Photometric Test Report

FL25-G2-XXX-3083-1040-INF-XXXXX-X

Laboratory and Equipment

Test lab	Viso LabSpion - serial: 2007279764 sensor serial: 0690170290 - Test lab
Spectrometer Manufacturer and Model	LabSpion – Type C, horizontal
Measurement serial number	PH-GVA-2026.Apr.23-8116-VO
Measurement date	2026-04-23

Measurement Conditions

Tested c-planes	36 planes – 10.00°
Tested gamma resolution	0.50°
Input Power	29 W

Electrical Data

Input Power	29 W
Input Voltage	381.6 V DC
Input Current	0.08 A
Power Factor	1.00

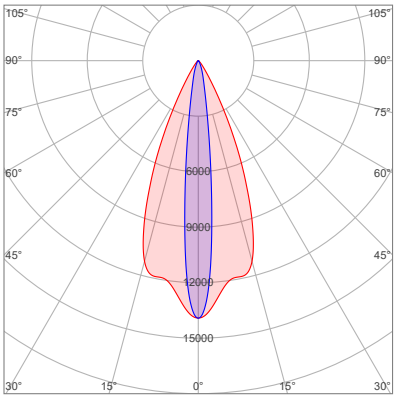
Tested Light Source

Product family	FL25-G2
Luminaire configuration	FL25-G2-XXX-3083-1040-INF-XXXXX-X
Manufacturer	GVA Lighting, Inc.
Size (width x length x height)	87 mm 0 mm x 190 mm

Main Light Measurement Results

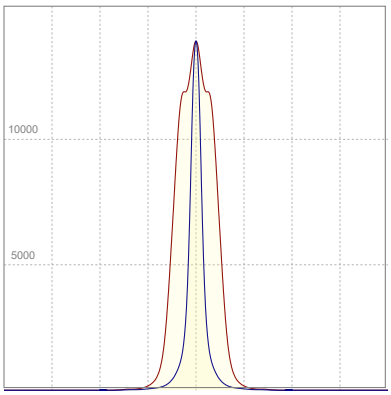
Output – Total Lumen (Up% / Down%)	2754 lm – 0%% / 100%%
Efficiency	94.95 lm/W
Peak Intensity	13915 cd
Correlated Color Temperature, CCT	2963 K
Color Rendering Index	CRI 82.7
Beam Angle (FWHM) | C0/180	43.0°
Beam Angle (FWHM) | C90/270	11.7°
Field Angle (10%) | C0/180	62.4°Unit: 0-100% of peak intensity
Field Angle (10%) | C90/270	26.4°
Optical Power	8263 mW
Peak Wavelength	606 nm
Dominant Wavelength	584 nm

Polar Light Distribution Diagram
Unit: 0-100% of peak intensity

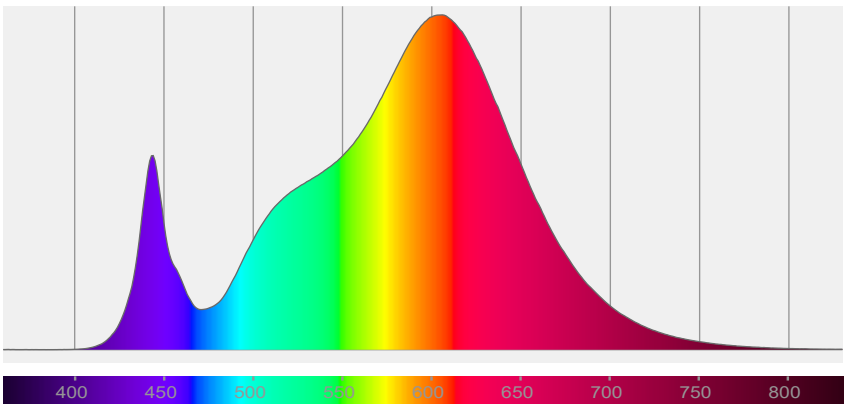


C0 - C180 η = 100%
C90 - C270

Linear distribution Diagram



Spectral Distribution



Color Temperature

2963 K

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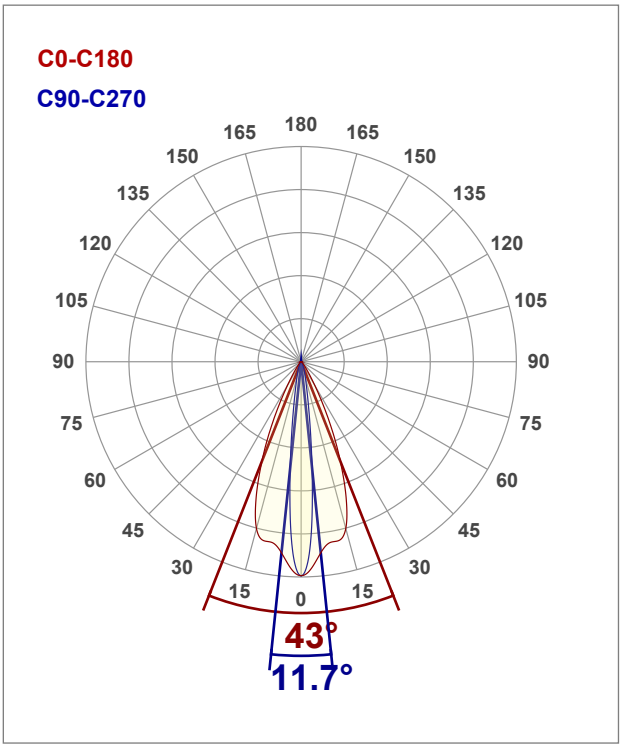
Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

Output (total Lumen)	2754 lm
Lumen Up% / Down%	0% / 100%
Peak Intensity	13915 cd
Beam Angle (50%-FWHM)	20.9°

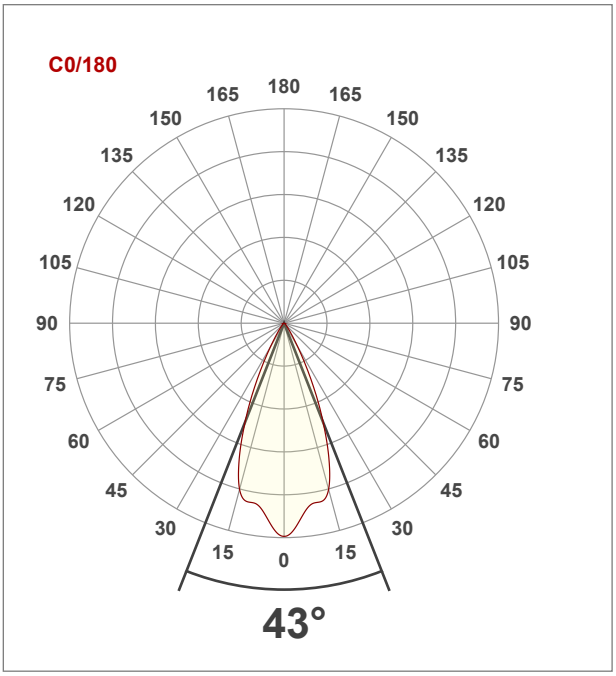
EU Ecodesign parameters

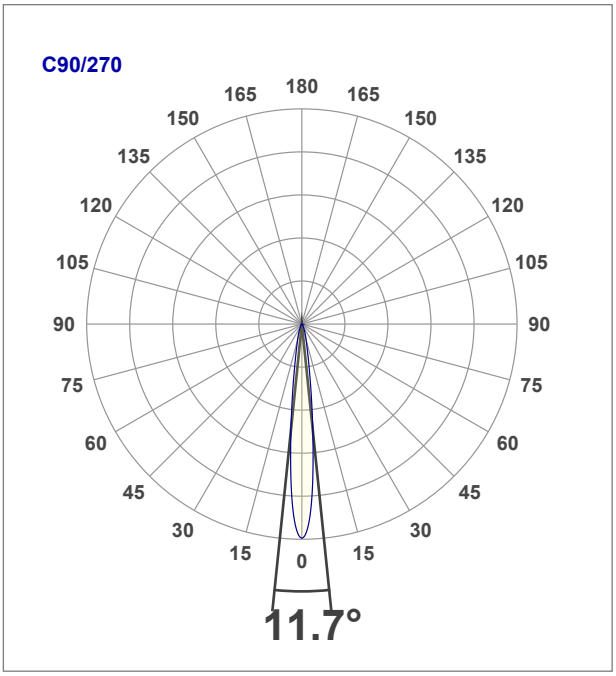
Directionality (DLS or NDLS)	DLS
Ecodesign Useful Luminous Flux	2673 lm
Ecodesign Energy Class	F

Intensity Ratio

In 120° cone	99.23%
In 90° cone	97.08%

Angular Distribution





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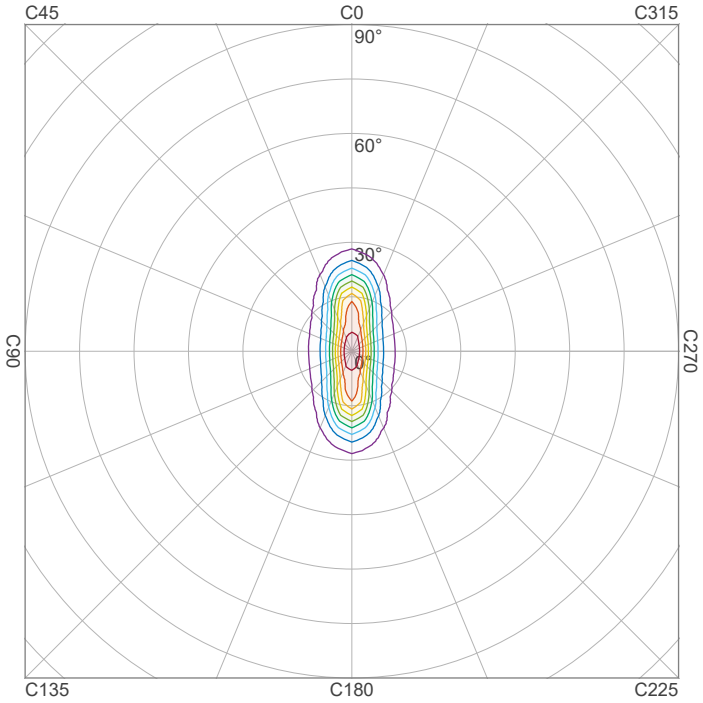
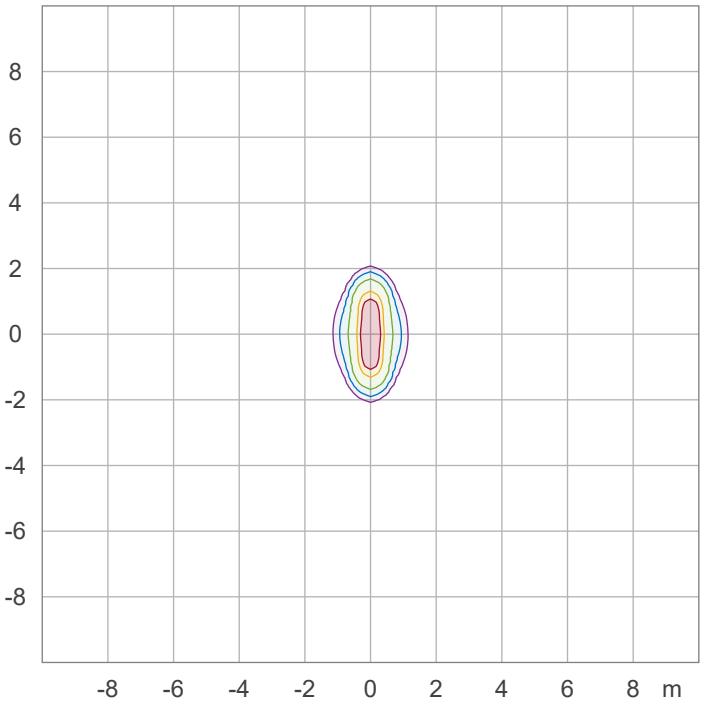
Iso-intensity Diagram (Iso-candela)



90 %	12512.9 cd
80 %	11122.6 cd
70 %	9732.3 cd
60 %	8342.0 cd
50 %	6951.6 cd
40 %	5561.3 cd
30 %	4171.0 cd
20 %	2780.7 cd
10 %	1390.3 cd

Peak intensity: 13903.3 cd
Number of c-planes: 36

Iso-illuminance Diagram (Iso-lux)



50.0 %	772 lx
30.0 %	463 lx
10.0 %	154 lx
5.0 %	77.2 lx
3.0 %	46.3 lx

Peak illuminance: 1545 lx
Mounting height: 3 m
Number of c-planes: 36

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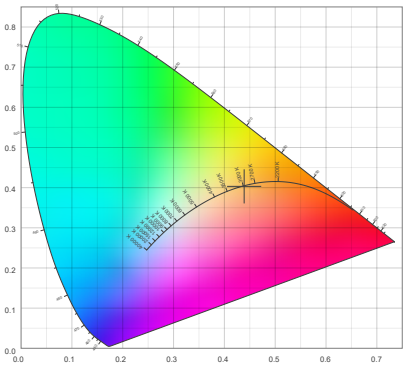
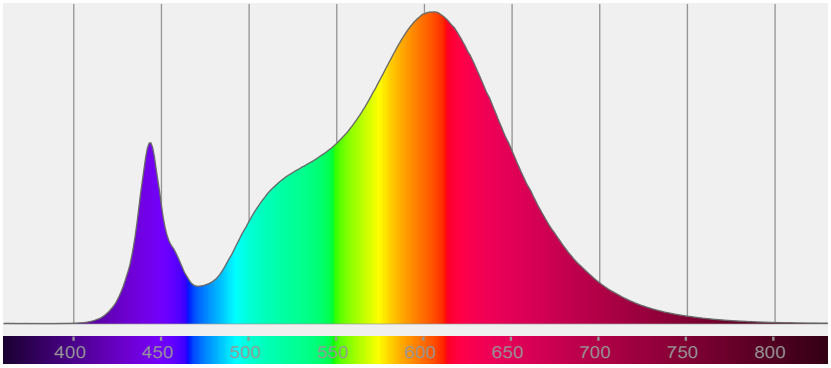
Color details

Correlated Color Temperature, Target	CCT = 2963 K	MacAdam Steps	SDCM = NaN
Correlated Color Temperature, Measured	CCT = 2963 K	Color deviation from BBL	Duv = -0.0006
Color Rendering Index	CRI 82.7	Color coordinates CIE 1931	(x;y) = (0.4389;0.4032)
Color Rendering Index, R9 (red)	R9 = 3.7	Color coordinate CIEs 1960	(u;v) = (0.2522;0.3476)
Color Rendering TM30-18	Rf 83.3	Color coordinate CIEs 1976	(u';v') = (0.2522;0.5213)
	Rg 98.8	Color Quality Scale	CQS = 81.3

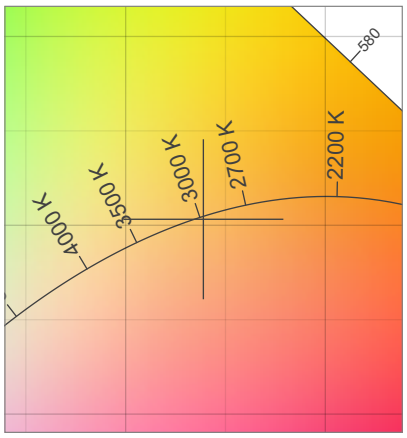
CIE 1931 Chromaticity diagram



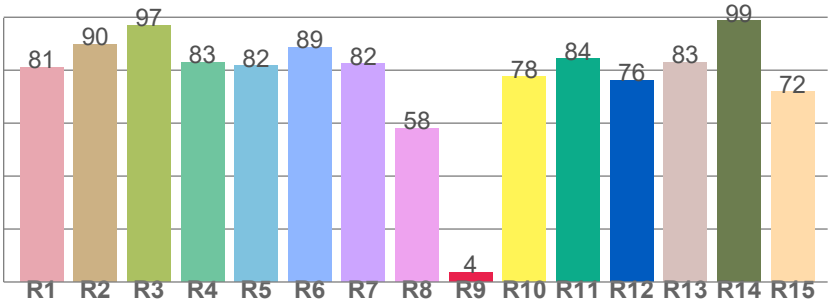
Spectral power distribution



CIE 1931 Chromaticity - zoomed



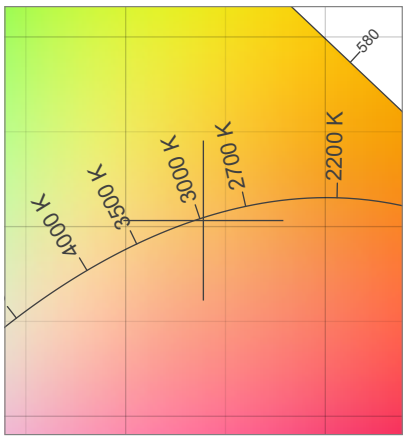
Color Rendering Index per reference color (CIE 1995)



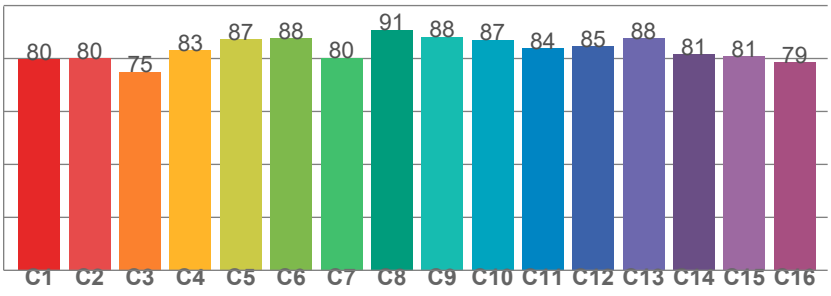
CRI R values, only R1-R8 are used to calculate final CRI value

R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14	R15
81.1	89.7	97.0	82.9	81.7	88.7	82.5	58.2	3.7	77.6	84.3	76.1	83.1	98.6	71.9

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
79.6	80.1	74.9	83.0	87.3	87.7	80.2	90.8	88.1	87.0	83.8	84.6	87.5	81.5	80.7	78.6

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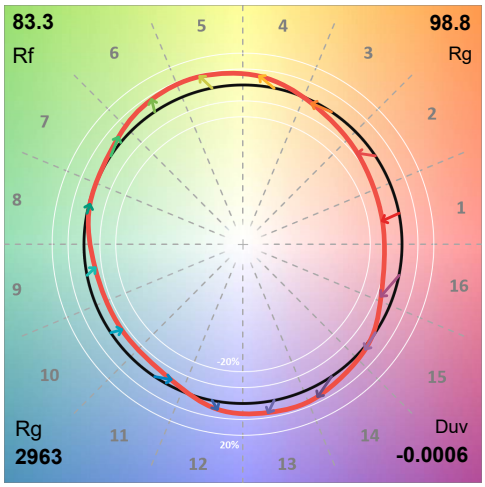
Color details - ANSI/IES TM-30-18 Color Rendition Report

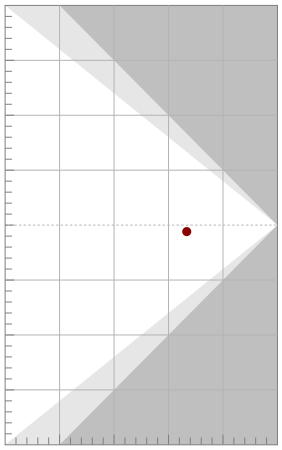
Color Vector Graphic



Color Distortion Graphic

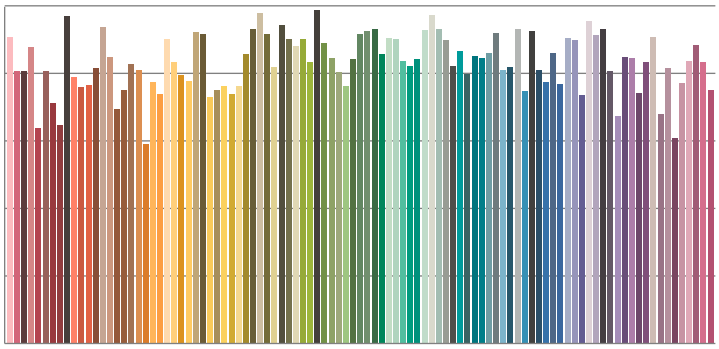
Gamut Index vs. Fidelity Index

Gamut index (Rg)



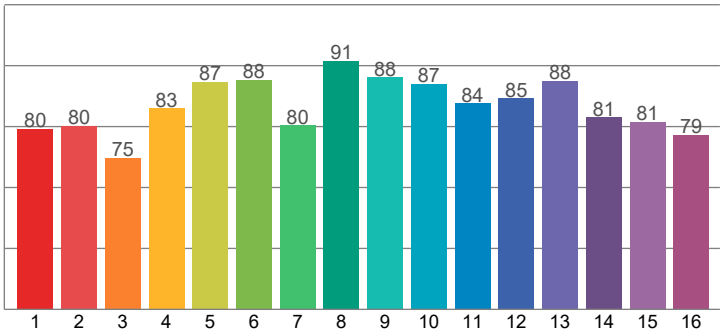
Fidelity index (Rf)

Color Rendition by Color Evaluation Sample (CES)



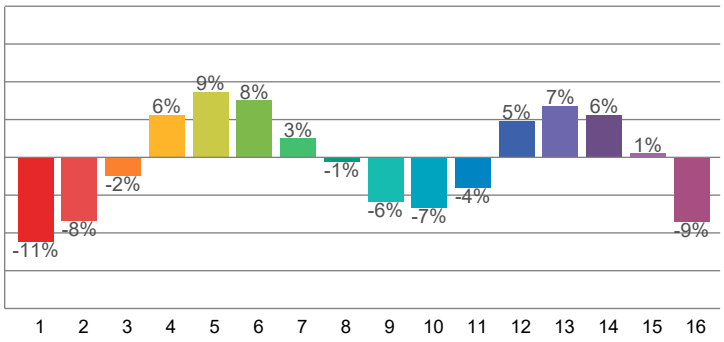
Color evaluation sample CES01 through CES99

Local Color Fidelity (per hue bin)



Hue angle bin (j)

Local Chroma Shift (per hue bin)



Hue angle bin (j)

CIE x	0.4389
CIE y	0.4389
CIE u'	0.2522
CIE v'	0.5213

CIE	**13.3-1995**
Ra	82.7
R9	3.7

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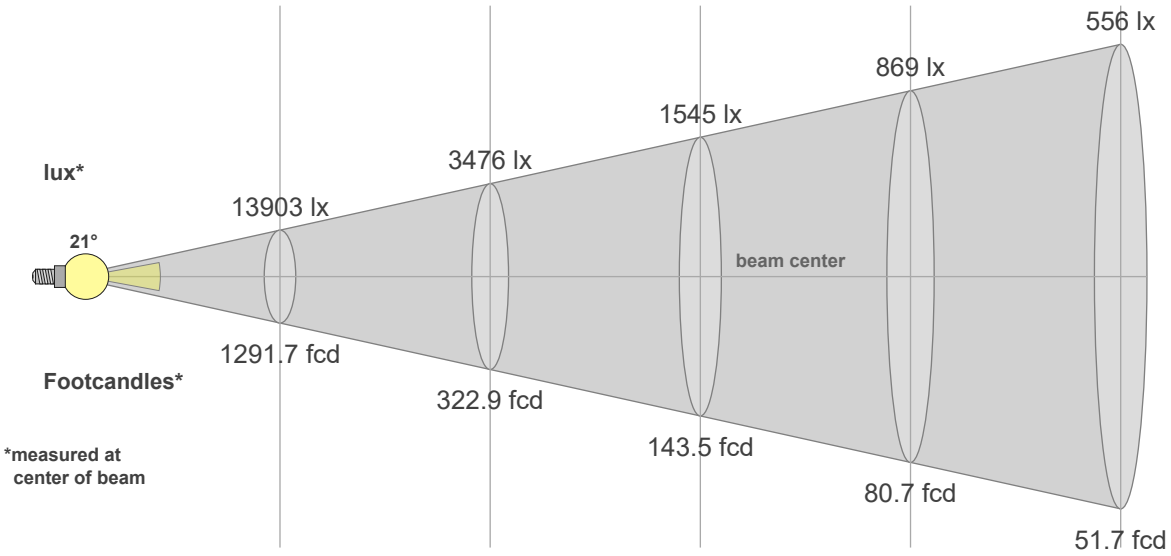
Beam details

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)	0.4 m	0.7 m	1.1 m	1.5 m	1.8 m
Beam width (feet)	1.2 ft	2.4 ft	3.6 ft	4.8 ft	6 ft

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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
13903	3476	1545	869	556	386	284	217	172	139	115	97	82	71	62	54	48	43	39	35	lux
1291.7	322.9	143.5	80.7	51.7	35.9	26.4	20.2	15.9	12.9	10.7	9	7.6	6.6	5.7	5	4.5	4	3.6	3.2	fc

Intensities in 0° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	γ
13.9k	13.9k	13.7k	13.4k	13.1k	12.8k	12.5k	12.2k	12.0k	11.9k	11.9k	11.9k	11.9k	11.8k	11.6k	11.2k	10.8k	10.2k	9.5k	8.8k	cd
100%	100%	98%	96%	94%	92%	90%	88%	86%	86%	86%	86%	85%	85%	83%	81%	77%	73%	68%	63%	of 0°val

Intensities in 90° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	γ
13.9k	13.7k	12.9k	11.7k	10.1k	8.4k	6.7k	5.3k	4.2k	3.2k	2.6k	2.1k	1.7k	1.4k	1.2k	1.1k	0.9k	0.8k	0.7k	0.7k	cd
100%	98%	93%	84%	73%	60%	49%	38%	30%	23%	19%	15%	12%	10%	9%	8%	7%	6%	5%	5%	of 0°val

Intensities in 180° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	γ
13.9k	13.9k	13.7k	13.4k	13.1k	12.8k	12.5k	12.2k	12.0k	11.9k	11.9k	11.9k	11.9k	11.8k	11.6k	11.2k	10.8k	10.2k	9.5k	8.8k	cd
100%	100%	98%	96%	94%	92%	90%	88%	86%	86%	86%	86%	85%	85%	83%	81%	77%	73%	68%	63%	of 0°val

Intensities in 270° c-plane

0°	1°	2°	3°	4°	5°	6°	7°	8°	9°	10°	11°	12°	13°	14°	15°	16°	17°	18°	19°	γ
13.9k	13.7k	12.9k	11.7k	10.1k	8.4k	6.7k	5.3k	4.2k	3.2k	2.6k	2.1k	1.7k	1.4k	1.2k	1.1k	0.9k	0.8k	0.7k	0.7k	cd
100%	98%	93%	84%	73%	60%	49%	38%	30%	23%	19%	15%	12%	10%	9%	8%	7%	6%	5%	5%	of 0°val

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Power details

Input power	
Frequency of input power	0.0 Hz
Power feed to light source	29 W
RMS Input voltage feed V,RMS	381.6 V
RMS Input current feed I,RMS	0.08 A
Volt-Amp or apparent power = V,RMS*I,RMS	29.0 VA
Displacement factor of AC power feed	1.00
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

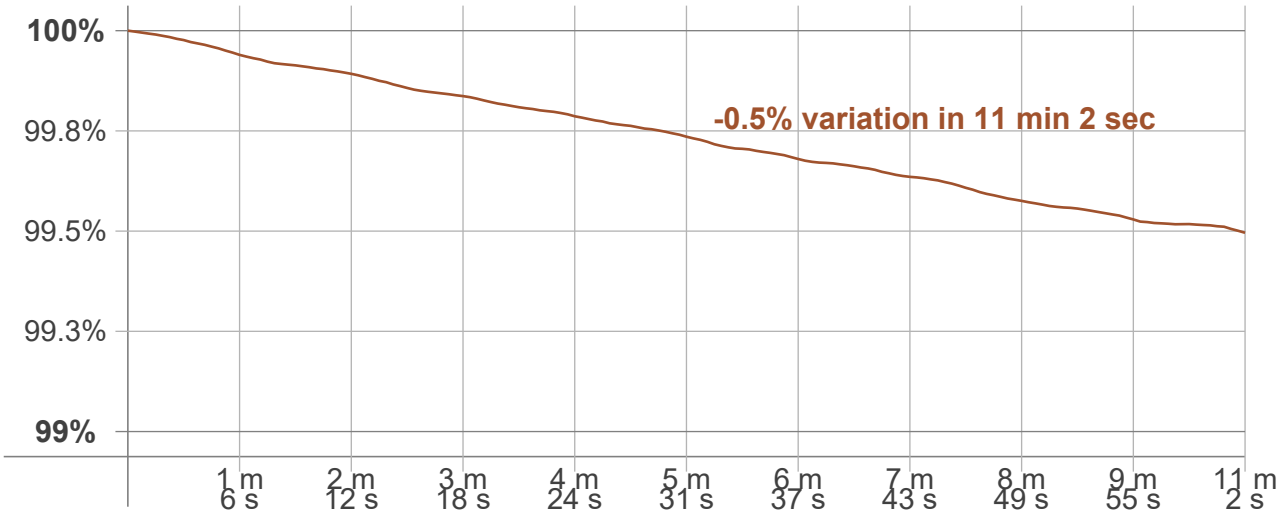
Efficiency

Radiated power efficiency	28.49
Lumen efficiency	94.95 lm/W

Stabilization details

Warmup Conditions		Color Temperature Change	
Stable period	15 min	CCT start	2961 K
Stable change max	2%	CCT shift	2 K
Minimum time	15 min	CCT end	2963 K
Warmup Result		**Output Change**	
Total warmup time	Not completed	Output start	2767 lm
Warmup variation	-0.5175%	Output change	-13.485 lm
		Output end	2754 lm

Stabilization Curve



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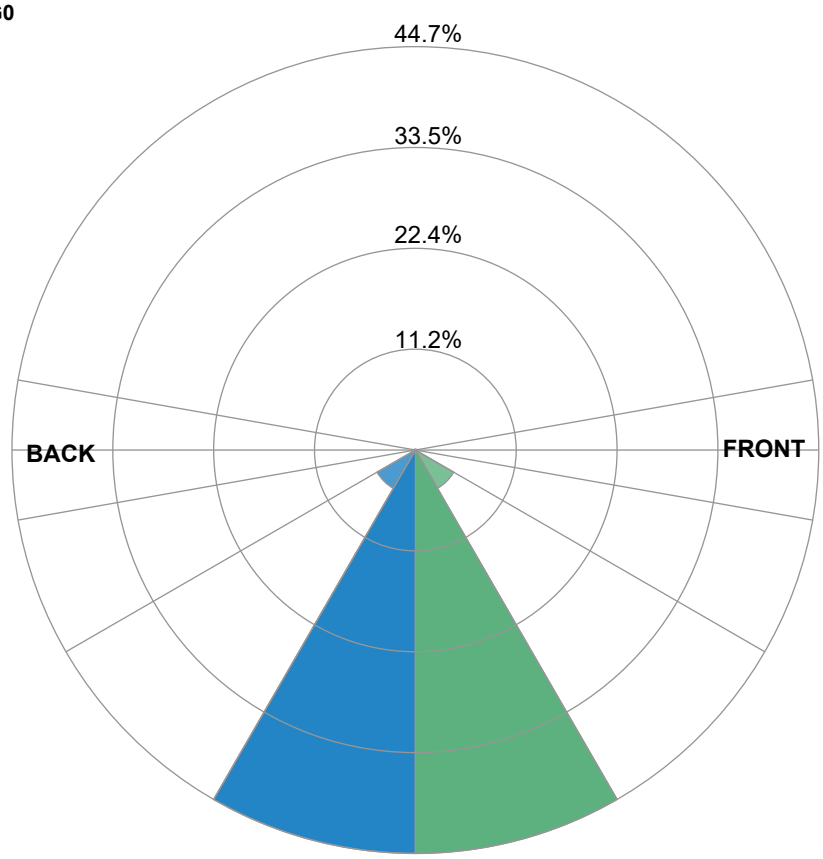
FL25-G2-XXX-3083-1040-INF-XXXXX-X

IESNA TM-15-07 LUMINIARE CLASSIFICATION SYSTEM FOR OUTDOOR LUMINAIRES

Forward Light			
Low (0-30°)	1230	lm	44.7%
Medium (30-60°)	135	lm	4.91%
High (60-80°)	10.7	lm	0.389%
Very High (80-90°)	0.00585	lm	0.000213%
Back Light			
Low (0-30°)	1230	lm	44.7%
Medium (30-60°)	135	lm	4.91%
High (60-80°)	10.7	lm	0.389%
Very High (80-90°)	0.00585	lm	0.000213%
Uplight			
Low (90-100°)	0	lm	0%
High (100-180°)	0	lm	0%
Total			
Sum	2754	lm	100%

BUG RATING B3 U0 G0