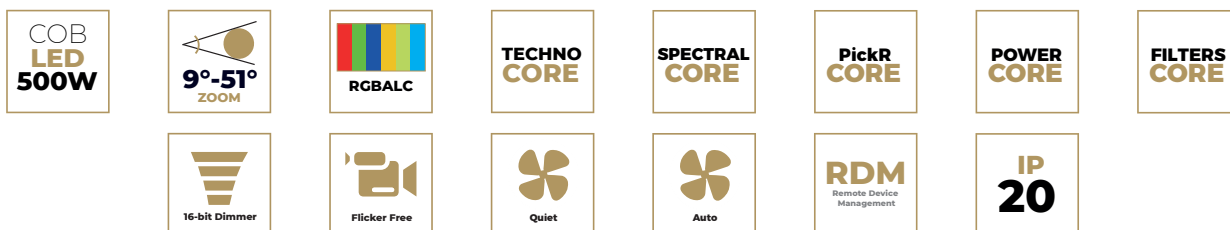




Designed for professional environments demanding power, precision, and operational comfort, **HERITAGE Fresnel 250** delivers a premium light signature, perfectly suited to studios, stages, and high-end installations. It combines photometric performance, light quality, and operational flexibility to 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 250** can also be operated in X,Y mode within the CIE 1931 color space. Its manual zoom range from 9° to 51° 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 10.239 lumens and a CRI > 98, **HERITAGE Fresnel 250** 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)

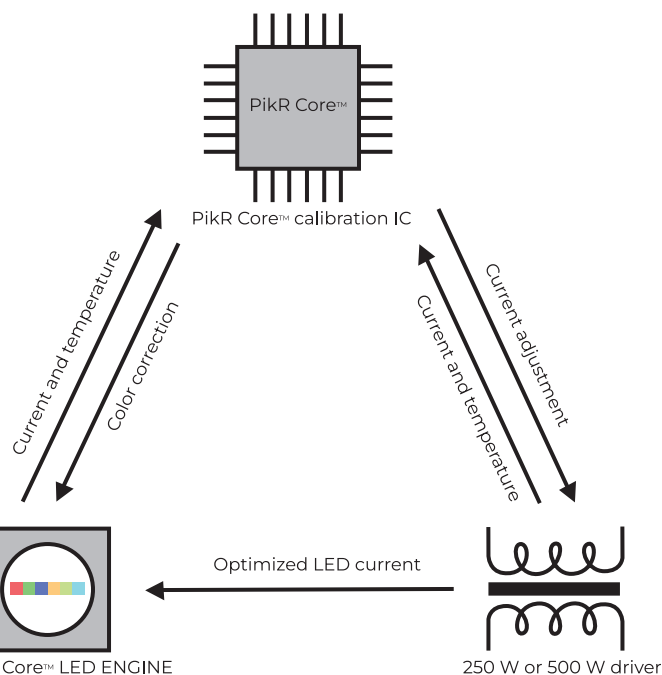
The LED engine and the **PikR Core™** calibration and processing chip form the technological heart of **Spectral Core™**, ensuring stability and repeatability.

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 250

Source

Engine	Spectral Core™ RGB + Amber + Lime + Cyan
LED Watts	500W
Engine CCT	8900K (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	330W
Standby Power Consumption	5,5W
Voltage Range	110V/240V - 50Hz/60Hz
Power Factor	0.99@110V - 0.98@240V
Current (Max)	3A@110V - 1.5A@240V
Fuse	T5A@250V
Connector	PowerCON True1 (In/Out)
Max Fixtures per Circuits (16A)	5@110V - 10@240V

Compliance & Protection

IP Rating	IP 20
Certification	CE, Rohs

Optical

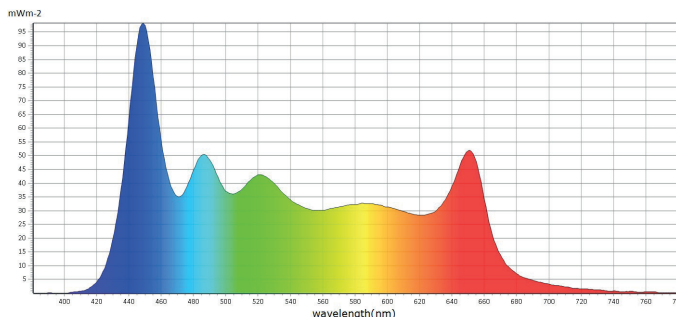
Lens Diameter	150 mm
Zoom Range (manual)	9.15° - 51.28°
Zoom Ratio	5.6:1

Colour System

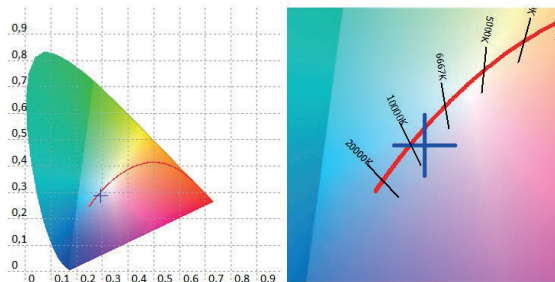
Colour System	RGBALC Virtual Macros (83 LeeFilters gels)
Control	8 bits / 16 bits

Performances

Fixture Luminous Flux (Max)	10329 lm
Fixture Illuminance	Narrow: 6554 lux@5m 9° Medium: 2791 lux@5m 33° Wide: 1060 lux@5m 51°
Fixture CCT Output	1800 - 10000 K
CRI	@6500k: 96.7 @3200k: 98
Tm30	@6500k: 93.78 @3200k: 95.79
TLCI	@6500k: 97.16 @3200k: 97.32
CQS	@6500k: 95.2 @3200k: 97.08

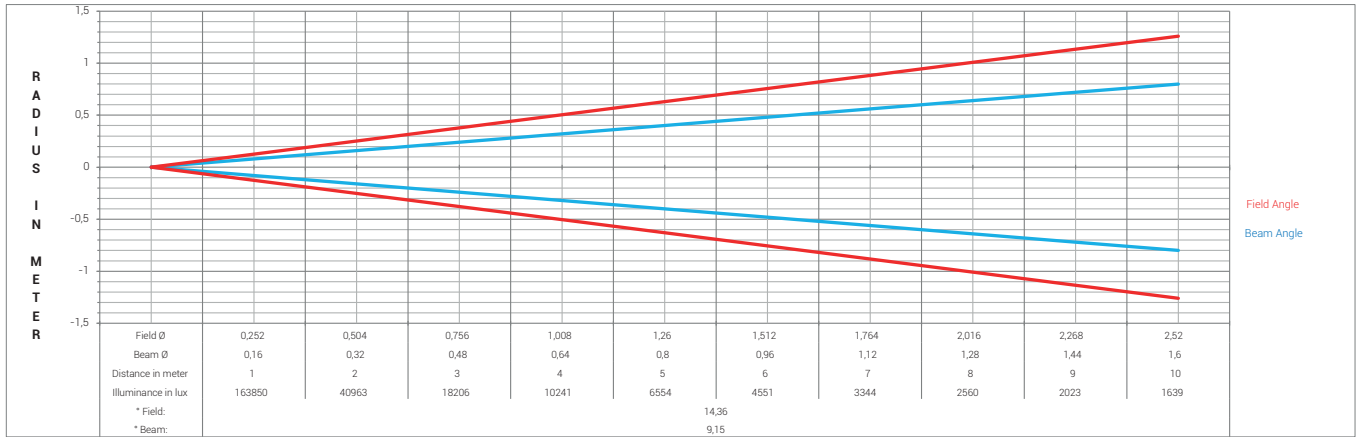


■ CIE1931

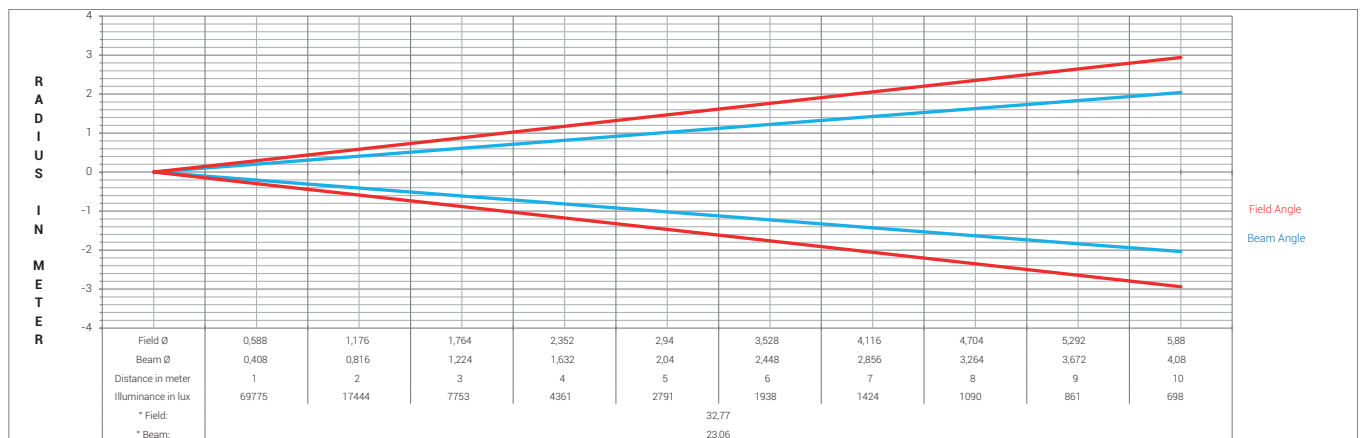


Photometry

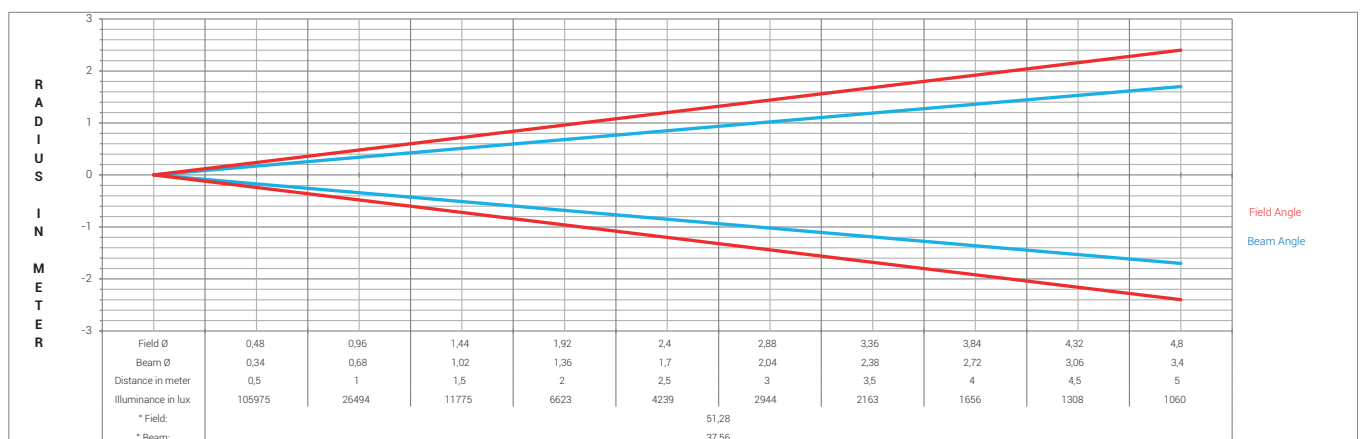
Narrow Angle (9°)



Medium Angle (33°)



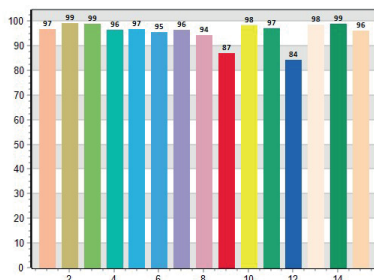
Wide Angle (51°)



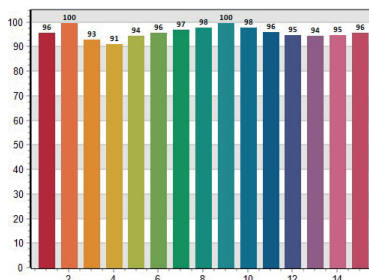
Colorimetry

@6500°K (Calibrated)

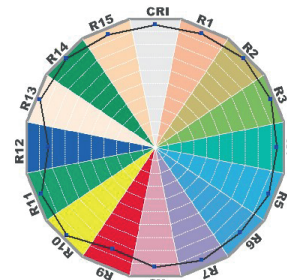
■ CRI: 96,73



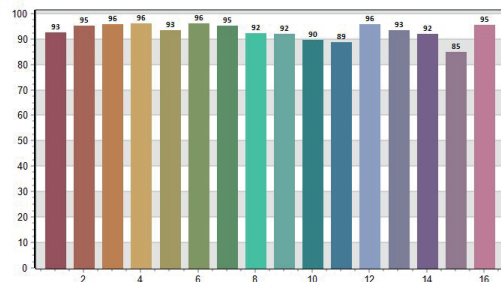
■ CQS: 95,20



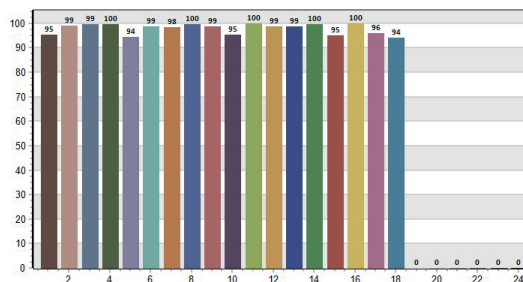
■ CRI-2



■ TM30: 93,78

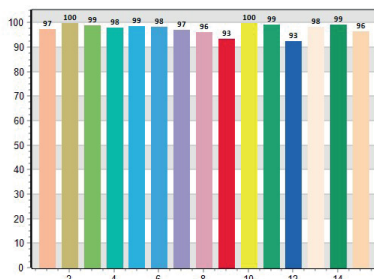


■ TLCI: 97,16

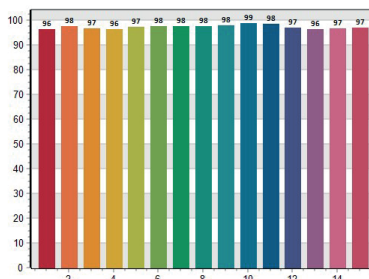


@3200°K (Calibrated)

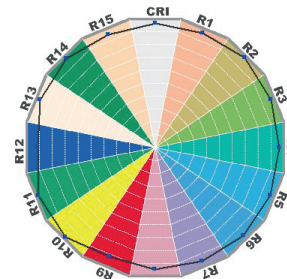
■ CRI: 97,99



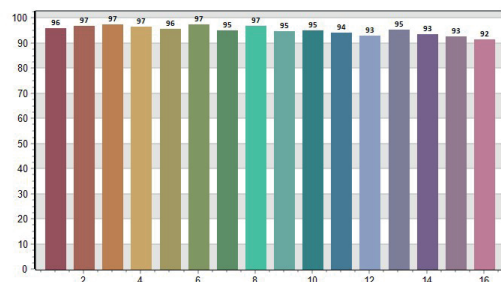
■ CQS: 97,08



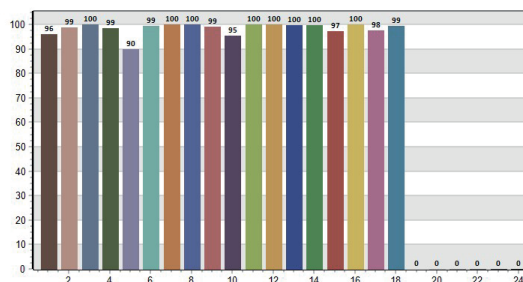
■ CRI-2



■ TM30: 95,79



■ TLCI: 97,32



[Find the complete photometry here :](#)



TECHNICAL DATASHEET

HERITAGE

FRESNEL 250

Color & Macros

Red x: 0.7084 / y: 0.2893

Green x: 0.1664 / y: 0.7185

Blue x: 0.1572 / y: 0.0253

Amber x: 0.5609 / y: 0.4183

Lime x: 0.4167 / y: 0.5542

Cyan x: 0.0896 / y: 0.2539

Full RGBALC x: 0.2928 / y: 0.2868

8000 K (calibrated macro) CCT: 8005 K
x: 0.2943 / y: 0.3096

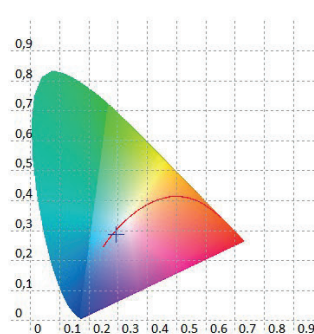
6500K (calibrated macro) CCT: 6598 K
x: 0.3118 / y: 0.3237

5600 K (calibrated macro) CCT: 5687 K
x: 0.3282 / y: 0.3399

3200 K (calibrated macro) CCT: 3275 K
x: 0.4183/ y: 0.3965

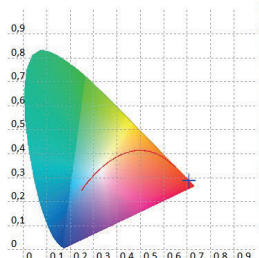
RGBALC@ 100%

■ CIE1931



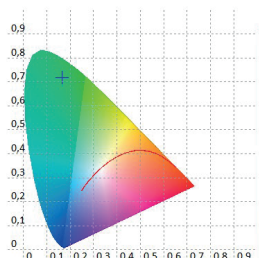
Red @ 100%

■ CIE1931



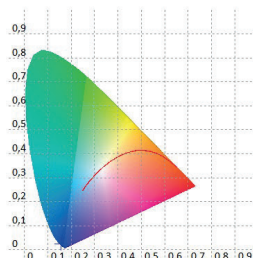
Green @ 100%

■ CIE1931



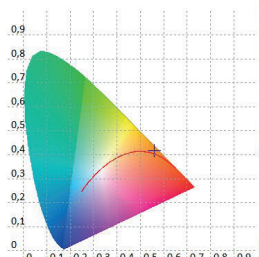
Blue @ 100%

■ CIE1931



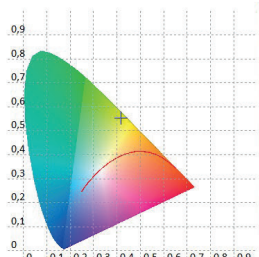
Amber @ 100%

■ CIE1931



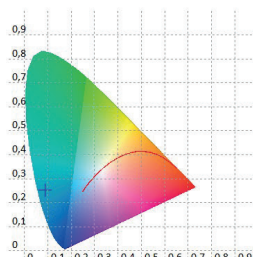
Lime @ 100%

■ CIE1931



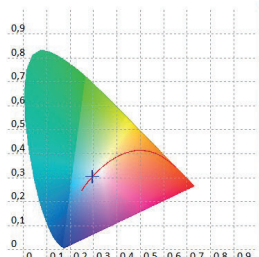
Cyan @ 100%

■ CIE1931



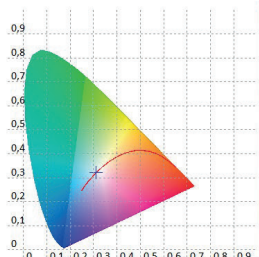
8000 K (calibrated)

■ CIE1931



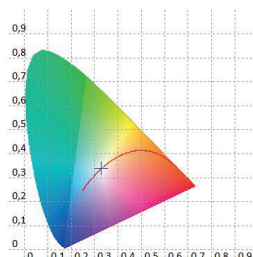
6500 K (calibrated)

■ CIE1931



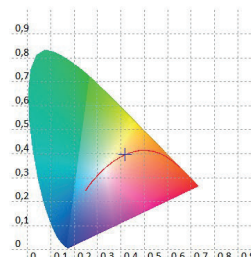
5600 K (calibrated)

■ 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	27dB @ 1m
Fan Mode High	28dB @ 1m
Fan Mode Quiet	25dB @ 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°	65°C
Total Heat Dissipation (Calculated +/- 10%)	1126 BTU/h - 330W@240V
Heat Dissipation (standby) (Calculated +/- 10%)	19 BTU/h - 5.5W@240V

TECHNICAL DATASHEET

HERITAGE

FRESNEL 250

Material

Housing	Plastic Die Cast Aluminium
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Physical

Fixture

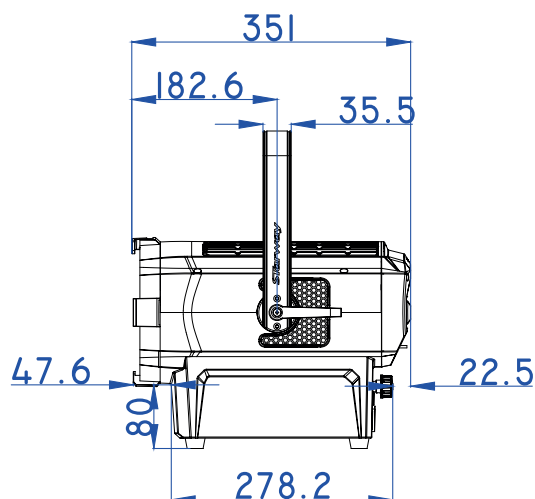
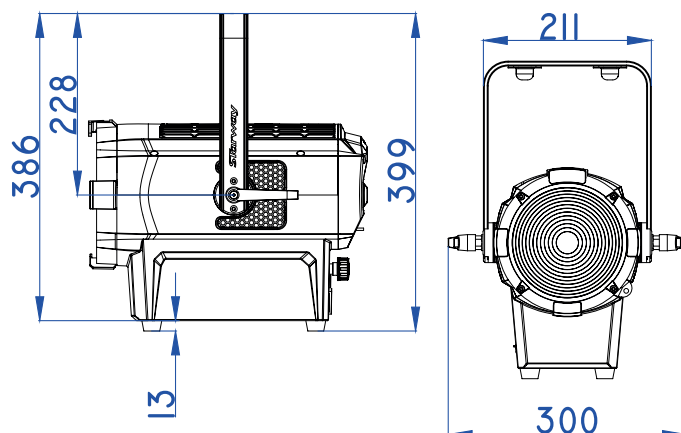
LxWxH 351mm x 399mm x 300mm

Weight 6.2 Kg

Carton Box

LxWxH 530mm x 370mm x 435mm

Weight 9 Kg



Included

Powercord 1.80m

Omega Bracket Yes

Quick Start Yes

Download

[Manual](#)



[DMX Chart](#)



[All Downloads](#)



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