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Nata

| | |
|-------------------------|---------------------|
| LumCAT: 4-2275-M | |
| Luminaire: 92.70.131.00 | |
| Report No: GC2017071907 | Voltage(V): 34.7600 |
| Test No: NT-0010 | Current(A): 0.6000 |
| LampCAT: SEOUL SAWx15 | Power (W): 20.8560 |
| Lamp flux(lm): 2937.0 | PF: 0.0000 |
| Number of Lamps: 1 | Ballast type: DC |
| Length(mm): 100 | Width(mm): 100 |
| Phm Type: C | Height(mm): 0 |

Photometric Results

Lumens(lm): 2598.01
Efficiency(%): 88.46%
Lumens(lm)/Power(W): 124.57
Central intensity(cd): 13821.080
Maximum intensity(cd): 13821.080
Angle of maximum intensity: C=0.0 γ =0.0
Beam Angle(50%Imax): [C0/180]Total=18.9
 [C90/270]Total=18.9
Field angle(10%Imax): [C0/180]Total=39.2
 [C90/270]Total=39.2
Maximum s/h(1/2): C0_180=0.32 C90_270=0.32
Maximum s/h(1/4): C0_180=0.33 C90_270=0.33
Up flux rate of lamp(%): 0.00%
Down flux rate of lamp(%): 88.46%
Up flux rate of LUM(%): - -
Down flux rate of LUM(%): 100.00%
CIE Type : Direct lighting
Output flux ratio in π solid angle : 98.717%

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0 | 13821.075 | 0.000 | 0 | .000% | .000% |
| 1.0 | 13727.163 | 13.181 | 13.181 | .449% | .507% |
| 2.0 | 13409.949 | 38.950 | 52.131 | 1.326% | 2.007% |
| 3.0 | 12883.971 | 62.886 | 115.017 | 2.141% | 4.427% |
| 4.0 | 12298.517 | 84.294 | 199.311 | 2.870% | 7.672% |
| 5.0 | 11425.065 | 102.058 | 301.369 | 3.475% | 11.600% |
| 6.0 | 10548.761 | 115.478 | 416.847 | 3.932% | 16.045% |
| 7.0 | 9496.598 | 124.421 | 541.268 | 4.236% | 20.834% |
| 8.0 | 8437.687 | 128.352 | 669.621 | 4.370% | 25.774% |
| 9.0 | 7348.724 | 127.940 | 797.561 | 4.356% | 30.699% |
| 10.0 | 6319.726 | 123.694 | 921.255 | 4.212% | 35.460% |
| 11.0 | 5382.344 | 116.928 | 1038.183 | 3.981% | 39.961% |
| 12.0 | 4574.770 | 108.846 | 1147.029 | 3.706% | 44.150% |
| 13.0 | 3877.108 | 100.302 | 1247.331 | 3.415% | 48.011% |
| 14.0 | 3218.054 | 90.817 | 1338.149 | 3.092% | 51.507% |
| 15.0 | 2739.172 | 81.783 | 1419.932 | 2.785% | 54.655% |
| 16.0 | 2376.602 | 74.960 | 1494.892 | 2.552% | 57.540% |
| 17.0 | 2006.379 | 68.255 | 1563.147 | 2.324% | 60.167% |
| 18.0 | 1700.435 | 61.117 | 1624.265 | 2.081% | 62.520% |
| 19.0 | 1490.948 | 55.524 | 1679.788 | 1.890% | 64.657% |
| 20.0 | 1310.129 | 51.267 | 1731.056 | 1.746% | 66.630% |
| 21.0 | 1186.756 | 47.945 | 1779.001 | 1.632% | 68.476% |
| 22.0 | 1105.123 | 46.056 | 1825.057 | 1.568% | 70.248% |
| 23.0 | 1049.401 | 45.208 | 1870.265 | 1.539% | 71.988% |
| 24.0 | 1011.071 | 45.049 | 1915.314 | 1.534% | 73.722% |
| 25.0 | 987.252 | 45.438 | 1960.752 | 1.547% | 75.471% |
| 26.0 | 968.713 | 46.171 | 2006.923 | 1.572% | 77.249% |
| 27.0 | 950.961 | 46.965 | 2053.888 | 1.599% | 79.056% |
| 28.0 | 936.449 | 47.785 | 2101.673 | 1.627% | 80.896% |
| 29.0 | 920.791 | 48.591 | 2150.264 | 1.654% | 82.766% |
| 30.0 | 905.292 | 49.304 | 2199.567 | 1.679% | 84.664% |
| 31.0 | 884.826 | 49.816 | 2249.384 | 1.696% | 86.581% |
| 32.0 | 843.115 | 49.503 | 2298.887 | 1.686% | 88.487% |
| 33.0 | 782.336 | 47.886 | 2346.774 | 1.630% | 90.330% |
| 34.0 | 699.812 | 44.854 | 2391.628 | 1.527% | 92.056% |
| 35.0 | 598.136 | 40.309 | 2431.937 | 1.372% | 93.608% |
| 36.0 | 479.884 | 34.324 | 2466.262 | 1.169% | 94.929% |
| 37.0 | 358.292 | 27.337 | 2493.598 | .931% | 95.981% |

| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 38.0 | 250.961 | 20.336 | 2513.934 | .692% | 96.764% |
| 39.0 | 156.938 | 13.923 | 2527.857 | .474% | 97.300% |
| 40.0 | 93.815 | 8.745 | 2536.602 | .298% | 97.636% |
| 41.0 | 48.264 | 5.059 | 2541.662 | .172% | 97.831% |
| 42.0 | 25.516 | 2.681 | 2544.342 | .091% | 97.934% |
| 43.0 | 19.763 | 1.677 | 2546.02 | .057% | 97.999% |
| 44.0 | 16.918 | 1.384 | 2547.404 | .047% | 98.052% |
| 45.0 | 14.727 | 1.216 | 2548.62 | .041% | 98.099% |
| 46.0 | 13.781 | 1.115 | 2549.735 | .038% | 98.142% |
| 47.0 | 13.468 | 1.084 | 2550.819 | .037% | 98.184% |
| 48.0 | 13.162 | 1.076 | 2551.895 | .037% | 98.225% |
| 49.0 | 12.911 | 1.071 | 2552.966 | .036% | 98.266% |
| 50.0 | 12.675 | 1.067 | 2554.033 | .036% | 98.307% |
| 51.0 | 12.473 | 1.064 | 2555.097 | .036% | 98.348% |
| 52.0 | 12.313 | 1.064 | 2556.16 | .036% | 98.389% |
| 53.0 | 12.132 | 1.063 | 2557.224 | .036% | 98.430% |
| 54.0 | 11.944 | 1.061 | 2558.285 | .036% | 98.471% |
| 55.0 | 11.798 | 1.060 | 2559.345 | .036% | 98.512% |
| 56.0 | 11.666 | 1.060 | 2560.405 | .036% | 98.553% |
| 57.0 | 11.576 | 1.063 | 2561.468 | .036% | 98.594% |
| 58.0 | 11.492 | 1.067 | 2562.534 | .036% | 98.635% |
| 59.0 | 11.402 | 1.070 | 2563.605 | .036% | 98.676% |
| 60.0 | 11.276 | 1.071 | 2564.676 | .036% | 98.717% |
| 61.0 | 11.179 | 1.072 | 2565.748 | .036% | 98.758% |
| 62.0 | 11.116 | 1.074 | 2566.822 | .037% | 98.800% |
| 63.0 | 11.082 | 1.080 | 2567.902 | .037% | 98.841% |
| 64.0 | 11.012 | 1.084 | 2568.986 | .037% | 98.883% |
| 65.0 | 10.956 | 1.087 | 2570.073 | .037% | 98.925% |
| 66.0 | 10.880 | 1.089 | 2571.162 | .037% | 98.967% |
| 67.0 | 10.838 | 1.092 | 2572.254 | .037% | 99.009% |
| 68.0 | 10.782 | 1.095 | 2573.35 | .037% | 99.051% |
| 69.0 | 10.762 | 1.099 | 2574.449 | .037% | 99.093% |
| 70.0 | 10.727 | 1.104 | 2575.552 | .038% | 99.136% |
| 71.0 | 10.685 | 1.107 | 2576.659 | .038% | 99.178% |
| 72.0 | 10.629 | 1.108 | 2577.767 | .038% | 99.221% |
| 73.0 | 10.581 | 1.109 | 2578.876 | .038% | 99.264% |
| 74.0 | 10.574 | 1.112 | 2579.989 | .038% | 99.306% |
| 75.0 | 10.539 | 1.116 | 2581.104 | .038% | 99.349% |

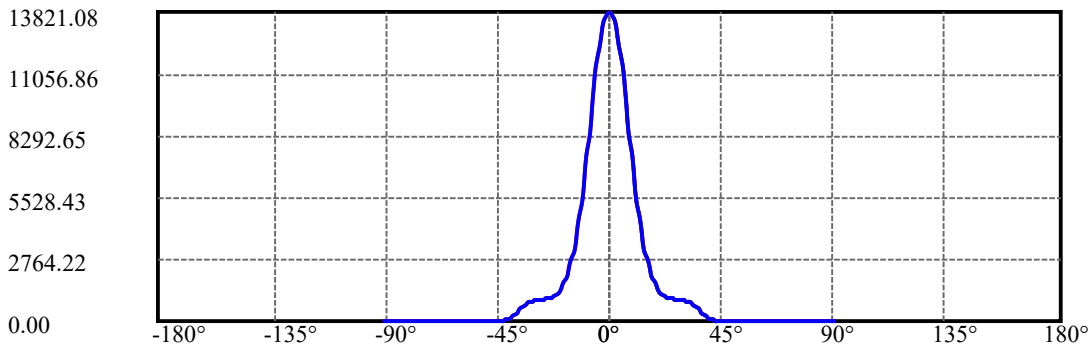
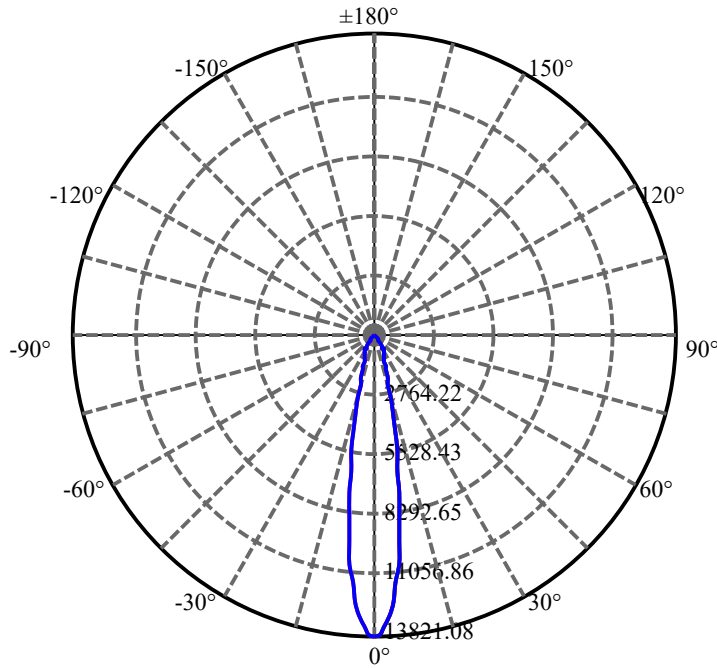
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 76.0 | 10.553 | 1.120 | 2582.224 | .038% | 99.392% |
| 77.0 | 10.497 | 1.122 | 2583.346 | .038% | 99.436% |
| 78.0 | 10.456 | 1.122 | 2584.468 | .038% | 99.479% |
| 79.0 | 10.456 | 1.124 | 2585.591 | .038% | 99.522% |
| 80.0 | 10.421 | 1.125 | 2586.717 | .038% | 99.565% |
| 81.0 | 10.421 | 1.127 | 2587.844 | .038% | 99.609% |
| 82.0 | 10.393 | 1.129 | 2588.973 | .038% | 99.652% |
| 83.0 | 10.386 | 1.130 | 2590.102 | .038% | 99.696% |
| 84.0 | 10.372 | 1.131 | 2591.233 | .039% | 99.739% |
| 85.0 | 10.344 | 1.131 | 2592.364 | .038% | 99.783% |
| 86.0 | 10.330 | 1.130 | 2593.494 | .038% | 99.826% |
| 87.0 | 10.316 | 1.130 | 2594.624 | .038% | 99.870% |
| 88.0 | 10.303 | 1.129 | 2595.753 | .038% | 99.913% |
| 89.0 | 10.282 | 1.128 | 2596.881 | .038% | 99.957% |
| 90.0 | 10.261 | 1.126 | 2598.008 | .038% | 100.000% |

ZONAL LUMEN SUMMARY

| Zone | Lumens | %Lamp | %Fixt |
|---------|---------|--------|---------|
| 0-30 | 2199.57 | 74.89% | 84.66% |
| 0-40 | 2536.60 | 86.37% | 97.64% |
| 0-60 | 2564.68 | 87.32% | 98.72% |
| 0-90 | 2596.88 | 88.42% | 99.96% |
| 0-120 | 2596.88 | 88.42% | 99.96% |
| 0-180 | 2598.01 | 88.46% | 100.00% |
| 60-90 | 33.28 | 1.13% | 1.28% |
| 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% |
| 0-27.51 | 2078.41 | 70.77% | 80.00% |

ZONAL LUMEN SUMMARY

| | |
|---------|--------|
| 0-10 | 921.26 |
| 10-20 | 809.80 |
| 20-30 | 468.51 |
| 30-40 | 337.03 |
| 40-50 | 17.43 |
| 50-60 | 10.64 |
| 60-70 | 10.88 |
| 70-80 | 11.16 |
| 80-90 | 10.16 |
| 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 |



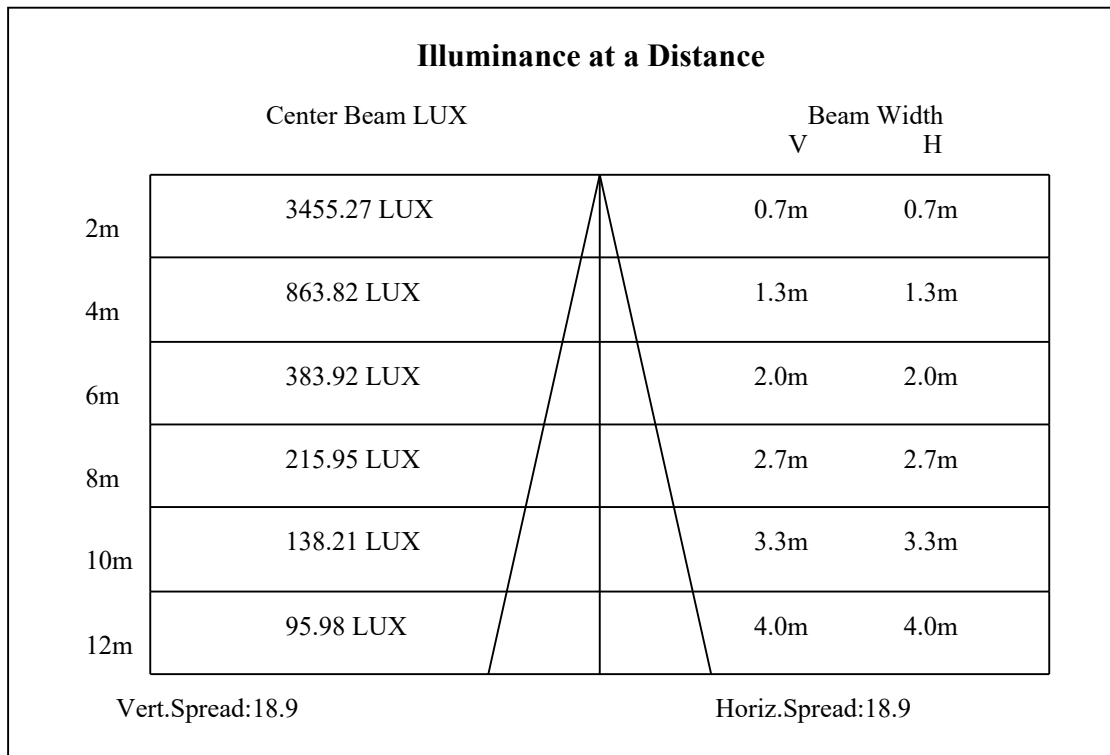
C0(Max): —————

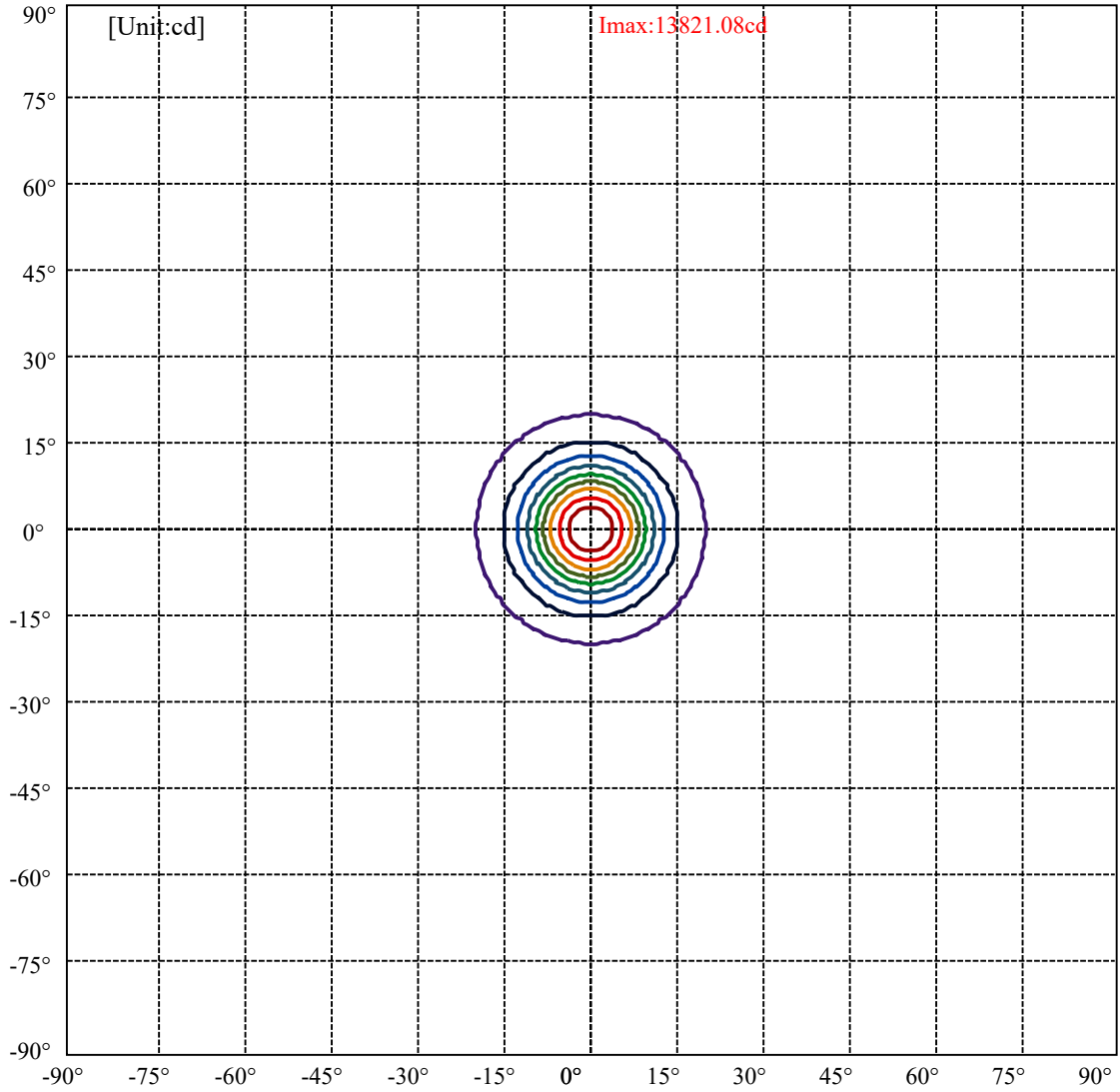
C0/C180: —————

C90/C270: —————

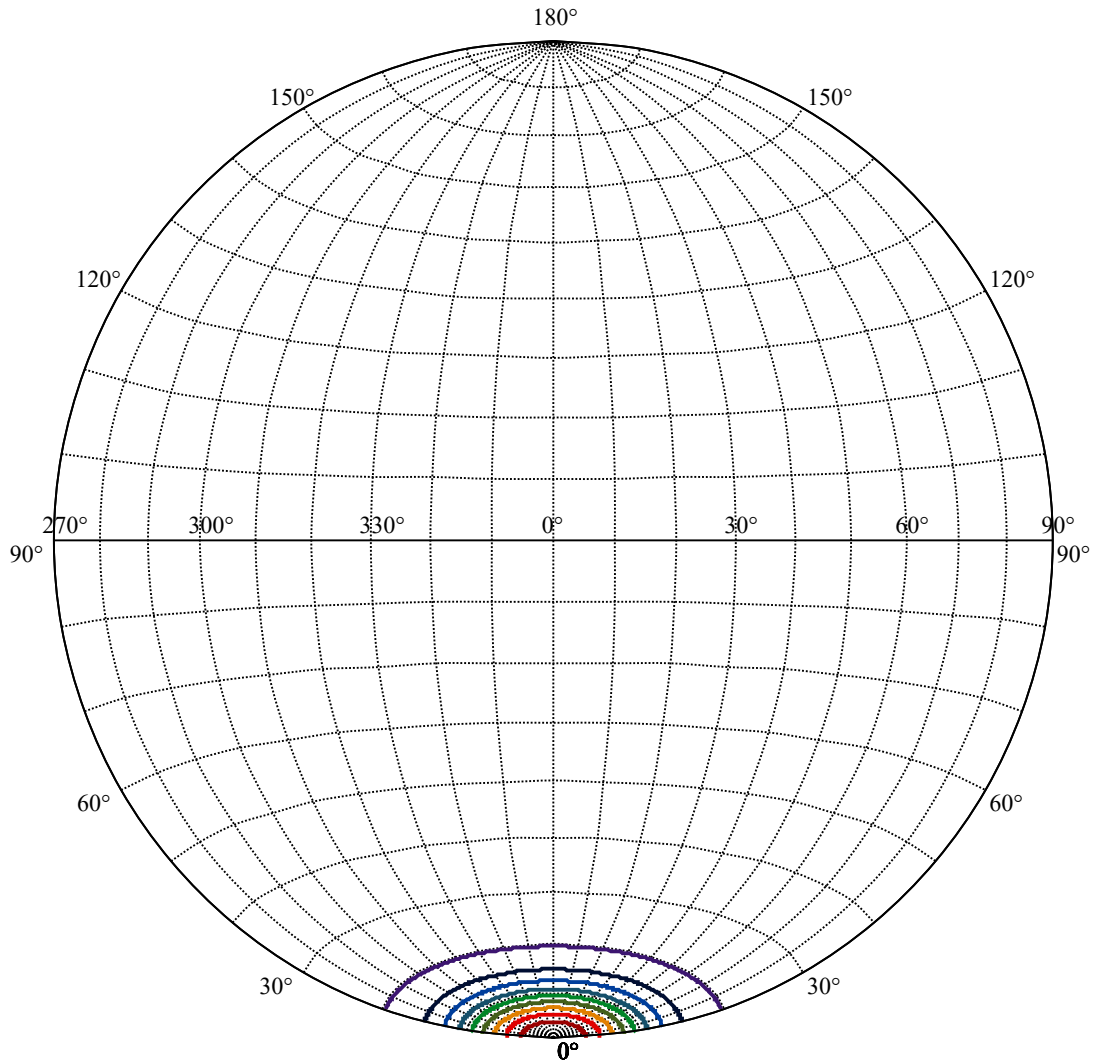
Field angle(10%Imax):C0/180Left:19.6 Right:19.6
:C90/270Left:19.6 Right:19.6

Beam Angle(50%Imax):C0/180Left:9.4 Right:9.4
:C90/270Left:9.4 Right:9.4





| | |
|-------------------|---|
| (10%Imax) 1382.11 | — |
| (20%Imax) 2764.22 | — |
| (30%Imax) 4146.32 | — |
| (40%Imax) 5528.43 | — |
| (50%Imax) 6910.54 | — |
| (60%Imax) 8292.65 | — |
| (70%Imax) 9674.75 | — |
| (80%Imax) 11056.9 | — |
| (90%Imax) 12439 | — |



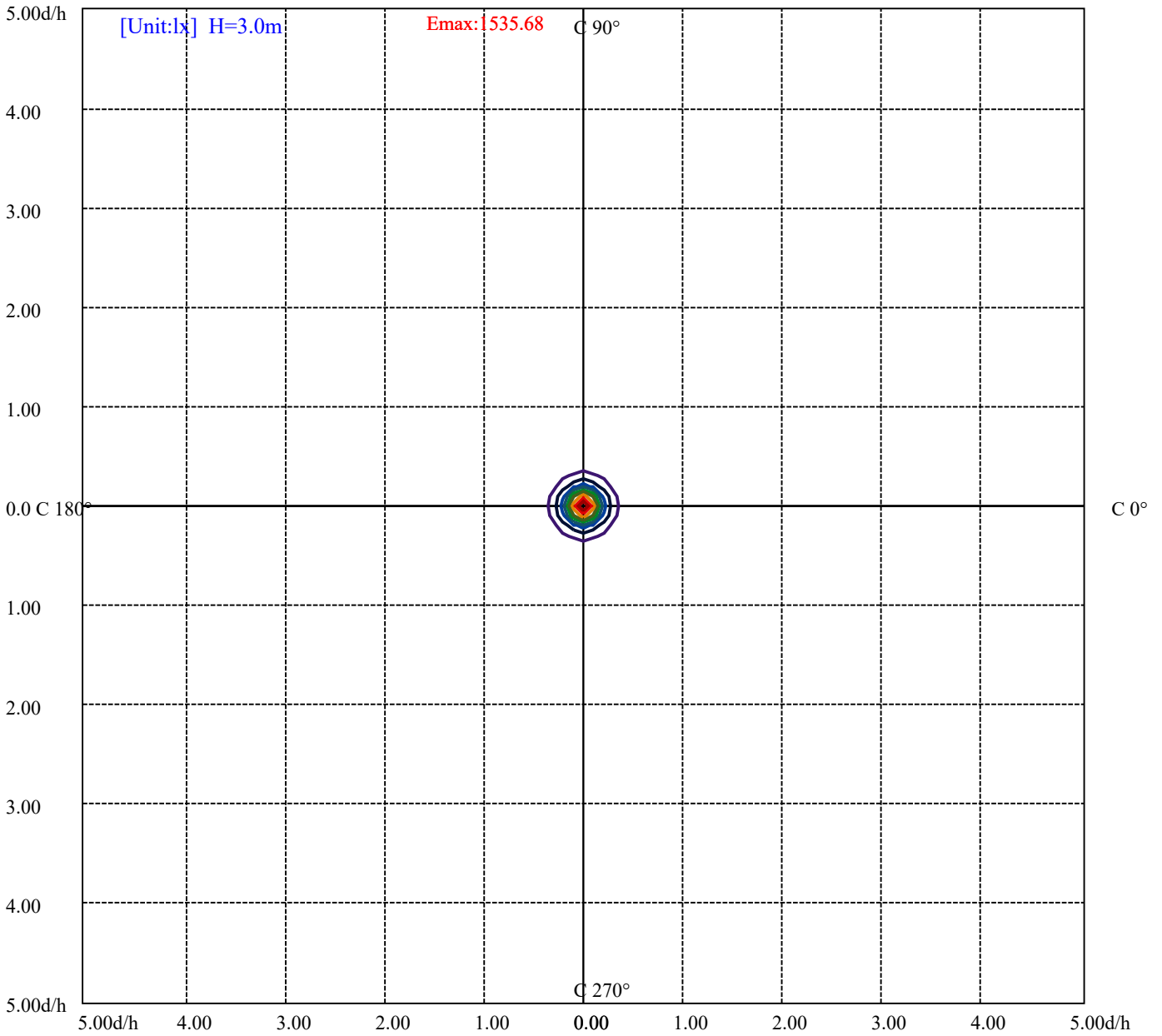
House

[Unit:cd]

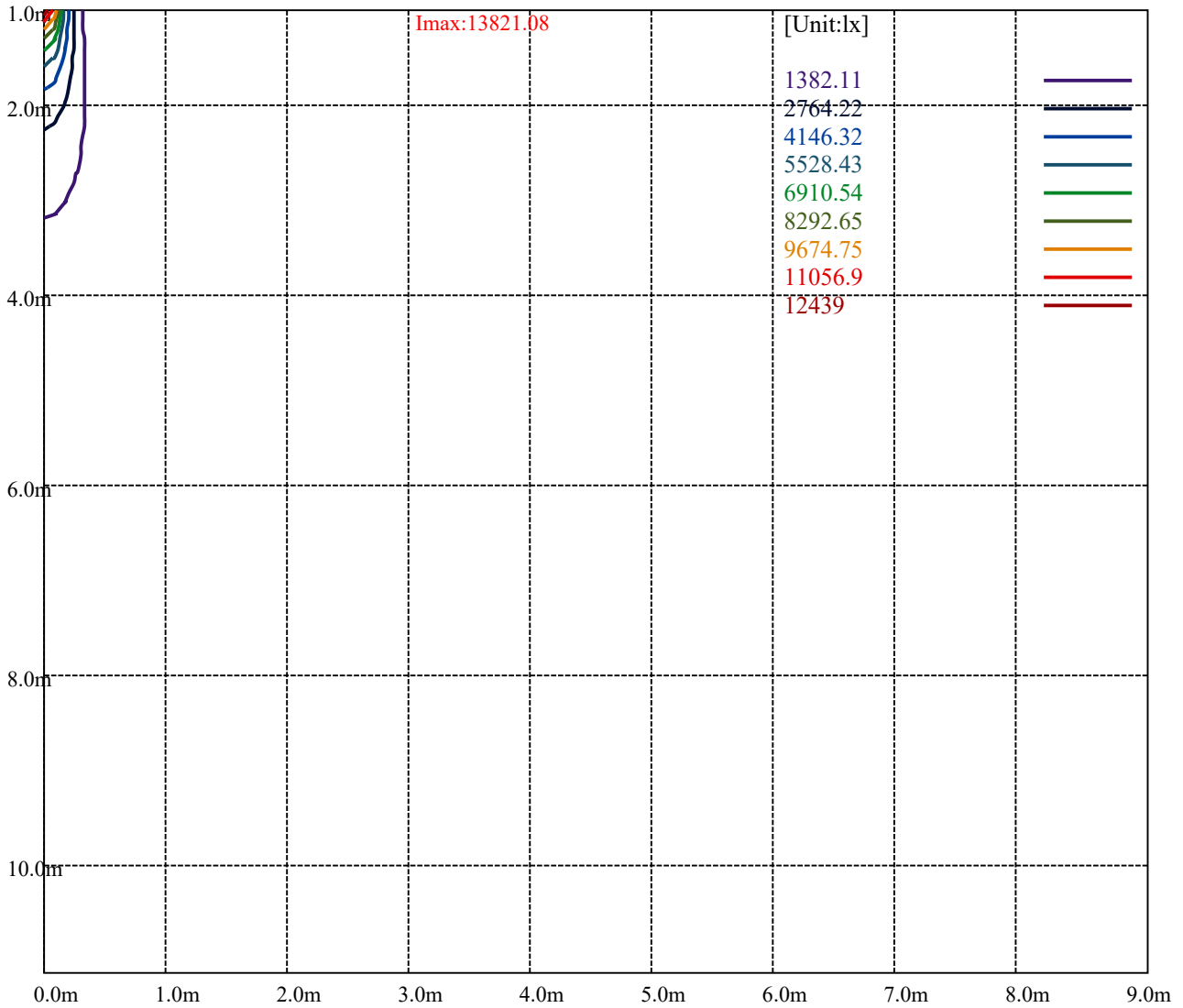
Road

Imax:13821.08

| | |
|-------------------|---|
| (10%Imax) 1382.11 | — |
| (20%Imax) 2764.22 | — |
| (30%Imax) 4146.32 | — |
| (40%Imax) 5528.43 | — |
| (50%Imax) 6910.54 | — |
| (60%Imax) 8292.65 | — |
| (70%Imax) 9674.75 | — |
| (80%Imax) 11056.9 | — |
| (90%Imax) 12439 | — |



| | |
|---------------------------------|---|
| (10%E _{max}) 153.5678 | — |
| (20%E _{max}) 307.1344 | — |
| (30%E _{max}) 460.7022 | — |
| (40%E _{max}) 614.2689 | — |
| (50%E _{max}) 767.8367 | — |
| (60%E _{max}) 921.4044 | — |
| (70%E _{max}) 1074.971 | — |
| (80%E _{max}) 1228.533 | — |
| (90%E _{max}) 1382.111 | — |



Luminance Table

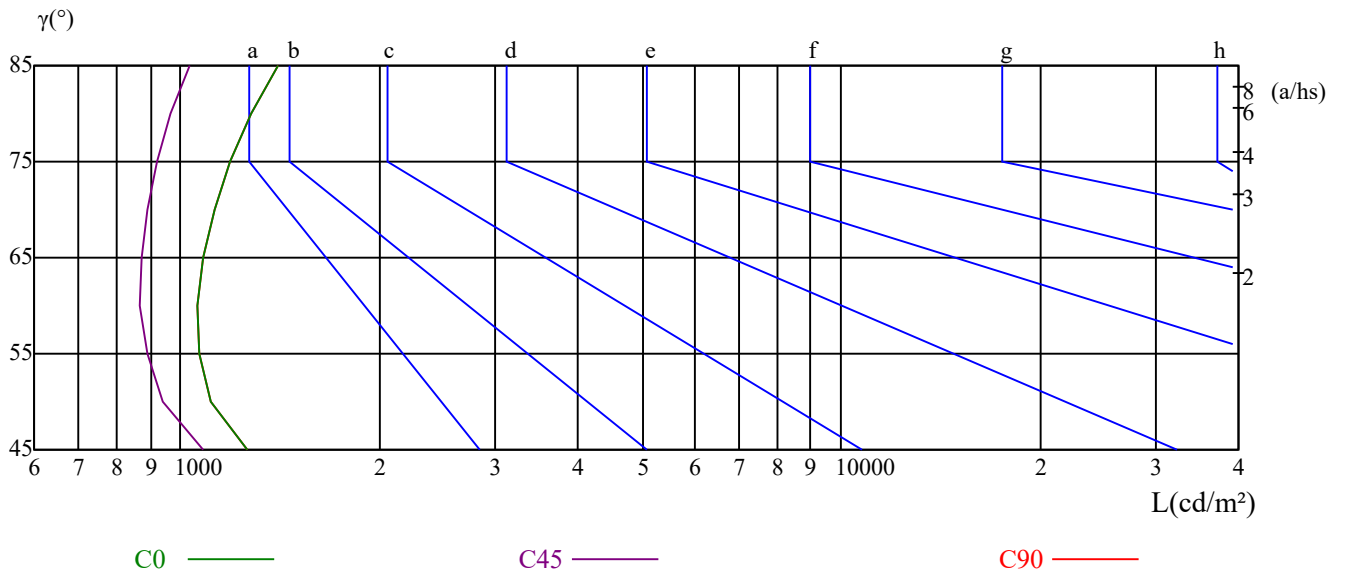
| γ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|------|------|------|------|------|------|------|------|------|
| C0 | 1262 | 1111 | 1067 | 1061 | 1083 | 1126 | 1189 | 1281 | 1408 |
| C45 | 1085 | 941 | 889 | 870 | 873 | 890 | 919 | 966 | 1031 |
| C90 | 1262 | 1111 | 1067 | 1061 | 1083 | 1126 | 1189 | 1281 | 1408 |

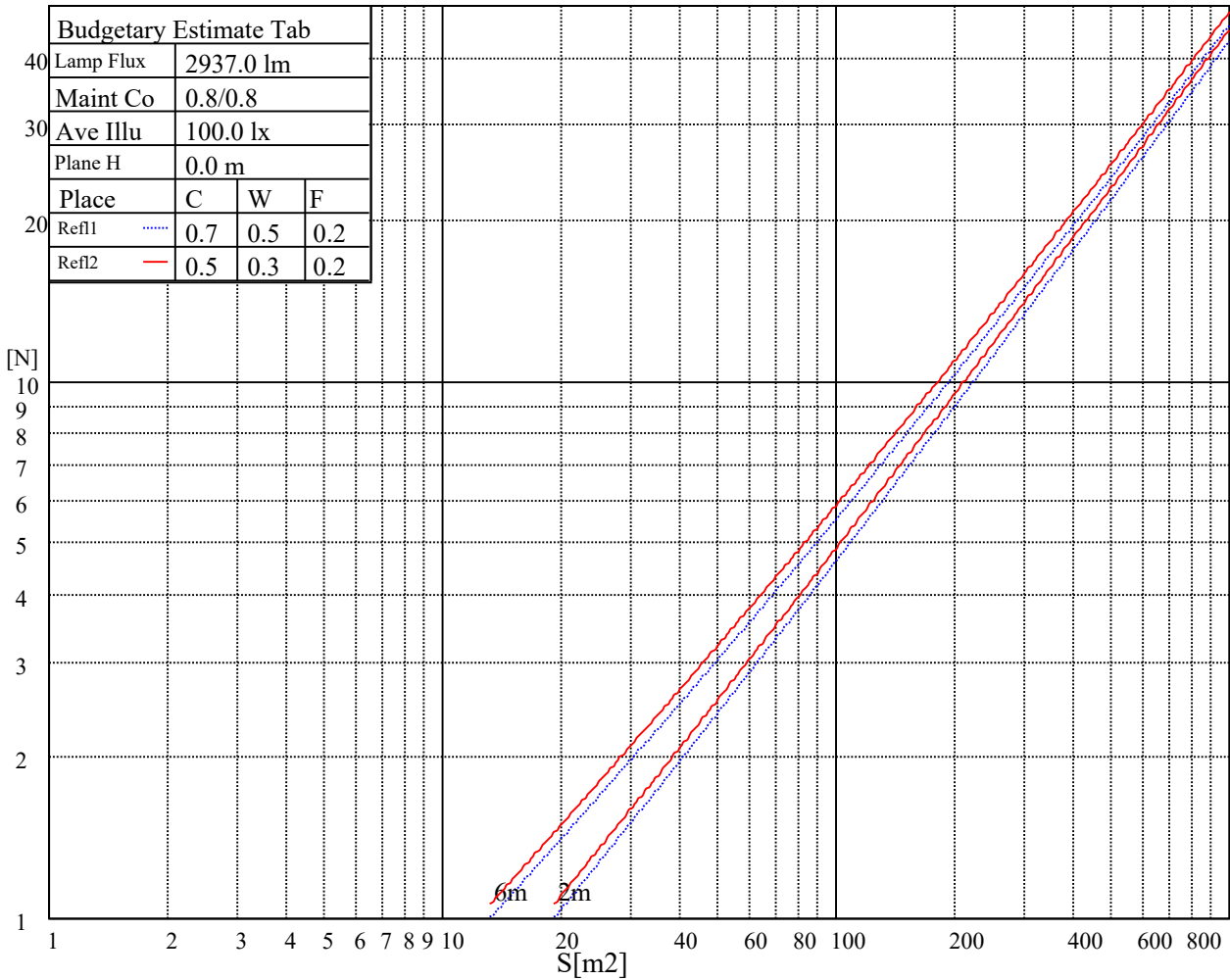
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 2593 | 2593 | 2593 | 4072 | 4072 | 4072 | 11869 | 11869 | 11869 |

Glare Table

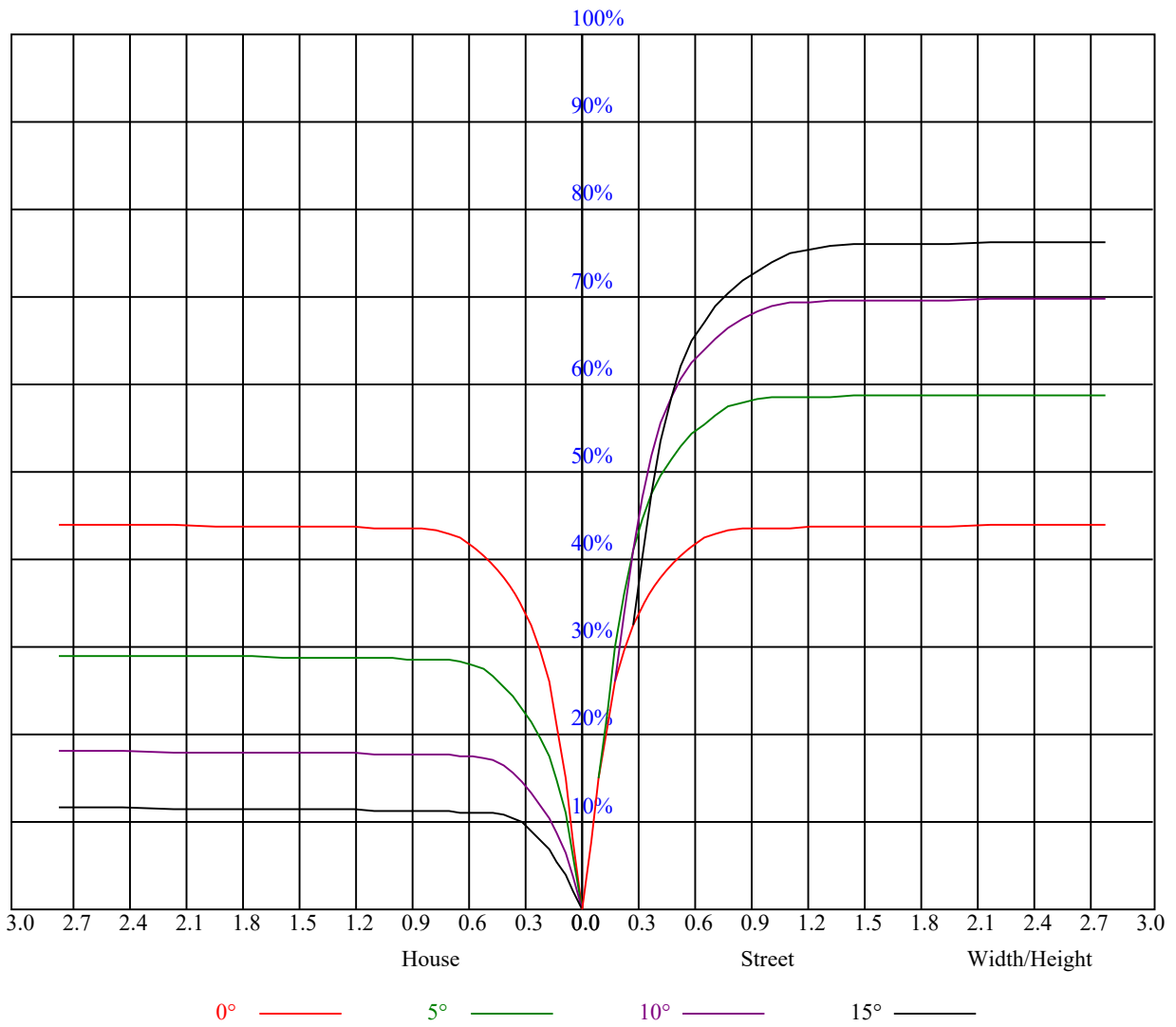
| Glare | Quality | Service Values Illuminance(lx) | | | | | | | |
|-------|---------|--------------------------------|------|------|-------|-------|-------|-------|-------|
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.5 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 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 RHOF=20 CU | | | | | | | | | | | | | | | |
| 0 | 1.05 | 1.05 | 1.05 | 1.03 | 1.03 | 1.03 | 0.98 | 0.98 | 0.98 | 0.94 | 0.94 | 0.94 | 0.90 | 0.90 | 0.90 | 0.88 |
| 1 | 0.99 | 0.97 | 0.96 | 0.97 | 0.96 | 0.94 | 0.94 | 0.92 | 0.91 | 0.90 | 0.89 | 0.88 | 0.87 | 0.87 | 0.86 | 0.84 |
| 2 | 0.94 | 0.91 | 0.89 | 0.92 | 0.90 | 0.88 | 0.90 | 0.87 | 0.86 | 0.87 | 0.85 | 0.84 | 0.85 | 0.83 | 0.82 | 0.81 |
| 3 | 0.89 | 0.86 | 0.83 | 0.88 | 0.85 | 0.82 | 0.86 | 0.83 | 0.81 | 0.84 | 0.82 | 0.80 | 0.82 | 0.80 | 0.79 | 0.77 |
| 4 | 0.85 | 0.81 | 0.79 | 0.84 | 0.81 | 0.78 | 0.83 | 0.80 | 0.77 | 0.81 | 0.78 | 0.76 | 0.79 | 0.77 | 0.75 | 0.74 |
| 5 | 0.82 | 0.78 | 0.75 | 0.81 | 0.77 | 0.74 | 0.80 | 0.76 | 0.74 | 0.78 | 0.75 | 0.73 | 0.77 | 0.75 | 0.73 | 0.72 |
| 6 | 0.79 | 0.74 | 0.72 | 0.78 | 0.74 | 0.71 | 0.77 | 0.73 | 0.71 | 0.76 | 0.73 | 0.70 | 0.75 | 0.72 | 0.70 | 0.69 |
| 7 | 0.76 | 0.72 | 0.69 | 0.75 | 0.71 | 0.69 | 0.74 | 0.71 | 0.68 | 0.73 | 0.70 | 0.68 | 0.72 | 0.70 | 0.68 | 0.67 |
| 8 | 0.73 | 0.69 | 0.66 | 0.73 | 0.69 | 0.66 | 0.72 | 0.68 | 0.66 | 0.71 | 0.68 | 0.66 | 0.70 | 0.67 | 0.65 | 0.64 |
| 9 | 0.71 | 0.67 | 0.64 | 0.70 | 0.66 | 0.64 | 0.69 | 0.66 | 0.64 | 0.69 | 0.66 | 0.63 | 0.68 | 0.65 | 0.63 | 0.62 |
| 10 | 0.68 | 0.64 | 0.62 | 0.68 | 0.64 | 0.62 | 0.67 | 0.64 | 0.62 | 0.67 | 0.64 | 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 | 13651.34 | 14013.07 | 14230.11 | 14196.72 | 13979.68 | 13389.77 | 12733.09 | 11920.57 | 10913.28 |
| 45.0 | 13962.99 | 13968.55 | 13729.25 | 13334.12 | 12777.61 | 11881.62 | 11052.41 | 9983.90 | 8948.78 |
| 90.0 | 13796.03 | 13445.43 | 12866.65 | 12109.79 | 11027.92 | 10461.94 | 9349.47 | 8168.54 | 7119.51 |
| 135.0 | 13873.94 | 13434.30 | 12655.17 | 11920.57 | 11091.36 | 9922.68 | 8859.73 | 7785.66 | 6622.54 |
| 180.0 | 13651.34 | 13100.39 | 12315.70 | 11079.68 | 10494.22 | 9233.16 | 8285.41 | 7073.87 | 5809.47 |
| 225.0 | 13962.99 | 13790.47 | 13361.95 | 12727.52 | 12026.31 | 11100.82 | 10168.66 | 9043.94 | 8014.94 |
| 270.0 | 13796.03 | 13946.29 | 13929.60 | 13679.16 | 13322.99 | 12482.65 | 11692.40 | 10929.97 | 9727.90 |
| 315.0 | 13873.94 | 14118.81 | 14191.16 | 14024.20 | 13668.03 | 12927.87 | 12248.92 | 11066.32 | 10345.08 |
| 360.0 | 13651.34 | 14013.07 | 14230.11 | 14196.72 | 13979.68 | 13389.77 | 12733.09 | 11920.57 | 10913.28 |
| C/γ(°) | 9.0 | 10.0 | 11.0 | 12.0 | 13.0 | 14.0 | 15.0 | 16.0 | 17.0 |
| 0.0 | 9811.38 | 8765.13 | 7579.75 | 6561.32 | 5492.81 | 4563.43 | 3862.22 | 3199.97 | 2821.54 |
| 45.0 | 7791.22 | 6616.98 | 5648.64 | 4791.60 | 3984.65 | 3305.71 | 2821.54 | 2591.14 | 2018.48 |
| 90.0 | 5922.01 | 4993.06 | 4240.65 | 3531.09 | 3020.77 | 2559.42 | 2187.66 | 1911.63 | 1674.00 |
| 135.0 | 5554.03 | 4708.13 | 3901.18 | 3316.84 | 2849.36 | 2386.90 | 2083.60 | 1790.87 | 1551.57 |
| 180.0 | 5030.90 | 4181.66 | 3415.90 | 2980.70 | 2577.23 | 2120.88 | 1877.68 | 1643.95 | 1423.01 |
| 225.0 | 6858.50 | 5768.84 | 4914.04 | 4087.05 | 3462.09 | 2889.99 | 2439.21 | 2108.64 | 1826.49 |
| 270.0 | 8570.35 | 7540.79 | 6416.63 | 5492.81 | 4674.73 | 3806.57 | 3227.79 | 2866.06 | 2265.58 |
| 315.0 | 9181.40 | 7983.22 | 6941.98 | 5836.74 | 4955.22 | 4111.54 | 3413.67 | 2900.56 | 2470.37 |
| 360.0 | 9811.38 | 8765.13 | 7579.75 | 6561.32 | 5492.81 | 4563.43 | 3862.22 | 3199.97 | 2821.54 |
| C/γ(°) | 18.0 | 19.0 | 20.0 | 21.0 | 22.0 | 23.0 | 24.0 | 25.0 | 26.0 |
| 0.0 | 2278.38 | 1967.28 | 1655.08 | 1450.28 | 1292.79 | 1165.90 | 1084.65 | 1041.80 | 1015.09 |
| 45.0 | 1754.69 | 1539.32 | 1332.86 | 1205.97 | 1118.60 | 1055.15 | 1020.09 | 997.83 | 977.24 |
| 90.0 | 1428.02 | 1269.41 | 1109.75 | 1065.28 | 1026.55 | 1000.34 | 976.85 | 957.71 | 943.41 |
| 135.0 | 1366.80 | 1221.55 | 1104.13 | 1048.48 | 1014.53 | 984.48 | 966.67 | 951.09 | 934.95 |
| 180.0 | 1246.60 | 1104.46 | 1065.28 | 1018.87 | 994.49 | 973.85 | 955.37 | 940.23 | 927.93 |
| 225.0 | 1548.78 | 1374.04 | 1236.58 | 1105.69 | 1056.66 | 1022.99 | 995.16 | 977.35 | 963.27 |
| 270.0 | 1943.91 | 1688.47 | 1435.81 | 1278.87 | 1167.01 | 1086.88 | 1041.24 | 1015.64 | 993.38 |
| 315.0 | 2036.29 | 1763.04 | 1541.55 | 1320.61 | 1170.35 | 1105.63 | 1048.53 | 1016.37 | 994.44 |
| 360.0 | 2278.38 | 1967.28 | 1655.08 | 1450.28 | 1292.79 | 1165.90 | 1084.65 | 1041.80 | 1015.09 |
| C/γ(°) | 27.0 | 28.0 | 29.0 | 30.0 | 31.0 | 32.0 | 33.0 | 34.0 | 35.0 |
| 0.0 | 988.93 | 971.68 | 957.21 | 943.85 | 926.60 | 911.57 | 896.55 | 879.85 | 854.81 |
| 45.0 | 959.99 | 946.63 | 929.38 | 913.24 | 899.33 | 882.08 | 859.82 | 761.31 | 642.22 |
| 90.0 | 929.16 | 912.13 | 896.05 | 879.52 | 862.54 | 801.72 | 688.91 | 573.49 | 452.00 |
| 135.0 | 921.59 | 905.45 | 889.87 | 875.40 | 852.03 | 769.11 | 672.83 | 522.57 | 366.19 |
| 180.0 | 910.63 | 897.16 | 883.30 | 865.66 | 816.85 | 707.89 | 579.05 | 448.55 | 320.27 |
| 225.0 | 947.97 | 937.56 | 919.81 | 903.50 | 891.93 | 871.00 | 790.03 | 687.35 | 576.38 |
| 270.0 | 975.02 | 961.10 | 947.19 | 931.05 | 916.03 | 902.67 | 888.20 | 860.93 | 756.86 |
| 315.0 | 974.40 | 959.88 | 943.52 | 930.11 | 913.30 | 898.88 | 883.30 | 864.44 | 816.35 |
| 360.0 | 988.93 | 971.68 | 957.21 | 943.85 | 926.60 | 911.57 | 896.55 | 879.85 | 854.81 |
| C/γ(°) | 36.0 | 37.0 | 38.0 | 39.0 | 40.0 | 41.0 | 42.0 | 43.0 | 44.0 |
| 0.0 | 777.45 | 666.15 | 529.80 | 381.21 | 285.49 | 139.74 | 50.64 | 31.00 | 24.71 |
| 45.0 | 525.35 | 401.80 | 282.71 | 146.42 | 63.72 | 29.50 | 22.76 | 18.31 | 15.53 |
| 90.0 | 302.13 | 194.17 | 96.61 | 33.34 | 25.27 | 20.15 | 16.03 | 14.25 | 13.97 |
| 135.0 | 294.40 | 123.16 | 59.71 | 27.55 | 22.93 | 18.81 | 14.69 | 13.91 | 13.63 |
| 180.0 | 177.36 | 83.14 | 38.18 | 25.32 | 20.15 | 16.75 | 14.41 | 13.75 | 13.41 |
| 225.0 | 411.10 | 288.94 | 182.09 | 69.12 | 32.56 | 26.88 | 21.26 | 16.31 | 14.30 |
| 270.0 | 651.12 | 529.80 | 368.41 | 289.94 | 131.50 | 54.98 | 30.44 | 24.15 | 18.92 |
| 315.0 | 700.15 | 579.17 | 450.17 | 282.60 | 168.90 | 79.30 | 33.89 | 26.43 | 20.87 |
| 360.0 | 777.45 | 666.15 | 529.80 | 381.21 | 285.49 | 139.74 | 50.64 | 31.00 | 24.71 |

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 | 18.48 | 14.91 | 14.41 | 14.02 | 13.69 | 13.41 | 13.08 | 12.86 | 12.58 |
| 45.0 | 14.02 | 13.75 | 13.41 | 13.19 | 12.97 | 12.74 | 12.58 | 12.35 | 12.13 |
| 90.0 | 13.58 | 13.36 | 13.08 | 12.80 | 12.63 | 12.47 | 12.24 | 12.19 | 12.02 |
| 135.0 | 13.30 | 13.08 | 12.91 | 12.63 | 12.41 | 12.30 | 12.13 | 12.02 | 11.85 |
| 180.0 | 13.13 | 12.91 | 12.74 | 12.52 | 12.41 | 12.13 | 12.02 | 11.85 | 11.74 |
| 225.0 | 13.91 | 13.52 | 13.25 | 12.91 | 12.69 | 12.41 | 12.24 | 12.13 | 11.97 |
| 270.0 | 14.86 | 14.30 | 13.91 | 13.58 | 13.19 | 12.91 | 12.69 | 12.52 | 12.35 |
| 315.0 | 16.53 | 14.41 | 14.02 | 13.63 | 13.30 | 13.02 | 12.80 | 12.58 | 12.41 |
| 360.0 | 18.48 | 14.91 | 14.41 | 14.02 | 13.69 | 13.41 | 13.08 | 12.86 | 12.58 |
| C/γ(°) | 54.0 | 55.0 | 56.0 | 57.0 | 58.0 | 59.0 | 60.0 | 61.0 | 62.0 |
| 0.0 | 12.47 | 12.24 | 12.08 | 11.85 | 11.74 | 11.63 | 11.58 | 11.46 | 11.41 |
| 45.0 | 12.02 | 11.85 | 11.74 | 11.69 | 11.58 | 11.46 | 11.30 | 11.24 | 11.19 |
| 90.0 | 11.80 | 11.69 | 11.58 | 11.52 | 11.41 | 11.35 | 11.24 | 11.13 | 11.02 |
| 135.0 | 11.69 | 11.58 | 11.46 | 11.41 | 11.35 | 11.30 | 11.13 | 11.07 | 11.07 |
| 180.0 | 11.63 | 11.52 | 11.46 | 11.35 | 11.35 | 11.30 | 11.19 | 11.07 | 11.02 |
| 225.0 | 11.74 | 11.63 | 11.46 | 11.41 | 11.35 | 11.24 | 11.19 | 11.02 | 10.96 |
| 270.0 | 12.08 | 11.91 | 11.74 | 11.63 | 11.58 | 11.46 | 11.30 | 11.19 | 11.13 |
| 315.0 | 12.13 | 11.97 | 11.80 | 11.74 | 11.58 | 11.46 | 11.30 | 11.24 | 11.13 |
| 360.0 | 12.47 | 12.24 | 12.08 | 11.85 | 11.74 | 11.63 | 11.58 | 11.46 | 11.41 |
| C/γ(°) | 63.0 | 64.0 | 65.0 | 66.0 | 67.0 | 68.0 | 69.0 | 70.0 | 71.0 |
| 0.0 | 11.30 | 11.19 | 11.07 | 11.07 | 11.07 | 11.02 | 10.96 | 10.91 | 10.80 |
| 45.0 | 11.19 | 11.07 | 10.96 | 10.96 | 10.91 | 10.80 | 10.85 | 10.80 | 10.69 |
| 90.0 | 11.02 | 10.96 | 10.91 | 10.80 | 10.74 | 10.69 | 10.69 | 10.69 | 10.63 |
| 135.0 | 10.96 | 10.91 | 10.91 | 10.85 | 10.74 | 10.69 | 10.63 | 10.57 | 10.63 |
| 180.0 | 11.02 | 10.96 | 10.91 | 10.80 | 10.80 | 10.74 | 10.74 | 10.69 | 10.69 |
| 225.0 | 10.91 | 10.91 | 10.91 | 10.85 | 10.74 | 10.74 | 10.63 | 10.69 | 10.63 |
| 270.0 | 11.13 | 11.02 | 10.96 | 10.85 | 10.85 | 10.80 | 10.80 | 10.74 | 10.69 |
| 315.0 | 11.13 | 11.07 | 11.02 | 10.85 | 10.85 | 10.80 | 10.80 | 10.74 | 10.74 |
| 360.0 | 11.30 | 11.19 | 11.07 | 11.07 | 11.07 | 11.02 | 10.96 | 10.91 | 10.80 |
| C/γ(°) | 72.0 | 73.0 | 74.0 | 75.0 | 76.0 | 77.0 | 78.0 | 79.0 | 80.0 |
| 0.0 | 10.80 | 10.74 | 10.74 | 10.69 | 10.69 | 10.63 | 10.57 | 10.57 | 10.57 |
| 45.0 | 10.69 | 10.63 | 10.63 | 10.63 | 10.63 | 10.52 | 10.46 | 10.46 | 10.46 |
| 90.0 | 10.52 | 10.52 | 10.46 | 10.41 | 10.52 | 10.46 | 10.41 | 10.35 | 10.30 |
| 135.0 | 10.63 | 10.57 | 10.57 | 10.46 | 10.46 | 10.41 | 10.41 | 10.41 | 10.41 |
| 180.0 | 10.57 | 10.52 | 10.52 | 10.52 | 10.57 | 10.52 | 10.46 | 10.52 | 10.41 |
| 225.0 | 10.63 | 10.57 | 10.52 | 10.52 | 10.46 | 10.46 | 10.46 | 10.46 | 10.46 |
| 270.0 | 10.57 | 10.52 | 10.57 | 10.57 | 10.52 | 10.46 | 10.41 | 10.41 | 10.35 |
| 315.0 | 10.63 | 10.57 | 10.57 | 10.52 | 10.57 | 10.52 | 10.46 | 10.46 | 10.41 |
| 360.0 | 10.80 | 10.74 | 10.74 | 10.69 | 10.69 | 10.63 | 10.57 | 10.57 | 10.57 |
| C/γ(°) | 81.0 | 82.0 | 83.0 | 84.0 | 85.0 | 86.0 | 87.0 | 88.0 | 89.0 |
| 0.0 | 10.52 | 10.46 | 10.52 | 10.46 | 10.46 | 10.46 | 10.46 | 10.46 | 10.41 |
| 45.0 | 10.46 | 10.41 | 10.41 | 10.52 | 10.35 | 10.30 | 10.30 | 10.18 | 10.18 |
| 90.0 | 10.35 | 10.35 | 10.30 | 10.24 | 10.30 | 10.24 | 10.24 | 10.24 | 10.18 |
| 135.0 | 10.35 | 10.30 | 10.41 | 10.30 | 10.30 | 10.30 | 10.24 | 10.35 | 10.30 |
| 180.0 | 10.46 | 10.46 | 10.35 | 10.41 | 10.41 | 10.41 | 10.41 | 10.41 | 10.41 |
| 225.0 | 10.41 | 10.35 | 10.41 | 10.41 | 10.30 | 10.30 | 10.24 | 10.24 | 10.18 |
| 270.0 | 10.41 | 10.35 | 10.35 | 10.30 | 10.30 | 10.30 | 10.30 | 10.24 | 10.24 |
| 315.0 | 10.41 | 10.46 | 10.35 | 10.35 | 10.35 | 10.35 | 10.35 | 10.30 | 10.35 |
| 360.0 | 10.52 | 10.46 | 10.52 | 10.46 | 10.46 | 10.46 | 10.46 | 10.46 | 10.41 |

Intensity data(cd)

| | |
|---------------|--------------|
| C/γ(°) | 90.0 |
| 0.0 | 10.35 |
| 45.0 | 10.24 |
| 90.0 | 10.18 |
| 135.0 | 10.30 |
| 180.0 | 10.35 |
| 225.0 | 10.18 |
| 270.0 | 10.18 |
| 315.0 | 10.30 |
| 360.0 | 10.35 |