



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: 2-2678-L

Luminaire: 92.70.412.00

Report No: 2024226-B012

Ballast type: AC

Test No: 2024226-C012

Voltage(V): 35.990

LampCAT: P2141-036-1206-P3090-1

Current(A): 0.701

Lamp flux(lm): 3301.0

Power (W): 25.228

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2798.85, Efficiency(%): 84.79% , Luminous Efficacy(lm/W): 110.94

Central intensity(cd): 10716.990, Maximum intensity(cd): 10716.990

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=22.2

[C90/270]Total=22.2

Field angle(10%Imax): [C0/180]Total=56.2

[C90/270]Total=56.2

Maximum s/h(1/2): C0_180=0.38 C90_270=0.38

Maximum s/h(1/4): C0_180=0.41 C90_270=0.41

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 84.79%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.061%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/2/26
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 | 10716.991 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 10663.297 | 10.230 | 10.23 | 0.31% | 0.37% |
| 2.0 | 10515.820 | 30.398 | 40.628 | 0.92% | 1.45% |
| 3.0 | 10237.180 | 49.634 | 90.263 | 1.50% | 3.22% |
| 4.0 | 9877.267 | 67.329 | 157.592 | 2.04% | 5.63% |
| 5.0 | 9386.994 | 82.874 | 240.466 | 2.51% | 8.59% |
| 6.0 | 8822.691 | 95.697 | 336.163 | 2.90% | 12.01% |
| 7.0 | 8164.094 | 105.437 | 441.599 | 3.19% | 15.78% |
| 8.0 | 7468.115 | 111.877 | 553.476 | 3.39% | 19.78% |
| 9.0 | 6768.698 | 115.382 | 668.858 | 3.50% | 23.90% |
| 10.0 | 6050.334 | 116.008 | 784.865 | 3.51% | 28.04% |
| 11.0 | 5446.748 | 114.879 | 899.745 | 3.48% | 32.15% |
| 12.0 | 4835.773 | 112.403 | 1012.148 | 3.41% | 36.16% |
| 13.0 | 4297.805 | 108.393 | 1120.54 | 3.28% | 40.04% |
| 14.0 | 3861.227 | 104.435 | 1224.975 | 3.16% | 43.77% |
| 15.0 | 3452.959 | 100.412 | 1325.387 | 3.04% | 47.35% |
| 16.0 | 3118.137 | 96.285 | 1421.672 | 2.92% | 50.79% |
| 17.0 | 2821.136 | 92.490 | 1514.163 | 2.80% | 54.10% |
| 18.0 | 2575.414 | 88.977 | 1603.14 | 2.70% | 57.28% |
| 19.0 | 2342.787 | 85.567 | 1688.707 | 2.59% | 60.34% |
| 20.0 | 2146.737 | 82.171 | 1770.878 | 2.49% | 63.27% |
| 21.0 | 1966.561 | 78.984 | 1849.861 | 2.39% | 66.09% |
| 22.0 | 1804.966 | 75.790 | 1925.652 | 2.30% | 68.80% |
| 23.0 | 1669.852 | 72.911 | 1998.563 | 2.21% | 71.41% |
| 24.0 | 1506.903 | 69.455 | 2068.018 | 2.10% | 73.89% |
| 25.0 | 1400.853 | 66.116 | 2134.134 | 2.00% | 76.25% |
| 26.0 | 1287.780 | 63.465 | 2197.599 | 1.92% | 78.52% |
| 27.0 | 1176.193 | 60.282 | 2257.881 | 1.83% | 80.67% |
| 28.0 | 1085.117 | 57.252 | 2315.133 | 1.73% | 82.72% |
| 29.0 | 982.037 | 54.083 | 2369.215 | 1.64% | 84.65% |
| 30.0 | 873.097 | 50.088 | 2419.304 | 1.52% | 86.44% |
| 31.0 | 763.265 | 45.538 | 2464.841 | 1.38% | 88.07% |
| 32.0 | 655.759 | 40.653 | 2505.494 | 1.23% | 89.52% |
| 33.0 | 561.757 | 35.868 | 2541.363 | 1.09% | 90.80% |
| 34.0 | 471.355 | 31.265 | 2572.628 | 0.95% | 91.92% |
| 35.0 | 386.102 | 26.629 | 2599.257 | 0.81% | 92.87% |
| 36.0 | 317.397 | 22.400 | 2621.657 | 0.68% | 93.67% |
| 37.0 | 270.228 | 19.165 | 2640.822 | 0.58% | 94.35% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 204.982 | 15.862 | 2656.684 | 0.48% | 94.92% |
| 39.0 | 167.477 | 12.713 | 2669.397 | 0.39% | 95.37% |
| 40.0 | 126.379 | 10.249 | 2679.646 | 0.31% | 95.74% |
| 41.0 | 87.060 | 7.600 | 2687.246 | 0.23% | 96.01% |
| 42.0 | 69.181 | 5.676 | 2692.923 | 0.17% | 96.22% |
| 43.0 | 56.130 | 4.642 | 2697.564 | 0.14% | 96.38% |
| 44.0 | 46.906 | 3.889 | 2701.453 | 0.12% | 96.52% |
| 45.0 | 40.834 | 3.372 | 2704.825 | 0.10% | 96.64% |
| 46.0 | 36.833 | 3.037 | 2707.863 | 0.09% | 96.75% |
| 47.0 | 34.148 | 2.823 | 2710.686 | 0.09% | 96.85% |
| 48.0 | 32.092 | 2.678 | 2713.363 | 0.08% | 96.95% |
| 49.0 | 30.717 | 2.579 | 2715.943 | 0.08% | 97.04% |
| 50.0 | 29.707 | 2.519 | 2718.462 | 0.08% | 97.13% |
| 51.0 | 29.100 | 2.488 | 2720.95 | 0.08% | 97.22% |
| 52.0 | 28.713 | 2.481 | 2723.431 | 0.08% | 97.31% |
| 53.0 | 28.618 | 2.494 | 2725.925 | 0.08% | 97.39% |
| 54.0 | 28.654 | 2.524 | 2728.449 | 0.08% | 97.48% |
| 55.0 | 28.888 | 2.569 | 2731.018 | 0.08% | 97.58% |
| 56.0 | 29.159 | 2.623 | 2733.641 | 0.08% | 97.67% |
| 57.0 | 29.459 | 2.680 | 2736.321 | 0.08% | 97.77% |
| 58.0 | 29.517 | 2.727 | 2739.048 | 0.08% | 97.86% |
| 59.0 | 29.400 | 2.754 | 2741.802 | 0.08% | 97.96% |
| 60.0 | 28.976 | 2.758 | 2744.56 | 0.08% | 98.06% |
| 61.0 | 28.266 | 2.732 | 2747.292 | 0.08% | 98.16% |
| 62.0 | 27.147 | 2.670 | 2749.962 | 0.08% | 98.25% |
| 63.0 | 25.801 | 2.575 | 2752.537 | 0.08% | 98.35% |
| 64.0 | 24.148 | 2.451 | 2754.988 | 0.07% | 98.43% |
| 65.0 | 22.575 | 2.312 | 2757.301 | 0.07% | 98.52% |
| 66.0 | 21.127 | 2.180 | 2759.481 | 0.07% | 98.59% |
| 67.0 | 19.905 | 2.063 | 2761.544 | 0.06% | 98.67% |
| 68.0 | 19.020 | 1.972 | 2763.516 | 0.06% | 98.74% |
| 69.0 | 18.500 | 1.914 | 2765.43 | 0.06% | 98.81% |
| 70.0 | 18.310 | 1.891 | 2767.321 | 0.06% | 98.87% |
| 71.0 | 18.083 | 1.881 | 2769.202 | 0.06% | 98.94% |
| 72.0 | 17.506 | 1.851 | 2771.052 | 0.06% | 99.01% |
| 73.0 | 17.103 | 1.810 | 2772.862 | 0.05% | 99.07% |
| 74.0 | 16.862 | 1.786 | 2774.648 | 0.05% | 99.14% |
| 75.0 | 16.438 | 1.759 | 2776.407 | 0.05% | 99.20% |

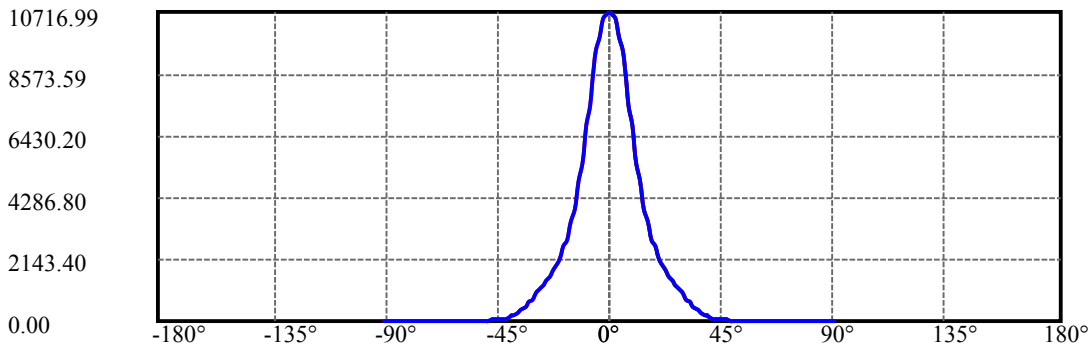
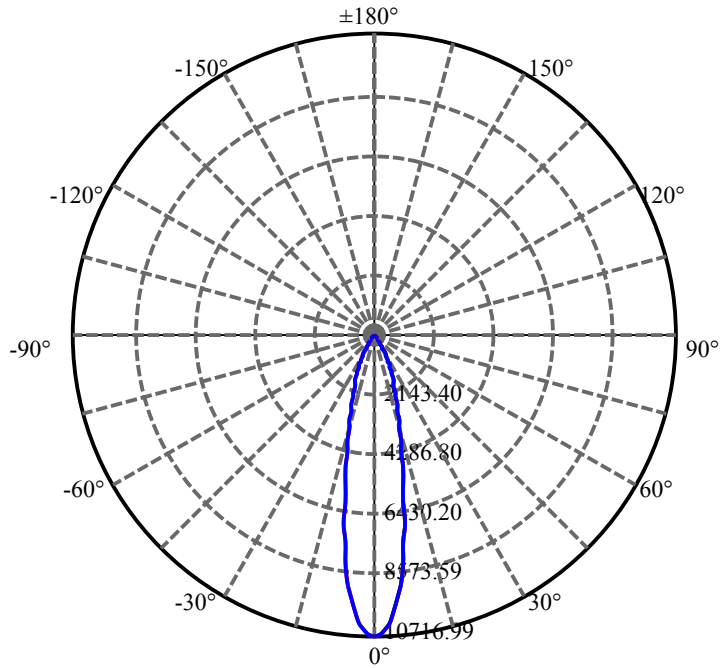
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 16.021 | 1.723 | 2778.13 | 0.05% | 99.26% |
| 77.0 | 15.721 | 1.692 | 2779.822 | 0.05% | 99.32% |
| 78.0 | 15.282 | 1.660 | 2781.482 | 0.05% | 99.38% |
| 79.0 | 14.872 | 1.620 | 2783.102 | 0.05% | 99.44% |
| 80.0 | 14.506 | 1.584 | 2784.686 | 0.05% | 99.49% |
| 81.0 | 14.140 | 1.549 | 2786.235 | 0.05% | 99.55% |
| 82.0 | 13.811 | 1.516 | 2787.751 | 0.05% | 99.60% |
| 83.0 | 13.460 | 1.483 | 2789.233 | 0.04% | 99.66% |
| 84.0 | 13.182 | 1.451 | 2790.685 | 0.04% | 99.71% |
| 85.0 | 12.875 | 1.422 | 2792.107 | 0.04% | 99.76% |
| 86.0 | 12.597 | 1.392 | 2793.499 | 0.04% | 99.81% |
| 87.0 | 12.356 | 1.366 | 2794.865 | 0.04% | 99.86% |
| 88.0 | 12.151 | 1.342 | 2796.207 | 0.04% | 99.91% |
| 89.0 | 12.019 | 1.325 | 2797.532 | 0.04% | 99.95% |
| 90.0 | 11.953 | 1.314 | 2798.846 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 2419.30 | 73.29% | 86.44% |
| 0-40 | 2679.65 | 81.18% | 95.74% |
| 0-60 | 2744.56 | 83.14% | 98.06% |
| 0-90 | 2797.53 | 84.75% | 99.95% |
| 0-120 | 2797.53 | 84.75% | 99.95% |
| 0-180 | 2798.85 | 84.79% | 100.00% |
| 60-90 | 52.97 | 1.60% | 1.89% |
| 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% |
| 0-26.69 | 2239.08 | 67.83% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 784.87 |
| 10-20 | 986.01 |
| 20-30 | 648.43 |
| 30-40 | 260.34 |
| 40-50 | 38.82 |
| 50-60 | 26.10 |
| 60-70 | 22.76 |
| 70-80 | 17.37 |
| 80-90 | 12.85 |
| 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: —————

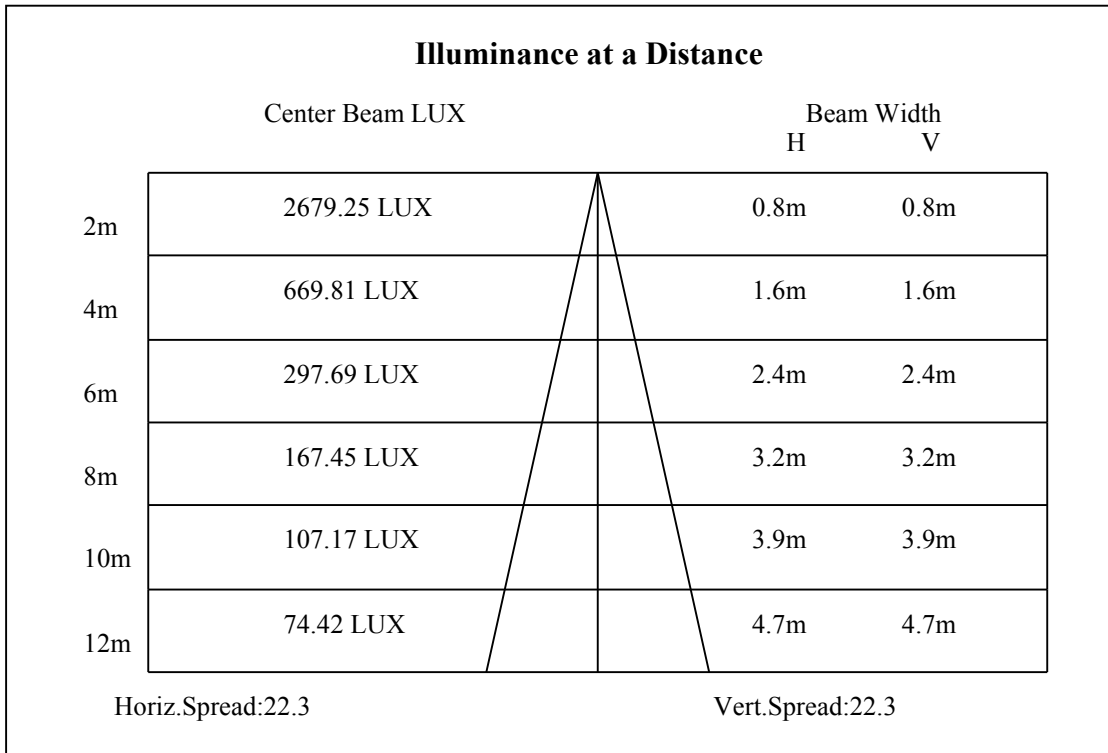
C90/C270: —————

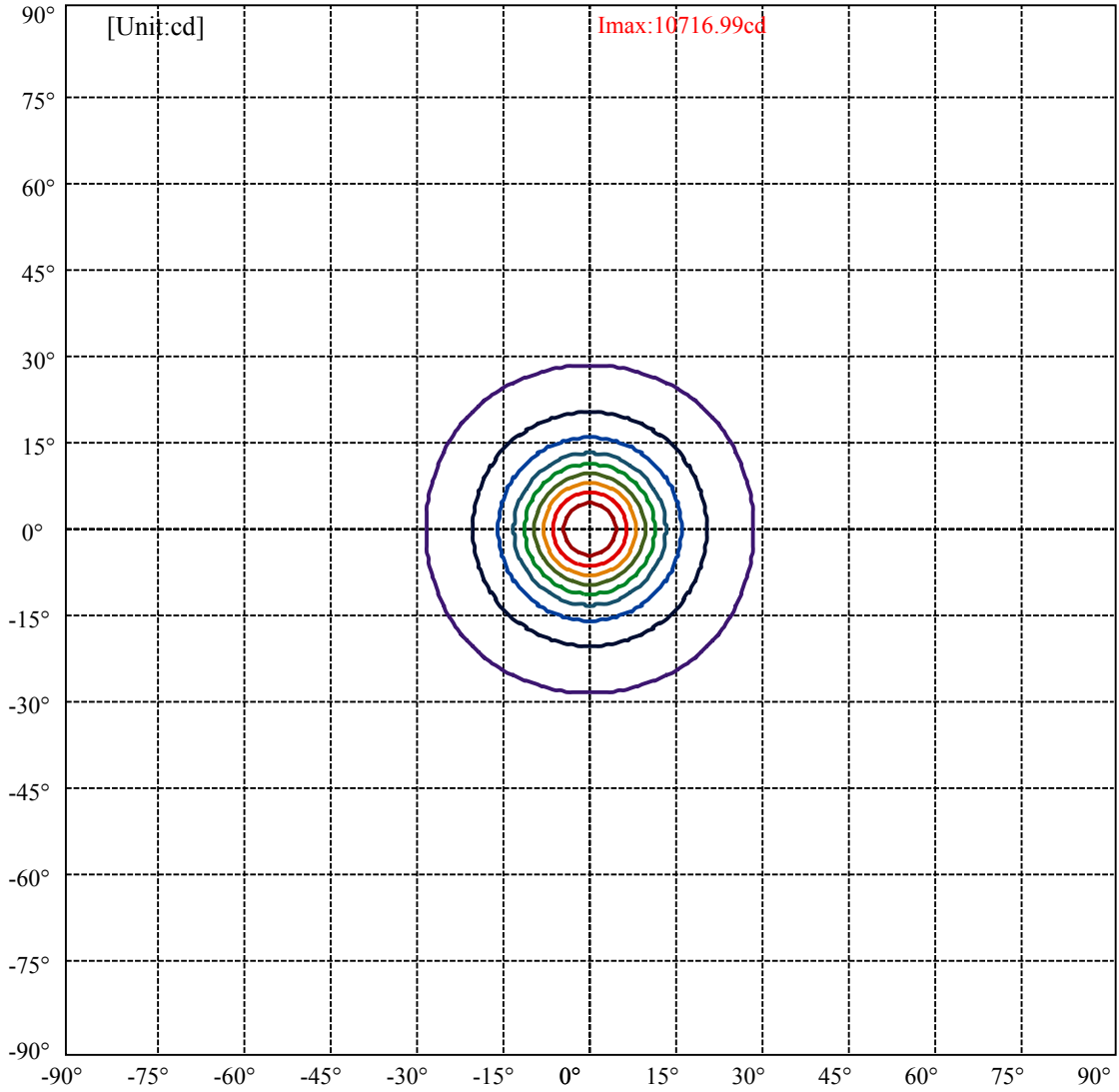
Field angle(10%Imax):C0/180Left:28.1 Right:28.1

:C90/270Left:28.1 Right:28.1

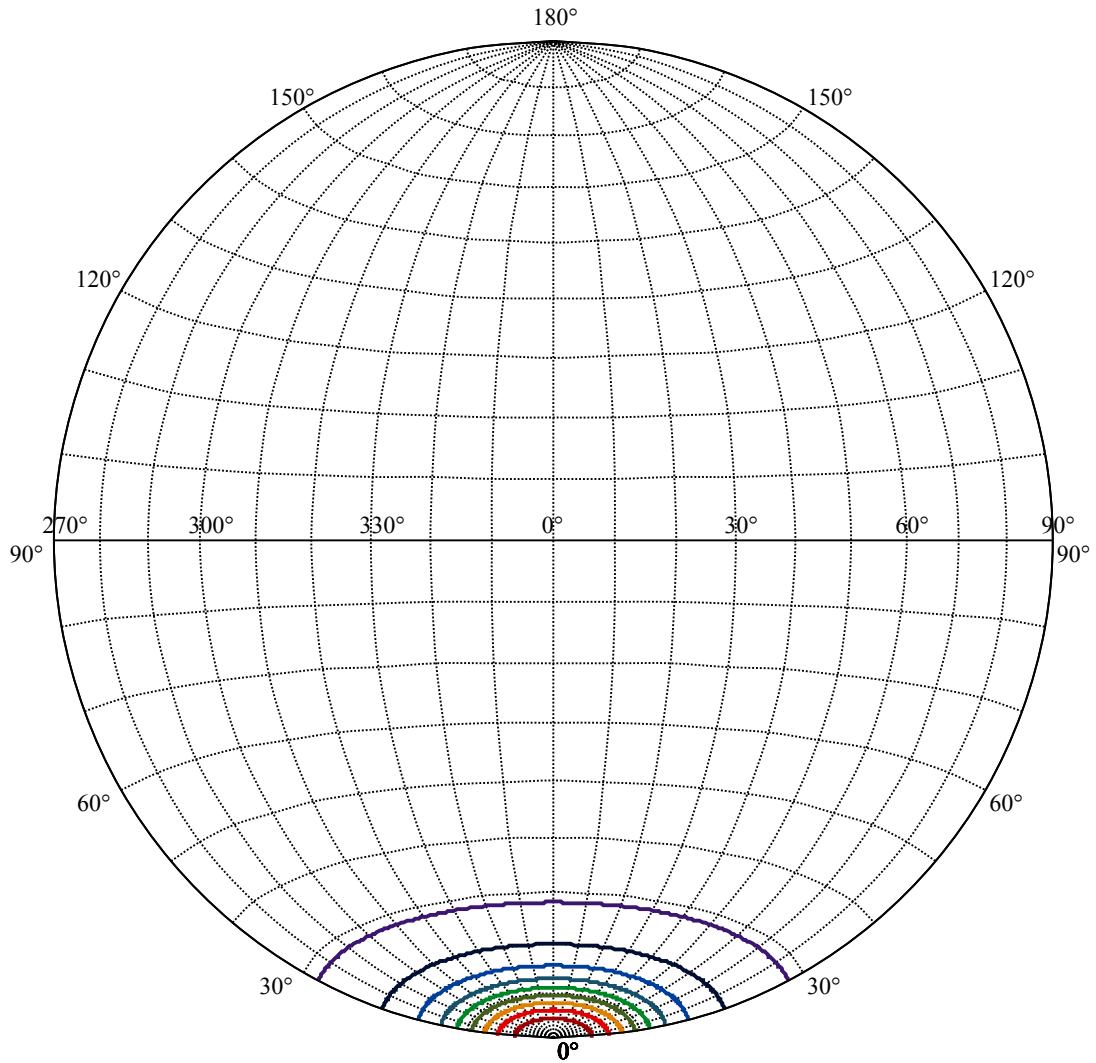
Beam Angle(50%Imax):C0/180Left:11.1 Right:11.1

:C90/270Left:11.1 Right:11.1





| | |
|-------------------|---|
| (10%Imax) 1071.7 | — |
| (20%Imax) 2143.4 | — |
| (30%Imax) 3215.1 | — |
| (40%Imax) 4286.8 | — |
| (50%Imax) 5358.5 | — |
| (60%Imax) 6430.2 | — |
| (70%Imax) 7501.89 | — |
| (80%Imax) 8573.59 | — |
| (90%Imax) 9645.29 | — |



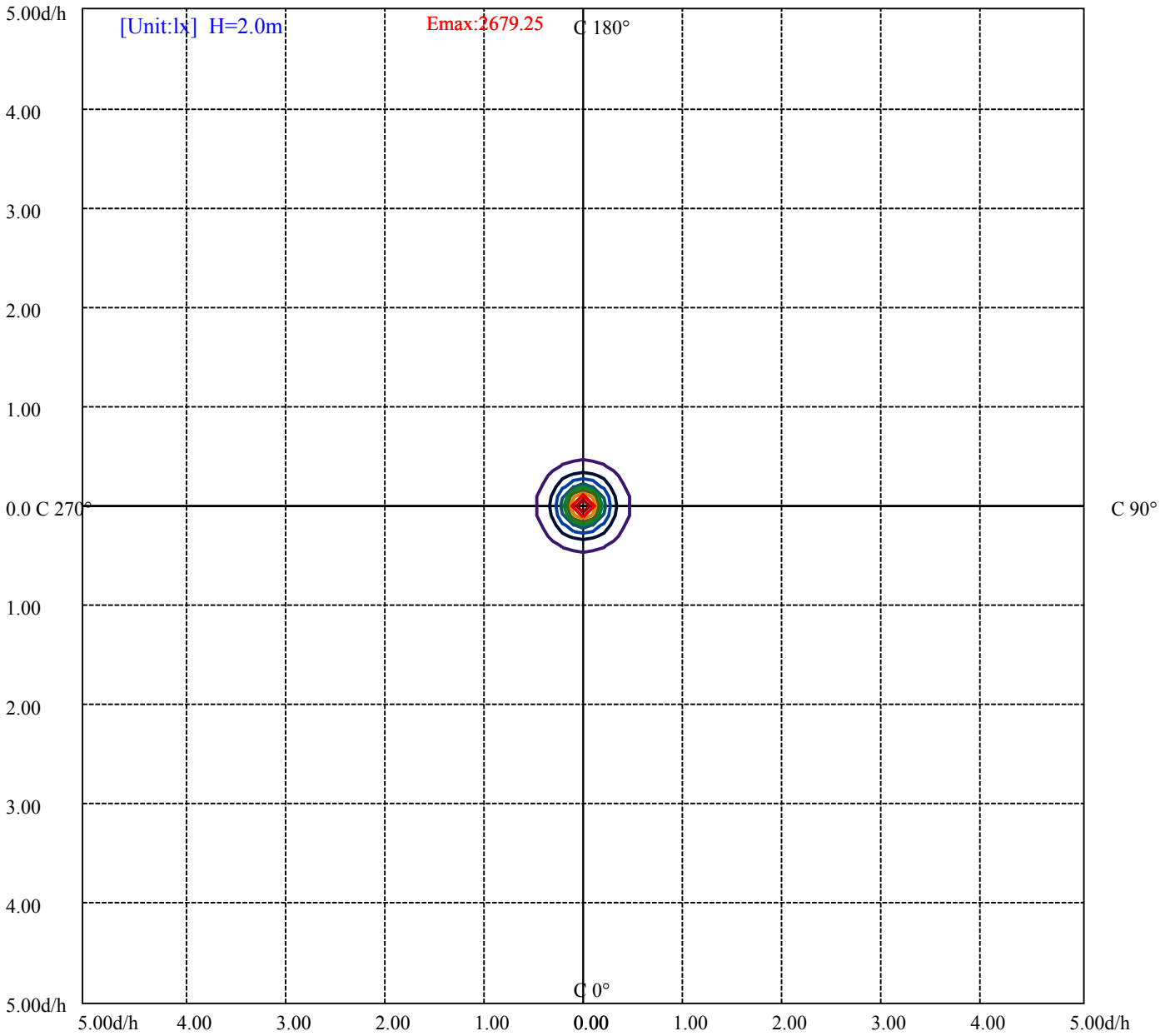
House

[Unit:cd]

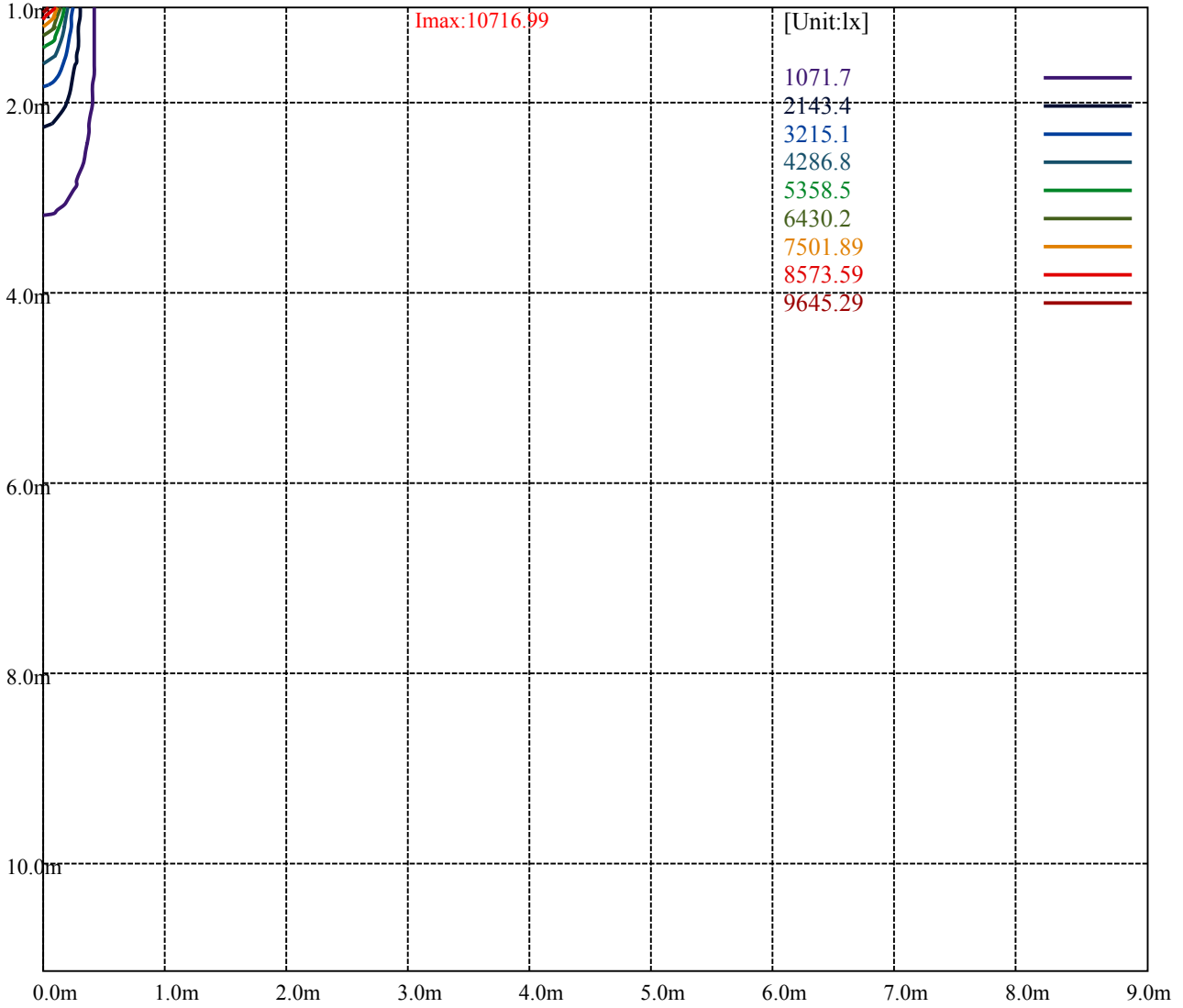
Road

Imax:10716.99

| | | |
|-----------|---------|---|
| (10%Imax) | 1071.7 | — |
| (20%Imax) | 2143.4 | — |
| (30%Imax) | 3215.1 | — |
| (40%Imax) | 4286.8 | — |
| (50%Imax) | 5358.5 | — |
| (60%Imax) | 6430.2 | — |
| (70%Imax) | 7501.89 | — |
| (80%Imax) | 8573.59 | — |
| (90%Imax) | 9645.29 | — |



- (10%Emax) 267.925
- (20%Emax) 535.85
- (30%Emax) 803.775
- (40%Emax) 1071.698
- (50%Emax) 1339.623
- (60%Emax) 1607.547
- (70%Emax) 1875.473
- (80%Emax) 2143.397
- (90%Emax) 2411.323



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

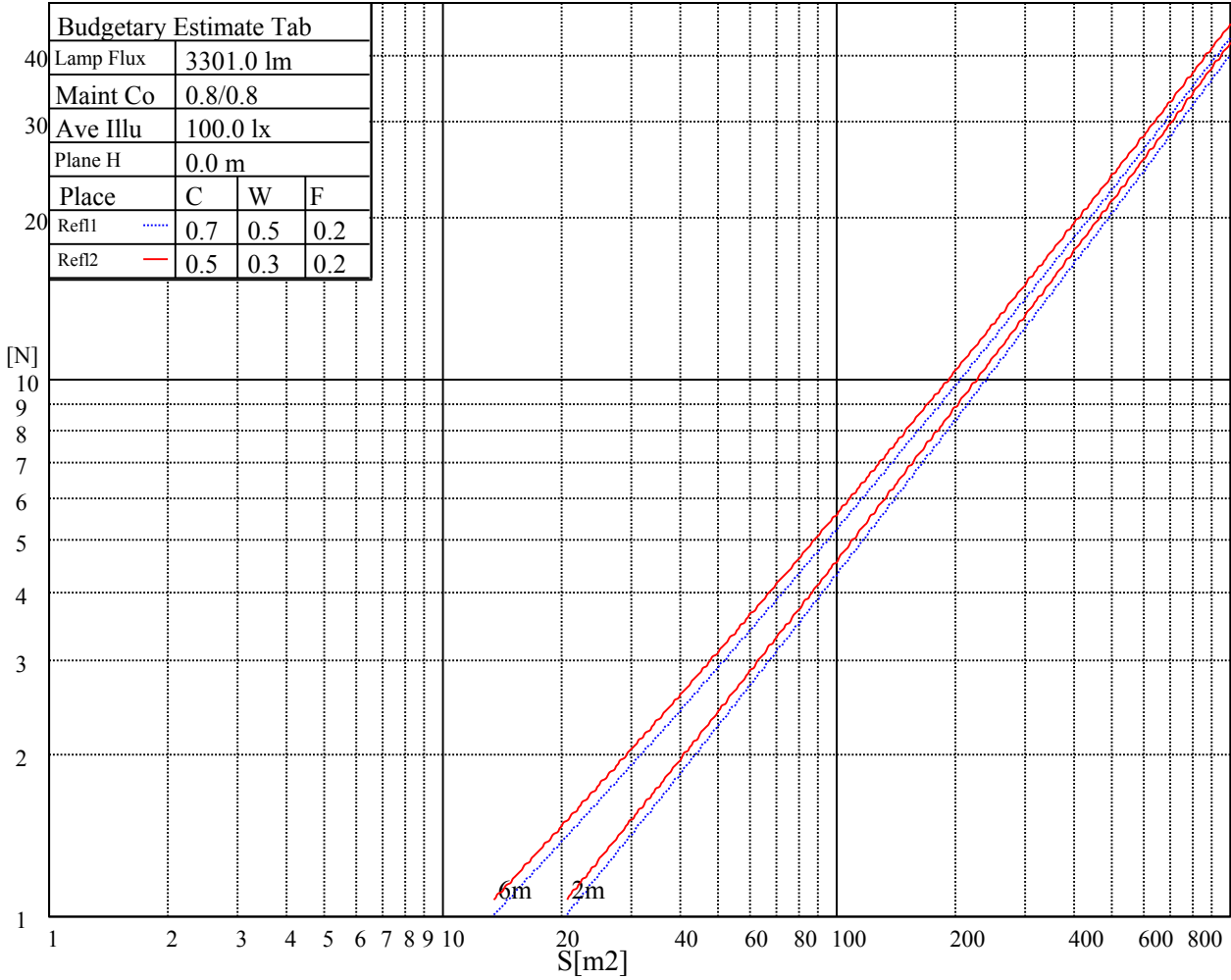
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

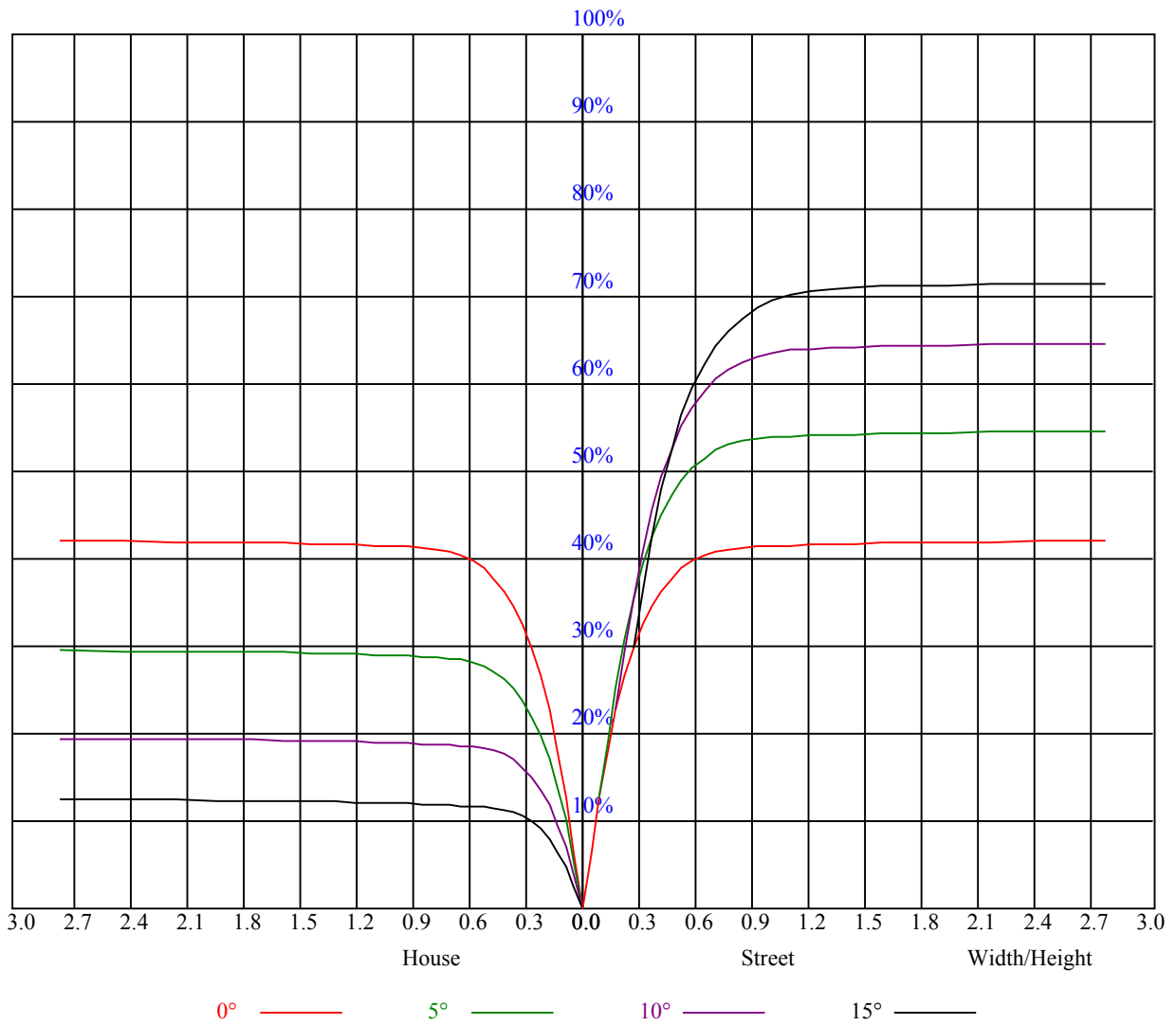


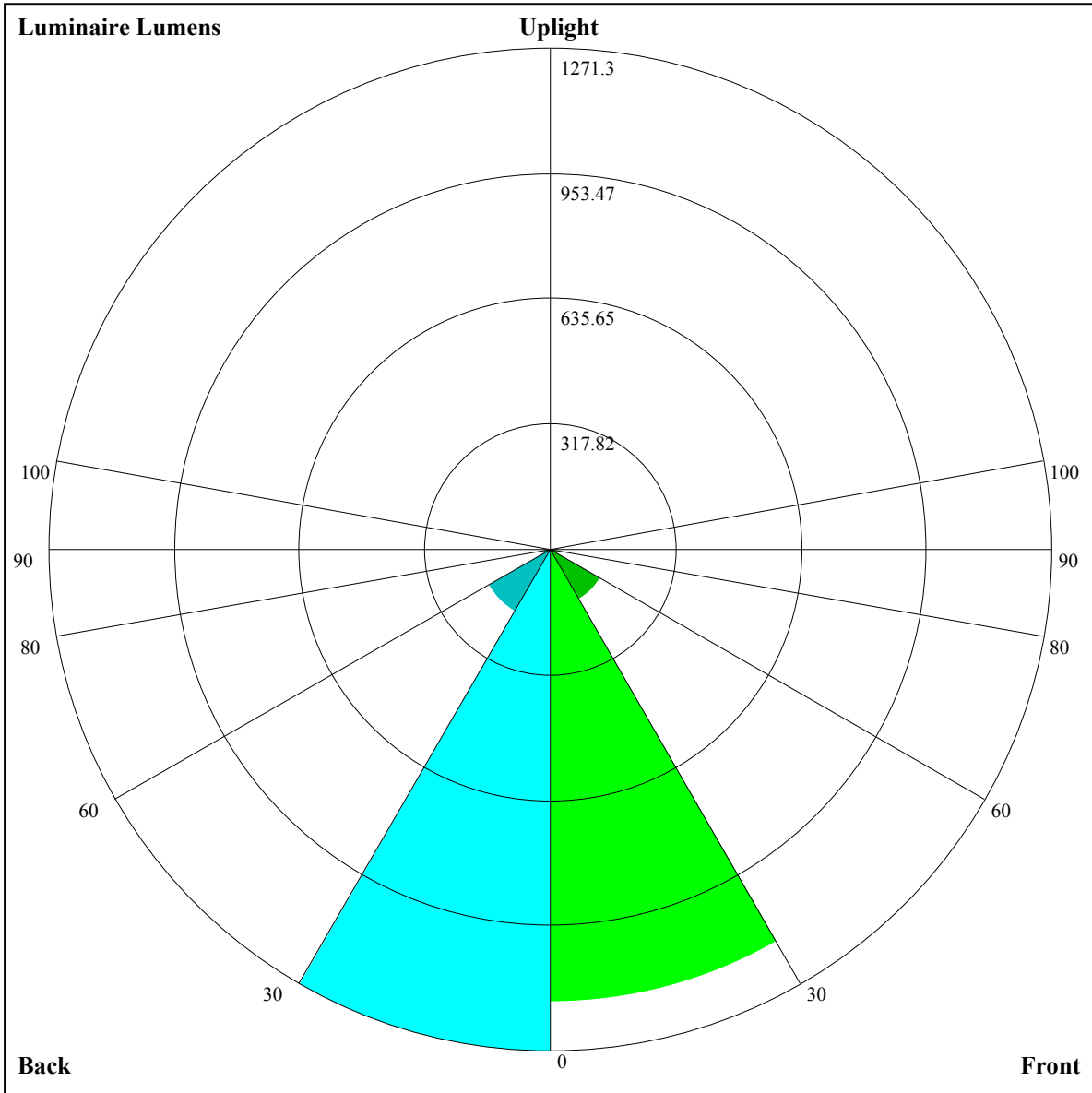
| Illumination assessment according UGR | | | | | | | | | | | |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|--|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf of 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 | 1.01 | 1.01 | 1.01 | 0.99 | 0.99 | 0.99 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.87 | 0.87 | 0.87 | 0.85 |
| 1 | 0.95 | 0.93 | 0.91 | 0.93 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 | 0.83 | 0.82 | 0.80 |
| 2 | 0.89 | 0.86 | 0.84 | 0.88 | 0.85 | 0.83 | 0.85 | 0.83 | 0.81 | 0.83 | 0.81 | 0.79 | 0.80 | 0.79 | 0.78 | 0.76 |
| 3 | 0.85 | 0.81 | 0.78 | 0.84 | 0.80 | 0.78 | 0.81 | 0.79 | 0.76 | 0.79 | 0.77 | 0.75 | 0.78 | 0.76 | 0.74 | 0.73 |
| 4 | 0.81 | 0.77 | 0.74 | 0.80 | 0.76 | 0.73 | 0.78 | 0.75 | 0.72 | 0.76 | 0.74 | 0.72 | 0.75 | 0.73 | 0.71 | 0.70 |
| 5 | 0.77 | 0.73 | 0.70 | 0.76 | 0.72 | 0.70 | 0.75 | 0.71 | 0.69 | 0.73 | 0.71 | 0.68 | 0.72 | 0.70 | 0.68 | 0.67 |
| 6 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.66 | 0.72 | 0.68 | 0.66 | 0.71 | 0.68 | 0.65 | 0.70 | 0.67 | 0.65 | 0.64 |
| 7 | 0.71 | 0.67 | 0.64 | 0.70 | 0.66 | 0.63 | 0.69 | 0.66 | 0.63 | 0.68 | 0.65 | 0.63 | 0.67 | 0.65 | 0.63 | 0.62 |
| 8 | 0.68 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.63 | 0.61 | 0.66 | 0.63 | 0.60 | 0.65 | 0.62 | 0.60 | 0.59 |
| 9 | 0.65 | 0.61 | 0.59 | 0.65 | 0.61 | 0.59 | 0.64 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.63 | 0.60 | 0.58 | 0.57 |
| 10 | 0.63 | 0.59 | 0.57 | 0.63 | 0.59 | 0.57 | 0.62 | 0.59 | 0.56 | 0.62 | 0.58 | 0.56 | 0.61 | 0.58 | 0.56 | 0.55 |





Luminaire Lumens:

FL=1146.95,FM=146.69,FH=20,FVH=7.01

BL=1271.3,BM=181.06,BH=20.04,BVH=7.16

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 | 10643.55 | 10295.34 | 9941.86 | 9514.65 | 8997.31 | 8225.98 | 7544.78 | 6681.57 | 6026.12 |
| 45.0 | 10762.35 | 10678.07 | 10445.74 | 10003.31 | 9577.85 | 8938.20 | 8323.71 | 7653.05 | 6804.47 |
| 90.0 | 10669.88 | 10461.54 | 10136.16 | 9627.59 | 9133.08 | 8546.10 | 7725.61 | 7037.97 | 6381.35 |
| 135.0 | 10792.19 | 10769.95 | 10633.60 | 10284.80 | 9895.63 | 9457.29 | 8926.50 | 8127.66 | 7447.05 |
| 180.0 | 10643.55 | 10750.64 | 10784.00 | 10791.02 | 10596.14 | 10342.74 | 9978.14 | 9557.95 | 8900.16 |
| 225.0 | 10762.35 | 10793.95 | 10757.08 | 10566.88 | 10298.85 | 9923.13 | 9347.27 | 8801.84 | 8159.27 |
| 270.0 | 10669.88 | 10776.98 | 10789.85 | 10725.48 | 10476.17 | 10168.34 | 9768.05 | 9289.33 | 8558.39 |
| 315.0 | 10792.19 | 10779.90 | 10638.28 | 10383.71 | 10043.10 | 9494.16 | 8967.46 | 8163.36 | 7468.11 |
| 360.0 | 10643.55 | 10295.34 | 9941.86 | 9514.65 | 8997.31 | 8225.98 | 7544.78 | 6681.57 | 6026.12 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 5413.39 | 4714.05 | 4216.02 | 3789.39 | 3346.38 | 3050.25 | 2792.75 | 2563.93 | 2312.87 |
| 45.0 | 6150.77 | 5536.87 | 4967.45 | 4334.82 | 3900.58 | 3522.53 | 3197.14 | 2849.52 | 2611.92 |
| 90.0 | 5598.91 | 5017.78 | 4492.83 | 4035.18 | 3634.31 | 3219.97 | 2933.21 | 2685.07 | 2422.89 |
| 135.0 | 6775.21 | 5982.23 | 5380.03 | 4820.56 | 4208.41 | 3792.90 | 3430.06 | 3044.98 | 2785.14 |
| 180.0 | 8272.80 | 7417.79 | 6732.49 | 6068.26 | 5300.44 | 4750.33 | 4256.99 | 3832.70 | 3372.12 |
| 225.0 | 7288.45 | 6590.86 | 5936.00 | 5181.06 | 4637.38 | 4161.01 | 3653.62 | 3310.09 | 3015.14 |
| 270.0 | 7893.57 | 7222.32 | 6537.02 | 5707.17 | 5100.29 | 4564.81 | 3986.61 | 3586.32 | 3239.28 |
| 315.0 | 6756.48 | 5920.78 | 5312.15 | 4749.74 | 4254.64 | 3828.02 | 3373.30 | 3072.49 | 2809.72 |
| 360.0 | 5413.39 | 4714.05 | 4216.02 | 3789.39 | 3346.38 | 3050.25 | 2792.75 | 2563.93 | 2312.87 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2133.20 | 1972.27 | 1820.69 | 1653.90 | 1533.93 | 1391.14 | 1157.34 | 1157.34 | 1054.17 |
| 45.0 | 2401.24 | 2168.32 | 2002.70 | 1851.13 | 1687.26 | 1563.78 | 1425.08 | 1318.57 | 1216.74 |
| 90.0 | 2232.11 | 2020.26 | 1868.10 | 1735.25 | 1578.41 | 1469.56 | 1296.33 | 1163.66 | 1163.66 |
| 135.0 | 2563.34 | 2363.20 | 2133.79 | 1976.36 | 1832.40 | 1705.99 | 1557.34 | 1449.66 | 1344.32 |
| 180.0 | 3063.13 | 2796.26 | 2570.37 | 2316.38 | 2127.35 | 1969.93 | 1793.77 | 1667.95 | 1521.64 |
| 225.0 | 2754.71 | 2467.37 | 2268.39 | 2089.31 | 1896.77 | 1759.24 | 1635.76 | 1494.14 | 1390.55 |
| 270.0 | 2880.54 | 2642.35 | 2387.19 | 2192.90 | 2010.31 | 1857.56 | 1694.87 | 1570.22 | 1454.93 |
| 315.0 | 2575.05 | 2312.28 | 2122.67 | 1917.26 | 1773.29 | 1641.61 | 1494.72 | 1385.29 | 1156.23 |
| 360.0 | 2133.20 | 1972.27 | 1820.69 | 1653.90 | 1533.93 | 1391.14 | 1157.34 | 1157.34 | 1054.17 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 954.21 | 850.51 | 751.43 | 628.47 | 533.26 | 448.75 | 374.95 | 291.21 | 233.04 |
| 45.0 | 1114.33 | 987.33 | 885.50 | 787.77 | 684.19 | 565.39 | 481.11 | 402.11 | 331.30 |
| 90.0 | 1035.97 | 937.47 | 834.41 | 733.81 | 609.75 | 512.19 | 410.18 | 339.14 | 273.65 |
| 135.0 | 1217.33 | 1117.84 | 1016.01 | 889.02 | 789.53 | 661.36 | 565.39 | 476.43 | 396.84 |
| 180.0 | 1414.55 | 1315.64 | 1216.16 | 1095.01 | 991.43 | 887.84 | 787.19 | 660.19 | 564.80 |
| 225.0 | 1166.18 | 1166.18 | 1067.16 | 968.43 | 840.15 | 742.12 | 643.63 | 547.36 | 442.14 |
| 270.0 | 1350.76 | 1250.10 | 1129.54 | 1028.30 | 929.40 | 800.06 | 697.65 | 602.84 | 487.55 |
| 315.0 | 1156.23 | 1055.86 | 956.08 | 853.96 | 728.43 | 628.36 | 533.96 | 451.56 | 359.50 |
| 360.0 | 954.21 | 850.51 | 751.43 | 628.47 | 533.26 | 448.75 | 374.95 | 291.21 | 233.04 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 184.52 | 144.49 | 105.57 | 83.98 | 64.84 | 54.54 | 47.23 | 40.91 | 37.51 |
| 45.0 | 297.94 | 297.94 | 150.70 | 109.55 | 86.73 | 70.05 | 55.60 | 47.81 | 42.31 |
| 90.0 | 205.06 | 160.59 | 125.30 | 92.88 | 74.15 | 60.75 | 51.21 | 43.07 | 38.80 |
| 135.0 | 307.89 | 307.89 | 230.75 | 144.78 | 105.46 | 82.75 | 66.36 | 54.66 | 45.00 |
| 180.0 | 476.43 | 398.01 | 311.98 | 295.60 | 295.60 | 140.16 | 107.27 | 83.63 | 63.15 |
| 225.0 | 367.46 | 299.28 | 238.60 | 175.39 | 134.48 | 102.59 | 79.88 | 60.75 | 50.74 |
| 270.0 | 407.38 | 320.18 | 304.38 | 304.38 | 154.09 | 110.90 | 85.68 | 68.00 | 55.65 |
| 315.0 | 292.50 | 233.45 | 172.58 | 133.26 | 95.68 | 74.73 | 60.22 | 50.21 | 42.08 |
| 360.0 | 184.52 | 144.49 | 105.57 | 83.98 | 64.84 | 54.54 | 47.23 | 40.91 | 37.51 |

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 | 35.00 | 33.01 | 31.31 | 30.26 | 29.73 | 29.20 | 29.03 | 29.09 | 29.32 |
| 45.0 | 37.75 | 35.23 | 33.30 | 31.95 | 30.61 | 30.02 | 29.67 | 29.50 | 29.50 |
| 90.0 | 35.76 | 33.65 | 31.72 | 30.67 | 29.96 | 29.44 | 29.38 | 29.32 | 29.67 |
| 135.0 | 39.74 | 35.35 | 32.95 | 31.13 | 29.61 | 28.79 | 28.27 | 27.97 | 28.09 |
| 180.0 | 52.32 | 43.72 | 39.09 | 35.87 | 33.59 | 31.49 | 30.31 | 29.44 | 28.73 |
| 225.0 | 42.78 | 38.57 | 35.52 | 32.89 | 31.25 | 30.08 | 29.20 | 28.56 | 28.27 |
| 270.0 | 45.59 | 40.44 | 36.87 | 33.65 | 31.84 | 30.43 | 29.26 | 28.62 | 28.15 |
| 315.0 | 37.75 | 34.70 | 32.42 | 30.31 | 29.14 | 28.21 | 27.68 | 27.21 | 27.21 |
| 360.0 | 35.00 | 33.01 | 31.31 | 30.26 | 29.73 | 29.20 | 29.03 | 29.09 | 29.32 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 29.55 | 30.02 | 30.14 | 30.08 | 29.67 | 28.85 | 27.74 | 26.45 | 24.93 |
| 45.0 | 29.73 | 29.96 | 30.37 | 30.49 | 30.49 | 30.02 | 29.38 | 28.32 | 26.74 |
| 90.0 | 29.90 | 30.26 | 30.49 | 30.55 | 30.20 | 29.44 | 28.50 | 27.21 | 25.81 |
| 135.0 | 28.15 | 28.56 | 28.73 | 29.32 | 29.32 | 29.38 | 28.73 | 28.03 | 26.69 |
| 180.0 | 28.44 | 28.44 | 28.50 | 28.91 | 29.20 | 29.61 | 29.79 | 29.79 | 29.32 |
| 225.0 | 28.21 | 28.27 | 28.73 | 29.09 | 29.38 | 29.55 | 29.50 | 28.97 | 28.15 |
| 270.0 | 28.03 | 27.97 | 28.38 | 28.68 | 29.20 | 29.55 | 29.73 | 29.61 | 28.79 |
| 315.0 | 27.21 | 27.62 | 27.92 | 28.56 | 28.68 | 28.79 | 28.44 | 27.74 | 26.74 |
| 360.0 | 29.55 | 30.02 | 30.14 | 30.08 | 29.67 | 28.85 | 27.74 | 26.45 | 24.93 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 22.82 | 21.36 | 20.07 | 19.20 | 18.55 | 18.26 | 18.61 | 19.14 | 19.31 |
| 45.0 | 25.22 | 23.41 | 22.06 | 21.07 | 20.83 | 20.72 | 20.78 | 22.12 | 23.00 |
| 90.0 | 24.11 | 22.00 | 20.48 | 19.25 | 18.49 | 17.91 | 17.50 | 17.26 | 17.15 |
| 135.0 | 25.34 | 23.64 | 22.00 | 20.13 | 18.96 | 18.20 | 17.56 | 16.97 | 16.62 |
| 180.0 | 28.44 | 27.21 | 25.87 | 24.23 | 22.06 | 20.48 | 19.37 | 18.61 | 17.85 |
| 225.0 | 26.98 | 25.22 | 23.47 | 21.89 | 20.37 | 19.08 | 18.26 | 17.73 | 17.26 |
| 270.0 | 28.03 | 26.39 | 24.87 | 23.00 | 20.95 | 19.55 | 18.61 | 17.85 | 17.15 |
| 315.0 | 25.46 | 23.94 | 21.77 | 20.25 | 19.02 | 17.97 | 17.32 | 16.80 | 16.33 |
| 360.0 | 22.82 | 21.36 | 20.07 | 19.20 | 18.55 | 18.26 | 18.61 | 19.14 | 19.31 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 18.73 | 19.02 | 18.55 | 17.73 | 17.09 | 16.27 | 15.16 | 14.40 | 13.87 |
| 45.0 | 21.07 | 19.61 | 19.90 | 18.73 | 17.67 | 17.56 | 16.39 | 15.57 | 14.86 |
| 90.0 | 17.21 | 16.91 | 16.68 | 16.39 | 15.92 | 15.45 | 15.10 | 14.69 | 14.28 |
| 135.0 | 16.21 | 15.92 | 15.63 | 15.39 | 15.10 | 14.92 | 14.75 | 14.46 | 14.28 |
| 180.0 | 17.32 | 16.97 | 16.62 | 16.44 | 16.33 | 16.27 | 16.27 | 15.98 | 15.57 |
| 225.0 | 16.74 | 16.39 | 16.09 | 15.74 | 15.51 | 15.27 | 14.98 | 14.81 | 14.57 |
| 270.0 | 16.74 | 16.33 | 15.98 | 15.74 | 15.45 | 15.22 | 15.04 | 14.75 | 14.57 |
| 315.0 | 16.04 | 15.68 | 15.45 | 15.33 | 15.10 | 14.81 | 14.57 | 14.34 | 14.05 |
| 360.0 | 18.73 | 19.02 | 18.55 | 17.73 | 17.09 | 16.27 | 15.16 | 14.40 | 13.87 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 13.58 | 13.28 | 12.99 | 12.76 | 12.41 | 12.17 | 12.06 | 11.94 | 11.94 |
| 45.0 | 14.16 | 13.69 | 13.34 | 12.99 | 12.70 | 12.29 | 12.11 | 12.00 | 11.88 |
| 90.0 | 13.99 | 13.64 | 13.34 | 12.93 | 12.52 | 12.23 | 12.06 | 11.94 | 11.88 |
| 135.0 | 13.93 | 13.75 | 13.46 | 13.28 | 12.87 | 12.58 | 12.35 | 12.17 | 12.00 |
| 180.0 | 15.22 | 14.63 | 14.05 | 13.75 | 13.46 | 13.23 | 12.87 | 12.52 | 12.29 |
| 225.0 | 14.28 | 14.05 | 13.69 | 13.34 | 13.11 | 12.87 | 12.47 | 12.23 | 12.11 |
| 270.0 | 14.28 | 14.05 | 13.69 | 13.46 | 13.17 | 12.87 | 12.58 | 12.29 | 12.11 |
| 315.0 | 13.69 | 13.40 | 13.11 | 12.93 | 12.76 | 12.52 | 12.35 | 12.11 | 11.94 |
| 360.0 | 13.58 | 13.28 | 12.99 | 12.76 | 12.41 | 12.17 | 12.06 | 11.94 | 11.94 |

Intensity data(cd)

| | |
|-----------------|-------|
| C/ γ (°) | 90.0 |
| 0.0 | 11.94 |
| 45.0 | 11.88 |
| 90.0 | 11.88 |
| 135.0 | 11.88 |
| 180.0 | 12.17 |
| 225.0 | 12.00 |
| 270.0 | 12.00 |
| 315.0 | 11.88 |
| 360.0 | 11.94 |