

Light efficiency:

51 Lumen/Watt

Light quality:

CRI: 83.7

Color temperature:

2932 K

Output: 1878 lm

Peak: 12911 cd

Power: 37.1 W

PF: 0.99

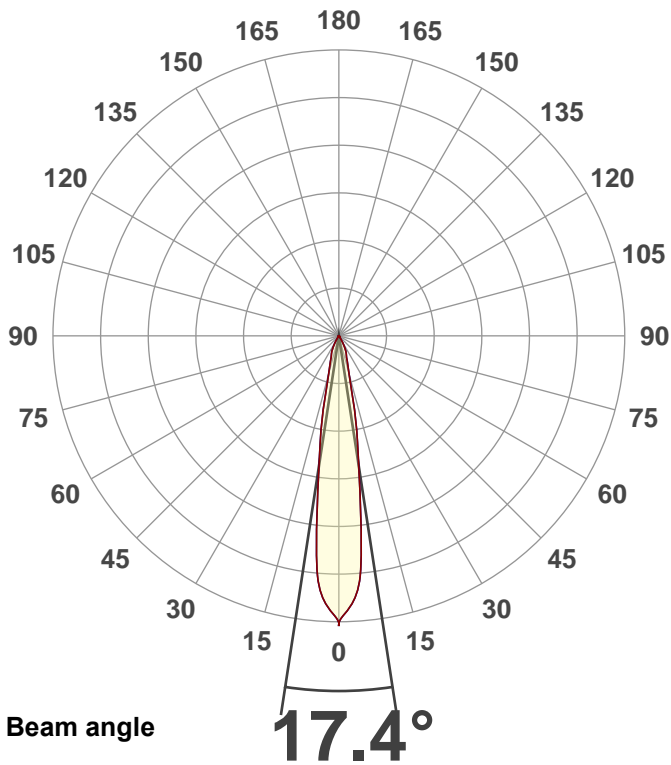


Product name:

NU4-RH-XTM09-20LM-30K-80-WHS15-120-DIM10-NC-WH

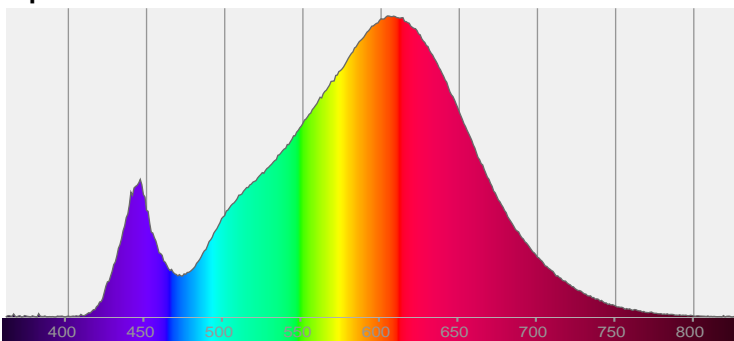
Date and time:

8/15/2018 10:48:42 AM

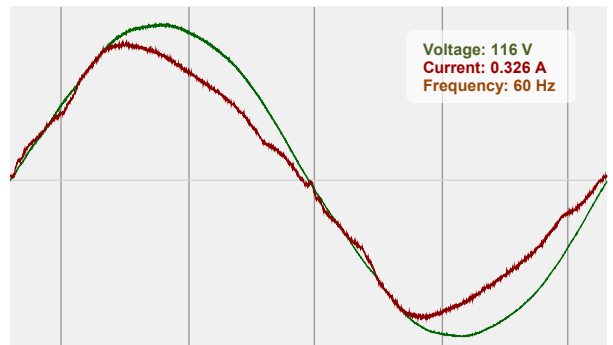


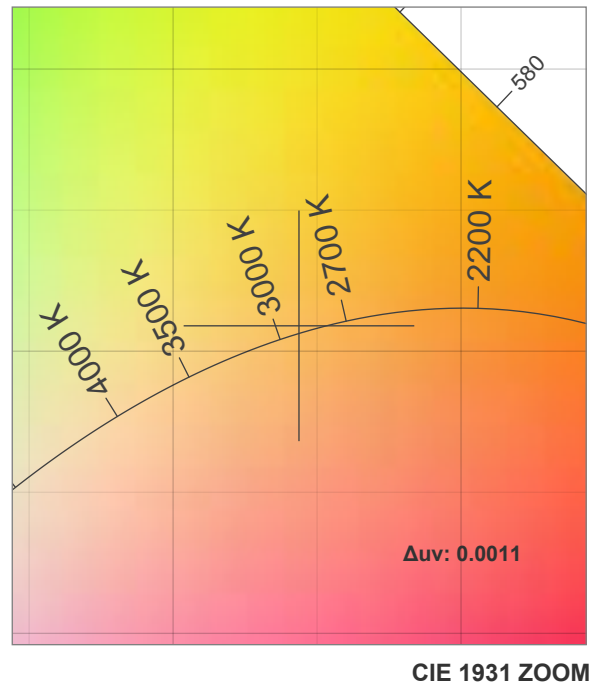
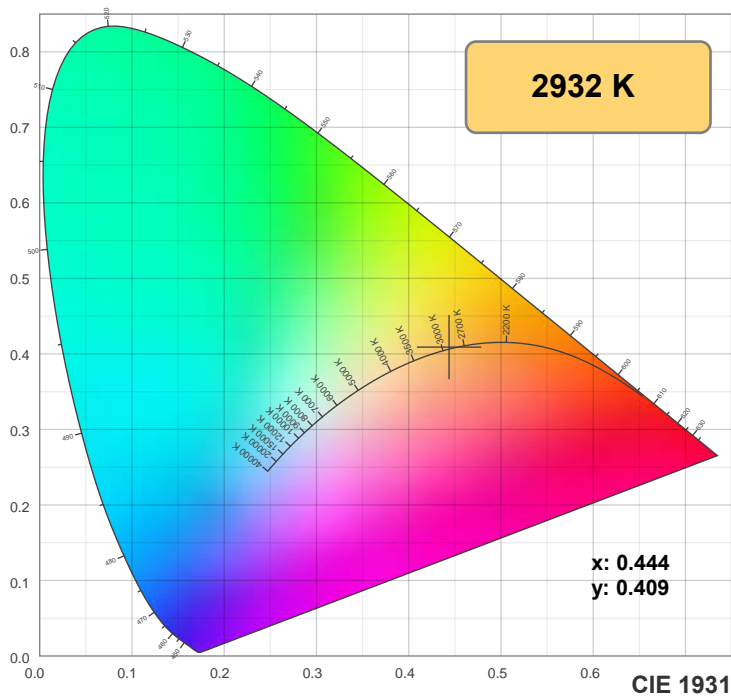
CIE 1931
x: 0.444
y: 0.409

Spectra

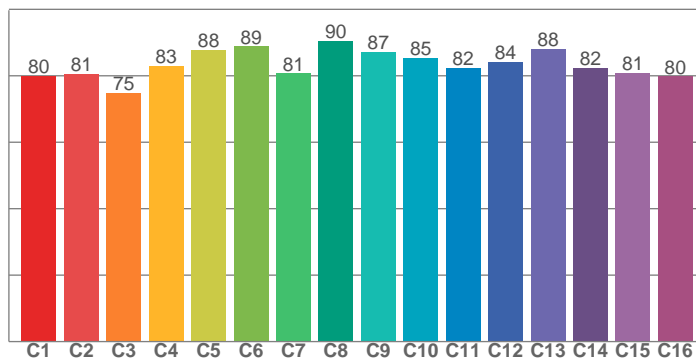


Power

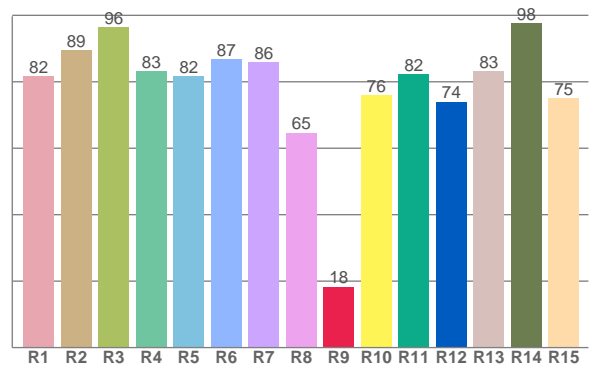




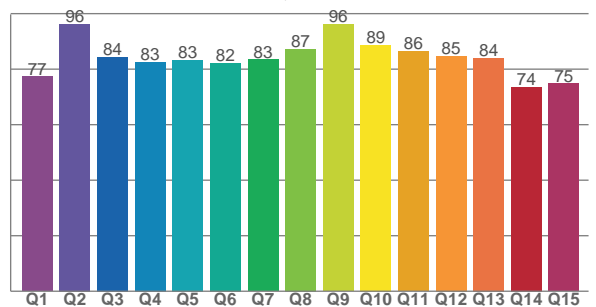
TM30: 83.4



CRI: 83.7 (R1-R8)



CQS: 83.0



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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.8 | 89.4 | 96.4 | 83.2 | 81.6 | 86.8 | 85.8 | 64.6 | 18.3 | 75.9 | 82.3 | 74.0 | 83.1 | 97.7 | 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 80.1 | 80.5 | 74.9 | 82.9 | 87.7 | 88.8 | 80.7 | 90.5 | 87.3 | 85.3 | 82.4 | 84.2 | 88.0 | 82.4 | 80.8 | 79.8 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 77.3 | 96.2 | 84.4 | 82.5 | 83.4 | 82.2 | 83.4 | 87.3 | 96.2 | 88.7 | 86.4 | 84.7 | 84.0 | 73.6 | 74.8 |

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 |
| 2932 K | 83.7 | 18.3 | 83.4 | 98.3 | 83.0 | 0.444 | 0.409 | 0.253 | 0.350 | 0.0011 |

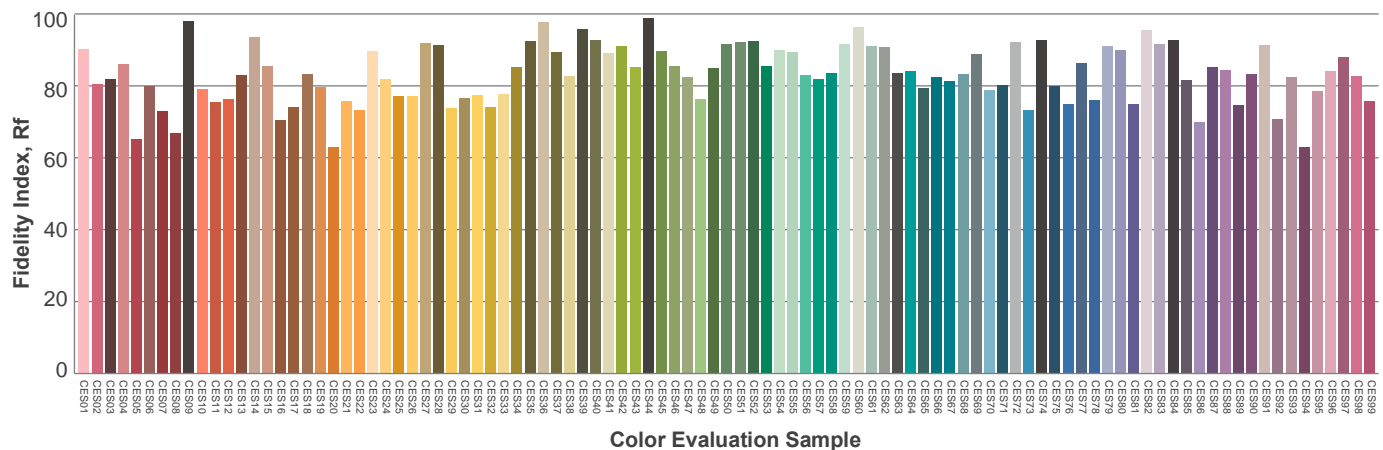
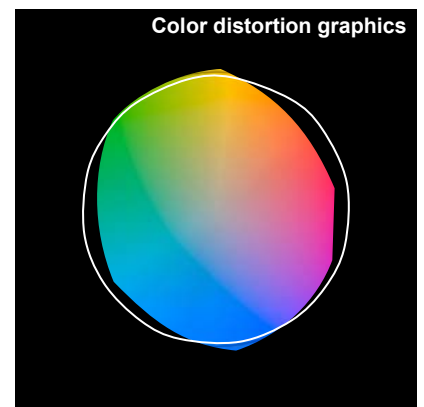
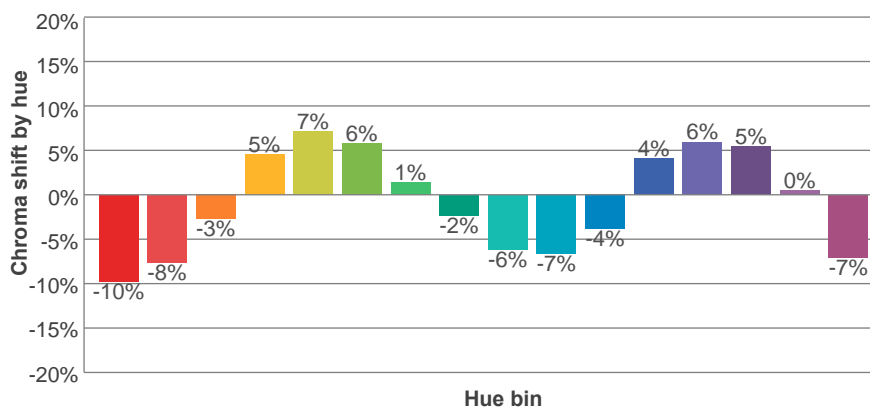
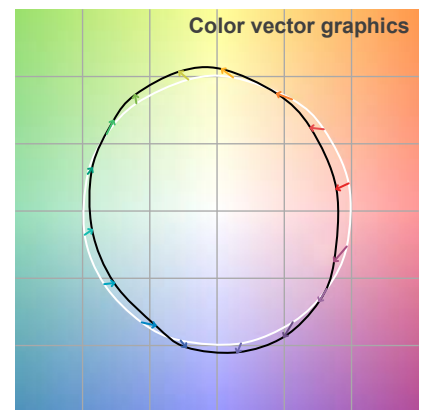
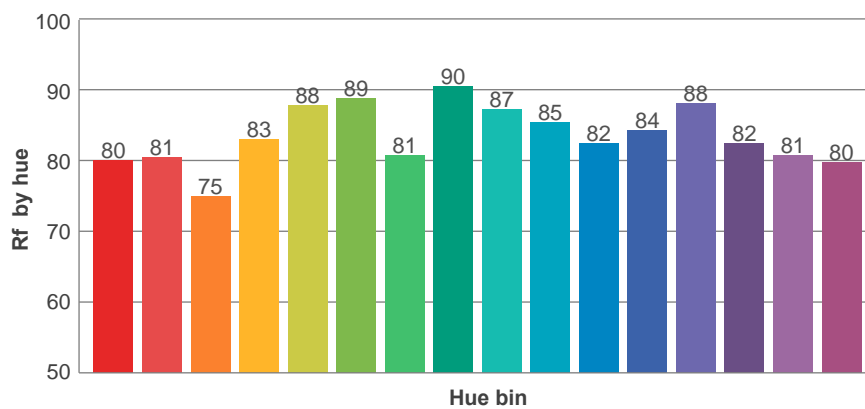
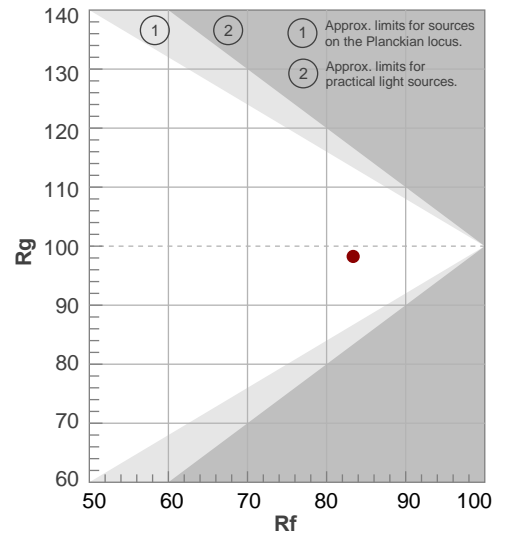
Rf 83.4

Fidelity index Rf

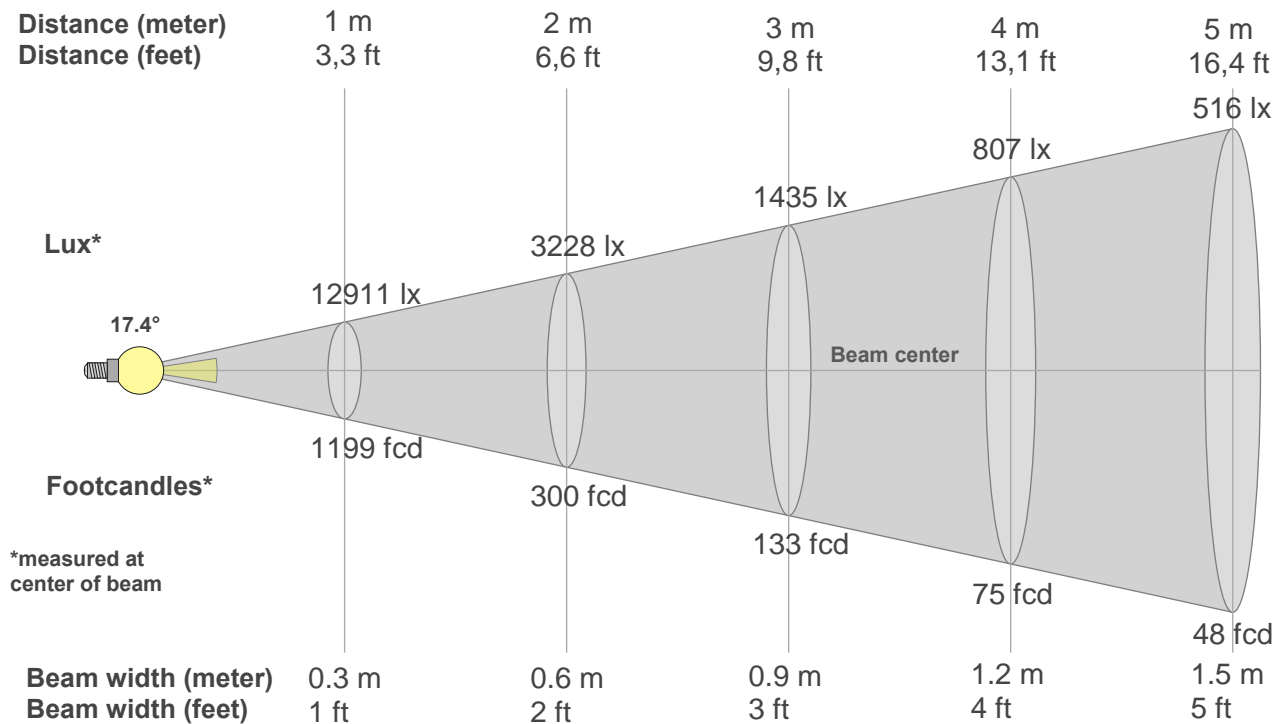
Rg 98.3

Gamut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 80 | -10% | -2% |
| 2 | 81 | -8% | 6% |
| 3 | 75 | -3% | 12% |
| 4 | 83 | 5% | 10% |
| 5 | 88 | 7% | 5% |
| 6 | 89 | 6% | -3% |
| 7 | 81 | 1% | -11% |
| 8 | 90 | -2% | -5% |
| 9 | 87 | -6% | -3% |
| 10 | 85 | -7% | 3% |
| 11 | 82 | -4% | 10% |
| 12 | 84 | 4% | 5% |
| 13 | 88 | 6% | -4% |
| 14 | 82 | 5% | -11% |
| 15 | 81 | 0% | -11% |
| 16 | 80 | -7% | -13% |



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 |
| 12911lx | 3228lx | 1435lx | 807lx | 516lx | 359lx | 263lx | 202lx | 159lx | 129lx | 107lx | 90lx | 76lx | 66lx | 57lx | 50lx | 45lx | 40lx | 36lx | 32lx |
| 1199.4fcd | 299.9fcd | 133.3fcd | 75fcd | 48fcd | 33.3fcd | 24.5fcd | 18.7fcd | 14.8fcd | 12fcd | 9.9fcd | 8.3fcd | 7.1fcd | 6.1fcd | 5.3fcd | 4.7fcd | 4.2fcd | 3.7fcd | 3.3fcd | 3fcd |

Intensities in 0° c-plane

| 0° | 1° | 2° | 3° | 4° | 5° | 6° | 7° | 8° | 9° | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 12.9K | 12.6K | 12.2K | 11.8K | 11.4K | 11.0K | 9.8K | 8.6K | 7.3K | 6.1K | 4.9K | 4.2K | 3.6K | 3.0K | 2.3K | 1.8K | 1.6K | 1.5K | 1.3K | 1.1K |
| 100% | 98% | 94% | 91% | 88% | 85% | 76% | 66% | 57% | 47% | 38% | 33% | 28% | 23% | 18% | 14% | 13% | 11% | 10% | 9% |

Intensities in 90° c-plane

| 0° | 1° | 2° | 3° | 4° | 5° | 6° | 7° | 8° | 9° | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 12.9K | 12.6K | 12.2K | 11.8K | 11.4K | 11.0K | 9.8K | 8.6K | 7.3K | 6.1K | 4.9K | 4.2K | 3.6K | 3.0K | 2.3K | 1.8K | 1.6K | 1.5K | 1.3K | 1.1K |
| 100% | 98% | 94% | 91% | 88% | 85% | 76% | 66% | 57% | 47% | 38% | 33% | 28% | 23% | 18% | 14% | 13% | 11% | 10% | 9% |

Intensities in 180° c-plane

| 0° | 1° | 2° | 3° | 4° | 5° | 6° | 7° | 8° | 9° | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 12.9K | 12.6K | 12.2K | 11.8K | 11.4K | 11.0K | 9.8K | 8.6K | 7.3K | 6.1K | 4.9K | 4.2K | 3.6K | 3.0K | 2.3K | 1.8K | 1.6K | 1.5K | 1.3K | 1.1K |
| 100% | 98% | 94% | 91% | 88% | 85% | 76% | 66% | 57% | 47% | 38% | 33% | 28% | 23% | 18% | 14% | 13% | 11% | 10% | 9% |

Intensities in 270° c-plane

| 0° | 1° | 2° | 3° | 4° | 5° | 6° | 7° | 8° | 9° | 10° | 11° | 12° | 13° | 14° | 15° | 16° | 17° | 18° | 19° |
|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 12.9K | 12.6K | 12.2K | 11.8K | 11.4K | 11.0K | 9.8K | 8.6K | 7.3K | 6.1K | 4.9K | 4.2K | 3.6K | 3.0K | 2.3K | 1.8K | 1.6K | 1.5K | 1.3K | 1.1K |
| 100% | 98% | 94% | 91% | 88% | 85% | 76% | 66% | 57% | 47% | 38% | 33% | 28% | 23% | 18% | 14% | 13% | 11% | 10% | 9% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 17.4° | 36.2° | 59.8° | 98.9% | 96.2% |