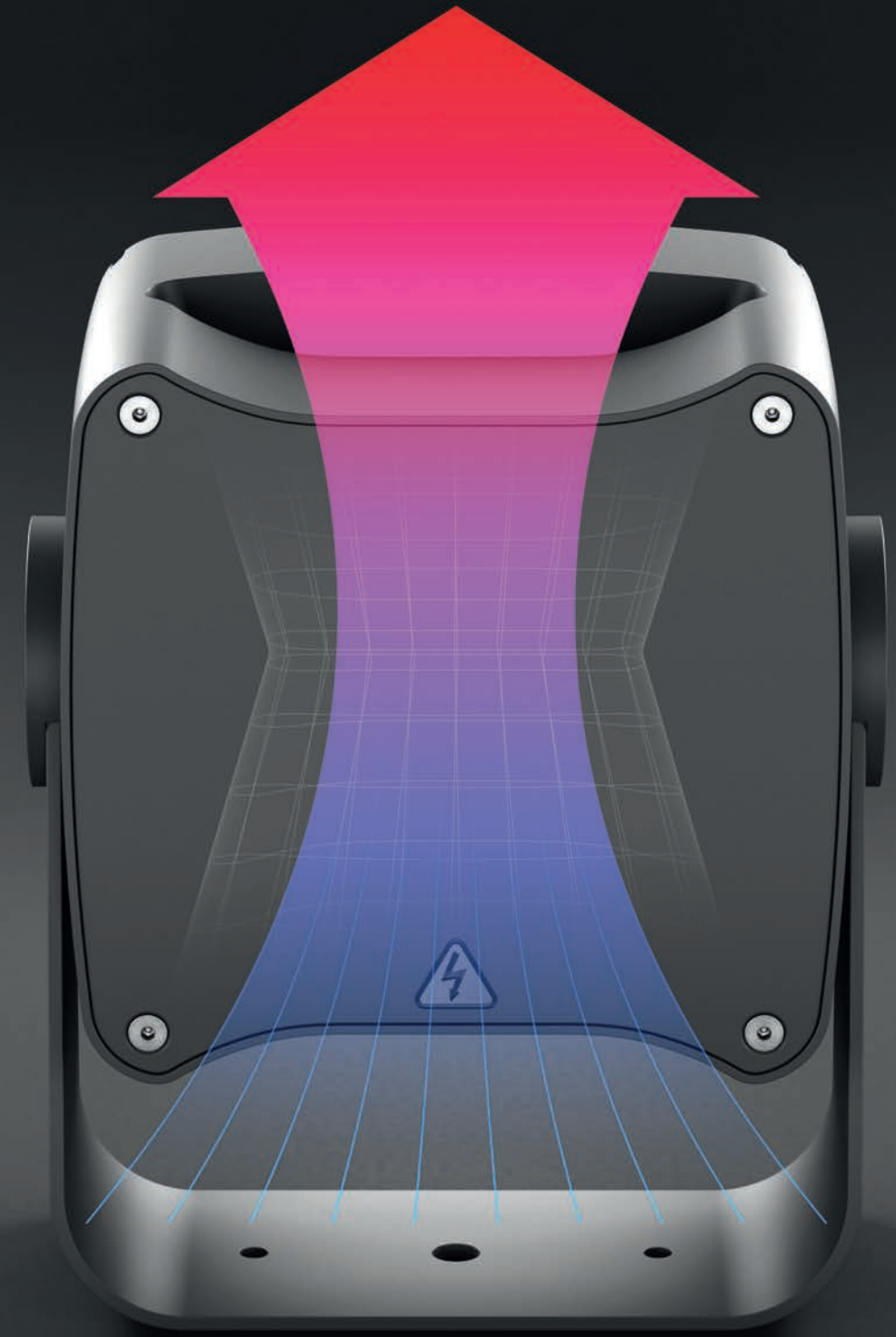
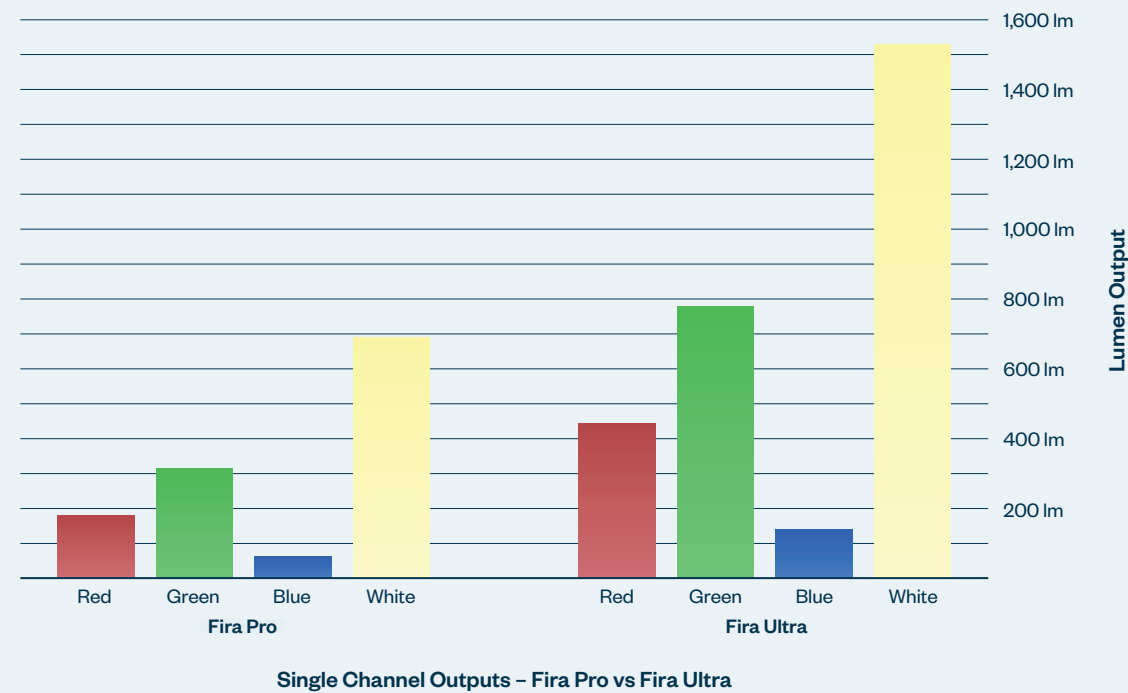
## Maximum performance

Featuring precision optics and our latest LED technical innovations, Fira delivers powerful, targeted illumination with precisely controlled beams and perfect uniformity. So whether you're highlighting an architectural feature, or illuminating a building façade, with Fira you can be sure light is directed only where it's needed.

Fira also incorporates our Cool Zone™ technology to help maximise luminaire performance. This innovative feature separates the driver from the LED chamber creating a thermal barrier, whilst also accelerating air flow using an engineered venturi slot to maximise the cooling effect.

### LuxRAMP™ Technology

Fira Pro and Fira Ultra models incorporate Pulsar's LuxRAMP technology which dynamically boosts the power sent to individual LED channels, helping to maximise the total light output of the luminaire. Fira Ultra is able to leverage this technology even further, resulting in more than double the brightness when compared with Fira Pro.



### Advanced Cooling

Cool Zone technology draws cool air through the luminaire to help improve luminaire performance.





## Multiple light sources



Dumfries House, United Kingdom

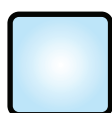
The Fira range can be specified with a selection of monochromatic and dynamic LED light sources to suit your project needs. Fira provides efficient, white light, whilst Fira Pro and Fira Ultra models utilise Pulsar's proprietary VividCOLOUR and TunableWHITE technologies to produce high quality multi-channel, variable light.

### VividCOLOUR

Using a mix of red, green, blue and white LEDs, Pulsar's VividCOLOUR technology expands the colour gamut, extending the range of blue, magenta and cyan hues to produce a full spectrum of colours.

### TunableWHITE

While most variable white sources use just two LEDs to create white light, Pulsar's TunableWHITE technology uses a mix of three white LEDs to produce light more closely aligned to the black body curve.



#### White Light

High quality, efficient white light. Available in a choice of three colour temperatures - 2700K, 3000K and 4000K



#### RGBA

Capable of producing a wide spectrum of warm, rich colours including very warm whites down to 1700K



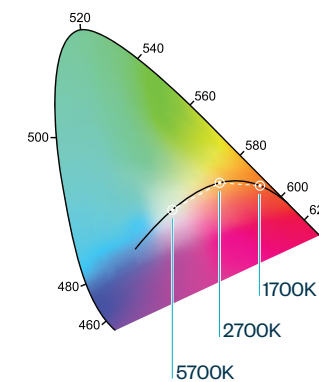
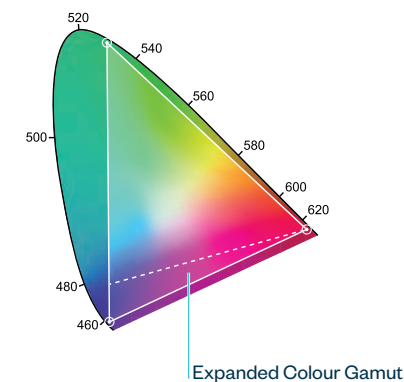
#### RGBW

Ideal for applications that require a mix of white and coloured light. Choose from RGBW 2700K and RGBW 5700K



#### Tunable White

Variable white light. Dynamically adjust the light's colour temperature from 5700K to 1700K to suit the application







## Engineered to last

Fira has been designed to withstand extreme weather conditions whilst enduring some of the world's toughest environments; so no matter where it's installed, it can deliver exceptional performance — year in, year out.

With Fira, every detail has been considered to ensure product reliability and longevity. From its anti-condensation valve to its durable power coated finish, with Fira, you can be confident that it will continue to perform whatever the weather.



### Outdoor Use

Features an IP66-rated housing for increased water protection, plus drainage points to prevent pooling



### Extreme Temperatures

Capable of withstanding wide fluctuations in ambient temperature from  $-40^{\circ}\text{C}$  to  $+50^{\circ}\text{C}^*$



### Durable Construction

Manufactured from die-cast LM6 aluminium and toughened glass with an impact protection rating of IK09



### Long Lasting

Offered with our 5-year warranty as standard, and a rated LED lifetime of up to 100,000 hours

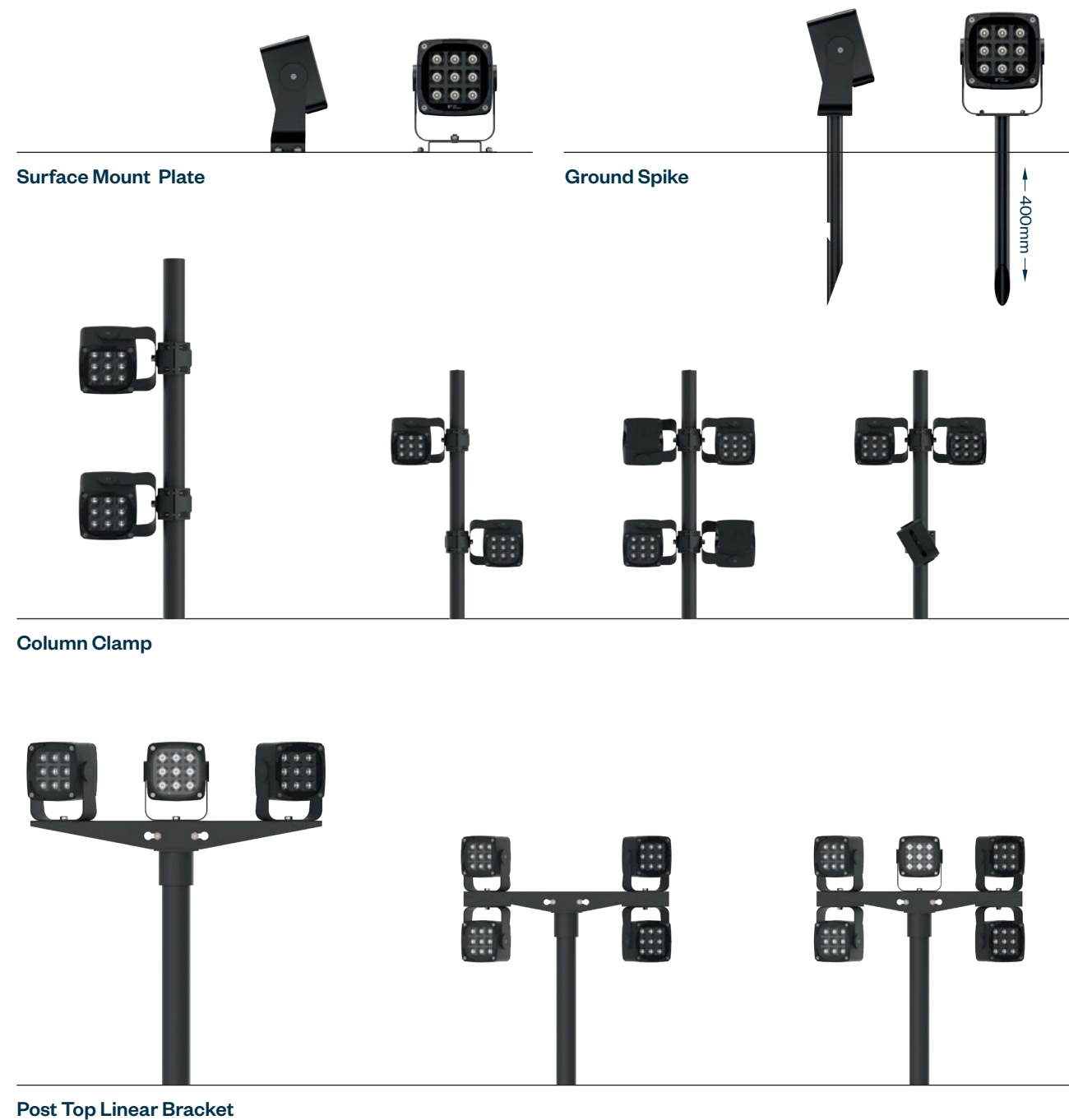
\* Fira rated up to  $+40^{\circ}\text{C}$





## Mounting options

Fira is a versatile lighting system suitable to several mounting locations, including floor, wall and ceiling positions. A range of mounting accessories provides further flexibility, allowing Fira to integrate seamlessly into architectural spaces. Multiple column-mounted solutions can also be configured to help bring public spaces to life.







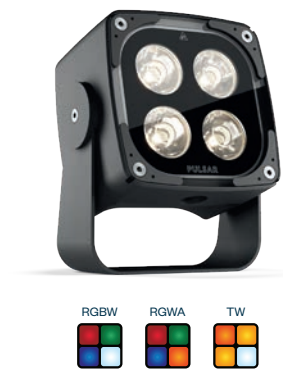
## Range overview

### FIRA – EFFICIENT, WHITE LIGHT



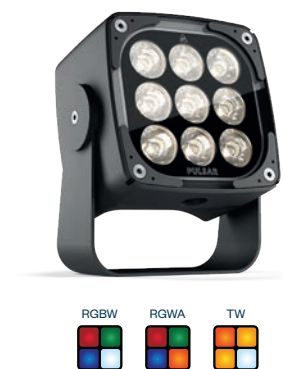
(2700K - 4000K)		8°	30°	65°
350mA (9W)	Luminous Flux (lm)	948 - 1070	825 - 931	684 - 772
	Peak Intensity (cd)	17,175 - 19,386	2,173 - 2,452	607 - 685
500mA (13W)	Luminous Flux (lm)	1478 - 1669	1,286 - 1,452	1,066 - 1,203
	Peak Intensity (cd)	26,778 - 30,238	3,388 - 3,825	946 - 1,068
700mA (18W)	Luminous Flux (lm)	1897 - 2141	1,650 - 1,862	1,367 - 1,543
	Peak Intensity (cd)	34,369 - 38,790	4,347 - 4,905	1,213 - 1,370
1050mA (27W)	Luminous Flux (lm)	2790 - 3148	2,427 - 2,739	2,011 - 2,270
	Peak Intensity (cd)	50,549 - 57,035	6,394 - 7,216	1,785 - 2,015

### FIRA PRO – BEAUTIFUL, DYNAMIC LIGHT



(All Channels On)		12°	20°	40°	80°	12° x 60°
RGBW (5700K)	Luminous Flux (lm)	1,078	1,077	1,071	1,069	1,054
	Peak Intensity (cd)	16,281	4,755	1,427	791	4,277
RGBW (2700K)	Luminous Flux (lm)	896	895	890	889	876
	Peak Intensity (cd)	13,532	3,956	1,186	658	3,554
RGBA (1700K)	Luminous Flux (lm)	834	833	829	827	816
	Peak Intensity (cd)	12,596	3,682	1,104	612	3,311
Tunable White	Luminous Flux (lm)	1,660	1,659	1,649	1,646	1,623
	Peak Intensity (cd)	25,071	7,324	2,197	1,219	6,586

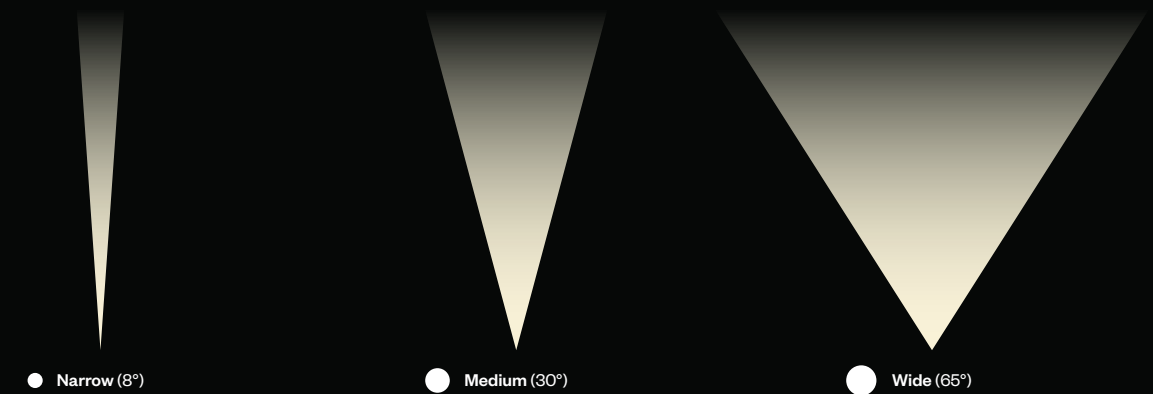
### FIRA ULTRA – POWERFUL, DYNAMIC LIGHT



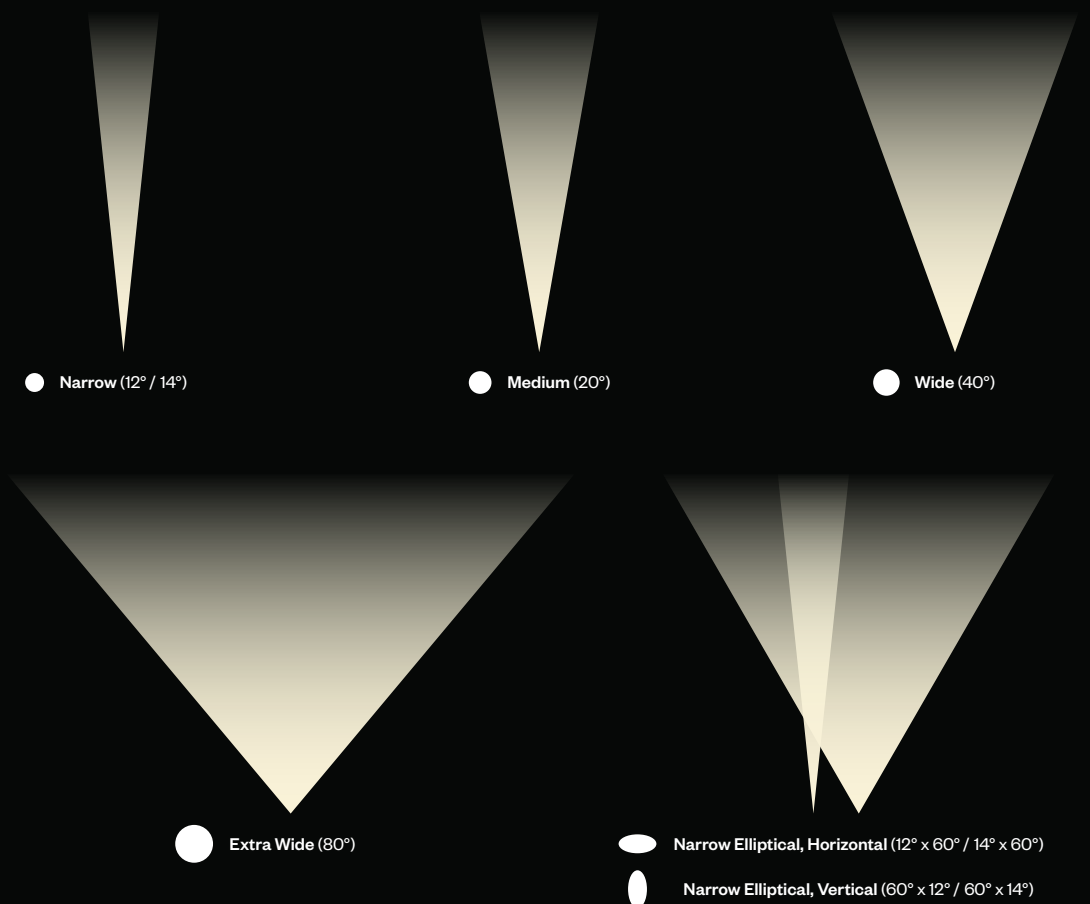
(All Channels On)		14°	20°	40°	80°	14° x 60°
RGBW (5700K)	Luminous Flux (lm)	1,259	1,258	1,250	1,248	1,231
	Peak Intensity (cd)	15,186	5,926	1,597	881	4,211
RGBW (2700K)	Luminous Flux (lm)	1,105	1,104	1,098	1,096	1,081
	Peak Intensity (cd)	13,329	5,206	1,403	773	3,698
RGBA (1700K)	Luminous Flux (lm)	1,092	1,091	1,085	1,083	1,068
	Peak Intensity (cd)	13,172	5,144	1,386	764	3,654
Tunable White	Luminous Flux (lm)	1,904	1,903	1,891	1,887	1,861
	Peak Intensity (cd)	22,966	8,965	2,415	1,331	6,366

PULSAR

### LIGHT DISTRIBUTIONS – FIRA



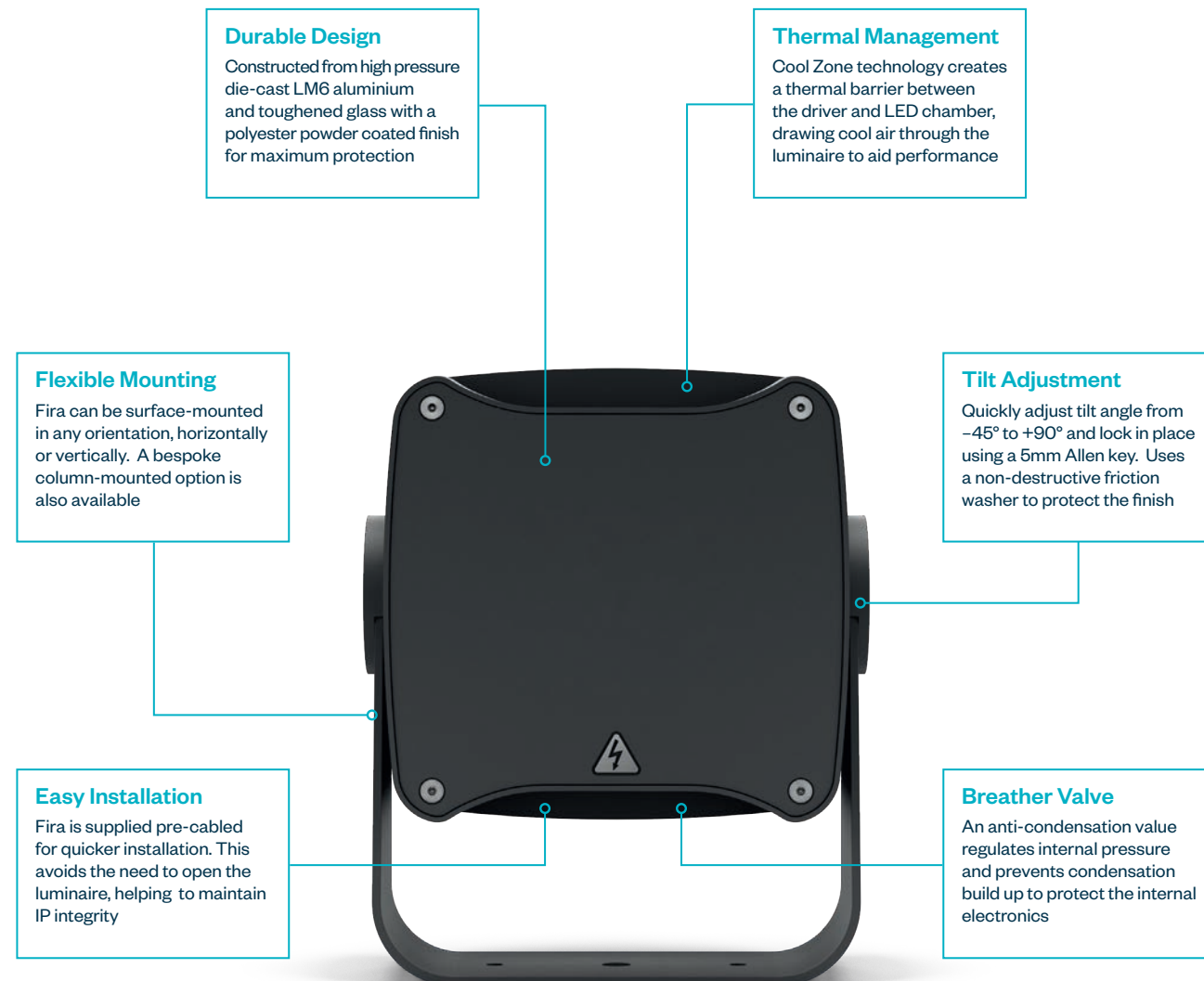
### LIGHT DISTRIBUTIONS – FIRA PRO | FIRA ULTRA





## Design features

Fira draws on the combined technical knowledge of DW Windsor and Pulsar to deliver a feature-rich external lighting solution capable of delivering exceptional light quality and performance.



Fira | Fira Pro | Fira Ultra



Fira



Fira Pro | Fira Ultra





## Control options

Lighting control systems offer many benefits, from increased flexibility to helping lower energy consumption. Fira can be specified with multiple control options to suit the individual needs of your scheme.

### FIRA



#### On / Off

Non-dimmable, provides illumination at a fixed light output. Supplied with a pre-wired 3-core cable.

#### DALI

Allows for control, configuration and diagnostic of individual or grouped luminaires via a hardwired connection. Supplied with a pre-wired 5-core cable.

#### Bluetooth

Switch, dim and configure luminaires wirelessly for increased convenience and flexibility. Manage luminaires individually or in a group using scenes. Controlled directly from a smart device, no additional controls cabling required.

For more information visit: [dwwindsor.com/fira](http://dwwindsor.com/fira)

### FIRA PRO | FIRA ULTRA

### DMX512



#### DMX512

An industry standard control protocol for dynamic lighting systems that is both incredibly fast and robust. Ideal for schemes that feature multiple luminaires as it ensures transitions remain synchronised.

For more information visit: [dwwindsor.com/fira](http://dwwindsor.com/fira)

#### RDM Compliant

Provides bi-directional communication between a control system and luminaire. Used during commissioning as well as for status reporting, including temperature monitoring.







# Optical accessories & finishes

## OPTICAL ACCESSORIES



Half Snoot



Full Snoot



Louvre

## STANDARD FINISHES



Black (RAL 9005)



White (RAL 9016)



Aluminium (RAL 9006)



Metallic Grey (RAL 9007)



Metallic Dark Grey (DB 703)

## Fira product codes

Fira product codes		Code	Example
<b>Product</b>			
Fira		FIR9	FIR9
<b>Control</b>			
Switched (on/off - default)		SW	SW
DALI		DALI	
Bluetooth		BLU	
<b>Colour Temperature</b>			
2700K		27	30
3000K		30	
4000K		40	
<b>Light Distribution</b>			
Narrow - 8°		N	M
Medium - 30°		M	
Wide - 65°		W	
<b>Drive Current</b>			
350mA (9W)		350	700
500mA (13W)		500	
700mA (18W)		700	
1050mA (27W)		501	
<b>Colour Finish</b>			
RAL 9016 White		40	10
RAL 9005 Black		10	
RAL 9006 Aluminium		26	
RAL 9007 Metallic Grey		27	
DB 703 Metallic Dark Grey		DB	
<b>Wiring</b>			
Pre-wired with 1m cable (default)		1M	1M
Pre-wired with 5m cable		5M	
Pre-wired with 10m cable		10M	
<b>Accessories (ordered separately)</b>			
Louvre		LVR	SNT
Snoot		SNT	
Half Snoot		HSNT	
Column Clamp (Ø60mm / Ø76mm)		CC	
Pole Top Linear Bracket (Ø76mm)		PT	
Example Code: <b>FIR9 SW 30 M 700 10 1M SNT</b>			

## Fira Pro & Fira Ultra product codes

Fira Pro & Fira Ultra product codes		Code	Example
<b>Product</b>			
Fira		FIRA	FIRA
<b>Version</b>			
Fira Pro		104	104
Fira Ultra		109	
<b>Control</b>			
DMX + RDM		RDM2	RDM2
<b>Light Source</b>			
RGBW 5700K		VC	VC
RGBW 2700K		A3	
RGBA 1700K		A1	
Tunable White		TW	
<b>Colour Finish</b>			
RAL 9016 White		40	26
RAL 9005 Black		10	
RAL 9006 Aluminium		26	
RAL 9007 Metallic Grey		27	
DB 703 Metallic Dark Grey		DB	
<b>Light Distribution</b>			
Narrow - 12°	Narrow - 14°	012 / 014	040
Medium - 20°	Medium - 20°	020	
Wide - 40°	Wide - 40°	040	
Extra Wide - 80°	Extra Wide - 80°	080	
Vertical Elliptical - 60°x 12°	Vertical Elliptical - 60°x 14°	V02	
Horizontal Elliptical - 12°x 60°	Horizontal Elliptical - 14°x 60°	H02	
<b>Not Applicable</b>			
Not Applicable		XX	XX
<b>Not Applicable</b>			
Not Applicable		XX	XX
Example Code: FIRA104 RDM2 VC 26 040 XX XX			



## Features

A compact, high-performance architectural luminaire range

Durable construction for product longevity

Advanced thermal design to aid luminaire performance

Multiple light source options including RGBW, RGBA & Tunable White

## Light Sources

Fira – monochromatic white light (2700K, 3000K, 4000K)

Fira Pro & Fira Ultra – dynamic light (RGBW, RGBA, Tunable White)

## Beam Options

Fira – 8° / 30° / 65°

Fira Pro – 12° / 20° / 40° / 80° / 12° x 60° / 60° x 12°

Fira Ultra – 14° / 20° / 40° / 80° / 14° x 60° / 60° x 12°

## Lifetime prediction

Fira – in excess of 100,000 (L90)

Fira Pro & Fira Ultra – in excess of 100,000 (L70)

## Total luminaire lumens

Fira – 684 - 3,148lm / 27W

Fira Pro – 1,078 - 1,660lm / 30W

Fira Ultra – 1,259 - 1,904lm / 32W

## Colour rendering index

Fira – 80Ra (2700K / 3000K / 4000K)

Fira Pro & Fira Ultra – 90Ra (RGBW / Tunable White)

## Total measured luminaire efficacy

Fira – up to 117lm/W

## Operating voltage

Fira – 220 - 240V AC @ 50/60Hz

Fira Pro & Fira Ultra – 120 - 277V AC @ 50/60Hz

## Control

Fira – On/Off / DALI / Bluetooth Wireless

Fira Pro & Fira Ultra – DMX 512 + RDM for easy setup

## Drive current

Fira – 350mA / 500mA / 700mA / 1050mA

## Range of movement

Pan: 360°

Tilt: -45° to +90°

## Mounting

Surface (horizontal and vertical)

Column

## Product colours

RAL 9016 White

RAL 9005 Black

RAL 9006 Aluminium

RAL 9007 Metallic grey

DB 703 Metallic dark grey

Other RAL colours on special request

## Materials

Body: High-pressure die-cast aluminium (LM6)

Glazing: Toughened glass

Seals: Silicone

Finish: Polyester powder coat

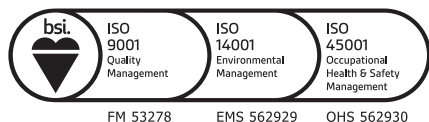
## Installation and maintenance

Available with various cable tail options prefitted

Mounting plate accessory available

Operational temperature range up to -40°C to +40°C\*\*

\* Class II on request \*\* 50°C for Fira Pro & Fira Ultra



FM 53278

EMS 562929

OHS 562930

### DW Windsor

Pindar Road, Hoddesdon, Hertfordshire, EN11 ODX  
+44 (0) 1992 474600 | info@dw Windsor.com  
dw Windsor.com