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NT

Client:

LumCAT: 1-1488-L

Luminaire: 92.70.427.00

Report No: 2024923-B016

Ballast type: AC

Test No: 2024923-C016

Voltage(V): 36.300

LampCAT: CITIZEN CLU028 LES9.8

Current(A): 0.360

Lamp flux(lm): 1715.0

Power (W): 13.068

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 1385.84, Efficiency(%): 80.81% , Luminous Efficacy(lm/W): 106.05

Central intensity(cd): 6907.470, Maximum intensity(cd): 6907.470

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

Beam Angle(50%Imax): [C0/180]Total=19.4

[C90/270]Total=19.4

Field angle(10%Imax): [C0/180]Total=48.4

[C90/270]Total=48.4

Maximum s/h(1/2): C0\_180=0.33 C90\_270=0.33

Maximum s/h(1/4): C0\_180=0.35 C90\_270=0.35

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 80.81%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 98.091%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/9/23  
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                | 6907.469      | 0.000       | 0         | 0.00%       | 0.00%      |
| 1.0                | 6851.141      | 6.583       | 6.583     | 0.38%       | 0.48%      |
| 2.0                | 6724.513      | 19.485      | 26.068    | 1.14%       | 1.88%      |
| 3.0                | 6504.688      | 31.640      | 57.708    | 1.84%       | 4.16%      |
| 4.0                | 6195.250      | 42.511      | 100.219   | 2.48%       | 7.23%      |
| 5.0                | 5783.325      | 51.531      | 151.75    | 3.00%       | 10.95%     |
| 6.0                | 5346.382      | 58.490      | 210.24    | 3.41%       | 15.17%     |
| 7.0                | 4869.277      | 63.408      | 273.648   | 3.70%       | 19.75%     |
| 8.0                | 4335.186      | 65.875      | 339.523   | 3.84%       | 24.50%     |
| 9.0                | 3813.531      | 66.041      | 405.564   | 3.85%       | 29.26%     |
| 10.0               | 3303.507      | 64.407      | 469.97    | 3.76%       | 33.91%     |
| 11.0               | 2884.998      | 61.836      | 531.806   | 3.61%       | 38.37%     |
| 12.0               | 2494.726      | 58.808      | 590.614   | 3.43%       | 42.62%     |
| 13.0               | 2157.417      | 55.209      | 645.823   | 3.22%       | 46.60%     |
| 14.0               | 1896.041      | 51.884      | 697.707   | 3.03%       | 50.35%     |
| 15.0               | 1694.065      | 49.287      | 746.994   | 2.87%       | 53.90%     |
| 16.0               | 1469.361      | 46.353      | 793.347   | 2.70%       | 57.25%     |
| 17.0               | 1303.077      | 43.174      | 836.521   | 2.52%       | 60.36%     |
| 18.0               | 1223.310      | 41.655      | 878.176   | 2.43%       | 63.37%     |
| 19.0               | 1120.347      | 40.775      | 918.951   | 2.38%       | 66.31%     |
| 20.0               | 1024.202      | 39.251      | 958.202   | 2.29%       | 69.14%     |
| 21.0               | 935.402       | 37.628      | 995.83    | 2.19%       | 71.86%     |
| 22.0               | 852.344       | 35.925      | 1031.756  | 2.09%       | 74.45%     |
| 23.0               | 781.817       | 34.289      | 1066.045  | 2.00%       | 76.92%     |
| 24.0               | 703.989       | 32.485      | 1098.53   | 1.89%       | 79.27%     |
| 25.0               | 634.391       | 30.432      | 1128.962  | 1.77%       | 81.46%     |
| 26.0               | 564.062       | 28.290      | 1157.251  | 1.65%       | 83.51%     |
| 27.0               | 494.069       | 25.887      | 1183.139  | 1.51%       | 85.37%     |
| 28.0               | 430.133       | 23.399      | 1206.538  | 1.36%       | 87.06%     |
| 29.0               | 366.190       | 20.834      | 1227.372  | 1.21%       | 88.57%     |
| 30.0               | 308.092       | 18.205      | 1245.577  | 1.06%       | 89.88%     |
| 31.0               | 265.275       | 15.956      | 1261.533  | 0.93%       | 91.03%     |
| 32.0               | 243.761       | 14.583      | 1276.117  | 0.85%       | 92.08%     |
| 33.0               | 191.252       | 12.816      | 1288.932  | 0.75%       | 93.01%     |
| 34.0               | 141.983       | 10.085      | 1299.017  | 0.59%       | 93.73%     |
| 35.0               | 117.864       | 8.070       | 1307.087  | 0.47%       | 94.32%     |
| 36.0               | 96.416        | 6.823       | 1313.909  | 0.40%       | 94.81%     |
| 37.0               | 78.259        | 5.697       | 1319.606  | 0.33%       | 95.22%     |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0               | 63.336        | 4.726       | 1324.333  | 0.28%       | 95.56%     |
| 39.0               | 51.119        | 3.907       | 1328.239  | 0.23%       | 95.84%     |
| 40.0               | 42.019        | 3.248       | 1331.488  | 0.19%       | 96.08%     |
| 41.0               | 34.455        | 2.723       | 1334.211  | 0.16%       | 96.27%     |
| 42.0               | 28.947        | 2.303       | 1336.514  | 0.13%       | 96.44%     |
| 43.0               | 24.477        | 1.979       | 1338.493  | 0.12%       | 96.58%     |
| 44.0               | 21.748        | 1.745       | 1340.238  | 0.10%       | 96.71%     |
| 45.0               | 19.598        | 1.589       | 1341.827  | 0.09%       | 96.82%     |
| 46.0               | 17.944        | 1.468       | 1343.295  | 0.09%       | 96.93%     |
| 47.0               | 16.672        | 1.377       | 1344.672  | 0.08%       | 97.03%     |
| 48.0               | 15.647        | 1.307       | 1345.978  | 0.08%       | 97.12%     |
| 49.0               | 14.879        | 1.254       | 1347.232  | 0.07%       | 97.21%     |
| 50.0               | 14.133        | 1.210       | 1348.442  | 0.07%       | 97.30%     |
| 51.0               | 13.555        | 1.171       | 1349.613  | 0.07%       | 97.39%     |
| 52.0               | 13.072        | 1.143       | 1350.756  | 0.07%       | 97.47%     |
| 53.0               | 12.677        | 1.120       | 1351.876  | 0.07%       | 97.55%     |
| 54.0               | 12.304        | 1.101       | 1352.977  | 0.06%       | 97.63%     |
| 55.0               | 11.982        | 1.084       | 1354.061  | 0.06%       | 97.71%     |
| 56.0               | 11.770        | 1.073       | 1355.134  | 0.06%       | 97.78%     |
| 57.0               | 11.566        | 1.067       | 1356.201  | 0.06%       | 97.86%     |
| 58.0               | 11.397        | 1.062       | 1357.263  | 0.06%       | 97.94%     |
| 59.0               | 11.273        | 1.060       | 1358.323  | 0.06%       | 98.01%     |
| 60.0               | 11.149        | 1.059       | 1359.382  | 0.06%       | 98.09%     |
| 61.0               | 11.061        | 1.060       | 1360.442  | 0.06%       | 98.17%     |
| 62.0               | 10.995        | 1.063       | 1361.505  | 0.06%       | 98.24%     |
| 63.0               | 10.944        | 1.067       | 1362.572  | 0.06%       | 98.32%     |
| 64.0               | 10.863        | 1.070       | 1363.642  | 0.06%       | 98.40%     |
| 65.0               | 10.717        | 1.068       | 1364.71   | 0.06%       | 98.48%     |
| 66.0               | 10.505        | 1.059       | 1365.769  | 0.06%       | 98.55%     |
| 67.0               | 10.205        | 1.041       | 1366.81   | 0.06%       | 98.63%     |
| 68.0               | 9.905         | 1.019       | 1367.829  | 0.06%       | 98.70%     |
| 69.0               | 9.598         | 0.995       | 1368.824  | 0.06%       | 98.77%     |
| 70.0               | 9.298         | 0.970       | 1369.794  | 0.06%       | 98.84%     |
| 71.0               | 8.998         | 0.946       | 1370.74   | 0.06%       | 98.91%     |
| 72.0               | 8.756         | 0.923       | 1371.663  | 0.05%       | 98.98%     |
| 73.0               | 8.559         | 0.905       | 1372.568  | 0.05%       | 99.04%     |
| 74.0               | 8.376         | 0.890       | 1373.459  | 0.05%       | 99.11%     |
| 75.0               | 8.200         | 0.876       | 1374.335  | 0.05%       | 99.17%     |

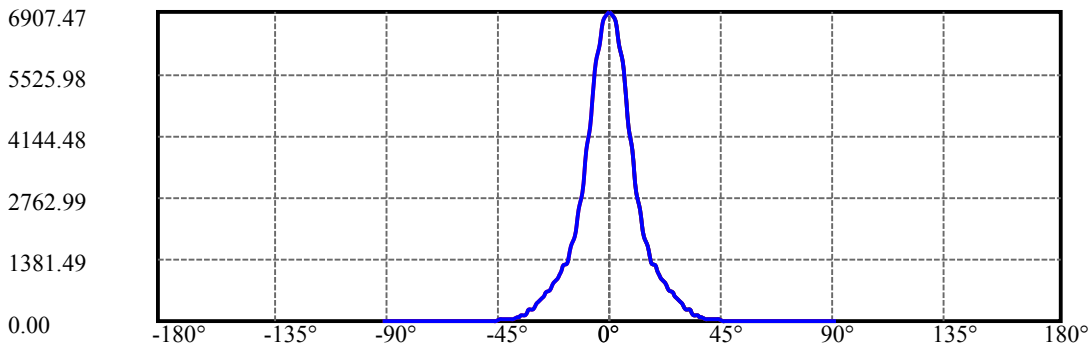
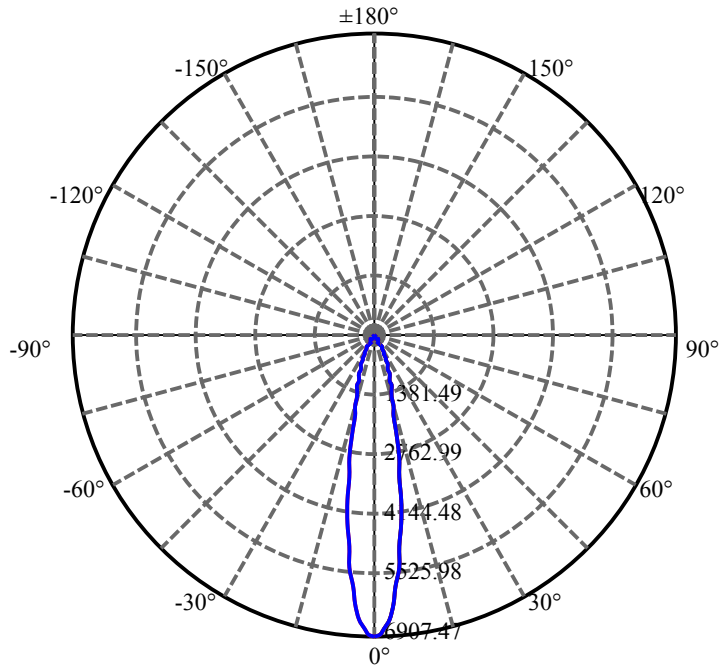
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0               | 8.032         | 0.862       | 1375.196  | 0.05%       | 99.23%     |
| 77.0               | 7.871         | 0.848       | 1376.044  | 0.05%       | 99.29%     |
| 78.0               | 7.732         | 0.835       | 1376.88   | 0.05%       | 99.35%     |
| 79.0               | 7.557         | 0.821       | 1377.701  | 0.05%       | 99.41%     |
| 80.0               | 7.396         | 0.806       | 1378.507  | 0.05%       | 99.47%     |
| 81.0               | 7.242         | 0.792       | 1379.299  | 0.05%       | 99.53%     |
| 82.0               | 7.103         | 0.778       | 1380.077  | 0.05%       | 99.58%     |
| 83.0               | 6.979         | 0.766       | 1380.842  | 0.04%       | 99.64%     |
| 84.0               | 6.847         | 0.753       | 1381.595  | 0.04%       | 99.69%     |
| 85.0               | 6.715         | 0.740       | 1382.336  | 0.04%       | 99.75%     |
| 86.0               | 6.576         | 0.727       | 1383.062  | 0.04%       | 99.80%     |
| 87.0               | 6.474         | 0.714       | 1383.776  | 0.04%       | 99.85%     |
| 88.0               | 6.364         | 0.703       | 1384.48   | 0.04%       | 99.90%     |
| 89.0               | 6.203         | 0.689       | 1385.168  | 0.04%       | 99.95%     |
| 90.0               | 6.094         | 0.674       | 1385.843  | 0.04%       | 100.00%    |

ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp  | %Fixt   |
|---------|---------|--------|---------|
| 0-30    | 1245.58 | 72.63% | 89.88%  |
| 0-40    | 1331.49 | 77.64% | 96.08%  |
| 0-60    | 1359.38 | 79.26% | 98.09%  |
| 0-90    | 1385.17 | 80.77% | 99.95%  |
| 0-120   | 1385.17 | 80.77% | 99.95%  |
| 0-180   | 1385.84 | 80.81% | 100.00% |
| 60-90   | 25.79   | 1.50%  | 1.86%   |
| 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%   |
| 0-24.33 | 1108.67 | 64.65% | 80.00%  |

ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 469.97 |
| 10-20   | 488.23 |
| 20-30   | 287.38 |
| 30-40   | 85.91  |
| 40-50   | 16.95  |
| 50-60   | 10.94  |
| 60-70   | 10.41  |
| 70-80   | 8.71   |
| 80-90   | 6.66   |
| 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: —————

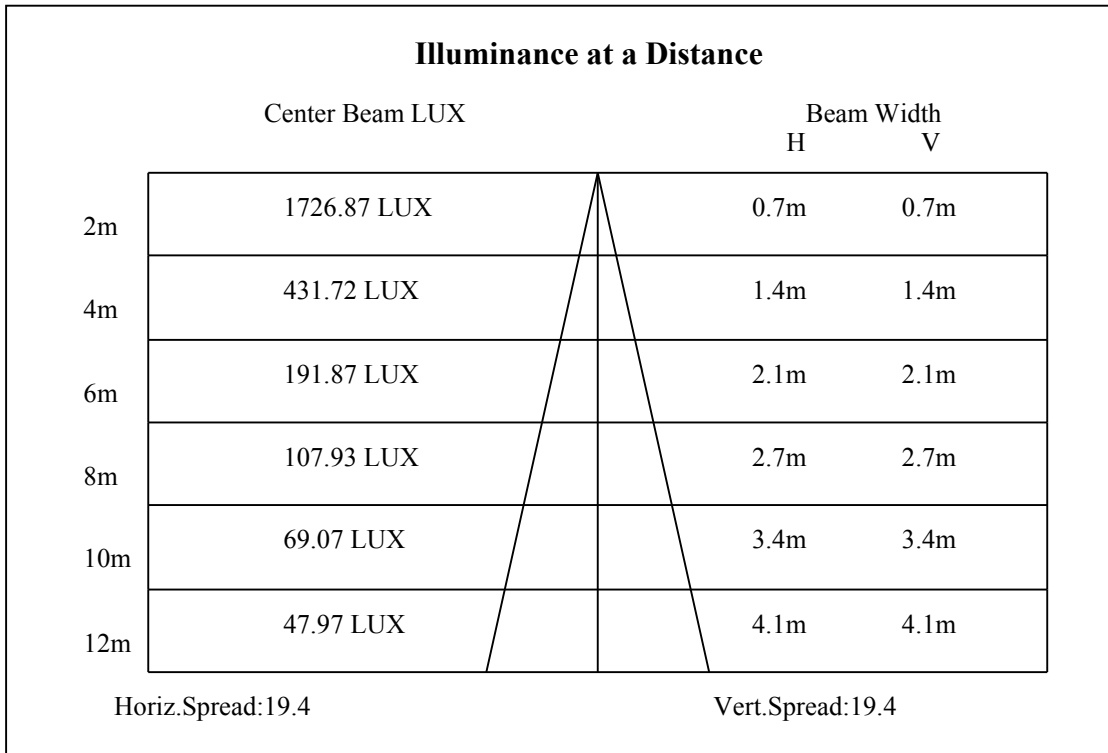
C90/C270: —————

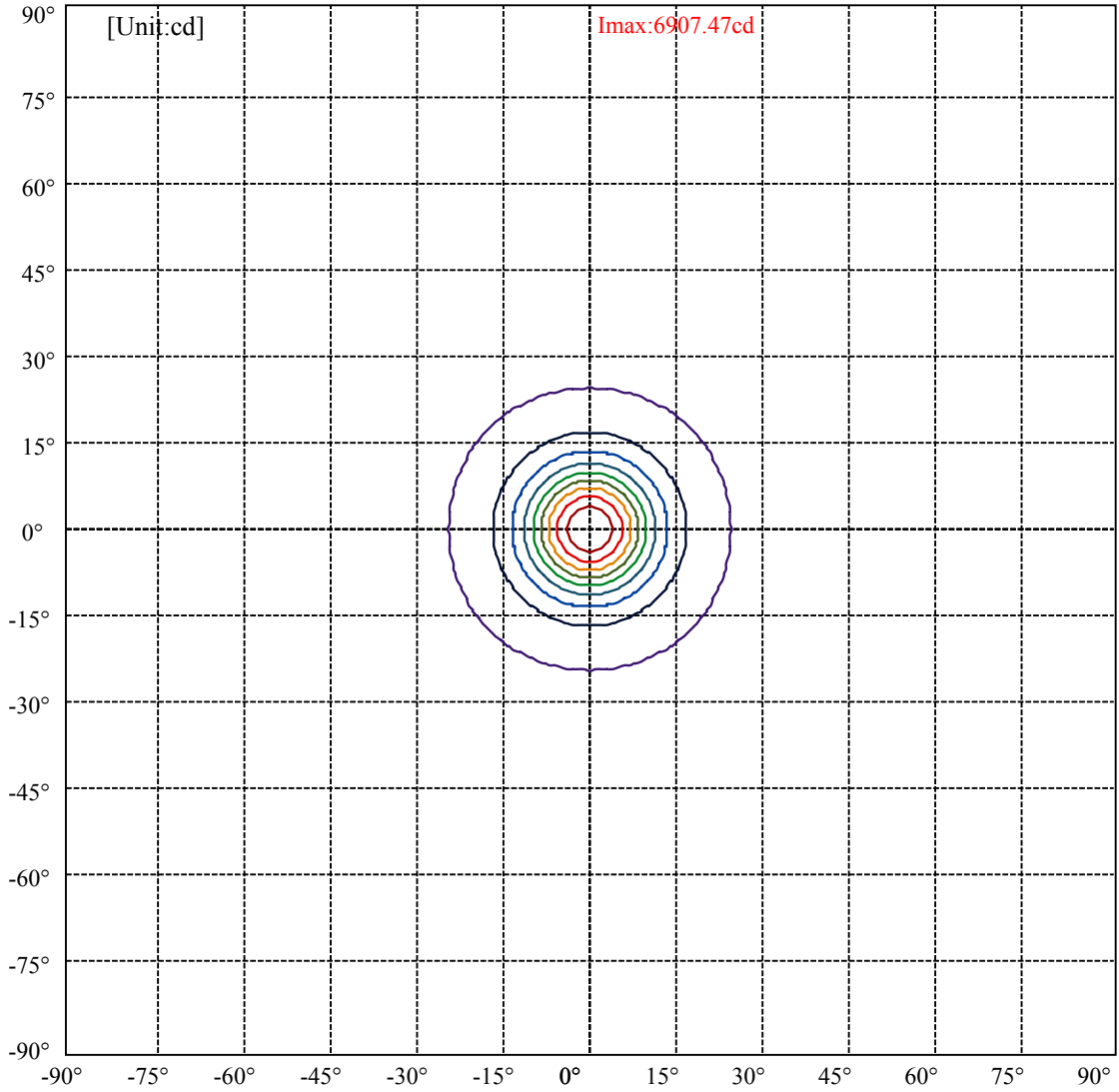
Field angle(10%Imax):C0/180Left:24.2 Right:24.2

:C90/270Left:24.2 Right:24.2

Beam Angle(50%Imax):C0/180Left:9.7 Right:9.7

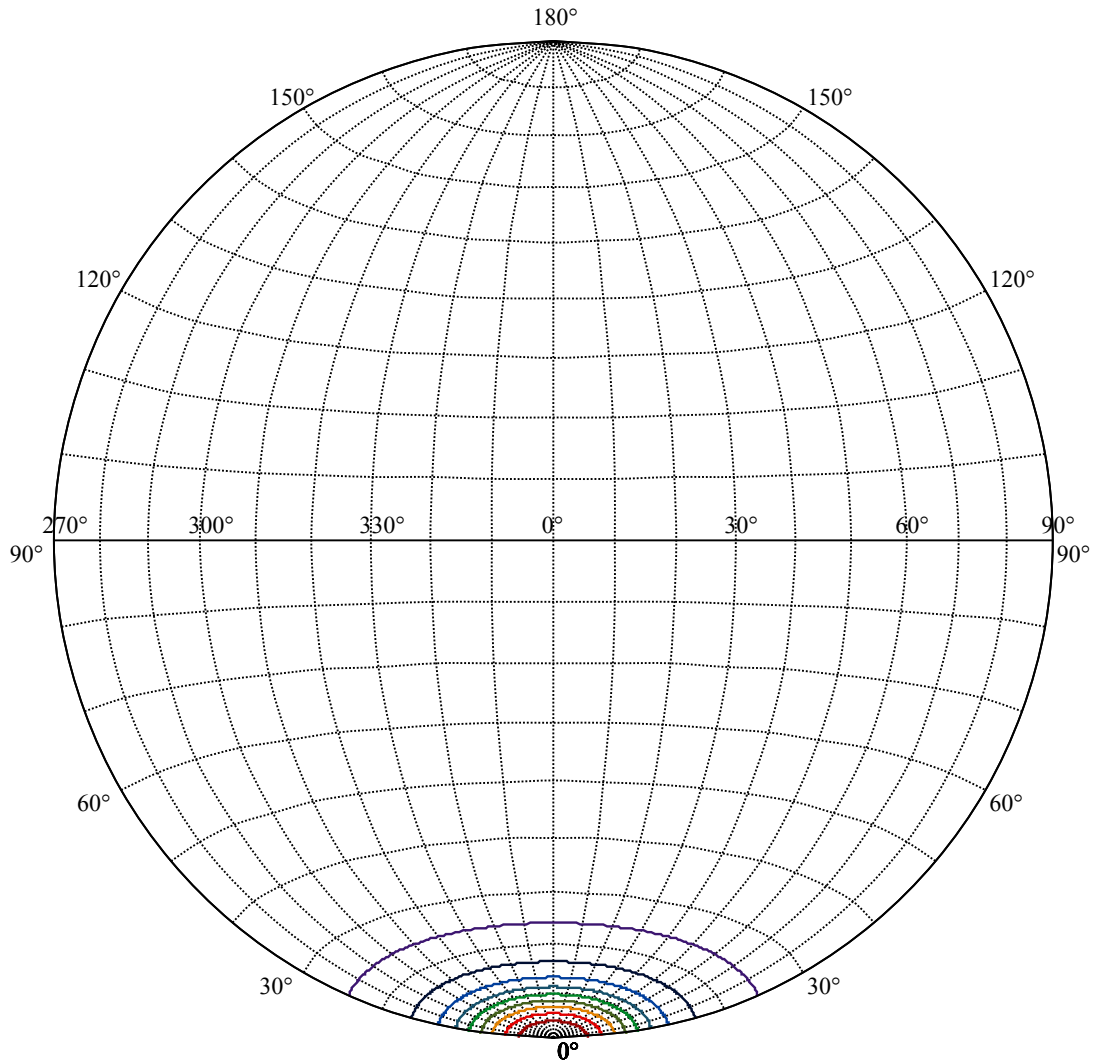
:C90/270Left:9.7 Right:9.7





|                   |   |
|-------------------|---|
| (10%Imax) 690.747 | — |
| (20%Imax) 1381.49 | — |
| (30%Imax) 2072.24 | — |
| (40%Imax) 2762.99 | — |
| (50%Imax) 3453.73 | — |
| (60%Imax) 4144.48 | — |
| (70%Imax) 4835.23 | — |
| (80%Imax) 5525.98 | — |
| (90%Imax) 6216.72 | — |





House

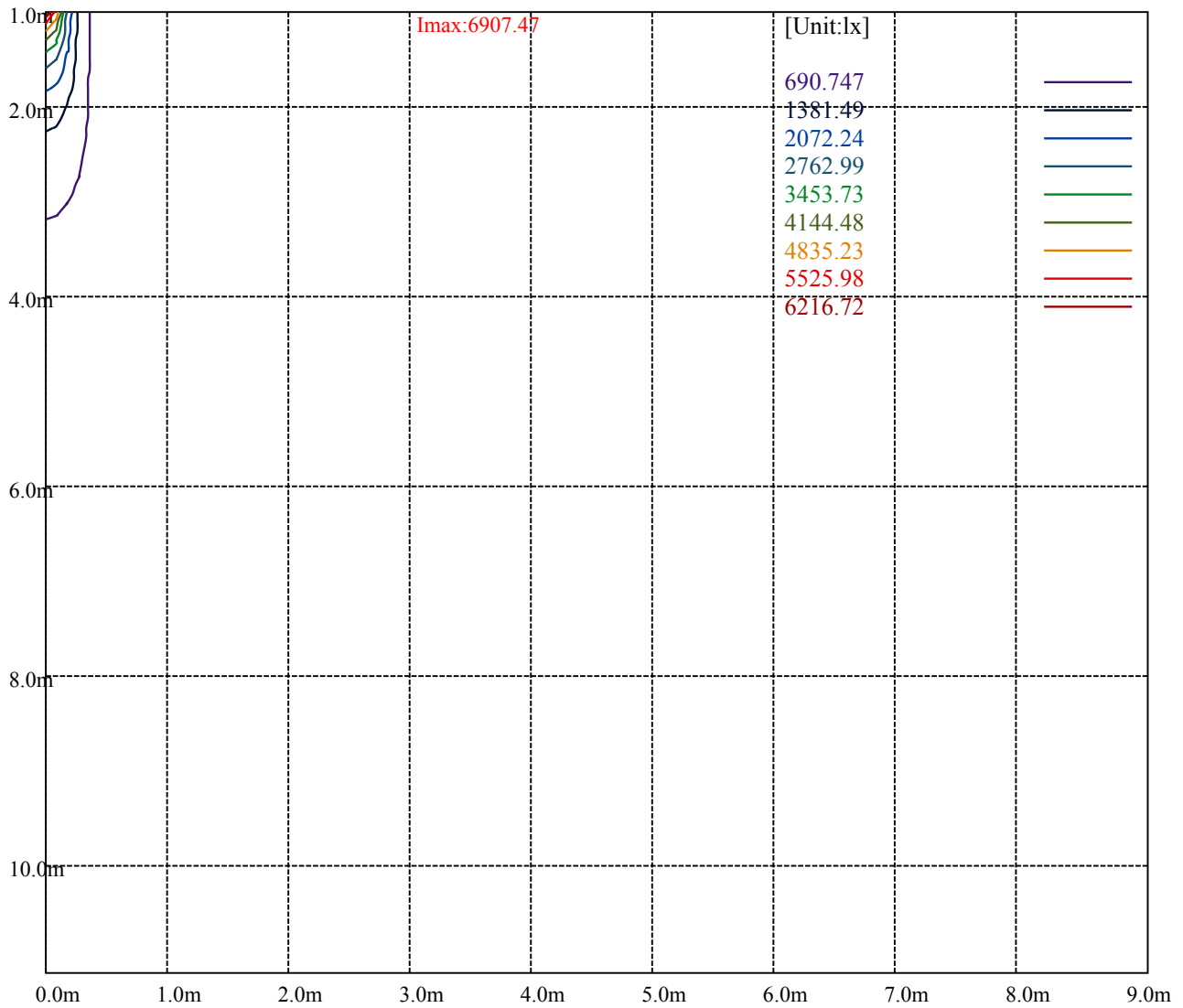
[Unit:cd]

Road

Imax:6907.47

|           |         |   |
|-----------|---------|---|
| (10%Imax) | 690.747 | — |
| (20%Imax) | 1381.49 | — |
| (30%Imax) | 2072.24 | — |
| (40%Imax) | 2762.99 | — |
| (50%Imax) | 3453.73 | — |
| (60%Imax) | 4144.48 | — |
| (70%Imax) | 4835.23 | — |
| (80%Imax) | 5525.98 | — |
| (90%Imax) | 6216.72 | — |





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

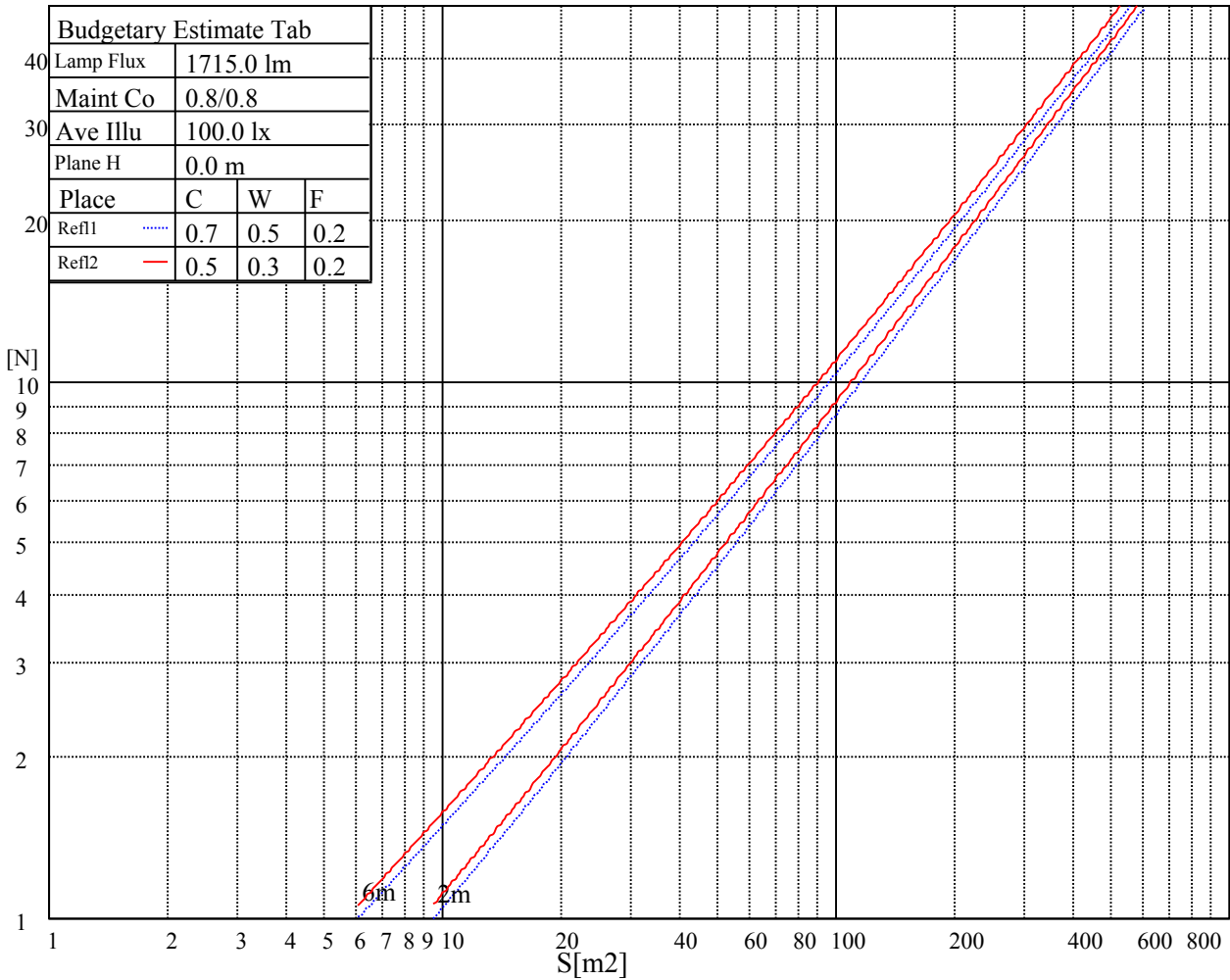
| Glare | Quality | Service Values Illuminance(lx) |      |      |       |       |       |       |       |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15  | A       | 2000                           | 1000 | 500  | <=300 |       |    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

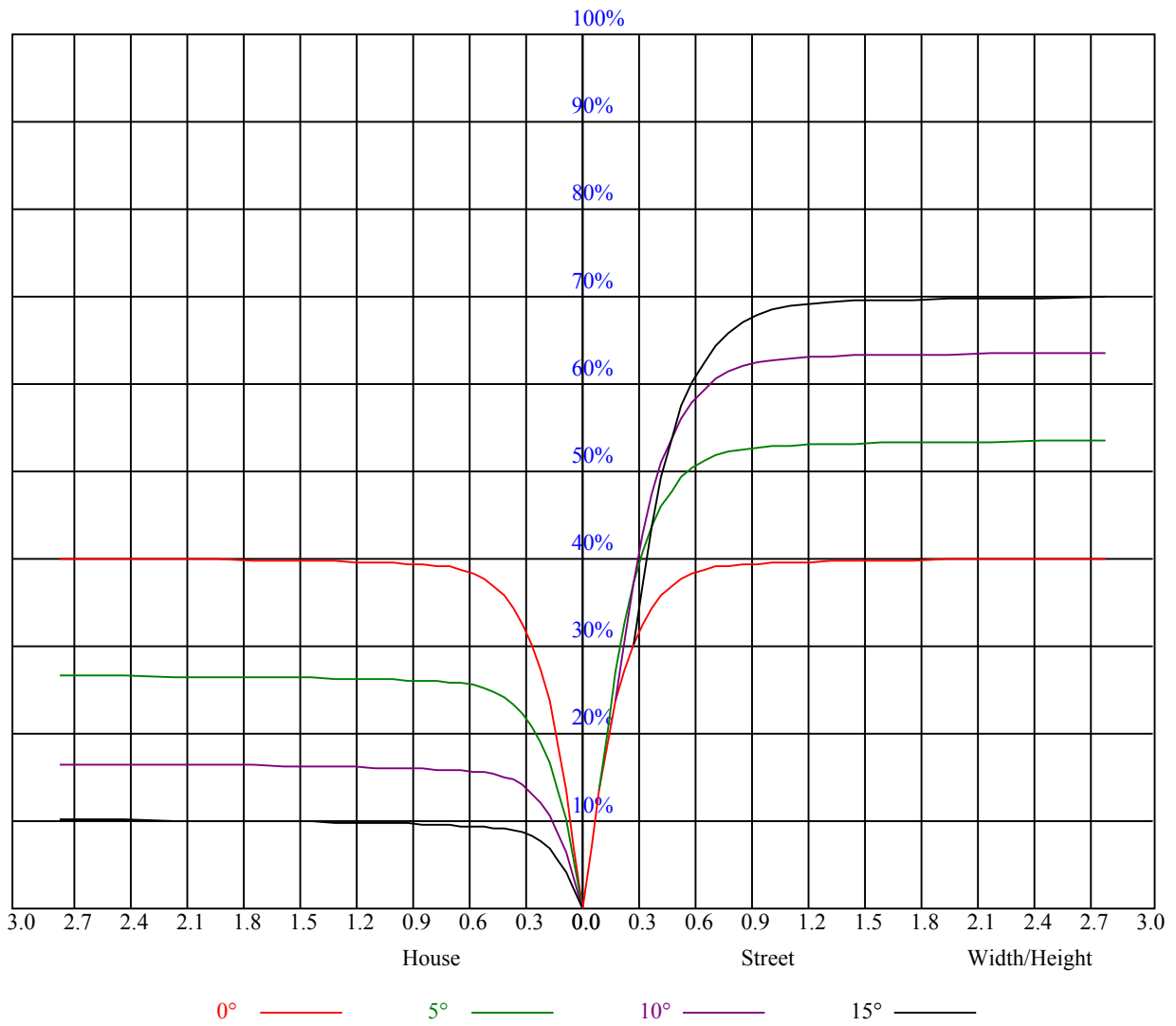


| Illumination assessment according UGR             |     |                  |     |     |     |     |                |     |     |     |  |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|--|
| Rf of Ceiling                                     | 70  | 70               | 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           |     |     |     |  |

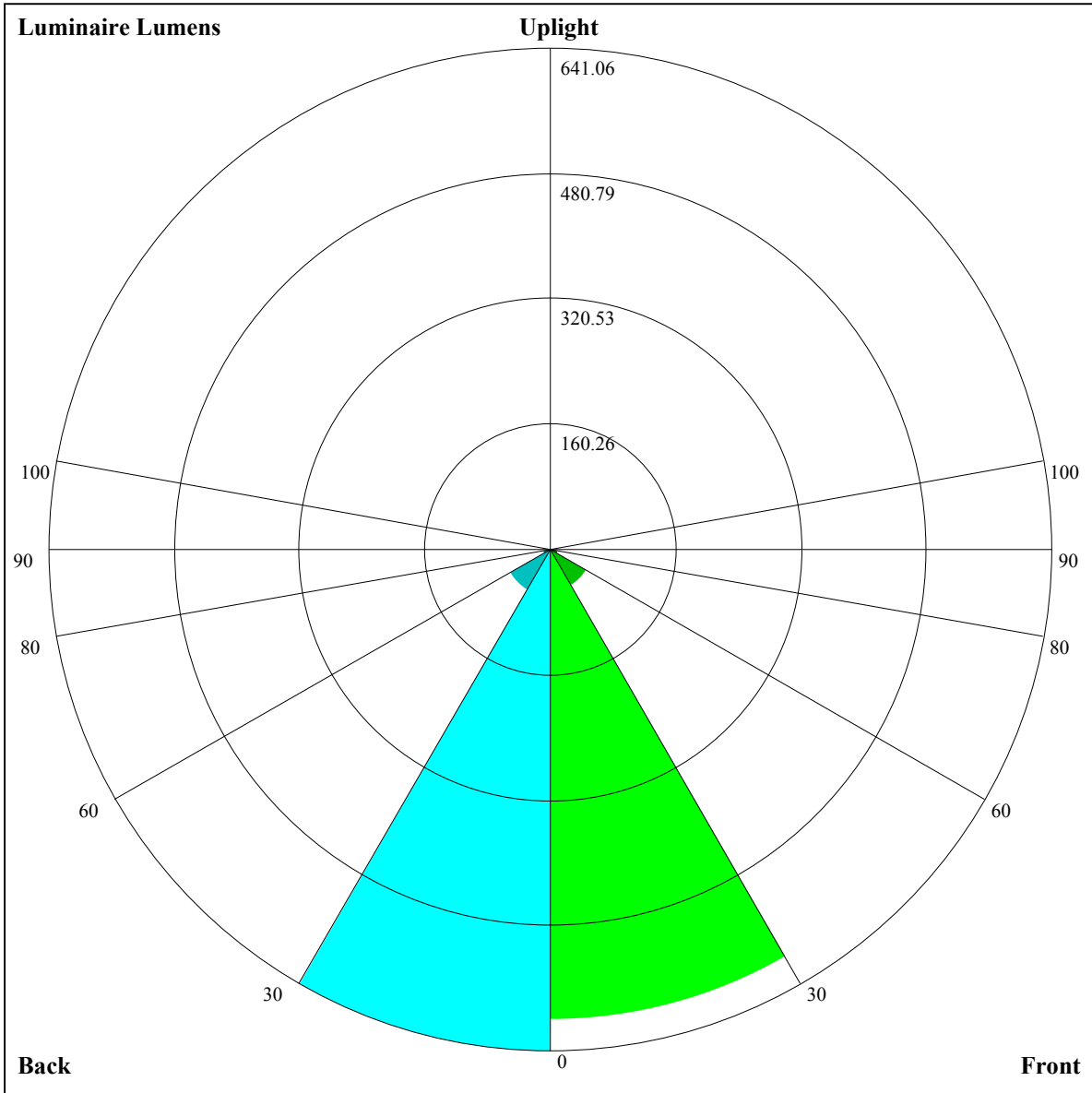
UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| 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 RHOF=20 CU |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0     | 0.96                                   | 0.96 | 0.96 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.86 | 0.86 | 0.86 | 0.82 | 0.82 | 0.82 | 0.81 |
| 1     | 0.91                                   | 0.89 | 0.87 | 0.89 | 0.87 | 0.86 | 0.86 | 0.84 | 0.83 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.78 | 0.77 |
| 2     | 0.86                                   | 0.83 | 0.81 | 0.84 | 0.82 | 0.80 | 0.82 | 0.80 | 0.78 | 0.80 | 0.78 | 0.77 | 0.77 | 0.76 | 0.75 | 0.74 |
| 3     | 0.82                                   | 0.78 | 0.76 | 0.81 | 0.78 | 0.75 | 0.79 | 0.76 | 0.74 | 0.77 | 0.75 | 0.73 | 0.75 | 0.73 | 0.72 | 0.71 |
| 4     | 0.78                                   | 0.75 | 0.72 | 0.77 | 0.74 | 0.71 | 0.76 | 0.73 | 0.71 | 0.74 | 0.72 | 0.70 | 0.73 | 0.71 | 0.69 | 0.68 |
| 5     | 0.75                                   | 0.71 | 0.69 | 0.74 | 0.71 | 0.68 | 0.73 | 0.70 | 0.68 | 0.72 | 0.69 | 0.67 | 0.70 | 0.68 | 0.67 | 0.66 |
| 6     | 0.72                                   | 0.68 | 0.66 | 0.71 | 0.68 | 0.65 | 0.70 | 0.67 | 0.65 | 0.69 | 0.67 | 0.65 | 0.68 | 0.66 | 0.64 | 0.63 |
| 7     | 0.69                                   | 0.66 | 0.63 | 0.69 | 0.65 | 0.63 | 0.68 | 0.65 | 0.63 | 0.67 | 0.64 | 0.62 | 0.66 | 0.64 | 0.62 | 0.61 |
| 8     | 0.67                                   | 0.63 | 0.61 | 0.67 | 0.63 | 0.61 | 0.66 | 0.63 | 0.61 | 0.65 | 0.62 | 0.60 | 0.64 | 0.62 | 0.60 | 0.59 |
| 9     | 0.65                                   | 0.61 | 0.59 | 0.65 | 0.61 | 0.59 | 0.64 | 0.61 | 0.59 | 0.63 | 0.60 | 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 | 0.57 | 0.61 | 0.59 | 0.57 | 0.61 | 0.58 | 0.57 | 0.56 |







Luminaire Lumens:

FL=601.98,FM=54.01,FH=9.54,FVH=3.64

BL=641.06,BM=60.95,BH=9.56,BVH=3.67

UL=0,UH=0

BUG Rating:B2-U0-G0

Intensity data(cd)

|        |         |         |         |         |         |         |         |         |         |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| C/γ(°) | 0.0     | 1.0     | 2.0     | 3.0     | 4.0     | 5.0     | 6.0     | 7.0     | 8.0     |
| 0.0    | 6871.77 | 6762.92 | 6579.74 | 6326.93 | 5892.10 | 5466.06 | 5009.00 | 4519.75 | 3909.36 |
| 45.0   | 6905.71 | 6903.37 | 6799.20 | 6570.38 | 6324.00 | 5893.27 | 5478.93 | 5031.24 | 4551.35 |
| 90.0   | 6918.59 | 6774.04 | 6587.35 | 6259.63 | 5902.64 | 5483.62 | 4927.07 | 4455.38 | 3976.66 |
| 135.0  | 6933.80 | 6923.27 | 6854.21 | 6697.96 | 6397.74 | 6067.09 | 5660.35 | 5119.61 | 4656.69 |
| 180.0  | 6871.77 | 6893.42 | 6822.03 | 6672.79 | 6447.48 | 6072.94 | 5707.76 | 5272.94 | 4711.70 |
| 225.0  | 6905.71 | 6800.37 | 6626.56 | 6371.40 | 6043.68 | 5547.41 | 5101.46 | 4632.70 | 4177.39 |
| 270.0  | 6918.59 | 6926.20 | 6859.48 | 6728.39 | 6456.85 | 6146.09 | 5765.70 | 5302.78 | 4720.48 |
| 315.0  | 6933.80 | 6825.54 | 6667.53 | 6410.03 | 6097.52 | 5590.13 | 5120.78 | 4619.82 | 3977.83 |
| 360.0  | 6871.77 | 6762.92 | 6579.74 | 6326.93 | 5892.10 | 5466.06 | 5009.00 | 4519.75 | 3909.36 |
| C/γ(°) | 9.0     | 10.0    | 11.0    | 12.0    | 13.0    | 14.0    | 15.0    | 16.0    | 17.0    |
| 0.0    | 3434.16 | 2880.54 | 2503.07 | 2185.29 | 1885.65 | 1699.55 | 1535.10 | 1299.84 | 1163.13 |
| 45.0   | 3947.99 | 3460.49 | 3017.48 | 2628.30 | 2220.40 | 1961.15 | 1756.90 | 1531.59 | 1382.36 |
| 90.0   | 3395.53 | 2973.00 | 2586.17 | 2263.71 | 2000.36 | 1743.44 | 1567.29 | 1309.79 | 1161.61 |
| 135.0  | 4168.03 | 3608.56 | 3176.07 | 2779.29 | 2373.15 | 2101.60 | 1877.46 | 1690.77 | 1493.55 |
| 180.0  | 4233.58 | 3655.37 | 3211.77 | 2814.41 | 2403.58 | 2132.03 | 1911.40 | 1722.38 | 1519.89 |
| 225.0  | 3606.80 | 3177.83 | 2770.51 | 2331.59 | 2046.59 | 1823.62 | 1595.97 | 1446.73 | 1149.26 |
| 270.0  | 4225.97 | 3732.62 | 3257.42 | 2731.30 | 2371.98 | 2009.72 | 1781.48 | 1592.46 | 1393.48 |
| 315.0  | 3496.19 | 2939.64 | 2557.49 | 2223.91 | 1957.64 | 1697.21 | 1526.91 | 1161.32 | 1161.32 |
| 360.0  | 3434.16 | 2880.54 | 2503.07 | 2185.29 | 1885.65 | 1699.55 | 1535.10 | 1299.84 | 1163.13 |
| C/γ(°) | 18.0    | 19.0    | 20.0    | 21.0    | 22.0    | 23.0    | 24.0    | 25.0    | 26.0    |
| 0.0    | 1138.67 | 1053.17 | 970.83  | 875.79  | 798.42  | 726.38  | 637.31  | 569.54  | 504.05  |
| 45.0   | 1255.95 | 1126.03 | 1032.98 | 952.22  | 860.34  | 786.02  | 716.96  | 630.93  | 565.97  |
| 90.0   | 1136.27 | 1043.63 | 938.76  | 863.62  | 771.27  | 702.74  | 636.02  | 569.89  | 492.12  |
| 135.0  | 1357.78 | 1243.08 | 1149.44 | 1037.08 | 959.83  | 884.92  | 797.13  | 728.08  | 644.39  |
| 180.0  | 1382.36 | 1260.63 | 1156.46 | 1042.93 | 961.00  | 888.43  | 792.45  | 725.74  | 657.27  |
| 225.0  | 1149.26 | 1078.98 | 996.17  | 923.49  | 838.16  | 770.92  | 706.19  | 642.46  | 563.81  |
| 270.0  | 1257.71 | 1135.40 | 1007.23 | 918.28  | 843.37  | 774.90  | 704.08  | 629.76  | 568.31  |
| 315.0  | 1108.47 | 1021.86 | 941.74  | 869.82  | 786.37  | 720.24  | 641.76  | 578.73  | 516.58  |
| 360.0  | 1138.67 | 1053.17 | 970.83  | 875.79  | 798.42  | 726.38  | 637.31  | 569.54  | 504.05  |
| C/γ(°) | 27.0    | 28.0    | 29.0    | 30.0    | 31.0    | 32.0    | 33.0    | 34.0    | 35.0    |
| 0.0    | 422.47  | 360.85  | 307.42  | 250.01  | 210.92  | 177.67  | 149.29  | 119.85  | 100.13  |
| 45.0   | 499.84  | 434.88  | 362.31  | 310.23  | 298.52  | 298.52  | 178.14  | 150.05  | 126.35  |
| 90.0   | 428.50  | 370.04  | 316.61  | 268.03  | 215.89  | 180.37  | 150.23  | 119.03  | 98.79   |
| 135.0  | 574.75  | 508.62  | 427.27  | 367.58  | 312.57  | 299.69  | 241.41  | 169.89  | 138.99  |
| 180.0  | 579.43  | 515.06  | 452.44  | 372.85  | 316.67  | 304.38  | 304.38  | 177.26  | 147.89  |
| 225.0  | 500.25  | 436.93  | 359.50  | 305.02  | 245.33  | 204.77  | 170.07  | 134.54  | 111.19  |
| 270.0  | 508.62  | 437.81  | 382.80  | 331.30  | 306.13  | 306.13  | 188.97  | 149.06  | 124.07  |
| 315.0  | 438.68  | 376.88  | 321.17  | 259.72  | 216.18  | 178.55  | 147.54  | 116.17  | 95.51   |
| 360.0  | 422.47  | 360.85  | 307.42  | 250.01  | 210.92  | 177.67  | 149.29  | 119.85  | 100.13  |
| C/γ(°) | 36.0    | 37.0    | 38.0    | 39.0    | 40.0    | 41.0    | 42.0    | 43.0    | 44.0    |
| 0.0    | 83.92   | 70.11   | 55.42   | 45.82   | 36.23   | 30.43   | 25.93   | 21.83   | 19.55   |
| 45.0   | 100.89  | 84.27   | 69.58   | 54.60   | 45.18   | 37.69   | 30.43   | 26.10   | 22.82   |
| 90.0   | 78.30   | 64.84   | 54.07   | 43.25   | 36.58   | 31.37   | 27.33   | 23.64   | 21.42   |
| 135.0  | 113.36  | 86.67   | 69.88   | 56.36   | 45.71   | 35.82   | 30.02   | 24.93   | 22.06   |
| 180.0  | 122.19  | 99.96   | 78.19   | 63.20   | 51.50   | 39.80   | 33.01   | 26.74   | 23.35   |
| 225.0  | 91.70   | 75.67   | 62.50   | 49.04   | 40.26   | 33.53   | 28.50   | 23.99   | 21.42   |
| 270.0  | 102.24  | 79.47   | 65.72   | 53.78   | 44.24   | 36.75   | 29.96   | 25.98   | 23.06   |
| 315.0  | 78.71   | 65.08   | 51.32   | 42.90   | 36.46   | 30.26   | 26.39   | 22.59   | 20.31   |
| 360.0  | 83.92   | 70.11   | 55.42   | 45.82   | 36.23   | 30.43   | 25.93   | 21.83   | 19.55   |

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    | 17.85 | 16.33 | 15.39 | 14.63 | 14.05 | 13.46 | 13.05 | 12.70 | 12.41 |
| 45.0   | 20.42 | 18.14 | 16.85 | 15.80 | 14.98 | 14.16 | 13.58 | 12.99 | 12.64 |
| 90.0   | 19.66 | 18.26 | 16.91 | 15.98 | 15.22 | 14.46 | 13.93 | 13.40 | 12.93 |
| 135.0  | 20.01 | 18.08 | 16.85 | 15.80 | 14.98 | 14.05 | 13.46 | 12.99 | 12.58 |
| 180.0  | 20.89 | 19.08 | 17.44 | 16.33 | 15.45 | 14.75 | 14.05 | 13.52 | 13.05 |
| 225.0  | 19.14 | 17.73 | 16.50 | 15.39 | 14.63 | 13.93 | 13.28 | 12.87 | 12.47 |
| 270.0  | 20.31 | 18.67 | 17.44 | 16.15 | 15.33 | 14.51 | 13.93 | 13.40 | 12.99 |
| 315.0  | 18.49 | 17.26 | 15.98 | 15.10 | 14.40 | 13.75 | 13.17 | 12.70 | 12.35 |
| 360.0  | 17.85 | 16.33 | 15.39 | 14.63 | 14.05 | 13.46 | 13.05 | 12.70 | 12.41 |
| C/γ(°) | 54.0  | 55.0  | 56.0  | 57.0  | 58.0  | 59.0  | 60.0  | 61.0  | 62.0  |
| 0.0    | 12.11 | 11.88 | 11.76 | 11.59 | 11.53 | 11.41 | 11.35 | 11.35 | 11.29 |
| 45.0   | 12.29 | 12.00 | 11.82 | 11.65 | 11.41 | 11.29 | 11.18 | 11.06 | 11.00 |
| 90.0   | 12.52 | 12.23 | 12.00 | 11.76 | 11.59 | 11.41 | 11.29 | 11.18 | 11.12 |
| 135.0  | 12.11 | 11.82 | 11.59 | 11.35 | 11.18 | 11.06 | 10.89 | 10.83 | 10.77 |
| 180.0  | 12.64 | 12.23 | 11.94 | 11.70 | 11.47 | 11.35 | 11.18 | 11.06 | 10.94 |
| 225.0  | 12.17 | 11.76 | 11.53 | 11.35 | 11.24 | 11.06 | 10.89 | 10.83 | 10.77 |
| 270.0  | 12.52 | 12.17 | 11.94 | 11.70 | 11.47 | 11.35 | 11.24 | 11.12 | 11.00 |
| 315.0  | 12.06 | 11.76 | 11.59 | 11.41 | 11.29 | 11.24 | 11.18 | 11.06 | 11.06 |
| 360.0  | 12.11 | 11.88 | 11.76 | 11.59 | 11.53 | 11.41 | 11.35 | 11.35 | 11.29 |
| C/γ(°) | 63.0  | 64.0  | 65.0  | 66.0  | 67.0  | 68.0  | 69.0  | 70.0  | 71.0  |
| 0.0    | 11.24 | 11.12 | 10.94 | 10.71 | 10.36 | 10.07 | 9.71  | 9.42  | 9.13  |
| 45.0   | 10.94 | 10.89 | 10.77 | 10.48 | 10.24 | 9.95  | 9.54  | 9.25  | 8.90  |
| 90.0   | 11.06 | 10.89 | 10.65 | 10.42 | 10.01 | 9.71  | 9.31  | 9.01  | 8.78  |
| 135.0  | 10.71 | 10.71 | 10.59 | 10.42 | 10.24 | 9.95  | 9.66  | 9.42  | 9.13  |
| 180.0  | 10.89 | 10.89 | 10.83 | 10.77 | 10.48 | 10.24 | 10.01 | 9.71  | 9.36  |
| 225.0  | 10.71 | 10.65 | 10.48 | 10.30 | 9.95  | 9.66  | 9.42  | 9.13  | 8.90  |
| 270.0  | 11.00 | 10.89 | 10.77 | 10.53 | 10.24 | 9.95  | 9.66  | 9.31  | 9.01  |
| 315.0  | 11.00 | 10.89 | 10.71 | 10.42 | 10.12 | 9.71  | 9.48  | 9.13  | 8.78  |
| 360.0  | 11.24 | 11.12 | 10.94 | 10.71 | 10.36 | 10.07 | 9.71  | 9.42  | 9.13  |
| C/γ(°) | 72.0  | 73.0  | 74.0  | 75.0  | 76.0  | 77.0  | 78.0  | 79.0  | 80.0  |
| 0.0    | 8.90  | 8.66  | 8.49  | 8.31  | 8.13  | 7.96  | 7.84  | 7.67  | 7.49  |
| 45.0   | 8.66  | 8.49  | 8.25  | 8.08  | 7.90  | 7.78  | 7.67  | 7.49  | 7.32  |
| 90.0   | 8.54  | 8.37  | 8.25  | 8.08  | 7.90  | 7.72  | 7.61  | 7.43  | 7.26  |
| 135.0  | 8.90  | 8.66  | 8.49  | 8.31  | 8.13  | 7.96  | 7.84  | 7.61  | 7.49  |
| 180.0  | 9.13  | 8.90  | 8.72  | 8.54  | 8.37  | 8.19  | 8.08  | 7.90  | 7.72  |
| 225.0  | 8.66  | 8.49  | 8.31  | 8.13  | 7.96  | 7.84  | 7.67  | 7.49  | 7.37  |
| 270.0  | 8.72  | 8.54  | 8.37  | 8.13  | 8.02  | 7.84  | 7.67  | 7.49  | 7.32  |
| 315.0  | 8.54  | 8.37  | 8.13  | 8.02  | 7.84  | 7.67  | 7.49  | 7.37  | 7.20  |
| 360.0  | 8.90  | 8.66  | 8.49  | 8.31  | 8.13  | 7.96  | 7.84  | 7.67  | 7.49  |
| C/γ(°) | 81.0  | 82.0  | 83.0  | 84.0  | 85.0  | 86.0  | 87.0  | 88.0  | 89.0  |
| 0.0    | 7.37  | 7.26  | 7.14  | 7.02  | 6.91  | 6.79  | 6.67  | 6.61  | 6.32  |
| 45.0   | 7.20  | 7.08  | 6.96  | 6.85  | 6.73  | 6.55  | 6.50  | 6.38  | 6.26  |
| 90.0   | 7.14  | 6.96  | 6.79  | 6.67  | 6.50  | 6.38  | 6.32  | 6.20  | 6.09  |
| 135.0  | 7.32  | 7.14  | 7.02  | 6.91  | 6.73  | 6.61  | 6.50  | 6.38  | 6.20  |
| 180.0  | 7.55  | 7.37  | 7.26  | 7.14  | 6.96  | 6.85  | 6.67  | 6.50  | 6.32  |
| 225.0  | 7.20  | 7.08  | 6.96  | 6.79  | 6.73  | 6.55  | 6.44  | 6.32  | 6.20  |
| 270.0  | 7.14  | 7.02  | 6.91  | 6.73  | 6.61  | 6.44  | 6.32  | 6.26  | 6.14  |
| 315.0  | 7.02  | 6.91  | 6.79  | 6.67  | 6.55  | 6.44  | 6.38  | 6.26  | 6.09  |
| 360.0  | 7.37  | 7.26  | 7.14  | 7.02  | 6.91  | 6.79  | 6.67  | 6.61  | 6.32  |

Intensity data(cd)

|        |      |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0    | 6.14 |
| 45.0   | 6.09 |
| 90.0   | 6.09 |
| 135.0  | 6.03 |
| 180.0  | 6.20 |
| 225.0  | 6.14 |
| 270.0  | 6.03 |
| 315.0  | 6.03 |
| 360.0  | 6.14 |