

Light efficiency:

124 Lumen/Watt

Light quality:

CRI: 83,5

Color temperature:

4060 K

Output: 1042 lm

Peak: 337 cd

Power: 8,4 W

PF: 1,0



Product name:

Pegasus-3-Gold-0508-840-CRF

Item number:

FLNP-L-16A-0508-840-CRF

Date and time:

18.02.2021 12:52:33

Description:

Rank: S15ZT

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 Grad K

CRI +/-0,7

Angular Resolution 1 Grad step

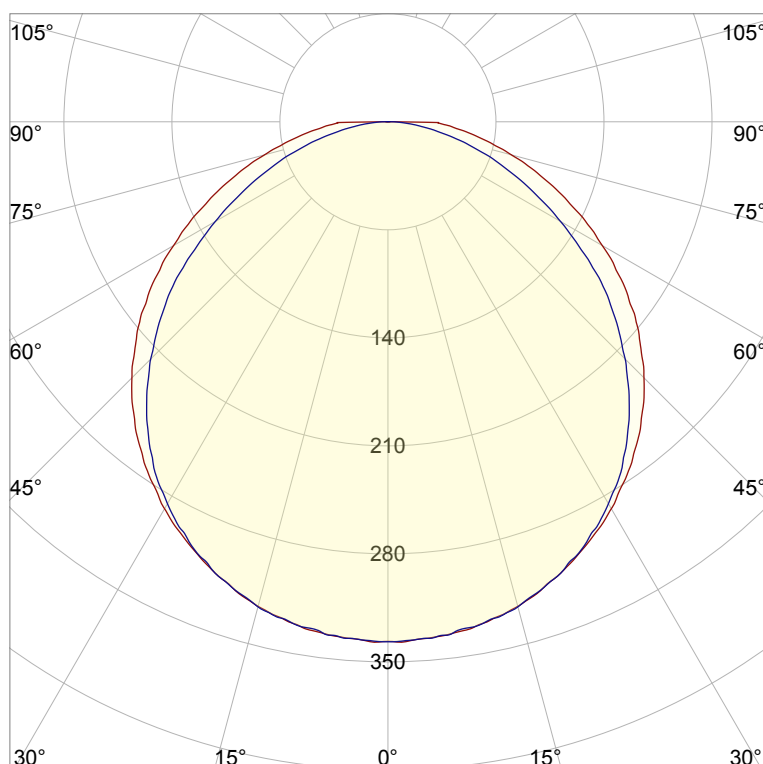
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustasse13-15

55411 Bingen am Rhein

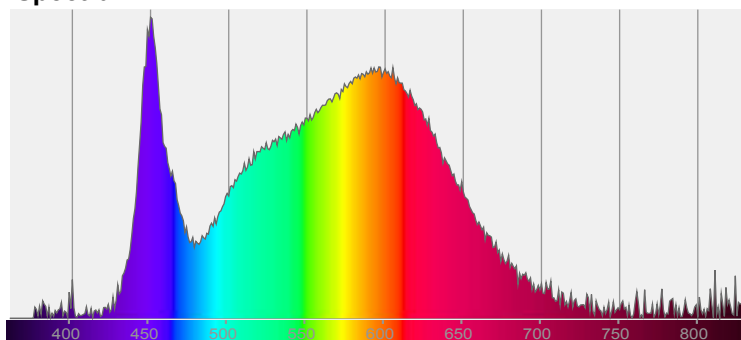


CIE 1931

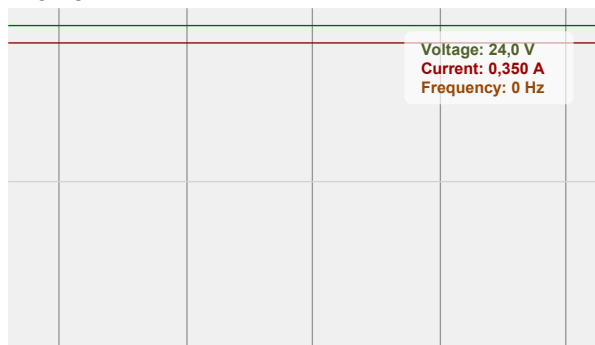
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y: 0,377

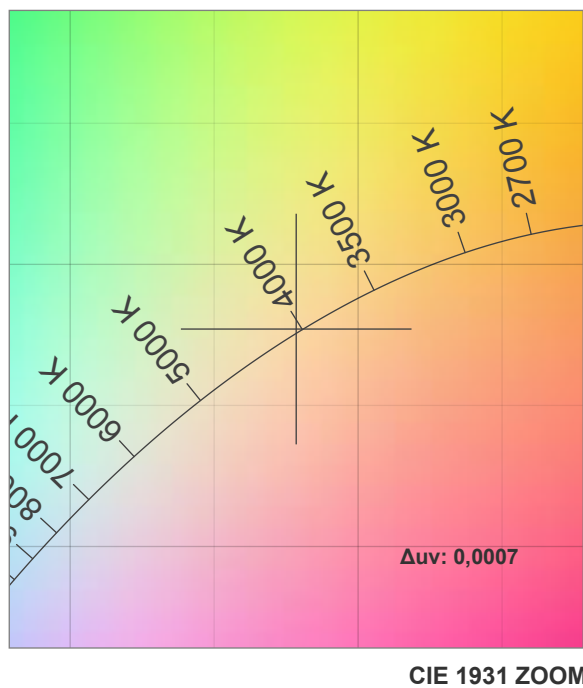
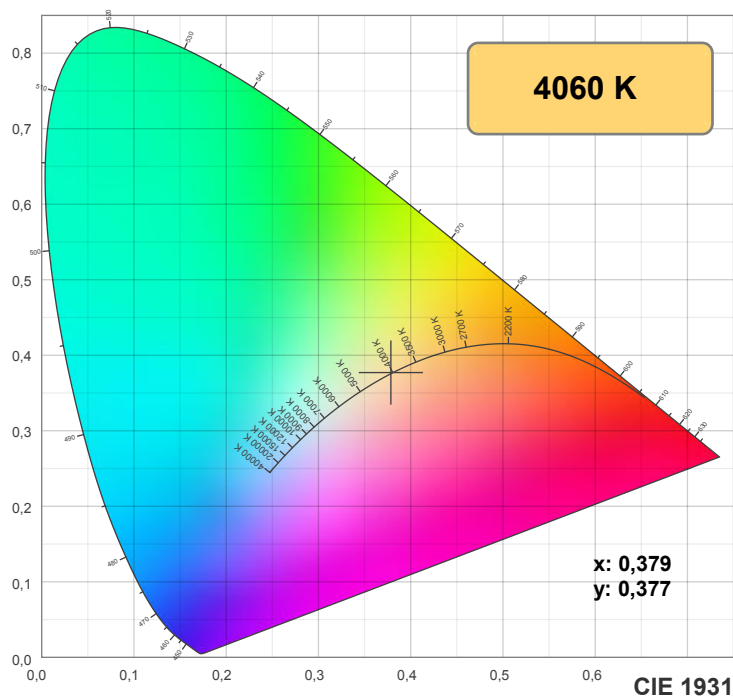
Spectra



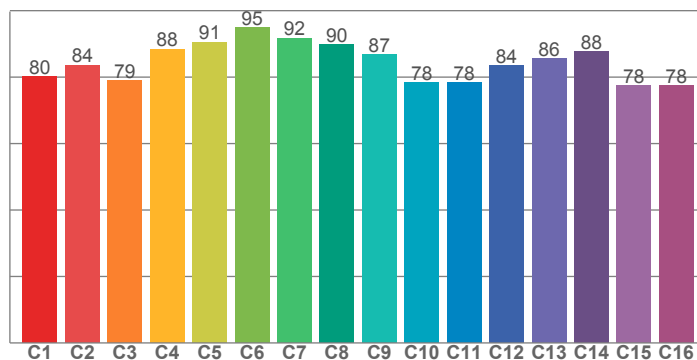
Power



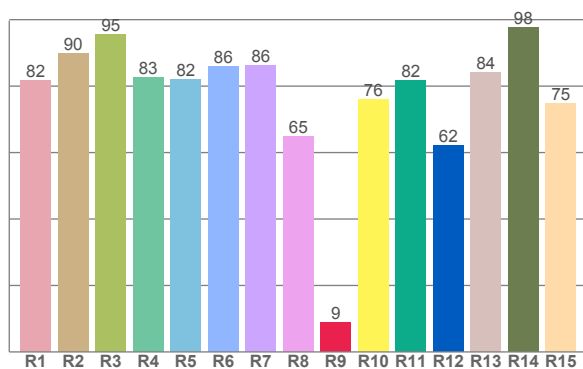
Voltage: 24,0 V
Current: 0,350 A
Frequency: 0 Hz



TM30: 84,4



CRI: 83,5 (R1-R8)



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 |
|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 81,8 | 89,9 | 95,5 | 82,5 | 81,9 | 85,8 | 86,1 | 64,8 | 8,9 | 75,9 | 81,8 | 62,2 | 84,0 | 97,8 | 74,9 |

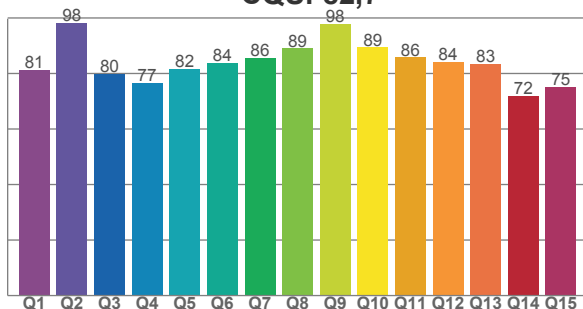
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 80,1 | 83,7 | 78,9 | 88,5 | 90,6 | 94,8 | 91,7 | 89,8 | 86,9 | 78,4 | 78,5 | 83,5 | 85,6 | 87,7 | 77,5 | 77,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81,2 | 98,2 | 79,8 | 76,5 | 81,6 | 83,7 | 85,5 | 89,0 | 97,7 | 89,4 | 85,8 | 84,1 | 83,4 | 71,8 | 75,3 |

CQS: 82,7



Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| CCT | CRI | CRI R9 | TM30 Rf | TM30 Rg | CQS | x | y | u | v | Δuv |
| 4060 K | 83,5 | 8,9 | 84,4 | 95,3 | 82,7 | 0,379 | 0,377 | 0,224 | 0,334 | 0,0007 |

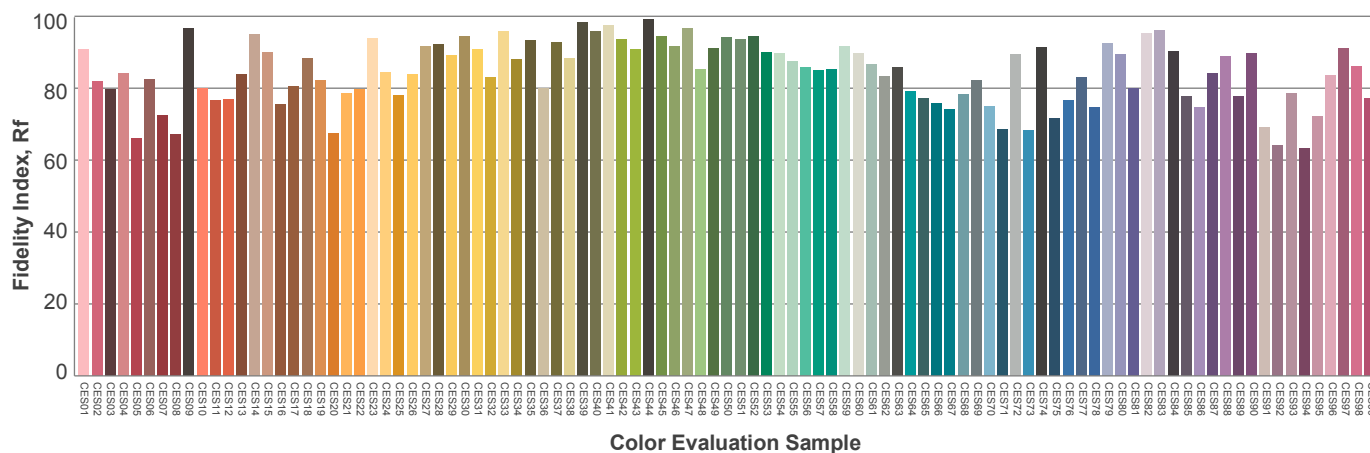
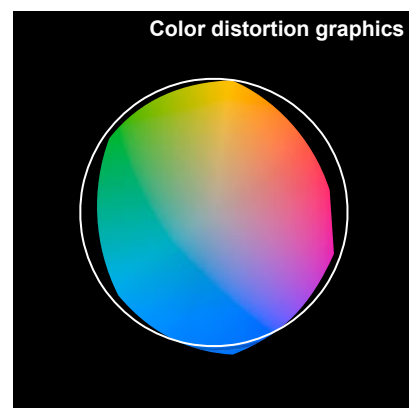
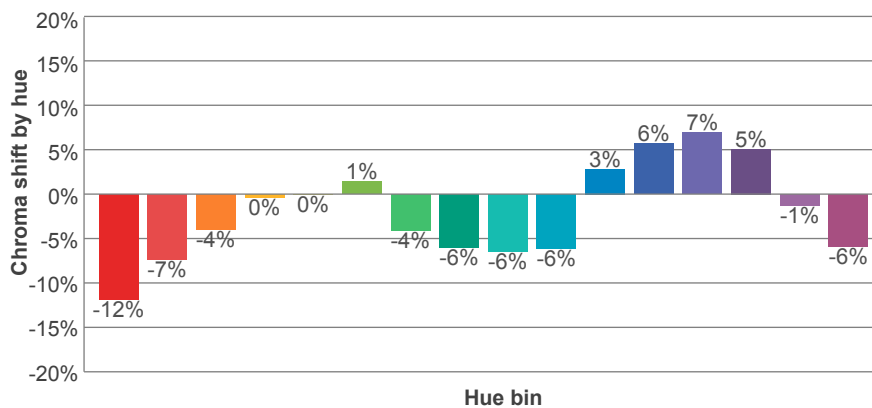
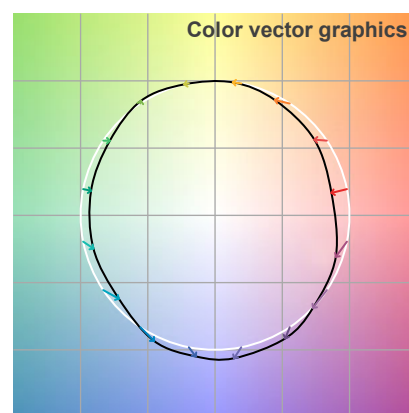
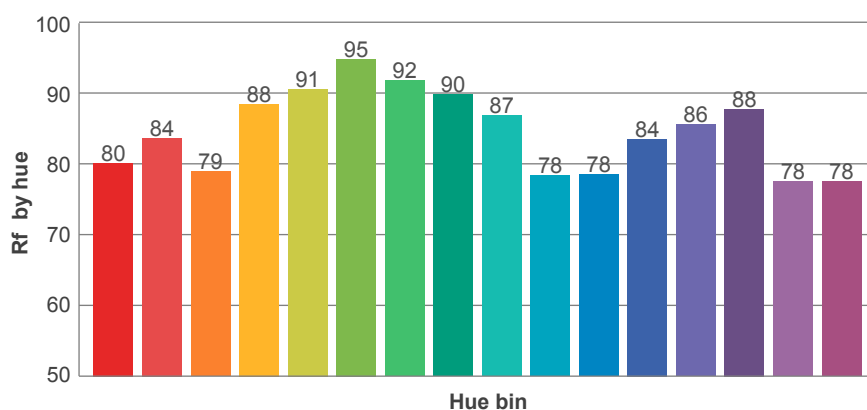
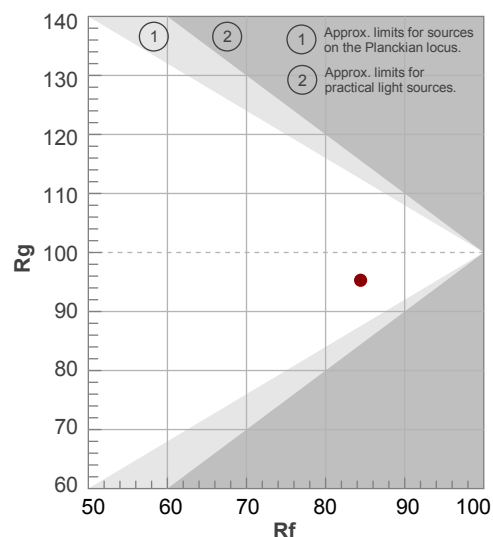
Rf 84,4

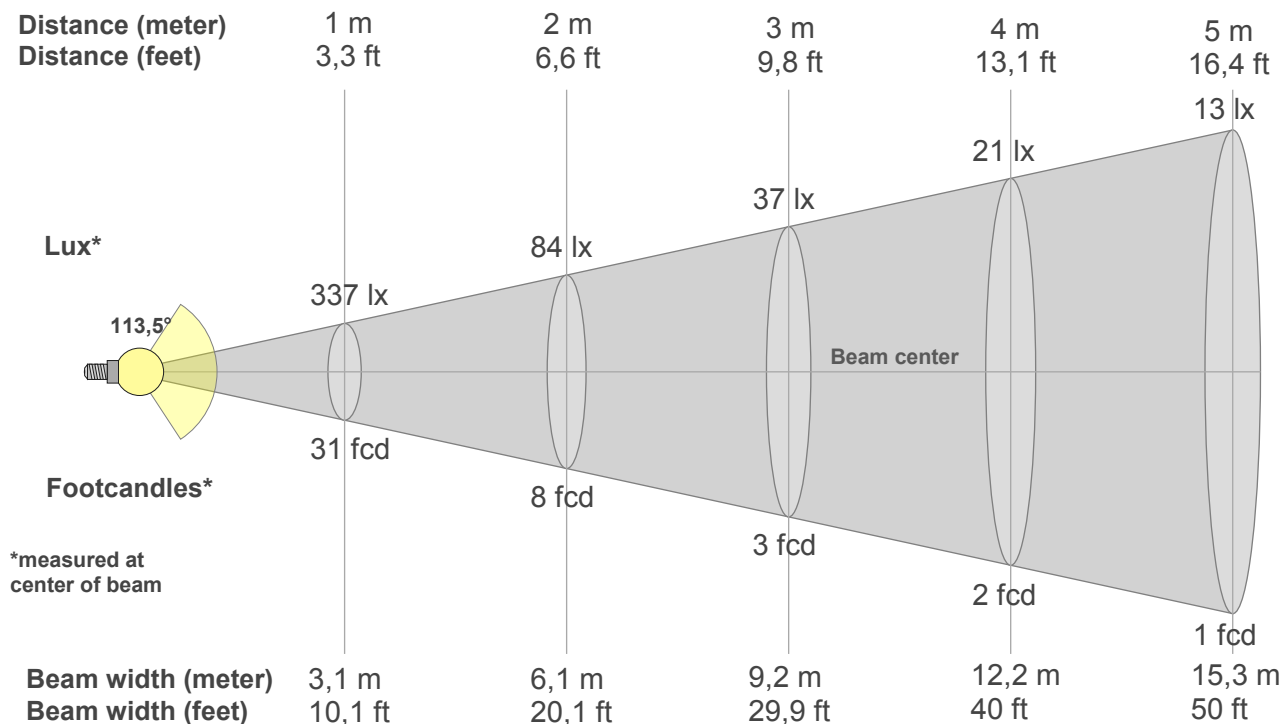
Fidelity index Rf

Rg 95,3

Gammut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 80 | -12% | -1% |
| 2 | 84 | -7% | 6% |
| 3 | 79 | -4% | 11% |
| 4 | 88 | 0% | 6% |
| 5 | 91 | 0% | 3% |
| 6 | 95 | 1% | -2% |
| 7 | 92 | -4% | -3% |
| 8 | 90 | -6% | 0% |
| 9 | 87 | -6% | 7% |
| 10 | 78 | -6% | 12% |
| 11 | 78 | 3% | 14% |
| 12 | 84 | 6% | 6% |
| 13 | 86 | 7% | -7% |
| 14 | 88 | 5% | -7% |
| 15 | 78 | -1% | -17% |
| 16 | 78 | -6% | -13% |





Beam intensities from 1-20m

| 1m | 2m | 3m | 4m | 5m | 6m | 7m | 8m | 9m | 10m | 11m | 12m | 13m | 14m | 15m | 16m | 17m | 18m | 19m | 20m |
|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3,3ft | 6,6ft | 9,8ft | 13,1ft | 16,4ft | 19,7ft | 23ft | 26,2ft | 29,5ft | 32,8ft | 36,1ft | 39,4ft | 42,7ft | 45,9ft | 49,2ft | 52,5ft | 55,8ft | 59,1ft | 62,3ft | 65,6ft |
| 337lx | 84lx | 37lx | 21lx | 13lx | 9lx | 7lx | 5lx | 4lx | 3lx | 3lx | 2lx | 2lx | 2lx | 1lx | 1lx | 1lx | 1lx | 1lx | 1lx |
| 31,3fcd | 7,8fcd | 3,5fcd | 2fcd | 1,3fcd | 0,9fcd | 0,6fcd | 0,5fcd | 0,4fcd | 0,3fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,2fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 337 | 335 | 332 | 325 | 315 | 303 | 289 | 273 | 255 | 235 | 212 | 188 | 160 | 134 | 107 | 83 | 61 | 43 | 17 | 16 |
| 100% | 100% | 98% | 97% | 94% | 90% | 86% | 81% | 76% | 70% | 63% | 56% | 48% | 40% | 32% | 25% | 18% | 13% | 5% | 5% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 337 | 336 | 332 | 325 | 315 | 302 | 286 | 266 | 243 | 217 | 190 | 160 | 129 | 100 | 74 | 51 | 29 | 13 | 2 | 2 |
| 100% | 100% | 98% | 97% | 94% | 90% | 85% | 79% | 72% | 65% | 56% | 48% | 38% | 30% | 22% | 15% | 9% | 4% | 1% | 0% |

Intensities in 180° c-plane

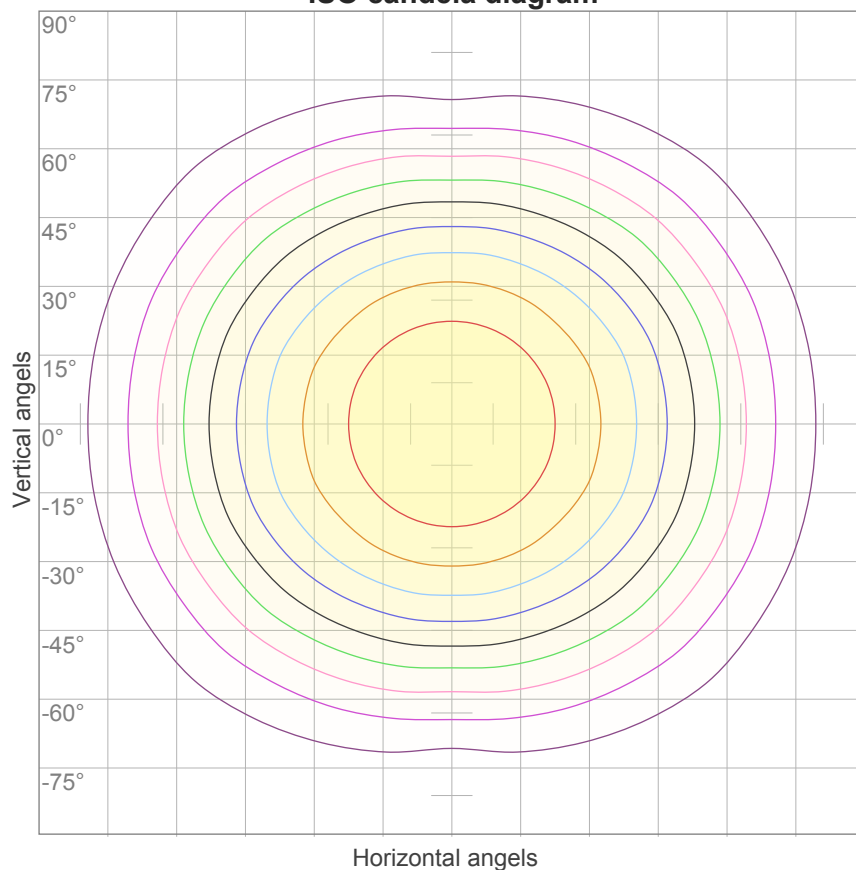
| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 337 | 335 | 332 | 325 | 315 | 303 | 289 | 273 | 255 | 235 | 212 | 188 | 160 | 134 | 107 | 83 | 61 | 43 | 17 | 16 |
| 100% | 100% | 98% | 97% | 94% | 90% | 86% | 81% | 76% | 70% | 63% | 56% | 48% | 40% | 32% | 25% | 18% | 13% | 5% | 5% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 337 | 336 | 332 | 325 | 315 | 302 | 286 | 266 | 243 | 217 | 190 | 160 | 129 | 100 | 74 | 51 | 29 | 13 | 2 | 2 |
| 100% | 100% | 98% | 97% | 94% | 90% | 85% | 79% | 72% | 65% | 56% | 48% | 38% | 30% | 22% | 15% | 9% | 4% | 1% | 0% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 113,5° | 171,8° | 199° | 73,5% | 49,9% |

ISO candela diagram



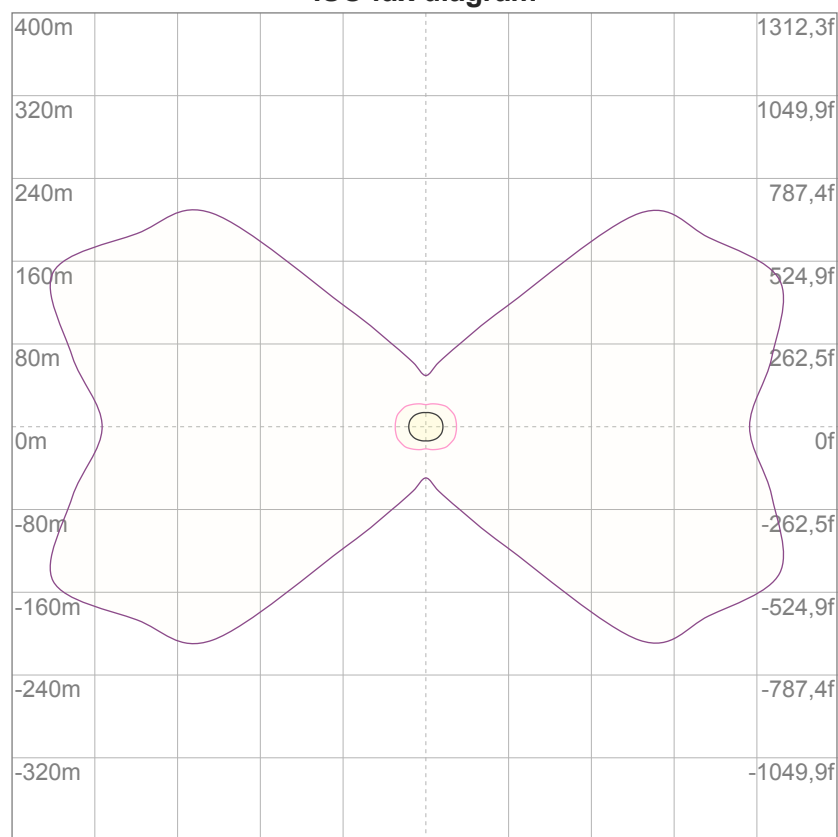
| | |
|-----|--------|
| 10% | 34 cd |
| 20% | 67 cd |
| 30% | 101 cd |
| 40% | 135 cd |
| 50% | 168 cd |
| 60% | 202 cd |
| 70% | 236 cd |
| 80% | 269 cd |
| 90% | 303 cd |

Conditions:

Number of c-planes: 16

Candela at center: 337 cd

ISO lux diagram



| | |
|-----|----------|
| 3% | 0,101 lx |
| 5% | 0,168 lx |
| 10% | 0,337 lx |
| 30% | 1,01 lx |
| 50% | 1,68 lx |

Conditions:

Number of c-planes: 16

Lux at center: 3,37 lx

*Lux distribution on a surface
when lamp is mounted at 10
meters from the surface.*

Glare Evaluation According to UGR

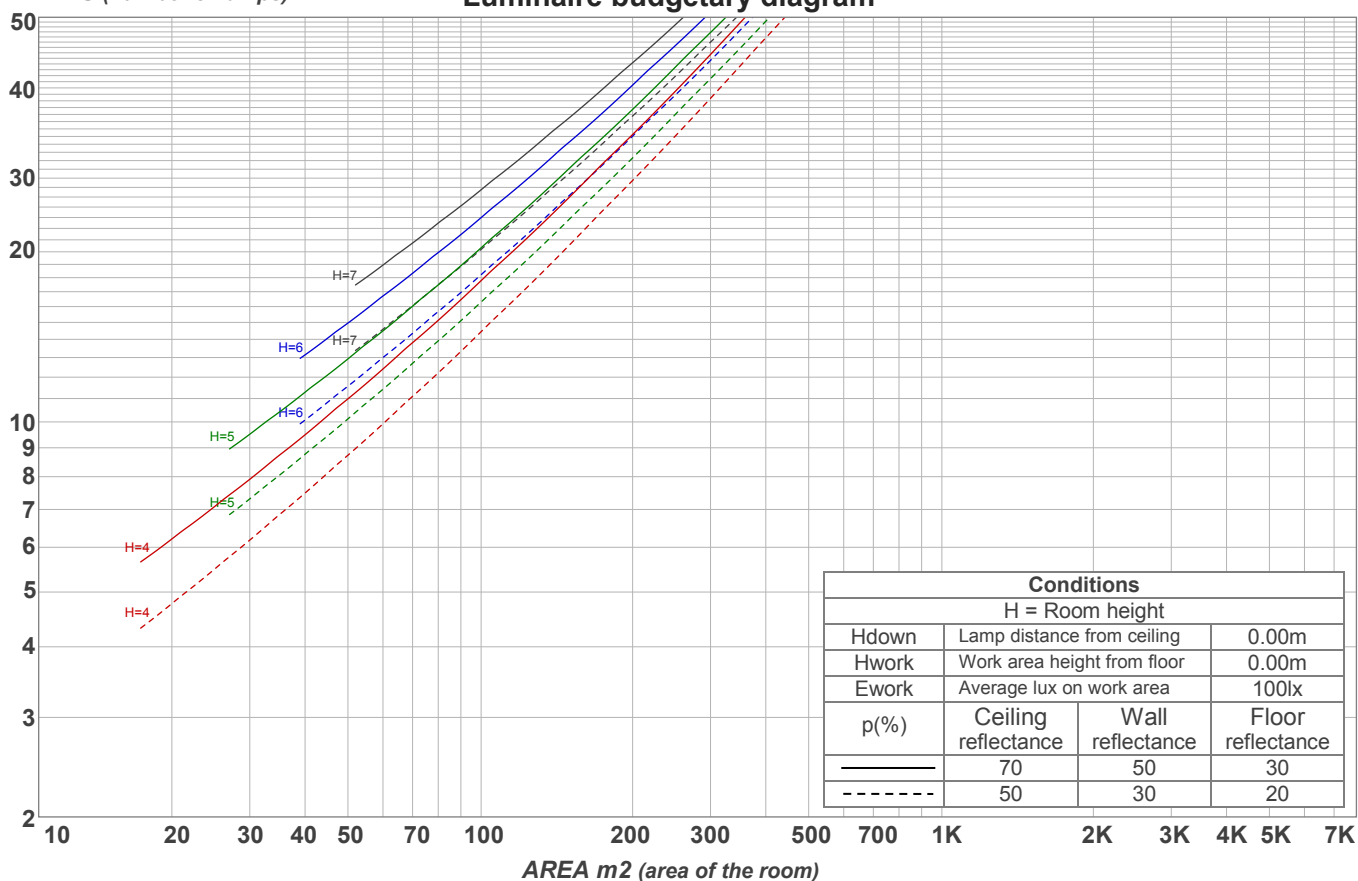
| | | | | | | | | | | | |
|--|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| p Walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| p Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room size X Y | | Viewing direction at right angles to lamp axis | | | | | Viewing direction parallel to lamp axis | | | | |
| 2H | 2H | 22,5 | 23,7 | 22,7 | 24,0 | 24,2 | 22,7 | 24,0 | 23,0 | 24,3 | 24,5 |
| | 3H | 23,7 | 25,0 | 24,1 | 25,3 | 25,5 | 23,9 | 25,2 | 24,4 | 25,5 | 25,7 |
| | 4H | 24,3 | 25,5 | 24,7 | 25,8 | 26,1 | 24,5 | 25,7 | 24,9 | 26,0 | 26,2 |
| | 6H | 24,8 | 25,9 | 25,1 | 26,2 | 26,6 | 24,9 | 26,0 | 25,2 | 26,3 | 26,6 |
| | 8H | 25,0 | 26,0 | 25,3 | 26,3 | 26,8 | 25,0 | 26,1 | 25,3 | 26,4 | 26,8 |
| | 12H | 25,1 | 26,1 | 25,5 | 26,5 | 26,9 | 25,0 | 26,1 | 25,4 | 26,4 | 26,9 |
| 4H | 2H | 23,0 | 24,2 | 23,4 | 24,5 | 24,8 | 23,2 | 24,5 | 23,6 | 24,7 | 25,0 |
| | 3H | 24,6 | 25,7 | 25,0 | 26,0 | 26,4 | 24,8 | 25,8 | 25,1 | 26,1 | 26,6 |
| | 4H | 25,2 | 26,2 | 25,7 | 26,6 | 27,2 | 25,3 | 26,3 | 25,8 | 26,7 | 27,2 |
| | 6H | 25,8 | 26,7 | 26,3 | 27,1 | 27,5 | 25,8 | 26,7 | 26,3 | 27,1 | 27,5 |
| | 8H | 26,0 | 26,9 | 26,6 | 27,3 | 27,6 | 26,0 | 26,8 | 26,5 | 27,2 | 27,6 |
| | 12H | 26,2 | 26,9 | 26,7 | 27,4 | 27,9 | 26,1 | 26,8 | 26,6 | 27,2 | 27,7 |
| 8H | 4H | 25,5 | 26,4 | 26,0 | 26,7 | 27,1 | 25,6 | 26,4 | 26,1 | 26,8 | 27,2 |
| | 6H | 26,3 | 26,9 | 26,8 | 27,4 | 28,0 | 26,3 | 26,9 | 26,8 | 27,4 | 27,9 |
| | 8H | 26,6 | 27,2 | 27,2 | 27,7 | 28,4 | 26,5 | 27,1 | 27,1 | 27,6 | 28,3 |
| | 12H | 26,9 | 27,4 | 27,5 | 27,9 | 28,5 | 26,8 | 27,2 | 27,3 | 27,7 | 28,4 |
| 12H | 4H | 25,5 | 26,3 | 26,0 | 26,7 | 27,2 | 25,6 | 26,3 | 26,1 | 26,7 | 27,2 |
| | 6H | 26,4 | 27,0 | 26,9 | 27,5 | 28,1 | 26,4 | 26,9 | 26,9 | 27,5 | 28,1 |
| | 8H | 26,8 | 27,3 | 27,4 | 27,8 | 28,4 | 26,7 | 27,2 | 27,3 | 27,7 | 28,3 |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | | |
| S = 1.0H | | 0,1 / -0,1 | | | | | 0,1 / -0,1 | | | | |
| S = 1.5H | | 0,1 / -0,3 | | | | | 0,2 / -0,3 | | | | |
| S = 2.0H | | 0,4 / -0,5 | | | | | 0,5 / -0,6 | | | | |
| Standard table | | n/a | | | | | n/a | | | | |
| Correction summand | | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 1042 lm total luminous flux | | | | | | | | | | | |

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 Lumens delivered to the task surface | | | | | | | | | | | | | | | | | |
| 0 | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 104 | 104 | 104 | 99 | 99 | 99 | 96 |
| 1 | 107 | 102 | 97 | 93 | 104 | 99 | 95 | 91 | 94 | 91 | 88 | 90 | 87 | 84 | 86 | 83 | 81 | 79 |
| 2 | 97 | 88 | 81 | 75 | 94 | 86 | 80 | 74 | 82 | 77 | 72 | 78 | 74 | 70 | 75 | 71 | 68 | 65 |
| 3 | 88 | 77 | 69 | 62 | 86 | 76 | 68 | 62 | 72 | 65 | 60 | 69 | 63 | 58 | 66 | 61 | 57 | 55 |
| 4 | 81 | 69 | 60 | 53 | 78 | 67 | 59 | 52 | 64 | 57 | 51 | 61 | 55 | 50 | 59 | 53 | 49 | 46 |
| 5 | 74 | 61 | 52 | 45 | 72 | 60 | 51 | 45 | 57 | 50 | 44 | 55 | 48 | 43 | 53 | 47 | 42 | 40 |
| 6 | 69 | 55 | 46 | 39 | 66 | 54 | 45 | 39 | 52 | 44 | 38 | 50 | 43 | 38 | 48 | 42 | 37 | 35 |
| 7 | 64 | 50 | 41 | 35 | 62 | 49 | 40 | 34 | 47 | 39 | 34 | 45 | 38 | 33 | 44 | 38 | 33 | 31 |
| 8 | 59 | 45 | 37 | 31 | 57 | 45 | 36 | 31 | 43 | 36 | 30 | 41 | 35 | 30 | 40 | 34 | 29 | 28 |
| 9 | 55 | 42 | 33 | 28 | 54 | 41 | 33 | 28 | 39 | 32 | 27 | 38 | 32 | 27 | 37 | 31 | 27 | 25 |
| 10 | 52 | 38 | 30 | 25 | 50 | 38 | 30 | 25 | 37 | 30 | 25 | 35 | 29 | 24 | 34 | 28 | 24 | 22 |

LAMPS (number of lamps)

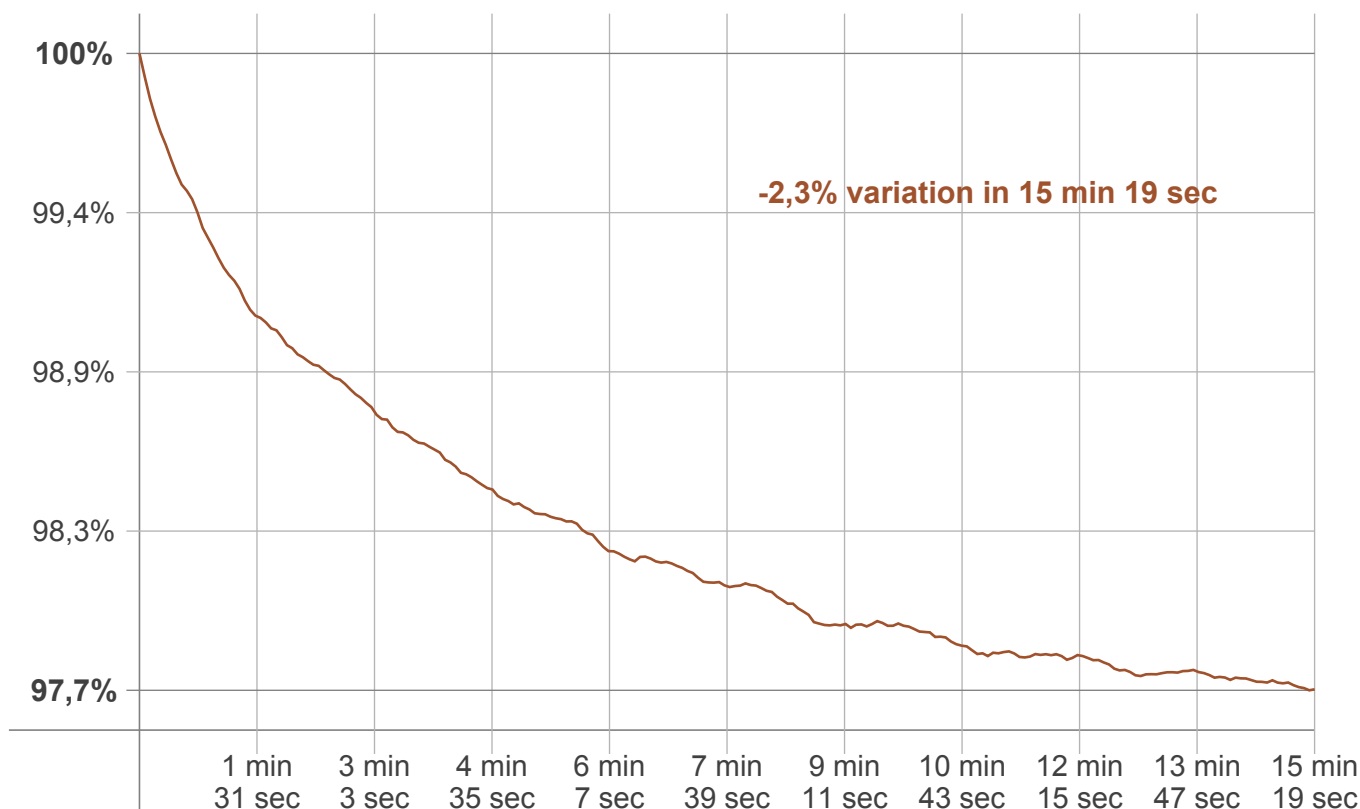
Luminaire budgetary diagram



Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 31,9 lm | 91,7 lm | 140 lm | 169 lm | 176 lm | 158 lm | 122 lm | 77,9 lm | 38,6 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 13,8 lm | 6,32 lm | 5,42 lm | 4,90 lm | 3,19 lm | 1,93 lm | 1,42 lm | 0,870 lm | 0,293 lm |

Warmup curve



Warmup result

| | |
|------------------|---------------|
| Warmup time: | 15 min 19 sec |
| Warmup variation | -2,3% |

Warmup conditions

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

Color temperature change

| CCT start | CCT change | CCT end |
|-----------|------------|---------|
| 4046 K | +14 K | 4060 K |

Output change

| Output start | Output change | Output end |
|--------------|---------------|------------|
| 1063 lm | -21 lm | 1042 lm |