

# LEDBeam 350™



**ROBE**®

# LEDBeam 350™

12 X 40W  
RGBW  
MULTICHIPS

PERFECT  
COLOUR  
MIXING

L3™ LOW  
LIGHT  
LINEARITY

ZOOM  
RANGE 3.8°-60°

EXTREMELY  
FAST PAN  
TILT  
MOVEMENT

TRUE  
WHITES



## Bigger, bolder, brighter! Building on the highly successful LEDBeam 150™ the big brother LEDBeam 350™ has arrived, delivering more punch and presence to create even more fast sweeping beams and gorgeous washes.



Maintaining the spectacular 3.8° to 60° zoom range and Robe's innovative lens coating technology, which keeps lenses clearer and scratch-free, we have added more advanced technology. CPulse™, our highly respected Pulse Width Modulation control system, removes any on-screen camera flicker, making LEDBeam 350's eminently suitable for work with the most advanced HD and UHD cameras.

All features, including fast movement, colour mixing, zoom and control from its smaller sister can be maintained via a compatibility mode, meaning you can seamlessly use both models together with identical behaviour on the same rig. The 12 x 40W RGBW high power multichips provide plenty of output with RGBW or CMY colour mixing control. DataSwatch™ contains 66 premixed colours and tones, including whites, for fast, reliable colour selection, while our L3™ dimming system takes care of imperceptible fades to black.

Being exceptionally quiet, due to the advanced cooling system and new super smooth zoom stepper motors, tungsten lamp emulation for lamps from 750W to 2500W, and a variable CTO from 2.700K to 8.000K, the fixture is ideal for theatrical use.

The LEDBeam 350™ FW version offers a Fresnel-Wash type of beam for smoother edges and better colour homogenization.

### Source

- Light source type: 12 x 40W RGBW multichips
- LED life expectancy: min. 50.000 hours
- Typical lumen maintenance: L70/B50 @ 50.000 hours

### Optical System

- Robe's proprietary optical design
- High-efficiency zoom optical system, ratio 15.5:1
- Zoom range: 3.8°–60°
- Fixture total lumen output:
  - LEDBeam 350™: 8.200 lm (integrating sphere), 6.600 lm (goniophotometer)
  - LEDBeam 350™ FW: 7.350 lm (integrating sphere), 5.900 lm (goniophotometer)
- Illuminance: 28.200 lx @ 5 m (LEDBeam 350)  
20.000 lx @ 5 m (LEDBeam 350 FW)
- RLCT™ Innovative lens coating technology (Patent pending)

### Dynamic Effects and Features

- Colour mixing mode RGBW or CMY
- White light: Variable CCT 2.700K - 8.000K
- DataSwatch™ filters: with 66 pre-programmed colours and tones including most used whites 2.700K, 3.200K, 4.200K, 5.600K and 8.000K
- Tungsten lamp effect: 750W, 1.000W, 1.200W, 2.000W, 2.500W lamp emulation for whites from 2.700K to 4.200K (red shift and thermal delay)
- Motorized exceptionally quiet zoom (LEDBeam 350), Motorized zoom (LEDBeam 350 FW)
- Electronic strobe effect with variable speed up to 20 Hz, pre-programmed random strobe & pulse effects
- High resolution electronic dimming: 0–100 %
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- Cpulse™ special flicker-free management for HD and UHD cameras, ready for 8K and 16K
- Extremely quiet operation suitable for all types of production in Theatre and TV

### Control and Programming

- Setting & Addressing: two-row LCD display & 4 control buttons, stand-alone operation with 3 editable programs (each up to 40 steps)
- Protocols: USITT DMX-512, RDM
  - ArtNet, MA Net, MA Net2, sACN - on request
- REAP™ - Robe Ethernet Access Portal
- Wireless CRMX™ technology from Lumen Radio - on request
- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity - on request
- DMX Protocol modes: 3; Control channels: 22, 16, 24
- Pan/Tilt resolution: 16 bit
- RGBW / CMY: 8 or 16 bit
- Zoom: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

### Movement

- Pan movement: 540° standard, 450° reduced
- Tilt movement: 228°
- Movement control: Standard and Speed
- Controllable speed of Pan/Tilt movement
- Automatic Pan/Tilt position correction

### Thermal Specification

- Maximum ambient temperature: 45 °C (113°F)
- Maximum surface temperature: 80 °C (176°F)
- Minimum operating temperature: -5 °C (23°F)
- Total heat dissipation: max. 1153 BTU/h (calculated)

### Noise Levels

- Sound pressure level:
  - 31 dB(A) at 1 m (quiet mode)
  - 34 dB(A) at 1 m (auto mode)

- Sound power level:
  - 39 dB(A) (quiet mode)
  - 42 dB(A) (auto mode)

### Electrical Specification and Connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: Max. 450W
- Power connector in/out: Neutrik powerCON TRUE1 in/out
- DMX and RDM data in/out: Locking 5-pin XLR
- Ethernet port in/out: RJ45, for Embedded Epass™ switch 10/100 Mbps - on request

### Approvals

- CE Compliant
- cETLus Compliant

### Mechanical Specification

- Height: 426 mm (16.8") – head in vertical position
- Width: 320 mm (12.6")
- Depth: 220 mm (8.7") – head in vertical position
- Weight
  - LEDBeam 350: 9.85 kg (21.72 lbs)
  - LEDBeam 350 FW: 9.9 kg (21.83 lbs)
- Ingress protection rating: IP20

### Rigging

- Mounting positions: Horizontally or vertically
- Universal operating position
- Mounting points: 2 pairs of 1/4-turn locking points
- 2 x Omega adaptors with 1/4-turn quick locks
- Safety cable attachment point

### Included Items

- User Manual
- Omega Adaptor CL-regular 2 pcs: 10980033

### Optional Accessories

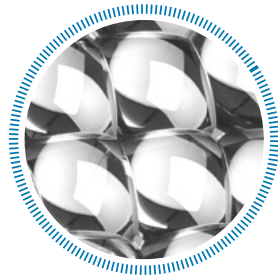
- Diffusion filter for LEDBeam 350 (2° FW): 10980559
- Wireless DMX external module: 10980127
- EggCrate: 10980560
- Doughty Trigger Clamp: 17030386
- Safety wire 36 kg: 99011963
- Mounting adapter for one omega holder - black: 10980100
- Mounting adapter for one omega holder - white: 10980129
- Mounting adapter for one omega holder - neutral: 10980113
- Mains Cable powerCON TRUE1 In/Schuko, 2 m, Indoor: 13052405
- Mains Cable powerCON TRUE1 In/US, 2m, Indoor: 13052406
- Daisy Chain powerCON TRUE1 In/Out, EU, 2 m, Indoor: 13052439
- Mains Cable powerCON TRUE1 In/CEE 16A, 2 m, Indoor: 13052445
- Mains Cable powerCON TRUE1 In/Open ended, 2 m, Indoor: 13052407
- Daisy Chain powerCON TRUE1 In/Out, US, 2 m, Indoor: 13052440
- Daisy Chain powerCON TRUE1 In/Out, EU, 5 m, Indoor: 13052444
- Single Top Loader Case: 10120273
- Quad Top Loader Case: 10120274
- Foam Shell: 20020397

### Legal

- LEDBeam 350™ is a Trademark of Robe lighting s. r. o.
- LEDBeam 350™ and LEDBeam 350™ FW are patented by Robe lighting s. r. o. and are protected by one or more pending or issued patents

### Optical System

Incorporating sophisticated customdesigned optical system combined with optional eggcrate for precise control of the light beam.



### Zoom Range

Spectacular zoom range of 3,8° to 60° offers fast sweeping beams and a wide excellent quality wash.



### Lens Coating Technology

The innovative lens coating technology protects soft plastic lenses against „surface scattering“ even when scrubbed repeatedly. Anti-static properties prolong the time period before the lenses will collect dust and create white maps on the lens surface. The new coating brings countless benefits including longer intervals between cleaning, bright and clear lenses, no scratches or marks, and higher light output (Patent pending).



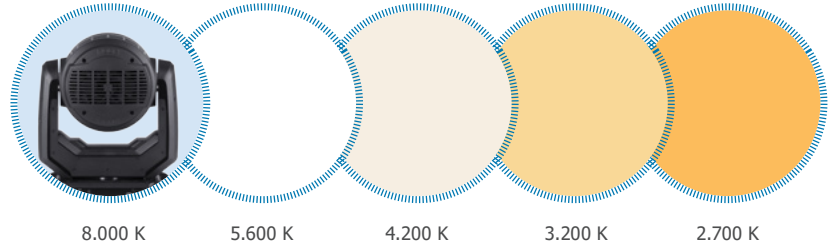
### LED Colours

LEDBeam 350™ is able to produce 4.300 from pastel to saturated colours.



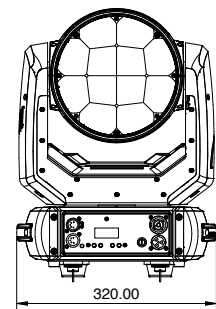
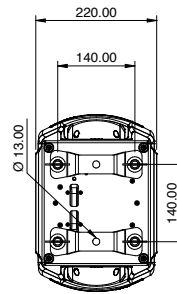
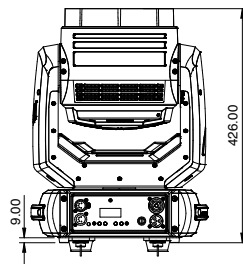
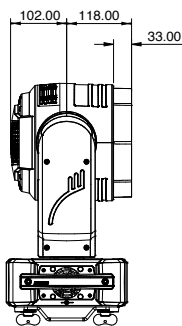
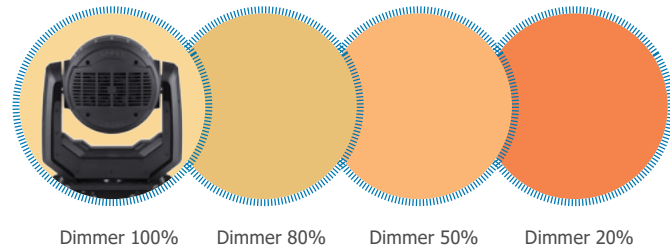
### True White Colours

Spotless colour mixing of specially calibrated LEDs together with predefined values on a Virtual Colour wheel channel allow quick direct calling of exact white hues of 2.700K, 3.200K, 4.200K, 5.600K and 8.000K.



### Tungsten Effect

The halogen lamp mode provides emulation of 750W, 1.000W, 1.200W, 2.000W and 2.500W. The dimmer channel initiates halogen lamp-like behavior (red effect and thermal delay) for each lamp type during dimming.

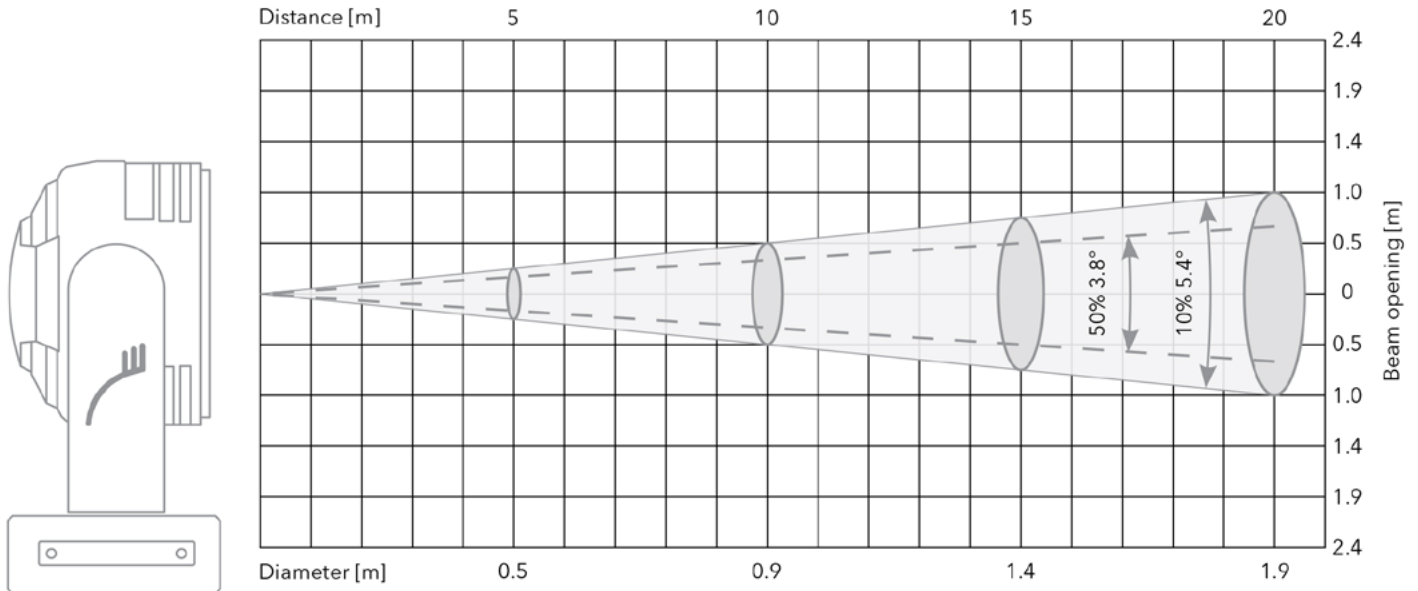


# LEDBeam 350

## Photometric report

### Beam angle 5.4° - Min. zoom

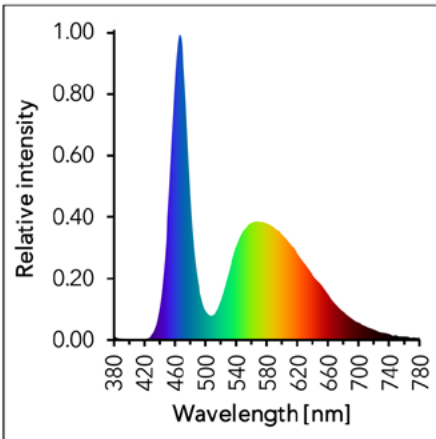
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
5.4°	3190 lm	3038 lm	705000 cd	440 W



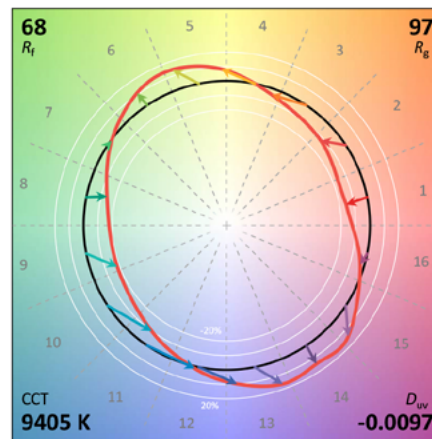
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	28200/2620	7050/655	3133/291	1763/164	1128/105	783/73	576/53	3038
Red	6640/617	1660/154	738/69	415/39	266/25	184/17	136/13	715
Green	11600/1078	2900/269	1289/120	725/67	464/43	322/30	237/22	1250
Blue	3410/317	853/79	379/35	213/20	136/13	95/9	70/6	367
White	14200/1319	3550/330	1578/147	888/82	568/53	394/37	290/27	1530

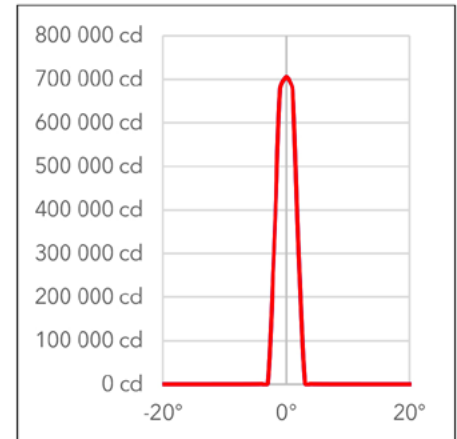
### Spectrum



### TM-30



### Light distribution



Color temperature	<b>CCT</b>	9405
Color Deviation from Black	<b>Duv</b>	-0.0098
Color Coordinate CIE 1931	<b>x</b>	0.2896
	<b>y</b>	0.2808
Color Coordinate	<b>u</b>	0.2000
	<b>v</b>	0.2910

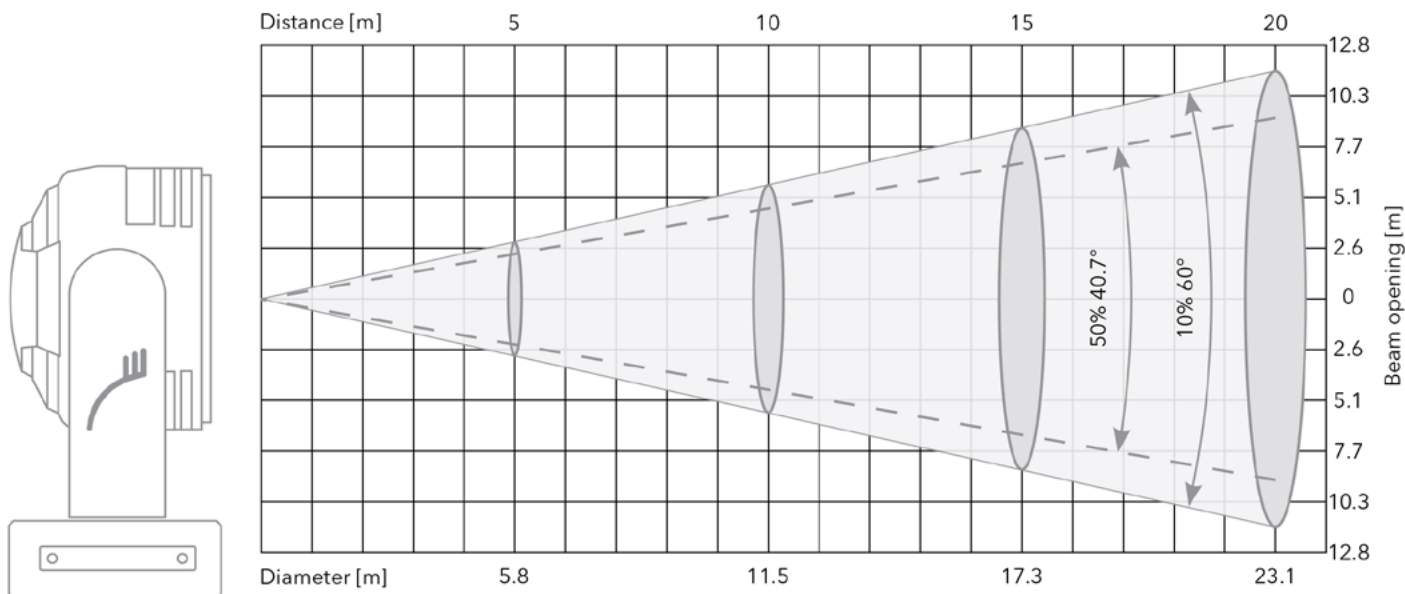
Color rendering index	<b>CRI</b>	74
Red component	<b>CRI R9</b>	12
Color fidelity	<b>TM30 Rf</b>	68
Color gamut	<b>TM30 Rg</b>	97
Television consistency Index	<b>TLCI</b>	46

# LEDBeam 350

## Photometric report

### Beam angle 60° - Max. zoom

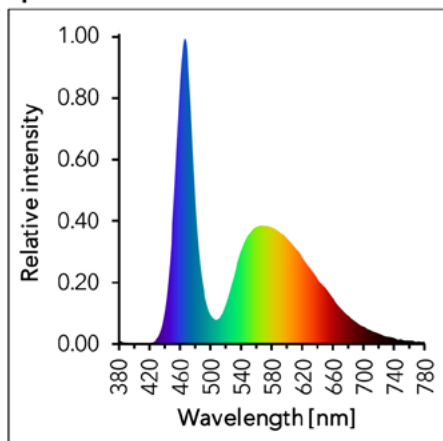
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
60°	8218 lm	6574 lm	13500 cd	440 W



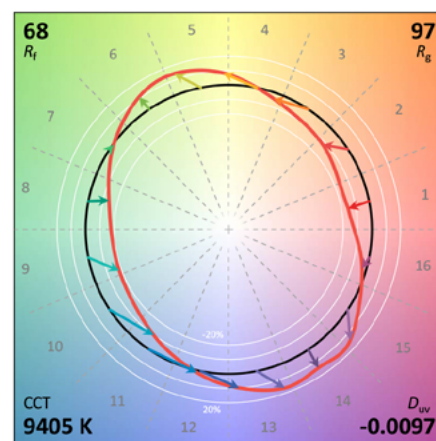
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	540/50	135/13	60/6	34/3.1	22/2	15/1.4	11/1	6574
Red	133/12	33/3.1	15/1.4	8/0.8	5/0.5	3.7/0.3	2.7/0.3	1619
Green	223/21	56/5	25/2.3	14/1.3	9/0.8	6/0.6	4.6/0.4	2715
Blue	65/6	16/1.5	7/0.7	4.1/0.4	2.6/0.2	1.8/0.2	1.3/0.1	791
White	262/24	66/6	29/2.7	16/1.5	10/1	7/0.7	5/0.5	3190

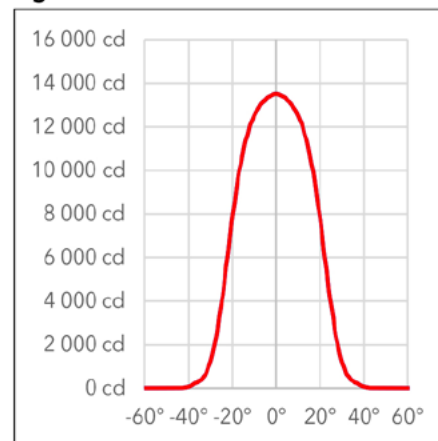
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