

ROBE®



iBOLT™

The time has come to replace your antiquated discharge sourced outdoor aerial effect luminaires with a new generation Searchlight and Skyflower fixture, to make outdoor lighting statements like never before!

With incisive solid, flat field beams, shapes and effects, the sky is your canvas. Highly and actively protected to operate in all environments, iBOLT™ projections are visible from kilometres away. Such brilliance demands attention!

Specifically designed to generate incredible power, and be perfectly safe to use, we developed the LSW-5™ engine. Its white 500W Phosphor Laser source produces an incoherent beam with an incredible intensity of 1.100.000 lx @ 20 m (42.000 lx @ 100 m). With such remarkable output, the iBOLT™ ensures ultimate contrast with the night sky for maximum impact.

Harnessing the power to deliver such presence, the large 300mm front lens in combination with the optical chain delivers ultimate, incisive beam definition. iBOLT™ has a zoom ratio of 21:1 with a zoom range of 0.4° - 8.5°, guaranteeing the creation of spell-binding aerial shafts of light.

Maximising colour options, iBOLT™ features a CMY colour mixing system and a colour wheel with 13 dichroic colours and an onboard DataSwatch™ colour library, including the most commonly used whites, you have the tools to cover everything from the dense saturates to the most refined pastel tones.

Far beyond the capabilities of a traditional searchlight, iBOLT™ offers an expansive effects suite, boasting static and rotating gobo wheels along with beam reducers tailored for in-air effects. Particularly remarkable is our proprietary SpecktaBeam™ effects engine, a patented innovation that delivers a truly transformative lighting experience.

The inclusion of a CMY + Colour wheel, complemented by the DataSwatch™ library, grants access to an extensive palette of colours limited only by imagination. Within the comprehensive iBOLT™ effects package, you'll find gobo wheels and our patented MLP™ stackable multi-level prisms, which enable independent speed and direction control. Combined with continuous PAN rotation, this unlocks a plethora of effects previously deemed unattainable.

To swirl around the sky, iBOLT™ has a pan movement range of 540° with continuous rotation control. Our MAPS™ Motionless Absolute Positioning System removes the need for pre-use pan and tilt calibration movement, while EMS™ Electronic Motion Stabilizer technology negates fixture hysteresis, removing irritating beam shake often associated with larger fixtures.

For all environment operation, iBOLT™ has the most advanced, patented IP65 protection available. Our RAINS™ Robe Automatic Ingress Protection System not only prevents ingress, it actively manages the fixture's internal microclimate, removing internal moisture build-up automatically. The system even runs an ingenious Self Pressure Test, without specialised tools, to check internal pressure buildup, ensuring maximum protection.

For operation in extreme cold, the iBOLT™ has our innovative POLAR+™ technology. When activated, the POLAR+™ standby mode will automatically maintain an internal temperature level, allowing instant operability down to minus 50 degrees centigrade!

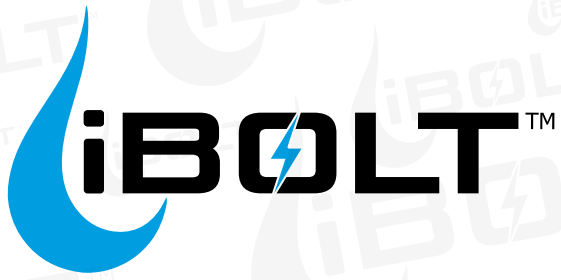
We take safety very seriously with such intense light levels. iBOLT™ has our patented, constantly scanning SafeGuard™ system which instantly reduces fixture output if someone gets within a direct, unsafe viewing distance.

Ideally suited for remote outdoor installations, iBOLT™ uses REAP™ Robe Ethernet Access Portal communication software, viewed as a web browser, giving real-time fixture monitoring of all parameters, including complete RAINST™ status information.

It's time to dominate the sky, with iBOLT™

Josef Valchar
CEO

ROBE®





The time has come to make outdoor lighting statements like never before. Now you can not only reach the sky, you can dominate it with the ultra-powerful Robe iBOLT™!

With incisive solid, flat field beams, shapes and effects, the sky is your canvas with this phosphor-laser sourced luminaire. Highly and actively protected to operate in all environments, iBOLT™ projections are visible from kilometres away. Such brilliance demands attention!

Generating such incredible power, the perfectly safe LSW-5™ engine, with its white 500W Phosphor Laser source, emits an incoherent beam light with an intensity of 1.100.000 lx @ 20 m (42.000 lx @ 100 m). With such remarkable output, iBOLT™ ensures ultimate contrast with the night sky for maximum impact.

With a large 300mm front lens creating such presence, the optics deliver ultimate, incisive beam definition. iBOLT™ has a zoom ratio of 21:1 with a zoom range of 0.4° - 8.5°, guaranteeing the creation of spell-binding aerial shafts of light.

To maximise colour options, iBOLT™ features a CMY colour mixing system and a colour wheel containing 13 dichroic colours. With the onboard DataSwatch™ colour library containing 66 pre-programmed colours, including the most common whites, you have the tools to cover everything from the dense saturates to the most refined pastel tones.

Far beyond the capabilities of a traditional searchlight, iBOLT™ offers an expansive effects suite, boasting static and rotating gobo wheels along with beam reducers tailored for in-air effects. Particularly remarkable is our proprietary SpektraBeam™ effects engine, a patented innovation that delivers a truly transformative lighting experience. Combined with the comprehensive iBOLT™ effects package, you'll find gobo wheels and our patented MLP™ stackable multi-level prisms, which enable independent speed and direction control. To swirl around the sky iBOLT™ features a 540° pan indexing range that can be easily switched to a continuous PAN rotation unlocking a plethora of effects previously deemed unattainable.

The MAPS™ Motionless Absolute Positioning System removes the need for pre-use pan and tilt calibration movement. EMST™ Electronic Motion Stabilizer technology negates fixture hysteresis and enables instant stopping, removing irritating beam shake often associated with larger fixtures, giving total control of your skyward projections.

Ensuring operation in all environments, iBOLT™ contains the most advanced, patented IP65 protection available. At the heart of the protection is RAINS™ Robe Automatic Ingress Protection System. This highly advanced patented technology not only prevents ingress, it actively manages the fixture's internal microclimate, removing internal moisture build-up caused by constant heating and cooling to provide maximum protection for electronics.

The luminaire runs an ingenious Self Pressure Test to check internal pressure. Requiring no special tools and taking under 3 minutes, the test provides an error message where gaskets and covers were not replaced correctly or locking screws incorrectly tightened, ensuring maximum protection.

For operation in extreme cold, the iBOLT™ contains our innovative POLAR+™ technology. When activated, POLAR+™ will automatically maintain an internal temperature level, allowing instant operability down to minus 50 degrees centigrade!

With such power, the intense light levels of iBOLT™ require additional safety measures. Our patented, constantly scanning ScanGuard™ system instantly reduces fixture output if someone gets within an unsafe viewing distance.

Ideally suited for remote outdoor installations, REAP™ Robe Ethernet Access Portal communication software, viewed as a web browser, shows realtime fixture monitoring of all parameters, including complete RAINS™ status information such as pressure and internal saturation levels.

By including NFC Near-Field Communication technology, you can access setup, diagnostic and performance features, even without power, directly from your mobile device using the Robe Com app.

iBOLT™ - Dominate the sky



Source

- Light source type: LSW-5™ 500W White Laser Source

Optical System

- Robe's proprietary optical design (Patent pending)
- Zoom optical system: 21:1
- Zoom range: 0.4° - 8.5°
- Output lens diameter: 300 mm
- Illuminance:
 - 1.100.000 lx @ 20 m
 - 42.000 lx @ 100 m

Dynamic Effects and Features

- Cyan: 0 - 100%
- Magenta: 0 - 100%
- Yellow: 0 - 100%
- Colour Wheel: 13 dichroic filters + white
- Rotating gobo wheel: 9 rotating gobos + open, indexable and replaceable gobos
- Static gobo wheel: 14 gobos + open
- MLP™ - Patented Multi-Level Prisms allow multiple prisms to be "stacked" while retaining individual speed and direction control. With variable shape and size it creates unlimited dynamic, multi-level flower and beam effects: Innovative Effect Engine consisting of 6 prisms placed on two wheels, producing 12 various Beam and Flower effects
- SpektraBeam™ - Paradigm-shifting patented effects engine. See it to believe it. The true, monumental breakthrough in effects modules
- Pre-programmed random strobe & pulse effects
- Dimmer: 0 - 100%
- DataSwatch™ filters: pre-programmed 66 colours and tones including most used whites 2.700K, 3.200K, 4.200K, 5.600K and 8.000K

- Motorised zoom and focus
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black
- AirLOC™ (Less Optical Cleaning) technology greatly reduces the level of airborne particles drawn over the optical elements. This increases the overall performance, light quality and time between routine cleaning and maintenance.
- POLAR+™ for power saving and instant operation in extremely cold weather conditions
- MAPS™ - Motionless absolute positioning system for Pan & Tilt (Patented)
- ScanGuard™ - Constantly scanning safety feature with auto-cut to prevent risk of direct source viewing

Control and Programming

- Setting & Addressing: ROBE Navigation System 2 (RNS2)
- Display: QVGA Robe screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, built-in analyser for easy fault finding, NFC app controller
- Protocols: USITT DMX-512, RDM, ArtNet, MA Net, MA Net2, sACN
- Wireless CRMX™ technology from Lumen Radio
- Epass™: Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity
- REAP™ - Robe Ethernet Access Portal
- RAINS™ (Robe Automatic Ingress Neutralization System) manages humidity, temperature and pressure control using an active monitoring system to automatically remove any moisture detected within the fixture and provides constant monitoring to ensure peak performance
- DMX Protocol modes: 1
- Control channels: 37

- Pan & Tilt resolution: 16 bit
- Colour wheel positioning: 8 or 16 bit
- CMY: 8 bit
- Rotating gobo wheel positioning: 8 bit
- Gobo indexing & rotation: 8 or 16 bit
- Static gobo wheel positioning: 8 bit
- Prism indexing & rotation: 8 bit
- Focus: 8 or 16 bit
- Dimmer: 8 or 16 bit

Movement

- Pan movement range 540° with continuous rotation control
- Tilt movement: 265°
- Movement control: Standard and Speed
- Controllable speed of Pan & Tilt movement
- Automatic Pan & Tilt position correction
- EMS™: Electronic Motion Stabilizer system for Pan & Tilt reducing beam deviation caused by truss movement or vibration (Patented)
- MAPS™ - Motionless absolute positioning system for Pan & Tilt (Patented)

Rotating Gobos

- Glass gobos: 9 rotating gobos + open
- Outside diameter: 15.9 mm
- Image diameter: 12.5 mm
- Thickness: 1.1 mm
- High temperature borofloat or better glass
- Patented slot & lock system for easy replacement of gobos

Static Gobos

- Aluminium wheel with fixed gobos: 10 gobos & 4 beam reducers + open position

Thermal Specification

- Maximum ambient temperature: 50 °C (122 °F)
- Maximum surface temperature: 100 °C (212 °F)
- Minimum operating temperature: -50 °C (-58 °F)
- Total heat dissipation: max. 1.790 BTU/h (calculated)

Electrical Specification and Connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: 700W
- Power connector in: IP65 Neutrik powerCON TRUE1
- DMX and RDM data in/out: IP65 Locking 5-pin XLR connectors
- Ethernet port in/out: IP65 RJ45, for Embedded Epass™ switch 10/100 Mbps

Approvals

- CE Compliant
- cETLus Compliant (pending)

Mechanical Specification

- Height: 830 mm (32.7") - Head in vertical position
- Width: 542 mm (21.34")
- Depth: 392 mm (15.44") - Head in vertical position
- Weight: 54.4 kg
- Ingress protection rating: IP65

Rigging

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

Included Items

- User Manual
- Omega Adaptor CL-regular 2 pcs
- Power cord including powerCON TRUE1 In connector:
US:13052277-01
EU:13052276-01

Optional Accessories

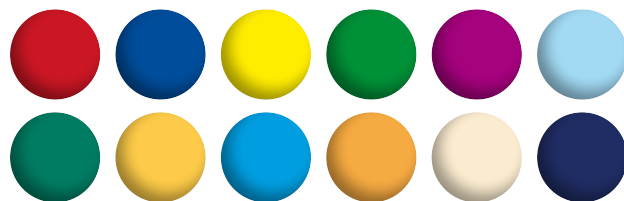
- Doughty Trigger Clamp: 17030386
- Safety wire 100 kg: 99011964
- Single Top Loader Case: 10120341-01

Legal

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



Colour Wheel



CMY Colour Mixing system:



Static Gobo Wheel

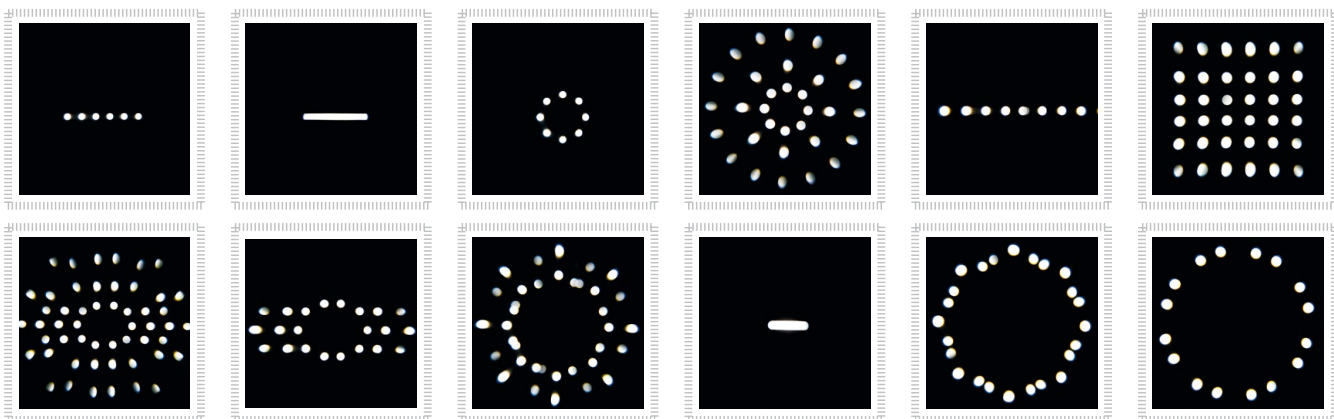


Rotating Gobo Wheel



Beam and Flower Effects

Innovative Effect Engine consisting of 6 prisms placed on two wheels, producing 12 various Beam and Flower effects (Patented).



SpektraBeam™

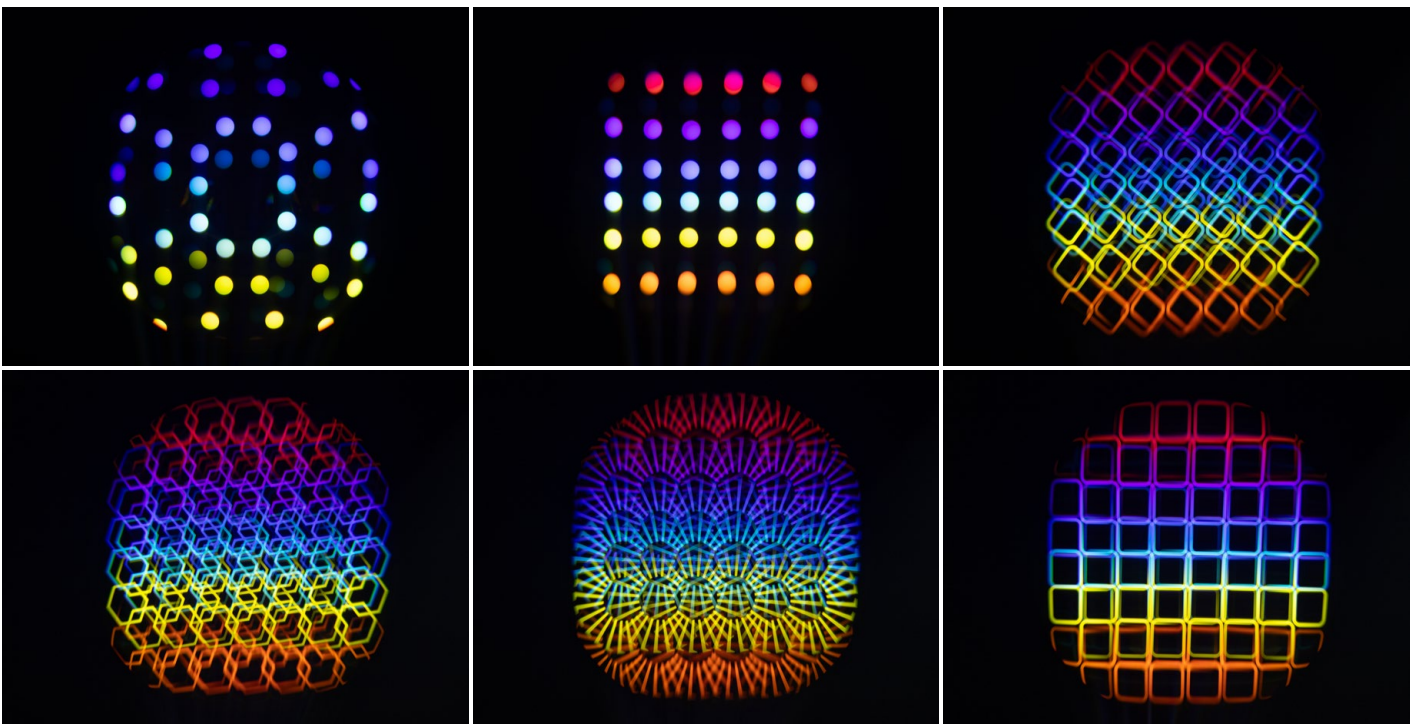
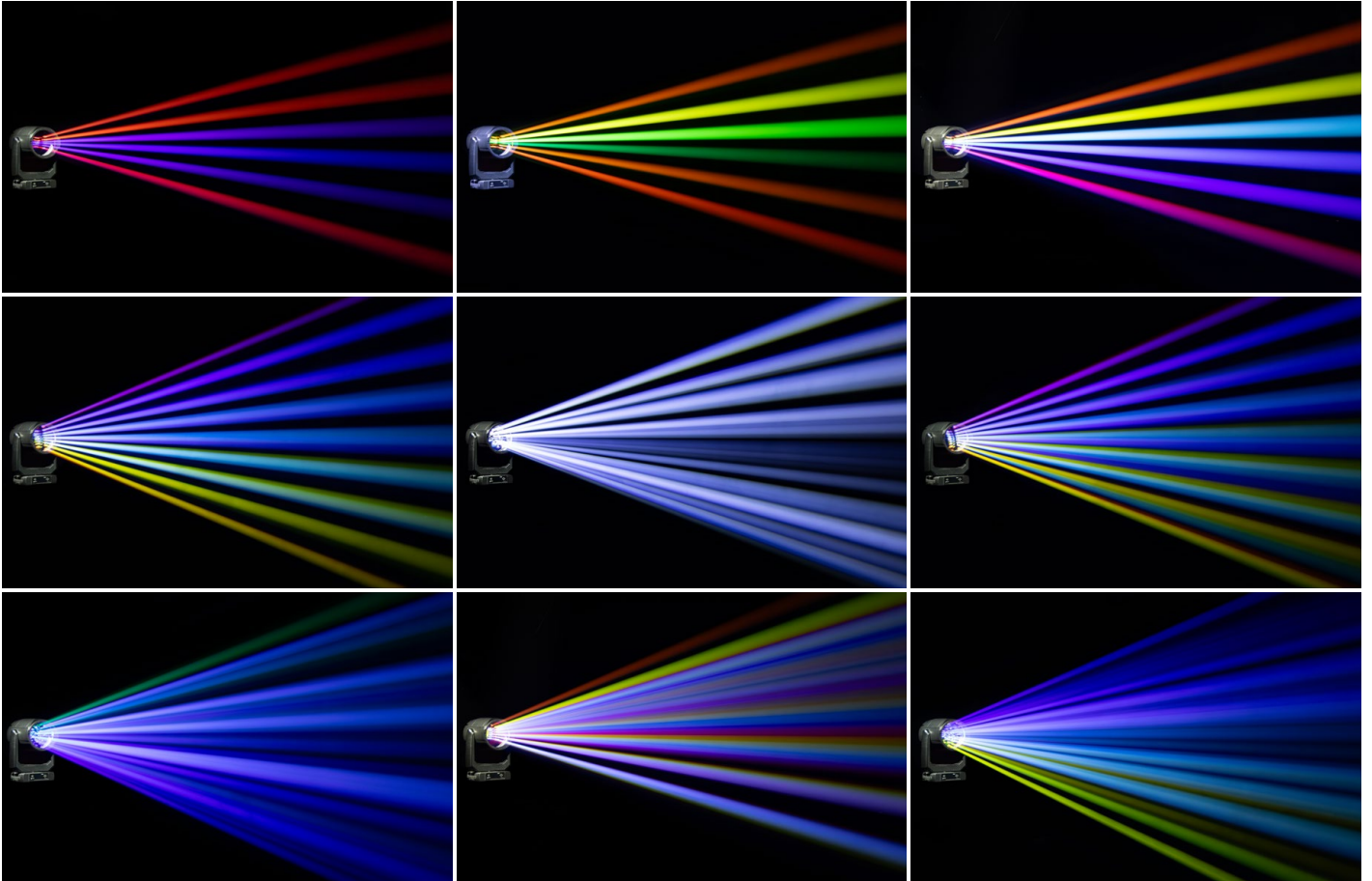
If piercing beams of light with optimized contrast tracking across the night sky aren't eye-catching enough, the iBOLT™ contains something truly unique: The Robe SpektraBeam™!

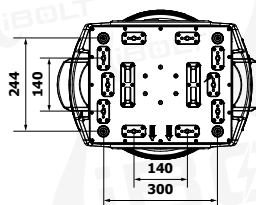
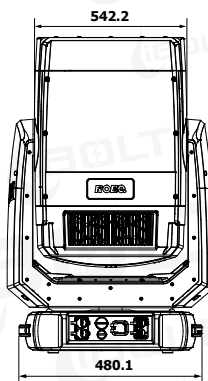
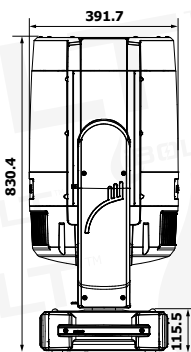
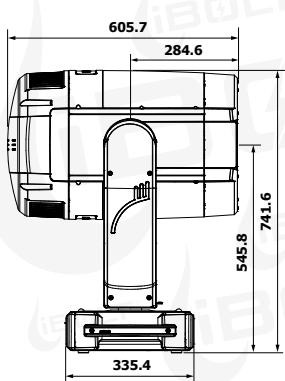
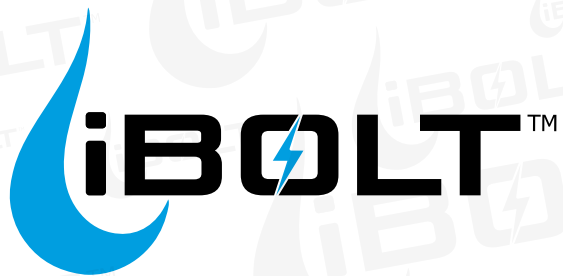
This cutting-edge module produces almost indescribable colours, patterns, shapes and effects, elevating your designs to a whole new level of visual impact. The SpektraBeam's highly innovative design allows you to split beams into sabre-like shafts and colour individual components, creating never-before-seen skyflower-style effects.

These mesmerizing visuals can be combined with on-board effect features to produce patterns and images previously only seen on stages.

With your canvas now elevated into the night sky, the endless combinations will inspire boundless creativity and leave a lasting impression.

Harnessing iBOLT's incredible power, SpektraBeam™ will transform the way you think about, design, and view projections in the night sky.



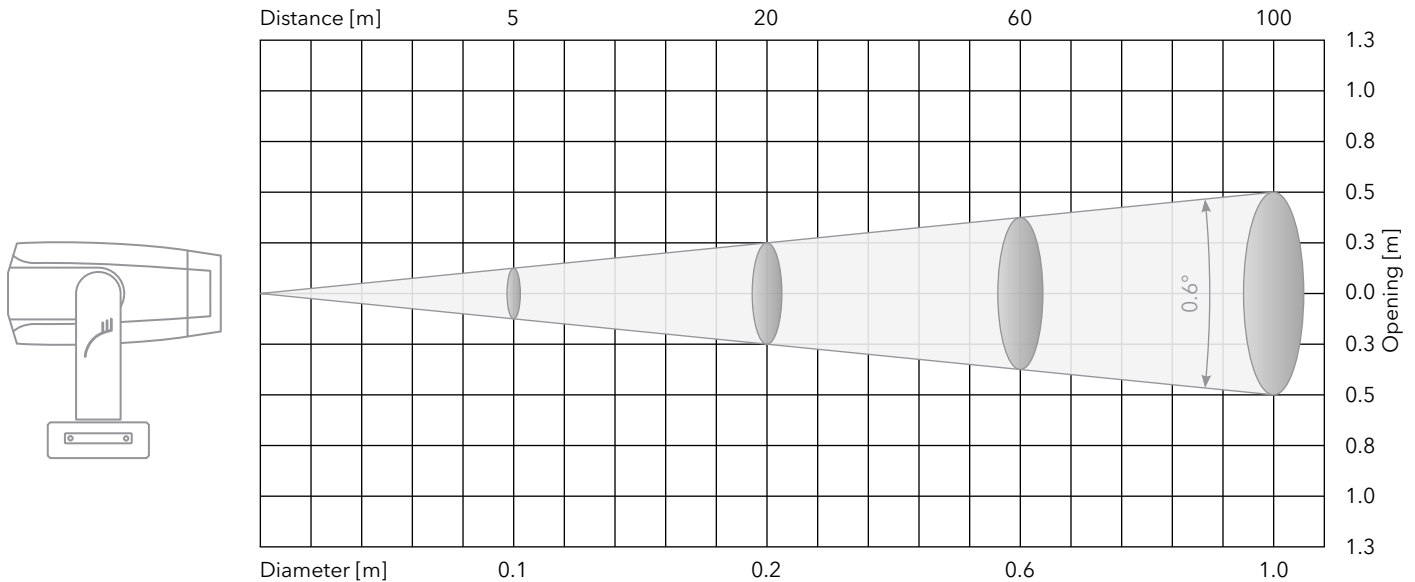


iBolt

Photometric report

Beam angle 0.6° - Min. angle

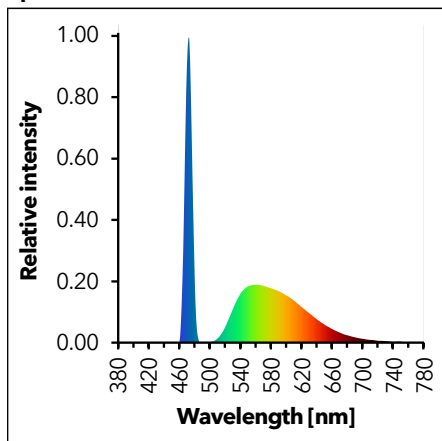
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
0.6°	15225 lm	14500 lm	412500000 cd	610 W



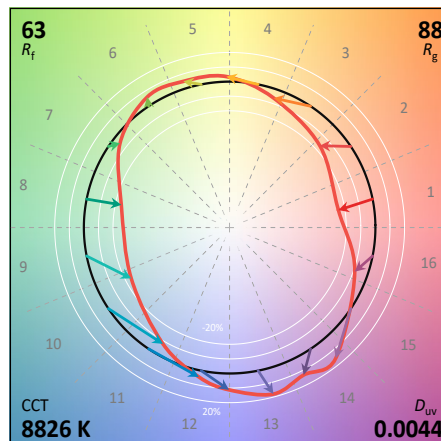
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	20 m	40 m	60 m	80 m	100 m	120 m	Total lumens
Sky Mode	16500000	1100000	260000/24155	115000/10684	65000/6039	41500/3855	30000/2787	14500

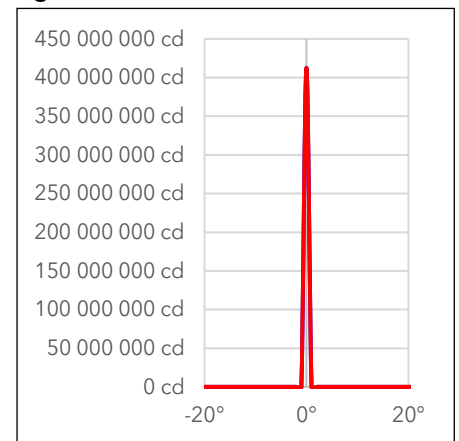
Spectrum



TM-30



Light distribution



Color temperature	CCT	8826 K
Color Deviation from Black	Duv	0.0047
Color Coordinate CIE 1931	x	0.2857
	y	0.3032
Color Coordinate	u	0.1884
	v	0.2999

Color rendering index	CRI	65
Red component	CRI R9	-58
Color fidelity	TM30 Rf	63
Color gamut	TM30 Rg	88
Television consistency Index	TLCI	38

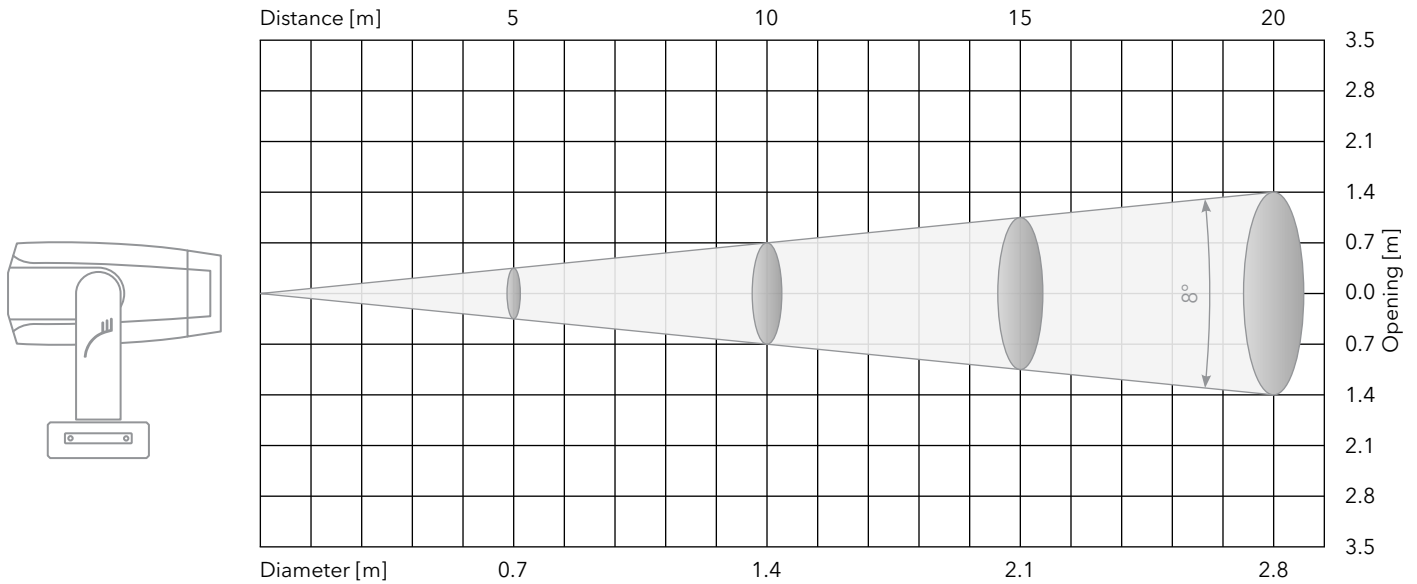
Fixture settings: DMX mode: 1
Measurement date: 28.06.2024

iBolt

Photometric report

Field angle 8° - Max. angle

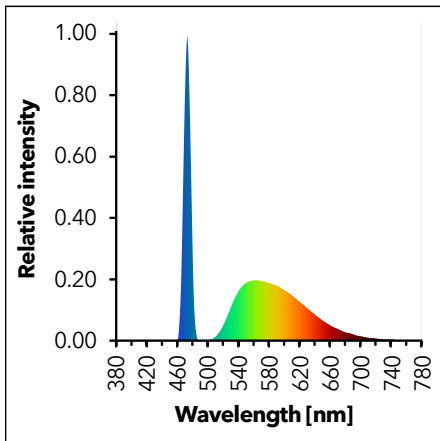
Field angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
8°	22463 lm	17970 lm	1809400 cd	610 W



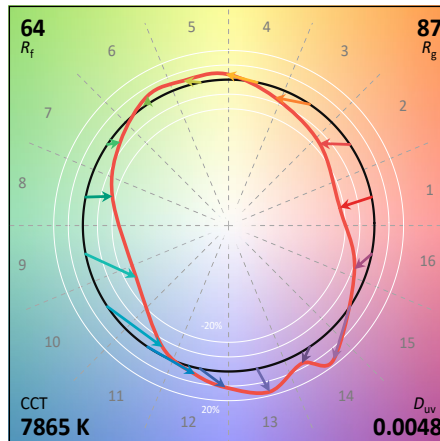
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	10 m	20 m	40 m	60 m	80 m	100 m	120 m	Total lumens
Sky Mode	18094/1681	4524/420	1131/105	503/47	283/26	181/17	126/12	17970

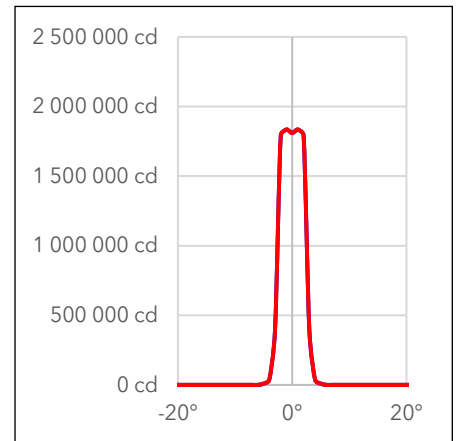
Spectrum



TM-30



Light distribution

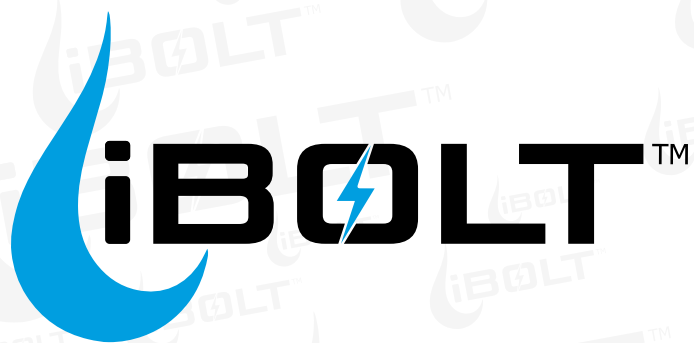


Color temperature	CCT	7865 K
Color Deviation from Black	Duv	0.0051
Color Coordinate CIE 1931	x	0.2942
	y	0.3135
Color Coordinate	u	0.1906
	v	0.3047

Color rendering index	CRI	66
Red component	CRI R9	-56
Color fidelity	TM30 Rf	64
Color gamut	TM30 Rg	87
Television consistency Index	TLCI	38

Fixture settings: DMX mode: 1
Measurement date: 28.06.2024





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