



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

NATA

Client:

LumCAT:2-1120-A3

Luminaire: 92.76.365.00

Report No: NT2017122301

Voltage(V): 220.3000

Test No: GC2017122301

Current(A): 0.1490

LampCAT: PrevaLED Core G7 L15-H1

Power (W): 31.8800

Lamp flux(lm): 3636.0

PF: 0.9670

Number of Lamps: 1

Ballast type: DC

Length(mm): 70

Width(mm): 70

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 3301.24, Efficiency(%): 90.79% , Luminous Efficacy(lm/W): 103.55

Central intensity(cd): 17732.480, Maximum intensity(cd): 17732.480

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=17.8

[C90/270]Total=17.8

Field angle(10%Imax): [C0/180]Total=39.4

[C90/270]Total=39.4

Maximum s/h(1/2): C0_180=0.30 C90_270=0.30

Maximum s/h(1/4): C0_180=0.30 C90_270=0.30

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 90.91%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 99.590%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 17732.480 | 4.242 | 4.242 | .117% | .129% |
| 1.0 | 17650.695 | 33.781 | 38.023 | .929% | 1.152% |
| 2.0 | 17389.096 | 66.550 | 104.573 | 1.830% | 3.168% |
| 3.0 | 16904.182 | 97.017 | 201.59 | 2.668% | 6.106% |
| 4.0 | 16206.391 | 123.972 | 325.561 | 3.410% | 9.862% |
| 5.0 | 15077.050 | 144.100 | 469.661 | 3.963% | 14.227% |
| 6.0 | 13702.931 | 157.072 | 626.734 | 4.320% | 18.985% |
| 7.0 | 11780.533 | 157.439 | 784.172 | 4.330% | 23.754% |
| 8.0 | 10017.415 | 152.884 | 937.057 | 4.205% | 28.385% |
| 9.0 | 8698.806 | 149.226 | 1086.282 | 4.104% | 32.905% |
| 10.0 | 7208.098 | 137.260 | 1223.542 | 3.775% | 37.063% |
| 11.0 | 5890.591 | 123.256 | 1346.798 | 3.390% | 40.797% |
| 12.0 | 4728.130 | 107.800 | 1454.599 | 2.965% | 44.062% |
| 13.0 | 3930.514 | 96.959 | 1551.558 | 2.667% | 46.999% |
| 14.0 | 3297.340 | 87.476 | 1639.034 | 2.406% | 49.649% |
| 15.0 | 2841.022 | 80.635 | 1719.669 | 2.218% | 52.092% |
| 16.0 | 2474.609 | 74.799 | 1794.468 | 2.057% | 54.357% |
| 17.0 | 2264.170 | 72.593 | 1867.061 | 1.997% | 56.556% |
| 18.0 | 2095.888 | 71.024 | 1938.085 | 1.953% | 58.708% |
| 19.0 | 1899.463 | 67.815 | 2005.9 | 1.865% | 60.762% |
| 20.0 | 1730.369 | 64.900 | 2070.799 | 1.785% | 62.728% |
| 21.0 | 1647.597 | 64.749 | 2135.548 | 1.781% | 64.689% |
| 22.0 | 1586.345 | 65.167 | 2200.715 | 1.792% | 66.663% |
| 23.0 | 1537.041 | 65.859 | 2266.574 | 1.811% | 68.658% |
| 24.0 | 1492.204 | 66.557 | 2333.131 | 1.830% | 70.674% |
| 25.0 | 1457.169 | 67.532 | 2400.663 | 1.857% | 72.720% |
| 26.0 | 1422.889 | 68.401 | 2469.064 | 1.881% | 74.792% |
| 27.0 | 1388.840 | 69.143 | 2538.207 | 1.902% | 76.886% |
| 28.0 | 1353.516 | 69.683 | 2607.89 | 1.916% | 78.997% |
| 29.0 | 1313.087 | 69.810 | 2677.7 | 1.920% | 81.112% |
| 30.0 | 1271.788 | 69.733 | 2747.433 | 1.918% | 83.224% |
| 31.0 | 1231.243 | 69.540 | 2816.973 | 1.913% | 85.331% |
| 32.0 | 1179.329 | 68.532 | 2885.505 | 1.885% | 87.407% |
| 33.0 | 1074.005 | 64.146 | 2949.651 | 1.764% | 89.350% |
| 34.0 | 968.710 | 59.403 | 3009.054 | 1.634% | 91.149% |
| 35.0 | 888.572 | 55.890 | 3064.944 | 1.537% | 92.842% |
| 36.0 | 779.988 | 50.276 | 3115.219 | 1.383% | 94.365% |
| 37.0 | 660.499 | 43.590 | 3158.809 | 1.199% | 95.686% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 538.656 | 36.367 | 3195.176 | 1.000% | 96.787% |
| 39.0 | 419.330 | 28.939 | 3224.115 | .796% | 97.664% |
| 40.0 | 313.379 | 22.090 | 3246.205 | .608% | 98.333% |
| 41.0 | 227.951 | 16.400 | 3262.604 | .451% | 98.830% |
| 42.0 | 171.321 | 12.571 | 3275.175 | .346% | 99.210% |
| 43.0 | 94.251 | 7.049 | 3282.224 | .194% | 99.424% |
| 44.0 | 26.421 | 2.013 | 3284.237 | .055% | 99.485% |
| 45.0 | 15.986 | 1.240 | 3285.477 | .034% | 99.522% |
| 46.0 | 12.471 | 0.984 | 3286.46 | .027% | 99.552% |
| 47.0 | 9.681 | 0.776 | 3287.237 | .021% | 99.576% |
| 48.0 | 7.030 | 0.573 | 3287.81 | .016% | 99.593% |
| 49.0 | 5.191 | 0.430 | 3288.239 | .012% | 99.606% |
| 50.0 | 4.501 | 0.378 | 3288.617 | .010% | 99.618% |
| 51.0 | 4.194 | 0.357 | 3288.975 | .010% | 99.628% |
| 52.0 | 4.008 | 0.346 | 3289.321 | .010% | 99.639% |
| 53.0 | 3.817 | 0.334 | 3289.655 | .009% | 99.649% |
| 54.0 | 3.683 | 0.327 | 3289.982 | .009% | 99.659% |
| 55.0 | 3.538 | 0.318 | 3290.3 | .009% | 99.669% |
| 56.0 | 3.434 | 0.312 | 3290.612 | .009% | 99.678% |
| 57.0 | 3.312 | 0.305 | 3290.917 | .008% | 99.687% |
| 58.0 | 3.208 | 0.298 | 3291.215 | .008% | 99.696% |
| 59.0 | 3.121 | 0.293 | 3291.508 | .008% | 99.705% |
| 60.0 | 3.057 | 0.290 | 3291.799 | .008% | 99.714% |
| 61.0 | 3.010 | 0.289 | 3292.087 | .008% | 99.723% |
| 62.0 | 2.981 | 0.289 | 3292.376 | .008% | 99.731% |
| 63.0 | 2.970 | 0.290 | 3292.666 | .008% | 99.740% |
| 64.0 | 2.952 | 0.291 | 3292.957 | .008% | 99.749% |
| 65.0 | 2.929 | 0.291 | 3293.248 | .008% | 99.758% |
| 66.0 | 2.918 | 0.292 | 3293.541 | .008% | 99.767% |
| 67.0 | 2.865 | 0.289 | 3293.83 | .008% | 99.775% |
| 68.0 | 2.860 | 0.291 | 3294.121 | .008% | 99.784% |
| 69.0 | 2.831 | 0.290 | 3294.411 | .008% | 99.793% |
| 70.0 | 2.813 | 0.290 | 3294.7 | .008% | 99.802% |
| 71.0 | 2.796 | 0.290 | 3294.99 | .008% | 99.811% |
| 72.0 | 2.773 | 0.289 | 3295.279 | .008% | 99.819% |
| 73.0 | 2.755 | 0.289 | 3295.568 | .008% | 99.828% |
| 74.0 | 2.738 | 0.289 | 3295.857 | .008% | 99.837% |
| 75.0 | 2.773 | 0.294 | 3296.151 | .008% | 99.846% |

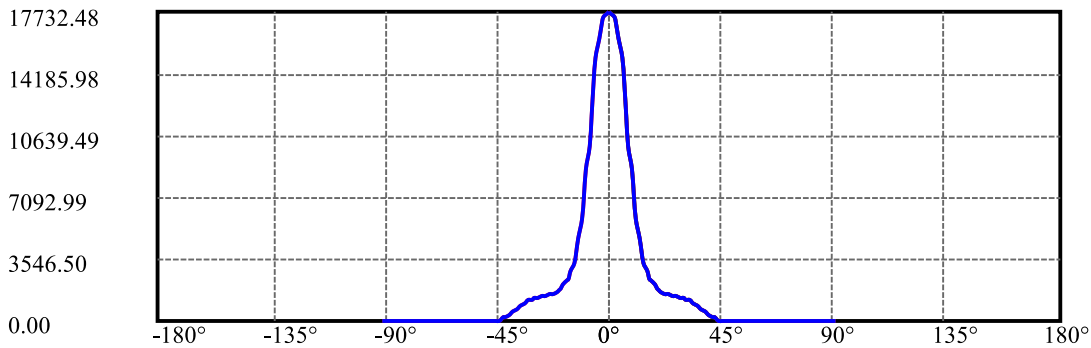
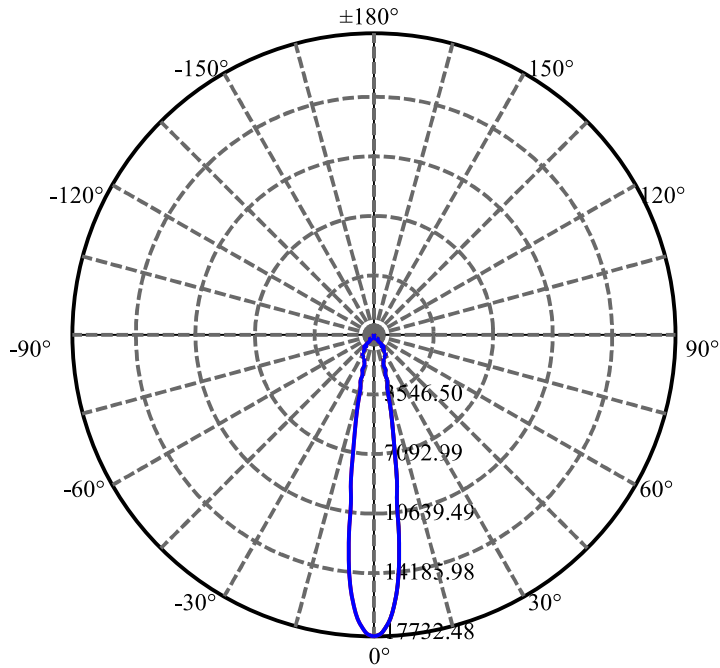
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 2.906 | 0.309 | 3296.46 | .009% | 99.855% |
| 77.0 | 3.115 | 0.333 | 3296.793 | .009% | 99.865% |
| 78.0 | 3.347 | 0.359 | 3297.152 | .010% | 99.876% |
| 79.0 | 3.840 | 0.413 | 3297.565 | .011% | 99.889% |
| 80.0 | 4.379 | 0.473 | 3298.038 | .013% | 99.903% |
| 81.0 | 4.872 | 0.528 | 3298.566 | .015% | 99.919% |
| 82.0 | 5.110 | 0.555 | 3299.121 | .015% | 99.936% |
| 83.0 | 4.542 | 0.494 | 3299.615 | .014% | 99.951% |
| 84.0 | 3.022 | 0.330 | 3299.945 | .009% | 99.961% |
| 85.0 | 2.413 | 0.264 | 3300.208 | .007% | 99.969% |
| 86.0 | 2.274 | 0.249 | 3300.457 | .007% | 99.976% |
| 87.0 | 2.164 | 0.237 | 3300.694 | .007% | 99.983% |
| 88.0 | 2.048 | 0.224 | 3300.918 | .006% | 99.990% |
| 89.0 | 1.990 | 0.218 | 3301.136 | .006% | 99.997% |
| 90.0 | 1.914 | 0.105 | 3301.241 | .003% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 2747.43 | 75.56% | 83.22% |
| 0-40 | 3246.20 | 89.28% | 98.33% |
| 0-60 | 3291.80 | 90.53% | 99.71% |
| 0-90 | 3301.14 | 90.79% | 100.00% |
| 0-120 | 3301.14 | 90.79% | 100.00% |
| 0-180 | 3301.24 | 90.79% | 100.00% |
| 60-90 | 9.63 | 0.26% | 0.29% |
| 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% |
| 0-28.47 | 2640.99 | 72.63% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|---------|
| 0-10 | 1223.54 |
| 10-20 | 847.26 |
| 20-30 | 676.63 |
| 30-40 | 498.77 |
| 40-50 | 42.41 |
| 50-60 | 3.18 |
| 60-70 | 2.90 |
| 70-80 | 3.34 |
| 80-90 | 3.10 |
| 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 |



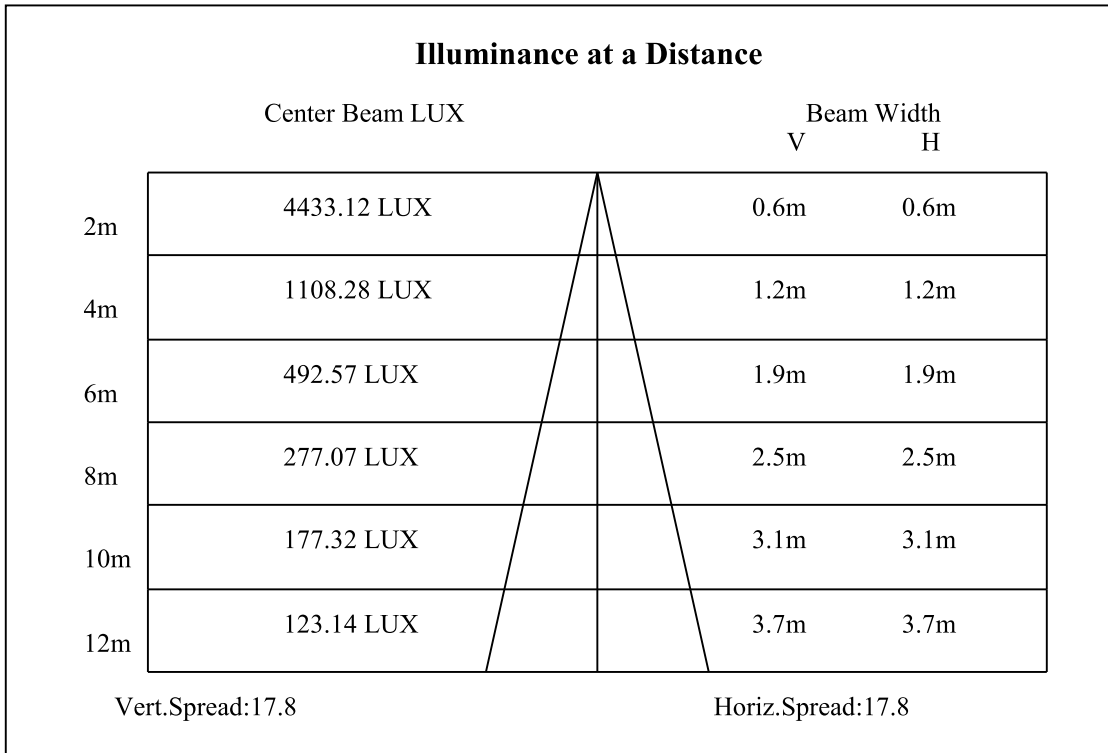
C0(Max): —————

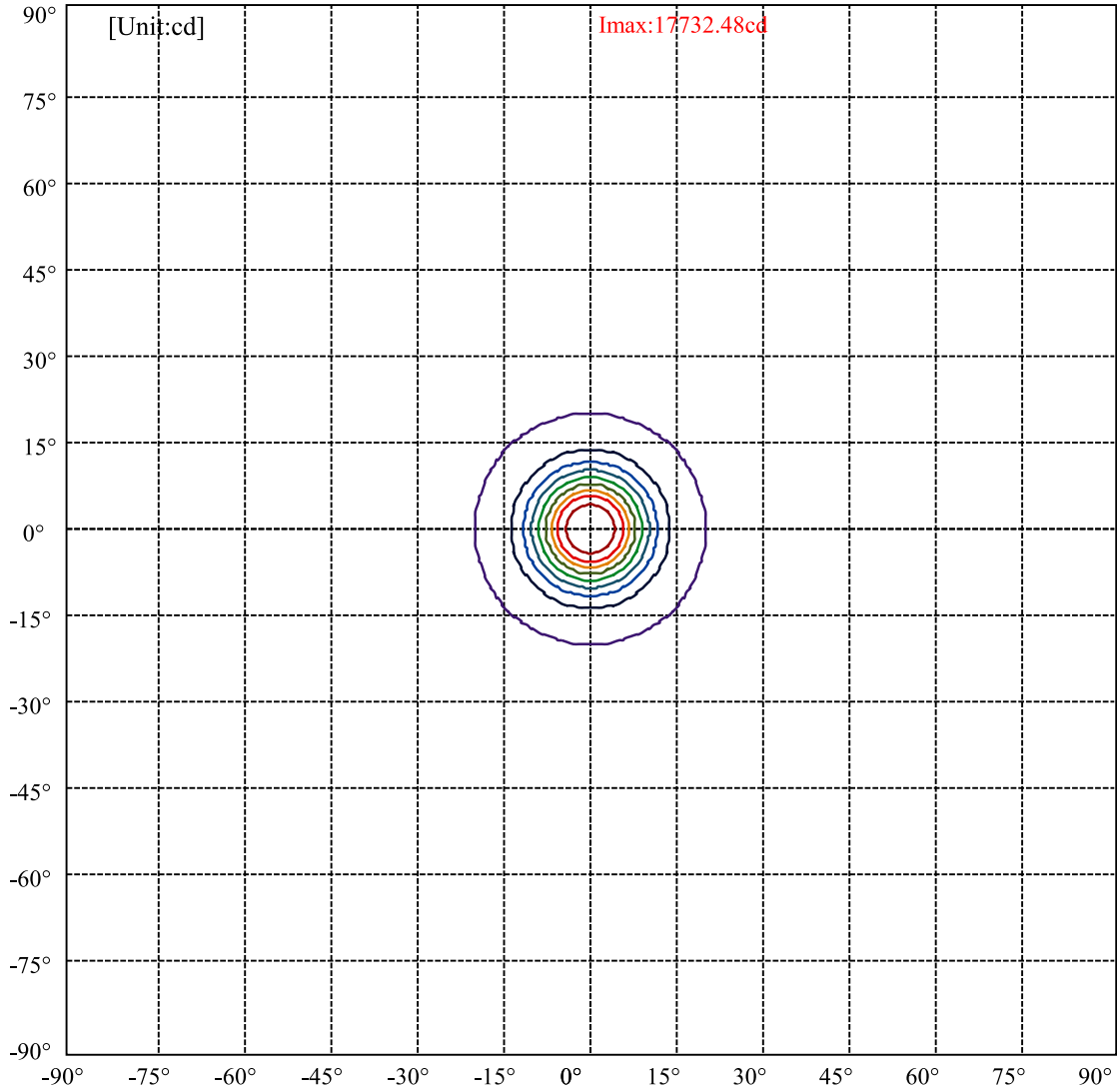
C0/C180: —————

C90/C270: —————

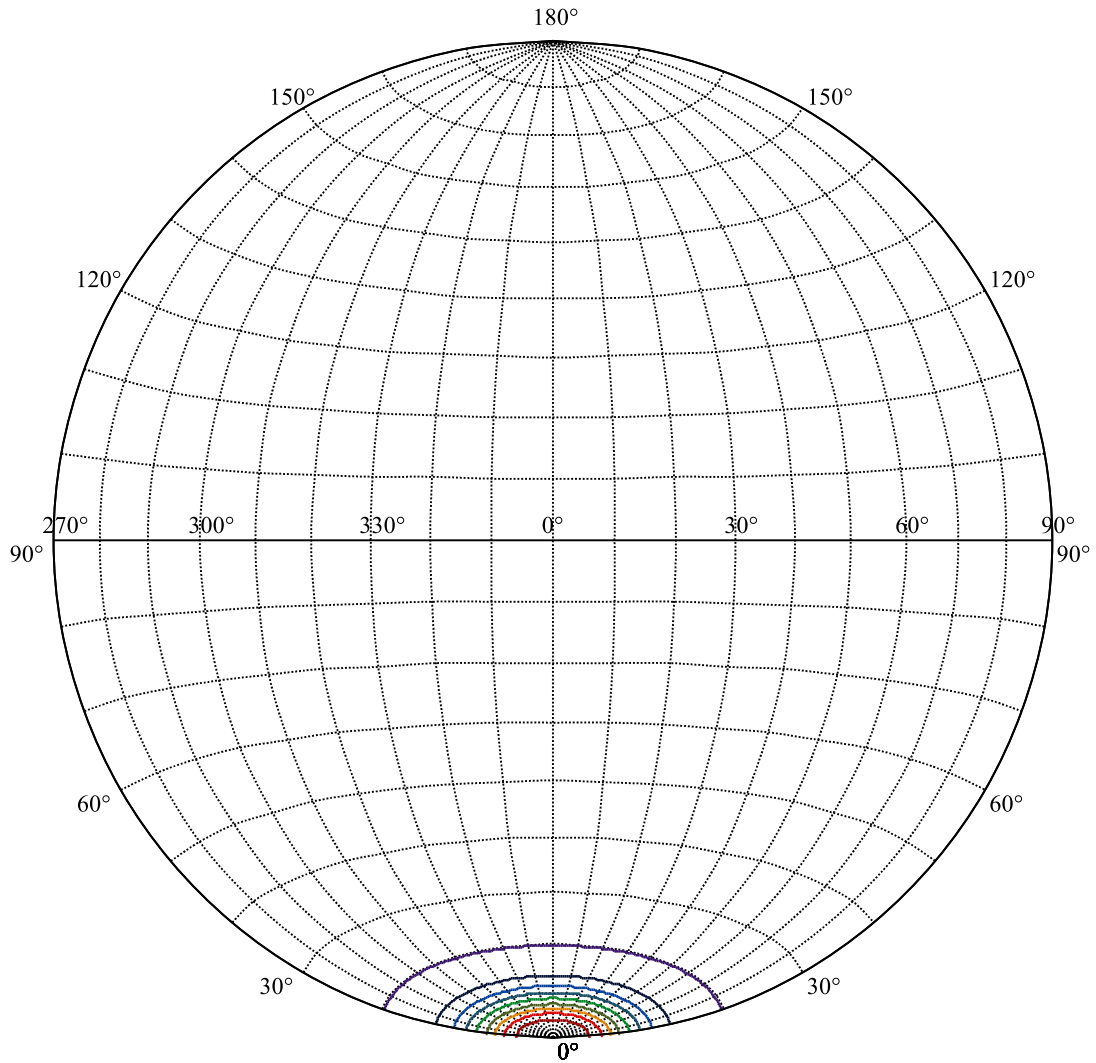
Field angle(10%Imax):C0/180Left:19.7 Right:19.7
:C90/270Left:19.7 Right:19.7

Beam Angle(50%Imax):C0/180Left:8.9 Right:8.9
:C90/270Left:8.9 Right:8.9





| | |
|-------------------|---|
| (10%Imax) 1773.25 | — |
| (20%Imax) 3546.5 | — |
| (30%Imax) 5319.74 | — |
| (40%Imax) 7092.99 | — |
| (50%Imax) 8866.24 | — |
| (60%Imax) 10639.5 | — |
| (70%Imax) 12412.7 | — |
| (80%Imax) 14186 | — |
| (90%Imax) 15959.2 | — |



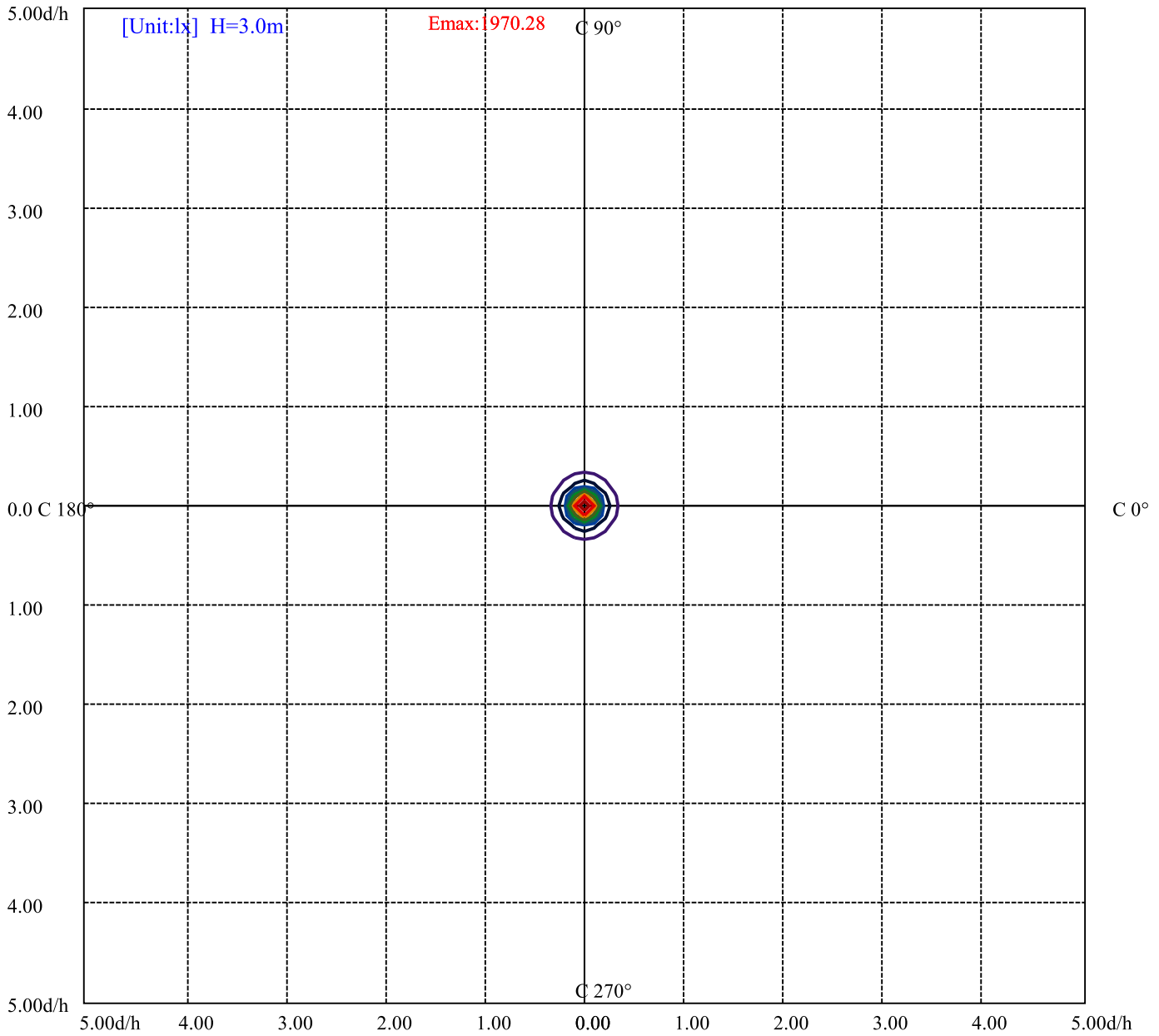
House

[Unit:cd]

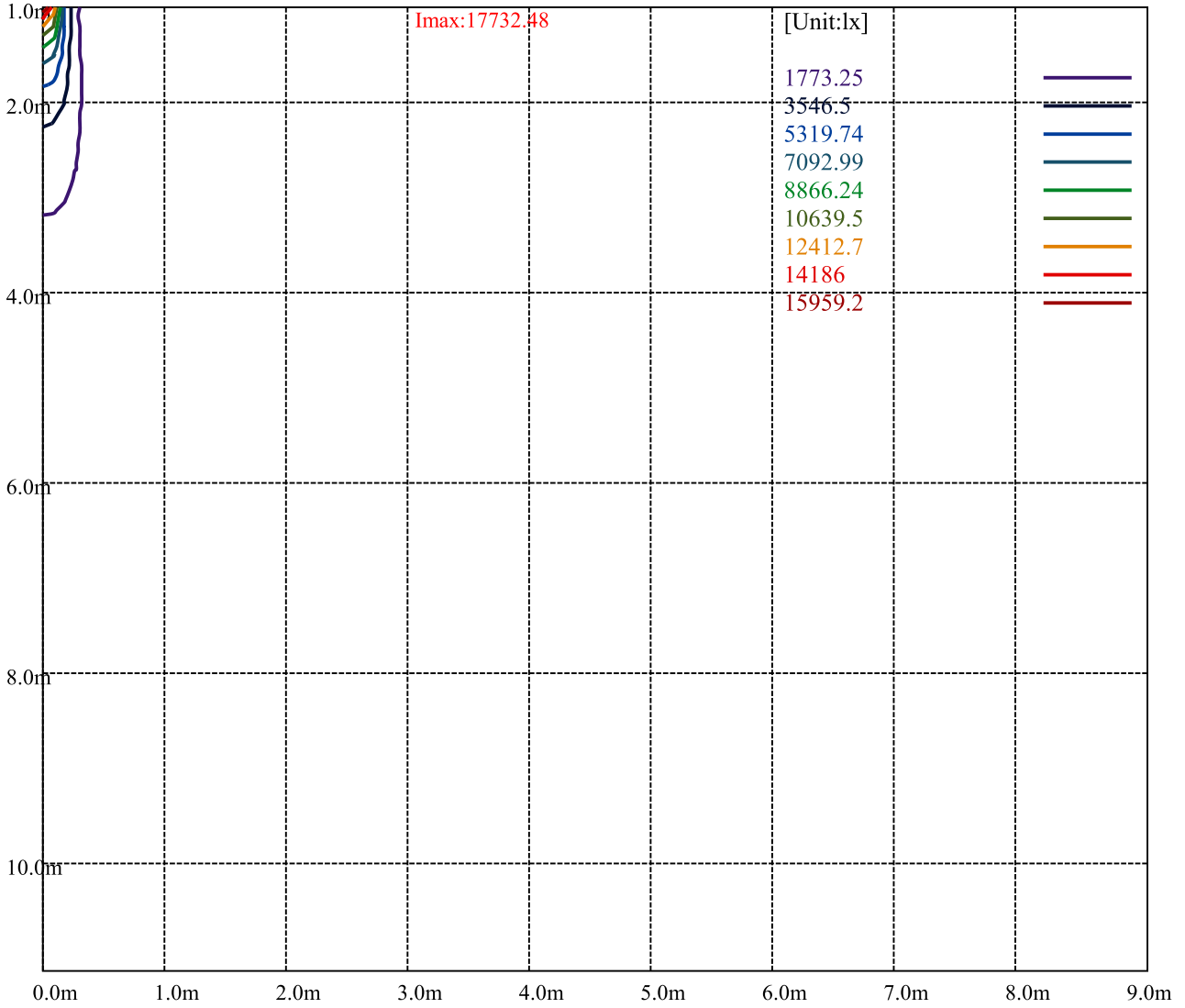
Road

Imax:1773.25

| | |
|-------------------|---|
| (10%Imax) 1773.25 | — |
| (20%Imax) 3546.5 | — |
| (30%Imax) 5319.74 | — |
| (40%Imax) 7092.99 | — |
| (50%Imax) 8866.24 | — |
| (60%Imax) 10639.5 | — |
| (70%Imax) 12412.7 | — |
| (80%Imax) 14186 | — |
| (90%Imax) 15959.2 | — |



| | |
|--------------------|---|
| (10%Emax) 197.0278 | — |
| (20%Emax) 394.0544 | — |
| (30%Emax) 591.0823 | — |
| (40%Emax) 788.11 | — |
| (50%Emax) 985.1367 | — |
| (60%Emax) 1182.167 | — |
| (70%Emax) 1379.189 | — |
| (80%Emax) 1576.222 | — |
| (90%Emax) 1773.245 | — |



Luminance Limiting Curve(no luminous side)

Luminance Table

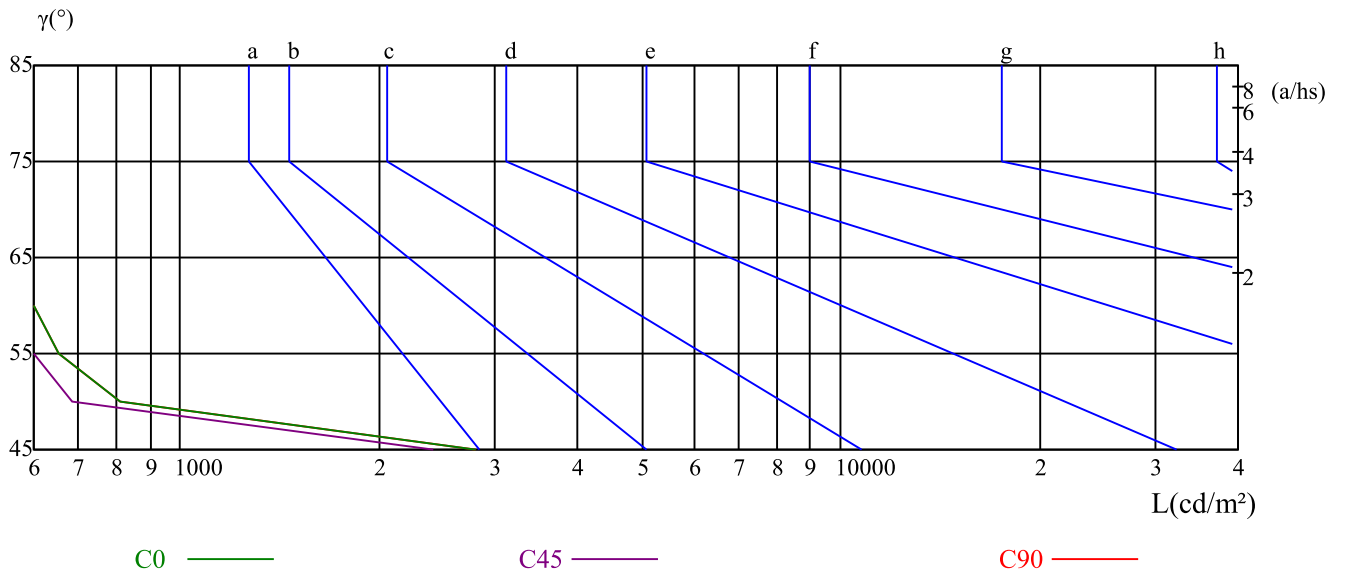
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|------|-----|-----|-----|-----|-----|-----|------|-----|
| C0 | 2808 | 809 | 656 | 590 | 595 | 607 | 643 | 1108 | 677 |
| C45 | 2417 | 686 | 548 | 485 | 480 | 480 | 498 | 836 | 496 |
| C90 | 2808 | 809 | 656 | 590 | 595 | 607 | 643 | 1108 | 677 |

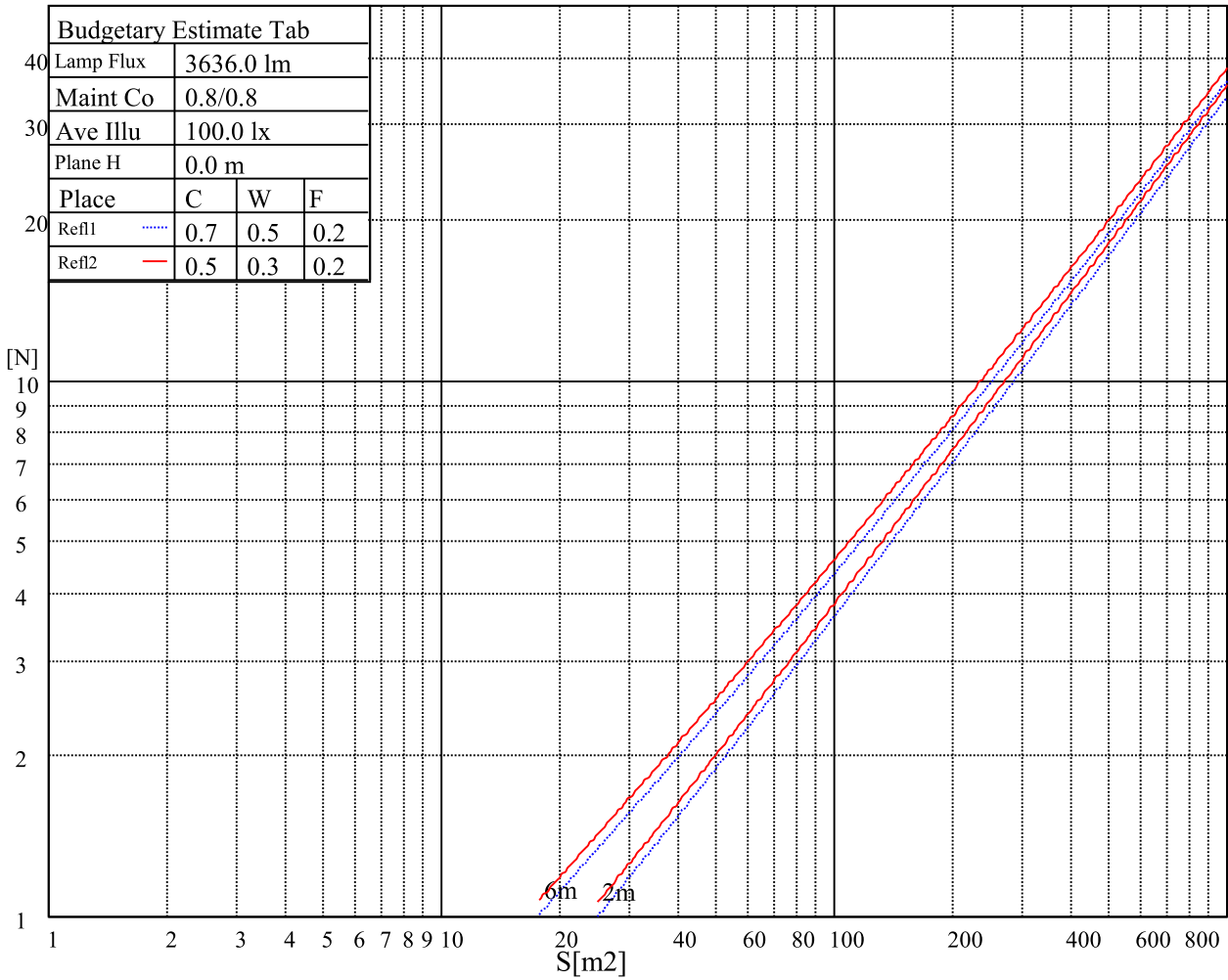
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 1415 | 1415 | 1415 | 2186 | 2186 | 2186 | 5650 | 5650 | 5650 |

Glare Table

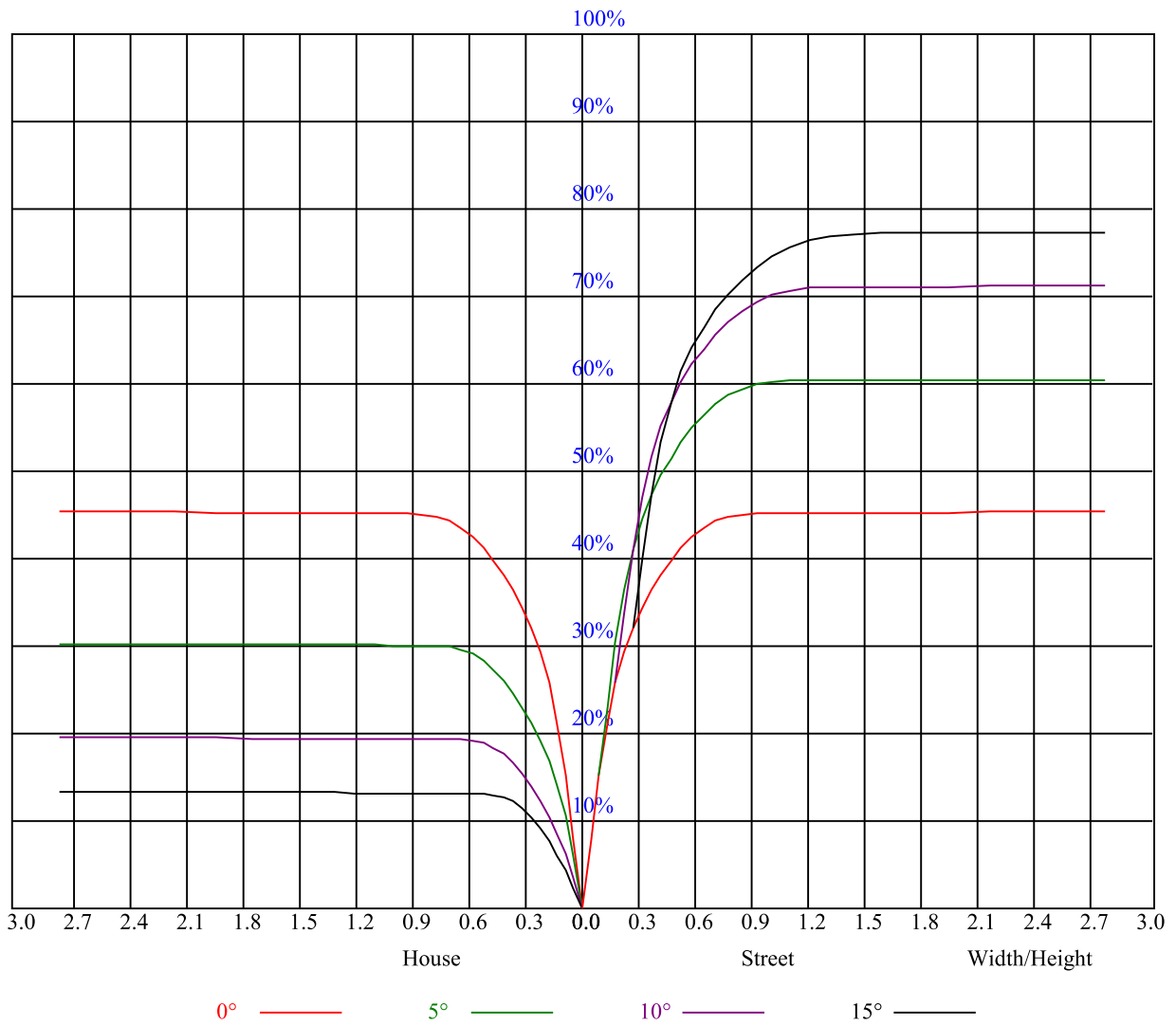
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

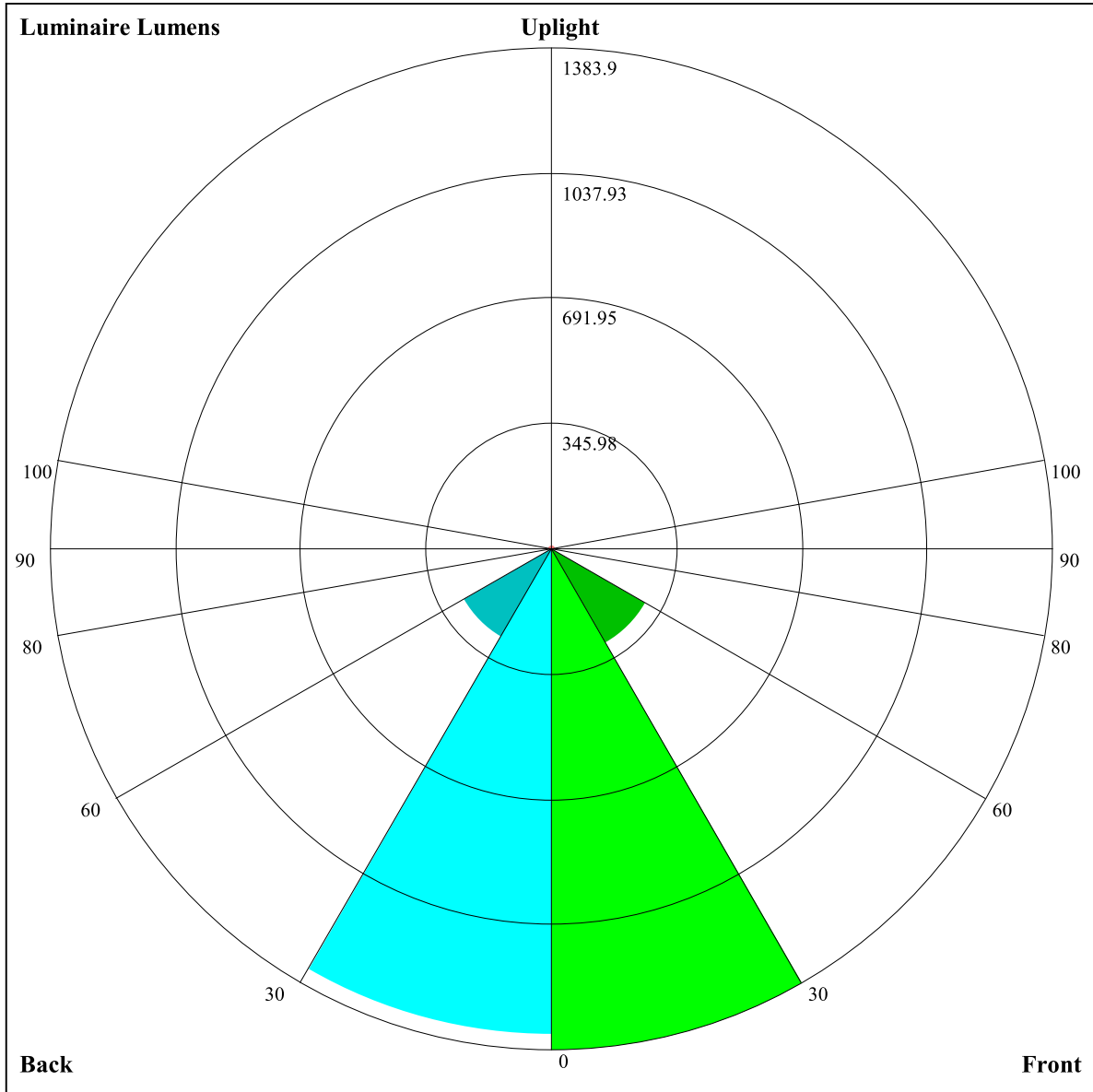
Luminance Limiting Curve





| 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 | 1.08 | 1.08 | 1.08 | 1.06 | 1.06 | 1.06 | 1.01 | 1.01 | 1.01 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.91 |
| 1 | 1.02 | 1.00 | 0.98 | 1.00 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 |
| 2 | 0.97 | 0.94 | 0.91 | 0.95 | 0.92 | 0.90 | 0.92 | 0.90 | 0.88 | 0.90 | 0.88 | 0.86 | 0.87 | 0.86 | 0.85 | 0.83 |
| 3 | 0.92 | 0.88 | 0.85 | 0.91 | 0.87 | 0.85 | 0.88 | 0.86 | 0.83 | 0.86 | 0.84 | 0.82 | 0.84 | 0.82 | 0.81 | 0.80 |
| 4 | 0.88 | 0.84 | 0.81 | 0.87 | 0.83 | 0.80 | 0.85 | 0.82 | 0.79 | 0.83 | 0.81 | 0.78 | 0.82 | 0.79 | 0.78 | 0.76 |
| 5 | 0.84 | 0.80 | 0.77 | 0.83 | 0.79 | 0.76 | 0.82 | 0.78 | 0.76 | 0.80 | 0.77 | 0.75 | 0.79 | 0.76 | 0.74 | 0.73 |
| 6 | 0.81 | 0.76 | 0.73 | 0.80 | 0.76 | 0.73 | 0.79 | 0.75 | 0.73 | 0.77 | 0.74 | 0.72 | 0.76 | 0.74 | 0.72 | 0.71 |
| 7 | 0.77 | 0.73 | 0.70 | 0.77 | 0.73 | 0.70 | 0.76 | 0.72 | 0.70 | 0.75 | 0.72 | 0.69 | 0.74 | 0.71 | 0.69 | 0.68 |
| 8 | 0.75 | 0.70 | 0.68 | 0.74 | 0.70 | 0.67 | 0.73 | 0.70 | 0.67 | 0.72 | 0.69 | 0.67 | 0.72 | 0.69 | 0.67 | 0.66 |
| 9 | 0.72 | 0.68 | 0.65 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.65 | 0.70 | 0.67 | 0.65 | 0.70 | 0.67 | 0.65 | 0.64 |
| 10 | 0.70 | 0.66 | 0.63 | 0.69 | 0.66 | 0.63 | 0.69 | 0.65 | 0.63 | 0.68 | 0.65 | 0.63 | 0.68 | 0.65 | 0.63 | 0.62 |





Luminaire Lumens:

FL=1383.9,FM=301.31,FH=2.77,FVH=1.42

BL=1340.5,BM=282.57,BH=3.35,BVH=1.92

UL=2.09,UH=9.94

BUG Rating:B3-U1-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 | 17800.93 | 17796.29 | 17536.43 | 17067.75 | 16325.30 | 15276.58 | 13995.85 | 12432.06 | 8894.64 |
| 45.0 | 17731.32 | 17749.88 | 17633.87 | 17262.65 | 16701.17 | 15800.94 | 14603.74 | 13174.51 | 11564.32 |
| 90.0 | 17671.00 | 17364.73 | 16840.38 | 16000.48 | 14858.95 | 13434.37 | 10993.56 | 9010.18 | 9010.18 |
| 135.0 | 17726.68 | 17647.79 | 17466.82 | 16840.38 | 16385.62 | 15387.95 | 14046.90 | 12450.62 | 10761.54 |
| 180.0 | 17800.93 | 17684.92 | 17374.02 | 16831.10 | 16162.89 | 15058.49 | 13610.70 | 11977.31 | 10237.18 |
| 225.0 | 17731.32 | 17480.74 | 17109.52 | 16733.65 | 15842.70 | 14005.13 | 13072.43 | 8864.48 | 8864.48 |
| 270.0 | 17671.00 | 17763.80 | 17689.56 | 17462.18 | 17067.75 | 16380.98 | 15322.99 | 13958.73 | 12339.25 |
| 315.0 | 17726.68 | 17717.40 | 17462.18 | 17035.27 | 16306.74 | 15271.94 | 13977.29 | 12376.38 | 8467.73 |
| 360.0 | 17800.93 | 17796.29 | 17536.43 | 17067.75 | 16325.30 | 15276.58 | 13995.85 | 12432.06 | 8894.64 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 8894.64 | 7271.45 | 6395.36 | 4754.53 | 3918.34 | 3310.00 | 3018.12 | 2622.30 | 2311.40 |
| 45.0 | 9847.39 | 8153.67 | 6603.80 | 5341.63 | 4385.72 | 3647.91 | 3095.71 | 2673.44 | 2478.54 |
| 90.0 | 6755.45 | 5941.07 | 4831.56 | 3976.35 | 3329.49 | 2855.24 | 2496.55 | 2223.69 | 2016.74 |
| 135.0 | 9035.33 | 7369.45 | 5944.87 | 4821.91 | 3977.37 | 3346.28 | 2863.69 | 2497.10 | 2376.45 |
| 180.0 | 8515.62 | 6900.78 | 5550.44 | 4520.29 | 3731.43 | 3128.19 | 2668.80 | 2334.69 | 2334.69 |
| 225.0 | 7489.08 | 5997.68 | 4839.92 | 3980.06 | 3334.59 | 2829.72 | 2447.36 | 2169.87 | 1966.62 |
| 270.0 | 10585.21 | 9165.26 | 7457.62 | 5981.99 | 4812.63 | 3958.81 | 3327.72 | 2835.85 | 2464.62 |
| 315.0 | 8467.73 | 6865.42 | 5501.16 | 4448.27 | 3954.54 | 3302.57 | 2810.23 | 2439.93 | 2164.30 |
| 360.0 | 8894.64 | 7271.45 | 6395.36 | 4754.53 | 3918.34 | 3310.00 | 3018.12 | 2622.30 | 2311.40 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2075.20 | 1904.90 | 1780.08 | 1684.02 | 1610.24 | 1553.17 | 1507.23 | 1467.78 | 1433.45 |
| 45.0 | 2362.53 | 2101.65 | 1831.12 | 1723.47 | 1641.80 | 1576.37 | 1524.86 | 1482.17 | 1444.58 |
| 90.0 | 1862.68 | 1746.67 | 1659.89 | 1592.61 | 1538.78 | 1494.23 | 1456.18 | 1421.38 | 1387.04 |
| 135.0 | 2320.77 | 1852.47 | 1732.75 | 1644.58 | 1591.68 | 1539.25 | 1497.02 | 1458.97 | 1425.09 |
| 180.0 | 1909.54 | 1778.69 | 1683.10 | 1610.71 | 1575.90 | 1528.57 | 1488.67 | 1452.94 | 1418.60 |
| 225.0 | 1873.81 | 1709.08 | 1629.73 | 1592.61 | 1542.49 | 1500.73 | 1465.00 | 1431.59 | 1397.72 |
| 270.0 | 2399.66 | 2288.29 | 1822.31 | 1710.01 | 1628.80 | 1590.75 | 1525.32 | 1502.12 | 1467.32 |
| 315.0 | 1962.91 | 1813.95 | 1703.98 | 1622.77 | 1561.05 | 1513.26 | 1473.35 | 1440.41 | 1409.32 |
| 360.0 | 2075.20 | 1904.90 | 1780.08 | 1684.02 | 1610.24 | 1553.17 | 1507.23 | 1467.78 | 1433.45 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 1400.04 | 1365.23 | 1326.72 | 1292.84 | 1246.44 | 1207.46 | 1156.88 | 885.70 | 885.70 |
| 45.0 | 1410.71 | 1376.37 | 1341.57 | 1299.34 | 1259.90 | 1220.92 | 1171.27 | 1116.97 | 969.88 |
| 90.0 | 1351.78 | 1317.90 | 1275.67 | 1229.27 | 1197.25 | 1118.83 | 859.48 | 859.48 | 786.07 |
| 135.0 | 1392.15 | 1356.42 | 1314.65 | 1269.64 | 1228.81 | 1186.12 | 1101.66 | 1000.97 | 886.35 |
| 180.0 | 1382.40 | 1345.28 | 1303.05 | 1260.36 | 1221.38 | 1175.44 | 1082.64 | 976.84 | 865.93 |
| 225.0 | 1361.52 | 1323.01 | 1277.53 | 1237.16 | 1193.54 | 1112.33 | 902.64 | 902.64 | 807.33 |
| 270.0 | 1435.30 | 1402.36 | 1367.55 | 1328.11 | 1284.03 | 1241.80 | 1197.25 | 1114.19 | 1014.42 |
| 315.0 | 1376.83 | 1341.57 | 1297.95 | 1257.58 | 1218.60 | 1171.73 | 1120.22 | 892.89 | 892.89 |
| 360.0 | 1400.04 | 1365.23 | 1326.72 | 1292.84 | 1246.44 | 1207.46 | 1156.88 | 885.70 | 885.70 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 833.64 | 712.71 | 589.42 | 464.92 | 346.08 | 236.01 | 140.00 | 64.73 | 24.36 |
| 45.0 | 902.13 | 779.16 | 658.51 | 538.33 | 417.68 | 304.45 | 257.58 | 237.17 | 42.23 |
| 90.0 | 666.21 | 542.04 | 420.00 | 308.63 | 244.87 | 114.34 | 46.77 | 25.85 | 14.43 |
| 135.0 | 763.38 | 640.41 | 518.84 | 399.58 | 291.92 | 267.33 | 267.33 | 59.26 | 22.46 |
| 180.0 | 744.36 | 620.92 | 495.17 | 378.70 | 272.43 | 272.43 | 231.60 | 41.44 | 19.54 |
| 225.0 | 660.92 | 563.94 | 445.05 | 330.48 | 225.52 | 133.60 | 61.86 | 22.69 | 16.89 |
| 270.0 | 897.49 | 776.37 | 655.73 | 532.29 | 416.28 | 306.77 | 264.08 | 264.08 | 52.62 |
| 315.0 | 771.78 | 648.44 | 526.54 | 401.71 | 292.25 | 188.68 | 101.34 | 38.79 | 18.84 |
| 360.0 | 833.64 | 712.71 | 589.42 | 464.92 | 346.08 | 236.01 | 140.00 | 64.73 | 24.36 |

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 | 17.08 | 13.22 | 11.28 | 7.52 | 5.06 | 4.55 | 4.08 | 3.94 | 3.81 |
| 45.0 | 19.49 | 15.03 | 11.46 | 8.63 | 5.94 | 4.78 | 4.50 | 4.32 | 4.04 |
| 90.0 | 10.95 | 9.33 | 7.15 | 4.87 | 4.73 | 4.45 | 4.27 | 4.08 | 3.90 |
| 135.0 | 15.82 | 12.20 | 9.42 | 7.15 | 5.06 | 4.50 | 4.27 | 4.08 | 3.94 |
| 180.0 | 15.50 | 12.06 | 9.23 | 6.82 | 4.83 | 4.41 | 4.13 | 3.99 | 3.85 |
| 225.0 | 13.22 | 10.26 | 7.80 | 5.66 | 4.36 | 4.04 | 3.85 | 3.71 | 3.57 |
| 270.0 | 21.07 | 16.29 | 12.48 | 9.42 | 6.91 | 5.06 | 4.41 | 3.99 | 3.85 |
| 315.0 | 14.76 | 11.37 | 8.63 | 6.17 | 4.64 | 4.22 | 4.04 | 3.94 | 3.57 |
| 360.0 | 17.08 | 13.22 | 11.28 | 7.52 | 5.06 | 4.55 | 4.08 | 3.94 | 3.81 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 3.67 | 3.48 | 3.39 | 3.25 | 3.11 | 3.02 | 2.92 | 2.83 | 2.83 |
| 45.0 | 3.81 | 3.71 | 3.53 | 3.43 | 3.29 | 3.16 | 3.06 | 2.97 | 2.88 |
| 90.0 | 3.76 | 3.57 | 3.48 | 3.39 | 3.29 | 3.20 | 3.11 | 3.11 | 3.06 |
| 135.0 | 3.85 | 3.71 | 3.62 | 3.48 | 3.39 | 3.29 | 3.25 | 3.20 | 3.20 |
| 180.0 | 3.71 | 3.53 | 3.48 | 3.39 | 3.34 | 3.25 | 3.25 | 3.25 | 3.29 |
| 225.0 | 3.48 | 3.39 | 3.29 | 3.16 | 3.11 | 3.06 | 3.06 | 3.06 | 3.06 |
| 270.0 | 3.71 | 3.62 | 3.43 | 3.29 | 3.16 | 3.11 | 2.97 | 2.92 | 2.83 |
| 315.0 | 3.48 | 3.29 | 3.25 | 3.11 | 2.97 | 2.88 | 2.83 | 2.74 | 2.69 |
| 360.0 | 3.67 | 3.48 | 3.39 | 3.25 | 3.11 | 3.02 | 2.92 | 2.83 | 2.83 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 2.78 | 2.74 | 2.74 | 2.69 | 2.60 | 2.60 | 2.55 | 2.55 | 2.46 |
| 45.0 | 2.88 | 2.83 | 2.78 | 2.78 | 2.74 | 2.74 | 2.64 | 2.64 | 2.64 |
| 90.0 | 3.02 | 2.97 | 2.92 | 2.88 | 2.83 | 2.83 | 2.78 | 2.78 | 2.78 |
| 135.0 | 3.20 | 3.20 | 3.20 | 3.20 | 3.16 | 3.11 | 3.11 | 3.06 | 3.02 |
| 180.0 | 3.29 | 3.29 | 3.29 | 3.34 | 3.29 | 3.29 | 3.29 | 3.29 | 3.29 |
| 225.0 | 3.06 | 3.06 | 3.06 | 3.02 | 3.02 | 3.02 | 3.02 | 2.97 | 2.97 |
| 270.0 | 2.88 | 2.88 | 2.83 | 2.78 | 2.74 | 2.74 | 2.69 | 2.64 | 2.69 |
| 315.0 | 2.64 | 2.64 | 2.60 | 2.64 | 2.55 | 2.55 | 2.55 | 2.55 | 2.51 |
| 360.0 | 2.78 | 2.74 | 2.74 | 2.69 | 2.60 | 2.60 | 2.55 | 2.55 | 2.46 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 2.41 | 2.41 | 2.37 | 2.37 | 2.32 | 2.32 | 2.23 | 2.23 | 2.32 |
| 45.0 | 2.64 | 2.60 | 2.55 | 2.60 | 2.60 | 2.55 | 2.51 | 2.46 | 2.46 |
| 90.0 | 2.74 | 2.74 | 2.78 | 2.74 | 2.69 | 2.64 | 3.02 | 4.45 | 5.52 |
| 135.0 | 2.97 | 2.92 | 2.92 | 2.97 | 3.39 | 3.94 | 5.01 | 5.06 | 5.75 |
| 180.0 | 3.25 | 3.25 | 3.20 | 3.48 | 4.27 | 5.57 | 6.08 | 7.47 | 9.19 |
| 225.0 | 2.97 | 2.97 | 2.92 | 2.92 | 2.88 | 2.88 | 3.02 | 4.18 | 4.97 |
| 270.0 | 2.69 | 2.64 | 2.64 | 2.64 | 2.64 | 2.60 | 2.55 | 2.55 | 2.46 |
| 315.0 | 2.51 | 2.51 | 2.51 | 2.46 | 2.46 | 2.41 | 2.37 | 2.32 | 2.37 |
| 360.0 | 2.41 | 2.41 | 2.37 | 2.37 | 2.32 | 2.32 | 2.23 | 2.23 | 2.32 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 2.78 | 3.81 | 4.13 | 2.51 | 2.23 | 2.13 | 2.00 | 1.90 | 1.81 |
| 45.0 | 2.46 | 2.74 | 3.39 | 3.11 | 2.46 | 2.27 | 2.09 | 1.95 | 1.86 |
| 90.0 | 6.08 | 6.13 | 3.99 | 2.55 | 2.32 | 2.18 | 1.95 | 1.86 | 1.86 |
| 135.0 | 6.77 | 6.68 | 7.01 | 4.87 | 2.64 | 2.46 | 2.37 | 2.18 | 2.09 |
| 180.0 | 9.98 | 10.44 | 7.52 | 3.48 | 2.88 | 2.64 | 2.64 | 2.41 | 2.23 |
| 225.0 | 5.99 | 5.34 | 3.11 | 2.46 | 2.32 | 2.23 | 2.18 | 2.23 | 2.23 |
| 270.0 | 2.41 | 2.55 | 3.67 | 2.97 | 2.23 | 2.09 | 2.04 | 2.00 | 2.04 |
| 315.0 | 2.51 | 3.20 | 3.53 | 2.23 | 2.23 | 2.18 | 2.04 | 1.86 | 1.81 |
| 360.0 | 2.78 | 3.81 | 4.13 | 2.51 | 2.23 | 2.13 | 2.00 | 1.90 | 1.81 |

Intensity data(cd)

| | |
|---------------|-------------|
| C/γ(°) | 90.0 |
| 0.0 | 1.76 |
| 45.0 | 1.81 |
| 90.0 | 1.81 |
| 135.0 | 2.00 |
| 180.0 | 2.09 |
| 225.0 | 2.09 |
| 270.0 | 2.00 |
| 315.0 | 1.76 |
| 360.0 | 1.76 |