

Light efficiency:

107 Lumen/Watt

Light quality:

CRI: 85.1

Color temperature:

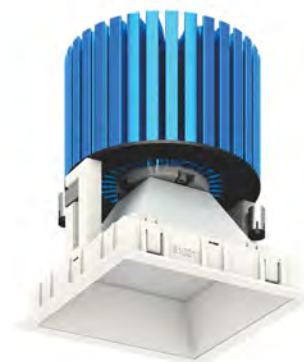
3017 K

Output: 858 lm

Peak: 711 cd

Power: 8.0 W

PF: 0.94

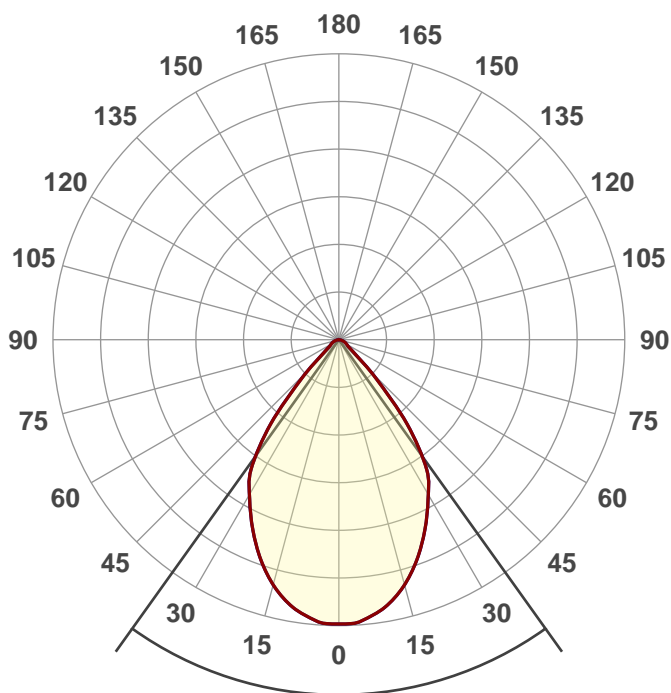


Product name:

NU4-QD-SW-10LM-30K-80-
D65-120-DIM10-NC-WH-WH

Date and time:

9/12/2018 10:09:37 AM



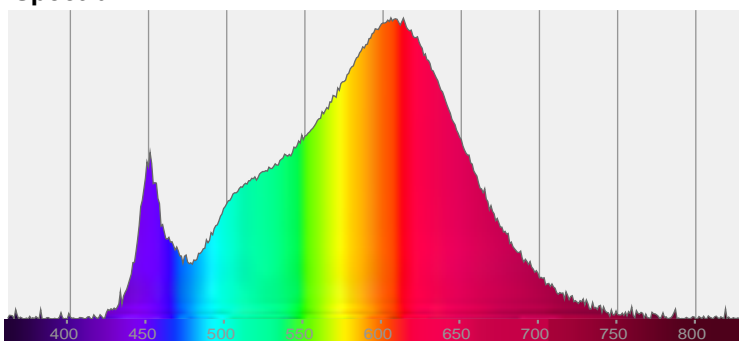
Beam angle

71.1°

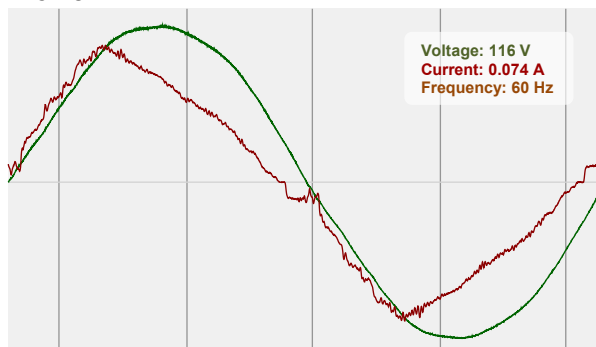


CIE 1931
x: 0.439
y: 0.411

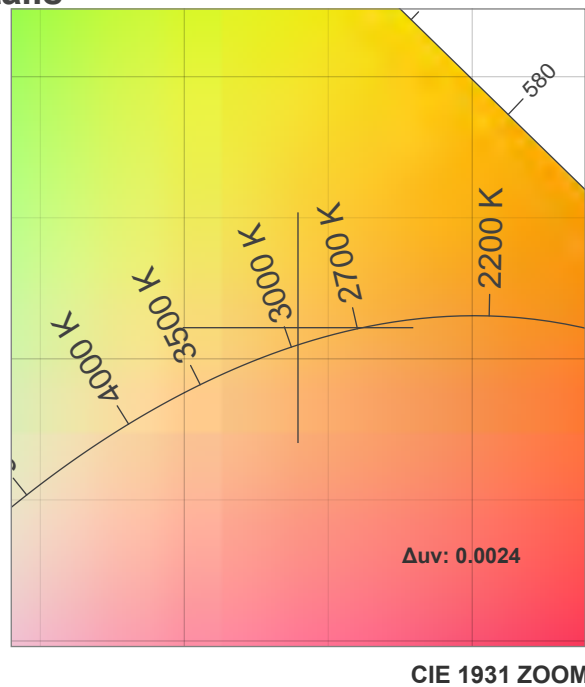
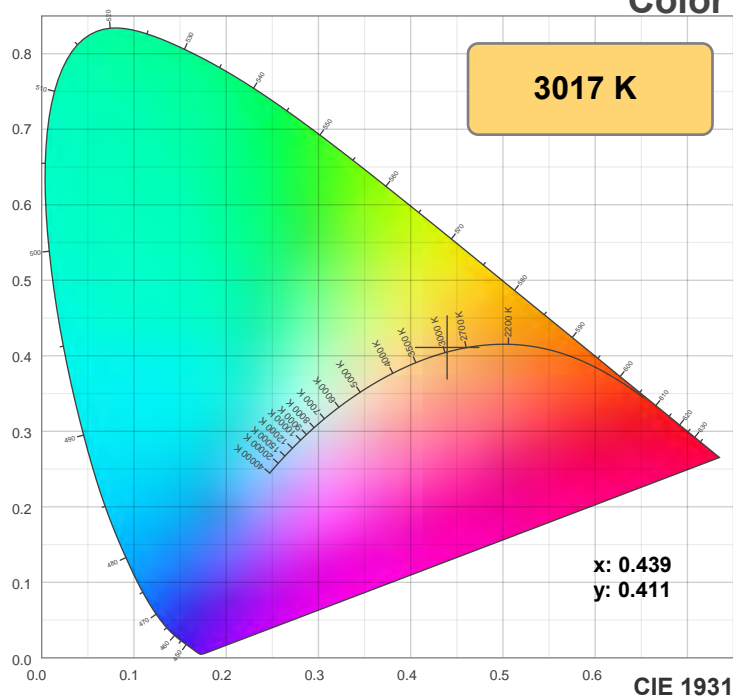
Spectra



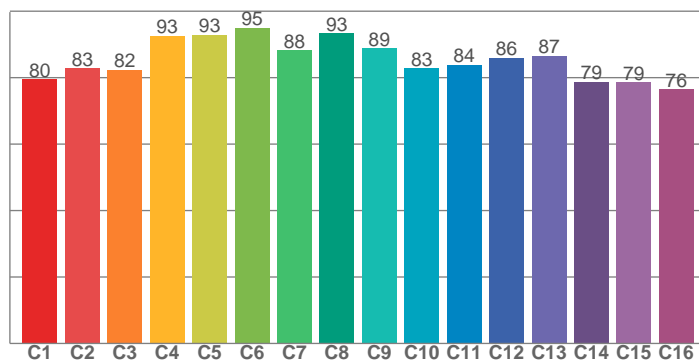
Power



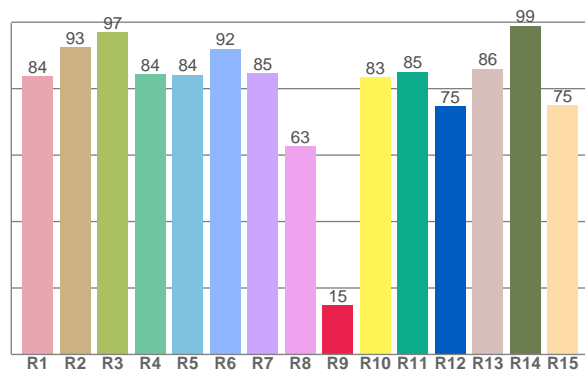
Color details



TM30: 85.8



CRI: 85.1 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 83.8 | 92.5 | 97.0 | 84.4 | 84.1 | 92.0 | 84.7 | 62.7 | 14.7 | 83.5 | 85.1 | 74.6 | 86.0 | 98.9 | 75.1 |

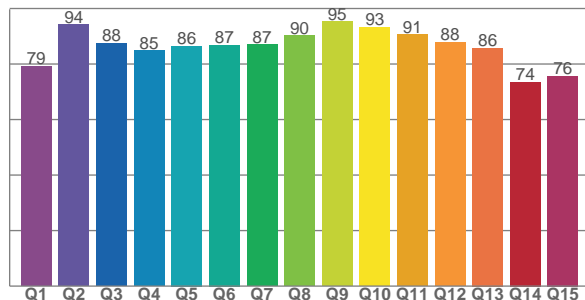
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.5 | 82.8 | 82.4 | 92.6 | 92.9 | 95.1 | 88.3 | 93.4 | 88.8 | 82.9 | 83.9 | 86.0 | 86.5 | 78.7 | 78.6 | 76.4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.2 | 94.2 | 87.5 | 84.8 | 86.5 | 86.9 | 86.9 | 90.2 | 95.2 | 93.3 | 90.5 | 87.8 | 85.7 | 73.5 | 75.7 |

CQS: 85.1



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 |
| 3017 K | 85.1 | 14.7 | 85.8 | 95.0 | 85.1 | 0.439 | 0.411 | 0.249 | 0.350 | 0.0024 |

TM30 details

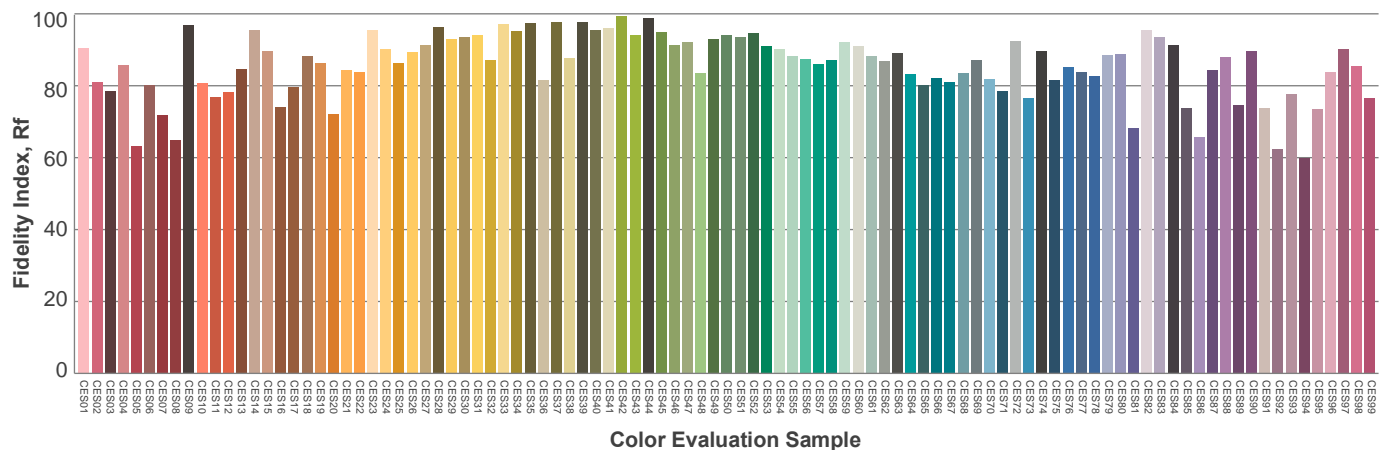
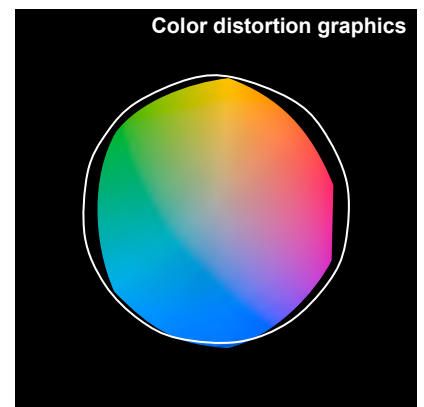
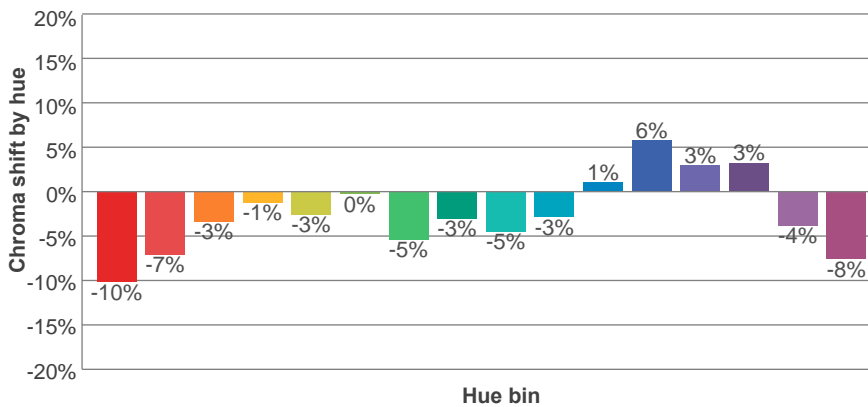
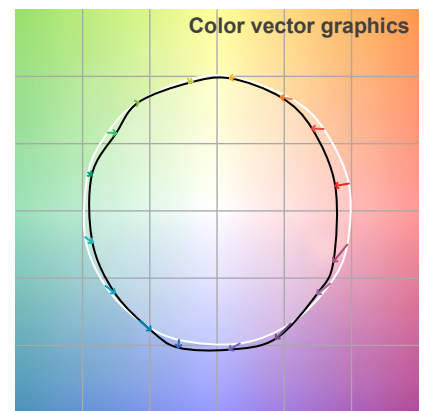
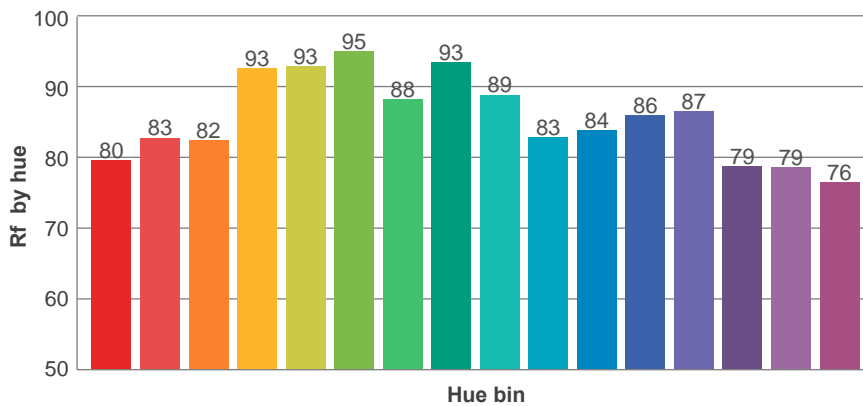
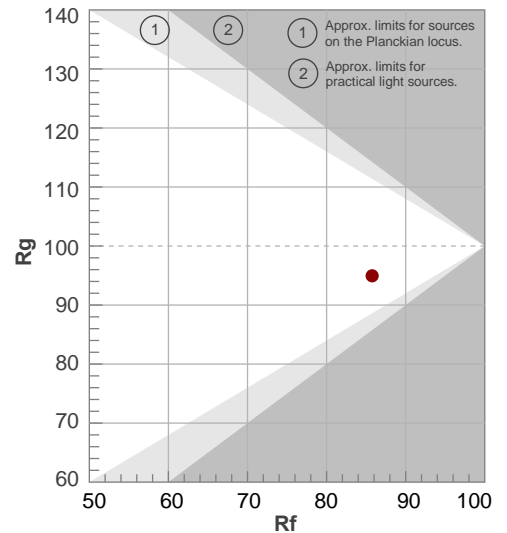
Rf 85.8

Fidelity index Rf

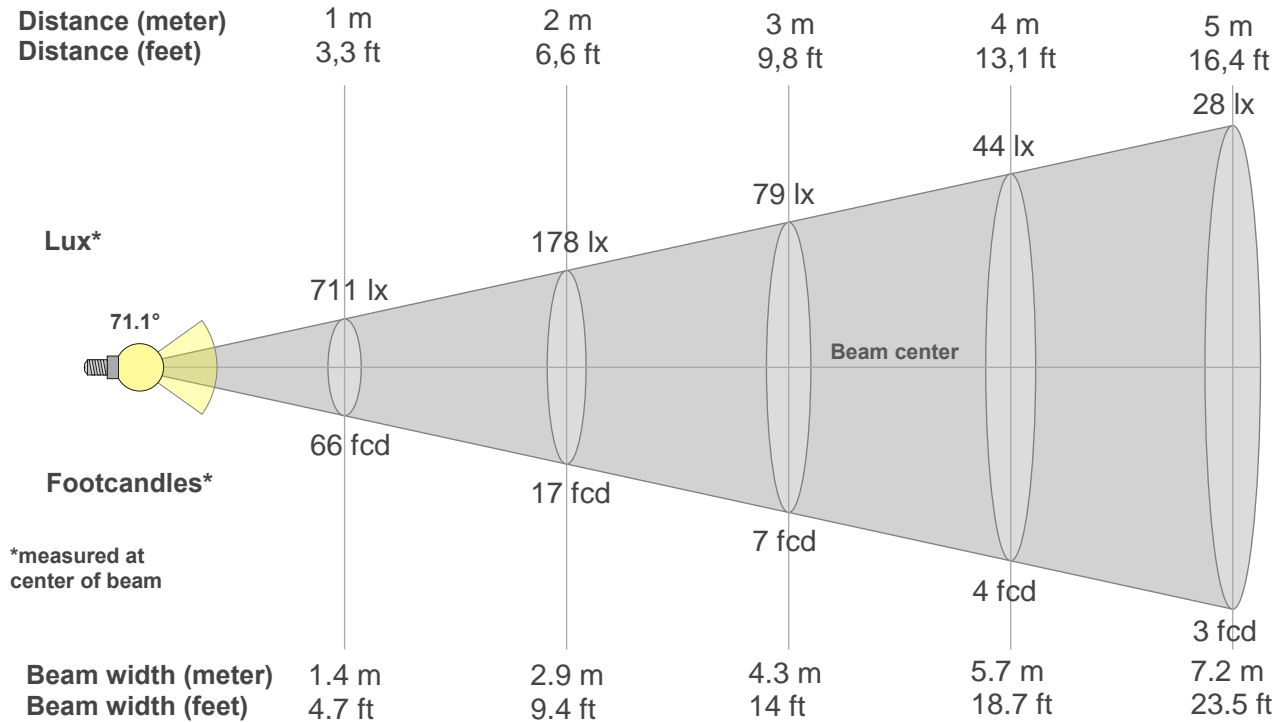
Rg 95.0

Gammut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 80 | -10% | 0% |
| 2 | 83 | -7% | 5% |
| 3 | 82 | -3% | 8% |
| 4 | 93 | -1% | 3% |
| 5 | 93 | -3% | 2% |
| 6 | 95 | 0% | -1% |
| 7 | 88 | -5% | -3% |
| 8 | 93 | -3% | 1% |
| 9 | 89 | -5% | 5% |
| 10 | 83 | -3% | 8% |
| 11 | 84 | 1% | 10% |
| 12 | 86 | 6% | 1% |
| 13 | 87 | 3% | -8% |
| 14 | 79 | 3% | -15% |
| 15 | 79 | -4% | -12% |
| 16 | 76 | -8% | -14% |



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 |
| 711lx | 178lx | 79lx | 44lx | 28lx | 20lx | 15lx | 11lx | 9lx | 7lx | 6lx | 5lx | 4lx | 4lx | 3lx | 3lx | 2lx | 2lx | 2lx | 2lx |
| 66.1fcd | 16.5fcd | 7.3fcd | 4.1fcd | 2.6fcd | 1.8fcd | 1.3fcd | 1fcd | 0.8fcd | 0.7fcd | 0.5fcd | 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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 711 | 711 | 707 | 699 | 689 | 678 | 661 | 644 | 624 | 601 | 578 | 553 | 527 | 500 | 474 | 447 | 420 | 393 | 345 | 296 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 49% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 711 | 711 | 707 | 699 | 689 | 678 | 661 | 644 | 624 | 601 | 578 | 553 | 527 | 500 | 474 | 447 | 420 | 393 | 345 | 296 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 49% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 711 | 711 | 707 | 699 | 689 | 678 | 661 | 644 | 624 | 601 | 578 | 553 | 527 | 500 | 474 | 447 | 420 | 393 | 345 | 296 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 49% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 711 | 711 | 707 | 699 | 689 | 678 | 661 | 644 | 624 | 601 | 578 | 553 | 527 | 500 | 474 | 447 | 420 | 393 | 345 | 296 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 49% | 42% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 71.1° | 95.3° | 130.1° | 96.1% | 89.4% |