

Journée Très LEDs - De beaux tests à faire

Images & mesures  
par constructeur

JTL 11



**CST**



Be4Post

*MagicHour*  
Que vos projets deviennent réalité

A Bright LED day - Brilliant tests on the horizon

Images & measurements  
by manufacturer



ELATION

KL PROFILE

SONY VENICE 2

<https://www.elationlighting.com/kl-profile-fc>

Full-color

350 W (Données du fabricant  
/ manufacturer's data)



ELATION

KL PROFILE

Interview du fabricant en français :

Interview with the manufacturer in French:



<https://www.youtube.com/watch?v=qcNvuEUPbJO&list=PLW8aVswX2z2Y6fVtZuJdpemmqLPavU5if&index=7>

## Plan / Plan

- KL PROFILE & Images
  - ✓ Peau caucasienne
    - Comparatifs KL PROFILE vs tungstène
    - Sous-exposition : ND 06 vs gradateur
  - ✓ Peau noire
    - Comparatifs KL PROFILE avec tungstène
    - Sous-exposition : ND 06 vs gradateur
- Mesures : Explications & exemples
- Mesures
- KL PROFILE, Spectra & SSI
- KL PROFILE, Images, Spectra & SSI
- KL PROFILE, & TM-30
- Données constructeur
- Explications : K, CCT K, Duv & coordonnées x,y

- KL PROFILE & Images
  - ✓ Caucasian skin tone
    - Comparison KL PROFILE vs tungsten
    - Underexposure: ND 06 vs dimmer
  - ✓ Black skin tone
    - Comparison KL PROFILE vs tungsten
    - Underexposure ND 06 vs dimmer
- Measurements: Explanations & examples
- Measurements
- KL PROFILE, Spectra & SSI
- KL PROFILE, Images, Spectra & SSI
- KL PROFILE & TM-30
- Manufacturer's data
- Explanations on K, CCT K, Duv & x,y coordinates

# KL PROFILE & Images

CAUCASIAN

Alice



**KL PROFILE**

Comparison with

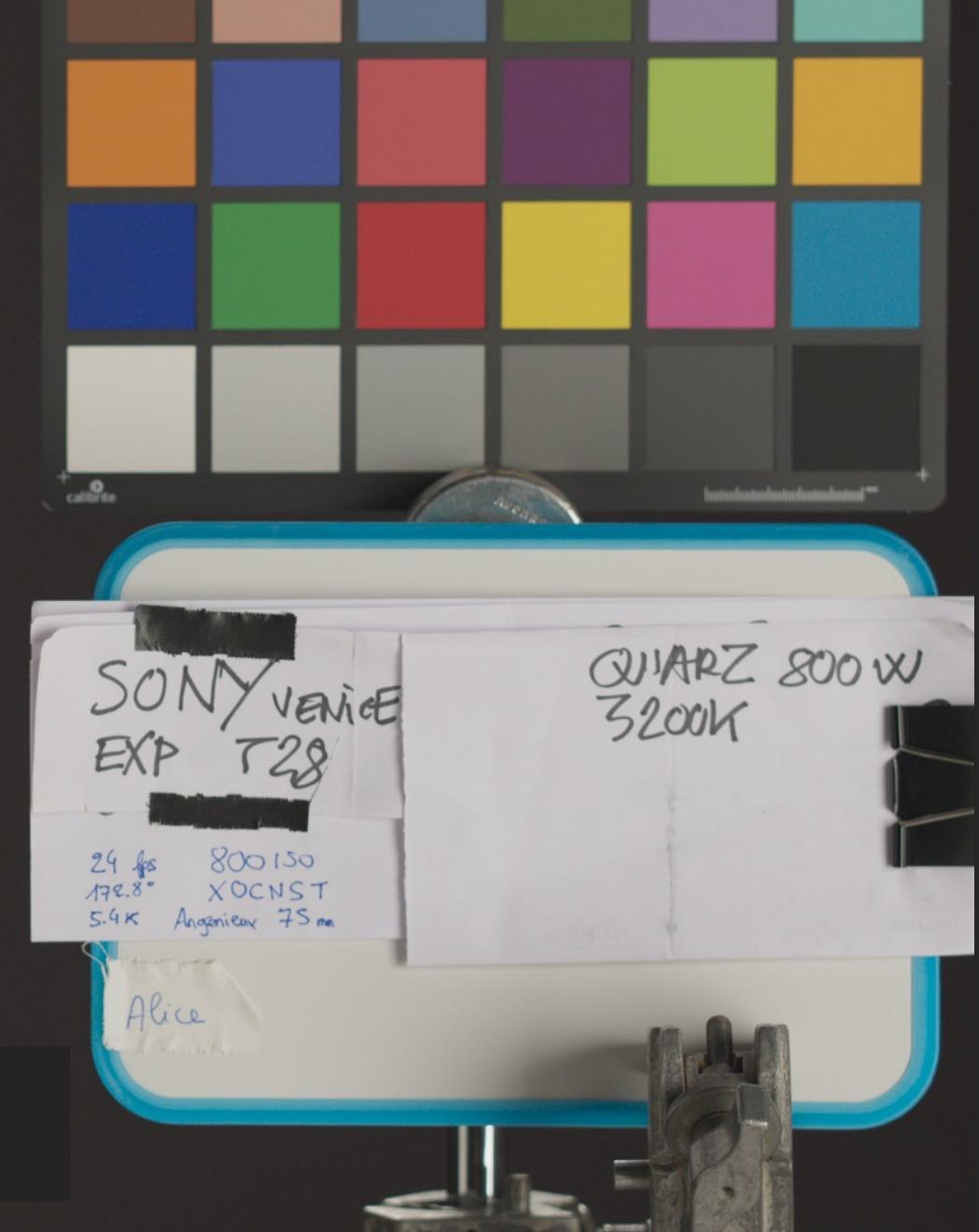
**TUNGSTEN**

SONY VENICE 2



TUNGSTEN REF.

SONY VENICE 2  
GRADED

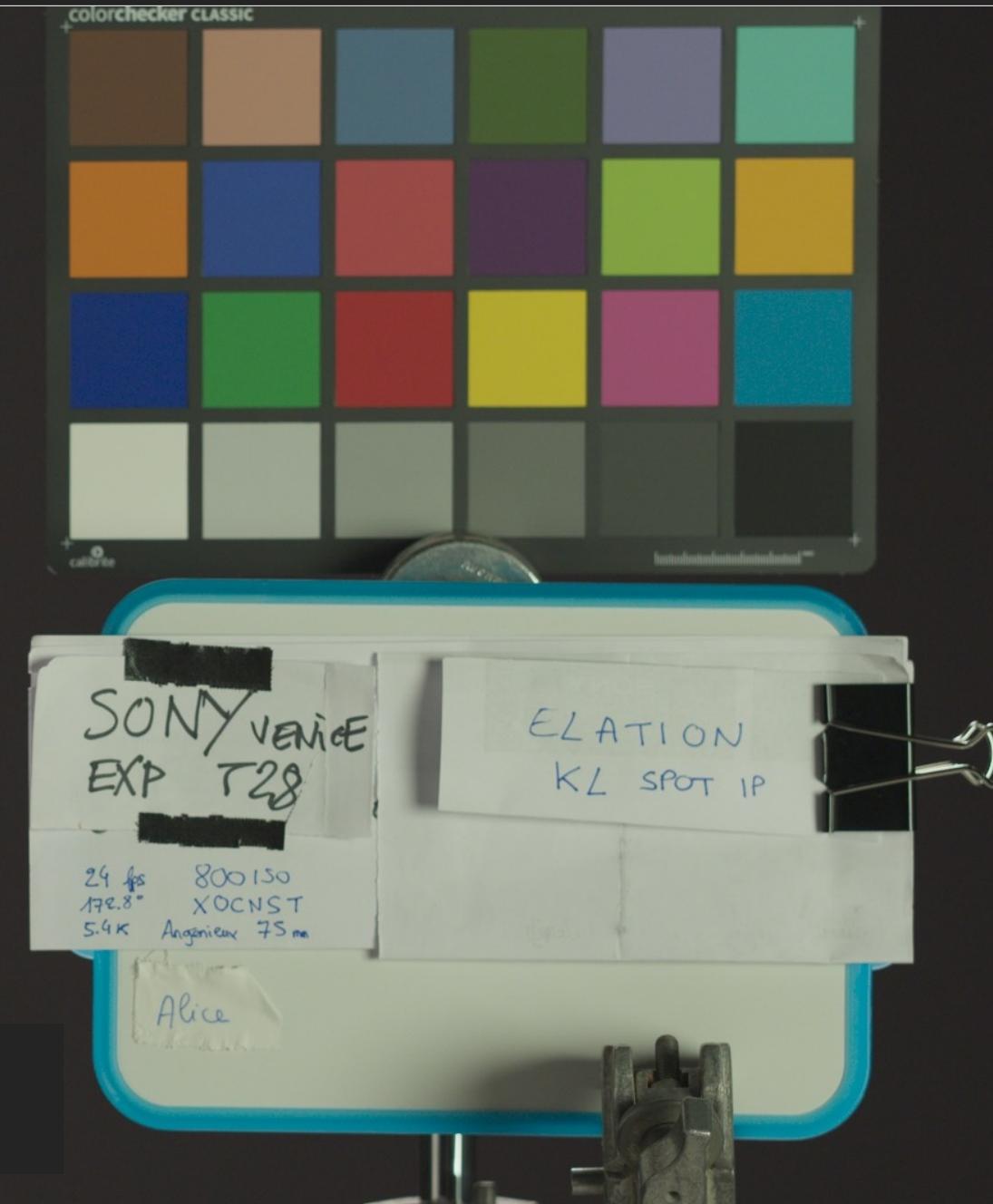


# Images & données ELATION KL PROFILE Images & Data



KL PROFILE

SONY VENICE 2  
GRADED



Images & données **ELATION KL PROFILE** Images & Data



TUNGSTEN REF.

SONY VENICE 2  
GRADED



KL PROFILE

CAUCASIAN

Alice



SONY VENICE 2

**KL PROFILE**

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

## UNDEREXPOSED (-2 STOPS ND 06) Comparison with

## DIMMER @ 25%

Pour vérifier si les gradateurs des projecteurs sont fiables, nous avons fait une comparaison entre deux plans sous-exposés :

- Le premier avec un filtre ND 06
- Le second en diminuant la puissance sur le projecteur à 25%, ce qui entraîne automatiquement une différence d'exposition sur les fonds.

De ce fait, le visage devient la seule référence à comparer.

Pour ramener la correction d'exposition au keylight, on a travaillé en offset en équivalent points de lumière de tirage.

To check whether the projectors' dimmers are reliable, we compared two underexposed shots:

- The first with an ND 06 filter
- The second by dimming down the power on the projector to 25%, which automatically results in a difference in exposure on the backgrounds.

As a result, the face becomes the only reference to compare.

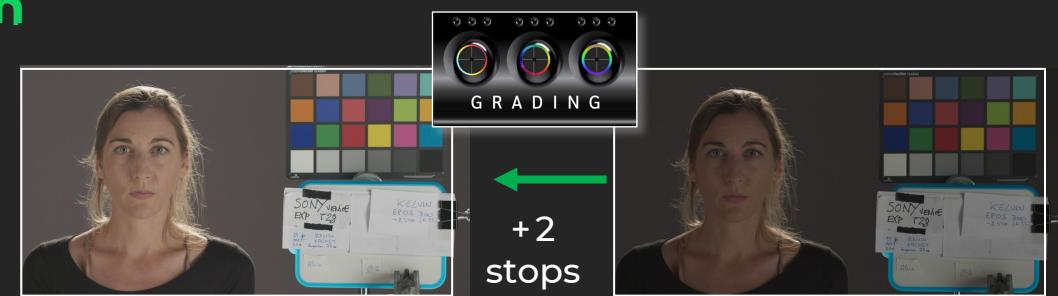
To correct the exposure up to the keylight, we worked in offset like with printer light points.



**UNDEREXPOSED**  
(- 2 STOPS ND 06)

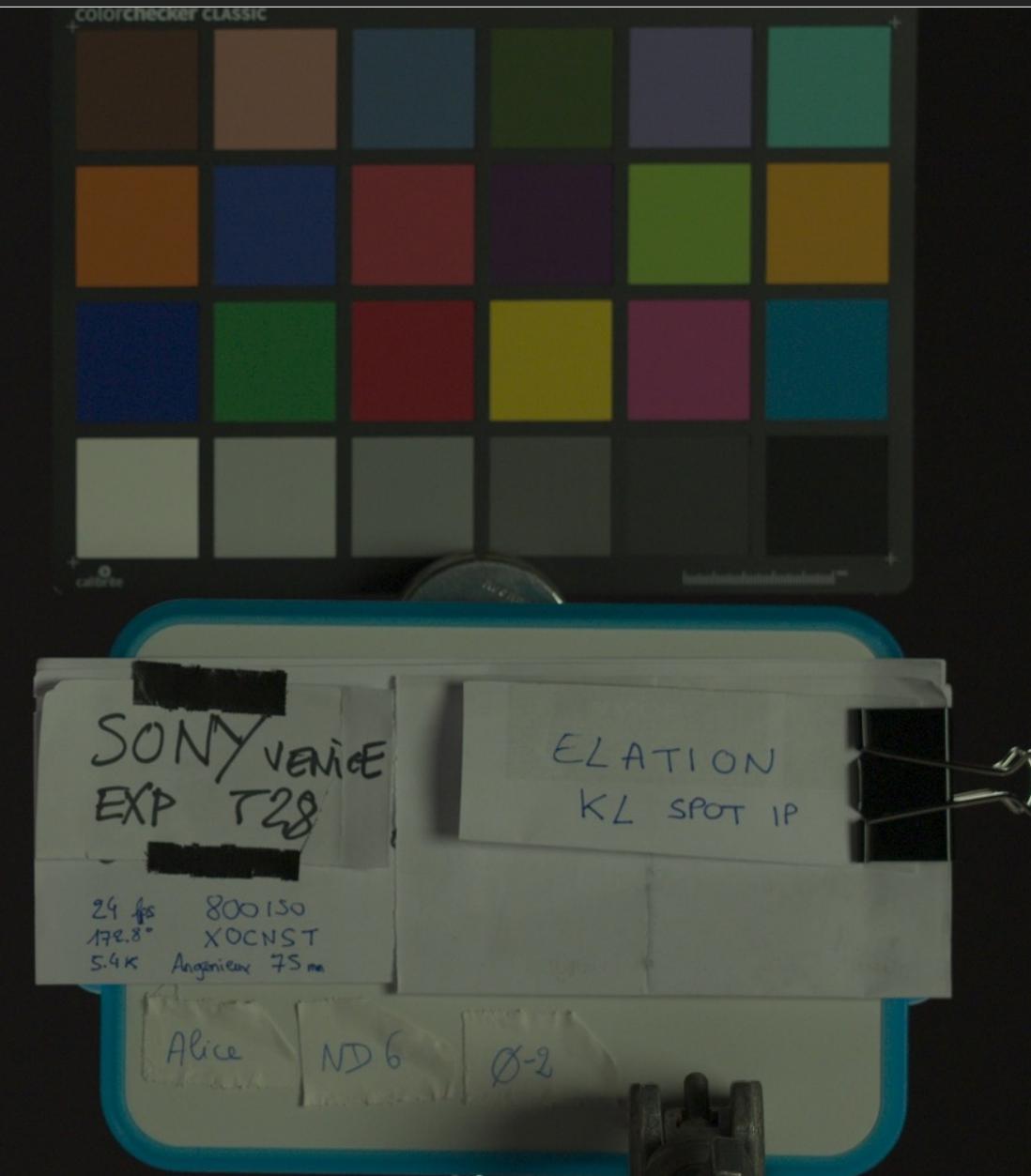


Back to Keylight



Back to Keylight  
DIMMER @ 25%

UNGRADED



GRADED



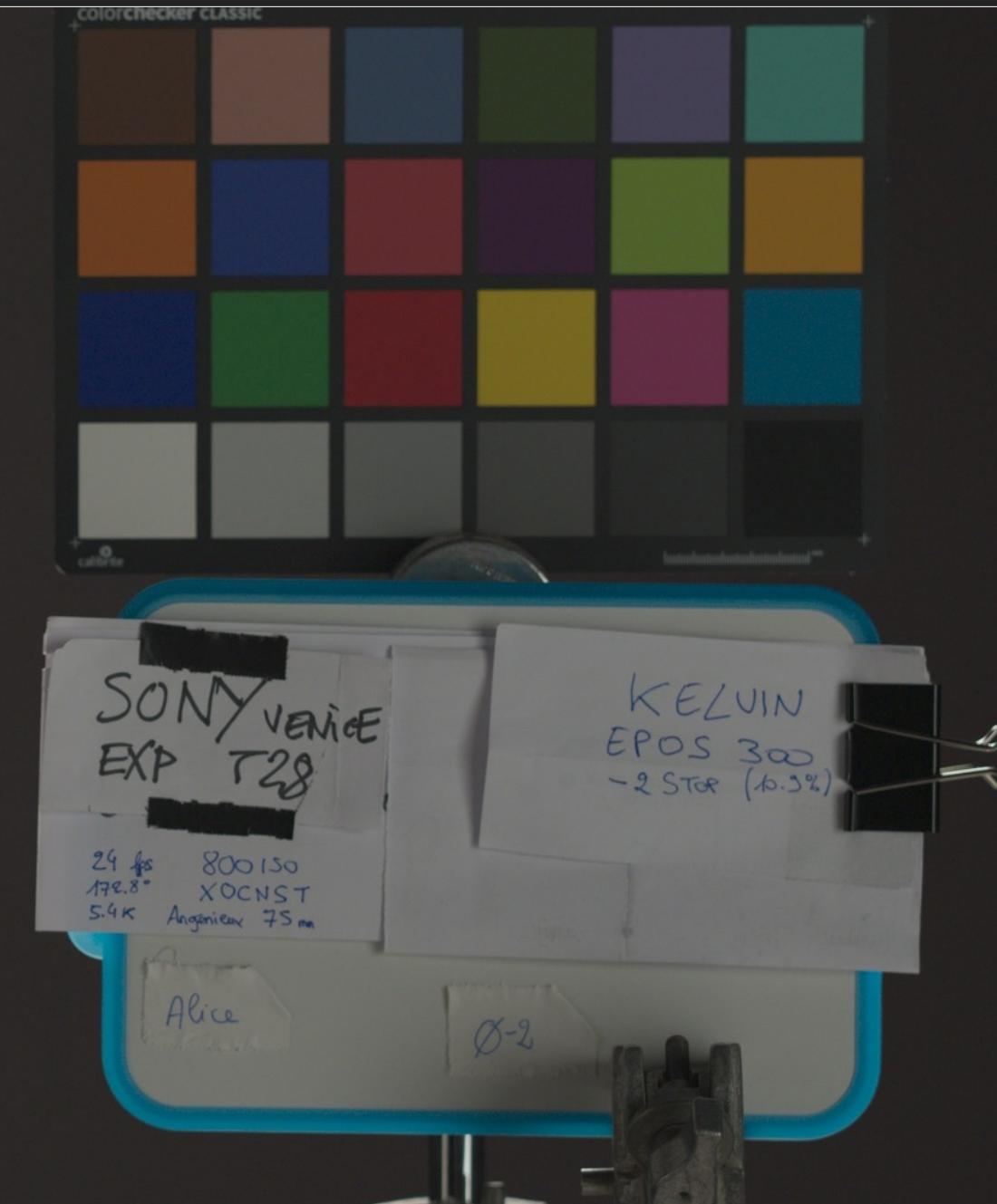
KL PROFILE  
Underexposed -2 stops



UNGRADED

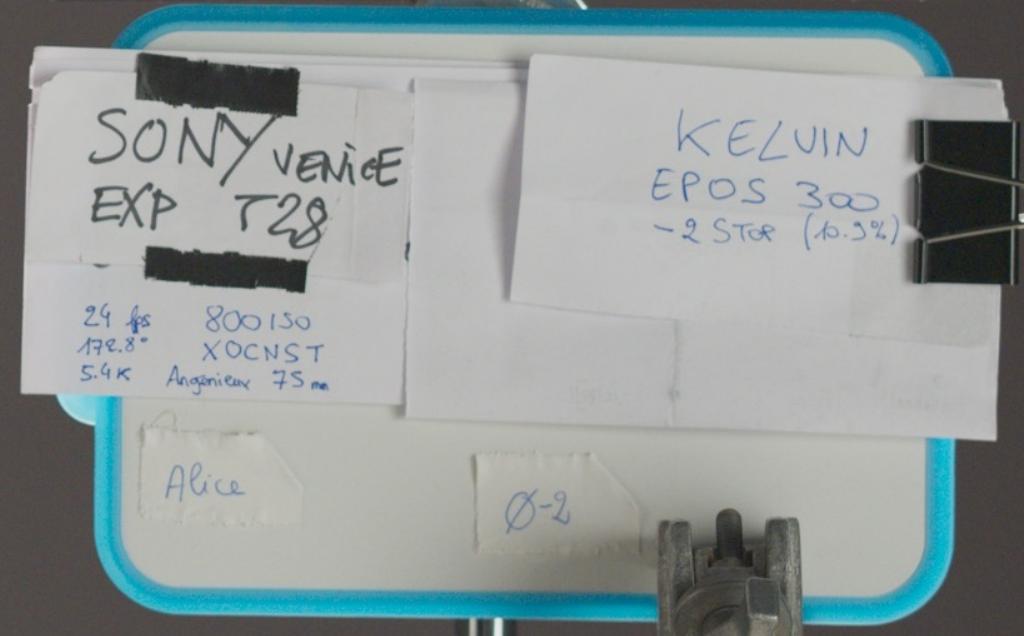


KL PROFILE  
+ Dimmer @ 25%



# Images & données ELATION KL PROFILE Images & Data

GRADED





GRADED





Les mesures comparatives  
en luminance doivent se  
faire sur la joue située droite  
caméra

Comparative  
luminance measurements  
should be taken on the  
cheek located camera right.



GRADED

KL PROFILE  
+ Dimmer @ 25%

KL PROFILE  
Underexposed -2 stops



Les mesures comparatives  
en luminance doivent se  
faire sur la joue située droite  
caméra

Comparative  
luminance measurements  
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cheek located camera right.



**UNGRADED**

**KL PROFILE**  
+ Dimmer @ 25%

**KL PROFILE**  
Underexposed -2 stops

CAUCASIAN

Alice



**KL PROFILE**

Comparison with

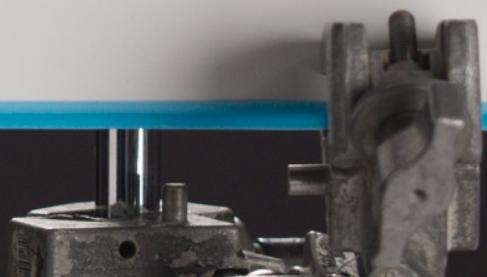
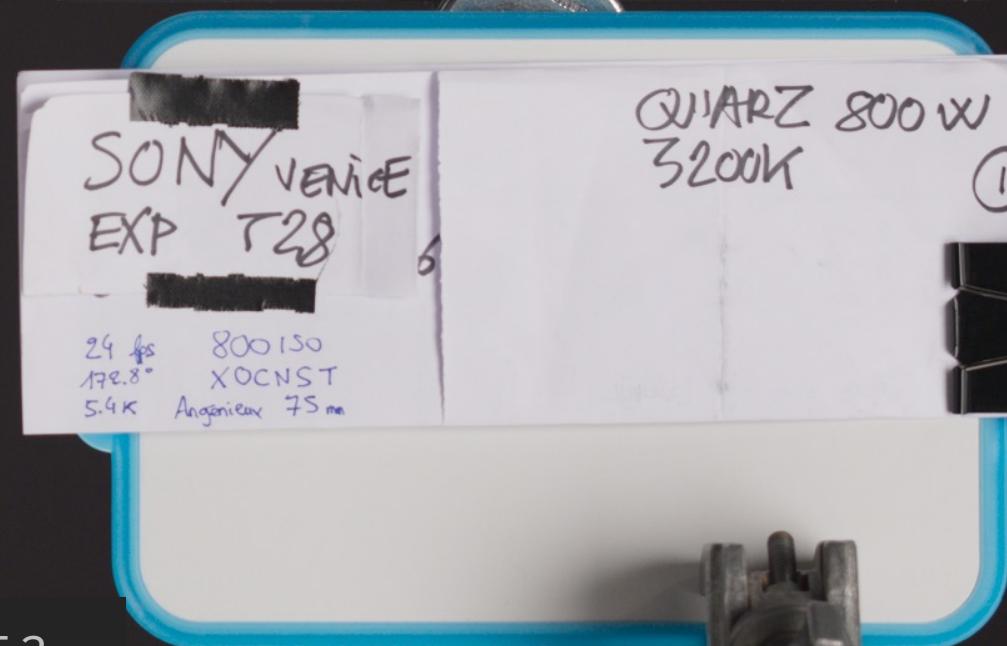
**TUNGSTEN**

SONY VENICE 2



TUNGSTEN REF.

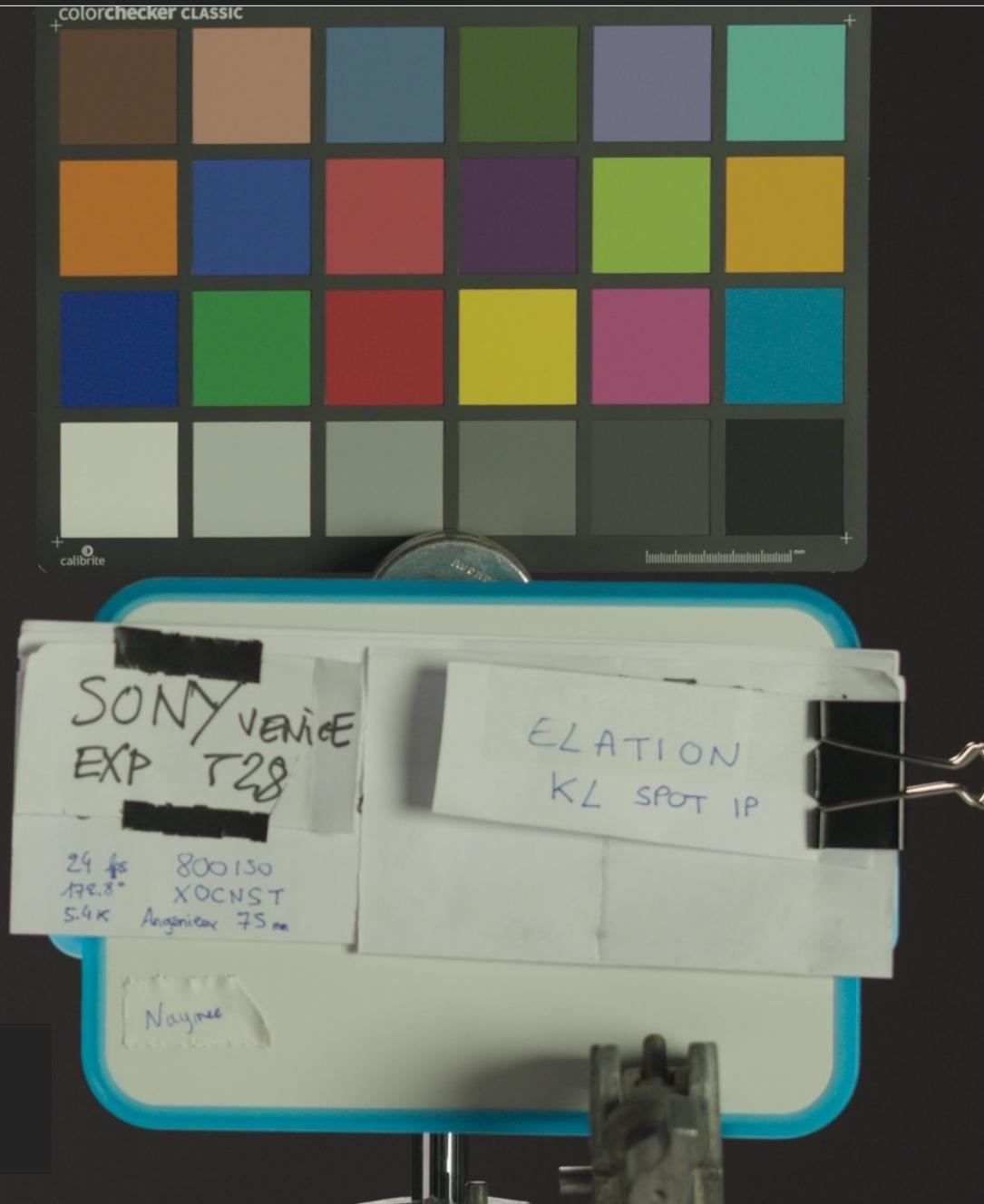
SONY VENICE 2  
GRADED



# Images & données ELATION KL PROFILE Images & Data



SONY VENICE 2  
GRADED



Images & données **ELATION KL PROFILE** Images & Data



TUNGSTEN REF.

SONY VENICE 2  
GRADED



KL PROFILE

CAUCASIAN

Alice



SONY VENICE 2

**KL PROFILE**

UNDEREXPOSED (-2 STOPS ND 06)

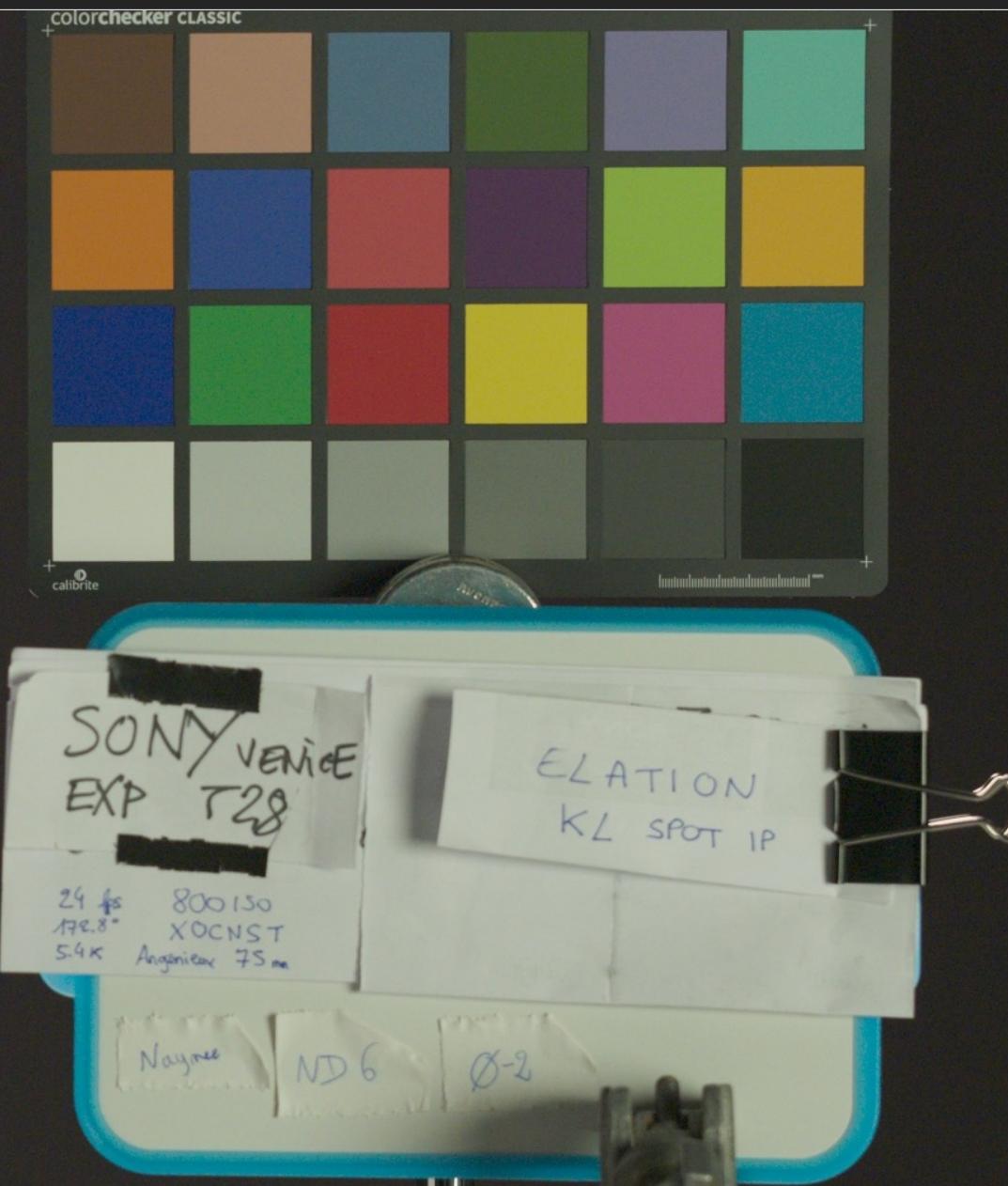
Comparison with

DIMMER @ 25%

UNGRADED



KL PROFILE  
Underexposed -2 stops

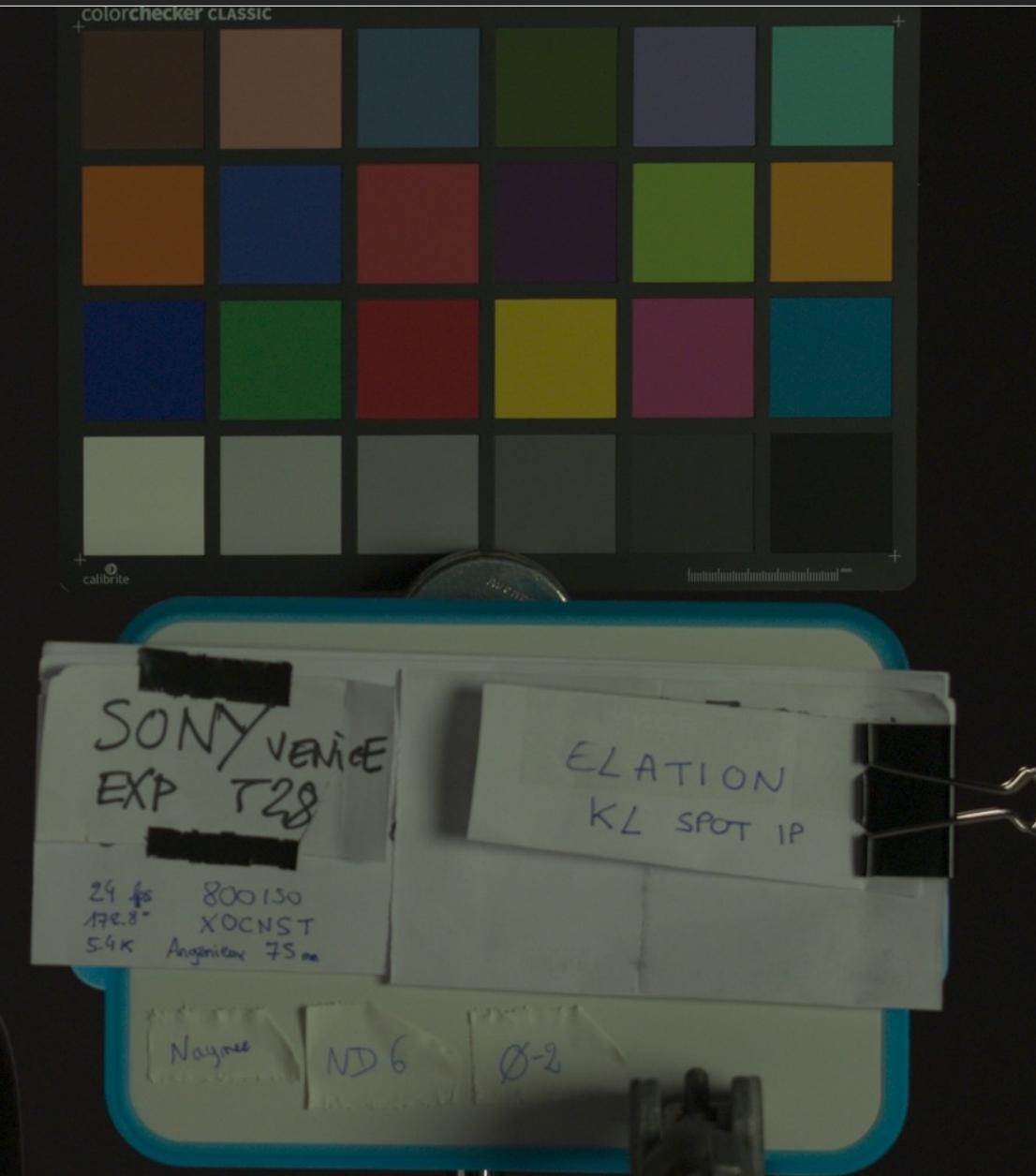


# Images & données ELATION KL PROFILE Images & Data

GRADED



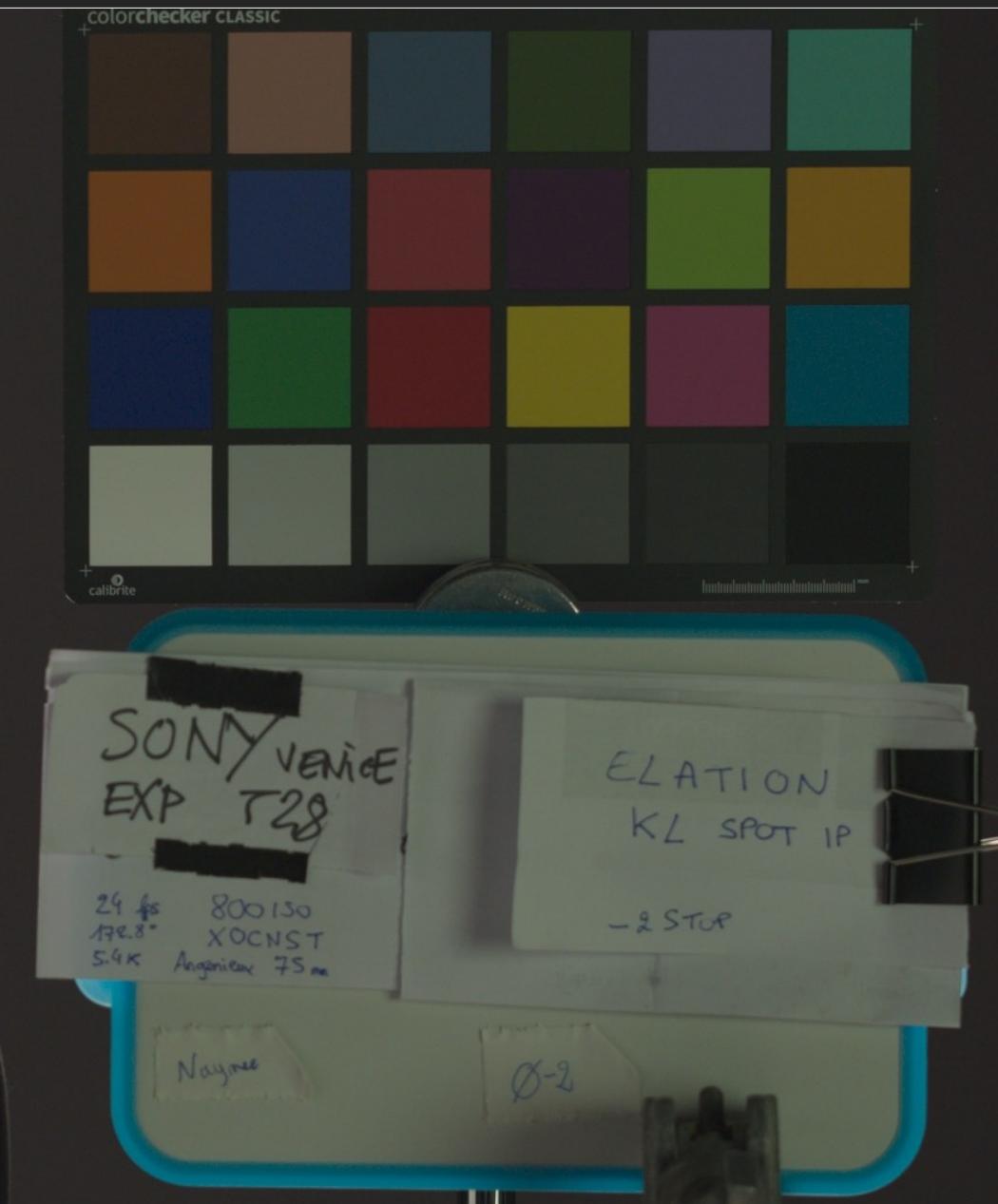
KL PROFILE  
Underexposed -2 stops



UNGRADED

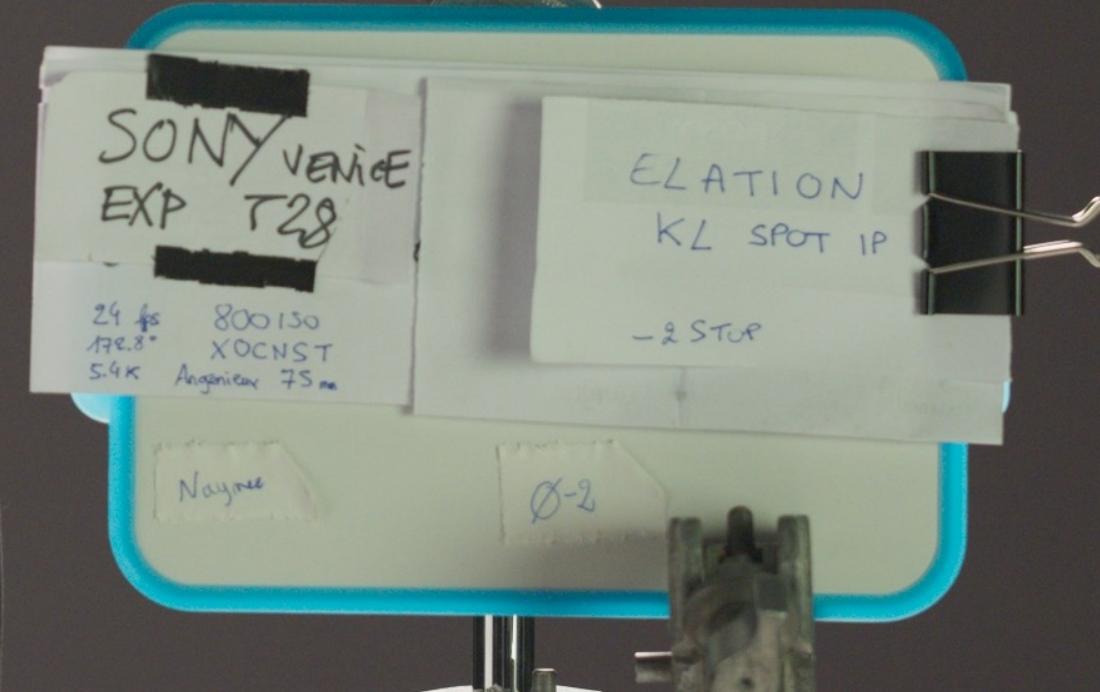
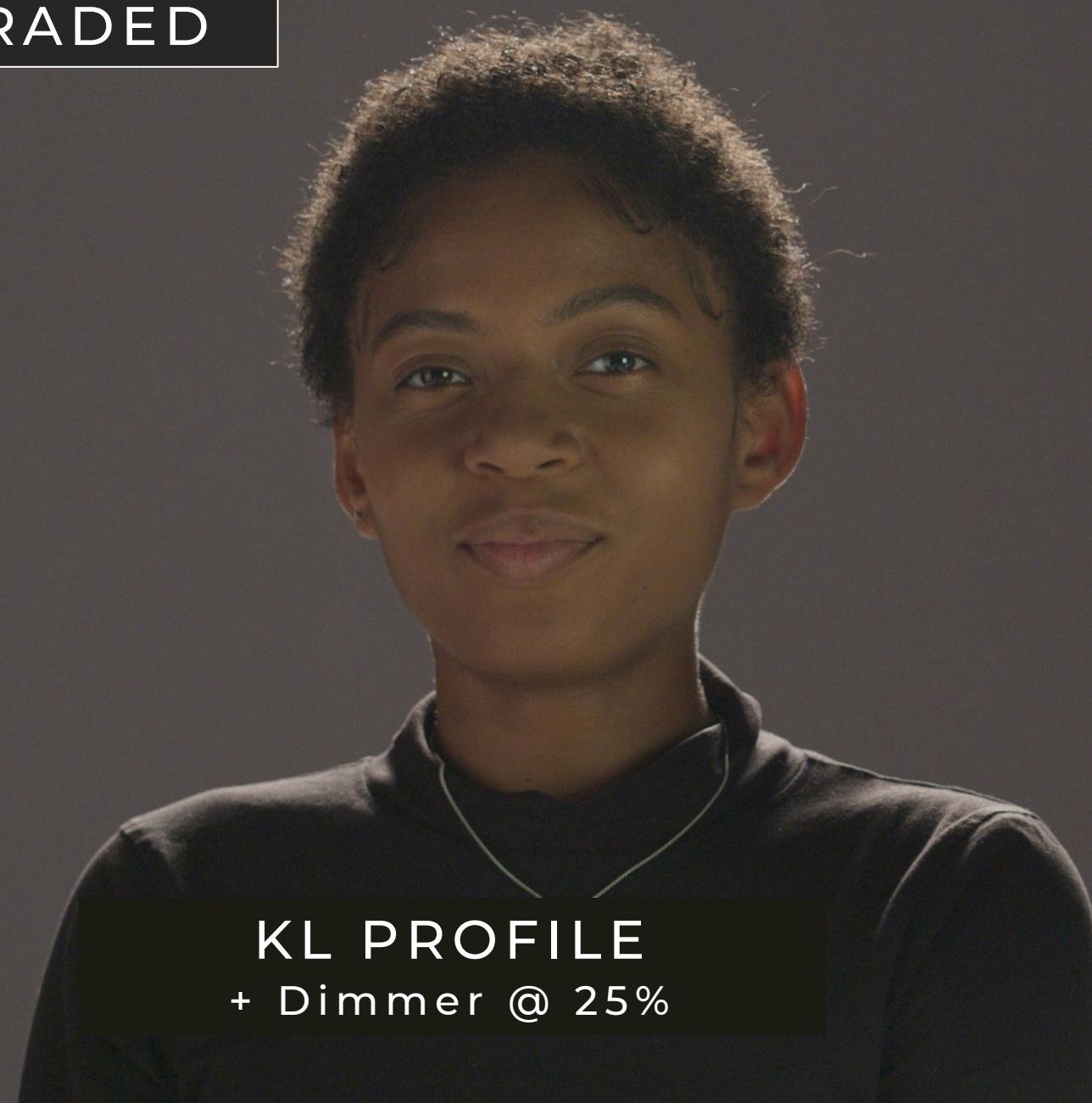


KL PROFILE  
+ Dimmer @ 25%



# Images & données ELATION KL PROFILE Images & Data

GRADED





GRADED

**KL PROFILE**  
+ Dimmer @ 25%



**KL PROFILE**  
Underexposed -2 stops



Les mesures comparatives  
en luminance doivent se  
faire sur la joue située droite  
caméra

Comparative  
luminance measurements  
should be taken on the  
cheek located camera right.



GRADED

**KL PROFILE**  
+ Dimmer @ 25%

**KL PROFILE**  
Underexposed -2 stops



Les mesures comparatives  
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Comparative  
luminance measurements  
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cheek located camera right.



**UNGRADED**

**KL PROFILE**  
+ Dimmer @ 25%

**KL PROFILE**  
Underexposed -2 stops

# Mesures

Explications & exemples

# Measurements

Explanations & examples

## Explications / Explanation

Type de données : Type of data:	Temp K *	CCT K *	Duv *	x *	y *	SSI *
Mesurées avec : Measured with:	JETI 1511 HiRes (JTI)		GOSEN Mavospec Base (GSN)		SEKONIC C-800	
Relatives à : Related to:	Power @ 100% indicated by the LED		Power @ 100% indicated by JETI	Power @ 50% indicated by JETI	Power @ 25% indicated by JETI	

\* Explications sur ces données en dernières pages  
These data are explained on the last pages

\* SSI : Index de similarité spectrale : expliqué dans le dossier JTL 2  
SSI: Spectral Similarity Index: explained in the JTL 2 file

\* Le calcul du SSI est basé sur une comparaison entre le SPD (Spectral Power Distribution) de la source à tester avec celui de l'illuminant standardisé CIE D55 (5503 K).  
The calculation of the SSI is based on a comparison between the SPD (Spectral Power Distribution) of the source to be tested and that of the CIE D55 standard illuminant (5503 K).

Les comparaisons entre les différents appareils de mesure

Comparisons between different measuring equipment

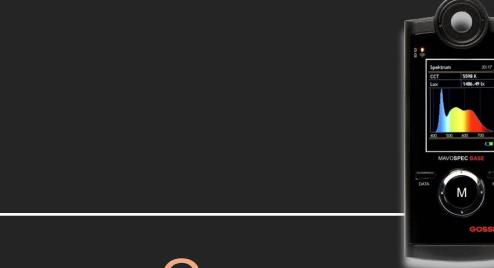
- Le but de cette métrologie était aussi de comparer les mesures entre un appareil de laboratoire (JETI) et des appareils de terrain (Sekonic & Gossen)

- The aim of this metrology was also to compare measurements between a laboratory instrument (JETI) and field instruments (Sekonic & Gossen)



Mesures prises avec :  
Measurements taken with:

JETI 1511  
HiRes (JTI)

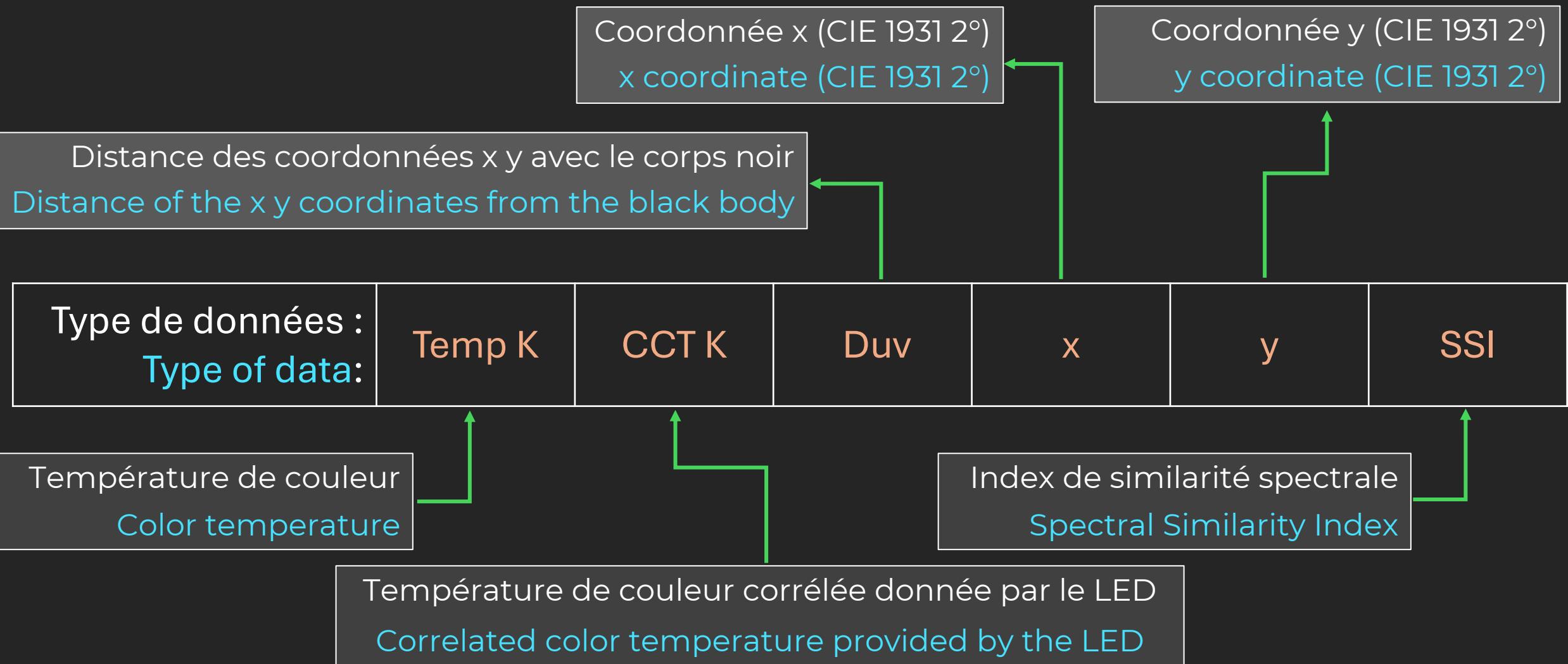


Gossen  
Mavospec Base (GSN)



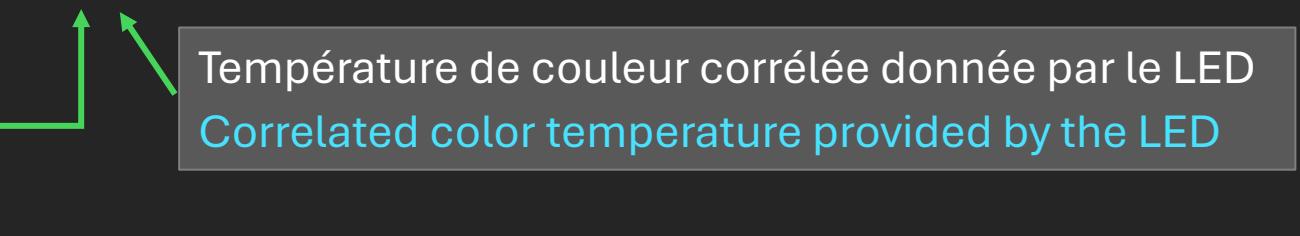
Sekonic  
C800

## Explications / Explanation



## Example on KL PROFILE

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	SSI
ELATION-KL-PROFILE	100%	CCT set on LED - 3200	3147	0,005	0,4334	0,4149	ELATION-KL-SPOT-IP_P3200_LED_100%	71



Type de données : Type of data:	Temp K	CCT K	Duv	x	y	SSI
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ELATION-KL-PROFILE	100%	CCT set on JETI - 3200	3247	0,005	0,4268	0,4128	ELATION-KL-SPOT-IP_P3200_JTI_100%	72
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## Example on KL PROFILE

LIGHT			JETI 1511 HiRes						SSI
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv		
ELATION-KL-PROFILE	100%	CCT set on LED - 3200	3147	0,005	0,4334	0,4149	ELATION-KL-SPOT-IP_P3200_LED_100%	71	

Relatives à :  
Related to:

Power @ 100%  
indicated by  
the LED

Power @ 100%  
indicated by  
JETI

Power @ 50%  
indicated by  
JETI

Power @ 25%  
indicated by  
JETI

ELATION-KL-PROFILE	100%	CCT set on JETI - 3200	3247	0,005	0,4268	0,4128	ELATION-KL-SPOT-IP_P3200_JTI_100%	72
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Pourquoi tester à différentes puissances ? /  
100%, 50%, 25% ?

Why test at different power levels?  
100%, 50%, 25%?

- Dans le passé, on a souvent pu constater des différences de température de couleur et d'index de qualité lors des changement de puissance

- In the past, we have often seen differences in colour temperature and quality index when changing power.

Données relatives à : Data related to:	Power @ 100% indicated by the LED	Power @ 100% indicated by JETI	Power @ 50% indicated by JETI	Power @ 25% indicated by JETI
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## SSI Scores

La valeur SSI est toujours indiquée par rapport à une référence, laquelle est indiquée entre crochets, exemples :

The SSI value is always indicated in relation to a reference, which is indicated in square bracket, examples:

**SSI[P3200] 86**

**SSI[CIE D55] 78**

0 - 70	70 - 80	80 - 90	90 - 100
Problèmes de rendu de couleur Color rendering issues	Problèmes possibles Possible problems	Bon Good	Excellent Excellent

Mesures

Measurements

KL PROFILE

3200 K

5600 K

3200 K

## KL PROFILE



LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
VISUAL REF. TUNGSTEN	100%	3200	3012	0,001	0,4372	0,406	TUNGSTEN	93
ELATION-KL-PROFILE	100%	CCT set on LED - 3200	3147	0,005	0,4334	0,4149	ELATION-KL-SPOT-IP_P3200_LED_100%	71
ELATION-KL-PROFILE	100%	CCT set on JETI - 3200	3247	0,005	0,4268	0,4128	ELATION-KL-SPOT-IP_P3200_JTI_100%	72
ELATION-KL-PROFILE	50%	CCT set on JETI - 3200	3236	0,005	0,4276	0,4132	ELATION-KL-SPOT-IP_P3200_JTI_50%	71
ELATION-KL-PROFILE	25%	CCT set on JETI - 3200	3203	0,005	0,4302	0,4149	ELATION-KL-SPOT-IP_P3200_JTI_25%	70

SEKONIC C-800 → GOSSSEN MAVOSPEC BASE → SEKONIC C-800

SEKONIC C-800			GOSSSEN MAVOSPEC BASE				
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST	
3023	0,0002	96	-	-	-	VISUAL REF-TUNGSTEN	
3157	0,0053	74	3130	0,0048	74	GSN_ELIATION-KL-SPOT-IP_P3200_LED_100%	
3245	0,0054	74	3219	0,0048	75	GSN_ELIATION-KL-SPOT-IP_P3200_JTI_100%	
3283	0,0057	73	3227	0,0051	74	GSN_ELIATION-KL-SPOT-IP_P3200_JTI_50%	
3248	0,0063	73	3183	0,0056	73	GSN_ELIATION-KL-SPOT-IP_P3200_JTI_25%	

## KL PROFILE



5600 K

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
ELATION-KL-PROFILE	100%	CCT set on <b>LED</b> - 5600	5629	0,007	0,3295	0,3515	ELATION-KL-SPOT-IP_P5600_ <b>LED_100%</b>	63
ELATION-KL-PROFILE	100%	CCT set on <b>JETI</b> - 5600	5629	0,007	0,3295	0,3515	ELATION-KL-SPOT-IP_P5600_ <b>JTI_100%</b>	63
ELATION-KL-PROFILE	50%	CCT set on <b>JETI</b> - 5600	5615	0,005	0,3298	0,3481	ELATION-KL-SPOT-IP_P5600_ <b>JTI_50%</b>	63
ELATION-KL-PROFILE	25%	CCT set on <b>JETI</b> - 5600	5606	0,005	0,33	0,3485	ELATION-KL-SPOT-IP_P5600_ <b>JTI_25%</b>	63

SEKONIC C-800			GOSSEN MAVOSPEC BASE				
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST	
5828	0,0047	64	5557	0,0056	67	GSN_ELIATION-KL-SPOT-IP_P5600_ <b>LED_100</b>	
5828	0,0047	64	5557	0,0056	67	GSN_ELIATION-KL-SPOT-IP_P5600_ <b>JTI_100%</b>	
5839	0,0043	64	5557	0,0054	66	GSN_ELIATION-KL-SPOT-IP_P5600_ <b>JTI_50%</b>	
5840	0,0045	64	5568	0,0055	66	GSN_ELIATION-KL-SPOT-IP_P5600_ <b>JTI_25%</b>	



# KL PROFILE

3200 K

Spectra & SSI

5600 K

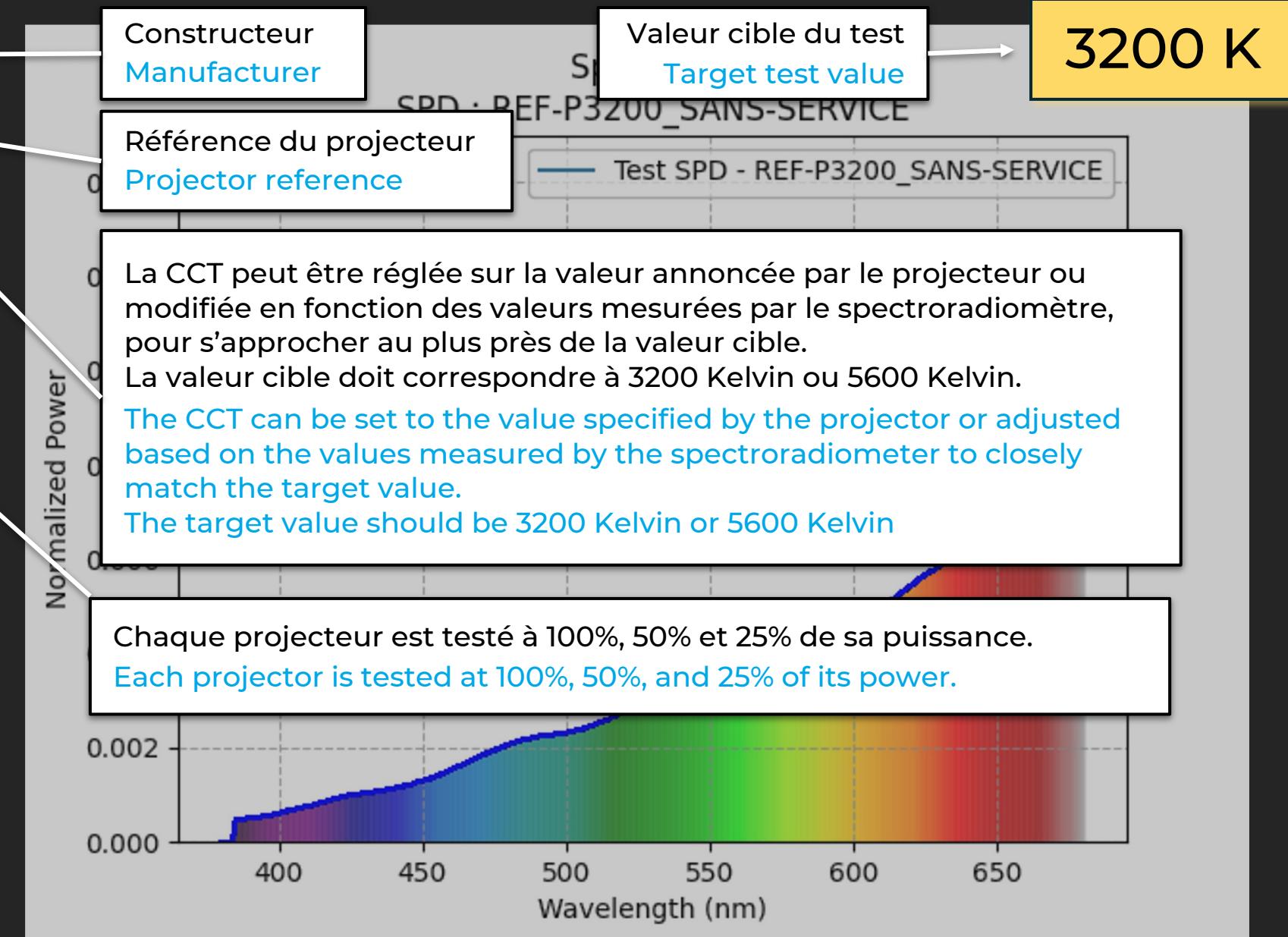
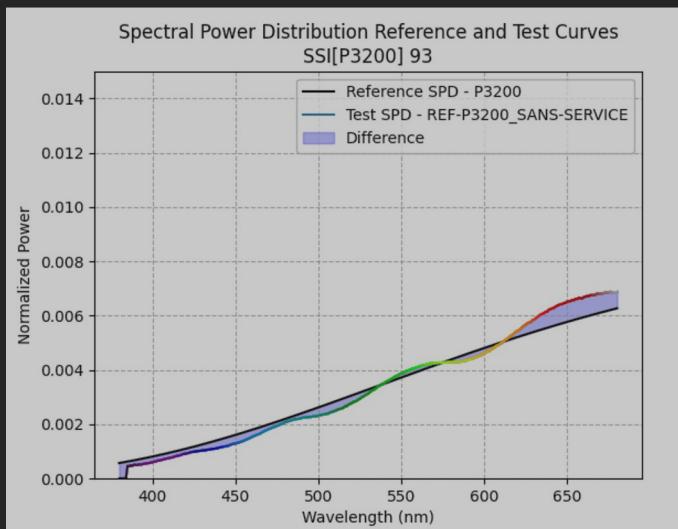
TM-30-18 & CRI



JETI

# Images & données ELATION KL PROFILE Images & Data

Manufacturer  
**PROJECTOR**  
Power: 100% - CCT set on **JETI**  
CCT 3012 Duv 0,001  
CIE 1931 2° x 0.4372 y 0.4060  
CRI Ra 97.51  
IES TM-30-18 Rf 98 Rg 100  
**SSI[P3200] 93**



## Manufacturer PROJECTOR

Power: 100% - CCT set on **JETI**

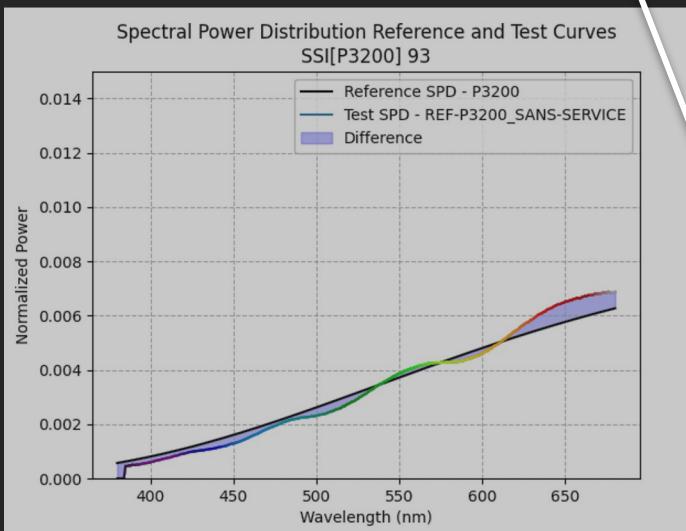
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

**SSI[P3200] 93**



CCT et Duv mesurés par le spectroradiomètre  
CCT and Duv measured by the spectroradiometer

**3200 K**

<https://cie.co.at/publications/colorimetry-part-1-cie-standard-colorimetric-observers-0>  
Coordonnées en x et y basées sur l'observateur CIE 1931 de référence 2°  
Coordinates in x and y based on the CIE 1931 standard observer 2°

### CIE 13.3-1995 CRI Color Rendering Index

**R<sub>a</sub>** est la valeur de l'indice de rendu des couleurs basé sur la valeur moyenne des 8 premières couleurs de test. C'est la Valeur CRI usuelle.  
La valeur **R<sub>e</sub>** peut être trouvée dans l'annexe des mesures.

**R<sub>a</sub>** is the color rendering index value based on the average of the first 8 test colors.  
This is the usual CRI value.  
The **R<sub>e</sub>** value can be found in the appendix of the measurements.

### IES TM-30-18 <https://webstore.ansi.org/standards/iesna/ansiestm3020>

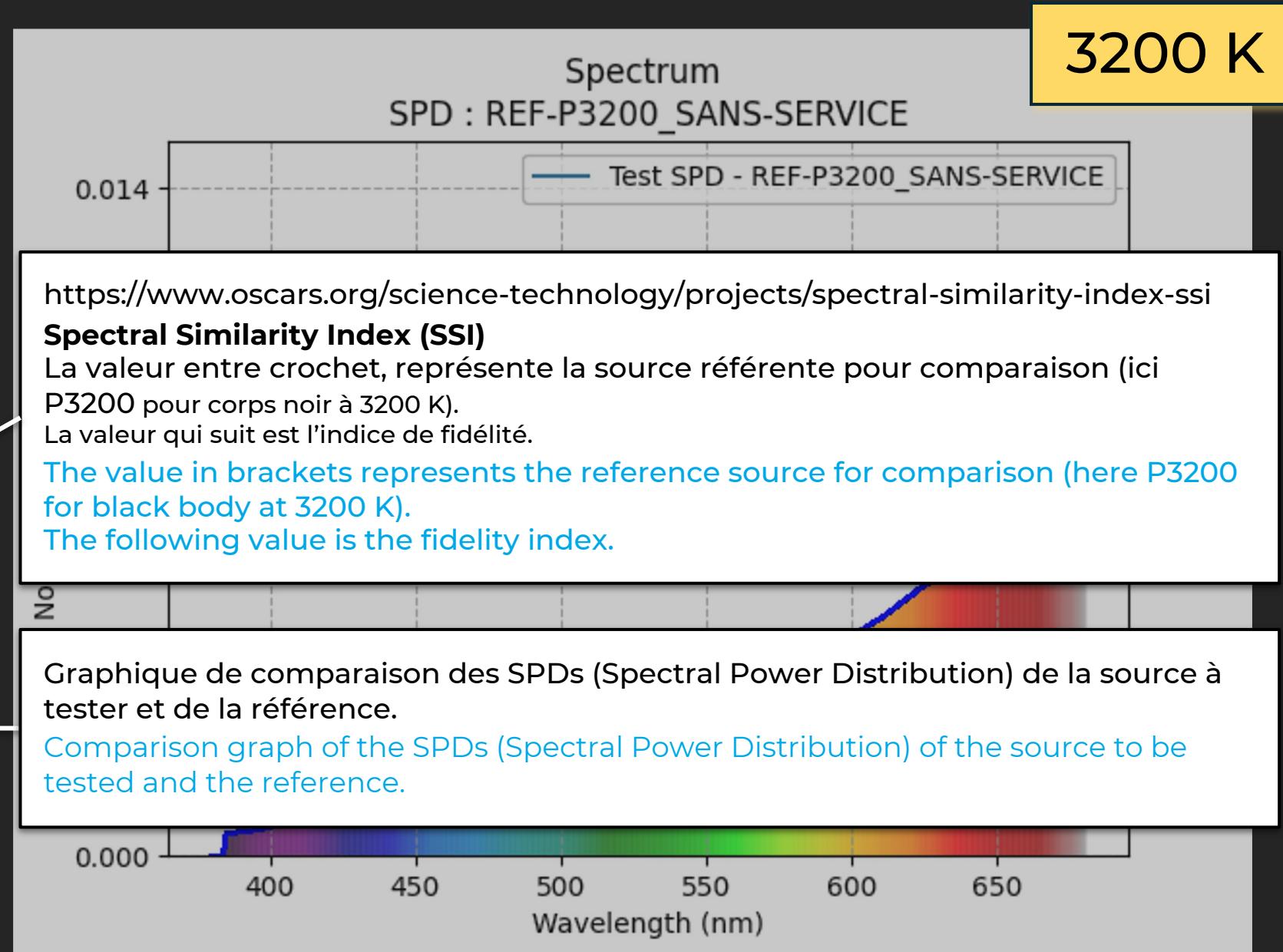
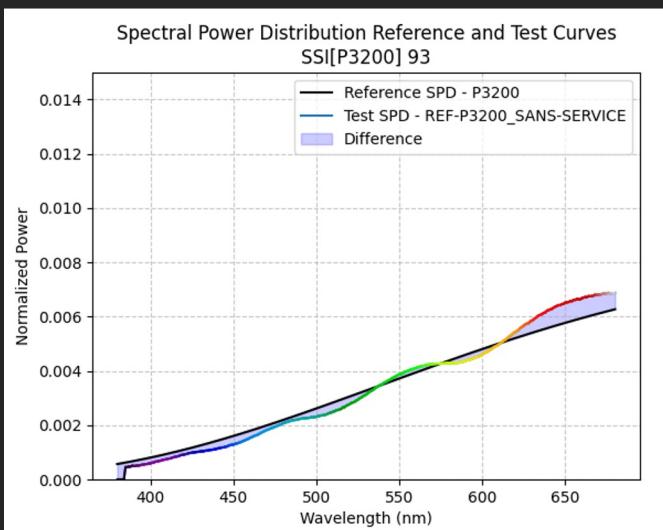
Color fidelity **R<sub>f</sub>** mesure la ressemblance ou la dissemblance des couleurs aux couleurs références (similaire au CRI).

Gamut **R<sub>g</sub>** Donne le niveau de saturation de la couleur. Les valeurs inférieures à 100 indiquent une saturation inférieure à la référence.

Color fidelity **R<sub>f</sub>** measures the similarity or dissimilarity of colors to the reference colors (similar to CRI).

Gamut **R<sub>g</sub>** indicates the level of color saturation. Values below 100 indicate a saturation lower than the reference.

**Manufacturer**  
**PROJECTOR**  
 Power: 100% - CCT set on **JETI**  
  
 CCT 3012 Duv 0,001  
 CIE 1931 2° x 0.4372 y 0.4060  
  
 CRI Ra 97.51  
 IES TM-30-18 Rf 98 Rg 100  
  
**SSI[P3200] 93**



# KL PROFILE

3200 K



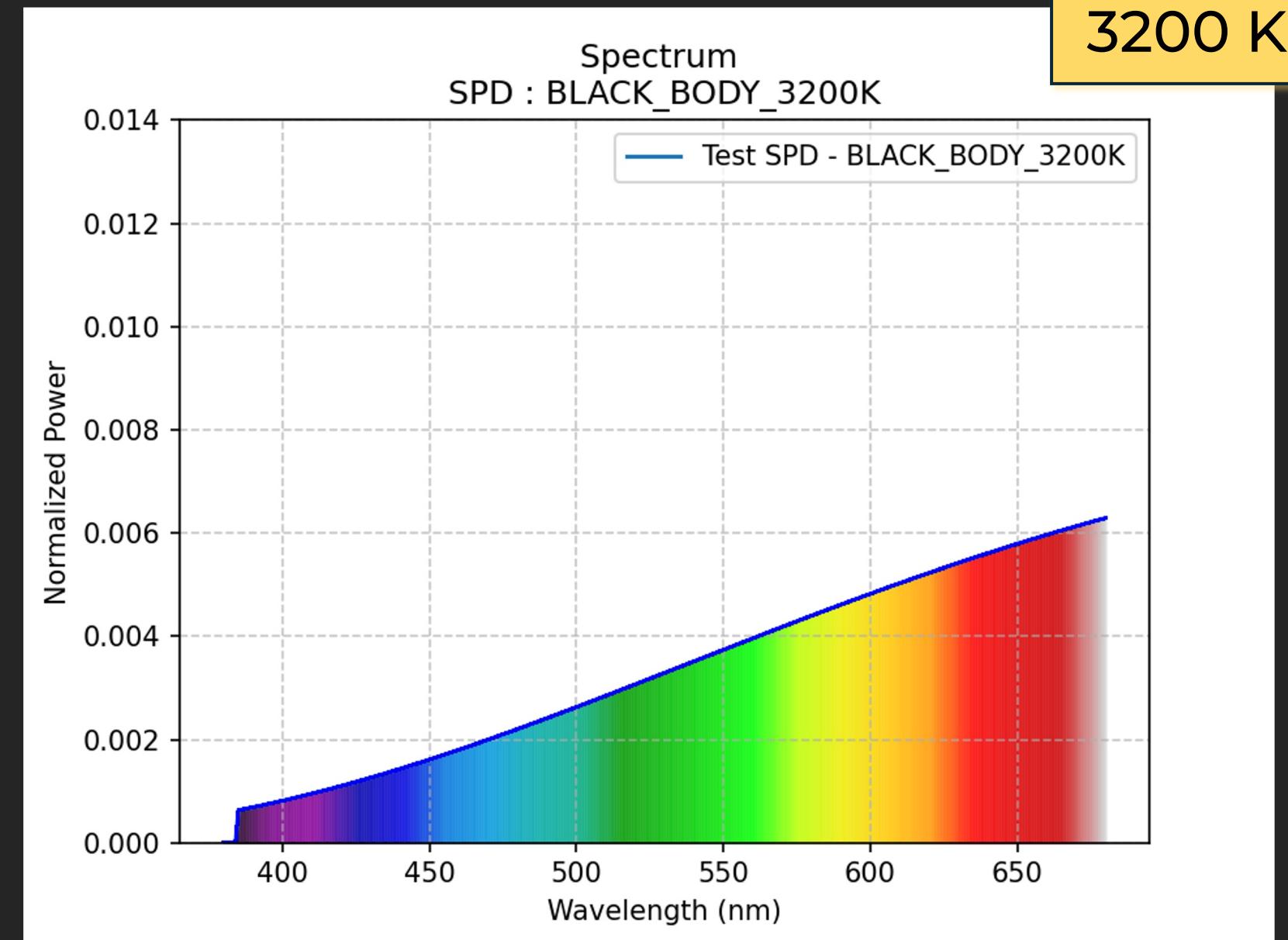
JETI

## SSI REFERENCE

Corps noir / Black body

3200 K

3200 K



# SOURCE TUNGSTEN comparative

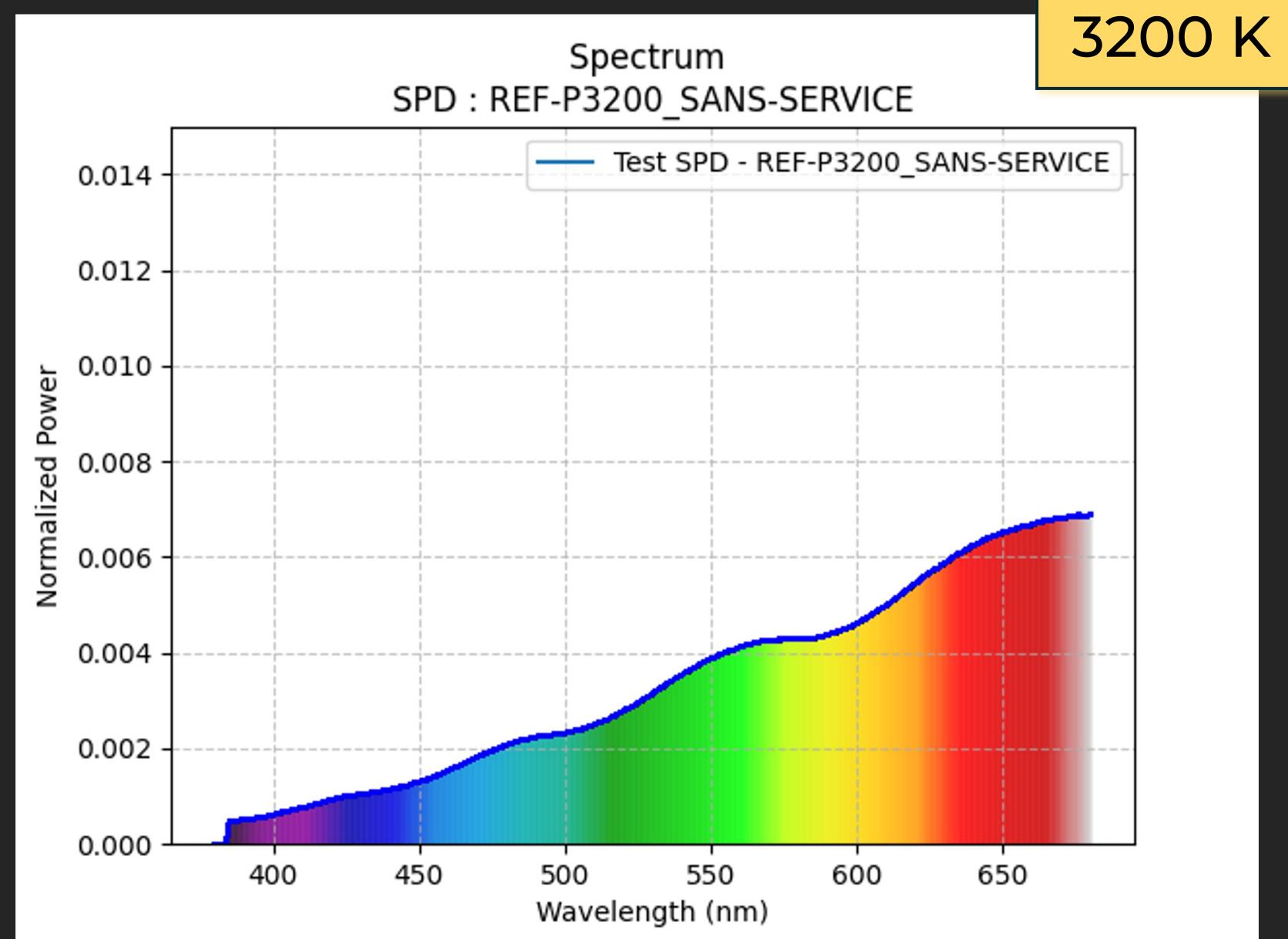
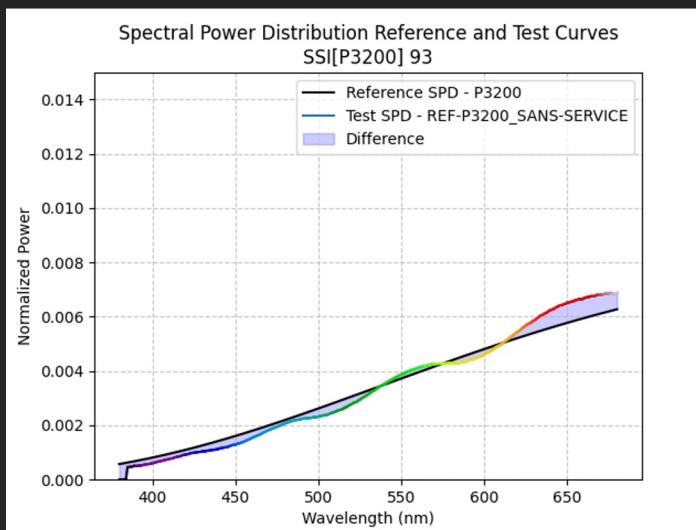
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

**SSI[P3200] 93**



# ELATION KL PROFILE

Power: 100% - CCT set on LED

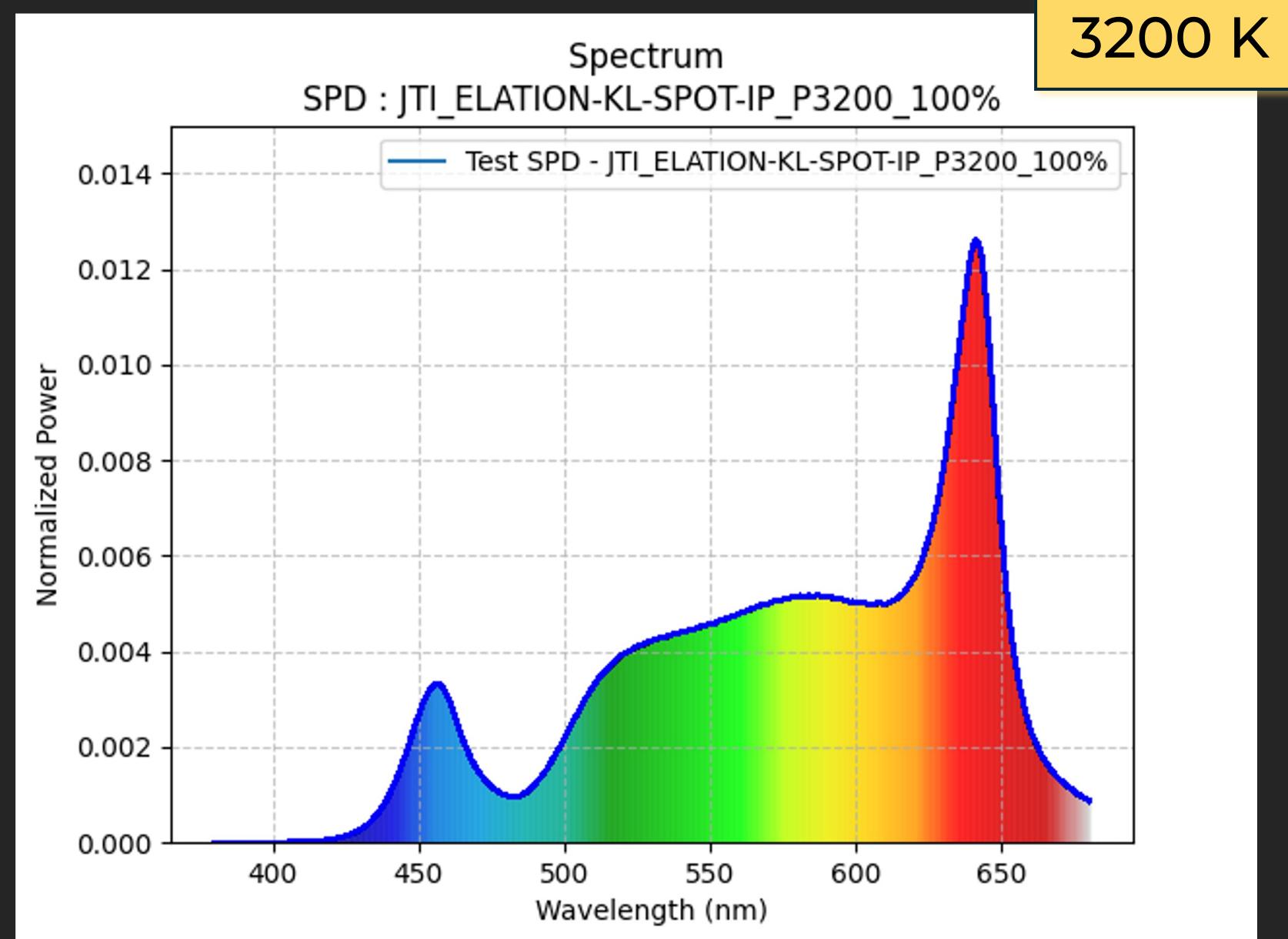
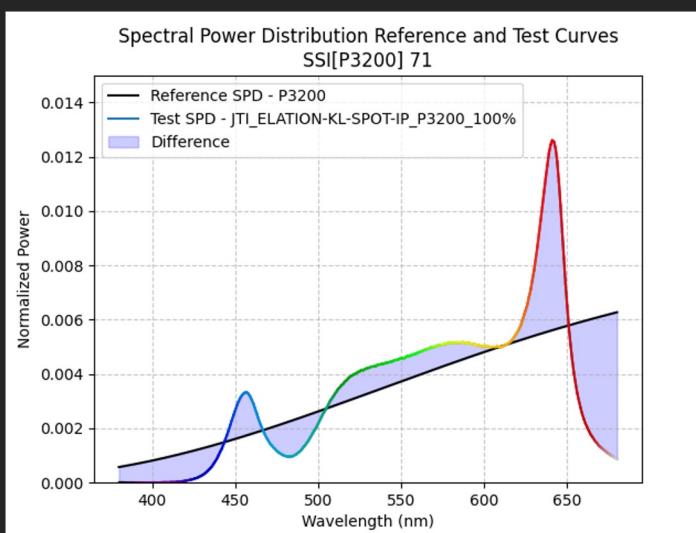
CCT 3147 Duv 0,005

CIE 1931 2° x 0.4334 y 0.4149

CRI Ra 94.86

IES TM-30-18 Rf 94 Rg 102

SSI[P3200] 71



# ELATION KL PROFILE

Power: **100%** - CCT set on **JETI**

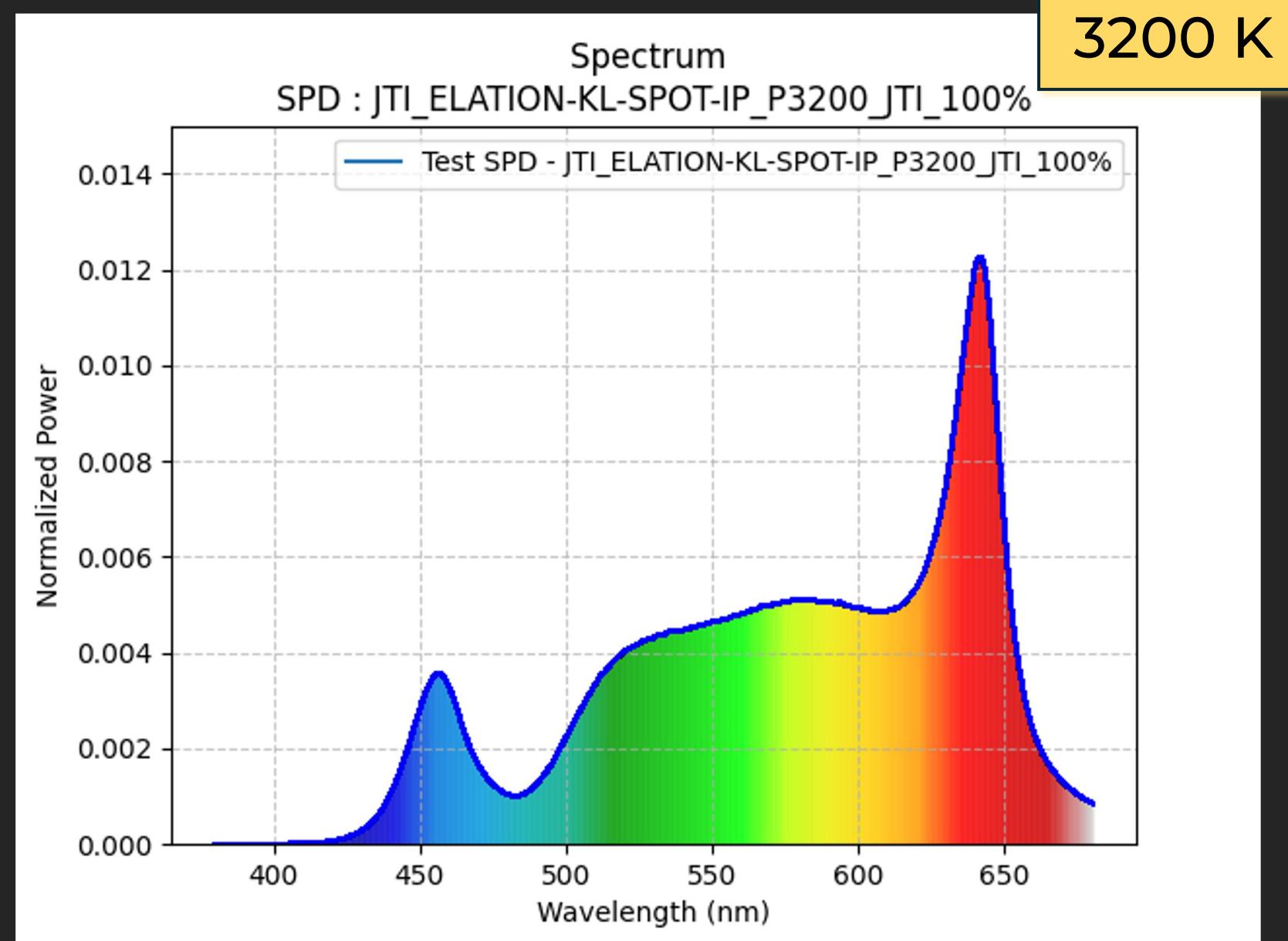
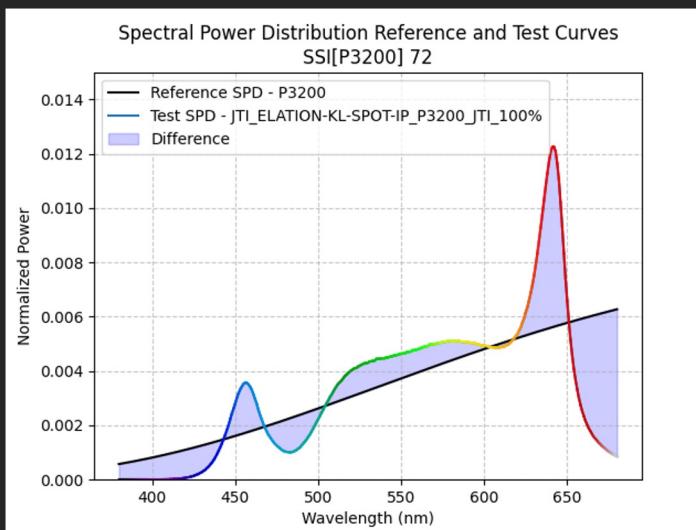
CCT **3247** Duv **0,005**

CIE 1931 2° x **0.4268** y **0.4128**

CRI Ra **94.47**

IES TM-30-18 Rf **94** Rg **102**

**SSI[P3200] 72**



**3200 K**

# ELATION KL PROFILE

Power: **50%** - CCT set on **JETI**

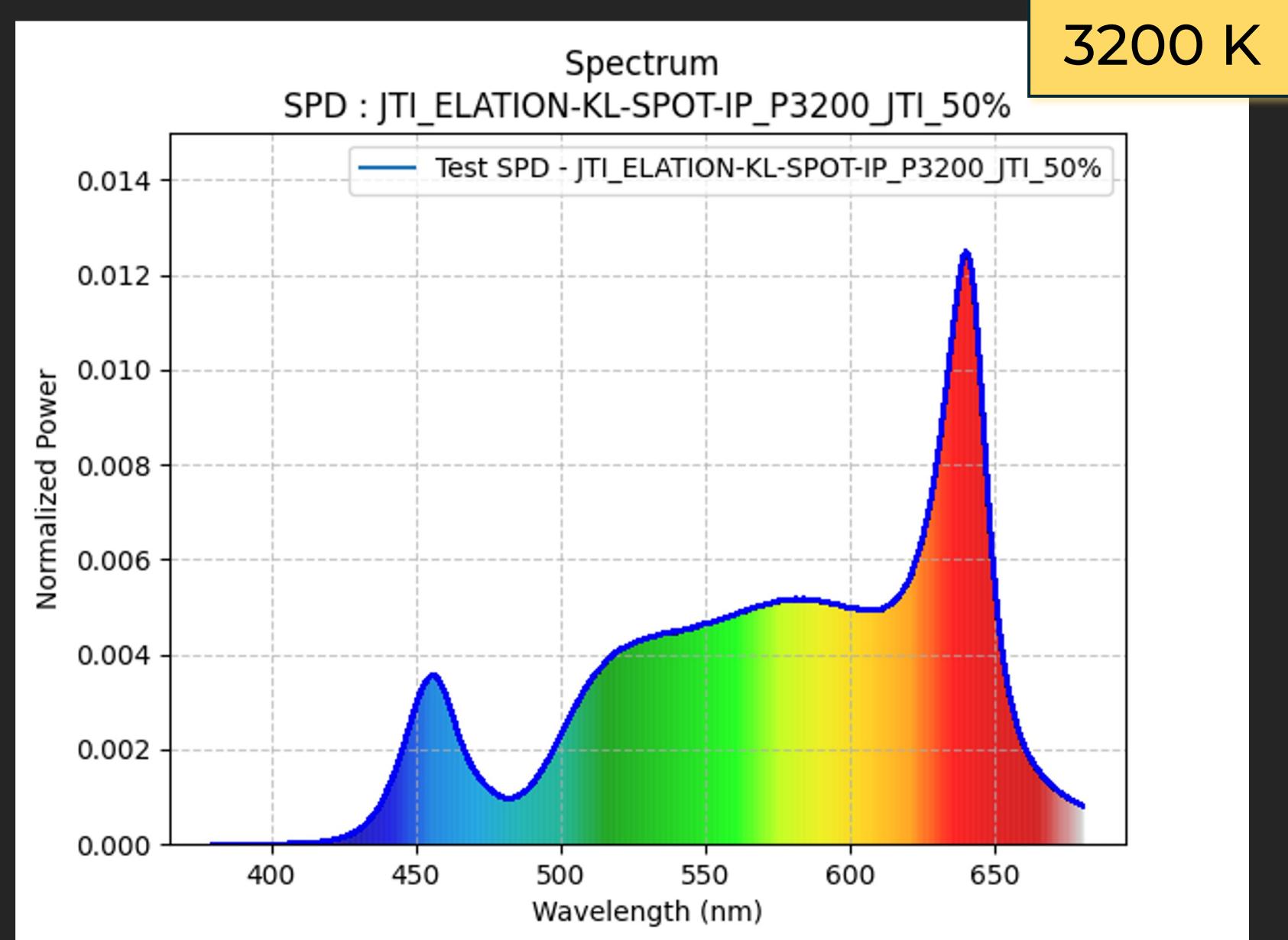
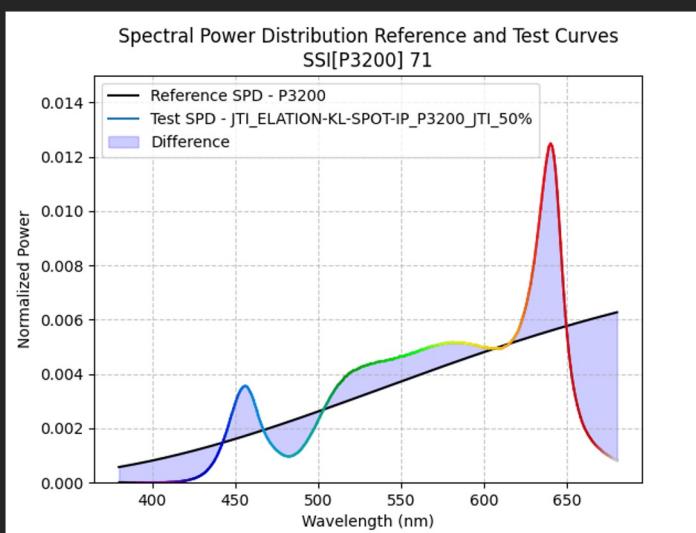
CCT **3236** Duv **0,005**

CIE 1931 2° x **0.4276** y **0.4132**

CRI Ra **94.83**

IES TM-30-18 Rf **94** Rg **102**

**SSI[P3200] 71**



# ELATION KL PROFILE

Power: **25%** - CCT set on **JETI**

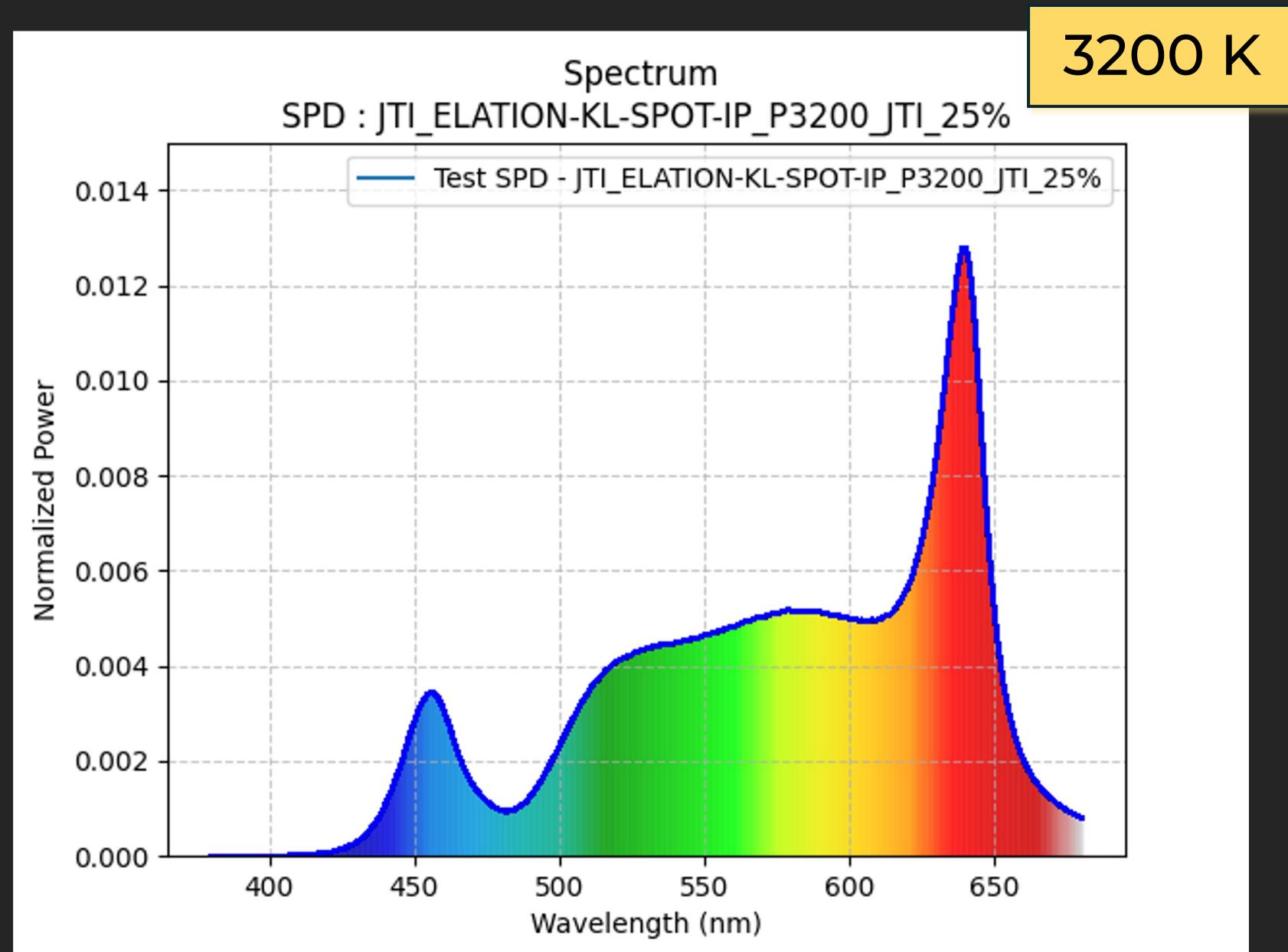
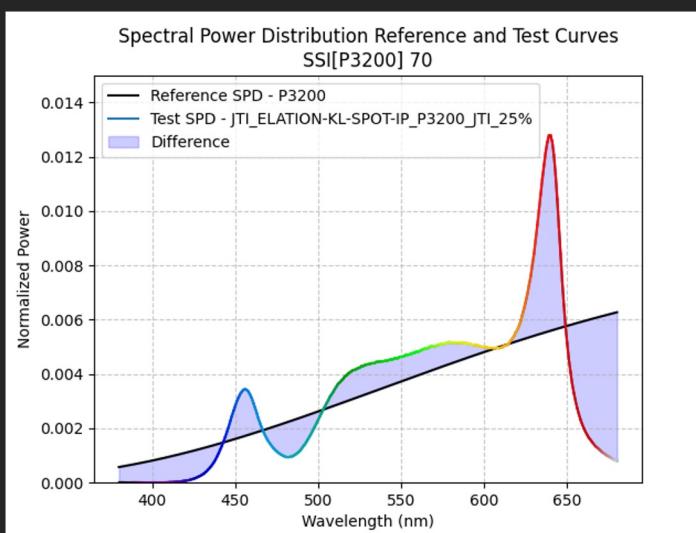
CCT **3203** Duv **0,005**

CIE 1931 2° x **0.4302** y **0.4149**

CRI Ra **95.08**

IES TM-30-18 Rf **94** Rg **102**

**SSI[P3200] 70**



**3200 K**

# KL PROFILE

5600 K



JETI

# SSI REFERENCE Daylight Locus

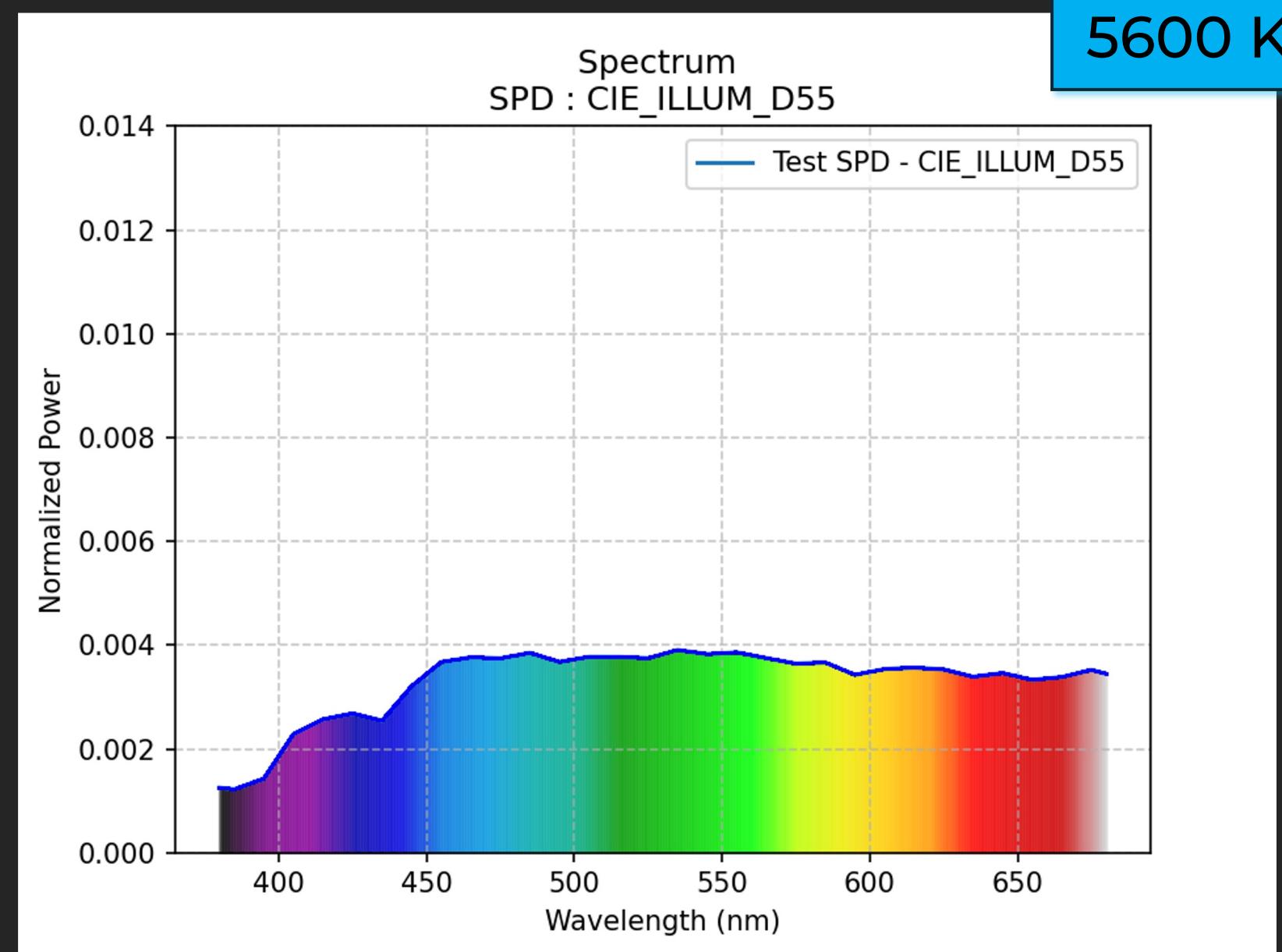
CIE illuminant D55\*  $\approx$  5503,0598 K

Le SPD de référence utilisé dans cette partie est basé sur l'illuminant standardisé CIE D55. Sa température en Kelvin est de 5503 K environ. Le calcul SSI est donc effectué avec cette référence, bien que les sources à tester aient été réglées sur 5600 K.

Vous trouverez en annexe métrologie les mêmes calculs SSI basés sur un illuminant "Daylight locus" à 5600 K ainsi que sur les valeurs de cct mesurées. Les indices SSI sont similaires.

The reference SPD used in this section is based on the standardized CIE D55 illuminant. Its temperature in Kelvin is approximately 5503 K. Therefore, the SSI calculation is performed with this reference, even though the test sources were set to 5600 K. In the metrology appendix, you will find the same SSI calculations based on a "Daylight locus" illuminant at 5600 K as well as on the measured CCT values. The SSI indices are similar.

5600 K



# SOURCE HMI comparative

from <https://ssi-calculator.oscars.org/>

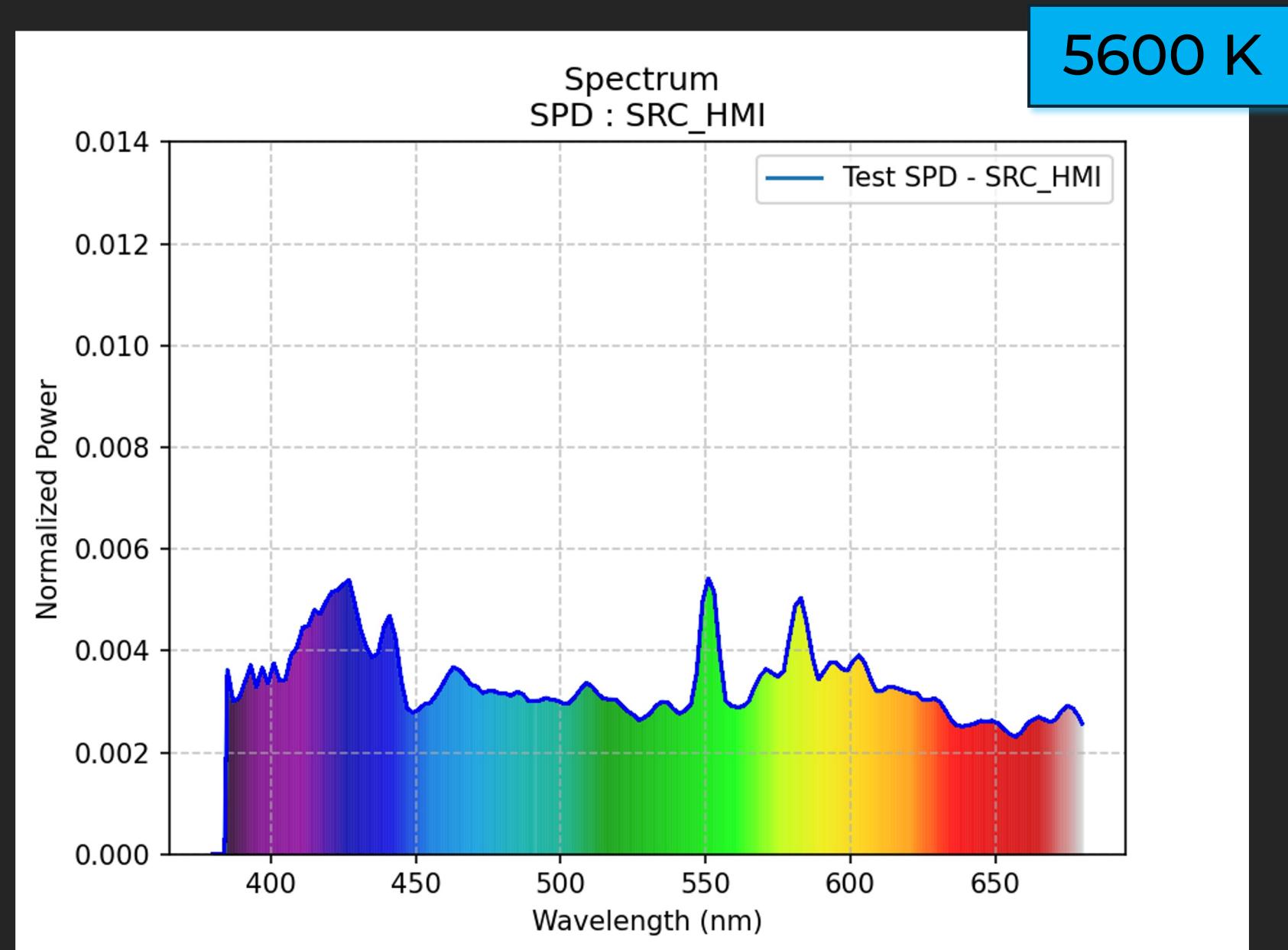
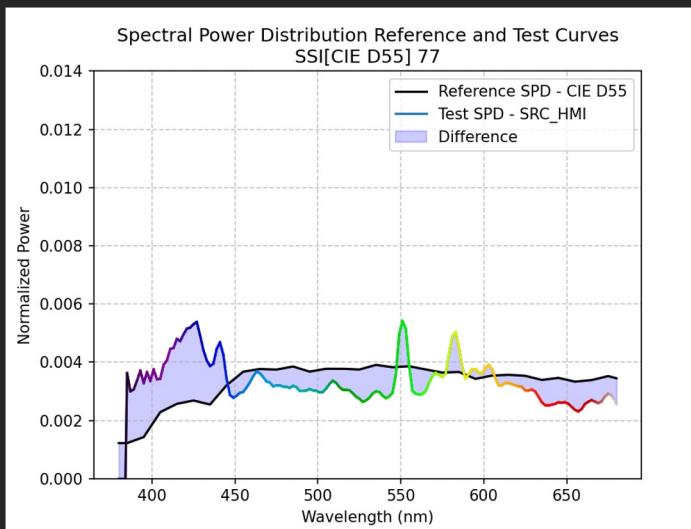
CCT 5605 Duv 0,000

CIE 1931 2° x 0.3301 y 0.3274

CRI Ra -

IES TM-30-18 Rf - Rg -

**SSI[CIE D55] 77**



ELATION

## KL PROFILE

Power: 100% - CCT set on LED

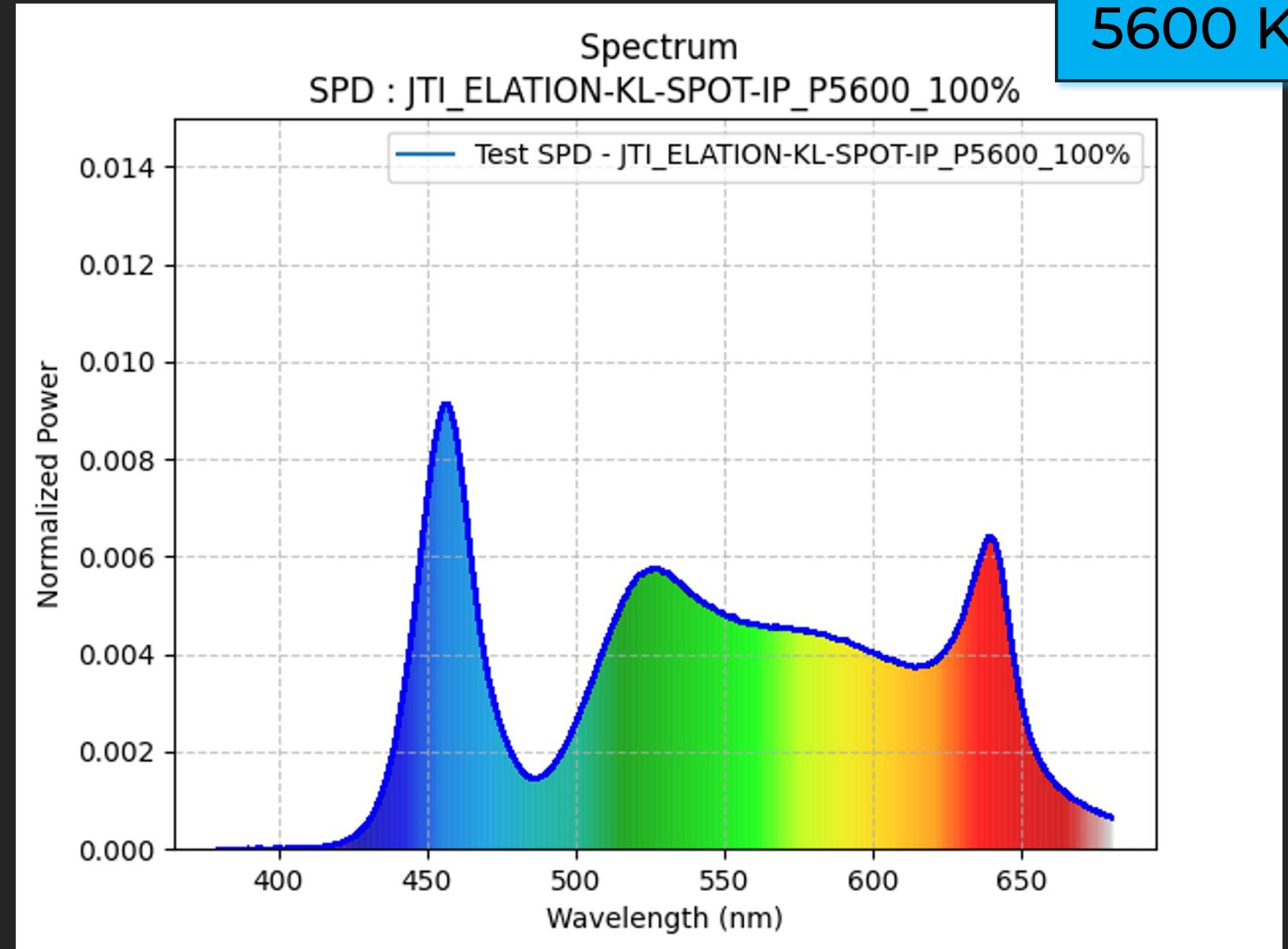
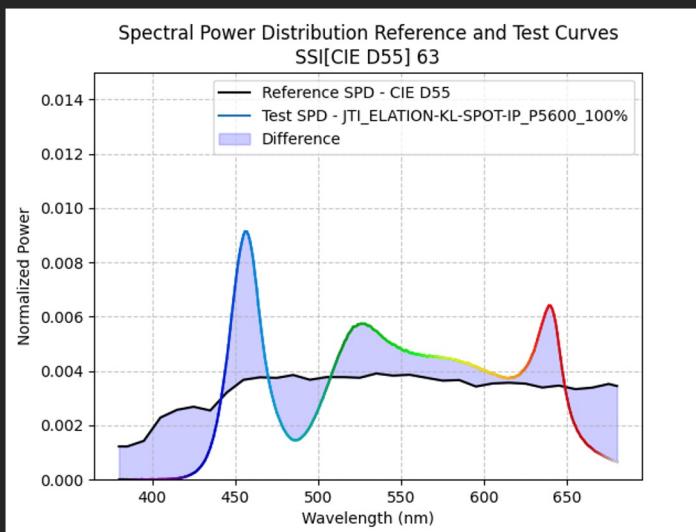
CCT 5629 Duv 0,007

CIE 1931 2° x 0.3295 y 0.3515

CRI Ra 89.95

IES TM-30-18 Rf 89 Rg 102

SSI[CIE D55] 63



ELATION

## KL PROFILE

Power: 100% - CCT set on JETI

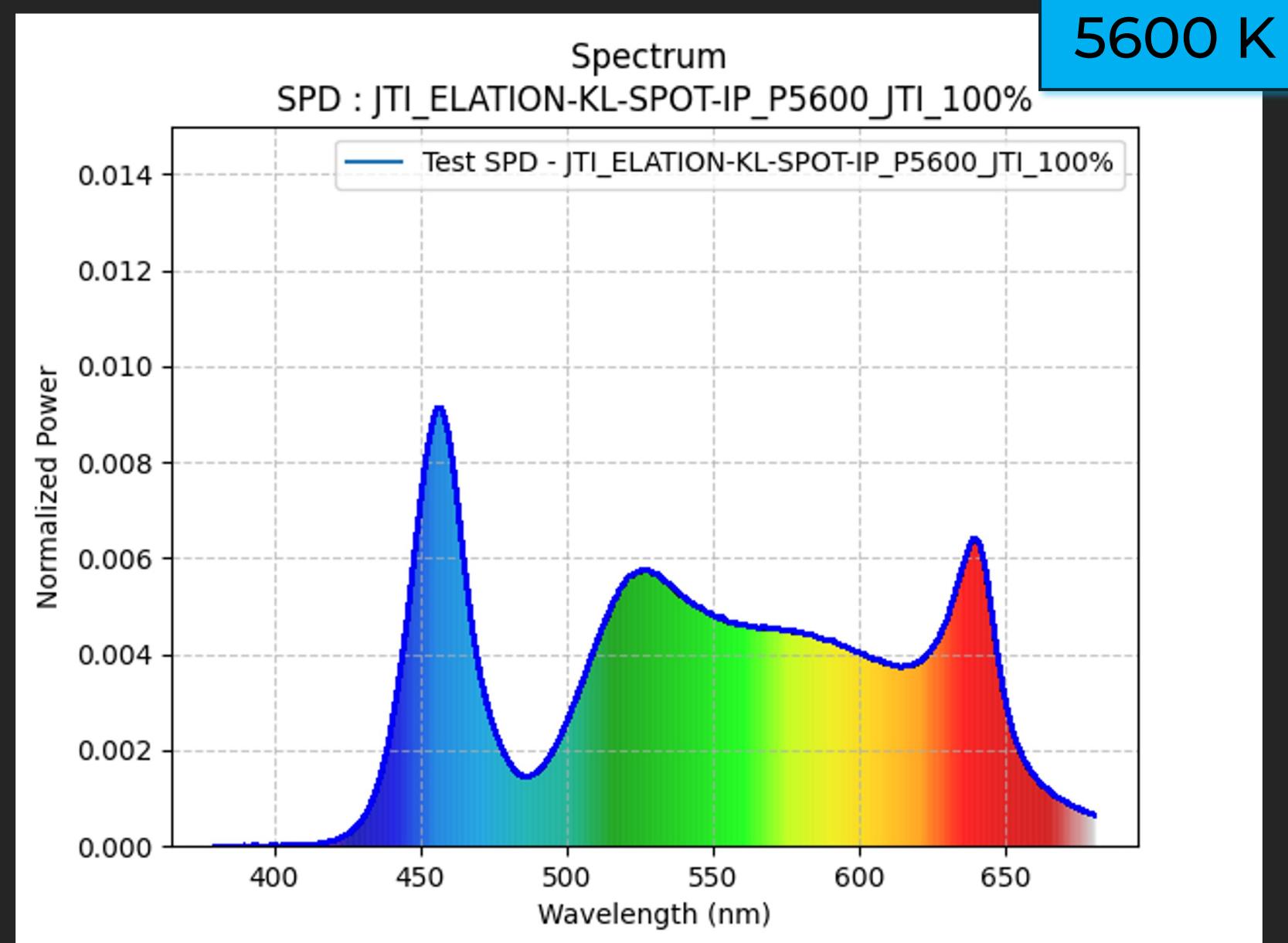
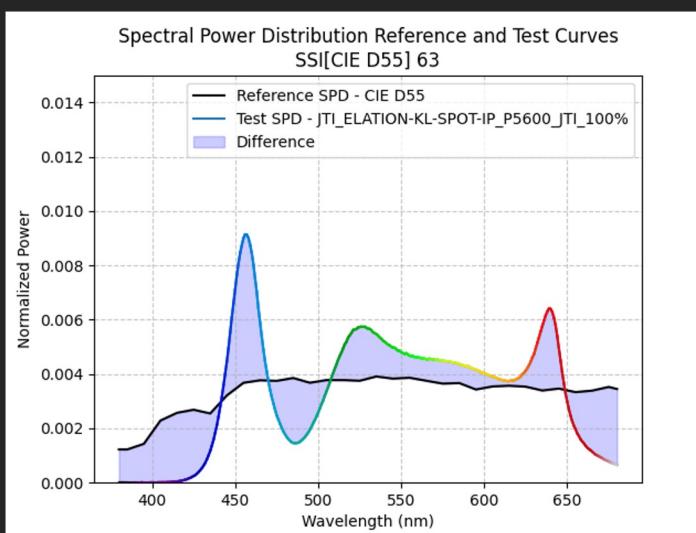
CCT 5629 Duv 0,007

CIE 1931 2° x 0.3295 y 0.3515

CRI Ra 89.95

IES TM-30-18 Rf 89 Rg 102

SSI[CIE D55] 63



ELATION

## KL PROFILE

Power: 50% - CCT set on JETI

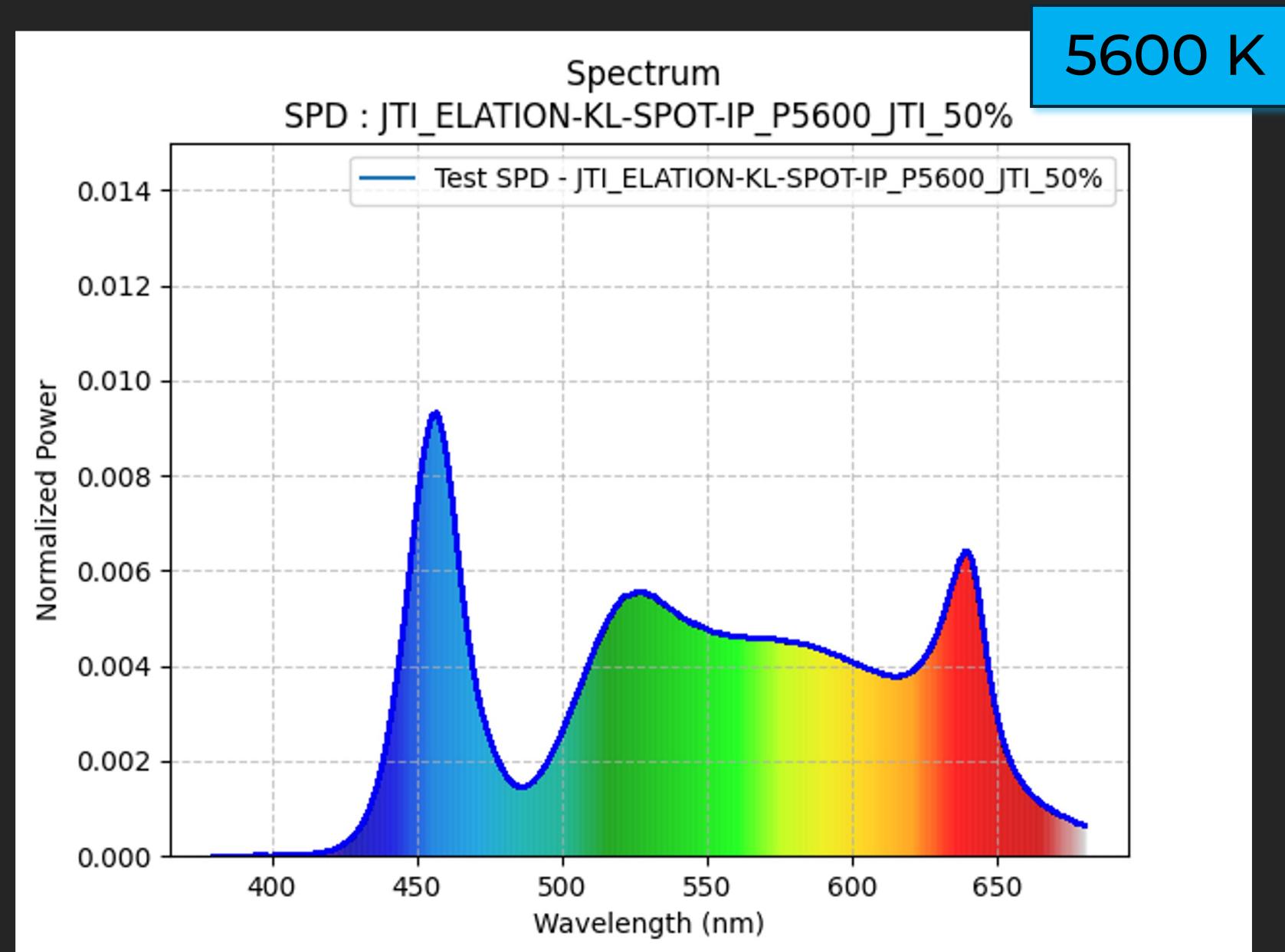
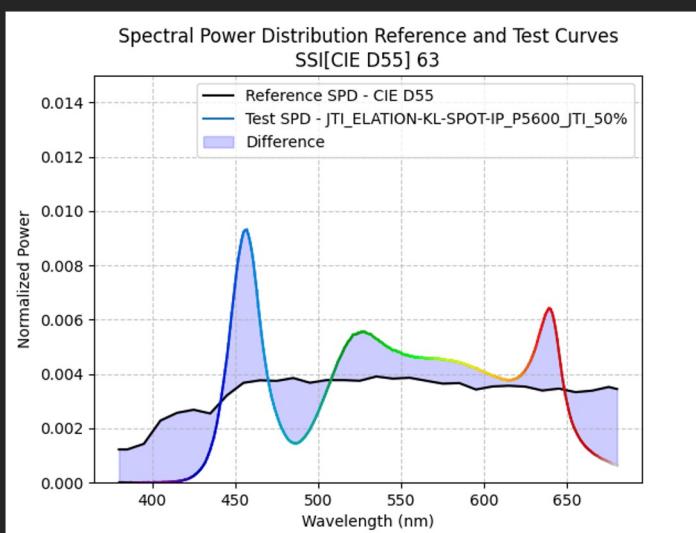
CCT 5615 Duv 0,005

CIE 1931 2° x 0.3298 y 0.3481

CRI Ra 90.09

IES TM-30-18 Rf 89 Rg 102

SSI[CIE D55] 63



ELATION

## KL PROFILE

Power: 25% - CCT set on JETI

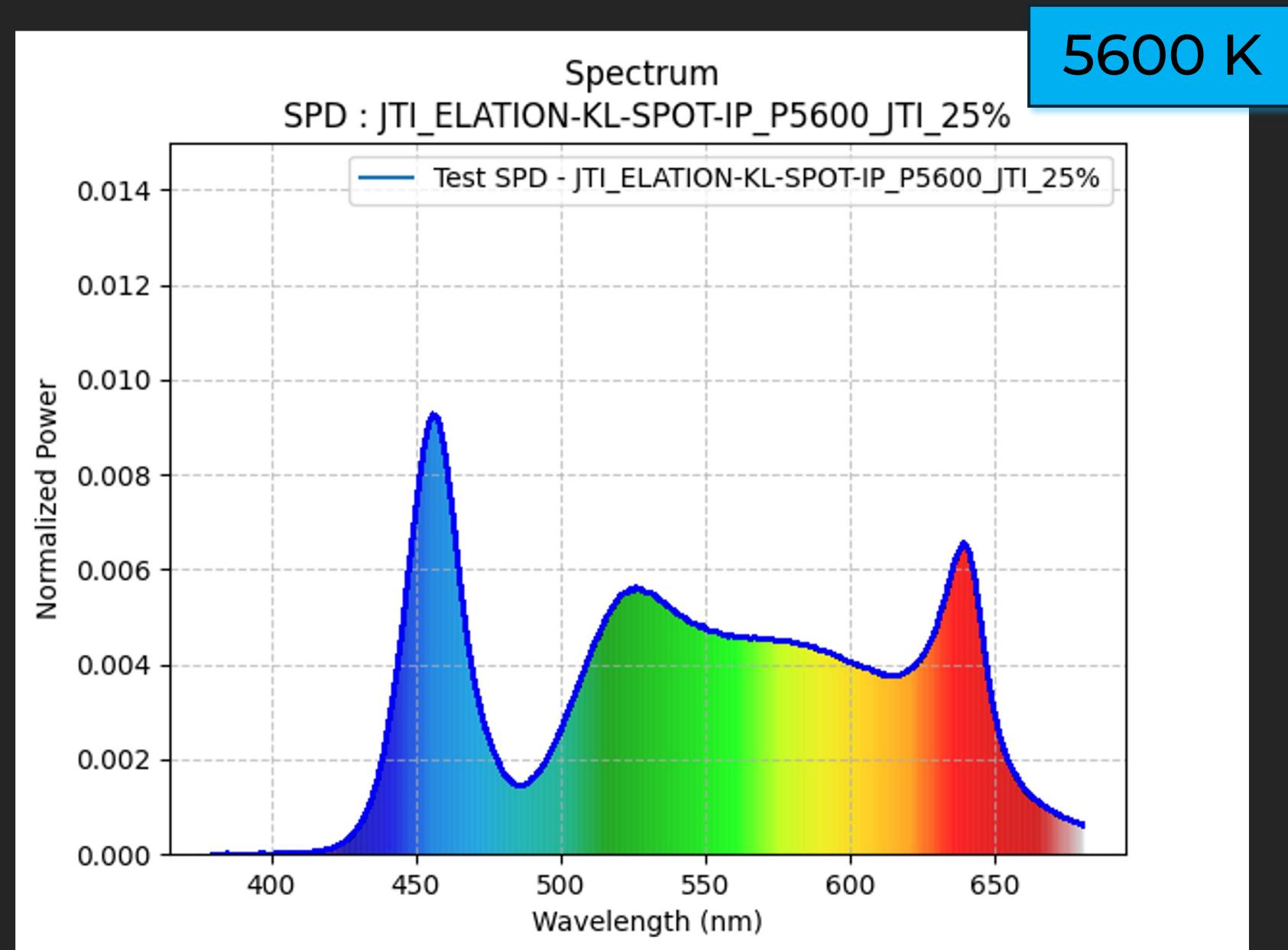
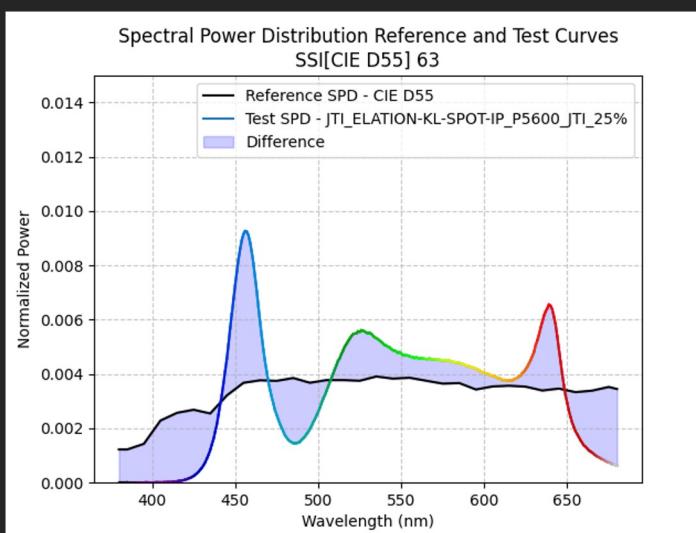
CCT 5606 Duv 0,005

CIE 1931 2° x 0.3300 y 0.3485

CRI Ra 90.44

IES TM-30-18 Rf 89 Rg 102

SSI[CIE D55] 63



# KL PROFILE

Images, Spectra

& SSI



JETI



SSI[P3200] 93

TUNGSTEN REF.

SONY VENICE 2  
GRADED



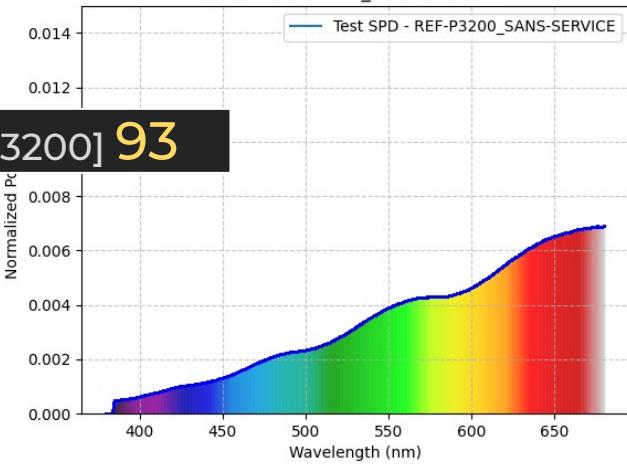
SSI[P3200] 72

KL PROFILE

# Images & données ELATION KL PROFILE Images & Data



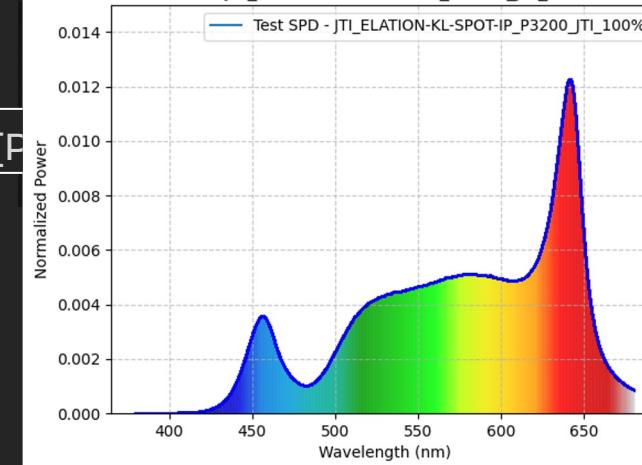
Spectrum  
SPD : REF-P3200\_SANS-SERVICE



TUNGSTEN REF.



Spectrum  
SPD : JTI\_ELATION-KL-SPOT-IP\_P3200\_JTI\_100%

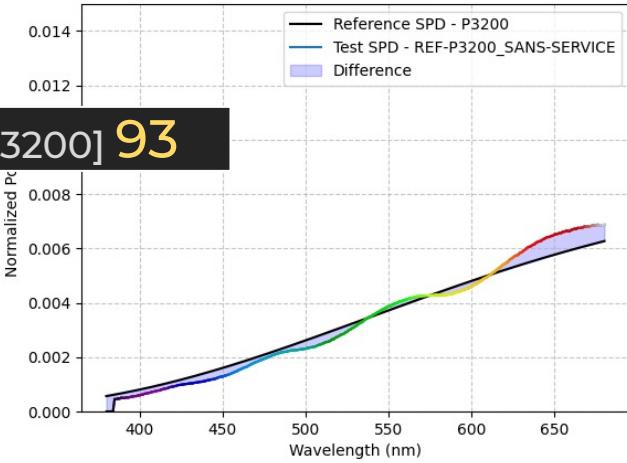


KL PROFILE

# Images & données ELATION KL PROFILE Images & Data



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 93

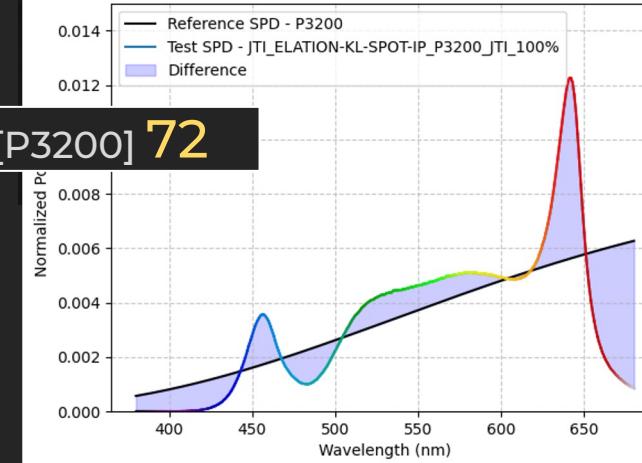


SSI[P3200] 93

TUNGSTEN REF.



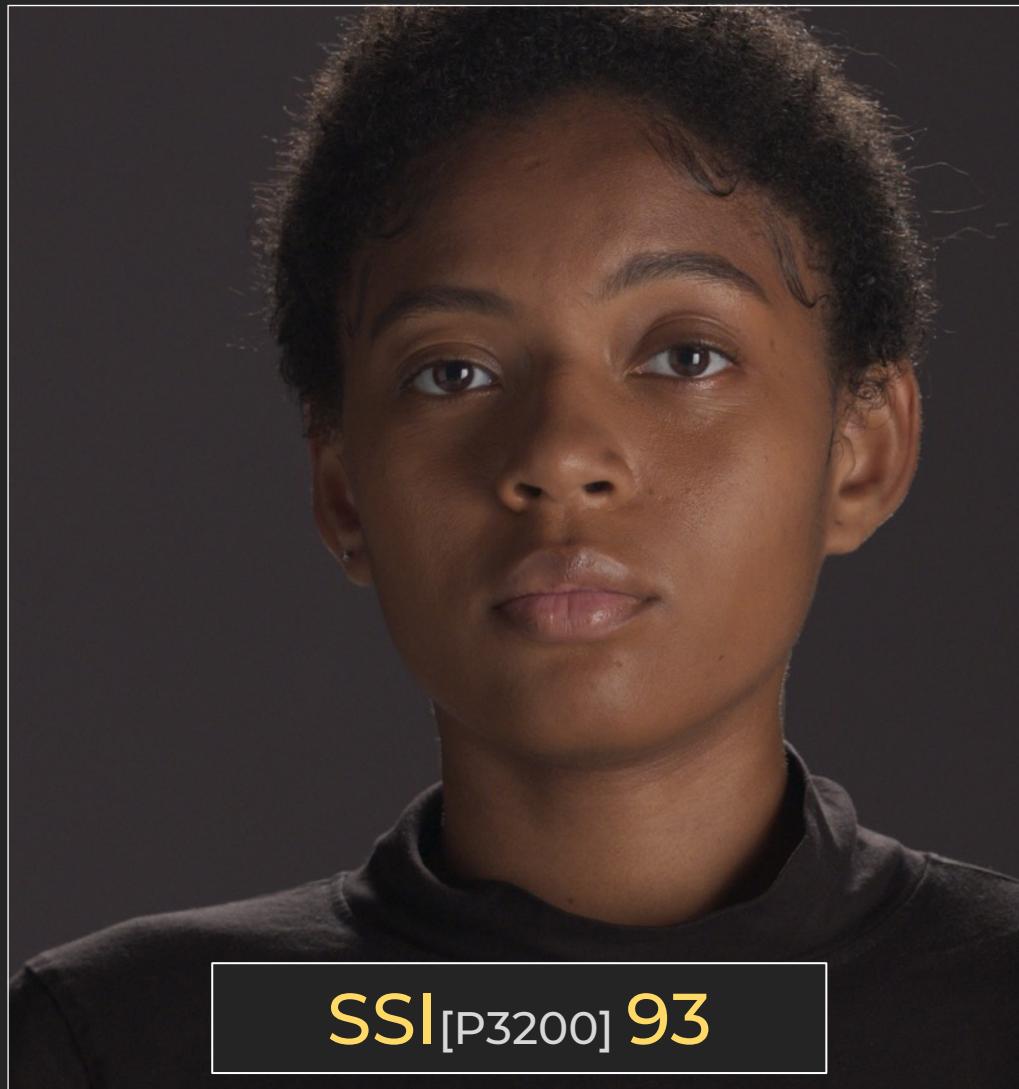
Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 72



SSI[P3200] 72

KL PROFILE

Images & données ELATION KL PROFILE Images & Data



SSI[P3200] 93

TUNGSTEN REF.

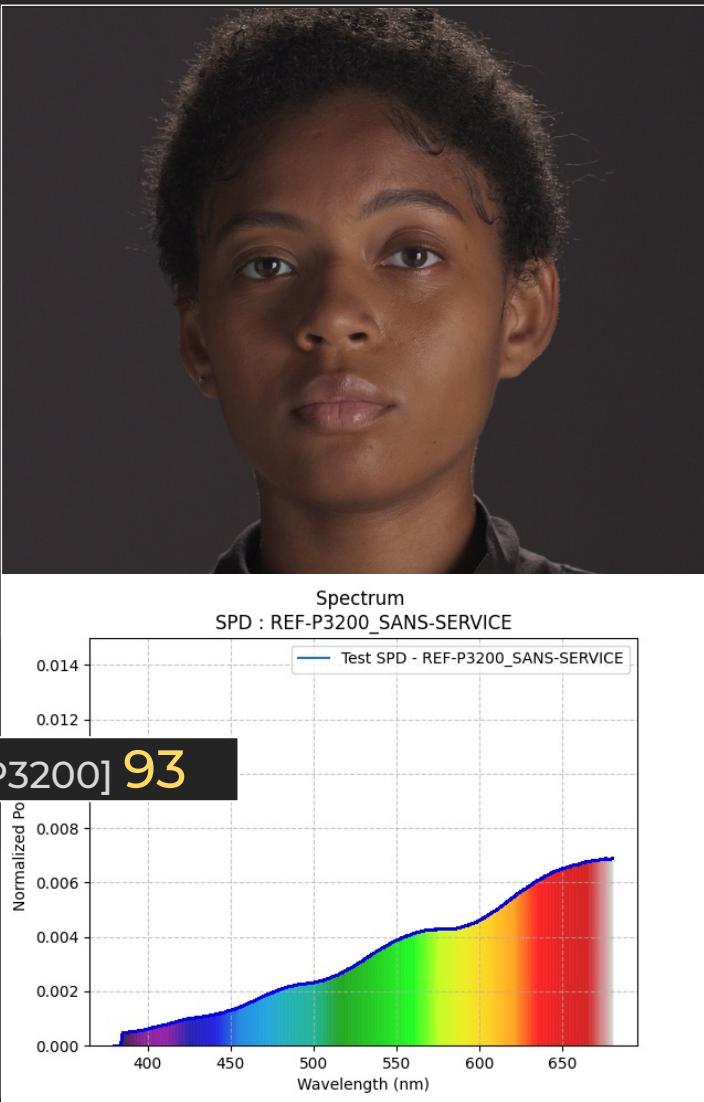
SONY VENICE  
GRADED



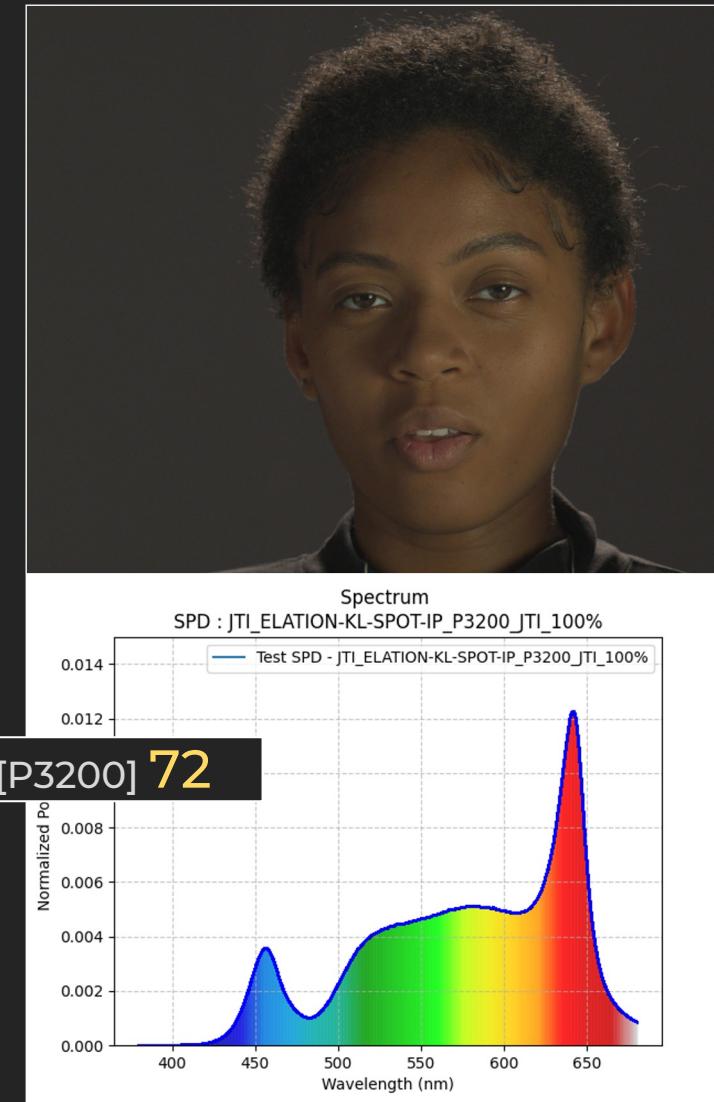
SSI[P3200] 72

KL PROFILE

# Images & données ELATION KL PROFILE Images & Data



TUNGSTEN REF.

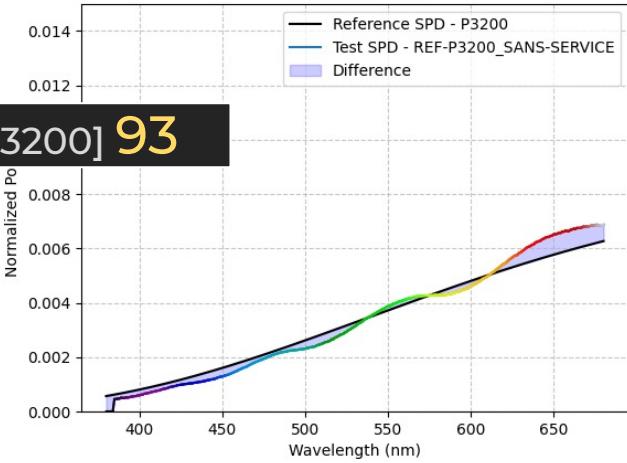


KL PROFILE

# Images & données ELATION KL PROFILE Images & Data



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 93

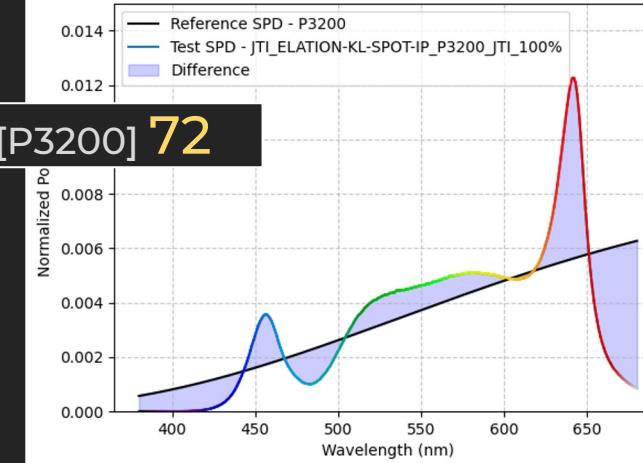


SSI[P3200] 93

93



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 72



SSI[P3200] 72

72

TUNGSTEN REF.

KL PROFILE

# KL PROFILE & TM-30-20

3200 K

5600 K

+

Comparison chart: SSI vs TM30-20 vs CRI

# TM-30-20

Toutes les données de cette partie dédiée au TM-30-20 ont été calculé avec le JETI.

Vous trouverez :

- les graphiques et résultats (incluant  $R_f$  &  $R_g$ ) du projecteur réglé à 100% de sa puissance à l'aide du JETI
- un tableau comparatif SSI / TM-30-20 / CRI.

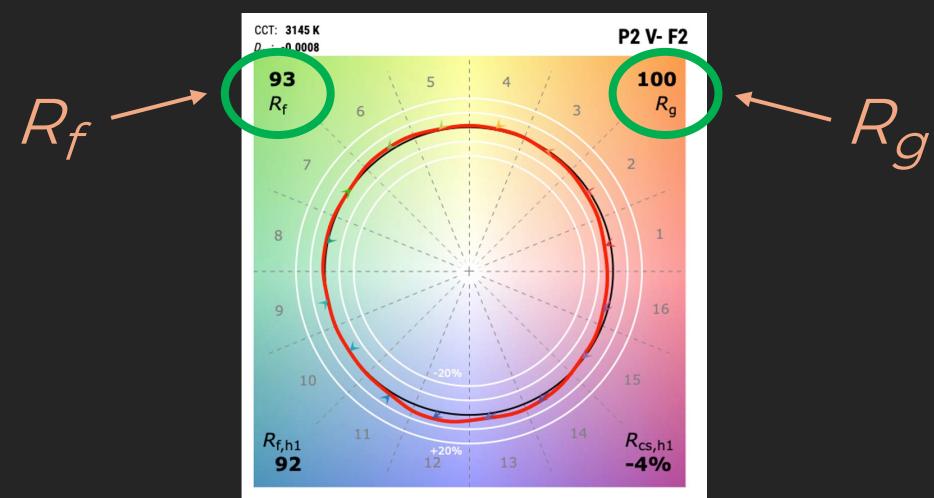
Toutes les mesures sont données en 3200 K et en 5600K

All the data in this section dedicated to the TM-30-20 has been calculated using JETI.

You will find :

- graphs and results (including  $R_f$  &  $R_g$ ) for the lighting fixture set at 100% power using JETI
- a table comparing SSI / TM-30-20 / CRI.

All measurements are provided in 3200K and 5600K



JETI

## TM-30-20

Dans le fichier JTL 2O consacré aux données TM-30-20

vous trouverez :

- les graphiques du projecteur réglé à 100%, à 50 % et à 25% de sa puissance à l'aide des indications du JETI
- les graphiques du projecteur réglé à 100% de sa puissance grâce aux indications du projecteur.

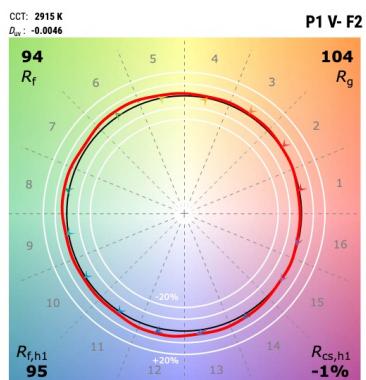
Toutes les mesures sont données en 3200 K et en 5600K

In the JTL 2O file dedicated to TM-30-20 data, you will find:

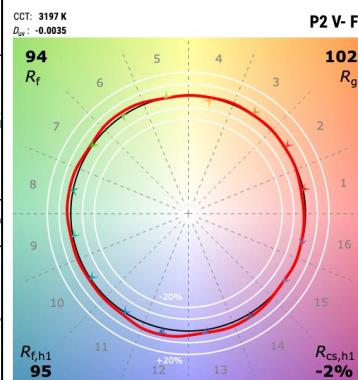
- graphs of the lighting fixture set at 100%, 50% and 25% power using JETI
- graphs of the lighting fixture set to 100% of its power thanks to the indications of the lighting fixture.

All measurements are provided in 3200K and 5600K

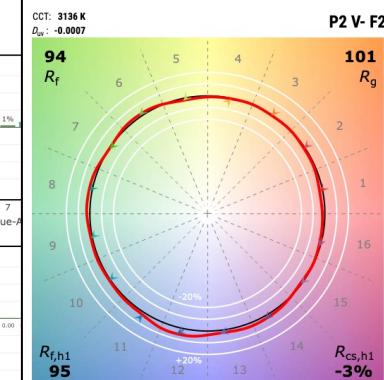
100 % indicated by fixture



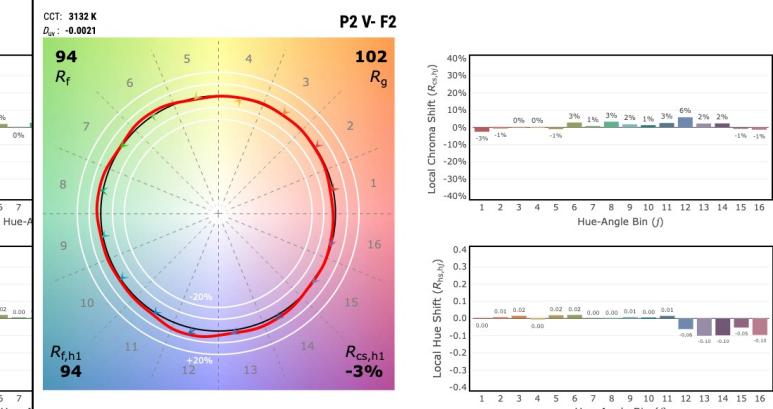
100 % indicated by JETI



50 % indicated by JETI



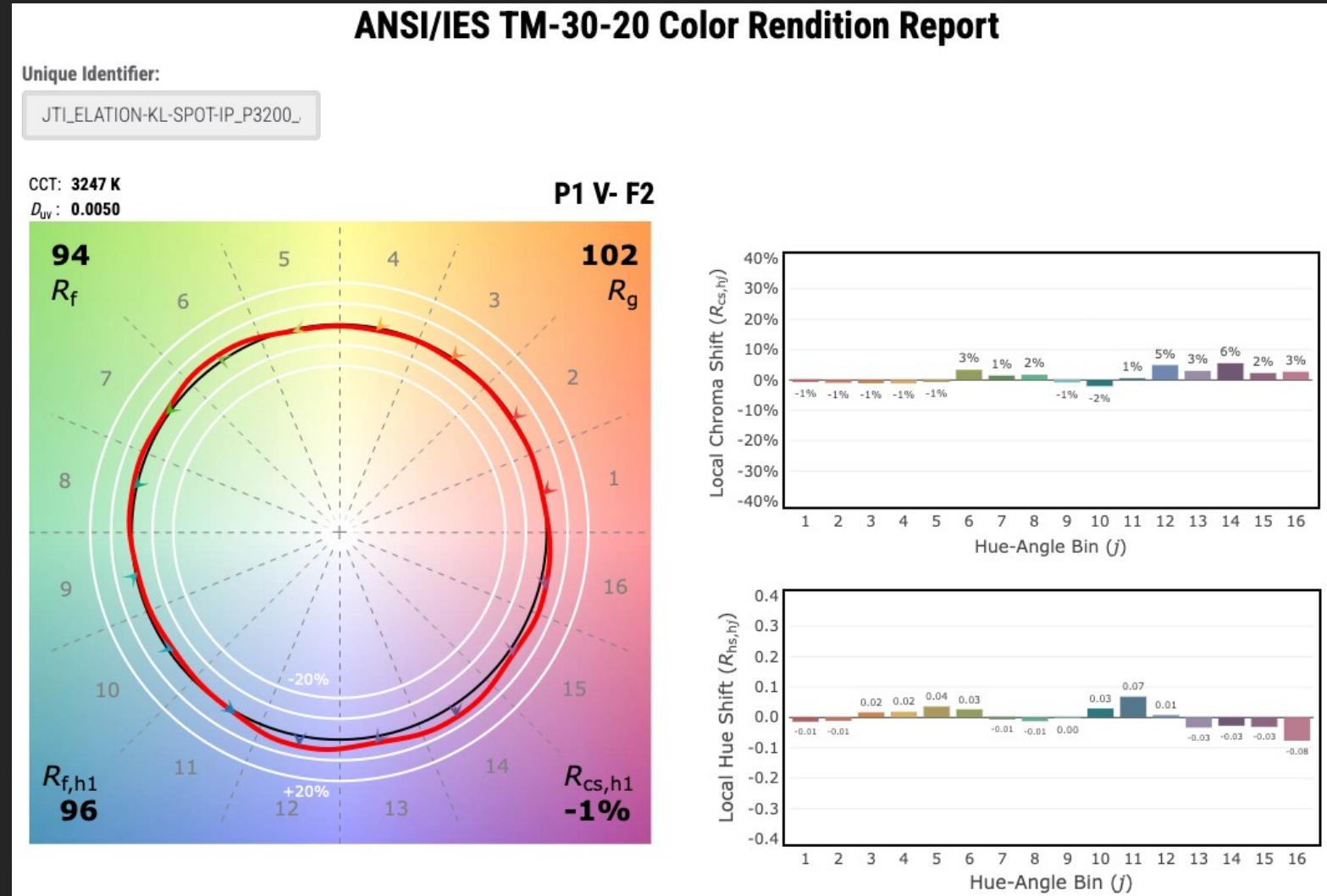
25 % indicated by JETI



3200 K

## KL PROFILE

TM-30-20

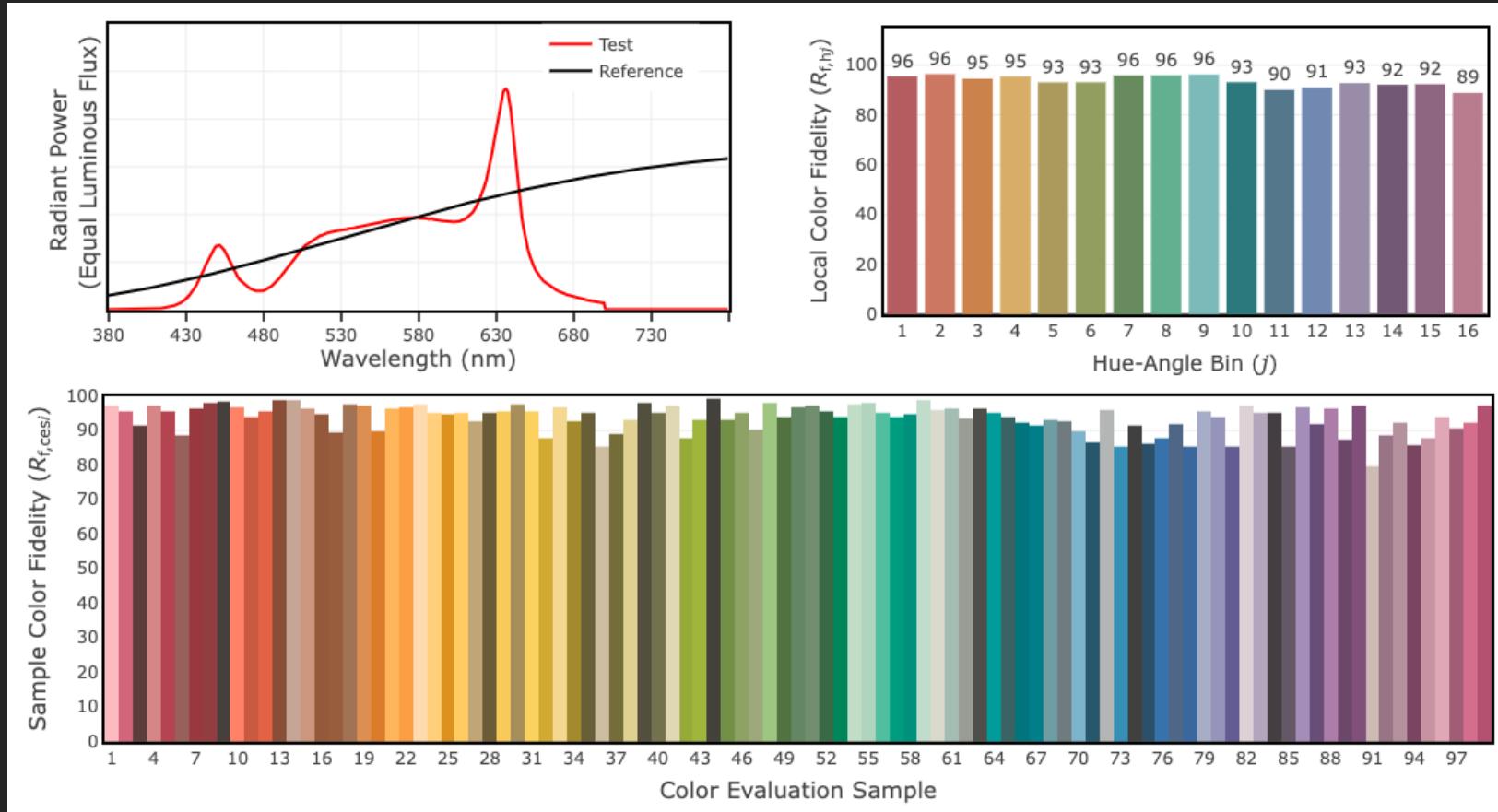


JETI

3200 K

KL PROFILE

TM-30-20



JETI

3200 K

## KL PROFILE

Comparison chart: SSI vs TM30-20 vs CRI

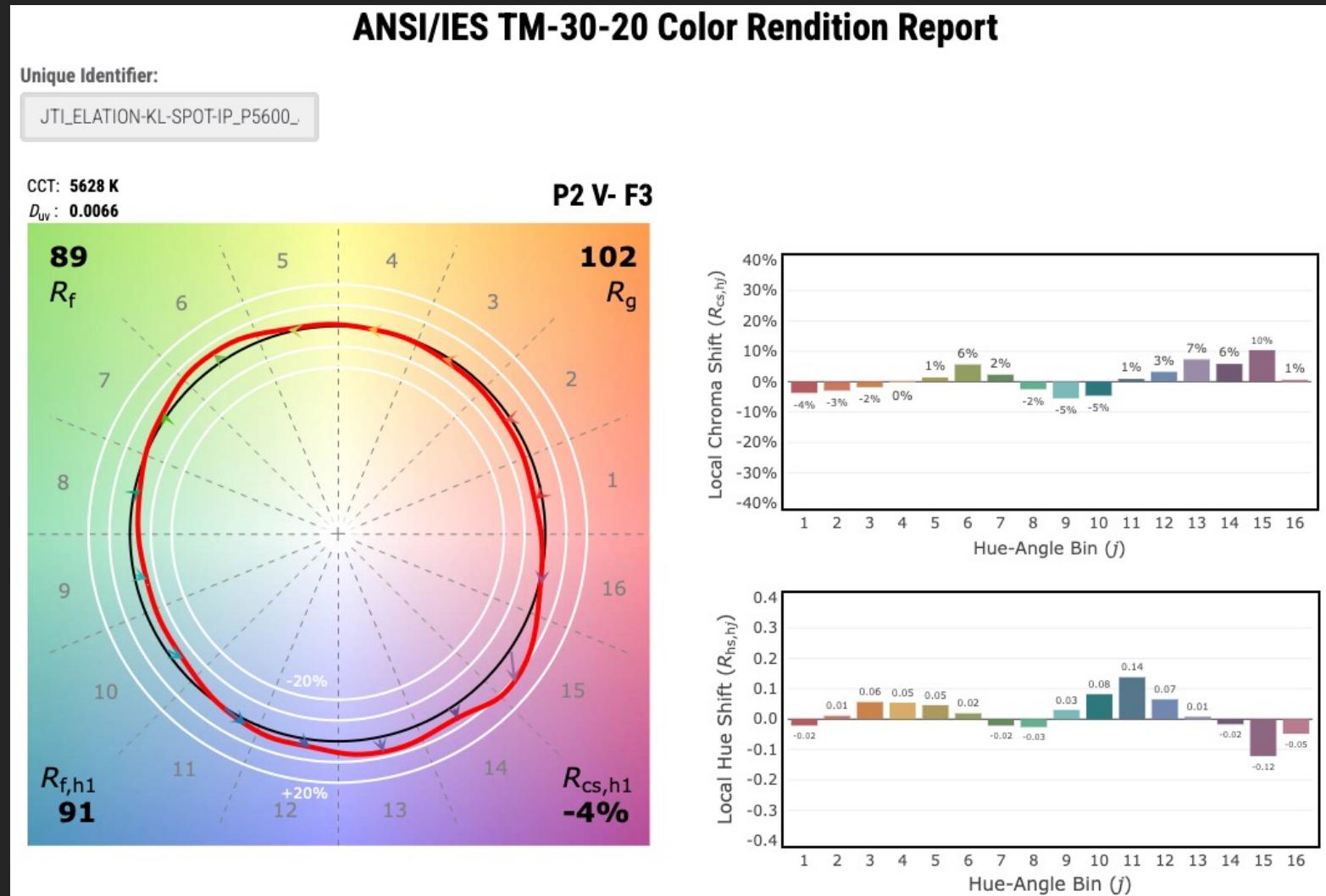
JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
TUNGSTEN VISUAL REF.	93	98	100	97,51	97,05
JTI_ELATION-KL-SPOT-IP_P3200_LED_100%	71	94	102	94,86	93,09
JTI_ELATION-KL-SPOT-IP_P3200_JTI_100%	72	94	102	94,47	92,63
JTI_ELATION-KL-SPOT-IP_P3200_JTI_50%	71	94	102	94,83	92,78
JTI_ELATION-KL-SPOT-IP_P3200_JTI_25%	70	94	102	95,08	93,06



JETI

## KL PROFILE TM-30-20

5600 K

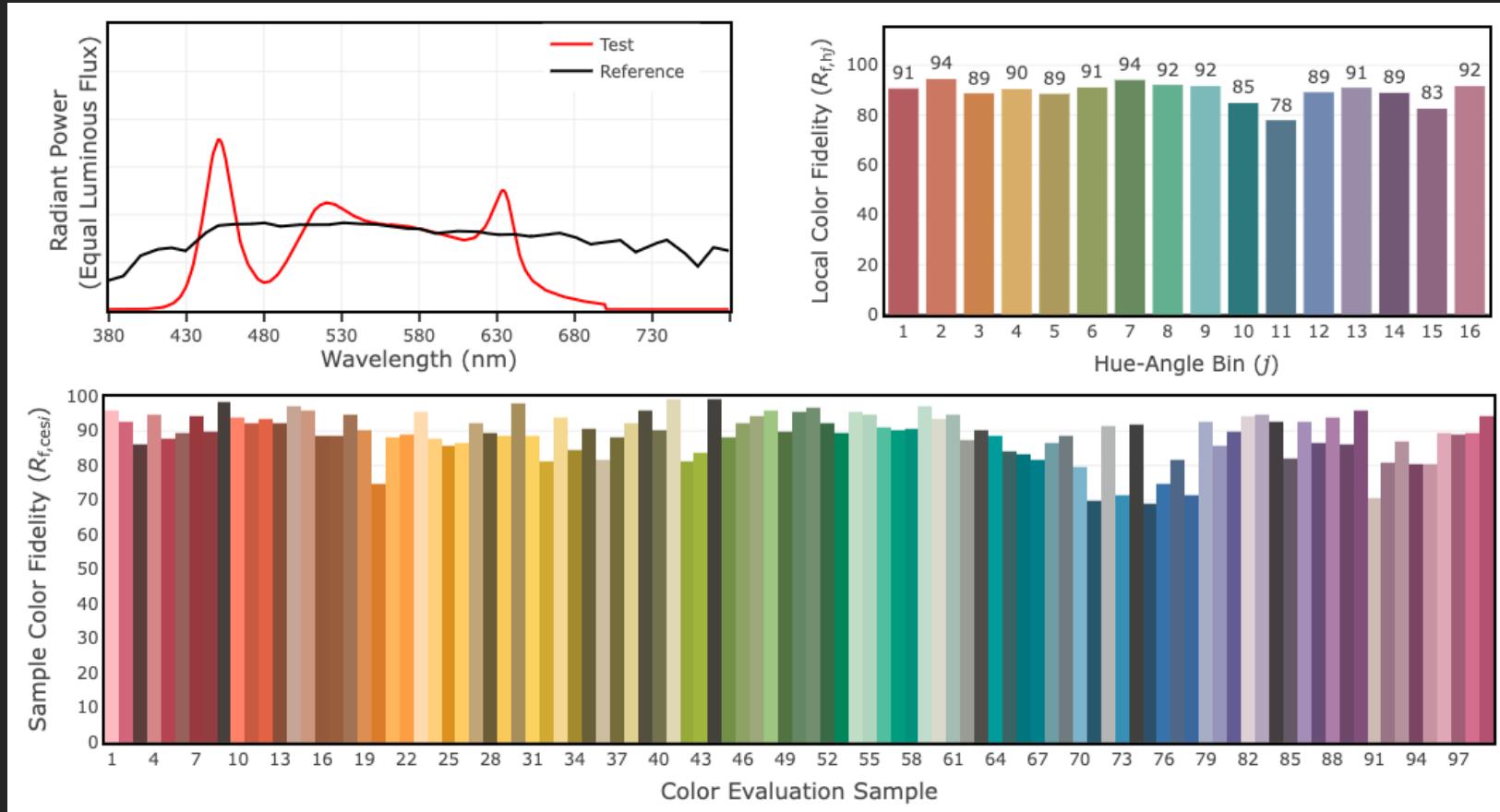


JETI

## KL PROFILE

TM-30-20

5600 K



JETI

## KL PROFILE

5600 K

Comparison chart: SSI vs TM30-20 vs CRI

JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
JTI_ELATION-KL-SPOT-IP_P5600_LED_100%	63	89	102	89,95	85,81
JTI_ELATION-KL-SPOT-IP_P5600_JTI_100%	63	89	102	89,95	85,81
JTI_ELATION-KL-SPOT-IP_P5600_JTI_50%	63	89	102	90,09	86,05
JTI_ELATION-KL-SPOT-IP_P5600_JTI_25%	63	89	102	90,44	86,55



JETI

Données constructeur

Manufacturer's data

ELATION

Données non communiquées

N/A - Data not provided

Explications / Explanations

K / CCT K / Duv /

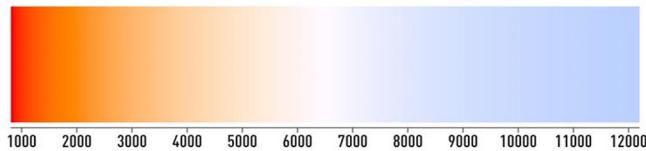
x,y coordinates

## Explications / Explanation

Type de données : Type of data:	Temp K	CCT K	Duv	x	y	SSI
------------------------------------	--------	-------	-----	---	---	-----



Températures des couleurs en Kelvin

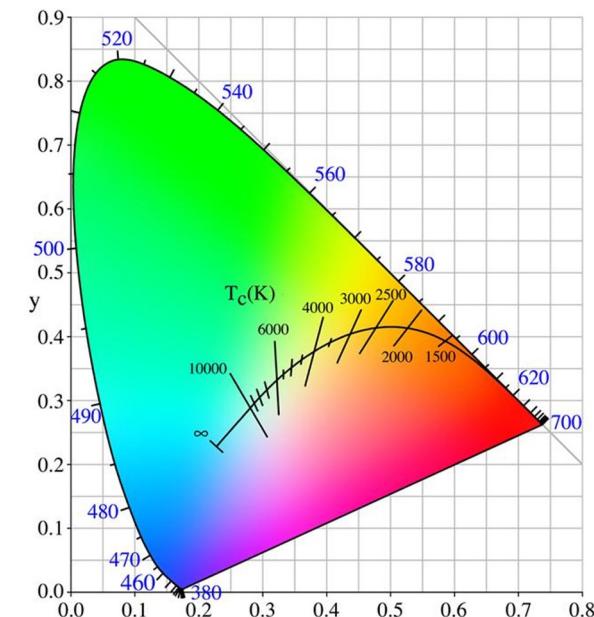


La température de couleur est la valeur cible idéale que nous cherchons à atteindre pour faire les mesures (3200 ou 5600). Celle-ci est basée sur la CCT et son unité est donc le Kelvin (K). La valeur peut être donnée directement par le projecteur ou réglée et ajustée avec les mesures prises par le spectroradiomètre JETI 1511 HiRes.

The color temperature is the ideal target value we aim to achieve for measurements (3200 or 5600). It is based on the CCT and its unit is Kelvin (K). The value can be directly provided by the projector or set and adjusted using the measurements taken by the JETI 1511 HiRes spectroradiometer.

# Explications / Explanation

Type de données : Type of data:	Temp K	CCT K	Duv	x	y	SSI
------------------------------------	--------	-------	-----	---	---	-----

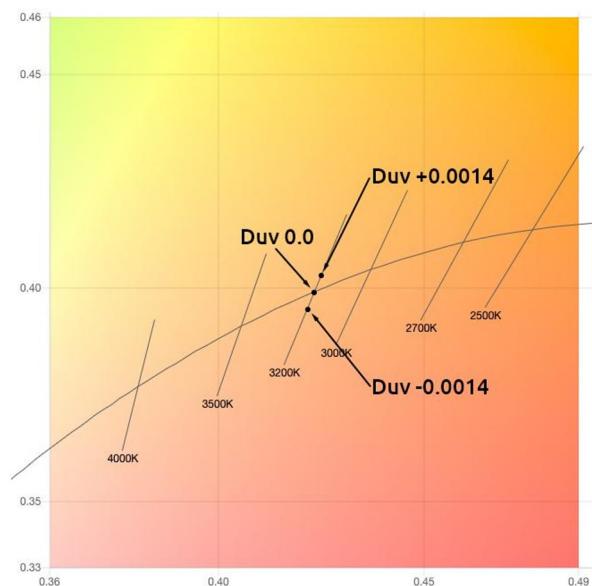


La CCT ou température de couleur corrélée, est la température précise d'un radiateur de Planck (corps noir) ayant la chromaticité la plus proche possible de celle associée à une distribution spectrale donnée. La CCT est donc calculée à partir de la distribution spectrale (SPD) de la source lumineuse ; Elle utilise comme unité standard le Kelvin (K). La CCT seule ne suffit pas pour définir précisément les coordonnées chromatiques ( $x$ ,  $y$  ou  $u'$ ,  $v'$ ) d'une couleur, il faut également le Duv.

CCT, or correlated color temperature, is the precise temperature of a Planckian radiator (black body) that has a chromaticity as close as possible to that associated with a given spectral distribution. CCT is calculated from the spectral power distribution (SPD) of the light source; it uses Kelvin (K) as the standard unit. CCT alone is not sufficient to precisely define the chromatic coordinates ( $x$ ,  $y$  or  $u'$ ,  $v'$ ) of a color, Duv is also required.

# Explications / Explanation

Type de données : Type of data:	Temp K	CCT K	Duv	x	y	SSI
------------------------------------	--------	-------	-----	---	---	-----



Le Duv ou Delta u,v est utilisé pour décrire la distance entre les coordonnées chromatiques de la source de lumière et le radiateur de Planck, appelé également lieu du corps noir. Une valeur négative indique que la source est en dessous de la courbe du corps noir (dominante magenta ou rose), une valeur positive indique que la source est au-dessus de la courbe du corps noir (dominante verte ou jaune). L'EBU TECH 3355 préconise une valeur limite de viabilité à la CCT (différence juste perceptible) de 0,0054, l'ANSI une valeur de +-0,006.

Duv or Delta u,v is used to describe the distance between the chromatic coordinates of the light source and the Planckian radiator, also known as the black body. A negative value indicates that the source is below the black body curve (magenta or pink tint), while a positive value indicates that the source is above the black body curve (green or yellow tint). The EBU TECH 3355 recommends a perceptibility threshold at the CCT (just noticeable difference) of 0.0054, while ANSI recommends a value of +-0.006.

# Explications / Explanation

Type de données :  
Type of data:

Temp K

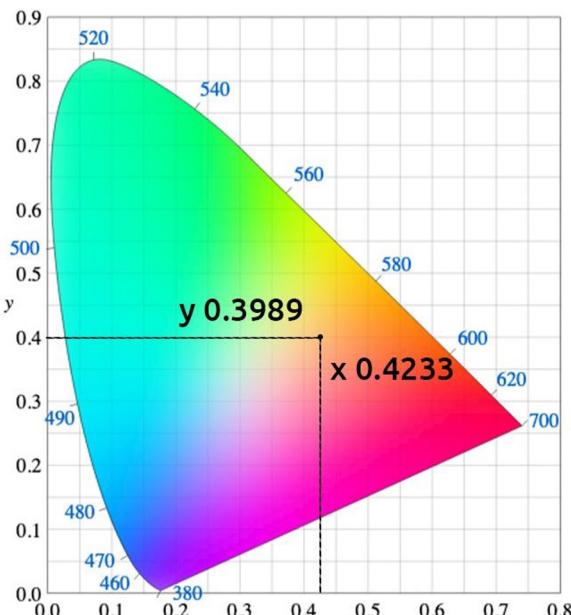
CCT K

Duv

x

y

SSI



Le système de coordonnées CIE xy 1931 est dérivé du système CIE XYZ. Les valeurs x et y sont des coordonnées cartésiennes qui permettent de définir précisément une couleur, sans toutefois prendre en compte sa luminance.

The CIE 1931 xy coordinate system is derived from the CIE XYZ system. The x and y values are Cartesian coordinates that allow for precise color definition, without considering its luminance.

## Tournage des tests

## Shooting tests

Directeur de Cininter	<b>François Roger</b>	Cininter, CEO
Directeur de la photographie, AFC	<b>Philippe Ros</b>	Cinematographer, AFC & co-chair of the ITC
Directeur technique de la CST	<b>Éric Chérioux</b>	CST Technical Manager
Directeur de la photographie, AFC	<b>Patrick Duroux</b>	Cinematographer AFC
Directrice de la photographie, UCO & Représentante du département image de la CST	<b>Françoise Noyon</b>	Cinematographer, UCO & Representative of the CST image department
Consultant en postproduction & Représentant du département image de la CST	<b>Thierry Beaumel</b>	Post-production consultant & Representative of the CST image department
Senior coloriste, AFC membre associé	<b>Jean Coudsi</b>	Senior Colorist, AFC associate member
Monteuse, CST	<b>Bohdana Korohod</b>	Editor, CST
Responsable de la communication externe et interne CST	<b>Sebastien Lefebvre</b>	Head of External and Internal Communications CST

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Directeur technique de la CST

Directrice de la photographie, UCO

& Représentante du département image de la CST

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