

Test report

Light measurement results

Laboratory and Equipment

Test lab
Spectrometer Manufacturer and Model
Measurement date

Viso LightSpion - Seriennummer: 1435906163
LightSpion – Type C, horizontal
21.11.2025

Measurement Conditions

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

2 planes – 180°
6°
19.1 W
24.0 V – 0.799 A

Tested Light Source

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

FLEX STRIP HPS-4-IN-1 RGBW (4000K) 1m 251108
ASD08408
awLed by audiowerk GmbH
1000mm
10mm x 1000mm | 4mm x 4mm
Charge 251108

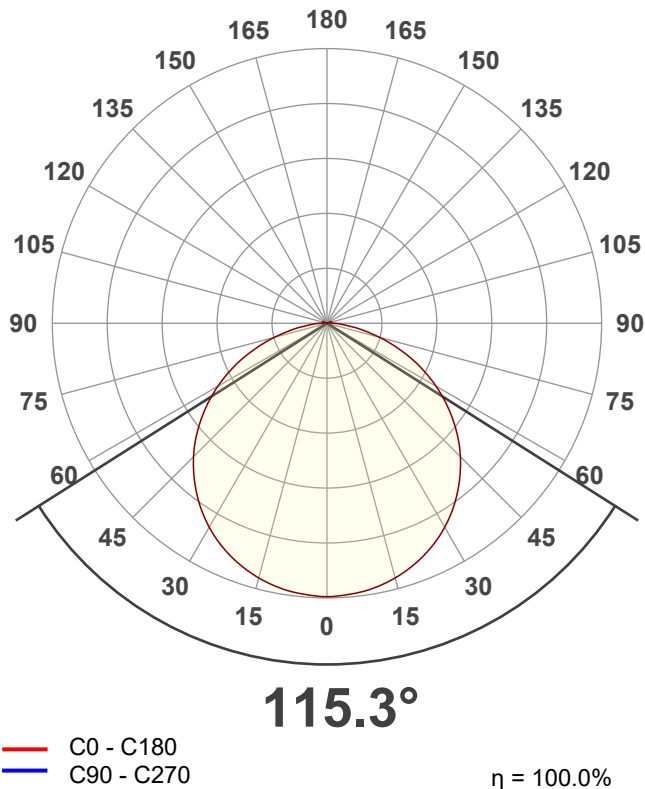
Main Light Measurement Results

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

1251 lm – 1.2% / 98.8%
65 lm/W
416 cd
10652 K
CRI 63.8
G

Polar light distribution diagram

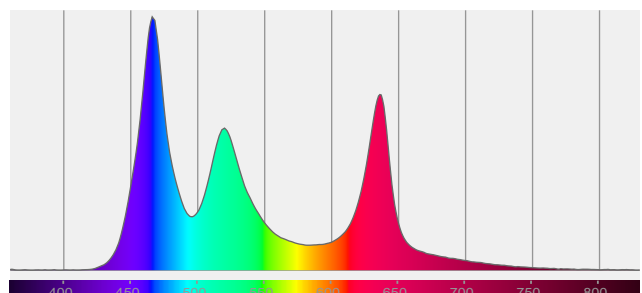
Unit: 0-100% of peak intensity



Product photo



Spectral power distribution

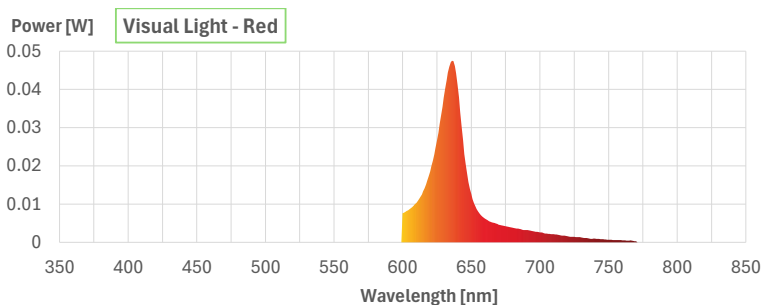


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Light measurement results

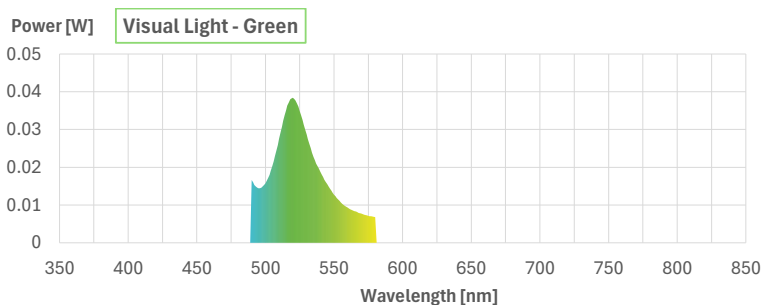
Light output 1 - LED Red:

Peak wavelength	636 nm
Output – Total Lumen	164 lm
Efficiency	29.80 lm/W
Input Power	5.50 W
Input RMS Voltage	24.00 V
Input RMS Current	0.23 A



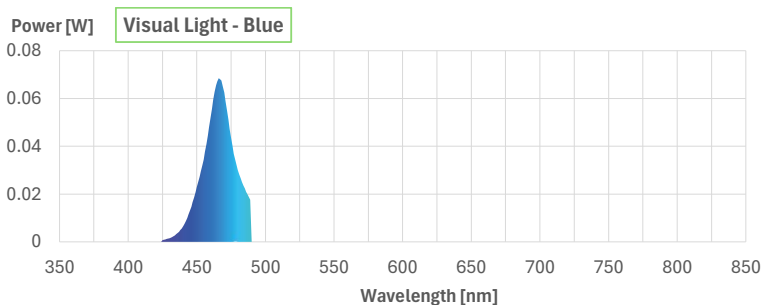
Light output 2 - LED Green:

Peak wavelength	520 nm
Output – Total Lumen	552 lm
Efficiency	103.86 lm/W
Input Power	5.32 W
Input RMS Voltage	24.00 V
Input RMS Current	0.22 A



Light output 3 - LED Blue:

Peak wavelength	466 nm
Output – Total Lumen	122 lm
Efficiency	23.63 lm/W
Input Power	5.18 W
Input RMS Voltage	24.00 V
Input RMS Current	0.22 A



Light output 4 - LED White:

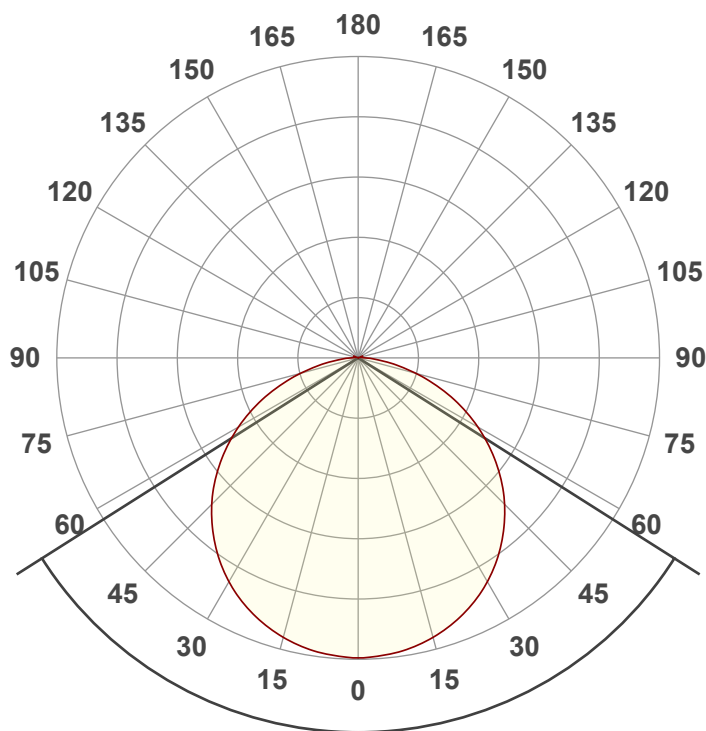
Correlated Color Temperature, CCT	4263 °K
Output – Total Lumen	416 lm
Efficiency	81 lm/W
Color Rendering Index	95 CRI
Input Power	5.12 W
Input RMS Voltage	24.00 V
Input RMS Current	0.21 A

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Luminous Intensity diagram

Unit: 0-100% of peak intensity



C0-C180
C90-C270

115.3°

Main Values

Output (total Lumen)	1251 lm
Lumen Up% / Down%	1.2% / 98.8%
Peak Intensity	416 cd
Beam Angle (50%-FWHM)	115.26°

EU Ecodesign parameters

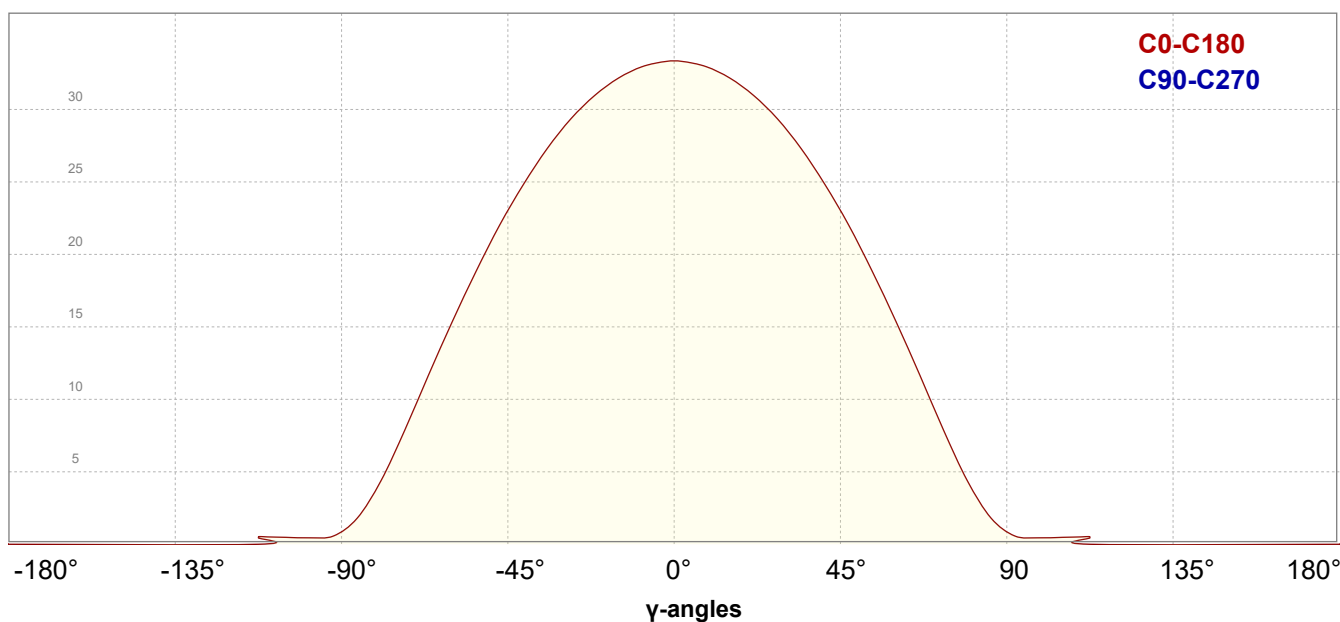
Directionality (DLS or NDLS)	NDLS
Ecodesign Useful Luminous	1251 lm
Ecodesign Energy Class	G

Intensity Ratio

In 120° cone	76.8%
In 90° cone	51.9%

Linear distribution diagram

Intensity [cd]

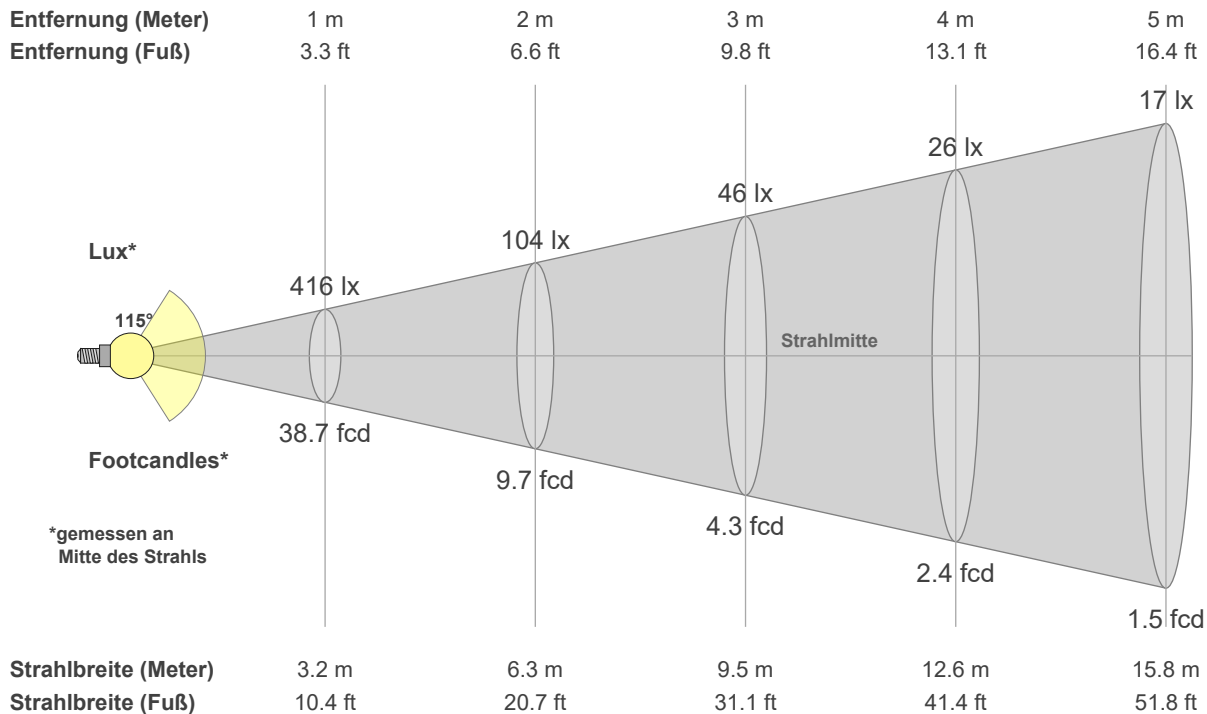


C0-C180
C90-C270

Test report

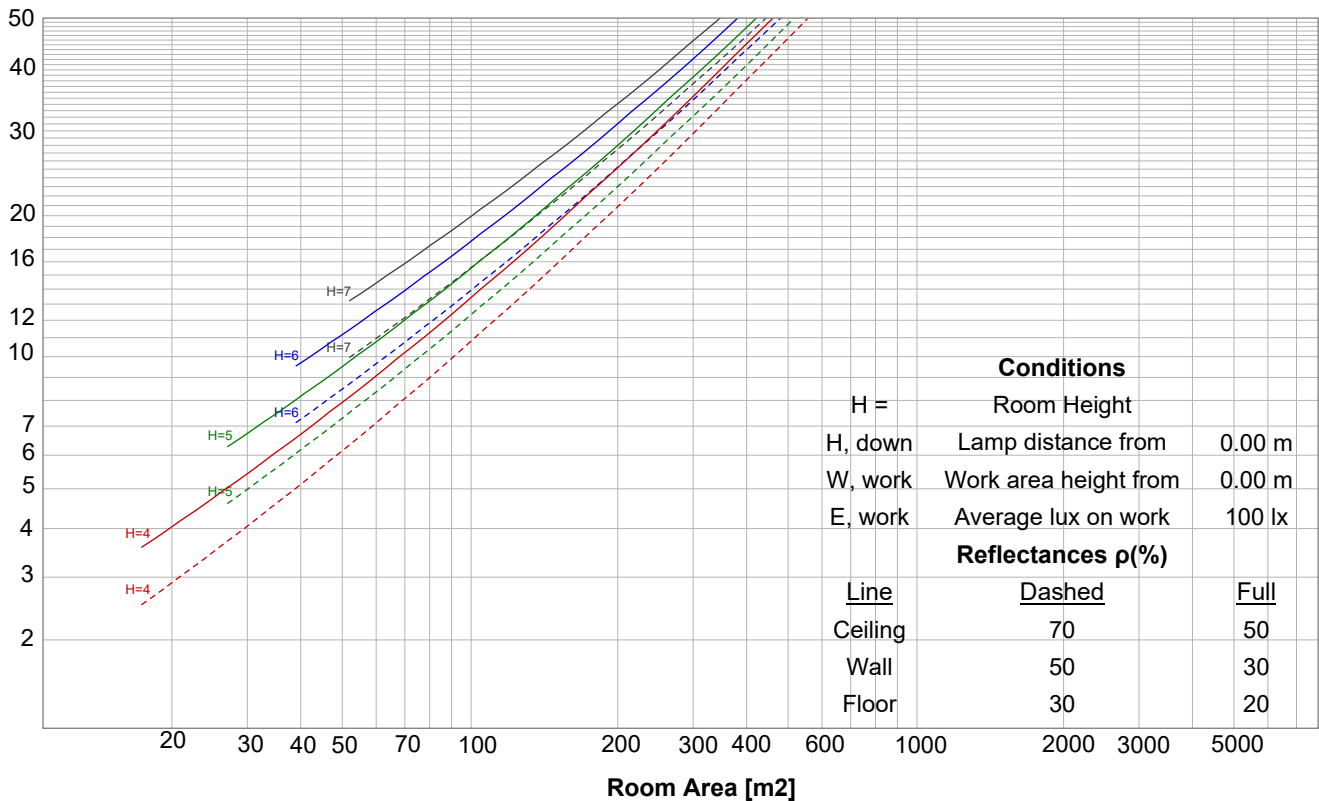
Light measurement results

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
416	104	46	26	17	12	8	7	5	4	3	3	2	2	2	2	1	1	1	1	lux
38.7	9.7	4.3	2.4	1.5	1.1	0.8	0.6	0.5	0.4	0.3	0.3	0.2	0.2	0.2	0.2	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
416	414	410	402	391	376	359	338	314	287	258	226	192	156	120	84	51	26	12	6	cd
100%	100%	98%	97%	94%	90%	86%	81%	75%	69%	62%	54%	46%	38%	29%	20%	12%	6%	3%	2%	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
416	414	410	402	391	376	359	338	314	287	258	226	192	156	120	84	51	26	12	6	cd
100%	100%	98%	97%	94%	90%	86%	81%	75%	69%	62%	54%	46%	38%	29%	20%	12%	6%	3%	2%	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
416	414	410	402	391	376	359	338	314	287	258	226	192	156	120	84	51	26	12	6	cd
100%	100%	98%	97%	94%	90%	86%	81%	75%	69%	62%	54%	46%	38%	29%	20%	12%	6%	3%	2%	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
416	414	410	402	391	376	359	338	314	287	258	226	192	156	120	84	51	26	12	6	cd
100%	100%	98%	97%	94%	90%	86%	81%	75%	69%	62%	54%	46%	38%	29%	20%	12%	6%	3%	2%	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	2H	25.6	26.8	25.9	27.1	27.4	27.3	28.5	27.6	28.8	29.1	
		3H	26.6	27.9	27.0	28.2	28.4	28.8	30.0	29.2	30.3	30.6	
		4H	27.0	28.2	27.4	28.5	28.7	29.4	30.6	29.8	30.9	31.2	
		6H	27.3	28.3	27.6	28.6	29.0	30.0	31.0	30.3	31.3	31.7	
		8H	27.3	28.3	27.7	28.6	29.1	30.1	31.1	30.5	31.5	31.9	
		12H	27.3	28.3	27.7	28.6	29.1	30.2	31.2	30.6	31.6	32.1	
	4H	2H	26.2	27.4	26.6	27.7	28.0	27.6	28.8	28.0	29.1	29.3	
		3H	27.5	28.5	27.9	28.8	29.3	29.3	30.3	29.7	30.6	31.1	
		4H	27.9	28.8	28.3	29.2	29.8	29.9	30.9	30.4	31.3	31.8	
		6H	28.2	29.0	28.7	29.4	29.8	30.5	31.4	31.0	31.7	32.1	
		8H	28.2	29.0	28.8	29.4	29.8	30.7	31.5	31.2	31.9	32.3	
		12H	28.3	28.9	28.8	29.4	29.9	30.9	31.5	31.4	32.0	32.5	
8H	4H	28.1	28.9	28.6	29.3	29.7	30.0	30.8	30.5	31.2	31.6		
	6H	28.5	29.1	29.0	29.6	30.2	30.7	31.3	31.2	31.7	32.3		
	8H	28.6	29.2	29.2	29.7	30.4	30.9	31.5	31.5	32.0	32.7		
	12H	28.7	29.2	29.3	29.7	30.3	31.2	31.6	31.8	32.1	32.8		
12H	4H	28.1	28.8	28.6	29.2	29.7	30.0	30.6	30.5	31.1	31.6		
	6H	28.6	29.1	29.1	29.6	30.3	30.7	31.2	31.2	31.7	32.4		
	8H	28.7	29.2	29.3	29.7	30.3	31.0	31.4	31.5	31.9	32.6		
Variations with the observer position for the luminaire spacings, S:													
S = 1.0H			0.1 / -0.2						0.1 / -0.1				
S = 1.5H			0.3 / -0.5						0.4 / -0.5				
S = 2.0H			0.7 / -1.0						1.0 / -1.1				

UGR-Daten konnten aufgrund fehlender/falscher Symmetrie nicht berechnet werden. Gehen Sie zu Bearbeiten -> Photometrisch ->

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	110.4	110.4	110.4	105.5	105.5	105.5	100.9	100.9	100.9	98.8
1	108.1	103.2	98.8	94.8	105.3	100.8	96.8	93.1	96.3	93.0	90.0	92.2	89.5	87.0	88.4	86.2	84.2	82.0
2	98.2	89.7	82.7	76.9	95.4	87.7	81.3	75.8	83.9	78.5	73.9	80.5	76.0	72.0	77.3	73.5	70.2	68.0
3	89.3	78.6	70.3	63.7	86.7	76.9	69.2	63.0	73.7	67.2	61.7	70.8	65.2	60.5	68.1	63.3	59.3	57.0
4	81.7	69.5	60.6	53.8	79.3	68.1	59.8	53.3	65.4	58.2	52.4	62.9	56.6	51.6	60.6	55.2	50.7	48.5
5	75.1	62.0	52.9	46.1	72.8	60.8	52.2	45.8	58.5	51.0	45.2	56.4	49.8	44.6	54.4	48.6	44.0	41.8
6	69.2	55.7	46.7	40.2	67.2	54.7	46.2	39.9	52.8	45.2	39.5	51.0	44.2	39.0	49.3	43.3	38.6	36.5
7	64.2	50.5	41.6	35.4	62.3	49.6	41.2	35.2	47.9	40.4	34.9	46.4	39.6	34.5	44.9	38.8	34.2	32.2
8	59.7	46.0	37.4	31.5	58.0	45.3	37.1	31.4	43.8	36.4	31.1	42.5	35.7	30.8	41.2	35.1	30.6	28.6
9	55.7	42.2	33.9	28.3	54.2	41.5	33.6	28.2	40.3	33.0	28.0	39.1	32.5	27.8	38.0	32.0	27.5	25.7
10	52.2	38.9	30.9	25.6	50.9	38.3	30.7	25.5	37.2	30.2	25.3	36.2	29.7	25.2	35.3	29.3	25.0	23.2

Test report

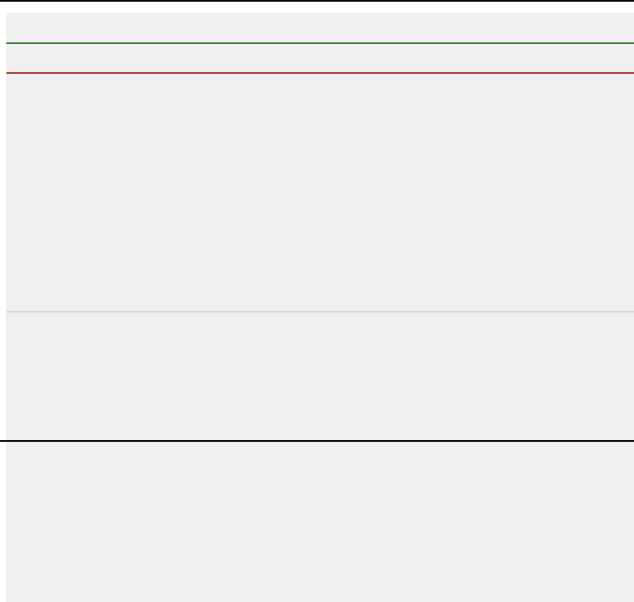
Light measurement results

Power details

Input power

Frequency of input power	0 Hz
Power feed to light source	19.1 W
RMS Input voltage feed V,RMS	24.0 V
RMS Input current feed I,RMS	0.799 A
Volt-Amp or apparent power = V,RMS*I,RMS	19.16 VA
Displacement factor of AC power feed	0.0
Power factor of AC current feed	1.0
Total harmonic distortion of the current	0%
Total harmonic distortion of the voltage	0%

Input power curve



Efficiency

Radiated power efficiency 27.3%

Lumen efficiency 65 lm/W

Stabilization details

Warmup Conditions

Stable period	3 Min	CCT start	10262 K
Stable change max	2.4%	CCT shift	+390 K
Minimum time	3 Min	CCT end	10652 K

Color Temperature Change

Warmup Result

Total warmup time	Lampe	Output start	1244 lm
Warmup variation	+0.7%	Output change	+7 lm
		Output end	1251 lm

Output Change

Stabilization Curve

