

Light efficiency:

108 Lumen/Watt

Light quality:

CRI: 85.0

Color temperature:

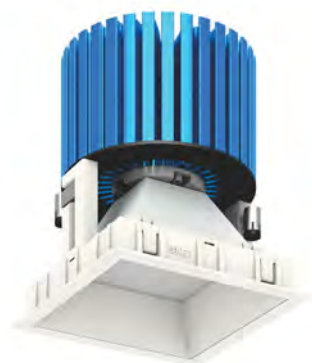
3036 K

Output: 1717 lm

Peak: 1420 cd

Power: 15.9 W

PF: 0.96

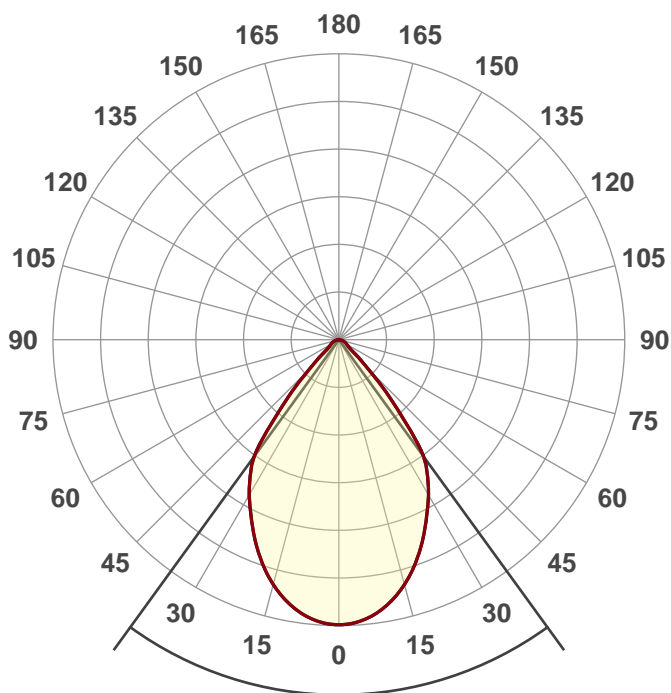


Product name:

NU4-QD-SW-20LM-30K-80-
D65-120-DIM10-NC-WH-WH

Date and time:

9/12/2018 2:10:50 PM



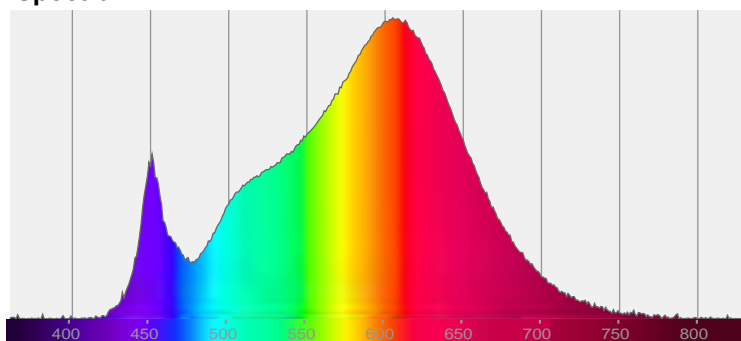
Beam angle

71.9°

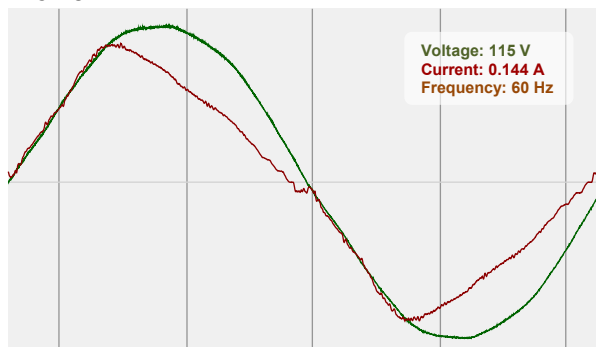


CIE 1931
x: 0.438
y: 0.410

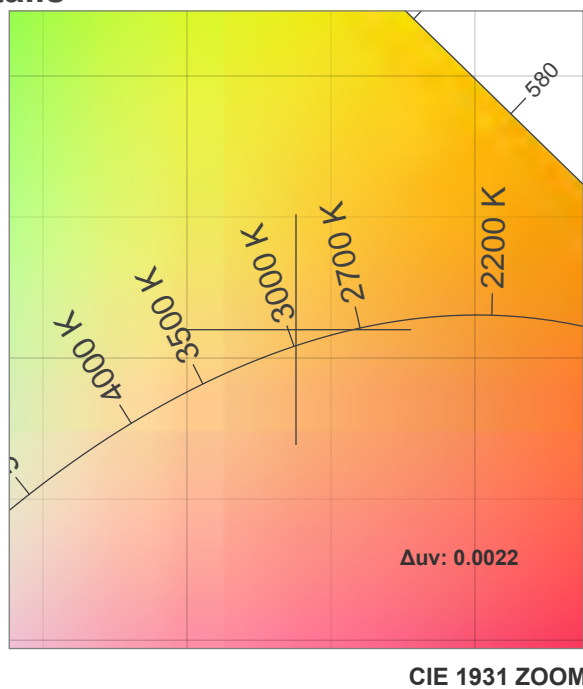
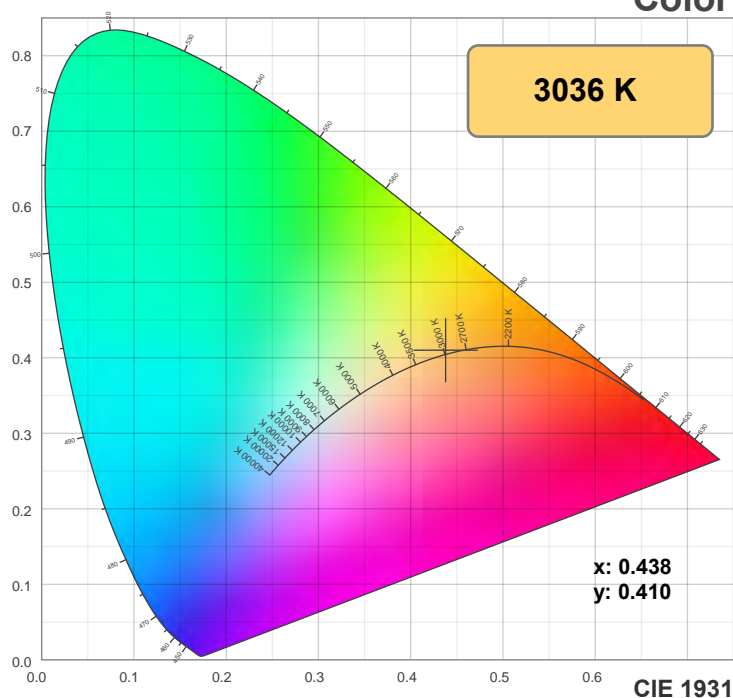
Spectra



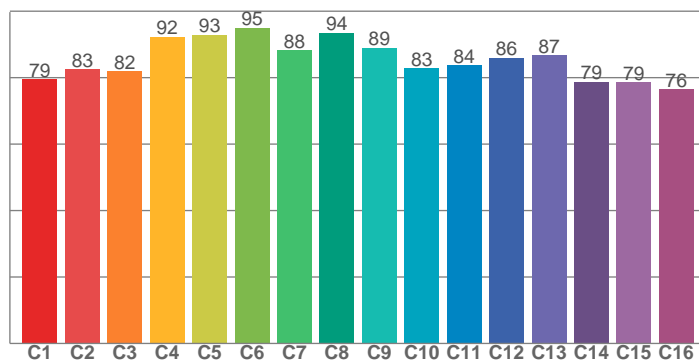
Power



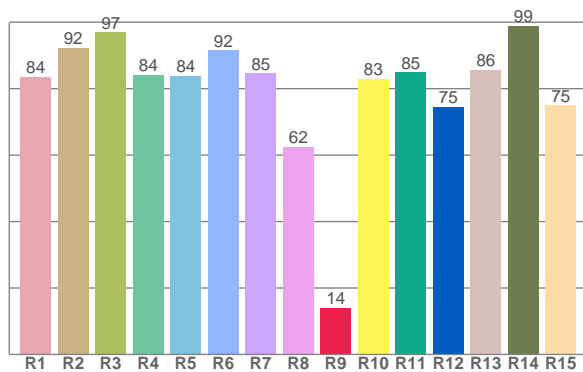
Color details



TM30: 85.7



CRI: 85.0 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 83.6 | 92.4 | 97.1 | 84.2 | 83.9 | 91.7 | 84.6 | 62.5 | 14.1 | 83.0 | 84.9 | 74.5 | 85.7 | 98.9 | 74.9 |

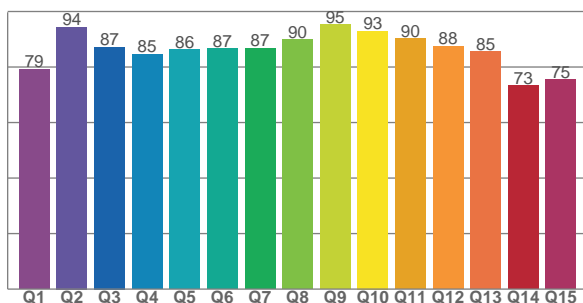
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.4 | 82.5 | 81.9 | 92.3 | 92.9 | 95.1 | 88.2 | 93.6 | 89.0 | 82.8 | 83.6 | 85.9 | 86.7 | 78.8 | 78.6 | 76.4 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.2 | 94.4 | 87.2 | 84.6 | 86.3 | 86.7 | 86.7 | 89.9 | 95.3 | 93.0 | 90.2 | 87.5 | 85.5 | 73.3 | 75.5 |

CQS: 84.9



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 |
| 3036 K | 85.0 | 14.1 | 85.7 | 95.1 | 84.9 | 0.438 | 0.410 | 0.249 | 0.349 | 0.0022 |

TM30 details

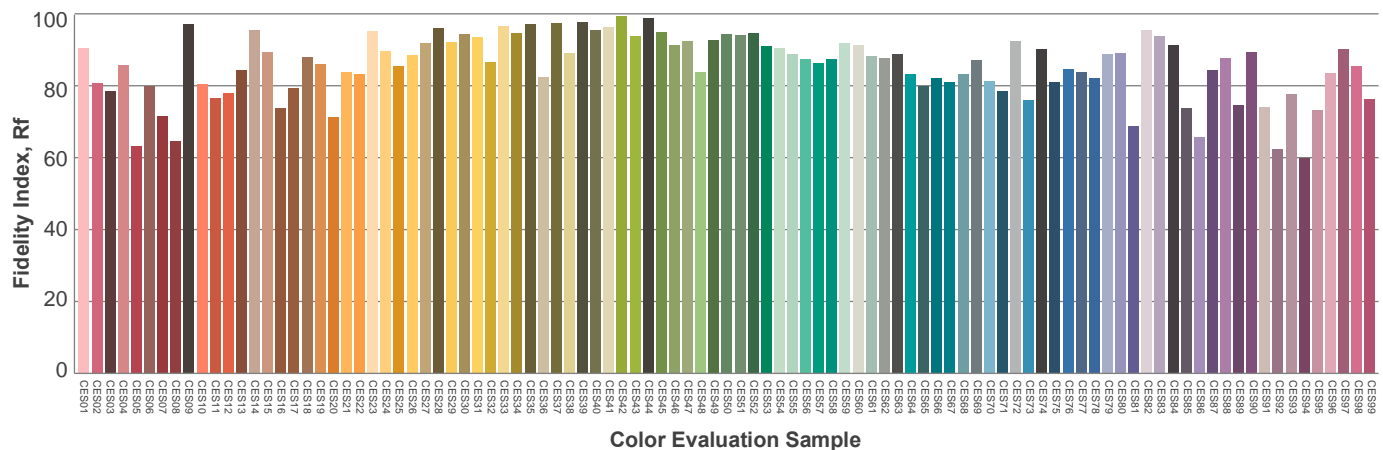
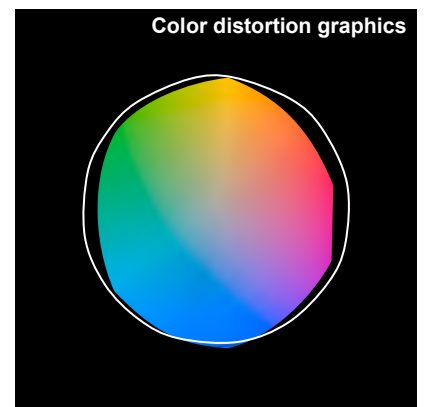
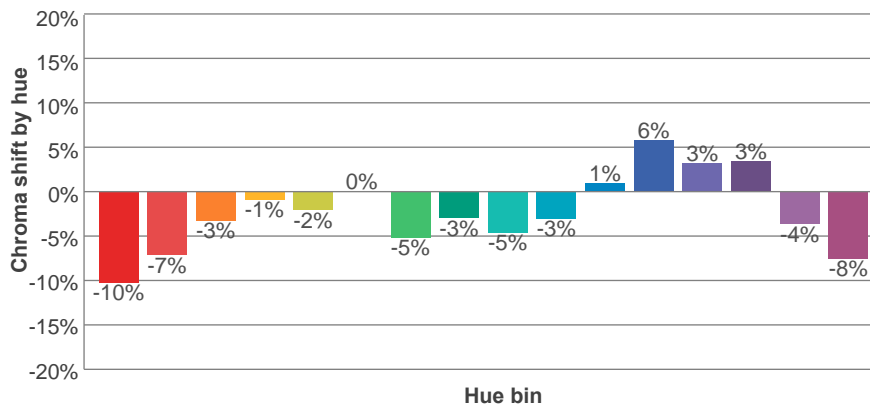
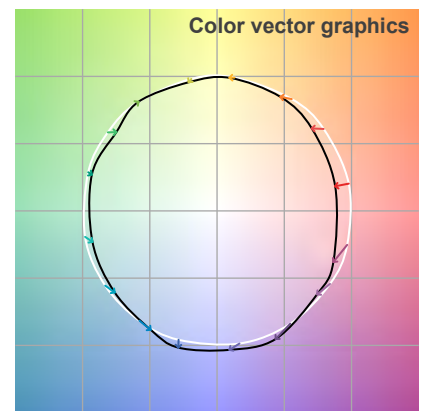
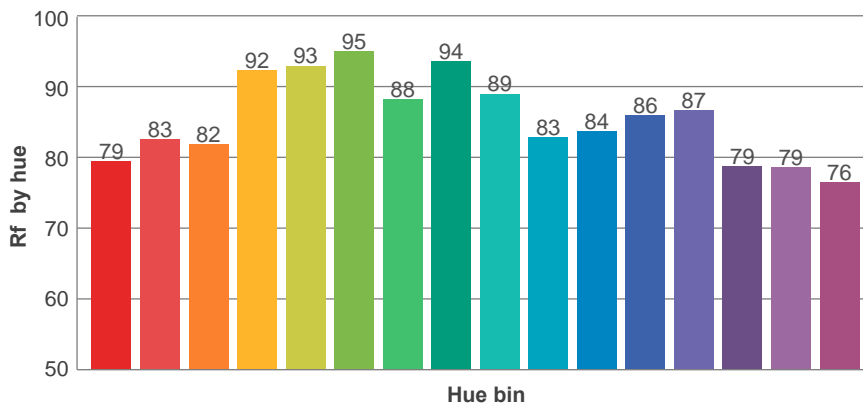
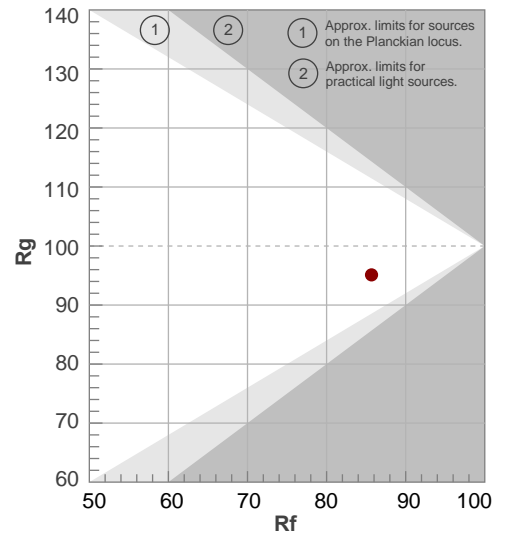
Rf 85.7

Fidelity index Rf

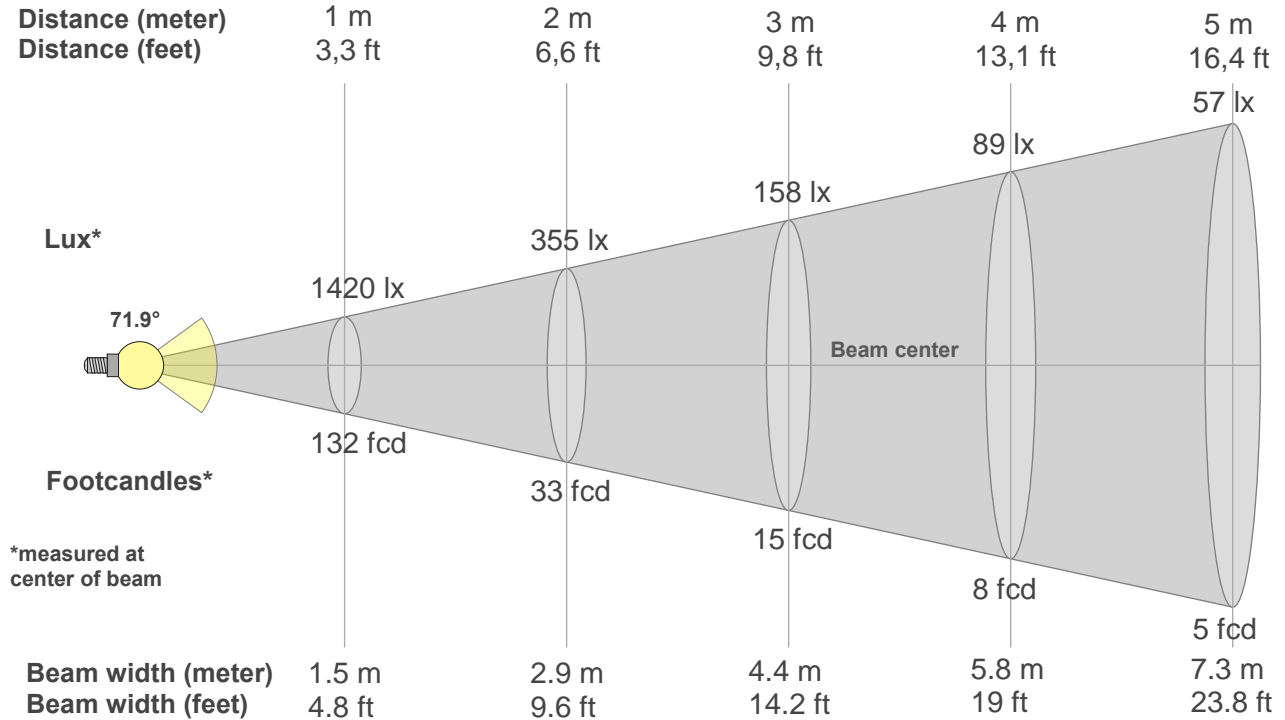
Rg 95.1

Gammut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 79 | -10% | 0% |
| 2 | 83 | -7% | 5% |
| 3 | 82 | -3% | 8% |
| 4 | 92 | -1% | 4% |
| 5 | 93 | -2% | 2% |
| 6 | 95 | 0% | -1% |
| 7 | 88 | -5% | -4% |
| 8 | 94 | -3% | 1% |
| 9 | 89 | -5% | 5% |
| 10 | 83 | -3% | 8% |
| 11 | 84 | 1% | 11% |
| 12 | 86 | 6% | 1% |
| 13 | 87 | 3% | -8% |
| 14 | 79 | 3% | -15% |
| 15 | 79 | -4% | -12% |
| 16 | 76 | -8% | -15% |



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 |
| 1420lx | 355lx | 158lx | 89lx | 57lx | 39lx | 29lx | 22lx | 18lx | 14lx | 12lx | 10lx | 8lx | 7lx | 6lx | 6lx | 5lx | 4lx | 4lx | 4lx |
| 131.9fcd | 33fcd | 14.7fcd | 8.2fcd | 5.3fcd | 3.7fcd | 2.7fcd | 2.1fcd | 1.6fcd | 1.3fcd | 1.1fcd | 0.9fcd | 0.8fcd | 0.7fcd | 0.6fcd | 0.5fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd |

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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 1420 | 1420 | 1409 | 1395 | 1376 | 1348 | 1321 | 1283 | 1244 | 1200 | 1152 | 1103 | 1050 | 997 | 945 | 893 | 839 | 774 | 709 | 599 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 90% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 50% | 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 1420 | 1420 | 1409 | 1395 | 1376 | 1348 | 1321 | 1283 | 1244 | 1200 | 1152 | 1103 | 1050 | 997 | 945 | 893 | 839 | 774 | 709 | 599 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 90% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 50% | 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 1420 | 1420 | 1409 | 1395 | 1376 | 1348 | 1321 | 1283 | 1244 | 1200 | 1152 | 1103 | 1050 | 997 | 945 | 893 | 839 | 774 | 709 | 599 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 90% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 50% | 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
| 1420 | 1420 | 1409 | 1395 | 1376 | 1348 | 1321 | 1283 | 1244 | 1200 | 1152 | 1103 | 1050 | 997 | 945 | 893 | 839 | 774 | 709 | 599 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 90% | 88% | 85% | 81% | 78% | 74% | 70% | 67% | 63% | 59% | 55% | 50% | 42% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 71.9° | 95.3° | 130.8° | 95.7% | 89.2% |