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	42.89 W

Tested Light Source

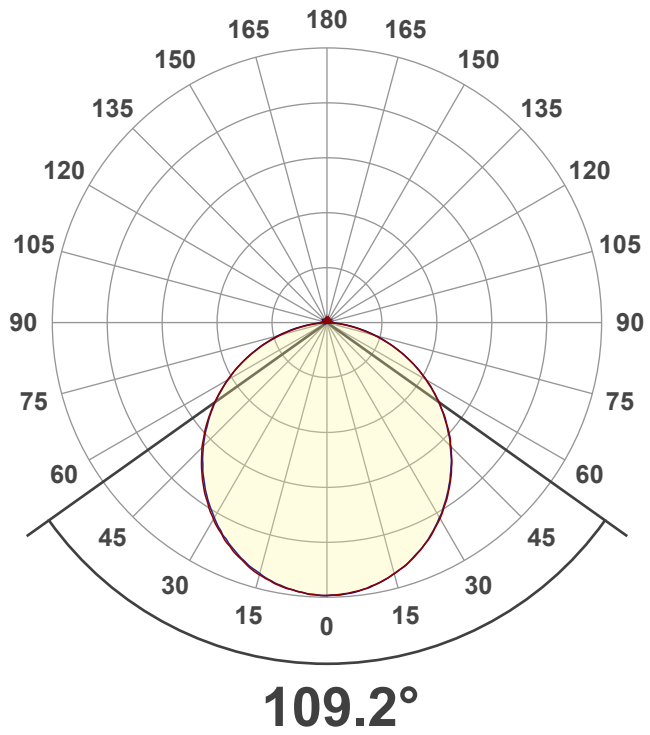
Luminaire	WETBPRO4-LIN-FLSH-LED35-HO-04-SAL-NU-SC-DM01
Basic Luminous Shape	NONE
Item No.	
Manufacturer	Prudential Lighting
Description	

Main Light Measurement Results

Output – Total Lumen (Up% / Down%)	4976 lm – 2.777% / 97.22%
Efficiency	116 lm/W
Peak Intensity	1758 cd
Correlated Color Temperature, CCT	3485 K
Color Rendering Index	CRI 84.4

Polar light distribution diagram

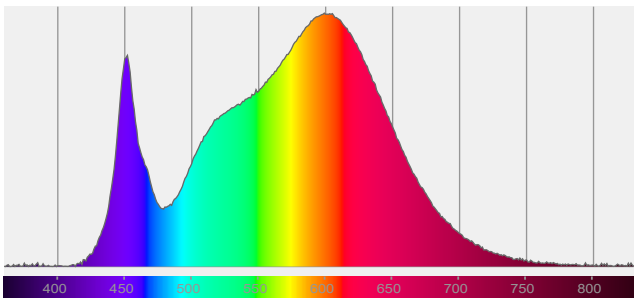
Unit: 0-100% of peak intensity



Zonal Lumen Summary:

VA/HA	0°	22.5°	45°	67.5°	90°
0°	1754 cd	1754 cd	1754 cd	1754 cd	1754 cd
5°	1743 cd	1743 cd	1744 cd	1745 cd	1746 cd
15°	1671 cd	1672 cd	1673 cd	1670 cd	1671 cd
25°	1541 cd	1538 cd	1534 cd	1532 cd	1538 cd
35°	1354 cd	1350 cd	1340 cd	1343 cd	1347 cd
45°	1127 cd	1121 cd	1110 cd	1113 cd	1120 cd
55°	874.9 cd	871.6 cd	859.3 cd	863.3 cd	869.4 cd
65°	599.5 cd	597.7 cd	587.3 cd	592.9 cd	598.6 cd
75°	314.5 cd	319.2 cd	317 cd	322.4 cd	323.7 cd
85°	61.97 cd	76.86 cd	84.17 cd	82.93 cd	79.3 cd
90°	9.114 cd	9.82 cd	8.735 cd	9.172 cd	2.952 cd

Spectral power distribution



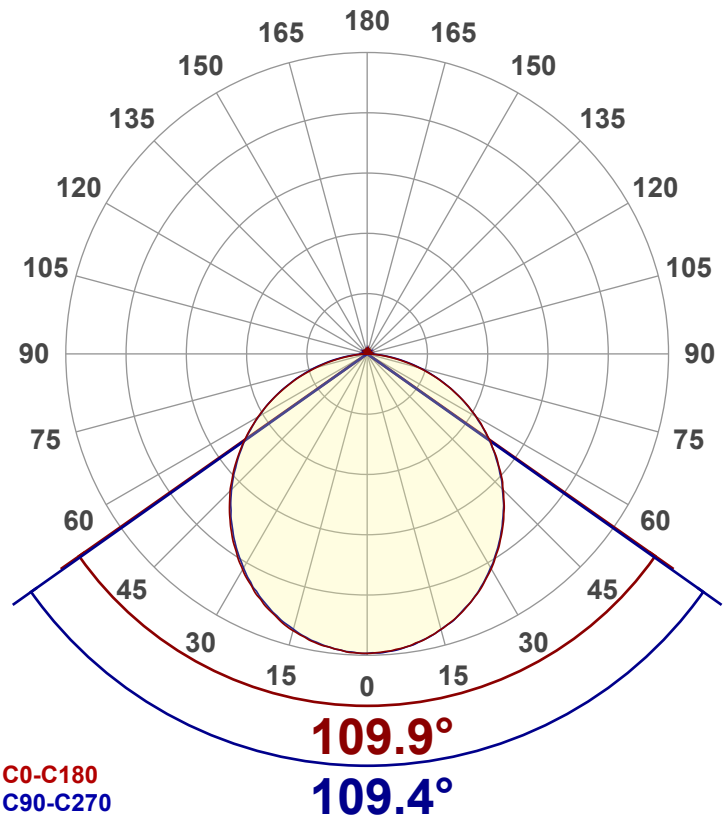
Prudential Lighting

Light measurement results

Print date 8/10/2026

Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	4976 lm
Lumen Up% / Down%	2.777% / 97.22%
Peak Intensity	1758 cd
Beam Angle (50%-FWHM)	109.2°

EU Ecodesign parameters

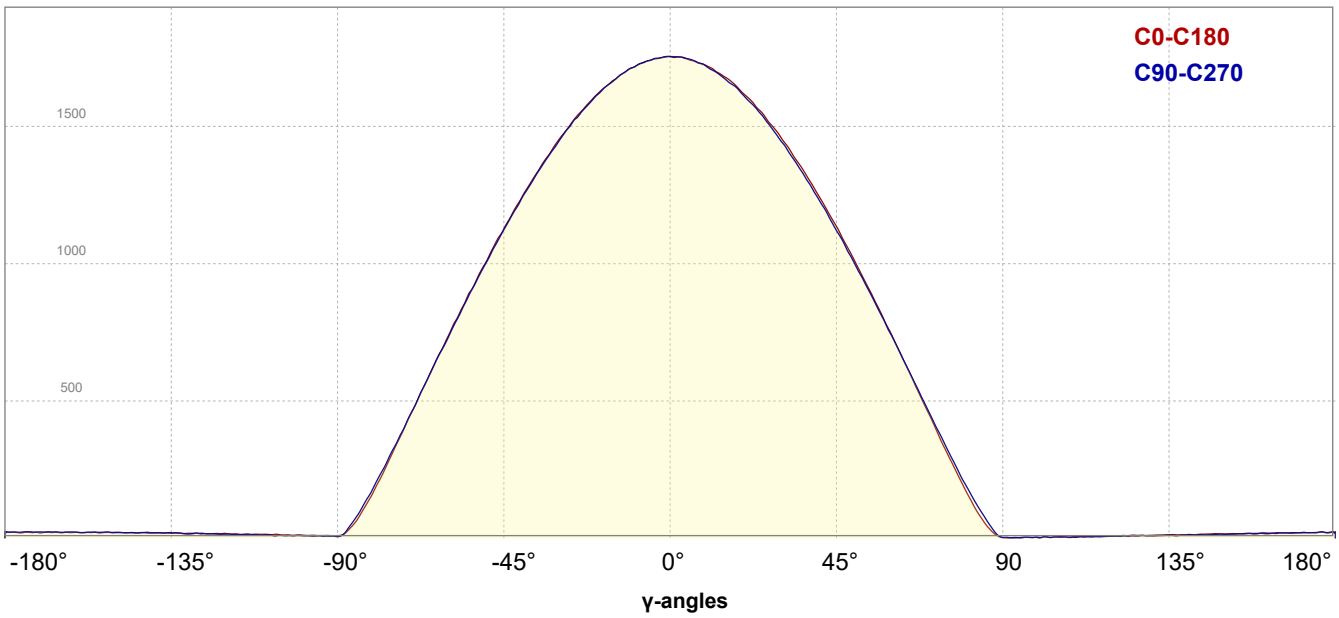
Directionality (DLS or NDLS)	NDLS
Ecodesign Useful Luminous Flux	4976 lm
Ecodesign Energy Class	E

Intensity Ratio

In 120° cone	76.94%
In 90° cone	52.79%

Linear distribution diagram

Intensity [cd]

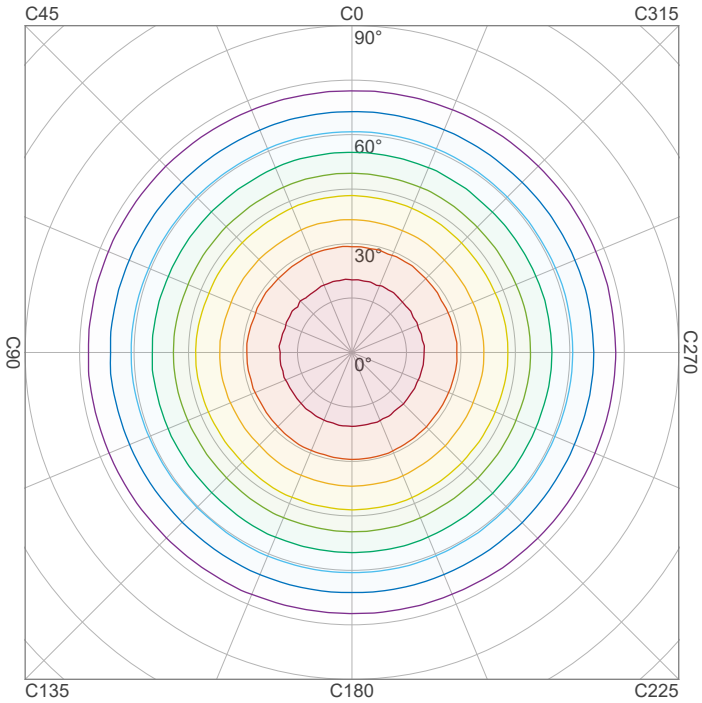


Prudential Lighting

Light measurement results

Print date 8/10/2026

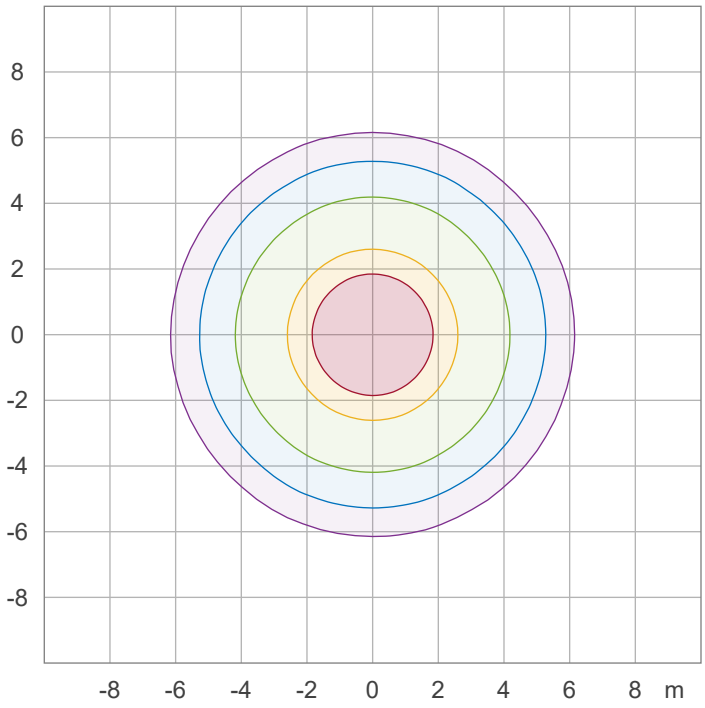
Iso-intensity Diagram (Iso-candela)



90 %	1582.2 cd
80 %	1406.4 cd
70 %	1230.6 cd
60 %	1054.8 cd
50 %	879.0 cd
40 %	703.2 cd
30 %	527.4 cd
20 %	351.6 cd
10 %	175.8 cd

Peak intensity: 1758.0 cd
Number of c-planes: 72

Iso-illuminance Diagram (Iso-lux)



50.0 %	97.6 lx
30.0 %	58.6 lx
10.0 %	19.5 lx
5.0 %	9.76 lx
3.0 %	5.86 lx

Peak illuminance: 195 lx
Mounting height: 3 m
Number of c-planes: 72

Prudential Lighting

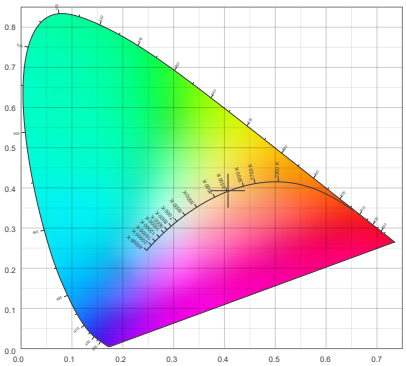
Light measurement results

Print date 8/10/2026

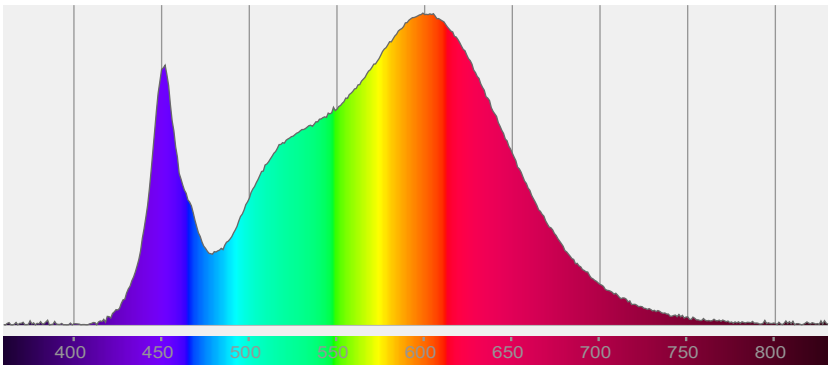
Color details

Correlated Color Temperature, Target	CCT = 3485 K	MacAdam Steps	SDCM = NaN
Correlated Color Temperature, Measured	CCT = 3485 K	Color deviation from BBL	Duv = 0.0006
Color Rendering Index	CRI 84.4	Color coordinates CIE 1931	(x;y) = (0.4070;0.3930)
Color Rendering Index, R9 (red)	R9 = 12.3	Color coordinate CIEs 1960	(u;v) = (0.2359;0.3417)
Color Rendering TM30-18	Rf 85.6	Color coordinate CIEs 1976	(u';v') = (0.2359;0.5125)
	Rg 95.9	Color Quality Scale	CQS = 84.2

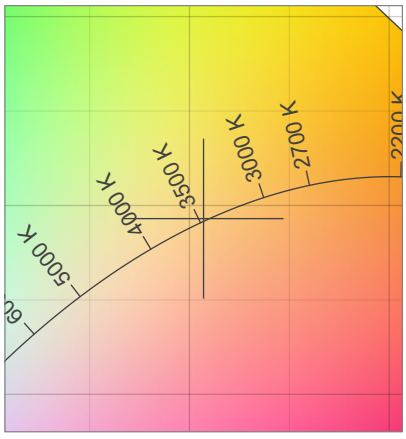
CIE 1931 Chromaticity diagram



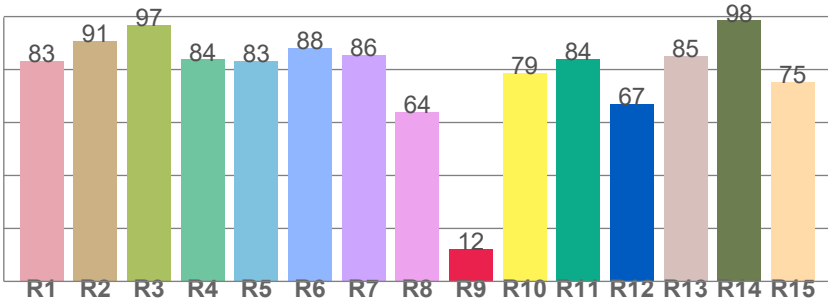
Spectral power distribution



CIE 1931 Chromaticity - zoomed



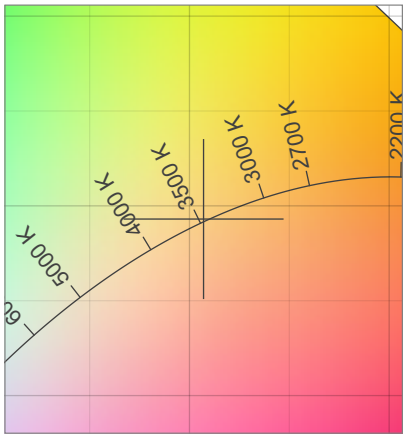
Color Rendering Index per reference color (CIE 1995)



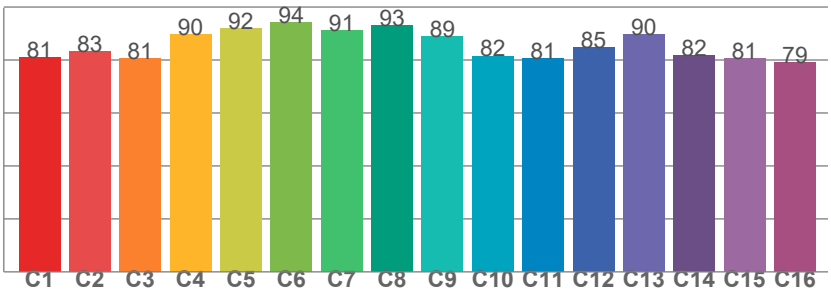
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
83.0	90.9	96.7	83.8	83.0	88.2	85.5	64.0	12.3	78.7	83.8	67.0	85.1	98.5	75.3

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
81.1	83.3	80.6	89.7	92.0	94.3	91.0	93.2	89.0	81.5	80.7	84.9	89.7	81.7	80.6	79.0

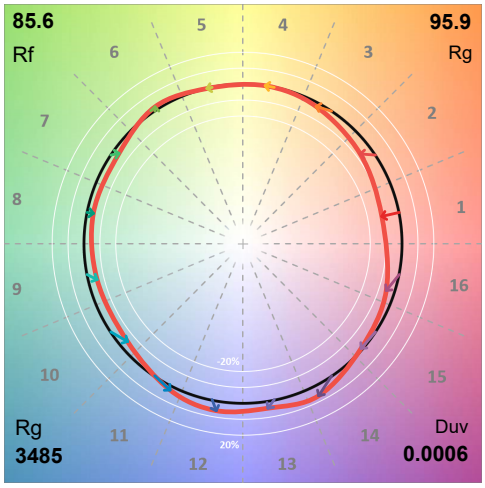
Prudential Lighting

Light measurement results

Print date 8/10/2026

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

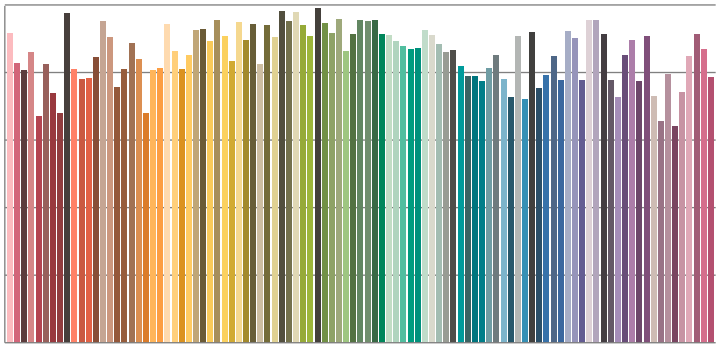
Color Vector Graphic



Color Distortion Graphic

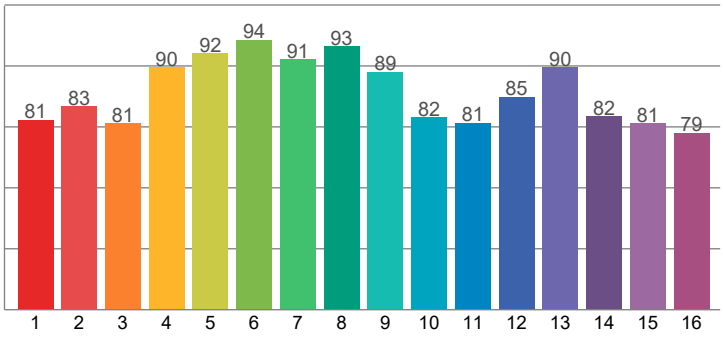


Color Rendition by Color Evaluation Sample (CES)



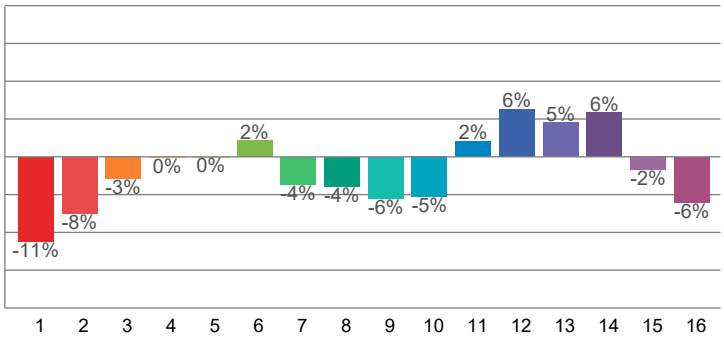
Color evaluation sample CES01 through CES99

Local Color Fidelity (per hue bin)



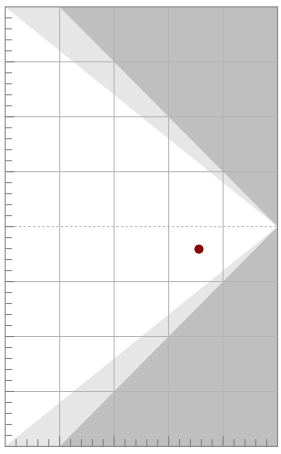
Hue angle bin (j)

Local Chroma Shift (per hue bin)



Hue angle bin (j)

Gamut Index vs. Fidelity Index



Gamut index (Rg)

Fidelity index (Rf)

CIE x	0.4070
CIE y	0.4070
CIE u'	0.2359
CIE v'	0.5125

CIE	13.3-1995
Ra	84.4
R9	12.3

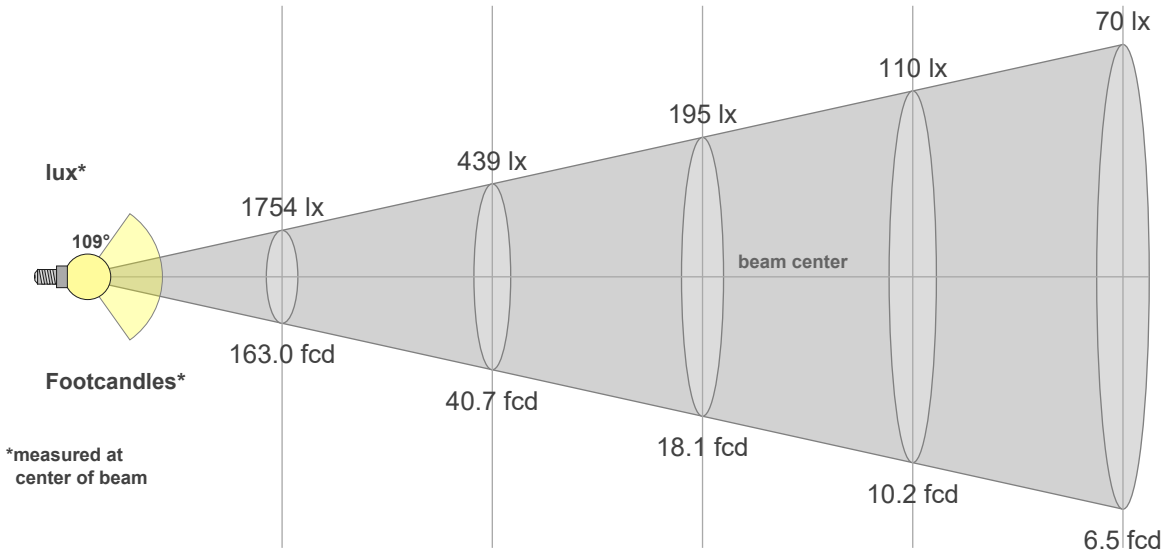
Prudential Lighting

Light measurement results

Print date 8/10/2026

Beam details

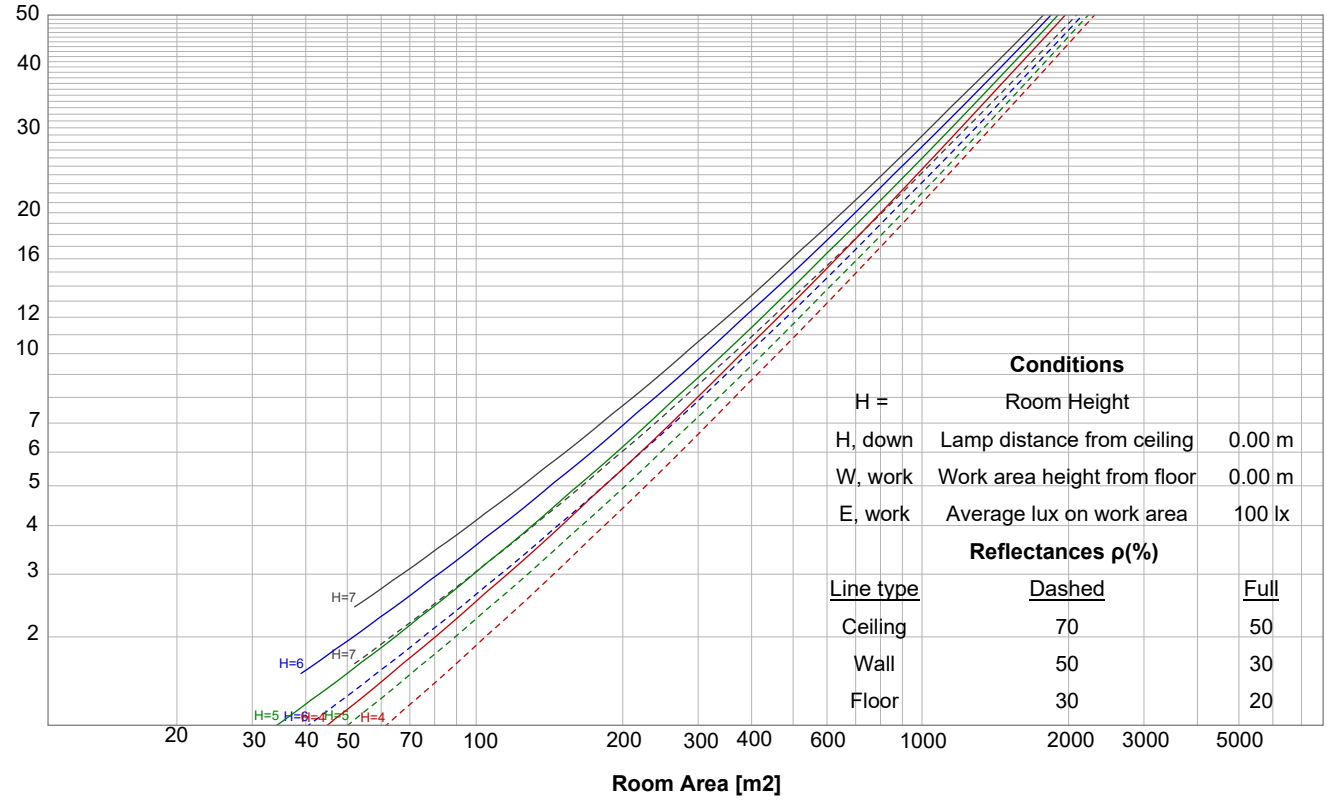
Distance (meter)	1 m	2 m	3 m	4 m	5 m
Distance (feet)	3.3 ft	6.6 ft	9.8 ft	13.1 ft	16.4 ft



Beam width (meter)	2.8 m	5.6 m	8.4 m	11.2 m	14.1 m
Beam width (feet)	9.2 ft	18.5 ft	27.7 ft	36.9 ft	46.1 ft

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
1754	439	195	110	70	49	36	27	22	18	14	12	10	9	8	7	6	5	5	4	lux
163	40.7	18.1	10.2	6.5	4.5	3.3	2.5	2	1.6	1.3	1.1	1	0.8	0.7	0.6	0.6	0.5	0.5	0.4	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
1754	1743	1715	1671	1614	1541	1454	1354	1245	1127	1002	875	738	599	457	315	177	62	9	10	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
1754	1746	1716	1671	1611	1538	1446	1347	1239	1120	998	869	736	599	460	324	193	79	3	2	cd
100%	100%	98%	95%	92%	88%	82%	77%	71%	64%	57%	50%	42%	34%	26%	18%	11%	5%	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
1754	1743	1720	1678	1617	1547	1459	1361	1252	1135	1008	875	738	596	453	308	173	58	3	3	cd
100%	99%	98%	96%	92%	88%	83%	78%	71%	65%	57%	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
1754	1742	1715	1669	1612	1534	1448	1349	1242	1123	998	869	733	598	459	323	192	76	6	9	cd
100%	99%	98%	95%	92%	87%	83%	77%	71%	64%	57%	50%	42%	34%	26%	18%	11%	4%	0%	1%	of 0°val

Prudential Lighting

Light measurement results

Print date 8/10/2026

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
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	118.4	118.4	118.4	118.4	115.3	115.3	115.3	115.3	109.6	109.6	109.6	104.3	104.3	104.3	99.5	99.5	99.5	97.2
1	108.2	103.4	99.1	95.3	105.1	100.9	97.0	93.5	96.1	92.9	90.0	91.7	89.2	86.8	87.7	85.6	83.7	81.4
2	98.4	90.1	83.3	77.6	95.5	88.0	81.8	76.5	84.0	78.8	74.3	80.3	76.0	72.2	76.9	73.3	70.2	67.8
3	89.7	79.1	71.0	64.5	86.9	77.4	69.8	63.8	74.0	67.6	62.3	70.9	65.4	60.8	68.0	63.4	59.5	57.2
4	82.1	70.1	61.4	54.7	79.6	68.6	60.5	54.1	65.7	58.7	53.1	63.1	57.0	52.1	60.6	55.4	51.1	48.8
5	75.5	62.7	53.7	47.1	73.2	61.4	53.0	46.7	58.9	51.6	45.9	56.7	50.2	45.2	54.5	48.9	44.4	42.2
6	69.7	56.4	47.5	41.1	67.6	55.3	46.9	40.8	53.2	45.8	40.2	51.3	44.7	39.6	49.5	43.6	39.1	37.0
7	64.6	51.1	42.4	36.3	62.7	50.2	41.9	36.1	48.4	41.0	35.6	46.7	40.1	35.2	45.2	39.2	34.7	32.7
8	60.2	46.7	38.2	32.4	58.4	45.9	37.8	32.2	44.3	37.0	31.8	42.8	36.3	31.5	41.5	35.5	31.1	29.2
9	56.2	42.8	34.7	29.1	54.6	42.1	34.3	29.0	40.8	33.7	28.7	39.5	33.0	28.4	38.3	32.4	28.1	26.2
10	52.7	39.5	31.6	26.4	51.3	38.9	31.4	26.3	37.7	30.8	26.0	36.6	30.3	25.8	35.6	29.7	25.5	23.8

Prudential Lighting

Light measurement results

Print date 8/10/2026

Power details

Input power	
Frequency of input power	60.0 Hz
Power feed to light source	42.89 W
RMS Input voltage feed V,RMS	120 V
RMS Input current feed I,RMS	0.36 A
Volt-Amp or apparent power = V,RMS*I,RMS	43.5 VA
Displacement factor of AC power feed	0.99
Power factor of AC current feed	0.99
Total harmonic distortion of the current	8.888%
Total harmonic distortion of the voltage	0.0724%

Input power curve



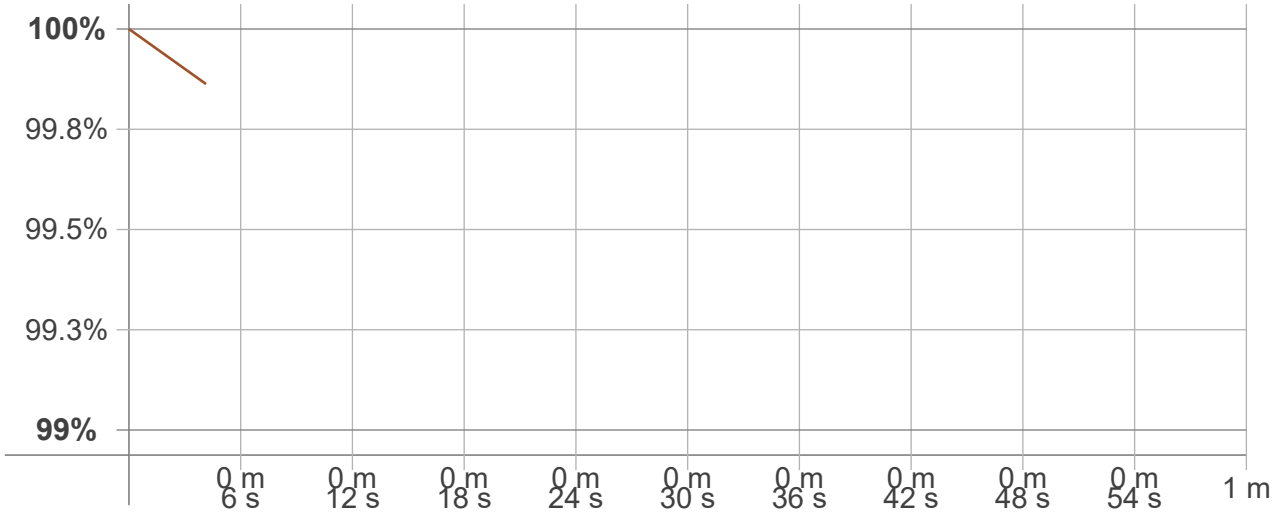
Efficiency

Radiated power efficiency	34.87
Lumen efficiency	116 lm/W

Stabilization details

Warmup Conditions		Color Temperature Change	
Stable period	15 min	CCT start	3485 K
Stable change max	1%	CCT shift	0 K
Minimum time	15 min	CCT end	3485 K
Warmup Result		**Output Change**	
Total warmup time	Not completed	Output start	4983 lm
Warmup variation	-0.1372%	Output change	-6.8346 lm
		Output end	4976 lm

Stabilization Curve



Prudential Lighting

Light measurement results

Print date 8/10/2026

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

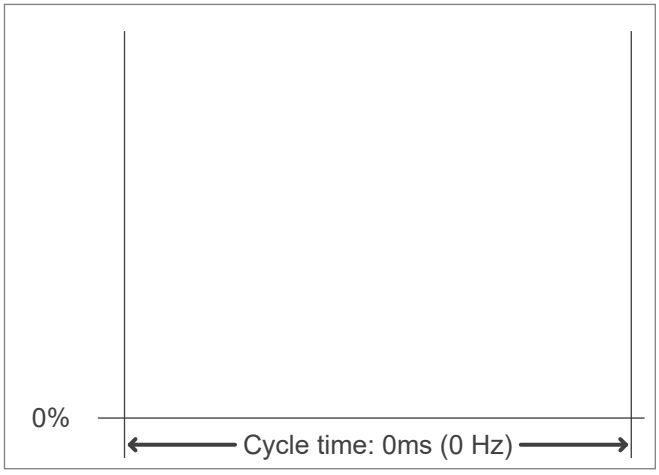
Flicker indices according to California Energy Commission (CEC) 2016b

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 %

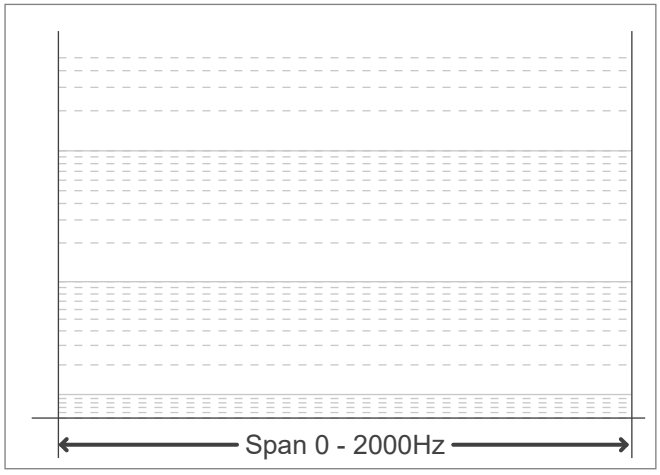
Flicker indices according to Lighting Research Center (2015)

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

