

Light efficiency:

94 Lumen/Watt

Light quality:

CRI: 92,2

Color temperature:

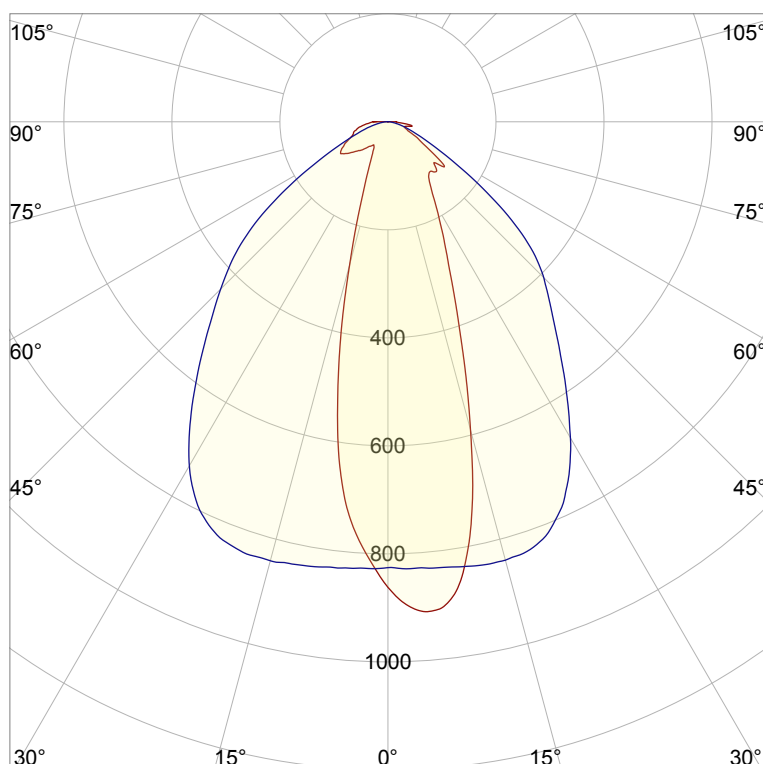
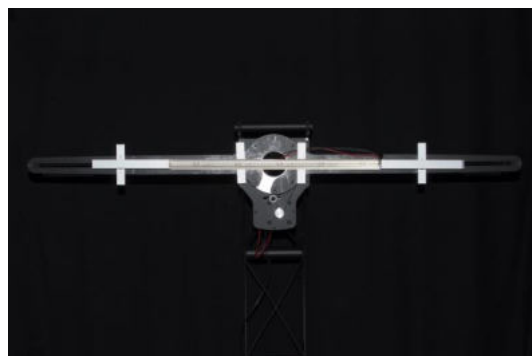
5516 K

Output: 944 lm

Peak: 952 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-4-0508-956-LAF-2

Item number:

FLNP/L/09D0508/956/LAF-2

Date and time:

09.04.2021 10:43:28

Description:

Rank: G7-2G0

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/-0,7

Angular Resolution 1 Grad step

Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse 13

55411 Bingen am Rhein

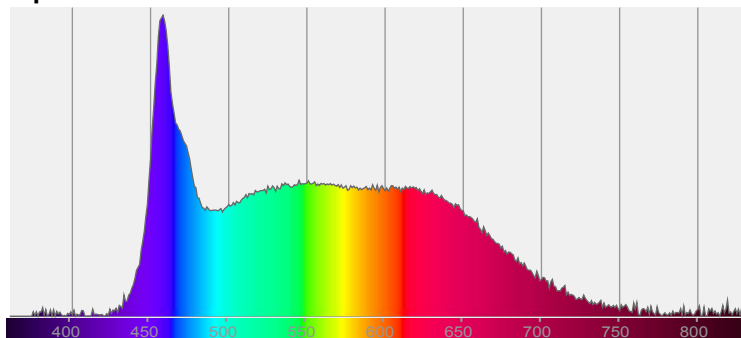


CIE 1931

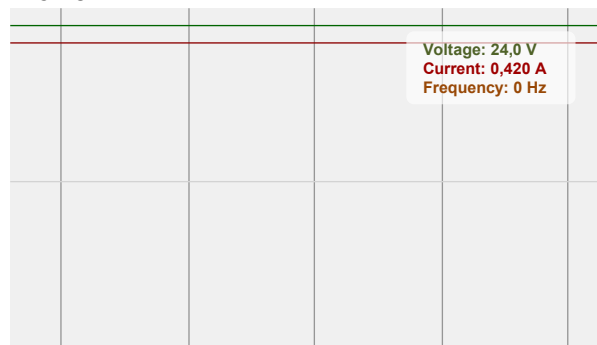
x: 0,332

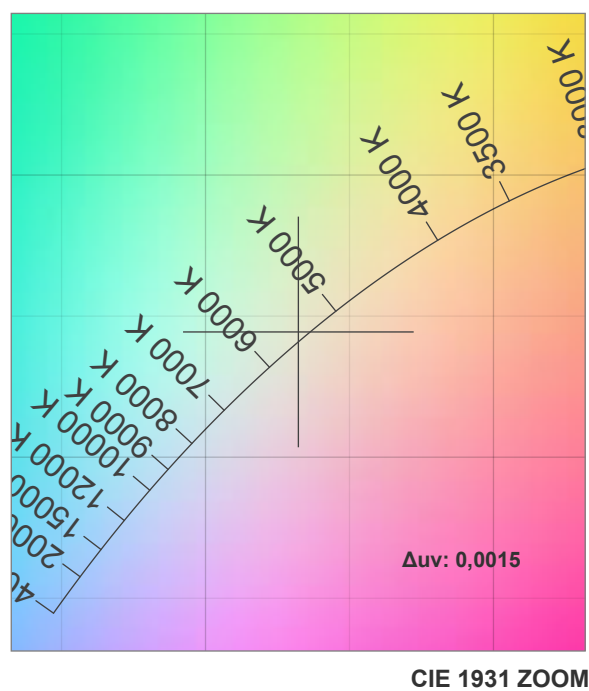
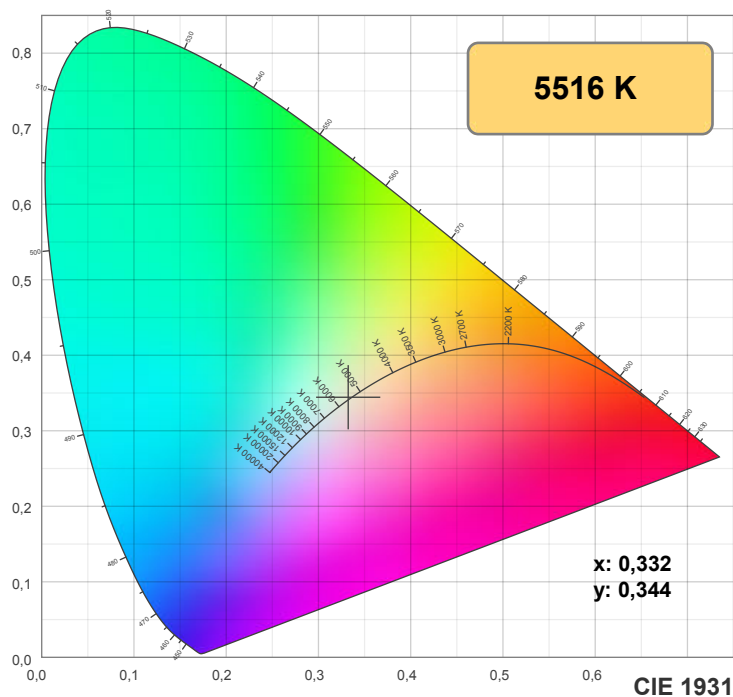
y: 0,344

Spectra

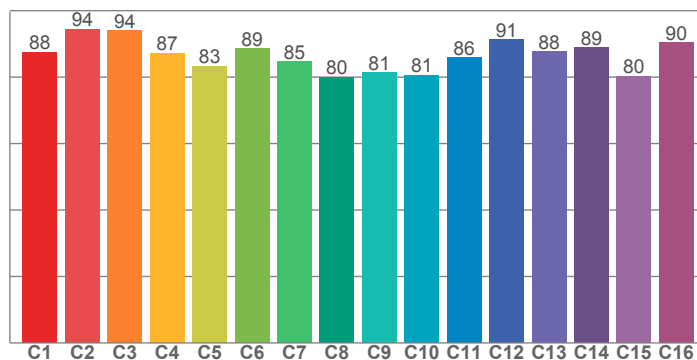


Power

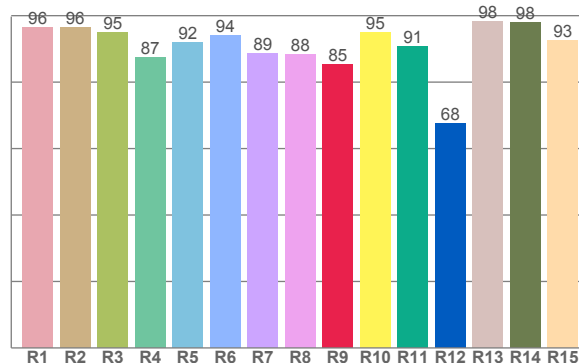




TM30: 86,5



CRI: 92,2 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 96,3 | 96,4 | 94,9 | 87,5 | 92,1 | 93,9 | 88,6 | 88,2 | 85,4 | 94,8 | 90,8 | 67,7 | 98,2 | 97,8 | 92,6 |

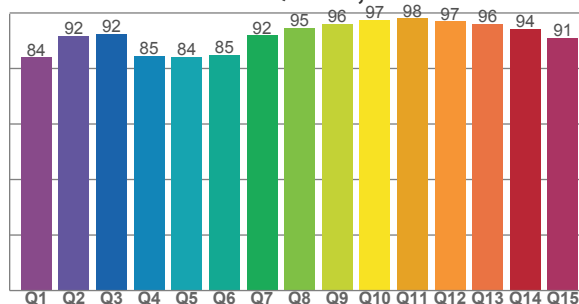
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 87,6 | 94,4 | 93,9 | 87,3 | 83,3 | 88,7 | 84,6 | 80,0 | 81,4 | 80,7 | 85,9 | 91,3 | 87,7 | 88,8 | 80,3 | 90,5 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 84,0 | 91,6 | 92,4 | 84,6 | 84,0 | 84,8 | 91,9 | 94,6 | 96,2 | 97,3 | 98,0 | 96,9 | 96,1 | 94,4 | 91,0 |

CQS: 90,5



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 |
| 5516 K | 92,2 | 85,4 | 86,5 | 94,3 | 90,5 | 0,332 | 0,344 | 0,205 | 0,319 | 0,0015 |

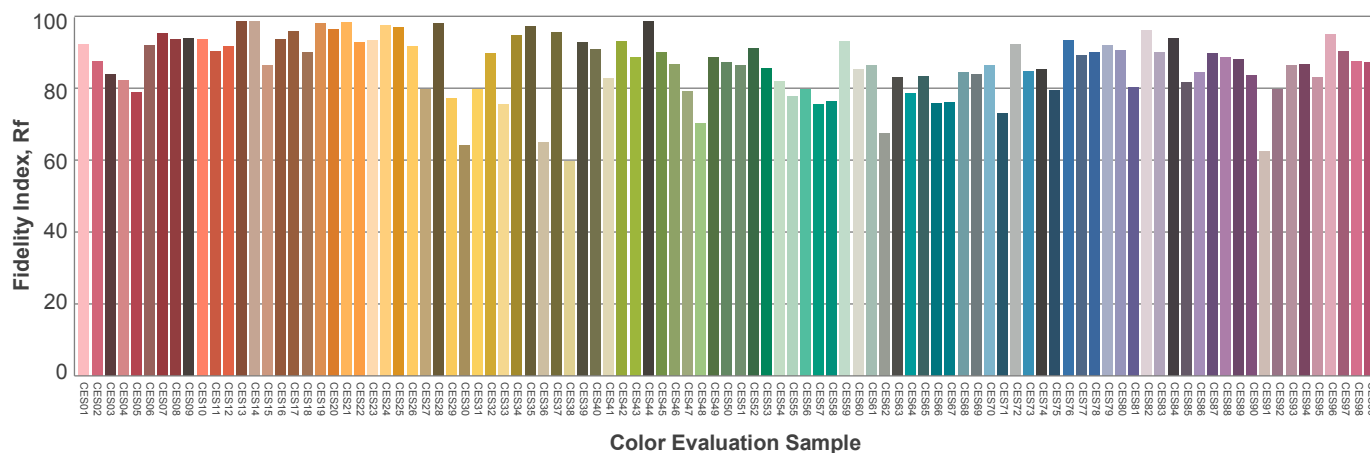
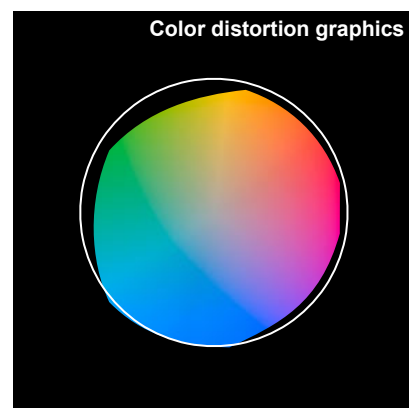
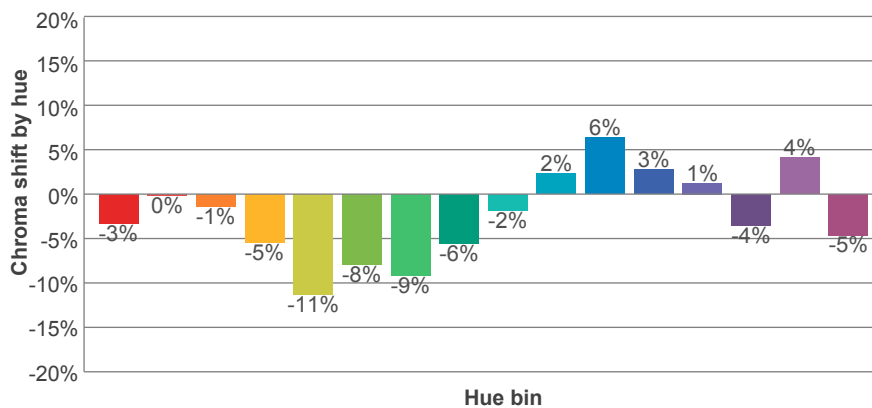
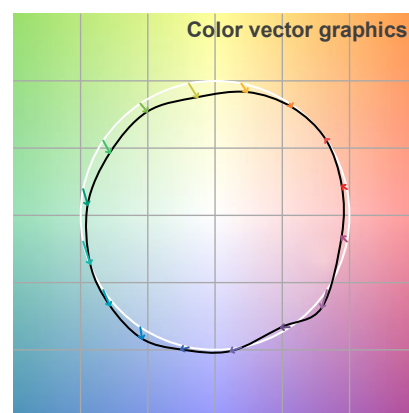
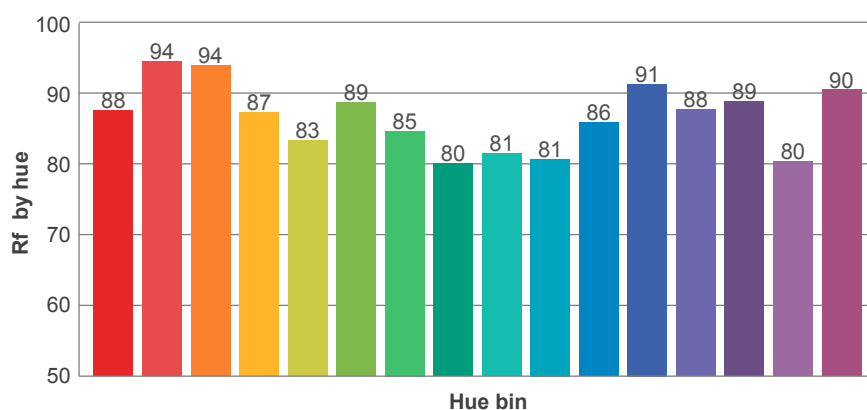
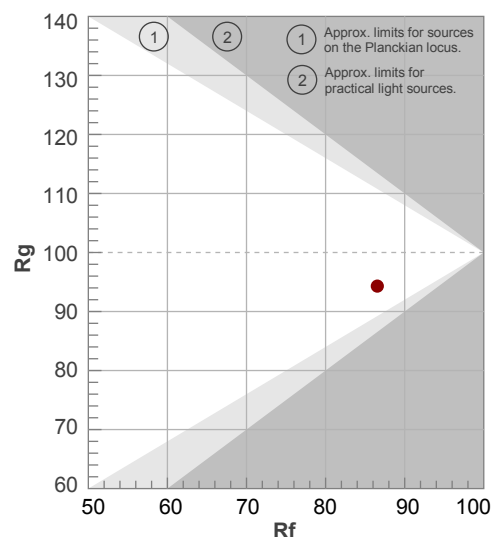
Rf 86,5

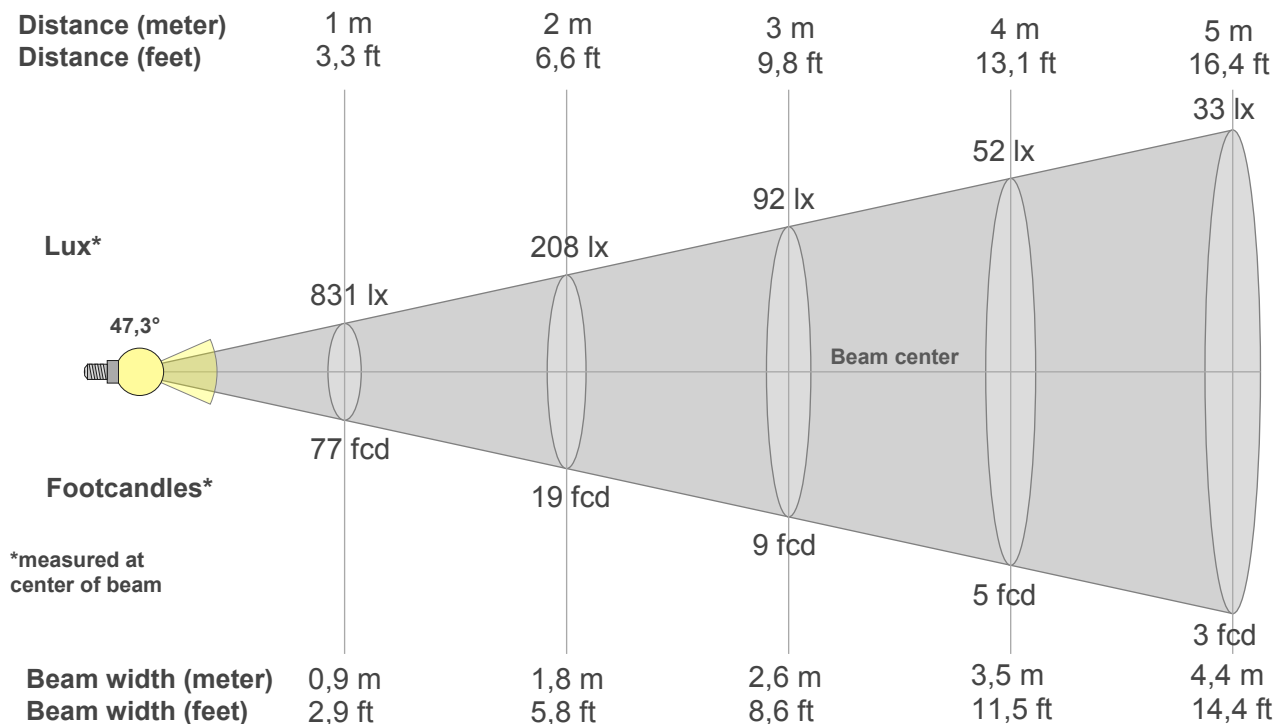
Fidelity index Rf

Rg 94,3

Gamut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 88 | -3% | 3% |
| 2 | 94 | 0% | 2% |
| 3 | 94 | -1% | -3% |
| 4 | 87 | -5% | -5% |
| 5 | 83 | -11% | -4% |
| 6 | 89 | -8% | -1% |
| 7 | 85 | -9% | 5% |
| 8 | 80 | -6% | 11% |
| 9 | 81 | -2% | 17% |
| 10 | 81 | 2% | 12% |
| 11 | 86 | 6% | 6% |
| 12 | 91 | 3% | -5% |
| 13 | 88 | 1% | -8% |
| 14 | 89 | -4% | -5% |
| 15 | 80 | 4% | -13% |
| 16 | 90 | -5% | 3% |





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 |
| 831lx | 208lx | 92lx | 52lx | 33lx | 23lx | 17lx | 13lx | 10lx | 8lx | 7lx | 6lx | 5lx | 4lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx |
| 77,2fcd | 19,3fcd | 8,6fcd | 4,8fcd | 3,1fcd | 2,1fcd | 1,6fcd | 1,2fcd | 1fcd | 0,8fcd | 0,6fcd | 0,5fcd | 0,5fcd | 0,4fcd | 0,3fcd | 0,3fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,2fcd |

Intensities in 0° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 831 | 892 | 908 | 907 | 883 | 827 | 745 | 643 | 541 | 449 | 373 | 313 | 267 | 232 | 201 | 176 | 155 | 140 | 129 | 123 |
| 100% | 107% | 109% | 109% | 106% | 99% | 90% | 77% | 65% | 54% | 45% | 38% | 32% | 28% | 24% | 21% | 19% | 17% | 15% | 15% |

Intensities in 90° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 831 | 828 | 828 | 831 | 832 | 836 | 839 | 840 | 838 | 836 | 826 | 809 | 786 | 754 | 718 | 676 | 631 | 588 | 547 | 510 |
| 100% | 100% | 100% | 100% | 100% | 101% | 101% | 101% | 101% | 101% | 99% | 97% | 95% | 91% | 86% | 81% | 76% | 71% | 66% | 61% |

Intensities in 180° c-plane

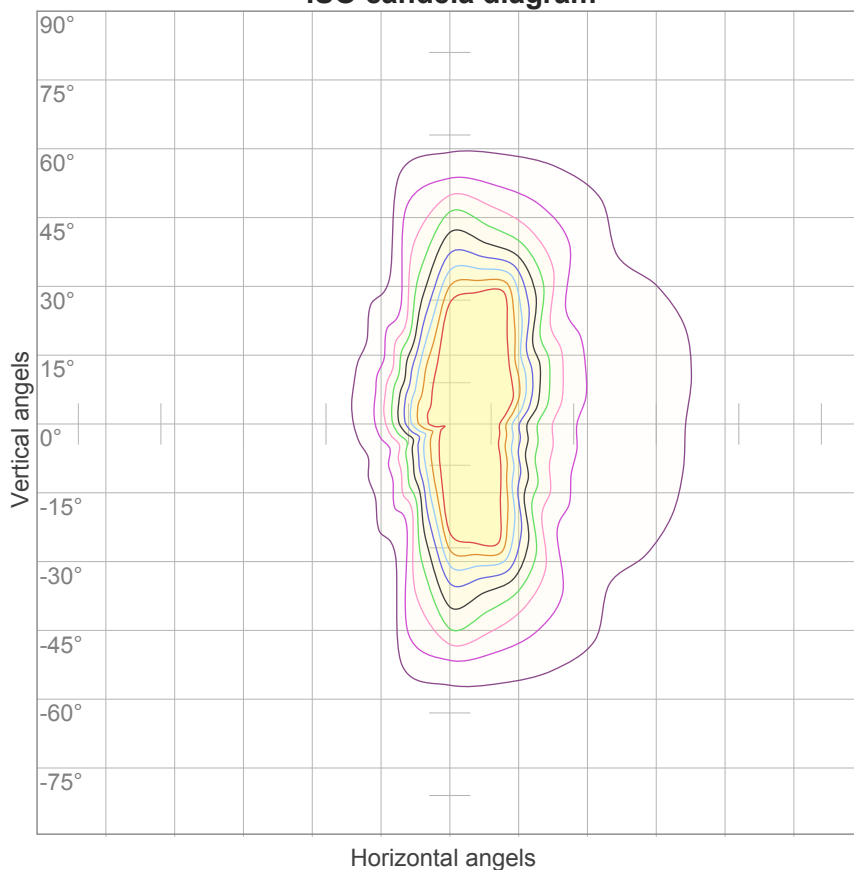
| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 831 | 820 | 775 | 720 | 641 | 537 | 428 | 322 | 234 | 169 | 126 | 97 | 77 | 64 | 55 | 52 | 51 | 53 | 56 | 59 |
| 100% | 99% | 93% | 87% | 77% | 65% | 51% | 39% | 28% | 20% | 15% | 12% | 9% | 8% | 7% | 6% | 6% | 6% | 7% | 7% |

Intensities in 270° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 831 | 828 | 829 | 831 | 832 | 835 | 837 | 841 | 841 | 842 | 837 | 831 | 816 | 797 | 769 | 735 | 695 | 651 | 607 | 565 |
| 100% | 100% | 100% | 100% | 100% | 100% | 101% | 101% | 101% | 101% | 101% | 100% | 98% | 96% | 93% | 88% | 84% | 78% | 73% | 68% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 47,3° | 98,2° | 171,8° | 85,2% | 68,4% |

ISO candela diagram



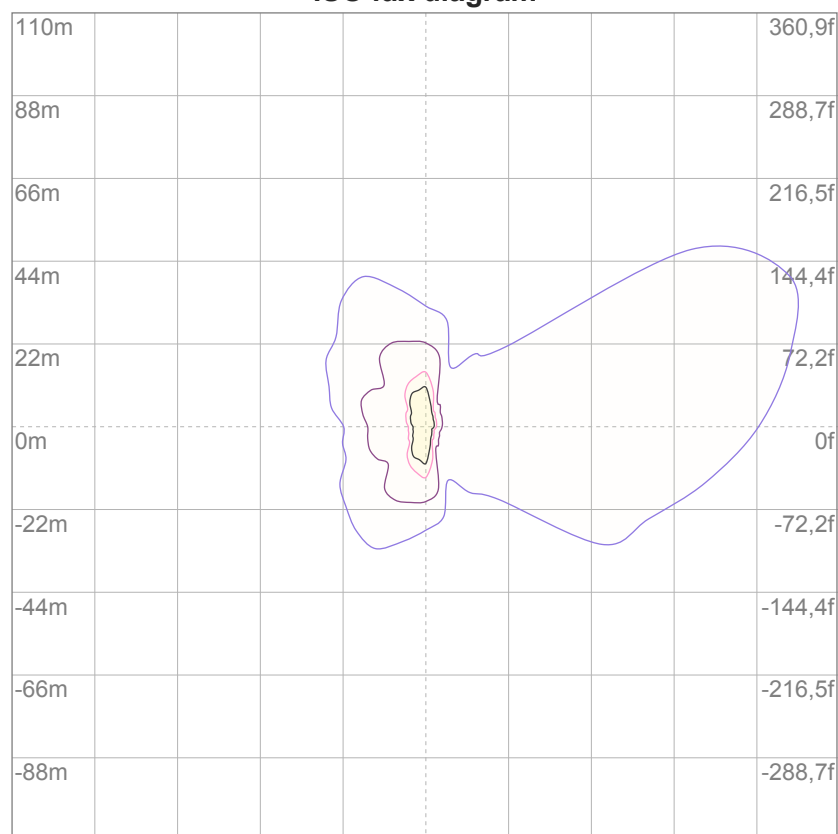
| | |
|-----|--------|
| 10% | 83 cd |
| 20% | 166 cd |
| 30% | 249 cd |
| 40% | 333 cd |
| 50% | 416 cd |
| 60% | 499 cd |
| 70% | 582 cd |
| 80% | 665 cd |
| 90% | 748 cd |

Conditions:

Number of c-planes: 16

Candela at center: 831 cd

ISO lux diagram



| | |
|-----|----------|
| 3% | 0,249 lx |
| 5% | 0,416 lx |
| 10% | 0,831 lx |
| 30% | 2,49 lx |
| 50% | 4,16 lx |

Conditions:

Number of c-planes: 16

Lux at center: 8,31 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 | | | | |
| 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 |
| n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a | n/a |
| Variation of the observer position for the luminaire distance S | | | | | | | | | | |
| n/a | n/a | | | | | n/a | | | | |
| n/a | n/a | | | | | n/a | | | | |
| n/a | n/a | | | | | n/a | | | | |
| Standard table | n/a | | | | | n/a | | | | |
| Correction summand | n/a | | | | | n/a | | | | |
| Corrected glare indices referring to 944 lm total luminous flux | | | | | | | | | | |

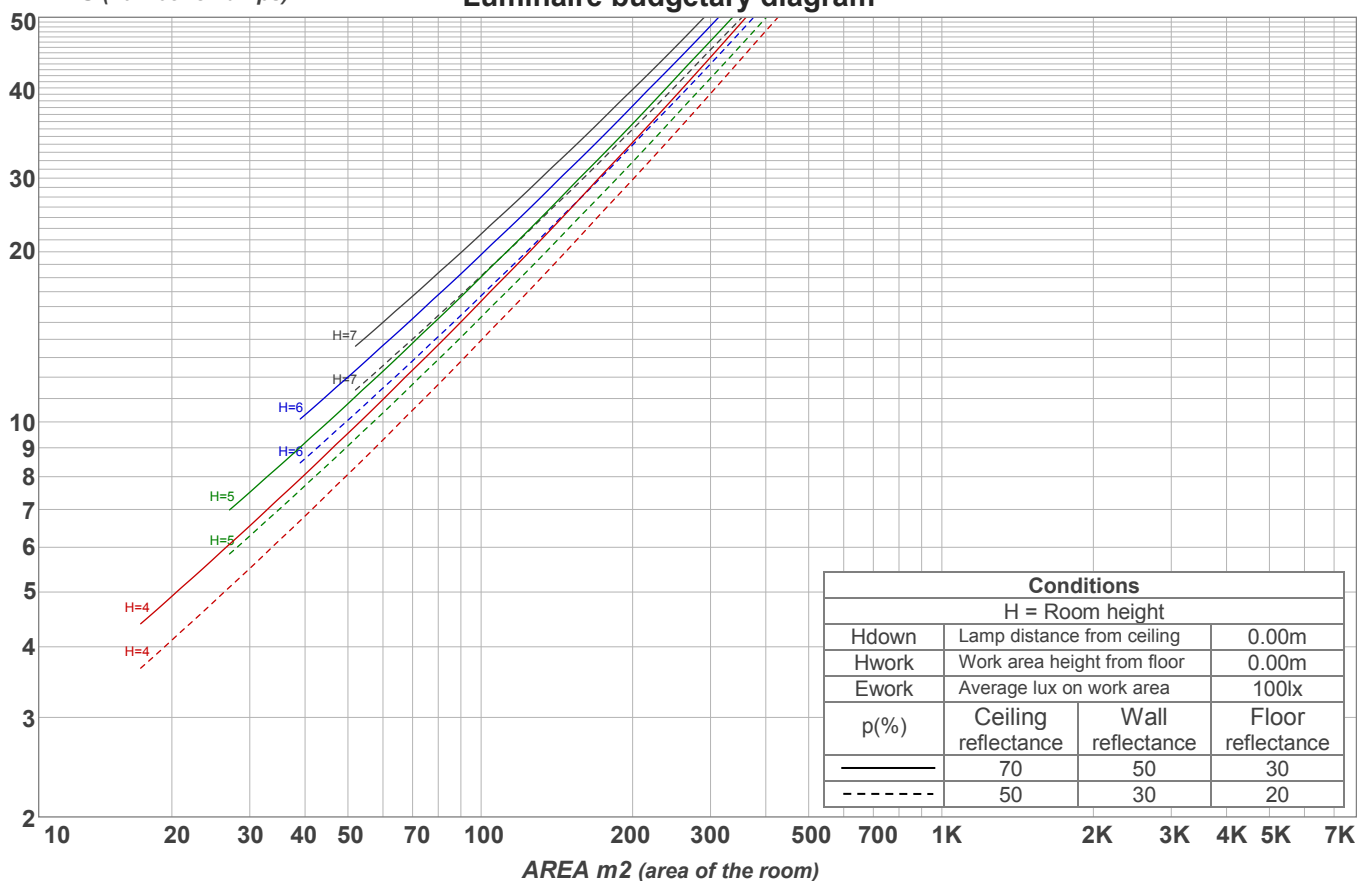
UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 110 | 106 | 102 | 98 | 107 | 103 | 100 | 97 | 99 | 96 | 94 | 95 | 93 | 91 | 92 | 90 | 88 | 86 |
| 2 | 102 | 95 | 89 | 84 | 99 | 93 | 87 | 83 | 89 | 85 | 81 | 86 | 82 | 79 | 83 | 80 | 77 | 75 |
| 3 | 94 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 68 | 66 |
| 4 | 88 | 78 | 70 | 64 | 86 | 76 | 69 | 64 | 74 | 68 | 63 | 72 | 66 | 62 | 70 | 65 | 61 | 59 |
| 5 | 82 | 71 | 63 | 58 | 80 | 70 | 63 | 57 | 68 | 62 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 |
| 6 | 77 | 65 | 58 | 52 | 75 | 65 | 57 | 52 | 63 | 56 | 51 | 61 | 55 | 51 | 60 | 55 | 51 | 49 |
| 7 | 72 | 61 | 53 | 48 | 71 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 45 |
| 8 | 68 | 56 | 49 | 44 | 67 | 56 | 49 | 44 | 54 | 48 | 43 | 53 | 47 | 43 | 52 | 47 | 43 | 41 |
| 9 | 65 | 53 | 45 | 41 | 63 | 52 | 45 | 40 | 51 | 45 | 40 | 50 | 44 | 40 | 49 | 44 | 40 | 38 |
| 10 | 61 | 49 | 42 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 41 | 37 | 46 | 41 | 37 | 36 |

LAMPS (number of lamps)

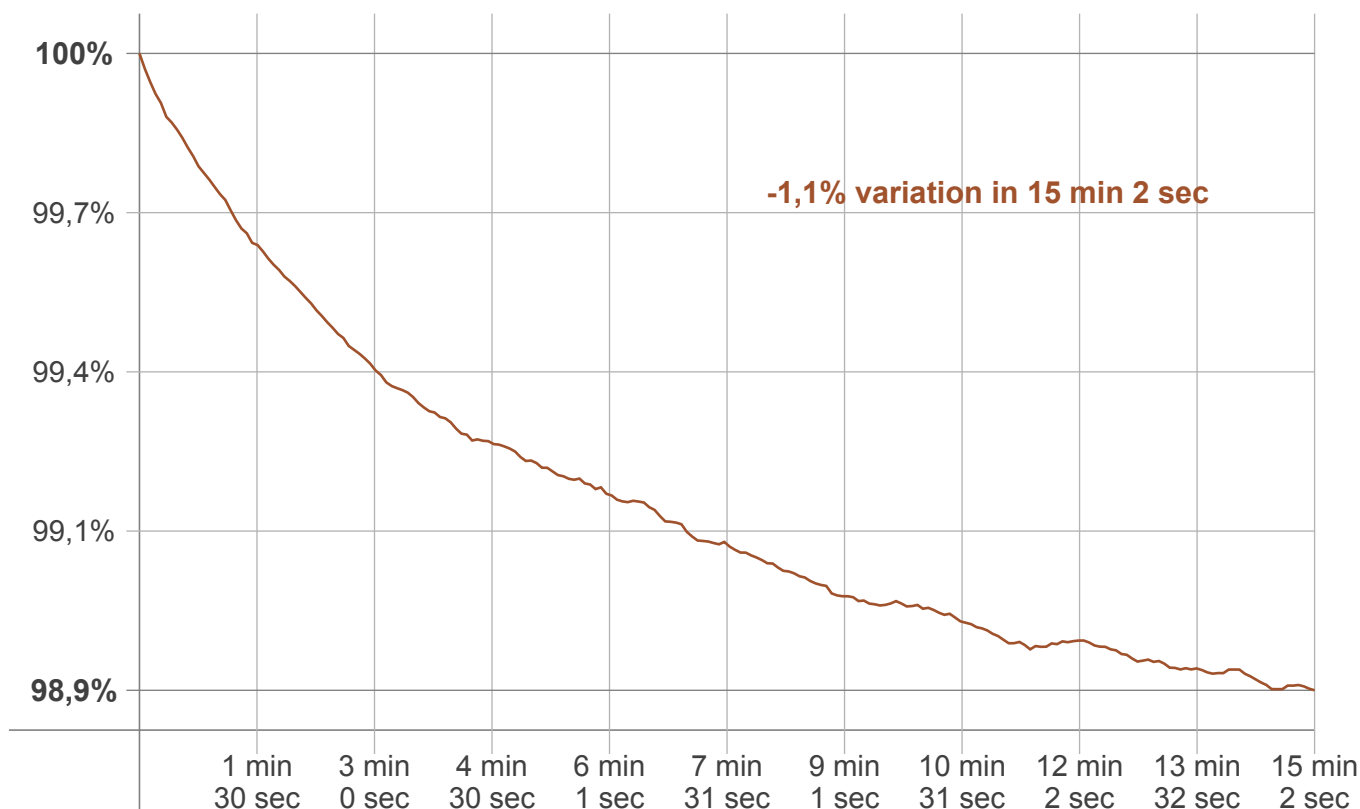
Luminaire budgetary diagram



Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 76,0 lm | 174 lm | 180 lm | 151 lm | 123 lm | 100 lm | 66,1 lm | 43,1 lm | 30,0 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 0,083 lm | 0,000 lm | 0,000 lm | 0,000 lm | 0,000 lm | 0,000 lm | 0,000 lm | 0,000 lm | 0,000 lm |

Warmup curve



Warmup result

| | |
|------------------|--------------|
| Warmup time: | 15 min 2 sec |
| Warmup variation | -1,1% |

Warmup conditions

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

Color temperature change

| CCT start | CCT change | CCT end |
|-----------|------------|---------|
| 5508 K | +8 K | 5516 K |

Output change

| Output start | Output change | Output end |
|--------------|---------------|------------|
| 954 lm | -10 lm | 944 lm |