

# Tetra2™



**ROBE**®

# Tetra2™

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

BRIGHT DEFINED  
"SHEET"  
OF  
LIGHT

TIGHT  
4° BEAM  
TO  
SMOOTH  
45° WASH



2 x MCFE™  
MULTI-COLOURED  
FLOWER  
EFFECTS

SEAMLESS  
CURTAIN  
OF  
LIGHT

FAST PACED  
SWEEPING  
MOVEMENT

# Tetra2™

**TETRAgnatha's are linear bars, built on the highly successful Spider and Tarrantula technology. TETRA2™ is the larger format of the TETRAgnatha duo.**



Generating an ultra-tight 4° beam from each of the 18 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 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 two exclusive Robe patented MCFE™ - Multi - Coloured Flower Effects - the pixel-driven TETRA2™ 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: 18x 40W RGBW LEDz 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: 10.500 lm (integrating sphere)  
8.439 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
- 2x MCFE™ - Multi-Coloured Flower Effects - creating spectacular multicolour beam effects in the air rotating in both directions at variable speed (Patented)
- Motorized zoom
- 2 independent zoom zones
- 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: 34, 56, 97, 115, 110, 128
- 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: 600W at 230 V / 50 Hz
- 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: 1007 mm (39.6")
- Depth: 192 mm (7.56") - head in horizontal position
- Weight: 18.1 kg (39.9 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

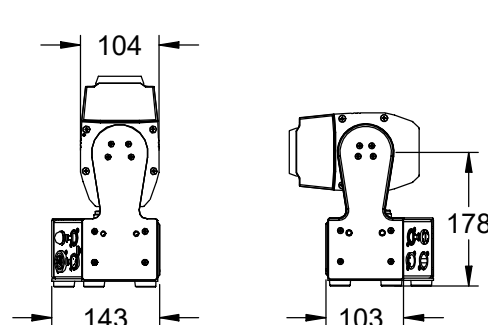
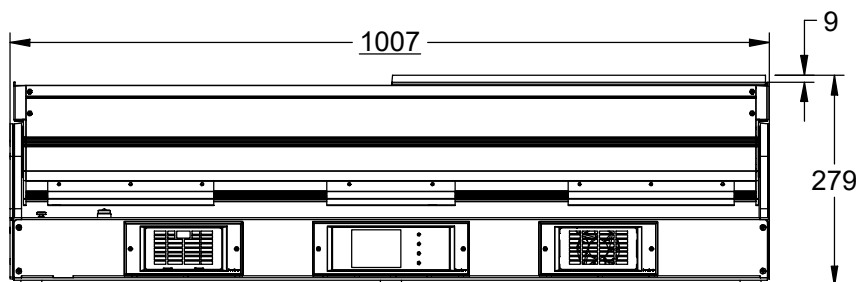
- User Manual
- Power cord including powerCON TRUE1 In connector

### 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: 10120259
- Triple Top Loader Case: 10120264
- Foam Shell: 20020371
- Omega Adaptor CL-variable 2pcs in box: 10980550

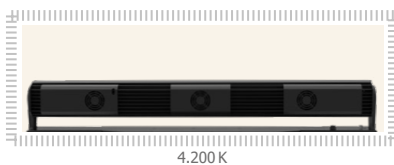
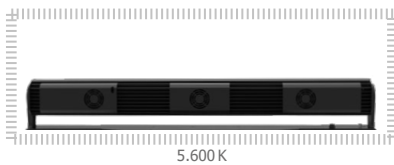
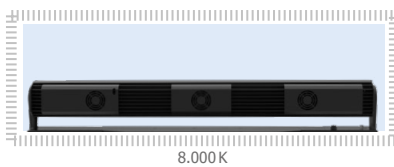
### Legal

- Tetra2™ is a Trademark of Robe lighting s. r. o.
- Tetra2™ is patented by Robe lighting s. r. o. and protected by one or more pending or issued patents



## True White Colours

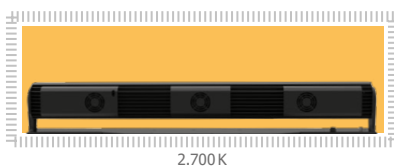
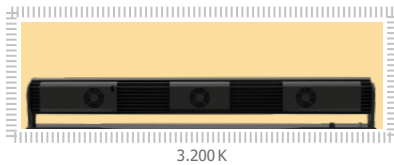
Spotless colormixing of specially calibrated LEDs together with predefined values on a Virtual Colour wheel channel allow quick direct calling of exact white hues of 2.700K, 3.200K, 4.200K, 5.600K and 8.000K.



## 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

Tetra2™ 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).



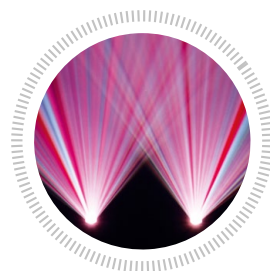
## Lens Coating Technology

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).



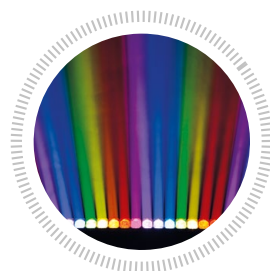
## Innovative Flower Effect

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).



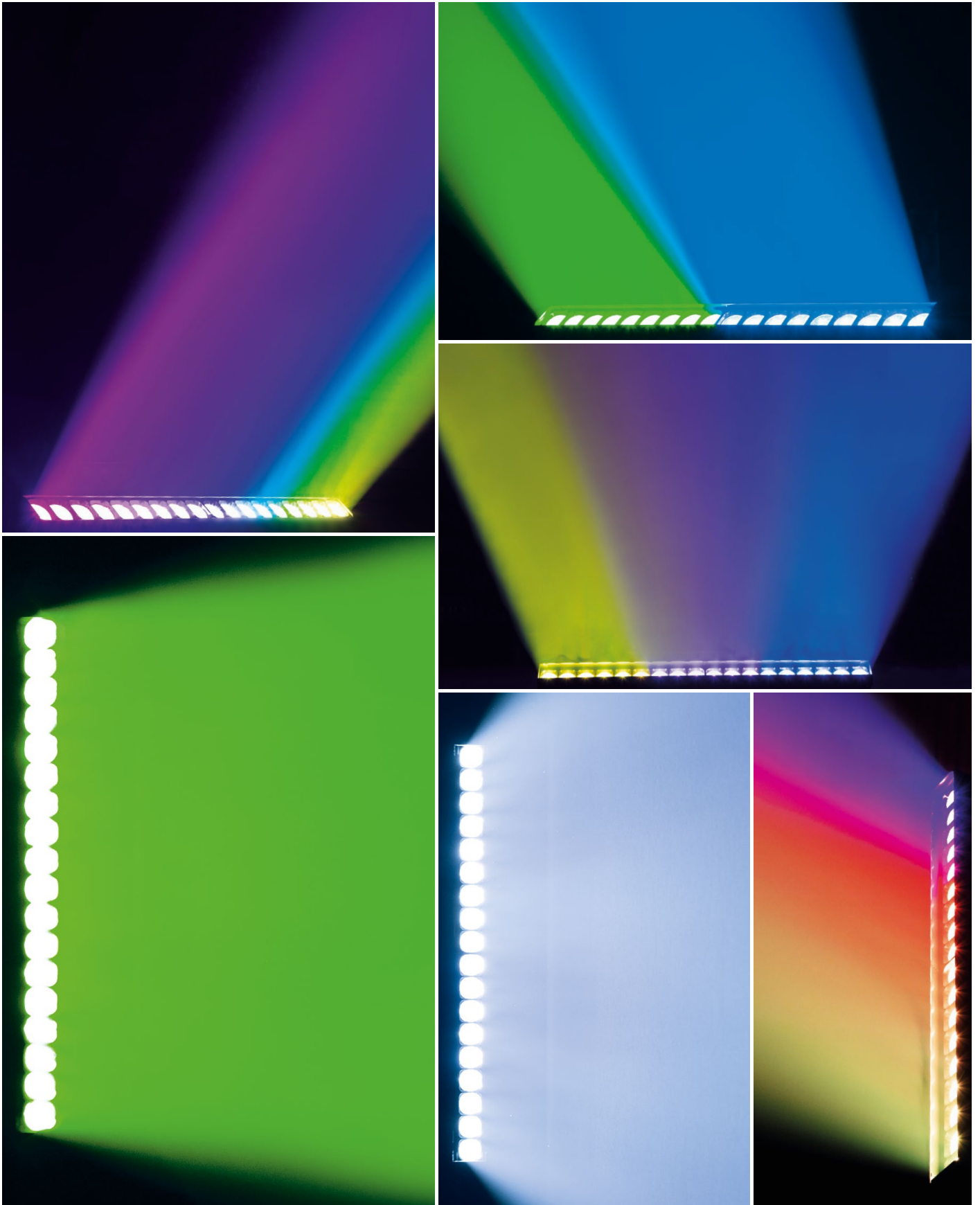
## Pixel Control

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.



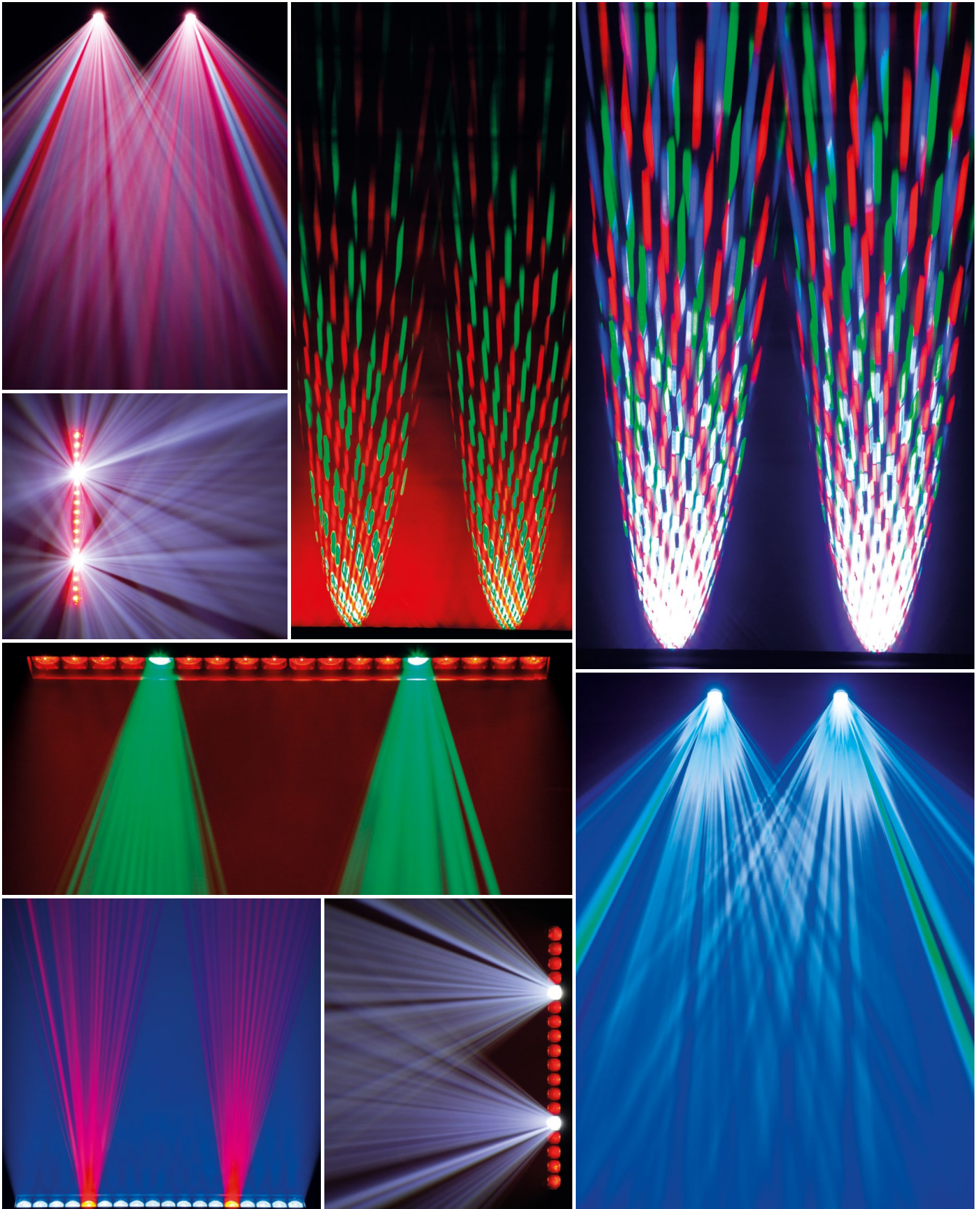
# Tetra2™

# Sheet of light



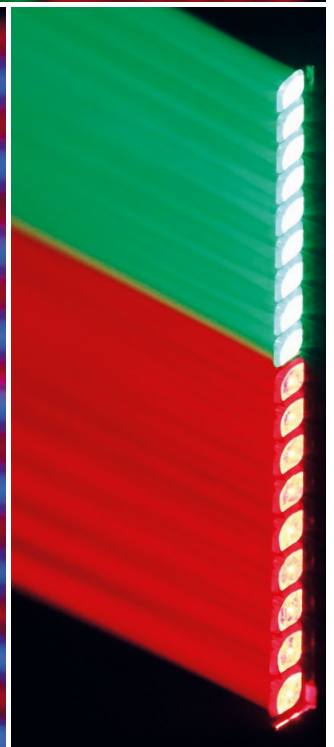
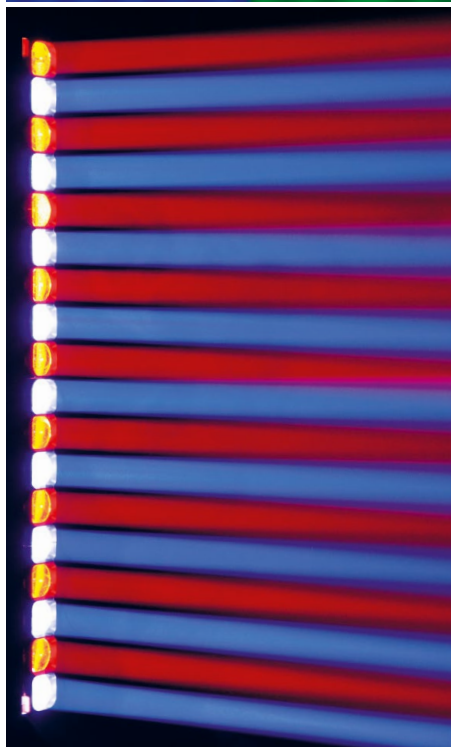
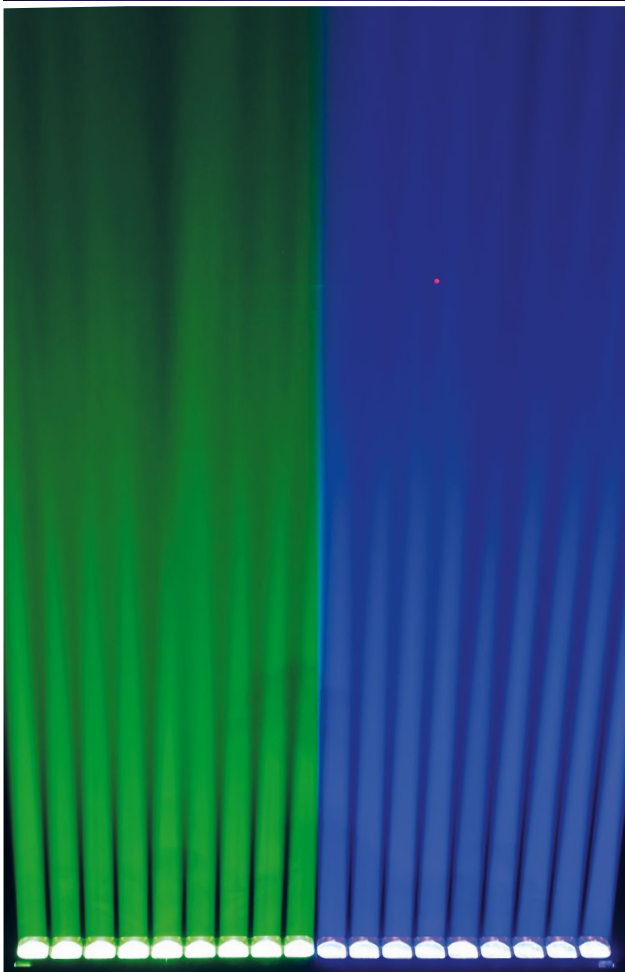
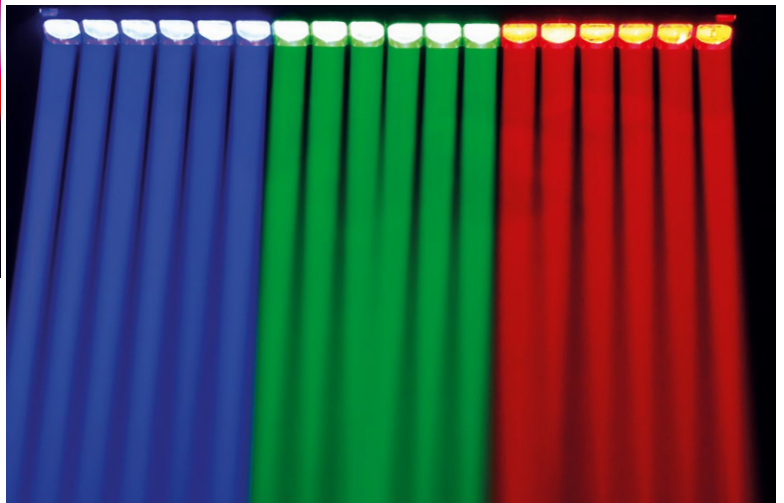
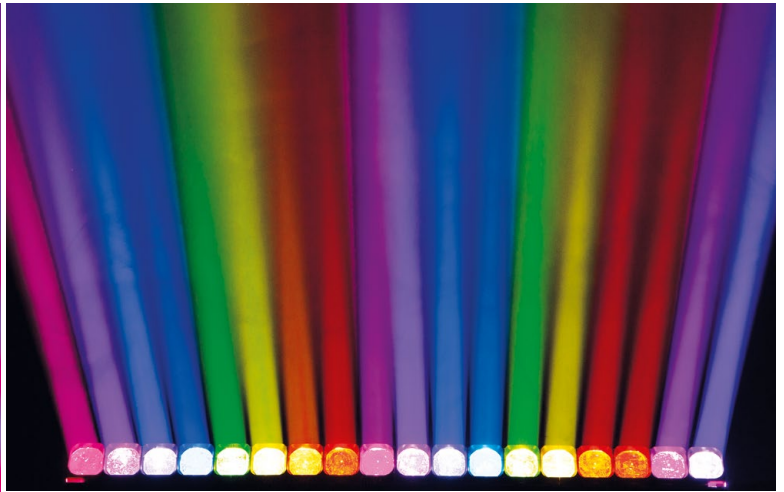
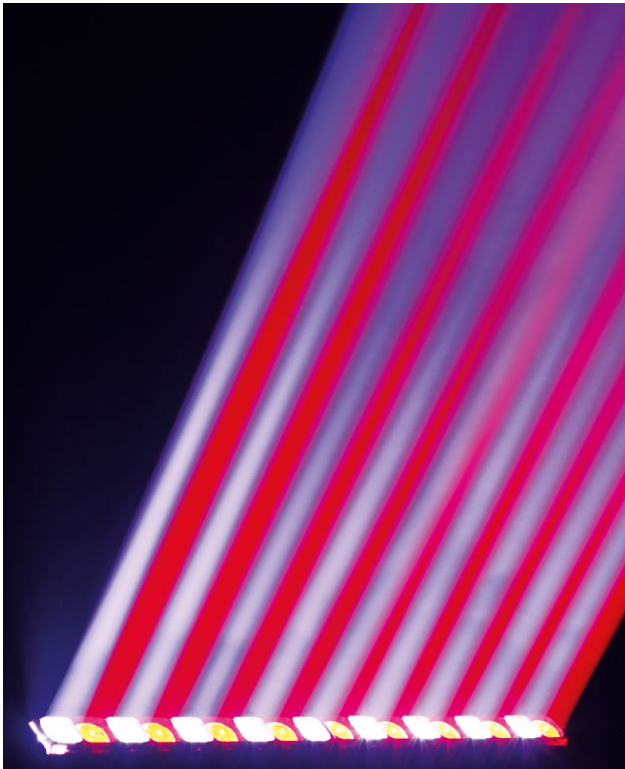
**Tetra2**<sup>TM</sup>

# Flower effect



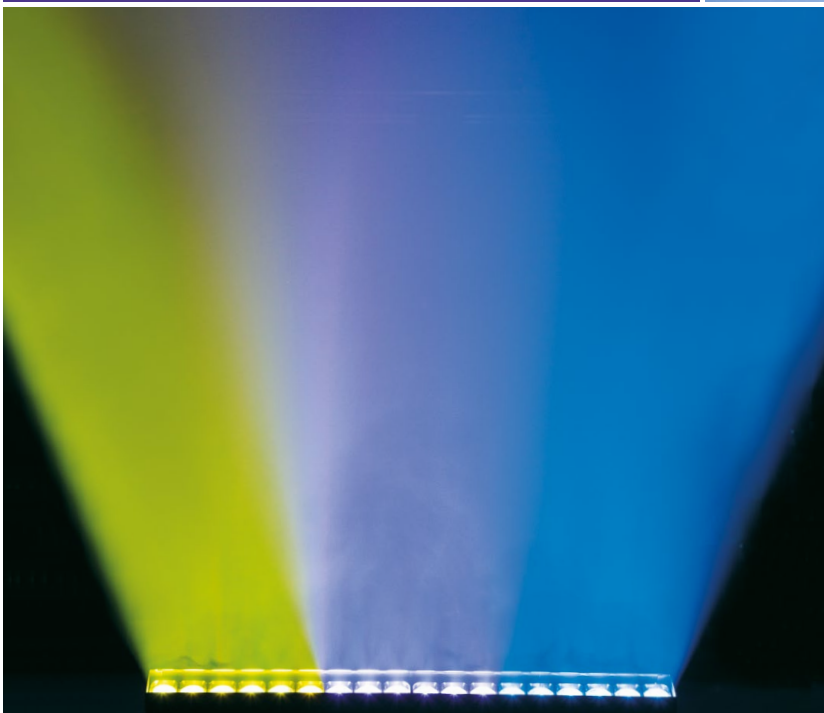
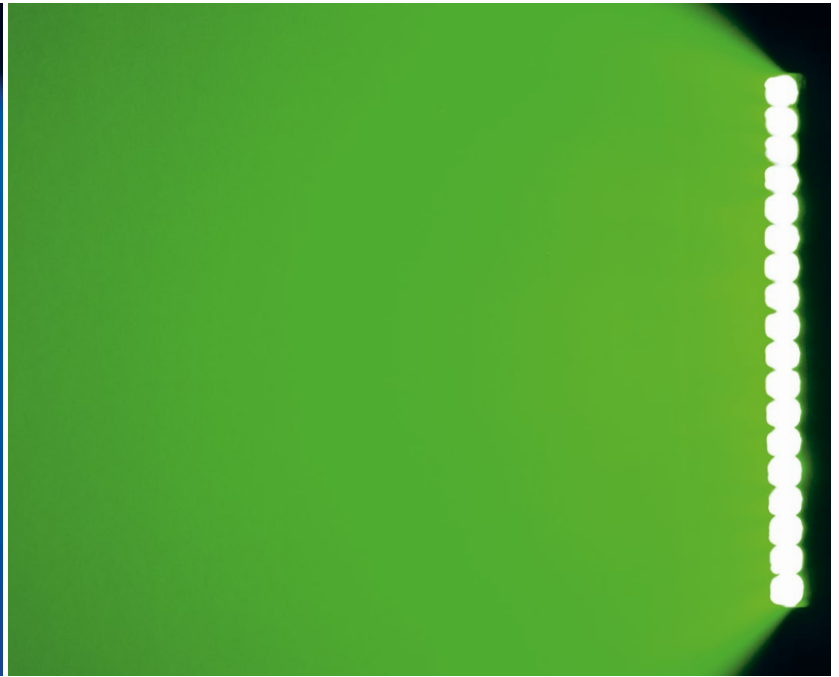
**Tetra2**<sup>TM</sup>

# Beam light



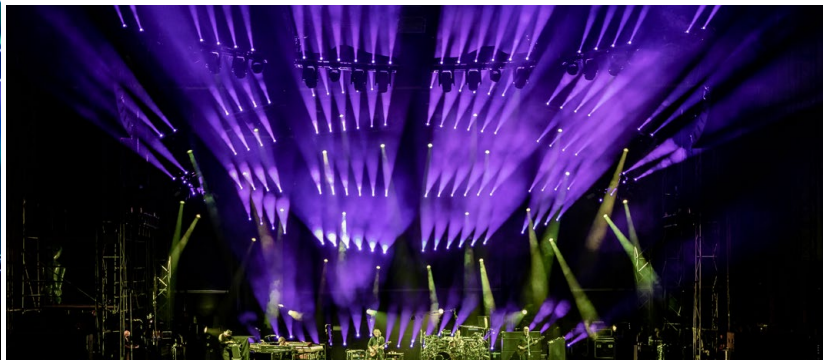
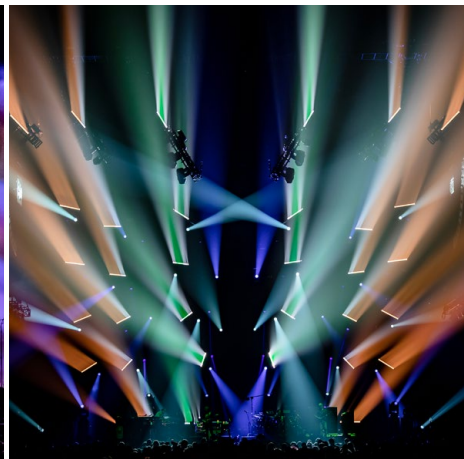
**Tetra2™**

# CYC & Wash light



**Tetra2**<sup>TM</sup>



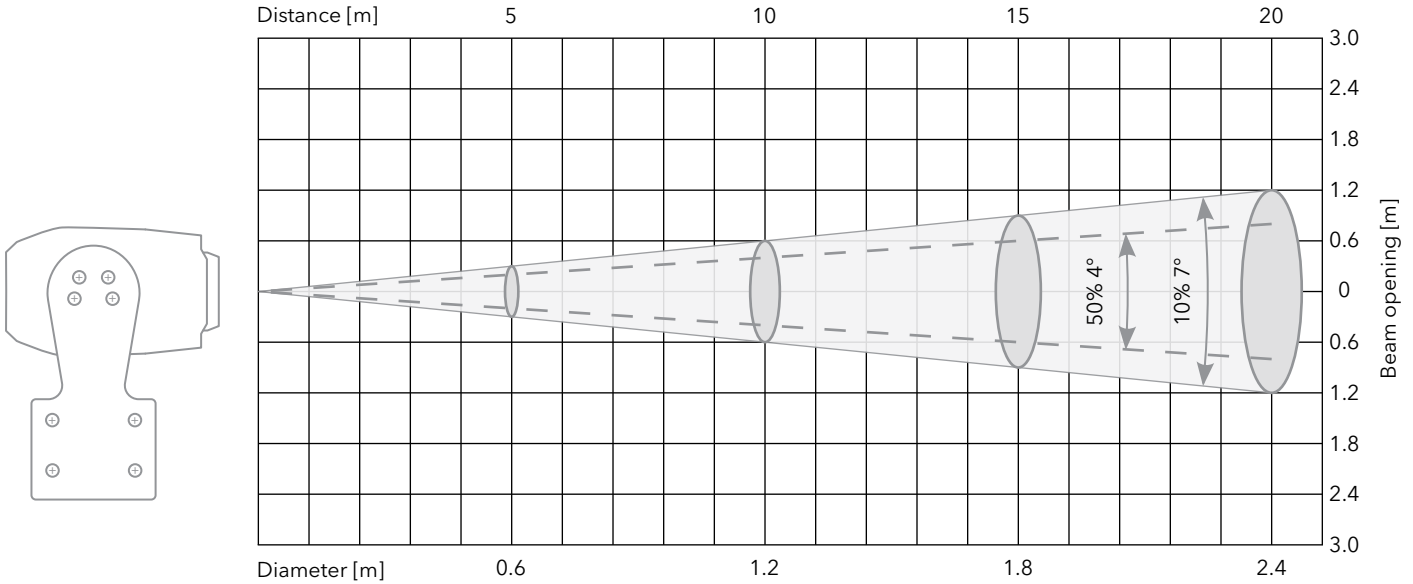


# Tetra2

## Photometric report

### Beam angle 7° - Min. zoom, WP off

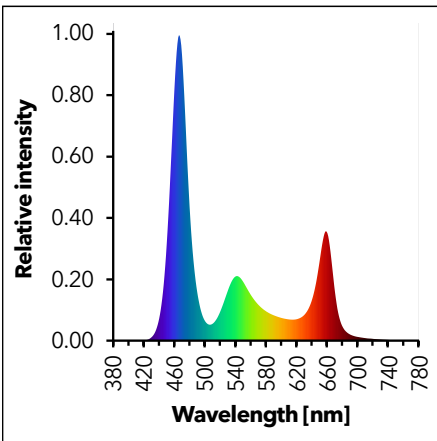
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	6414 lm	5831 lm	365000 cd	535 W



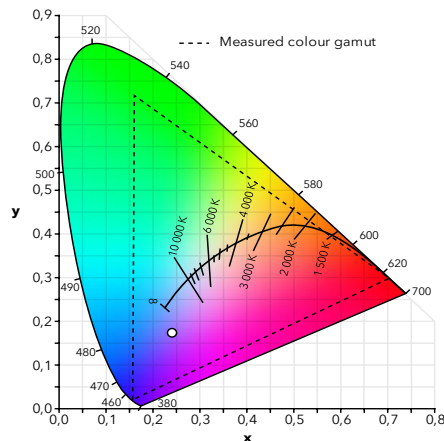
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	14600/1356	3650/339	1622/151	913/85	584/54	406/38	298/28	5831
Red	2366/220	592/55	263/24	148/14	95/9	66/6	48/4.5	945
Green	4890/454	1223/114	543/50	306/28	196/18	136/13	100/9	1953
Blue	1020/95	255/24	113/11	64/6	41/3.8	28/2.6	21/1.9	407
White	6310/586	1578/147	701/65	394/37	252/23	175/16	129/12	2520

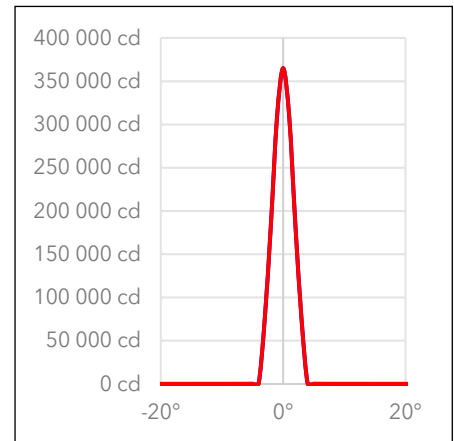
#### Spectrum



#### 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

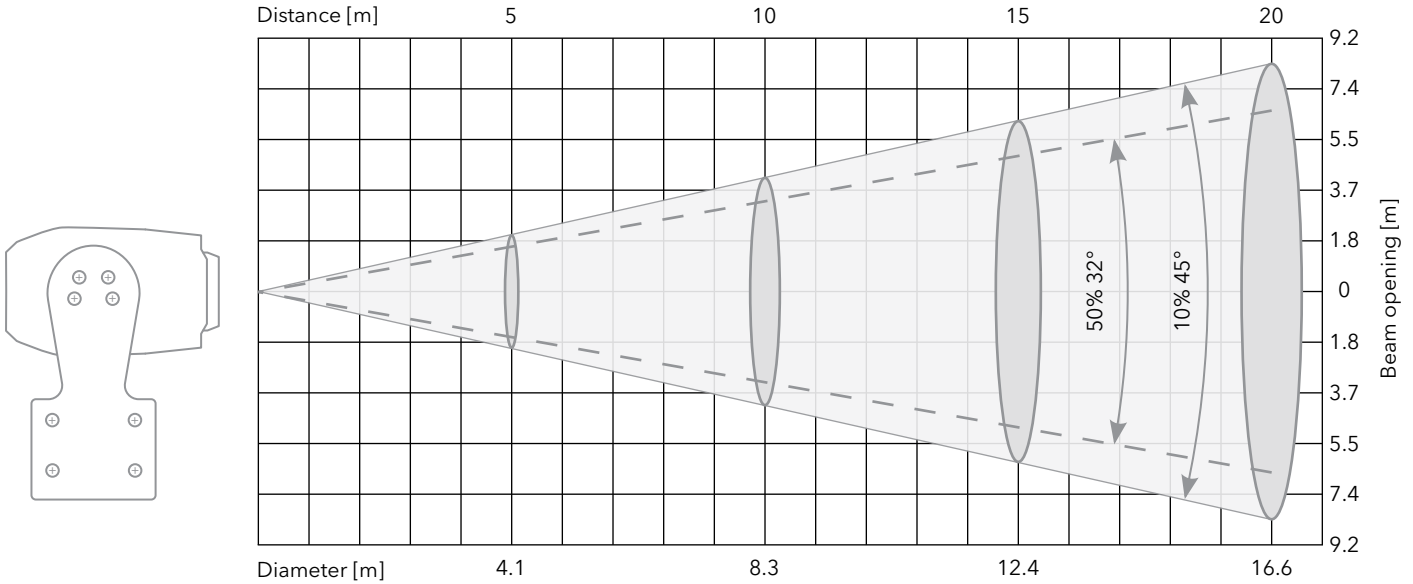
Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K Off; All pixels On  
Measurement date: 19.04.2022

# Tetra2

## Photometric report

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

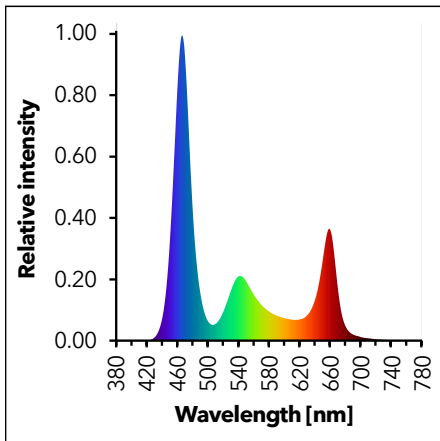
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
45°	10549 lm	8439 lm	33325 cd	535 W



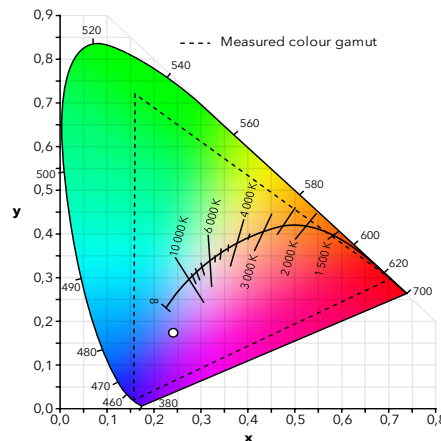
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	25 m	30 m	35 m	Total lumens
R+G+B+W	1333/124	333/31	148/14	83/8	53/5	37/3.4	27/2.5	8439
Red	218/20	55/5	24/2.3	14/1.3	9/0.8	6/0.6	4.4/0.4	1380
Green	455/42	114/11	51/4.7	28/2.6	18/1.7	13/1.2	9/0.9	2881
Blue	90/8	23/2.1	10/0.9	6/0.5	3.6/0.3	2.5/0.2	1.8/0.2	570
White	595/55	149/14	66/6	37/3.5	24/2.2	17/1.5	12/1.1	3767

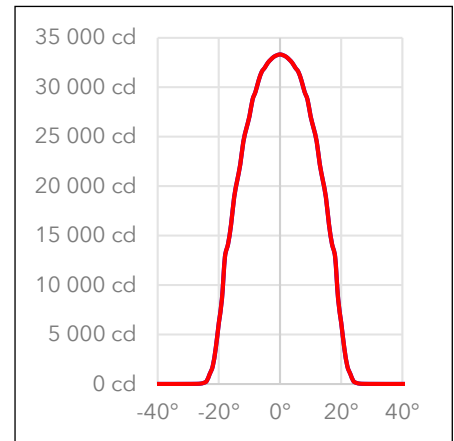
#### Spectrum



#### 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

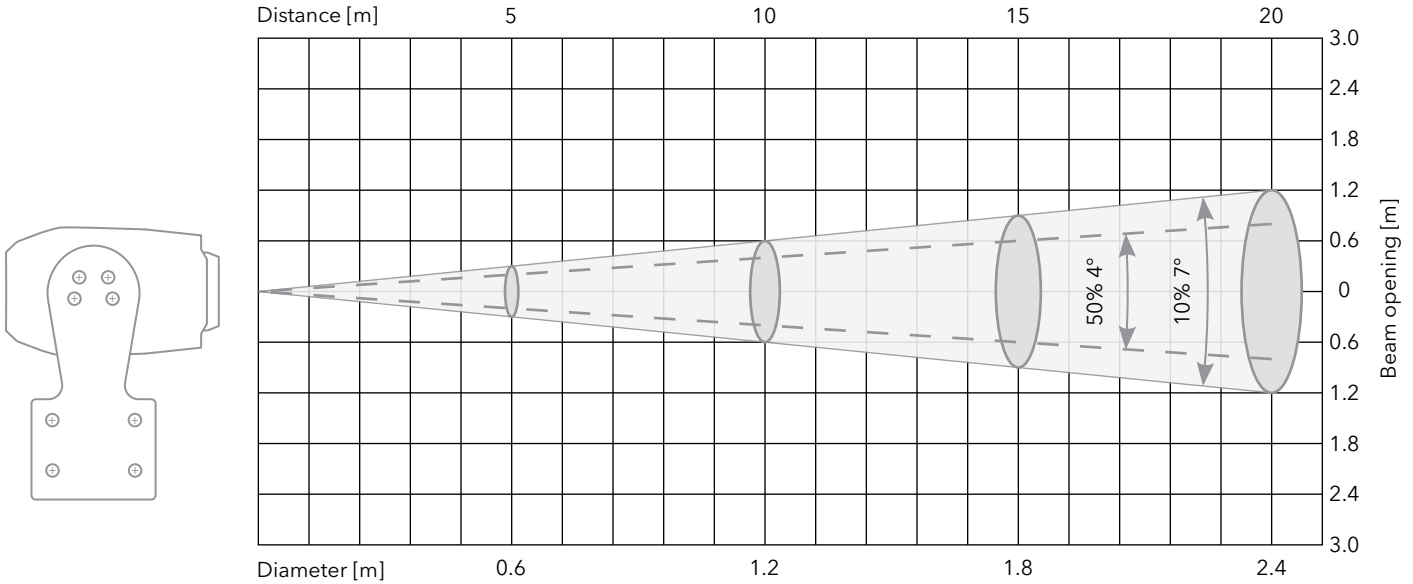
Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K Off; All pixels On  
Measurement date: 19.04.2022

# Tetra2

## Photometric report

### Beam angle 7° - Min. zoom, WP on

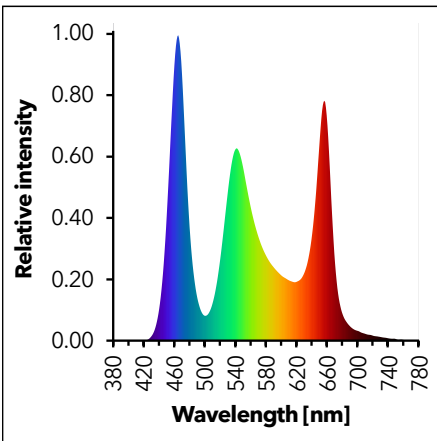
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
7°	5610 lm	5100 lm	319275 cd	535 W



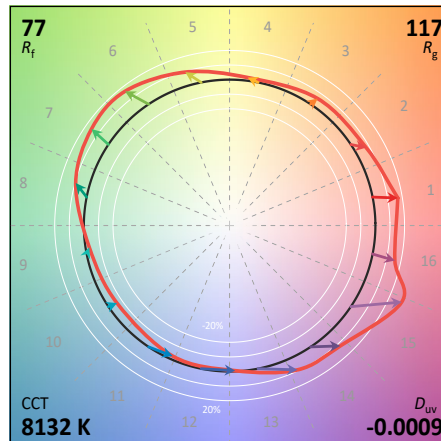
#### Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	30 m	40 m	50 m	Total lumens
8000 K	12771/1186.5	3192.8/296.6	1419/131.8	798.2/74.2	354.8/33	199.5/18.5	127.7/11.9	5100
5600 K	13366/1241.7	3341.5/310.4	1485.1/138	835.4/77.6	371.3/34.5	208.8/19.4	133.7/12.4	5338
4200 K	10792/1002.6	2698/250.7	1199.1/111.4	674.5/62.7	299.8/27.9	168.6/15.7	107.9/10	4310
3200 K	7280/676.3	1820/169.1	808.9/75.1	455/42.3	202.2/18.8	113.8/10.6	72.8/6.8	2907
2700 K	6111/567.7	1527.8/141.9	679/63.1	381.9/35.5	169.8/15.8	95.5/8.9	61.1/5.7	2440

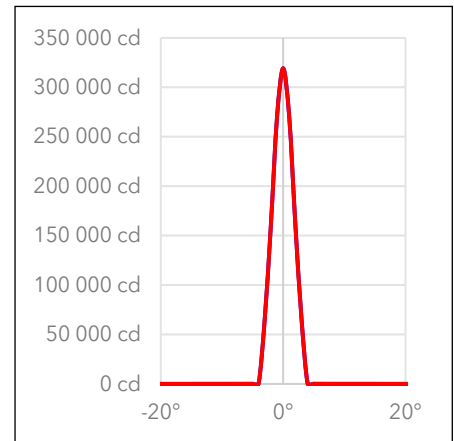
#### Spectrum



#### TM-30



#### Light distribution



Color temperature	CCT	8132
Color Deviation from Black	Duv	-0.0009
Color Coordinate CIE 1931	x	0.2944
	y	0.3022
Color Coordinate	u	0.1950
	v	0.3003

Color rendering index	CRI	71
Red component	CRI R9	-30
Color fidelity	TM30 Rf	77
Color gamut	TM30 Rg	117
Television consistency Index	TLCI	61

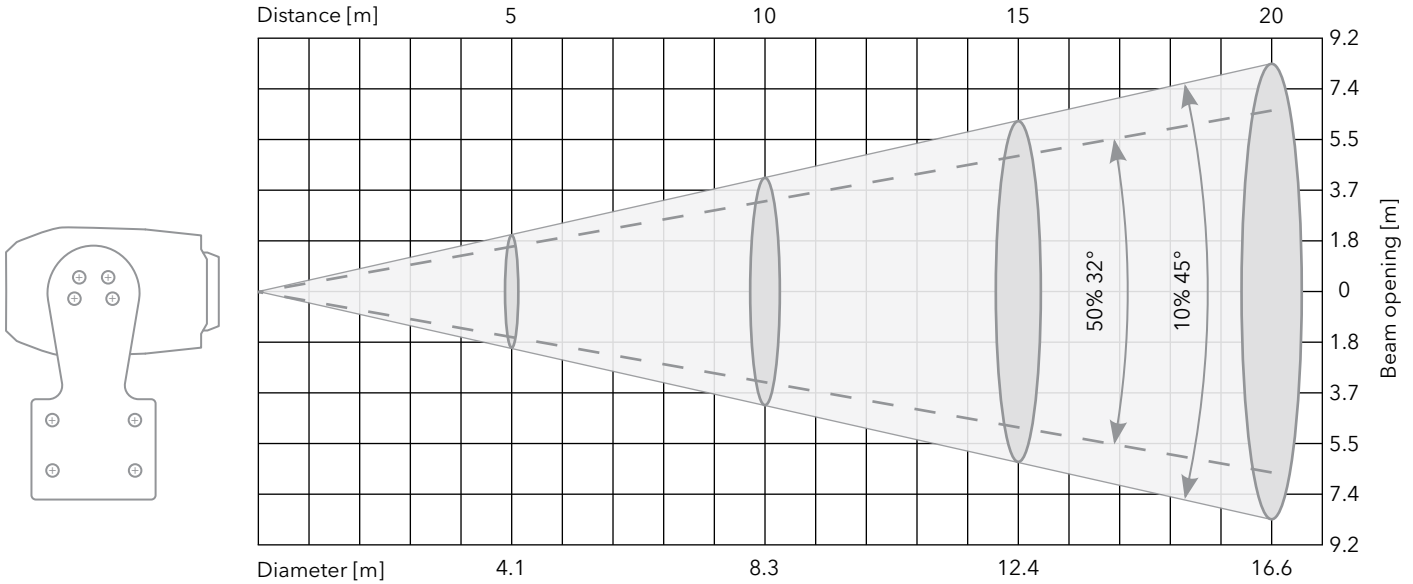
Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K On; All pixels On  
Measurement date: 19.04.2022

# Tetra2

## Photometric report

Beam angle 45° - Max. zoom, WP on

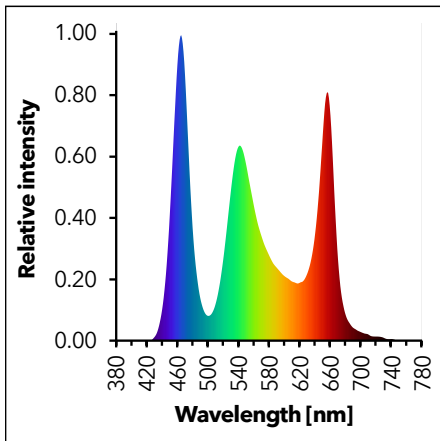
Beam angle	Total lumen output (integrating sphere)	Total lumen output (goniophotometer)	Peak candela	Power
45°	9164 lm	7331 lm	28950 cd	535 W



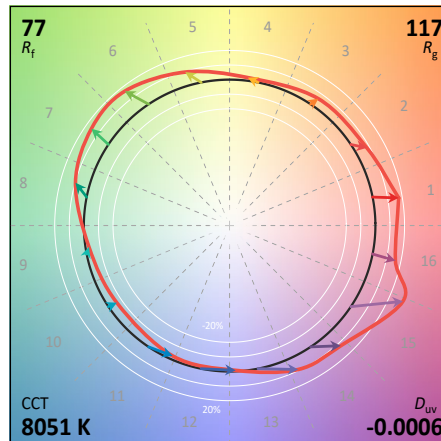
Center beam intensity [lx]/[fcd]; Total lumen output [lm] measured by goniophotometer

Distance	5 m	10 m	15 m	20 m	30 m	40 m	50 m	Total lumens
8000 K	1158/107.6	289.5/26.9	128.7/12	72.4/6.7	32.2/3	18.1/1.7	11.6/1.1	7331
5600 K	1217/113.1	304.3/28.3	135.2/12.6	76.1/7.1	33.8/3.1	19/1.8	12.2/1.1	7705
4200 K	979/91	244.8/22.7	108.8/10.1	61.2/5.7	27.2/2.5	15.3/1.4	9.8/0.9	6198
3200 K	658/61.1	164.5/15.3	73.1/6.8	41.1/3.8	18.3/1.7	10.3/1	6.6/0.6	4166
2700 K	555/51.6	138.8/12.9	61.7/5.7	34.7/3.2	15.4/1.4	8.7/0.8	5.6/0.5	3514

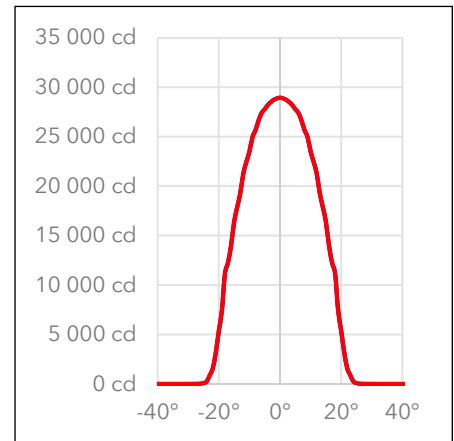
Spectrum



TM-30



Light distribution



Color temperature	CCT	8051
Color Deviation from Black	Duv	-0.0006
Color Coordinate CIE 1931	x	0.2950
	y	0.3034
Color Coordinate	u	0.1950
	v	0.3009

Color rendering index	CRI	71
Red component	CRI R9	-35
Color fidelity	TM30 Rf	77
Color gamut	TM30 Rg	117
Television consistency Index	TLCI	59

Fixture settings: DMX mode: 1; Flower effect Off; White Point 8000K On; All pixels On  
Measurement date: 19.04.2022

# Teira2™



 **ROBIN**<sup>®</sup>  
Innovative Technology

[www.robe.cz](http://www.robe.cz)

**ROBE**<sup>®</sup>

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