

Test report

Light measurement results

Laboratory and Equipment

Test lab
Spectrometer Manufacturer and Model
Measurement date

awLed by audiowerk GmbH
LightSpion – Type C, horizontal
11.08.2026

Measurement Conditions

Tested c-planes
Tested gamma resolution
Input Power
Input RMS Voltage and Current

2 planes – 180.00°
7.50°
21.14 W
24 V – 0.88 A

Tested Light Source

Luminaire
Item No.
Manufacturer
Measured length
Dimension (Lamp w x h) | (Light w x h)
Description

FLEX STRIP HP-420 FREE-CUT 4-IN-1 RGBW (3000K) 1m 2607
ASD08FC106
awLed by audiowerk GmbH
1000mm
10mm x 1000mm | 4mm x 4mm
Charge 260716

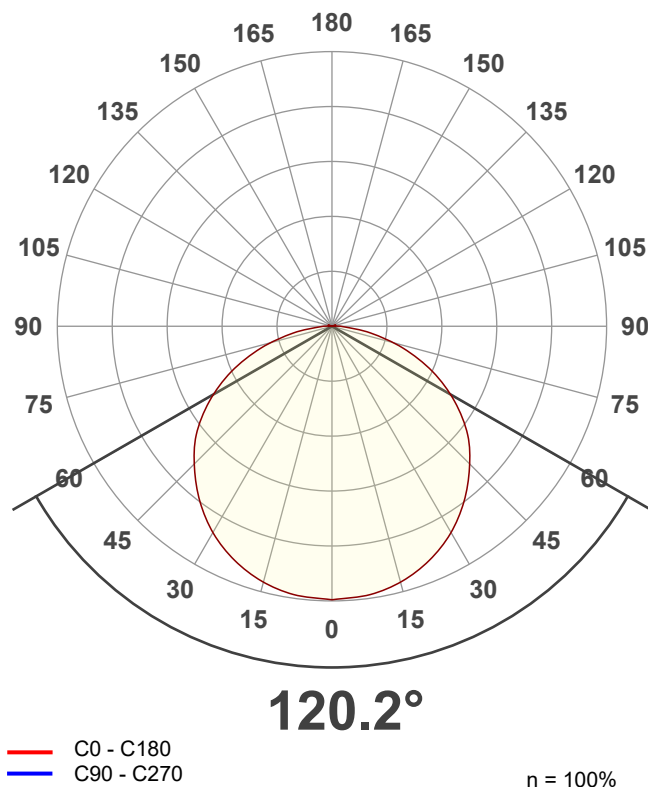
Main Light Measurement Results

Output – Total Lumen (Up% / Down%)
Efficiency
Peak Intensity
Correlated Color Temperature, CCT
Color Rendering Index
Ecodesign Energy Class

1225 lm – 1.022% / 98.98%
57.93 lm/W
388.8 cd
28215 K
CRI 0.0
G

Polar light distribution diagram

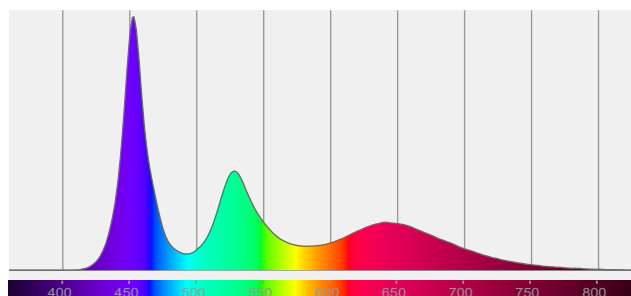
Unit: 0-100% of peak intensity



Product photo

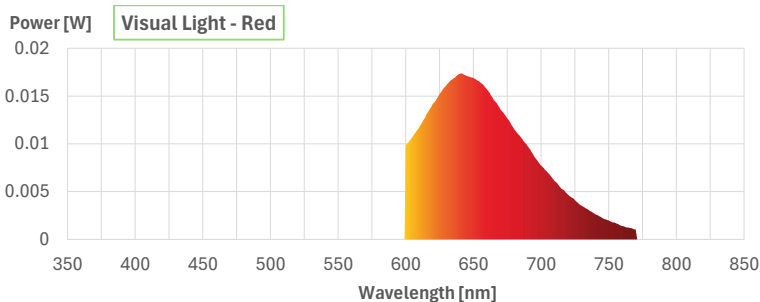


Spectral power distribution



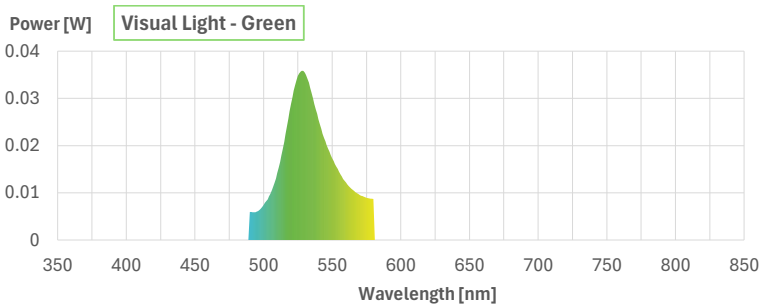
Light output 1 - LED Red:

Peak wavelength	641 nm
Output – Total Lumen	80 lm
Efficiency	13.48 lm/W
Input Power	5.93 W
Input RMS Voltage	23.99 V
Input RMS Current	0.25 A



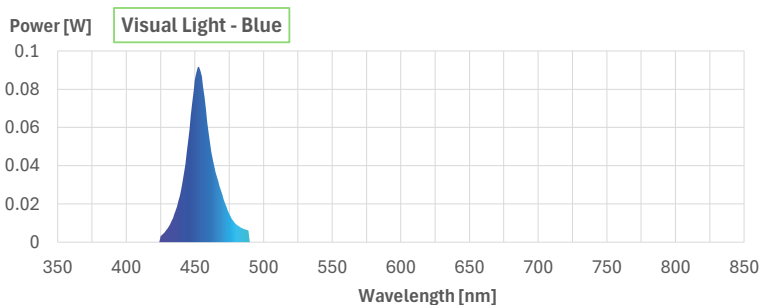
Light output 2 - LED Green:

Peak wavelength	528 nm
Output – Total Lumen	622 lm
Efficiency	102.06 lm/W
Input Power	6.09 W
Input RMS Voltage	23.99 V
Input RMS Current	0.25 A



Light output 3 - LED Blue:

Peak wavelength	453 nm
Output – Total Lumen	85 lm
Efficiency	14.37 lm/W
Input Power	5.89 W
Input RMS Voltage	24.00 V
Input RMS Current	0.25 A



Light output 4 - LED White:

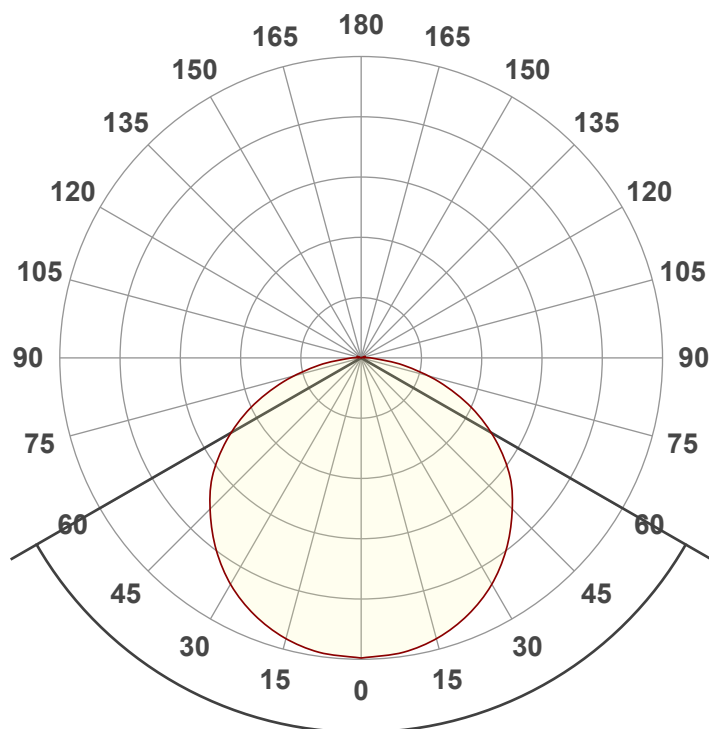
Correlated Color Temperature, CCT	3113 °K
Output – Total Lumen	452 lm
Efficiency	77 lm/W
Color Rendering Index	93 CRI
Input Power	5.89 W
Input RMS Voltage	23.99 V
Input RMS Current	0.25 A

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Luminous Intensity diagram

Unit: 0-100% of peak intensity



C0-C180
C90-C270

120.2°

Main Values

Output (total Lumen)	1225 lm
Lumen Up% / Down%	1.022% / 98.98%
Peak Intensity	388.8 cd
Beam Angle (50%-FWHM)	120.2°

EU Ecodesign parameters

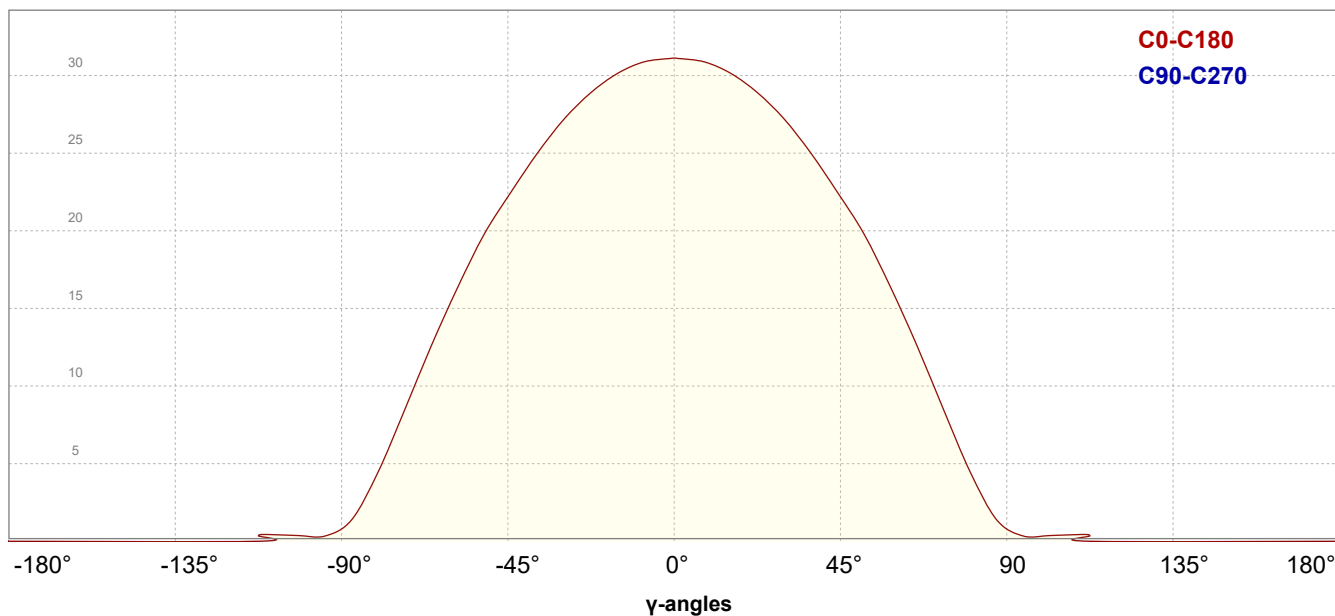
Directionality (DLS or NDLS)	NDLS
Ecodesign Useful Luminous Flux	1225 lm
Ecodesign Energy Class	G

Intensity Ratio

In 120° cone	75.34%
In 90° cone	50.08%

Linear distribution diagram

Intensity [cd]

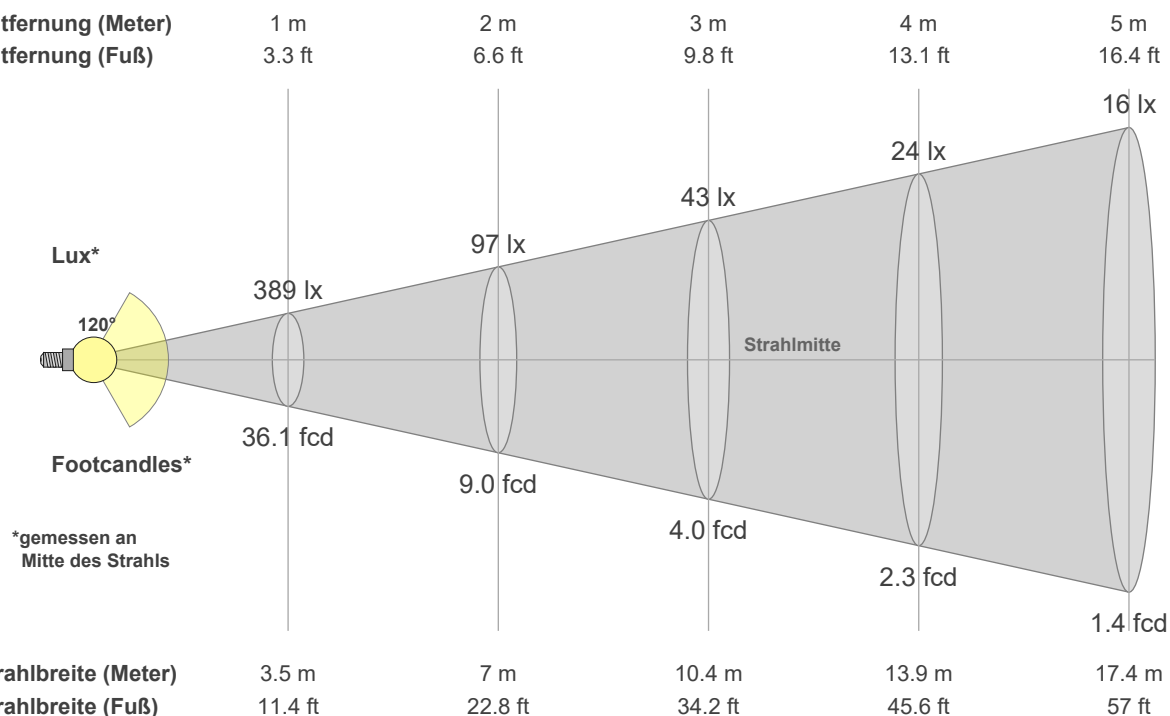


C0-C180
C90-C270

Test report

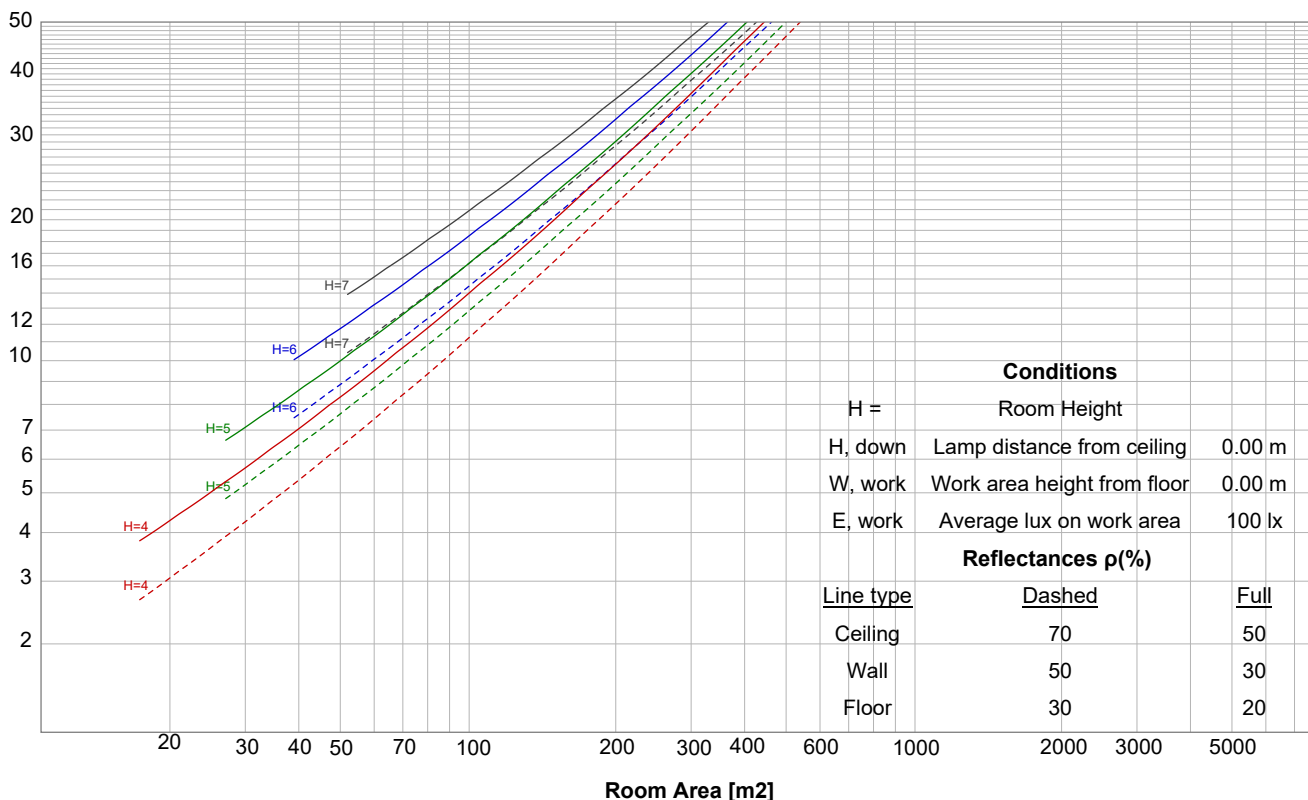
Light measurement results

Beam details



Luminaire budgetary diagram

LAMPS (number of lamps)



Test report

Light measurement results

Intensity details

Beam intensities from 1 – 20 m

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	m
3.3	6.6	9.8	13.1	16.4	19.7	23	26.2	29.5	32.8	36.1	39.4	42.7	45.9	49.2	52.5	55.8	59.1	62.3	65.6	ft
389	97	43	24	16	11	8	6	5	4	3	3	2	2	2	2	1	1	1	1	lux
36.1	9	4	2.3	1.4	1	0.7	0.6	0.4	0.4	0.3	0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	fc

Intensities in 0° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
389	387	384	377	367	354	339	320	299	277	254	226	195	162	127	91	56	29	12	4	cd
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	58%	50%	42%	33%	23%	15%	8%	3%	1%	of 0°val

Intensities in 90° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
389	387	384	377	367	354	339	320	299	277	254	226	195	162	127	91	56	29	12	4	cd
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	58%	50%	42%	33%	23%	15%	8%	3%	1%	of 0°val

Intensities in 180° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
389	387	384	377	367	354	339	320	299	277	254	226	195	162	127	91	56	29	12	4	cd
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	58%	50%	42%	33%	23%	15%	8%	3%	1%	of 0°val

Intensities in 270° c-plane

0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	γ
389	387	384	377	367	354	339	320	299	277	254	226	195	162	127	91	56	29	12	4	cd
100%	100%	99%	97%	94%	91%	87%	82%	77%	71%	65%	58%	50%	42%	33%	23%	15%	8%	3%	1%	of 0°val

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UGR Table

Corrected, comprehensive UGR table according to 117-1995, S/H ratio=0.25

Reflectances												
	ρ Ceiling		70	70	50	50	30	70	70	50	50	30
	ρ Walls		50	30	50	30	30	50	30	50	30	30
	ρ Floor		20	20	20	20	20	20	20	20	20	20
Room size			Viewed Crosswise					Viewed Endwise				
H = mounting height above eye level			(Viewing direction orthogonal to lamp length axis)					(Viewing direction parallel to lamp length axis)				
	X	Y										
2H	2H		25.6	26.9	25.9	27.2	27.4	27.4	28.6	27.6	28.9	29.2
	3H		26.7	28.0	27.2	28.3	28.6	29.0	30.3	29.4	30.6	30.8
	4H		27.2	28.4	27.6	28.7	29.0	29.7	30.9	30.1	31.2	31.5
	6H		27.5	28.6	27.8	28.9	29.3	30.3	31.4	30.6	31.7	32.1
	8H		27.6	28.6	27.9	28.9	29.4	30.5	31.5	30.8	31.9	32.3
	12H		27.6	28.6	28.0	28.9	29.4	30.6	31.7	31.0	32.0	32.5
4H	2H		26.3	27.5	26.7	27.8	28.1	27.7	28.9	28.1	29.2	29.5
	3H		27.7	28.7	28.1	29.0	29.5	29.5	30.5	29.9	30.9	31.4
	4H		28.1	29.1	28.6	29.5	30.1	30.2	31.2	30.7	31.6	32.2
	6H		28.5	29.4	29.0	29.7	30.1	30.9	31.8	31.4	32.2	32.6
	8H		28.6	29.4	29.1	29.8	30.2	31.1	31.9	31.6	32.3	32.7
	12H		28.6	29.3	29.1	29.7	30.2	31.3	32.0	31.8	32.5	33.0
8H	4H		28.4	29.2	28.9	29.6	30.0	30.3	31.1	30.8	31.5	31.9
	6H		28.9	29.5	29.4	30.0	30.5	31.1	31.7	31.6	32.2	32.8
	8H		29.0	29.6	29.5	30.1	30.8	31.4	31.9	31.9	32.5	33.1
	12H		29.1	29.6	29.7	30.1	30.8	31.6	32.1	32.2	32.7	33.3
12H	4H		28.4	29.1	28.9	29.5	30.0	30.3	31.0	30.8	31.4	31.9
	6H		28.9	29.5	29.4	30.0	30.7	31.1	31.7	31.6	32.2	32.9
	8H		29.1	29.6	29.7	30.1	30.7	31.4	31.9	32.0	32.4	33.0
Variations with the observer position for the luminaire spacings, S:												
S = 1.0H			0.1 / -0.2					0.1 / -0.1				
S = 1.5H			0.2 / -0.4					0.4 / -0.4				
S = 2.0H			0.6 / -0.8					0.9 / -0.9				

UGR-Daten konnten aufgrund fehlender/falscher Symmetrie nicht berechnet werden. Gehen Sie zu Bearbeiten -> Photometrisch -> Korrekturen und wählen Sie Asymmetrie korrigieren (UGR für asymmetrische Verteilungen nicht definiert)..

Coefficients of utilization

Ceiling reflectance	80				70				50			30			10			0
Wall reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Floor reflectance	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
RCR		(Room Cavity Ratio)				Room values are expressed as percentage of Lumen delivered to the task surface												
0	118.8	118.8	118.8	118.8	115.9	115.9	115.9	115.9	110.5	110.5	110.5	105.6	105.6	105.6	101.1	101.1	101.1	99.0
1	107.8	102.8	98.2	94.1	105.0	100.4	96.3	92.5	95.9	92.5	89.4	91.8	89.0	86.4	88.0	85.8	83.7	81.5
2	97.7	89.0	81.9	75.9	94.9	87.0	80.5	74.9	83.3	77.7	73.0	79.8	75.2	71.1	76.6	72.8	69.4	67.1
3	88.7	77.8	69.3	62.5	86.1	76.1	68.2	61.9	72.9	66.2	60.7	70.0	64.3	59.4	67.3	62.4	58.3	56.0
4	81.0	68.6	59.5	52.6	78.6	67.2	58.7	52.2	64.5	57.2	51.3	62.0	55.7	50.5	59.7	54.2	49.7	47.4
5	74.4	61.1	51.9	45.0	72.1	59.9	51.2	44.7	57.6	50.0	44.1	55.5	48.8	43.5	53.6	47.7	42.9	40.7
6	68.6	54.9	45.7	39.1	66.5	53.9	45.2	38.9	51.9	44.2	38.4	50.1	43.2	38.0	48.4	42.3	37.6	35.4
7	63.5	49.6	40.7	34.4	61.7	48.8	40.3	34.2	47.1	39.5	33.9	45.6	38.7	33.5	44.1	37.9	33.2	31.2
8	59.0	45.2	36.5	30.6	57.4	44.5	36.2	30.4	43.0	35.5	30.2	41.7	34.9	29.9	40.4	34.3	29.6	27.7
9	55.1	41.4	33.1	27.4	53.6	40.8	32.8	27.3	39.5	32.2	27.1	38.4	31.7	26.9	37.3	31.2	26.7	24.8
10	51.6	38.2	30.1	24.8	50.3	37.6	29.9	24.7	36.5	29.4	24.5	35.5	29.0	24.4	34.6	28.5	24.2	22.4

Test report

Light measurement results

Power details

Input power

Frequency of input power	0.0 Hz
Power feed to light source	21.14 W
RMS Input voltage feed V,RMS	24 V
RMS Input current feed I,RMS	0.88 A
Volt-Amp or apparent power = V,RMS*I,RMS	21.2 VA
Displacement factor of AC power feed	0.00
Power factor of AC current feed	1.00
Total harmonic distortion of the current	0%
Total harmonic distortion of the voltage	0%

Input power curve

Efficiency

Radiated power efficiency 26.2

Lumen efficiency 57.93 lm/W

Stabilization details

Warmup Conditions

Stable period	3 Min	CCT start	27793 K
Stable change max	5%	CCT shift	422 K
Minimum time	3 Min	CCT end	28215 K

Color Temperature Change

Warmup Result

Total warmup time	Lampe stabilisiert in	Output start	1229 lm
Warmup variation	-0.395%	Output change	-4.2103 lm
		Output end	1225 lm

Output Change

Stabilization Curve

