Fira

The small but powerful 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
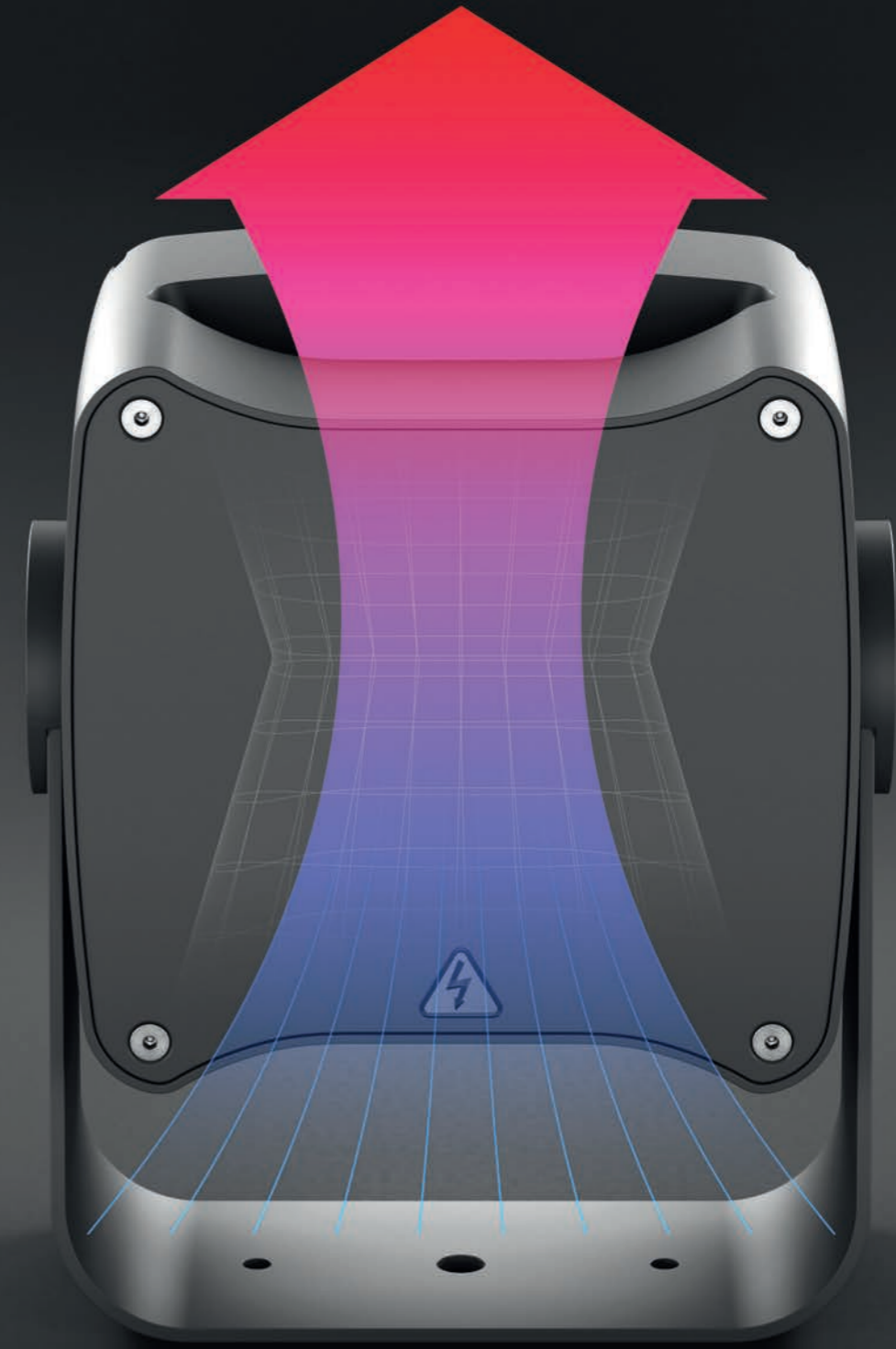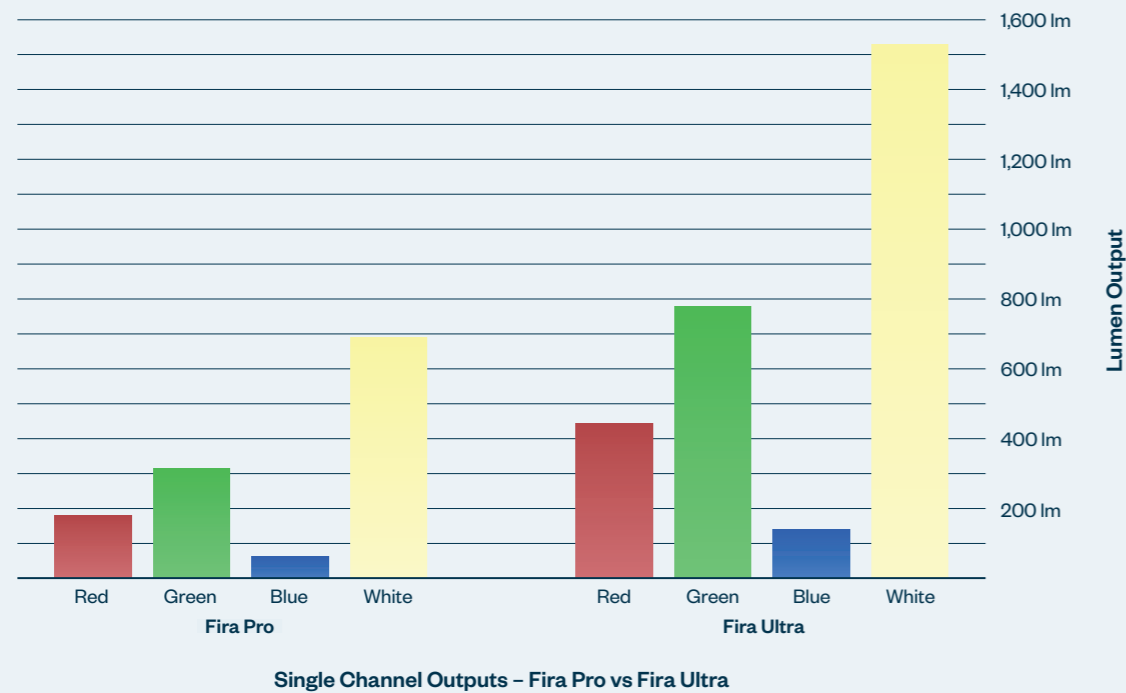- Town squares & plazas

212mm

175mm

106mm

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.

	Lumen Output
	1,600 lm
	1,400 lm
	1,200 lm
	1,000 lm
	800 lm
	600 lm
	400 lm
	200 lm

Red   Green   Blue   White
Fira Pro

Red   Green   Blue   White
Fira Ultra

Single Channel Outputs – Fira Pro vs Fira Ultra

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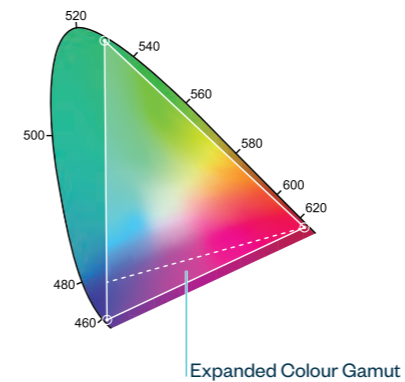
TunableWHITE
While most variable white sources use just two LEDs to create white light, Pulsar's TunableWHITE technology uses a mix of three white LEDs to produce light more closely aligned to the black body curve.

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
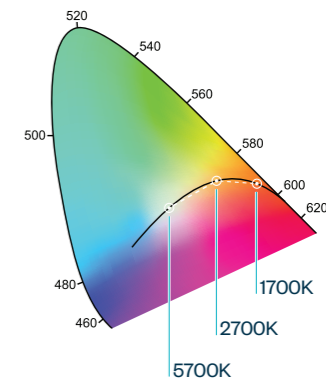
Expanded Colour Gamut

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° C to +50° 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° 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.

Surface Mount Plate

Ground Spike

400mm

Column Clamp

Post Top Linear Bracket
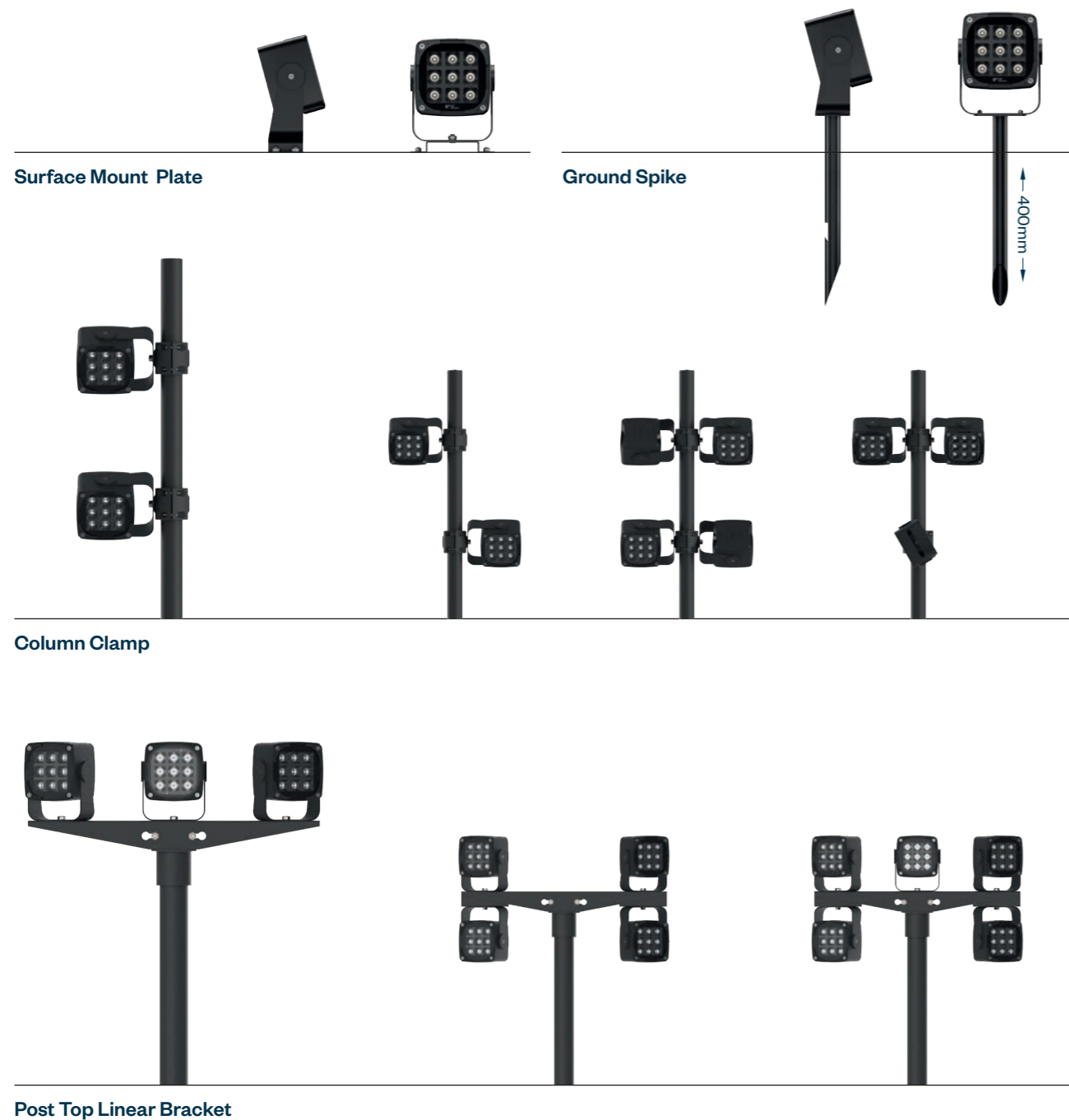
Range overview

FIRA – EFFICIENT, WHITE LIGHT

DW Windsor

2700K 3000K 4000K

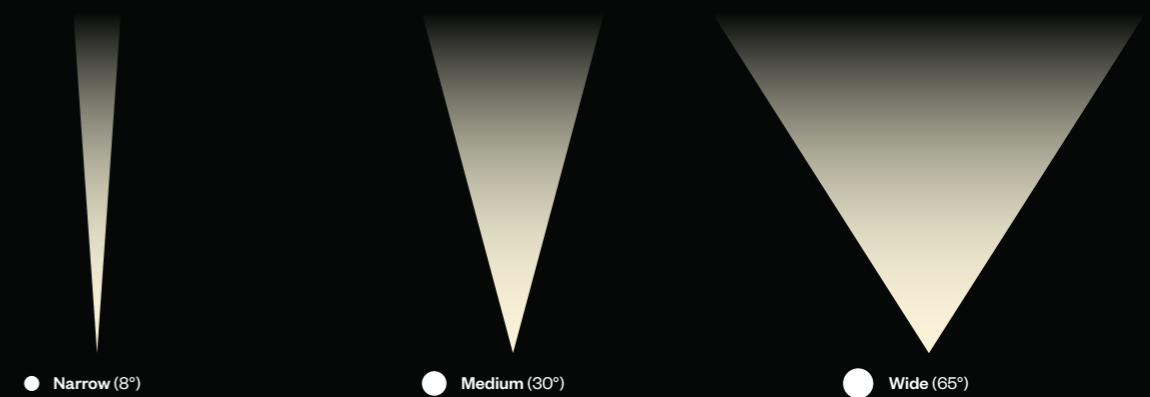| (2700K - 4000K)		8°	30°	65°
350mA (9W)	Luminous Flux (lm)	948 - 1070	825 - 931	684 - 772
	Peak Intensity (cd)	17,175 - 19,386	2,173 - 2,452	607 - 685
500mA (13W)	Luminous Flux (lm)	1478 - 1669	1,286 - 1,452	1,066 - 1,203
	Peak Intensity (cd)	26,778 - 30,238	3,388 - 3,825	946 - 1,068
700mA (18W)	Luminous 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 - 57035	6,394 - 7,216	1,785 - 2,015

FIRA PRO – BEAUTIFUL, DYNAMIC LIGHT

PULSAR

RGBW RGWA TW

(All Channels On)		10°	20°	40°	80°	10° 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

PULSAR

RGBW RGWA TW

(All Channels On)		10°	20°	40°	80°	10° 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

LIGHT DISTRIBUTIONS – FIRA

Narrow (8°)   Medium (30°)   Wide (65°)

LIGHT DISTRIBUTIONS – FIRA PRO | FIRA ULTRA

Narrow Spot (10° / 15°)   Narrow Flood (20° / 30°)   Flood (40° / 60°)

Extra Wide Flood (80°)

Narrow Elliptical, Horizontal (10° x 60° / 15° x 60° / 30° x 60°)

Narrow Elliptical, Vertical (60° x 10° / 60° x 15° / 60° x 30°)
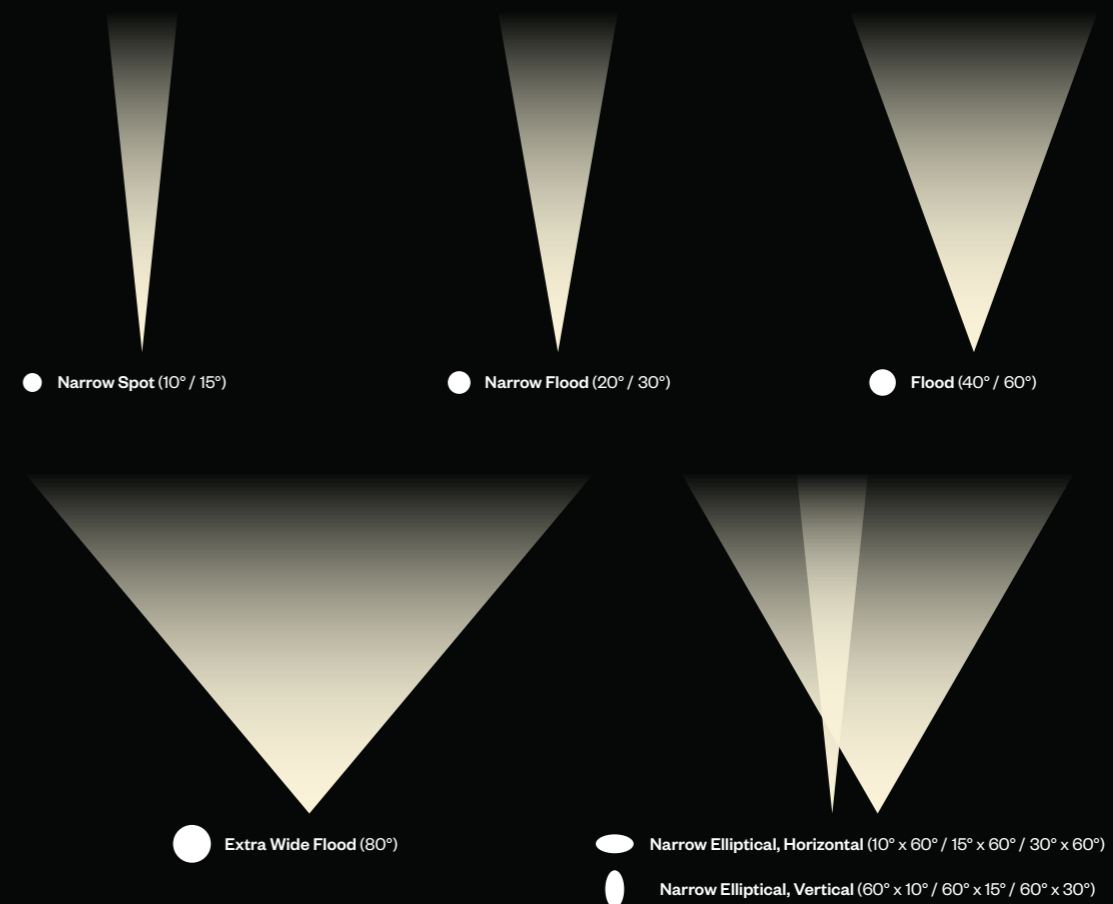
Design features

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.

LEDs
Fira is equipped with nine highly efficient, 80CRI LEDs, capable of producing up to 117lm/W. Available in 2700K, 3000K and 4000K

Dimming Controls
Bluetooth-enabled for direct wireless dimming control, no additional cabling required. DALI and on/off switching options also available

Beam Distributions
Fira is offered with a choice of narrow (8°), medium (30°) or wide (65°) distributions to support a range of external applications

LED Optics
Fira's LED optics are individually recessed within the front fascia to reduce discomfort glare and improve visual comfort

Fira

Durable Design
Constructed from high pressure die-cast LM6 aluminium and toughened glass with a polyester powder coated finish for maximum protection

Thermal Management
Cool Zone technology creates a thermal barrier between the driver and LED chamber, drawing cool air through the luminaire to aid performance

Flexible Mounting
Fira can be surface-mounted in any orientation, horizontally or vertically. A bespoke column-mounted option is also available

Tilt Adjustment
Quickly adjust tilt angle from −45° to +90° and lock in place using a 5mm Allen key. Uses a non-destructive friction washer to protect the finish

Easy Installation
Fira is supplied pre-cabled for quicker installation. This avoids the need to open the luminaire, helping to maintain IP integrity

Breather Valve
An anti-condensation value regulates internal pressure and prevents condensation build up to protect the internal electronics

Fira | Fira Pro | Fira Ultra

LEDs
QuadCORE LED technology enables a variety of optimised colour-mixing solutions using four individually binned LEDs for high CRI (90+) illumination

Dimming Controls
Utilises DMX512 for dynamic control with Pulsar's InterBIT Smoothing technology to produce seamless fades and transitions between scenes

Beam Distributions
Holographic Beam Shaping technology enables a range of symmetric and asymmetric distributions with excellent uniformity from 10° to 80°

LED Optics
Homogeneous colour mixing blends light within the optic to produce a single-coloured, uniform beam whilst helping to minimise colour fringing

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

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

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)

Corten Brown

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Fira product codes

	Code	Example
Product		
Fira	FIR9	FIR9
Control		
Switched (on/off - default)	SW	
DALI	DALI	SW
Bluetooth	BLU	
Colour Temperature		
2700K	27	
3000K	30	30
4000K	40	
Light Distribution		
Narrow 8°	N	
Medium 30°	M	M
Wide 65°	W	
Drive Current		
350mA (9W)	350	
500mA (13W)	500	700
700mA (18W)	700	
1050mA (27W)	501	
Colour Finish		
RAL 9016 White	40	
RAL 9005 Black	10	
RAL 9006 Aluminium	26	
RAL 9007 Metallic Grey	27	10
DB 703 Metallic Dark Grey	DB	
Corten Brown	CB	
Wiring		
Pre-wired with 1m cable (default)	1M	
Pre-wired with 5m cable	5M	1M
Pre-wired with 10m cable	10M	
Accessories (ordered separately)		
Louvre	LVR	
Snoot	SNT	
Half Snoot	HSNT	SNT
Column Clamp (Ø60mm / Ø76mm)	CC	
Pole Top Linear Bracket (Ø76mm)	PT	
Example Code: **FIR9.SW.30.M.700.10.1M.SNT**		

Fira Pro & Fira Ultra product codes

	Code	Example
Product		
Fira	FIRA	FIRA
Version		
Fira Pro	104	
Fira Ultra	109	104
Control		
DMX + RDM	RDM2	RDM2
Light Source		
RGBW 5700K	VC	
RGBW 2700K	A3	
RGBA 1700K	A1	VC
Tunable White	TW	
Colour Finish		
RAL 9016 White	40	
RAL 9005 Black	10	
RAL 9006 Aluminium	26	
RAL 9007 Metallic Grey	27	26
DB 703 Metallic Dark Grey	DB	
Corten Brown	CB	
Light Distribution		
Narrow Spot (10° / 15°)	010 / 015	
Narrow Flood (20° / 30°)	020 / 030	
Flood (40° / 60°)	040 / 060	
Extra Wide Flood 80°	080	040
Vertical Elliptical (60°x 10° / 60°x 15° / 60°x 30°)	V01 / V02 / V03	
Horizontal Elliptical (10°x 60° / 15°x 60° / 30°x 60°)	H01 / H02 / H03	
Not Applicable		
Not Applicable	XX	XX
Not Applicable		
Not Applicable	XX	XX
Example Code: **FIRA104.RDM2.VC.26.040.XX.XX**		

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Fira™

IP66 | IK09 | CLASS I | CLASS II

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 & Ultra (Symmetric) – 10° / 15° / 20° / 30° / 40° / 60° / 80°

Fira Pro & Ultra (Elliptical) – 10° x 60° / 15° x 60° / 30° x 60°

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

Corten brown

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*

* 50°C for Fira Pro & Fira Ultra

MADE IN BRITAIN

AUG-2023-C