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Nata

| | |
|-----------------------------------|---------------------|
| LumCAT: 1-1061-N | |
| Luminaire: 92.70.361.000 | |
| Report No: 220519-B027 | Voltage(V): 37.2000 |
| Test No: 220519-C027 | Current(A): 0.3700 |
| LampCAT: Bridgelux C10-(30C2000C) | Power (W): 13.7640 |
| Lamp flux(lm): 1425.8 | PF: 0.0000 |
| Number of Lamps: 1 | Ballast type: DC |
| Length(mm): 43 | Width(mm): 43 |
| Phm Type: C | Height(mm): 0 |

Photometric Results

Lumens(lm): 1226.43
Efficiency(%): 86.02%
Lumens(lm)/Power(W): 89.10
Central intensity(cd): 5655.313
Maximum intensity(cd): 5655.313
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=21.9
 [C90/270]Total=21.9
Field angle(10%Imax): [C0/180]Total=49.0
 [C90/270]Total=49.0
Maximum s/h(1/2): C0_180=0.37 C90_270=0.37
Maximum s/h(1/4): C0_180=0.39 C90_270=0.39
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 86.02%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.189%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 5655.313 | 0.000 | 0 | .000% | .000% |
| 1.0 | 5623.495 | 5.397 | 5.397 | .379% | .440% |
| 2.0 | 5529.608 | 16.008 | 21.405 | 1.123% | 1.745% |
| 3.0 | 5369.246 | 26.066 | 47.471 | 1.828% | 3.871% |
| 4.0 | 5159.663 | 35.244 | 82.715 | 2.472% | 6.744% |
| 5.0 | 4888.459 | 43.226 | 125.941 | 3.032% | 10.269% |
| 6.0 | 4587.678 | 49.800 | 175.741 | 3.493% | 14.329% |
| 7.0 | 4236.107 | 54.769 | 230.51 | 3.841% | 18.795% |
| 8.0 | 3888.569 | 58.147 | 288.657 | 4.078% | 23.536% |
| 9.0 | 3519.819 | 60.041 | 348.698 | 4.211% | 28.432% |
| 10.0 | 3145.467 | 60.318 | 409.016 | 4.230% | 33.350% |
| 11.0 | 2814.586 | 59.553 | 468.569 | 4.177% | 38.206% |
| 12.0 | 2492.891 | 58.018 | 526.588 | 4.069% | 42.937% |
| 13.0 | 2182.400 | 55.484 | 582.072 | 3.891% | 47.461% |
| 14.0 | 1906.192 | 52.334 | 634.405 | 3.670% | 51.728% |
| 15.0 | 1678.011 | 49.206 | 683.611 | 3.451% | 55.740% |
| 16.0 | 1458.225 | 45.955 | 729.565 | 3.223% | 59.487% |
| 17.0 | 1307.252 | 43.066 | 772.631 | 3.020% | 62.998% |
| 18.0 | 1148.832 | 40.495 | 813.127 | 2.840% | 66.300% |
| 19.0 | 1049.425 | 38.245 | 851.372 | 2.682% | 69.419% |
| 20.0 | 942.102 | 36.450 | 887.822 | 2.556% | 72.391% |
| 21.0 | 845.279 | 34.321 | 922.144 | 2.407% | 75.189% |
| 22.0 | 754.903 | 32.156 | 954.3 | 2.255% | 77.811% |
| 23.0 | 674.864 | 30.000 | 984.3 | 2.104% | 80.257% |
| 24.0 | 601.839 | 27.913 | 1012.214 | 1.958% | 82.533% |
| 25.0 | 531.614 | 25.772 | 1037.986 | 1.808% | 84.635% |
| 26.0 | 462.458 | 23.465 | 1061.451 | 1.646% | 86.548% |
| 27.0 | 393.443 | 20.940 | 1082.391 | 1.469% | 88.255% |
| 28.0 | 334.385 | 18.427 | 1100.818 | 1.292% | 89.758% |
| 29.0 | 263.742 | 15.649 | 1116.467 | 1.098% | 91.034% |
| 30.0 | 219.054 | 13.035 | 1129.502 | .914% | 92.097% |
| 31.0 | 158.054 | 10.494 | 1139.996 | .736% | 92.952% |
| 32.0 | 115.988 | 7.851 | 1147.847 | .551% | 93.592% |
| 33.0 | 87.194 | 5.986 | 1153.833 | .420% | 94.080% |
| 34.0 | 68.731 | 4.719 | 1158.552 | .331% | 94.465% |
| 35.0 | 58.140 | 3.940 | 1162.492 | .276% | 94.786% |
| 36.0 | 51.410 | 3.488 | 1165.98 | .245% | 95.071% |
| 37.0 | 46.167 | 3.182 | 1169.163 | .223% | 95.330% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 41.334 | 2.921 | 1172.083 | .205% | 95.568% |
| 39.0 | 37.002 | 2.674 | 1174.757 | .188% | 95.787% |
| 40.0 | 33.469 | 2.458 | 1177.215 | .172% | 95.987% |
| 41.0 | 30.384 | 2.274 | 1179.489 | .159% | 96.172% |
| 42.0 | 27.427 | 2.100 | 1181.589 | .147% | 96.344% |
| 43.0 | 24.924 | 1.939 | 1183.528 | .136% | 96.502% |
| 44.0 | 22.833 | 1.803 | 1185.331 | .126% | 96.649% |
| 45.0 | 20.861 | 1.679 | 1187.01 | .118% | 96.786% |
| 46.0 | 19.300 | 1.571 | 1188.581 | .110% | 96.914% |
| 47.0 | 17.799 | 1.476 | 1190.056 | .103% | 97.034% |
| 48.0 | 16.492 | 1.386 | 1191.442 | .097% | 97.147% |
| 49.0 | 15.334 | 1.307 | 1192.749 | .092% | 97.254% |
| 50.0 | 14.318 | 1.236 | 1193.986 | .087% | 97.354% |
| 51.0 | 13.467 | 1.176 | 1195.161 | .082% | 97.450% |
| 52.0 | 12.802 | 1.127 | 1196.288 | .079% | 97.542% |
| 53.0 | 12.115 | 1.084 | 1197.372 | .076% | 97.630% |
| 54.0 | 11.562 | 1.044 | 1198.416 | .073% | 97.716% |
| 55.0 | 11.151 | 1.014 | 1199.43 | .071% | 97.798% |
| 56.0 | 10.748 | 0.990 | 1200.419 | .069% | 97.879% |
| 57.0 | 10.464 | 0.970 | 1201.389 | .068% | 97.958% |
| 58.0 | 10.210 | 0.956 | 1202.345 | .067% | 98.036% |
| 59.0 | 9.994 | 0.945 | 1203.29 | .066% | 98.113% |
| 60.0 | 9.770 | 0.934 | 1204.223 | .065% | 98.189% |
| 61.0 | 9.531 | 0.921 | 1205.145 | .065% | 98.264% |
| 62.0 | 9.374 | 0.911 | 1206.055 | .064% | 98.338% |
| 63.0 | 9.165 | 0.902 | 1206.957 | .063% | 98.412% |
| 64.0 | 8.941 | 0.888 | 1207.845 | .062% | 98.484% |
| 65.0 | 8.724 | 0.874 | 1208.72 | .061% | 98.556% |
| 66.0 | 8.507 | 0.860 | 1209.579 | .060% | 98.626% |
| 67.0 | 8.268 | 0.844 | 1210.423 | .059% | 98.695% |
| 68.0 | 8.082 | 0.828 | 1211.251 | .058% | 98.762% |
| 69.0 | 7.865 | 0.814 | 1212.065 | .057% | 98.828% |
| 70.0 | 7.693 | 0.799 | 1212.864 | .056% | 98.894% |
| 71.0 | 7.492 | 0.785 | 1213.649 | .055% | 98.958% |
| 72.0 | 7.335 | 0.771 | 1214.419 | .054% | 99.020% |
| 73.0 | 7.170 | 0.759 | 1215.178 | .053% | 99.082% |
| 74.0 | 7.028 | 0.746 | 1215.924 | .052% | 99.143% |
| 75.0 | 6.879 | 0.735 | 1216.659 | .052% | 99.203% |

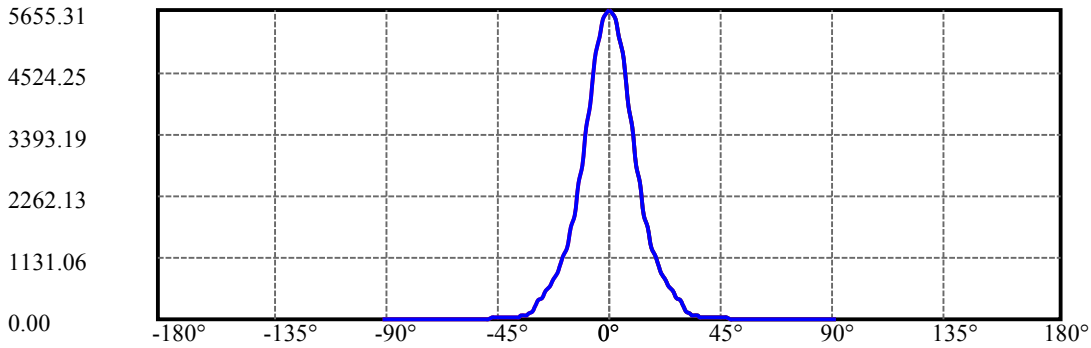
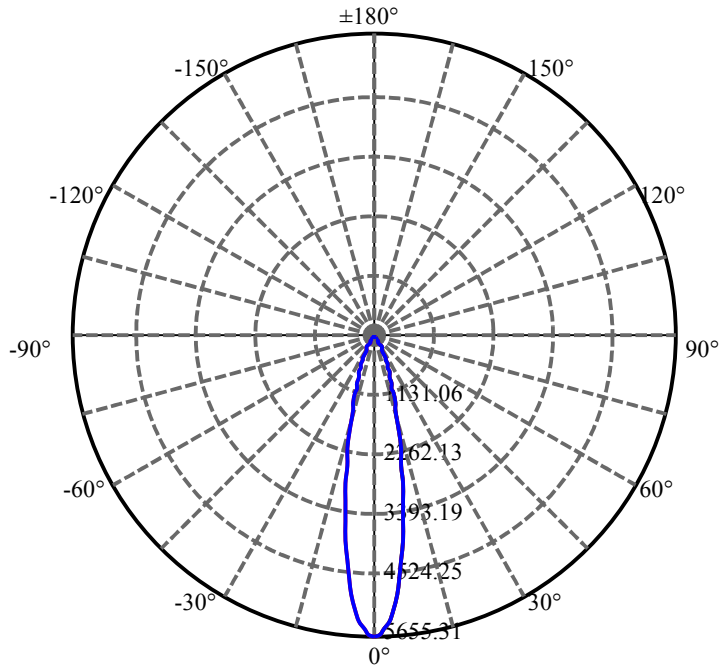
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 6.737 | 0.723 | 1217.382 | .051% | 99.262% |
| 77.0 | 6.618 | 0.712 | 1218.094 | .050% | 99.320% |
| 78.0 | 6.491 | 0.702 | 1218.796 | .049% | 99.377% |
| 79.0 | 6.371 | 0.691 | 1219.487 | .048% | 99.434% |
| 80.0 | 6.267 | 0.681 | 1220.168 | .048% | 99.489% |
| 81.0 | 6.162 | 0.672 | 1220.84 | .047% | 99.544% |
| 82.0 | 6.057 | 0.663 | 1221.503 | .046% | 99.598% |
| 83.0 | 5.953 | 0.653 | 1222.156 | .046% | 99.651% |
| 84.0 | 5.848 | 0.643 | 1222.799 | .045% | 99.704% |
| 85.0 | 5.751 | 0.633 | 1223.432 | .044% | 99.755% |
| 86.0 | 5.639 | 0.623 | 1224.054 | .044% | 99.806% |
| 87.0 | 5.520 | 0.611 | 1224.665 | .043% | 99.856% |
| 88.0 | 5.400 | 0.598 | 1225.263 | .042% | 99.905% |
| 89.0 | 5.325 | 0.588 | 1225.851 | .041% | 99.953% |
| 90.0 | 5.281 | 0.582 | 1226.433 | .041% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 1129.50 | 79.22% | 92.10% |
| 0-40 | 1177.21 | 82.56% | 95.99% |
| 0-60 | 1204.22 | 84.46% | 98.19% |
| 0-90 | 1225.85 | 85.98% | 99.95% |
| 0-120 | 1225.85 | 85.98% | 99.95% |
| 0-180 | 1226.43 | 86.02% | 100.00% |
| 60-90 | 22.56 | 1.58% | 1.84% |
| 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% |
| 0-22.89 | 981.15 | 68.81% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 409.02 |
| 10-20 | 478.81 |
| 20-30 | 241.68 |
| 30-40 | 47.71 |
| 40-50 | 16.77 |
| 50-60 | 10.24 |
| 60-70 | 8.64 |
| 70-80 | 7.30 |
| 80-90 | 5.68 |
| 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: —————

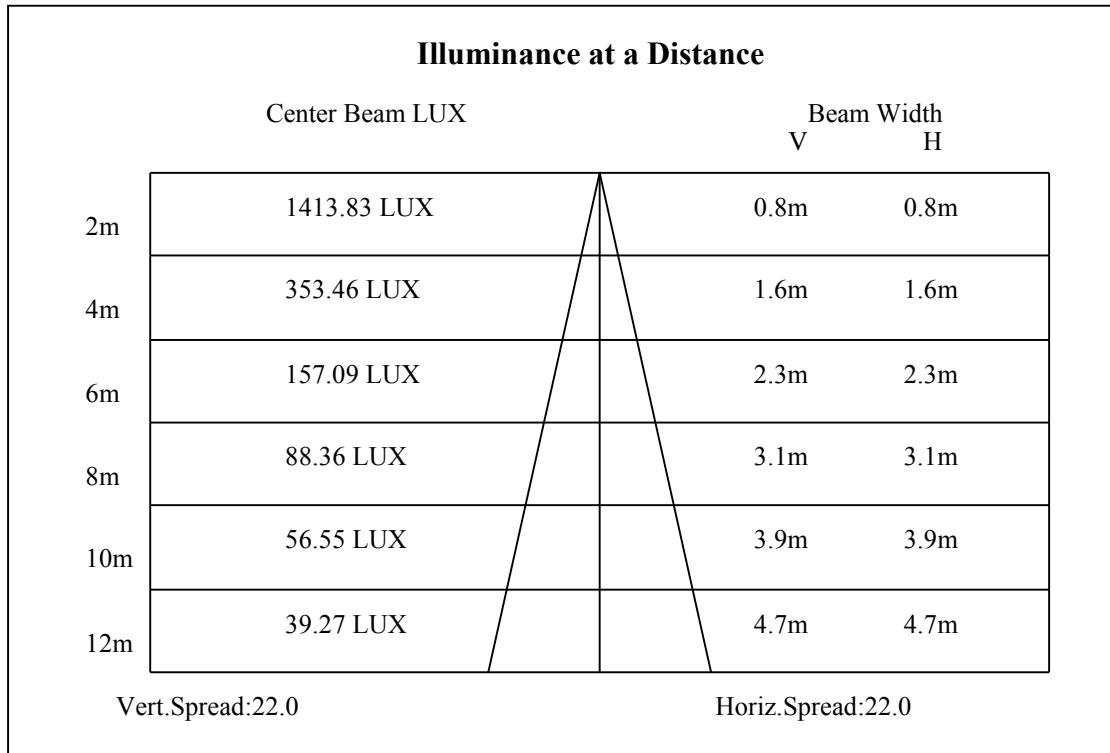
C90/C270: —————

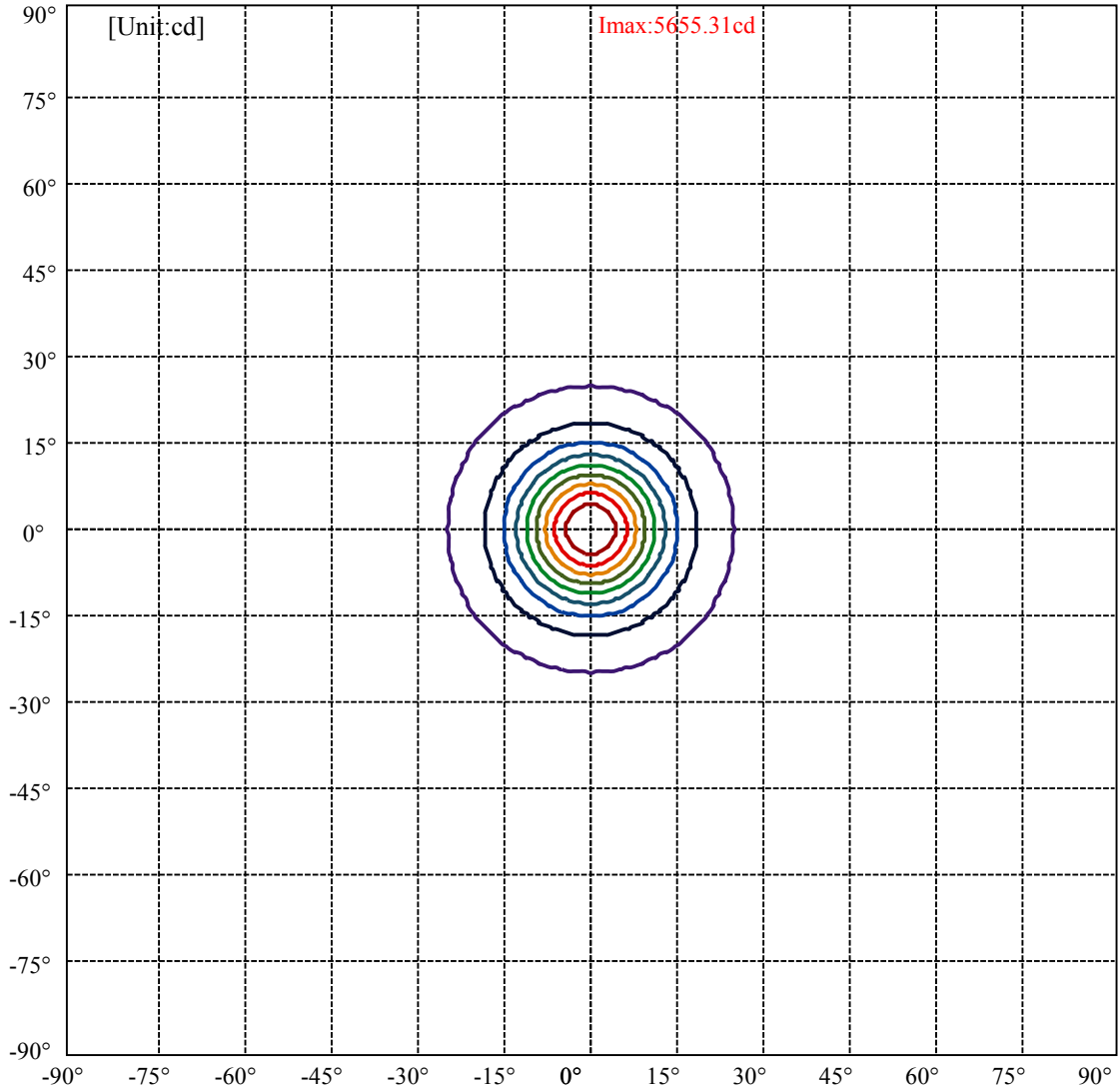
Field angle(10%Imax):C0/180Left:24.5 Right:24.5

:C90/270Left:24.5 Right:24.5

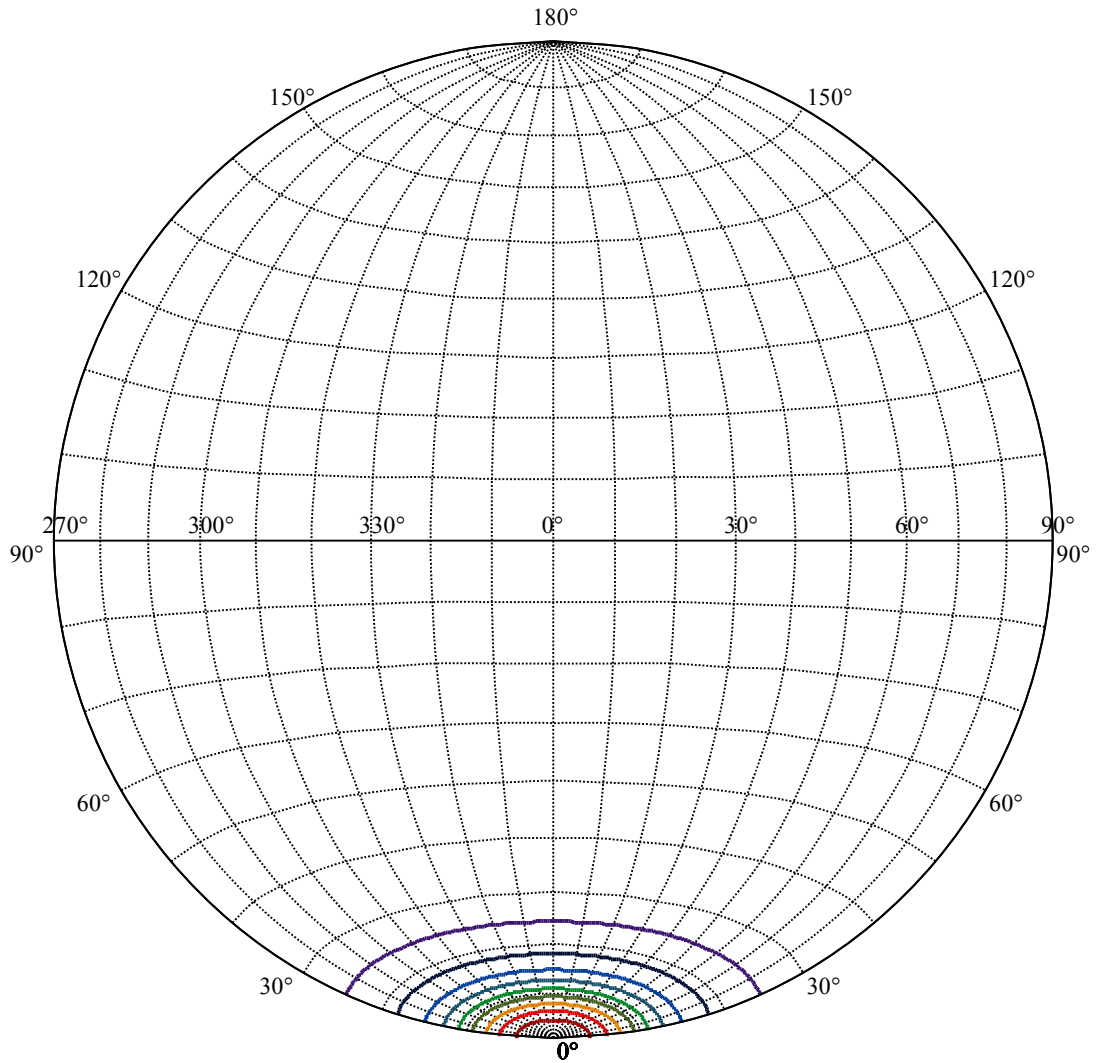
Beam Angle(50%Imax):C0/180Left:11.0 Right:11.0

:C90/270Left:11.0 Right:11.0





| | |
|-------------------|---|
| (10%Imax) 565.531 | — |
| (20%Imax) 1131.06 | — |
| (30%Imax) 1696.59 | — |
| (40%Imax) 2262.13 | — |
| (50%Imax) 2827.66 | — |
| (60%Imax) 3393.19 | — |
| (70%Imax) 3958.72 | — |
| (80%Imax) 4524.25 | — |
| (90%Imax) 5089.78 | — |



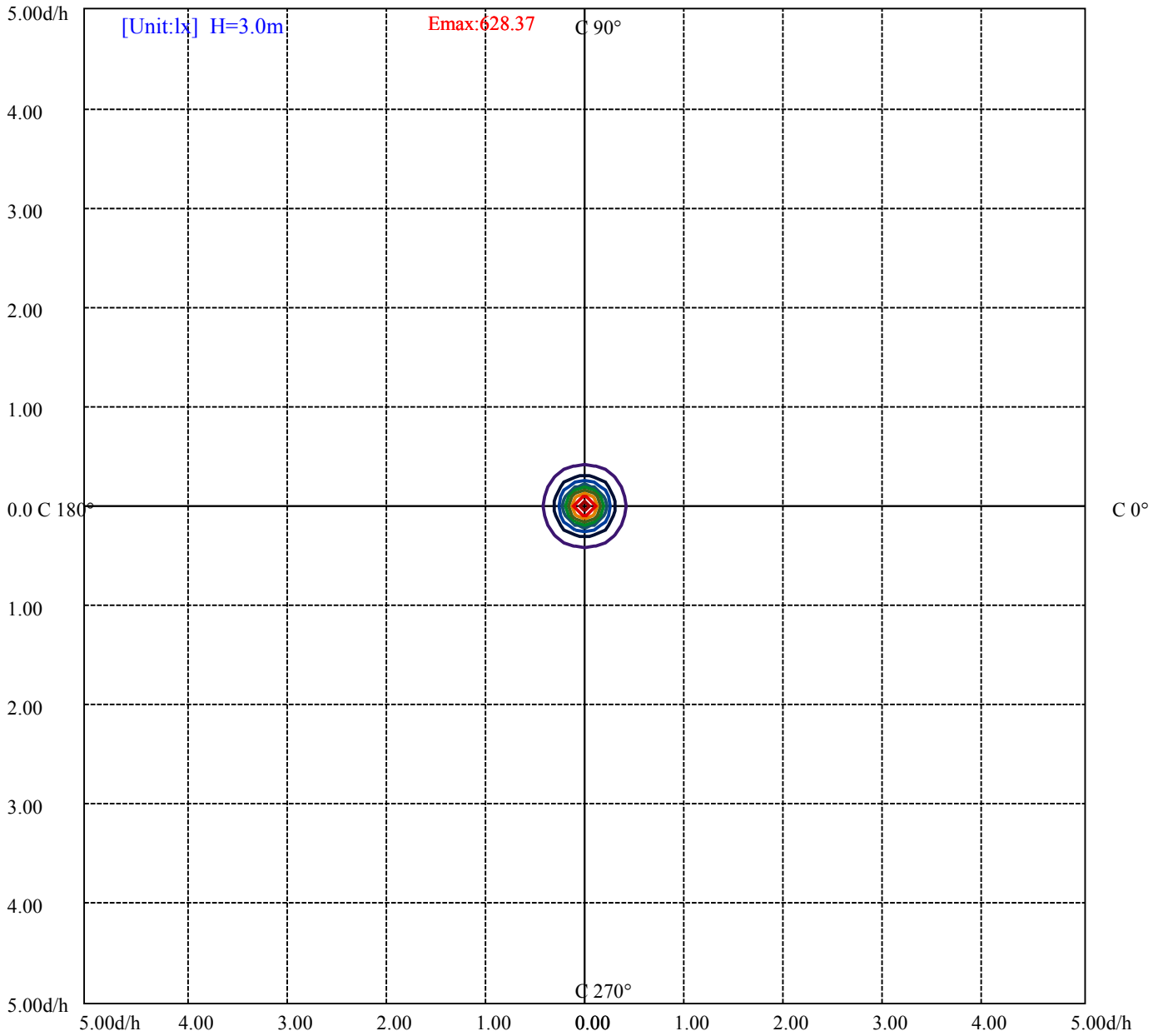
House

[Unit:cd]

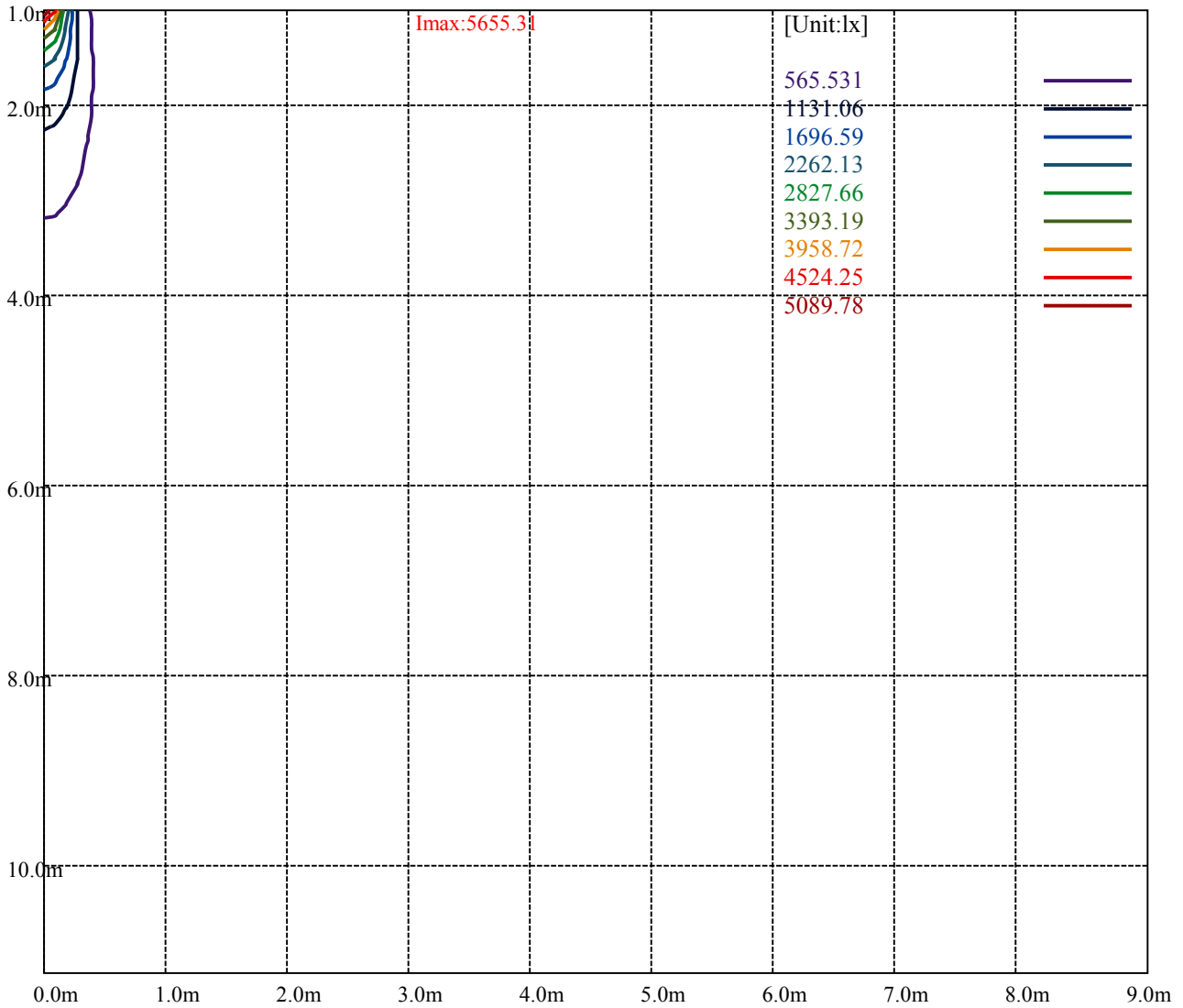
Road

Imax:5655.31

| | |
|-------------------|---|
| (10%Imax) 565.531 | — |
| (20%Imax) 1131.06 | — |
| (30%Imax) 1696.59 | — |
| (40%Imax) 2262.13 | — |
| (50%Imax) 2827.66 | — |
| (60%Imax) 3393.19 | — |
| (70%Imax) 3958.72 | — |
| (80%Imax) 4524.25 | — |
| (90%Imax) 5089.78 | — |



| | |
|--------------------|---|
| (10%Emax) 62.83678 | — |
| (20%Emax) 125.6733 | — |
| (30%Emax) 188.51 | — |
| (40%Emax) 251.3467 | — |
| (50%Emax) 314.1833 | — |
| (60%Emax) 377.0211 | — |
| (70%Emax) 439.8578 | — |
| (80%Emax) 502.6945 | — |
| (90%Emax) 565.5311 | — |



Luminance Table

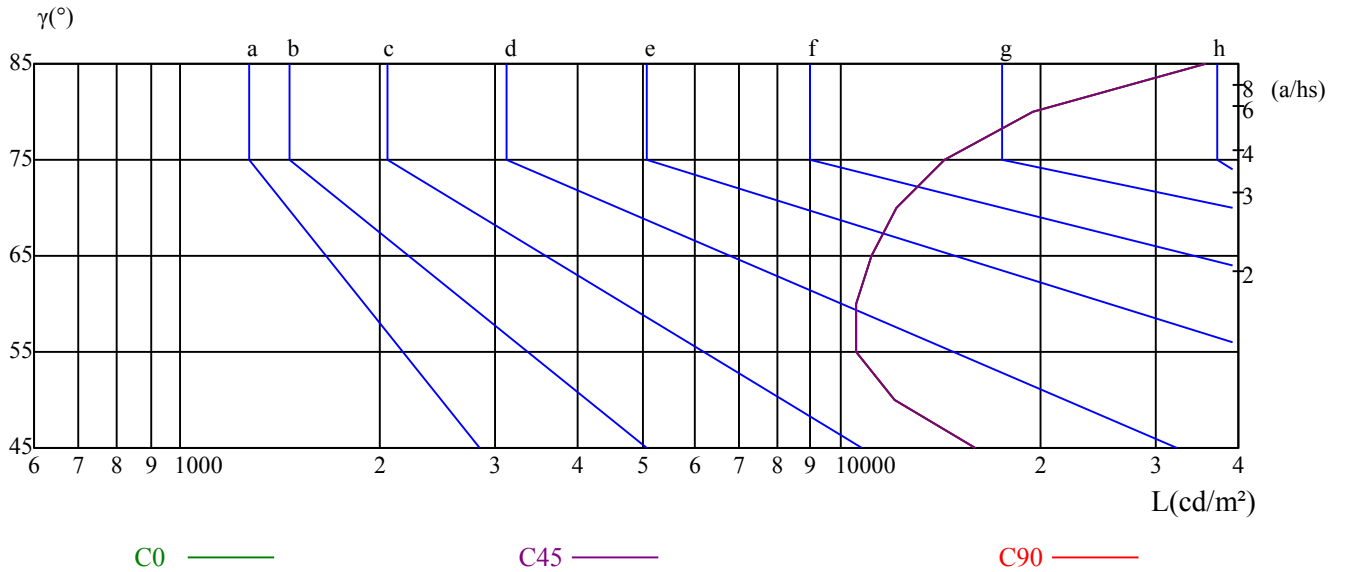
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0 | 15956 | 12047 | 10515 | 10567 | 11164 | 12165 | 14375 | 19517 | 35688 |
| C45 | 15956 | 12047 | 10515 | 10567 | 11164 | 12165 | 14375 | 19517 | 35688 |
| C90 | 15956 | 12047 | 10515 | 10567 | 11164 | 12165 | 14375 | 19517 | 35688 |

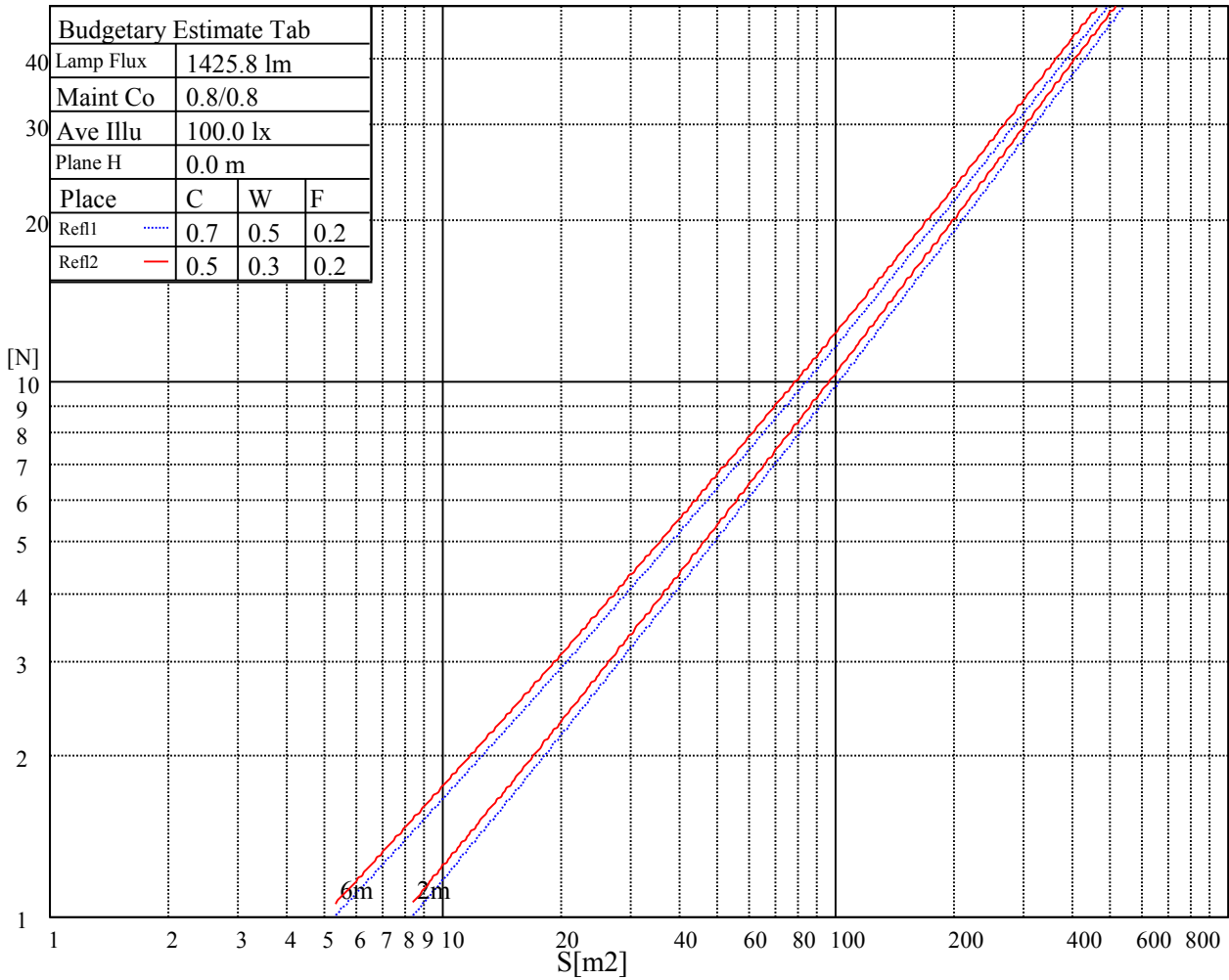
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 11164 | 11164 | 11164 | 14375 | 14375 | 14375 | 35688 | 35688 | 35688 |

Glare Table

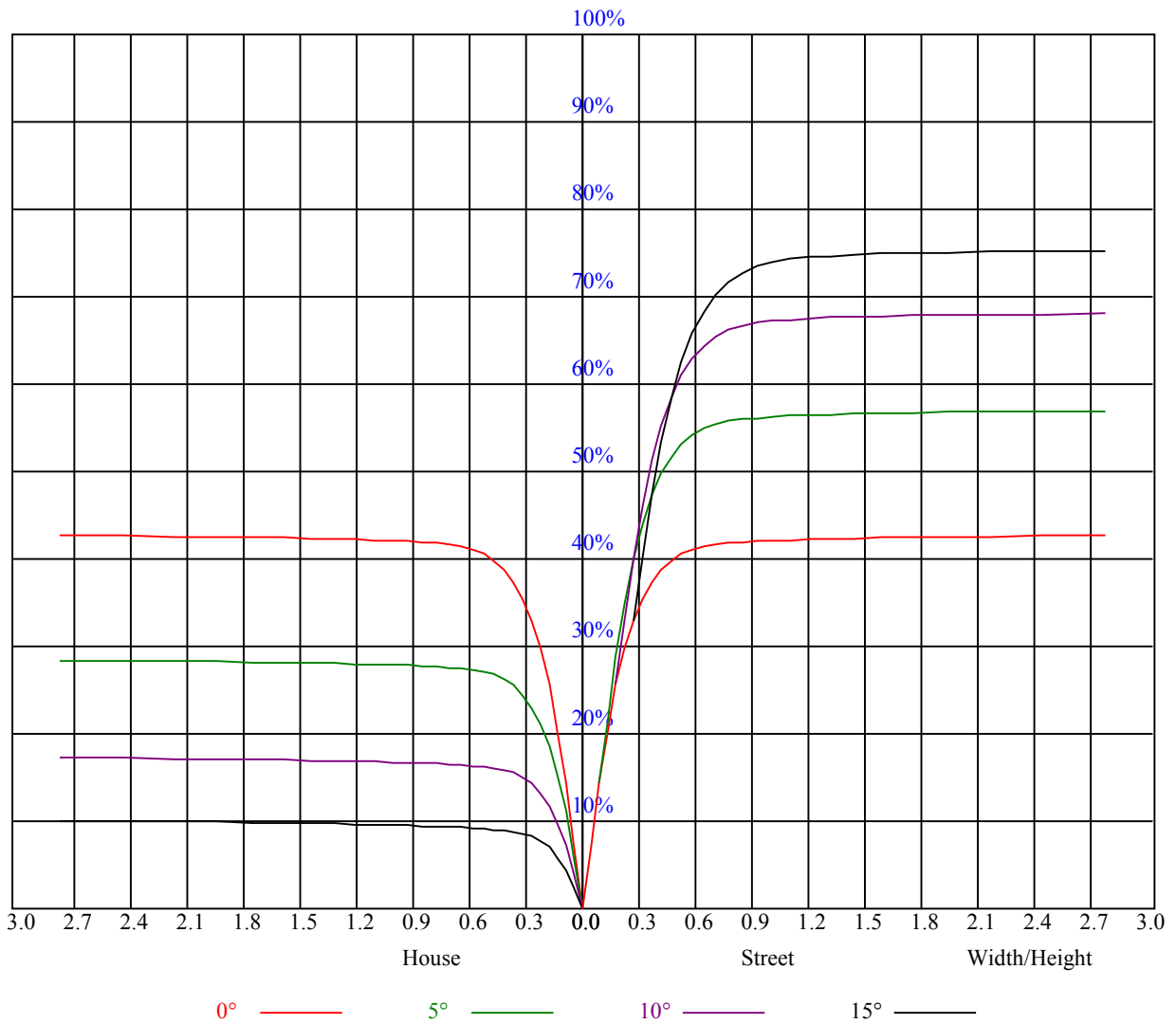
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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 | 1.02 | 1.02 | 1.02 | 1.00 | 1.00 | 1.00 | 0.96 | 0.96 | 0.96 | 0.92 | 0.92 | 0.92 | 0.88 | 0.88 | 0.88 | 0.86 |
| 1 | 0.96 | 0.95 | 0.93 | 0.95 | 0.93 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.86 | 0.85 | 0.84 | 0.84 | 0.82 |
| 2 | 0.91 | 0.89 | 0.86 | 0.90 | 0.87 | 0.85 | 0.87 | 0.85 | 0.83 | 0.85 | 0.83 | 0.82 | 0.83 | 0.81 | 0.80 | 0.79 |
| 3 | 0.87 | 0.84 | 0.81 | 0.86 | 0.83 | 0.80 | 0.84 | 0.81 | 0.79 | 0.82 | 0.80 | 0.78 | 0.80 | 0.78 | 0.77 | 0.76 |
| 4 | 0.83 | 0.80 | 0.77 | 0.83 | 0.79 | 0.77 | 0.81 | 0.78 | 0.76 | 0.79 | 0.77 | 0.75 | 0.78 | 0.76 | 0.74 | 0.73 |
| 5 | 0.80 | 0.76 | 0.74 | 0.79 | 0.76 | 0.73 | 0.78 | 0.75 | 0.73 | 0.77 | 0.74 | 0.72 | 0.75 | 0.73 | 0.71 | 0.70 |
| 6 | 0.77 | 0.73 | 0.71 | 0.77 | 0.73 | 0.70 | 0.75 | 0.72 | 0.70 | 0.74 | 0.72 | 0.69 | 0.73 | 0.71 | 0.69 | 0.68 |
| 7 | 0.74 | 0.71 | 0.68 | 0.74 | 0.70 | 0.68 | 0.73 | 0.70 | 0.67 | 0.72 | 0.69 | 0.67 | 0.71 | 0.69 | 0.67 | 0.66 |
| 8 | 0.72 | 0.68 | 0.66 | 0.72 | 0.68 | 0.65 | 0.71 | 0.68 | 0.65 | 0.70 | 0.67 | 0.65 | 0.69 | 0.67 | 0.65 | 0.64 |
| 9 | 0.70 | 0.66 | 0.63 | 0.69 | 0.66 | 0.63 | 0.69 | 0.65 | 0.63 | 0.68 | 0.65 | 0.63 | 0.67 | 0.65 | 0.63 | 0.62 |
| 10 | 0.68 | 0.64 | 0.62 | 0.67 | 0.64 | 0.61 | 0.67 | 0.64 | 0.61 | 0.66 | 0.63 | 0.61 | 0.66 | 0.63 | 0.61 | 0.60 |



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 | 5651.43 | 5676.53 | 5635.30 | 5533.12 | 5379.55 | 5114.85 | 4854.33 | 4563.93 | 4209.59 |
| 45.0 | 5658.60 | 5568.97 | 5414.21 | 5223.60 | 4950.53 | 4633.84 | 4314.16 | 3971.78 | 3589.95 |
| 90.0 | 5631.71 | 5528.34 | 5375.97 | 5115.45 | 4857.91 | 4552.57 | 4172.55 | 3782.96 | 3437.58 |
| 135.0 | 5679.51 | 5615.58 | 5488.30 | 5339.52 | 5062.86 | 4748.56 | 4468.92 | 4047.06 | 3707.67 |
| 180.0 | 5651.43 | 5572.56 | 5420.19 | 5205.08 | 4959.49 | 4630.85 | 4305.79 | 3919.19 | 3530.20 |
| 225.0 | 5658.60 | 5680.71 | 5644.86 | 5534.91 | 5380.75 | 5184.76 | 4899.14 | 4577.07 | 4251.42 |
| 270.0 | 5631.71 | 5677.72 | 5656.21 | 5576.14 | 5421.98 | 5208.66 | 4962.48 | 4646.39 | 4329.10 |
| 315.0 | 5679.51 | 5667.56 | 5601.83 | 5426.16 | 5264.23 | 5033.58 | 4724.06 | 4380.49 | 4053.04 |
| 360.0 | 5651.43 | 5676.53 | 5635.30 | 5533.12 | 5379.55 | 5114.85 | 4854.33 | 4563.93 | 4209.59 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 3831.95 | 3499.13 | 3126.87 | 2803.01 | 2458.83 | 2146.32 | 1895.36 | 1646.19 | 1437.06 |
| 45.0 | 3206.94 | 2828.10 | 2514.40 | 2225.80 | 1935.40 | 1688.02 | 1502.19 | 1327.71 | 1179.52 |
| 90.0 | 3052.78 | 2691.27 | 2394.90 | 2083.58 | 1841.58 | 1609.15 | 1411.96 | 1185.14 | 1141.52 |
| 135.0 | 3370.66 | 2951.20 | 2631.52 | 2333.35 | 1992.76 | 1758.53 | 1557.76 | 1354.00 | 1217.76 |
| 180.0 | 3189.61 | 2816.75 | 2475.56 | 2188.15 | 1928.23 | 1650.97 | 1467.53 | 1269.15 | 1148.87 |
| 225.0 | 3872.59 | 3488.37 | 3146.59 | 2767.75 | 2451.66 | 2134.97 | 1853.53 | 1638.42 | 1456.18 |
| 270.0 | 3953.25 | 3581.59 | 3247.57 | 2919.53 | 2523.96 | 2234.16 | 1970.05 | 1682.04 | 1486.65 |
| 315.0 | 3680.78 | 3307.32 | 2979.28 | 2621.96 | 2326.78 | 2027.42 | 1765.70 | 1563.14 | 1390.45 |
| 360.0 | 3831.95 | 3499.13 | 3126.87 | 2803.01 | 2458.83 | 2146.32 | 1895.36 | 1646.19 | 1437.06 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 1285.88 | 1159.21 | 1025.96 | 931.55 | 840.72 | 743.92 | 659.07 | 599.92 | 524.03 |
| 45.0 | 1067.19 | 962.62 | 853.87 | 766.63 | 684.77 | 614.26 | 538.97 | 473.24 | 396.16 |
| 90.0 | 997.10 | 916.67 | 827.34 | 733.35 | 653.94 | 594.36 | 518.24 | 442.35 | 382.18 |
| 135.0 | 1102.44 | 986.52 | 890.32 | 800.09 | 701.50 | 630.39 | 570.04 | 495.35 | 430.22 |
| 180.0 | 1043.29 | 949.12 | 838.57 | 751.93 | 674.31 | 602.01 | 546.50 | 473.36 | 393.89 |
| 225.0 | 1188.01 | 1143.91 | 1039.82 | 922.64 | 832.84 | 745.30 | 662.84 | 596.39 | 529.35 |
| 270.0 | 1325.92 | 1180.72 | 1064.20 | 962.62 | 853.87 | 756.47 | 677.60 | 609.48 | 547.34 |
| 315.0 | 1180.84 | 1096.64 | 996.74 | 893.43 | 797.28 | 712.19 | 641.45 | 562.81 | 496.49 |
| 360.0 | 1285.88 | 1159.21 | 1025.96 | 931.55 | 840.72 | 743.92 | 659.07 | 599.92 | 524.03 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 446.35 | 378.83 | 310.72 | 303.54 | 195.15 | 152.91 | 105.05 | 74.63 | 62.20 |
| 45.0 | 330.43 | 302.95 | 213.08 | 164.26 | 117.29 | 81.38 | 64.83 | 56.47 | 49.65 |
| 90.0 | 315.38 | 260.58 | 201.07 | 144.90 | 104.81 | 76.07 | 63.88 | 57.78 | 51.81 |
| 135.0 | 362.10 | 308.92 | 231.96 | 179.80 | 122.55 | 88.31 | 69.43 | 60.47 | 54.43 |
| 180.0 | 342.50 | 286.40 | 208.30 | 162.17 | 119.03 | 76.07 | 63.82 | 57.78 | 51.51 |
| 225.0 | 453.64 | 389.05 | 322.96 | 262.79 | 210.51 | 155.30 | 109.71 | 80.55 | 65.91 |
| 270.0 | 467.27 | 390.78 | 332.23 | 301.75 | 216.84 | 166.53 | 123.87 | 89.99 | 68.00 |
| 315.0 | 429.86 | 357.56 | 289.62 | 233.22 | 178.24 | 131.34 | 96.98 | 72.18 | 61.61 |
| 360.0 | 446.35 | 378.83 | 310.72 | 303.54 | 195.15 | 152.91 | 105.05 | 74.63 | 62.20 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 53.90 | 48.28 | 43.44 | 38.18 | 34.60 | 31.55 | 28.26 | 25.87 | 23.84 |
| 45.0 | 44.34 | 39.91 | 35.31 | 32.09 | 29.04 | 26.11 | 23.72 | 21.81 | 19.96 |
| 90.0 | 45.41 | 40.99 | 37.11 | 32.92 | 29.88 | 27.13 | 24.56 | 22.29 | 20.50 |
| 135.0 | 49.12 | 43.86 | 39.56 | 36.09 | 32.39 | 29.52 | 26.59 | 24.08 | 22.11 |
| 180.0 | 45.95 | 41.77 | 37.52 | 33.88 | 30.83 | 27.84 | 25.45 | 23.00 | 20.97 |
| 225.0 | 57.30 | 51.45 | 46.37 | 40.93 | 37.23 | 34.00 | 30.29 | 27.67 | 25.39 |
| 270.0 | 60.53 | 54.55 | 47.68 | 43.08 | 39.02 | 35.19 | 31.73 | 28.92 | 26.23 |
| 315.0 | 54.73 | 48.52 | 43.68 | 38.84 | 34.78 | 31.73 | 28.80 | 25.75 | 23.66 |
| 360.0 | 53.90 | 48.28 | 43.44 | 38.18 | 34.60 | 31.55 | 28.26 | 25.87 | 23.84 |

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 | 21.51 | 19.96 | 18.52 | 17.15 | 15.89 | 14.94 | 13.98 | 13.21 | 12.49 |
| 45.0 | 18.40 | 17.09 | 15.83 | 14.88 | 13.86 | 13.09 | 12.43 | 11.89 | 11.29 |
| 90.0 | 18.82 | 17.51 | 16.19 | 15.06 | 14.10 | 13.27 | 12.49 | 11.95 | 11.41 |
| 135.0 | 20.20 | 18.52 | 17.21 | 16.07 | 14.82 | 13.92 | 13.15 | 12.43 | 11.77 |
| 180.0 | 19.36 | 17.99 | 16.61 | 15.30 | 14.34 | 13.32 | 12.67 | 12.07 | 11.47 |
| 225.0 | 22.83 | 21.27 | 19.48 | 17.75 | 16.67 | 15.42 | 14.22 | 13.62 | 12.91 |
| 270.0 | 23.96 | 22.11 | 20.26 | 18.76 | 17.27 | 15.95 | 14.94 | 14.22 | 13.15 |
| 315.0 | 21.81 | 19.96 | 18.28 | 16.97 | 15.72 | 14.64 | 13.86 | 13.03 | 12.43 |
| 360.0 | 21.51 | 19.96 | 18.52 | 17.15 | 15.89 | 14.94 | 13.98 | 13.21 | 12.49 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 11.89 | 11.41 | 10.93 | 10.64 | 10.34 | 10.16 | 9.86 | 9.68 | 9.50 |
| 45.0 | 10.88 | 10.64 | 10.22 | 9.98 | 9.86 | 9.62 | 9.44 | 9.26 | 9.08 |
| 90.0 | 10.99 | 10.64 | 10.40 | 10.16 | 9.92 | 9.74 | 9.56 | 9.32 | 9.20 |
| 135.0 | 11.35 | 10.88 | 10.58 | 10.34 | 10.10 | 9.92 | 9.74 | 9.44 | 9.32 |
| 180.0 | 10.99 | 10.70 | 10.34 | 10.16 | 9.92 | 9.74 | 9.56 | 9.32 | 9.20 |
| 225.0 | 12.07 | 11.59 | 11.23 | 10.82 | 10.52 | 10.28 | 9.98 | 9.74 | 9.62 |
| 270.0 | 12.55 | 12.07 | 11.41 | 11.05 | 10.76 | 10.46 | 10.16 | 9.92 | 9.68 |
| 315.0 | 11.77 | 11.29 | 10.88 | 10.58 | 10.28 | 10.04 | 9.86 | 9.56 | 9.38 |
| 360.0 | 11.89 | 11.41 | 10.93 | 10.64 | 10.34 | 10.16 | 9.86 | 9.68 | 9.50 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 9.26 | 9.08 | 8.90 | 8.66 | 8.43 | 8.25 | 8.01 | 7.83 | 7.65 |
| 45.0 | 8.90 | 8.72 | 8.43 | 8.31 | 8.01 | 7.83 | 7.65 | 7.53 | 7.29 |
| 90.0 | 8.96 | 8.72 | 8.54 | 8.31 | 8.13 | 7.95 | 7.71 | 7.53 | 7.35 |
| 135.0 | 9.26 | 8.84 | 8.66 | 8.48 | 8.19 | 8.01 | 7.83 | 7.59 | 7.35 |
| 180.0 | 8.96 | 8.72 | 8.54 | 8.25 | 8.01 | 7.83 | 7.59 | 7.41 | 7.23 |
| 225.0 | 9.32 | 9.20 | 8.90 | 8.66 | 8.48 | 8.25 | 8.01 | 7.89 | 7.71 |
| 270.0 | 9.44 | 9.26 | 9.02 | 8.84 | 8.60 | 8.37 | 8.19 | 8.01 | 7.77 |
| 315.0 | 9.20 | 8.96 | 8.78 | 8.54 | 8.31 | 8.19 | 7.95 | 7.77 | 7.59 |
| 360.0 | 9.26 | 9.08 | 8.90 | 8.66 | 8.43 | 8.25 | 8.01 | 7.83 | 7.65 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 7.47 | 7.29 | 7.11 | 6.93 | 6.81 | 6.69 | 6.51 | 6.39 | 6.27 |
| 45.0 | 7.17 | 6.99 | 6.87 | 6.69 | 6.57 | 6.45 | 6.33 | 6.21 | 6.09 |
| 90.0 | 7.23 | 7.05 | 6.93 | 6.81 | 6.69 | 6.57 | 6.45 | 6.33 | 6.27 |
| 135.0 | 7.23 | 7.05 | 6.93 | 6.81 | 6.63 | 6.51 | 6.39 | 6.33 | 6.21 |
| 180.0 | 7.11 | 6.99 | 6.87 | 6.69 | 6.57 | 6.45 | 6.33 | 6.27 | 6.15 |
| 225.0 | 7.47 | 7.29 | 7.17 | 7.05 | 6.87 | 6.75 | 6.63 | 6.45 | 6.39 |
| 270.0 | 7.65 | 7.47 | 7.29 | 7.11 | 6.99 | 6.87 | 6.75 | 6.63 | 6.51 |
| 315.0 | 7.35 | 7.23 | 7.05 | 6.93 | 6.75 | 6.63 | 6.51 | 6.33 | 6.21 |
| 360.0 | 7.47 | 7.29 | 7.11 | 6.93 | 6.81 | 6.69 | 6.51 | 6.39 | 6.27 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 6.15 | 6.04 | 5.92 | 5.80 | 5.74 | 5.62 | 5.56 | 5.44 | 5.38 |
| 45.0 | 5.98 | 5.86 | 5.80 | 5.68 | 5.62 | 5.50 | 5.44 | 5.32 | 5.26 |
| 90.0 | 6.15 | 6.04 | 5.98 | 5.74 | 5.62 | 5.56 | 5.38 | 5.26 | 5.26 |
| 135.0 | 6.09 | 6.04 | 5.92 | 5.92 | 5.74 | 5.62 | 5.50 | 5.32 | 5.26 |
| 180.0 | 6.09 | 6.04 | 5.92 | 5.80 | 5.68 | 5.56 | 5.44 | 5.26 | 5.26 |
| 225.0 | 6.27 | 6.15 | 6.04 | 5.98 | 5.92 | 5.80 | 5.68 | 5.62 | 5.44 |
| 270.0 | 6.39 | 6.33 | 6.15 | 6.09 | 5.98 | 5.86 | 5.62 | 5.56 | 5.44 |
| 315.0 | 6.15 | 5.98 | 5.92 | 5.80 | 5.74 | 5.62 | 5.56 | 5.44 | 5.32 |
| 360.0 | 6.15 | 6.04 | 5.92 | 5.80 | 5.74 | 5.62 | 5.56 | 5.44 | 5.38 |

Intensity data(cd)

| | |
|---------------|-------------|
| C/γ(°) | 90.0 |
| 0.0 | 5.32 |
| 45.0 | 5.26 |
| 90.0 | 5.26 |
| 135.0 | 5.26 |
| 180.0 | 5.20 |
| 225.0 | 5.38 |
| 270.0 | 5.32 |
| 315.0 | 5.26 |
| 360.0 | 5.32 |