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NT

Client:

LumCAT: 1-1302-L

Luminaire: 92.70.427.00

Report No: 2024730-B014

Ballast type: AC

Test No: 2024730-C014

Voltage(V): 34.390

LampCAT: Fortimo\_SLM\_C\_1203

Current(A): 0.216

Lamp flux(lm): 1286.0

Power (W): 7.428

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 1223.16, Efficiency(%): 95.11% , Luminous Efficacy(lm/W): 164.67

Central intensity(cd): 2287.703, Maximum intensity(cd): 2287.703

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

Beam Angle(50% I<sub>max</sub>): [C0/180]Total=43.4

[C90/270]Total=43.4

Field angle(10% I<sub>max</sub>): [C0/180]Total=67.4

[C90/270]Total=67.4

Maximum s/h(1/2): C0\_180=0.69 C90\_270=0.69

Maximum s/h(1/4): C0\_180=0.67 C90\_270=0.67

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 95.11%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.022%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/7/30  
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                | 2287.703      | 0.000       | 0         | 0.00%       | 0.00%      |
| 1.0                | 2281.704      | 2.186       | 2.186     | 0.17%       | 0.18%      |
| 2.0                | 2270.293      | 6.533       | 8.72      | 0.51%       | 0.71%      |
| 3.0                | 2259.466      | 10.834      | 19.554    | 0.84%       | 1.60%      |
| 4.0                | 2250.249      | 15.095      | 34.649    | 1.17%       | 2.83%      |
| 5.0                | 2233.350      | 19.288      | 53.937    | 1.50%       | 4.41%      |
| 6.0                | 2203.796      | 23.318      | 77.256    | 1.81%       | 6.32%      |
| 7.0                | 2171.975      | 27.160      | 104.416   | 2.11%       | 8.54%      |
| 8.0                | 2138.763      | 30.851      | 135.267   | 2.40%       | 11.06%     |
| 9.0                | 2104.454      | 34.389      | 169.656   | 2.67%       | 13.87%     |
| 10.0               | 2066.049      | 37.742      | 207.398   | 2.93%       | 16.96%     |
| 11.0               | 2020.548      | 40.833      | 248.231   | 3.18%       | 20.29%     |
| 12.0               | 1967.512      | 43.595      | 291.826   | 3.39%       | 23.86%     |
| 13.0               | 1907.673      | 45.989      | 337.815   | 3.58%       | 27.62%     |
| 14.0               | 1842.274      | 47.999      | 385.814   | 3.73%       | 31.54%     |
| 15.0               | 1772.120      | 49.620      | 435.434   | 3.86%       | 35.60%     |
| 16.0               | 1690.188      | 50.732      | 486.166   | 3.94%       | 39.75%     |
| 17.0               | 1605.550      | 51.324      | 537.49    | 3.99%       | 43.94%     |
| 18.0               | 1509.061      | 51.353      | 588.843   | 3.99%       | 48.14%     |
| 19.0               | 1371.767      | 50.121      | 638.964   | 3.90%       | 52.24%     |
| 20.0               | 1272.162      | 48.391      | 687.355   | 3.76%       | 56.20%     |
| 21.0               | 1204.261      | 47.552      | 734.907   | 3.70%       | 60.08%     |
| 22.0               | 1113.003      | 46.566      | 781.474   | 3.62%       | 63.89%     |
| 23.0               | 1012.183      | 44.592      | 826.066   | 3.47%       | 67.54%     |
| 24.0               | 915.943       | 42.156      | 868.222   | 3.28%       | 70.98%     |
| 25.0               | 820.061       | 39.473      | 907.694   | 3.07%       | 74.21%     |
| 26.0               | 729.973       | 36.589      | 944.283   | 2.85%       | 77.20%     |
| 27.0               | 641.626       | 33.556      | 977.84    | 2.61%       | 79.94%     |
| 28.0               | 561.158       | 30.452      | 1008.292  | 2.37%       | 82.43%     |
| 29.0               | 486.351       | 27.406      | 1035.697  | 2.13%       | 84.67%     |
| 30.0               | 414.047       | 24.311      | 1060.008  | 1.89%       | 86.66%     |
| 31.0               | 350.308       | 21.271      | 1081.279  | 1.65%       | 88.40%     |
| 32.0               | 293.176       | 18.435      | 1099.714  | 1.43%       | 89.91%     |
| 33.0               | 252.166       | 16.066      | 1115.78   | 1.25%       | 91.22%     |
| 34.0               | 217.828       | 14.223      | 1130.003  | 1.11%       | 92.38%     |
| 35.0               | 148.464       | 11.376      | 1141.379  | 0.88%       | 93.31%     |
| 36.0               | 114.338       | 8.368       | 1149.747  | 0.65%       | 94.00%     |
| 37.0               | 87.564        | 6.585       | 1156.332  | 0.51%       | 94.54%     |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0               | 68.003        | 5.193       | 1161.524  | 0.40%       | 94.96%     |
| 39.0               | 52.824        | 4.124       | 1165.648  | 0.32%       | 95.30%     |
| 40.0               | 42.056        | 3.309       | 1168.957  | 0.26%       | 95.57%     |
| 41.0               | 34.440        | 2.724       | 1171.681  | 0.21%       | 95.79%     |
| 42.0               | 29.027        | 2.306       | 1173.987  | 0.18%       | 95.98%     |
| 43.0               | 25.677        | 2.026       | 1176.014  | 0.16%       | 96.15%     |
| 44.0               | 23.007        | 1.837       | 1177.851  | 0.14%       | 96.30%     |
| 45.0               | 21.156        | 1.697       | 1179.548  | 0.13%       | 96.43%     |
| 46.0               | 19.664        | 1.596       | 1181.145  | 0.12%       | 96.57%     |
| 47.0               | 18.493        | 1.518       | 1182.662  | 0.12%       | 96.69%     |
| 48.0               | 17.527        | 1.456       | 1184.118  | 0.11%       | 96.81%     |
| 49.0               | 16.642        | 1.403       | 1185.522  | 0.11%       | 96.92%     |
| 50.0               | 15.947        | 1.359       | 1186.88   | 0.11%       | 97.03%     |
| 51.0               | 15.326        | 1.323       | 1188.204  | 0.10%       | 97.14%     |
| 52.0               | 14.770        | 1.291       | 1189.495  | 0.10%       | 97.25%     |
| 53.0               | 14.272        | 1.263       | 1190.758  | 0.10%       | 97.35%     |
| 54.0               | 13.819        | 1.238       | 1191.996  | 0.10%       | 97.45%     |
| 55.0               | 13.380        | 1.214       | 1193.211  | 0.09%       | 97.55%     |
| 56.0               | 12.999        | 1.192       | 1194.403  | 0.09%       | 97.65%     |
| 57.0               | 12.641        | 1.172       | 1195.575  | 0.09%       | 97.75%     |
| 58.0               | 12.260        | 1.152       | 1196.726  | 0.09%       | 97.84%     |
| 59.0               | 11.924        | 1.131       | 1197.857  | 0.09%       | 97.93%     |
| 60.0               | 11.551        | 1.109       | 1198.966  | 0.09%       | 98.02%     |
| 61.0               | 11.178        | 1.085       | 1200.051  | 0.08%       | 98.11%     |
| 62.0               | 10.827        | 1.060       | 1201.111  | 0.08%       | 98.20%     |
| 63.0               | 10.461        | 1.035       | 1202.146  | 0.08%       | 98.28%     |
| 64.0               | 10.124        | 1.010       | 1203.156  | 0.08%       | 98.36%     |
| 65.0               | 9.773         | 0.985       | 1204.141  | 0.08%       | 98.45%     |
| 66.0               | 9.437         | 0.958       | 1205.1    | 0.07%       | 98.52%     |
| 67.0               | 9.100         | 0.932       | 1206.032  | 0.07%       | 98.60%     |
| 68.0               | 8.771         | 0.905       | 1206.937  | 0.07%       | 98.67%     |
| 69.0               | 8.500         | 0.881       | 1207.818  | 0.07%       | 98.75%     |
| 70.0               | 8.244         | 0.860       | 1208.678  | 0.07%       | 98.82%     |
| 71.0               | 8.061         | 0.843       | 1209.521  | 0.07%       | 98.89%     |
| 72.0               | 7.901         | 0.830       | 1210.351  | 0.06%       | 98.95%     |
| 73.0               | 7.754         | 0.819       | 1211.169  | 0.06%       | 99.02%     |
| 74.0               | 7.593         | 0.807       | 1211.976  | 0.06%       | 99.09%     |
| 75.0               | 7.440         | 0.794       | 1212.771  | 0.06%       | 99.15%     |

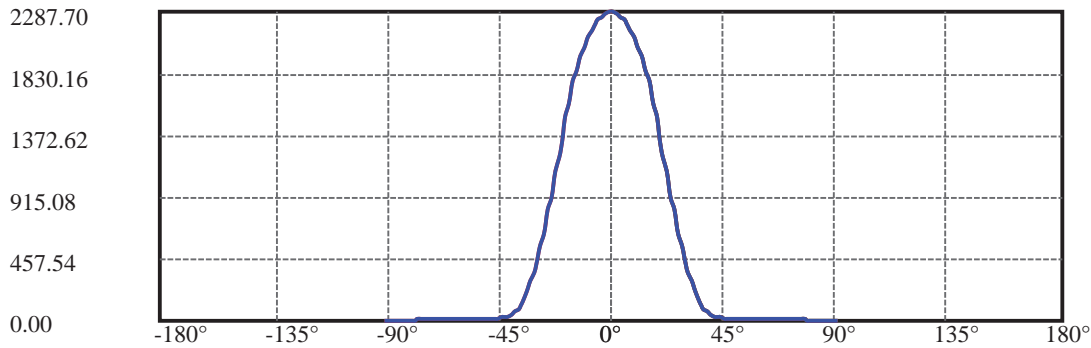
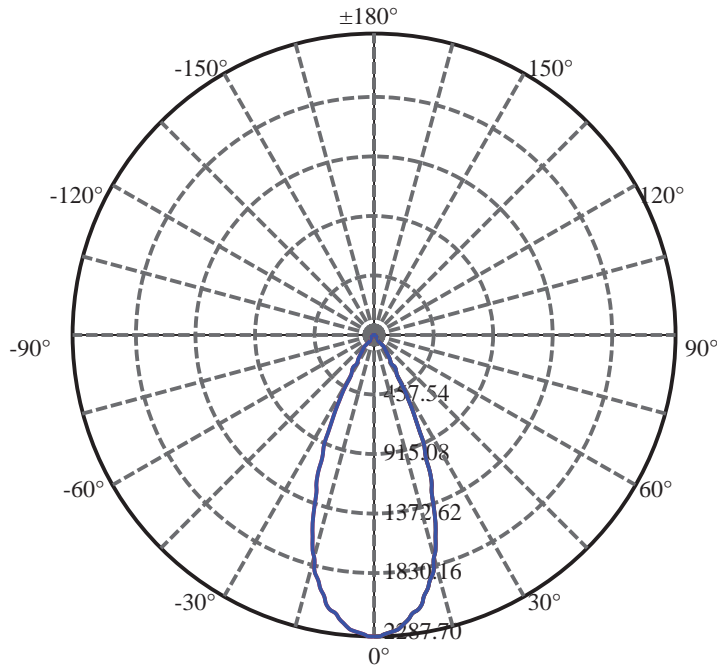
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0               | 7.315         | 0.783       | 1213.554  | 0.06%       | 99.21%     |
| 77.0               | 7.154         | 0.771       | 1214.325  | 0.06%       | 99.28%     |
| 78.0               | 7.015         | 0.759       | 1215.084  | 0.06%       | 99.34%     |
| 79.0               | 6.862         | 0.746       | 1215.829  | 0.06%       | 99.40%     |
| 80.0               | 6.708         | 0.732       | 1216.561  | 0.06%       | 99.46%     |
| 81.0               | 6.584         | 0.719       | 1217.28   | 0.06%       | 99.52%     |
| 82.0               | 6.467         | 0.708       | 1217.988  | 0.06%       | 99.58%     |
| 83.0               | 6.313         | 0.695       | 1218.682  | 0.05%       | 99.63%     |
| 84.0               | 6.181         | 0.681       | 1219.363  | 0.05%       | 99.69%     |
| 85.0               | 6.057         | 0.668       | 1220.031  | 0.05%       | 99.74%     |
| 86.0               | 5.896         | 0.653       | 1220.684  | 0.05%       | 99.80%     |
| 87.0               | 5.764         | 0.638       | 1221.322  | 0.05%       | 99.85%     |
| 88.0               | 5.618         | 0.624       | 1221.946  | 0.05%       | 99.90%     |
| 89.0               | 5.508         | 0.610       | 1222.556  | 0.05%       | 99.95%     |
| 90.0               | 5.435         | 0.600       | 1223.156  | 0.05%       | 100.00%    |

ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp  | %Fixt   |
|---------|---------|--------|---------|
| 0-30    | 1060.01 | 82.43% | 86.66%  |
| 0-40    | 1168.96 | 90.90% | 95.57%  |
| 0-60    | 1198.97 | 93.23% | 98.02%  |
| 0-90    | 1222.56 | 95.07% | 99.95%  |
| 0-120   | 1222.56 | 95.07% | 99.95%  |
| 0-180   | 1223.16 | 95.11% | 100.00% |
| 60-90   | 23.59   | 1.83%  | 1.93%   |
| 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%   |
| 0-27.02 | 978.52  | 76.09% | 80.00%  |

ZONAL LUMEN SUMMARY

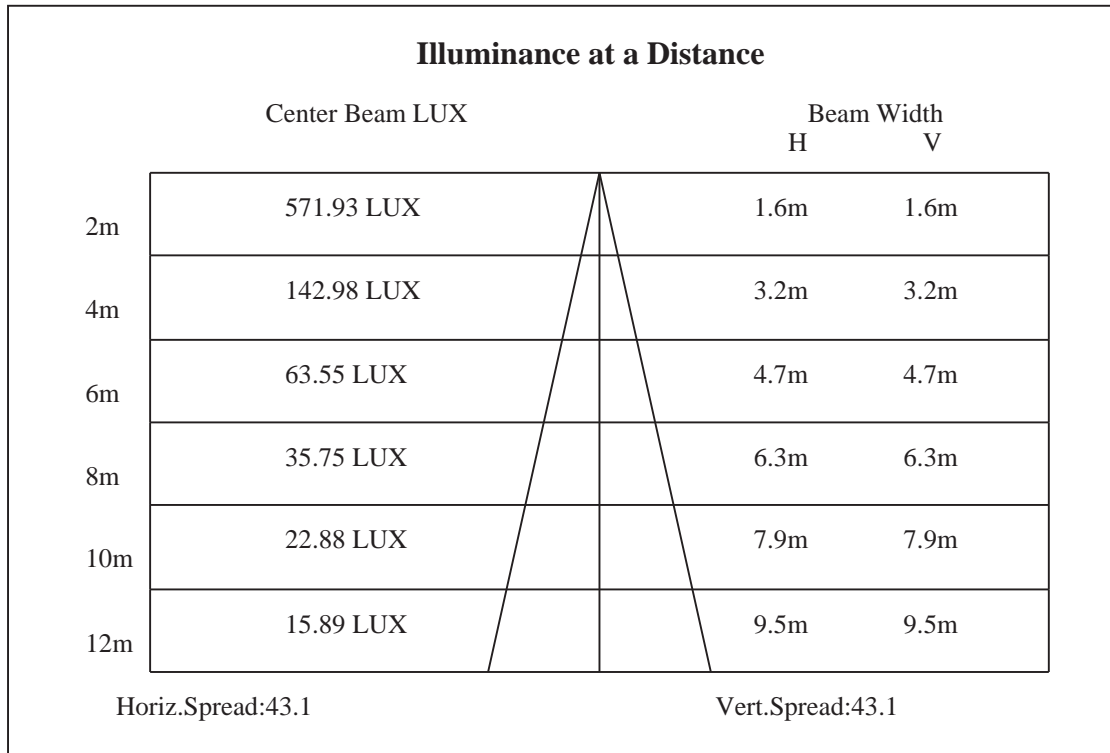
|         |        |
|---------|--------|
| 0-10    | 207.40 |
| 10-20   | 479.96 |
| 20-30   | 372.65 |
| 30-40   | 108.95 |
| 40-50   | 17.92  |
| 50-60   | 12.09  |
| 60-70   | 9.71   |
| 70-80   | 7.88   |
| 80-90   | 5.99   |
| 90-100  | 0.00   |
| 100-110 | 0.00   |
| 110-120 | 0.00   |
| 120-130 | 0.00   |
| 130-140 | 0.00   |
| 140-150 | 0.00   |
| 150-160 | 0.00   |
| 160-170 | 0.00   |
| 170-180 | 0.00   |

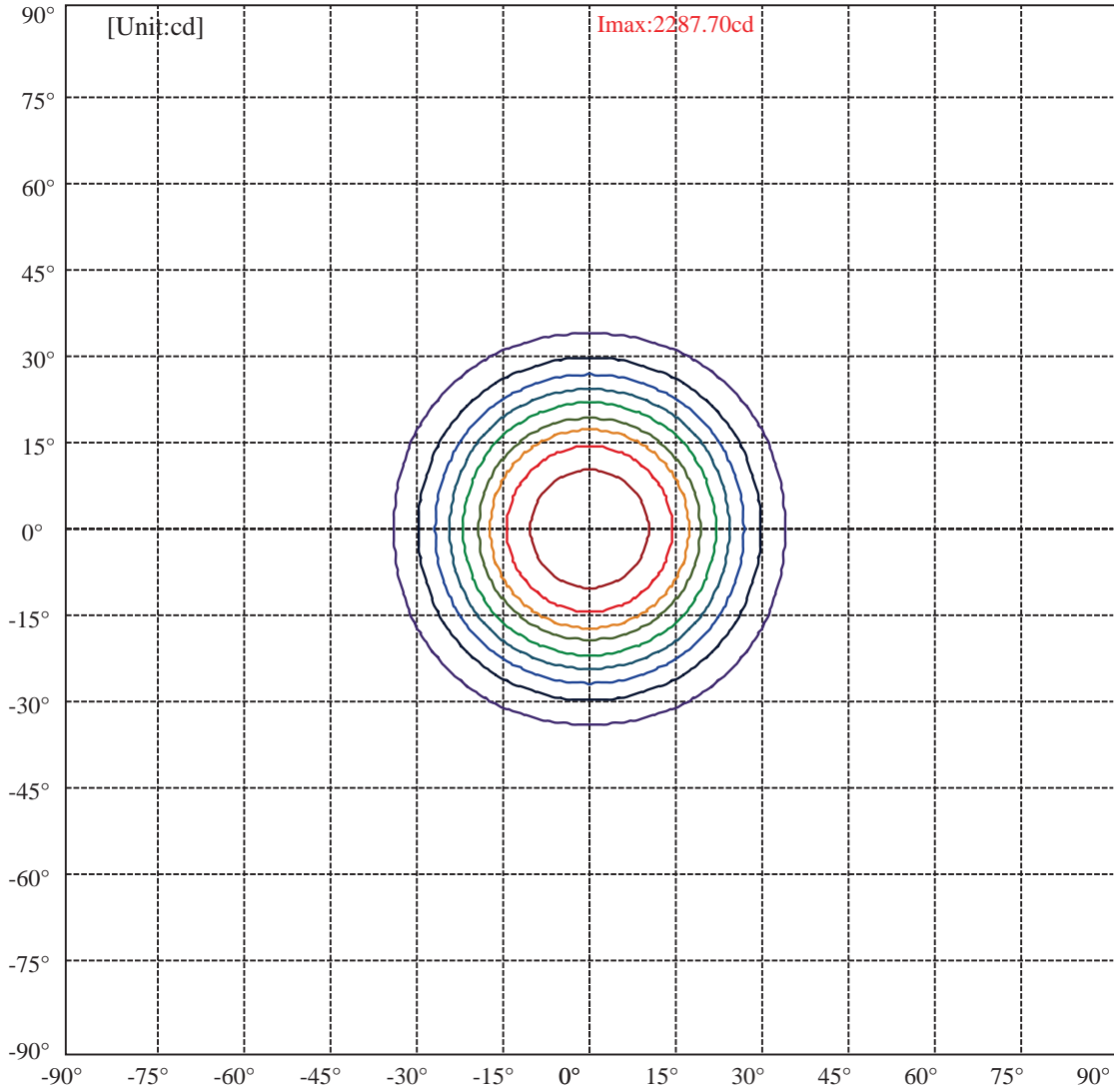


C0(Max): —————  
C0/C180: —————  
C90/C270: —————

Field angle(10%Imax):C0/180Left:33.7 Right:33.7  
:C90/270Left:33.7 Right:33.7

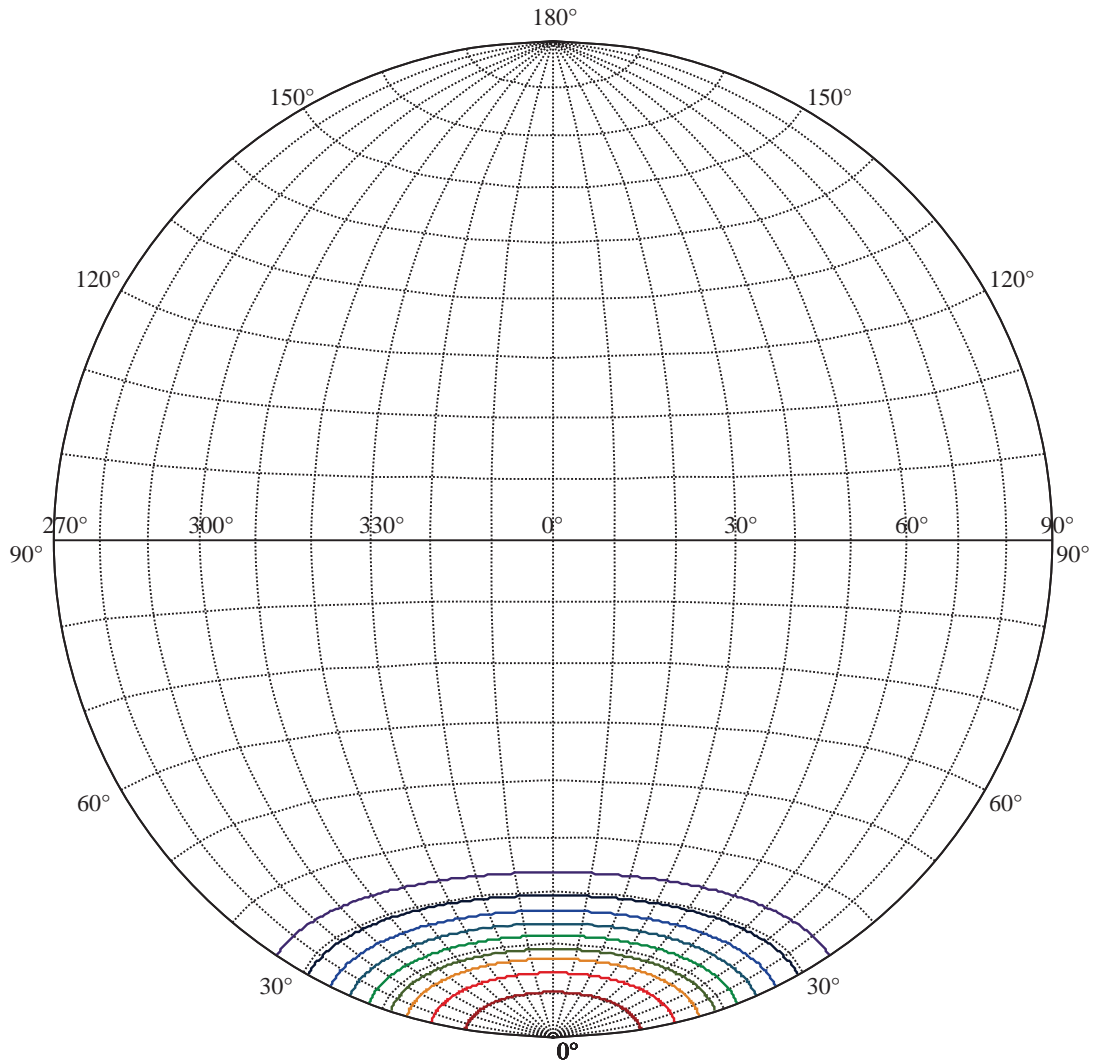
Beam Angle(50%Imax):C0/180Left:21.7 Right:21.7  
:C90/270Left:21.7 Right:21.7





|                                 |   |
|---------------------------------|---|
| (10% I <sub>max</sub> ) 228.77  | — |
| (20% I <sub>max</sub> ) 457.541 | — |
| (30% I <sub>max</sub> ) 686.311 | — |
| (40% I <sub>max</sub> ) 915.081 | — |
| (50% I <sub>max</sub> ) 1143.85 | — |
| (60% I <sub>max</sub> ) 1372.62 | — |
| (70% I <sub>max</sub> ) 1601.39 | — |
| (80% I <sub>max</sub> ) 1830.16 | — |
| (90% I <sub>max</sub> ) 2058.93 | — |





House

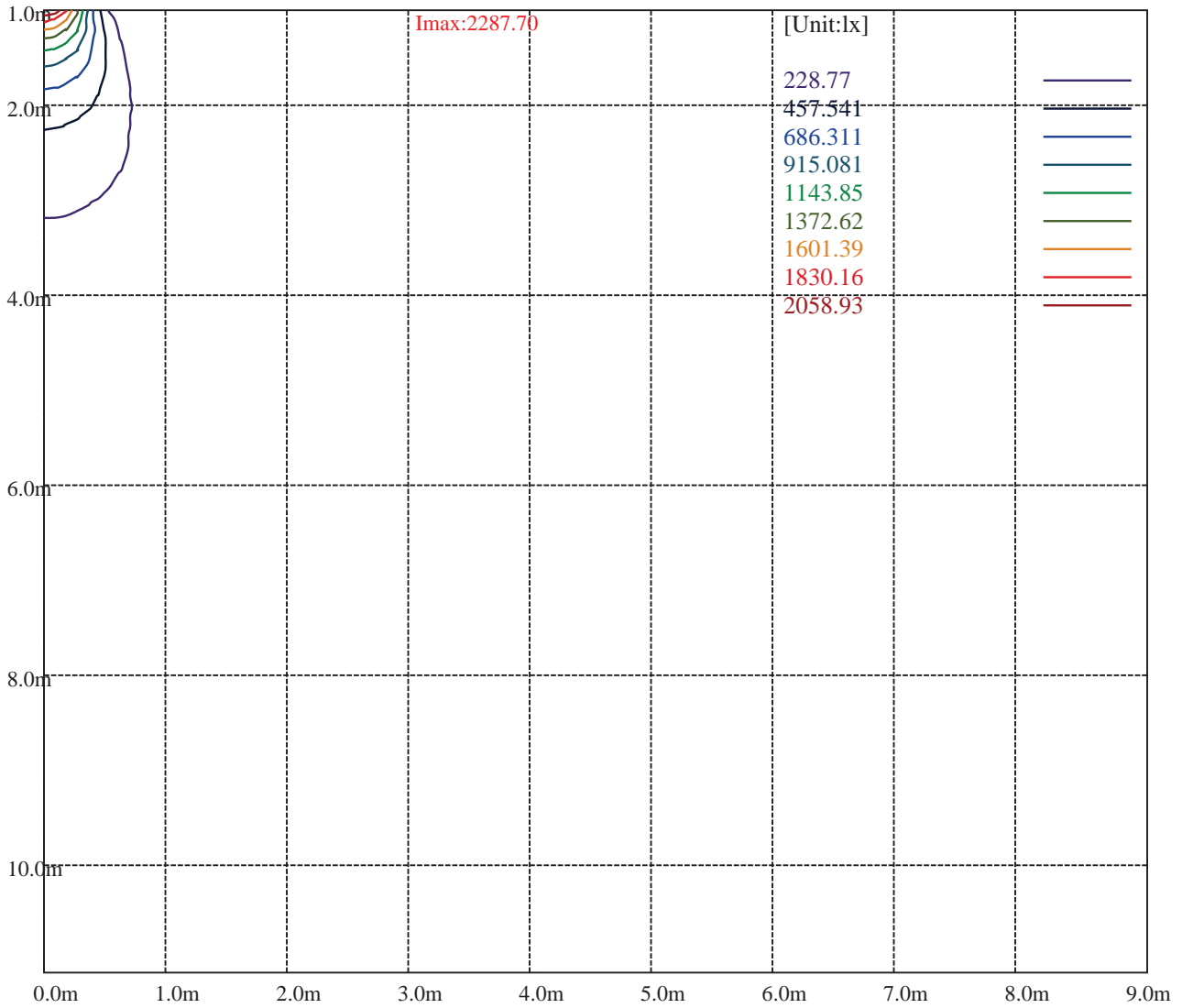
[Unit:cd]

Road

Imax:2287.70

|            |         |   |
|------------|---------|---|
| (10% Imax) | 228.77  | — |
| (20% Imax) | 457.541 | — |
| (30% Imax) | 686.311 | — |
| (40% Imax) | 915.081 | — |
| (50% Imax) | 1143.85 | — |
| (60% Imax) | 1372.62 | — |
| (70% Imax) | 1601.39 | — |
| (80% Imax) | 1830.16 | — |
| (90% Imax) | 2058.93 | — |





Luminance Table

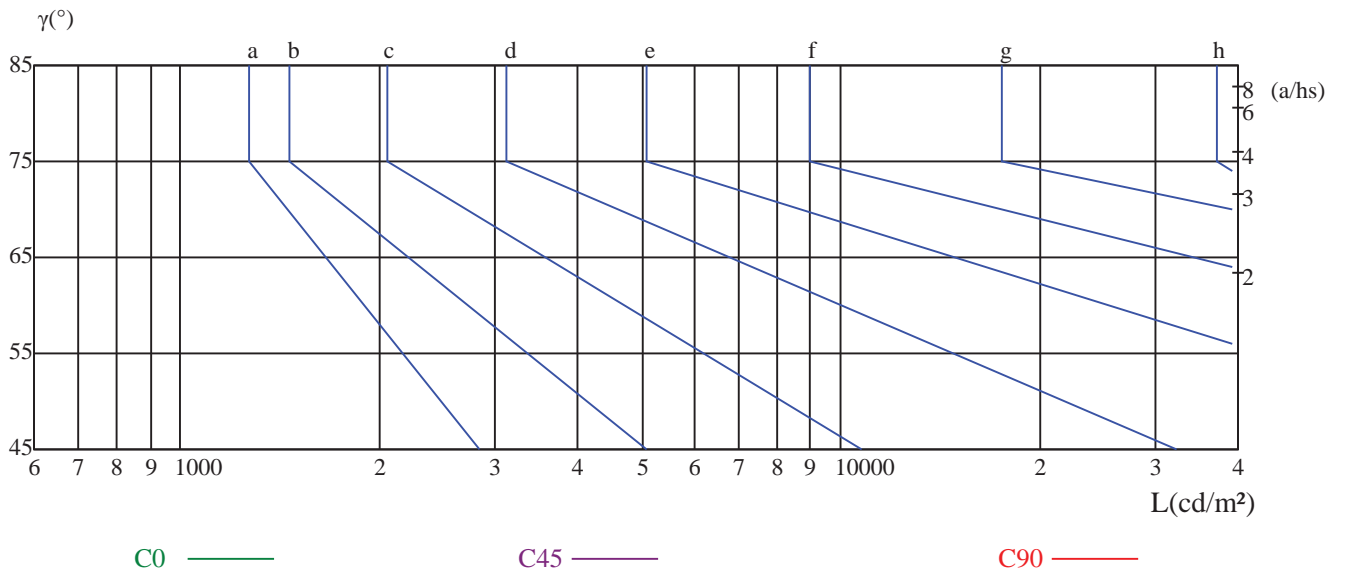
| $\gamma$ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C45      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C90      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |

| 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

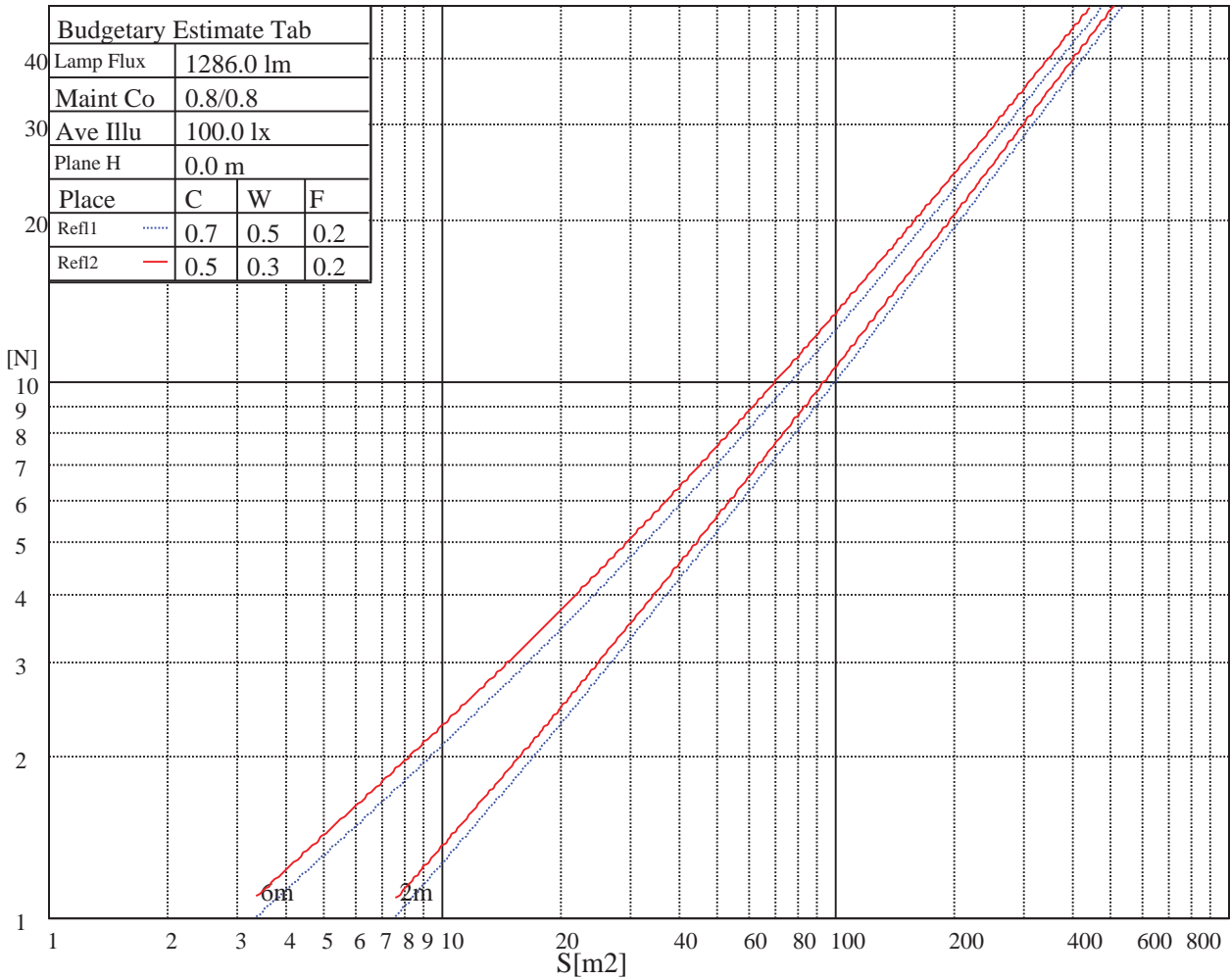
| Glare | Quality | Service Values Illuminance(lx) |      |      |       |       |       |       |       |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15  | A       | 2000                           | 1000 | 500  | <=300 |       |    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

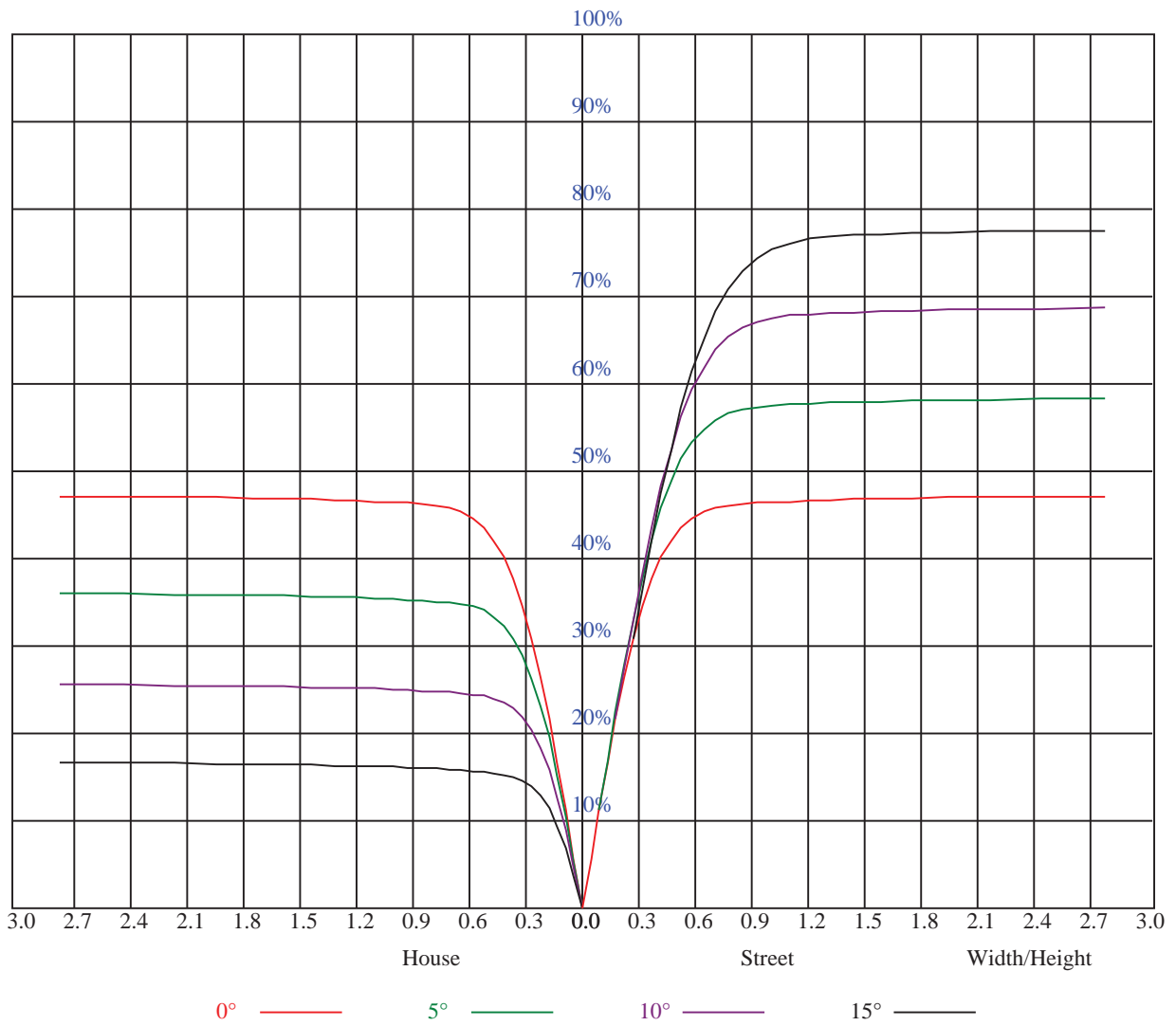


| Illumination assessment according UGR             |                  |     |     |     |     |                |     |     |     |     |
|---|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling                                     | 70               | 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 |
|   | 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 |
| 8H  | 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 |
| 12H   | 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     | 1.13                                    | 1.13 | 1.13 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.01 | 1.01 | 1.01 | 0.97 | 0.97 | 0.97 | 0.95 |
| 1     | 1.06                                    | 1.04 | 1.02 | 1.04 | 1.02 | 1.00 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 2     | 0.99                                    | 0.96 | 0.93 | 0.98 | 0.95 | 0.92 | 0.95 | 0.92 | 0.90 | 0.92 | 0.90 | 0.88 | 0.89 | 0.88 | 0.86 | 0.85 |
| 3     | 0.94                                    | 0.89 | 0.86 | 0.92 | 0.88 | 0.85 | 0.90 | 0.87 | 0.84 | 0.88 | 0.85 | 0.83 | 0.86 | 0.83 | 0.81 | 0.80 |
| 4     | 0.89                                    | 0.84 | 0.80 | 0.88 | 0.83 | 0.80 | 0.86 | 0.82 | 0.79 | 0.84 | 0.81 | 0.78 | 0.82 | 0.79 | 0.77 | 0.76 |
| 5     | 0.84                                    | 0.79 | 0.76 | 0.83 | 0.79 | 0.75 | 0.82 | 0.78 | 0.75 | 0.80 | 0.77 | 0.74 | 0.79 | 0.76 | 0.73 | 0.72 |
| 6     | 0.80                                    | 0.75 | 0.71 | 0.79 | 0.75 | 0.71 | 0.78 | 0.74 | 0.71 | 0.77 | 0.73 | 0.70 | 0.75 | 0.72 | 0.70 | 0.69 |
| 7     | 0.76                                    | 0.71 | 0.68 | 0.76 | 0.71 | 0.68 | 0.74 | 0.70 | 0.67 | 0.73 | 0.70 | 0.67 | 0.72 | 0.69 | 0.67 | 0.65 |
| 8     | 0.73                                    | 0.68 | 0.64 | 0.72 | 0.68 | 0.64 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.70 | 0.66 | 0.64 | 0.62 |
| 9     | 0.70                                    | 0.65 | 0.61 | 0.69 | 0.65 | 0.61 | 0.68 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.63 | 0.61 | 0.60 |
| 10    | 0.67                                    | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.66 | 0.61 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.57 |







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    | 2267.81 | 2243.23 | 2234.45 | 2226.25 | 2211.04 | 2178.85 | 2135.54 | 2103.36 | 2070.58 |
| 45.0   | 2297.65 | 2280.10 | 2263.12 | 2249.66 | 2236.20 | 2220.40 | 2185.87 | 2151.35 | 2115.65 |
| 90.0   | 2287.70 | 2272.49 | 2268.98 | 2260.20 | 2231.52 | 2205.77 | 2168.32 | 2139.06 | 2106.87 |
| 135.0  | 2297.65 | 2304.09 | 2294.73 | 2293.56 | 2304.67 | 2294.14 | 2271.32 | 2234.45 | 2209.87 |
| 180.0  | 2267.81 | 2286.53 | 2281.27 | 2273.07 | 2274.24 | 2276.58 | 2259.61 | 2229.77 | 2206.36 |
| 225.0  | 2297.65 | 2299.99 | 2279.51 | 2270.73 | 2266.05 | 2252.00 | 2218.06 | 2190.56 | 2153.10 |
| 270.0  | 2287.70 | 2301.75 | 2294.73 | 2266.05 | 2250.25 | 2243.81 | 2237.96 | 2208.70 | 2168.32 |
| 315.0  | 2297.65 | 2265.46 | 2245.57 | 2236.20 | 2228.01 | 2195.24 | 2153.69 | 2118.57 | 2079.36 |
| 360.0  | 2267.81 | 2243.23 | 2234.45 | 2226.25 | 2211.04 | 2178.85 | 2135.54 | 2103.36 | 2070.58 |
| C/γ(°) | 9.0     | 10.0    | 11.0    | 12.0    | 13.0    | 14.0    | 15.0    | 16.0    | 17.0    |
| 0.0    | 2028.45 | 1982.80 | 1933.06 | 1874.53 | 1801.38 | 1739.93 | 1666.19 | 1588.36 | 1477.75 |
| 45.0   | 2070.58 | 2026.69 | 1977.53 | 1913.16 | 1853.47 | 1796.70 | 1731.15 | 1640.44 | 1558.51 |
| 90.0   | 2068.83 | 2015.57 | 1966.41 | 1904.97 | 1825.38 | 1761.00 | 1686.68 | 1590.70 | 1502.92 |
| 135.0  | 2179.44 | 2152.52 | 2114.48 | 2067.66 | 2019.08 | 1949.44 | 1885.65 | 1791.43 | 1713.60 |
| 180.0  | 2180.02 | 2155.44 | 2119.16 | 2077.02 | 2021.43 | 1944.76 | 1879.80 | 1810.16 | 1727.64 |
| 225.0  | 2122.67 | 2089.31 | 2036.64 | 1992.16 | 1938.91 | 1883.31 | 1787.92 | 1712.43 | 1631.08 |
| 270.0  | 2133.20 | 2093.99 | 2062.39 | 2007.97 | 1957.64 | 1898.53 | 1842.93 | 1763.93 | 1686.68 |
| 315.0  | 2052.44 | 2012.06 | 1954.71 | 1902.62 | 1844.10 | 1764.51 | 1696.63 | 1624.06 | 1546.22 |
| 360.0  | 2028.45 | 1982.80 | 1933.06 | 1874.53 | 1801.38 | 1739.93 | 1666.19 | 1588.36 | 1477.75 |
| C/γ(°) | 18.0    | 19.0    | 20.0    | 21.0    | 22.0    | 23.0    | 24.0    | 25.0    | 26.0    |
| 0.0    | 1385.87 | 1153.71 | 1153.71 | 1082.49 | 988.56  | 876.61  | 792.80  | 709.29  | 614.19  |
| 45.0   | 1477.17 | 1390.55 | 1281.70 | 1192.75 | 1101.45 | 989.67  | 901.31  | 816.45  | 710.52  |
| 90.0   | 1391.72 | 1158.75 | 1158.75 | 1116.43 | 1007.70 | 919.15  | 833.89  | 747.98  | 644.68  |
| 135.0  | 1627.57 | 1534.52 | 1419.81 | 1316.81 | 1214.40 | 1117.25 | 994.36  | 901.89  | 811.77  |
| 180.0  | 1621.72 | 1534.52 | 1440.30 | 1341.98 | 1220.25 | 1119.01 | 1017.18 | 905.99  | 824.64  |
| 225.0  | 1543.88 | 1423.91 | 1165.24 | 1165.24 | 1141.31 | 1027.48 | 937.06  | 830.26  | 751.19  |
| 270.0  | 1588.36 | 1503.50 | 1412.21 | 1296.92 | 1206.21 | 1117.84 | 1028.30 | 909.50  | 826.40  |
| 315.0  | 1436.20 | 1274.68 | 1145.58 | 1121.47 | 1024.14 | 930.45  | 822.65  | 739.14  | 656.39  |
| 360.0  | 1385.87 | 1153.71 | 1153.71 | 1082.49 | 988.56  | 876.61  | 792.80  | 709.29  | 614.19  |
| C/γ(°) | 27.0    | 28.0    | 29.0    | 30.0    | 31.0    | 32.0    | 33.0    | 34.0    | 35.0    |
| 0.0    | 538.64  | 467.77  | 388.82  | 329.48  | 277.22  | 231.92  | 181.13  | 145.31  | 114.06  |
| 45.0   | 628.59  | 536.71  | 469.99  | 405.03  | 342.42  | 299.69  | 299.69  | 181.42  | 145.19  |
| 90.0   | 567.26  | 493.93  | 428.03  | 351.14  | 296.07  | 244.80  | 191.08  | 153.45  | 112.83  |
| 135.0  | 702.91  | 622.15  | 547.83  | 467.07  | 404.45  | 345.93  | 306.13  | 306.13  | 186.63  |
| 180.0  | 738.61  | 645.56  | 574.16  | 486.97  | 419.08  | 365.24  | 306.13  | 306.13  | 195.35  |
| 225.0  | 653.46  | 576.91  | 505.93  | 438.16  | 370.97  | 294.72  | 243.45  | 198.57  | 149.41  |
| 270.0  | 742.71  | 659.61  | 558.95  | 480.53  | 409.13  | 330.13  | 300.28  | 300.28  | 172.17  |
| 315.0  | 560.82  | 486.61  | 417.09  | 354.00  | 283.13  | 232.98  | 189.44  | 151.34  | 112.07  |
| 360.0  | 538.64  | 467.77  | 388.82  | 329.48  | 277.22  | 231.92  | 181.13  | 145.31  | 114.06  |
| C/γ(°) | 36.0    | 37.0    | 38.0    | 39.0    | 40.0    | 41.0    | 42.0    | 43.0    | 44.0    |
| 0.0    | 88.84   | 66.66   | 53.31   | 41.02   | 34.35   | 29.44   | 25.22   | 22.82   | 20.95   |
| 45.0   | 106.98  | 83.34   | 65.72   | 51.97   | 39.56   | 32.77   | 27.15   | 23.99   | 21.71   |
| 90.0   | 88.49   | 70.23   | 56.12   | 42.78   | 35.64   | 30.61   | 26.98   | 23.76   | 21.77   |
| 135.0  | 140.69  | 109.50  | 84.86   | 66.19   | 52.14   | 39.97   | 33.71   | 29.44   | 25.81   |
| 180.0  | 157.72  | 122.90  | 90.48   | 70.87   | 55.25   | 44.36   | 35.00   | 30.31   | 26.39   |
| 225.0  | 117.34  | 90.89   | 70.93   | 52.67   | 42.43   | 35.41   | 29.61   | 26.57   | 23.88   |
| 270.0  | 127.93  | 93.34   | 72.04   | 56.42   | 44.65   | 35.00   | 29.79   | 26.10   | 23.29   |
| 315.0  | 86.73   | 63.67   | 50.56   | 40.67   | 32.42   | 27.97   | 24.76   | 22.41   | 20.25   |
| 360.0  | 88.84   | 66.66   | 53.31   | 41.02   | 34.35   | 29.44   | 25.22   | 22.82   | 20.95   |

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    | 19.43 | 18.02 | 17.15 | 16.33 | 15.63 | 14.92 | 14.40 | 13.99 | 13.52 |
| 45.0   | 19.55 | 18.26 | 17.15 | 16.27 | 15.39 | 14.75 | 14.22 | 13.87 | 13.34 |
| 90.0   | 20.31 | 18.73 | 17.79 | 16.91 | 16.09 | 15.45 | 14.86 | 14.28 | 13.81 |
| 135.0  | 23.76 | 21.77 | 20.54 | 19.55 | 18.49 | 17.73 | 17.09 | 16.50 | 15.92 |
| 180.0  | 24.29 | 22.65 | 21.07 | 20.01 | 19.20 | 18.49 | 17.67 | 17.09 | 16.56 |
| 225.0  | 22.24 | 20.89 | 19.72 | 18.49 | 17.62 | 16.85 | 16.21 | 15.45 | 14.92 |
| 270.0  | 20.83 | 19.31 | 18.02 | 16.91 | 15.74 | 15.04 | 14.46 | 13.75 | 13.28 |
| 315.0  | 18.84 | 17.67 | 16.50 | 15.74 | 14.98 | 14.34 | 13.69 | 13.23 | 12.82 |
| 360.0  | 19.43 | 18.02 | 17.15 | 16.33 | 15.63 | 14.92 | 14.40 | 13.99 | 13.52 |
| C/γ(°) | 54.0  | 55.0  | 56.0  | 57.0  | 58.0  | 59.0  | 60.0  | 61.0  | 62.0  |
| 0.0    | 13.11 | 12.76 | 12.29 | 12.00 | 11.70 | 11.35 | 11.12 | 10.83 | 10.53 |
| 45.0   | 12.99 | 12.70 | 12.35 | 12.06 | 11.76 | 11.53 | 11.18 | 10.89 | 10.53 |
| 90.0   | 13.40 | 12.93 | 12.58 | 12.23 | 11.88 | 11.47 | 11.06 | 10.77 | 10.42 |
| 135.0  | 15.27 | 14.81 | 14.40 | 13.99 | 13.46 | 13.05 | 12.47 | 12.00 | 11.53 |
| 180.0  | 16.04 | 15.39 | 14.98 | 14.51 | 13.99 | 13.58 | 13.11 | 12.52 | 12.17 |
| 225.0  | 14.51 | 13.99 | 13.58 | 13.11 | 12.58 | 12.23 | 11.82 | 11.35 | 11.00 |
| 270.0  | 12.82 | 12.41 | 12.17 | 11.82 | 11.59 | 11.35 | 11.12 | 10.83 | 10.48 |
| 315.0  | 12.41 | 12.06 | 11.65 | 11.41 | 11.12 | 10.83 | 10.53 | 10.24 | 9.95  |
| 360.0  | 13.11 | 12.76 | 12.29 | 12.00 | 11.70 | 11.35 | 11.12 | 10.83 | 10.53 |
| C/γ(°) | 63.0  | 64.0  | 65.0  | 66.0  | 67.0  | 68.0  | 69.0  | 70.0  | 71.0  |
| 0.0    | 10.12 | 9.89  | 9.66  | 9.36  | 9.07  | 8.90  | 8.66  | 8.49  | 8.37  |
| 45.0   | 10.18 | 9.83  | 9.54  | 9.13  | 8.84  | 8.54  | 8.31  | 8.13  | 7.96  |
| 90.0   | 10.07 | 9.71  | 9.31  | 9.01  | 8.72  | 8.31  | 8.13  | 7.96  | 7.84  |
| 135.0  | 11.12 | 10.71 | 10.36 | 9.95  | 9.54  | 9.19  | 8.84  | 8.37  | 8.13  |
| 180.0  | 11.76 | 11.24 | 10.83 | 10.42 | 10.01 | 9.48  | 9.13  | 8.78  | 8.43  |
| 225.0  | 10.65 | 10.36 | 9.83  | 9.54  | 9.13  | 8.78  | 8.43  | 8.13  | 7.96  |
| 270.0  | 10.12 | 9.89  | 9.60  | 9.31  | 9.01  | 8.72  | 8.43  | 8.19  | 8.02  |
| 315.0  | 9.66  | 9.36  | 9.07  | 8.78  | 8.49  | 8.25  | 8.08  | 7.90  | 7.78  |
| 360.0  | 10.12 | 9.89  | 9.66  | 9.36  | 9.07  | 8.90  | 8.66  | 8.49  | 8.37  |
| C/γ(°) | 72.0  | 73.0  | 74.0  | 75.0  | 76.0  | 77.0  | 78.0  | 79.0  | 80.0  |
| 0.0    | 8.19  | 8.08  | 7.90  | 7.72  | 7.61  | 7.49  | 7.32  | 7.20  | 7.02  |
| 45.0   | 7.78  | 7.61  | 7.49  | 7.32  | 7.20  | 7.08  | 6.91  | 6.73  | 6.61  |
| 90.0   | 7.67  | 7.49  | 7.37  | 7.26  | 7.14  | 6.91  | 6.79  | 6.61  | 6.44  |
| 135.0  | 7.96  | 7.78  | 7.61  | 7.49  | 7.37  | 7.20  | 7.08  | 6.91  | 6.73  |
| 180.0  | 8.25  | 8.13  | 7.96  | 7.78  | 7.61  | 7.43  | 7.32  | 7.20  | 7.02  |
| 225.0  | 7.84  | 7.72  | 7.49  | 7.37  | 7.26  | 7.08  | 6.96  | 6.79  | 6.67  |
| 270.0  | 7.90  | 7.72  | 7.61  | 7.43  | 7.26  | 7.14  | 7.02  | 6.85  | 6.67  |
| 315.0  | 7.61  | 7.49  | 7.32  | 7.14  | 7.08  | 6.91  | 6.73  | 6.61  | 6.50  |
| 360.0  | 8.19  | 8.08  | 7.90  | 7.72  | 7.61  | 7.49  | 7.32  | 7.20  | 7.02  |
| C/γ(°) | 81.0  | 82.0  | 83.0  | 84.0  | 85.0  | 86.0  | 87.0  | 88.0  | 89.0  |
| 0.0    | 6.91  | 6.79  | 6.67  | 6.55  | 6.50  | 6.26  | 6.03  | 5.79  | 5.62  |
| 45.0   | 6.50  | 6.38  | 6.20  | 6.09  | 5.97  | 5.79  | 5.68  | 5.56  | 5.44  |
| 90.0   | 6.38  | 6.26  | 6.09  | 5.97  | 5.85  | 5.62  | 5.56  | 5.44  | 5.38  |
| 135.0  | 6.61  | 6.50  | 6.32  | 6.20  | 6.03  | 5.97  | 5.74  | 5.62  | 5.50  |
| 180.0  | 6.91  | 6.73  | 6.61  | 6.44  | 6.26  | 6.09  | 6.03  | 5.91  | 5.74  |
| 225.0  | 6.50  | 6.38  | 6.26  | 6.09  | 5.97  | 5.85  | 5.74  | 5.56  | 5.50  |
| 270.0  | 6.55  | 6.44  | 6.26  | 6.14  | 6.03  | 5.85  | 5.74  | 5.56  | 5.50  |
| 315.0  | 6.32  | 6.26  | 6.09  | 5.97  | 5.85  | 5.74  | 5.62  | 5.50  | 5.38  |
| 360.0  | 6.91  | 6.79  | 6.67  | 6.55  | 6.50  | 6.26  | 6.03  | 5.79  | 5.62  |

Intensity data(cd)

|               |             |
|---------------|-------------|
| <i>C/γ(°)</i> | <b>90.0</b> |
| <b>0.0</b>    | <b>5.56</b> |
| <b>45.0</b>   | <b>5.44</b> |
| <b>90.0</b>   | <b>5.38</b> |
| <b>135.0</b>  | <b>5.38</b> |
| <b>180.0</b>  | <b>5.56</b> |
| <b>225.0</b>  | <b>5.38</b> |
| <b>270.0</b>  | <b>5.38</b> |
| <b>315.0</b>  | <b>5.38</b> |
| <b>360.0</b>  | <b>5.56</b> |