

Light efficiency:

77 Lumen/Watt

Light quality:

CRI: 94.4

Color temperature:

3323 K

Output: 897 lm

Peak: 733 cd

Power: 11.6 W

PF: 0.95

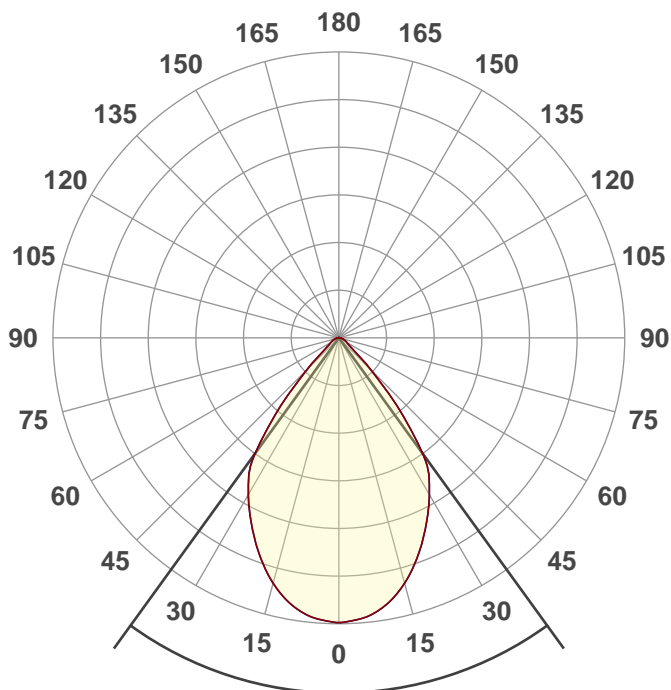


Product name:

NU4-QD-TW-10LM-2765-95-D70-120-DIM10Z-NC-WH-WH

Date and time:

12/3/2018 11:45:23 AM



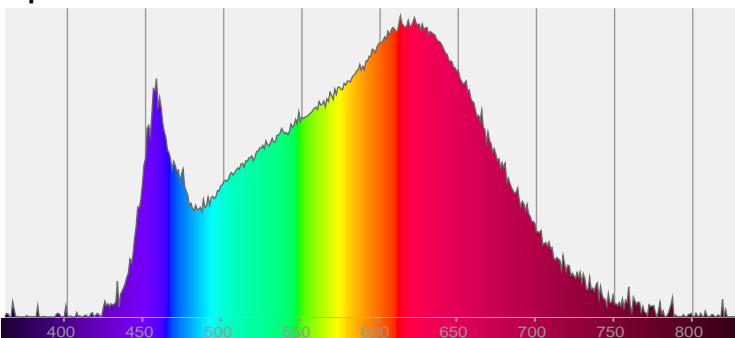
Beam angle

71.8°

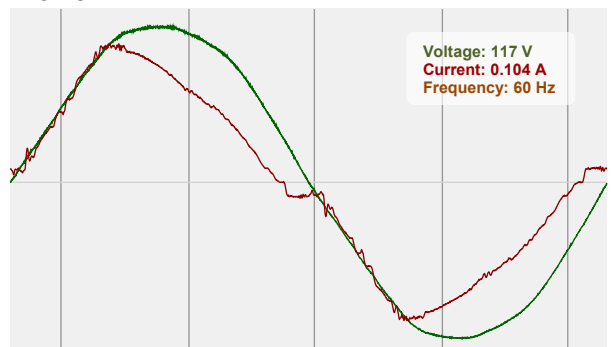


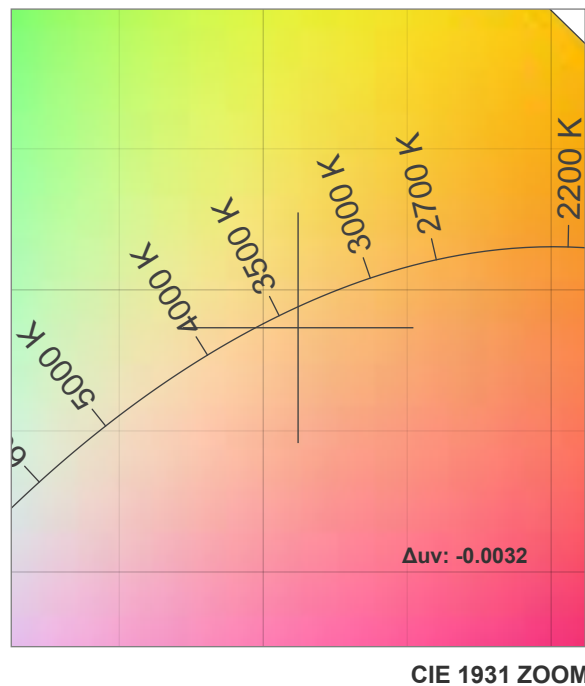
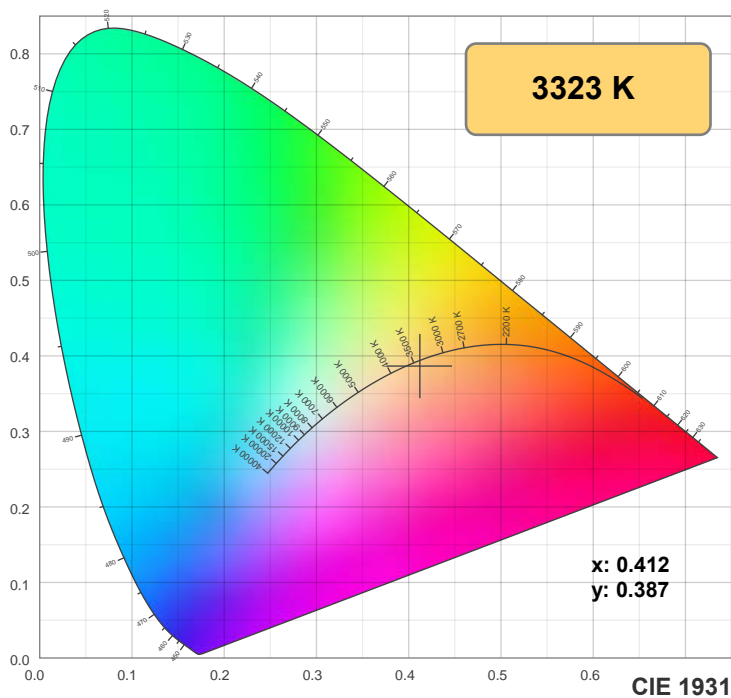
CIE 1931
x: 0.412
y: 0.387

Spectra

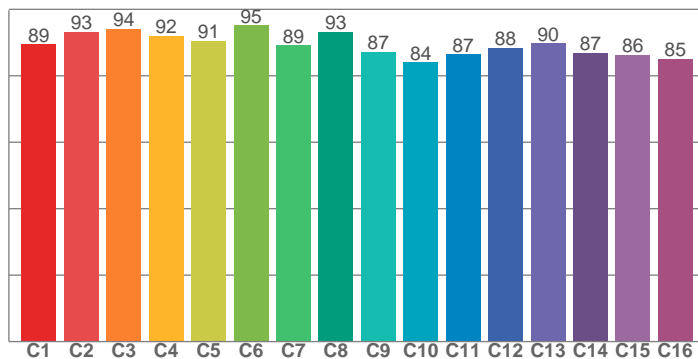


Power

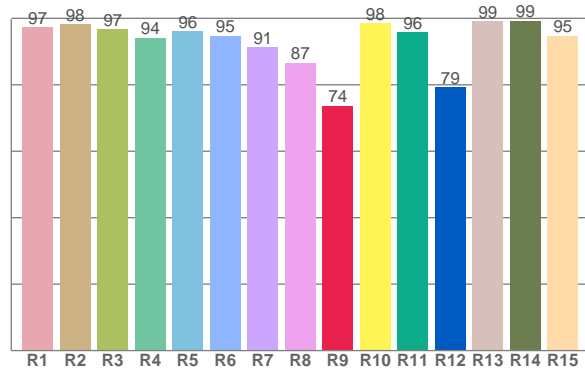




TM30: 89.5



CRI: 94.4 (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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 97.3 | 98.3 | 96.7 | 94.2 | 96.2 | 94.7 | 91.2 | 86.7 | 73.7 | 98.5 | 95.7 | 79.2 | 99.2 | 99.3 | 94.8 |

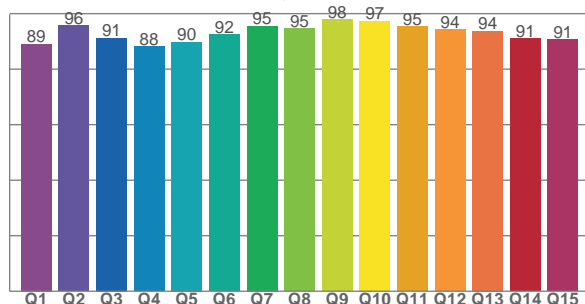
TM30 C values, 16 binned values out of total of 99 C values

| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 | C16 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89.4 | 93.1 | 94.1 | 92.0 | 90.5 | 95.1 | 89.1 | 93.2 | 87.1 | 84.1 | 86.5 | 88.4 | 89.8 | 86.9 | 86.3 | 85.1 |

CQS Q values

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 89.1 | 95.7 | 91.2 | 88.2 | 89.8 | 92.4 | 95.5 | 94.6 | 97.9 | 97.3 | 95.4 | 94.2 | 93.7 | 91.1 | 90.6 |

CQS: 92.4



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 |
| 3323 K | 94.4 | 73.7 | 89.5 | 97.9 | 92.4 | 0.412 | 0.387 | 0.242 | 0.340 | -0.0032 |

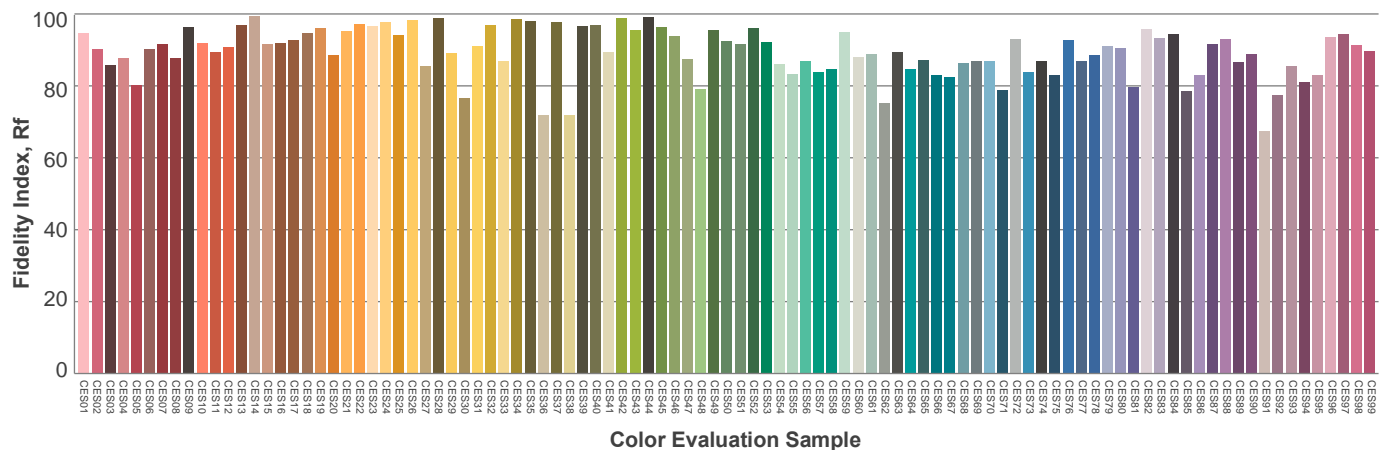
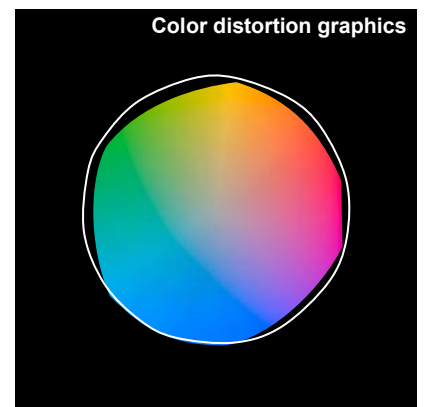
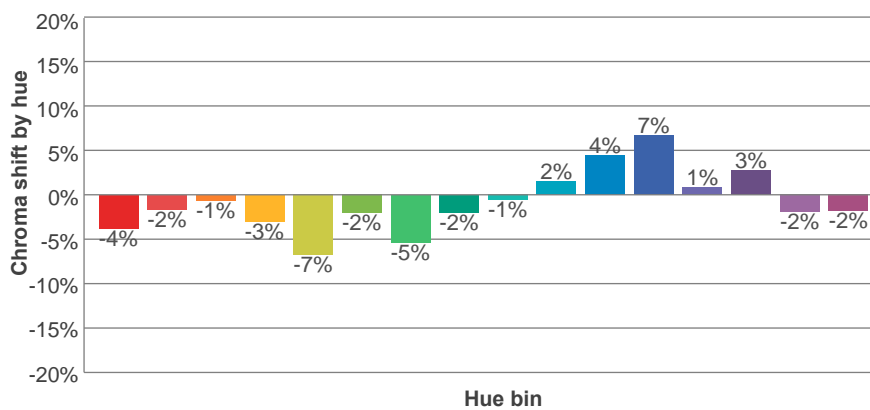
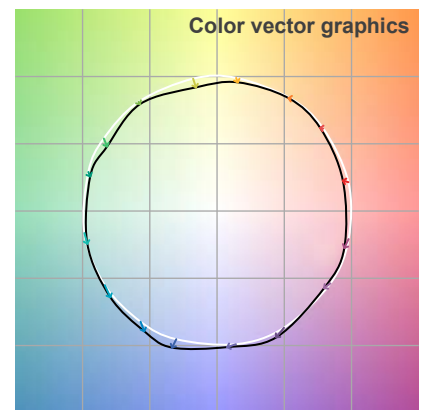
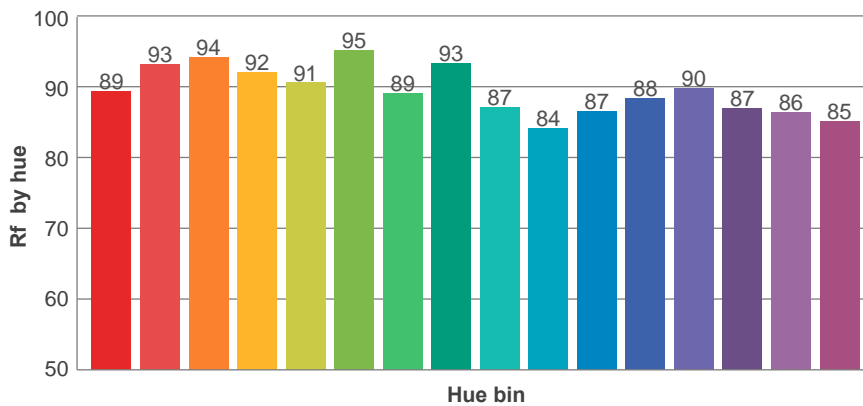
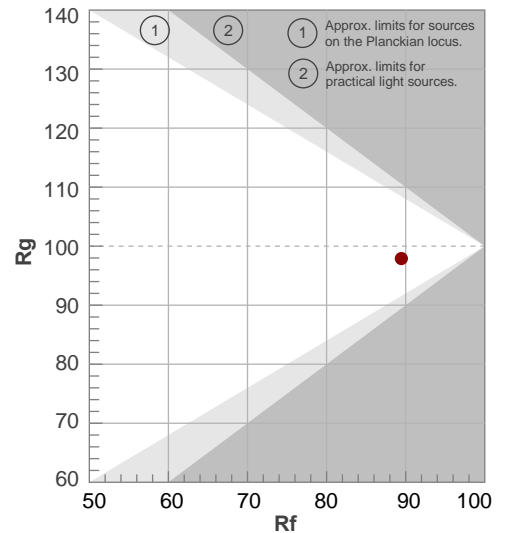
Rf 89.5

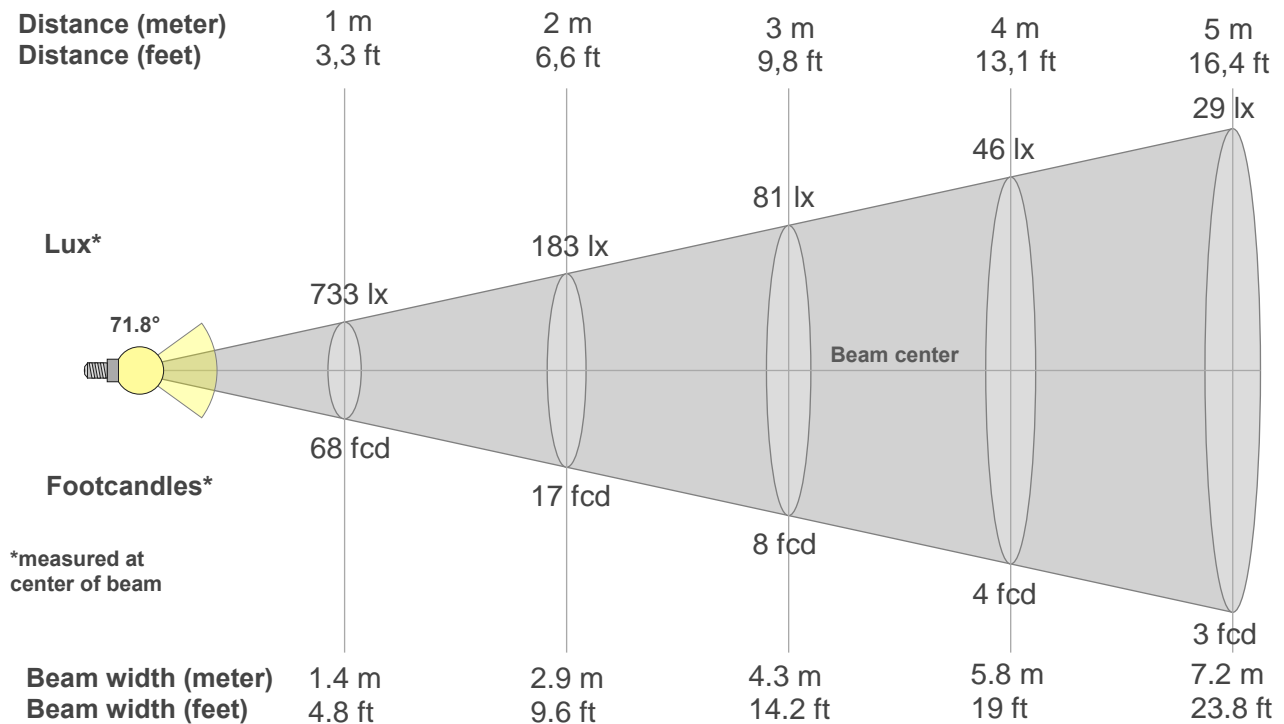
Fidelity index Rf

Rg 97.9

Gamut index Rg

| Hue Bin | R _f | Graphic shifts (%) | |
|---------|----------------|--------------------|-----|
| | | Chroma | Hue |
| 1 | 89 | -4% | 2% |
| 2 | 93 | -2% | 2% |
| 3 | 94 | -1% | 2% |
| 4 | 92 | -3% | -2% |
| 5 | 91 | -7% | -1% |
| 6 | 95 | -2% | 0% |
| 7 | 89 | -5% | 4% |
| 8 | 93 | -2% | 3% |
| 9 | 87 | -1% | 8% |
| 10 | 84 | 2% | 10% |
| 11 | 87 | 4% | 6% |
| 12 | 88 | 7% | -2% |
| 13 | 90 | 1% | -7% |
| 14 | 87 | 3% | -9% |
| 15 | 86 | -2% | -6% |
| 16 | 85 | -2% | -7% |





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 |
| 733lx | 183lx | 81lx | 46lx | 29lx | 20lx | 15lx | 11lx | 9lx | 7lx | 6lx | 5lx | 4lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx | 2lx |
| 68.1fcd | 17fcd | 7.6fcd | 4.3fcd | 2.7fcd | 1.9fcd | 1.4fcd | 1.1fcd | 0.8fcd | 0.7fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 732 | 727 | 722 | 711 | 699 | 683 | 664 | 645 | 621 | 597 | 572 | 546 | 520 | 493 | 467 | 437 | 406 | 364 | 305 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 71% | 67% | 64% | 60% | 55% | 50% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 732 | 727 | 722 | 711 | 699 | 683 | 664 | 645 | 621 | 597 | 572 | 546 | 520 | 493 | 467 | 437 | 406 | 364 | 305 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 71% | 67% | 64% | 60% | 55% | 50% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 732 | 727 | 722 | 711 | 699 | 683 | 664 | 645 | 621 | 597 | 572 | 546 | 520 | 493 | 467 | 437 | 406 | 364 | 305 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 71% | 67% | 64% | 60% | 55% | 50% | 42% |

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° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 733 | 732 | 727 | 722 | 711 | 699 | 683 | 664 | 645 | 621 | 597 | 572 | 546 | 520 | 493 | 467 | 437 | 406 | 364 | 305 |
| 100% | 100% | 99% | 98% | 97% | 95% | 93% | 91% | 88% | 85% | 81% | 78% | 74% | 71% | 67% | 64% | 60% | 55% | 50% | 42% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 71.8° | 96.3° | 130.2° | 95.6% | 88.5% |