

Journée Très LEDs - De beaux tests à faire

Images & mesures
par constructeur

JTL 9A



CST



Be4Post

MagicHour

A Bright LED day - Brilliant tests on the horizon

Images & measurements
by manufacturer



DEDOLIGHT

DLED9N-BI

ARRI ALEXA 35

<https://www.zebra-groupe.com>

<https://cvp.com/product/dedolight-neo-plus-90w-bi-sys-dled9nbi>

Bi-color

90 w

Données du fabricant
/ Manufacturer's data

DEDOLIGHT

DLED9N-BI



Plan / Plan

- DLED9N-BI & Images
 - ✓ Peau caucasienne
 - Comparatifs DLED9N-BI vs tungstène
 - Sous-exposition : ND 06 vs gradateur
 - ✓ Peau noire
 - Comparatifs DLED9N-BI avec tungstène
 - Sous-exposition : ND 06 vs gradateur
- Mesures : Explications & exemples
- Mesures
- DLED9N-BI, Spectra & SSI
- DLED9N-BI, Images, Spectra & SSI
- DLED9N-BI, & TM-30
- Données constructeur
- Explications : K, CCT K, Duv & coordonnées x,y

- DLED9N-BI & Images
 - ✓ Caucasian skin tone
 - Comparison DLED9N-BI vs tungsten
 - Underexposure: ND 06 vs dimmer
 - ✓ Black skin tone
 - Comparison DLED9N-BI vs tungsten
 - Underexposure ND 06 vs dimmer
- Measurements: Explanations & examples
- Measurements
- DLED9N-BI, Spectra & SSI
- DLED9N-BI, Images, Spectra & SSI
- DLED9N-BI & TM-30
- Manufacturer's data
- Explanations on K, CCT K, Duv & x,y coordinates

DLED9N-BI

& Images

CAUCASIAN

Alice



ARRI ALEXA 35

DLED9N - BI

Comparison with

TUNGSTEN





DLED9N-BI

ARRI ALEXA 35
GRADED



Images & données DEDOLIGHT DLED9N-BI [Images & Data](#)



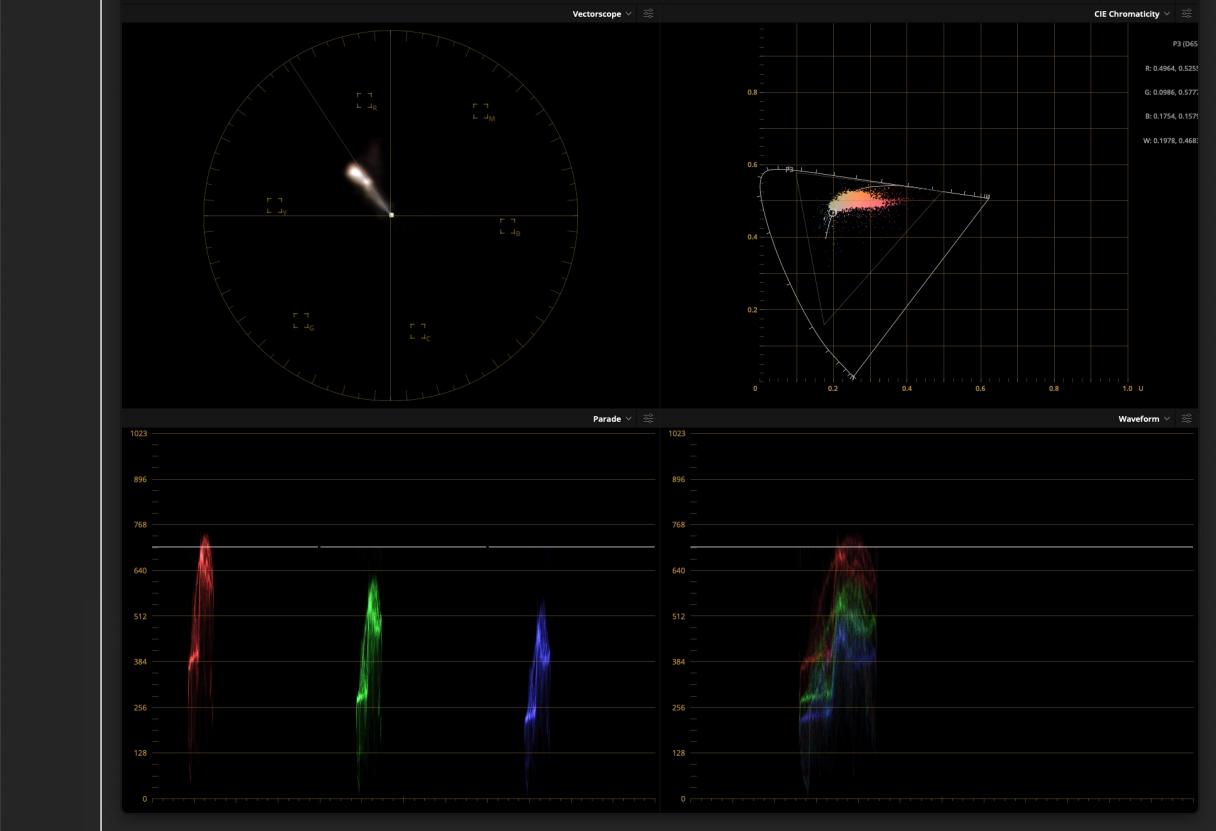
TUNGSTEN REF.

ARRI ALEXA 35
GRADED



DLED9N-BI

Images & données DEDOLIGHT DLED9N-BI Images & Data



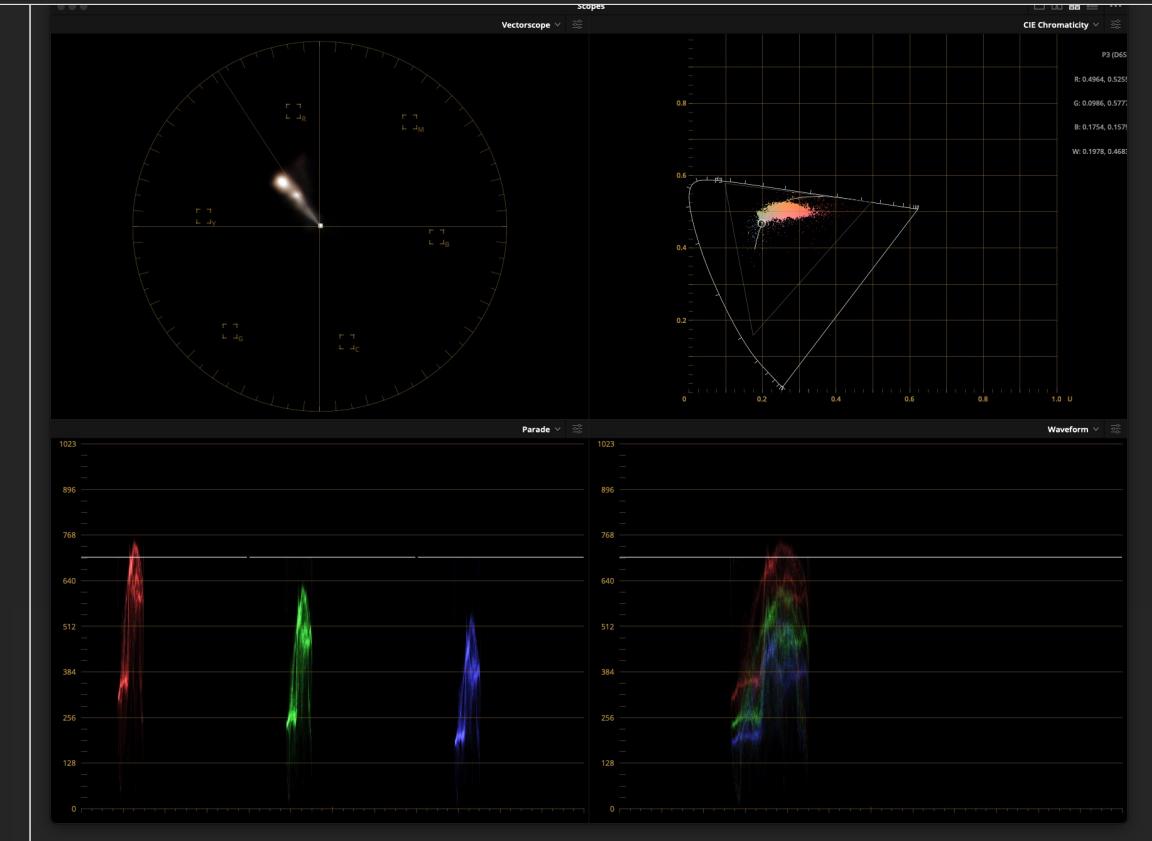
ARRI ALEXA 35
GRADED



Images & données DEDOLIGHT DLED9N-BI Images & Data



ARRI ALEXA 35
GRADED



CAUCASIAN

Alice



ARRI ALEXA 35

DLED9N-BI

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

DIMMER @ 25%

UNDEREXPOSED (-2 STOPS ND 06) Comparison with

DIMMER @ 25%

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

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

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

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

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

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

As a result, the face becomes the only reference to compare. To correct the exposure up to the keylight, we worked in offset like with printer light points.

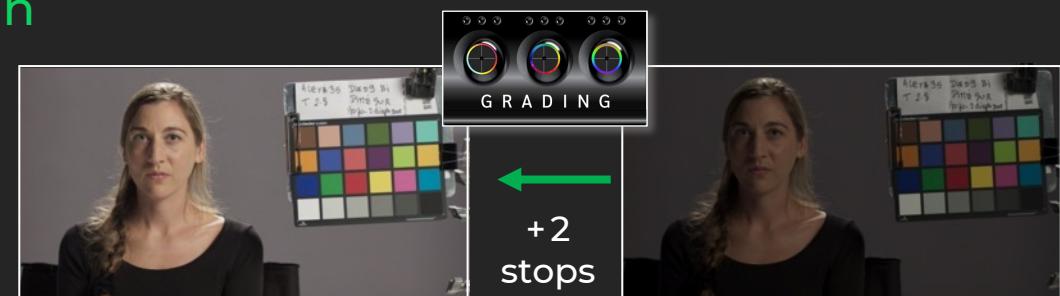


UNDEREXPOSED
(- 2 STOPS ND 06)

Comparison



Back to Keylight



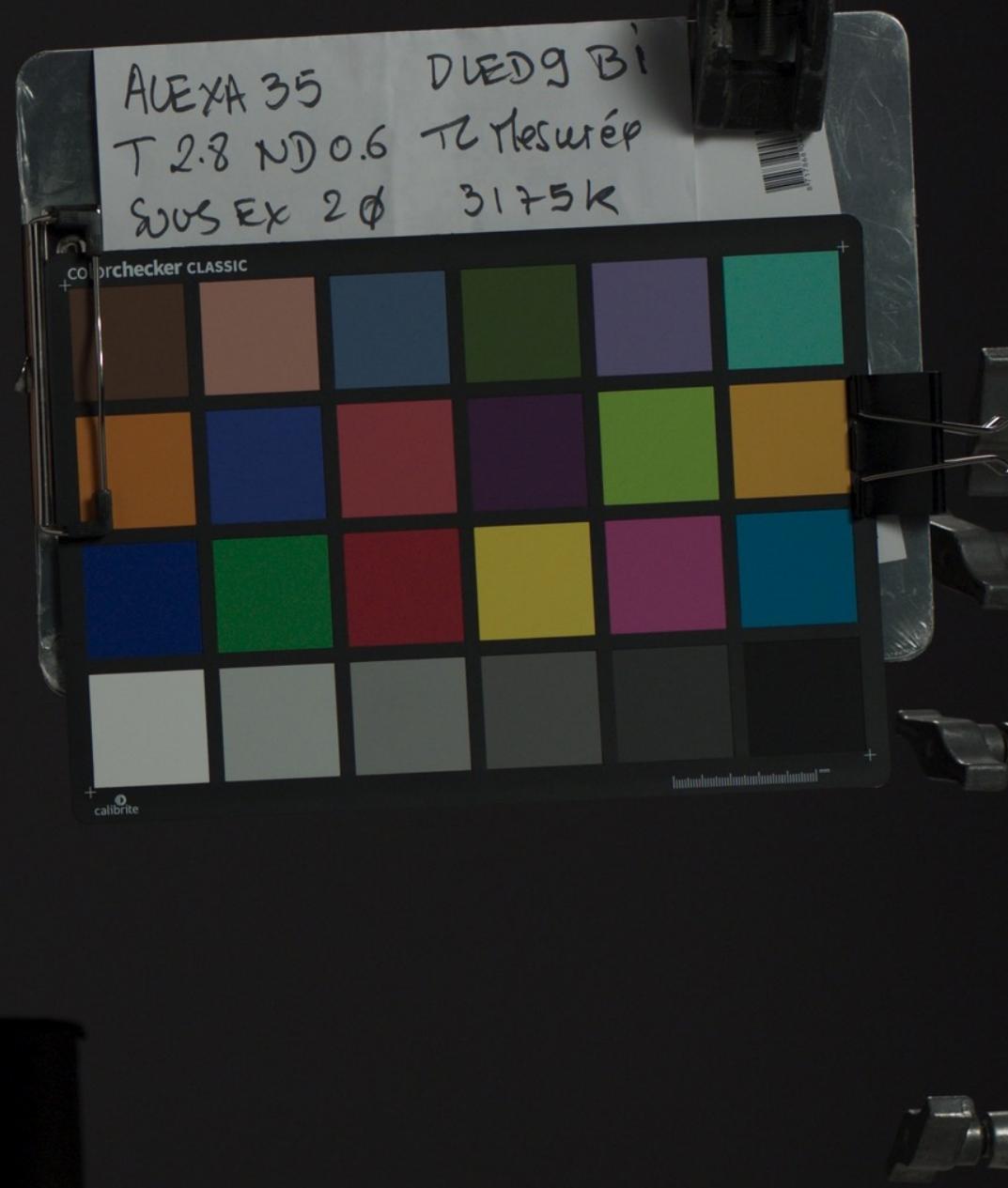
Back to Keylight

DIMMER @ 25%

UNGRADED



DLED9N-BI
Underexposed -2 stops



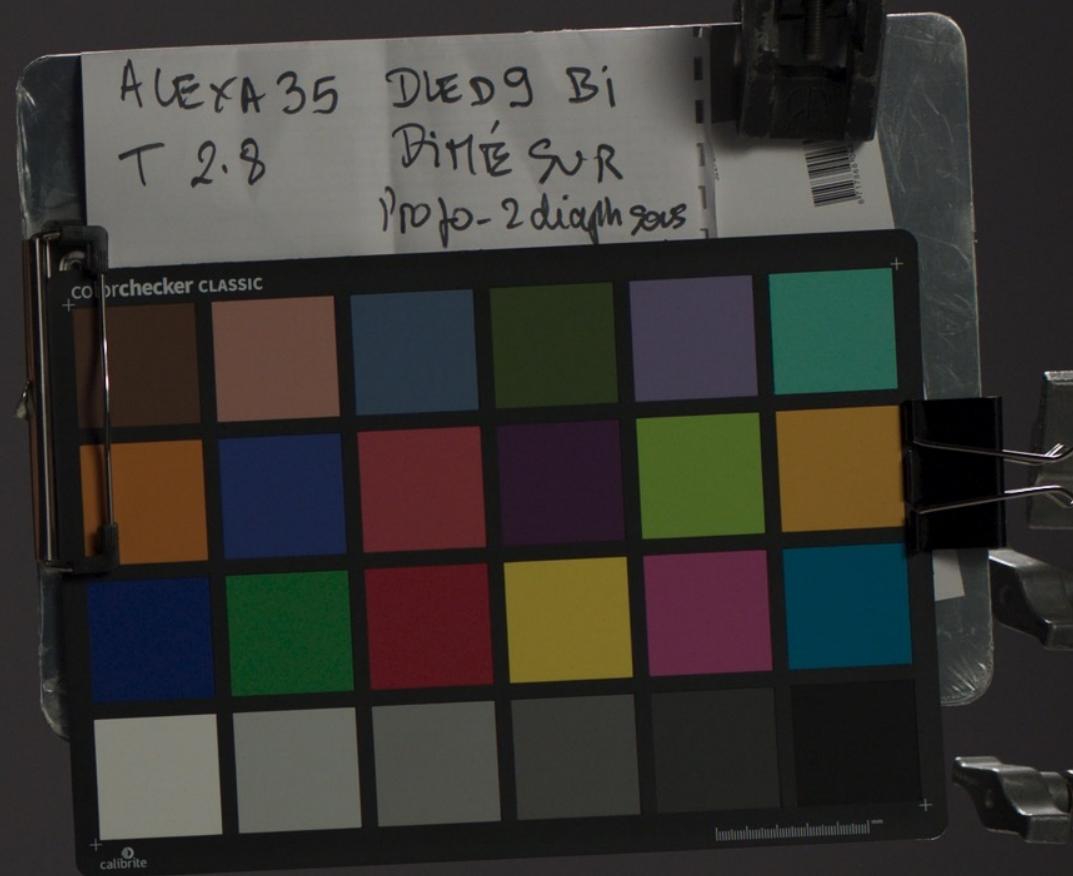
GRADED



UNGRADED



DLED9N-BI
+ Dimmer @ 25%



GRADED



DLED9N-BI
+ Dimmer @ 25%





GRADED

DLED9N-BI
+ Dimmer @ 25%



DLED9N-BI
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

DLED9N-BI
+ Dimmer @ 25%

DLED9N-BI
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

DLED9N-BI
+ Dimmer @ 25%

DLED9N-BI
Underexposed -2 stops

BLACK SKIN TONE

Naymee



ARRI ALEXA 35

DLED9N - BI

Comparison with

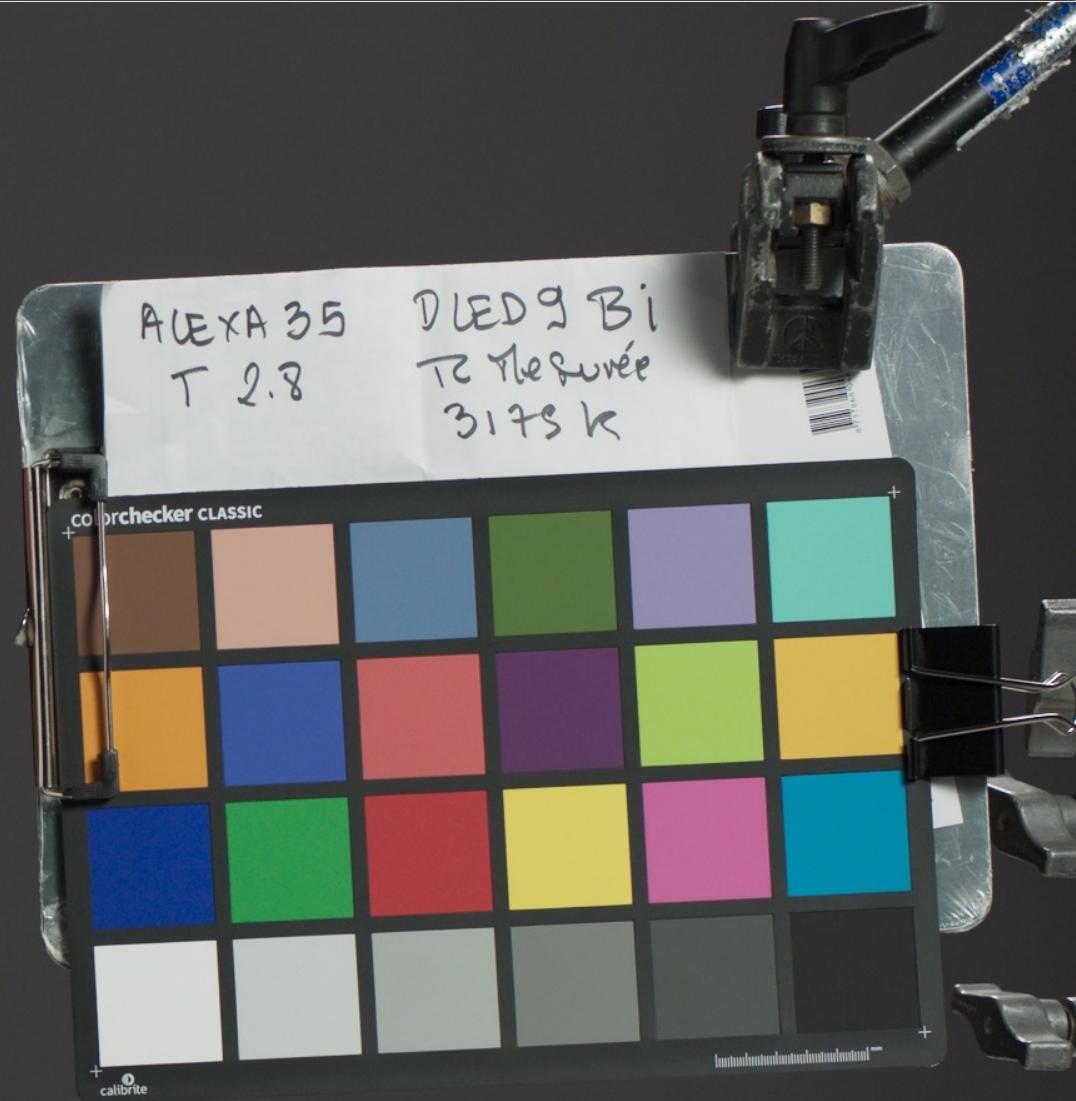
TUNGSTEN





DLED9N-BI

ARRI ALEXA 35
GRADED



Images & données DEDOLIGHT DLED9N-BI [Images & Data](#)



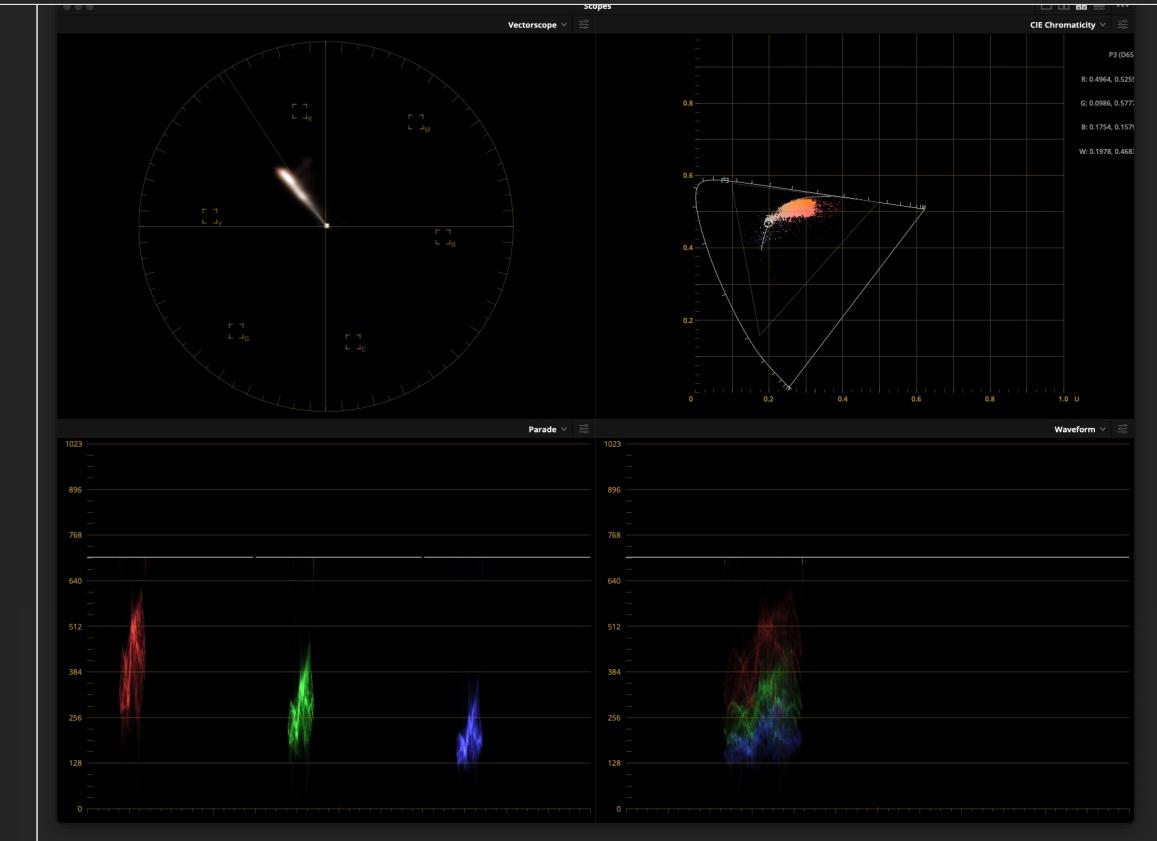
TUNGSTEN REF.

ARRI ALEXA 35
GRADED



DLED9N-BI

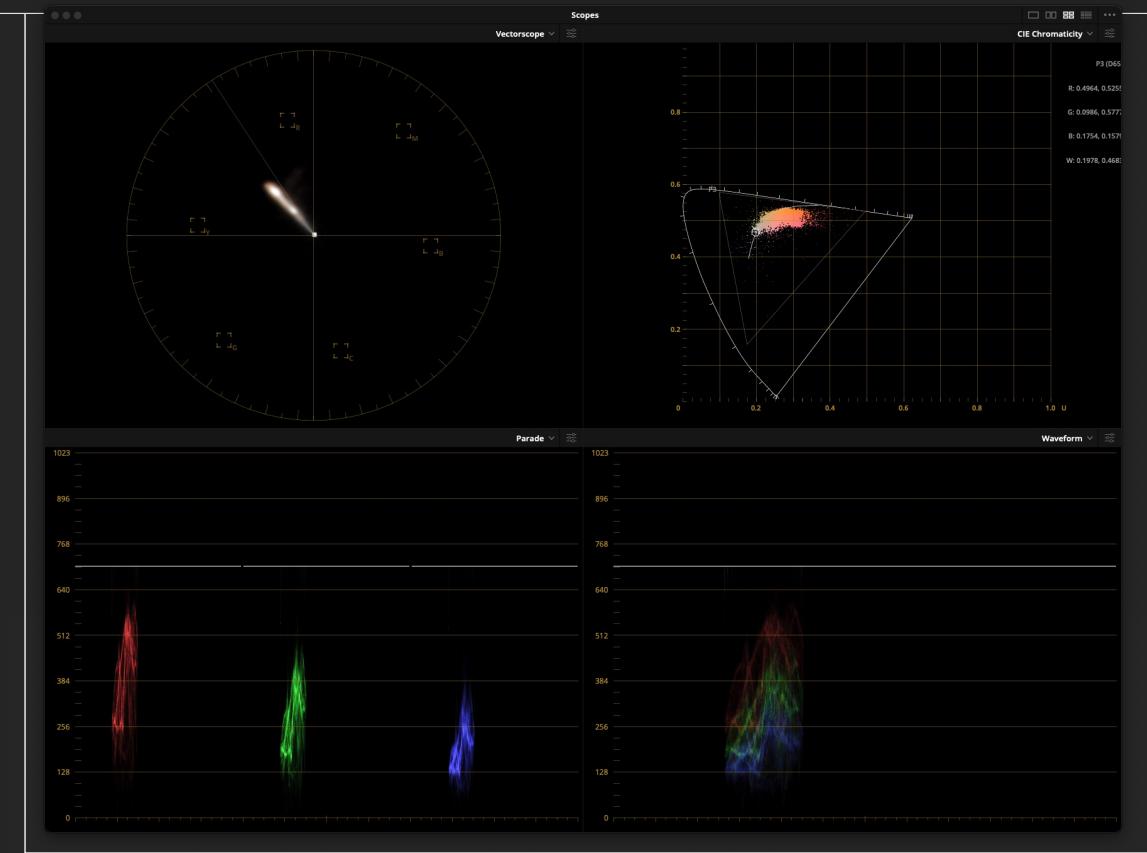
Images & données DEDOLIGHT DLED9N-BI Images & Data



Images & données DEDOLIGHT DLED9N-BI Images & Data



DLED9N-BI



BLACK SKIN TONE

Naymee



DLED9N-BI

UNDEREXPOSED (-2 STOPS ND 06)

Comparison with

ARRI ALEXA 35

DIMMER @ 25%

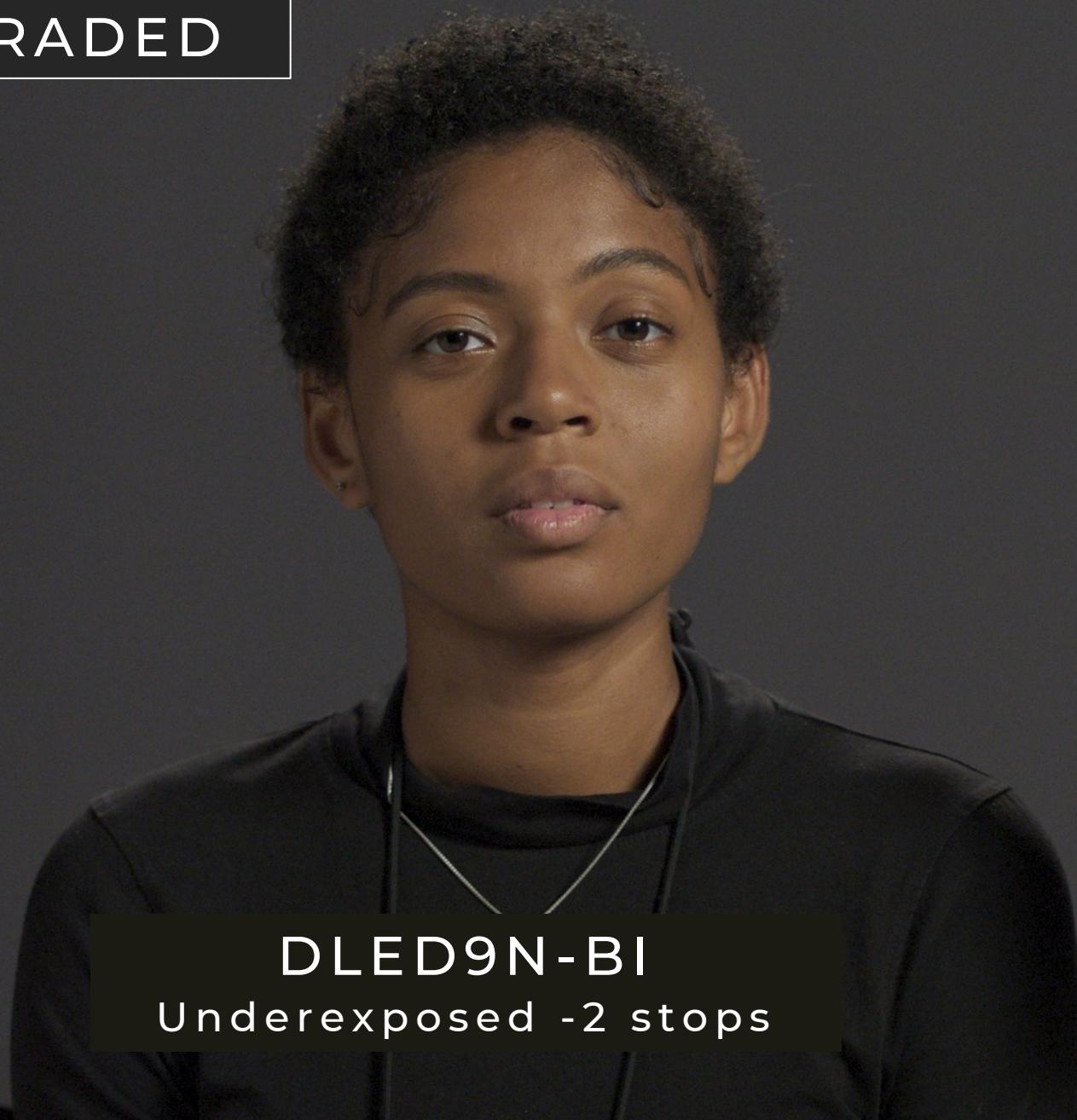
UNGRADED



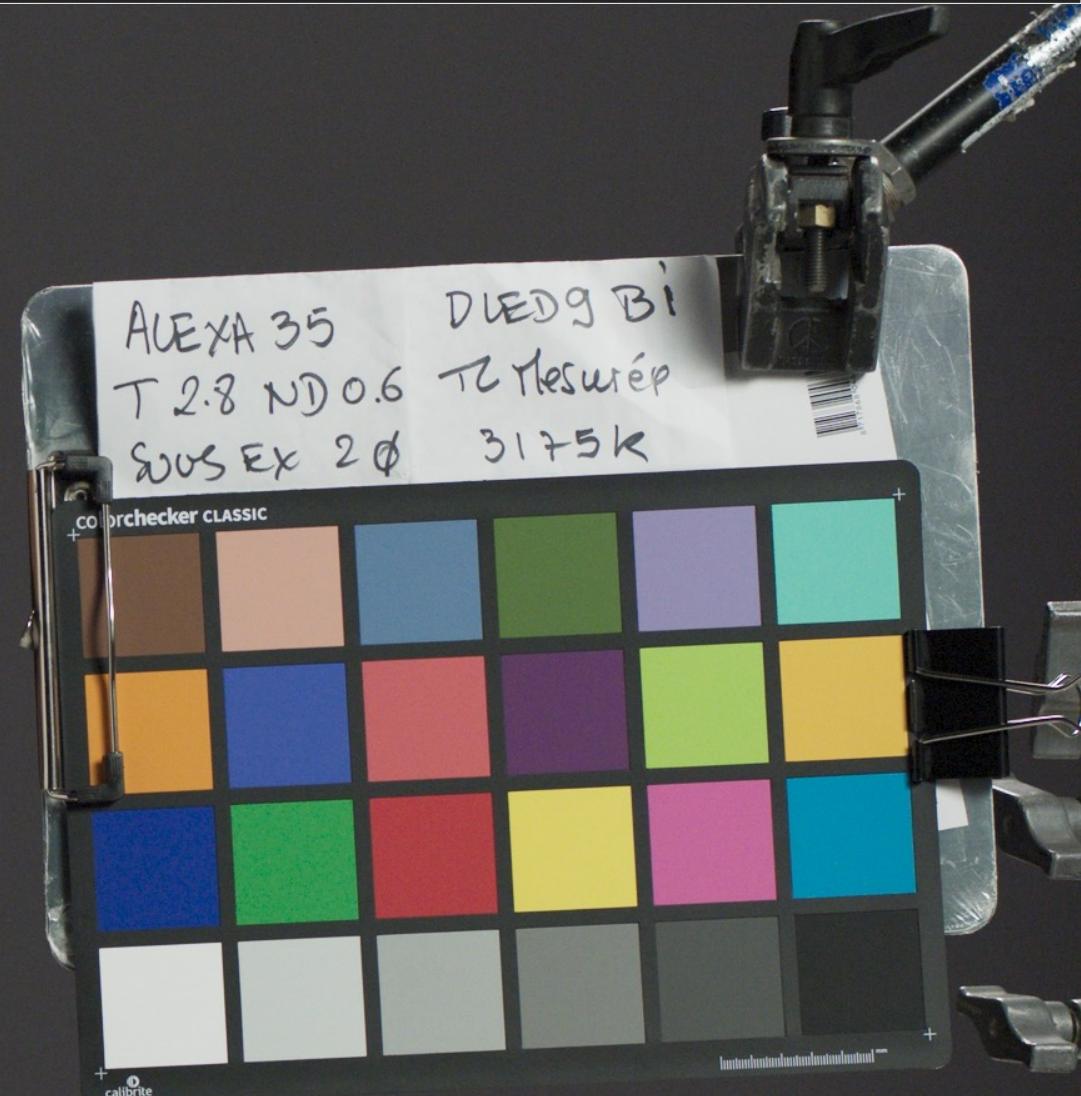
DLED9N-BI
Underexposed -2 stops



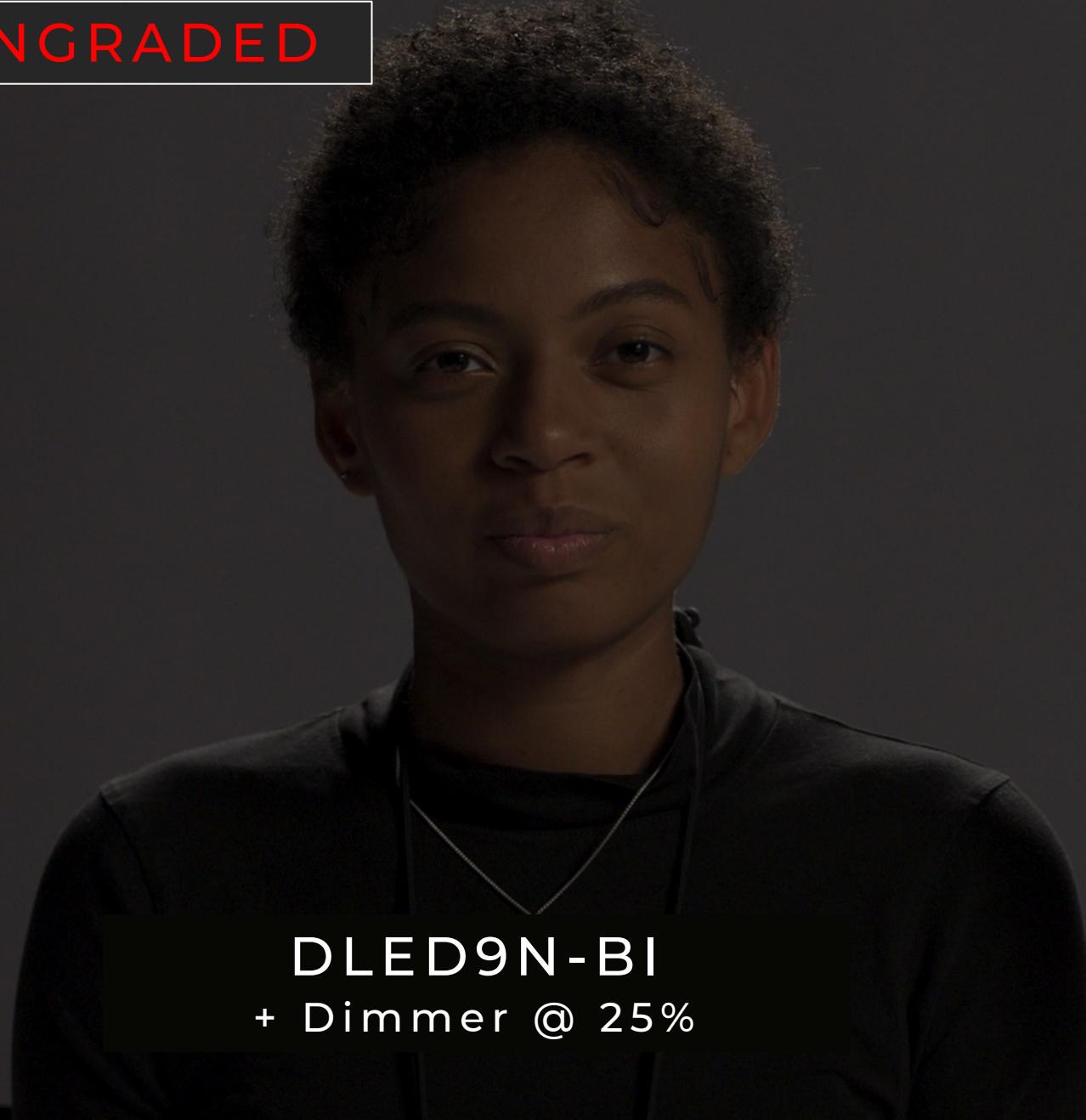
GRADED



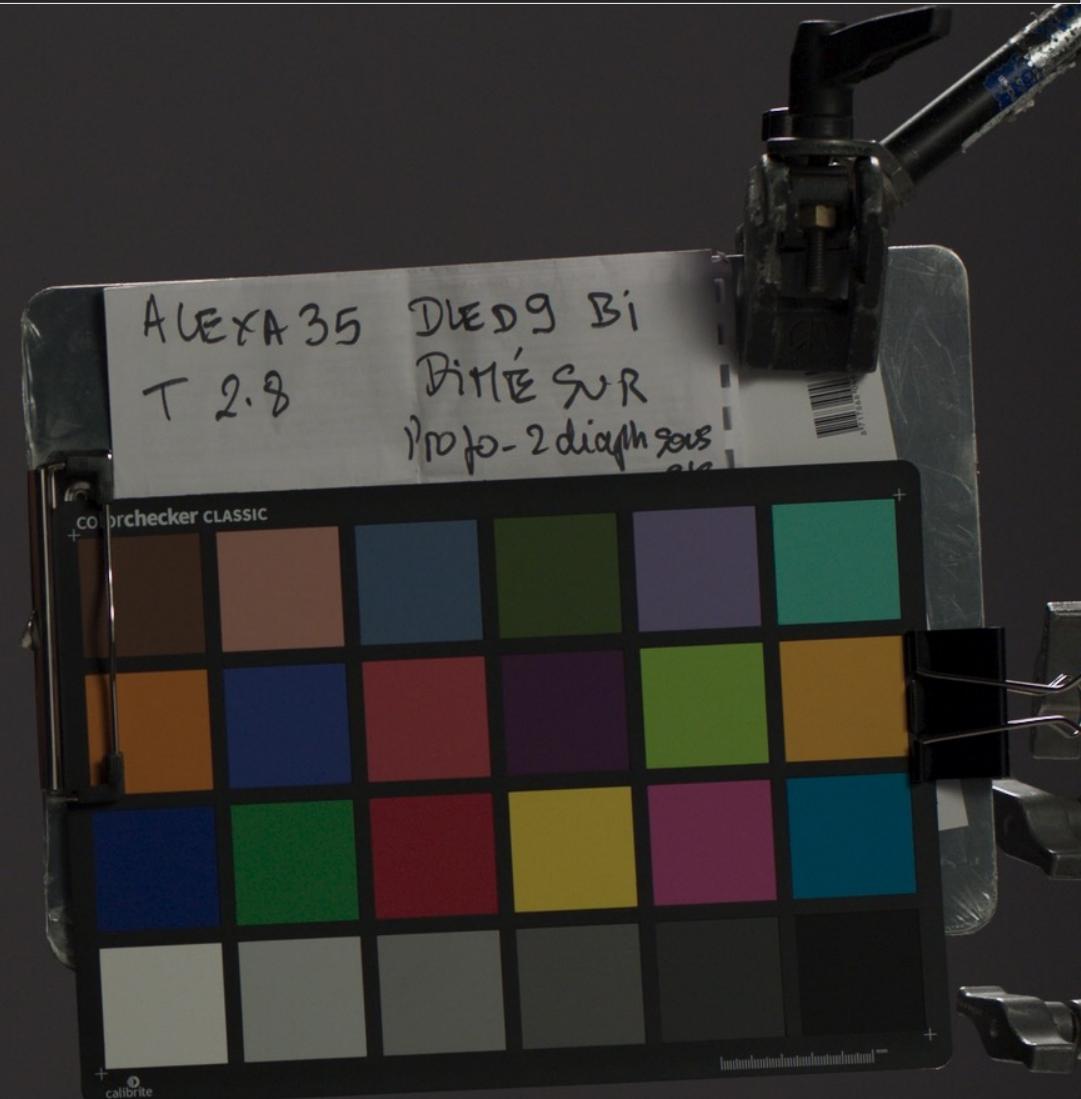
DLED9N-BI
Underexposed -2 stops



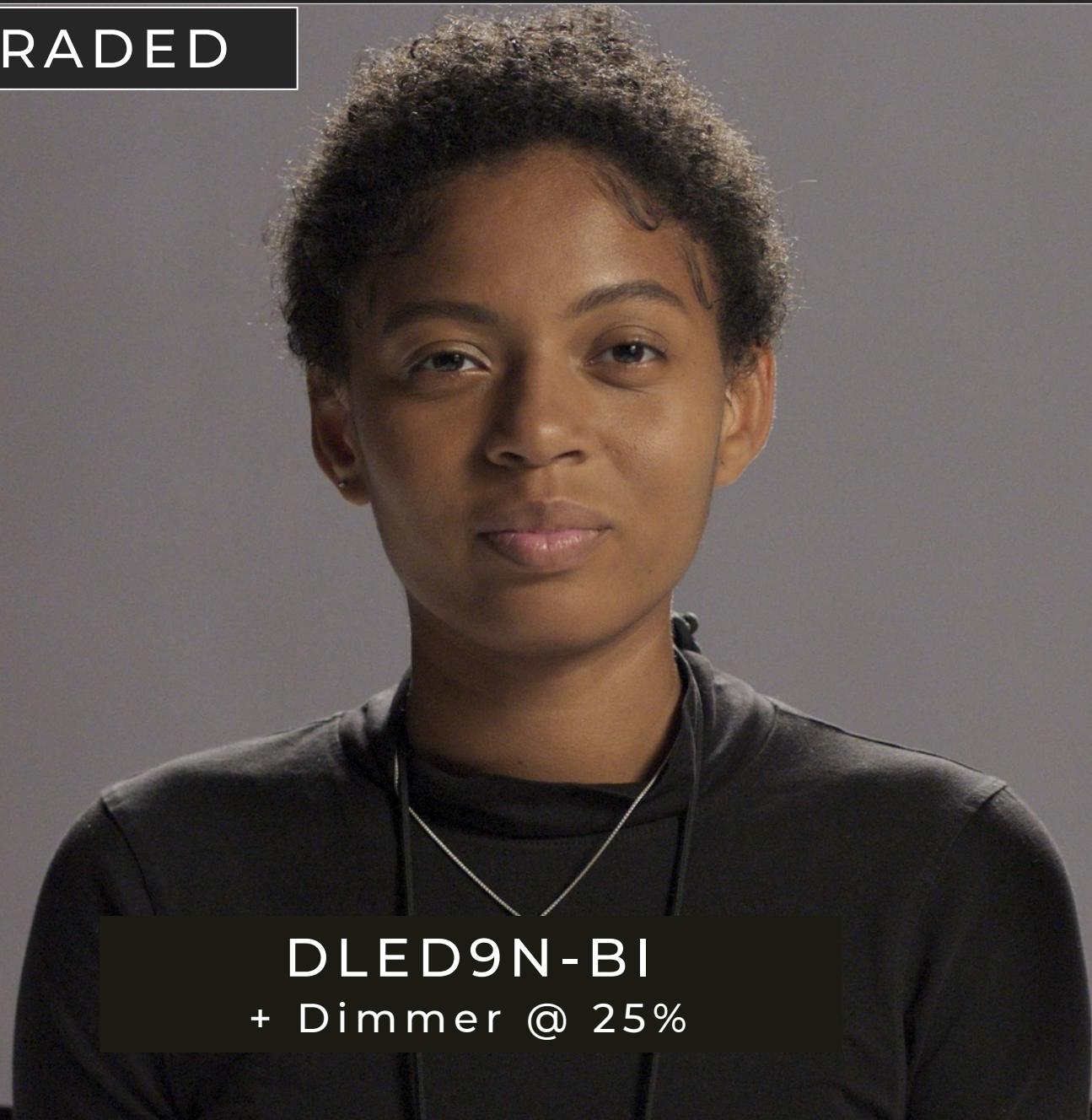
UNGRADED



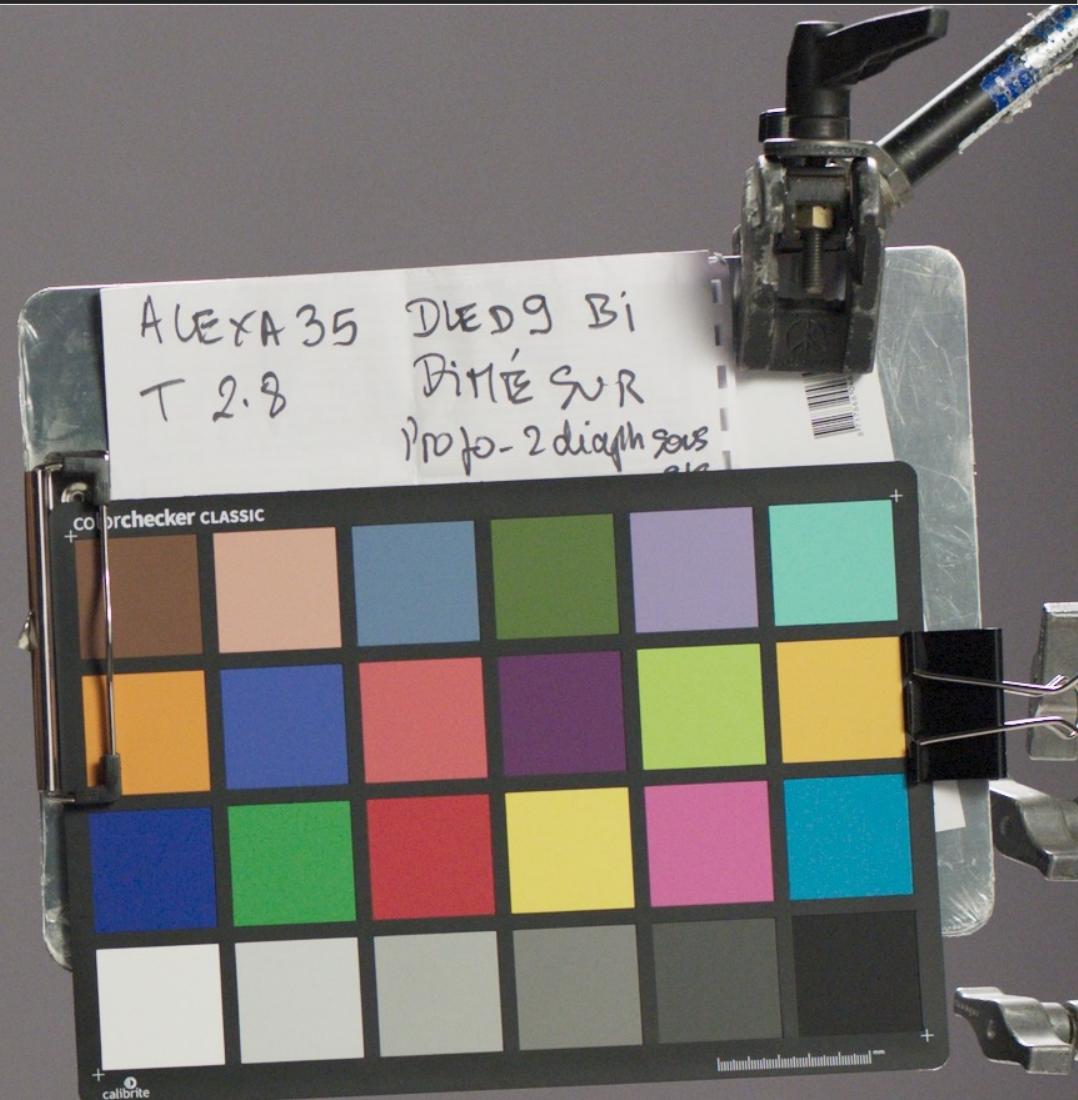
DLED9N-BI
+ Dimmer @ 25%



GRADED



DLED9N-BI
+ Dimmer @ 25%





GRADED

DLED9N-BI
+ Dimmer @ 25%



DLED9N-BI
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

DLED9N-BI
+ Dimmer @ 25%

DLED9N-BI
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

DLED9N-BI
+ Dimmer @ 25%

DLED9N-BI
Underexposed -2 stops

Mesures

Explications & exemples

Measurements

Explanations & examples

Explications / Explanation

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

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

* 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).

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

Les comparaisons entre les différents appareils de mesure

Comparisons between different measuring equipment

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

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



Mesures prises avec :
Measurements taken with:

JETI 1511
HiRes (JTI)

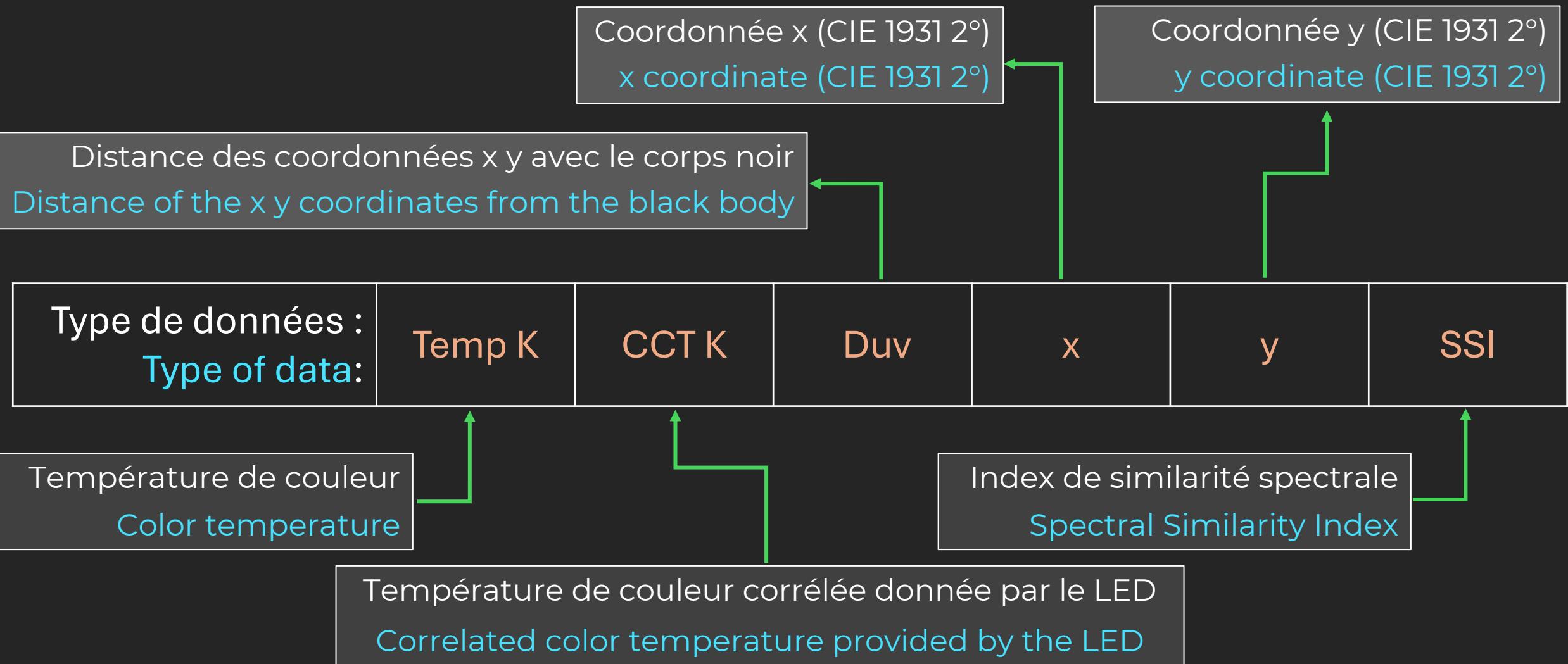


Gossen
Mavospec Base (GSN)



Sekonic
C800

Explications / Explanation



Example on DLED9N - BI

LIGHT			JETI 1511 HiRes						SSI
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv		
	100%	CCT set on LED - 3200	3200				P3200_LED_100%		

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

	100%	CCT set on JETI - 3200	3200				P3200_JTI_100%	
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Example on DLED9N - BI

LIGHT			JETI 1511 HiRes						SSI
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST csv		
DEDOLIGHT D LED 9 BI	100%	CCT set on LED - 3200	3353	-0,001	0,4132	0,3933	JTI_DEDOLIGHT-D-LED-9-BI_P3200	LED_100%	72

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

DEDOLIGHT D LED 9 BI	100%	CCT set on JETI - 3200	3190	0	0,4241	0,3993	JTI_DEDOLIGHT-D-LED-9-BI_P3200	JTI_100%	73
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Pourquoi tester à différentes puissances ?

100%, 50%, 25% ?

Why test at different power levels?

100%, 50%, 25%?

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

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

Données relatives à :
Data related to:

Power @ 100%
indicated by
the LED

Power @ 100%
indicated by
JETI

Power @ 50%
indicated by
JETI

Power @ 25%
indicated by
JETI

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

DLED9N-BI

3200 K

5600 K

3200 K

DLED9N-BI



LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
VISUAL TUNGSTEN REF.	100%	3200	3012	0,001	0,4372	0,406	TUNGSTEN	93
DEDOLIGHT D LED 9 BI	100%	CCT set on LED - 3200	3353	-0,001	0,4132	0,3933	JTIDEDOLIGHT-D-LED-9-BI_P3200_LED_100%	82
DEDOLIGHT D LED 9 BI	100%	CCT set on JETI - 3200	3190	0	0,4241	0,3993	JTIDEDOLIGHT-D-LED-9-BI_P3200_JTI_100%	83
DEDOLIGHT D LED 9 BI	50%	CCT set on JETI - 3200	2759	0,001	0,4576	0,4141	JTIDEDOLIGHT-D-LED-9-BI_P3200_JTI_50%	80
DEDOLIGHT D LED 9 BI	25%	CCT set on JETI - 3200	2737	0,002	0,4595	0,4147	JTIDEDOLIGHT-D-LED-9-BI_P3200_JTI_25%	79

SEKONIC C-800			GOSSSEN MAVOSPEC BASE				
CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST	
3023	0,0002	96	-	-	-	VISUAL REF-TUNGSTEN	
3315	0	83	3248	0,0006	85	GSNDEDOLIGHT-D-LED-9-BI_P3200_LED_100%	
3138	0,0006	85	3086	0,0009	85	GSNDEDOLIGHT-D-LED-9-BI_P3200_JTI_100%	
2760	0,0026	82	2760	0,0016	81	GSNDEDOLIGHT-D-LED-9-BI_P3200_JTI_50%	
2732	0,0023	82	2717	0,0015	80	GSNDEDOLIGHT-D-LED-9-BI_P3200_JTI_25%	



DLED9N-BI



5600 K

LIGHT			JETI 1511 HiRes					
Ref	Power	Temp K	CCT K	Duv	x	y	SPD TEST	SSI
DEDOLIGHT D LED 9 BI	100%	CCT set on LED - 5600	5770	0	0,3266	0,3352	JTI_DEDOLIGHT-D-LED-9-BI_P5600_LED_100%	73
DEDOLIGHT D LED 9 BI	100%	CCT set on JETI - 5600	5577	-0,002	0,3307	0,3361	JTI_DEDOLIGHT-D-LED-9-BI_P5600_JTI_100%	73
DEDOLIGHT D LED 9 BI	50%	CCT set on JETI - 5600	6188	-0,001	0,3188	0,327	JTI_DEDOLIGHT-D-LED-9-BI_P5600_JTI_50%	69
DEDOLIGHT D LED 9 BI	25%	CCT set on JETI - 5600	6599	0,001	0,3119	0,3234	JTI_DEDOLIGHT-D-LED-9-BI_P5600_JTI_25%	67

SEKONIC C-800

GOSSEN MAVOSPEC BASE



CCT	Duv	SSI	CCT	Duv	SSI	SPD TEST
5664	0,0005	74	5413	0,002	76	GSN_DEDOLIGHT-D-LED-9-BI_P5600_LED_100
5399	0,0001	74	5238	0,0007	76	GSN_DEDOLIGHT-D-LED-9-BI_P5600_JTI_100%
5830	0,0015	72	5640	0,002	73	GSN_DEDOLIGHT-D-LED-9-BI_P5600_JTI_50%
6619	0,0008	68	6320	0,0015	70	GSN_DEDOLIGHT-D-LED-9-BI_P5600_JTI_25%

DLED9N - BI

3200 K

Spectra & SSI

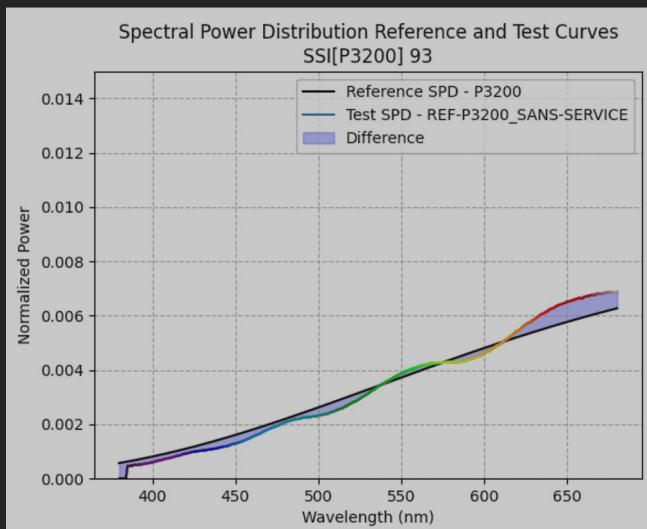
5600 K

TM-30-18 & CRI



JETI

Manufacteur
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
Valeur cible du test
Target test value
3200 K

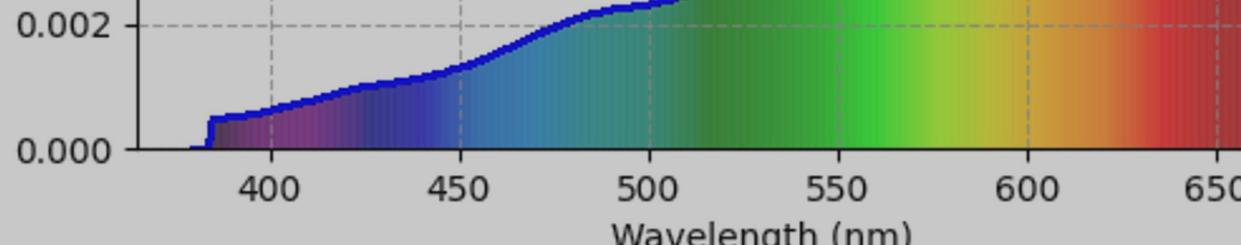
Référence du projecteur
Projector reference

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.



Manufacturer PROJECTOR

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

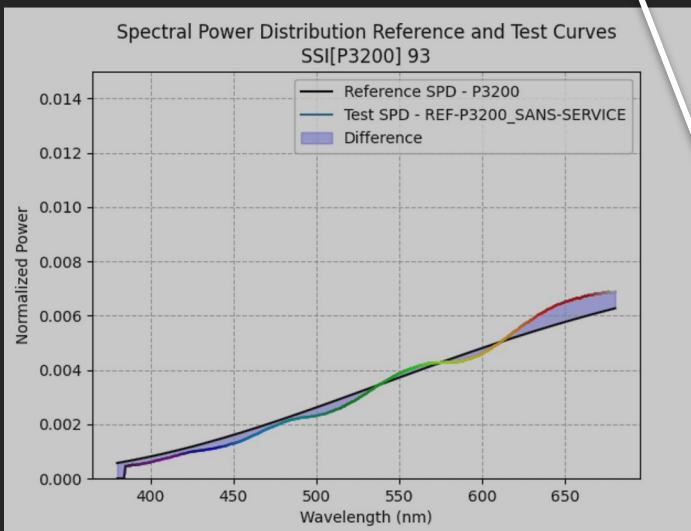
CCT 3012 Duv 0,001

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/ansiestm3020>

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).

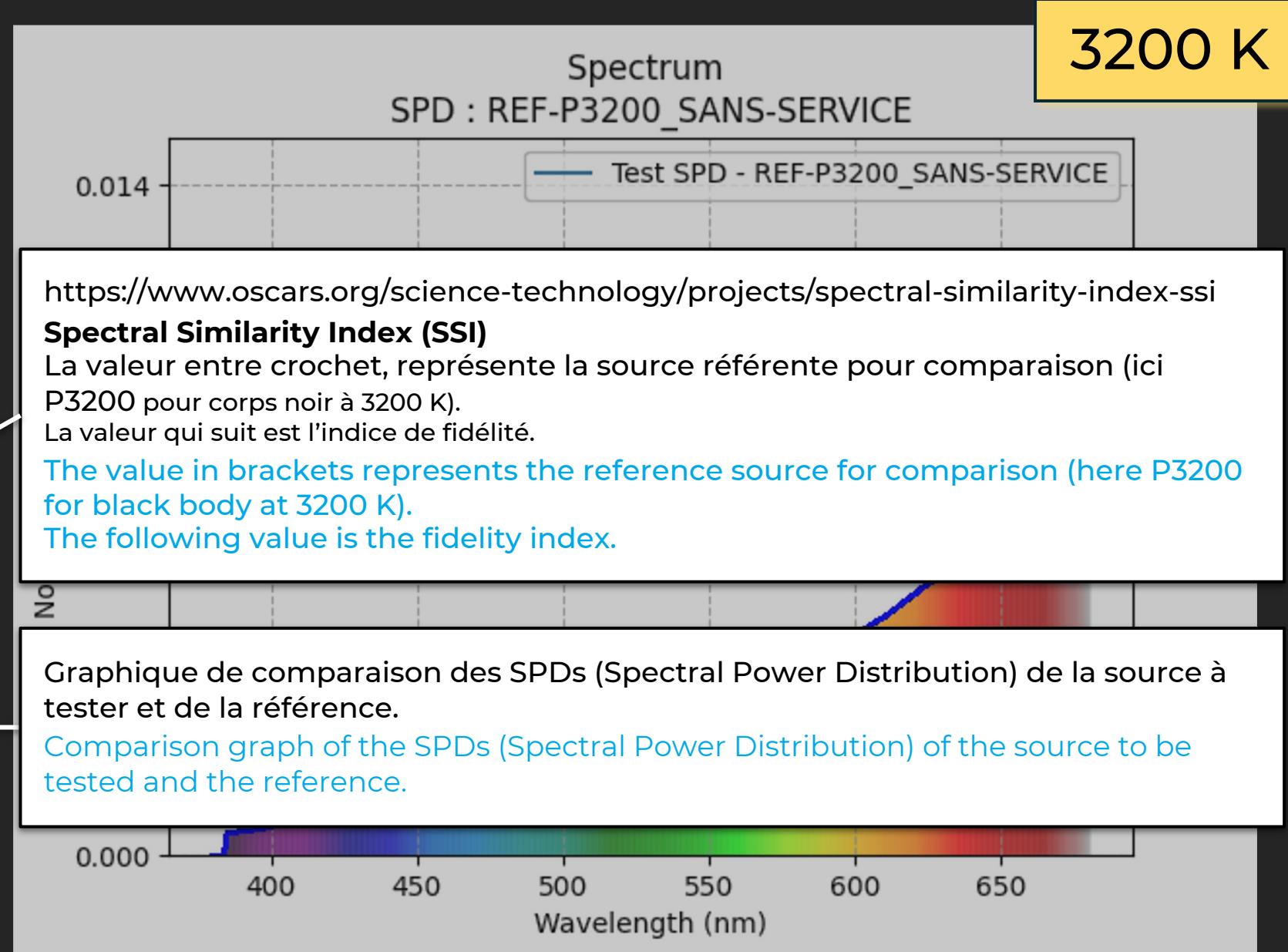
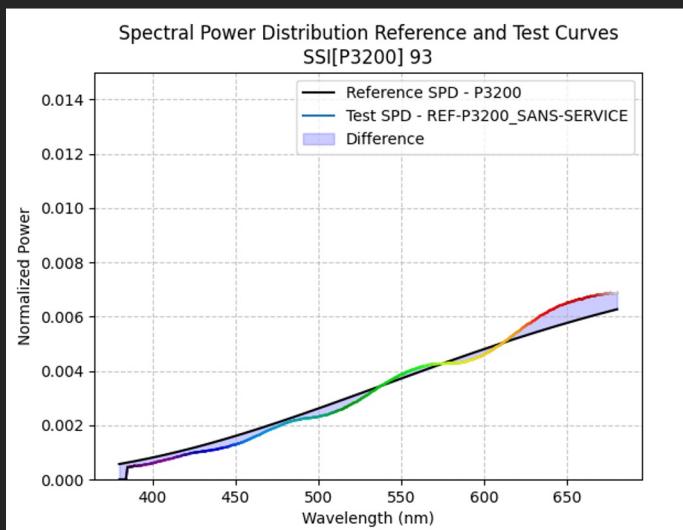
Gamut **R_g** indicates the level of color saturation. Values below 100 indicate a saturation lower than the reference.

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



DLED9N - BI

3200 K



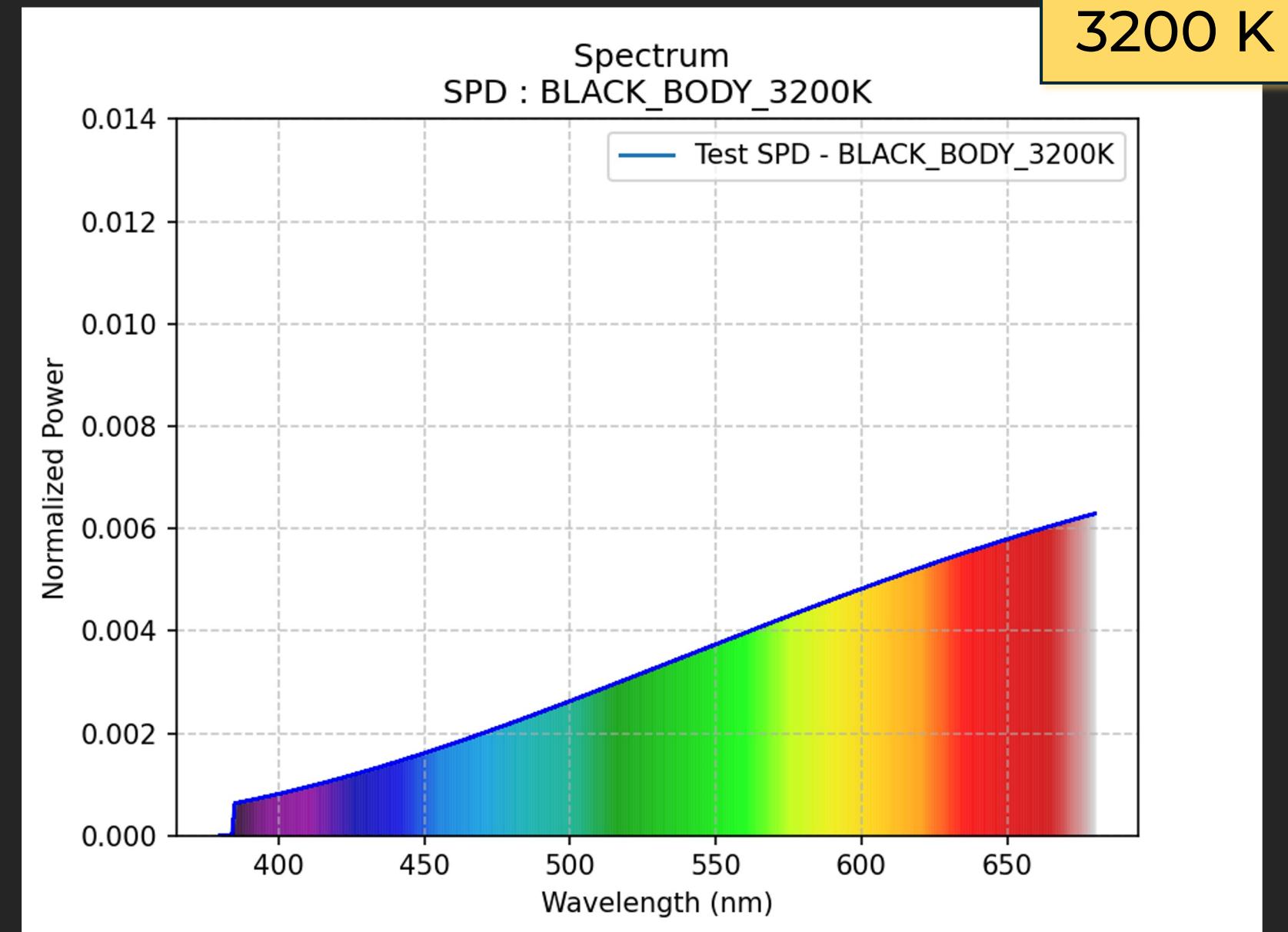
JETI

SSI REFERENCE

Corps noir / Black body

3200 K

3200 K



SOURCE TUNGSTEN Comparison

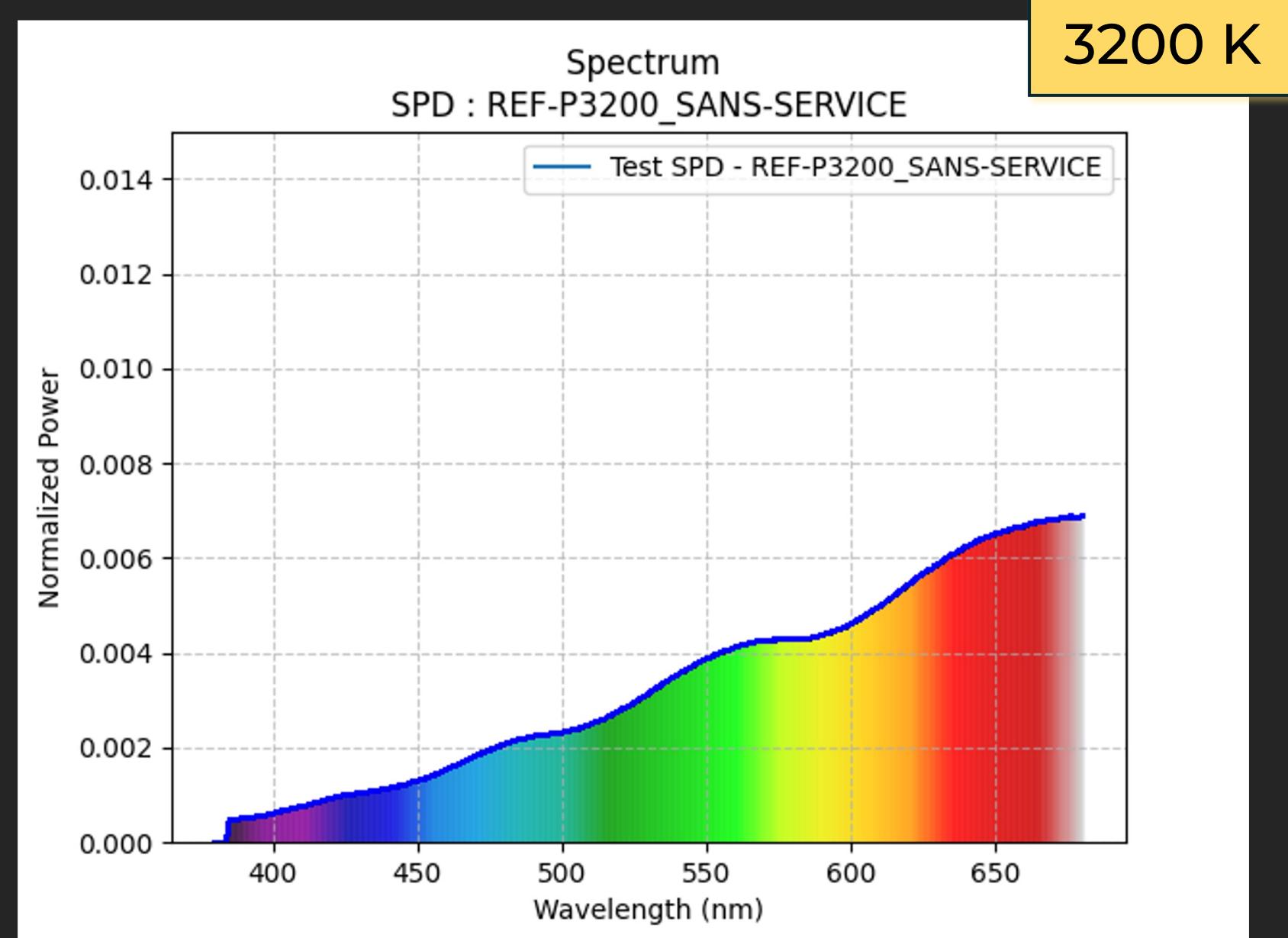
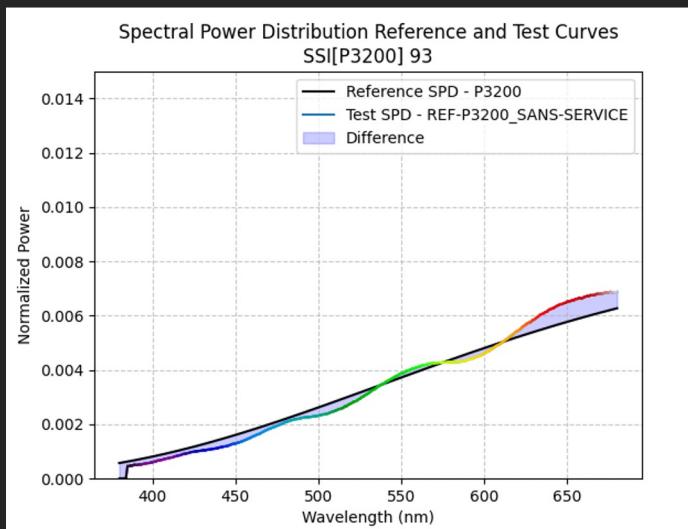
CCT 3012 Duv 0,001

CIE 1931 2° x 0.4372 y 0.4060

CRI Ra 97.51

IES TM-30-18 Rf 98 Rg 100

SSI[P3200] 93



DEDOLIGHT

DLED9N-BI

Power: 100% - CCT set on LED

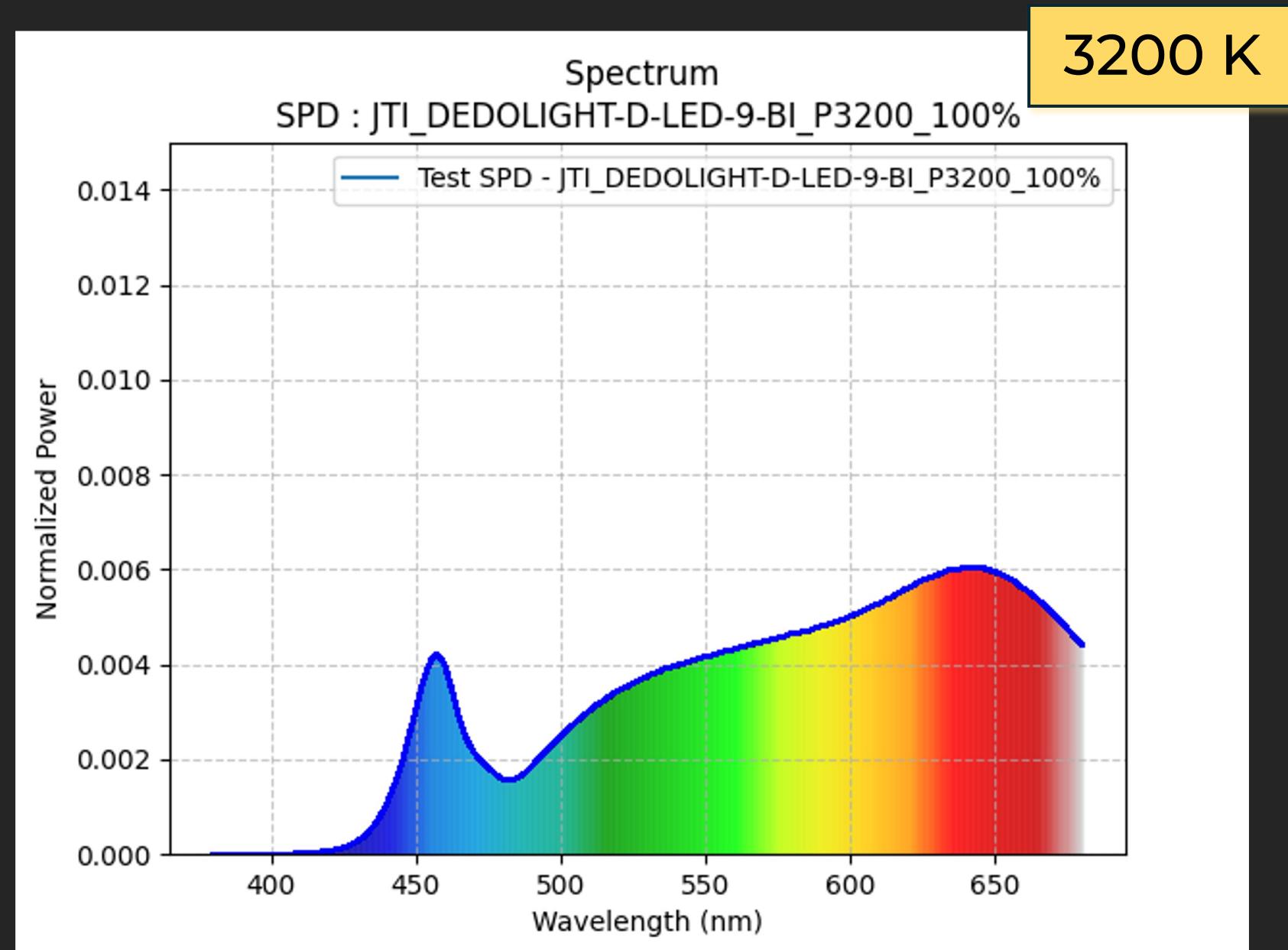
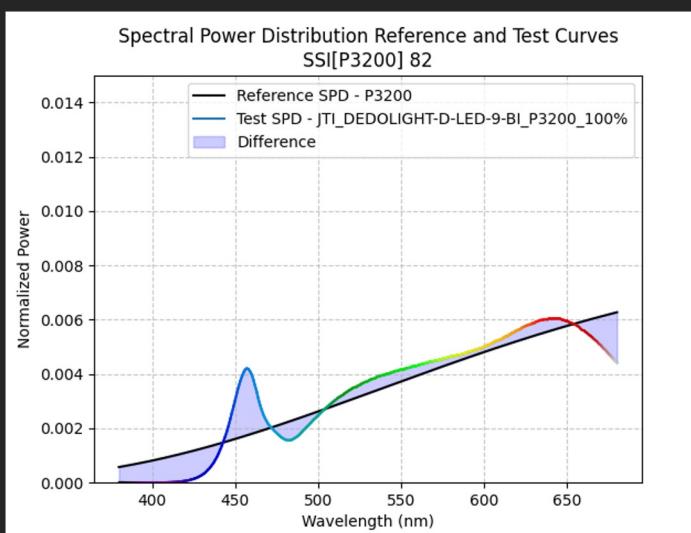
CCT 3353 Duv -0,001

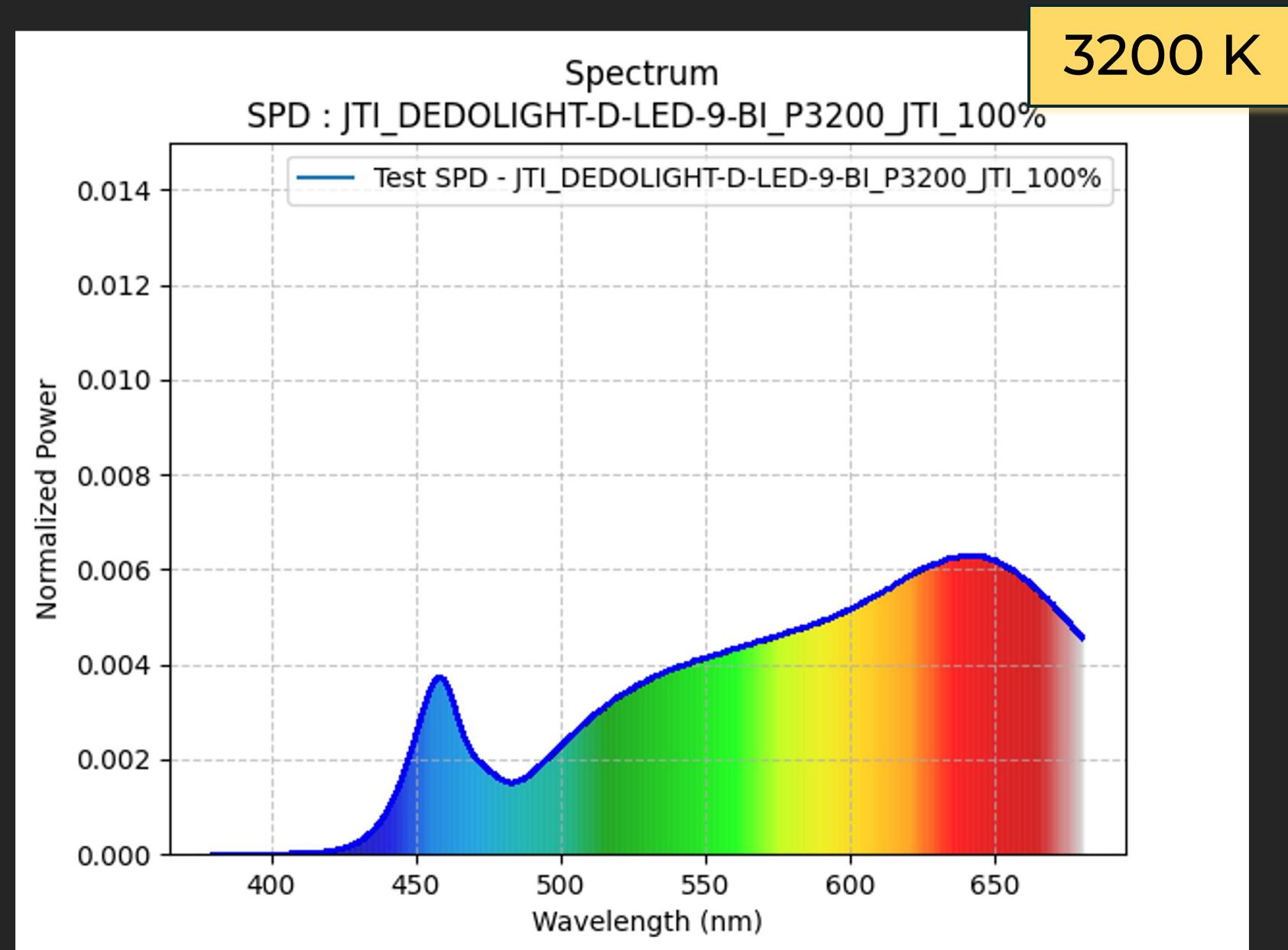
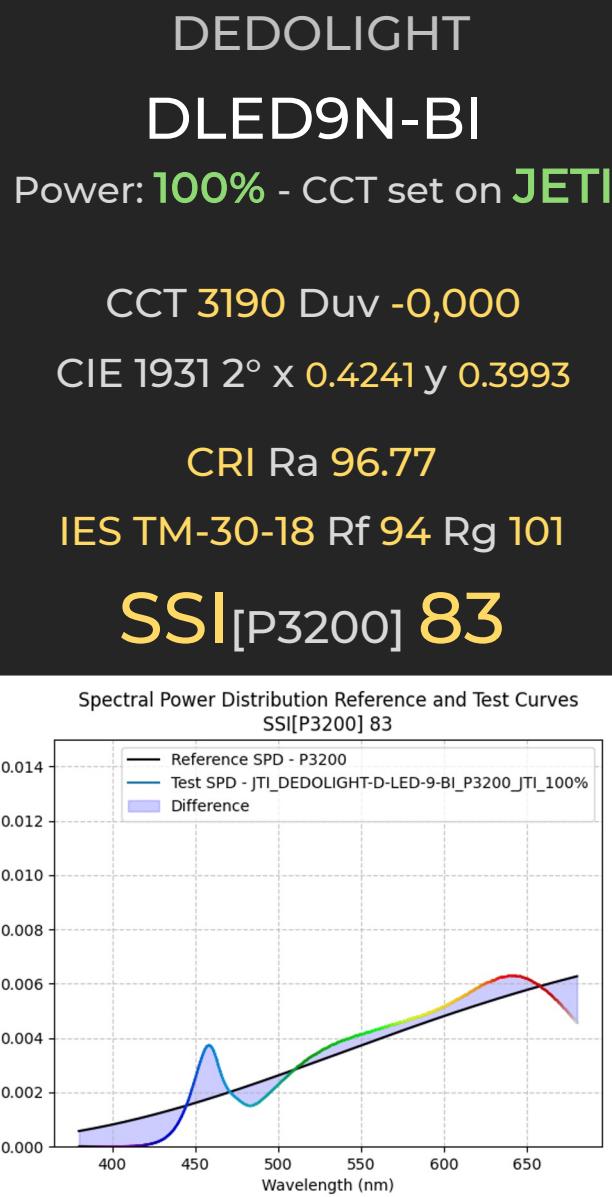
CIE 1931 2° x 0.4132 y 0.3933

CRI Ra 97.11

IES TM-30-18 Rf 94 Rg 102

SSI[P3200] 82





DEDOLIGHT

DLED9N-BI

Power: 50% - CCT set on JETI

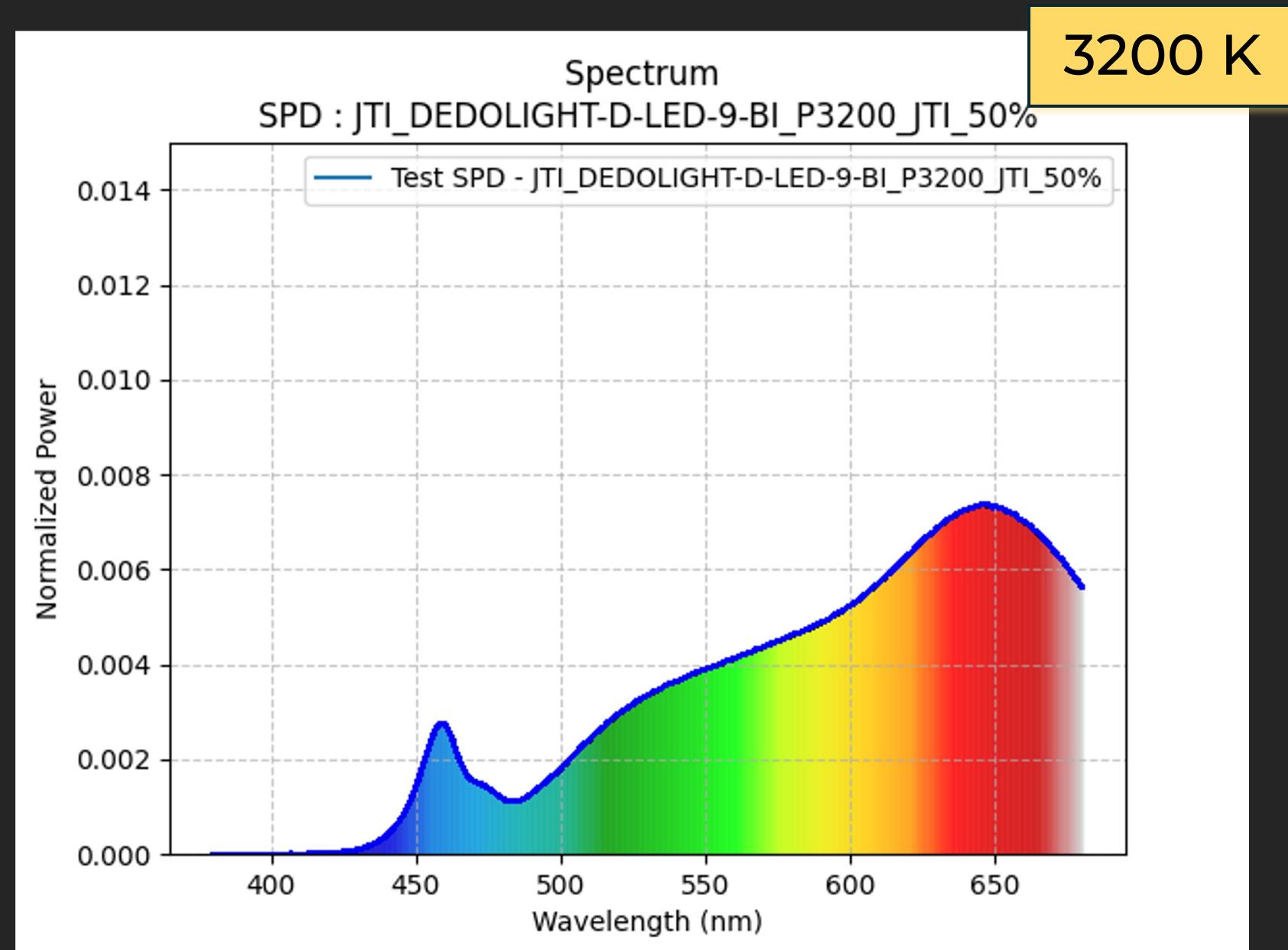
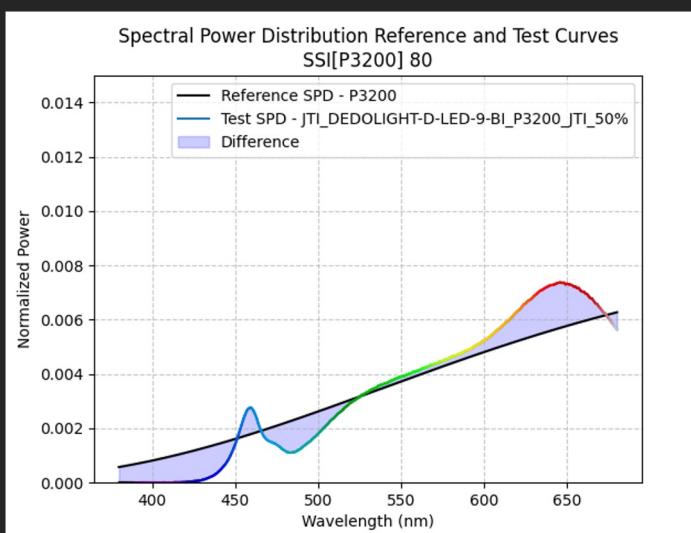
CCT 2759 Duv 0,001

CIE 1931 2° x 0.4576 y 0.4141

CRI Ra 97.91

IES TM-30-18 Rf 95 Rg 101

SSI[P3200] 80



DEDOLIGHT

DLED9N-BI

Power: 25% - CCT set on JETI

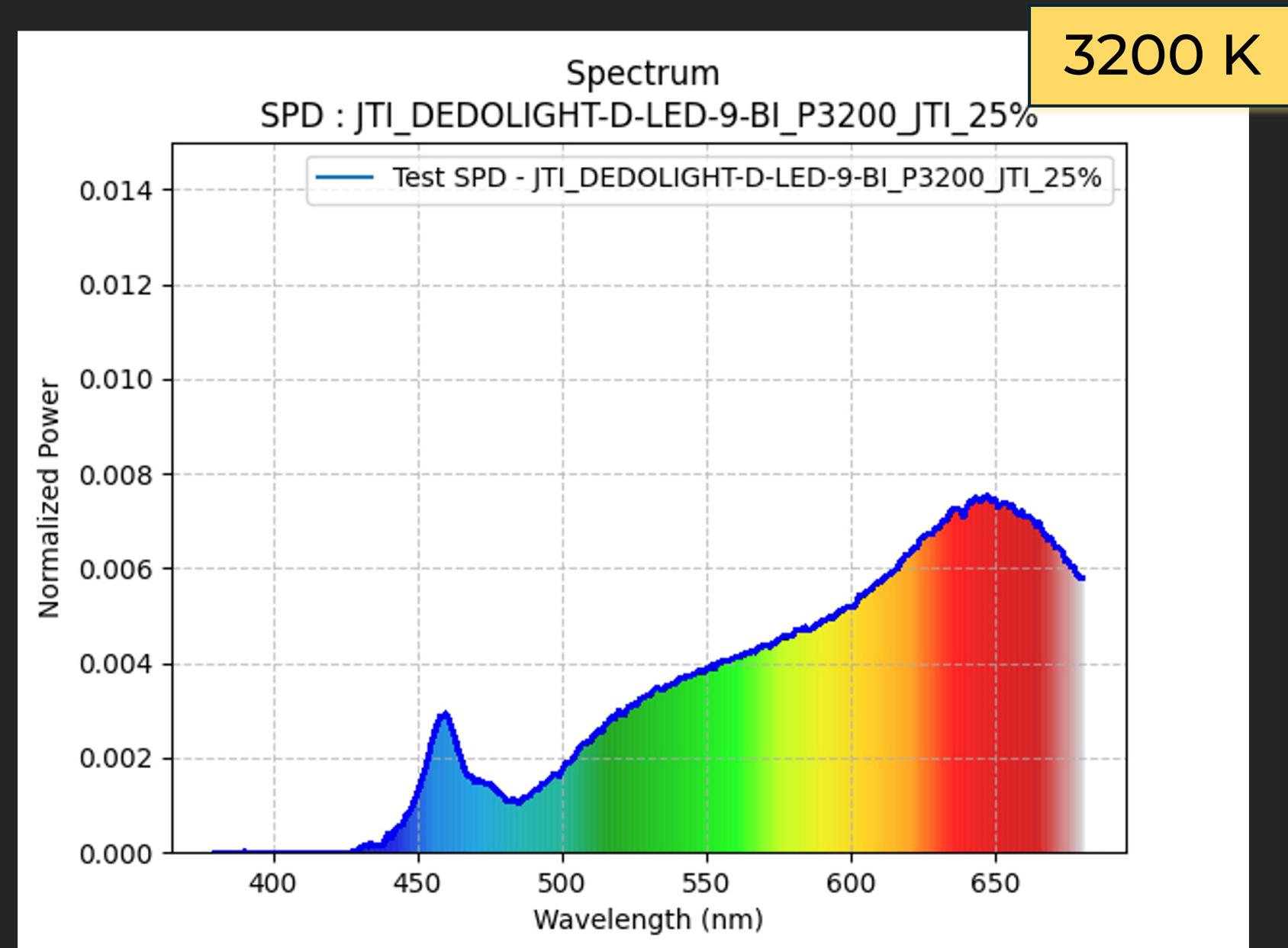
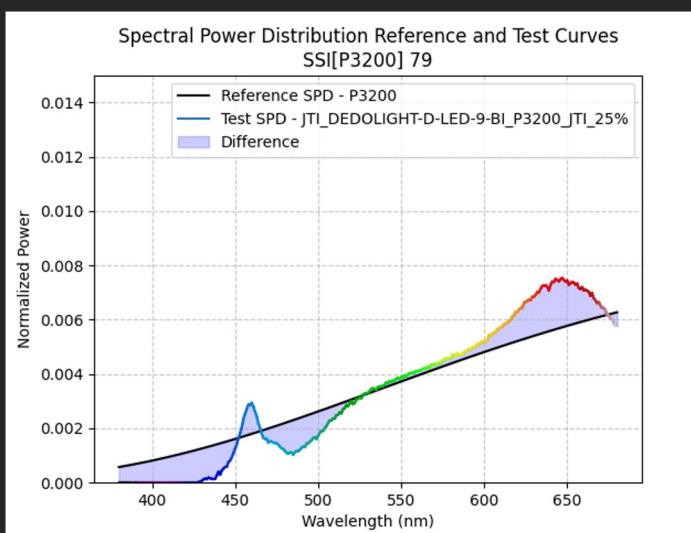
CCT 2737 Duv 0,002

CIE 1931 2° x 0.4595 y 0.4147

CRI Ra 98.06

IES TM-30-18 Rf 95 Rg 101

SSI[P3200] 79



DLED9N - BI

5600 K



JETI

SSI REFERENCE Daylight Locus

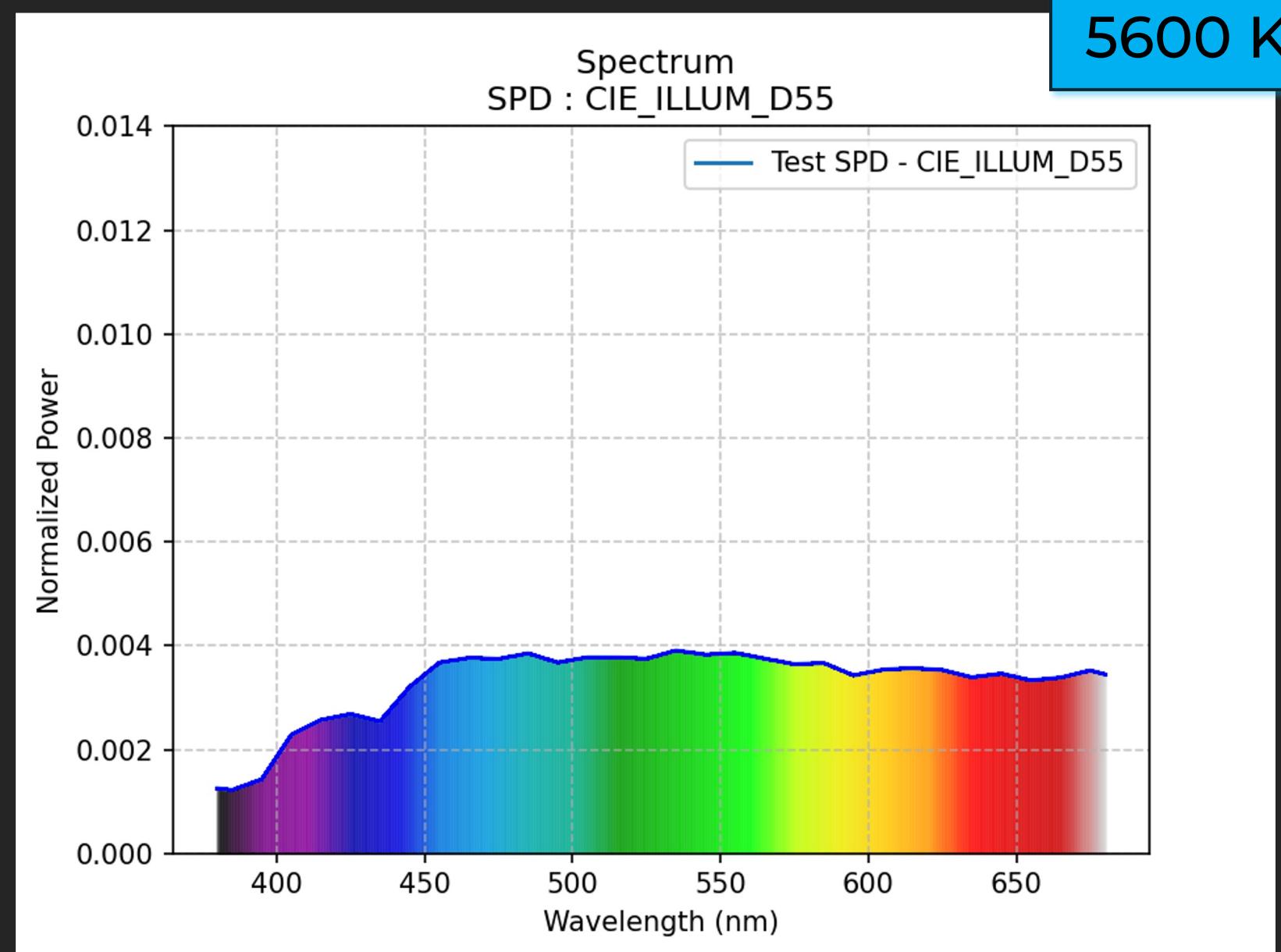
CIE illuminant D55* \approx 5503,0598 K

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

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

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

5600 K



SOURCE HMI Comparison

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

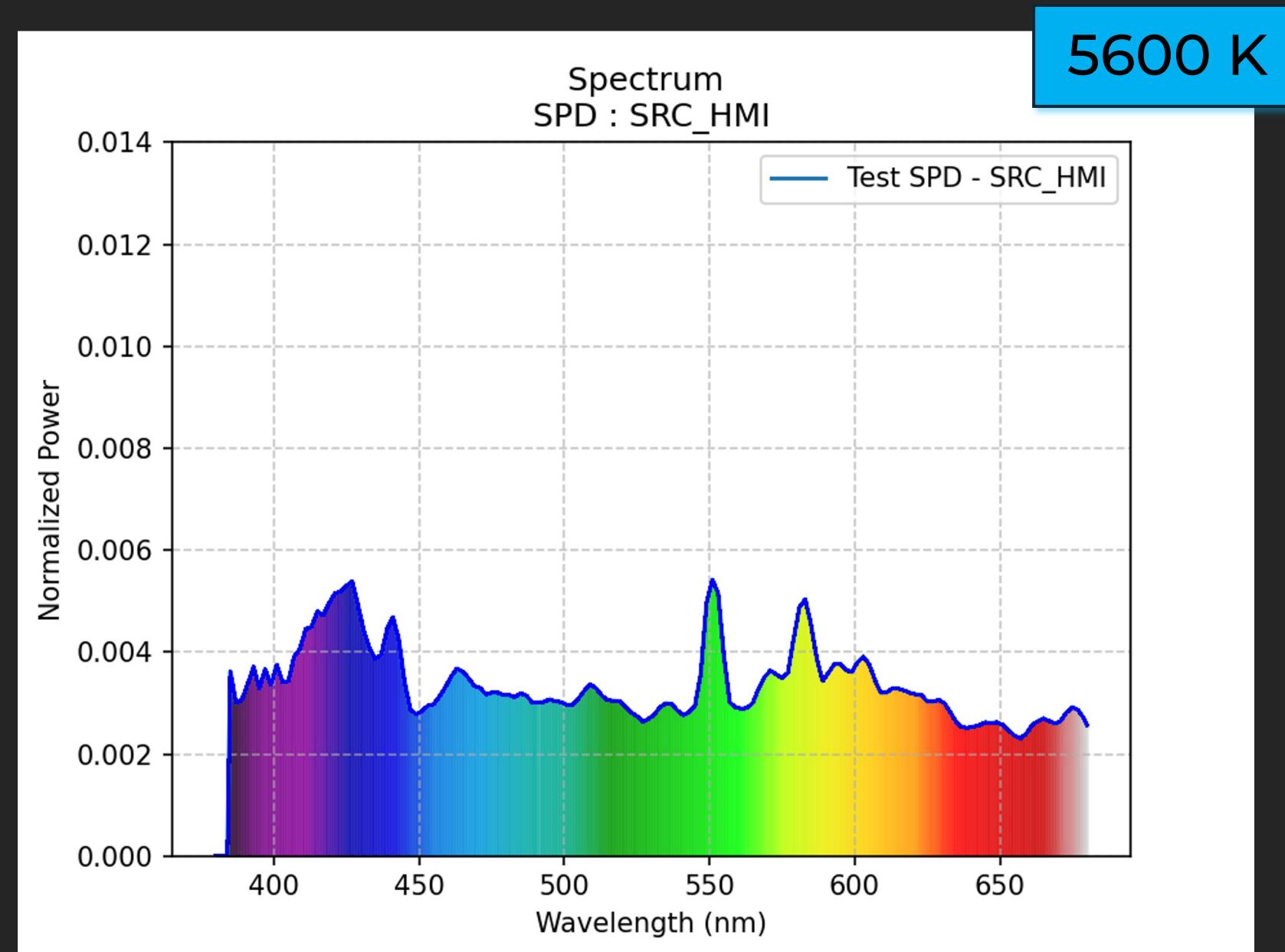
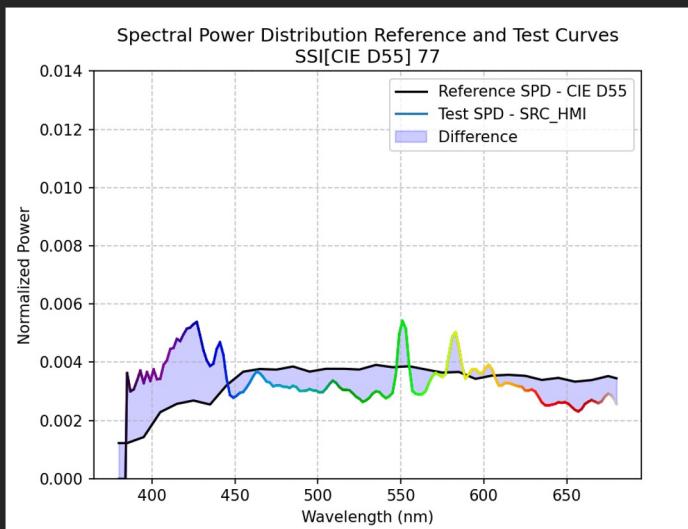
CCT 5605 Duv 0,000

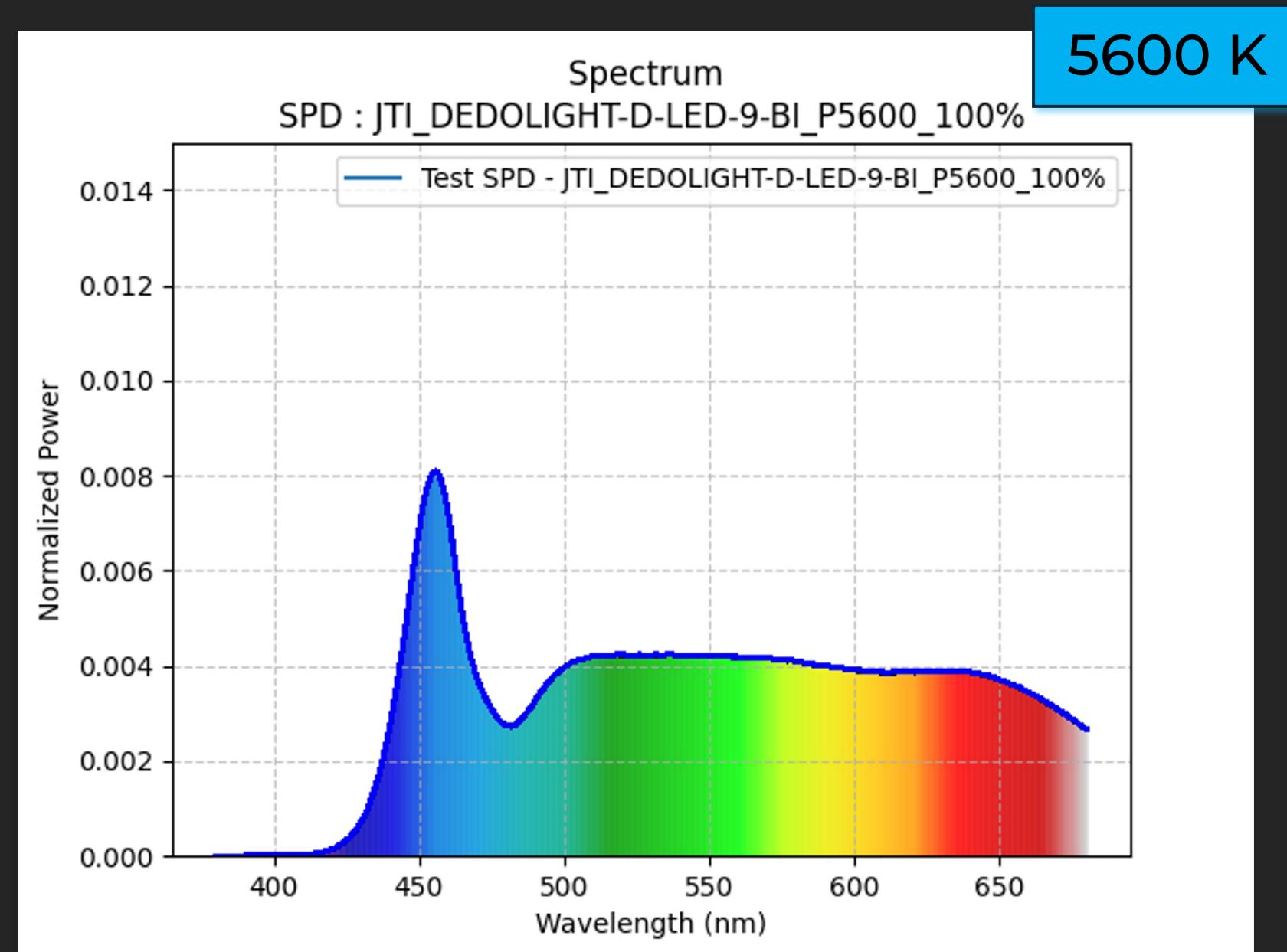
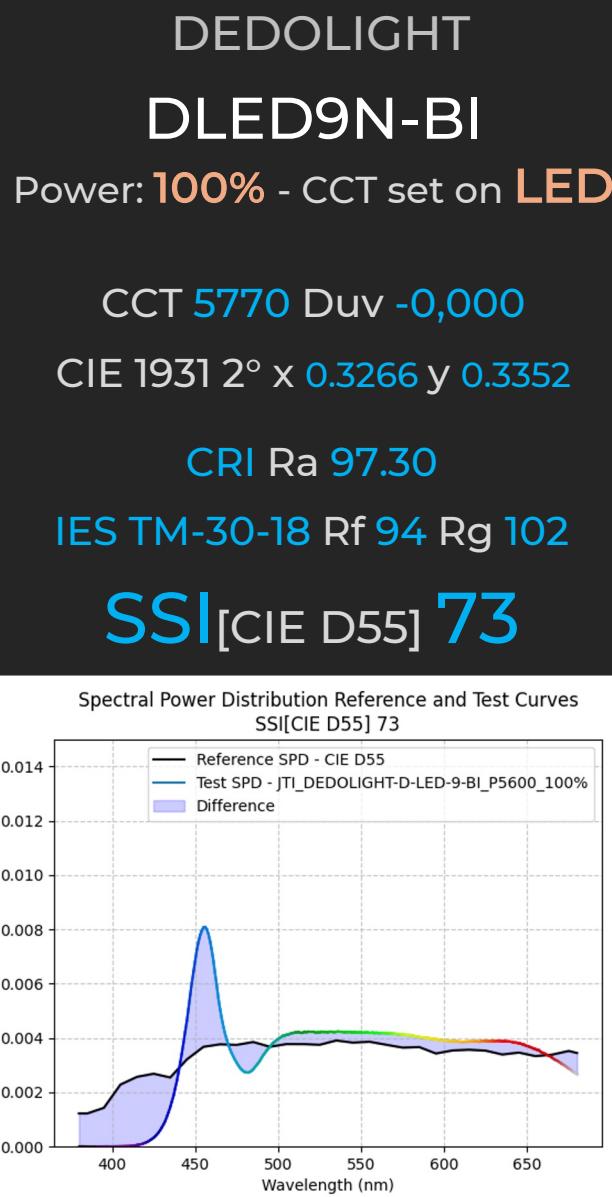
CIE 1931 2° x 0.3301 y 0.3274

CRI Ra -

IES TM-30-18 Rf - Rg -

SSI[CIE D55] 77





DEDOLIGHT
DLED9N-BI - DOME
Power: 100% - CCT set on JETI

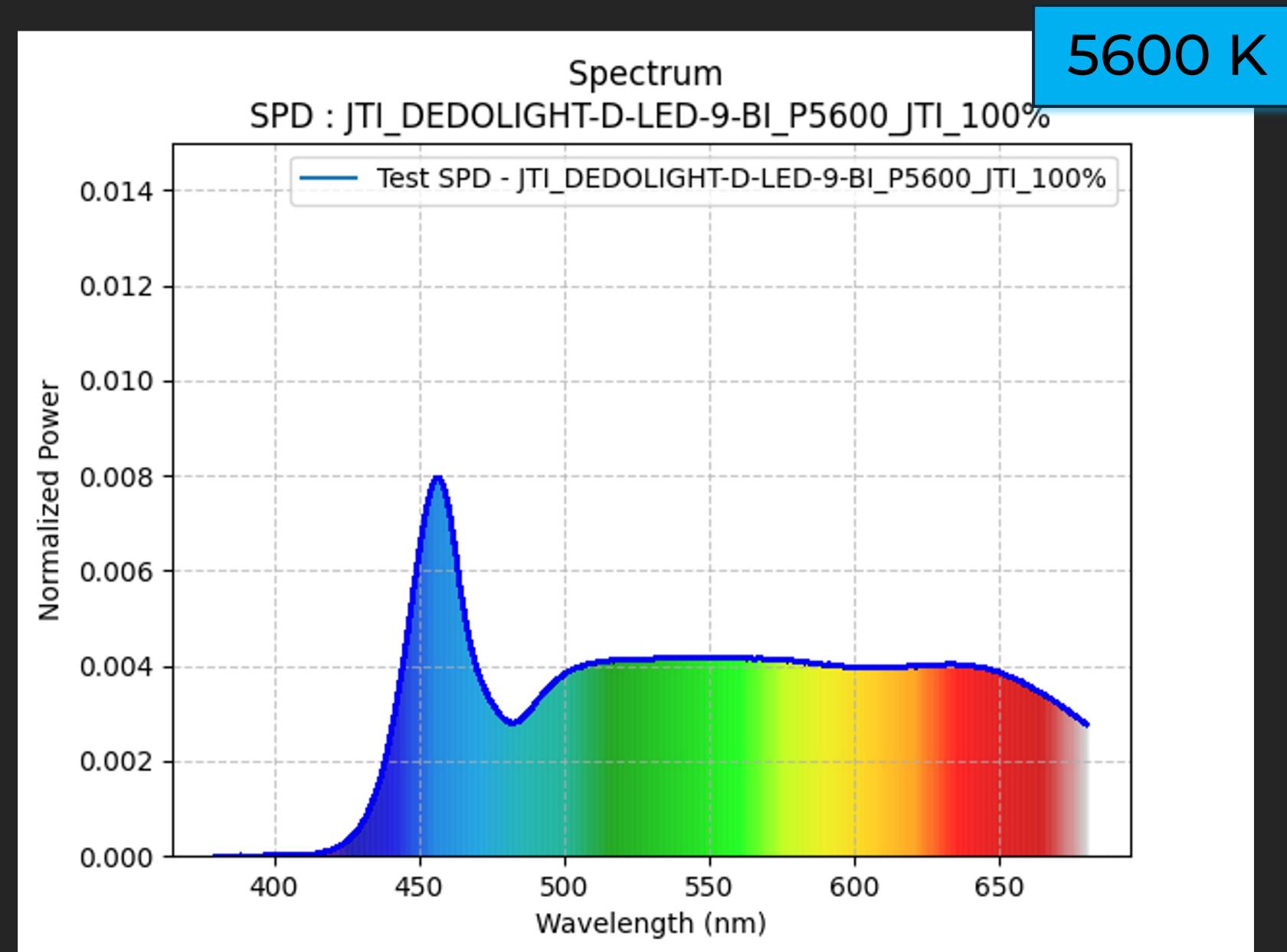
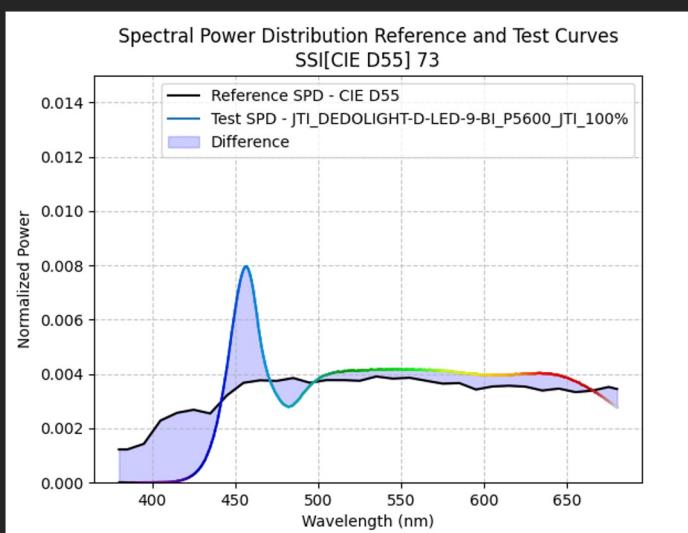
CCT 5577 Duv -0,002

CIE 1931 2° x 0.3307 y 0.3361

CRI Ra 97.54

IES TM-30-18 Rf 94 Rg 102

SSI[CIE D55] 73

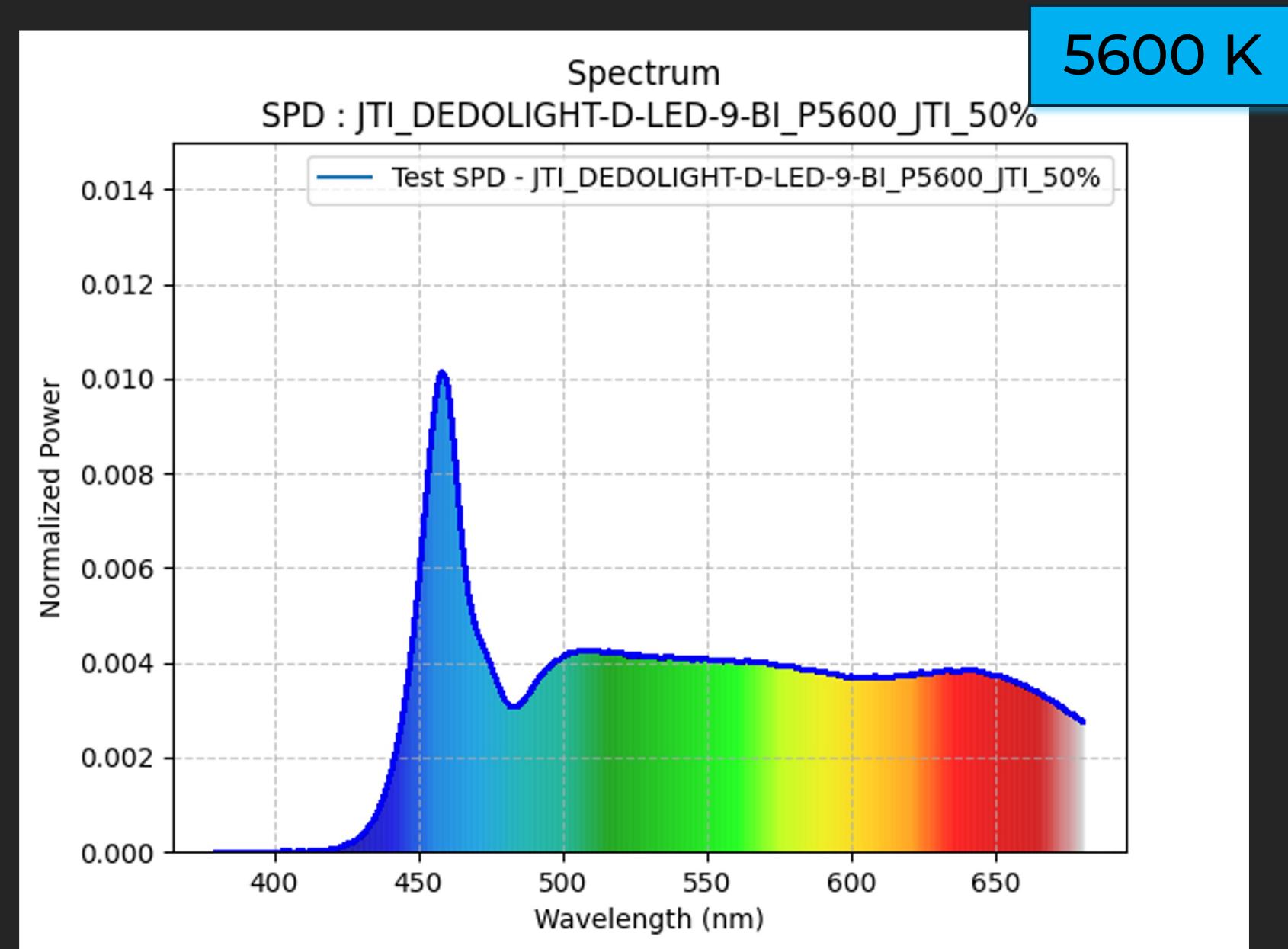
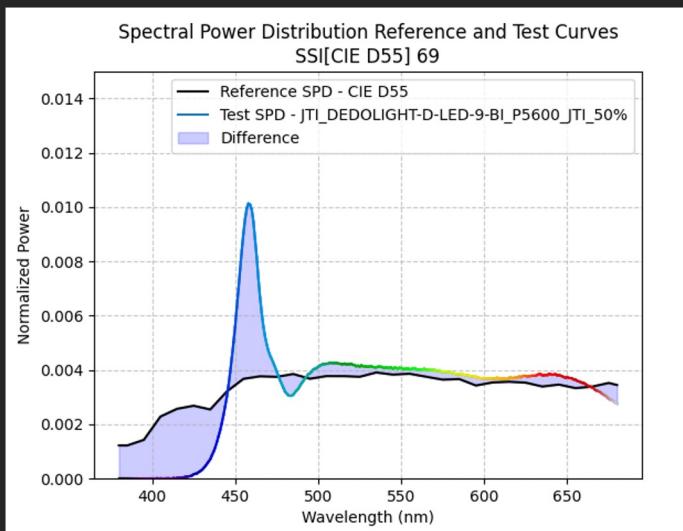


DEDOLIGHT
DLED9N-BI - DOME
Power: 50% - CCT set on JETI

CCT 6188 Duv -0,001
CIE 1931 2° x 0.3188 y 0.3270

CRI Ra 96.45
IES TM-30-18 Rf 92 Rg 101

SSI[CIE D55] 69

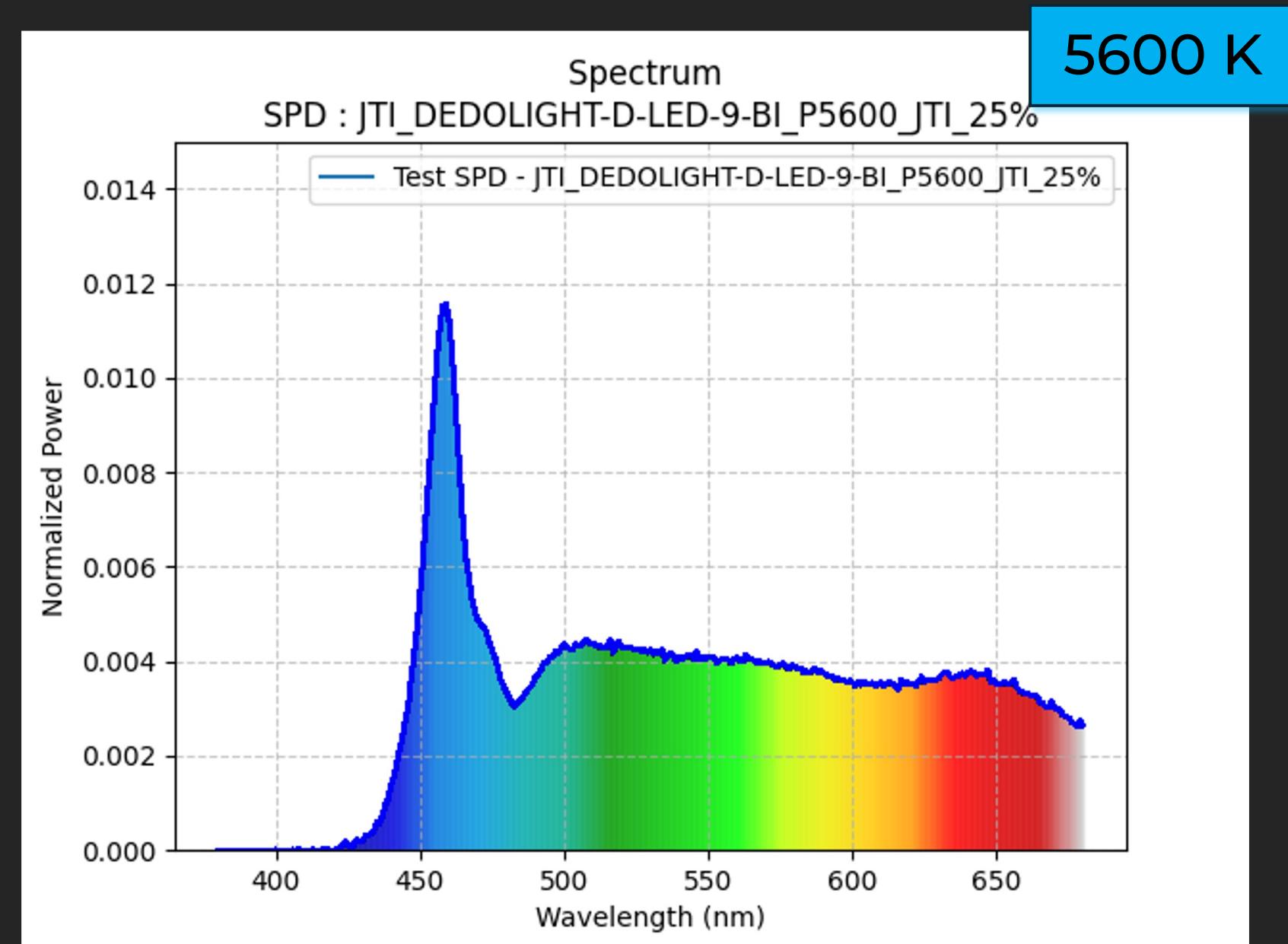


DEDOLIGHT
DLED9N-BI - DOME
Power: 25% - CCT set on JETI

CCT 6599 Duv 0,001
CIE 1931 2° x 0.3119 y 0.3234

CRI Ra 96.26
IES TM-30-18 Rf 91 Rg 99

SSI[CIE D55] 67



DLED9N-BI

Images, Spectra

& SSI



JETI



TUNGSTEN REF.

ARRI ALEXA 35
GRADED

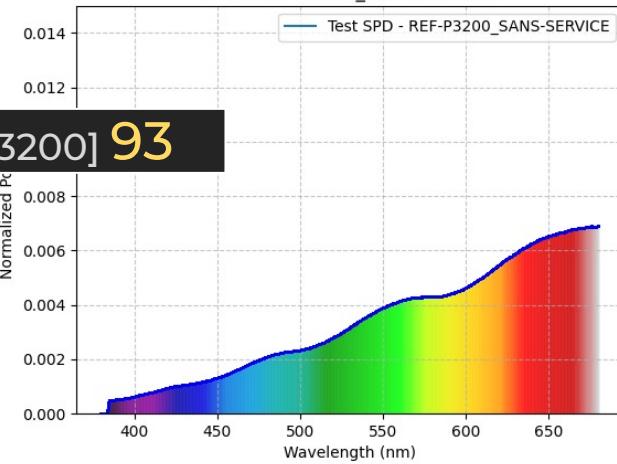


DLED9N-BI

Images & données DEDOLIGHT DLED9N-BI Images & Data



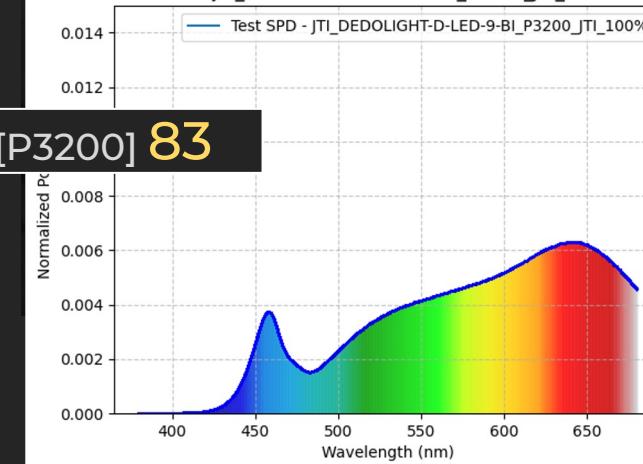
Spectrum
SPD : REF-P3200_SANS-SERVICE



TUNGSTEN REF.



Spectrum
SPD : JTI_DEDOLIGHT-D-LED-9-BI_P3200_JTI_100%



DLED9N-BI

Images & données DEDOLIGHT DLED9N-BI Images & Data



TUNGSTEN REF.



DLED9N-BI



TUNGSTEN REF.

ARRI ALEXA 35
GRADED

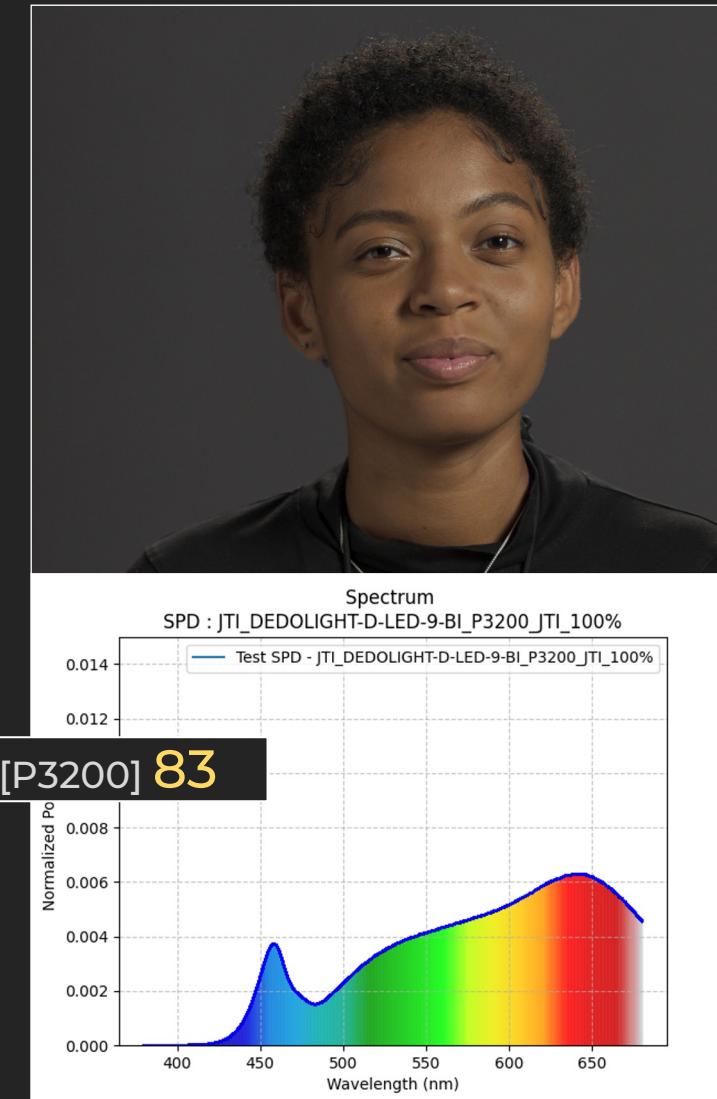


DLED9N-BI

Images & données DEDOLIGHT DLED9N-BI Images & Data

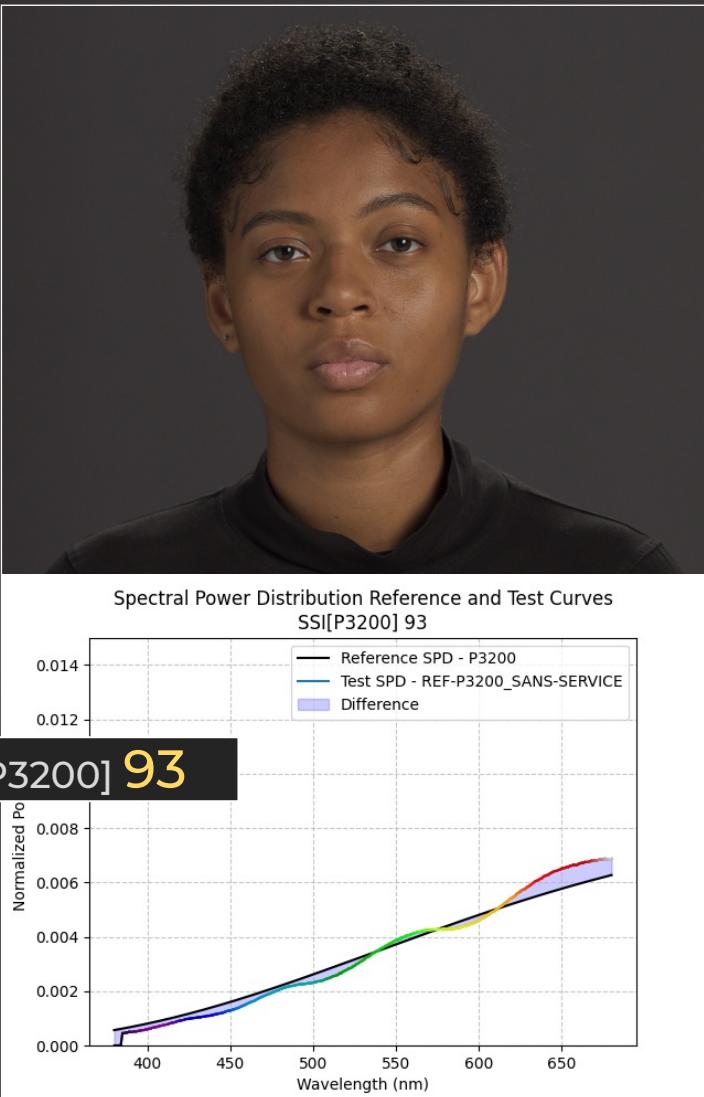


TUNGSTEN REF.

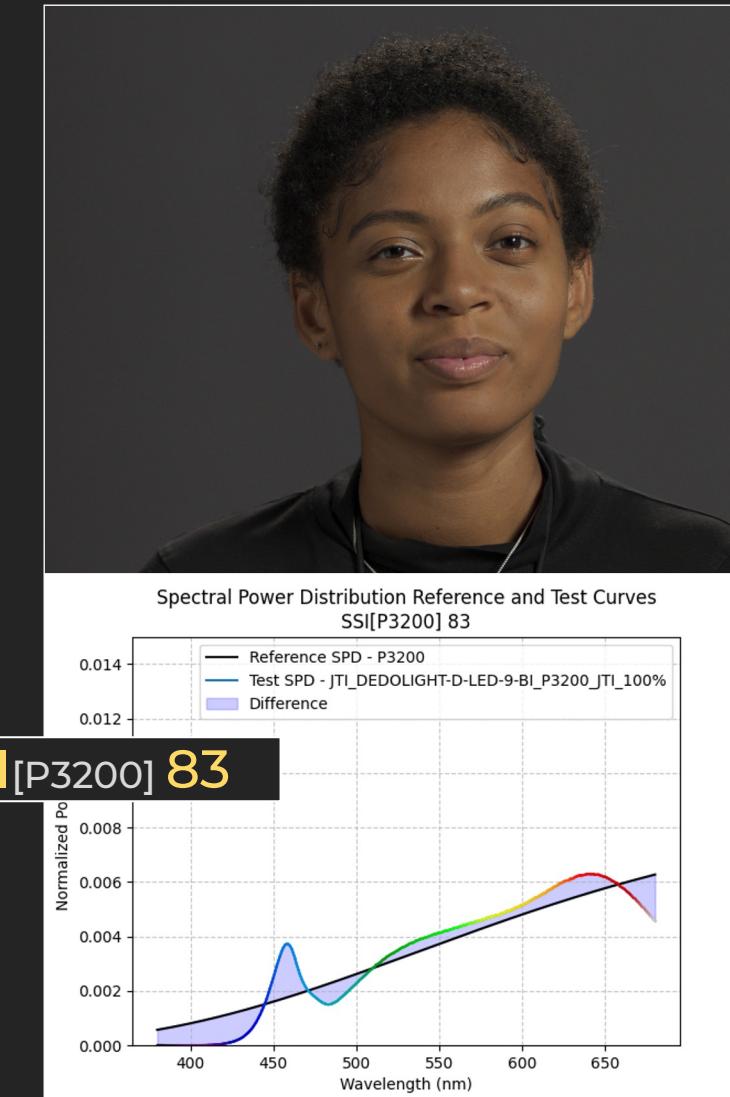


DLED9N-BI

Images & données DEDOLIGHT DLED9N-BI Images & Data



TUNGSTEN REF.



DLED9N-BI

DLED9N-BI & TM-30-20

3200 K

5600 K

+

Comparison chart: SSI vs TM30-20 vs CRI

TM-30-20

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

Vous trouverez :

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

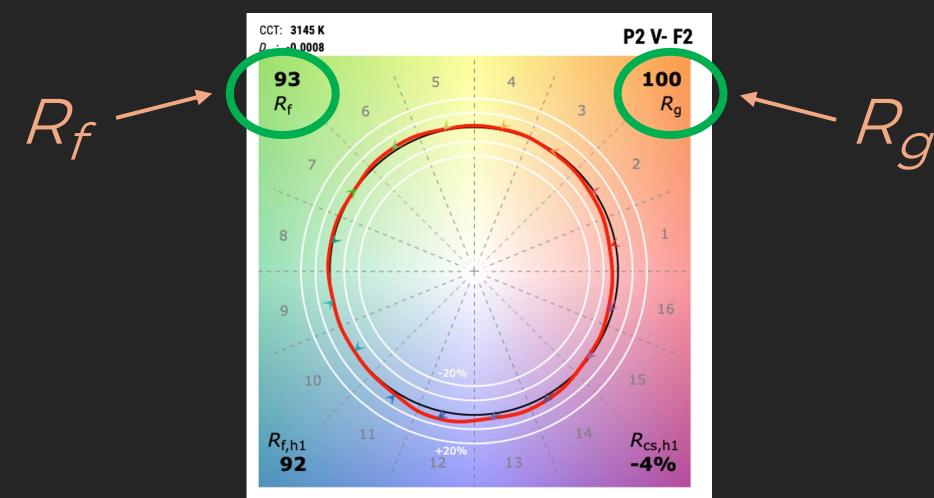
Toutes les mesures sont données en 3200 K et en 5600K

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

You will find :

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

All measurements are provided in 3200K and 5600K



JETI

TM-30-20

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

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

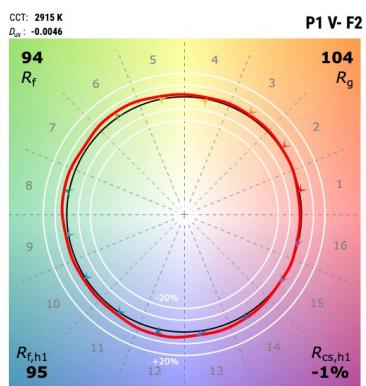
Toutes les mesures sont données en 3200 K et en 5600K

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

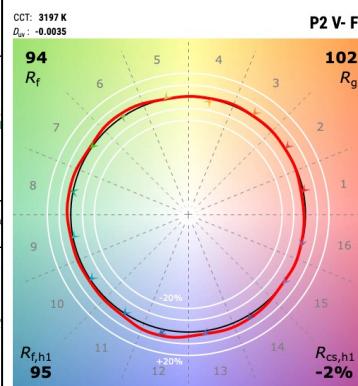
- graphs of the lighting fixture set at 100%, 50% and 25% power using JETI
- graphs of the lighting fixture set to 100% of its power thanks to the indications of the lighting fixture.

All measurements are provided in 3200K and 5600K

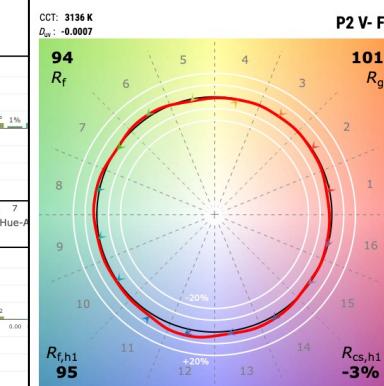
100 % indicated by fixture



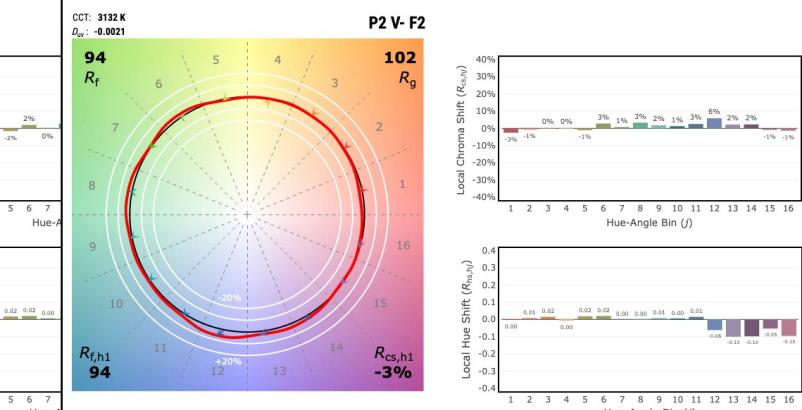
100 % indicated by JETI



50 % indicated by JETI



25 % indicated by JETI



3200 K

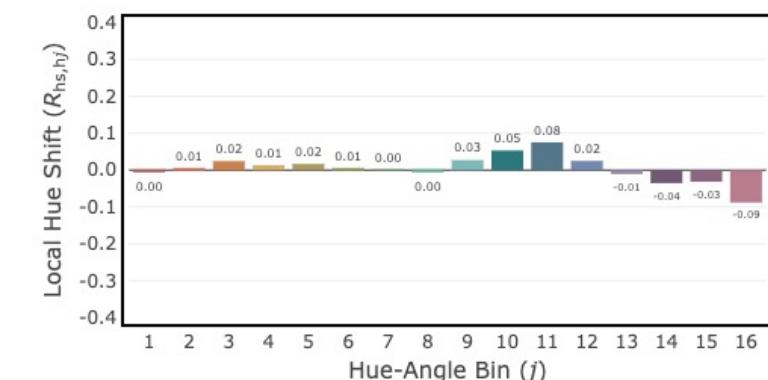
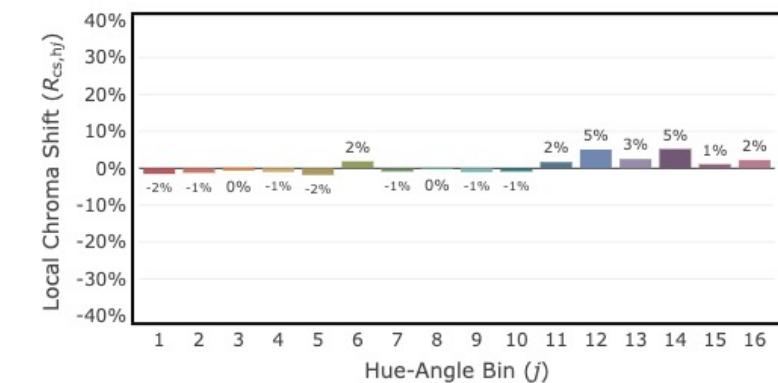
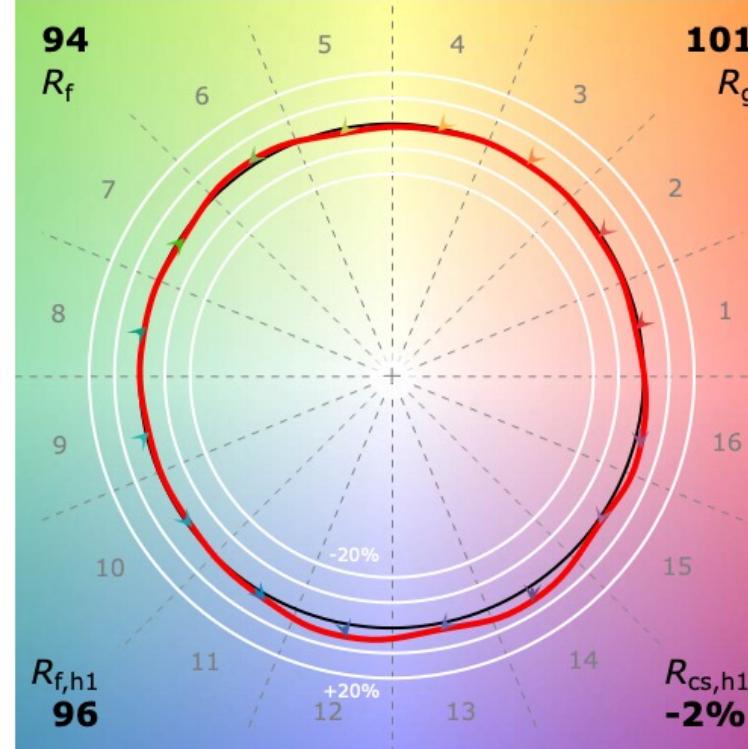
DLED9N-BI

TM-30-20

ANSI/IES TM-30-20 Color Rendition Report

Unique Identifier:

JTI_DEDOLIGHT-D-LED-9-BI_P320

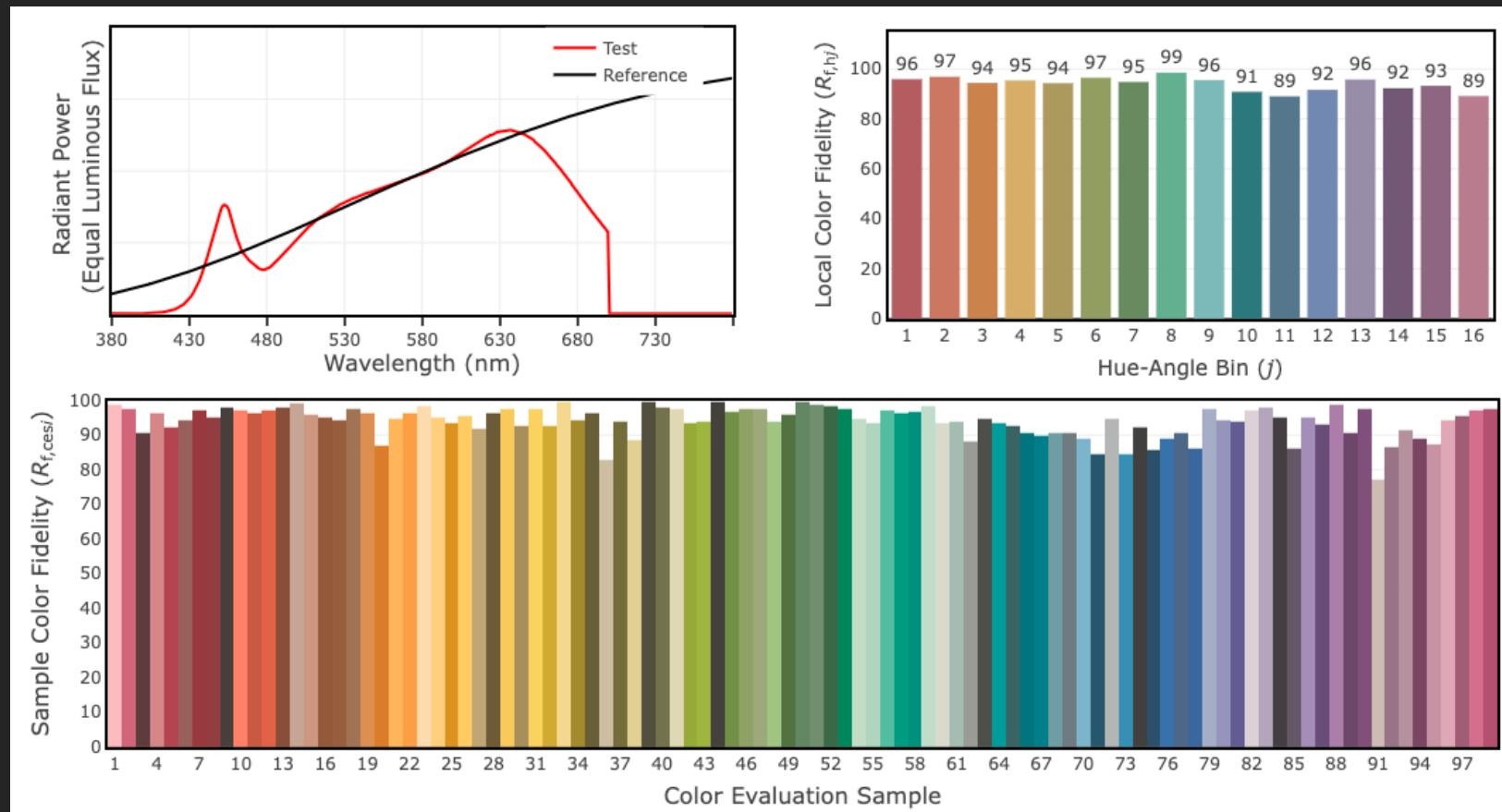
CCT: 3192 K
 D_{uv} : 0.0001

JETI

3200 K

DLED9N-BI

TM-30-20



JETI

3200 K

DLED9N-BI

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%	82	94	102	97,11	95,3
P3200_JTI_100%	83	94	101	96,77	94,79
P3200_JTI_50%	80	95	101	97,91	96,08
P3200_JTI_25%	79	95	101	98,06	96,25

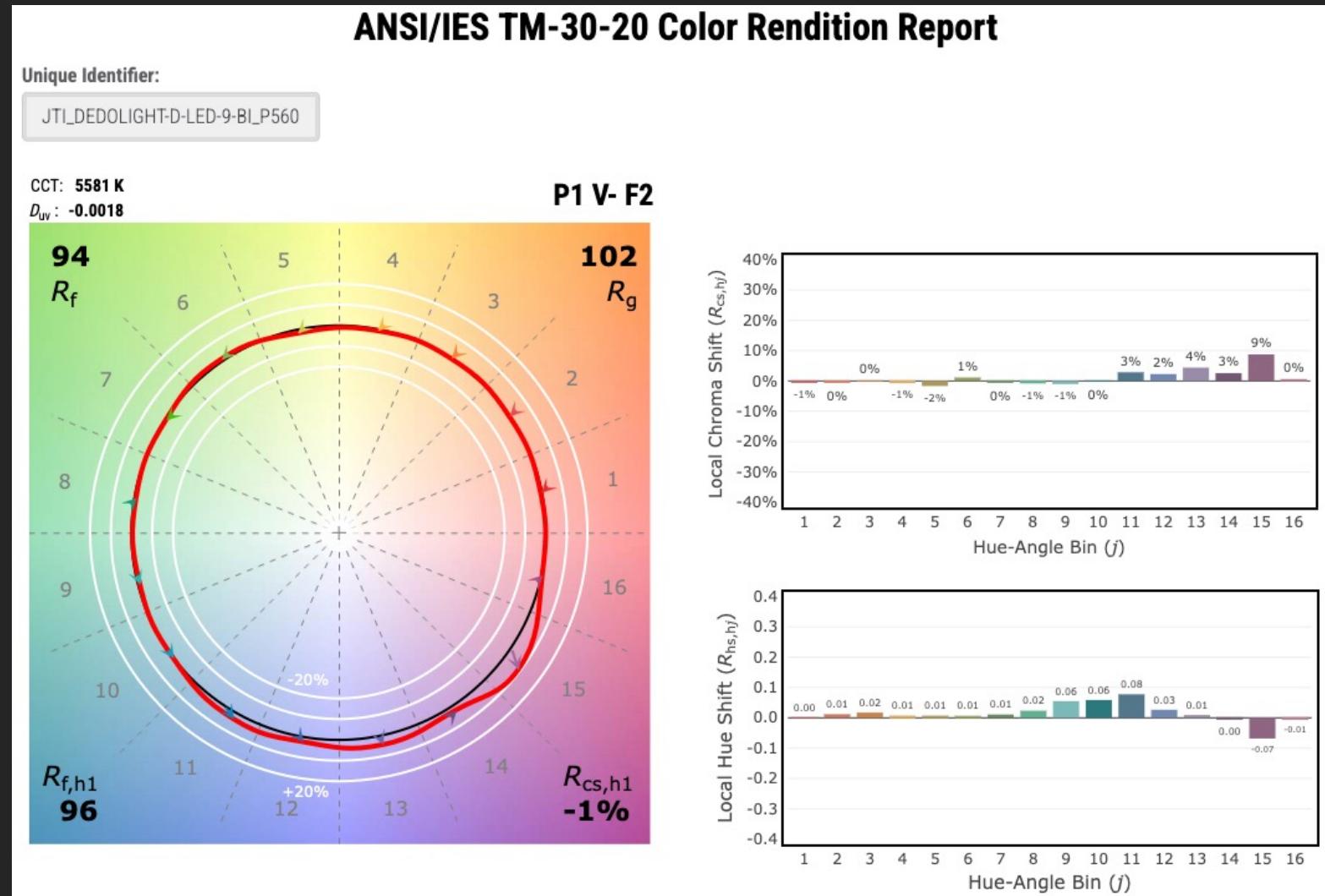


JETI

DLED9N-BI

TM-30-20

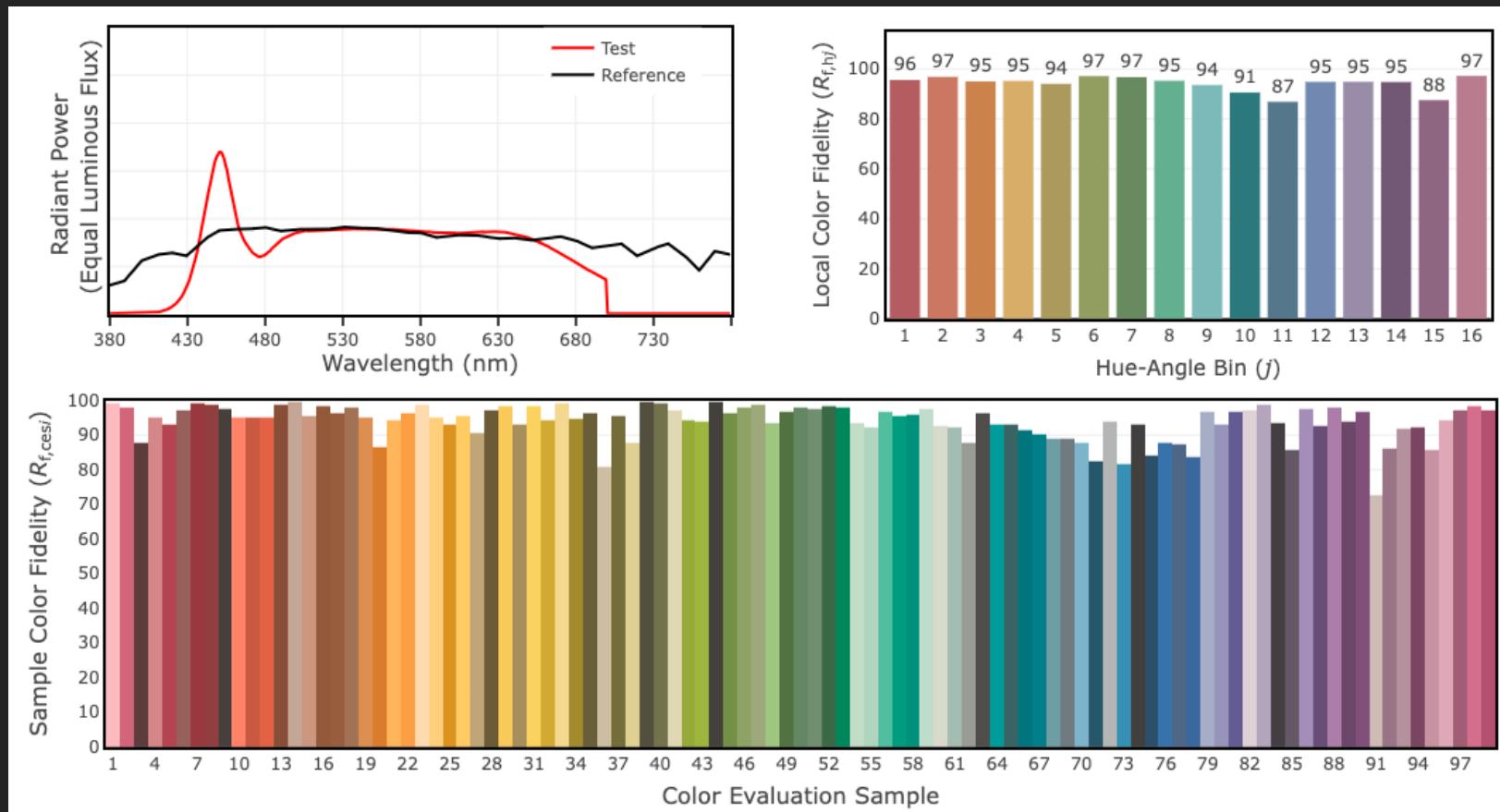
5600 K



DLED9N-BI

TM-30-20

5600 K



JETI

DLED9N-BI

5600 K

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	94	102	97,3	95,92
P5600_JTI_100%	73	94	102	97,54	96,22
P5600_JTI_50%	69	92	101	96,45	94,12
P5600_JTI_25%	67	91	99	96,26	93,99



JETI

Données constructeur

Manufacturer's data

DEDOLIGHT

Images & données DEDOLIGHT DLED9N-BI Images & Data

Name of the tested product Company		DLED9N BI	
Type of light: Fresnel, panel or others		Dedolight Lens	
Full Color or Bi-Color	Bi-Color	IP	40
Dimensions (inches/cm)	W 202 x L 234 x H 290 mm	Weight (lbs/kg)	3,700 kg
Built-in ballast	Yes	No	Ballast weight 580 g
Mandatory optical accessory	Yes	No	Optional optical accessories (excludes lightbox and louvers) Yes No
If yes to optional, which ones?	Parallel Beam attachment, Projection attachment, Wide angle, Soft box, scrim, 3 sort of barndoors,		
Type of circuit board material			
Type of housing construction(metal, plastic, others)	Aluminium		
Website	https://www.zebra-groupe.com/		
Person in charge/Position	Jean-Charles Pasquier / Ligthing sale manager		
Electrical power consumption			
Maximum internal temperature	°C F		
AC/DC - Battery voltage	90-250 V	AC only	DC only Battery - voltage 12 – 18 V
With AC, draws	1,33 Amps	With DC, draws	6,9 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	Lux @ 5 meters (15 ft.) (Without diffuser)	@ 3200K @ 5600K
Fresnel diameter (cm/inches)	129mm	Beam angles:	Spot 4 ° Mid 0 ° Flood 50 °
Lux @ 1 meter (3.3 ft.) Optic Spot	40 800@ 3200K 43 000@ 5600K	Lux @ 3 meters (10 ft.) Optic Spot	4 533 @ 3200K 4 777 @ 5600K
Lux @ 1 meter (3.3 ft.) Optic Mid	5 680@ 3200K 6 55@ 5600K	Lux @ 3 meters (10 ft.) Optic Mid	631@ 3200K 729@ 5600K
Lux @ 1 meter (3.3 ft.) Optic Flood	3 860@ 3200K 5 050@ 5600K	Lux @ 3 meters (10 ft.) Optic Flood	429@ 3200K 561@ 5600K
Lux @ 5 meters (15 ft.) Optic Flood			
1632@ 3200K 1720@ 5600K			
Full Color (RGB - Large spectrum)			
Number of color diodes		Types	
Color temperature range	°K	-	°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	
Bi-Color			
Number of diodes		Types	
Color temperature between	2700°K	and	6 600°K
Color temperature preset	Yes	No	
Green Magenta Control	Yes	No	

Color index		CRI	98
		TLCI	98
		TMA 30-18/20 - Rf	92
		SSI [P3200]	SS1 [CIE D55]
			106

Other specificities	

Operating temperatures	From - 20°C to +35°C
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 50 000FPS
Camera shutter possibility	Yes No Maximum angle 180°
Operating positions	All No limitations:
Spigot diameter	16 Female 28mm male
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?	
Color shifts when dimming	Yes No
Change of light levels when selecting CT	Yes No

Environmental concern	
Warranty (in years)	1 year
For how long parts are available?	10 years
Average repair time	2 weeks
What do you know about recycling your products?	
Do customers send them back to you or do they take care of it themselves?	SEND BACK TO THE DISTRIBUTOR
Country of manufacturing	GERMANY

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

Page 1/2

Explications / Explanations

K / CCT K / Duv /

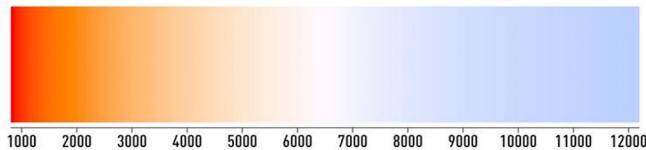
x,y coordinates

Explications / Explanation

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



Températures des couleurs en Kelvin

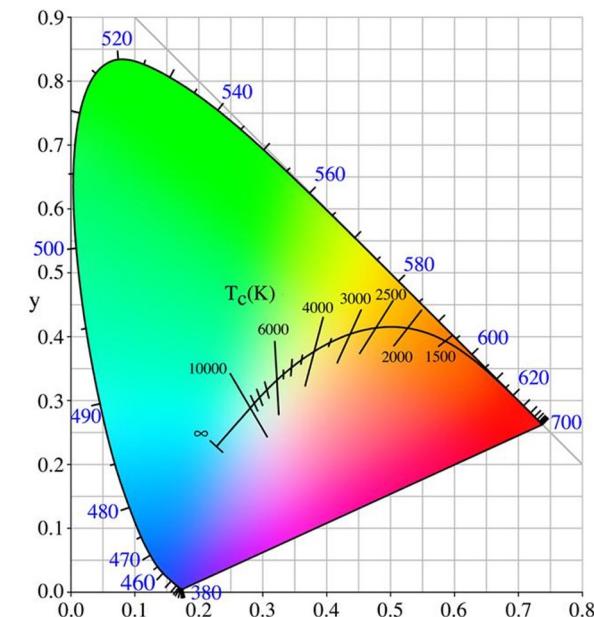


La température de couleur est la valeur cible idéale que nous cherchons à atteindre pour faire les mesures (3200 ou 5600). Celle-ci est basée sur la CCT et son unité est donc le Kelvin (K). La valeur peut être donnée directement par le projecteur ou réglée et ajustée avec les mesures prises par le spectroradiomètre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

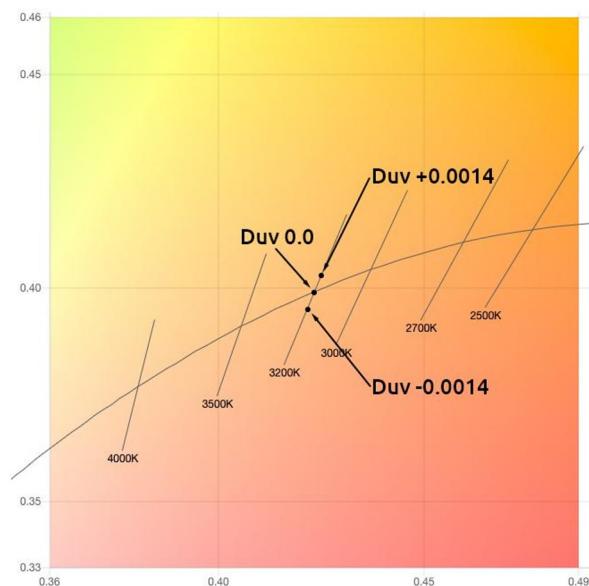


La CCT ou température de couleur corrélée, est la température précise d'un radiateur de Planck (corps noir) ayant la chromaticité la plus proche possible de celle associée à une distribution spectrale donnée. La CCT est donc calculée à partir de la distribution spectrale (SPD) de la source lumineuse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

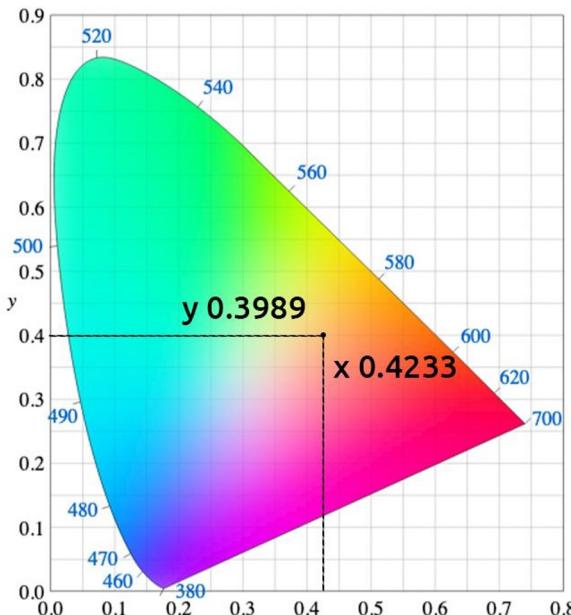
CCT K

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	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

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Directeur de la photographie, AFC

Directeur technique de la CST

Directrice de la photographie, UCO

& Représentante du département image de la CST

Consultant en postproduction

& Représentant du département image de la CST

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Cinematographer, UCO

& Representative of the CST image department

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