

Light efficiency:

68 Lumen/Watt

Light quality:

CRI: 80.8

Color temperature:

2958 K

Output: 1224 lm

Peak: 1792 cd

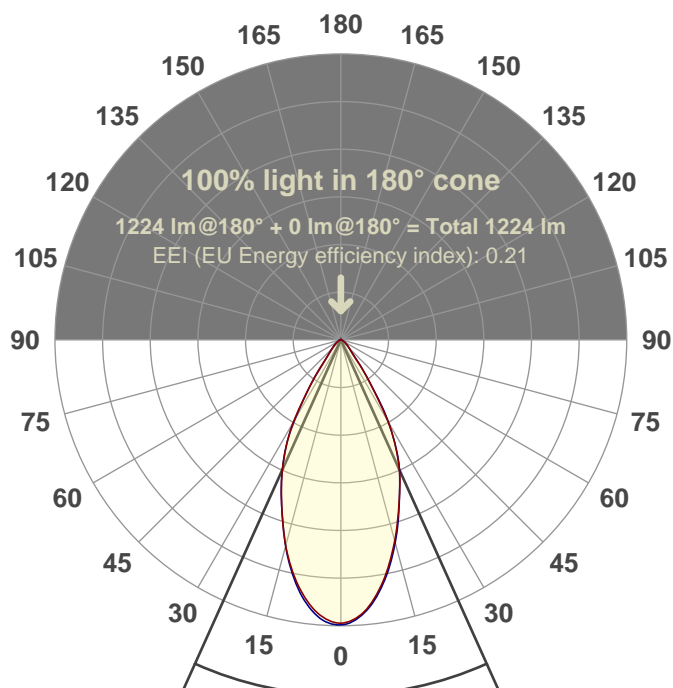
Power: 18.0 W

PF: 0.98



**112250-XTM19-20LM-30K-83-DA40-UNV-  
ELV-WH-CLR**

Date and time:  
12/11/2019 3:23:03 PM



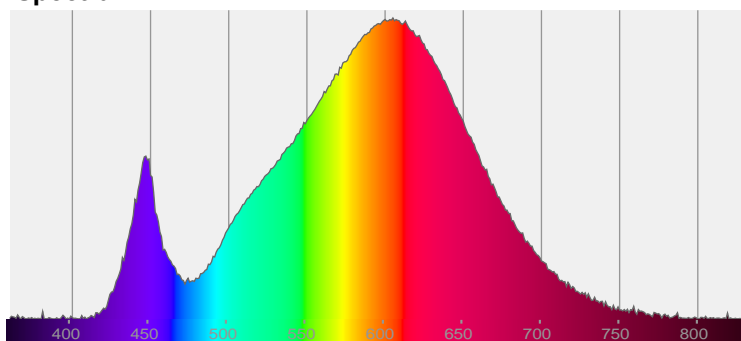
Beam angle

**48.5°**

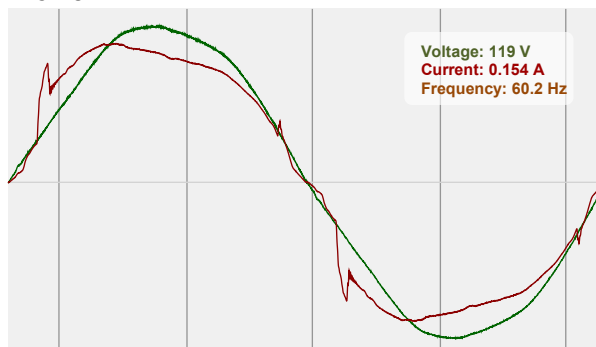


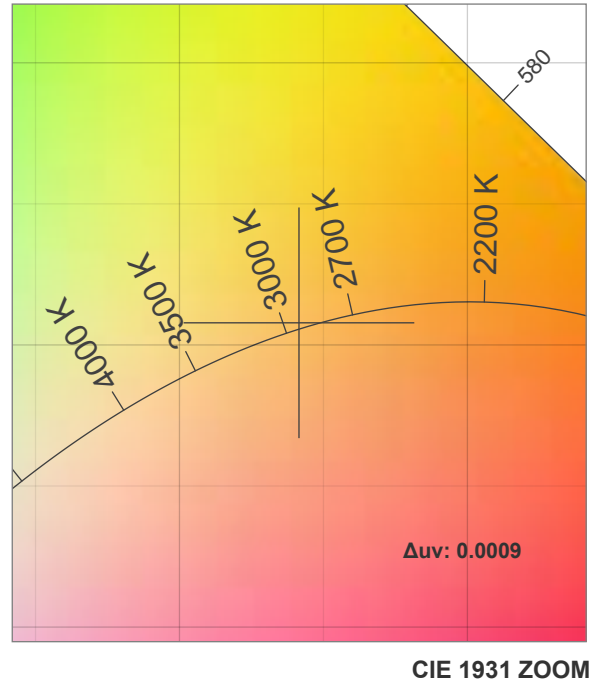
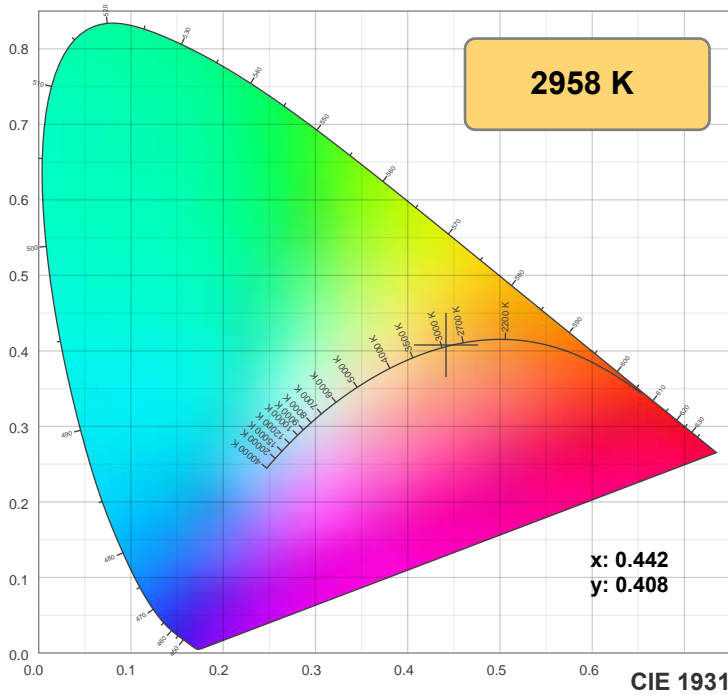
CIE 1931  
x: 0.442  
y: 0.408

Spectra

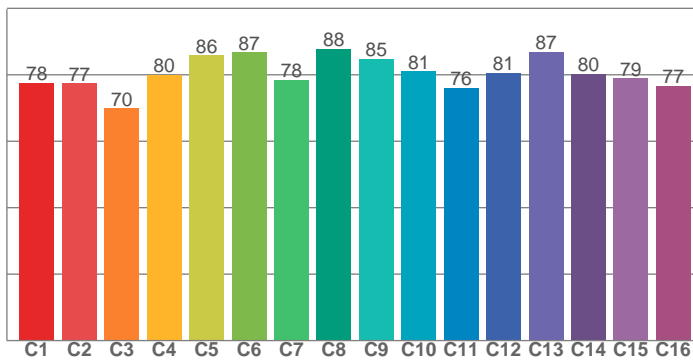


Power

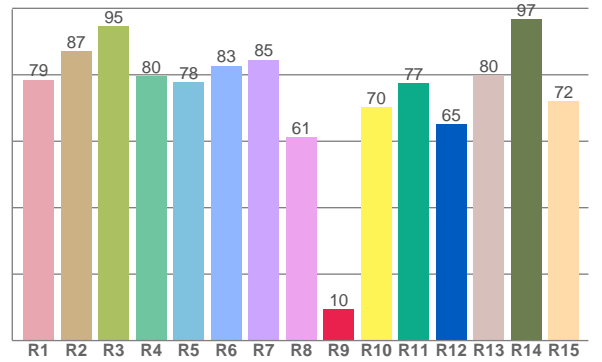




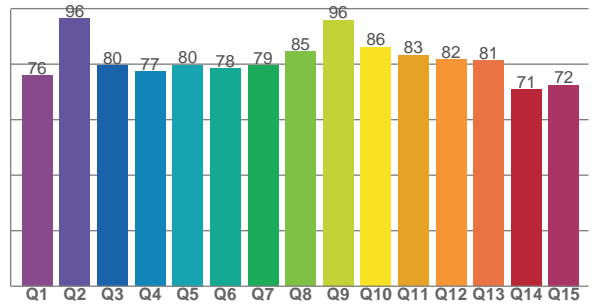
TM30: 80.3



CRI: 80.8 (R1-R8)



CQS: 80.1



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  |
|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 78.5 | 87.1 | 94.7 | 79.6 | 77.8 | 82.7 | 84.6 | 61.2 | 9.5 | 70.3 | 77.4 | 65.2 | 79.9 | 96.7 | 72.1 |

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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 77.6 | 77.4 | 69.9 | 80.0 | 85.9 | 86.7 | 78.4 | 87.8 | 84.7 | 81.0 | 76.1 | 80.6 | 86.9 | 80.4 | 78.9 | 76.6 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 75.9 | 96.4 | 79.5 | 77.4 | 79.7 | 78.4 | 79.5 | 84.6 | 95.9 | 86.1 | 83.2 | 81.6 | 81.4 | 70.9 | 72.5 |

## 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                | $\Delta uv$                     |
| 2958 K            | 80.8                  | 9.5           | 80.3           | 97.9        | 80.1                | 0.442                     | 0.408                     | 0.252            | 0.349            | 0.0009                          |

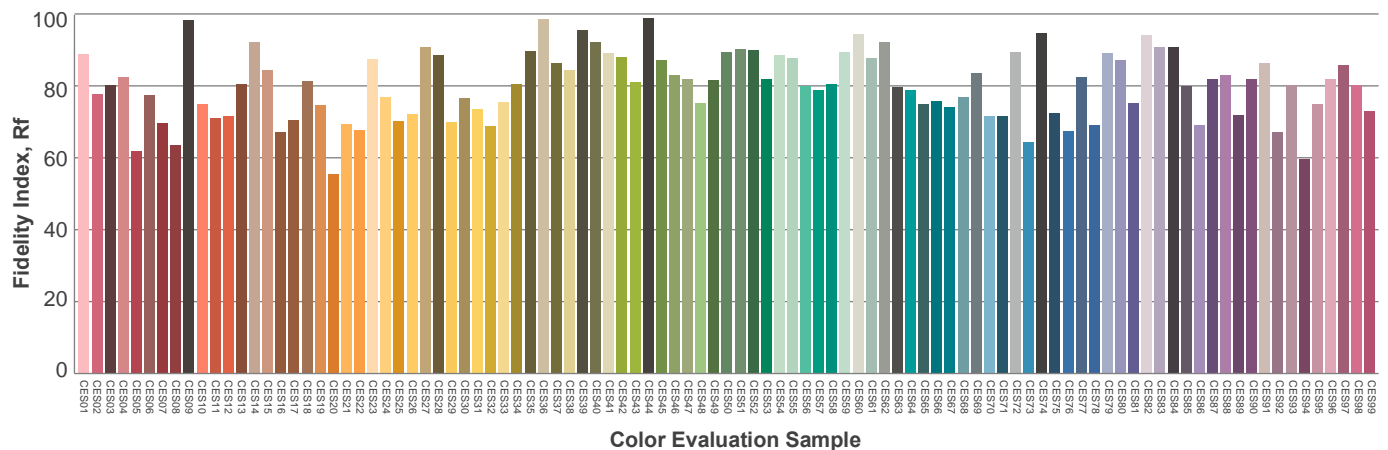
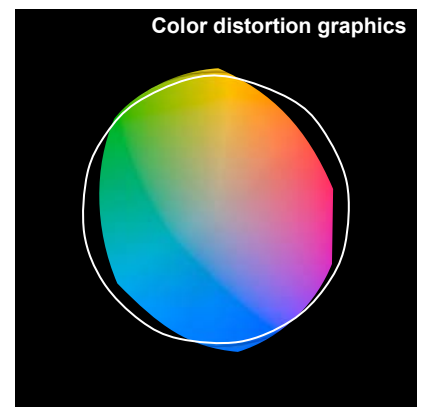
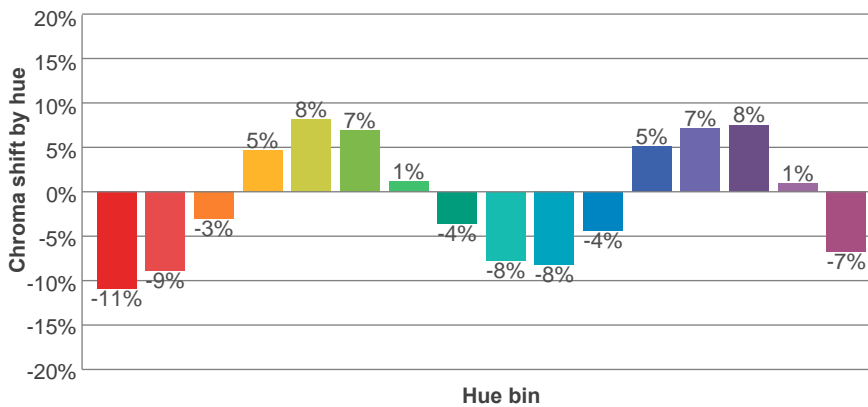
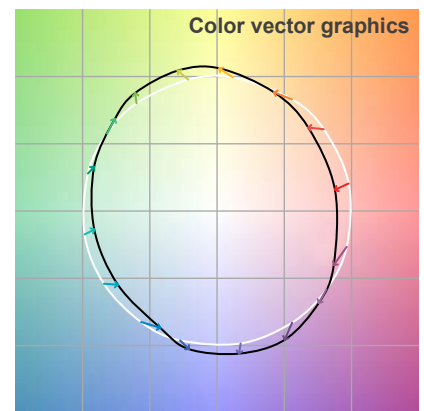
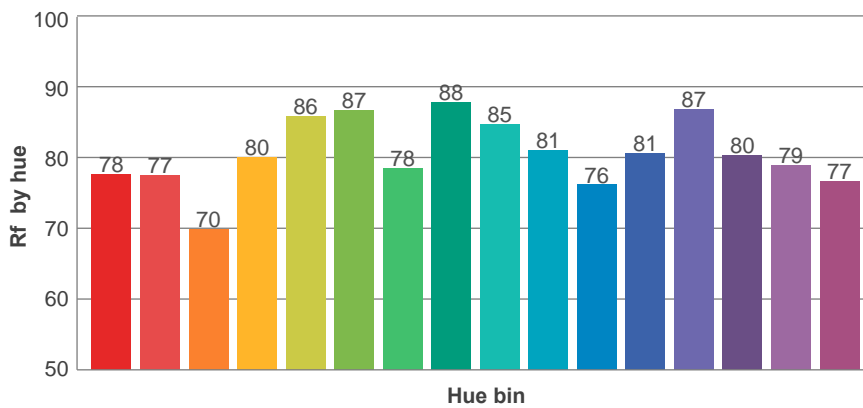
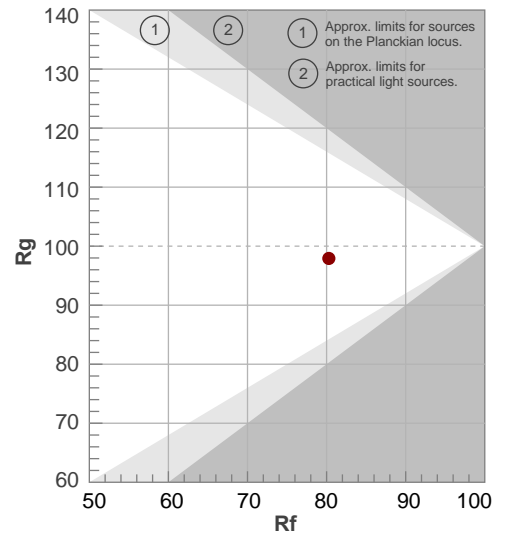
**Rf 80.3**

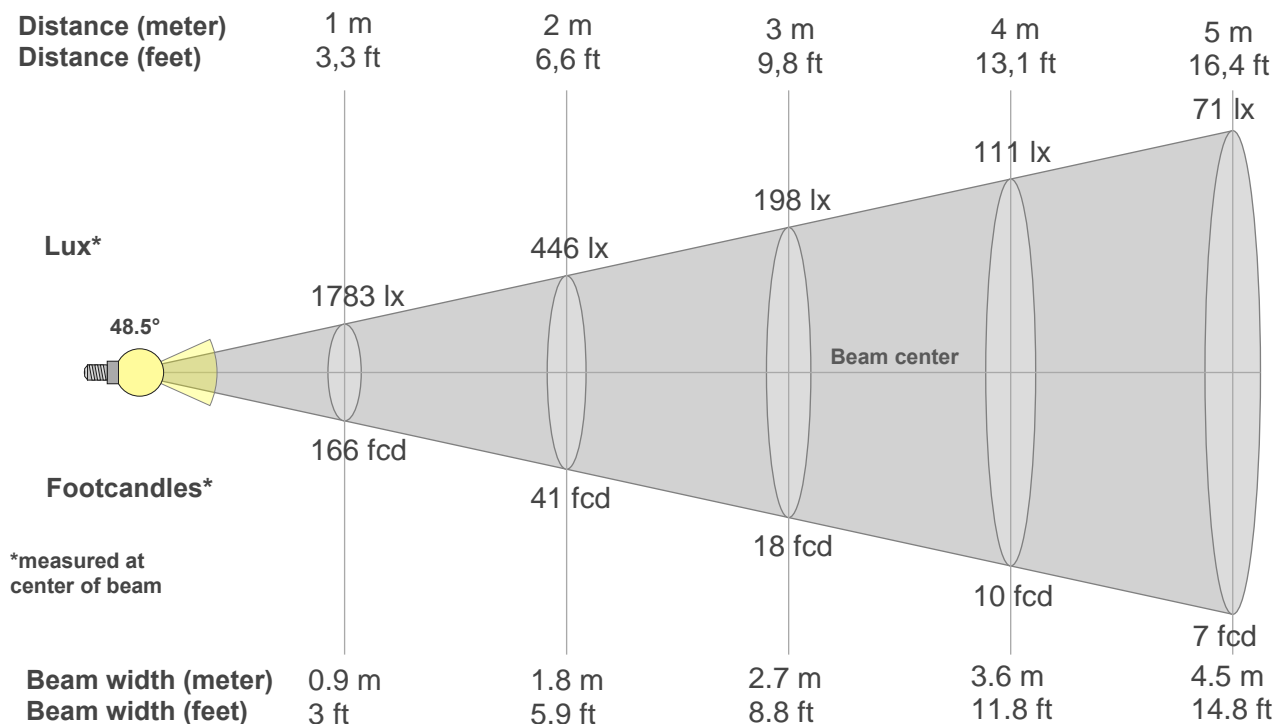
Fidelity index Rf

**Rg 97.9**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 78             | -11%               | -3%  |
| 2       | 77             | -9%                | 7%   |
| 3       | 70             | -3%                | 14%  |
| 4       | 80             | 5%                 | 11%  |
| 5       | 86             | 8%                 | 7%   |
| 6       | 87             | 7%                 | -3%  |
| 7       | 78             | 1%                 | -12% |
| 8       | 88             | -4%                | -6%  |
| 9       | 85             | -8%                | -2%  |
| 10      | 81             | -8%                | 6%   |
| 11      | 76             | -4%                | 14%  |
| 12      | 81             | 5%                 | 8%   |
| 13      | 87             | 7%                 | -3%  |
| 14      | 80             | 8%                 | -12% |
| 15      | 79             | 1%                 | -12% |
| 16      | 77             | -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 |
| 1783lx   | 446lx   | 198lx   | 111lx   | 71lx   | 50lx   | 36lx   | 28lx   | 22lx   | 18lx   | 15lx   | 12lx   | 11lx   | 9lx    | 8lx    | 7lx    | 6lx    | 6lx    | 5lx    | 4lx    |
| 165.7fcd | 41.4fcd | 18.4fcd | 10.4fcd | 6.6fcd | 4.6fcd | 3.4fcd | 2.6fcd | 2fcd   | 1.7fcd | 1.4fcd | 1.2fcd | 1fcd   | 0.8fcd | 0.7fcd | 0.6fcd | 0.6fcd | 0.5fcd | 0.5fcd | 0.4fcd |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1783 | 1756 | 1729 | 1679 | 1609 | 1538 | 1447 | 1355 | 1262 | 1167 | 1074 | 990 | 905 | 807 | 704 | 595 | 467 | 339 | 253 | 177 |
| 100% | 98%  | 97%  | 94%  | 90%  | 86%  | 81%  | 76%  | 71%  | 65%  | 60%  | 56% | 51% | 45% | 39% | 33% | 26% | 19% | 14% | 10% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1783 | 1773 | 1733 | 1694 | 1621 | 1546 | 1462 | 1367 | 1273 | 1175 | 1078 | 988 | 904 | 817 | 706 | 595 | 477 | 355 | 244 | 184 |
| 100% | 99%  | 97%  | 95%  | 91%  | 87%  | 82%  | 77%  | 71%  | 66%  | 60%  | 55% | 51% | 46% | 40% | 33% | 27% | 20% | 14% | 10% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1783 | 1759 | 1735 | 1690 | 1627 | 1562 | 1474 | 1387 | 1291 | 1190 | 1091 | 999 | 906 | 807 | 706 | 598 | 472 | 346 | 259 | 182 |
| 100% | 99%  | 97%  | 95%  | 91%  | 88%  | 83%  | 78%  | 72%  | 67%  | 61%  | 56% | 51% | 45% | 40% | 34% | 26% | 19% | 15% | 10% |

**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° |
|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1783 | 1775 | 1760 | 1705 | 1649 | 1572 | 1485 | 1393 | 1290 | 1187 | 1092 | 1000 | 906 | 806 | 707 | 582 | 453 | 339 | 248 | 157 |
| 100% | 100% | 99%  | 96%  | 93%  | 88%  | 83%  | 78%  | 72%  | 67%  | 61%  | 56%  | 51% | 45% | 40% | 33% | 25% | 19% | 14% | 9%  |

| Beam angle 50° | Field angle 10° | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| {B_ANG}°       | 75.8°           | 104.1°            | 97.8%                        | 93.1%                       |