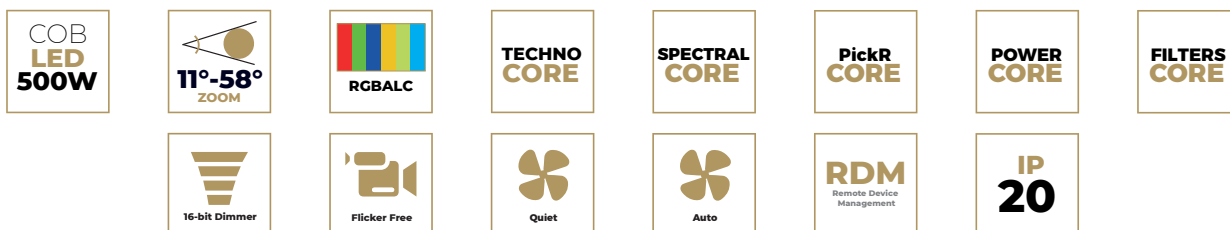




Designed for professional environments demanding power, precision, and operational comfort, **HERITAGE Fresnel 500** delivers a premium light signature, perfectly suited to studios, stages, and high-end installations. It combines photometric performance, light quality, and operational flexibility to meet the expectations of lighting designers and operators. At the heart of the fixture, **Techno Core™** technology: the **Spectral Core™** module, combined with **Pikr Core™** technology, delivers rich, balanced, and perfectly controlled color rendering. It enables both the creation of intense, deep colors and the production of precise, natural whites across the entire range, thanks to a calibrated white channel that accurately positions the light along the black body curve. Whites are stable, uniform, and fully reproducible from one fixture to another.

For advanced control, **HERITAGE Fresnel 500** can also be operated in X,Y mode within the CIE 1931 color space. Its zoom range from 11° to 58° provides great operational flexibility, allowing instant beam adjustment - from tight framing to wide coverage - while maintaining remarkable light uniformity. This versatility makes it equally effective for creative applications and everyday operation. With a luminous output of up to 18.300 lumens and a CRI > 95, **HERITAGE Fresnel 500** establishes itself as a reference solution for productions where performance must be paired with impeccable light quality and genuine ease of use.





SPECTRAL CORE™ PikR CORE™ FILTERS CORE™ POWER CORE™

The Technology

The colorimetric reference for stage lighting **Spectral Core™** is a proprietary LED technology developed by STARWAY for theatres, opera houses, and permanent installations requiring perfect color consistency and absolute fidelity in stage rendering.

Based on a unique RGB, Amber, Lime, and Cyan LED engine, shared across the entire range, Spectral Core™ ensures a consistent color signature throughout all fixtures in the HERITAGE series.

Precision architecture

The **Spectral Core™** module is built around a three-part design:

- **Spectral Core™** Multispectral LED engine
- **PikR Core™** Calibration and processing chip
- **250W (or 500W) Power Core™** power supply.
(depending of model)

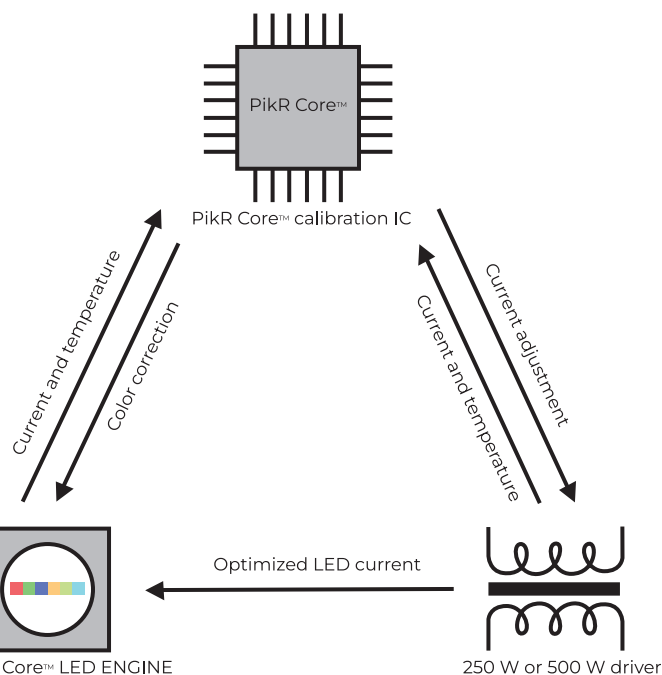
The LED engine and the **PikR Core™** calibration and processing chip form the technological heart of **Spectral Core™**, ensuring stability and repeatability.

Intelligent control

Via the internal **Spectral Core™ / PikR Core™** internal software, the system operates with a bidirectional data flow, continuously optimizing color quality and luminous efficiency.

Reference whites and colors

- TM-30 > 94
- CRI > 98
- Extended color temperature range from 1,800 K to 10,000 K
- Accurate black-body reproduction with Duv < 0.002
- CIE 1931 color space X,Y control directly from the console
- **Filters Core™** database including 80+ iconic LEEfilter™ gels.



Sustainable performance

Power Core™'s real-time optimization allows 100% of the LED engine's potential to be utilized while limiting derating to 10%, ensuring consistent output, long-term stability, and extended lifespan.

TECHNICAL DATASHEET

HERITAGE

FRESNEL 500

Source

Engine	Spectral Core™ RGB + Amber + Lime + Cyan
LED Watts	500W
Engine CCT	9700K (Full RGBL)
Engine Life (L70)	> 50000 H
Refresh Rate	900Hz to 25 kHz
Dimming	Electronic - 16 bits
Dimming Curves	Linear, Square, Inv Square, S-curve
Dimming Modes	Dim0 (0s), Dim1 (0.25s), Dim2 (0.5s), Dim3 (0.75s), Dim4 (1s)
Strobe Speed	1 - 25 Hz
Strobe Modes	Standard, Pulse, Random

Electrical

Max Consumption	550W
Standby Power Consumption	5W
Voltage Range	110V/240V - 50Hz/60Hz
Power Factor	0.99@110V - 0.98@240V
Current (Max)	5.02A@110V - 2.31A@240V
Fuse	T8A@250V
Connector	PowerCON True1 (In/Out)
Max Fixtures per Circuits (16A)	3@110V - 6@240V

Compliance & Protection

IP Rating	IP 20
Certification	CE, Rohs

Optical

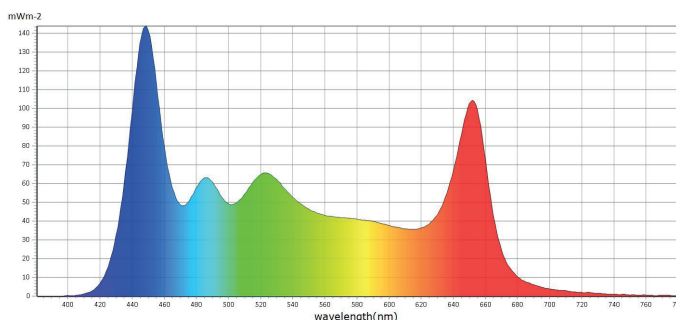
Lens Diameter	200 mm
Zoom Range	10.85° - 58.5°
Zoom Ratio	5.4:1

Colour System

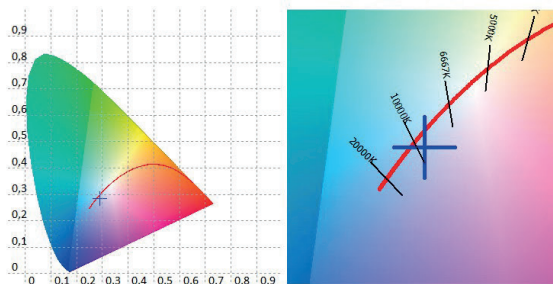
Colour System	RGBALC Virtual Macros (83 LeeFilters gels)
Control	8 bits / 16 bits

Performances

Fixture Luminous Flux (Max)	18303 lm
Fixture Illuminance	Narrow: 10038 lux@5m 10.9° Medium: 4792 lux@5m 19.7° Wide: 1326 lux@5m 45.6°
Fixture CCT Output	1800 - 10000 K
CRI	@6500k: 97.58 @3200k: 98.41
Tm30	@6500k: 94.47 @3200k: 96.62
TLCI	@6500k: 97.73 @3200k: 95.86
CQS	@6500k: 95.44 @3200k: 97.16

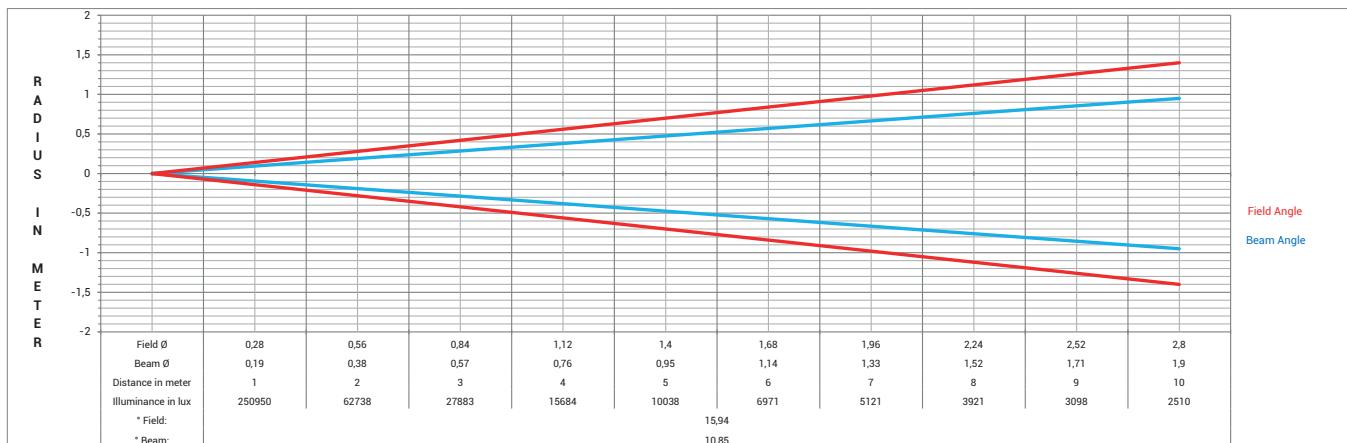


■ CIE1931

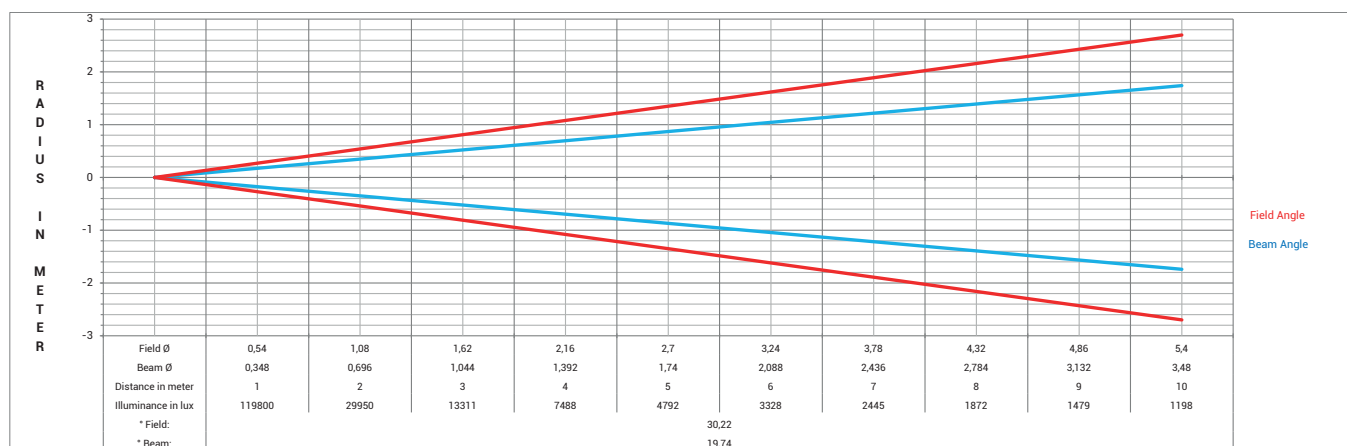


Photometry

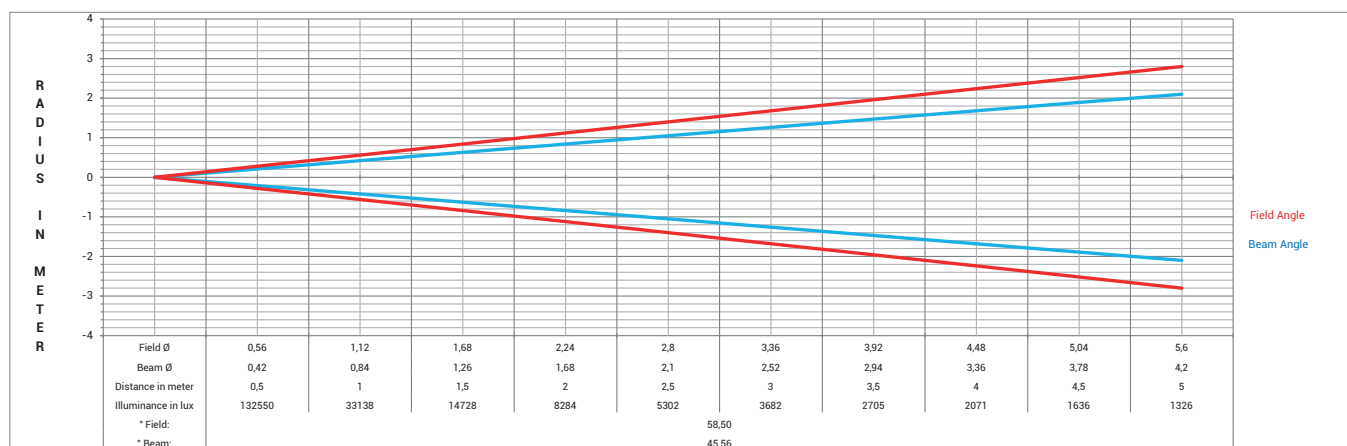
Narrow Angle (10.85°)



Medium Angle (19.74°)



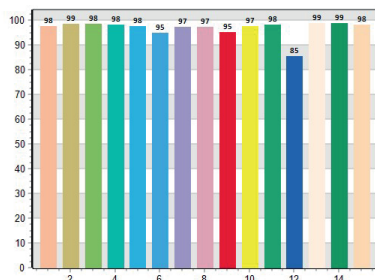
Wide Angle (45.56°)



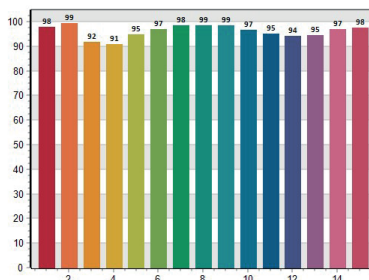
Colorimetry

@6500°K (Calibrated)

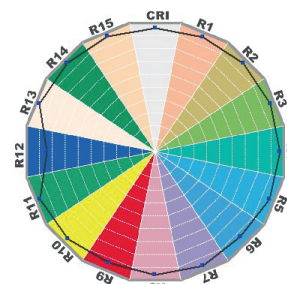
■ CRI: 97,58



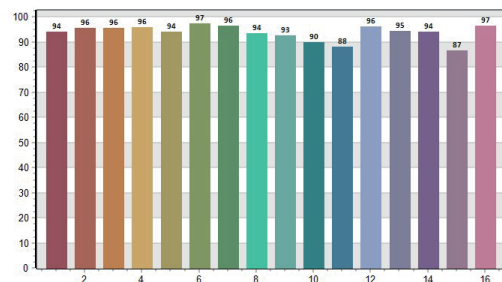
■ CQS: 95,44



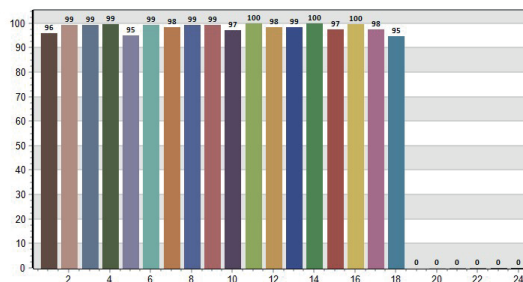
■ CRI-2



■ TM30: 94,47

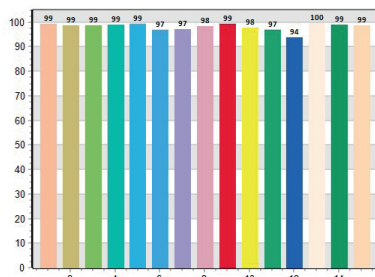


■ TLCI: 97,73

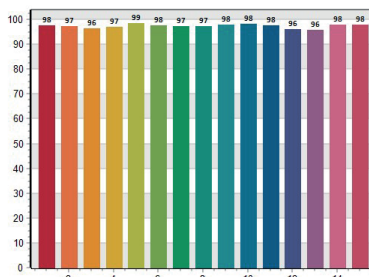


@3200°K (Calibrated)

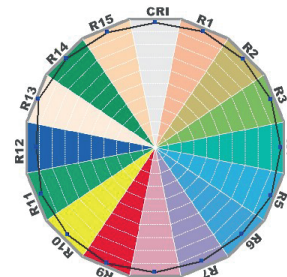
■ CRI: 98,41



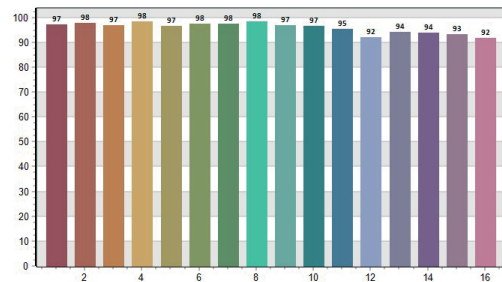
■ CQS: 97,16



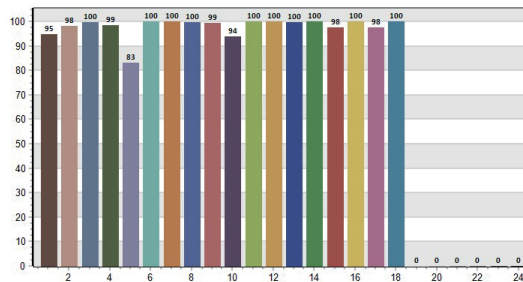
■ CRI-2



■ TM30: 96,62



■ TLCI: 95,86



[Find the complete photometry here :](#)



TECHNICAL DATASHEET

HERITAGE

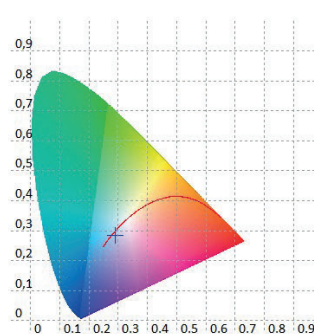
FRESNEL 500

Color & Macros

Red	x: 0.7091 / y: 0.2891
Green	x: 0.1669 / y: 0.7194
Blue	x: 0.1572 / y: 0.0237
Amber	x: 0.5612 / y: 0.4186
Lime	x: 0.4151 / y: 0.5512
Cyan	x: 0.0911 / y: 0.2392
Full RGBALC	x: 0.2893 / y: 0.2839
8000 K (calibrated macro)	CCT: 8230 K x: 0.2932 / y: 0.3022
6500K (calibrated macro)	CCT: 6595 K x: 0.3122 / y: 0.3211
5600 K (calibrated macro)	CCT: 5602 K x: 0.3311 / y: 0.3377
3200 K (calibrated macro)	CCT: 3211 K x: 0.4199 / y: 0.3926

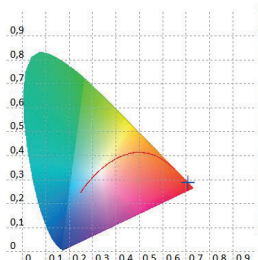
RGBALC@ 100%

■ CIE1931



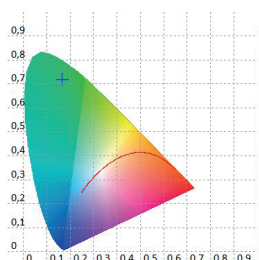
Red @ 100%

■ CIE1931



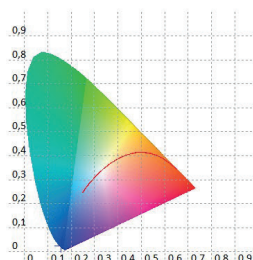
Green @ 100%

■ CIE1931



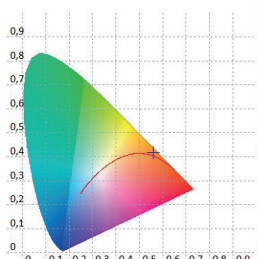
Blue @ 100%

■ CIE1931



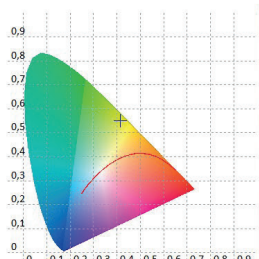
Amber @ 100%

■ CIE1931



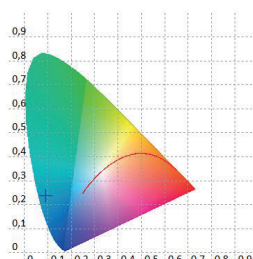
Lime @ 100%

■ CIE1931



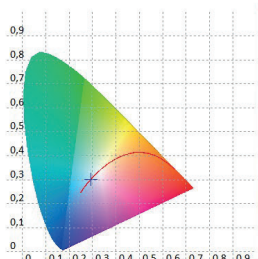
Cyan @ 100%

■ CIE1931



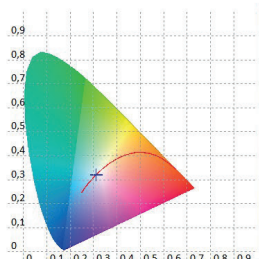
8000 K (calibrated)

■ CIE1931



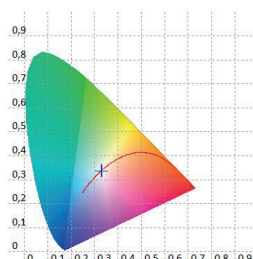
6500 K (calibrated)

■ CIE1931



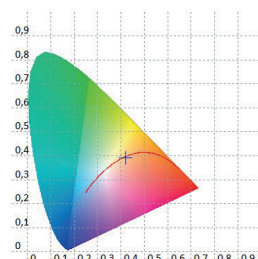
5600 K (calibrated)

■ CIE1931



3200 K (calibrated)

■ CIE1931



Control

DMX Control	DMX (USITT DMX-512-A) RDM (ANSI/ESTA E1.20)
DMX Modes	9 User Modes
Channel Count	Dimmer - 1 Dimmer 16bit - 2 Dimmer + CCT - 3 HSI - 16bit - 14 RGBALC - 8bit - 17 RGBALC - 16bit - 23 CYM - 16bit - 17 RGBW Extended - 16bit - 19 X&Y 16bit - 15
Local Control	OLED panel Navigation buttons Encoder knob
RDM Functions	Yes

Noise Level

Fan Mode Auto	35dB @ 1m
Fan Mode High	38dB @ 1m
Fan Mode Quiet	32dB @ 1m

Connectors

Power	PowerCoN True 1 (In/Out)
DMX	XLR 5 Pin (In/Out)
USB	Upgrade purpose

Thermal

Cooling System	Forced
Cooling Modes	Auto - High - Quiet
Max Ambient Temperature (Ta Max)	45°C
Min Ambient Temperature (Ta Min)	-10°C
Max Surface Temperature, steady state, at Ta 40°	74°C
Total Heat Dissipation (Calculated +/- 10%)	1877 BTU/h - 550W@240V
Heat Dissipation (standby) (Calculated +/- 10%)	17 BTU/h - 5W@240V

TECHNICAL DATASHEET

HERITAGE

FRESNEL 500

Material

Housing	Plastic Die Cast Aluminium
---------	-------------------------------

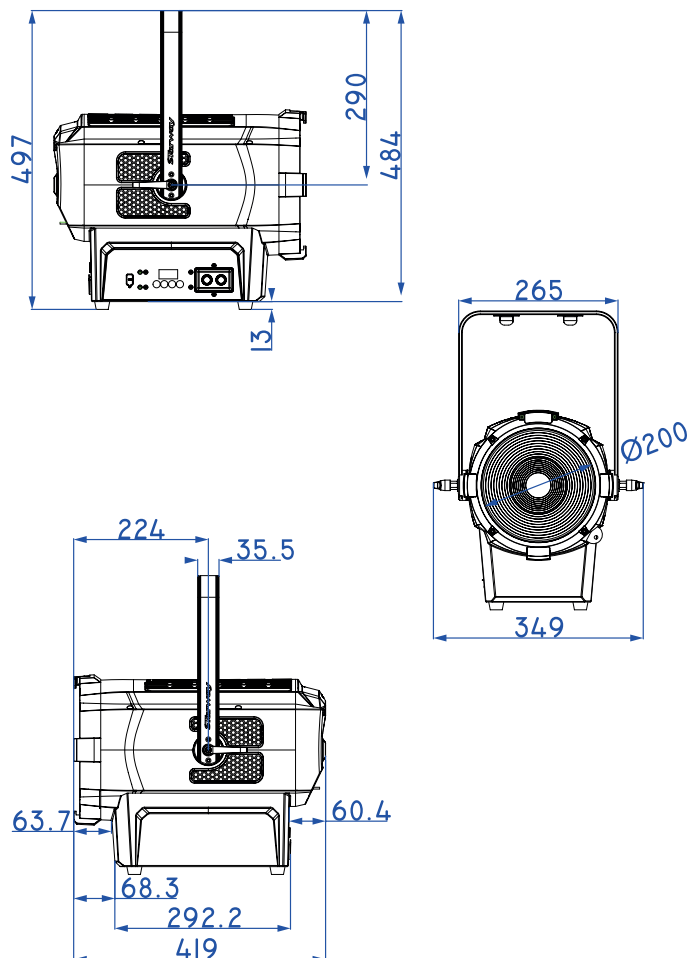
Physical

Fixture

LxWxH	419mm x 349mm x 497mm
Weight	10 Kg

Carton Box

LxWxH	630mm x 415mm x 510mm
Weight	14.6 Kg



Included

Powercord	1.80m
Omega Bracket	Yes
Quick Start	Yes

Download

[Manual](#)



[DMX Chart](#)



[All Downloads](#)



Starway

22 Rue Édouard Buffard
77144 Montevrain
France

starway.eu
