Prudential Lighting

Light measurement results

Print date 8/10/2026

Laboratory and Equipment

Test lab	Viso LabSpion - serial: 2435469709 sensor serial: 0895736217 - T
Spectrometer Manufacturer and Model	LabSpion – Type C, horizontal
Measurement date	8/4/2026

Measurement Conditions

Tested c-planes	72 planes – 5.00°
Tested gamma resolution	1.00°
Input Power	15.63 W

Tested Light Source

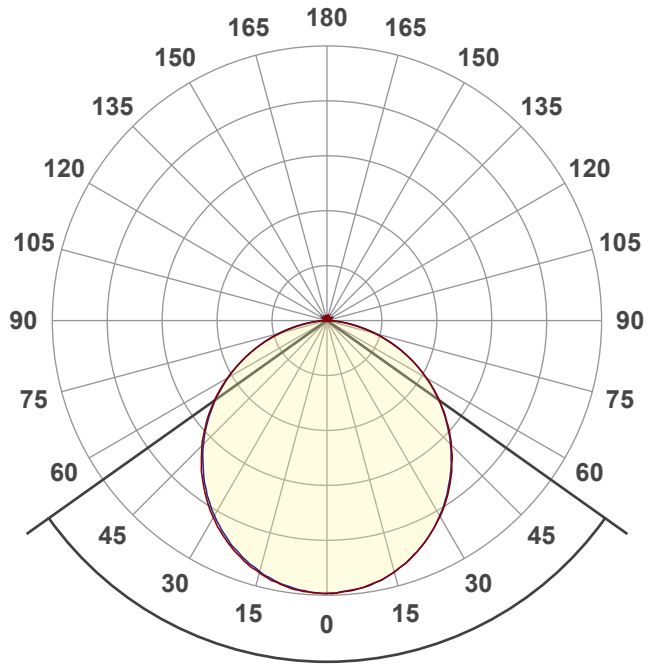
Luminaire	WETBPRO4-LIN-FLSH-LED35-LO-04-SAL-NU-SC-DM01
Basic Luminous Shape	NONE
Item No.	
Manufacturer	Prudential Lighting
Description	

Main Light Measurement Results

Output – Total Lumen (Up% / Down%)	2027 lm – 1.645% / 98.36%
Efficiency	129.6 lm/W
Peak Intensity	723.9 cd
Correlated Color Temperature, CCT	3461 K
Color Rendering Index	CRI 84.9

Polar light distribution diagram

Unit: 0-100% of peak intensity



109.2°

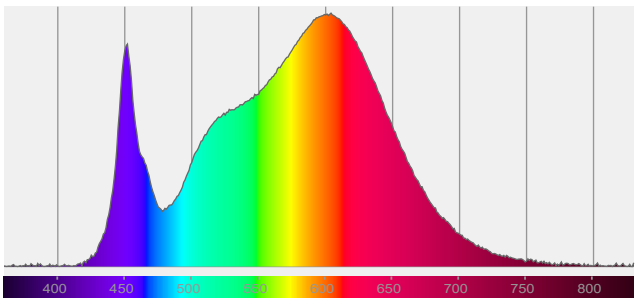
C0 - C180
C90 - C270

η = 100%

Zonal Lumen Summary:

VA/HA	0°	22.5°	45°	67.5°	90°
0°	722.3 cd	722.3 cd	722.3 cd	722.3 cd	722.3 cd
5°	718.3 cd	718.4 cd	719.2 cd	718.2 cd	716.4 cd
15°	689.3 cd	689 cd	689.3 cd	688 cd	688.7 cd
25°	633.7 cd	633 cd	632.3 cd	631.4 cd	633.2 cd
35°	559.1 cd	555.4 cd	554.8 cd	554.1 cd	555.8 cd
45°	465.5 cd	462.1 cd	460.4 cd	459 cd	462.3 cd
55°	361.1 cd	358.4 cd	354.8 cd	355.6 cd	358.6 cd
65°	247.8 cd	246 cd	243.1 cd	245.5 cd	247.2 cd
75°	130.3 cd	131 cd	131.1 cd	134.1 cd	134.8 cd
85°	25.53 cd	31.2 cd	34.24 cd	34.26 cd	32.47 cd
90°	4.076 cd	3.876 cd	3.687 cd	4.552 cd	1.939 cd

Spectral power distribution



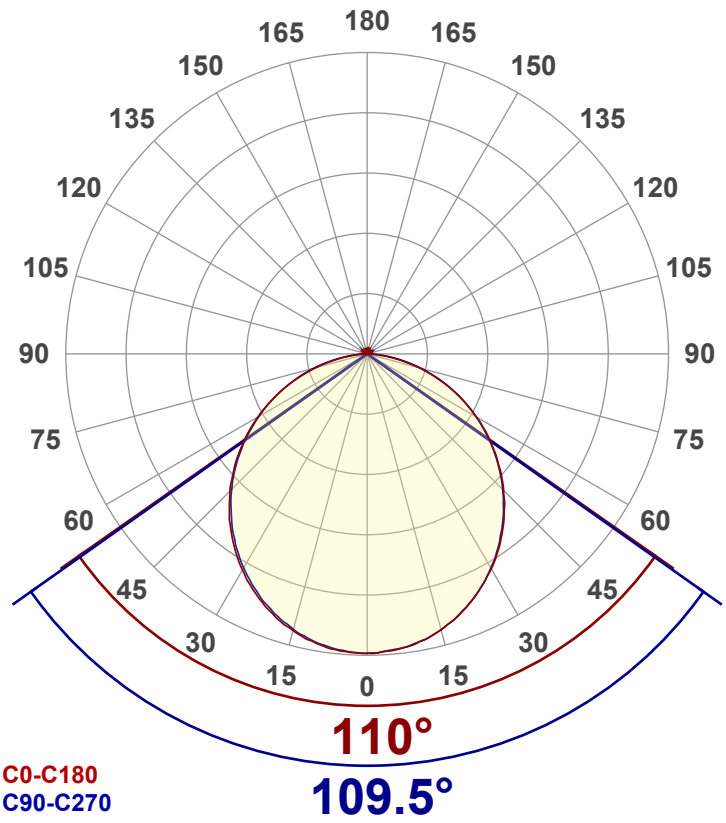
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Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	2027 lm
Lumen Up% / Down%	1.645% / 98.36%
Peak Intensity	723.9 cd
Beam Angle (50%-FWHM)	109.2°

EU Ecodesign parameters

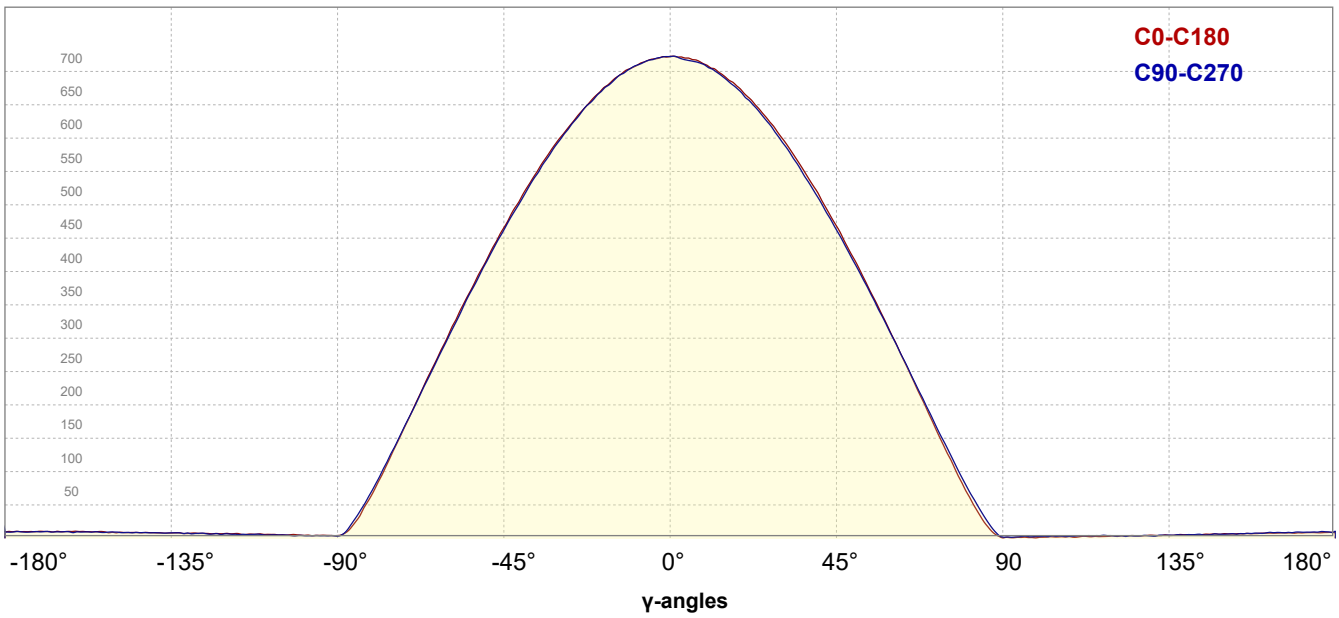
Directionality (DLS or NDLS)	NDLS
Ecodesign Useful Luminous Flux	2027 lm
Ecodesign Energy Class	E

Intensity Ratio

In 120° cone	77.82%
In 90° cone	53.38%

Linear distribution diagram

Intensity [cd]

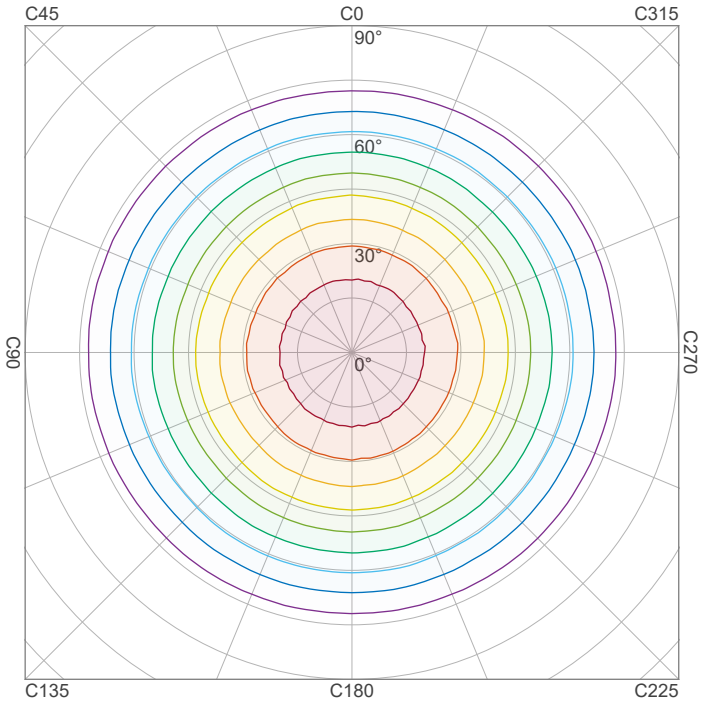


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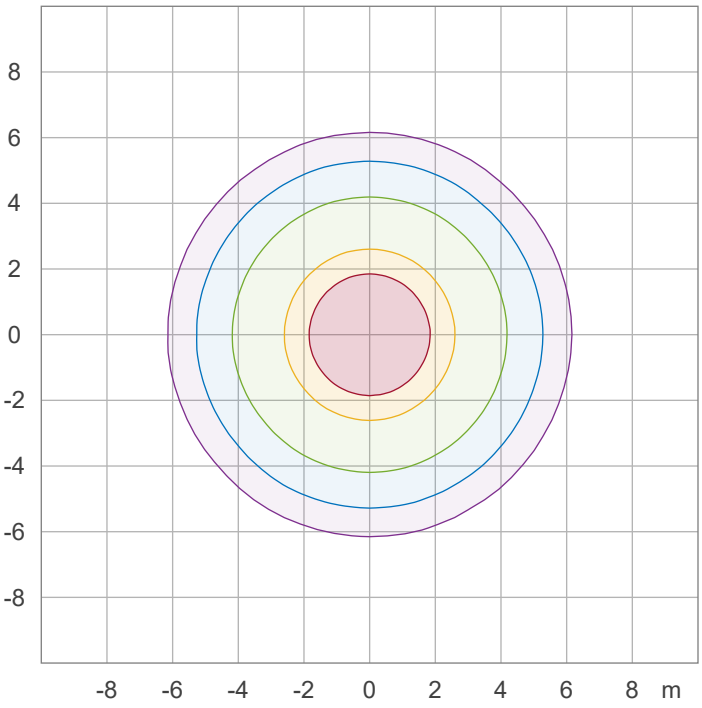
Iso-intensity Diagram (Iso-candela)



90 %	651.2 cd
80 %	578.9 cd
70 %	506.5 cd
60 %	434.1 cd
50 %	361.8 cd
40 %	289.4 cd
30 %	217.1 cd
20 %	144.7 cd
10 %	72.4 cd

Peak intensity: 723.6 cd
Number of c-planes: 72

Iso-illuminance Diagram (Iso-lux)



50.0 %	40.2 lx
30.0 %	24.1 lx
10.0 %	8.04 lx
5.0 %	4.02 lx
3.0 %	2.41 lx

Peak illuminance: 80.4 lx
Mounting height: 3 m
Number of c-planes: 72

Prudential Lighting

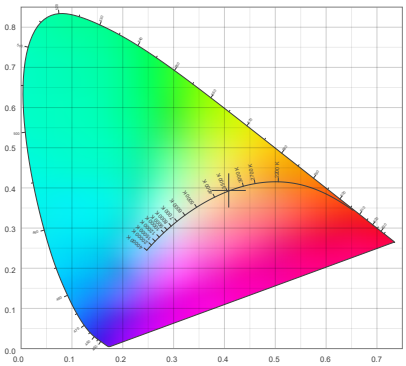
Light measurement results

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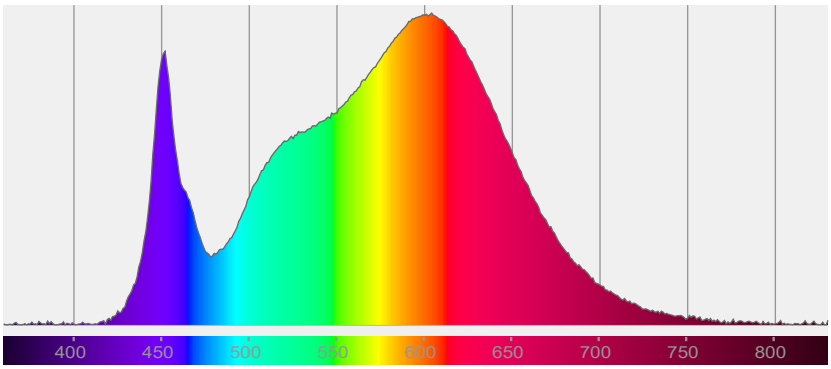
Color details

Correlated Color Temperature, Target	CCT = 3461 K	MacAdam Steps	SDCM = NaN
Correlated Color Temperature, Measured	CCT = 3461 K	Color deviation from BBL	Duv = 0.0006
Color Rendering Index	CRI 84.9	Color coordinates CIE 1931	(x;y) = (0.4084;0.3937)
Color Rendering Index, R9 (red)	R9 = 14.1	Color coordinate CIEs 1960	(u;v) = (0.2365;0.3420)
Color Rendering TM30-18	Rf 85.8	Color coordinate CIEs 1976	(u';v') = (0.2365;0.5130)
	Rg 95.9	Color Quality Scale	CQS = 84.5

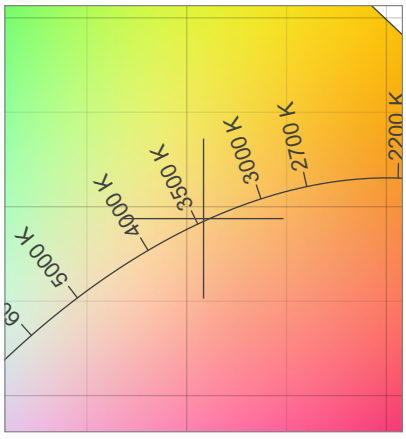
CIE 1931 Chromaticity diagram



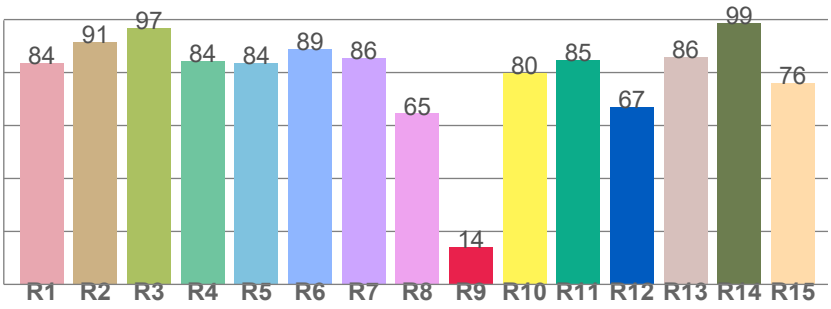
Spectral power distribution



CIE 1931 Chromaticity - zoomed



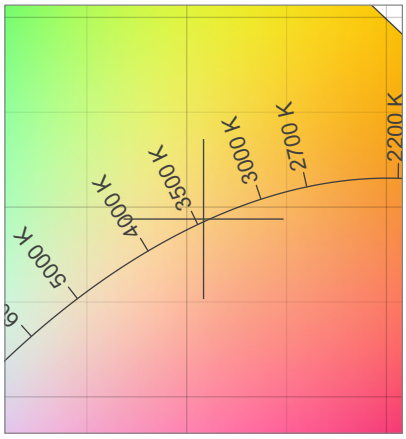
Color Rendering Index per reference color (CIE 1995)



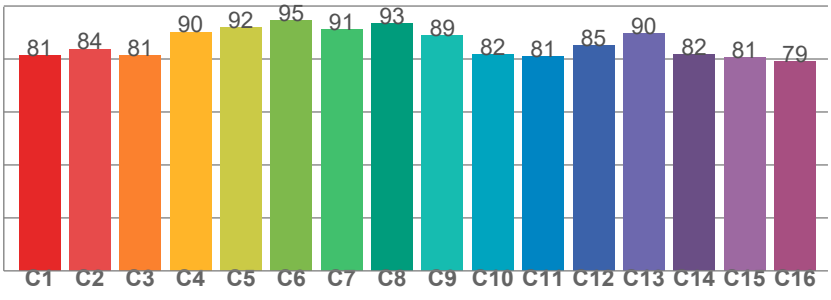
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
83.7	91.4	96.9	84.3	83.7	89.0	85.6	64.5	14.1	80.0	84.7	67.0	85.7	98.7	75.9

CIE 1931 Chromaticity - SDCM



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
81.4	83.8	81.3	90.2	92.0	94.6	91.2	93.4	89.0	81.7	80.9	85.0	89.6	81.6	80.7	79.0

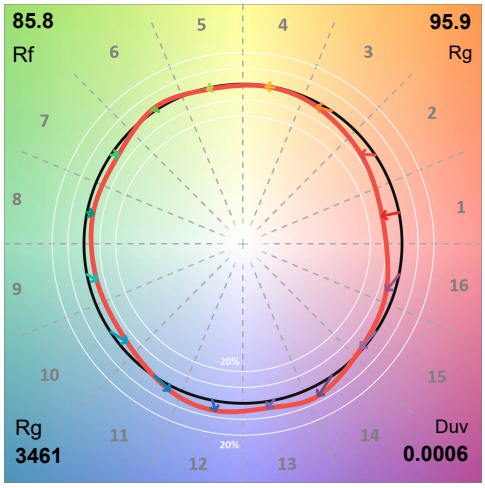
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Color details - ANSI/IES TM-30-18 Color Rendition Report

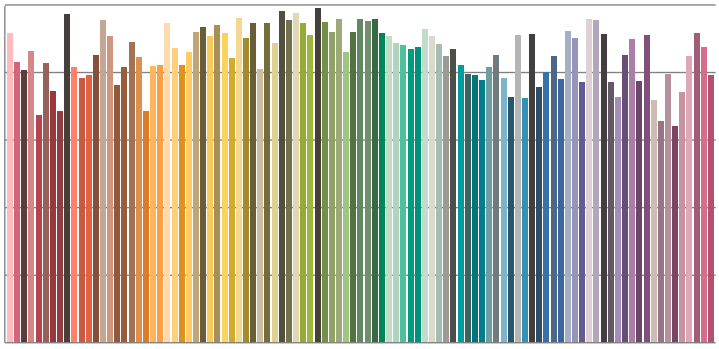
Color Vector Graphic



Color Distortion Graphic

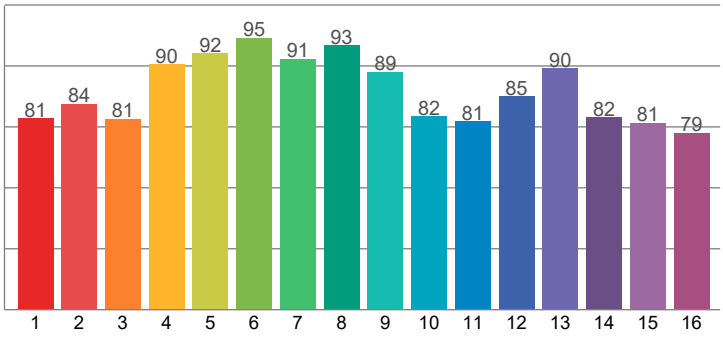


Color Rendition by Color Evaluation Sample (CES)



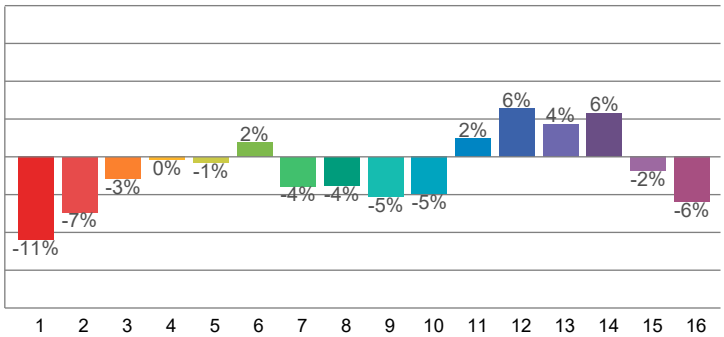
Color evaluation sample CES01 through CES99

Local Color Fidelity (per hue bin)



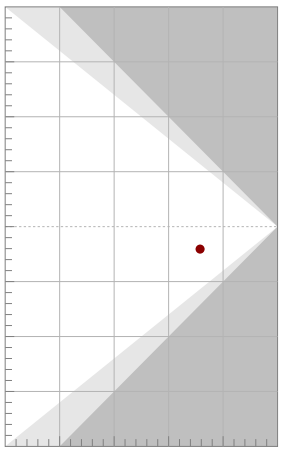
Hue angle bin (j)

Local Chroma Shift (per hue bin)



Hue angle bin (j)

Gamut Index vs. Fidelity Index



Gamut index (Rg)

Fidelity index (Rf)

CIE x	0.4084
CIE y	0.4084
CIE u'	0.2365
CIE v'	0.5130

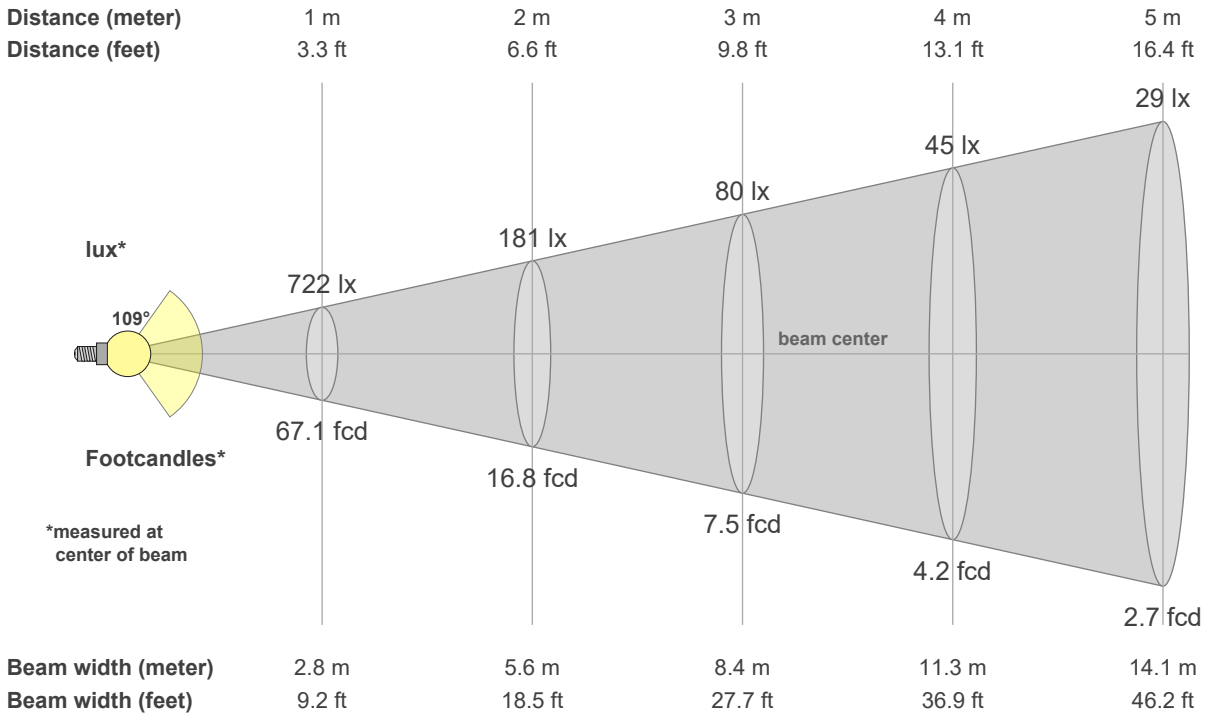
CIE	13.3-1995
Ra	84.9
R9	14.1

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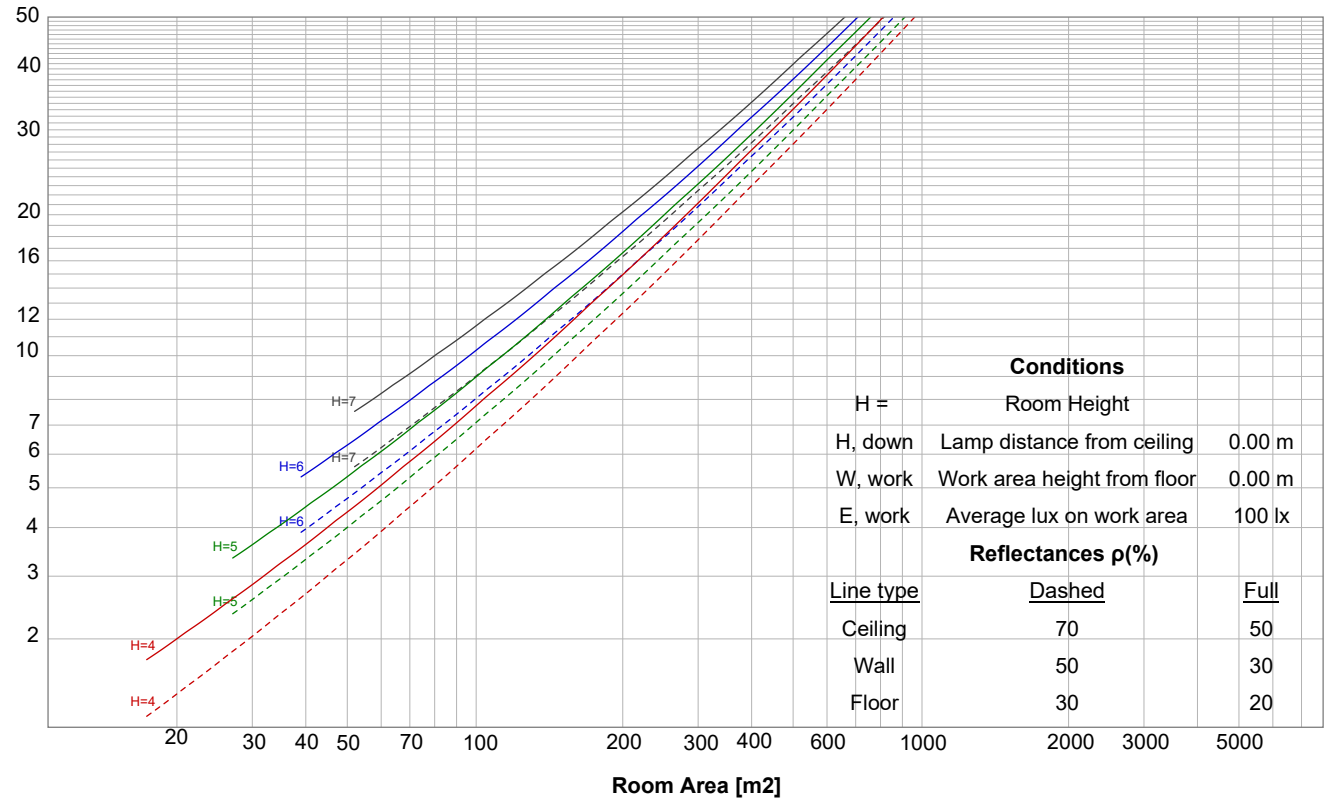
Print date 8/10/2026

Beam details



Luminaire budgetary diagram

LAMPS (number of lamps)



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
722	181	80	45	29	20	15	11	9	7	6	5	4	4	3	3	2	2	2	2	lux
67.1	16.8	7.5	4.2	2.7	1.9	1.4	1	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.3	0.2	0.2	0.2	0.2	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
722	718	706	689	664	634	599	559	514	465	414	361	305	248	188	130	73	26	4	4	cd
100%	99%	98%	95%	92%	88%	83%	77%	71%	64%	57%	50%	42%	34%	26%	18%	10%	4%	1%	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
722	716	707	689	663	633	597	556	511	462	411	359	303	247	191	135	80	32	2	3	cd
100%	99%	98%	95%	92%	88%	83%	77%	71%	64%	57%	50%	42%	34%	26%	19%	11%	4%	0%	0%	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
722	720	709	691	667	637	602	561	518	468	416	361	304	246	186	127	71	24	1	1	cd
100%	100%	98%	96%	92%	88%	83%	78%	72%	65%	58%	50%	42%	34%	26%	18%	10%	3%	0%	0%	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
722	717	707	688	663	631	596	555	510	462	411	358	301	245	188	132	78	31	3	4	cd
100%	99%	98%	95%	92%	87%	83%	77%	71%	64%	57%	50%	42%	34%	26%	18%	11%	4%	0%	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 = mouting 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	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 light source dimensions. Go to Edit -> Photometric -> Dimensions and set the source dimensions.

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	118.7	118.7	118.7	118.7	115.7	115.7	115.7	115.7	110.2	110.2	110.2	105.2	105.2	105.2	100.5	100.5	100.5	98.4
1	108.4	103.6	99.4	95.5	105.5	101.2	97.3	93.8	96.7	93.5	90.5	92.5	89.9	87.5	88.6	86.5	84.6	82.4
2	98.6	90.3	83.5	77.8	95.8	88.3	82.0	76.7	84.5	79.2	74.7	81.0	76.6	72.7	77.7	74.1	70.9	68.6
3	89.9	79.3	71.2	64.7	87.2	77.6	70.1	64.0	74.4	67.9	62.6	71.4	65.9	61.3	68.7	64.0	60.1	57.8
4	82.3	70.3	61.5	54.8	79.8	68.8	60.7	54.3	66.1	59.0	53.4	63.6	57.5	52.5	61.2	56.0	51.6	49.4
5	75.7	62.8	53.8	47.2	73.4	61.6	53.2	46.9	59.3	51.9	46.2	57.1	50.6	45.5	55.1	49.4	44.9	42.7
6	69.9	56.6	47.6	41.2	67.8	55.5	47.1	40.9	53.5	46.0	40.5	51.7	45.0	40.0	50.0	44.1	39.5	37.4
7	64.8	51.3	42.5	36.4	62.9	50.4	42.1	36.2	48.7	41.2	35.8	47.1	40.4	35.4	45.6	39.6	35.1	33.1
8	60.3	46.8	38.3	32.5	58.6	46.0	37.9	32.3	44.6	37.2	32.0	43.2	36.6	31.7	41.9	35.9	31.4	29.5
9	56.4	43.0	34.8	29.2	54.8	42.3	34.5	29.1	41.0	33.9	28.9	39.8	33.3	28.6	38.7	32.7	28.4	26.5
10	52.8	39.6	31.7	26.5	51.5	39.1	31.5	26.4	38.0	31.0	26.2	36.9	30.5	26.0	35.9	30.0	25.8	24.0

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Power details

Input power	
Frequency of input power	60.0 Hz
Power feed to light source	15.63 W
RMS Input voltage feed V,RMS	120 V
RMS Input current feed I,RMS	0.13 A
Volt-Amp or apparent power = V,RMS*I,RMS	15.8 VA
Displacement factor of AC power feed	0.99
Power factor of AC current feed	0.99
Total harmonic distortion of the current	6.445%
Total harmonic distortion of the voltage	0.1059%

Input power curve



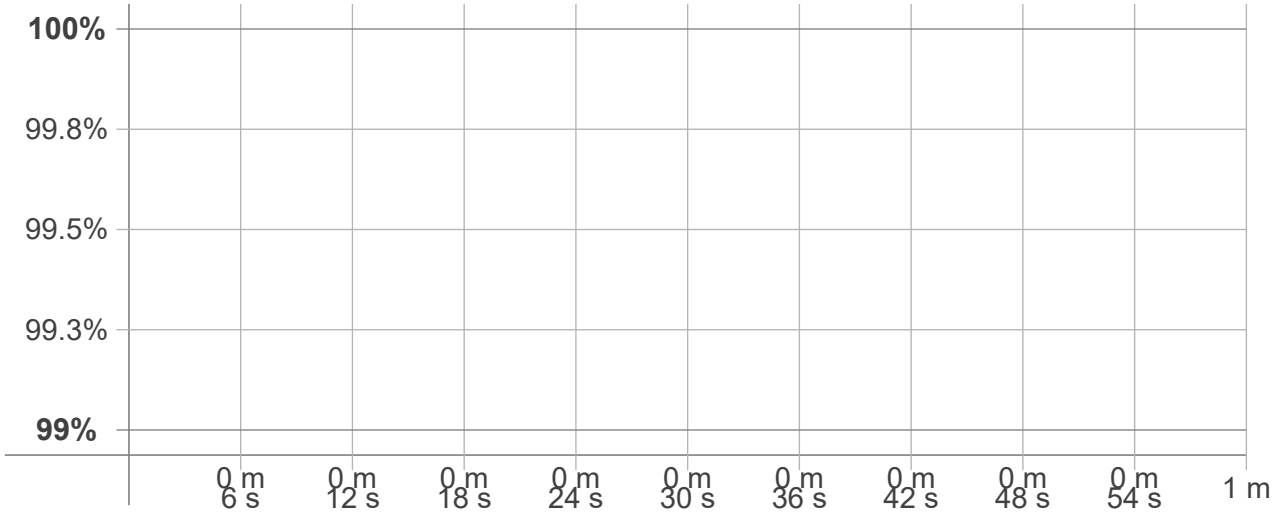
Efficiency

Radiated power efficiency	38.98
Lumen efficiency	129.6 lm/W

Stabilization details

Warmup Conditions		Color Temperature Change	
Stable period	n/a	CCT start	NaN K
Stable change max	n/a%	CCT shift	NaN K
Minimum time	n/a	CCT end	3461 K
Warmup Result		**Output Change**	
Total warmup time	n/a	Output start	NaN lm
Warmup variation	NaN%	Output change	NaN lm
		Output end	2027 lm

Stabilization Curve



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Flicker TLA details

Flicker Meter Type	Viso Systems LabFlicker
Frequency of input power	60.0 Hz
Flicker/TLA sample rate	NaN samples/s

Measurement time

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

Flicker indices according to Illuminating Engineering Society (IES)

Flicker frequency	NaN Hz
Percent Flicker	NaN %
Flicker index	NaN

TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC 61000-4-15)

PstLM value (F < 80 Hz)	NaN
SVM value (80 < F < 2000 Hz)	NaN

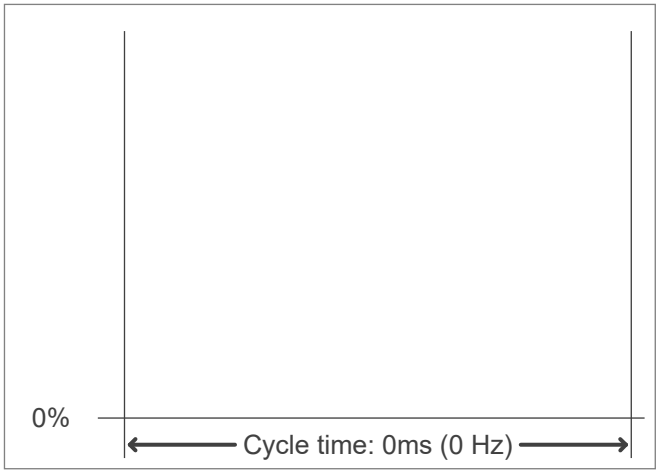
Flicker indices according to California Energy Commission (CEC) 2016b

JA8/10 40 Hz	NaN %
JA8/10 90 Hz	NaN %
JA8/10 200 Hz	NaN %
JA8/10 400 Hz	NaN %
JA8/10 1000 Hz	NaN %

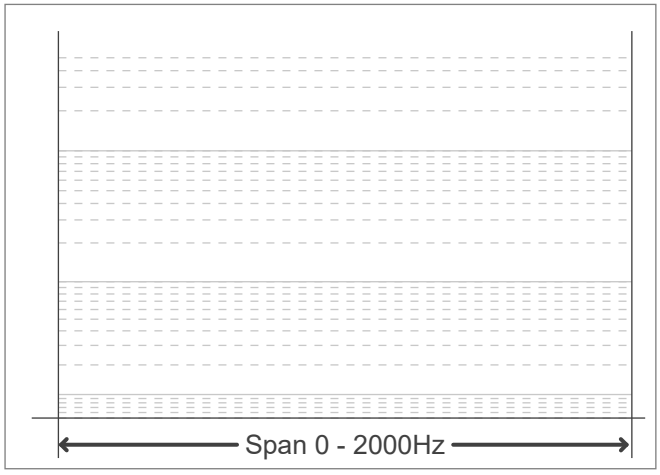
Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp	NaN

Flicker frame (frame of one flicker period in time domain)



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

