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NT

Client:

LumCAT: 3-2808-L

Luminaire: 92.70.412.00

Report No: 2024315-B014

Ballast type: AC

Test No: 2024315-C014

Voltage(V): 34.640

LampCAT: BRIDGELUX V13B LES13

Current(A): 0.450

Lamp flux(lm): 2626.0

Power (W): 15.588

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

### Photometric Results

Lumens(lm): 2154.92, Efficiency(%): 82.06% , Luminous Efficacy(lm/W): 138.24

Central intensity(cd): 4208.266, Maximum intensity(cd): 4208.266

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

Beam Angle(50%Imax): [C0/180]Total=41.8

[C90/270]Total=41.8

Field angle(10%Imax): [C0/180]Total=65.6

[C90/270]Total=65.6

Maximum s/h(1/2): C0\_180=0.68 C90\_270=0.68

Maximum s/h(1/4): C0\_180=0.65 C90\_270=0.65

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 82.06%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 97.180%

Equipment: GMS1980  
Temperature(°C): 25.0

Date: 2024/3/15  
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                | 4208.265      | 0.000       | 0         | 0.00%       | 0.00%      |
| 1.0                | 4204.388      | 4.025       | 4.025     | 0.15%       | 0.19%      |
| 2.0                | 4190.708      | 12.049      | 16.075    | 0.46%       | 0.75%      |
| 3.0                | 4165.471      | 19.985      | 36.06     | 0.76%       | 1.67%      |
| 4.0                | 4129.699      | 27.767      | 63.827    | 1.06%       | 2.96%      |
| 5.0                | 4089.391      | 35.358      | 99.185    | 1.35%       | 4.60%      |
| 6.0                | 4036.355      | 42.703      | 141.888   | 1.63%       | 6.58%      |
| 7.0                | 3976.662      | 49.737      | 191.624   | 1.89%       | 8.89%      |
| 8.0                | 3906.655      | 56.419      | 248.044   | 2.15%       | 11.51%     |
| 9.0                | 3826.845      | 62.676      | 310.719   | 2.39%       | 14.42%     |
| 10.0               | 3731.892      | 68.404      | 379.123   | 2.60%       | 17.59%     |
| 11.0               | 3616.676      | 73.427      | 452.551   | 2.80%       | 21.00%     |
| 12.0               | 3500.436      | 77.800      | 530.351   | 2.96%       | 24.61%     |
| 13.0               | 3370.004      | 81.535      | 611.886   | 3.10%       | 28.39%     |
| 14.0               | 3228.306      | 84.458      | 696.343   | 3.22%       | 32.31%     |
| 15.0               | 3083.390      | 86.650      | 782.993   | 3.30%       | 36.34%     |
| 16.0               | 2926.915      | 88.068      | 871.061   | 3.35%       | 40.42%     |
| 17.0               | 2769.782      | 88.713      | 959.774   | 3.38%       | 44.54%     |
| 18.0               | 2602.408      | 88.576      | 1048.35   | 3.37%       | 48.65%     |
| 19.0               | 2436.716      | 87.670      | 1136.02   | 3.34%       | 52.72%     |
| 20.0               | 2249.956      | 85.779      | 1221.799  | 3.27%       | 56.70%     |
| 21.0               | 2081.996      | 83.182      | 1304.981  | 3.17%       | 60.56%     |
| 22.0               | 1911.477      | 80.251      | 1385.232  | 3.06%       | 64.28%     |
| 23.0               | 1750.028      | 76.828      | 1462.06   | 2.93%       | 67.85%     |
| 24.0               | 1579.947      | 72.805      | 1534.865  | 2.77%       | 71.23%     |
| 25.0               | 1368.615      | 67.044      | 1601.909  | 2.55%       | 74.34%     |
| 26.0               | 1254.876      | 61.928      | 1663.837  | 2.36%       | 77.21%     |
| 27.0               | 1135.797      | 58.488      | 1722.325  | 2.23%       | 79.93%     |
| 28.0               | 998.569       | 54.038      | 1776.363  | 2.06%       | 82.43%     |
| 29.0               | 872.329       | 48.948      | 1825.311  | 1.86%       | 84.70%     |
| 30.0               | 736.725       | 43.444      | 1868.755  | 1.65%       | 86.72%     |
| 31.0               | 611.875       | 37.530      | 1906.285  | 1.43%       | 88.46%     |
| 32.0               | 501.099       | 31.885      | 1938.17   | 1.21%       | 89.94%     |
| 33.0               | 398.750       | 26.510      | 1964.68   | 1.01%       | 91.17%     |
| 34.0               | 305.736       | 21.320      | 1986      | 0.81%       | 92.16%     |
| 35.0               | 243.095       | 17.045      | 2003.045  | 0.65%       | 92.95%     |
| 36.0               | 192.576       | 13.872      | 2016.916  | 0.53%       | 93.60%     |
| 37.0               | 97.623        | 9.465       | 2026.381  | 0.36%       | 94.04%     |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0               | 72.063        | 5.664       | 2032.045  | 0.22%       | 94.30%     |
| 39.0               | 60.373        | 4.520       | 2036.565  | 0.17%       | 94.51%     |
| 40.0               | 53.351        | 3.966       | 2040.532  | 0.15%       | 94.69%     |
| 41.0               | 48.552        | 3.629       | 2044.16   | 0.14%       | 94.86%     |
| 42.0               | 44.828        | 3.393       | 2047.553  | 0.13%       | 95.02%     |
| 43.0               | 42.114        | 3.221       | 2050.774  | 0.12%       | 95.17%     |
| 44.0               | 39.642        | 3.086       | 2053.859  | 0.12%       | 95.31%     |
| 45.0               | 37.345        | 2.959       | 2056.818  | 0.11%       | 95.45%     |
| 46.0               | 35.545        | 2.851       | 2059.669  | 0.11%       | 95.58%     |
| 47.0               | 33.687        | 2.754       | 2062.422  | 0.10%       | 95.71%     |
| 48.0               | 32.246        | 2.665       | 2065.087  | 0.10%       | 95.83%     |
| 49.0               | 30.849        | 2.591       | 2067.678  | 0.10%       | 95.95%     |
| 50.0               | 29.656        | 2.523       | 2070.201  | 0.10%       | 96.07%     |
| 51.0               | 28.610        | 2.465       | 2072.666  | 0.09%       | 96.18%     |
| 52.0               | 27.791        | 2.420       | 2075.086  | 0.09%       | 96.30%     |
| 53.0               | 27.089        | 2.387       | 2077.474  | 0.09%       | 96.41%     |
| 54.0               | 26.467        | 2.360       | 2079.834  | 0.09%       | 96.52%     |
| 55.0               | 26.021        | 2.343       | 2082.177  | 0.09%       | 96.62%     |
| 56.0               | 25.786        | 2.341       | 2084.518  | 0.09%       | 96.73%     |
| 57.0               | 25.779        | 2.358       | 2086.876  | 0.09%       | 96.84%     |
| 58.0               | 25.882        | 2.389       | 2089.265  | 0.09%       | 96.95%     |
| 59.0               | 25.977        | 2.424       | 2091.689  | 0.09%       | 97.07%     |
| 60.0               | 26.043        | 2.458       | 2094.147  | 0.09%       | 97.18%     |
| 61.0               | 26.064        | 2.487       | 2096.633  | 0.09%       | 97.30%     |
| 62.0               | 26.108        | 2.514       | 2099.147  | 0.10%       | 97.41%     |
| 63.0               | 26.203        | 2.544       | 2101.692  | 0.10%       | 97.53%     |
| 64.0               | 26.189        | 2.571       | 2104.263  | 0.10%       | 97.65%     |
| 65.0               | 26.225        | 2.594       | 2106.856  | 0.10%       | 97.77%     |
| 66.0               | 25.925        | 2.602       | 2109.458  | 0.10%       | 97.89%     |
| 67.0               | 25.377        | 2.580       | 2112.038  | 0.10%       | 98.01%     |
| 68.0               | 24.579        | 2.531       | 2114.569  | 0.10%       | 98.13%     |
| 69.0               | 23.943        | 2.475       | 2117.044  | 0.09%       | 98.24%     |
| 70.0               | 23.563        | 2.440       | 2119.484  | 0.09%       | 98.36%     |
| 71.0               | 23.402        | 2.427       | 2121.911  | 0.09%       | 98.47%     |
| 72.0               | 23.277        | 2.427       | 2124.338  | 0.09%       | 98.58%     |
| 73.0               | 23.021        | 2.421       | 2126.76   | 0.09%       | 98.69%     |
| 74.0               | 22.356        | 2.386       | 2129.145  | 0.09%       | 98.80%     |
| 75.0               | 21.895        | 2.338       | 2131.483  | 0.09%       | 98.91%     |

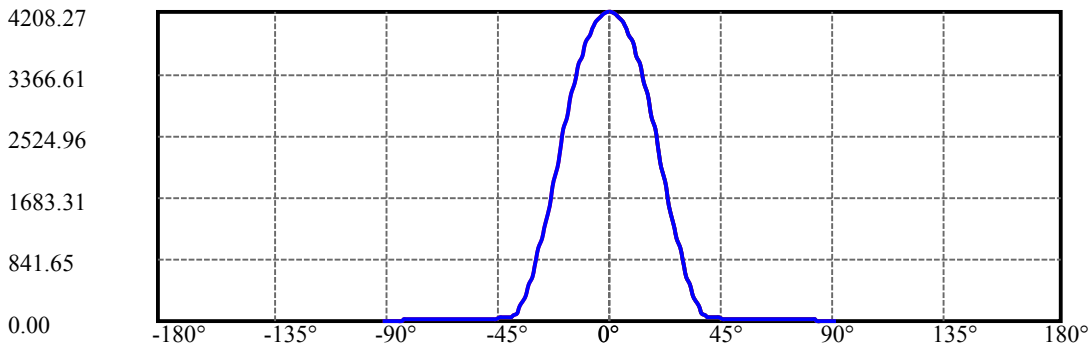
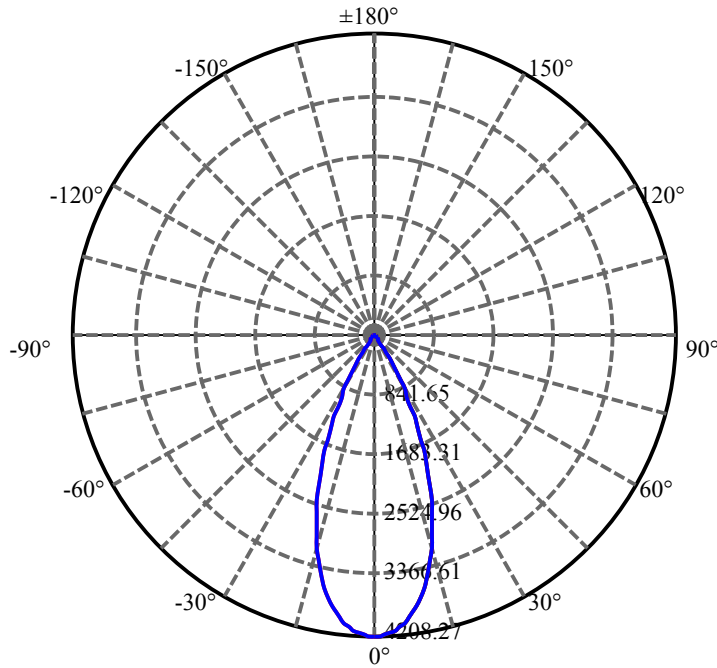
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0               | 21.705        | 2.314       | 2133.798  | 0.09%       | 99.02%     |
| 77.0               | 21.017        | 2.278       | 2136.075  | 0.09%       | 99.13%     |
| 78.0               | 20.154        | 2.204       | 2138.279  | 0.08%       | 99.23%     |
| 79.0               | 19.451        | 2.128       | 2140.407  | 0.08%       | 99.33%     |
| 80.0               | 17.952        | 2.016       | 2142.424  | 0.08%       | 99.42%     |
| 81.0               | 16.445        | 1.860       | 2144.284  | 0.07%       | 99.51%     |
| 82.0               | 14.097        | 1.656       | 2145.94   | 0.06%       | 99.58%     |
| 83.0               | 11.851        | 1.411       | 2147.35   | 0.05%       | 99.65%     |
| 84.0               | 10.790        | 1.233       | 2148.584  | 0.05%       | 99.71%     |
| 85.0               | 10.219        | 1.147       | 2149.731  | 0.04%       | 99.76%     |
| 86.0               | 9.824         | 1.096       | 2150.826  | 0.04%       | 99.81%     |
| 87.0               | 9.466         | 1.056       | 2151.882  | 0.04%       | 99.86%     |
| 88.0               | 9.254         | 1.025       | 2152.907  | 0.04%       | 99.91%     |
| 89.0               | 9.144         | 1.008       | 2153.916  | 0.04%       | 99.95%     |
| 90.0               | 9.115         | 1.001       | 2154.917  | 0.04%       | 100.00%    |

ZONAL LUMEN SUMMARY

| Zone    | Lumens  | %Lamp  | %Fixt   |
|---------|---------|--------|---------|
| 0-30    | 1868.76 | 71.16% | 86.72%  |
| 0-40    | 2040.53 | 77.70% | 94.69%  |
| 0-60    | 2094.15 | 79.75% | 97.18%  |
| 0-90    | 2153.92 | 82.02% | 99.95%  |
| 0-120   | 2153.92 | 82.02% | 99.95%  |
| 0-180   | 2154.92 | 82.06% | 100.00% |
| 60-90   | 59.77   | 2.28%  | 2.77%   |
| 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%   |
| 0-27.03 | 1723.93 | 65.65% | 80.00%  |

ZONAL LUMEN SUMMARY

|         |        |
|---------|--------|
| 0-10    | 379.12 |
| 10-20   | 842.68 |
| 20-30   | 646.96 |
| 30-40   | 171.78 |
| 40-50   | 29.67  |
| 50-60   | 23.95  |
| 60-70   | 25.34  |
| 70-80   | 22.94  |
| 80-90   | 11.49  |
| 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: —————

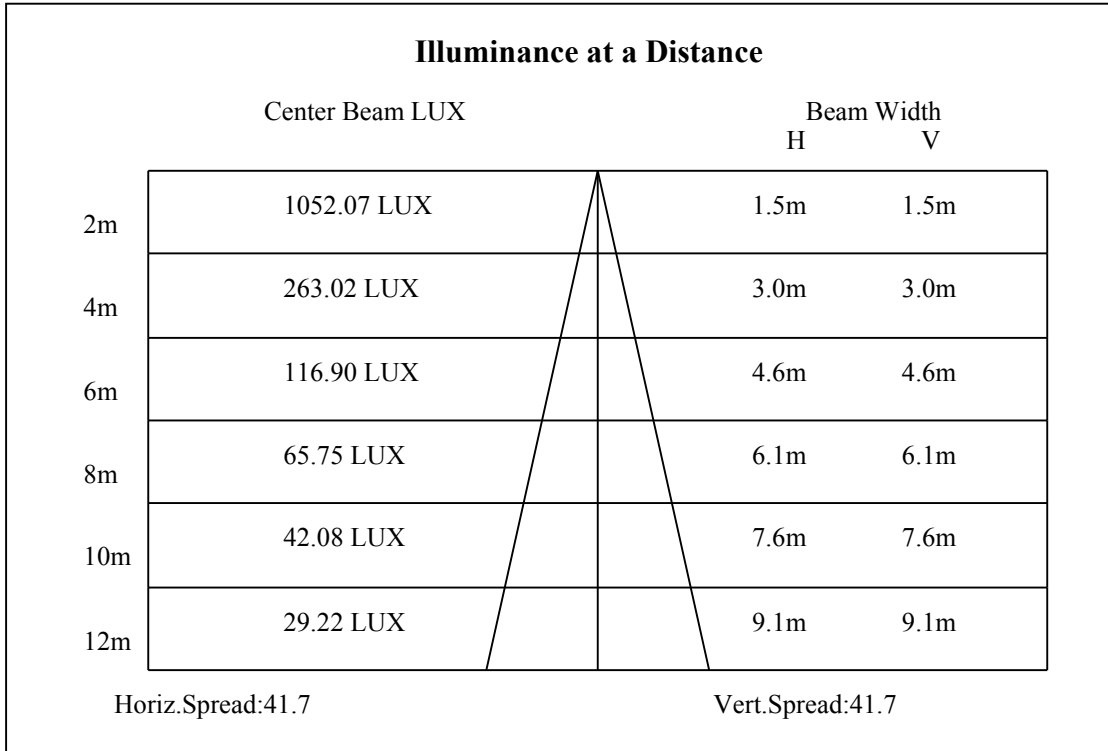
C90/C270: —————

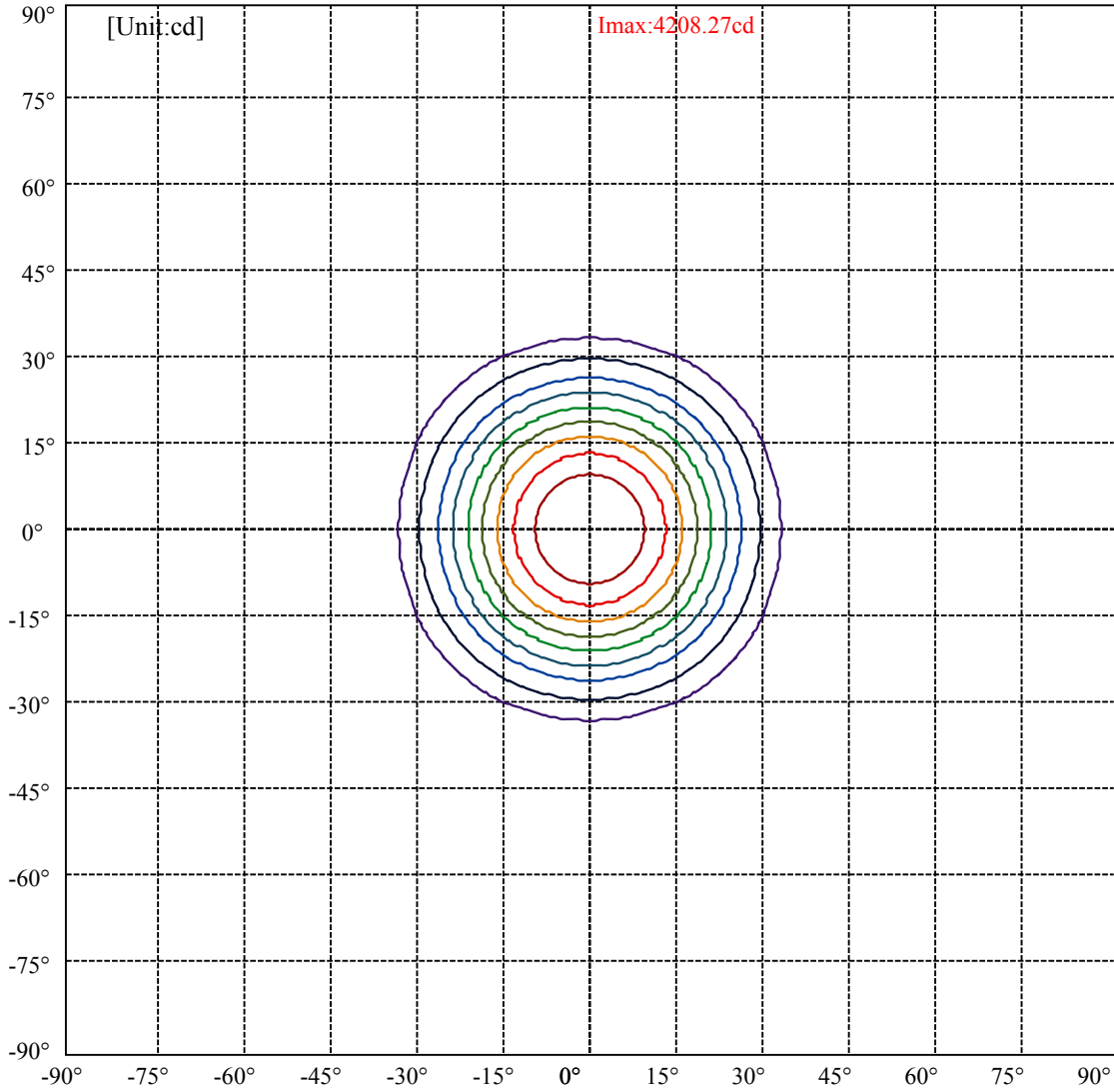
Field angle(10%Imax):C0/180Left:32.8 Right:32.8

:C90/270Left:32.8 Right:32.8

Beam Angle(50%Imax):C0/180Left:20.9 Right:20.9

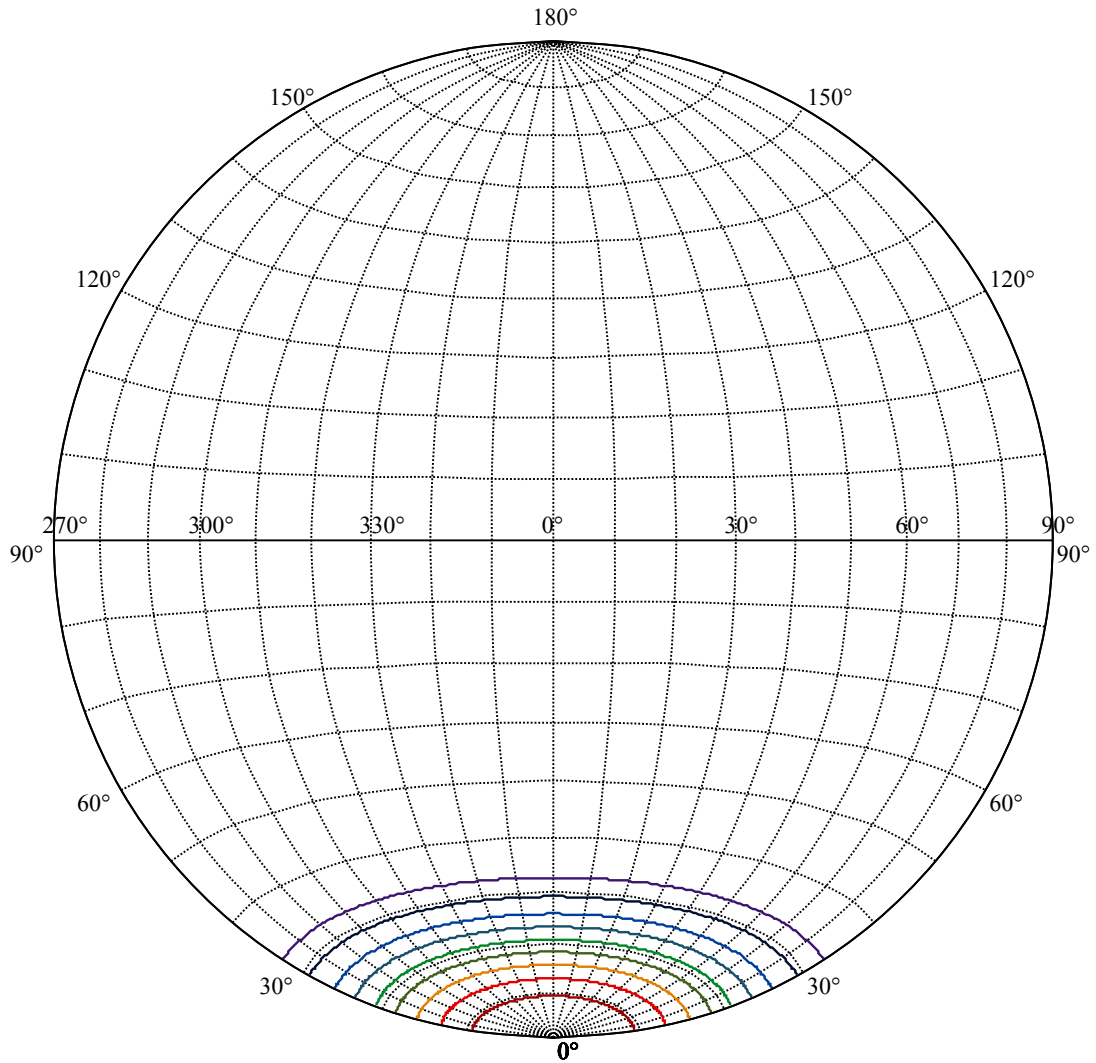
:C90/270Left:20.9 Right:20.9





|                                |   |
|--------------------------------|---|
| (10%I <sub>max</sub> ) 420.827 | — |
| (20%I <sub>max</sub> ) 841.653 | — |
| (30%I <sub>max</sub> ) 1262.48 | — |
| (40%I <sub>max</sub> ) 1683.31 | — |
| (50%I <sub>max</sub> ) 2104.13 | — |
| (60%I <sub>max</sub> ) 2524.96 | — |
| (70%I <sub>max</sub> ) 2945.79 | — |
| (80%I <sub>max</sub> ) 3366.61 | — |
| (90%I <sub>max</sub> ) 3787.44 | — |





House

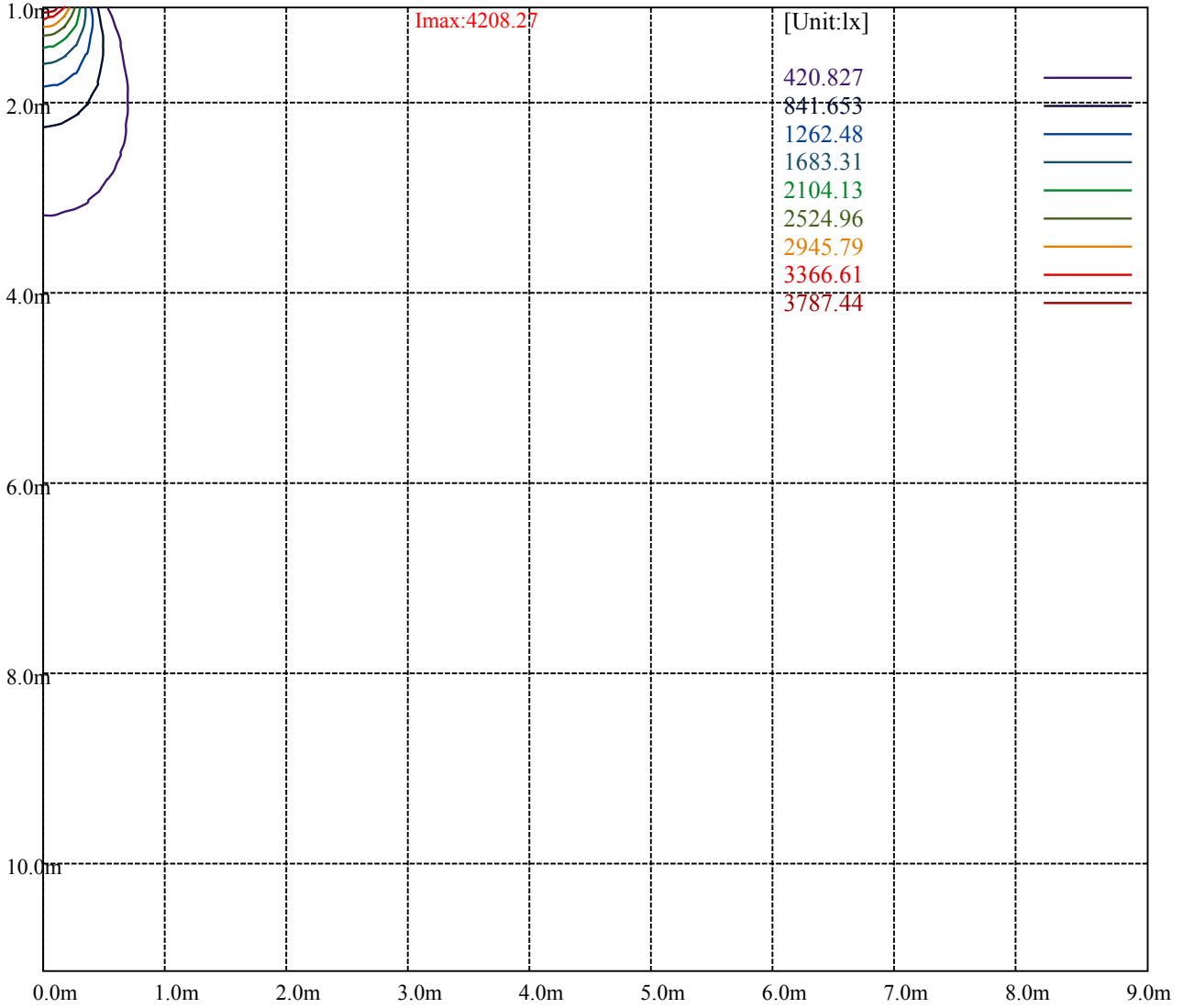
[Unit:cd]

Road

**Imax:4208.27**

|           |         |   |
|-----------|---------|---|
| (10%Imax) | 420.827 | — |
| (20%Imax) | 841.653 | — |
| (30%Imax) | 1262.48 | — |
| (40%Imax) | 1683.31 | — |
| (50%Imax) | 2104.13 | — |
| (60%Imax) | 2524.96 | — |
| (70%Imax) | 2945.79 | — |
| (80%Imax) | 3366.61 | — |
| (90%Imax) | 3787.44 | — |





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

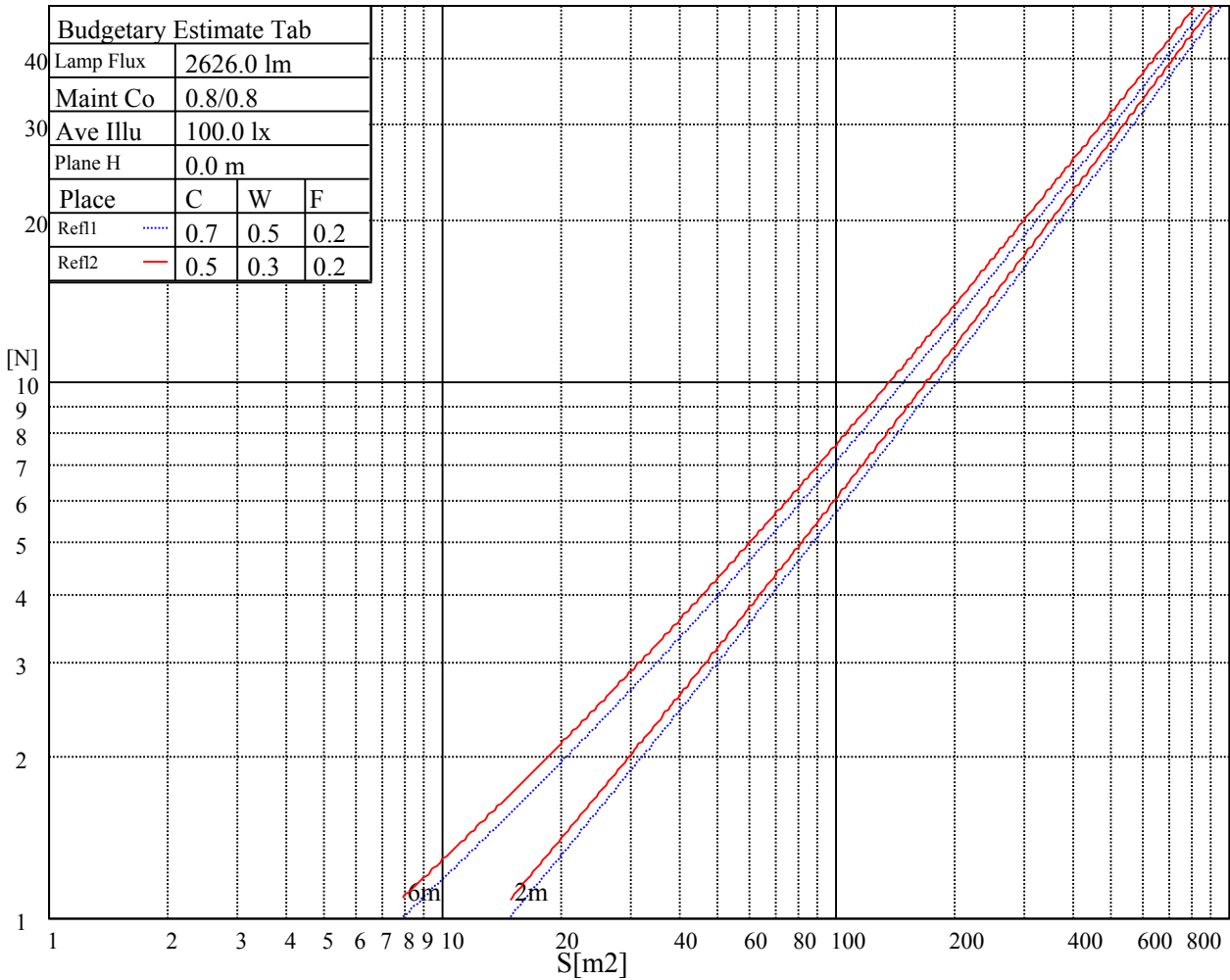
| Glare | Quality | Service Values Illuminance(lx) |      |      |       |       |       |       |       |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15  | A       | 2000                           | 1000 | 500  | <=300 |       |    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

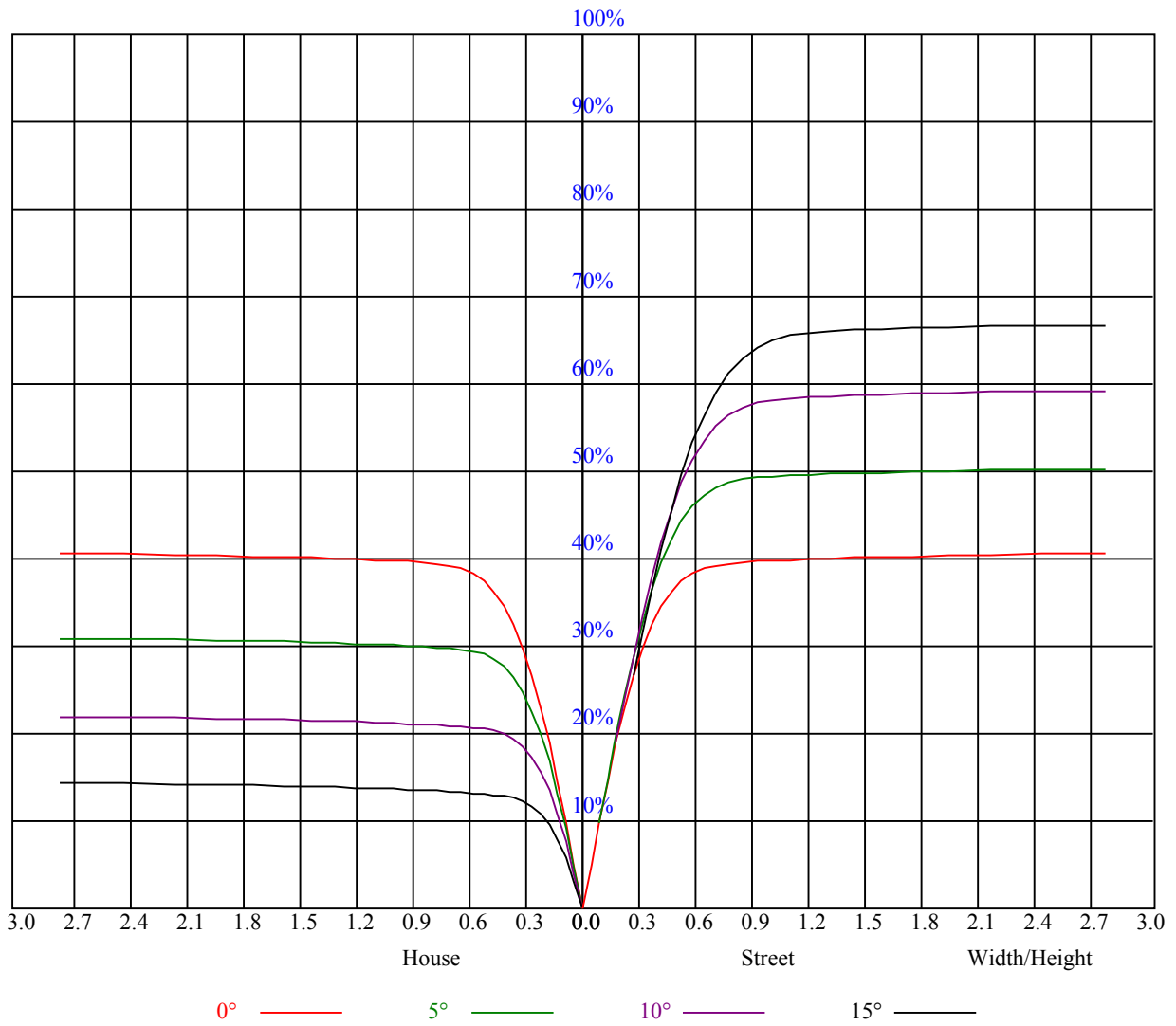


| Illumination assessment according UGR             |     |                  |     |     |     |     |                |     |     |     |  |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|--|
| Rf of Ceiling                                     | 70  | 70    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

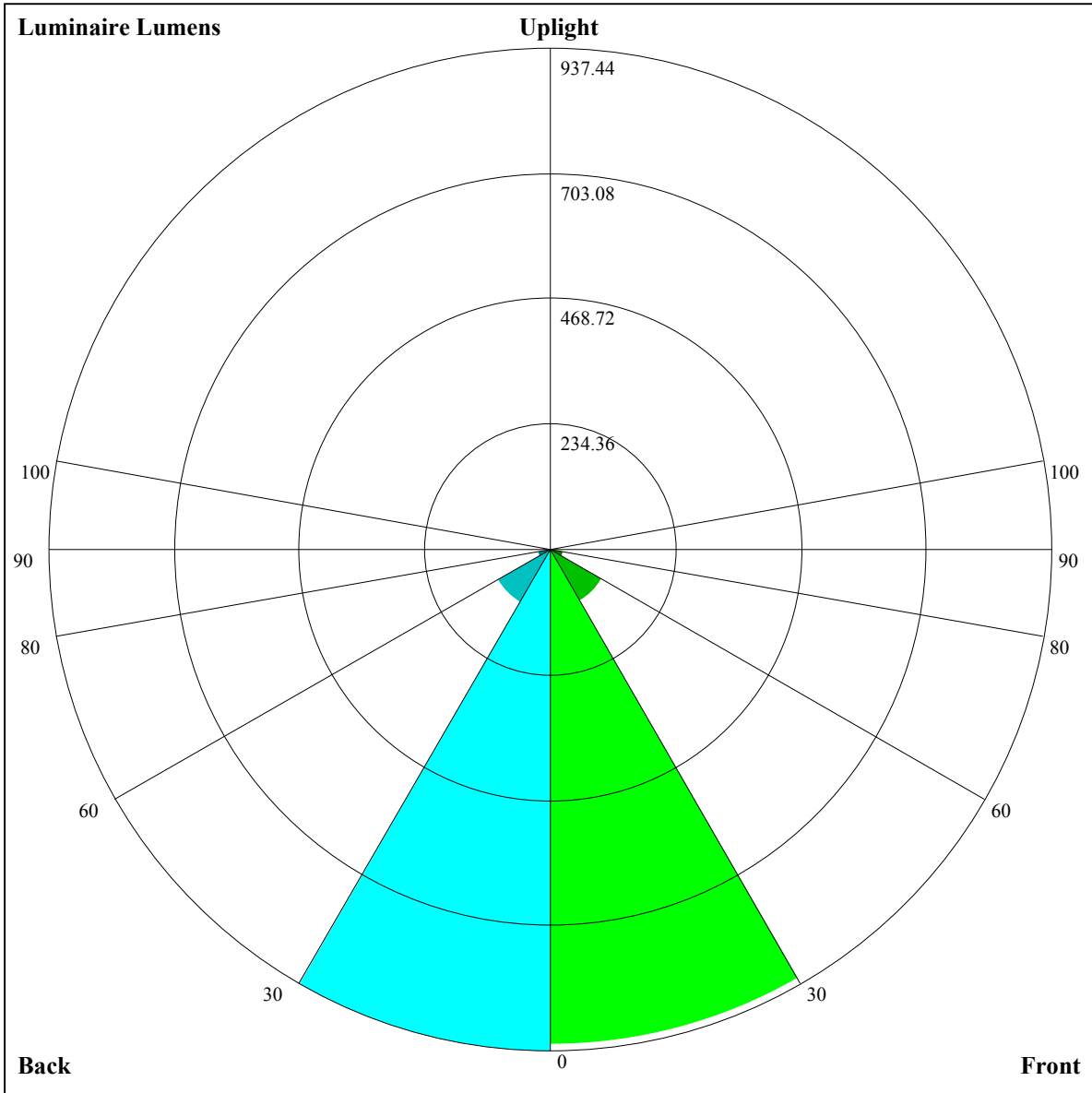
UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| 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     | 0.98                                   | 0.98 | 0.98 | 0.95 | 0.95 | 0.95 | 0.91 | 0.91 | 0.91 | 0.87 | 0.87 | 0.87 | 0.84 | 0.84 | 0.84 | 0.82 |
| 1     | 0.91                                   | 0.89 | 0.87 | 0.89 | 0.88 | 0.86 | 0.86 | 0.85 | 0.83 | 0.83 | 0.82 | 0.81 | 0.80 | 0.79 | 0.79 | 0.77 |
| 2     | 0.86                                   | 0.82 | 0.80 | 0.84 | 0.81 | 0.79 | 0.81 | 0.79 | 0.77 | 0.79 | 0.77 | 0.76 | 0.77 | 0.75 | 0.74 | 0.73 |
| 3     | 0.81                                   | 0.77 | 0.74 | 0.79 | 0.76 | 0.73 | 0.77 | 0.75 | 0.72 | 0.75 | 0.73 | 0.71 | 0.74 | 0.72 | 0.70 | 0.69 |
| 4     | 0.76                                   | 0.72 | 0.69 | 0.75 | 0.72 | 0.69 | 0.74 | 0.70 | 0.68 | 0.72 | 0.69 | 0.67 | 0.71 | 0.68 | 0.66 | 0.65 |
| 5     | 0.72                                   | 0.68 | 0.65 | 0.72 | 0.68 | 0.65 | 0.70 | 0.67 | 0.64 | 0.69 | 0.66 | 0.64 | 0.68 | 0.65 | 0.63 | 0.62 |
| 6     | 0.69                                   | 0.65 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.64 | 0.61 | 0.66 | 0.63 | 0.60 | 0.65 | 0.62 | 0.60 | 0.59 |
| 7     | 0.66                                   | 0.61 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.63 | 0.60 | 0.58 | 0.62 | 0.60 | 0.57 | 0.56 |
| 8     | 0.63                                   | 0.58 | 0.56 | 0.62 | 0.58 | 0.55 | 0.61 | 0.58 | 0.55 | 0.61 | 0.57 | 0.55 | 0.60 | 0.57 | 0.55 | 0.54 |
| 9     | 0.60                                   | 0.56 | 0.53 | 0.60 | 0.56 | 0.53 | 0.59 | 0.55 | 0.53 | 0.58 | 0.55 | 0.53 | 0.58 | 0.55 | 0.52 | 0.51 |
| 10    | 0.58                                   | 0.53 | 0.51 | 0.57 | 0.53 | 0.51 | 0.57 | 0.53 | 0.50 | 0.56 | 0.53 | 0.50 | 0.55 | 0.52 | 0.50 | 0.49 |







Luminaire Lumens:

FL=924.52,FM=111.99,FH=23.46,FVH=6.15

BL=937.44,BM=115.78,BH=23.9,BVH=6.36

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    | 4210.17 | 4187.93 | 4163.93 | 4126.48 | 4085.51 | 4024.65 | 3970.22 | 3905.85 | 3801.68 |
| 45.0   | 4207.83 | 4216.02 | 4216.02 | 4197.29 | 4164.52 | 4129.99 | 4086.10 | 4012.95 | 3949.74 |
| 90.0   | 4218.36 | 4216.60 | 4194.95 | 4162.76 | 4114.19 | 4069.71 | 4022.31 | 3949.74 | 3883.61 |
| 135.0  | 4196.71 | 4200.80 | 4190.85 | 4163.93 | 4134.09 | 4100.14 | 4041.62 | 3988.37 | 3929.26 |
| 180.0  | 4210.17 | 4210.17 | 4204.31 | 4196.71 | 4167.45 | 4138.77 | 4089.03 | 4045.13 | 3993.63 |
| 225.0  | 4207.83 | 4200.22 | 4175.64 | 4142.28 | 4106.00 | 4059.76 | 3999.49 | 3943.89 | 3871.32 |
| 270.0  | 4218.36 | 4206.66 | 4199.63 | 4176.81 | 4144.04 | 4106.00 | 4064.45 | 3997.15 | 3939.79 |
| 315.0  | 4196.71 | 4196.71 | 4180.32 | 4157.50 | 4121.80 | 4086.10 | 4017.63 | 3970.22 | 3884.20 |
| 360.0  | 4210.17 | 4187.93 | 4163.93 | 4126.48 | 4085.51 | 4024.65 | 3970.22 | 3905.85 | 3801.68 |
| C/γ(°) | 9.0     | 10.0    | 11.0    | 12.0    | 13.0    | 14.0    | 15.0    | 16.0    | 17.0    |
| 0.0    | 3711.56 | 3576.95 | 3466.35 | 3339.94 | 3212.36 | 3041.47 | 2895.17 | 2743.01 | 2587.92 |
| 45.0   | 3882.44 | 3801.09 | 3678.20 | 3571.10 | 3449.96 | 3321.80 | 3155.01 | 3008.12 | 2868.25 |
| 90.0   | 3794.66 | 3699.85 | 3555.30 | 3436.50 | 3299.56 | 3170.81 | 2989.39 | 2850.10 | 2659.91 |
| 135.0  | 3835.62 | 3750.18 | 3646.60 | 3502.63 | 3380.32 | 3247.47 | 3110.53 | 2922.09 | 2767.00 |
| 180.0  | 3917.55 | 3845.57 | 3756.62 | 3654.20 | 3514.33 | 3392.02 | 3259.76 | 3125.16 | 2950.76 |
| 225.0  | 3785.88 | 3668.25 | 3558.81 | 3444.69 | 3286.68 | 3153.84 | 3019.82 | 2840.74 | 2691.51 |
| 270.0  | 3873.66 | 3791.73 | 3677.03 | 3573.44 | 3455.23 | 3298.39 | 3169.64 | 2999.92 | 2851.27 |
| 315.0  | 3813.38 | 3721.50 | 3594.51 | 3480.98 | 3361.59 | 3200.65 | 3067.81 | 2926.18 | 2781.63 |
| 360.0  | 3711.56 | 3576.95 | 3466.35 | 3339.94 | 3212.36 | 3041.47 | 2895.17 | 2743.01 | 2587.92 |
| C/γ(°) | 18.0    | 19.0    | 20.0    | 21.0    | 22.0    | 23.0    | 24.0    | 25.0    | 26.0    |
| 0.0    | 2393.04 | 2228.60 | 2064.73 | 1907.89 | 1721.79 | 1579.00 | 1305.11 | 1135.86 | 1135.86 |
| 45.0   | 2678.05 | 2520.04 | 2356.17 | 2153.10 | 1989.24 | 1840.59 | 1656.83 | 1516.96 | 1369.49 |
| 90.0   | 2504.82 | 2340.37 | 2129.69 | 1970.51 | 1823.03 | 1641.03 | 1497.65 | 1136.62 | 1136.62 |
| 135.0  | 2611.92 | 2450.98 | 2247.91 | 2082.87 | 1889.75 | 1742.27 | 1597.72 | 1416.30 | 1264.14 |
| 180.0  | 2803.29 | 2647.03 | 2437.52 | 2267.22 | 2098.68 | 1906.72 | 1759.24 | 1614.11 | 1449.66 |
| 225.0  | 2538.18 | 2330.42 | 2164.22 | 2002.11 | 1848.78 | 1665.61 | 1530.42 | 1140.78 | 1140.78 |
| 270.0  | 2701.46 | 2547.54 | 2335.69 | 2170.07 | 2010.31 | 1859.90 | 1673.80 | 1537.44 | 1405.77 |
| 315.0  | 2588.51 | 2428.74 | 2263.71 | 2102.19 | 1910.23 | 1765.10 | 1618.79 | 1450.83 | 1136.68 |
| 360.0  | 2393.04 | 2228.60 | 2064.73 | 1907.89 | 1721.79 | 1579.00 | 1305.11 | 1135.86 | 1135.86 |
| C/γ(°) | 27.0    | 28.0    | 29.0    | 30.0    | 31.0    | 32.0    | 33.0    | 34.0    | 35.0    |
| 0.0    | 967.03  | 843.31  | 732.82  | 621.74  | 490.42  | 394.21  | 306.77  | 206.76  | 139.87  |
| 45.0   | 1223.76 | 1051.71 | 928.81  | 801.23  | 682.43  | 550.17  | 453.61  | 337.73  | 315.49  |
| 90.0   | 1030.17 | 891.88  | 776.07  | 659.55  | 522.25  | 423.94  | 331.30  | 250.89  | 162.81  |
| 135.0  | 1118.42 | 981.48  | 853.32  | 701.16  | 592.31  | 489.31  | 372.26  | 308.47  | 308.47  |
| 180.0  | 1300.43 | 1155.88 | 1017.18 | 856.83  | 728.66  | 613.37  | 508.03  | 386.89  | 300.28  |
| 225.0  | 1074.41 | 946.60  | 818.67  | 667.22  | 557.72  | 457.94  | 342.53  | 260.37  | 188.85  |
| 270.0  | 1235.47 | 1108.47 | 967.44  | 824.06  | 698.23  | 561.87  | 455.36  | 365.82  | 299.11  |
| 315.0  | 1136.68 | 1009.22 | 884.33  | 762.02  | 622.97  | 517.98  | 420.13  | 328.95  | 229.88  |
| 360.0  | 967.03  | 843.31  | 732.82  | 621.74  | 490.42  | 394.21  | 306.77  | 206.76  | 139.87  |
| C/γ(°) | 36.0    | 37.0    | 38.0    | 39.0    | 40.0    | 41.0    | 42.0    | 43.0    | 44.0    |
| 0.0    | 90.59   | 70.46   | 59.75   | 53.67   | 48.98   | 45.76   | 42.43   | 40.15   | 37.57   |
| 45.0   | 315.49  | 104.23  | 73.45   | 63.50   | 56.24   | 50.10   | 46.47   | 43.72   | 41.38   |
| 90.0   | 108.79  | 69.99   | 61.27   | 54.43   | 48.46   | 44.95   | 42.37   | 40.15   | 37.57   |
| 135.0  | 147.65  | 88.43   | 70.23   | 61.21   | 53.20   | 48.63   | 44.42   | 41.90   | 39.50   |
| 180.0  | 300.28  | 143.32  | 95.80   | 70.52   | 61.45   | 54.78   | 49.69   | 45.41   | 42.72   |
| 225.0  | 116.93  | 77.54   | 64.08   | 55.19   | 49.80   | 45.82   | 43.07   | 40.79   | 38.27   |
| 270.0  | 299.11  | 121.84  | 78.71   | 63.56   | 54.66   | 49.33   | 45.47   | 42.72   | 40.38   |
| 315.0  | 161.76  | 105.16  | 73.21   | 60.92   | 54.02   | 49.04   | 44.71   | 42.08   | 39.74   |
| 360.0  | 90.59   | 70.46   | 59.75   | 53.67   | 48.98   | 45.76   | 42.43   | 40.15   | 37.57   |

Intensity data(cd)

|        |       |       |       |       |       |       |       |       |       |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C/γ(°) | 45.0  | 46.0  | 47.0  | 48.0  | 49.0  | 50.0  | 51.0  | 52.0  | 53.0  |
| 0.0    | 35.70 | 34.18 | 32.42 | 31.19 | 30.02 | 28.91 | 28.21 | 27.56 | 26.98 |
| 45.0   | 38.74 | 36.87 | 35.05 | 33.53 | 31.84 | 30.55 | 29.32 | 28.44 | 27.80 |
| 90.0   | 35.70 | 34.00 | 32.60 | 30.96 | 29.79 | 28.79 | 27.74 | 27.04 | 26.45 |
| 135.0  | 36.87 | 35.00 | 33.42 | 32.07 | 30.43 | 29.26 | 28.27 | 27.51 | 26.69 |
| 180.0  | 40.32 | 38.27 | 35.87 | 34.29 | 32.89 | 31.49 | 30.08 | 29.14 | 28.21 |
| 225.0  | 36.46 | 34.76 | 33.01 | 31.66 | 30.20 | 29.26 | 28.32 | 27.45 | 26.86 |
| 270.0  | 37.81 | 35.93 | 33.83 | 32.30 | 31.02 | 29.55 | 28.68 | 27.80 | 26.92 |
| 315.0  | 37.16 | 35.35 | 33.30 | 31.95 | 30.61 | 29.44 | 28.27 | 27.39 | 26.80 |
| 360.0  | 35.70 | 34.18 | 32.42 | 31.19 | 30.02 | 28.91 | 28.21 | 27.56 | 26.98 |
| C/γ(°) | 54.0  | 55.0  | 56.0  | 57.0  | 58.0  | 59.0  | 60.0  | 61.0  | 62.0  |
| 0.0    | 26.45 | 26.16 | 26.10 | 25.98 | 25.98 | 25.93 | 25.81 | 25.63 | 25.46 |
| 45.0   | 27.04 | 26.51 | 26.28 | 26.39 | 26.57 | 26.69 | 26.74 | 26.74 | 26.69 |
| 90.0   | 25.81 | 25.57 | 25.69 | 25.93 | 26.22 | 26.45 | 26.63 | 26.74 | 26.69 |
| 135.0  | 26.16 | 25.69 | 25.46 | 25.52 | 25.75 | 25.98 | 26.04 | 26.04 | 25.87 |
| 180.0  | 27.39 | 26.80 | 26.22 | 26.04 | 25.98 | 26.04 | 26.22 | 26.28 | 26.34 |
| 225.0  | 26.34 | 25.98 | 25.81 | 25.87 | 26.04 | 26.16 | 26.34 | 26.57 | 27.51 |
| 270.0  | 26.39 | 25.87 | 25.46 | 25.28 | 25.28 | 25.34 | 25.46 | 25.57 | 25.63 |
| 315.0  | 26.16 | 25.57 | 25.28 | 25.22 | 25.22 | 25.22 | 25.11 | 24.93 | 24.70 |
| 360.0  | 26.45 | 26.16 | 26.10 | 25.98 | 25.98 | 25.93 | 25.81 | 25.63 | 25.46 |
| C/γ(°) | 63.0  | 64.0  | 65.0  | 66.0  | 67.0  | 68.0  | 69.0  | 70.0  | 71.0  |
| 0.0    | 25.05 | 24.52 | 24.17 | 23.76 | 23.47 | 23.88 | 24.46 | 25.52 | 26.39 |
| 45.0   | 27.04 | 27.74 | 29.20 | 30.37 | 31.31 | 31.37 | 30.43 | 29.26 | 28.27 |
| 90.0   | 26.39 | 25.75 | 24.99 | 24.11 | 22.94 | 21.77 | 21.19 | 20.60 | 20.19 |
| 135.0  | 25.63 | 25.22 | 24.52 | 23.47 | 22.41 | 21.24 | 20.42 | 19.72 | 19.25 |
| 180.0  | 26.28 | 26.04 | 25.69 | 24.93 | 24.05 | 23.00 | 21.83 | 21.01 | 20.95 |
| 225.0  | 29.26 | 30.84 | 32.66 | 33.59 | 33.24 | 32.25 | 31.60 | 32.01 | 32.54 |
| 270.0  | 25.52 | 25.34 | 24.99 | 24.29 | 23.58 | 22.59 | 21.77 | 21.13 | 20.83 |
| 315.0  | 24.46 | 24.05 | 23.58 | 22.88 | 22.00 | 20.54 | 19.84 | 19.25 | 18.79 |
| 360.0  | 25.05 | 24.52 | 24.17 | 23.76 | 23.47 | 23.88 | 24.46 | 25.52 | 26.39 |
| C/γ(°) | 72.0  | 73.0  | 74.0  | 75.0  | 76.0  | 77.0  | 78.0  | 79.0  | 80.0  |
| 0.0    | 25.87 | 25.93 | 25.46 | 25.22 | 25.05 | 24.52 | 22.71 | 20.54 | 15.74 |
| 45.0   | 28.50 | 28.62 | 26.63 | 25.22 | 25.34 | 24.58 | 22.36 | 22.24 | 20.42 |
| 90.0   | 19.84 | 19.55 | 19.37 | 18.96 | 18.38 | 17.79 | 17.15 | 16.56 | 15.86 |
| 135.0  | 18.79 | 18.32 | 17.97 | 17.62 | 17.32 | 17.03 | 16.56 | 15.86 | 15.10 |
| 180.0  | 21.13 | 21.30 | 21.24 | 21.01 | 21.42 | 21.19 | 21.13 | 20.95 | 20.42 |
| 225.0  | 33.12 | 32.25 | 30.78 | 30.02 | 29.50 | 27.62 | 26.74 | 25.93 | 24.11 |
| 270.0  | 20.60 | 20.19 | 19.78 | 19.90 | 19.66 | 18.79 | 18.26 | 17.50 | 16.39 |
| 315.0  | 18.38 | 18.02 | 17.62 | 17.21 | 16.97 | 16.62 | 16.33 | 16.04 | 15.57 |
| 360.0  | 25.87 | 25.93 | 25.46 | 25.22 | 25.05 | 24.52 | 22.71 | 20.54 | 15.74 |
| C/γ(°) | 81.0  | 82.0  | 83.0  | 84.0  | 85.0  | 86.0  | 87.0  | 88.0  | 89.0  |
| 0.0    | 12.93 | 11.41 | 10.71 | 10.36 | 9.95  | 9.48  | 9.25  | 9.07  | 9.07  |
| 45.0   | 18.49 | 15.04 | 12.23 | 11.18 | 10.48 | 9.83  | 9.54  | 9.36  | 9.19  |
| 90.0   | 14.46 | 12.70 | 11.24 | 10.42 | 9.83  | 9.60  | 9.42  | 9.25  | 9.13  |
| 135.0  | 13.99 | 12.35 | 10.94 | 10.24 | 9.83  | 9.66  | 9.48  | 9.25  | 9.19  |
| 180.0  | 19.25 | 16.74 | 13.58 | 11.24 | 10.53 | 10.12 | 9.60  | 9.31  | 9.19  |
| 225.0  | 22.18 | 16.39 | 11.53 | 10.77 | 10.24 | 9.60  | 9.36  | 9.19  | 9.07  |
| 270.0  | 15.74 | 14.86 | 12.87 | 11.65 | 10.71 | 10.24 | 9.54  | 9.31  | 9.19  |
| 315.0  | 14.51 | 13.28 | 11.70 | 10.48 | 10.18 | 10.07 | 9.54  | 9.31  | 9.13  |
| 360.0  | 12.93 | 11.41 | 10.71 | 10.36 | 9.95  | 9.48  | 9.25  | 9.07  | 9.07  |

Intensity data(cd)

|        |      |
|--------|------|
| C/γ(°) | 90.0 |
| 0.0    | 9.07 |
| 45.0   | 9.07 |
| 90.0   | 9.19 |
| 135.0  | 9.19 |
| 180.0  | 9.01 |
| 225.0  | 9.07 |
| 270.0  | 9.19 |
| 315.0  | 9.13 |
| 360.0  | 9.07 |