

# TIBO HE - 553WW

550 - LED 115 W



- **Type:** Profile spot
- **Source:** LED 115 W
- **Optics:** 30° to 45° zoom  
15° to 35° configuration possible
- **Colour temperature:** Warm white

Profile spot

## A High Efficiency LED engine housed within a compact and versatile profile

Tibo HE 553 is a product evolution of the original 75 W LED Tibo 533 model. Tibo HE (High Efficiency) is a new mighty compact profile spot featuring a 115 W white LED engine. It offers twice as much light output and quality. Tibo HE delivers a very high CRI and guarantees a light output that far exceeds 1000 W tungsten luminaires and nearly matches that of 1200 W tungsten models. The power supply is now integrated into the unit to make it really compact and easier to incorporate into a design vision. Its versatile optical design remains unchanged and still offers two different zoom ranges in one single unit – from 15/35° to 30/45° - which makes Tibo HE fitting into any application, from architectural to event applications as well as traditional entertainment lighting.

### Features

- **Shutter gate:** 4 shutters. Remove shutters for easy maintenance or tuck fully inside gate for secure transport
- **Universal gobo holder:** m-size, glass and metal gobos
- **Continuous 360° rotation of the fixture:** adjustment of the projected image is always possible
- **Adjustable response time:** choice of fast or slow dimming for tungsten-like simulation - adjustment by DMX protocol
- **Universal data control:** compatible with DMX, RDM, Art-Net, sACN protocols
- **Remote setup:** all parameters can be adjusted by RDM protocol or by web interface
- **PWM adjustment:** choice of different PWM dimming frequencies - continuous mode available
- **DMX:** 8 or 16 bit dimming and strobe function
- **Dimming parameters:** choice of square or linear dimming curves
- **Tilt reference on hanging yoke:** index for rapid re-positioning

### Optical

- **Long life:** outstanding operational lifetime expectation, no need to replace lamps, low maintenance
- **Efficient fixture:** up to 55 lm/W
- **Very high quality white:** CRI>95 / TM-30 Rf>92 Rg>97 / TLCI>97
- **Coated double condenser optical system:** ensures optimal light transmission
- **Variable zoom optics:** sharp focus at every beam angle. Independent control of image size and focus. Focus handles on both sides
- **Two different zoom ranges in one single unit:** 30/45° or 15/35° by adding/removing one lens - save on material costs and storage of separate lens tubes
- **Electronic dimmer:** dimming without clipping or cut-out at low intensity levels; high quality smoothing
- **No colour shift:** colour temperature remains the same when dimming

### Construction

- **Made in France :** fully manufactured in Robert Juliat premises retaining complete control over all aspects of quality
- **PSU:** built-in electronic flicker-free power supply for easy, plug-and-play installation
- **Power connectors:** neutrik® powerCON TRUE1 TOP IN and OUT connectors for daisy chaining
- **Silent-running cooling fans:** ideal for TV studios and opera houses
- **Electronic thermal management system:** ensures maximum performance of the system without any risk of overheating
- **Bodywork:** die cast aluminium housing
- **Captive knobs and handles:** additional security when working at height or in transit
- **Easy access to all lenses without tool:** easy cleaning of all lenses (including into the lamp house)

Picture:553

DSEN365\_553WW - 02/10/2023

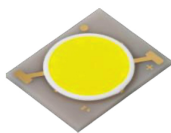
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ROBERT JULIAT



- Lamp type: LED
- Power: 115 W

| LED specifications | Power * | Lumen output* | Colour temperature* | Life*    | CRI* |
|--------------------|---------|---------------|---------------------|----------|------|
| LED 115W WW        | 115 W   | 11 400 lm     | 3000K               | 60 000 h | 98   |

(\*) manufacturer's data

## Optics

### Characteristics

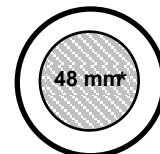
- Type: Zoom
- Range: 30° to 45° (Field angle)  
15° to 35° configuration possible
- Focal length: 69 - 98 mm

### Gel filter

- Shape: Square
- Standard size: 138x138 mm (5.4x5.4 in)

### Gobo

- Size: M
- Material: Metal  
Glass



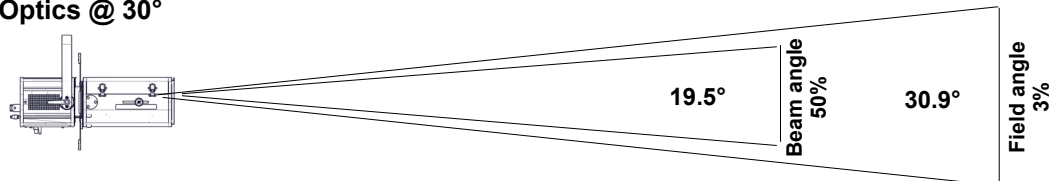
66 mm

\*Maximum image size

## Photometrics (Photometrics report(s) available at the end of the document)

optics: 30°-45° / Standard

### • Optics @ 30°



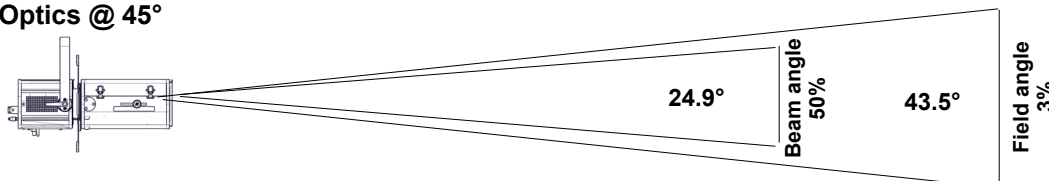
**Beam intensity**  
55 400 cd

**Field lumens**  
6 930 lm

**Efficacy**  
53 lm/W

|              |           |           |           |         |         |         |
|--------------|-----------|-----------|-----------|---------|---------|---------|
| Distance     | 3 m       | 5 m       | 7 m       | 10 m    | 12 m    | 15 m    |
| Diameter     | 1.7 m     | 2.8 m     | 3.9 m     | 5.5 m   | 6.6 m   | 8.3 m   |
| Illumination | 6 200 lux | 2 250 lux | 1 150 lux | 560 lux | 390 lux | 250 lux |
| Distance     | 10 ft     | 15 ft     | 25 ft     | 35 ft   | 40 ft   | 50 ft   |
| Diameter     | 5.5 ft    | 8.3 ft    | 13.8 ft   | 19.3 ft | 22.1 ft | 27.6 ft |
| Illumination | 560 fc    | 250 fc    | 90 fc     | 46 fc   | 35 fc   | 23 fc   |

### • Optics @ 45°



**Beam intensity**  
33 100 cd

**Field lumens**  
7 230 lm

**Efficacy**  
56 lm/W

|              |           |           |         |         |         |         |
|--------------|-----------|-----------|---------|---------|---------|---------|
| Distance     | 3 m       | 5 m       | 7 m     | 10 m    | 12 m    | 15 m    |
| Diameter     | 2.4 m     | 4 m       | 5.6 m   | 8 m     | 9.6 m   | 12 m    |
| Illumination | 3 700 lux | 1 350 lux | 680 lux | 340 lux | 230 lux | 150 lux |
| Distance     | 10 ft     | 15 ft     | 25 ft   | 35 ft   | 40 ft   | 50 ft   |
| Diameter     | 8 ft      | 12 ft     | 19.9 ft | 27.9 ft | 31.9 ft | 39.9 ft |
| Illumination | 340 fc    | 150 fc    | 55 fc   | 28 fc   | 21 fc   | 14 fc   |

## Remote control

- Data protocol: USITT DMX512-A  
RDM / Art-Net / sACN

- Data IN connector: 5 pins XLR mâle + etherCON RJ45
- Data OUT connector: 5 pins XLR femelle



### • DMX chart:

#### Mode 1 (1 channels)

Dimmer

#### Mode 2 (2 channels)

Dimmer  
Dimmer fine

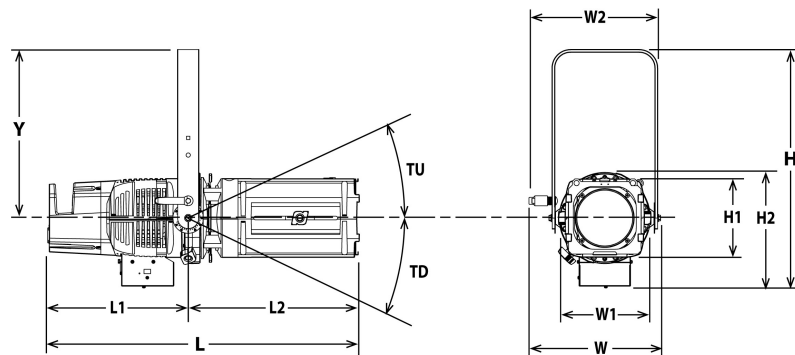
#### Mode 3 (5 channels)

Dimmer  
Strobe duration  
Strobe speed  
Response time  
Control mode

#### Mode 4 (6 channels)

Dimmer  
Dimmer fine  
Strobe duration  
Strobe speed  
Response time  
Control mode

Dimensions and weight



Weight: 10.2 kg (22.4 lbs)

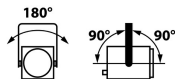
| Height              | Length               | Width               | Yoke                | Tilt    |
|---------------------|----------------------|---------------------|---------------------|---------|
| H= 454 mm (17.9 in) | L= 594 mm (23.4 in)  | W= 251 mm (9.9 in)  | Y= 301 mm (11.9 in) | TD= 90° |
| H1= 150 mm (5.9 in) | L1= 268 mm (10.6 in) | W1= 150 mm (5.9 in) |                     |         |
| H2= 218 mm (8.6 in) | L2= 326 mm (12.8 in) |                     |                     |         |

Shipping

- Weight : 11.4 kg (25.1 lbs)
- Volume : .06 m³ (1.98 ft³)

Installation

- Minimum distance to illuminated surface: 0.5 m ( 1.6 ft )
- Operating position:



Construction

- **Housing:** Die cast aluminium
- **Colour:** Black
- **Cooling:** Low noise variable fan
- **Maximum ambient temperature (Ta):** 40°C (104°F)
- **Maximum case temperature (Tc):** °C (°F)
- **Total heat dissipation:** 444 BTU/h
- **Ingress Protection (IP) rating:** IP20

Electrical compatibility

- 220/230 V - 50 Hz
- 220/230 V - 60 Hz
- 245 V - 50 Hz
- 100 V - 50 Hz
- 110/120 V - 60 Hz
- 100 V - 60 Hz
- 208 V - 60 Hz
- Selector: automatic detection

Power input



- **Type:** removable power cord with Neutrik powerCON TRUE1 TOP connector (included)
- **Cable:** H07RNF 3G1.5
- **Length:** 3 m (9.8 ft)
- **Power connector:** CEE 7/7 (2P+E NF/Schuko)

Power consumption

| Voltage | Frequency | Current | Power | Power factor |
|---------|-----------|---------|-------|--------------|
| 230 V   | 50 Hz     | 0.7 A   | 130 W | 0.81         |
| 120 V   | 60 Hz     | 1.2 A   | 135 W | 0.94         |
| 100 V   | 60 Hz     | 1.4 A   | 135 W | 0.93         |

Power Supply Unit

- **PSU:** Internal - Electronic PSU - Flicker free with PFC
- **Control:** / DMX
- **Protection:** Mains: 2x 6.3A 5x20 T fuses /
- **Power thru:** Neutrik powerCON TRUE1 TOP - Maximum of 22 units (230 V) / 11 units (120 V)

Warranty

- **Fixture: 3 years**  
See General Sales Condition on website

Approvals



Acoustics

- Noise level: < 23,5 dB(A)

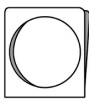
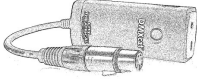
## Model

|              |                                                              |
|--------------|--------------------------------------------------------------|
| <b>553WW</b> | LED 115 W Profile spot - 553WW Tibo HE - Warm White - 30/45° |
|--------------|--------------------------------------------------------------|

## Options

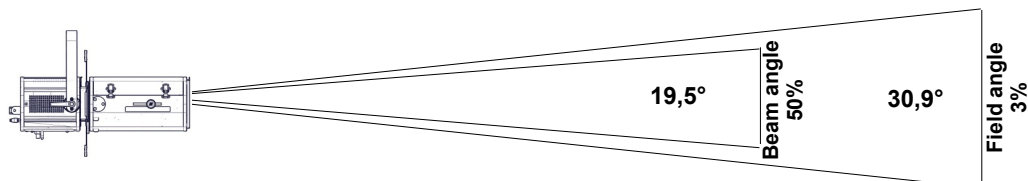
|                  |                                           |                                                                                     |
|------------------|-------------------------------------------|-------------------------------------------------------------------------------------|
| <b>PCP1716A</b>  | 16A blue 2P+E 6h IEC60309 power connector |  |
| <b>T-RAL9010</b> | White housing (RAL 9010)                  |  |

## Accessories

|                |                                                                                                             |                                                                                       |
|----------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>D4</b>      | Shutter for Tibo series<br><b>4 included</b>                                                                |    |
| <b>PF100M</b>  | 135x135mm metal filter holder<br><b>1 included</b>                                                          |    |
| <b>IS500/2</b> | Drop-in iris (monoplane) with holder                                                                        |    |
| <b>SGUT</b>    | Universal "M" size gobo-holder (metal, glass, frosted glass)                                                |   |
| <b>DMXcat</b>  | Bluetooth DMX/RDM Multifunction test tool - City Theatrical DMXcat®                                         |  |
| <b>872</b>     | Doughty "Twenty clamp" with M10 screw/nut for Ø48 to 51mm pipes - SWL: 20Kg - TÜV approved - Poids: 0.25 Kg |  |
| <b>878</b>     | Hook clamp 25x6mm with 23mm M10 screw for Ø35 to 50mm pipes - SWL: 11Kg - Poids: 0.46 Kg                    |  |
| <b>CS2</b>     | Safety cable Ø3 mm L= 600mm - SWL: 75 Kg                                                                    |  |

## • Optics @ 30°

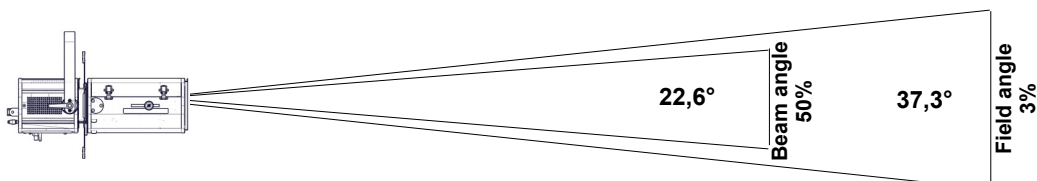
| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 6 930 Lm     | 3 890 Lm    | 53 Lm/W  | 55 400 Cd      | 3 060 K | 0.0014   |



|                |           |           |           |         |         |         |
|----------------|-----------|-----------|-----------|---------|---------|---------|
| Distance       | 3 m       | 5 m       | 7 m       | 10 m    | 12 m    | 15 m    |
| Field diameter | 1,7 m     | 2,8 m     | 3,9 m     | 5,5 m   | 6,6 m   | 8,3 m   |
| Illumination   | 6 200 lux | 2 250 lux | 1 150 lux | 560 lux | 390 lux | 250 lux |
| Distance       | 10 ft     | 15 ft     | 25 ft     | 35 ft   | 40 ft   | 50 ft   |
| Field diameter | 5,5 ft    | 8,3 ft    | 13,8 ft   | 19,3 ft | 22,1 ft | 27,6 ft |
| Illumination   | 560 fc    | 250 fc    | 90 fc     | 46 fc   | 35 fc   | 23 fc   |

## • Optics @ 38°

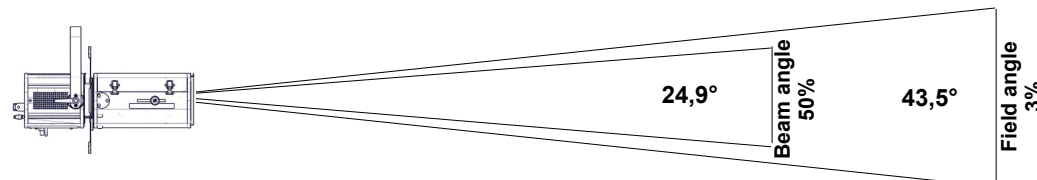
| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 7 040 Lm     | 3 950 Lm    | 54 Lm/W  | 43 800 Cd      | 3 070 K | 0.0016   |



|                |           |           |         |         |         |         |
|----------------|-----------|-----------|---------|---------|---------|---------|
| Distance       | 3 m       | 5 m       | 7 m     | 10 m    | 12 m    | 15 m    |
| Field diameter | 2 m       | 3,4 m     | 4,7 m   | 6,8 m   | 8,1 m   | 10,1 m  |
| Illumination   | 4 900 lux | 1 800 lux | 900 lux | 440 lux | 310 lux | 200 lux |
| Distance       | 10 ft     | 15 ft     | 25 ft   | 35 ft   | 40 ft   | 50 ft   |
| Field diameter | 6,8 ft    | 10,1 ft   | 16,9 ft | 23,6 ft | 27 ft   | 33,8 ft |
| Illumination   | 440 fc    | 200 fc    | 75 fc   | 36 fc   | 28 fc   | 18 fc   |

## • Optics @ 45°

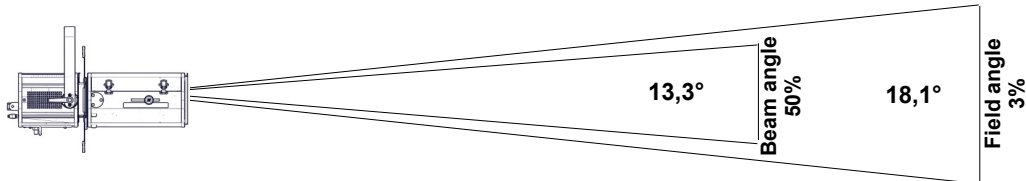
| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 7 230 Lm     | 4 060 Lm    | 56 Lm/W  | 33 100 Cd      | 3 060 K | 0.0015   |



|                |           |           |         |         |         |         |
|----------------|-----------|-----------|---------|---------|---------|---------|
| Distance       | 3 m       | 5 m       | 7 m     | 10 m    | 12 m    | 15 m    |
| Field diameter | 2,4 m     | 4 m       | 5,6 m   | 8 m     | 9,6 m   | 12 m    |
| Illumination   | 3 700 lux | 1 350 lux | 680 lux | 340 lux | 230 lux | 150 lux |
| Distance       | 10 ft     | 15 ft     | 25 ft   | 35 ft   | 40 ft   | 50 ft   |
| Field diameter | 8 ft      | 12 ft     | 19,9 ft | 27,9 ft | 31,9 ft | 39,9 ft |
| Illumination   | 340 fc    | 150 fc    | 55 fc   | 28 fc   | 21 fc   | 14 fc   |

## • Optics @ 15°

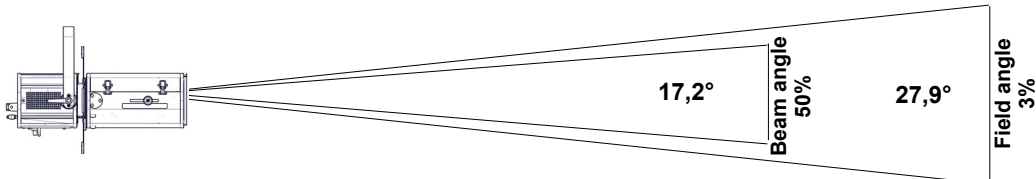
| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 6 810 Lm     | 3 820 Lm    | 52 Lm/W  | 153 300 Cd     | 3 070 K | 0.0015   |



|                |            |           |           |           |           |         |
|----------------|------------|-----------|-----------|-----------|-----------|---------|
| Distance       | 3 m        | 5 m       | 7 m       | 10 m      | 12 m      | 15 m    |
| Field diameter | 1 m        | 1,6 m     | 2,2 m     | 3,2 m     | 3,8 m     | 4,8 m   |
| Illumination   | 17 500 lux | 6 200 lux | 3 150 lux | 1 550 lux | 1 100 lux | 690 lux |
| Distance       | 10 ft      | 15 ft     | 25 ft     | 35 ft     | 40 ft     | 50 ft   |
| Field diameter | 3,2 ft     | 4,8 ft    | 8 ft      | 11,1 ft   | 12,7 ft   | 15,9 ft |
| Illumination   | 1 550 fc   | 690 fc    | 250 fc    | 130 fc    | 100 fc    | 65 fc   |

## • Optics @ 25°

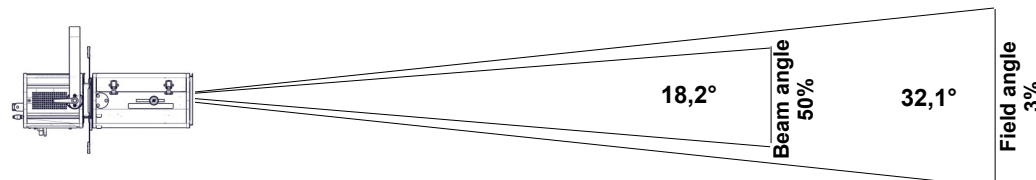
| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 6 680 Lm     | 3 860 Lm    | 53 Lm/W  | 80 400 Cd      | 3 050 K | 0.0016   |



|                |           |           |           |         |         |         |
|----------------|-----------|-----------|-----------|---------|---------|---------|
| Distance       | 3 m       | 5 m       | 7 m       | 10 m    | 12 m    | 15 m    |
| Field diameter | 1,5 m     | 2,5 m     | 3,5 m     | 5 m     | 6 m     | 7,5 m   |
| Illumination   | 9 000 lux | 3 250 lux | 1 650 lux | 810 lux | 560 lux | 360 lux |
| Distance       | 10 ft     | 15 ft     | 25 ft     | 35 ft   | 40 ft   | 50 ft   |
| Field diameter | 5 ft      | 7,5 ft    | 12,4 ft   | 17,4 ft | 19,9 ft | 24,8 ft |
| Illumination   | 810 fc    | 360 fc    | 130 fc    | 70 fc   | 55 fc   | 33 fc   |

## • Optics @ 35°

| Field lumens | Beam lumens | Efficacy | Beam intensity | CCT     | Delta uv |
|--------------|-------------|----------|----------------|---------|----------|
| 6 950 Lm     | 3 910 Lm    | 54 Lm/W  | 61 200 Cd      | 3 050 K | 0.0016   |

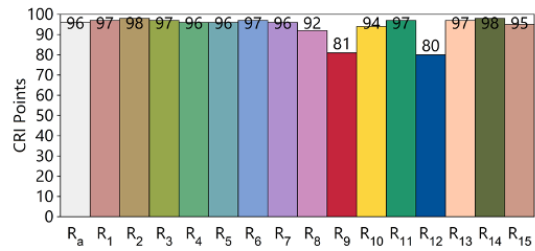


|                |           |           |           |         |         |         |
|----------------|-----------|-----------|-----------|---------|---------|---------|
| Distance       | 3 m       | 5 m       | 7 m       | 10 m    | 12 m    | 15 m    |
| Field diameter | 1,7 m     | 2,9 m     | 4 m       | 5,8 m   | 6,9 m   | 8,6 m   |
| Illumination   | 6 900 lux | 2 450 lux | 1 250 lux | 620 lux | 430 lux | 280 lux |
| Distance       | 10 ft     | 15 ft     | 25 ft     | 35 ft   | 40 ft   | 50 ft   |
| Field diameter | 5,8 ft    | 8,6 ft    | 14,4 ft   | 20,1 ft | 23 ft   | 28,8 ft |
| Illumination   | 620 fc    | 280 fc    | 100 fc    | 50 fc   | 39 fc   | 25 fc   |

Light quality report

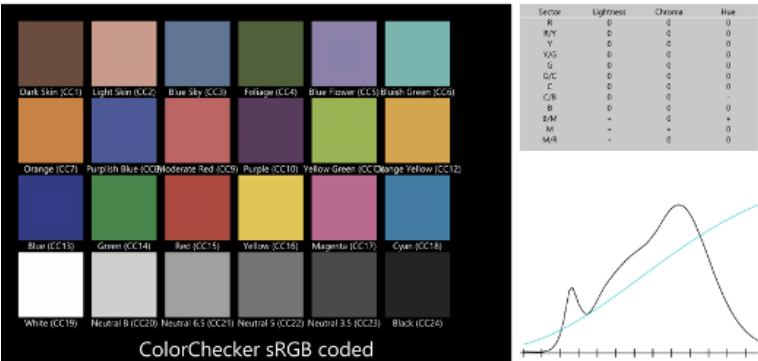
| CCT    | DeltaUV | CRI Ra | CRI R9 | CQS Qa | TM30-18 Rf | TM30-18 Rg | TLCI | SSI [P3000] |
|--------|---------|--------|--------|--------|------------|------------|------|-------------|
| 2 980K | 0.0014  | 96     | 81     | 95     | 92         | 98         | 97   | 85          |

CRI - CIE Colour Rendering Index

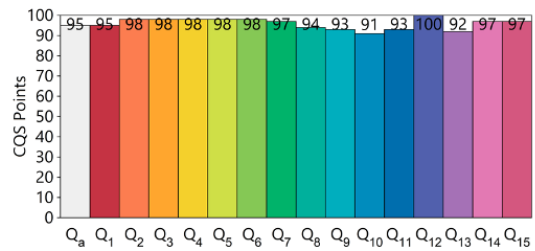


TLCI - Television Lighting Consistency Index

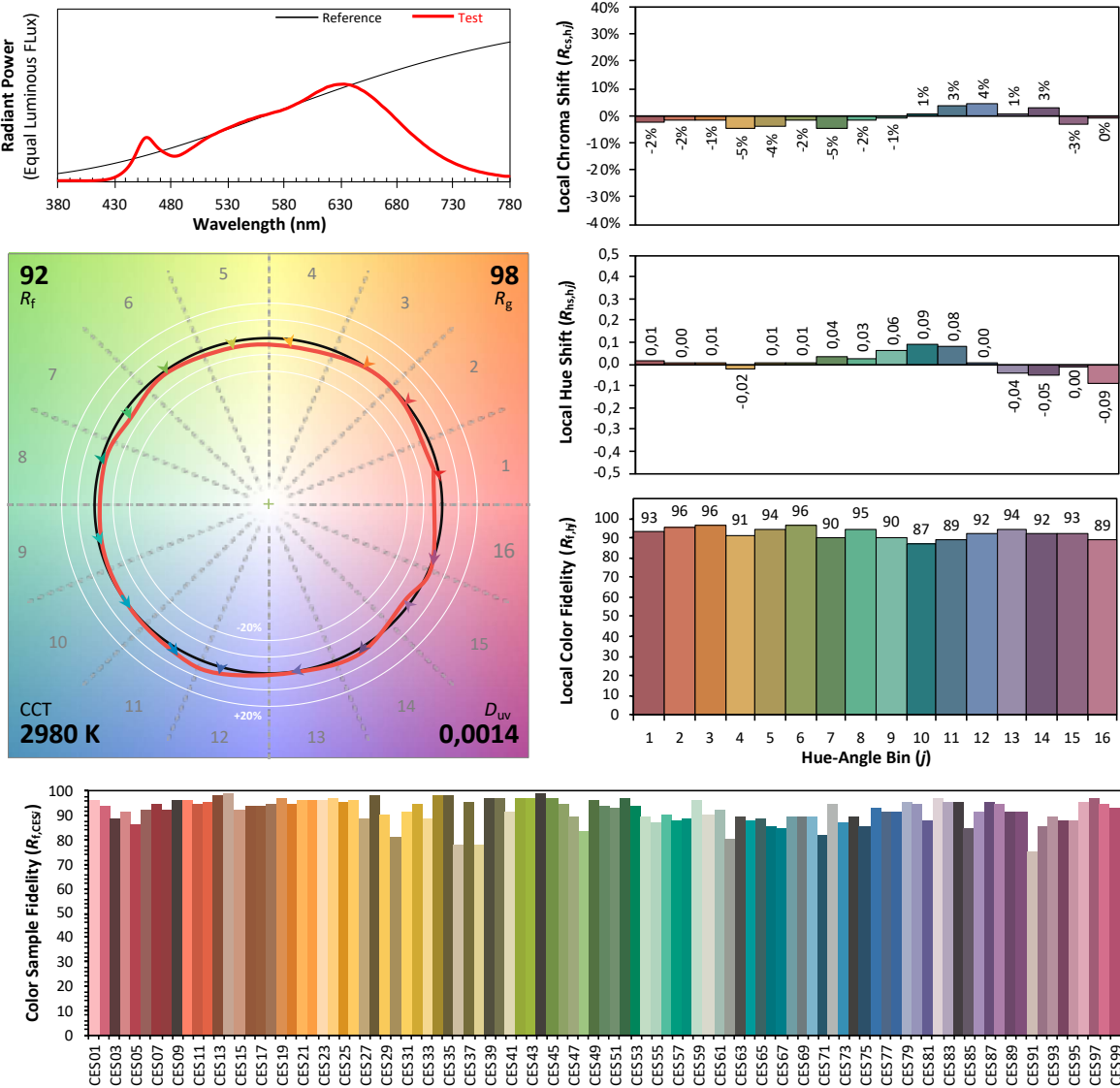
Test : CCT = P2984 (+0.3)  
TLCI-2012 : 97 (P2984)



CQS - NIST Colour Quality Scale



ANSI/IES TM-30-18 Colour Rendition Report



Colours are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00