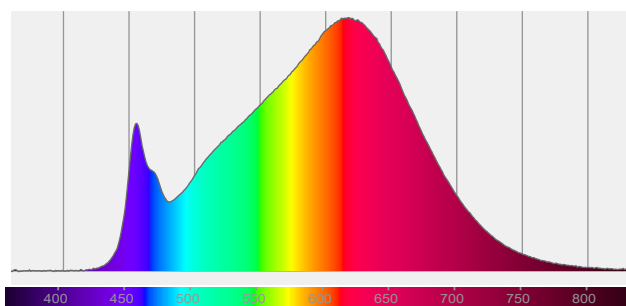
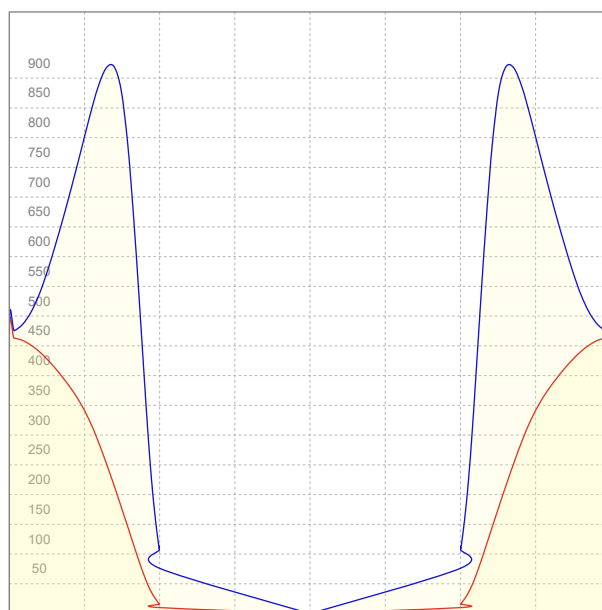
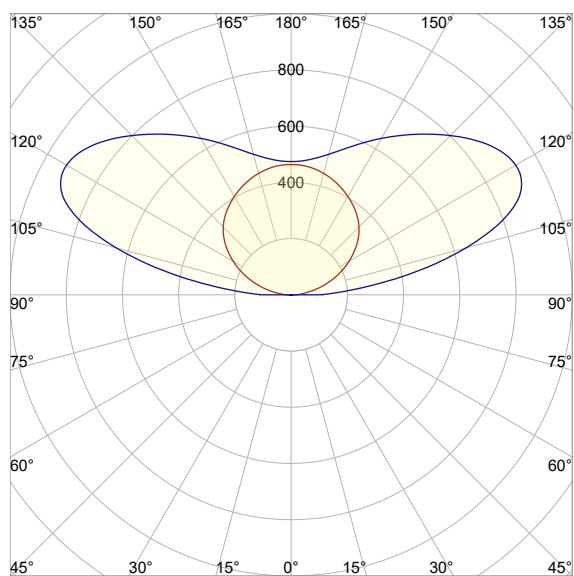
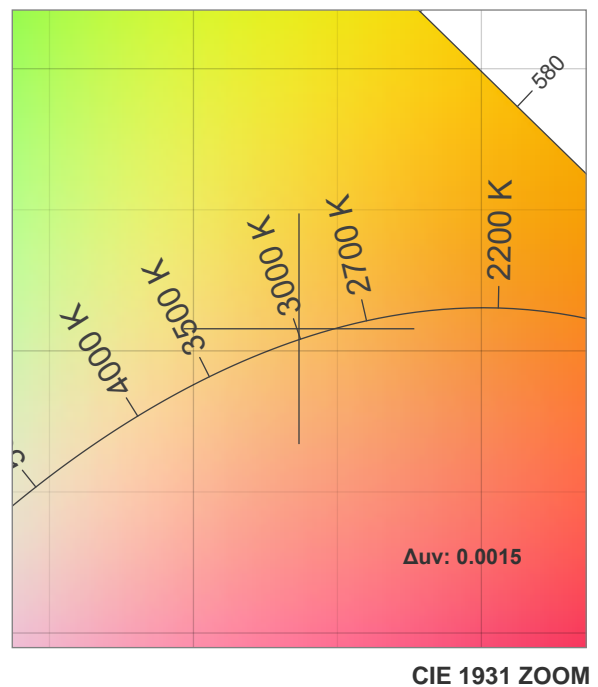
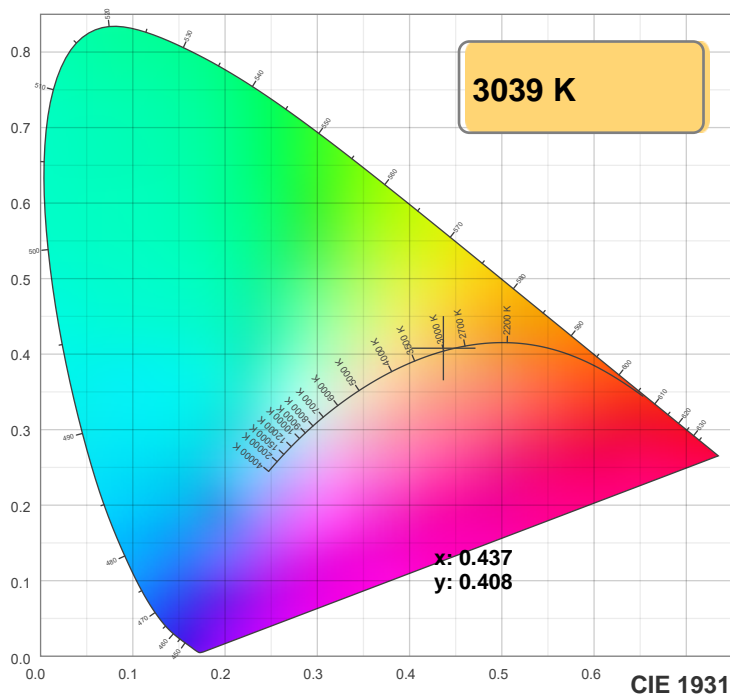


Light efficiency:**144 Lumen/Watt****Output: 3015 lm****Light quality:****CRI: 91.4****Peak: 919 cd****Color temperature:****3039 K****Power: 20.9 W****PF: 1.0**

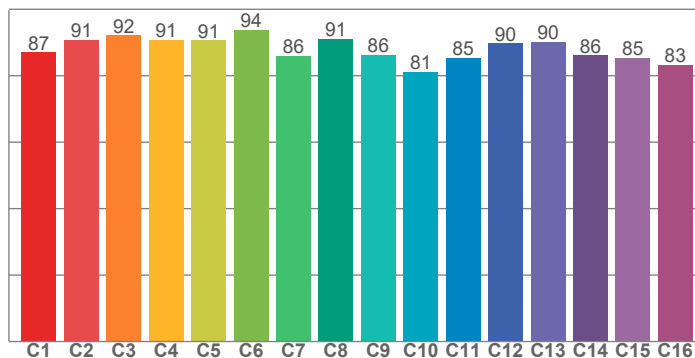
No photo

**Product name:****NANOBeam Cosine 120°****Item number:****NBE9560****Configuration:****NBE9560-4FT-3090-WT-IC120-750LPF****Date and time:****11/8/2021 10:02:59 AM****Description:****Power Supply @ 560 mA**

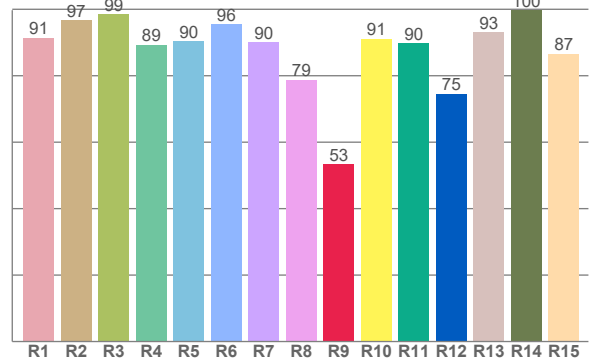
Color Details



TM-30: 88.3



CRI: 91.4 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 91.5 | 96.7 | 98.6 | 89.3 | 90.5 | 95.6 | 90.1 | 78.8 | 53.3 | 91.1 | 89.7 | 74.6 | 93.0 | 99.7 | 86.6 |

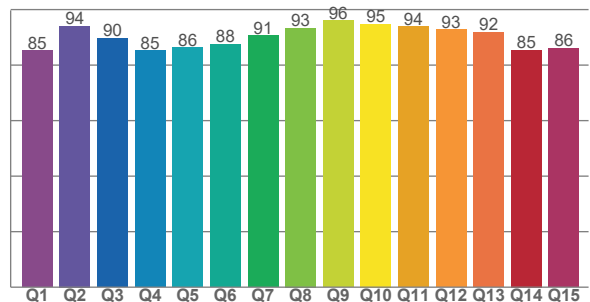
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 87.0 | 90.8 | 92.1 | 90.8 | 90.6 | 93.8 | 86.0 | 91.1 | 86.3 | 81.2 | 85.3 | 89.8 | 90.2 | 86.2 | 85.5 | 83.2 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 85.2 | 94.1 | 89.7 | 85.3 | 86.3 | 87.5 | 90.6 | 93.3 | 96.1 | 94.8 | 93.8 | 92.8 | 91.8 | 85.4 | 86.0 |

CQS: 89.4



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 |
| 3039 K | 91.4 | 53.3 | 88.3 | 95.0 | 89.4 | 0.437 | 0.408 | 0.249 | 0.349 | 0.0015 |

TM-30 Details

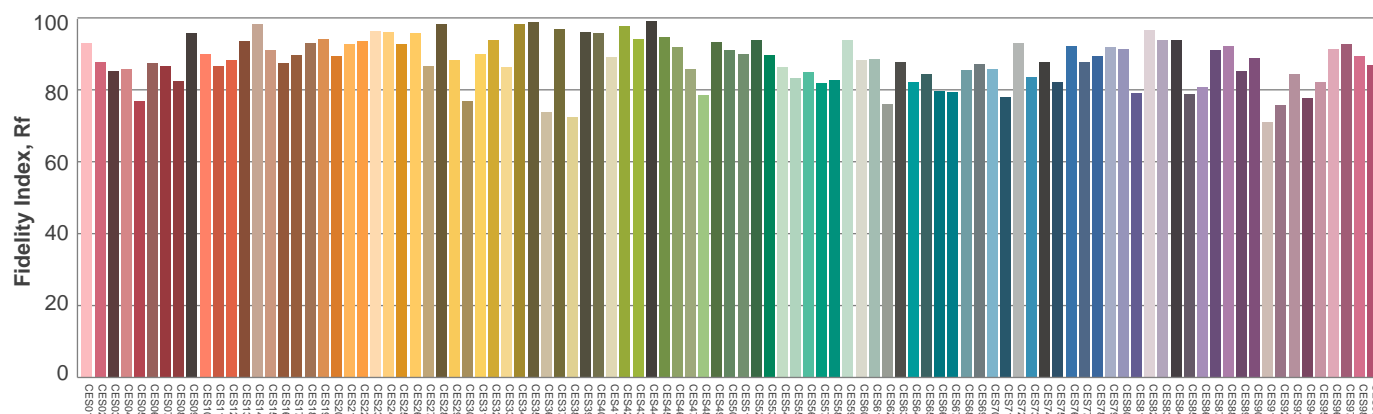
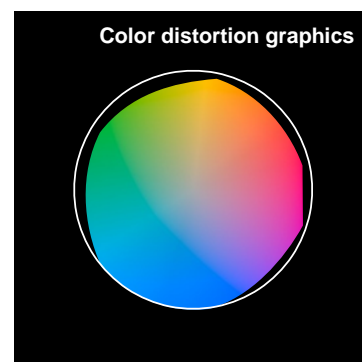
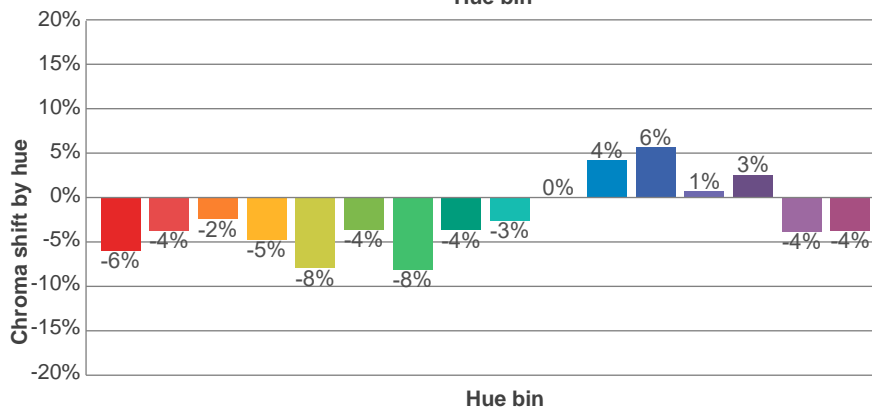
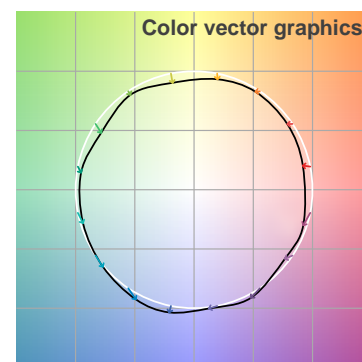
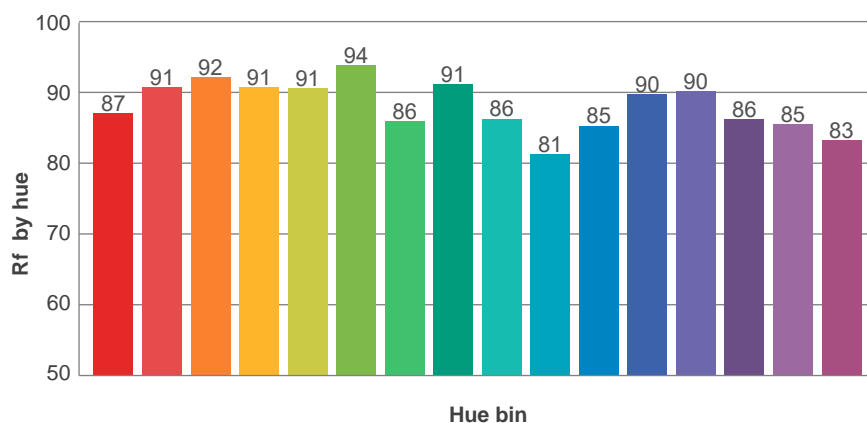
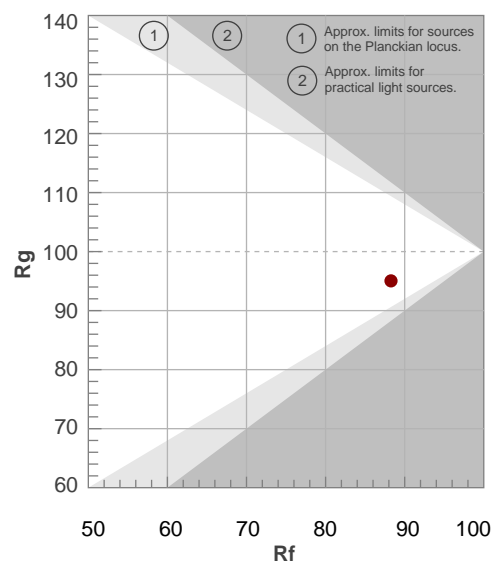
Rf 88.3

Fidelity index Rf

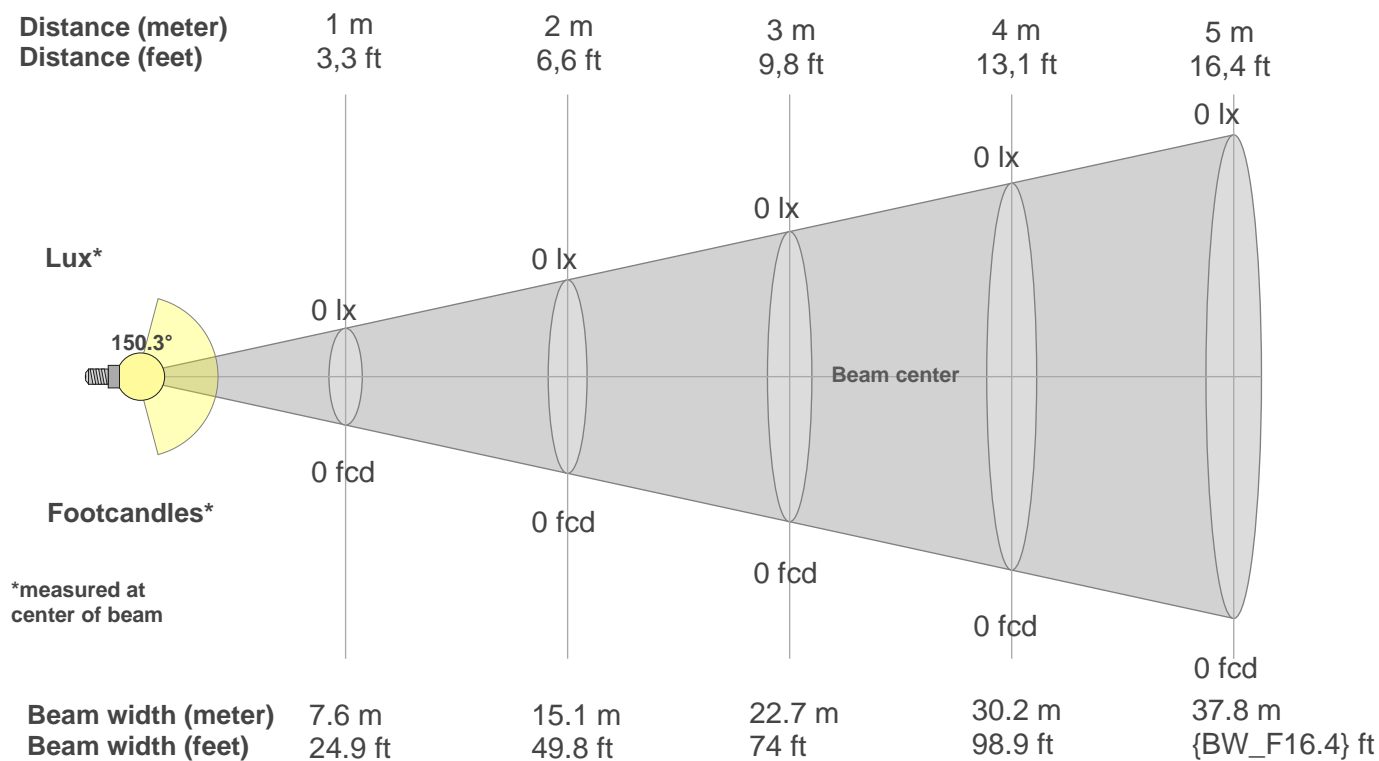
Rg 95.0

Gamut index Rg

| Hue Bin | R _f | Shifts (%) | |
|---------|----------------|------------|------|
| | | Chroma | Hue |
| 1 | 87 | -6% | 2% |
| 2 | 91 | -4% | 2% |
| 3 | 92 | -2% | 3% |
| 4 | 91 | -5% | -1% |
| 5 | 91 | -8% | 0% |
| 6 | 94 | -4% | 0% |
| 7 | 86 | -8% | 4% |
| 8 | 91 | -4% | 4% |
| 9 | 86 | -3% | 9% |
| 10 | 81 | 0% | 11% |
| 11 | 85 | 4% | 10% |
| 12 | 90 | 6% | 0% |
| 13 | 90 | 1% | -7% |
| 14 | 86 | 3% | -11% |
| 15 | 85 | -4% | -6% |
| 16 | 83 | -4% | -11% |



Beam details



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 |
| 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx | 0lx |
| 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 0fcd | 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 62 | 136 | 213 | 283 | 341 | 382 | 414 | 440 | 457 |
| NaN% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 7 | 15 | 23 | 30 | 38 | 45 | 53 | 61 | 68 | 76 | 387 | 750 | 916 | 890 | 801 | 704 | 614 | 537 | 490 |
| NaN% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 62 | 136 | 213 | 283 | 341 | 382 | 414 | 440 | 457 |
| NaN% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 7 | 15 | 23 | 30 | 38 | 45 | 53 | 61 | 68 | 76 | 387 | 750 | 916 | 890 | 801 | 704 | 614 | 537 | 490 |
| NaN% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% | âˆž% |

UGR

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 | | | | |
| CIE 117-1995. Corrected glare indices referring to 3015 lm total luminous flux | | | | | | | | | | |