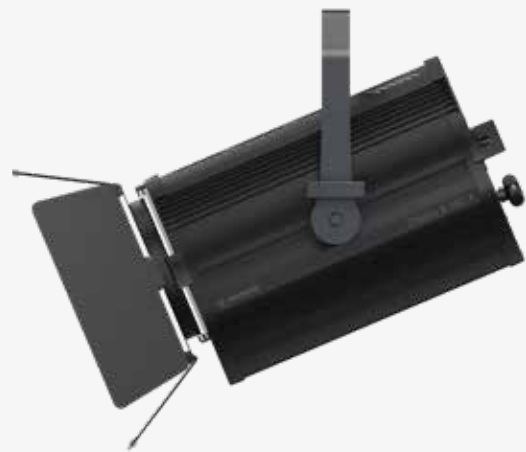


# Otello 6 HD FullSpectrum +

Last update:  
23/04/2024



Otello 6 HD + with 8 leaf barndoor

#### Introducing

● Developed to offer the best solution in the stage lighting field focussing on **theatre and TV studios applications**, Otello Led Fresnel incorporates all traditional characteristics of a Fresnel light such as the **distinctive soft-edged** and **very wide beam** and the **smooth and homogeneous light field**.

The improved **HD electronic** with an advanced LED controller guarantees a smooth 20 bit dimming and a superlative **color mixing**.

Next to the traditional manual or P.O. option, Otello offers an optional motorized zoom, which together with a modern design and Oled display with on-board selector for quick setting represents the state of the art in terms of LED Fresnel range.

The family consists of 2 fixtures with lenses of 150 mm (5,9 inch) and 200 mm (7,87 inch). All variants include COB, VariWhite, Studio and FullSpectrum 6 LEDs in 3 power steps.

● **FullSpectrum** : 2.700 – 20.000 K (CRI average > 95); Red, Green, Blue, Cyan, Lime, Amber color mixing with Green-Magenta adjustment

● **VariWhite | Tungsten | Daylight**: white engines with the Tungsten and Daylight COB LED calibrated respectively at 3.000 K and 5.600 K CCT and a tunable white source ranging from 2.800 to 6.500 K (CRI > 94) for the VariWhite version

#### Key Features



- Red, Green, Blue, Cyan, Lime, Amber light source, 20 bit color mixing
- Green-Magenta adjustment
- Color mixing with hue and saturation control



- High CRI 97 @ 3.200 K, CRI 96 @ 5.600 K



- CCT 2.700K → 20.000 K



- Fresnel lens (diameter: 150 mm / 5.9 in)
- Zoom range from 9° to 68° half peak angle
- Available with Manual or Motorized Zoom



- Extruded aluminum, flame-retardant technopolymer reinforced with fiberglass



- Custom color on request (optional)



- Manual (standard) or Pole Operated Pan-Tilt (optional)

General	
● LED Source	RGBCLA COB LED (Red, Green, Blue, Cyan, Lime, Amber) - Color mixing with hue and saturation control
● CCT Range	●●●●● CCT from 2.700 K to 10.000 K (through DMX) or up to 20.000 K (through Display)
● Color Rendition Average	CRI 97 @ 3.200 K, CRI 96 @ 5.600 K
● Dimming	8 or 16 bit, 5 selectable curves: Exponential, Logarithmic, Linear, Halo and Standard
● Dimming Smooth Selection	Fast, Slow and Very Slow
● Strobe	Electronic strobe, synchronized, random, pulse effect
● Lens	Glass Fresnel lens (diameter: 150 mm / 5.9 in)
● Optical	Zoom range from 9° to 68° half peak angle (motorized, manual or PO zoom available)
● Green-Magenta adjustment	Continuously adjustable (Full Minusgreen to Full Plusgreen)
● Color saturation function	Generated colors fades to White tone selected with the CCT channel
● Dim to Warm function	Halogen lamp dimmer simulation
● Camera flicker control/Hz range	Yes: 20.000 Hz
● Calibrated Cob	Yes
● L80 Rating (hours to 80% output)	50.000 Hours
Electrical	
● Voltage Input	80-264V, 50-60 Hz, Auto-sensing
● Power Consumption	190 W Maximum - 0.84 A at 230V, 1.68 A at 115V - $\cos\phi$ : 0.98 (manual / P.O. zoom) 200 W Maximum - 0.88 A at 230V, 1.77 A at 115V - $\cos\phi$ : 0.98 (motorized zoom)
● Power Connection	In and Out PowerCON TRUE1 Top connectors to feed up to 8 (at 230V) or 4 (at 115V) fixtures
● Data Connection	In and Out DMX 5 pin locking XLR connectors
Thermal	
● Ambient Operating Temperature	0°C - +40°C (32°F - 104°F)
● Fan (controllable)	Yes, 4 different settings: Silent, Studio, Auto, DMX Regulated
Control Options	
● Protocols	DMX512A, RDM (Remote Device Management), Wireless (Optional By LumenRadio)
● RDM configuration	Yes
● DMX Channels	Manual / PO zoom version: 16 / 7 / 1 / Studio mode / RGB mode / fine RGB mode / Sunrise mode Motorized zoom version: 17 / 8 / Studio mode / RGB mode / fine RGB mode / Sunrise mode
● Display	Graphic OLED with on-board selector for quick setting
● Firmware upgrade	Through DMX with RDM Upgrade USB interface ( code AC10011A001)
Physical	
● Yoke	Manual (standard) or Pole Operated Pan-Tilt (optional)
● Materials	Extruded aluminum, flame-retardant technopolymer reinforced with fiberglass
● Weight	With Manual Yoke: 9.5 Kg / 20.94 lbs - With Pole Operated Yoke: 11 Kg / 24.25 lbs
● Length	425.6 mm / 16.76 in
● Width	With Manual Yoke: 277.7 mm / 10.93 in - With Pole Operated Yoke: 370 mm / 14.56 in
● Height without yoke	267.3 mm / 10.52 in
● Height with yoke	With Manual Yoke: 384.2 mm / 15.13 in - With Pole Operated Yoke: 558 mm / 21.96 in
● IP Rating	IP20
● Color options	Black (standard), custom color on request (optional)
Included accessories	
BC10044A001	8-Leaf Barndoor
GKIT17 (USA) / GKIT16 (EU)	1.5 m power cable with PowerCON TRUE1 Top and bare ends
BC10044A005	Color frame holder



Otello 6 HD + (manual zoom)  
Rear Panel with the new OLED  
display



Otello 6 HD + with  
Pole Operated Yoke and Pole Operated  
Zoom

Otello 6 HD+ PO version / Rear Panel

DMX Charts - Manual version

**16 Channels**

- 01 → Master Dimmer
- 02 → Red
- 03 → Green
- 04 → Blue
- 05 → Cyan
- 06 → Lime
- 07 → Amber
- 08 → Strobe Effect
- 09 → Dimmer Fine
- 10 → Special Functions
- 11 → Red Tone
- 12 → Green Tone
- 13 → Blue Tone
- 14 → White Tone
- 15 → Green Saturation
- 16 → Saturation

**7 Channels**

- 01 → Master Dimmer
- 02 → Red
- 03 → Green
- 04 → Blue
- 05 → Cyan
- 06 → Lime
- 07 → Amber

**Studio Mode**

- 01 → Master Dimmer
- 02 → White Tone
- 03 → Green Saturation
- 04 → Saturation
- 05 → Hue
- 06 → Dimmer Fine
- 07 → Special Functions

**1 Channel**

- 01 → Master Dimmer - Color  
Temperature Settable by Display

**RGB Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Red
- 04 → Green
- 05 → Blue
- 06 → White Tone
- 07 → Saturation
- 08 → Strobe Effect
- 09 → Special Functions

**Fine RGB Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Red
- 04 → Red Fine
- 05 → Green
- 06 → Green Fine
- 07 → Blue
- 08 → Blue Fine
- 09 → White Tone
- 10 → Saturation
- 11 → Strobe
- 12 → Special Functions

**Sunrise Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Proportional CCT
- 04 → Step CCT
- 05 → Green Saturation
- 06 → Special Functions

**17 Channels**

- 01 → Master Dimmer
- 02 → Red
- 03 → Green
- 04 → Blue
- 05 → Cyan
- 06 → Lime
- 07 → Amber
- 08 → Strobe Effect
- 09 → Dimmer Fine
- 10 → Special Functions
- 11 → Red Tone
- 12 → Green Tone
- 13 → Blue Tone
- 14 → White Tone
- 15 → Green Saturation
- 16 → Saturation
- 17 → Zoom

**8 Channels**

- 01 → Master Dimmer
- 02 → Red
- 03 → Green
- 04 → Blue
- 05 → Cyan
- 06 → Lime
- 07 → Amber
- 08 → Zoom

**Studio Mode**

- 01 → Master Dimmer
- 02 → White Tone
- 03 → Green Saturation
- 04 → Saturation
- 05 → Hue
- 06 → Dimmer Fine
- 07 → Special Functions
- 08 → Zoom

**RGB Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Red
- 04 → Green
- 05 → Blue
- 06 → White Tone
- 07 → Saturation
- 08 → Strobe Effect
- 09 → Special Functions
- 10 → Zoom

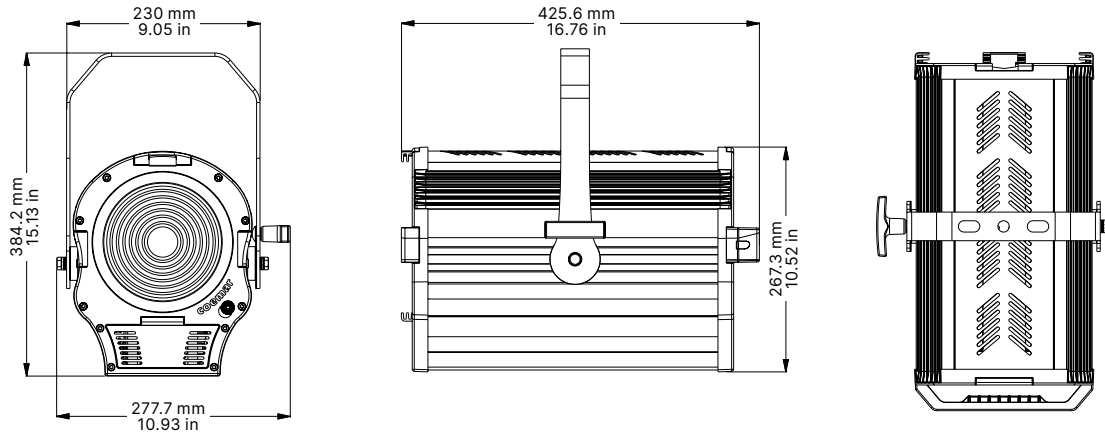
**Fine RGB Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Red
- 04 → Red Fine
- 05 → Green
- 06 → Green Fine
- 07 → Blue
- 08 → Blue Fine
- 09 → White Tone
- 10 → Saturation
- 11 → Strobe
- 12 → Special Functions
- 13 → Zoom

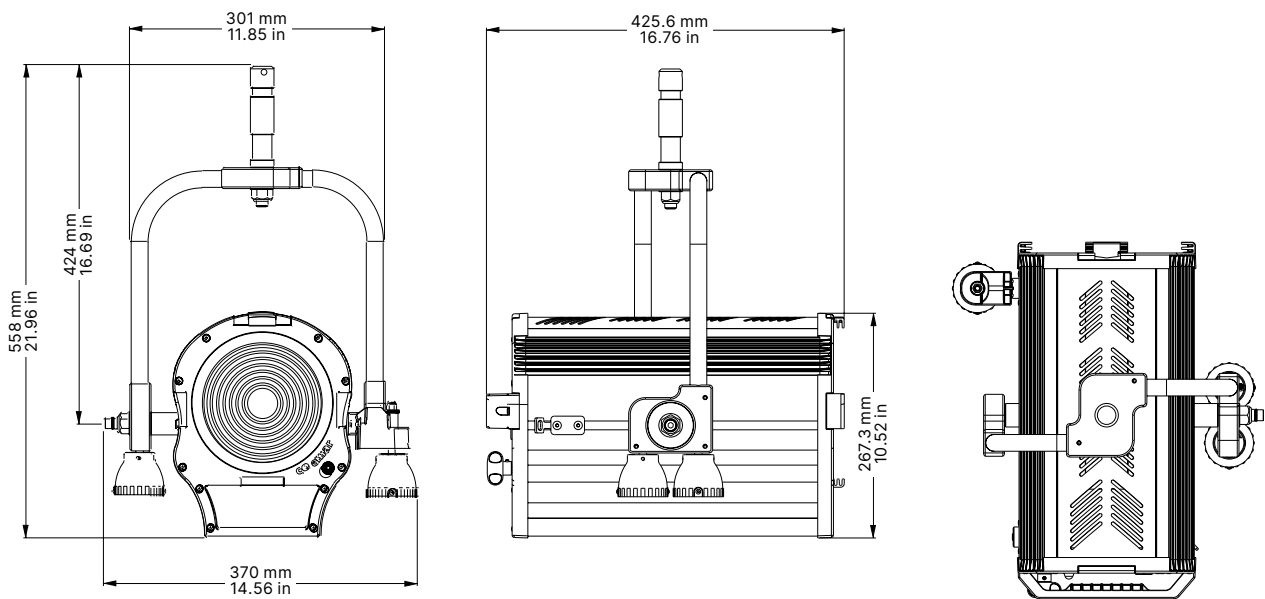
**Sunrise Mode**

- 01 → Master Dimmer
- 02 → Dimmer Fine
- 03 → Proportional CCT
- 04 → Step CCT
- 05 → Green Saturation
- 06 → Special Functions
- 07 → Zoom

Drawing Size - Manual Yoke Version



Drawing Size - Pole operated Yoke Version



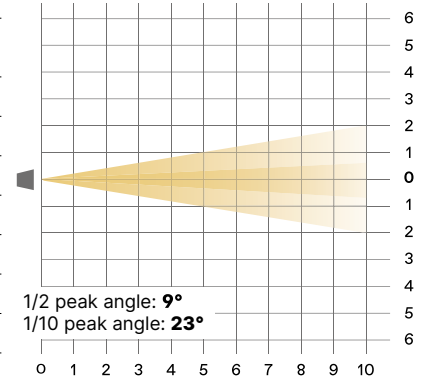
Models

Product	Code
Otello 6 HD FullSpectrum + Manual Yoke, Manual Zoom	F144Q090M
Otello 6 HD FullSpectrum + Manual Yoke, Motorized Zoom	F144Q000M
Otello 6 HD FullSpectrum + Pole Operated	F144Q010M

## Otello 6 HD FullSpectrum +

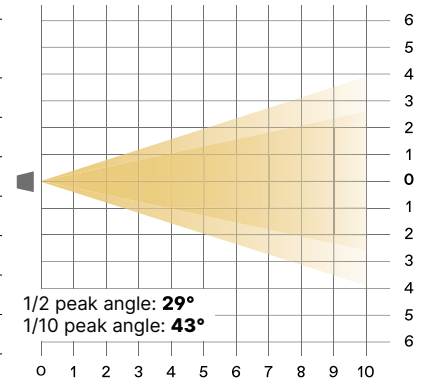
### Optic: Minimum Zoom

Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	<b>3.200K</b>	105.546	26.387	11.727	6.597	4.222	2.932	2.154	1.649	1.303	1.055
	<b>5.600K</b>	111.132	27.783	12.348	6.946	4.445	3.087	2.268	1.736	1.372	1.111
<b>1/2 P.A. Ø (m)</b>	0,16	0,31	0,47	0,63	0,79	0,94	1,10	1,26	1,42	1,57	
<b>1/10 P.A. Ø (m)</b>	0,41	0,81	1,22	1,63	2,03	2,44	2,85	3,26	3,66	4,07	
lux	<b>3.200K</b>	CRI 96	TLCI 92.1								
	<b>5.600K</b>	CRI 96	TLCI 95.2								



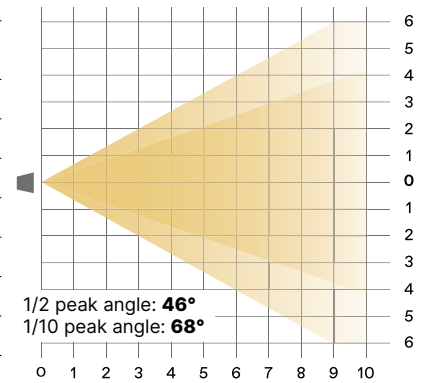
### Optic: Medium Zoom

Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	<b>3.200K</b>	27.342	6.836	3.038	1.709	1.094	760	558	427	338	273
	<b>5.600K</b>	29.253	7.313	3250	1828	1170	813	597	457	361	293
<b>1/2 P.A. Ø (m)</b>	0,52	1,03	1,55	2,07	2,59	3,10	3,62	4,14	4,66	5,17	
<b>1/10 P.A. Ø (m)</b>	0,79	1,58	2,36	3,15	3,94	4,73	5,51	6,30	7,09	7,88	
lux	<b>3.200K</b>	CRI 96	TLCI 93								
	<b>5.600K</b>	CRI 96	TLCI 96								



### Optic: Maximum Zoom

Distance(m)	1	2	3	4	5	6	7	8	9	10	
lux	<b>3.200K</b>	11.907	2.977	1.323	744	476	331	243	186	147	119
	<b>5.600K</b>	12.838	3.210	1.426	802	514	357	262	201	158	128
<b>1/2 P.A. Ø (m)</b>	0,85	1,70	2,55	3,40	4,24	5,09	5,94	6,79	7,64	8,49	
<b>1/10 P.A. Ø (m)</b>	1,35	2,70	4,05	5,40	6,75	8,09	9,44	10,79	12,14	13,49	
lux	<b>3.200K</b>	CRI 96	TLCI 93								
	<b>5.600K</b>	CRI 96	TLCI 95.5								



## Otello 6 HD FullSpectrum + Minimum Zoom - 3.200K

### General

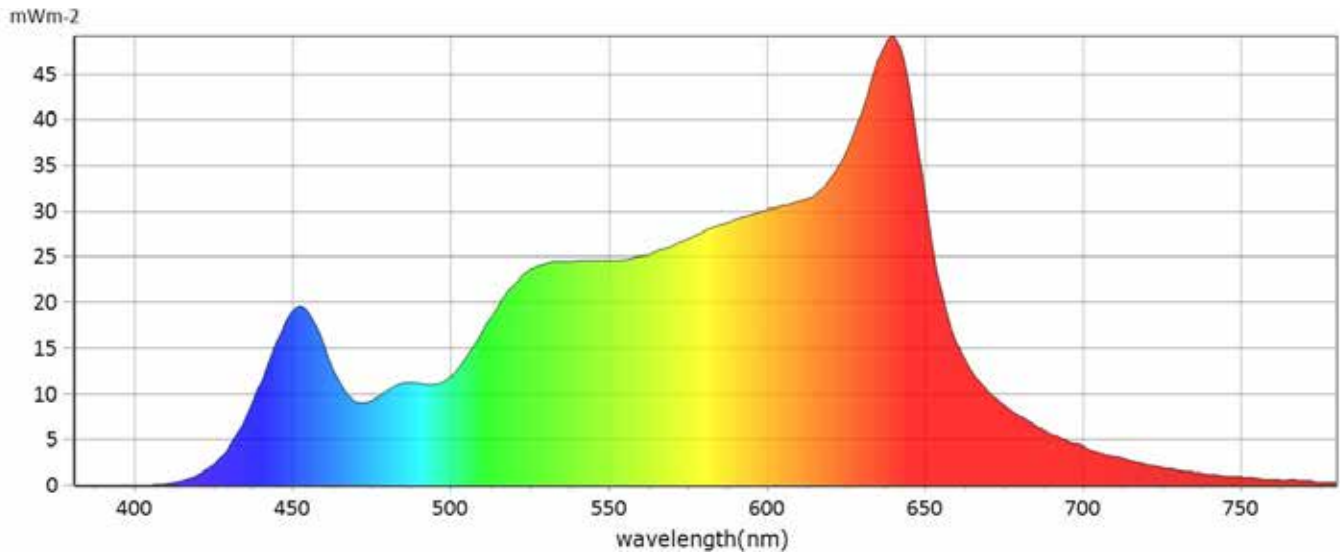
● CCT	3221 K
● x	0,4206
● y	0,3992
● LambdaD	582 nm
● LambdaP	639 nm



### Measurements

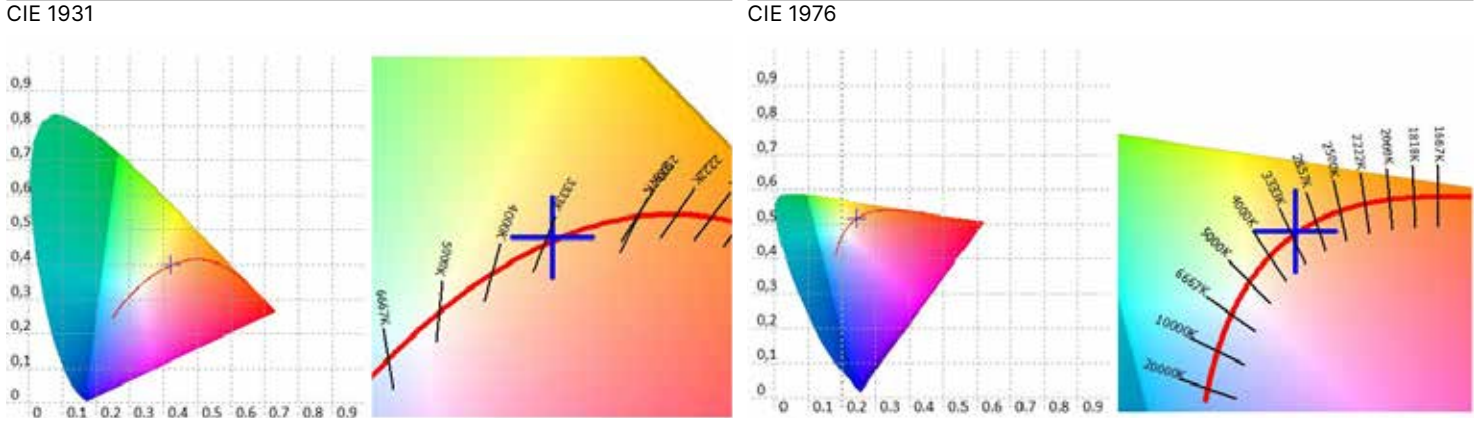
<b>CCT</b>	3221 K	<b>u'10</b>	0,2466	<b>Duv</b>	0,0006	<b>GAI</b>	64,6	<b>IRR</b>	5,852	<b>R6</b>	95,2	<b>R15</b>	96,1
<b>LUX</b>	2.154 lx	<b>v'10</b>	0,5167	<b>MEL</b>	1095 lx	<b>PPFD</b>	27,50 umolm 2s-1	<b>CQS</b>	94,0	<b>R7</b>	96,9		
<b>I-Time</b>	6000 us	<b>X</b>	1961,04	<b>LambdaPV</b>	49,11	<b>PFD</b>	28,24 umolm 2s-1	<b>CRI</b>	96	<b>R8</b>	95,7		
<b>x</b>	0,4206	<b>Y</b>	1861,34	<b>LambdaD</b>	582 nm	<b>PFD-B</b>	3,448 umolm 2s-1	<b>TLCI</b>	92,1	<b>R9</b>	87,5		
<b>y</b>	0,3992	<b>Z</b>	840,06	<b>LambdaP</b>	639 nm	<b>PFD-G</b>	11,29 umolm 2s-1	<b>R1</b>	98,0	<b>R10</b>	88,5		
<b>u'</b>	0,2421	<b>delta-x</b>	0,0007	<b>Purity</b>	45,95%	<b>PFD-R</b>	12,76 umolm 2s-1	<b>R2</b>	96,1	<b>R11</b>	95,5		
<b>v'</b>	0,5170	<b>delta-y</b>	0,0017	<b>fc</b>	173,0	<b>PFD-UV</b>	0,0004 umolm 2s-1	<b>R3</b>	91,5	<b>R12</b>	81,8		
<b>x10</b>	0,4258	<b>delta-u'</b>	-0,0003	<b>Rf</b>	93,6	<b>PFD-FR</b>	-0,7439 umolm 2s-1	<b>R4</b>	96,3	<b>R13</b>	97,5		
<b>y10</b>	0,3965	<b>delta-v'</b>	0,0008	<b>Rg</b>	102,1	<b>S/P</b>	1,51	<b>R5</b>	96,5	<b>R14</b>	94,3		

### Spectrum





### Otello 6 HD FullSpectrum + Minimum Zoom - 3.200K



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,0	96,4	91,5	96,3	96,9	95,2	96,9	95,7	87,5	88,5	95,5	81,8	97,5	94,3	96,1

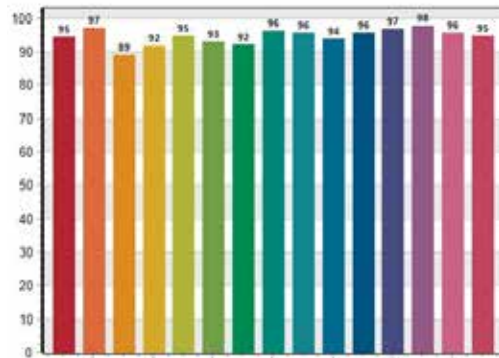
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,0	96,4	92,3	94,1	92,6	92,5	95,6	95,9	96,5	91,6	88,5	90,1	92,5	90,6	91,6	88,4

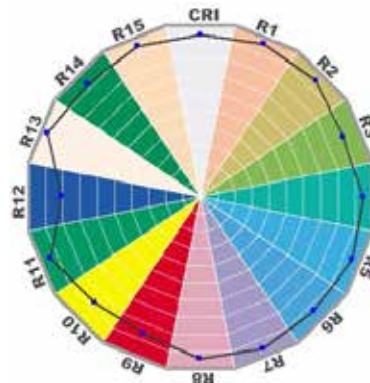
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,5	97,2	89,1	91,7	94,7	93,0	92,0	96,3	95,6	93,9	95,7	97,0	97,8	95,6	94,9

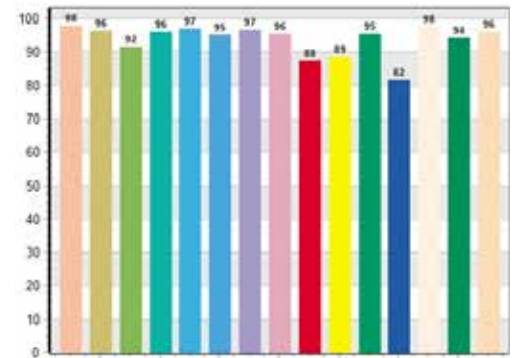
CQS: 94, 03



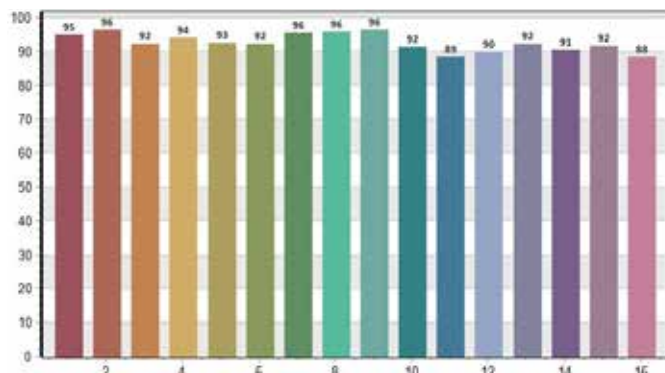
CRI-2



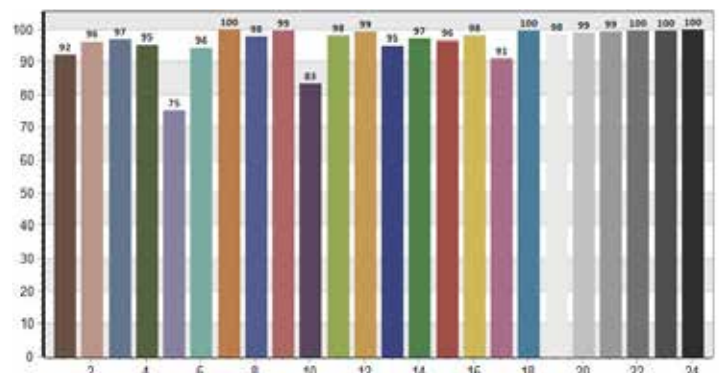
CRI: 95, 85



TM30: 93, 59

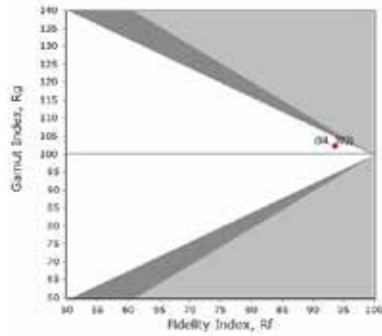
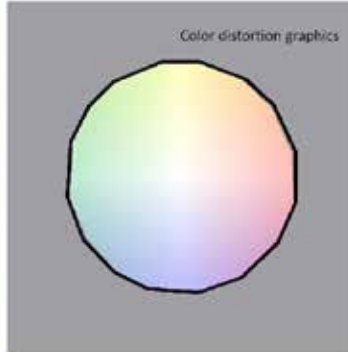
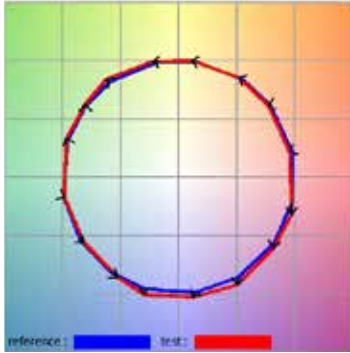


TLCI: 93, 11



## Otello 6 HD FullSpectrum + Minimum Zoom - 3.200K

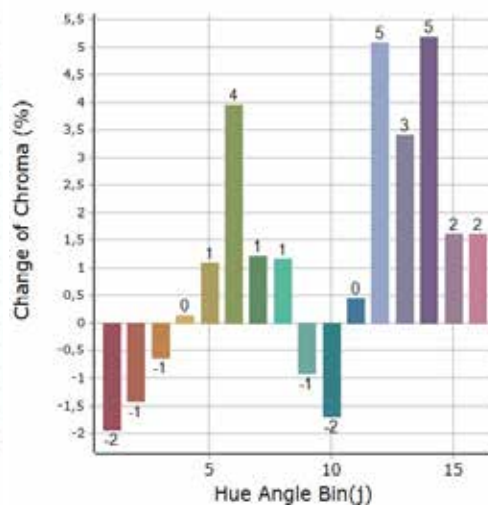
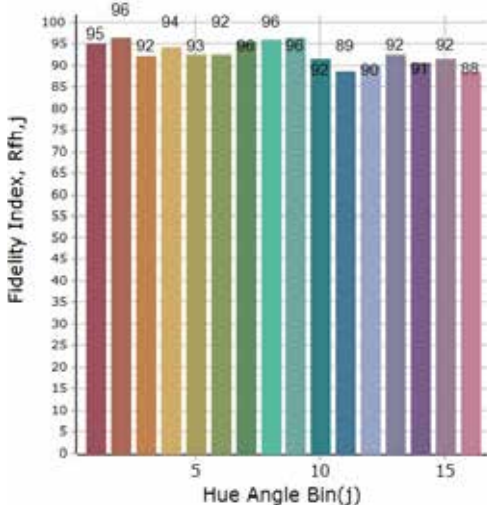
### General Color Rendition



**Rf**  
93,6  
Fidelity index Rf

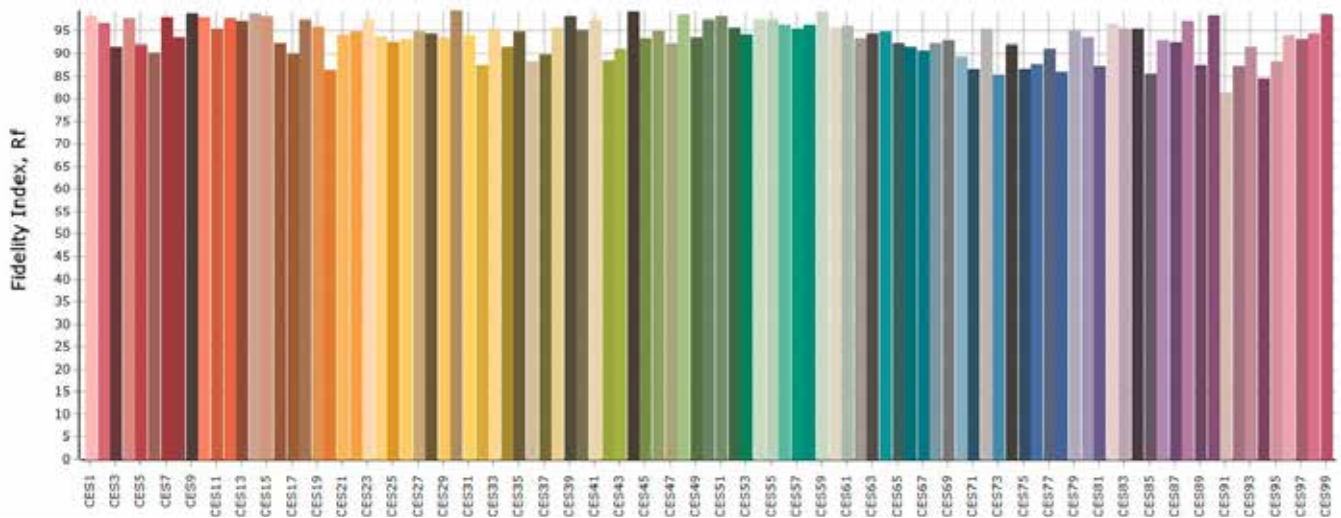
**Rg**  
102,1  
Gammut index Rg

### Color Rendition by Hue



Hue Bin	graphic shifts (%)		
	Rf	Chroma	Hue
1	95,0	-1,9%	-0,9%
2	96,4	-1,4%	0,8%
3	92,3	-0,6%	3,3%
4	94,1	0,1%	2,9%
5	92,6	1,1%	3,4%
6	92,5	4,0%	1,3%
7	95,6	1,2%	-1,4%
8	95,9	1,2%	-1,9%
9	96,5	-0,9%	0,4%
10	91,6	-1,7%	3,8%
11	88,5	0,4%	7,0%
12	90,1	5,1%	1,4%
13	92,5	3,4%	-2,6%
14	90,6	5,2%	-3,5%
15	91,6	1,6%	-4,1%
16	88,4	1,6%	-7,4%

### Color Fidelity by Sample



## Otello 6 HD FullSpectrum + Medium Zoom - 3.200K

### General

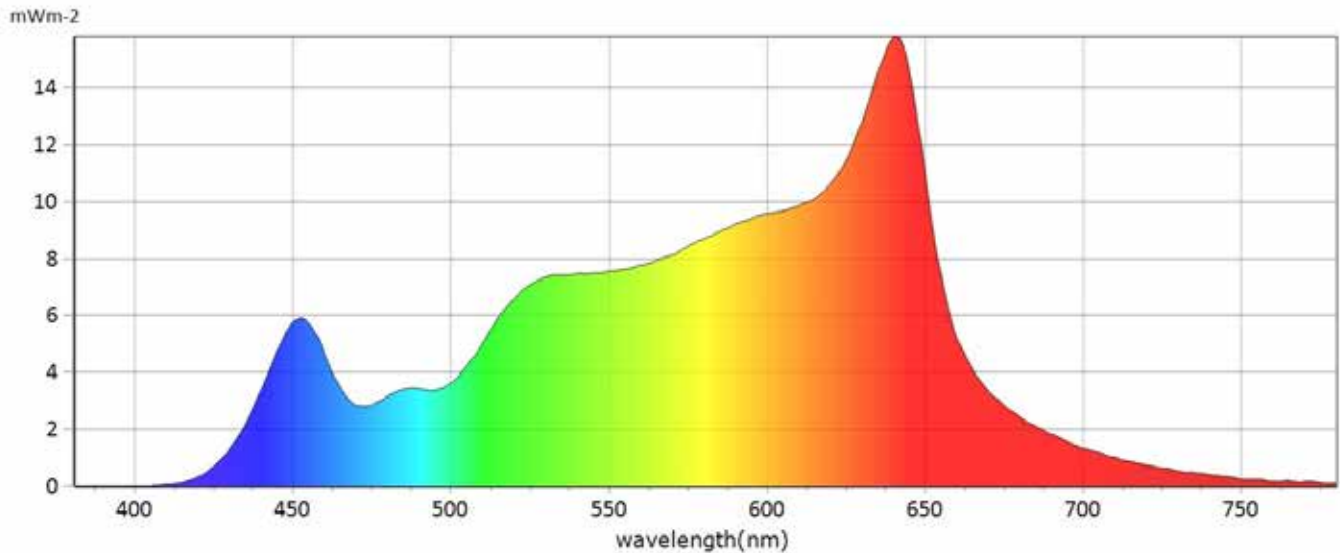
● CCT	3149 K
● x	0,4259
● y	0,3986
● LambdaD	582 nm
● LambdaP	640 nm



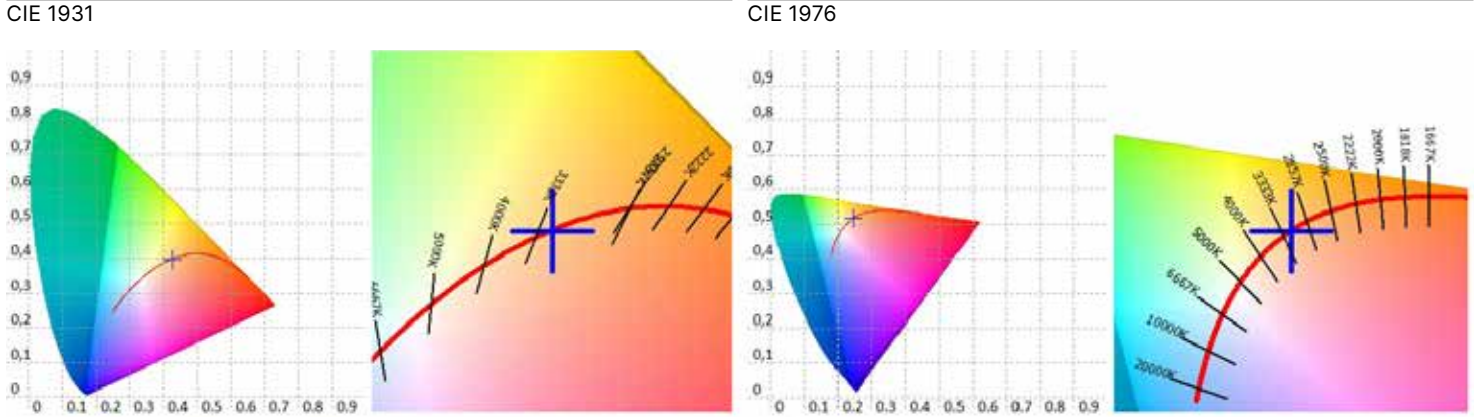
### Measurements

<b>CCT</b>	3149 K	<b>u'10</b>	0,2501	<b>Duv</b>	-0,0006	<b>GAI</b>	63,9	<b>IRR</b>	1,838	<b>R6</b>	95,9	<b>R15</b>	96,9
<b>LUX</b>	558 lx	<b>v'10</b>	0,5172	<b>MEL</b>	332,1 lx	<b>PPFD</b>	8,659 umolm 2s-1	<b>CQS</b>	93,7	<b>R7</b>	96,7		
<b>I-Time</b>	18000 us	<b>X</b>	618,15	<b>LambdaPV</b>	15,80	<b>PFD</b>	8,898 umolm 2s-1	<b>CRI</b>	96	<b>R8</b>	95,9		
<b>x</b>	0,4259	<b>Y</b>	578,49	<b>LambdaD</b>	582 nm	<b>PFD-B</b>	1,048 umolm 2s-1	<b>TLCI</b>	93	<b>R9</b>	89,1		
<b>y</b>	0,3986	<b>Z</b>	254,78	<b>LambdaP</b>	640 nm	<b>PFD-G</b>	3,483 umolm 2s-1	<b>R1</b>	98,4	<b>R10</b>	90,1		
<b>u'</b>	0,2458	<b>delta-x</b>	-0,0008	<b>Purity</b>	47,59%	<b>PFD-R</b>	4,129 umolm 2s-1	<b>R2</b>	97,1	<b>R11</b>	95,5		
<b>v'</b>	0,5175	<b>delta-y</b>	-0,0017	<b>fc</b>	53,76	<b>PFD-UV</b>	0,0001 umolm 2s-1	<b>R3</b>	92,1	<b>R12</b>	83,9		
<b>x10</b>	0,4308	<b>delta-u'</b>	0,0002	<b>Rf</b>	93,6	<b>PFD-FR</b>	0,2394 umolm 2s-1	<b>R4</b>	96,2	<b>R13</b>	98,2		
<b>y10</b>	0,3960	<b>delta-v'</b>	-0,0008	<b>Rg</b>	102,6	<b>S/P</b>	1,48	<b>R5</b>	97,6	<b>R14</b>	94,5		

### Spectrum



### Otello 6 HD FullSpectrum + Medium Zoom - 3.200K



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,4	97,1	92,1	96,2	97,6	95,9	96,7	95,9	89,1	90,1	95,4	83,9	98,3	94,5	96,9

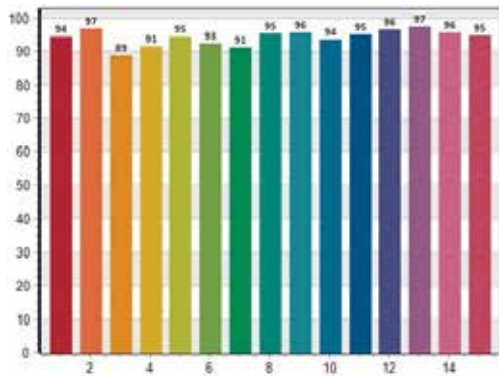
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,2	96,5	91,8	93,9	92,3	92,0	95,4	95,4	96,6	92,1	88,9	89,9	92,4	90,6	91,6	87,8

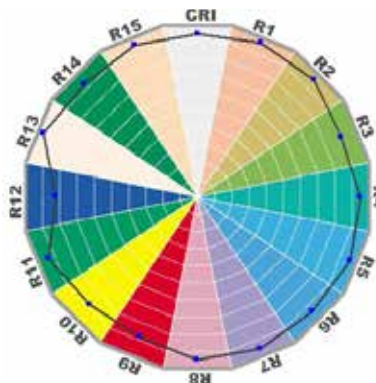
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,4	97,0	88,9	91,4	94,6	92,5	91,1	95,4	95,6	93,5	95,1	96,5	97,5	95,7	94,9

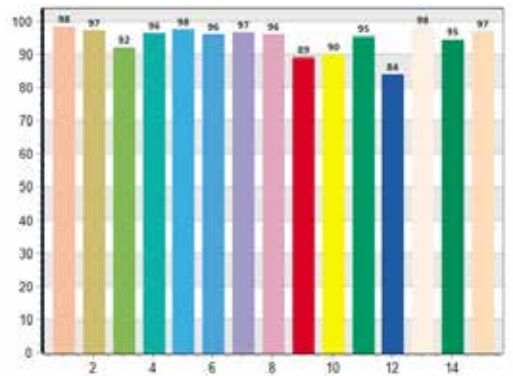
CQS: 93,70



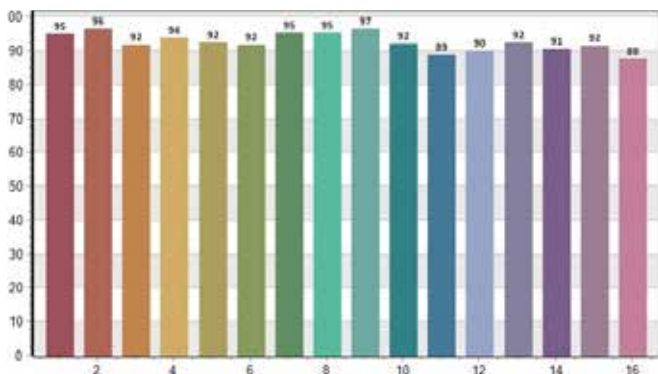
CRI-2



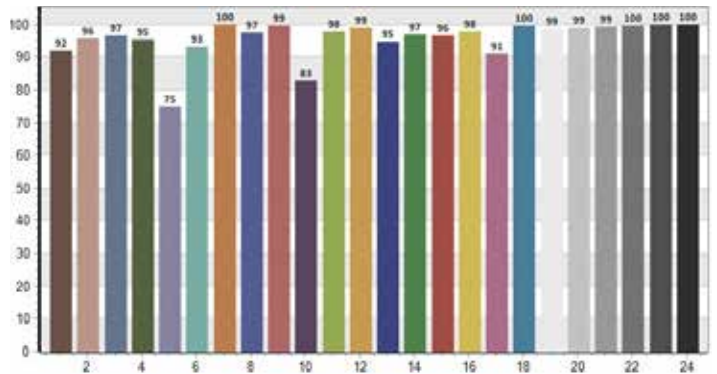
CRI: 96,25



TM30: 93, 58

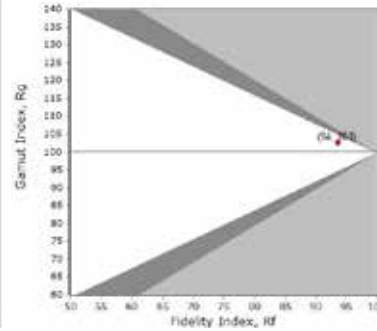
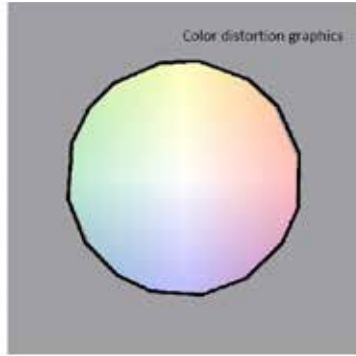
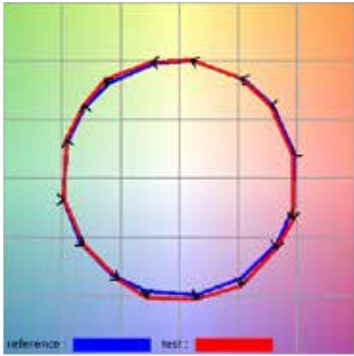


TLCI: 92, 93



## Otello 6 HD FullSpectrum + Medium Zoom - 3.200K

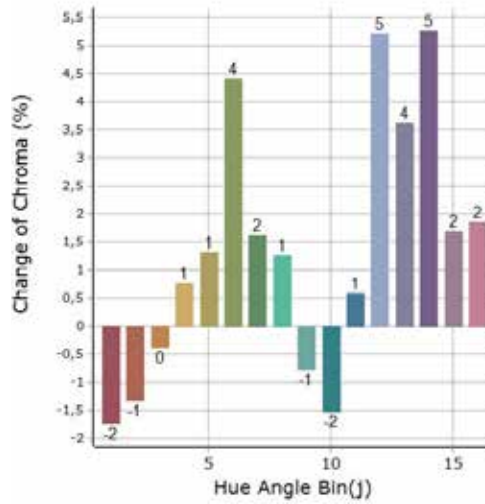
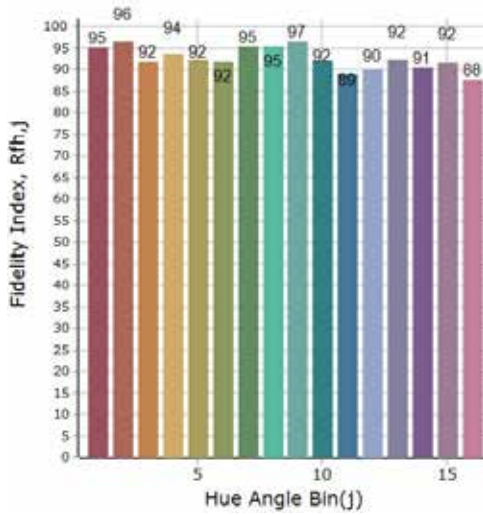
### General Color Rendition



**Rf**  
93,6  
Fidelity index Rf

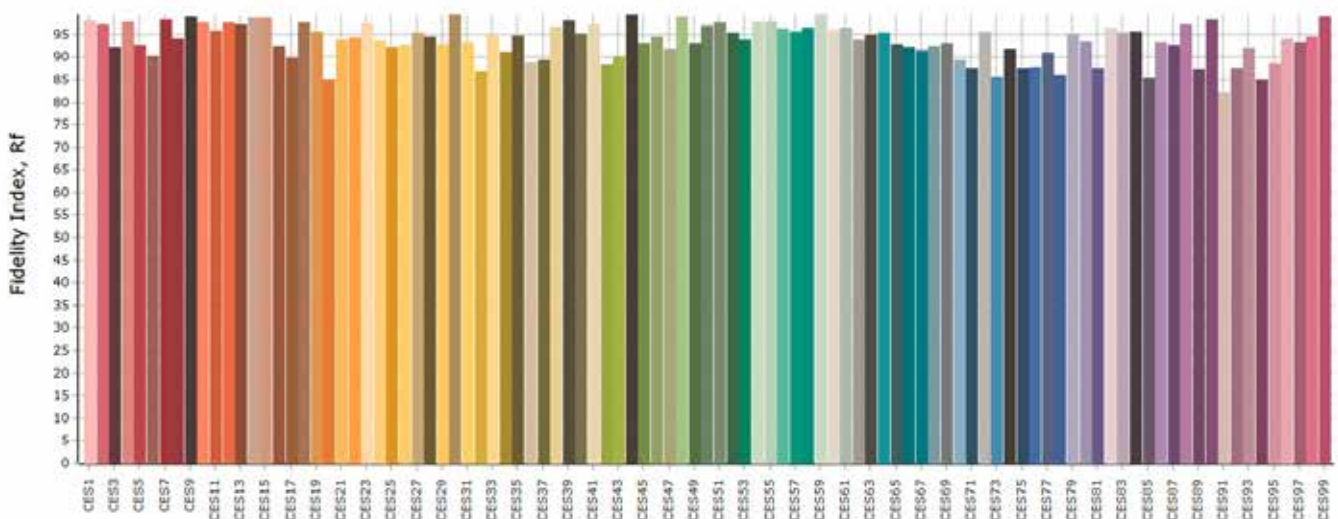
**Rg**  
102,6  
Gammut index Rg

### Color Rendition by Hue



Hue Bin	graphic shifts (%)		
	Rf	Chroma	Hue
1	95,2	-1,7%	-1,0%
2	96,5	-1,3%	1,0%
3	91,8	-0,4%	3,6%
4	93,9	0,8%	3,0%
5	92,3	1,3%	3,7%
6	92,0	4,4%	1,0%
7	95,4	1,6%	-1,7%
8	95,4	1,3%	-2,2%
9	96,6	-0,8%	0,2%
10	92,1	-1,5%	3,5%
11	88,9	0,6%	6,7%
12	89,9	5,2%	1,2%
13	92,4	3,6%	-2,6%
14	90,6	5,3%	-3,5%
15	91,6	1,7%	-4,2%
16	87,8	1,9%	-8,4%

### Color Fidelity by Sample



## Otello 6 HD FullSpectrum + Maximum Zoom - 3.200K

### General

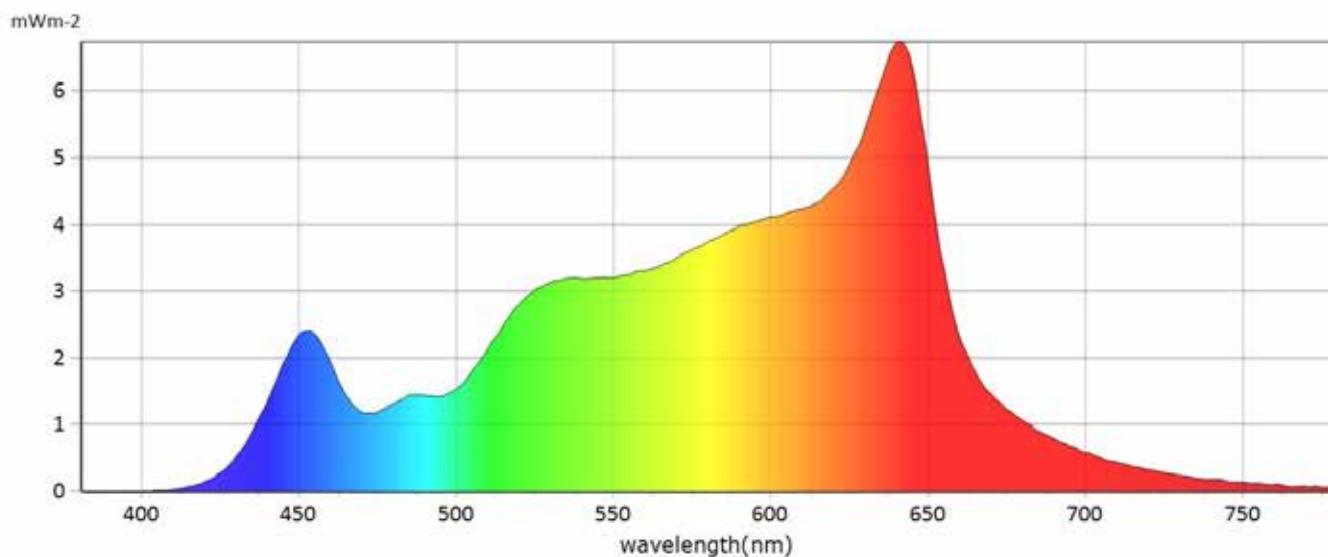
● CCT	3117 K
● x	0,4290
● y	0,4015
● LambdaD	582 nm
● LambdaP	640 nm



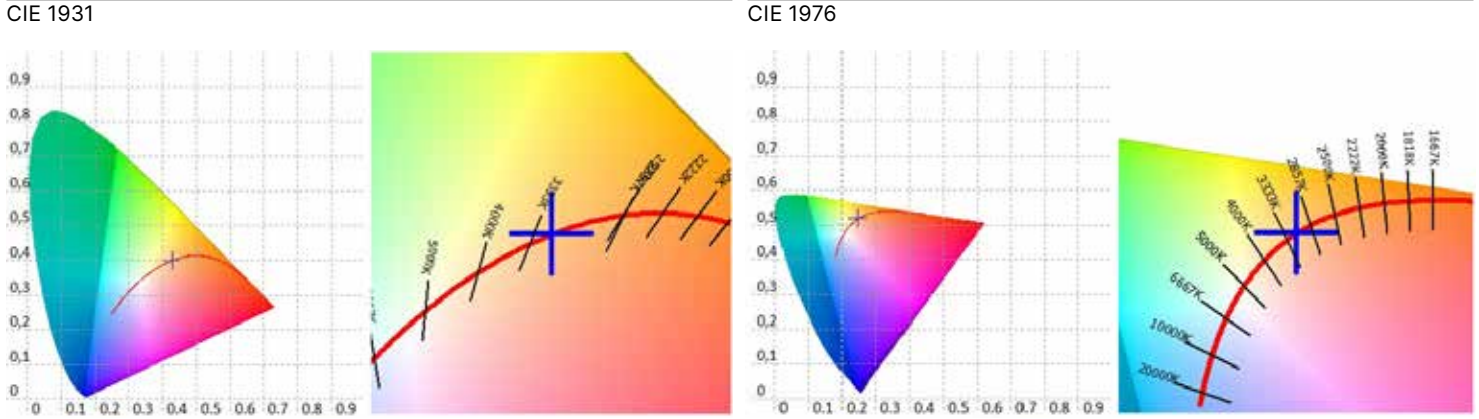
### Measurements

<b>CCT</b>	3117 K	<b>u'10</b>	0,2510	<b>Duv</b>	0,0001	<b>GAI</b>	61,8	<b>IRR</b>	0,7849	<b>R6</b>	95,7	<b>R15</b>	96,3
<b>LUX</b>	243 lx	<b>v'10</b>	0,5188	<b>MEL</b>	139,5 lux	<b>PPFD</b>	3,703 umolm <sup>2</sup> s <sup>-1</sup>	<b>CQS</b>	93,8	<b>R7</b>	96,9		
<b>I-Time</b>	42000 us	<b>X</b>	264,41	<b>LambdaPV</b>	6,743	<b>PFD</b>	3,808 umolm <sup>2</sup> s <sup>-1</sup>	<b>CRI</b>	96	<b>R8</b>	95,6		
<b>x</b>	0,4290	<b>Y</b>	247,45	<b>LambdaD</b>	582 nm	<b>PFD-B</b>	0,4318 umolm <sup>2</sup> s <sup>-1</sup>	<b>TLCI</b>	93	<b>R9</b>	87,9		
<b>y</b>	0,4015	<b>Z</b>	104,52	<b>LambdaP</b>	640 nm	<b>PFD-G</b>	1,489 umolm <sup>2</sup> s <sup>-1</sup>	<b>R1</b>	98,0	<b>R10</b>	89,5		
<b>u'</b>	0,2466	<b>delta-x</b>	0,0001	<b>Purity</b>	49,35%	<b>PFD-R</b>	1,782 umolm <sup>2</sup> s <sup>-1</sup>	<b>R2</b>	96,8	<b>R11</b>	95,9		
<b>v'</b>	0,5192	<b>delta-y</b>	0,0003	<b>fc</b>	23,00	<b>PFD-UV</b>	0,0001 umolm <sup>2</sup> s <sup>-1</sup>	<b>R3</b>	92,1	<b>R12</b>	83,1		
<b>x10</b>	0,4341	<b>delta-u'</b>	-0,0001	<b>Rf</b>	93,7	<b>PFD-FR</b>	0,1058 umolm <sup>2</sup> s <sup>-1</sup>	<b>R4</b>	96,6	<b>R13</b>	97,7		
<b>y10</b>	0,3988	<b>delta-v'</b>	0,0001	<b>Rg</b>	102,2	<b>S/P</b>	1,46	<b>R5</b>	97,1	<b>R14</b>	94,5		

### Spectrum



### Otello 6 HD FullSpectrum + Maximum Zoom - 3.200K



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,0	96,8	92,1	96,6	97,1	95,7	96,9	95,6	87,9	89,5	95,9	83,1	97,7	94,5	96,3

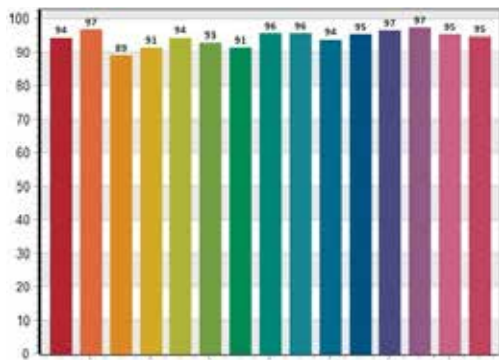
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
95,1	96,3	92,1	94,3	92,4	92,6	95,6	96,0	96,5	91,8	89,0	90,1	92,5	90,7	91,7	87,9

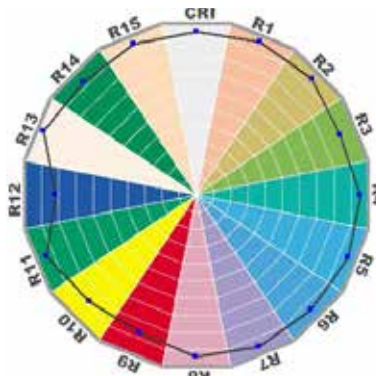
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
94,3	96,8	89,2	91,5	94,5	92,8	91,5	95,5	95,6	93,7	95,3	96,6	97,4	95,4	94,7

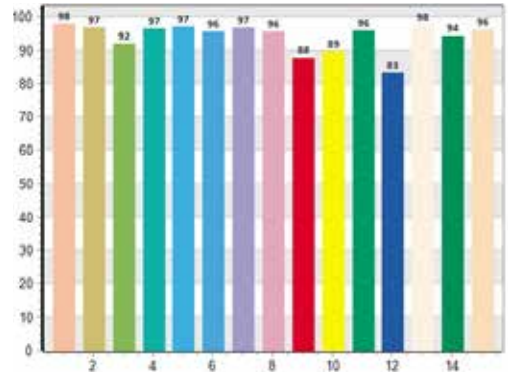
CQS: 93, 79



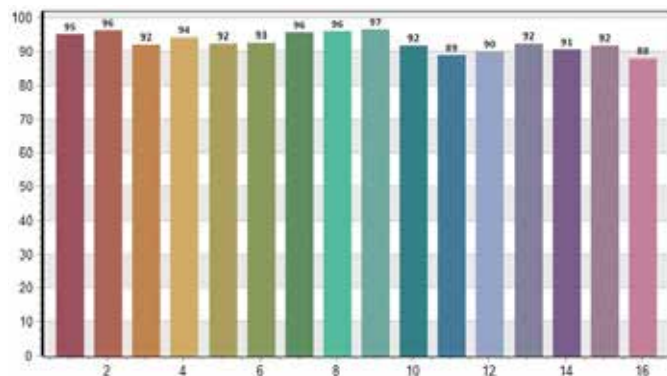
CRI-2



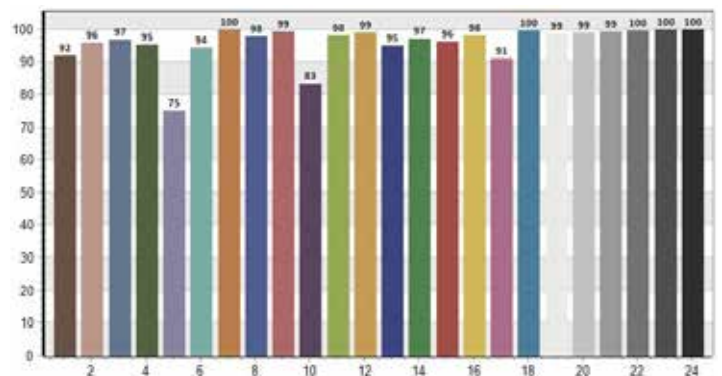
CRI: 96, 09



TM30: 93, 69

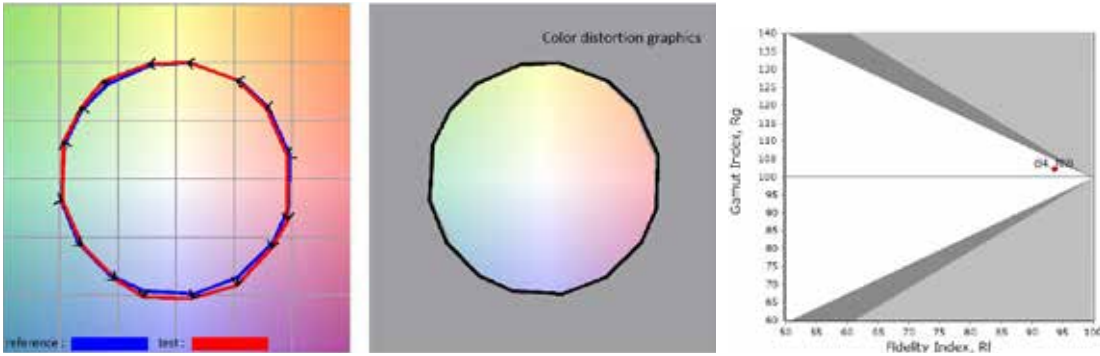


TLCI: 93, 11



## Otello 6 HD FullSpectrum + Maximum Zoom - 3.200K

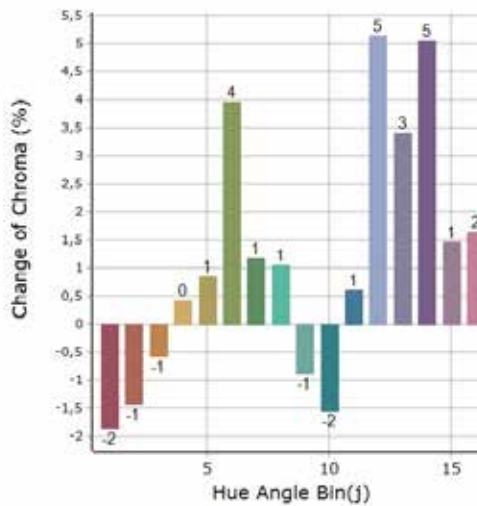
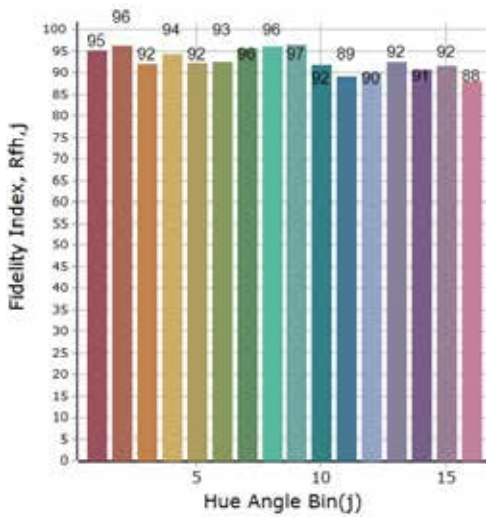
### General Color Rendition



**Rf**  
39,7  
Fidelity index Rf

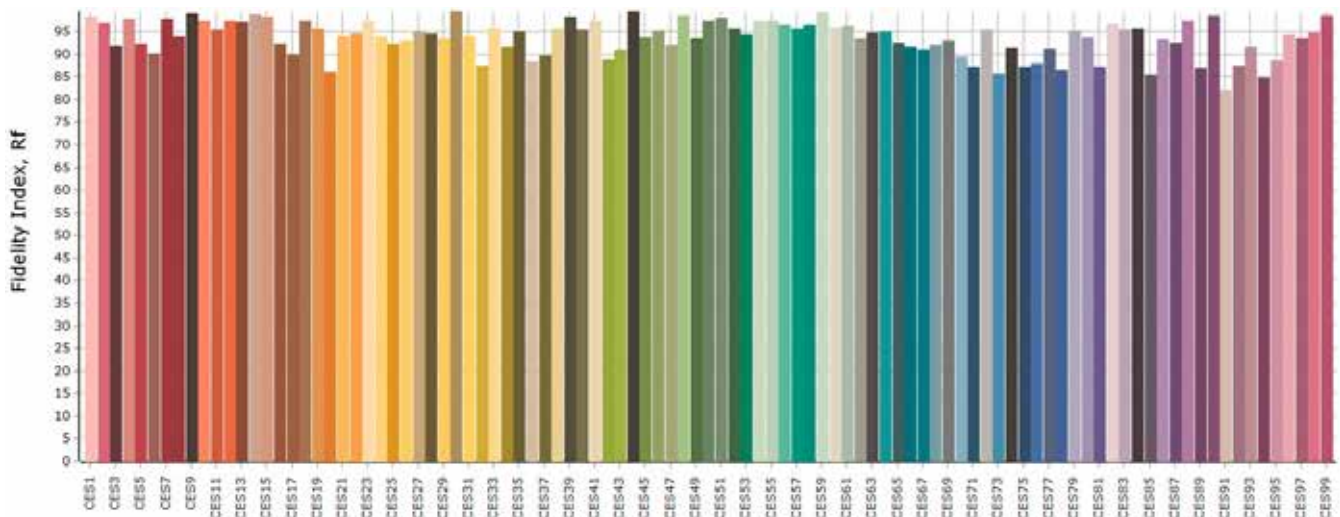
**Rg**  
102,2  
Gammut index Rg

### Color Rendition by Hue



Hue Bin	graphic shifts (%)		
	Rf	Chroma	Hue
1	95,1	-1,9%	-1,0%
2	96,3	-1,4%	-1,0%
3	92,1	-0,6%	3,4%
4	94,3	0,4%	2,8%
5	92,4	0,9%	3,6%
6	92,6	4,0%	1,1%
7	95,6	1,2%	-1,5%
8	96,0	1,1%	-1,9%
9	96,5	-0,9%	0,5%
10	91,8	1,5%	3,8%
11	89,0	0,6%	6,7%
12	90,1	5,2%	1,0%
13	92,5	3,4%	-2,8%
14	90,7	5,1%	-3,7%
15	91,7	1,5%	-4,2%
16	87,9	1,7%	-8,4%

### Color Fidelity by Sample





## Otello 6 HD FullSpectrum + Minimum Zoom - 5.600K

### General

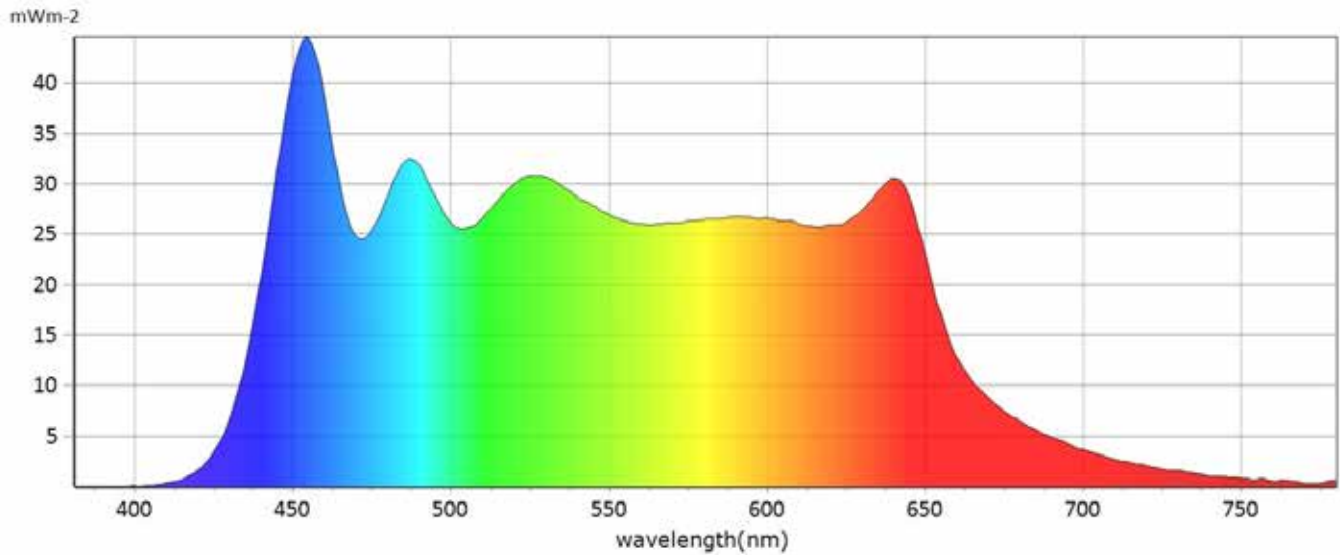
● CCT	5716 K
● x	0,3275
● y	0,3455
● LambdaD	522 nm
● LambdaP	453 nm



### Measurements

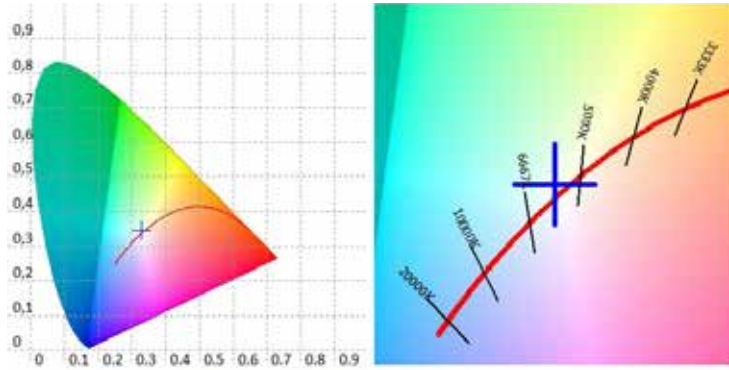
<b>CCT</b>	5716 K	<b>u'10</b>	0,2020	<b>Duv</b>	0,0045	<b>GAI</b>	91,1	<b>IRR</b>	6,752	<b>R6</b>	96,2	<b>R15</b>	95,7
<b>LUX</b>	2268 lx	<b>v'10</b>	0,4823	<b>MEL</b>	2070 lx	<b>PPFD</b>	30,31 umolm 2s-1	<b>CQS</b>	95,9	<b>R7</b>	94,3		
<b>I-Time</b>	4800 us	<b>X</b>	1882,72	<b>LambdaPV</b>	44,60	<b>PFD</b>	30,97 umolm 2s-1	<b>CRI</b>	96	<b>R8</b>	93,9		
<b>x</b>	0,3275	<b>Y</b>	1986,33	<b>LambdaD</b>	522 nm	<b>PFD-B</b>	8,199 umolm 2s-1	<b>TLCI</b>	95,2	<b>R9</b>	90,9		
<b>y</b>	0,3455	<b>Z</b>	1880,20	<b>LambdaP</b>	453 nm	<b>PFD-G</b>	12,60 umolm 2s-1	<b>R1</b>	98,3	<b>R10</b>	95,4		
<b>u'</b>	0,2018	<b>delta-x</b>	-0,0003	<b>Purity</b>	2,43%	<b>PFD-R</b>	9,505 umolm 2s-1	<b>R2</b>	97,3	<b>R11</b>	98,9		
<b>v'</b>	0,4790	<b>delta-y</b>	0,0086	<b>fc</b>	184,6	<b>PFD-UV</b>	0,0018 umolm 2s-1	<b>R3</b>	97,1	<b>R12</b>	82,6		
<b>x10</b>	0,3308	<b>delta-u'</b>	-0,0034	<b>Rf</b>	92,1	<b>PFD-FR</b>	0,6617 umolm 2s-1	<b>R4</b>	95,9	<b>R13</b>	97,7		
<b>y10</b>	0,3511	<b>delta-v'</b>	0,0043	<b>Rg</b>	97,9	<b>S/P</b>	2,36	<b>R5</b>	97,3	<b>R14</b>	97,4		

### Spectrum

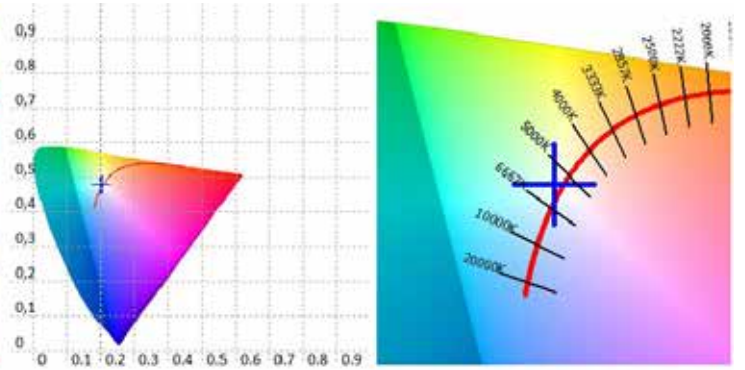


### Otello 6 HD FullSpectrum + Minimum Zoom - 5.600K

CIE 1931



CIE 1976



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,3	97,3	97,1	95,9	97,3	96,2	94,3	93,9	90,9	95,4	98,9	82,6	97,7	97,4	95,7

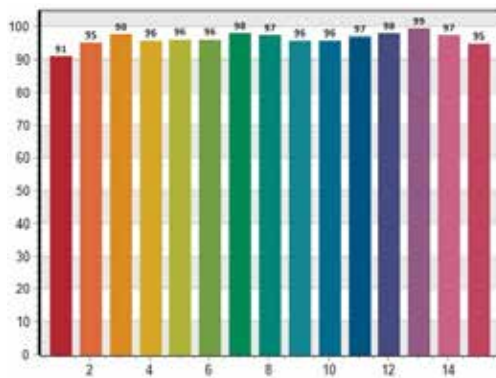
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,5	97,8	94,3	89,9	87,4	94,0	91,6	89,4	90,2	90,6	90,7	90,4	88,9	91,2	83,5	95,3

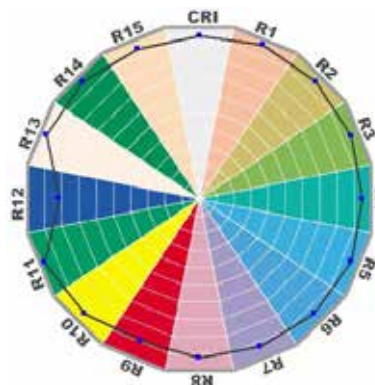
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90,9	95,2	97,6	96,0	96,1	96,0	97,9	97,2	96,0	95,9	97,2	97,9	99,5	97,2	94,8

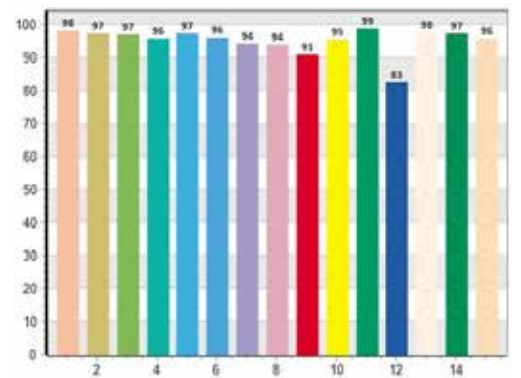
CQS: 95, 90



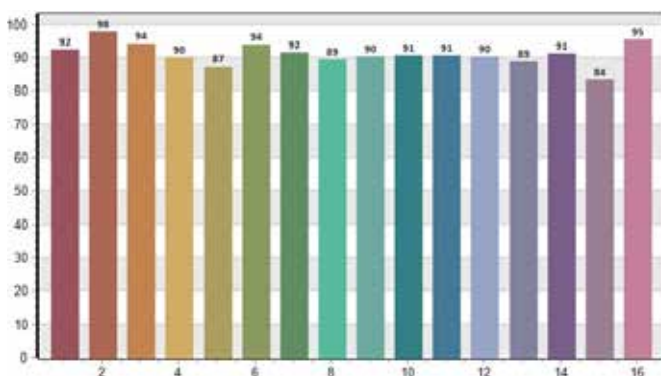
CRI-2



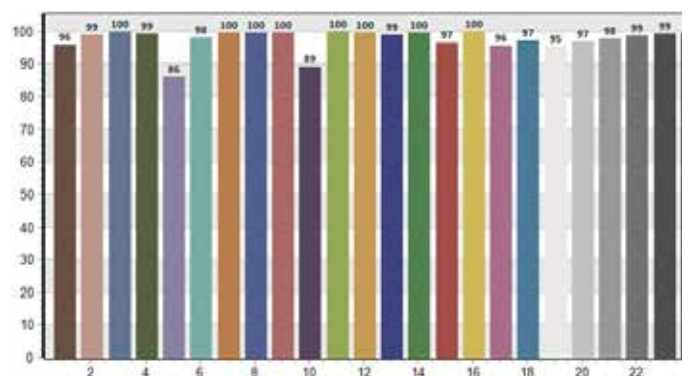
CRI: 96, 29



TM30: 92, 09

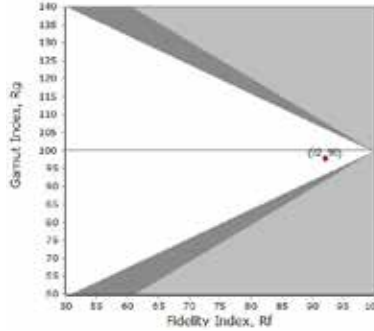
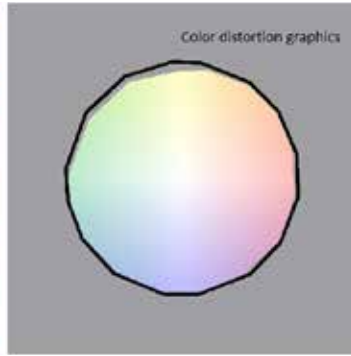
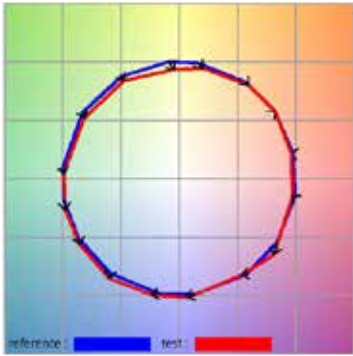


TLCI: 96, 19



## Otello 6 HD FullSpectrum + Minimum Zoom - 5.600K

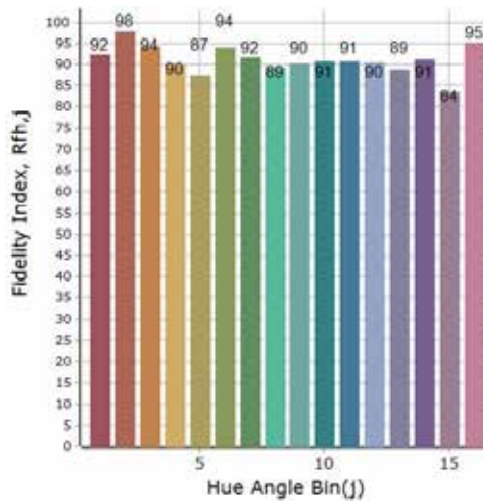
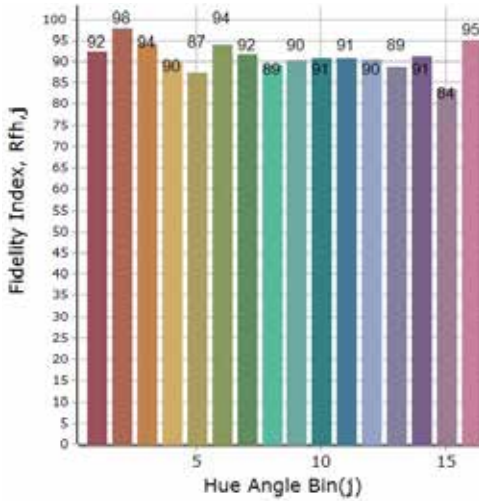
### General Color Rendition



**Rf**  
92,1  
Fidelity index Rf

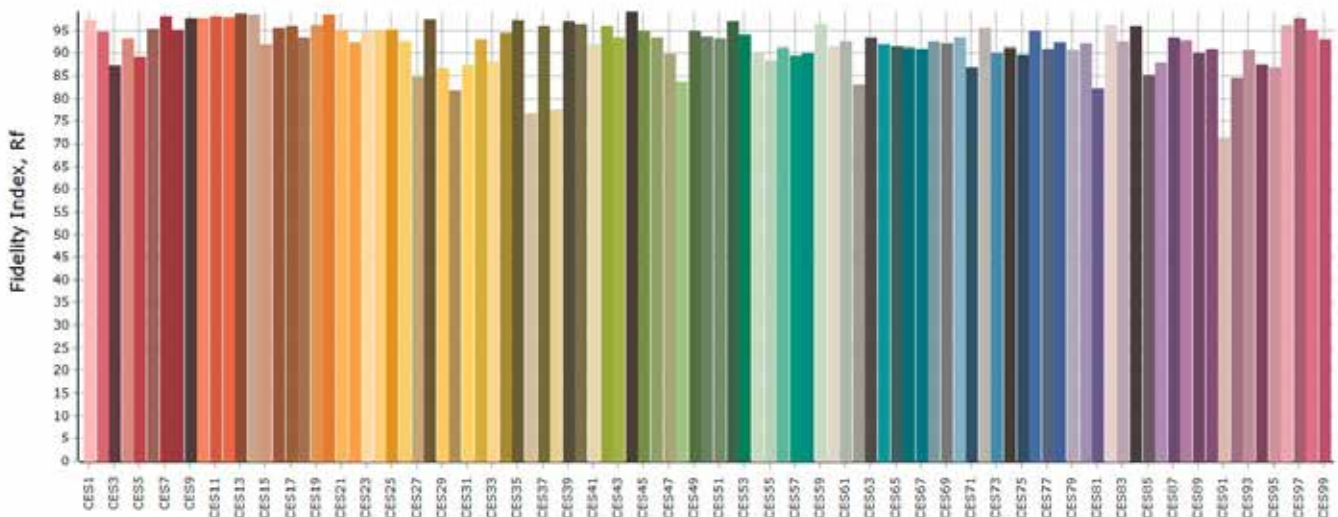
**Rg**  
97,9  
Gammut index Rg

### Color Rendition by Hue



Hue Bin	graphic shifts (%)		
	Rf	Chroma	Hue
1	92,5	-1,6%	0,9%
2	97,8	0,5%	0,0%
3	94,3	-0,7%	-2,6%
4	89,9	-3,4%	-4,7%
5	87,4	-7,1%	-4,0%
6	94,0	-3,9%	0,1%
7	91,6	-3,9%	3,3%
8	89,4	-1,8%	5,7%
9	90,2	0,8%	8,1%
10	90,6	2,0%	5,0%
11	90,7	4,3%	2,3%
12	90,4	2,0%	-5,5%
13	88,9	1,2%	-7,4%
14	91,2	-1,7%	-4,2%
15	83,5	3,8%	-9,9%
16	95,3	-1,8%	1,0%

### Color Fidelity by Sample



## Otello 6 HD FullSpectrum + Medium Zoom - 5.600K

### General

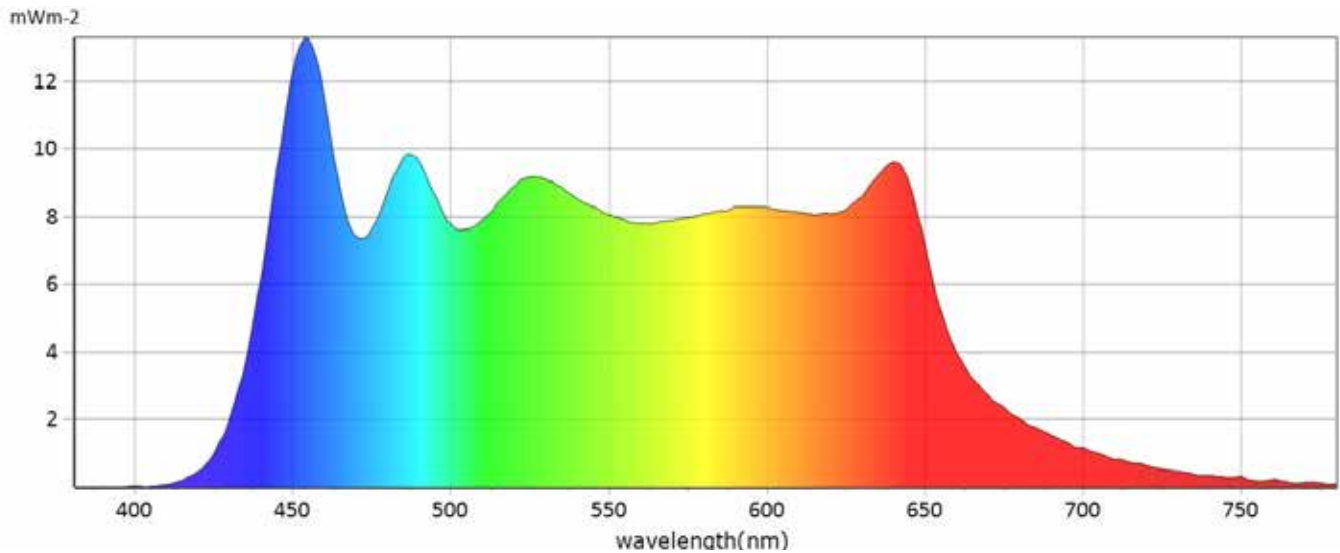
● CCT	5716 K
● x	0,3275
● y	0,3455
● LambdaD	522 nm
● LambdaP	453 nm



### Measurements

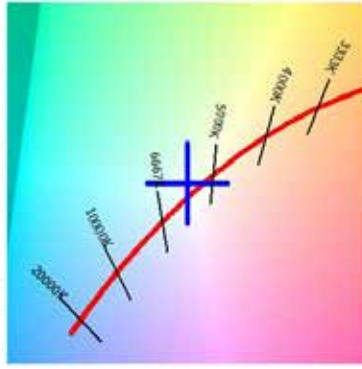
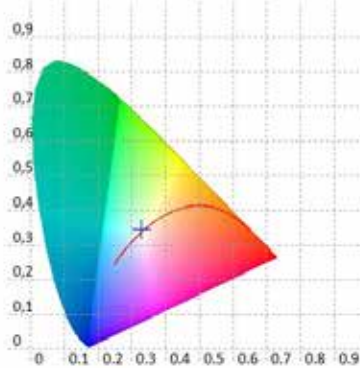
<b>CCT</b>	5716 K	<b>u'10</b>	0,2020	<b>Duv</b>	0,0045	<b>GAI</b>	91,1	<b>IRR</b>	6,752	<b>R6</b>	96,2	<b>R15</b>	95,7
<b>LUX</b>	597 lx	<b>v'10</b>	0,4823	<b>MEL</b>	2070 lx	<b>PPFD</b>	30,31 umolm <sup>2</sup> s <sup>-1</sup>	<b>CQS</b>	95,9	<b>R7</b>	94,3		
<b>I-Time</b>	4800 us	<b>X</b>	1882,72	<b>LambdaPV</b>	44,60	<b>PFD</b>	30,97 umolm <sup>2</sup> s <sup>-1</sup>	<b>CRI</b>	96	<b>R8</b>	93,9		
<b>x</b>	0,3275	<b>Y</b>	1986,33	<b>LambdaD</b>	522 nm	<b>PFD-B</b>	8,119 umolm <sup>2</sup> s <sup>-1</sup>	<b>TLCI</b>	76	<b>R9</b>	90,9		
<b>y</b>	0,3455	<b>Z</b>	1880,20	<b>LambdaP</b>	453 nm	<b>PFD-G</b>	12,60 umolm <sup>2</sup> s <sup>-1</sup>	<b>R1</b>	98,3	<b>R10</b>	95,4		
<b>u'</b>	0,2018	<b>delta-x</b>	-0,0003	<b>Purity</b>	2,43%	<b>PFD-R</b>	9,505 umolm <sup>2</sup> s <sup>-1</sup>	<b>R2</b>	97,3	<b>R11</b>	98,9		
<b>v'</b>	0,4790	<b>delta-y</b>	0,0086	<b>fc</b>	184,6	<b>PFD-UV</b>	0,0018 umolm <sup>2</sup> s <sup>-1</sup>	<b>R3</b>	97,1	<b>R12</b>	82,6		
<b>x10</b>	0,3308	<b>delta-u'</b>	-0,0034	<b>Rf</b>	92,1	<b>PFD-FR</b>	0,6617 umolm <sup>2</sup> s <sup>-1</sup>	<b>R4</b>	95,9	<b>R13</b>	97,7		
<b>y10</b>	0,3511	<b>delta-v'</b>	0,0043	<b>Rg</b>	97,9	<b>S/P</b>	2,36	<b>R5</b>	97,3	<b>R14</b>	97,4		

### Spectrum

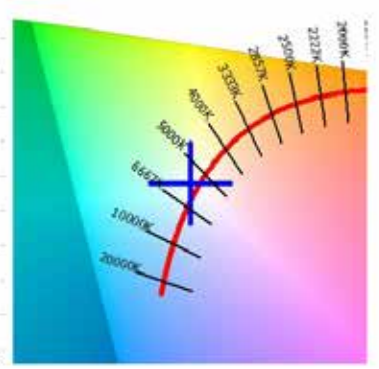
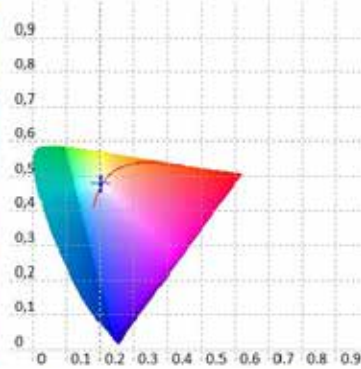


### Otello 6 HD FullSpectrum + Medium Zoom - 5.600K

CIE 1931



CIE 1976



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
98,3	97,3	97,1	95,9	97,3	96,2	94,3	93,9	90,9	95,4	98,9	82,6	97,7	97,4	95,7

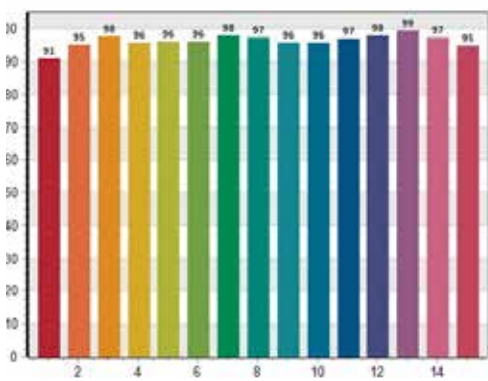
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,5	97,8	94,3	89,9	87,4	94,0	91,6	89,4	90,2	90,6	90,7	90,4	88,9	91,2	83,5	95,3

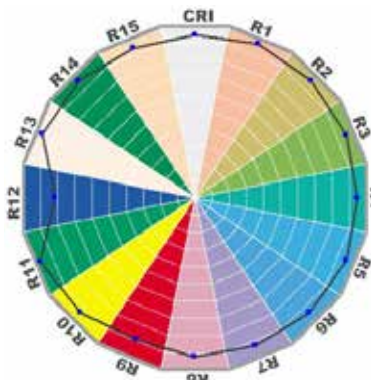
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
90,9	95,2	97,6	96,0	96,1	96,0	97,9	97,2	96,0	95,9	97,2	97,9	99,5	97,2	94,8

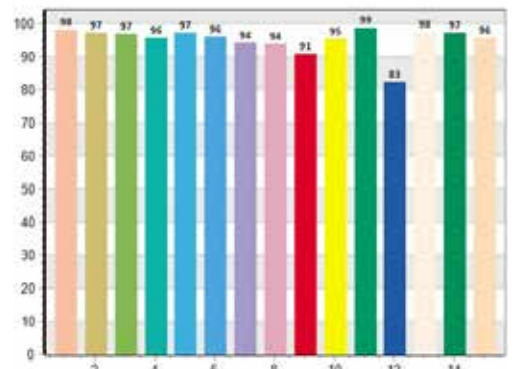
CQS: 95, 90



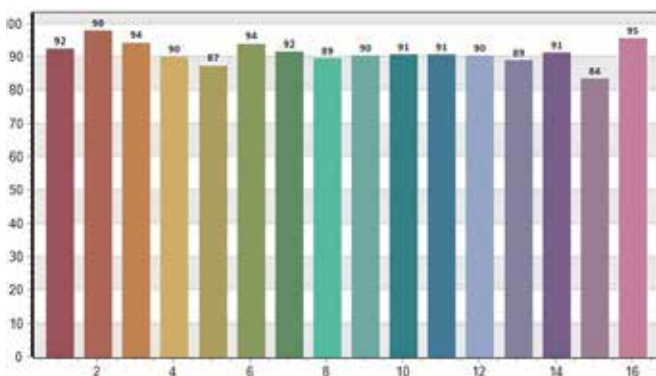
CRI-2



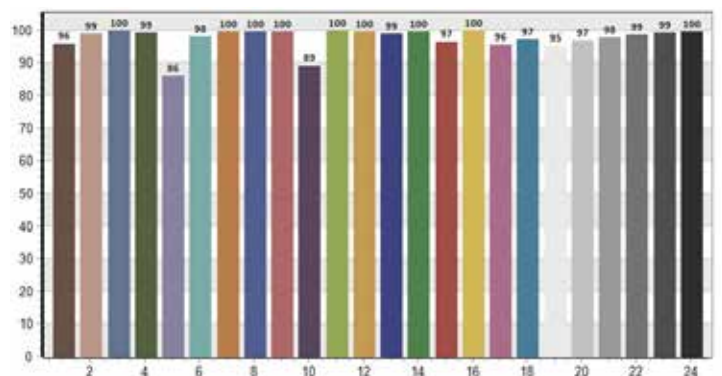
CRI: 96, 29



TM30: 92, 09

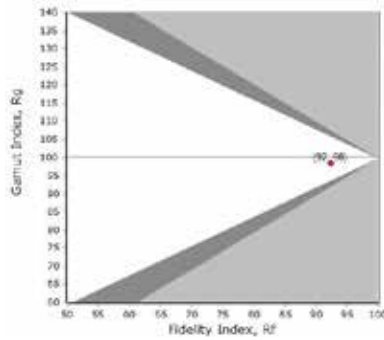
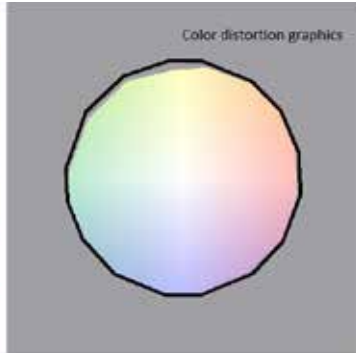
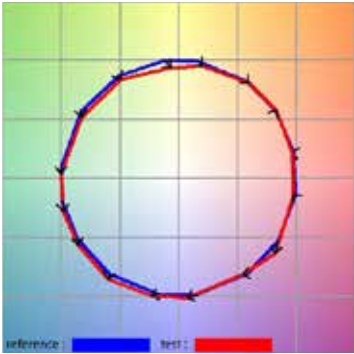


TLCI: 96, 19



## Otello 6 HD FullSpectrum + Medium Zoom - 5.600K

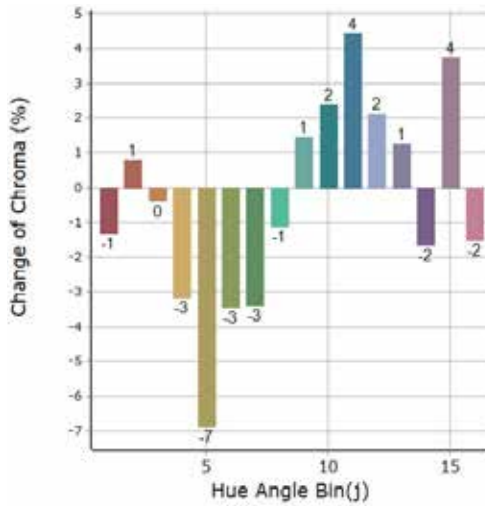
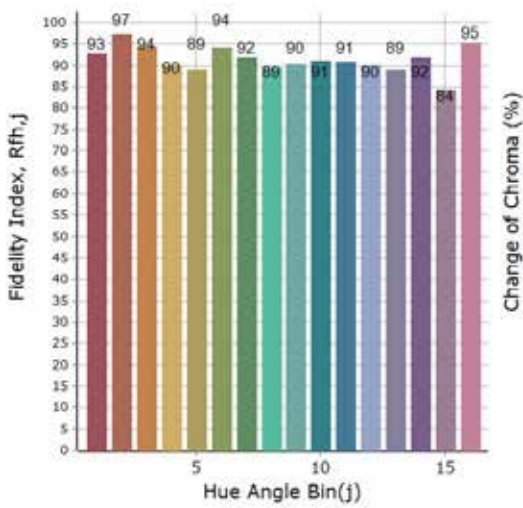
### General Color Rendition



**Rf**  
92,3  
Fidelity index Rf

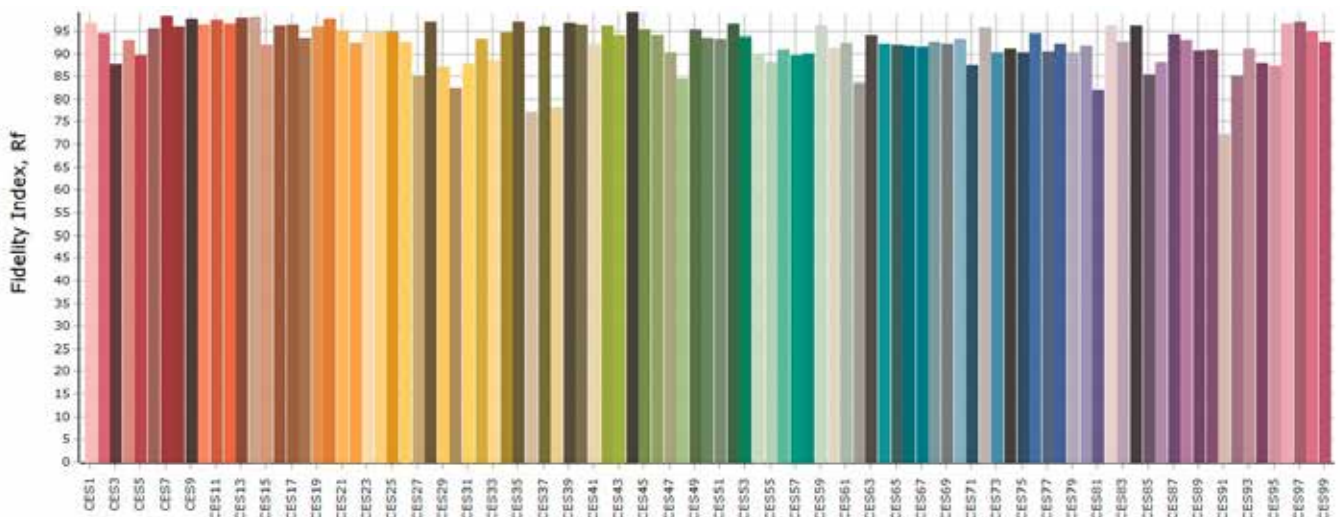
**Rg**  
98,5  
Gammut index Rg

### Color Rendition by Hue



Hue Bin	graphic shifts (%)		
	Rf	Chroma	Hue
1	92,8	-1,3%	1,0%
2	97,2	0,8%	0,2%
3	94,4	-0,4%	-2,5%
4	90,2	-3,1%	-4,7%
5	88,9	-6,9%	-3,7%
6	94,1	-3,4%	0,4%
7	91,9	-3,4%	3,6%
8	89,4	-1,1%	5,8%
9	90,4	1,5%	7,7%
10	91,2	2,4%	4,5%
11	90,8	4,4%	1,8%
12	90,1	2,1%	-5,7%
13	89,0	1,3%	-7,3%
14	91,8	-1,6%	-3,6%
15	84,2	3,7%	-9,3%
16	95,3	-1,5%	1,4%

### Color Fidelity by Sample



## Otello 6 HD FullSpectrum + Maximum Zoom - 5.600K



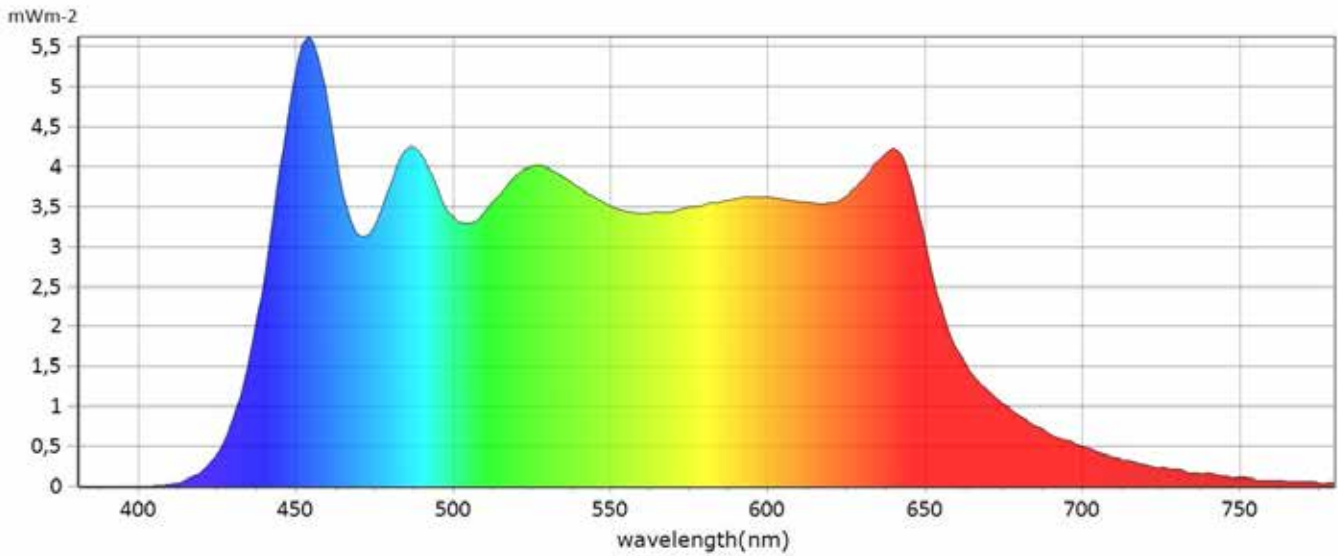
### General

● CCT	5425 K
● x	0,3343
● y	0,3491
● LambdaD	557 nm
● LambdaP	453 nm

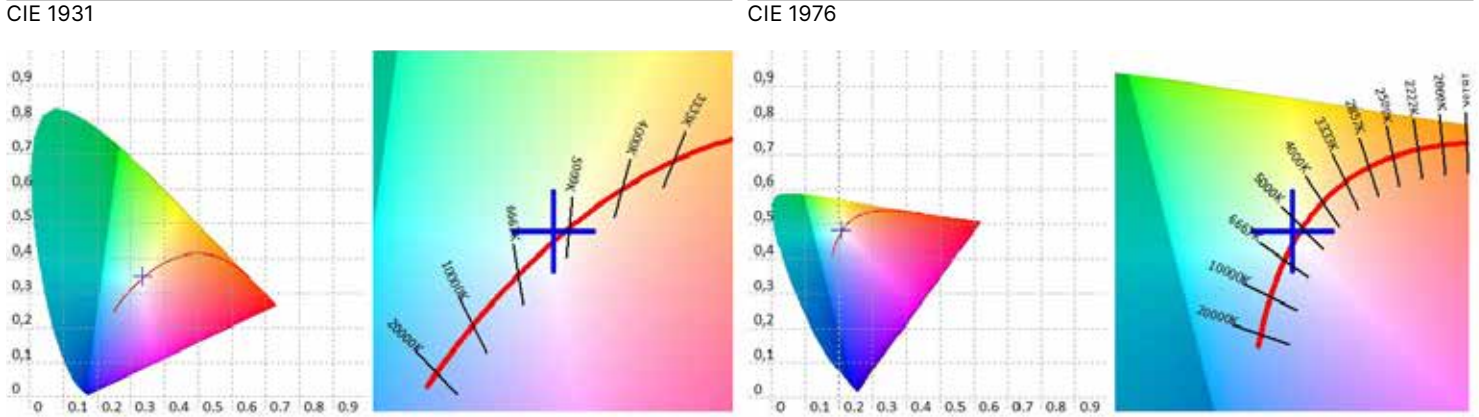
### Measurements

<b>CCT</b>	5425 K	<b>u'10</b>	0,2052	<b>Duv</b>	0,0033	<b>GAI</b>	90,2	<b>IRR</b>	0,8876	<b>R6</b>	95,0	<b>R15</b>	96,4
<b>LUX</b>	262	<b>v'10</b>	0,4849	<b>MEL</b>	266,1 lx	<b>PPFD</b>	3,998 umolm <sup>2</sup> s <sup>-1</sup>	<b>CQS</b>	96,2	<b>R7</b>	94,2		
<b>I-Time</b>	36000 us	<b>X</b>	251,26	<b>LambdaPV</b>	5,628	<b>PFD</b>	4,087 umolm <sup>2</sup> s <sup>-1</sup>	<b>CRI</b>	96	<b>R8</b>	97,2		
<b>x</b>	0,3343	<b>Y</b>	262,39	<b>LambdaD</b>	557 nm	<b>PFD-B</b>	1,044 umolm <sup>2</sup> s <sup>-1</sup>	<b>TLCI</b>	95,5	<b>R9</b>	92,4		
<b>y</b>	0,4391	<b>Z</b>	238,03	<b>LambdaP</b>	452 nm	<b>PFD-G</b>	1,655 umolm <sup>2</sup> s <sup>-1</sup>	<b>R1</b>	97,5	<b>R10</b>	93,9		
<b>u'</b>	0,2051	<b>delta-x</b>	0,0001	<b>Purity</b>	5,05%	<b>PFD-R</b>	1,300 umolm <sup>2</sup> s <sup>-1</sup>	<b>R2</b>	96,6	<b>R11</b>	97,9		
<b>v'</b>	0,4818	<b>delta-y</b>	0,0065	<b>fc</b>	24,39	<b>PFD-UV</b>	0,0001 umolm <sup>2</sup> s <sup>-1</sup>	<b>R3</b>	96,8	<b>R12</b>	84,1		
<b>x10</b>	0,3375	<b>delta-u'</b>	-0,0024	<b>Rf</b>	92,3	<b>PFD-FR</b>	0,0880 umolm <sup>2</sup> s <sup>-1</sup>	<b>R4</b>	96,3	<b>R13</b>	96,8		
<b>y10</b>	0,3544	<b>delta-v'</b>	0,0033	<b>Rg</b>	98,3	<b>S/P</b>	2,30	<b>R5</b>	97,0	<b>R14</b>	97,3		

### Spectrum



### Otello 6 HD FullSpectrum + Maximum Zoom - 5.600K



CRI values, only R1-R8 are used to calculate final CRI

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
97,5	96,6	96,8	96,3	97,0	95,0	94,2	94,2	92,4	93,9	97,9	84,1	96,8	97,3	96,4

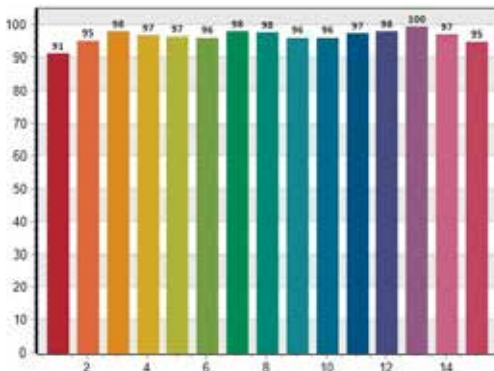
TM30 C values, 16 binned values out of total of 99 C values

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
92,7	97,5	94,4	90,1	89,6	93,7	91,9	89,5	90,5	91,3	90,9	89,8	88,7	91,6	83,7	93,7

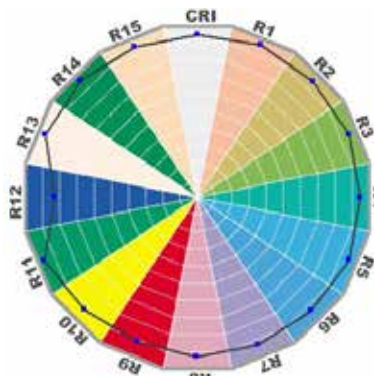
CQS Q values

Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15
91,3	95,3	97,9	96,7	96,6	96,3	98,0	97,6	96,3	96,2	97,3	98,1	99,5	97,1	94,8

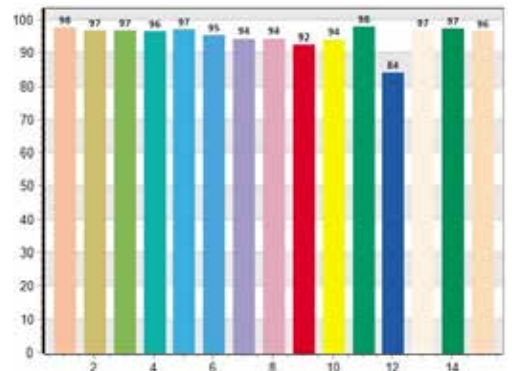
CQS: 96, 16



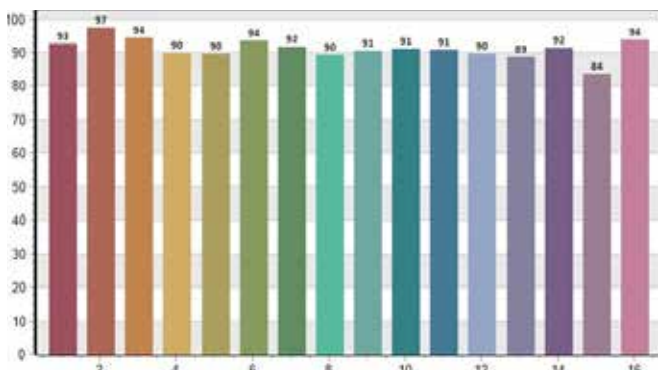
CRI-2



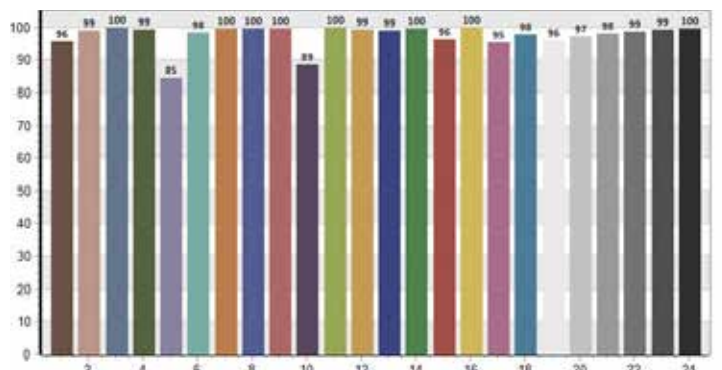
CRI: 95, 95



TM30: 92,29



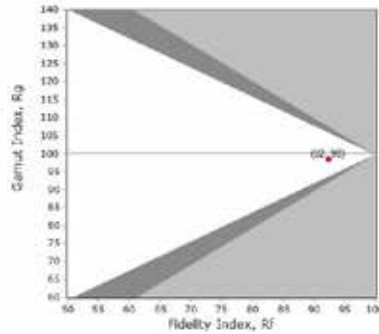
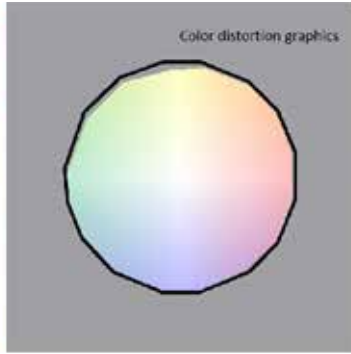
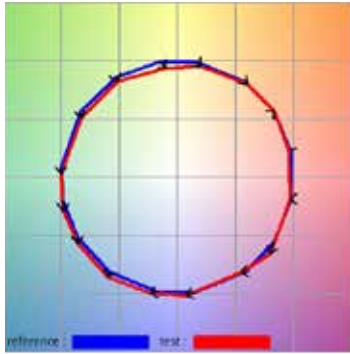
TLCI: 95, 94





## Otello 6 HD FullSpectrum + Maximum Zoom - 5.600K

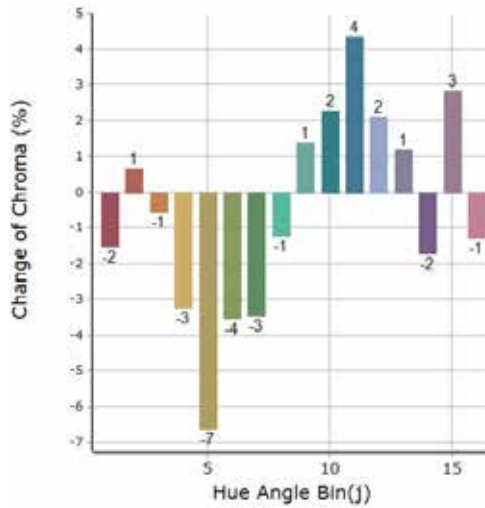
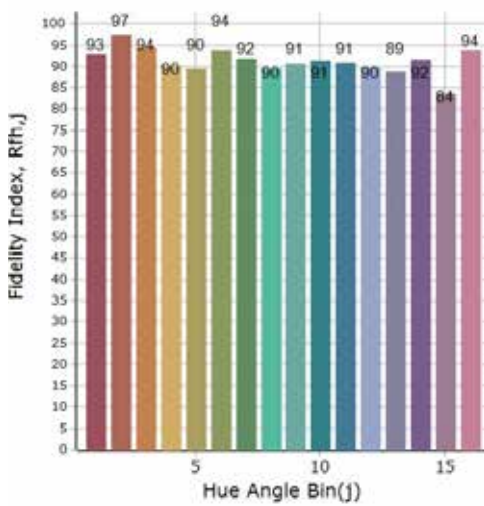
### General Color Rendition



**Rf**  
92,3  
Fidelity index Rf

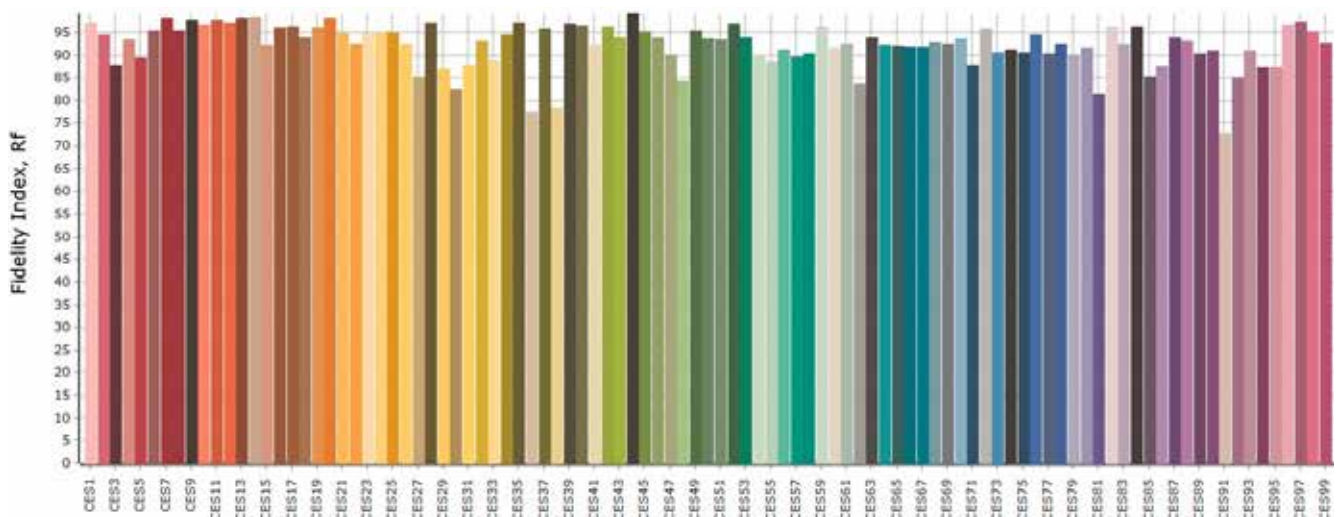
**Rg**  
98,3  
Gammut index Rg

### Color Rendition by Hue



graphic shifts (%)			
Hue Bin	Rf	Chroma	Hue
1	92,7	-1,5%	1,0%
2	97,5	0,7%	0,1%
3	94,4	-0,5%	2,5%
4	90,1	-3,2%	-4,7%
5	89,6	-6,6%	-3,4%
6	93,7	-3,5%	0,6%
7	91,9%	-3,5%	0,6%
8	91,9	-3,5%	3,6%
9	90,5	1,4%	7,6%
10	91,3	2,3%	4,5%
11	90,9	4,4%	1,7%
12	89,8	2,1%	5,9%
13	88,7	1,2%	7,7%
14	91,6	-1,7%	3,8%
15	83,7	2,8%	9,4%
16	93,7	-1,3%	0,4%

### Color Fidelity by Sample



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