

# SULLY - 653CSX 4C

6505X - 4 COLOURS LED 200W



- **Type:** Profile spot
- **Source:** 4 colours LED 200W
- **Optics:** 28° to 54° zoom
- **Standard:** 110 V North american

Profile spot

## The new colourful classics

Sully 4C is a series of variable zoom profile featuring a 4-colour LED source and integrating an innovative software platform named RJ Color. With advanced setting and control modes, these profile spots deliver perfect whites and high quality saturated and pastel colours. Sully 4C is fully manufactured in France at Robert Juliat premises. Each LED engine is factory-calibrated to ensure colour consistency from one profile to another. In addition, the Sully 4C LED retrofit compartment is an ideal economic and technological solution to convert 600SX tungsten fixtures.

### Features

- **Light intensity:** 8 or 16 bit dimming and strobe function
- **Colour control:** CIE XY, Hue saturation, RGB (with choice of the colour space - Native / sRGB / REC.709 / REC.2020 / ProPhoto) or RAW modes
- **Calibrated white sources:** 3 white presets reproducing tungsten 3000 K or 3200 K lamps, or discharge 6500 K lamps
- **Colour Temperature adjustment (CCT):** white from 1700 to 10000 Kelvin with Delta UV control (+/- Green – Magenta)
- **Colour mixing optimization:** choice of High Quality or High Brightness mode
- **Colour filter simulation:** 300 colour filters included with transmission / saturation adjustment - Fade time and type adjustment between 2 colour filters for adjustable transition
- **DimShift function:** when dimming the light, the colours follow the Planck curve (tungsten redshift emulation) - Available on all sources (white presets, any CCT value) and all colour filters
- **1 parameter DMX mode:** filter or colour selection through local display and dimming control by DMX (8 or 16 bits)
- **Adjustable response time:** choice of fast or slow dimming for tungsten-like simulation - adjustment by DMX - 3 modes available: tungsten, linear and linear with flash detection
- **Multi-function double gate:** simultaneous use of gobos and iris. Sharp focus of both gobo and shutter
- **Shutter gate:** up to 8 shutters. Remove shutters for easy maintenance or tuck fully inside gate for secure transport
- **User-friendly shutter-lock system:** secures shutters' setting in any circumstances (locking efficient up to 4 shutters)
- **Lens tube lock feature:** secures rotating lens tube against unwanted movement
- **90° rotating lens tube / gate / front accessories holder:** rotation of the projected image is always possible while the lamp remains vertical – no need to move the yoke
- **Internal glass filter holder:** long term use of durable coloured, dichroic and textured glass or gels
- **PWM adjustment:** choice of different PWM dimming frequencies
- **Local setup:** dMX address and mode, dimming curve and response time through 4-button display with automatic light switch-off
- **Dimming parameters:** choice of square, linear or tungsten dimming curves

### Optical

- **4-colour mixing LED system:** Red, Green, Blue, and Lime
- **Thermal management of each colour:** thanks to the thermal management algorithms, the colours you have set will stay the same during the performance
- **Factory calibrated source:** to ensure consistency between fixtures
- **SX optical system:** double condenser optics for exceptional optical quality
- **Optional coated double condenser optics:** up to 15% more light output
- **Variable zoom optics:** sharp focus at every beam angle. Independent control of image size and focus. Focus handles on both sides
- **Coated zoom lenses:** all zoom lenses are anti-reflection coated (AR) to ensure a maximum transmission of light.
- **Electronic dimmer:** dimming without clipping or cut-out at low intensity levels; high quality smoothing

### Construction

- **Made in France :** fully manufactured in Robert Juliat premises retaining complete control over all aspects of quality
- **Interchangeable lamp bases:** with 600SX (1000/1200 W tungsten) series
- **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
- **3 cooling modes available:** includes silent mode for perfect integration in concert halls
- **Bodywork:** strong sheet metal construction for durability
- **Captive knobs and handles:** additional security when working at height or in transit
- **Spare parts and accessories:** interchangeable across the tungsten, discharge or LED ranges, reducing running costs
- **Easy access to all parts:** easy cleaning and maintenance

Picture:653SX 4C

DSEN405\_653CSX\_4C - 02/10/2023

Robert Juliat reserves the right to change or alter any of the items detailed on this page, to increase or improve manufacturing techniques without prior notice.

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ROBERT JULIAT

**Source** (Light quality report(s) available at the end of the document)

- **Lamp type:** LED - 4 colours
- **Power:** 196 W
- **Lumen output:** 7730 lm
- **Life:** 36000 hours (L70B50)

Colours	Power *	Lumen output*
Red	57 W	1 540 lm
Green	40 W	2 000 lm
Blue	41 W	500 lm
Lime	58 W	3 690 lm

(\*) manufacturer's data

## Optics

### Characteristics

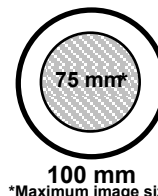
- **Type:** Zoom
- **Range:** 28° to 54° (Field angle)
- **Focal length:** 86 - 160 mm

### Gel filter

- **Shape:** Square
- **Standard size:** 191x191 mm (7.5x7.5 in)

### Gobo

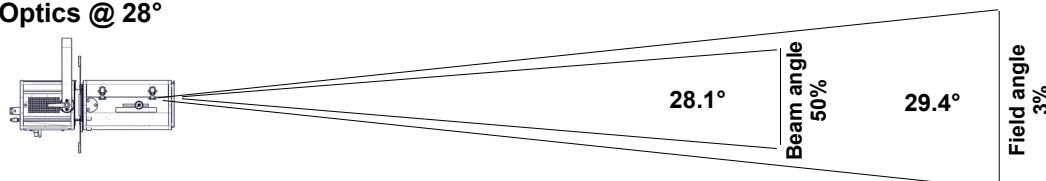
- **Size:** A
- **Material:** Metal  
Glass



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

optics: 28°-54° / Optional coated double condenser optics / 3200 K / High Brightness

### • Optics @ 28°



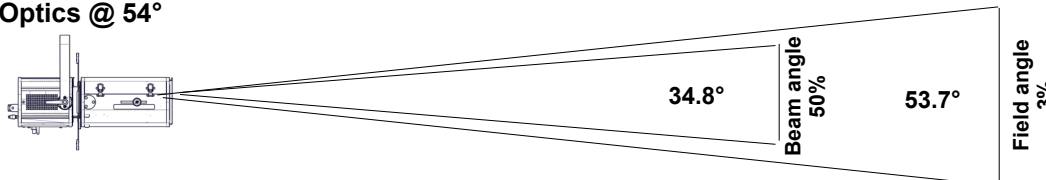
**Beam intensity**  
41 100 cd

**Field lumens**  
5 860 lm

**Efficacy**  
35 lm/W

<b>Distance</b>	3 m	5 m	7 m	10 m	12 m	15 m
<b>Diameter</b>	1.6 m	2.6 m	3.7 m	5.2 m	6.3 m	7.9 m
<b>Illumination</b>	4 600 lux	1 650 lux	840 lux	420 lux	290 lux	190 lux
<b>Distance</b>	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
<b>Diameter</b>	5.2 ft	7.9 ft	13.1 ft	18.4 ft	21 ft	26.2 ft
<b>Illumination</b>	420 fc	190 fc	70 fc	34 fc	26 fc	17 fc

### • Optics @ 54°



**Beam intensity**  
15 700 cd

**Field lumens**  
6 040 lm

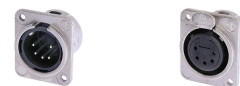
**Efficacy**  
36 lm/W

<b>Distance</b>	3 m	5 m	7 m	10 m	12 m	15 m
<b>Diameter</b>	3 m	5.1 m	7.1 m	10.1 m	12.1 m	15.2 m
<b>Illumination</b>	1 750 lux	630 lux	330 lux	160 lux	110 lux	70 lux
<b>Distance</b>	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
<b>Diameter</b>	10.1 ft	15.2 ft	25.3 ft	35.4 ft	40.5 ft	50.6 ft
<b>Illumination</b>	160 fc	70 fc	26 fc	13 fc	10 fc	7 fc

## Remote control

- **Data protocol:** USITT DMX512-A  
RDM

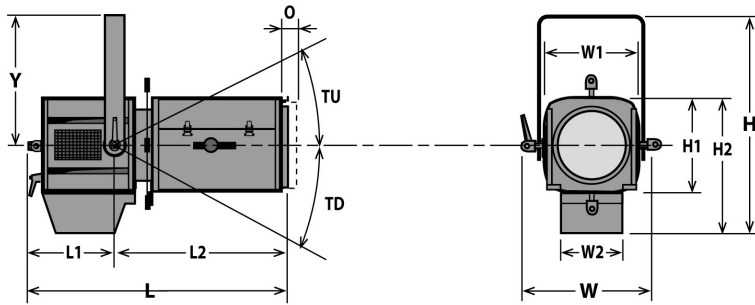
- **Data IN connector:** 5 pins XLR male
- **Data OUT connector:** 5 pins XLR femelle



### • DMX chart:

Mode 1 (1 channels)	Mode 2 (6 channels)	Mode 3 (20 channels)	Mode 4 (20 channels)	Mode 5 (22 channels)	Mode 6 (24 channels)
Dimmer	Dimmer Dimmer fine Strobe duration Strobe speed Response time Control mode	Dimmer @16b Strobe: duration + speed Response time Control mode Source type Filter + adjustments CCT + delta UV CIE XY Colour control @16b	Dimmer @16b Strobe: duration + speed Response time Control mode Source type Filter + adjustments CCT + delta UV Hue Saturation @16b	Dimmer @16b Strobe: duration + speed Response time Control mode Source type Filter + adjustments CCT + delta UV RGB colour control @16b	Dimmer @16b Strobe: duration + speed Response time Control mode Source type Filter + adjustments CCT + delta UV RGLB colour control @16b

## Dimensions and weight



**Weight:** 12.8 kg (28.2 lbs)

Height	Length	Width	Yoke	Tilt	Option
H= 473 mm (18.6 in)	L= 564 mm (22.2 in)	W= 330 mm (13 in)	Y= 280 mm (11 in)	TU= 63°	O= 25 mm (1 in)
H1= 208 mm (8.2 in)	L1= 240 mm (9.4 in)	W1= 208 mm (8.2 in)		TD= 90°	
H2= 294 mm (11.6 in)	L2= 324 mm (12.8 in)	W2= 136 mm (5.4 in)			

## Shipping

- **Weight :** 15.8 kg (34.8 lbs)
- **Volume :** .13 m<sup>3</sup> (4.59 ft<sup>3</sup>)

## Installation

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



## Construction

- **Housing:** Steel sheet - Aluminium
- **Colour:** Black
- **Cooling:** Low noise variable fan
- **Maximum ambient temperature (Ta):** 40°C (104°F)
- **Maximum case temperature (Tc):** 72°C (161.6°F)
- **Total heat dissipation:** 608 BTU/h
- **Ingress Protection (IP) rating:** IP20

## Electrical compatibility

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

## Power input



- **Type:** removable power cord with Neutrik powerCON TRUE1 TOP connector (included)
- **Cable:** 14 AWG SJ type (UL/CSA)
- **Length:** 1.5 m (4.9 ft)
- **Power connector:** without connector

## Power consumption

Voltage	Frequency	Current	Power	Power factor
110 V	60 Hz	1.82 A	178 W	0.99
230 V	50 Hz	0.88 A	175 W	0.87
100 V	60 Hz	1.82 A	178 W	0.99

## 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 11 units (230 V) / 8 units (120 V)

## Approvals



## Warranty

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


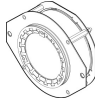
## Acoustics

- **Noise level:** < 26 dB(A)















## Model



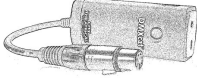



<b>653CSX 4C</b>	4 colours LED 200W Profile spot - 653CSX 4C Sully - 28/54° - North american standard
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## Options

<b>CAV600</b>	Double slot front cassette for 180x180mm accessories	
<b>APH 68LEDM</b>	Double-condenser set for Led profile	

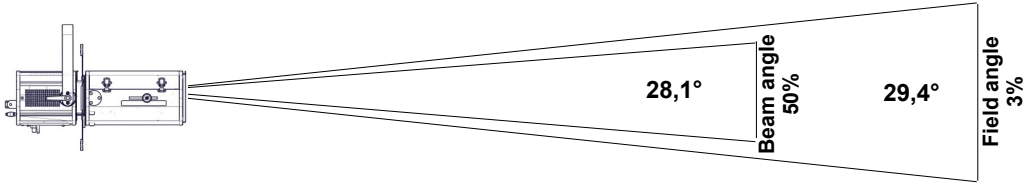
## Accessories

<b>D8</b>	Shutter for SX series <b>4 included</b>	
<b>SGUX</b>	Universal "A" size gobo-holder (metal, glass, frosted glass) <b>1 included</b>	
<b>IWSX755</b>	Drop-in iris (monoplane) with holder - Poids: 0.26 Kg	
<b>D8</b>	Shutter for SX series	
<b>D8</b>	Shutter for SX series	
<b>G500</b>	180x180mm safety grid	
<b>CAV600A</b>	Double slot front cassette for 180x180mm accessories - Poids: 0.43 Kg	
<b>APH 68LED</b>	Double-condenser set for Led profile - Poids: 0.58 Kg	
<b>T/650CDSXCW</b>	SULLY 115W LED compartment with display - Cool White - North American standard - 1,50m UL/CSA power cable without plug - Poids: 2.33 Kg	
<b>T/650CDSXWW</b>	SULLY 115W LED compartment with display - Warm White - North American standard - 1,50m UL/CSA power cable without plug - Poids: 2.33 Kg	
<b>T/650CSXCW</b>	SULLY 115W LED compartment - Cool White - North American standard - 1,50m UL/CSA power cable without plug - Poids: 2.27 Kg	
<b>T/650CSXWW</b>	SULLY 115W LED compartment - Warm White - North American standard - 1,50m UL/CSA power cable without plug - Poids: 2.27 Kg	
<b>FO100-10</b>	Ø97mm optical filter for coloured LED source - typ 10	
<b>VD120</b>	120x120mm frosted glass	
		

<b>FCD600</b>	Angled yoke	
<b>TH600</b>	180x180mm "Top hat" (without safety cable) - ø150mm / 150mm long	
<b>DMXcat</b>	Bluetooth DMX/RDM Multifunction test tool - City Theatrical DMXcat®	
<b>876</b>	Hook clamp 40x10mm with 28mm M10 screw for Ø35 to 50mm pipes - SWL: 50Kg - Poids: 1.25 Kg	
<b>880</b>	Hook clamp 40x10mm with 28mm M10 screw for Ø50 to 63mm pipes - SWL: 50Kg - Poids: 1.36 Kg	
<b>CS2</b>	Safety cable Ø3 mm L= 600mm - SWL: 75 Kg	

• Optics @ 28°

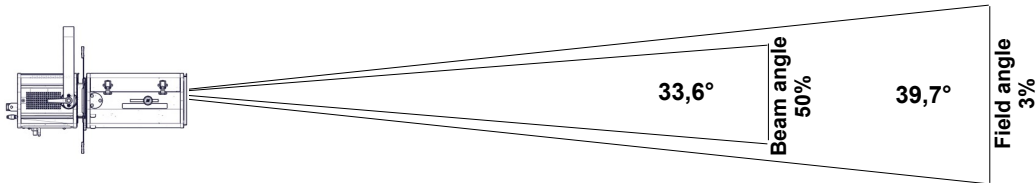
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 860 Lm		35 Lm/W	41 100 Cd	3 220 K	0.001



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,6 m	3,7 m	5,2 m	6,3 m	7,9 m
Illumination	4 600 lux	1 650 lux	840 lux	420 lux	290 lux	190 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,2 ft	7,9 ft	13,1 ft	18,4 ft	21 ft	26,2 ft
Illumination	420 fc	190 fc	70 fc	34 fc	26 fc	17 fc

• Optics @ 40°

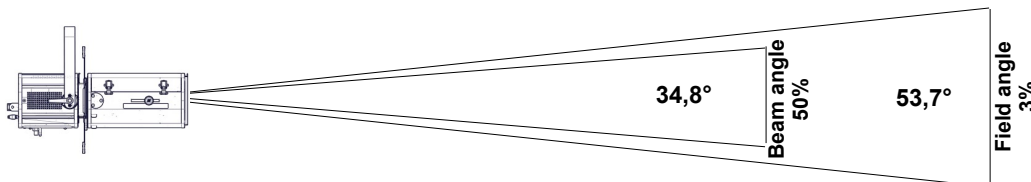
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 870 Lm		35 Lm/W	23 100 Cd	3 210 K	0.0014



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,2 m	3,6 m	5,1 m	7,2 m	8,7 m	10,8 m
Illumination	2 600 lux	930 lux	480 lux	240 lux	170 lux	110 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	7,2 ft	10,8 ft	18,1 ft	25,3 ft	28,9 ft	36,1 ft
Illumination	240 fc	110 fc	37 fc	19 fc	15 fc	10 fc

• Optics @ 54°

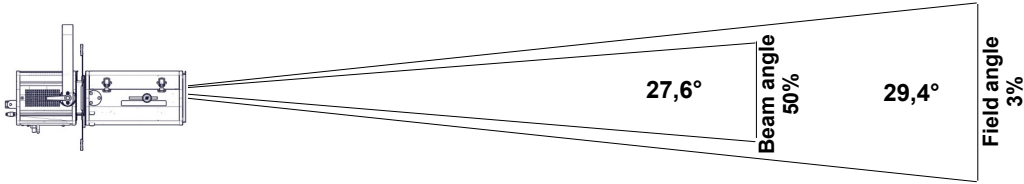
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
6 040 Lm		36 Lm/W	15 700 Cd	3 210 K	0.0004



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	3 m	5,1 m	7,1 m	10,1 m	12,1 m	15,2 m
Illumination	1 750 lux	630 lux	330 lux	160 lux	110 lux	70 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	10,1 ft	15,2 ft	25,3 ft	35,4 ft	40,5 ft	50,6 ft
Illumination	160 fc	70 fc	26 fc	13 fc	10 fc	7 fc

• Optics @ 28°

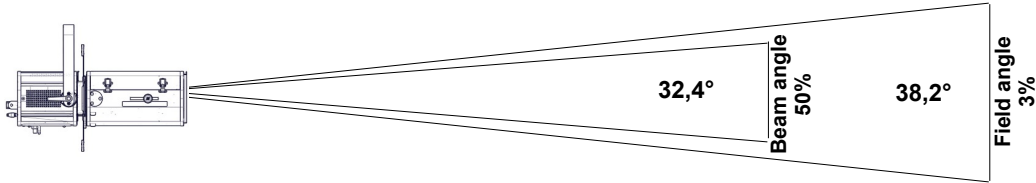
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 770 Lm		36 Lm/W	40 700 Cd	3 010 K	0.001



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,6 m	3,7 m	5,2 m	6,3 m	7,9 m
Illumination	4 550 lux	1 650 lux	840 lux	410 lux	290 lux	190 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,2 ft	7,9 ft	13,1 ft	18,4 ft	21 ft	26,2 ft
Illumination	410 fc	190 fc	70 fc	34 fc	26 fc	17 fc

• Optics @ 40°

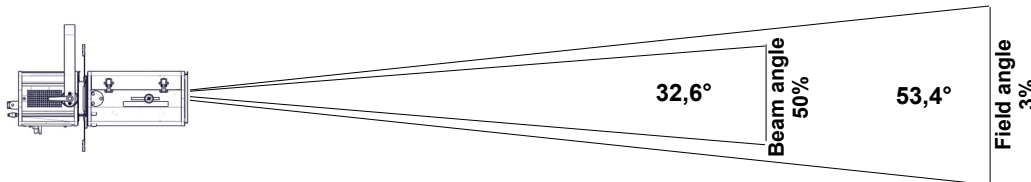
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 800 Lm		36 Lm/W	24 600 Cd	3 020 K	0.0018



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,1 m	3,5 m	4,8 m	6,9 m	8,3 m	10,4 m
Illumination	2 750 lux	990 lux	510 lux	250 lux	180 lux	110 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	6,9 ft	10,4 ft	17,3 ft	24,2 ft	27,7 ft	34,6 ft
Illumination	250 fc	110 fc	40 fc	21 fc	16 fc	10 fc

• Optics @ 54°

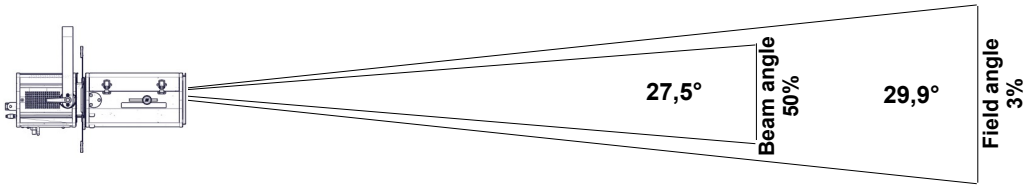
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 820 Lm		36 Lm/W	16 700 Cd	3 000 K	0.001



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	3 m	5 m	7 m	10,1 m	12,1 m	15,1 m
Illumination	1 900 lux	670 lux	350 lux	170 lux	120 lux	75 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	10,1 ft	15,1 ft	25,1 ft	35,2 ft	40,2 ft	50,3 ft
Illumination	170 fc	75 fc	27 fc	14 fc	11 fc	7 fc

• Optics @ 28°

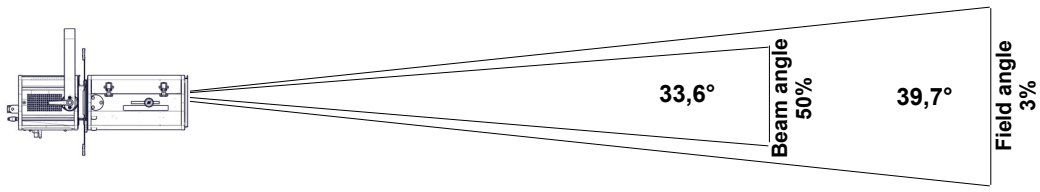
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 640 Lm		34 Lm/W	37 900 Cd	6 610 K	0.005



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,7 m	3,7 m	5,3 m	6,4 m	8 m
Illumination	4 250 lux	1 550 lux	780 lux	380 lux	270 lux	170 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,3 ft	8 ft	13,4 ft	18,7 ft	21,4 ft	26,7 ft
Illumination	380 fc	170 fc	65 fc	31 fc	24 fc	16 fc

• Optics @ 40°

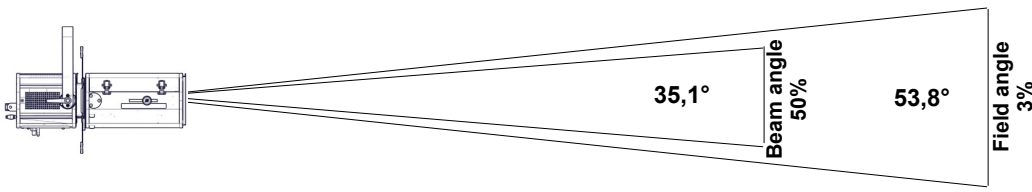
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 660 Lm		34 Lm/W	23 100 Cd	6 560 K	0.0054



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,2 m	3,6 m	5,1 m	7,2 m	8,7 m	10,8 m
Illumination	2 600 lux	930 lux	480 lux	240 lux	170 lux	110 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	7,2 ft	10,8 ft	18,1 ft	25,3 ft	28,9 ft	36,1 ft
Illumination	240 fc	110 fc	37 fc	19 fc	15 fc	10 fc

• Optics @ 54°

Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 760 Lm		35 Lm/W	14 800 Cd	6 540 K	0.005

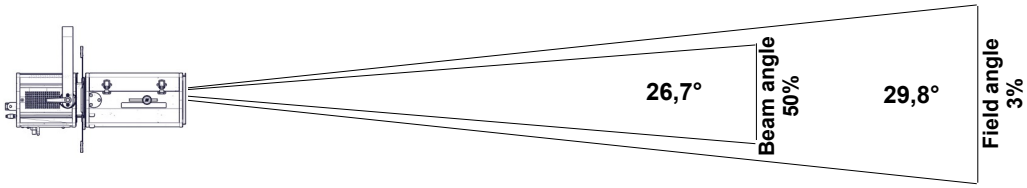


Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	3 m	5,1 m	7,1 m	10,1 m	12,2 m	15,2 m
Illumination	1 650 lux	600 lux	310 lux	150 lux	110 lux	70 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	10,1 ft	15,2 ft	25,4 ft	35,5 ft	40,6 ft	50,7 ft
Illumination	150 fc	70 fc	24 fc	13 fc	10 fc	6 fc



• Optics @ 28°

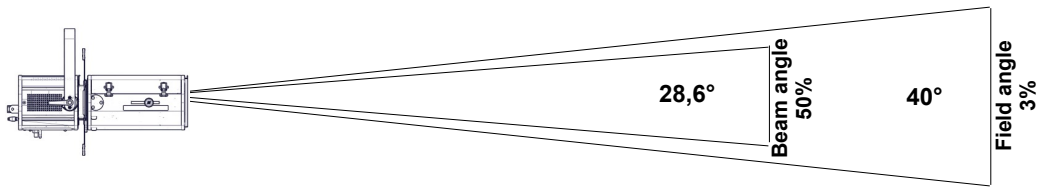
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 600 Lm		37 Lm/W	24 700 Cd	3 210 K	0.0031



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,7 m	3,7 m	5,3 m	6,4 m	8 m
Illumination	2 750 lux	990 lux	510 lux	250 lux	180 lux	110 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,3 ft	8 ft	13,3 ft	18,6 ft	21,3 ft	26,6 ft
Illumination	250 fc	110 fc	40 fc	21 fc	16 fc	10 fc

• Optics @ 40°

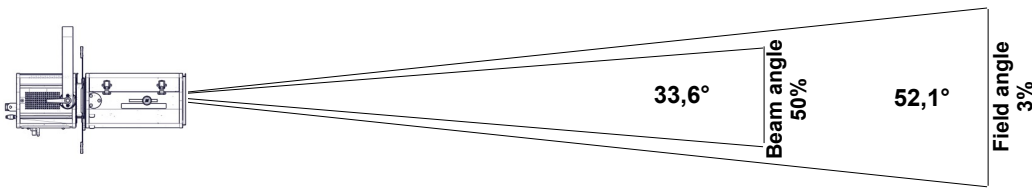
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 710 Lm		38 Lm/W	16 400 Cd	3 190 K	0.0026



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,2 m	3,6 m	5,1 m	7,3 m	8,7 m	10,9 m
Illumination	1 850 lux	660 lux	340 lux	170 lux	120 lux	75 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	7,3 ft	10,9 ft	18,2 ft	25,5 ft	29,1 ft	36,4 ft
Illumination	170 fc	75 fc	27 fc	14 fc	11 fc	7 fc

• Optics @ 54°

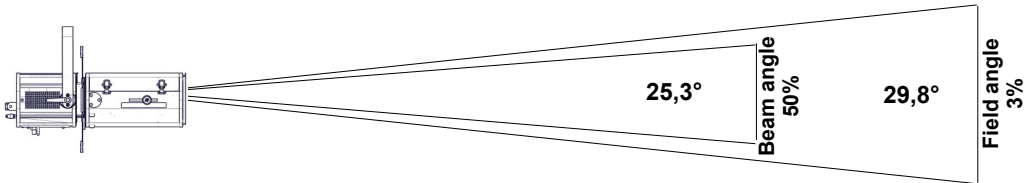
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 930 Lm		41 Lm/W	11 000 Cd	3 180 K	0.003



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,9 m	4,9 m	6,8 m	9,8 m	11,7 m	14,7 m
Illumination	1 250 lux	450 lux	230 lux	120 lux	80 lux	49 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	9,8 ft	14,7 ft	24,4 ft	34,2 ft	39,1 ft	48,9 ft
Illumination	120 fc	49 fc	18 fc	9 fc	7 fc	5 fc

• Optics @ 28°

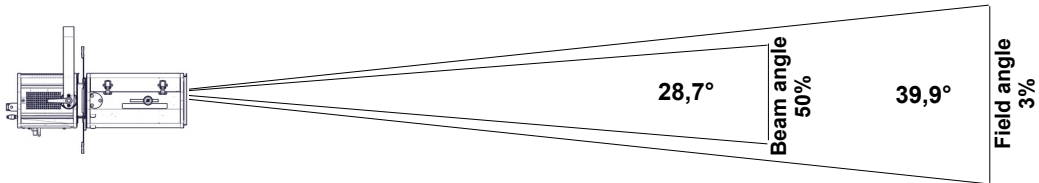
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 630 Lm		37 Lm/W	25 700 Cd	3 010 K	0.0026



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,7 m	3,7 m	5,3 m	6,4 m	8 m
Illumination	2 900 lux	1 050 lux	530 lux	260 lux	180 lux	120 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,3 ft	8 ft	13,3 ft	18,6 ft	21,3 ft	26,6 ft
Illumination	260 fc	120 fc	42 fc	21 fc	17 fc	11 fc

• Optics @ 40°

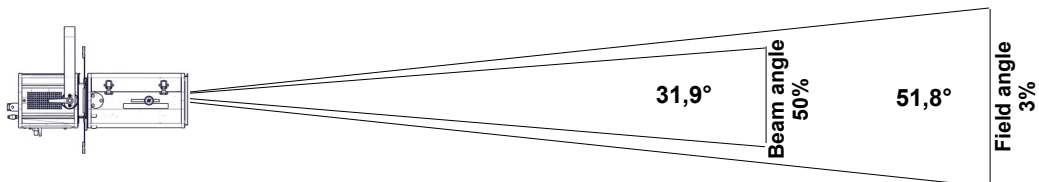
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 690 Lm		38 Lm/W	16 300 Cd	3 000 K	0.0026



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,2 m	3,6 m	5,1 m	7,3 m	8,7 m	10,9 m
Illumination	1 850 lux	660 lux	340 lux	170 lux	120 lux	75 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	7,3 ft	10,9 ft	18,1 ft	25,4 ft	29 ft	36,3 ft
Illumination	170 fc	75 fc	27 fc	14 fc	11 fc	7 fc

• Optics @ 54°

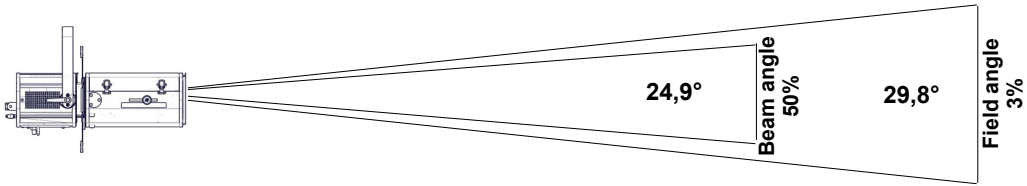
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 840 Lm		39 Lm/W	11 500 Cd	3 000 K	0.0028



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,9 m	4,9 m	6,8 m	9,7 m	11,7 m	14,6 m
Illumination	1 300 lux	470 lux	240 lux	120 lux	80 lux	55 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	9,7 ft	14,6 ft	24,3 ft	34 ft	38,8 ft	48,6 ft
Illumination	120 fc	55 fc	19 fc	10 fc	8 fc	5 fc

• Optics @ 28°

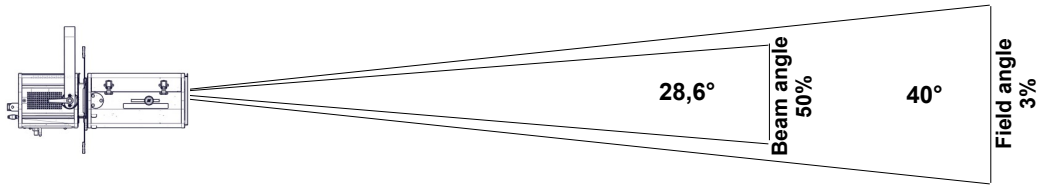
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 740 Lm		34 Lm/W	26 900 Cd	5 970 K	0.0049



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	1,6 m	2,7 m	3,7 m	5,3 m	6,4 m	8 m
Illumination	3 000 lux	1 100 lux	550 lux	270 lux	190 lux	120 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	5,3 ft	8 ft	13,3 ft	18,6 ft	21,3 ft	26,6 ft
Illumination	270 fc	120 fc	44 fc	22 fc	17 fc	11 fc

• Optics @ 40°

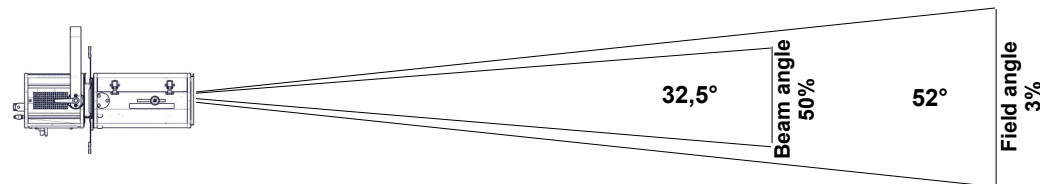
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 830 Lm		35 Lm/W	17 000 Cd	5 920 K	0.0047



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,2 m	3,6 m	5,1 m	7,3 m	8,7 m	10,9 m
Illumination	1 900 lux	690 lux	350 lux	180 lux	120 lux	80 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	7,3 ft	10,9 ft	18,2 ft	25,5 ft	29,1 ft	36,4 ft
Illumination	180 fc	80 fc	28 fc	14 fc	11 fc	7 fc

• Optics @ 54°

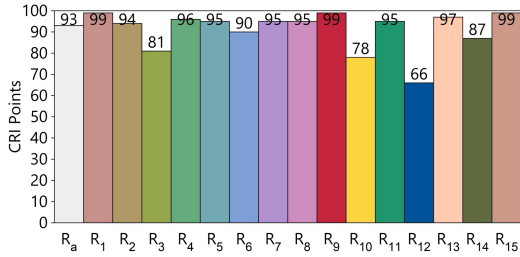
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
3 990 Lm		37 Lm/W	11 900 Cd	5 860 K	0.0051



Distance	3 m	5 m	7 m	10 m	12 m	15 m
Field diameter	2,9 m	4,9 m	6,8 m	9,8 m	11,7 m	14,6 m
Illumination	1 350 lux	480 lux	250 lux	120 lux	85 lux	55 lux
Distance	10 ft	15 ft	25 ft	35 ft	40 ft	50 ft
Field diameter	9,8 ft	14,6 ft	24,4 ft	34,1 ft	39 ft	48,8 ft
Illumination	120 fc	55 fc	20 fc	10 fc	8 fc	5 fc

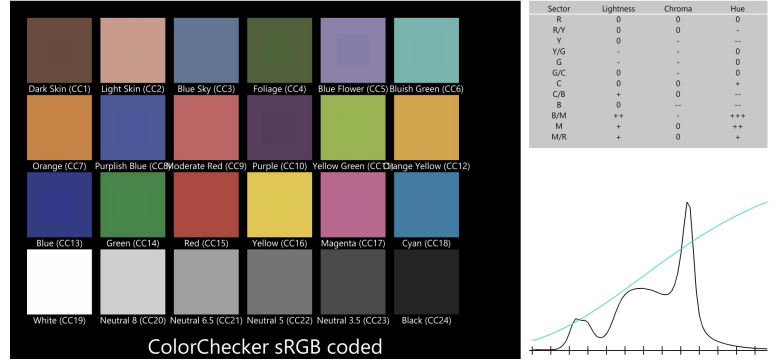
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [3044]
3 050K	0.0034	93	99	92	91	102	87	68

CRI - CIE Colour Rendering Index

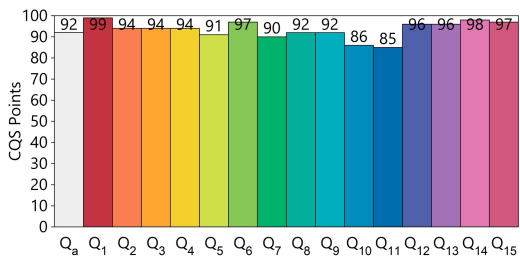


TLCI - Television Lighting Consistency Index

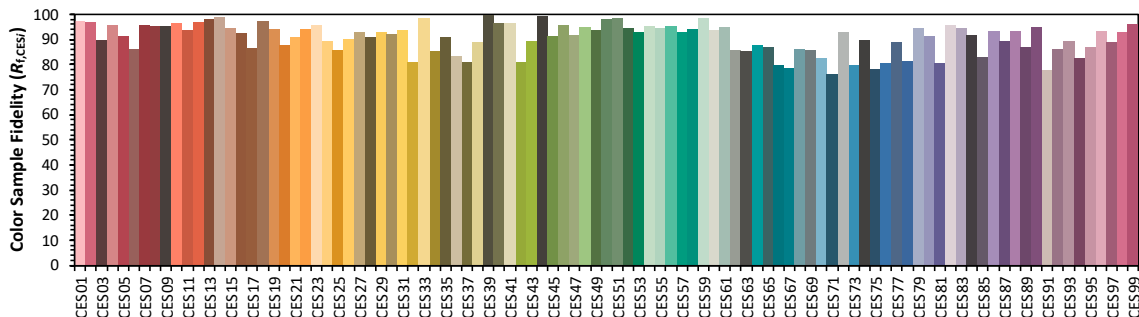
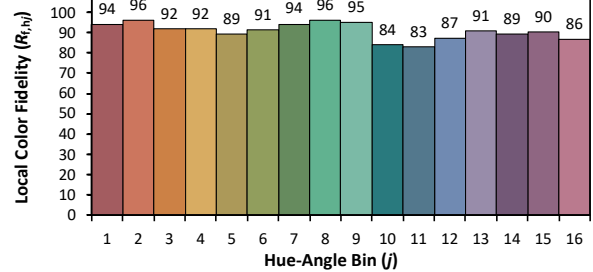
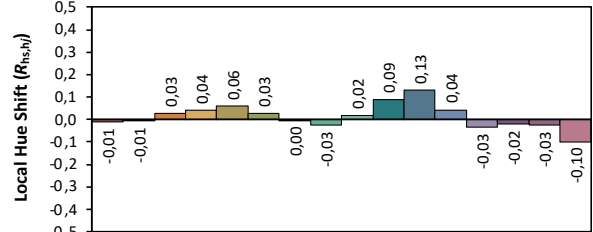
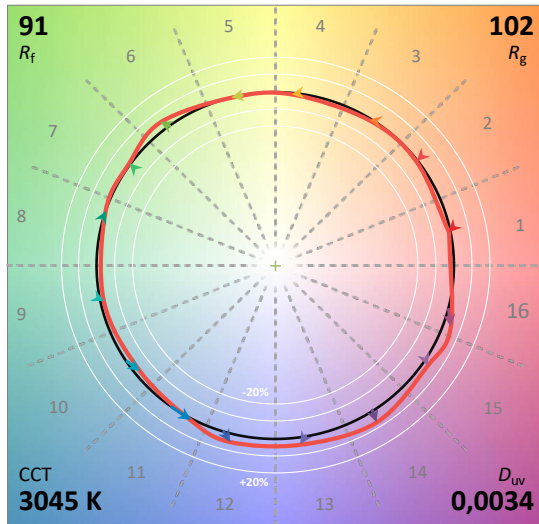
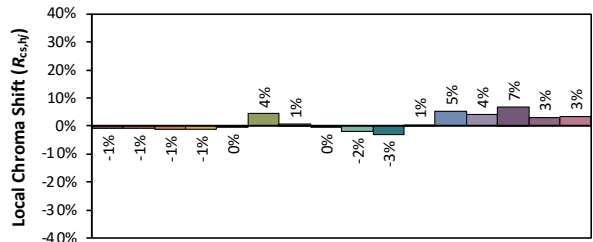
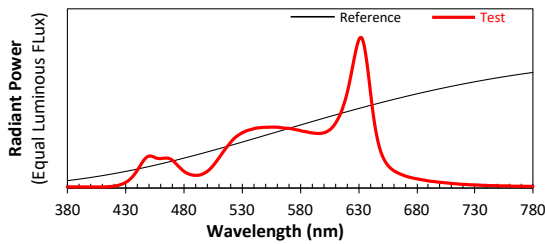
Test : CCT = P3045 (+0.6)  
 TLCI-2012 : 87 (P3045)



CQS - NIST Colour Quality Scale



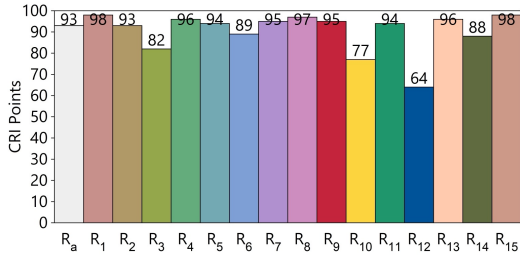
ANSI/IES TM-30-18 Colour Rendition Report



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

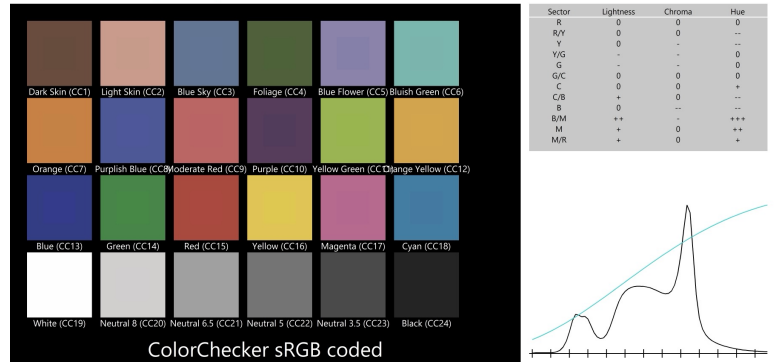
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [3236]
3 240K	0.0036	93	95	92	90	101	87	68

CRI - CIE Colour Rendering Index

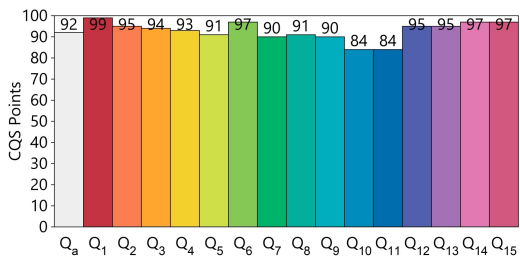


TLCI - Television Lighting Consistency Index

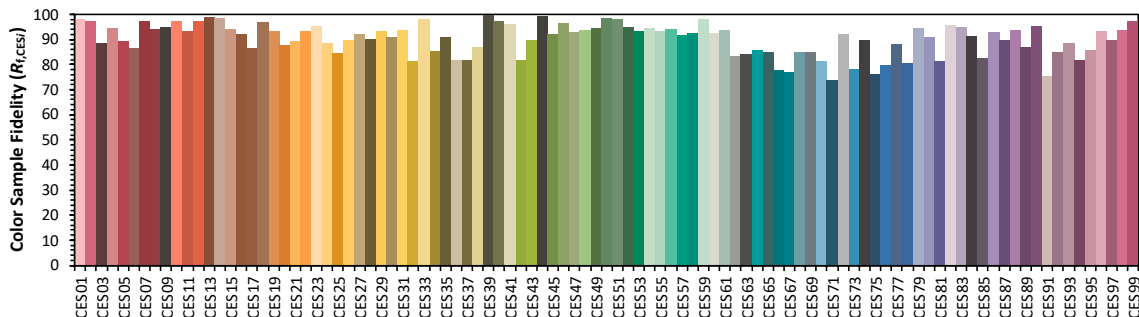
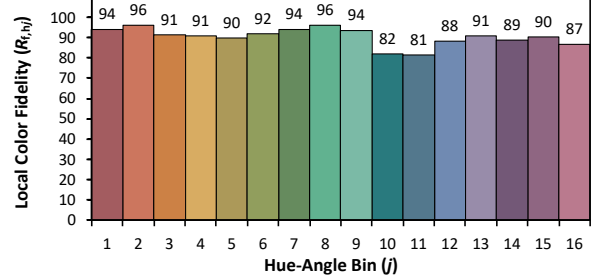
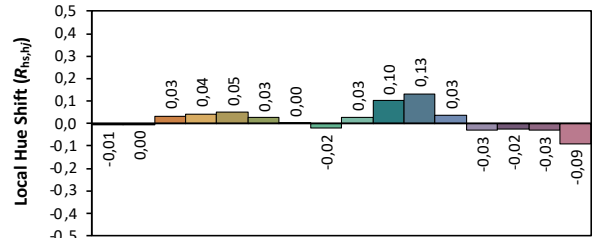
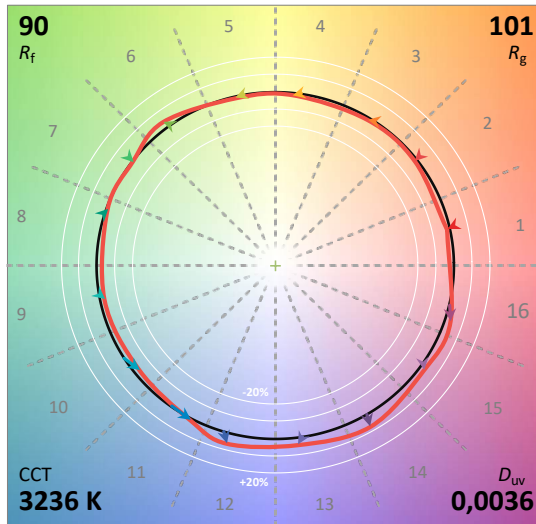
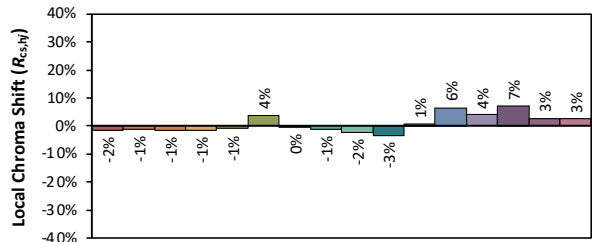
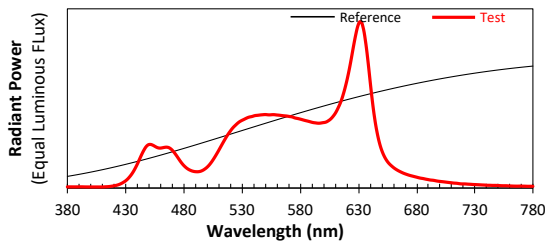
Test : CCT = P3237 (+0.7)  
 TLCI-2012 : 87 (P3237)



CQS - NIST Colour Quality Scale



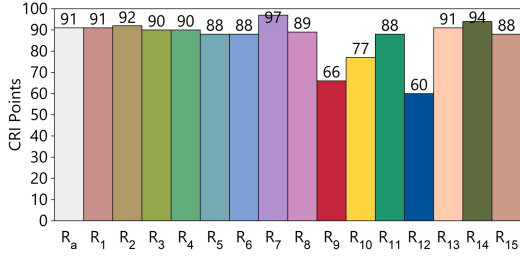
ANSI/IES TM-30-18 Colour Rendition Report



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

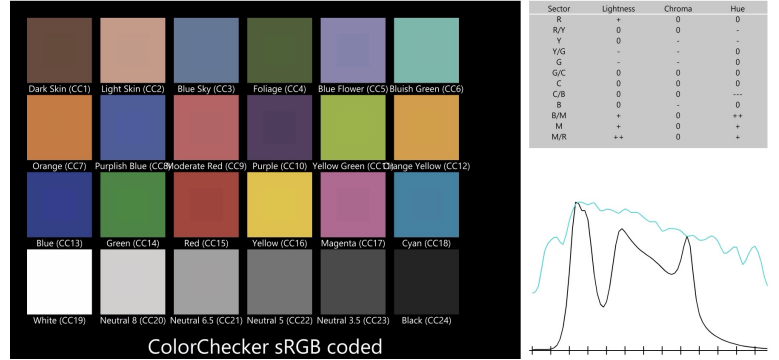
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [6111]
6 110K	0.0084	91	66	89	88	97	89	65

CRI - CIE Colour Rendering Index

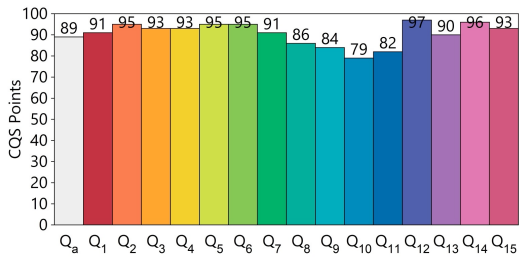


TLCI - Television Lighting Consistency Index

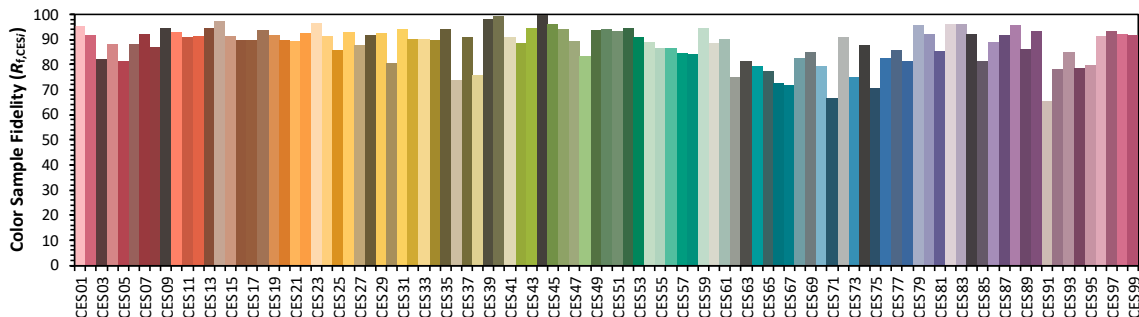
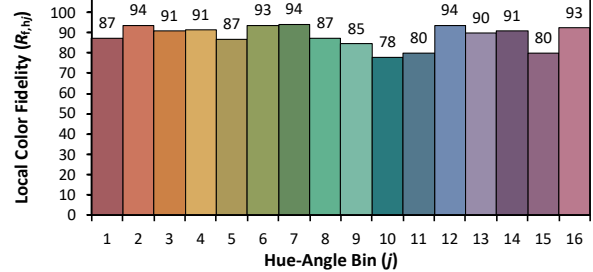
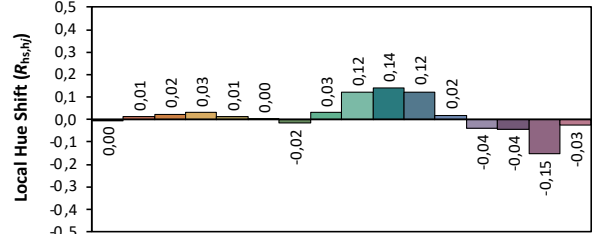
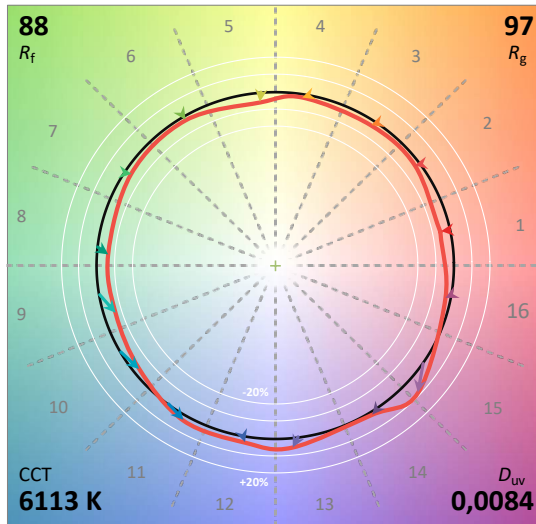
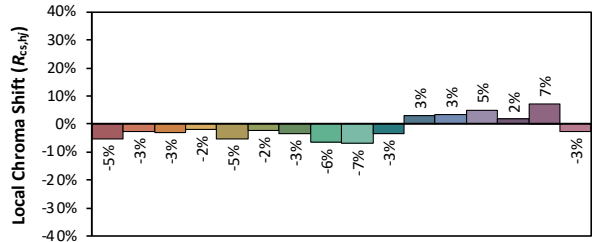
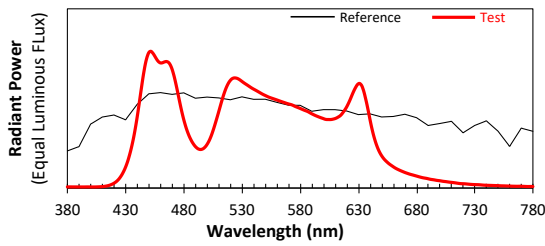
Test : CCT = D6112 (+1.0)  
 TLCI-2012 : 89 (D6112)



CQS - NIST Colour Quality Scale

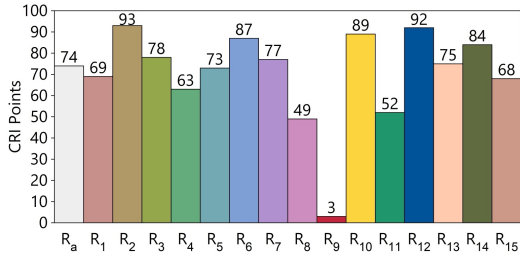


ANSI/IES TM-30-18 Colour Rendition Report



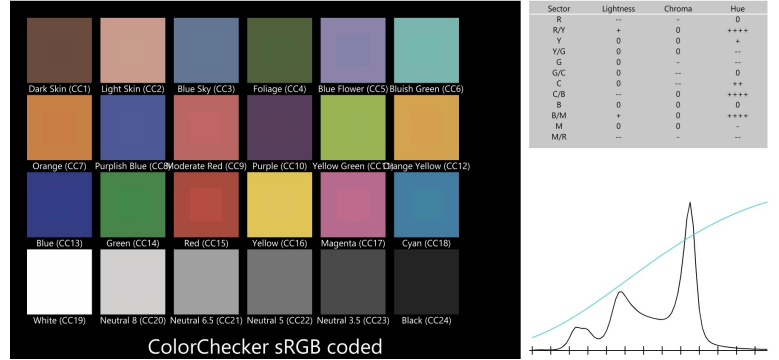
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [3191]
3 190K	0.0053	74	3	84	84	108	70	59

CRI - CIE Colour Rendering Index

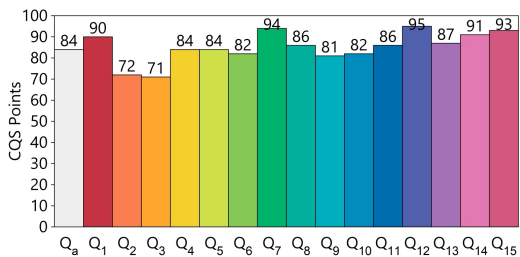


TLCI - Television Lighting Consistency Index

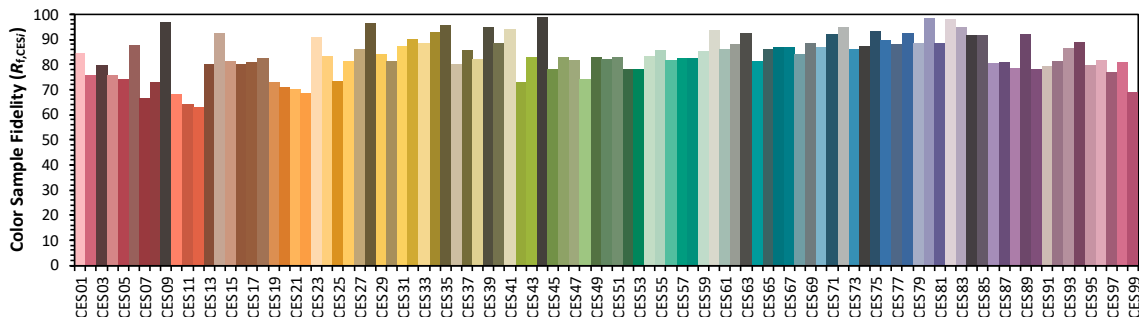
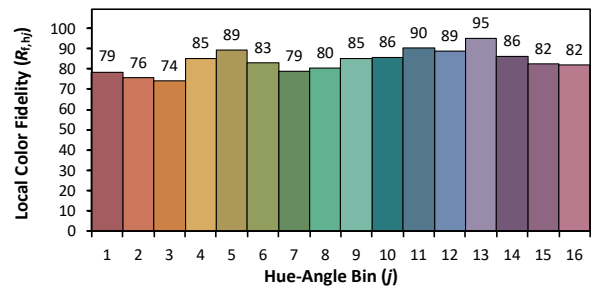
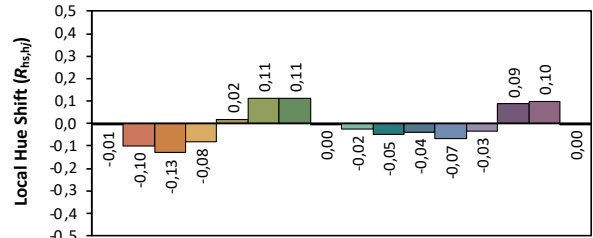
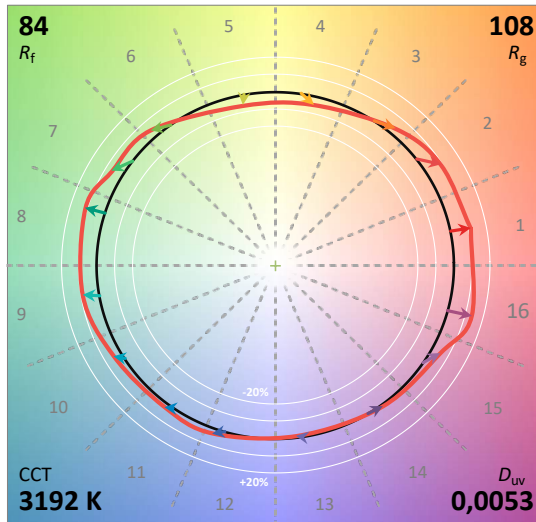
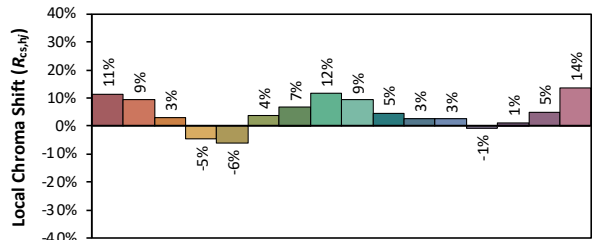
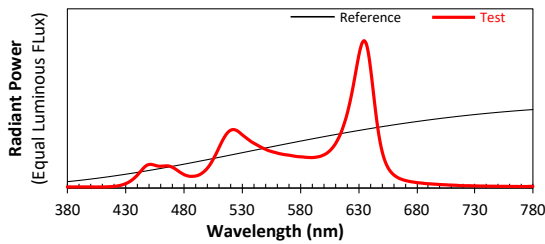
Direct spectrum input : CCT = P3192 (+1.0)  
 TLCI-2012 : 70 (P3192)



CQS - NIST Colour Quality Scale



ANSI/IES TM-30-18 Colour Rendition Report

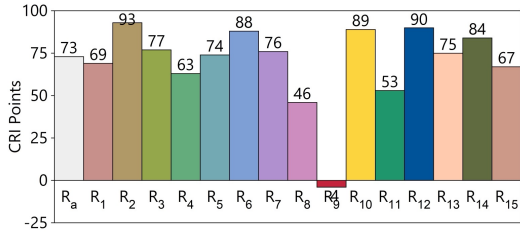


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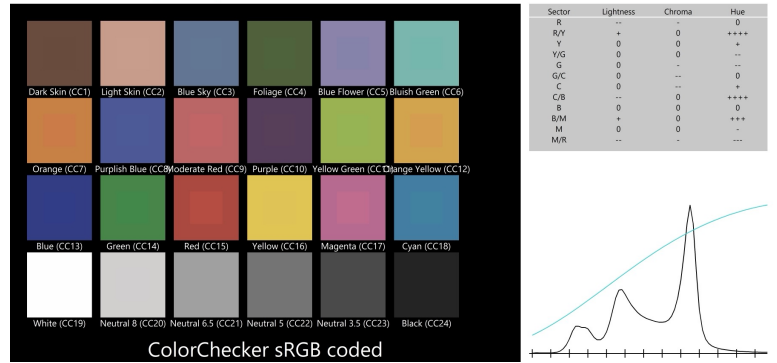
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [3396]
3 400K	0.0059	73	-4	83	83	108	69	58

CRI - CIE Colour Rendering Index

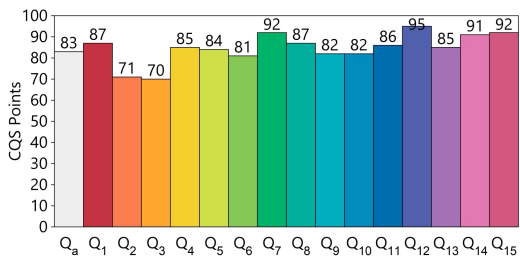


TLCI - Television Lighting Consistency Index

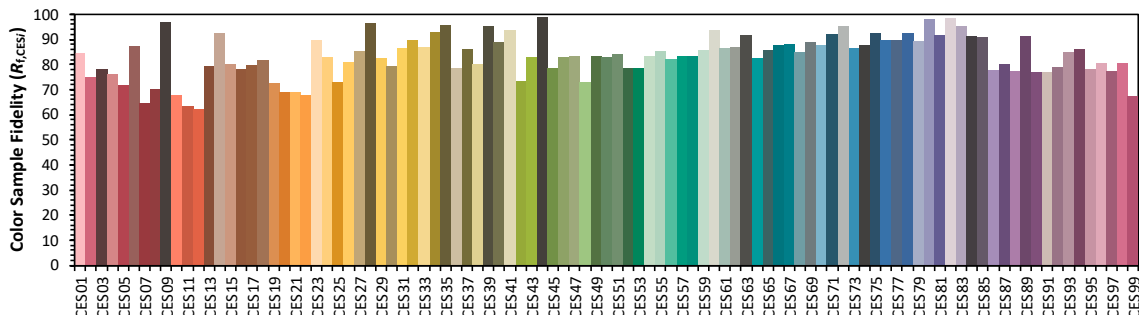
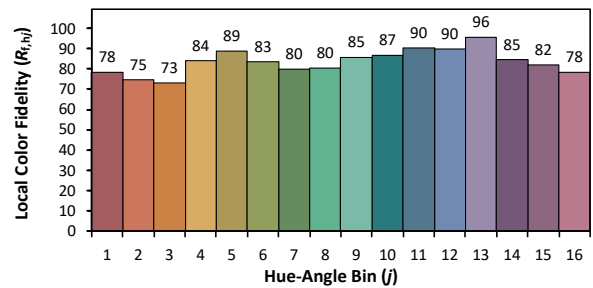
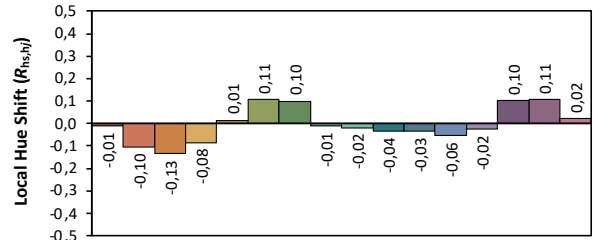
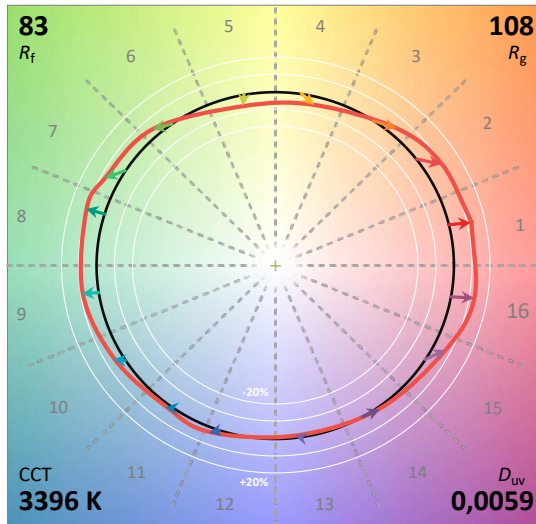
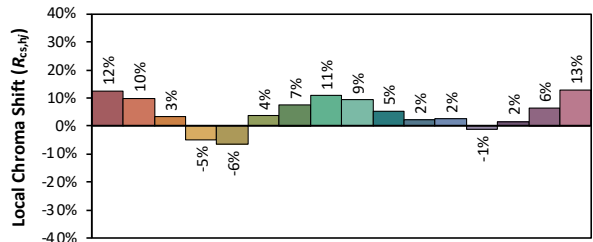
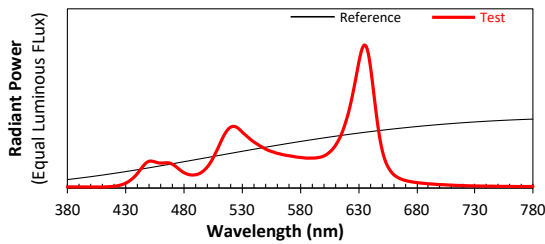
test : CCT = P3396 (+1.1)  
 TLCI-2012 : 69 (P3396)



CQS - NIST Colour Quality Scale



ANSI/IES TM-30-18 Colour Rendition Report

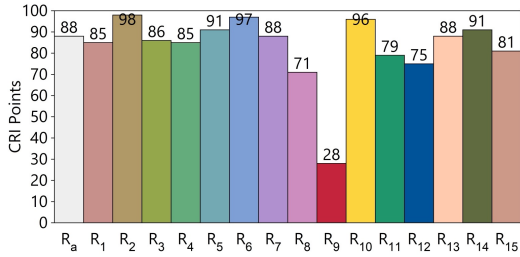


Colours are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00



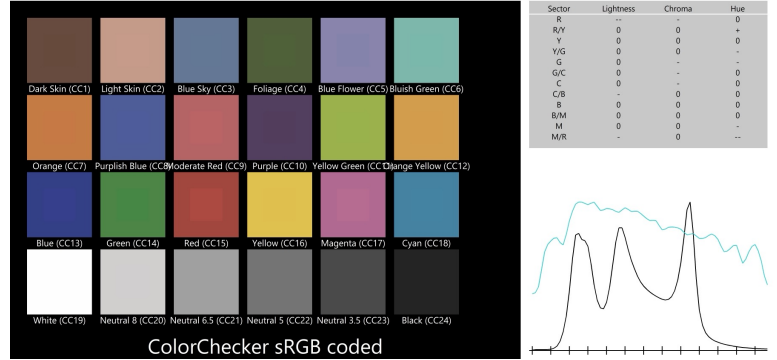
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [6054]
6 060K	0.0088	88	28	91	88	104	86	60

CRI - CIE Colour Rendering Index

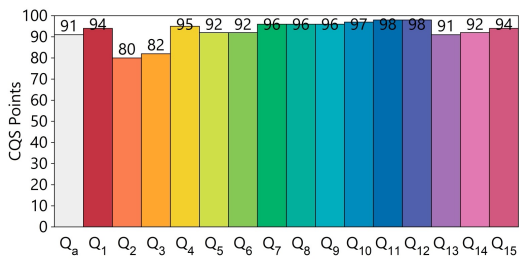


TLCI - Television Lighting Consistency Index

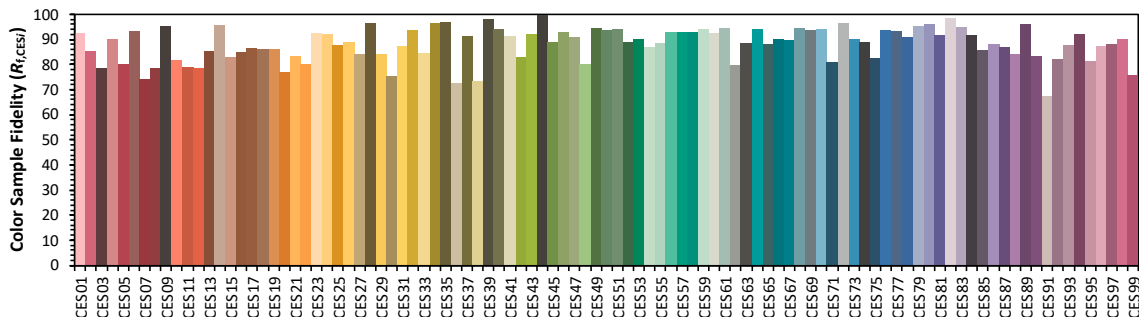
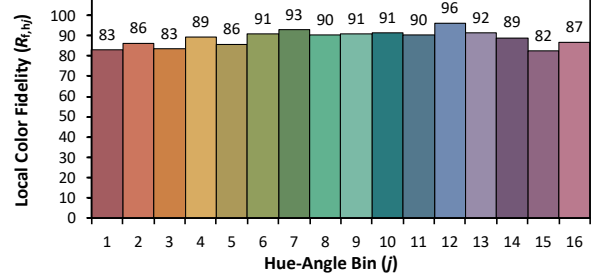
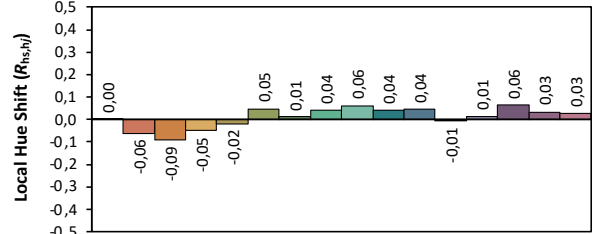
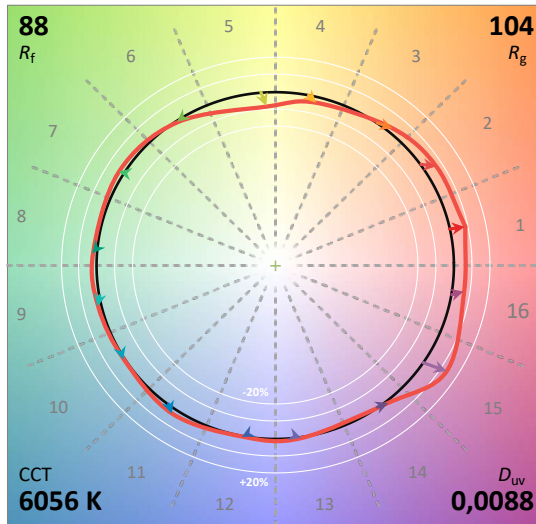
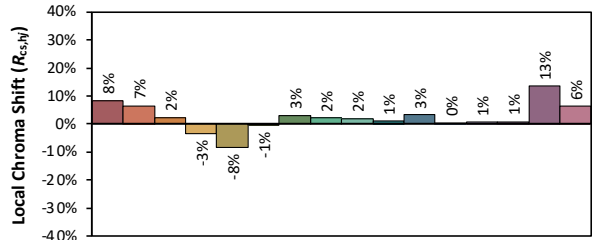
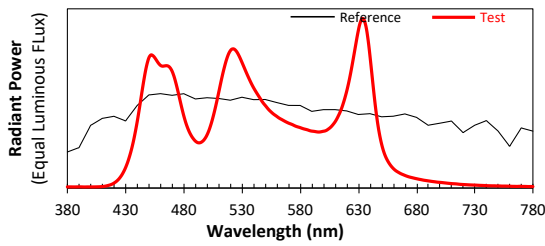
Test : CCT = D6055 (+1.0)  
 TLCI-2012 : 86 (D6055)



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