

LED Flux measurement

Date : **26/07/2022**

Operator : **CLD**

FORM-L-41 ED1 REV 4

Filename : **2022_550.xml**



226-TEST

NBN EN ISO/IEC 17025 :2017

LEDs

Trademark : **Seoul**

Entry number : **42R219-1**

Type : **5050**

BIN Description : **LVL2 I03**

Part number : **Unknown**

Color or CCT (Theoretical) : **Neutral White**

Number of LEDs : **36**

Lenses

Trademark : **None**

Type : **None**

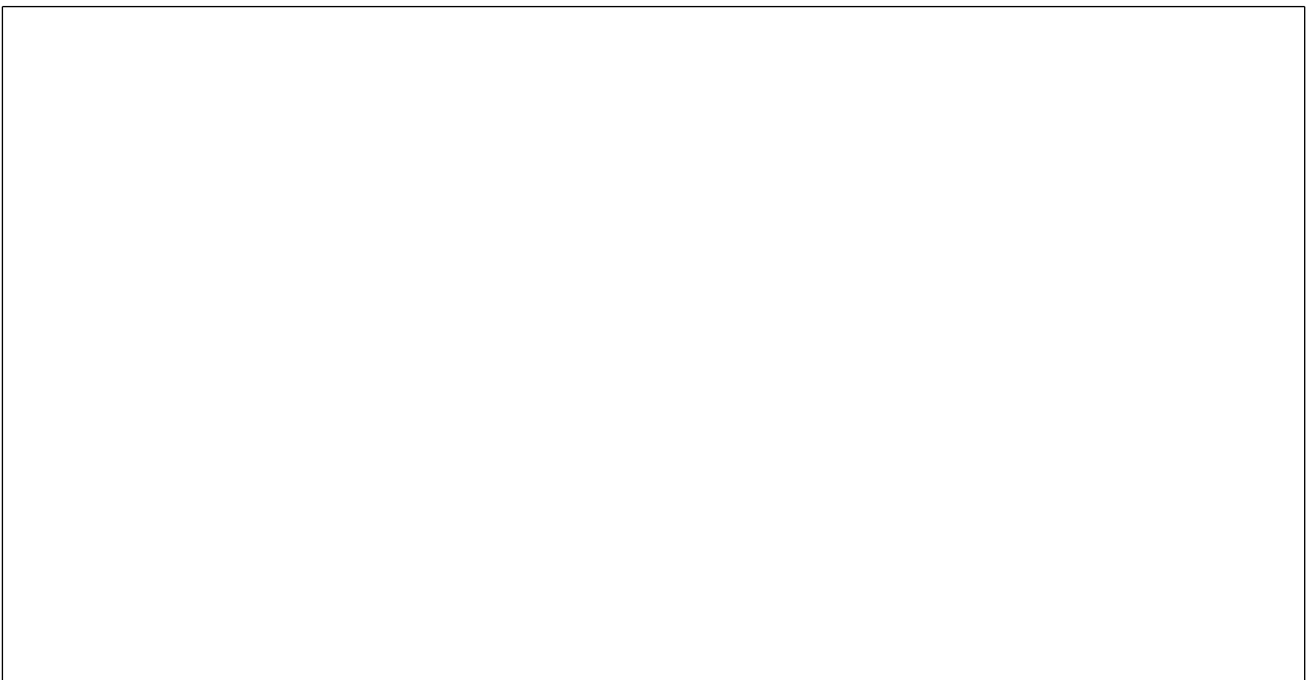
Power & Print

Type : **DELTA SM400-AR-4**

Print description : **Lensoflex 50 pcba with 3 string in //**

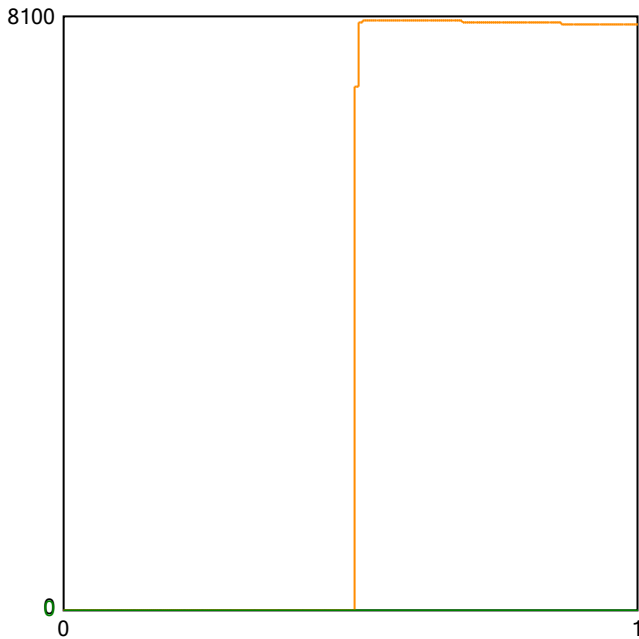
Active

Picture



Sphere photometric measurement

Maximum flux : **8070** lm



Operating condition

Position in sphere :



Ambient sphere T : **24.8** °C

Electrical measurement

● Secondary electrical measurement

Voltage : **66.32** V

Current : **0.600** A

Power : **39.79** W

→ LEDs light efficiency :

202.8 lm/W

224.2 lm/Led

● Primary electrical measurement

Voltage : **N/A** V

Current : **N/A** A

Power : **N/A** W

Cos φ : **N/A**

→ Driver losses : **N/A** %

→ LEDS & Driver light efficiency :

N/A lm/W

Description :

Mesure @35°C/600mA

Comment :

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Colorimetry

Auto: ref: illuminant - Planckian radiator CCT= 3863 K

File Preset Options Extra Calibration: #1 no accessory Apr'22 Correction Info

Preset: CRI

Auto: ref: illuminant - Planckian radiator, CCT= 3863 K

R1=68.4	R8=48.4
R2=80.6	R9=-36.2
R3=89.6	R10=53.4
R4=68.7	R11=63.2
R5=67.7	R12=38.7
R6=71.7	R13=70.9
R7=80.4	R14=94.1

Chromaticity difference DC= 1.5E-3

CRI color samples

Ra= 71.94 (mean value of R1 - R8)

Re= 61.40 (mean value of R1 - R14)

Auto: ref: illuminant - Planckian radiator, CCT= 3863 K

Patch	Value
R1	69
R2	84
R3	90
R4	69
R5	68
R6	72
R7	80
R8	48
R9	53
R10	63
R11	71
R12	39
R13	94
R14	71

Weighting Function: None

MEASUREMENT (Radiance) Average 1

Target: Cont. (Interval 0 s) Hold Integration Time Quick mode

#5 #6 #7 #8 #9 #10 #11

to Table auto to Ref. to PDF

Luminance L_v 1.488E+3 $\frac{cd}{m^2}$

Radiance (380-780nm) L_g 4.178E+0 $\frac{W}{sr \cdot m^2}$

Corr. Color Temp CCT 3864 K

Chromaticity x 0.3878 y 0.3844

Chromaticity u' 0.2269 v' 0.5060

Quit

LED Flux measurement

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LEDs

Trademark : **Seoul**

Entry number : **42R219-2**

Type : **5050**

BIN Description : **LVL2 I03**

Part number : **Unknown**

Color or CCT (Theoretical) : **Neutral White**

Number of LEDs : **36**

Lenses

Trademark : **None**

Type : **None**

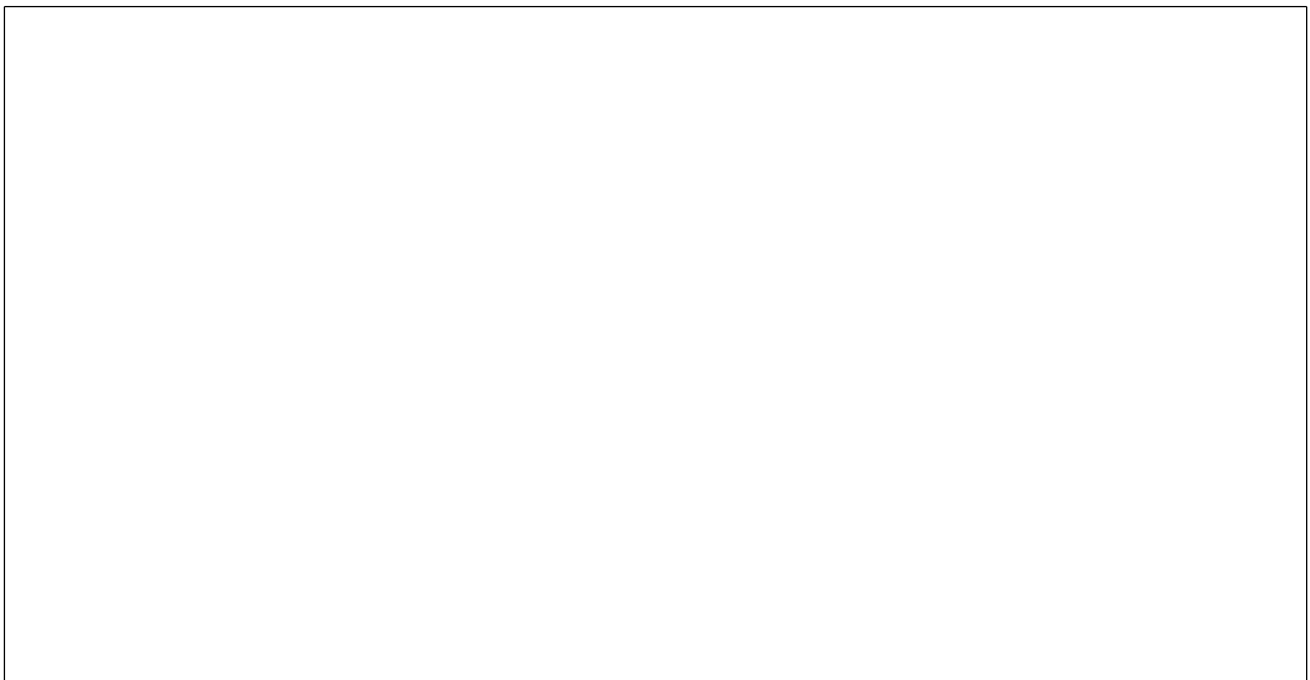
Power & Print

Type : **DELTA SM400-AR-4**

Print description : **Lensoflex 50 pcba with 3 string in //**

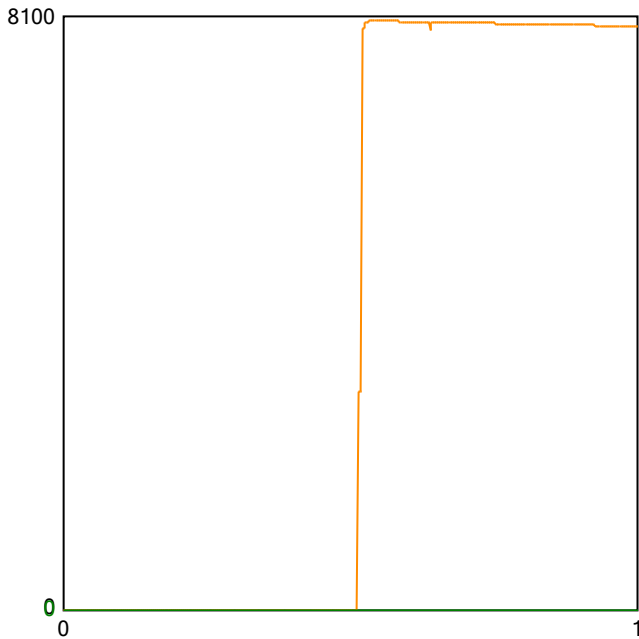
Active

Picture



Sphere photometric measurement

Maximum flux : **8051** lm



Operating condition

Position in sphere :



Ambient sphere T : **24.8** °C

Electrical measurement

● Secondary electrical measurement

Voltage : **66.31** V

Current : **0.600** A

Power : **39.78** W

→ LEDs light efficiency :

202.4 lm/W

223.6 lm/Led

● Primary electrical measurement

Voltage : **N/A** V

Current : **N/A** A

Power : **N/A** W

Cos φ : **N/A**

→ Driver losses : **N/A** %

→ LEDS & Driver light efficiency :

N/A lm/W

Description :

Mesure @35°C/600mA

Comment :

FORM-L-41 ED1 REV 4



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NBN EN ISO/IEC 17025 : 2017

Approved by : RLABO

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Colorimetry

Auto: ref: illuminant - Planckian radiator CCT= 3868 K

File Preset Options Extra Calibration: #1 no accessory Apr'22 Correction Info

Presets: CRI

Auto: ref: illuminant - Planckian radiator, CCT= 3868 K

Auto: ref: illuminant - Planckian radiator, CCT= 3868 K

Chromaticity difference DC= 1.4E-3

CRI color samples

R1=68.5	R8=48.5
R2=80.7	R9=35.9
R3=89.6	R10=53.6
R4=68.7	R11=63.2
R5=67.7	R12=39.0
R6=71.8	R13=71.0
R7=80.5	R14=94.1

Re= 72.00
(mean value of R1 - R8)

Re= 61.49
(mean value of R1 - R14)

Weighting Function: None

MEASUREMENT (Radiance)

Average 1

Target

Cont. (Interval 0 s)

Hold Integration Time

Quick mode

Luminance L_v 1.490E+3 $\frac{cd}{m^2}$

Radiance (380-780nm) L_g 4.191E+0 $\frac{W}{sr \cdot m^2}$

Corr. Color Temp CCT 3869 K

Chromaticity x 0.3875 y 0.3840

Chromaticity u' 0.2269 v' 0.5058

#6

#7

#8

#9

#10

#11

#12

to Table auto to Ref. to PDF

Quit

LED Flux measurement

Date : **26/07/2022**

Operator : **CLD**

FORM-L-41 ED1 REV 4

Filename : **2022_552.xml**



226-TEST

NBN EN ISO/IEC 17025 :2017

LEDs

Trademark : **Seoul**

Entry number : **42R219-3**

Type : **5050**

BIN Description : **LVL2 I03**

Part number : **Unknown**

Color or CCT (Theoretical) : **Neutral White**

Number of LEDs : **36**

Lenses

Trademark : **None**

Type : **None**

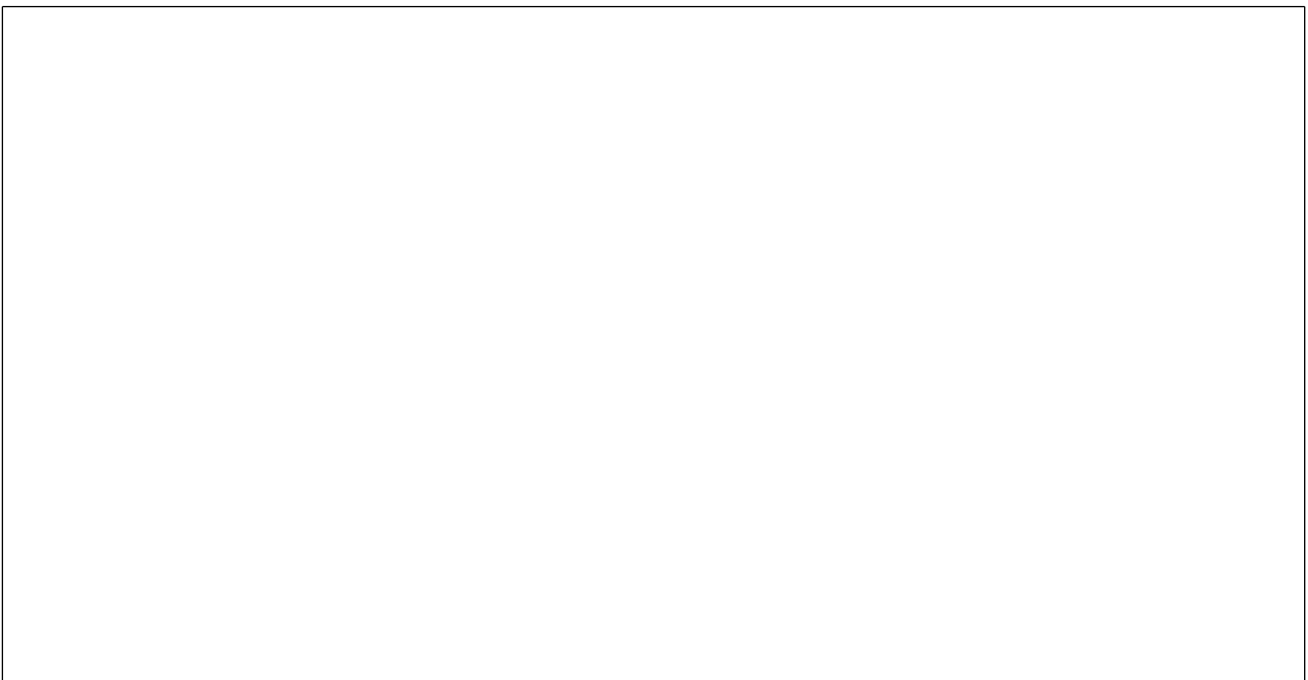
Power & Print

Type : **DELTA SM400-AR-4**

Print description : **Lensoflex 50 pcba with 3 string in //**

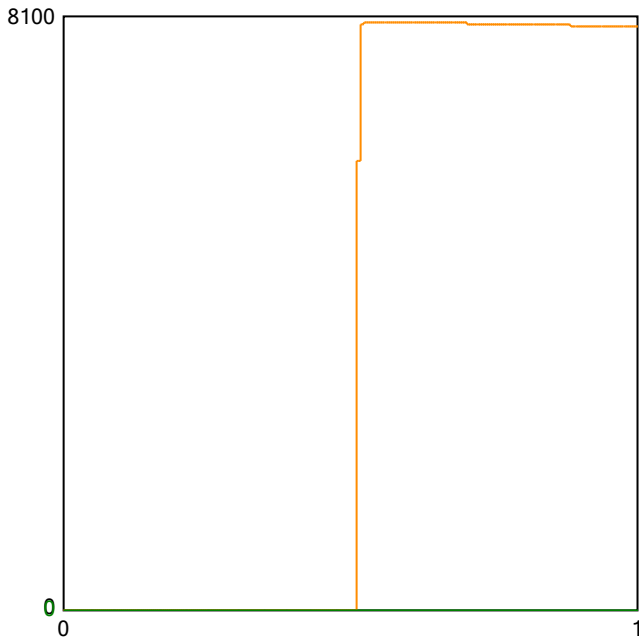
Active

Picture



Sphere photometric measurement

Maximum flux : **8044** lm



Operating condition

Position in sphere :



Ambient sphere T : **24.8** °C

Electrical measurement

● Secondary electrical measurement

Voltage : **66.34** V

Current : **0.600** A

Power : **39.80** W

→ LEDs light efficiency :

202.1 lm/W

223.4 lm/Led

● Primary electrical measurement

Voltage : **N/A** V

Current : **N/A** A

Power : **N/A** W

Cos φ : **N/A**

→ Driver losses : **N/A** %

→ LEDS & Driver light efficiency :

N/A lm/W

Description :

Mesure @35°C/600mA

Comment :

FORM-L-41 ED1 REV 4



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Approved by : RLABO

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226-TEST

NBN EN ISO/IEC 17025 :2017

Colorimetry

Auto: ref: illuminant - Planckian radiator CCT= 3859 K

File Preset Options Extra Calibration: #1 no accessory Apr'22 Correction Info

Preset: CRI

Auto: ref: illuminant - Planckian radiator, CCT= 3859 K

R1=68.4	R8=48.4
R2=80.6	R9=-36.2
R3=89.6	R10=53.4
R4=68.7	R11=63.2
R5=67.6	R12=38.8
R6=71.7	R13=70.9
R7=80.4	R14=94.1

Chromaticity difference DC= 1.5E-3

CRI color samples

Ra= 71.94 (mean value of R1 - R8)

Re= 61.42 (mean value of R1 - R14)

Auto: ref: illuminant - Planckian radiator, CCT= 3859 K

Weighting Function: None

MEASUREMENT (Radiance) Average 1

Target

Cont. (Interval 0 s)

Hold Integration Time

Quick mode

#7 to #13

to Table auto to Ref. to PDF

Luminance L_v 1.486E+3 $\frac{cd}{m^2}$

Radiance (380-780nm) L_g 4.175E+0 $\frac{W}{sr \cdot m^2}$

Corr. Color Temp CCT 3850 K

Chromaticity x 0.3880 y 0.3845

Chromaticity u' 0.2270 v' 0.5061

Quit

LED Flux measurement

Date : **26/07/2022**

Operator : **CLD**

FORM-L-41 ED1 REV 4

Filename : **2022_553.xml**



226-TEST

NBN EN ISO/IEC 17025 :2017

LEDs

Trademark : **Seoul**

Entry number : **42R219-4**

Type : **5050**

BIN Description : **LVL2 I03**

Part number : **Unknown**

Color or CCT (Theoretical) : **Neutral White**

Number of LEDs : **36**

Lenses

Trademark : **None**

Type : **None**

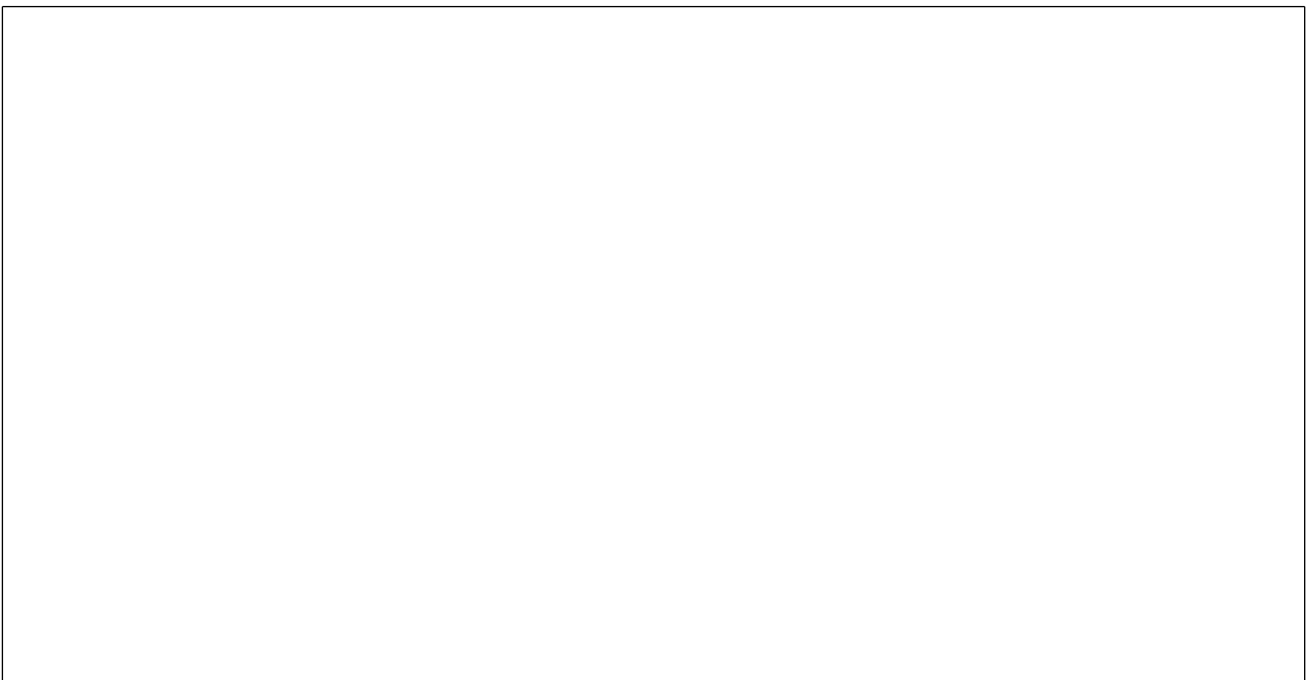
Power & Print

Type : **DELTA SM400-AR-4**

Print description : **Lensoflex 50 pcba with 3 string in //**

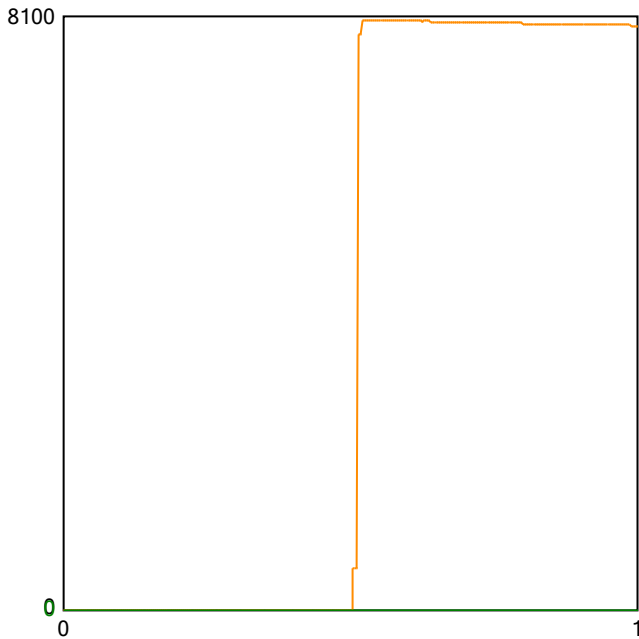
Active

Picture



Sphere photometric measurement

Maximum flux : **8060** lm



Operating condition

Position in sphere :



Ambient sphere T : **24.8** °C

Electrical measurement

● Secondary electrical measurement

Voltage : **66.34** V

Current : **0.600** A

Power : **39.80** W

→ LEDs light efficiency :

202.5 lm/W

223.9 lm/Led

● Primary electrical measurement

Voltage : **N/A** V

Current : **N/A** A

Power : **N/A** W

Cos φ : **N/A**

→ Driver losses : **N/A** %

→ LEDS & Driver light efficiency :

N/A lm/W

Description :

Mesure @35°C/600mA

Comment :

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226-TEST

NBN EN ISO/IEC 17025 :2017

Colorimetry

Auto: ref: illuminant - Planckian radiator CCT= 3870 K

File Preset Options Extra Calibration: #1 no accessory Apr'22 Correction Info

Preset: CRI

$R_g = 72$
 $R_g = 62$

Auto: ref: illuminant - Planckian radiator, CCT= 3870 K

R	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Value	68	84	90	72	80	48	54	63	71	94	39	71	71	94

Auto: ref: illuminant - Planckian radiator, CCT= 3870 K

Chromaticity difference DC= 1.5E-3

CRI color samples	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
Value	68.5	80.8	89.8	68.7	67.7	71.9	80.5	48.4	-36.1	53.8	63.2	38.9	71.1	94.2

$R_g = 72.03$
(mean value of R1 - R8)

$R_e = 61.52$
(mean value of R1 - R14)

Weighting Function: None

MEASUREMENT (Radiance) Average 1

Target

Cont. (Interval 0 s)
Hold Integration Time
Quick mode

#8
#9
#10
#11
#12
#13
#14

to Table auto to Ref. to PDF

Luminance L_v 1.490E+3 $\frac{cd}{m^2}$

Radiance (380-780nm) L_g 4.186E+0 $\frac{W}{sr \cdot m^2}$

Corr. Color Temp CCT 3870 K

Chromaticity x 0.3876 y 0.3844

Chromaticity u' 0.2267 v' 0.5059

Quit