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NT

Client: NT

LumCAT: 1-1546-L & 92.70.395.00

Luminaire: 92.70.457.00 LED HOLDER

Report No: 20241114-B009

Ballast type: AC

Test No: 20241114-C009

Voltage(V): 34.820

LampCAT: PHILIPS SLM 1202 L06 G7

Current(A): 0.160

Lamp flux(lm): 782.0

Power (W): 5.571

Number of Lamps: 1

PF: 0.000

Length(mm): 35

Width(mm): 35

Phm Type: C

Height(mm): 24

### Photometric Results

Lumens(lm): 724.22, Efficiency(%): 92.61% , Luminous Efficacy(lm/W): 130.00

Central intensity(cd): 1167.422, Maximum intensity(cd): 1181.526

Angle of maximum intensity: C=0.0  $\gamma$ =5.0

Beam Angle(50%Imax): [C0/180]Total=47.8

[C90/270]Total=47.8

Field angle(10%Imax): [C0/180]Total=67.0

[C90/270]Total=67.0

Maximum s/h(1/2): C0\_180=0.79 C90\_270=0.79

Maximum s/h(1/4): C0\_180=0.71 C90\_270=0.71

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 92.61%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.025%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/11/14  
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                | 1167.421      | 0.000       | 0         | 0.00%       | 0.00%      |
| 1.0                | 1167.765      | 1.117       | 1.117     | 0.14%       | 0.15%      |
| 2.0                | 1170.238      | 3.356       | 4.473     | 0.43%       | 0.62%      |
| 3.0                | 1174.356      | 5.607       | 10.081    | 0.72%       | 1.39%      |
| 4.0                | 1180.779      | 7.883       | 17.964    | 1.01%       | 2.48%      |
| 5.0                | 1181.525      | 10.163      | 28.126    | 1.30%       | 3.88%      |
| 6.0                | 1178.160      | 12.401      | 40.527    | 1.59%       | 5.60%      |
| 7.0                | 1175.834      | 14.611      | 55.138    | 1.87%       | 7.61%      |
| 8.0                | 1167.165      | 16.768      | 71.907    | 2.14%       | 9.93%      |
| 9.0                | 1157.414      | 18.839      | 90.746    | 2.41%       | 12.53%     |
| 10.0               | 1142.498      | 20.813      | 111.56    | 2.66%       | 15.40%     |
| 11.0               | 1127.824      | 22.685      | 134.245   | 2.90%       | 18.54%     |
| 12.0               | 1108.753      | 24.449      | 158.694   | 3.13%       | 21.91%     |
| 13.0               | 1084.832      | 26.032      | 184.726   | 3.33%       | 25.51%     |
| 14.0               | 1059.528      | 27.448      | 212.174   | 3.51%       | 29.30%     |
| 15.0               | 1029.250      | 28.676      | 240.849   | 3.67%       | 33.26%     |
| 16.0               | 994.656       | 29.656      | 270.505   | 3.79%       | 37.35%     |
| 17.0               | 955.877       | 30.375      | 300.88    | 3.88%       | 41.55%     |
| 18.0               | 914.890       | 30.845      | 331.725   | 3.94%       | 45.80%     |
| 19.0               | 869.066       | 31.037      | 362.762   | 3.97%       | 50.09%     |
| 20.0               | 818.920       | 30.895      | 393.657   | 3.95%       | 54.36%     |
| 21.0               | 760.090       | 30.320      | 423.977   | 3.88%       | 58.54%     |
| 22.0               | 700.822       | 29.358      | 453.335   | 3.75%       | 62.60%     |
| 23.0               | 640.638       | 28.147      | 481.483   | 3.60%       | 66.48%     |
| 24.0               | 576.929       | 26.620      | 508.103   | 3.40%       | 70.16%     |
| 25.0               | 510.865       | 24.734      | 532.837   | 3.16%       | 73.57%     |
| 26.0               | 446.519       | 22.599      | 555.436   | 2.89%       | 76.69%     |
| 27.0               | 386.453       | 20.379      | 575.815   | 2.61%       | 79.51%     |
| 28.0               | 331.954       | 18.189      | 594.004   | 2.33%       | 82.02%     |
| 29.0               | 285.736       | 16.161      | 610.164   | 2.07%       | 84.25%     |
| 30.0               | 255.685       | 14.618      | 624.782   | 1.87%       | 86.27%     |
| 31.0               | 201.734       | 12.729      | 637.512   | 1.63%       | 88.03%     |
| 32.0               | 162.188       | 10.426      | 647.938   | 1.33%       | 89.47%     |
| 33.0               | 129.561       | 8.595       | 656.533   | 1.10%       | 90.65%     |
| 34.0               | 105.311       | 7.108       | 663.641   | 0.91%       | 91.64%     |
| 35.0               | 85.304        | 5.920       | 669.56    | 0.76%       | 92.45%     |
| 36.0               | 69.971        | 4.944       | 674.504   | 0.63%       | 93.14%     |
| 37.0               | 57.967        | 4.173       | 678.677   | 0.53%       | 93.71%     |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0               | 47.754        | 3.529       | 682.206   | 0.45%       | 94.20%     |
| 39.0               | 39.627        | 2.983       | 685.188   | 0.38%       | 94.61%     |
| 40.0               | 33.892        | 2.564       | 687.752   | 0.33%       | 94.96%     |
| 41.0               | 28.866        | 2.235       | 689.987   | 0.29%       | 95.27%     |
| 42.0               | 25.070        | 1.960       | 691.947   | 0.25%       | 95.54%     |
| 43.0               | 21.785        | 1.736       | 693.682   | 0.22%       | 95.78%     |
| 44.0               | 19.525        | 1.559       | 695.242   | 0.20%       | 96.00%     |
| 45.0               | 17.615        | 1.427       | 696.669   | 0.18%       | 96.20%     |
| 46.0               | 15.933        | 1.312       | 697.981   | 0.17%       | 96.38%     |
| 47.0               | 14.499        | 1.210       | 699.191   | 0.15%       | 96.54%     |
| 48.0               | 13.270        | 1.123       | 700.314   | 0.14%       | 96.70%     |
| 49.0               | 12.165        | 1.045       | 701.358   | 0.13%       | 96.84%     |
| 50.0               | 11.229        | 0.975       | 702.334   | 0.12%       | 96.98%     |
| 51.0               | 10.454        | 0.917       | 703.251   | 0.12%       | 97.11%     |
| 52.0               | 9.803         | 0.869       | 704.12    | 0.11%       | 97.23%     |
| 53.0               | 9.210         | 0.827       | 704.947   | 0.11%       | 97.34%     |
| 54.0               | 8.683         | 0.789       | 705.736   | 0.10%       | 97.45%     |
| 55.0               | 8.244         | 0.756       | 706.492   | 0.10%       | 97.55%     |
| 56.0               | 7.871         | 0.728       | 707.22    | 0.09%       | 97.65%     |
| 57.0               | 7.549         | 0.705       | 707.925   | 0.09%       | 97.75%     |
| 58.0               | 7.235         | 0.684       | 708.609   | 0.09%       | 97.84%     |
| 59.0               | 6.964         | 0.664       | 709.272   | 0.08%       | 97.94%     |
| 60.0               | 6.694         | 0.645       | 709.918   | 0.08%       | 98.03%     |
| 61.0               | 6.474         | 0.628       | 710.546   | 0.08%       | 98.11%     |
| 62.0               | 6.240         | 0.613       | 711.159   | 0.08%       | 98.20%     |
| 63.0               | 6.050         | 0.598       | 711.756   | 0.08%       | 98.28%     |
| 64.0               | 5.867         | 0.585       | 712.341   | 0.07%       | 98.36%     |
| 65.0               | 5.706         | 0.573       | 712.914   | 0.07%       | 98.44%     |
| 66.0               | 5.545         | 0.561       | 713.475   | 0.07%       | 98.52%     |
| 67.0               | 5.406         | 0.551       | 714.026   | 0.07%       | 98.59%     |
| 68.0               | 5.260         | 0.540       | 714.566   | 0.07%       | 98.67%     |
| 69.0               | 5.128         | 0.530       | 715.096   | 0.07%       | 98.74%     |
| 70.0               | 5.011         | 0.521       | 715.617   | 0.07%       | 98.81%     |
| 71.0               | 4.894         | 0.512       | 716.129   | 0.07%       | 98.88%     |
| 72.0               | 4.777         | 0.503       | 716.632   | 0.06%       | 98.95%     |
| 73.0               | 4.674         | 0.494       | 717.126   | 0.06%       | 99.02%     |
| 74.0               | 4.572         | 0.486       | 717.612   | 0.06%       | 99.09%     |
| 75.0               | 4.455         | 0.477       | 718.089   | 0.06%       | 99.15%     |

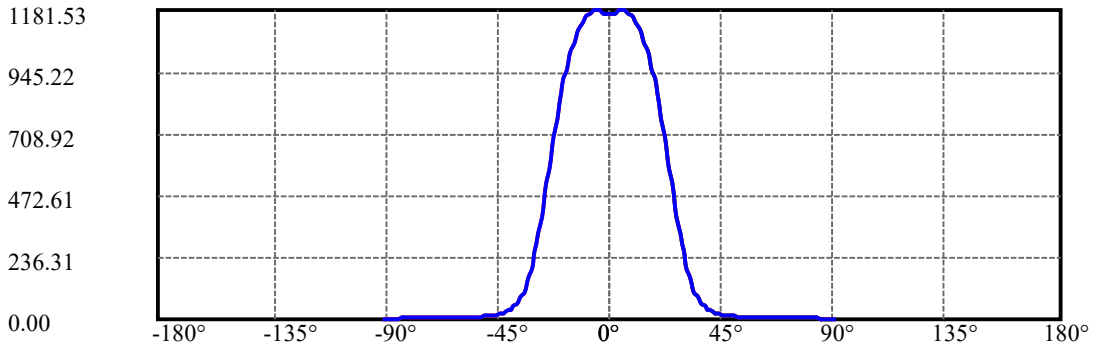
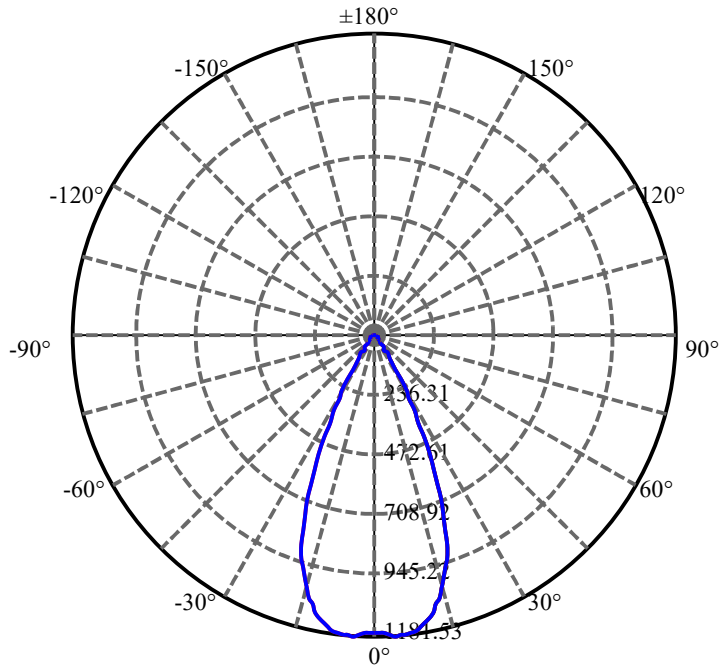
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0               | 4.353         | 0.468       | 718.556   | 0.06%       | 99.22%     |
| 77.0               | 4.243         | 0.458       | 719.015   | 0.06%       | 99.28%     |
| 78.0               | 4.148         | 0.449       | 719.464   | 0.06%       | 99.34%     |
| 79.0               | 4.053         | 0.441       | 719.904   | 0.06%       | 99.40%     |
| 80.0               | 3.950         | 0.431       | 720.336   | 0.06%       | 99.46%     |
| 81.0               | 3.841         | 0.421       | 720.757   | 0.05%       | 99.52%     |
| 82.0               | 3.767         | 0.413       | 721.17    | 0.05%       | 99.58%     |
| 83.0               | 3.672         | 0.404       | 721.574   | 0.05%       | 99.64%     |
| 84.0               | 3.599         | 0.396       | 721.97    | 0.05%       | 99.69%     |
| 85.0               | 3.541         | 0.390       | 722.36    | 0.05%       | 99.74%     |
| 86.0               | 3.467         | 0.383       | 722.743   | 0.05%       | 99.80%     |
| 87.0               | 3.402         | 0.376       | 723.119   | 0.05%       | 99.85%     |
| 88.0               | 3.343         | 0.369       | 723.489   | 0.05%       | 99.90%     |
| 89.0               | 3.321         | 0.365       | 723.854   | 0.05%       | 99.95%     |
| 90.0               | 3.307         | 0.363       | 724.217   | 0.05%       | 100.00%    |

ZONAL LUMEN SUMMARY

| Zone    | Lumens | %Lamp  | %Fixt   |
|---------|--------|--------|---------|
| 0-30    | 624.78 | 79.90% | 86.27%  |
| 0-40    | 687.75 | 87.95% | 94.96%  |
| 0-60    | 709.92 | 90.78% | 98.03%  |
| 0-90    | 723.85 | 92.56% | 99.95%  |
| 0-120   | 723.85 | 92.56% | 99.95%  |
| 0-180   | 724.22 | 92.61% | 100.00% |
| 60-90   | 13.94  | 1.78%  | 1.92%   |
| 90-120  | 0.00   | 0.00%  | 0.00%   |
| 90-130  | 0.00   | 0.00%  | 0.00%   |
| 90-150  | 0.00   | 0.00%  | 0.00%   |
| 90-180  | 0.00   | 0.00%  | 0.00%   |
| 0-27.20 | 579.37 | 74.09% | 80.00%  |

ZONAL LUMEN SUMMARY

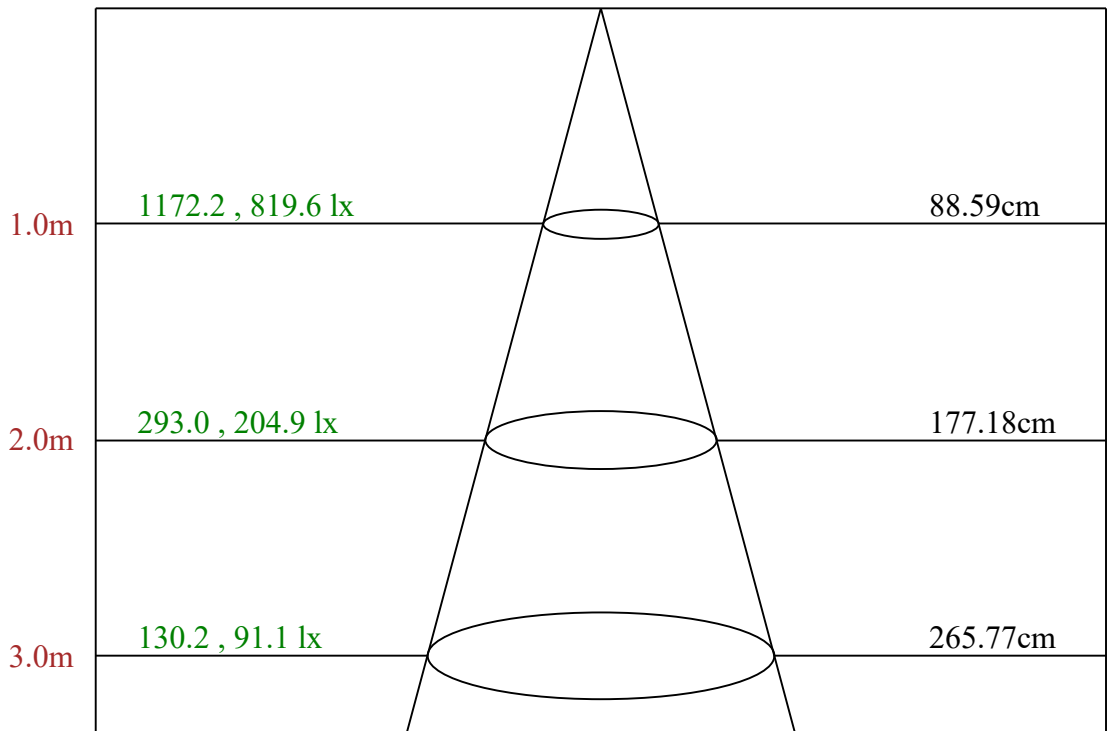
|         |        |
|---------|--------|
| 0-10    | 111.56 |
| 10-20   | 282.10 |
| 20-30   | 231.13 |
| 30-40   | 62.97  |
| 40-50   | 14.58  |
| 50-60   | 7.58   |
| 60-70   | 5.70   |
| 70-80   | 4.72   |
| 80-90   | 3.52   |
| 90-100  | 0.00   |
| 100-110 | 0.00   |
| 110-120 | 0.00   |
| 120-130 | 0.00   |
| 130-140 | 0.00   |
| 140-150 | 0.00   |
| 150-160 | 0.00   |
| 160-170 | 0.00   |
| 170-180 | 0.00   |



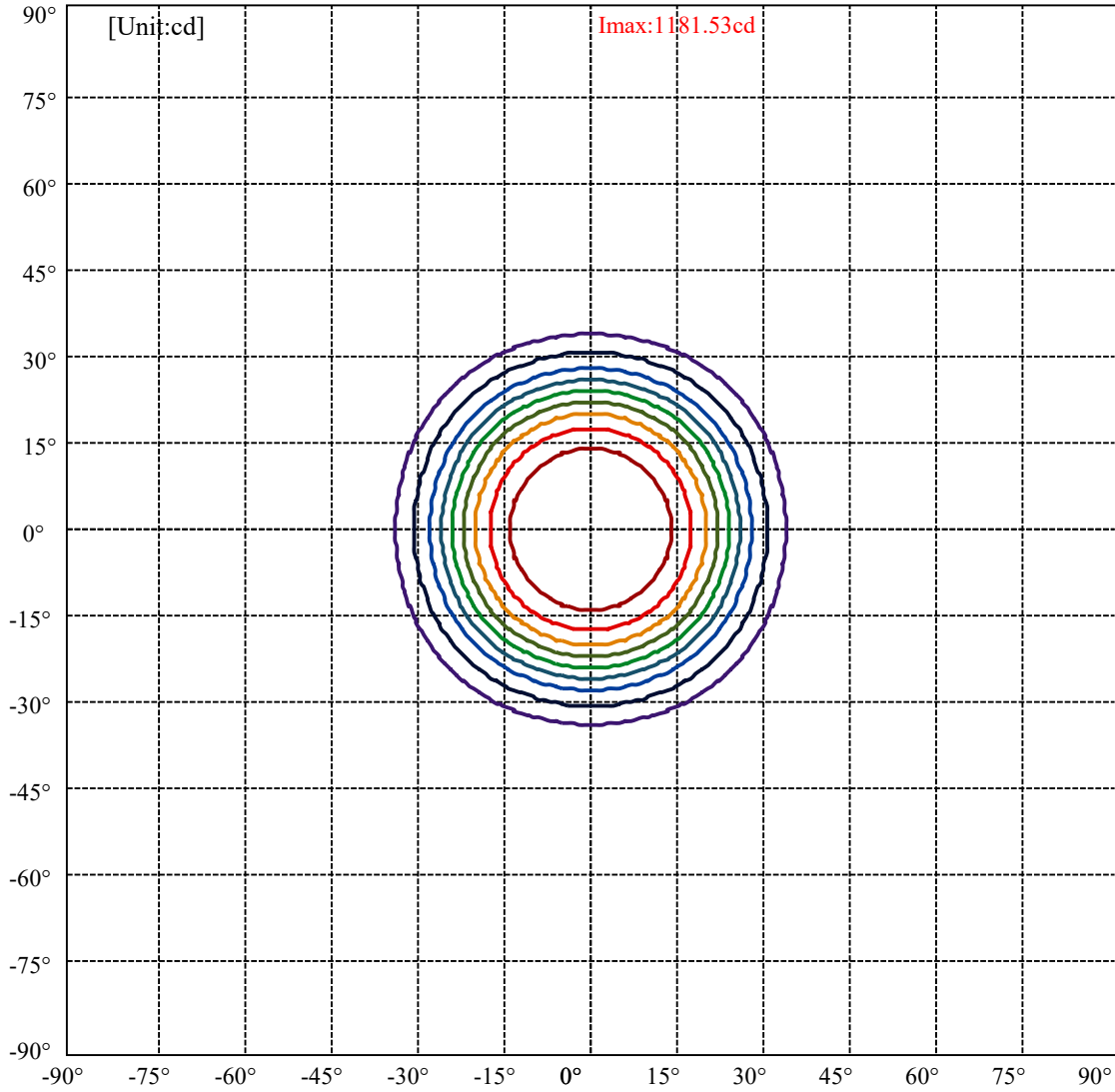
C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:33.5 Right:33.5  
:C90/270Left:33.5 Right:33.5

Beam Angle(50%Imax):C0/180Left:23.9 Right:23.9  
:C90/270Left:23.9 Right:23.9

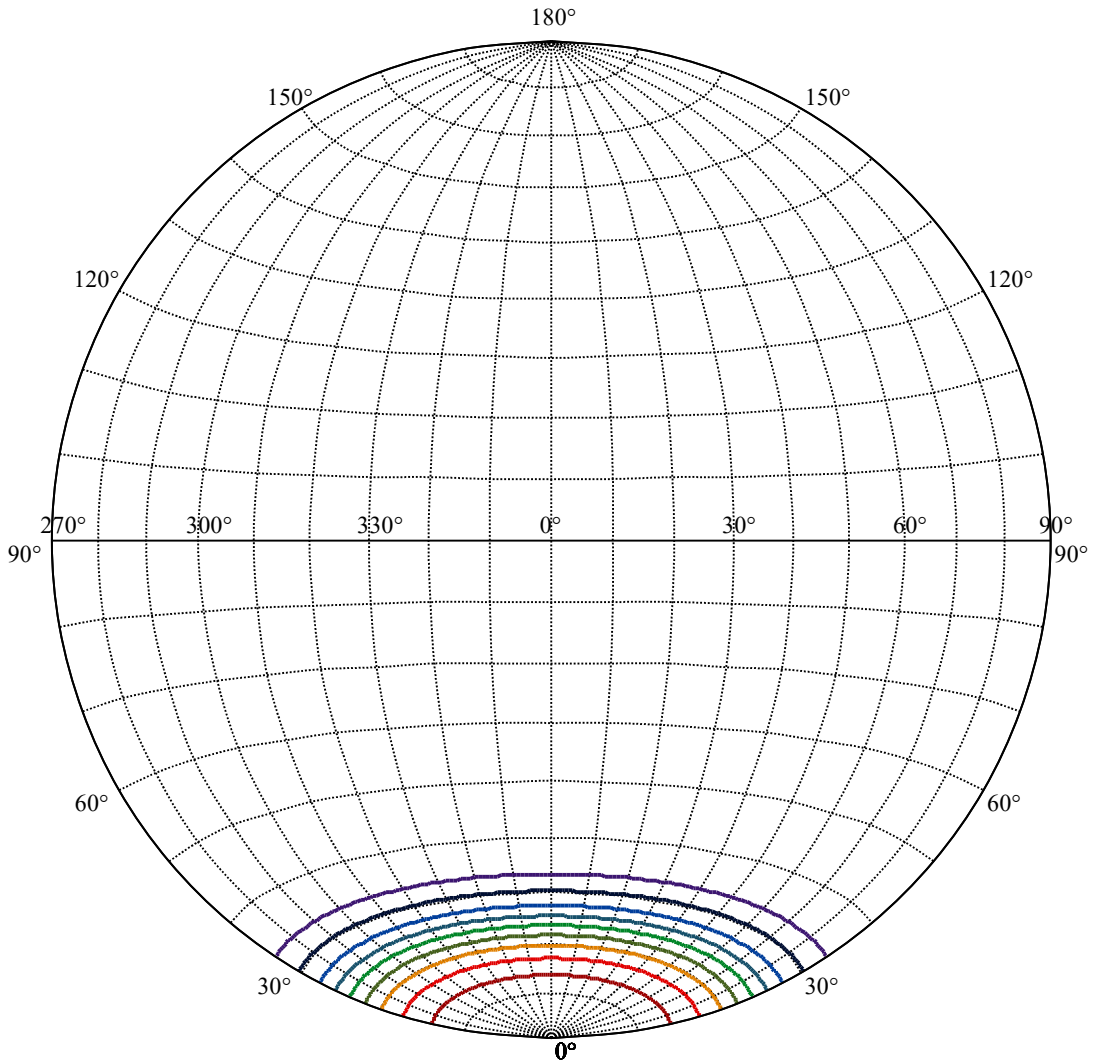


Max , Ave      Beam angle of C0 plane 47.78



|                   |   |
|-------------------|---|
| (10%Imax) 118.153 | — |
| (20%Imax) 236.305 | — |
| (30%Imax) 354.458 | — |
| (40%Imax) 472.61  | — |
| (50%Imax) 590.763 | — |
| (60%Imax) 708.915 | — |
| (70%Imax) 827.068 | — |
| (80%Imax) 945.22  | — |
| (90%Imax) 1063.37 | — |





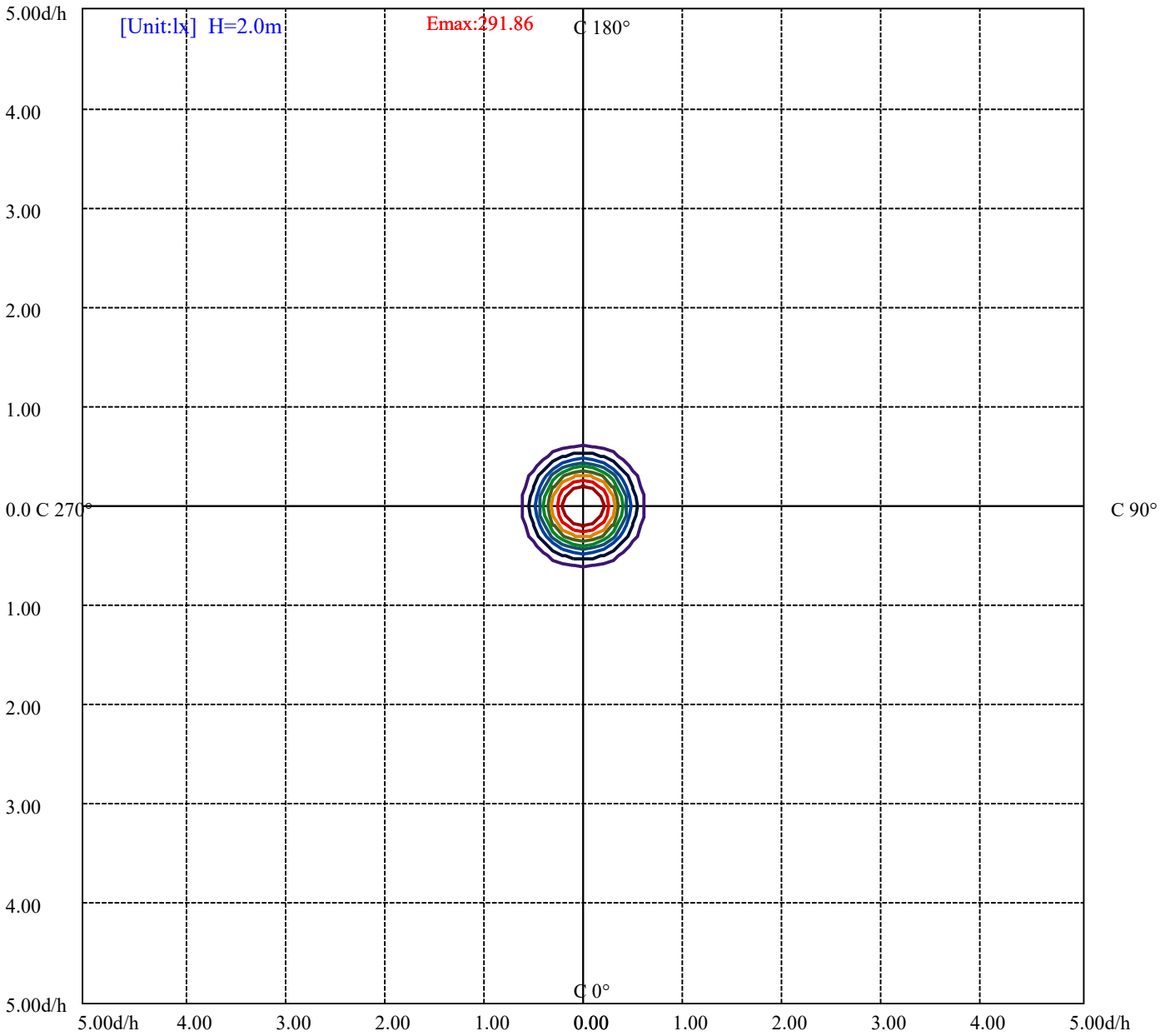
House

[Unit:cd]

Road

**Imax:1181.53**

|           |         |   |
|-----------|---------|---|
| (10%Imax) | 118.153 | — |
| (20%Imax) | 236.305 | — |
| (30%Imax) | 354.458 | — |
| (40%Imax) | 472.61  | — |
| (50%Imax) | 590.763 | — |
| (60%Imax) | 708.915 | — |
| (70%Imax) | 827.068 | — |
| (80%Imax) | 945.22  | — |
| (90%Imax) | 1063.37 | — |



|                    |   |
|--------------------|---|
| (10%Emax) 29.1855  | — |
| (20%Emax) 58.371   | — |
| (30%Emax) 87.5565  | — |
| (40%Emax) 116.7422 | — |
| (50%Emax) 145.9277 | — |
| (60%Emax) 175.1133 | — |
| (70%Emax) 204.2988 | — |
| (80%Emax) 233.4843 | — |
| (90%Emax) 262.67   | — |

Luminance Limiting Curve(no luminous side)

Luminance Table

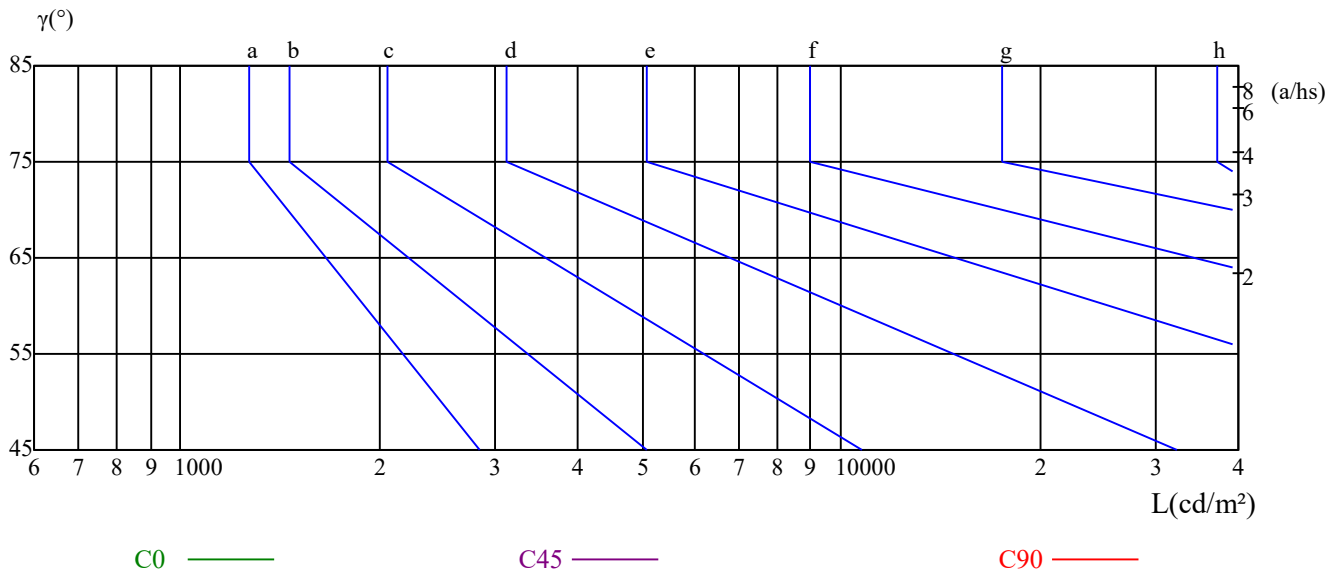
| $\gamma$ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C45      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C90      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |

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

Glare Table

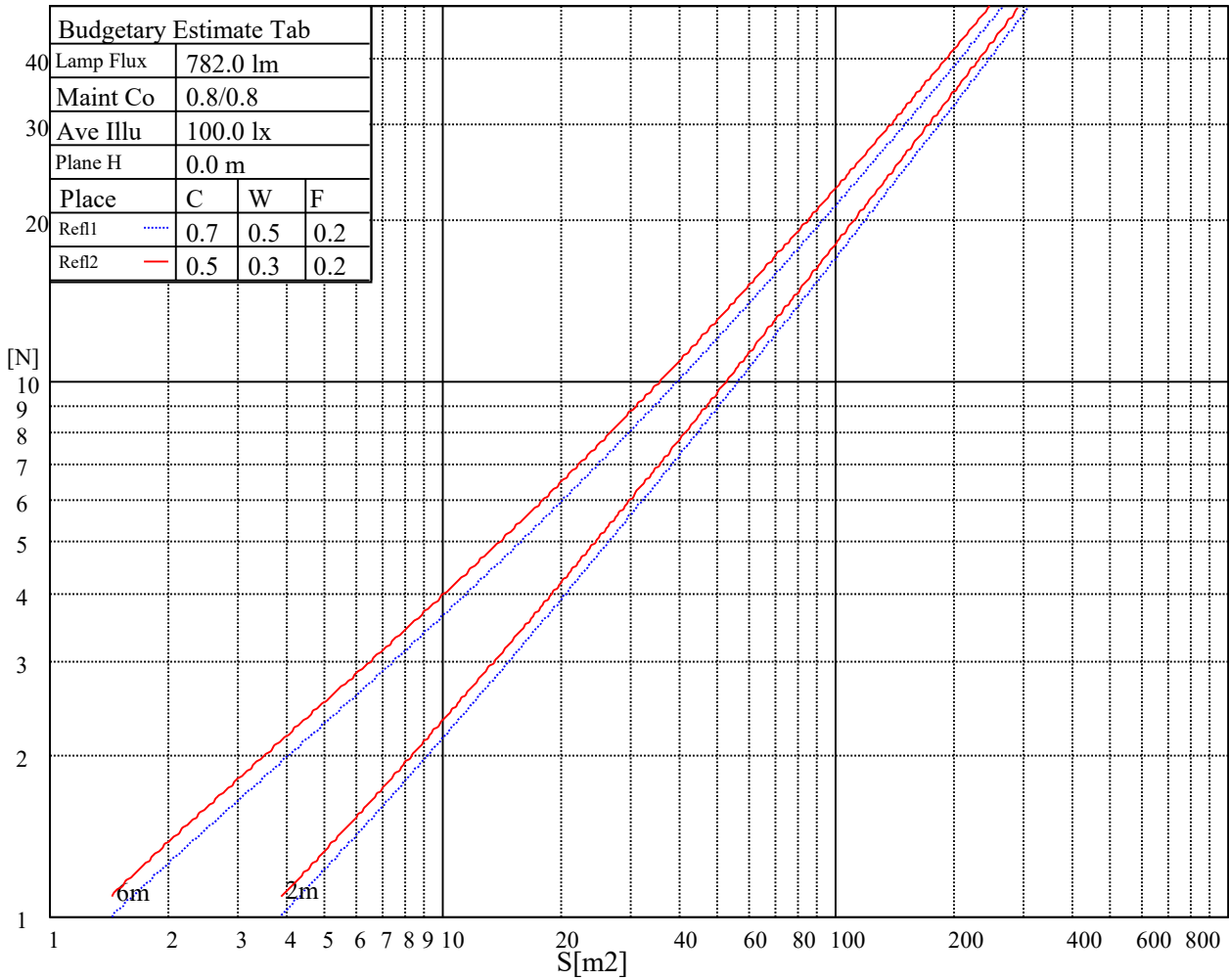
| Glare | Quality | Service Values Illuminance(lx) |      |      |       |       |       |       |       |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15  | A       | 2000                           | 1000 | 500  | <=300 |       |    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

Luminance Limiting Curve



| Illumination assessment according UGR             |         |                  |     |     |     |         |                |     |     |     |  |
|---|---------|------------------|-----|-----|-----|---------|----------------|-----|-----|-----|--|
| Rf of Ceiling                                     | 70      | 70               | 50  | 50  | 30  | 70      | 70             | 50  | 50  | 30  |  |
| Rf of Wall  | 50      | 30               | 50  | 30  | 30  | 50      | 30             | 50  | 30  | 30  |  |
| Rf of Floor                                       | 20      | 20               | 20  | 20  | 20  | 20      | 20             | 20  | 20  | 20  |  |
| Room dimensions                                   |         | Viewed crosswise |     |     |     |         | Viewed endwise |     |     |     |  |
| X   | Y       |                  |     |     |     |         |                |     |     |     |  |
| 2H  | 2H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 3H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 4H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 6H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 8H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 12H     | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
| 4H  | 2H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 3H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 4H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 6H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
|   | 8H      | 非数字              | 非数字 | 非数字 | 非数字 | 非数字     | 非数字            | 非数字 | 非数字 | 非数字 |  |
| 8H  | 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     | 1.10                                    | 1.10 | 1.10 | 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     | 1.03                                    | 1.01 | 0.99 | 1.01 | 0.99 | 0.97 | 0.97 | 0.96 | 0.94 | 0.94 | 0.92 | 0.91 | 0.91 | 0.90 | 0.89 | 0.87 |
| 2     | 0.97                                    | 0.93 | 0.90 | 0.95 | 0.92 | 0.89 | 0.92 | 0.89 | 0.87 | 0.89 | 0.87 | 0.85 | 0.87 | 0.85 | 0.84 | 0.82 |
| 3     | 0.91                                    | 0.87 | 0.83 | 0.90 | 0.86 | 0.83 | 0.87 | 0.84 | 0.81 | 0.85 | 0.82 | 0.80 | 0.83 | 0.81 | 0.79 | 0.78 |
| 4     | 0.86                                    | 0.81 | 0.78 | 0.85 | 0.81 | 0.77 | 0.83 | 0.79 | 0.76 | 0.81 | 0.78 | 0.76 | 0.79 | 0.77 | 0.75 | 0.73 |
| 5     | 0.81                                    | 0.77 | 0.73 | 0.81 | 0.76 | 0.73 | 0.79 | 0.75 | 0.72 | 0.77 | 0.74 | 0.71 | 0.76 | 0.73 | 0.71 | 0.70 |
| 6     | 0.77                                    | 0.72 | 0.69 | 0.77 | 0.72 | 0.69 | 0.75 | 0.71 | 0.68 | 0.74 | 0.70 | 0.68 | 0.73 | 0.70 | 0.67 | 0.66 |
| 7     | 0.74                                    | 0.69 | 0.65 | 0.73 | 0.68 | 0.65 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.63 |
| 8     | 0.70                                    | 0.65 | 0.62 | 0.70 | 0.65 | 0.62 | 0.69 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.64 | 0.61 | 0.60 |
| 9     | 0.67                                    | 0.62 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.65 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.57 |
| 10    | 0.64                                    | 0.59 | 0.56 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.62 | 0.58 | 0.56 | 0.62 | 0.58 | 0.56 | 0.55 |

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    | 1169.92 | 1171.09 | 1178.70 | 1183.97 | 1190.99 | 1193.33 | 1192.75 | 1192.16 | 1164.95 |
| 45.0   | 1164.01 | 1164.42 | 1167.17 | 1167.17 | 1196.26 | 1200.94 | 1200.35 | 1199.77 | 1199.77 |
| 90.0   | 1169.92 | 1176.36 | 1187.48 | 1196.84 | 1206.21 | 1207.38 | 1209.72 | 1207.38 | 1204.45 |
| 135.0  | 1165.83 | 1167.00 | 1169.34 | 1174.61 | 1181.04 | 1182.80 | 1186.89 | 1186.89 | 1185.72 |
| 180.0  | 1169.92 | 1170.51 | 1169.92 | 1174.61 | 1172.85 | 1169.92 | 1167.00 | 1162.90 | 1155.88 |
| 225.0  | 1164.01 | 1161.67 | 1159.39 | 1158.98 | 1153.77 | 1150.96 | 1142.94 | 1133.11 | 1116.73 |
| 270.0  | 1169.92 | 1167.00 | 1162.90 | 1164.07 | 1165.24 | 1164.66 | 1159.97 | 1158.80 | 1147.68 |
| 315.0  | 1165.83 | 1164.07 | 1167.00 | 1174.61 | 1179.87 | 1182.21 | 1165.65 | 1165.65 | 1162.14 |
| 360.0  | 1169.92 | 1171.09 | 1178.70 | 1183.97 | 1190.99 | 1193.33 | 1192.75 | 1192.16 | 1164.95 |
| C/γ(°) | 9.0     | 10.0    | 11.0    | 12.0    | 13.0    | 14.0    | 15.0    | 16.0    | 17.0    |
| 0.0    | 1164.95 | 1160.38 | 1146.63 | 1123.69 | 1102.21 | 1076.87 | 1049.54 | 1009.28 | 974.40  |
| 45.0   | 1198.60 | 1193.33 | 1184.55 | 1174.02 | 1153.54 | 1135.98 | 1113.74 | 1086.82 | 1043.51 |
| 90.0   | 1196.84 | 1167.17 | 1167.17 | 1149.56 | 1121.64 | 1096.18 | 1056.80 | 1023.73 | 986.69  |
| 135.0  | 1175.78 | 1168.75 | 1151.78 | 1137.15 | 1117.84 | 1089.75 | 1062.24 | 1023.62 | 990.84  |
| 180.0  | 1142.42 | 1124.86 | 1108.47 | 1089.16 | 1058.73 | 1035.32 | 998.45  | 967.44  | 932.32  |
| 225.0  | 1100.87 | 1078.10 | 1054.28 | 1031.22 | 1001.38 | 973.11  | 943.03  | 908.56  | 859.99  |
| 270.0  | 1133.64 | 1119.01 | 1100.28 | 1076.29 | 1054.63 | 1031.22 | 1004.30 | 965.09  | 931.15  |
| 315.0  | 1146.22 | 1128.37 | 1109.41 | 1088.93 | 1068.68 | 1037.78 | 1005.88 | 972.70  | 928.11  |
| 360.0  | 1164.95 | 1160.38 | 1146.63 | 1123.69 | 1102.21 | 1076.87 | 1049.54 | 1009.28 | 974.40  |
| C/γ(°) | 18.0    | 19.0    | 20.0    | 21.0    | 22.0    | 23.0    | 24.0    | 25.0    | 26.0    |
| 0.0    | 938.47  | 885.68  | 837.16  | 770.92  | 715.91  | 656.56  | 593.18  | 518.28  | 459.05  |
| 45.0   | 1010.16 | 974.46  | 935.25  | 875.56  | 818.79  | 762.61  | 705.84  | 627.42  | 549.58  |
| 90.0   | 936.95  | 892.47  | 841.73  | 785.31  | 726.56  | 645.91  | 579.84  | 514.53  | 435.17  |
| 135.0  | 957.49  | 915.94  | 856.83  | 805.33  | 752.66  | 694.72  | 620.40  | 558.95  | 497.50  |
| 180.0  | 884.33  | 838.69  | 792.45  | 738.03  | 666.63  | 610.45  | 552.51  | 493.99  | 424.35  |
| 225.0  | 814.81  | 766.18  | 716.67  | 649.54  | 596.05  | 540.75  | 469.53  | 414.75  | 361.49  |
| 270.0  | 891.36  | 839.27  | 793.62  | 732.76  | 678.33  | 622.74  | 567.14  | 493.40  | 437.81  |
| 315.0  | 885.56  | 839.86  | 777.65  | 723.28  | 651.65  | 591.37  | 527.00  | 465.61  | 407.20  |
| 360.0  | 938.47  | 885.68  | 837.16  | 770.92  | 715.91  | 656.56  | 593.18  | 518.28  | 459.05  |
| C/γ(°) | 27.0    | 28.0    | 29.0    | 30.0    | 31.0    | 32.0    | 33.0    | 34.0    | 35.0    |
| 0.0    | 400.29  | 347.27  | 287.70  | 244.98  | 206.76  | 164.74  | 136.53  | 112.54  | 88.25   |
| 45.0   | 484.04  | 421.42  | 365.82  | 303.21  | 303.21  | 247.61  | 179.31  | 144.14  | 119.85  |
| 90.0   | 376.53  | 323.28  | 264.87  | 224.90  | 187.62  | 150.23  | 124.65  | 103.12  | 80.70   |
| 135.0  | 437.22  | 365.24  | 314.32  | 302.62  | 247.61  | 180.02  | 150.23  | 119.15  | 98.73   |
| 180.0  | 371.68  | 322.52  | 299.11  | 299.11  | 183.35  | 152.69  | 120.67  | 101.30  | 78.60   |
| 225.0  | 298.99  | 253.75  | 213.78  | 170.12  | 140.10  | 116.17  | 95.86   | 75.55   | 62.33   |
| 270.0  | 383.38  | 333.64  | 297.94  | 297.94  | 185.63  | 154.67  | 121.20  | 101.54  | 83.45   |
| 315.0  | 339.49  | 288.52  | 242.34  | 202.60  | 159.59  | 131.38  | 108.03  | 85.15   | 70.52   |
| 360.0  | 400.29  | 347.27  | 287.70  | 244.98  | 206.76  | 164.74  | 136.53  | 112.54  | 88.25   |
| C/γ(°) | 36.0    | 37.0    | 38.0    | 39.0    | 40.0    | 41.0    | 42.0    | 43.0    | 44.0    |
| 0.0    | 73.09   | 60.86   | 49.04   | 41.32   | 35.29   | 30.49   | 25.63   | 22.71   | 20.31   |
| 45.0   | 99.49   | 82.34   | 64.43   | 53.72   | 45.35   | 37.10   | 31.95   | 26.63   | 23.29   |
| 90.0   | 66.77   | 55.65   | 46.99   | 38.10   | 32.60   | 28.21   | 24.58   | 20.89   | 18.67   |
| 135.0  | 81.40   | 64.32   | 53.84   | 45.47   | 38.68   | 32.19   | 28.09   | 24.87   | 22.30   |
| 180.0  | 65.49   | 54.84   | 45.88   | 37.34   | 32.01   | 27.45   | 24.11   | 20.66   | 18.49   |
| 225.0  | 52.14   | 44.07   | 35.93   | 30.90   | 26.86   | 23.06   | 20.66   | 18.26   | 16.62   |
| 270.0  | 65.14   | 54.43   | 45.71   | 37.22   | 31.95   | 27.74   | 23.82   | 21.36   | 19.49   |
| 315.0  | 56.24   | 47.23   | 40.20   | 32.95   | 28.38   | 24.70   | 21.71   | 18.90   | 17.03   |
| 360.0  | 73.09   | 60.86   | 49.04   | 41.32   | 35.29   | 30.49   | 25.63   | 22.71   | 20.31   |

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    | 18.38 | 16.33 | 14.92 | 13.69 | 12.35 | 11.47 | 10.65 | 9.89  | 9.31 |
| 45.0   | 20.72 | 18.67 | 16.50 | 15.04 | 13.69 | 12.29 | 11.35 | 10.53 | 9.89 |
| 90.0   | 16.85 | 14.92 | 13.64 | 12.23 | 11.35 | 10.53 | 9.95  | 9.31  | 8.78 |
| 135.0  | 19.72 | 17.97 | 16.44 | 14.75 | 13.52 | 12.23 | 11.35 | 10.59 | 9.89 |
| 180.0  | 16.80 | 14.98 | 13.75 | 12.64 | 11.47 | 10.71 | 9.89  | 9.31  | 8.84 |
| 225.0  | 15.27 | 14.05 | 12.76 | 11.88 | 11.06 | 10.42 | 9.66  | 9.19  | 8.72 |
| 270.0  | 17.62 | 16.27 | 15.10 | 14.05 | 12.82 | 12.00 | 11.18 | 10.53 | 9.77 |
| 315.0  | 15.57 | 14.28 | 12.87 | 11.88 | 11.06 | 10.18 | 9.60  | 9.07  | 8.49 |
| 360.0  | 18.38 | 16.33 | 14.92 | 13.69 | 12.35 | 11.47 | 10.65 | 9.89  | 9.31 |
| C/γ(°) | 54.0  | 55.0  | 56.0  | 57.0  | 58.0  | 59.0  | 60.0  | 61.0  | 62.0 |
| 0.0    | 8.72  | 8.31  | 7.96  | 7.61  | 7.26  | 7.02  | 6.79  | 6.55  | 6.26 |
| 45.0   | 9.19  | 8.72  | 8.31  | 7.90  | 7.61  | 7.32  | 6.96  | 6.73  | 6.55 |
| 90.0   | 8.43  | 8.02  | 7.67  | 7.43  | 7.14  | 6.91  | 6.67  | 6.44  | 6.20 |
| 135.0  | 9.25  | 8.72  | 8.31  | 7.90  | 7.49  | 7.20  | 6.96  | 6.67  | 6.44 |
| 180.0  | 8.43  | 7.96  | 7.61  | 7.37  | 7.08  | 6.79  | 6.55  | 6.38  | 6.14 |
| 225.0  | 8.19  | 7.84  | 7.43  | 7.14  | 6.85  | 6.61  | 6.32  | 6.09  | 5.91 |
| 270.0  | 9.19  | 8.66  | 8.25  | 7.90  | 7.49  | 7.14  | 6.85  | 6.67  | 6.32 |
| 315.0  | 8.08  | 7.72  | 7.43  | 7.14  | 6.96  | 6.73  | 6.44  | 6.26  | 6.09 |
| 360.0  | 8.72  | 8.31  | 7.96  | 7.61  | 7.26  | 7.02  | 6.79  | 6.55  | 6.26 |
| C/γ(°) | 63.0  | 64.0  | 65.0  | 66.0  | 67.0  | 68.0  | 69.0  | 70.0  | 71.0 |
| 0.0    | 6.14  | 5.97  | 5.79  | 5.56  | 5.44  | 5.33  | 5.15  | 5.09  | 4.92 |
| 45.0   | 6.32  | 6.09  | 5.97  | 5.79  | 5.62  | 5.44  | 5.33  | 5.21  | 5.09 |
| 90.0   | 6.03  | 5.85  | 5.68  | 5.56  | 5.44  | 5.27  | 5.15  | 5.03  | 4.92 |
| 135.0  | 6.26  | 6.03  | 5.85  | 5.68  | 5.56  | 5.38  | 5.27  | 5.09  | 4.97 |
| 180.0  | 5.91  | 5.79  | 5.62  | 5.44  | 5.33  | 5.15  | 5.03  | 4.92  | 4.86 |
| 225.0  | 5.74  | 5.56  | 5.38  | 5.27  | 5.15  | 5.03  | 4.92  | 4.80  | 4.68 |
| 270.0  | 6.14  | 5.97  | 5.79  | 5.62  | 5.44  | 5.33  | 5.15  | 5.03  | 4.92 |
| 315.0  | 5.85  | 5.68  | 5.56  | 5.44  | 5.27  | 5.15  | 5.03  | 4.92  | 4.80 |
| 360.0  | 6.14  | 5.97  | 5.79  | 5.56  | 5.44  | 5.33  | 5.15  | 5.09  | 4.92 |
| C/γ(°) | 72.0  | 73.0  | 74.0  | 75.0  | 76.0  | 77.0  | 78.0  | 79.0  | 80.0 |
| 0.0    | 4.86  | 4.74  | 4.62  | 4.51  | 4.39  | 4.27  | 4.21  | 4.10  | 3.98 |
| 45.0   | 4.97  | 4.86  | 4.74  | 4.62  | 4.51  | 4.39  | 4.27  | 4.21  | 4.04 |
| 90.0   | 4.80  | 4.74  | 4.62  | 4.51  | 4.33  | 4.27  | 4.16  | 4.04  | 3.98 |
| 135.0  | 4.86  | 4.74  | 4.62  | 4.51  | 4.45  | 4.33  | 4.21  | 4.16  | 4.04 |
| 180.0  | 4.68  | 4.62  | 4.51  | 4.39  | 4.27  | 4.16  | 4.04  | 3.98  | 3.86 |
| 225.0  | 4.56  | 4.45  | 4.39  | 4.27  | 4.16  | 4.04  | 3.98  | 3.86  | 3.80 |
| 270.0  | 4.80  | 4.68  | 4.56  | 4.45  | 4.39  | 4.27  | 4.21  | 4.10  | 3.98 |
| 315.0  | 4.68  | 4.56  | 4.51  | 4.39  | 4.33  | 4.21  | 4.10  | 3.98  | 3.92 |
| 360.0  | 4.86  | 4.74  | 4.62  | 4.51  | 4.39  | 4.27  | 4.21  | 4.10  | 3.98 |
| C/γ(°) | 81.0  | 82.0  | 83.0  | 84.0  | 85.0  | 86.0  | 87.0  | 88.0  | 89.0 |
| 0.0    | 3.86  | 3.80  | 3.69  | 3.63  | 3.57  | 3.45  | 3.39  | 3.34  | 3.34 |
| 45.0   | 3.98  | 3.86  | 3.80  | 3.69  | 3.63  | 3.57  | 3.45  | 3.39  | 3.34 |
| 90.0   | 3.86  | 3.80  | 3.69  | 3.63  | 3.57  | 3.51  | 3.45  | 3.39  | 3.34 |
| 135.0  | 3.92  | 3.86  | 3.75  | 3.63  | 3.57  | 3.51  | 3.45  | 3.39  | 3.34 |
| 180.0  | 3.75  | 3.69  | 3.57  | 3.51  | 3.45  | 3.39  | 3.34  | 3.28  | 3.28 |
| 225.0  | 3.69  | 3.63  | 3.57  | 3.51  | 3.45  | 3.39  | 3.34  | 3.28  | 3.28 |
| 270.0  | 3.86  | 3.75  | 3.69  | 3.63  | 3.57  | 3.45  | 3.39  | 3.34  | 3.34 |
| 315.0  | 3.80  | 3.75  | 3.63  | 3.57  | 3.51  | 3.45  | 3.39  | 3.34  | 3.34 |
| 360.0  | 3.86  | 3.80  | 3.69  | 3.63  | 3.57  | 3.45  | 3.39  | 3.34  | 3.34 |



Intensity data(cd)

|        |      |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0    | 3.28 |
| 45.0   | 3.28 |
| 90.0   | 3.34 |
| 135.0  | 3.34 |
| 180.0  | 3.28 |
| 225.0  | 3.34 |
| 270.0  | 3.34 |
| 315.0  | 3.28 |
| 360.0  | 3.28 |