

Light efficiency:

82 Lumen/Watt

Light quality:

CRI: 92,3

Color temperature:

3030 K

Output: 824 lm

Peak: 837 cd

Power: 10,1 W

PF: 1,0



Product name:

Pegasus-3-Gold-0508-930-LAF-2

Item number:

FLNP/L/16A0508/930/LAF-2

Date and time:

05.05.2021 15:02:19

Description:

Rank: M27ZT

Toleranzen:

Lumen +/-4%

Candela +/-2,5%

Colour Temp +/-35 K

CRI +/- 0,7

Angular Resolution 1 Grad step

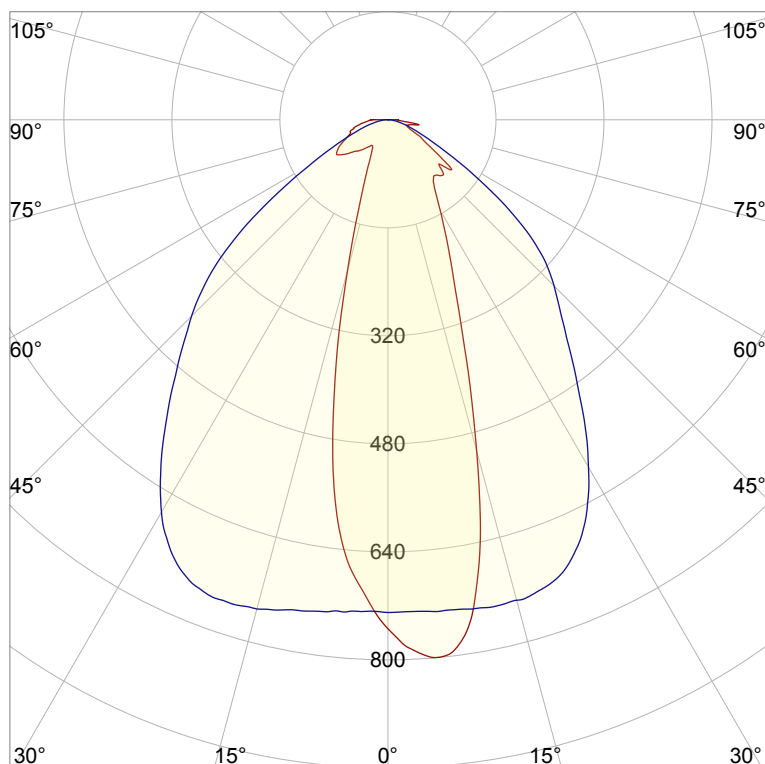
Last Calibration 20-05-2020

Pruefer: Peter Ulrich

Pruefort: Lichtlabor

Gaustrasse13

55411 Bingen am Rhein

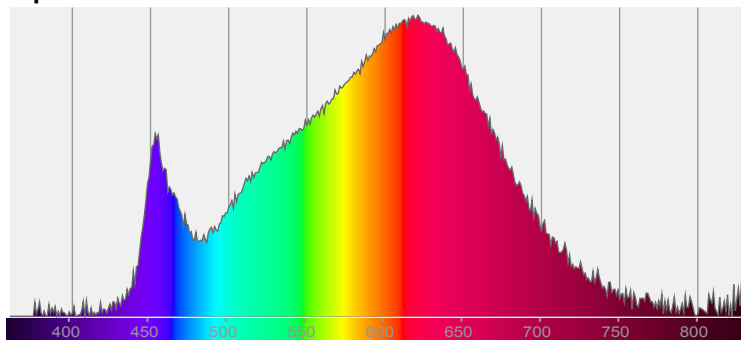


CIE 1931

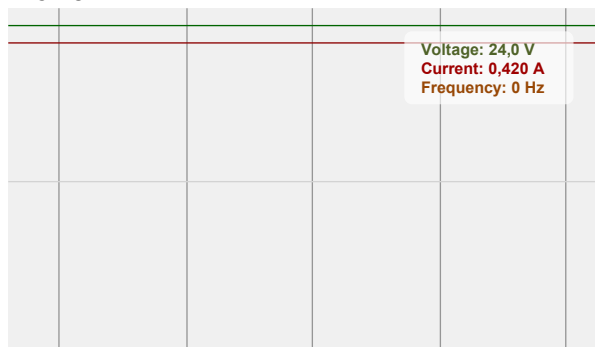
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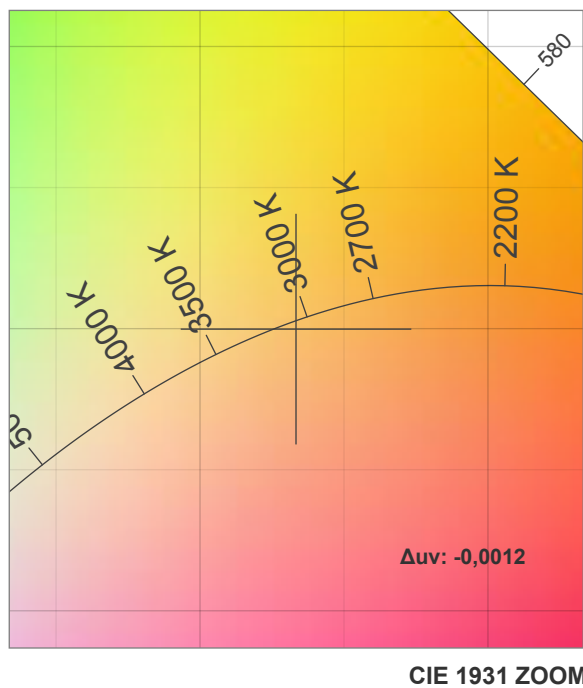
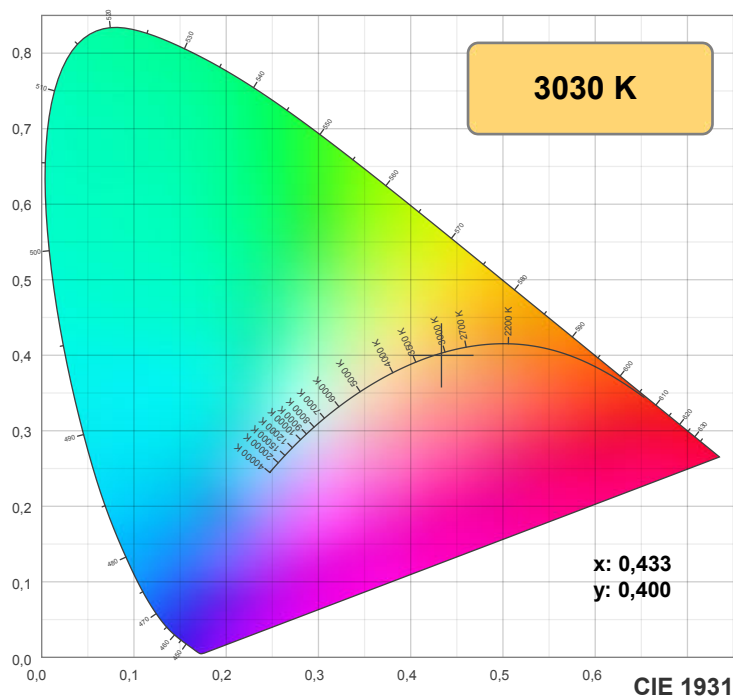
y: 0,400

Spectra

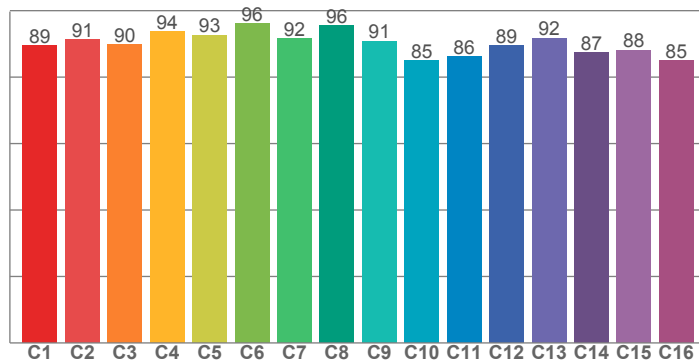


Power

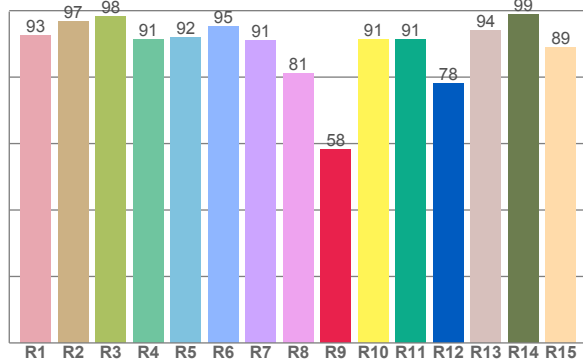




TM30: 90,3



CRI: 92,3 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92,6 | 96,9 | 98,3 | 91,2 | 92,0 | 95,2 | 91,0 | 81,0 | 58,3 | 91,3 | 91,4 | 78,0 | 93,9 | 98,9 | 88,9 |

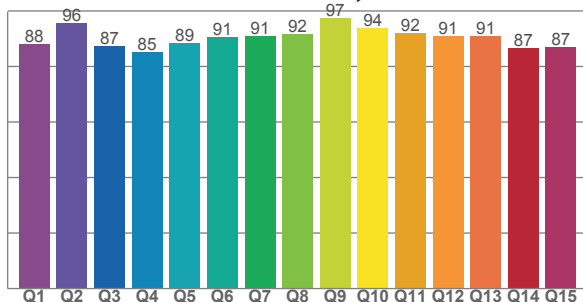
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89,5 | 91,3 | 89,9 | 93,8 | 92,7 | 96,2 | 91,7 | 95,5 | 90,9 | 85,0 | 86,1 | 89,4 | 91,8 | 87,4 | 88,2 | 85,1 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 88,2 | 95,7 | 87,4 | 85,2 | 88,6 | 90,7 | 90,9 | 91,6 | 97,4 | 93,7 | 92,0 | 91,1 | 91,1 | 86,6 | 87,2 |

CQS: 89,8



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 |
| 3030 K | 92,3 | 58,3 | 90,3 | 98,1 | 89,8 | 0,433 | 0,400 | 0,250 | 0,346 | -0,0012 |

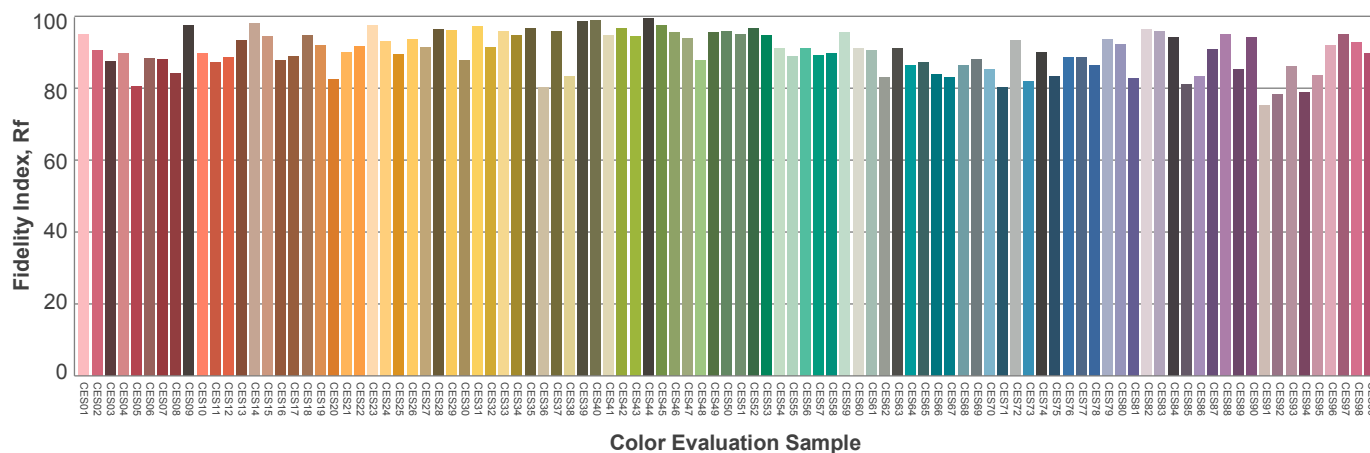
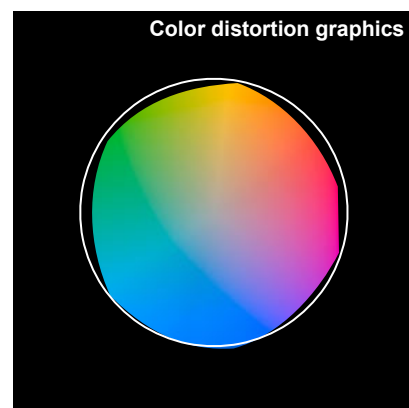
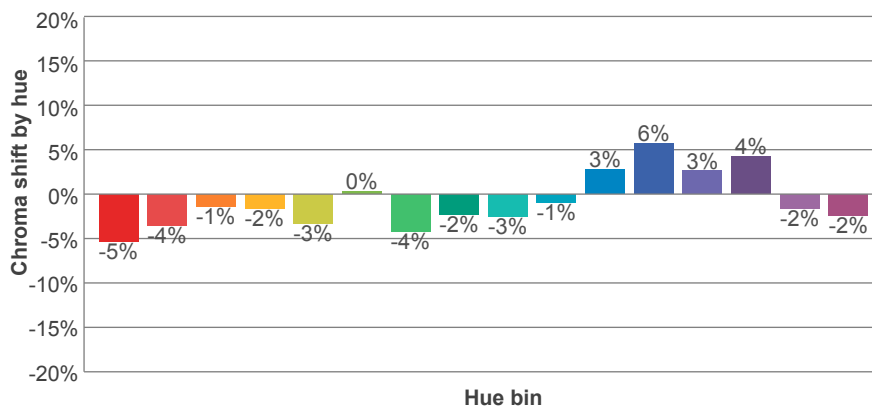
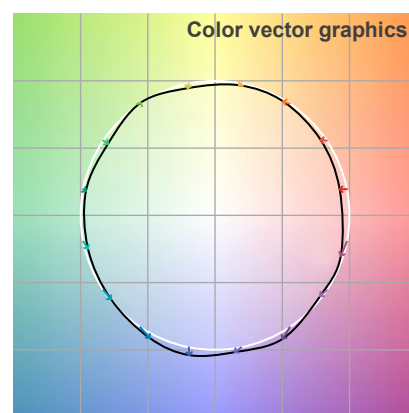
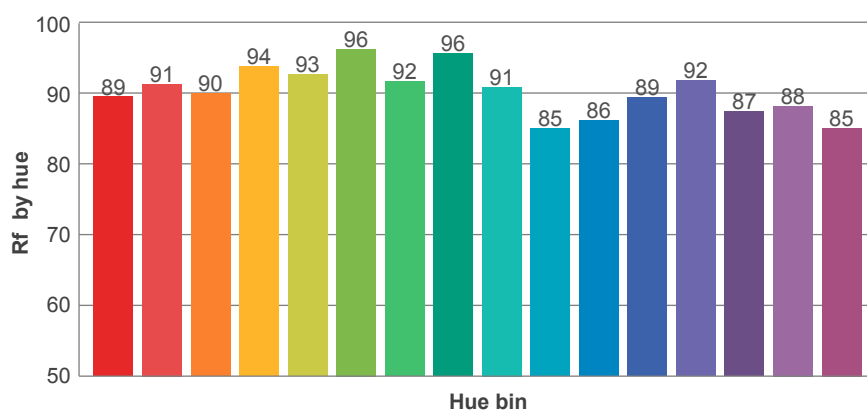
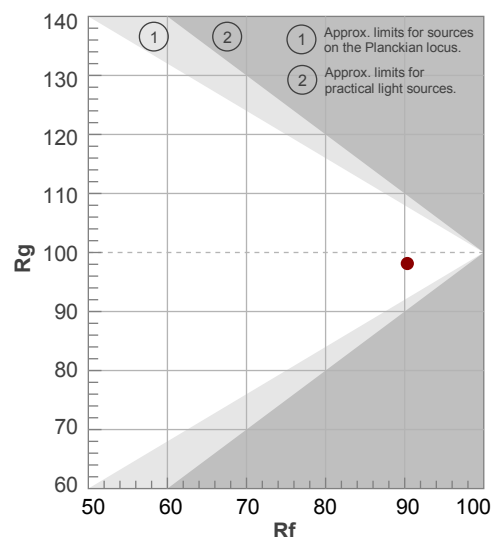
Rf 90,3

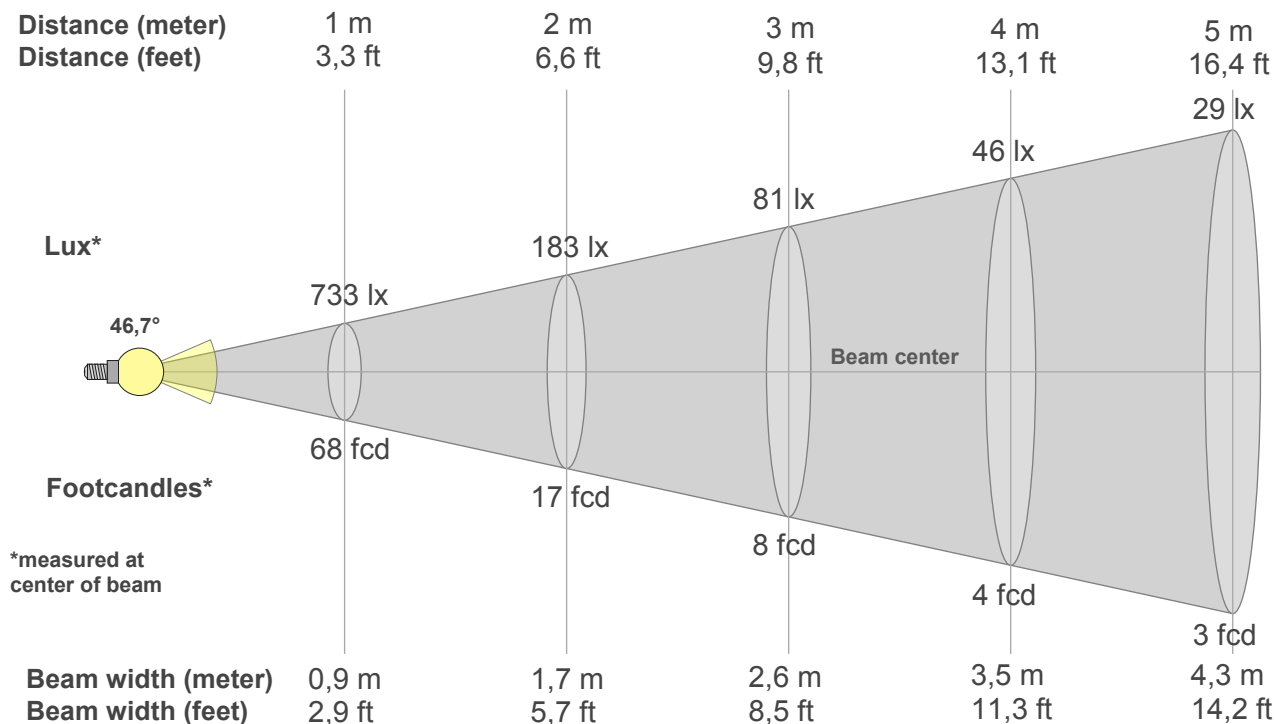
Fidelity index Rf

Rg 98,1

Gamut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 89 | -5% | 1% |
| 2 | 91 | -4% | 3% |
| 3 | 90 | -1% | 5% |
| 4 | 94 | -2% | 2% |
| 5 | 93 | -3% | 2% |
| 6 | 96 | 0% | -1% |
| 7 | 92 | -4% | 0% |
| 8 | 96 | -2% | 1% |
| 9 | 91 | -3% | 6% |
| 10 | 85 | -1% | 9% |
| 11 | 86 | 3% | 10% |
| 12 | 89 | 6% | 1% |
| 13 | 92 | 3% | -5% |
| 14 | 87 | 4% | -9% |
| 15 | 88 | -2% | -6% |
| 16 | 85 | -2% | -11% |





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 |
| 733lx | 183lx | 81lx | 46lx | 29lx | 20lx | 15lx | 11lx | 9lx | 7lx | 6lx | 5lx | 4lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx | 2lx |
| 68,1fcd | 17fcd | 7,6fcd | 4,3fcd | 2,7fcd | 1,9fcd | 1,4fcd | 1,1fcd | 0,8fcd | 0,7fcd | 0,6fcd | 0,5fcd | 0,4fcd | 0,3fcd | 0,3fcd | 0,3fcd | 0,2fcd | 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° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 780 | 795 | 798 | 779 | 731 | 654 | 557 | 461 | 379 | 312 | 264 | 228 | 199 | 175 | 155 | 138 | 124 | 115 | 110 |
| 100% | 106% | 108% | 109% | 106% | 100% | 89% | 76% | 63% | 52% | 43% | 36% | 31% | 27% | 24% | 21% | 19% | 17% | 16% | 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° |
|------|-----|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 729 | 730 | 732 | 733 | 735 | 738 | 737 | 737 | 732 | 725 | 711 | 691 | 665 | 632 | 594 | 555 | 514 | 475 | 440 |
| 100% | 99% | 100% | 100% | 100% | 100% | 101% | 101% | 101% | 100% | 99% | 97% | 94% | 91% | 86% | 81% | 76% | 70% | 65% | 60% |

Intensities in 180° c-plane

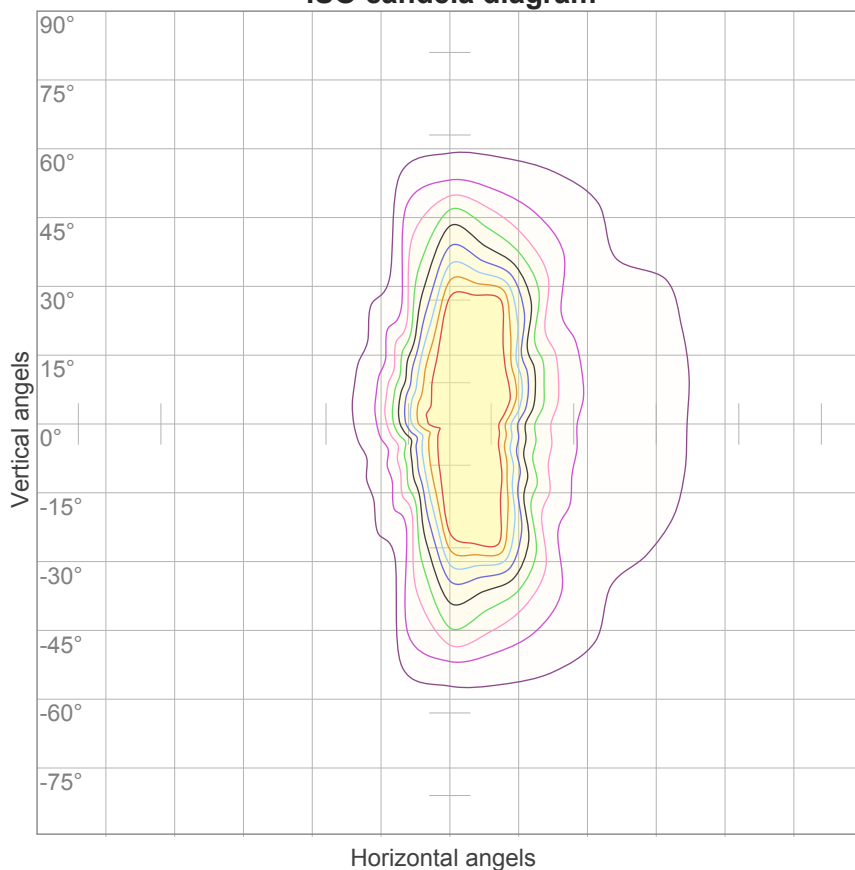
| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 720 | 682 | 635 | 564 | 470 | 368 | 272 | 197 | 142 | 107 | 84 | 67 | 56 | 49 | 46 | 45 | 47 | 50 | 53 |
| 100% | 98% | 93% | 87% | 77% | 64% | 50% | 37% | 27% | 19% | 15% | 11% | 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° |
|------|-----|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 733 | 728 | 729 | 731 | 735 | 739 | 742 | 747 | 750 | 753 | 753 | 748 | 738 | 722 | 699 | 671 | 636 | 599 | 561 | 524 |
| 100% | 99% | 100% | 100% | 100% | 101% | 101% | 102% | 102% | 103% | 103% | 102% | 101% | 99% | 95% | 92% | 87% | 82% | 77% | 72% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 46,7° | 98,1° | 172,8° | 84,9% | 68,1% |

ISO candela diagram



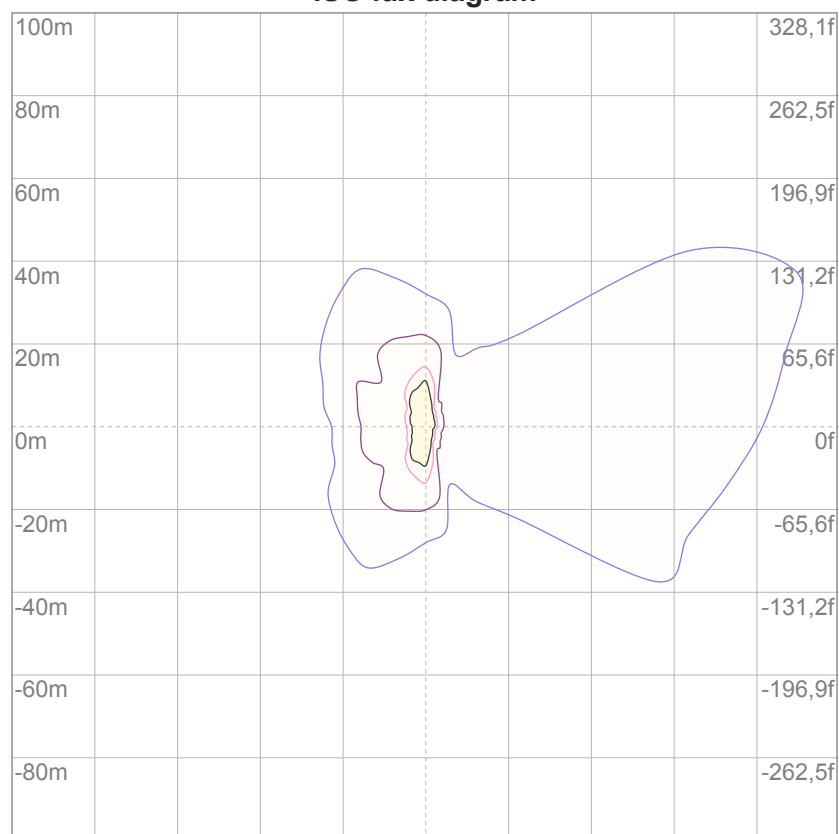
| | |
|-----|--------|
| 10% | 73 cd |
| 20% | 147 cd |
| 30% | 220 cd |
| 40% | 293 cd |
| 50% | 366 cd |
| 60% | 440 cd |
| 70% | 513 cd |
| 80% | 586 cd |
| 90% | 660 cd |

Conditions:

Number of c-planes: 16

Candela at center: 733 cd

ISO lux diagram



| | |
|-----|----------|
| 3% | 0,220 lx |
| 5% | 0,366 lx |
| 10% | 0,733 lx |
| 30% | 2,20 lx |
| 50% | 3,66 lx |

Conditions:

Number of c-planes: 16

Lux at center: 7,33 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 824 lm total luminous flux | | | | | | | | | | |

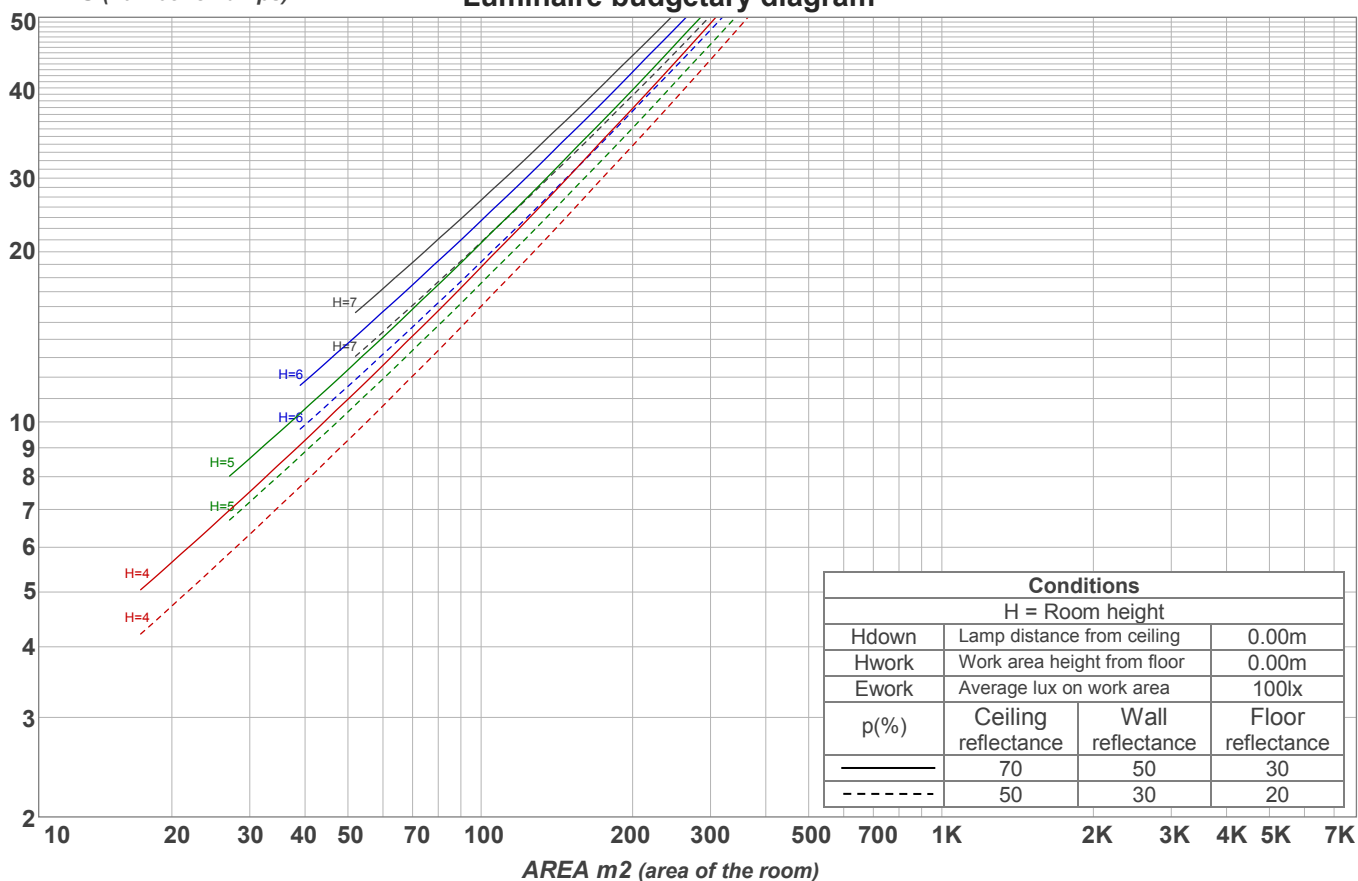
UGR data could not be calculated due to missing/wrong symmetry. Goto Edit->Photometric->Corrections and select Correct asymmetry.

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 | 94 | 88 | 83 | 99 | 93 | 87 | 82 | 89 | 85 | 81 | 86 | 82 | 79 | 83 | 80 | 77 | 75 |
| 3 | 94 | 85 | 78 | 73 | 92 | 84 | 77 | 72 | 81 | 75 | 71 | 78 | 73 | 69 | 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 | 57 | 80 | 70 | 63 | 57 | 68 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 55 | 54 |
| 6 | 77 | 65 | 58 | 52 | 75 | 64 | 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 | 50 | 46 | 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)

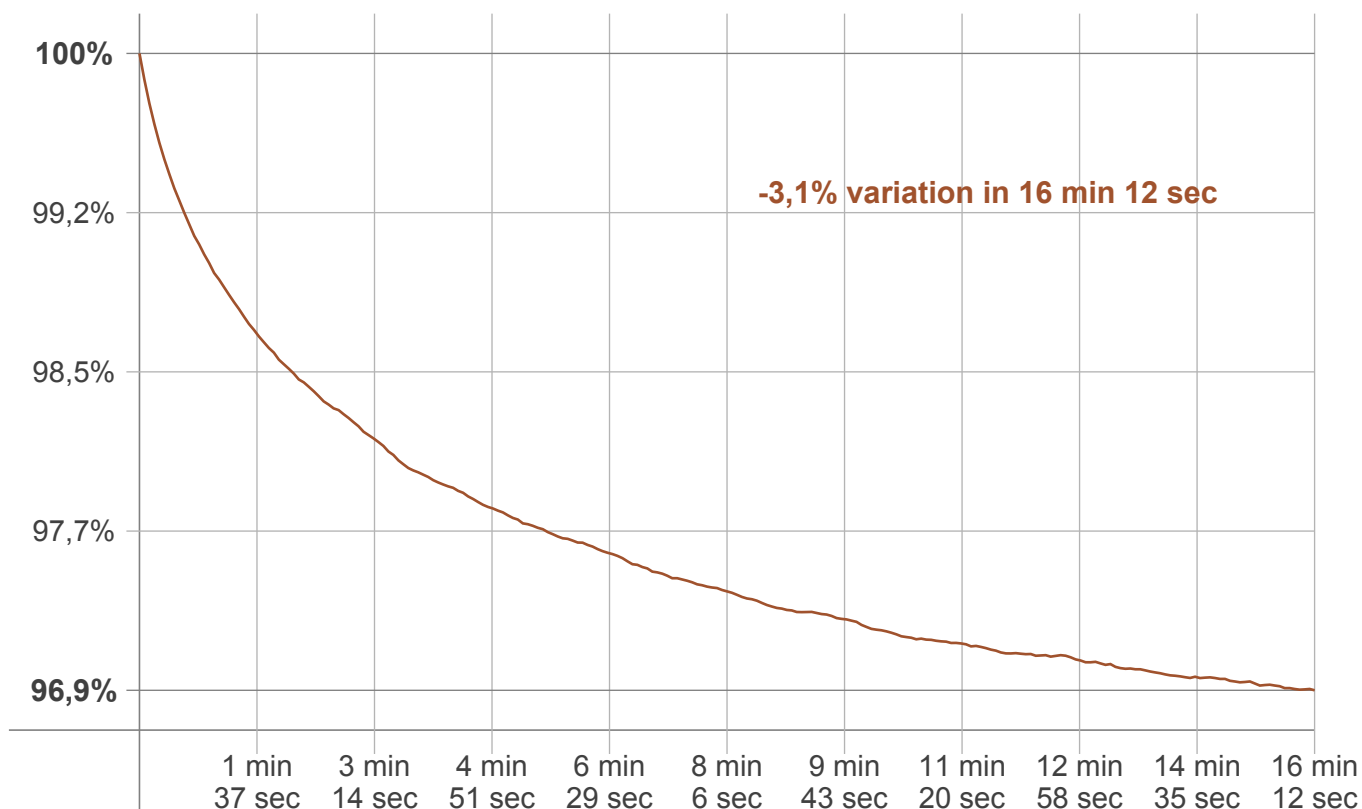
Luminaire budgetary diagram



Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 67,2 lm | 152 lm | 156 lm | 130 lm | 107 lm | 87,2 lm | 58,0 lm | 38,4 lm | 27,5 lm |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 0,059 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: | 16 min 12 sec |
| Warmup variation | -3,1% |

Warmup conditions

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

Color temperature change

| CCT start | CCT change | CCT end |
|-----------|------------|---------|
| 3035 K | -5 K | 3030 K |

Output change

| Output start | Output change | Output end |
|--------------|---------------|------------|
| 846 lm | -23 lm | 824 lm |