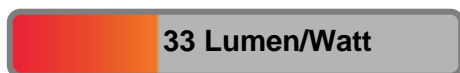


Light efficiency:



Light quality:



Color temperature:



Output: 998 lm

Peak: 2377 cd

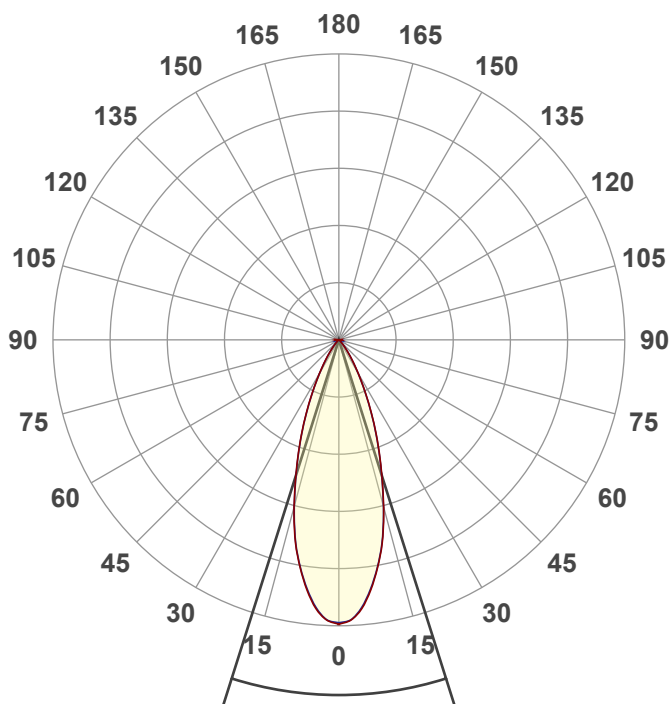
Power: 30.0 W

PF: 0.98



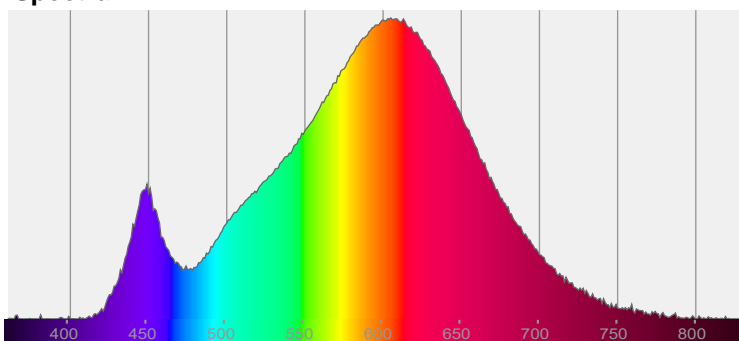
NU3-RDDR-XTM09-16LM-30K-83-25D-DL-SA

Date and time:  
4/11/2022 10:16:26 AM

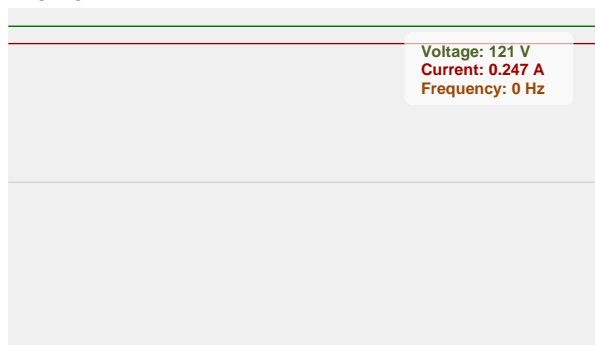


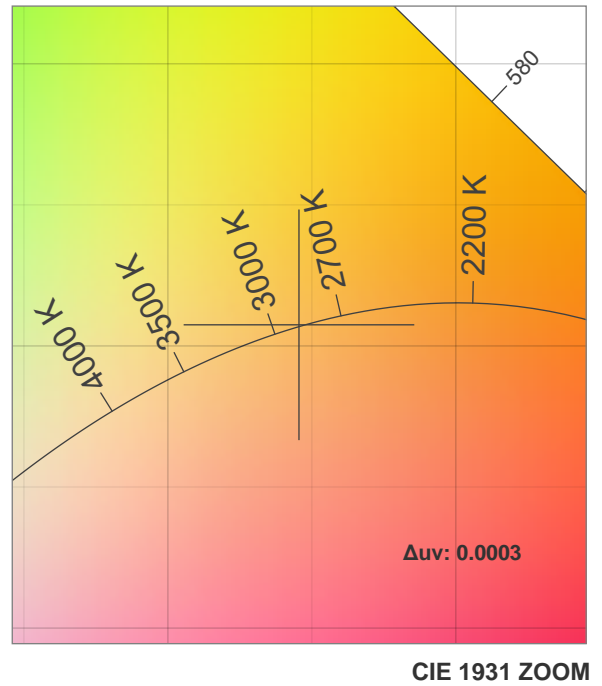
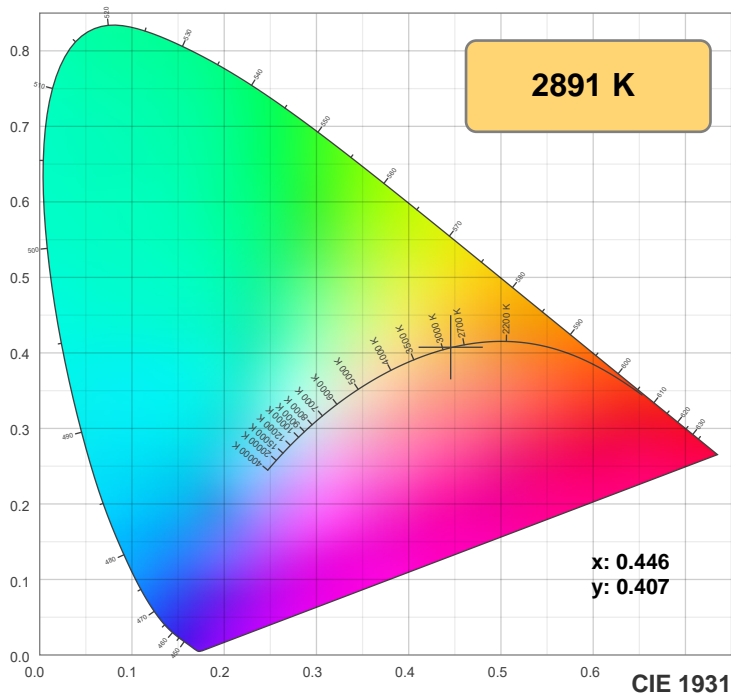
CIE 1931  
x: 0.446  
y: 0.407

Spectra

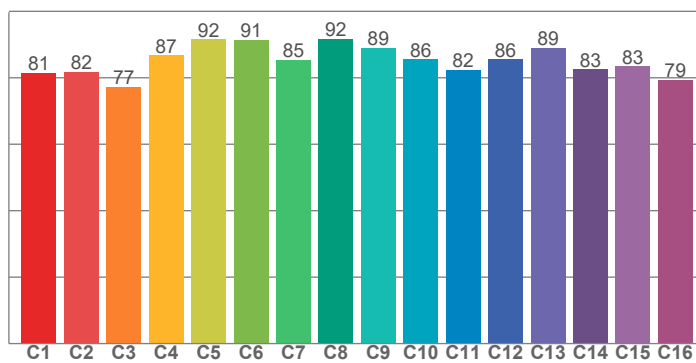


Power

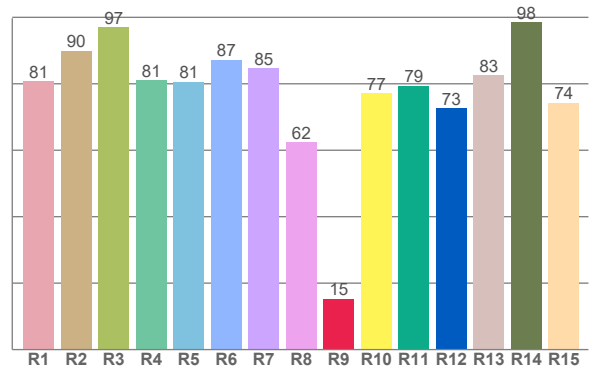




TM30: 85.1



CRI: 83.0 (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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 80.8 | 89.9 | 97.1 | 81.0 | 80.6 | 87.2 | 84.6 | 62.5 | 15.3 | 77.1 | 79.4 | 72.6 | 82.7 | 98.5 | 74.3 |

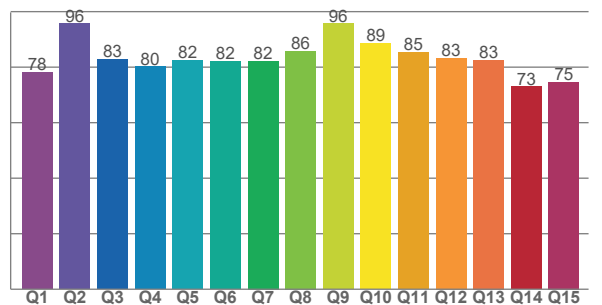
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.4 | 81.7 | 77.2 | 86.8 | 91.5 | 91.5 | 85.4 | 91.7 | 89.0 | 85.5 | 82.4 | 85.6 | 89.0 | 82.5 | 83.5 | 79.3 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 78.1 | 95.6 | 82.8 | 80.2 | 82.5 | 82.1 | 82.3 | 85.8 | 95.7 | 88.6 | 85.3 | 83.2 | 82.5 | 73.0 | 74.6 |

CQS: 82.3



## 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                             |
| 2891 K            | 83.0                  | 15.3          | 85.1           | 97.2        | 82.3                | 0.446                     | 0.407                     | 0.255            | 0.349            | 0.0003                          |

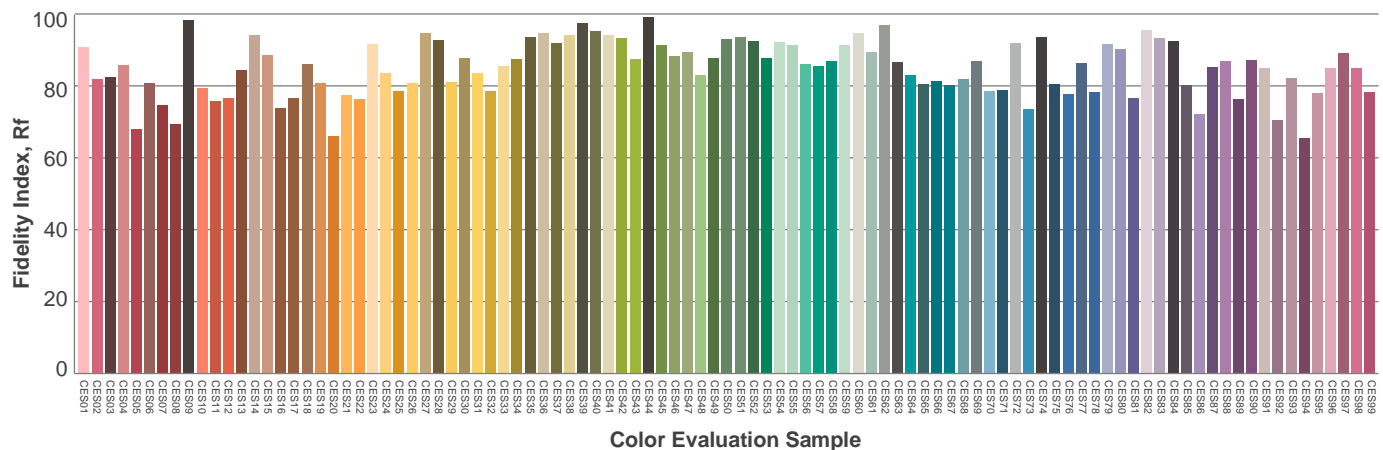
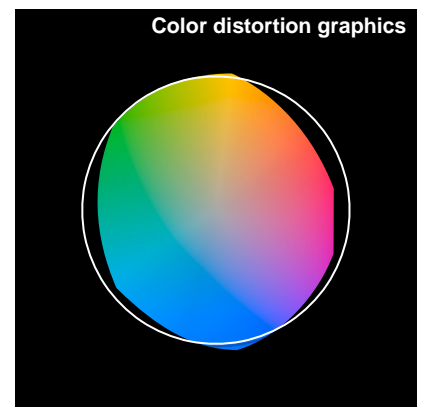
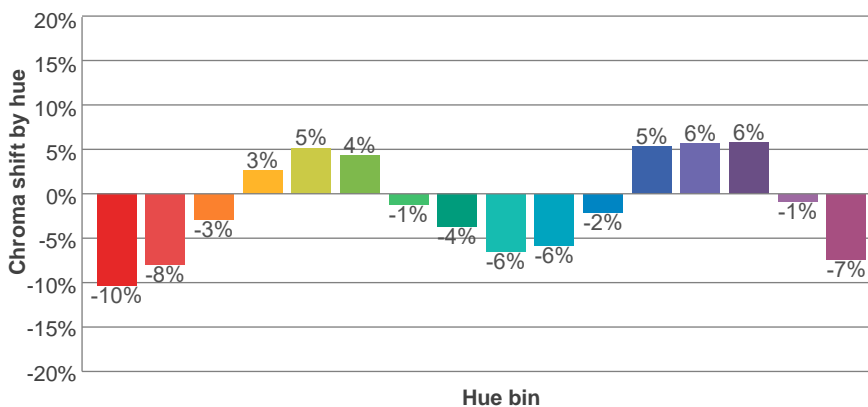
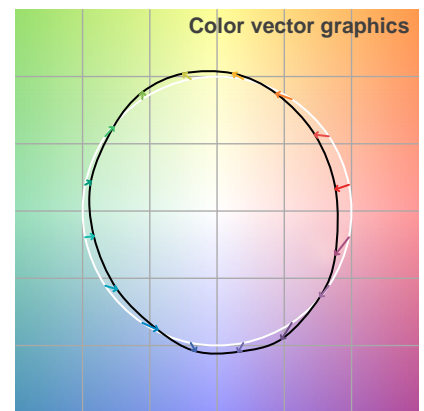
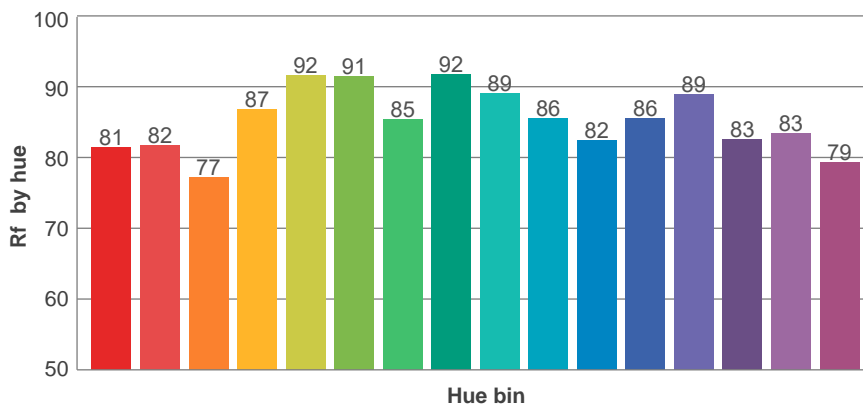
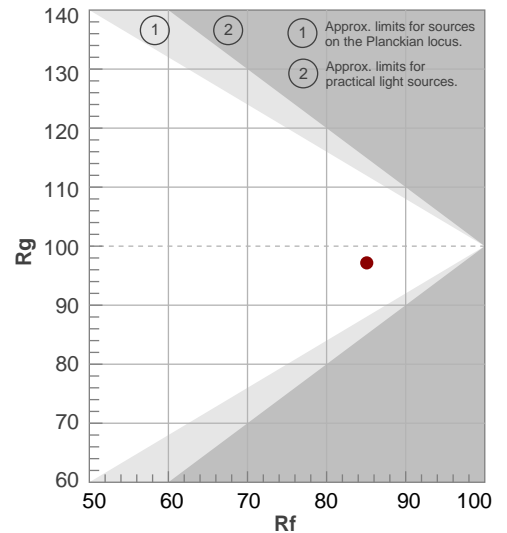
**Rf 85.1**

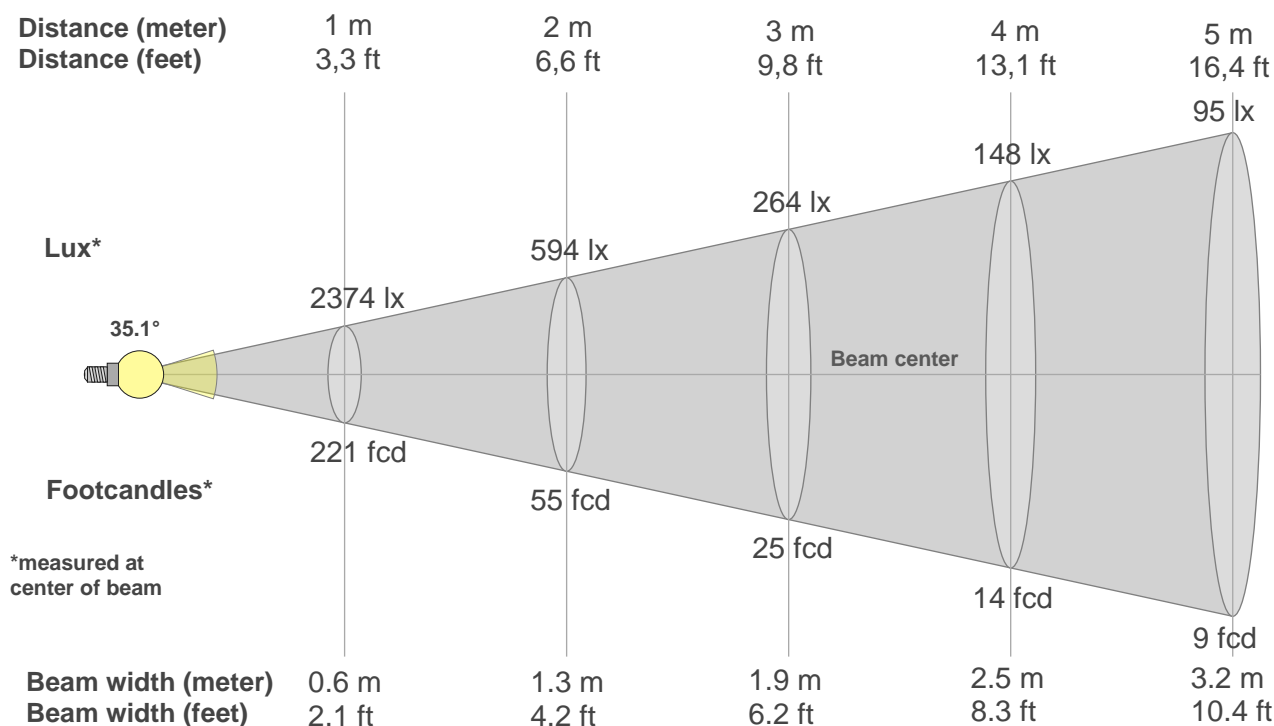
Fidelity index Rf

**Rg 97.2**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 81             | -10%               | -1%  |
| 2       | 82             | -8%                | 7%   |
| 3       | 77             | -3%                | 12%  |
| 4       | 87             | 3%                 | 8%   |
| 5       | 92             | 5%                 | 5%   |
| 6       | 91             | 4%                 | -3%  |
| 7       | 85             | -1%                | -9%  |
| 8       | 92             | -4%                | -3%  |
| 9       | 89             | -6%                | 0%   |
| 10      | 86             | -6%                | 7%   |
| 11      | 82             | -2%                | 12%  |
| 12      | 86             | 5%                 | 5%   |
| 13      | 89             | 6%                 | -5%  |
| 14      | 83             | 6%                 | -13% |
| 15      | 83             | -1%                | -10% |
| 16      | 79             | -7%                | -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 |
| 2374lx   | 594lx   | 264lx   | 148lx   | 95lx   | 66lx   | 48lx   | 37lx   | 29lx   | 24lx   | 20lx   | 16lx   | 14lx   | 12lx   | 11lx   | 9lx    | 8lx    | 7lx    | 7lx    | 6lx    |
| 220.6fcd | 55.1fcd | 24.5fcd | 13.8fcd | 8.8fcd | 6.1fcd | 4.5fcd | 3.4fcd | 2.7fcd | 2.2fcd | 1.8fcd | 1.5fcd | 1.3fcd | 1.1fcd | 1fcd   | 0.9fcd | 0.8fcd | 0.7fcd | 0.6fcd | 0.6fcd |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2374 | 2351 | 2288 | 2186 | 2054 | 1903 | 1741 | 1547 | 1346 | 1155 | 980 | 818 | 668 | 536 | 422 | 327 | 249 | 186 | 134 | 93  |
| 100% | 99%  | 96%  | 92%  | 87%  | 80%  | 73%  | 65%  | 57%  | 49%  | 41% | 34% | 28% | 23% | 18% | 14% | 10% | 8%  | 6%  | 4%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2374 | 2346 | 2280 | 2175 | 2044 | 1896 | 1734 | 1539 | 1337 | 1147 | 972 | 810 | 659 | 526 | 413 | 319 | 241 | 179 | 129 | 90  |
| 100% | 99%  | 96%  | 92%  | 86%  | 80%  | 73%  | 65%  | 56%  | 48%  | 41% | 34% | 28% | 22% | 17% | 13% | 10% | 8%  | 5%  | 4%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2374 | 2351 | 2288 | 2186 | 2054 | 1903 | 1741 | 1547 | 1346 | 1155 | 980 | 818 | 668 | 536 | 422 | 327 | 249 | 186 | 134 | 93  |
| 100% | 99%  | 96%  | 92%  | 87%  | 80%  | 73%  | 65%  | 57%  | 49%  | 41% | 34% | 28% | 23% | 18% | 14% | 10% | 8%  | 6%  | 4%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 2374 | 2346 | 2280 | 2175 | 2044 | 1896 | 1734 | 1539 | 1337 | 1147 | 972 | 810 | 659 | 526 | 413 | 319 | 241 | 179 | 129 | 90  |
| 100% | 99%  | 96%  | 92%  | 86%  | 80%  | 73%  | 65%  | 56%  | 48%  | 41% | 34% | 28% | 22% | 17% | 13% | 10% | 8%  | 5%  | 4%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 35.1°          | 64.3°           | 80.5°             | 99.3%                        | 98.5%                       |