



SGSO

Address: LIT by CARDI

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Client:

LumCAT: 0017440223 KAI 5.8W 4000K 700lm

## Luminaire:

Report No:

Voltage(V): 230.0000

Test No: KYZ-A251014055-02-004

Current(A): 0.0270

LampCAT: LED

Power (W): 5.8000

Lamp flux(lm)

PF: 0.9398

Number of Lamps: 1

Ballast type:

Length(mm): 46

Width(mm): -46

Phm Type: C

Height(mm): 0

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Photometric Results

Lumens(lm): 700.00

Lumens(lm)/Power(W): 120.69

Central intensity(cd): 341.912

Maximum intensity(cd): 375.217

Angle of maximum intensity:  $C=135.0$   $\gamma=5.0$ 

Beam Angle(50%Imax): [C0/180]Total=83.8

[C90/270]Total=82.3

Field angle(10%Imax): [C0/180]Total=137.7

[C90/270]Total=135.7

Maximum s/h(1/2): C0\_180=1.13 C90\_270=1.07

Maximum s/h(1/4): C0\_180=1.17 C90\_270=1.15

Up flux rate of LUM(%): 1.92%

Down flux rate of LUM(%): 98.08%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 85.491%

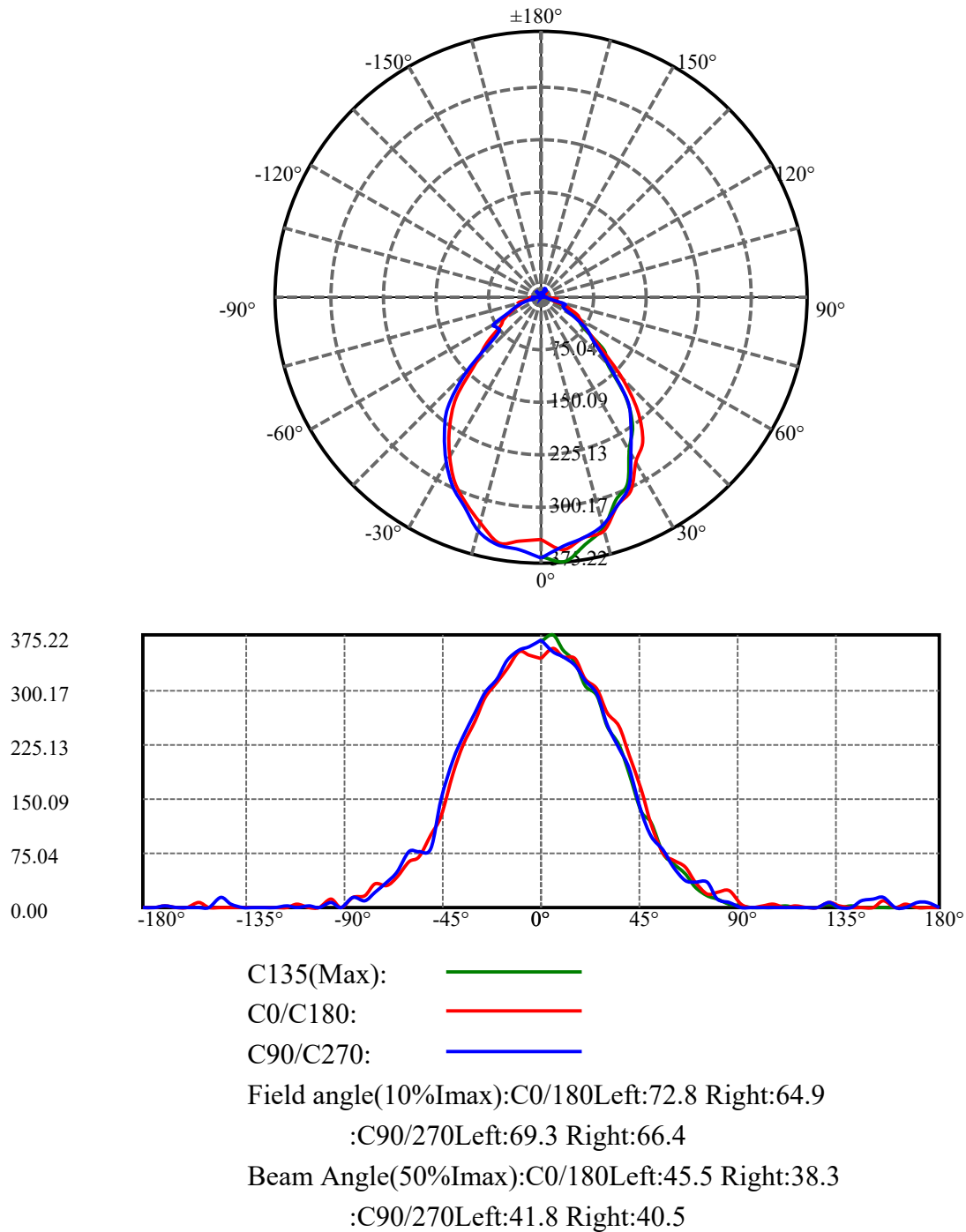
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 369.748       | 0.000       | 0         | .000%       | .000%      |
| 5.0                | 370.294       | 8.545       | 8.545     | 1.221%      | 1.221%     |
| 10.0               | 363.583       | 25.358      | 33.903    | 3.623%      | 4.843%     |
| 15.0               | 352.153       | 41.009      | 74.913    | 5.858%      | 10.702%    |
| 20.0               | 334.203       | 54.637      | 129.549   | 7.805%      | 18.507%    |
| 25.0               | 305.723       | 64.828      | 194.377   | 9.261%      | 27.768%    |
| 30.0               | 274.188       | 70.886      | 265.263   | 10.127%     | 37.895%    |
| 35.0               | 237.033       | 72.714      | 337.977   | 10.388%     | 48.283%    |
| 40.0               | 199.305       | 70.317      | 408.295   | 10.045%     | 58.328%    |
| 45.0               | 153.475       | 63.093      | 471.388   | 9.013%      | 67.341%    |
| 50.0               | 117.766       | 52.940      | 524.327   | 7.563%      | 74.904%    |
| 55.0               | 81.784        | 41.910      | 566.237   | 5.987%      | 80.891%    |
| 60.0               | 62.416        | 32.195      | 598.432   | 4.599%      | 85.490%    |
| 65.0               | 49.976        | 26.391      | 624.823   | 3.770%      | 89.261%    |
| 70.0               | 36.718        | 21.203      | 646.026   | 3.029%      | 92.290%    |
| 75.0               | 29.653        | 16.757      | 662.783   | 2.394%      | 94.684%    |
| 80.0               | 16.995        | 12.056      | 674.839   | 1.722%      | 96.406%    |
| 85.0               | 12.658        | 7.783       | 682.622   | 1.112%      | 97.518%    |
| 90.0               | 2.346         | 3.968       | 686.59    | .567%       | 98.085%    |
| 95.0               | 3.492         | 1.544       | 688.134   | .221%       | 98.305%    |
| 100.0              | 2.319         | 1.525       | 689.659   | .218%       | 98.523%    |
| 105.0              | 0.737         | 0.790       | 690.448   | .113%       | 98.636%    |
| 110.0              | 0.900         | 0.413       | 690.862   | .059%       | 98.695%    |
| 115.0              | 1.828         | 0.667       | 691.529   | .095%       | 98.790%    |
| 120.0              | 2.619         | 1.044       | 692.573   | .149%       | 98.939%    |
| 125.0              | 2.046         | 1.041       | 693.614   | .149%       | 99.088%    |
| 130.0              | 3.383         | 1.140       | 694.754   | .163%       | 99.251%    |
| 135.0              | 3.983         | 1.438       | 696.192   | .205%       | 99.456%    |
| 140.0              | 1.609         | 1.000       | 697.192   | .143%       | 99.599%    |
| 145.0              | 1.719         | 0.536       | 697.729   | .077%       | 99.676%    |
| 150.0              | 3.301         | 0.714       | 698.442   | .102%       | 99.778%    |
| 155.0              | 2.346         | 0.690       | 699.133   | .099%       | 99.876%    |
| 160.0              | 0.436         | 0.282       | 699.415   | .040%       | 99.917%    |
| 165.0              | 1.364         | 0.143       | 699.558   | .020%       | 99.937%    |
| 170.0              | 3.137         | 0.258       | 699.816   | .037%       | 99.974%    |
| 175.0              | 0.764         | 0.135       | 699.951   | .019%       | 99.993%    |
| 180.0              | 3.328         | 0.047       | 699.998   | .007%       | 100.000%   |

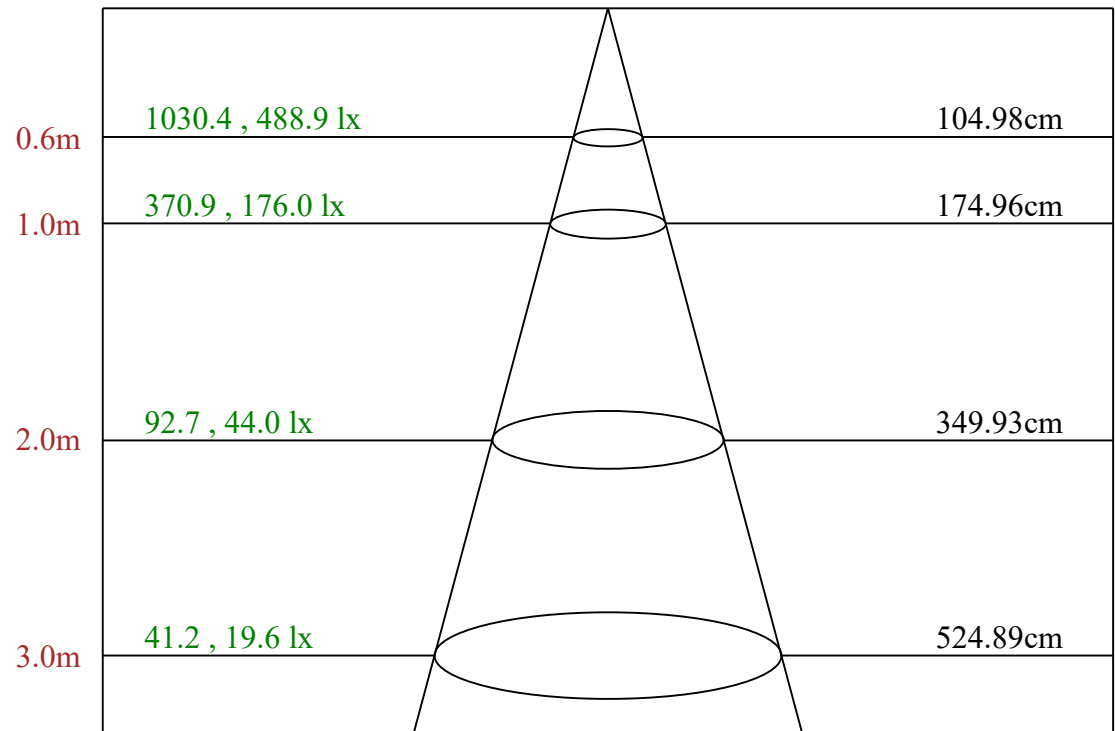
## ZONAL LUMEN SUMMARY

| Zone    | Lumens | %Fixt   |
|---------|--------|---------|
| 0-30    | 265.26 | 37.89%  |
| 0-40    | 408.29 | 58.33%  |
| 0-60    | 598.43 | 85.49%  |
| 0-90    | 686.59 | 98.08%  |
| 0-120   | 692.57 | 98.94%  |
| 0-180   | 700.00 | 100.00% |
| 60-90   | 120.35 | 17.19%  |
| 90-120  | 9.95   | 1.42%   |
| 90-130  | 12.13  | 1.73%   |
| 90-150  | 15.82  | 2.26%   |
| 90-180  | 17.33  | 2.48%   |
| 0-54.26 | 560.00 | 80.00%  |

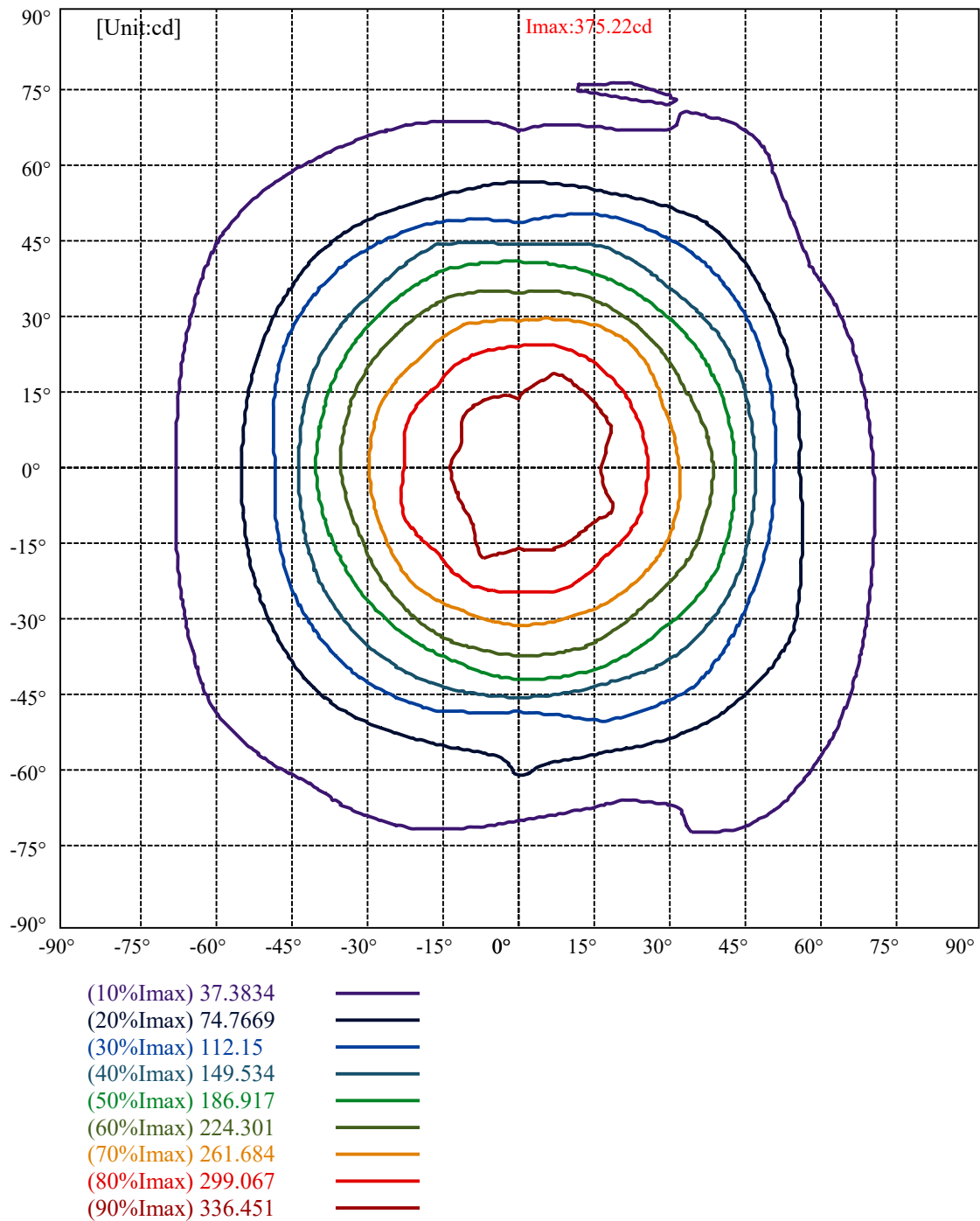
## ZONAL LUMEN SUMMARY

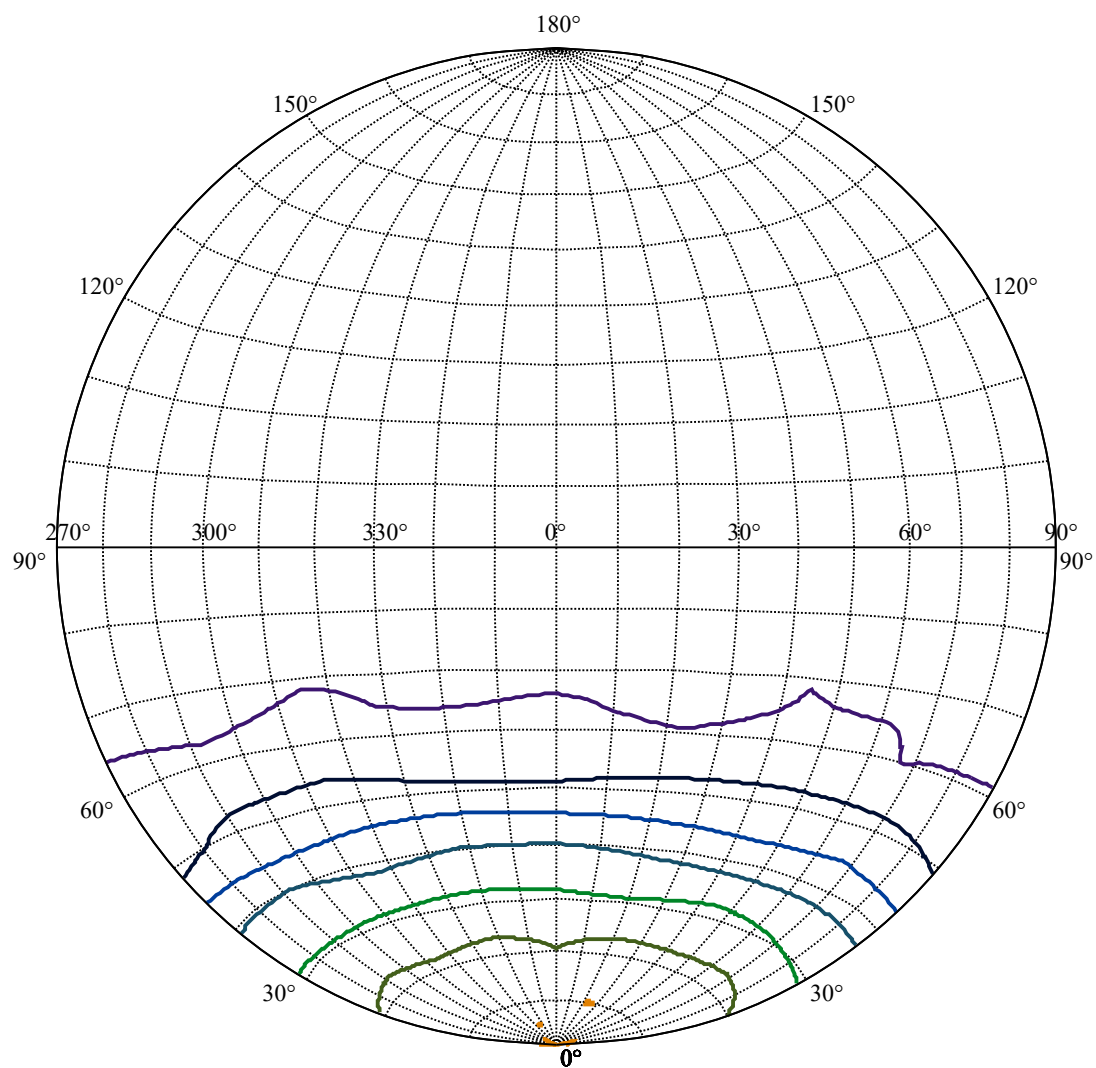
|         |        |
|---------|--------|
| 0-10    | 33.90  |
| 10-20   | 95.65  |
| 20-30   | 135.71 |
| 30-40   | 143.03 |
| 40-50   | 116.03 |
| 50-60   | 74.10  |
| 60-70   | 47.59  |
| 70-80   | 28.81  |
| 80-90   | 11.75  |
| 90-100  | 3.07   |
| 100-110 | 1.20   |
| 110-120 | 1.71   |
| 120-130 | 2.18   |
| 130-140 | 2.44   |
| 140-150 | 1.25   |
| 150-160 | 0.97   |
| 160-170 | 0.40   |
| 170-180 | 0.13   |





Max , Ave      Beam angle of C135 plane 82.36





House

[Unit:cd]

Road

**Imax:375.22**

(10%Imax) 52.1286

(20%Imax) 104.257

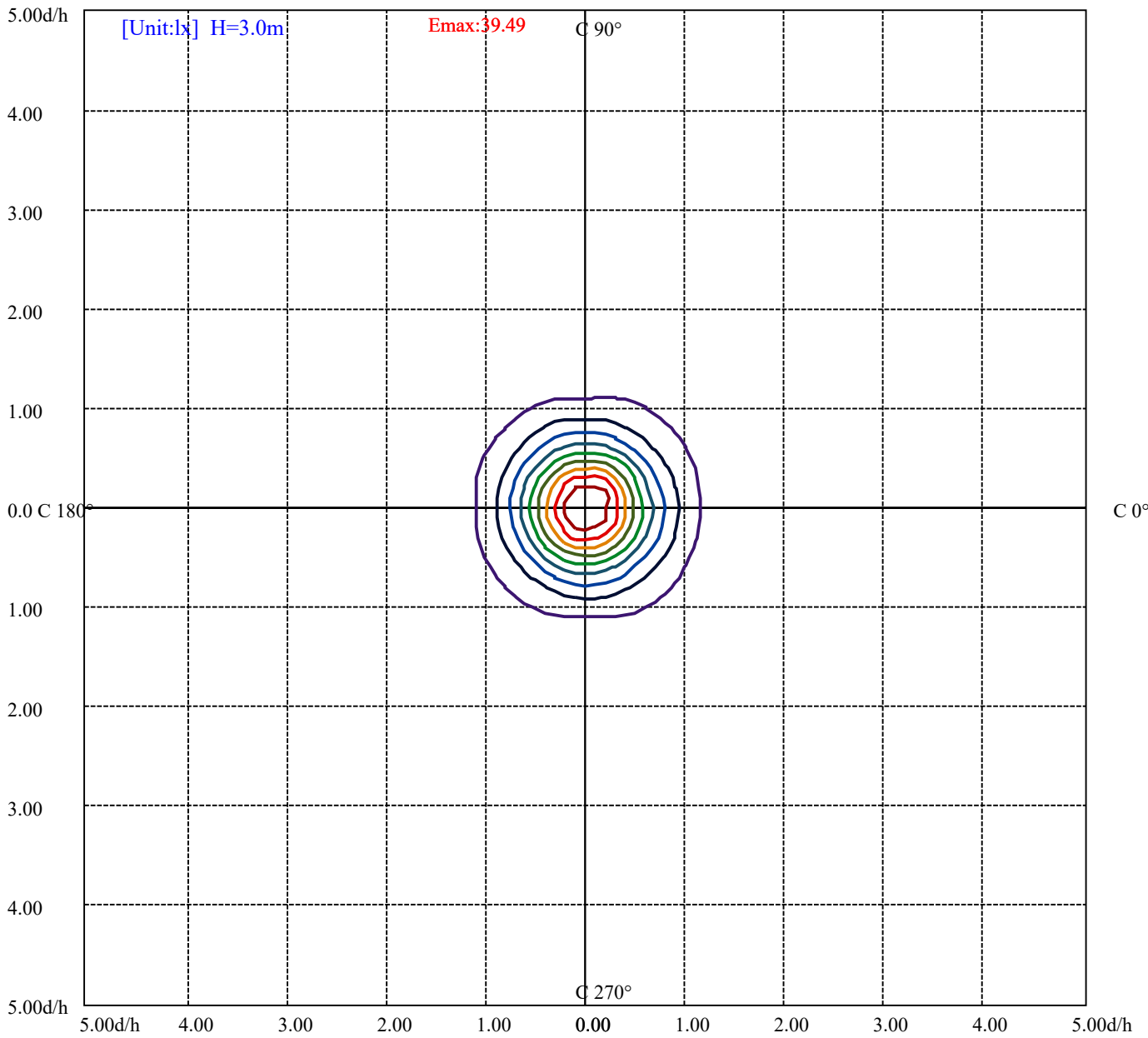
(30%Imax) 156.386

(40%Imax) 208.514

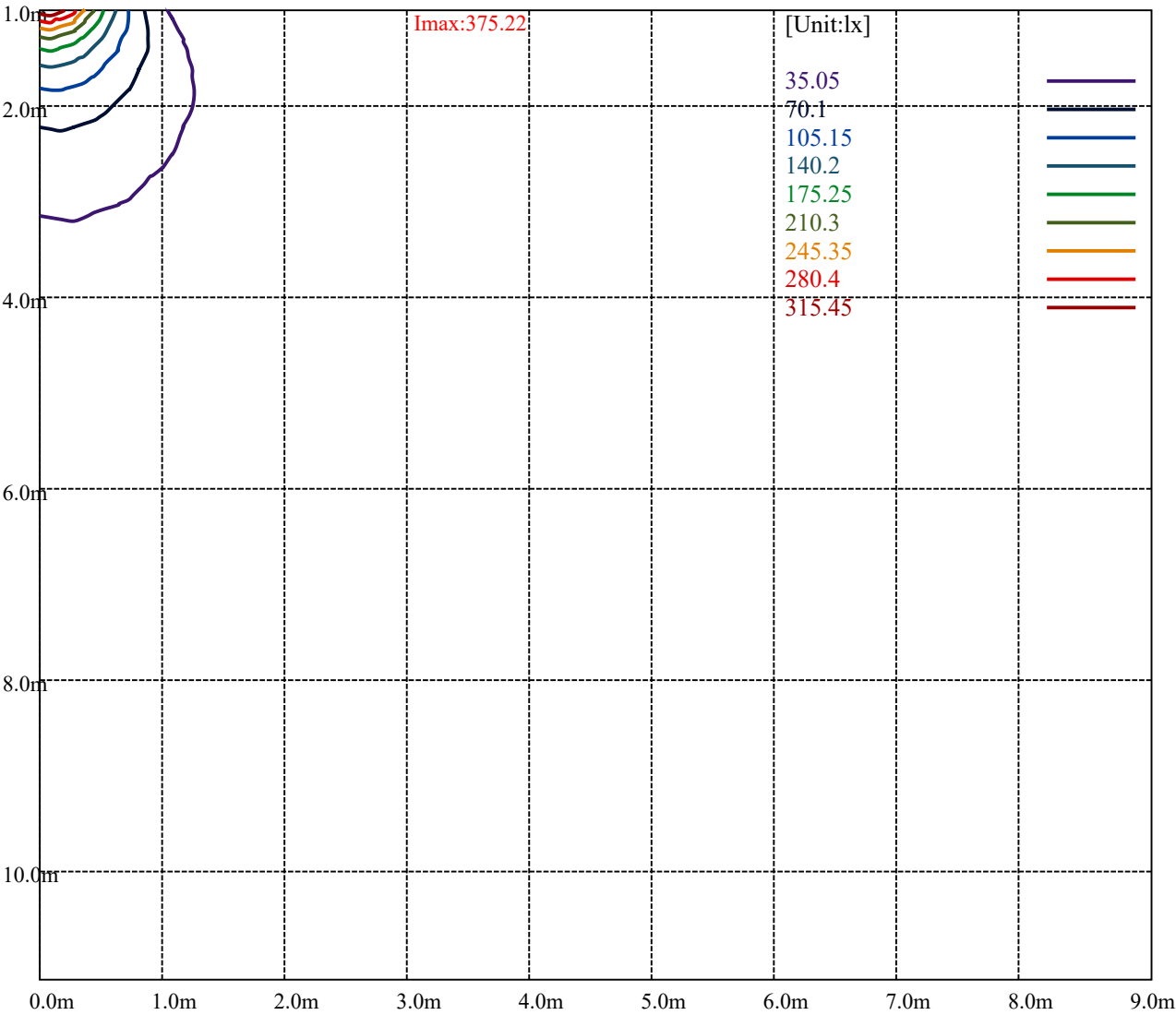
(50%Imax) 260.643

(60%Imax) 312.772

(70%Imax) 364.9



|                                 |   |
|---------------------------------|---|
| (10%E <sub>max</sub> ) 3.948934 | — |
| (20%E <sub>max</sub> ) 7.897867 | — |
| (30%E <sub>max</sub> ) 11.84678 | — |
| (40%E <sub>max</sub> ) 15.79578 | — |
| (50%E <sub>max</sub> ) 19.74467 | — |
| (60%E <sub>max</sub> ) 23.69356 | — |
| (70%E <sub>max</sub> ) 27.64256 | — |
| (80%E <sub>max</sub> ) 31.59144 | — |
| (90%E <sub>max</sub> ) 35.54045 | — |



Luminance Table

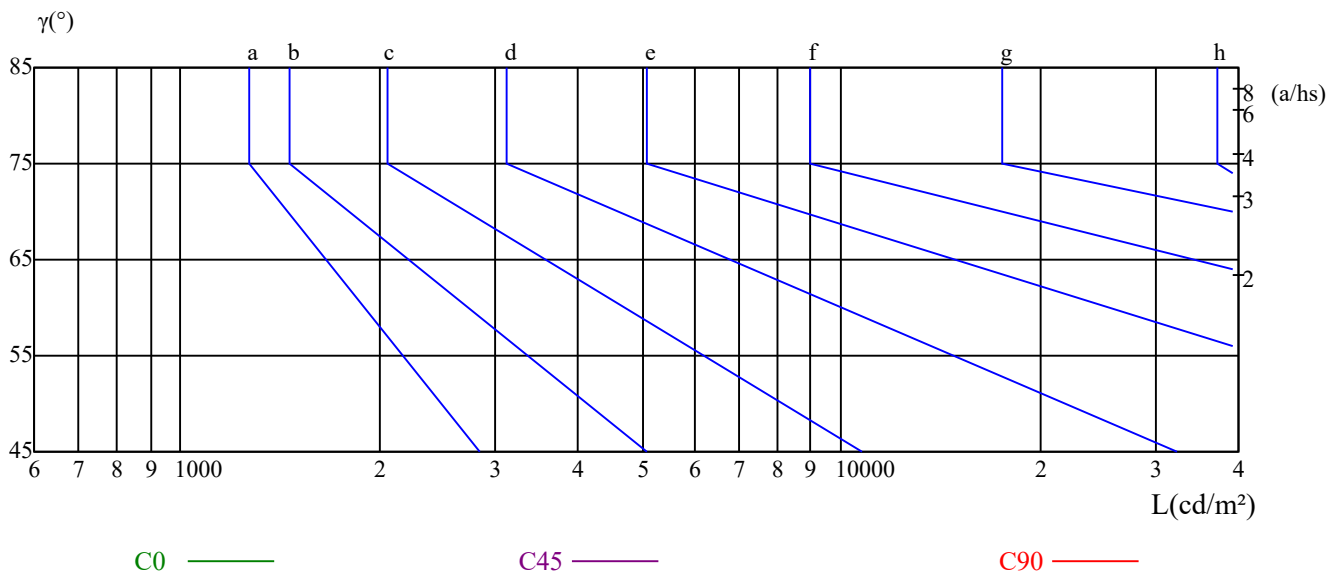
|          |     |     |    |    |    |    |    |    |    |
|----------|-----|-----|----|----|----|----|----|----|----|
| $\gamma$ | 45  | 50  | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
| C0       | 163 | 113 | 75 | 65 | 56 | 35 | 18 | 20 | 23 |
| C45      | 147 | 129 | 87 | 64 | 56 | 51 | 31 | 14 | 2  |
| C90      | 134 | 97  | 80 | 56 | 38 | 34 | 34 | 12 | 6  |

|            |            |         |            |            |         |            |            |         |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
| 49         | 43         | 53      | 25         | 27         | 28      | 18         | 10         | 6       |

Glare Table

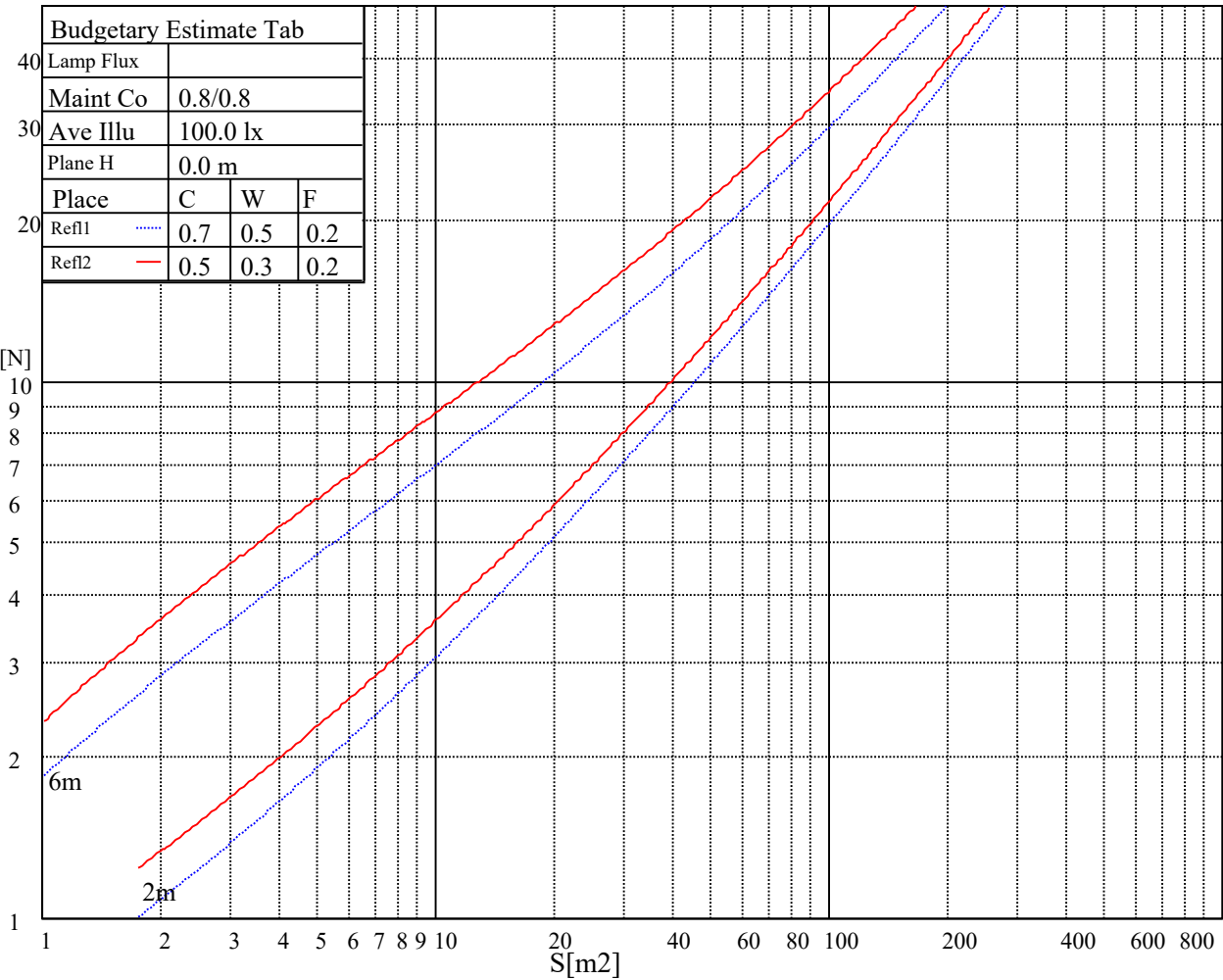
| Glare | Quality | Service Values Illuminance(lx) |      |      |            |            |            |            |            |
|-------|---------|--------------------------------|------|------|------------|------------|------------|------------|------------|
| 1.15  | A       | 2000                           | 1000 | 500  | $\leq 300$ |            |            |            |            |
| 1.5   | B       |                                | 2000 | 1000 | 500        | $\leq 300$ |            |            |            |
| 1.85  | C       |                                |      | 2000 | 1000       | 500        | $\leq 300$ |            |            |
| 2.2   | D       |                                |      |      | 2000       | 1000       | 500        | $\leq 300$ |            |
| 2.55  | E       |                                |      |      |            | 2000       | 1000       | 500        | $\leq 300$ |
|       |         | a                              | b    | c    | d          | e          | f          | g          | h          |

Luminance Limiting Curve

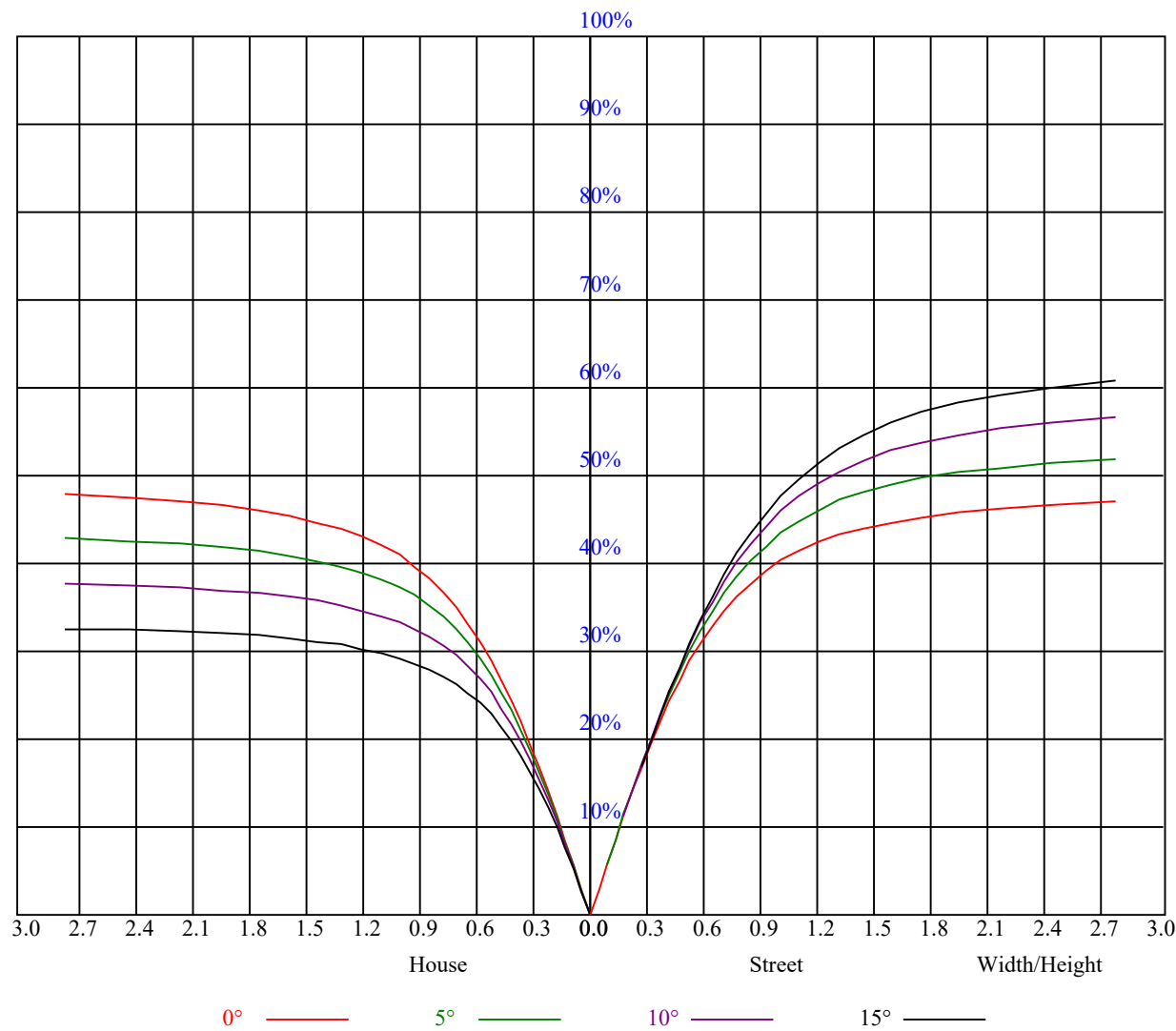


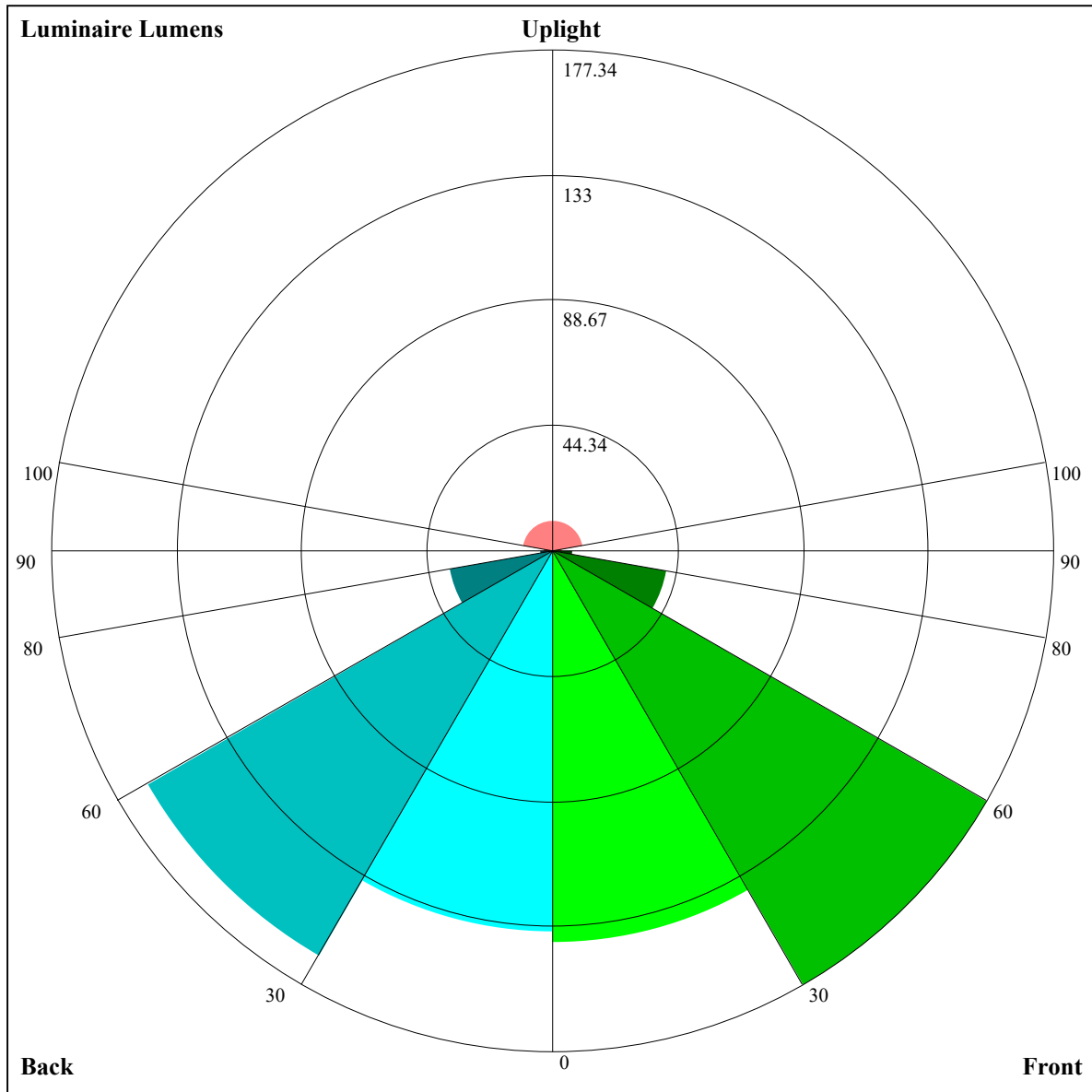
| Illumination assessment according UGR             |     |                  |     |     |     |     |                |     |     |     |  |
|---------------------------------------------------|-----|------------------|-----|-----|-----|-----|----------------|-----|-----|-----|--|
| Rf of Ceiling                                     | 70  | 70               | 50  | 50  | 30  | 70  | 70             | 50  | 50  | 30  |  |
| Rf of Wall                                        | 50  | 30               | 50  | 30  | 30  | 50  | 30             | 50  | 30  | 30  |  |
| Rf of Floor                                       | 20  | 20               | 20  | 20  | 20  | 20  | 20             | 20  | 20  | 20  |  |
| Room dimensions                                   |     | Viewed crosswise |     |     |     |     | Viewed endwise |     |     |     |  |
| X                                                 | Y   |                  |     |     |     |     |                |     |     |     |  |
| 2H                                                | 2H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 3H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 4H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 6H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 8H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
| 4H                                                | 12H | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 2H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 3H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 4H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 6H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
| 8H                                                | 8H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 12H | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 4H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 6H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 8H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
| 12H                                               | 12H | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 4H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 6H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
|                                                   | 8H  | 非数字              | 非数字 | 非数字 | 非数字 | 非数字 | 非数字            | 非数字 | 非数字 | 非数字 |  |
| Variation with the observer position at spacings: |     |                  |     |     |     |     |                |     |     |     |  |
| S = 1.0H                                          |     | 非数字/非数字          |     |     |     |     | 非数字/非数字        |     |     |     |  |
| S = 1.5H                                          |     | 非数字/非数字          |     |     |     |     | 非数字/非数字        |     |     |     |  |
| S = 2.0H                                          |     | 非数字/非数字          |     |     |     |     | 非数字/非数字        |     |     |     |  |
| Standard tables:                                  |     | BK0              |     |     |     |     | BK0            |     |     |     |  |
| Uncorrected UGR                                   |     | 负无穷大             |     |     |     |     | 负无穷大           |     |     |     |  |
|                                                   |     |                  |     |     |     |     |                |     |     |     |  |

UGR calculation is based on CIE Publ. 117 ,S/H = 0.25



| RHOC | 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    | 1.19                                   | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.10 | 1.10 | 1.10 | 1.05 | 1.05 | 1.05 | 1.00 | 1.00 | 1.00 | 0.98 |
| 1    | 1.06                                   | 1.02 | 0.99 | 1.03 | 1.00 | 0.97 | 0.99 | 0.96 | 0.93 | 0.94 | 0.92 | 0.90 | 0.91 | 0.89 | 0.87 | 0.85 |
| 2    | 0.94                                   | 0.88 | 0.83 | 0.92 | 0.87 | 0.82 | 0.88 | 0.84 | 0.80 | 0.85 | 0.81 | 0.78 | 0.82 | 0.79 | 0.76 | 0.74 |
| 3    | 0.84                                   | 0.77 | 0.72 | 0.83 | 0.76 | 0.71 | 0.80 | 0.74 | 0.69 | 0.77 | 0.72 | 0.68 | 0.74 | 0.70 | 0.67 | 0.64 |
| 4    | 0.76                                   | 0.68 | 0.62 | 0.75 | 0.67 | 0.62 | 0.72 | 0.66 | 0.61 | 0.70 | 0.64 | 0.60 | 0.67 | 0.63 | 0.59 | 0.57 |
| 5    | 0.69                                   | 0.61 | 0.55 | 0.68 | 0.60 | 0.55 | 0.66 | 0.59 | 0.54 | 0.64 | 0.58 | 0.53 | 0.62 | 0.57 | 0.53 | 0.51 |
| 6    | 0.63                                   | 0.55 | 0.49 | 0.62 | 0.54 | 0.49 | 0.60 | 0.53 | 0.48 | 0.58 | 0.52 | 0.48 | 0.57 | 0.51 | 0.47 | 0.45 |
| 7    | 0.58                                   | 0.50 | 0.44 | 0.57 | 0.49 | 0.44 | 0.55 | 0.48 | 0.44 | 0.54 | 0.48 | 0.43 | 0.52 | 0.47 | 0.43 | 0.41 |
| 8    | 0.53                                   | 0.45 | 0.40 | 0.52 | 0.45 | 0.40 | 0.51 | 0.44 | 0.40 | 0.50 | 0.44 | 0.39 | 0.48 | 0.43 | 0.39 | 0.37 |
| 9    | 0.49                                   | 0.42 | 0.37 | 0.49 | 0.41 | 0.36 | 0.47 | 0.41 | 0.36 | 0.46 | 0.40 | 0.36 | 0.45 | 0.40 | 0.36 | 0.34 |
| 10   | 0.46                                   | 0.38 | 0.33 | 0.45 | 0.38 | 0.33 | 0.44 | 0.38 | 0.33 | 0.43 | 0.37 | 0.33 | 0.42 | 0.37 | 0.33 | 0.31 |





Luminaire Lumens:

FL=138.61,FM=177.34,FH=41.1,FVH=6.95

BL=135.27,BM=165.63,BH=37.5,BVH=4.8

UL=3.18,UH=10.7

BUG Rating:B1-U2-G0

## 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    | 353.98 | 370.13 | 357.47 | 354.42 | 325.17 | 311.64 | 277.16 | 257.08 | 217.80 |
| 22.5   | 353.54 | 366.64 | 378.86 | 365.33 | 347.87 | 310.33 | 276.29 | 235.26 | 207.33 |
| 45.0   | 367.95 | 372.75 | 373.19 | 368.82 | 344.82 | 308.59 | 298.55 | 236.57 | 197.72 |
| 67.5   | 379.73 | 375.37 | 358.35 | 361.40 | 348.74 | 310.33 | 275.42 | 237.88 | 195.54 |
| 90.0   | 381.92 | 364.46 | 356.60 | 345.25 | 323.86 | 304.22 | 260.14 | 226.97 | 197.29 |
| 112.5  | 371.44 | 359.22 | 368.38 | 346.56 | 340.45 | 298.99 | 270.18 | 237.88 | 200.78 |
| 135.0  | 379.30 | 388.46 | 367.08 | 349.18 | 316.44 | 301.17 | 258.39 | 230.90 | 191.61 |
| 157.5  | 370.13 | 362.27 | 354.42 | 337.83 | 323.43 | 304.22 | 267.56 | 232.20 | 189.87 |
| 180.0  | 353.98 | 358.78 | 363.15 | 340.89 | 319.94 | 298.11 | 265.81 | 231.77 | 191.61 |
| 202.5  | 353.54 | 367.95 | 361.40 | 339.58 | 329.97 | 307.28 | 264.07 | 217.80 | 184.19 |
| 225.0  | 367.95 | 375.37 | 369.69 | 340.45 | 326.05 | 296.37 | 274.11 | 228.71 | 180.70 |
| 247.5  | 379.73 | 360.96 | 366.20 | 359.22 | 347.00 | 308.15 | 270.61 | 246.17 | 186.81 |
| 270.0  | 381.92 | 371.00 | 366.64 | 352.67 | 326.92 | 306.41 | 276.73 | 244.86 | 210.38 |
| 292.5  | 371.44 | 377.11 | 349.62 | 356.60 | 339.14 | 312.08 | 276.29 | 244.43 | 216.06 |
| 315.0  | 379.30 | 375.80 | 357.91 | 360.09 | 336.96 | 302.48 | 284.58 | 237.88 | 203.40 |
| 337.5  | 370.13 | 378.42 | 368.38 | 356.16 | 350.49 | 311.21 | 291.13 | 246.17 | 217.80 |
| 360.0  | 353.98 | 370.13 | 357.47 | 354.42 | 325.17 | 311.64 | 277.16 | 257.08 | 217.80 |
|        |        |        |        |        |        |        |        |        |        |
| C/γ(°) | 45.0   | 50.0   | 55.0   | 60.0   | 65.0   | 70.0   | 75.0   | 80.0   | 85.0   |
| 0.0    | 168.48 | 117.41 | 77.26  | 66.78  | 58.49  | 36.66  | 18.77  | 20.51  | 24.01  |
| 22.5   | 161.50 | 132.25 | 82.93  | 56.31  | 39.28  | 19.64  | 35.35  | 27.93  | 8.73   |
| 45.0   | 151.89 | 133.56 | 89.91  | 65.91  | 57.62  | 52.38  | 31.86  | 14.84  | 1.75   |
| 67.5   | 159.31 | 131.38 | 81.62  | 53.69  | 52.81  | 26.62  | 44.08  | 24.01  | 29.68  |
| 90.0   | 138.36 | 100.83 | 82.49  | 58.05  | 39.28  | 35.35  | 35.35  | 12.66  | 6.55   |
| 112.5  | 163.24 | 116.98 | 74.20  | 53.25  | 53.69  | 34.05  | 21.82  | 6.98   | 6.98   |
| 135.0  | 137.49 | 120.47 | 76.38  | 63.29  | 49.32  | 29.68  | 17.90  | 13.09  | 4.37   |
| 157.5  | 141.85 | 121.78 | 70.71  | 51.50  | 46.27  | 34.92  | 32.30  | 10.04  | 2.62   |
| 180.0  | 131.38 | 102.57 | 72.89  | 64.16  | 43.21  | 32.30  | 32.74  | 16.59  | 13.97  |
| 202.5  | 147.09 | 109.99 | 78.13  | 60.23  | 49.32  | 38.85  | 28.81  | 5.24   | 21.39  |
| 225.0  | 151.89 | 114.36 | 82.93  | 61.54  | 51.50  | 35.79  | 22.70  | 29.24  | 5.24   |
| 247.5  | 154.51 | 113.92 | 81.62  | 51.07  | 54.12  | 48.89  | 23.57  | 24.44  | 7.86   |
| 270.0  | 154.95 | 85.55  | 79.44  | 79.00  | 50.63  | 36.23  | 20.95  | 9.17   | 13.53  |
| 292.5  | 152.33 | 130.51 | 89.48  | 64.16  | 44.96  | 26.63  | 30.99  | 13.97  | 20.51  |
| 315.0  | 164.99 | 132.69 | 103.88 | 71.15  | 61.98  | 50.63  | 44.52  | 17.46  | 13.53  |
| 337.5  | 176.34 | 120.03 | 84.68  | 78.57  | 47.14  | 48.89  | 32.74  | 25.75  | 21.82  |
| 360.0  | 168.48 | 117.41 | 77.26  | 66.78  | 58.49  | 36.66  | 18.77  | 20.51  | 24.01  |
|        |        |        |        |        |        |        |        |        |        |
| C/γ(°) | 90.0   | 95.0   | 100.0  | 105.0  | 110.0  | 115.0  | 120.0  | 125.0  | 130.0  |
| 0.0    | 4.80   | 0.00   | 2.18   | 5.67   | 0.00   | 1.31   | 0.00   | 0.00   | 7.86   |
| 22.5   | 3.49   | 0.00   | 11.35  | 0.00   | 0.00   | 0.00   | 12.22  | 0.00   | 2.18   |
| 45.0   | 0.00   | 3.49   | 6.98   | 0.00   | 0.00   | 9.17   | 3.93   | 0.00   | 0.00   |
| 67.5   | 0.00   | 0.00   | 4.80   | 0.00   | 1.31   | 6.11   | 0.87   | 0.00   | 6.55   |
| 90.0   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 7.42   |
| 112.5  | 13.97  | 0.00   | 9.60   | 3.93   | 1.31   | 0.00   | 0.00   | 0.00   | 0.00   |
| 135.0  | 1.75   | 0.00   | 0.00   | 0.00   | 3.49   | 0.00   | 0.00   | 0.00   | 4.36   |
| 157.5  | 0.00   | 13.09  | 0.00   | 0.00   | 0.00   | 2.18   | 11.35  | 2.18   | 0.00   |
| 180.0  | 0.00   | 12.66  | 0.00   | 0.00   | 5.24   | 0.00   | 0.00   | 0.00   | 0.00   |
| 202.5  | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 5.67   | 0.00   | 9.60   | 0.00   |
| 225.0  | 3.93   | 0.00   | 1.31   | 0.00   | 3.05   | 0.00   | 0.00   | 7.86   | 3.49   |
| 247.5  | 5.24   | 2.62   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.87   | 6.55   |
| 270.0  | 0.00   | 6.98   | 0.87   | 2.18   | 0.00   | 1.31   | 0.00   | 0.00   | 0.00   |
| 292.5  | 0.87   | 5.67   | 0.00   | 0.00   | 0.00   | 0.00   | 6.98   | 12.22  | 15.71  |
| 315.0  | 0.00   | 3.06   | 0.00   | 0.00   | 0.00   | 0.00   | 6.55   | 0.00   | 0.00   |
| 337.5  | 3.49   | 8.29   | 0.00   | 0.00   | 0.00   | 3.49   | 0.00   | 0.00   | 0.00   |
| 360.0  | 4.80   | 0.00   | 2.18   | 5.67   | 0.00   | 1.31   | 0.00   | 0.00   | 7.86   |

Intensity data(cd)

Appendix Page: 17 Total:17

| C/γ(°) | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0    | 1.75  | 0.00  | 0.00  | 0.00  | 9.60  | 0.00  | 4.36  | 0.00  | 0.00  |
| 22.5   | 11.79 | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 5.24  | 0.00  |
| 45.0   | 0.00  | 5.24  | 0.00  | 6.55  | 0.00  | 0.00  | 0.00  | 0.87  | 0.00  |
| 67.5   | 24.44 | 0.87  | 0.87  | 0.00  | 3.06  | 0.00  | 0.00  | 13.97 | 0.00  |
| 90.0   | 0.00  | 0.00  | 9.17  | 12.66 | 13.53 | 0.87  | 0.00  | 6.98  | 8.29  |
| 112.5  | 3.93  | 1.31  | 0.00  | 11.79 | 0.00  | 0.00  | 0.00  | 0.44  | 0.00  |
| 135.0  | 0.00  | 1.75  | 0.00  | 0.00  | 0.00  | 0.00  | 3.05  | 0.00  | 0.00  |
| 157.5  | 0.00  | 0.00  | 0.00  | 4.80  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 180.0  | 0.00  | 0.00  | 0.00  | 0.00  | 6.11  | 0.00  | 0.00  | 3.06  | 0.44  |
| 202.5  | 6.98  | 1.31  | 0.00  | 0.00  | 0.00  | 6.11  | 0.00  | 3.06  | 0.00  |
| 225.0  | 7.86  | 0.00  | 0.00  | 0.44  | 5.24  | 0.00  | 0.00  | 0.00  | 0.00  |
| 247.5  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.87  |
| 270.0  | 0.00  | 3.93  | 13.53 | 0.00  | 0.00  | 0.00  | 0.00  | 1.31  | 0.00  |
| 292.5  | 6.98  | 2.18  | 0.00  | 0.00  | 0.00  | 0.00  | 4.80  | 6.11  | 0.00  |
| 315.0  | 0.00  | 0.00  | 3.93  | 8.29  | 0.00  | 0.00  | 0.00  | 8.29  | 0.00  |
| 337.5  | 0.00  | 9.17  | 0.00  | 8.29  | 0.00  | 0.00  | 9.60  | 0.87  | 2.62  |
| 360.0  | 1.75  | 0.00  | 0.00  | 0.00  | 9.60  | 0.00  | 4.36  | 0.00  | 0.00  |

|        |       |
|--------|-------|
| C/γ(°) | 180.0 |
| 0.0    | 0.44  |
| 22.5   | 14.84 |
| 45.0   | 6.98  |
| 67.5   | 0.00  |
| 90.0   | 0.00  |
| 112.5  | 4.36  |
| 135.0  | 0.00  |
| 157.5  | 0.00  |
| 180.0  | 0.44  |
| 202.5  | 14.84 |
| 225.0  | 6.98  |
| 247.5  | 0.00  |
| 270.0  | 0.00  |
| 292.5  | 4.36  |
| 315.0  | 0.00  |
| 337.5  | 0.00  |
| 360.0  | 0.44  |