

Test report

Print date 21/01/2026
Light measurement results



Laboratory and Equipment

Test lab
Spectrometer Manufacturer and Model
Measurement date
Operator

Viso LabSpion - serial: 1996407700 sensor serial: 1118720440 - Test lab
LabSpion – Type C, horizontal
18/09/2025
MW

Measurement Conditions

Tested c-planes
Tested gamma resolution
Input Power

12 planes – 30°
5°
6,8 W

Tested Light Source

Luminaire
Basic Luminous Shape
Item No.
Manufacturer
Description

NANOFLEX
PANEL
NANOFLEX80677.6RG30ADD25WHBS,white
Acolyte
Beam Angle: 25 degree, product length 1m

Main Light Measurement Results

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

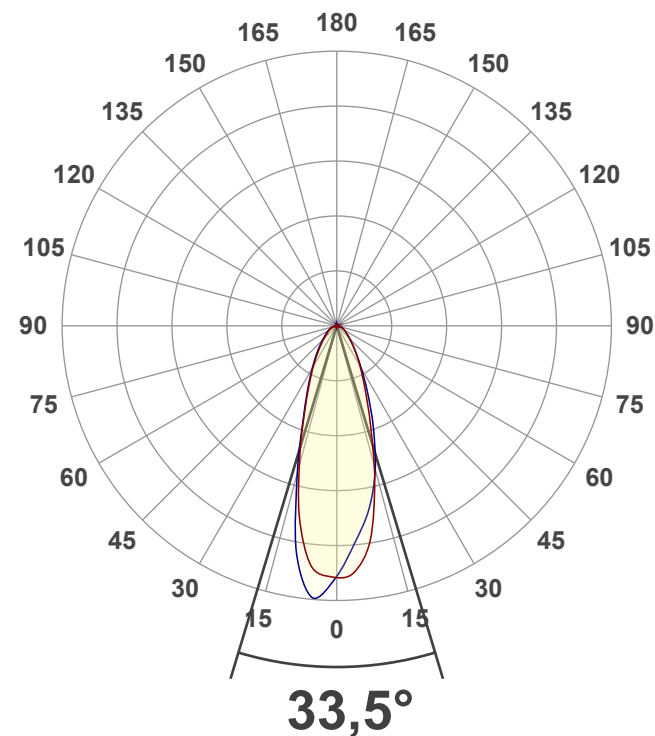
487 lm – 1,11% / 98,89%
71 lm/W
851 cd
2988 K
CRI 81,9
583 nm
601 nm

Lumen per length
Watt per length

486,87 lm/m 148,40 lm/ft
6,84 W/m 2,08 W/ft

Polar light distribution diagram

Unit: 0-100% of peak intensity



— C0 - C180
— C90 - C270

$\eta = 100.0\%$

71 lm/W

2988 K

Product photo



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Color Parameters

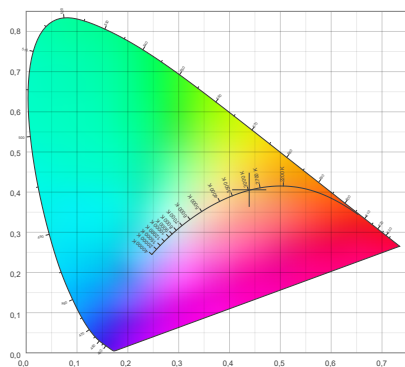
Correlated Color Temperature, Target
Correlated Color Temperature, Measured
Color Rendering Index
Color Rendering Index, R9 (red)
Color Rendering TM30-18

CCT = 2988 K
CCT = 2988 K
CRI 81,9
R9 = 2,8
Rf 84,4
Rg 93,9

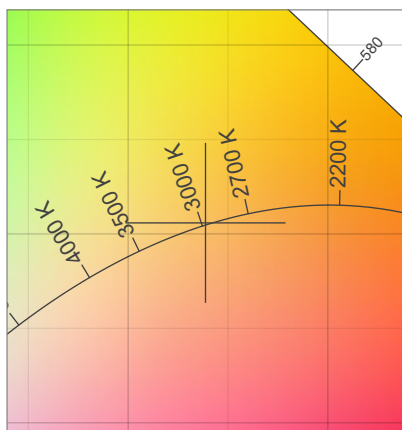
MacAdam Steps
Color deviation from BBL
Color coordinates CIE 1931
Color coordinate CIEs 1960
Color coordinate CIEs 1976
Color Quality Scale

SDCM = n/a
Duv = 0,0005
(x;y) = (0,439;0,406)
(u;v) = (0,251;0,348)
(u';v') = (0,251;0,522)
CQS = 81,6

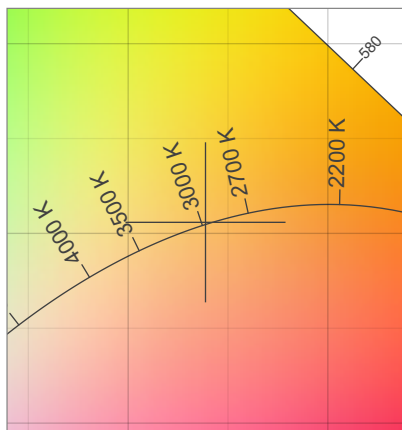
CIE 1931 Chromaticity diagram



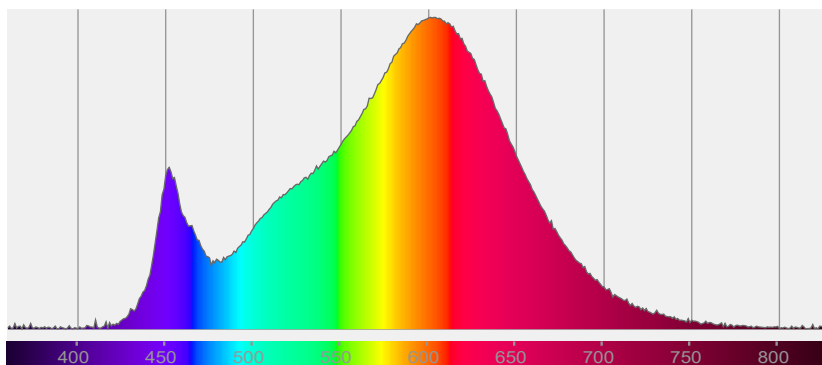
CIE 1931 Chromaticity - zoomed



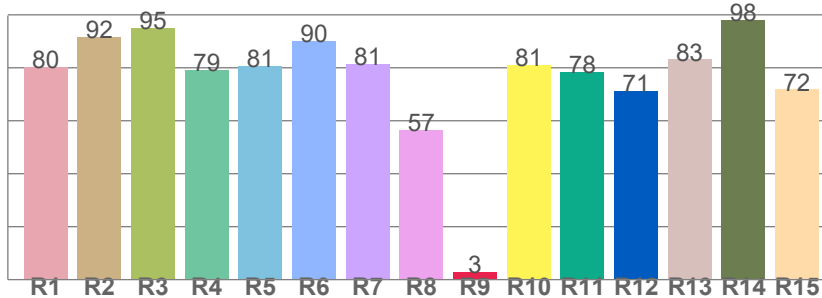
CIE 1931 Chromaticity - SDCM



Spectral power distribution



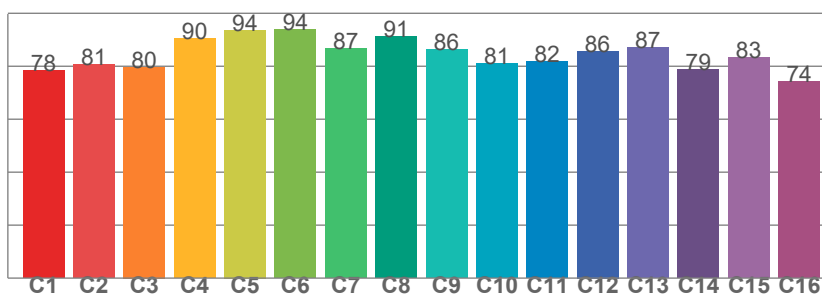
Color Rendering Index per reference color (CIE 1995)



CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
80,3	91,7	95,1	79,2	80,6	90,1	81,3	56,6	2,8	81,1	78,3	71,3	83,2	97,9	71,8

TM30-18 Rf-values per hue bin



TM30-18 Rf-values per hue bin

C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16
78,3	80,8	79,7	90,4	93,7	94,0	86,8	91,3	86,3	81,0	81,8	85,8	87,0	78,9	83,4	74,2

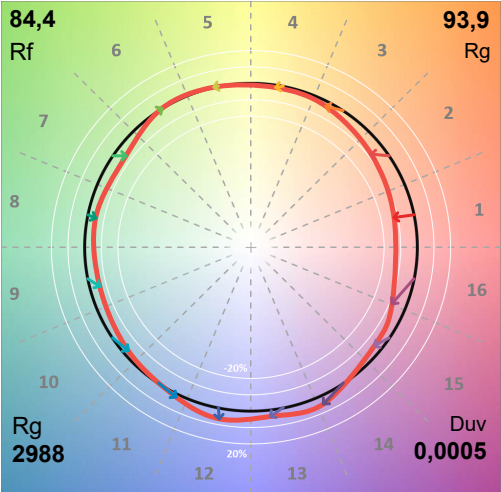
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Color details - ANSI/IES TM-30-18 Color Rendition Report

Color Vector Graphic



Color Distortion Graphic



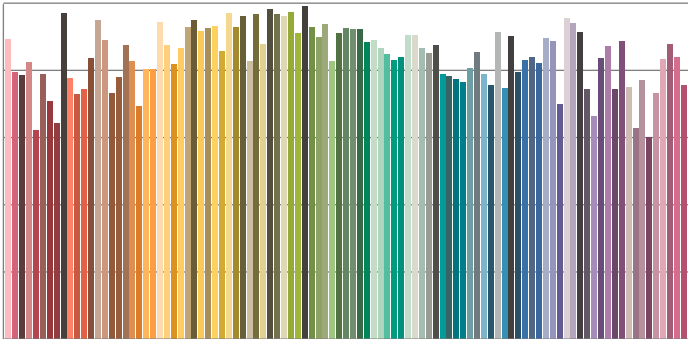
CIE x 0,439
CIE y 0,439
CIE u' 0,251
CIE v' 0,522

CIE 13.3-1995

Ra 81,9

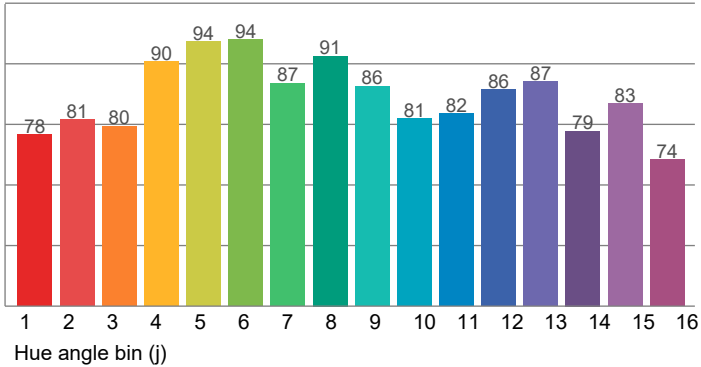
R9 2,8

Color Rendition by Color Evaluation Sample (CES)

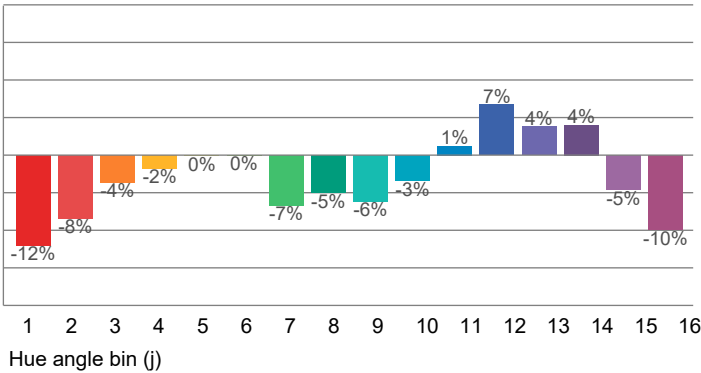


Color evaluation sample CES01 through CES99

Local Color Fidelity (per hue bin)



Local Chroma Shift (per hue bin)

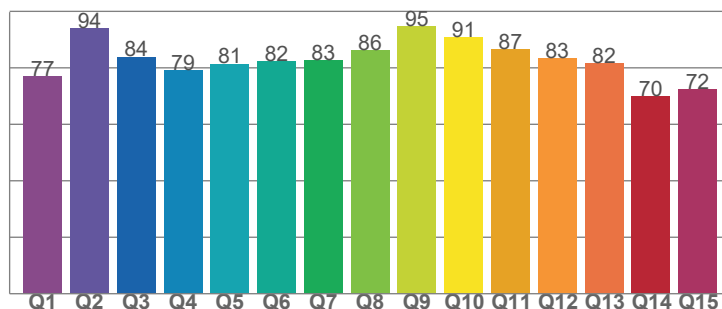


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Color Rendering Index (CQS)



Q1	76,93	Q9	94,63
Q2	94,04	Q10	90,77
Q3	83,93	Q11	86,60
Q4	79,07	Q12	83,35
Q5	81,44	Q13	81,59
Q6	82,37	Q14	69,85
Q7	82,77	Q15	72,35
Q8	86,25	CQS	81,63

Hue Bin	Rf	Shifts (%)	
		Chroma	Hue
1	78	-12%	1%
2	81	-8%	7%
3	80	-4%	10%
4	90	-2%	4%
5	94	0%	3%
6	94	0%	-3%
7	87	-7%	-4%
8	91	-5%	1%
9	86	-6%	6%
10	81	-3%	12%
11	82	1%	13%
12	86	7%	2%
13	87	4%	-9%
14	79	4%	-17%
15	83	-5%	-9%
16	74	-10%	-17%

Rg 93,9

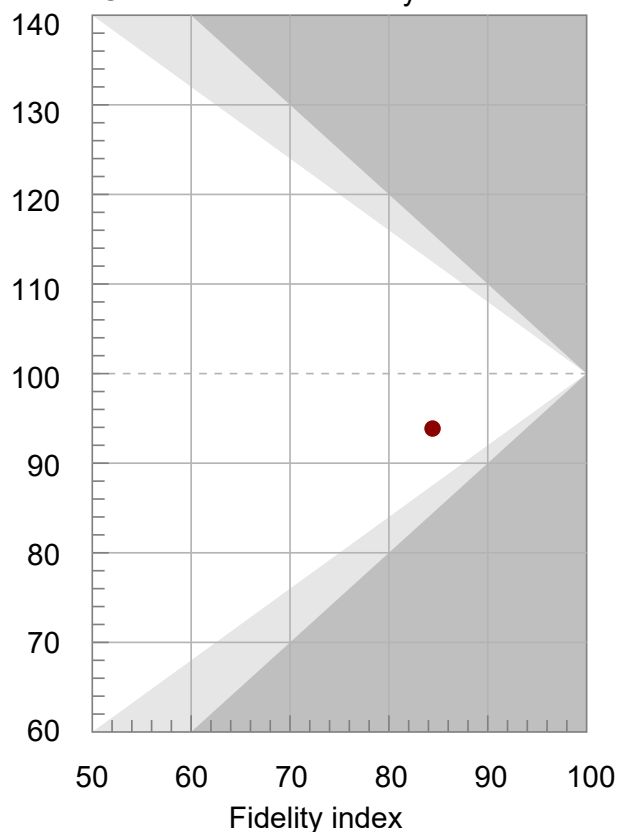
Gamut Index Rf

Gamut index

Rf 84,4

Fidelity Index Rf

Gamut Index vs. Fidelity



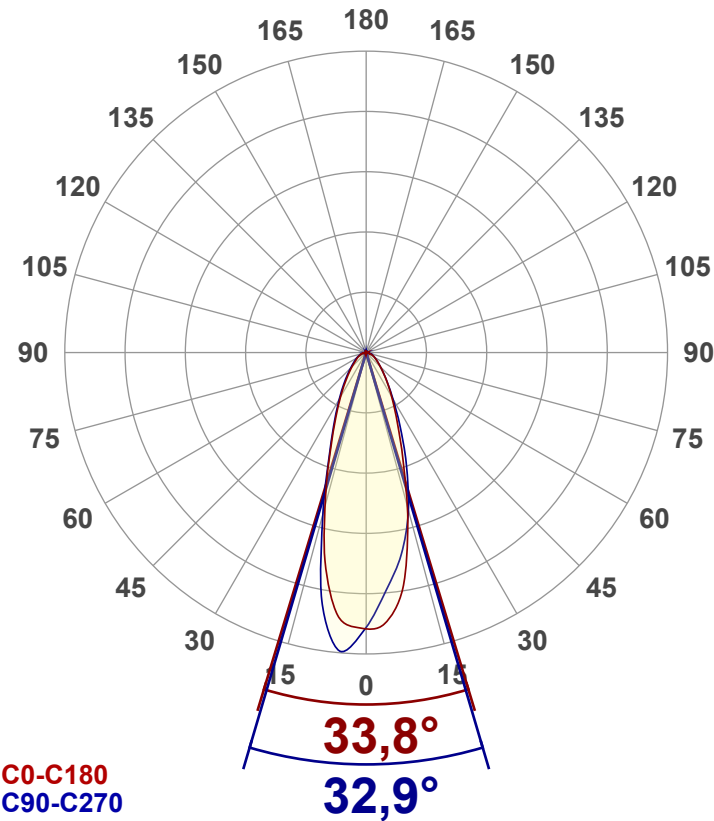
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Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

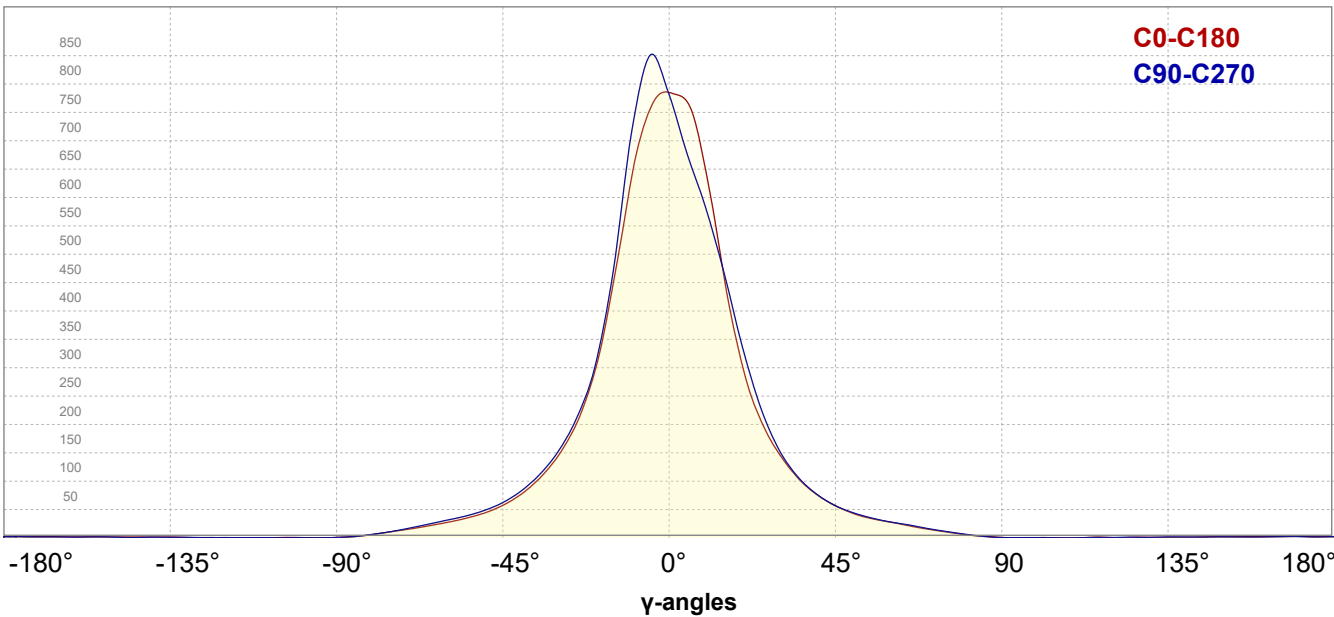
Output (total Lumen)	487 lm
Lumen Up% / Down%	1,11% / 98,89%
Peak Intensity	851 cd
Beam Angle (50%-FWHM)	33,50°
Field Angle (10%-FWHM)	78,86°
Cutoff Angle (2.5%-FWHM)	{c_ANG/0.00}°

Intensity Ratios

In 120° cone	486,9
In 90° cone	148,4

Linear distribution diagram

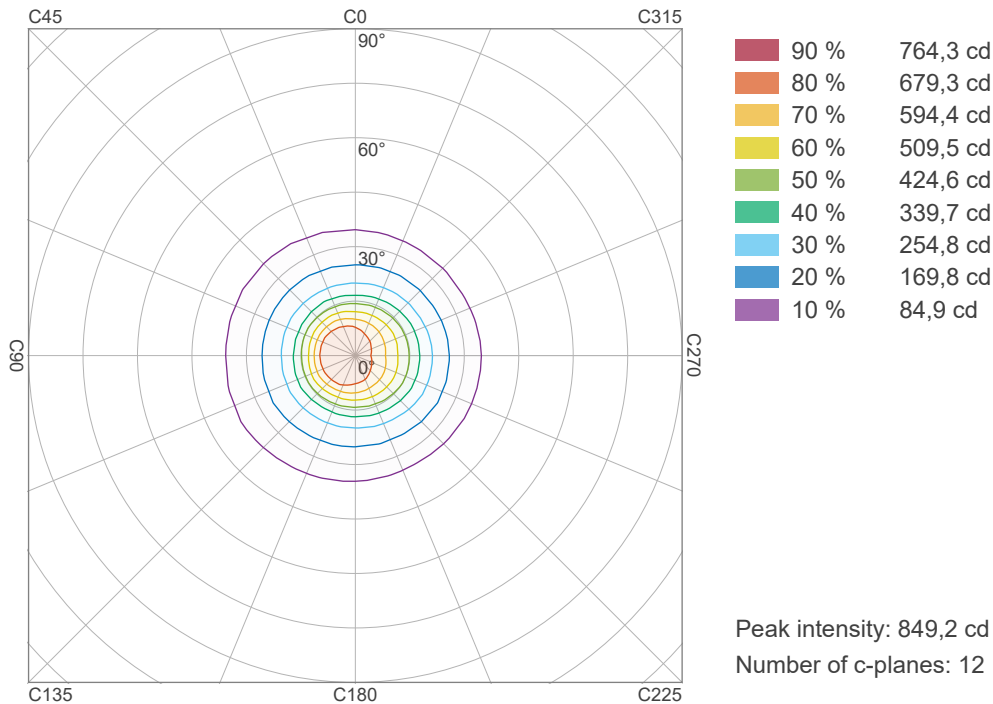
Intensity [cd]



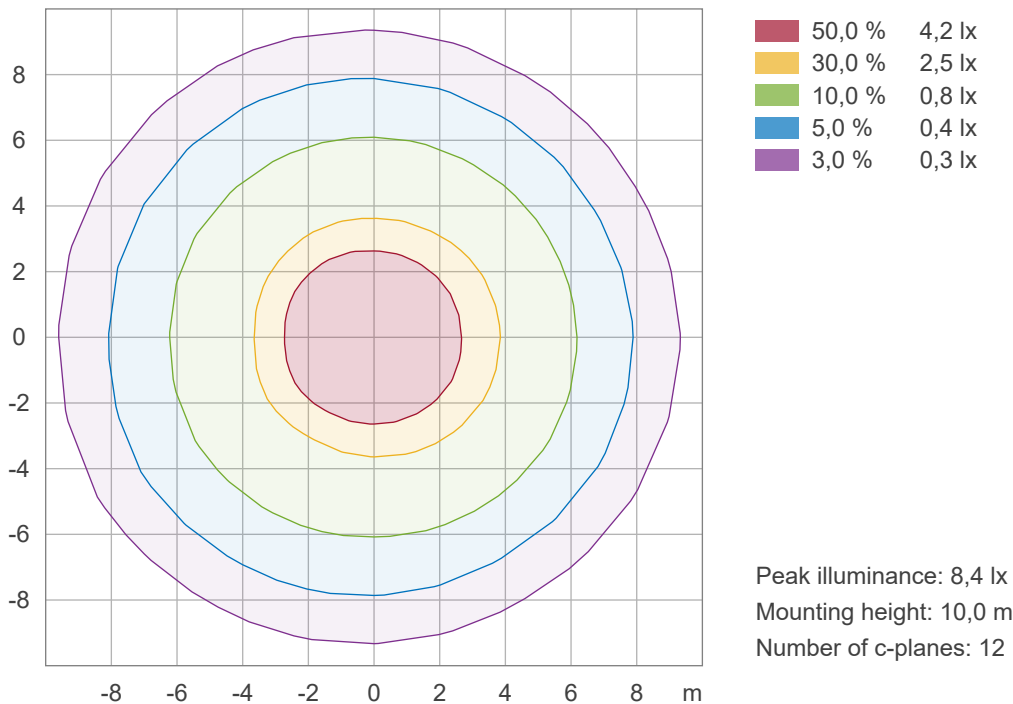
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Iso-intensity Diagram (Iso-candela)



Iso-illuminance Diagram (Iso-lux)

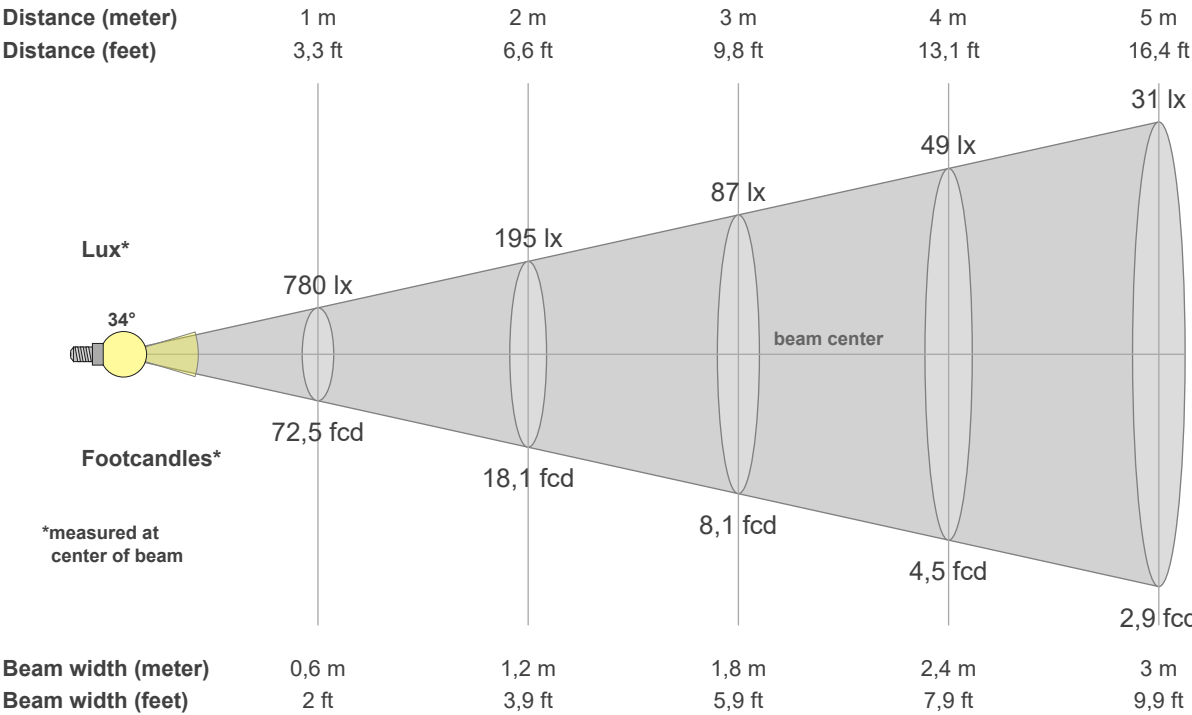


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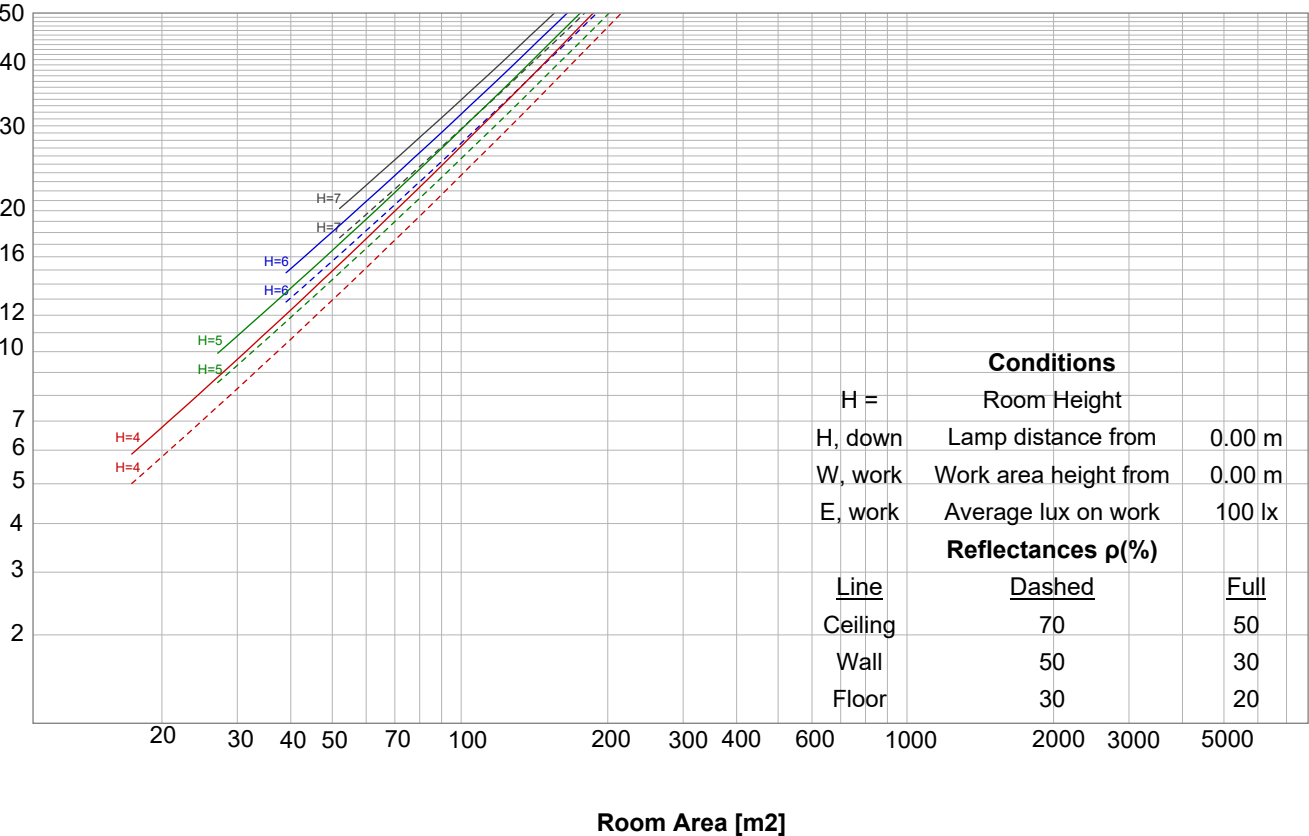


Beam details



Luminaire budgetary diagram

LAMPS (number of lamps)



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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
780	195	87	49	31	22	16	12	10	8	6	5	5	4	3	3	3	2	2	2	lux
72,5	18,1	8,1	4,5	2,9	2	1,5	1,1	0,9	0,7	0,6	0,5	0,4	0,4	0,3	0,3	0,3	0,2	0,2	0,2	fc

Intensities in 0° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	γ
780	777	769	732	694	635	562	489	421	353	301	259	218	193	167	146	129	113	100	88	cd
100%	99%	99%	94%	89%	81%	72%	63%	54%	45%	39%	33%	28%	25%	21%	19%	17%	14%	13%	11%	of 0°val

Intensities in 90° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	γ
780	738	695	655	617	579	533	487	437	384	332	289	246	211	181	152	134	115	100	88	cd
100%	95%	89%	84%	79%	74%	68%	62%	56%	49%	43%	37%	32%	27%	23%	20%	17%	15%	13%	11%	of 0°val

Intensities in 180° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	γ
780	778	765	752	697	638	572	495	418	360	304	257	224	191	169	148	129	113	98	87	cd
100%	100%	98%	96%	89%	82%	73%	63%	54%	46%	39%	33%	29%	24%	22%	19%	16%	15%	13%	11%	of 0°val

Intensities in 270° c-plane

0°	2°	4°	6°	8°	10°	12°	14°	16°	18°	20°	22°	24°	26°	28°	30°	32°	34°	36°	38°	γ
780	809	836	828	774	720	624	526	440	373	305	266	230	200	176	153	136	120	106	95	cd
100%	104%	107%	106%	99%	92%	80%	67%	56%	48%	39%	34%	29%	26%	23%	20%	17%	15%	14%	12%	of 0°val

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IESNA TM-15-07 LUMINAIARE CLASSIFICATION SYSTEM FOR OUTDOOR

Forward Light

Low (0-30°)	148,3	lm	30,5%
Medium (30-60°)	73,2	lm	15%
High (60-80°)	17	lm	3,5%
Very High (80-90°)	1,6	lm	0,3%

Back Light

Low (0-30°)	149,1	lm	30,6%
Medium (30-60°)	73,6	lm	15,1%
High (60-80°)	16,9	lm	3,5%
Very High (80-90°)	1,7	lm	0,4%

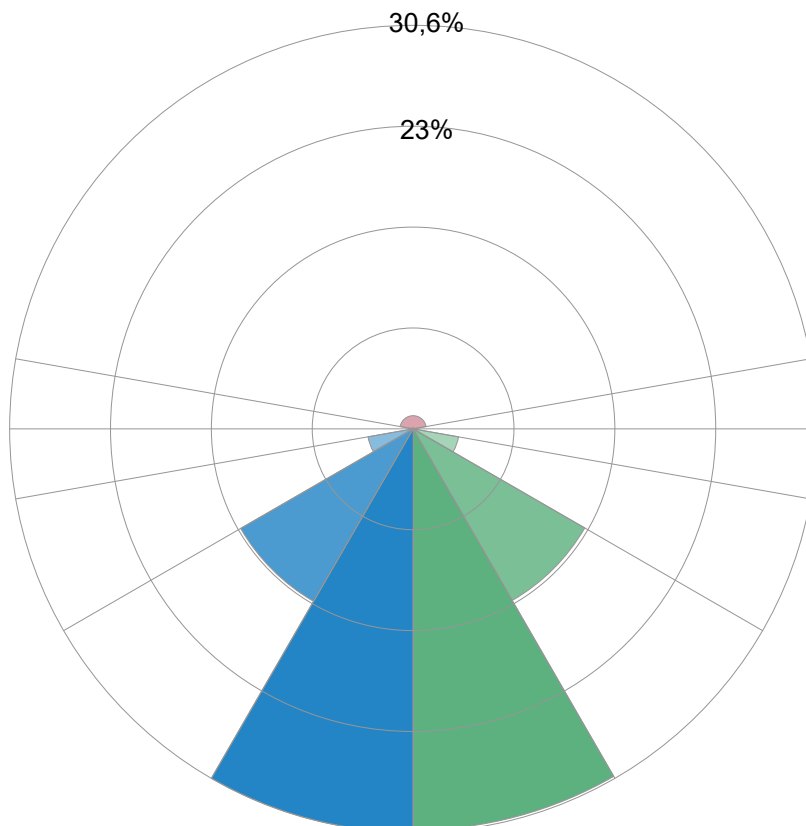
Uplight

Low (90-100°)	0,6	lm	0,1%
High (100-180°)	4,9	lm	1%

Total

Sum	486,9	lm	100%
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BUG RATING B1 U1 G0



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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									
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Variations with the observer position for the luminaire spacings, S:									
n/a	n/a					n/a				
n/a	n/a					n/a				
n/a	n/a					n/a				

UGR data could not be calculated due to missing/wrong symmetry. Go to Edit -> Photometric -> Corrections and select Correct asymmetry

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	101,0	101,0	101,0	98,9
1	111,9	108,6	105,6	102,9	109,3	106,3	103,6	101,2	102,0	99,8	97,8	98,0	96,3	94,7	94,4	93,0	91,7	89,8
2	105,2	99,4	94,7	90,6	102,8	97,6	93,2	89,5	94,1	90,5	87,4	90,9	87,9	85,3	87,9	85,5	83,3	81,5
3	99,1	91,6	85,8	81,2	96,9	90,1	84,8	80,5	87,2	82,7	79,0	84,5	80,8	77,6	82,1	78,9	76,2	74,5
4	93,5	84,9	78,6	73,7	91,5	83,6	77,8	73,2	81,2	76,2	72,2	79,0	74,7	71,2	77,0	73,3	70,3	68,6
5	88,4	79,0	72,5	67,7	86,6	78,0	71,9	67,3	76,0	70,7	66,6	74,2	69,5	65,9	72,4	68,4	65,2	63,5
6	83,8	74,0	67,4	62,6	82,2	73,1	66,9	62,4	71,4	65,9	61,8	69,8	65,0	61,3	68,4	64,1	60,8	59,2
7	79,6	69,5	63,0	58,4	78,1	68,8	62,6	58,2	67,3	61,8	57,8	66,0	61,1	57,4	64,7	60,4	57,0	55,5
8	75,8	65,6	59,2	54,7	74,4	64,9	58,8	54,6	63,7	58,2	54,3	62,6	57,6	54,0	61,5	57,0	53,7	52,2
9	72,3	62,1	55,8	51,6	71,1	61,5	55,5	51,5	60,5	55,0	51,2	59,5	54,5	51,0	58,5	54,0	50,7	49,3
10	69,1	58,9	52,8	48,8	68,0	58,4	52,6	48,7	57,5	52,2	48,5	56,7	51,8	48,3	55,8	51,3	48,1	46,7

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Power details

Input power

Frequency of input power	0 Hz
Power feed to light source	6,8 W
RMS Input voltage feed V,RMS	24,0 V
RMS Input current feed I,RMS	0,285 A
Volt-Amp or apparent power =	6,84 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 21,4%

Lumen efficiency 71 lm/W

Stabilization details

Warmup Conditions

Stable period	n/a
Stable change max	n/a%
Minimum time	n/a

Color Temperature Change

CCT start	n/a K
CCT shift	n/a K
CCT end	2988 K

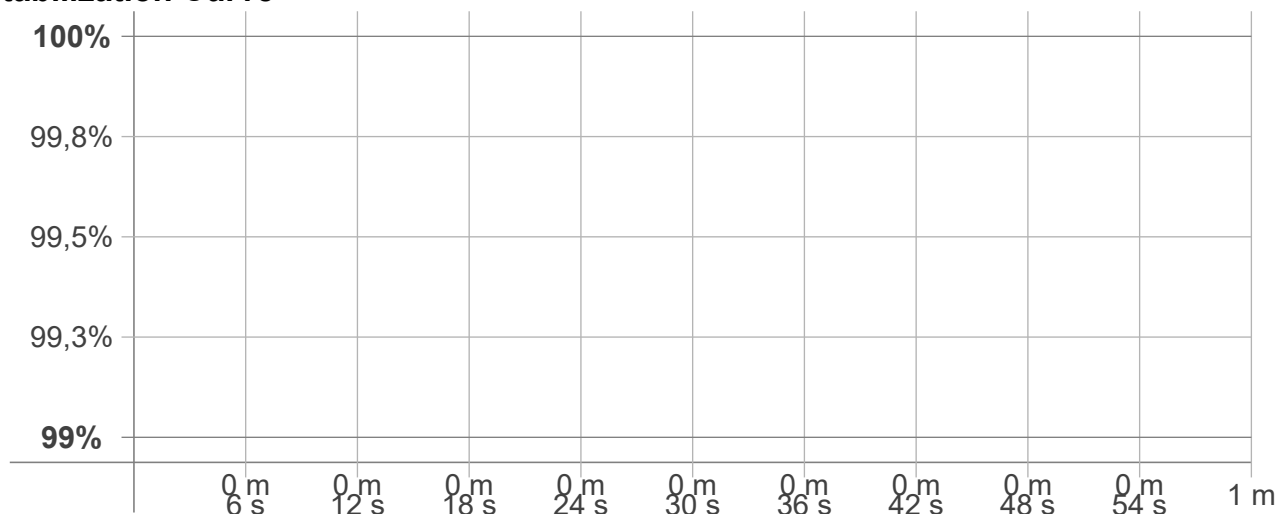
Warmup Result

Total warmup time	n/a
Warmup variation	n/a%

Output Change

Output start	n/a lm
Output change	n/a lm
Output end	487 lm

Stabilization Curve



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Flicker TLA details

Flicker Meter Type	Viso Systems LabFlicker
Frequency of input power	0 Hz
Flicker/TLA sample rate	n/a samples/s

Measurement time	
PstLM	180 sec.
All other indices	1,5 sec,

Flicker indices according to Illuminating Engineering Society

Flicker frequency	n/a Hz
Percent Flicker	n/a %
Flicker index	n/a

Flicker indices according to California Energy Commission (CEC)

JA8/10 40 Hz	n/a %
JA8/10 90 Hz	n/a %
JA8/10 200 Hz	n/a %
JA8/10 400 Hz	n/a %
JA8/10 1000 Hz	n/a %

TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC

PstLM value ($F < 80$ Hz)	n/a
SVM value ($80 < F < 2000$ Hz)	n/a

Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp	n/a
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Flicker frame (frame of one flicker period in time domain)



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

