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Nata

LumCAT: LN01D04515DA-N

Luminaire: 97.70.234.00

Report No: 210106-B004

Test No: 210106-C004

LampCAT: XICATO XOB LES 9.8MM

Lamp flux(lm): 1260.4

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 34.5400

Current(A): 0.3810

Power (W): 13.1590

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1097.05

Efficiency(%): 87.04%

Lumens(lm)/Power(W): 83.37

Central intensity(cd): 6619.500

Maximum intensity(cd): 6619.500

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=19.3

[C90/270]Total=19.3

Field angle(10%Imax): [C0/180]Total=38.0

[C90/270]Total=38.0

Maximum s/h(1/2): C0_180=0.33 C90_270=0.33

Maximum s/h(1/4): C0_180=0.34 C90_270=0.34

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 87.04%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 96.350%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 6619.500 | 0.000 | 0 | .000% | .000% |
| 1.0 | 6570.000 | 6.311 | 6.311 | .501% | .575% |
| 2.0 | 6397.242 | 18.612 | 24.923 | 1.477% | 2.272% |
| 3.0 | 6142.289 | 29.990 | 54.913 | 2.379% | 5.006% |
| 4.0 | 5841.000 | 40.112 | 95.025 | 3.182% | 8.662% |
| 5.0 | 5443.805 | 48.547 | 143.572 | 3.852% | 13.087% |
| 6.0 | 4984.734 | 54.805 | 198.376 | 4.348% | 18.083% |
| 7.0 | 4559.484 | 59.241 | 257.617 | 4.700% | 23.483% |
| 8.0 | 4076.297 | 61.805 | 319.422 | 4.903% | 29.116% |
| 9.0 | 3606.609 | 62.266 | 381.688 | 4.940% | 34.792% |
| 10.0 | 3156.398 | 61.203 | 442.89 | 4.856% | 40.371% |
| 11.0 | 2709.141 | 58.609 | 501.499 | 4.650% | 45.713% |
| 12.0 | 2328.117 | 55.064 | 556.564 | 4.369% | 50.733% |
| 13.0 | 1954.336 | 50.822 | 607.386 | 4.032% | 55.365% |
| 14.0 | 1608.173 | 45.600 | 652.985 | 3.618% | 59.522% |
| 15.0 | 1355.013 | 40.680 | 693.665 | 3.227% | 63.230% |
| 16.0 | 1156.366 | 36.799 | 730.464 | 2.920% | 66.584% |
| 17.0 | 928.962 | 32.474 | 762.938 | 2.576% | 69.544% |
| 18.0 | 787.085 | 28.294 | 791.232 | 2.245% | 72.123% |
| 19.0 | 664.770 | 25.259 | 816.491 | 2.004% | 74.426% |
| 20.0 | 550.470 | 22.242 | 838.734 | 1.765% | 76.453% |
| 21.0 | 462.023 | 19.442 | 858.176 | 1.542% | 78.225% |
| 22.0 | 396.127 | 17.245 | 875.421 | 1.368% | 79.797% |
| 23.0 | 336.213 | 15.366 | 890.787 | 1.219% | 81.198% |
| 24.0 | 286.938 | 13.624 | 904.411 | 1.081% | 82.440% |
| 25.0 | 246.741 | 12.135 | 916.546 | .963% | 83.546% |
| 26.0 | 215.613 | 10.914 | 927.46 | .866% | 84.541% |
| 27.0 | 183.916 | 9.775 | 937.234 | .776% | 85.432% |
| 28.0 | 159.968 | 8.706 | 945.941 | .691% | 86.226% |
| 29.0 | 141.054 | 7.876 | 953.816 | .625% | 86.943% |
| 30.0 | 125.093 | 7.186 | 961.002 | .570% | 87.598% |
| 31.0 | 111.839 | 6.593 | 967.596 | .523% | 88.199% |
| 32.0 | 100.146 | 6.073 | 973.669 | .482% | 88.753% |
| 33.0 | 90.563 | 5.618 | 979.287 | .446% | 89.265% |
| 34.0 | 82.934 | 5.251 | 984.538 | .417% | 89.744% |
| 35.0 | 75.319 | 4.915 | 989.453 | .390% | 90.192% |
| 36.0 | 69.180 | 4.601 | 994.053 | .365% | 90.611% |
| 37.0 | 64.238 | 4.351 | 998.405 | .345% | 91.008% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 59.625 | 4.134 | 1002.539 | .328% | 91.385% |
| 39.0 | 54.788 | 3.905 | 1006.444 | .310% | 91.741% |
| 40.0 | 51.202 | 3.697 | 1010.141 | .293% | 92.078% |
| 41.0 | 47.749 | 3.524 | 1013.665 | .280% | 92.399% |
| 42.0 | 44.283 | 3.344 | 1017.008 | .265% | 92.704% |
| 43.0 | 41.302 | 3.170 | 1020.178 | .252% | 92.993% |
| 44.0 | 38.630 | 3.017 | 1023.195 | .239% | 93.268% |
| 45.0 | 35.993 | 2.868 | 1026.063 | .228% | 93.529% |
| 46.0 | 33.490 | 2.717 | 1028.78 | .216% | 93.777% |
| 47.0 | 31.416 | 2.581 | 1031.362 | .205% | 94.012% |
| 48.0 | 29.398 | 2.458 | 1033.82 | .195% | 94.236% |
| 49.0 | 27.759 | 2.347 | 1036.168 | .186% | 94.450% |
| 50.0 | 26.128 | 2.247 | 1038.414 | .178% | 94.655% |
| 51.0 | 24.743 | 2.152 | 1040.567 | .171% | 94.851% |
| 52.0 | 23.625 | 2.076 | 1042.642 | .165% | 95.040% |
| 53.0 | 22.535 | 2.008 | 1044.65 | .159% | 95.223% |
| 54.0 | 21.417 | 1.937 | 1046.587 | .154% | 95.400% |
| 55.0 | 20.552 | 1.873 | 1048.461 | .149% | 95.571% |
| 56.0 | 19.709 | 1.819 | 1050.28 | .144% | 95.736% |
| 57.0 | 18.802 | 1.761 | 1052.041 | .140% | 95.897% |
| 58.0 | 18.084 | 1.706 | 1053.746 | .135% | 96.052% |
| 59.0 | 17.409 | 1.659 | 1055.406 | .132% | 96.204% |
| 60.0 | 16.699 | 1.611 | 1057.017 | .128% | 96.351% |
| 61.0 | 16.045 | 1.563 | 1058.58 | .124% | 96.493% |
| 62.0 | 15.469 | 1.519 | 1060.098 | .120% | 96.631% |
| 63.0 | 14.885 | 1.476 | 1061.575 | .117% | 96.766% |
| 64.0 | 14.358 | 1.435 | 1063.01 | .114% | 96.897% |
| 65.0 | 13.929 | 1.400 | 1064.41 | .111% | 97.024% |
| 66.0 | 13.704 | 1.379 | 1065.788 | .109% | 97.150% |
| 67.0 | 13.669 | 1.376 | 1067.165 | .109% | 97.275% |
| 68.0 | 13.873 | 1.395 | 1068.56 | .111% | 97.403% |
| 69.0 | 14.224 | 1.433 | 1069.993 | .114% | 97.533% |
| 70.0 | 14.688 | 1.485 | 1071.478 | .118% | 97.669% |
| 71.0 | 15.265 | 1.548 | 1073.026 | .123% | 97.810% |
| 72.0 | 15.968 | 1.624 | 1074.65 | .129% | 97.958% |
| 73.0 | 16.552 | 1.701 | 1076.351 | .135% | 98.113% |
| 74.0 | 17.065 | 1.767 | 1078.118 | .140% | 98.274% |
| 75.0 | 17.494 | 1.826 | 1079.944 | .145% | 98.440% |

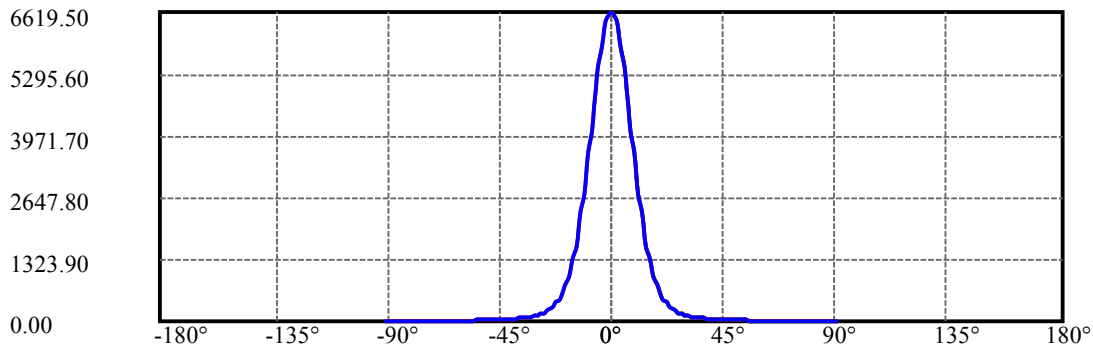
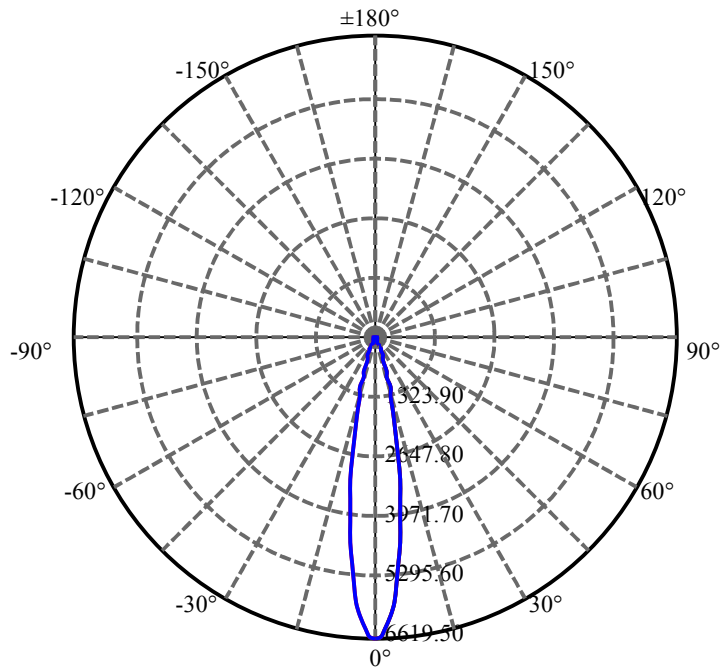
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 17.480 | 1.857 | 1081.8 | .147% | 98.610% |
| 77.0 | 17.093 | 1.843 | 1083.644 | .146% | 98.778% |
| 78.0 | 16.179 | 1.781 | 1085.425 | .141% | 98.940% |
| 79.0 | 14.885 | 1.669 | 1087.094 | .132% | 99.092% |
| 80.0 | 13.549 | 1.533 | 1088.627 | .122% | 99.232% |
| 81.0 | 11.918 | 1.377 | 1090.004 | .109% | 99.357% |
| 82.0 | 10.301 | 1.205 | 1091.209 | .096% | 99.467% |
| 83.0 | 8.902 | 1.044 | 1092.253 | .083% | 99.562% |
| 84.0 | 7.678 | 0.903 | 1093.156 | .072% | 99.645% |
| 85.0 | 6.813 | 0.791 | 1093.947 | .063% | 99.717% |
| 86.0 | 6.166 | 0.709 | 1094.656 | .056% | 99.781% |
| 87.0 | 5.674 | 0.648 | 1095.304 | .051% | 99.841% |
| 88.0 | 5.379 | 0.605 | 1095.91 | .048% | 99.896% |
| 89.0 | 5.196 | 0.580 | 1096.49 | .046% | 99.949% |
| 90.0 | 5.098 | 0.564 | 1097.054 | .045% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 961.00 | 76.24% | 87.60% |
| 0-40 | 1010.14 | 80.14% | 92.08% |
| 0-60 | 1057.02 | 83.86% | 96.35% |
| 0-90 | 1096.49 | 86.99% | 99.95% |
| 0-120 | 1096.49 | 86.99% | 99.95% |
| 0-180 | 1097.05 | 87.04% | 100.00% |
| 60-90 | 41.08 | 3.26% | 3.74% |
| 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% |
| 0-22.14 | 877.64 | 69.63% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 442.89 |
| 10-20 | 395.84 |
| 20-30 | 122.27 |
| 30-40 | 49.14 |
| 40-50 | 28.27 |
| 50-60 | 18.60 |
| 60-70 | 14.46 |
| 70-80 | 17.15 |
| 80-90 | 7.86 |
| 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 |



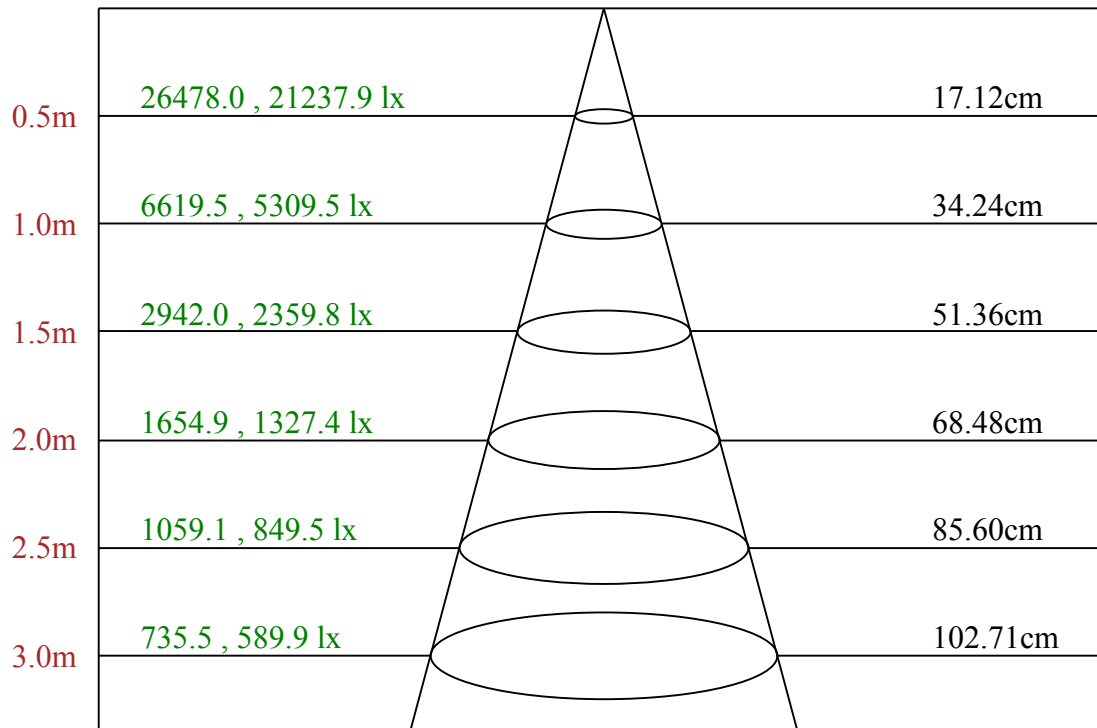
C0(Max): —————

C0/C180: —————

C90/C270: —————

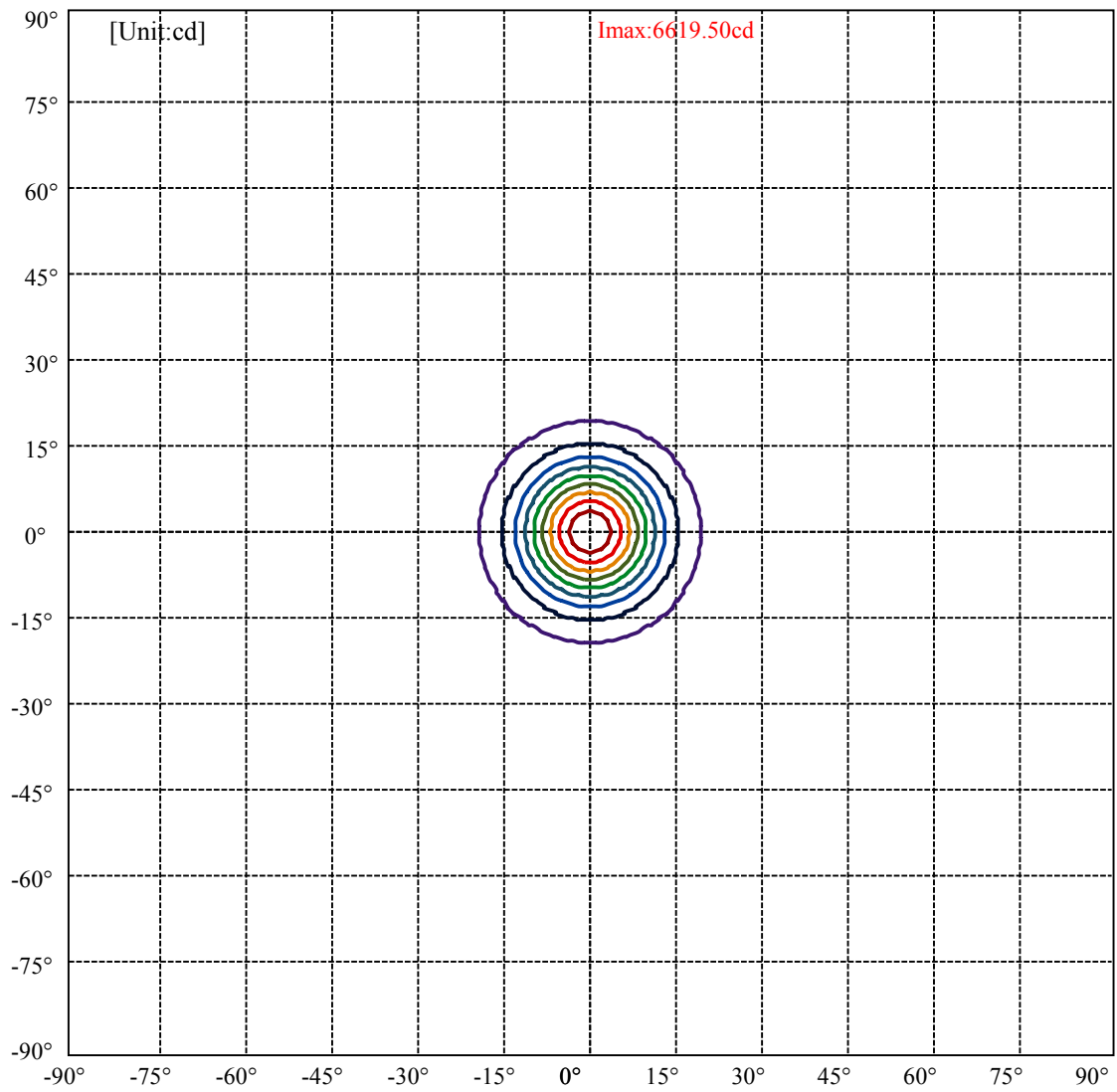
Field angle(10%Imax):C0/180Left:19.0 Right:19.0
:C90/270Left:19.0 Right:19.0

Beam Angle(50%Imax):C0/180Left:9.7 Right:9.7
:C90/270Left:9.7 Right:9.7

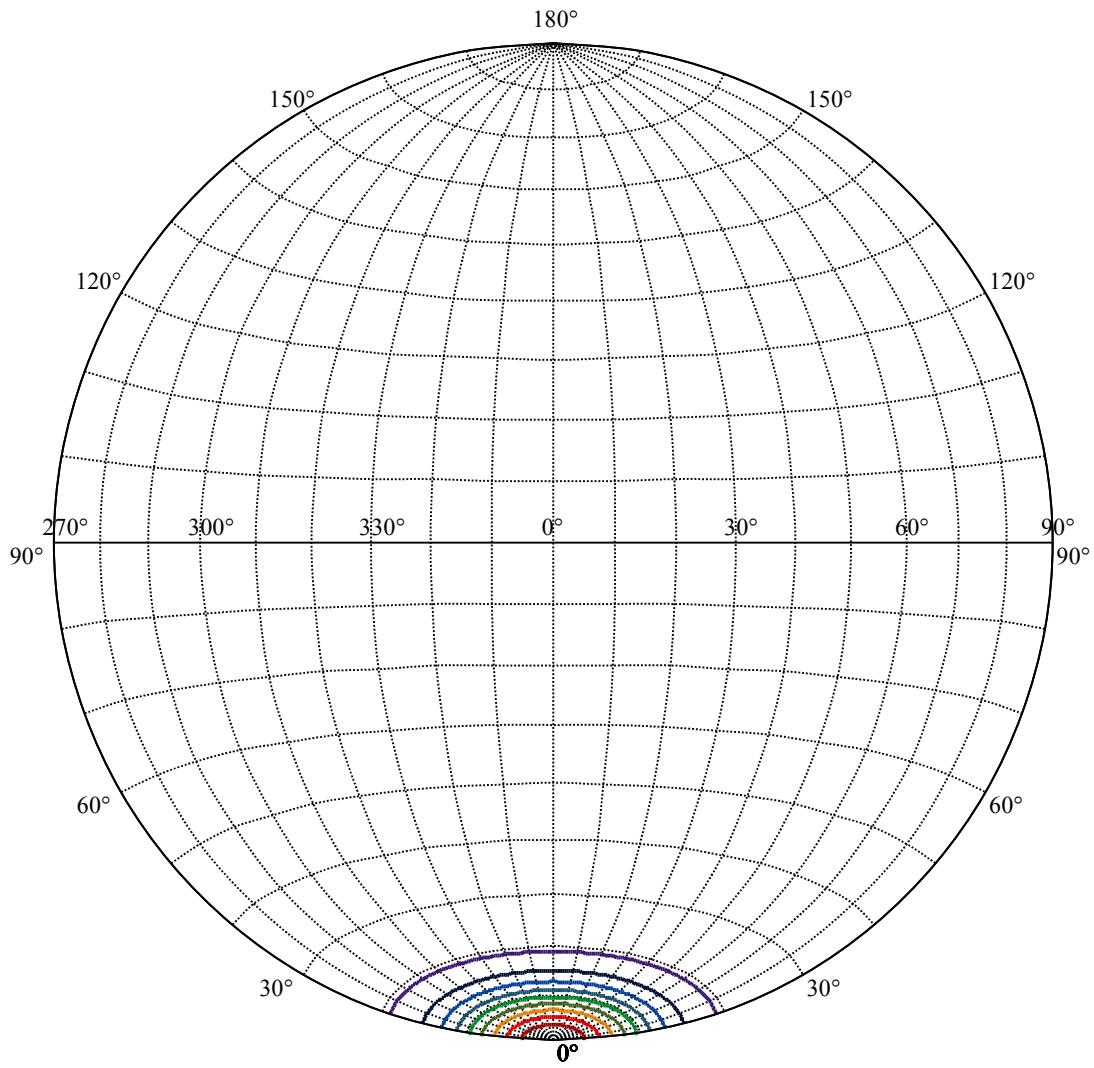


Max , Ave Beam angle of C0 plane 19.43

ISO-Intensity(V-H)



| | |
|-------------------|---|
| (10%Imax) 661.95 | — |
| (20%Imax) 1323.9 | — |
| (30%Imax) 1985.85 | — |
| (40%Imax) 2647.8 | — |
| (50%Imax) 3309.75 | — |
| (60%Imax) 3971.7 | — |
| (70%Imax) 4633.65 | — |
| (80%Imax) 5295.6 | — |
| (90%Imax) 5957.55 | — |



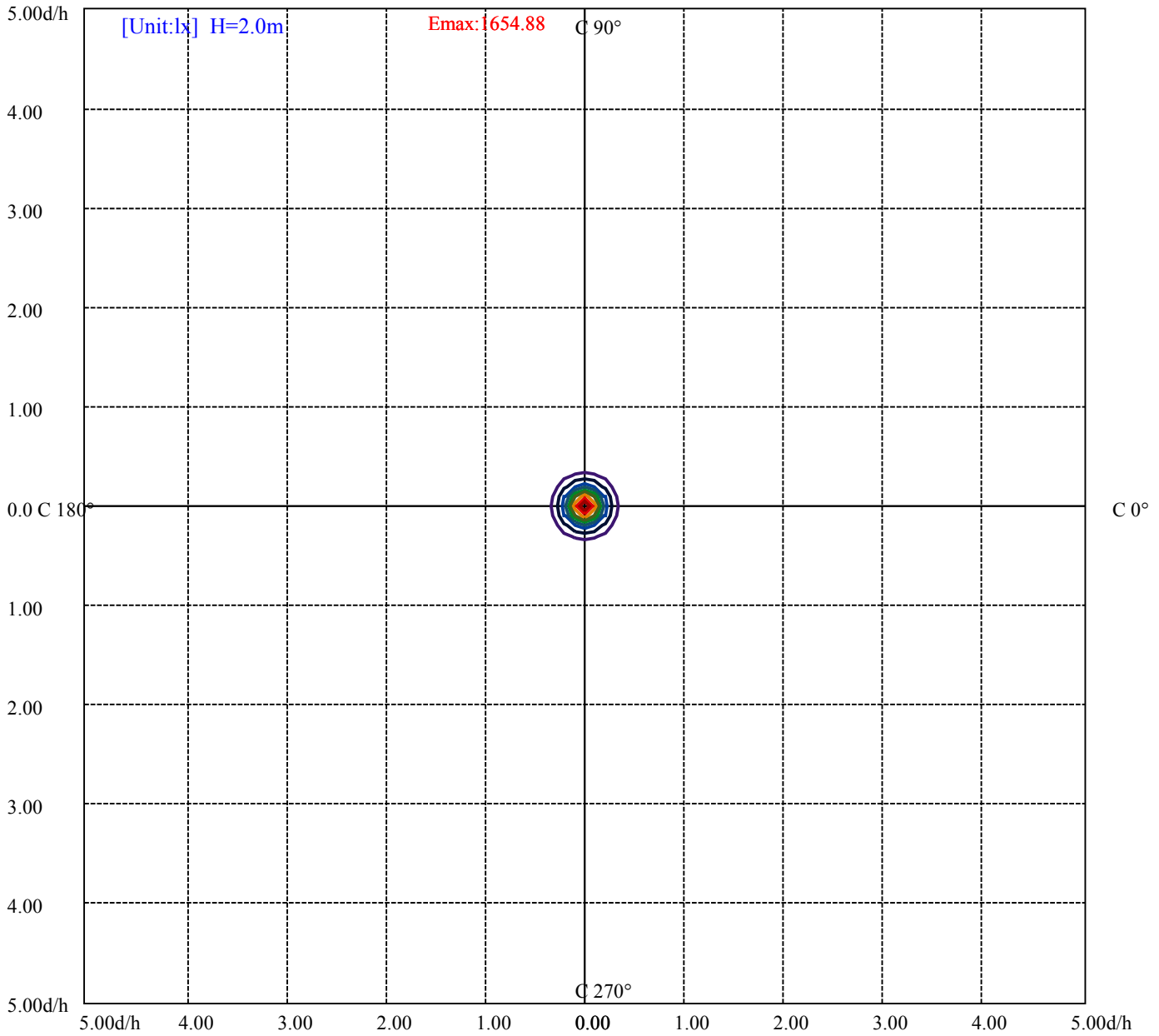
House

[Unit:cd]

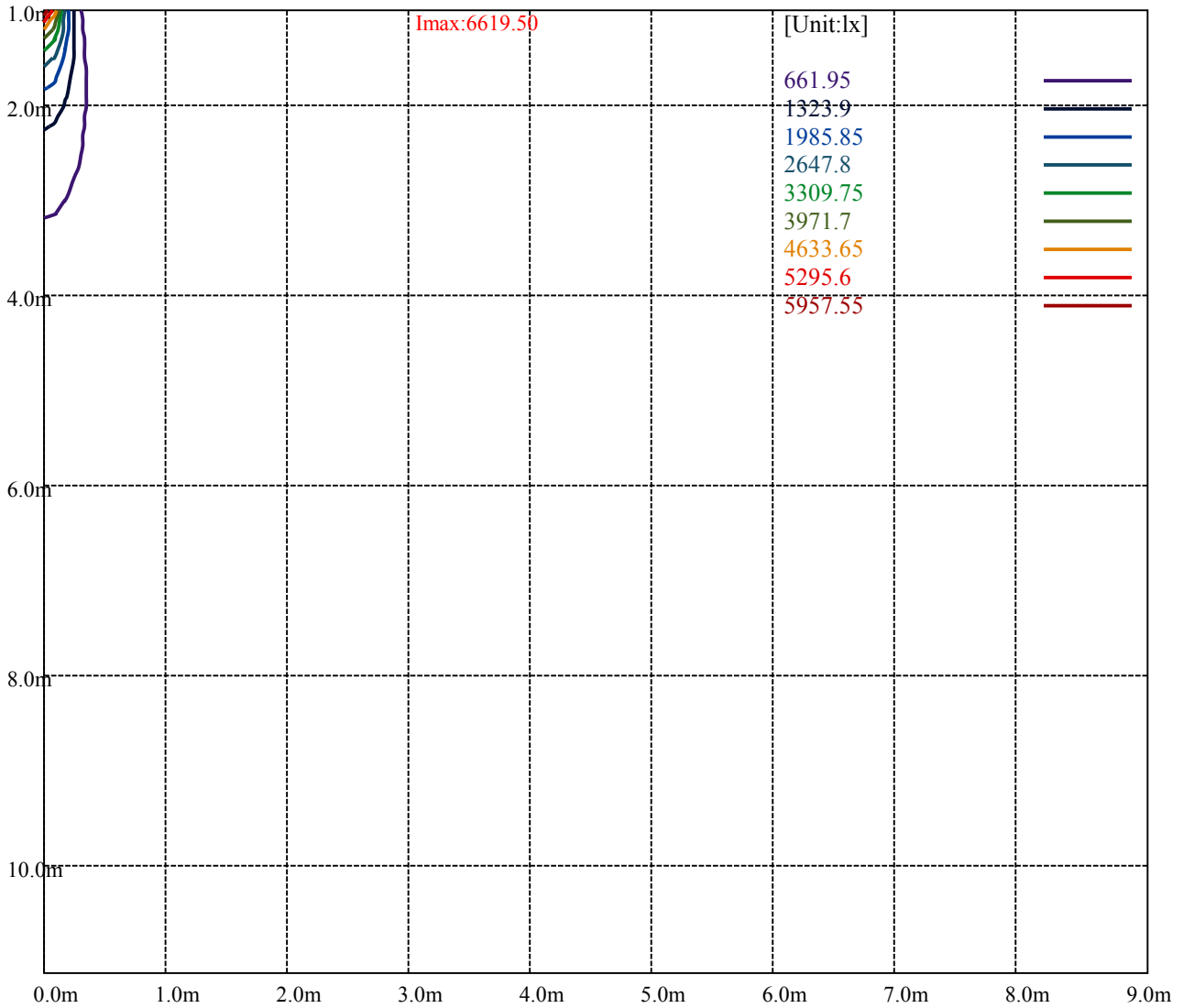
Road

Imax:6619.50

| | |
|-------------------|---|
| (10%Imax) 661.95 | — |
| (20%Imax) 1323.9 | — |
| (30%Imax) 1985.85 | — |
| (40%Imax) 2647.8 | — |
| (50%Imax) 3309.75 | — |
| (60%Imax) 3971.7 | — |
| (70%Imax) 4633.65 | — |
| (80%Imax) 5295.6 | — |
| (90%Imax) 5957.55 | — |



- (10%Emax) 165.4872
- (20%Emax) 330.975
- (30%Emax) 496.4625
- (40%Emax) 661.95
- (50%Emax) 827.4375
- (60%Emax) 992.925
- (70%Emax) 1158.412
- (80%Emax) 1323.897
- (90%Emax) 1489.385



Luminance Table

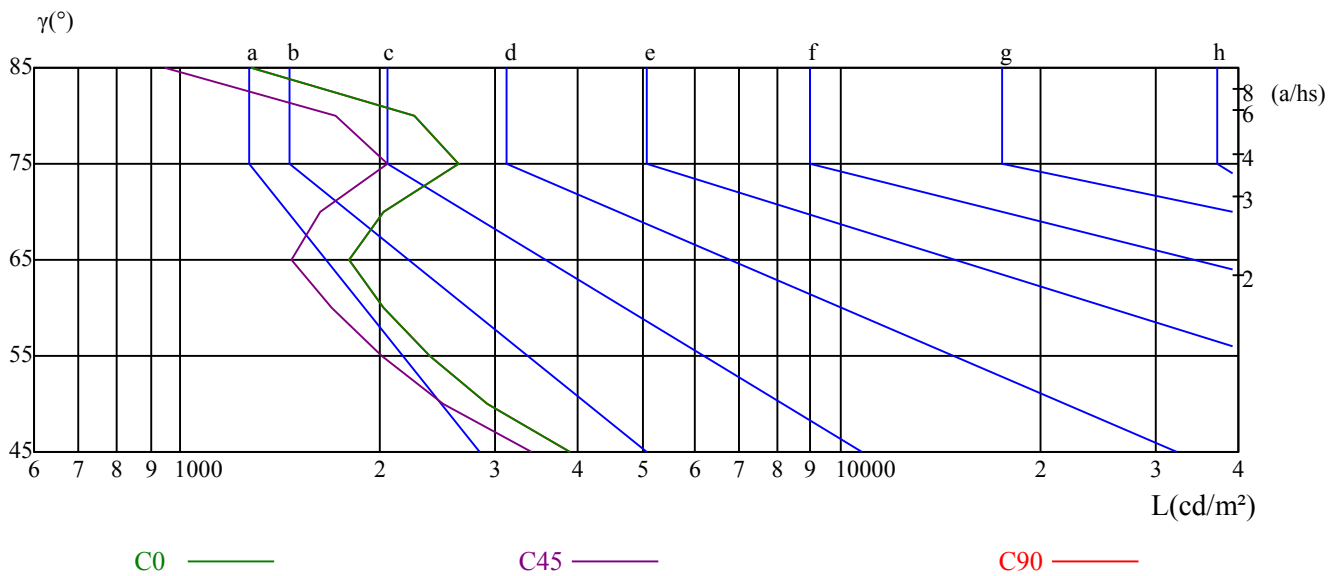
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|------|------|------|------|------|------|------|------|------|
| C0 | 3896 | 2915 | 2383 | 2033 | 1798 | 2035 | 2637 | 2258 | 1281 |
| C45 | 3400 | 2507 | 2018 | 1693 | 1470 | 1631 | 2064 | 1720 | 944 |
| C90 | 3896 | 2915 | 2383 | 2033 | 1798 | 2035 | 2637 | 2258 | 1281 |

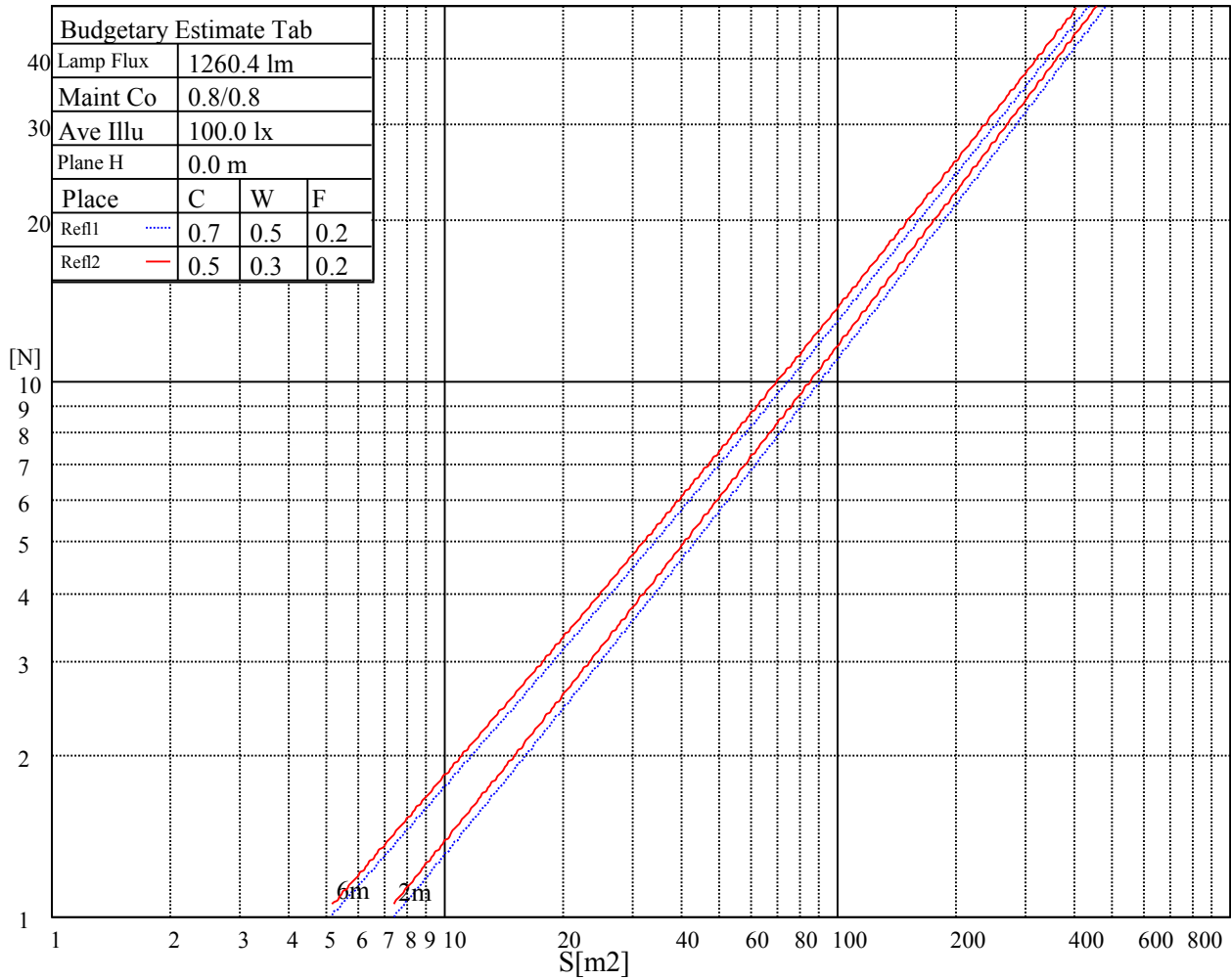
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 3894 | 3894 | 3894 | 7986 | 7986 | 7986 | 9236 | 9236 | 9236 |

Glare Table

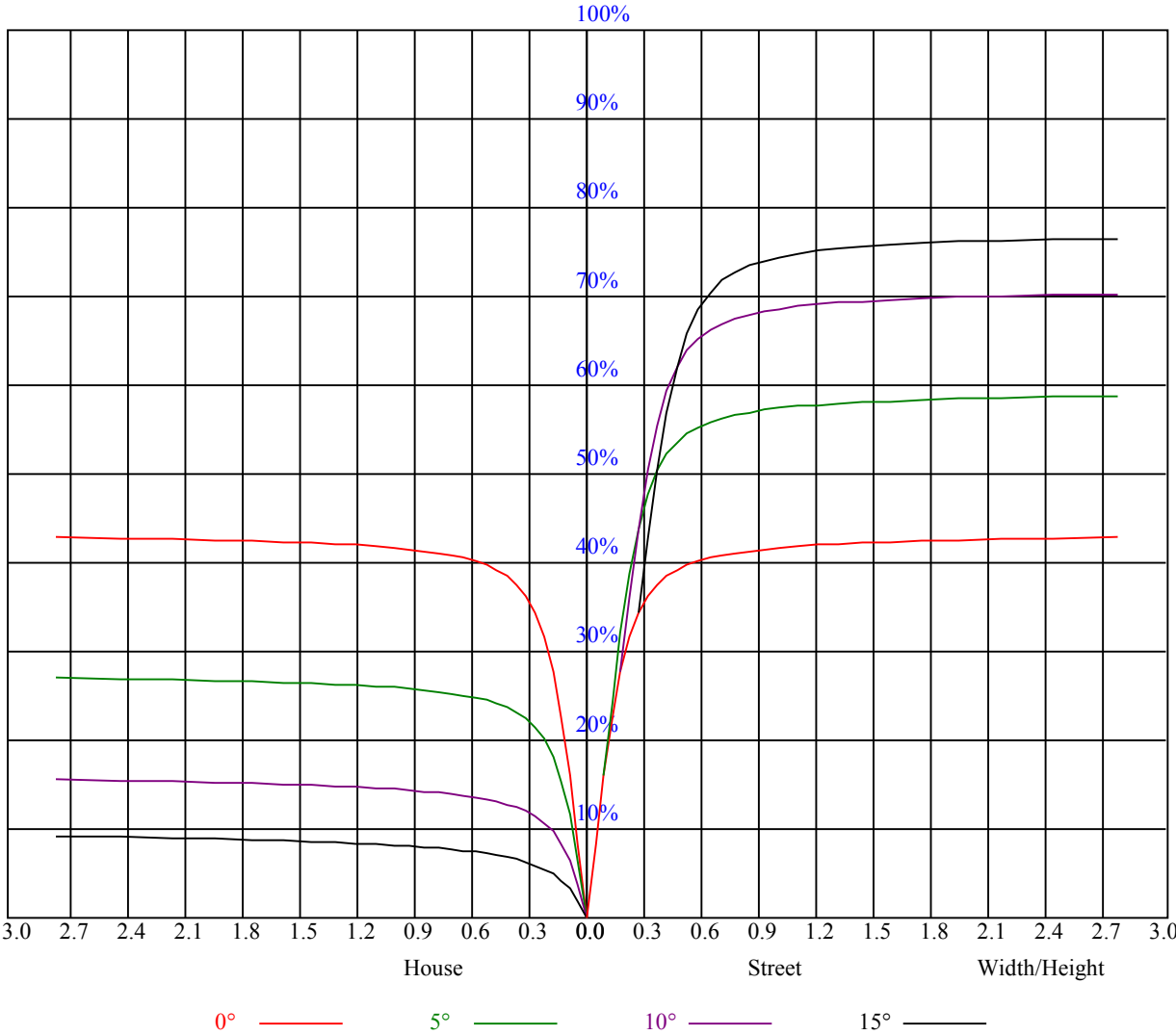
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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 | 1.04 | 1.04 | 1.04 | 1.01 | 1.01 | 1.01 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.89 | 0.89 | 0.89 | 0.87 |
| 1 | 0.97 | 0.95 | 0.94 | 0.95 | 0.94 | 0.92 | 0.92 | 0.91 | 0.89 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.83 |
| 2 | 0.92 | 0.89 | 0.87 | 0.91 | 0.88 | 0.86 | 0.88 | 0.86 | 0.84 | 0.85 | 0.84 | 0.82 | 0.83 | 0.82 | 0.80 | 0.79 |
| 3 | 0.88 | 0.84 | 0.82 | 0.87 | 0.83 | 0.81 | 0.84 | 0.82 | 0.80 | 0.82 | 0.80 | 0.78 | 0.81 | 0.79 | 0.77 | 0.76 |
| 4 | 0.84 | 0.80 | 0.78 | 0.83 | 0.80 | 0.77 | 0.81 | 0.79 | 0.76 | 0.80 | 0.77 | 0.75 | 0.78 | 0.76 | 0.75 | 0.73 |
| 5 | 0.81 | 0.77 | 0.74 | 0.80 | 0.77 | 0.74 | 0.79 | 0.76 | 0.73 | 0.77 | 0.75 | 0.73 | 0.76 | 0.74 | 0.72 | 0.71 |
| 6 | 0.78 | 0.74 | 0.72 | 0.78 | 0.74 | 0.71 | 0.76 | 0.73 | 0.71 | 0.75 | 0.73 | 0.70 | 0.74 | 0.72 | 0.70 | 0.69 |
| 7 | 0.76 | 0.72 | 0.69 | 0.75 | 0.72 | 0.69 | 0.74 | 0.71 | 0.69 | 0.73 | 0.70 | 0.68 | 0.72 | 0.70 | 0.68 | 0.67 |
| 8 | 0.73 | 0.70 | 0.67 | 0.73 | 0.69 | 0.67 | 0.72 | 0.69 | 0.67 | 0.71 | 0.69 | 0.66 | 0.71 | 0.68 | 0.66 | 0.65 |
| 9 | 0.71 | 0.68 | 0.65 | 0.71 | 0.68 | 0.65 | 0.70 | 0.67 | 0.65 | 0.70 | 0.67 | 0.65 | 0.69 | 0.66 | 0.65 | 0.64 |
| 10 | 0.70 | 0.66 | 0.64 | 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 |



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 | 6572.25 | 6685.31 | 6685.88 | 6575.63 | 6380.44 | 6072.75 | 5691.94 | 5307.19 | 4836.94 |
| 45.0 | 6656.06 | 6626.81 | 6498.56 | 6224.63 | 5931.00 | 5580.56 | 5079.38 | 4645.13 | 4202.44 |
| 90.0 | 6599.81 | 6435.56 | 6153.19 | 5792.63 | 5417.44 | 4950.00 | 4451.06 | 3999.38 | 3497.06 |
| 135.0 | 6649.88 | 6481.13 | 6152.63 | 5820.75 | 5442.75 | 4971.94 | 4467.38 | 4015.13 | 3518.44 |
| 180.0 | 6572.25 | 6365.81 | 6044.63 | 5654.25 | 5254.88 | 4771.13 | 4261.50 | 3807.56 | 3305.81 |
| 225.0 | 6656.06 | 6582.94 | 6360.75 | 6097.50 | 5775.19 | 5348.81 | 4876.88 | 4442.63 | 3942.56 |
| 270.0 | 6599.81 | 6666.75 | 6612.75 | 6463.13 | 6235.88 | 5895.00 | 5490.00 | 5090.63 | 4614.19 |
| 315.0 | 6649.88 | 6715.69 | 6669.56 | 6509.81 | 6290.44 | 5960.25 | 5559.75 | 5168.25 | 4692.94 |
| 360.0 | 6572.25 | 6685.31 | 6685.88 | 6575.63 | 6380.44 | 6072.75 | 5691.94 | 5307.19 | 4836.94 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 4347.00 | 3906.56 | 3410.44 | 2979.56 | 2523.38 | 2109.38 | 1782.00 | 1495.69 | 1193.06 |
| 45.0 | 3699.56 | 3204.00 | 2783.81 | 2343.94 | 1991.81 | 1649.25 | 1360.69 | 1143.56 | 939.94 |
| 90.0 | 3065.63 | 2613.38 | 2204.44 | 1881.00 | 1564.88 | 1232.44 | 1106.61 | 943.59 | 774.51 |
| 135.0 | 3039.19 | 2634.19 | 2216.25 | 1884.94 | 1566.00 | 1303.31 | 1111.50 | 948.94 | 781.31 |
| 180.0 | 2877.19 | 2432.81 | 2035.69 | 1723.50 | 1424.81 | 1103.51 | 993.04 | 838.97 | 679.78 |
| 225.0 | 3447.00 | 3017.81 | 2558.81 | 2181.94 | 1805.63 | 1485.00 | 1108.46 | 1035.06 | 823.22 |
| 270.0 | 4123.69 | 3687.75 | 3204.00 | 2792.81 | 2361.38 | 1974.94 | 1673.44 | 1407.94 | 1134.56 |
| 315.0 | 4253.63 | 3754.69 | 3259.69 | 2837.25 | 2396.81 | 2007.56 | 1704.38 | 1437.19 | 1105.31 |
| 360.0 | 4347.00 | 3906.56 | 3410.44 | 2979.56 | 2523.38 | 2109.38 | 1782.00 | 1495.69 | 1193.06 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 997.31 | 833.63 | 664.31 | 556.88 | 468.00 | 387.56 | 322.31 | 286.88 | 229.44 |
| 45.0 | 771.19 | 642.38 | 555.19 | 443.81 | 383.63 | 331.31 | 284.06 | 232.09 | 202.56 |
| 90.0 | 663.36 | 571.44 | 484.99 | 412.65 | 358.82 | 308.36 | 265.73 | 233.72 | 202.95 |
| 135.0 | 669.94 | 572.63 | 478.13 | 416.25 | 362.81 | 309.94 | 285.19 | 233.27 | 205.65 |
| 180.0 | 576.90 | 492.98 | 422.83 | 351.23 | 304.14 | 260.61 | 223.71 | 196.20 | 173.14 |
| 225.0 | 688.05 | 575.94 | 462.43 | 389.59 | 330.30 | 275.79 | 231.30 | 199.97 | 172.01 |
| 270.0 | 956.81 | 808.88 | 658.13 | 561.94 | 480.94 | 413.44 | 343.69 | 298.13 | 287.44 |
| 315.0 | 973.13 | 820.29 | 677.76 | 563.85 | 480.38 | 402.69 | 339.53 | 293.68 | 251.72 |
| 360.0 | 997.31 | 833.63 | 664.31 | 556.88 | 468.00 | 387.56 | 322.31 | 286.88 | 229.44 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 197.61 | 168.69 | 145.97 | 129.32 | 114.19 | 101.59 | 92.36 | 84.54 | 76.28 |
| 45.0 | 174.71 | 151.93 | 134.78 | 118.63 | 106.93 | 95.91 | 86.68 | 79.65 | 73.13 |
| 90.0 | 179.55 | 156.94 | 135.90 | 123.36 | 111.15 | 98.04 | 89.27 | 81.56 | 73.29 |
| 135.0 | 178.48 | 156.21 | 139.33 | 123.19 | 109.63 | 99.28 | 89.44 | 81.96 | 74.70 |
| 180.0 | 151.54 | 133.37 | 119.59 | 106.54 | 96.75 | 87.47 | 79.59 | 73.52 | 67.56 |
| 225.0 | 148.95 | 131.96 | 116.49 | 105.13 | 94.56 | 85.73 | 79.09 | 73.41 | 67.28 |
| 270.0 | 220.28 | 190.18 | 170.61 | 147.15 | 129.88 | 118.18 | 104.12 | 94.56 | 86.18 |
| 315.0 | 220.22 | 190.46 | 165.77 | 147.43 | 131.63 | 114.98 | 103.95 | 94.28 | 84.15 |
| 360.0 | 197.61 | 168.69 | 145.97 | 129.32 | 114.19 | 101.59 | 92.36 | 84.54 | 76.28 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 70.65 | 65.64 | 61.26 | 56.42 | 52.88 | 49.33 | 46.07 | 43.37 | 40.89 |
| 45.0 | 67.33 | 62.83 | 58.89 | 54.34 | 51.02 | 47.98 | 44.78 | 41.85 | 39.32 |
| 90.0 | 67.50 | 62.44 | 56.87 | 52.88 | 49.05 | 44.72 | 41.91 | 38.59 | 35.33 |
| 135.0 | 68.23 | 63.28 | 59.29 | 53.78 | 50.12 | 47.08 | 42.75 | 39.94 | 37.63 |
| 180.0 | 62.44 | 58.33 | 54.62 | 50.23 | 47.03 | 44.16 | 41.12 | 38.25 | 36.00 |
| 225.0 | 62.78 | 58.89 | 54.51 | 51.24 | 48.26 | 45.17 | 42.24 | 39.71 | 37.07 |
| 270.0 | 77.18 | 70.93 | 65.36 | 59.34 | 55.24 | 51.47 | 47.31 | 44.21 | 41.40 |
| 315.0 | 77.34 | 71.55 | 66.21 | 60.08 | 56.03 | 52.09 | 48.09 | 44.49 | 41.40 |
| 360.0 | 70.65 | 65.64 | 61.26 | 56.42 | 52.88 | 49.33 | 46.07 | 43.37 | 40.89 |

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 | 38.31 | 35.83 | 33.81 | 31.61 | 29.81 | 27.96 | 26.38 | 25.09 | 23.85 |
| 45.0 | 36.73 | 34.37 | 32.40 | 30.49 | 28.91 | 27.34 | 25.93 | 24.81 | 23.74 |
| 90.0 | 33.19 | 30.71 | 28.29 | 26.83 | 25.37 | 23.74 | 22.78 | 21.83 | 20.81 |
| 135.0 | 34.71 | 32.40 | 30.83 | 28.74 | 27.39 | 26.27 | 24.92 | 24.02 | 23.12 |
| 180.0 | 33.58 | 31.44 | 29.70 | 28.01 | 26.72 | 25.37 | 24.19 | 23.12 | 22.16 |
| 225.0 | 34.82 | 32.46 | 30.38 | 28.58 | 27.00 | 25.48 | 24.30 | 23.29 | 22.11 |
| 270.0 | 38.31 | 35.49 | 33.13 | 30.66 | 28.63 | 26.55 | 24.92 | 23.63 | 22.39 |
| 315.0 | 38.31 | 35.21 | 32.79 | 30.26 | 28.24 | 26.33 | 24.53 | 23.23 | 22.11 |
| 360.0 | 38.31 | 35.83 | 33.81 | 31.61 | 29.81 | 27.96 | 26.38 | 25.09 | 23.85 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 22.73 | 21.83 | 20.98 | 19.97 | 19.18 | 18.39 | 17.61 | 16.93 | 16.26 |
| 45.0 | 22.50 | 21.60 | 20.81 | 19.86 | 19.07 | 18.45 | 17.66 | 16.93 | 16.31 |
| 90.0 | 19.86 | 19.13 | 18.34 | 17.61 | 17.04 | 16.37 | 15.86 | 15.19 | 14.63 |
| 135.0 | 21.94 | 20.98 | 20.14 | 19.13 | 18.39 | 17.72 | 16.99 | 16.43 | 15.86 |
| 180.0 | 21.04 | 20.25 | 19.46 | 18.56 | 17.83 | 17.21 | 16.43 | 15.75 | 15.19 |
| 225.0 | 21.21 | 20.36 | 19.35 | 18.62 | 17.94 | 17.10 | 16.54 | 15.92 | 15.30 |
| 270.0 | 21.26 | 20.31 | 19.52 | 18.56 | 17.83 | 17.21 | 16.43 | 15.75 | 15.24 |
| 315.0 | 20.81 | 19.97 | 19.07 | 18.11 | 17.38 | 16.82 | 16.09 | 15.47 | 14.96 |
| 360.0 | 22.73 | 21.83 | 20.98 | 19.97 | 19.18 | 18.39 | 17.61 | 16.93 | 16.26 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 15.64 | 15.02 | 14.51 | 13.95 | 13.50 | 12.99 | 12.54 | 12.21 | 11.70 |
| 45.0 | 15.64 | 15.08 | 14.40 | 13.84 | 13.33 | 12.88 | 12.32 | 11.93 | 11.59 |
| 90.0 | 14.18 | 13.67 | 13.22 | 12.99 | 13.05 | 13.67 | 14.46 | 15.47 | 16.54 |
| 135.0 | 15.24 | 14.74 | 14.79 | 15.36 | 16.37 | 17.83 | 19.58 | 21.32 | 23.51 |
| 180.0 | 14.51 | 14.01 | 13.39 | 12.88 | 12.49 | 12.04 | 11.64 | 11.19 | 10.80 |
| 225.0 | 14.74 | 14.23 | 13.56 | 13.11 | 12.66 | 12.15 | 11.76 | 11.42 | 10.97 |
| 270.0 | 14.68 | 14.12 | 13.73 | 13.39 | 13.22 | 13.39 | 13.89 | 14.79 | 16.03 |
| 315.0 | 14.46 | 14.01 | 13.84 | 14.12 | 14.74 | 16.03 | 17.61 | 19.18 | 20.98 |
| 360.0 | 15.64 | 15.02 | 14.51 | 13.95 | 13.50 | 12.99 | 12.54 | 12.21 | 11.70 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 11.36 | 10.97 | 10.69 | 10.13 | 9.79 | 9.51 | 9.11 | 8.72 | 8.49 |
| 45.0 | 11.03 | 10.63 | 10.29 | 9.84 | 9.51 | 9.17 | 8.83 | 8.55 | 8.27 |
| 90.0 | 17.94 | 18.96 | 19.69 | 20.03 | 19.63 | 18.62 | 16.88 | 14.63 | 12.38 |
| 135.0 | 25.76 | 27.62 | 29.19 | 30.49 | 30.26 | 28.69 | 25.93 | 22.61 | 19.46 |
| 180.0 | 10.24 | 9.90 | 9.56 | 9.17 | 8.83 | 8.55 | 8.16 | 7.88 | 7.59 |
| 225.0 | 10.52 | 10.18 | 9.79 | 9.45 | 9.11 | 8.78 | 8.55 | 8.21 | 7.93 |
| 270.0 | 17.44 | 18.73 | 20.03 | 21.38 | 21.99 | 21.99 | 21.15 | 19.63 | 17.83 |
| 315.0 | 23.46 | 25.43 | 27.28 | 29.48 | 30.71 | 31.44 | 30.83 | 28.86 | 26.44 |
| 360.0 | 11.36 | 10.97 | 10.69 | 10.13 | 9.79 | 9.51 | 9.11 | 8.72 | 8.49 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 8.16 | 7.93 | 7.59 | 7.31 | 6.92 | 6.58 | 6.02 | 5.68 | 5.40 |
| 45.0 | 7.93 | 7.65 | 7.31 | 6.92 | 6.64 | 6.30 | 5.91 | 5.51 | 5.34 |
| 90.0 | 10.07 | 8.27 | 7.48 | 7.09 | 6.19 | 5.57 | 5.23 | 5.06 | 4.95 |
| 135.0 | 15.24 | 11.14 | 8.72 | 7.48 | 6.13 | 5.57 | 5.23 | 5.06 | 4.95 |
| 180.0 | 7.31 | 6.92 | 6.64 | 6.19 | 5.79 | 5.46 | 5.23 | 5.06 | 5.06 |
| 225.0 | 7.71 | 7.43 | 7.09 | 6.75 | 6.58 | 6.19 | 5.74 | 5.46 | 5.29 |
| 270.0 | 15.53 | 12.88 | 10.01 | 7.82 | 7.43 | 6.58 | 5.96 | 5.51 | 5.23 |
| 315.0 | 23.40 | 20.19 | 16.37 | 11.87 | 8.83 | 7.09 | 6.08 | 5.68 | 5.34 |
| 360.0 | 8.16 | 7.93 | 7.59 | 7.31 | 6.92 | 6.58 | 6.02 | 5.68 | 5.40 |

Intensity data(cd)

| | |
|---------------|-------------|
| C/γ(°) | 90.0 |
| 0.0 | 5.23 |
| 45.0 | 5.23 |
| 90.0 | 4.95 |
| 135.0 | 4.89 |
| 180.0 | 5.01 |
| 225.0 | 5.23 |
| 270.0 | 5.01 |
| 315.0 | 5.23 |
| 360.0 | 5.23 |