Journée Très LEDs - De beaux tests à faire

Images & mesures par constructeur

JTL 12

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A Bright LED day - Brilliant tests on the horizon

Images & measurements by manufacturer



K5600

ALPHA 300 LED

SONY VENICE 2

https://k5600.eu/products/kit-alpha-300-led

https://k5600.eu/en/products/kit-alpha-300-led

Bi-color

300 w

Données du fabricant
/ Manufacturer's data





K5600

ALPHA 300 LED

Interview du fabricant en français :

Interview with the manufacturer in French:

https://www.youtube.com/watch?v=4DHmmdJaZN4&list=PLW8aVswX2z2Y6fVtZuJdpemmqLPavU5if&index=10

Plan / Plan

- ALPHA 300 & Images
  - ✓ Peau caucasienne
    - Comparatifs ALPHA 300 vs tungstène
    - Sous-exposition : ND 06 vs gradateur
  - ✓ Peau noire
    - Comparatifs ALPHA 300 avec tungstène
    - Sous-exposition : ND 06 vs gradateur
- Mesures : Explications & exemples
- Mesures
- ALPHA 300, Spectra & SSI
- ALPHA 300, Images, Spectra & SSI
- ALPHA 300, & TM-30
- Données constructeur
- Explications : K, CCT K, Duv & coordonnées x,y

- ALPHA 300 & Images
  - ✓ Caucasian skin tone
    - Comparison ALPHA 300 vs tungsten
    - Underexposure: ND 06 vs dimmer
  - ✓ Black skin tone
    - Comparison ALPHA 300 vs tungsten
    - Underexposure ND 06 vs dimmer
- Measurements: Explanations & examples
- Measurements
- ALPHA 300, Spectra & SSI
- ALPHA 300, Images, Spectra & SSI
- ALPHA 300 & TM-30
- Manufacturer’s data
- Explanations on K, CCT K, Duv & x,y coordinates

ALPHA 300
& Images

CAUCASIAN

Alice



SONY VENICE 2

ALPHA 300

Comparison with

TUNGSTEN



TUNGSTEN REF.

SONY VENICE 2

GRADED

Images & données K5600 ALPHA 300 Images & Data



ALPHA 300

SONY VENICE 2

GRADED



TUNGSTEN REF.

SONY VENICE 2

GRADED



ALPHA 300

CAUCASIAN

Alice



SONY VENICE 2

ALPHA 300

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.

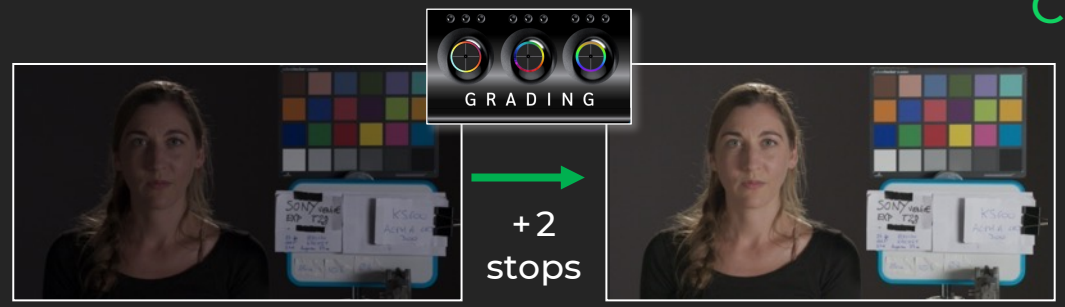
To check whether the projectors' dimmers are reliable, we compared two underexposed shots:

- 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.

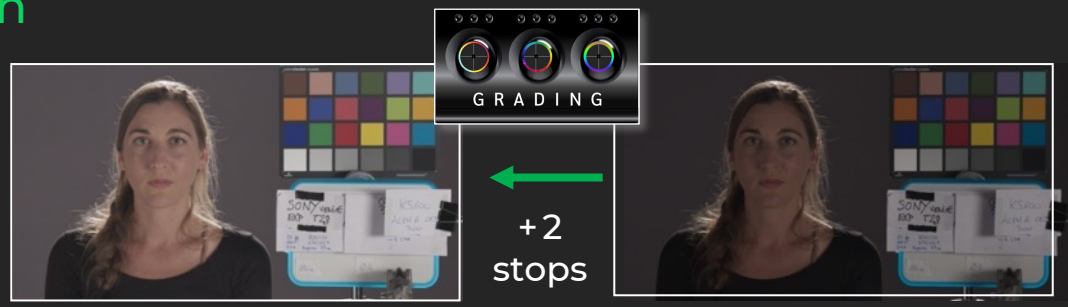
To correct the exposure up to the keylight, we worked in offset like with printer light points.

Comparison



UNDEREXPOSED
(-2 STOPS ND 06)

Back to Keylight



Back to Keylight

DIMMER @ 25%

UNGRADED



ALPHA 300

Underexposed -2 stops

GRADED



ALPHA 300

Underexposed -2 stops

UNGRADED



ALPHA 300

+ Dimmer @ 25%

GRADED



ALPHA 300
+ Dimmer @ 25%

Images & données K5600 ALPHA 300 Images & Data





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

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



GRADED

ALPHA 300
+ Dimmer @ 25%

ALPHA 300
Underexposed -2 stops



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

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



UNGRADED

ALPHA 300
+ Dimmer @ 25%

ALPHA 300
Underexposed -2 stops

CAUCASIAN

Alice



SONY VENICE 2

ALPHA 300

Comparison with

TUNGSTEN



TUNGSTEN REF.

SONY VENICE 2

GRADED

Images & données K5600 ALPHA 300 Images & Data



ALPHA 300

SONY VENICE 2

GRADED



TUNGSTEN REF.

SONY VENICE 2

GRADED



ALPHA 300

CAUCASIAN

Alice



SONY VENICE 2

ALPHA 300

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

UNGRADED



ALPHA 300

Underexposed -2 stops

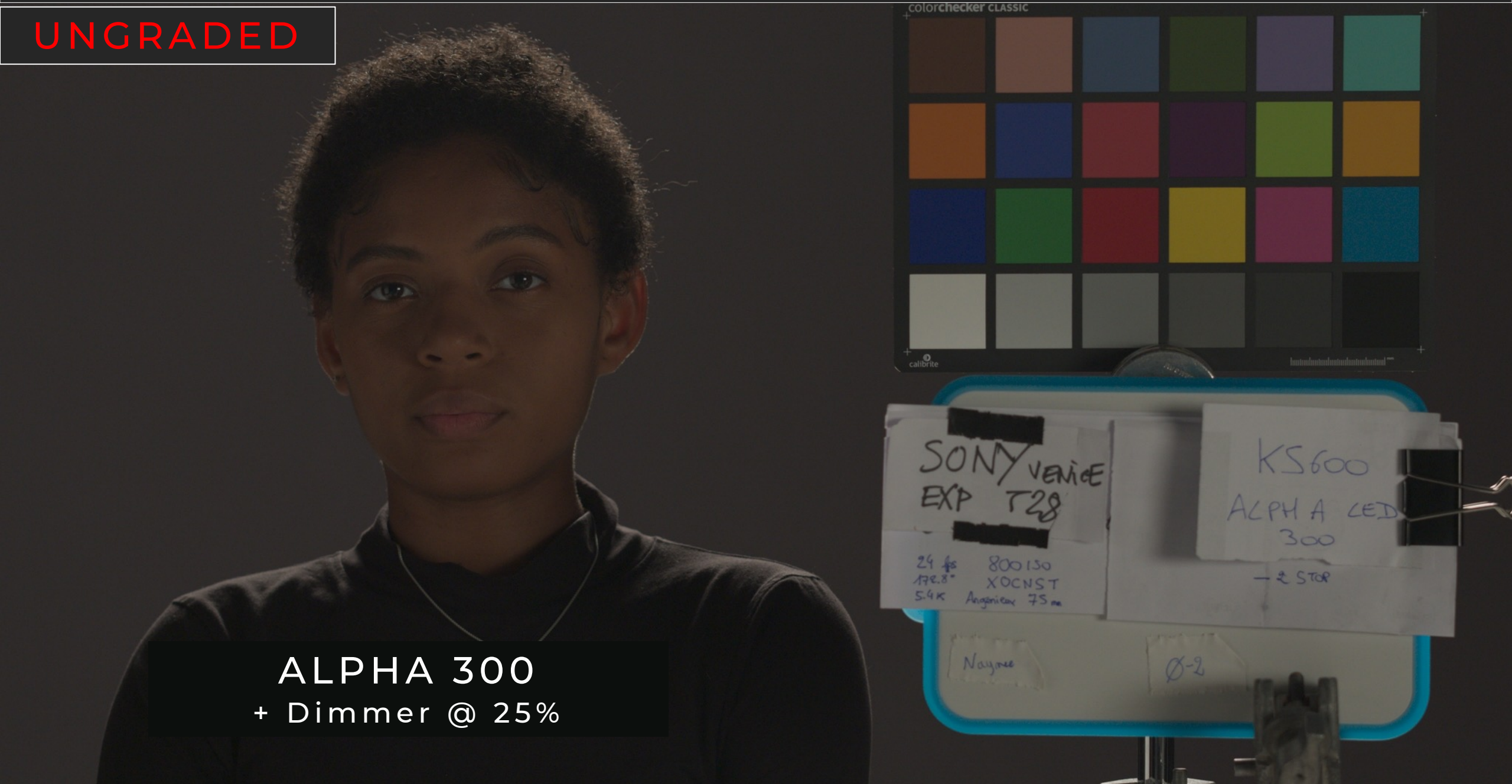
GRADED



ALPHA 300

Underexposed -2 stops

UNGRADED

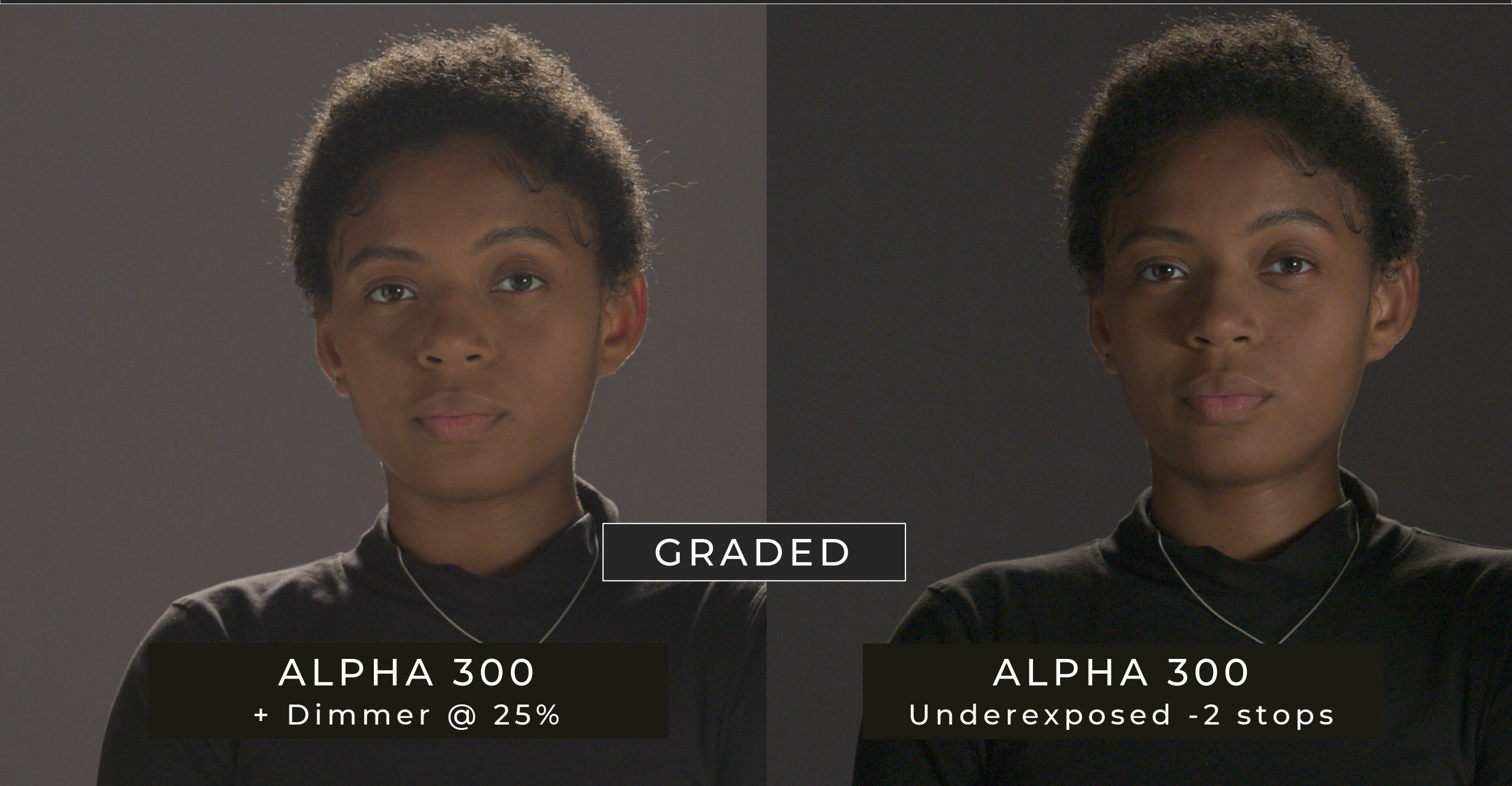


ALPHA 300
+ Dimmer @ 25%

GRADED



ALPHA 300
+ Dimmer @ 25%


GRADED
ALPHA 300
+ Dimmer @ 25%
ALPHA 300
Underexposed -2 stops



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

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



GRADED

ALPHA 300
+ Dimmer @ 25%

ALPHA 300
Underexposed -2 stops



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

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



UNGRADED

ALPHA 300
+ Dimmer @ 25%

ALPHA 300
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)	GOSSEN 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

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

Comparisons between different measuring equipment

- 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

Coordonnée x (CIE 1931 2°)
x coordinate (CIE 1931 2°)

Coordonnée y (CIE 1931 2°)
y coordinate (CIE 1931 2°)

Distance des coordonnées x y avec le corps noir
Distance of the x y coordinates from the black body

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

Température de couleur
Color temperature

Température de couleur corrélée donnée par le LED
Correlated color temperature provided by the LED

Index de similarité spectrale
Spectral Similarity Index

Example on ALPHA 300

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	SSI
ALPHA 300	100%	CCT set on **LED** - 3200	3358	-0,002	0,4114	0,3894	JTI_ALPHA-300_P3200_**LED_100%**	83

Température de couleur corrélée donnée par le LED
Correlated color temperature provided by the LED

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

Température de couleur corrélée donnée par le JETI
Correlated color temperature provided by the JETI

ALPHA 300	100%	CCT set on **JETI** - 3200	3205	-0,002	0,4208	0,3938	JTI_ALPHA-300_P3200_**JTI_100%**	84

Example on ALPHA 300

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	SSI
ALPHA 300	100%	CCT set on **LED** - 3200	3358	-0,002	0,4114	0,3894	JTI_ALPHA-300_P3200_**LED_100%**	83

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

ALPHA 300	100%	CCT set on **JETI** - 3200	3205	-0,002	0,4208	0,3938	JTI_ALPHA-300_P3200_**JTI_100%**	84

Images & données K5600 ALPHA 300 Images & Data

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

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

ALPHA 300

3200 K

5600 K

3200 K

ALPHA 300



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
ALPHA 300	100%	CCT set on **LED** - 3200	3358	-0,002	0,4114	0,3894	JTI_ALPHA-300_P3200_**LED_100%**	83
ALPHA 300	100%	CCT set on **JETI** - 3200	3205	-0,002	0,4208	0,3938	JTI_ALPHA-300_P3200_**JTI_100%**	84
ALPHA 300	50%	CCT set on **JETI** - 3200	3118	0	0,4287	0,4009	JTI_ALPHA-300_P3200_**JTI_50%**	85
ALPHA 300	25%	CCT set on **JETI** - 3200	3016	0,002	0,4383	0,4088	JTI_ALPHA-300_P3200_**JTI_25%**	85



SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
3023	0,0002	96	-	-	-	VISUAL REF-TUNGSTEN
3368	-0,0013	83	3314	-0,0008	85	GSN_ALPHA-300_P3200_**LED_100%**
3209	-0,0009	85	3182	-0,001	86	GSN_ALPHA-300_P3200_**JTI_100%**
3137	0,0014	86	3086	0,0008	87	GSN_ALPHA-300_P3200_**JTI_50%**
3027	0,003	86	2993	0,0023	86	GSN_ALPHA-300_P3200_**JTI_25%**



ALPHA 300



5600 K

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
ALPHA 300	100%	CCT set on **LED** - 5600	5209	-0,004	0,339	0,3388	JTI_ALPHA-300_P5600_**LED_100%**	74
ALPHA 300	100%	CCT set on **JETI** - 5600	5606	-0,004	0,3301	0,332	JTI_ALPHA-300_P5600_**JTI_100%**	73
ALPHA 300	50%	CCT set on **JETI** - 5600	5376	-0,002	0,3352	0,3399	JTI_ALPHA-300_P5600_**JTI_50%**	74
ALPHA 300	25%	CCT set on **JETI** - 5600	5399	0,001	0,3349	0,3343	JTI_ALPHA-300_P5600_**JTI_25%**	74

SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
5209	-0,0027	74	4992	-0,0015	76	GSN_ALPHA-300_P5600__**LED_100**
5516	-0,0018	74	5309	-0,0008	76	GSN_ALPHA-300_P5600_**JTI_100%**
5295	0,0006	74	5202	0,0006	76	GSN_ALPHA-300_P5600_**JTI_50%**
5314	0,0039	74	5224	0,0031	76	GSN_ALPHA-300_P5600_**JTI_25%**





ALPHA 300

Spectra & SSI

TM-30-18 & CRI

3200 K

5600 K



JETI

Images & données K5600 ALPHA 300 Images & Data

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

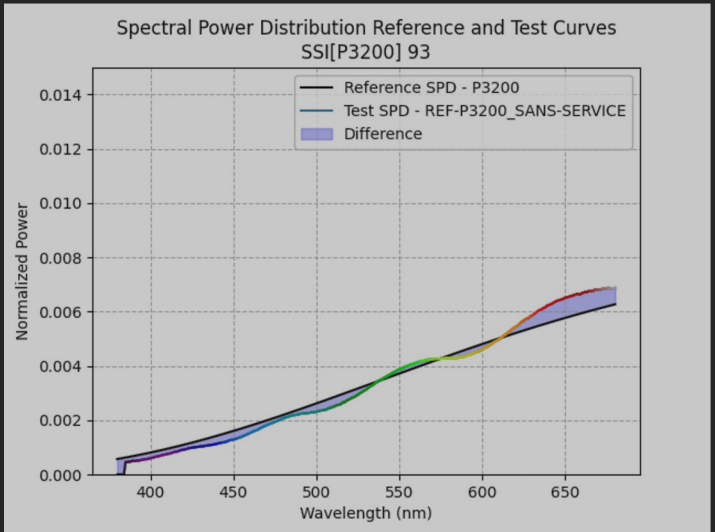
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93

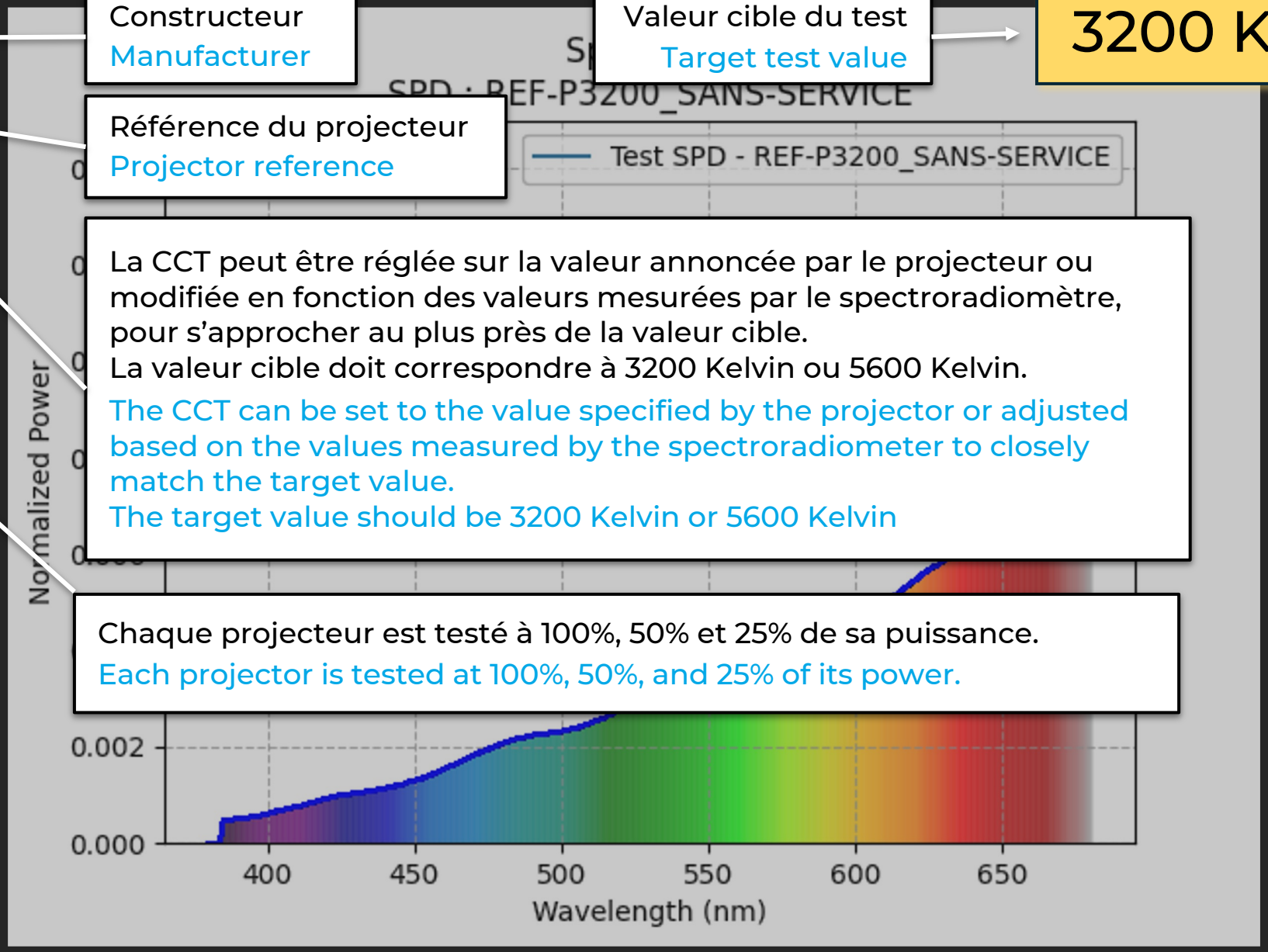


Constructeur
Manufacturer

Référence du projecteur
Projector reference

Valeur cible du test
Target test value

3200 K



La CCT peut être réglée sur la valeur annoncée par le projecteur ou modifiée en fonction des valeurs mesurées par le spectroradiomètre, pour s'approcher au plus près de la valeur cible.
La valeur cible doit correspondre à 3200 Kelvin ou 5600 Kelvin.

The CCT can be set to the value specified by the projector or adjusted based on the values measured by the spectroradiometer to closely match the target value.
The target value should be 3200 Kelvin or 5600 Kelvin

Chaque projecteur est testé à 100%, 50% et 25% de sa puissance.

Each projector is tested at 100%, 50%, and 25% of its power.

Images & données K5600 ALPHA 300 Images & Data

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

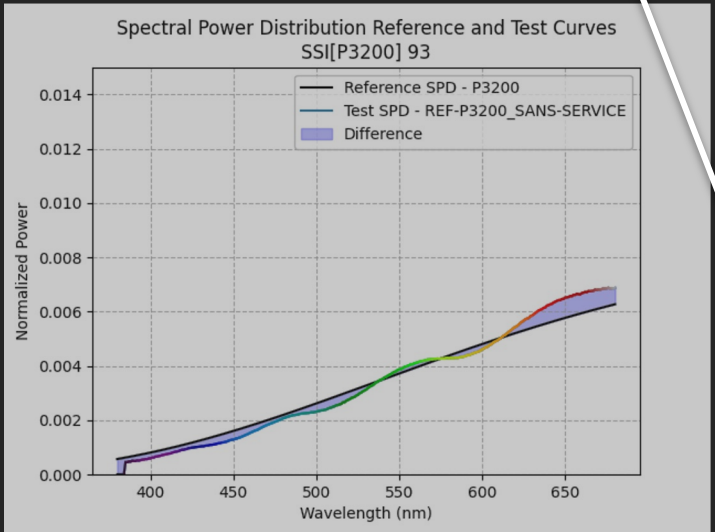
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93



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_a 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_e** peut être trouvée dans l'annexe des mesures.
R_a is the color rendering index value based on the average of the first 8 test colors. This is the usual CRI value.
The R_e value can be found in the appendix of the measurements.

IES TM-30-18 https://webstore.ansi.org/standards/iesna/ansiiestm3020
Color fidelity **R_f** mesure la ressemblance ou la dissemblance des couleurs aux couleurs références (similaire au CRI).
Gamut **R_g** Donne le niveau de saturation de la couleur. Les valeurs inférieures à 100 indiquent une saturation inférieure à la référence.
Color fidelity R_f measures the similarity or dissimilarity of colors to the reference colors (similar to CRI).
Gamut R_g indicates the level of color saturation. Values below 100 indicate a saturation lower than the reference.

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

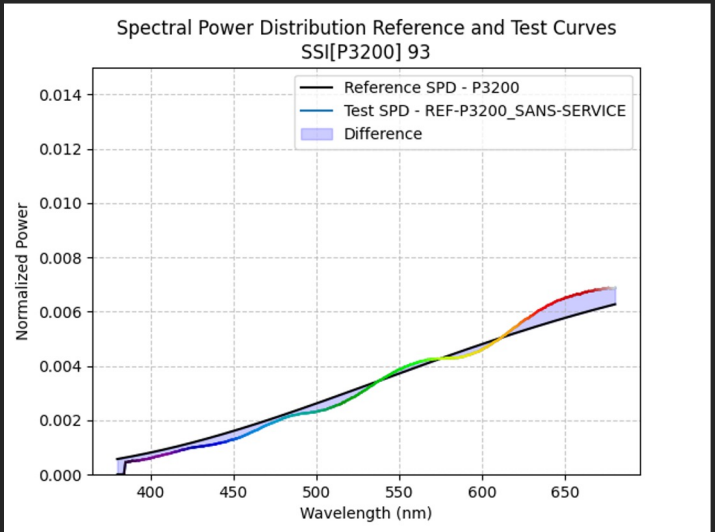
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

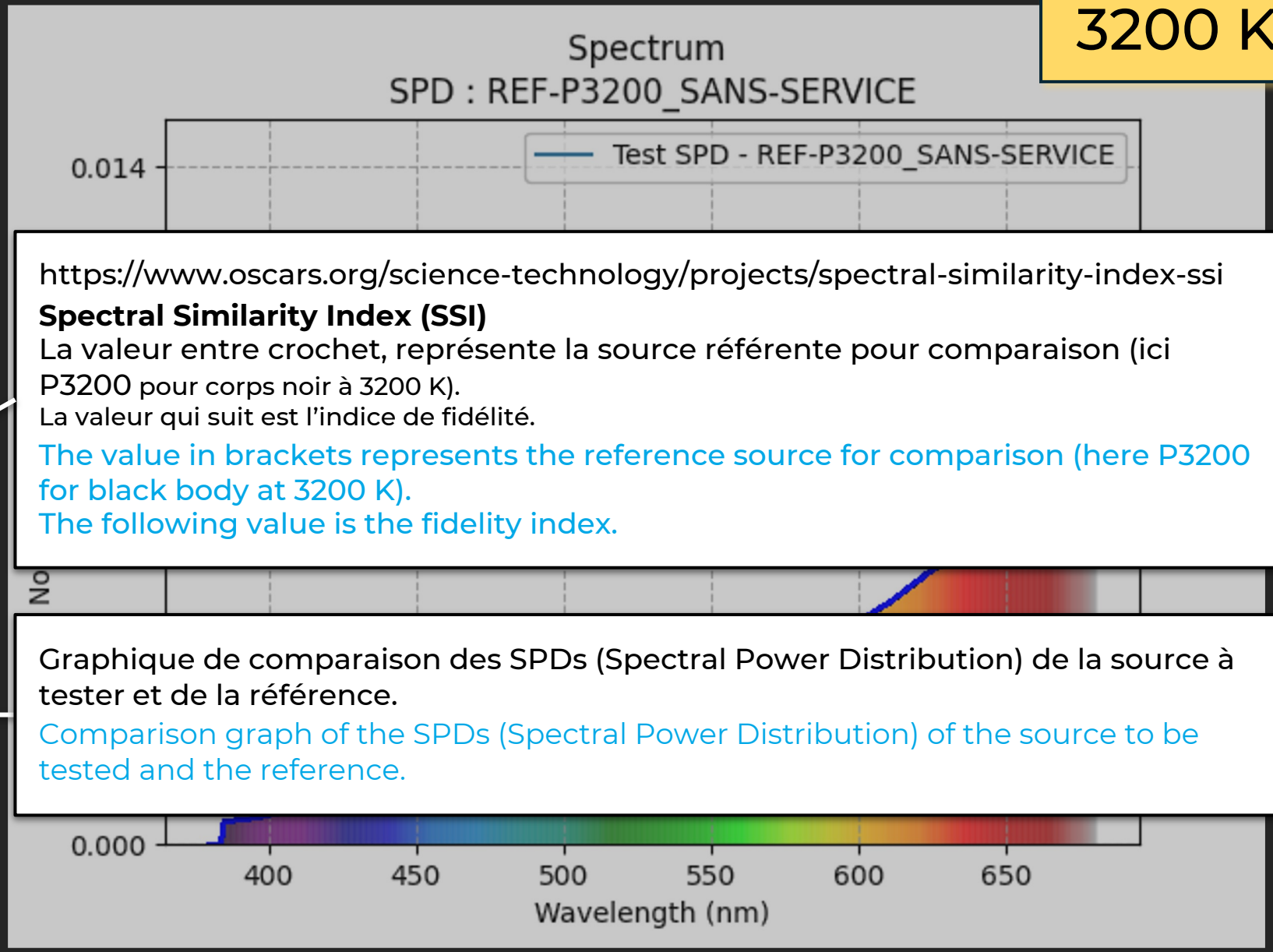
CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93



3200 K



https://www.oscars.org/science-technology/projects/spectral-similarity-index-ssi

Spectral Similarity Index (SSI)

La valeur entre crochet, représente la source référente pour comparaison (ici P3200 pour corps noir à 3200 K).

La valeur qui suit est l'indice de fidélité.

The value in brackets represents the reference source for comparison (here P3200 for black body at 3200 K).

The following value is the fidelity index.

Graphique de comparaison des SPDs (Spectral Power Distribution) de la source à tester et de la référence.

Comparison graph of the SPDs (Spectral Power Distribution) of the source to be tested and the reference.

ALPHA 300

3200 K



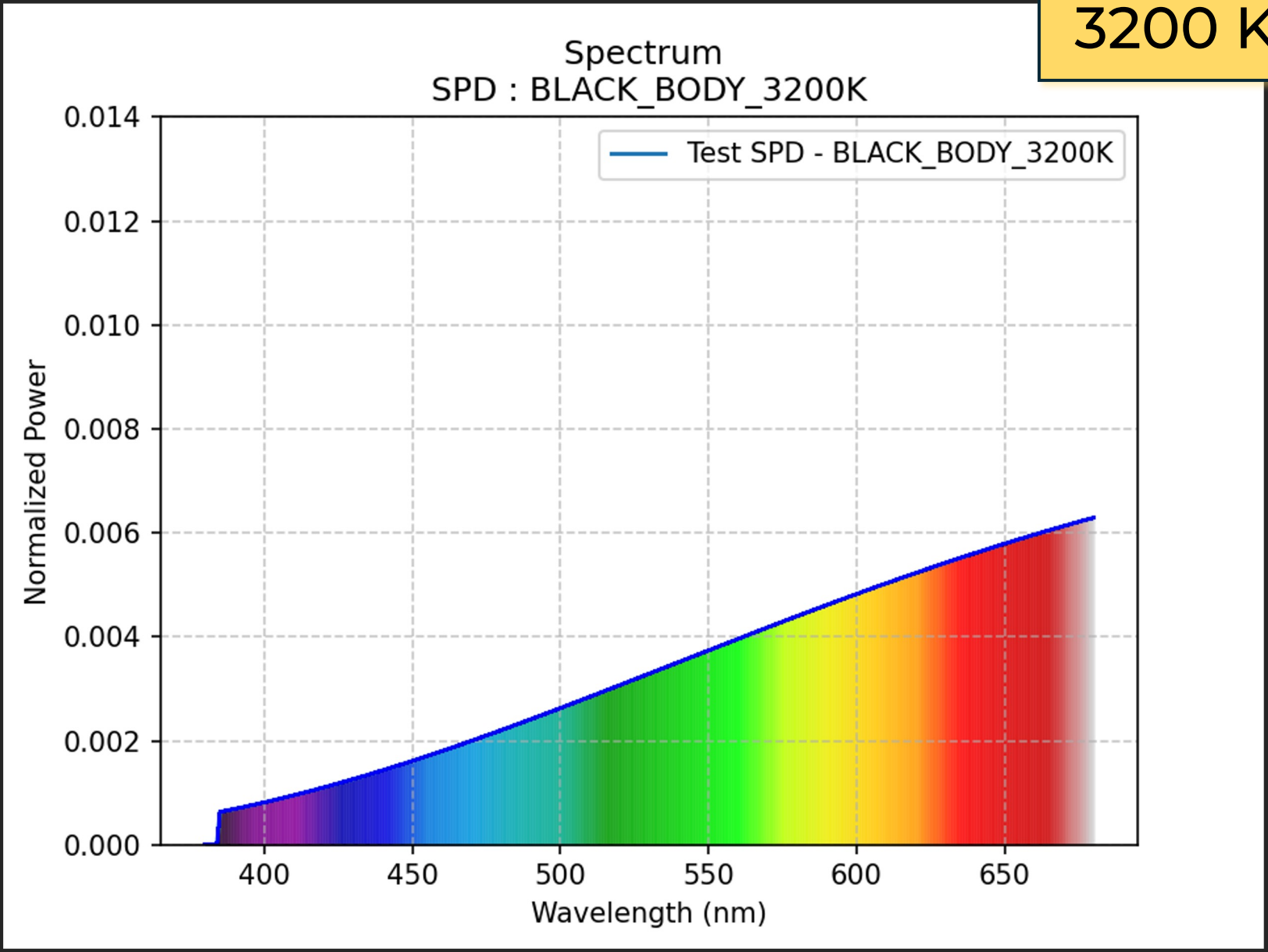
JETI

SSI REFERENCE

Corps noir / Black body

3200 K

3200 K



SOURCE TUNGSTEN comparative

3200 K

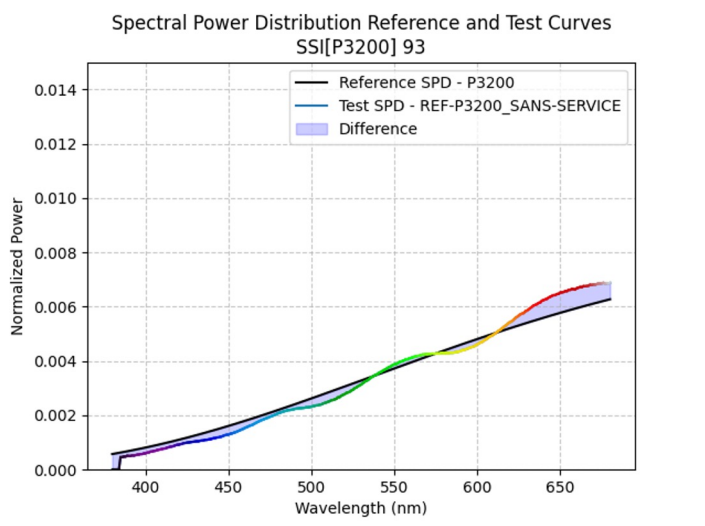
CCT 3012 Duv 0,001

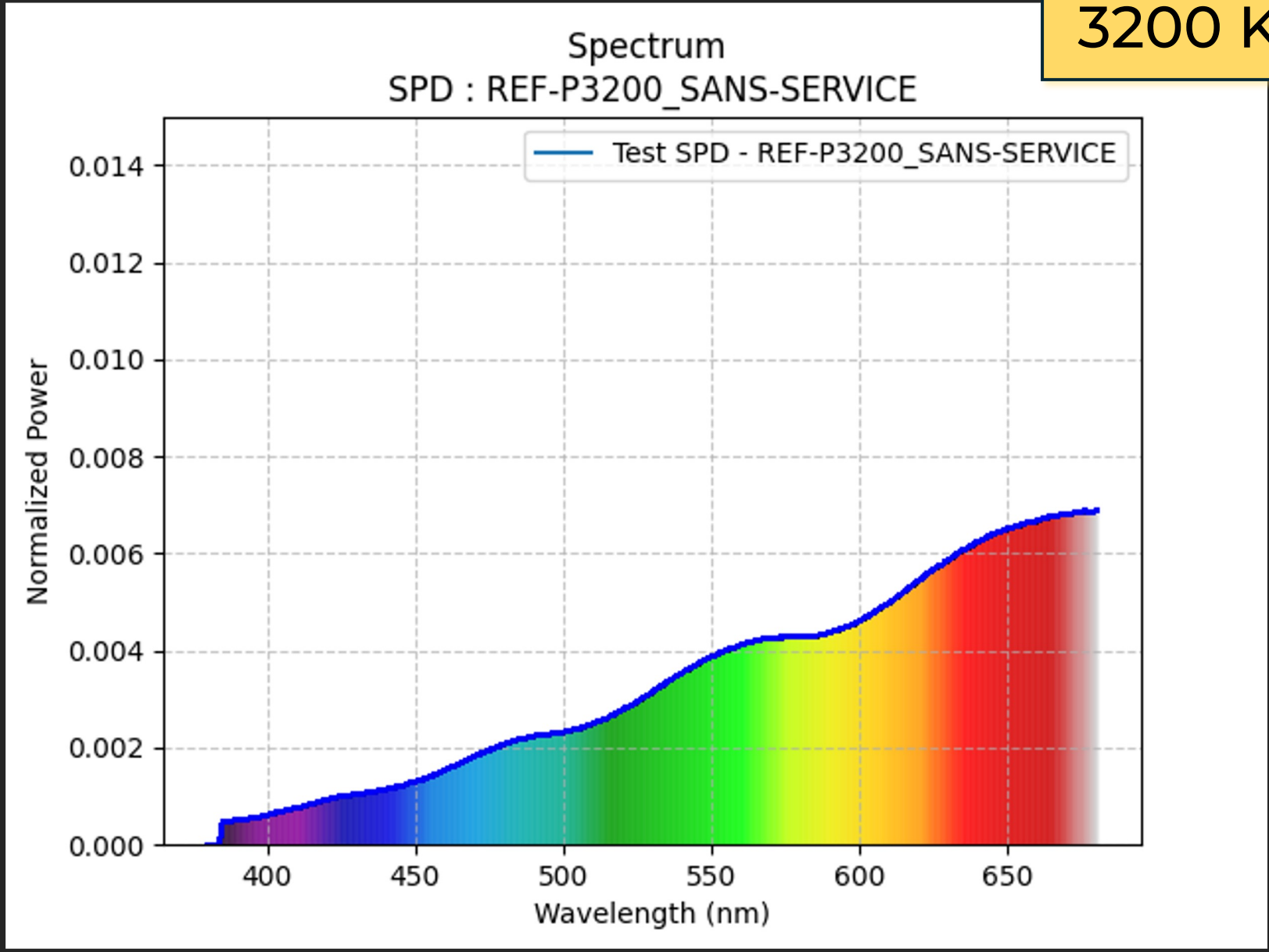
CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93





K5600

ALPHA 300

Power: 100% - CCT set on LED

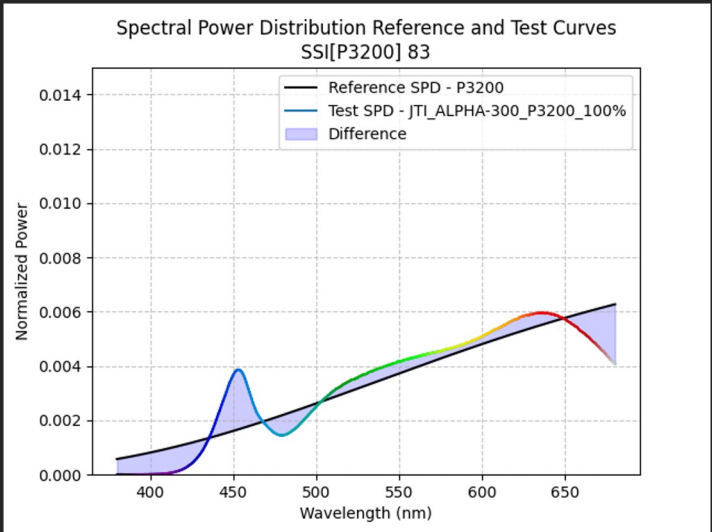
CCT 3358 Duv -0,002

CIE 1931 2° x 0.4114 y 0.3894

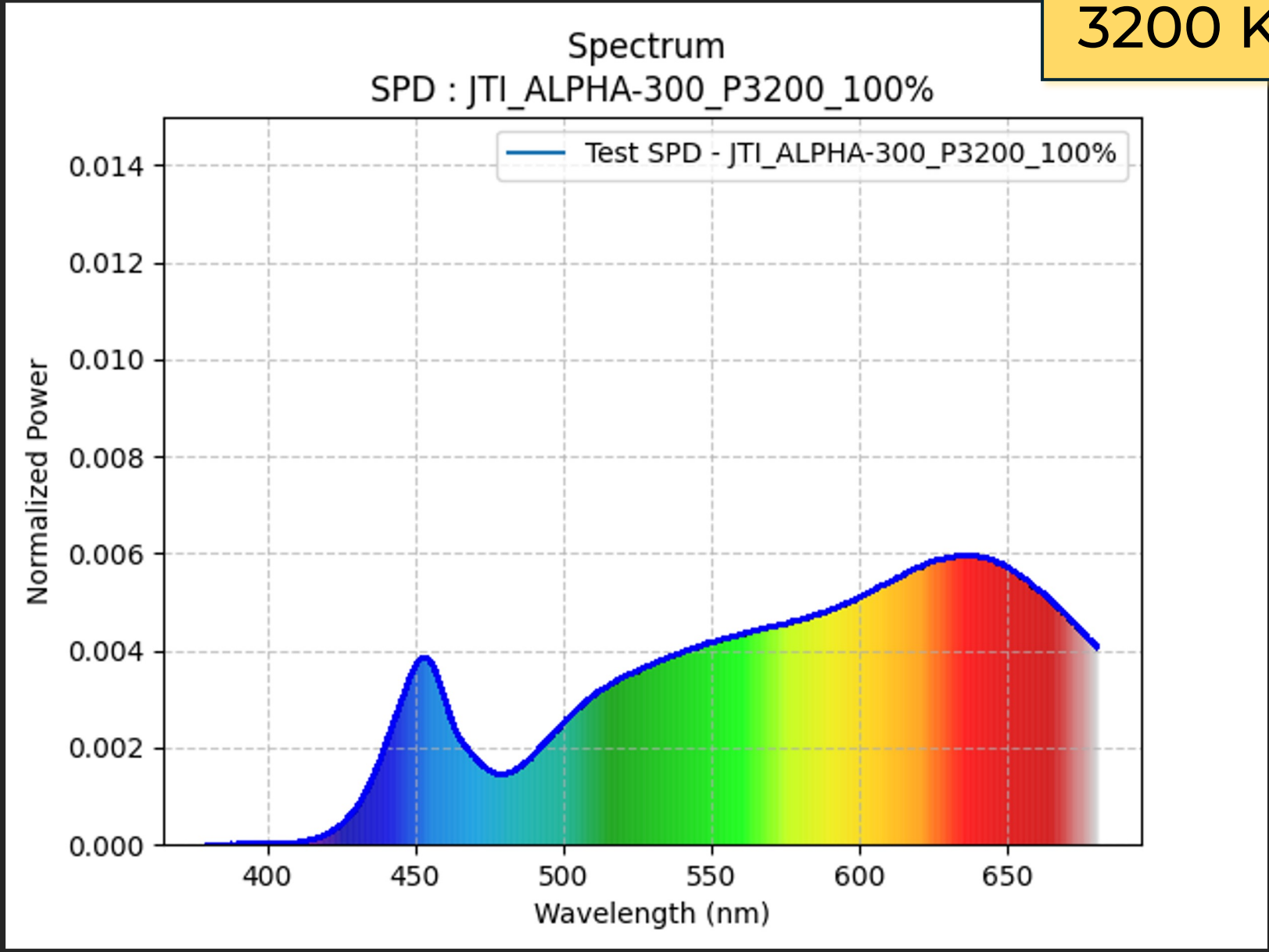
CRI Ra 95.54

IES TM-30-18 Rf 93 Rg 103

SSI[P3200] 83



3200 K



K5600

ALPHA 300

Power: 100% - CCT set on JETI

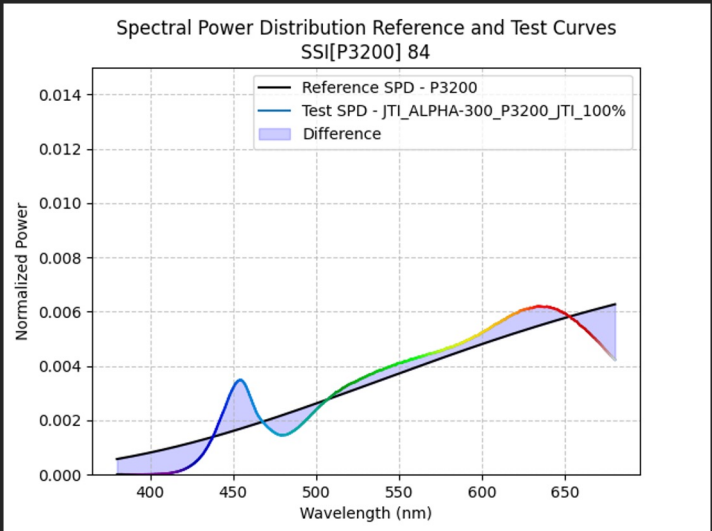
CCT 3205 Duv -0,002

CIE 1931 2° x 0.4208 y 0.3938

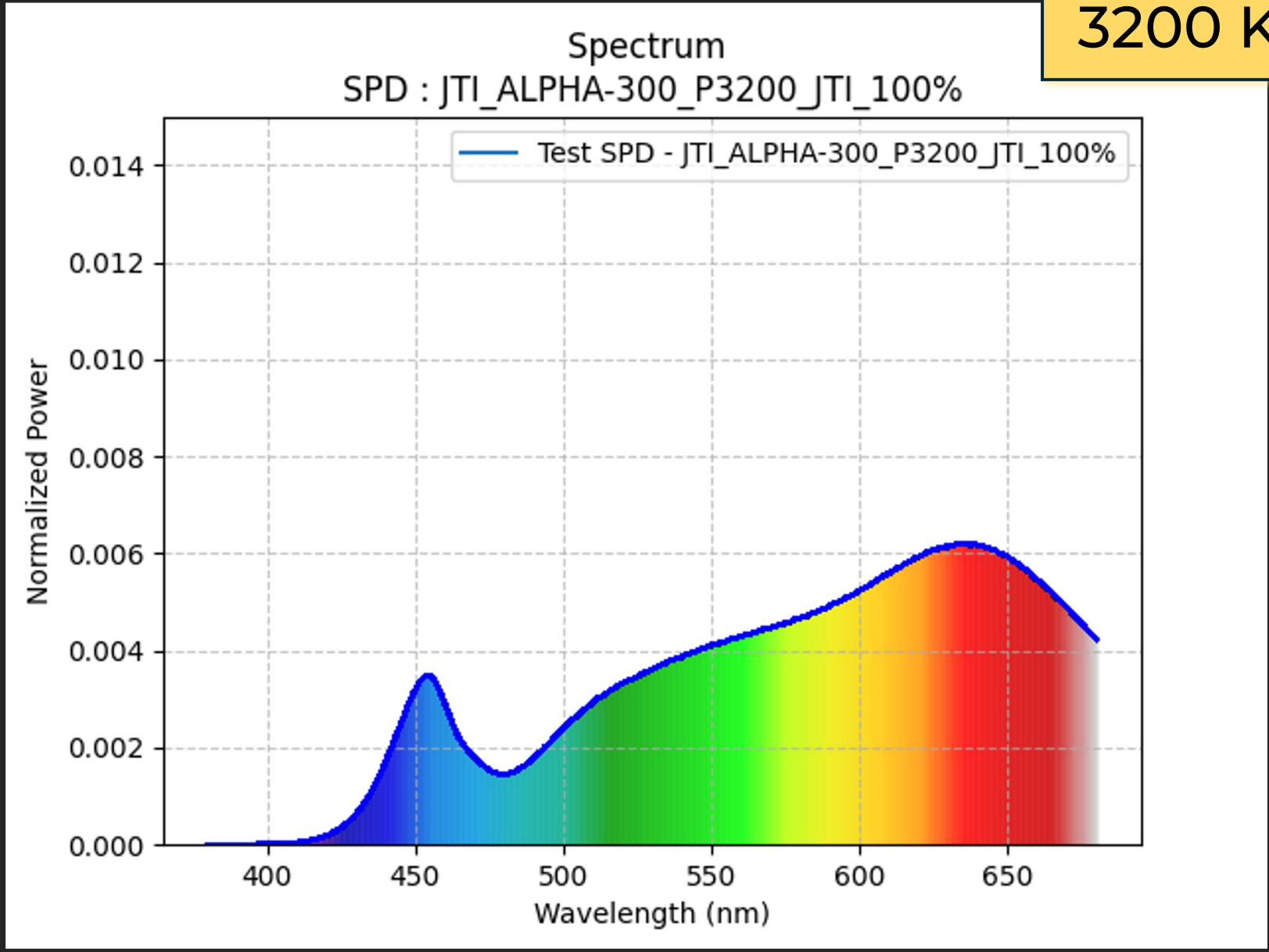
CRI Ra 95.91

IES TM-30-18 Rf 94 Rg 103

SSI[P3200] 84



3200 K



K5600

ALPHA 300

Power: 50% - CCT set on JETI

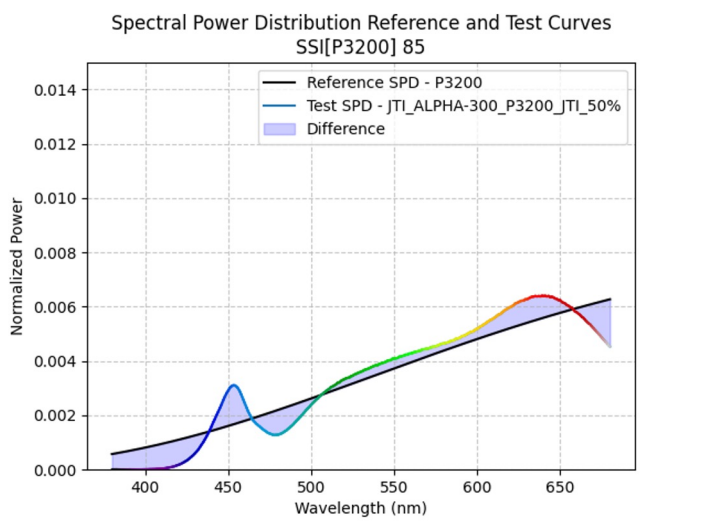
CCT 3118 Duv -0,000

CIE 1931 2° x 0.4287 y 0.4009

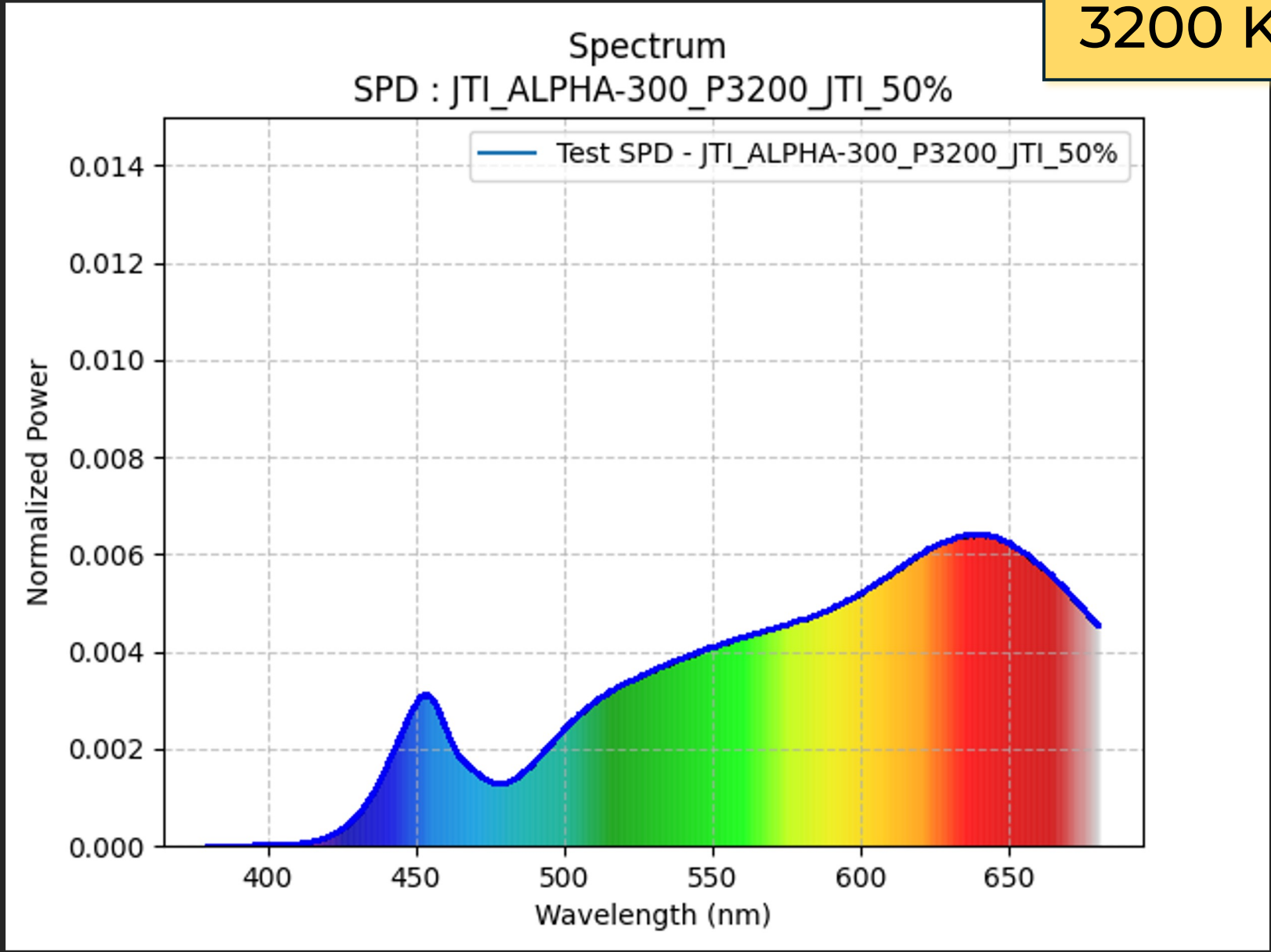
CRI Ra 96.31

IES TM-30-18 Rf 95 Rg 103

SSI[P3200] 85



3200 K



Images & données K5600 ALPHA 300 Images & Data

K5600

ALPHA 300

Power: 25% - CCT set on JETI

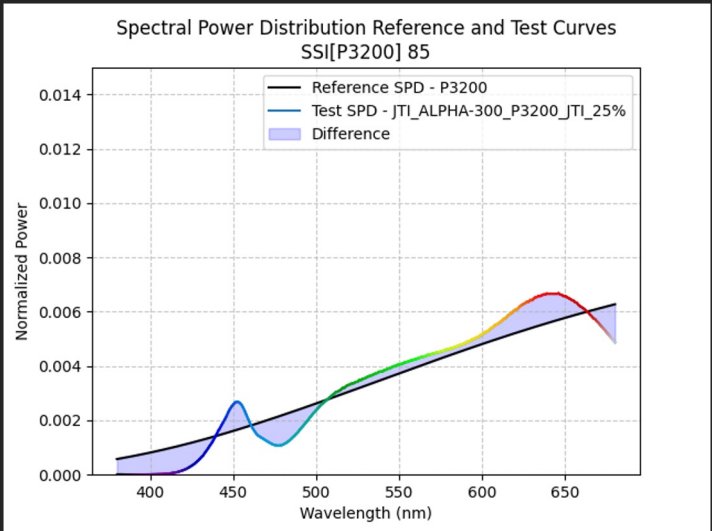
CCT 3016 Duv 0,002

CIE 1931 2° x 0.4383 y 0.4088

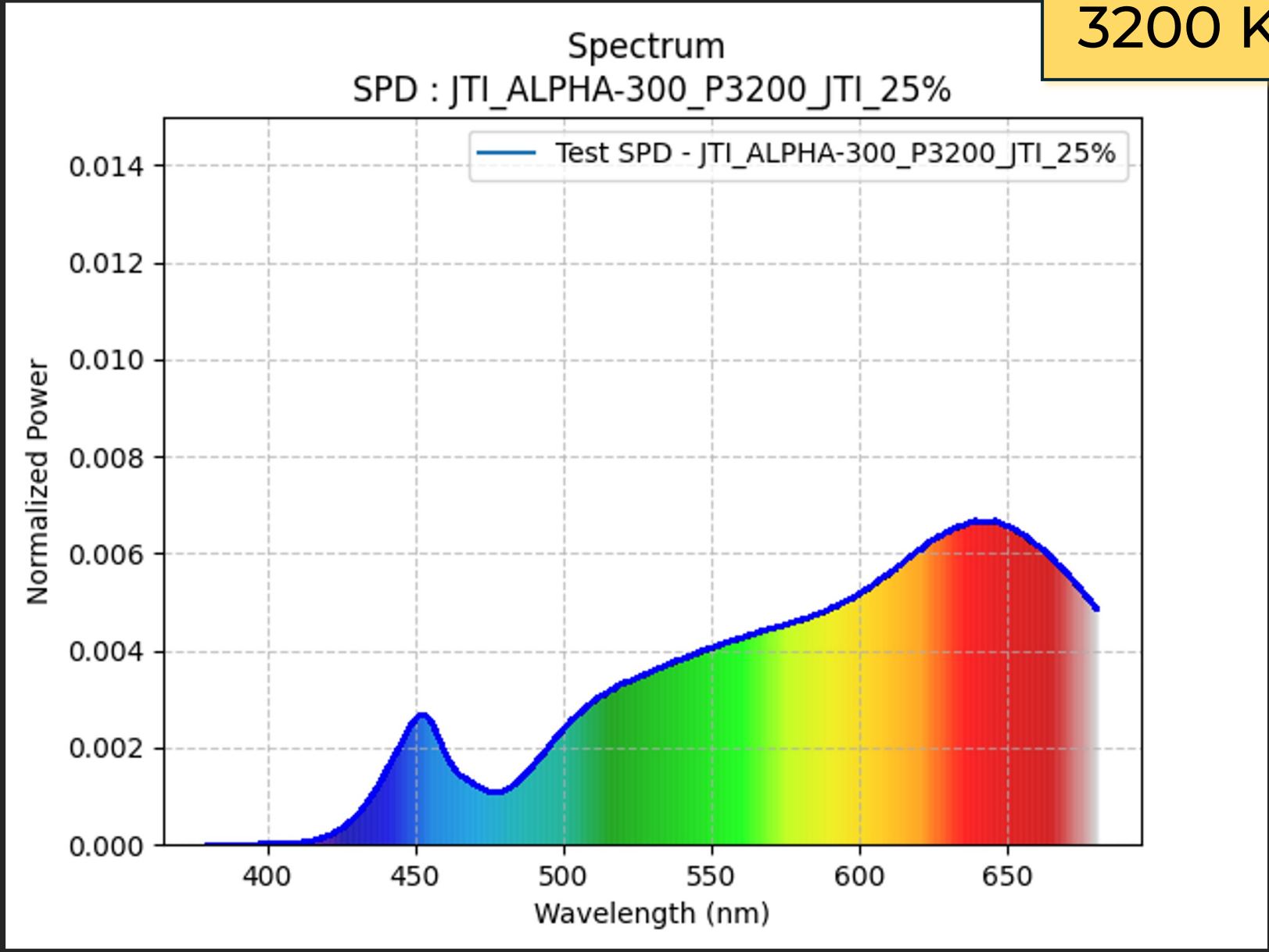
CRI Ra 96.54

IES TM-30-18 Rf 95 Rg 102

SSI[P3200] 85



3200 K



ALPHA 300

5600 K



JETI

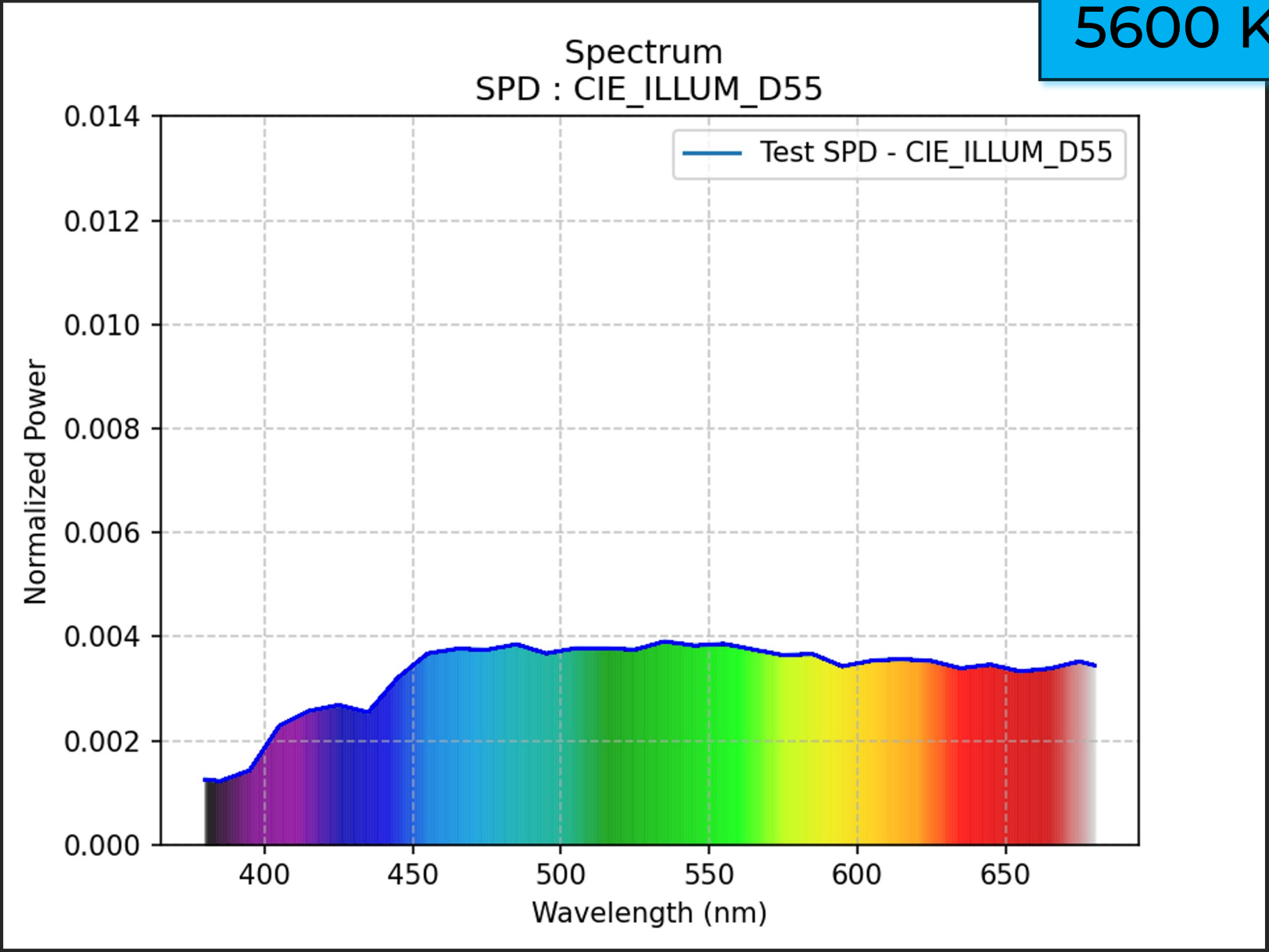
5600 K

SSI REFERENCE Daylight Locus

CIE illuminant D55* ≃ 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.



SOURCE HMI comparative

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

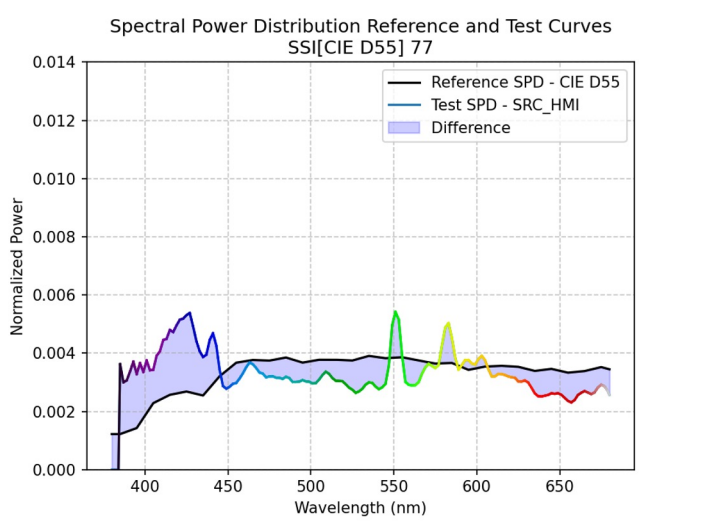
CCT 5605 Duv 0,000

CIE 1931 2° x 0.3301 y 0.3274

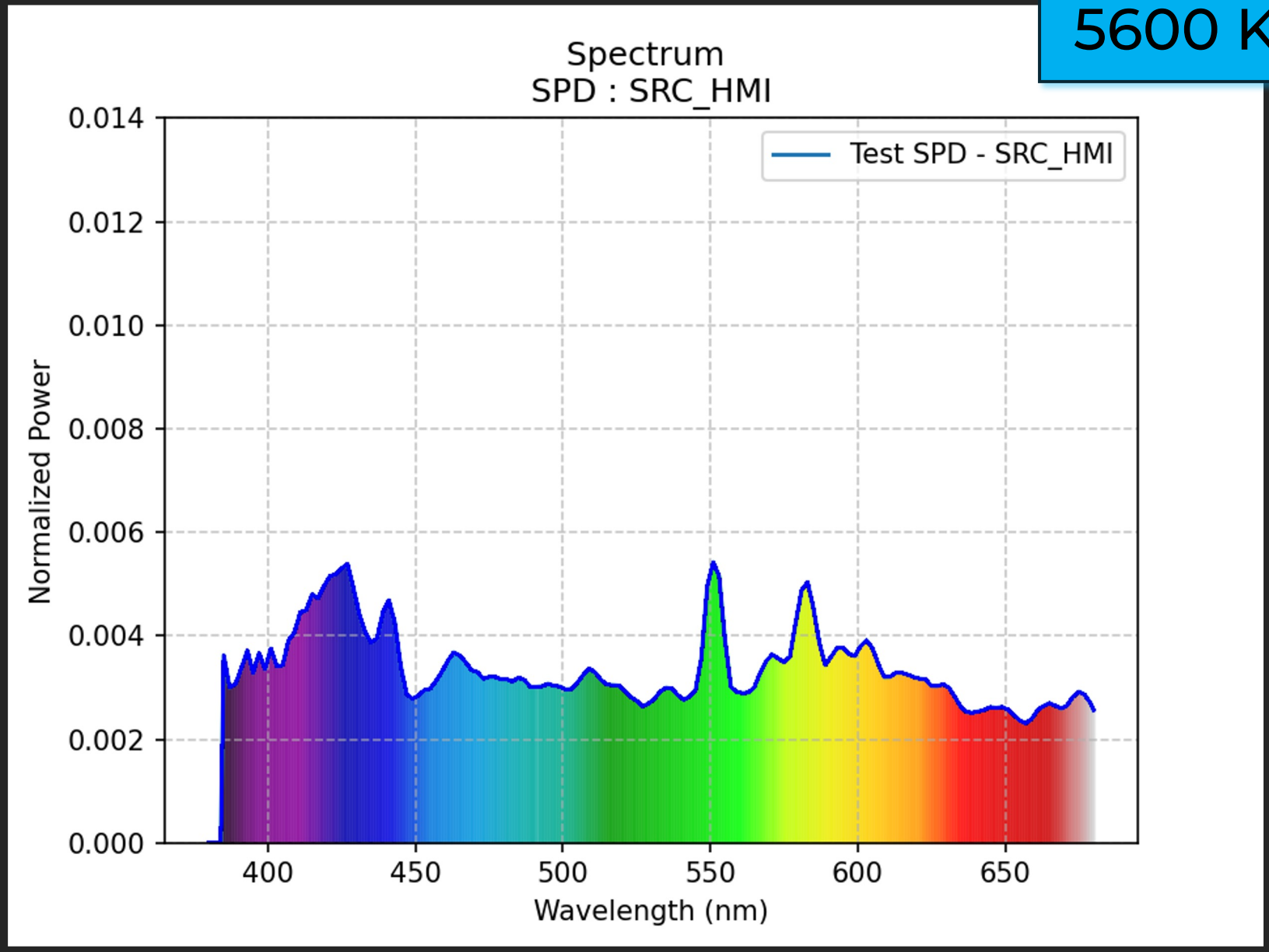
CRI Ra -

IES TM-30-18 Rf - Rg -

SSI[CIE D55] 77



5600 K



Images & données K5600 ALPHA 300 Images & Data

K5600

ALPHA 300

Power: 100% - CCT set on LED

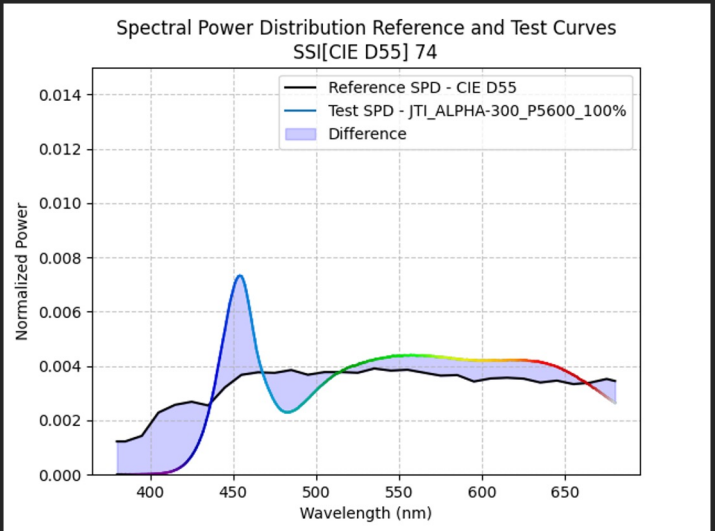
CCT 5209 Duv -0,004

CIE 1931 2° x 0.3390 y 0.3388

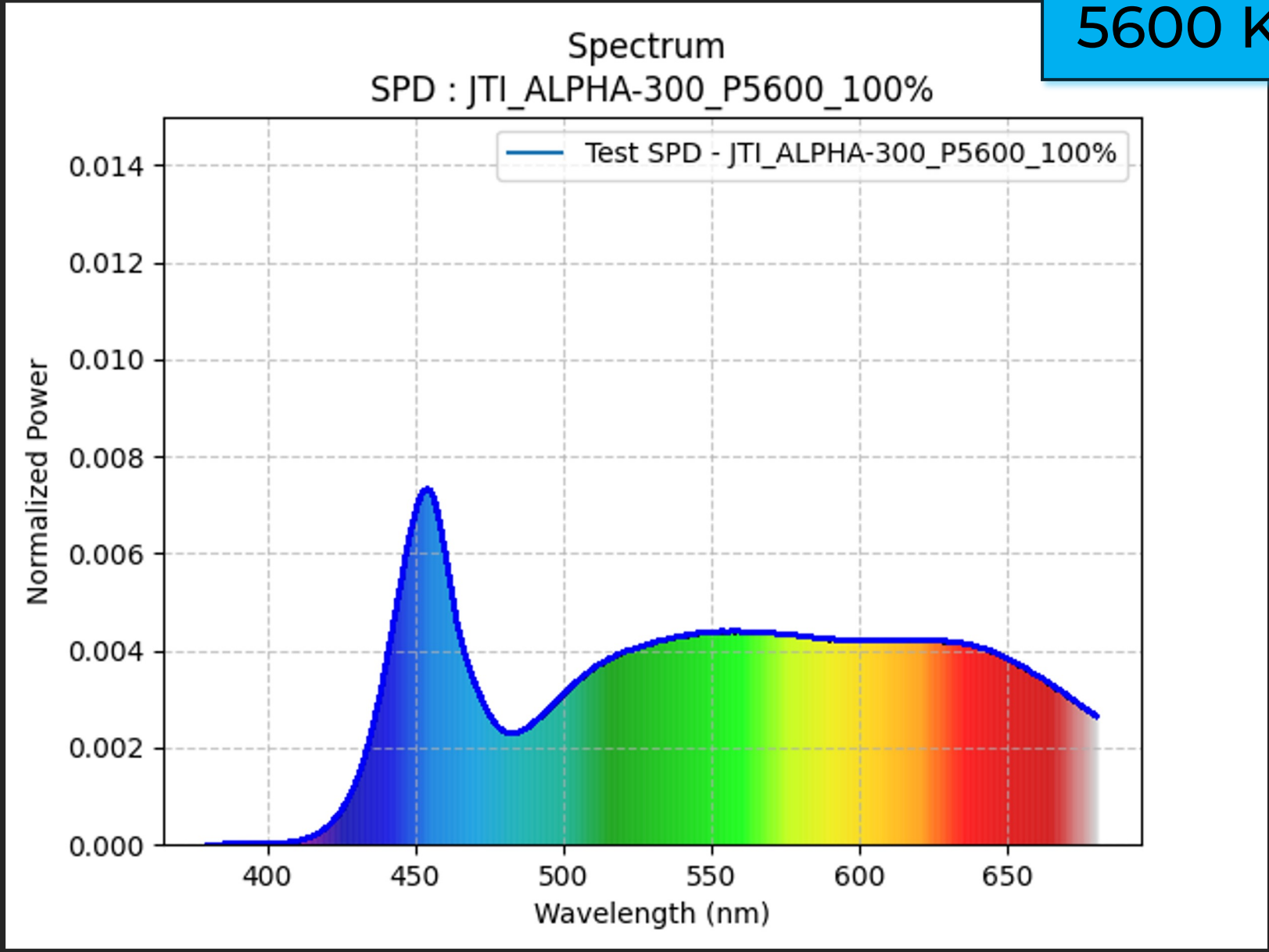
CRI Ra 93.35

IES TM-30-18 Rf 90 Rg 104

SSI [CIE D55] **74**



5600 K



K5600

ALPHA 300

Power: 100% - CCT set on JETI

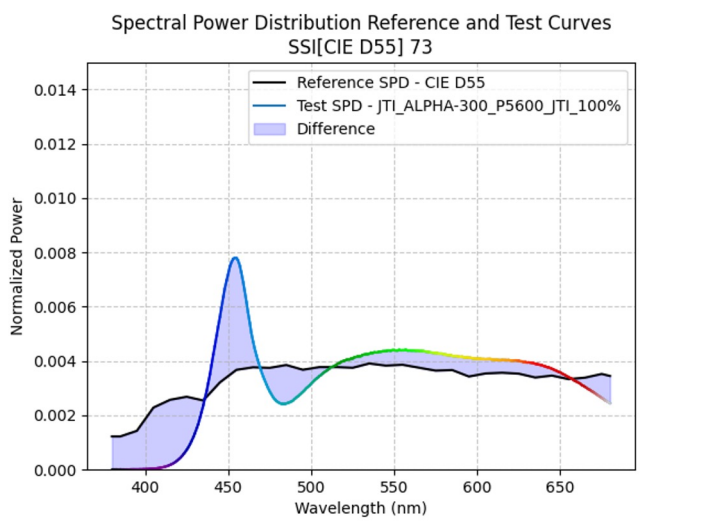
CCT 5606 Duv -0,004

CIE 1931 2° x 0.3301 y 0.3320

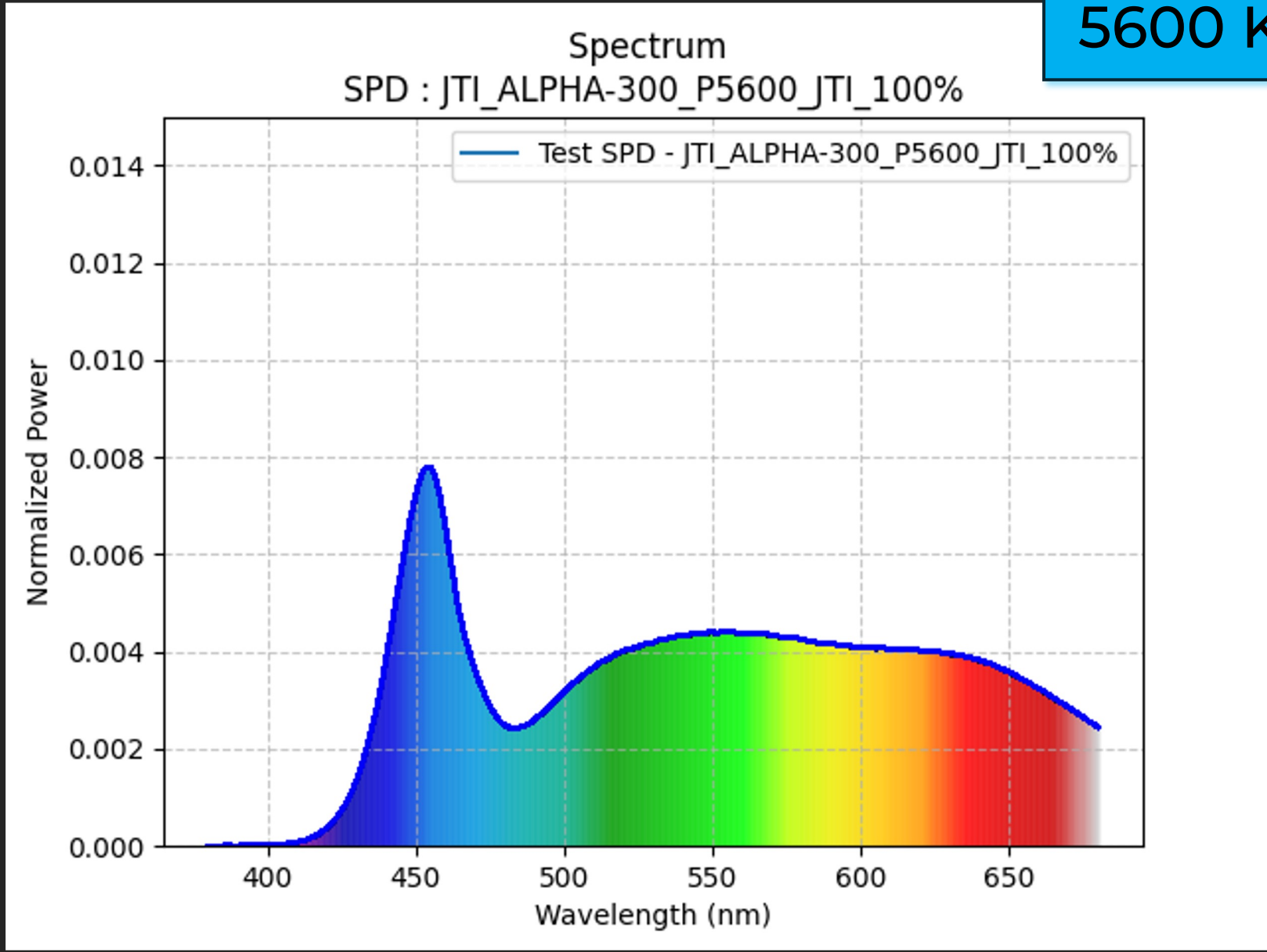
CRI Ra 93.07

IES TM-30-18 Rf 90 Rg 103

SSI[CIE D55] 73



5600 K



Images & données K5600 ALPHA 300 Images & Data

K5600

ALPHA 300

Power: 50% - CCT set on JETI

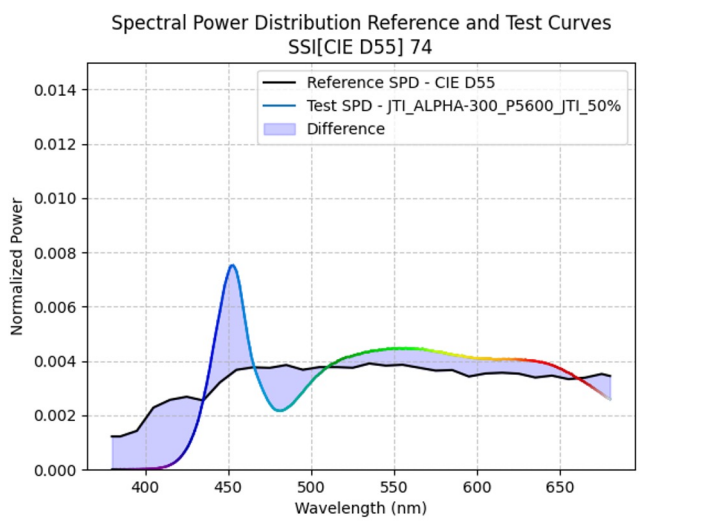
CCT 5376 Duv -0,002

CIE 1931 2° x 0.3352 y 0.3399

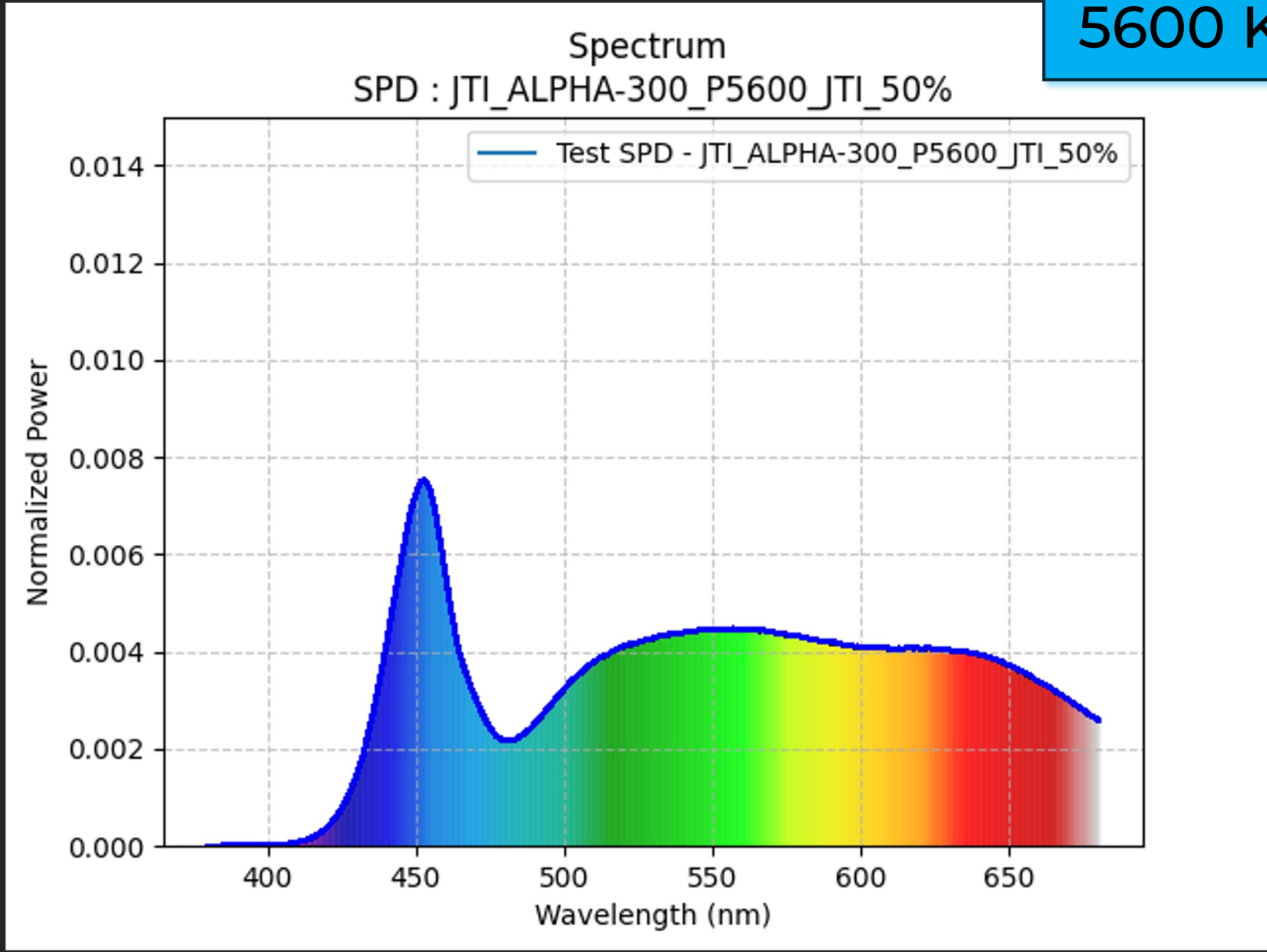
CRI Ra 91.87

IES TM-30-18 Rf 90 Rg 103

SSI [CIE D55] **74**



5600 K



Images & données K5600 ALPHA 300 Images & Data

K5600

ALPHA 300

Power: 25% - CCT set on JETI

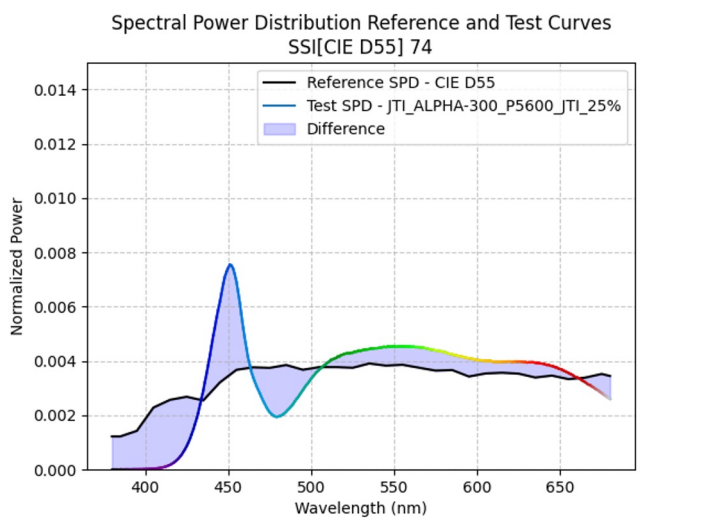
CCT 5399 Duv 0,001

CIE 1931 2° x 0.3349 y 0.3443

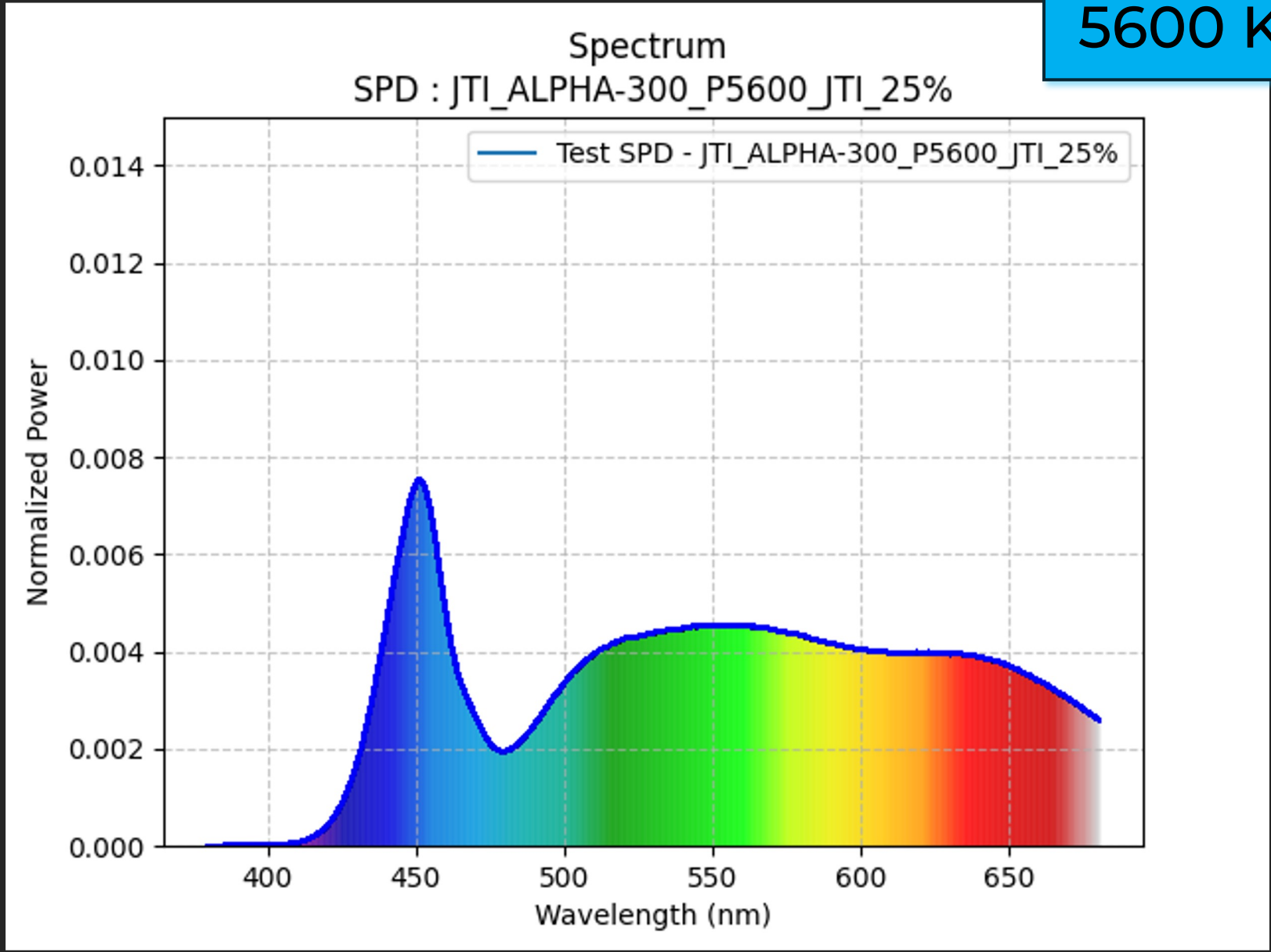
CRI Ra 90.33

IES TM-30-18 Rf 89 Rg 103

SSI [CIE D55] **74**



5600 K



ALPHA 300

Images, Spectra

& SSI



JETI



TUNGSTEN REF.

SONY VENICE 2

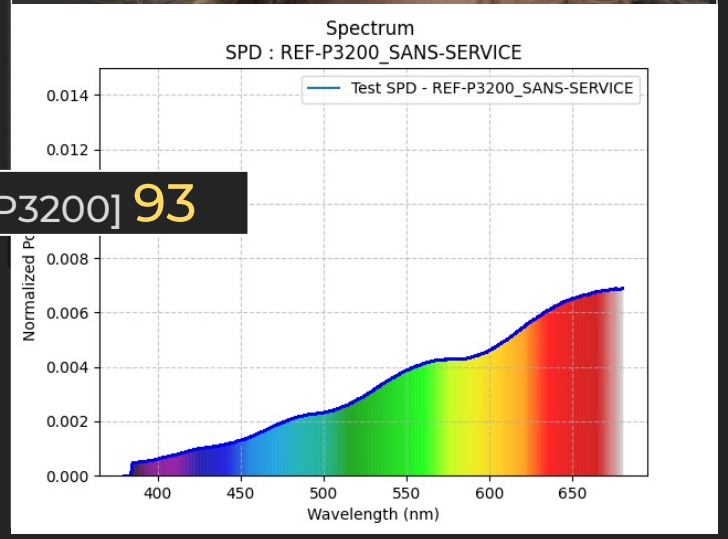
GRADED



ALPHA 300

Images & données K5600 ALPHA 300 Images & Data

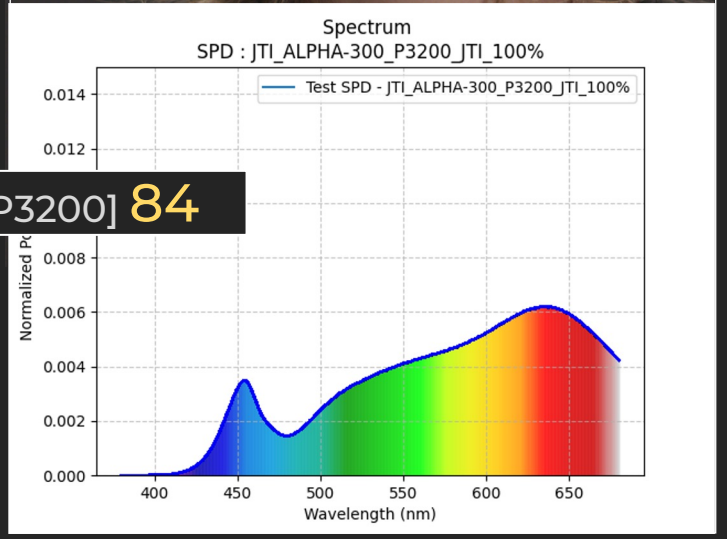




SSI[P3200] 93

TUNGSTEN REF.



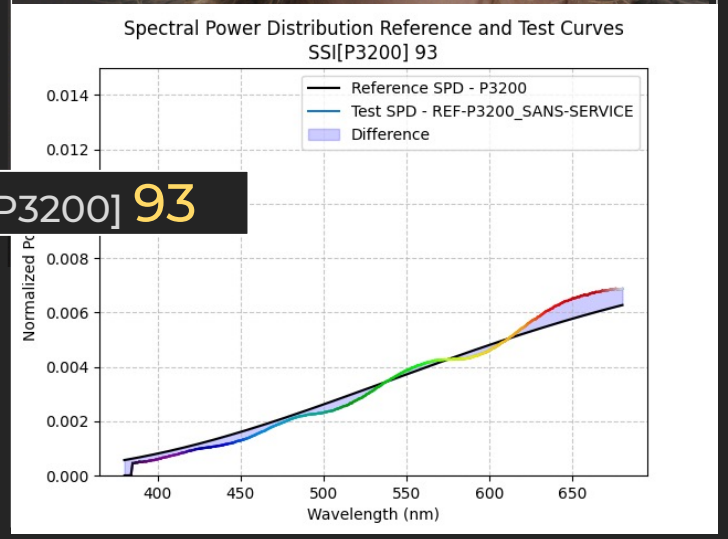


SSI[P3200] 84

ALPHA 300

Images & données K5600 ALPHA 300 Images & Data

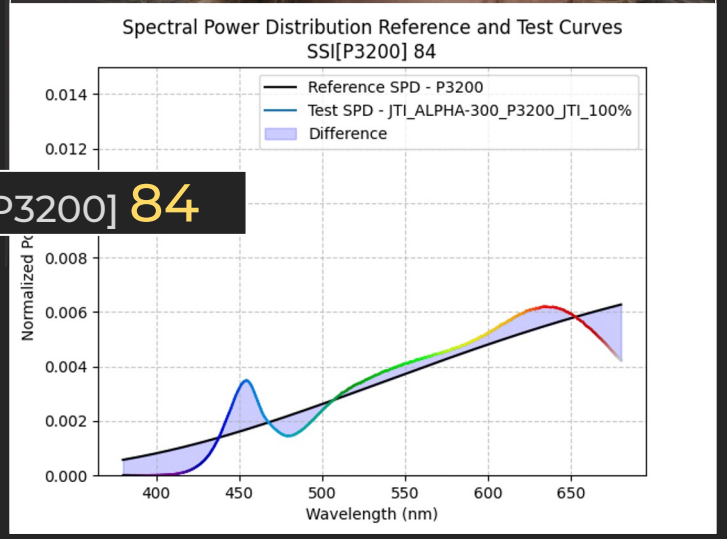




SSI[P3200] 93

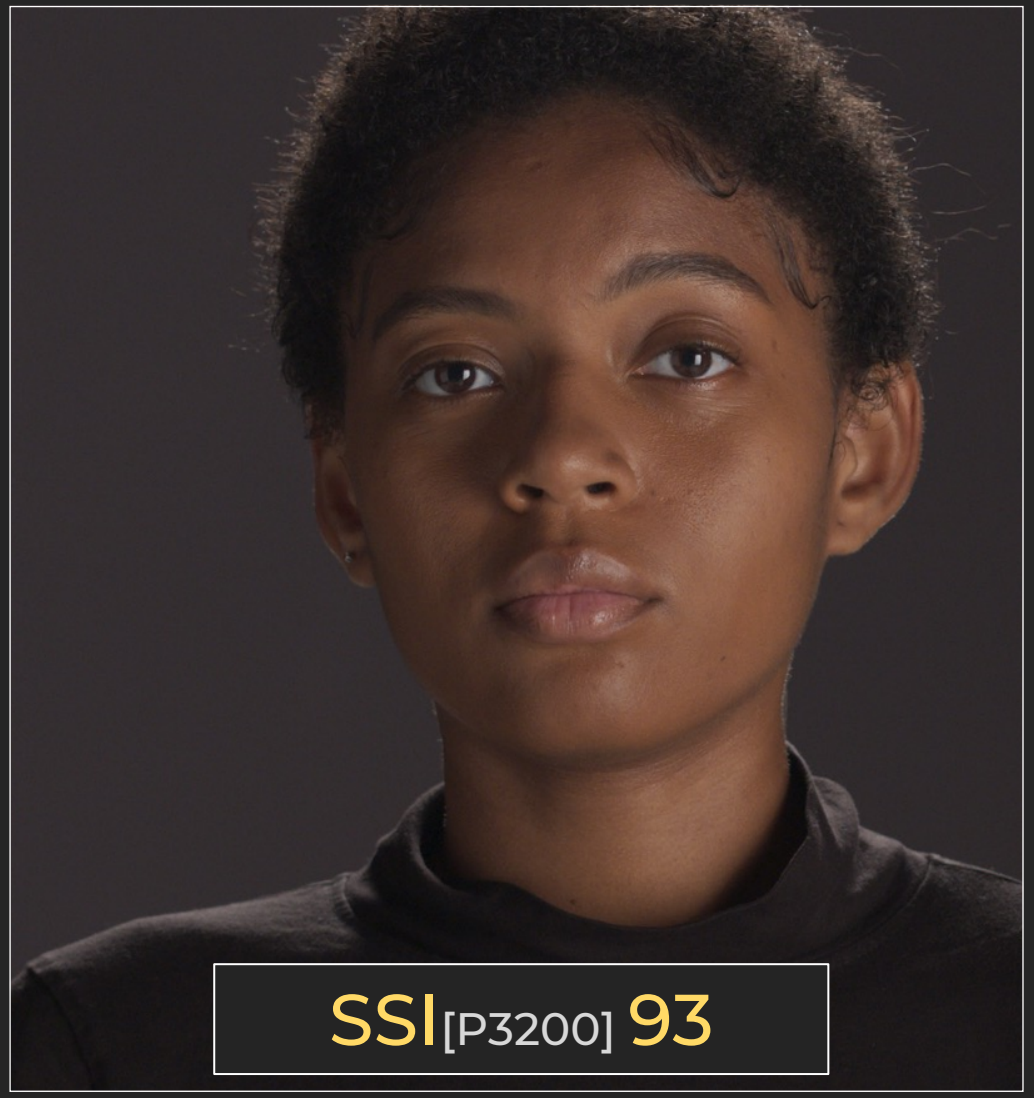
TUNGSTEN REF.





SSI[P3200] 84

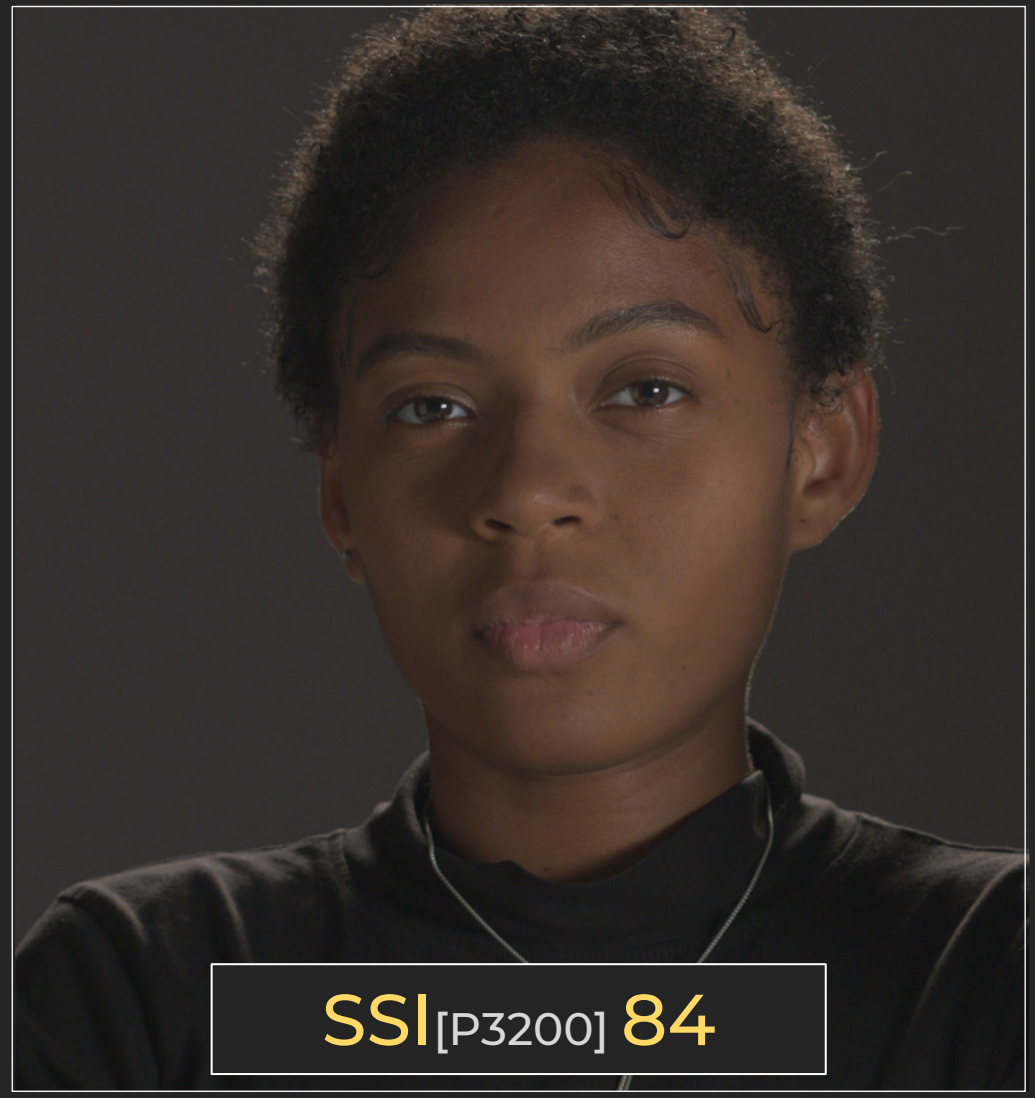
ALPHA 300



TUNGSTEN REF.

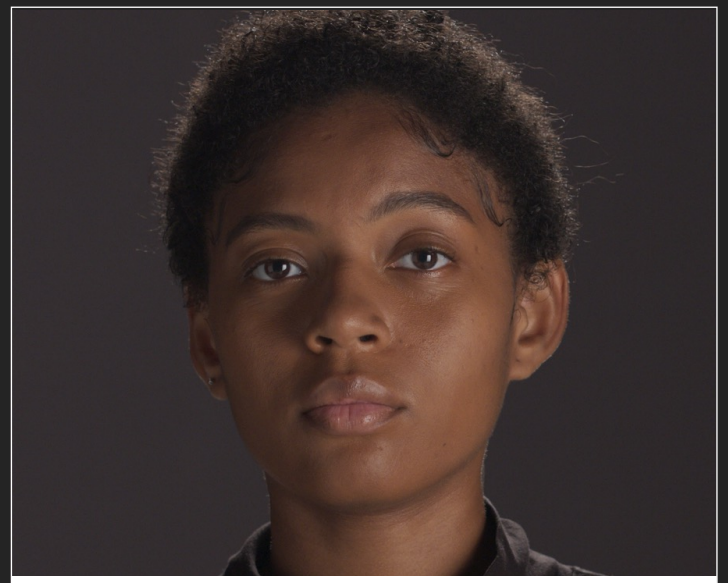
SONY VENICE 2

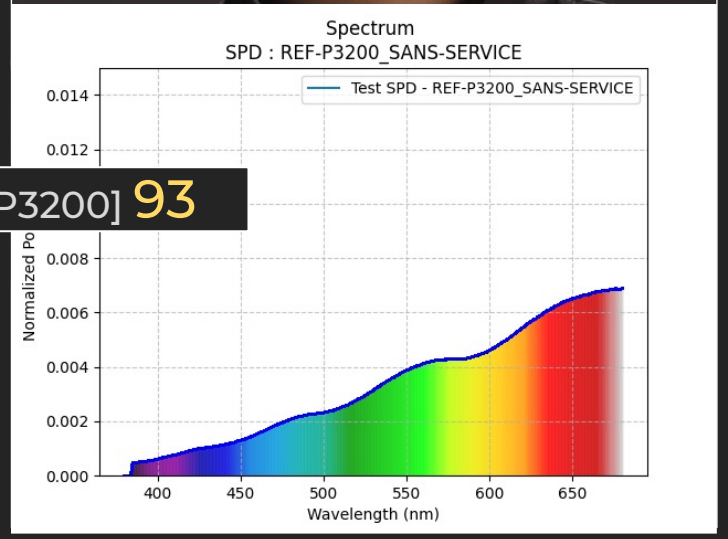
GRADED



ALPHA 300

Images & données K5600 ALPHA 300 Images & Data

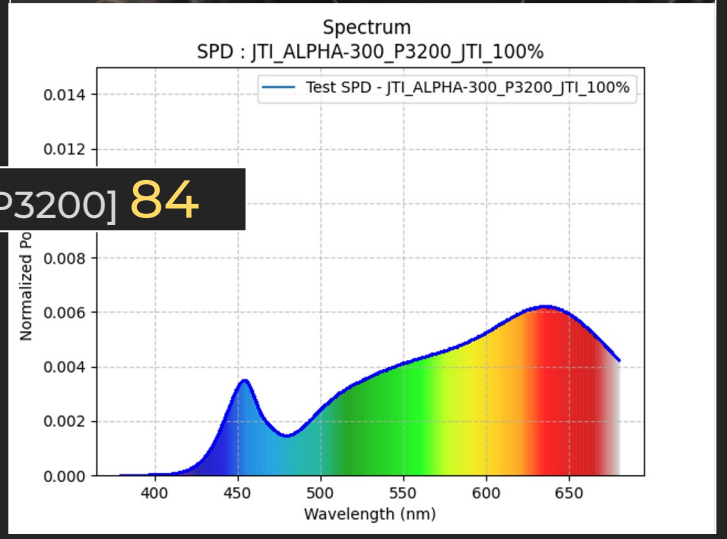




SSI[P3200] 93

TUNGSTEN REF.

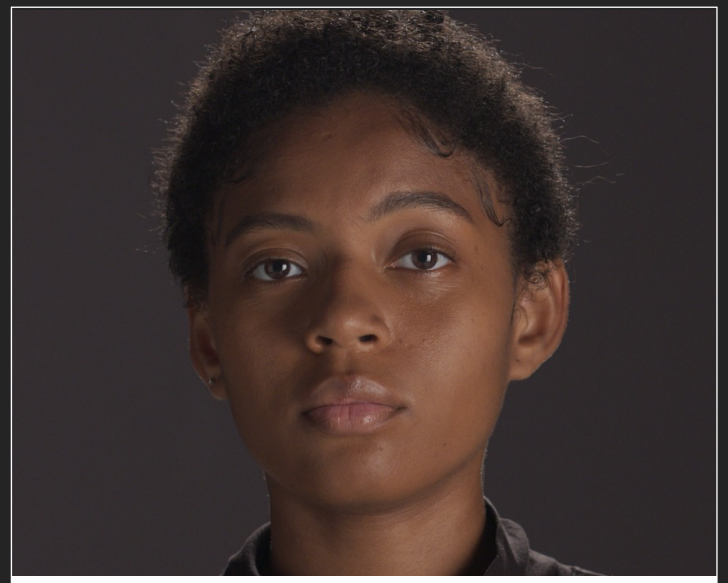


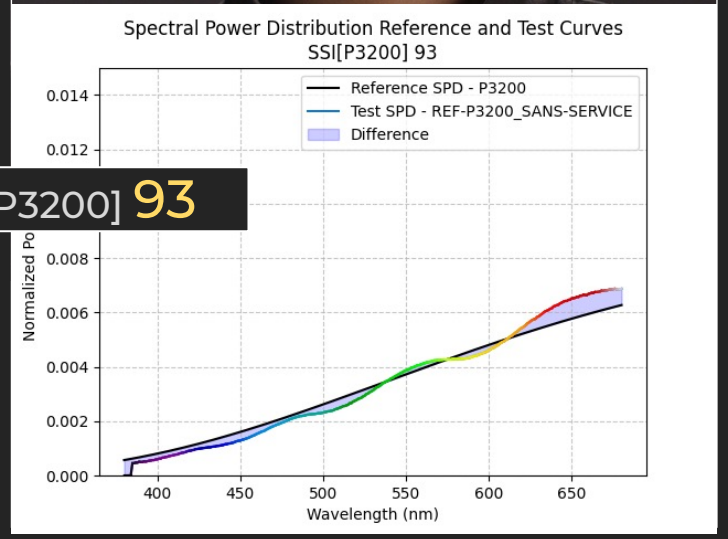


SSI[P3200] 84

ALPHA 300

Images & données K5600 ALPHA 300 Images & Data

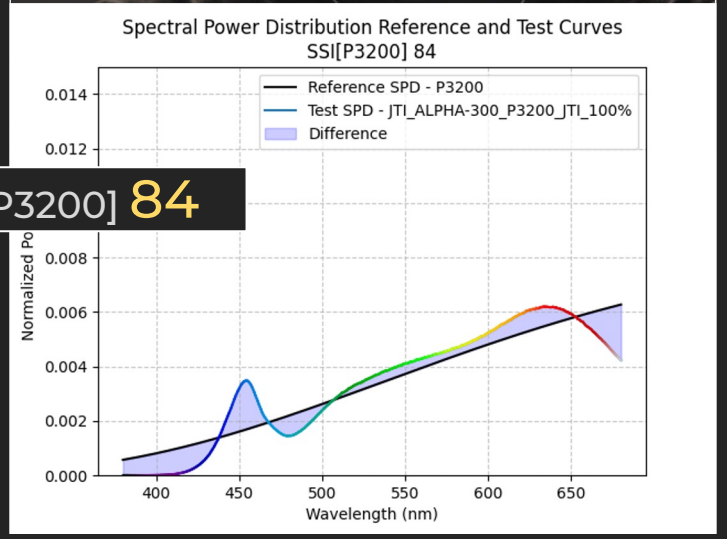




SSI[P3200] 93

TUNGSTEN REF.





SSI[P3200] 84

ALPHA 300

ALPHA 300

& 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

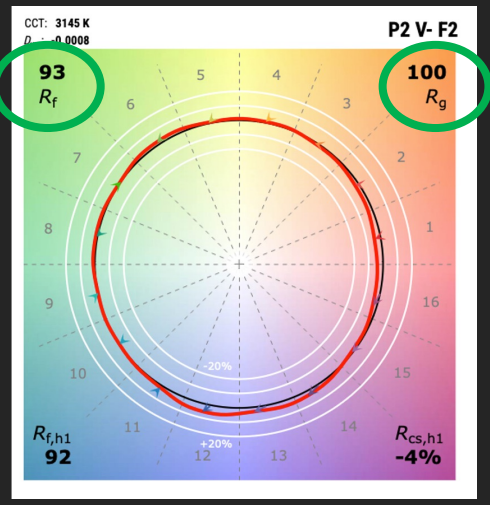
All the data in this section dedicated to the TM-30-20 has been calculated using JETI.

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

R_f



R_g



JETI

TM-30-20

Dans le fichier JTL 20 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.

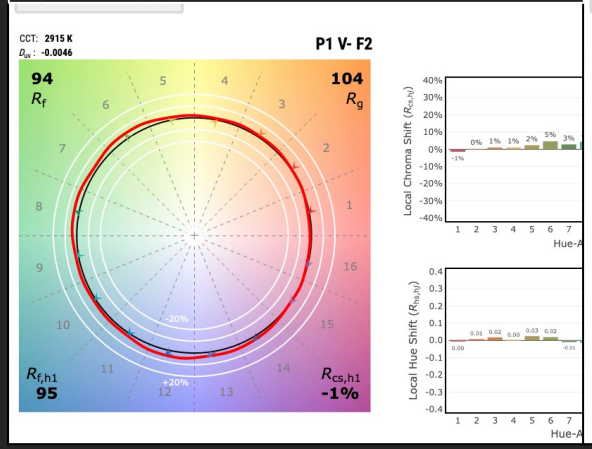
Toutes les mesures sont données en 3200 K et en 5600K

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

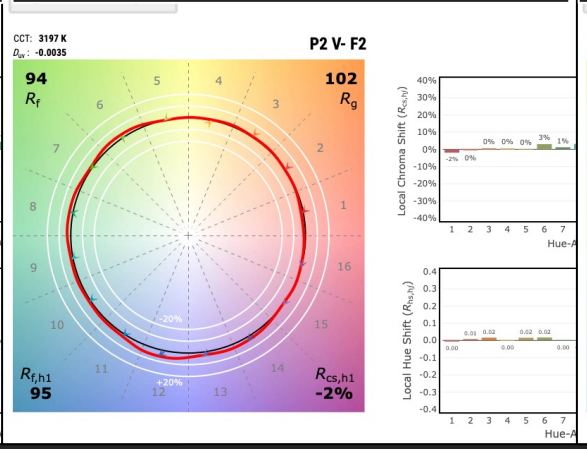
- graphs of the lighting fixture set at 100%, 50% and 25% power using JETI
- graphs of the lighting fixture set to 100% of its power thanks to the indications of the lighting fixture.

All measurements are provided in 3200K and 5600K

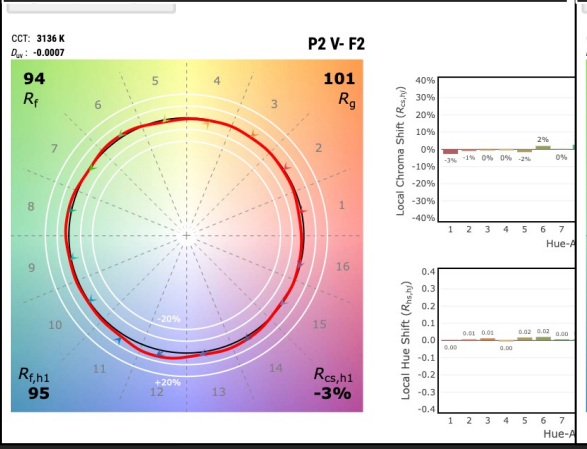
100 % indicated by fixture



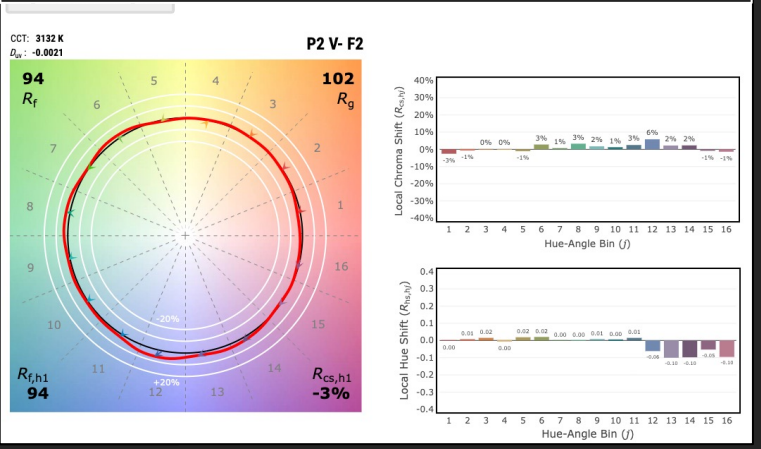
100 % indicated by JETI



50 % indicated by JETI



25 % indicated by JETI



3200 K

ALPHA 300 TM-30-20

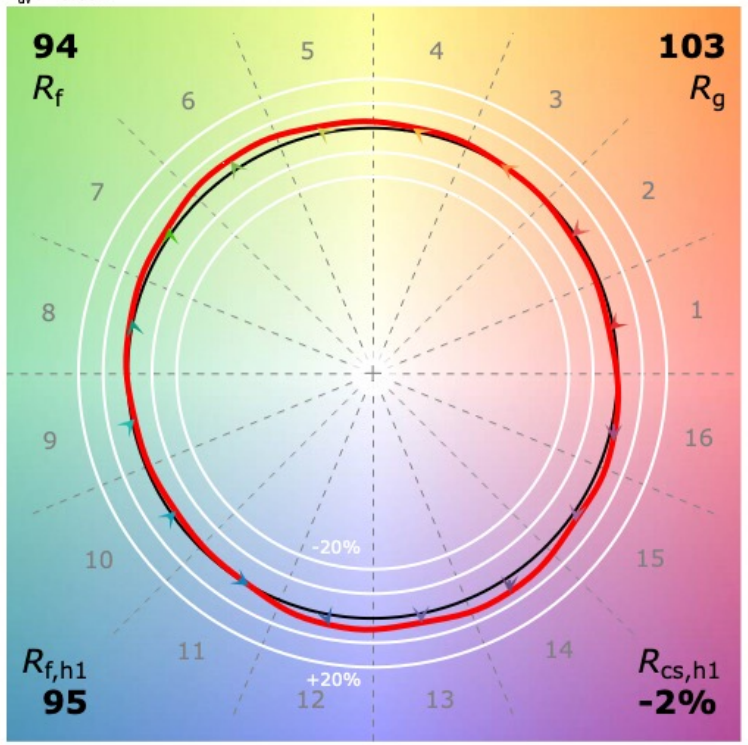
ANSI/IES TM-30-20 Color Rendition Report

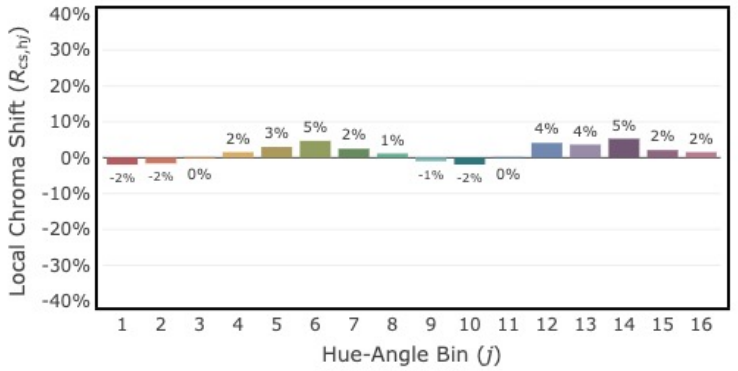
Unique Identifier:

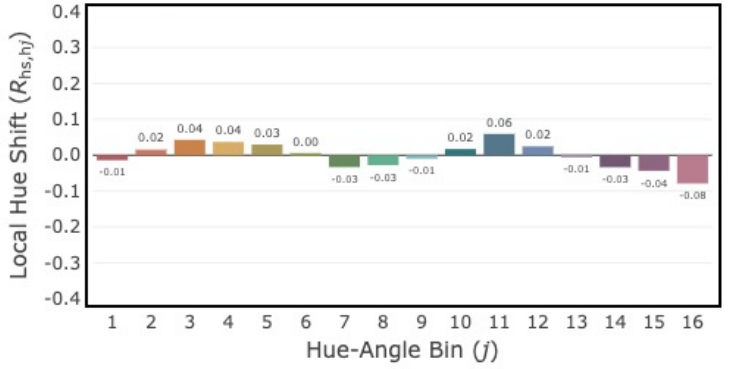
JTI_ALPHA-300_P3200_JTI_100%

CCT: **3208 K**
D_{uv}: **-0.0017**

P2 V- F2





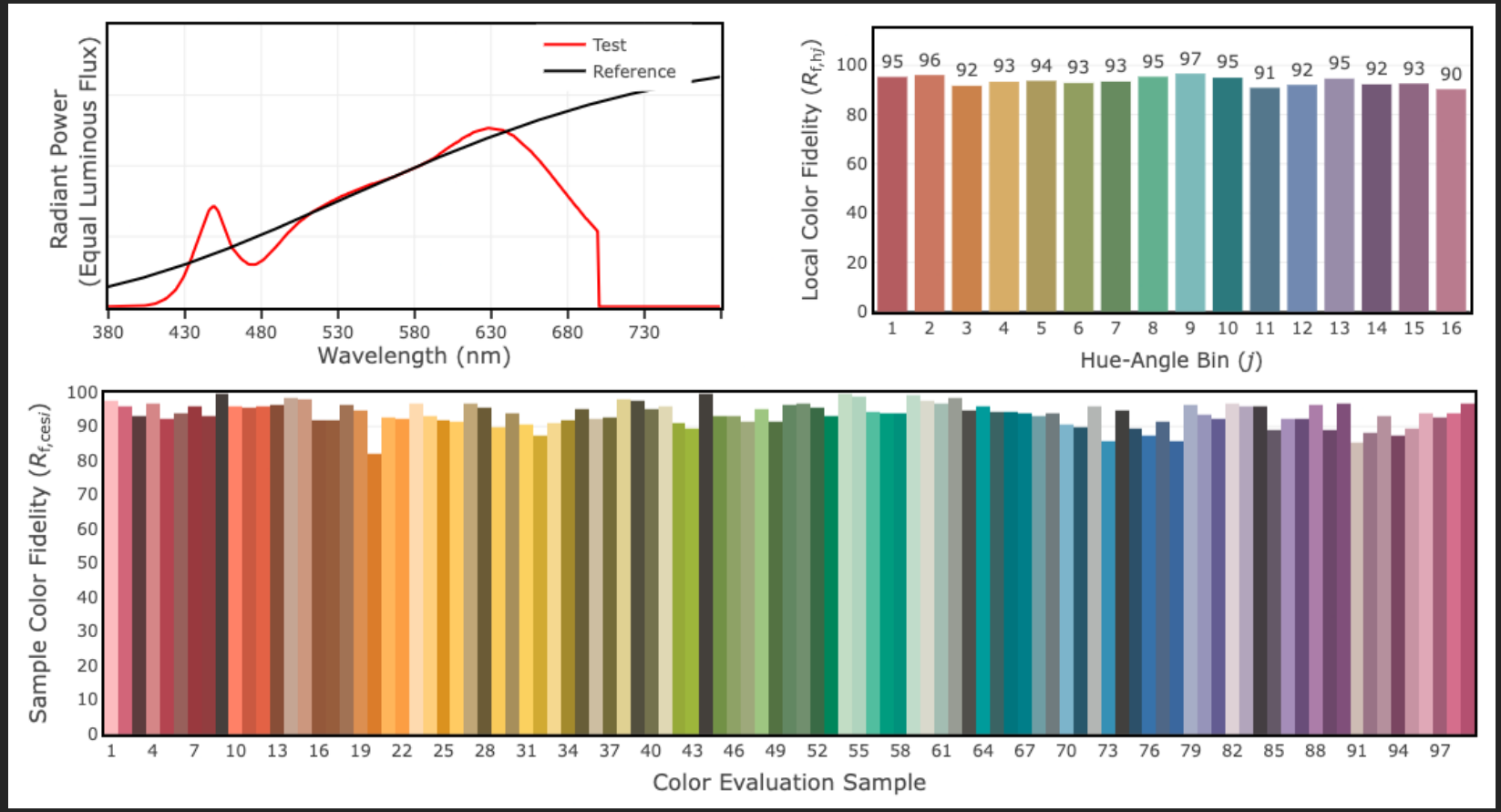




JETI

3200 K

ALPHA 300 TM-30-20





JETI

3200 K

ALPHA 300

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_ALPHA-300_P3200_**LED_100%**	83	93	103	95,54	93,99
JTI_ALPHA-300_P3200_**JTI_100%**	84	94	103	95,91	94,31
JTI_ALPHA-300_P3200_**JTI_50%**	85	95	103	96,31	94,84
JTI_ALPHA-300_P3200_**JTI_25%**	85	95	102	96,54	95,21



JETI

ALPHA 300 TM-30-20

5600 K

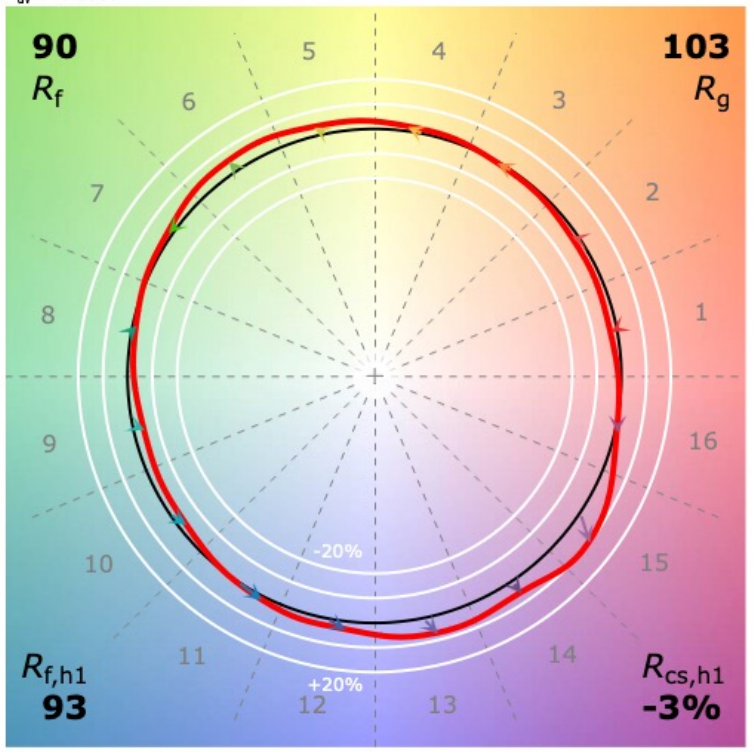
ANSI/IES TM-30-20 Color Rendition Report

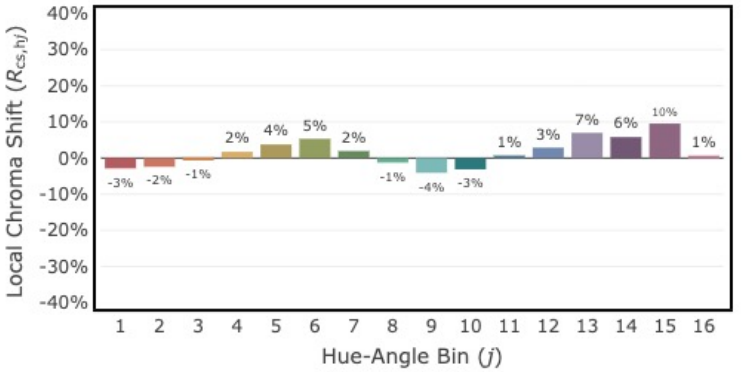
Unique Identifier:

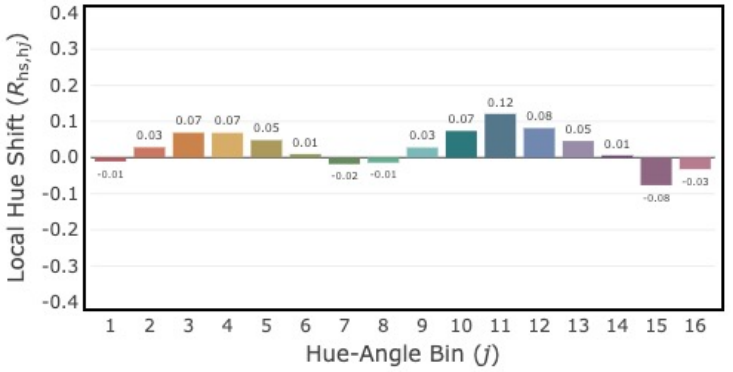
JTI_ALPHA-300_P5600_JTI_100%

CCT: **5609 K**
D_{uv} : **-0.0036**

P2 V- F2





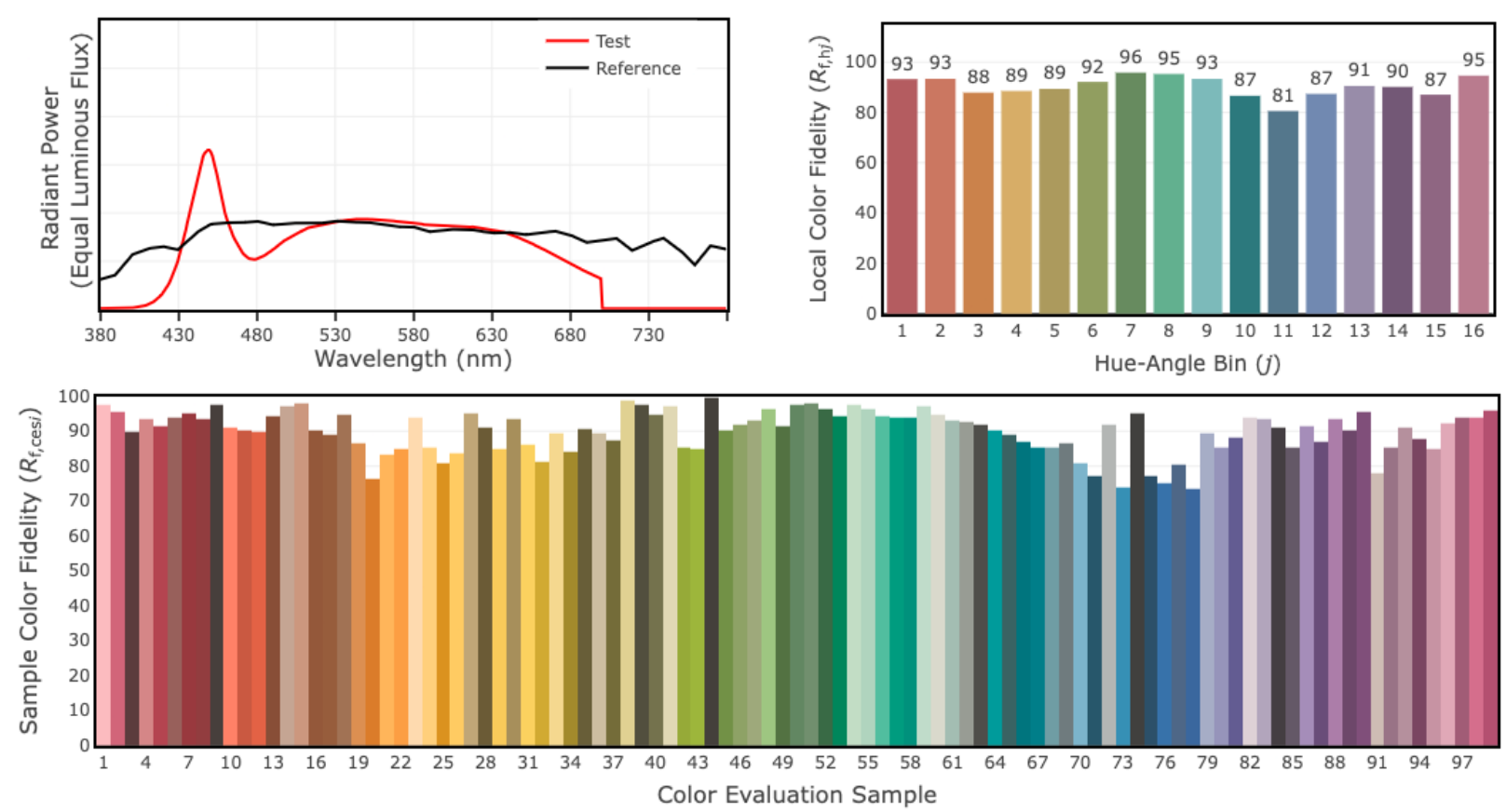




JETI

ALPHA 300 TM-30-20

5600 K





JETI

5600 K

ALPHA 300

Comparison chart: SSI vs TM30-20 vs CRI

JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
JTI_ALPHA-300_P5600_**LED_100%**	74	90	104	93,35	91,49
JTI_ALPHA-300_P5600_**JTI_100%**	73	90	103	93,07	90,97
JTI_ALPHA-300_P5600_**JTI_50%**	74	90	103	91,87	89,75
JTI_ALPHA-300_P5600_**JTI_25%**	74	90	103	93,07	90,97



JETI

Données constructeur

Manufacturer's data

K5600

Images & données K5600 ALPHA 300 Images & Data

1					
Name of the tested product	Alpha 300 LED				
Company	K5600				
Type of light: Fresnel, panel or others	FRESNEL				
Full Color or Bi-Color	BI COLOR	IP			
Dimensions (inches/cm)	290X280X350 mm	Weight (Lbs/kg)	5.4 KG		
Built-in ballast		No	Ballast weight	2.8 KG	
Mandatory optical accessory		NO	Optional optical accessories (excludes lightbox and louvers)	Yes	
If yes to optional, which ones?	Spacebeam, Chimera, Snapbag				
Type of circuit board material					
Type of housing construction (metal, plastic, others)	Aluminium and stainless steel				
Website	https://k5600.eu/products/kit-alpha-300-led				
Person in charge/Position	Kenny Galerne				

2					
Electrical power consumption	300 W				
Maximum internal temperature	80°C	F			
AC/DC - Battery voltage	YES	AC only	DC only Battery - voltage		
With AC, draws	1.25 Amps	With DC, draws	10Amps/30 V		

3						
Panel: Focusable unit	Yes	No	Beam angles			
Lux @ 1 meter (3.3 ft.) (Without diffuser)	@ 3200K @ 5600K	Lux @ 3 meter (10ft.) (Without diffuser)	@ 3200K @ 5600K	Lux @ 5 meter (15ft.) (Without diffuser)	@ 3200K @ 5600K	

4											
Fresnel diameter (cm/inches)			Beam angles:	Spot	10 °	Mid	30°	Flood	50 °		
Lux @ 1 meter (3.3 ft.)	114,500 @ 3200K	Lux @ 3 meters (10 ft.)	12,722 @ 3200K	Lux @ 5 meters (15 ft.)	4,580 @ 3200K						
Optic Spot	146,250 @ 5600K	**Optic Spot**	16,250 @ 5600K	**Optic Spot**	5,850 @ 5600K						
Lux @ 1 meter (3.3 ft.)	31,250 @ 3200K	Lux @ 3 meters (10 ft.)	3,472 @ 3200K	Lux @ 5 meters (15 ft.)	1,250 @ 3200K						
Optic Mid	43,750 @ 5600K	**Optic Mid**	4,861 @ 5600K	**Optic Mid**	1,750 @ 5600K						
Lux @ 1 meter (3.3 ft.)	17,625 @ 3200K	Lux @ 3 meters (10 ft.)	1,958 @ 3200K	Lux @ 5 meters (15 ft.)	705 @ 3200K						
Optic Flood	22,250 @ 5600K	**Optic Flood**	2,471 @ 5600K	**Optic Flood**	890@ 5600K						

5	
~~Full Color (RGB - Large spectrum)~~	

https://k5600.eu/products/kit-alpha-300-led

https://k5600.eu/en/products/kit-alpha-300-led

6				
Bi-Color				
Number of diodes	2	Types		
Color temperature between	2700 K	and	6500K	
Color temperature preset			No	
Green Magenta Control			No	

7				
Color index	CRI	97		
	TLCI			
	TMA 30-18/20 - Rf		TMA 30-18/20 - Rg	
	SSI [P3200]		SSI [CIE D55]	

8	
Other specificities	10 years warranty Real Fresnel: Single shadow, barndoor cut, hot spot in center of beam and progressively less to the edge

9								
Operating temperatures	From - 10°C to +50°C		F					
Fan:	Yes		Switchable		No	Noise level in dB at 1 m		
If switchable, % of light output			If switched off, for how long					
High speed possibility	Yes		Maximum speed	1000 fps				
Camera shutter possibility	Yes		Maximum angle					

10		
Operating positions	All	No: limitations:
Spigot diameter	Diam 16mm	

11						
Memory of settings	Yes		Wireless DMX compatibility	Yes		
			Built in Lumen radio protocol	Yes		
Wired DMX compatibility	Yes		Maximum distance			
			Master/Slave: for synchronising multiple units	Yes		
Native apps		No	Apps compatibility	Yes		
Which ones?						
			Color shifts when dimming		No	
			Change of light levels when selecting CT		No	

12	
Environmental concern	
Warranty (in years)	10 years
For how long parts are available?	10 years
Average repair time	48 hours
What do you know about recycling your products?	Aluminium and steel are 100% recyclable and indefinitely.
Do customers send them back to you or do they take care of it themselves?	NO
Country of manufacturing	France and Europe

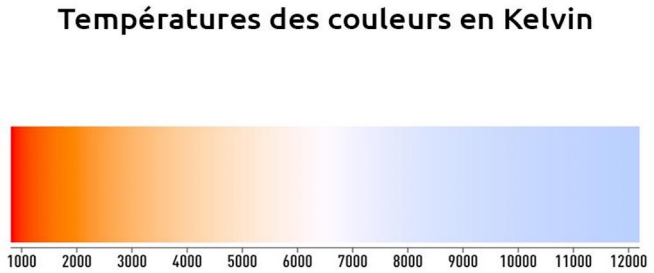
Please use next page for other specificities or comments. Thank you!

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

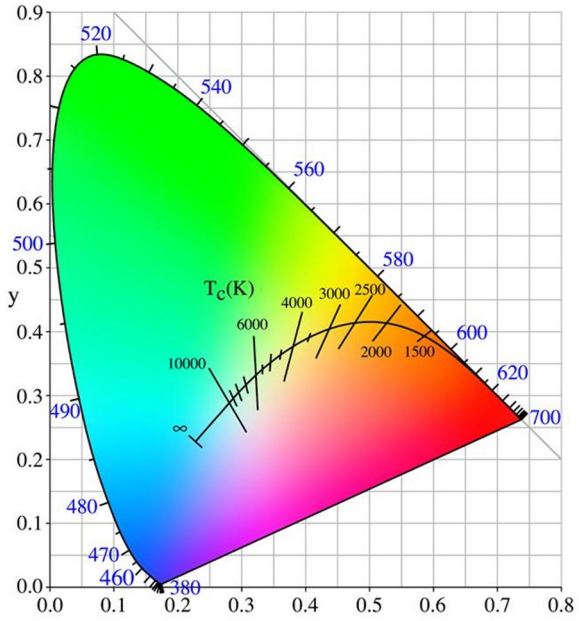


La température de couleur est la valeur cible idéale que nous cherchons à atteindre pour faire les mesures (3200 ou 5600). Celle-ci est basée sur la CCT et son unité est donc le Kelvin (K). La valeur peut être donnée directement par le projecteur ou réglée et ajustée avec les mesures prisent par le spectroradiomètre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

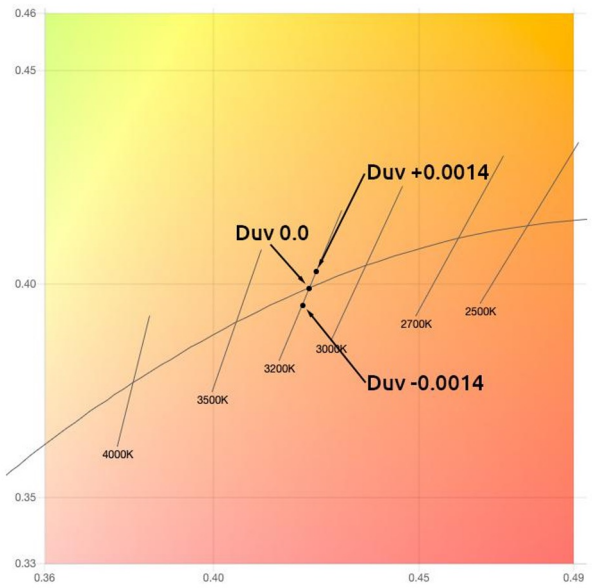


La CCT ou température de couleur corrélée, est la température précise d'un radiateur de Planck (corps noir) ayant la chromaticité la plus proche possible de celle associée à une distribution spectrale donnée. La CCT est donc calculée à partir de la distribution spectrale (SPD) de la source lumineuse ; 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

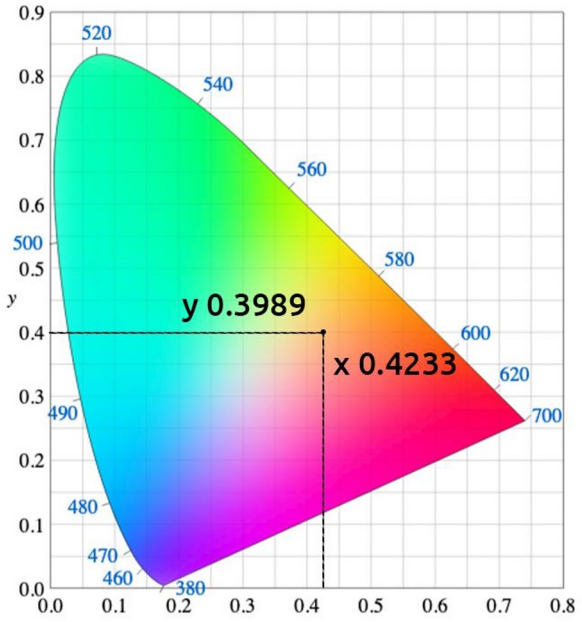


Le Duv ou Delta u,v est utilisé pour décrire la distance entre les coordonnées chromatiques de la source de lumière et le radiateur de Planck, appelé également lieu du corps noir. Une valeur négative indique que la source est en dessous de la courbe du corps noir (dominante magenta ou rose), une valeur 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 a 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	François Roger	Cininter, CEO
Directeur de la photographie, AFC	Philippe Ros	Cinematographer, AFC & co-chair of the ITC
Directeur technique de la CST	Éric Chérioux	CST Technical Manager
Directeur de la photographie, AFC	Patrick Duroux	Cinematographer AFC
Directrice de la photographie, UCO & Représentante du département image de la CST	Françoise Noyon	Cinematographer, UCO & Representative of the CST image department
Consultant en postproduction & Représentant du département image de la CST	Thierry Beaumel	Post-production consultant & Representative of the CST image department
Senior coloriste, AFC membre associé	Jean Coudsi	Senior Colorist, AFC associate member
Monteuse, CST	Bohdana Korohod	Editor, CST
Responsable de la communication externe et interne CST	Sebastien Lefebvre	Head of External and Internal Communications CST

Banque de données / Data Bank

PDF presentations

Directeur de la photographie, AFC	Philippe Ros	Cinematographer, AFC & co-chair of the ITC
Directeur technique de la CST	Éric Chérioux	CST Technical Manager
Directrice de la photographie, UCO & Représentante du département image de la CST	Françoise Noyon	Cinematographer, UCO & Representative of the CST image department
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Clips

Monteuse, CST	Bohdana Korohod	Editor, CST
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