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Address:380JinOu Road,Gaoxin Zone,Jiang Men City,Guangdong,China

## Nata

Client: NT
LumCAT: 1-1755-LM
Luminaire: 92.70.492.00 LED HOLDER
Report No: 20251128-B003
Ballast type: DC

| | |
|---|---|
| Test No: 20251128-C003 | Voltage(V): 34.600 |
| LampCAT: PHILIPS SLM 1203 L09 1313 | Current(A): 0.218 |
| Lamp flux(lm): 1321.0 | Power (W): 7.542 |
| Number of Lamps: 1 | PF: 0.000 |
| Length(mm): 50 | Width(mm): 50 |
| Phm Type: C | Height(mm): 22 |

## Photometric Results

Lumens(lm): 1278.60, Efficiency(%): 96.79% , Luminous Efficacy(lm/W): 169.53
Central intensity(cd): 3415.757, Maximum intensity(cd): 3415.757
Angle of maximum intensity: C=0.0 γ=0.0
Beam Angle(50%Imax): [C0/180]Total=25.4
[C90/270]Total=25.4
Field angle(10%Imax): [C0/180]Total=75.4
[C90/270]Total=75.4
Maximum s/h(1/2): C0_180=0.42 C90_270=0.42
Maximum s/h(1/4): C0_180=0.47 C90_270=0.47
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 96.79%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 99.359%

NT Nata 1-1755-LM

## Zonal flux distribution table



| γ(°) | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|---|---|---|---|---|---|
| 0.0 | 3415.757 | 0.000 | 0 | 0.00% | 0.00% |
| 1.0 | 3401.332 | 3.262 | 3.262 | 0.25% | 0.26% |
| 2.0 | 3354.936 | 9.697 | 12.959 | 0.73% | 1.01% |
| 3.0 | 3280.982 | 15.871 | 28.83 | 1.20% | 2.25% |
| 4.0 | 3181.946 | 21.633 | 50.464 | 1.64% | 3.95% |
| 5.0 | 3059.658 | 26.851 | 77.315 | 2.03% | 6.05% |
| 6.0 | 2910.350 | 31.374 | 108.689 | 2.38% | 8.50% |
| 7.0 | 2737.898 | 35.059 | 143.747 | 2.65% | 11.24% |
| 8.0 | 2564.261 | 37.947 | 181.694 | 2.87% | 14.21% |
| 9.0 | 2352.120 | 39.845 | 221.538 | 3.02% | 17.33% |
| 10.0 | 2151.582 | 40.757 | 262.295 | 3.09% | 20.51% |
| 11.0 | 1989.798 | 41.381 | 303.676 | 3.13% | 23.75% |
| 12.0 | 1810.758 | 41.546 | 345.221 | 3.15% | 27.00% |
| 13.0 | 1654.098 | 41.119 | 386.341 | 3.11% | 30.22% |
| 14.0 | 1518.418 | 40.608 | 426.948 | 3.07% | 33.39% |
| 15.0 | 1385.128 | 39.861 | 466.81 | 3.02% | 36.51% |
| 16.0 | 1257.759 | 38.726 | 505.535 | 2.93% | 39.54% |
| 17.0 | 1141.080 | 37.356 | 542.892 | 2.83% | 42.46% |
| 18.0 | 1041.279 | 35.982 | 578.874 | 2.72% | 45.27% |
| 19.0 | 956.818 | 34.763 | 613.637 | 2.63% | 47.99% |
| 20.0 | 874.511 | 33.518 | 647.155 | 2.54% | 50.61% |
| 21.0 | 806.693 | 32.283 | 679.438 | 2.44% | 53.14% |
| 22.0 | 746.603 | 31.214 | 710.652 | 2.36% | 55.58% |
| 23.0 | 696.730 | 30.285 | 740.937 | 2.29% | 57.95% |
| 24.0 | 648.159 | 29.404 | 770.341 | 2.23% | 60.25% |
| 25.0 | 610.192 | 28.612 | 798.953 | 2.17% | 62.49% |
| 26.0 | 575.196 | 27.981 | 826.934 | 2.12% | 64.67% |
| 27.0 | 544.968 | 27.405 | 854.339 | 2.07% | 66.82% |
| 28.0 | 519.003 | 26.937 | 881.277 | 2.04% | 68.92% |
| 29.0 | 495.364 | 26.539 | 907.816 | 2.01% | 71.00% |
| 30.0 | 476.385 | 26.237 | 934.053 | 1.99% | 73.05% |
| 31.0 | 458.591 | 26.019 | 960.072 | 1.97% | 75.09% |
| 32.0 | 444.715 | 25.879 | 985.95 | 1.96% | 77.11% |
| 33.0 | 429.171 | 25.745 | 1011.695 | 1.95% | 79.12% |
| 34.0 | 417.707 | 25.629 | 1037.324 | 1.94% | 81.13% |
| 35.0 | 400.494 | 25.410 | 1062.735 | 1.92% | 83.12% |
| 36.0 | 382.850 | 24.942 | 1087.677 | 1.89% | 85.07% |
| 37.0 | 358.952 | 24.193 | 1111.87 | 1.83% | 86.96% |

NT Nata 1-1755-LM

## Zonal flux distribution table



| γ(°) | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|---|---|---|---|---|---|
| 38.0 | 332.858 | 23.092 | 1134.962 | 1.75% | 88.77% |
| 39.0 | 303.137 | 21.708 | 1156.67 | 1.64% | 90.46% |
| 40.0 | 272.037 | 20.060 | 1176.73 | 1.52% | 92.03% |
| 41.0 | 235.954 | 18.089 | 1194.819 | 1.37% | 93.45% |
| 42.0 | 204.068 | 15.987 | 1210.806 | 1.21% | 94.70% |
| 43.0 | 169.298 | 13.831 | 1224.637 | 1.05% | 95.78% |
| 44.0 | 134.937 | 11.483 | 1236.119 | 0.87% | 96.68% |
| 45.0 | 103.256 | 9.154 | 1245.273 | 0.69% | 97.39% |
| 46.0 | 75.031 | 6.972 | 1252.246 | 0.53% | 97.94% |
| 47.0 | 50.659 | 4.999 | 1257.245 | 0.38% | 98.33% |
| 48.0 | 33.123 | 3.387 | 1260.632 | 0.26% | 98.59% |
| 49.0 | 20.808 | 2.215 | 1262.846 | 0.17% | 98.77% |
| 50.0 | 14.134 | 1.457 | 1264.303 | 0.11% | 98.88% |
| 51.0 | 10.980 | 1.063 | 1265.366 | 0.08% | 98.96% |
| 52.0 | 9.559 | 0.881 | 1266.247 | 0.07% | 99.03% |
| 53.0 | 8.601 | 0.790 | 1267.037 | 0.06% | 99.10% |
| 54.0 | 7.697 | 0.718 | 1267.755 | 0.05% | 99.15% |
| 55.0 | 6.523 | 0.635 | 1268.39 | 0.05% | 99.20% |
| 56.0 | 5.350 | 0.537 | 1268.927 | 0.04% | 99.24% |
| 57.0 | 4.586 | 0.454 | 1269.381 | 0.03% | 99.28% |
| 58.0 | 3.886 | 0.392 | 1269.773 | 0.03% | 99.31% |
| 59.0 | 3.316 | 0.337 | 1270.109 | 0.03% | 99.34% |
| 60.0 | 3.122 | 0.304 | 1270.414 | 0.02% | 99.36% |
| 61.0 | 3.014 | 0.293 | 1270.706 | 0.02% | 99.38% |
| 62.0 | 2.928 | 0.286 | 1270.993 | 0.02% | 99.40% |
| 63.0 | 2.842 | 0.281 | 1271.273 | 0.02% | 99.43% |
| 64.0 | 2.810 | 0.277 | 1271.551 | 0.02% | 99.45% |
| 65.0 | 2.756 | 0.275 | 1271.826 | 0.02% | 99.47% |
| 66.0 | 2.723 | 0.273 | 1272.1 | 0.02% | 99.49% |
| 67.0 | 2.680 | 0.272 | 1272.371 | 0.02% | 99.51% |
| 68.0 | 2.637 | 0.269 | 1272.641 | 0.02% | 99.53% |
| 69.0 | 2.637 | 0.269 | 1272.91 | 0.02% | 99.55% |
| 70.0 | 2.637 | 0.271 | 1273.181 | 0.02% | 99.58% |
| 71.0 | 2.605 | 0.271 | 1273.452 | 0.02% | 99.60% |
| 72.0 | 2.584 | 0.270 | 1273.721 | 0.02% | 99.62% |
| 73.0 | 2.594 | 0.271 | 1273.992 | 0.02% | 99.64% |
| 74.0 | 2.562 | 0.271 | 1274.263 | 0.02% | 99.66% |
| 75.0 | 2.562 | 0.271 | 1274.534 | 0.02% | 99.68% |

## Zonal flux distribution table



| γ(°) | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|---|---|---|---|---|---|
| 76.0 | 2.573 | 0.273 | 1274.807 | 0.02% | 99.70% |
| 77.0 | 2.540 | 0.273 | 1275.079 | 0.02% | 99.72% |
| 78.0 | 2.540 | 0.272 | 1275.351 | 0.02% | 99.75% |
| 79.0 | 2.540 | 0.273 | 1275.624 | 0.02% | 99.77% |
| 80.0 | 2.508 | 0.272 | 1275.896 | 0.02% | 99.79% |
| 81.0 | 2.508 | 0.271 | 1276.168 | 0.02% | 99.81% |
| 82.0 | 2.497 | 0.271 | 1276.439 | 0.02% | 99.83% |
| 83.0 | 2.497 | 0.272 | 1276.711 | 0.02% | 99.85% |
| 84.0 | 2.487 | 0.272 | 1276.982 | 0.02% | 99.87% |
| 85.0 | 2.487 | 0.271 | 1277.254 | 0.02% | 99.89% |
| 86.0 | 2.487 | 0.272 | 1277.525 | 0.02% | 99.92% |
| 87.0 | 2.465 | 0.271 | 1277.796 | 0.02% | 99.94% |
| 88.0 | 2.454 | 0.269 | 1278.066 | 0.02% | 99.96% |
| 89.0 | 2.444 | 0.268 | 1278.334 | 0.02% | 99.98% |
| 90.0 | 2.476 | 0.270 | 1278.604 | 0.02% | 100.00% |

## Zonal flux distribution table



ZONAL LUMEN SUMMARY

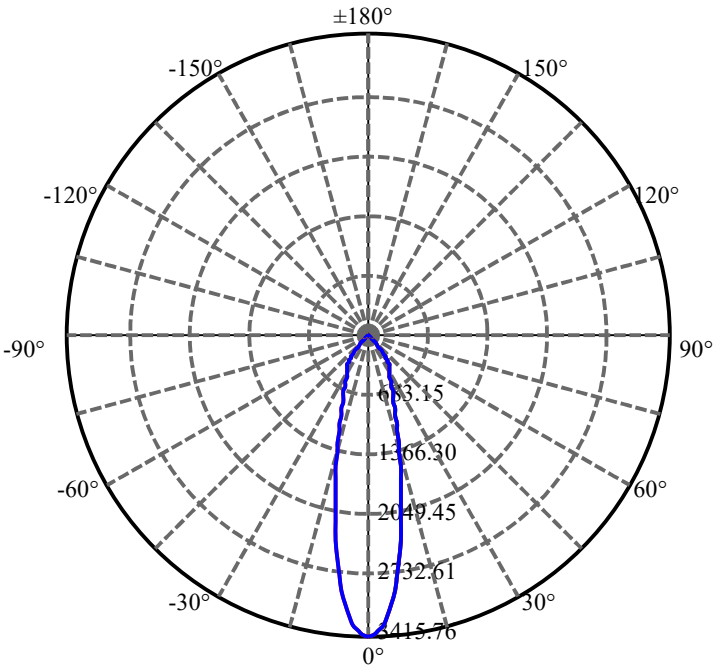
| Zone | Lumens | %Lamp | %Fixt |
|---|---|---|---|
| 0-30 | 934.05 | 70.71% | 73.05% |
| 0-40 | 1176.73 | 89.08% | 92.03% |
| 0-60 | 1270.41 | 96.17% | 99.36% |
| 0-90 | 1278.33 | 96.77% | 99.98% |
| 0-120 | 1278.33 | 96.77% | 99.98% |
| 0-180 | 1278.60 | 96.79% | 100.00% |
| 60-90 | 7.92 | 0.60% | 0.62% |
| 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% |
| 0-33.44 | 1022.88 | 77.43% | 80.00% |

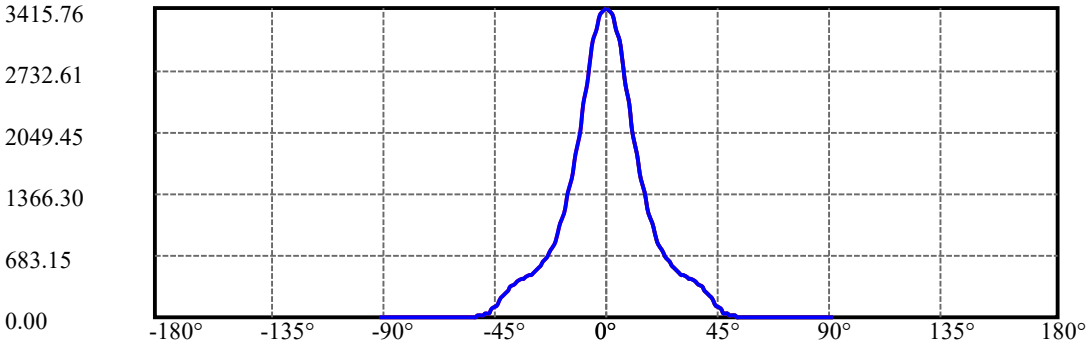
ZONAL LUMEN SUMMARY

| | |
|---|---|
| 0-10 | 262.30 |
| 10-20 | 384.86 |
| 20-30 | 286.90 |
| 30-40 | 242.68 |
| 40-50 | 87.57 |
| 50-60 | 6.11 |
| 60-70 | 2.77 |
| 70-80 | 2.72 |
| 80-90 | 2.44 |
| 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 |

Light Distribution Curve [Unit:cd]






C0(Max):

C0/C180:

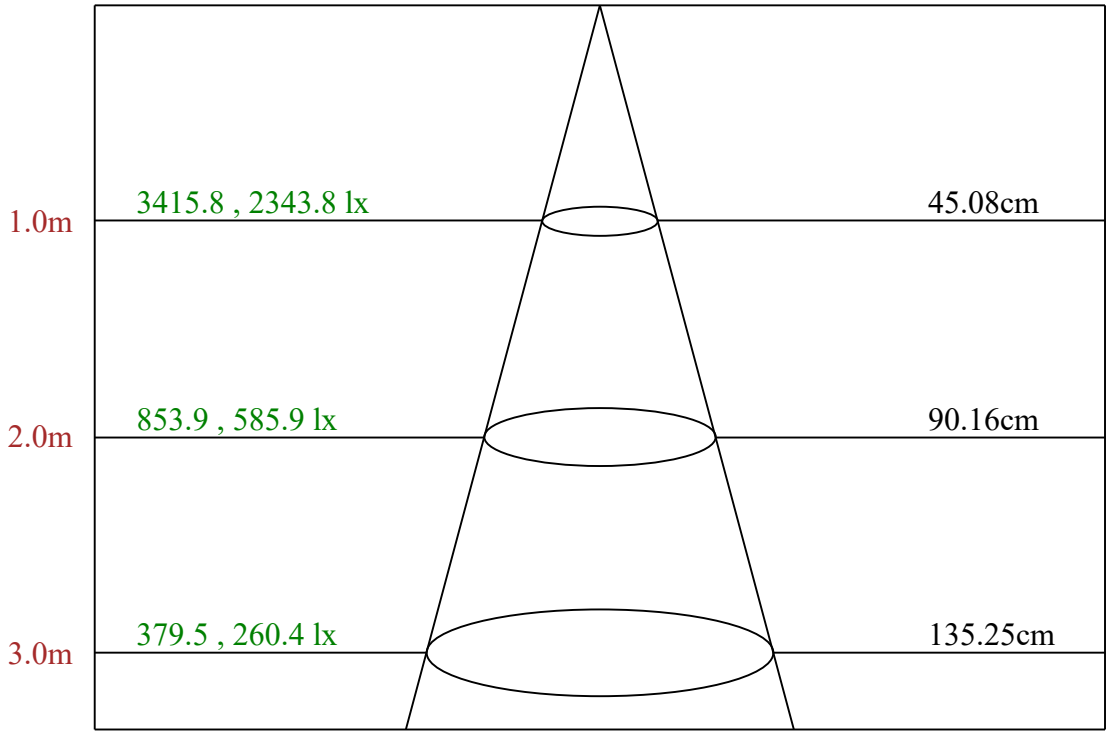
C90/C270:

Field angle(10%Imax):C0/180Left:37.7 Right:37.7
:C90/270Left:37.7 Right:37.7

Beam Angle(50%Imax):C0/180Left:12.7 Right:12.7
:C90/270Left:12.7 Right:12.7

Lux distance Curve





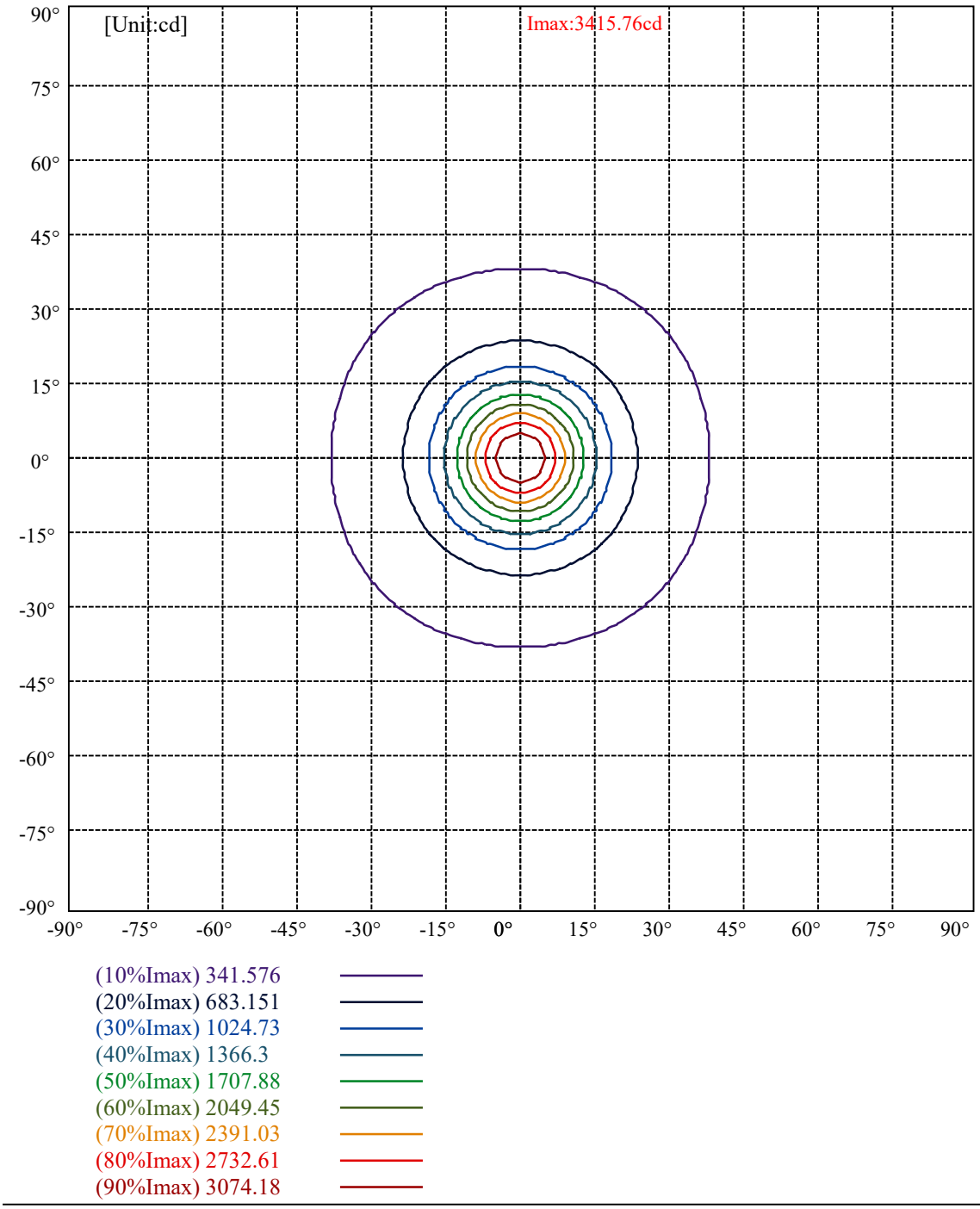

Max , Ave

Beam angle of C0 plane 25.41

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2025/11/28
Humidity(%): 60.0%

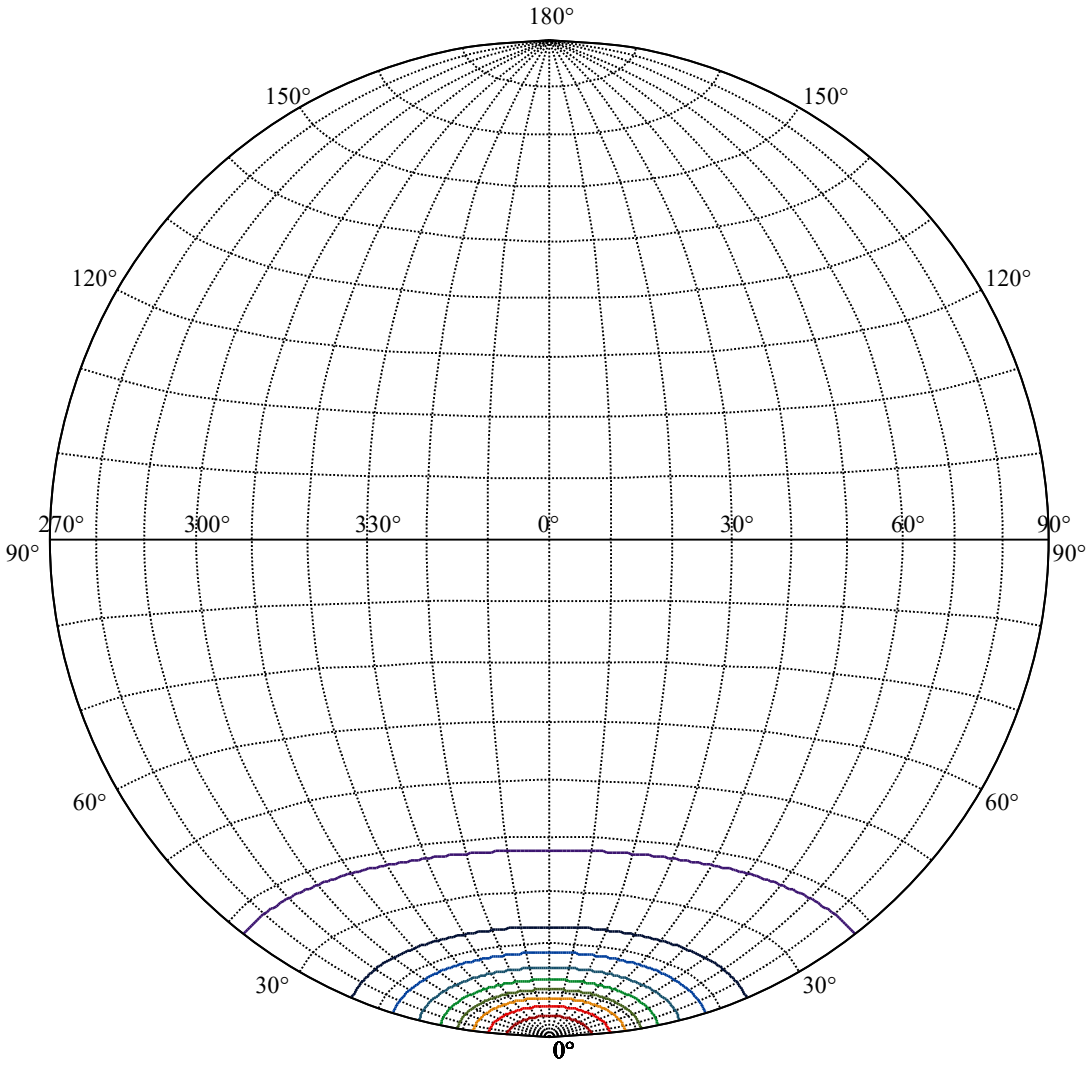
Operator: YZQ
Distance(m): 9.28




Equipment: GMS1980
Temperature(°C): 25.0
Date: 2025/11/28
Humidity(%): 60.0%
Operator: YZQ
Distance(m): 9.28

ISO candela diagram on circular web






House [Unit:cd] Road

Imax:3415.76

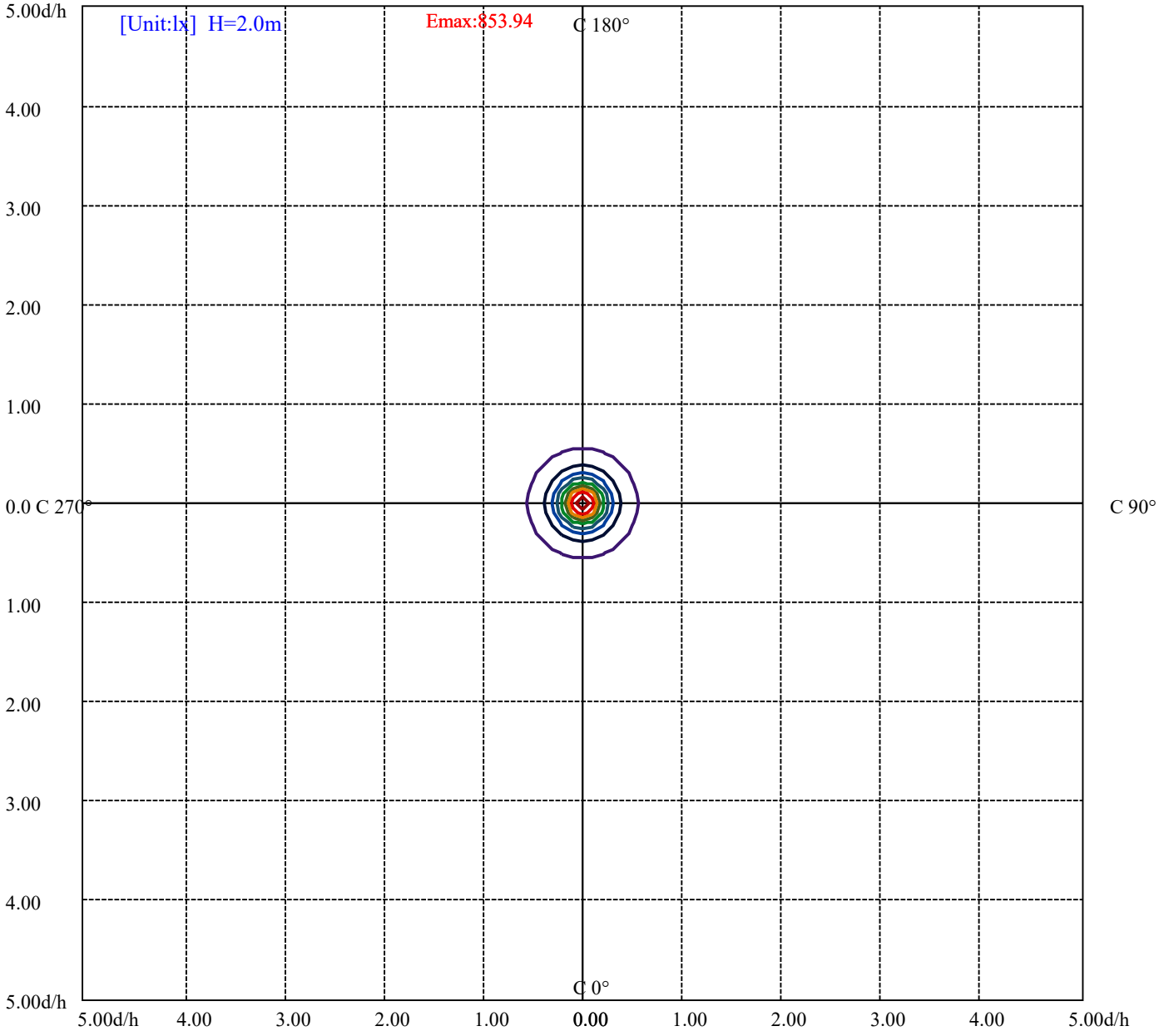
(10%Imax) 341.576
(20%Imax) 683.151
(30%Imax) 1024.73
(40%Imax) 1366.3
(50%Imax) 1707.88
(60%Imax) 2049.45
(70%Imax) 2391.03
(80%Imax) 2732.61
(90%Imax) 3074.18

Equipment: GMS1980 Date: 2025/11/28 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

NT Nata 1-1755-LM

ISO illuminance diagram



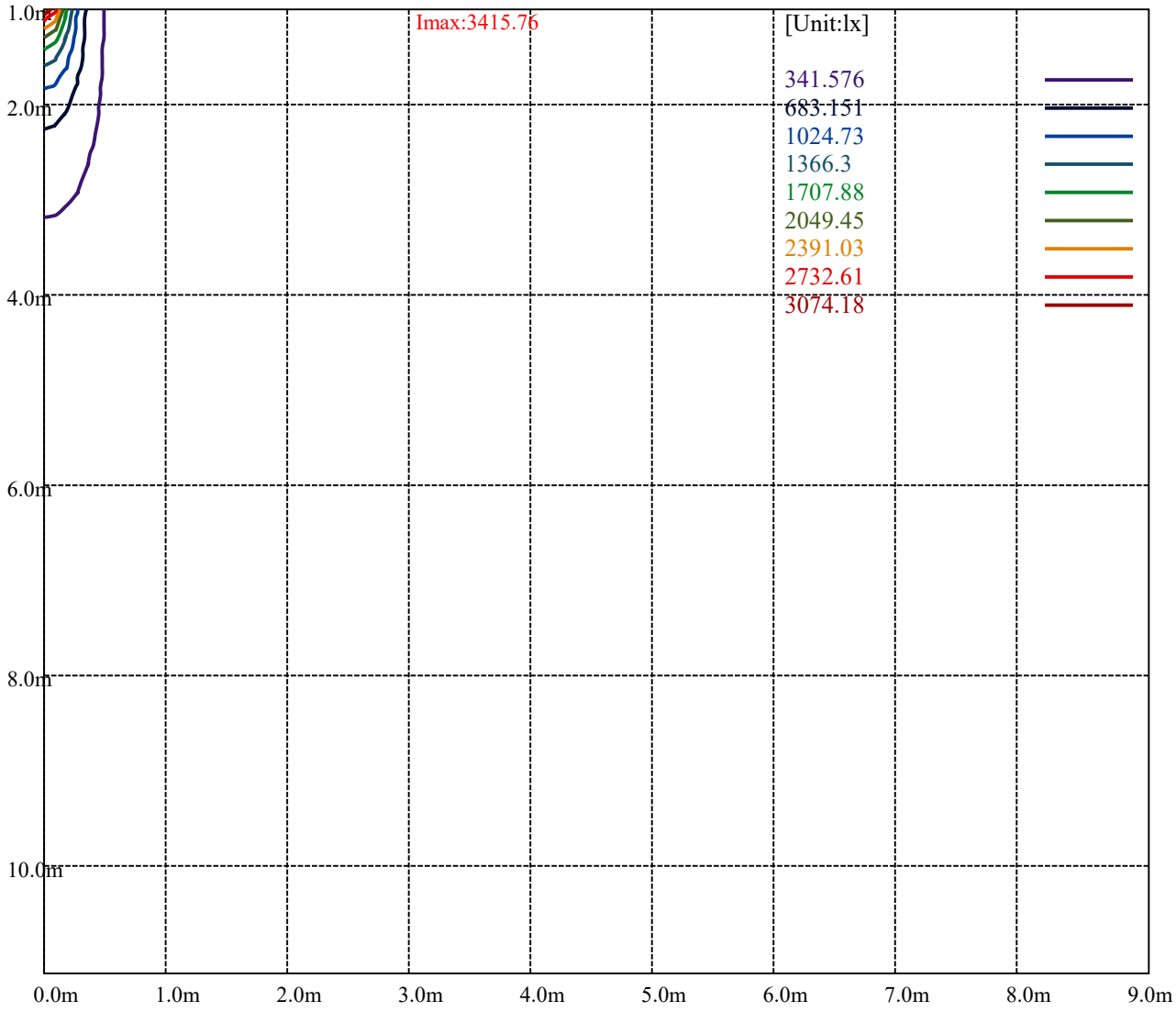



Equipment: GMS1980 Date: 2025/11/28 Operator: YZQ

Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

## Space ISO Lux diagram






| | | |
|---|---|---|
| Equipment: GMS1980 | Date: 2025/11/28 | Operator: YZQ |
| Temperature(°C): 25.0 | Humidity(%): 60.0% | Distance(m): 9.28 |

NT Nata 1-1755-LM

## Luminance Limitting Curve(no luminous side)



Luminance Table

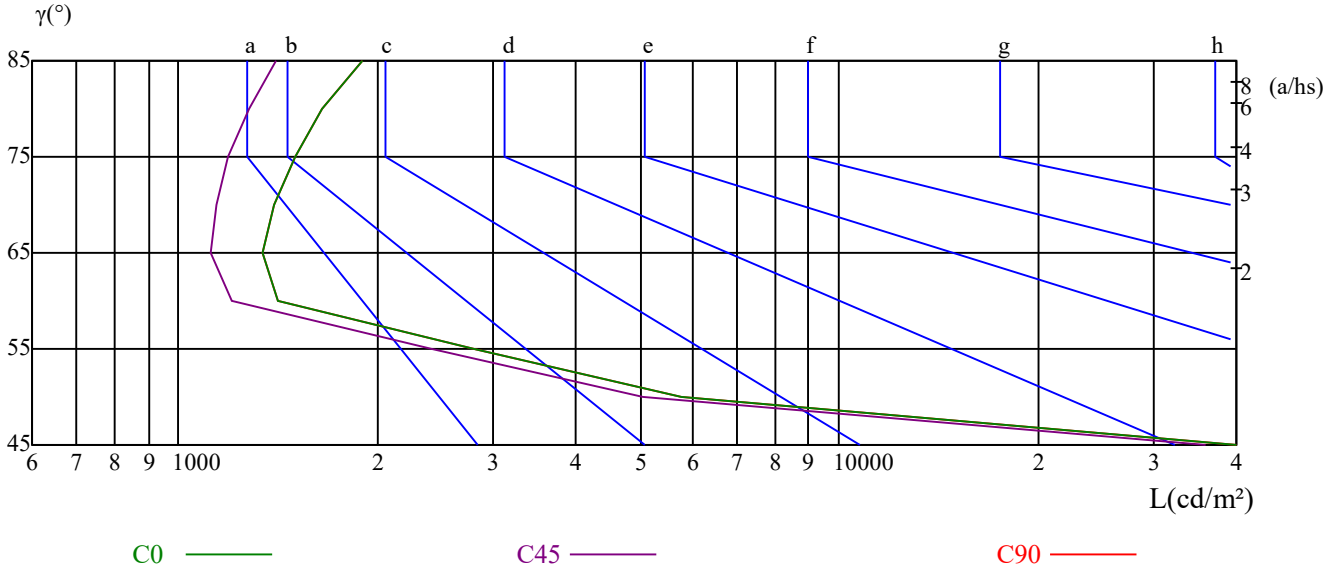
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|---|---|---|---|---|---|---|---|---|---|
| C0 | 40563 | 5770 | 2794 | 1417 | 1342 | 1396 | 1499 | 1653 | 1893 |
| C45 | 36006 | 5050 | 2409 | 1202 | 1117 | 1138 | 1192 | 1276 | 1407 |
| C90 | 40563 | 5770 | 2794 | 1417 | 1342 | 1396 | 1499 | 1653 | 1893 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|---|---|---|---|---|---|---|---|---|
| 2608 | 2608 | 2608 | 3960 | 3960 | 3960 | 11413 | 11413 | 11413 |

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 Limitting Curve



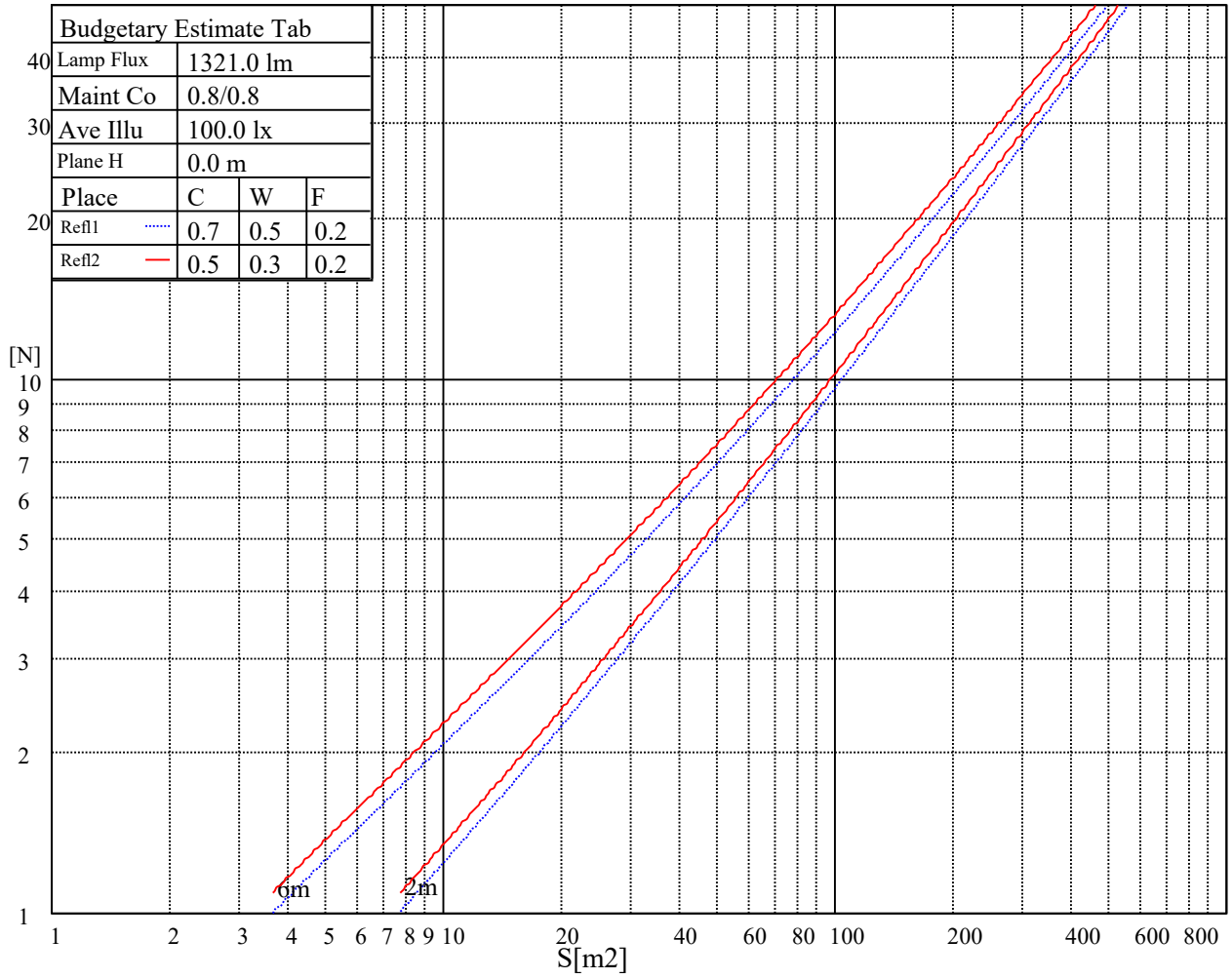
| Illumination assessment according UGR | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Rf of Ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| Rf of Wall | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| Rf of Floor | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| X | Y | | | | | | | | | | |
| 2H | 2H | 21.21 | 22.19 | 21.57 | 22.50 | 22.82 | 21.10 | 22.09 | 21.47 | 22.40 | 22.72 |
| | 3H | 21.01 | 21.88 | 21.39 | 22.22 | 22.56 | 20.90 | 21.78 | 21.29 | 22.11 | 22.46 |
| | 4H | 20.91 | 21.72 | 21.31 | 22.07 | 22.44 | 20.81 | 21.61 | 21.21 | 21.97 | 22.33 |
| | 6H | 20.83 | 21.57 | 21.25 | 21.94 | 22.34 | 20.73 | 21.46 | 21.14 | 21.84 | 22.24 |
| | 8H | 20.76 | 21.46 | 21.18 | 21.85 | 22.26 | 20.66 | 21.36 | 21.08 | 21.75 | 22.15 |
| | 12H | 20.70 | 21.36 | 21.12 | 21.76 | 22.18 | 20.60 | 21.26 | 21.02 | 21.66 | 22.07 |
| 4H | 2H | 20.90 | 21.71 | 21.30 | 22.06 | 22.43 | 20.80 | 21.60 | 21.20 | 21.96 | 22.32 |
| | 3H | 20.66 | 21.33 | 21.09 | 21.73 | 22.15 | 20.56 | 21.23 | 20.99 | 21.63 | 22.04 |
| | 4H | 20.60 | 21.17 | 21.03 | 21.60 | 22.05 | 20.49 | 21.07 | 20.93 | 21.50 | 21.94 |
| | 6H | 20.47 | 20.98 | 20.94 | 21.43 | 21.89 | 20.37 | 20.88 | 20.84 | 21.33 | 21.78 |
| | 8H | 20.42 | 20.89 | 20.91 | 21.35 | 21.83 | 20.32 | 20.79 | 20.81 | 21.25 | 21.73 |
| | 12H | 20.39 | 20.82 | 20.88 | 21.28 | 21.80 | 20.29 | 20.72 | 20.78 | 21.17 | 21.69 |
| 8H | 4H | 20.39 | 20.87 | 20.88 | 21.33 | 21.80 | 20.29 | 20.77 | 20.78 | 21.22 | 21.70 |
| | 6H | 20.26 | 20.65 | 20.77 | 21.13 | 21.64 | 20.16 | 20.55 | 20.67 | 21.03 | 21.54 |
| | 8H | 20.26 | 20.59 | 20.80 | 21.11 | 21.61 | 20.16 | 20.49 | 20.70 | 21.01 | 21.51 |
| | 12H | 20.24 | 20.49 | 20.78 | 21.01 | 21.53 | 20.14 | 20.39 | 20.68 | 20.91 | 21.43 |
| 12H | 4H | 20.34 | 20.78 | 20.83 | 21.23 | 21.75 | 20.24 | 20.68 | 20.73 | 21.13 | 21.65 |
| | 6H | 20.25 | 20.57 | 20.78 | 21.10 | 21.59 | 20.15 | 20.47 | 20.68 | 20.99 | 21.49 |
| | 8H | 20.21 | 20.47 | 20.76 | 20.99 | 21.51 | 20.11 | 20.37 | 20.66 | 20.88 | 21.41 |

| Variation with the observer position at spacings: | | |
|---|---|---|
| S = 1.0H | 3.6/-14.8 | 3.6/-14.8 |
| S = 1.5H | 6.1/-13.9 | 6.1/-13.9 |
| S = 2.0H | 8.0/-12.7 | 8.0/-12.7 |
| Standard tables: | BK0 | BK0 |
| Uncorrected UGR | 1.3 | 1.3 |

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

## Budgetary Estimate Table






Equipment: GMS1980 Date: 2025/11/28 Operator: YZQ
Temperature(°C): 25.0 Humidity(%): 60.0% Distance(m): 9.28

## Utilization factor table for indoor luminaire



| 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 | COEFFCIENTS OF UTILIZATION RHOFC=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.15 | 1.15 | 1.15 | 1.13 | 1.13 | 1.13 | 1.08 | 1.08 | 1.08 | 1.03 | 1.03 | 1.03 | 0.99 | 0.99 | 0.99 | 0.97 |
| 1 | 1.08 | 1.05 | 1.03 | 1.06 | 1.04 | 1.02 | 1.02 | 1.00 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.91 |
| 2 | 1.01 | 0.97 | 0.94 | 0.99 | 0.96 | 0.93 | 0.96 | 0.93 | 0.91 | 0.93 | 0.91 | 0.89 | 0.91 | 0.89 | 0.87 | 0.86 |
| 3 | 0.95 | 0.90 | 0.87 | 0.93 | 0.89 | 0.86 | 0.91 | 0.87 | 0.85 | 0.89 | 0.86 | 0.83 | 0.86 | 0.84 | 0.82 | 0.81 |
| 4 | 0.89 | 0.84 | 0.80 | 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 | 0.75 | 0.83 | 0.78 | 0.75 | 0.82 | 0.77 | 0.74 | 0.80 | 0.76 | 0.73 | 0.79 | 0.75 | 0.73 | 0.72 |
| 6 | 0.80 | 0.74 | 0.71 | 0.79 | 0.74 | 0.70 | 0.78 | 0.73 | 0.70 | 0.76 | 0.72 | 0.69 | 0.75 | 0.72 | 0.69 | 0.68 |
| 7 | 0.76 | 0.70 | 0.67 | 0.75 | 0.70 | 0.66 | 0.74 | 0.69 | 0.66 | 0.73 | 0.69 | 0.66 | 0.72 | 0.68 | 0.65 | 0.64 |
| 8 | 0.72 | 0.67 | 0.63 | 0.71 | 0.66 | 0.63 | 0.70 | 0.66 | 0.63 | 0.69 | 0.65 | 0.62 | 0.69 | 0.65 | 0.62 | 0.61 |
| 9 | 0.69 | 0.63 | 0.60 | 0.68 | 0.63 | 0.60 | 0.67 | 0.63 | 0.60 | 0.66 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.58 |
| 10 | 0.66 | 0.60 | 0.57 | 0.65 | 0.60 | 0.57 | 0.64 | 0.60 | 0.57 | 0.64 | 0.60 | 0.57 | 0.63 | 0.59 | 0.56 | 0.55 |

## 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 | 3433.63 | 3444.82 | 3425.01 | 3380.23 | 3292.39 | 3195.94 | 3078.82 | 2911.75 | 2761.04 |
| 45.0 | 3393.15 | 3431.04 | 3445.68 | 3426.74 | 3382.82 | 3311.34 | 3192.50 | 3073.65 | 2898.83 |
| 90.0 | 3437.93 | 3443.10 | 3418.13 | 3347.51 | 3260.53 | 3147.71 | 2976.34 | 2819.60 | 2646.50 |
| 135.0 | 3398.32 | 3437.07 | 3449.13 | 3422.43 | 3370.76 | 3290.67 | 3184.74 | 3022.84 | 2872.13 |
| 180.0 | 3433.63 | 3397.46 | 3337.17 | 3256.22 | 3127.91 | 3003.90 | 2861.80 | 2707.65 | 2508.72 |
| 225.0 | 3393.15 | 3331.15 | 3222.64 | 3111.54 | 2982.37 | 2835.97 | 2637.03 | 2468.24 | 2296.00 |
| 270.0 | 3437.93 | 3392.29 | 3325.12 | 3205.41 | 3082.26 | 2939.31 | 2776.54 | 2555.22 | 2372.65 |
| 315.0 | 3398.32 | 3333.73 | 3216.61 | 3097.76 | 2956.53 | 2752.43 | 2575.03 | 2344.23 | 2158.21 |
| 360.0 | 3433.63 | 3444.82 | 3425.01 | 3380.23 | 3292.39 | 3195.94 | 3078.82 | 2911.75 | 2761.04 |

| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2601.72 | 2393.32 | 2225.39 | 2058.32 | 1702.73 | 1702.73 | 1563.57 | 1433.96 | 1314.34 |
| 45.0 | 2744.68 | 2583.64 | 2415.71 | 2202.13 | 2033.34 | 1871.44 | 1717.29 | 1539.02 | 1405.54 |
| 90.0 | 2465.66 | 2232.28 | 1912.78 | 1693.00 | 1693.00 | 1500.10 | 1361.88 | 1237.78 | 1099.82 |
| 135.0 | 2707.65 | 2489.77 | 2308.92 | 2082.43 | 1905.03 | 1738.82 | 1582.08 | 1402.09 | 1272.92 |
| 180.0 | 2343.37 | 2134.96 | 1973.92 | 1780.15 | 1638.92 | 1506.30 | 1384.87 | 1272.92 | 1144.60 |
| 225.0 | 2085.87 | 1694.12 | 1694.12 | 1589.14 | 1458.76 | 1338.97 | 1202.99 | 1104.90 | 1016.20 |
| 270.0 | 2185.77 | 2002.34 | 1782.74 | 1620.83 | 1472.71 | 1306.50 | 1189.38 | 1085.18 | 970.64 |
| 315.0 | 1682.24 | 1682.24 | 1604.82 | 1460.05 | 1328.29 | 1182.49 | 1078.98 | 986.23 | 904.59 |
| 360.0 | 2601.72 | 2393.32 | 2225.39 | 2058.32 | 1702.73 | 1702.73 | 1563.57 | 1433.96 | 1314.34 |

| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 1181.80 | 1086.81 | 1001.13 | 906.57 | 840.17 | 780.66 | 715.64 | 670.43 | 622.12 |
| 45.0 | 1285.83 | 1179.05 | 1061.06 | 977.53 | 885.38 | 821.66 | 764.82 | 702.81 | 659.75 |
| 90.0 | 1006.29 | 923.45 | 834.32 | 773.52 | 720.47 | 663.54 | 624.44 | 590.77 | 561.49 |
| 135.0 | 1158.38 | 1057.62 | 949.11 | 875.05 | 810.46 | 752.76 | 691.62 | 650.28 | 604.64 |
| 180.0 | 1052.45 | 974.09 | 900.88 | 820.79 | 763.96 | 714.01 | 658.89 | 621.00 | 587.41 |
| 225.0 | 937.14 | 850.42 | 790.65 | 737.43 | 680.16 | 639.95 | 604.47 | 573.55 | 539.79 |
| 270.0 | 891.41 | 825.96 | 753.62 | 701.95 | 658.89 | 621.00 | 580.52 | 552.11 | 527.13 |
| 315.0 | 816.92 | 757.15 | 705.31 | 660.70 | 613.34 | 580.27 | 544.87 | 520.59 | 499.23 |
| 360.0 | 1181.80 | 1086.81 | 1001.13 | 906.57 | 840.17 | 780.66 | 715.64 | 670.43 | 622.12 |

| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 588.71 | 558.82 | 532.99 | 505.52 | 485.71 | 468.05 | 452.29 | 437.74 | 420.86 |
| 45.0 | 621.00 | 579.66 | 550.38 | 527.13 | 505.60 | 481.49 | 465.13 | 449.62 | 435.85 |
| 90.0 | 529.97 | 507.84 | 488.64 | 472.01 | 453.41 | 440.15 | 428.18 | 414.40 | 404.24 |
| 135.0 | 573.63 | 545.22 | 515.94 | 496.13 | 478.90 | 462.54 | 446.18 | 436.71 | 436.71 |
| 180.0 | 550.38 | 526.27 | 496.99 | 478.04 | 460.82 | 446.18 | 434.12 | 434.12 | 397.87 |
| 225.0 | 515.94 | 494.06 | 470.03 | 453.07 | 434.04 | 420.26 | 408.29 | 394.85 | 370.05 |
| 270.0 | 504.74 | 481.49 | 464.26 | 448.76 | 434.98 | 434.98 | 405.27 | 393.47 | 381.42 |
| 315.0 | 475.37 | 458.67 | 443.68 | 430.42 | 415.26 | 404.07 | 393.91 | 380.73 | 356.96 |
| 360.0 | 588.71 | 558.82 | 532.99 | 505.52 | 485.71 | 468.05 | 452.29 | 437.74 | 420.86 |

| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 406.48 | 388.31 | 358.34 | 329.83 | 291.94 | 260.08 | 227.27 | 185.15 | 152.09 |
| 45.0 | 435.85 | 403.03 | 383.83 | 351.10 | 324.67 | 287.38 | 255.17 | 224.51 | 190.58 |
| 90.0 | 389.69 | 372.98 | 350.33 | 323.81 | 287.12 | 256.98 | 225.03 | 193.77 | 154.58 |
| 135.0 | 409.15 | 396.40 | 381.16 | 359.29 | 335.52 | 300.73 | 269.21 | 227.52 | 194.11 |
| 180.0 | 378.92 | 350.59 | 322.17 | 292.80 | 262.14 | 221.24 | 186.45 | 154.07 | 113.33 |
| 225.0 | 344.56 | 318.21 | 289.01 | 250.00 | 219.34 | 186.02 | 155.36 | 117.55 | 88.53 |
| 270.0 | 363.94 | 333.28 | 305.38 | 277.13 | 247.16 | 207.20 | 178.01 | 146.40 | 116.09 |
| 315.0 | 334.23 | 308.82 | 272.65 | 241.13 | 208.41 | 168.02 | 136.07 | 105.41 | 70.19 |
| 360.0 | 406.48 | 388.31 | 358.34 | 329.83 | 291.94 | 260.08 | 227.27 | 185.15 | 152.09 |

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 | 119.88 | 90.42 | 56.75 | 35.65 | 21.70 | 13.52 | 11.02 | 9.90 | 8.87 |
| 45.0 | 150.71 | 120.48 | 90.25 | 64.16 | 36.77 | 21.79 | 13.52 | 11.11 | 9.65 |
| 90.0 | 123.06 | 93.96 | 59.94 | 37.98 | 22.48 | 12.23 | 10.42 | 9.13 | 8.27 |
| 135.0 | 160.01 | 120.05 | 89.39 | 62.78 | 37.03 | 22.56 | 14.12 | 11.11 | 9.82 |
| 180.0 | 85.08 | 53.05 | 33.41 | 21.19 | 14.04 | 12.06 | 10.85 | 9.99 | 9.21 |
| 225.0 | 57.96 | 36.94 | 22.65 | 13.87 | 12.49 | 11.20 | 10.25 | 9.21 | 8.44 |
| 270.0 | 81.30 | 55.80 | 35.05 | 18.77 | 12.31 | 11.02 | 9.73 | 8.96 | 8.18 |
| 315.0 | 48.05 | 29.54 | 17.83 | 10.59 | 9.65 | 8.70 | 7.92 | 7.06 | 6.37 |
| 360.0 | 119.88 | 90.42 | 56.75 | 35.65 | 21.70 | 13.52 | 11.02 | 9.90 | 8.87 |

| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 7.84 | 7.15 | 6.37 | 5.25 | 3.70 | 3.53 | 3.27 | 3.10 | 3.01 |
| 45.0 | 8.61 | 7.58 | 6.80 | 6.11 | 4.99 | 3.70 | 3.53 | 3.36 | 3.19 |
| 90.0 | 7.58 | 6.98 | 6.11 | 5.08 | 3.53 | 3.36 | 3.19 | 3.10 | 2.93 |
| 135.0 | 9.04 | 8.27 | 7.58 | 6.80 | 5.94 | 3.62 | 3.27 | 3.19 | 3.10 |
| 180.0 | 8.27 | 7.41 | 5.17 | 3.62 | 3.44 | 3.27 | 3.01 | 2.93 | 2.84 |
| 225.0 | 7.23 | 4.65 | 3.44 | 3.36 | 3.19 | 3.01 | 2.93 | 2.76 | 2.76 |
| 270.0 | 7.41 | 6.46 | 4.05 | 3.27 | 3.19 | 3.10 | 2.93 | 2.84 | 2.84 |
| 315.0 | 5.60 | 3.70 | 3.27 | 3.19 | 3.10 | 2.93 | 2.84 | 2.84 | 2.76 |
| 360.0 | 7.84 | 7.15 | 6.37 | 5.25 | 3.70 | 3.53 | 3.27 | 3.10 | 3.01 |

| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.93 | 2.84 | 2.76 | 2.76 | 2.67 | 2.67 | 2.67 | 2.67 | 2.58 |
| 45.0 | 2.93 | 2.93 | 2.84 | 2.76 | 2.76 | 2.67 | 2.67 | 2.67 | 2.58 |
| 90.0 | 2.84 | 2.84 | 2.76 | 2.76 | 2.67 | 2.67 | 2.67 | 2.67 | 2.67 |
| 135.0 | 2.93 | 2.84 | 2.84 | 2.76 | 2.76 | 2.67 | 2.67 | 2.67 | 2.67 |
| 180.0 | 2.84 | 2.84 | 2.76 | 2.76 | 2.67 | 2.58 | 2.58 | 2.58 | 2.58 |
| 225.0 | 2.76 | 2.76 | 2.67 | 2.67 | 2.58 | 2.67 | 2.67 | 2.58 | 2.58 |
| 270.0 | 2.76 | 2.76 | 2.76 | 2.67 | 2.67 | 2.58 | 2.58 | 2.67 | 2.58 |
| 315.0 | 2.76 | 2.67 | 2.67 | 2.67 | 2.67 | 2.58 | 2.58 | 2.58 | 2.58 |
| 360.0 | 2.93 | 2.84 | 2.76 | 2.76 | 2.67 | 2.67 | 2.67 | 2.67 | 2.58 |

| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.50 | 2.58 | 2.58 | 2.50 |
| 45.0 | 2.58 | 2.67 | 2.58 | 2.58 | 2.58 | 2.50 | 2.58 | 2.50 | 2.50 |
| 90.0 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.50 | 2.58 | 2.50 |
| 135.0 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.50 | 2.58 | 2.58 |
| 180.0 | 2.58 | 2.58 | 2.58 | 2.50 | 2.50 | 2.50 | 2.58 | 2.50 | 2.50 |
| 225.0 | 2.58 | 2.58 | 2.50 | 2.50 | 2.58 | 2.50 | 2.50 | 2.50 | 2.50 |
| 270.0 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.50 |
| 315.0 | 2.58 | 2.58 | 2.50 | 2.58 | 2.58 | 2.58 | 2.50 | 2.50 | 2.50 |
| 360.0 | 2.58 | 2.58 | 2.58 | 2.58 | 2.58 | 2.50 | 2.58 | 2.58 | 2.50 |

| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
|---|---|---|---|---|---|---|---|---|---|
| 0.0 | 2.58 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 |
| 45.0 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 | 2.50 | 2.50 |
| 90.0 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 |
| 135.0 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 | 2.50 | 2.50 |
| 180.0 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 | 2.41 | 2.50 | 2.41 | 2.41 |
| 225.0 | 2.50 | 2.50 | 2.41 | 2.41 | 2.50 | 2.50 | 2.41 | 2.41 | 2.41 |
| 270.0 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 | 2.50 |
| 315.0 | 2.50 | 2.50 | 2.58 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 | 2.41 |
| 360.0 | 2.58 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.50 | 2.41 |

Intensity data(cd)



| C/γ(°) | 90.0 |
|---|---|
| 0.0 | 2.50 |
| 45.0 | 2.50 |
| 90.0 | 2.50 |
| 135.0 | 2.50 |
| 180.0 | 2.41 |
| 225.0 | 2.50 |
| 270.0 | 2.50 |
| 315.0 | 2.41 |
| 360.0 | 2.50 |