

Light efficiency:

73 Lumen/Watt

Light quality:

CRI: 83.2

Color temperature:

2936 K

Output: 752 lm

Peak: 471 cd

Power: 10.3 W

PF: 0.98



Beam angle

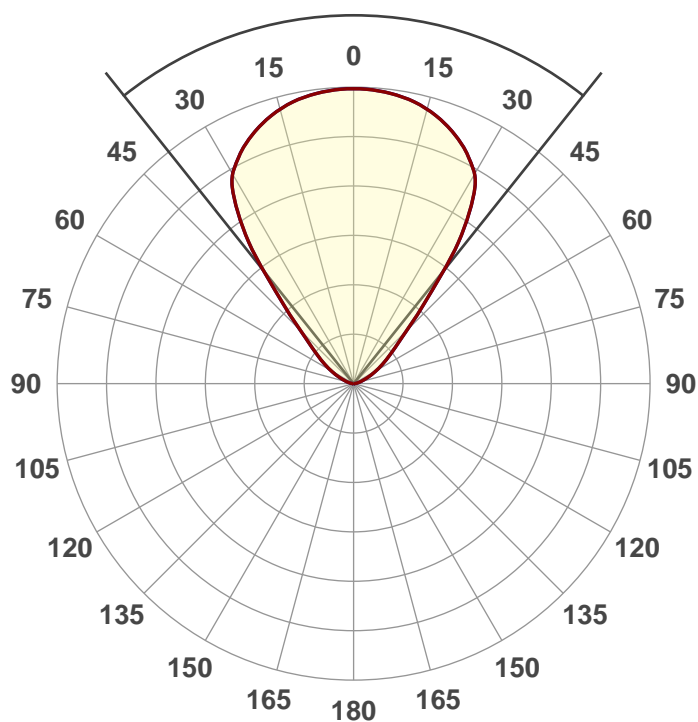
77.1°

Product name:

NU3-QD-XTM19-10LM-30K-83-WH80-120-Dim10-RET-WH-WH

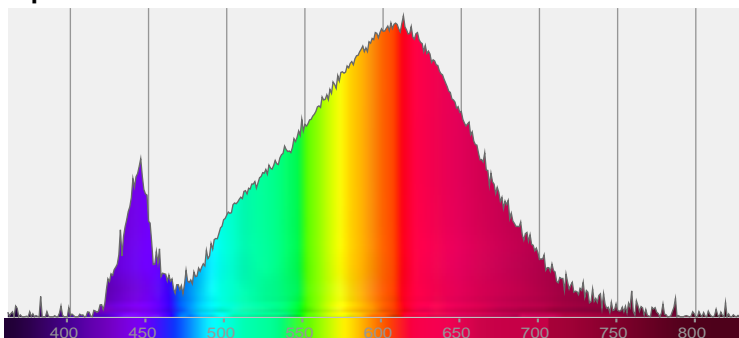
Date and time:

11/29/2017 2:27:40 PM

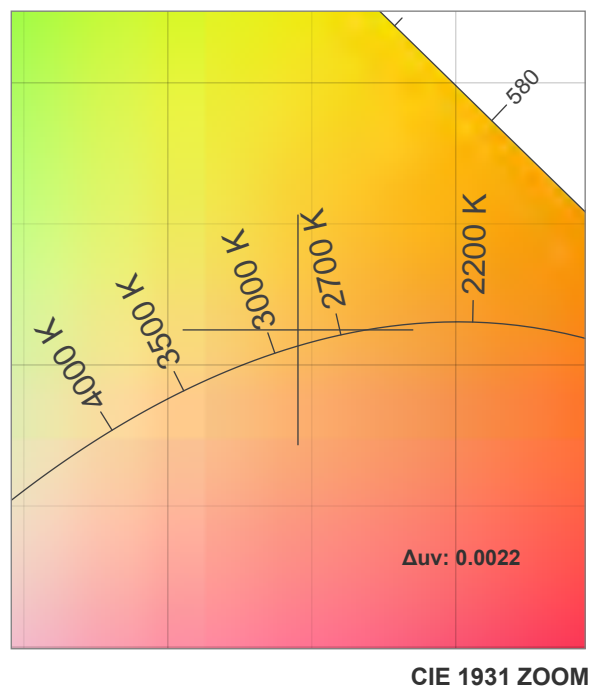
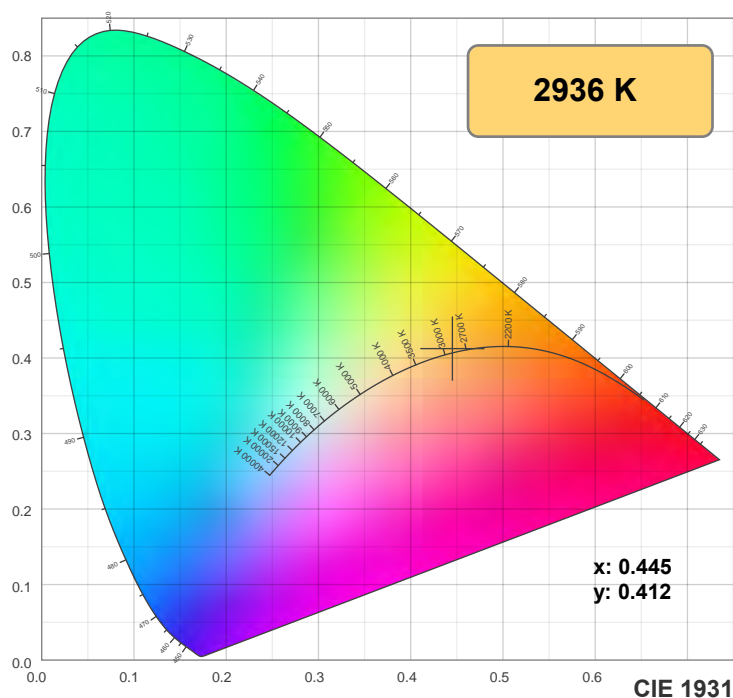


CIE 1931  
x: 0.445  
y: 0.412

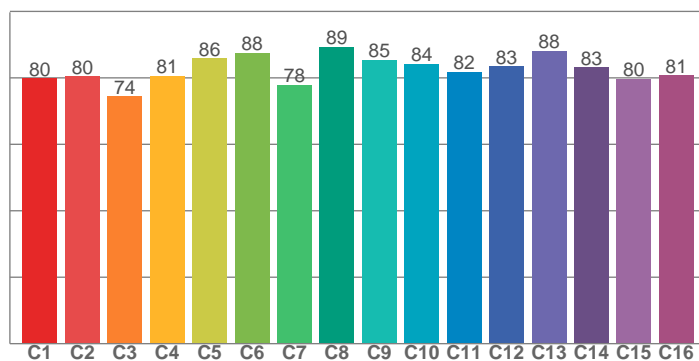
Spectra



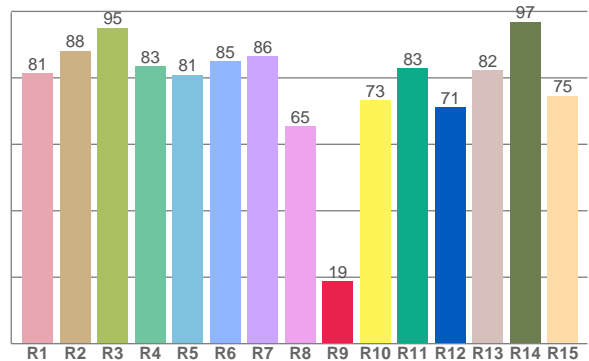
## Color details



TM30: 82.5



CRI: 83.2 (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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 81.3 | 88.2 | 95.1 | 83.5 | 80.9 | 85.1 | 86.5 | 65.4 | 18.7 | 73.4 | 82.8 | 71.1 | 82.3 | 96.9 | 74.6 |

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  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 79.8 | 80.5 | 74.4 | 80.6 | 85.9 | 87.5 | 77.9 | 89.3 | 85.3 | 84.2 | 81.8 | 83.5 | 88.1 | 83.1 | 79.8 | 80.7 |

## Color parameters

| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | 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     | x                         | y                         | u                | v                | Δuv                             |
| 2936 K            | 83.2                  | 18.7          | 82.5           | 98.7        | 0.445                     | 0.412                     | 0.252            | 0.351            | 0.0022                          |

## TM30 details

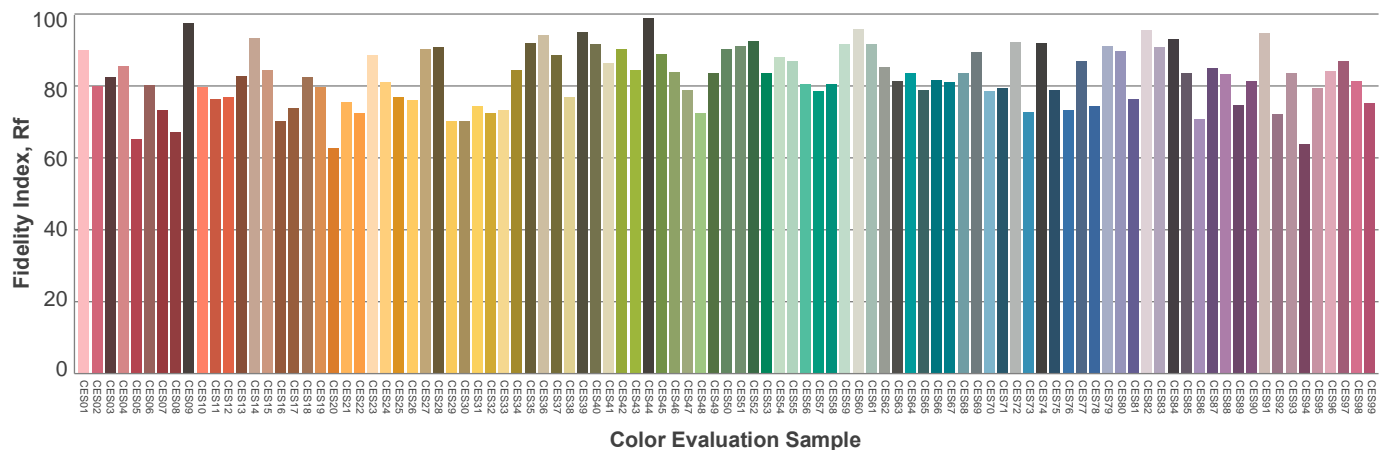
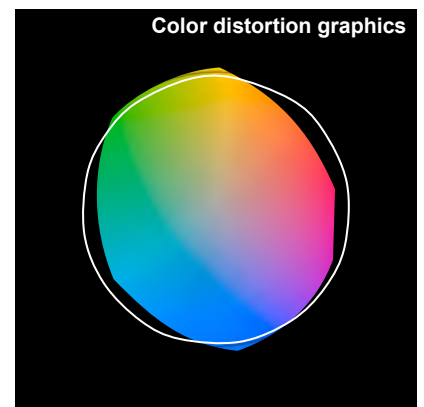
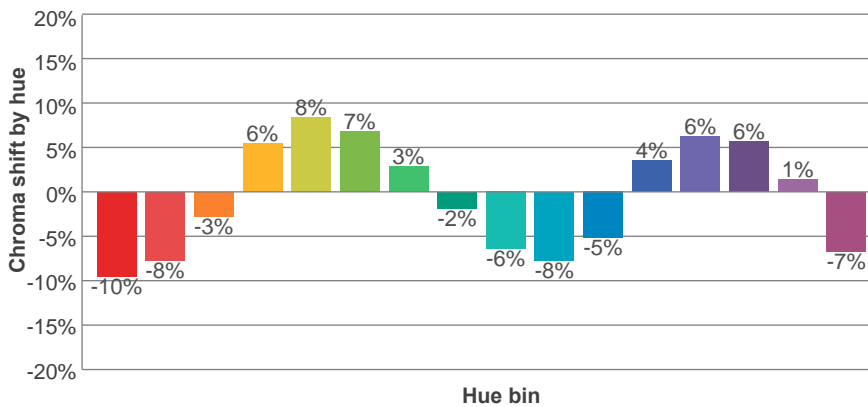
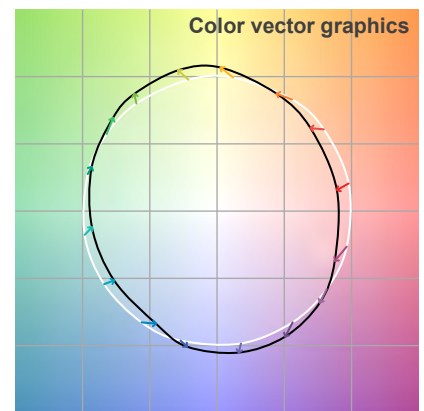
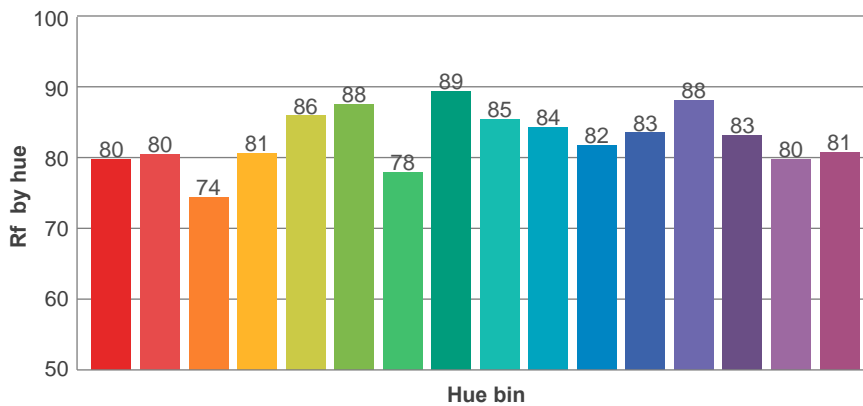
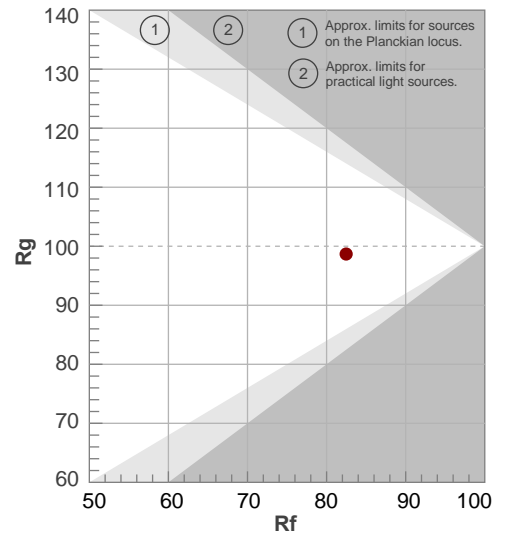
**Rf 82.5**

Fidelity index Rf

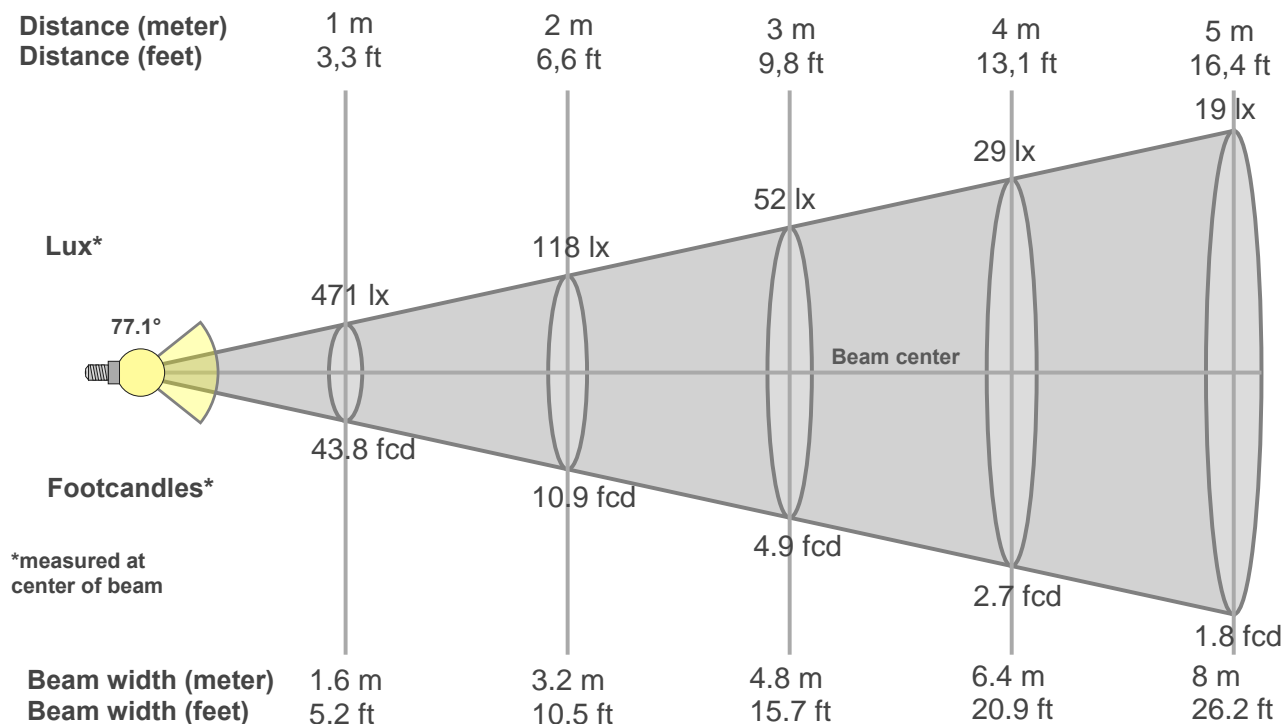
**Rg 98.7**

Gammut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |      |
|---------|----------------|--------------------|------|
|         |                | Chroma             | Hue  |
| 1       | 80             | -10%               | -3%  |
| 2       | 80             | -8%                | 6%   |
| 3       | 74             | -3%                | 12%  |
| 4       | 81             | 6%                 | 11%  |
| 5       | 86             | 8%                 | 6%   |
| 6       | 88             | 7%                 | -3%  |
| 7       | 78             | 3%                 | -12% |
| 8       | 89             | -2%                | -6%  |
| 9       | 85             | -6%                | -4%  |
| 10      | 84             | -8%                | 2%   |
| 11      | 82             | -5%                | 9%   |
| 12      | 83             | 4%                 | 6%   |
| 13      | 88             | 6%                 | -3%  |
| 14      | 83             | 6%                 | -10% |
| 15      | 80             | 1%                 | -11% |
| 16      | 81             | -7%                | -12% |



## Beam details



### 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 |
| 471lx   | 118lx   | 52lx   | 29lx   | 19lx   | 13lx   | 10lx   | 7lx    | 6lx    | 5lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    | 2lx    | 1lx    | 1lx    | 1lx    |
| 43.8fcd | 10.9fcd | 4.9fcd | 2.7fcd | 1.8fcd | 1.2fcd | 0.9fcd | 0.7fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd | 0.1fcd | 0.1fcd |

### Intensities in 0° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 469  | 464 | 454 | 438 | 415 | 382 | 310 | 203 | 124 | 84  | 60  | 42  | 28  | 17  | 11  | 6   | 2   | 1   | 1   |
| 100% | 100% | 98% | 96% | 93% | 88% | 81% | 66% | 43% | 26% | 18% | 13% | 9%  | 6%  | 4%  | 2%  | 1%  | 1%  | 0%  | 0%  |

### Intensities in 90° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 469  | 464 | 454 | 438 | 415 | 382 | 310 | 203 | 124 | 84  | 60  | 42  | 28  | 17  | 11  | 6   | 2   | 1   | 1   |
| 100% | 100% | 98% | 96% | 93% | 88% | 81% | 66% | 43% | 26% | 18% | 13% | 9%  | 6%  | 4%  | 2%  | 1%  | 1%  | 0%  | 0%  |

### Intensities in 180° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 469  | 464 | 454 | 438 | 415 | 382 | 310 | 203 | 124 | 84  | 60  | 42  | 28  | 17  | 11  | 6   | 2   | 1   | 1   |
| 100% | 100% | 98% | 96% | 93% | 88% | 81% | 66% | 43% | 26% | 18% | 13% | 9%  | 6%  | 4%  | 2%  | 1%  | 1%  | 0%  | 0%  |

### Intensities in 270° c-plane

| 0°   | 5°   | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 471  | 469  | 464 | 454 | 438 | 415 | 382 | 310 | 203 | 124 | 84  | 60  | 42  | 28  | 17  | 11  | 6   | 2   | 1   | 1   |
| 100% | 100% | 98% | 96% | 93% | 88% | 81% | 66% | 43% | 26% | 18% | 13% | 9%  | 6%  | 4%  | 2%  | 1%  | 1%  | 0%  | 0%  |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 77.1°          | 117.2°          | 147.9°            | 93.9%                        | 81.3%                       |