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NT

Client:

LumCAT: 2-2685-L

Luminaire: 92.70.411.00

Report No: 2024418-B017

Ballast type: AC

Test No: 2024418-C017

Voltage(V): 33.680

LampCAT: NICHIA NFCWJ120B-V3

Current(A): 0.576

Lamp flux(lm): 2726.0

Power (W): 19.399

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2338.33, Efficiency(%): 85.78% , Luminous Efficacy(lm/W): 120.54

Central intensity(cd): 3949.450, Maximum intensity(cd): 3949.450

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=45.8

[C90/270]Total=45.8

Field angle(10%Imax): [C0/180]Total=69.6

[C90/270]Total=69.6

Maximum s/h(1/2): C0_180=0.73 C90_270=0.73

Maximum s/h(1/4): C0_180=0.71 C90_270=0.71

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 85.78%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 97.887%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/4/18
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 | 3949.449 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 3941.403 | 3.776 | 3.776 | 0.14% | 0.16% |
| 2.0 | 3934.673 | 11.304 | 15.08 | 0.41% | 0.64% |
| 3.0 | 3918.433 | 18.782 | 33.862 | 0.69% | 1.45% |
| 4.0 | 3894.731 | 26.153 | 60.015 | 0.96% | 2.57% |
| 5.0 | 3865.616 | 33.385 | 93.4 | 1.22% | 3.99% |
| 6.0 | 3828.527 | 40.435 | 133.835 | 1.48% | 5.72% |
| 7.0 | 3784.270 | 47.252 | 181.087 | 1.73% | 7.74% |
| 8.0 | 3724.284 | 53.737 | 234.824 | 1.97% | 10.04% |
| 9.0 | 3644.767 | 59.722 | 294.547 | 2.19% | 12.60% |
| 10.0 | 3568.541 | 65.278 | 359.824 | 2.39% | 15.39% |
| 11.0 | 3476.222 | 70.392 | 430.216 | 2.58% | 18.40% |
| 12.0 | 3388.511 | 75.041 | 505.257 | 2.75% | 21.61% |
| 13.0 | 3279.074 | 79.127 | 584.385 | 2.90% | 24.99% |
| 14.0 | 3173.075 | 82.587 | 666.972 | 3.03% | 28.52% |
| 15.0 | 3059.469 | 85.563 | 752.535 | 3.14% | 32.18% |
| 16.0 | 2937.595 | 87.874 | 840.409 | 3.22% | 35.94% |
| 17.0 | 2791.728 | 89.221 | 929.63 | 3.27% | 39.76% |
| 18.0 | 2650.104 | 89.724 | 1019.354 | 3.29% | 43.59% |
| 19.0 | 2522.963 | 90.001 | 1109.355 | 3.30% | 47.44% |
| 20.0 | 2389.386 | 89.910 | 1199.264 | 3.30% | 51.29% |
| 21.0 | 2239.203 | 88.878 | 1288.142 | 3.26% | 55.09% |
| 22.0 | 2103.357 | 87.266 | 1375.408 | 3.20% | 58.82% |
| 23.0 | 1954.856 | 85.152 | 1460.56 | 3.12% | 62.46% |
| 24.0 | 1813.378 | 82.387 | 1542.947 | 3.02% | 65.98% |
| 25.0 | 1659.830 | 78.973 | 1621.921 | 2.90% | 69.36% |
| 26.0 | 1480.627 | 74.131 | 1696.051 | 2.72% | 72.53% |
| 27.0 | 1299.792 | 68.024 | 1764.075 | 2.50% | 75.44% |
| 28.0 | 1205.403 | 63.426 | 1827.501 | 2.33% | 78.15% |
| 29.0 | 1078.628 | 59.757 | 1887.258 | 2.19% | 80.71% |
| 30.0 | 925.855 | 54.121 | 1941.379 | 1.99% | 83.02% |
| 31.0 | 793.024 | 47.834 | 1989.212 | 1.75% | 85.07% |
| 32.0 | 669.446 | 41.898 | 2031.111 | 1.54% | 86.86% |
| 33.0 | 555.722 | 36.094 | 2067.204 | 1.32% | 88.41% |
| 34.0 | 450.726 | 30.458 | 2097.663 | 1.12% | 89.71% |
| 35.0 | 377.792 | 25.731 | 2123.393 | 0.94% | 90.81% |
| 36.0 | 317.141 | 22.127 | 2145.52 | 0.81% | 91.75% |
| 37.0 | 276.746 | 19.369 | 2164.889 | 0.71% | 92.58% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 222.239 | 16.655 | 2181.545 | 0.61% | 93.29% |
| 39.0 | 183.190 | 13.838 | 2195.383 | 0.51% | 93.89% |
| 40.0 | 143.563 | 11.396 | 2206.779 | 0.42% | 94.37% |
| 41.0 | 120.373 | 9.399 | 2216.178 | 0.34% | 94.78% |
| 42.0 | 98.362 | 7.947 | 2224.125 | 0.29% | 95.12% |
| 43.0 | 83.051 | 6.720 | 2230.845 | 0.25% | 95.40% |
| 44.0 | 70.644 | 5.801 | 2236.646 | 0.21% | 95.65% |
| 45.0 | 61.902 | 5.094 | 2241.74 | 0.19% | 95.87% |
| 46.0 | 54.675 | 4.559 | 2246.299 | 0.17% | 96.06% |
| 47.0 | 49.174 | 4.130 | 2250.429 | 0.15% | 96.24% |
| 48.0 | 45.516 | 3.828 | 2254.257 | 0.14% | 96.40% |
| 49.0 | 42.319 | 3.607 | 2257.864 | 0.13% | 96.56% |
| 50.0 | 39.444 | 3.409 | 2261.273 | 0.13% | 96.70% |
| 51.0 | 37.162 | 3.241 | 2264.514 | 0.12% | 96.84% |
| 52.0 | 35.165 | 3.104 | 2267.617 | 0.11% | 96.98% |
| 53.0 | 33.424 | 2.984 | 2270.601 | 0.11% | 97.10% |
| 54.0 | 31.858 | 2.877 | 2273.478 | 0.11% | 97.23% |
| 55.0 | 30.468 | 2.782 | 2276.261 | 0.10% | 97.35% |
| 56.0 | 29.195 | 2.696 | 2278.957 | 0.10% | 97.46% |
| 57.0 | 28.076 | 2.619 | 2281.575 | 0.10% | 97.57% |
| 58.0 | 26.781 | 2.537 | 2284.112 | 0.09% | 97.68% |
| 59.0 | 25.596 | 2.449 | 2286.561 | 0.09% | 97.79% |
| 60.0 | 24.514 | 2.367 | 2288.928 | 0.09% | 97.89% |
| 61.0 | 23.329 | 2.283 | 2291.211 | 0.08% | 97.98% |
| 62.0 | 22.290 | 2.198 | 2293.409 | 0.08% | 98.08% |
| 63.0 | 21.134 | 2.112 | 2295.521 | 0.08% | 98.17% |
| 64.0 | 20.212 | 2.029 | 2297.55 | 0.07% | 98.26% |
| 65.0 | 19.334 | 1.957 | 2299.507 | 0.07% | 98.34% |
| 66.0 | 18.574 | 1.891 | 2301.399 | 0.07% | 98.42% |
| 67.0 | 17.937 | 1.836 | 2303.234 | 0.07% | 98.50% |
| 68.0 | 17.513 | 1.796 | 2305.03 | 0.07% | 98.58% |
| 69.0 | 17.235 | 1.773 | 2306.803 | 0.07% | 98.65% |
| 70.0 | 16.972 | 1.757 | 2308.56 | 0.06% | 98.73% |
| 71.0 | 16.796 | 1.745 | 2310.305 | 0.06% | 98.80% |
| 72.0 | 16.591 | 1.736 | 2312.041 | 0.06% | 98.88% |
| 73.0 | 16.416 | 1.726 | 2313.767 | 0.06% | 98.95% |
| 74.0 | 16.284 | 1.719 | 2315.486 | 0.06% | 99.02% |
| 75.0 | 16.130 | 1.713 | 2317.199 | 0.06% | 99.10% |

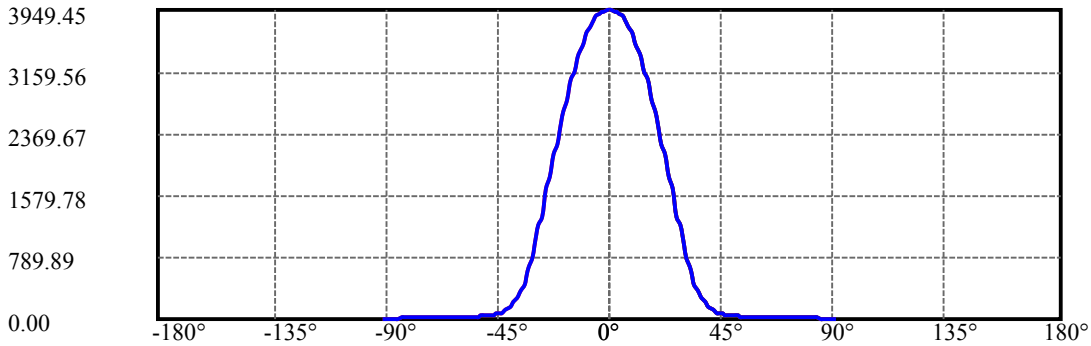
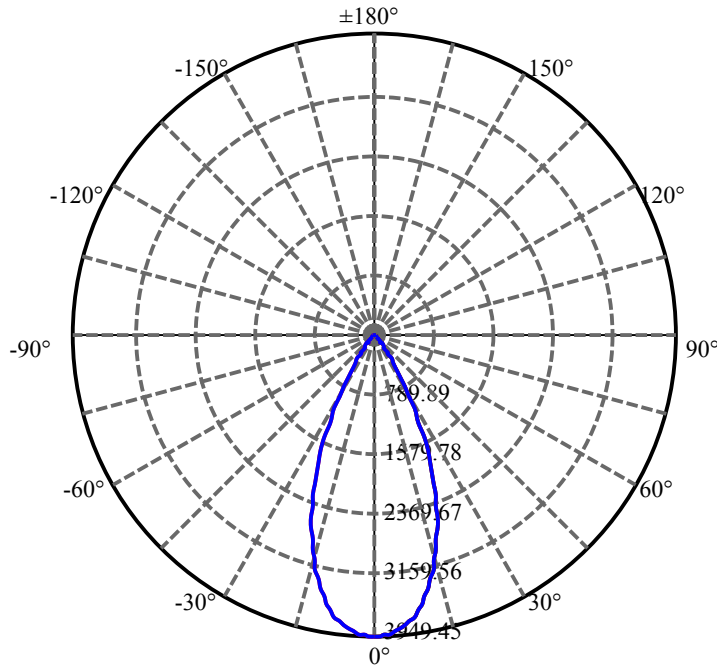
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 15.984 | 1.705 | 2318.903 | 0.06% | 99.17% |
| 77.0 | 15.808 | 1.695 | 2320.598 | 0.06% | 99.24% |
| 78.0 | 15.618 | 1.682 | 2322.281 | 0.06% | 99.31% |
| 79.0 | 15.304 | 1.661 | 2323.942 | 0.06% | 99.38% |
| 80.0 | 14.814 | 1.624 | 2325.566 | 0.06% | 99.45% |
| 81.0 | 14.301 | 1.574 | 2327.14 | 0.06% | 99.52% |
| 82.0 | 13.577 | 1.512 | 2328.652 | 0.06% | 99.59% |
| 83.0 | 12.787 | 1.433 | 2330.085 | 0.05% | 99.65% |
| 84.0 | 11.902 | 1.345 | 2331.43 | 0.05% | 99.70% |
| 85.0 | 11.222 | 1.262 | 2332.692 | 0.05% | 99.76% |
| 86.0 | 10.673 | 1.197 | 2333.889 | 0.04% | 99.81% |
| 87.0 | 10.337 | 1.150 | 2335.039 | 0.04% | 99.86% |
| 88.0 | 10.066 | 1.118 | 2336.157 | 0.04% | 99.91% |
| 89.0 | 9.905 | 1.095 | 2337.251 | 0.04% | 99.95% |
| 90.0 | 9.846 | 1.083 | 2338.334 | 0.04% | 100.00% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1941.38 | 71.22% | 83.02% |
| 0-40 | 2206.78 | 80.95% | 94.37% |
| 0-60 | 2288.93 | 83.97% | 97.89% |
| 0-90 | 2337.25 | 85.74% | 99.95% |
| 0-120 | 2337.25 | 85.74% | 99.95% |
| 0-180 | 2338.33 | 85.78% | 100.00% |
| 60-90 | 48.32 | 1.77% | 2.07% |
| 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% |
| 0-28.72 | 1870.67 | 68.62% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 359.82 |
| 10-20 | 839.44 |
| 20-30 | 742.11 |
| 30-40 | 265.40 |
| 40-50 | 54.49 |
| 50-60 | 27.66 |
| 60-70 | 19.63 |
| 70-80 | 17.01 |
| 80-90 | 11.69 |
| 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: —————

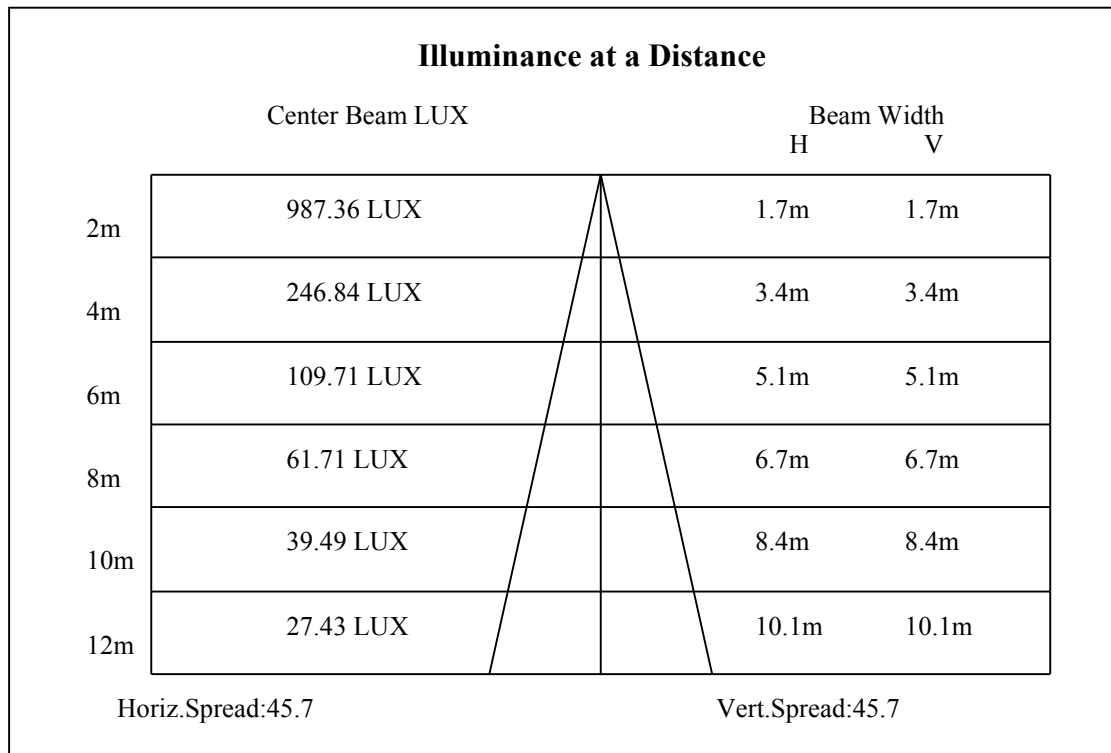
C90/C270: —————

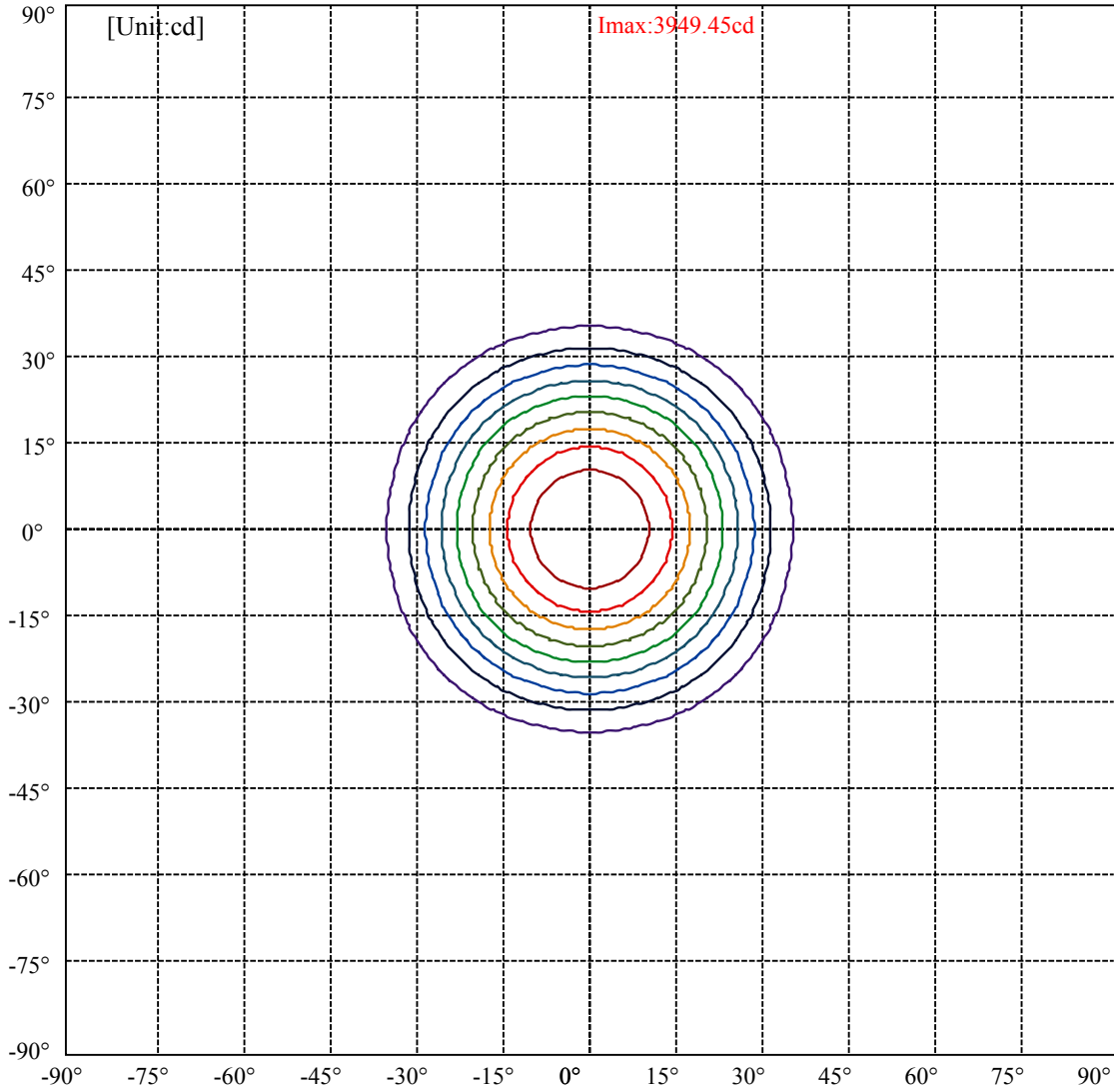
Field angle(10%Imax):C0/180Left:34.8 Right:34.8

:C90/270Left:34.8 Right:34.8

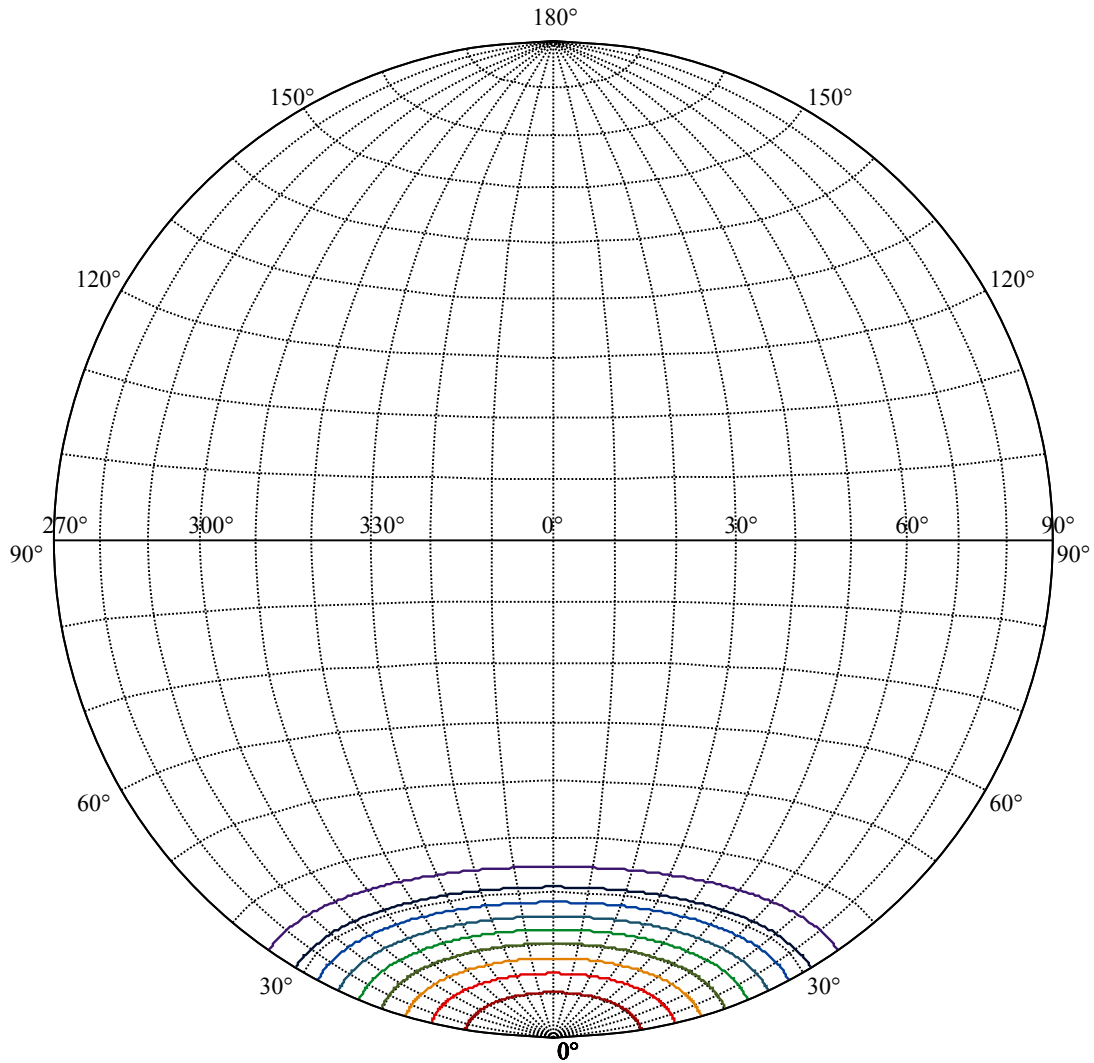
Beam Angle(50%Imax):C0/180Left:22.9 Right:22.9

:C90/270Left:22.9 Right:22.9





| | |
|-------------------|---|
| (10%Imax) 394.945 | — |
| (20%Imax) 789.89 | — |
| (30%Imax) 1184.83 | — |
| (40%Imax) 1579.78 | — |
| (50%Imax) 1974.72 | — |
| (60%Imax) 2369.67 | — |
| (70%Imax) 2764.61 | — |
| (80%Imax) 3159.56 | — |
| (90%Imax) 3554.5 | — |



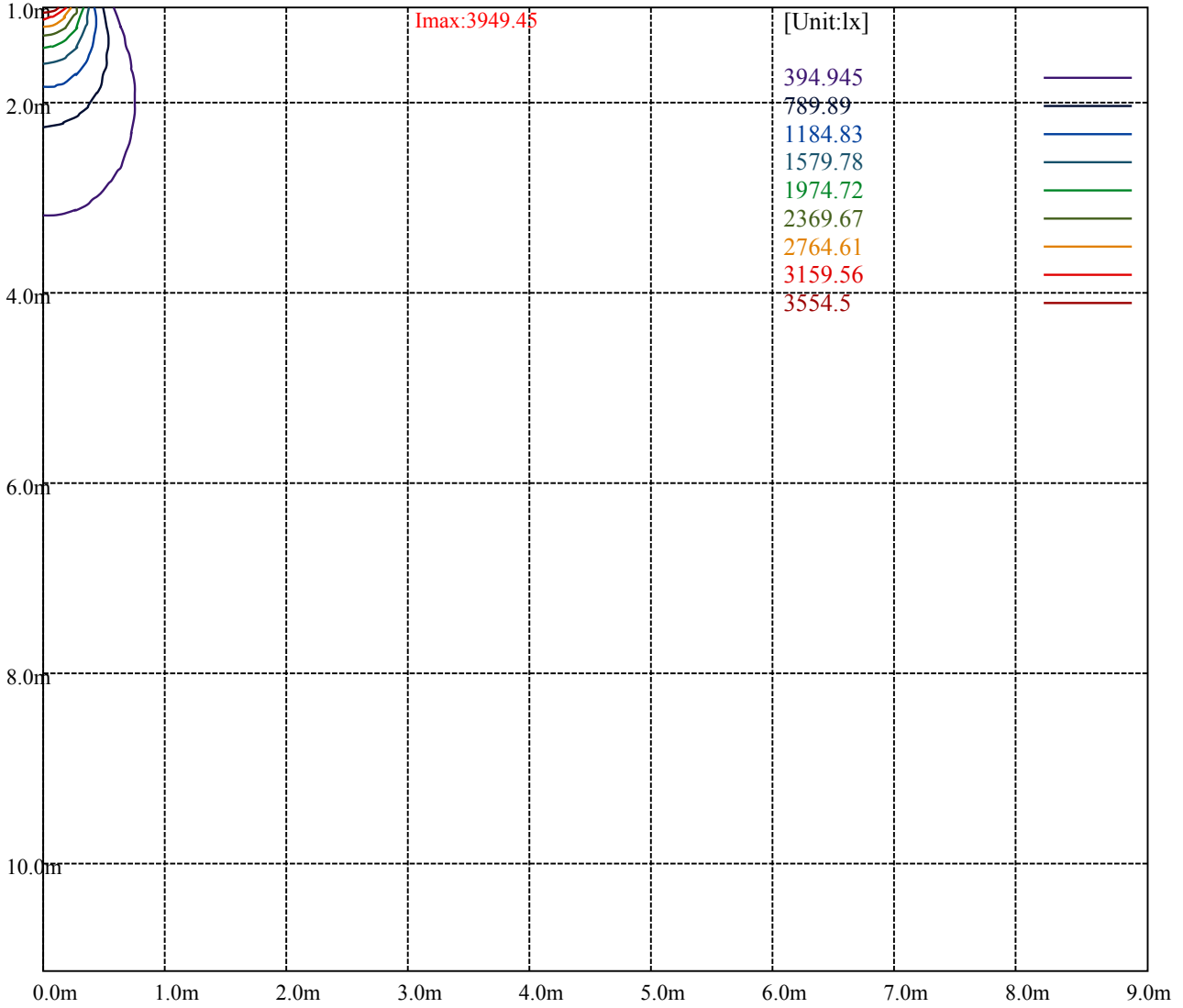
House

[Unit:cd]

Road

I_{max}:3949.45

| | | |
|------------------------|---------|---|
| (10%I _{max}) | 394.945 | — |
| (20%I _{max}) | 789.89 | — |
| (30%I _{max}) | 1184.83 | — |
| (40%I _{max}) | 1579.78 | — |
| (50%I _{max}) | 1974.72 | — |
| (60%I _{max}) | 2369.67 | — |
| (70%I _{max}) | 2764.61 | — |
| (80%I _{max}) | 3159.56 | — |
| (90%I _{max}) | 3554.5 | — |



Luminance Table

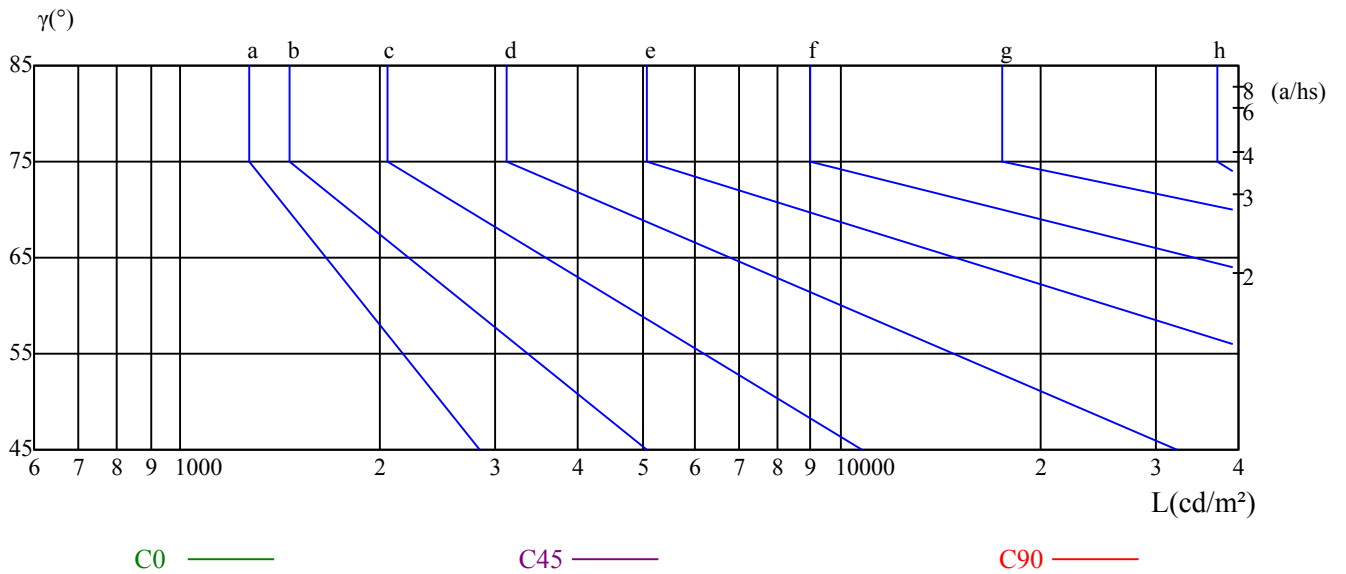
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| C90 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| 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

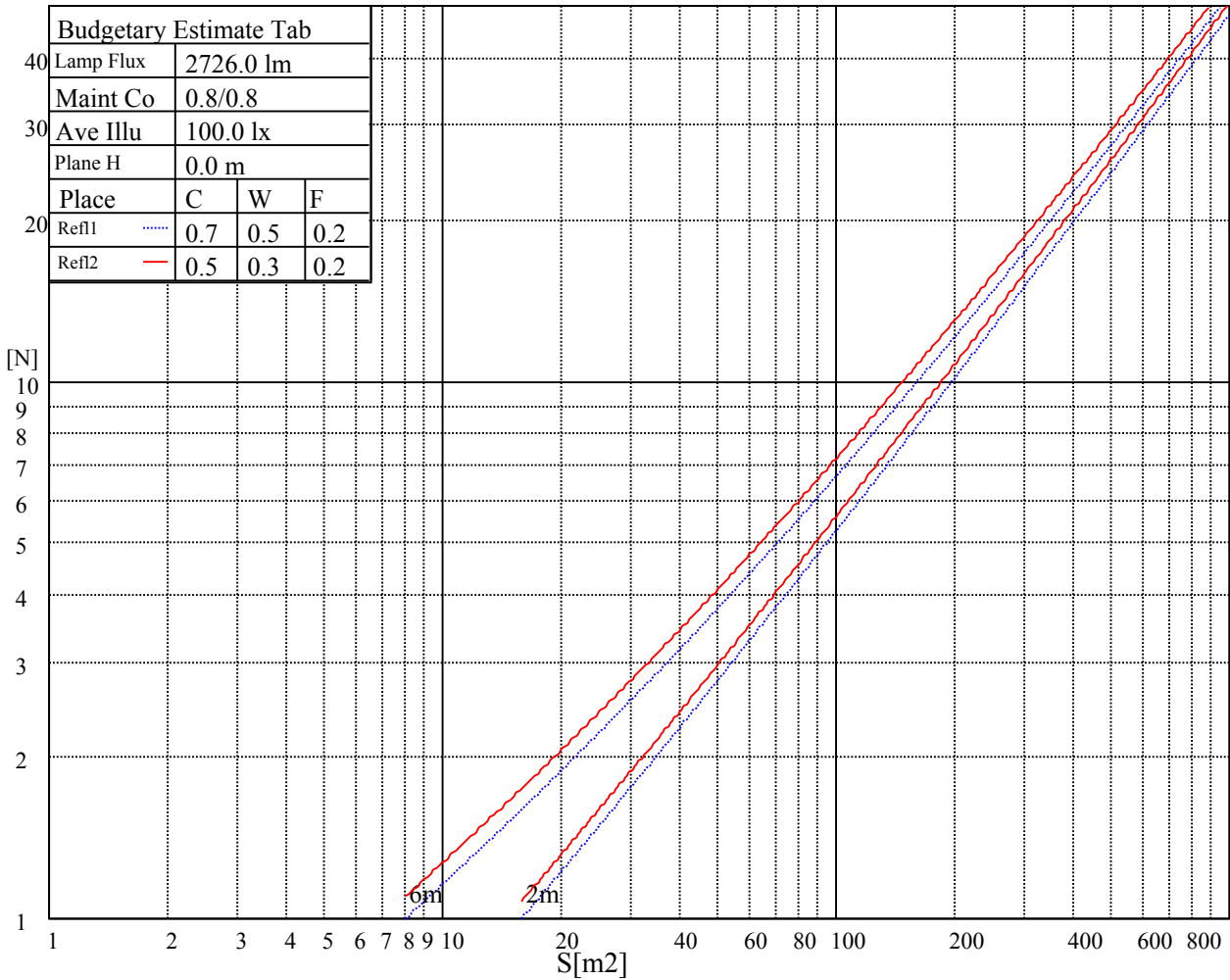
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 |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

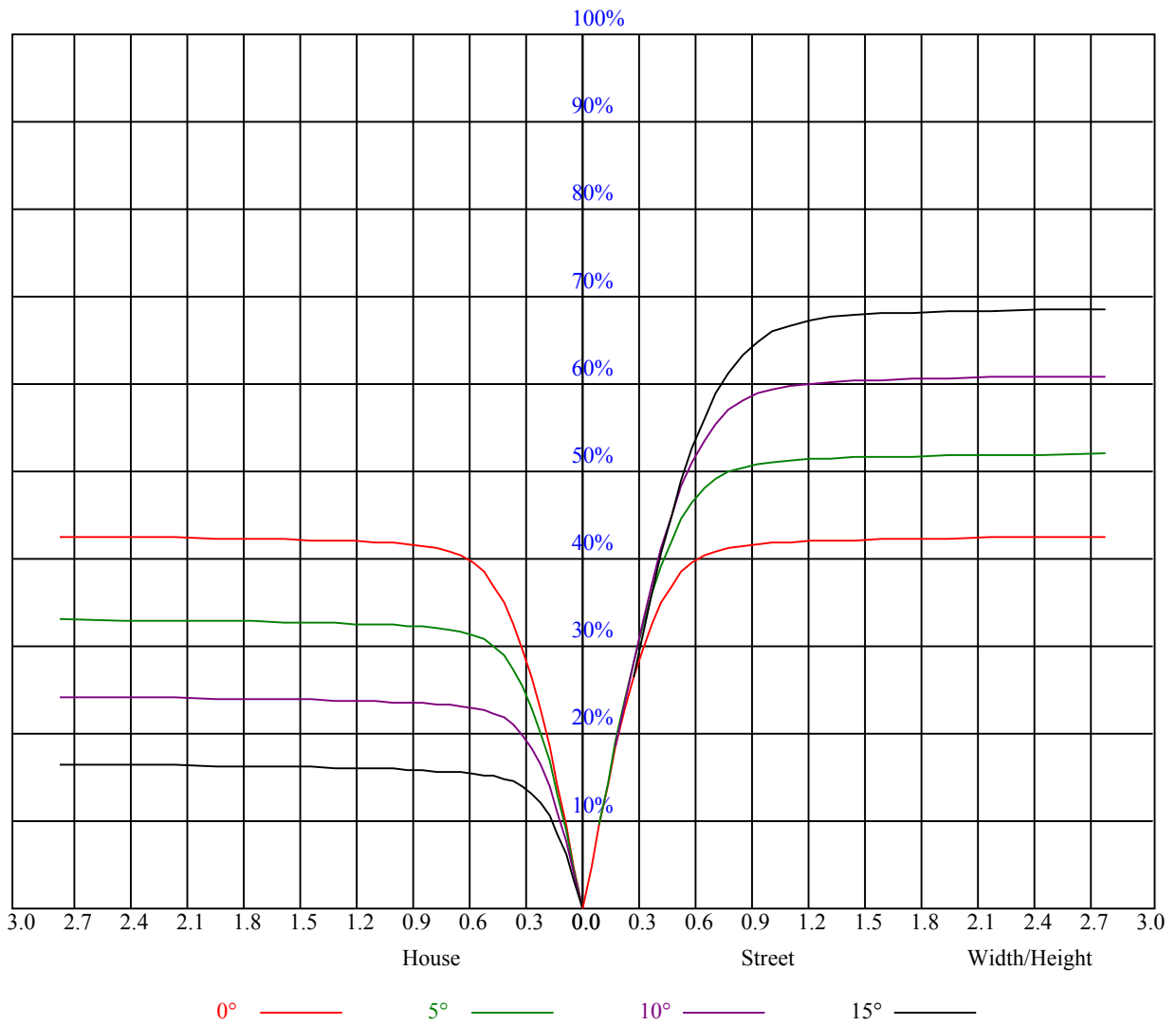


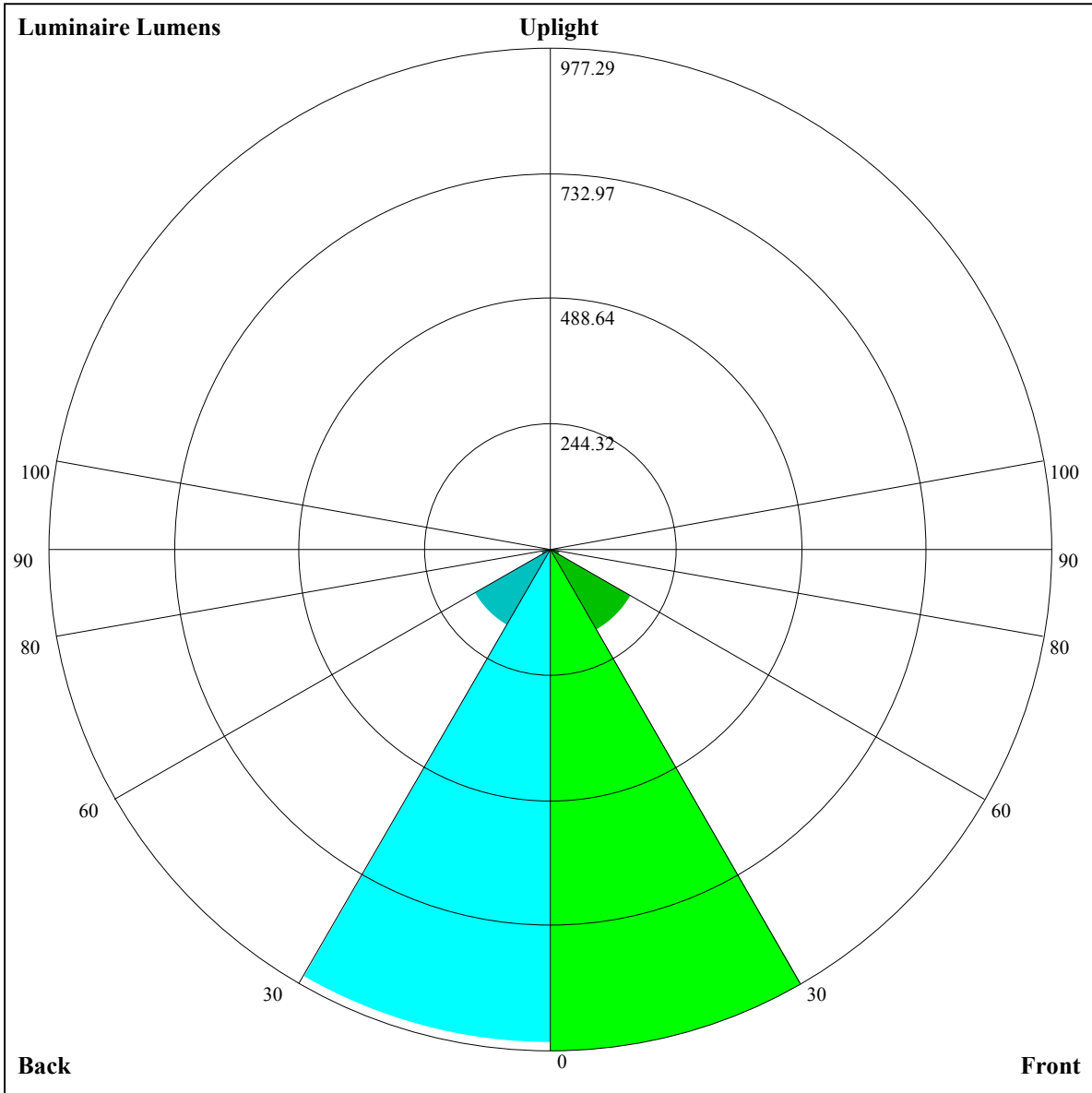
| Illumination assessment according UGR | | | | | | | | | | | |
|---|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|-----|
| Rf of Ceiling | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 | |
| Rf of Wall | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 | |
| Rf 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 | 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 | 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 | 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 | 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 | 非数字 |
| 4H | 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 | 非数字 |
| | 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 | 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 | 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 | 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 | 非数字 |
| 8H | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 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 | 1.02 | 1.02 | 1.02 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 0.95 | 0.91 | 0.91 | 0.91 | 0.88 | 0.88 | 0.88 | 0.86 |
| 1 | 0.95 | 0.93 | 0.91 | 0.93 | 0.91 | 0.90 | 0.90 | 0.88 | 0.87 | 0.87 | 0.85 | 0.84 | 0.84 | 0.83 | 0.82 | 0.80 |
| 2 | 0.89 | 0.86 | 0.83 | 0.88 | 0.85 | 0.82 | 0.85 | 0.82 | 0.80 | 0.82 | 0.80 | 0.79 | 0.80 | 0.78 | 0.77 | 0.76 |
| 3 | 0.84 | 0.80 | 0.77 | 0.83 | 0.79 | 0.76 | 0.80 | 0.77 | 0.75 | 0.78 | 0.76 | 0.74 | 0.76 | 0.74 | 0.72 | 0.71 |
| 4 | 0.79 | 0.75 | 0.71 | 0.78 | 0.74 | 0.71 | 0.76 | 0.73 | 0.70 | 0.75 | 0.72 | 0.69 | 0.73 | 0.70 | 0.68 | 0.67 |
| 5 | 0.75 | 0.70 | 0.67 | 0.74 | 0.70 | 0.66 | 0.72 | 0.69 | 0.66 | 0.71 | 0.68 | 0.65 | 0.70 | 0.67 | 0.65 | 0.64 |
| 6 | 0.71 | 0.66 | 0.63 | 0.70 | 0.66 | 0.63 | 0.69 | 0.65 | 0.62 | 0.68 | 0.64 | 0.62 | 0.67 | 0.64 | 0.61 | 0.60 |
| 7 | 0.67 | 0.63 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.65 | 0.61 | 0.59 | 0.64 | 0.61 | 0.58 | 0.57 |
| 8 | 0.64 | 0.59 | 0.56 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.62 | 0.58 | 0.56 | 0.61 | 0.58 | 0.55 | 0.54 |
| 9 | 0.61 | 0.56 | 0.53 | 0.61 | 0.56 | 0.53 | 0.60 | 0.56 | 0.53 | 0.59 | 0.56 | 0.53 | 0.58 | 0.55 | 0.53 | 0.52 |
| 10 | 0.58 | 0.54 | 0.51 | 0.58 | 0.54 | 0.51 | 0.57 | 0.53 | 0.51 | 0.57 | 0.53 | 0.50 | 0.56 | 0.53 | 0.50 | 0.49 |





Luminaire Lumens:

FL=977.29,FM=179.73,FH=18.44,FVH=6.47

BL=960.26,BM=170.95,BH=18.18,BVH=6.32

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 | 3960.28 | 3952.08 | 3949.16 | 3937.45 | 3911.70 | 3887.71 | 3852.59 | 3815.73 | 3748.42 |
| 45.0 | 3938.04 | 3947.40 | 3953.25 | 3954.42 | 3945.06 | 3921.65 | 3894.73 | 3858.45 | 3806.36 |
| 90.0 | 3953.84 | 3951.50 | 3947.99 | 3926.33 | 3897.66 | 3857.28 | 3815.14 | 3773.00 | 3720.33 |
| 135.0 | 3945.65 | 3945.65 | 3942.72 | 3930.43 | 3907.02 | 3881.27 | 3836.79 | 3801.09 | 3758.37 |
| 180.0 | 3960.28 | 3943.30 | 3931.60 | 3907.02 | 3879.52 | 3857.28 | 3820.99 | 3765.98 | 3709.21 |
| 225.0 | 3938.04 | 3913.46 | 3899.41 | 3871.32 | 3843.82 | 3807.53 | 3758.37 | 3699.85 | 3623.77 |
| 270.0 | 3953.84 | 3943.30 | 3931.01 | 3915.80 | 3890.05 | 3864.30 | 3839.13 | 3798.75 | 3732.62 |
| 315.0 | 3945.65 | 3934.53 | 3922.24 | 3904.68 | 3883.03 | 3847.91 | 3810.46 | 3761.30 | 3695.17 |
| 360.0 | 3960.28 | 3952.08 | 3949.16 | 3937.45 | 3911.70 | 3887.71 | 3852.59 | 3815.73 | 3748.42 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 3677.03 | 3597.44 | 3488.58 | 3399.05 | 3286.68 | 3188.95 | 3083.61 | 2970.08 | 2808.55 |
| 45.0 | 3760.13 | 3695.75 | 3610.90 | 3526.62 | 3419.53 | 3331.16 | 3238.69 | 3109.36 | 2998.17 |
| 90.0 | 3631.38 | 3554.13 | 3471.61 | 3383.83 | 3267.95 | 3170.81 | 3067.81 | 2953.69 | 2789.83 |
| 135.0 | 3675.86 | 3606.80 | 3531.31 | 3449.96 | 3342.28 | 3249.23 | 3150.32 | 3038.55 | 2881.71 |
| 180.0 | 3622.02 | 3541.84 | 3459.32 | 3375.05 | 3259.76 | 3159.10 | 3043.23 | 2918.58 | 2762.32 |
| 225.0 | 3527.21 | 3444.69 | 3357.49 | 3260.35 | 3129.84 | 3016.31 | 2860.64 | 2730.13 | 2594.36 |
| 270.0 | 3662.40 | 3585.73 | 3479.22 | 3394.95 | 3300.14 | 3176.66 | 3057.27 | 2934.96 | 2777.54 |
| 315.0 | 3602.12 | 3521.94 | 3411.34 | 3318.28 | 3226.40 | 3092.39 | 2974.17 | 2845.42 | 2721.35 |
| 360.0 | 3677.03 | 3597.44 | 3488.58 | 3399.05 | 3286.68 | 3188.95 | 3083.61 | 2970.08 | 2808.55 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2683.90 | 2556.32 | 2426.99 | 2264.88 | 2133.79 | 1996.85 | 1818.35 | 1680.24 | 1540.96 |
| 45.0 | 2837.81 | 2712.58 | 2587.34 | 2428.74 | 2305.26 | 2168.90 | 2034.30 | 1863.41 | 1721.21 |
| 90.0 | 2668.68 | 2541.11 | 2387.78 | 2255.52 | 2125.60 | 1958.22 | 1816.01 | 1675.56 | 1502.92 |
| 135.0 | 2757.05 | 2634.74 | 2482.00 | 2349.74 | 2224.50 | 2060.05 | 1925.45 | 1755.73 | 1619.96 |
| 180.0 | 2624.79 | 2496.04 | 2369.05 | 2215.72 | 2083.46 | 1909.06 | 1776.80 | 1642.79 | 1475.41 |
| 225.0 | 2432.84 | 2307.60 | 2180.61 | 2007.38 | 1869.85 | 1741.69 | 1602.99 | 1469.56 | 1167.17 |
| 270.0 | 2638.84 | 2508.92 | 2385.44 | 2223.33 | 2085.22 | 1941.25 | 1810.16 | 1638.10 | 1503.50 |
| 315.0 | 2556.91 | 2426.40 | 2295.90 | 2168.32 | 1999.19 | 1862.83 | 1722.96 | 1553.25 | 1313.89 |
| 360.0 | 2683.90 | 2556.32 | 2426.99 | 2264.88 | 2133.79 | 1996.85 | 1818.35 | 1680.24 | 1540.96 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 1161.85 | 1161.85 | 1094.96 | 932.44 | 804.57 | 682.08 | 568.49 | 453.67 | 381.68 |
| 45.0 | 1577.24 | 1435.03 | 1260.63 | 1127.20 | 993.77 | 836.93 | 714.62 | 575.33 | 481.70 |
| 90.0 | 1157.46 | 1157.46 | 1090.74 | 926.70 | 800.30 | 678.33 | 567.32 | 453.49 | 382.15 |
| 135.0 | 1478.92 | 1340.81 | 1170.51 | 1035.91 | 905.99 | 773.73 | 623.91 | 523.83 | 439.56 |
| 180.0 | 1341.98 | 1208.55 | 1071.61 | 901.31 | 767.29 | 646.73 | 539.05 | 431.95 | 364.65 |
| 225.0 | 1167.17 | 1032.86 | 898.32 | 735.22 | 618.11 | 517.46 | 415.04 | 349.85 | 282.78 |
| 270.0 | 1370.07 | 1196.84 | 1067.51 | 904.23 | 765.53 | 647.32 | 539.64 | 431.37 | 364.07 |
| 315.0 | 1143.65 | 1109.82 | 974.75 | 843.84 | 688.63 | 572.99 | 477.72 | 386.31 | 325.74 |
| 360.0 | 1161.85 | 1161.85 | 1094.96 | 932.44 | 804.57 | 682.08 | 568.49 | 453.67 | 381.68 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 319.71 | 268.15 | 213.08 | 177.09 | 148.30 | 124.48 | 100.83 | 85.79 | 71.28 |
| 45.0 | 405.03 | 340.66 | 297.94 | 297.94 | 185.05 | 154.32 | 124.01 | 104.58 | 88.72 |
| 90.0 | 321.00 | 256.97 | 213.31 | 177.15 | 141.21 | 118.10 | 99.49 | 81.40 | 69.99 |
| 135.0 | 368.17 | 308.47 | 308.47 | 188.50 | 156.43 | 130.74 | 105.69 | 89.48 | 76.72 |
| 180.0 | 306.13 | 306.13 | 200.67 | 168.31 | 134.13 | 112.42 | 90.71 | 77.48 | 66.95 |
| 225.0 | 236.72 | 197.45 | 157.78 | 131.97 | 110.90 | 93.87 | 80.12 | 66.77 | 58.93 |
| 270.0 | 306.72 | 306.72 | 203.42 | 170.89 | 143.56 | 120.32 | 97.26 | 82.75 | 68.71 |
| 315.0 | 273.65 | 229.41 | 183.23 | 153.68 | 128.93 | 108.73 | 88.78 | 76.14 | 63.85 |
| 360.0 | 319.71 | 268.15 | 213.08 | 177.09 | 148.30 | 124.48 | 100.83 | 85.79 | 71.28 |

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 | 62.21 | 55.60 | 49.57 | 46.00 | 43.01 | 39.74 | 37.57 | 35.70 | 34.06 |
| 45.0 | 76.25 | 64.02 | 56.88 | 51.62 | 46.64 | 43.60 | 40.97 | 38.22 | 36.28 |
| 90.0 | 61.16 | 54.60 | 48.81 | 45.41 | 42.66 | 40.20 | 37.63 | 35.70 | 33.71 |
| 135.0 | 66.54 | 57.35 | 51.97 | 47.87 | 44.65 | 41.20 | 38.86 | 36.81 | 34.65 |
| 180.0 | 58.93 | 51.79 | 47.46 | 44.13 | 41.26 | 38.22 | 36.17 | 34.35 | 32.77 |
| 225.0 | 53.14 | 48.57 | 44.18 | 41.20 | 38.10 | 35.93 | 34.12 | 32.13 | 30.78 |
| 270.0 | 60.16 | 53.96 | 48.05 | 44.54 | 41.61 | 38.45 | 36.28 | 34.53 | 32.77 |
| 315.0 | 56.83 | 51.50 | 46.47 | 43.37 | 40.61 | 38.22 | 35.70 | 33.88 | 32.36 |
| 360.0 | 62.21 | 55.60 | 49.57 | 46.00 | 43.01 | 39.74 | 37.57 | 35.70 | 34.06 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 32.54 | 30.90 | 29.73 | 28.68 | 27.21 | 26.10 | 24.99 | 23.64 | 22.59 |
| 45.0 | 34.18 | 32.71 | 31.37 | 30.20 | 28.85 | 27.80 | 26.69 | 25.57 | 24.40 |
| 90.0 | 32.25 | 31.02 | 29.50 | 28.38 | 27.27 | 25.98 | 24.93 | 23.82 | 22.77 |
| 135.0 | 33.12 | 31.78 | 30.31 | 29.26 | 27.86 | 26.80 | 25.69 | 24.58 | 23.53 |
| 180.0 | 31.08 | 29.90 | 28.56 | 27.45 | 26.34 | 24.99 | 23.94 | 22.82 | 21.77 |
| 225.0 | 29.61 | 28.15 | 27.04 | 25.87 | 24.76 | 23.41 | 22.36 | 21.42 | 20.48 |
| 270.0 | 31.08 | 29.79 | 28.68 | 27.56 | 26.16 | 24.99 | 23.94 | 22.59 | 21.54 |
| 315.0 | 31.02 | 29.50 | 28.38 | 27.21 | 25.81 | 24.70 | 23.58 | 22.18 | 21.24 |
| 360.0 | 32.54 | 30.90 | 29.73 | 28.68 | 27.21 | 26.10 | 24.99 | 23.64 | 22.59 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 21.42 | 20.60 | 19.66 | 18.79 | 18.02 | 17.62 | 17.32 | 17.09 | 16.97 |
| 45.0 | 23.06 | 22.06 | 21.07 | 20.25 | 19.20 | 18.43 | 18.02 | 17.67 | 17.38 |
| 90.0 | 21.59 | 20.78 | 19.90 | 18.90 | 18.14 | 17.73 | 17.44 | 17.15 | 16.91 |
| 135.0 | 22.24 | 21.30 | 20.48 | 19.25 | 18.49 | 18.08 | 17.73 | 17.38 | 17.21 |
| 180.0 | 20.66 | 19.78 | 18.84 | 18.20 | 17.67 | 17.32 | 17.09 | 16.80 | 16.68 |
| 225.0 | 19.31 | 18.43 | 17.79 | 17.38 | 17.03 | 16.74 | 16.56 | 16.39 | 16.21 |
| 270.0 | 20.42 | 19.55 | 18.61 | 18.02 | 17.50 | 17.15 | 16.91 | 16.68 | 16.50 |
| 315.0 | 20.37 | 19.20 | 18.32 | 17.79 | 17.44 | 17.03 | 16.80 | 16.62 | 16.50 |
| 360.0 | 21.42 | 20.60 | 19.66 | 18.79 | 18.02 | 17.62 | 17.32 | 17.09 | 16.97 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 16.74 | 16.56 | 16.39 | 16.21 | 16.09 | 15.92 | 15.68 | 15.45 | 14.98 |
| 45.0 | 17.15 | 16.97 | 16.80 | 16.62 | 16.50 | 16.33 | 16.21 | 16.04 | 15.80 |
| 90.0 | 16.68 | 16.50 | 16.39 | 16.27 | 16.04 | 15.92 | 15.74 | 15.51 | 15.10 |
| 135.0 | 16.97 | 16.80 | 16.68 | 16.50 | 16.39 | 16.27 | 16.15 | 15.86 | 15.63 |
| 180.0 | 16.56 | 16.33 | 16.21 | 16.04 | 15.92 | 15.74 | 15.57 | 15.33 | 14.57 |
| 225.0 | 16.04 | 15.86 | 15.74 | 15.63 | 15.45 | 15.22 | 14.92 | 14.28 | 13.81 |
| 270.0 | 16.33 | 16.15 | 16.04 | 15.92 | 15.74 | 15.57 | 15.33 | 15.04 | 14.40 |
| 315.0 | 16.27 | 16.15 | 16.04 | 15.86 | 15.74 | 15.51 | 15.33 | 14.92 | 14.22 |
| 360.0 | 16.74 | 16.56 | 16.39 | 16.21 | 16.09 | 15.92 | 15.68 | 15.45 | 14.98 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 14.40 | 13.93 | 13.23 | 12.11 | 11.53 | 10.83 | 10.42 | 10.18 | 9.95 |
| 45.0 | 15.57 | 14.81 | 14.22 | 13.40 | 12.35 | 11.59 | 10.94 | 10.48 | 10.18 |
| 90.0 | 14.40 | 13.99 | 13.05 | 12.17 | 11.53 | 10.83 | 10.48 | 10.18 | 9.95 |
| 135.0 | 14.98 | 14.40 | 13.69 | 12.47 | 11.59 | 10.89 | 10.48 | 10.18 | 9.95 |
| 180.0 | 14.16 | 13.28 | 12.29 | 11.41 | 10.71 | 10.36 | 10.18 | 9.89 | 9.77 |
| 225.0 | 13.11 | 12.11 | 11.41 | 10.77 | 10.36 | 10.12 | 9.89 | 9.77 | 9.83 |
| 270.0 | 13.99 | 13.17 | 12.23 | 11.53 | 10.89 | 10.42 | 10.18 | 9.89 | 9.77 |
| 315.0 | 13.81 | 12.93 | 12.17 | 11.35 | 10.83 | 10.36 | 10.12 | 9.95 | 9.83 |
| 360.0 | 14.40 | 13.93 | 13.23 | 12.11 | 11.53 | 10.83 | 10.42 | 10.18 | 9.95 |

Intensity data(cd)

| | |
|-----------------|-------|
| C/ γ (°) | 90.0 |
| 0.0 | 9.83 |
| 45.0 | 10.01 |
| 90.0 | 9.83 |
| 135.0 | 9.77 |
| 180.0 | 9.77 |
| 225.0 | 9.83 |
| 270.0 | 9.83 |
| 315.0 | 9.89 |
| 360.0 | 9.83 |