



NATA LIGHTING CO.,LTD.
www.nata.cn
Email:info@nata.com
Tel:+86-750-3770000 Fax:+86-750-3771111
Address:380JinOu Road,GaoXin Zone,Jiang Men City,Guangdong,China

NT

Client:

LumCAT: 1-1302-L

Luminaire: 92.70.410.00

Report No: 2024731-B015

Ballast type: AC

Test No: 2024731-C015

Voltage(V): 35.070

LampCAT: LUXEON CoB 1203 LES9

Current(A): 0.300

Lamp flux(lm): 1274.0

Power (W): 10.521

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 1214.10, Efficiency(%): 95.30% , Luminous Efficacy(lm/W): 115.40

Central intensity(cd): 2337.886, Maximum intensity(cd): 2337.886

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=42.2

[C90/270]Total=42.2

Field angle(10%Imax): [C0/180]Total=66.6

[C90/270]Total=66.6

Maximum s/h(1/2): C0_180=0.68 C90_270=0.68

Maximum s/h(1/4): C0_180=0.66 C90_270=0.66

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 95.30%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.035%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/7/31
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 | 2337.886 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 2335.399 | 2.236 | 2.236 | 0.18% | 0.18% |
| 2.0 | 2325.084 | 6.689 | 8.925 | 0.53% | 0.74% |
| 3.0 | 2313.160 | 11.093 | 20.018 | 0.87% | 1.65% |
| 4.0 | 2296.043 | 15.428 | 35.447 | 1.21% | 2.92% |
| 5.0 | 2269.049 | 19.639 | 55.086 | 1.54% | 4.54% |
| 6.0 | 2241.617 | 23.705 | 78.79 | 1.86% | 6.49% |
| 7.0 | 2207.088 | 27.613 | 106.403 | 2.17% | 8.76% |
| 8.0 | 2167.586 | 31.309 | 137.712 | 2.46% | 11.34% |
| 9.0 | 2125.523 | 34.793 | 172.505 | 2.73% | 14.21% |
| 10.0 | 2079.656 | 38.055 | 210.561 | 2.99% | 17.34% |
| 11.0 | 2028.595 | 41.050 | 251.611 | 3.22% | 20.72% |
| 12.0 | 1972.706 | 43.740 | 295.351 | 3.43% | 24.33% |
| 13.0 | 1901.601 | 45.978 | 341.329 | 3.61% | 28.11% |
| 14.0 | 1831.081 | 47.778 | 389.107 | 3.75% | 32.05% |
| 15.0 | 1756.758 | 49.255 | 438.362 | 3.87% | 36.11% |
| 16.0 | 1676.216 | 50.303 | 488.665 | 3.95% | 40.25% |
| 17.0 | 1577.459 | 50.668 | 539.333 | 3.98% | 44.42% |
| 18.0 | 1463.465 | 50.138 | 589.472 | 3.94% | 48.55% |
| 19.0 | 1369.975 | 49.296 | 638.768 | 3.87% | 52.61% |
| 20.0 | 1265.542 | 48.237 | 687.005 | 3.79% | 56.59% |
| 21.0 | 1180.626 | 46.971 | 733.976 | 3.69% | 60.45% |
| 22.0 | 1089.243 | 45.614 | 779.59 | 3.58% | 64.21% |
| 23.0 | 992.410 | 43.679 | 823.269 | 3.43% | 67.81% |
| 24.0 | 895.541 | 41.277 | 864.546 | 3.24% | 71.21% |
| 25.0 | 805.474 | 38.677 | 903.224 | 3.04% | 74.39% |
| 26.0 | 712.219 | 35.825 | 939.049 | 2.81% | 77.35% |
| 27.0 | 628.875 | 32.810 | 971.859 | 2.58% | 80.05% |
| 28.0 | 553.067 | 29.924 | 1001.784 | 2.35% | 82.51% |
| 29.0 | 478.692 | 26.994 | 1028.777 | 2.12% | 84.74% |
| 30.0 | 401.764 | 23.772 | 1052.549 | 1.87% | 86.69% |
| 31.0 | 342.123 | 20.701 | 1073.251 | 1.62% | 88.40% |
| 32.0 | 290.367 | 18.120 | 1091.371 | 1.42% | 89.89% |
| 33.0 | 252.686 | 15.999 | 1107.369 | 1.26% | 91.21% |
| 34.0 | 190.586 | 13.415 | 1120.784 | 1.05% | 92.31% |
| 35.0 | 165.933 | 11.072 | 1131.856 | 0.87% | 93.23% |
| 36.0 | 111.317 | 8.828 | 1140.684 | 0.69% | 93.95% |
| 37.0 | 85.743 | 6.427 | 1147.111 | 0.50% | 94.48% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 66.533 | 5.083 | 1152.194 | 0.40% | 94.90% |
| 39.0 | 52.092 | 4.049 | 1156.243 | 0.32% | 95.23% |
| 40.0 | 42.070 | 3.284 | 1159.527 | 0.26% | 95.51% |
| 41.0 | 34.748 | 2.735 | 1162.262 | 0.21% | 95.73% |
| 42.0 | 30.095 | 2.356 | 1164.618 | 0.18% | 95.92% |
| 43.0 | 26.350 | 2.091 | 1166.709 | 0.16% | 96.10% |
| 44.0 | 23.950 | 1.898 | 1168.607 | 0.15% | 96.25% |
| 45.0 | 22.063 | 1.768 | 1170.376 | 0.14% | 96.40% |
| 46.0 | 20.424 | 1.662 | 1172.037 | 0.13% | 96.54% |
| 47.0 | 19.086 | 1.571 | 1173.609 | 0.12% | 96.66% |
| 48.0 | 18.083 | 1.503 | 1175.111 | 0.12% | 96.79% |
| 49.0 | 17.242 | 1.451 | 1176.562 | 0.11% | 96.91% |
| 50.0 | 16.401 | 1.403 | 1177.965 | 0.11% | 97.02% |
| 51.0 | 15.706 | 1.358 | 1179.323 | 0.11% | 97.14% |
| 52.0 | 15.113 | 1.322 | 1180.645 | 0.10% | 97.24% |
| 53.0 | 14.572 | 1.291 | 1181.937 | 0.10% | 97.35% |
| 54.0 | 14.104 | 1.264 | 1183.201 | 0.10% | 97.46% |
| 55.0 | 13.636 | 1.238 | 1184.439 | 0.10% | 97.56% |
| 56.0 | 13.197 | 1.212 | 1185.651 | 0.10% | 97.66% |
| 57.0 | 12.780 | 1.188 | 1186.839 | 0.09% | 97.75% |
| 58.0 | 12.348 | 1.162 | 1188.001 | 0.09% | 97.85% |
| 59.0 | 11.909 | 1.134 | 1189.135 | 0.09% | 97.94% |
| 60.0 | 11.522 | 1.107 | 1190.242 | 0.09% | 98.03% |
| 61.0 | 11.127 | 1.081 | 1191.323 | 0.08% | 98.12% |
| 62.0 | 10.754 | 1.054 | 1192.377 | 0.08% | 98.21% |
| 63.0 | 10.351 | 1.026 | 1193.404 | 0.08% | 98.30% |
| 64.0 | 9.993 | 0.998 | 1194.402 | 0.08% | 98.38% |
| 65.0 | 9.634 | 0.971 | 1195.373 | 0.08% | 98.46% |
| 66.0 | 9.276 | 0.943 | 1196.317 | 0.07% | 98.54% |
| 67.0 | 8.881 | 0.913 | 1197.23 | 0.07% | 98.61% |
| 68.0 | 8.603 | 0.886 | 1198.115 | 0.07% | 98.68% |
| 69.0 | 8.361 | 0.865 | 1198.981 | 0.07% | 98.75% |
| 70.0 | 8.142 | 0.848 | 1199.828 | 0.07% | 98.82% |
| 71.0 | 7.981 | 0.833 | 1200.662 | 0.07% | 98.89% |
| 72.0 | 7.805 | 0.821 | 1201.483 | 0.06% | 98.96% |
| 73.0 | 7.645 | 0.808 | 1202.291 | 0.06% | 99.03% |
| 74.0 | 7.498 | 0.796 | 1203.087 | 0.06% | 99.09% |
| 75.0 | 7.337 | 0.784 | 1203.871 | 0.06% | 99.16% |

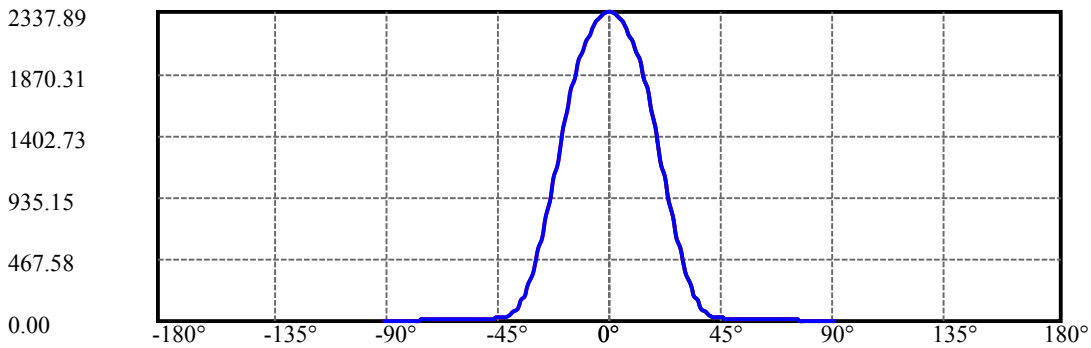
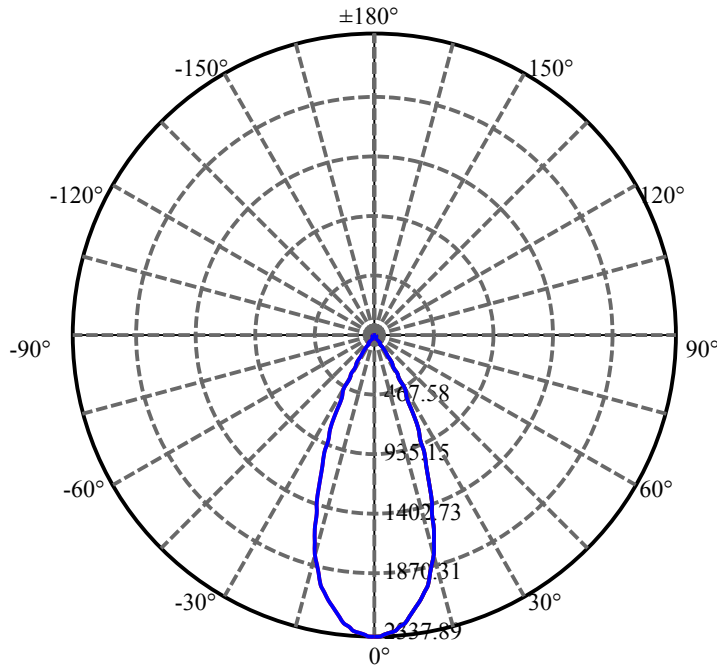
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 7.184 | 0.771 | 1204.641 | 0.06% | 99.22% |
| 77.0 | 7.052 | 0.759 | 1205.4 | 0.06% | 99.28% |
| 78.0 | 6.920 | 0.748 | 1206.148 | 0.06% | 99.35% |
| 79.0 | 6.767 | 0.735 | 1206.884 | 0.06% | 99.41% |
| 80.0 | 6.598 | 0.721 | 1207.604 | 0.06% | 99.47% |
| 81.0 | 6.474 | 0.707 | 1208.311 | 0.06% | 99.52% |
| 82.0 | 6.342 | 0.695 | 1209.006 | 0.05% | 99.58% |
| 83.0 | 6.225 | 0.683 | 1209.689 | 0.05% | 99.64% |
| 84.0 | 6.079 | 0.670 | 1210.36 | 0.05% | 99.69% |
| 85.0 | 5.940 | 0.656 | 1211.016 | 0.05% | 99.75% |
| 86.0 | 5.794 | 0.641 | 1211.657 | 0.05% | 99.80% |
| 87.0 | 5.684 | 0.628 | 1212.285 | 0.05% | 99.85% |
| 88.0 | 5.567 | 0.616 | 1212.901 | 0.05% | 99.90% |
| 89.0 | 5.450 | 0.604 | 1213.505 | 0.05% | 99.95% |
| 90.0 | 5.384 | 0.594 | 1214.099 | 0.05% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1052.55 | 82.62% | 86.69% |
| 0-40 | 1159.53 | 91.01% | 95.51% |
| 0-60 | 1190.24 | 93.43% | 98.03% |
| 0-90 | 1213.51 | 95.25% | 99.95% |
| 0-120 | 1213.51 | 95.25% | 99.95% |
| 0-180 | 1214.10 | 95.30% | 100.00% |
| 60-90 | 23.26 | 1.83% | 1.92% |
| 90-120 | 0.00 | 0.00% | 0.00% |
| 90-130 | 0.00 | 0.00% | 0.00% |
| 90-150 | 0.00 | 0.00% | 0.00% |
| 90-180 | 0.00 | 0.00% | 0.00% |
| 0-26.98 | 971.28 | 76.24% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 210.56 |
| 10-20 | 476.44 |
| 20-30 | 365.54 |
| 30-40 | 106.98 |
| 40-50 | 18.44 |
| 50-60 | 12.28 |
| 60-70 | 9.59 |
| 70-80 | 7.78 |
| 80-90 | 5.90 |
| 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: —————

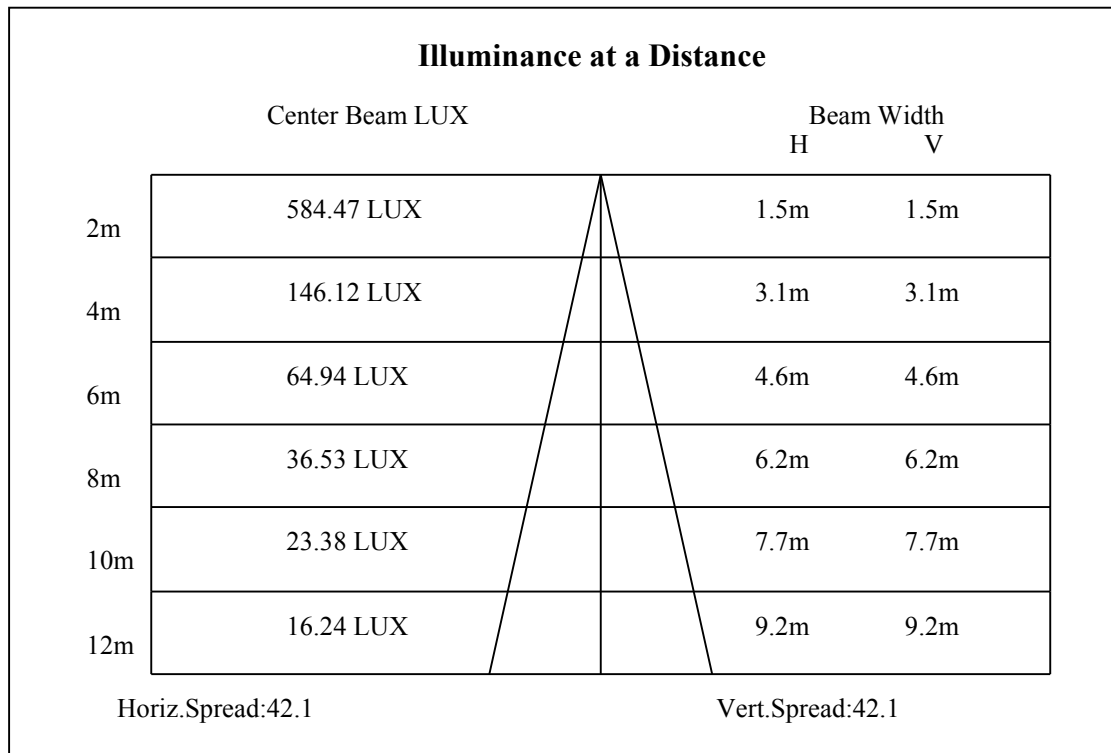
C90/C270: —————

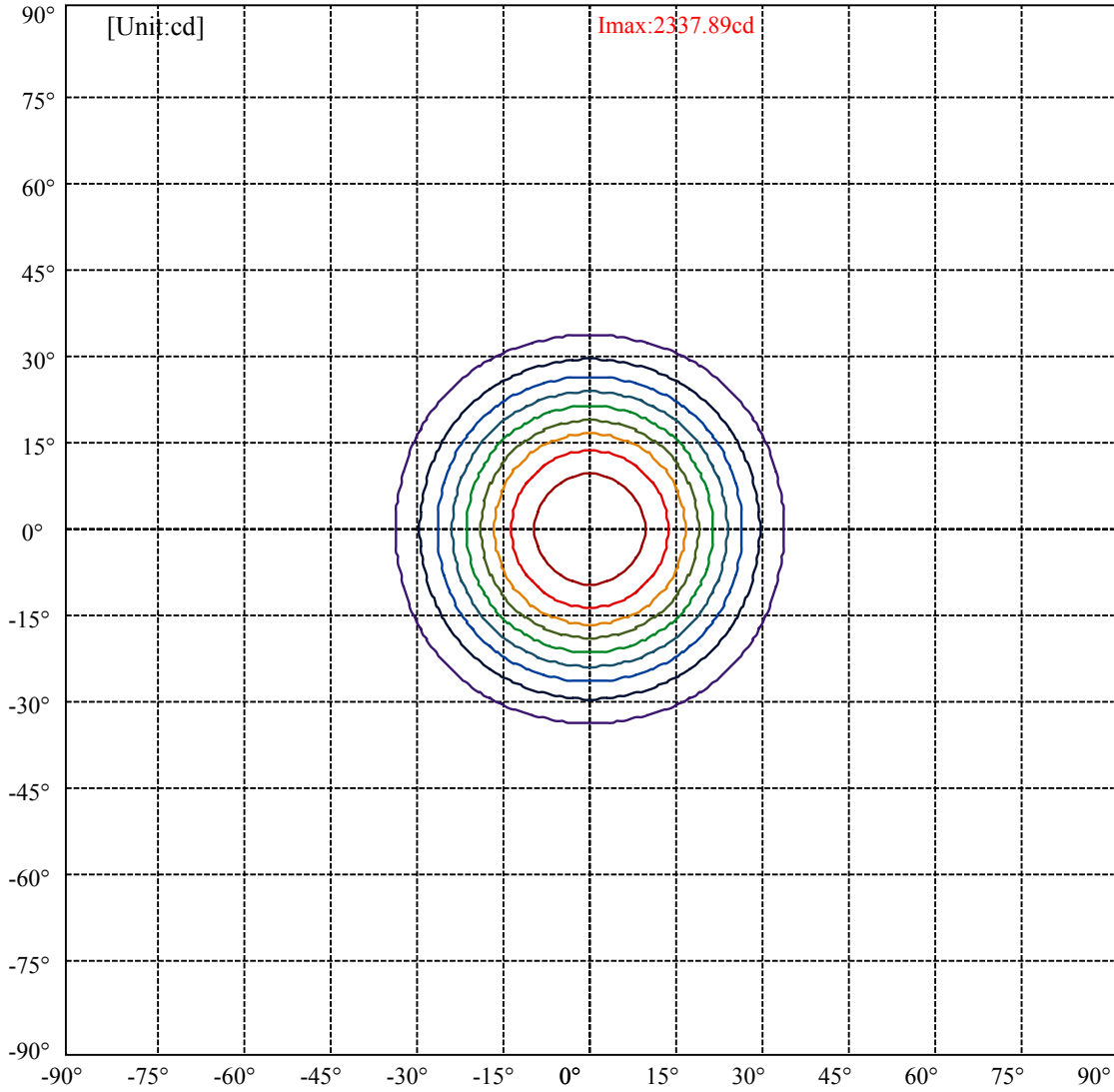
Field angle(10%Imax):C0/180Left:33.3 Right:33.3

:C90/270Left:33.3 Right:33.3

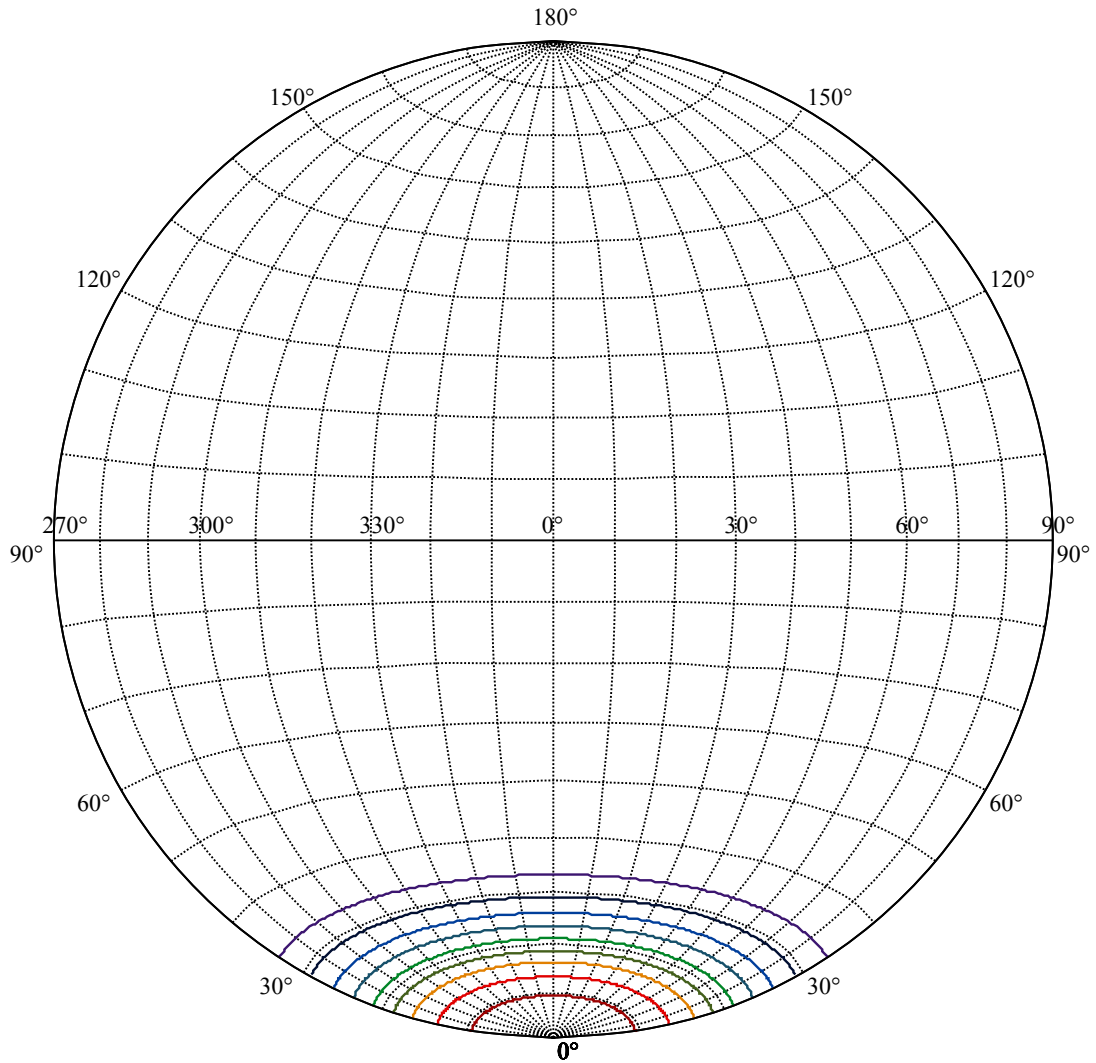
Beam Angle(50%Imax):C0/180Left:21.1 Right:21.1

:C90/270Left:21.1 Right:21.1





| | |
|-------------------|---|
| (10%Imax) 233.789 | — |
| (20%Imax) 467.577 | — |
| (30%Imax) 701.366 | — |
| (40%Imax) 935.154 | — |
| (50%Imax) 1168.94 | — |
| (60%Imax) 1402.73 | — |
| (70%Imax) 1636.52 | — |
| (80%Imax) 1870.31 | — |
| (90%Imax) 2104.1 | — |



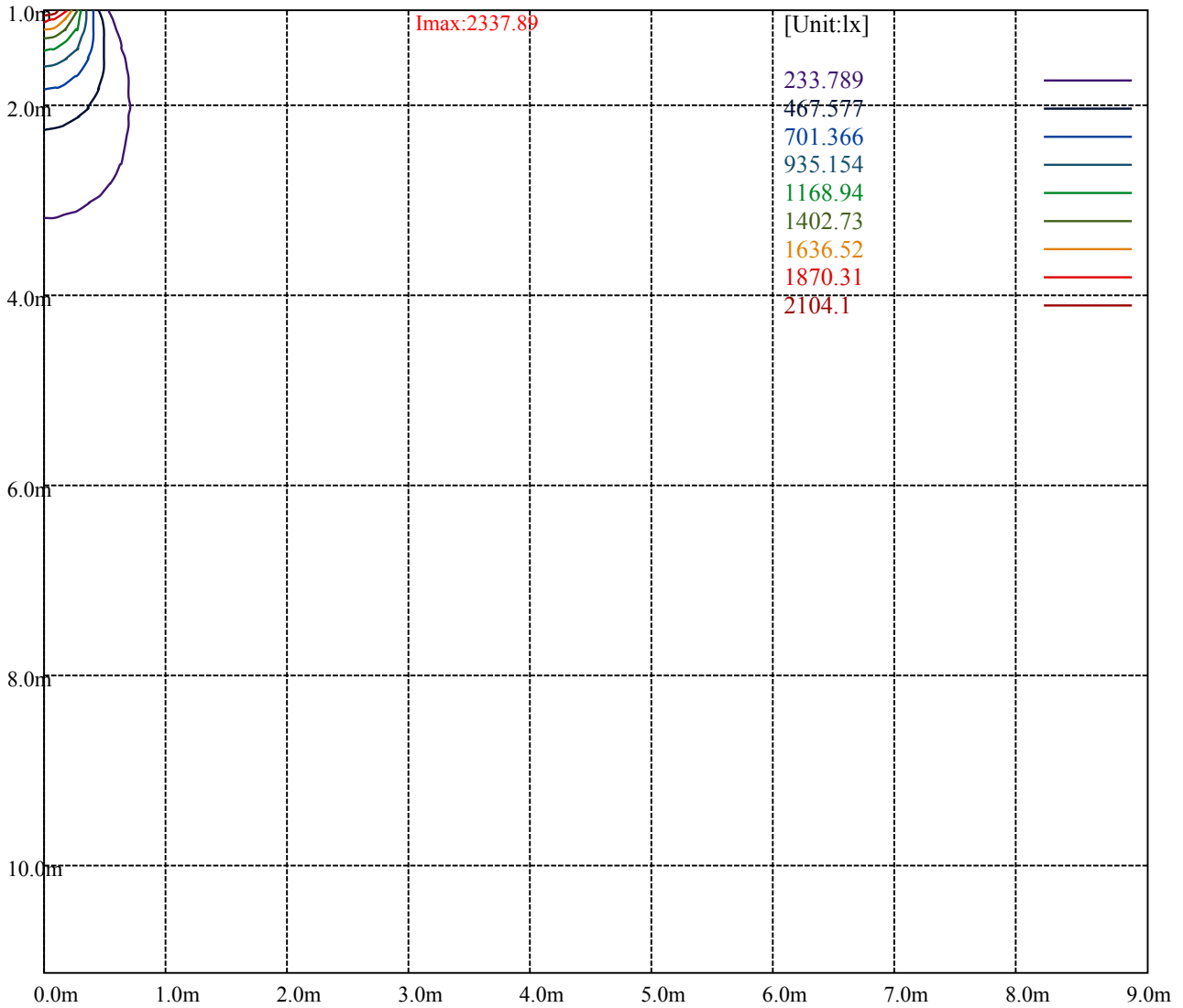
House

[Unit:cd]

Road

Imax:2337.89

| | |
|-------------------|---|
| (10%Imax) 233.789 | — |
| (20%Imax) 467.577 | — |
| (30%Imax) 701.366 | — |
| (40%Imax) 935.154 | — |
| (50%Imax) 1168.94 | — |
| (60%Imax) 1402.73 | — |
| (70%Imax) 1636.52 | — |
| (80%Imax) 1870.31 | — |
| (90%Imax) 2104.1 | — |



Luminance Table

| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

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

Glare Table

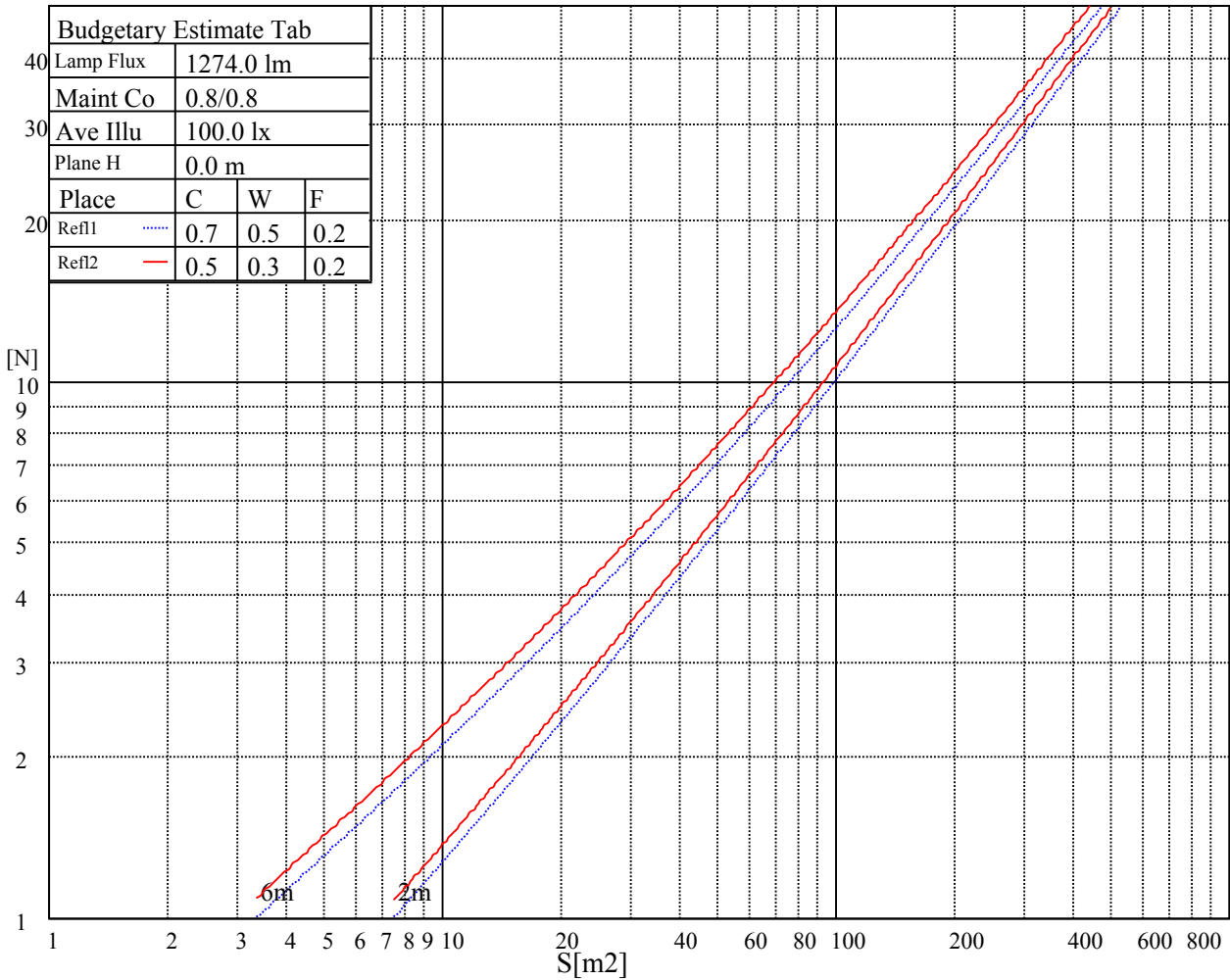
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

Luminance Limiting Curve

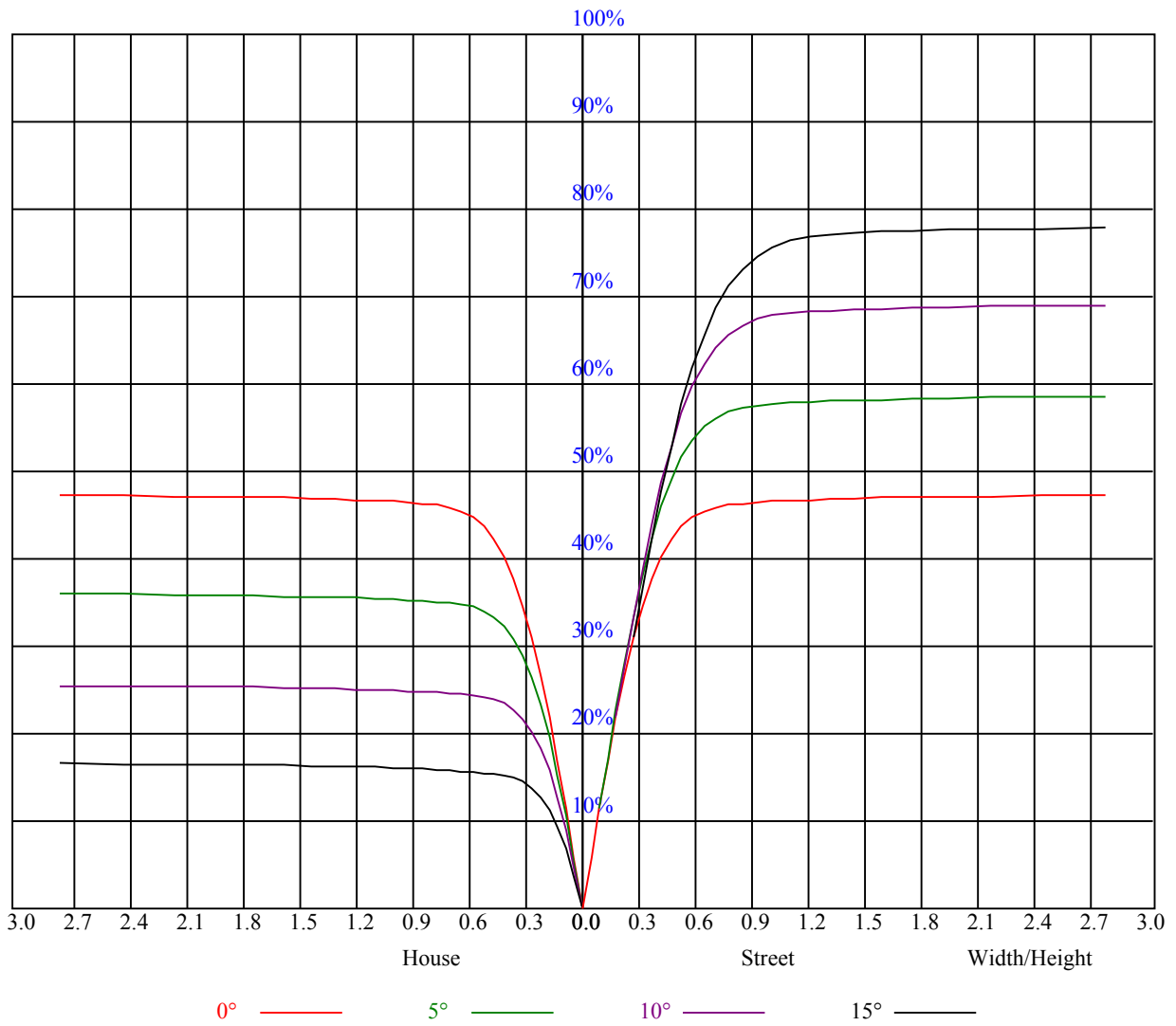


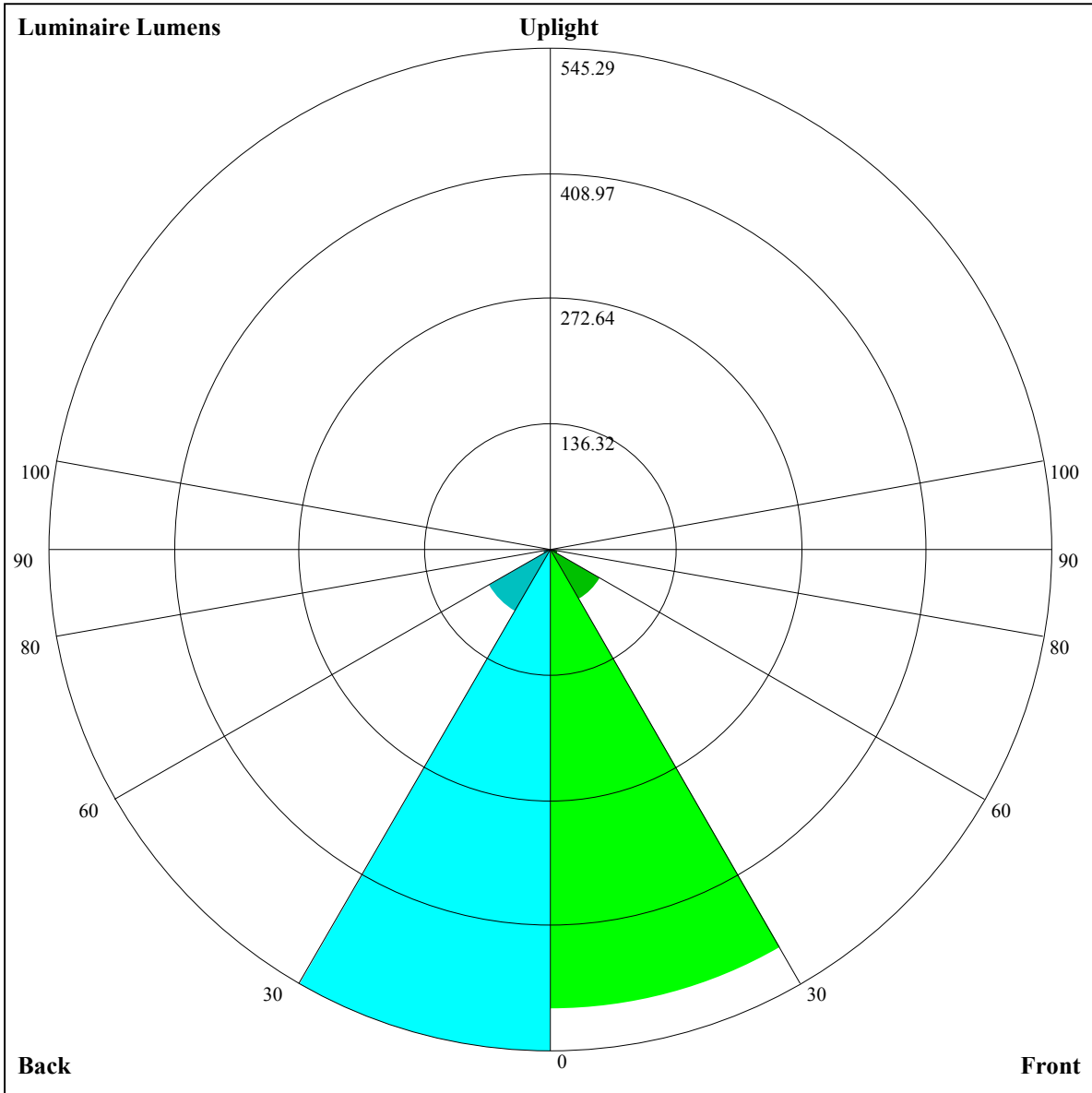
| Illumination assessment according UGR | | | | | | | | | | |
|---|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Rf of Floor | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room dimensions | Viewed crosswise | | | | | Viewed endwise | | | | |
| X | Y | | | | | | | | | |
| 2H | 2H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 3H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 4H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 6H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 8H | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 | 非数字 |
| | 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 RHOF=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 | 0.99 | 0.97 | 0.97 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 |
| 2 | 1.00 | 0.96 | 0.93 | 0.98 | 0.95 | 0.92 | 0.95 | 0.92 | 0.90 | 0.92 | 0.90 | 0.88 | 0.90 | 0.88 | 0.86 | 0.85 |
| 3 | 0.94 | 0.90 | 0.86 | 0.93 | 0.89 | 0.86 | 0.90 | 0.87 | 0.84 | 0.88 | 0.85 | 0.83 | 0.86 | 0.84 | 0.82 | 0.80 |
| 4 | 0.89 | 0.84 | 0.81 | 0.88 | 0.83 | 0.80 | 0.86 | 0.82 | 0.79 | 0.84 | 0.81 | 0.78 | 0.82 | 0.80 | 0.77 | 0.76 |
| 5 | 0.84 | 0.79 | 0.76 | 0.83 | 0.79 | 0.76 | 0.82 | 0.78 | 0.75 | 0.80 | 0.77 | 0.74 | 0.79 | 0.76 | 0.74 | 0.72 |
| 6 | 0.80 | 0.75 | 0.72 | 0.80 | 0.75 | 0.71 | 0.78 | 0.74 | 0.71 | 0.77 | 0.73 | 0.71 | 0.76 | 0.73 | 0.70 | 0.69 |
| 7 | 0.77 | 0.72 | 0.68 | 0.76 | 0.71 | 0.68 | 0.75 | 0.71 | 0.67 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.67 | 0.66 |
| 8 | 0.73 | 0.68 | 0.65 | 0.73 | 0.68 | 0.65 | 0.72 | 0.67 | 0.64 | 0.71 | 0.67 | 0.64 | 0.70 | 0.66 | 0.64 | 0.63 |
| 9 | 0.70 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.69 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.64 | 0.61 | 0.60 |
| 10 | 0.67 | 0.62 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.65 | 0.61 | 0.59 | 0.65 | 0.61 | 0.58 | 0.57 |





Luminaire Lumens:

FL=500.56,FM=62.23,FH=8.57,FVH=3.19

BL=545.29,BM=77.85,BH=8.76,BVH=3.29

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 | 2330.42 | 2317.55 | 2308.77 | 2295.31 | 2276.58 | 2230.35 | 2199.92 | 2163.64 | 2118.57 |
| 45.0 | 2341.54 | 2348.57 | 2333.35 | 2332.18 | 2327.50 | 2303.50 | 2275.41 | 2239.13 | 2200.50 |
| 90.0 | 2353.25 | 2349.15 | 2334.52 | 2329.25 | 2328.08 | 2302.33 | 2261.37 | 2225.67 | 2190.56 |
| 135.0 | 2326.33 | 2357.34 | 2371.39 | 2355.59 | 2325.74 | 2312.28 | 2302.92 | 2281.85 | 2246.15 |
| 180.0 | 2330.42 | 2356.76 | 2353.83 | 2332.18 | 2307.60 | 2295.31 | 2287.70 | 2253.17 | 2219.82 |
| 225.0 | 2341.54 | 2320.48 | 2297.65 | 2290.63 | 2276.00 | 2249.08 | 2212.21 | 2178.27 | 2146.66 |
| 270.0 | 2353.25 | 2329.25 | 2305.85 | 2290.04 | 2278.92 | 2254.35 | 2221.57 | 2181.19 | 2136.71 |
| 315.0 | 2326.33 | 2304.09 | 2295.31 | 2280.10 | 2247.91 | 2205.19 | 2171.83 | 2133.79 | 2081.70 |
| 360.0 | 2330.42 | 2317.55 | 2308.77 | 2295.31 | 2276.58 | 2230.35 | 2199.92 | 2163.64 | 2118.57 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 2072.34 | 2005.04 | 1942.42 | 1871.61 | 1781.48 | 1709.50 | 1625.23 | 1532.76 | 1420.40 |
| 45.0 | 2167.73 | 2134.96 | 2094.58 | 2044.83 | 1969.93 | 1908.48 | 1841.76 | 1743.44 | 1654.49 |
| 90.0 | 2150.76 | 2100.43 | 2043.08 | 1978.70 | 1915.50 | 1829.47 | 1755.15 | 1671.46 | 1558.51 |
| 135.0 | 2206.36 | 2165.98 | 2129.11 | 2081.12 | 2012.06 | 1957.05 | 1886.82 | 1816.60 | 1722.38 |
| 180.0 | 2175.93 | 2129.11 | 2099.26 | 2061.81 | 2003.87 | 1944.18 | 1882.73 | 1824.20 | 1746.37 |
| 225.0 | 2091.65 | 2053.03 | 2005.04 | 1950.03 | 1880.39 | 1818.94 | 1739.35 | 1670.29 | 1589.53 |
| 270.0 | 2103.94 | 2067.07 | 2009.14 | 1954.71 | 1897.36 | 1813.67 | 1740.52 | 1659.17 | 1554.42 |
| 315.0 | 2035.47 | 1981.63 | 1906.14 | 1838.84 | 1752.22 | 1667.36 | 1582.51 | 1491.80 | 1373.58 |
| 360.0 | 2072.34 | 2005.04 | 1942.42 | 1871.61 | 1781.48 | 1709.50 | 1625.23 | 1532.76 | 1420.40 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 1267.66 | 1146.51 | 1146.51 | 1029.00 | 937.30 | 850.16 | 743.88 | 661.07 | 585.81 |
| 45.0 | 1563.19 | 1448.49 | 1354.27 | 1234.88 | 1137.74 | 1040.00 | 945.78 | 829.91 | 736.86 |
| 90.0 | 1463.71 | 1299.26 | 1167.17 | 1142.30 | 1044.51 | 924.42 | 832.72 | 751.43 | 656.97 |
| 135.0 | 1641.03 | 1555.00 | 1461.37 | 1343.15 | 1251.27 | 1136.57 | 1043.51 | 956.90 | 842.78 |
| 180.0 | 1676.14 | 1602.99 | 1515.79 | 1407.52 | 1326.18 | 1233.13 | 1122.52 | 1034.74 | 921.20 |
| 225.0 | 1480.09 | 1390.55 | 1158.10 | 1158.10 | 1090.57 | 999.86 | 916.05 | 832.83 | 726.38 |
| 270.0 | 1464.29 | 1365.39 | 1243.08 | 1142.42 | 1045.27 | 956.32 | 842.78 | 757.34 | 678.92 |
| 315.0 | 1151.61 | 1151.61 | 1078.04 | 987.63 | 881.11 | 798.83 | 717.08 | 619.58 | 548.82 |
| 360.0 | 1267.66 | 1146.51 | 1146.51 | 1029.00 | 937.30 | 850.16 | 743.88 | 661.07 | 585.81 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 494.22 | 427.86 | 366.53 | 294.49 | 244.98 | 201.20 | 162.05 | 119.50 | 92.99 |
| 45.0 | 654.34 | 578.26 | 488.72 | 424.35 | 362.31 | 304.96 | 304.96 | 194.59 | 155.73 |
| 90.0 | 584.82 | 520.44 | 461.10 | 388.76 | 331.53 | 278.45 | 233.15 | 179.31 | 141.33 |
| 135.0 | 755.00 | 670.14 | 594.06 | 508.62 | 446.00 | 385.72 | 326.03 | 299.11 | 299.11 |
| 180.0 | 834.59 | 748.56 | 659.61 | 550.17 | 471.75 | 400.35 | 330.13 | 296.18 | 296.18 |
| 225.0 | 640.24 | 558.89 | 465.20 | 391.98 | 326.32 | 253.23 | 203.83 | 152.33 | 119.09 |
| 270.0 | 601.67 | 515.06 | 447.17 | 372.85 | 316.67 | 303.21 | 303.21 | 166.15 | 131.50 |
| 315.0 | 466.13 | 405.33 | 347.16 | 282.90 | 237.43 | 195.82 | 158.13 | 117.51 | 91.53 |
| 360.0 | 494.22 | 427.86 | 366.53 | 294.49 | 244.98 | 201.20 | 162.05 | 119.50 | 92.99 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 73.80 | 59.17 | 46.00 | 38.74 | 33.53 | 28.97 | 26.34 | 23.88 | 22.30 |
| 45.0 | 114.47 | 89.13 | 70.52 | 53.20 | 43.60 | 37.04 | 31.37 | 28.09 | 25.63 |
| 90.0 | 103.70 | 81.11 | 64.02 | 48.81 | 40.50 | 34.65 | 30.37 | 26.74 | 24.64 |
| 135.0 | 170.30 | 127.75 | 99.78 | 76.78 | 56.59 | 45.30 | 37.40 | 30.61 | 26.92 |
| 180.0 | 160.12 | 122.72 | 89.48 | 69.41 | 54.07 | 41.08 | 34.70 | 29.20 | 26.16 |
| 225.0 | 92.93 | 72.10 | 56.83 | 43.42 | 36.11 | 30.96 | 27.27 | 23.94 | 21.95 |
| 270.0 | 102.88 | 75.73 | 59.99 | 47.93 | 38.98 | 31.37 | 27.21 | 24.23 | 21.89 |
| 315.0 | 72.33 | 58.23 | 45.65 | 38.45 | 33.18 | 28.62 | 26.10 | 24.11 | 22.12 |
| 360.0 | 73.80 | 59.17 | 46.00 | 38.74 | 33.53 | 28.97 | 26.34 | 23.88 | 22.30 |

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 | 21.01 | 19.72 | 18.79 | 18.08 | 17.44 | 16.68 | 16.21 | 15.74 | 15.22 |
| 45.0 | 23.76 | 21.95 | 20.66 | 19.66 | 18.73 | 17.79 | 17.15 | 16.39 | 15.86 |
| 90.0 | 22.94 | 21.48 | 20.13 | 19.20 | 18.32 | 17.56 | 16.68 | 16.09 | 15.51 |
| 135.0 | 24.35 | 21.89 | 20.37 | 19.02 | 17.97 | 16.85 | 16.09 | 15.39 | 14.81 |
| 180.0 | 23.82 | 22.00 | 20.13 | 18.96 | 17.97 | 17.03 | 16.15 | 15.57 | 14.92 |
| 225.0 | 20.31 | 18.61 | 17.56 | 16.44 | 15.68 | 14.98 | 14.22 | 13.69 | 13.23 |
| 270.0 | 19.55 | 18.08 | 16.56 | 15.63 | 14.92 | 14.05 | 13.58 | 13.05 | 12.58 |
| 315.0 | 20.78 | 19.66 | 18.49 | 17.67 | 16.91 | 16.27 | 15.57 | 14.98 | 14.46 |
| 360.0 | 21.01 | 19.72 | 18.79 | 18.08 | 17.44 | 16.68 | 16.21 | 15.74 | 15.22 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 14.75 | 14.16 | 13.75 | 13.11 | 12.70 | 12.17 | 11.65 | 11.18 | 10.77 |
| 45.0 | 15.39 | 14.81 | 14.40 | 13.93 | 13.34 | 12.82 | 12.35 | 11.88 | 11.47 |
| 90.0 | 15.22 | 14.81 | 14.28 | 13.87 | 13.34 | 12.87 | 12.29 | 11.76 | 11.41 |
| 135.0 | 14.22 | 13.81 | 13.34 | 12.99 | 12.64 | 12.23 | 11.88 | 11.53 | 11.18 |
| 180.0 | 14.34 | 13.93 | 13.52 | 13.17 | 12.76 | 12.29 | 12.00 | 11.65 | 11.29 |
| 225.0 | 12.76 | 12.29 | 11.88 | 11.53 | 11.24 | 10.89 | 10.65 | 10.42 | 10.01 |
| 270.0 | 12.17 | 11.88 | 11.47 | 11.18 | 10.89 | 10.59 | 10.42 | 10.07 | 9.71 |
| 315.0 | 13.99 | 13.40 | 12.93 | 12.47 | 11.88 | 11.41 | 10.94 | 10.53 | 10.18 |
| 360.0 | 14.75 | 14.16 | 13.75 | 13.11 | 12.70 | 12.17 | 11.65 | 11.18 | 10.77 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 10.30 | 9.89 | 9.42 | 9.07 | 8.60 | 8.43 | 8.25 | 8.08 | 7.90 |
| 45.0 | 10.94 | 10.53 | 10.12 | 9.60 | 9.19 | 8.66 | 8.37 | 8.13 | 7.90 |
| 90.0 | 11.00 | 10.48 | 10.12 | 9.71 | 9.13 | 8.72 | 8.37 | 8.08 | 7.96 |
| 135.0 | 10.77 | 10.48 | 10.12 | 9.83 | 9.42 | 9.13 | 8.78 | 8.43 | 8.25 |
| 180.0 | 11.00 | 10.59 | 10.30 | 9.95 | 9.54 | 9.25 | 8.95 | 8.72 | 8.54 |
| 225.0 | 9.66 | 9.36 | 8.95 | 8.66 | 8.43 | 8.25 | 8.13 | 7.96 | 7.84 |
| 270.0 | 9.42 | 9.31 | 9.07 | 8.78 | 8.49 | 8.31 | 8.13 | 7.96 | 7.78 |
| 315.0 | 9.71 | 9.31 | 8.95 | 8.60 | 8.25 | 8.08 | 7.90 | 7.78 | 7.67 |
| 360.0 | 10.30 | 9.89 | 9.42 | 9.07 | 8.60 | 8.43 | 8.25 | 8.08 | 7.90 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 7.72 | 7.55 | 7.37 | 7.26 | 7.08 | 6.96 | 6.79 | 6.67 | 6.50 |
| 45.0 | 7.72 | 7.61 | 7.49 | 7.26 | 7.14 | 7.02 | 6.91 | 6.73 | 6.55 |
| 90.0 | 7.78 | 7.61 | 7.49 | 7.32 | 7.14 | 7.08 | 6.96 | 6.73 | 6.55 |
| 135.0 | 8.08 | 7.90 | 7.78 | 7.55 | 7.43 | 7.32 | 7.20 | 7.02 | 6.85 |
| 180.0 | 8.37 | 8.19 | 8.08 | 7.90 | 7.72 | 7.55 | 7.43 | 7.32 | 7.14 |
| 225.0 | 7.61 | 7.49 | 7.32 | 7.20 | 7.02 | 6.91 | 6.79 | 6.61 | 6.50 |
| 270.0 | 7.67 | 7.49 | 7.32 | 7.20 | 7.02 | 6.91 | 6.73 | 6.67 | 6.44 |
| 315.0 | 7.49 | 7.32 | 7.14 | 7.02 | 6.91 | 6.67 | 6.55 | 6.38 | 6.26 |
| 360.0 | 7.72 | 7.55 | 7.37 | 7.26 | 7.08 | 6.96 | 6.79 | 6.67 | 6.50 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 6.38 | 6.26 | 6.14 | 5.97 | 5.85 | 5.74 | 5.62 | 5.44 | 5.38 |
| 45.0 | 6.44 | 6.26 | 6.14 | 5.97 | 5.85 | 5.74 | 5.62 | 5.50 | 5.38 |
| 90.0 | 6.44 | 6.32 | 6.14 | 6.03 | 5.91 | 5.74 | 5.62 | 5.50 | 5.33 |
| 135.0 | 6.73 | 6.55 | 6.44 | 6.26 | 6.09 | 5.97 | 5.85 | 5.74 | 5.56 |
| 180.0 | 6.96 | 6.85 | 6.73 | 6.61 | 6.44 | 6.26 | 6.14 | 6.03 | 5.79 |
| 225.0 | 6.32 | 6.26 | 6.14 | 5.97 | 5.85 | 5.68 | 5.62 | 5.50 | 5.38 |
| 270.0 | 6.38 | 6.20 | 6.09 | 5.97 | 5.85 | 5.68 | 5.56 | 5.44 | 5.38 |
| 315.0 | 6.14 | 6.03 | 5.97 | 5.85 | 5.68 | 5.56 | 5.44 | 5.38 | 5.38 |
| 360.0 | 6.38 | 6.26 | 6.14 | 5.97 | 5.85 | 5.74 | 5.62 | 5.44 | 5.38 |

Intensity data(cd)

| | |
|---------------|-------------|
| <i>C/γ(°)</i> | 90.0 |
| 0.0 | 5.38 |
| 45.0 | 5.33 |
| 90.0 | 5.33 |
| 135.0 | 5.44 |
| 180.0 | 5.68 |
| 225.0 | 5.33 |
| 270.0 | 5.27 |
| 315.0 | 5.33 |
| 360.0 | 5.38 |