

Light efficiency:

62 Lumen/Watt

Light quality:

CRI: 80.6

Color temperature:

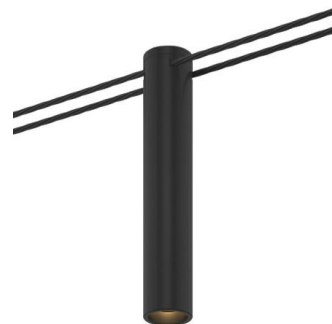
4000 K

Output: 770 lm

Peak: 5305 cd

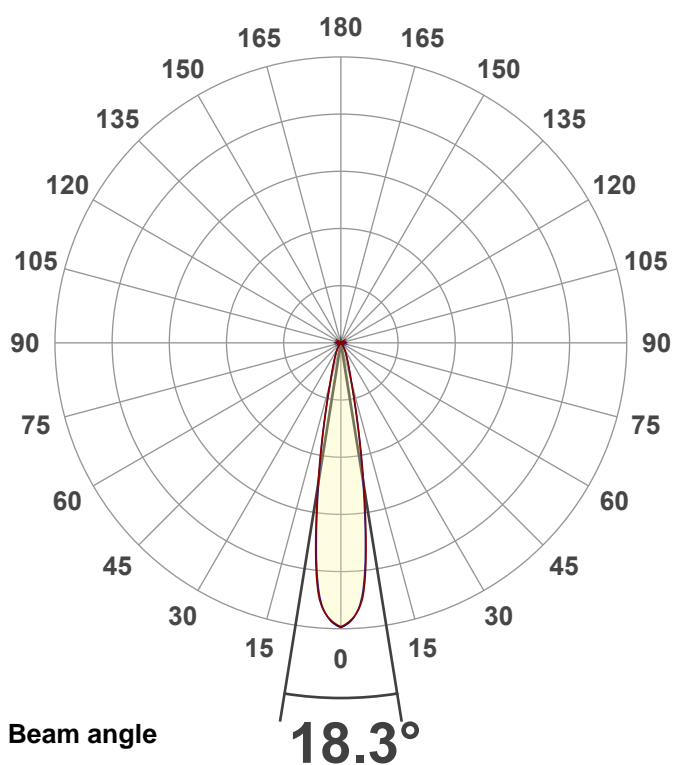
Power: 12.5 W

PF: 0.91



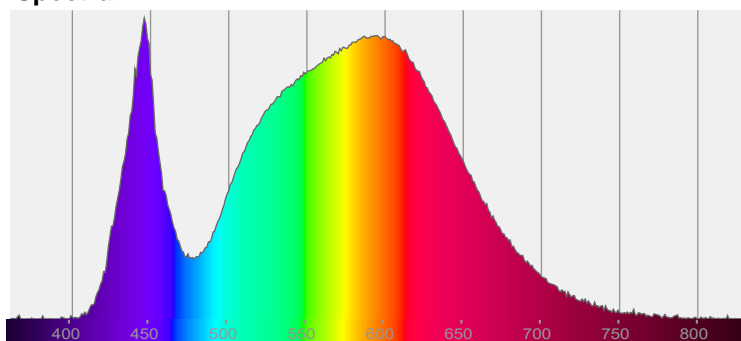
EXT-SKY-D-SW-10LM-40K-80-20D-24-BK-BK

Date and time:  
11/2/2021 10:14:42 AM

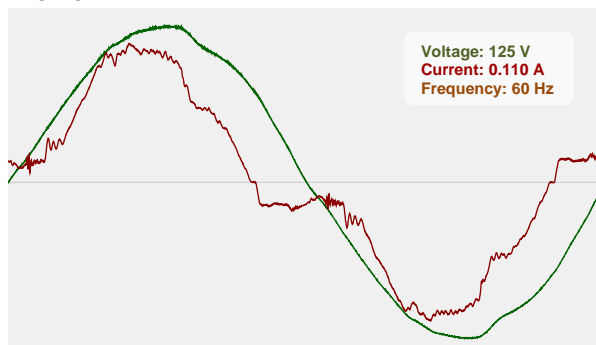


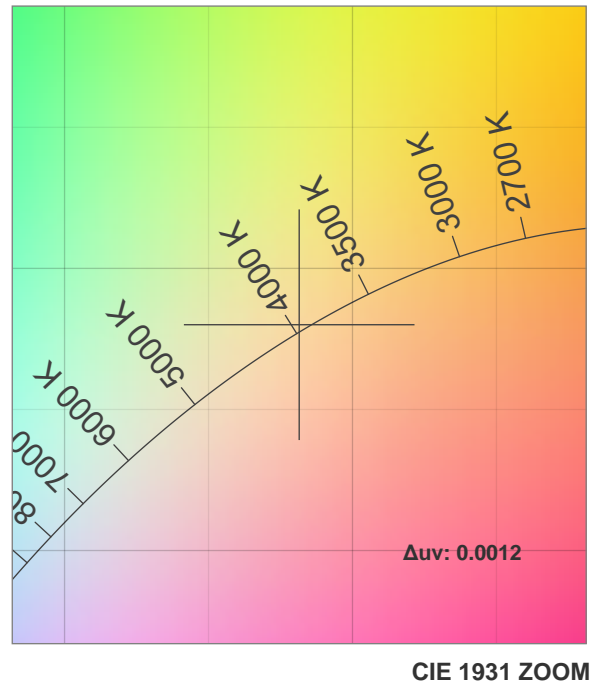
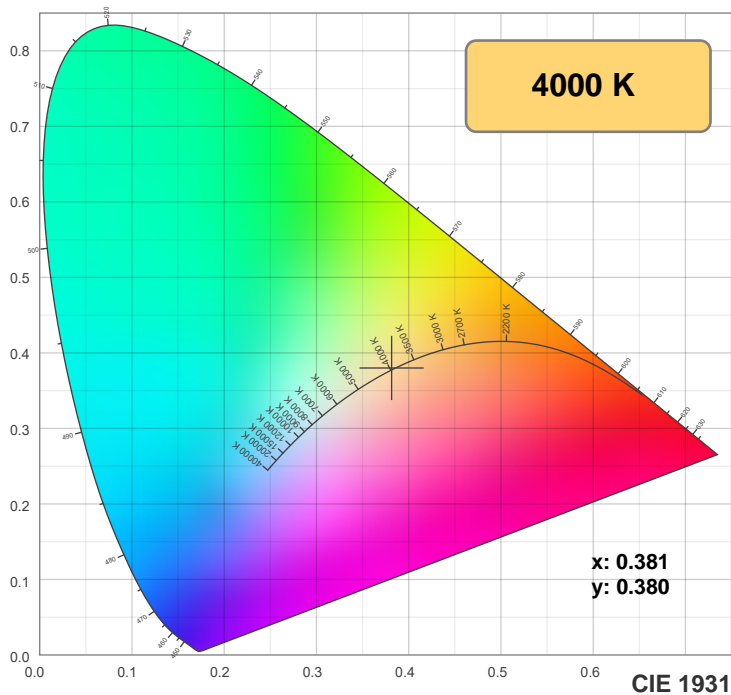
CIE 1931  
x: 0.381  
y: 0.380

Spectra

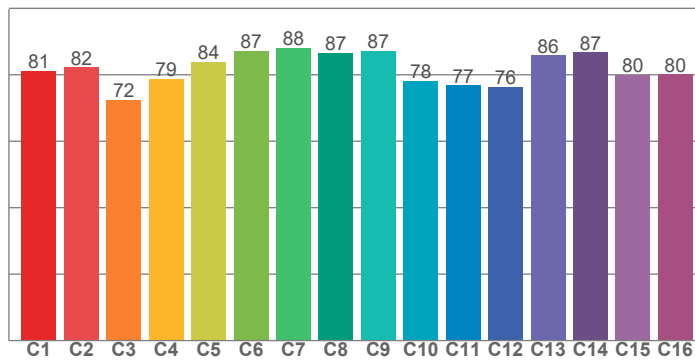


Power

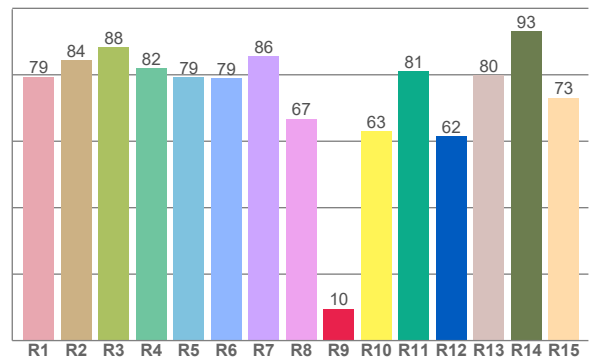




TM30: 81.7



CRI: 80.6 (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  |
|------|------|------|------|------|------|------|------|-----|------|------|------|------|------|------|
| 79.4 | 84.3 | 88.3 | 81.9 | 79.2 | 78.9 | 85.7 | 66.8 | 9.5 | 62.9 | 81.0 | 61.5 | 79.9 | 93.2 | 73.1 |

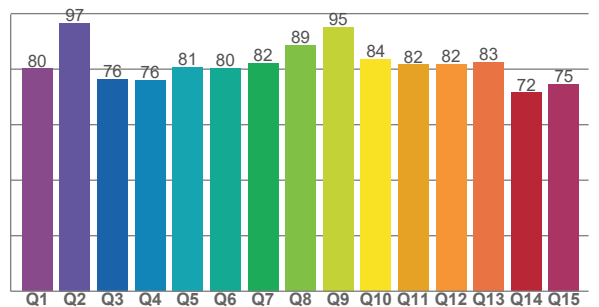
TM30 C values, 16 binned values out of total of 99 C values

| C1   | C2   | C3   | C4   | C5   | C6   | C7   | C8   | C9   | C10  | C11  | C12  | C13  | C14  | C15  | C16  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.2 | 82.2 | 72.5 | 78.7 | 83.8 | 87.2 | 88.1 | 86.5 | 87.2 | 78.2 | 76.8 | 76.4 | 85.8 | 86.8 | 80.0 | 80.1 |

CQS Q values

| Q1   | Q2   | Q3   | Q4   | Q5   | Q6   | Q7   | Q8   | Q9   | Q10  | Q11  | Q12  | Q13  | Q14  | Q15  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 80.2 | 96.6 | 76.4 | 76.0 | 80.7 | 80.5 | 82.2 | 88.6 | 95.2 | 83.6 | 81.6 | 81.8 | 82.6 | 71.5 | 74.7 |

CQS: 80.9



## 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                             |
| 4000 K            | 80.6                  | 9.5           | 81.7           | 98.5        | 80.9                | 0.381                     | 0.380                     | 0.224            | 0.335            | 0.0012                          |

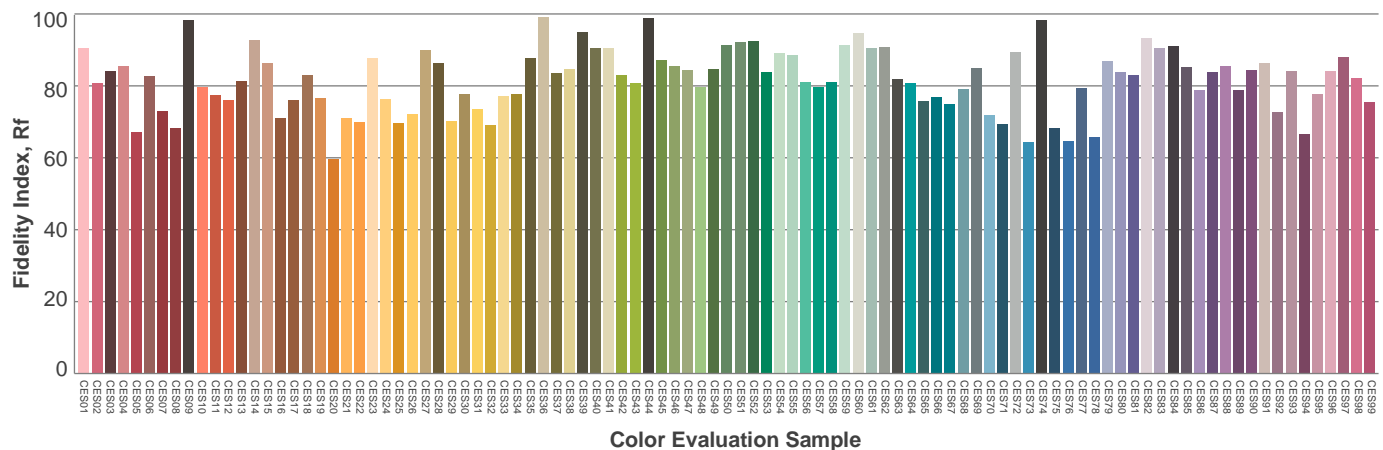
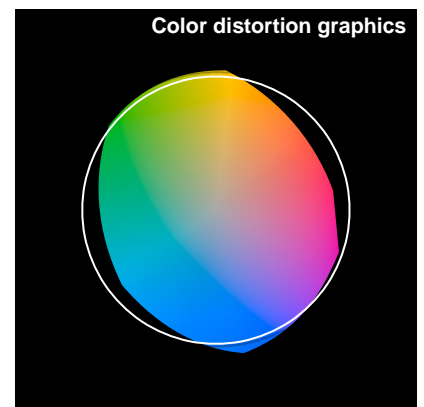
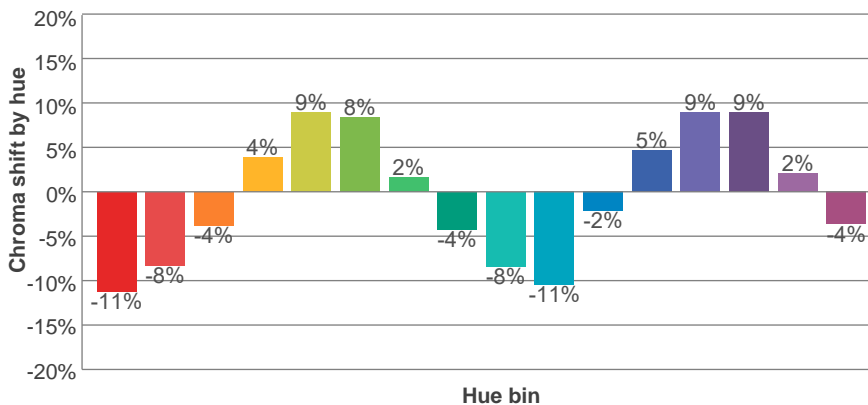
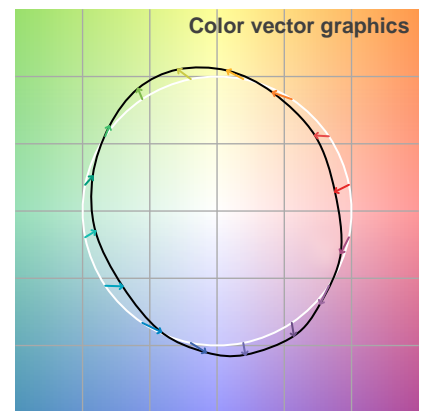
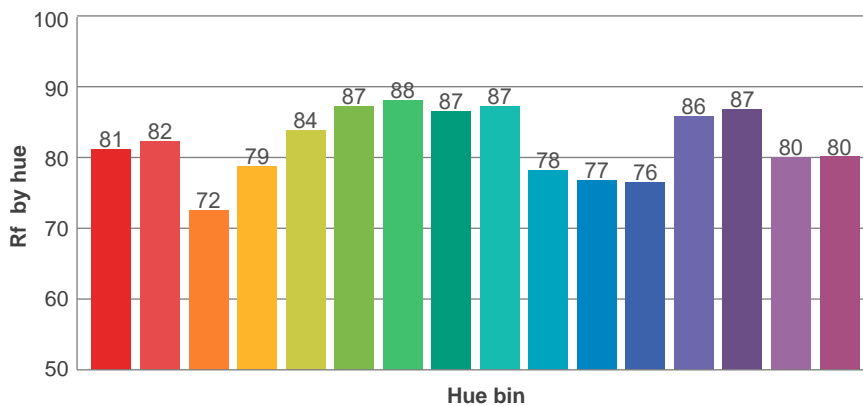
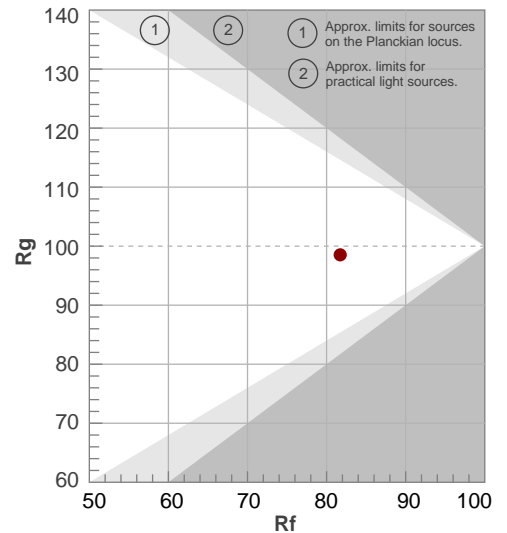
**Rf 81.7**

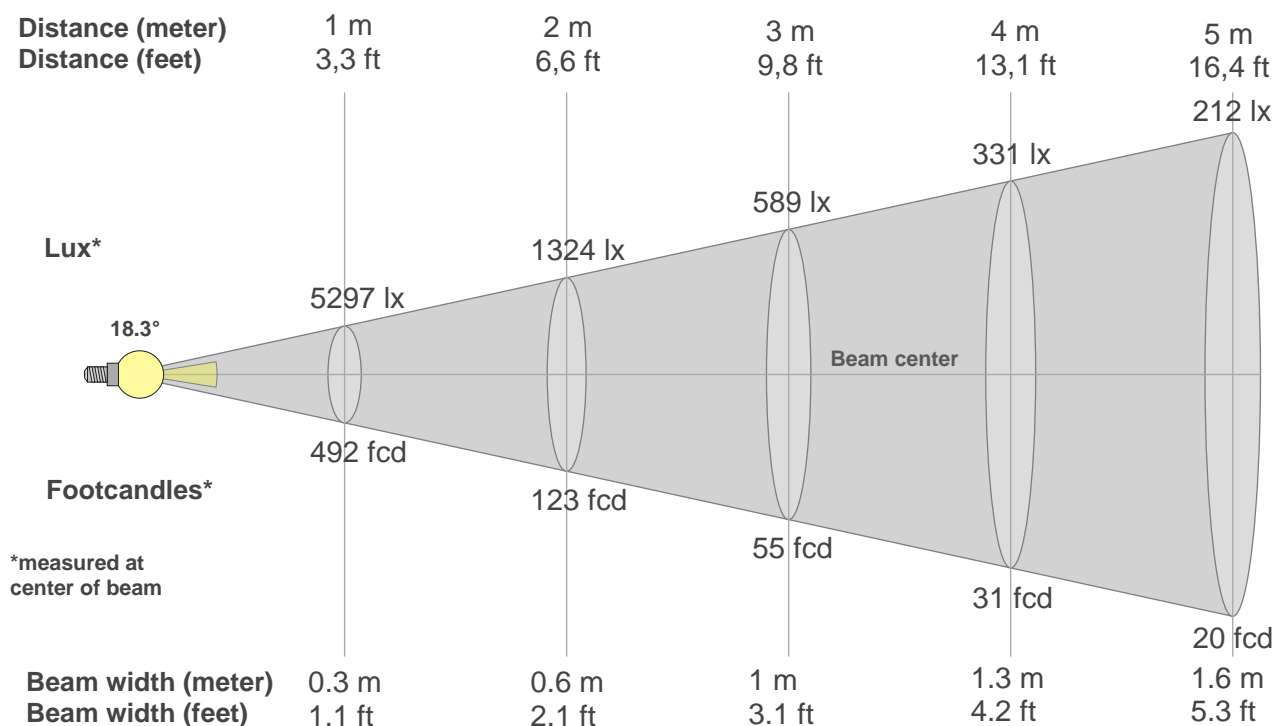
Fidelity index Rf

**Rg 98.5**

Gamut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 81             | -11%               | -3%  |
| 2       | 82             | -8%                | 6%   |
| 3       | 72             | -4%                | 15%  |
| 4       | 79             | 4%                 | 13%  |
| 5       | 84             | 9%                 | 8%   |
| 6       | 87             | 8%                 | -2%  |
| 7       | 88             | 2%                 | -8%  |
| 8       | 87             | -4%                | -7%  |
| 9       | 87             | -8%                | -3%  |
| 10      | 78             | -11%               | 8%   |
| 11      | 77             | -2%                | 15%  |
| 12      | 76             | 5%                 | 12%  |
| 13      | 86             | 9%                 | 0%   |
| 14      | 87             | 9%                 | -4%  |
| 15      | 80             | 2%                 | -15% |
| 16      | 80             | -4%                | -13% |





#### 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 |
| 5297lx   | 1324lx | 589lx   | 331lx   | 212lx   | 147lx   | 108lx | 83lx   | 65lx   | 53lx   | 44lx   | 37lx   | 31lx   | 27lx   | 24lx   | 21lx   | 18lx   | 16lx   | 15lx   | 13lx   |
| 492.1fcd | 123fcd | 54.7fcd | 30.8fcd | 19.7fcd | 13.7fcd | 10fcd | 7.7fcd | 6.1fcd | 4.9fcd | 4.1fcd | 3.4fcd | 2.9fcd | 2.5fcd | 2.2fcd | 1.9fcd | 1.7fcd | 1.5fcd | 1.4fcd | 1.2fcd |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| 5297 | 5250 | 5182 | 5091 | 4955 | 4741 | 4363 | 3859 | 3303 | 2774 | 2281 | 1846 | 1487 | 1190 | 959 | 787 | 664 | 570 | 494 | 432 |
| 100% | 99%  | 98%  | 96%  | 94%  | 90%  | 82%  | 73%  | 62%  | 52%  | 43%  | 35%  | 28%  | 22%  | 18% | 15% | 13% | 11% | 9%  | 8%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| 5297 | 5267 | 5199 | 5089 | 4933 | 4677 | 4280 | 3765 | 3204 | 2668 | 2193 | 1783 | 1423 | 1132 | 906 | 741 | 624 | 539 | 473 | 418 |
| 100% | 99%  | 98%  | 96%  | 93%  | 88%  | 81%  | 71%  | 60%  | 50%  | 41%  | 34%  | 27%  | 21%  | 17% | 14% | 12% | 10% | 9%  | 8%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| 5297 | 5250 | 5182 | 5091 | 4955 | 4741 | 4363 | 3859 | 3303 | 2774 | 2281 | 1846 | 1487 | 1190 | 959 | 787 | 664 | 570 | 494 | 432 |
| 100% | 99%  | 98%  | 96%  | 94%  | 90%  | 82%  | 73%  | 62%  | 52%  | 43%  | 35%  | 28%  | 22%  | 18% | 15% | 13% | 11% | 9%  | 8%  |

#### 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° |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|
| 5297 | 5267 | 5199 | 5089 | 4933 | 4677 | 4280 | 3765 | 3204 | 2668 | 2193 | 1783 | 1423 | 1132 | 906 | 741 | 624 | 539 | 473 | 418 |
| 100% | 99%  | 98%  | 96%  | 93%  | 88%  | 81%  | 71%  | 60%  | 50%  | 41%  | 34%  | 27%  | 21%  | 17% | 14% | 12% | 10% | 9%  | 8%  |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| {B_ANG}°       | 34.8°           | 61.1°             | 99.5%                        | 99.2%                       |