Journée Très LEDs - De beaux tests à faire

Images & mesures par constructeur

JTL 15

TRANSPA

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Que vos projets deviennent réalité

A Bright LED day - Brilliant tests on the horizon

Images & measurements by manufacturer

RUBYLIGHT

BOA v.2 120 DMX

RED RAPTOR

https://rubylight.fr/le-boa/

Bi-color

60 W / 1, 20 m

Données du fabricant
/ Manufacturer's data

RUBYLIGHT

BOA v.2 120 DMX

Interview du fabricant en français :

Interview with the manufacturer in French:

↓

https://www.youtube.com/watch?v=nn9w7CmYS0U&list=PLW8aVswX2z2Y6fVtZuJdpemmqLPavU5if&index=13

Plan / Plan

- BOA v.2 120 DMX & Images
  - ✓ Peau caucasienne
    - Comparatifs BOA v.2 120 DMX vs tungstène
    - Sous-exposition : ND 06 vs gradateur
  - ✓ Peau noire
    - Comparatifs BOA v.2 120 DMX avec tungstène
    - Sous-exposition : ND 06 vs gradateur
- Mesures : Explications & exemples
- Mesures
- BOA v.2 120 DMX, Spectra & SSI
- BOA v.2 120 DMX, Images, Spectra & SSI
- BOA v.2 120 DMX, & TM-30
- Données constructeur
- Explications : K, CCT K, Duv & coordonnées x,y

- BOA v.2 120 DMX & Images
  - ✓ Caucasian skin tone
    - Comparison BOA v.2 120 DMX vs tungsten
    - Underexposure: ND 06 vs dimmer
  - ✓ Black skin tone
    - Comparison BOA v.2 120 DMX vs tungsten
    - Underexposure ND 06 vs dimmer
- Measurements: Explanations & examples
- Measurements
- BOA v.2 120 DMX, Spectra & SSI
- BOA v.2 120 DMX, Images, Spectra & SSI
- BOA v.2 120 DMX & TM-30
- Manufacturer’s data
- Explanations on K, CCT K, Duv & x,y coordinates

BOA v.2 120 DMX
& Images

CAUCASIAN

Alice

RED RAPTOR

BOA v.2 120 DMX

Comparison with

TUNGSTEN

TUNGSTEN REF.

RED RAPTOR
GRADED


colorchecker CLASSIC
RAPTOR
T2,8
LED BOA
100%
ALICE 3
BOA v.2 120 DMX
RED RAPTOR
GRADED

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

TUNGSTEN REF.

RED RAPTOR
GRADED

BOA v.2 120 DMX

CAUCASIAN

Alice

RED RAPTOR

BOA v.2 120 DMX

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

BOA v.2 120 DMX

Underexposed -2 stops

GRADED

BOA v.2 120 DMX

Underexposed -2 stops

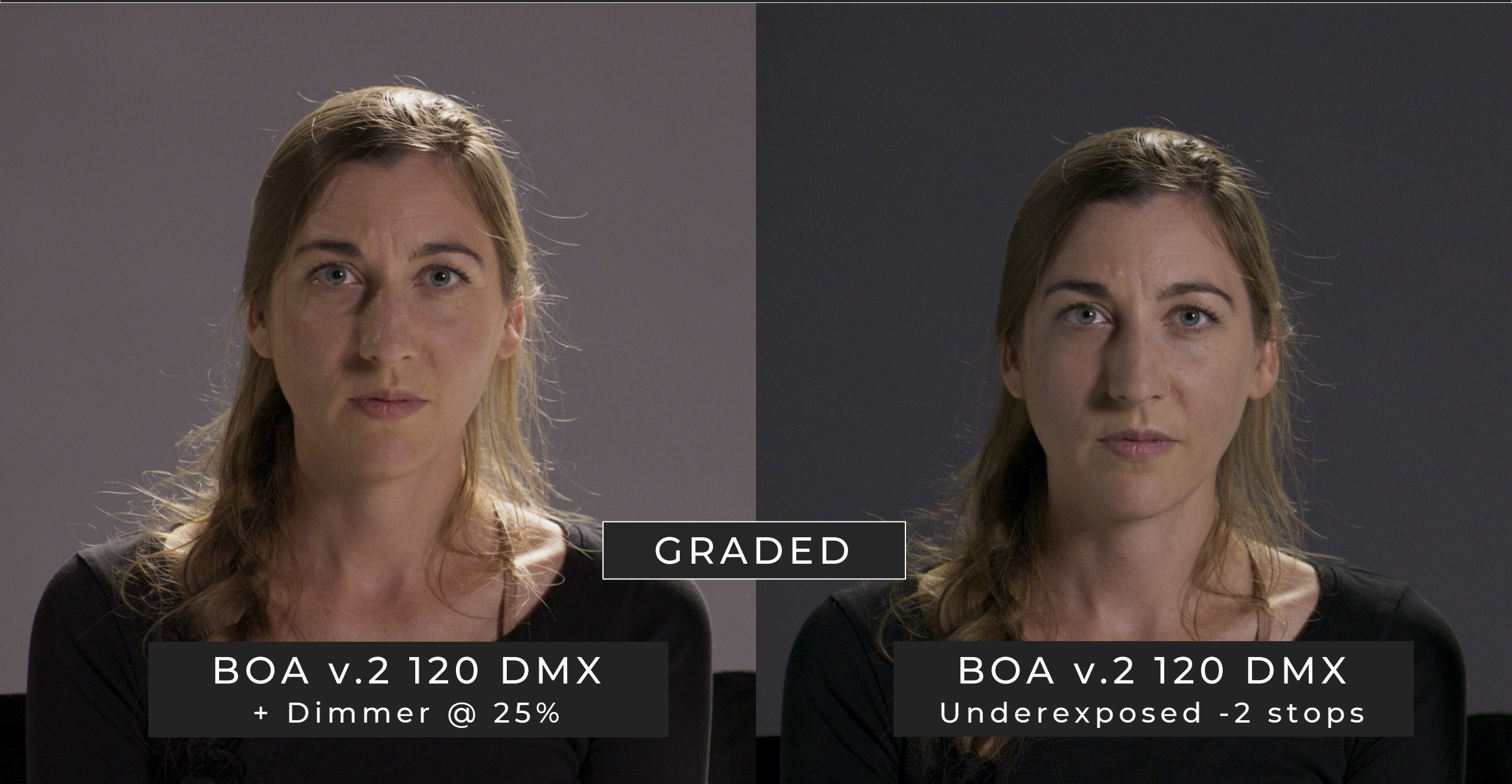
UNGRADED

BOA v.2 120 DMX
+ Dimmer @ 25%

GRADED

BOA v.2 120 DMX
+ Dimmer @ 25%

Images & données RUBYLIGHT BOA v.2 120 DMX 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

BOA v.2 120 DMX
+ Dimmer @ 25%

BOA v.2 120 DMX
Underexposed -2 stops

Images & données RUBYLIGHT BOA v.2 120 DMX 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.

UNGRADED

BOA v.2 120 DMX
+ Dimmer @ 25%

BOA v.2 120 DMX
Underexposed -2 stops

BLACK SKIN TONE

Naymee

RED RAPTOR

BOA v.2 120 DMX

Comparison with

TUNGSTEN

TUNGSTEN REF.

RED RAPTOR
GRADED

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

TUNGSTEN REF.

RED RAPTOR
GRADED

BOA v.2 120 DMX

BLACK SKIN TONE

Naymee

RED RAPTOR

BOA v.2 120 DMX

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

UNGRADED

BOA v.2 120 DMX

Underexposed -2 stops

GRADED

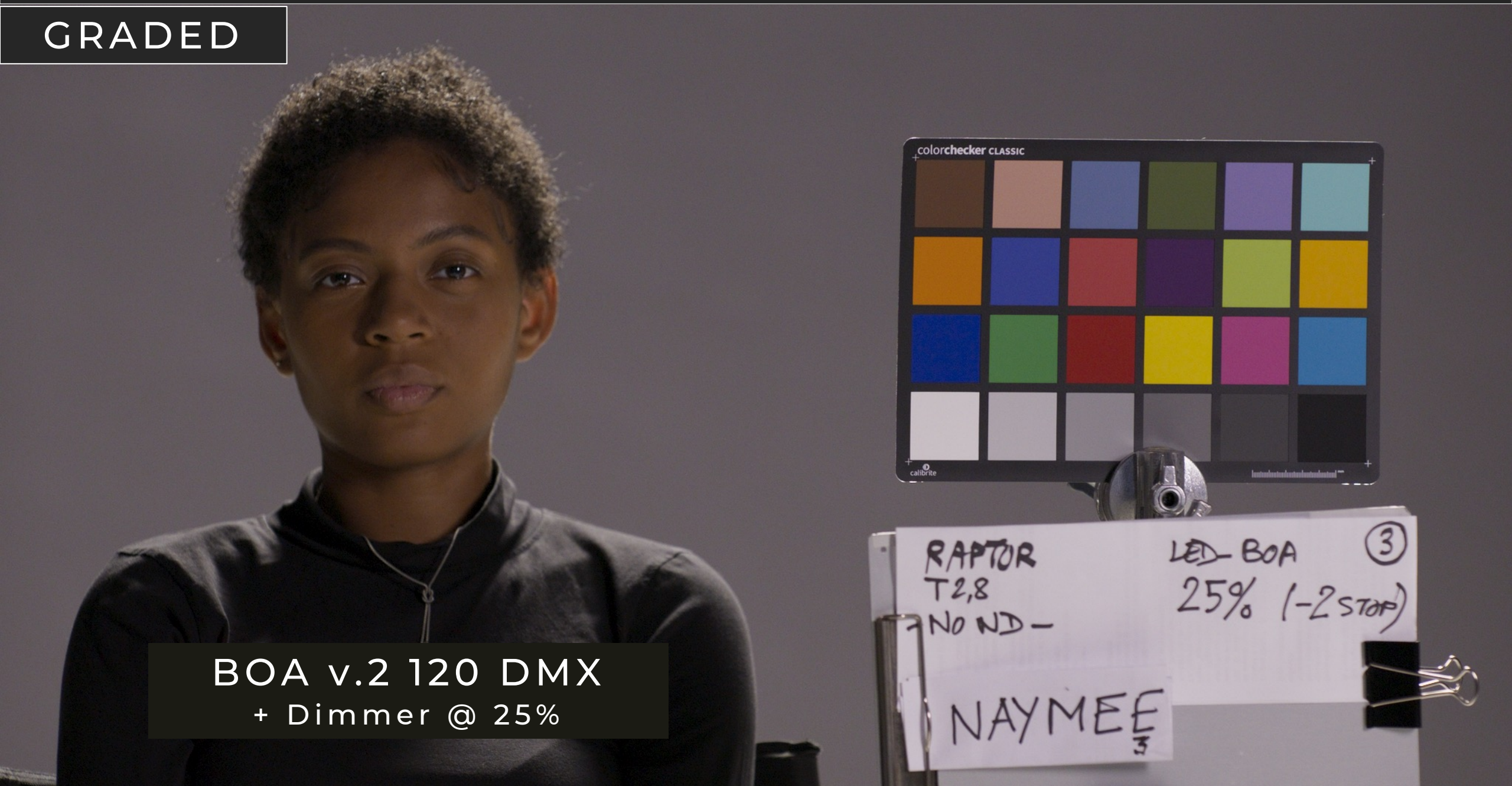
BOA v.2 120 DMX

Underexposed -2 stops

UNGRADED

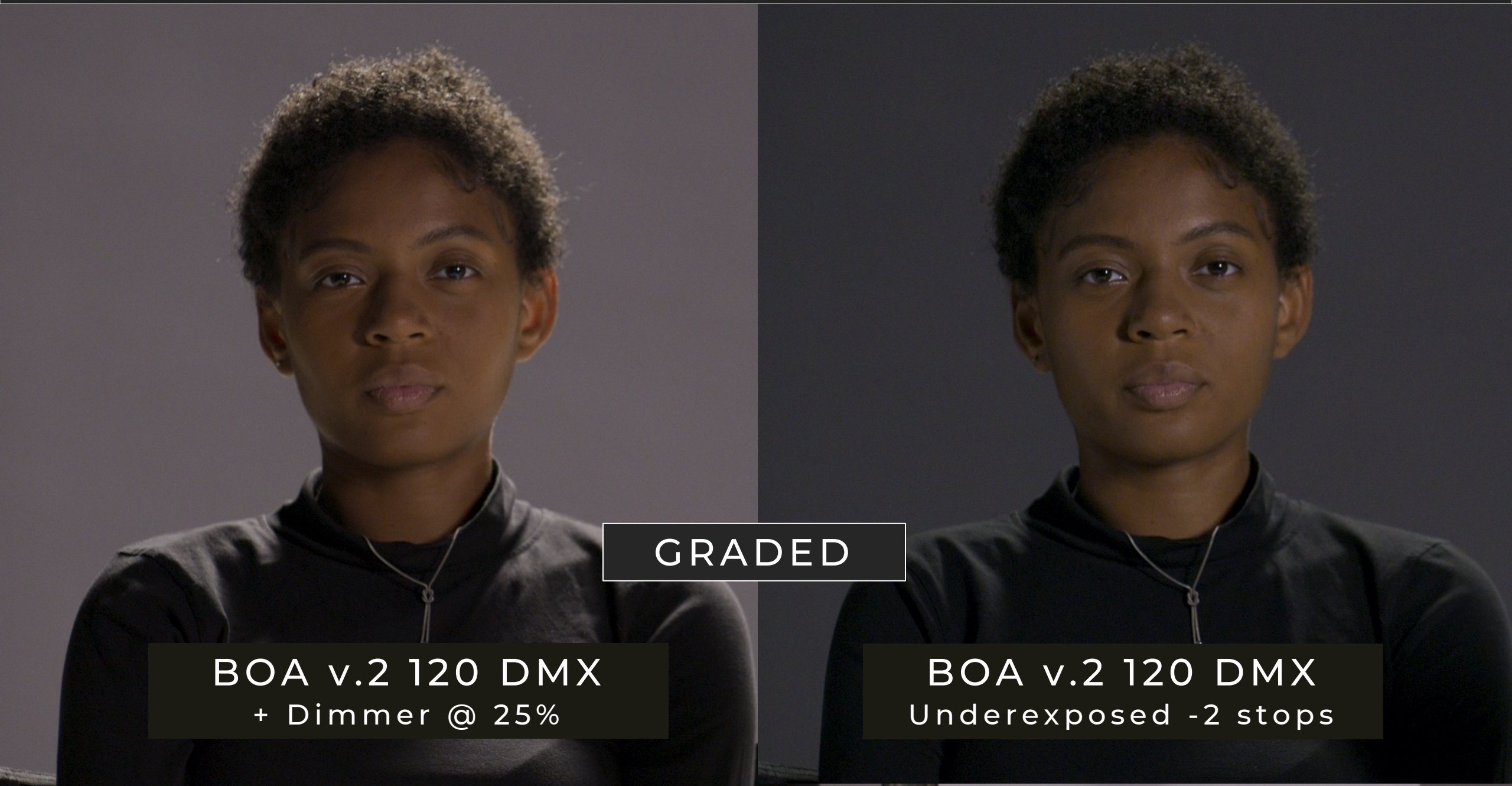

colorchecker CLASSIC
RAPTOR
T2,8
NO ND -
LED BOA
25% (-2 STOP)
3
NAYMEE
3
BOA v.2 120 DMX
+ Dimmer @ 25%

GRADED



BOA v.2 120 DMX
+ Dimmer @ 25%

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data



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

GRADED

BOA v.2 120 DMX
+ Dimmer @ 25%

BOA v.2 120 DMX
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

BOA v.2 120 DMX
+ Dimmer @ 25%

BOA v.2 120 DMX
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).

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

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 BOA v.2 120 DMX

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	SSI
BOA v.2 120 DMX	100%	CCT set on **LED** - 3200	3233	-0,006	0,4141	0,3815	JTI_BOA-120_P3200_**LED_100%**	81

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

BOA v.2 120 DMX	100%	CCT set on **JETI** - 3200	3187	-0,006	0,4169	0,3828	JTI_BOA-120_P3200_**JTI_100%**	82

Example on BOA v.2 120 DMX

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	SSI
BOA v.2 120 DMX	100%	CCT set on **LED** - 3200	3233	-0,006	0,4141	0,3815	JTI_BOA-120_P3200_**LED_100%**	81

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

BOA v.2 120 DMX	100%	CCT set on **JETI** - 3200	3187	-0,006	0,4169	0,3828	JTI_BOA-120_P3200_**JTI_100%**	82

Images & données RUBYLIGHT BOA v.2 120 DMX 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

BOA v.2 120 DMX

3200 K

5600 K

3200 K

BOA v.2 120 DMX

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
BOA v.2 120 DMX	100%	CCT set on **LED** - 3200	3233	-0,006	0,4141	0,3815	JTI_BOA-120_P3200_**LED_100%**	81
BOA v.2 120 DMX	100%	CCT set on **JETI** - 3200	3187	-0,006	0,4169	0,3828	JTI_BOA-120_P3200_**JTI_100%**	82
BOA v.2 120 DMX	50%	CCT set on **JETI** - 3200	3120	-0,006	0,4206	0,3835	JTI_BOA-120_P3200_**JTI_50%**	82
BOA v.2 120 DMX	25%	CCT set on **JETI** - 3200	3078	-0,006	0,4236	0,3853	JTI_BOA-120_P3200_**JTI_25%**	82

SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
3023	0,0002	96	-	-	-	VISUAL REF-TUNGSTEN
3272	-0,005	82	3222	-0,0046	84	GSN_BOA-120_P3200_**LED_100%**
3168	-0,0054	83	3129	-0,0052	84	GSN_BOA-120_P3200_**JTI_100%**
3133	-0,0057	83	3073	-0,0052	84	GSN_BOA-120_P3200_**JTI_50%**
3063	-0,0049	84	3020	-0,005	84	GSN_BOA-120_P3200_**JTI_25%**

BOA v.2 120 DMX

5600 K

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
BOA v.2 120 DMX	100%	CCT set on **LED** - 5600	5565	0,003	0,331	0,3452	JTI_BOA-120__P5600_**LED_100%**	74
BOA v.2 120 DMX	100%	CCT set on **JETI** - 5600	5606	0,003	0,3301	0,3446	JTI_BOA-120__P5600_**JTI_100%**	73
BOA v.2 120 DMX	50%	CCT set on **JETI** - 5600	5649	0,003	0,3291	0,3442	JTI_BOA-120__P5600_**JTI_50%**	73
BOA v.2 120 DMX	25%	CCT set on **JETI** - 5600	5688	0,004	0,3282	0,3443	JTI_BOA-120__P5600_**JTI_25%**	73

SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
5631	0,0034	74	5433	0,004	75	GSN_BOA-120_P5600__**LED_100**
5558	0,0033	74	5455	0,0038	75	GSN_BOA-120_P5600_**JTI_100%**
5757	0,0037	74	5497	0,0044	75	GSN_BOA-120_P5600_**JTI_50%**
5769	0,0045	74	5501	0,0054	75	GSN_BOA-120_P5600_**JTI_25%**

BOA v.2 120 DMX

Spectra & SSI

3200 K

5600 K

TM-30-18 & CRI

JETI

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

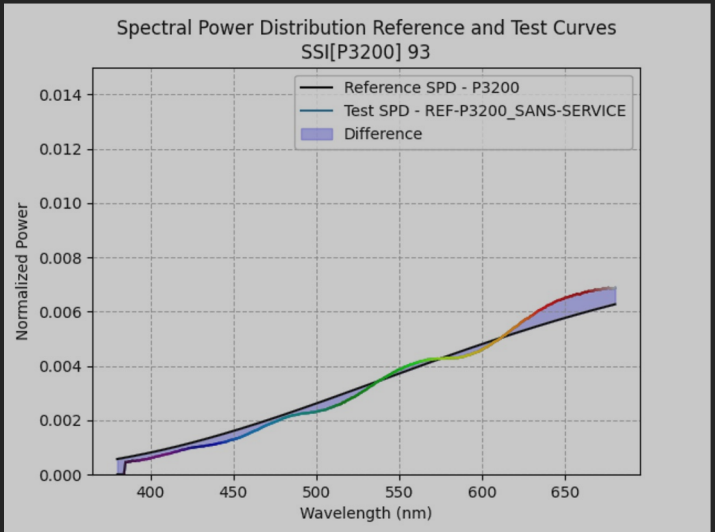
CCT 3012 Duv 0,001

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

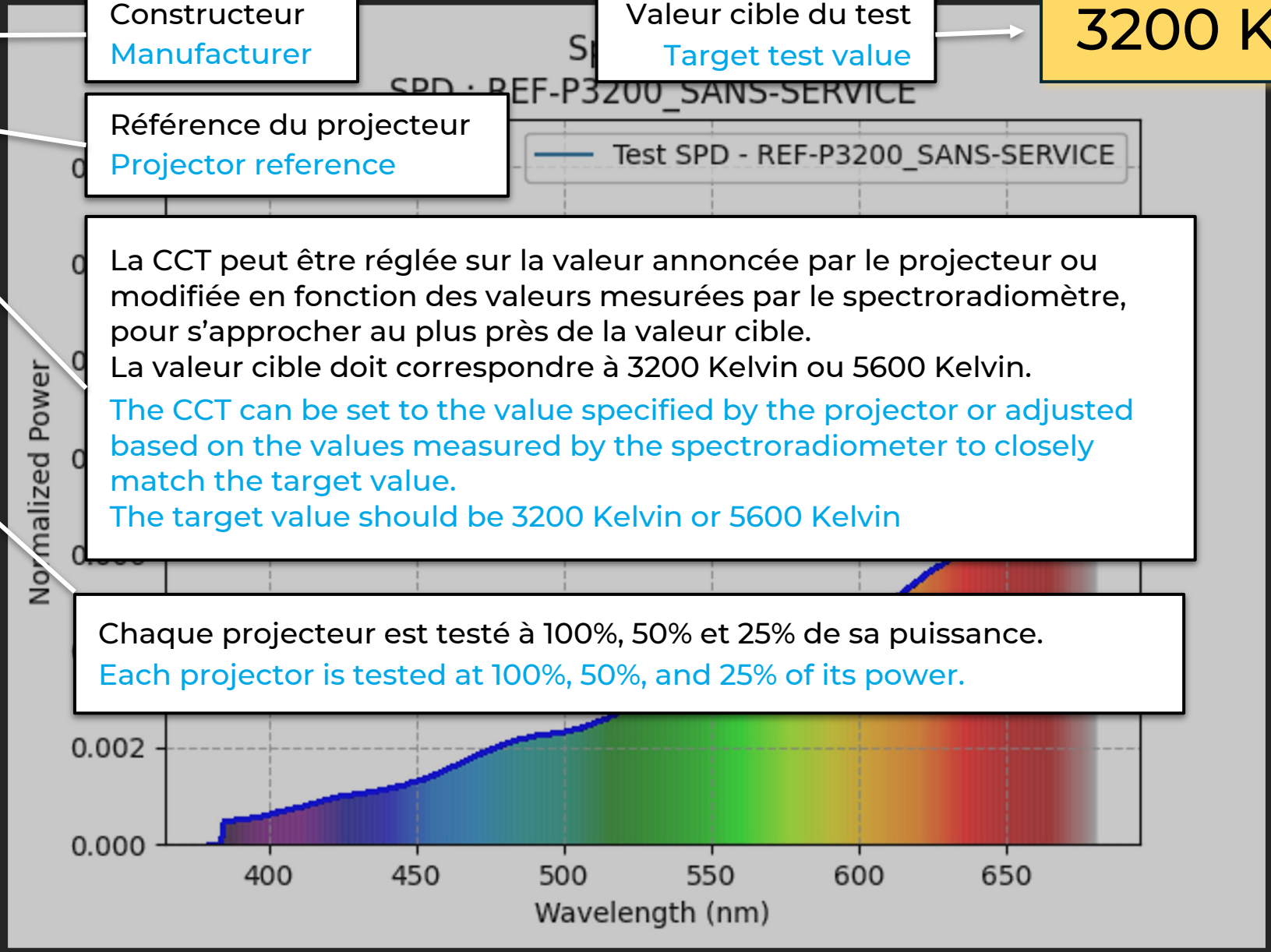
3200 K

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 RUBYLIGHT BOA v.2 120 DMX Images & Data

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

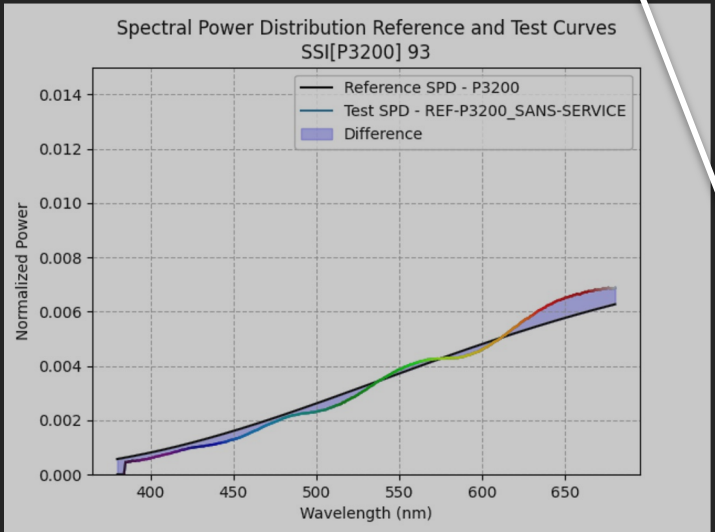
CCT 3012 Duv 0,001

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.

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

3200 K

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

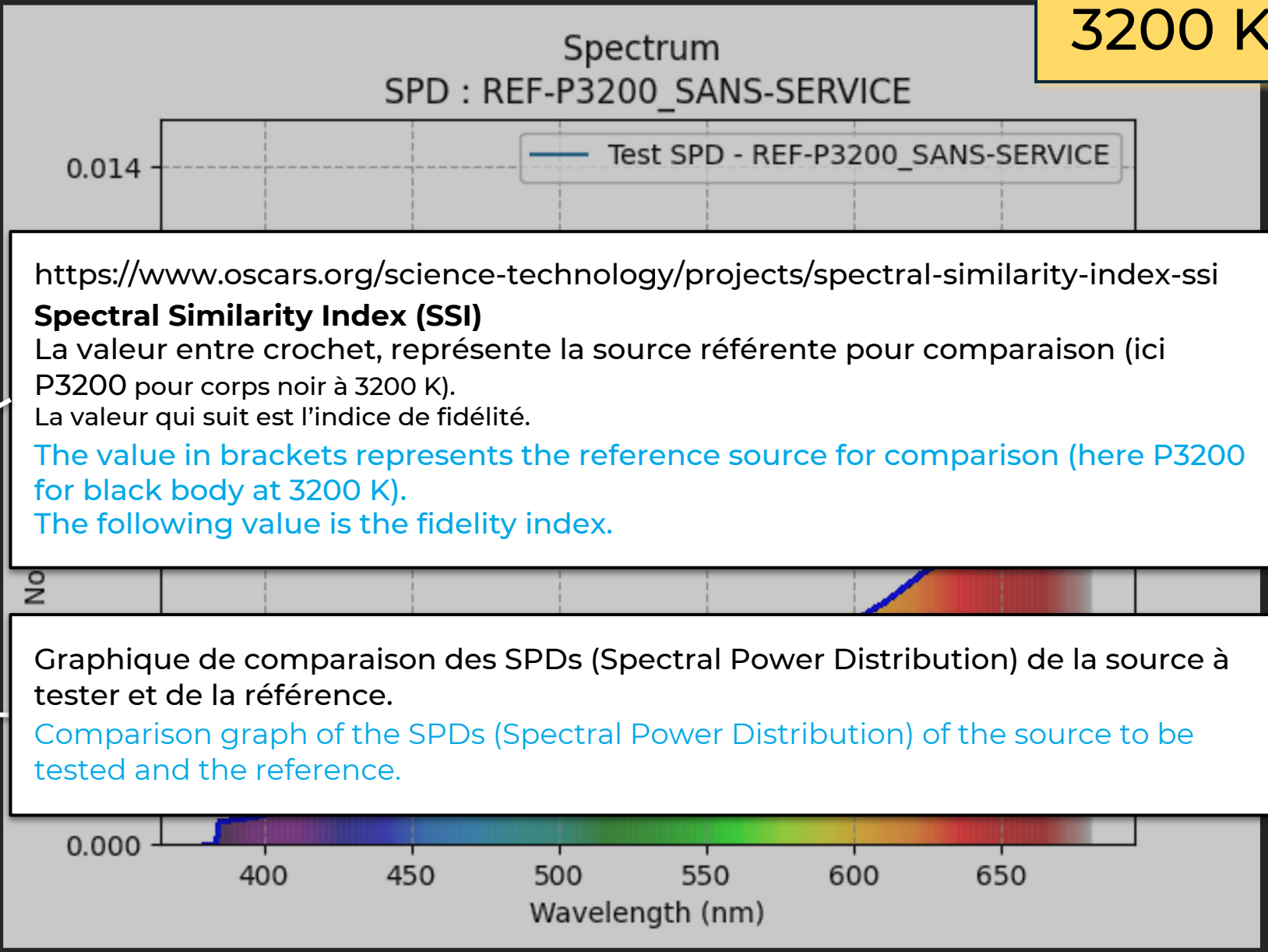
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93



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).

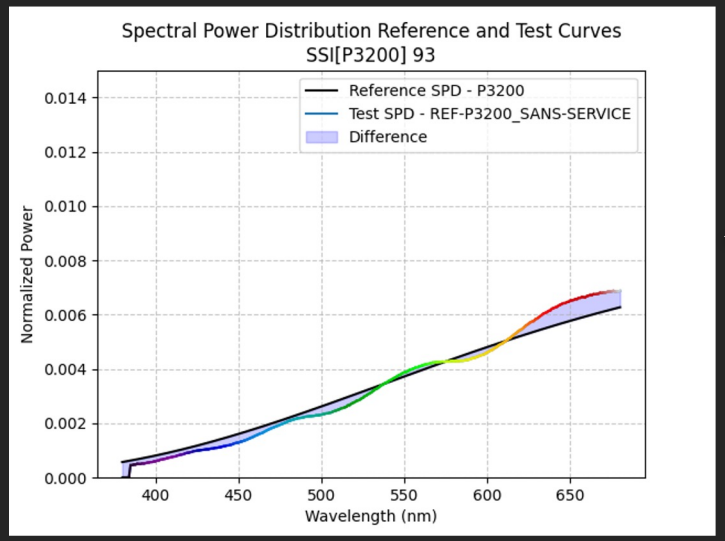
La valeur qui suit est l'indice de fidélité.

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.



BOA v.2 120 DMX

3200 K

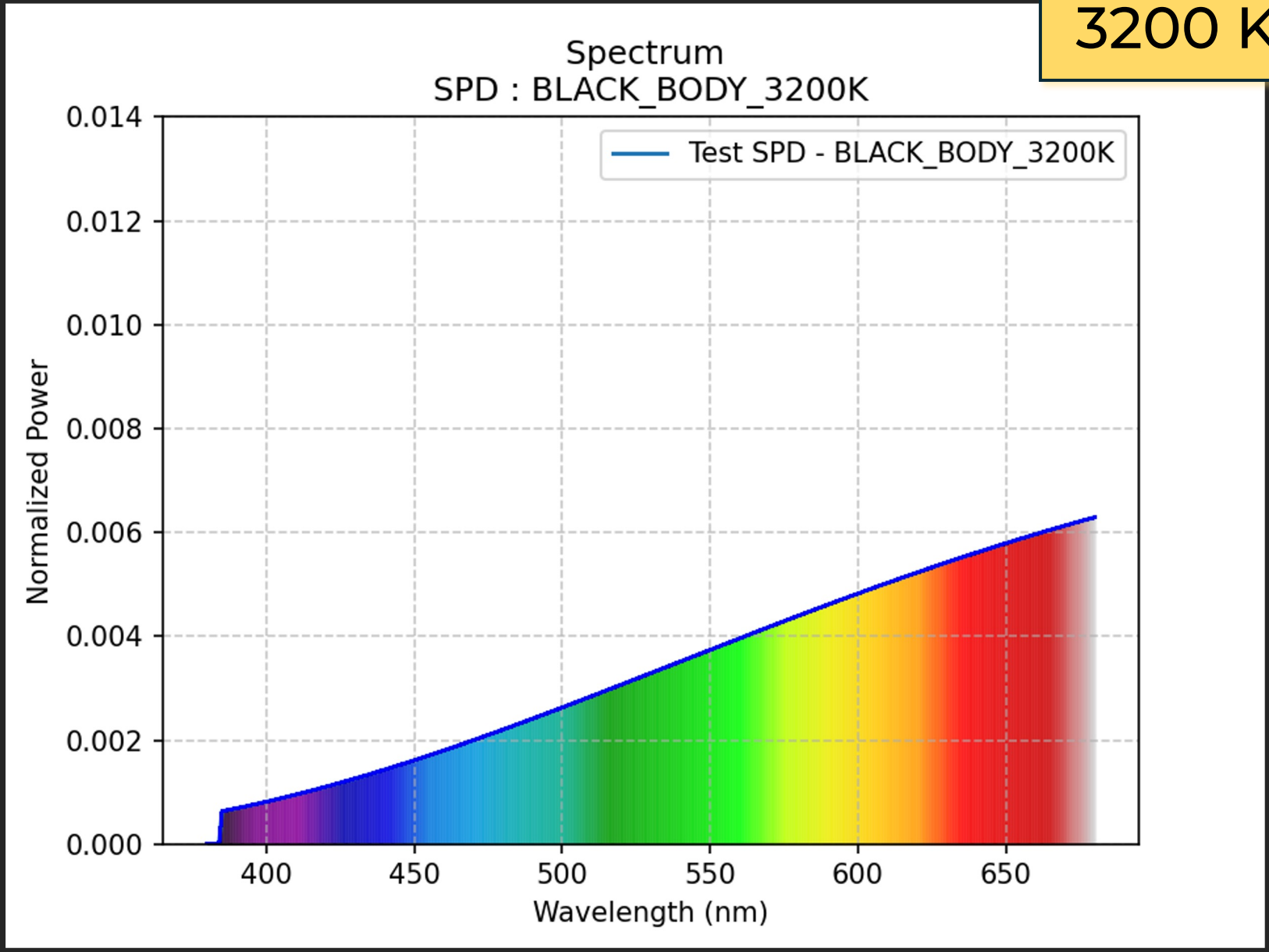
JETI

SSI REFERENCE

Corps noir / Black body

3200 K

3200 K



SOURCE TUNGSTEN comparative

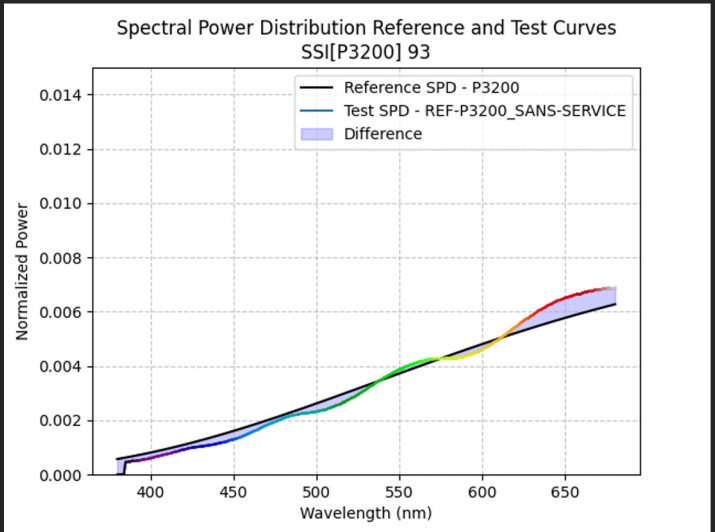
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

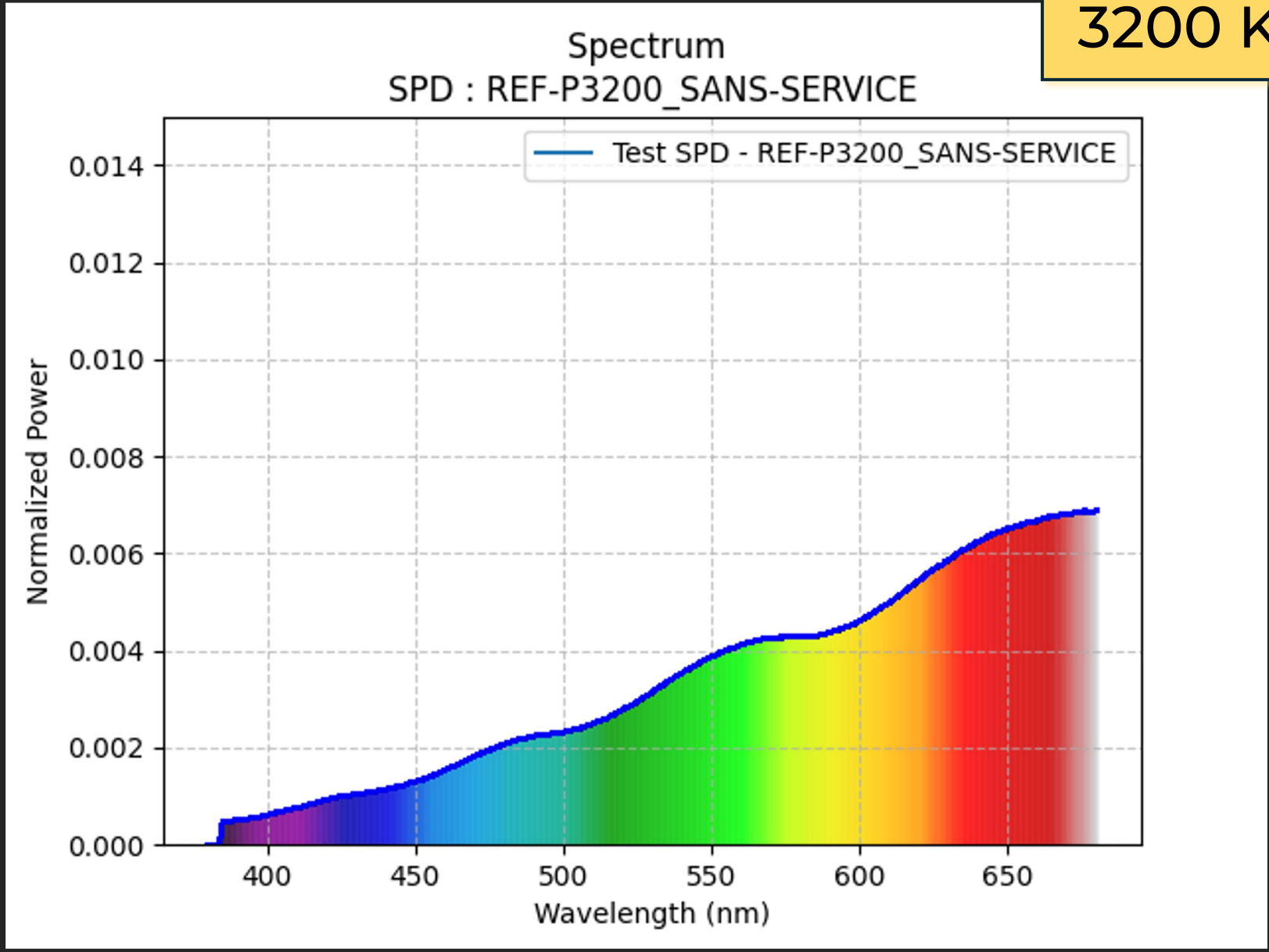
CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93



3200 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 100% - CCT set on LED

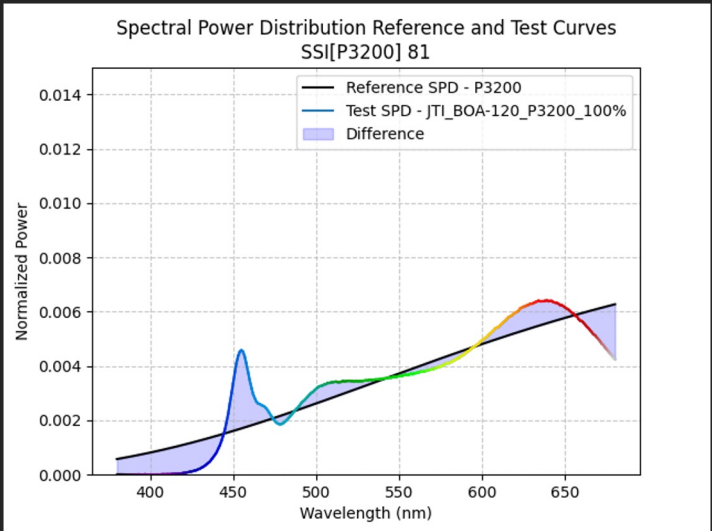
CCT 3233 Duv -0,006

CIE 1931 2° x 0.4141 y 0.3815

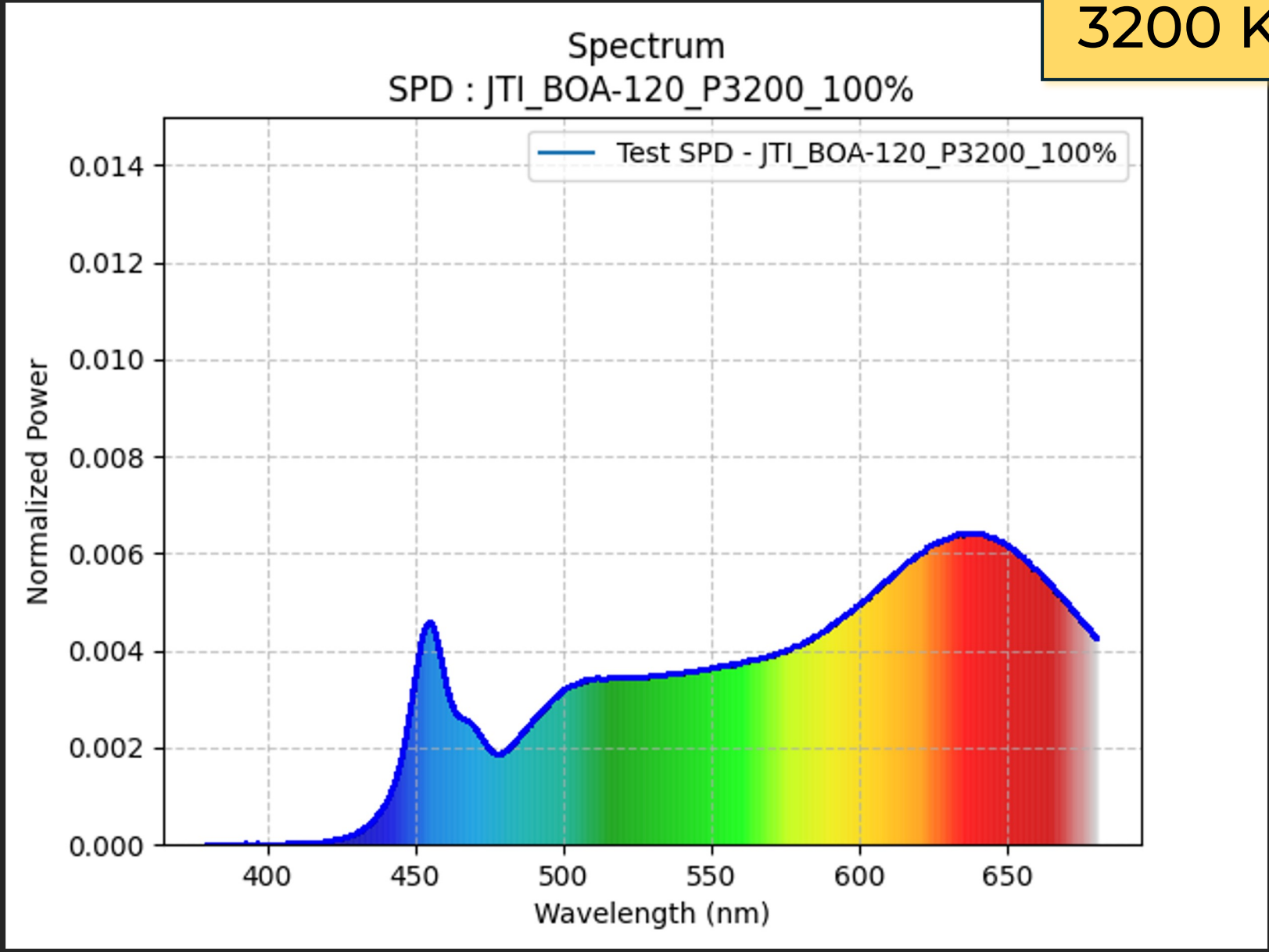
CRI Ra 92.78

IES TM-30-18 Rf 94 Rg 103

SSI[P3200] 81



3200 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 100% - CCT set on JETI

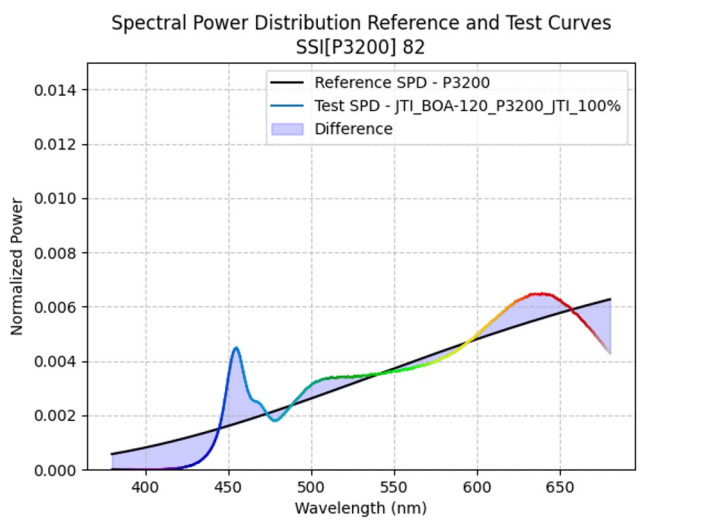
CCT 3187 Duv -0,006

CIE 1931 2° x 0.4169 y 0.3828

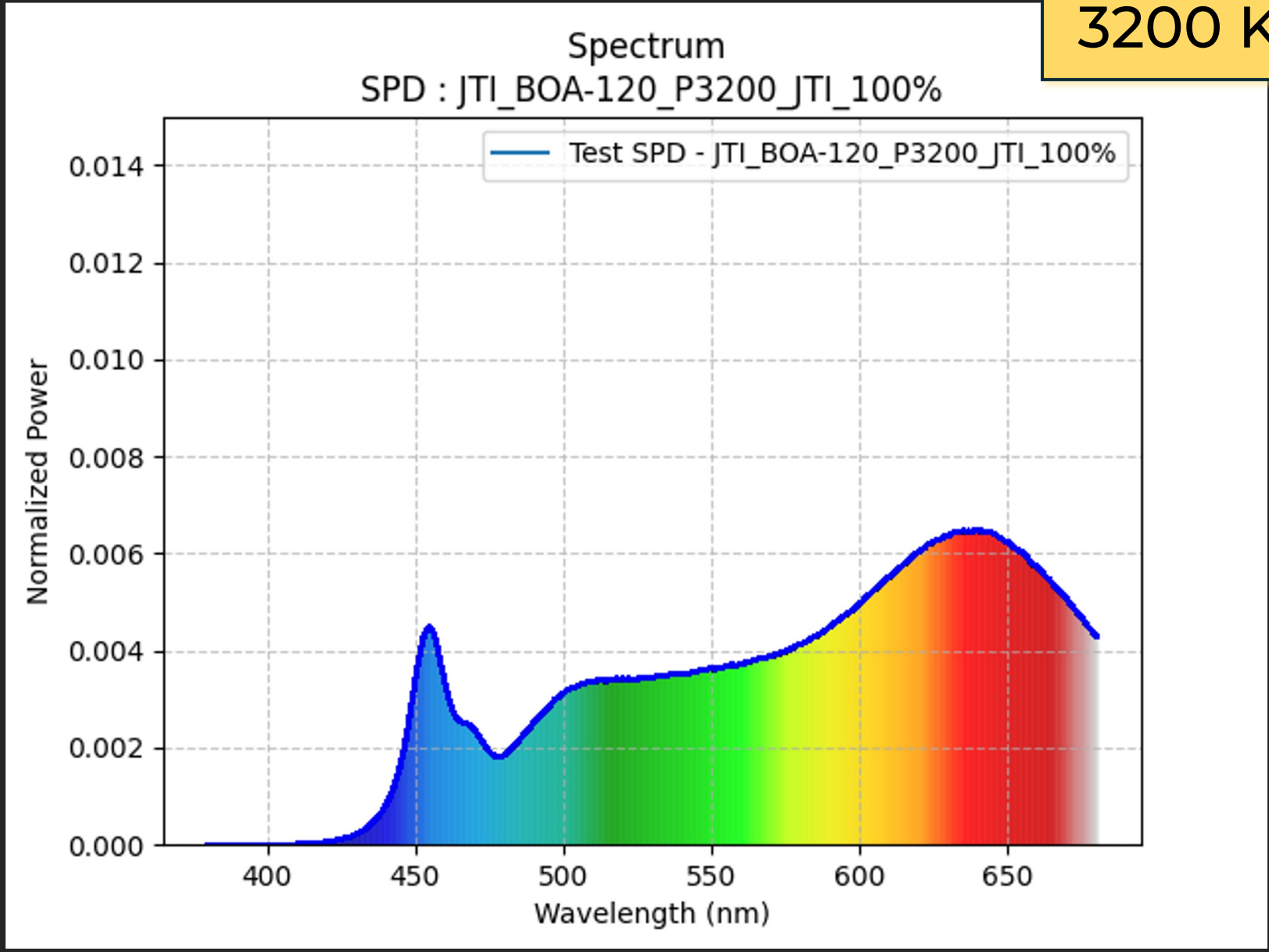
CRI Ra 92.83

IES TM-30-18 Rf 94 Rg 103

SSI[P3200] 82



3200 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 50% - CCT set on JETI

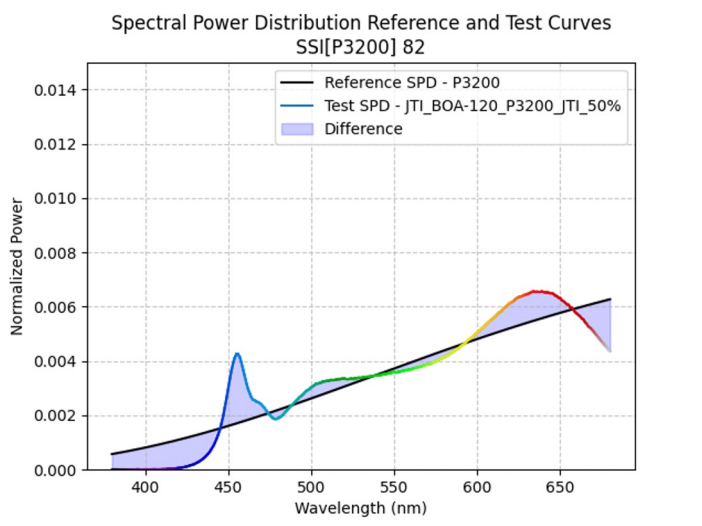
CCT 3120 Duv -0,006

CIE 1931 2° x 0.4206 y 0.3835

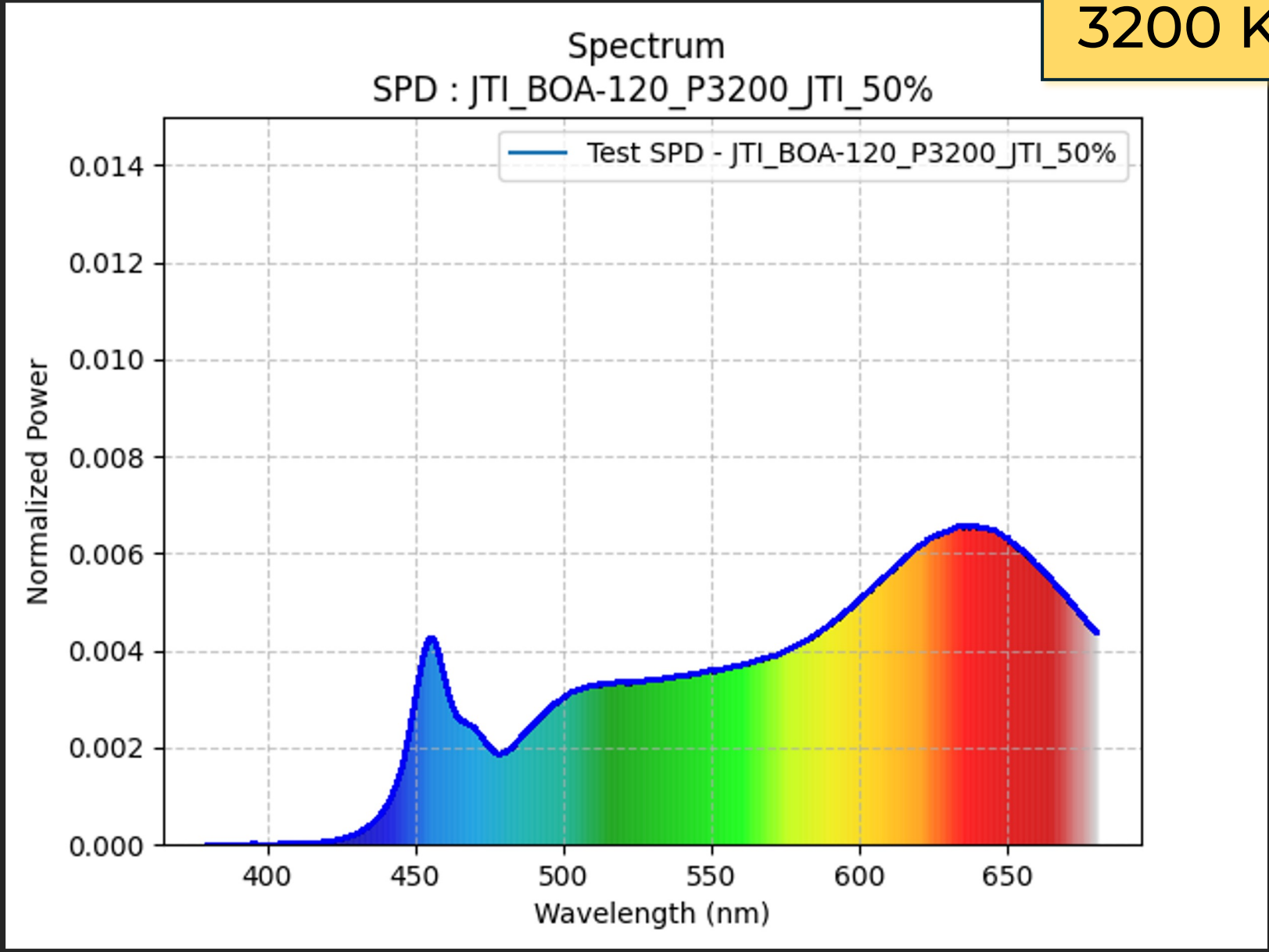
CRI Ra 92.69

IES TM-30-18 Rf 94 Rg 103

SSI[P3200] 82



3200 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 25% - CCT set on JETI

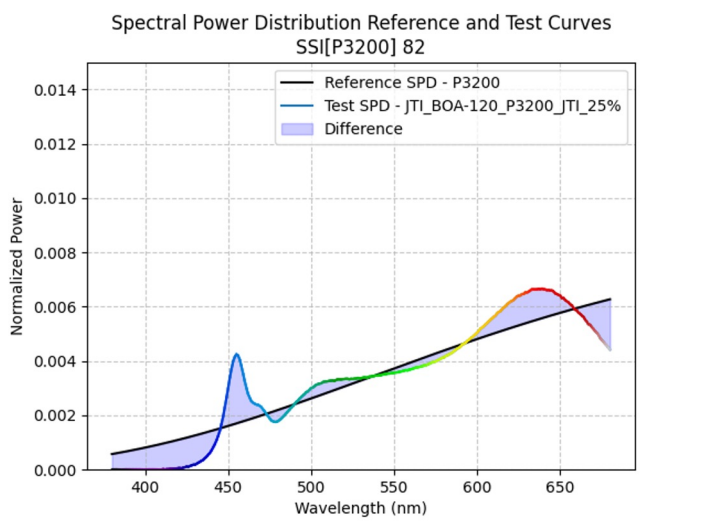
CCT 3078 Duv -0,006

CIE 1931 2° x 0.4236 y 0.3853

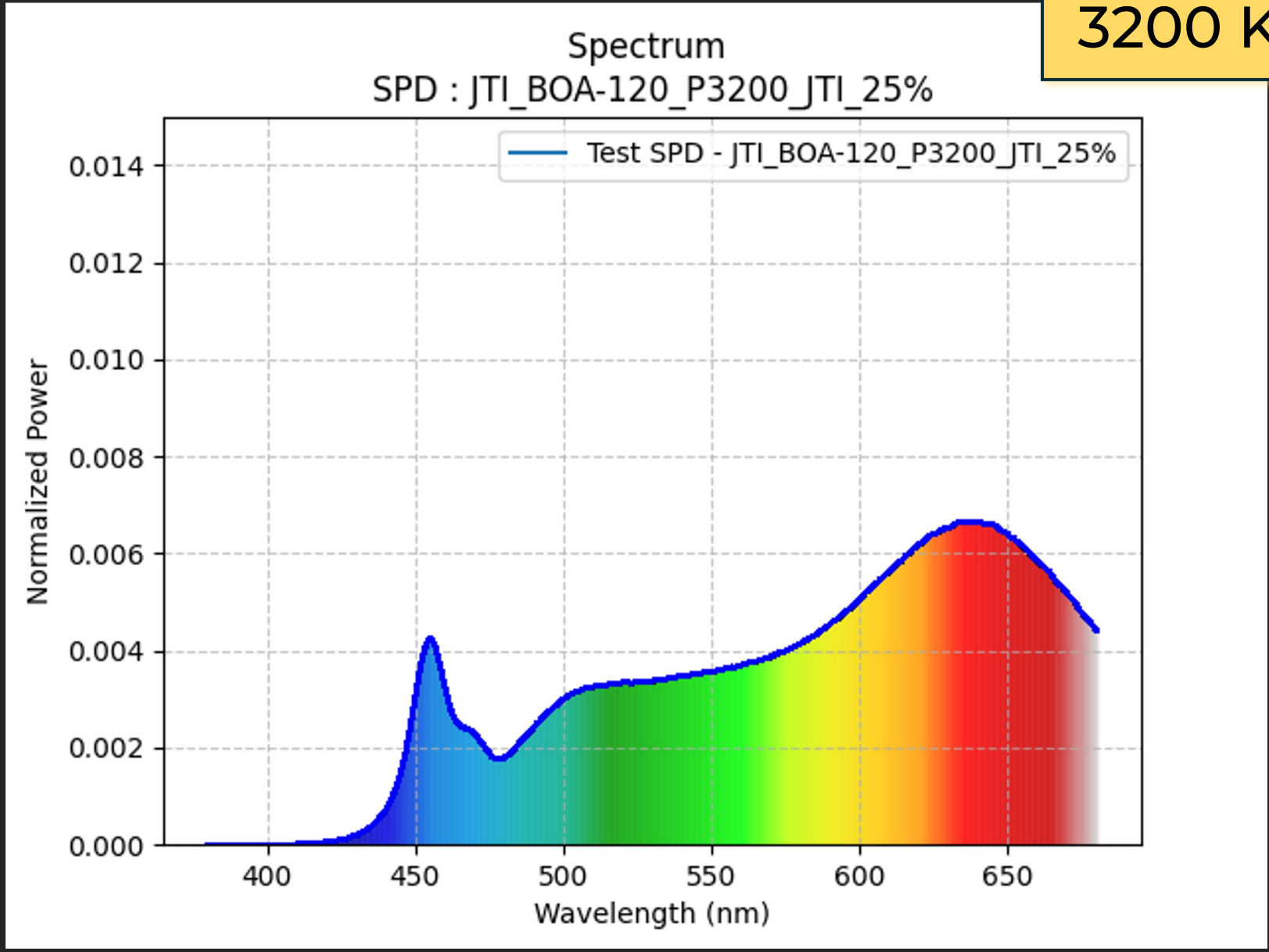
CRI Ra 92.83

IES TM-30-18 Rf 94 Rg 103

SSI[P3200] 82



3200 K



BOA v.2 120 DMX

5600 K

JETI

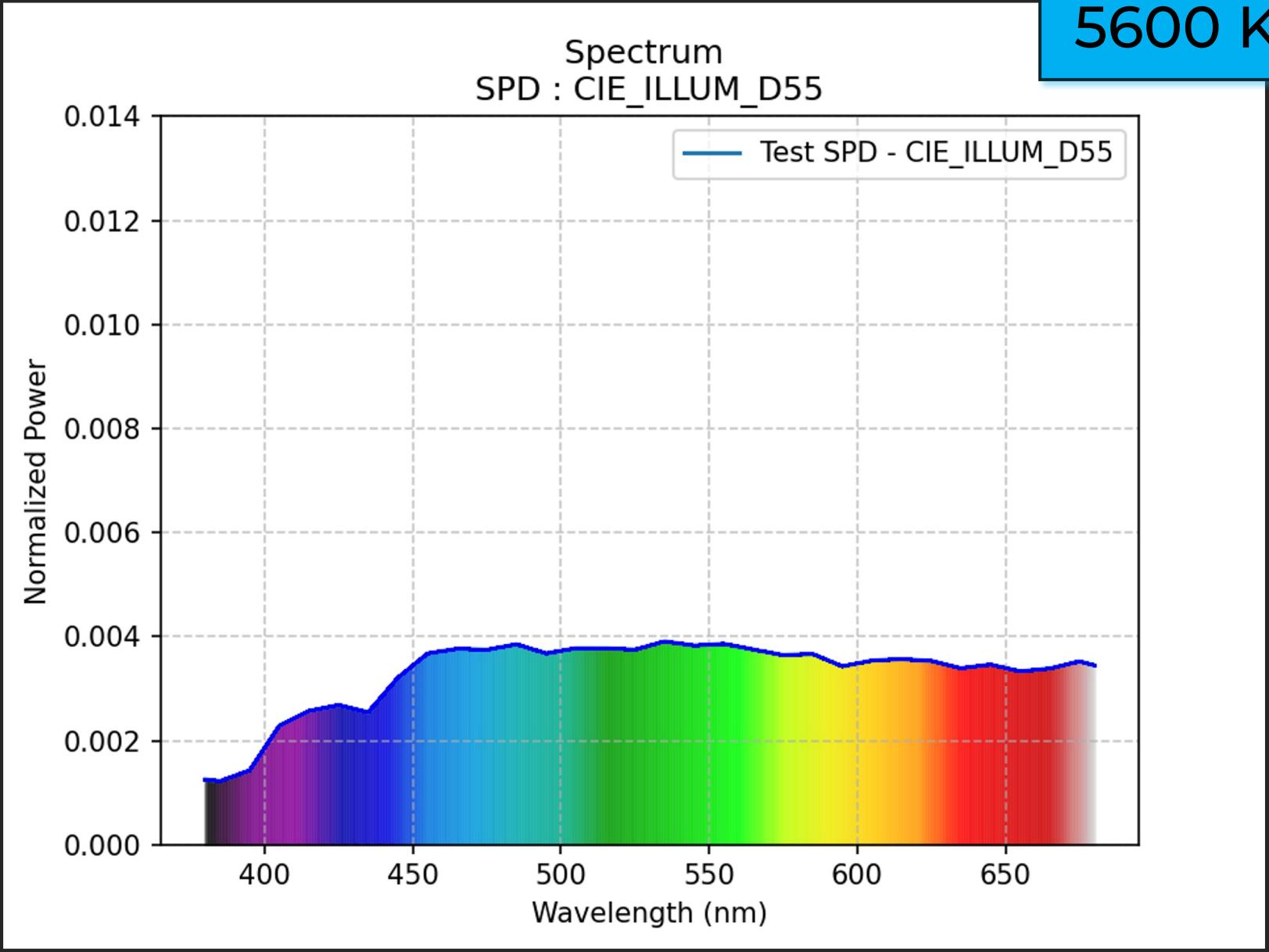
5600 K

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/

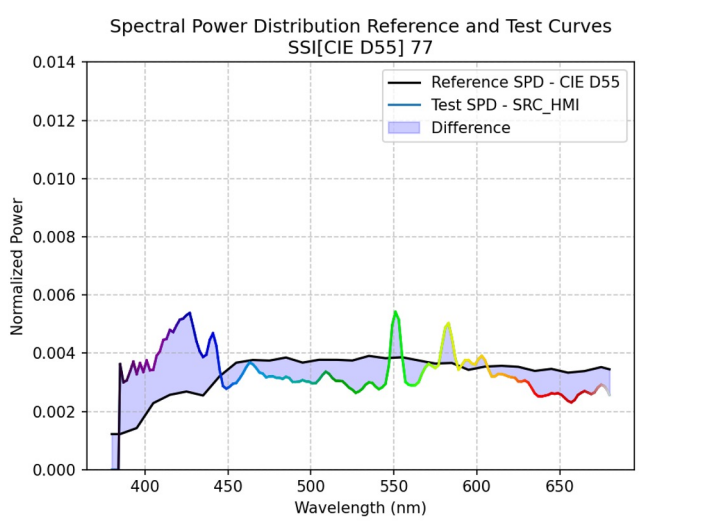
CCT 5605 Duv 0,000

CIE 1931 2° x 0.3301 y 0.3274

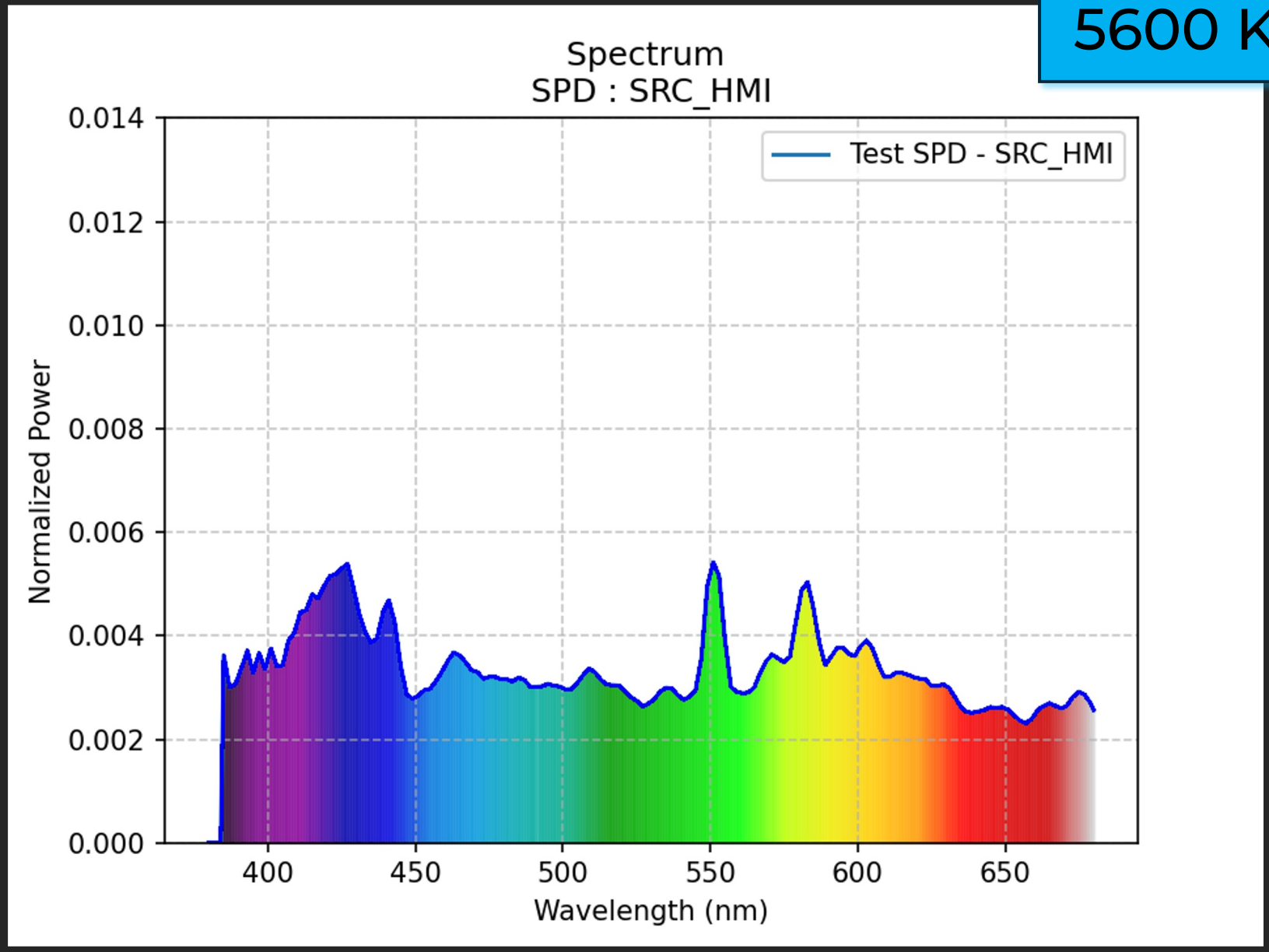
CRI Ra -

IES TM-30-18 Rf - Rg -

SSI[CIE D55] 77



5600 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 100% - CCT set on LED

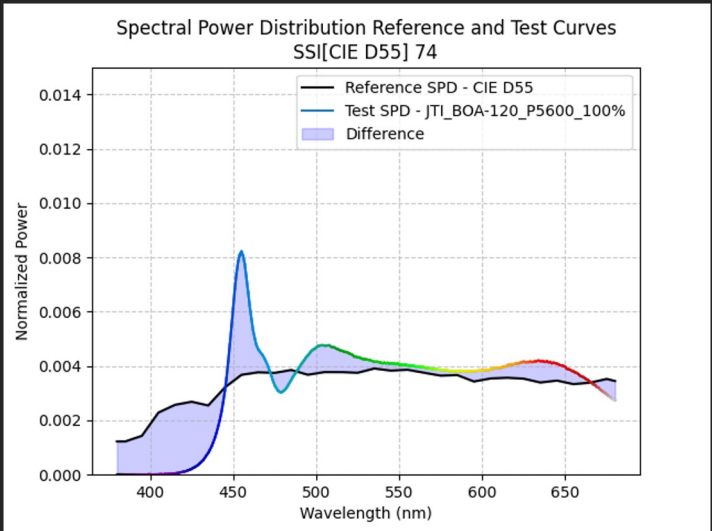
CCT 5565 Duv 0,003

CIE 1931 2° x 0.3310 y 0.3452

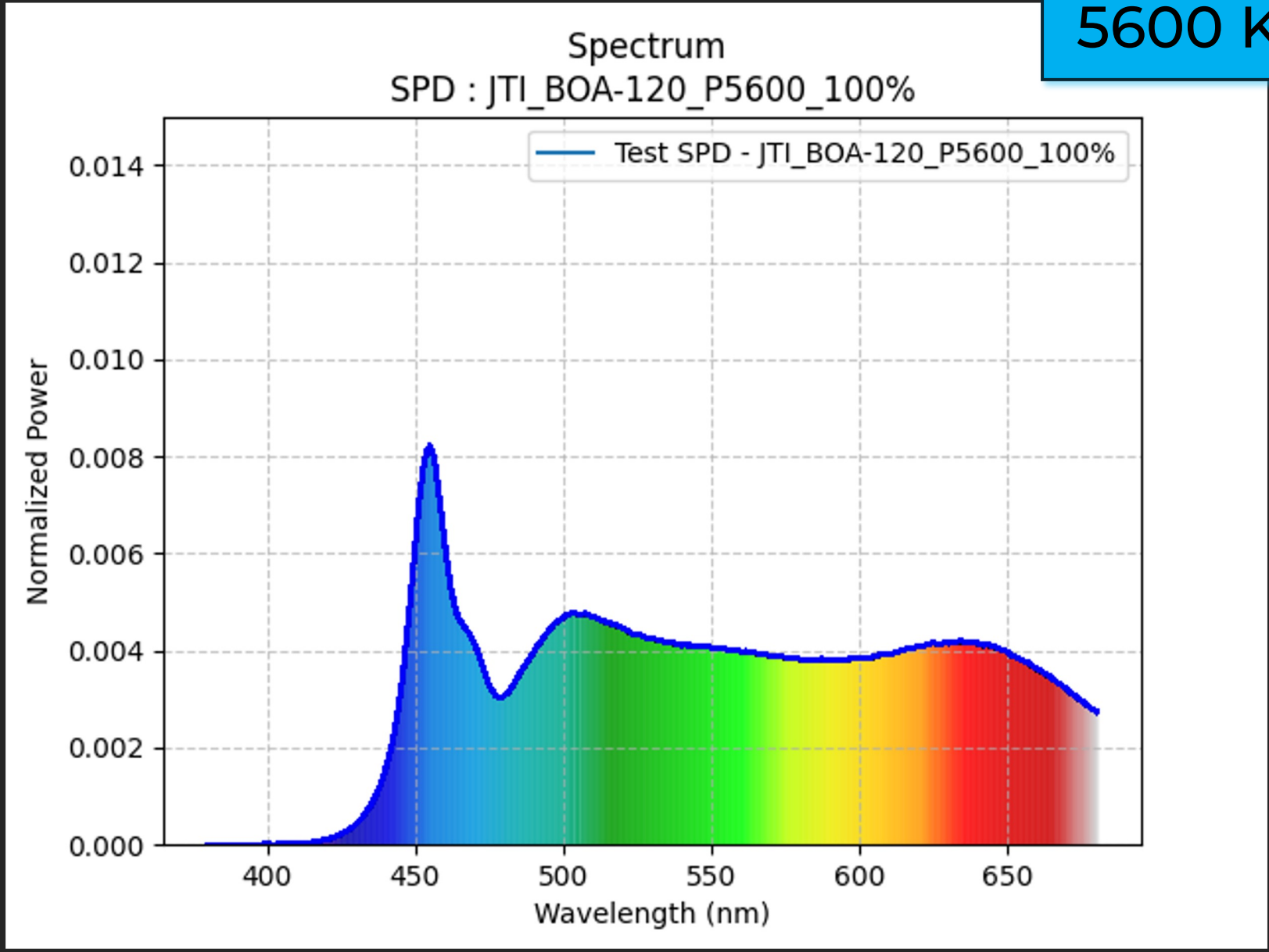
CRI Ra 95.94

IES TM-30-18 Rf 93 Rg 100

SSI [CIE D55] **74**



5600 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 100% - CCT set on JETI

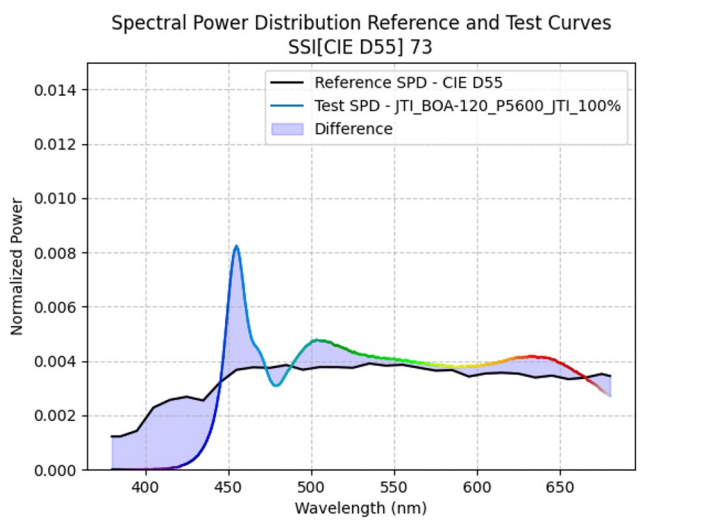
CCT 5606 Duv 0,003

CIE 1931 2° x 0.3301 y 0.3446

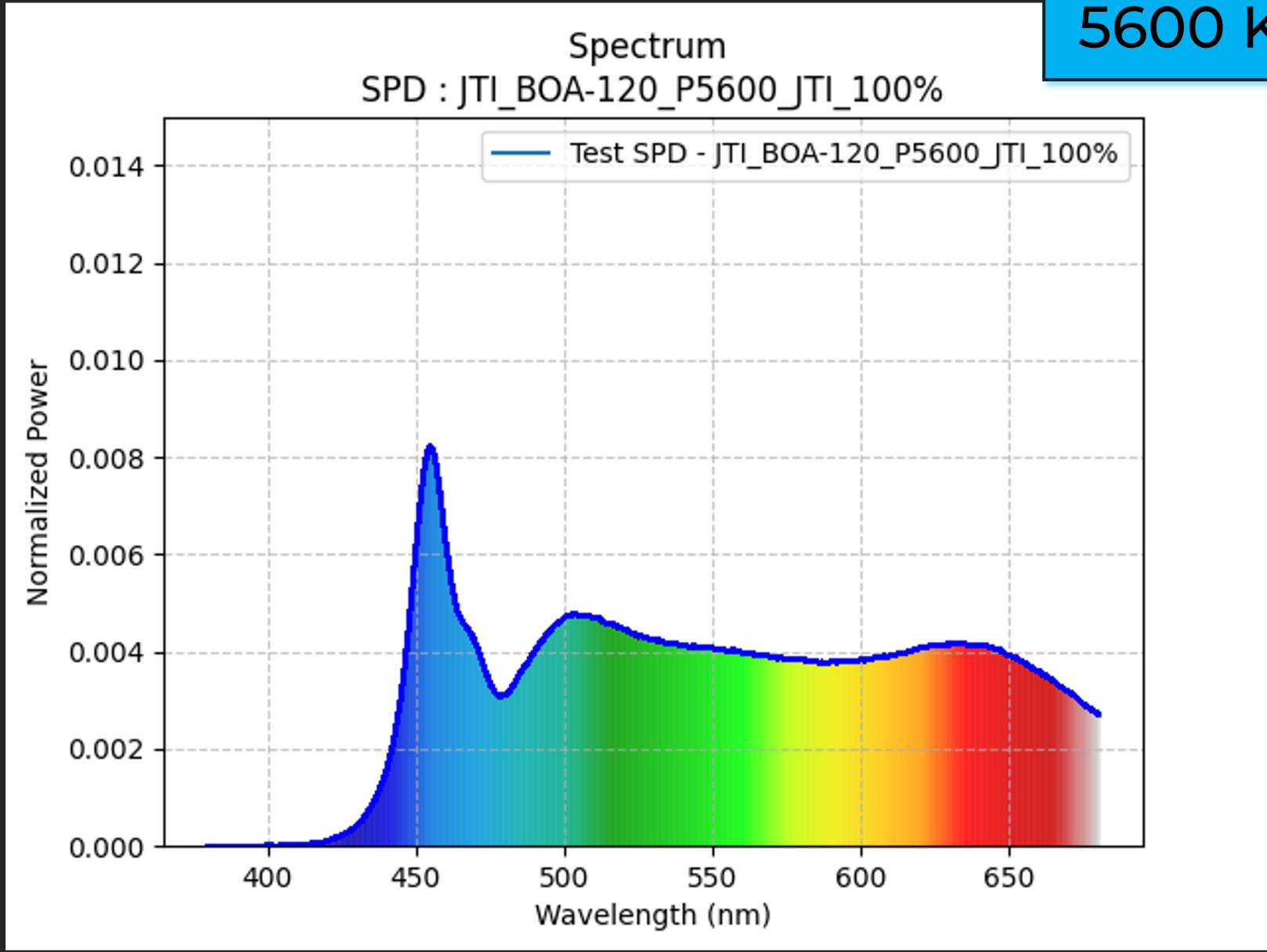
CRI Ra 95.89

IES TM-30-18 Rf 93 Rg 100

SSI[CIE D55] 73



5600 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 50% - CCT set on JETI

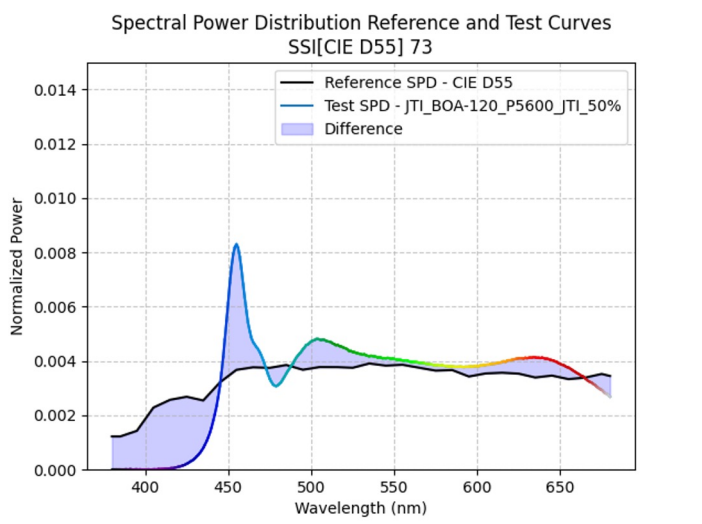
CCT 5649 Duv 0,003

CIE 1931 2° x 0.3291 y 0.3442

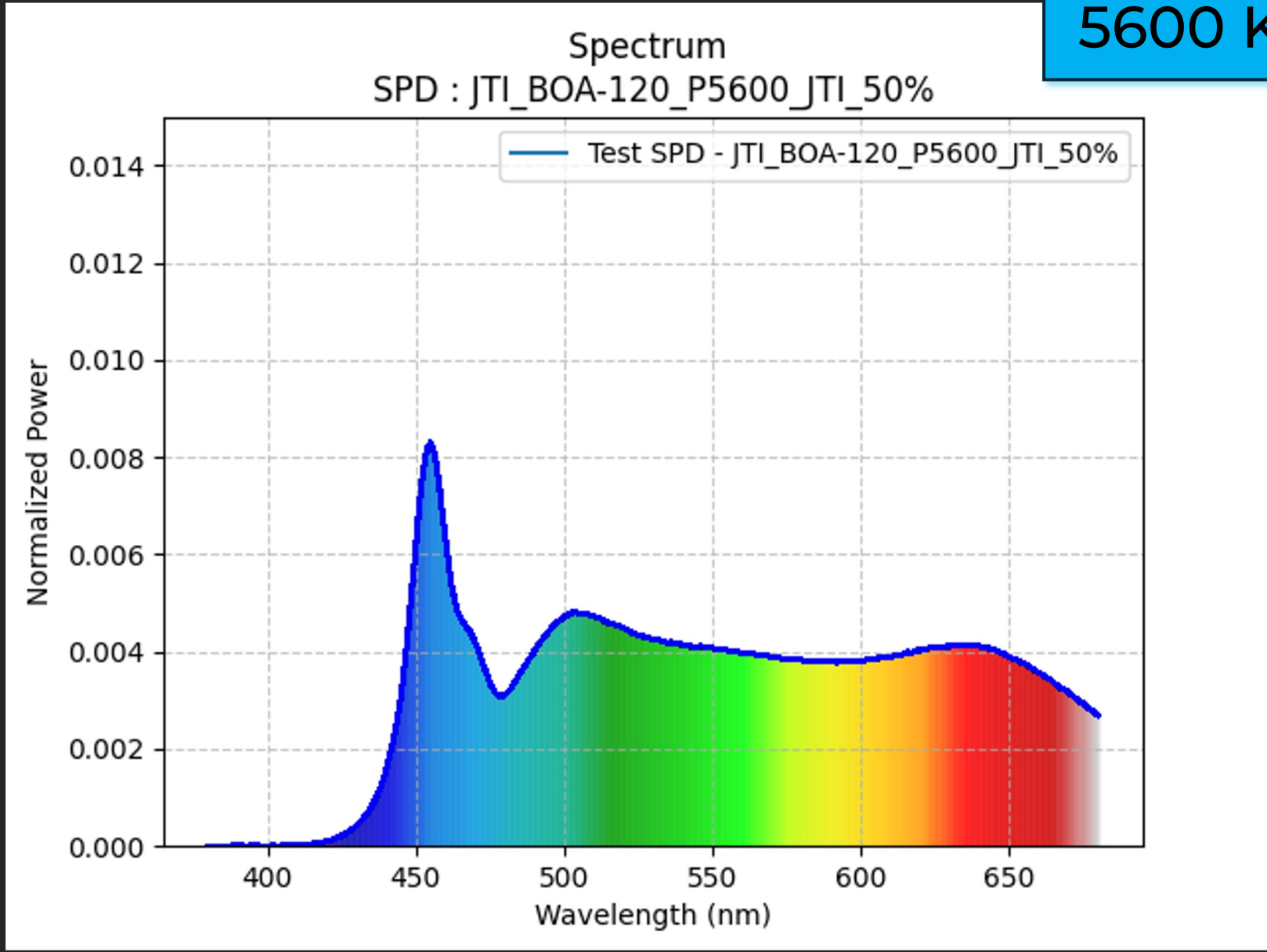
CRI Ra 96.04

IES TM-30-18 Rf 93 Rg 100

SSI[CIE D55] 73



5600 K



Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

RUBYLIGHT

BOA v.2 120 DMX

Power: 25% - CCT set on JETI

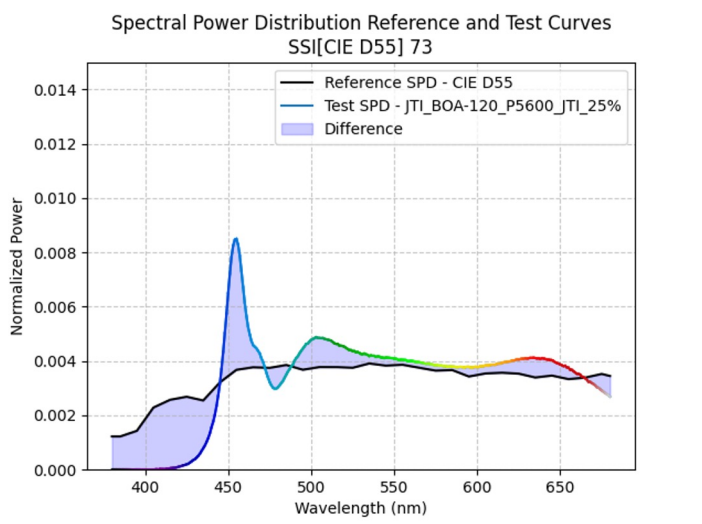
CCT 5688 Duv 0,004

CIE 1931 2° x 0.3282 y 0.3443

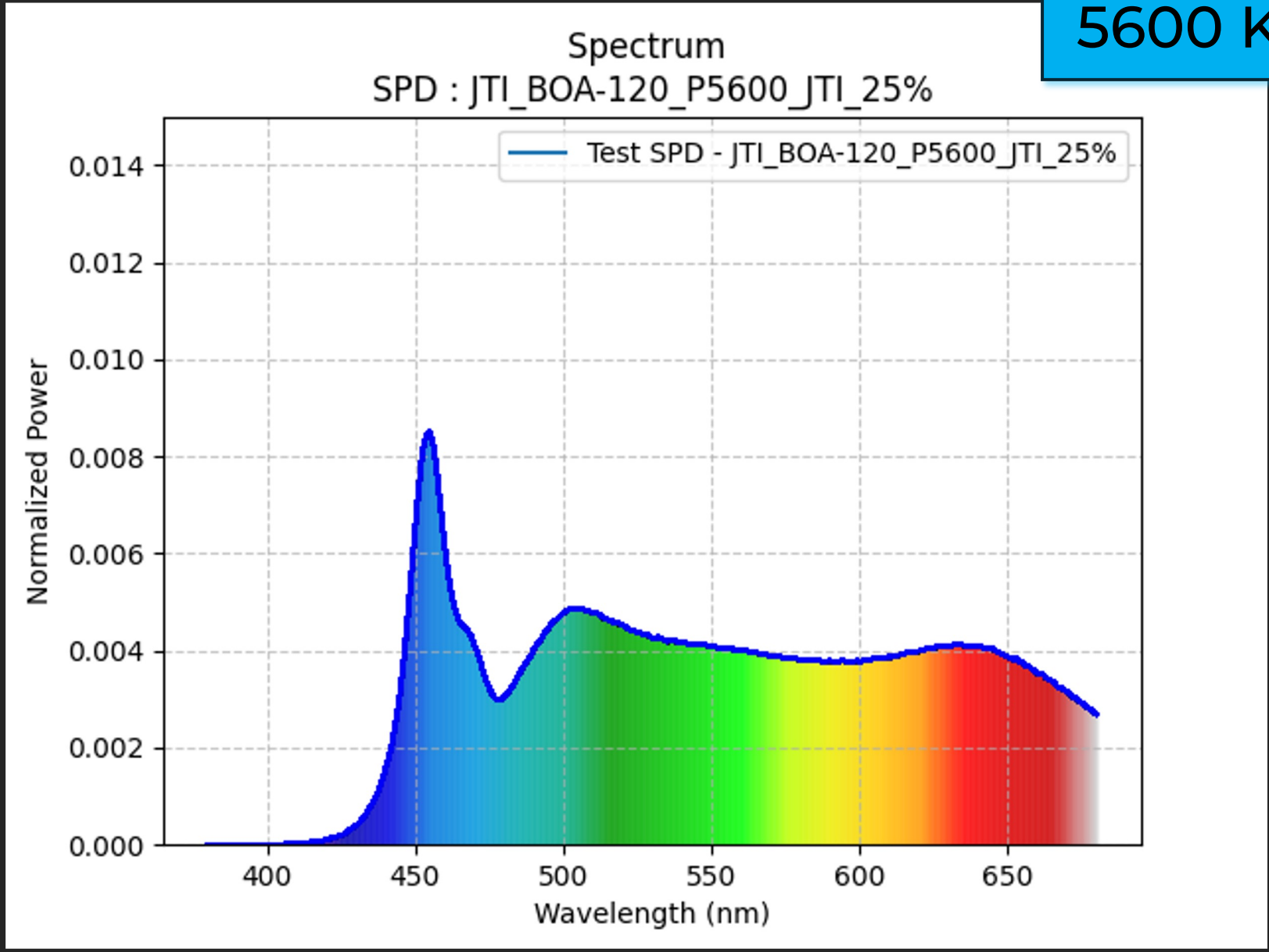
CRI Ra 96.39

IES TM-30-18 Rf 93 Rg 100

SSI[CIE D55] 73



5600 K



BOA v.2 120 DMX

Images, Spectra

& SSI

JETI

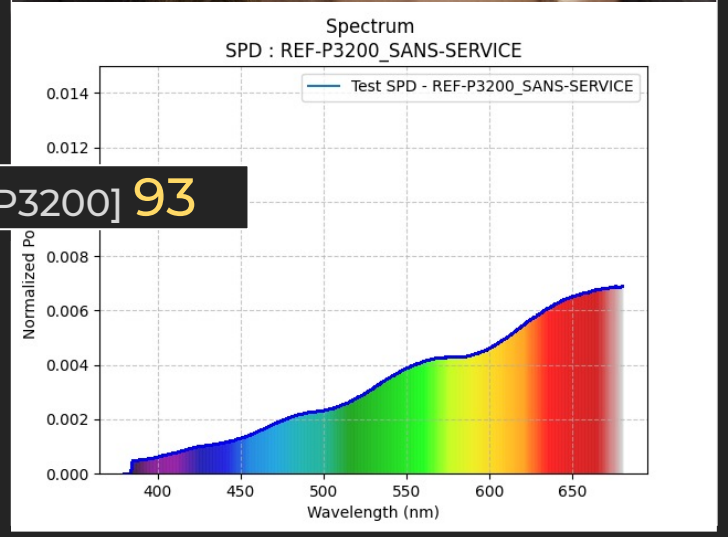
Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

TUNGSTEN REF.

RED RAPTOR
GRADED

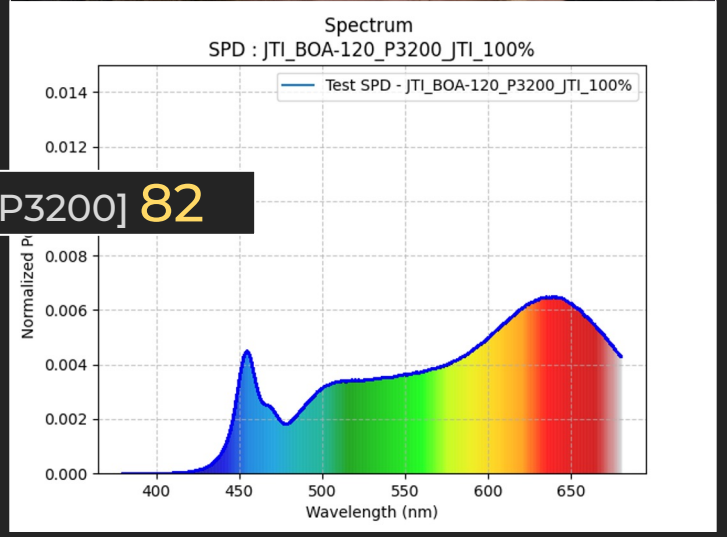
BOA v.2 120 DMX

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data



SSI[P3200] 93

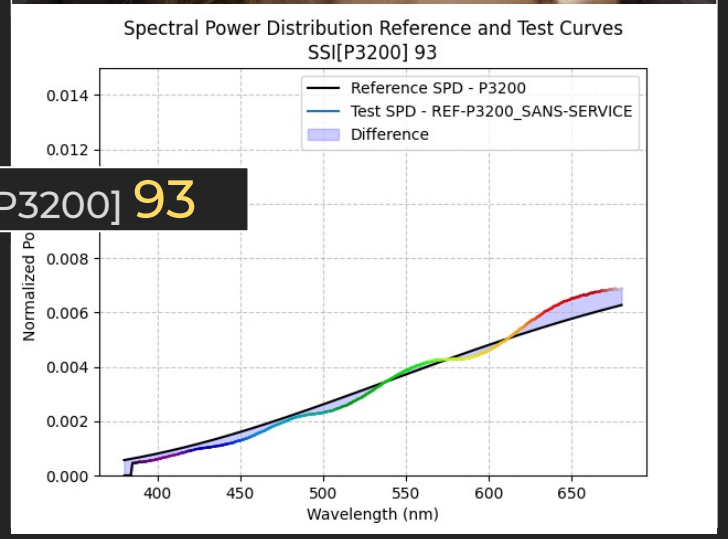
TUNGSTEN REF.



SSI[P3200] 82

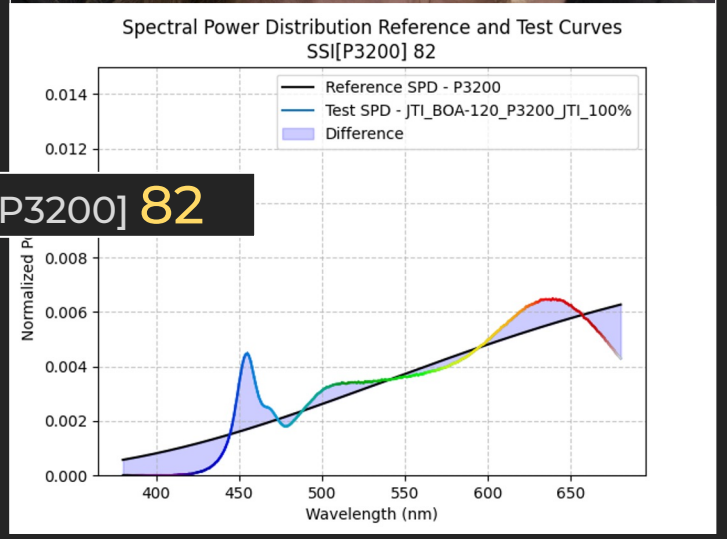
BOA v.2 120 DMX

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data



SSI[P3200] 93

TUNGSTEN REF.



SSI[P3200] 82

BOA v.2 120 DMX

BOA v.2 120 DMX

& 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

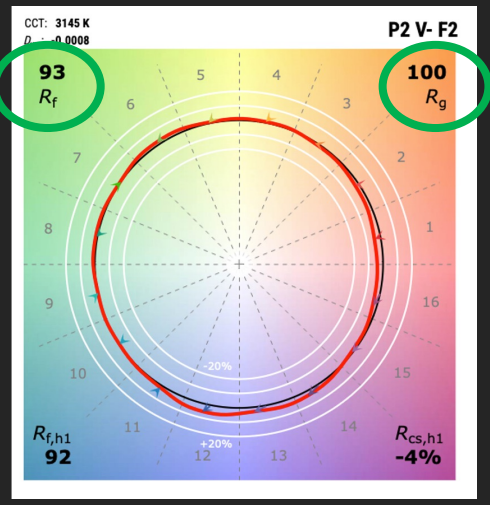
All the data in this section dedicated to the TM-30-20 has been calculated using JETI.

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.

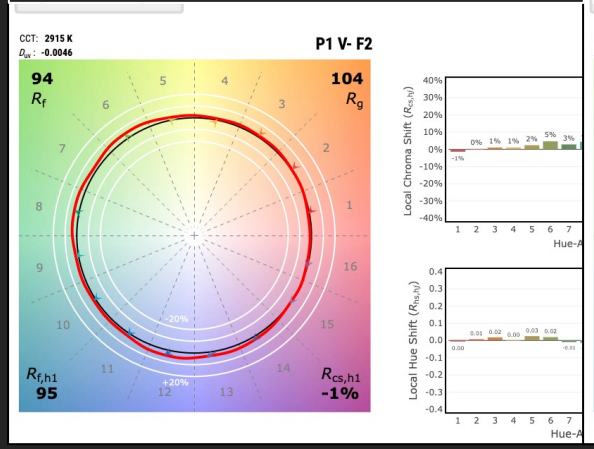
Toutes les mesures sont données en 3200 K et en 5600K

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

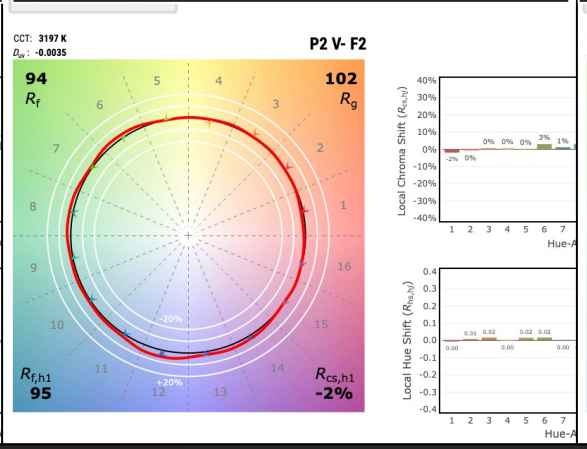
- graphs of the lighting fixture set at 100%, 50% and 25% power using JETI
- graphs of the lighting fixture set to 100% of its power thanks to the indications of the lighting fixture.

All measurements are provided in 3200K and 5600K

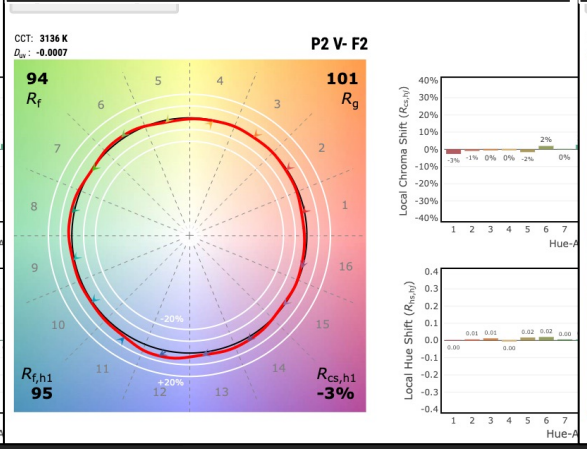
100 % indicated by fixture



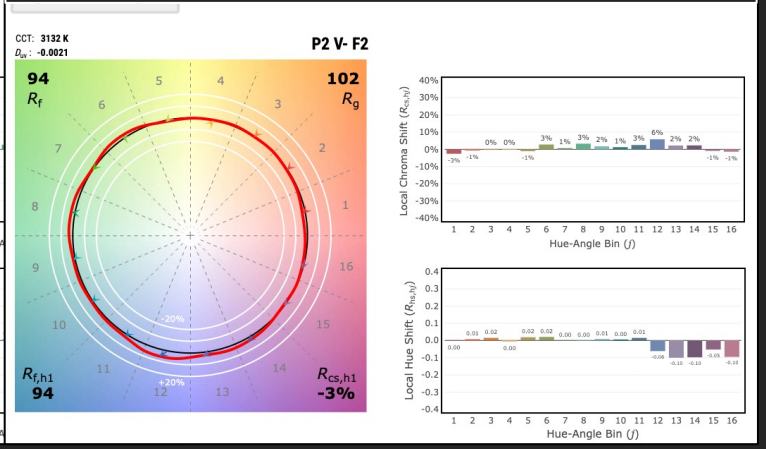
100 % indicated by JETI



50 % indicated by JETI



25 % indicated by JETI



3200 K

BOA v.2 120 DMX TM-30-20

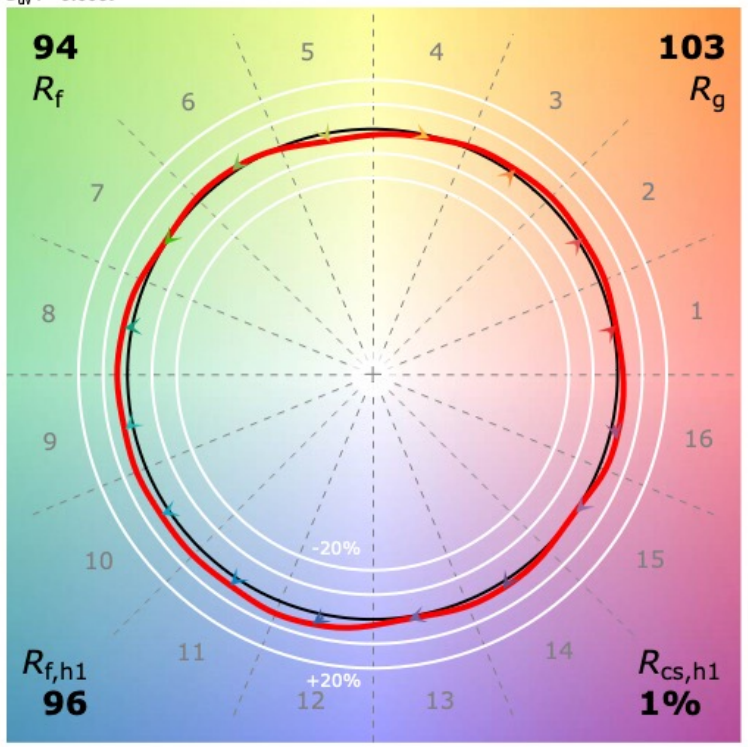
ANSI/IES TM-30-20 Color Rendition Report

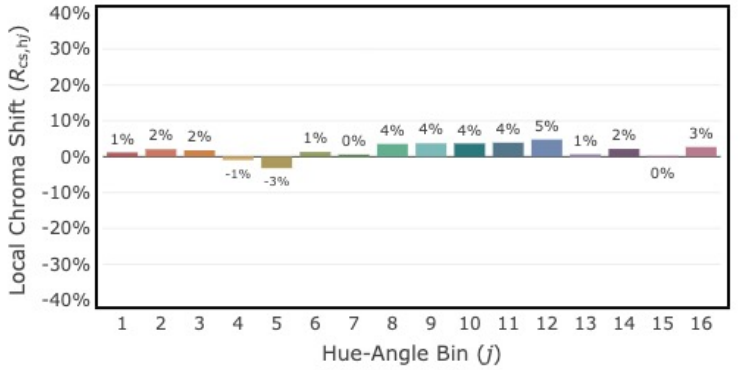
Unique Identifier:

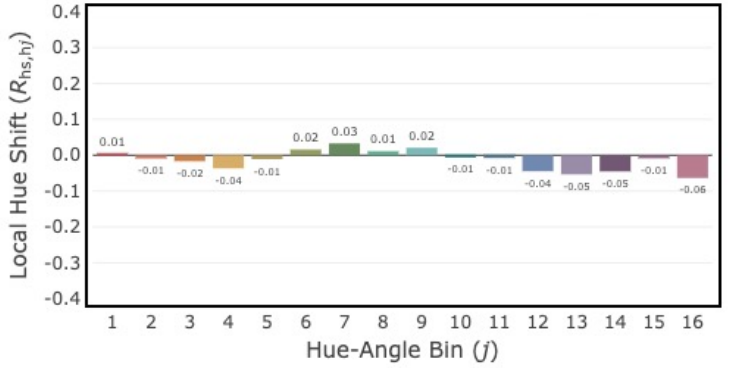
JTI_BOA-120_P3200_JTI_100%

CCT: **3190 K**
D_{uv}: **-0.0057**

P1 V3 F2



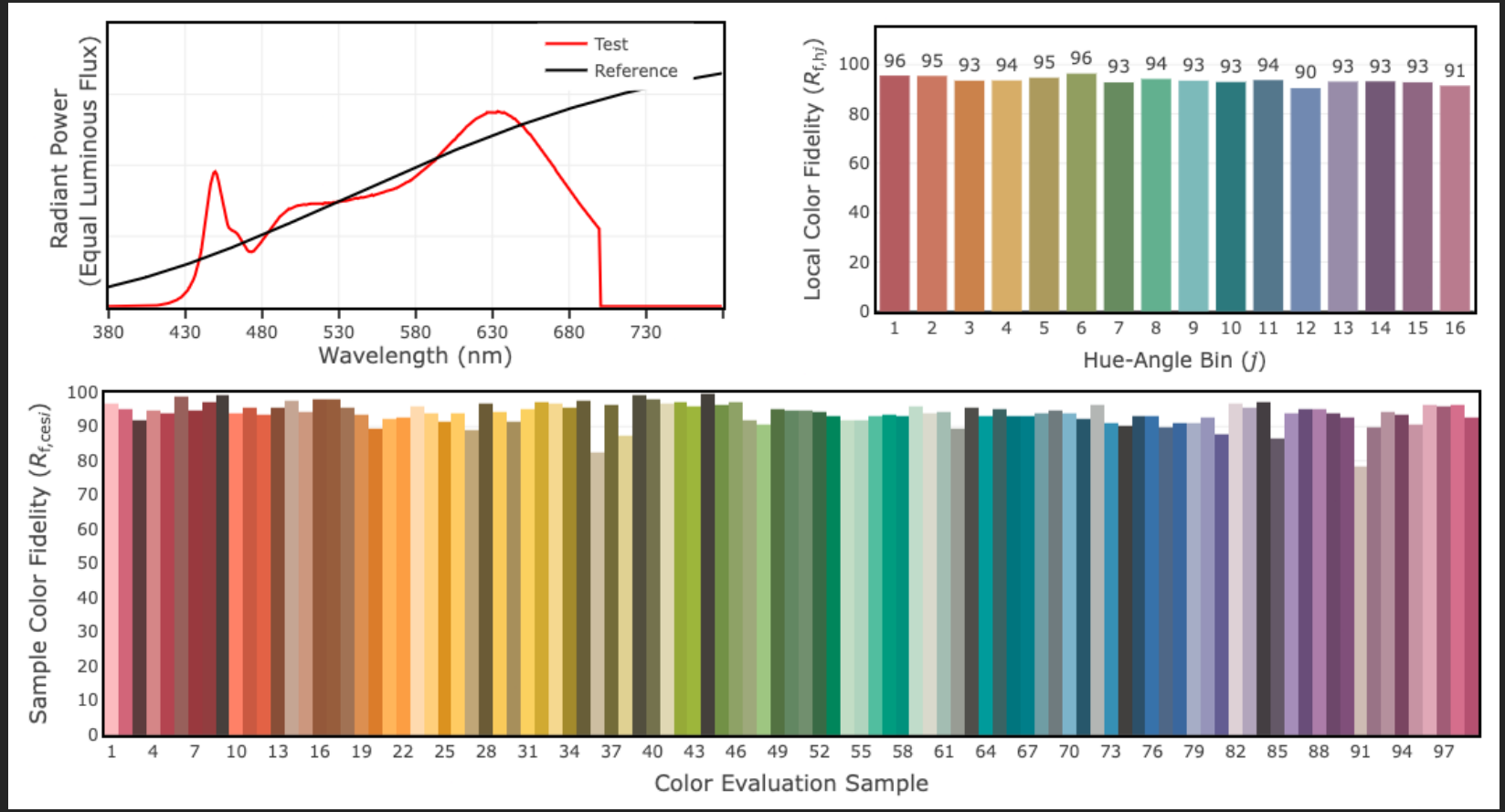




JETI

3200 K

BOA v.2 120 DMX TM-30-20



JETI

3200 K

BOA v.2 120 DMX

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
P3200_**LED_100%**	81	94	103	92,78	90,76
P3200_**JTI_100%**	82	94	103	92,83	90,86
P3200_**JTI_50%**	82	94	103	92,69	90,77
P3200_**JTI_25%**	82	94	103	92,83	90,92

JETI

BOA v.2 120 DMX TM-30-20

5600 K

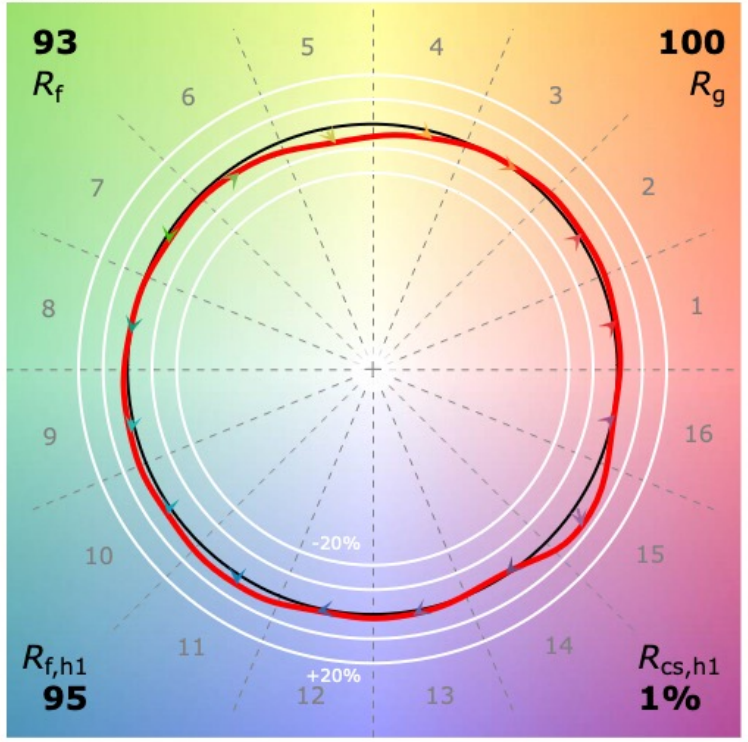
ANSI/IES TM-30-20 Color Rendition Report

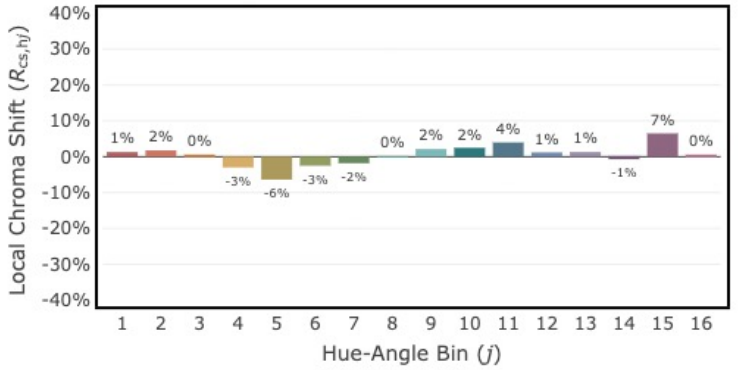
Unique Identifier:

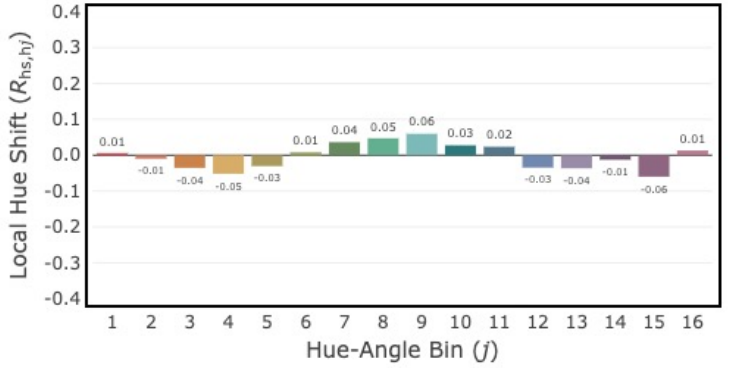
JTI_BOA-120_P5600_JTI_100%

CCT: **5608 K**
D_{uv} : **0.0029**

P1 V3 F2

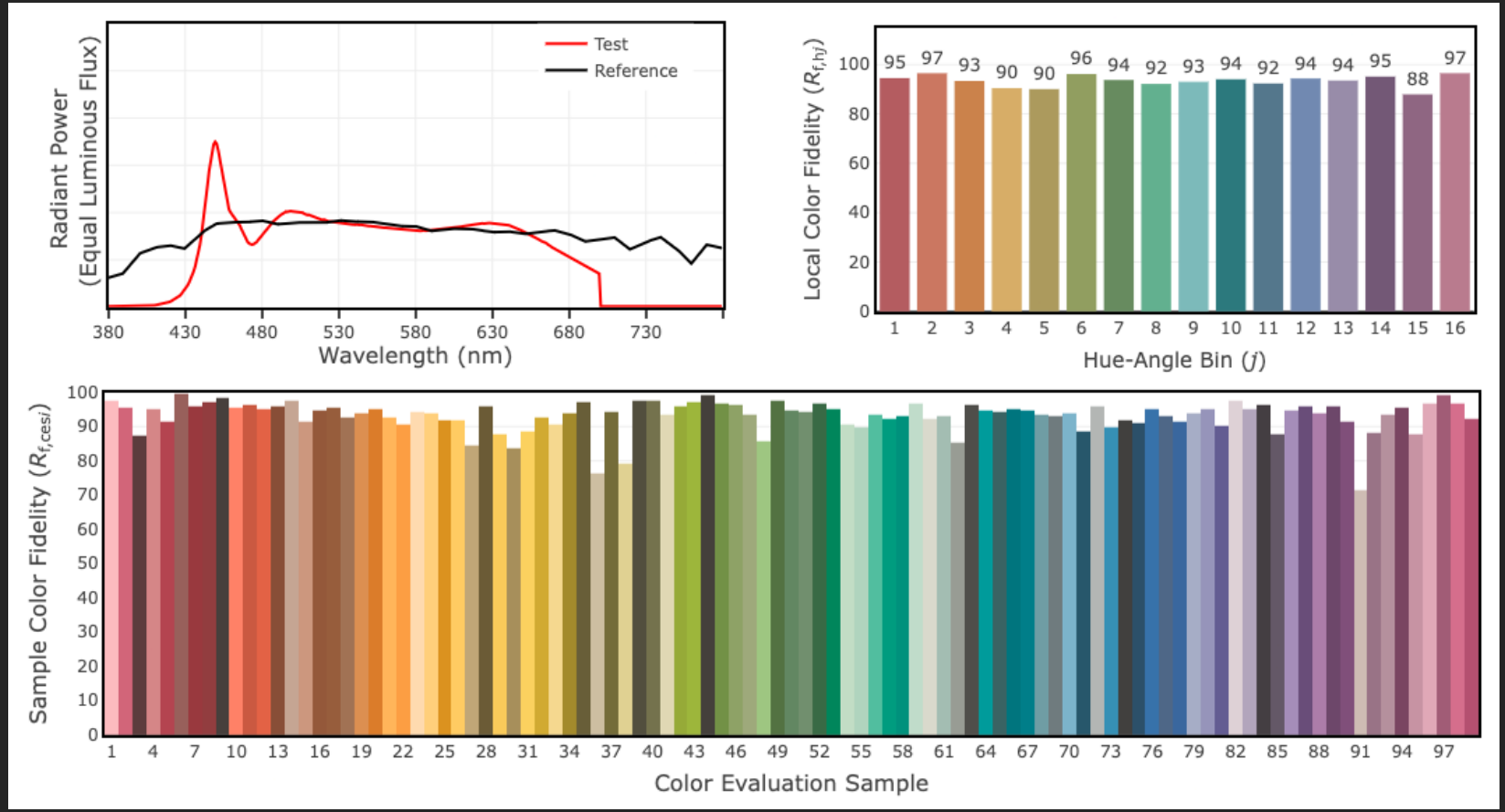






JETI

BOA v.2 120 DMX TM-30-20 5600 K



JETI

5600 K

BOA v.2 120 DMX

Comparison chart: SSI vs TM30-20 vs CRI

JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
P5600_**LED_100%**	73	93	100	95,94	94
P5600_**JTI_100%**	73	93	100	95,89	93,94
P5600_**JTI_50%**	73	93	100	96,04	94,12
P5600_**JTI_25%**	73	93	100	96,36	94,46

JETI

Données constructeur

Manufacturer's data

RUBYLIGHT

Images & données RUBYLIGHT BOA v.2 120 DMX Images & Data

Name of the tested product Company	BOA v.2 120 DMX RUBY LIGHT				
Type of light: Fresnel, panel or others	Flexible soft LED				
Full Color or Bi-Color	BI-color		IP	65	
Dimensions (inches/cm)		Weight (Lbs/kg)			
Built-in ballast	~~Yes~~	No	Ballast weight		
Mandatory optical accessory	~~Yes~~	No	Optional optical accessories (excludes lightbox and louvers)	Yes	~~No~~
If yes to optional, which ones?	Difuseur Cosmetic, Difuseur Opal, difuseur Tube, tarlatane black, water drop				
Type of circuit board material	flexible printed circuit board				
Type of housing construction (metal, plastic, others)	textile and foam confection				
Website	www.rubylight.fr/				
Person in charge/Position	Guillermo GRASSI Manager				

Electrical power consumption					
Maximum internal temperature		- °C		F	
AC/DC - Battery voltage	24 V	~~AC only~~	~~DC only Battery - voltage~~		
~~With AC, draws~~	Amps	With DC, draws	+- 40W per meter ~~Amps/V~~		

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		

Fresnel diameter (cm/inches)		Beam angles:	Spot	°	Mid	°	Flood	°	
Lux @ 1 meter (3.3 ft.) **Optic Spot**	@ 3200K @ 5600K	Lux @ 3 meters (10 ft.) **Optic Spot**	@ 3200K @ 5600K	Lux @ 5 meters (15 ft.) **Optic Spot**	@ 3200K @ 5600K				
Lux @ 1 meter (3.3 ft.) **Optic Mid**	@ 3200K @ 5600K	Lux @ 3 meters (10 ft.) **Optic Mid**	@ 3200K @ 5600K	Lux @ 5 meters (15 ft.) **Optic Mid**	@ 3200K @ 5600K				
Lux @ 1 meter (3.3 ft.) **Optic Flood**	@ 3200K @ 5600K	Lux @ 3 meters (10 ft.) **Optic Flood**	1 @ 3200K @ 5600K	Lux @ 5 meters (15 ft.) **Optic Flood**	@ 3200K @ 5600K				

Bi-Color					
Number of diodes		Types			
Color temperature between	2650 K	and	5750 K		
Color temperature preset	3200 4300 5600 Yes	No			
Green Magenta Control	~~Yes~~	No			

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

Other specificities	Notre PWM est de 32Khz

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

Operating positions	All	No: limitations:	
Spigot diameter			

Memory of settings	Yes	No	Wireless DMX compatibility	Yes	~~No~~	
			Built in Lumen radio protocol	~~Yes~~	No	
Wired DMX compatibility	Yes	~~No~~	Maximum distance			
			Master/Slave: for synchronising multiple units	Yes	~~No~~	
Native apps	~~Yes~~	No	Apps compatibility	Yes	No	
Which ones?	depends on the wireless DMX used. compatible with exalux and moonlite systems					
			Color shifts when dimming	~~Yes~~	No	
			Change of light levels when selecting CT	Yes	~~No~~	

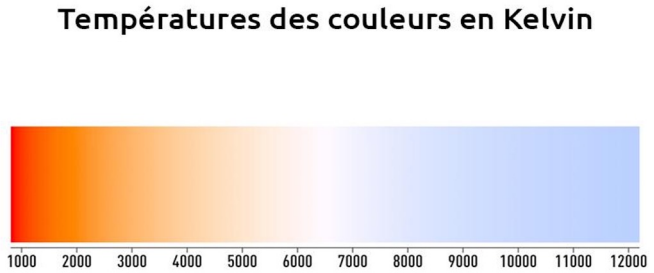
Environmental concern	
Warranty (in years)	2
For how long parts are available?	we can take back parts since 2017
Average repair time	15 days
What do you know about recycling your products?	We are part of the French lighting industry, which includes Recylum. We don't know what happens to our products when they reach the end of their useful life, so unless they ask us to, we take back all the appliances we sell, with discounts for new or repair. It's important that the products come back to us for a second life.
Do customers send them back to you or do they take care of it themselves?	we have very little recovery. Hirers and customers return to us infrequently.
Country of manufacturing	LED : China. Fabrics: France Germany Electronics: France Design, stamping, manufacturing and service in France

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

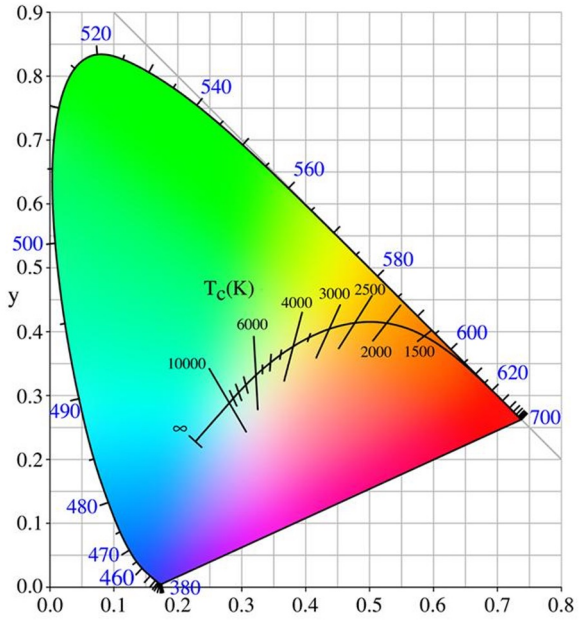


La température de couleur est la valeur cible idéale que nous cherchons à atteindre pour faire les mesures (3200 ou 5600). Celle-ci est basée sur la CCT et son unité est donc le Kelvin (K). La valeur peut être donnée directement par le projecteur ou réglée et ajustée avec les mesures prisent par le spectroradiomètre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

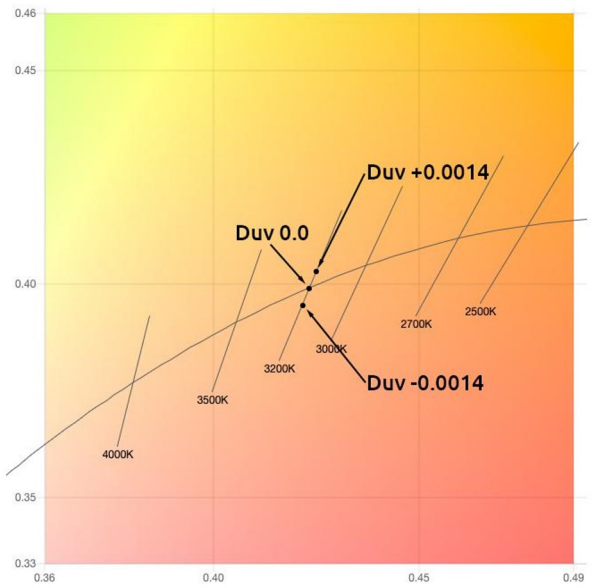


La CCT ou température de couleur corrélée, est la température précise d'un radiateur de Planck (corps noir) ayant la chromaticité la plus proche possible de celle associée à une distribution spectrale donnée. La CCT est donc calculée à partir de la distribution spectrale (SPD) de la source lumineuse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

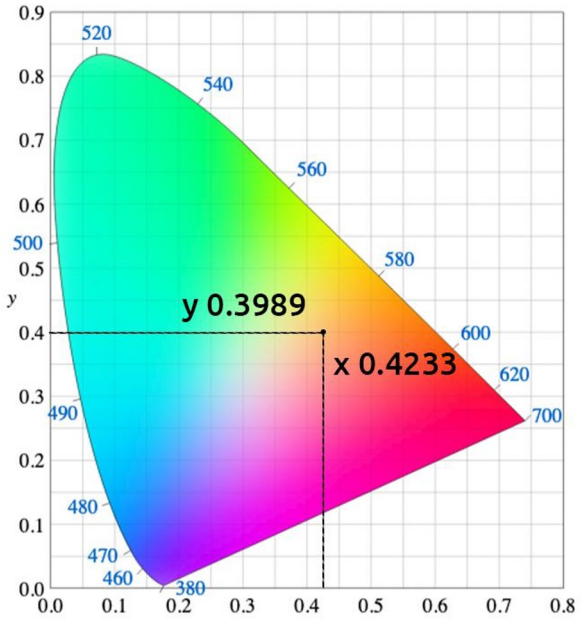


Le Duv ou Delta u,v est utilisé pour décrire la distance entre les coordonnées chromatiques de la source de lumière et le radiateur de Planck, appelé également lieu du corps noir. Une valeur négative indique que la source est en dessous de la courbe du corps noir (dominante magenta ou rose), une valeur 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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Responsable de la communication externe et interne, CST	Sebastien Lefebvre	Head of External and Internal Communications, CST

Clips

Monteuse, CST	Bohdana Korohod	Editor, CST
Directeur de la photographie, AFC	Patrick Duroux	Cinematographer, AFC
Responsable de la communication externe et interne CST	Sebastien Lefebvre	Head of External and Internal Communications CST