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NT

Client:

LumCAT: 2-2689-L

Luminaire: 92.70.411.00

Report No: 2024418-B024

Ballast type: AC

Test No: 2024418-C024

Voltage(V): 33.670

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.576

Lamp flux(lm): 2726.0

Power (W): 19.393

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2265.75, Efficiency(%): 83.12% , Luminous Efficacy(lm/W): 116.83

Central intensity(cd): 4272.787, Maximum intensity(cd): 4272.787

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=42.8

[C90/270]Total=42.8

Field angle(10%Imax): [C0/180]Total=66.6

[C90/270]Total=66.6

Maximum s/h(1/2): C0_180=0.68 C90_270=0.68

Maximum s/h(1/4): C0_180=0.67 C90_270=0.67

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 83.12%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.548%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/18
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 | 4272.786 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 4272.055 | 4.089 | 4.089 | 0.15% | 0.18% |
| 2.0 | 4260.716 | 12.247 | 16.336 | 0.45% | 0.72% |
| 3.0 | 4240.599 | 20.332 | 36.668 | 0.75% | 1.62% |
| 4.0 | 4209.070 | 28.284 | 64.952 | 1.04% | 2.87% |
| 5.0 | 4159.326 | 36.000 | 100.952 | 1.32% | 4.46% |
| 6.0 | 4100.145 | 43.406 | 144.358 | 1.59% | 6.37% |
| 7.0 | 4033.941 | 50.488 | 194.846 | 1.85% | 8.60% |
| 8.0 | 3947.767 | 57.124 | 251.97 | 2.10% | 11.12% |
| 9.0 | 3845.499 | 63.160 | 315.13 | 2.32% | 13.91% |
| 10.0 | 3739.573 | 68.642 | 383.772 | 2.52% | 16.94% |
| 11.0 | 3629.478 | 73.632 | 457.404 | 2.70% | 20.19% |
| 12.0 | 3501.094 | 77.947 | 535.351 | 2.86% | 23.63% |
| 13.0 | 3359.543 | 81.418 | 616.77 | 2.99% | 27.22% |
| 14.0 | 3219.893 | 84.216 | 700.986 | 3.09% | 30.94% |
| 15.0 | 3078.488 | 86.467 | 787.453 | 3.17% | 34.75% |
| 16.0 | 2945.423 | 88.267 | 875.72 | 3.24% | 38.65% |
| 17.0 | 2784.120 | 89.224 | 964.944 | 3.27% | 42.59% |
| 18.0 | 2645.714 | 89.526 | 1054.471 | 3.28% | 46.54% |
| 19.0 | 2498.677 | 89.502 | 1143.972 | 3.28% | 50.49% |
| 20.0 | 2353.541 | 88.809 | 1232.781 | 3.26% | 54.41% |
| 21.0 | 2203.065 | 87.496 | 1320.278 | 3.21% | 58.27% |
| 22.0 | 2030.058 | 85.066 | 1405.344 | 3.12% | 62.03% |
| 23.0 | 1882.581 | 82.098 | 1487.442 | 3.01% | 65.65% |
| 24.0 | 1715.426 | 78.665 | 1566.107 | 2.89% | 69.12% |
| 25.0 | 1519.654 | 73.559 | 1639.666 | 2.70% | 72.37% |
| 26.0 | 1385.425 | 68.575 | 1708.24 | 2.52% | 75.39% |
| 27.0 | 1209.133 | 63.476 | 1771.717 | 2.33% | 78.20% |
| 28.0 | 1094.751 | 58.329 | 1830.046 | 2.14% | 80.77% |
| 29.0 | 946.323 | 53.400 | 1883.447 | 1.96% | 83.13% |
| 30.0 | 797.318 | 47.078 | 1930.525 | 1.73% | 85.20% |
| 31.0 | 665.847 | 40.718 | 1971.242 | 1.49% | 87.00% |
| 32.0 | 557.288 | 35.041 | 2006.284 | 1.29% | 88.55% |
| 33.0 | 452.269 | 29.742 | 2036.026 | 1.09% | 89.86% |
| 34.0 | 356.307 | 24.470 | 2060.496 | 0.90% | 90.94% |
| 35.0 | 297.002 | 20.289 | 2080.785 | 0.74% | 91.84% |
| 36.0 | 243.600 | 17.213 | 2097.998 | 0.63% | 92.60% |
| 37.0 | 195.494 | 14.321 | 2112.319 | 0.53% | 93.23% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 145.033 | 11.366 | 2123.685 | 0.42% | 93.73% |
| 39.0 | 112.341 | 8.785 | 2132.47 | 0.32% | 94.12% |
| 40.0 | 93.058 | 7.164 | 2139.633 | 0.26% | 94.43% |
| 41.0 | 79.188 | 6.134 | 2145.767 | 0.23% | 94.70% |
| 42.0 | 68.223 | 5.356 | 2151.123 | 0.20% | 94.94% |
| 43.0 | 60.951 | 4.785 | 2155.908 | 0.18% | 95.15% |
| 44.0 | 56.006 | 4.414 | 2160.322 | 0.16% | 95.35% |
| 45.0 | 51.822 | 4.144 | 2164.466 | 0.15% | 95.53% |
| 46.0 | 48.574 | 3.926 | 2168.392 | 0.14% | 95.70% |
| 47.0 | 45.669 | 3.748 | 2172.14 | 0.14% | 95.87% |
| 48.0 | 43.219 | 3.593 | 2175.734 | 0.13% | 96.03% |
| 49.0 | 41.149 | 3.465 | 2179.198 | 0.13% | 96.18% |
| 50.0 | 38.910 | 3.338 | 2182.536 | 0.12% | 96.33% |
| 51.0 | 36.972 | 3.210 | 2185.747 | 0.12% | 96.47% |
| 52.0 | 35.231 | 3.098 | 2188.845 | 0.11% | 96.61% |
| 53.0 | 33.672 | 2.997 | 2191.842 | 0.11% | 96.74% |
| 54.0 | 32.100 | 2.899 | 2194.741 | 0.11% | 96.87% |
| 55.0 | 30.549 | 2.797 | 2197.538 | 0.10% | 96.99% |
| 56.0 | 29.305 | 2.705 | 2200.242 | 0.10% | 97.11% |
| 57.0 | 28.010 | 2.621 | 2202.863 | 0.10% | 97.22% |
| 58.0 | 26.781 | 2.534 | 2205.397 | 0.09% | 97.34% |
| 59.0 | 25.552 | 2.447 | 2207.843 | 0.09% | 97.44% |
| 60.0 | 24.382 | 2.359 | 2210.202 | 0.09% | 97.55% |
| 61.0 | 23.329 | 2.277 | 2212.479 | 0.08% | 97.65% |
| 62.0 | 22.246 | 2.196 | 2214.675 | 0.08% | 97.75% |
| 63.0 | 21.171 | 2.112 | 2216.787 | 0.08% | 97.84% |
| 64.0 | 20.271 | 2.034 | 2218.82 | 0.07% | 97.93% |
| 65.0 | 19.671 | 1.977 | 2220.797 | 0.07% | 98.02% |
| 66.0 | 19.312 | 1.945 | 2222.742 | 0.07% | 98.10% |
| 67.0 | 19.312 | 1.942 | 2224.684 | 0.07% | 98.19% |
| 68.0 | 19.488 | 1.966 | 2226.65 | 0.07% | 98.27% |
| 69.0 | 19.832 | 2.006 | 2228.656 | 0.07% | 98.36% |
| 70.0 | 20.271 | 2.060 | 2230.715 | 0.08% | 98.45% |
| 71.0 | 20.805 | 2.123 | 2232.838 | 0.08% | 98.55% |
| 72.0 | 21.463 | 2.198 | 2235.036 | 0.08% | 98.64% |
| 73.0 | 22.026 | 2.274 | 2237.31 | 0.08% | 98.74% |
| 74.0 | 22.399 | 2.336 | 2239.646 | 0.09% | 98.85% |
| 75.0 | 22.392 | 2.367 | 2242.012 | 0.09% | 98.95% |

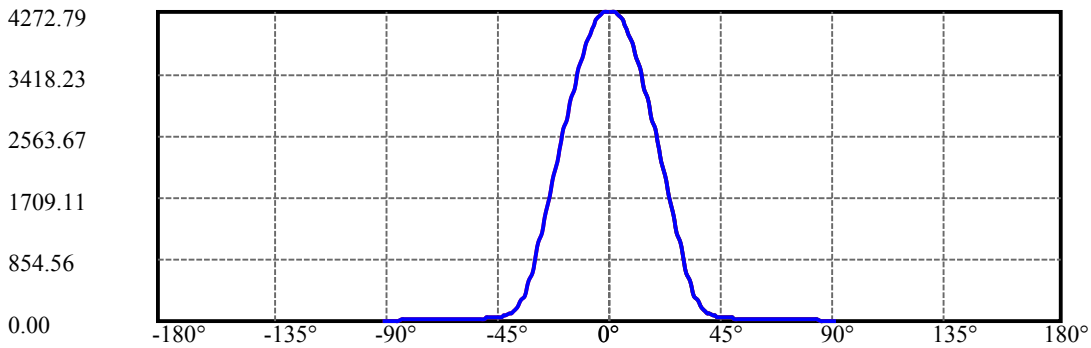
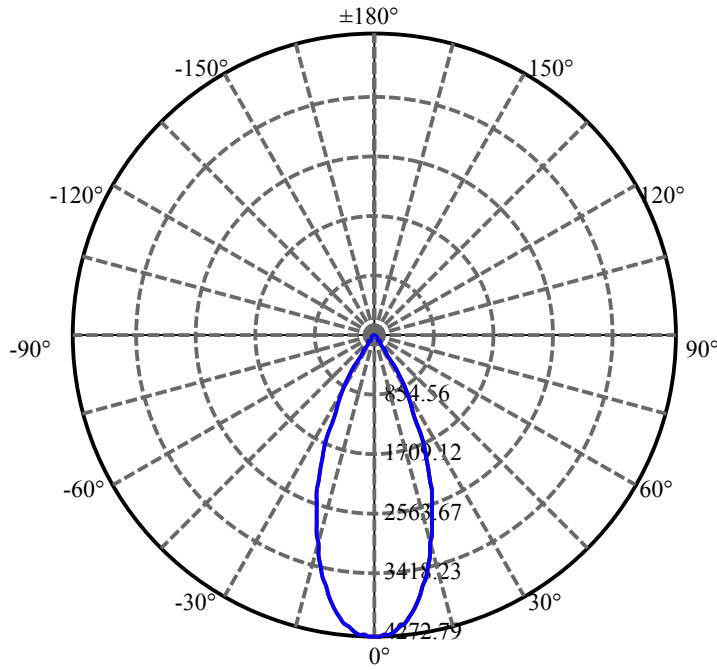
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 21.712 | 2.341 | 2244.354 | 0.09% | 99.06% |
| 77.0 | 20.688 | 2.261 | 2246.614 | 0.08% | 99.16% |
| 78.0 | 19.378 | 2.145 | 2248.759 | 0.08% | 99.25% |
| 79.0 | 17.937 | 2.005 | 2250.764 | 0.07% | 99.34% |
| 80.0 | 16.108 | 1.835 | 2252.599 | 0.07% | 99.42% |
| 81.0 | 14.696 | 1.666 | 2254.265 | 0.06% | 99.49% |
| 82.0 | 13.877 | 1.549 | 2255.815 | 0.06% | 99.56% |
| 83.0 | 13.409 | 1.483 | 2257.298 | 0.05% | 99.63% |
| 84.0 | 12.948 | 1.436 | 2258.734 | 0.05% | 99.69% |
| 85.0 | 12.019 | 1.363 | 2260.097 | 0.05% | 99.75% |
| 86.0 | 10.805 | 1.248 | 2261.344 | 0.05% | 99.81% |
| 87.0 | 10.241 | 1.152 | 2262.496 | 0.04% | 99.86% |
| 88.0 | 9.920 | 1.104 | 2263.6 | 0.04% | 99.91% |
| 89.0 | 9.795 | 1.081 | 2264.681 | 0.04% | 99.95% |
| 90.0 | 9.685 | 1.068 | 2265.749 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1930.52 | 70.82% | 85.20% |
| 0-40 | 2139.63 | 78.49% | 94.43% |
| 0-60 | 2210.20 | 81.08% | 97.55% |
| 0-90 | 2264.68 | 83.08% | 99.95% |
| 0-120 | 2264.68 | 83.08% | 99.95% |
| 0-180 | 2265.75 | 83.12% | 100.00% |
| 60-90 | 54.48 | 2.00% | 2.40% |
| 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% |
| 0-27.70 | 1812.60 | 66.49% | 80.00% |

ZONAL LUMEN SUMMARY

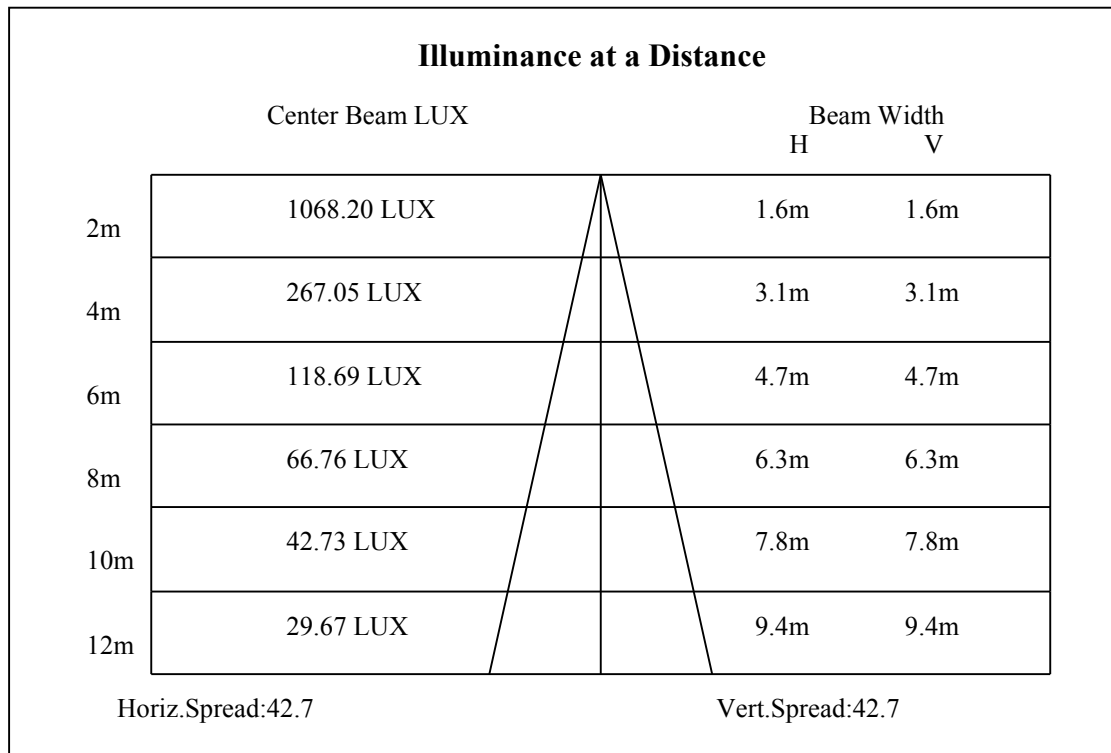
| | |
|---------|--------|
| 0-10 | 383.77 |
| 10-20 | 849.01 |
| 20-30 | 697.74 |
| 30-40 | 209.11 |
| 40-50 | 42.90 |
| 50-60 | 27.67 |
| 60-70 | 20.51 |
| 70-80 | 21.88 |
| 80-90 | 12.08 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

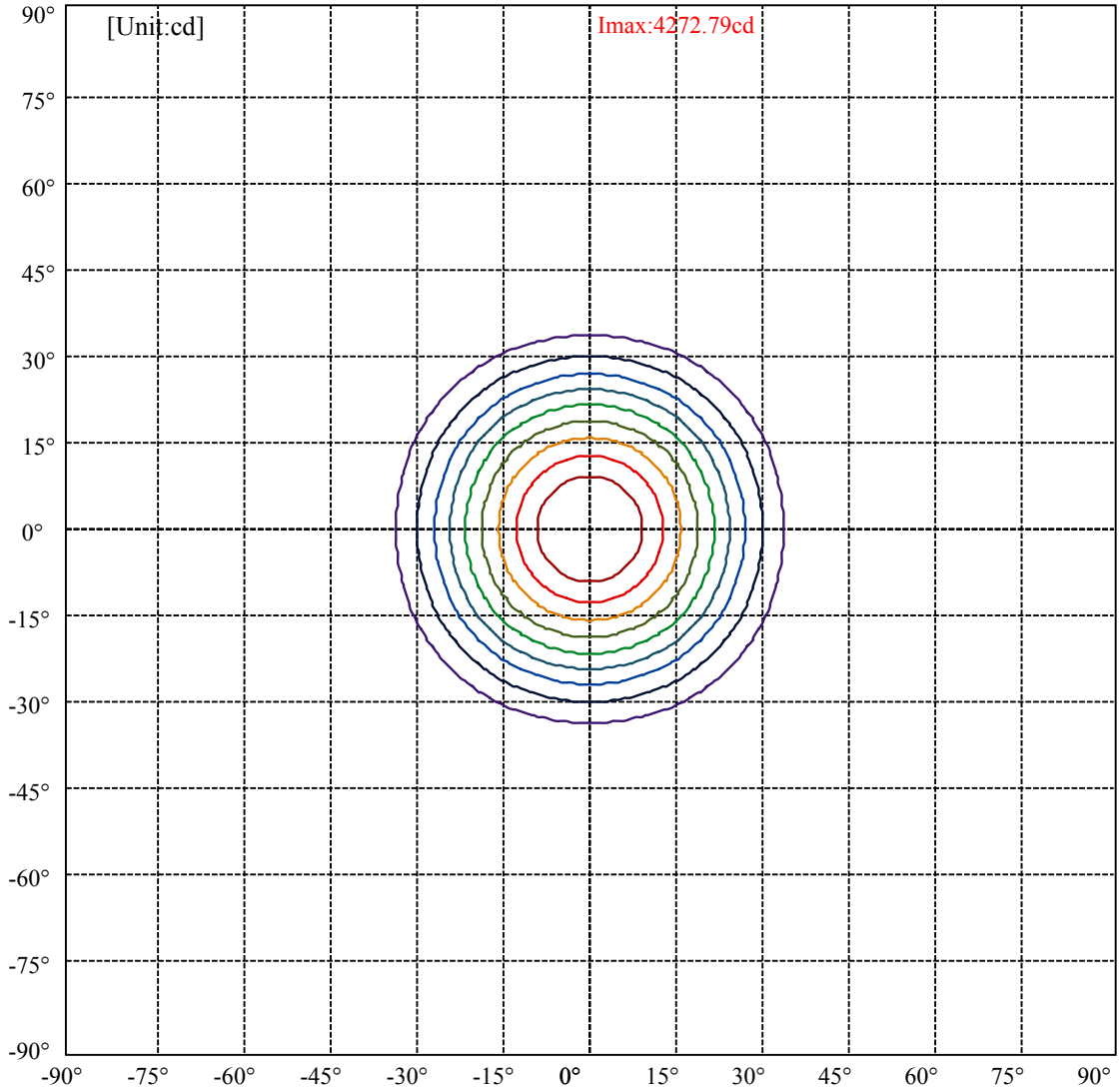


C0(Max): —————
C0/C180: —————
C90/C270: —————

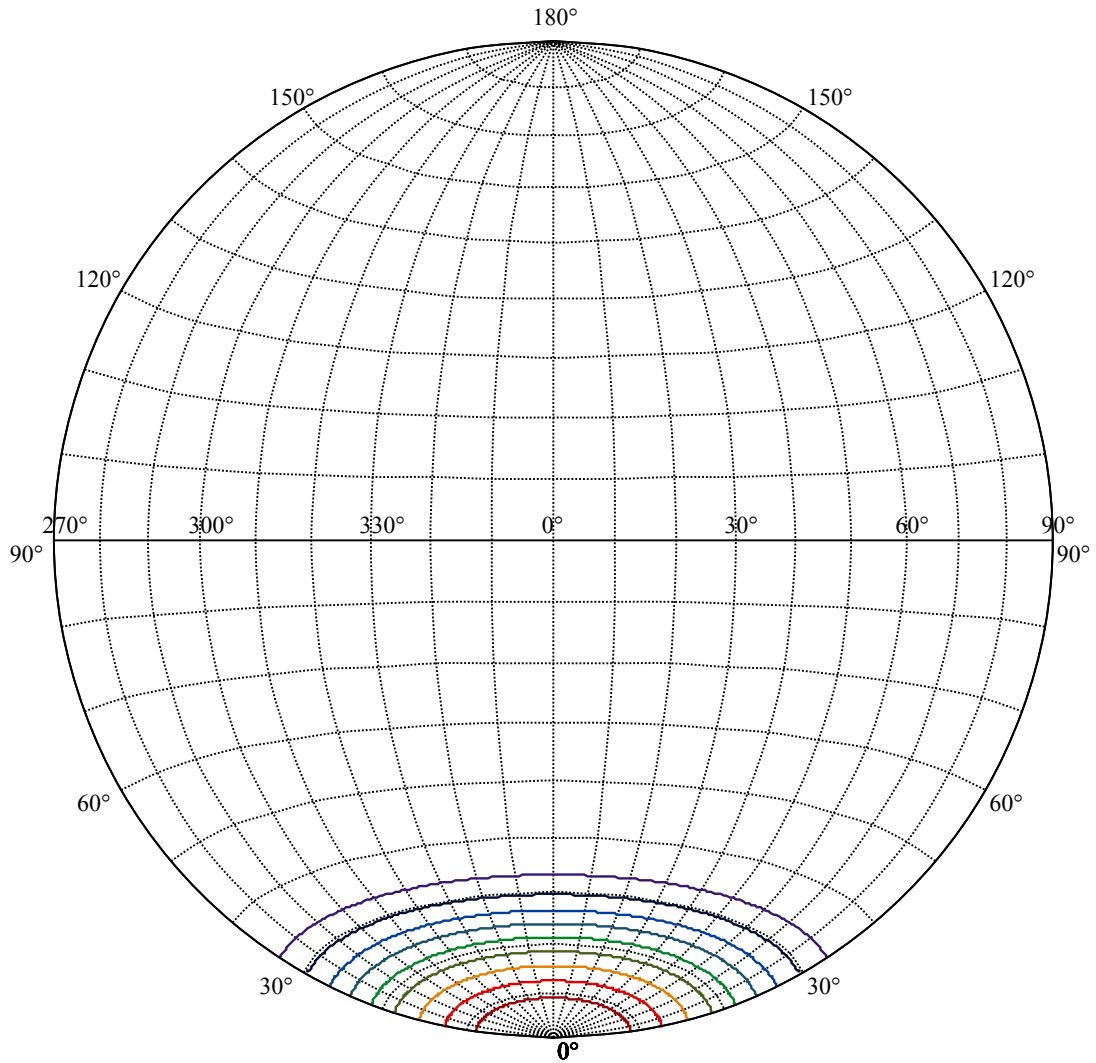
Field angle(10%Imax):C0/180Left:33.3 Right:33.3
:C90/270Left:33.3 Right:33.3

Beam Angle(50%Imax):C0/180Left:21.4 Right:21.4
:C90/270Left:21.4 Right:21.4





| | |
|-------------------|---|
| (10%Imax) 427.279 | — |
| (20%Imax) 854.557 | — |
| (30%Imax) 1281.84 | — |
| (40%Imax) 1709.11 | — |
| (50%Imax) 2136.39 | — |
| (60%Imax) 2563.67 | — |
| (70%Imax) 2990.95 | — |
| (80%Imax) 3418.23 | — |
| (90%Imax) 3845.51 | — |



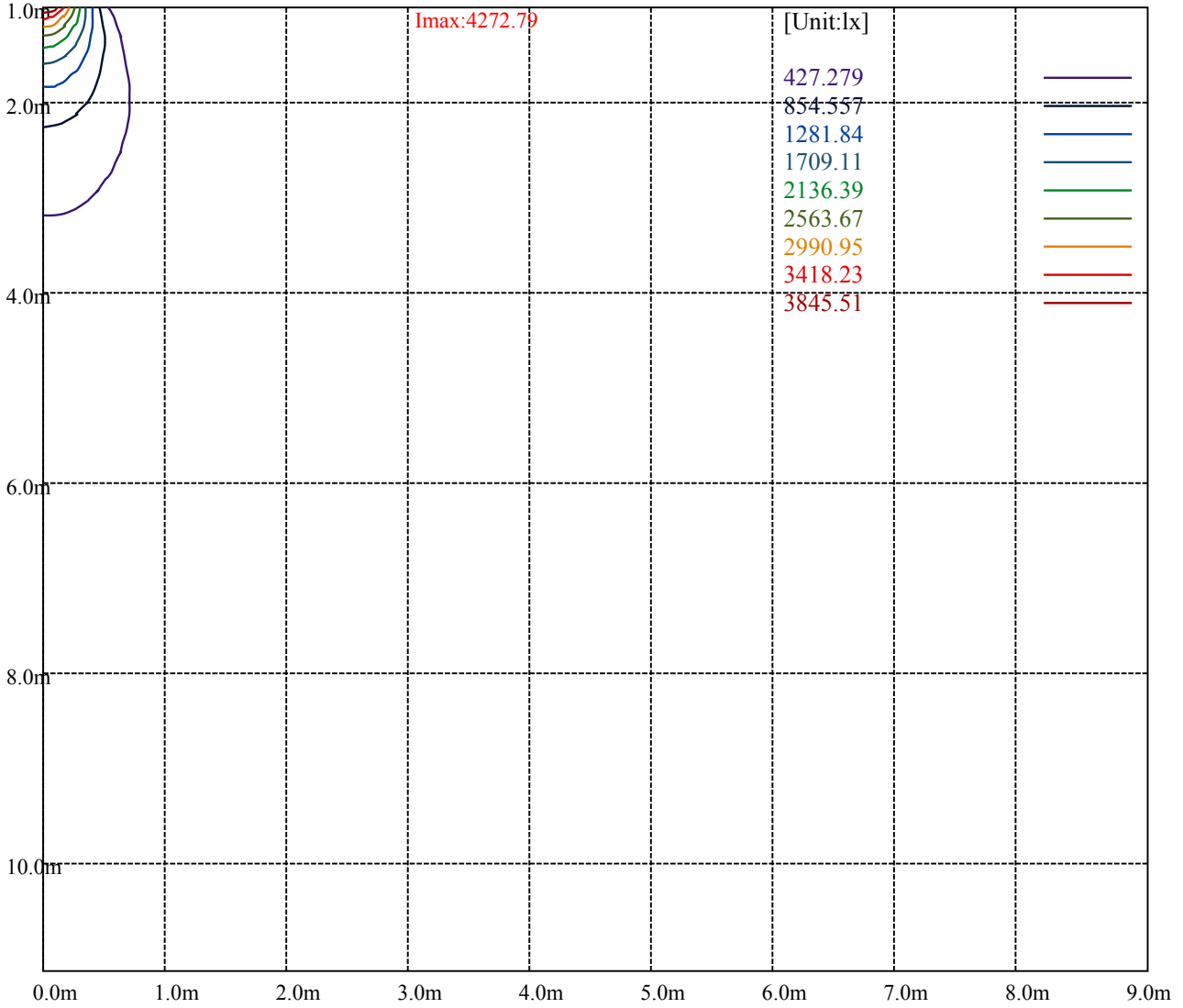
House

[Unit:cd]

Road

Imax:4272.79

| | | |
|-----------|---------|---|
| (10%Imax) | 427.279 | — |
| (20%Imax) | 854.557 | — |
| (30%Imax) | 1281.84 | — |
| (40%Imax) | 1709.11 | — |
| (50%Imax) | 2136.39 | — |
| (60%Imax) | 2563.67 | — |
| (70%Imax) | 2990.95 | — |
| (80%Imax) | 3418.23 | — |
| (90%Imax) | 3845.51 | — |



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

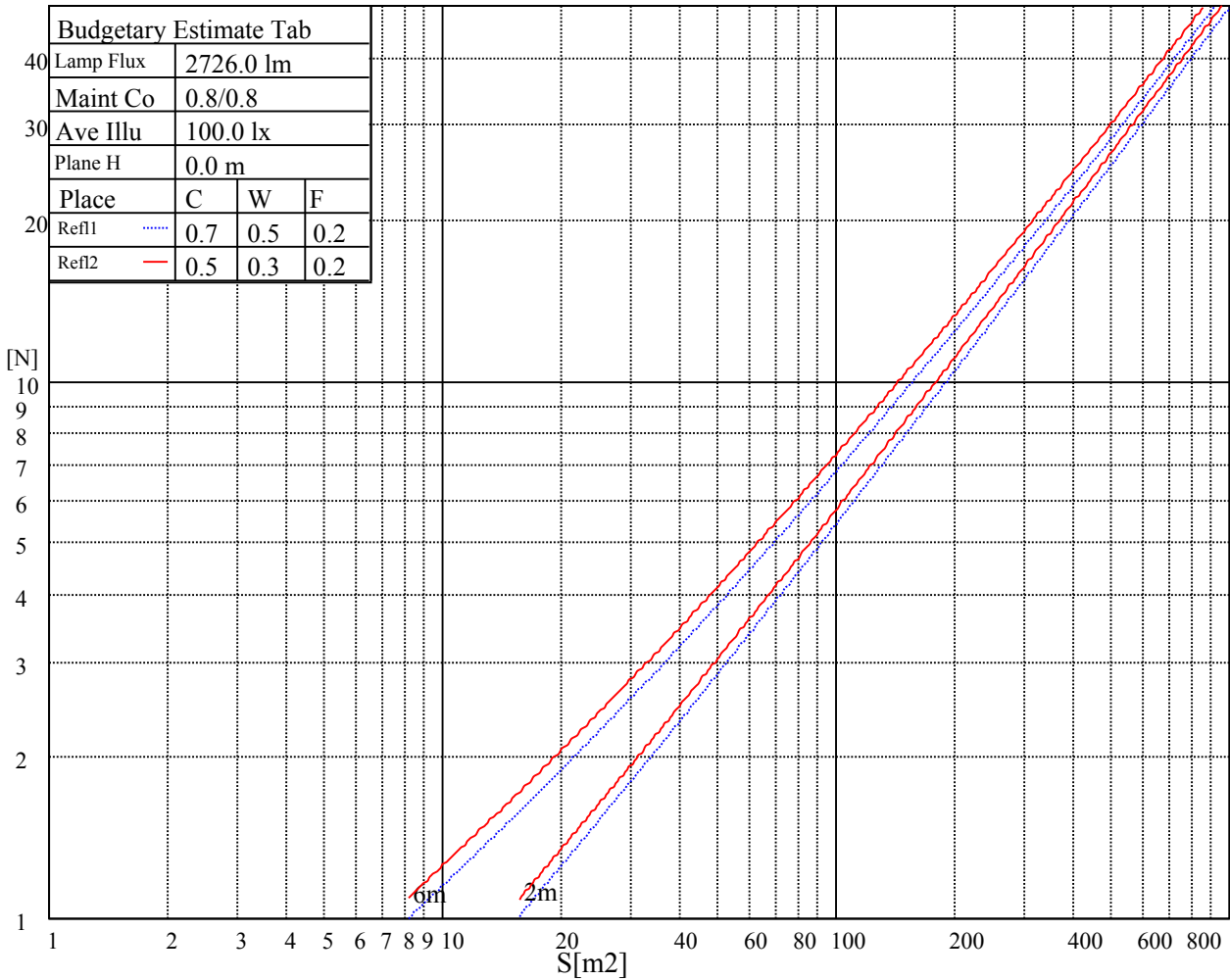
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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

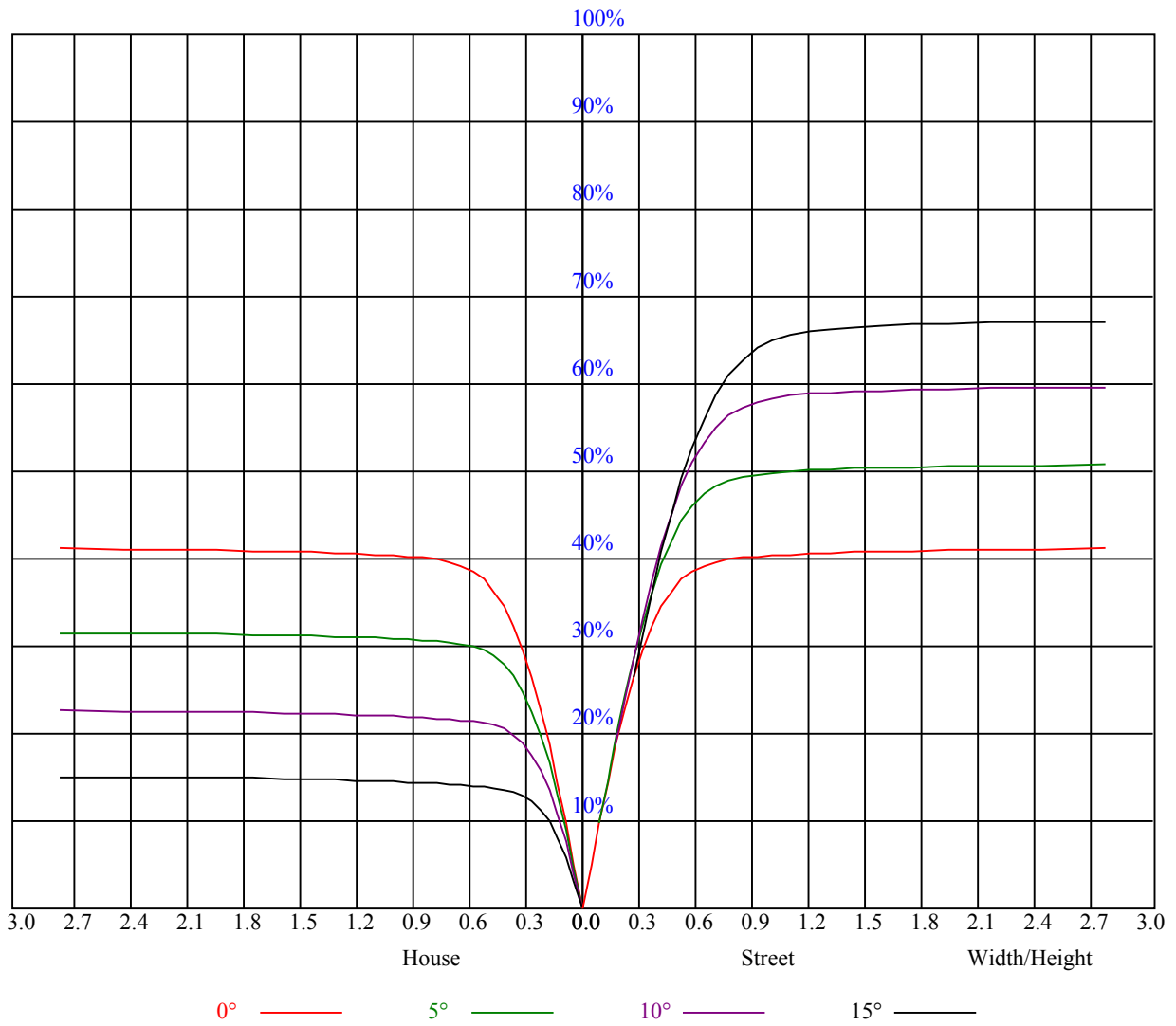


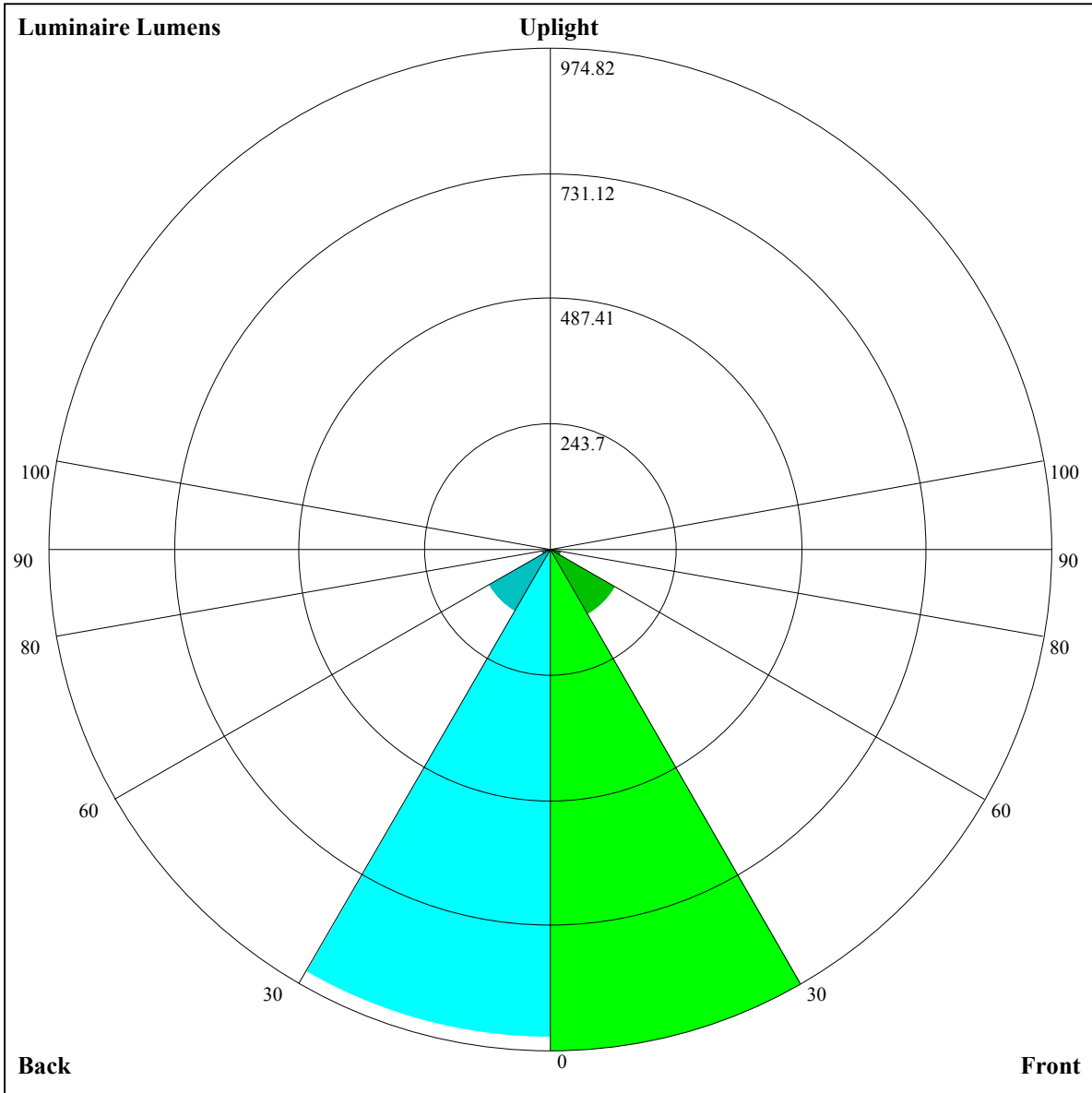
| Illumination assessment according UGR | | | | | | | | | | | |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf 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 | 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 | 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 | 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 | 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 | 非数字 |
| 4H | 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 | 非数字 |
| | 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 | 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 | 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 | 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 | 非数字 |
| 8H | 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 | 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 | 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 | 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 | 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 | 非数字 |
| 12H | 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 | 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 | 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 | 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 | 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 RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 0.99 | 0.99 | 0.99 | 0.97 | 0.97 | 0.97 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.85 | 0.85 | 0.85 | 0.83 |
| 1 | 0.92 | 0.90 | 0.88 | 0.90 | 0.89 | 0.87 | 0.87 | 0.86 | 0.84 | 0.84 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 |
| 2 | 0.86 | 0.83 | 0.81 | 0.85 | 0.82 | 0.80 | 0.82 | 0.80 | 0.78 | 0.80 | 0.78 | 0.76 | 0.78 | 0.76 | 0.75 | 0.73 |
| 3 | 0.81 | 0.78 | 0.75 | 0.80 | 0.77 | 0.74 | 0.78 | 0.75 | 0.73 | 0.76 | 0.74 | 0.72 | 0.74 | 0.72 | 0.71 | 0.69 |
| 4 | 0.77 | 0.73 | 0.70 | 0.76 | 0.72 | 0.69 | 0.74 | 0.71 | 0.68 | 0.73 | 0.70 | 0.68 | 0.71 | 0.69 | 0.67 | 0.66 |
| 5 | 0.73 | 0.69 | 0.65 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.65 | 0.69 | 0.66 | 0.64 | 0.68 | 0.66 | 0.63 | 0.62 |
| 6 | 0.69 | 0.65 | 0.62 | 0.69 | 0.65 | 0.61 | 0.68 | 0.64 | 0.61 | 0.66 | 0.63 | 0.61 | 0.65 | 0.63 | 0.60 | 0.59 |
| 7 | 0.66 | 0.62 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.64 | 0.60 | 0.58 | 0.63 | 0.60 | 0.57 | 0.56 |
| 8 | 0.63 | 0.59 | 0.56 | 0.63 | 0.58 | 0.55 | 0.62 | 0.58 | 0.55 | 0.61 | 0.57 | 0.55 | 0.60 | 0.57 | 0.55 | 0.54 |
| 9 | 0.60 | 0.56 | 0.53 | 0.60 | 0.56 | 0.53 | 0.59 | 0.55 | 0.53 | 0.58 | 0.55 | 0.52 | 0.58 | 0.55 | 0.52 | 0.51 |
| 10 | 0.58 | 0.53 | 0.51 | 0.57 | 0.53 | 0.50 | 0.57 | 0.53 | 0.50 | 0.56 | 0.53 | 0.50 | 0.55 | 0.52 | 0.50 | 0.49 |





Luminaire Lumens:

FL=974.82,FM=144.98,FH=22.26,FVH=6.73

BL=950.32,BM=138.51,BH=20.12,BVH=6.57

UL=0,UH=0

BUG Rating:B2-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 | 4285.66 | 4291.51 | 4294.44 | 4282.15 | 4265.18 | 4216.60 | 4164.52 | 4102.49 | 4029.33 |
| 45.0 | 4258.16 | 4280.98 | 4285.66 | 4296.20 | 4286.25 | 4269.86 | 4237.09 | 4197.88 | 4129.99 |
| 90.0 | 4278.05 | 4281.56 | 4277.47 | 4266.35 | 4237.67 | 4193.20 | 4155.16 | 4094.29 | 4008.85 |
| 135.0 | 4269.27 | 4271.03 | 4264.01 | 4249.38 | 4228.31 | 4189.68 | 4137.01 | 4085.51 | 3997.73 |
| 180.0 | 4285.66 | 4278.05 | 4253.47 | 4218.36 | 4182.66 | 4134.67 | 4058.59 | 3985.44 | 3903.51 |
| 225.0 | 4258.16 | 4242.35 | 4207.83 | 4158.08 | 4093.12 | 4014.70 | 3929.84 | 3836.21 | 3742.57 |
| 270.0 | 4278.05 | 4266.93 | 4253.47 | 4230.65 | 4186.76 | 4138.18 | 4069.13 | 4000.07 | 3890.63 |
| 315.0 | 4269.27 | 4264.01 | 4249.38 | 4223.63 | 4192.61 | 4117.70 | 4049.82 | 3969.64 | 3879.52 |
| 360.0 | 4285.66 | 4291.51 | 4294.44 | 4282.15 | 4265.18 | 4216.60 | 4164.52 | 4102.49 | 4029.33 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 3916.97 | 3818.07 | 3708.63 | 3555.89 | 3431.23 | 3259.76 | 3118.14 | 2986.46 | 2820.84 |
| 45.0 | 4061.52 | 3973.15 | 3883.61 | 3757.79 | 3640.16 | 3516.68 | 3352.23 | 3210.02 | 3038.55 |
| 90.0 | 3928.67 | 3813.38 | 3709.21 | 3595.10 | 3471.03 | 3303.07 | 3170.81 | 3029.77 | 2902.19 |
| 135.0 | 3926.92 | 3839.72 | 3738.48 | 3634.31 | 3490.93 | 3365.10 | 3232.84 | 3099.41 | 2933.79 |
| 180.0 | 3784.71 | 3689.90 | 3573.44 | 3451.72 | 3291.95 | 3160.27 | 3029.18 | 2899.85 | 2742.42 |
| 225.0 | 3603.29 | 3489.76 | 3367.44 | 3241.03 | 3071.32 | 2943.74 | 2814.41 | 2687.41 | 2520.04 |
| 270.0 | 3801.68 | 3660.06 | 3544.77 | 3423.04 | 3260.93 | 3126.92 | 2995.24 | 2863.56 | 2700.87 |
| 315.0 | 3740.23 | 3632.55 | 3510.24 | 3349.89 | 3218.80 | 3083.61 | 2915.06 | 2786.90 | 2614.26 |
| 360.0 | 3916.97 | 3818.07 | 3708.63 | 3555.89 | 3431.23 | 3259.76 | 3118.14 | 2986.46 | 2820.84 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2687.41 | 2543.45 | 2397.14 | 2250.83 | 2065.90 | 1911.99 | 1768.02 | 1618.79 | 1322.67 |
| 45.0 | 2909.80 | 2775.20 | 2640.01 | 2467.95 | 2321.06 | 2174.75 | 2029.62 | 1848.20 | 1697.80 |
| 90.0 | 2741.84 | 2608.99 | 2469.71 | 2324.57 | 2140.23 | 1990.41 | 1809.57 | 1663.27 | 1515.79 |
| 135.0 | 2801.53 | 2645.86 | 2509.50 | 2371.98 | 2189.39 | 2044.83 | 1900.28 | 1721.79 | 1569.63 |
| 180.0 | 2611.92 | 2475.56 | 2304.09 | 2164.22 | 1982.80 | 1832.40 | 1693.70 | 1511.11 | 1363.63 |
| 225.0 | 2380.17 | 2202.26 | 2061.81 | 1919.01 | 1742.86 | 1595.97 | 1340.22 | 1159.92 | 1125.45 |
| 270.0 | 2561.00 | 2411.77 | 2269.56 | 2092.82 | 1943.01 | 1796.11 | 1618.21 | 1470.73 | 1325.01 |
| 315.0 | 2472.05 | 2326.33 | 2176.51 | 2033.13 | 1855.22 | 1714.18 | 1563.78 | 1163.43 | 1163.43 |
| 360.0 | 2687.41 | 2543.45 | 2397.14 | 2250.83 | 2065.90 | 1911.99 | 1768.02 | 1618.79 | 1322.67 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 1135.69 | 1097.94 | 955.97 | 820.78 | 668.15 | 555.67 | 453.26 | 345.99 | 276.34 |
| 45.0 | 1546.22 | 1392.31 | 1209.72 | 1063.41 | 887.26 | 757.92 | 637.95 | 502.77 | 409.13 |
| 90.0 | 1136.57 | 1136.57 | 1030.11 | 855.25 | 732.06 | 618.58 | 514.00 | 395.20 | 318.19 |
| 135.0 | 1418.06 | 1265.31 | 1119.01 | 941.10 | 810.60 | 692.38 | 557.78 | 461.22 | 375.77 |
| 180.0 | 1215.57 | 1071.02 | 930.57 | 765.53 | 650.24 | 544.90 | 448.34 | 347.10 | 295.60 |
| 225.0 | 985.52 | 847.29 | 719.07 | 576.62 | 476.02 | 387.18 | 296.94 | 238.83 | 191.19 |
| 270.0 | 1142.42 | 1000.21 | 829.91 | 704.08 | 589.38 | 485.21 | 374.02 | 302.62 | 302.62 |
| 315.0 | 1093.02 | 947.36 | 776.24 | 651.77 | 513.07 | 416.45 | 335.86 | 256.74 | 207.17 |
| 360.0 | 1135.69 | 1097.94 | 955.97 | 820.78 | 668.15 | 555.67 | 453.26 | 345.99 | 276.34 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 221.27 | 177.56 | 136.01 | 111.13 | 93.52 | 80.76 | 69.17 | 62.21 | 57.24 |
| 45.0 | 328.37 | 310.81 | 236.14 | 155.26 | 126.06 | 103.94 | 84.86 | 74.03 | 65.72 |
| 90.0 | 255.16 | 204.59 | 154.50 | 124.65 | 97.85 | 82.75 | 71.87 | 62.68 | 57.47 |
| 135.0 | 303.79 | 303.79 | 181.36 | 137.47 | 111.95 | 92.82 | 76.61 | 67.83 | 61.51 |
| 180.0 | 295.60 | 168.08 | 134.84 | 103.99 | 86.26 | 73.62 | 63.03 | 57.59 | 53.26 |
| 225.0 | 145.25 | 117.28 | 92.58 | 78.83 | 68.71 | 61.57 | 56.36 | 51.38 | 48.34 |
| 270.0 | 231.40 | 145.37 | 117.22 | 96.50 | 81.64 | 69.12 | 62.09 | 56.06 | 52.20 |
| 315.0 | 167.96 | 136.47 | 107.62 | 90.89 | 78.48 | 68.94 | 61.80 | 55.83 | 52.32 |
| 360.0 | 221.27 | 177.56 | 136.01 | 111.13 | 93.52 | 80.76 | 69.17 | 62.21 | 57.24 |

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 | 52.55 | 49.63 | 46.53 | 44.24 | 42.14 | 39.74 | 37.92 | 36.23 | 34.70 |
| 45.0 | 58.17 | 53.72 | 50.33 | 46.76 | 44.36 | 42.02 | 39.50 | 37.69 | 36.05 |
| 90.0 | 53.26 | 49.86 | 46.35 | 43.95 | 41.67 | 39.62 | 37.34 | 35.76 | 34.24 |
| 135.0 | 56.71 | 51.97 | 48.92 | 46.23 | 43.83 | 41.08 | 39.15 | 36.93 | 35.35 |
| 180.0 | 49.98 | 47.17 | 44.13 | 41.90 | 39.91 | 37.57 | 35.87 | 34.24 | 32.30 |
| 225.0 | 45.82 | 43.60 | 40.91 | 39.15 | 37.40 | 35.41 | 33.77 | 32.01 | 30.61 |
| 270.0 | 49.22 | 46.12 | 43.89 | 41.73 | 39.91 | 37.63 | 36.11 | 34.47 | 33.01 |
| 315.0 | 48.87 | 46.53 | 44.30 | 41.79 | 39.97 | 38.22 | 36.11 | 34.53 | 33.12 |
| 360.0 | 52.55 | 49.63 | 46.53 | 44.24 | 42.14 | 39.74 | 37.92 | 36.23 | 34.70 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 33.18 | 31.43 | 30.14 | 28.91 | 27.74 | 26.39 | 25.28 | 24.29 | 23.76 |
| 45.0 | 34.12 | 32.66 | 31.25 | 29.90 | 28.32 | 27.15 | 26.04 | 25.05 | 23.58 |
| 90.0 | 32.36 | 31.02 | 29.73 | 28.09 | 26.92 | 25.81 | 24.46 | 23.29 | 22.18 |
| 135.0 | 33.83 | 32.13 | 30.78 | 29.50 | 27.92 | 26.80 | 25.57 | 24.46 | 23.17 |
| 180.0 | 31.02 | 29.26 | 28.03 | 26.92 | 25.81 | 24.40 | 23.35 | 22.24 | 21.19 |
| 225.0 | 29.32 | 27.86 | 26.69 | 25.57 | 24.46 | 23.12 | 22.06 | 21.01 | 19.90 |
| 270.0 | 31.25 | 29.96 | 28.79 | 27.33 | 26.28 | 25.28 | 23.94 | 22.94 | 22.00 |
| 315.0 | 31.72 | 30.08 | 29.03 | 27.86 | 26.80 | 25.46 | 24.35 | 23.35 | 22.18 |
| 360.0 | 33.18 | 31.43 | 30.14 | 28.91 | 27.74 | 26.39 | 25.28 | 24.29 | 23.76 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 23.47 | 23.23 | 23.35 | 23.88 | 24.76 | 25.63 | 26.63 | 27.62 | 28.73 |
| 45.0 | 22.47 | 21.13 | 20.13 | 19.14 | 18.08 | 17.56 | 17.09 | 16.74 | 16.33 |
| 90.0 | 21.13 | 19.84 | 18.79 | 18.02 | 17.44 | 16.91 | 16.56 | 16.27 | 16.04 |
| 135.0 | 21.71 | 20.66 | 19.61 | 18.61 | 17.97 | 17.50 | 17.03 | 16.80 | 16.80 |
| 180.0 | 19.84 | 18.79 | 18.08 | 17.56 | 17.73 | 18.32 | 19.43 | 20.48 | 21.59 |
| 225.0 | 18.79 | 18.08 | 17.62 | 17.15 | 16.85 | 16.44 | 16.21 | 15.92 | 15.80 |
| 270.0 | 20.78 | 19.96 | 19.55 | 19.61 | 20.31 | 21.19 | 22.18 | 23.47 | 24.64 |
| 315.0 | 21.19 | 20.48 | 20.25 | 20.54 | 21.36 | 22.36 | 23.53 | 24.87 | 26.51 |
| 360.0 | 23.47 | 23.23 | 23.35 | 23.88 | 24.76 | 25.63 | 26.63 | 27.62 | 28.73 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 29.61 | 29.73 | 29.61 | 28.85 | 27.92 | 26.80 | 24.64 | 21.83 | 17.79 |
| 45.0 | 16.09 | 15.80 | 15.51 | 15.27 | 15.10 | 14.86 | 14.69 | 14.51 | 14.34 |
| 90.0 | 16.50 | 17.56 | 18.55 | 19.43 | 19.66 | 19.25 | 18.84 | 18.38 | 16.97 |
| 135.0 | 17.21 | 18.14 | 19.37 | 20.66 | 21.07 | 20.78 | 20.31 | 19.55 | 18.20 |
| 180.0 | 22.47 | 22.88 | 22.94 | 22.65 | 22.18 | 21.59 | 20.89 | 19.43 | 15.92 |
| 225.0 | 15.57 | 15.45 | 15.33 | 15.27 | 15.16 | 15.10 | 15.04 | 14.86 | 14.69 |
| 270.0 | 25.93 | 27.45 | 28.27 | 27.92 | 25.87 | 23.12 | 20.37 | 17.56 | 15.80 |
| 315.0 | 28.32 | 29.20 | 29.61 | 29.09 | 26.74 | 23.99 | 20.25 | 17.38 | 15.16 |
| 360.0 | 29.61 | 29.73 | 29.61 | 28.85 | 27.92 | 26.80 | 24.64 | 21.83 | 17.79 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 14.98 | 13.81 | 13.17 | 12.52 | 11.94 | 11.24 | 10.48 | 10.18 | 9.89 |
| 45.0 | 14.16 | 13.93 | 13.69 | 13.34 | 12.93 | 12.35 | 11.12 | 10.36 | 10.01 |
| 90.0 | 15.16 | 13.46 | 12.99 | 12.58 | 11.70 | 10.83 | 10.24 | 10.01 | 9.89 |
| 135.0 | 16.50 | 14.57 | 13.75 | 12.87 | 11.94 | 10.94 | 10.30 | 10.07 | 9.89 |
| 180.0 | 13.64 | 12.99 | 12.52 | 11.88 | 10.77 | 10.18 | 10.01 | 9.83 | 9.60 |
| 225.0 | 14.46 | 14.10 | 13.64 | 12.87 | 10.24 | 9.95 | 9.60 | 9.60 | 9.66 |
| 270.0 | 14.63 | 14.34 | 14.05 | 14.34 | 13.69 | 10.48 | 10.12 | 9.66 | 9.71 |
| 315.0 | 14.05 | 13.81 | 13.46 | 13.17 | 12.93 | 10.48 | 10.07 | 9.66 | 9.71 |
| 360.0 | 14.98 | 13.81 | 13.17 | 12.52 | 11.94 | 11.24 | 10.48 | 10.18 | 9.89 |

Intensity data(cd)

| | |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0 | 9.66 |
| 45.0 | 9.89 |
| 90.0 | 9.66 |
| 135.0 | 9.60 |
| 180.0 | 9.66 |
| 225.0 | 9.66 |
| 270.0 | 9.66 |
| 315.0 | 9.71 |
| 360.0 | 9.66 |