



NATA LIGHTING CO.,LTD
www.nata.cn
Email:info@nata.cn
Tel:+86 0750-377 0000(10 lines) Fax:+86 0750-377 1111
Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

Nata

LumCAT: 2-1674-M
Luminaire: 92.70.131.00
Report No: NT2017071901
Test No: GC2017071901
LampCAT: SEOUL SAWx15
Lamp flux(lm): 2937.0
Number of Lamps: 1
Length(mm): 70
Phm Type: C

Voltage(V): 34.7800
Current(A): 0.6000
Power (W): 20.8680
PF: 0.0000
Ballast type: DC
Width(mm): 70
Height(mm): 0

Photometric Results

Lumens(lm): 2643.16
Efficiency(%): 90.00%
Lumens(lm)/Power(W): 126.66
Central intensity(cd): 16337.920
Maximum intensity(cd): 16337.920
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=16.5
 [C90/270]Total=16.5
Field angle(10%Imax): [C0/180]Total=35.1
 [C90/270]Total=35.1
Maximum s/h(1/2): C0_180=0.28 C90_270=0.28
Maximum s/h(1/4): C0_180=0.29 C90_270=0.29
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 90.00%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.729%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2017/7/19
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.46

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 16337.918 | 0.000 | 0 | .000% | .000% |
| 1.0 | 16215.485 | 15.576 | 15.576 | .530% | .589% |
| 2.0 | 15806.446 | 45.961 | 61.537 | 1.565% | 2.328% |
| 3.0 | 15139.322 | 74.012 | 135.549 | 2.520% | 5.128% |
| 4.0 | 14178.915 | 98.138 | 233.687 | 3.341% | 8.841% |
| 5.0 | 13084.526 | 117.286 | 350.973 | 3.993% | 13.279% |
| 6.0 | 11543.533 | 129.427 | 480.4 | 4.407% | 18.175% |
| 7.0 | 10118.504 | 134.456 | 614.856 | 4.578% | 23.262% |
| 8.0 | 8535.912 | 133.506 | 748.362 | 4.546% | 28.313% |
| 9.0 | 7094.118 | 126.673 | 875.035 | 4.313% | 33.106% |
| 10.0 | 5769.401 | 116.410 | 991.445 | 3.964% | 37.510% |
| 11.0 | 4700.891 | 104.620 | 1096.064 | 3.562% | 41.468% |
| 12.0 | 3885.316 | 93.860 | 1189.924 | 3.196% | 45.019% |
| 13.0 | 3157.254 | 83.578 | 1273.502 | 2.846% | 48.181% |
| 14.0 | 2658.407 | 74.440 | 1347.941 | 2.535% | 50.997% |
| 15.0 | 2281.994 | 67.824 | 1415.766 | 2.309% | 53.563% |
| 16.0 | 1998.032 | 62.714 | 1478.48 | 2.135% | 55.936% |
| 17.0 | 1727.495 | 58.016 | 1536.496 | 1.975% | 58.131% |
| 18.0 | 1555.740 | 54.133 | 1590.63 | 1.843% | 60.179% |
| 19.0 | 1423.269 | 51.829 | 1642.458 | 1.765% | 62.140% |
| 20.0 | 1310.407 | 50.034 | 1692.492 | 1.704% | 64.033% |
| 21.0 | 1218.756 | 48.565 | 1741.057 | 1.654% | 65.870% |
| 22.0 | 1157.129 | 47.744 | 1788.802 | 1.626% | 67.677% |
| 23.0 | 1103.439 | 47.433 | 1836.235 | 1.615% | 69.471% |
| 24.0 | 1055.405 | 47.200 | 1883.435 | 1.607% | 71.257% |
| 25.0 | 1023.043 | 47.259 | 1930.694 | 1.609% | 73.045% |
| 26.0 | 994.911 | 47.634 | 1978.328 | 1.622% | 74.847% |
| 27.0 | 970.522 | 48.085 | 2026.413 | 1.637% | 76.666% |
| 28.0 | 950.675 | 48.641 | 2075.053 | 1.656% | 78.506% |
| 29.0 | 931.705 | 49.248 | 2124.302 | 1.677% | 80.370% |
| 30.0 | 913.118 | 49.810 | 2174.112 | 1.696% | 82.254% |
| 31.0 | 886.092 | 50.069 | 2224.181 | 1.705% | 84.148% |
| 32.0 | 846.774 | 49.645 | 2273.826 | 1.690% | 86.027% |
| 33.0 | 795.567 | 48.384 | 2322.21 | 1.647% | 87.857% |
| 34.0 | 737.140 | 46.384 | 2368.594 | 1.579% | 89.612% |
| 35.0 | 655.778 | 43.259 | 2411.853 | 1.473% | 91.249% |
| 36.0 | 571.083 | 39.063 | 2450.916 | 1.330% | 92.727% |
| 37.0 | 485.845 | 34.471 | 2485.387 | 1.174% | 94.031% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 391.919 | 29.299 | 2514.686 | .998% | 95.139% |
| 39.0 | 295.086 | 23.449 | 2538.135 | .798% | 96.026% |
| 40.0 | 226.126 | 18.178 | 2556.313 | .619% | 96.714% |
| 41.0 | 160.026 | 13.751 | 2570.064 | .468% | 97.234% |
| 42.0 | 102.343 | 9.532 | 2579.596 | .325% | 97.595% |
| 43.0 | 59.172 | 5.983 | 2585.579 | .204% | 97.821% |
| 44.0 | 36.062 | 3.594 | 2589.174 | .122% | 97.957% |
| 45.0 | 24.160 | 2.314 | 2591.488 | .079% | 98.045% |
| 46.0 | 19.422 | 1.704 | 2593.193 | .058% | 98.109% |
| 47.0 | 17.169 | 1.455 | 2594.648 | .050% | 98.165% |
| 48.0 | 15.575 | 1.324 | 2595.972 | .045% | 98.215% |
| 49.0 | 14.456 | 1.233 | 2597.205 | .042% | 98.261% |
| 50.0 | 13.781 | 1.177 | 2598.382 | .040% | 98.306% |
| 51.0 | 13.440 | 1.152 | 2599.534 | .039% | 98.349% |
| 52.0 | 13.162 | 1.141 | 2600.675 | .039% | 98.393% |
| 53.0 | 12.869 | 1.132 | 2601.808 | .039% | 98.435% |
| 54.0 | 12.626 | 1.124 | 2602.931 | .038% | 98.478% |
| 55.0 | 12.424 | 1.118 | 2604.05 | .038% | 98.520% |
| 56.0 | 12.202 | 1.113 | 2605.162 | .038% | 98.562% |
| 57.0 | 12.021 | 1.108 | 2606.27 | .038% | 98.604% |
| 58.0 | 11.847 | 1.104 | 2607.374 | .038% | 98.646% |
| 59.0 | 11.722 | 1.102 | 2608.475 | .038% | 98.688% |
| 60.0 | 11.576 | 1.101 | 2609.576 | .037% | 98.729% |
| 61.0 | 11.436 | 1.098 | 2610.674 | .037% | 98.771% |
| 62.0 | 11.325 | 1.097 | 2611.771 | .037% | 98.812% |
| 63.0 | 11.235 | 1.097 | 2612.868 | .037% | 98.854% |
| 64.0 | 11.151 | 1.098 | 2613.967 | .037% | 98.895% |
| 65.0 | 11.068 | 1.100 | 2615.066 | .037% | 98.937% |
| 66.0 | 10.984 | 1.100 | 2616.166 | .037% | 98.979% |
| 67.0 | 10.915 | 1.101 | 2617.268 | .037% | 99.020% |
| 68.0 | 10.859 | 1.103 | 2618.371 | .038% | 99.062% |
| 69.0 | 10.838 | 1.107 | 2619.477 | .038% | 99.104% |
| 70.0 | 10.769 | 1.110 | 2620.587 | .038% | 99.146% |
| 71.0 | 10.727 | 1.111 | 2621.698 | .038% | 99.188% |
| 72.0 | 10.657 | 1.112 | 2622.81 | .038% | 99.230% |
| 73.0 | 10.643 | 1.114 | 2623.924 | .038% | 99.272% |
| 74.0 | 10.616 | 1.118 | 2625.042 | .038% | 99.314% |
| 75.0 | 10.588 | 1.120 | 2626.162 | .038% | 99.357% |

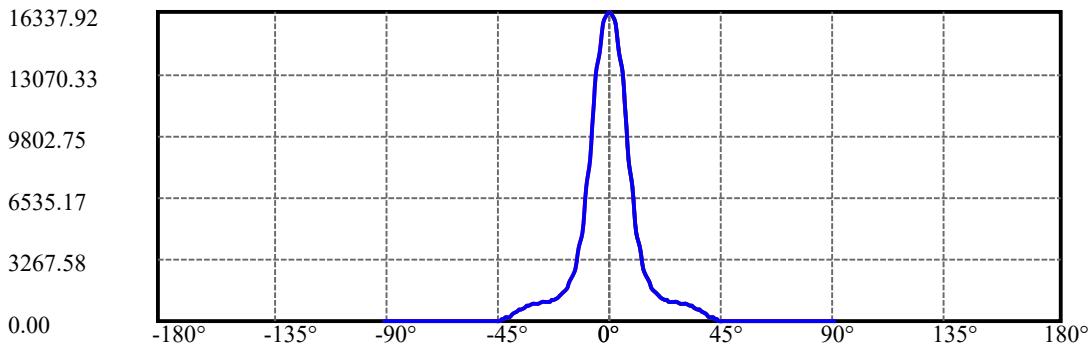
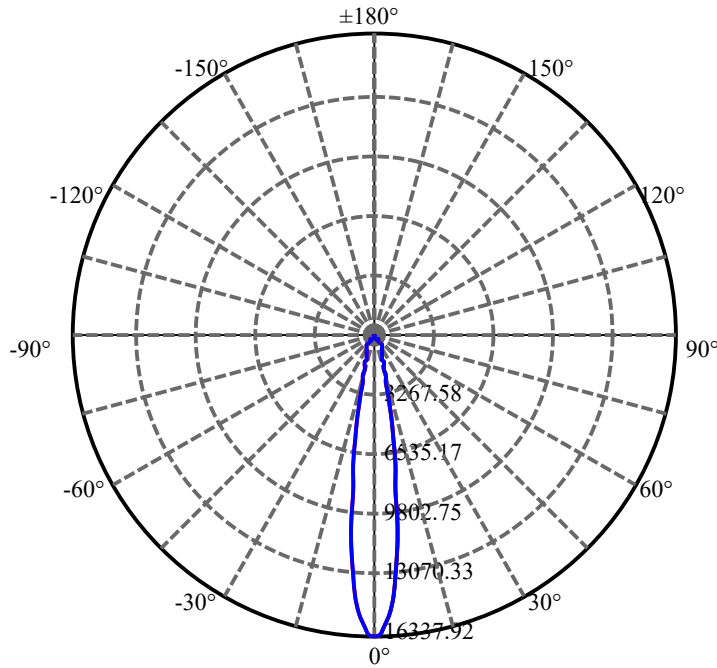
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 10.553 | 1.122 | 2627.284 | .038% | 99.399% |
| 77.0 | 10.539 | 1.125 | 2628.409 | .038% | 99.442% |
| 78.0 | 10.525 | 1.128 | 2629.536 | .038% | 99.484% |
| 79.0 | 10.511 | 1.130 | 2630.666 | .038% | 99.527% |
| 80.0 | 10.511 | 1.133 | 2631.8 | .039% | 99.570% |
| 81.0 | 10.476 | 1.135 | 2632.935 | .039% | 99.613% |
| 82.0 | 10.476 | 1.136 | 2634.071 | .039% | 99.656% |
| 83.0 | 10.483 | 1.139 | 2635.21 | .039% | 99.699% |
| 84.0 | 10.442 | 1.140 | 2636.35 | .039% | 99.742% |
| 85.0 | 10.435 | 1.139 | 2637.49 | .039% | 99.785% |
| 86.0 | 10.414 | 1.140 | 2638.629 | .039% | 99.828% |
| 87.0 | 10.372 | 1.138 | 2639.767 | .039% | 99.872% |
| 88.0 | 10.330 | 1.134 | 2640.901 | .039% | 99.914% |
| 89.0 | 10.316 | 1.132 | 2642.033 | .039% | 99.957% |
| 90.0 | 10.296 | 1.130 | 2643.163 | .038% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 2174.11 | 74.02% | 82.25% |
| 0-40 | 2556.31 | 87.04% | 96.71% |
| 0-60 | 2609.58 | 88.85% | 98.73% |
| 0-90 | 2642.03 | 89.96% | 99.96% |
| 0-120 | 2642.03 | 89.96% | 99.96% |
| 0-180 | 2643.16 | 90.00% | 100.00% |
| 60-90 | 33.56 | 1.14% | 1.27% |
| 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% |
| 0-28.80 | 2114.53 | 72.00% | 80.00% |

ZONAL LUMEN SUMMARY

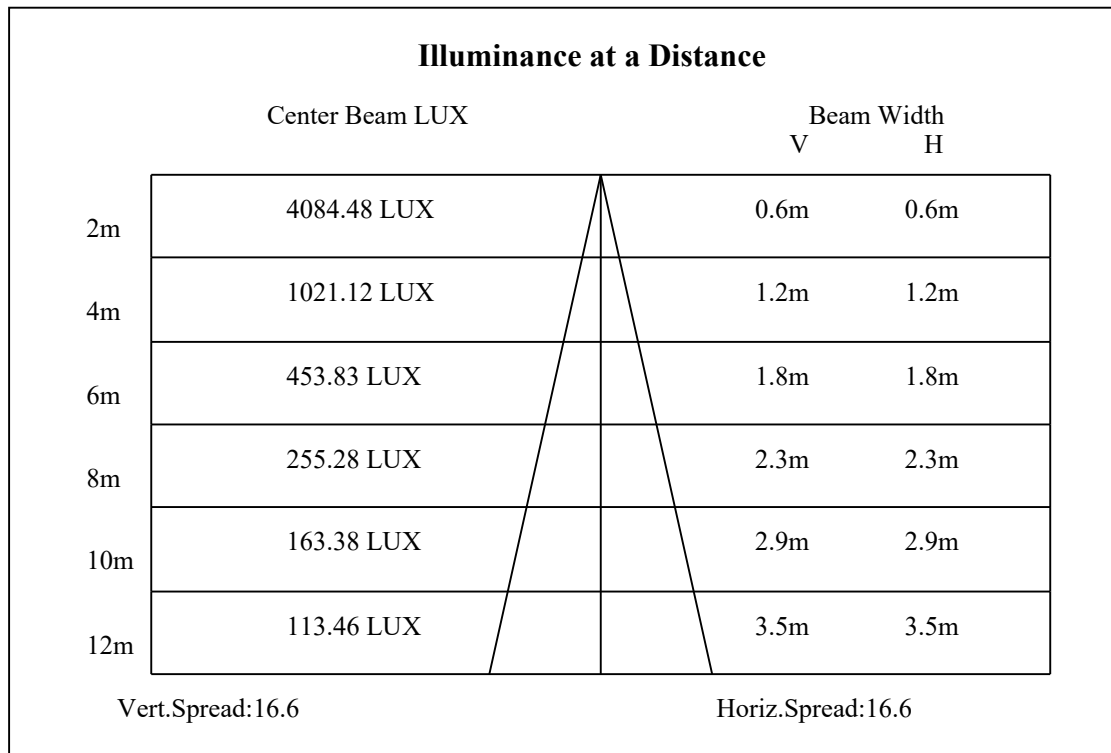
| | |
|---------|--------|
| 0-10 | 991.44 |
| 10-20 | 701.05 |
| 20-30 | 481.62 |
| 30-40 | 382.20 |
| 40-50 | 42.07 |
| 50-60 | 11.19 |
| 60-70 | 11.01 |
| 70-80 | 11.21 |
| 80-90 | 10.23 |
| 90-100 | 0.00 |
| 100-110 | 0.00 |
| 110-120 | 0.00 |
| 120-130 | 0.00 |
| 130-140 | 0.00 |
| 140-150 | 0.00 |
| 150-160 | 0.00 |
| 160-170 | 0.00 |
| 170-180 | 0.00 |

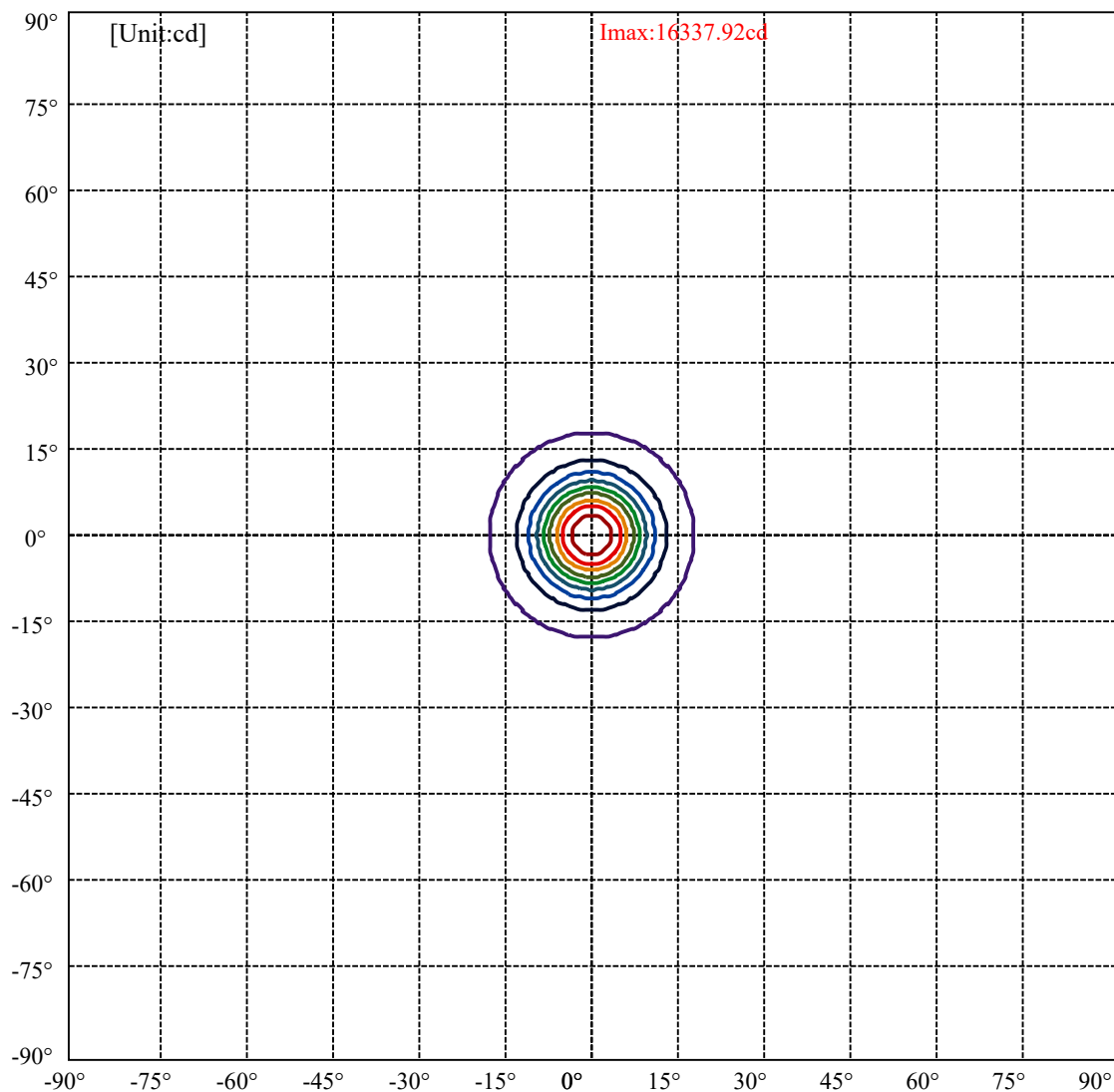


C0(Max): —————
C0/C180: —————
C90/C270: —————

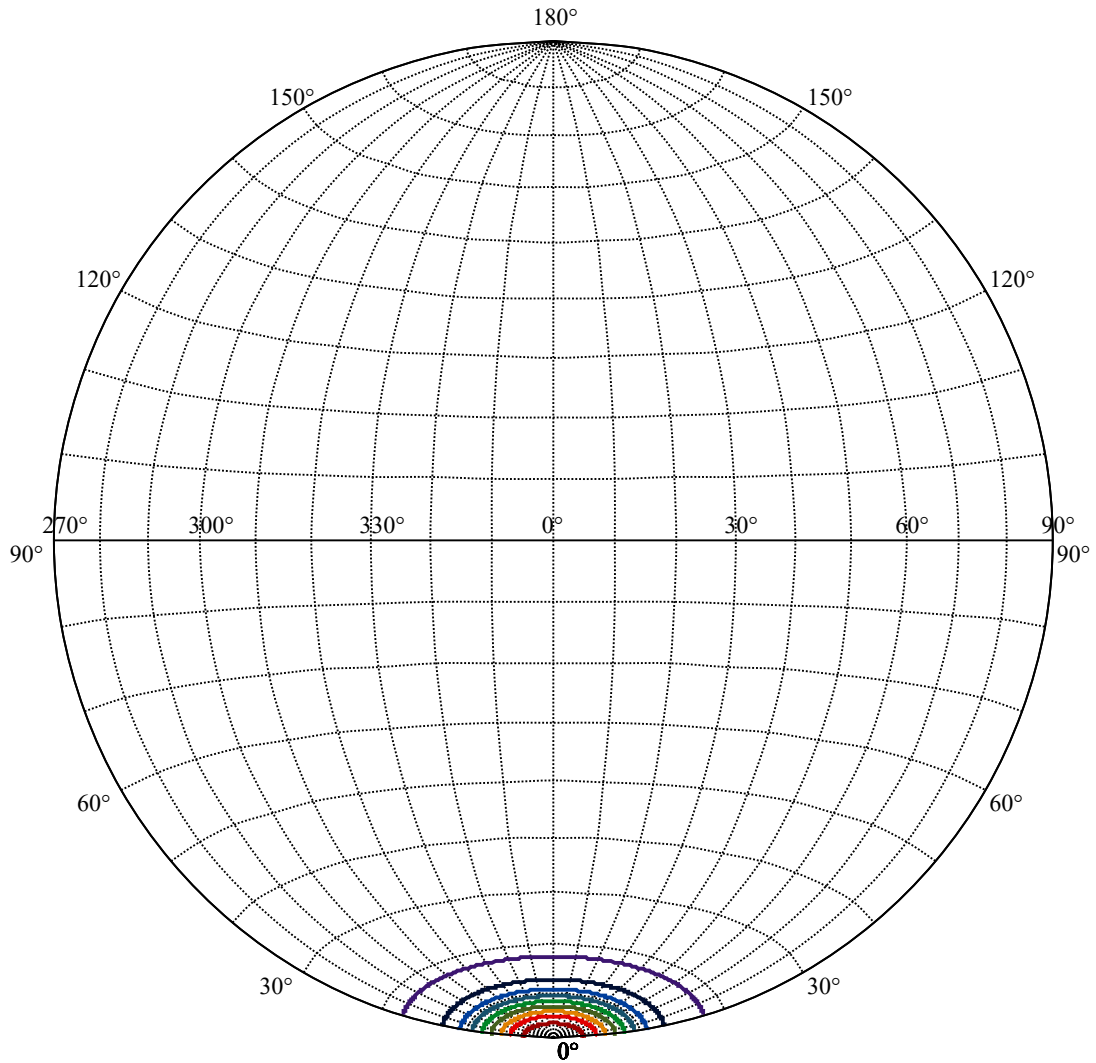
Field angle(10%Imax):C0/180Left:17.5 Right:17.5
:C90/270Left:17.5 Right:17.5

Beam Angle(50%Imax):C0/180Left:8.3 Right:8.3
:C90/270Left:8.3 Right:8.3





| | |
|-------------------|---|
| (10%Imax) 1633.79 | — |
| (20%Imax) 3267.58 | — |
| (30%Imax) 4901.38 | — |
| (40%Imax) 6535.17 | — |
| (50%Imax) 8168.96 | — |
| (60%Imax) 9802.75 | — |
| (70%Imax) 11436.5 | — |
| (80%Imax) 13070.3 | — |
| (90%Imax) 14704.1 | — |



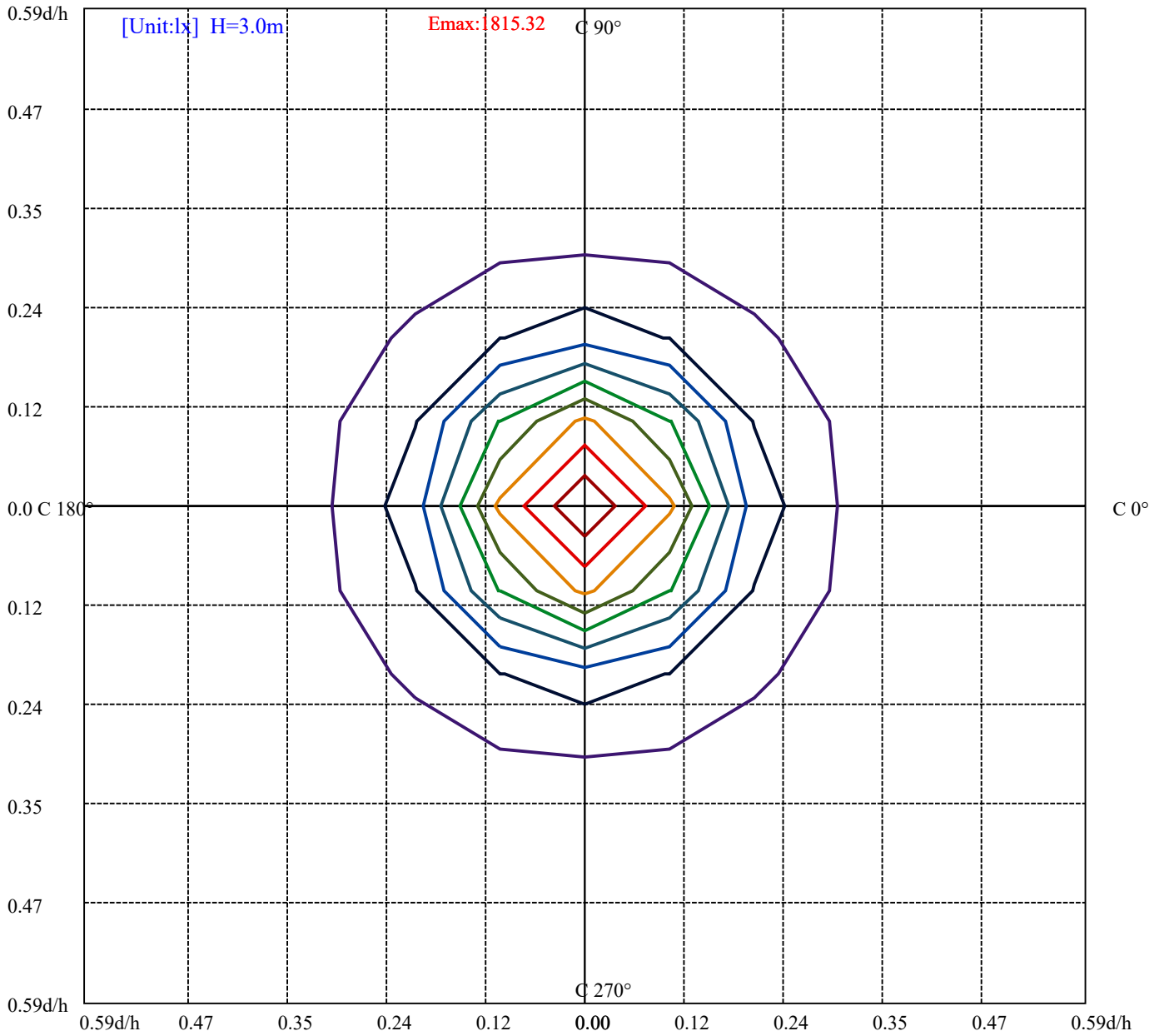
House

[Unit:cd]

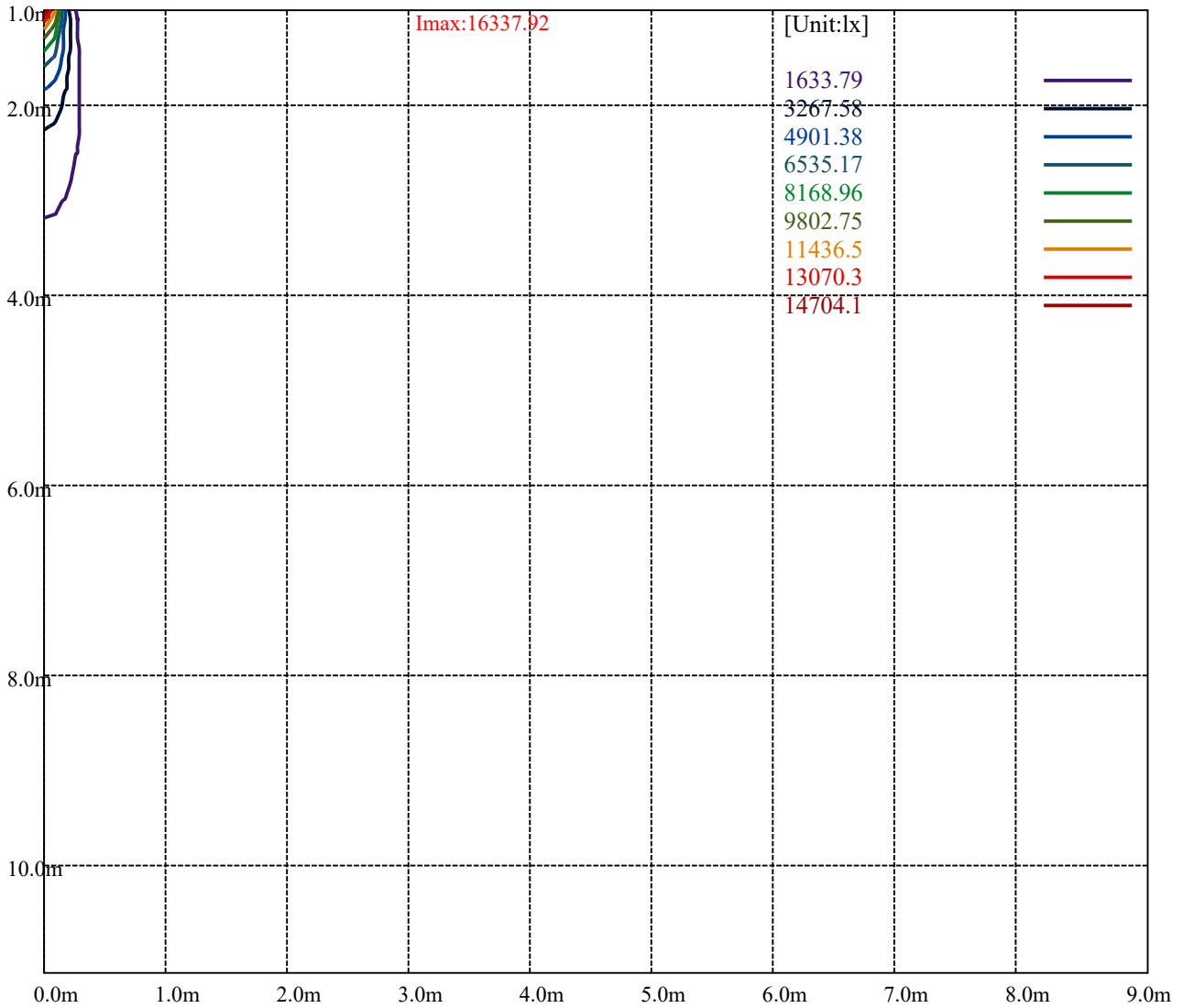
Road

Imax:16337.92

| | | |
|-----------|---------|---|
| (10%Imax) | 1633.79 | — |
| (20%Imax) | 3267.58 | — |
| (30%Imax) | 4901.38 | — |
| (40%Imax) | 6535.17 | — |
| (50%Imax) | 8168.96 | — |
| (60%Imax) | 9802.75 | — |
| (70%Imax) | 11436.5 | — |
| (80%Imax) | 13070.3 | — |
| (90%Imax) | 14704.1 | — |



- (10%Emax) 181.5322
- (20%Emax) 363.0645
- (30%Emax) 544.5967
- (40%Emax) 726.1289
- (50%Emax) 907.6611
- (60%Emax) 1089.193
- (70%Emax) 1270.722
- (80%Emax) 1452.255
- (90%Emax) 1633.789



Luminance Table

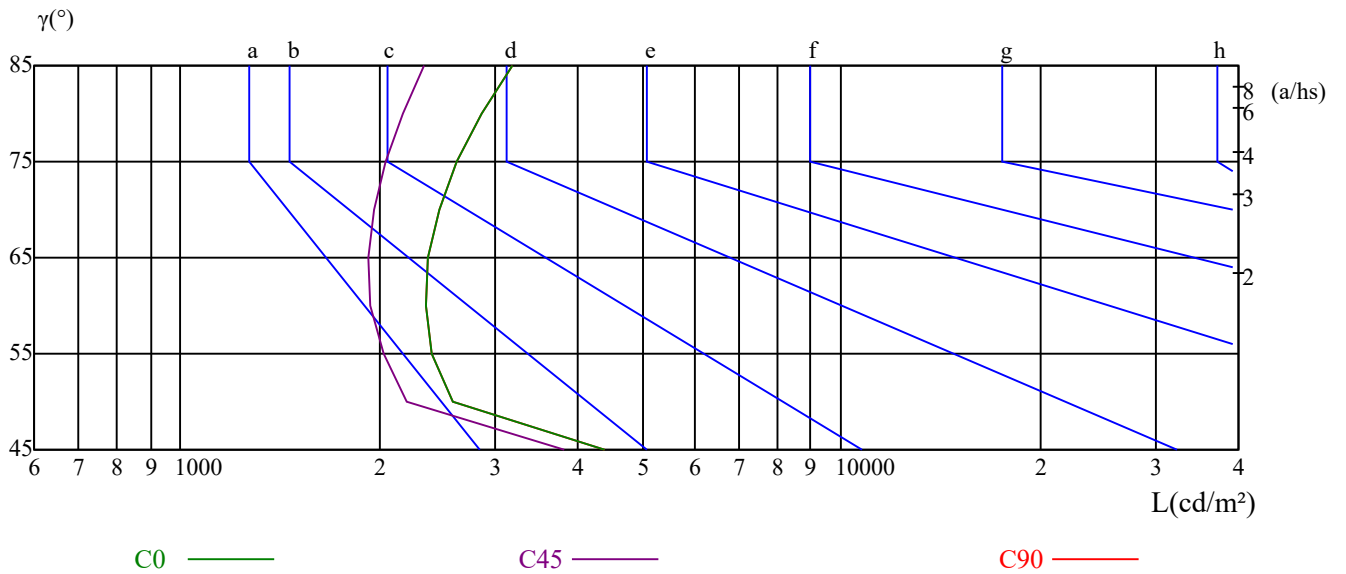
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|------|------|------|------|------|------|------|------|------|
| C0 | 4397 | 2577 | 2407 | 2345 | 2369 | 2463 | 2620 | 2858 | 3175 |
| C45 | 3814 | 2202 | 2025 | 1941 | 1925 | 1962 | 2041 | 2168 | 2334 |
| C90 | 4397 | 2577 | 2407 | 2345 | 2369 | 2463 | 2620 | 2858 | 3175 |

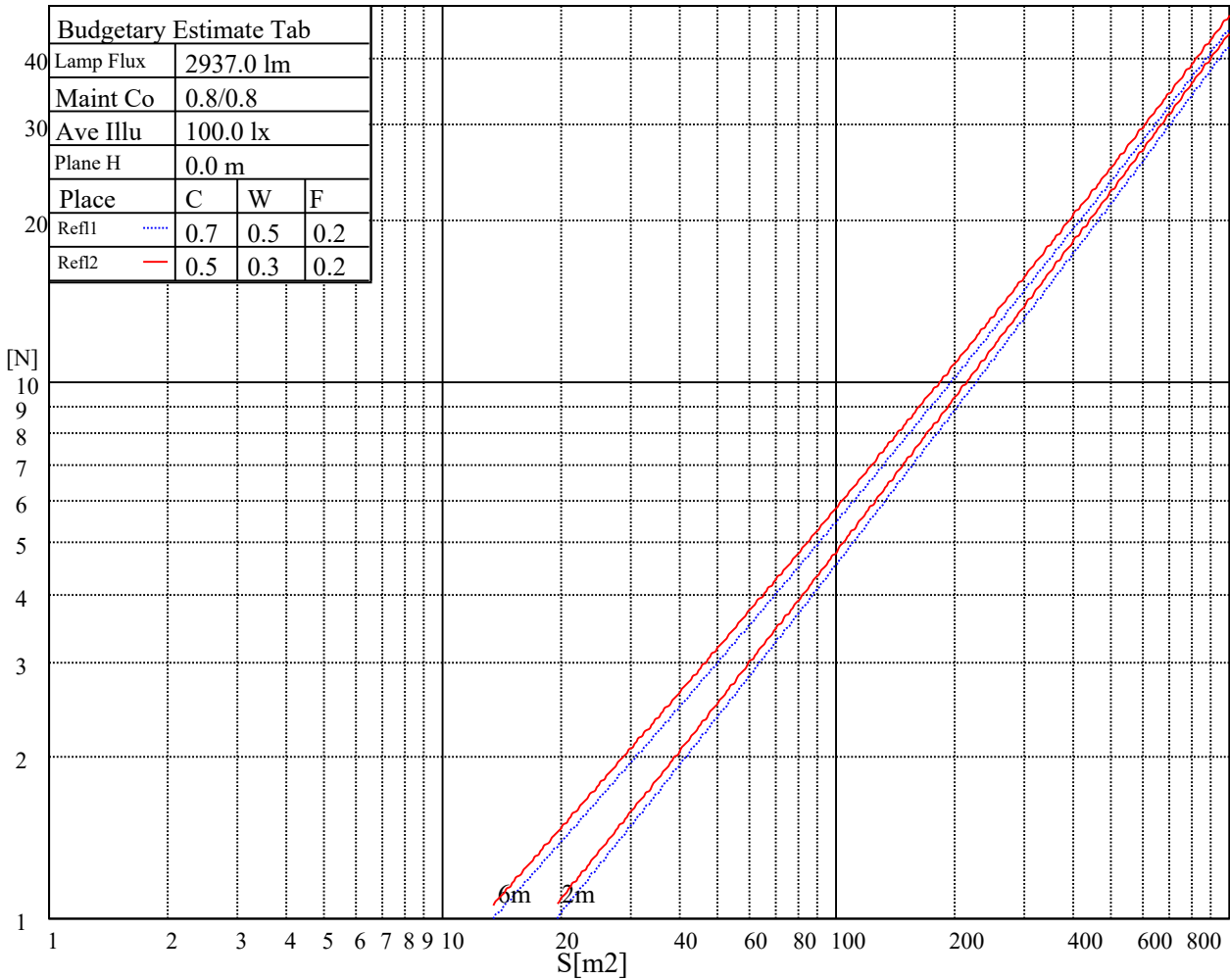
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 5345 | 5345 | 5345 | 8349 | 8349 | 8349 | 24434 | 24434 | 24434 |

Glare Table

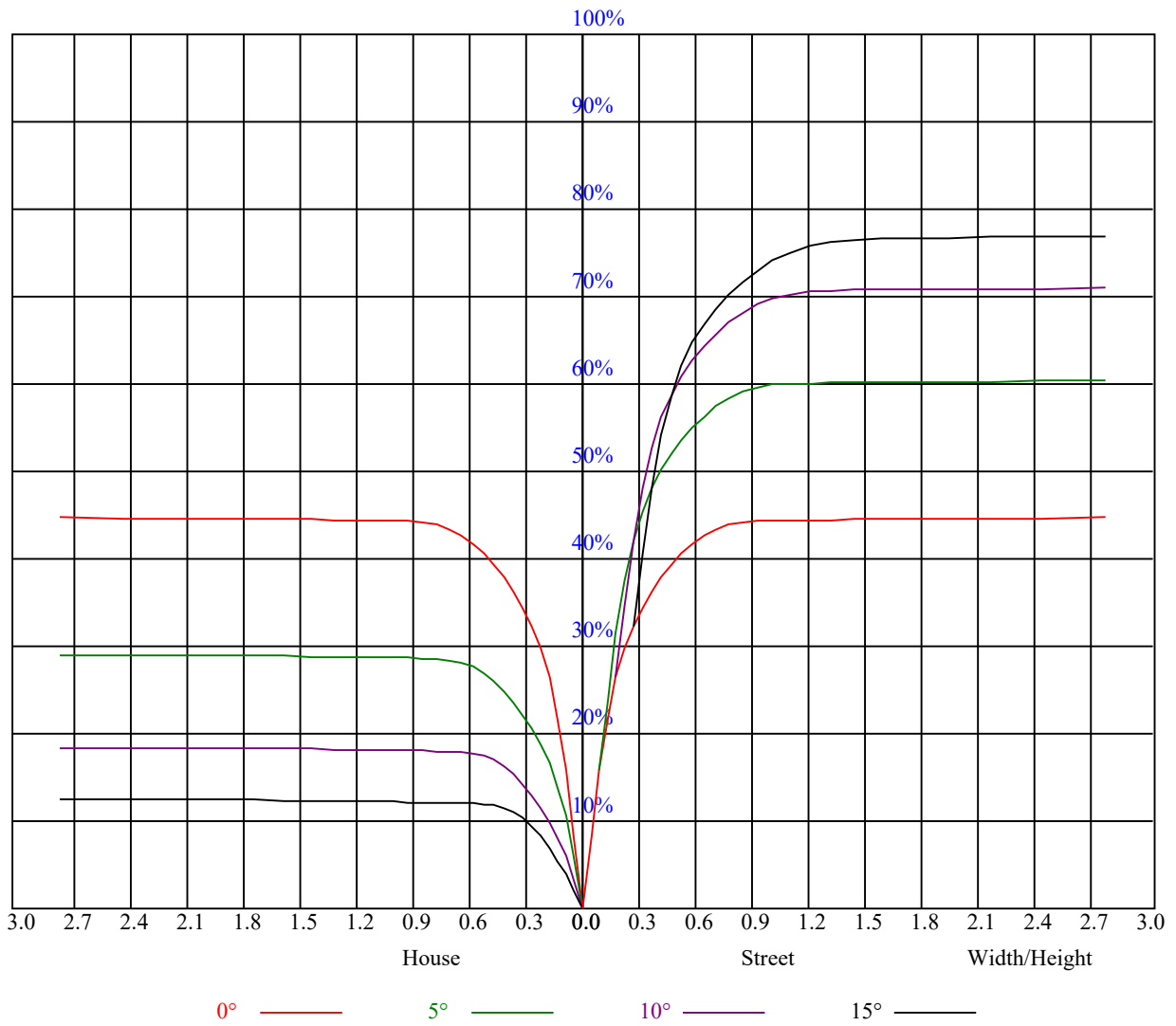
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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





| 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 | 1.07 | 1.07 | 1.07 | 1.05 | 1.05 | 1.05 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.90 |
| 1 | 1.01 | 0.99 | 0.97 | 0.99 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 |
| 2 | 0.95 | 0.92 | 0.90 | 0.94 | 0.91 | 0.89 | 0.91 | 0.89 | 0.87 | 0.88 | 0.87 | 0.85 | 0.86 | 0.85 | 0.83 | 0.82 |
| 3 | 0.91 | 0.87 | 0.84 | 0.90 | 0.86 | 0.84 | 0.87 | 0.84 | 0.82 | 0.85 | 0.83 | 0.81 | 0.83 | 0.81 | 0.80 | 0.78 |
| 4 | 0.87 | 0.83 | 0.80 | 0.86 | 0.82 | 0.79 | 0.84 | 0.81 | 0.78 | 0.82 | 0.79 | 0.77 | 0.81 | 0.78 | 0.76 | 0.75 |
| 5 | 0.83 | 0.79 | 0.76 | 0.82 | 0.78 | 0.75 | 0.81 | 0.77 | 0.75 | 0.79 | 0.76 | 0.74 | 0.78 | 0.75 | 0.73 | 0.72 |
| 6 | 0.80 | 0.75 | 0.72 | 0.79 | 0.75 | 0.72 | 0.78 | 0.74 | 0.72 | 0.77 | 0.73 | 0.71 | 0.75 | 0.73 | 0.71 | 0.70 |
| 7 | 0.77 | 0.72 | 0.69 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.69 | 0.74 | 0.71 | 0.69 | 0.73 | 0.70 | 0.68 | 0.67 |
| 8 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.67 | 0.73 | 0.69 | 0.66 | 0.72 | 0.69 | 0.66 | 0.71 | 0.68 | 0.66 | 0.65 |
| 9 | 0.71 | 0.67 | 0.65 | 0.71 | 0.67 | 0.64 | 0.70 | 0.67 | 0.64 | 0.70 | 0.66 | 0.64 | 0.69 | 0.66 | 0.64 | 0.63 |
| 10 | 0.69 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.68 | 0.65 | 0.62 | 0.68 | 0.64 | 0.62 | 0.67 | 0.64 | 0.62 | 0.61 |



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 | 16138.96 | 16450.61 | 16561.92 | 16489.57 | 16088.88 | 15526.80 | 14664.20 | 13478.82 | 12176.57 |
| 45.0 | 16511.83 | 16450.61 | 16083.31 | 15510.10 | 14647.50 | 13629.08 | 12137.61 | 10395.72 | 8809.65 |
| 90.0 | 16328.18 | 15960.88 | 15204.02 | 14146.64 | 12944.56 | 11094.15 | 9470.79 | 7872.48 | 6413.85 |
| 135.0 | 16372.70 | 15955.31 | 15070.45 | 14057.59 | 12760.91 | 11063.54 | 9199.21 | 7585.31 | 5982.55 |
| 180.0 | 16138.96 | 15593.58 | 14769.93 | 13328.56 | 11082.46 | 10271.62 | 8202.49 | 6652.04 | 5340.33 |
| 225.0 | 16511.83 | 16361.57 | 16016.53 | 15337.58 | 14458.29 | 13194.99 | 10931.64 | 9753.50 | 8179.67 |
| 270.0 | 16328.18 | 16456.18 | 16289.22 | 16038.79 | 15621.40 | 14831.15 | 13606.82 | 12248.92 | 10596.06 |
| 315.0 | 16372.70 | 16495.13 | 16456.18 | 16205.75 | 15827.32 | 15064.89 | 14135.51 | 12961.26 | 10788.62 |
| 360.0 | 16138.96 | 16450.61 | 16561.92 | 16489.57 | 16088.88 | 15526.80 | 14664.20 | 13478.82 | 12176.57 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 10495.89 | 8731.74 | 7229.14 | 5904.63 | 4591.26 | 3806.57 | 3194.40 | 2832.67 | 2287.28 |
| 45.0 | 7128.97 | 5665.33 | 4630.21 | 3823.26 | 3083.10 | 2849.36 | 2305.09 | 2000.68 | 1758.03 |
| 90.0 | 5058.73 | 4033.63 | 3349.67 | 2770.34 | 2388.57 | 2066.34 | 1815.91 | 1636.16 | 1475.32 |
| 135.0 | 4691.43 | 3806.57 | 3060.84 | 2860.49 | 2164.85 | 1859.88 | 1656.75 | 1496.47 | 1352.33 |
| 180.0 | 4191.68 | 3343.55 | 2788.70 | 2329.02 | 2021.27 | 1748.02 | 1538.77 | 1404.65 | 1293.34 |
| 225.0 | 6512.91 | 5133.30 | 4186.11 | 3288.45 | 2816.53 | 2364.64 | 2008.47 | 1807.01 | 1591.64 |
| 270.0 | 8865.30 | 7379.40 | 5893.50 | 4824.99 | 3873.35 | 3161.01 | 2849.36 | 2321.23 | 1968.40 |
| 315.0 | 9808.04 | 8061.69 | 6468.94 | 5281.34 | 4319.12 | 3411.44 | 2887.21 | 2485.40 | 2093.61 |
| 360.0 | 10495.89 | 8731.74 | 7229.14 | 5904.63 | 4591.26 | 3806.57 | 3194.40 | 2832.67 | 2287.28 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2023.49 | 1802.56 | 1578.28 | 1443.05 | 1331.74 | 1236.02 | 1158.67 | 1105.24 | 1058.49 |
| 45.0 | 1591.08 | 1463.08 | 1335.08 | 1252.72 | 1185.38 | 1123.61 | 1075.75 | 1041.80 | 1009.52 |
| 90.0 | 1349.55 | 1263.85 | 1193.73 | 1108.08 | 1076.41 | 1040.57 | 1004.46 | 980.08 | 959.54 |
| 135.0 | 1264.40 | 1197.07 | 1130.84 | 1087.43 | 1051.26 | 1017.87 | 989.49 | 968.89 | 948.86 |
| 180.0 | 1204.30 | 1106.19 | 1095.39 | 1054.99 | 1022.71 | 998.50 | 976.18 | 953.65 | 938.12 |
| 225.0 | 1418.56 | 1330.07 | 1245.48 | 1148.65 | 1105.24 | 1070.24 | 1032.84 | 1003.95 | 982.14 |
| 270.0 | 1750.80 | 1577.17 | 1411.88 | 1308.93 | 1226.56 | 1154.77 | 1098.56 | 1060.72 | 1027.33 |
| 315.0 | 1843.74 | 1646.17 | 1492.58 | 1346.21 | 1257.73 | 1185.94 | 1107.30 | 1070.01 | 1035.29 |
| 360.0 | 2023.49 | 1802.56 | 1578.28 | 1443.05 | 1331.74 | 1236.02 | 1158.67 | 1105.24 | 1058.49 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 1022.32 | 996.16 | 970.56 | 952.76 | 935.50 | 918.25 | 903.23 | 888.20 | 853.70 |
| 45.0 | 983.92 | 964.44 | 943.85 | 928.83 | 911.02 | 892.65 | 853.14 | 799.16 | 699.54 |
| 90.0 | 938.56 | 923.20 | 906.90 | 888.70 | 861.93 | 797.65 | 713.56 | 633.20 | 551.51 |
| 135.0 | 931.61 | 916.03 | 897.66 | 879.30 | 836.44 | 773.00 | 690.08 | 609.94 | 486.95 |
| 180.0 | 924.26 | 905.06 | 888.81 | 857.70 | 788.92 | 706.39 | 625.86 | 519.95 | 418.00 |
| 225.0 | 963.00 | 946.91 | 932.61 | 917.19 | 902.72 | 867.22 | 794.87 | 725.36 | 638.38 |
| 270.0 | 997.28 | 977.80 | 956.65 | 942.18 | 928.27 | 911.57 | 893.21 | 858.70 | 781.35 |
| 315.0 | 1003.23 | 975.80 | 956.60 | 938.29 | 923.93 | 907.45 | 890.59 | 862.60 | 816.80 |
| 360.0 | 1022.32 | 996.16 | 970.56 | 952.76 | 935.50 | 918.25 | 903.23 | 888.20 | 853.70 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 801.38 | 726.81 | 624.41 | 530.92 | 440.76 | 336.69 | 281.60 | 157.55 | 83.59 |
| 45.0 | 617.18 | 545.39 | 411.27 | 327.23 | 286.05 | 158.05 | 85.37 | 42.24 | 26.55 |
| 90.0 | 443.15 | 357.17 | 276.31 | 179.37 | 105.68 | 53.26 | 28.33 | 23.99 | 20.54 |
| 135.0 | 392.90 | 303.30 | 232.96 | 112.19 | 69.62 | 38.84 | 24.99 | 21.93 | 18.92 |
| 180.0 | 324.45 | 228.95 | 153.15 | 79.30 | 40.96 | 26.77 | 23.71 | 19.76 | 17.47 |
| 225.0 | 537.82 | 437.76 | 349.05 | 248.65 | 170.29 | 105.68 | 51.98 | 27.88 | 24.60 |
| 270.0 | 702.32 | 623.30 | 509.77 | 422.40 | 331.13 | 286.61 | 143.47 | 81.47 | 41.02 |
| 315.0 | 749.46 | 664.09 | 578.44 | 460.63 | 364.52 | 274.31 | 179.31 | 98.56 | 55.82 |
| 360.0 | 801.38 | 726.81 | 624.41 | 530.92 | 440.76 | 336.69 | 281.60 | 157.55 | 83.59 |

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 | 43.74 | 27.10 | 22.48 | 18.53 | 16.03 | 14.53 | 14.08 | 13.69 | 13.30 |
| 45.0 | 22.87 | 19.03 | 16.97 | 15.75 | 14.02 | 13.69 | 13.36 | 13.13 | 12.86 |
| 90.0 | 17.47 | 15.58 | 14.53 | 14.19 | 13.91 | 13.52 | 13.19 | 12.91 | 12.69 |
| 135.0 | 16.92 | 15.03 | 14.64 | 14.25 | 13.97 | 13.69 | 13.41 | 13.13 | 12.80 |
| 180.0 | 16.36 | 15.03 | 14.53 | 14.19 | 13.80 | 13.58 | 13.30 | 13.08 | 12.80 |
| 225.0 | 20.70 | 16.97 | 15.47 | 14.36 | 13.86 | 13.52 | 13.25 | 12.97 | 12.74 |
| 270.0 | 26.88 | 22.87 | 18.87 | 16.81 | 14.36 | 13.80 | 13.47 | 13.19 | 12.86 |
| 315.0 | 28.33 | 23.76 | 19.87 | 16.53 | 15.69 | 13.91 | 13.47 | 13.19 | 12.91 |
| 360.0 | 43.74 | 27.10 | 22.48 | 18.53 | 16.03 | 14.53 | 14.08 | 13.69 | 13.30 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 13.02 | 12.86 | 12.47 | 12.24 | 12.08 | 11.91 | 11.74 | 11.63 | 11.41 |
| 45.0 | 12.69 | 12.47 | 12.19 | 12.08 | 11.97 | 11.80 | 11.58 | 11.46 | 11.41 |
| 90.0 | 12.47 | 12.30 | 12.13 | 11.91 | 11.74 | 11.69 | 11.58 | 11.41 | 11.30 |
| 135.0 | 12.63 | 12.47 | 12.24 | 12.08 | 11.91 | 11.85 | 11.69 | 11.58 | 11.46 |
| 180.0 | 12.52 | 12.35 | 12.19 | 12.08 | 11.85 | 11.69 | 11.63 | 11.46 | 11.41 |
| 225.0 | 12.41 | 12.13 | 11.97 | 11.85 | 11.63 | 11.52 | 11.46 | 11.30 | 11.19 |
| 270.0 | 12.58 | 12.35 | 12.19 | 11.97 | 11.80 | 11.69 | 11.46 | 11.30 | 11.19 |
| 315.0 | 12.69 | 12.47 | 12.24 | 11.97 | 11.80 | 11.63 | 11.46 | 11.35 | 11.24 |
| 360.0 | 13.02 | 12.86 | 12.47 | 12.24 | 12.08 | 11.91 | 11.74 | 11.63 | 11.41 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 11.30 | 11.24 | 11.13 | 11.02 | 10.96 | 10.96 | 10.85 | 10.85 | 10.74 |
| 45.0 | 11.30 | 11.24 | 11.07 | 11.02 | 10.91 | 10.91 | 10.91 | 10.85 | 10.69 |
| 90.0 | 11.19 | 11.13 | 11.13 | 11.02 | 10.91 | 10.80 | 10.85 | 10.80 | 10.74 |
| 135.0 | 11.35 | 11.24 | 11.19 | 11.07 | 11.02 | 10.96 | 10.85 | 10.80 | 10.80 |
| 180.0 | 11.30 | 11.13 | 11.02 | 11.02 | 10.91 | 10.91 | 10.91 | 10.74 | 10.80 |
| 225.0 | 11.13 | 11.07 | 10.96 | 10.91 | 10.80 | 10.85 | 10.80 | 10.74 | 10.74 |
| 270.0 | 11.13 | 11.07 | 11.02 | 10.91 | 10.85 | 10.74 | 10.74 | 10.69 | 10.69 |
| 315.0 | 11.19 | 11.07 | 11.02 | 10.91 | 10.85 | 10.74 | 10.80 | 10.69 | 10.63 |
| 360.0 | 11.30 | 11.24 | 11.13 | 11.02 | 10.96 | 10.96 | 10.85 | 10.85 | 10.74 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 10.69 | 10.63 | 10.69 | 10.69 | 10.63 | 10.63 | 10.52 | 10.52 | 10.46 |
| 45.0 | 10.69 | 10.63 | 10.63 | 10.63 | 10.57 | 10.52 | 10.52 | 10.52 | 10.52 |
| 90.0 | 10.63 | 10.63 | 10.52 | 10.52 | 10.57 | 10.52 | 10.52 | 10.41 | 10.41 |
| 135.0 | 10.74 | 10.69 | 10.69 | 10.57 | 10.57 | 10.52 | 10.57 | 10.52 | 10.52 |
| 180.0 | 10.69 | 10.74 | 10.69 | 10.69 | 10.57 | 10.57 | 10.52 | 10.52 | 10.57 |
| 225.0 | 10.63 | 10.63 | 10.57 | 10.57 | 10.57 | 10.57 | 10.57 | 10.63 | 10.63 |
| 270.0 | 10.57 | 10.57 | 10.57 | 10.52 | 10.46 | 10.52 | 10.52 | 10.46 | 10.52 |
| 315.0 | 10.63 | 10.63 | 10.57 | 10.52 | 10.46 | 10.46 | 10.46 | 10.52 | 10.46 |
| 360.0 | 10.69 | 10.63 | 10.69 | 10.69 | 10.63 | 10.63 | 10.52 | 10.52 | 10.46 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 10.52 | 10.52 | 10.46 | 10.52 | 10.52 | 10.52 | 10.46 | 10.35 | 10.41 |
| 45.0 | 10.41 | 10.41 | 10.46 | 10.46 | 10.41 | 10.35 | 10.30 | 10.30 | 10.35 |
| 90.0 | 10.41 | 10.41 | 10.41 | 10.35 | 10.35 | 10.30 | 10.30 | 10.30 | 10.24 |
| 135.0 | 10.46 | 10.41 | 10.46 | 10.41 | 10.41 | 10.41 | 10.35 | 10.30 | 10.30 |
| 180.0 | 10.52 | 10.52 | 10.52 | 10.46 | 10.41 | 10.41 | 10.35 | 10.41 | 10.35 |
| 225.0 | 10.57 | 10.52 | 10.52 | 10.41 | 10.46 | 10.41 | 10.35 | 10.35 | 10.24 |
| 270.0 | 10.46 | 10.63 | 10.57 | 10.52 | 10.46 | 10.46 | 10.41 | 10.24 | 10.24 |
| 315.0 | 10.46 | 10.41 | 10.46 | 10.41 | 10.46 | 10.46 | 10.46 | 10.41 | 10.41 |
| 360.0 | 10.52 | 10.52 | 10.46 | 10.52 | 10.52 | 10.52 | 10.46 | 10.35 | 10.41 |

Intensity data(cd)

| | |
|-----------------|-------|
| C/ γ (°) | 90.0 |
| 0.0 | 10.35 |
| 45.0 | 10.30 |
| 90.0 | 10.30 |
| 135.0 | 10.24 |
| 180.0 | 10.35 |
| 225.0 | 10.30 |
| 270.0 | 10.24 |
| 315.0 | 10.30 |
| 360.0 | 10.35 |