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NT

Client: NT

LumCAT: 1-1759-LM2

Luminaire: 92.70.492.00 LED HOLDER

Report No: 20251128-B007

Ballast type: AC

Test No: 20251218-C007

Voltage(V): 35.060

LampCAT: CITIZEN CLU028 LES9.8

Current(A): 0.362

Lamp flux(lm): 1573.0

Power (W): 12.691

Number of Lamps: 1

PF: 0.000

Length(mm): 50

Width(mm): 50

Phm Type: C

Height(mm): 22

#### Photometric Results

Lumens(lm): 1506.68, Efficiency(%): 95.78% , Luminous Efficacy(lm/W): 118.72

Central intensity(cd): 4189.163, Maximum intensity(cd): 4189.163

Angle of maximum intensity: C=0.0  $\gamma$ =0.0

Beam Angle(50%Imax): [C0/180]Total=24.0

[C90/270]Total=24.0

Field angle(10%Imax): [C0/180]Total=76.6

[C90/270]Total=76.6

Maximum s/h(1/2): C0\_180=0.40 C90\_270=0.40

Maximum s/h(1/4): C0\_180=0.44 C90\_270=0.44

Up flux rate of lamp(%): 0.00%

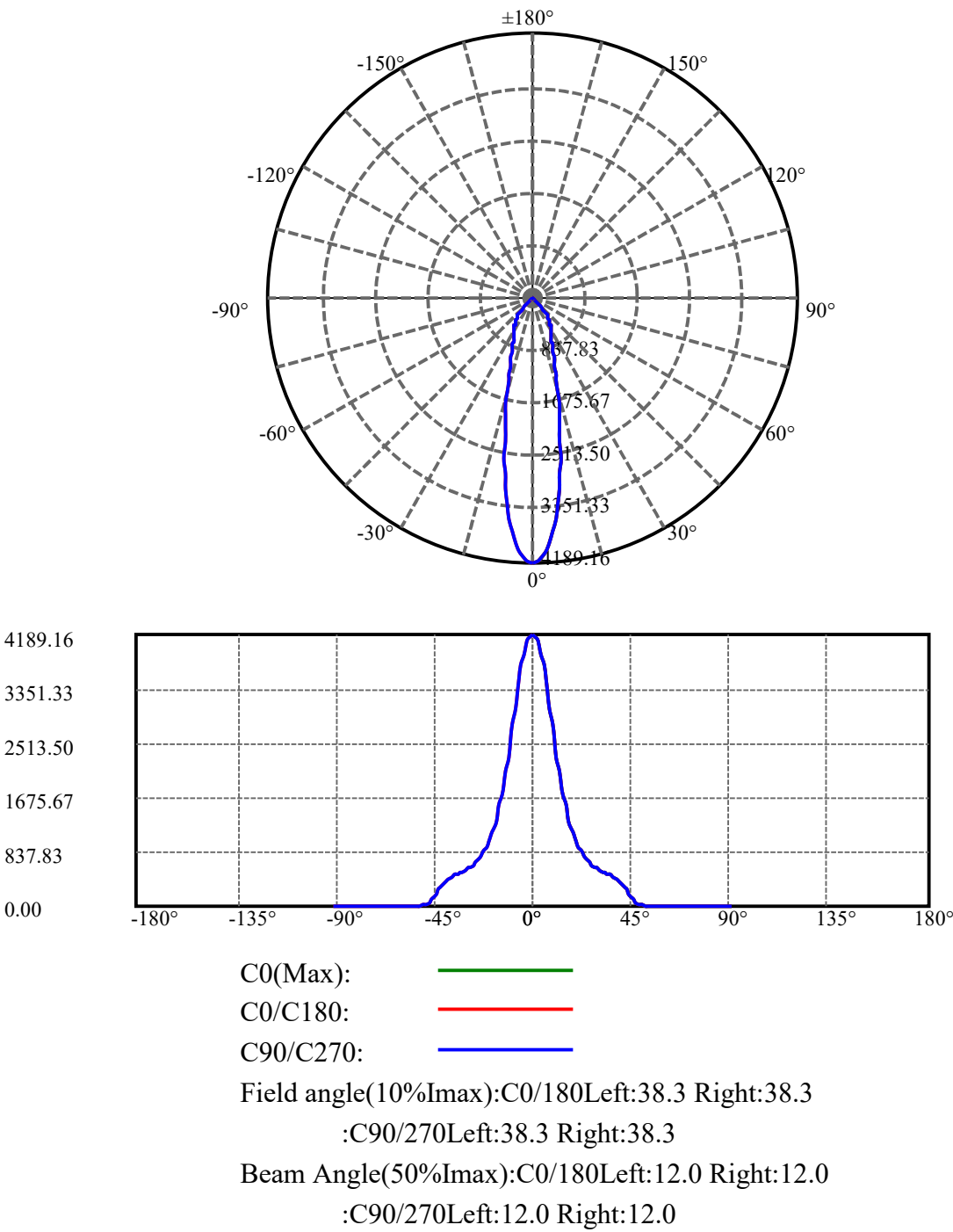
Down flux rate of lamp(%): 95.78%

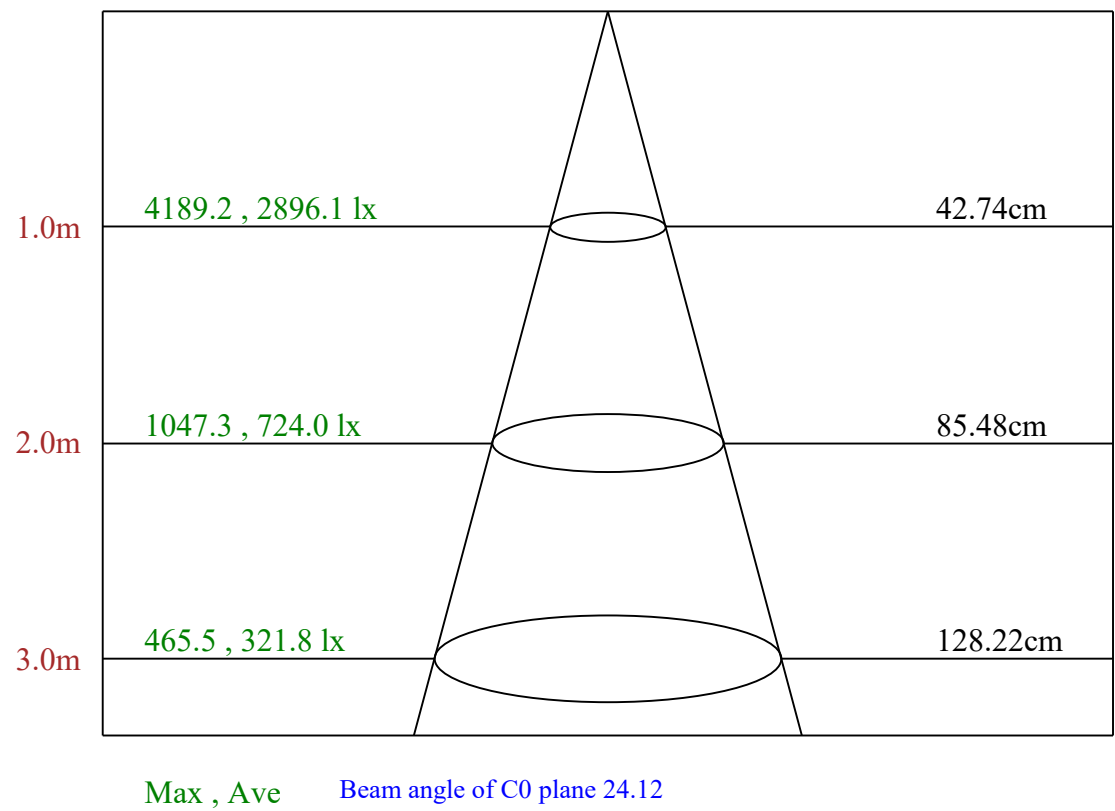
Up flux rate of LUM(%): - -

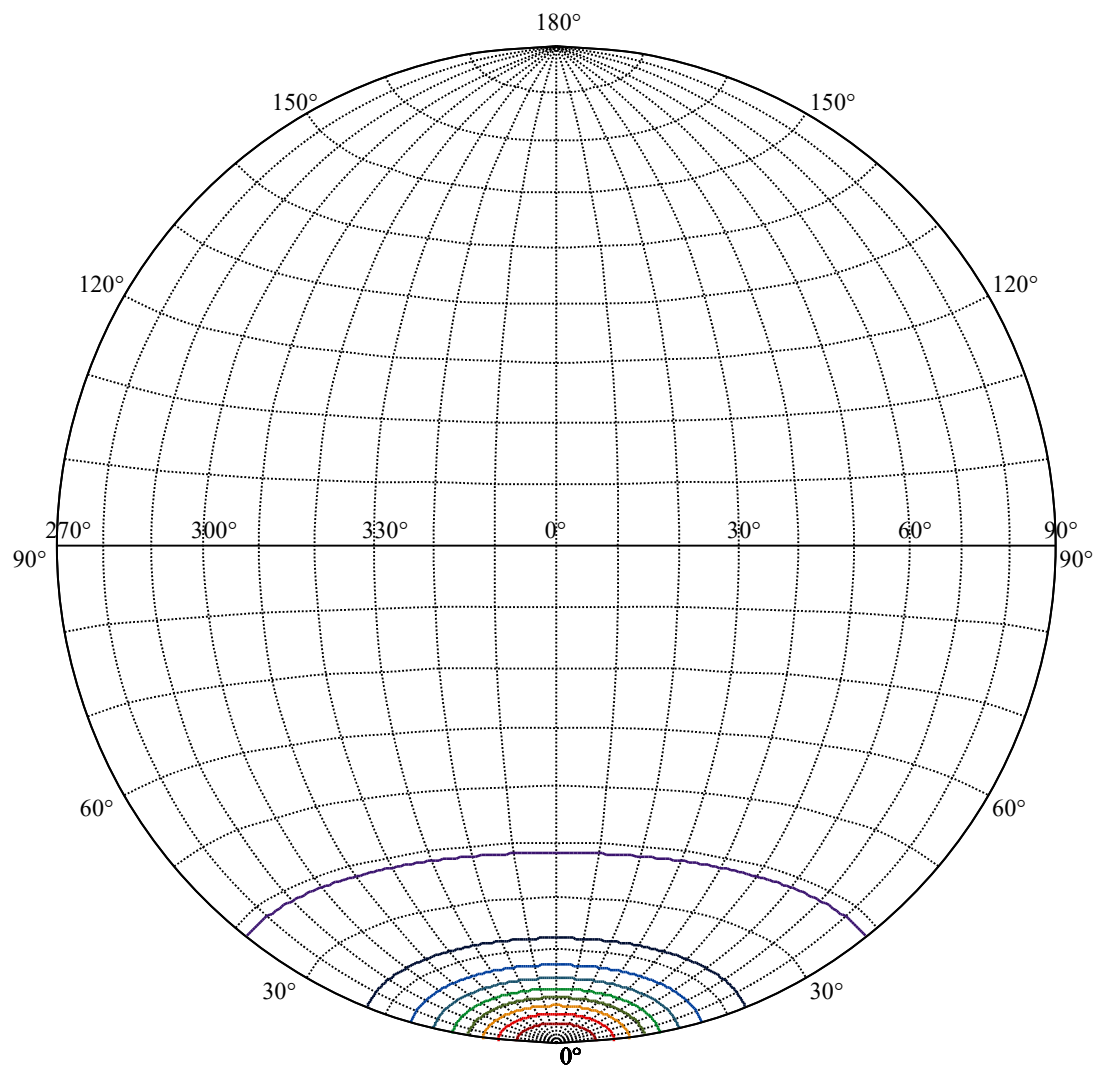
Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in  $\pi$  solid angle : 99.945%





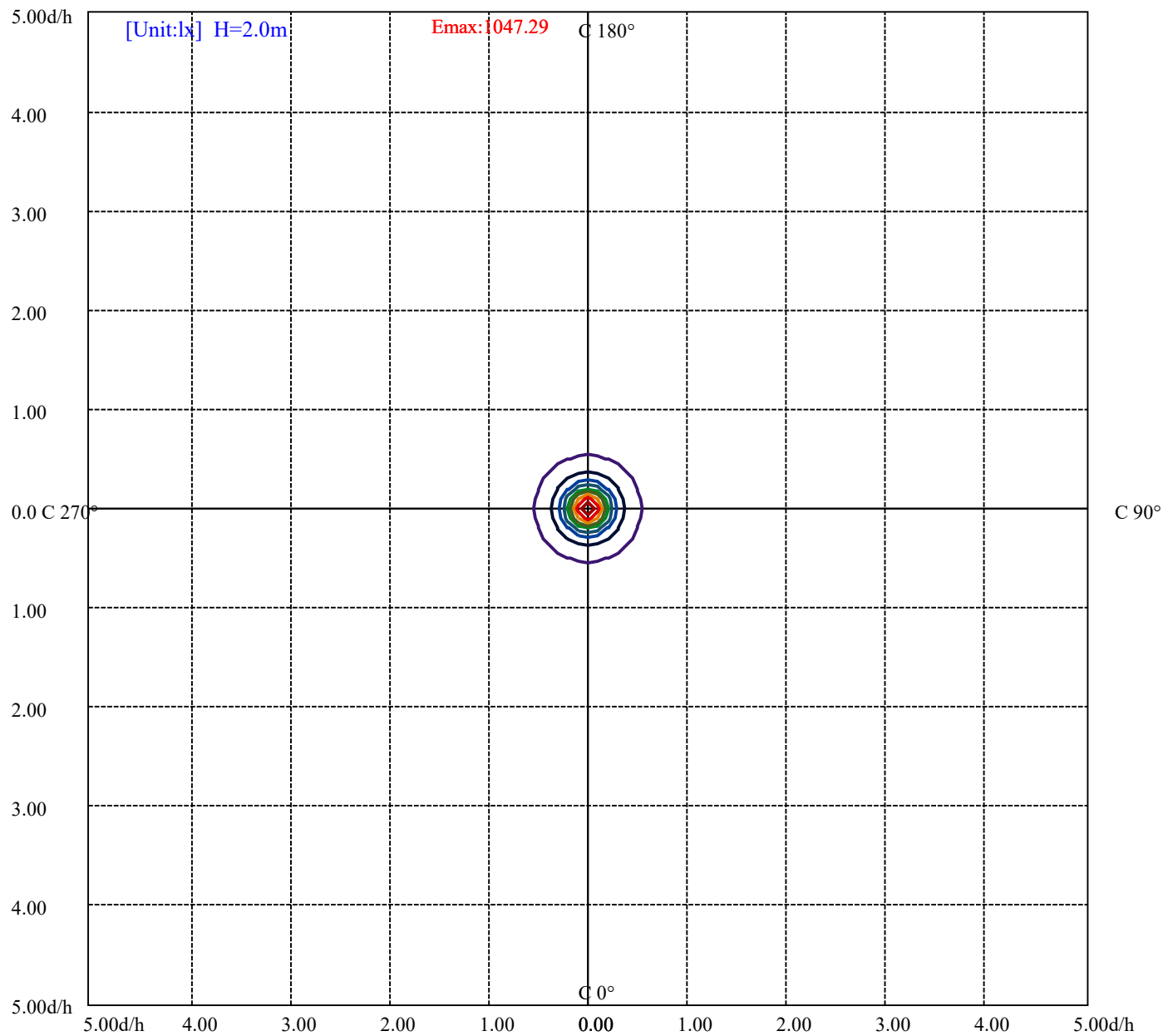


House

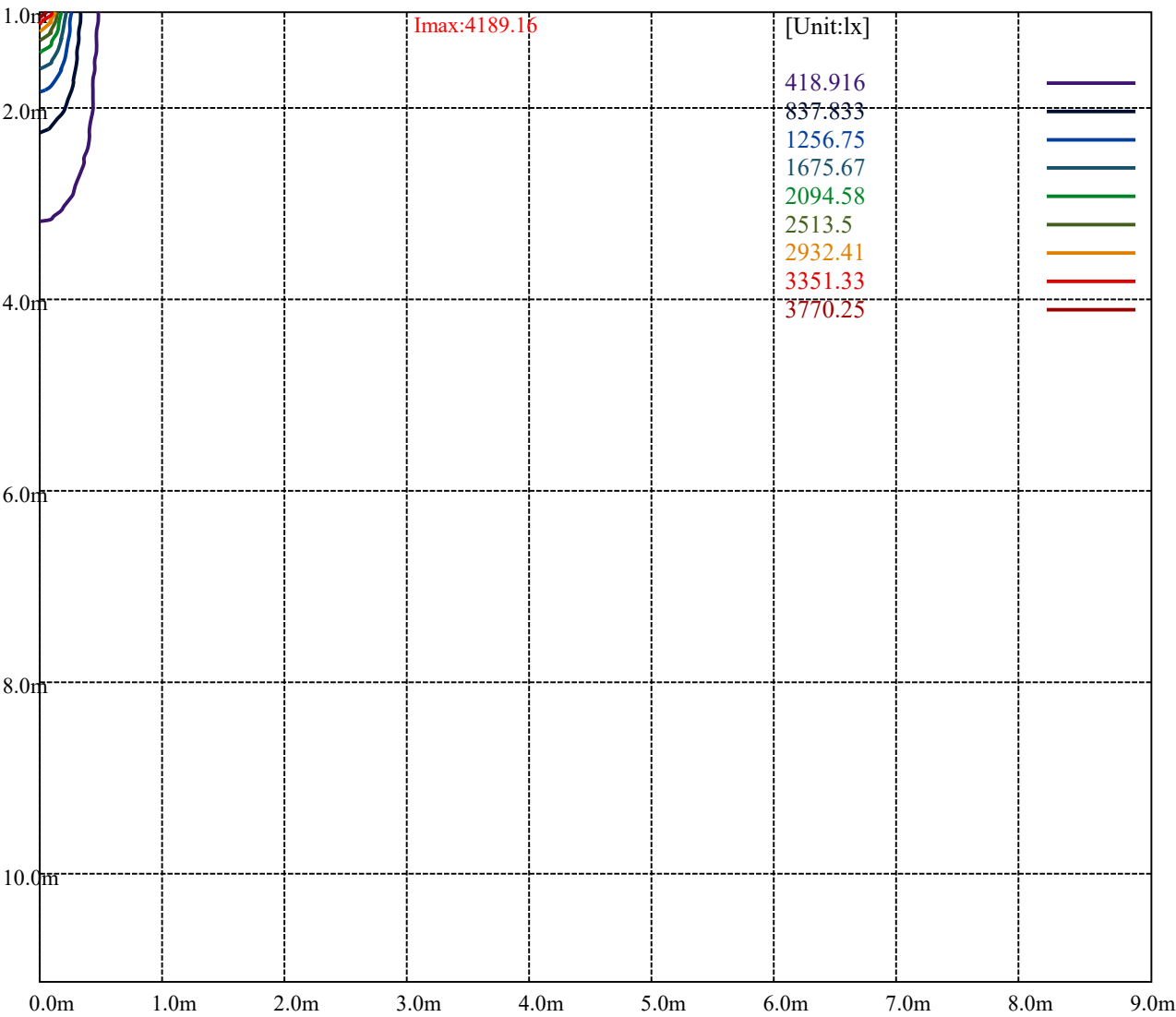
[Unit:cd]

Road

|                   |   |
|-------------------|---|
| Imax:4189.16      |   |
| (10%Imax) 418.916 | — |
| (20%Imax) 837.833 | — |
| (30%Imax) 1256.75 | — |
| (40%Imax) 1675.67 | — |
| (50%Imax) 2094.58 | — |
| (60%Imax) 2513.5  | — |
| (70%Imax) 2932.41 | — |
| (80%Imax) 3351.33 | — |
| (90%Imax) 3770.25 | — |



|           |          |  |
|-----------|----------|--|
| (10%Emax) | 104.729  |  |
| (20%Emax) | 209.458  |  |
| (30%Emax) | 314.1875 |  |
| (40%Emax) | 418.915  |  |
| (50%Emax) | 523.645  |  |
| (60%Emax) | 628.3725 |  |
| (70%Emax) | 733.1025 |  |
| (80%Emax) | 837.8325 |  |
| (90%Emax) | 942.56   |  |



Luminance Table

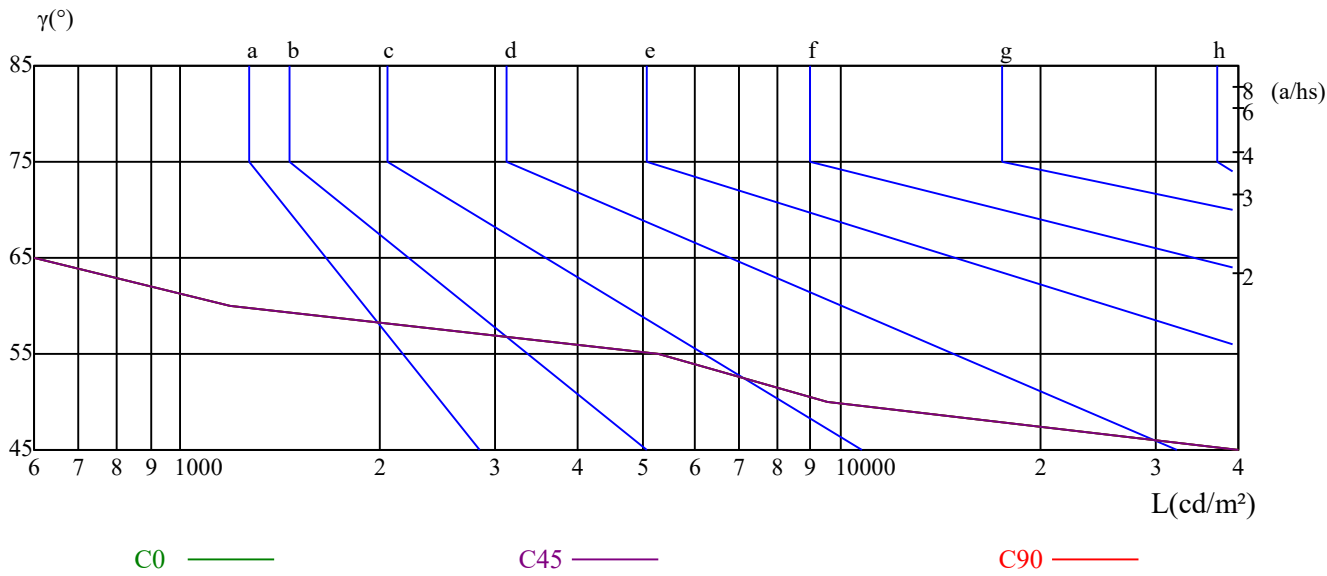
| $\gamma$ | 45    | 50   | 55   | 60   | 65  | 70  | 75  | 80  | 85  |
|----------|-------|------|------|------|-----|-----|-----|-----|-----|
| C0       | 80699 | 9552 | 5301 | 1187 | 373 | 247 | 185 | 162 | 355 |
| C45      | 80699 | 9552 | 5301 | 1187 | 373 | 247 | 185 | 162 | 355 |
| C90      | 80699 | 9552 | 5301 | 1187 | 373 | 247 | 185 | 162 | 355 |

| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 373        | 373        | 373     | 185        | 185        | 185     | 355        | 355        | 355     |

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          |

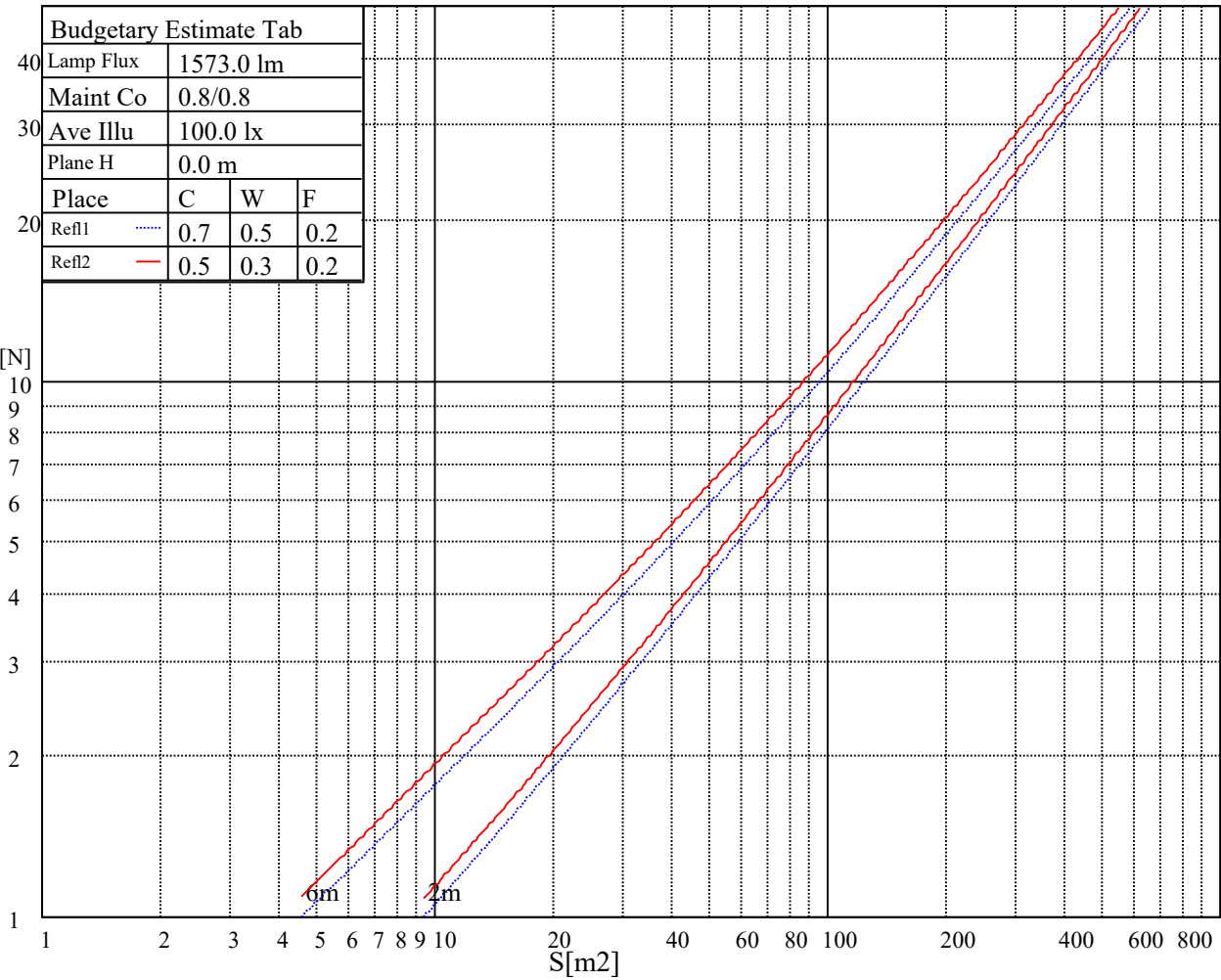
Luminance Limiting Curve



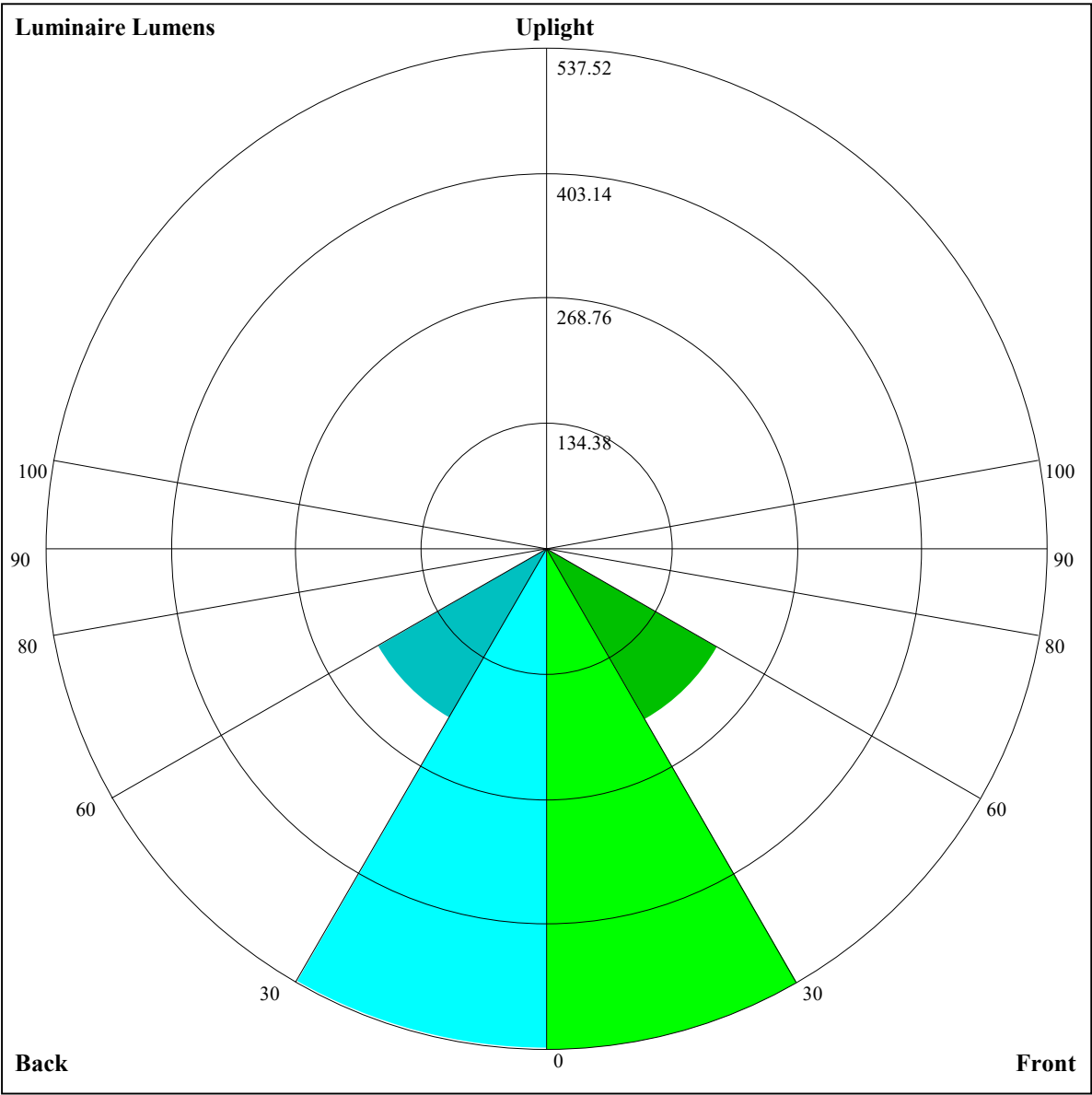
| Illumination assessment according UGR             |     |                  |       |       |       |       |                |       |       |       |       |
|---------------------------------------------------|-----|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| 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  | 23.85            | 24.84 | 24.22 | 25.15 | 25.47 | 23.60          | 24.59 | 23.96 | 24.90 | 25.21 |
|                                                   | 3H  | 23.65            | 24.52 | 24.04 | 24.86 | 25.21 | 23.40          | 24.27 | 23.78 | 24.61 | 24.95 |
|                                                   | 4H  | 23.55            | 24.35 | 23.95 | 24.71 | 25.08 | 23.29          | 24.10 | 23.69 | 24.45 | 24.82 |
|                                                   | 6H  | 23.46            | 24.19 | 23.88 | 24.57 | 24.97 | 23.20          | 23.94 | 23.62 | 24.32 | 24.71 |
|                                                   | 8H  | 23.38            | 24.08 | 23.80 | 24.47 | 24.88 | 23.13          | 23.83 | 23.55 | 24.21 | 24.62 |
|                                                   | 12H | 23.31            | 23.97 | 23.74 | 24.37 | 24.79 | 23.05          | 23.72 | 23.48 | 24.11 | 24.53 |
| 4H                                                | 2H  | 23.55            | 24.35 | 23.95 | 24.71 | 25.08 | 23.29          | 24.10 | 23.69 | 24.45 | 24.82 |
|                                                   | 3H  | 23.30            | 23.97 | 23.73 | 24.37 | 24.79 | 23.05          | 23.72 | 23.48 | 24.11 | 24.53 |
|                                                   | 4H  | 23.23            | 23.80 | 23.67 | 24.23 | 24.67 | 22.97          | 23.55 | 23.41 | 23.97 | 24.42 |
|                                                   | 6H  | 23.08            | 23.59 | 23.55 | 24.04 | 24.49 | 22.83          | 23.33 | 23.30 | 23.79 | 24.24 |
|                                                   | 8H  | 23.02            | 23.49 | 23.51 | 23.95 | 24.42 | 22.76          | 23.23 | 23.25 | 23.69 | 24.17 |
|                                                   | 12H | 22.97            | 23.40 | 23.46 | 23.85 | 24.37 | 22.71          | 23.14 | 23.20 | 23.60 | 24.12 |
| 8H                                                | 4H  | 23.02            | 23.49 | 23.51 | 23.95 | 24.42 | 22.76          | 23.23 | 23.25 | 23.69 | 24.17 |
|                                                   | 6H  | 22.86            | 23.24 | 23.36 | 23.72 | 24.23 | 22.60          | 22.99 | 23.11 | 23.47 | 23.98 |
|                                                   | 8H  | 22.84            | 23.16 | 23.37 | 23.68 | 24.18 | 22.58          | 22.91 | 23.12 | 23.43 | 23.93 |
|                                                   | 12H | 22.78            | 23.03 | 23.32 | 23.55 | 24.07 | 22.52          | 22.77 | 23.07 | 23.29 | 23.82 |
| 12H                                               | 4H  | 22.97            | 23.40 | 23.46 | 23.85 | 24.37 | 22.71          | 23.14 | 23.20 | 23.60 | 24.12 |
|                                                   | 6H  | 22.84            | 23.16 | 23.37 | 23.68 | 24.18 | 22.58          | 22.91 | 23.12 | 23.43 | 23.93 |
|                                                   | 8H  | 22.78            | 23.03 | 23.32 | 23.55 | 24.07 | 22.52          | 22.77 | 23.07 | 23.29 | 23.81 |
| Variation with the observer position at spacings: |     |                  |       |       |       |       |                |       |       |       |       |
| S = 1.0H                                          |     | 3.5/-18.5        |       |       |       |       | 3.5/-18.5      |       |       |       |       |
| S = 1.5H                                          |     | 5.6/-29.7        |       |       |       |       | 5.6/-29.7      |       |       |       |       |
| S = 2.0H                                          |     | 7.6/-32.5        |       |       |       |       | 7.6/-32.5      |       |       |       |       |
| Standard tables:                                  |     | BK0              |       |       |       |       | BK0            |       |       |       |       |
| Uncorrected UGR                                   |     | 4.3              |       |       |       |       | 4.3            |       |       |       |       |

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





| 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   | COEFFCIENTS OF UTILIZATION RHOFC=20 CU |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 0     | 1.14                                   | 1.14 | 1.14 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | 0.98 | 0.98 | 0.98 | 0.96 |
| 1     | 1.07                                   | 1.04 | 1.02 | 1.05 | 1.03 | 1.01 | 1.01 | 0.99 | 0.98 | 0.97 | 0.96 | 0.95 | 0.94 | 0.93 | 0.92 | 0.90 |
| 2     | 1.00                                   | 0.96 | 0.93 | 0.98 | 0.95 | 0.92 | 0.95 | 0.93 | 0.90 | 0.92 | 0.90 | 0.88 | 0.90 | 0.88 | 0.86 | 0.85 |
| 3     | 0.94                                   | 0.89 | 0.86 | 0.92 | 0.88 | 0.85 | 0.90 | 0.87 | 0.84 | 0.88 | 0.85 | 0.82 | 0.86 | 0.83 | 0.81 | 0.80 |
| 4     | 0.88                                   | 0.83 | 0.80 | 0.87 | 0.83 | 0.79 | 0.85 | 0.81 | 0.78 | 0.83 | 0.80 | 0.77 | 0.82 | 0.79 | 0.76 | 0.75 |
| 5     | 0.83                                   | 0.78 | 0.74 | 0.82 | 0.78 | 0.74 | 0.81 | 0.77 | 0.73 | 0.79 | 0.76 | 0.73 | 0.78 | 0.75 | 0.72 | 0.71 |
| 6     | 0.79                                   | 0.74 | 0.70 | 0.78 | 0.73 | 0.69 | 0.77 | 0.72 | 0.69 | 0.75 | 0.71 | 0.69 | 0.74 | 0.71 | 0.68 | 0.67 |
| 7     | 0.75                                   | 0.69 | 0.66 | 0.74 | 0.69 | 0.66 | 0.73 | 0.68 | 0.65 | 0.72 | 0.68 | 0.65 | 0.71 | 0.67 | 0.65 | 0.63 |
| 8     | 0.71                                   | 0.66 | 0.62 | 0.71 | 0.66 | 0.62 | 0.69 | 0.65 | 0.62 | 0.69 | 0.64 | 0.62 | 0.68 | 0.64 | 0.61 | 0.60 |
| 9     | 0.68                                   | 0.63 | 0.59 | 0.67 | 0.62 | 0.59 | 0.66 | 0.62 | 0.59 | 0.66 | 0.61 | 0.59 | 0.65 | 0.61 | 0.58 | 0.57 |
| 10    | 0.65                                   | 0.60 | 0.56 | 0.64 | 0.59 | 0.56 | 0.64 | 0.59 | 0.56 | 0.63 | 0.59 | 0.56 | 0.62 | 0.58 | 0.56 | 0.55 |



Luminaire Lumens:

FL=537.52,FM=211.77,FH=0.35,FVH=0.05

BL=535.93,BM=209.1,BH=0.35,BVH=0.06

UL=0,UH=0

BUG Rating:B2-U0-G0

## Intensity data(cd)

Appendix Page: 12 Total:14

| C/γ(°) | 0.0     | 1.0     | 2.0     | 3.0     | 4.0     | 5.0     | 6.0     | 7.0     | 8.0     |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0.0    | 4200.13 | 4139.38 | 4109.57 | 3985.26 | 3903.69 | 3667.44 | 3425.01 | 3292.82 | 3059.38 |
| 45.0   | 4177.63 | 4192.26 | 4174.82 | 4112.94 | 4009.44 | 3867.69 | 3764.19 | 3521.19 | 3284.38 |
| 90.0   | 4192.26 | 4168.63 | 4054.44 | 3893.57 | 3791.76 | 3592.63 | 3363.13 | 3109.44 | 2784.88 |
| 135.0  | 4186.63 | 4183.26 | 4139.94 | 4058.94 | 3993.13 | 3823.82 | 3648.32 | 3443.01 | 3215.76 |
| 180.0  | 4200.13 | 4187.76 | 4161.32 | 4069.63 | 3955.44 | 3805.26 | 3623.57 | 3501.51 | 3236.57 |
| 225.0  | 4177.63 | 4084.82 | 3940.26 | 3848.01 | 3661.82 | 3445.26 | 3201.69 | 2884.44 | 2725.26 |
| 270.0  | 4192.26 | 4192.82 | 4143.88 | 4053.32 | 3923.38 | 3825.51 | 3587.57 | 3354.69 | 3096.51 |
| 315.0  | 4186.63 | 4140.51 | 4096.63 | 3994.26 | 3757.44 | 3647.76 | 3441.32 | 3211.26 | 2967.13 |
| 360.0  | 4200.13 | 4139.38 | 4109.57 | 3985.26 | 3903.69 | 3667.44 | 3425.01 | 3292.82 | 3059.38 |
| C/γ(°) | 9.0     | 10.0    | 11.0    | 12.0    | 13.0    | 14.0    | 15.0    | 16.0    | 17.0    |
| 0.0    | 2818.63 | 2580.13 | 2309.01 | 2181.32 | 1982.76 | 1801.63 | 1607.57 | 1466.38 | 1388.19 |
| 45.0   | 3028.44 | 2712.88 | 2452.44 | 2302.82 | 1976.57 | 1851.69 | 1628.94 | 1466.94 | 1325.76 |
| 90.0   | 2621.76 | 2355.69 | 2109.32 | 1887.13 | 1653.69 | 1549.63 | 1394.38 | 1053.00 | 1053.00 |
| 135.0  | 3069.51 | 2778.13 | 2442.32 | 2303.94 | 2046.32 | 1852.82 | 1680.69 | 1526.57 | 1441.63 |
| 180.0  | 3001.44 | 2761.26 | 2476.63 | 2253.88 | 2048.57 | 1861.26 | 1756.63 | 1568.19 | 1429.26 |
| 225.0  | 2463.13 | 2215.63 | 1988.38 | 1745.38 | 1636.82 | 1474.26 | 1333.07 | 1068.47 | 1068.47 |
| 270.0  | 2770.82 | 2660.57 | 2338.26 | 1998.51 | 1869.13 | 1637.38 | 1469.76 | 1322.94 | 1198.07 |
| 315.0  | 2670.13 | 2525.01 | 2292.69 | 2075.01 | 1877.01 | 1668.32 | 1573.82 | 1377.51 | 1098.79 |
| 360.0  | 2818.63 | 2580.13 | 2309.01 | 2181.32 | 1982.76 | 1801.63 | 1607.57 | 1466.38 | 1388.19 |
| C/γ(°) | 18.0    | 19.0    | 20.0    | 21.0    | 22.0    | 23.0    | 24.0    | 25.0    | 26.0    |
| 0.0    | 1096.54 | 1096.54 | 1078.54 | 996.19  | 884.98  | 848.64  | 794.25  | 746.61  | 705.83  |
| 45.0   | 1201.44 | 1136.19 | 1020.88 | 939.32  | 869.01  | 807.69  | 746.38  | 703.07  | 665.94  |
| 90.0   | 1053.00 | 966.15  | 877.73  | 816.24  | 783.79  | 718.20  | 671.91  | 651.43  | 621.90  |
| 135.0  | 1290.32 | 1178.94 | 1083.32 | 982.07  | 952.26  | 870.13  | 811.63  | 761.01  | 709.26  |
| 180.0  | 1306.07 | 1196.94 | 1137.88 | 1030.44 | 924.69  | 885.32  | 815.57  | 764.38  | 719.94  |
| 225.0  | 1013.85 | 932.68  | 850.05  | 813.88  | 760.16  | 689.74  | 667.41  | 634.67  | 606.60  |
| 270.0  | 1131.69 | 1015.26 | 932.57  | 861.69  | 800.38  | 739.63  | 712.63  | 658.63  | 638.94  |
| 315.0  | 1098.79 | 1098.79 | 1011.88 | 935.38  | 855.79  | 799.14  | 749.81  | 699.75  | 677.36  |
| 360.0  | 1096.54 | 1096.54 | 1078.54 | 996.19  | 884.98  | 848.64  | 794.25  | 746.61  | 705.83  |
| C/γ(°) | 27.0    | 28.0    | 29.0    | 30.0    | 31.0    | 32.0    | 33.0    | 34.0    | 35.0    |
| 0.0    | 663.24  | 644.46  | 615.83  | 590.51  | 568.29  | 544.33  | 533.08  | 515.36  | 498.77  |
| 45.0   | 645.69  | 611.38  | 586.63  | 565.82  | 546.69  | 536.57  | 517.44  | 503.94  | 491.01  |
| 90.0   | 596.42  | 574.09  | 550.97  | 540.56  | 525.21  | 511.26  | 498.09  | 483.30  | 471.54  |
| 135.0  | 672.13  | 638.94  | 610.82  | 595.63  | 568.07  | 549.51  | 530.94  | 514.63  | 495.51  |
| 180.0  | 681.69  | 660.88  | 625.44  | 598.44  | 575.38  | 554.57  | 543.32  | 521.94  | 498.88  |
| 225.0  | 581.96  | 556.93  | 545.51  | 528.58  | 513.56  | 499.50  | 484.03  | 476.61  | 459.73  |
| 270.0  | 604.63  | 579.88  | 559.07  | 540.51  | 530.94  | 512.38  | 498.88  | 485.94  | 474.13  |
| 315.0  | 644.01  | 614.93  | 589.39  | 562.95  | 551.03  | 532.52  | 515.25  | 498.99  | 481.39  |
| 360.0  | 663.24  | 644.46  | 615.83  | 590.51  | 568.29  | 544.33  | 533.08  | 515.36  | 498.77  |
| C/γ(°) | 36.0    | 37.0    | 38.0    | 39.0    | 40.0    | 41.0    | 42.0    | 43.0    | 44.0    |
| 0.0    | 480.77  | 461.36  | 433.18  | 397.74  | 346.67  | 319.22  | 271.52  | 222.75  | 174.21  |
| 45.0   | 478.63  | 471.32  | 455.57  | 424.63  | 406.07  | 362.76  | 320.57  | 294.13  | 294.13  |
| 90.0   | 459.17  | 432.96  | 414.34  | 379.41  | 338.23  | 295.65  | 241.99  | 214.65  | 152.94  |
| 135.0  | 482.01  | 465.13  | 451.07  | 412.82  | 375.13  | 332.38  | 287.94  | 287.94  | 195.53  |
| 180.0  | 490.44  | 470.76  | 446.57  | 413.94  | 375.69  | 349.82  | 295.26  | 295.26  | 240.41  |
| 225.0  | 450.23  | 422.27  | 389.98  | 351.84  | 309.77  | 255.26  | 227.14  | 180.96  | 136.01  |
| 270.0  | 466.82  | 446.57  | 424.63  | 406.63  | 364.44  | 323.38  | 298.63  | 298.63  | 190.80  |
| 315.0  | 467.83  | 447.13  | 409.28  | 386.78  | 345.49  | 301.22  | 255.21  | 200.48  | 173.36  |
| 360.0  | 480.77  | 461.36  | 433.18  | 397.74  | 346.67  | 319.22  | 271.52  | 222.75  | 174.21  |

## Intensity data(cd)

| C/ $\gamma$ (°) | 45.0   | 46.0   | 47.0  | 48.0  | 49.0  | 50.0  | 51.0  | 52.0  | 53.0  |
|-----------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0.0             | 120.09 | 95.74  | 49.22 | 24.53 | 19.97 | 13.78 | 11.48 | 9.56  | 7.88  |
| 45.0            | 241.14 | 135.06 | 93.94 | 71.27 | 35.94 | 19.13 | 12.04 | 10.24 | 9.06  |
| 90.0            | 104.01 | 88.76  | 49.44 | 25.48 | 13.89 | 10.91 | 9.90  | 8.55  | 7.59  |
| 135.0           | 151.37 | 126.39 | 80.44 | 48.71 | 27.56 | 17.27 | 15.47 | 13.67 | 11.81 |
| 180.0           | 150.98 | 108.34 | 72.17 | 44.27 | 32.63 | 19.91 | 17.27 | 15.36 | 13.50 |
| 225.0           | 95.85  | 54.56  | 30.66 | 19.01 | 15.41 | 14.46 | 12.77 | 11.59 | 10.58 |
| 270.0           | 147.21 | 105.86 | 83.03 | 45.06 | 23.57 | 14.12 | 12.21 | 11.03 | 9.28  |
| 315.0           | 130.61 | 90.96  | 50.46 | 27.45 | 19.69 | 13.22 | 10.74 | 9.79  | 8.61  |
| 360.0           | 120.09 | 95.74  | 49.22 | 24.53 | 19.97 | 13.78 | 11.48 | 9.56  | 7.88  |
| C/ $\gamma$ (°) | 54.0   | 55.0   | 56.0  | 57.0  | 58.0  | 59.0  | 60.0  | 61.0  | 62.0  |
| 0.0             | 7.14   | 5.85   | 4.61  | 2.98  | 2.42  | 2.25  | 1.80  | 1.24  | 1.13  |
| 45.0            | 7.37   | 6.24   | 5.29  | 4.22  | 2.08  | 1.80  | 1.46  | 1.35  | 1.07  |
| 90.0            | 6.81   | 5.57   | 4.44  | 1.86  | 1.41  | 1.35  | 1.13  | 0.96  | 0.73  |
| 135.0           | 11.19  | 9.84   | 9.23  | 3.49  | 2.14  | 2.08  | 1.74  | 1.46  | 1.13  |
| 180.0           | 12.94  | 11.14  | 7.88  | 5.01  | 2.31  | 1.97  | 1.74  | 1.41  | 1.29  |
| 225.0           | 9.28   | 8.16   | 2.08  | 1.58  | 1.35  | 1.18  | 1.01  | 0.84  | 0.51  |
| 270.0           | 8.38   | 7.59   | 6.19  | 5.46  | 1.74  | 1.41  | 1.35  | 1.01  | 0.84  |
| 315.0           | 7.54   | 6.41   | 3.83  | 2.53  | 2.31  | 1.91  | 1.63  | 1.24  | 0.96  |
| 360.0           | 7.14   | 5.85   | 4.61  | 2.98  | 2.42  | 2.25  | 1.80  | 1.24  | 1.13  |
| C/ $\gamma$ (°) | 63.0   | 64.0   | 65.0  | 66.0  | 67.0  | 68.0  | 69.0  | 70.0  | 71.0  |
| 0.0             | 0.79   | 0.51   | 0.45  | 0.34  | 0.34  | 0.28  | 0.34  | 0.28  | 0.23  |
| 45.0            | 0.90   | 0.68   | 0.45  | 0.39  | 0.34  | 0.23  | 0.28  | 0.23  | 0.17  |
| 90.0            | 0.51   | 0.45   | 0.28  | 0.28  | 0.28  | 0.28  | 0.23  | 0.17  | 0.17  |
| 135.0           | 0.90   | 0.68   | 0.45  | 0.45  | 0.34  | 0.34  | 0.28  | 0.23  | 0.28  |
| 180.0           | 0.90   | 0.68   | 0.51  | 0.39  | 0.39  | 0.34  | 0.28  | 0.28  | 0.23  |
| 225.0           | 0.45   | 0.39   | 0.23  | 0.28  | 0.23  | 0.23  | 0.17  | 0.17  | 0.11  |
| 270.0           | 0.68   | 0.51   | 0.45  | 0.34  | 0.23  | 0.23  | 0.17  | 0.17  | 0.17  |
| 315.0           | 0.62   | 0.45   | 0.34  | 0.34  | 0.28  | 0.23  | 0.23  | 0.17  | 0.23  |
| 360.0           | 0.79   | 0.51   | 0.45  | 0.34  | 0.34  | 0.28  | 0.34  | 0.28  | 0.23  |
| C/ $\gamma$ (°) | 72.0   | 73.0   | 74.0  | 75.0  | 76.0  | 77.0  | 78.0  | 79.0  | 80.0  |
| 0.0             | 0.17   | 0.23   | 0.17  | 0.17  | 0.17  | 0.11  | 0.06  | 0.11  | 0.06  |
| 45.0            | 0.23   | 0.17   | 0.17  | 0.06  | 0.11  | 0.11  | 0.06  | 0.11  | 0.06  |
| 90.0            | 0.17   | 0.11   | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.06  | 0.06  |
| 135.0           | 0.23   | 0.28   | 0.17  | 0.17  | 0.17  | 0.11  | 0.17  | 0.11  | 0.11  |
| 180.0           | 0.23   | 0.23   | 0.17  | 0.23  | 0.17  | 0.11  | 0.17  | 0.11  | 0.17  |
| 225.0           | 0.11   | 0.11   | 0.11  | 0.06  | 0.06  | 0.06  | 0.06  | 0.00  | 0.00  |
| 270.0           | 0.17   | 0.11   | 0.11  | 0.06  | 0.11  | 0.11  | 0.06  | 0.00  | 0.06  |
| 315.0           | 0.11   | 0.17   | 0.17  | 0.11  | 0.11  | 0.11  | 0.11  | 0.06  | 0.06  |
| 360.0           | 0.17   | 0.23   | 0.17  | 0.17  | 0.17  | 0.11  | 0.06  | 0.11  | 0.06  |
| C/ $\gamma$ (°) | 81.0   | 82.0   | 83.0  | 84.0  | 85.0  | 86.0  | 87.0  | 88.0  | 89.0  |
| 0.0             | 0.11   | 0.06   | 0.11  | 0.06  | 0.06  | 0.17  | 0.11  | 0.11  | 0.11  |
| 45.0            | 0.06   | 0.11   | 0.06  | 0.00  | 0.06  | 0.06  | 0.06  | 0.06  | 0.06  |
| 90.0            | 0.06   | 0.06   | 0.06  | 0.06  | 0.11  | 0.11  | 0.17  | 0.28  | 0.34  |
| 135.0           | 0.17   | 0.11   | 0.11  | 0.17  | 0.17  | 0.17  | 0.28  | 0.34  | 0.45  |
| 180.0           | 0.11   | 0.11   | 0.11  | 0.11  | 0.11  | 0.11  | 0.11  | 0.17  | 0.23  |
| 225.0           | 0.00   | 0.06   | 0.00  | 0.00  | 0.00  | 0.06  | 0.06  | 0.06  | 0.06  |
| 270.0           | 0.00   | 0.00   | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  | 0.00  |
| 315.0           | 0.06   | 0.06   | 0.06  | 0.11  | 0.11  | 0.17  | 0.23  | 0.23  | 0.23  |
| 360.0           | 0.11   | 0.06   | 0.11  | 0.06  | 0.06  | 0.17  | 0.11  | 0.11  | 0.11  |

Intensity data(cd)

|                       |      |
|-----------------------|------|
| C/ $\gamma(^{\circ})$ | 90.0 |
| 0.0                   | 0.17 |
| 45.0                  | 0.11 |
| 90.0                  | 0.39 |
| 135.0                 | 0.56 |
| 180.0                 | 0.28 |
| 225.0                 | 0.06 |
| 270.0                 | 0.06 |
| 315.0                 | 0.23 |
| 360.0                 | 0.17 |