

Light Measurement Report

Print date: 16-9-2025

Measurement date and time: 16-9-2025 12:59:45 – Measurement no. VFR-250916-3236-MS

Measurement tracking No. and Link: [VT250916-000997](#)

Operator:



Laboratory and Equipment

Laboratory Owner and Location
Goniospectrometer System and Type
Sensor Name, Calibr. Date and Serial No.
Spectrometer Manufacturer and Model

Viso Systems, Copenhagen V, Denmark
LabSpion – Type C, horizontal
LabSensor Model2 – 11-1-2024 – 3130191315
Ibsen Photonics, Denmark – Freedom VIS (Custom Viso)

Measurement Conditions

Number of C-planes and Resolution
 γ (gamma)-Resolution
Test Distance
Input Power, Power and Displ. Factors
Input RMS Voltage and Current
Frequency of Input Power
Warm-up Time and Variation

12 planes – 30°
5°
7,77 m
30,1 W – PF 0,97 – DPF 0,98
230 V – 0,135 A
50 Hz
Lamp stabilized in 15 min 1 sec – 2,0%

Tested Light Source

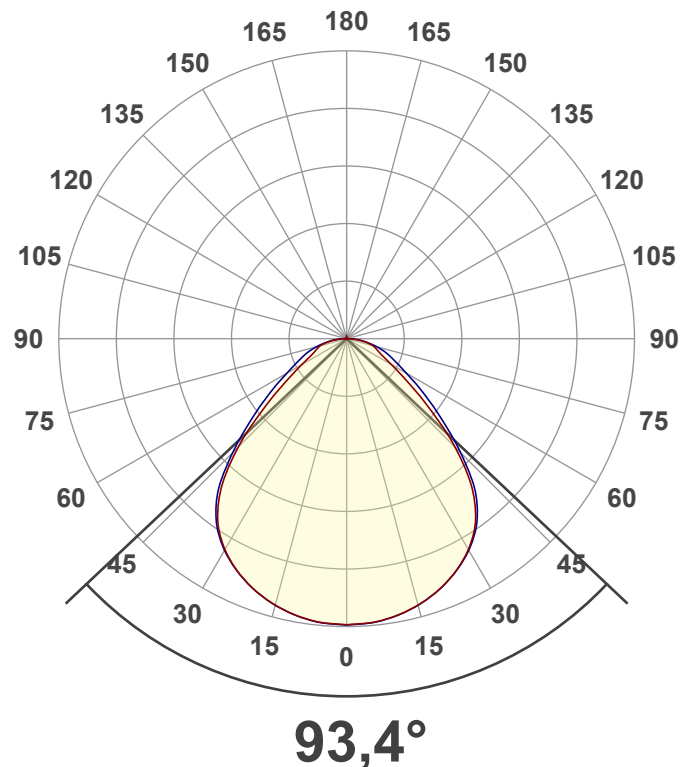
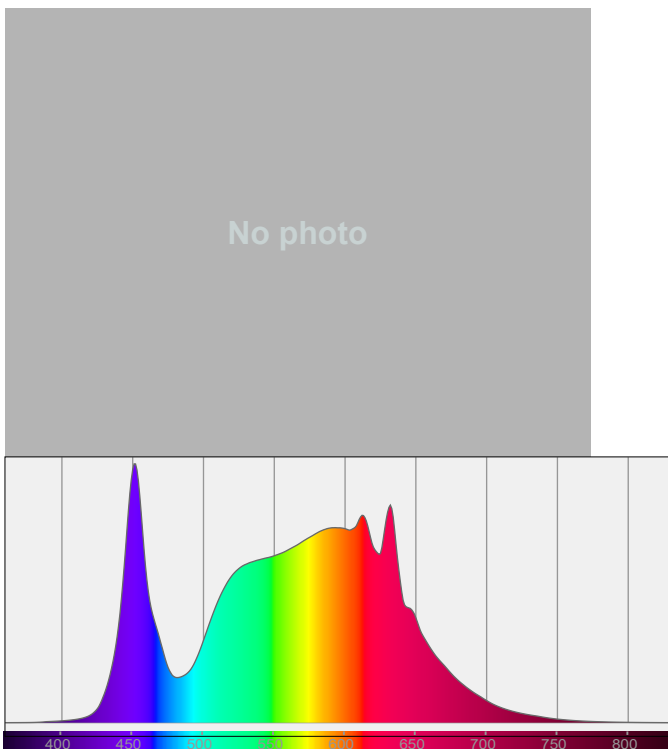
Product Name
Item No. and Manufacturer
Product Description (line 1)
ZONDER DRIVER

814069-4000K
814069-4000K – Dutchfulfillment
BACK-LIT LED PANEEL | EUROPA | 62X62CM | 30W | CCT-SWITCH |

Main Light Measurement Results

Output – Total Lumen (Up% / Down%)
Efficiency
Peak Intensity and Beam Angle
Correlated Color Temperature, Target/Measured
Color Rendering Index
Color Rendering TM30-18
Color Shift, CIE duv and MacAdam Steps
Flicker

4059 lm – 0,56% / 99,44%
135 lm/W
1785 cd – 93,4°
CCT = 4000 K / 3988 K
CRI 85,3
 R_f 84,4 – R_g 98,4
Duv -0,0008 – SDCM 0,7
SVM 0,01 – PstLM 0,01



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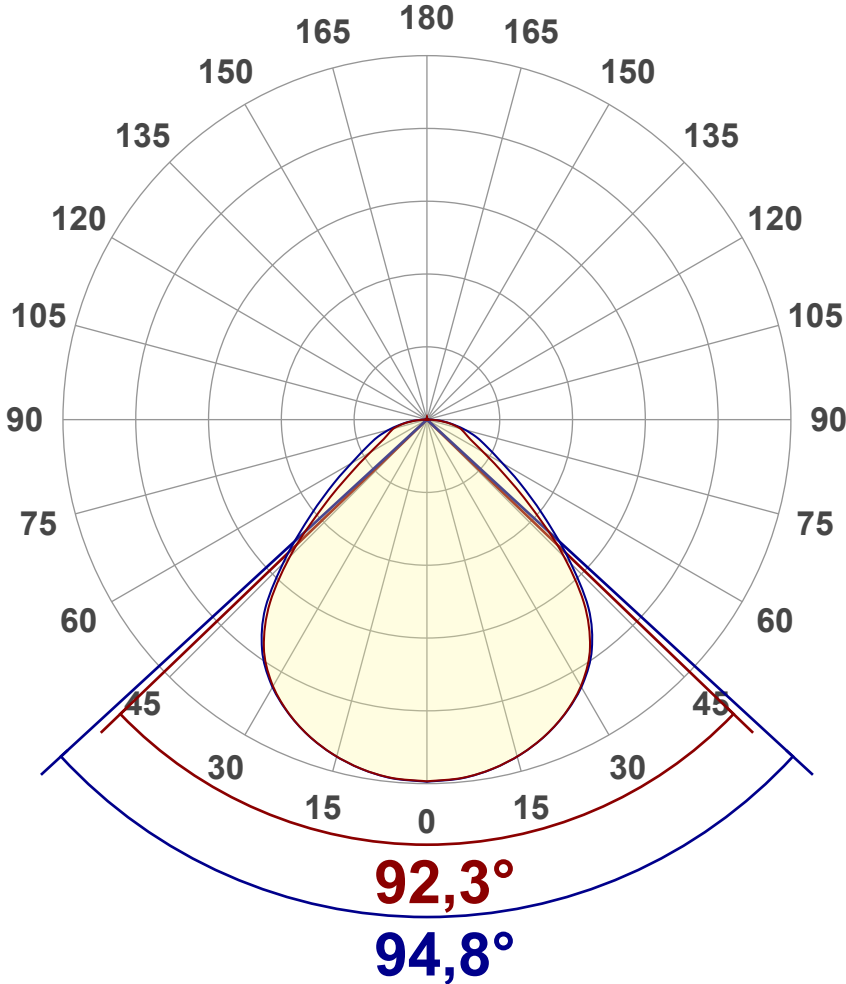
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Operator:



Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

| | |
|----------------------|----------------|
| Output (total Lumen) | 4059 lm |
| Lumen Up% / Down% | 0,56% / 99,44% |
| Peak Intensity | 1785 cd |
| Beam Angle (50%) | 93,4° |
| Beam Angle (90%) | 94,8° |
| Beam Angle (10%) | 92,3° |

Cut-off Angle

| | |
|--------------|------|
| Average 2,5% | 174° |
|--------------|------|

Field Angle

| | |
|-------------|--------|
| Average 10% | 149,1° |
|-------------|--------|

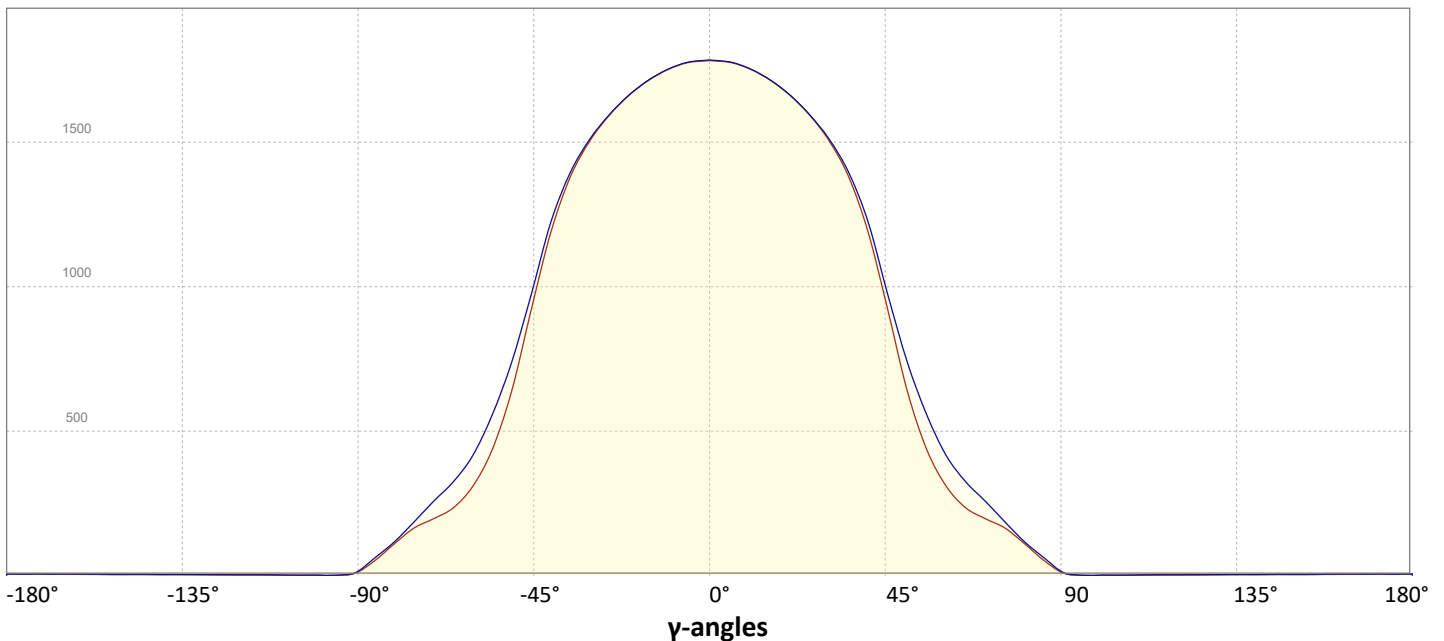
Intensity Ratio

| | |
|--------------|-------|
| In 120° cone | 85,9% |
| In 90° cone | 65,7% |

C000-C180

C090-C270

Linear distribution diagram - Intensity (candela) vs γ -angle



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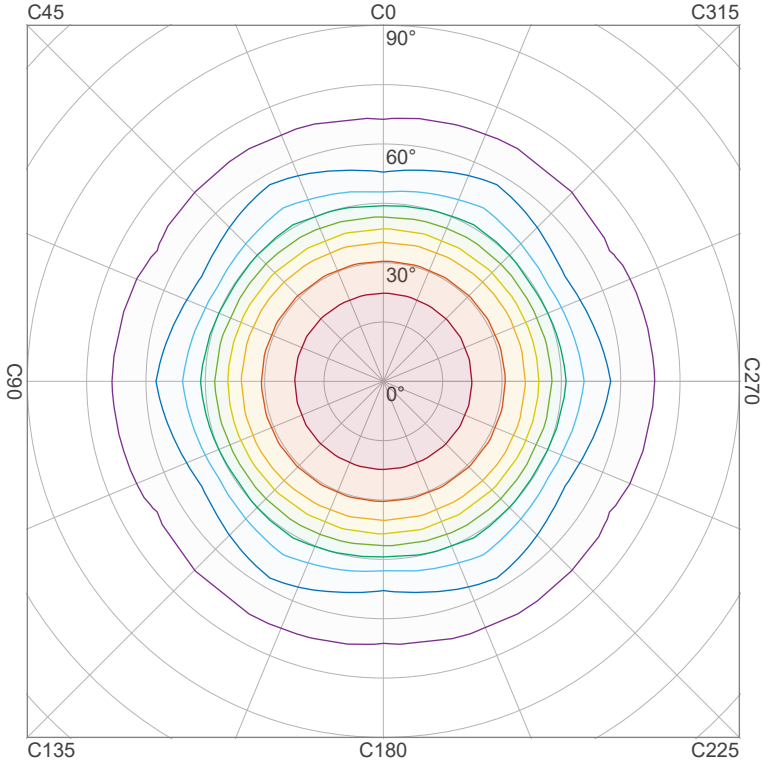
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Operator:



Iso-intensity Diagram (Iso-candela)

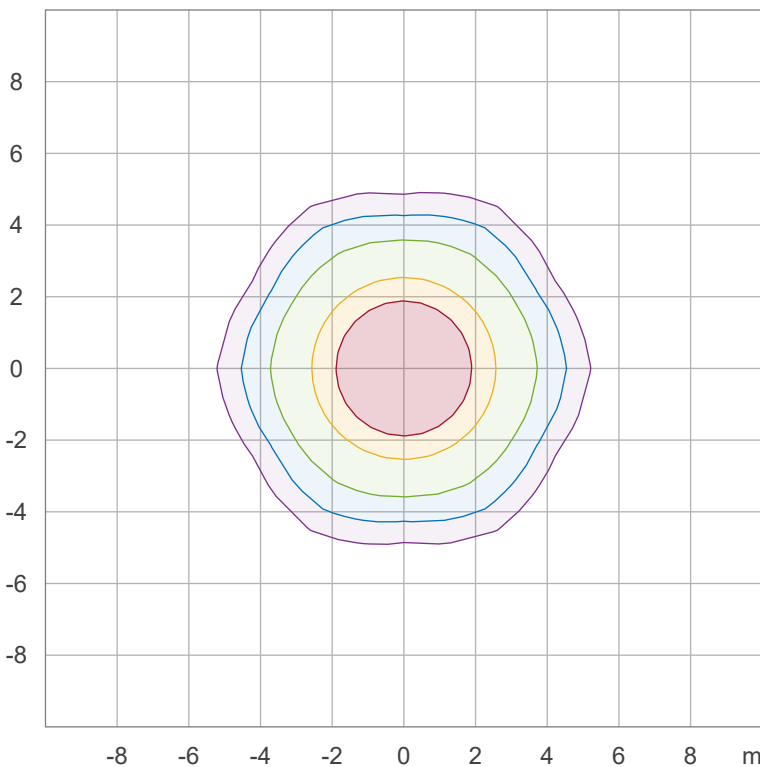


| | |
|------|-----------|
| 90 % | 1605,5 cd |
| 80 % | 1427,1 cd |
| 70 % | 1248,7 cd |
| 60 % | 1070,3 cd |
| 50 % | 892,0 cd |
| 40 % | 713,6 cd |
| 30 % | 535,2 cd |
| 20 % | 356,8 cd |
| 10 % | 178,4 cd |

Peak intensity: 1783,9 cd

Number of c-planes: 12

Iso-illuminance Diagram (Iso-lux)



| | |
|--------|---------|
| 50,0 % | 99,1 lx |
| 30,0 % | 59,5 lx |
| 10,0 % | 19,8 lx |
| 5,0 % | 9,9 lx |
| 3,0 % | 5,9 lx |

Peak illuminance: 198,2 lx

Mounting height: 3,0 m

Number of c-planes: 12

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Operator:



Color details

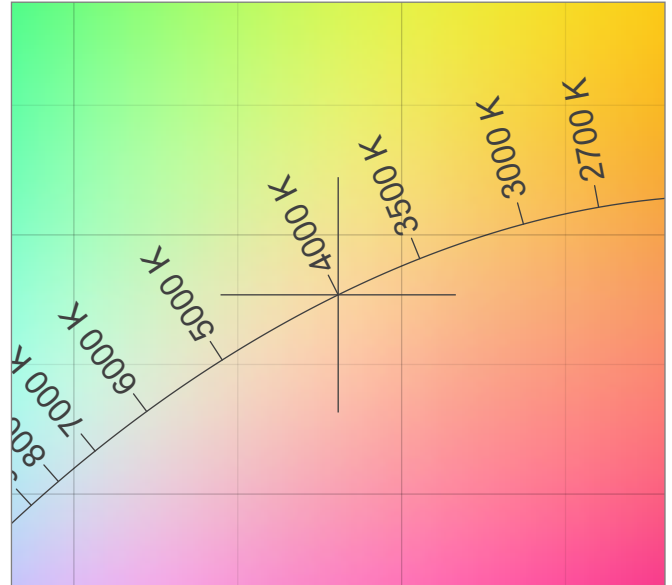
Correlated Color Temperature, Target CCT = 4000 K
 Correlated Color Temperature, Measured CCT = 3988 K
 Color Rendering Index CRI 85,3
 Color Rendering Index, R9 (red component) R9 = 28,3
 Color Rendering TM30-18 R_f 84,4 – R_g 98,4
 Color Quality Scale CQS = 83,6

MacAdam Steps SDCM = 0,7
 Color coordinates CIE 1931 (x;y) = (0,381;0,377)
 Color coordinate CIEs 1960 (u;v) = (0,225;0,334)
 Color deviation from BBL Duv = -0,0008
 Color coordinate CIEs 1976 (CIELUV) (u';v') = (0,225;0,502)

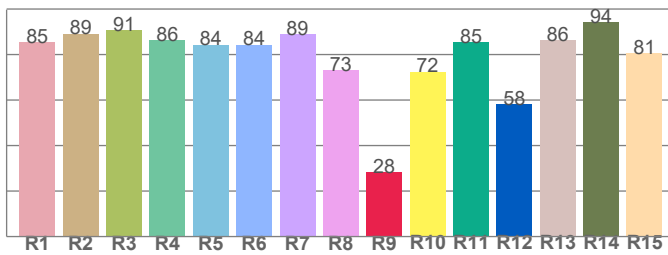
CIE 1931



CIE 1931 – zoomed on Planckian locus



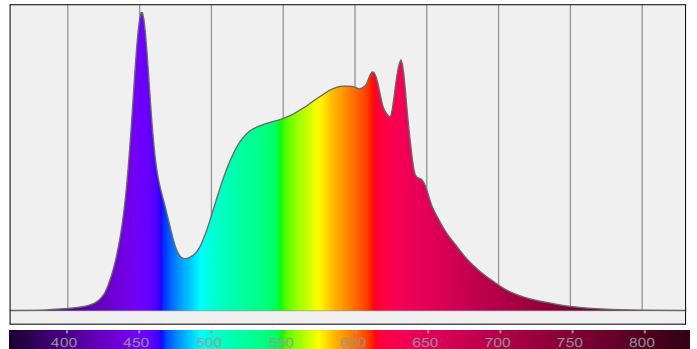
Color Rendering Index per reference color (CIE 1995)



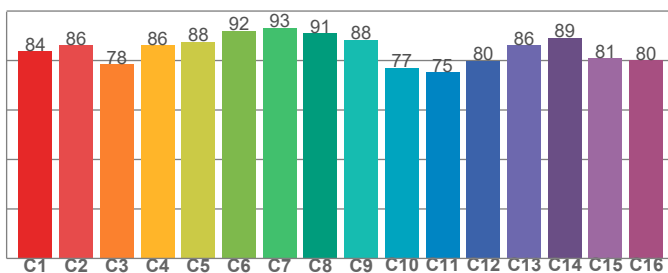
CRI R values, only R1-R8 are used to calculate final CRI value

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 85,4 | 89,1 | 90,6 | 86,2 | 84,2 | 84,3 | 89,0 | 73,2 | 28,3 | 72,5 | 85,4 | 58,2 | 86,2 | 94,3 | 80,5 |

Spectral power distribution (SPD) / W/nm – 0-100%



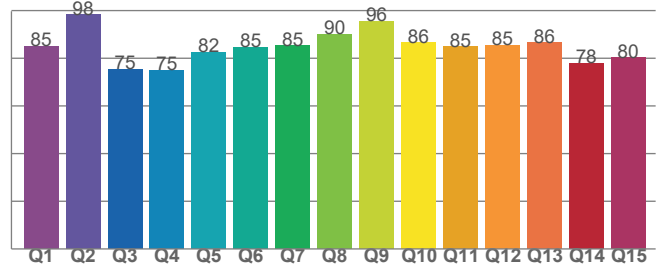
TM30-18 R_f-values per hue bin



TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 83,8 | 86,3 | 78,5 | 86,2 | 87,7 | 92,1 | 93,2 | 91,0 | 88,3 | 77,1 | 75,3 | 79,8 | 86,1 | 89,2 | 80,9 | 80,1 |

Color Quality Scale by reference color



CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 85,1 | 98,2 | 75,5 | 75,0 | 82,4 | 84,7 | 85,3 | 90,0 | 95,6 | 86,4 | 84,9 | 85,4 | 86,5 | 77,9 | 80,3 |

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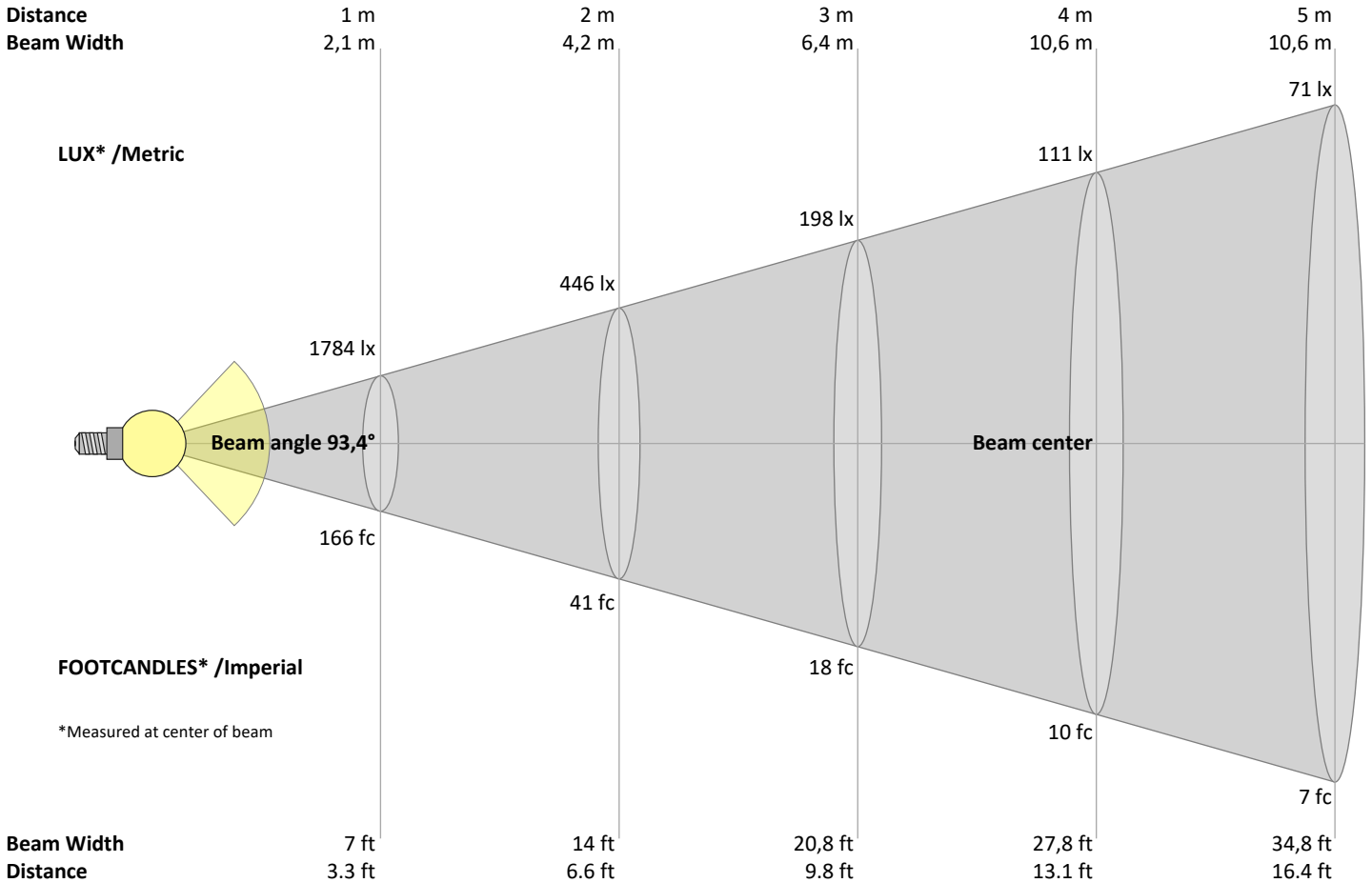
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Operator:



Beam 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 |
| 1784 | 446 | 198 | 111 | 71 | 50 | 36 | 28 | 22 | 18 | 15 | 12 | 11 | 9 | 8 | 7 | 6 | 6 | 5 | 4 | lux |
| 165,7 | 41,4 | 18,4 | 10,4 | 6,6 | 4,6 | 3,4 | 2,6 | 2 | 1,7 | 1,4 | 1,2 | 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 |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 1784 | 1776 | 1755 | 1719 | 1669 | 1602 | 1516 | 1396 | 1212 | 955 | 675 | 462 | 325 | 244 | 202 | 169 | 118 | 60 | 15 | 3 | cd |
| 100% | 100% | 98% | 96% | 94% | 90% | 85% | 78% | 68% | 54% | 38% | 26% | 18% | 14% | 11% | 9% | 7% | 3% | 1% | 0% | 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 |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 1784 | 1777 | 1755 | 1719 | 1669 | 1603 | 1521 | 1410 | 1245 | 1005 | 769 | 580 | 433 | 336 | 266 | 196 | 127 | 70 | 18 | 3 | cd |
| 100% | 100% | 98% | 96% | 94% | 90% | 85% | 79% | 70% | 56% | 43% | 33% | 24% | 19% | 15% | 11% | 7% | 4% | 1% | 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 |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 1784 | 1776 | 1755 | 1719 | 1669 | 1602 | 1516 | 1396 | 1212 | 955 | 675 | 462 | 325 | 244 | 202 | 169 | 118 | 60 | 15 | 3 | cd |
| 100% | 100% | 98% | 96% | 94% | 90% | 85% | 78% | 68% | 54% | 38% | 26% | 18% | 14% | 11% | 9% | 7% | 3% | 1% | 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 |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 1784 | 1777 | 1755 | 1719 | 1669 | 1603 | 1521 | 1410 | 1245 | 1005 | 769 | 580 | 433 | 336 | 266 | 196 | 127 | 70 | 18 | 3 | cd |
| 100% | 100% | 98% | 96% | 94% | 90% | 85% | 79% | 70% | 56% | 43% | 33% | 24% | 19% | 15% | 11% | 7% | 4% | 1% | 0% | of 0°val |

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Operator:



Light Planning – UGR table

Uncorrected, comprehensive UGR table according to 117-1995

| Reflectances | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
|-------------------------------------|-----------|--|------|------|------|------|--|------|------|------|------|
| | 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 | 15,5 | 16,6 | 15,7 | 16,9 | 17,1 | 15,5 | 16,6 | 15,7 | 16,9 | 17,1 |
| | 3H | 16,2 | 17,4 | 16,7 | 17,7 | 17,9 | 16,4 | 17,5 | 16,8 | 17,8 | 18,0 |
| | 4H | 16,7 | 17,8 | 17,1 | 18,1 | 18,3 | 17,0 | 18,0 | 17,4 | 18,3 | 18,6 |
| | 6H | 17,3 | 18,2 | 17,6 | 18,5 | 18,9 | 17,5 | 18,5 | 17,9 | 18,8 | 19,1 |
| | 8H | 17,4 | 18,3 | 17,8 | 18,7 | 19,1 | 17,7 | 18,6 | 18,1 | 19,0 | 19,4 |
| | 12H | 17,6 | 18,4 | 17,9 | 18,8 | 19,2 | 17,9 | 18,8 | 18,2 | 19,1 | 19,6 |
| 4H | 2H | 15,8 | 16,8 | 16,2 | 17,1 | 17,4 | 15,7 | 16,8 | 16,2 | 17,1 | 17,4 |
| | 3H | 17,0 | 17,9 | 17,3 | 18,2 | 18,7 | 16,9 | 17,8 | 17,3 | 18,2 | 18,6 |
| | 4H | 17,5 | 18,4 | 18,0 | 18,8 | 19,3 | 17,6 | 18,4 | 18,0 | 18,8 | 19,4 |
| | 6H | 18,2 | 19,0 | 18,7 | 19,3 | 19,7 | 18,3 | 19,1 | 18,8 | 19,4 | 19,8 |
| | 8H | 18,4 | 19,1 | 18,9 | 19,5 | 19,9 | 18,6 | 19,3 | 19,1 | 19,7 | 20,0 |
| | 12H | 18,6 | 19,2 | 19,1 | 19,6 | 20,1 | 18,8 | 19,4 | 19,3 | 19,8 | 20,3 |
| 8H | 4H | 17,8 | 18,5 | 18,3 | 18,9 | 19,3 | 17,9 | 18,6 | 18,4 | 19,0 | 19,3 |
| | 6H | 18,6 | 19,2 | 19,1 | 19,6 | 20,2 | 18,7 | 19,3 | 19,3 | 19,8 | 20,3 |
| | 8H | 19,0 | 19,5 | 19,6 | 20,0 | 20,7 | 19,2 | 19,6 | 19,7 | 20,2 | 20,8 |
| | 12H | 19,3 | 19,7 | 19,9 | 20,2 | 20,9 | 19,5 | 19,9 | 20,1 | 20,4 | 21,0 |
| 12H | 4H | 17,8 | 18,4 | 18,3 | 18,9 | 19,3 | 17,9 | 18,5 | 18,4 | 18,9 | 19,4 |
| | 6H | 18,7 | 19,2 | 19,3 | 19,7 | 20,4 | 18,9 | 19,3 | 19,4 | 19,9 | 20,5 |
| | 8H | 19,2 | 19,6 | 19,8 | 20,1 | 20,7 | 19,3 | 19,7 | 19,9 | 20,2 | 20,8 |

Variations with the observer position for the luminaire spacings, S:

| | | |
|----------|------------|------------|
| S = 1.0H | 0,2 / -0,3 | 0,2 / -0,2 |
| S = 1.5H | 0,5 / -0,6 | 0,6 / -0,6 |
| S = 2.0H | 1,0 / -1,0 | 1,1 / -1,0 |

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 | 0 |
| RCR | (RCR: Room Cavity Ratio) | | | | | | | | | | | | | | | | | |
| | Room Values are expressed as percentage of Lumen delivered to the task surface | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 99 |
| 1 | 110 | 105 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 93 | 95 | 93 | 90 | 91 | 89 | 88 | 86 |
| 2 | 101 | 94 | 87 | 82 | 98 | 92 | 86 | 81 | 88 | 83 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 |
| 3 | 93 | 84 | 76 | 70 | 91 | 82 | 75 | 70 | 79 | 73 | 68 | 76 | 71 | 67 | 74 | 69 | 66 | 64 |
| 4 | 86 | 75 | 67 | 61 | 84 | 74 | 66 | 60 | 71 | 65 | 60 | 69 | 63 | 59 | 67 | 62 | 58 | 56 |
| 5 | 80 | 68 | 59 | 53 | 78 | 67 | 59 | 53 | 65 | 58 | 52 | 63 | 57 | 52 | 61 | 55 | 51 | 49 |
| 6 | 74 | 62 | 53 | 47 | 72 | 61 | 53 | 47 | 59 | 52 | 47 | 57 | 51 | 46 | 56 | 50 | 46 | 44 |
| 7 | 69 | 56 | 48 | 42 | 67 | 55 | 48 | 42 | 54 | 47 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 39 |
| 8 | 64 | 52 | 44 | 38 | 63 | 51 | 43 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 9 | 60 | 48 | 40 | 34 | 59 | 47 | 39 | 34 | 46 | 39 | 34 | 45 | 38 | 34 | 44 | 38 | 34 | 32 |
| 10 | 57 | 44 | 36 | 31 | 55 | 43 | 36 | 31 | 42 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 31 | 29 |

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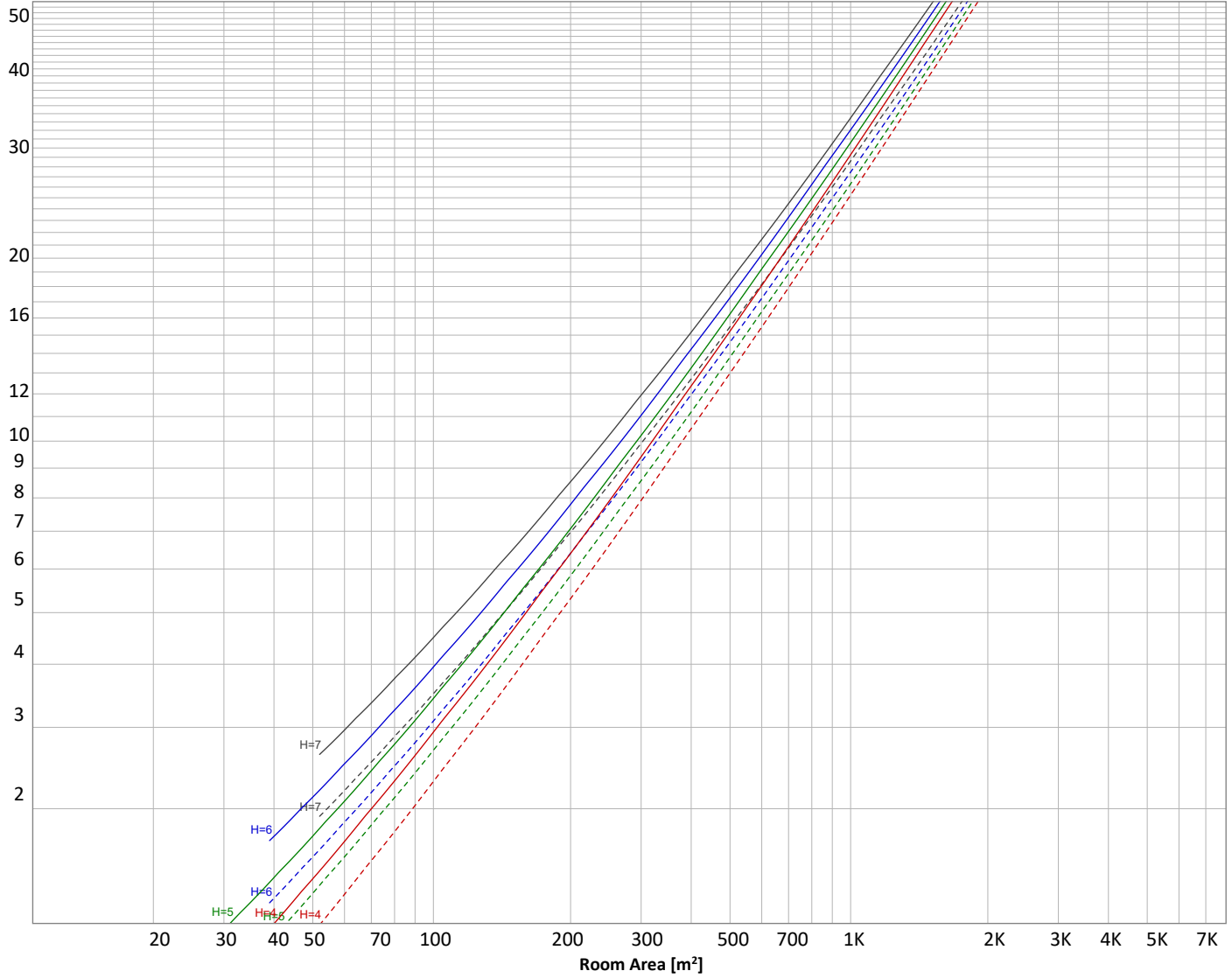
Operator:



Luminaire budgetary diagram

Uncorrected, comprehensive UGR table according to 117-1995

LAMPS (number of lamps)



Conditions

| | | | | | |
|---|----------------|------------|---------------------|------------------|-------------------|
| H = Room height | Flux = 4059 lm | $\rho(\%)$ | | | |
| H _{down} = Lamp distance from ceiling = | 0.00 m | Line type | Ceiling reflectance | Wall reflectance | Floor reflectance |
| H _{work} = Work area height from floor = | 0.00 m | ----- | 70 | 50 | 30 |
| E _{work} = Average lux on work area = | 100 lx | ————— | 50 | 30 | 20 |

Zonal Lumen Summary

| | | | | | | | | |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
| 169 lm | 485 lm | 738 lm | 869 lm | 750 lm | 475 lm | 289 lm | 188 lm | 73,7 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 4,70 lm | 2,29 lm | 2,87 lm | 3,07 lm | 2,95 lm | 2,70 lm | 2,20 lm | 1,49 lm | 0,524 lm |

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Outdoor Light Planning

Lumen per Zone

| Zone (γ) | Lumen | % Total |
|----------|-----------------|---------|
| 0-10° | {LUM00-10} lm | #VALUE! |
| 10-20° | {LUM10-20} lm | #VALUE! |
| 20-30° | {LUM20-30} lm | #VALUE! |
| 30-40° | {LUM30-40} lm | #VALUE! |
| 40-50° | {LUM40-50} lm | #VALUE! |
| 50-60° | {LUM50-60} lm | #VALUE! |
| 60-70° | {LUM60-70} lm | #VALUE! |
| 70-80° | {LUM70-80} lm | #VALUE! |
| 80-90° | {LUM80-90} lm | #VALUE! |
| 90-100° | {LUM90-100} lm | #VALUE! |
| 100-110° | {LUM100-110} lm | #VALUE! |
| 110-120° | {LUM110-120} lm | #VALUE! |
| 120-130° | {LUM120-130} lm | #VALUE! |
| 130-140° | {LUM130-140} lm | #VALUE! |
| 140-150° | {LUM140-150} lm | #VALUE! |
| 150-160° | {LUM150-160} lm | #VALUE! |
| 160-170° | {LUM160-170} lm | #VALUE! |
| 170-180° | {LUM170-180} lm | #VALUE! |
| Total | 0 lm | #VALUE! |

Intensity peaks

| | |
|----------------|------------|
| Max intensity | {PEAK} cd |
| Intensity, 90° | {INT90} cd |
| Intensity, 0° | {INT0} cd |

Zonal Lumen summary

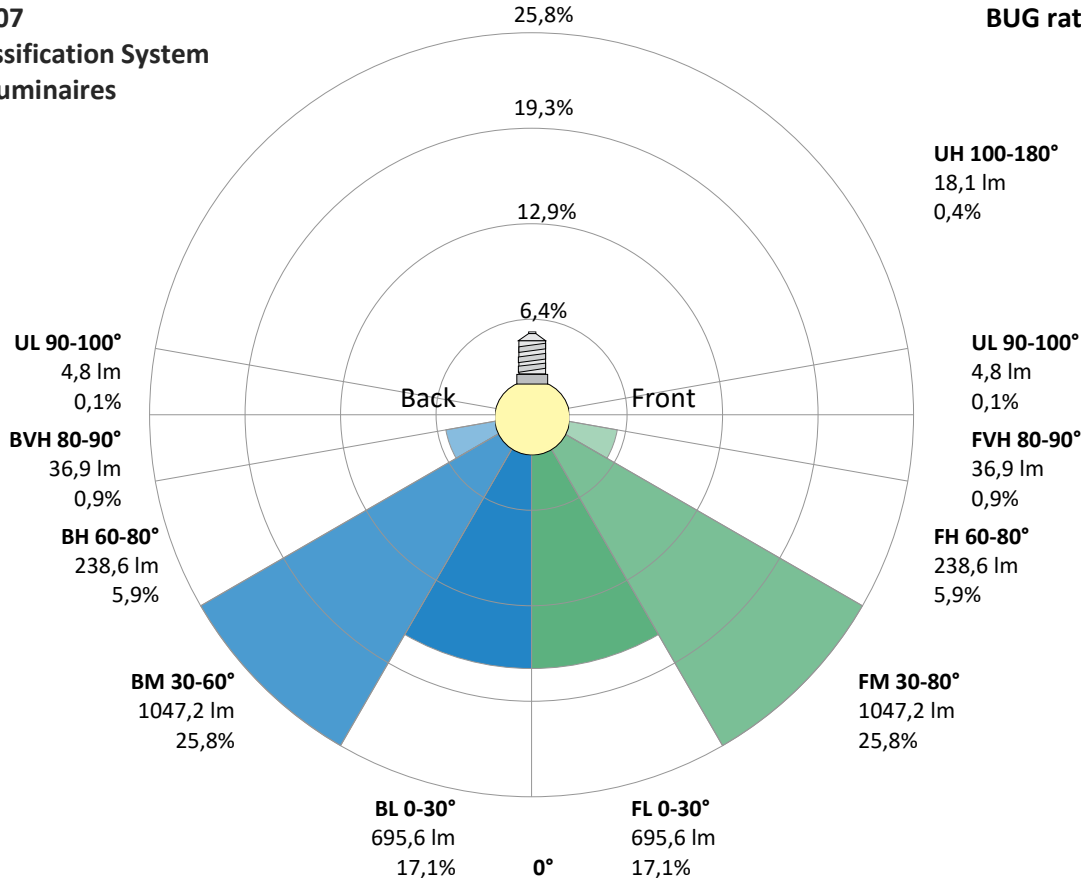
| Zone (γ) | Lumen | % Total |
|----------|----------------|---------|
| 0-30° | {LUM00-30} lm | #VALUE! |
| 0-40° | {LUM00-40} lm | #VALUE! |
| 0-60° | {LUM00-60} lm | #VALUE! |
| 60-90° | {LUM60-90} lm | #VALUE! |
| 70-100° | {LUM70-100} lm | #VALUE! |
| 90-120° | {LUM90-120} lm | #VALUE! |
| 0-90° | {LUM00-90} lm | #VALUE! |
| 90-180° | {LUM90-180} lm | #VALUE! |
| 0-180° | {LUM00-180} lm | #VALUE! |

BUG rating

| | Lumen | % Total |
|----------------------|-----------|---------|
| Forward light | | |
| Low(0-30°) | {BUG0} lm | #VALUE! |
| Medium(30-60°) | {BUG1} lm | #VALUE! |
| High(60-80°) | {BUG2} lm | #VALUE! |
| Very high(80-90°) | {BUG3} lm | #VALUE! |
| Back light | | |
| Low(0-30°) | {BUG4} lm | #VALUE! |
| Medium(30-60°) | {BUG5} lm | #VALUE! |
| High(60-80°) | {BUG6} lm | #VALUE! |
| Very high(80-90°) | {BUG7} lm | #VALUE! |
| Uplight | | |
| Low(90-100°) | {BUG8} lm | #VALUE! |
| High(100-180°) | {BUG9} lm | #VALUE! |

IESNA TM-15-07 Luminaire Classification System For Outdoor Luminaires

BUG rating B2 U2 G1



Light Measurement Report

Print date: 16-9-2025

Measurement date and time: 16-9-2025 12:59:45 – Measurement no. VFR-250916-3236-MS

Measurement tracking No. and Link: [VT250916-000997](#)

Operator:

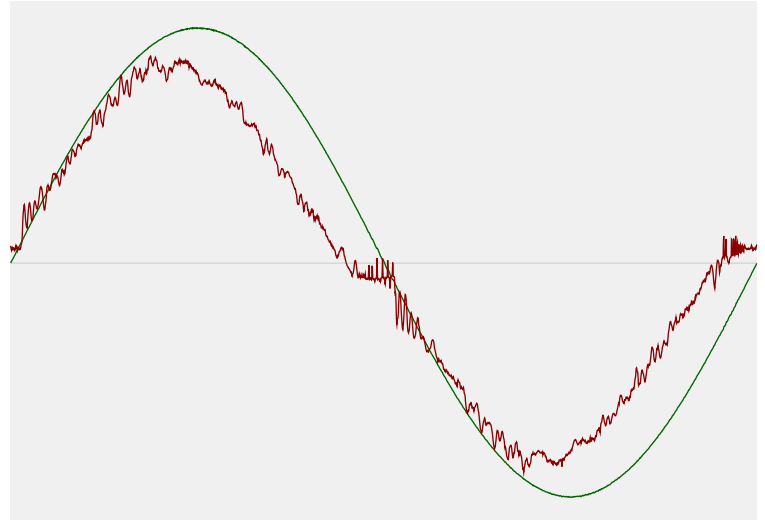


Power Details

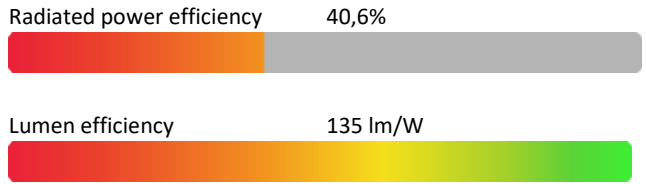
Input Power

| | |
|---|----------|
| Power feed to light source | 30,1 W |
| Frequency of input power | 50 Hz |
| RMS Input voltage feed, V_{RMS} | 230 V |
| RMS Input current feed, I_{RMS} | 0,135 A |
| Volt-Ampere or apparent power = $V_{RMS} * I_{RMS}$ | 31,11 VA |
| Displacement factor of AC power feed | 0,98 |
| Power factor of AC current feed | 0,97 |
| Total harmonic distortion of the current | 11,88% |
| Total harmonic distortion of the voltage | 0,06% |

Input Power Curve



Efficiency



Stabilization Details

Warmup Conditions

| | |
|-------------------|--------|
| Stable period | 15 min |
| Stable change max | 2,0% |
| Minimum time | 15 min |

Color Temperature Change

| | |
|-----------|--------|
| CCT start | 4000 K |
| CCT shift | +0 K |
| CCT end | 4000 K |

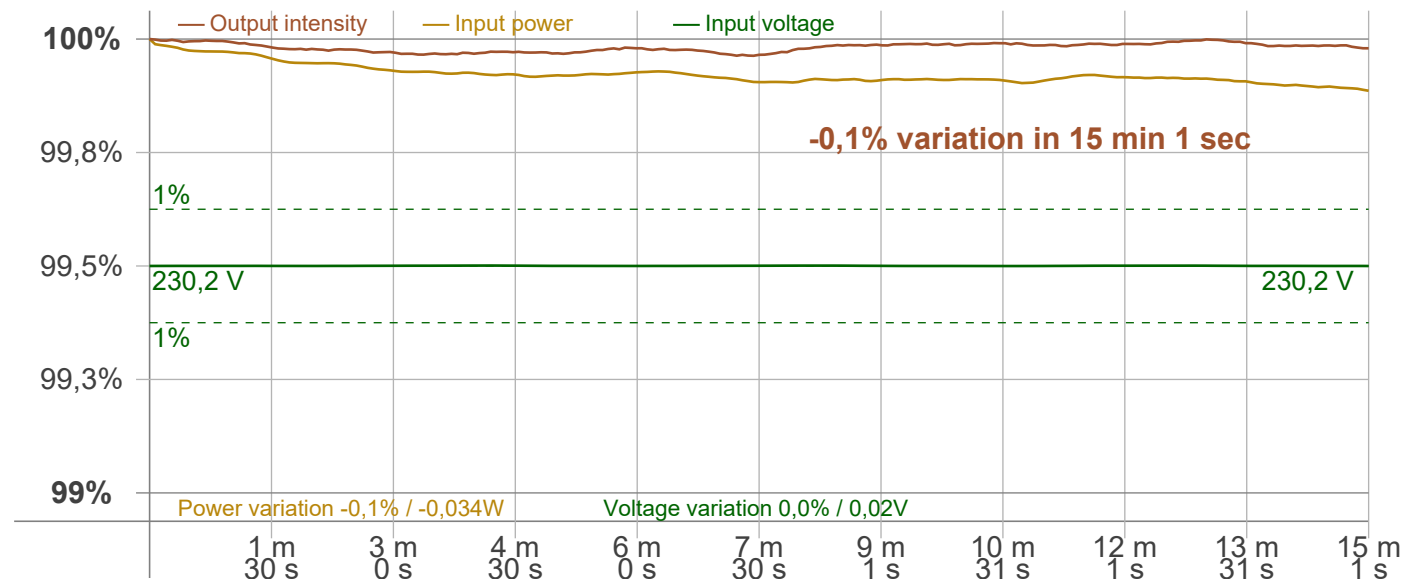
Warmup Result

| | |
|-------------------|---------------------------------|
| Total warmup time | Lamp stabilized in 15 min 1 sec |
| Warmup variation | -0,1% |

Output Change

| | |
|---------------|---------|
| Output start | 4060 lm |
| Output change | -1 lm |
| Output end | 4059 lm |

Stabilization Curve



Light Measurement Report

Print date: 16-9-2025

Measurement date and time: 16-9-2025 12:59:45 – Measurement no. VFR-250916-3236-MS

Measurement tracking No. and Link: [VT250916-000997](https://www.viso-systems.com/VT250916-000997)

Operator:



Flicker /TLA details

Flicker Meter Type Viso Systems LabFlicker
 Frequency of input power 50 Hz
 Flicker/TLA sample rate 20000 samples/s

Measurement time
 PstLM 180 sec
 All other indices 1,2 sec

Flicker indices according to Illuminating Engineering Society (IES)

Flicker frequency 100,5 Hz
 Percent Flicker 0,81 %
 Flicker index 0

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

JA8/10 40 Hz 0,02 %
 JA8/10 90 Hz 0,03 %
 JA8/10 200 Hz 0,35 %
 JA8/10 400 Hz 0,52 %
 JA8/10 1000 Hz 0,71 %

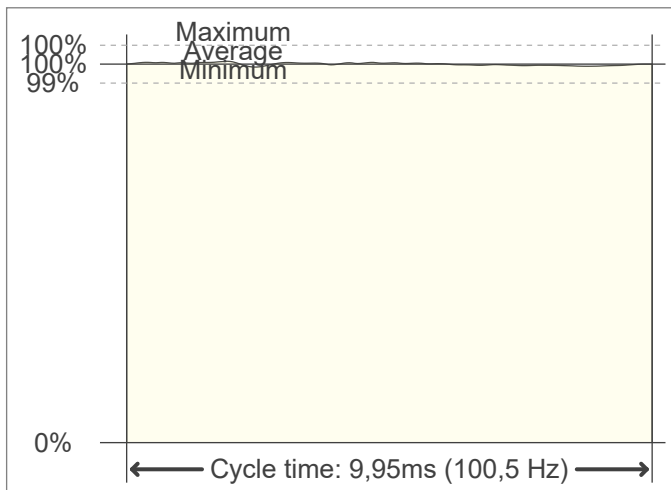
TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC 61000-4-15)

PstLM value (F < 80 Hz) 0,01
 SVM value (80 < F < 2000 Hz) 0,01

Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp 0,01

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



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

