

Light efficiency:

80 Lumen/Watt

Light quality:

CRI: 85.0

Color temperature:

3010 K

Output: 561 lm

Peak: 642 cd

Power: 7.0 W

PF: 0.93

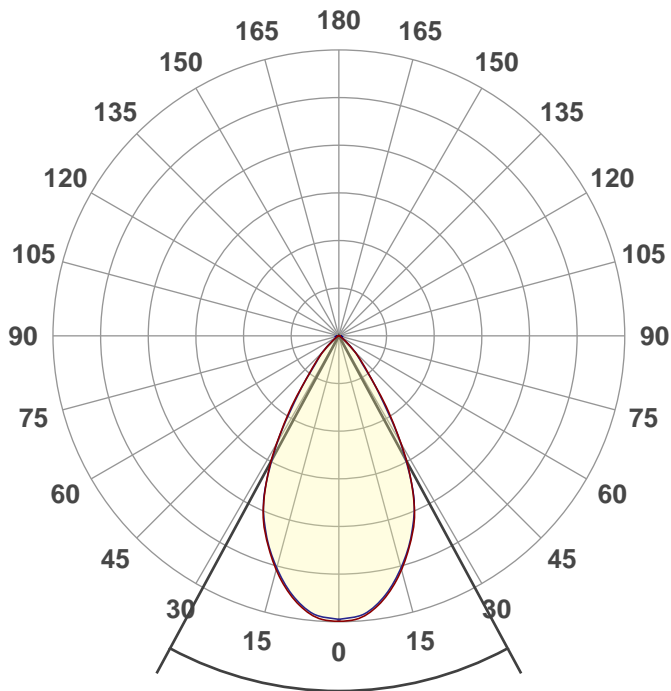


Product name:

**NU3-RD-SW-07LM-30K-80-D60-NL-120-NC-WH-WH**

Date and time:

**2/8/2019 10:34:03 AM**



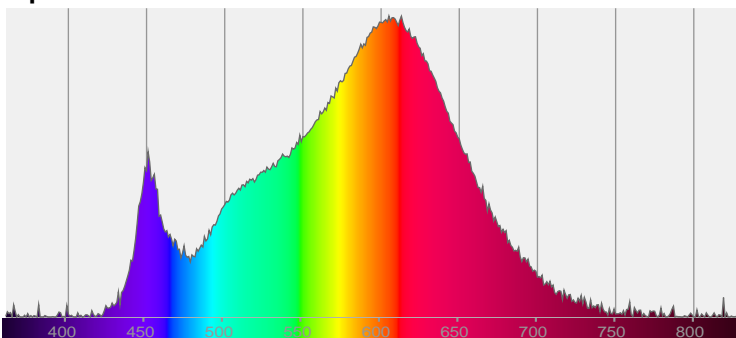
Beam angle

**56.7°**

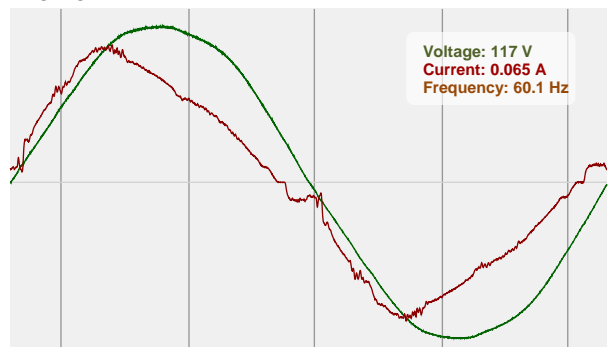


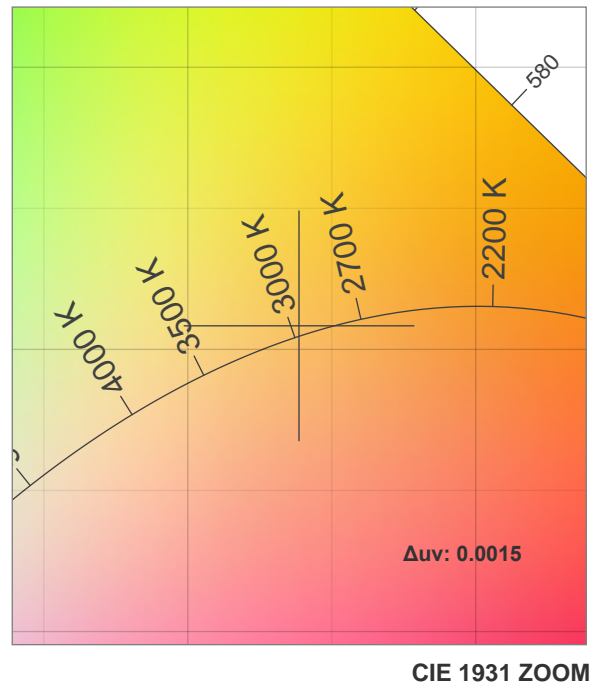
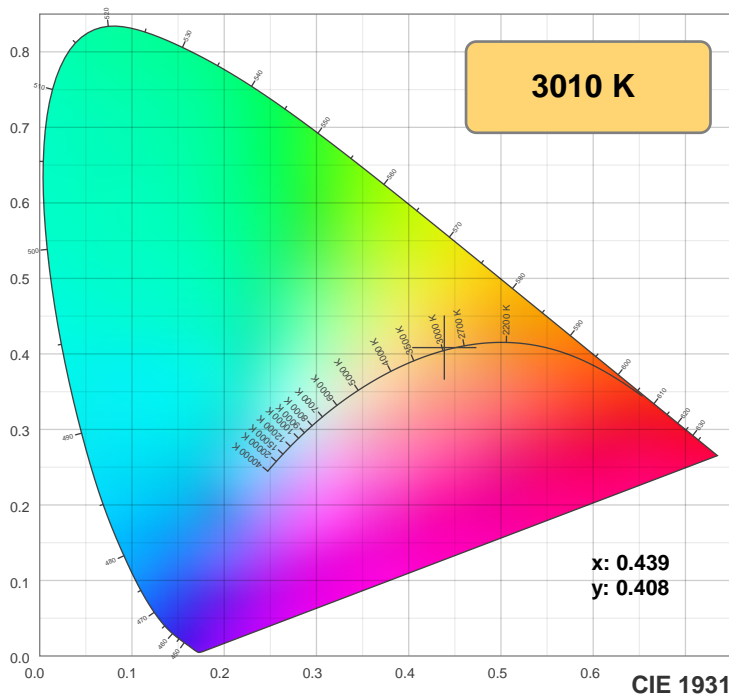
CIE 1931  
x: 0.439  
y: 0.408

Spectra

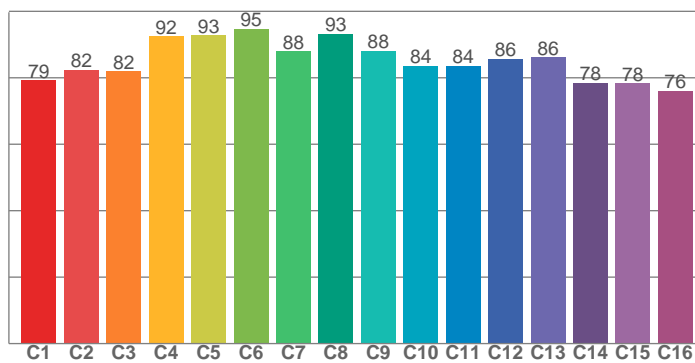


Power

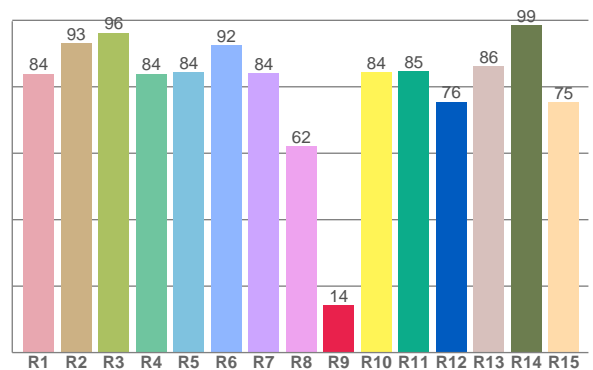




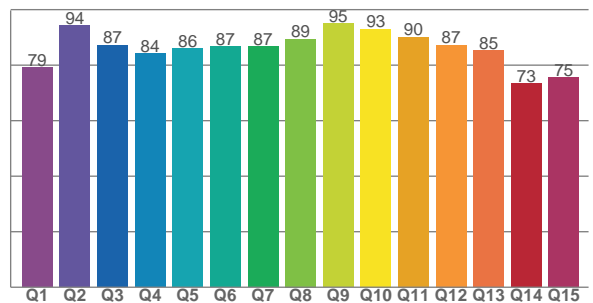
**TM30: 85.5**



**CRI: 85.0 (R1-R8)**



**CQS: 84.8**



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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 83.9 | 93.0 | 96.3 | 84.0 | 84.3 | 92.5 | 84.0 | 62.1 | 14.3 | 84.4 | 84.7 | 75.5 | 86.2 | 98.5 | 75.3 |

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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.3 | 82.4 | 81.9 | 92.5 | 92.8 | 94.8 | 88.0 | 93.2 | 88.2 | 83.6 | 83.6 | 85.8 | 86.2 | 78.4 | 78.4 | 76.1 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.1 | 94.2 | 87.1 | 84.2 | 86.0 | 86.6 | 86.6 | 89.4 | 95.0 | 93.0 | 90.1 | 87.3 | 85.2 | 73.4 | 75.5 |

## 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                             |
| 3010 K            | 85.0                  | 14.3          | 85.5           | 95.0        | 84.8                | 0.439                     | 0.408                     | 0.250            | 0.349            | 0.0015                          |

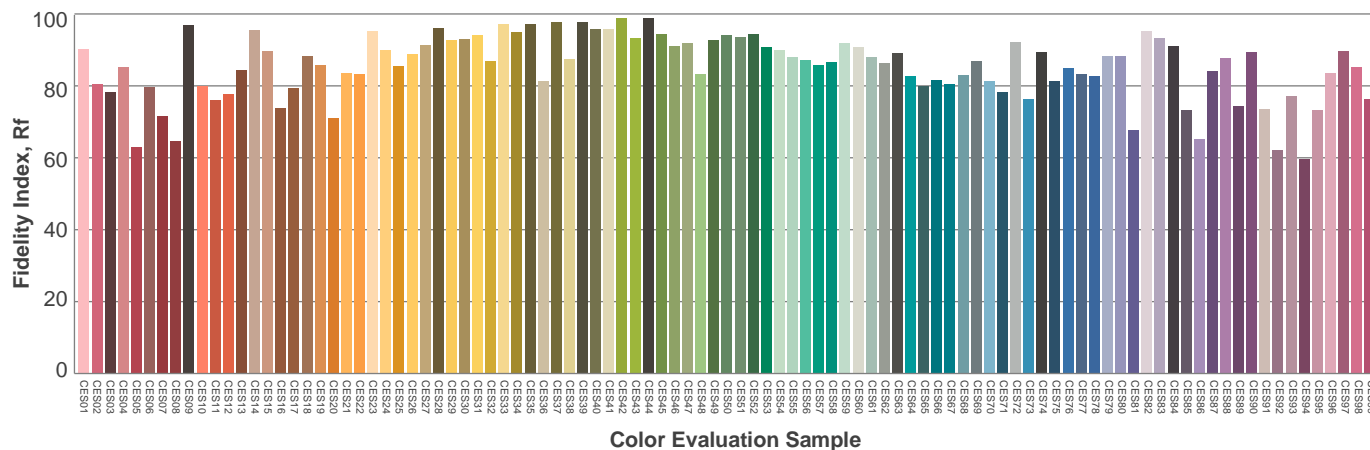
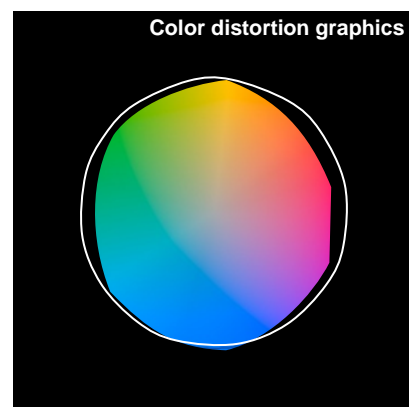
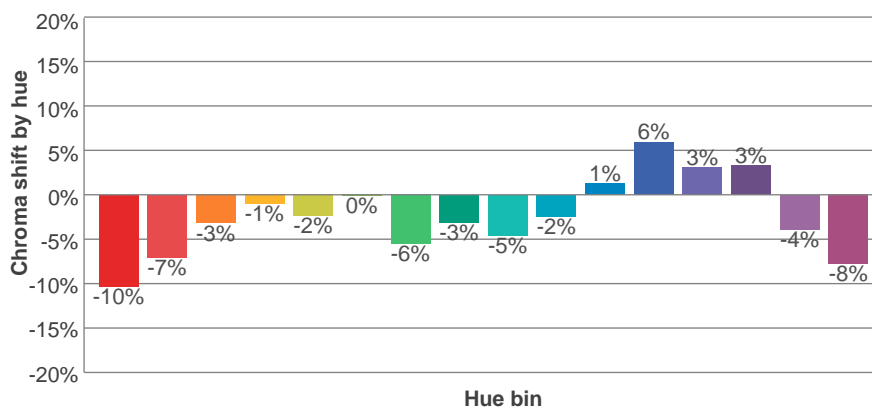
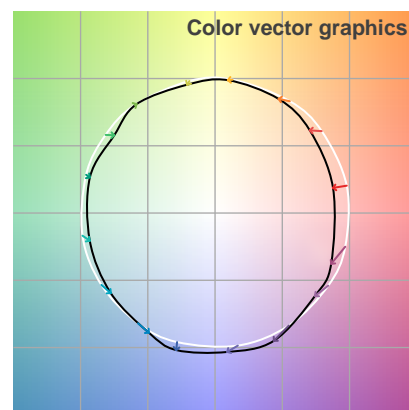
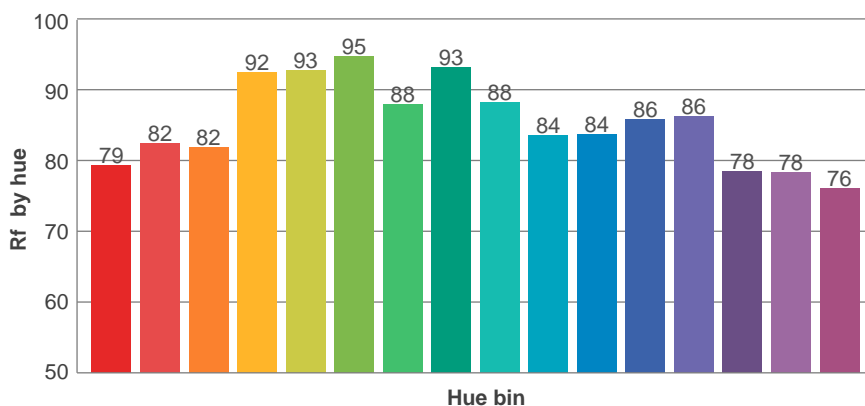
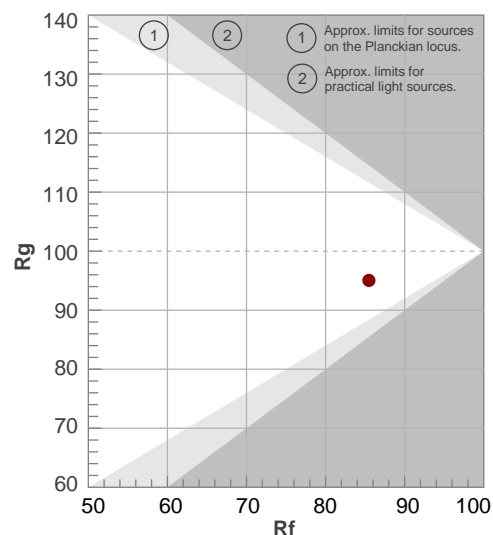
**Rf 85.5**

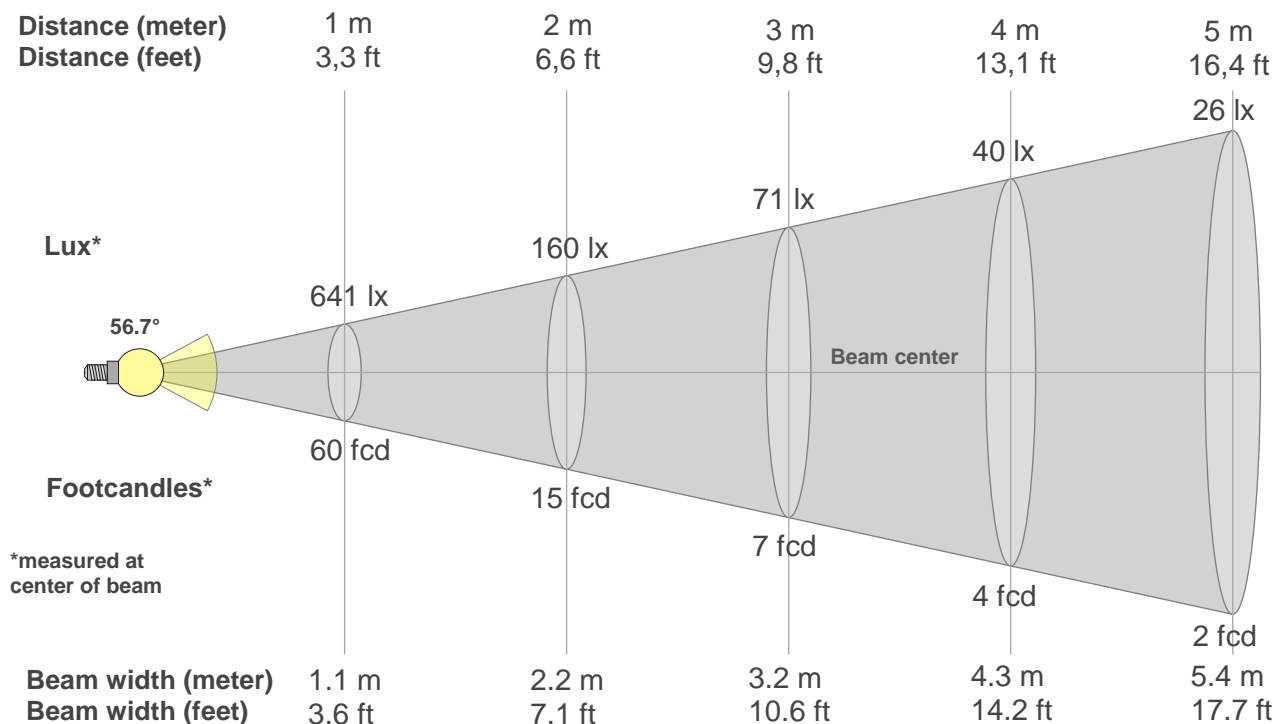
Fidelity index Rf

**Rg 95.0**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 79             | -10%               | 0%   |
| 2       | 82             | -7%                | 5%   |
| 3       | 82             | -3%                | 8%   |
| 4       | 92             | -1%                | 3%   |
| 5       | 93             | -2%                | 2%   |
| 6       | 95             | 0%                 | -1%  |
| 7       | 88             | -6%                | -3%  |
| 8       | 93             | -3%                | 1%   |
| 9       | 88             | -5%                | 5%   |
| 10      | 84             | -2%                | 9%   |
| 11      | 84             | 1%                 | 11%  |
| 12      | 86             | 6%                 | 1%   |
| 13      | 86             | 3%                 | -9%  |
| 14      | 78             | 3%                 | -16% |
| 15      | 78             | -4%                | -12% |
| 16      | 76             | -8%                | -15% |





### 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 |
| 641lx   | 160lx   | 71lx   | 40lx   | 26lx   | 18lx   | 13lx   | 10lx   | 8lx    | 6lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 2lx    |
| 59.6fcd | 14.9fcd | 6.6fcd | 3.7fcd | 2.4fcd | 1.7fcd | 1.2fcd | 0.9fcd | 0.7fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd |

### 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° |
|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 641  | 642  | 639  | 628 | 617 | 599 | 580 | 559 | 534 | 509 | 480 | 452 | 417 | 375 | 332 | 283 | 234 | 190 | 150 | 111 |
| 100% | 100% | 100% | 98% | 96% | 93% | 90% | 87% | 83% | 79% | 75% | 70% | 65% | 58% | 52% | 44% | 37% | 30% | 23% | 17% |

### 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 641  | 637 | 633 | 626 | 611 | 596 | 575 | 554 | 530 | 505 | 479 | 447 | 415 | 376 | 327 | 278 | 230 | 181 | 142 | 112 |
| 100% | 99% | 99% | 98% | 95% | 93% | 90% | 86% | 83% | 79% | 75% | 70% | 65% | 59% | 51% | 43% | 36% | 28% | 22% | 17% |

### 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° |
|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 641  | 642  | 639  | 628 | 617 | 599 | 580 | 559 | 534 | 509 | 480 | 452 | 417 | 375 | 332 | 283 | 234 | 190 | 150 | 111 |
| 100% | 100% | 100% | 98% | 96% | 93% | 90% | 87% | 83% | 79% | 75% | 70% | 65% | 58% | 52% | 44% | 37% | 30% | 23% | 17% |

### 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 641  | 637 | 633 | 626 | 611 | 596 | 575 | 554 | 530 | 505 | 479 | 447 | 415 | 376 | 327 | 278 | 230 | 181 | 142 | 112 |
| 100% | 99% | 99% | 98% | 95% | 93% | 90% | 86% | 83% | 79% | 75% | 70% | 65% | 59% | 51% | 43% | 36% | 28% | 22% | 17% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 56.7°          | 86.1°           | 104.9°            | 96.9%                        | 92.5%                       |