



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

Nata

Client:

LumCAT: 2-2569-L

Luminaire: 92.70.411.00

Report No: 2024910-B008

Ballast type: AC

Test No: 2024910-C008

Voltage(V): 33.740

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.580

Lamp flux(lm): 2597.0

Power (W): 19.550

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2343.74, Efficiency(%): 90.25% , Luminous Efficacy(lm/W): 119.88

Central intensity(cd): 3700.847, Maximum intensity(cd): 3700.847

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=48.6

[C90/270]Total=48.6

Field angle(10%Imax): [C0/180]Total=72.8

[C90/270]Total=72.8

Maximum s/h(1/2): C0_180=0.75 C90_270=0.75

Maximum s/h(1/4): C0_180=0.76 C90_270=0.76

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.25%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.119%

Equipment: GMS 1800
Temperature(°C): 25.0

Date: 2024/9/10
Humidity(%): 60.0%

Operator: NT
Distance(m): 7.25

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 3700.847 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 3698.252 | 3.540 | 3.54 | 0.14% | 0.15% |
| 2.0 | 3688.711 | 10.602 | 14.143 | 0.41% | 0.60% |
| 3.0 | 3670.111 | 17.600 | 31.743 | 0.68% | 1.35% |
| 4.0 | 3646.642 | 24.492 | 56.234 | 0.94% | 2.40% |
| 5.0 | 3603.113 | 31.188 | 87.422 | 1.20% | 3.73% |
| 6.0 | 3561.602 | 37.652 | 125.075 | 1.45% | 5.34% |
| 7.0 | 3507.226 | 43.876 | 168.951 | 1.69% | 7.21% |
| 8.0 | 3441.681 | 49.732 | 218.683 | 1.91% | 9.33% |
| 9.0 | 3374.953 | 55.245 | 273.928 | 2.13% | 11.69% |
| 10.0 | 3291.529 | 60.329 | 334.257 | 2.32% | 14.26% |
| 11.0 | 3204.814 | 64.912 | 399.169 | 2.50% | 17.03% |
| 12.0 | 3113.783 | 69.071 | 468.24 | 2.66% | 19.98% |
| 13.0 | 3026.247 | 72.867 | 541.107 | 2.81% | 23.09% |
| 14.0 | 2922.120 | 76.139 | 617.246 | 2.93% | 26.34% |
| 15.0 | 2824.131 | 78.887 | 696.133 | 3.04% | 29.70% |
| 16.0 | 2733.375 | 81.433 | 777.566 | 3.14% | 33.18% |
| 17.0 | 2623.132 | 83.415 | 860.981 | 3.21% | 36.74% |
| 18.0 | 2539.347 | 85.118 | 946.099 | 3.28% | 40.37% |
| 19.0 | 2431.607 | 86.484 | 1032.583 | 3.33% | 44.06% |
| 20.0 | 2323.808 | 87.037 | 1119.621 | 3.35% | 47.77% |
| 21.0 | 2220.654 | 87.263 | 1206.883 | 3.36% | 51.49% |
| 22.0 | 2110.621 | 87.039 | 1293.922 | 3.35% | 55.21% |
| 23.0 | 2007.401 | 86.407 | 1380.33 | 3.33% | 58.89% |
| 24.0 | 1884.898 | 85.100 | 1465.429 | 3.28% | 62.53% |
| 25.0 | 1778.400 | 83.295 | 1548.725 | 3.21% | 66.08% |
| 26.0 | 1657.230 | 81.098 | 1629.823 | 3.12% | 69.54% |
| 27.0 | 1523.373 | 77.814 | 1707.637 | 3.00% | 72.86% |
| 28.0 | 1392.768 | 73.831 | 1781.468 | 2.84% | 76.01% |
| 29.0 | 1275.160 | 69.801 | 1851.268 | 2.69% | 78.99% |
| 30.0 | 1110.251 | 64.406 | 1915.674 | 2.48% | 81.74% |
| 31.0 | 980.442 | 58.181 | 1973.855 | 2.24% | 84.22% |
| 32.0 | 867.163 | 52.932 | 2026.786 | 2.04% | 86.48% |
| 33.0 | 735.684 | 47.220 | 2074.007 | 1.82% | 88.49% |
| 34.0 | 610.559 | 40.741 | 2114.748 | 1.57% | 90.23% |
| 35.0 | 494.206 | 34.310 | 2149.058 | 1.32% | 91.69% |
| 36.0 | 398.752 | 28.432 | 2177.49 | 1.09% | 92.91% |
| 37.0 | 327.596 | 23.689 | 2201.179 | 0.91% | 93.92% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 247.826 | 19.207 | 2220.386 | 0.74% | 94.74% |
| 39.0 | 198.226 | 15.225 | 2235.611 | 0.59% | 95.39% |
| 40.0 | 144.264 | 11.945 | 2247.556 | 0.46% | 95.90% |
| 41.0 | 126.124 | 9.628 | 2257.185 | 0.37% | 96.31% |
| 42.0 | 96.025 | 8.071 | 2265.256 | 0.31% | 96.65% |
| 43.0 | 81.590 | 6.579 | 2271.835 | 0.25% | 96.93% |
| 44.0 | 70.480 | 5.740 | 2277.574 | 0.22% | 97.18% |
| 45.0 | 62.819 | 5.123 | 2282.697 | 0.20% | 97.40% |
| 46.0 | 55.585 | 4.631 | 2287.328 | 0.18% | 97.59% |
| 47.0 | 49.402 | 4.176 | 2291.503 | 0.16% | 97.77% |
| 48.0 | 44.093 | 3.780 | 2295.283 | 0.15% | 97.93% |
| 49.0 | 39.488 | 3.432 | 2298.715 | 0.13% | 98.08% |
| 50.0 | 35.480 | 3.126 | 2301.841 | 0.12% | 98.21% |
| 51.0 | 32.142 | 2.861 | 2304.702 | 0.11% | 98.33% |
| 52.0 | 29.396 | 2.641 | 2307.343 | 0.10% | 98.45% |
| 53.0 | 26.813 | 2.445 | 2309.788 | 0.09% | 98.55% |
| 54.0 | 24.915 | 2.280 | 2312.068 | 0.09% | 98.65% |
| 55.0 | 22.930 | 2.136 | 2314.203 | 0.08% | 98.74% |
| 56.0 | 21.124 | 1.991 | 2316.194 | 0.08% | 98.82% |
| 57.0 | 19.921 | 1.877 | 2318.071 | 0.07% | 98.90% |
| 58.0 | 18.423 | 1.773 | 2319.844 | 0.07% | 98.98% |
| 59.0 | 17.346 | 1.672 | 2321.516 | 0.06% | 99.05% |
| 60.0 | 16.229 | 1.586 | 2323.102 | 0.06% | 99.12% |
| 61.0 | 15.256 | 1.503 | 2324.605 | 0.06% | 99.18% |
| 62.0 | 14.343 | 1.426 | 2326.031 | 0.05% | 99.24% |
| 63.0 | 13.456 | 1.352 | 2327.383 | 0.05% | 99.30% |
| 64.0 | 12.687 | 1.283 | 2328.666 | 0.05% | 99.36% |
| 65.0 | 11.879 | 1.216 | 2329.882 | 0.05% | 99.41% |
| 66.0 | 11.229 | 1.153 | 2331.035 | 0.04% | 99.46% |
| 67.0 | 10.598 | 1.098 | 2332.132 | 0.04% | 99.50% |
| 68.0 | 9.941 | 1.040 | 2333.172 | 0.04% | 99.55% |
| 69.0 | 9.284 | 0.981 | 2334.153 | 0.04% | 99.59% |
| 70.0 | 8.706 | 0.924 | 2335.077 | 0.04% | 99.63% |
| 71.0 | 8.127 | 0.870 | 2335.947 | 0.03% | 99.67% |
| 72.0 | 7.562 | 0.816 | 2336.763 | 0.03% | 99.70% |
| 73.0 | 7.037 | 0.763 | 2337.526 | 0.03% | 99.73% |
| 74.0 | 6.498 | 0.712 | 2338.238 | 0.03% | 99.77% |
| 75.0 | 6.045 | 0.663 | 2338.901 | 0.03% | 99.79% |

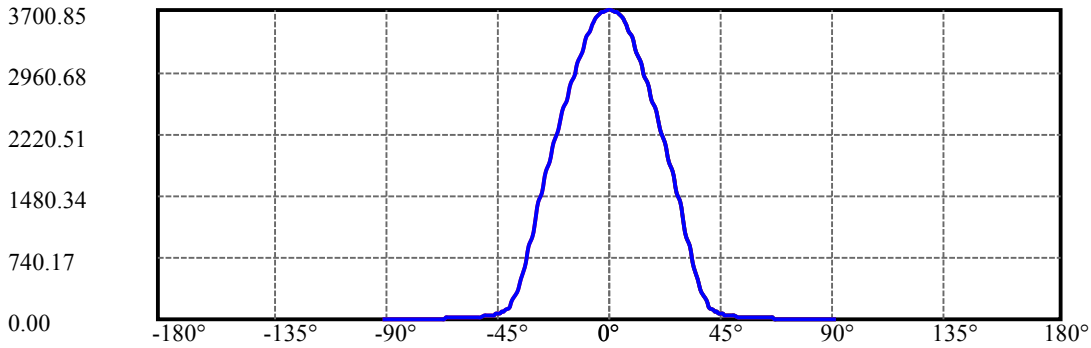
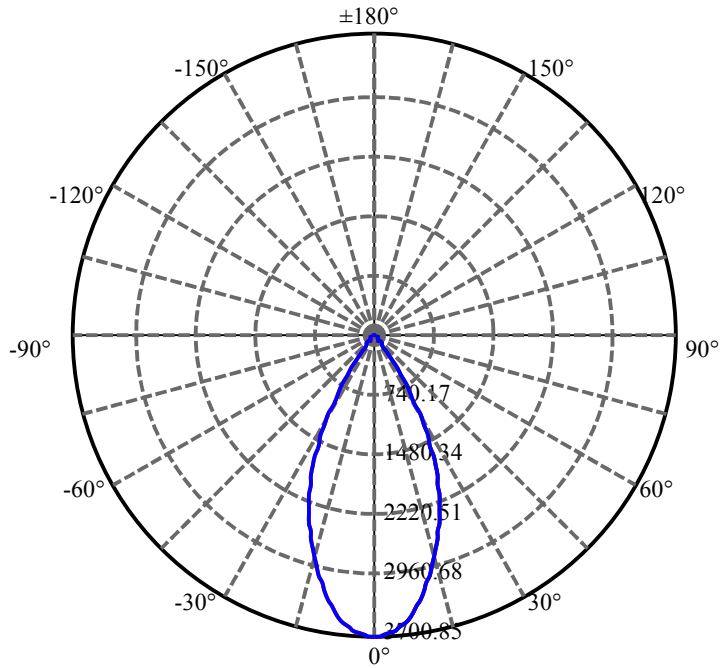
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 5.545 | 0.615 | 2339.516 | 0.02% | 99.82% |
| 77.0 | 5.039 | 0.564 | 2340.08 | 0.02% | 99.84% |
| 78.0 | 4.593 | 0.516 | 2340.596 | 0.02% | 99.87% |
| 79.0 | 4.179 | 0.471 | 2341.067 | 0.02% | 99.89% |
| 80.0 | 3.739 | 0.427 | 2341.494 | 0.02% | 99.90% |
| 81.0 | 3.351 | 0.383 | 2341.877 | 0.01% | 99.92% |
| 82.0 | 2.930 | 0.341 | 2342.218 | 0.01% | 99.93% |
| 83.0 | 2.589 | 0.300 | 2342.518 | 0.01% | 99.95% |
| 84.0 | 2.273 | 0.265 | 2342.783 | 0.01% | 99.96% |
| 85.0 | 1.912 | 0.228 | 2343.011 | 0.01% | 99.97% |
| 86.0 | 1.669 | 0.196 | 2343.207 | 0.01% | 99.98% |
| 87.0 | 1.413 | 0.169 | 2343.376 | 0.01% | 99.98% |
| 88.0 | 1.202 | 0.143 | 2343.519 | 0.01% | 99.99% |
| 89.0 | 0.979 | 0.120 | 2343.638 | 0.00% | 100.00% |
| 90.0 | 0.913 | 0.104 | 2343.742 | 0.00% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1915.67 | 73.76% | 81.74% |
| 0-40 | 2247.56 | 86.54% | 95.90% |
| 0-60 | 2323.10 | 89.45% | 99.12% |
| 0-90 | 2343.64 | 90.24% | 100.00% |
| 0-120 | 2343.64 | 90.24% | 100.00% |
| 0-180 | 2343.74 | 90.25% | 100.00% |
| 60-90 | 20.54 | 0.79% | 0.88% |
| 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% |
| 0-29.37 | 1874.99 | 72.20% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 334.26 |
| 10-20 | 785.36 |
| 20-30 | 796.05 |
| 30-40 | 331.88 |
| 40-50 | 54.28 |
| 50-60 | 21.26 |
| 60-70 | 11.97 |
| 70-80 | 6.42 |
| 80-90 | 2.14 |
| 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: —————

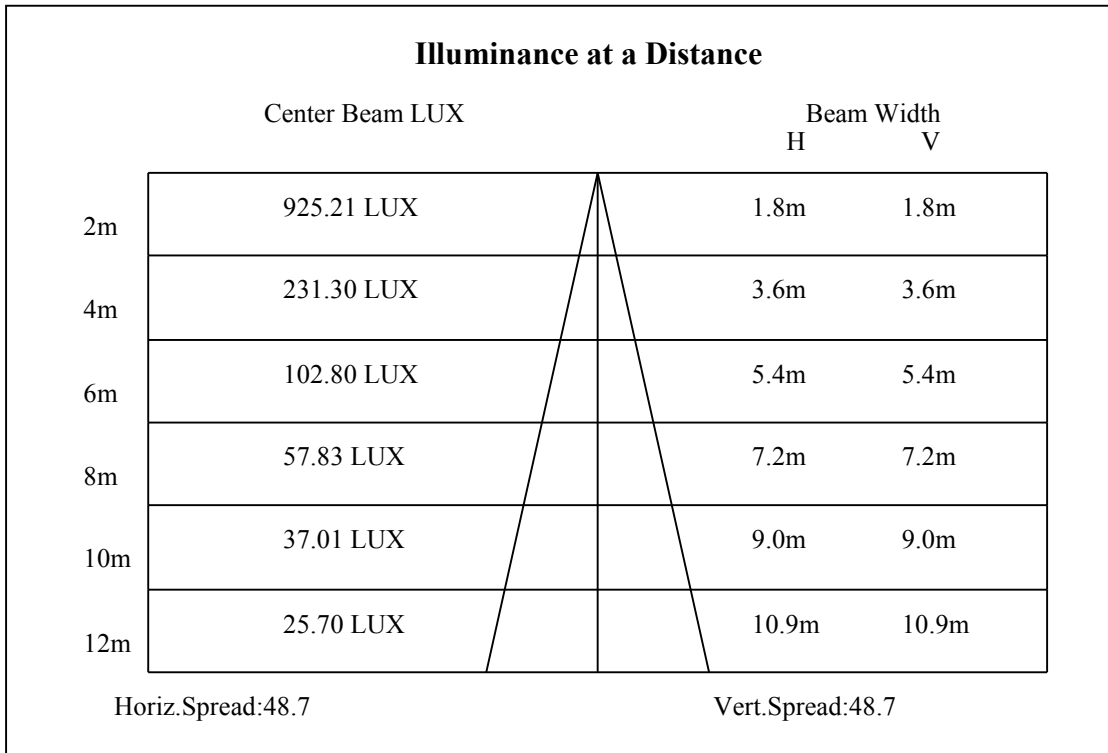
C90/C270: —————

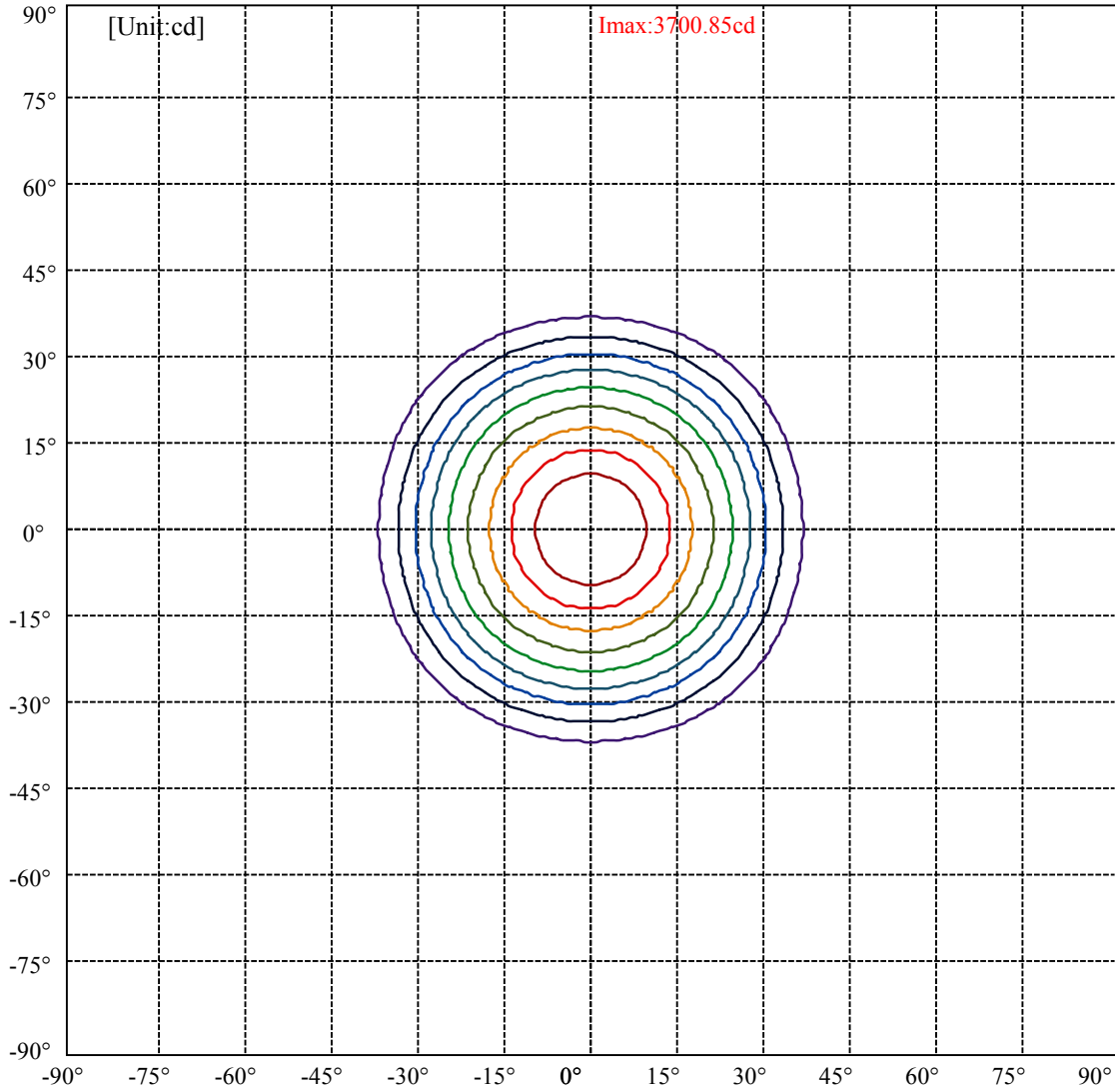
Field angle(10%Imax):C0/180Left:36.4 Right:36.4

:C90/270Left:36.4 Right:36.4

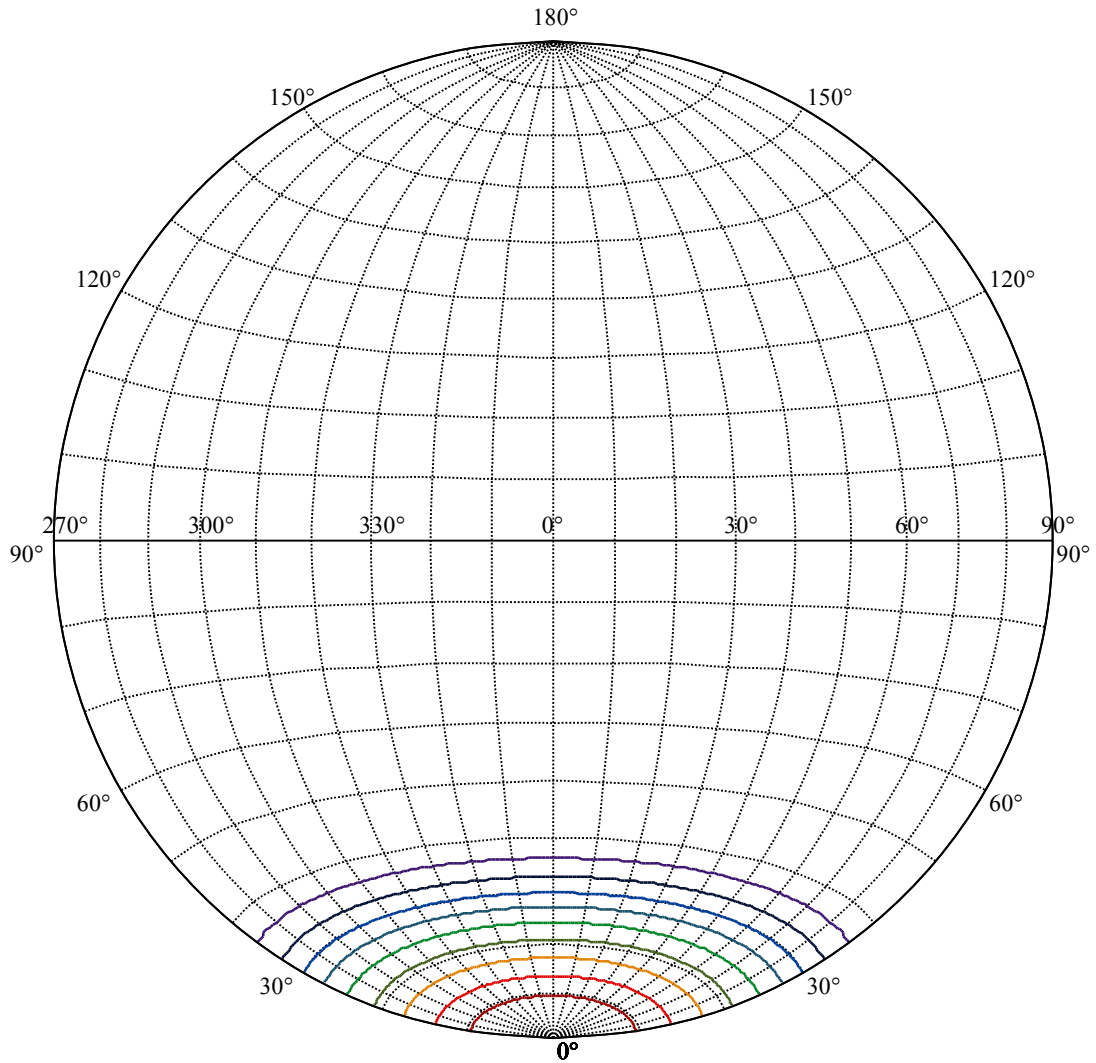
Beam Angle(50%Imax):C0/180Left:24.3 Right:24.3

:C90/270Left:24.3 Right:24.3





| | |
|-------------------|---|
| (10%Imax) 370.085 | — |
| (20%Imax) 740.169 | — |
| (30%Imax) 1110.25 | — |
| (40%Imax) 1480.34 | — |
| (50%Imax) 1850.42 | — |
| (60%Imax) 2220.51 | — |
| (70%Imax) 2590.59 | — |
| (80%Imax) 2960.68 | — |
| (90%Imax) 3330.76 | — |



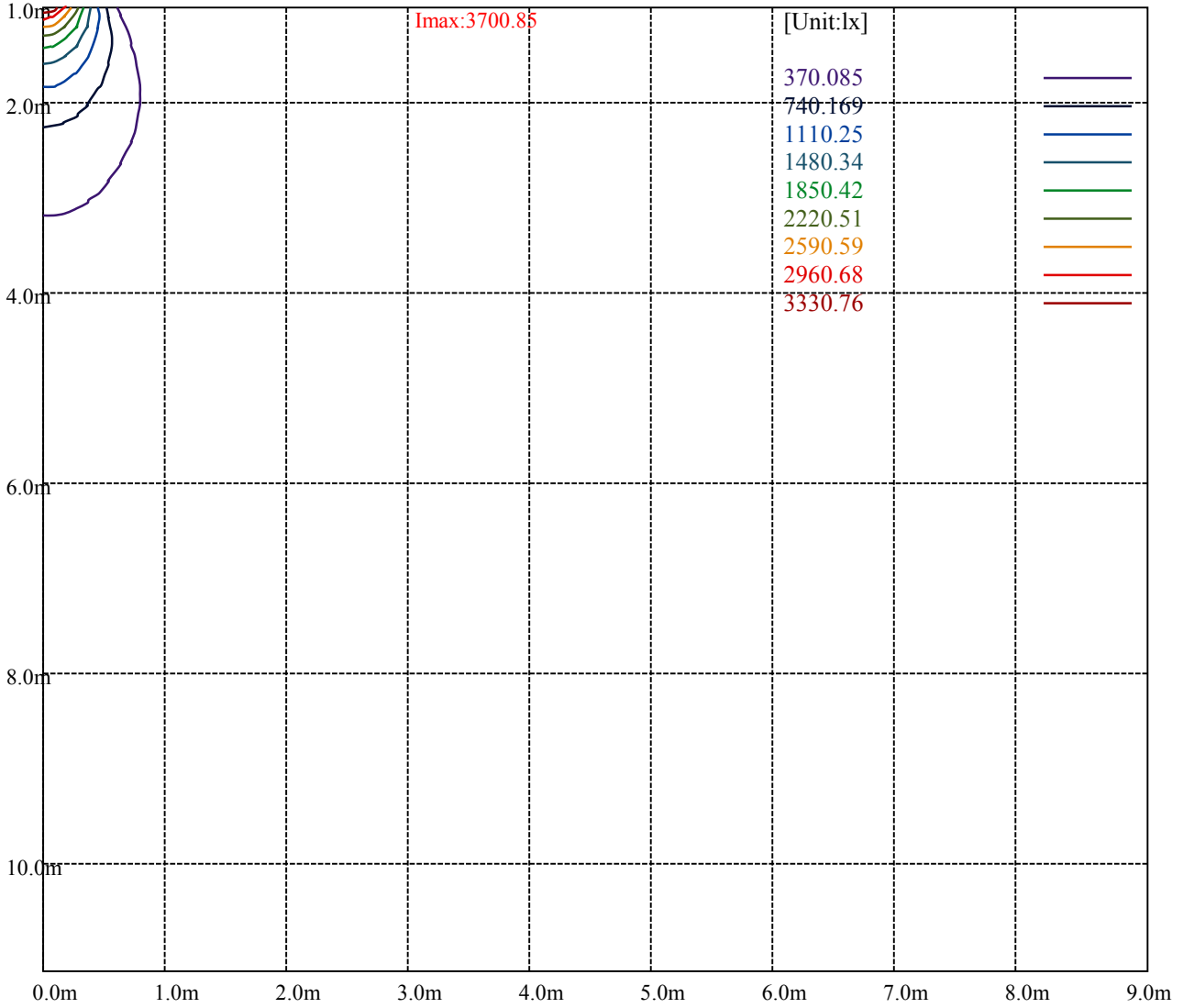
House

[Unit:cd]

Road

Imax:3700.85

| | | |
|-----------|---------|---|
| (10%Imax) | 370.085 | — |
| (20%Imax) | 740.169 | — |
| (30%Imax) | 1110.25 | — |
| (40%Imax) | 1480.34 | — |
| (50%Imax) | 1850.42 | — |
| (60%Imax) | 2220.51 | — |
| (70%Imax) | 2590.59 | — |
| (80%Imax) | 2960.68 | — |
| (90%Imax) | 3330.76 | — |



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

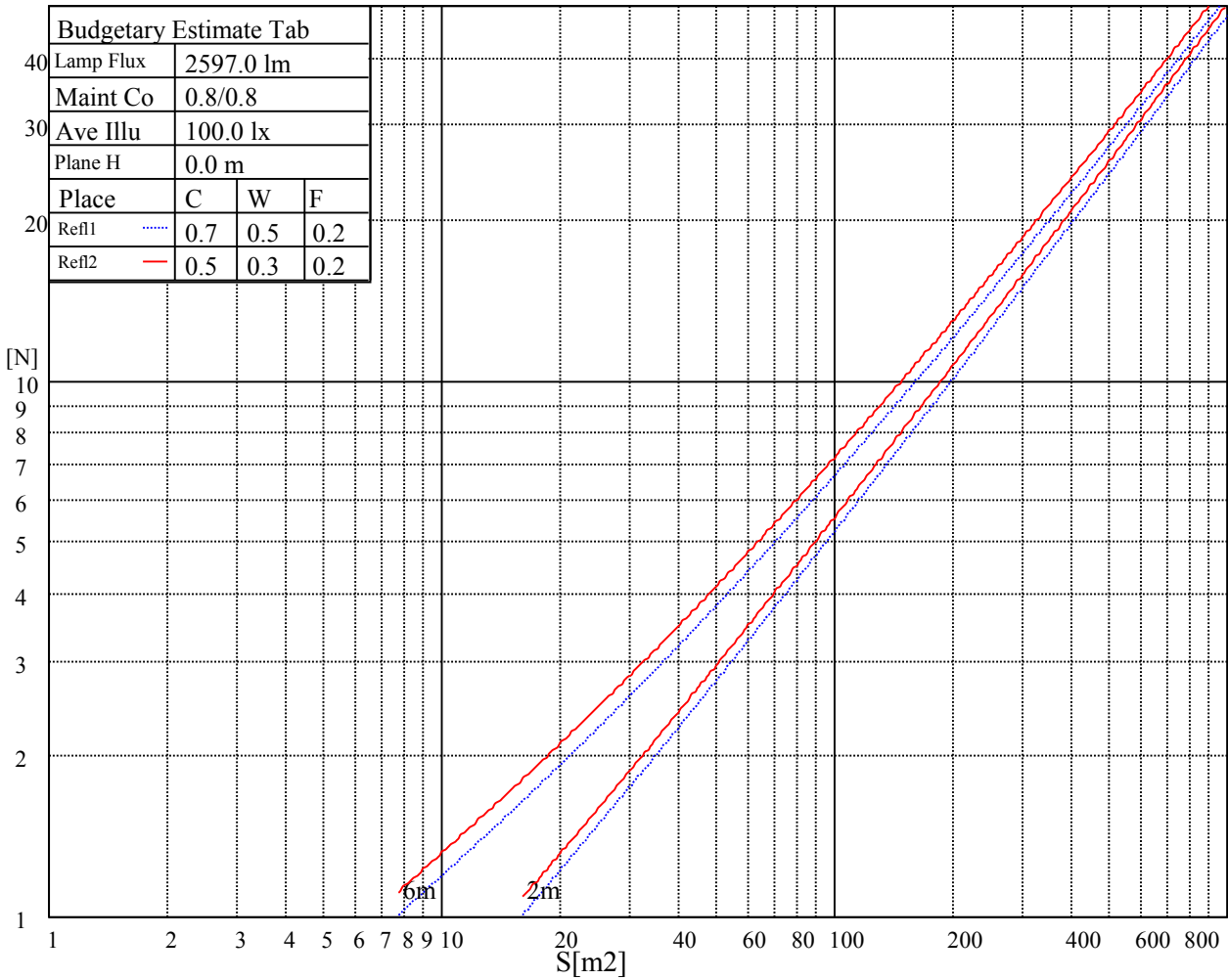
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

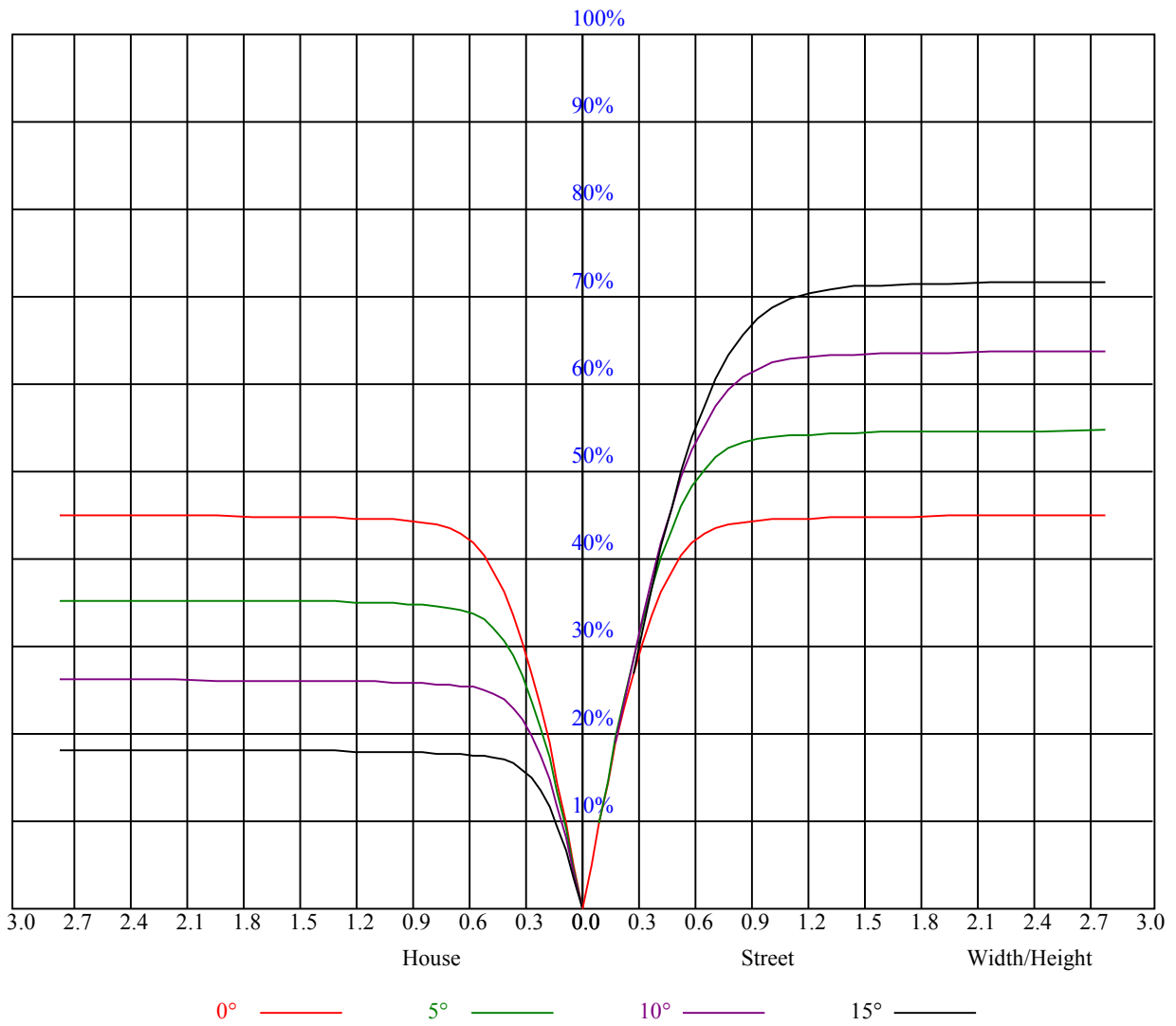


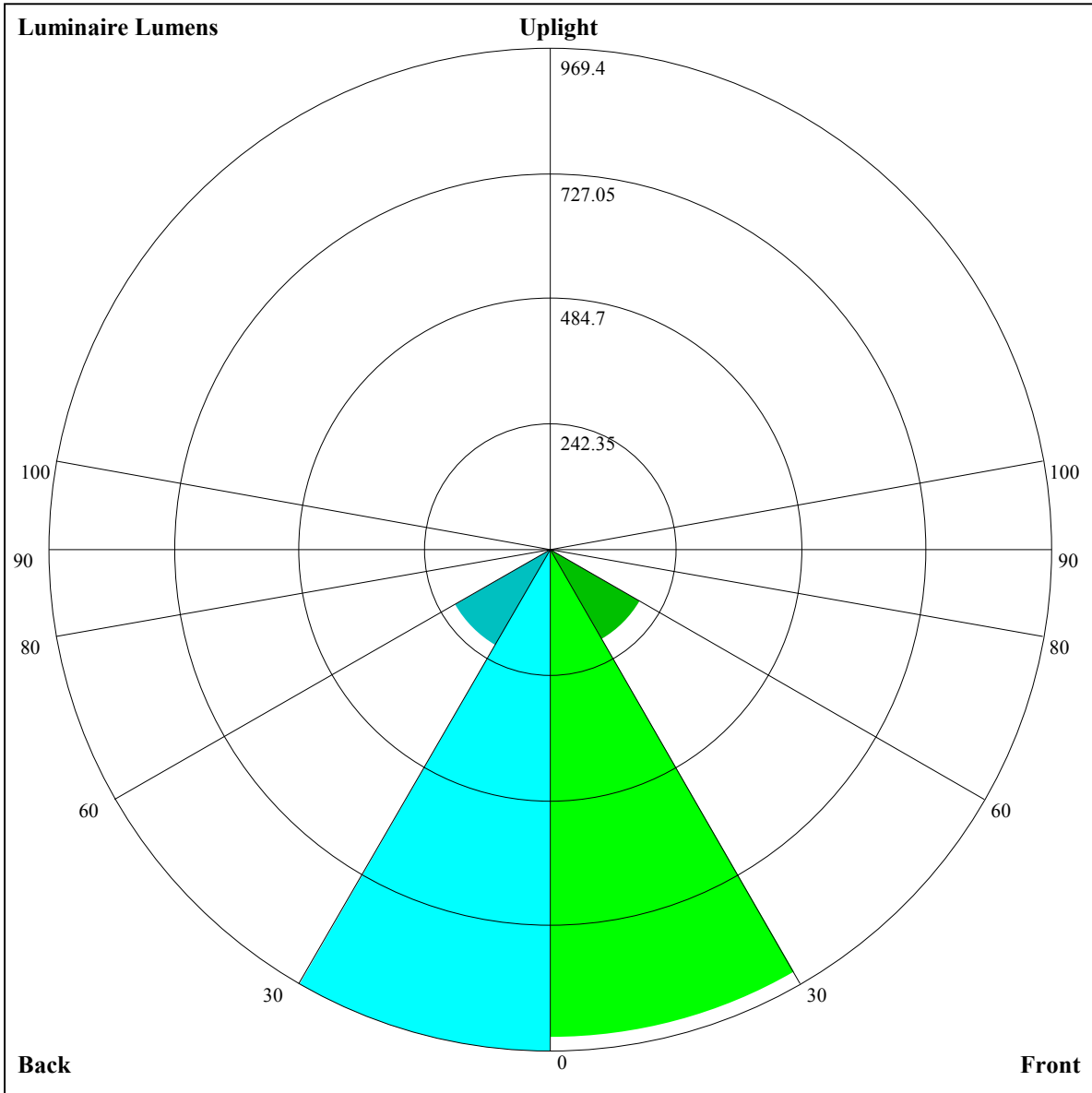
| Illumination assessment according UGR | | | | | | | | | | | |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|--|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf of 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 | |
| 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 | |
| | 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 | 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 | 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 | 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 | 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 RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.07 | 1.07 | 1.07 | 1.05 | 1.05 | 1.05 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.90 |
| 1 | 1.00 | 0.98 | 0.96 | 0.98 | 0.97 | 0.95 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.85 |
| 2 | 0.94 | 0.91 | 0.88 | 0.92 | 0.89 | 0.87 | 0.90 | 0.87 | 0.85 | 0.87 | 0.85 | 0.83 | 0.84 | 0.83 | 0.81 | 0.80 |
| 3 | 0.88 | 0.84 | 0.81 | 0.87 | 0.83 | 0.80 | 0.85 | 0.82 | 0.79 | 0.83 | 0.80 | 0.78 | 0.81 | 0.78 | 0.76 | 0.75 |
| 4 | 0.83 | 0.79 | 0.75 | 0.82 | 0.78 | 0.75 | 0.80 | 0.77 | 0.74 | 0.78 | 0.75 | 0.73 | 0.77 | 0.74 | 0.72 | 0.71 |
| 5 | 0.79 | 0.74 | 0.70 | 0.78 | 0.73 | 0.70 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.69 | 0.73 | 0.70 | 0.68 | 0.67 |
| 6 | 0.74 | 0.69 | 0.66 | 0.74 | 0.69 | 0.66 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.65 | 0.70 | 0.67 | 0.64 | 0.63 |
| 7 | 0.70 | 0.65 | 0.62 | 0.70 | 0.65 | 0.62 | 0.69 | 0.65 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.63 | 0.61 | 0.60 |
| 8 | 0.67 | 0.62 | 0.58 | 0.66 | 0.62 | 0.58 | 0.65 | 0.61 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.60 | 0.58 | 0.57 |
| 9 | 0.64 | 0.59 | 0.55 | 0.63 | 0.59 | 0.55 | 0.62 | 0.58 | 0.55 | 0.62 | 0.58 | 0.55 | 0.61 | 0.57 | 0.55 | 0.54 |
| 10 | 0.61 | 0.56 | 0.53 | 0.60 | 0.56 | 0.53 | 0.60 | 0.55 | 0.52 | 0.59 | 0.55 | 0.52 | 0.58 | 0.55 | 0.52 | 0.51 |





Luminaire Lumens:

FL=943.55,FM=200.5,FH=9.07,FVH=1.11

BL=969.4,BM=215.64,BH=9.27,BVH=1.16

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 | 3688.73 | 3670.86 | 3640.22 | 3600.11 | 3569.47 | 3487.00 | 3452.46 | 3382.29 | 3280.85 |
| 45.0 | 3709.34 | 3697.09 | 3683.16 | 3659.72 | 3619.09 | 3561.11 | 3508.76 | 3438.01 | 3370.57 |
| 90.0 | 3699.87 | 3687.57 | 3659.19 | 3610.73 | 3566.16 | 3505.97 | 3422.40 | 3354.43 | 3271.96 |
| 135.0 | 3705.45 | 3709.34 | 3709.34 | 3690.36 | 3656.93 | 3609.57 | 3561.11 | 3500.40 | 3424.08 |
| 180.0 | 3688.73 | 3699.87 | 3702.08 | 3708.76 | 3703.76 | 3678.69 | 3640.22 | 3596.80 | 3544.39 |
| 225.0 | 3709.34 | 3718.22 | 3717.11 | 3714.33 | 3705.97 | 3670.33 | 3655.83 | 3614.04 | 3561.69 |
| 270.0 | 3699.87 | 3708.76 | 3708.76 | 3710.44 | 3701.50 | 3688.73 | 3668.65 | 3642.48 | 3614.62 |
| 315.0 | 3705.45 | 3694.30 | 3689.83 | 3666.44 | 3650.26 | 3623.50 | 3583.40 | 3529.36 | 3465.29 |
| 360.0 | 3688.73 | 3670.86 | 3640.22 | 3600.11 | 3569.47 | 3487.00 | 3452.46 | 3382.29 | 3280.85 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 3239.06 | 3149.39 | 3054.67 | 2964.42 | 2871.91 | 2775.51 | 2676.90 | 2577.72 | 2481.32 |
| 45.0 | 3297.56 | 3213.46 | 3124.84 | 3026.23 | 2973.30 | 2839.06 | 2739.29 | 2675.80 | 2526.47 |
| 90.0 | 3179.45 | 3075.85 | 2982.24 | 2892.51 | 2793.91 | 2691.94 | 2592.75 | 2490.25 | 2381.03 |
| 135.0 | 3343.82 | 3255.77 | 3152.70 | 3056.88 | 2968.31 | 2862.97 | 2769.41 | 2670.75 | 2565.47 |
| 180.0 | 3488.15 | 3404.58 | 3317.64 | 3212.36 | 3113.17 | 3015.67 | 2909.81 | 2830.12 | 2709.23 |
| 225.0 | 3492.57 | 3411.78 | 3332.15 | 3246.31 | 3149.91 | 3044.63 | 2949.91 | 2849.05 | 2742.08 |
| 270.0 | 3567.26 | 3507.65 | 3438.53 | 3358.85 | 3273.65 | 3180.56 | 3083.63 | 2993.91 | 2899.77 |
| 315.0 | 3391.75 | 3313.75 | 3235.75 | 3152.70 | 3065.81 | 2966.63 | 2871.33 | 2779.40 | 2679.69 |
| 360.0 | 3239.06 | 3149.39 | 3054.67 | 2964.42 | 2871.91 | 2775.51 | 2676.90 | 2577.72 | 2481.32 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2381.03 | 2275.17 | 2169.89 | 2057.87 | 1944.81 | 1836.69 | 1724.73 | 1661.19 | 1491.83 |
| 45.0 | 2462.40 | 2354.85 | 2242.89 | 2123.10 | 2005.52 | 1884.05 | 1764.26 | 1647.83 | 1520.21 |
| 90.0 | 2272.96 | 2156.53 | 2035.59 | 1918.58 | 1803.84 | 1735.88 | 1565.36 | 1431.64 | 1347.49 |
| 135.0 | 2463.50 | 2358.22 | 2277.43 | 2138.66 | 2024.44 | 1931.41 | 1813.88 | 1698.50 | 1572.62 |
| 180.0 | 2628.97 | 2525.89 | 2427.86 | 2323.10 | 2213.88 | 2098.03 | 1977.09 | 1860.08 | 1745.34 |
| 225.0 | 2640.69 | 2539.29 | 2436.22 | 2329.25 | 2220.03 | 2110.28 | 1993.80 | 1904.13 | 1770.41 |
| 270.0 | 2841.84 | 2750.44 | 2614.51 | 2552.12 | 2451.83 | 2346.50 | 2233.96 | 2124.73 | 2012.78 |
| 315.0 | 2623.39 | 2492.46 | 2386.07 | 2322.53 | 2220.61 | 2116.38 | 2006.10 | 1899.08 | 1797.16 |
| 360.0 | 2381.03 | 2275.17 | 2169.89 | 2057.87 | 1944.81 | 1836.69 | 1724.73 | 1661.19 | 1491.83 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 1414.93 | 1086.10 | 1086.10 | 972.14 | 835.22 | 705.28 | 577.45 | 460.61 | 355.95 |
| 45.0 | 1385.97 | 1250.57 | 1106.28 | 966.99 | 831.59 | 699.55 | 575.82 | 461.08 | 361.31 |
| 90.0 | 1067.81 | 1067.81 | 925.94 | 785.86 | 656.72 | 532.41 | 419.13 | 319.05 | 235.01 |
| 135.0 | 1440.58 | 1299.61 | 1154.17 | 1013.77 | 871.70 | 735.77 | 604.26 | 482.26 | 373.04 |
| 180.0 | 1630.02 | 1513.54 | 1380.92 | 1242.21 | 1106.81 | 971.99 | 837.69 | 704.55 | 574.72 |
| 225.0 | 1655.09 | 1558.69 | 1427.18 | 1098.50 | 1070.33 | 1012.77 | 871.54 | 733.88 | 605.05 |
| 270.0 | 1901.87 | 1793.80 | 1678.48 | 1552.54 | 1413.83 | 1277.85 | 1135.77 | 994.27 | 849.99 |
| 315.0 | 1690.73 | 1572.04 | 1442.21 | 1249.99 | 1057.35 | 1001.68 | 863.81 | 728.78 | 598.58 |
| 360.0 | 1414.93 | 1086.10 | 1086.10 | 972.14 | 835.22 | 705.28 | 577.45 | 460.61 | 355.95 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 268.38 | 198.69 | 148.07 | 118.74 | 102.08 | 88.73 | 82.00 | 68.86 | 61.18 |
| 45.0 | 290.04 | 290.04 | 162.21 | 127.88 | 107.96 | 92.72 | 80.74 | 70.54 | 62.18 |
| 90.0 | 171.93 | 131.20 | 108.07 | 91.77 | 81.58 | 69.49 | 61.18 | 55.56 | 48.52 |
| 135.0 | 277.74 | 277.74 | 205.41 | 112.80 | 102.13 | 87.46 | 76.53 | 67.39 | 59.66 |
| 180.0 | 461.08 | 398.69 | 304.49 | 304.49 | 166.78 | 129.83 | 108.75 | 93.04 | 81.05 |
| 225.0 | 485.89 | 377.66 | 284.68 | 208.88 | 153.59 | 121.16 | 109.28 | 93.46 | 77.16 |
| 270.0 | 711.22 | 580.29 | 461.08 | 395.32 | 295.61 | 295.61 | 146.39 | 114.80 | 96.66 |
| 315.0 | 523.73 | 366.47 | 308.59 | 225.91 | 144.39 | 123.99 | 103.34 | 89.09 | 77.42 |
| 360.0 | 268.38 | 198.69 | 148.07 | 118.74 | 102.08 | 88.73 | 82.00 | 68.86 | 61.18 |

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 | 57.03 | 50.99 | 45.62 | 40.79 | 36.69 | 33.17 | 30.33 | 27.81 | 25.44 |
| 45.0 | 55.19 | 49.25 | 43.94 | 39.26 | 35.27 | 31.96 | 29.17 | 27.70 | 24.55 |
| 90.0 | 44.15 | 39.53 | 35.58 | 32.33 | 29.70 | 27.28 | 25.07 | 23.23 | 21.55 |
| 135.0 | 53.14 | 47.62 | 42.47 | 38.06 | 34.38 | 31.33 | 28.86 | 26.54 | 24.49 |
| 180.0 | 71.06 | 62.60 | 55.61 | 49.46 | 43.99 | 39.26 | 35.43 | 32.17 | 29.44 |
| 225.0 | 71.43 | 63.08 | 55.98 | 49.88 | 44.47 | 39.58 | 35.58 | 32.17 | 29.54 |
| 270.0 | 82.47 | 71.64 | 62.76 | 55.40 | 49.15 | 43.52 | 38.69 | 34.59 | 31.12 |
| 315.0 | 68.07 | 59.97 | 53.25 | 47.57 | 42.26 | 37.74 | 34.01 | 30.96 | 28.38 |
| 360.0 | 57.03 | 50.99 | 45.62 | 40.79 | 36.69 | 33.17 | 30.33 | 27.81 | 25.44 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 23.39 | 21.55 | 19.82 | 18.50 | 17.24 | 16.19 | 15.14 | 14.19 | 13.35 |
| 45.0 | 23.39 | 21.71 | 19.71 | 18.98 | 17.77 | 16.66 | 15.66 | 14.77 | 13.93 |
| 90.0 | 20.03 | 18.66 | 17.35 | 16.29 | 15.30 | 14.30 | 13.46 | 12.67 | 11.98 |
| 135.0 | 22.76 | 21.18 | 19.71 | 18.40 | 17.19 | 16.29 | 15.09 | 14.35 | 13.51 |
| 180.0 | 27.07 | 25.28 | 22.97 | 21.66 | 20.13 | 18.50 | 17.50 | 16.35 | 15.40 |
| 225.0 | 27.12 | 24.97 | 23.07 | 21.39 | 19.87 | 18.50 | 17.24 | 16.29 | 15.14 |
| 270.0 | 29.44 | 25.97 | 23.97 | 22.81 | 20.50 | 19.61 | 18.24 | 17.08 | 16.03 |
| 315.0 | 26.12 | 24.13 | 22.39 | 21.34 | 19.40 | 18.71 | 17.50 | 16.35 | 15.40 |
| 360.0 | 23.39 | 21.55 | 19.82 | 18.50 | 17.24 | 16.19 | 15.14 | 14.19 | 13.35 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 12.62 | 11.77 | 11.14 | 10.67 | 10.09 | 9.46 | 8.94 | 8.30 | 7.78 |
| 45.0 | 13.09 | 12.30 | 11.56 | 10.83 | 10.20 | 9.51 | 8.83 | 8.20 | 7.52 |
| 90.0 | 11.20 | 10.78 | 9.88 | 9.30 | 8.94 | 8.30 | 7.62 | 7.10 | 6.62 |
| 135.0 | 12.67 | 11.93 | 11.20 | 10.51 | 9.93 | 9.30 | 8.67 | 8.09 | 7.57 |
| 180.0 | 14.45 | 13.56 | 12.67 | 11.98 | 11.30 | 10.62 | 9.88 | 9.36 | 8.78 |
| 225.0 | 14.19 | 13.46 | 12.56 | 11.98 | 11.20 | 10.51 | 9.88 | 9.30 | 8.67 |
| 270.0 | 15.03 | 14.14 | 13.30 | 12.51 | 11.77 | 11.14 | 10.51 | 9.88 | 9.30 |
| 315.0 | 14.40 | 13.56 | 12.72 | 12.04 | 11.35 | 10.67 | 9.93 | 9.41 | 8.78 |
| 360.0 | 12.62 | 11.77 | 11.14 | 10.67 | 10.09 | 9.46 | 8.94 | 8.30 | 7.78 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 7.31 | 6.73 | 6.20 | 5.68 | 5.26 | 4.73 | 4.21 | 3.84 | 3.42 |
| 45.0 | 6.89 | 6.47 | 5.89 | 5.31 | 4.94 | 4.36 | 3.99 | 3.63 | 3.15 |
| 90.0 | 6.10 | 5.57 | 5.05 | 4.68 | 4.21 | 3.73 | 3.31 | 2.94 | 2.52 |
| 135.0 | 7.04 | 6.52 | 5.99 | 5.57 | 5.05 | 4.57 | 4.10 | 3.73 | 3.42 |
| 180.0 | 8.20 | 7.62 | 7.04 | 6.62 | 6.20 | 5.57 | 5.05 | 4.78 | 4.15 |
| 225.0 | 8.04 | 7.57 | 7.04 | 6.52 | 5.99 | 5.52 | 4.99 | 4.57 | 4.05 |
| 270.0 | 8.73 | 8.25 | 7.73 | 7.36 | 6.62 | 6.20 | 5.89 | 5.20 | 4.94 |
| 315.0 | 8.20 | 7.57 | 7.04 | 6.62 | 6.10 | 5.62 | 5.20 | 4.73 | 4.26 |
| 360.0 | 7.31 | 6.73 | 6.20 | 5.68 | 5.26 | 4.73 | 4.21 | 3.84 | 3.42 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 3.05 | 2.68 | 2.26 | 2.00 | 1.73 | 1.47 | 1.31 | 1.05 | 0.68 |
| 45.0 | 2.73 | 2.31 | 2.05 | 1.73 | 1.42 | 1.16 | 0.95 | 0.79 | 0.68 |
| 90.0 | 2.21 | 2.00 | 1.68 | 1.47 | 1.26 | 1.05 | 0.68 | 0.68 | 0.68 |
| 135.0 | 2.84 | 2.47 | 2.26 | 2.00 | 1.58 | 1.47 | 1.26 | 1.05 | 0.63 |
| 180.0 | 3.84 | 3.26 | 2.94 | 2.63 | 2.10 | 1.89 | 1.58 | 1.37 | 1.10 |
| 225.0 | 3.73 | 3.31 | 2.89 | 2.47 | 2.16 | 1.89 | 1.58 | 1.31 | 1.16 |
| 270.0 | 4.57 | 3.99 | 3.57 | 3.15 | 2.68 | 2.31 | 2.05 | 1.79 | 1.47 |
| 315.0 | 3.84 | 3.42 | 3.05 | 2.73 | 2.37 | 2.10 | 1.89 | 1.58 | 1.42 |
| 360.0 | 3.05 | 2.68 | 2.26 | 2.00 | 1.73 | 1.47 | 1.31 | 1.05 | 0.68 |

Intensity data(cd)

| | |
|-----------------|------|
| C/ γ (°) | 90.0 |
| 0.0 | 0.68 |
| 45.0 | 0.68 |
| 90.0 | 0.79 |
| 135.0 | 0.68 |
| 180.0 | 0.95 |
| 225.0 | 1.00 |
| 270.0 | 1.26 |
| 315.0 | 1.26 |
| 360.0 | 0.68 |