

Journée Très LEDs - De beaux tests à faire

Images & mesure  
par constructeur

JTL 16

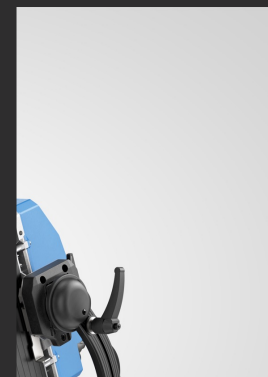


Be4P

MagicHour  
Que vos projets deviennent réalité

A Bright LED day - Brilliant tests on the horizon

Images & measurements  
by manufacturer



ROSCO DMG

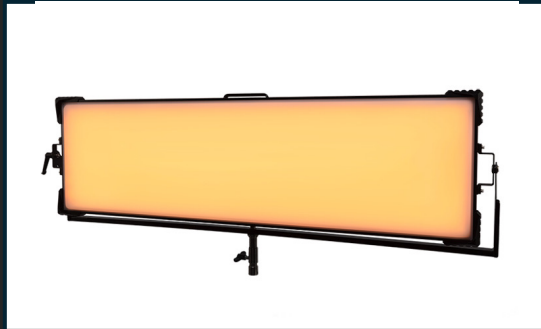
MAXI MIX

RED RAPTOR

ROSCO DMG.

# Bi-color

360 W Données du fabricant  
/ Manufacturer's data



ROSCO DMG  
MAXI MIX

Interview du fabricant en français :

Interview with the manufacturer in French:



<https://www.youtube.com/watch?v=c2Ev-073iyg&list=PLW8aVswX2z2Y6fVtZuJdpemmqLPavU5if&index=7>

## Plan / Plan

- MAXI MIX & Images
    - ✓ Peau caucasienne
      - Comparatifs MAXI MIX vs tungstène
      - Sous-exposition : ND 06 vs gradateur
    - ✓ Peau noire
      - Comparatifs MAXI MIX avec tungstène
      - Sous-exposition : ND 06 vs gradateur
  - Mesures : Explications & exemples
  - Mesures
  - MAXI MIX, Spectra & SSI
  - MAXI MIX, Images, Spectra & SSI
  - MAXI MIX, & TM-30
  - Données constructeur
  - Explications : K, CCT K, Duv & coordonnées x,y
- MAXI MIX & Images
    - ✓ Caucasian skin tone
      - Comparison MAXI MIX vs tungsten
      - Underexposure: ND 06 vs dimmer
    - ✓ Black skin tone
      - Comparison MAXI MIX vs tungsten
      - Underexposure ND 06 vs dimmer
  - Measurements: Explanations & examples
  - Measurements
  - MAXI MIX, Spectra & SSI
  - MAXI MIX, Images, Spectra & SSI
  - MAXI MIX & TM-30
  - Manufacturer's data
  - Explanations on K, CCT K, Duv & x,y coordinates

# MAXI MIX & Images



CAUCASIAN

Alice



RED RAPTOR

MAXI MIX

Comparison with

TUNGSTEN



TUNGSTEN REF.

RED RAPTOR  
GRADED



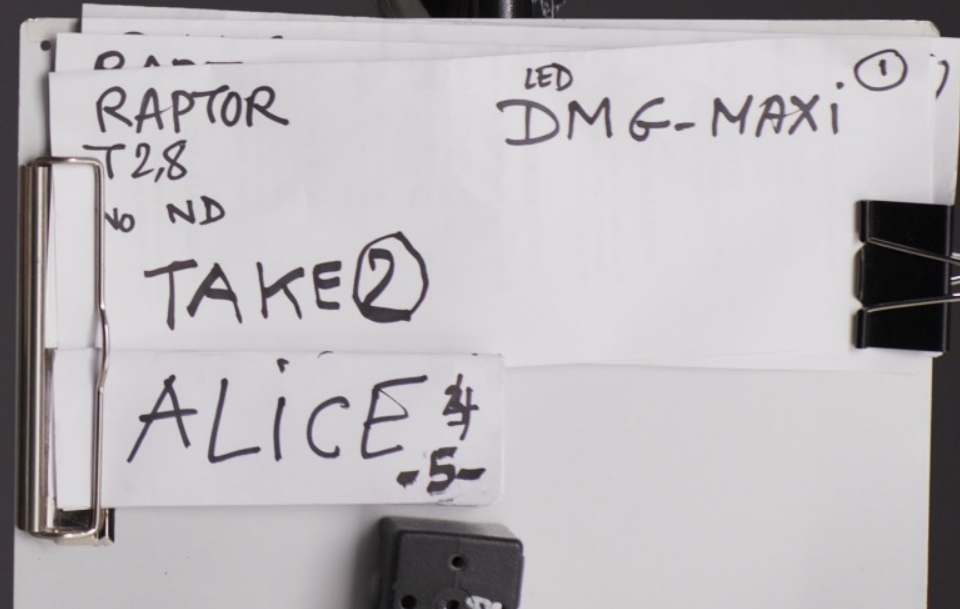
CAM = RED RAPTOR  
LENS T 2,8  
NO ND

3200K  
QUARZ

①

ALICE 11M45  
EMMA 1120A51A





MAXI MIX

RED RAPTOR  
GRADED



TUNGSTEN REF.

RED RAPTOR  
GRADED



MAXI MIX

CAUCASIAN

Alice



MAXI MIX

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

RED RAPTOR



**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.

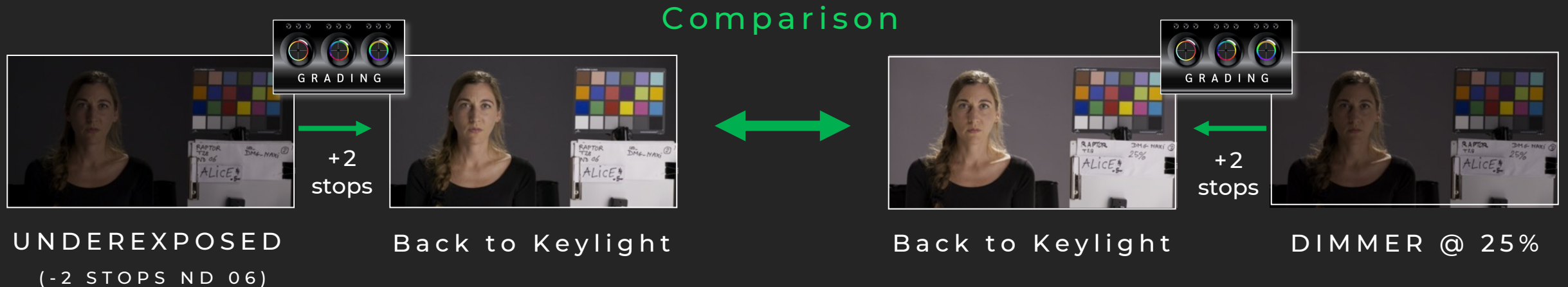
Pour ramener la correction d'exposition au keylight, on a travaillé en offset en équivalent points de lumière de tirage.

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.

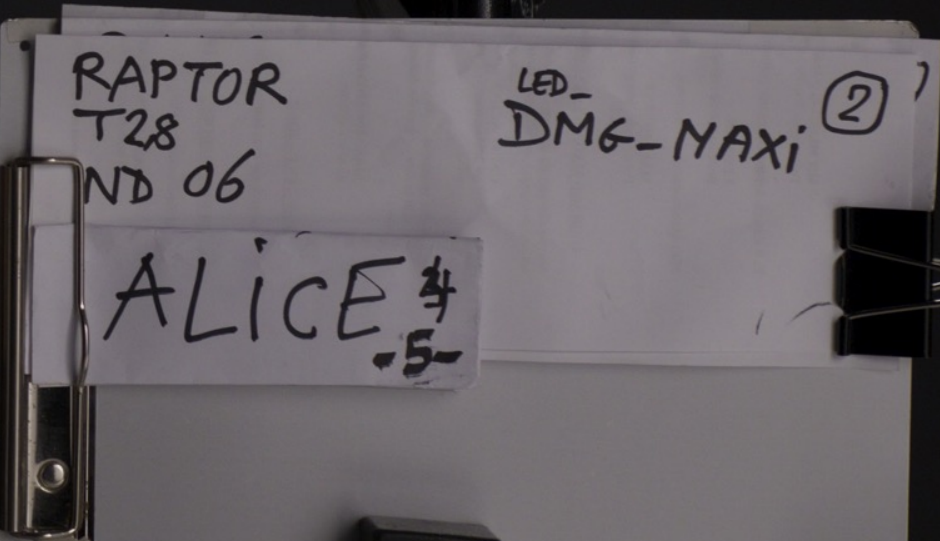
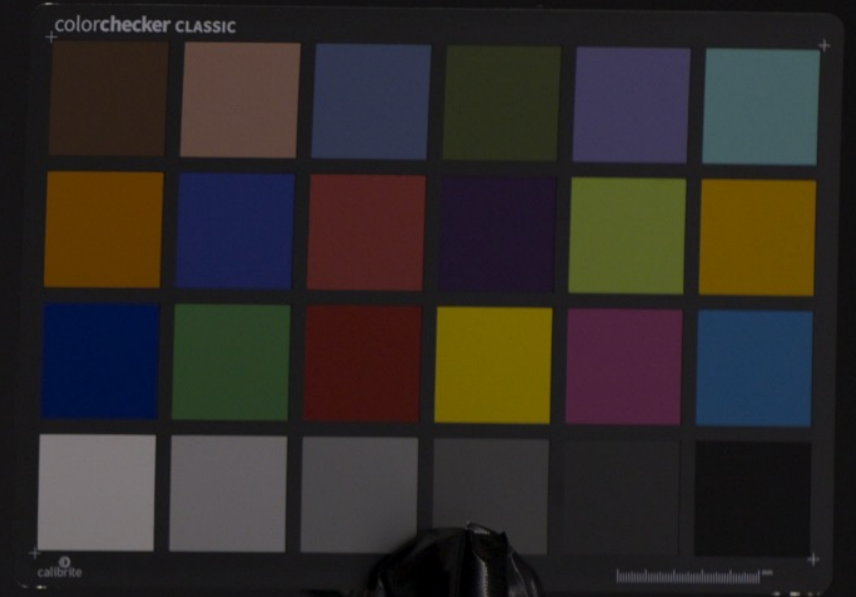
To correct the exposure up to the keylight, we worked in offset like with printer light points.



UNGRADED



MAXI MIX  
Underexposed -2 stops

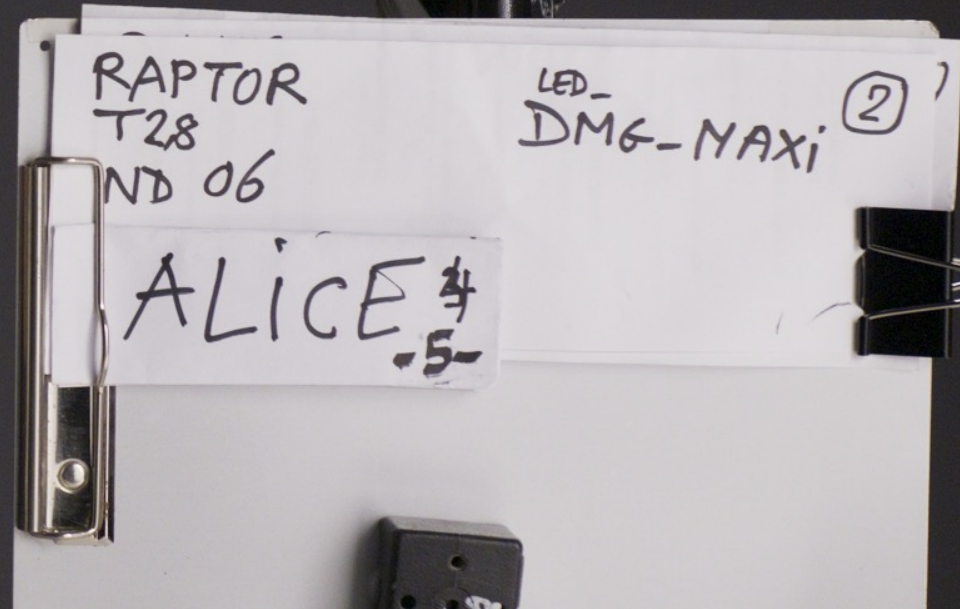




GRADED



MAXI MIX  
Underexposed -2 stops





UNGRADED



RAPTOR  
T2,8

DMG MAXI ③  
25%

ALICE 4  
-5-

MAXI MIX  
+ Dimmer @ 25%



GRADED



RAPTOR  
T2,8

DMG MAXI ③  
25%

ALICE 4  
-5-

MAXI MIX  
+ Dimmer @ 25%





GRADED

MAXI MIX  
+ Dimmer @ 25%



MAXI MIX  
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**

**MAXI MIX**  
+ Dimmer @ 25%

**MAXI MIX**  
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**

**MAXI MIX**  
+ Dimmer @ 25%

**MAXI MIX**  
Underexposed -2 stops

## BLACK SKIN TONE

Naymee



RED RAPTOR

# MAXI MIX

Comparison with

# TUNGSTEN



TUNGSTEN REF.

RED RAPTOR  
GRADED



CAM = RED RAPTOR  
LENS T 2,8  
NO ND

3200K  
QUARZ

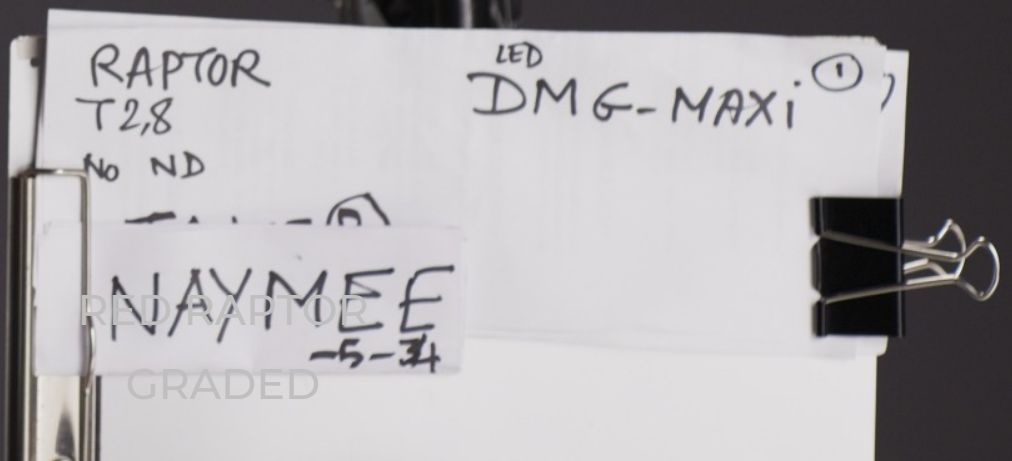
①

~~ALICE 11<sup>H</sup>45~~ NAYMEE 11<sup>H</sup>45





MAXI MIX







TUNGSTEN REF.

RED RAPTOR  
GRADED



MAXI MIX

## BLACK SKIN TONE

Naymee



RED RAPTOR

# MAXI MIX

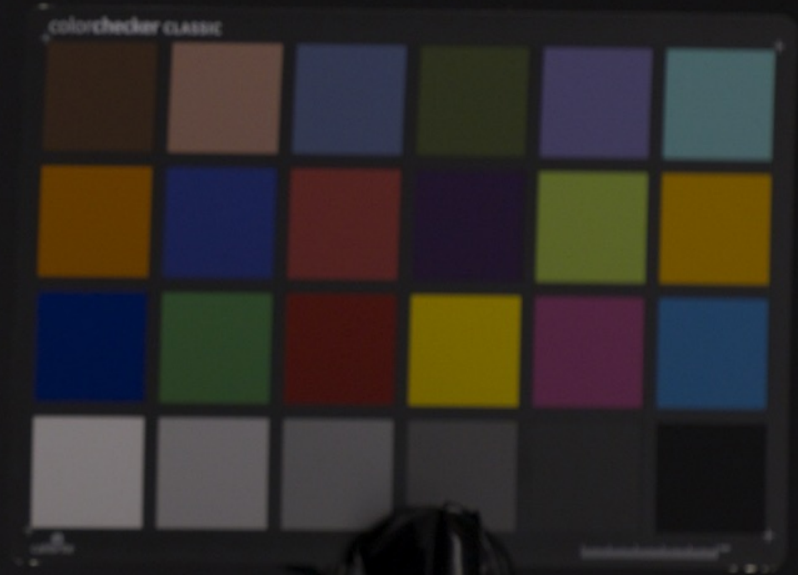
UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

UNGRADED

MAXI MIX  
Underexposed -2 stops



RAPTOR  
T28  
ND 06

LED-  
DMG-MAXI (2)

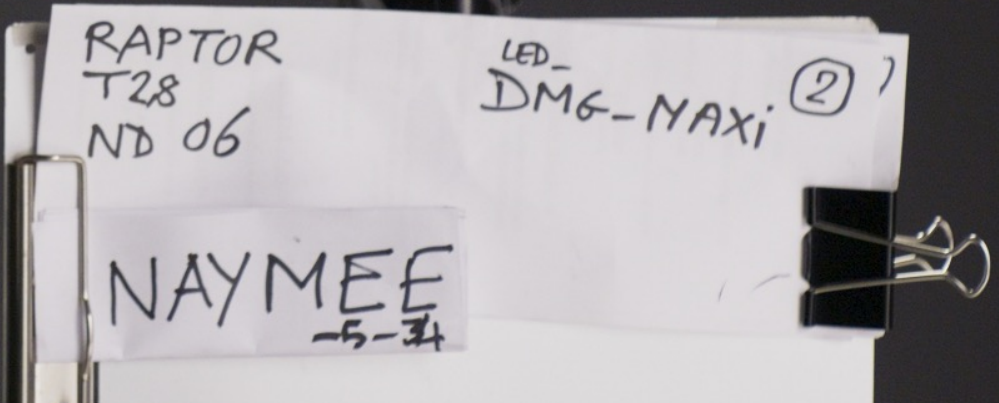
NAYMEE  
-5-34



GRADED



MAXI MIX  
Underexposed -2 stops

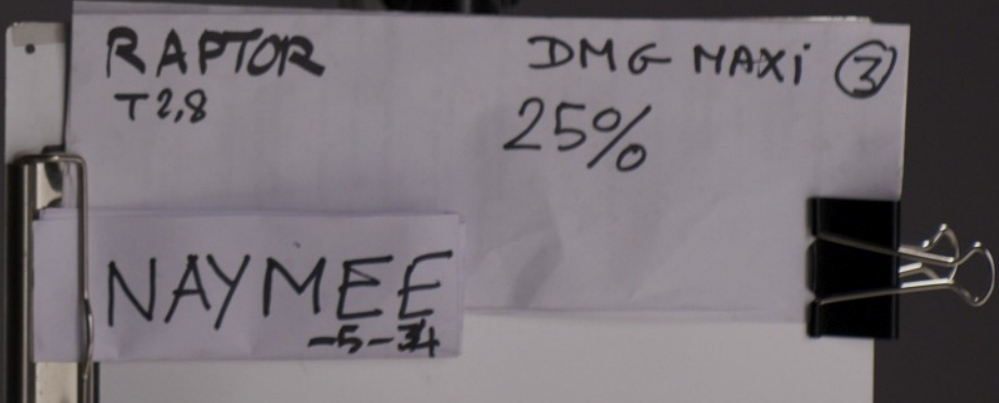




UNGRADED



MAXI MIX  
+ Dimmer @ 25%

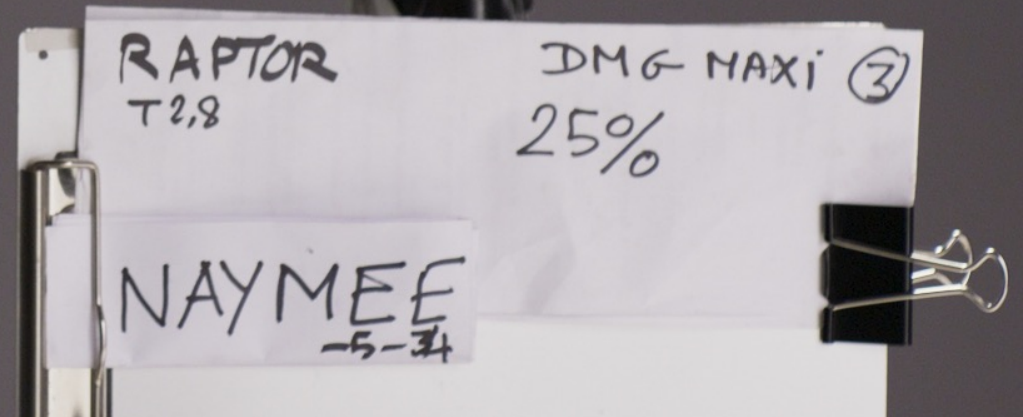




GRADED



MAXI MIX  
+ Dimmer @ 25%







MAXI MIX  
+ Dimmer @ 25%

GRADED



MAXI MIX  
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**

**MAXI MIX**  
+ Dimmer @ 25%

**MAXI MIX**  
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)



JETI 1511  
HiRes (JETI)



Gossen  
Mavospec Base (GSN)



Sekonic  
C800

Mesures prises avec :  
Measurements taken with:

# 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

Index de similarité spectrale  
Spectral Similarity Index

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

# Example on MAXI MIX

LIGHT			JETI 1511 HiRes					SSI
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	
DMG MAXI MIX	100%	CCT set on <b>LED</b> - 3200	3215	0	0,4219	0,3975	JTI_DMG-MAXI-MIX_P3200_ <b>LED</b> _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

DMG MAXI MIX	100%	CCT set on <b>JETI</b> - 3200	3219	-0,001	0,4212	0,3962	JTI_DMG-MAXI-MIX_P3200_ <b>JTI</b> _100%	81
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# Example on MAXI MIX

LIGHT			JETI 1511 HiRes					SSI
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv	
DMG MAXI MIX	100%	CCT set on <b>LED</b> - 3200	3215	0	0,4219	0,3975	JTI_DMG-MAXI-MIX_P3200- <b>LED_100%</b>	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

DMG MAXI MIX	100%	CCT set on <b>JETI</b> - 3200	3219	-0,001	0,4212	0,3962	JTI_DMG-MAXI-MIX_P3200- <b>JTI_100%</b>	81
--------------	------	-------------------------------	------	--------	--------	--------	---	----

Pourquoi tester à différentes puissances ?

100%, 50%, 25% ?

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

Why test at different power levels?

100%, 50%, 25%?

- 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**<sub>[P3200]</sub> **86**

**SSI**<sub>[CIE D55]</sub> **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

MAXI MIX

3200 K

5600 K

3200 K

MAXI MIX



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
DMG MAXI MIX	100%	CCT set on <b>LED</b> - 3200	3215	0	0,4219	0,3975	JTI_DMG-MAXI-MIX_P3200_ <b>LED_100%</b>	81
DMG MAXI MIX	100%	CCT set on <b>JETI</b> - 3200	3219	-0,001	0,4212	0,3962	JTI_DMG-MAXI-MIX_P3200_ <b>JTI_100%</b>	81
DMG MAXI MIX	50%	CCT set on <b>JETI</b> - 3200	3226	-0,001	0,4201	0,3945	JTI_DMG-MAXI-MIX_P3200_ <b>JTI_50%</b>	81
DMG MAXI MIX	25%	CCT set on <b>JETI</b> - 3200	3230	-0,001	0,4197	0,3941	JTI_DMG-MAXI-MIX_P3200_ <b>JTI_25%</b>	80



SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
3023	0,0002	96	-	-	-	VISUAL REF-TUNGSTEN
3260	0	82	3196	0	83	GSN_DMG-MAXI-MI_P3200_ <b>LED_100%</b>
3260	0	82	3196	0	83	GSN_DMG-MAXI-MIX_P3200_ <b>JTI_100%</b>
3272	-0,0006	81	3215	-0,0009	83	GSN_DMG-MAXI-MIX_P3200_ <b>JTI_50%</b>
3284	-0,0008	81	3221	-0,001	82	GSN_DMG-MAXI-MIX_P3200_ <b>JTI_25%</b>



# MAXI MIX



**5600 K**

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
DMG MAXI MIX	100%	CCT set on <b>LED</b> - 5600	5864	-0,002	0,3248	0,3314	JTI_DMG-MAXI-MIX_P5600_ <b>LED_100%</b>	<b>67</b>
DMG MAXI MIX	100%	CCT set on <b>JETI</b> - 5600	5624	-0,002	0,3297	0,3354	JTI_DMG-MAXI-MIX_P5600_ <b>JTI_100%</b>	<b>68</b>
DMG MAXI MIX	50%	CCT set on <b>JETI</b> - 5600	5625	-0,002	0,3297	0,3351	JTI_DMG-MAXI-MIX_P5600_ <b>JTI_50%</b>	<b>68</b>
DMG MAXI MIX	25%	CCT set on <b>JETI</b> - 5600	5627	-0,002	0,3296	0,3354	JTI_DMG-MAXI-MIX_P5600_ <b>JTI_25%</b>	<b>68</b>

SEKONIC C-800			GOSSEN MAVOSPEC BASE			
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
6008	-0,0018	<b>68</b>	5703	-0,0006	<b>70</b>	GSN_DMG-MAXI-MIX_P5600_ <b>LED_100</b>
5761	-0,0017	<b>69</b>	5480	-0,0007	<b>71</b>	GSN_DMG-MAXI-MIX_P5600_ <b>JTI_100%</b>
5754	-0,0017	<b>68</b>	5481	-0,0008	<b>71</b>	GSN_DMG-MAXI-MIX_P5600_ <b>JTI_50%</b>
5780	-0,0017	<b>68</b>	5487	-0,001	<b>70</b>	GSN_DMG-MAXI-MIX_P5600_ <b>JTI_25%</b>



# MAXI MIX

3200 K

## Spectra & SSI

5600 K

### TM-30-18 & CRI



JETI

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<sub>[P3200]</sub> 93

Constructeur  
Manufacturer

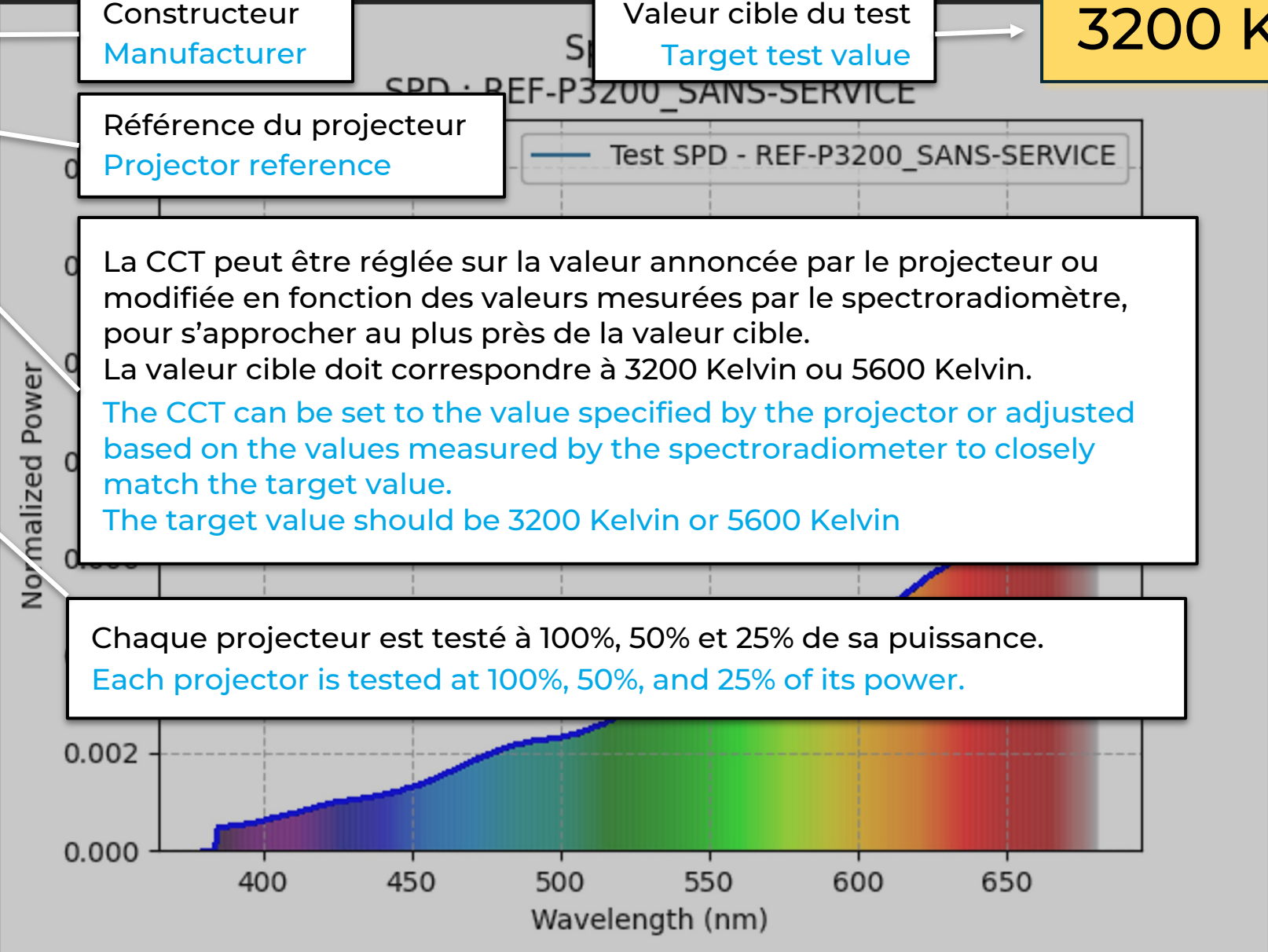
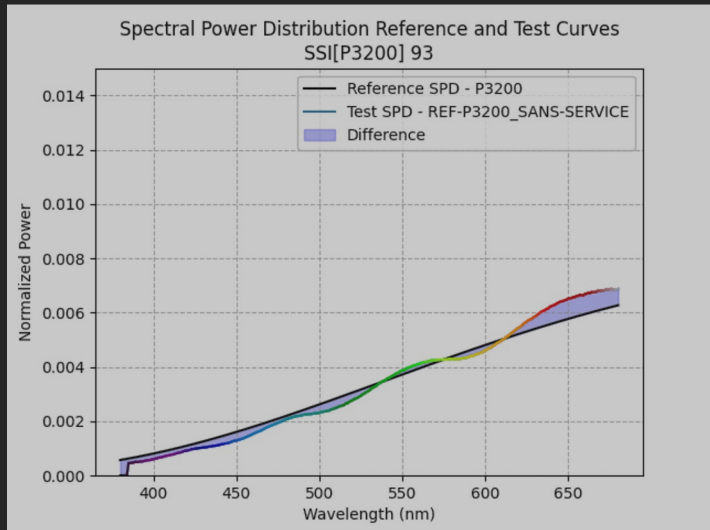
Valeur cible du test  
Target test value

3200 K

Référence du projecteur  
Projector reference

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.



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<sub>[P3200]</sub> 93

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

<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**

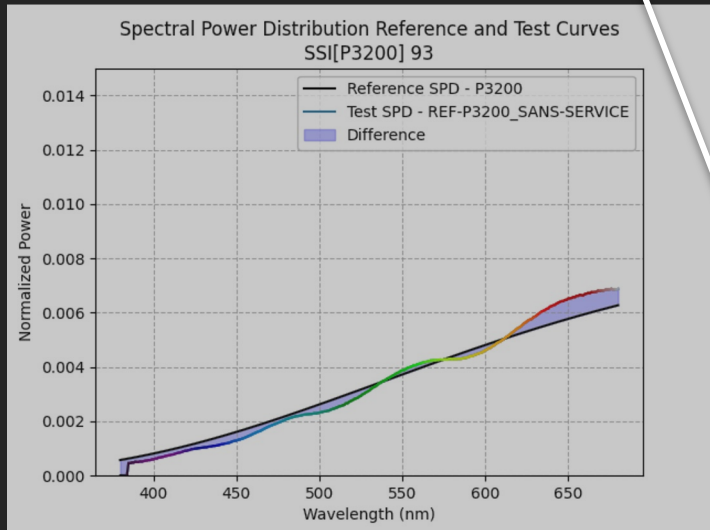
R<sub>a</sub> est la valeur de l'indice de rendu des couleurs basé sur la valeur moyenne des 8 premières couleurs de test. C'est la Valeur CRI usuelle.  
La valeur R<sub>e</sub> peut être trouvée dans l'annexe des mesures.

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/ansiiestm3020>

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.



3200 K

Manufacturer

PROJECTOR

Power: 100% - CCT set on JETI

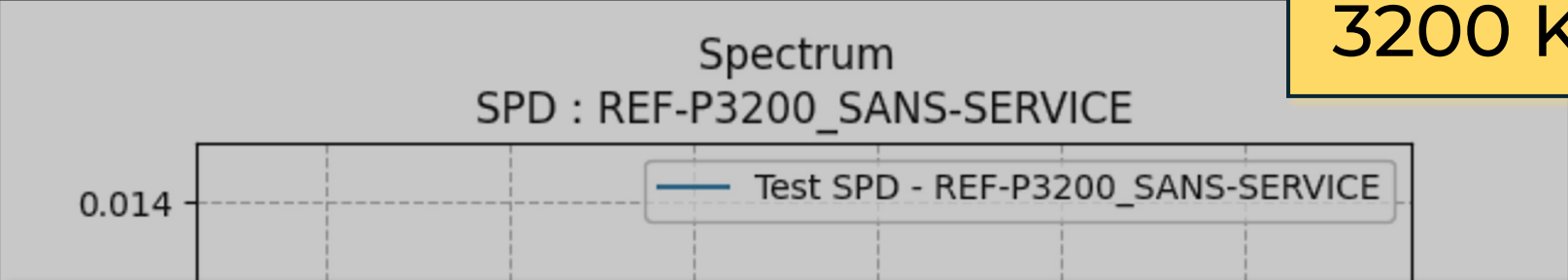
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

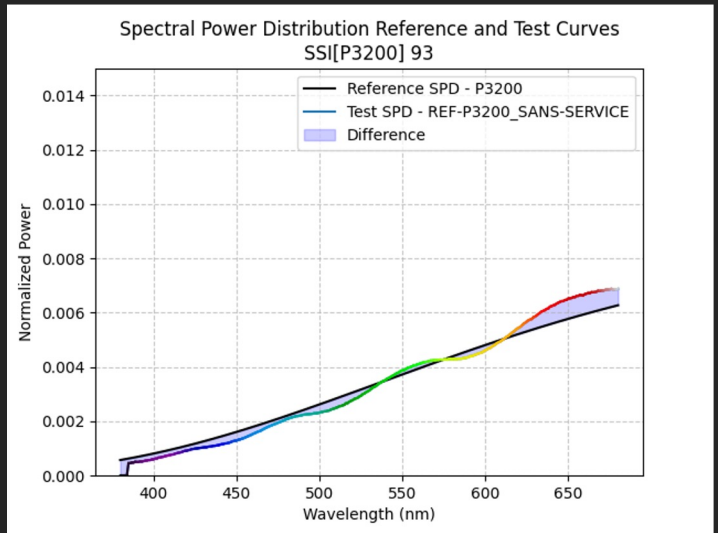
SSI<sub>[P3200]</sub> 93



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

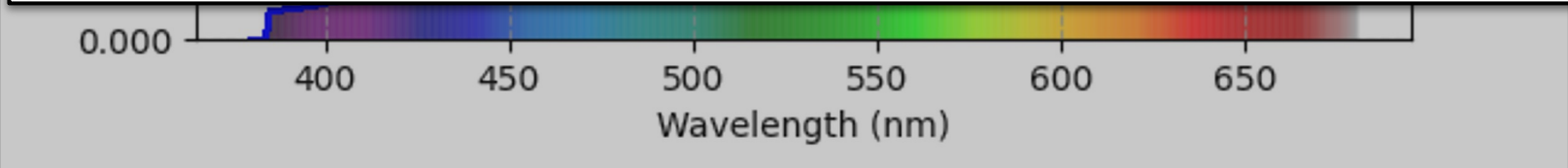
**Spectral Similarity Index (SSI)**  
La valeur entre crochets, représente la source référente pour comparaison (ici P3200 pour corps noir à 3200 K).  
La valeur qui suit est l'indice de fidélité.

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.



# MAXI MIX

3200 K

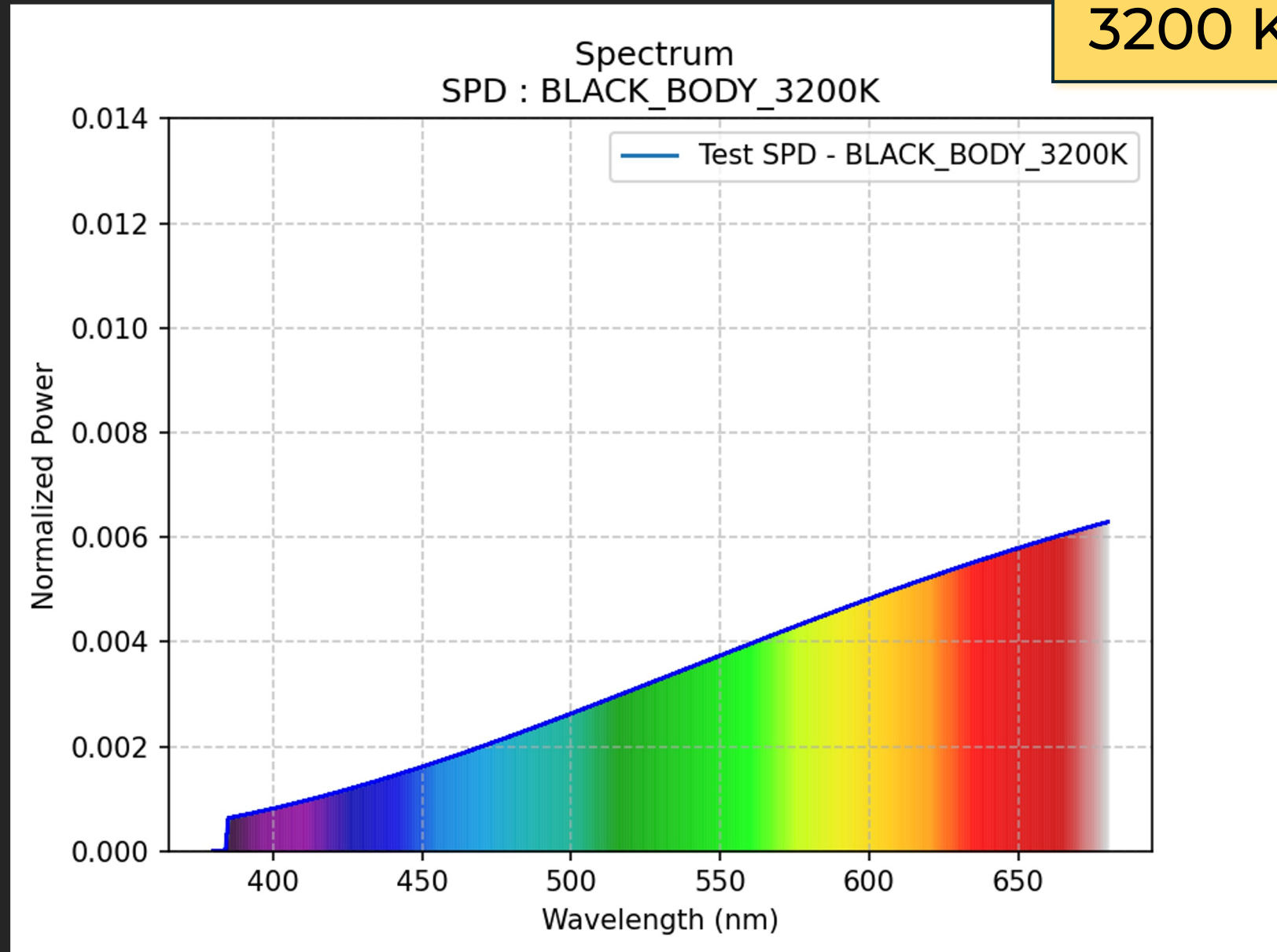


JETI



**SSI REFERENCE**  
Corps noir / Black body  
3200 K

3200 K



3200 K

# SOURCE TUNGSTEN comparative

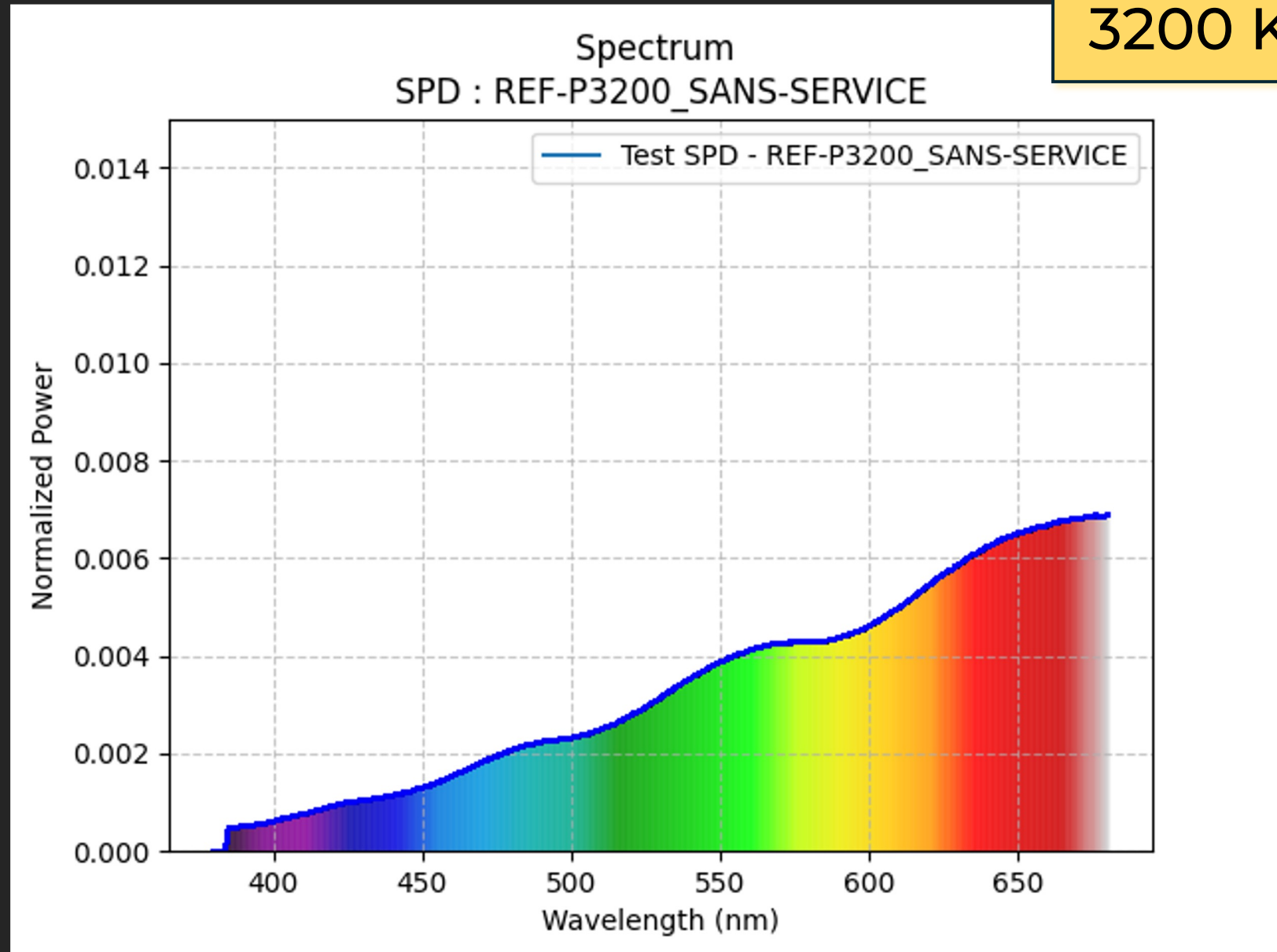
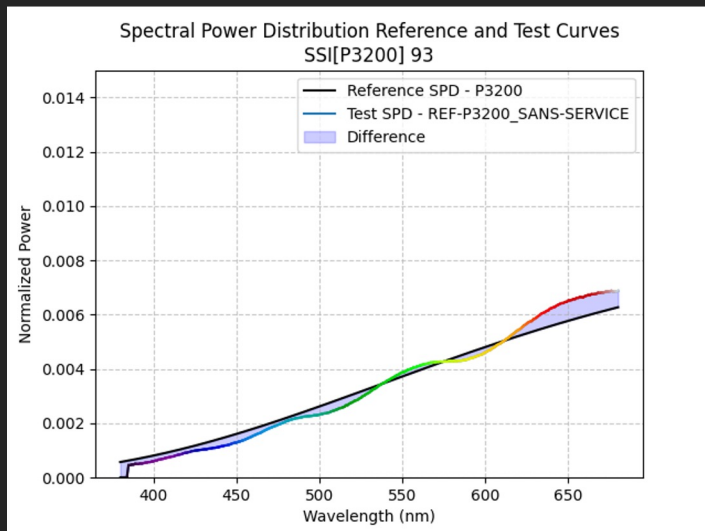
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI<sub>[P3200]</sub> 93



ROSCO DMG

MAXI MIX

Power: 100% - CCT set on LED

CCT 3215 Duv -0,000

CIE 1931 2° x 0.4219 y 0.3975

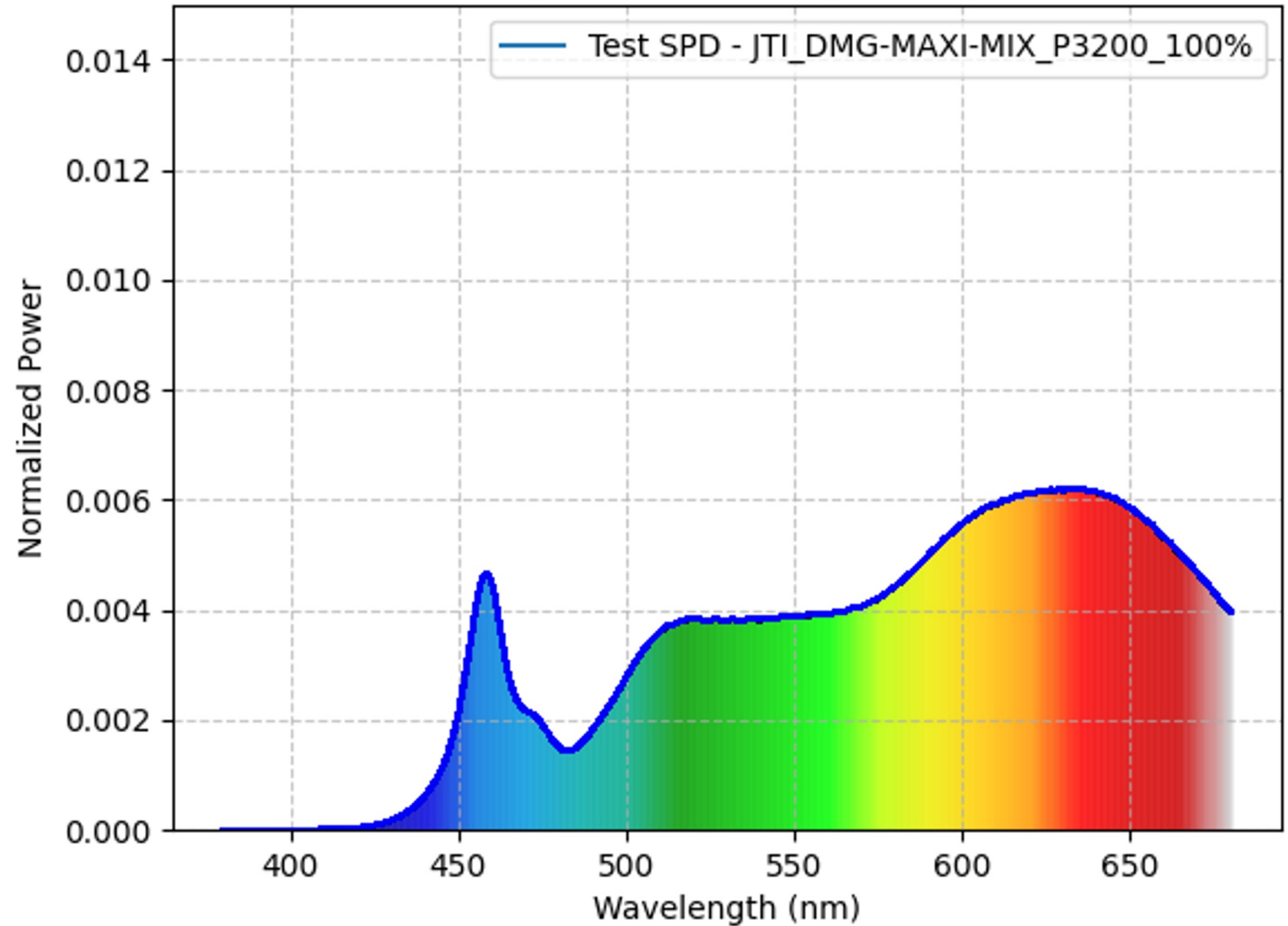
CRI Ra 96.41

IES TM-30-18 Rf 94 Rg 100

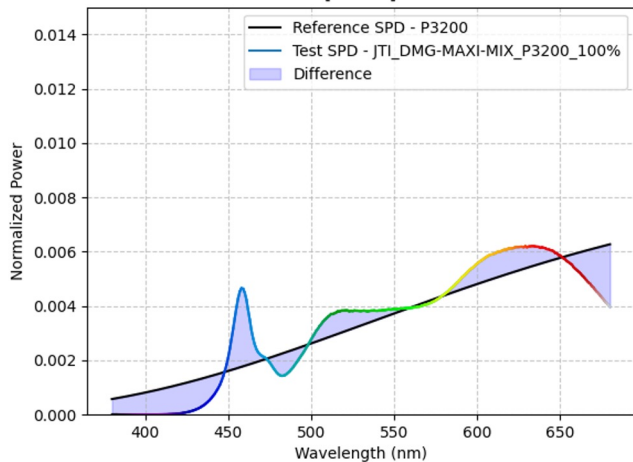
SSI[P3200] 81

3200 K

Spectrum  
SPD : JTI\_DMG-MAXI-MIX\_P3200\_100%



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 81



ROSCO DMG

MAXI MIX

Power: 100% - CCT set on JETI

CCT 3219 Duv -0,001

CIE 1931 2° x 0.4212 y 0.3962

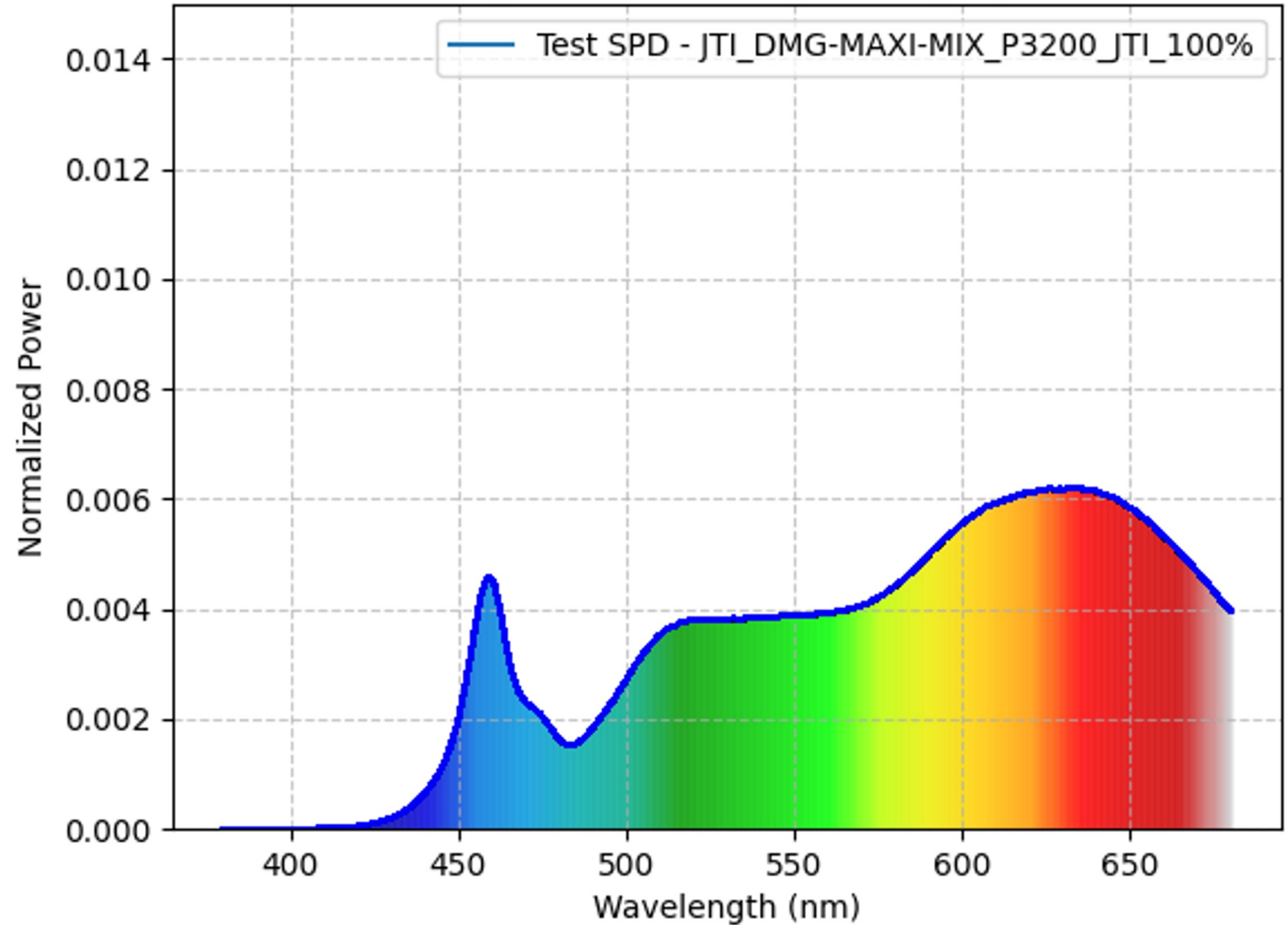
CRI Ra 96.28

IES TM-30-18 Rf 94 Rg 100

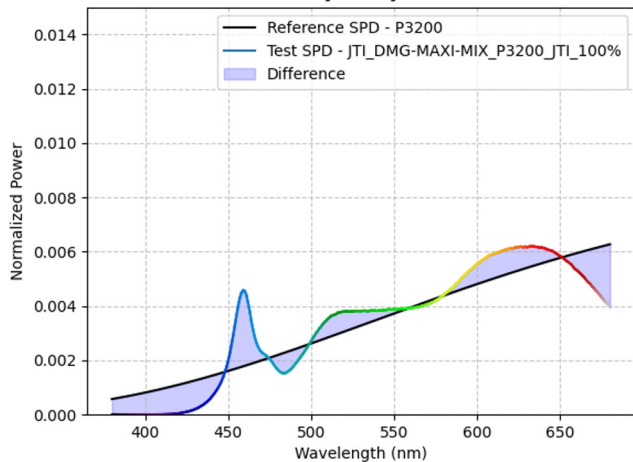
SSI[P3200] 81

3200 K

Spectrum  
SPD : JTI\_DMG-MAXI-MIX\_P3200\_JTI\_100%



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 81



ROSCO DMG

MAXI MIX

Power: 50% - CCT set on JETI

CCT 3226 Duv -0,001

CIE 1931 2° x 0.4201 y 0.3945

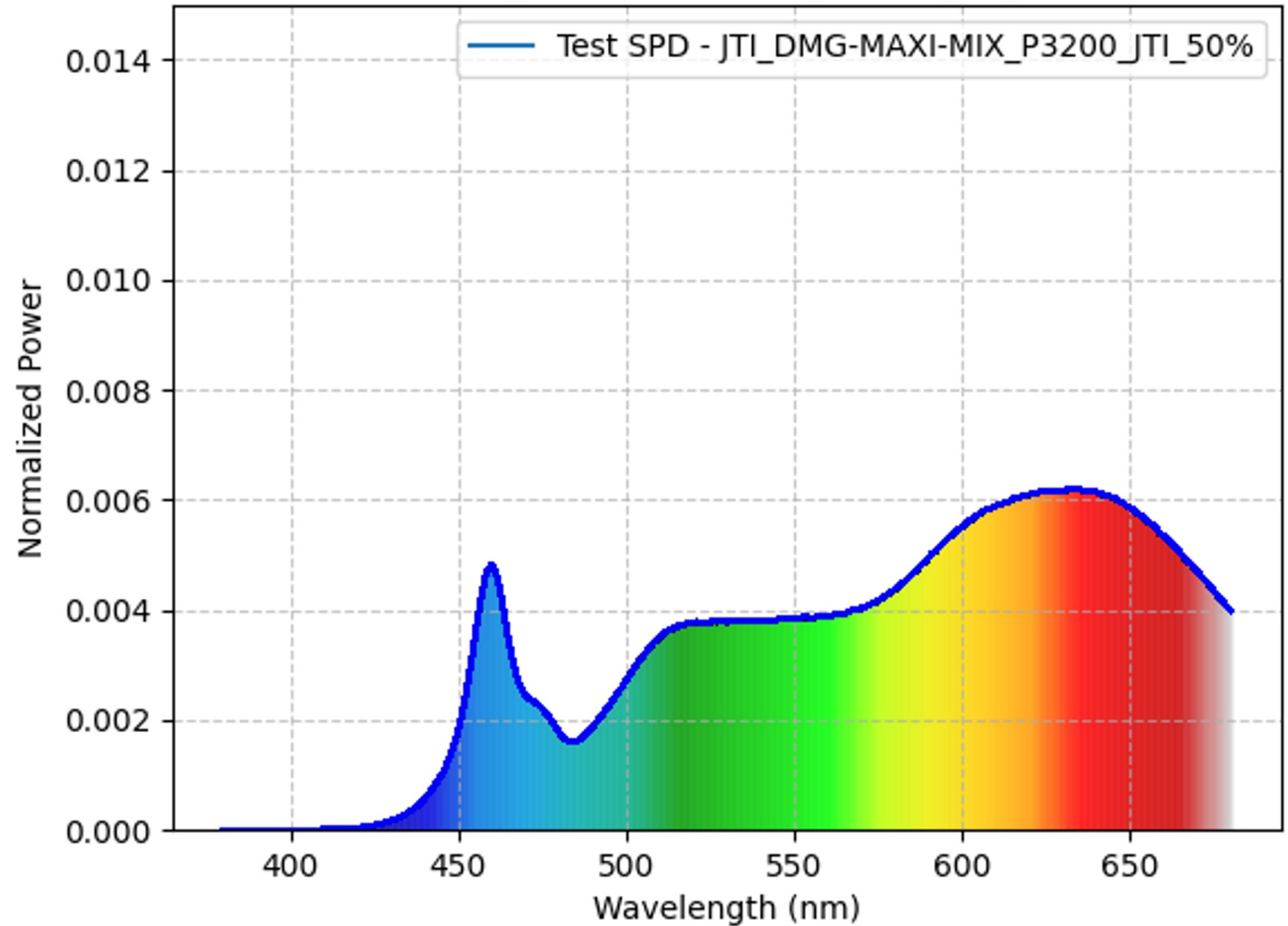
CRI Ra 95.76

IES TM-30-18 Rf 93 Rg 100

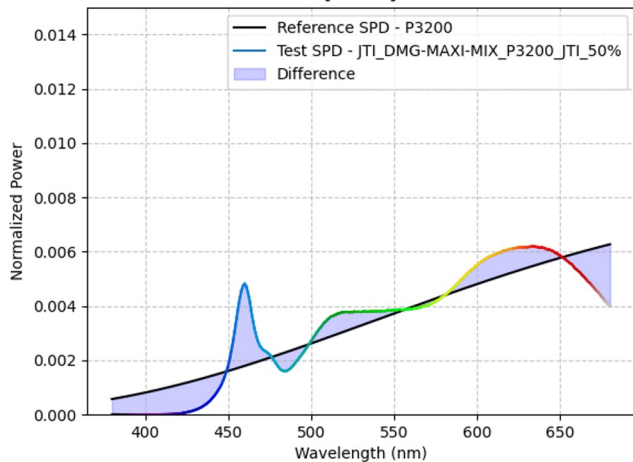
SSI<sub>[P3200]</sub> 81

3200 K

Spectrum  
SPD : JTI\_DMGMAXI-MIX\_P3200\_JTI\_50%



Spectral Power Distribution Reference and Test Curves  
SSI<sub>[P3200]</sub> 81





ROSCO DMG

MAXI MIX

Power: 25% - CCT set on JETI

CCT 3230 Duv -0,001

CIE 1931 2° x 0.4197 y 0.3941

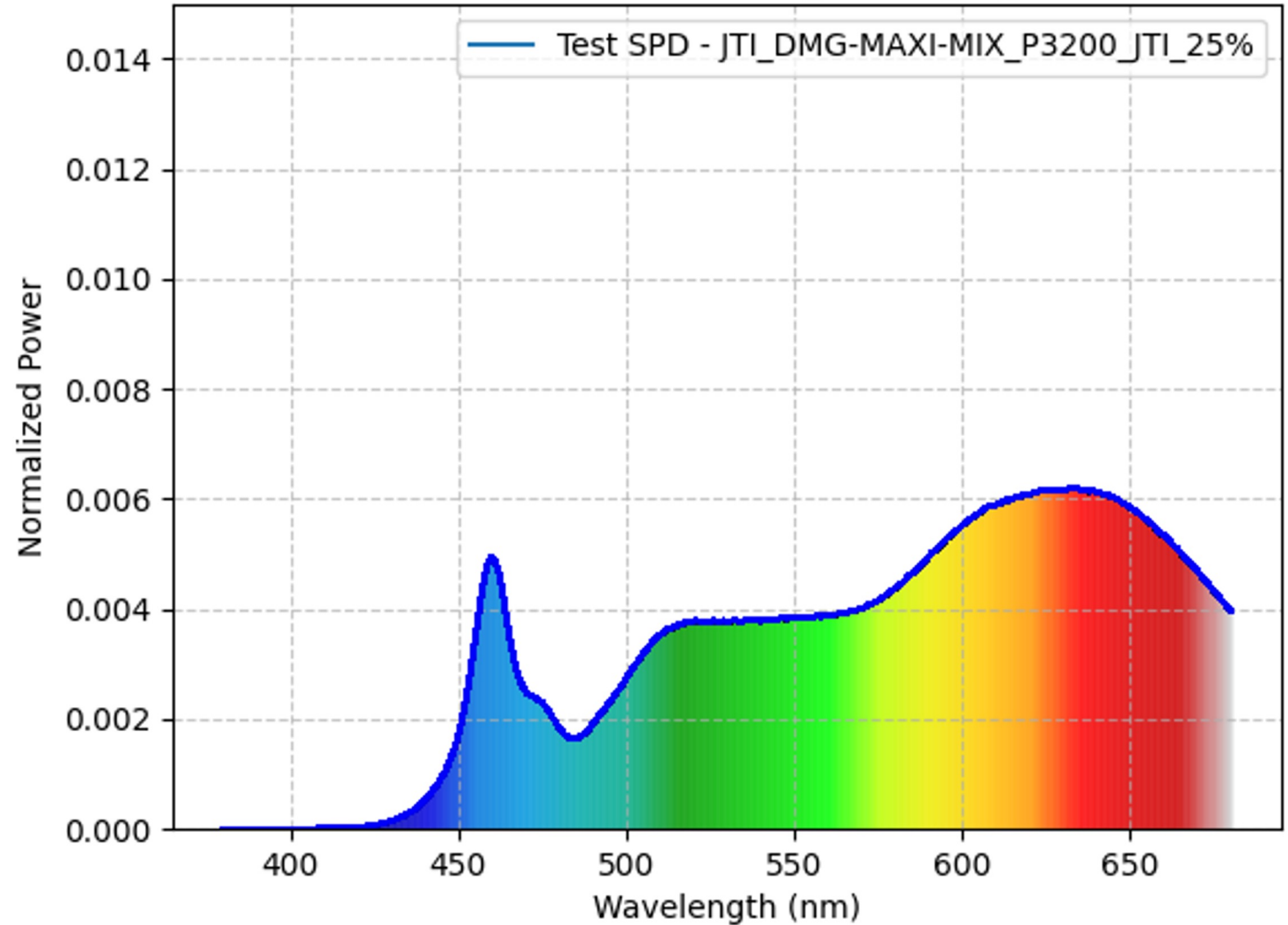
CRI Ra 95.44

IES TM-30-18 Rf 93 Rg 100

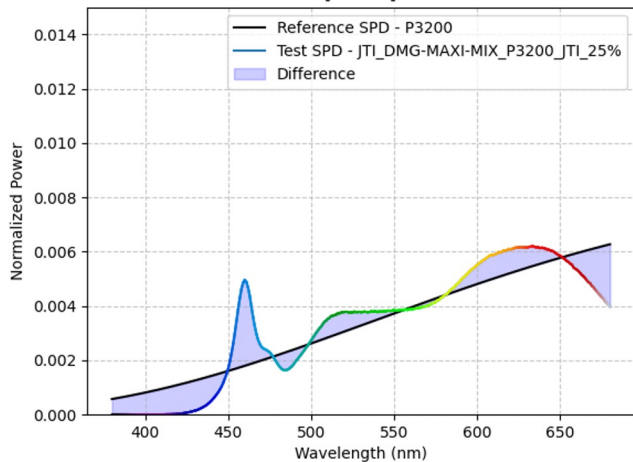
SSI<sub>[P3200]</sub> 80

3200 K

Spectrum  
SPD : JTI\_DMG-MAXI-MIX\_P3200\_JTI\_25%



Spectral Power Distribution Reference and Test Curves  
SSI<sub>[P3200]</sub> 80



# MAXI MIX

5600 K



JETI

# SSI REFERENCE Daylight Locus

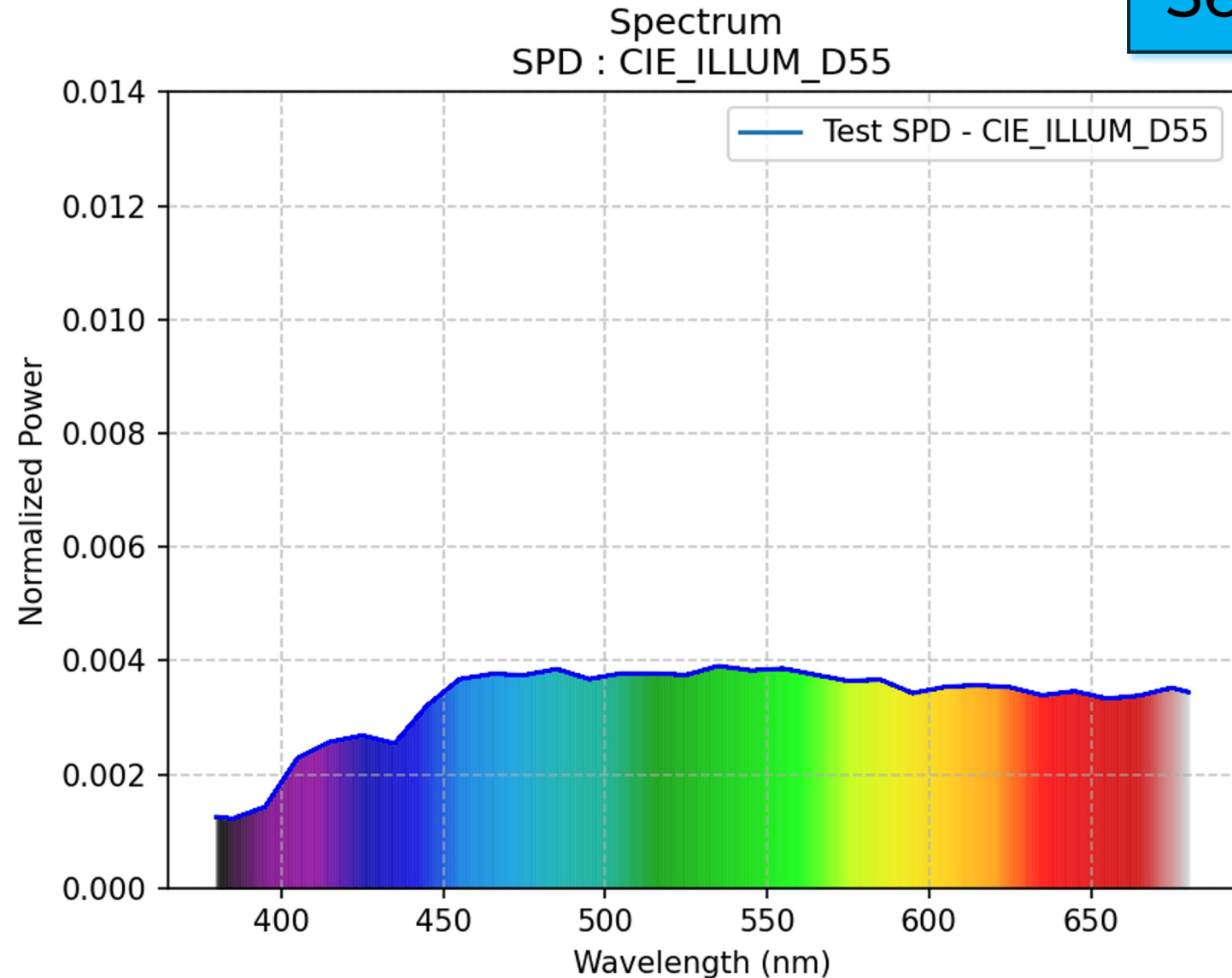
**5600 K**

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/>

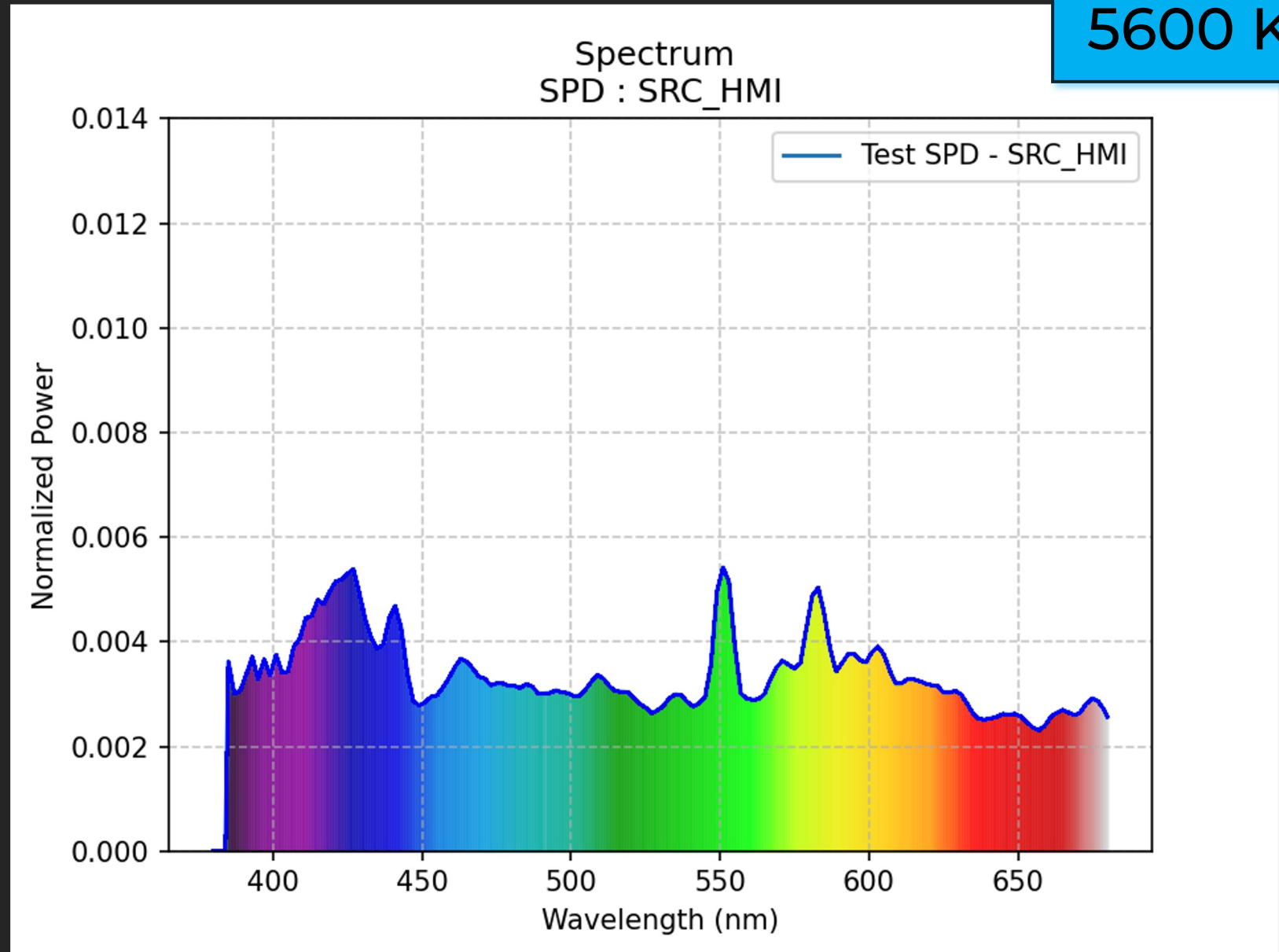
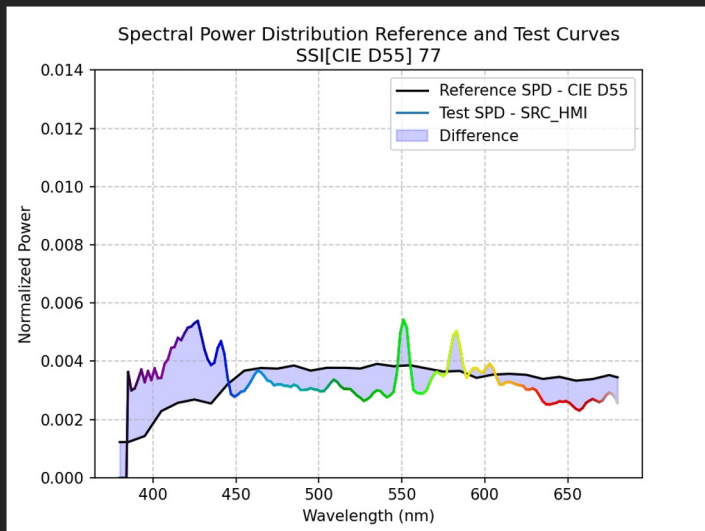
CCT 5605 Duv 0,000

CIE 1931 2° x 0.3301 y 0.3274

CRI Ra -

IES TM-30-18 Rf - Rg -

SSI[CIE D55] 77



ROSCO DMG

**MAXI MIX**

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

CCT **5864** Duv **-0,002**

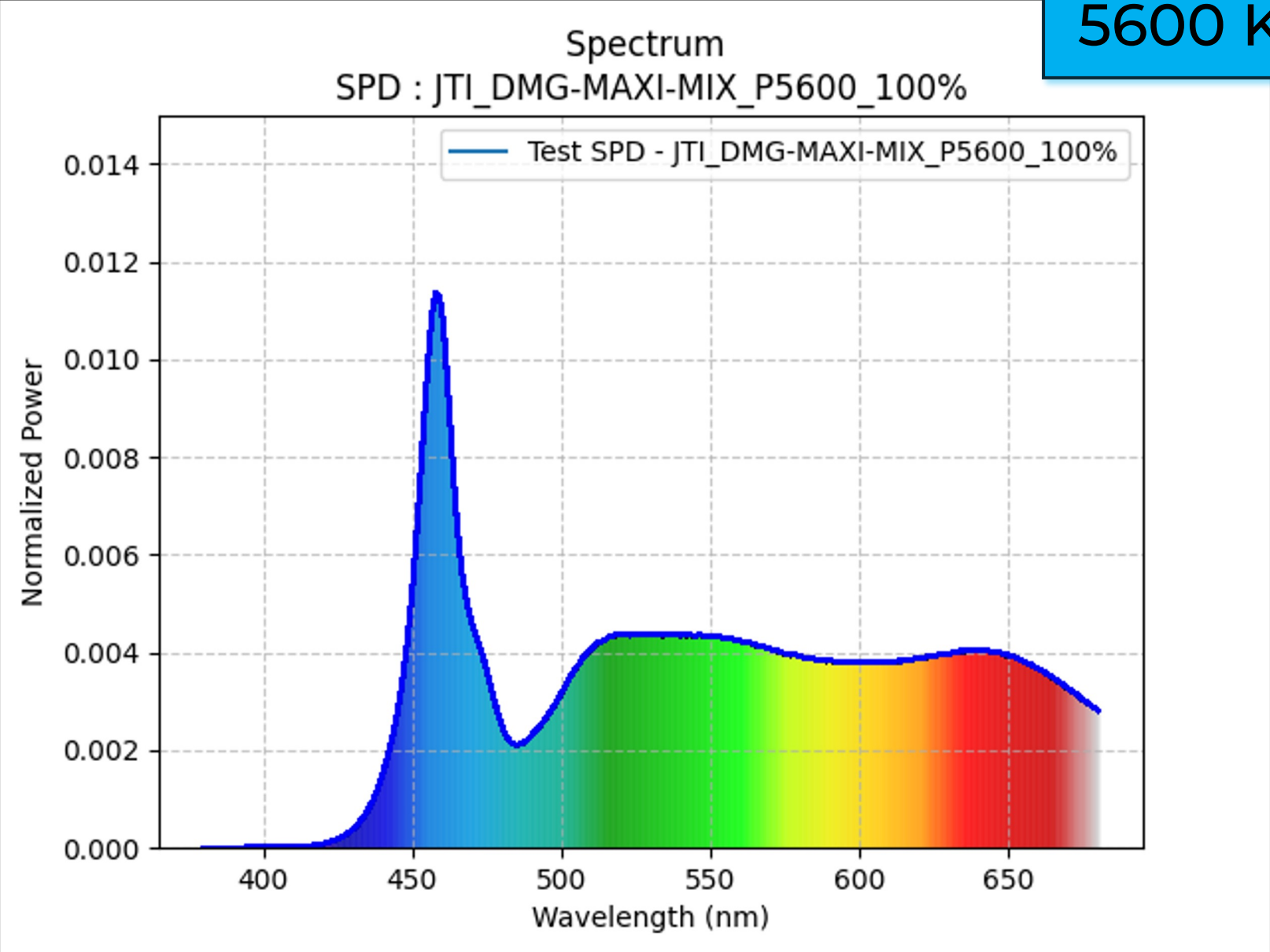
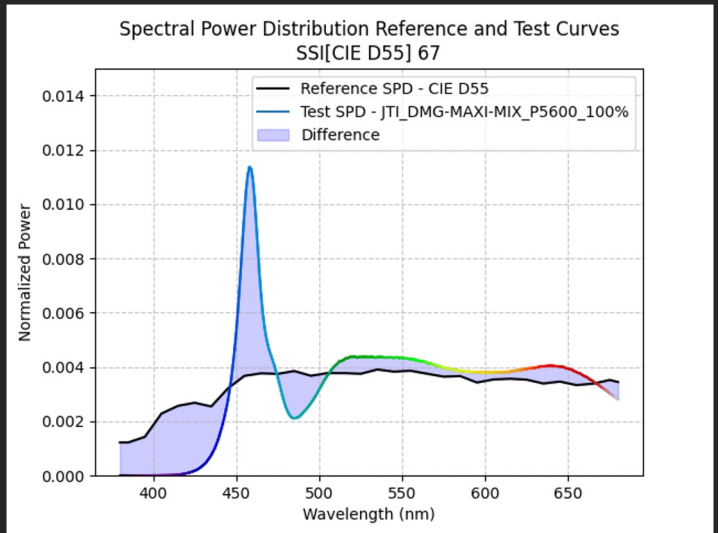
CIE 1931 2° x **0.3248** y **0.3314**

CRI Ra **96.04**

IES TM-30-18 Rf **91** Rg **102**

**SSI**[CIE D55] **67**

**5600 K**



**5600 K**

ROSCO DMG

**MAXI MIX**

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

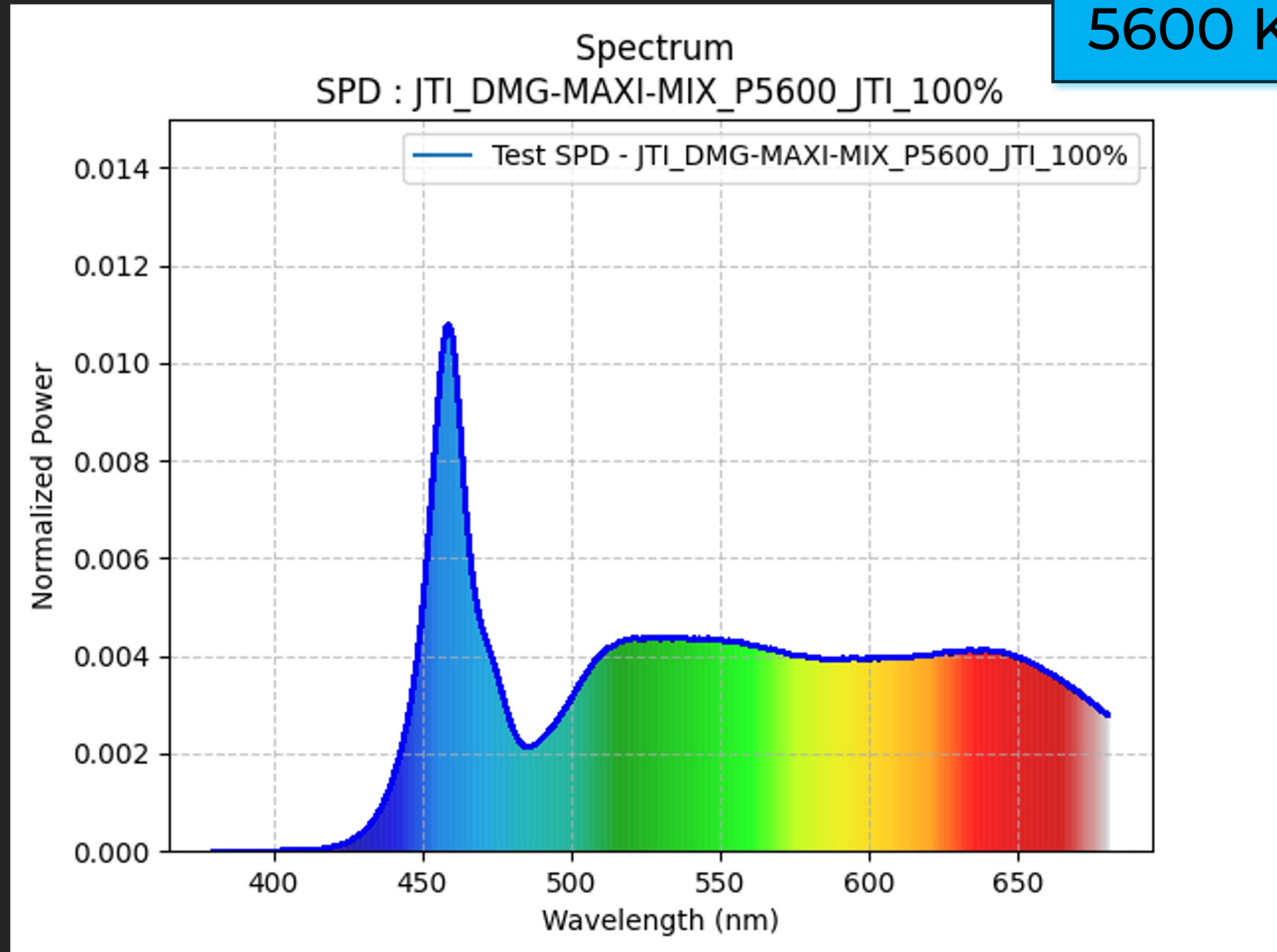
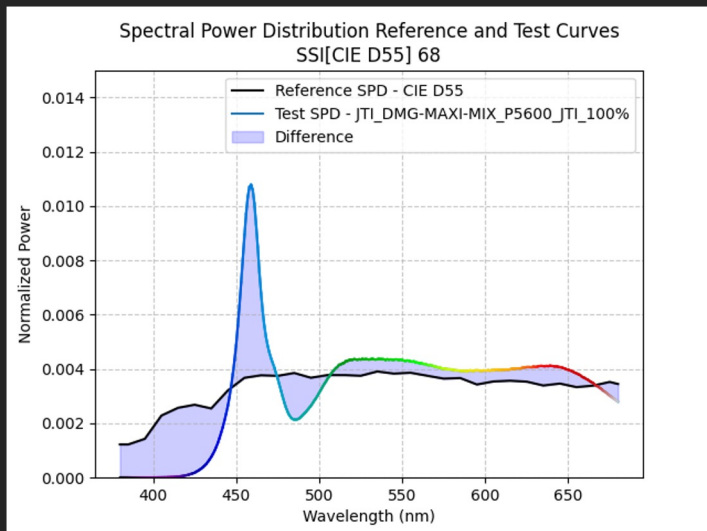
CCT **5624** Duv **-0,002**

CIE 1931 2° x **0.3297** y **0.3354**

CRI Ra **96.57**

IES TM-30-18 Rf **92** Rg **102**

**SSI**[CIE D55] **68**





ROSCO DMG

MAXI MIX

Power: 50% - CCT set on JETI

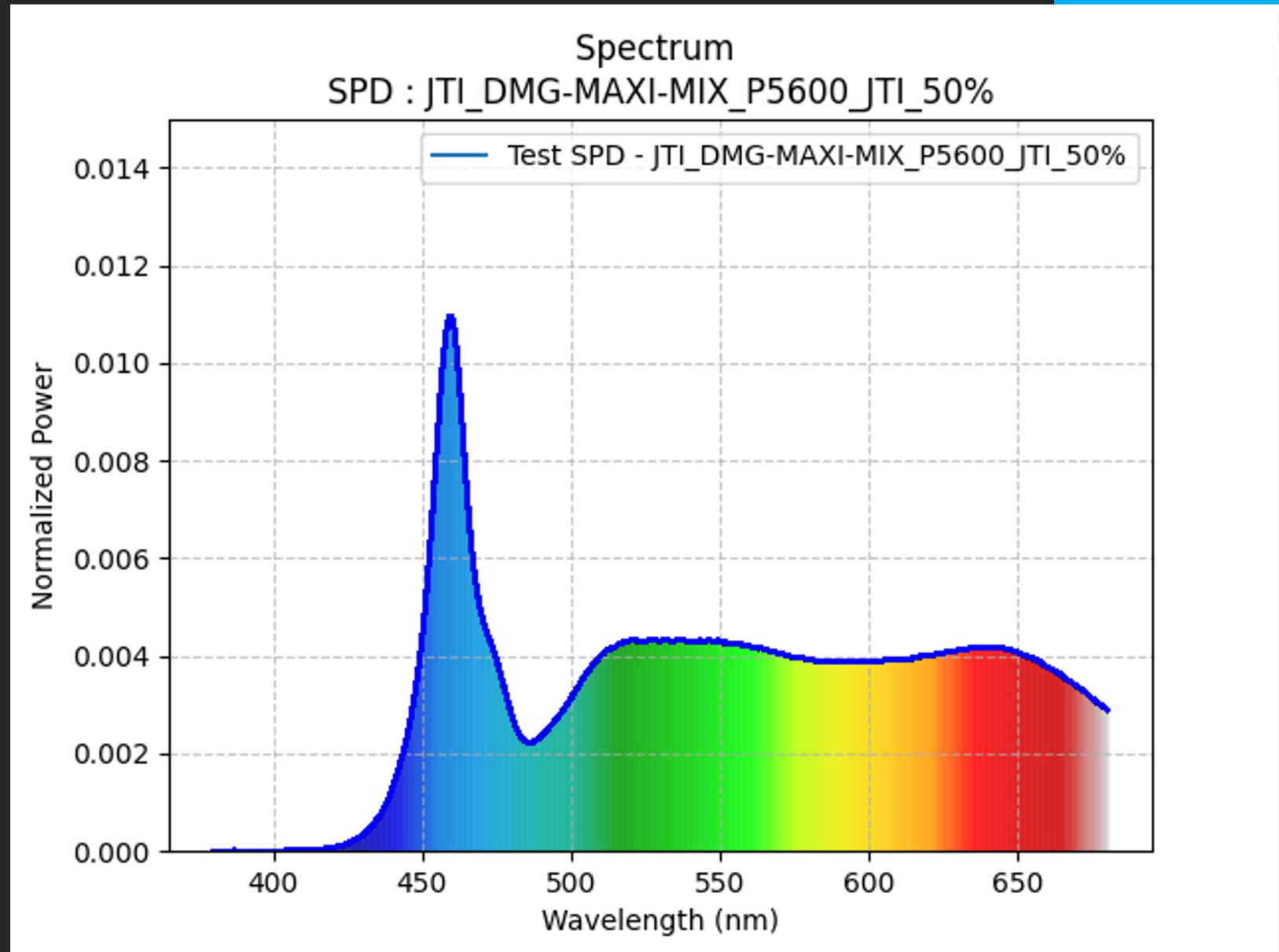
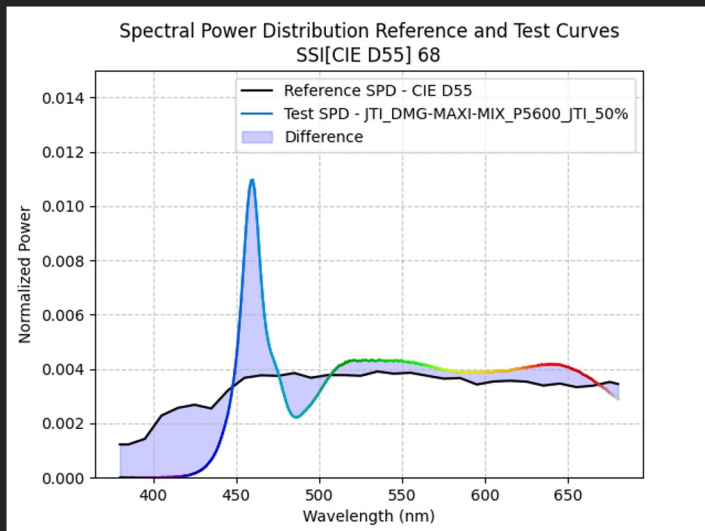
CCT 5625 Duv -0,002

CIE 1931 2° x 0.3297 y 0.3351

CRI Ra 96.45

IES TM-30-18 Rf 91 Rg 102

SSI[CIE D55] 68



5600 K

ROSCO DMG

MAXI MIX

Power: 25% - CCT set on JETI

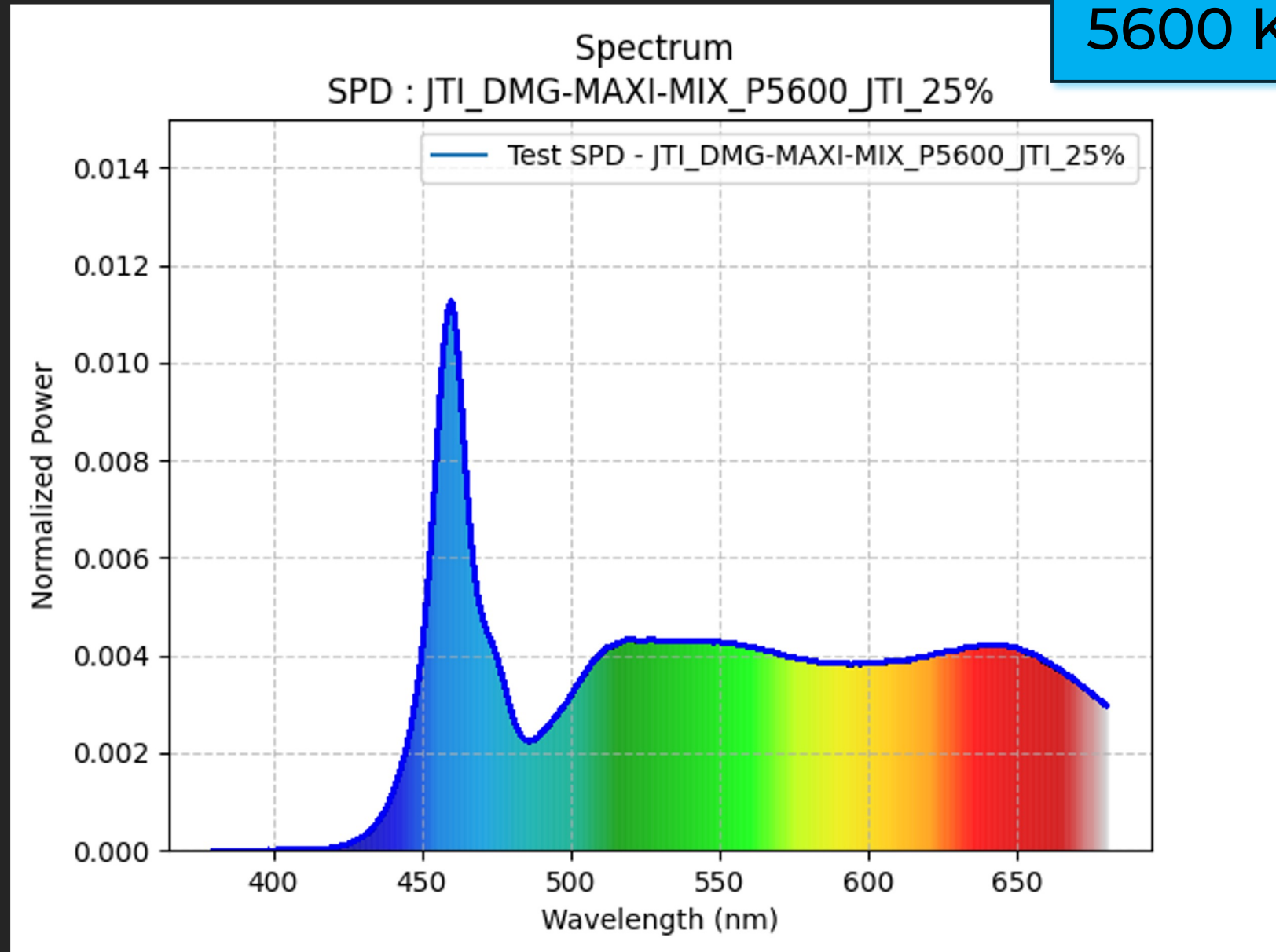
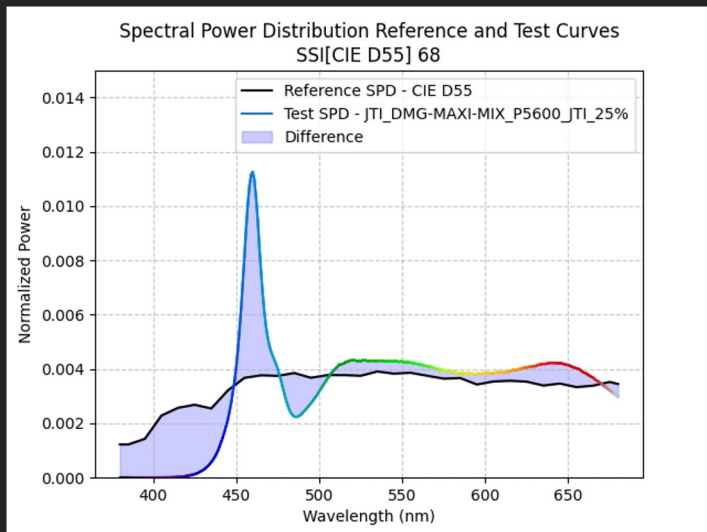
CCT 5627 Duv -0,002

CIE 1931 2° x 0.3296 y 0.3354

CRI Ra 96.13

IES TM-30-18 Rf 91 Rg 102

SSI[CIE D55] 68



# MAXI MIX

## Images, Spectra & SSI



JETI



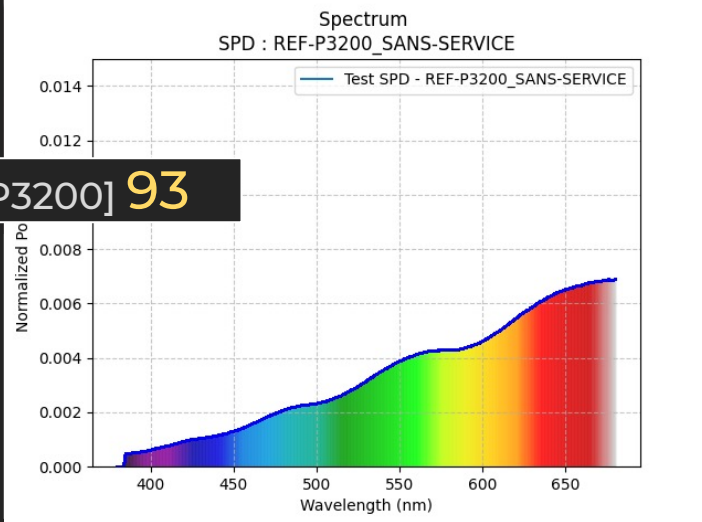


TUNGSTEN REF.



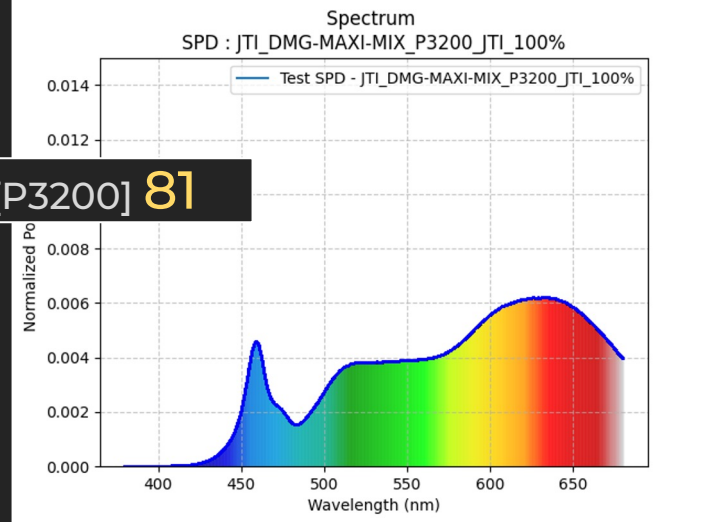
MAXI MIX

RED RAPTOR  
GRADED



SSI[P3200] 93

TUNGSTEN REF.

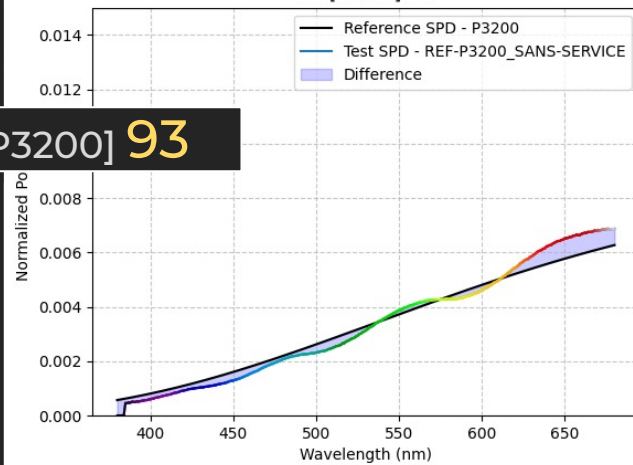


SSI[P3200] 81

MAXI MIX



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

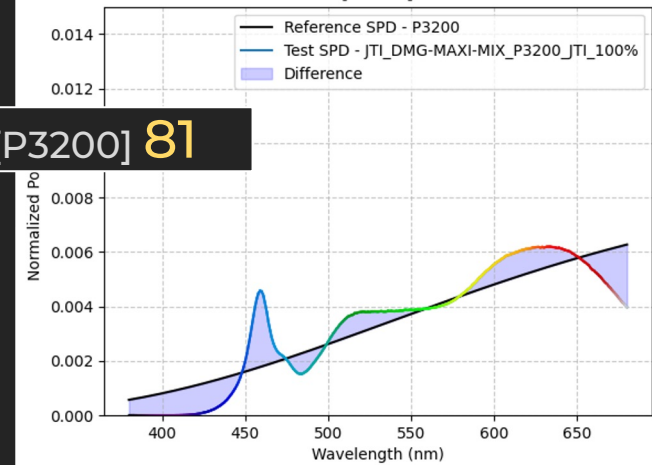


SSI[P3200] 93

TUNGSTEN REF.



Spectral Power Distribution Reference and Test Curves  
SSI[P3200] 81



SSI[P3200] 81

MAXI MIX

MAXI MIX

3200 K

& TM-30-20

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.

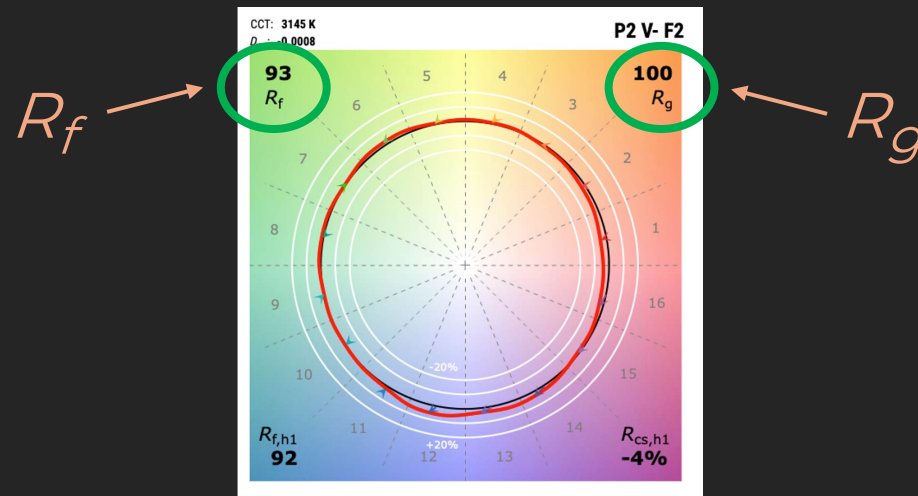
Toutes les mesures sont données en 3200 K et en 5600K

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 20** consacré aux données TM-30-20 vous trouverez :

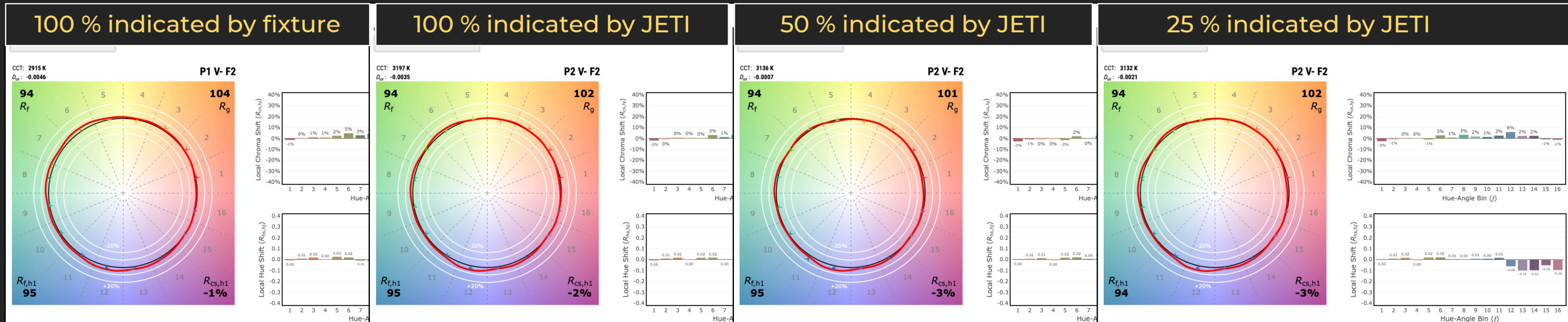
- les graphiques du projecteur réglé à 100%, à 50 % et à 25% de sa puissance à l'aide des indications du JETI
- les graphiques du projecteur réglé à 100% de sa puissance grâce aux indications du projecteur.

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



3200 K

MAXI MIX TM-30-20

### ANSI/IES TM-30-20 Color Rendition Report

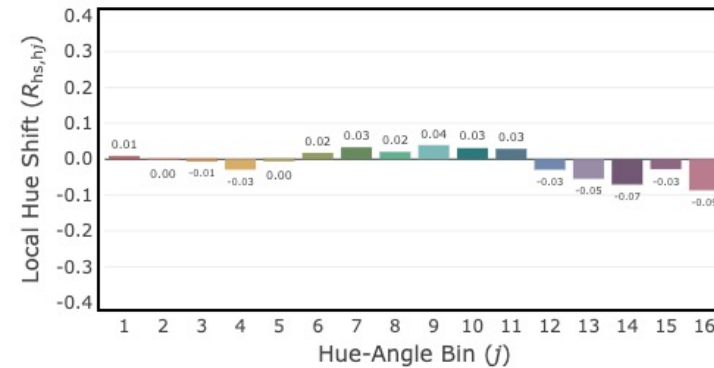
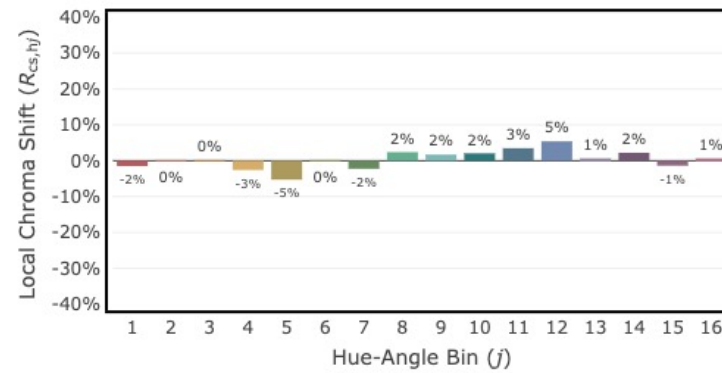
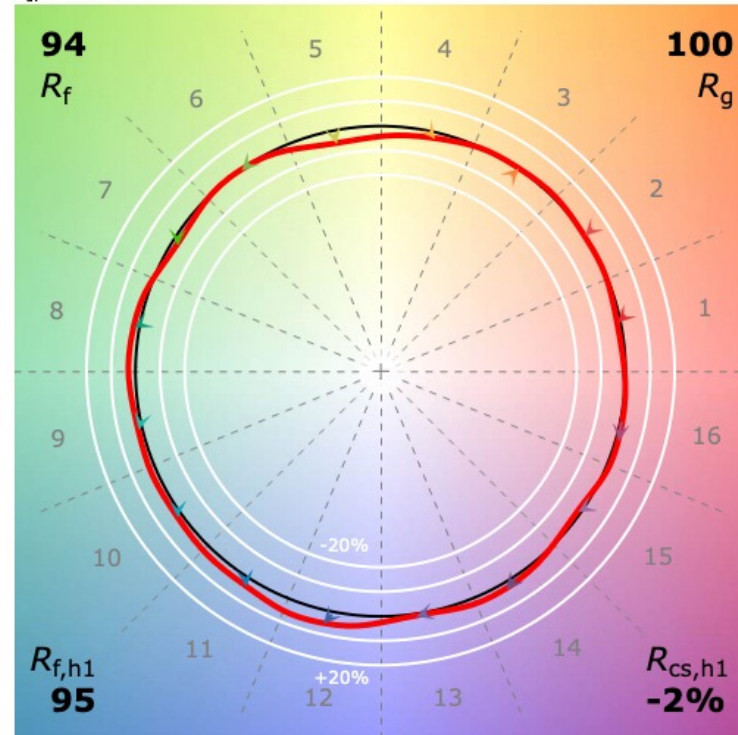
Unique Identifier:

JTI\_DMG-MAXI-MIX\_P3200\_JTI\_1

CCT: 3221 K

$D_{uv}$ : -0.0007

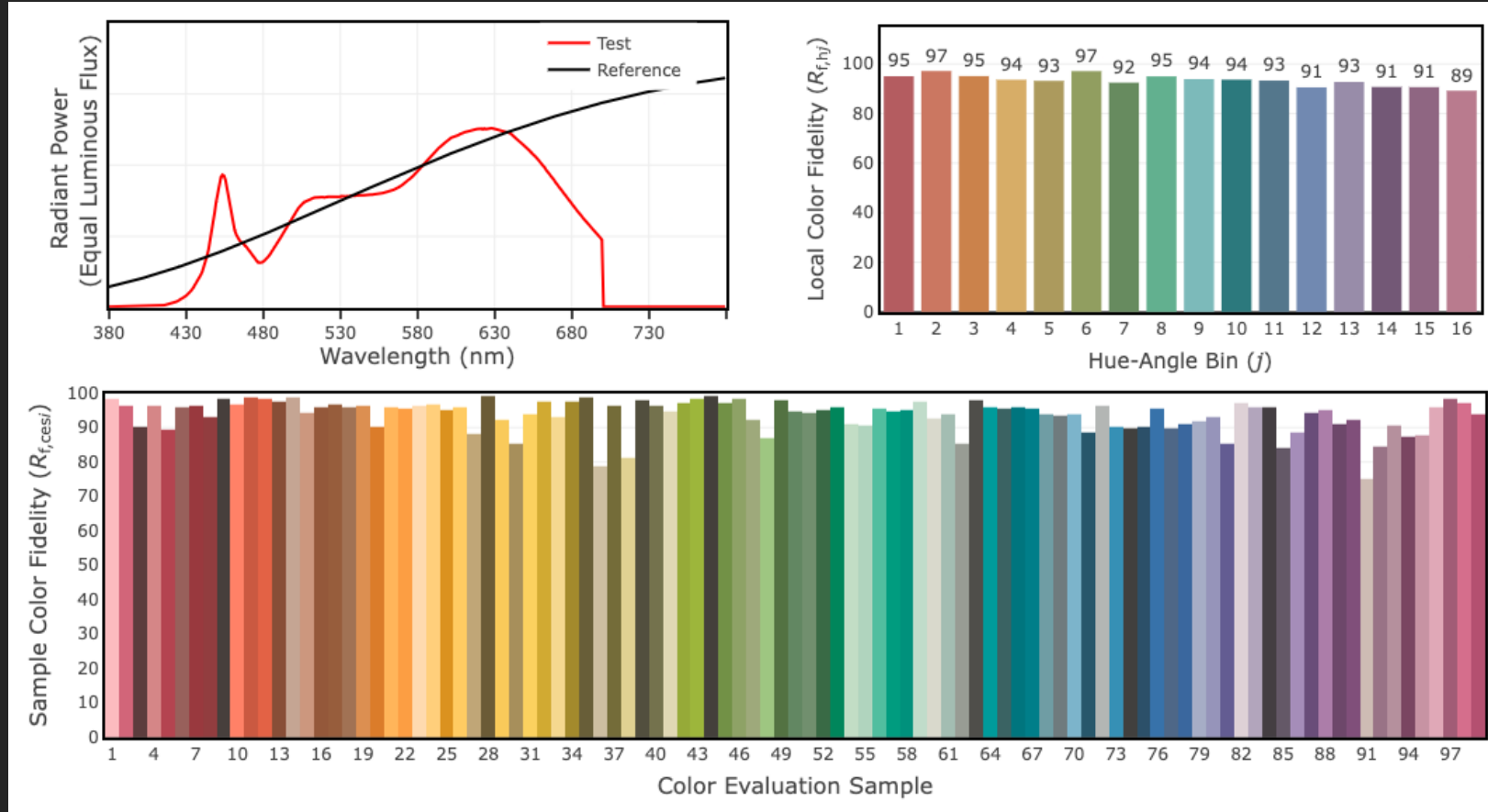
P2 V- F2



JETI

3200 K

MAXI MIX TM-30-20



JETI



3200 K

MAXI MIX

Comparison chart: SSI vs TM30-20 vs CRI

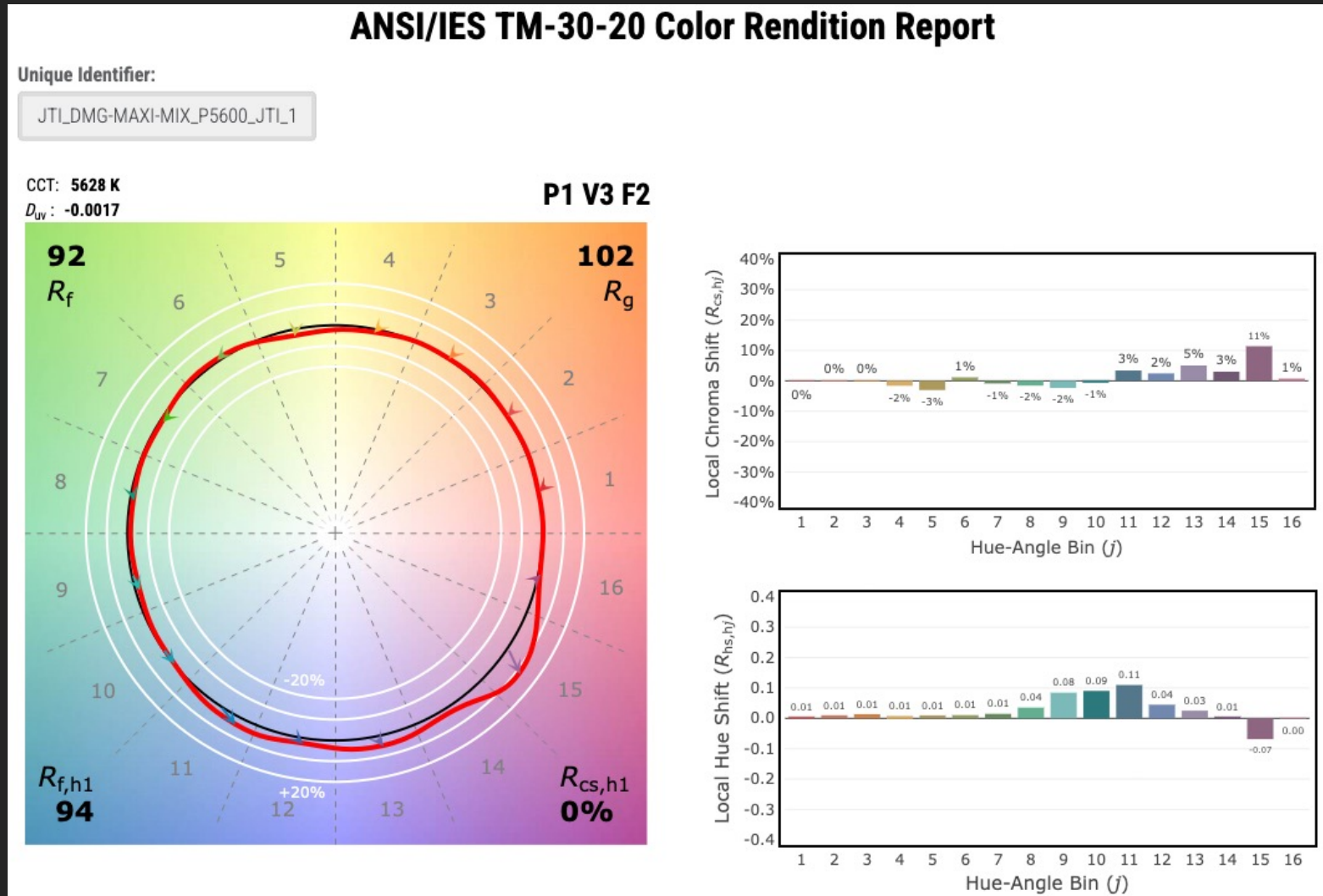
JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
TUNGSTEN VISUAL REF.	93	98	100	97,51	97,05
JTI_DMG-MAXI-MIX_P3200_LED_100%	81	94	100	96,41	94,6
JTI_DMG-MAXI-MIX_P3200_JTI_100%	81	94	100	96,28	94,52
JTI_DMG-MAXI-MIX_P3200_JTI_50%	81	93	100	95,76	94,08
JTI_DMG-MAXI-MIX_P3200_JTI_25%	80	93	100	95,44	93,77



JETI

# MAXI MIX TM-30-20

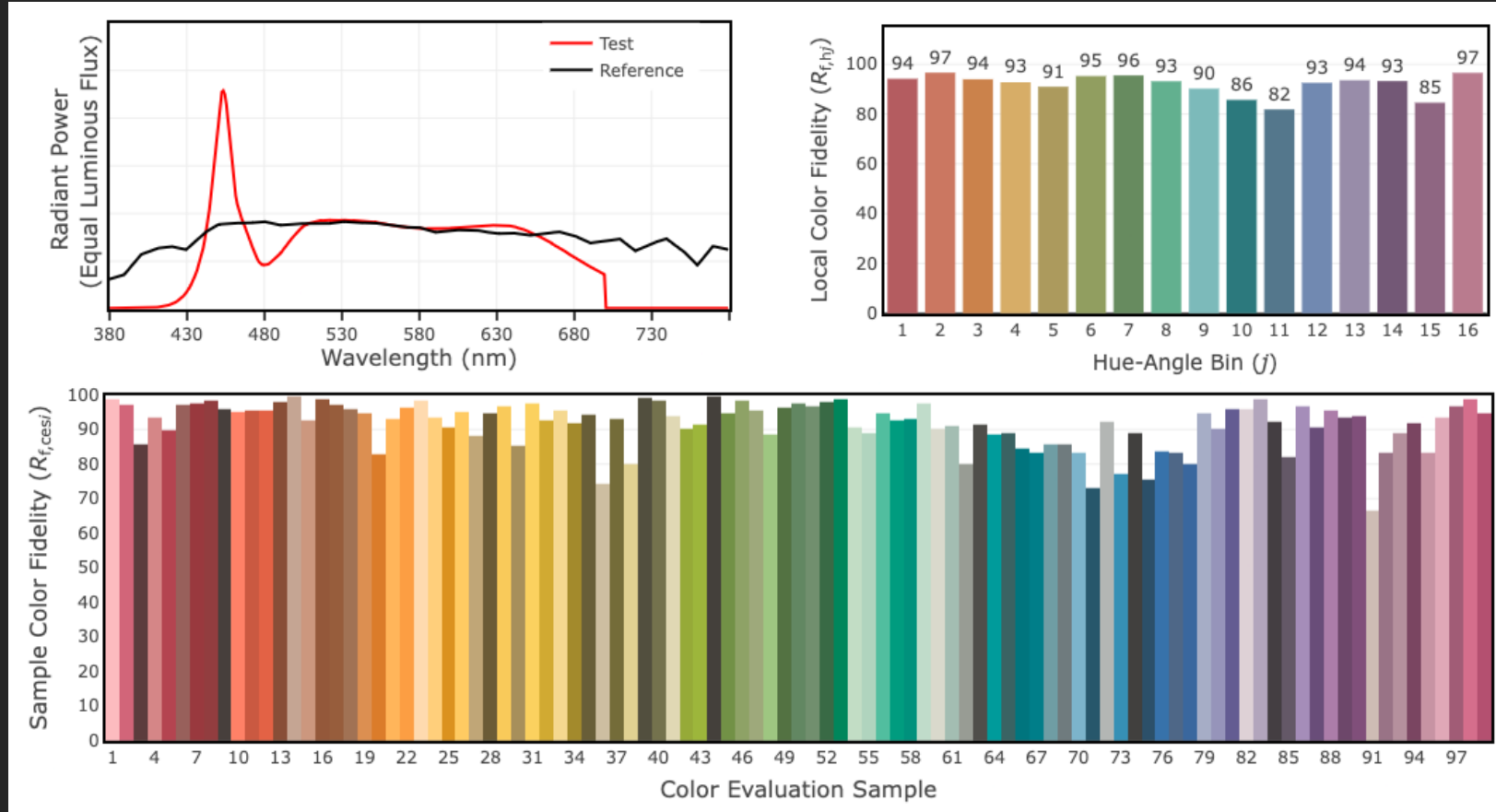
5600 K



JETI

# MAXI MIX TM-30-20

5600 K



JETI

**5600 K**

# MAXI MIX

## Comparison chart: SSI vs TM30-20 vs CRI

JETI 1511 HiRes					
SPD TEST	SSI	TM30 Rf	TM30 Rg	CRI Ra	CRI Re
JTI_DMG-MAXI-MIX_P5600_LED_100%	67	91	102	96,04	93,32
JTI_DMG-MAXI-MIX_P5600_JTI_100%	68	92	102	96,57	94,13
JTI_DMG-MAXI-MIX_P5600_JTI_50%	68	91	102	96,45	93,75
JTI_DMG-MAXI-MIX_P5600_JTI_25%	68	91	102	96,13	93,27



JETI



Données constructeur

Manufacturer's data

ROSCO DMG

# Images & données ROSCO DMG MAXI MIX Images & Data

Name of the tested product		DMG MAXI MIX – Rosco			
Company					
Type of light: Fresnel, panel or others		Panel			
Full Color or Bi-Color		Full Color		IP 20	
Dimensions (inches/cm)		120x36x8.5cm		Weight (Lbs/kg) 17.6Kg	
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?		DOP choice (x3) / Dome / Barndoors			
Type of circuit board material		Aluminium			
Type of housing construction (metal, plastic, others)		98% aluminium / 2% plastic (in mass)			
Website		www.rosco.com			
Person in charge/Position		Nils de Montgrand / VP LED lighting			

Electrical power consumption		360W			
Maximum internal temperature		70°C		F	
AC/DC - Battery voltage		Yes	AC only	DC only Battery - voltage 24-35VDC	
With AC, draws		Amps		With DC, draws Amps/V	

Panel: Focusable unit		Yes	No	Beam angles	
Lux @ 1 meter (3.3 ft.) (Without diffuser)		7377 @ 3200K	7550 @ 5600K	Lux @ 3 meter (10ft.) (Without diffuser) 1034 @ 3200K 1045 @ 5600K	
				Lux @ 5 meter (15ft.) (Without diffuser) @ 3200K @ 5600K	

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

Full Color (RGB - Large spectrum)			
Number of color diodes		6	
Types		R, G, B, A L, W	
Color temperature range		1700 K - 10000 K	
Color temperature preset		Yes	No
Green Magenta Control		Yes	No
Saturation Hue Adjustment		Yes	No
Gels preset		Yes	No
Camera profiles LUTs		Yes	No
Color spaces		Yes	No

Color index	CRI	94+ across white range	
	TLCI		
	TMA 30-18/20 - Rf	TMA 30-18/20 - Rg	
	SSI [P3200]	SSI [CIE D55]	

Other specificities	
---------------------	--

Operating temperatures		From -XX°C to +XX°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			
Native apps		Yes	No	Apps compatibility		Yes	No
Which ones?							
				Color shifts when dimming		Yes	No
				Change of light levels when selecting CT		Yes	No

Environmental concern	
Warranty (in years)	3
For how long parts are available?	10 years minimum
Average repair time	1 day
What do you know about recycling your products?	They are all still <u>working!</u>
Do customers send them back to you or do they take care of it themselves?	Products still working
Country of manufacturing	China, but will be France for DMG LION

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

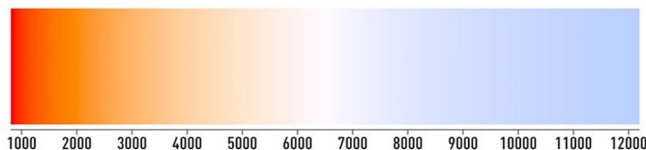
Duv

x

y

SSI

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

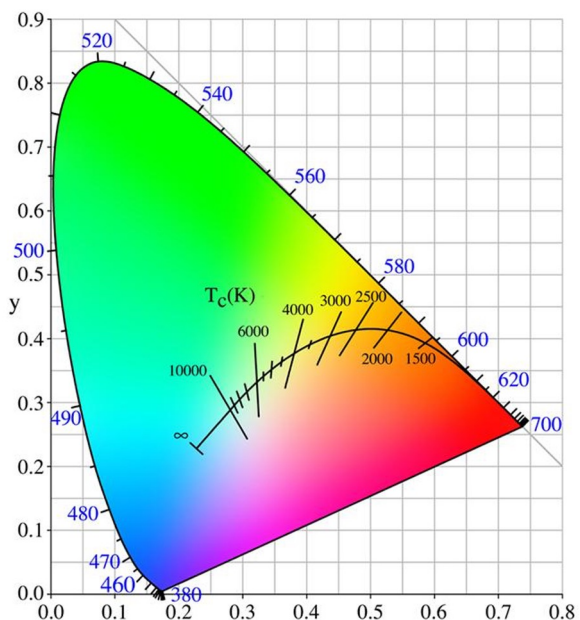
CCT K

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

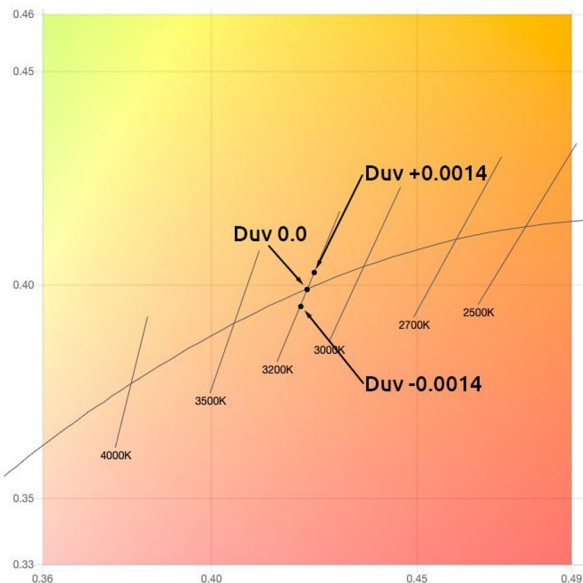
CCT K

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

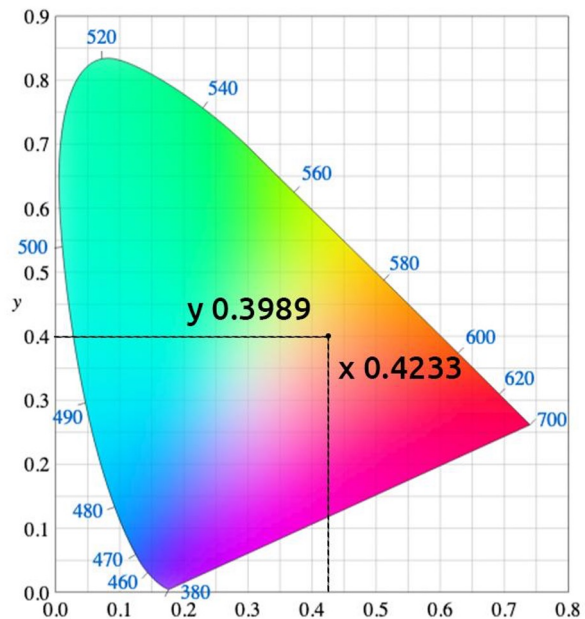
CCT K

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
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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
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Responsable de la communication externe et interne CST	<b>Sebastien Lefebvre</b>	Head of External and Internal Communications CST



PDF presentations

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