

**TetraX**™



**ROBE**®

# TetraX™

3 x MCFE™  
MULTI-COLOURED  
FLOWER  
EFFECTS

SEAMLESS  
CURTAIN  
OF  
LIGHT

HIGH-SPEED  
PAN  
CONTINUOUS  
ROTATION



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

BRIGHT DEFINED  
"SHEET"  
OF  
LIGHT

TIGHT  
4° BEAM  
TO  
SMOOTH  
45° WASH

# TetraX

# TetraX™

**Need something exceptional to stand out from the crowd? Something very different to create a powerful signature effect. Lack that missing X factor? Then go to the extreme with the visually sensational TetraX™!**



Developed from the immensely successful Tetra1™, the TetraX™ adds dynamic pan movement with extremely high-speed continuous rotation, dramatically increasing sweeping effect possibilities of the fixture.

Generating an ultra-tight 4° beam from each of the 9 evenly spaced pixels, they combine to produce a bright, defined “sheet” of light, as desired by Lighting Designers. The homogenised beams and smooth 11:1 motorised zoom provide ultra-smooth washes out to 45°.

TetraX™ sets itself apart by including three exclusive eye-catching Robe patented MCFE™ – Multi-Coloured Flower Effect – emitting sharp, multi-coloured spikes of light, with variable speed and rotation direction control, to further increase the projection of charismatic in-air animations.

All-inclusive colour and dimming control are available via RGBW and CMY colour mixing modes; variable CCT of 2.700K – 8.000K; tungsten emulation simulating the red shift and thermal delay of tungsten lamps for whites from 2.700K – 4.200K; DataSwatch™ 237 pre-programmed colour library; L3™ Low Light Linearity dimming software for imperceptible fades to black.

An Epass™ Ethernet switch ensures sustained network connectivity. A wide range of protocols (sACN, Art-Net or Kling-Net) allows quick network installation and control from media servers, DMX, or the internal effects engine.

**TetraX™ – eXceeding the eXceptional**

**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
- 3x 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
- Epass™ - Ethernet pass through switch which sustains Ethernet integrity, when the fixture has no power, to automatically maintain network connectivity
- DMX Protocol modes: 6
- Control channels: 41, 61, 75, 84, 88, 97
- RGBW / CMY: 8 or 16 bit
- Zoom: 8 or 16 bit
- Dimmer: 8 or 16 bit (internal 18 bit)

**Movement**

- Pan movement range 540° with continuous rotation control
- 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)
- Total heat dissipation: max. 818 BTU/h (calculated)

**Electrical Specification and Connections**

- Power supply: Electronic auto-ranging
- Input voltage range: 100-240 V, 50/60 Hz
- Power consumption: max. 320 W
- 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

**Mechanical Specification**

- Height: 368 mm (14.48")
- Width: 512 mm (20.15")
- Depth: 205 mm (8.07") - head in horizontal position
- Weight: 15.7 kg (34.6 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**

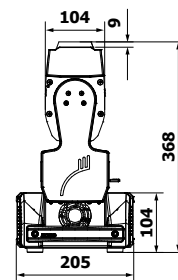
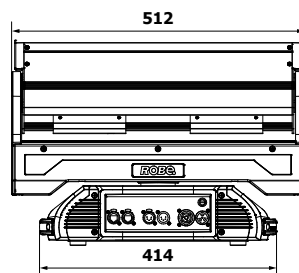
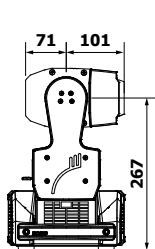
- User Manual
- Omega Adaptor CL-regular 2 pcs: 99010420-02
- Power cord including powerCON TRUE1 In connector

**Optional Accessories**

- Diffusion filter: 2" 10980698
- Clear lens cover: 10980699
- Safety wire 36 kg: 99011963
- 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: 10120292
- Dual Top Loader Case: 10120293
- Quad Top Loader Case: 10120294
- Dual Foam Shell: 20020447
- Omega Adaptor CL-variable 2pcs in box: 10980550

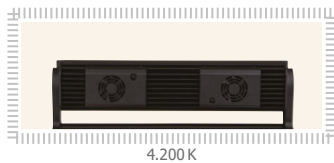
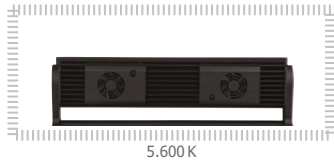
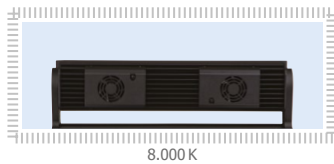
**Legal**

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



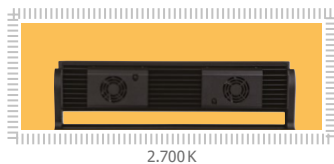
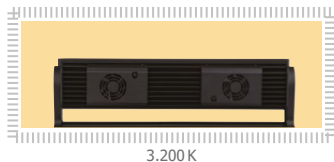
## True White Colours

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

TetraX™ 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).



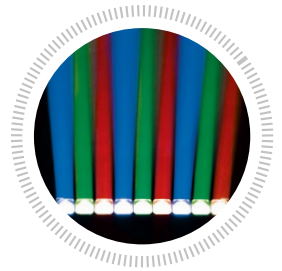
## Innovative Flower Effect

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).

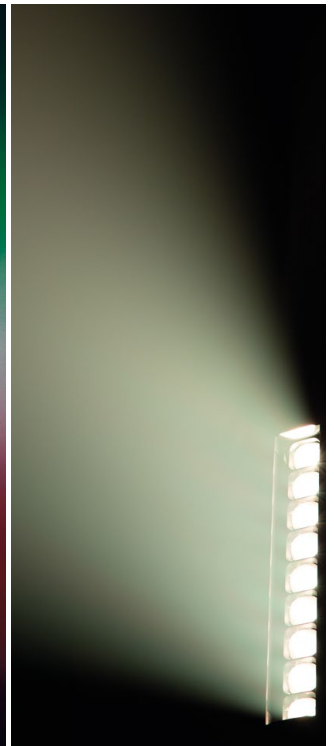
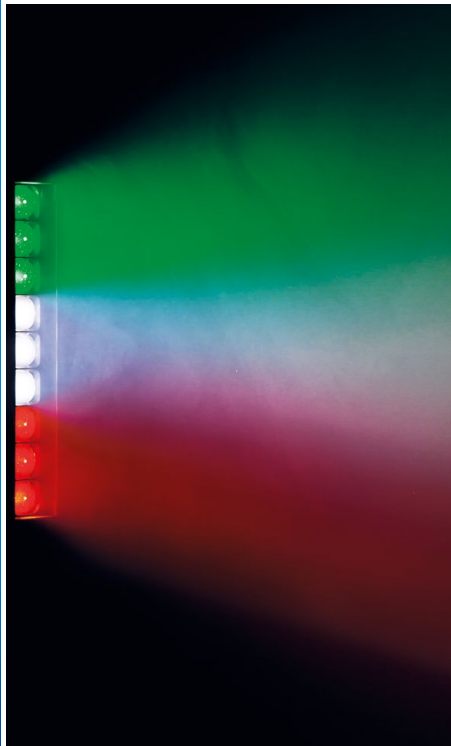
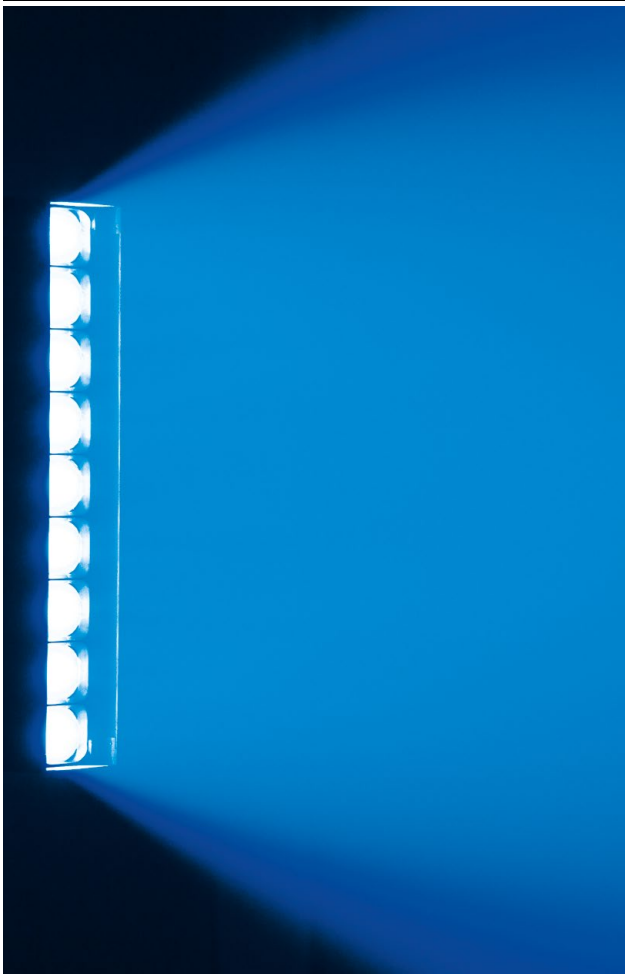
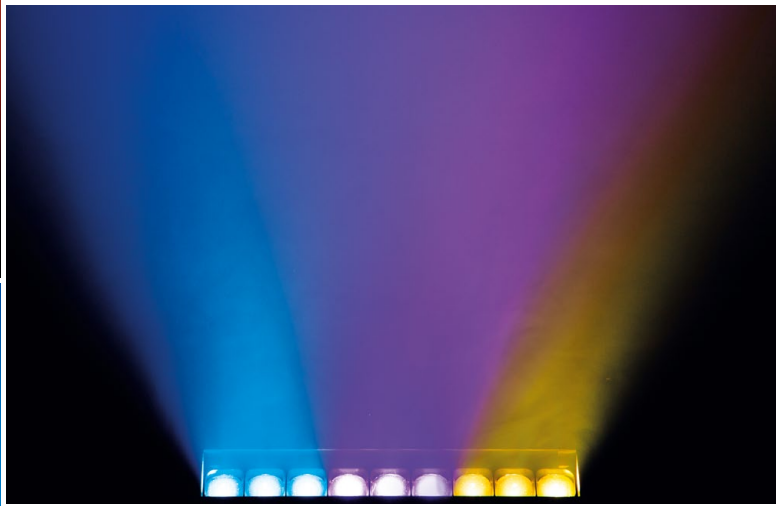
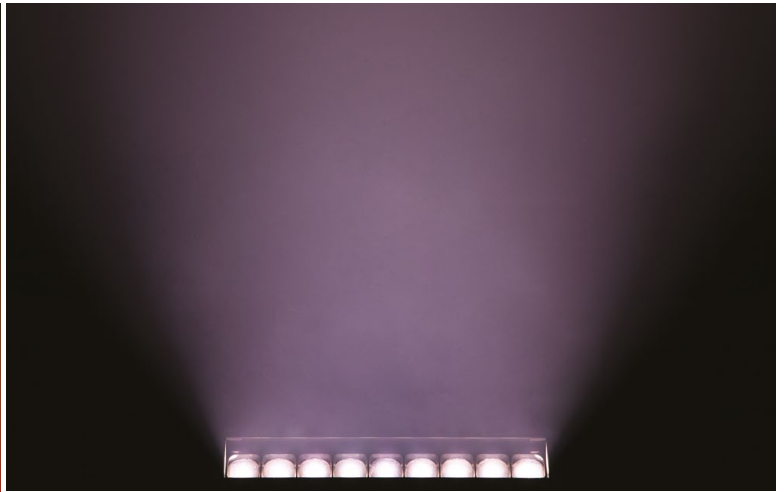
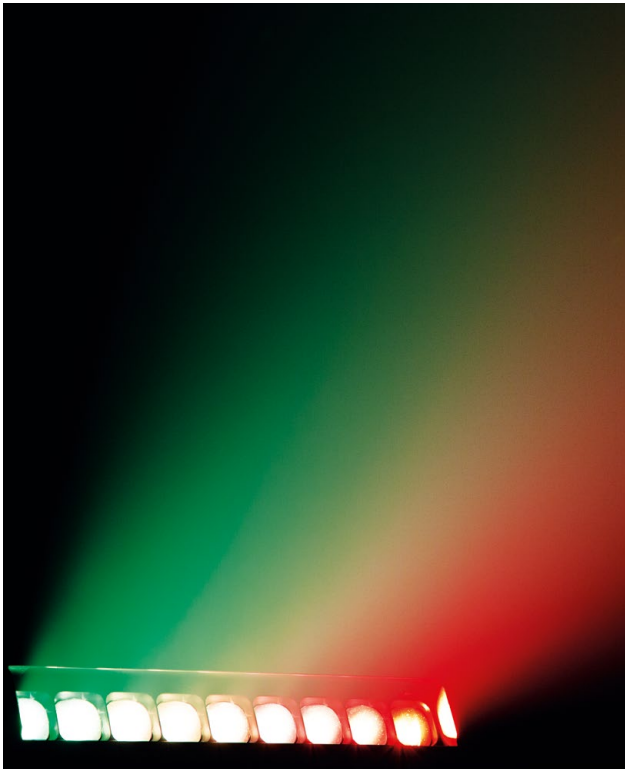


## Pixel Control

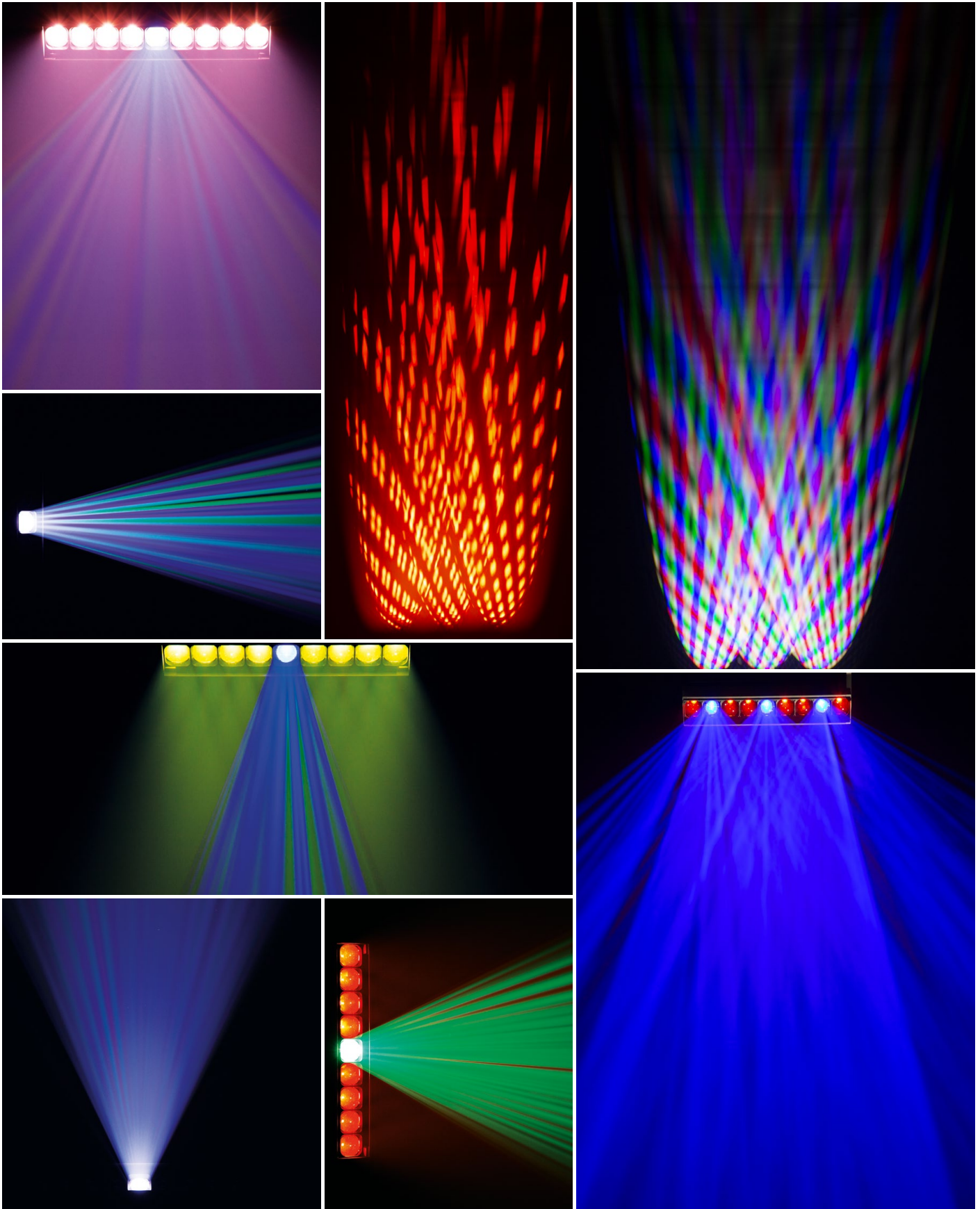
Individual pixel control of each LED via DMX or Kling-Net protocols allows to turn the fixture to the low res screen or to create variety of spectacular beam effects in the air.



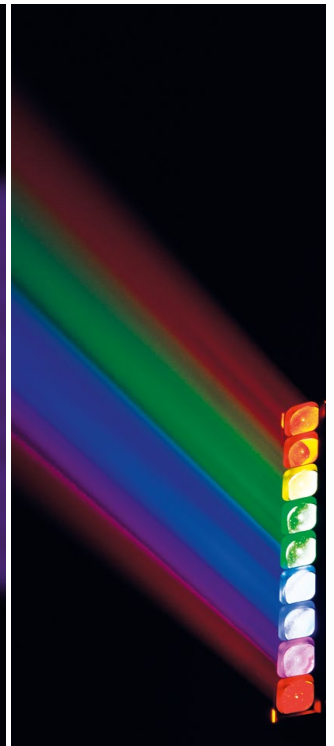
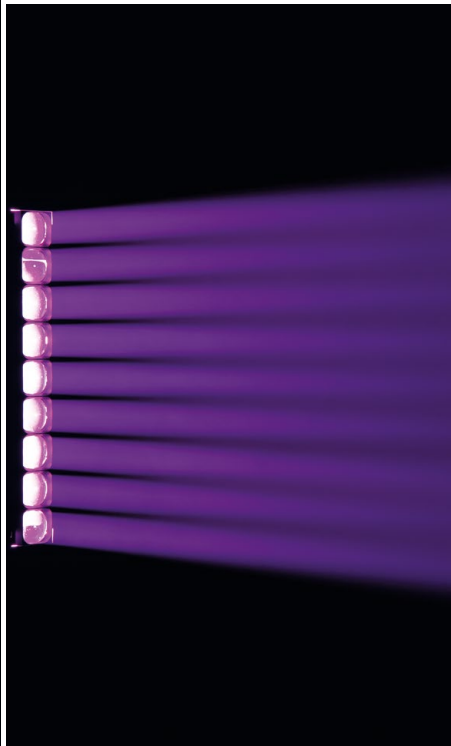
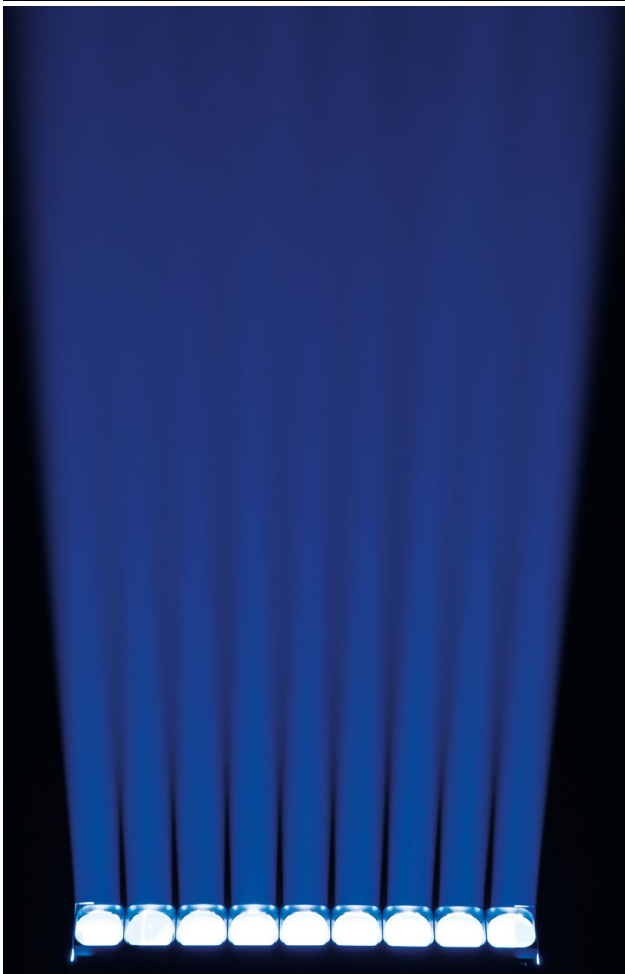
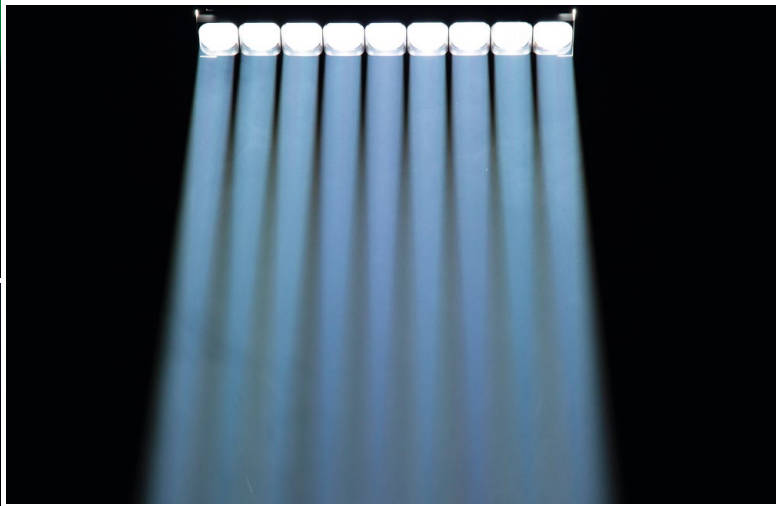
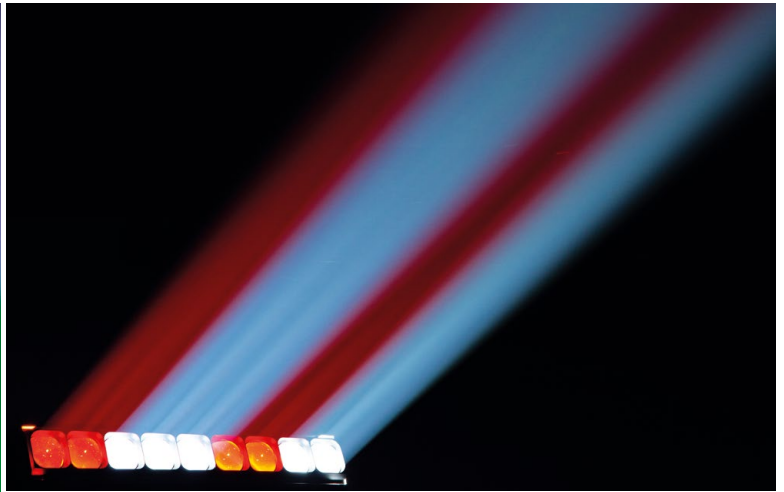
# Sheet of light



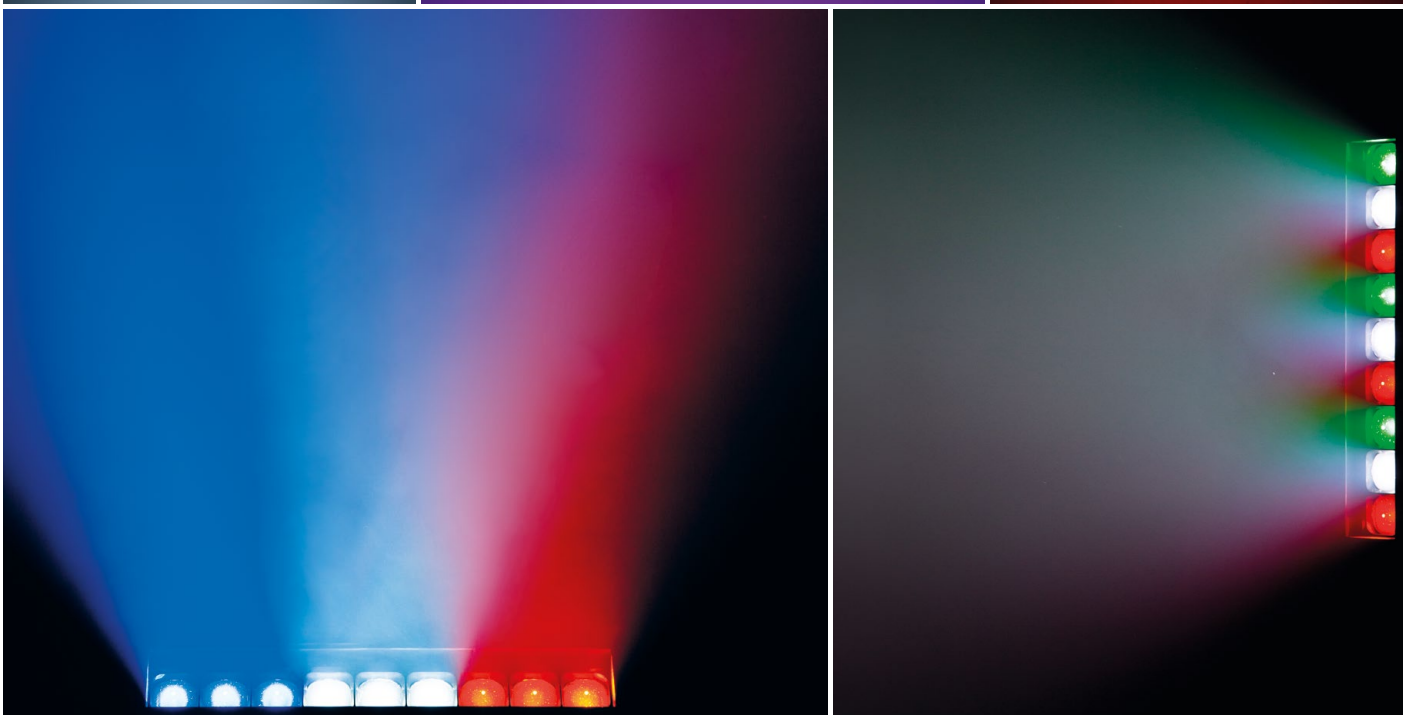
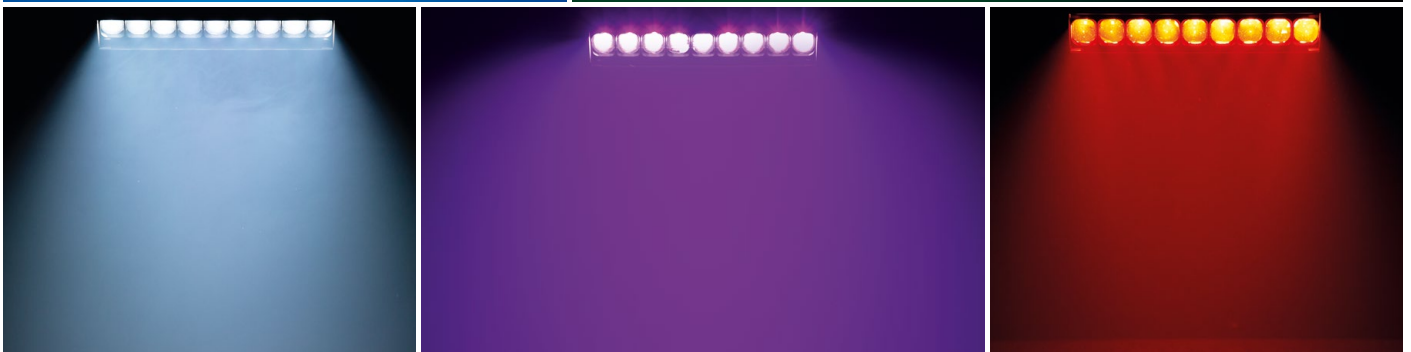
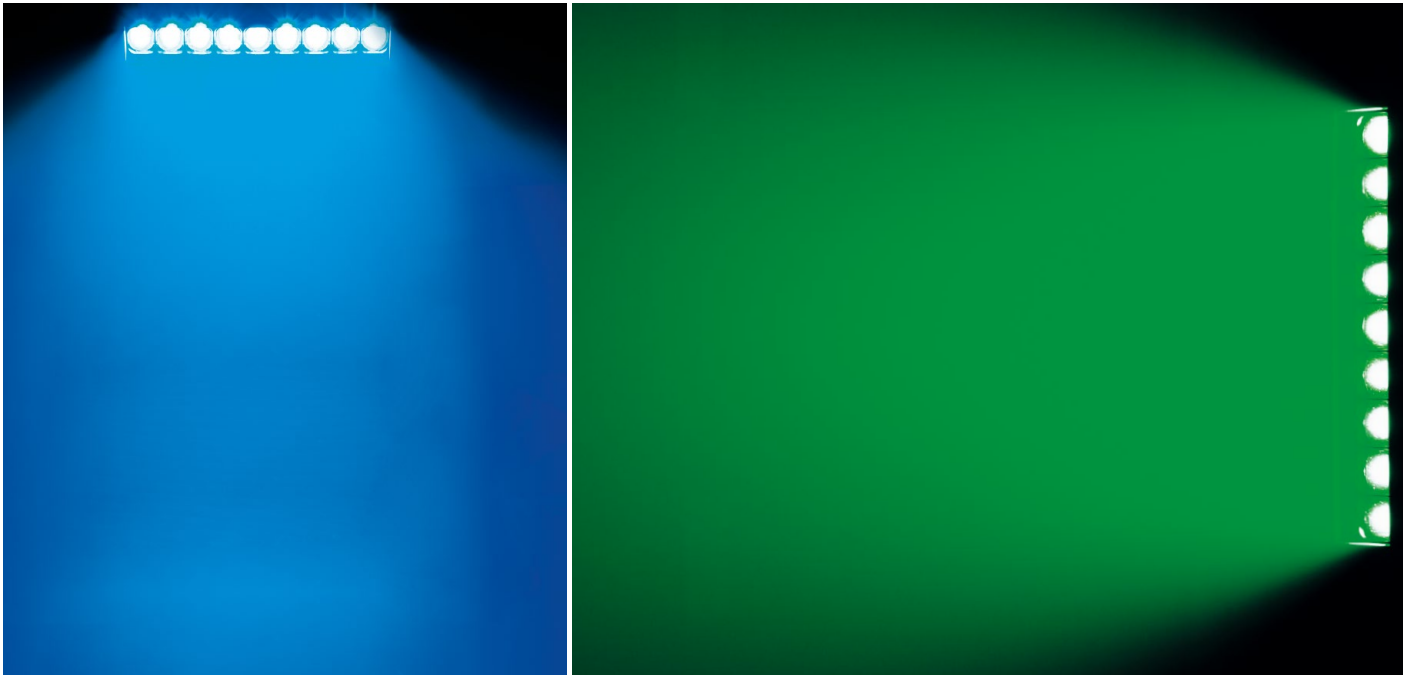
# Flower effect



# Beam light



# CYC & Wash light



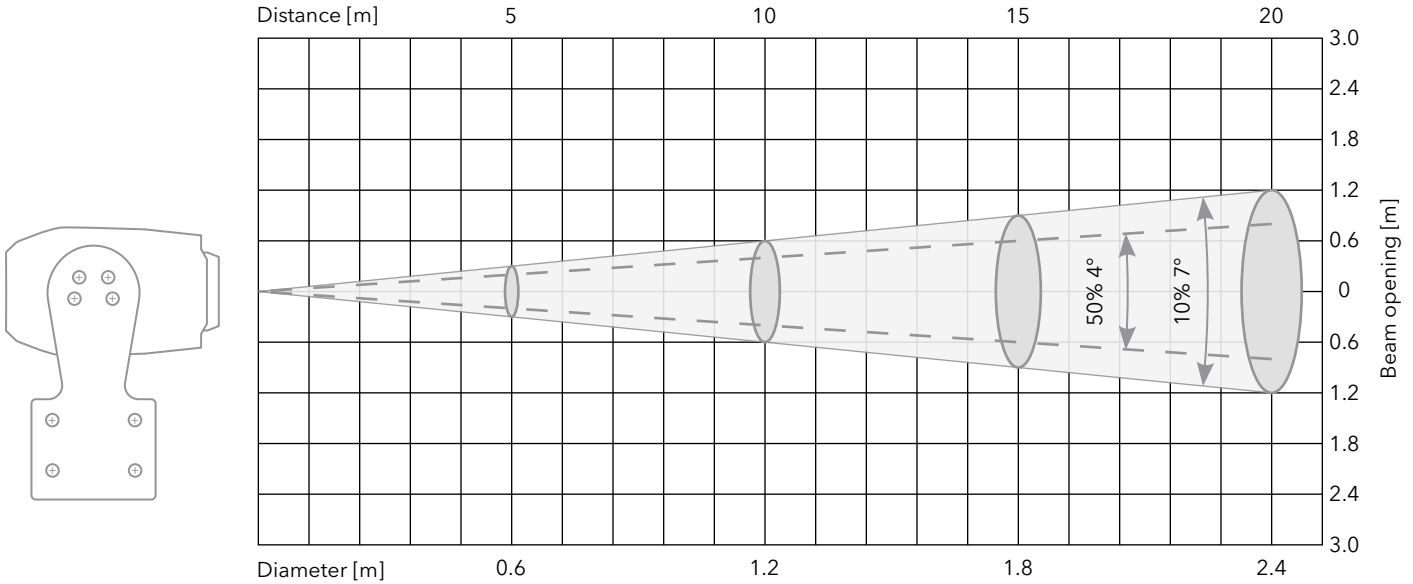


# TetraX

## Photometric report

### Beam angle 7° - Min. zoom, WP off

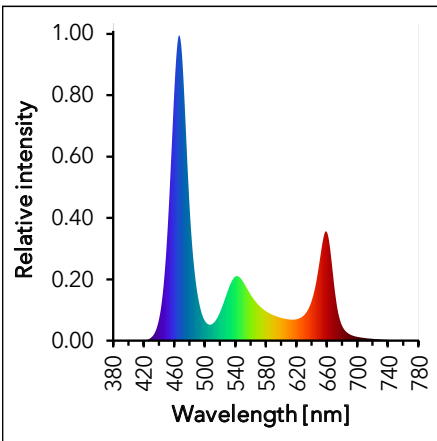
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	2886 lm	2749 lm	168975 cd	280 W



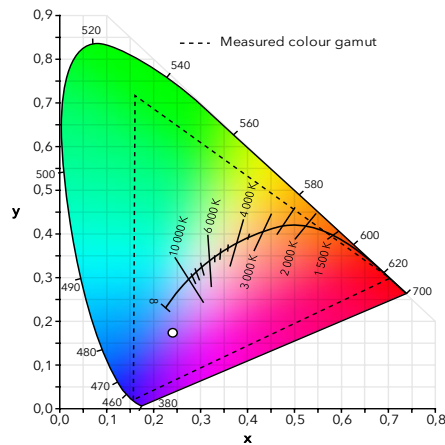
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	6759/628	1690/157	751/70	422/39	270/25	188/17	138/13	2749
Red	1102/102	276/26	122/11	69/6	44/4.1	31/2.8	22/2.1	448
Green	2259/210	565/52	251/23	141/13	90/8	63/6	46/4.3	919
Blue	472/44	118/11	52/4.9	30/2.7	19/1.8	13/1.2	10/0.9	192
White	2917/271	729/68	324/30	182/17	117/11	81/8	60/6	1186

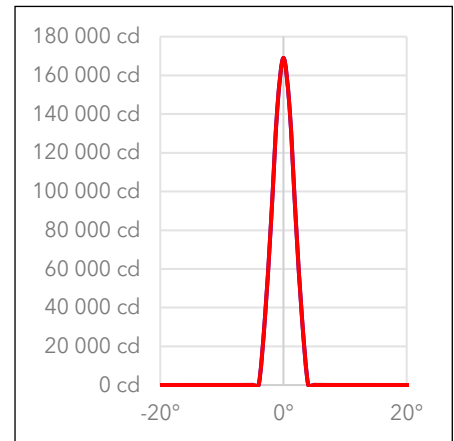
#### Spectrum



#### CIE 1931 color space gamut



#### Light distribution



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

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

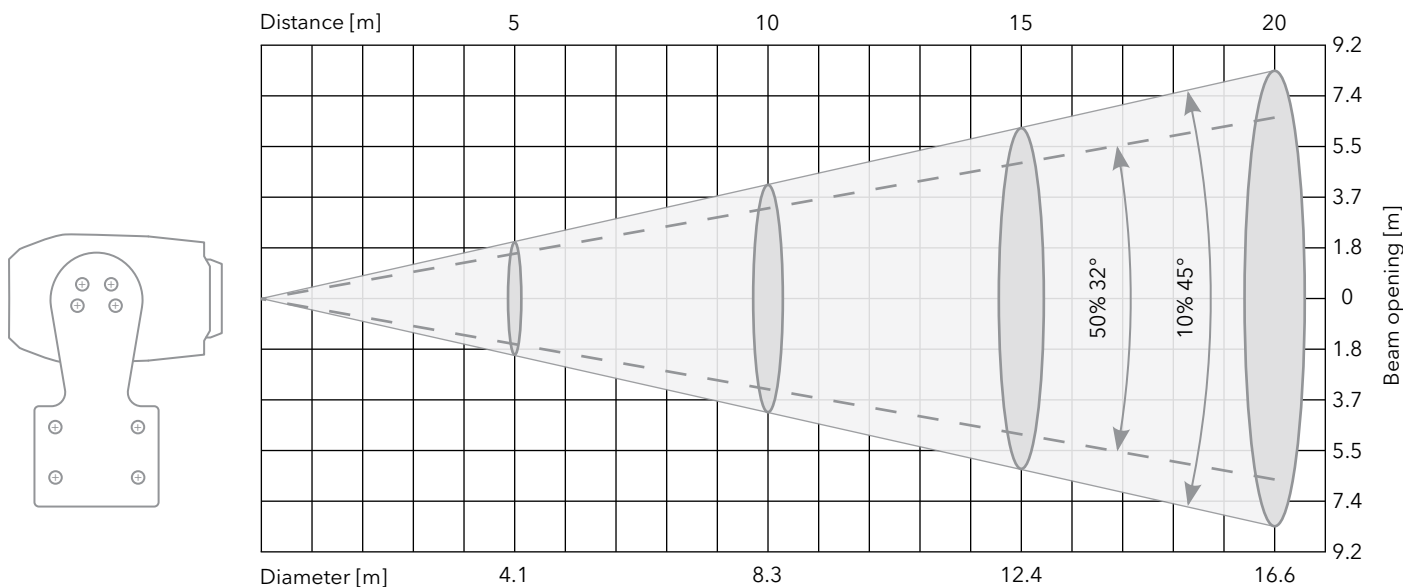
Fixture settings: Mode 1, Flower Effect Off, White point Off, All pixels On  
Measurement date: 14.04.2022

# TetraX

## Photometric report

### Beam angle 45° - Max. zoom, WP off

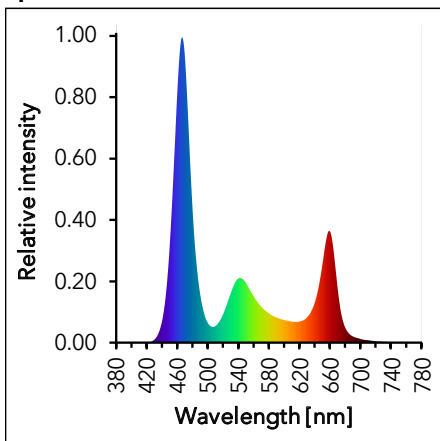
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
45°	4890 lm	3912 lm	15625 cd	280 W



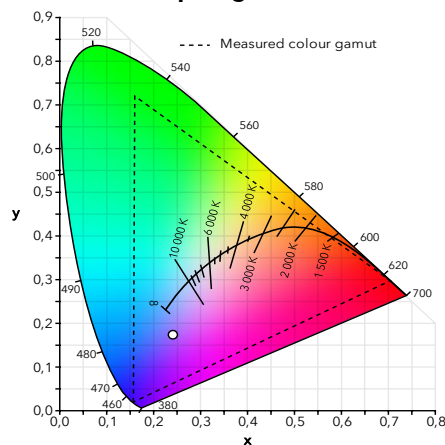
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	625/58	156/15	69/6	39/3.6	25/2.3	17/1.6	13/1.2	3912
Red	102/9	26/2.4	11/1.1	6/0.6	4.1/0.4	2.8/0.3	2.1/0.2	638
Green	213/20	53/4.9	24/2.2	13/1.2	9/0.8	6/0.5	4.3/0.4	1333
Blue	45/4.2	11/1	5/0.5	2.8/0.3	1.8/0.2	1.3/0.1	0.9/0.1	282
White	272/25	68/6	30/2.8	17/1.6	11/1	8/0.7	6/0.5	1703

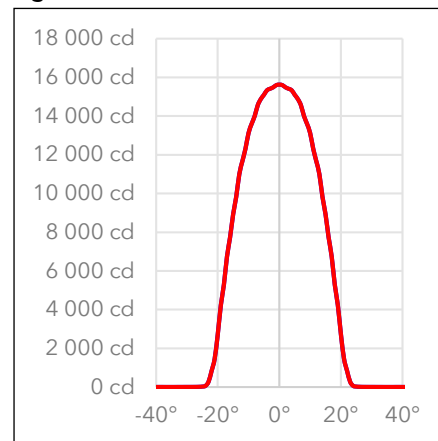
#### Spectrum



#### CIE 1931 color space gamut



#### Light distribution



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

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

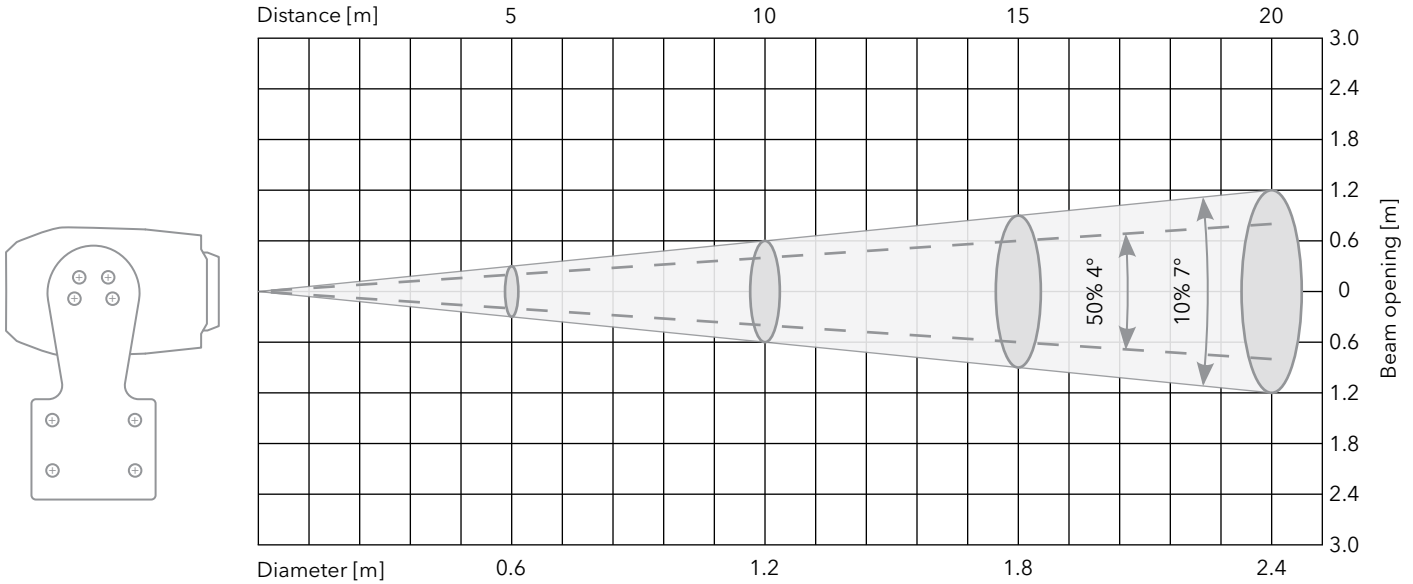
Fixture settings: Mode 1, Flower Effect Off, White point Off, All pixels On  
Measurement date: 14.04.2022

# TetraX

## Photometric report

### Beam angle 7° - Min. zoom, WP on

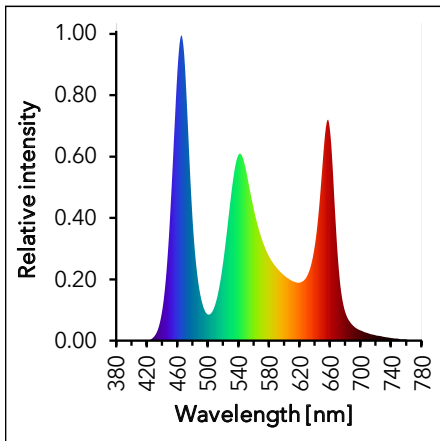
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	2521 lm	2401 lm	147575 cd	265 W



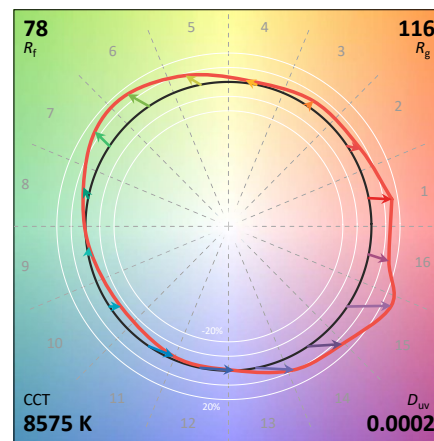
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	5903/548.4	1475.8/137.1	655.9/60.9	368.9/34.3	236.1/21.9	164/15.2	120.5/11.2	2401
Red	1102/102.4	275.5/25.6	122.4/11.4	68.9/6.4	44.1/4.1	30.6/2.8	22.5/2.1	448
Green	2259/209.9	564.8/52.5	251/23.3	141.2/13.1	90.4/8.4	62.8/5.8	46.1/4.3	919
Blue	472/43.9	118/11	52.4/4.9	29.5/2.7	18.9/1.8	13.1/1.2	9.6/0.9	192
White	2917/271	729.3/67.7	324.1/30.1	182.3/16.9	116.7/10.8	81/7.5	59.5/5.5	1186

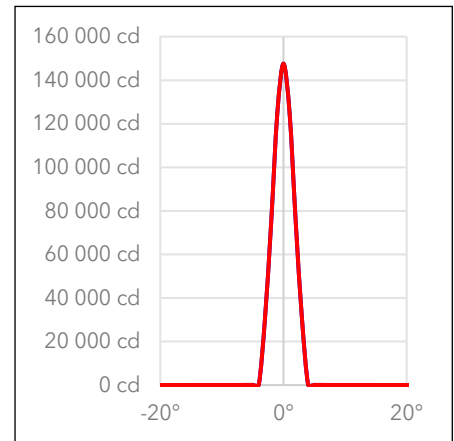
#### Spectrum



#### TM-30



#### Light distribution



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

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

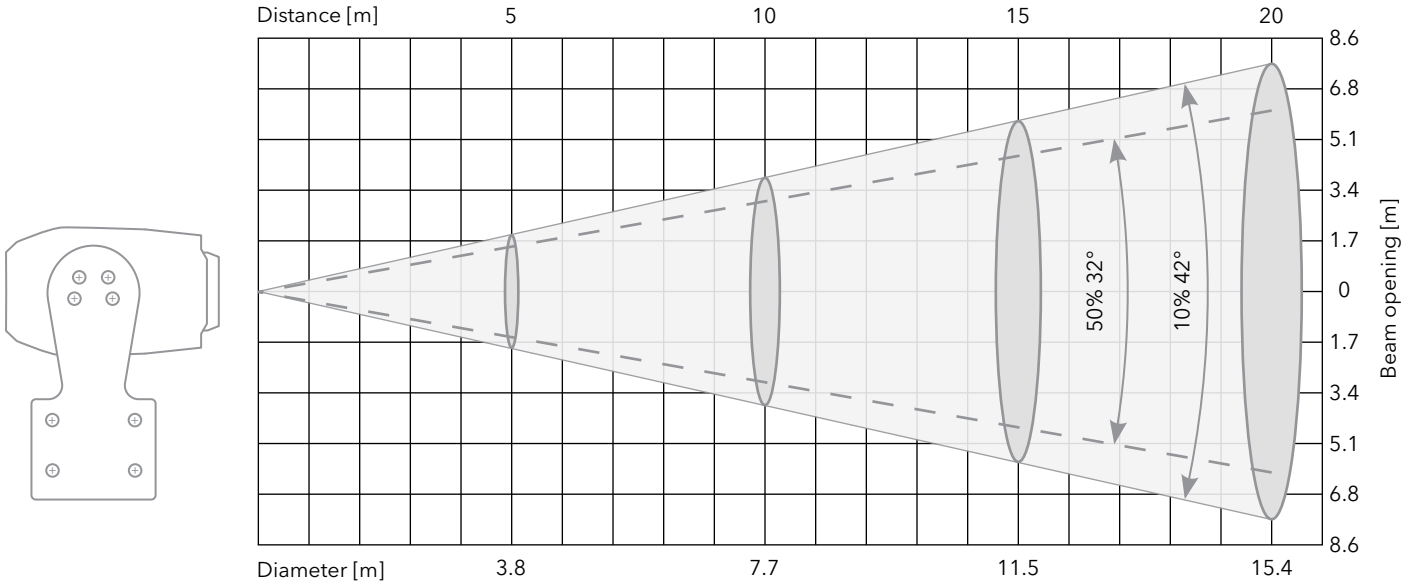
Fixture settings: Mode 1, Flower Effect Off, White point On, All pixels On  
Measurement date: 14.04.2022

# TetraX

## Photometric report

### Beam angle 42° - Max. zoom, WP on

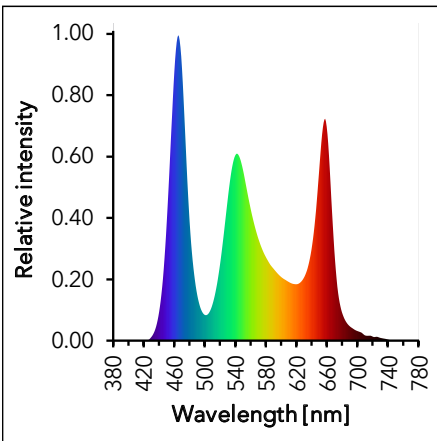
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
42°	4246 lm	3397 lm	13575 cd	265 W



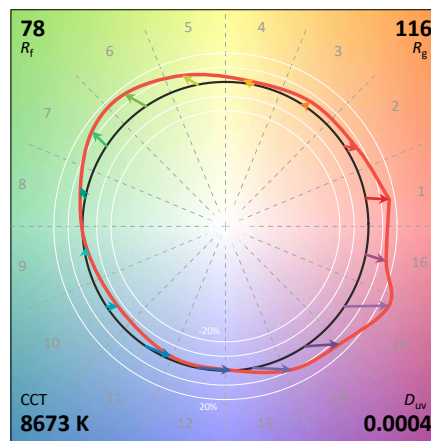
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	543/50.4	135.8/12.6	60.3/5.6	33.9/3.2	21.7/2	15.1/1.4	11.1/1	3397
Red	102/9.5	25.5/2.4	11.3/1.1	6.4/0.6	4.1/0.4	2.8/0.3	2.1/0.2	638
Green	213/19.8	53.3/4.9	23.7/2.2	13.3/1.2	8.5/0.8	5.9/0.5	4.3/0.4	1333
Blue	45/4.2	11.3/1	5/0.5	2.8/0.3	1.8/0.2	1.3/0.1	0.9/0.1	282
White	272/25.3	68/6.3	30.2/2.8	17/1.6	10.9/1	7.6/0.7	5.6/0.5	1702

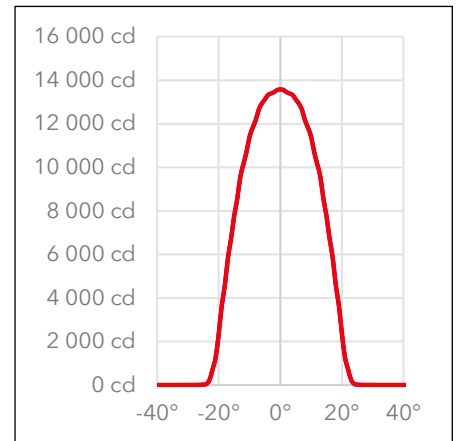
#### Spectrum



#### TM-30



#### Light distribution



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

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

Fixture settings: Mode 1, Flower Effect Off, White point On, All pixels On  
Measurement date: 14.04.2022

# TetraX<sup>TM</sup>



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Head office: ROBE lighting s. r. o. | Házovice 2090 | 756 61 Rožnov pod Radhoštěm | Czech Republic

Factory: ROBE lighting s. r. o. | Palackého 416 | 757 01 Valašské Meziříčí | Czech Republic

Tel.: +420 571 751 500 | E-mail: [robe@robe.cz](mailto:robe@robe.cz)

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