



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: 1-1377-L

Luminaire: 92.70.427.00

Report No: 20231120-B011

Ballast type: AC

Test No: 20231120-C011

Voltage(V): 36.530

LampCAT: P2121-018-1203-P3090-1

Current(A): 0.399

Lamp flux(lm): 2085.4

Power (W): 14.575

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1937.13, Efficiency(%): 92.89% , Luminous Efficacy(lm/W): 132.91

Central intensity(cd): 8479.757, Maximum intensity(cd): 8479.757

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=21.2

[C90/270]Total=21.2

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

[C90/270]Total=51.2

Maximum s/h(1/2): C0_180=0.36 C90_270=0.36

Maximum s/h(1/4): C0_180=0.39 C90_270=0.39

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.89%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.146%

Equipment: GMS1980
Temperature(°C): 0.0

Date: 2023/11/20
Humidity(%): 0.0%

Operator: NT07
Distance(m): 7.44

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 8479.756 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 8425.510 | 8.089 | 8.089 | 0.39% | 0.42% |
| 2.0 | 8292.523 | 23.995 | 32.084 | 1.15% | 1.66% |
| 3.0 | 8057.339 | 39.104 | 71.188 | 1.88% | 3.67% |
| 4.0 | 7695.050 | 52.728 | 123.916 | 2.53% | 6.40% |
| 5.0 | 7284.741 | 64.442 | 188.358 | 3.09% | 9.72% |
| 6.0 | 6786.697 | 73.949 | 262.307 | 3.55% | 13.54% |
| 7.0 | 6229.494 | 80.791 | 343.099 | 3.87% | 17.71% |
| 8.0 | 5653.678 | 85.046 | 428.144 | 4.08% | 22.10% |
| 9.0 | 5079.177 | 86.984 | 515.128 | 4.17% | 26.59% |
| 10.0 | 4532.975 | 86.986 | 602.115 | 4.17% | 31.08% |
| 11.0 | 4000.681 | 85.269 | 687.383 | 4.09% | 35.48% |
| 12.0 | 3550.449 | 82.545 | 769.928 | 3.96% | 39.75% |
| 13.0 | 3141.870 | 79.421 | 849.349 | 3.81% | 43.85% |
| 14.0 | 2767.957 | 75.645 | 924.994 | 3.63% | 47.75% |
| 15.0 | 2480.118 | 72.048 | 997.042 | 3.45% | 51.47% |
| 16.0 | 2224.592 | 68.937 | 1065.979 | 3.31% | 55.03% |
| 17.0 | 1992.453 | 65.671 | 1131.65 | 3.15% | 58.42% |
| 18.0 | 1807.018 | 62.645 | 1194.295 | 3.00% | 61.65% |
| 19.0 | 1649.745 | 60.141 | 1254.436 | 2.88% | 64.76% |
| 20.0 | 1494.063 | 57.540 | 1311.976 | 2.76% | 67.73% |
| 21.0 | 1326.694 | 54.164 | 1366.14 | 2.60% | 70.52% |
| 22.0 | 1200.031 | 50.776 | 1416.916 | 2.43% | 73.14% |
| 23.0 | 1124.363 | 48.772 | 1465.688 | 2.34% | 75.66% |
| 24.0 | 1014.445 | 46.762 | 1512.45 | 2.24% | 78.08% |
| 25.0 | 910.463 | 43.768 | 1556.218 | 2.10% | 80.34% |
| 26.0 | 812.134 | 40.662 | 1596.88 | 1.95% | 82.44% |
| 27.0 | 715.992 | 37.386 | 1634.266 | 1.79% | 84.37% |
| 28.0 | 619.850 | 33.821 | 1668.087 | 1.62% | 86.11% |
| 29.0 | 538.300 | 30.300 | 1698.387 | 1.45% | 87.68% |
| 30.0 | 449.824 | 26.679 | 1725.067 | 1.28% | 89.05% |
| 31.0 | 381.898 | 23.146 | 1748.212 | 1.11% | 90.25% |
| 32.0 | 320.110 | 20.112 | 1768.324 | 0.96% | 91.29% |
| 33.0 | 270.548 | 17.401 | 1785.725 | 0.83% | 92.18% |
| 34.0 | 240.069 | 15.453 | 1801.178 | 0.74% | 92.98% |
| 35.0 | 197.924 | 13.602 | 1814.78 | 0.65% | 93.68% |
| 36.0 | 150.119 | 11.082 | 1825.862 | 0.53% | 94.26% |
| 37.0 | 123.286 | 8.917 | 1834.779 | 0.43% | 94.72% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 102.446 | 7.535 | 1842.313 | 0.36% | 95.11% |
| 39.0 | 85.051 | 6.400 | 1848.713 | 0.31% | 95.44% |
| 40.0 | 71.628 | 5.464 | 1854.178 | 0.26% | 95.72% |
| 41.0 | 60.937 | 4.721 | 1858.898 | 0.23% | 95.96% |
| 42.0 | 52.614 | 4.126 | 1863.024 | 0.20% | 96.17% |
| 43.0 | 45.632 | 3.639 | 1866.663 | 0.17% | 96.36% |
| 44.0 | 40.463 | 3.249 | 1869.912 | 0.16% | 96.53% |
| 45.0 | 35.980 | 2.938 | 1872.85 | 0.14% | 96.68% |
| 46.0 | 32.534 | 2.679 | 1875.53 | 0.13% | 96.82% |
| 47.0 | 29.289 | 2.459 | 1877.989 | 0.12% | 96.95% |
| 48.0 | 27.075 | 2.279 | 1880.267 | 0.11% | 97.06% |
| 49.0 | 25.110 | 2.143 | 1882.41 | 0.10% | 97.18% |
| 50.0 | 23.394 | 2.022 | 1884.432 | 0.10% | 97.28% |
| 51.0 | 21.996 | 1.920 | 1886.353 | 0.09% | 97.38% |
| 52.0 | 20.882 | 1.840 | 1888.193 | 0.09% | 97.47% |
| 53.0 | 19.858 | 1.772 | 1889.965 | 0.08% | 97.57% |
| 54.0 | 19.014 | 1.713 | 1891.678 | 0.08% | 97.65% |
| 55.0 | 18.315 | 1.666 | 1893.344 | 0.08% | 97.74% |
| 56.0 | 17.692 | 1.627 | 1894.972 | 0.08% | 97.82% |
| 57.0 | 17.180 | 1.594 | 1896.566 | 0.08% | 97.91% |
| 58.0 | 16.731 | 1.568 | 1898.134 | 0.08% | 97.99% |
| 59.0 | 16.350 | 1.547 | 1899.681 | 0.07% | 98.07% |
| 60.0 | 16.018 | 1.529 | 1901.21 | 0.07% | 98.15% |
| 61.0 | 15.700 | 1.514 | 1902.724 | 0.07% | 98.22% |
| 62.0 | 15.430 | 1.500 | 1904.224 | 0.07% | 98.30% |
| 63.0 | 15.174 | 1.488 | 1905.712 | 0.07% | 98.38% |
| 64.0 | 14.862 | 1.474 | 1907.186 | 0.07% | 98.45% |
| 65.0 | 14.558 | 1.456 | 1908.642 | 0.07% | 98.53% |
| 66.0 | 14.226 | 1.436 | 1910.078 | 0.07% | 98.60% |
| 67.0 | 13.811 | 1.410 | 1911.488 | 0.07% | 98.68% |
| 68.0 | 13.409 | 1.379 | 1912.867 | 0.07% | 98.75% |
| 69.0 | 13.008 | 1.348 | 1914.214 | 0.06% | 98.82% |
| 70.0 | 12.614 | 1.316 | 1915.53 | 0.06% | 98.88% |
| 71.0 | 12.261 | 1.286 | 1916.816 | 0.06% | 98.95% |
| 72.0 | 11.922 | 1.257 | 1918.073 | 0.06% | 99.02% |
| 73.0 | 11.631 | 1.232 | 1919.305 | 0.06% | 99.08% |
| 74.0 | 11.347 | 1.208 | 1920.513 | 0.06% | 99.14% |
| 75.0 | 11.085 | 1.185 | 1921.698 | 0.06% | 99.20% |

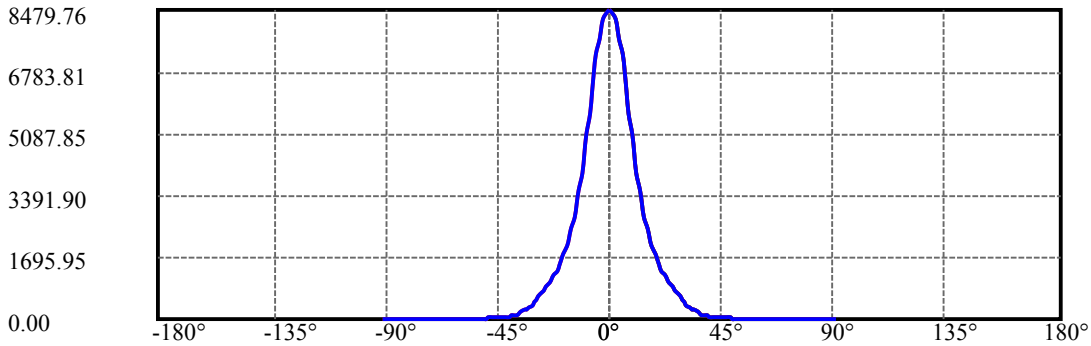
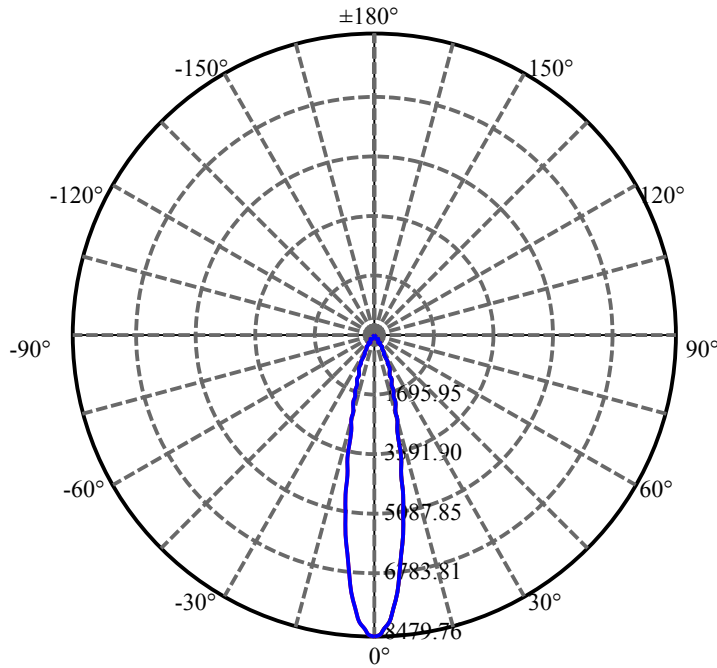
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 10.829 | 1.163 | 1922.861 | 0.06% | 99.26% |
| 77.0 | 10.573 | 1.141 | 1924.002 | 0.05% | 99.32% |
| 78.0 | 10.344 | 1.120 | 1925.122 | 0.05% | 99.38% |
| 79.0 | 10.116 | 1.099 | 1926.221 | 0.05% | 99.44% |
| 80.0 | 9.881 | 1.078 | 1927.299 | 0.05% | 99.49% |
| 81.0 | 9.715 | 1.060 | 1928.359 | 0.05% | 99.55% |
| 82.0 | 9.514 | 1.043 | 1929.402 | 0.05% | 99.60% |
| 83.0 | 9.327 | 1.024 | 1930.426 | 0.05% | 99.65% |
| 84.0 | 9.120 | 1.005 | 1931.431 | 0.05% | 99.71% |
| 85.0 | 8.953 | 0.986 | 1932.417 | 0.05% | 99.76% |
| 86.0 | 8.787 | 0.970 | 1933.387 | 0.05% | 99.81% |
| 87.0 | 8.677 | 0.956 | 1934.343 | 0.05% | 99.86% |
| 88.0 | 8.566 | 0.945 | 1935.287 | 0.05% | 99.90% |
| 89.0 | 8.400 | 0.930 | 1936.217 | 0.04% | 99.95% |
| 90.0 | 8.303 | 0.916 | 1937.133 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1725.07 | 82.72% | 89.05% |
| 0-40 | 1854.18 | 88.91% | 95.72% |
| 0-60 | 1901.21 | 91.17% | 98.15% |
| 0-90 | 1936.22 | 92.85% | 99.95% |
| 0-120 | 1936.22 | 92.85% | 99.95% |
| 0-180 | 1937.13 | 92.89% | 100.00% |
| 60-90 | 35.01 | 1.68% | 1.81% |
| 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% |
| 0-24.85 | 1549.71 | 74.31% | 80.00% |

ZONAL LUMEN SUMMARY

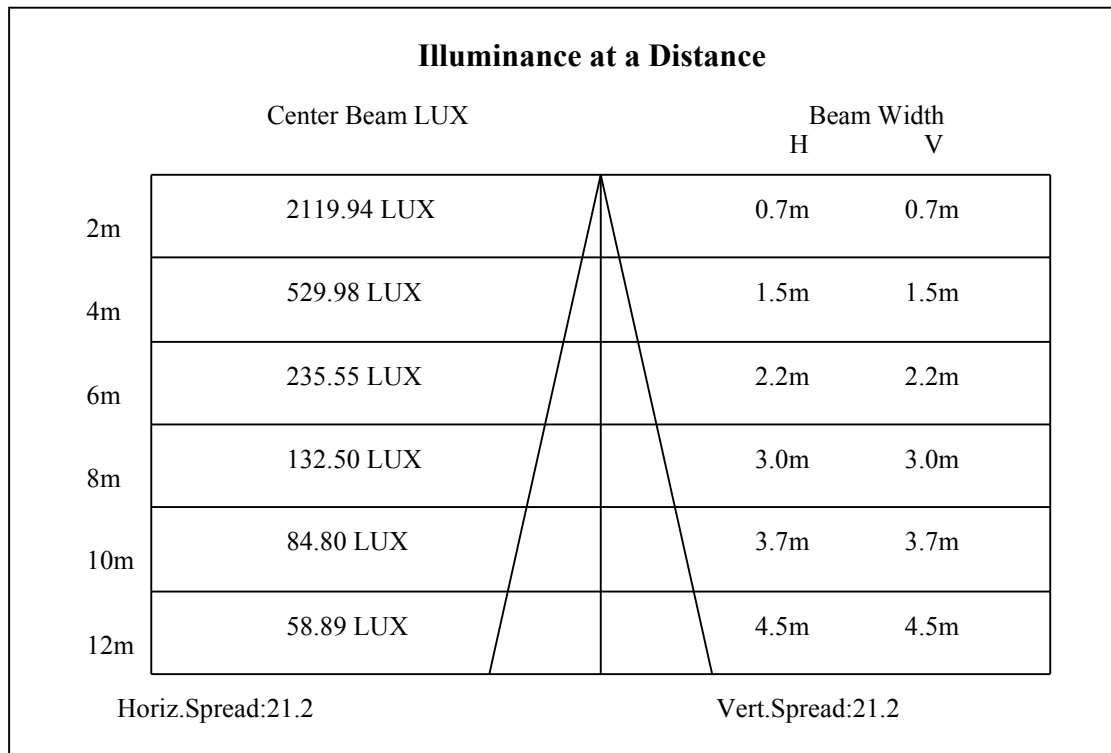
| | |
|---------|--------|
| 0-10 | 602.11 |
| 10-20 | 709.86 |
| 20-30 | 413.09 |
| 30-40 | 129.11 |
| 40-50 | 30.25 |
| 50-60 | 16.78 |
| 60-70 | 14.32 |
| 70-80 | 11.77 |
| 80-90 | 8.92 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

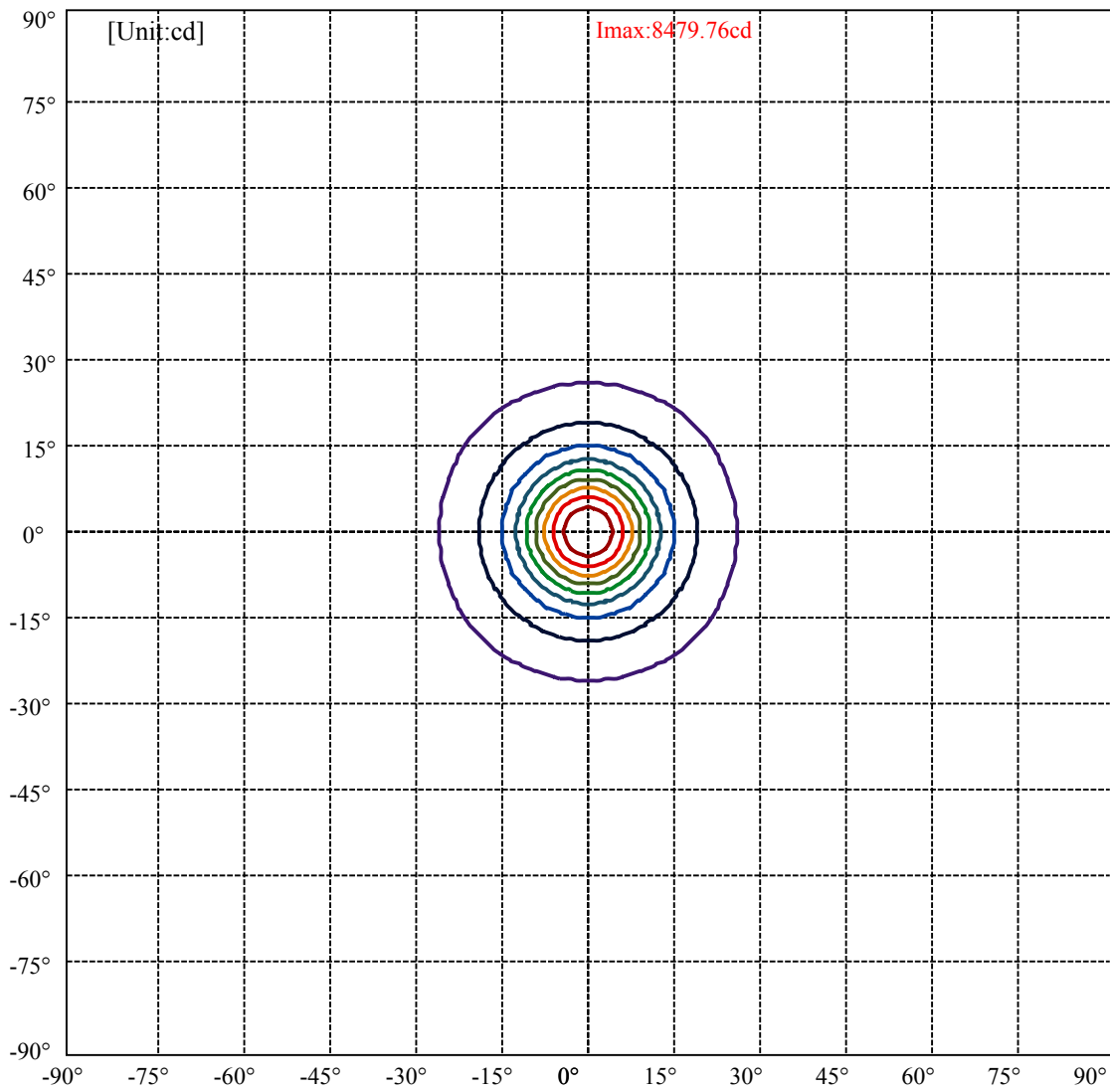


C0(Max): ———
C0/C180: ———
C90/C270: ———

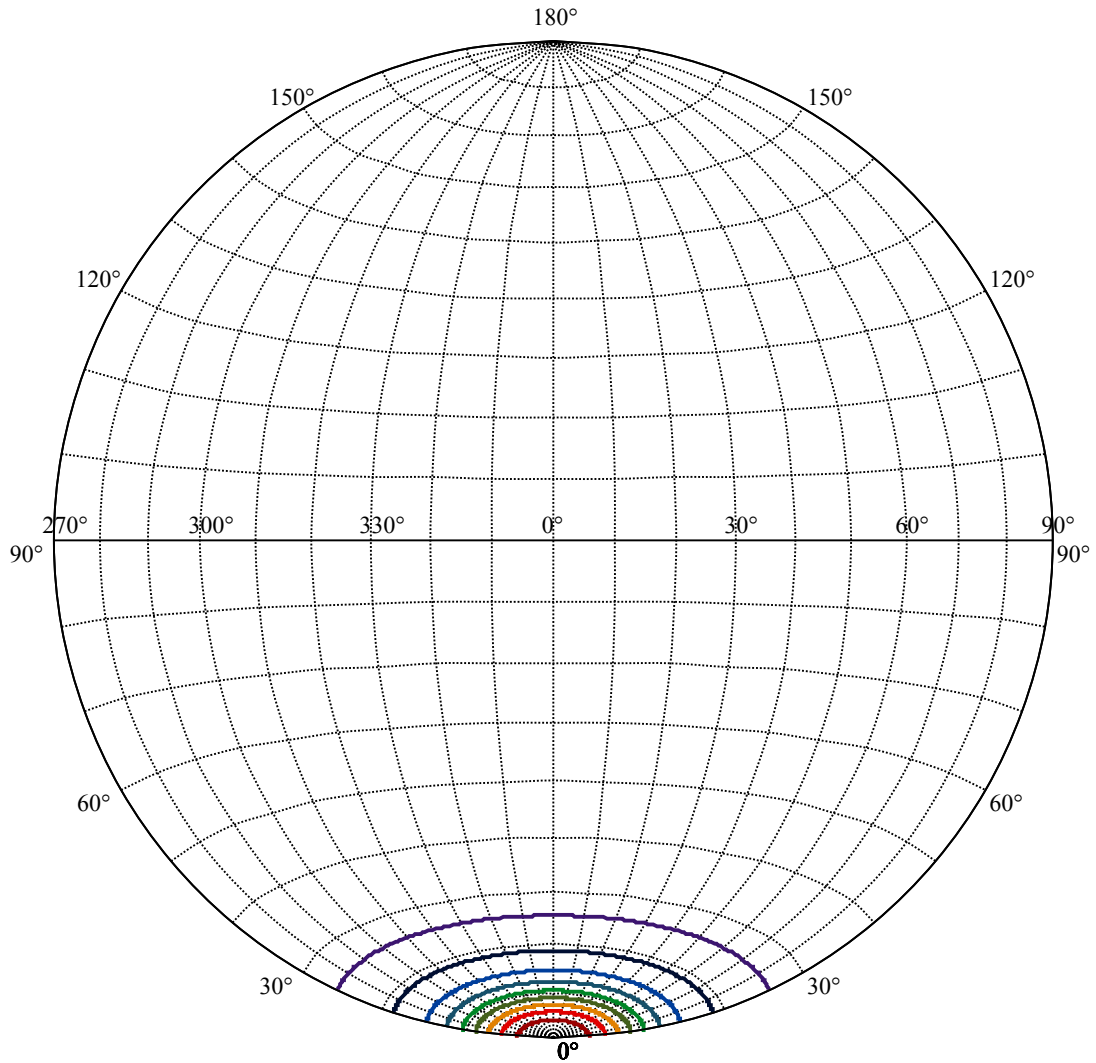
Field angle(10%Imax):C0/180Left:25.6 Right:25.6
:C90/270Left:25.6 Right:25.6

Beam Angle(50%Imax):C0/180Left:10.6 Right:10.6
:C90/270Left:10.6 Right:10.6





| | |
|-------------------|---|
| (10%Imax) 847.976 | — |
| (20%Imax) 1695.95 | — |
| (30%Imax) 2543.93 | — |
| (40%Imax) 3391.9 | — |
| (50%Imax) 4239.88 | — |
| (60%Imax) 5087.85 | — |
| (70%Imax) 5935.83 | — |
| (80%Imax) 6783.81 | — |
| (90%Imax) 7631.78 | — |



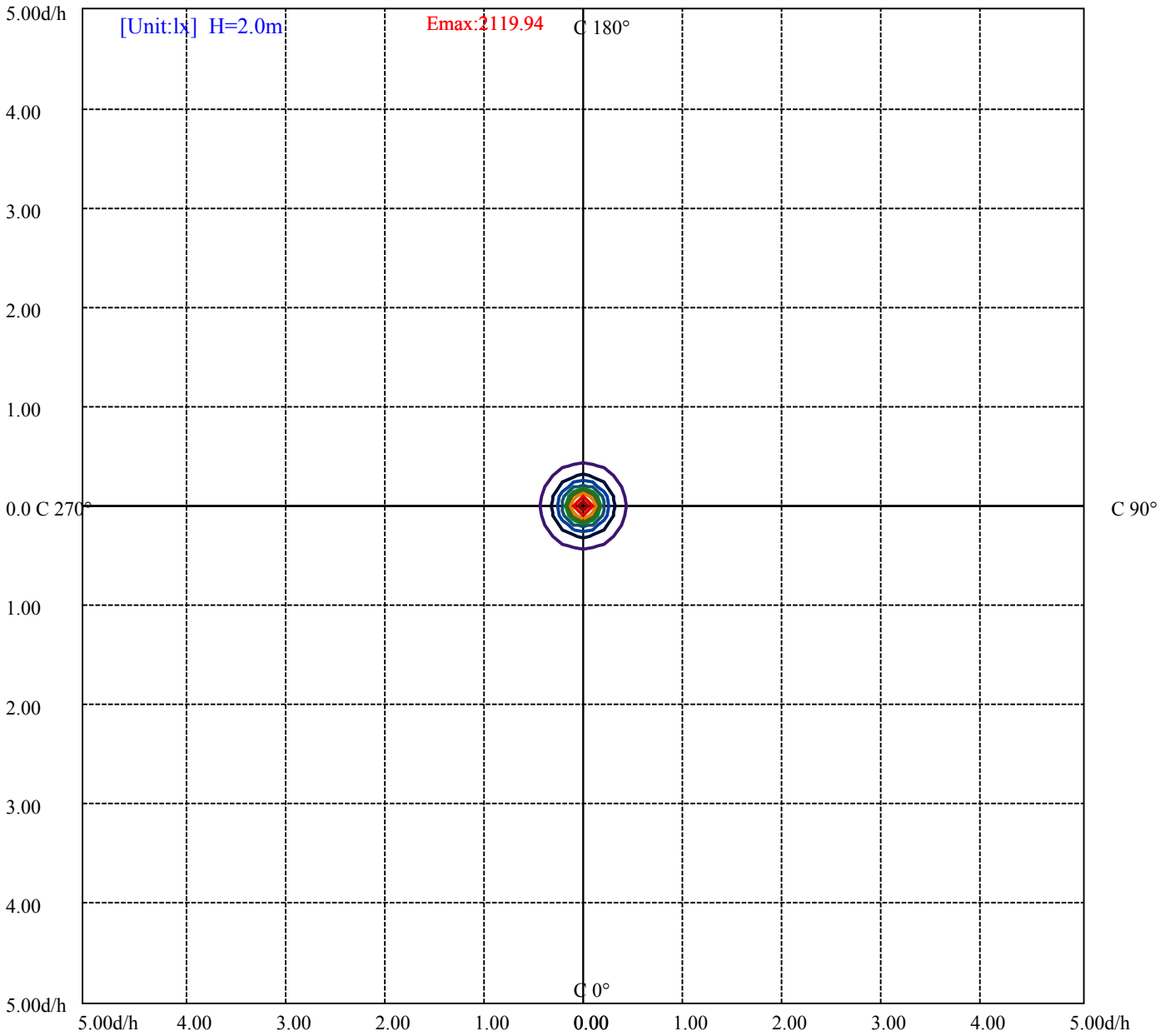
House

[Unit:cd]

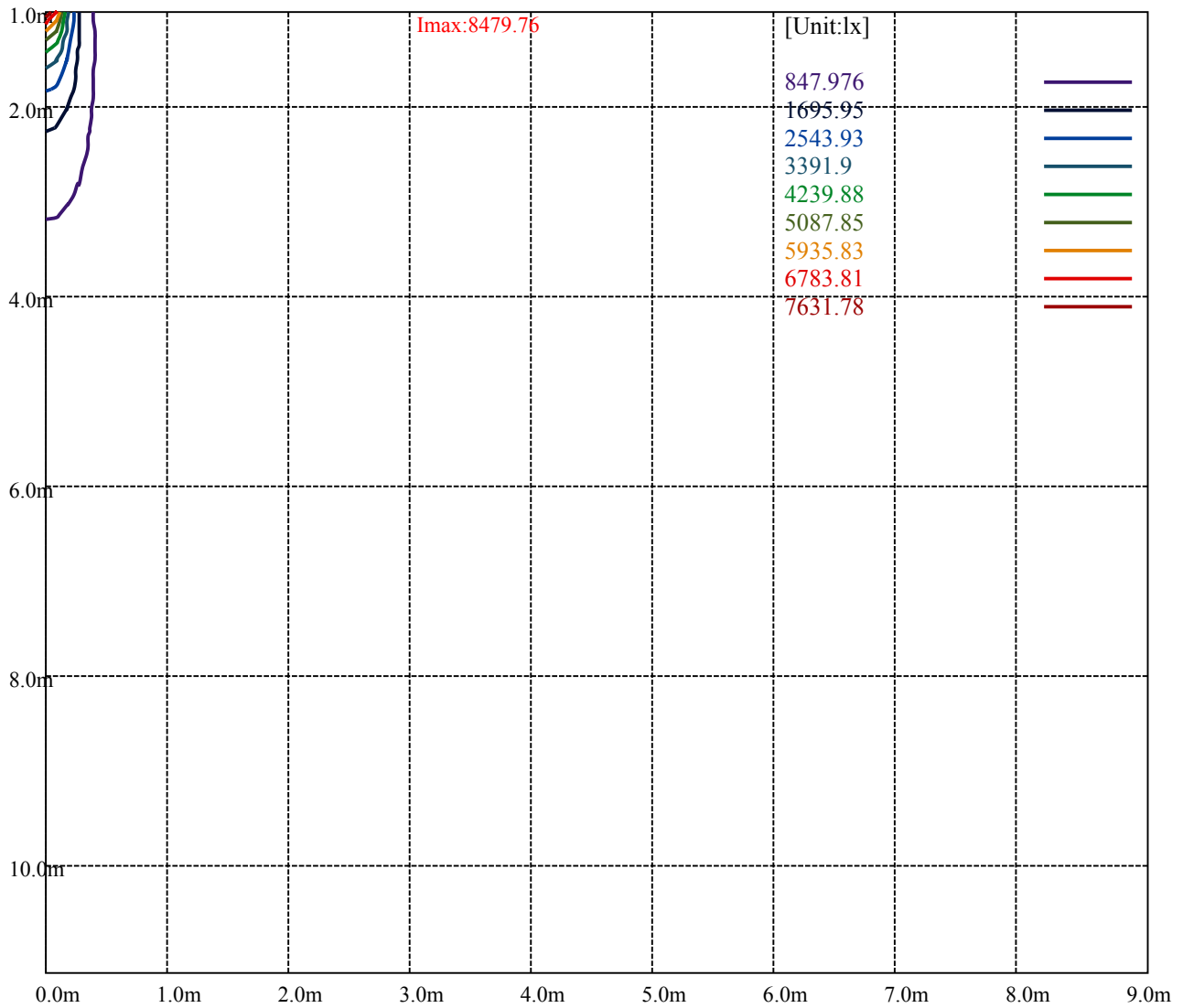
Road

Imax:8479.76

| | | |
|-----------|---------|---|
| (10%Imax) | 847.976 | — |
| (20%Imax) | 1695.95 | — |
| (30%Imax) | 2543.93 | — |
| (40%Imax) | 3391.9 | — |
| (50%Imax) | 4239.88 | — |
| (60%Imax) | 5087.85 | — |
| (70%Imax) | 5935.83 | — |
| (80%Imax) | 6783.81 | — |
| (90%Imax) | 7631.78 | — |



- (10%Emax) 211.9937
- (20%Emax) 423.9875
- (30%Emax) 635.98
- (40%Emax) 847.975
- (50%Emax) 1059.968
- (60%Emax) 1271.963
- (70%Emax) 1483.955
- (80%Emax) 1695.95
- (90%Emax) 1907.943



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

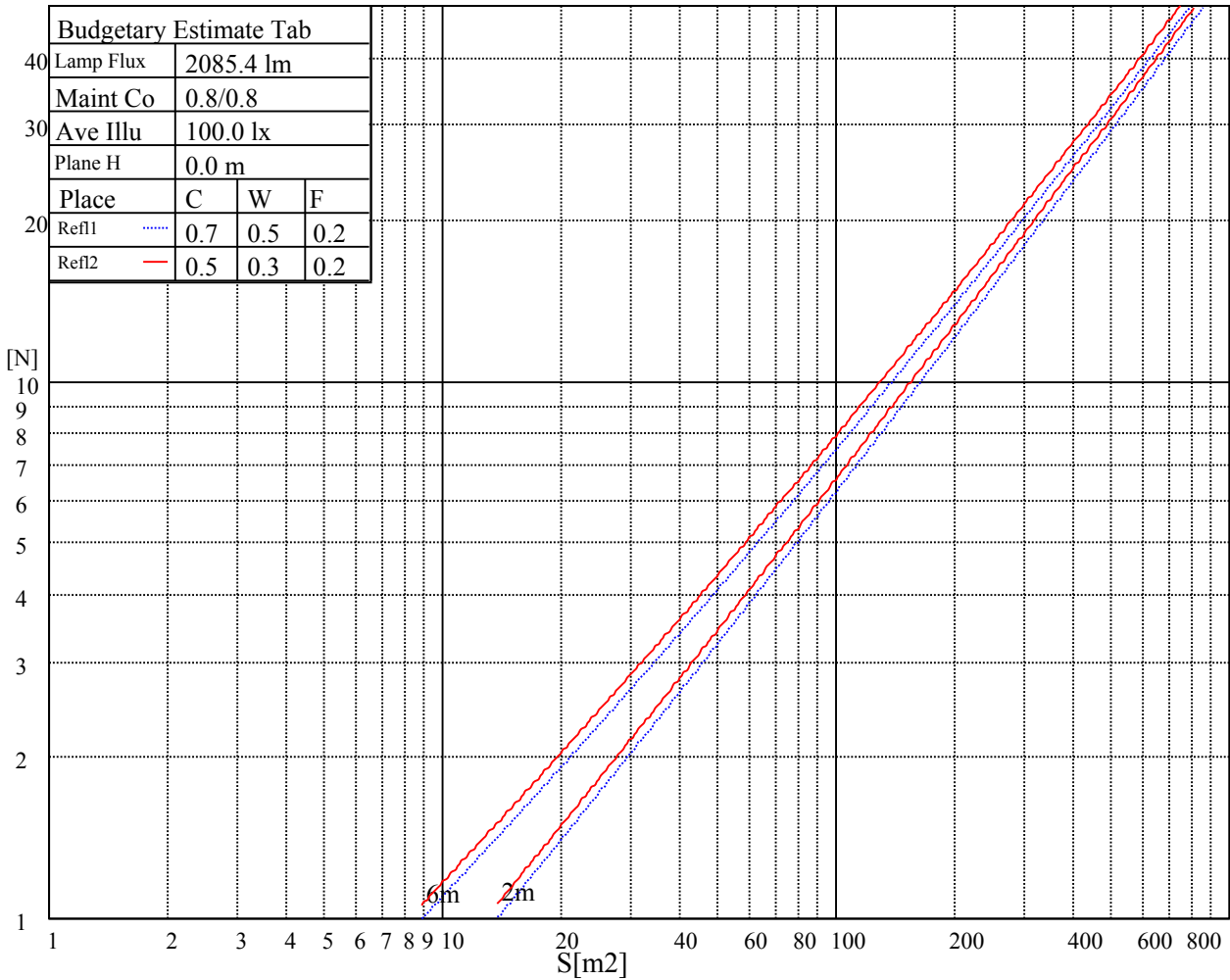
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

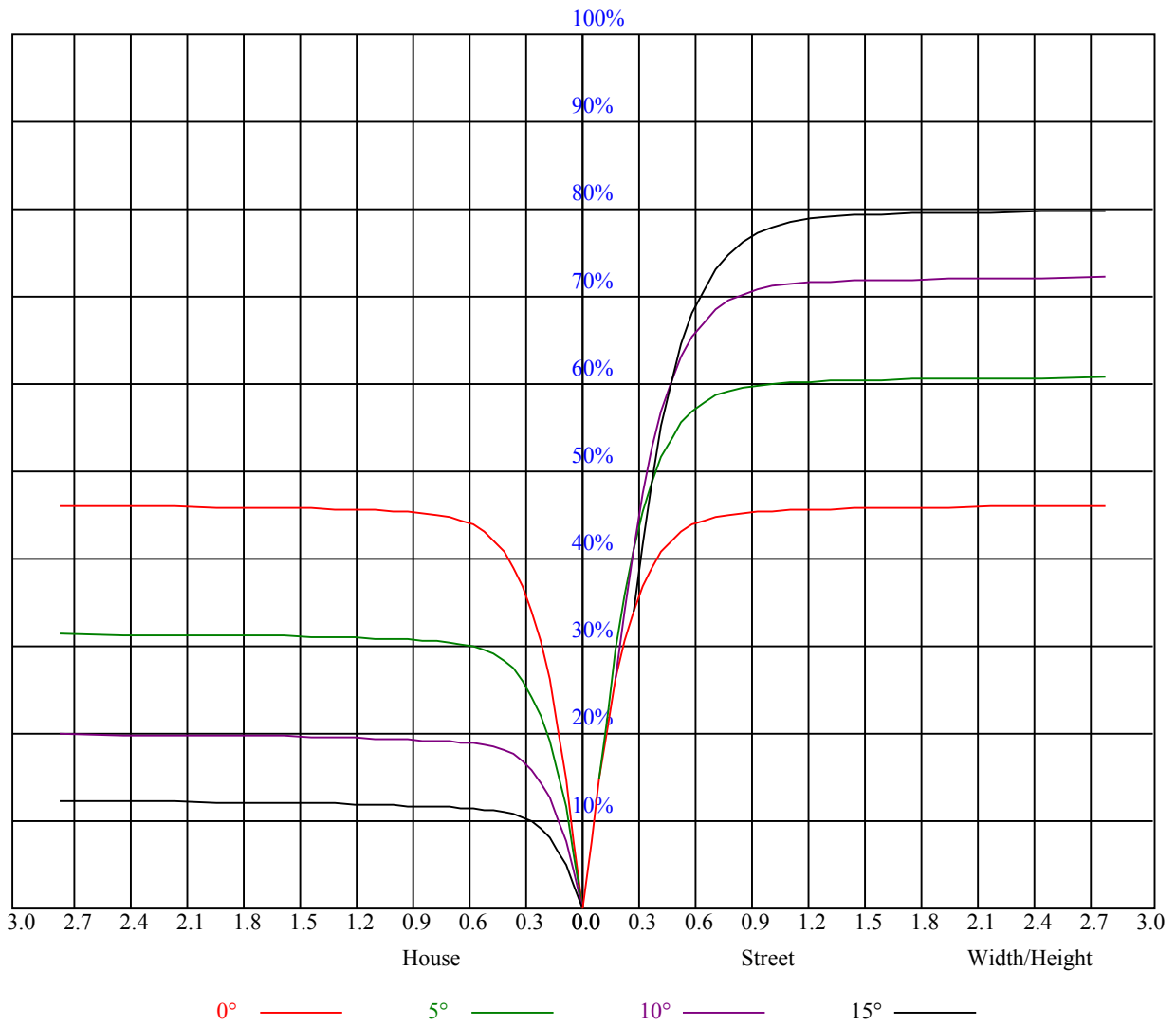


| Illumination assessment according UGR | | | | | | | | | | | |
|---|---------|------------------|-----|-----|-----|---------|----------------|-----|-----|-----|--|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| 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 RHOF=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.11 | 1.11 | 1.11 | 1.08 | 1.08 | 1.08 | 1.03 | 1.03 | 1.03 | 0.99 | 0.99 | 0.99 | 0.95 | 0.95 | 0.95 | 0.93 |
| 1 | 1.04 | 1.02 | 1.00 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.88 |
| 2 | 0.98 | 0.95 | 0.93 | 0.97 | 0.94 | 0.92 | 0.94 | 0.92 | 0.90 | 0.91 | 0.89 | 0.88 | 0.89 | 0.87 | 0.86 | 0.84 |
| 3 | 0.93 | 0.90 | 0.87 | 0.92 | 0.89 | 0.86 | 0.90 | 0.87 | 0.85 | 0.88 | 0.85 | 0.83 | 0.86 | 0.84 | 0.82 | 0.81 |
| 4 | 0.89 | 0.85 | 0.82 | 0.88 | 0.84 | 0.81 | 0.86 | 0.83 | 0.81 | 0.85 | 0.82 | 0.80 | 0.83 | 0.81 | 0.79 | 0.78 |
| 5 | 0.85 | 0.81 | 0.78 | 0.85 | 0.81 | 0.78 | 0.83 | 0.80 | 0.77 | 0.82 | 0.79 | 0.76 | 0.80 | 0.78 | 0.76 | 0.75 |
| 6 | 0.82 | 0.78 | 0.75 | 0.81 | 0.77 | 0.74 | 0.80 | 0.77 | 0.74 | 0.79 | 0.76 | 0.73 | 0.78 | 0.75 | 0.73 | 0.72 |
| 7 | 0.79 | 0.75 | 0.72 | 0.78 | 0.74 | 0.71 | 0.77 | 0.74 | 0.71 | 0.76 | 0.73 | 0.71 | 0.75 | 0.73 | 0.70 | 0.69 |
| 8 | 0.76 | 0.72 | 0.69 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.68 | 0.74 | 0.71 | 0.68 | 0.73 | 0.70 | 0.68 | 0.67 |
| 9 | 0.74 | 0.69 | 0.66 | 0.73 | 0.69 | 0.66 | 0.72 | 0.69 | 0.66 | 0.72 | 0.68 | 0.66 | 0.71 | 0.68 | 0.66 | 0.65 |
| 10 | 0.71 | 0.67 | 0.64 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.70 | 0.66 | 0.64 | 0.69 | 0.66 | 0.64 | 0.63 |



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 | 8477.96 | 8322.97 | 8099.89 | 7789.91 | 7300.03 | 6847.24 | 6353.49 | 5822.09 | 5126.85 |
| 45.0 | 8475.19 | 8469.65 | 8366.14 | 8174.07 | 7811.50 | 7425.69 | 6966.25 | 6331.34 | 5797.18 |
| 90.0 | 8471.31 | 8322.97 | 8107.09 | 7799.88 | 7292.28 | 6823.99 | 6314.74 | 5631.12 | 5085.34 |
| 135.0 | 8494.56 | 8439.21 | 8315.22 | 8081.63 | 7665.37 | 7234.16 | 6649.63 | 6147.57 | 5621.71 |
| 180.0 | 8477.96 | 8484.05 | 8442.53 | 8259.31 | 8020.18 | 7695.26 | 7184.34 | 6711.62 | 6191.85 |
| 225.0 | 8475.19 | 8404.34 | 8201.74 | 7932.72 | 7595.07 | 7171.61 | 6574.35 | 6050.15 | 5494.40 |
| 270.0 | 8471.31 | 8500.65 | 8461.35 | 8289.76 | 8045.09 | 7721.27 | 7338.78 | 6753.69 | 6216.21 |
| 315.0 | 8494.56 | 8460.24 | 8346.22 | 8131.44 | 7830.87 | 7358.71 | 6912.00 | 6388.36 | 5695.89 |
| 360.0 | 8477.96 | 8322.97 | 8099.89 | 7789.91 | 7300.03 | 6847.24 | 6353.49 | 5822.09 | 5126.85 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 4600.99 | 4108.34 | 3651.12 | 3148.51 | 2809.20 | 2470.43 | 2230.20 | 2013.76 | 1795.67 |
| 45.0 | 5248.63 | 4718.89 | 4096.72 | 3648.36 | 3242.06 | 2886.14 | 2519.70 | 2265.62 | 2053.62 |
| 90.0 | 4566.67 | 3955.57 | 3523.26 | 3133.01 | 2805.32 | 2465.45 | 2226.32 | 2019.30 | 1837.19 |
| 135.0 | 4956.36 | 4453.75 | 3982.69 | 3559.24 | 3098.69 | 2783.18 | 2514.16 | 2272.27 | 2017.09 |
| 180.0 | 5520.97 | 5004.52 | 4486.41 | 4006.49 | 3472.33 | 3099.25 | 2775.43 | 2498.11 | 2193.66 |
| 225.0 | 4948.61 | 4306.51 | 3836.56 | 3411.44 | 3048.88 | 2661.95 | 2396.26 | 2122.81 | 1930.73 |
| 270.0 | 5663.78 | 5126.85 | 4454.30 | 3962.76 | 3517.17 | 3042.23 | 2716.20 | 2383.53 | 2145.51 |
| 315.0 | 5127.40 | 4589.37 | 3974.39 | 3533.77 | 3141.32 | 2735.02 | 2462.68 | 2221.34 | 1966.16 |
| 360.0 | 4600.99 | 4108.34 | 3651.12 | 3148.51 | 2809.20 | 2470.43 | 2230.20 | 2013.76 | 1795.67 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 1648.98 | 1512.26 | 1386.05 | 1094.12 | 1094.12 | 1016.24 | 920.36 | 807.83 | 718.99 |
| 45.0 | 1821.69 | 1662.82 | 1497.87 | 1377.20 | 1260.96 | 1151.35 | 1025.15 | 926.07 | 832.52 |
| 90.0 | 1641.79 | 1512.26 | 1382.73 | 1079.67 | 1079.67 | 1029.91 | 906.64 | 815.30 | 700.33 |
| 135.0 | 1841.06 | 1690.50 | 1521.67 | 1405.43 | 1290.29 | 1153.02 | 1049.50 | 928.83 | 834.73 |
| 180.0 | 1998.82 | 1833.86 | 1636.81 | 1502.30 | 1347.86 | 1238.81 | 1134.75 | 1037.33 | 921.08 |
| 225.0 | 1760.24 | 1573.70 | 1451.37 | 1335.13 | 1092.90 | 1092.90 | 997.97 | 905.42 | 812.48 |
| 270.0 | 1960.07 | 1784.05 | 1591.97 | 1458.57 | 1335.68 | 1213.90 | 1079.95 | 982.53 | 887.32 |
| 315.0 | 1783.49 | 1628.50 | 1484.03 | 1361.15 | 1098.77 | 1098.77 | 1001.24 | 880.40 | 789.62 |
| 360.0 | 1648.98 | 1512.26 | 1386.05 | 1094.12 | 1094.12 | 1016.24 | 920.36 | 807.83 | 718.99 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 631.92 | 530.95 | 454.40 | 387.59 | 316.01 | 267.14 | 225.07 | 180.18 | 150.62 |
| 45.0 | 740.08 | 626.05 | 544.13 | 469.95 | 402.42 | 328.25 | 290.05 | 290.05 | 185.43 |
| 90.0 | 610.27 | 527.91 | 455.78 | 374.19 | 317.90 | 269.30 | 227.45 | 181.78 | 151.95 |
| 135.0 | 740.63 | 647.64 | 561.29 | 467.18 | 400.21 | 339.32 | 287.29 | 287.29 | 190.86 |
| 180.0 | 829.75 | 736.76 | 649.85 | 543.02 | 463.31 | 394.67 | 333.78 | 282.30 | 282.30 |
| 225.0 | 699.34 | 611.16 | 526.86 | 433.64 | 367.99 | 309.54 | 249.42 | 209.62 | 166.78 |
| 270.0 | 773.29 | 683.06 | 598.37 | 498.18 | 426.22 | 347.07 | 292.82 | 280.09 | 280.09 |
| 315.0 | 702.66 | 595.27 | 515.73 | 424.84 | 361.13 | 305.61 | 258.50 | 209.24 | 175.36 |
| 360.0 | 631.92 | 530.95 | 454.40 | 387.59 | 316.01 | 267.14 | 225.07 | 180.18 | 150.62 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 126.04 | 105.84 | 84.97 | 72.07 | 61.72 | 53.58 | 45.78 | 40.74 | 36.59 |
| 45.0 | 154.38 | 123.22 | 103.18 | 87.18 | 74.17 | 61.61 | 53.58 | 47.27 | 41.96 |
| 90.0 | 126.87 | 106.72 | 86.02 | 73.18 | 60.50 | 52.75 | 46.33 | 39.91 | 35.70 |
| 135.0 | 158.98 | 126.76 | 105.84 | 89.56 | 73.51 | 63.49 | 55.24 | 47.44 | 42.23 |
| 180.0 | 187.48 | 149.34 | 125.32 | 100.30 | 84.25 | 71.30 | 61.06 | 51.31 | 45.17 |
| 225.0 | 138.55 | 115.74 | 97.09 | 78.21 | 66.26 | 57.01 | 49.82 | 42.73 | 38.36 |
| 270.0 | 162.24 | 135.84 | 114.08 | 96.70 | 81.98 | 67.42 | 58.45 | 51.20 | 45.28 |
| 315.0 | 146.41 | 122.83 | 103.07 | 83.20 | 70.63 | 60.34 | 50.65 | 44.45 | 38.42 |
| 360.0 | 126.04 | 105.84 | 84.97 | 72.07 | 61.72 | 53.58 | 45.78 | 40.74 | 36.59 |

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 | 32.33 | 29.67 | 26.85 | 25.02 | 23.53 | 21.92 | 20.87 | 19.93 | 19.15 |
| 45.0 | 36.53 | 32.99 | 30.06 | 27.62 | 25.13 | 23.53 | 21.92 | 20.87 | 19.76 |
| 90.0 | 32.27 | 29.50 | 26.68 | 24.91 | 23.36 | 22.14 | 20.81 | 19.93 | 19.15 |
| 135.0 | 38.08 | 33.65 | 30.78 | 28.40 | 26.35 | 24.19 | 22.81 | 21.59 | 20.54 |
| 180.0 | 40.08 | 35.92 | 31.66 | 29.06 | 26.85 | 24.63 | 23.14 | 21.86 | 20.54 |
| 225.0 | 34.60 | 31.50 | 28.34 | 26.29 | 24.19 | 22.81 | 21.53 | 20.31 | 19.43 |
| 270.0 | 39.36 | 35.54 | 31.61 | 29.06 | 27.01 | 24.85 | 23.36 | 22.14 | 20.76 |
| 315.0 | 34.60 | 31.50 | 28.34 | 26.24 | 24.47 | 23.08 | 21.53 | 20.43 | 19.54 |
| 360.0 | 32.33 | 29.67 | 26.85 | 25.02 | 23.53 | 21.92 | 20.87 | 19.93 | 19.15 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 18.32 | 17.77 | 17.27 | 16.83 | 16.38 | 16.05 | 15.78 | 15.55 | 15.22 |
| 45.0 | 19.04 | 18.43 | 17.82 | 17.21 | 16.77 | 16.44 | 16.11 | 15.72 | 15.44 |
| 90.0 | 18.32 | 17.77 | 17.27 | 16.72 | 16.38 | 16.05 | 15.72 | 15.50 | 15.22 |
| 135.0 | 19.48 | 18.76 | 17.99 | 17.49 | 17.05 | 16.55 | 16.22 | 15.89 | 15.61 |
| 180.0 | 19.60 | 18.71 | 18.05 | 17.55 | 17.05 | 16.55 | 16.22 | 15.89 | 15.61 |
| 225.0 | 18.71 | 18.10 | 17.38 | 16.94 | 16.61 | 16.22 | 15.89 | 15.61 | 15.39 |
| 270.0 | 19.87 | 19.04 | 18.38 | 17.77 | 17.16 | 16.83 | 16.44 | 16.00 | 15.72 |
| 315.0 | 18.76 | 17.93 | 17.38 | 16.94 | 16.44 | 16.11 | 15.78 | 15.44 | 15.22 |
| 360.0 | 18.32 | 17.77 | 17.27 | 16.83 | 16.38 | 16.05 | 15.78 | 15.55 | 15.22 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 15.00 | 14.61 | 14.28 | 13.95 | 13.45 | 13.12 | 12.73 | 12.40 | 12.01 |
| 45.0 | 15.22 | 15.00 | 14.67 | 14.34 | 13.95 | 13.51 | 13.17 | 12.73 | 12.34 |
| 90.0 | 15.00 | 14.61 | 14.34 | 14.00 | 13.56 | 13.06 | 12.68 | 12.23 | 11.90 |
| 135.0 | 15.33 | 15.00 | 14.72 | 14.39 | 13.89 | 13.45 | 13.12 | 12.62 | 12.29 |
| 180.0 | 15.39 | 15.11 | 14.78 | 14.50 | 14.12 | 13.78 | 13.28 | 12.95 | 12.57 |
| 225.0 | 15.06 | 14.78 | 14.45 | 14.06 | 13.73 | 13.34 | 12.84 | 12.51 | 12.18 |
| 270.0 | 15.50 | 15.17 | 14.89 | 14.56 | 14.23 | 13.84 | 13.40 | 12.95 | 12.62 |
| 315.0 | 14.89 | 14.61 | 14.34 | 14.00 | 13.56 | 13.17 | 12.84 | 12.51 | 12.18 |
| 360.0 | 15.00 | 14.61 | 14.28 | 13.95 | 13.45 | 13.12 | 12.73 | 12.40 | 12.01 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 11.68 | 11.46 | 11.18 | 10.90 | 10.63 | 10.41 | 10.19 | 9.96 | 9.69 |
| 45.0 | 12.01 | 11.73 | 11.40 | 11.13 | 10.90 | 10.68 | 10.41 | 10.19 | 10.02 |
| 90.0 | 11.62 | 11.35 | 11.07 | 10.85 | 10.57 | 10.35 | 10.13 | 9.96 | 9.69 |
| 135.0 | 11.96 | 11.62 | 11.40 | 11.13 | 10.85 | 10.63 | 10.41 | 10.13 | 9.96 |
| 180.0 | 12.18 | 11.85 | 11.51 | 11.29 | 10.96 | 10.74 | 10.52 | 10.24 | 10.02 |
| 225.0 | 11.90 | 11.57 | 11.35 | 11.07 | 10.85 | 10.52 | 10.30 | 10.07 | 9.80 |
| 270.0 | 12.23 | 11.96 | 11.62 | 11.35 | 11.13 | 10.79 | 10.57 | 10.35 | 10.07 |
| 315.0 | 11.79 | 11.51 | 11.24 | 10.96 | 10.74 | 10.46 | 10.24 | 10.02 | 9.80 |
| 360.0 | 11.68 | 11.46 | 11.18 | 10.90 | 10.63 | 10.41 | 10.19 | 9.96 | 9.69 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 9.58 | 9.41 | 9.19 | 8.97 | 8.80 | 8.69 | 8.58 | 8.41 | 8.30 |
| 45.0 | 9.74 | 9.58 | 9.30 | 9.13 | 8.97 | 8.80 | 8.69 | 8.58 | 8.36 |
| 90.0 | 9.58 | 9.35 | 9.13 | 8.97 | 8.86 | 8.69 | 8.64 | 8.47 | 8.30 |
| 135.0 | 9.80 | 9.58 | 9.41 | 9.13 | 8.97 | 8.80 | 8.69 | 8.64 | 8.36 |
| 180.0 | 9.85 | 9.58 | 9.41 | 9.24 | 9.08 | 8.86 | 8.75 | 8.58 | 8.52 |
| 225.0 | 9.63 | 9.47 | 9.30 | 9.08 | 8.91 | 8.80 | 8.64 | 8.58 | 8.30 |
| 270.0 | 9.91 | 9.69 | 9.52 | 9.35 | 9.08 | 8.91 | 8.75 | 8.69 | 8.69 |
| 315.0 | 9.63 | 9.47 | 9.35 | 9.08 | 8.97 | 8.75 | 8.69 | 8.58 | 8.36 |
| 360.0 | 9.58 | 9.41 | 9.19 | 8.97 | 8.80 | 8.69 | 8.58 | 8.41 | 8.30 |

Intensity data(cd)

| | |
|---------------|-------------|
| C/γ(°) | 90.0 |
| 0.0 | 8.30 |
| 45.0 | 8.30 |
| 90.0 | 8.30 |
| 135.0 | 8.36 |
| 180.0 | 8.25 |
| 225.0 | 8.30 |
| 270.0 | 8.30 |
| 315.0 | 8.30 |
| 360.0 | 8.30 |