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Nata

LumCAT: LN01D04560DA-N

Luminaire: 97.70.234.00

Report No: 210106-B006

Test No: 210106-C006

LampCAT: TRIDONIC SLE G7 9MM

Lamp flux(lm): 1978.0

Number of Lamps: 1

Length(mm): 92

Phm Type: C

Voltage(V): 36.0900

Current(A): 0.3810

Power (W): 13.7500

PF: 0.0000

Ballast type: DC

Width(mm): 92

Height(mm): 50

Photometric Results

Lumens(lm): 1631.15

Efficiency(%): 82.46%

Lumens(lm)/Power(W): 118.63

Central intensity(cd): 1552.641

Maximum intensity(cd): 1552.641

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=59.6

[C90/270]Total=59.6

Field angle(10%Imax): [C0/180]Total=94.9

[C90/270]Total=94.9

Maximum s/h(1/2): C0_180=0.90 C90_270=0.90

Maximum s/h(1/4): C0_180=0.91 C90_270=0.91

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 82.46%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 94.343%

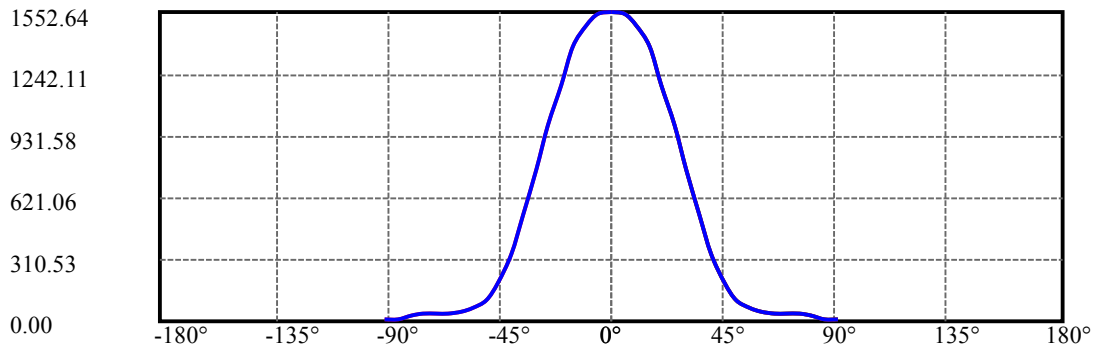
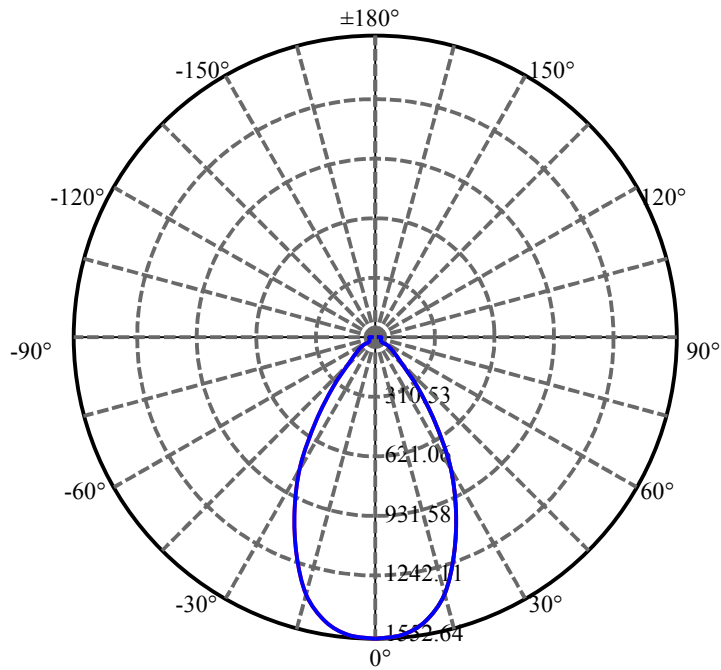
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 1552.641 | 0.000 | 0 | .000% | .000% |
| 5.0 | 1540.547 | 36.978 | 36.978 | 1.869% | 2.267% |
| 10.0 | 1487.672 | 108.329 | 145.307 | 5.477% | 8.908% |
| 15.0 | 1375.313 | 169.830 | 315.137 | 8.586% | 19.320% |
| 20.0 | 1187.880 | 211.243 | 526.381 | 10.680% | 32.270% |
| 25.0 | 985.219 | 227.918 | 754.299 | 11.523% | 46.243% |
| 30.0 | 766.666 | 221.703 | 976.001 | 11.208% | 59.835% |
| 35.0 | 530.227 | 190.977 | 1166.978 | 9.655% | 71.543% |
| 40.0 | 333.577 | 144.119 | 1311.097 | 7.286% | 80.379% |
| 45.0 | 197.402 | 98.315 | 1409.412 | 4.970% | 86.406% |
| 50.0 | 110.883 | 62.294 | 1471.705 | 3.149% | 90.225% |
| 55.0 | 70.095 | 39.351 | 1511.056 | 1.989% | 92.637% |
| 60.0 | 50.252 | 27.818 | 1538.874 | 1.406% | 94.343% |
| 65.0 | 37.927 | 21.436 | 1560.31 | 1.084% | 95.657% |
| 70.0 | 34.467 | 18.331 | 1578.641 | .927% | 96.781% |
| 75.0 | 35.262 | 18.226 | 1596.867 | .921% | 97.898% |
| 80.0 | 28.434 | 17.043 | 1613.91 | .862% | 98.943% |
| 85.0 | 13.641 | 11.433 | 1625.343 | .578% | 99.644% |
| 90.0 | 7.580 | 5.810 | 1631.153 | .294% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 976.00 | 49.34% | 59.84% |
| 0-40 | 1311.10 | 66.28% | 80.38% |
| 0-60 | 1538.87 | 77.80% | 94.34% |
| 0-90 | 1625.34 | 82.17% | 99.64% |
| 0-120 | 1625.34 | 82.17% | 99.64% |
| 0-180 | 1631.15 | 82.46% | 100.00% |
| 60-90 | 114.29 | 5.78% | 7.01% |
| 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% |
| 0-39.79 | 1304.92 | 65.97% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 145.31 |
| 10-20 | 381.07 |
| 20-30 | 449.62 |
| 30-40 | 335.10 |
| 40-50 | 160.61 |
| 50-60 | 67.17 |
| 60-70 | 39.77 |
| 70-80 | 35.27 |
| 80-90 | 11.43 |
| 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: —————

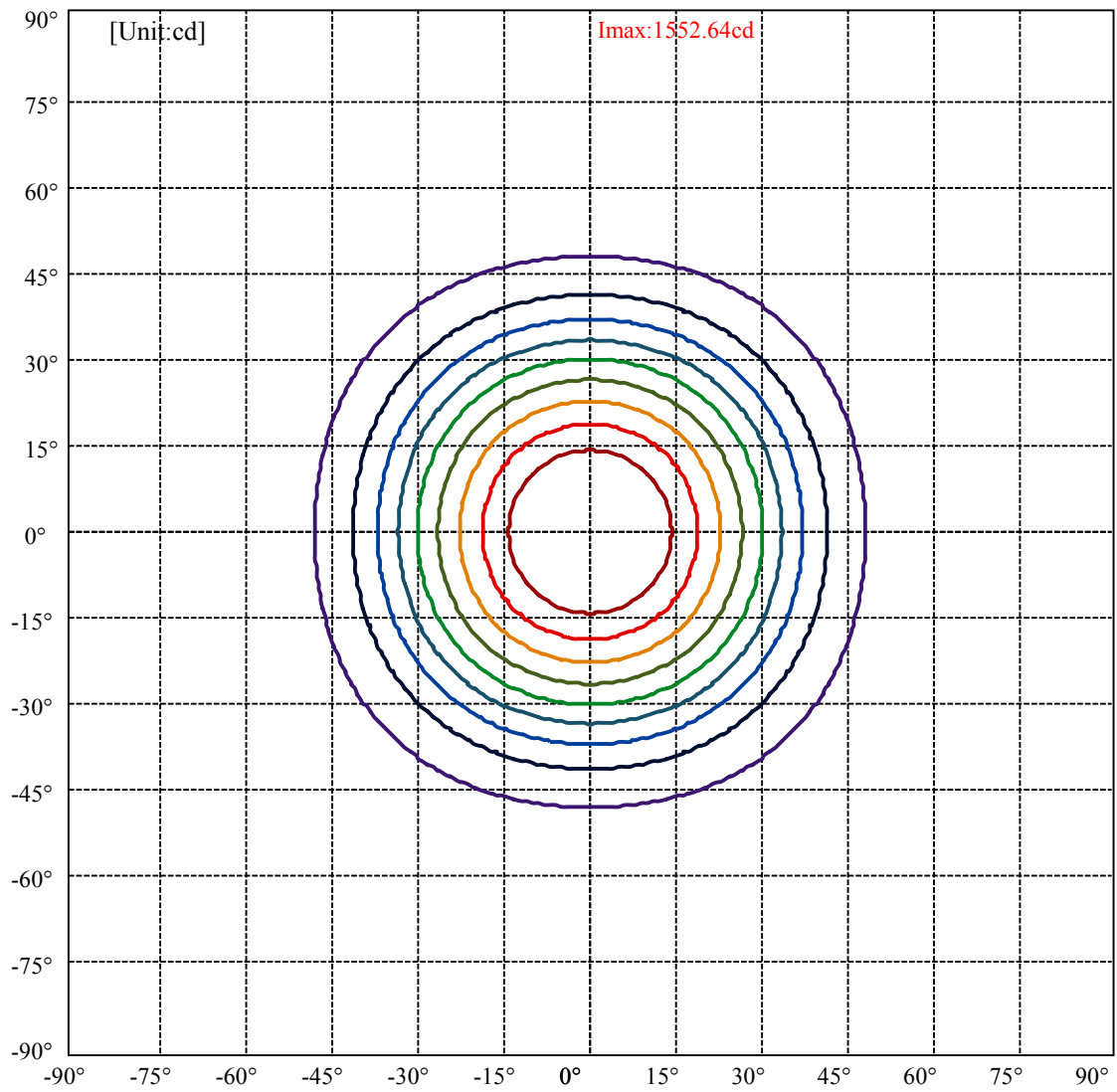
Field angle(10%Imax):C0/180Left:47.4 Right:47.4

:C90/270Left:47.4 Right:47.4

Beam Angle(50%Imax):C0/180Left:29.8 Right:29.8

:C90/270Left:29.8 Right:29.8

ISO-Intensity(V-H)

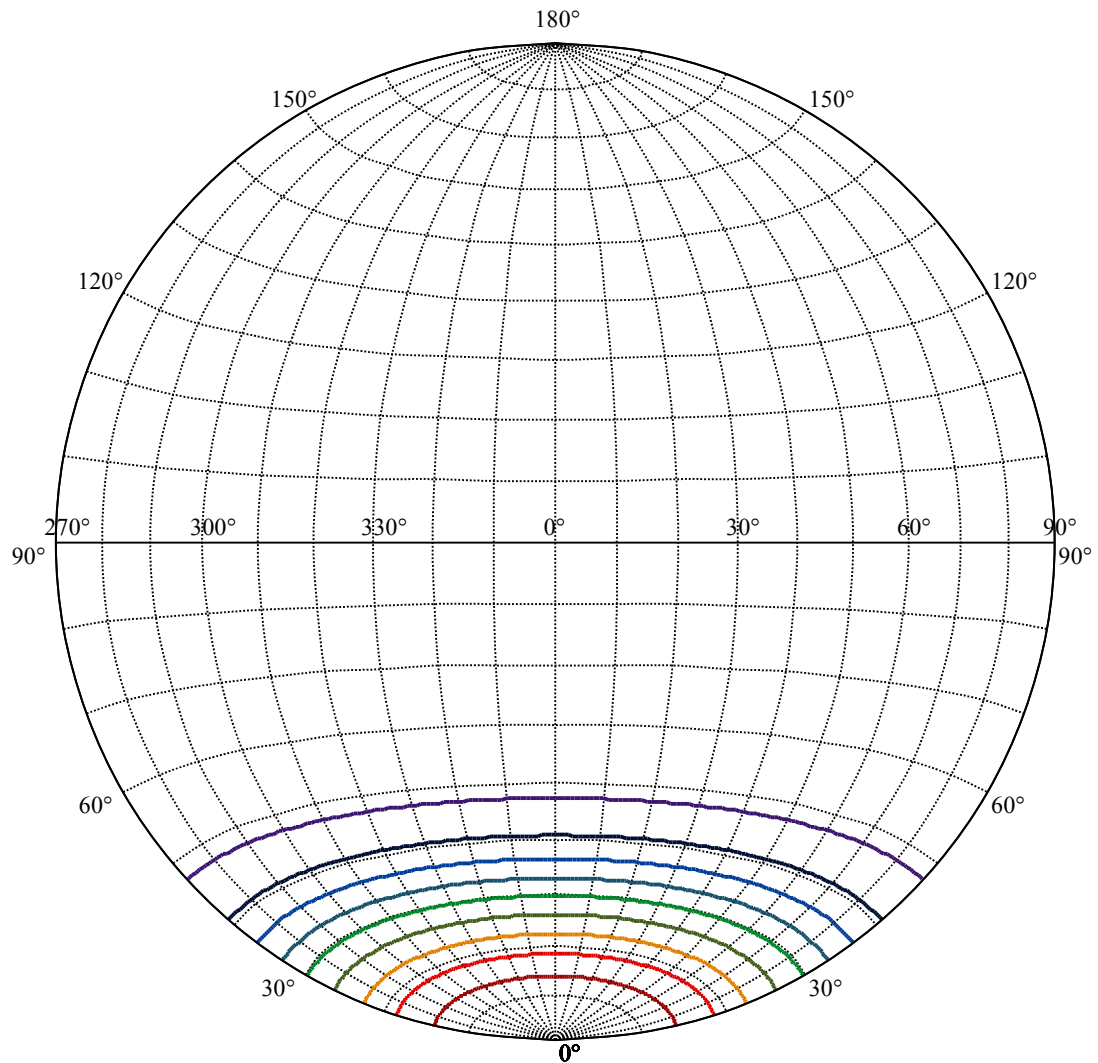


| | |
|-------------------|---|
| (10%Imax) 155.264 | — |
| (20%Imax) 310.528 | — |
| (30%Imax) 465.792 | — |
| (40%Imax) 621.056 | — |
| (50%Imax) 776.32 | — |
| (60%Imax) 931.584 | — |
| (70%Imax) 1086.85 | — |
| (80%Imax) 1242.11 | — |
| (90%Imax) 1397.38 | — |

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2021/01/06
Humidity(%): 65.0%

Operator: NT07
Distance(m): 7.50












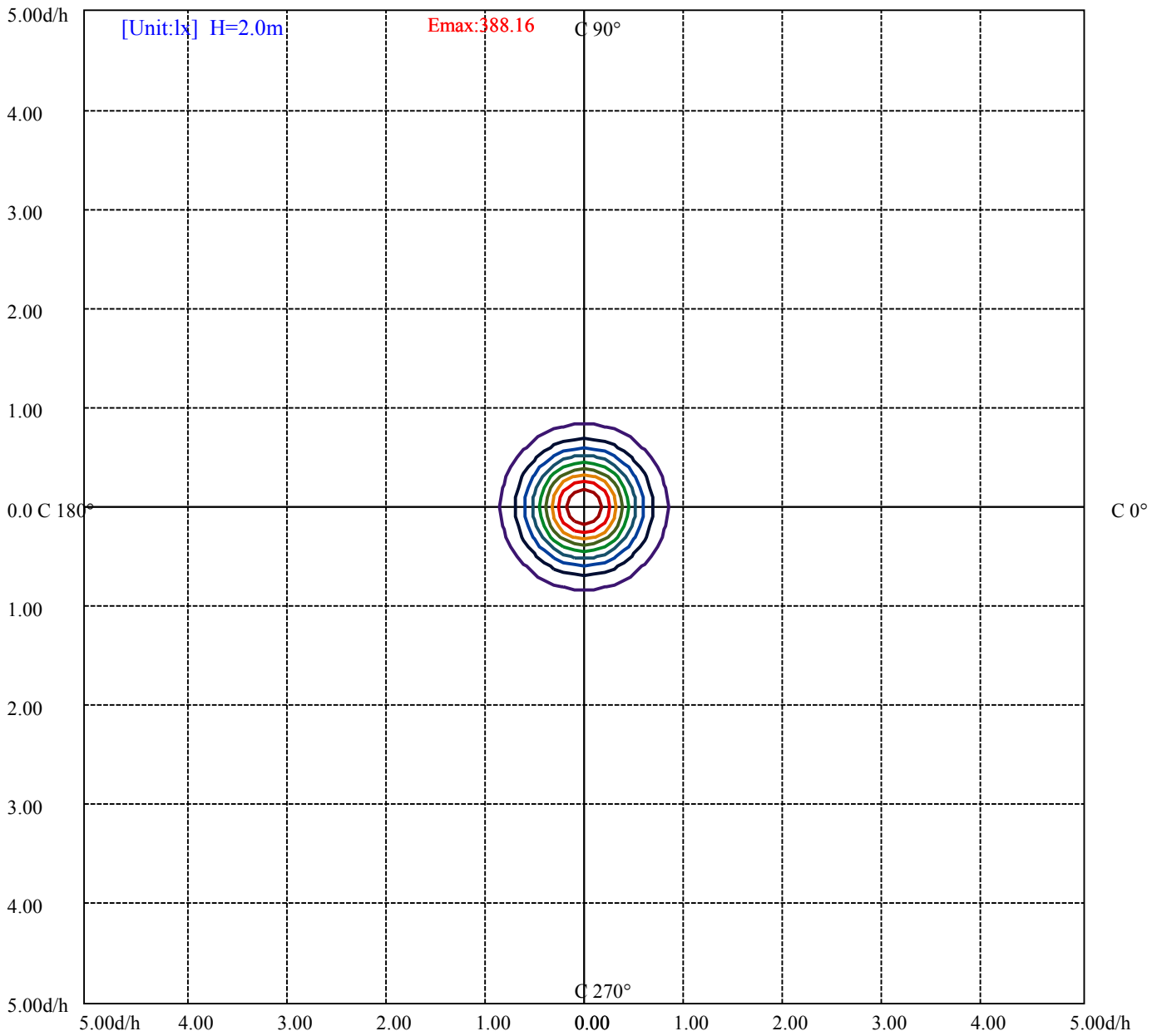
House

[Unit:cd]

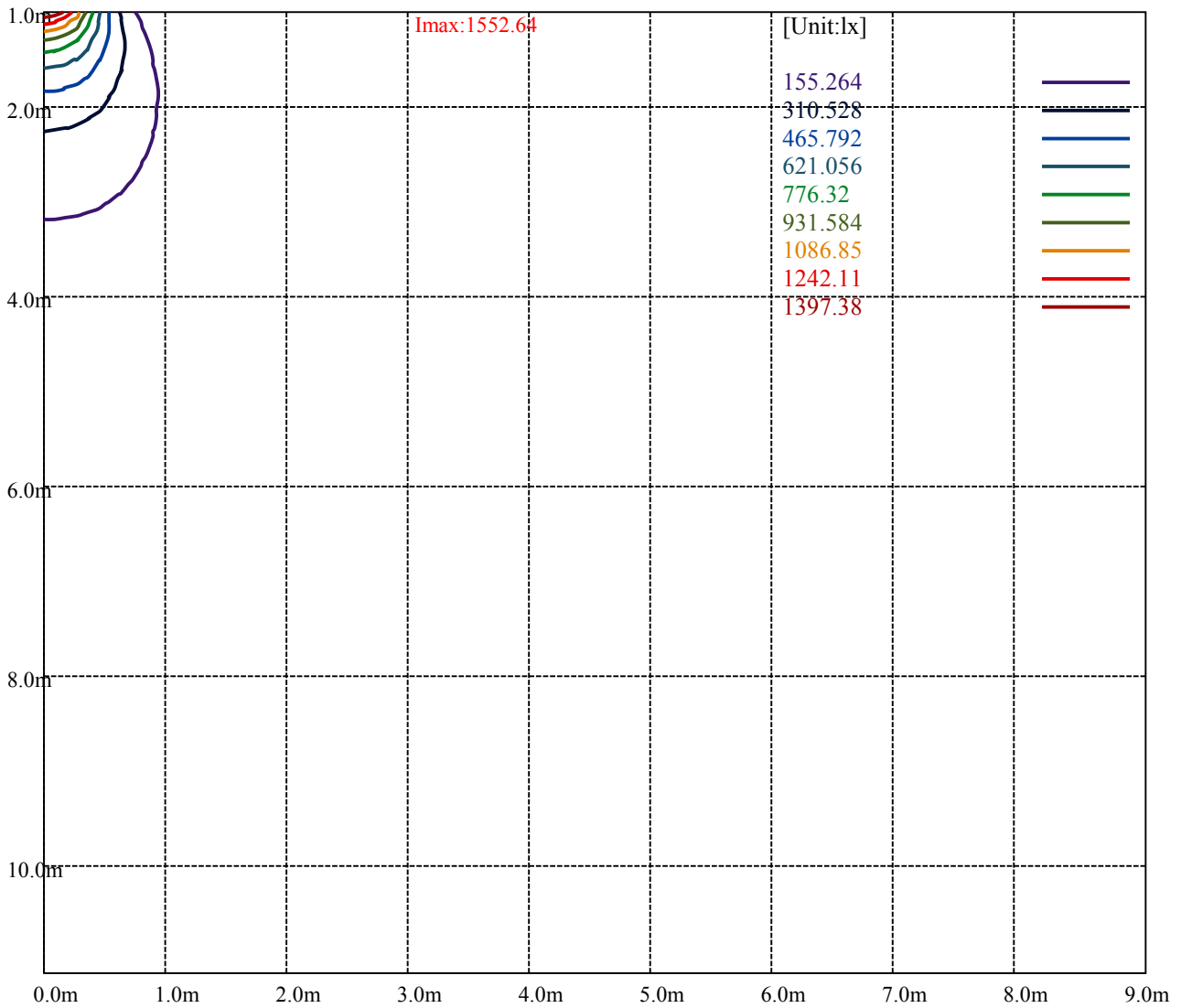
Road

Imax:1552.64

| | | |
|-----------|---------|---|
| (10%Imax) | 155.264 |  |
| (20%Imax) | 310.528 |  |
| (30%Imax) | 465.792 |  |
| (40%Imax) | 621.056 |  |
| (50%Imax) | 776.32 |  |
| (60%Imax) | 931.584 |  |
| (70%Imax) | 1086.85 |  |
| (80%Imax) | 1242.11 |  |
| (90%Imax) | 1397.38 |  |



- (10%Emax) 38.816
- (20%Emax) 77.632
- (30%Emax) 116.448
- (40%Emax) 155.264
- (50%Emax) 194.08
- (60%Emax) 232.896
- (70%Emax) 271.7125
- (80%Emax) 310.5275
- (90%Emax) 349.345



Luminance Table

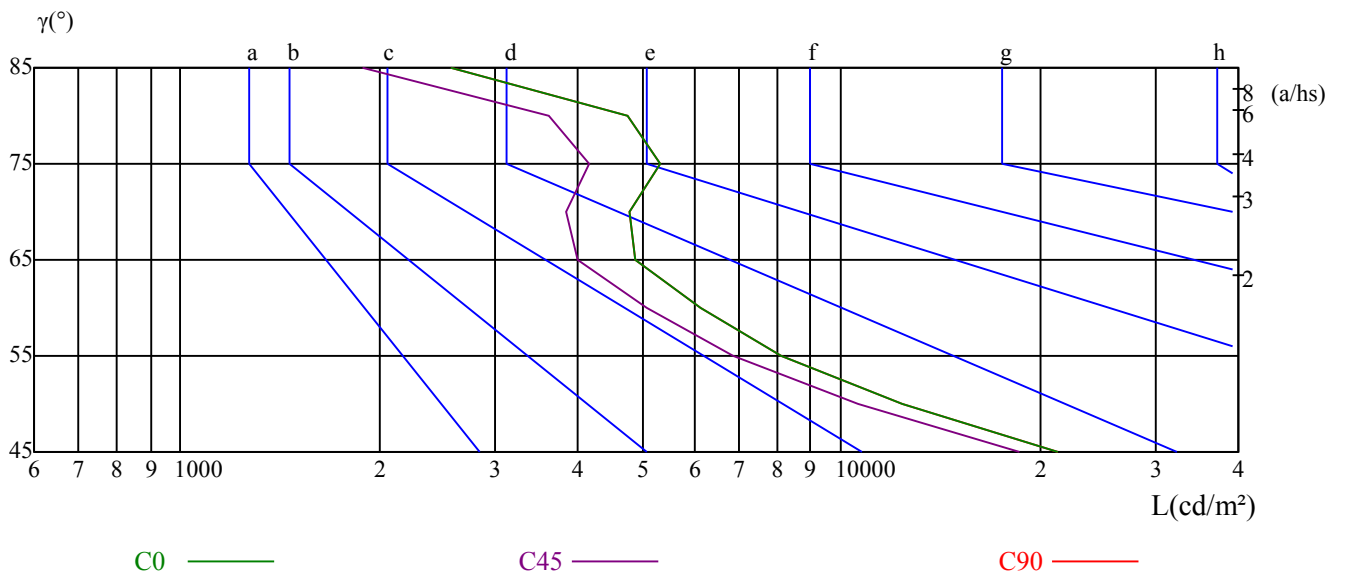
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|-------|-------|------|------|------|------|------|------|------|
| C0 | 21369 | 12369 | 8129 | 6117 | 4896 | 4776 | 5315 | 4739 | 2564 |
| C45 | 18649 | 10637 | 6883 | 5094 | 4004 | 3826 | 4161 | 3610 | 1890 |
| C90 | 21369 | 12369 | 8129 | 6117 | 4896 | 4776 | 5315 | 4739 | 2564 |

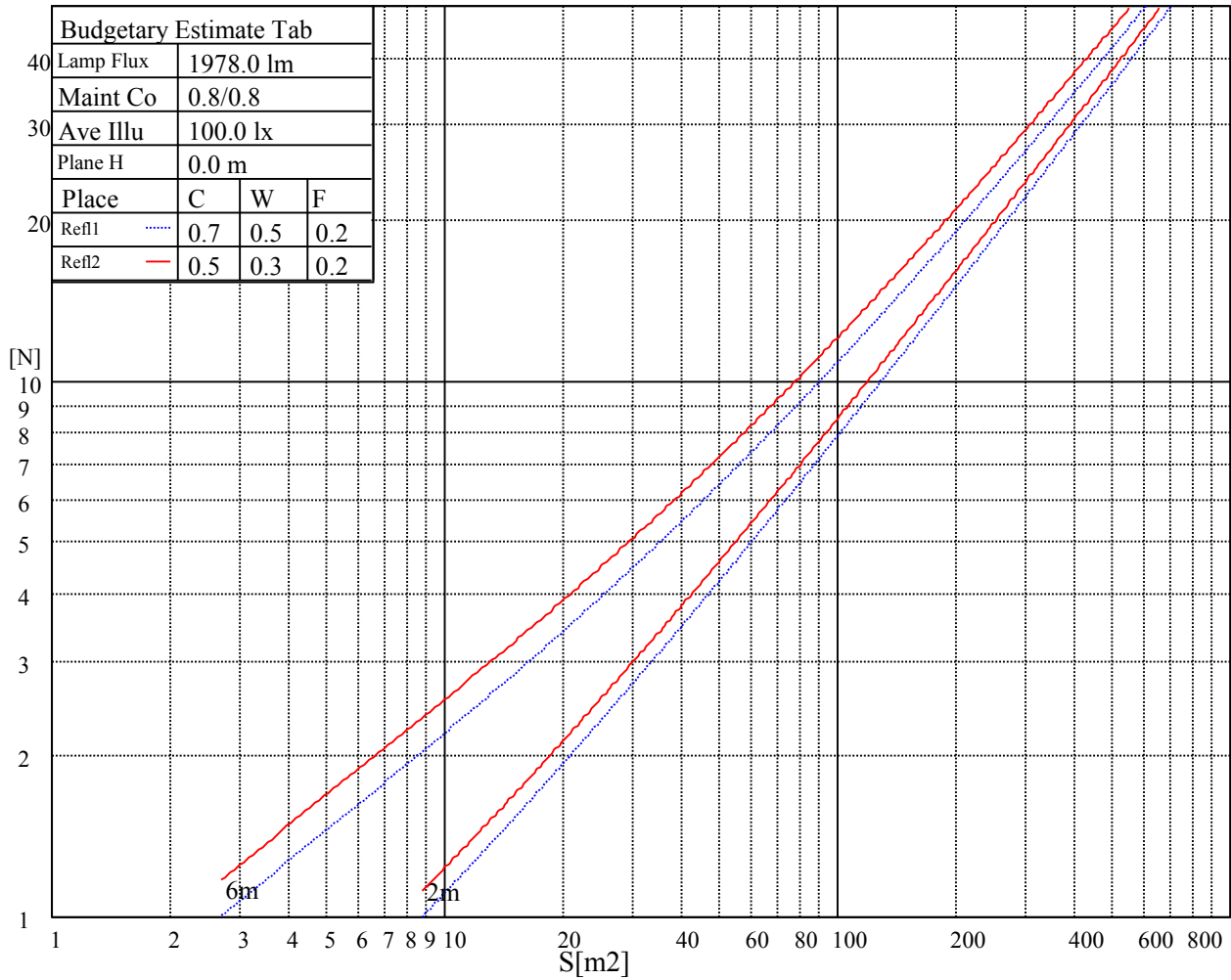
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 10603 | 10603 | 10603 | 16097 | 16097 | 16097 | 18491 | 18491 | 18491 |

Glare Table

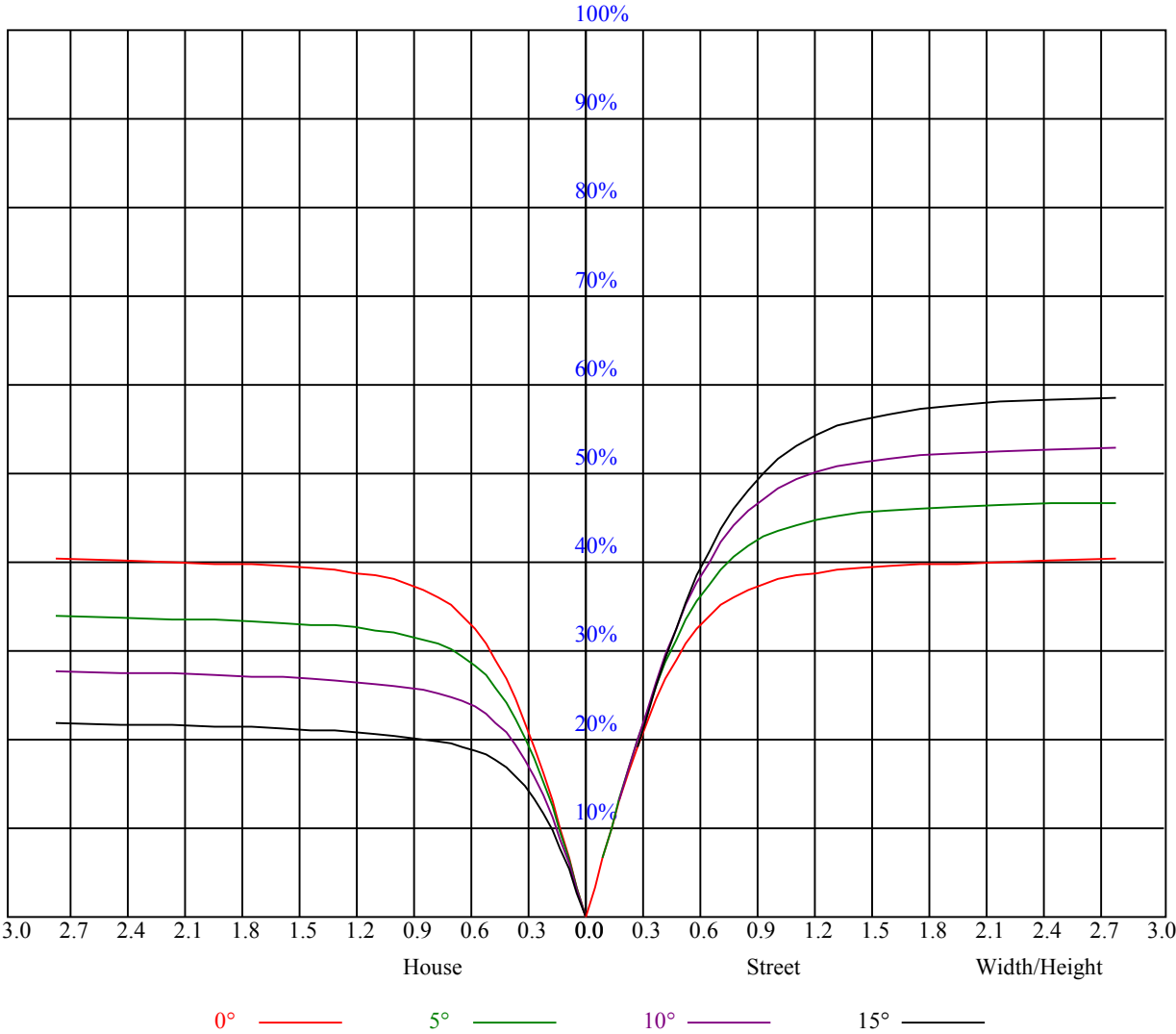
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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 | 0.98 | 0.98 | 0.98 | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.84 | 0.84 | 0.84 | 0.82 |
| 1 | 0.90 | 0.87 | 0.85 | 0.88 | 0.86 | 0.84 | 0.85 | 0.83 | 0.81 | 0.81 | 0.80 | 0.79 | 0.79 | 0.77 | 0.76 | 0.75 |
| 2 | 0.82 | 0.78 | 0.75 | 0.81 | 0.77 | 0.74 | 0.78 | 0.75 | 0.72 | 0.76 | 0.73 | 0.71 | 0.73 | 0.71 | 0.69 | 0.68 |
| 3 | 0.76 | 0.71 | 0.67 | 0.75 | 0.70 | 0.67 | 0.72 | 0.69 | 0.65 | 0.70 | 0.67 | 0.64 | 0.68 | 0.66 | 0.63 | 0.62 |
| 4 | 0.70 | 0.65 | 0.61 | 0.69 | 0.64 | 0.60 | 0.67 | 0.63 | 0.60 | 0.65 | 0.62 | 0.59 | 0.64 | 0.61 | 0.58 | 0.57 |
| 5 | 0.65 | 0.59 | 0.55 | 0.64 | 0.59 | 0.55 | 0.63 | 0.58 | 0.55 | 0.61 | 0.57 | 0.54 | 0.60 | 0.56 | 0.54 | 0.52 |
| 6 | 0.60 | 0.55 | 0.51 | 0.60 | 0.55 | 0.51 | 0.58 | 0.54 | 0.50 | 0.57 | 0.53 | 0.50 | 0.56 | 0.53 | 0.50 | 0.48 |
| 7 | 0.56 | 0.51 | 0.47 | 0.56 | 0.51 | 0.47 | 0.55 | 0.50 | 0.47 | 0.54 | 0.50 | 0.46 | 0.53 | 0.49 | 0.46 | 0.45 |
| 8 | 0.53 | 0.47 | 0.44 | 0.52 | 0.47 | 0.44 | 0.51 | 0.47 | 0.43 | 0.51 | 0.46 | 0.43 | 0.50 | 0.46 | 0.43 | 0.42 |
| 9 | 0.50 | 0.44 | 0.41 | 0.49 | 0.44 | 0.41 | 0.48 | 0.44 | 0.41 | 0.48 | 0.43 | 0.40 | 0.47 | 0.43 | 0.40 | 0.39 |
| 10 | 0.47 | 0.42 | 0.38 | 0.46 | 0.41 | 0.38 | 0.46 | 0.41 | 0.38 | 0.45 | 0.41 | 0.38 | 0.44 | 0.40 | 0.38 | 0.37 |



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 | 1551.94 | 1553.06 | 1518.75 | 1437.75 | 1284.75 | 1074.38 | 851.06 | 624.38 | 404.44 |
| 45.0 | 1551.94 | 1551.38 | 1506.94 | 1398.38 | 1236.38 | 1031.63 | 803.81 | 555.75 | 347.06 |
| 90.0 | 1554.19 | 1544.63 | 1491.19 | 1366.31 | 1119.38 | 944.55 | 708.30 | 464.51 | 285.13 |
| 135.0 | 1552.50 | 1551.94 | 1506.94 | 1401.75 | 1201.50 | 960.75 | 735.75 | 488.81 | 294.75 |
| 180.0 | 1551.94 | 1532.25 | 1464.19 | 1323.56 | 1111.50 | 906.86 | 680.29 | 458.44 | 275.23 |
| 225.0 | 1551.94 | 1522.13 | 1448.44 | 1315.69 | 1114.48 | 945.84 | 747.17 | 507.26 | 307.24 |
| 270.0 | 1554.19 | 1529.44 | 1473.75 | 1372.50 | 1212.75 | 1004.06 | 807.19 | 586.69 | 381.38 |
| 315.0 | 1552.50 | 1539.56 | 1491.19 | 1386.56 | 1222.31 | 1013.68 | 799.76 | 555.98 | 373.39 |
| 360.0 | 1551.94 | 1553.06 | 1518.75 | 1437.75 | 1284.75 | 1074.38 | 851.06 | 624.38 | 404.44 |
| C/γ(°) | 45.0 | 50.0 | 55.0 | 60.0 | 65.0 | 70.0 | 75.0 | 80.0 | 85.0 |
| 0.0 | 284.63 | 133.54 | 81.11 | 55.97 | 42.64 | 33.36 | 26.72 | 21.54 | 15.19 |
| 45.0 | 195.36 | 115.59 | 72.62 | 52.43 | 39.21 | 31.39 | 25.59 | 19.91 | 13.67 |
| 90.0 | 157.11 | 95.12 | 61.93 | 45.79 | 34.99 | 37.01 | 41.12 | 26.27 | 11.42 |
| 135.0 | 159.36 | 98.78 | 63.39 | 45.84 | 35.49 | 41.74 | 50.23 | 37.13 | 10.97 |
| 180.0 | 152.44 | 92.76 | 61.65 | 44.94 | 34.31 | 27.96 | 22.28 | 16.71 | 10.91 |
| 225.0 | 174.04 | 102.94 | 65.93 | 48.26 | 36.62 | 29.48 | 23.91 | 18.73 | 13.16 |
| 270.0 | 246.54 | 127.63 | 77.79 | 55.63 | 40.50 | 34.20 | 41.79 | 38.48 | 15.19 |
| 315.0 | 209.76 | 120.71 | 76.33 | 53.16 | 39.66 | 40.61 | 50.46 | 48.71 | 18.62 |
| 360.0 | 284.63 | 133.54 | 81.11 | 55.97 | 42.64 | 33.36 | 26.72 | 21.54 | 15.19 |
| C/γ(°) | 90.0 | | | | | | | | |
| 0.0 | 8.61 | | | | | | | | |
| 45.0 | 7.48 | | | | | | | | |
| 90.0 | 6.86 | | | | | | | | |
| 135.0 | 6.75 | | | | | | | | |
| 180.0 | 7.59 | | | | | | | | |
| 225.0 | 7.59 | | | | | | | | |
| 270.0 | 7.65 | | | | | | | | |
| 315.0 | 8.10 | | | | | | | | |
| 360.0 | 8.61 | | | | | | | | |