

Light Measurement Report

Print date: 15-5-2025

Measurement date and time: 15-5-2025 09:22:44 – Measurement no. VFR-250515-1261-MS

Measurement tracking No. and Link: [VT250515-003675](#)

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°
4,79 m
14,2 W – PF 0,96 – DPF 0,97
230 V – 0,065 A
50 Hz
Lamp stabilized in 15 min 1 sec – 2,0%

Tested Light Source

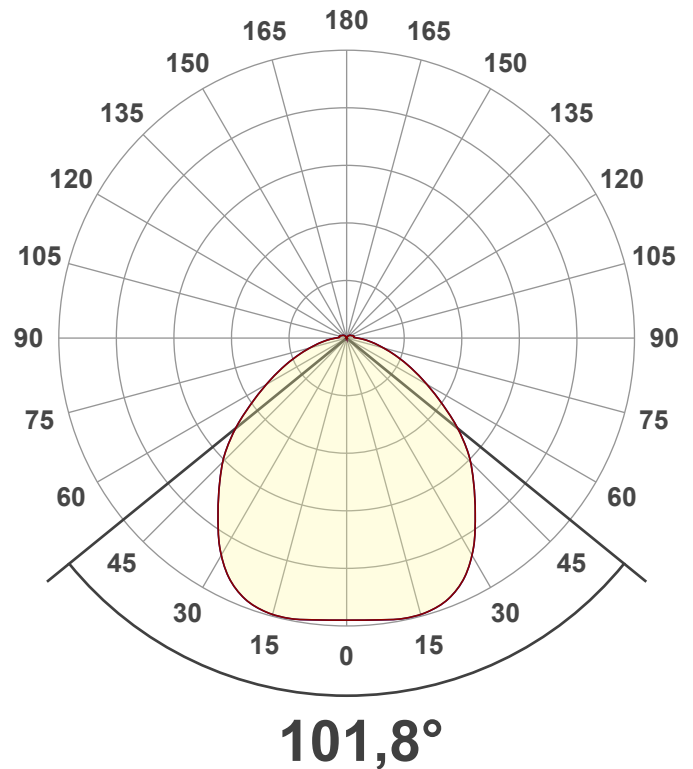
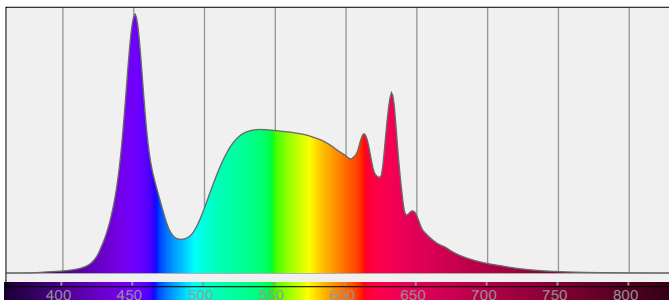
Product Name
Item No. and Manufacturer
Product Description (line 1)

803209-5000K-14W
803209-5000K-14W – Dutchfulfillment
3-FASE RAILARMATUUR | TARVOS | 60CM | WIT | 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

2092 lm – 4,14% / 95,86%
147 lm/W
769 cd – 101,8°
CCT = 5000 K / 5101 K
CRI 81,3
 R_f 81,3 – R_g 98,8
Duv 0,0043 – SDCM 4,6
SVM 0,03 – PstLM 0,13



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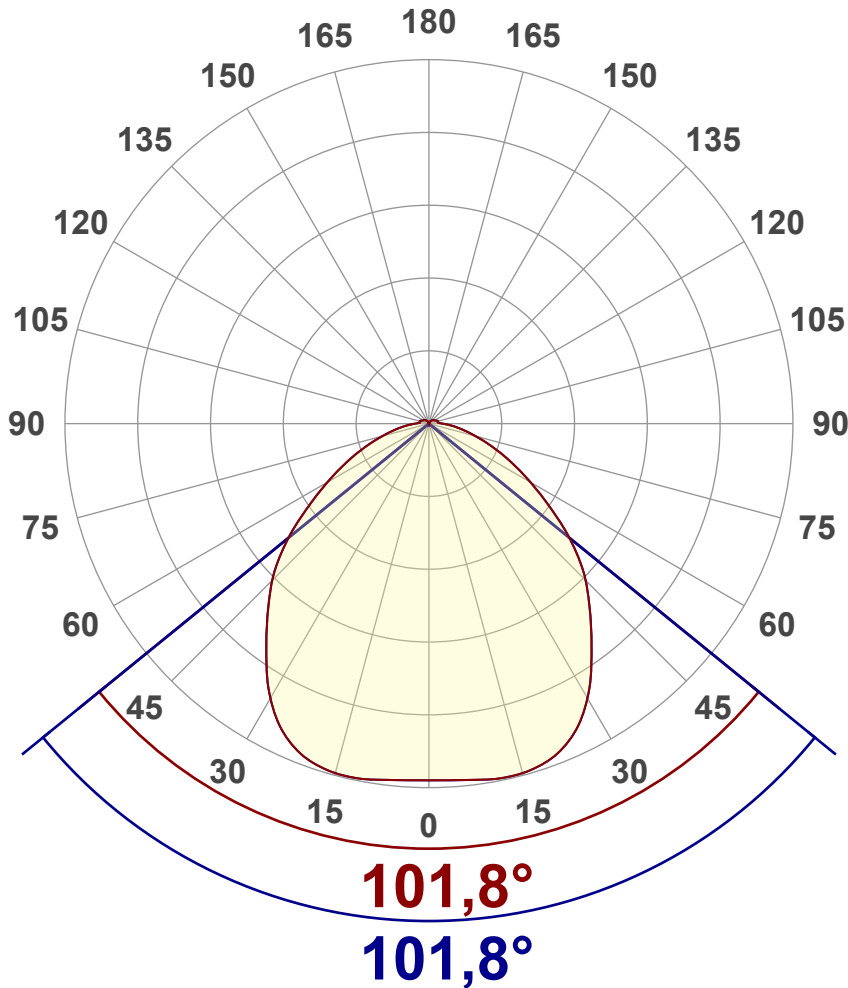
Measurement tracking No. and Link: [VT250515-003675](https://www.viso-systems.com/VT250515-003675)

Operator:



Luminous Intensity diagram

Unit: 0-100% of peak intensity



Main Values

| | |
|----------------------|----------------|
| Output (total Lumen) | 2092 lm |
| Lumen Up% / Down% | 4,14% / 95,86% |
| Peak Intensity | 769 cd |
| Beam Angle (50%) | 101,8° |
| Beam Angle (90%) | 101,8° |
| Beam Angle (10%) | 101,8° |

Cut-off Angle

| | |
|--------------|--------|
| Average 2,5% | 214,8° |
|--------------|--------|

Field Angle

| | |
|-------------|--------|
| Average 10% | 158,4° |
|-------------|--------|

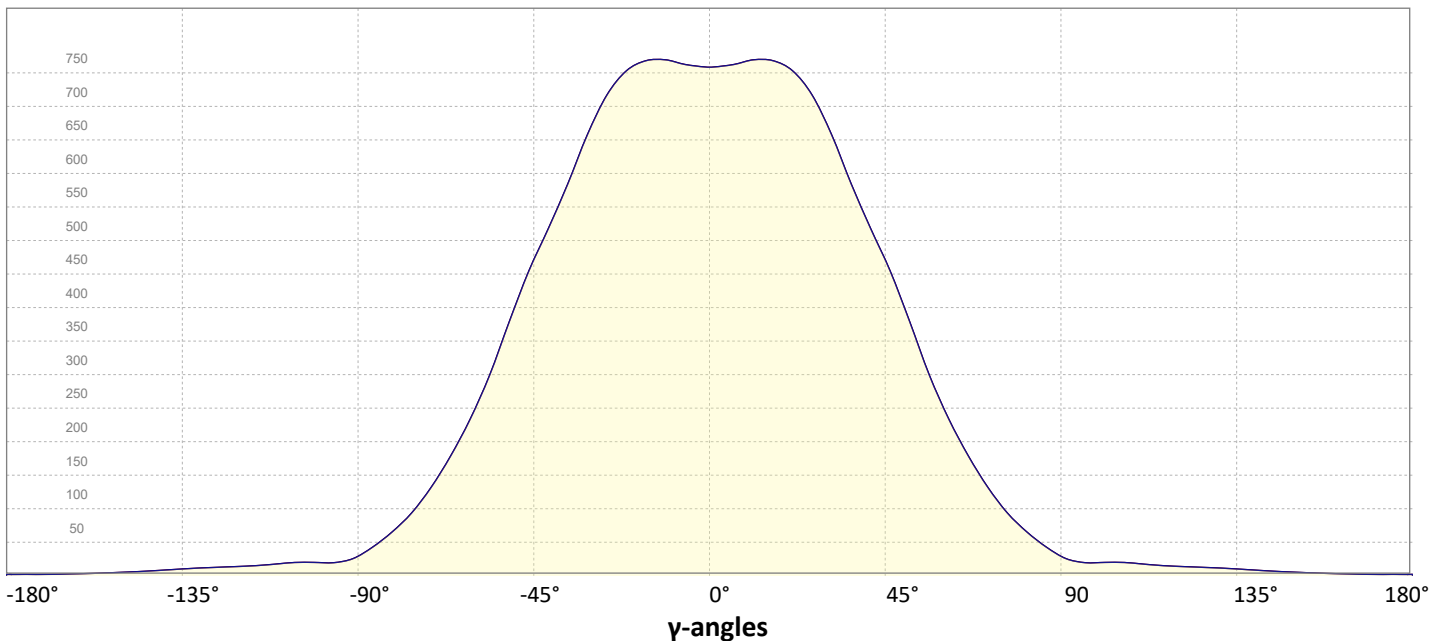
Intensity Ratio

| | |
|--------------|-------|
| In 120° cone | 78,9% |
| In 90° cone | 56,7% |

C000-C180

C090-C270

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



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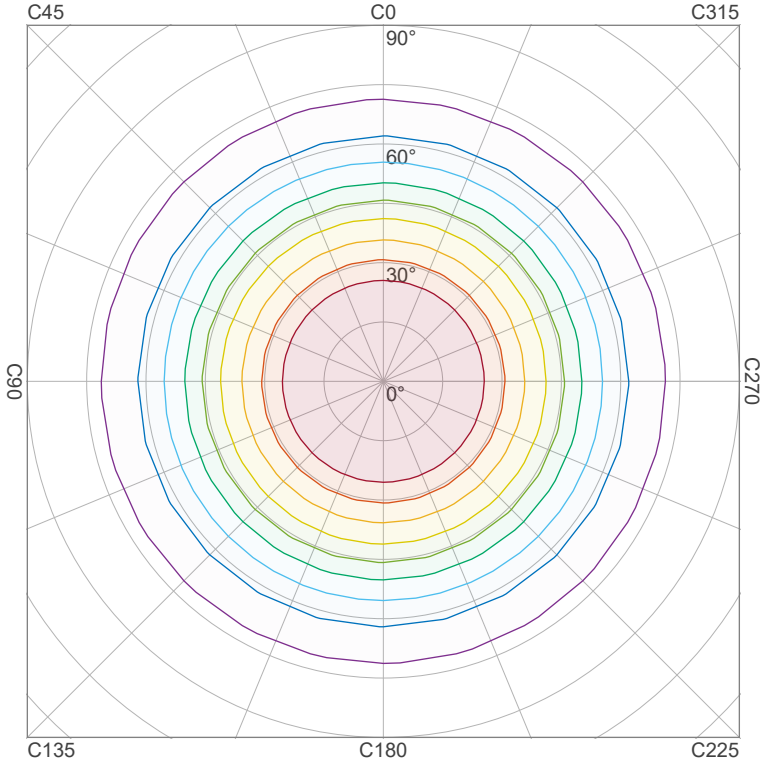
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Operator:



Iso-intensity Diagram (Iso-candela)

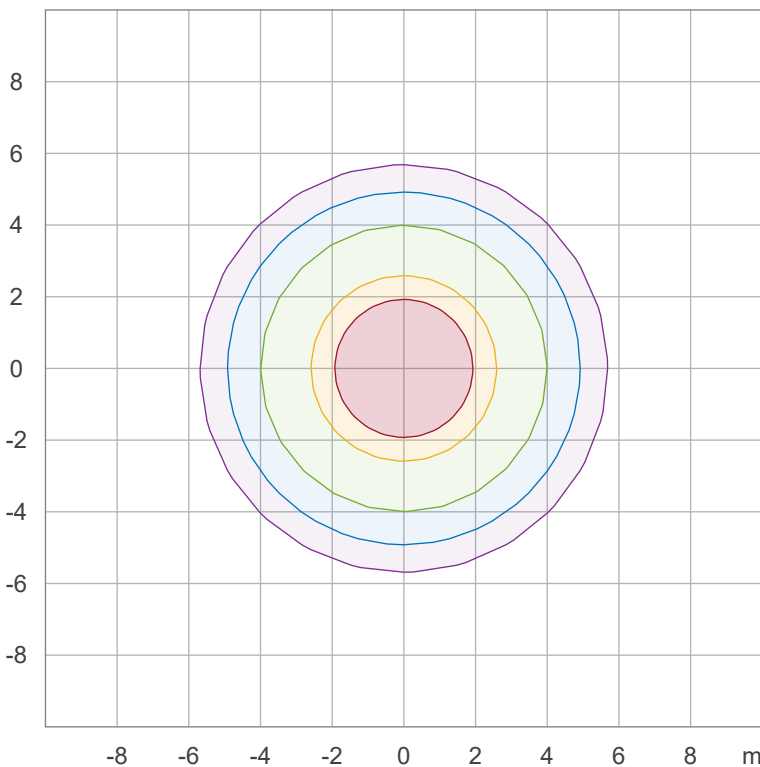


| | |
|------|----------|
| 90 % | 692,3 cd |
| 80 % | 615,4 cd |
| 70 % | 538,5 cd |
| 60 % | 461,6 cd |
| 50 % | 384,6 cd |
| 40 % | 307,7 cd |
| 30 % | 230,8 cd |
| 20 % | 153,9 cd |
| 10 % | 76,9 cd |

Peak intensity: 769,3 cd

Number of c-planes: 12

Iso-illuminance Diagram (Iso-lux)



| | |
|--------|---------|
| 50,0 % | 42,2 lx |
| 30,0 % | 25,3 lx |
| 10,0 % | 8,4 lx |
| 5,0 % | 4,2 lx |
| 3,0 % | 2,5 lx |

Peak illuminance: 84,3 lx

Mounting height: 3,0 m

Number of c-planes: 12

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Operator:



Color details

Correlated Color Temperature, Target CCT = 5000 K
 Correlated Color Temperature, Measured CCT = 5101 K
 Color Rendering Index CRI 81,3
 Color Rendering Index, R9 (red component) R9 = 24,5
 Color Rendering TM30-18 R_f 81,3 – R_g 98,8
 Color Quality Scale CQS = 80,3

MacAdam Steps SDCM = 4,6
 Color coordinates CIE 1931 (x;y) = (0,345;0,352)
 Color coordinate CIEs 1960 (u;v) = (0,211;0,323)
 Color deviation from BBL Duv = 0,0043
 Color coordinate CIEs 1976 (CIELUV) (u';v') = (0,211;0,485)

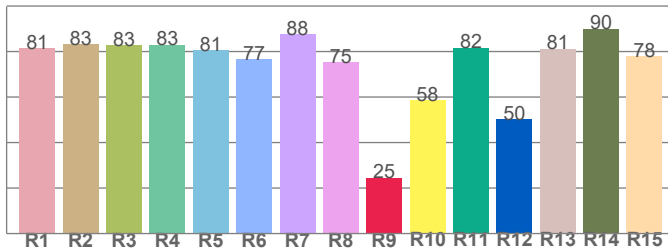
CIE 1931



CIE 1931 – zoomed on Planckian locus



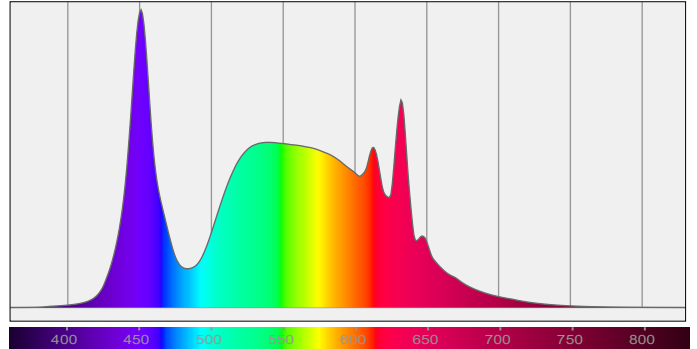
Color Rendering Index per reference color (CIE 1995)



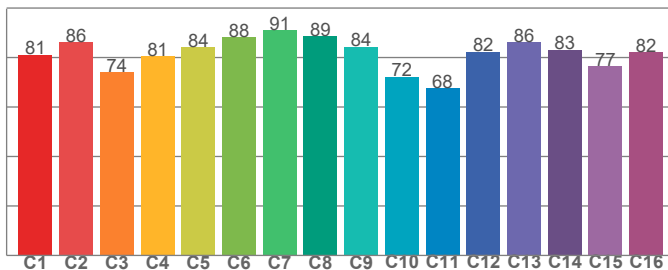
CRI R values, only R1-R8 are used to calculate final CRI value

| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81,5 | 83,2 | 82,8 | 83,0 | 80,5 | 76,7 | 87,6 | 75,4 | 24,5 | 58,5 | 81,6 | 50,1 | 81,2 | 90,0 | 77,9 |

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



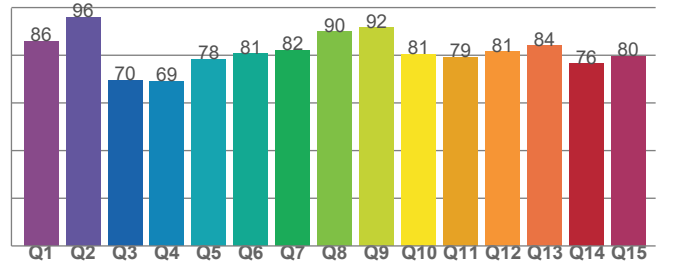
TM30-18 R_f-values per hue bin



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81,1 | 86,1 | 73,9 | 80,6 | 84,2 | 88,3 | 91,1 | 88,6 | 84,4 | 72,2 | 67,6 | 82,3 | 86,2 | 83,2 | 76,5 | 82,1 |

Color Quality Scale by reference color



CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 86,0 | 96,0 | 69,6 | 69,2 | 78,3 | 80,7 | 82,2 | 89,9 | 91,6 | 80,5 | 79,2 | 81,5 | 83,9 | 76,4 | 79,6 |

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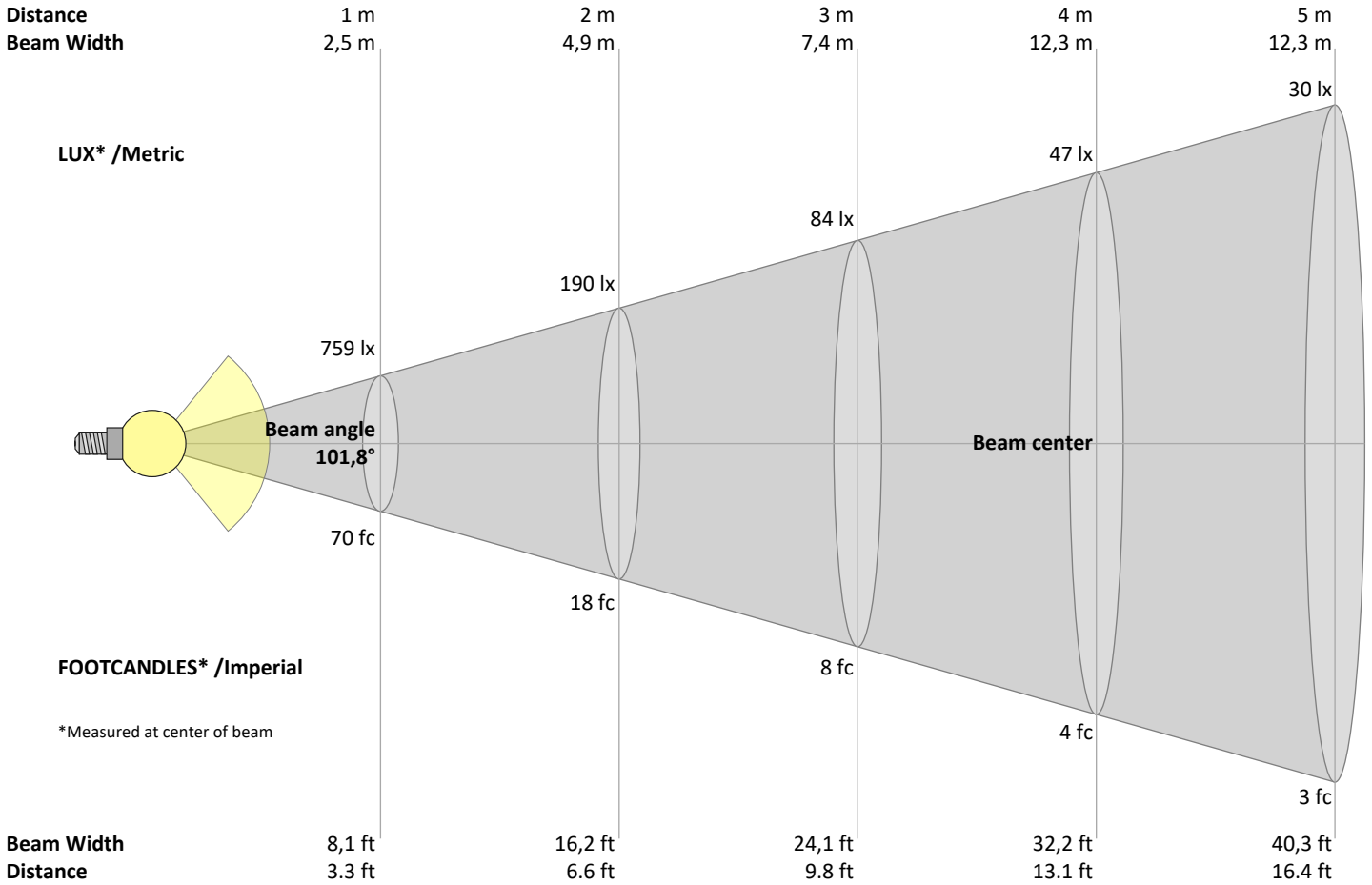
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Operator:



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 |
| 759 | 190 | 84 | 47 | 30 | 21 | 15 | 12 | 9 | 8 | 6 | 5 | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 2 | lux |
| 70,5 | 17,6 | 7,8 | 4,4 | 2,8 | 2 | 1,4 | 1,1 | 0,9 | 0,7 | 0,6 | 0,5 | 0,4 | 0,4 | 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 |
|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 759 | 762 | 768 | 768 | 757 | 726 | 673 | 603 | 535 | 471 | 398 | 320 | 251 | 193 | 144 | 103 | 73 | 48 | 30 | 21 | cd |
| 100% | 100% | 101% | 101% | 100% | 96% | 89% | 79% | 70% | 62% | 52% | 42% | 33% | 25% | 19% | 14% | 10% | 6% | 4% | 3% | 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 |
|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 759 | 762 | 768 | 768 | 757 | 726 | 673 | 603 | 535 | 471 | 398 | 320 | 251 | 193 | 144 | 103 | 73 | 48 | 30 | 21 | cd |
| 100% | 100% | 101% | 101% | 100% | 96% | 89% | 79% | 70% | 62% | 52% | 42% | 33% | 25% | 19% | 14% | 10% | 6% | 4% | 3% | 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 |
|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 759 | 762 | 768 | 768 | 757 | 726 | 673 | 603 | 535 | 471 | 398 | 320 | 251 | 193 | 144 | 103 | 73 | 48 | 30 | 21 | cd |
| 100% | 100% | 101% | 101% | 100% | 96% | 89% | 79% | 70% | 62% | 52% | 42% | 33% | 25% | 19% | 14% | 10% | 6% | 4% | 3% | 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 |
|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----------|
| 759 | 762 | 768 | 768 | 757 | 726 | 673 | 603 | 535 | 471 | 398 | 320 | 251 | 193 | 144 | 103 | 73 | 48 | 30 | 21 | cd |
| 100% | 100% | 101% | 101% | 100% | 96% | 89% | 79% | 70% | 62% | 52% | 42% | 33% | 25% | 19% | 14% | 10% | 6% | 4% | 3% | 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 | 21,2 | 22,4 | 21,5 | 22,7 | 23,0 | 21,5 | 22,6 | 21,7 | 22,9 | 23,2 |
| | 3H | 22,2 | 23,4 | 22,7 | 23,7 | 24,0 | 22,5 | 23,7 | 23,0 | 24,0 | 24,3 |
| | 4H | 22,7 | 23,8 | 23,2 | 24,1 | 24,5 | 23,0 | 24,1 | 23,5 | 24,5 | 24,8 |
| | 6H | 23,1 | 24,1 | 23,5 | 24,5 | 24,9 | 23,6 | 24,5 | 23,9 | 24,9 | 25,3 |
| | 8H | 23,3 | 24,2 | 23,7 | 24,6 | 25,1 | 23,8 | 24,7 | 24,2 | 25,1 | 25,6 |
| | 12H | 23,4 | 24,4 | 23,9 | 24,8 | 25,3 | 24,0 | 24,9 | 24,4 | 25,3 | 25,8 |
| 4H | 2H | 21,7 | 22,8 | 22,1 | 23,1 | 23,4 | 21,8 | 22,9 | 22,3 | 23,3 | 23,6 |
| | 3H | 23,0 | 23,9 | 23,4 | 24,3 | 24,8 | 23,2 | 24,1 | 23,6 | 24,5 | 25,1 |
| | 4H | 23,5 | 24,4 | 24,0 | 24,8 | 25,4 | 23,8 | 24,7 | 24,3 | 25,1 | 25,7 |
| | 6H | 24,0 | 24,8 | 24,6 | 25,2 | 25,7 | 24,4 | 25,2 | 24,9 | 25,6 | 26,1 |
| | 8H | 24,2 | 25,0 | 24,8 | 25,4 | 25,9 | 24,7 | 25,4 | 25,2 | 25,9 | 26,3 |
| | 12H | 24,4 | 25,0 | 25,0 | 25,5 | 26,1 | 25,0 | 25,6 | 25,5 | 26,1 | 26,6 |
| 8H | 4H | 23,7 | 24,5 | 24,3 | 24,9 | 25,3 | 24,0 | 24,7 | 24,6 | 25,2 | 25,6 |
| | 6H | 24,4 | 25,0 | 25,0 | 25,5 | 26,1 | 24,8 | 25,3 | 25,3 | 25,9 | 26,5 |
| | 8H | 24,8 | 25,2 | 25,3 | 25,8 | 26,5 | 25,2 | 25,7 | 25,8 | 26,3 | 27,0 |
| | 12H | 25,1 | 25,5 | 25,7 | 26,1 | 26,7 | 25,6 | 26,0 | 26,3 | 26,6 | 27,3 |
| 12H | 4H | 23,7 | 24,3 | 24,3 | 24,8 | 25,4 | 24,0 | 24,6 | 24,5 | 25,1 | 25,6 |
| | 6H | 24,5 | 25,0 | 25,1 | 25,6 | 26,3 | 24,9 | 25,3 | 25,4 | 25,9 | 26,6 |
| | 8H | 24,9 | 25,3 | 25,5 | 25,9 | 26,5 | 25,3 | 25,7 | 25,9 | 26,3 | 27,0 |

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

| | | |
|----------|------------|------------|
| S = 1.0H | 0,1 / -0,2 | 0,1 / -0,1 |
| S = 1.5H | 0,2 / -0,4 | 0,2 / -0,3 |
| S = 2.0H | 0,6 / -0,7 | 0,6 / -0,6 |

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 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 103 | 103 | 103 | 98 | 98 | 98 | 96 |
| 1 | 108 | 103 | 99 | 96 | 105 | 101 | 97 | 94 | 96 | 93 | 90 | 91 | 89 | 86 | 87 | 85 | 83 | 81 |
| 2 | 99 | 91 | 84 | 79 | 96 | 89 | 83 | 78 | 85 | 80 | 75 | 81 | 77 | 73 | 77 | 74 | 71 | 68 |
| 3 | 91 | 80 | 73 | 66 | 88 | 79 | 71 | 66 | 75 | 69 | 64 | 72 | 67 | 62 | 69 | 64 | 61 | 58 |
| 4 | 83 | 72 | 63 | 57 | 81 | 70 | 62 | 56 | 67 | 60 | 55 | 64 | 59 | 54 | 62 | 57 | 53 | 51 |
| 5 | 77 | 64 | 56 | 49 | 74 | 63 | 55 | 49 | 61 | 53 | 48 | 58 | 52 | 47 | 56 | 51 | 46 | 44 |
| 6 | 71 | 58 | 50 | 43 | 69 | 57 | 49 | 43 | 55 | 48 | 42 | 53 | 47 | 42 | 51 | 45 | 41 | 39 |
| 7 | 66 | 53 | 44 | 39 | 64 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 35 |
| 8 | 62 | 48 | 40 | 35 | 60 | 48 | 40 | 34 | 46 | 39 | 34 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 58 | 45 | 37 | 31 | 56 | 44 | 36 | 31 | 42 | 35 | 31 | 41 | 35 | 30 | 40 | 34 | 30 | 28 |
| 10 | 54 | 41 | 33 | 28 | 53 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 37 | 31 | 27 | 26 |

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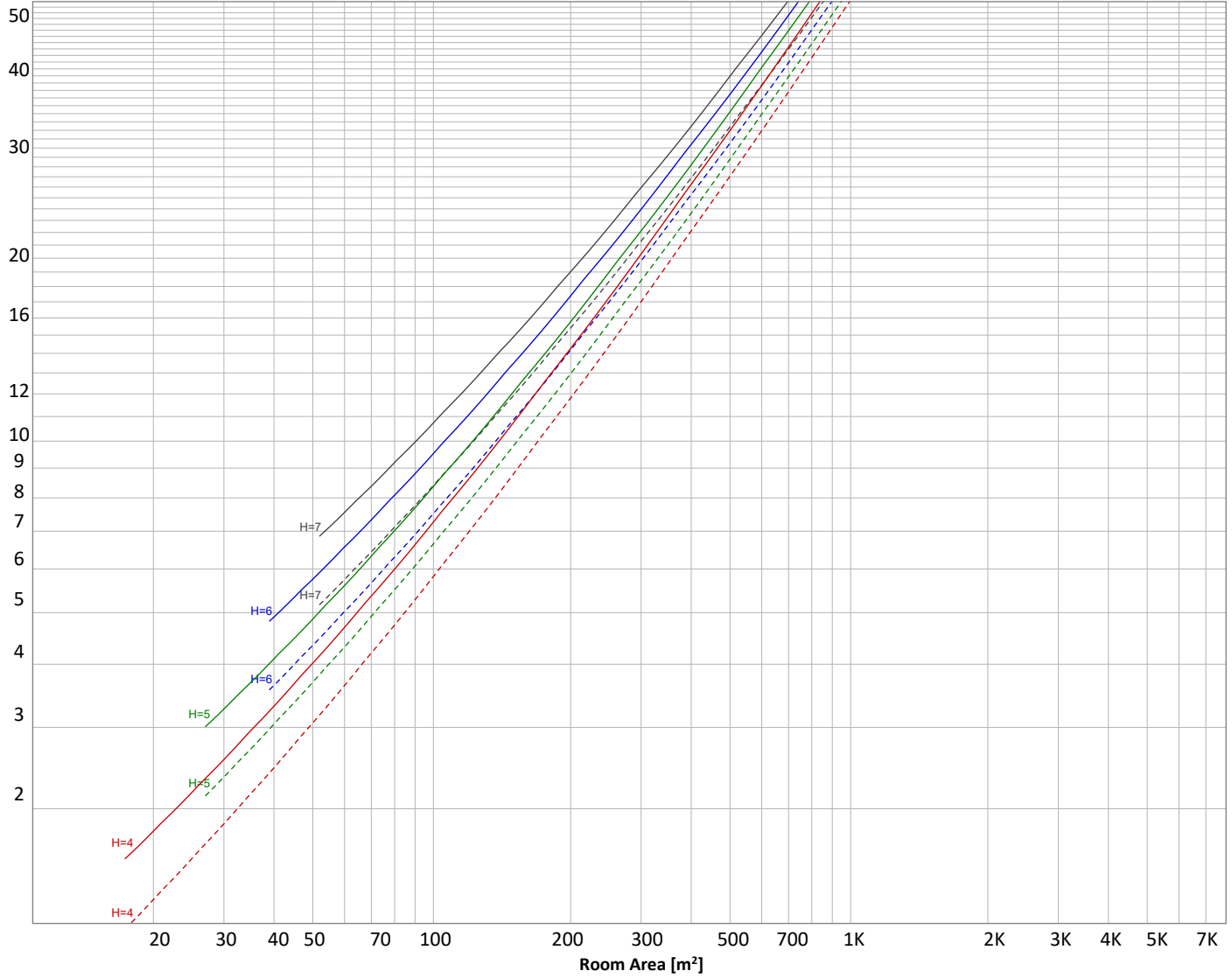
Operator:



Luminaire budgetary diagram

Uncorrected, comprehensive UGR table according to 117-1995

LAMPS (number of lamps)



Conditions

| | | | | | |
|---|----------------|-----------|---------------------|--------------------------|-------------------|
| H = Room height | Flux = 2092 lm | | | | |
| H _{down} = Lamp distance from ceiling = | 0.00 m | Line type | Ceiling reflectance | ρ(%) 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° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 72,9 lm | 217 lm | 334 lm | 378 lm | 362 lm | 287 lm | 192 lm | 110 lm | 53,5 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 23,8 lm | 20,7 lm | 15,6 lm | 11,5 lm | 7,85 lm | 4,24 lm | 1,97 lm | 0,742 lm | 0,195 lm |

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Operator:



Outdoor Light Planning

Lumen per Zone

| Zone (γ) | Lumen | % Total |
|--------------|----------------|---------------|
| 0-10° | 73 lm | 3,5% |
| 10-20° | 217 lm | 10,4% |
| 20-30° | 334 lm | 15,9% |
| 30-40° | 378 lm | 18,0% |
| 40-50° | 362 lm | 17,3% |
| 50-60° | 287 lm | 13,7% |
| 60-70° | 192 lm | 9,2% |
| 70-80° | 110 lm | 5,3% |
| 80-90° | 54 lm | 2,6% |
| 90-100° | 24 lm | 1,1% |
| 100-110° | 21 lm | 1,0% |
| 110-120° | 16 lm | 0,7% |
| 120-130° | 12 lm | 0,6% |
| 130-140° | 8 lm | 0,4% |
| 140-150° | 4 lm | 0,2% |
| 150-160° | 2 lm | 0,1% |
| 160-170° | 1 lm | 0,0% |
| 170-180° | 0 lm | 0,0% |
| Total | 2092 lm | 100,0% |

Intensity peaks

| | |
|----------------|--------|
| Max intensity | 769 cd |
| Intensity, 90° | 30 cd |
| Intensity, 0° | 759 cd |

Zonal Lumen summary

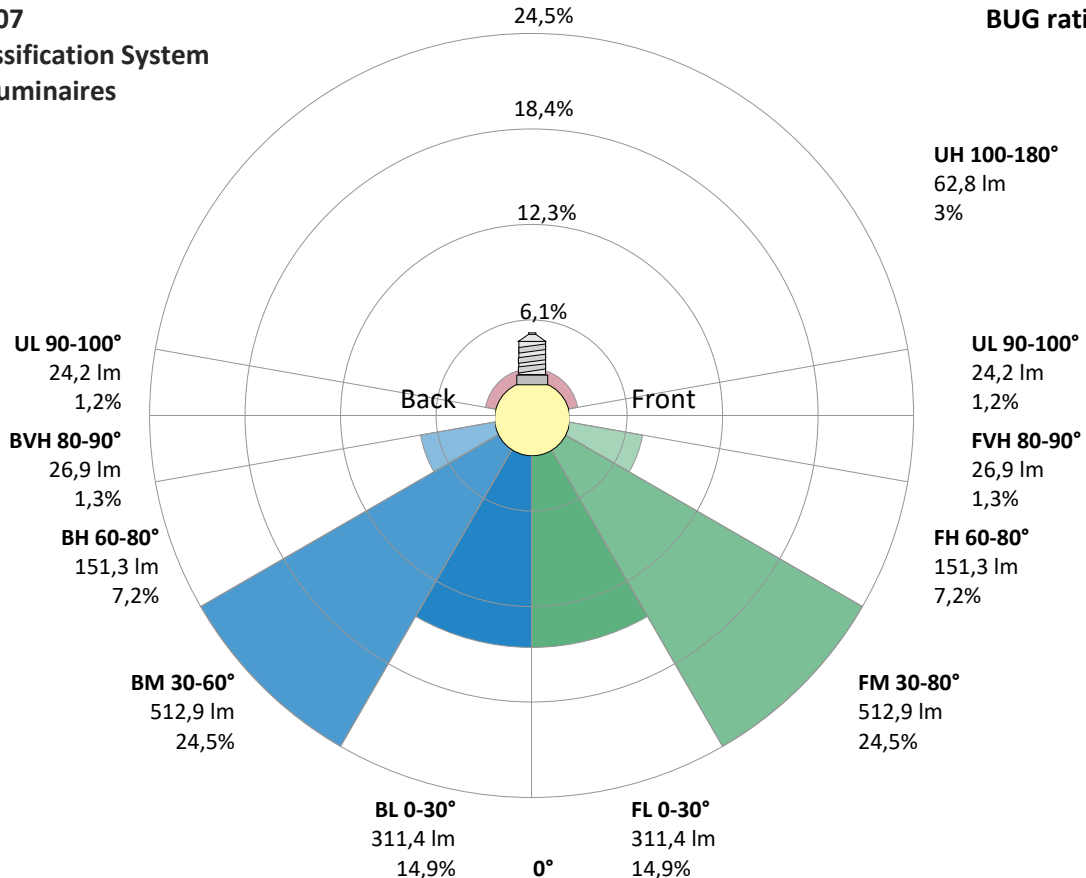
| Zone (γ) | Lumen | % Total |
|----------|---------|---------|
| 0-30° | 624 lm | 29,8% |
| 0-40° | 1001 lm | 47,9% |
| 0-60° | 1650 lm | 78,9% |
| 60-90° | 356 lm | 17,0% |
| 70-100° | 188 lm | 9,0% |
| 90-120° | 60 lm | 2,9% |
| 0-90° | 2005 lm | 95,9% |
| 90-180° | 87 lm | 4,1% |
| 0-180° | 2092 lm | 100,0% |

BUG rating

| | Lumen | % Total |
|----------------------|--------|---------|
| Forward light | | |
| Low(0-30°) | 311 lm | 14,9% |
| Medium(30-60°) | 513 lm | 24,5% |
| High(60-80°) | 151 lm | 7,2% |
| Very high(80-90°) | 27 lm | 1,3% |
| Back light | | |
| Low(0-30°) | 311 lm | 14,9% |
| Medium(30-60°) | 513 lm | 24,5% |
| High(60-80°) | 151 lm | 7,2% |
| Very high(80-90°) | 27 lm | 1,3% |
| Uplight | | |
| Low(90-100°) | 24 lm | 1,2% |
| High(100-180°) | 63 lm | 3,0% |

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

BUG rating B1 U3 G1



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Measurement tracking No. and Link: [VT250515-003675](https://www.viso-systems.com/VT250515-003675)

Operator:

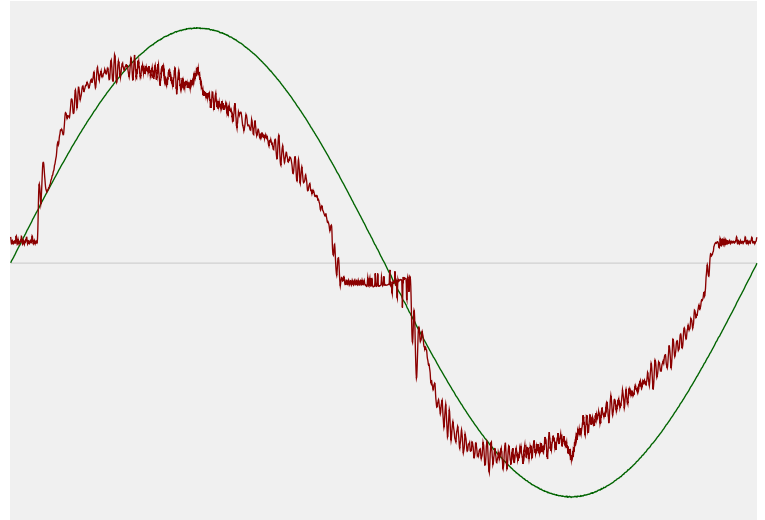


Power Details

Input Power

| | |
|---|---------|
| Power feed to light source | 14,2 W |
| Frequency of input power | 50 Hz |
| RMS Input voltage feed, V_{RMS} | 230 V |
| RMS Input current feed, I_{RMS} | 0,065 A |
| Volt-Ampere or apparent power = $V_{RMS} * I_{RMS}$ | 14,9 VA |
| Displacement factor of AC power feed | 0,97 |
| Power factor of AC current feed | 0,96 |
| Total harmonic distortion of the current | 14,62% |
| Total harmonic distortion of the voltage | 0,06% |

Input Power Curve



Efficiency

| | |
|---------------------------|----------|
| Radiated power efficiency | 43,8% |
| Lumen efficiency | 147 lm/W |

Stabilization Details

Warmup Conditions

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

Color Temperature Change

| | |
|-----------|--------|
| CCT start | 4999 K |
| CCT shift | +1 K |
| CCT end | 5000 K |

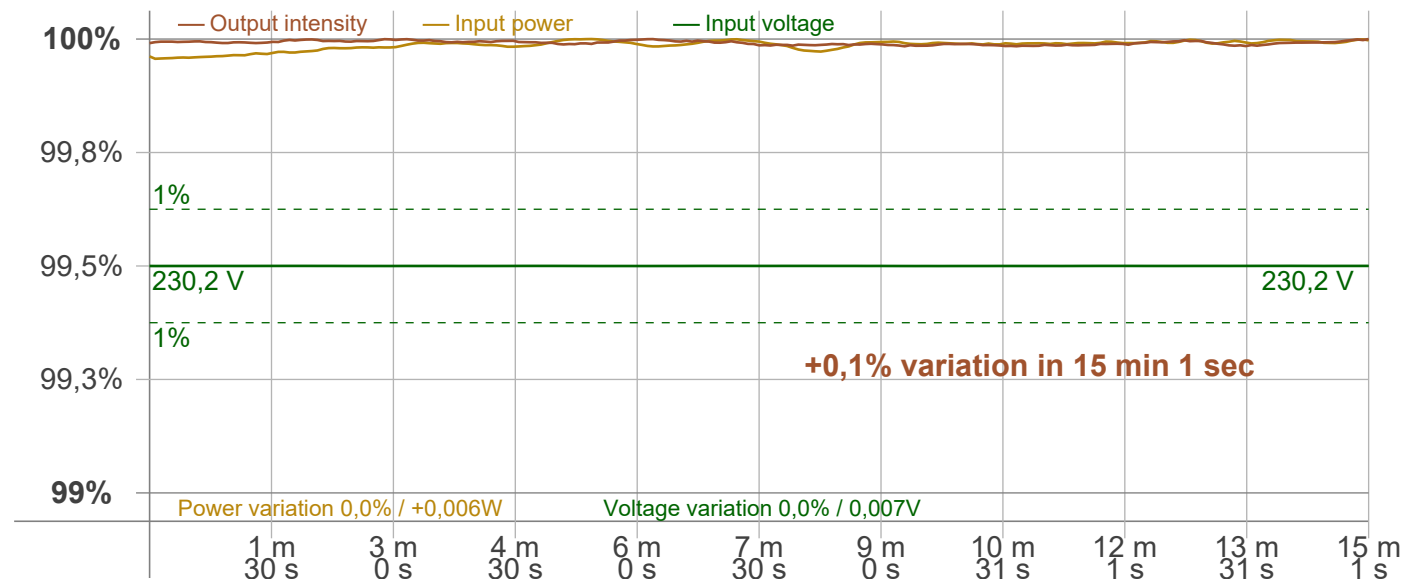
Warmup Result

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

Output Change

| | |
|---------------|---------|
| Output start | 2092 lm |
| Output change | +1 lm |
| Output end | 2092 lm |

Stabilization Curve



Light Measurement Report

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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 Hz
 Percent Flicker 0,92 %
 Flicker index 0

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

JA8/10 40 Hz 0,09 %
 JA8/10 90 Hz 0,09 %
 JA8/10 200 Hz 0,89 %
 JA8/10 400 Hz 0,89 %
 JA8/10 1000 Hz 0,9 %

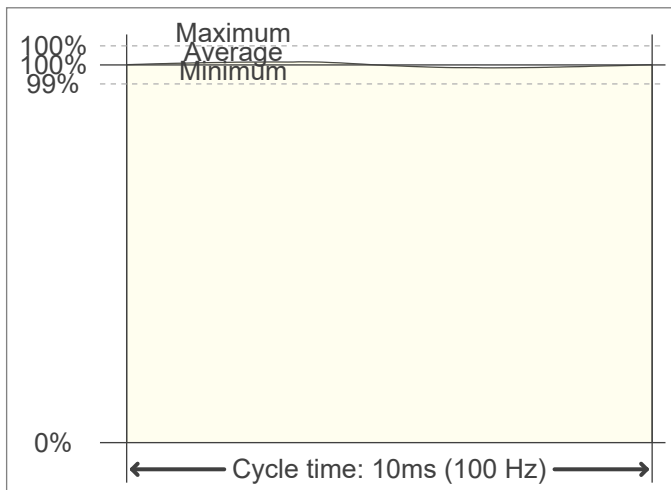
TLA indices (re IEC TR 61547-1, IEC 61000-3-3 and IEC 61000-4-15)

PstLM value (F < 80 Hz) 0,13
 SVM value (80 < F < 2000 Hz) 0,03

Flicker indices according to Lighting Research Center (2015)

Perception metric, Assist Mp 0,08

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



Flicker FFT (flicker curve in frequency domain)



IEEE 1789 Frequency/modulation plot

