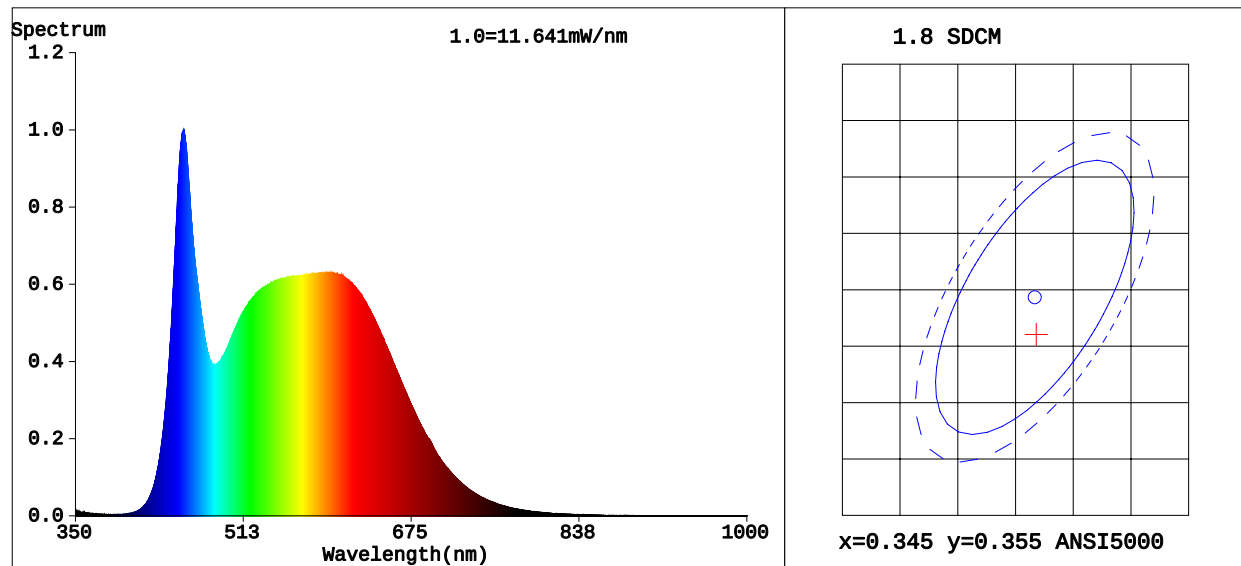


## Spectrum Test Report



## Color Parameters:

Chromaticity Coordinate:  $x=0.3448$   $y=0.3520$   $u'=0.2111$   $v'=0.4848$

CCT=5010K(Duv=0.0003) Dominant WL:Ld =572.3nm Purity=9.1%

Ratio:R=17.1% G=77.4% B=5.5% Peak WL:Lp=454.9nm FWHM=30.2nm

Render Index:Ra=92.2

|        |        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|--------|
| R1 =93 | R2 =97 | R3 =97 | R4 =91 | R5 =92 | R6 =93 | R7 =92 |        |
| R8 =84 | R9 =59 | R10=90 | R11=91 | R12=73 | R13=94 | R14=98 | R15=91 |

## Photo Parameters:

Flux = 498.3 lm Eff. : 103.38 lm/W Fe = 1.710 W

## Electrical parameters:

V = 120.05 V I = 0.05064 AP = 4.820 W PF = 0.7928

Status: Integral T = 1706 ms Ip = 54441 (83%)

Model:A19-5-E26-950-F-C  
Tester:SY  
Temperature:24.8Deg  
Manufacturer:RAB Lighting Inc.

Number:1  
Date:2018-10-11  
Humidity:45%  
Remarks:

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**RAB Lighting Inc.**

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Client:

LumCAT: A19-5-E26-950-F-C

Luminaire:

Report No:

Voltage(V): 120.0400

Test No: 255201-01-001

Current(A): 0.0500

LampCAT:

Power (W): 4.6740

Lamp flux(lm)

PF: 0.7784

Number of Lamps: 1

Ballast type:

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

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**Photometric Results**

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Lumens(lm): 548.95

Lumens(lm)/Power(W): 117.45

Central intensity(cd): 38.369

Maximum intensity(cd): 62.311

Angle of maximum intensity: C=247.5  $\gamma$ =70.0

Beam Angle(50%Imax): [C0/180]Total=272.1

[C90/270]Total=279.9

Field angle(10%Imax): [C0/180]Total=318.9

[C90/270]Total=347.5

Maximum s/h(1/2): C0\_180=1.58 C90\_270=2.05

Maximum s/h(1/4): C0\_180=1.93 C90\_270=2.09

Up flux rate of LUM(%): 40.61%

Down flux rate of LUM(%): 56.72%

CIE Type : General diffuse lighting

Output flux ratio in  $\pi$  solid angle : 28.320%

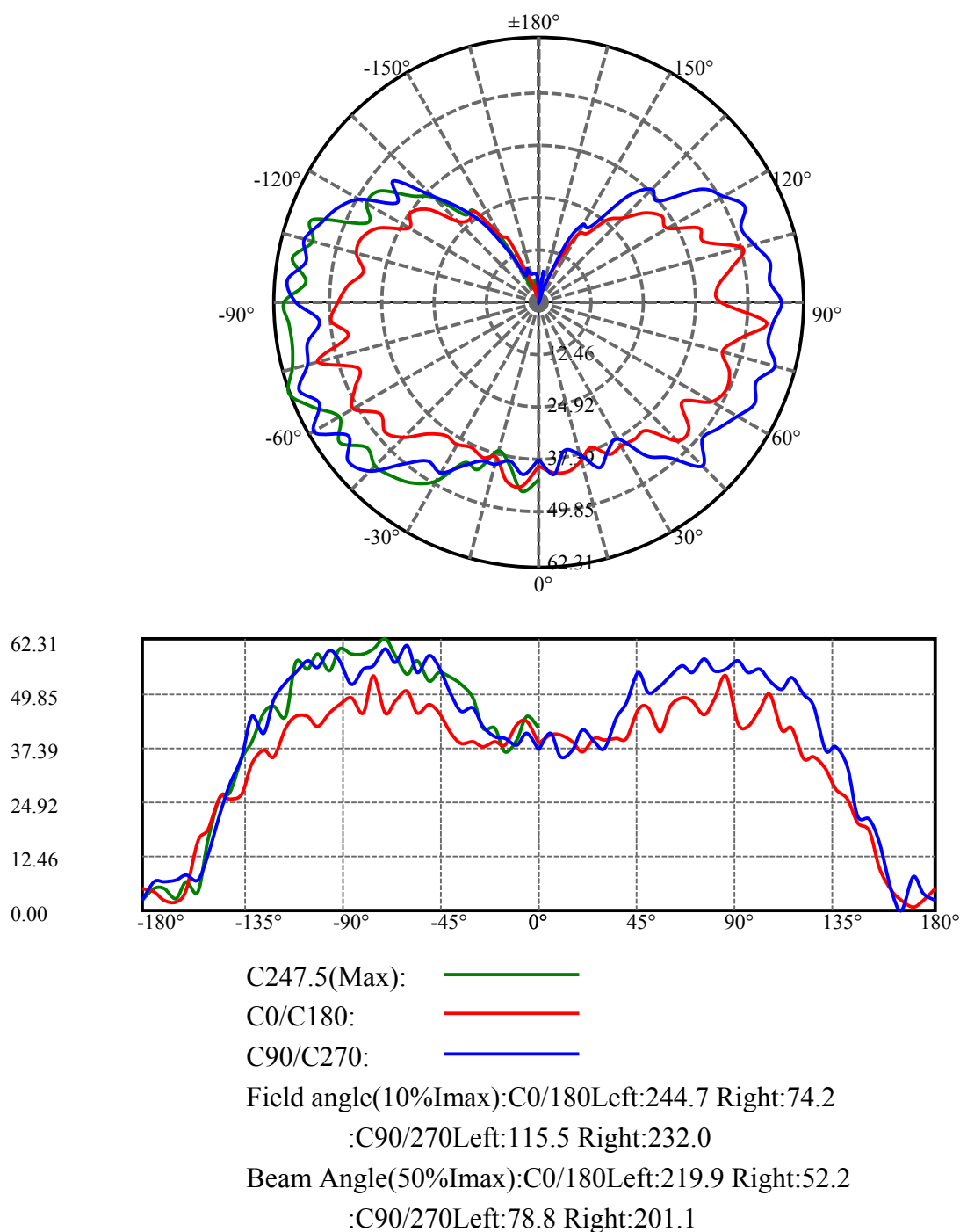
| $\gamma(^{\circ})$ | Average I(cd) | Zonal F(lm) | Sum F(lm) | Eff Flux(%) | Eff Sum(%) |
|--------------------|---------------|-------------|-----------|-------------|------------|
| 0.0                | 38.868        | 0.232       | 0.232     | .042%       | .042%      |
| 5.0                | 40.326        | 1.926       | 2.159     | .351%       | .393%      |
| 10.0               | 38.791        | 3.692       | 5.851     | .673%       | 1.066%     |
| 15.0               | 37.889        | 5.375       | 11.226    | .979%       | 2.045%     |
| 20.0               | 36.316        | 6.808       | 18.035    | 1.240%      | 3.285%     |
| 25.0               | 38.599        | 8.942       | 26.976    | 1.629%      | 4.914%     |
| 30.0               | 40.575        | 11.120      | 38.097    | 2.026%      | 6.940%     |
| 35.0               | 42.647        | 13.408      | 51.505    | 2.443%      | 9.382%     |
| 40.0               | 44.700        | 15.749      | 67.254    | 2.869%      | 12.251%    |
| 45.0               | 49.784        | 19.296      | 86.55     | 3.515%      | 15.766%    |
| 50.0               | 49.860        | 20.936      | 107.486   | 3.814%      | 19.580%    |
| 55.0               | 51.855        | 23.283      | 130.769   | 4.241%      | 23.822%    |
| 60.0               | 51.855        | 24.616      | 155.385   | 4.484%      | 28.306%    |
| 65.0               | 53.045        | 26.352      | 181.737   | 4.800%      | 33.106%    |
| 70.0               | 55.136        | 28.399      | 210.136   | 5.173%      | 38.280%    |
| 75.0               | 53.218        | 28.177      | 238.313   | 5.133%      | 43.413%    |
| 80.0               | 53.256        | 28.748      | 267.061   | 5.237%      | 48.649%    |
| 85.0               | 54.158        | 29.573      | 296.634   | 5.387%      | 54.037%    |
| 90.0               | 53.313        | 29.223      | 325.857   | 5.323%      | 59.360%    |
| 95.0               | 51.990        | 28.389      | 354.246   | 5.172%      | 64.532%    |
| 100.0              | 50.647        | 27.340      | 381.586   | 4.980%      | 69.512%    |
| 105.0              | 48.920        | 25.901      | 407.487   | 4.718%      | 74.230%    |
| 110.0              | 48.095        | 24.773      | 432.26    | 4.513%      | 78.743%    |
| 115.0              | 45.409        | 22.559      | 454.819   | 4.109%      | 82.853%    |
| 120.0              | 42.704        | 20.272      | 475.09    | 3.693%      | 86.545%    |
| 125.0              | 40.575        | 18.218      | 493.309   | 3.319%      | 89.864%    |
| 130.0              | 37.410        | 15.708      | 509.017   | 2.862%      | 92.726%    |
| 135.0              | 33.899        | 13.139      | 522.156   | 2.393%      | 95.119%    |
| 140.0              | 28.604        | 10.078      | 532.234   | 1.836%      | 96.955%    |
| 145.0              | 23.040        | 7.244       | 539.478   | 1.320%      | 98.275%    |
| 150.0              | 16.844        | 4.616       | 544.094   | .841%       | 99.116%    |
| 155.0              | 11.223        | 2.600       | 546.694   | .474%       | 99.589%    |
| 160.0              | 6.657         | 1.248       | 547.942   | .227%       | 99.817%    |
| 165.0              | 3.223         | 0.457       | 548.4     | .083%       | 99.900%    |
| 170.0              | 3.818         | 0.363       | 548.763   | .066%       | 99.966%    |
| 175.0              | 3.587         | 0.171       | 548.934   | .031%       | 99.997%    |
| 180.0              | 2.532         | 0.015       | 548.949   | .003%       | 100.000%   |

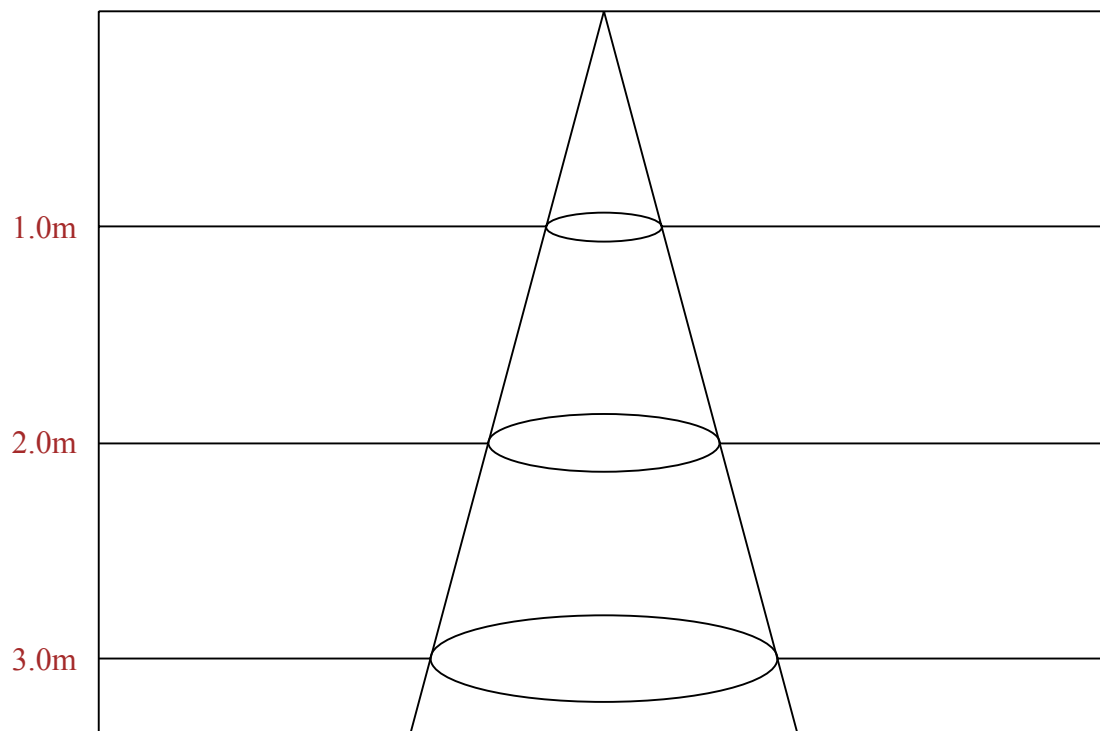
## ZONAL LUMEN SUMMARY

| Zone     | Lumens | %Fixt   |
|----------|--------|---------|
| 0-30     | 38.10  | 6.94%   |
| 0-40     | 67.25  | 12.25%  |
| 0-60     | 155.39 | 28.31%  |
| 0-90     | 325.86 | 59.36%  |
| 0-120    | 475.09 | 86.55%  |
| 0-180    | 548.95 | 100.00% |
| 60-90    | 195.09 | 35.54%  |
| 90-120   | 178.46 | 32.51%  |
| 90-130   | 212.38 | 38.69%  |
| 90-150   | 247.46 | 45.08%  |
| 90-180   | 252.30 | 45.96%  |
| 0-111.53 | 439.16 | 80.00%  |

## ZONAL LUMEN SUMMARY

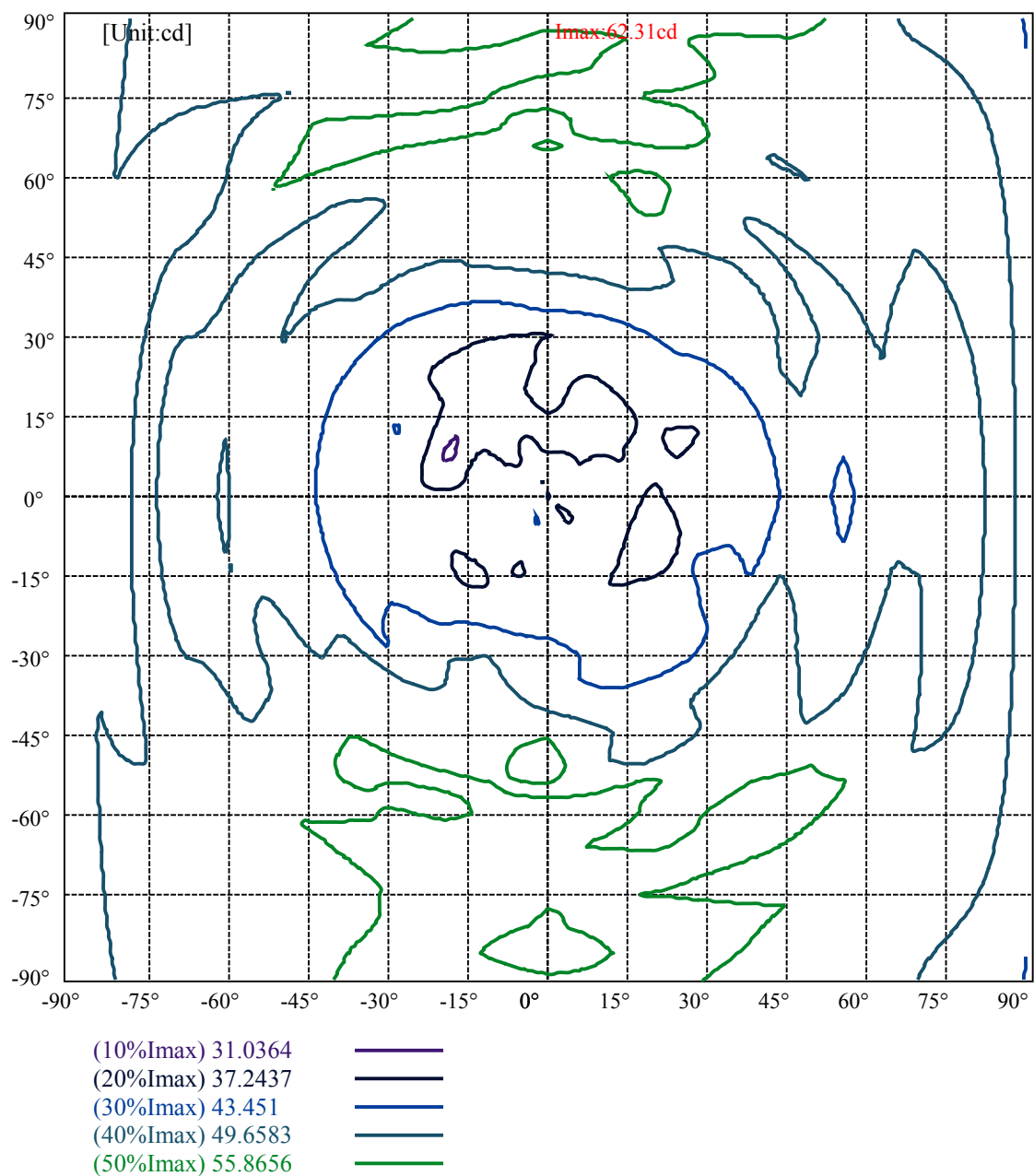
|         |       |
|---------|-------|
| 0-10    | 5.85  |
| 10-20   | 12.18 |
| 20-30   | 20.06 |
| 30-40   | 29.16 |
| 40-50   | 40.23 |
| 50-60   | 47.90 |
| 60-70   | 54.75 |
| 70-80   | 56.92 |
| 80-90   | 58.80 |
| 90-100  | 55.73 |
| 100-110 | 50.67 |
| 110-120 | 42.83 |
| 120-130 | 33.93 |
| 130-140 | 23.22 |
| 140-150 | 11.86 |
| 150-160 | 3.85  |
| 160-170 | 0.82  |
| 170-180 | 0.17  |

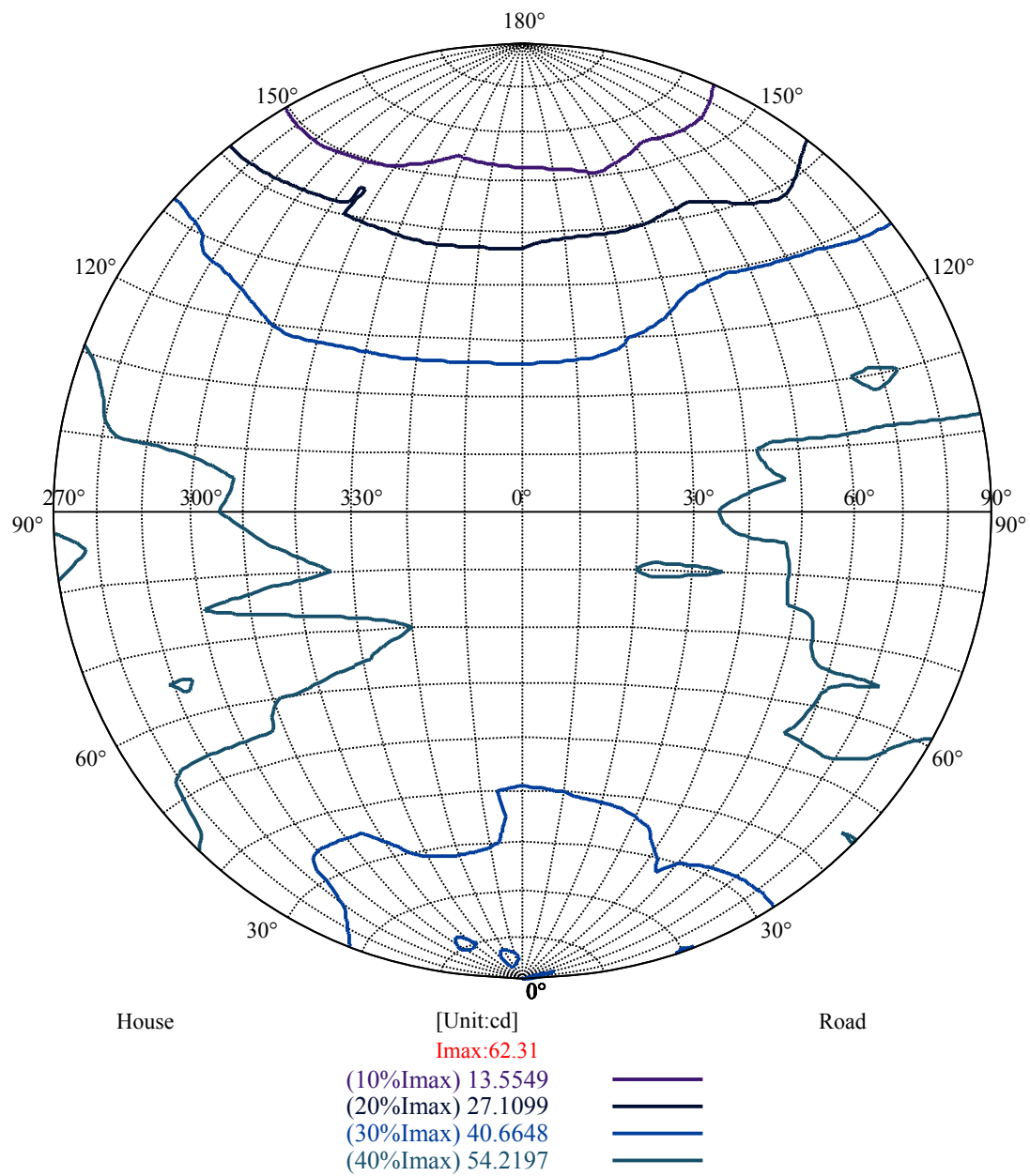


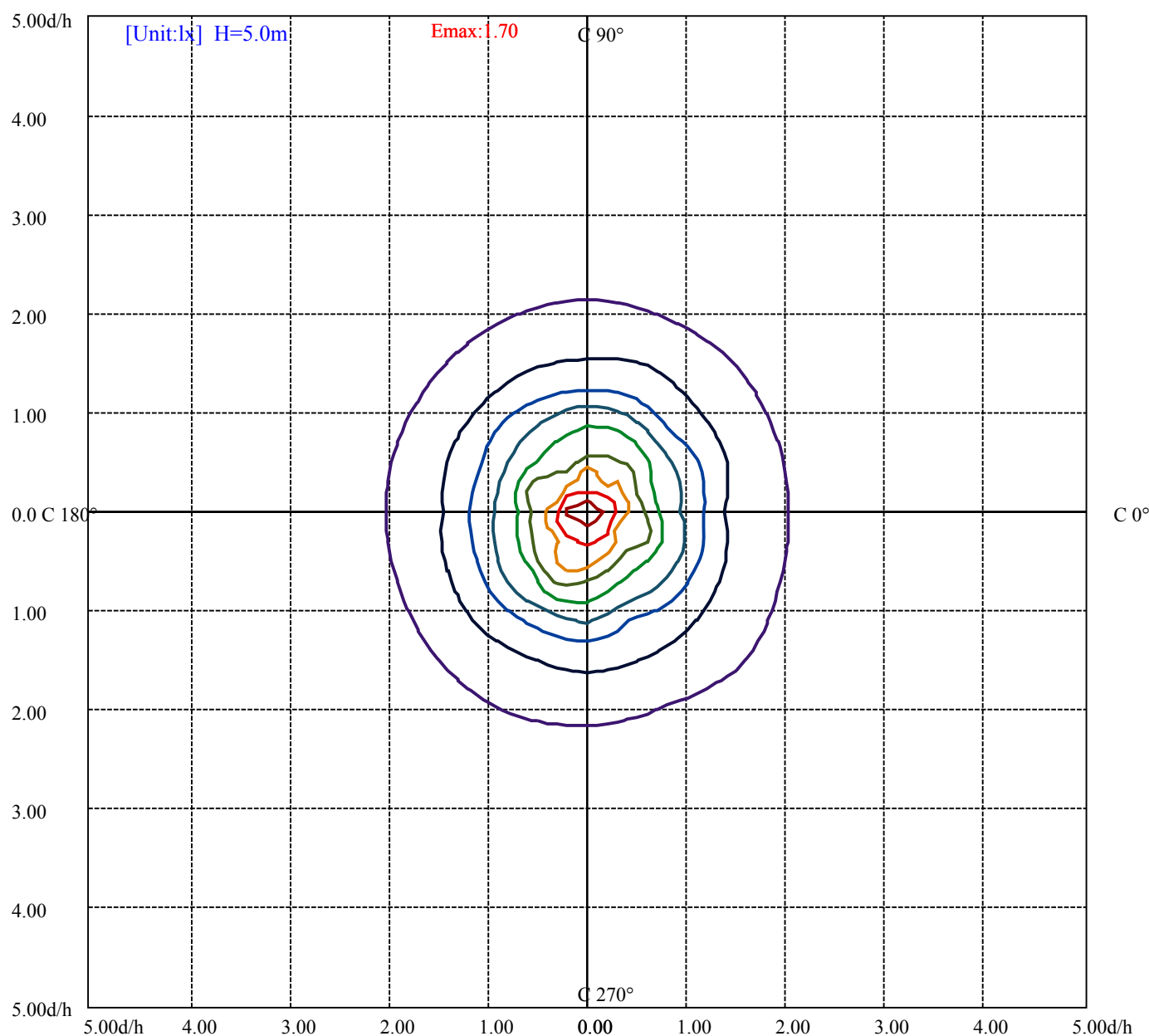


Max , Ave

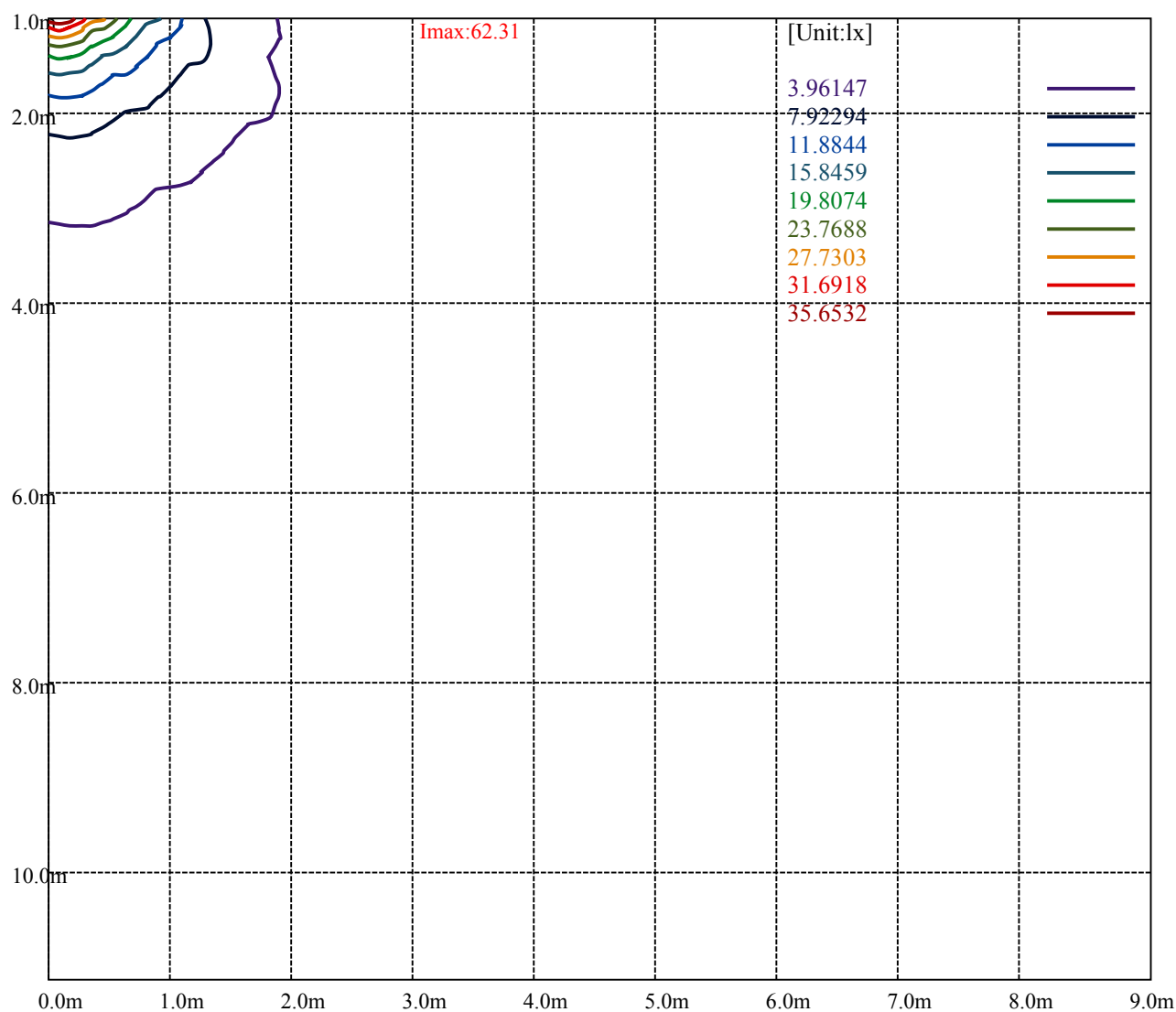
Beam angle of C247.5 plane 292.06







|                     |   |
|---------------------|---|
| (10%Emax) 0.170208  | — |
| (20%Emax) 0.3404156 | — |
| (30%Emax) 0.510624  | — |
| (40%Emax) 0.680832  | — |
| (50%Emax) 0.8510399 | — |
| (60%Emax) 1.021248  | — |
| (70%Emax) 1.191456  | — |
| (80%Emax) 1.361664  | — |
| (90%Emax) 1.531872  | — |



Luminance Table

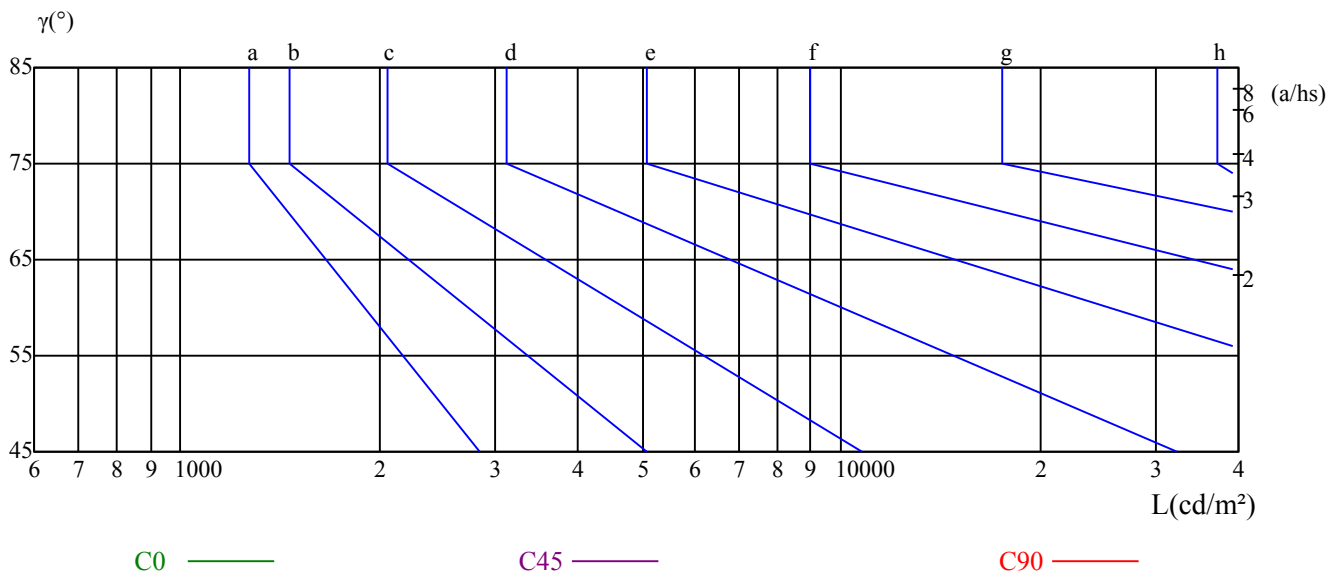
| $\gamma$ | 45 | 50 | 55 | 60 | 65 | 70 | 75 | 80 | 85 |
|----------|----|----|----|----|----|----|----|----|----|
| C0       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C45      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C90      | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |

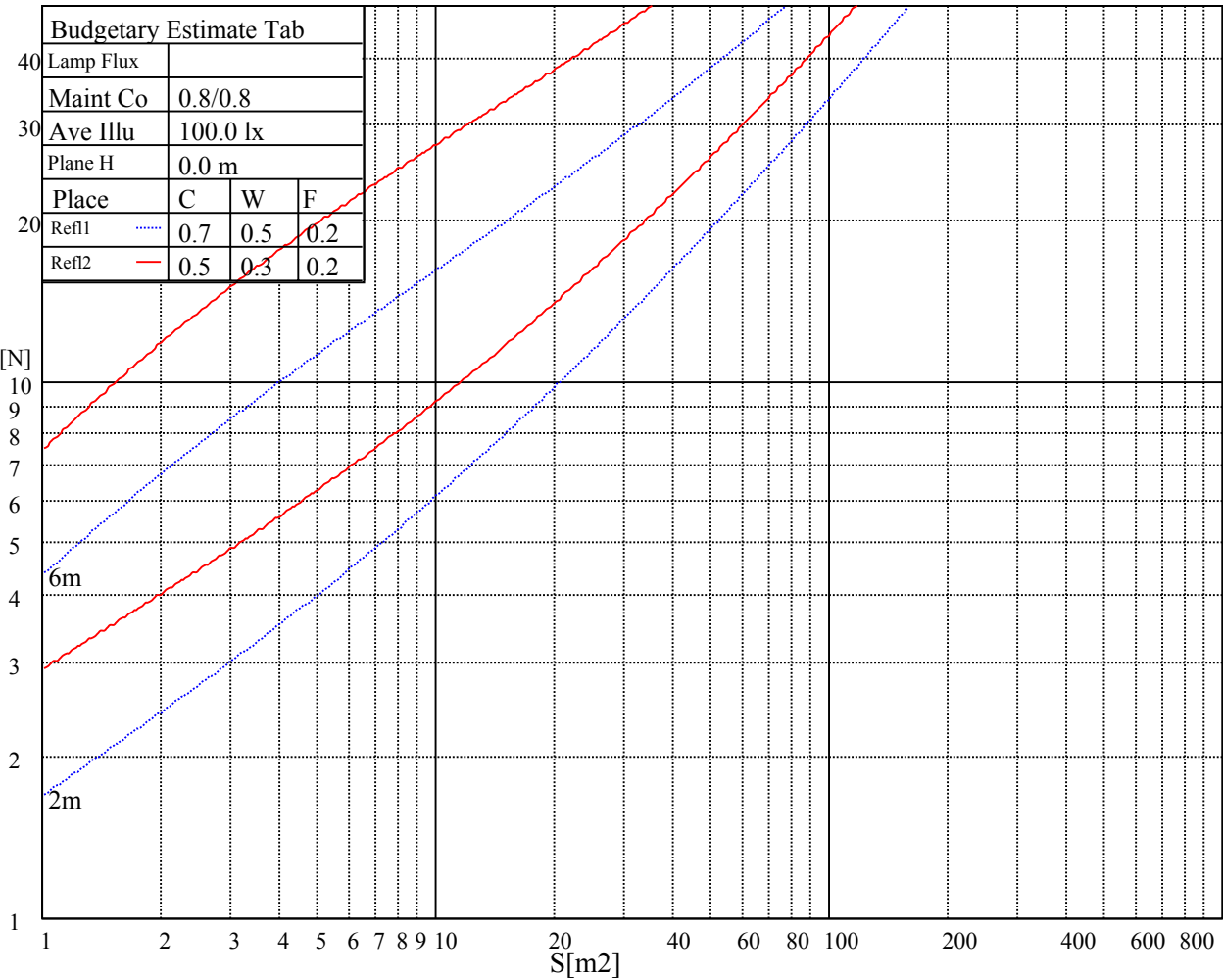
| L(Hor)(65) | L(Ver)(65) | L45(65) | L(Hor)(75) | L(Ver)(75) | L45(75) | L(Hor)(85) | L(Ver)(85) | L45(85) |
|------------|------------|---------|------------|------------|---------|------------|------------|---------|
| 0          | 0          | 0       | 0          | 0          | 0       | 0          | 0          | 0       |

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





| 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    | 1.09                                   | 1.09 | 1.09 | 1.01 | 1.01 | 1.01 | 0.87 | 0.87 | 0.87 | 0.74 | 0.74 | 0.74 | 0.62 | 0.62 | 0.62 | 0.57 |
| 1    | 0.89                                   | 0.83 | 0.78 | 0.82 | 0.77 | 0.73 | 0.70 | 0.66 | 0.63 | 0.59 | 0.56 | 0.53 | 0.48 | 0.46 | 0.44 | 0.39 |
| 2    | 0.75                                   | 0.67 | 0.60 | 0.69 | 0.62 | 0.56 | 0.58 | 0.53 | 0.48 | 0.49 | 0.44 | 0.41 | 0.40 | 0.36 | 0.33 | 0.29 |
| 3    | 0.64                                   | 0.55 | 0.48 | 0.59 | 0.51 | 0.44 | 0.50 | 0.43 | 0.38 | 0.41 | 0.36 | 0.32 | 0.34 | 0.30 | 0.26 | 0.22 |
| 4    | 0.56                                   | 0.46 | 0.39 | 0.51 | 0.43 | 0.36 | 0.43 | 0.37 | 0.31 | 0.36 | 0.31 | 0.26 | 0.29 | 0.25 | 0.21 | 0.18 |
| 5    | 0.49                                   | 0.40 | 0.33 | 0.45 | 0.37 | 0.30 | 0.38 | 0.31 | 0.26 | 0.32 | 0.26 | 0.22 | 0.26 | 0.21 | 0.18 | 0.14 |
| 6    | 0.44                                   | 0.34 | 0.28 | 0.40 | 0.32 | 0.26 | 0.34 | 0.27 | 0.22 | 0.28 | 0.23 | 0.19 | 0.23 | 0.19 | 0.15 | 0.12 |
| 7    | 0.39                                   | 0.30 | 0.24 | 0.36 | 0.28 | 0.22 | 0.31 | 0.24 | 0.19 | 0.26 | 0.20 | 0.16 | 0.21 | 0.16 | 0.13 | 0.10 |
| 8    | 0.35                                   | 0.27 | 0.21 | 0.33 | 0.25 | 0.19 | 0.28 | 0.21 | 0.17 | 0.23 | 0.18 | 0.14 | 0.19 | 0.15 | 0.11 | 0.09 |
| 9    | 0.32                                   | 0.24 | 0.18 | 0.30 | 0.22 | 0.17 | 0.25 | 0.19 | 0.15 | 0.21 | 0.16 | 0.12 | 0.17 | 0.13 | 0.10 | 0.08 |
| 10   | 0.29                                   | 0.21 | 0.16 | 0.27 | 0.20 | 0.15 | 0.23 | 0.17 | 0.13 | 0.20 | 0.15 | 0.11 | 0.16 | 0.12 | 0.09 | 0.07 |

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| Intensity data(cd) |       |       |       |       |       |       |       |       | Appendix Page: 13 Total:14 |  |  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|--|--|
| C/γ(°)             | 0.0   | 5.0   | 10.0  | 15.0  | 20.0  | 25.0  | 30.0  | 35.0  | 40.0                       |  |  |
| 0.0                | 38.37 | 40.21 | 40.21 | 38.68 | 36.22 | 39.60 | 38.98 | 39.29 | 39.29                      |  |  |
| 22.5               | 39.90 | 38.68 | 40.21 | 37.14 | 39.90 | 36.22 | 37.14 | 37.45 | 42.36                      |  |  |
| 45.0               | 40.52 | 38.06 | 36.83 | 36.22 | 35.30 | 40.21 | 41.13 | 43.28 | 46.66                      |  |  |
| 67.5               | 41.75 | 40.52 | 36.22 | 36.22 | 32.84 | 38.68 | 38.98 | 43.59 | 49.11                      |  |  |
| 90.0               | 36.83 | 40.52 | 35.30 | 36.83 | 41.44 | 38.68 | 37.14 | 44.20 | 47.58                      |  |  |
| 112.5              | 36.22 | 37.14 | 39.29 | 34.38 | 33.76 | 33.15 | 36.22 | 40.82 | 44.81                      |  |  |
| 135.0              | 38.98 | 41.44 | 34.38 | 36.53 | 32.84 | 36.53 | 36.22 | 39.29 | 42.36                      |  |  |
| 157.5              | 38.37 | 41.75 | 42.36 | 38.06 | 28.85 | 38.98 | 43.89 | 42.36 | 40.21                      |  |  |
| 180.0              | 38.37 | 43.28 | 42.67 | 37.75 | 38.68 | 37.45 | 38.68 | 38.37 | 40.52                      |  |  |
| 202.5              | 39.90 | 39.90 | 39.90 | 40.21 | 38.68 | 38.37 | 40.82 | 41.13 | 42.05                      |  |  |
| 225.0              | 40.52 | 41.13 | 37.14 | 41.44 | 33.76 | 40.82 | 42.05 | 47.27 | 43.59                      |  |  |
| 247.5              | 41.75 | 44.51 | 38.98 | 36.22 | 41.75 | 41.75 | 48.81 | 51.87 | 53.41                      |  |  |
| 270.0              | 36.83 | 40.52 | 38.06 | 39.60 | 39.90 | 42.36 | 46.35 | 45.74 | 49.73                      |  |  |
| 292.5              | 36.22 | 40.52 | 38.68 | 38.68 | 38.98 | 40.21 | 40.82 | 40.82 | 45.43                      |  |  |
| 315.0              | 38.98 | 34.69 | 41.75 | 39.60 | 35.91 | 39.29 | 37.75 | 40.52 | 43.89                      |  |  |
| 337.5              | 38.37 | 42.36 | 38.68 | 38.68 | 32.23 | 35.30 | 44.20 | 46.35 | 44.20                      |  |  |
| 360.0              | 38.37 | 40.21 | 40.21 | 38.68 | 36.22 | 39.60 | 38.98 | 39.29 | 39.29                      |  |  |
| C/γ(°)             | 45.0  | 50.0  | 55.0  | 60.0  | 65.0  | 70.0  | 75.0  | 80.0  | 85.0                       |  |  |
| 0.0                | 46.04 | 46.35 | 41.13 | 46.96 | 48.81 | 47.88 | 44.81 | 48.19 | 53.72                      |  |  |
| 22.5               | 47.58 | 50.95 | 50.34 | 47.88 | 50.34 | 50.34 | 51.57 | 54.94 | 52.18                      |  |  |
| 45.0               | 46.66 | 45.74 | 52.18 | 48.81 | 53.72 | 49.11 | 54.02 | 53.72 | 54.02                      |  |  |
| 67.5               | 52.80 | 50.65 | 56.48 | 57.40 | 53.72 | 60.78 | 55.25 | 57.40 | 56.17                      |  |  |
| 90.0               | 54.64 | 50.03 | 51.57 | 53.72 | 56.17 | 54.64 | 57.71 | 54.94 | 55.25                      |  |  |
| 112.5              | 49.42 | 50.65 | 52.18 | 53.41 | 53.72 | 58.01 | 54.02 | 53.10 | 57.71                      |  |  |
| 135.0              | 46.35 | 51.57 | 51.87 | 46.66 | 51.57 | 58.01 | 56.17 | 50.03 | 54.02                      |  |  |
| 157.5              | 45.12 | 45.43 | 49.73 | 48.50 | 48.81 | 53.72 | 48.19 | 47.58 | 51.26                      |  |  |
| 180.0              | 45.12 | 47.27 | 45.43 | 50.34 | 47.88 | 45.12 | 53.72 | 45.43 | 48.81                      |  |  |
| 202.5              | 47.88 | 48.19 | 52.49 | 48.50 | 49.11 | 53.41 | 50.65 | 53.41 | 54.02                      |  |  |
| 225.0              | 54.64 | 53.10 | 56.17 | 56.79 | 54.02 | 56.79 | 50.65 | 51.57 | 54.02                      |  |  |
| 247.5              | 54.64 | 52.80 | 57.09 | 54.02 | 58.63 | 62.31 | 59.86 | 58.93 | 58.93                      |  |  |
| 270.0              | 55.86 | 58.32 | 54.64 | 60.78 | 56.79 | 60.16 | 56.17 | 55.25 | 51.87                      |  |  |
| 292.5              | 47.88 | 45.43 | 56.48 | 55.25 | 53.72 | 58.32 | 55.56 | 59.24 | 59.24                      |  |  |
| 315.0              | 50.34 | 51.26 | 53.10 | 54.02 | 59.55 | 58.63 | 51.87 | 55.86 | 54.02                      |  |  |
| 337.5              | 51.57 | 50.03 | 48.81 | 46.66 | 52.18 | 54.94 | 51.26 | 52.49 | 51.26                      |  |  |
| 360.0              | 46.04 | 46.35 | 41.13 | 46.96 | 48.81 | 47.88 | 44.81 | 48.19 | 53.72                      |  |  |
| C/γ(°)             | 90.0  | 95.0  | 100.0 | 105.0 | 110.0 | 115.0 | 120.0 | 125.0 | 130.0                      |  |  |
| 0.0                | 42.97 | 42.36 | 46.04 | 49.73 | 41.44 | 41.75 | 34.99 | 35.30 | 32.54                      |  |  |
| 22.5               | 48.19 | 47.58 | 42.05 | 49.11 | 43.28 | 41.75 | 41.13 | 35.91 | 35.91                      |  |  |
| 45.0               | 59.55 | 53.72 | 56.17 | 47.88 | 48.81 | 45.12 | 48.50 | 47.88 | 39.60                      |  |  |
| 67.5               | 55.86 | 58.93 | 55.56 | 52.80 | 55.56 | 49.42 | 45.12 | 45.43 | 40.21                      |  |  |
| 90.0               | 57.09 | 54.64 | 55.25 | 52.80 | 50.65 | 53.41 | 49.73 | 46.66 | 36.83                      |  |  |
| 112.5              | 56.17 | 53.72 | 53.72 | 50.34 | 51.87 | 46.66 | 48.81 | 41.75 | 41.13                      |  |  |
| 135.0              | 50.65 | 50.65 | 46.66 | 46.35 | 50.34 | 51.87 | 44.81 | 46.04 | 42.36                      |  |  |
| 157.5              | 51.57 | 51.57 | 52.49 | 44.51 | 46.66 | 41.44 | 39.90 | 36.83 | 34.38                      |  |  |
| 180.0              | 47.27 | 45.12 | 42.05 | 44.51 | 44.51 | 41.75 | 35.30 | 36.83 | 33.76                      |  |  |
| 202.5              | 52.80 | 46.35 | 45.74 | 43.59 | 41.75 | 38.37 | 38.68 | 37.75 | 36.22                      |  |  |
| 225.0              | 54.64 | 55.56 | 47.58 | 46.35 | 46.66 | 45.12 | 38.98 | 37.75 | 34.69                      |  |  |
| 247.5              | 59.86 | 54.94 | 58.93 | 55.25 | 56.79 | 44.51 | 46.96 | 45.43 | 38.68                      |  |  |
| 270.0              | 57.09 | 59.55 | 55.56 | 57.09 | 54.64 | 52.18 | 48.50 | 40.82 | 44.51                      |  |  |
| 292.5              | 57.40 | 60.47 | 53.41 | 49.42 | 50.03 | 47.27 | 45.43 | 42.05 | 38.37                      |  |  |
| 315.0              | 51.87 | 51.57 | 49.42 | 48.50 | 45.12 | 44.20 | 38.98 | 36.83 | 34.69                      |  |  |
| 337.5              | 50.03 | 45.12 | 49.73 | 44.51 | 41.44 | 41.75 | 37.45 | 35.91 | 34.69                      |  |  |
| 360.0              | 42.97 | 42.36 | 46.04 | 49.73 | 41.44 | 41.75 | 34.99 | 35.30 | 32.54                      |  |  |

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| Intensity data(cd) |       |       |       |       |       |       |       |       | Appendix Page: 14 Total:14 |  |  |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------------------|--|--|
| C/ $\gamma$ (°)    | 135.0 | 140.0 | 145.0 | 150.0 | 155.0 | 160.0 | 165.0 | 170.0 | 175.0                      |  |  |
| 0.0                | 27.93 | 25.48 | 19.95 | 18.11 | 9.52  | 4.60  | 2.15  | 0.61  | 2.46                       |  |  |
| 22.5               | 37.14 | 24.86 | 19.64 | 13.81 | 11.05 | 8.59  | 1.23  | 2.15  | 7.67                       |  |  |
| 45.0               | 38.37 | 31.31 | 23.02 | 16.27 | 13.51 | 10.74 | 6.14  | 5.83  | 3.38                       |  |  |
| 67.5               | 34.99 | 23.02 | 19.64 | 23.33 | 11.36 | 6.14  | 6.45  | 1.53  | 3.07                       |  |  |
| 90.0               | 37.45 | 32.84 | 21.79 | 20.87 | 15.65 | 4.60  | 0.00  | 7.67  | 3.68                       |  |  |
| 112.5              | 38.06 | 34.38 | 29.77 | 19.95 | 13.20 | 11.05 | 0.00  | 2.46  | 7.06                       |  |  |
| 135.0              | 34.07 | 34.38 | 23.02 | 19.34 | 13.51 | 9.82  | 0.00  | 3.07  | 3.38                       |  |  |
| 157.5              | 33.76 | 28.55 | 26.40 | 17.19 | 12.28 | 9.52  | 3.07  | 0.00  | 2.15                       |  |  |
| 180.0              | 26.70 | 25.48 | 26.09 | 18.42 | 15.96 | 4.60  | 1.84  | 2.46  | 4.30                       |  |  |
| 202.5              | 29.77 | 27.63 | 19.95 | 15.96 | 12.58 | 5.22  | 6.14  | 4.30  | 2.15                       |  |  |
| 225.0              | 35.61 | 31.62 | 20.87 | 14.73 | 8.59  | 0.00  | 2.46  | 5.53  | 3.07                       |  |  |
| 247.5              | 34.99 | 27.01 | 26.09 | 16.27 | 4.30  | 6.45  | 2.76  | 5.22  | 4.91                       |  |  |
| 270.0              | 35.30 | 28.85 | 22.10 | 12.89 | 7.06  | 8.29  | 7.06  | 6.75  | 6.45                       |  |  |
| 292.5              | 37.75 | 30.70 | 20.87 | 11.97 | 12.28 | 3.68  | 3.68  | 6.75  | 1.53                       |  |  |
| 315.0              | 31.62 | 27.01 | 27.32 | 12.89 | 5.83  | 8.59  | 3.68  | 6.75  | 0.00                       |  |  |
| 337.5              | 28.85 | 24.56 | 22.10 | 17.50 | 12.89 | 4.60  | 4.91  | 0.00  | 2.15                       |  |  |
| 360.0              | 27.93 | 25.48 | 19.95 | 18.11 | 9.52  | 4.60  | 2.15  | 0.61  | 2.46                       |  |  |
| C/ $\gamma$ (°)    | 180.0 |       |       |       |       |       |       |       |                            |  |  |
| 0.0                | 5.22  |       |       |       |       |       |       |       |                            |  |  |
| 22.5               | 1.84  |       |       |       |       |       |       |       |                            |  |  |
| 45.0               | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 67.5               | 2.15  |       |       |       |       |       |       |       |                            |  |  |
| 90.0               | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 112.5              | 0.00  |       |       |       |       |       |       |       |                            |  |  |
| 135.0              | 3.68  |       |       |       |       |       |       |       |                            |  |  |
| 157.5              | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 180.0              | 5.22  |       |       |       |       |       |       |       |                            |  |  |
| 202.5              | 1.84  |       |       |       |       |       |       |       |                            |  |  |
| 225.0              | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 247.5              | 2.15  |       |       |       |       |       |       |       |                            |  |  |
| 270.0              | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 292.5              | 0.00  |       |       |       |       |       |       |       |                            |  |  |
| 315.0              | 3.68  |       |       |       |       |       |       |       |                            |  |  |
| 337.5              | 2.46  |       |       |       |       |       |       |       |                            |  |  |
| 360.0              | 5.22  |       |       |       |       |       |       |       |                            |  |  |