

Light efficiency:

104 Lumen/Watt

Light quality:

CRI: 83.4

Color temperature:

2994 K

Output: 6986 lm

Peak: 22014 cd

Power: 66.9 W

PF: 0.99

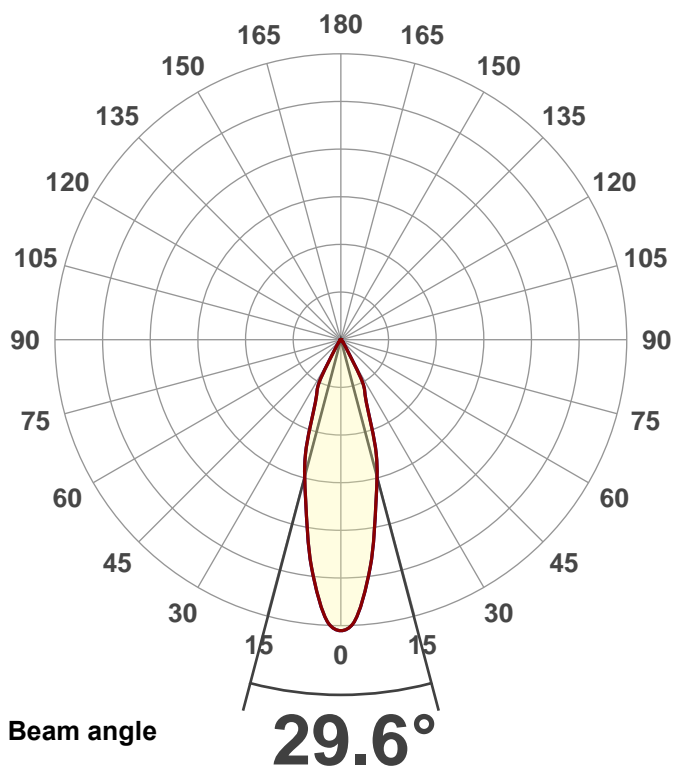


Product name:

680XK-9-CXB-70LM-30K-80-SA30-10V-MC-S-A16

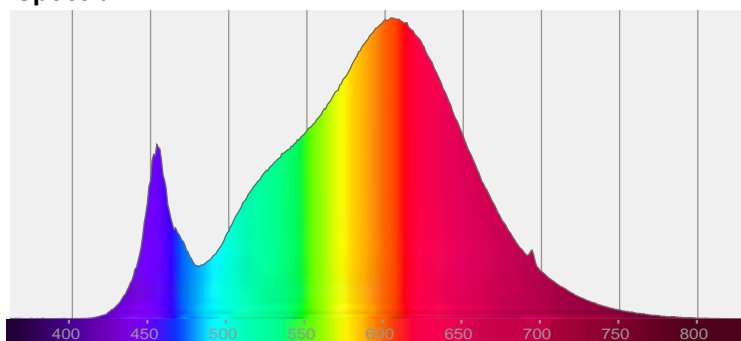
Date and time:

1/26/2018 10:43:58 AM

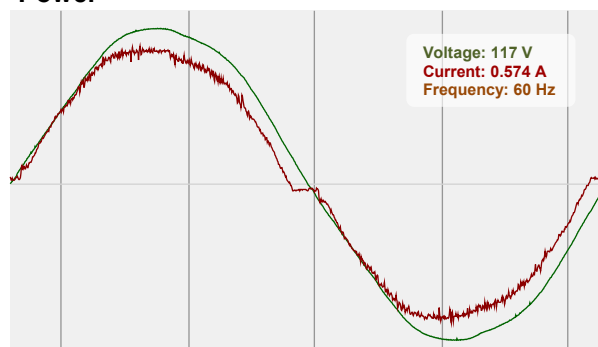


CIE 1931
x: 0.439
y: 0.407

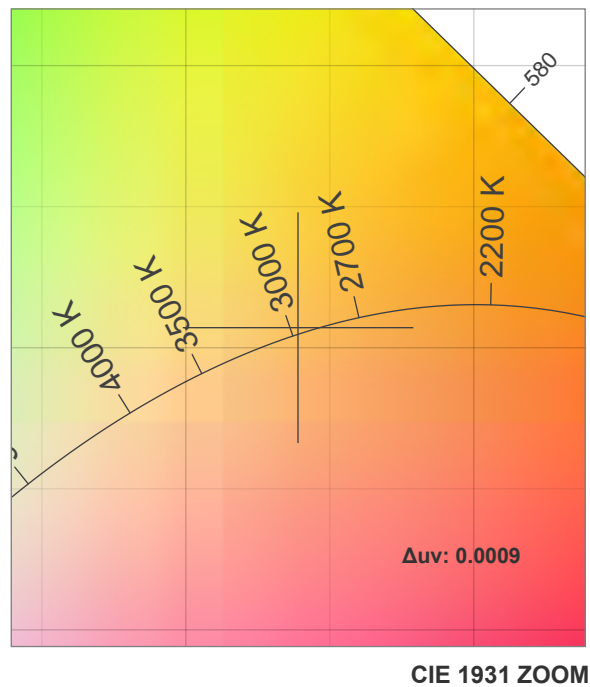
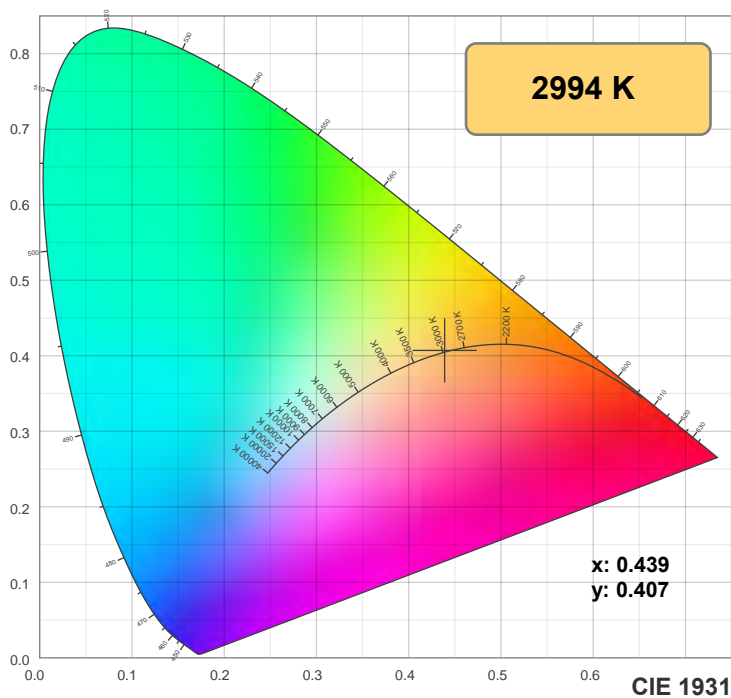
Spectra



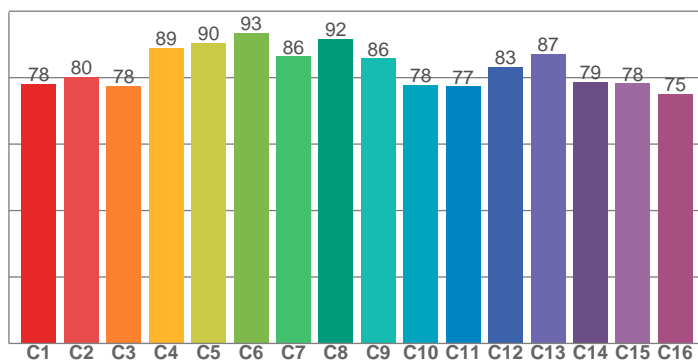
Power



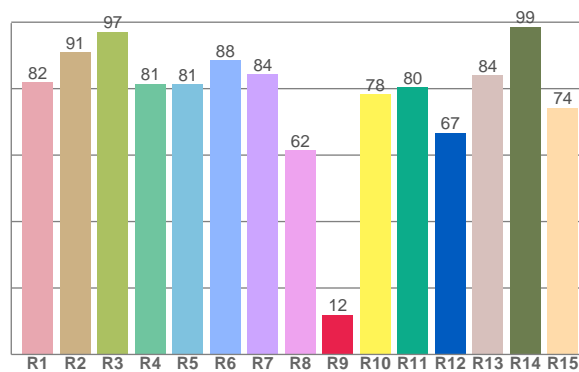
Color details



TM30: 83.0



CRI: 83.4 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.9 | 90.9 | 97.2 | 81.5 | 81.3 | 88.5 | 84.2 | 61.6 | 12.0 | 78.3 | 80.4 | 66.7 | 84.1 | 98.7 | 74.3 |

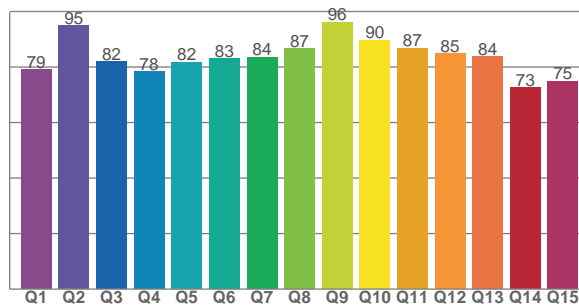
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 78.2 | 80.3 | 77.5 | 88.9 | 90.5 | 93.5 | 86.4 | 91.7 | 85.8 | 77.8 | 77.4 | 83.3 | 87.2 | 78.7 | 78.2 | 75.2 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.1 | 94.9 | 81.9 | 78.3 | 81.7 | 83.0 | 83.5 | 86.6 | 96.1 | 89.7 | 86.8 | 84.8 | 83.7 | 72.6 | 74.9 |

CQS: 82.5



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 |
| 2994 K | 83.4 | 12.0 | 83.0 | 95.4 | 82.5 | 0.439 | 0.407 | 0.251 | 0.349 | 0.0009 |

TM30 details

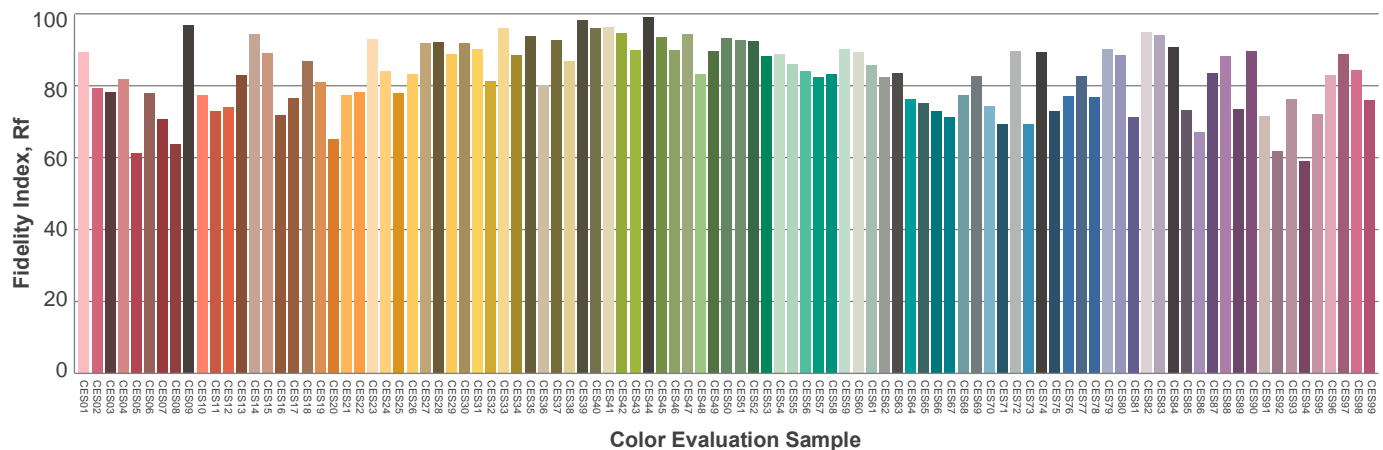
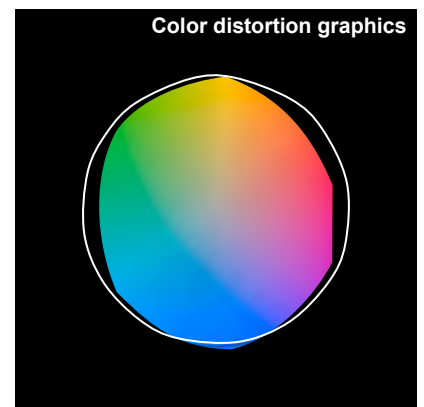
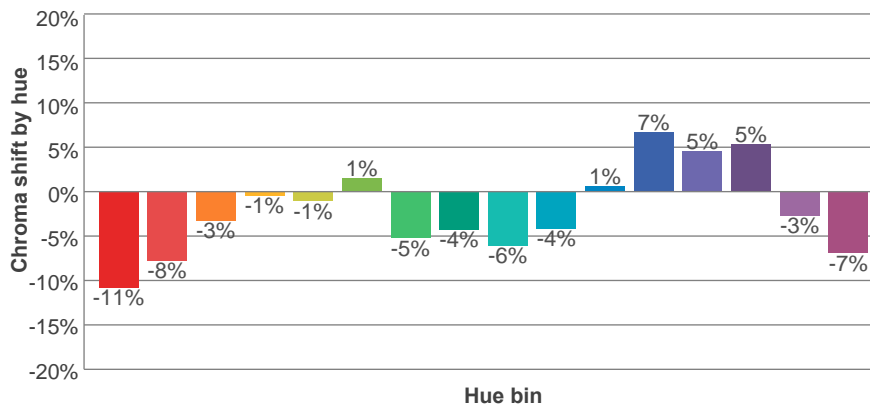
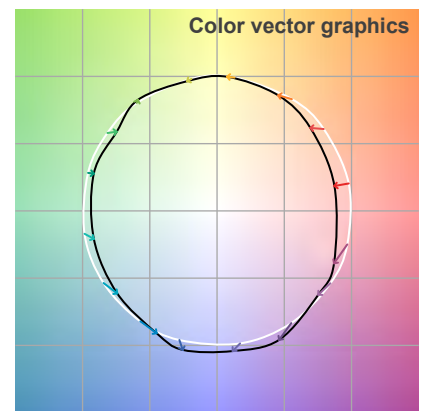
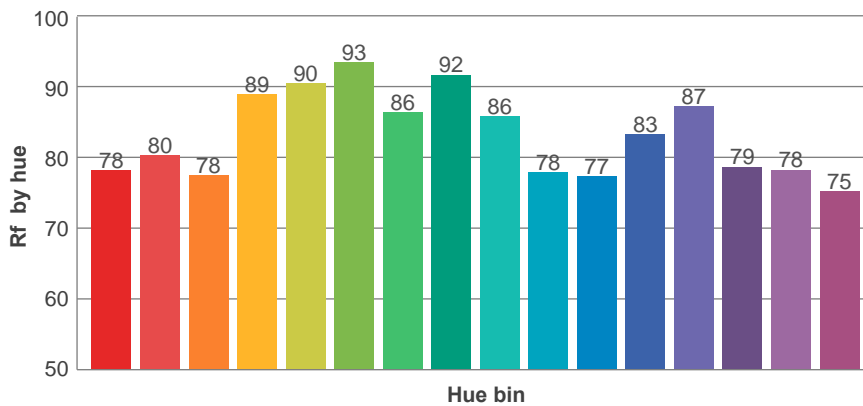
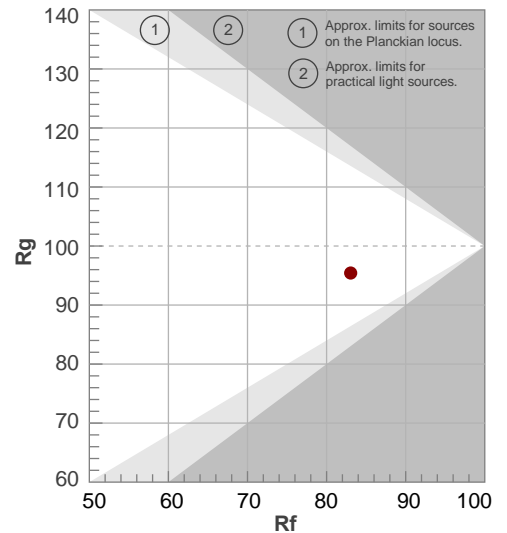
Rf 83.0

Fidelity index Rf

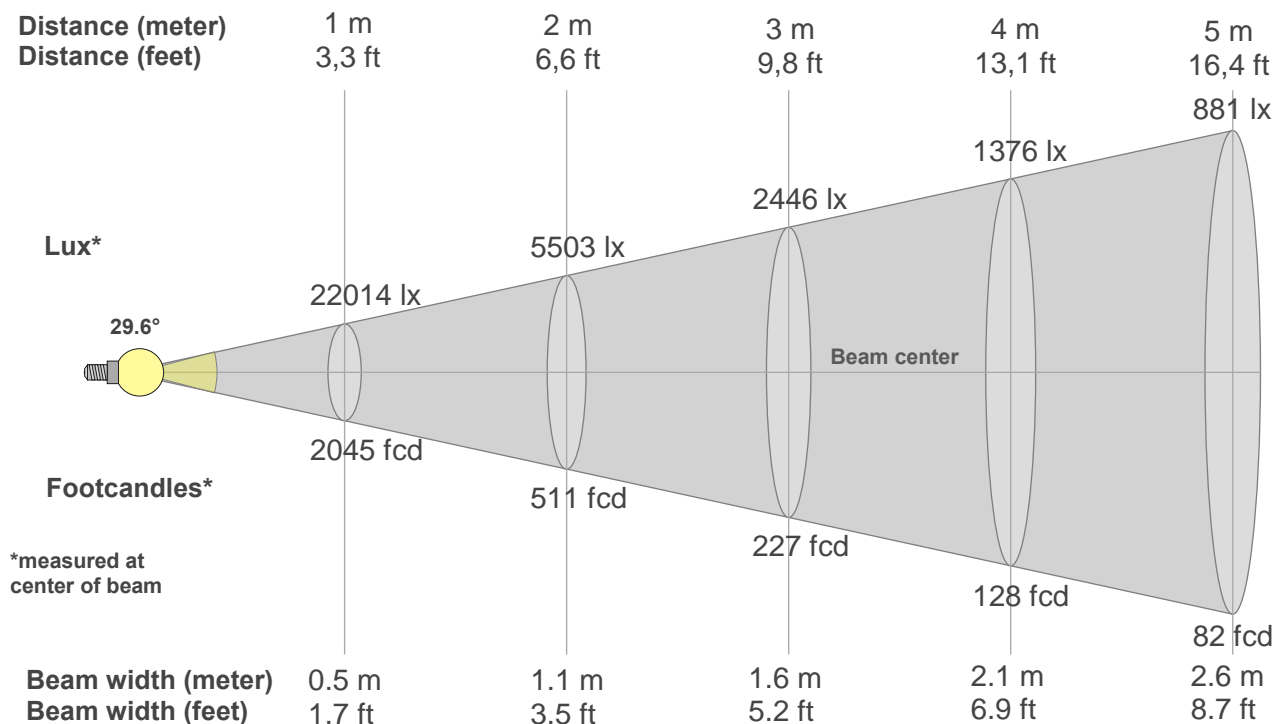
Rg 95.4

Gammut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|------|
| | | Chroma | Hue |
| 1 | 78 | -11% | 0% |
| 2 | 80 | -8% | 6% |
| 3 | 78 | -3% | 10% |
| 4 | 89 | -1% | 6% |
| 5 | 90 | -1% | 4% |
| 6 | 93 | 1% | -2% |
| 7 | 86 | -5% | -5% |
| 8 | 92 | -4% | 0% |
| 9 | 86 | -6% | 5% |
| 10 | 78 | -4% | 12% |
| 11 | 77 | 1% | 15% |
| 12 | 83 | 7% | 4% |
| 13 | 87 | 5% | -6% |
| 14 | 79 | 5% | -14% |
| 15 | 78 | -3% | -12% |
| 16 | 75 | -7% | -16% |



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 |
| 22014lx | 5503lx | 2446lx | 1376lx | 881lx | 611lx | 449lx | 344lx | 272lx | 220lx | 182lx | 153lx | 130lx | 112lx | 98lx | 86lx | 76lx | 68lx | 61lx | 55lx |
| 2045.2fcd | 511.3fcd | 227.2fcd | 127.8fcd | 81.8fcd | 56.8fcd | 41.7fcd | 32fcd | 25.2fcd | 20.5fcd | 16.9fcd | 14.2fcd | 12.1fcd | 10.4fcd | 9.1fcd | 8fcd | 7.1fcd | 6.3fcd | 5.7fcd | 5.1fcd |

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° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 22.0K | 22.0K | 20.7K | 18.9K | 17.1K | 15.1K | 13.1K | 11.6K | 10.1K | 8.6K | 7.0K | 5.3K | 4.6K | 4.0K | 3.1K | 1.9K | 0.8K | 0.6K | 0.3K | 0.1K |
| 100% | 100% | 94% | 86% | 78% | 69% | 59% | 53% | 46% | 39% | 32% | 24% | 21% | 18% | 14% | 9% | 4% | 3% | 1% | 1% |

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° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 22.0K | 22.0K | 20.7K | 18.9K | 17.1K | 15.1K | 13.1K | 11.6K | 10.1K | 8.6K | 7.0K | 5.3K | 4.6K | 4.0K | 3.1K | 1.9K | 0.8K | 0.6K | 0.3K | 0.1K |
| 100% | 100% | 94% | 86% | 78% | 69% | 59% | 53% | 46% | 39% | 32% | 24% | 21% | 18% | 14% | 9% | 4% | 3% | 1% | 1% |

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° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 22.0K | 22.0K | 20.7K | 18.9K | 17.1K | 15.1K | 13.1K | 11.6K | 10.1K | 8.6K | 7.0K | 5.3K | 4.6K | 4.0K | 3.1K | 1.9K | 0.8K | 0.6K | 0.3K | 0.1K |
| 100% | 100% | 94% | 86% | 78% | 69% | 59% | 53% | 46% | 39% | 32% | 24% | 21% | 18% | 14% | 9% | 4% | 3% | 1% | 1% |

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° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 22.0K | 22.0K | 20.7K | 18.9K | 17.1K | 15.1K | 13.1K | 11.6K | 10.1K | 8.6K | 7.0K | 5.3K | 4.6K | 4.0K | 3.1K | 1.9K | 0.8K | 0.6K | 0.3K | 0.1K |
| 100% | 100% | 94% | 86% | 78% | 69% | 59% | 53% | 46% | 39% | 32% | 24% | 21% | 18% | 14% | 9% | 4% | 3% | 1% | 1% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 29.6° | 59.1° | 68.1° | 99.6% | 99.4% |