

Tetra1™



ROBE®

Tetra1™

CURTAIN,
BEAM, WASH,
CYC, FX & FOOT
LIGHT

BRIGHT DEFINED
"SHEET"
OF
LIGHT

TIGHT
4° BEAM
TO
SMOOTH
45° WASH



1x MCFE™
MULTI-COLOURED
FLOWER
EFFECTS

SEAMLESS
CURTAIN
OF
LIGHT

FAST PACED
SWEEPING
MOVEMENT

Tetra1™



TETRA1™ is a linear bar built on the highly successful Spider and Tarrantula technology. Despite its shorter length, TETRA1™ maintains the same features, quality and pixel spacing as TETRA2™.

Generating an ultra-tight 4° beam from each of the 9 pixels, they combine to produce a bright, defined "sheet" of light, desired by Lighting Designers. Seamless curtains of light can be constructed using several fixtures as the compact, detailed design allows any combination of TETRA1™ and TETRA2™ to be placed end-to-end on stage or truss, whilst maintaining equal spacing between pixels. With the addition of one exclusive Robe patented MCFE™ - Multi-Coloured Flower Effect - the pixel-driven TETRA1™ sets itself apart from others by projecting charismatic in-air animations.

The homogenised beams, together with the smooth 11:1 zoom, provide a wash out to 45°, a footlight, a wall graze or dynamic in-air effects with fast-paced sweeping movements.

Utilizing our latest L3™ (Low Light Linearity) dimming system for an imperceptible fade to black, the 18-bit control provides ultra-smooth colour mixing across the full colour spectrum. An embedded Ethernet switch and wide range of protocols (sACN, Art-Net or Kling-Net) allow a quick network installation and ease of control from media servers, DMX or the internal effects engine.

Source

- Light source type: 9x 40W RGBW LED multichips
- LED life expectancy: min. 50.000 hours
- Typical lumen maintenance: L70/B50 @ 50.000 hours

Optical System

- Robe's proprietary optical design
- Zoom range: 4° - 45°
- Highly efficient component optics
- Fixture total lumen output: 5.300 lm (integrating sphere)
4.225 lm (goniophotometer)

Dynamic Effects and Features

- Colour mixing mode RGBW or CMY
- Individual control of each RGBW pixel
- Variable CCT: 2.700K - 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)
- DataSwatch™ filters: pre-programmed 237 colours and tones including most used whites 2.700K, 3.200K, 4.200K, 5.600K and 8.000K
- Pre-programmed pixel effects with colour, dimming and strobe chases, waves and pulses at variable speed and direction
- 1x MCFE™ - Multi-Coloured Flower Effects - creating spectacular multicolour beam effects in the air rotating in both directions at variable speed (Patented)
- Motorized zoom
- Pre-programmed random strobe & pulse effects
- Electronic strobe effect with variable speed up to 20 Hz
- High resolution electronic dimming: 0-100 %
- L3™ - (Low Light Linearity) Imperceptible 18 bit dimming for ultra smooth fade to black

Control and Programming

- Setting & Addressing: QVGA Robe touch screen with battery backup, gravitation sensor for auto screen positioning, operation memory service log with RTC, stand-alone operation with 3 editable programs (each up to 88 steps), built-in analyser for easy fault finding
- Protocols: USITT DMX-512, RDM, Art-Net, MA Net, MA Net2, sACN, Kling-Net
- REAP™ - Robe Ethernet Access Portal
- Wireless CRMX™ technology from Lumen Radio - on request
- DMX Protocol modes: 6
- Control channels: 25, 45, 59, 68, 72, 81
- RGBW / CMY: 8 or 16 bit
- Zoom: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

Movement

- Tilt movement: 191°
- 16 bit movement resolution
- Controllable speed of Pan & Tilt movement

Thermal Specification

- Maximum ambient temperature: 40°C (104°F)
- Maximum surface temperature: 70°C (158°F)
- Minimum operating temperature: -5°C (23°F)

Electrical Specification and Connections

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: 400W at 230 V / 50 H
- Power connector in/out: Neutrik powerCON TRUE1 in/out
- DMX and RDM data in/out: Locking 5-pin XLR
- Ethernet port in/out: RJ45
- Embedded Ethernet switch 10/100 Mbps

Mechanical Specification

- Height: 279 mm (10.98") - head in vertical position
- Width: 508 mm (20")
- Depth: 192 mm (7.56") - head in horizontal position
- Weight: 11.3 kg (24.9 lbs)
- Ingress protection rating: IP20

Rigging

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

Included Items

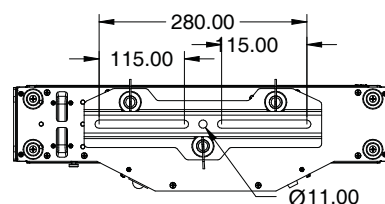
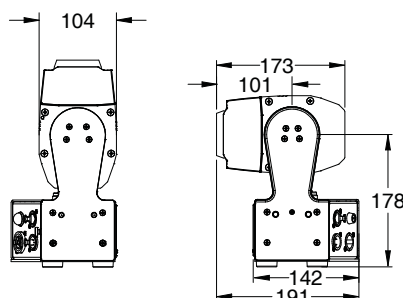
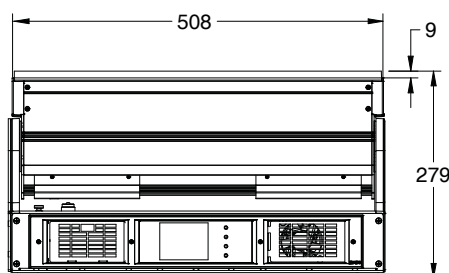
- User Manual
- Variable Omega Adaptor - 2 pcs
- Power cord including powerCON TRUE1 In connector

Optional Accessories

- Safety wire 35 kg
- Daisy Chain powerCON TRUE1 In/Out, EU, 2m, Indoor: 13052439
- Daisy Chain powerCON TRUE1 In/Out, US, 2m, Indoor: 13052440
- Daisy Chain powerCON TRUE1 In/Out, EU, 5m, Indoor: 13052444
- Single Top Loader Case: 10120261
- Six Pack Top Loader Case: 10120263
- Dual Foam Shell: 20020372
- Omega Adaptor CL-variable 2pcs in box: 10980550

Legal

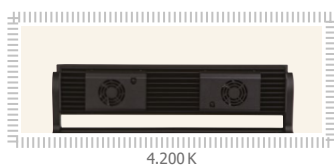
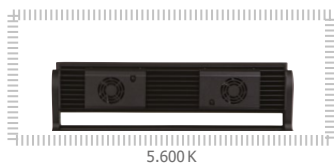
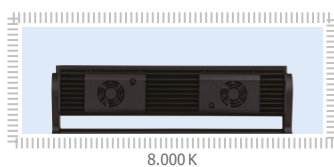
- Tetra1™ is a Trademark of Robe lighting s. r. o.
- Tetra1™ is patented by Robe lighting s. r. o. and protected by one or more pending or issued patents



Tetra1™

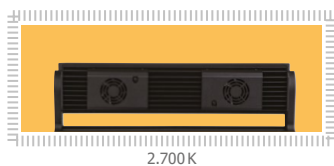
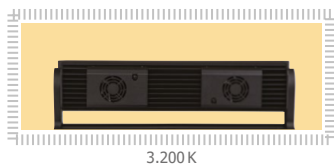
True White Colours

Spotless colormixing 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 tungsten lamps. The dimmer channel initiates halogen lamp-like behavior (red effect and thermal delay) for each lamp type during dimming.



LED Colours

Tetra1™ is able to produce 4.300 from pastel to saturated colours.



Proprietary Optical System

Robe RnD have designed a very efficient 11:1 zoom optical system with a range from 4° to 45° (Patent pending).



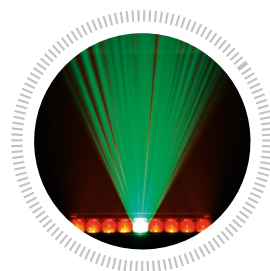
Lens Coating Technology

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).



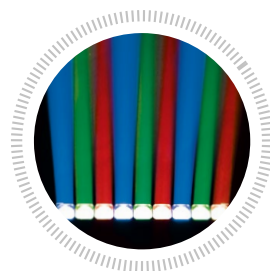
Innovative Flower Effect

The innovative MCFE™ - Multi-Coloured Flower Effect creates sharp colourful spikes of light, rotating in both directions at variable speed, adding new visual effect to the show (Patented).



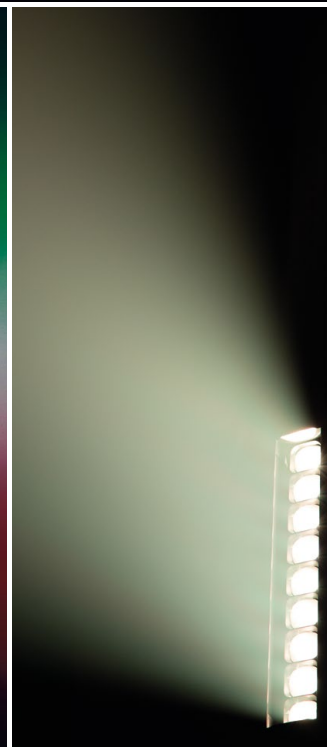
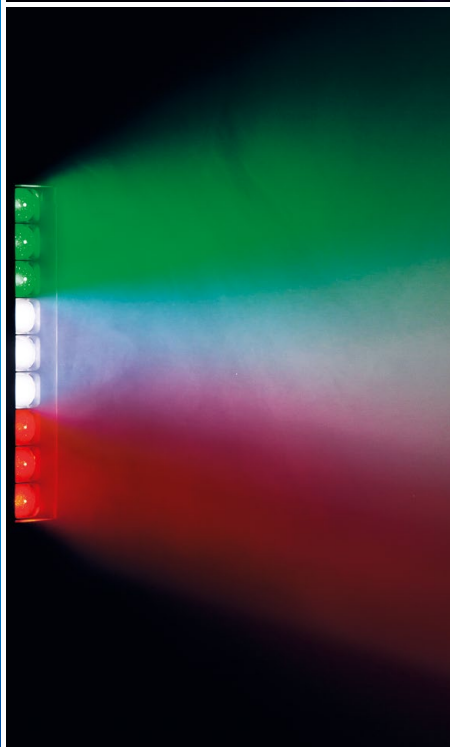
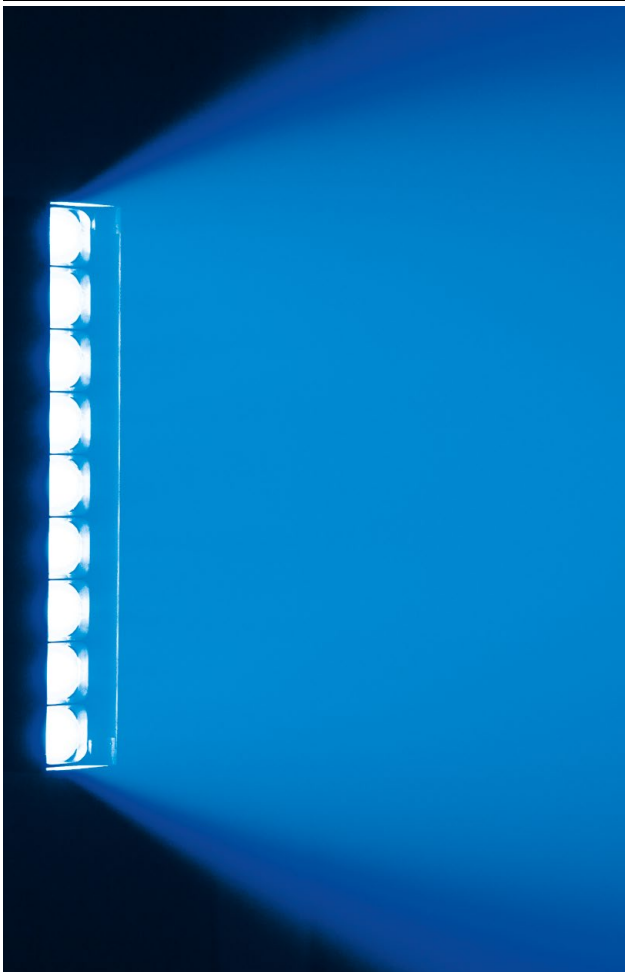
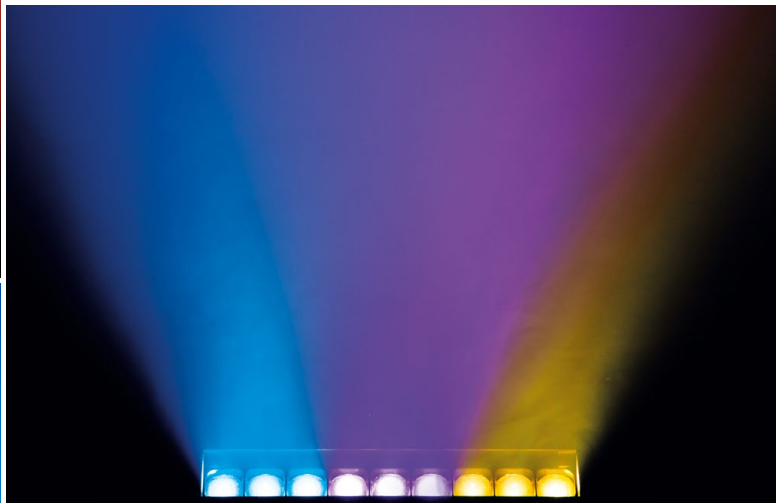
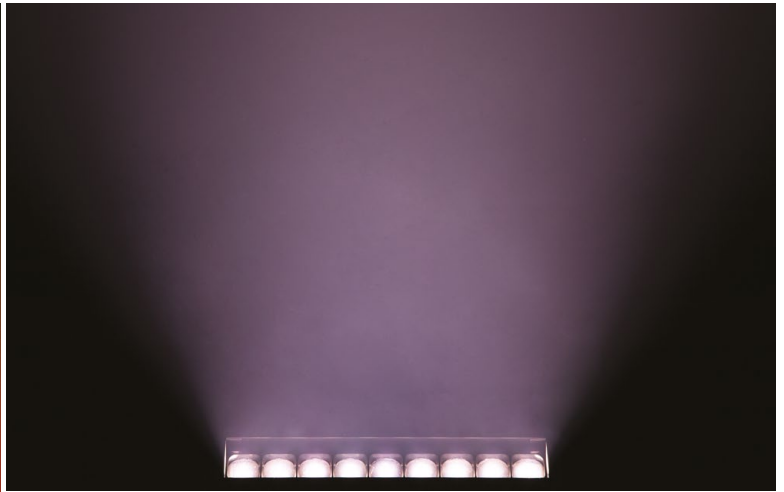
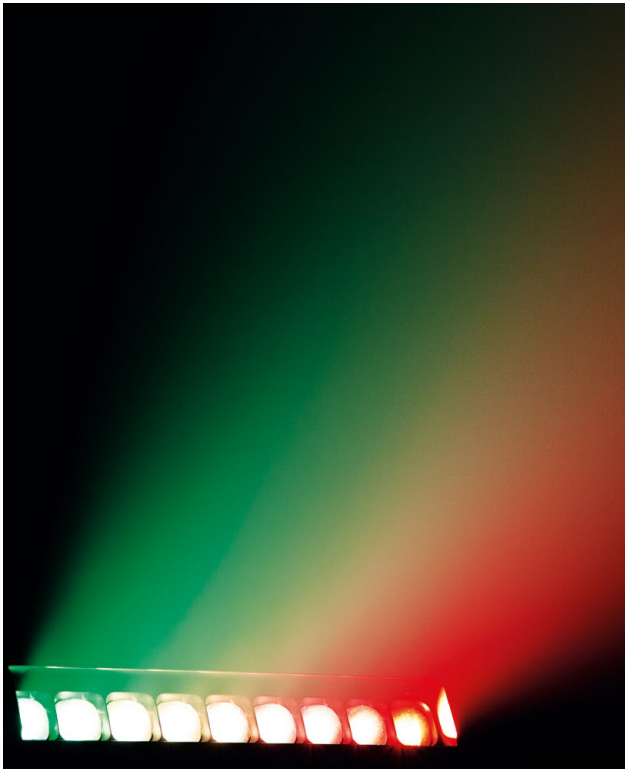
Pixel Control

Individual pixel control of each LED via DMX or Kling-Net protocols allows to turn the fixture to the low res screen or to create variety of spectacular beam effects in the air.



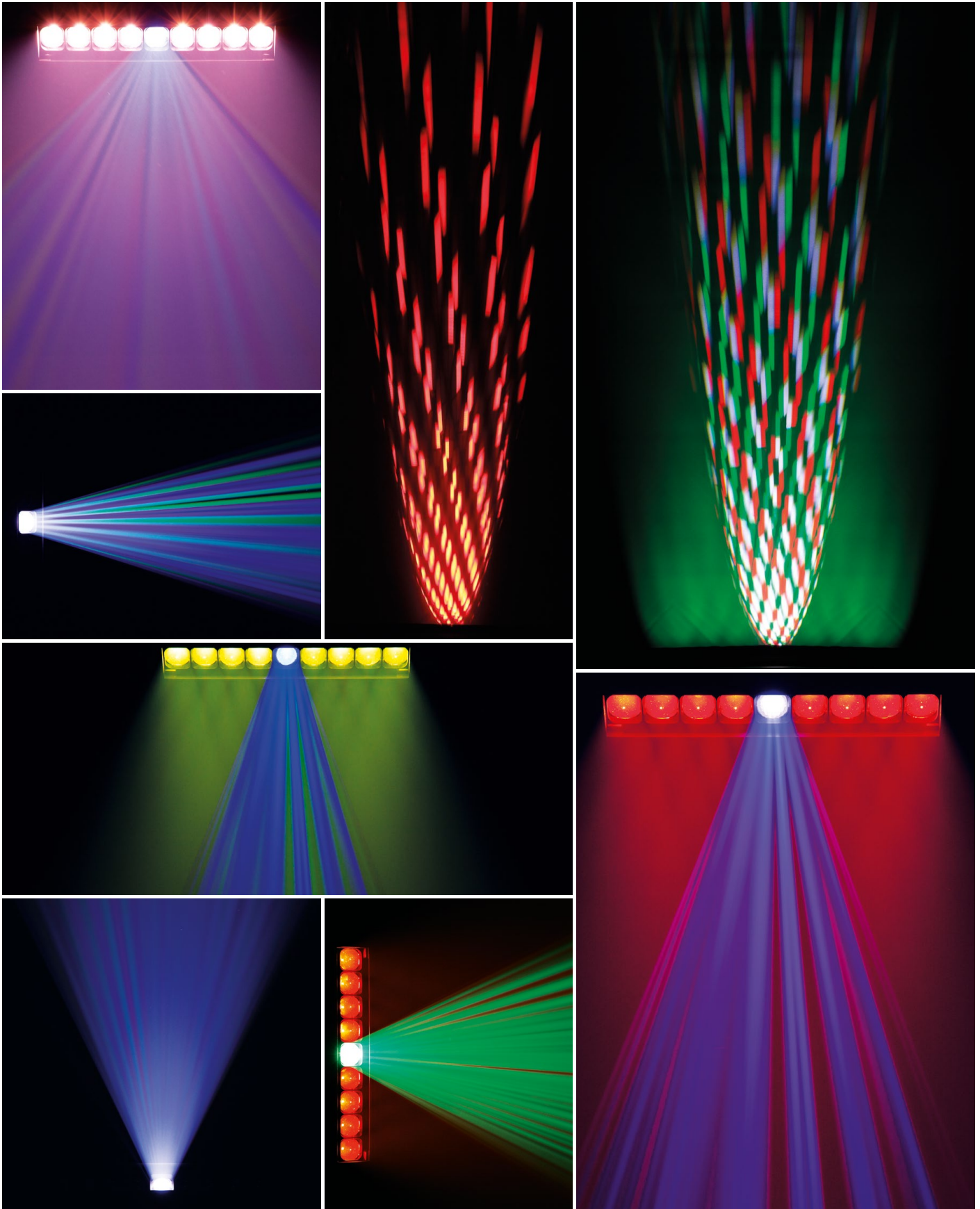
Tetra1™

Sheet of light



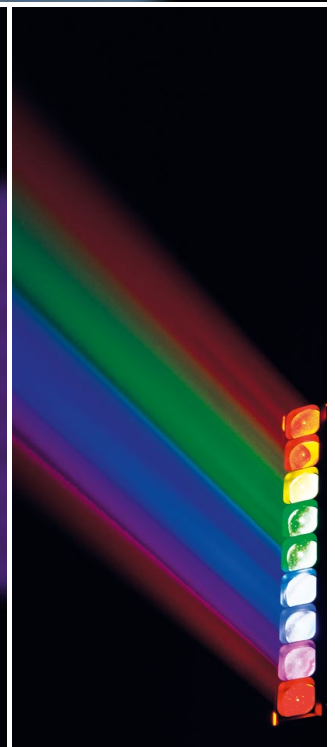
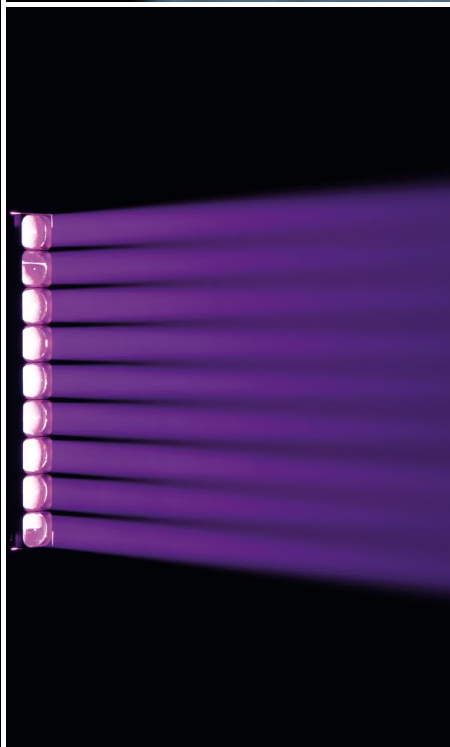
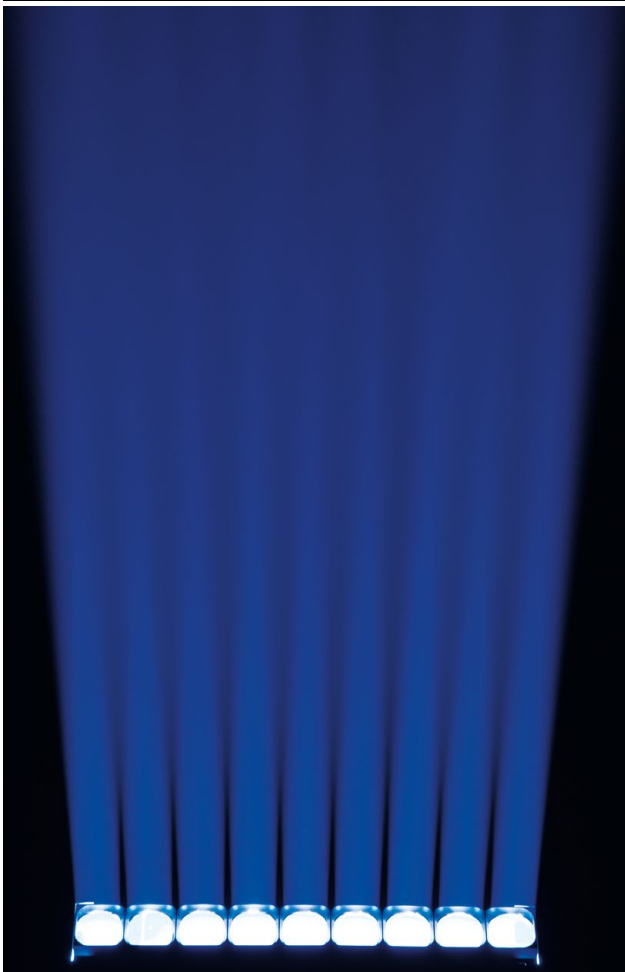
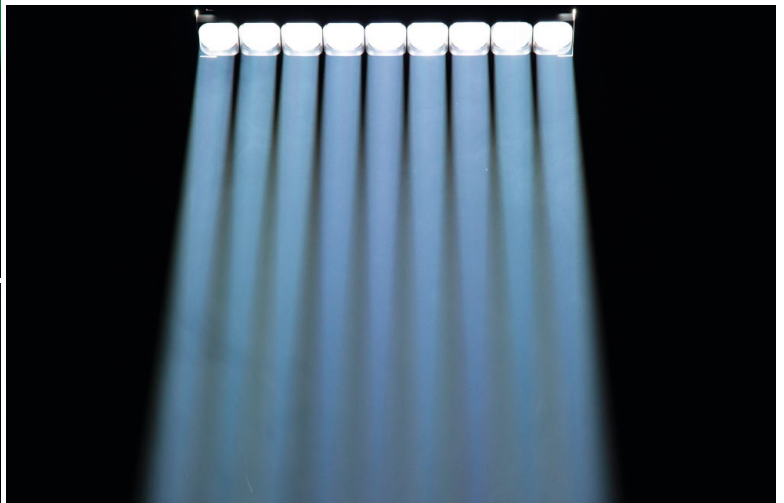
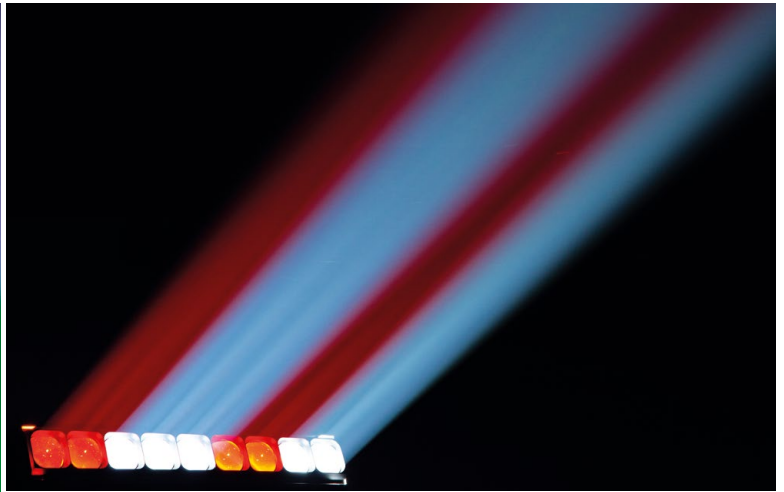
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Flower effect



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Beam light



Tetra1TM

The figure displays a 2x5 grid of images showing the light output from a 10-lens array. The top row shows single colors: blue, green, white, purple, and red. The bottom row shows combinations: blue and white, green and white, white and red, blue and red, and green and red.

Tetra1™



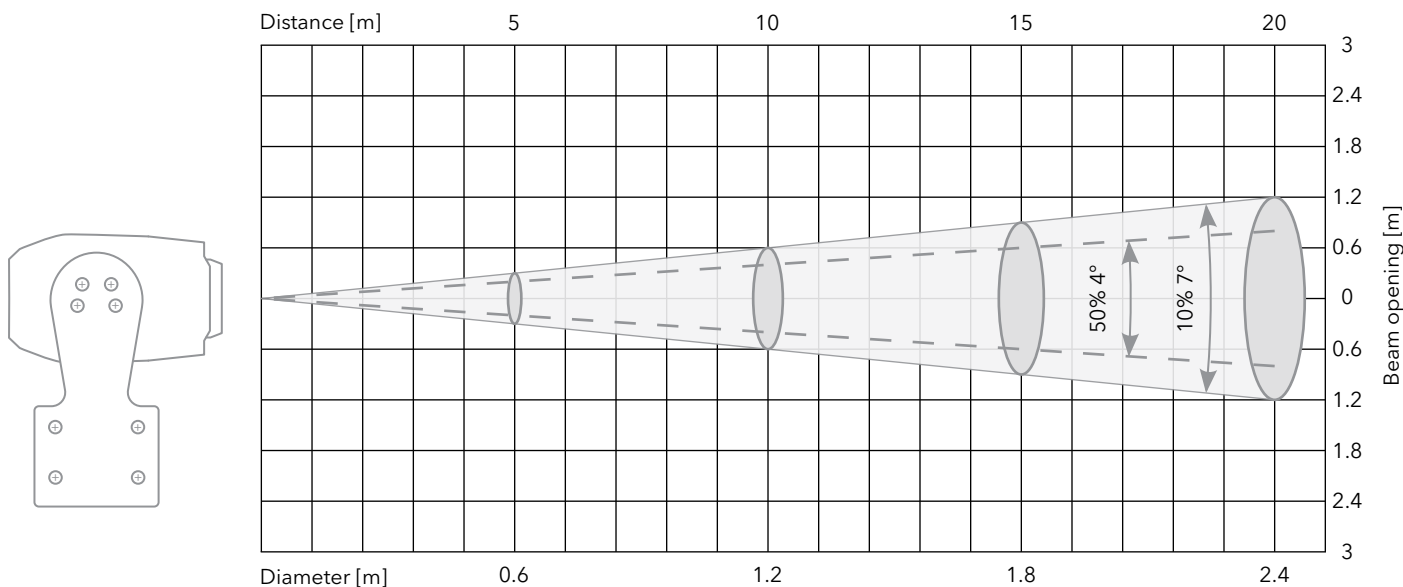
Tetra1™

Tetra1

Photometric report

Beam angle 7° - Min. zoom, WP off

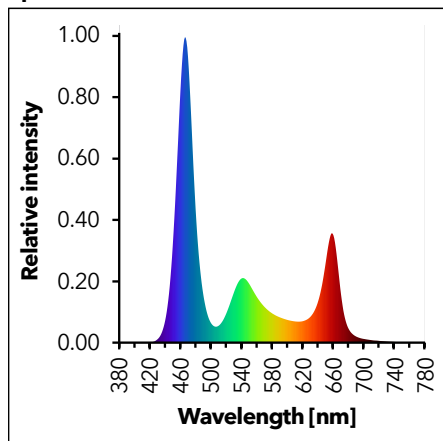
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	3266 lm	2969 lm	182500 cd	265 W



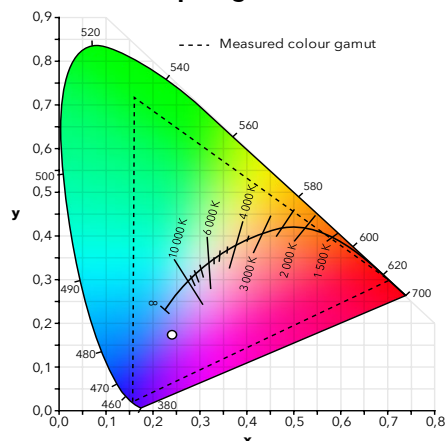
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	7300/678	1825/170	811/75	456/42	292/27	203/19	149/14	2969
Red	1190/111	298/28	132/12	74/7	48/4.4	33/3.1	24/2.3	484
Green	2440/227	610/57	271/25	153/14	98/9	68/6	50/4.6	992
Blue	510/47	128/12	57/5	32/3	20/1.9	14/1.3	10/1	207
White	3150/293	788/73	350/33	197/18	126/12	88/8	64/6	1281

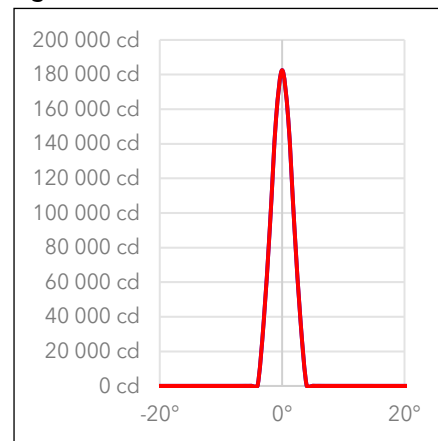
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2401
	y	0.1736
Color Coordinate	u	0.2086
	v	0.2263

Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

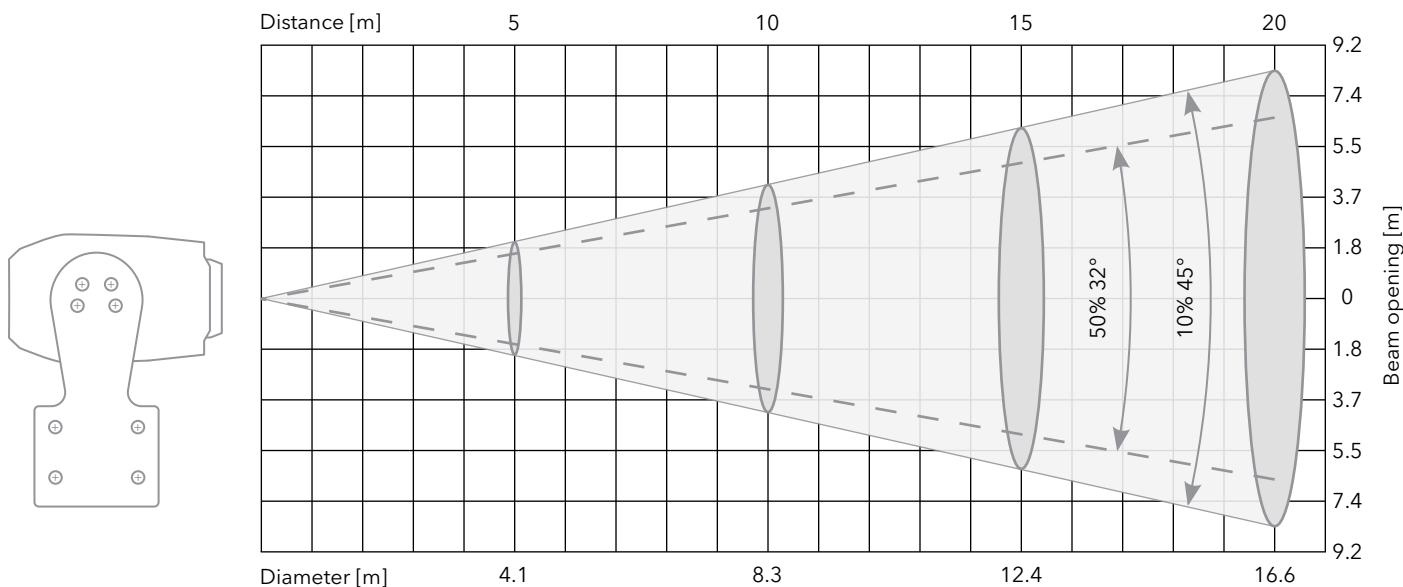
Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K Off; All pixels On
Measurement date: 19.04.2021

Tetra1

Photometric report

Beam angle 45° - Max. zoom, WP off

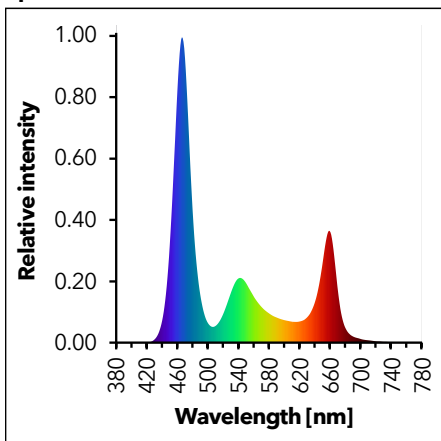
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
45°	5281 lm	4225 lm	16875 cd	265 W



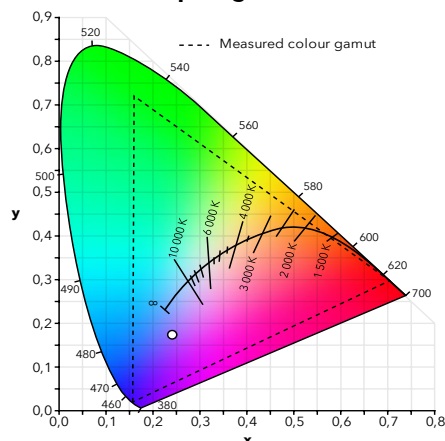
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	675/63	169/16	75/7	42/3.9	27/2.5	19/1.7	14/1.3	4225
Red	110/10	28/2.6	12/1.1	7/0.6	4.4/0.4	3.1/0.3	2.2/0.2	689
Green	230/21	58/5	26/2.4	14/1.3	9/0.9	6/0.6	4.7/0.4	1440
Blue	49/4.6	12/1.1	5/0.5	3.1/0.3	2/0.2	1.4/0.1	1/0.1	307
White	294/27	74/7	33/3	18/1.7	12/1.1	8/0.8	6/0.6	1840

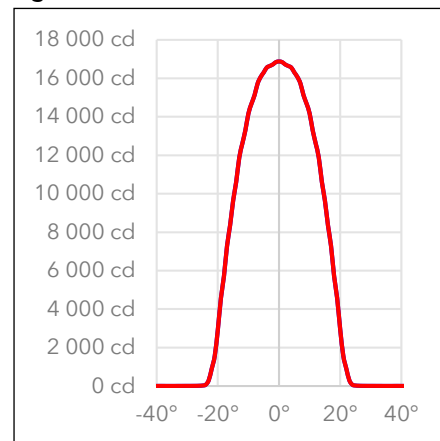
Spectrum



CIE 1931 color space gamut



Light distribution



Color temperature	CCT	N/A
Color Deviation from Black	Duv	N/A
Color Coordinate CIE 1931	x	0.2405
	y	0.1737
Color Coordinate	u	0.2090
	v	0.2264

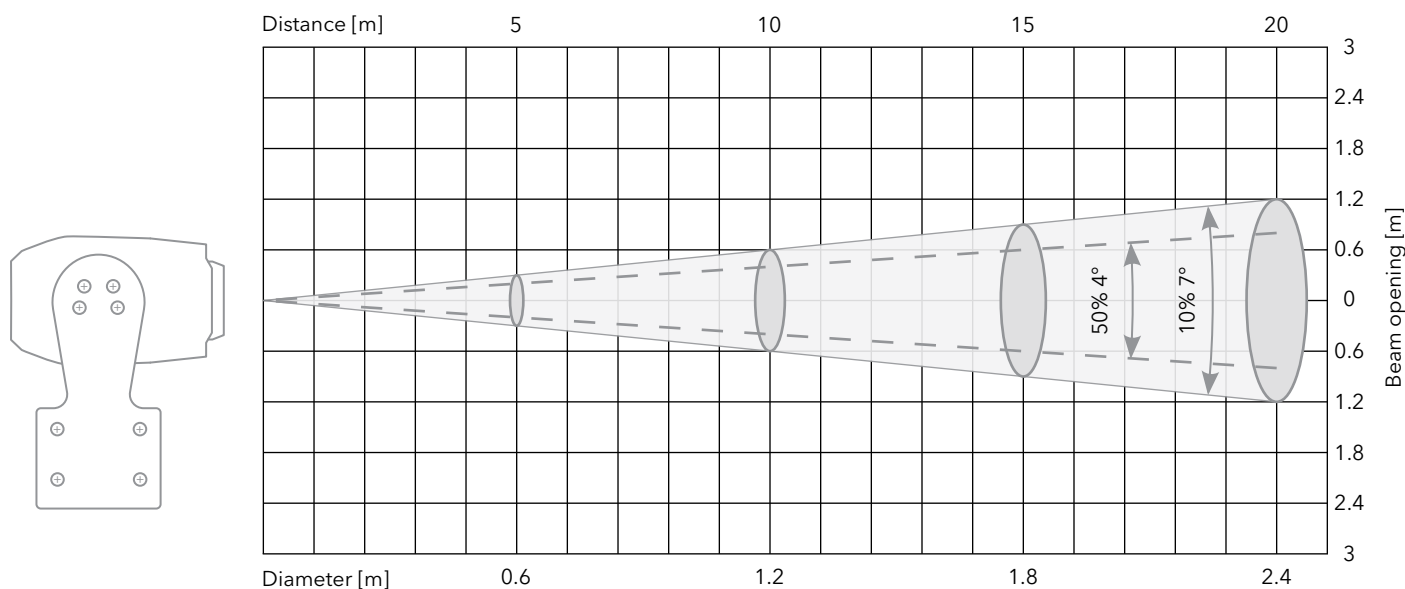
Color rendering index	CRI	N/A
Red component	CRI R9	N/A
Color fidelity	TM30 Rf	N/A
Color gamut	TM30 Rg	N/A
Television consistency Index	TLCI	N/A

Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K Off; All pixels On
Measurement date: 19.04.2021

Photometric report

Beam angle 7° - Min. zoom, WP on

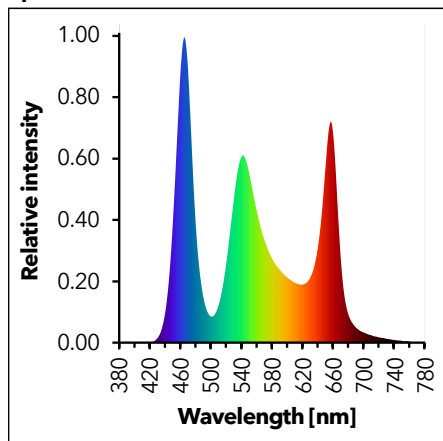
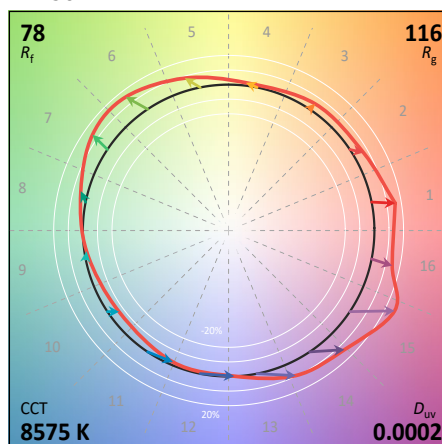
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	2857 lm	2597 lm	159625 cd	265 W



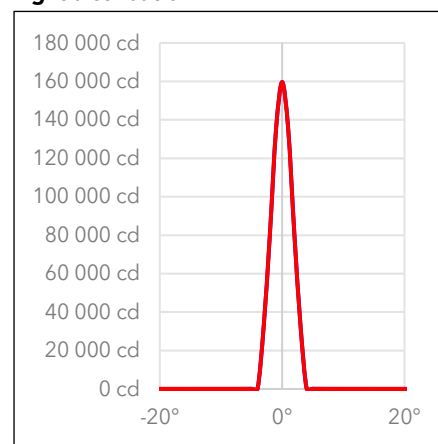
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	30 m	40 m	50 m	Total lumens
8000 K	6385/593.2	1596.3/148.3	709.4/65.9	399.1/37.1	177.4/16.5	99.8/9.3	63.9/5.9	2597
5600 K	6683/620.9	1670.8/155.2	742.6/69	417.7/38.8	185.6/17.2	104.4/9.7	66.8/6.2	2718
4200 K	5396/501.3	1349/125.3	599.6/55.7	337.3/31.3	149.9/13.9	84.3/7.8	54/5	2195
3200 K	3640/338.2	910/84.5	404.4/37.6	227.5/21.1	101.1/9.4	56.9/5.3	36.4/3.4	1481
2700 K	3056/283.9	764/71	339.6/31.5	191/17.7	84.9/7.9	47.8/4.4	30.6/2.8	1243

Spectrum

**TM-30**

Light distribution



Color temperature	CCT	8575
Color Deviation from Black	Duv	0.0002
Color Coordinate CIE 1931	x	0.2901
	y	0.2995
Color Coordinate	u	0.1930
	v	0.2988

Color rendering index	CRI	73
Red component	CRI R9	-19
Color fidelity	TM30 Rf	78
Color gamut	TM30 Rg	116
Television consistency Index	TLCI	64

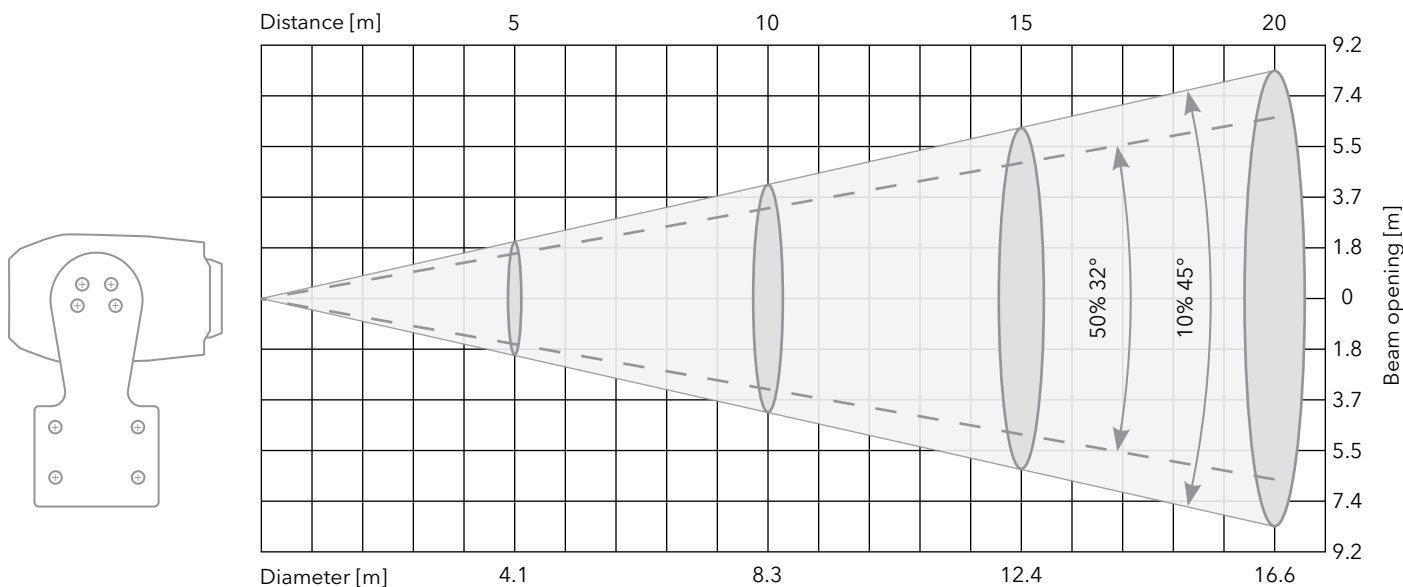
Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K On; All pixels On
Measurement date: 19.04.2021

Tetra1

Photometric report

Beam angle 45° - Max. zoom, WP on

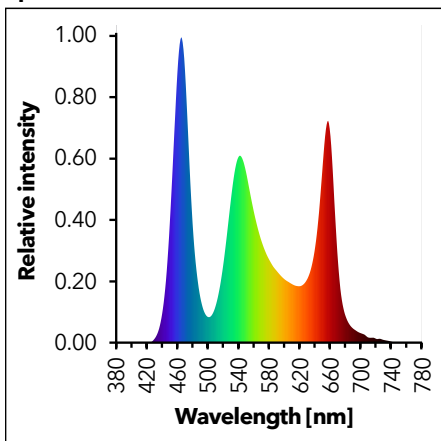
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
45°	4588 lm	3670 lm	14650 cd	265 W



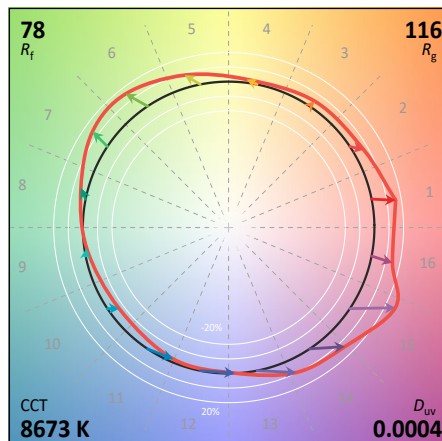
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	30 m	40 m	50 m	Total lumens
8000 K	586/54.4	146.5/13.6	65.1/6	36.6/3.4	16.3/1.5	9.2/0.9	5.9/0.5	3670
5600 K	616/57.2	154/14.3	68.4/6.4	38.5/3.6	17.1/1.6	9.6/0.9	6.2/0.6	3858
4200 K	496/46.1	124/11.5	55.1/5.1	31/2.9	13.8/1.3	7.8/0.7	5/0.5	3106
3200 K	333/30.9	83.3/7.7	37/3.4	20.8/1.9	9.3/0.9	5.2/0.5	3.3/0.3	2086
2700 K	281/26.1	70.3/6.5	31.2/2.9	17.6/1.6	7.8/0.7	4.4/0.4	2.8/0.3	1760

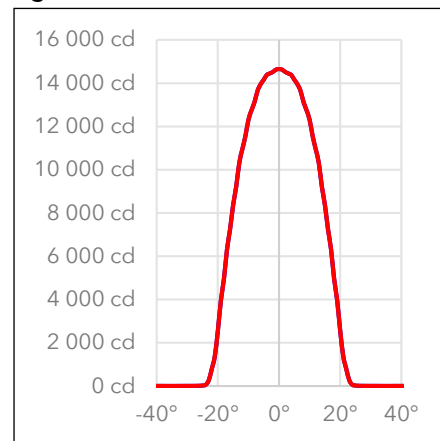
Spectrum



TM-30



Light distribution



Color temperature	CCT	8673
Color Deviation from Black	Duv	0.0004
Color Coordinate CIE 1931	x	0.2892
	y	0.2989
Color Coordinate	u	0.1925
	v	0.2985

Color rendering index	CRI	73
Red component	CRI R9	-21
Color fidelity	TM30 Rf	78
Color gamut	TM30 Rg	116
Television consistency Index	TLCI	63

Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K On; All pixels On
Measurement date: 19.04.2021

Tetra1™



 **ROBIN**[®]
Innovative Technology

www.robe.cz

ROBE[®]

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