

SULLY - 651SX WW

650SX - LED 115 W



- **Type:** Profile spot
- **Source:** LED 115 W
- **Optics:** 11° to 26° zoom
11° to 26° configuration possible
- **Colour temperature:** Warm white

Profile spot

The new classic theatre zoom profile in LED version

The Sully 650SX Series is a variable zoom profile range featuring a high-quality 115 W warm white LED source (CRI = 98) that delivers a first-class white light and an output that far exceeds 1000 W tungsten luminaires and nearly matches that of 1200 W tungsten models. Combining this new LED engine with the proven optics of the renowned 600SX Series, Sully profile offers accurate framing and superb gobo projection. The LED compartment of the Sully profile can be swapped with those of the 600SX Series (as well as with those of Aledin 630SX or Quincy 420SX Series). It is equally happy on stage, overhead, on side booms or prosceniums, in opera houses, theatres and studios.

Features

- **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)
- **Universal gobo holder:** "A" size glass and metal gobo
- **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 – no need to move the yoke
- **Internal glass filter holder:** long term use of durable coloured, dichroic or textured glass
- **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
- **Local setup (optional):** DMX address and mode, dimming curve and response time through 4-button display with automatic light switch-off
- **Easy focus reference:** graduated scale on side of the unit; fast and easy refocusing
- **Tilt reference on hanging yoke:** index for rapid re-positioning

Optical

- **Long life:** outstanding operational lifetime expectation, no need to replace lamps, low maintenance
- **Very high quality white:** CRI>95 / TM-30 Rf>92 Rg>97 / TLCI>97
- **Choice of colour temperature:** warm or cool white LED compartment can be easily swapped
- **High output:** almost matching the lumen output of a 1200 W Tungsten 600SX profile
- **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
- **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
- **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
- **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:651SX

DSEN377_651SX_WW - 23/03/2022

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
- **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

Life data following L80B10 standard - (*) manufacturer's data

Optics

Characteristics

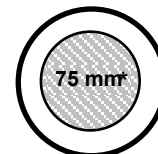
- **Type:** Zoom
- **Beam range:** 11° to 26°
11° to 26° configuration possible
- **Focal length:** 197 - 415 mm

Gel filter

- **Shape:** Square
- **Standard size:** 180x180 mm (7.1x7.1 in)
- **Optional size:** 185x185 mm (7.3x7.3 in)

Gobo

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

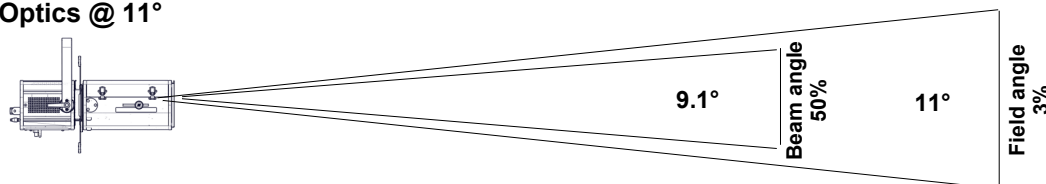


100 mm
*Maximum image size

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

with LED 115W WW source

• Optics @ 11°



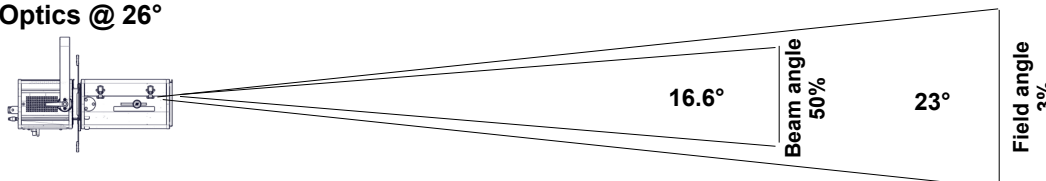
Beam intensity
333 300 cd

Field lumens
5 900 lm

Efficacy
45 lm/W

Distance	5 m	10 m	15 m	20 m	25 m	30 m
Diameter	1 m	1.9 m	2.9 m	3.9 m	4.8 m	5.8 m
Illumination	13 500 lux	3 350 lux	1 500 lux	840 lux	540 lux	380 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Diameter	2.9 ft	6.7 ft	9.6 ft	12.5 ft	15.4 ft	19.3 ft
Illumination	1 500 fc	280 fc	140 fc	80 fc	55 fc	34 fc

• Optics @ 26°



Beam intensity
89 600 cd

Field lumens
6 330 lm

Efficacy
48 lm/W

Distance	5 m	10 m	15 m	20 m	25 m	30 m
Diameter	2 m	4.1 m	6.1 m	8.1 m	10.2 m	12.2 m
Illumination	3 600 lux	900 lux	400 lux	230 lux	150 lux	100 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Diameter	6.1 ft	14.2 ft	20.3 ft	26.4 ft	32.6 ft	40.7 ft
Illumination	400 fc	75 fc	36 fc	22 fc	15 fc	9 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

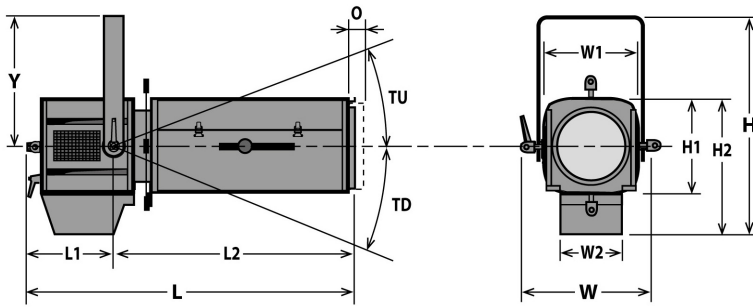
Mode 3 (5 channels)

Dimmer
Strobe duration
Strobe speed
Response time
Control mode

Mode 4 (6 channels)

Dimmer
Master dimmer
Strobe duration
Strobe speed
Response time
Control mode

Dimensions and weight



Weight: 13.9 kg (30.6 lbs)

Height	Length	Width	Yoke	Tilt	Option
H= 463 mm (18.2 in)	L= 782 mm (30.8 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= 284 mm (11.2 in)	L2= 542 mm (21.3 in)	W2= 136 mm (5.4 in)			

Shipping

- **Weight :** 16.8 kg (37 lbs)
- **Volume :** .13 m³ (4.59 ft³)

Installation

- **Minimum distance to illuminated surface:** 0.8 m (2.6 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):** 52°C (125.6°F)
- **Total heat dissipation:** 444 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:** 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	1.15 A	135 W	0.98
100 V	60 Hz	1.4 A	135 W	0.96

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) / 12 units (120 V)

Warranty

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

Approvals









Acoustics

- **Noise level:** < 22,8 dB(A)











Model


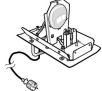
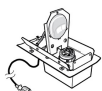
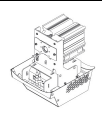
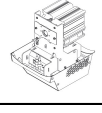
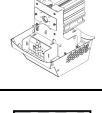

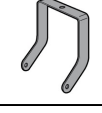



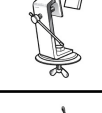

651SX WW	LED 115 W Profile spot - 651SX WW Sully - Warm White - 11/26°
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Options

CAV600E	Double slot front cassette for 185x185mm accessories	
CAV600	Double slot front cassette for 180x180mm accessories	
APH 68LEDM	Double-condenser set for Led profile	
PCP1716A	16A blue 2P+E 6h IEC60309 power connector	
FCD600PV	Angled yoke	
DISP2	Display and keyboard for local setup	

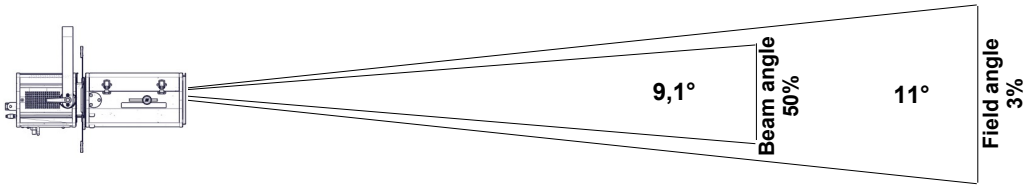
Accessories

D8	Shutter for SX series 4 included	
PF500M2	180x180mm metal filter holder 1 included	
SGUX	Universal "A" size gobo-holder (metal, glass, frosted glass) 1 included	
IWSX755	Drop-in iris (monoplane) with holder - Poids: 0.26 Kg	
PF600M2	185x185mm metal filter holder	
G500	180x180mm safety grid	
CAV600A	Double slot front cassette for 180x180mm accessories - Poids: 0.43 Kg	
CAV600AE	Double slot front cassette for 185x185mm accessories - Poids: 0.45 Kg	
RPF613	180x180mm front extension cassette for 215x215mm accessories without fan (recommended for dark colours on 613SX/663SX) - Poids: 1.5 Kg	
RPF613E	180x180mm front extension cassette for 245x245mm accessories without fan (recommended for dark colours on 613SX/663SX)	

APH 68LED	Double-condenser set for Led profile - Poids: 0.58 Kg	
T/600SX	Lamp compartment for 1000/1200W tungsten GX9,5 lamps - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector - Poids: 1.36 Kg	
T/600VSX	Lamp compartment for 1000/1200W tungsten G22 lamps with fan - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector - Poids: 2.03 Kg	
T/650DSXCW	SULLY 115W LED compartment with display - Cool White - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector - Poids: 2.33 Kg	
T/650DSXWW	SULLY 115W LED compartment with display - Warm White - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector - Poids: 2.33 Kg	
T/650SXCW	SULLY 115W LED compartment - Cool White - 3 meter power cable with CEE 7/7 (2P+T NF/SCHUKO) connector - Poids: 2.27 Kg	
VD120	120x120mm frosted glass	
FCD600	Angled yoke	
TH600	180x180mm "Top hat" (without safety cable) - ø150mm / 150mm long	
DMXcat	Bluetooth DMX/RDM Multifunction test tool - City Theatrical DMXcat®	
876	Hook clamp 40x10mm with 28mm M10 screw for Ø35 to 50mm pipes - SWL: 50Kg - Poids: 1.25 Kg	
880	Hook clamp 40x10mm with 28mm M10 screw for Ø50 to 63mm pipes - SWL: 50Kg - Poids: 1.36 Kg	
CS2	Safety cable Ø3 mm L= 600mm - SWL: 75 Kg	

• Optics @ 11°

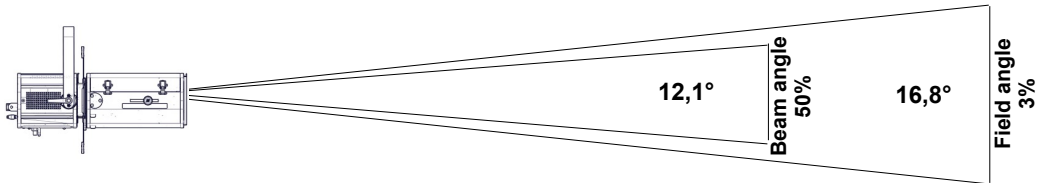
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
5 900 Lm	4 700 Lm	45 Lm/W	333 300 Cd	3 030 K	0.0035



Distance	5 m	10 m	15 m	20 m	25 m	30 m
Field diameter	1 m	1,9 m	2,9 m	3,9 m	4,8 m	5,8 m
Illumination	13 500 lux	3 350 lux	1 500 lux	840 lux	540 lux	380 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Field diameter	2,9 ft	6,7 ft	9,6 ft	12,5 ft	15,4 ft	19,3 ft
Illumination	1 500 fc	280 fc	140 fc	80 fc	55 fc	34 fc

• Optics @ 19°

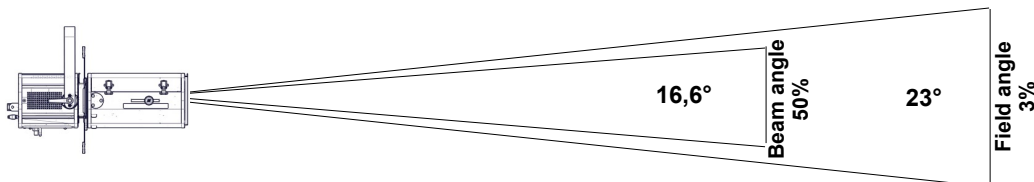
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
6 120 Lm	5 260 Lm	47 Lm/W	170 000 Cd	3 030 K	0.0026



Distance	5 m	10 m	15 m	20 m	25 m	30 m
Field diameter	1,5 m	3 m	4,4 m	5,9 m	7,4 m	8,9 m
Illumination	6 900 lux	1 750 lux	760 lux	430 lux	280 lux	190 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Field diameter	4,4 ft	10,3 ft	14,8 ft	19,2 ft	23,6 ft	29,5 ft
Illumination	760 fc	140 fc	70 fc	41 fc	27 fc	18 fc

• Optics @ 26°

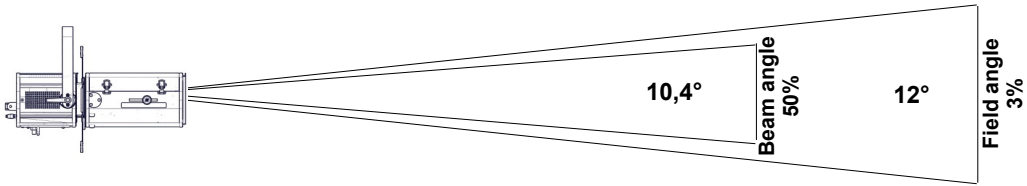
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
6 330 Lm	5 300 Lm	48 Lm/W	89 600 Cd	3 020 K	0.0032



Distance	5 m	10 m	15 m	20 m	25 m	30 m
Field diameter	2 m	4,1 m	6,1 m	8,1 m	10,2 m	12,2 m
Illumination	3 600 lux	900 lux	400 lux	230 lux	150 lux	100 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Field diameter	6,1 ft	14,2 ft	20,3 ft	26,4 ft	32,6 ft	40,7 ft
Illumination	400 fc	75 fc	36 fc	22 fc	15 fc	9 fc

• Optics @ 11°

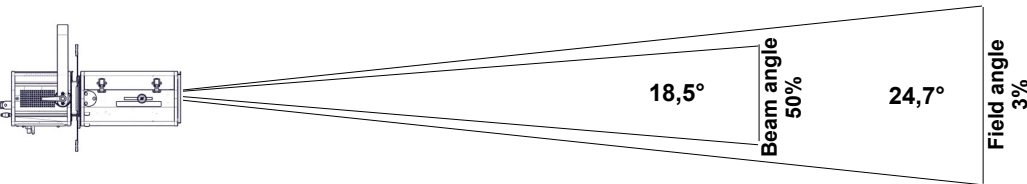
Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
6 610 Lm			373 700 Cd	3 060 K	



Distance	5 m	10 m	15 m	20 m	25 m	30 m
Field diameter	1,1 m	2,1 m	3,2 m	4,2 m	5,3 m	6,3 m
Illumination	15 000 lux	3 750 lux	1 700 lux	940 lux	600 lux	420 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Field diameter	3,2 ft	7,4 ft	10,5 ft	13,7 ft	16,8 ft	21 ft
Illumination	1 700 fc	310 fc	150 fc	90 fc	60 fc	38 fc

• Optics @ 26°

Field lumens	Beam lumens	Efficacy	Beam intensity	CCT	Delta uv
7 450 Lm			103 500 Cd	3 070 K	

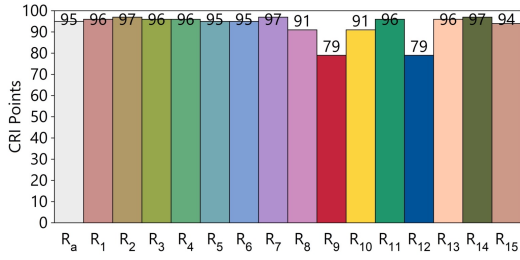


Distance	5 m	10 m	15 m	20 m	25 m	30 m
Field diameter	2,2 m	4,4 m	6,6 m	8,8 m	10,9 m	13,1 m
Illumination	4 150 lux	1 050 lux	470 lux	260 lux	170 lux	120 lux
Distance	15 ft	35 ft	50 ft	65 ft	80 ft	100 ft
Field diameter	6,6 ft	15,3 ft	21,9 ft	28,5 ft	35 ft	43,8 ft
Illumination	470 fc	85 fc	42 fc	25 fc	17 fc	11 fc

Light quality report

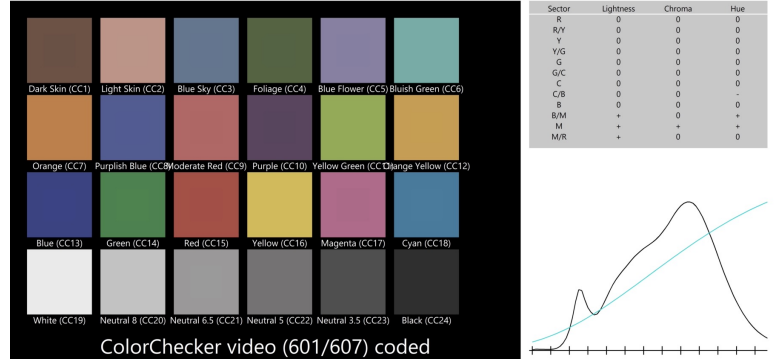
CCT	DeltaUV	CRI Ra	CRI R9	CQS Qa	TM30-18 Rf	TM30-18 Rg	TLCI	SSI [P2984]
2 980K	0.0026	95	79	95	93	98	97	85

CRI - CIE Colour Rendering Index

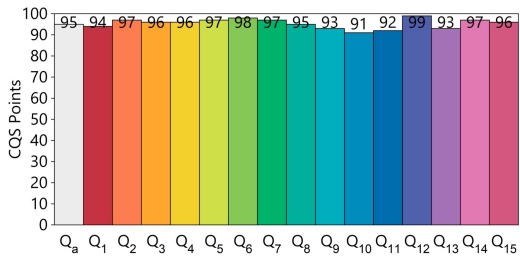


TLCI - Television Lighting Consistency Index

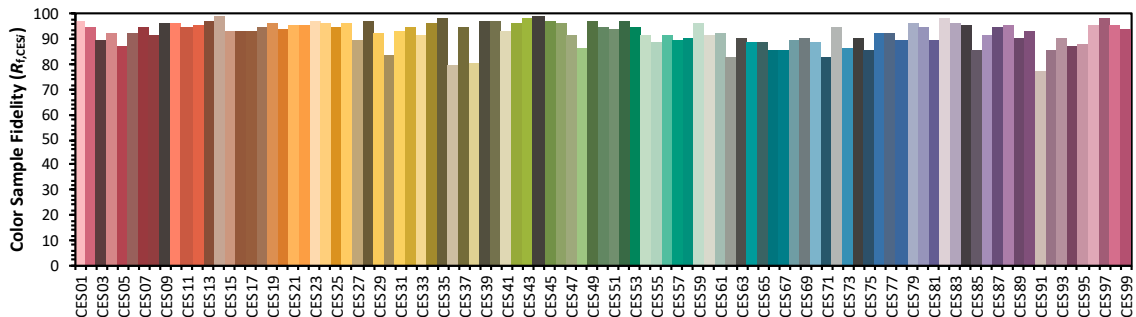
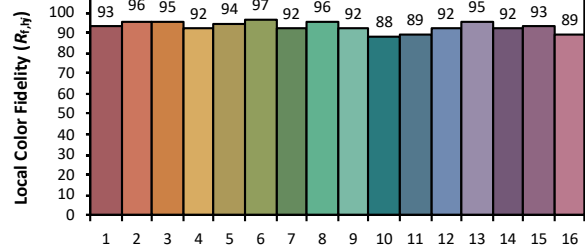
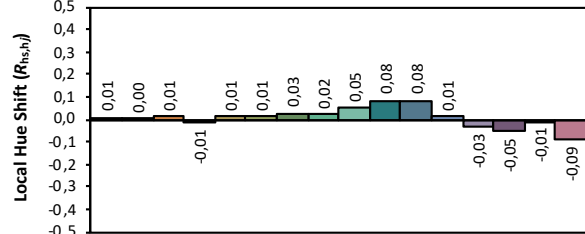
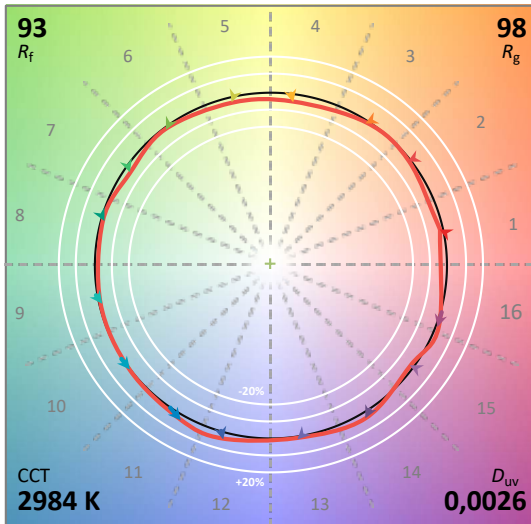
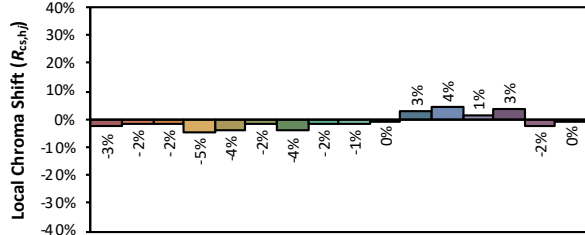
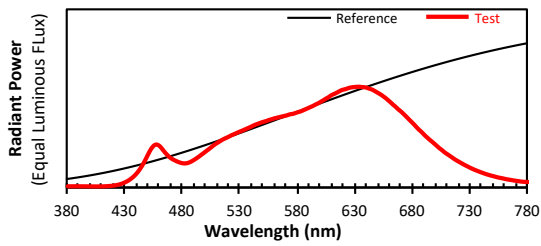
Test : CCT = P2984 (+0.5)
 TLCI-2012 : 97 (P2984)



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