

### Light efficiency:

**52 Lumen/Watt**

### Light quality:

**CRI: 93,7**

### Color temperature:

**6232 K**

**Output: 500 lm**

**Peak: 134 cd**

**Power: 9,6 W**

**PF: 1,0**



### Product name:

**Pegasus-5\_0510\_965\_Cover-Round-White**

### Item number:

**FL/L2C/09E/0510/965/CRW**

### Date and time:

**02.04.2025 14:26:56**

### Description:

**Tolerances:**

**Lumen +/-4%**

**Candela +/-2,5%**

**Colour Temp +/-35 Kelvin**

**CRI +/-0,7**

**Angular Resolution: 1 Degree Step**

**Last Calibration 13.10.2023**

**Tester:**

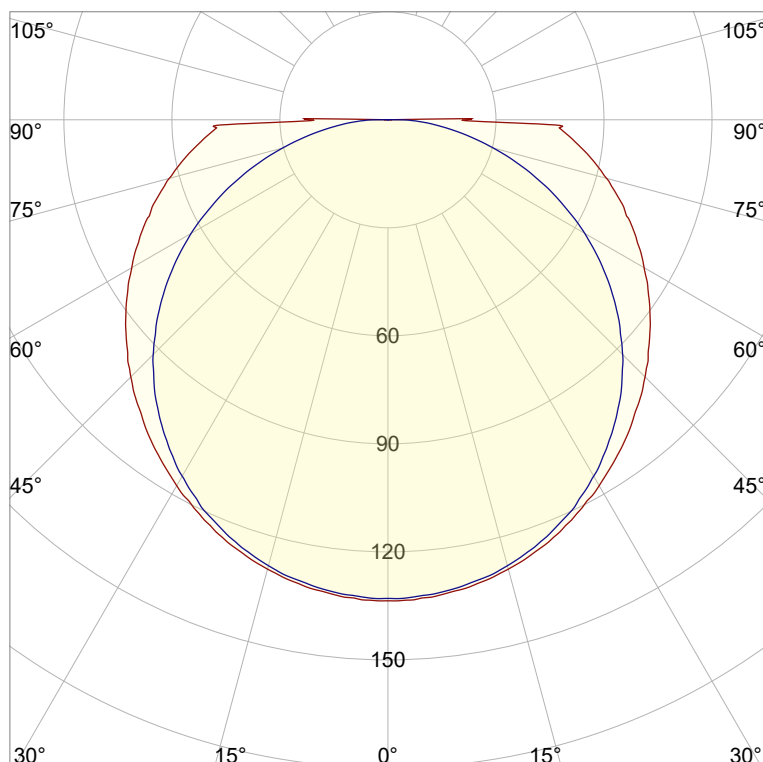
**Peter Ulrich**

**Test Site:**

**Lichtlabor**

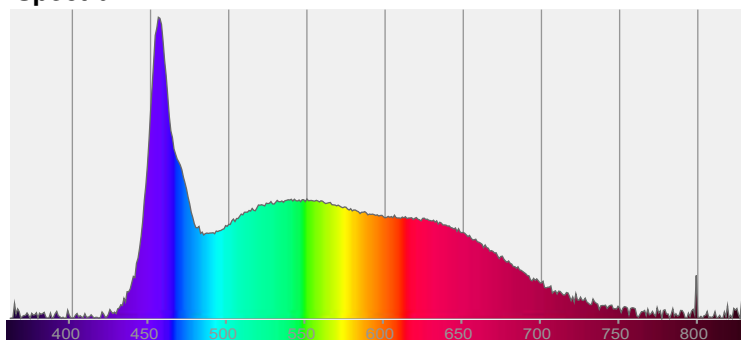
**Gaustrasse 13**

**55411 Bingen am Rhein**

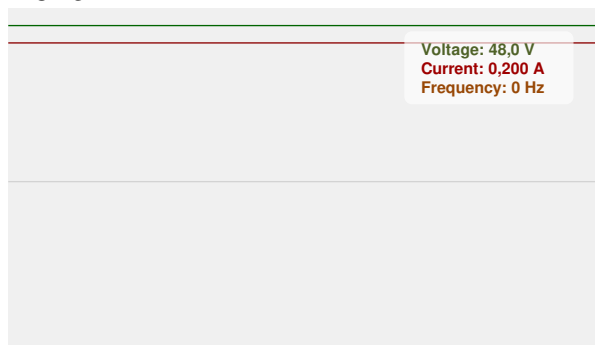


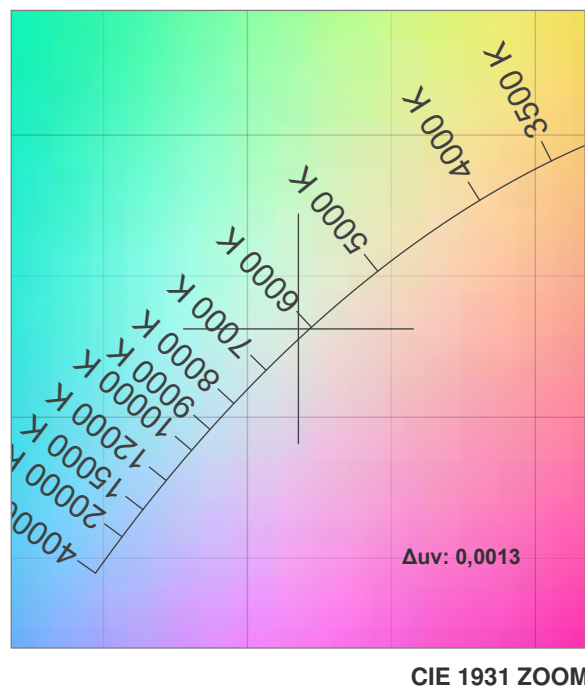
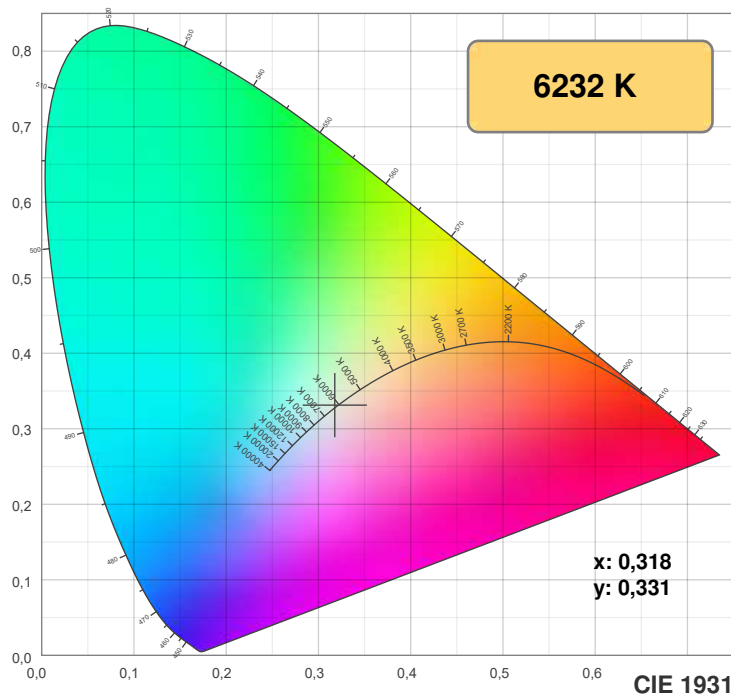
**CIE 1931**  
**x: 0,318**  
**y: 0,331**

### Spectra

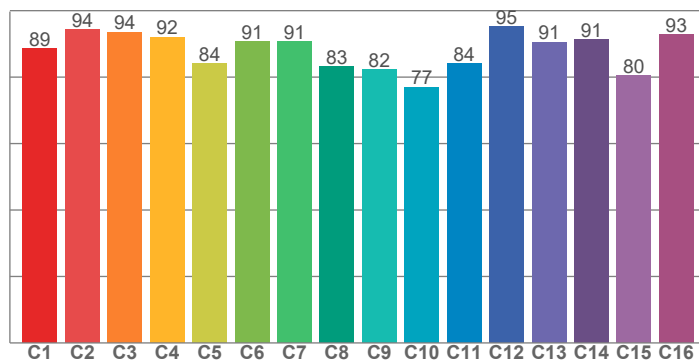


### Power

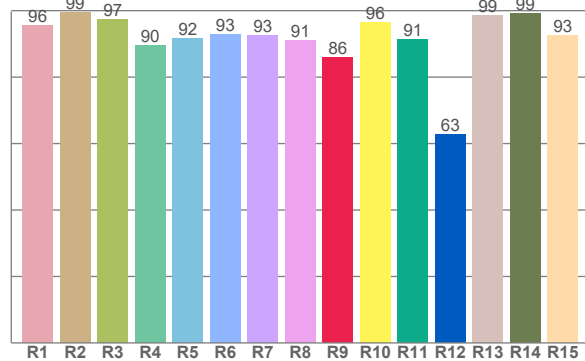




**TM30: 87,7**



**CRI: 93,7 (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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 95,5 | 99,4 | 97,3 | 89,5 | 91,6 | 92,9 | 92,6 | 91,0 | 85,9 | 96,4 | 91,4 | 62,7 | 98,6 | 99,1 | 92,6 |

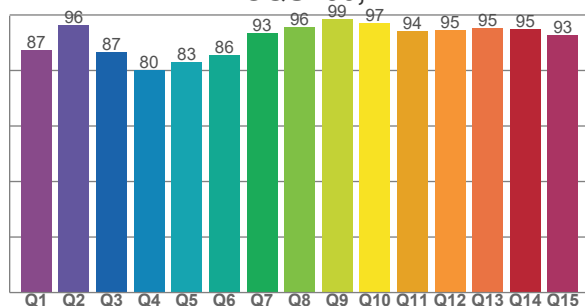
**TM30 C values, 16 binned values out of total of 99 C values**

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 88,7 | 94,4 | 93,6 | 92,0 | 84,0 | 90,8 | 90,7 | 83,2 | 82,3 | 77,0 | 84,0 | 95,3 | 90,5 | 91,2 | 80,4 | 92,7 |

**CQS Q values**

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 87,3 | 96,3 | 86,8 | 80,1 | 83,2 | 85,7 | 93,4 | 95,6 | 98,6 | 97,1 | 94,4 | 94,7 | 95,3 | 94,8 | 92,8 |

**CQS: 90,1**



## 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                             |
| 6232 K            | 93,7                  | 85,9          | 87,7           | 96,0        | 90,1                | 0,318                     | 0,331                     | 0,200            | 0,314            | 0,0013                          |

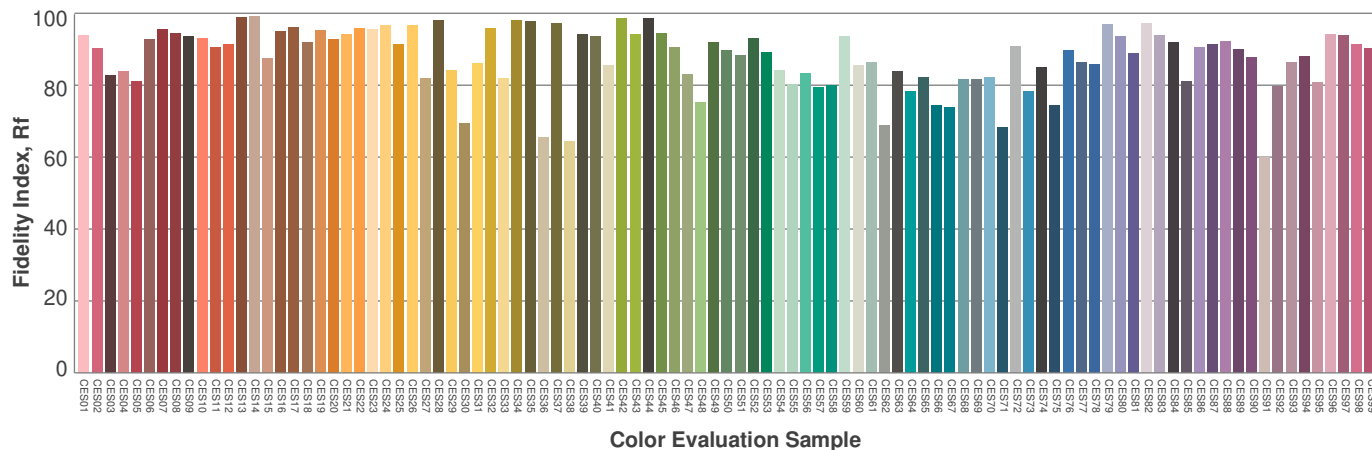
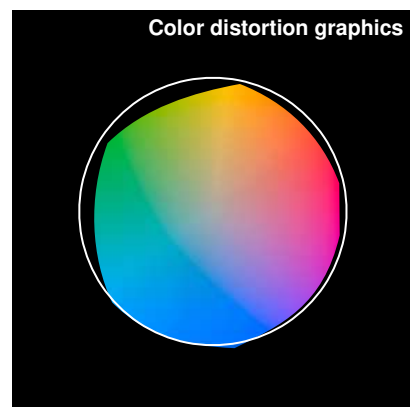
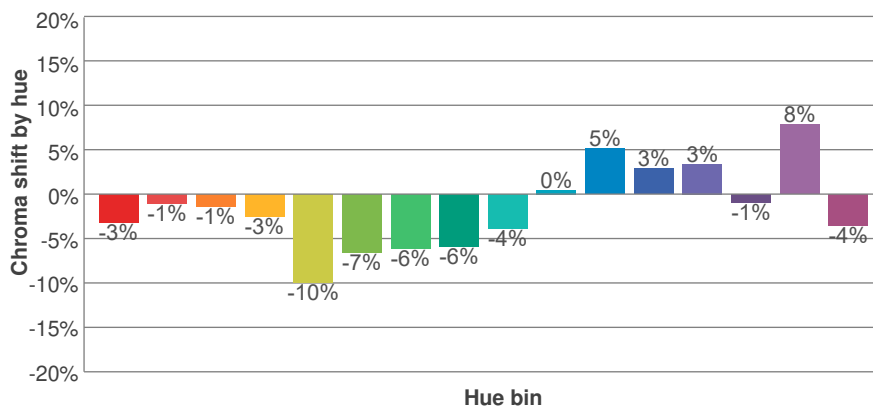
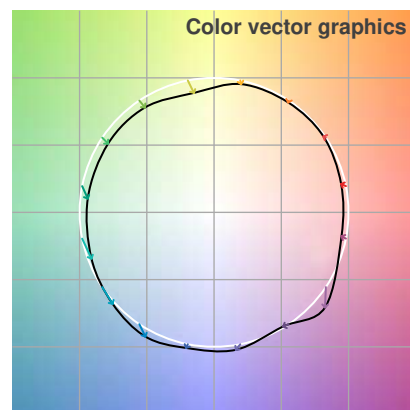
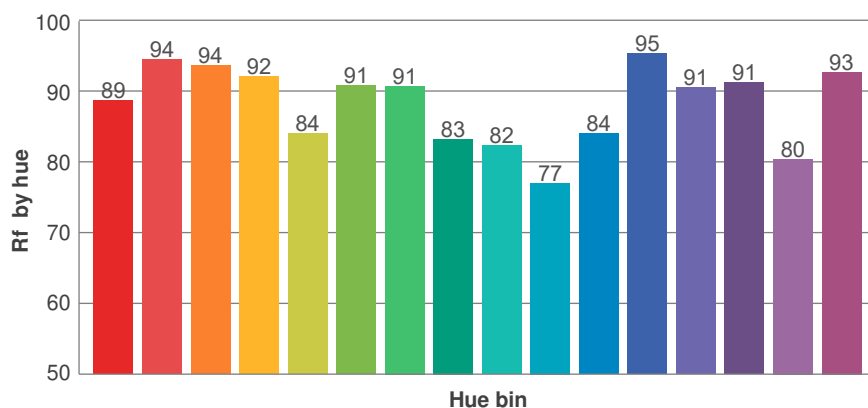
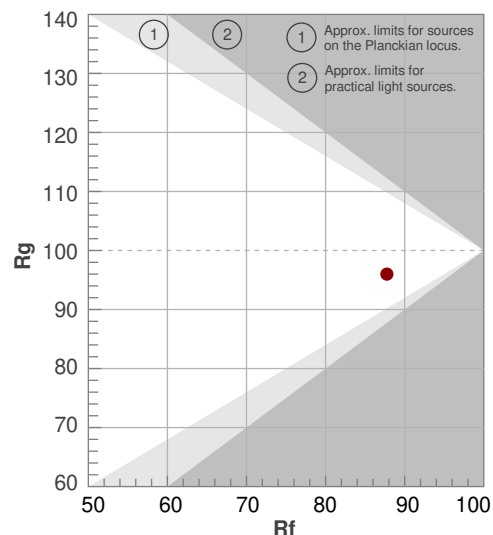
## Rf 87,7

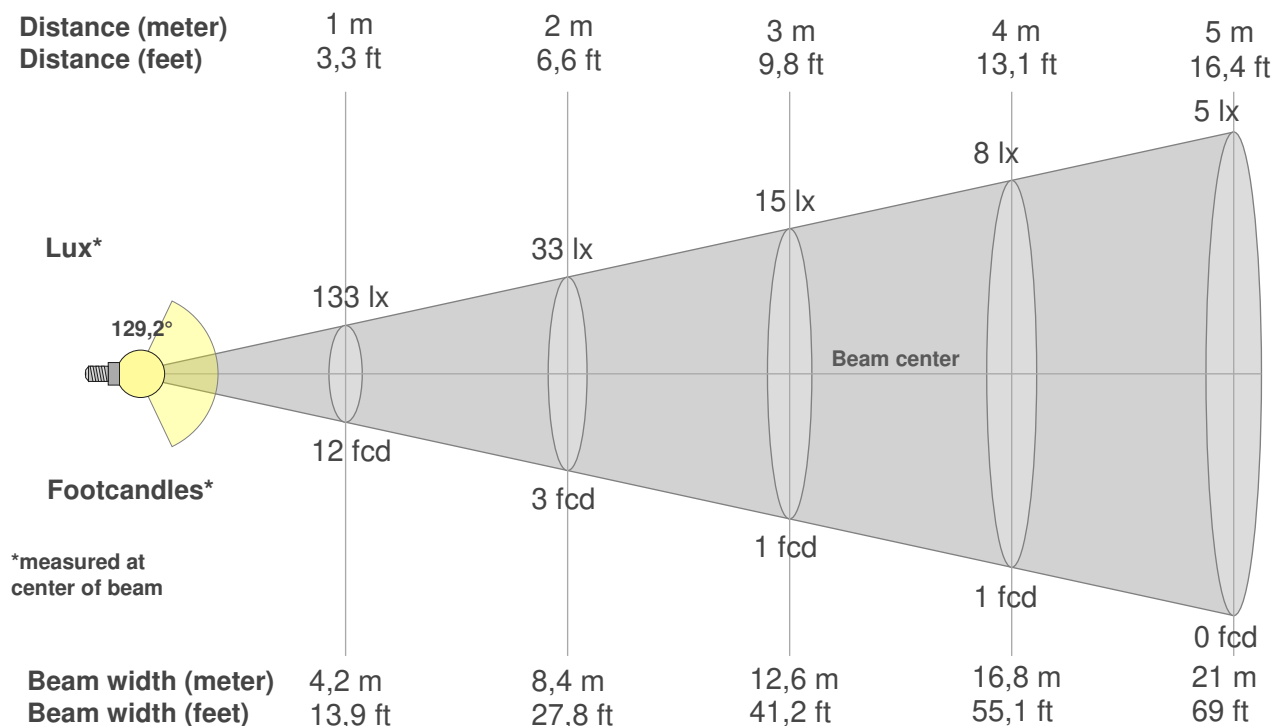
Fidelity index Rf

## Rg 96,0

Gammut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 89             | -3%                | 2%   |
| 2       | 94             | -1%                | 2%   |
| 3       | 94             | -1%                | 0%   |
| 4       | 92             | -3%                | -1%  |
| 5       | 84             | -10%               | -3%  |
| 6       | 91             | -7%                | -1%  |
| 7       | 91             | -6%                | 1%   |
| 8       | 83             | -6%                | 8%   |
| 9       | 82             | -4%                | 16%  |
| 10      | 77             | 0%                 | 15%  |
| 11      | 84             | 5%                 | 9%   |
| 12      | 95             | 3%                 | -1%  |
| 13      | 91             | 3%                 | -4%  |
| 14      | 91             | -1%                | -4%  |
| 15      | 80             | 8%                 | -13% |
| 16      | 93             | -4%                | 1%   |





## 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 |
| 133lx   | 33lx   | 15lx   | 8lx    | 5lx    | 4lx    | 3lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 1lx    | 0lx    | 0lx    | 0lx    | 0lx    |
| 12,4fcd | 3,1fcd | 1,4fcd | 0,8fcd | 0,5fcd | 0,3fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0,1fcd | 0fcd   | 0fcd   | 0fcd   | 0fcd   | 0fcd   |

## Intensities in 0° c-plane

| 0°   | 9°  | 18° | 27° | 36° | 45° | 54° | 63° | 72° | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 133  | 132 | 127 | 120 | 111 | 101 | 90  | 78  | 67  | 55  | 22  | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 100% | 99% | 96% | 90% | 83% | 76% | 67% | 59% | 50% | 41% | 17% | 0%  | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |

## Intensities in 90° c-plane

| 0°   | 9°  | 18° | 27° | 36° | 45° | 54° | 63° | 72° | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 133  | 131 | 126 | 118 | 106 | 92  | 75  | 56  | 37  | 18  | 2   | 2   | 2    | 2    | 1    | 1    | 1    | 1    | 0    | 0    |
| 100% | 98% | 95% | 88% | 80% | 69% | 57% | 42% | 28% | 14% | 2%  | 2%  | 1%   | 1%   | 1%   | 1%   | 1%   | 1%   | 0%   | 0%   |

## Intensities in 180° c-plane

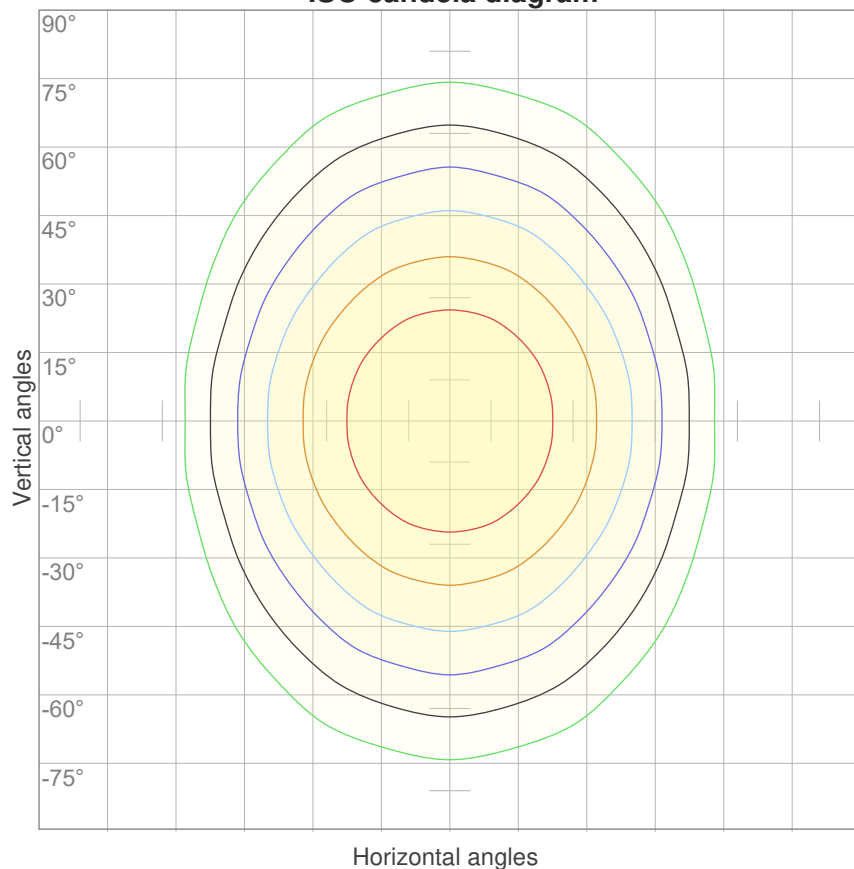
| 0°   | 9°  | 18° | 27° | 36° | 45° | 54° | 63° | 72° | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 133  | 132 | 127 | 120 | 111 | 101 | 90  | 78  | 67  | 55  | 22  | 0   | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| 100% | 99% | 96% | 90% | 83% | 76% | 67% | 59% | 50% | 41% | 17% | 0%  | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   | 0%   |

## Intensities in 270° c-plane

| 0°   | 9°  | 18° | 27° | 36° | 45° | 54° | 63° | 72° | 81° | 90° | 99° | 108° | 117° | 126° | 135° | 144° | 153° | 162° | 171° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| 133  | 131 | 126 | 118 | 106 | 92  | 75  | 56  | 37  | 18  | 2   | 2   | 2    | 2    | 1    | 1    | 1    | 1    | 0    | 0    |
| 100% | 98% | 95% | 88% | 80% | 69% | 57% | 42% | 28% | 14% | 2%  | 2%  | 1%   | 1%   | 1%   | 1%   | 1%   | 1%   | 0%   | 0%   |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 129,2°         | 205,7°          | 215,3°            | 64,1%                        | 42,2%                       |

### ISO candela diagram



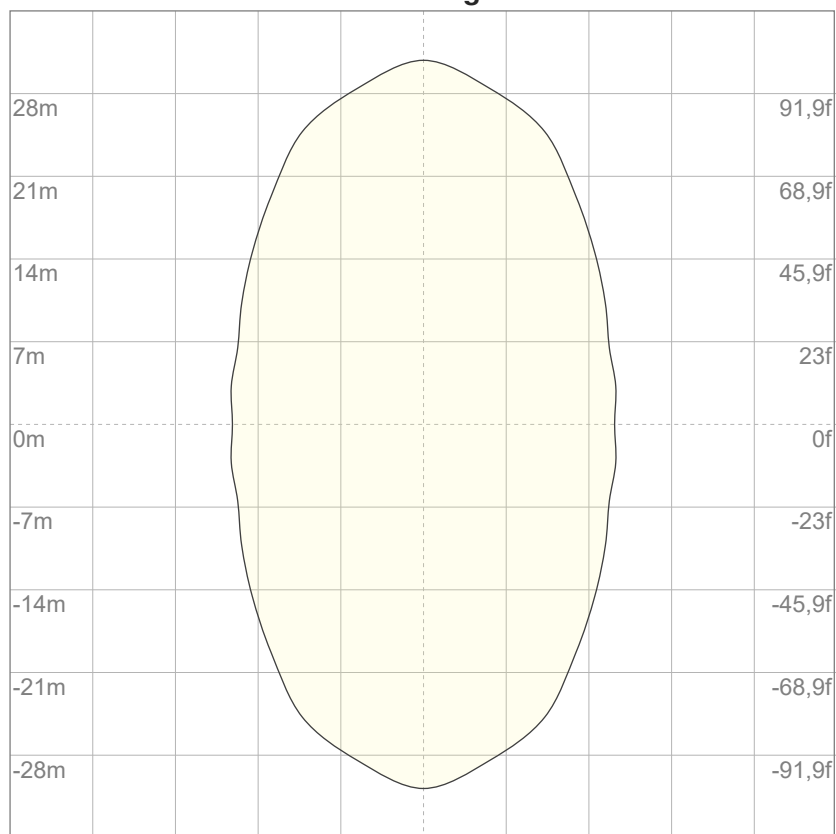
|     |        |
|-----|--------|
| 10% | 13 cd  |
| 20% | 27 cd  |
| 30% | 40 cd  |
| 40% | 53 cd  |
| 50% | 67 cd  |
| 60% | 80 cd  |
| 70% | 93 cd  |
| 80% | 107 cd |
| 90% | 120 cd |

#### Conditions:

Number of c-planes: 16

Candela at center: 133 cd

### ISO lux diagram



|     |          |
|-----|----------|
| 3%  | 40,0m lx |
| 5%  | 66,7m lx |
| 10% | 0,133 lx |
| 30% | 0,400 lx |
| 50% | 0,667 lx |

#### Conditions:

Number of c-planes: 16

Lux at center: 1,33 lx

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

### Glare Evaluation According to UGR

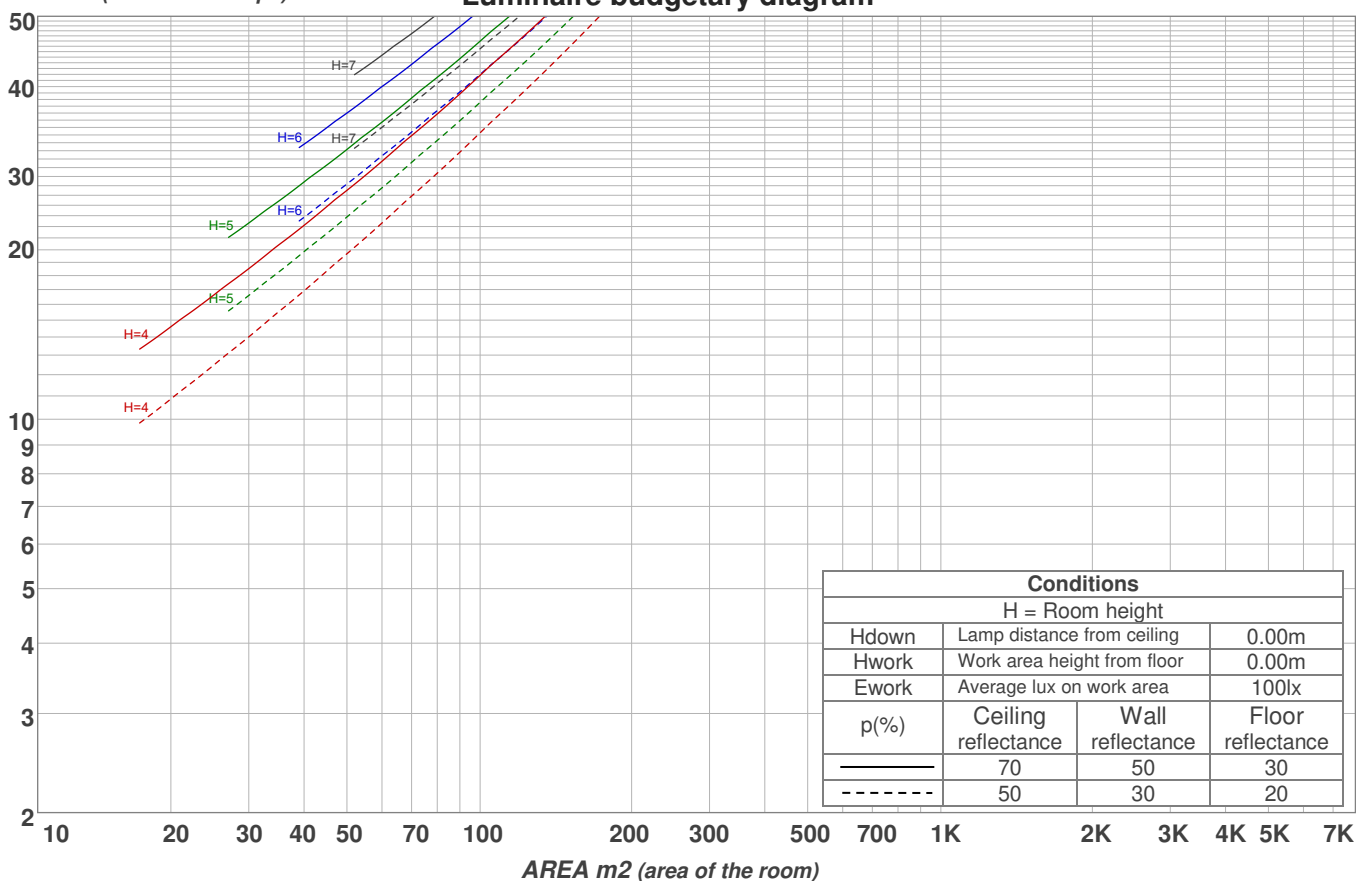
|   |     |   |      |      |      |      |   |      |      |      |      |
|---|-----|---|------|------|------|------|---|------|------|------|------|
| p Ceiling   |     | 70  | 70   | 50   | 50   | 30   | 70                                      | 70   | 50   | 50   | 30   |
| p Walls   |     | 50  | 30   | 50   | 30   | 30   | 50                                      | 30   | 50   | 30   | 30   |
| p Floor   |     | 20  | 20   | 20   | 20   | 20   | 20                                      | 20   | 20   | 20   | 20   |
| Room size<br>X      Y   |     | Viewing direction at right angles to<br>lamp axis |      |      |      |      | Viewing direction parallel to lamp axis |      |      |      |      |
| 2H  | 2H  | 23,2  | 24,6 | 23,5 | 24,9 | 25,2 | 22,9                                    | 24,3 | 23,2 | 24,6 | 24,8 |
|   | 3H  | 25,3  | 26,8 | 25,8 | 27,1 | 27,3 | 24,6                                    | 26,0 | 25,0 | 26,3 | 26,5 |
|   | 4H  | 26,5  | 27,8 | 26,9 | 28,1 | 28,4 | 25,3                                    | 26,7 | 25,8 | 27,0 | 27,2 |
|   | 6H  | 27,7  | 28,9 | 28,0 | 29,1 | 29,5 | 26,0                                    | 27,3 | 26,4 | 27,5 | 27,9 |
|   | 8H  | 28,2  | 29,4 | 28,5 | 29,7 | 30,1 | 26,3                                    | 27,5 | 26,6 | 27,8 | 28,2 |
|   | 12H | 28,7  | 29,9 | 29,1 | 30,2 | 30,7 | 26,5                                    | 27,6 | 26,9 | 28,0 | 28,4 |
| 4H  | 2H  | 23,9  | 25,3 | 24,3 | 25,6 | 25,8 | 23,7                                    | 25,0 | 24,1 | 25,3 | 25,6 |
|   | 3H  | 26,4  | 27,5 | 26,8 | 27,9 | 28,3 | 25,6                                    | 26,8 | 26,0 | 27,1 | 27,6 |
|   | 4H  | 27,6  | 28,7 | 28,0 | 29,1 | 29,6 | 26,5                                    | 27,5 | 26,9 | 28,0 | 28,5 |
|   | 6H  | 28,9  | 29,9 | 29,4 | 30,3 | 30,7 | 27,3                                    | 28,3 | 27,8 | 28,7 | 29,0 |
|   | 8H  | 29,5  | 30,5 | 30,0 | 30,9 | 31,2 | 27,6                                    | 28,5 | 28,1 | 28,9 | 29,3 |
|   | 12H | 30,2  | 31,0 | 30,7 | 31,4 | 31,9 | 27,9                                    | 28,7 | 28,4 | 29,1 | 29,6 |
| 8H  | 4H  | 28,0  | 28,9 | 28,5 | 29,3 | 29,7 | 27,0                                    | 28,0 | 27,6 | 28,4 | 28,8 |
|   | 6H  | 29,6  | 30,3 | 30,1 | 30,8 | 31,3 | 28,1                                    | 28,8 | 28,6 | 29,3 | 29,9 |
|   | 8H  | 30,4  | 31,1 | 30,9 | 31,6 | 32,2 | 28,6                                    | 29,3 | 29,1 | 29,8 | 30,4 |
|   | 12H | 31,2  | 31,8 | 31,8 | 32,3 | 32,9 | 29,0                                    | 29,6 | 29,6 | 30,1 | 30,7 |
| 12H   | 4H  | 28,0  | 28,8 | 28,5 | 29,3 | 29,8 | 27,2                                    | 28,0 | 27,7 | 28,4 | 28,9 |
|   | 6H  | 29,7  | 30,4 | 30,2 | 30,9 | 31,5 | 28,4                                    | 29,0 | 28,9 | 29,5 | 30,2 |
|   | 8H  | 30,6  | 31,2 | 31,2 | 31,7 | 32,3 | 28,9                                    | 29,5 | 29,5 | 30,0 | 30,6 |
| Variation of the observer position for the luminaire distance S |     |   |      |      |      |      |   |      |      |      |      |
| S = 1.0H  |     | 0,1 / 0,0   |      |      |      |      | 0,1 / -0,1                              |      |      |      |      |
| S = 1.5H  |     | 0,1 / -0,1  |      |      |      |      | 0,1 / -0,1                              |      |      |      |      |
| S = 2.0H  |     | 0,2 / -0,2  |      |      |      |      | 0,2 / -0,3                              |      |      |      |      |
| Standard table  |     | n/a   |      |      |      |      | n/a                                     |      |      |      |      |
| Correction<br>summand   |     | n/a   |      |      |      |      | n/a                                     |      |      |      |      |
| Corrected glare indices referring to 500 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 | 114 | 114 | 114 | 114 | 108 | 108 | 108 | 102 | 102 | 102 | 97 | 97 | 97 | 94 |
| 1                   | 105  | 99  | 93  | 88  | 101 | 96  | 91  | 86  | 90  | 86  | 83  | 85  | 82  | 79  | 81 | 78 | 76 | 73 |
| 2                   | 94   | 84  | 77  | 70  | 91  | 82  | 75  | 69  | 77  | 71  | 66  | 73  | 68  | 64  | 69 | 65 | 61 | 59 |
| 3                   | 85   | 73  | 64  | 57  | 82  | 71  | 63  | 56  | 67  | 60  | 54  | 64  | 58  | 53  | 60 | 55 | 51 | 48 |
| 4                   | 78   | 64  | 55  | 48  | 75  | 63  | 54  | 47  | 59  | 52  | 46  | 56  | 50  | 44  | 53 | 48 | 43 | 41 |
| 5                   | 71   | 57  | 48  | 40  | 68  | 56  | 47  | 40  | 53  | 45  | 39  | 50  | 43  | 38  | 48 | 42 | 37 | 35 |
| 6                   | 66   | 51  | 42  | 35  | 63  | 50  | 41  | 35  | 48  | 40  | 34  | 45  | 38  | 33  | 43 | 37 | 32 | 30 |
| 7                   | 61   | 46  | 37  | 31  | 58  | 45  | 37  | 30  | 43  | 35  | 30  | 41  | 34  | 29  | 39 | 33 | 29 | 26 |
| 8                   | 56   | 42  | 33  | 27  | 54  | 41  | 33  | 27  | 39  | 32  | 26  | 38  | 31  | 26  | 36 | 30 | 25 | 23 |
| 9                   | 53   | 39  | 30  | 24  | 51  | 38  | 30  | 24  | 36  | 29  | 24  | 35  | 28  | 23  | 33 | 27 | 23 | 21 |
| 10                  | 49   | 36  | 27  | 22  | 48  | 35  | 27  | 22  | 33  | 26  | 21  | 32  | 26  | 21  | 31 | 25 | 21 | 19 |

## LAMPS (number of lamps)

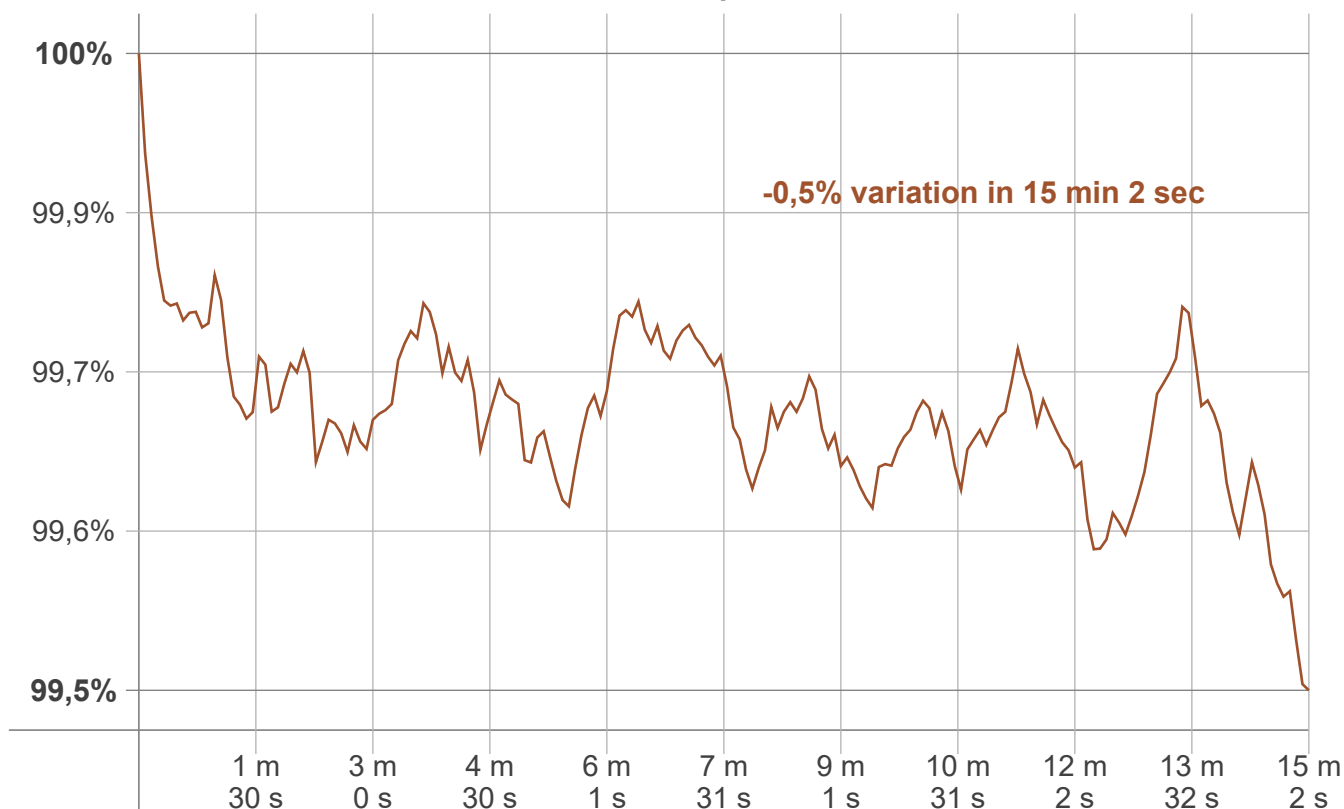
## Luminaire budgetary diagram



## Zonal Lumen Summary

| 0°-10°   | 10°-20°   | 20°-30°   | 30°-40°   | 40°-50°   | 50°-60°   | 60°-70°   | 70°-80°   | 80°-90°   |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 12,6 lm  | 36,4 lm   | 55,8 lm   | 68,9 lm   | 74,4 lm   | 72,4 lm   | 64,0 lm   | 51,2 lm   | 35,6 lm   |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 12,2 lm  | 3,98 lm   | 3,08 lm   | 2,78 lm   | 2,28 lm   | 1,76 lm   | 1,30 lm   | 0,795 lm  | 0,268 lm  |

## Warmup curve



## Warmup result

|                  |                                 |
|------------------|---------------------------------|
| Warmup time:     | Lamp stabilized in 15 min 2 sec |
| Warmup variation | -0,5%                           |

## Warmup conditions

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

## Color temperature change

| CCT start | CCT change | CCT end |
|-----------|------------|---------|
| 6221 K    | +11 K      | 6232 K  |

## Output change

| Output start | Output change | Output end |
|--------------|---------------|------------|
| 501 lm       | -1 lm         | 500 lm     |