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Nata

LumCAT: 1669-E
Luminaire: 92.76.330.00
Report No: 2017030003-1
Test No: 2017030003
LampCAT: PHILIPS SLM 1203 G5 L9
Lamp flux(lm): 1120.0
Number of Lamps: 1
Length(mm): 47
Phm Type: C

Voltage(V): 36.0000
Current(A): 0.3000
Power (W): 10.8000
PF: 0.0000
Ballast type: DC
Width(mm): 47
Height(mm): 0

Photometric Results

Lumens(lm): 1008.02
Efficiency(%): 90.00%
Lumens(lm)/Power(W): 94.81
Central intensity(cd): 2832.982
Maximum intensity(cd): 2832.982
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=24.5
 [C90/270]Total=24.5
Field angle(10%Imax): [C0/180]Total=77.3
 [C90/270]Total=77.3
Maximum s/h(1/2): C0_180=0.41 C90_270=0.41
Maximum s/h(1/4): C0_180=0.44 C90_270=0.44
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 91.43%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 97.308%

Equipment: gms1980
Temperature(°C): 25.0

Date: 2017/3/2
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.42

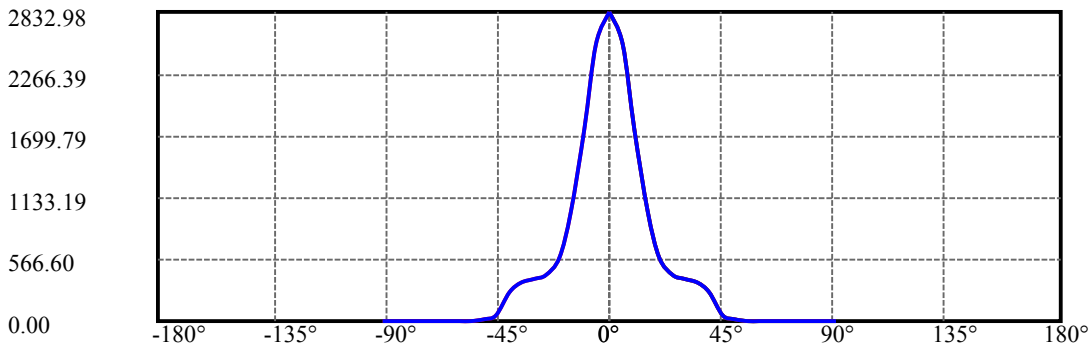
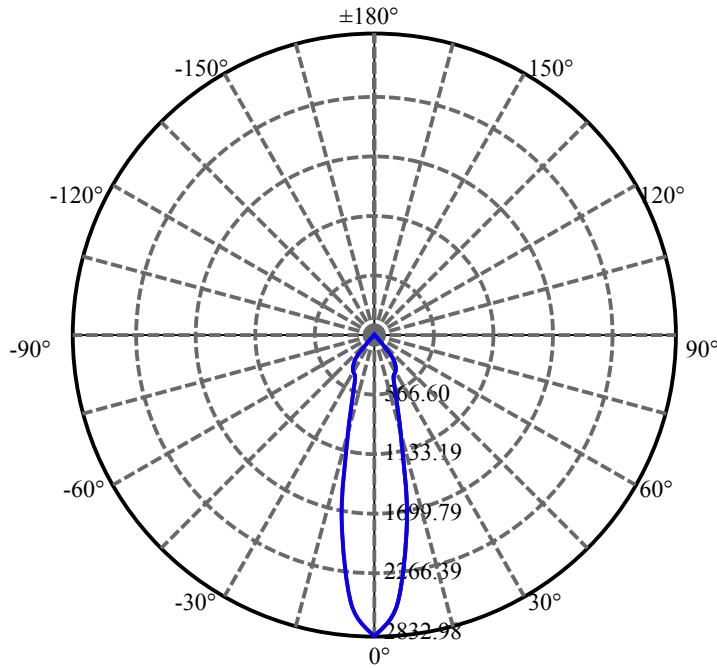
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 2832.982 | 16.942 | 16.942 | 1.513% | 1.681% |
| 5.0 | 2538.596 | 121.277 | 138.219 | 10.828% | 13.712% |
| 10.0 | 1756.244 | 167.165 | 305.384 | 14.925% | 30.295% |
| 15.0 | 1007.697 | 142.960 | 448.344 | 12.764% | 44.478% |
| 20.0 | 575.560 | 107.902 | 556.247 | 9.634% | 55.182% |
| 25.0 | 429.770 | 99.558 | 655.804 | 8.889% | 65.059% |
| 30.0 | 385.725 | 105.715 | 761.519 | 9.439% | 75.546% |
| 35.0 | 356.215 | 111.994 | 873.513 | 9.999% | 86.657% |
| 40.0 | 256.673 | 90.435 | 963.948 | 8.075% | 95.628% |
| 45.0 | 55.222 | 21.403 | 985.351 | 1.911% | 97.751% |
| 50.0 | 15.746 | 6.612 | 991.963 | .590% | 98.407% |
| 55.0 | 5.175 | 2.324 | 994.287 | .207% | 98.638% |
| 60.0 | 4.515 | 2.143 | 996.43 | .191% | 98.850% |
| 65.0 | 4.239 | 2.106 | 998.536 | .188% | 99.059% |
| 70.0 | 4.129 | 2.127 | 1000.663 | .190% | 99.270% |
| 75.0 | 3.964 | 2.099 | 1002.762 | .187% | 99.479% |
| 80.0 | 3.909 | 2.110 | 1004.872 | .188% | 99.688% |
| 85.0 | 3.854 | 2.104 | 1006.976 | .188% | 99.897% |
| 90.0 | 3.799 | 1.041 | 1008.017 | .093% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 761.52 | 67.99% | 75.55% |
| 0-40 | 963.95 | 86.07% | 95.63% |
| 0-60 | 996.43 | 88.97% | 98.85% |
| 0-90 | 1006.98 | 89.91% | 99.90% |
| 0-120 | 1006.98 | 89.91% | 99.90% |
| 0-180 | 1008.02 | 90.00% | 100.00% |
| 60-90 | 12.69 | 1.13% | 1.26% |
| 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% |
| 0-32.00 | 806.41 | 72.00% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 305.38 |
| 10-20 | 250.86 |
| 20-30 | 205.27 |
| 30-40 | 202.43 |
| 40-50 | 28.02 |
| 50-60 | 4.47 |
| 60-70 | 4.23 |
| 70-80 | 4.21 |
| 80-90 | 2.10 |
| 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: —————

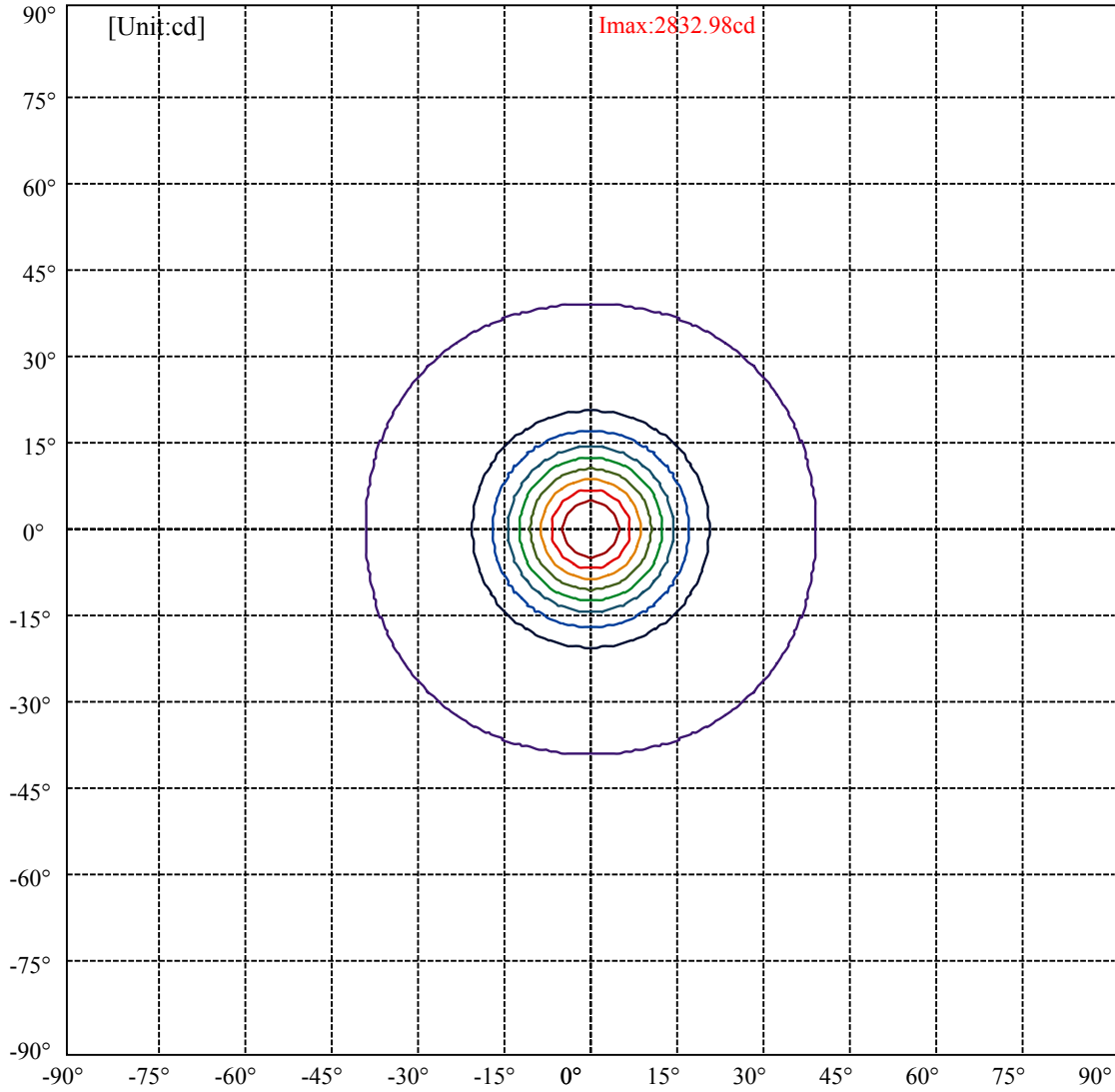
C90/C270: —————

Field angle(10%Imax):C0/180Left:38.7 Right:38.7

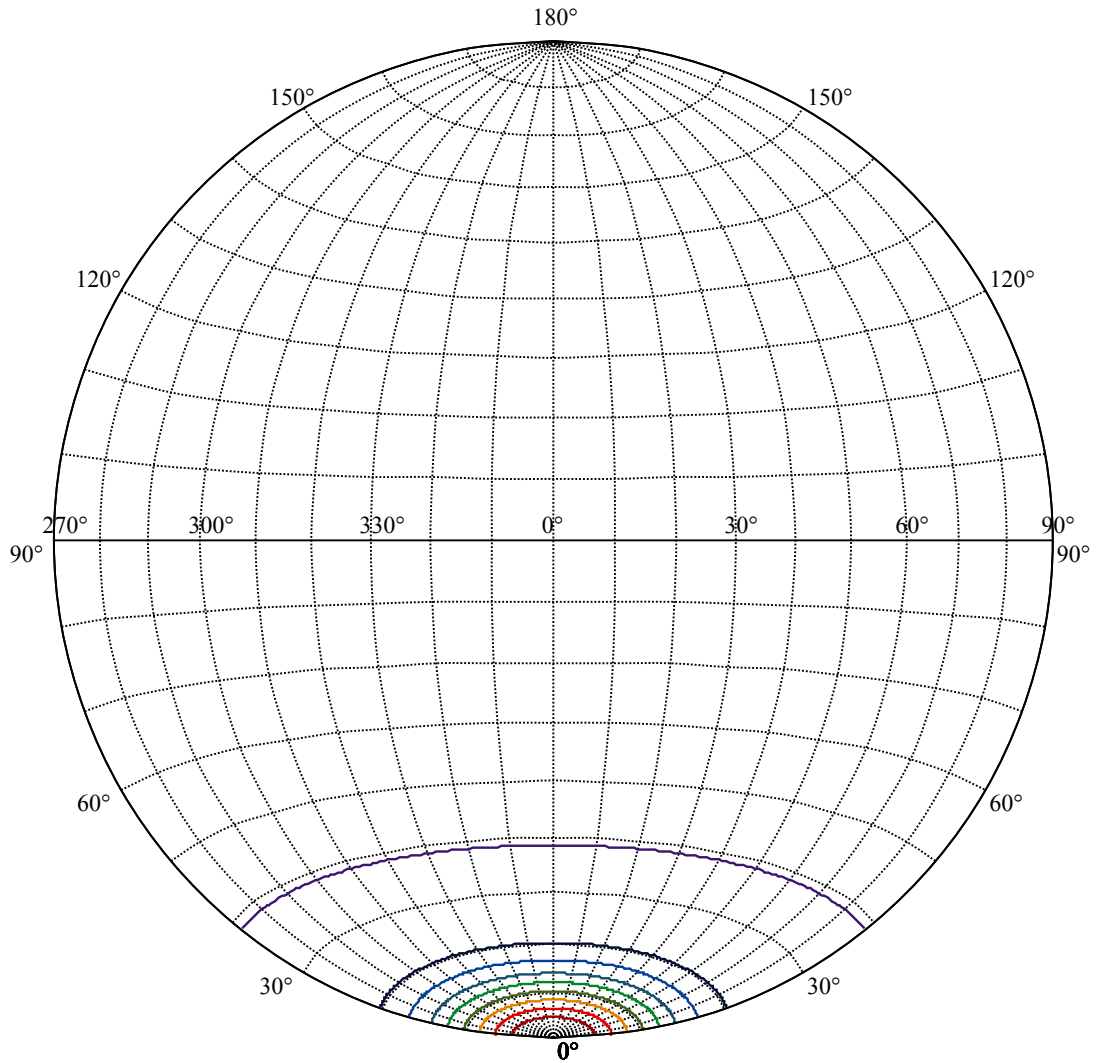
:C90/270Left:38.7 Right:38.7

Beam Angle(50%Imax):C0/180Left:12.3 Right:12.3

:C90/270Left:12.3 Right:12.3



| | |
|-------------------|---|
| (10%Imax) 283.298 | — |
| (20%Imax) 566.596 | — |
| (30%Imax) 849.895 | — |
| (40%Imax) 1133.19 | — |
| (50%Imax) 1416.49 | — |
| (60%Imax) 1699.79 | — |
| (70%Imax) 1983.09 | — |
| (80%Imax) 2266.39 | — |
| (90%Imax) 2549.68 | — |



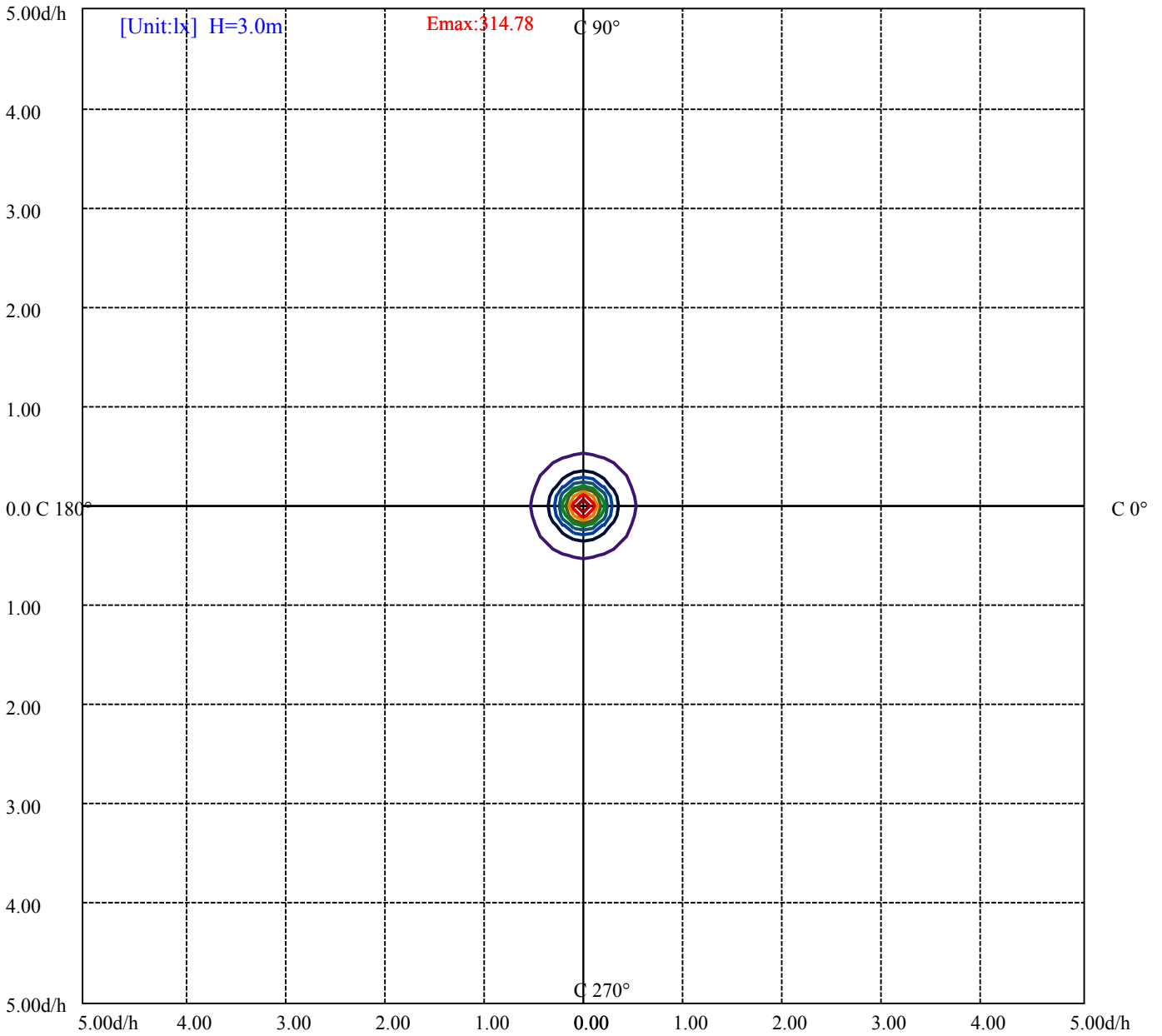
House

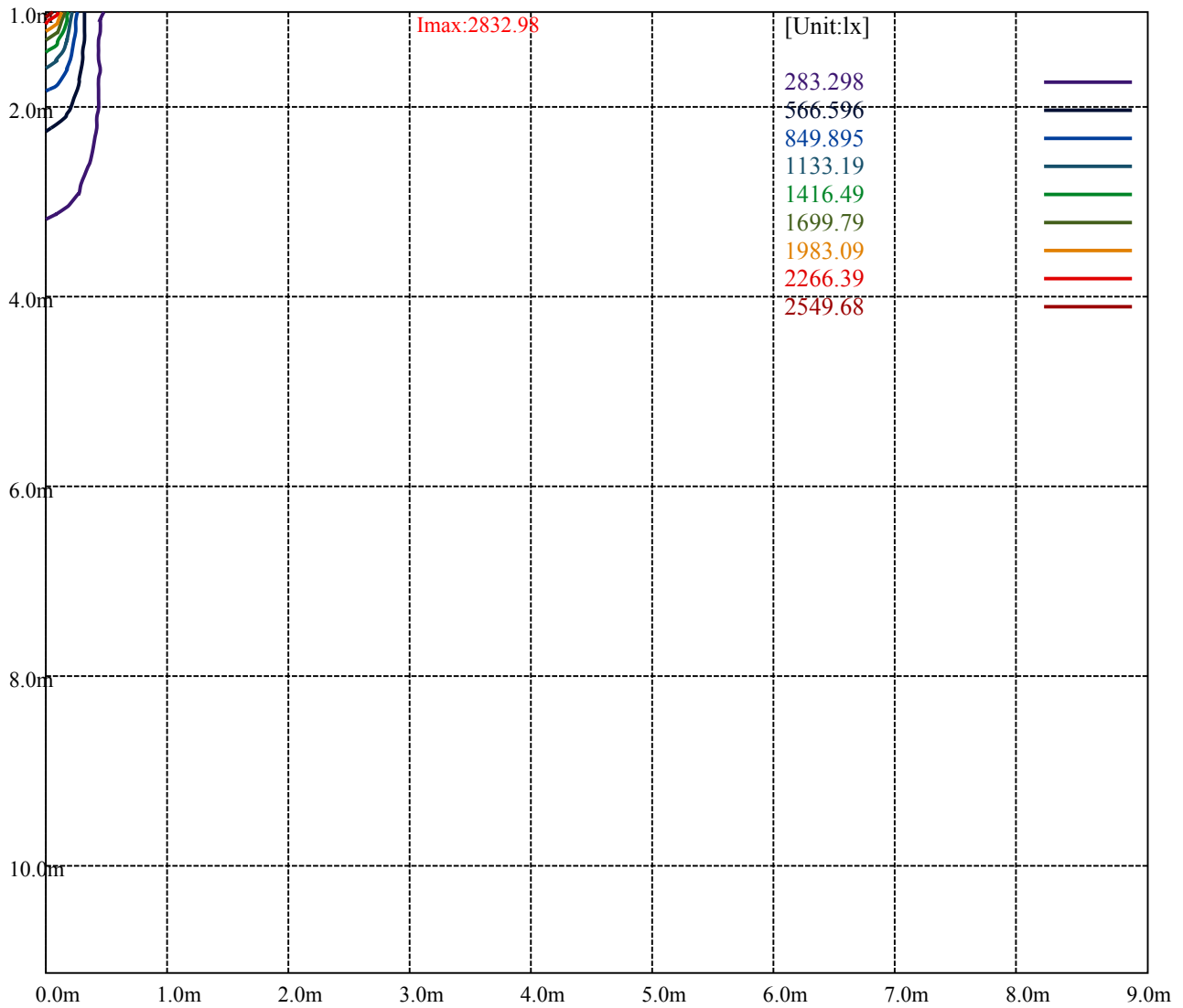
[Unit:cd]

Road

Imax:2832.98

| | | |
|-----------|---------|---|
| (10%Imax) | 283.298 | — |
| (20%Imax) | 566.596 | — |
| (30%Imax) | 849.895 | — |
| (40%Imax) | 1133.19 | — |
| (50%Imax) | 1416.49 | — |
| (60%Imax) | 1699.79 | — |
| (70%Imax) | 1983.09 | — |
| (80%Imax) | 2266.39 | — |
| (90%Imax) | 2549.68 | — |





Luminance Table

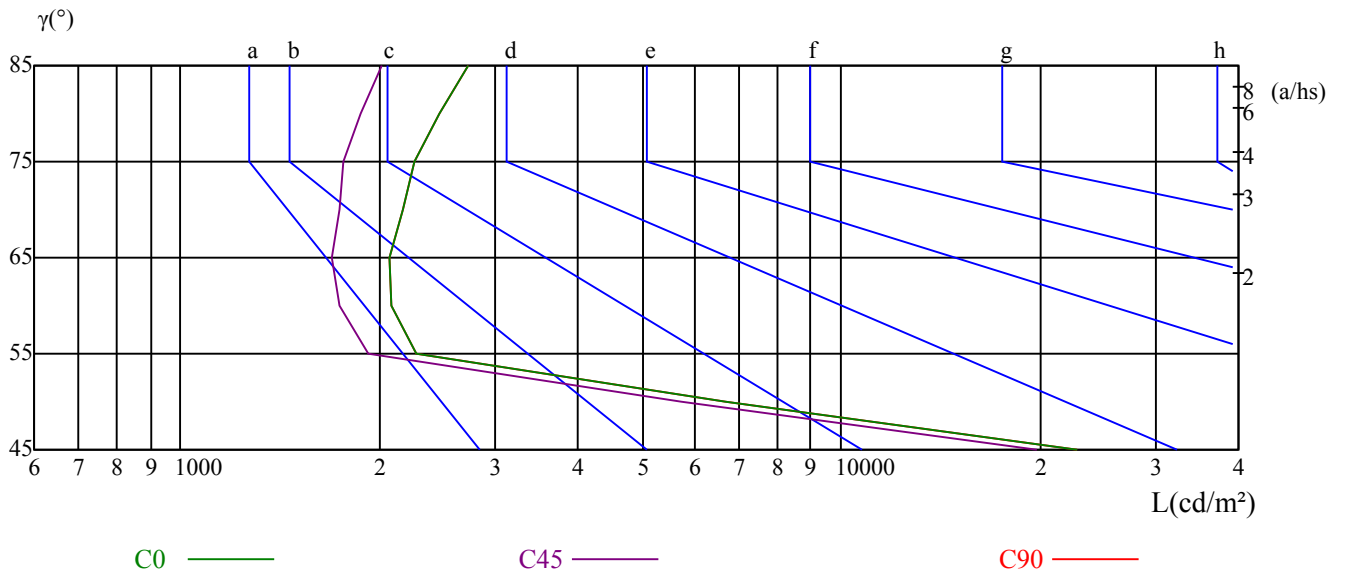
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|-------|------|------|------|------|------|------|------|------|
| C0 | 22762 | 6683 | 2282 | 2087 | 2077 | 2169 | 2262 | 2463 | 2734 |
| C45 | 19835 | 5739 | 1929 | 1736 | 1696 | 1735 | 1769 | 1874 | 2013 |
| C90 | 22762 | 6683 | 2282 | 2087 | 2077 | 2169 | 2262 | 2463 | 2734 |

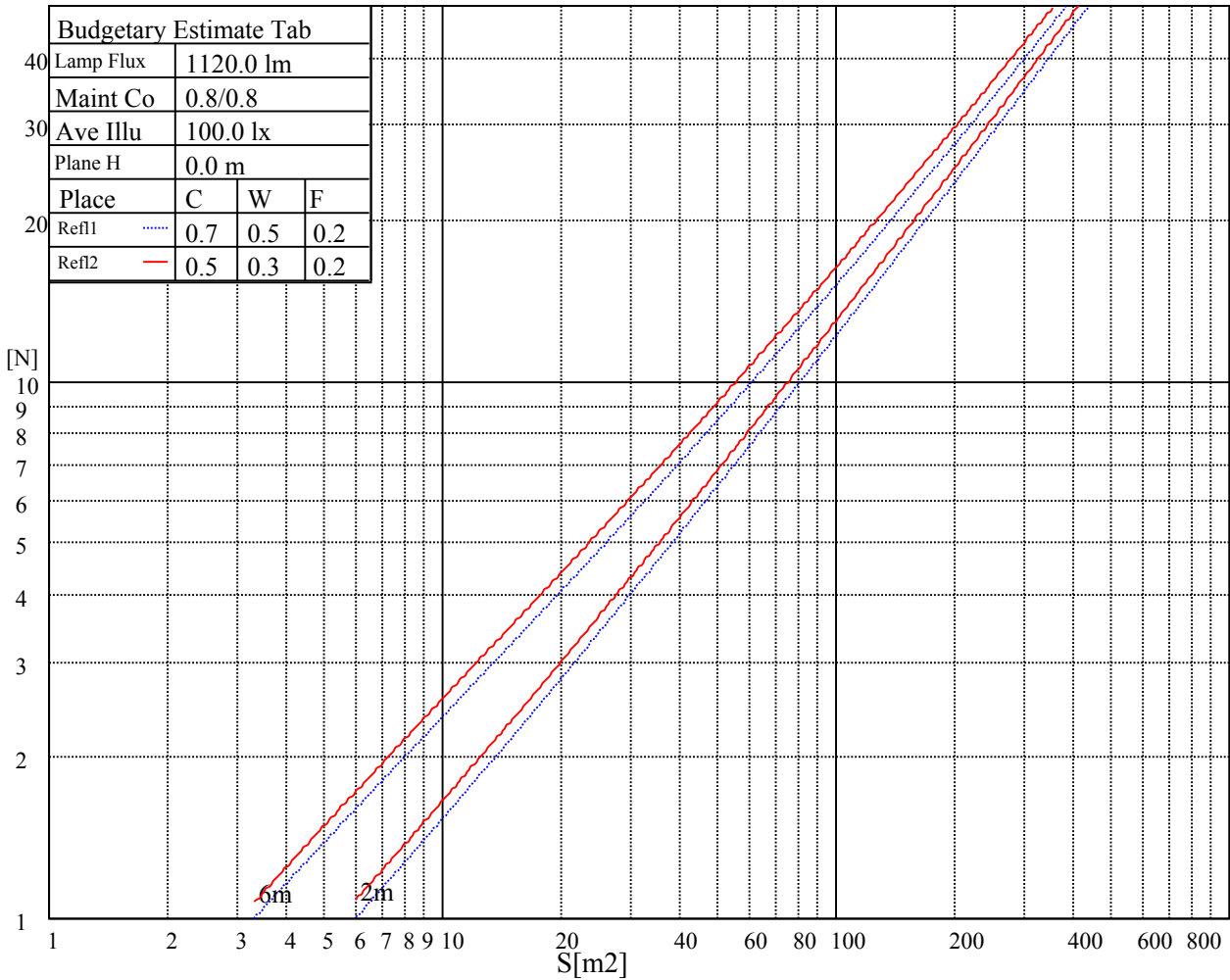
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 4541 | 4541 | 4541 | 6933 | 6933 | 6933 | 20018 | 20018 | 20018 |

Glare Table

| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| | | a | b | c | d | e | f | g | h |
| 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 RHOF=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.09 | 1.09 | 1.09 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 0.97 | 0.97 | 0.97 | 0.93 | 0.93 | 0.93 | 0.91 |
| 1 | 1.00 | 0.97 | 0.95 | 0.98 | 0.96 | 0.94 | 0.94 | 0.92 | 0.91 | 0.91 | 0.89 | 0.88 | 0.88 | 0.87 | 0.85 | 0.84 |
| 2 | 0.94 | 0.90 | 0.87 | 0.92 | 0.89 | 0.86 | 0.89 | 0.87 | 0.84 | 0.87 | 0.84 | 0.82 | 0.84 | 0.82 | 0.81 | 0.79 |
| 3 | 0.89 | 0.84 | 0.81 | 0.87 | 0.83 | 0.80 | 0.85 | 0.82 | 0.79 | 0.83 | 0.80 | 0.78 | 0.81 | 0.78 | 0.76 | 0.75 |
| 4 | 0.84 | 0.79 | 0.76 | 0.83 | 0.78 | 0.75 | 0.81 | 0.77 | 0.74 | 0.79 | 0.76 | 0.73 | 0.77 | 0.75 | 0.72 | 0.71 |
| 5 | 0.80 | 0.75 | 0.71 | 0.79 | 0.74 | 0.71 | 0.77 | 0.73 | 0.70 | 0.76 | 0.72 | 0.70 | 0.74 | 0.71 | 0.69 | 0.68 |
| 6 | 0.76 | 0.71 | 0.67 | 0.75 | 0.70 | 0.67 | 0.74 | 0.70 | 0.67 | 0.73 | 0.69 | 0.66 | 0.71 | 0.68 | 0.66 | 0.65 |
| 7 | 0.72 | 0.67 | 0.64 | 0.72 | 0.67 | 0.64 | 0.71 | 0.66 | 0.63 | 0.70 | 0.66 | 0.63 | 0.69 | 0.65 | 0.63 | 0.62 |
| 8 | 0.69 | 0.64 | 0.61 | 0.69 | 0.64 | 0.61 | 0.68 | 0.64 | 0.61 | 0.67 | 0.63 | 0.60 | 0.66 | 0.63 | 0.60 | 0.59 |
| 9 | 0.66 | 0.62 | 0.58 | 0.66 | 0.61 | 0.58 | 0.65 | 0.61 | 0.58 | 0.64 | 0.61 | 0.58 | 0.64 | 0.60 | 0.58 | 0.57 |
| 10 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.62 | 0.58 | 0.56 | 0.61 | 0.58 | 0.55 | 0.54 |

Intensity data(cd)

| | | | | | | | | | |
|--------|---------|---------|---------|---------|--------|--------|--------|--------|--------|
| C/γ(°) | 0.0 | 5.0 | 10.0 | 15.0 | 20.0 | 25.0 | 30.0 | 35.0 | 40.0 |
| 0.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 22.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 45.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 67.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 90.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 112.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 135.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 157.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 180.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 202.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 225.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 247.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 270.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 292.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 315.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 337.5 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| 360.0 | 2832.98 | 2538.60 | 1756.24 | 1007.70 | 575.56 | 429.77 | 385.73 | 356.21 | 256.67 |
| C/γ(°) | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | 85.0 |
| 0.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 22.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 45.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 67.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 90.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 112.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 135.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 157.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 180.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 202.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 225.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 247.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 270.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 292.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 315.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 337.5 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| 360.0 | 55.22 | 15.75 | 5.18 | 4.51 | 4.24 | 4.13 | 3.96 | 3.91 | 3.85 |
| C/γ(°) | 90.0 | | | | | | | | |
| 0.0 | 3.80 | | | | | | | | |
| 22.5 | 3.80 | | | | | | | | |
| 45.0 | 3.80 | | | | | | | | |
| 67.5 | 3.80 | | | | | | | | |
| 90.0 | 3.80 | | | | | | | | |
| 112.5 | 3.80 | | | | | | | | |
| 135.0 | 3.80 | | | | | | | | |
| 157.5 | 3.80 | | | | | | | | |
| 180.0 | 3.80 | | | | | | | | |
| 202.5 | 3.80 | | | | | | | | |
| 225.0 | 3.80 | | | | | | | | |
| 247.5 | 3.80 | | | | | | | | |
| 270.0 | 3.80 | | | | | | | | |
| 292.5 | 3.80 | | | | | | | | |
| 315.0 | 3.80 | | | | | | | | |
| 337.5 | 3.80 | | | | | | | | |
| 360.0 | 3.80 | | | | | | | | |