



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client:

LumCAT: 2-2682-L

Luminaire: 92.70.429.00

Report No: 2024410-B019

Ballast type: AC

Test No: 2024410-C019

Voltage(V): 34.800

LampCAT: CREE CXA1830 LES14

Current(A): 0.530

Lamp flux(lm): 2713.0

Power (W): 18.444

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2341.22, Efficiency(%): 86.30% , Luminous Efficacy(lm/W): 126.94

Central intensity(cd): 10738.500, Maximum intensity(cd): 10738.500

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=17.8

[C90/270]Total=17.8

Field angle(10%Imax): [C0/180]Total=51.2

[C90/270]Total=51.2

Maximum s/h(1/2): C0_180=0.30 C90_270=0.30

Maximum s/h(1/4): C0_180=0.37 C90_270=0.37

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 86.30%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.035%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/10
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 10738.498 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 10628.476 | 10.224 | 10.224 | 0.38% | 0.44% |
| 2.0 | 10363.808 | 30.130 | 40.354 | 1.11% | 1.72% |
| 3.0 | 9895.628 | 48.454 | 88.808 | 1.79% | 3.79% |
| 4.0 | 9292.261 | 64.228 | 153.036 | 2.37% | 6.54% |
| 5.0 | 8551.439 | 76.763 | 229.798 | 2.83% | 9.82% |
| 6.0 | 7673.602 | 85.267 | 315.065 | 3.14% | 13.46% |
| 7.0 | 6845.728 | 90.121 | 405.187 | 3.32% | 17.31% |
| 8.0 | 5994.591 | 91.896 | 497.082 | 3.39% | 21.23% |
| 9.0 | 5320.485 | 91.703 | 588.785 | 3.38% | 25.15% |
| 10.0 | 4698.757 | 90.670 | 679.455 | 3.34% | 29.02% |
| 11.0 | 4231.308 | 89.230 | 768.685 | 3.29% | 32.83% |
| 12.0 | 3776.442 | 87.536 | 856.221 | 3.23% | 36.57% |
| 13.0 | 3418.724 | 85.388 | 941.61 | 3.15% | 40.22% |
| 14.0 | 3101.019 | 83.452 | 1025.062 | 3.08% | 43.78% |
| 15.0 | 2818.283 | 81.263 | 1106.325 | 3.00% | 47.25% |
| 16.0 | 2561.003 | 78.822 | 1185.146 | 2.91% | 50.62% |
| 17.0 | 2316.964 | 75.963 | 1261.109 | 2.80% | 53.87% |
| 18.0 | 2109.868 | 72.989 | 1334.098 | 2.69% | 56.98% |
| 19.0 | 1920.548 | 70.121 | 1404.219 | 2.58% | 59.98% |
| 20.0 | 1755.880 | 67.289 | 1471.508 | 2.48% | 62.85% |
| 21.0 | 1599.259 | 64.425 | 1535.933 | 2.37% | 65.60% |
| 22.0 | 1410.846 | 60.489 | 1596.423 | 2.23% | 68.19% |
| 23.0 | 1279.807 | 56.457 | 1652.88 | 2.08% | 70.60% |
| 24.0 | 1211.957 | 54.479 | 1707.359 | 2.01% | 72.93% |
| 25.0 | 1123.149 | 53.095 | 1760.454 | 1.96% | 75.19% |
| 26.0 | 1045.819 | 51.199 | 1811.653 | 1.89% | 77.38% |
| 27.0 | 980.662 | 49.578 | 1861.231 | 1.83% | 79.50% |
| 28.0 | 919.359 | 48.104 | 1909.336 | 1.77% | 81.55% |
| 29.0 | 840.771 | 46.050 | 1955.385 | 1.70% | 83.52% |
| 30.0 | 761.831 | 43.270 | 1998.655 | 1.59% | 85.37% |
| 31.0 | 670.704 | 39.865 | 2038.521 | 1.47% | 87.07% |
| 32.0 | 586.125 | 36.007 | 2074.528 | 1.33% | 88.61% |
| 33.0 | 493.762 | 31.814 | 2106.341 | 1.17% | 89.97% |
| 34.0 | 408.816 | 27.315 | 2133.656 | 1.01% | 91.13% |
| 35.0 | 329.430 | 22.927 | 2156.583 | 0.85% | 92.11% |
| 36.0 | 265.846 | 18.954 | 2175.537 | 0.70% | 92.92% |
| 37.0 | 230.747 | 16.196 | 2191.733 | 0.60% | 93.62% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 151.998 | 12.775 | 2204.509 | 0.47% | 94.16% |
| 39.0 | 91.368 | 8.307 | 2212.815 | 0.31% | 94.52% |
| 40.0 | 73.395 | 5.746 | 2218.562 | 0.21% | 94.76% |
| 41.0 | 65.421 | 4.943 | 2223.505 | 0.18% | 94.97% |
| 42.0 | 61.039 | 4.595 | 2228.099 | 0.17% | 95.17% |
| 43.0 | 57.703 | 4.399 | 2232.498 | 0.16% | 95.36% |
| 44.0 | 54.843 | 4.248 | 2236.746 | 0.16% | 95.54% |
| 45.0 | 52.158 | 4.112 | 2240.858 | 0.15% | 95.71% |
| 46.0 | 49.773 | 3.986 | 2244.844 | 0.15% | 95.88% |
| 47.0 | 47.689 | 3.876 | 2248.72 | 0.14% | 96.05% |
| 48.0 | 45.969 | 3.786 | 2252.507 | 0.14% | 96.21% |
| 49.0 | 44.499 | 3.715 | 2256.222 | 0.14% | 96.37% |
| 50.0 | 43.160 | 3.655 | 2259.877 | 0.13% | 96.53% |
| 51.0 | 42.268 | 3.614 | 2263.491 | 0.13% | 96.68% |
| 52.0 | 41.558 | 3.597 | 2267.088 | 0.13% | 96.83% |
| 53.0 | 40.973 | 3.590 | 2270.678 | 0.13% | 96.99% |
| 54.0 | 40.607 | 3.596 | 2274.274 | 0.13% | 97.14% |
| 55.0 | 40.373 | 3.615 | 2277.889 | 0.13% | 97.29% |
| 56.0 | 39.825 | 3.624 | 2281.512 | 0.13% | 97.45% |
| 57.0 | 38.903 | 3.600 | 2285.112 | 0.13% | 97.60% |
| 58.0 | 37.454 | 3.531 | 2288.643 | 0.13% | 97.75% |
| 59.0 | 35.062 | 3.390 | 2292.033 | 0.12% | 97.90% |
| 60.0 | 32.239 | 3.180 | 2295.213 | 0.12% | 98.03% |
| 61.0 | 29.620 | 2.952 | 2298.165 | 0.11% | 98.16% |
| 62.0 | 26.818 | 2.720 | 2300.884 | 0.10% | 98.28% |
| 63.0 | 23.914 | 2.467 | 2303.352 | 0.09% | 98.38% |
| 64.0 | 20.995 | 2.204 | 2305.555 | 0.08% | 98.48% |
| 65.0 | 18.800 | 1.969 | 2307.525 | 0.07% | 98.56% |
| 66.0 | 17.118 | 1.792 | 2309.317 | 0.07% | 98.64% |
| 67.0 | 16.079 | 1.669 | 2310.986 | 0.06% | 98.71% |
| 68.0 | 15.465 | 1.598 | 2312.584 | 0.06% | 98.78% |
| 69.0 | 14.967 | 1.552 | 2314.136 | 0.06% | 98.84% |
| 70.0 | 14.579 | 1.517 | 2315.654 | 0.06% | 98.91% |
| 71.0 | 14.206 | 1.488 | 2317.142 | 0.05% | 98.97% |
| 72.0 | 13.899 | 1.461 | 2318.603 | 0.05% | 99.03% |
| 73.0 | 13.614 | 1.439 | 2320.042 | 0.05% | 99.10% |
| 74.0 | 13.350 | 1.418 | 2321.459 | 0.05% | 99.16% |
| 75.0 | 13.102 | 1.398 | 2322.857 | 0.05% | 99.22% |

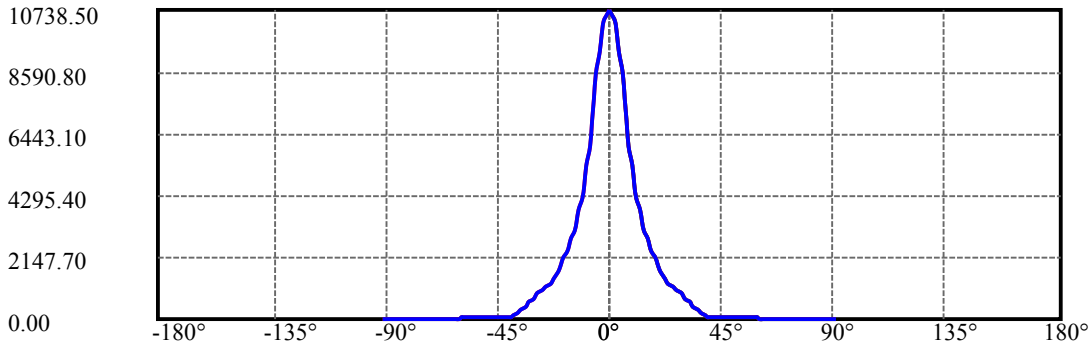
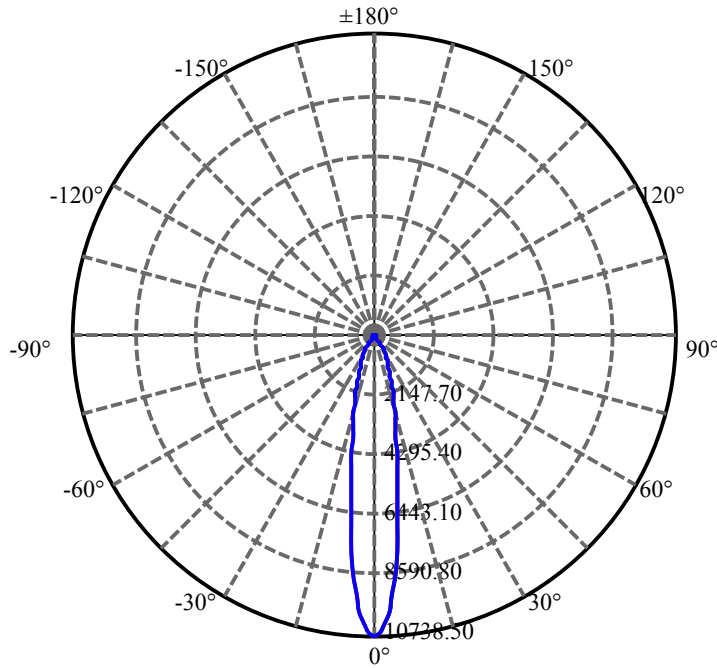
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 12.897 | 1.380 | 2324.237 | 0.05% | 99.27% |
| 77.0 | 12.685 | 1.364 | 2325.601 | 0.05% | 99.33% |
| 78.0 | 12.429 | 1.344 | 2326.945 | 0.05% | 99.39% |
| 79.0 | 12.173 | 1.322 | 2328.267 | 0.05% | 99.45% |
| 80.0 | 11.902 | 1.298 | 2329.565 | 0.05% | 99.50% |
| 81.0 | 11.617 | 1.272 | 2330.837 | 0.05% | 99.56% |
| 82.0 | 11.339 | 1.245 | 2332.082 | 0.05% | 99.61% |
| 83.0 | 11.083 | 1.219 | 2333.301 | 0.04% | 99.66% |
| 84.0 | 10.805 | 1.192 | 2334.493 | 0.04% | 99.71% |
| 85.0 | 10.578 | 1.167 | 2335.66 | 0.04% | 99.76% |
| 86.0 | 10.395 | 1.146 | 2336.807 | 0.04% | 99.81% |
| 87.0 | 10.205 | 1.127 | 2337.934 | 0.04% | 99.86% |
| 88.0 | 10.037 | 1.109 | 2339.043 | 0.04% | 99.91% |
| 89.0 | 9.905 | 1.093 | 2340.136 | 0.04% | 99.95% |
| 90.0 | 9.861 | 1.084 | 2341.219 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1998.66 | 73.67% | 85.37% |
| 0-40 | 2218.56 | 81.78% | 94.76% |
| 0-60 | 2295.21 | 84.60% | 98.03% |
| 0-90 | 2340.14 | 86.26% | 99.95% |
| 0-120 | 2340.14 | 86.26% | 99.95% |
| 0-180 | 2341.22 | 86.30% | 100.00% |
| 60-90 | 44.92 | 1.66% | 1.92% |
| 90-120 | 0.00 | 0.00% | 0.00% |
| 90-130 | 0.00 | 0.00% | 0.00% |
| 90-150 | 0.00 | 0.00% | 0.00% |
| 90-180 | 0.00 | 0.00% | 0.00% |
| 0-27.24 | 1872.98 | 69.04% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 679.46 |
| 10-20 | 792.05 |
| 20-30 | 527.15 |
| 30-40 | 219.91 |
| 40-50 | 41.31 |
| 50-60 | 35.34 |
| 60-70 | 20.44 |
| 70-80 | 13.91 |
| 80-90 | 10.57 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |



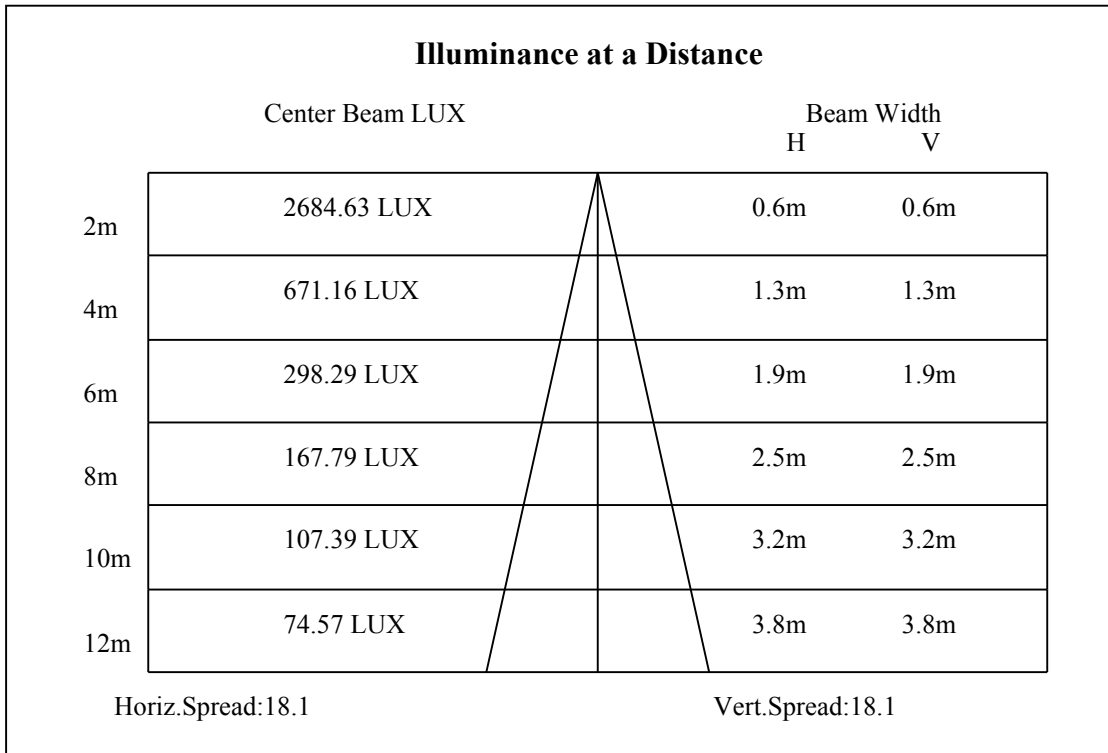
C0(Max): —————

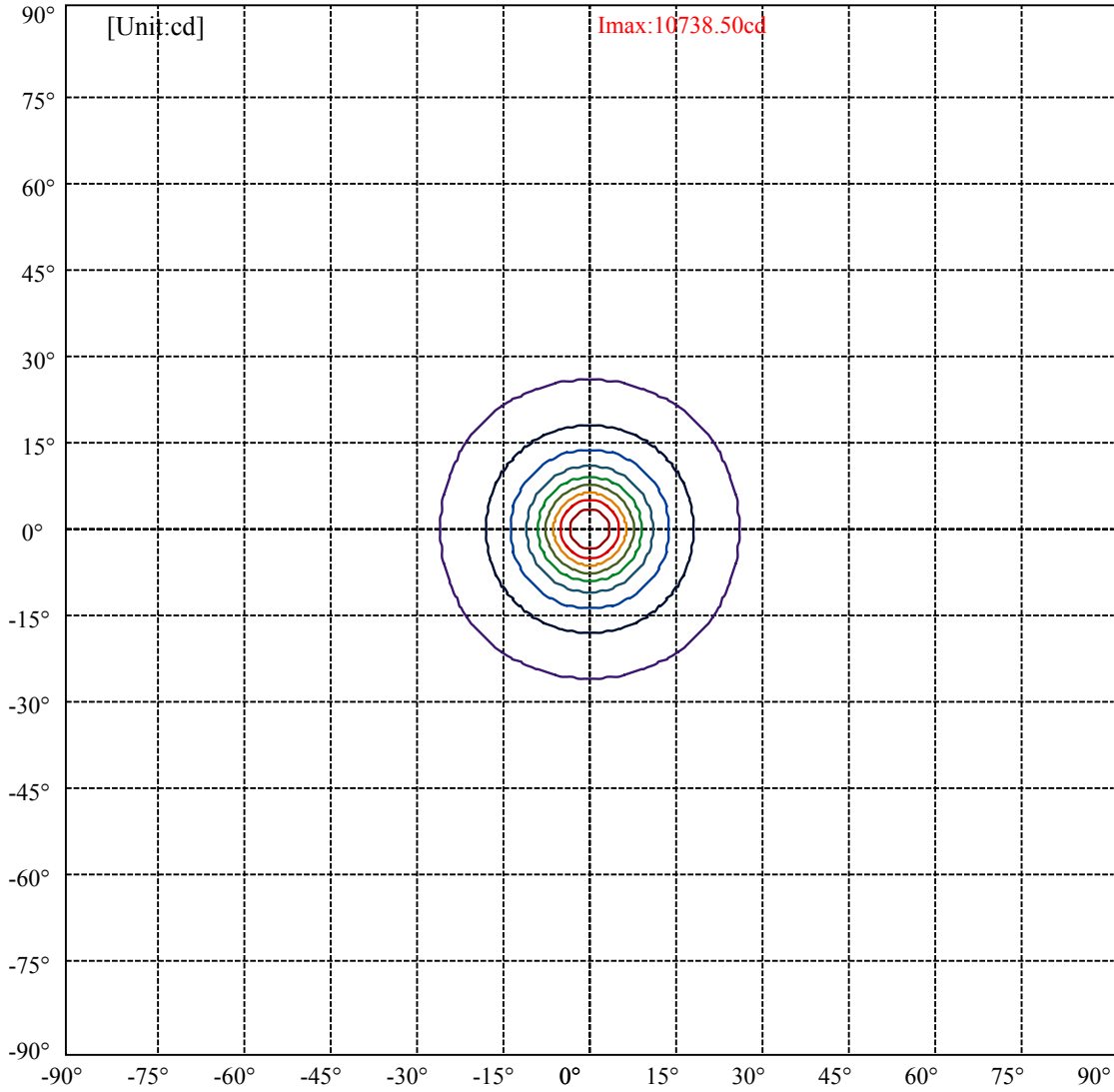
C0/C180: —————

C90/C270: —————

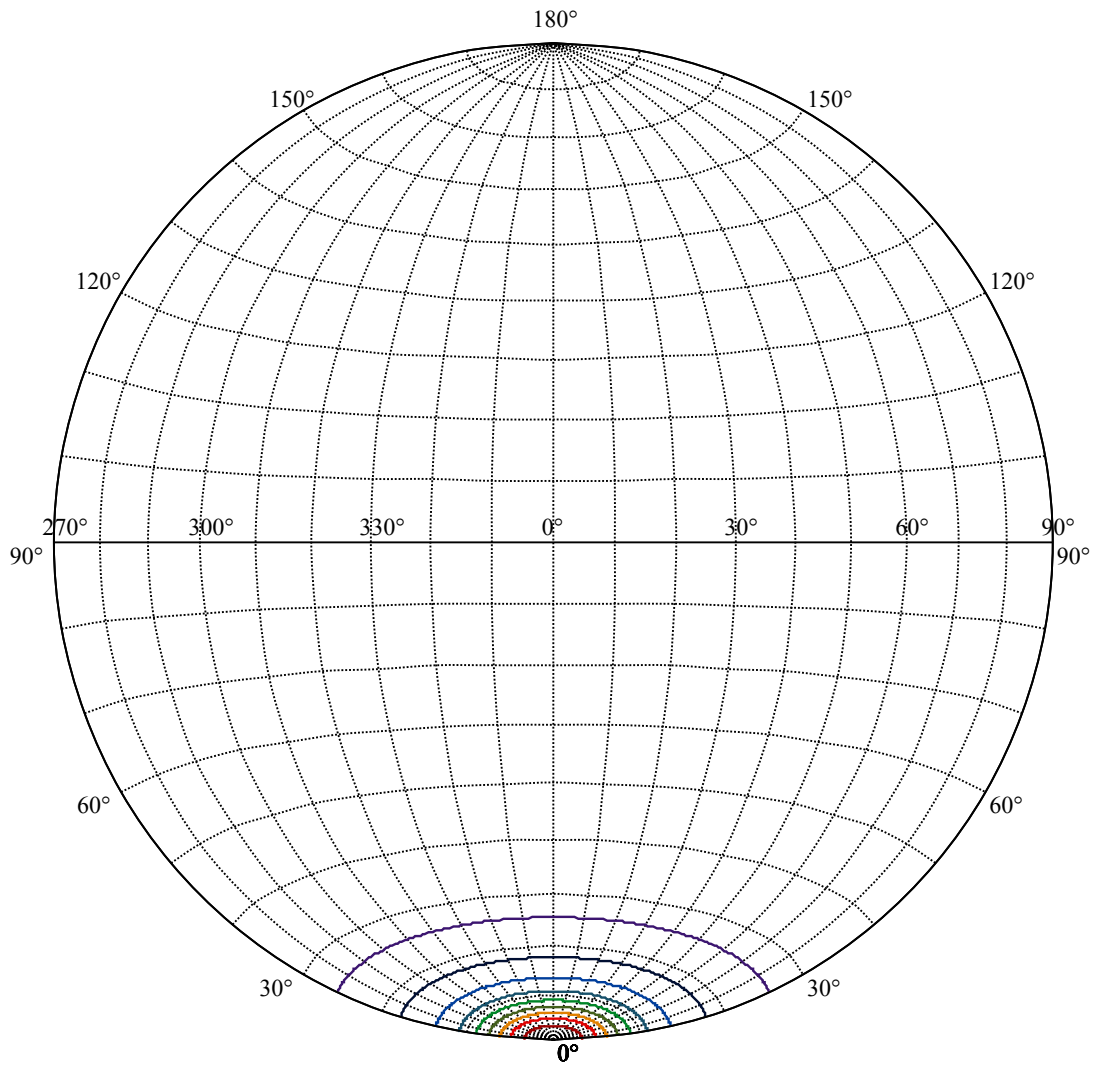
Field angle(10%Imax):C0/180Left:25.6 Right:25.6
:C90/270Left:25.6 Right:25.6

Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9
:C90/270Left:8.9 Right:8.9





| | |
|-------------------|---|
| (10%Imax) 1073.85 | — |
| (20%Imax) 2147.7 | — |
| (30%Imax) 3221.55 | — |
| (40%Imax) 4295.4 | — |
| (50%Imax) 5369.25 | — |
| (60%Imax) 6443.1 | — |
| (70%Imax) 7516.95 | — |
| (80%Imax) 8590.8 | — |
| (90%Imax) 9664.65 | — |



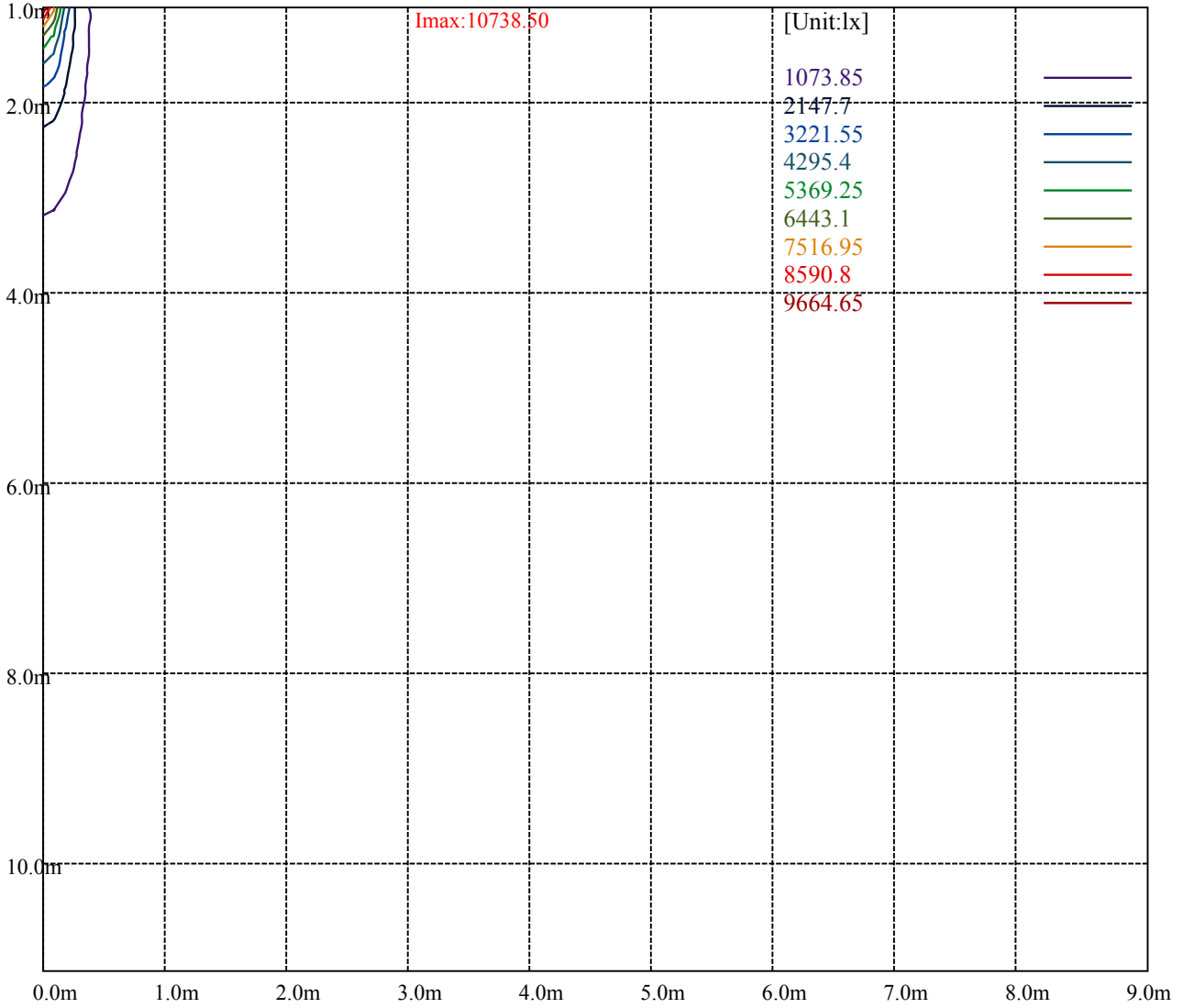
House

[Unit:cd]

Road

Imax:10738.50

| | |
|-------------------|---|
| (10%Imax) 1073.85 | — |
| (20%Imax) 2147.7 | — |
| (30%Imax) 3221.55 | — |
| (40%Imax) 4295.4 | — |
| (50%Imax) 5369.25 | — |
| (60%Imax) 6443.1 | — |
| (70%Imax) 7516.95 | — |
| (80%Imax) 8590.8 | — |
| (90%Imax) 9664.65 | — |



Luminance Table

| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Glare Table

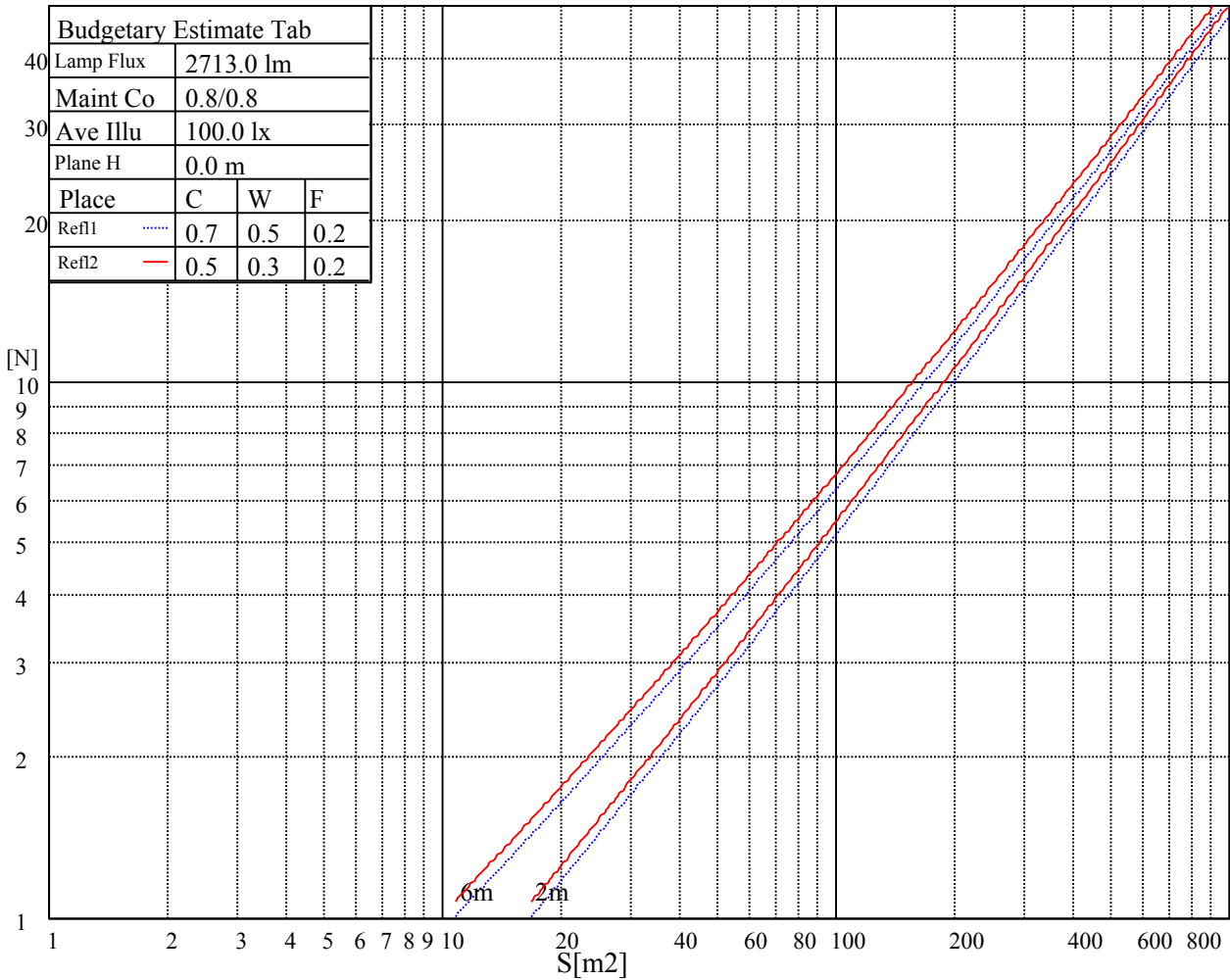
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.2 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |
| | | a | b | c | d | e | f | g | h |

Luminance Limiting Curve

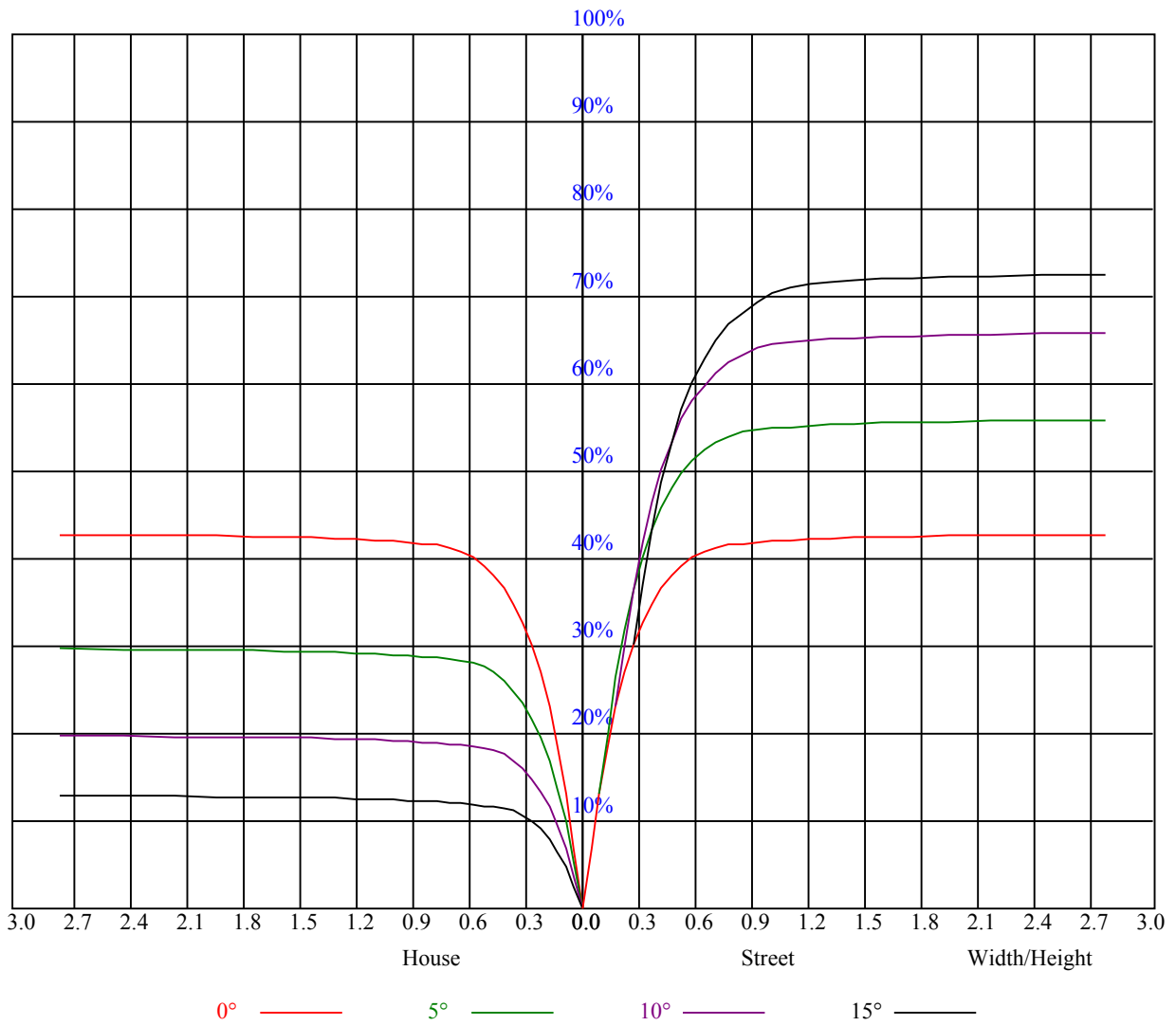


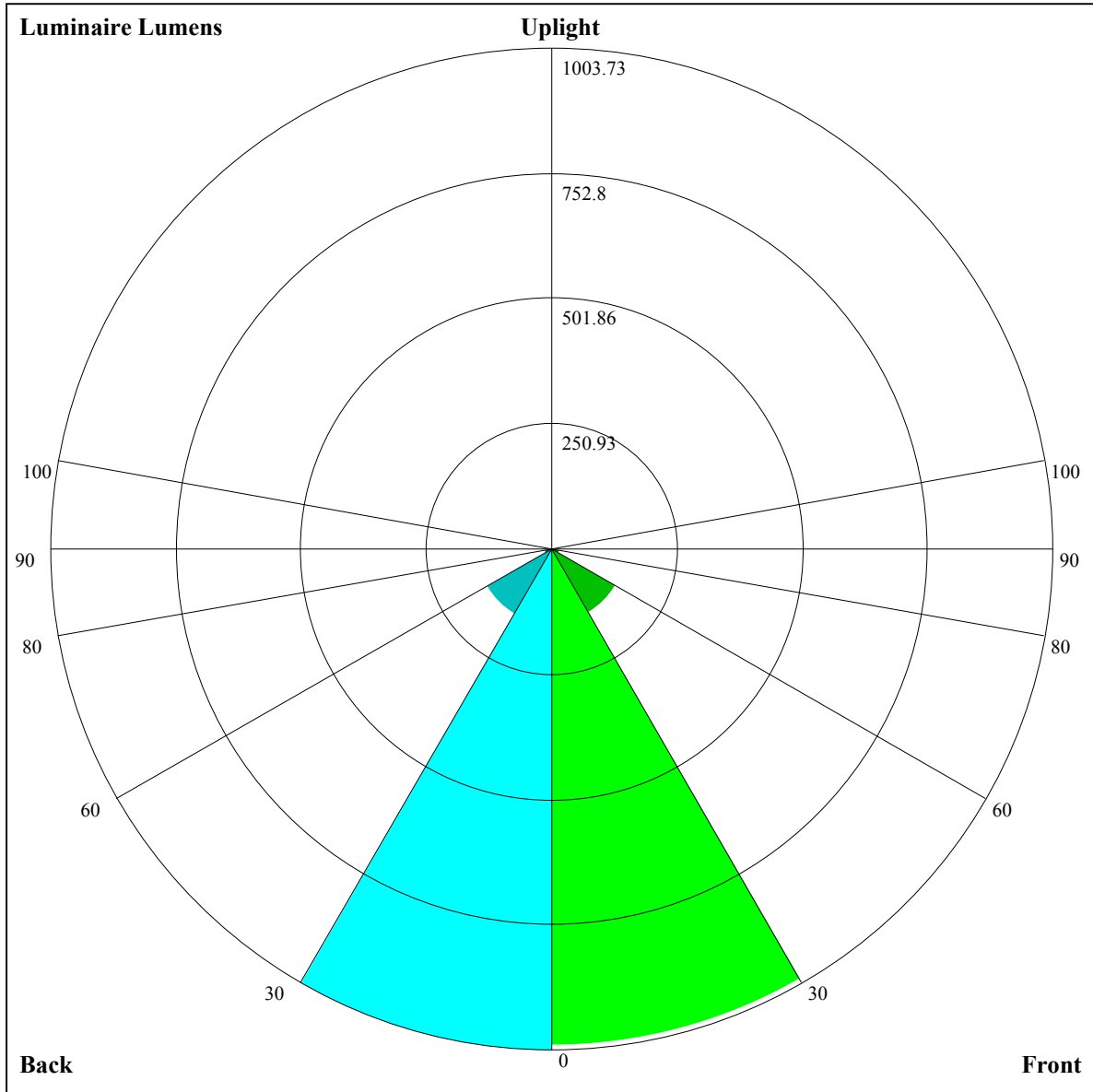
| Illumination assessment according UGR | | | | | | | | | | |
|---|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Rf of Floor | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room dimensions | Viewed crosswise | | | | | Viewed endwise | | | | |
| X | Y | | | | | | | | | |
| 2H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 4H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 8H | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 12H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| 12H | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| Variation with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| S = 1.5H | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| S = 2.0H | 非数字/非数字 | | | | | 非数字/非数字 | | | | |
| Standard tables: | BK0 | | | | | BK0 | | | | |
| Uncorrected UGR | 负无穷大 | | | | | 负无穷大 | | | | |

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| RHOCC | 80 | | | 70 | | | 50 | | | 30 | | | 10 | | | 0 |
|-------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| RHOW | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 |
| RCR | COEFFICIENTS OF UTILIZATION RHOF=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.03 | 1.03 | 1.03 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.86 |
| 1 | 0.96 | 0.94 | 0.93 | 0.94 | 0.93 | 0.91 | 0.91 | 0.90 | 0.88 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.82 |
| 2 | 0.91 | 0.88 | 0.85 | 0.89 | 0.87 | 0.84 | 0.87 | 0.84 | 0.82 | 0.84 | 0.82 | 0.81 | 0.82 | 0.80 | 0.79 | 0.78 |
| 3 | 0.86 | 0.82 | 0.80 | 0.85 | 0.82 | 0.79 | 0.83 | 0.80 | 0.78 | 0.81 | 0.78 | 0.76 | 0.79 | 0.77 | 0.75 | 0.74 |
| 4 | 0.82 | 0.78 | 0.75 | 0.81 | 0.77 | 0.74 | 0.79 | 0.76 | 0.74 | 0.78 | 0.75 | 0.73 | 0.76 | 0.74 | 0.72 | 0.71 |
| 5 | 0.78 | 0.74 | 0.71 | 0.77 | 0.73 | 0.71 | 0.76 | 0.73 | 0.70 | 0.75 | 0.72 | 0.69 | 0.73 | 0.71 | 0.69 | 0.68 |
| 6 | 0.75 | 0.71 | 0.68 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.67 | 0.72 | 0.69 | 0.66 | 0.71 | 0.68 | 0.66 | 0.65 |
| 7 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.69 | 0.66 | 0.64 | 0.68 | 0.66 | 0.63 | 0.62 |
| 8 | 0.69 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.68 | 0.64 | 0.62 | 0.67 | 0.64 | 0.61 | 0.66 | 0.63 | 0.61 | 0.60 |
| 9 | 0.66 | 0.62 | 0.60 | 0.66 | 0.62 | 0.60 | 0.65 | 0.62 | 0.59 | 0.65 | 0.61 | 0.59 | 0.64 | 0.61 | 0.59 | 0.58 |
| 10 | 0.64 | 0.60 | 0.57 | 0.64 | 0.60 | 0.57 | 0.63 | 0.60 | 0.57 | 0.63 | 0.59 | 0.57 | 0.62 | 0.59 | 0.57 | 0.56 |





Luminaire Lumens:

FL=993.24,FM=147.64,FH=17.23,FVH=5.84

BL=1003.73,BM=151.67,BH=17.21,BVH=5.83

UL=0,UH=0

BUG Rating:B3-U0-G0

Intensity data(cd)

| | | | | | | | | | |
|--------|----------|----------|----------|----------|---------|---------|---------|---------|---------|
| C/γ(°) | 0.0 | 1.0 | 2.0 | 3.0 | 4.0 | 5.0 | 6.0 | 7.0 | 8.0 |
| 0.0 | 10778.15 | 10561.61 | 10219.26 | 9722.99 | 9085.68 | 8131.76 | 7310.10 | 6505.42 | 5796.13 |
| 45.0 | 10668.13 | 10795.70 | 10730.74 | 10484.36 | 9929.57 | 9334.98 | 8619.84 | 7809.89 | 6748.29 |
| 90.0 | 10791.61 | 10697.97 | 10436.38 | 9996.29 | 9450.86 | 8581.21 | 7792.33 | 6754.73 | 5982.81 |
| 135.0 | 10716.11 | 10789.27 | 10709.09 | 10376.68 | 9918.45 | 9339.66 | 8447.78 | 7660.65 | 6651.14 |
| 180.0 | 10778.15 | 10748.30 | 10544.06 | 10067.68 | 9531.03 | 8891.97 | 7957.95 | 7132.78 | 6144.92 |
| 225.0 | 10668.13 | 10370.83 | 9926.64 | 9195.70 | 8505.13 | 7707.47 | 6663.43 | 5907.90 | 5249.53 |
| 270.0 | 10791.61 | 10700.90 | 10426.43 | 9975.80 | 9262.41 | 8564.83 | 7768.34 | 6923.27 | 5978.13 |
| 315.0 | 10716.11 | 10363.22 | 9917.87 | 9345.52 | 8654.95 | 7859.63 | 6829.05 | 6071.18 | 5405.78 |
| 360.0 | 10778.15 | 10561.61 | 10219.26 | 9722.99 | 9085.68 | 8131.76 | 7310.10 | 6505.42 | 5796.13 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 5030.65 | 4514.48 | 4065.62 | 3596.85 | 3284.93 | 2933.79 | 2689.75 | 2460.34 | 2250.83 |
| 45.0 | 5999.20 | 5333.80 | 4774.32 | 4198.46 | 3806.95 | 3459.91 | 3085.36 | 2820.26 | 2521.21 |
| 90.0 | 5316.24 | 4630.36 | 4187.93 | 3803.44 | 3385.00 | 3097.65 | 2838.40 | 2599.63 | 2322.82 |
| 135.0 | 5914.93 | 5273.52 | 4740.97 | 4183.25 | 3806.95 | 3464.59 | 3162.03 | 2826.11 | 2582.66 |
| 180.0 | 5466.06 | 4877.32 | 4372.27 | 3874.25 | 3519.02 | 3196.56 | 2912.72 | 2598.46 | 2381.92 |
| 225.0 | 4677.76 | 4100.73 | 3723.85 | 3384.41 | 3087.71 | 2754.71 | 2517.11 | 2301.16 | 2060.05 |
| 270.0 | 5332.63 | 4636.21 | 4158.08 | 3768.32 | 3352.23 | 3057.27 | 2793.92 | 2551.64 | 2291.21 |
| 315.0 | 4826.41 | 4223.63 | 3827.43 | 3402.56 | 3107.02 | 2843.67 | 2546.96 | 2330.42 | 2125.01 |
| 360.0 | 5030.65 | 4514.48 | 4065.62 | 3596.85 | 3284.93 | 2933.79 | 2689.75 | 2460.34 | 2250.83 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2020.84 | 1855.81 | 1700.14 | 1560.85 | 1400.50 | 1159.97 | 1159.97 | 1097.30 | 1016.24 |
| 45.0 | 2312.28 | 2119.16 | 1945.35 | 1747.54 | 1601.82 | 1473.66 | 1355.44 | 1226.69 | 1135.98 |
| 90.0 | 2131.45 | 1945.93 | 1786.75 | 1599.48 | 1461.95 | 1156.87 | 1156.87 | 1113.80 | 1026.54 |
| 135.0 | 2362.03 | 2169.49 | 1943.01 | 1786.17 | 1604.75 | 1472.48 | 1352.51 | 1216.74 | 1125.45 |
| 180.0 | 2186.46 | 1947.69 | 1788.51 | 1647.47 | 1473.07 | 1347.83 | 1247.76 | 1129.54 | 1062.24 |
| 225.0 | 1886.24 | 1693.70 | 1556.17 | 1433.27 | 1148.68 | 1148.68 | 1110.58 | 1039.94 | 983.65 |
| 270.0 | 2086.97 | 1899.70 | 1739.35 | 1562.61 | 1433.27 | 1316.23 | 1192.75 | 1112.57 | 1044.69 |
| 315.0 | 1892.68 | 1732.91 | 1587.77 | 1456.68 | 1162.73 | 1162.73 | 1119.77 | 1048.61 | 971.77 |
| 360.0 | 2020.84 | 1855.81 | 1700.14 | 1560.85 | 1400.50 | 1159.97 | 1159.97 | 1097.30 | 1016.24 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 959.30 | 901.07 | 814.34 | 734.46 | 649.66 | 545.49 | 466.25 | 386.78 | 292.44 |
| 45.0 | 1062.83 | 984.99 | 928.23 | 863.27 | 762.02 | 679.50 | 575.33 | 492.23 | 409.72 |
| 90.0 | 968.37 | 912.13 | 844.60 | 750.67 | 669.44 | 586.51 | 503.35 | 403.04 | 326.15 |
| 135.0 | 1050.54 | 987.33 | 911.84 | 843.95 | 762.02 | 680.09 | 576.51 | 495.16 | 416.15 |
| 180.0 | 996.11 | 942.27 | 863.85 | 785.43 | 695.89 | 619.81 | 513.89 | 425.52 | 352.95 |
| 225.0 | 913.95 | 848.11 | 768.46 | 686.59 | 582.24 | 499.96 | 419.78 | 325.56 | 256.27 |
| 270.0 | 976.21 | 922.96 | 834.59 | 754.41 | 673.07 | 588.79 | 484.62 | 406.20 | 330.71 |
| 315.0 | 917.98 | 856.01 | 760.27 | 675.88 | 571.30 | 488.84 | 410.36 | 336.04 | 251.06 |
| 360.0 | 959.30 | 901.07 | 814.34 | 734.46 | 649.66 | 545.49 | 466.25 | 386.78 | 292.44 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 223.38 | 163.75 | 107.39 | 80.76 | 69.41 | 64.14 | 60.04 | 56.77 | 53.55 |
| 45.0 | 332.47 | 313.74 | 227.07 | 119.68 | 86.09 | 68.82 | 63.91 | 60.69 | 58.29 |
| 90.0 | 254.57 | 190.67 | 123.37 | 86.38 | 67.71 | 62.68 | 59.28 | 56.24 | 53.49 |
| 135.0 | 320.76 | 302.62 | 302.62 | 115.00 | 83.63 | 70.34 | 63.73 | 60.04 | 57.29 |
| 180.0 | 301.45 | 301.45 | 140.63 | 92.76 | 74.21 | 67.42 | 62.21 | 59.46 | 56.42 |
| 225.0 | 192.01 | 123.72 | 88.31 | 69.99 | 64.32 | 60.10 | 57.12 | 53.31 | 50.86 |
| 270.0 | 311.98 | 311.98 | 127.34 | 91.76 | 73.97 | 66.07 | 61.98 | 58.70 | 54.78 |
| 315.0 | 190.14 | 138.05 | 99.25 | 74.62 | 67.83 | 63.79 | 60.04 | 56.42 | 54.07 |
| 360.0 | 223.38 | 163.75 | 107.39 | 80.76 | 69.41 | 64.14 | 60.04 | 56.77 | 53.55 |

Intensity data(cd)

| | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 45.0 | 46.0 | 47.0 | 48.0 | 49.0 | 50.0 | 51.0 | 52.0 | 53.0 |
| 0.0 | 51.21 | 48.57 | 46.64 | 44.77 | 43.60 | 42.08 | 41.20 | 40.91 | 40.26 |
| 45.0 | 54.60 | 52.32 | 50.27 | 47.87 | 46.06 | 44.89 | 43.42 | 42.25 | 41.90 |
| 90.0 | 51.21 | 49.28 | 46.82 | 44.95 | 43.83 | 42.66 | 41.55 | 40.97 | 40.44 |
| 135.0 | 53.96 | 51.85 | 49.80 | 47.58 | 45.53 | 44.13 | 42.90 | 41.67 | 41.08 |
| 180.0 | 53.61 | 50.68 | 48.87 | 47.40 | 45.59 | 43.95 | 42.72 | 42.43 | 41.84 |
| 225.0 | 48.69 | 46.58 | 44.71 | 43.42 | 42.25 | 41.02 | 40.91 | 40.15 | 39.62 |
| 270.0 | 52.55 | 49.74 | 47.34 | 45.82 | 44.65 | 43.19 | 42.49 | 41.96 | 41.20 |
| 315.0 | 51.44 | 49.16 | 47.05 | 45.94 | 44.48 | 43.37 | 42.96 | 42.14 | 41.43 |
| 360.0 | 51.21 | 48.57 | 46.64 | 44.77 | 43.60 | 42.08 | 41.20 | 40.91 | 40.26 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 39.74 | 39.85 | 39.44 | 38.57 | 36.87 | 33.83 | 31.02 | 28.50 | 25.75 |
| 45.0 | 41.43 | 40.79 | 40.61 | 40.50 | 39.85 | 38.45 | 36.28 | 33.30 | 29.73 |
| 90.0 | 40.09 | 40.26 | 39.85 | 38.86 | 37.45 | 34.70 | 31.78 | 29.03 | 27.04 |
| 135.0 | 40.61 | 40.15 | 39.85 | 39.56 | 38.62 | 36.69 | 34.41 | 31.49 | 28.03 |
| 180.0 | 41.26 | 40.79 | 40.38 | 39.62 | 37.92 | 35.99 | 33.24 | 30.14 | 27.74 |
| 225.0 | 39.50 | 39.33 | 38.04 | 36.40 | 34.88 | 32.30 | 28.73 | 26.98 | 24.29 |
| 270.0 | 40.91 | 40.73 | 40.15 | 39.09 | 37.45 | 35.52 | 32.01 | 29.50 | 27.27 |
| 315.0 | 41.32 | 41.08 | 40.26 | 38.62 | 36.58 | 33.01 | 30.43 | 28.03 | 24.70 |
| 360.0 | 39.74 | 39.85 | 39.44 | 38.57 | 36.87 | 33.83 | 31.02 | 28.50 | 25.75 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 22.82 | 19.55 | 17.73 | 16.44 | 15.80 | 15.16 | 14.69 | 14.40 | 14.05 |
| 45.0 | 27.62 | 24.81 | 21.19 | 18.79 | 16.85 | 16.09 | 15.57 | 15.10 | 14.57 |
| 90.0 | 23.47 | 20.54 | 18.61 | 16.97 | 15.92 | 15.39 | 14.92 | 14.51 | 14.10 |
| 135.0 | 25.98 | 23.23 | 20.37 | 17.97 | 16.56 | 15.74 | 15.10 | 14.75 | 14.40 |
| 180.0 | 25.05 | 21.65 | 19.49 | 17.38 | 16.33 | 15.68 | 15.16 | 14.75 | 14.34 |
| 225.0 | 21.19 | 18.67 | 17.03 | 15.86 | 15.39 | 14.92 | 14.46 | 14.10 | 13.87 |
| 270.0 | 23.53 | 20.83 | 18.67 | 17.15 | 15.98 | 15.51 | 15.04 | 14.57 | 14.22 |
| 315.0 | 21.65 | 18.67 | 17.32 | 16.39 | 15.80 | 15.22 | 14.81 | 14.46 | 14.10 |
| 360.0 | 22.82 | 19.55 | 17.73 | 16.44 | 15.80 | 15.16 | 14.69 | 14.40 | 14.05 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 13.75 | 13.40 | 13.23 | 12.99 | 12.76 | 12.58 | 12.29 | 12.06 | 11.82 |
| 45.0 | 14.28 | 13.99 | 13.69 | 13.40 | 13.23 | 12.99 | 12.76 | 12.52 | 12.29 |
| 90.0 | 13.87 | 13.58 | 13.28 | 13.11 | 12.93 | 12.64 | 12.47 | 12.23 | 11.94 |
| 135.0 | 13.93 | 13.75 | 13.40 | 13.17 | 12.99 | 12.82 | 12.64 | 12.41 | 12.11 |
| 180.0 | 14.10 | 13.75 | 13.52 | 13.23 | 13.05 | 12.82 | 12.52 | 12.29 | 12.06 |
| 225.0 | 13.58 | 13.28 | 13.11 | 12.87 | 12.64 | 12.41 | 12.17 | 11.94 | 11.59 |
| 270.0 | 13.93 | 13.64 | 13.34 | 13.11 | 12.82 | 12.64 | 12.35 | 12.06 | 11.82 |
| 315.0 | 13.75 | 13.52 | 13.23 | 12.93 | 12.76 | 12.58 | 12.23 | 11.88 | 11.59 |
| 360.0 | 13.75 | 13.40 | 13.23 | 12.99 | 12.76 | 12.58 | 12.29 | 12.06 | 11.82 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 11.53 | 11.24 | 11.00 | 10.71 | 10.53 | 10.36 | 10.18 | 10.01 | 9.83 |
| 45.0 | 11.88 | 11.65 | 11.35 | 11.12 | 10.83 | 10.59 | 10.42 | 10.24 | 10.07 |
| 90.0 | 11.65 | 11.41 | 11.12 | 10.83 | 10.65 | 10.42 | 10.24 | 10.07 | 9.89 |
| 135.0 | 11.88 | 11.53 | 11.35 | 11.06 | 10.77 | 10.53 | 10.36 | 10.18 | 10.01 |
| 180.0 | 11.76 | 11.41 | 11.18 | 10.83 | 10.59 | 10.42 | 10.24 | 10.01 | 9.89 |
| 225.0 | 11.35 | 11.06 | 10.77 | 10.53 | 10.30 | 10.24 | 10.01 | 9.89 | 9.83 |
| 270.0 | 11.53 | 11.29 | 11.00 | 10.77 | 10.53 | 10.30 | 10.12 | 9.95 | 9.83 |
| 315.0 | 11.35 | 11.12 | 10.89 | 10.59 | 10.42 | 10.30 | 10.07 | 9.95 | 9.89 |
| 360.0 | 11.53 | 11.24 | 11.00 | 10.71 | 10.53 | 10.36 | 10.18 | 10.01 | 9.83 |

Intensity data(cd)

| | |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0 | 9.89 |
| 45.0 | 9.89 |
| 90.0 | 9.83 |
| 135.0 | 9.89 |
| 180.0 | 9.83 |
| 225.0 | 9.83 |
| 270.0 | 9.83 |
| 315.0 | 9.89 |
| 360.0 | 9.89 |