

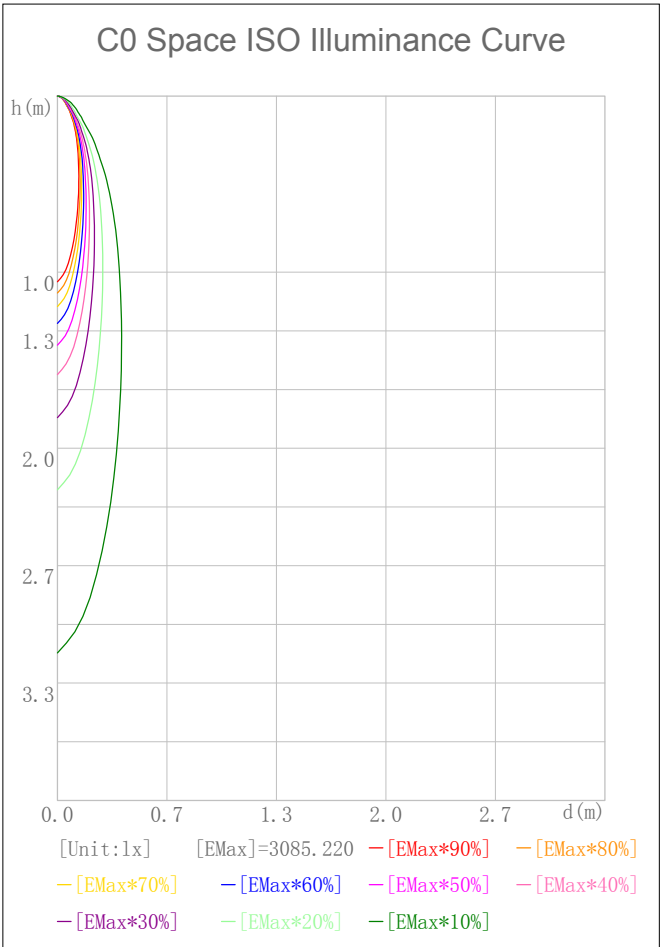
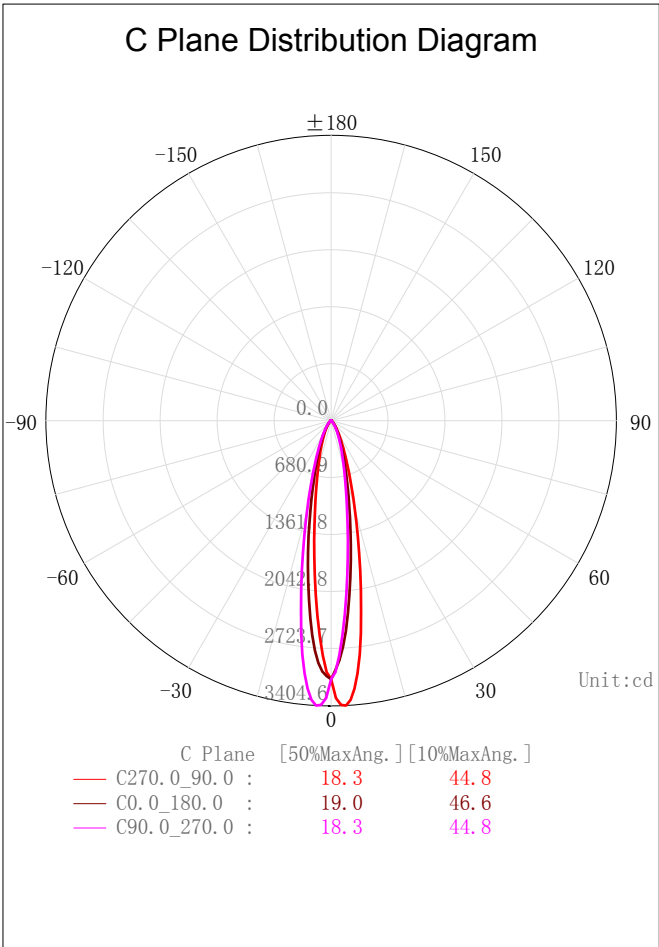
Indoor Luminaire Photometric Data

Description Information

|   |                         |                      |                       |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name:WL02-09-XX-04 2700K RA90 15D      |                         | Lum. Catalog:        | Test ID: 01           |
| Lamp Name:                                      |                         | Lamp Catalog: LED    | Test Date: 2021/11/16 |
| Manufacture: Shenzhen Norming Lighting Co., Ltd |                         | Shld.Ang(°):         | Test Machine:GON-2000 |
| Test Lab: Quality Department                    |                         | Frequency (Hz):      | Lamp CCT (K): Ra:     |
| Lum. Size (W*L*H):0.038m*0.038m*0.000m          |                         | Lum. Area (m2):0.001 | Lum. W (kg): 0.000    |
| Test System: C, γ                               | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25       | Humidity(%): 50.0     |

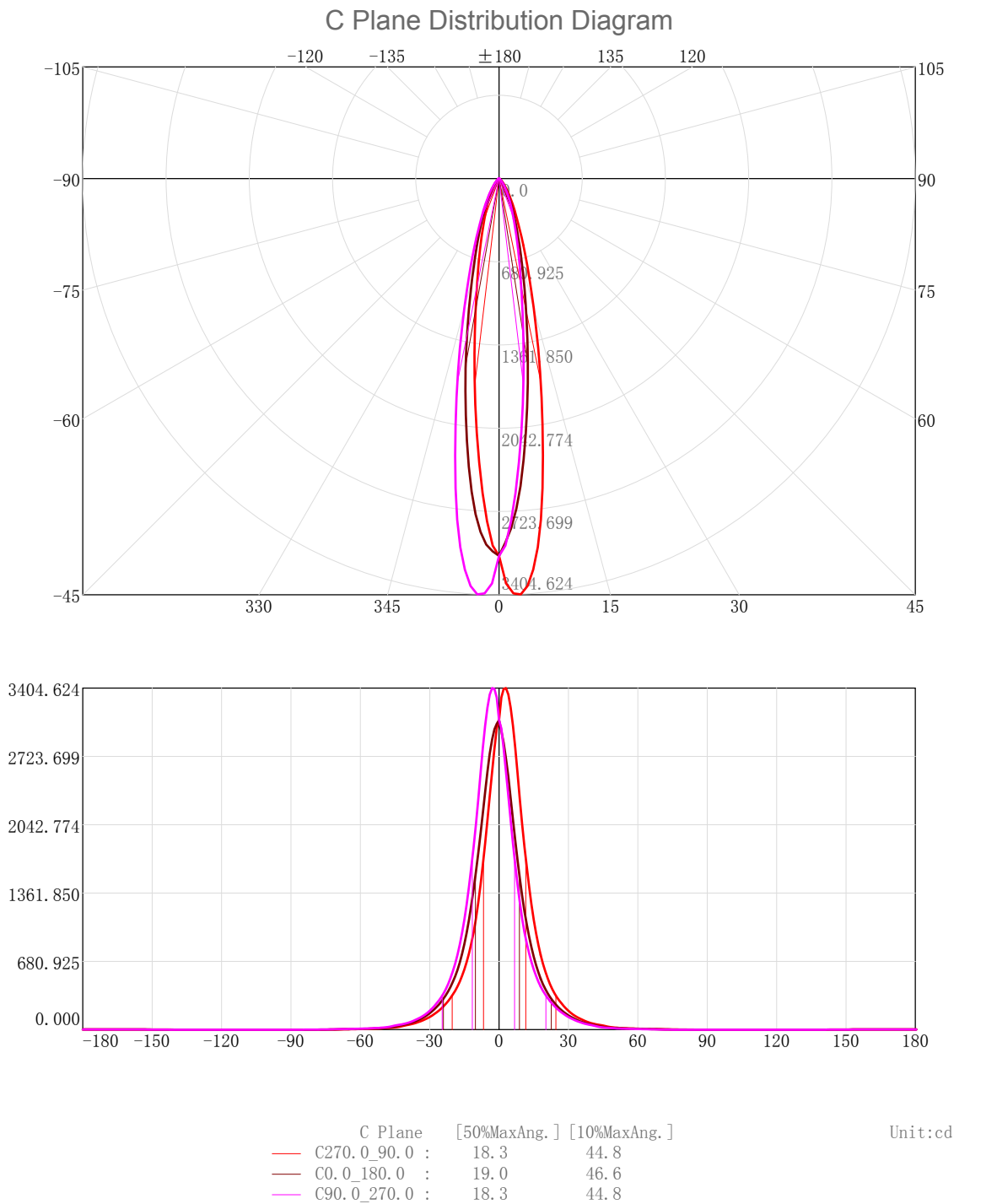
Character Parameter

| Lamp Speciality Parameter                       |                                  | Luminaire Speciality Parameter        |  |
|---|----------------------------------|---------------------------------------|--|
| Rated Flux(lm): 669.920                         | Luminary Flux(lm): 669.919       | Field Angle(10%Imax): 44.8(°)         |  |
| Rated Power(W):                                 | Luminary Efficiency: 100.00%     | Down Lumens&Percent: 667.127lm 99.58% |  |
| Rated Voltage(V):                               | Luminary EER(lm/W): 75.646       | Up Lumens&Percent: 2.792lm 0.42%      |  |
| Tested Power(W): 8.856                          | Max. Candela(cd): 3404.624       | S/MH: C0_a180=0.322 C90_270=0.338     |  |
| Lamps' Inside: 1                                | Max Cand@Ang. (°): C=270.0 γ=3.0 | CIE Type: Semi-Direct                 |  |
| Tested Electrics (V, A, pf):241.0, 0.040, 0.899 | Beam Angle(50%Imax): 18.3(°)     | ErP ϕ use(90°): 619.168lm             |  |
| Lamp Size (W*L*H):0.038m*0.038m*0.000m          | Left=-6.7°, Right=11.6°          | IRF(%): 1127.328                      |  |



2D Plane Light Intensity Distribution Curve

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catelog:         | Test ID: 01                 |
| Lamp Name:                                      | Lamp Catelog: LED     | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16       |



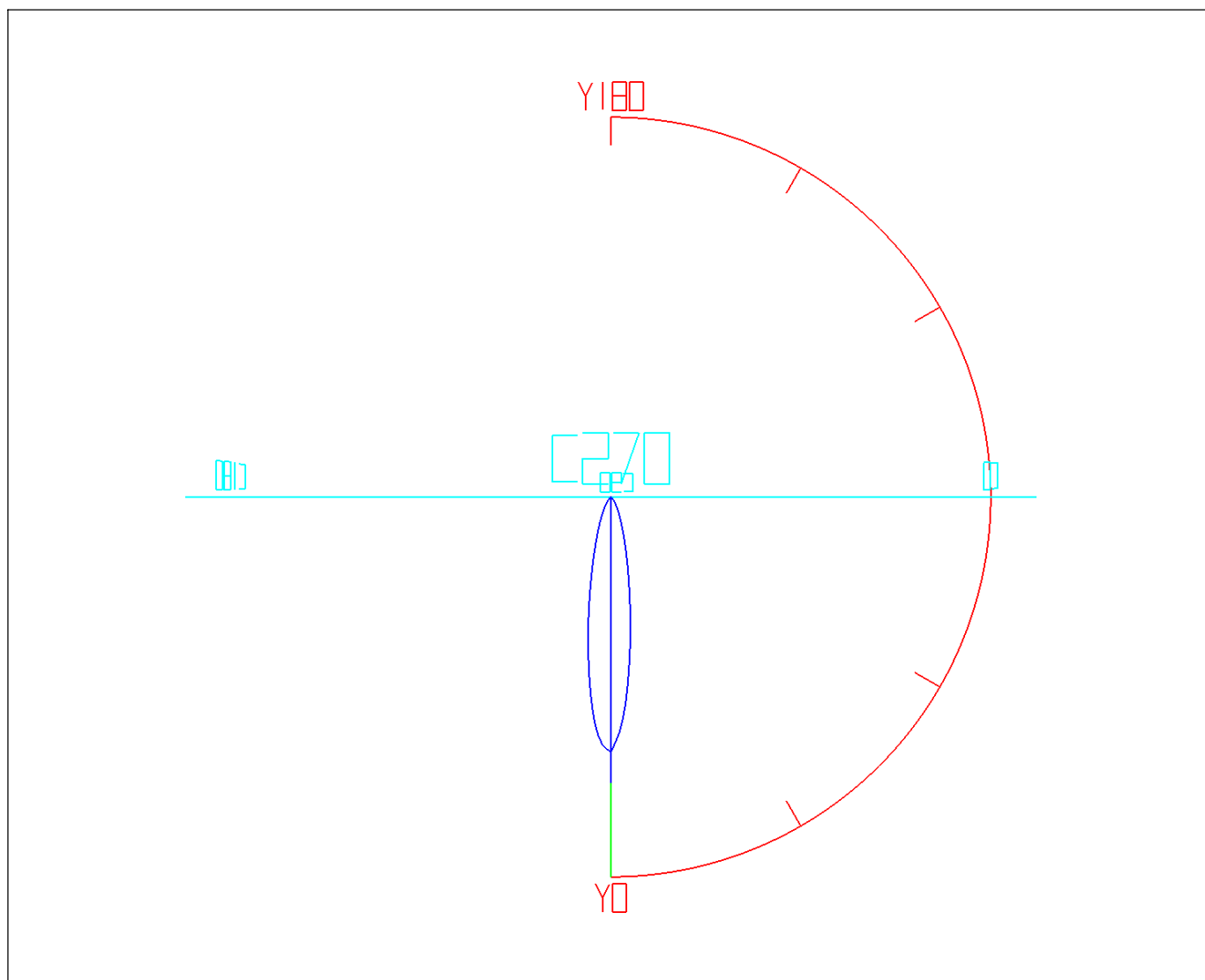
# IES Indoor Report

Photometric Filename:WL02-09-XX-04 2700K RA90 15D.IES

## 3D Light Intensity Distribution Modal

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |

## 3D Light Intensity Distribution Modal



Curves: 3D Model — Fixture — Vert. HUD — Hori. HUD —  
View Angles: Orient:0 Tilt:0 Roll:0 Spin:0

IES Indoor Report

Photometric Filename:WL02-09-XX-04 2700K RA90 15D.IES

Zonal Flux Tabulation

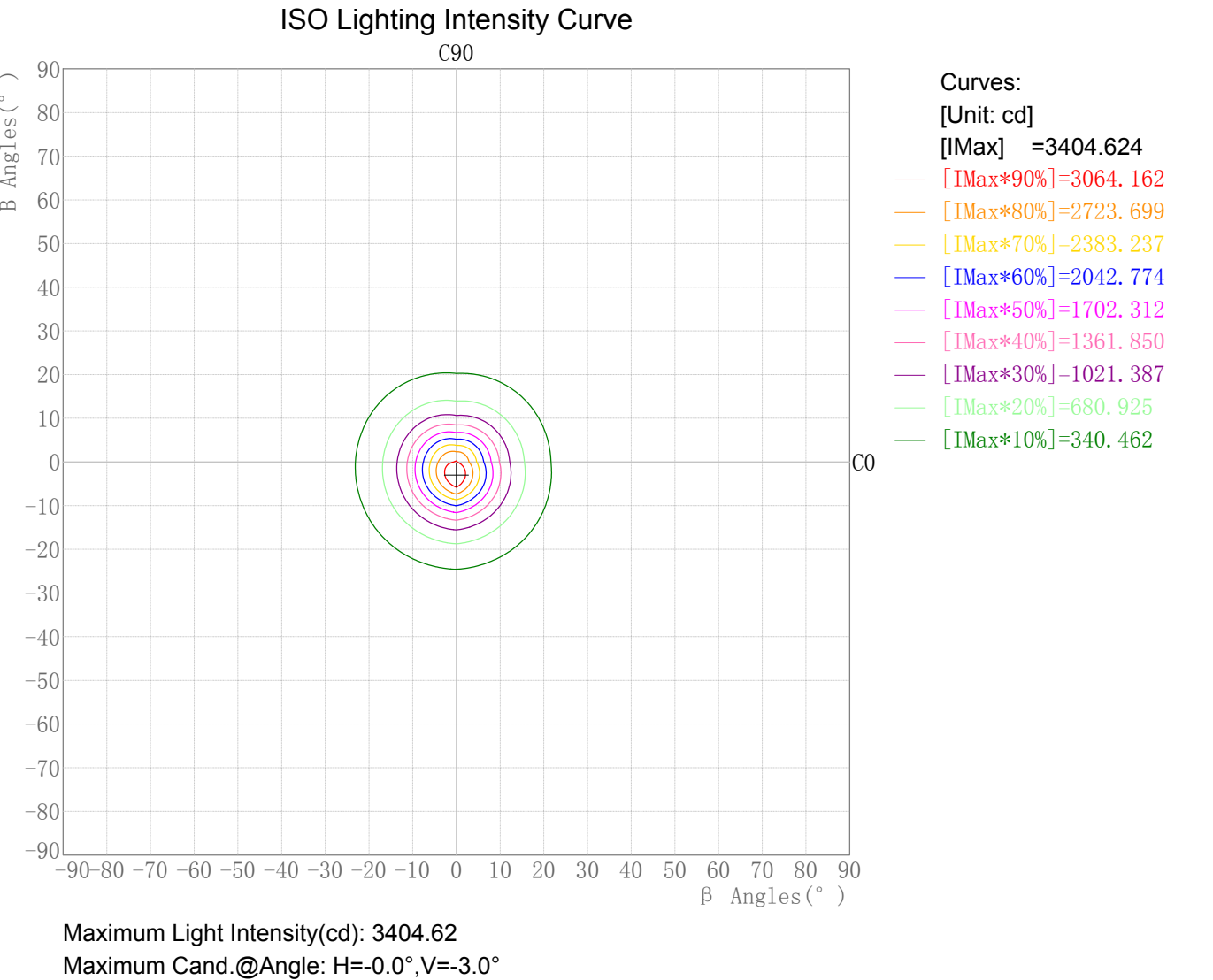
| Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0   | 2.95              | 2.95              | 0.44      | 0.44      | 47.0-48.0 | 1.80              | 644.83            | 0.27      | 96.25     |
| 1.0-2.0   | 8.75              | 11.70             | 1.31      | 1.75      | 48.0-49.0 | 1.65              | 646.47            | 0.25      | 96.50     |
| 2.0-3.0   | 14.13             | 25.83             | 2.11      | 3.86      | 49.0-50.0 | 1.53              | 648.00            | 0.23      | 96.73     |
| 3.0-4.0   | 18.84             | 44.67             | 2.81      | 6.67      | 50.0-51.0 | 1.42              | 649.42            | 0.21      | 96.94     |
| 4.0-5.0   | 22.71             | 67.38             | 3.39      | 10.06     | 51.0-52.0 | 1.32              | 650.74            | 0.20      | 97.14     |
| 5.0-6.0   | 25.65             | 93.03             | 3.83      | 13.89     | 52.0-53.0 | 1.24              | 651.98            | 0.18      | 97.32     |
| 6.0-7.0   | 27.70             | 120.73            | 4.13      | 18.02     | 53.0-54.0 | 1.16              | 653.14            | 0.17      | 97.50     |
| 7.0-8.0   | 28.89             | 149.61            | 4.31      | 22.33     | 54.0-55.0 | 1.09              | 654.23            | 0.16      | 97.66     |
| 8.0-9.0   | 29.32             | 178.93            | 4.38      | 26.71     | 55.0-56.0 | 1.02              | 655.25            | 0.15      | 97.81     |
| 9.0-10.0  | 29.16             | 208.09            | 4.35      | 31.06     | 56.0-57.0 | 0.97              | 656.22            | 0.14      | 97.95     |
| 10.0-11.0 | 28.59             | 236.68            | 4.27      | 35.33     | 57.0-58.0 | 0.92              | 657.14            | 0.14      | 98.09     |
| 11.0-12.0 | 27.70             | 264.39            | 4.14      | 39.47     | 58.0-59.0 | 0.88              | 658.02            | 0.13      | 98.22     |
| 12.0-13.0 | 26.57             | 290.96            | 3.97      | 43.43     | 59.0-60.0 | 0.83              | 658.85            | 0.12      | 98.35     |
| 13.0-14.0 | 25.30             | 316.26            | 3.78      | 47.21     | 60.0-61.0 | 0.78              | 659.63            | 0.12      | 98.46     |
| 14.0-15.0 | 23.97             | 340.23            | 3.58      | 50.79     | 61.0-62.0 | 0.74              | 660.37            | 0.11      | 98.57     |
| 15.0-16.0 | 22.62             | 362.85            | 3.38      | 54.16     | 62.0-63.0 | 0.69              | 661.06            | 0.10      | 98.68     |
| 16.0-17.0 | 21.29             | 384.14            | 3.18      | 57.34     | 63.0-64.0 | 0.66              | 661.72            | 0.10      | 98.78     |
| 17.0-18.0 | 19.99             | 404.13            | 2.98      | 60.33     | 64.0-65.0 | 0.62              | 662.34            | 0.09      | 98.87     |
| 18.0-19.0 | 18.75             | 422.88            | 2.80      | 63.12     | 65.0-66.0 | 0.59              | 662.93            | 0.09      | 98.96     |
| 19.0-20.0 | 17.57             | 440.45            | 2.62      | 65.75     | 66.0-67.0 | 0.55              | 663.47            | 0.08      | 99.04     |
| 20.0-21.0 | 16.46             | 456.91            | 2.46      | 68.20     | 67.0-68.0 | 0.51              | 663.98            | 0.08      | 99.11     |
| 21.0-22.0 | 15.42             | 472.32            | 2.30      | 70.50     | 68.0-69.0 | 0.46              | 664.44            | 0.07      | 99.18     |
| 22.0-23.0 | 14.44             | 486.77            | 2.16      | 72.66     | 69.0-70.0 | 0.41              | 664.85            | 0.06      | 99.24     |
| 23.0-24.0 | 13.53             | 500.30            | 2.02      | 74.68     | 70.0-71.0 | 0.36              | 665.20            | 0.05      | 99.30     |
| 24.0-25.0 | 12.66             | 512.96            | 1.89      | 76.57     | 71.0-72.0 | 0.31              | 665.51            | 0.05      | 99.34     |
| 25.0-26.0 | 11.83             | 524.79            | 1.77      | 78.34     | 72.0-73.0 | 0.27              | 665.78            | 0.04      | 99.38     |
| 26.0-27.0 | 11.04             | 535.83            | 1.65      | 79.98     | 73.0-74.0 | 0.23              | 666.01            | 0.03      | 99.42     |
| 27.0-28.0 | 10.28             | 546.11            | 1.53      | 81.52     | 74.0-75.0 | 0.20              | 666.21            | 0.03      | 99.45     |
| 28.0-29.0 | 9.55              | 555.66            | 1.43      | 82.94     | 75.0-76.0 | 0.17              | 666.38            | 0.03      | 99.47     |
| 29.0-30.0 | 8.86              | 564.52            | 1.32      | 84.27     | 76.0-77.0 | 0.14              | 666.52            | 0.02      | 99.49     |
| 30.0-31.0 | 8.22              | 572.74            | 1.23      | 85.49     | 77.0-78.0 | 0.12              | 666.64            | 0.02      | 99.51     |
| 31.0-32.0 | 7.61              | 580.34            | 1.14      | 86.63     | 78.0-79.0 | 0.10              | 666.74            | 0.02      | 99.53     |
| 32.0-33.0 | 7.03              | 587.37            | 1.05      | 87.68     | 79.0-80.0 | 0.08              | 666.83            | 0.01      | 99.54     |
| 33.0-34.0 | 6.48              | 593.86            | 0.97      | 88.65     | 80.0-81.0 | 0.07              | 666.90            | 0.01      | 99.55     |
| 34.0-35.0 | 5.96              | 599.82            | 0.89      | 89.54     | 81.0-82.0 | 0.06              | 666.95            | 0.01      | 99.56     |
| 35.0-36.0 | 5.49              | 605.31            | 0.82      | 90.36     | 82.0-83.0 | 0.05              | 667.00            | 0.01      | 99.56     |
| 36.0-37.0 | 5.06              | 610.37            | 0.76      | 91.11     | 83.0-84.0 | 0.04              | 667.04            | 0.01      | 99.57     |
| 37.0-38.0 | 4.66              | 615.03            | 0.70      | 91.81     | 84.0-85.0 | 0.03              | 667.06            | 0.00      | 99.57     |
| 38.0-39.0 | 4.31              | 619.34            | 0.64      | 92.45     | 85.0-86.0 | 0.02              | 667.09            | 0.00      | 99.58     |
| 39.0-40.0 | 3.99              | 623.33            | 0.60      | 93.05     | 86.0-87.0 | 0.02              | 667.10            | 0.00      | 99.58     |
| 40.0-41.0 | 3.69              | 627.02            | 0.55      | 93.60     | 87.0-88.0 | 0.01              | 667.11            | 0.00      | 99.58     |
| 41.0-42.0 | 3.39              | 630.41            | 0.51      | 94.10     | 88.0-89.0 | 0.01              | 667.12            | 0.00      | 99.58     |
| 42.0-43.0 | 3.09              | 633.50            | 0.46      | 94.56     | 89.0-90.0 | 0.00              | 667.13            | 0.00      | 99.58     |
| 43.0-44.0 | 2.79              | 636.30            | 0.42      | 94.98     | 90.0-91.0 | 0.00              | 667.13            | 0.00      | 99.58     |
| 44.0-45.0 | 2.51              | 638.80            | 0.37      | 95.36     | 91.0-92.0 | 0.00              | 667.13            | 0.00      | 99.58     |
| 45.0-46.0 | 2.23              | 641.04            | 0.33      | 95.69     | 92.0-93.0 | 0.00              | 667.13            | 0.00      | 99.58     |
| 46.0-47.0 | 1.99              | 643.03            | 0.30      | 95.99     | 93.0-94.0 | 0.00              | 667.13            | 0.00      | 99.58     |

Zonal Flux Tabulation - (Cont.)

| Zone(γ)     | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)     | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|-------------|-------------------|-------------------|-----------|-----------|
| 94.0-95.0   | 0.00              | 667.13            | 0.00      | 99.58     | 141.0-142.0 | 0.04              | 667.25            | 0.01      | 99.60     |
| 95.0-96.0   | 0.00              | 667.13            | 0.00      | 99.58     | 142.0-143.0 | 0.05              | 667.30            | 0.01      | 99.61     |
| 96.0-97.0   | 0.00              | 667.13            | 0.00      | 99.58     | 143.0-144.0 | 0.06              | 667.37            | 0.01      | 99.62     |
| 97.0-98.0   | 0.00              | 667.13            | 0.00      | 99.58     | 144.0-145.0 | 0.07              | 667.44            | 0.01      | 99.63     |
| 98.0-99.0   | 0.00              | 667.13            | 0.00      | 99.58     | 145.0-146.0 | 0.08              | 667.52            | 0.01      | 99.64     |
| 99.0-100.0  | 0.00              | 667.13            | 0.00      | 99.58     | 146.0-147.0 | 0.09              | 667.60            | 0.01      | 99.65     |
| 100.0-101.0 | 0.00              | 667.13            | 0.00      | 99.58     | 147.0-148.0 | 0.09              | 667.69            | 0.01      | 99.67     |
| 101.0-102.0 | 0.00              | 667.13            | 0.00      | 99.58     | 148.0-149.0 | 0.10              | 667.79            | 0.01      | 99.68     |
| 102.0-103.0 | 0.00              | 667.13            | 0.00      | 99.58     | 149.0-150.0 | 0.10              | 667.89            | 0.01      | 99.70     |
| 103.0-104.0 | 0.00              | 667.13            | 0.00      | 99.58     | 150.0-151.0 | 0.10              | 667.99            | 0.02      | 99.71     |
| 104.0-105.0 | 0.00              | 667.13            | 0.00      | 99.58     | 151.0-152.0 | 0.10              | 668.10            | 0.02      | 99.73     |
| 105.0-106.0 | 0.00              | 667.13            | 0.00      | 99.58     | 152.0-153.0 | 0.11              | 668.20            | 0.02      | 99.74     |
| 106.0-107.0 | 0.00              | 667.13            | 0.00      | 99.58     | 153.0-154.0 | 0.11              | 668.31            | 0.02      | 99.76     |
| 107.0-108.0 | 0.00              | 667.13            | 0.00      | 99.58     | 154.0-155.0 | 0.11              | 668.42            | 0.02      | 99.78     |
| 108.0-109.0 | 0.00              | 667.13            | 0.00      | 99.58     | 155.0-156.0 | 0.10              | 668.52            | 0.02      | 99.79     |
| 109.0-110.0 | 0.00              | 667.13            | 0.00      | 99.58     | 156.0-157.0 | 0.10              | 668.62            | 0.02      | 99.81     |
| 110.0-111.0 | 0.00              | 667.13            | 0.00      | 99.58     | 157.0-158.0 | 0.10              | 668.72            | 0.02      | 99.82     |
| 111.0-112.0 | 0.00              | 667.13            | 0.00      | 99.58     | 158.0-159.0 | 0.10              | 668.82            | 0.01      | 99.84     |
| 112.0-113.0 | 0.00              | 667.13            | 0.00      | 99.58     | 159.0-160.0 | 0.10              | 668.92            | 0.01      | 99.85     |
| 113.0-114.0 | 0.00              | 667.13            | 0.00      | 99.58     | 160.0-161.0 | 0.09              | 669.01            | 0.01      | 99.86     |
| 114.0-115.0 | 0.00              | 667.13            | 0.00      | 99.58     | 161.0-162.0 | 0.09              | 669.10            | 0.01      | 99.88     |
| 115.0-116.0 | 0.00              | 667.13            | 0.00      | 99.58     | 162.0-163.0 | 0.09              | 669.19            | 0.01      | 99.89     |
| 116.0-117.0 | 0.00              | 667.13            | 0.00      | 99.58     | 163.0-164.0 | 0.08              | 669.27            | 0.01      | 99.90     |
| 117.0-118.0 | 0.00              | 667.13            | 0.00      | 99.58     | 164.0-165.0 | 0.08              | 669.35            | 0.01      | 99.91     |
| 118.0-119.0 | 0.00              | 667.13            | 0.00      | 99.58     | 165.0-166.0 | 0.07              | 669.42            | 0.01      | 99.93     |
| 119.0-120.0 | 0.00              | 667.13            | 0.00      | 99.58     | 166.0-167.0 | 0.07              | 669.49            | 0.01      | 99.94     |
| 120.0-121.0 | 0.00              | 667.13            | 0.00      | 99.58     | 167.0-168.0 | 0.06              | 669.55            | 0.01      | 99.95     |
| 121.0-122.0 | 0.00              | 667.13            | 0.00      | 99.58     | 168.0-169.0 | 0.06              | 669.61            | 0.01      | 99.95     |
| 122.0-123.0 | 0.00              | 667.13            | 0.00      | 99.58     | 169.0-170.0 | 0.05              | 669.67            | 0.01      | 99.96     |
| 123.0-124.0 | 0.00              | 667.13            | 0.00      | 99.58     | 170.0-171.0 | 0.05              | 669.72            | 0.01      | 99.97     |
| 124.0-125.0 | 0.00              | 667.13            | 0.00      | 99.58     | 171.0-172.0 | 0.04              | 669.76            | 0.01      | 99.98     |
| 125.0-126.0 | 0.00              | 667.13            | 0.00      | 99.58     | 172.0-173.0 | 0.04              | 669.80            | 0.01      | 99.98     |
| 126.0-127.0 | 0.00              | 667.13            | 0.00      | 99.58     | 173.0-174.0 | 0.03              | 669.83            | 0.00      | 99.99     |
| 127.0-128.0 | 0.00              | 667.13            | 0.00      | 99.58     | 174.0-175.0 | 0.03              | 669.86            | 0.00      | 99.99     |
| 128.0-129.0 | 0.00              | 667.13            | 0.00      | 99.58     | 175.0-176.0 | 0.02              | 669.88            | 0.00      | 99.99     |
| 129.0-130.0 | 0.00              | 667.13            | 0.00      | 99.58     | 176.0-177.0 | 0.02              | 669.90            | 0.00      | 100.00    |
| 130.0-131.0 | 0.00              | 667.13            | 0.00      | 99.58     | 177.0-178.0 | 0.01              | 669.91            | 0.00      | 100.00    |
| 131.0-132.0 | 0.00              | 667.13            | 0.00      | 99.58     | 178.0-179.0 | 0.01              | 669.92            | 0.00      | 100.00    |
| 132.0-133.0 | 0.00              | 667.13            | 0.00      | 99.58     | 179.0-180.0 | 0.00              | 669.92            | 0.00      | 100.00    |
| 133.0-134.0 | 0.00              | 667.13            | 0.00      | 99.58     |             |                   |                   |           |           |
| 134.0-135.0 | 0.00              | 667.13            | 0.00      | 99.58     |             |                   |                   |           |           |
| 135.0-136.0 | 0.00              | 667.13            | 0.00      | 99.58     |             |                   |                   |           |           |
| 136.0-137.0 | 0.00              | 667.13            | 0.00      | 99.58     |             |                   |                   |           |           |
| 137.0-138.0 | 0.00              | 667.14            | 0.00      | 99.58     |             |                   |                   |           |           |
| 138.0-139.0 | 0.01              | 667.15            | 0.00      | 99.59     |             |                   |                   |           |           |
| 139.0-140.0 | 0.02              | 667.17            | 0.00      | 99.59     |             |                   |                   |           |           |
| 140.0-141.0 | 0.03              | 667.20            | 0.00      | 99.59     |             |                   |                   |           |           |

Rectangle ISO Lighting Intensity Diagram

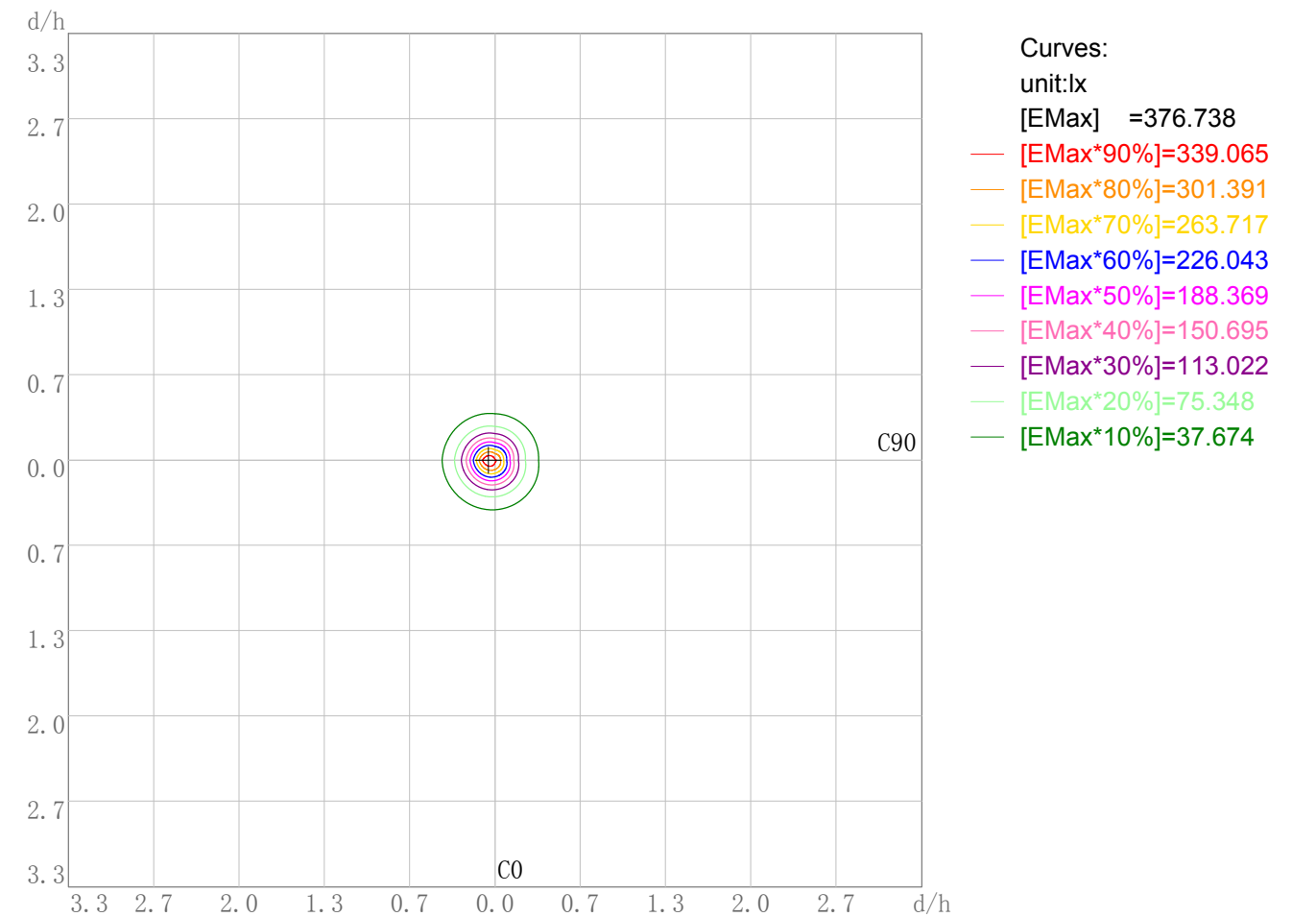
|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |



Plane ISO-Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 376.74  
Working Plane Maximum Illuminance Position(d/h):H-0.1 V-0.0

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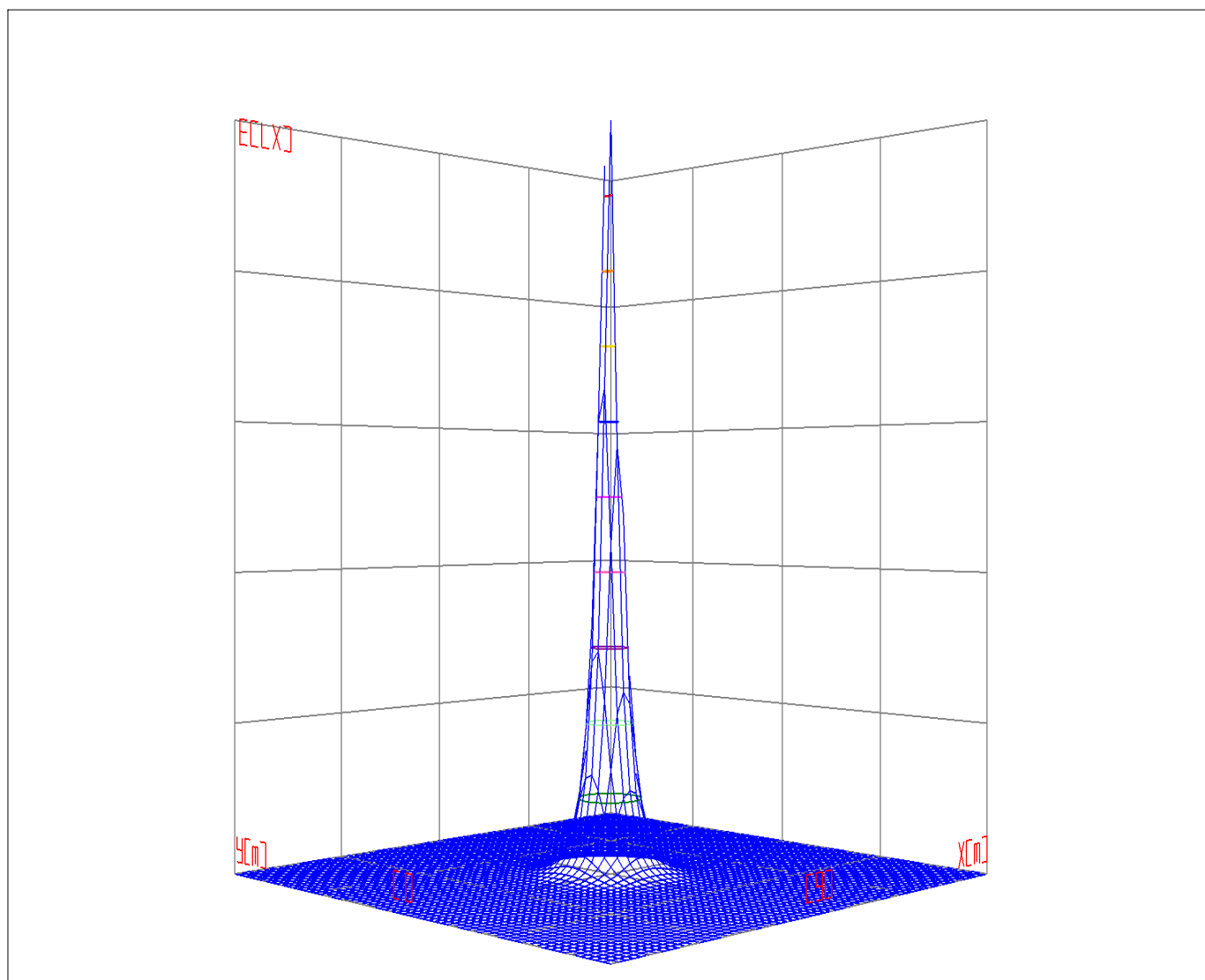
# IES Indoor Report

Photometric Filename:WL02-09-XX-04 2700K RA90 15D.IES

## 3D Plane ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |

## 3D Plane Illuminance Modal



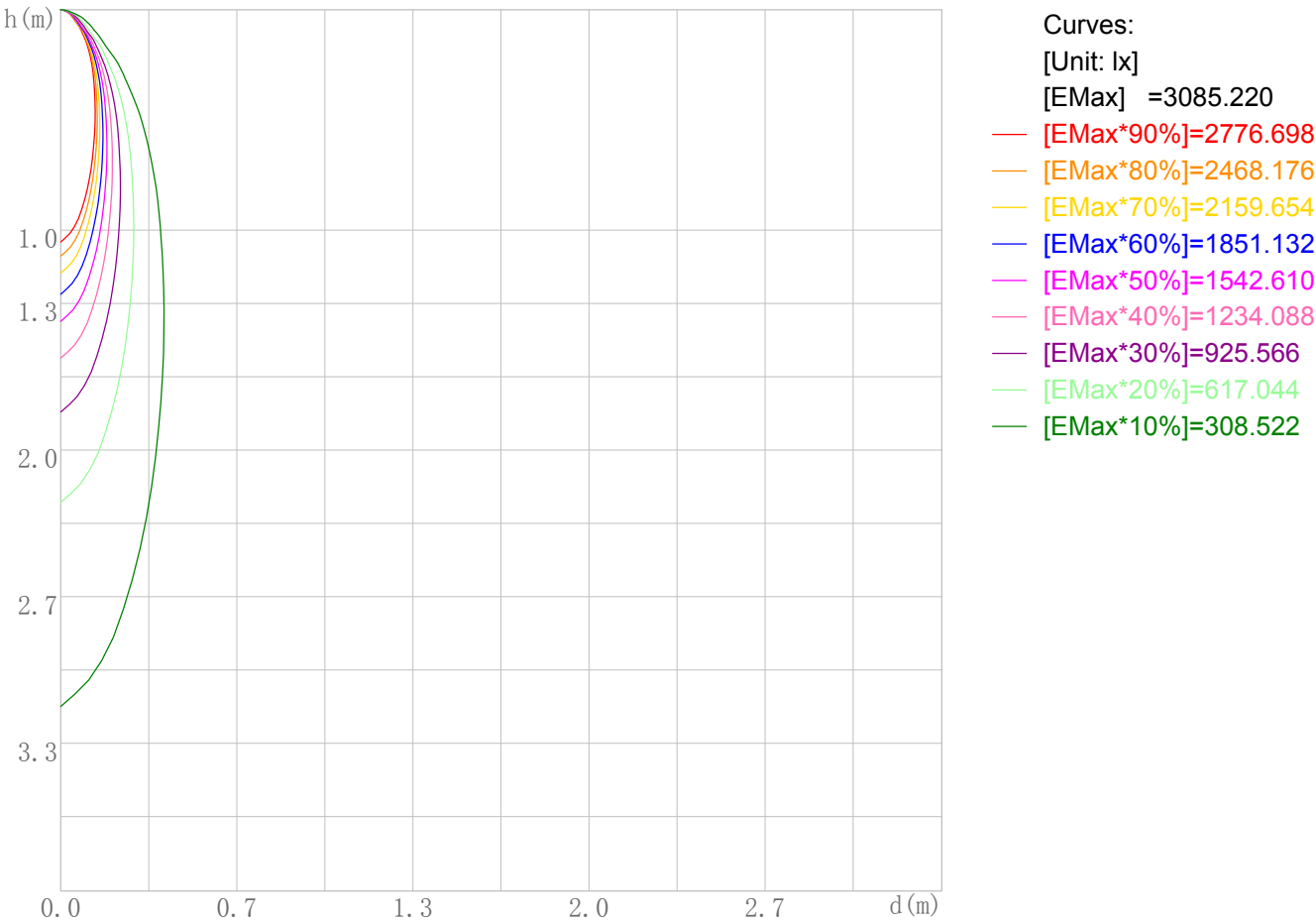
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0



Space ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |

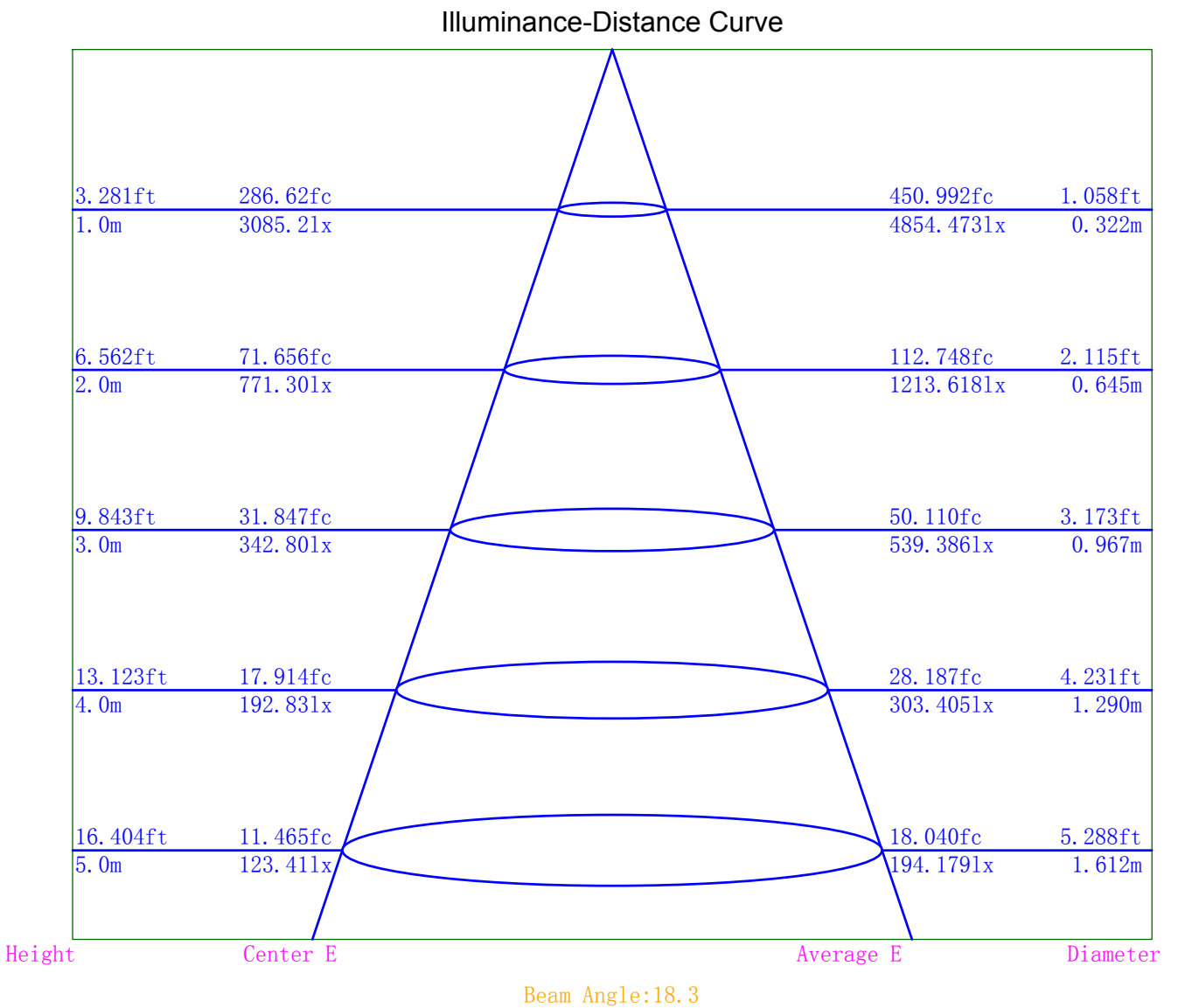
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:3085.22lx,0.0deg  
Plane Maximum Lighting Intensity and @Angle:3085.220cd,0deg

Illuminance-Distance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |



Indoor Luminance Limiting Curves

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |

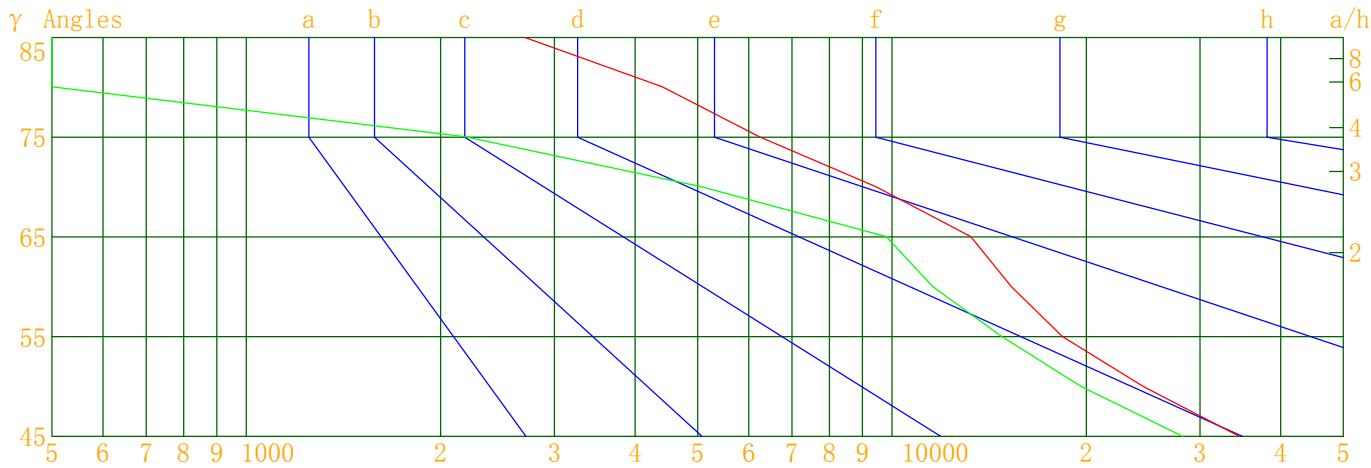
Glare Grade Table

| GI   | Quality | Using Illuminance |      |      |       |       |       |       |       |
|------|---------|-------------------|------|------|-------|-------|-------|-------|-------|
| 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       | a                 |      |      |       | 2000  | 1000  | 500   | <=300 |
|      |         |                   | b    | c    | d     | e     | f     | g     | h     |

Luminance Table

| Gama(deg) | 45    | 50    | 55    | 60    | 65    | 70   | 75   | 80   | 85   |
|-----------|-------|-------|-------|-------|-------|------|------|------|------|
| C0        | 34528 | 24493 | 18364 | 15300 | 13242 | 9443 | 6231 | 4408 | 2701 |
| C90       | 28199 | 19628 | 14789 | 11560 | 9800  | 5066 | 2184 | 0    | 0    |

Luminance Limiting Curve



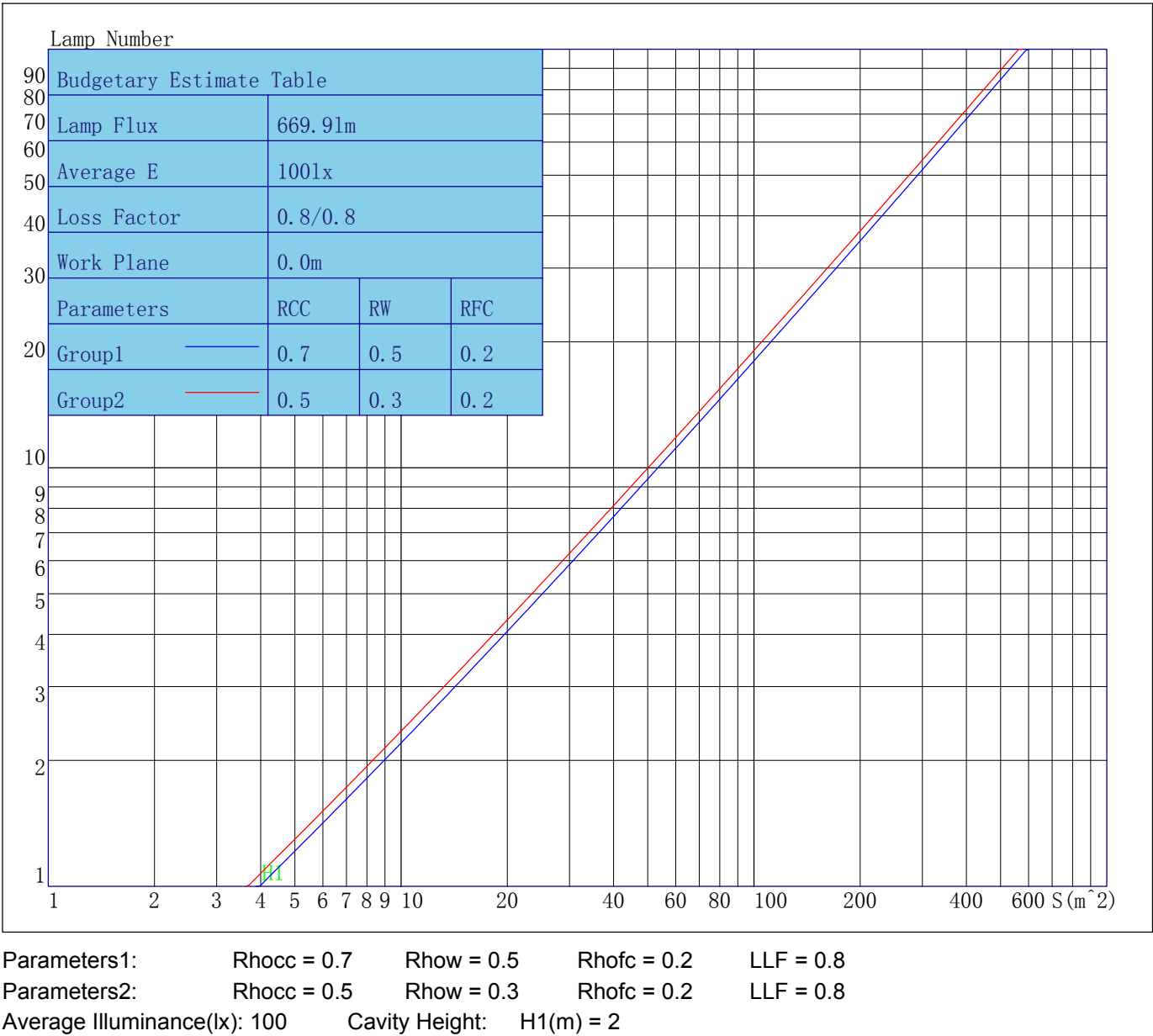
Luminous Size: Length(m)=-0.038 Width(m)=-0.038 Height(m)=0.000 Area(m^2)=0.001134

Luminous Type: Without Luminous Side

Luminous Curves: C0-C180 Color: C90-C270 Color:

Indoor Budgetary Estimate Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16        |



Indoor Coefficient of Utilization Table

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catelog:         | Test ID: 01                 |
| Lamp Name:                                      | Lamp Catelog: LED     | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16       |

| Coefficients of Utilization - Zonal Cavity Method |   |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Coef.   | Effective Floor Cavity Reflectance RFC=0.20 |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| RhoCC (%)   | 80  |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0   |
| RhoW (%)  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| RCR   | Coefficient of Utilization(%)               |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119   | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1   | 114   | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 98  | 98  | 97  | 95  |
| 2   | 110   | 106 | 102 | 99  | 108 | 104 | 101 | 98  | 101 | 98  | 96  | 98  | 96  | 94  | 95  | 93  | 92  | 90  |
| 3   | 106   | 100 | 96  | 93  | 104 | 99  | 95  | 92  | 96  | 93  | 90  | 94  | 91  | 89  | 92  | 89  | 88  | 86  |
| 4   | 102   | 95  | 91  | 87  | 100 | 94  | 90  | 87  | 92  | 89  | 86  | 90  | 87  | 85  | 88  | 86  | 84  | 82  |
| 5   | 98  | 91  | 86  | 83  | 96  | 90  | 86  | 82  | 88  | 85  | 82  | 87  | 84  | 81  | 85  | 82  | 80  | 79  |
| 6   | 94  | 87  | 82  | 79  | 93  | 86  | 82  | 79  | 85  | 81  | 78  | 84  | 80  | 78  | 82  | 79  | 77  | 76  |
| 7   | 91  | 84  | 79  | 76  | 90  | 83  | 79  | 75  | 82  | 78  | 75  | 81  | 77  | 75  | 80  | 77  | 74  | 73  |
| 8   | 88  | 81  | 76  | 73  | 87  | 80  | 76  | 72  | 79  | 75  | 72  | 78  | 74  | 72  | 77  | 74  | 72  | 70  |
| 9   | 85  | 78  | 73  | 70  | 84  | 77  | 73  | 70  | 76  | 72  | 70  | 76  | 72  | 69  | 75  | 72  | 69  | 68  |
| 10  | 83  | 75  | 71  | 68  | 82  | 75  | 70  | 67  | 74  | 70  | 67  | 73  | 70  | 67  | 73  | 69  | 67  | 66  |

Unified Glare Rating Table

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: WL02-09-XX-04 2700K RA90 15D         | Lum. Catelog:         | Test ID: 01                 |
| Lamp Name:                                      | Lamp Catelog: LED     | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/16       |

Unified Glare Rating Table

|   |                 |      |      |      |      |               |      |      |      |      |
|---|-----------------|------|------|------|------|---------------|------|------|------|------|
| Ceiling RCC                                       | 0.70            | 0.70 | 0.50 | 0.50 | 0.30 | 0.70          | 0.70 | 0.50 | 0.50 | 0.30 |
| Wall RW   | 0.50            | 0.30 | 0.50 | 0.30 | 0.30 | 0.50          | 0.30 | 0.50 | 0.30 | 0.30 |
| Floor RFC   | 0.20            | 0.20 | 0.20 | 0.20 | 0.20 | 0.20          | 0.20 | 0.20 | 0.20 | 0.20 |
| Room Size   | Vewed crosswise |      |      |      |      | Vewed endwise |      |      |      |      |
| X=2H    Y=2H                                      | 18.4            | 19.4 | 18.8 | 19.7 | 20.1 | 17.4          | 18.4 | 17.8 | 18.8 | 19.1 |
|   | 18.6            | 19.5 | 19.0 | 19.8 | 20.2 | 17.5          | 18.4 | 17.8 | 18.7 | 19.1 |
|   | 18.6            | 19.4 | 19.0 | 19.8 | 20.2 | 17.4          | 18.2 | 17.8 | 18.6 | 19.0 |
|   | 18.5            | 19.3 | 18.9 | 19.7 | 20.1 | 17.3          | 18.0 | 17.7 | 18.4 | 18.8 |
|   | 18.5            | 19.2 | 18.9 | 19.6 | 20.0 | 17.2          | 17.9 | 17.7 | 18.3 | 18.8 |
|   | 18.4            | 19.1 | 18.9 | 19.5 | 20.0 | 17.2          | 17.9 | 17.6 | 18.2 | 18.7 |
| X=4H    Y=2H                                      | 18.4            | 19.2 | 18.8 | 19.6 | 20.0 | 17.4          | 18.2 | 17.8 | 18.6 | 19.0 |
|   | 18.6            | 19.3 | 19.0 | 19.7 | 20.2 | 17.5          | 18.2 | 17.9 | 18.6 | 19.0 |
|   | 18.6            | 19.3 | 19.1 | 19.7 | 20.2 | 17.4          | 18.0 | 17.8 | 18.4 | 18.9 |
|   | 18.6            | 19.1 | 19.1 | 19.6 | 20.1 | 17.3          | 17.8 | 17.7 | 18.3 | 18.8 |
|   | 18.5            | 19.1 | 19.0 | 19.5 | 20.0 | 17.2          | 17.7 | 17.7 | 18.2 | 18.7 |
|   | 18.5            | 18.9 | 19.0 | 19.4 | 19.9 | 17.1          | 17.6 | 17.6 | 18.1 | 18.6 |
| X=8H    Y=4H                                      | 18.5            | 19.0 | 19.0 | 19.5 | 20.0 | 17.2          | 17.8 | 17.7 | 18.2 | 18.7 |
|   | 18.5            | 18.9 | 19.0 | 19.4 | 20.0 | 17.1          | 17.5 | 17.6 | 18.0 | 18.6 |
|   | 18.5            | 18.8 | 19.0 | 19.4 | 19.9 | 17.0          | 17.4 | 17.6 | 18.0 | 18.5 |
|   | 18.4            | 18.8 | 19.0 | 19.3 | 19.9 | 17.0          | 17.3 | 17.5 | 17.8 | 18.4 |
| X=12H    Y=4H                                     | 18.5            | 18.9 | 19.0 | 19.4 | 19.9 | 17.2          | 17.6 | 17.7 | 18.1 | 18.6 |
|   | 18.4            | 18.8 | 19.0 | 19.3 | 19.9 | 17.1          | 17.4 | 17.6 | 17.9 | 18.5 |
|   | 18.4            | 18.8 | 18.9 | 19.3 | 19.8 | 17.0          | 17.3 | 17.5 | 17.8 | 18.4 |
| Variations with the objerver position at spacings |                 |      |      |      |      |               |      |      |      |      |
| S=1.0H  | 0.7/-0.8        |      |      |      |      | 1.9/-2.9      |      |      |      |      |
| S=1.5H  | 1.5/-1.7        |      |      |      |      | 2.9/-4.7      |      |      |      |      |
| S=2.0H  | 2.6/-3.2        |      |      |      |      | 4.1/-7.2      |      |      |      |      |
| Reduced UGR Table:                                |                 |      |      |      |      |               |      |      |      |      |
| Nordic Standard Table:                            | BK0             |      |      |      |      | BK0           |      |      |      |      |
| Correction Value                                  | 0.6             |      |      |      |      | 0.3           |      |      |      |      |

o the CIE Pub.117, data has been corrected, refers to the lamp’s lumens 8.2flm.

Candela Tabulation

| V/H    | C0.0    | C90.0   | C180.0  | C270.0  |
|--------|---------|---------|---------|---------|
| γ 0.0  | 3085.22 | 3085.22 | 3085.22 | 3085.22 |
| γ 1.0  | 2976.86 | 3001.89 | 3048.25 | 3310.84 |
| γ 2.0  | 2860.16 | 2803.48 | 2994.23 | 3394.92 |
| γ 3.0  | 2704.35 | 2574.04 | 2893.54 | 3404.62 |
| γ 4.0  | 2520.49 | 2328.20 | 2751.43 | 3339.95 |
| γ 5.0  | 2305.82 | 2086.69 | 2570.15 | 3209.99 |
| γ 6.0  | 2093.25 | 1857.34 | 2368.03 | 3031.15 |
| γ 7.0  | 1886.97 | 1643.95 | 2158.66 | 2810.09 |
| γ 8.0  | 1689.63 | 1444.99 | 1953.31 | 2557.34 |
| γ 9.0  | 1505.74 | 1265.89 | 1758.41 | 2293.36 |
| γ 10.0 | 1335.19 | 1106.94 | 1575.38 | 2048.19 |
| γ 11.0 | 1181.78 | 971.21  | 1401.84 | 1825.24 |
| γ 12.0 | 1045.75 | 856.63  | 1239.11 | 1615.77 |
| γ 13.0 | 926.34  | 758.97  | 1092.74 | 1421.79 |
| γ 14.0 | 820.60  | 674.22  | 964.87  | 1247.99 |
| γ 15.0 | 726.54  | 600.37  | 852.58  | 1096.04 |
| γ 16.0 | 644.59  | 536.61  | 754.97  | 963.30  |
| γ 17.0 | 572.68  | 479.64  | 669.10  | 847.43  |
| γ 18.0 | 509.10  | 430.41  | 595.27  | 745.89  |
| γ 19.0 | 453.80  | 387.39  | 531.19  | 657.78  |
| γ 20.0 | 405.64  | 349.41  | 474.61  | 580.44  |
| γ 21.0 | 363.89  | 315.66  | 424.85  | 513.68  |
| γ 22.0 | 327.50  | 285.39  | 382.01  | 455.44  |
| γ 23.0 | 295.10  | 258.40  | 344.35  | 405.23  |
| γ 24.0 | 266.10  | 233.62  | 310.42  | 362.16  |
| γ 25.0 | 239.32  | 211.34  | 279.79  | 324.75  |
| γ 26.0 | 215.20  | 191.01  | 251.89  | 291.61  |
| γ 27.0 | 194.19  | 172.42  | 226.03  | 262.21  |
| γ 28.0 | 175.47  | 155.67  | 203.45  | 234.46  |
| γ 29.0 | 158.33  | 140.39  | 182.73  | 209.72  |
| γ 30.0 | 142.71  | 126.69  | 164.11  | 188.10  |
| γ 31.0 | 129.04  | 114.49  | 147.20  | 168.76  |
| γ 32.0 | 116.50  | 103.15  | 131.80  | 151.26  |
| γ 33.0 | 105.14  | 92.61   | 118.36  | 135.71  |
| γ 34.0 | 93.57   | 83.14   | 106.17  | 122.13  |
| γ 35.0 | 83.43   | 74.74   | 95.05   | 109.90  |
| γ 36.0 | 75.00   | 67.50   | 85.00   | 98.94   |
| γ 37.0 | 67.84   | 61.14   | 76.11   | 88.95   |
| γ 38.0 | 61.48   | 55.46   | 68.35   | 79.68   |
| γ 39.0 | 55.99   | 50.39   | 61.68   | 71.73   |
| γ 40.0 | 51.04   | 45.76   | 55.69   | 64.93   |
| γ 41.0 | 46.62   | 40.70   | 50.61   | 59.01   |
| γ 42.0 | 42.35   | 34.55   | 45.95   | 53.86   |
| γ 43.0 | 36.90   | 29.40   | 41.73   | 49.22   |
| γ 44.0 | 31.64   | 25.56   | 36.49   | 45.21   |
| γ 45.0 | 27.69   | 22.61   | 30.52   | 41.22   |
| γ 46.0 | 24.73   | 20.33   | 25.73   | 35.72   |

Candela Tabulation - (Cont.)

| V/H    | C0.0  | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 22.47 | 18.49 | 22.40  | 30.39  |
| γ 48.0 | 20.62 | 16.99 | 19.85  | 26.57  |
| γ 49.0 | 19.18 | 15.65 | 17.95  | 23.70  |
| γ 50.0 | 17.85 | 14.31 | 16.48  | 21.38  |
| γ 51.0 | 16.57 | 12.71 | 15.33  | 19.57  |
| γ 52.0 | 15.09 | 11.70 | 14.30  | 18.11  |
| γ 53.0 | 13.70 | 10.86 | 13.15  | 16.85  |
| γ 54.0 | 12.76 | 10.21 | 11.81  | 15.69  |
| γ 55.0 | 11.95 | 9.62  | 11.01  | 14.34  |
| γ 56.0 | 11.31 | 9.11  | 10.30  | 13.02  |
| γ 57.0 | 10.73 | 8.52  | 9.76   | 12.13  |
| γ 58.0 | 10.13 | 7.81  | 9.28   | 11.45  |
| γ 59.0 | 9.42  | 7.09  | 8.83   | 10.90  |
| γ 60.0 | 8.68  | 6.55  | 8.31   | 10.38  |
| γ 61.0 | 7.99  | 6.09  | 7.69   | 9.87   |
| γ 62.0 | 7.46  | 5.75  | 7.07   | 9.24   |
| γ 63.0 | 7.04  | 5.44  | 6.58   | 8.57   |
| γ 64.0 | 6.69  | 5.11  | 6.17   | 7.90   |
| γ 65.0 | 6.35  | 4.70  | 5.87   | 7.42   |
| γ 66.0 | 5.96  | 4.12  | 5.57   | 7.07   |
| γ 67.0 | 5.51  | 3.42  | 5.25   | 6.74   |
| γ 68.0 | 4.89  | 2.83  | 4.85   | 6.43   |
| γ 69.0 | 4.20  | 2.37  | 4.29   | 6.06   |
| γ 70.0 | 3.66  | 1.97  | 3.59   | 5.63   |
| γ 71.0 | 3.21  | 1.61  | 3.03   | 5.02   |
| γ 72.0 | 2.79  | 1.32  | 2.56   | 4.34   |
| γ 73.0 | 2.42  | 1.07  | 2.17   | 3.79   |
| γ 74.0 | 2.10  | 0.83  | 1.81   | 3.33   |
| γ 75.0 | 1.83  | 0.64  | 1.50   | 2.92   |
| γ 76.0 | 1.59  | 0.46  | 1.25   | 2.53   |
| γ 77.0 | 1.38  | 0.31  | 1.02   | 2.21   |
| γ 78.0 | 1.19  | 0.18  | 0.82   | 1.94   |
| γ 79.0 | 1.02  | 0.05  | 0.64   | 1.69   |
| γ 80.0 | 0.87  | 0.00  | 0.47   | 1.47   |
| γ 81.0 | 0.72  | 0.00  | 0.32   | 1.28   |
| γ 82.0 | 0.60  | 0.00  | 0.19   | 1.10   |
| γ 83.0 | 0.48  | 0.00  | 0.06   | 0.94   |
| γ 84.0 | 0.36  | 0.00  | 0.00   | 0.80   |
| γ 85.0 | 0.27  | 0.00  | 0.00   | 0.66   |
| γ 86.0 | 0.17  | 0.00  | 0.00   | 0.54   |
| γ 87.0 | 0.09  | 0.00  | 0.00   | 0.43   |
| γ 88.0 | 0.01  | 0.00  | 0.00   | 0.32   |
| γ 89.0 | 0.00  | 0.00  | 0.00   | 0.22   |
| γ 90.0 | 0.00  | 0.00  | 0.00   | 0.13   |
| γ 91.0 | 0.00  | 0.00  | 0.00   | 0.03   |
| γ 92.0 | 0.00  | 0.00  | 0.00   | 0.00   |
| γ 93.0 | 0.00  | 0.00  | 0.00   | 0.00   |



Candela Tabulation - (Cont.)

| V/H     | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 94.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 95.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 96.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 97.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 98.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 99.0  | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 100.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 101.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 102.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 103.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 104.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 105.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 106.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 107.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 108.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 109.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 110.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 111.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 112.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 113.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 114.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 115.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 116.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 117.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 118.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 119.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 120.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 121.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 122.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 123.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 124.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 125.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 126.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 127.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 128.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 129.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 130.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 131.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 132.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 133.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 134.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 135.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 136.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 137.0 | 0.00 | 0.02  | 0.04   | 0.00   |
| γ 138.0 | 0.09 | 0.17  | 0.19   | 0.00   |
| γ 139.0 | 0.23 | 0.33  | 0.34   | 0.10   |
| γ 140.0 | 0.39 | 0.49  | 0.50   | 0.23   |

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Candela Tabulation - (Cont.)

| V/H     | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.54 | 0.64  | 0.68   | 0.37   |
| γ 142.0 | 0.70 | 0.81  | 0.86   | 0.53   |
| γ 143.0 | 0.87 | 0.97  | 1.02   | 0.69   |
| γ 144.0 | 1.03 | 1.13  | 1.19   | 0.84   |
| γ 145.0 | 1.17 | 1.27  | 1.34   | 1.00   |
| γ 146.0 | 1.33 | 1.40  | 1.50   | 1.16   |
| γ 147.0 | 1.47 | 1.53  | 1.63   | 1.32   |
| γ 148.0 | 1.60 | 1.64  | 1.76   | 1.46   |
| γ 149.0 | 1.73 | 1.74  | 1.87   | 1.60   |
| γ 150.0 | 1.86 | 1.84  | 1.99   | 1.74   |
| γ 151.0 | 1.96 | 1.91  | 2.09   | 1.86   |
| γ 152.0 | 2.06 | 2.00  | 2.18   | 1.96   |
| γ 153.0 | 2.15 | 2.06  | 2.26   | 2.06   |
| γ 154.0 | 2.24 | 2.12  | 2.34   | 2.15   |
| γ 155.0 | 2.30 | 2.17  | 2.41   | 2.23   |
| γ 156.0 | 2.36 | 2.21  | 2.47   | 2.31   |
| γ 157.0 | 2.42 | 2.24  | 2.53   | 2.37   |
| γ 158.0 | 2.47 | 2.29  | 2.58   | 2.42   |
| γ 159.0 | 2.52 | 2.32  | 2.63   | 2.47   |
| γ 160.0 | 2.57 | 2.37  | 2.67   | 2.51   |
| γ 161.0 | 2.61 | 2.40  | 2.70   | 2.54   |
| γ 162.0 | 2.63 | 2.43  | 2.74   | 2.59   |
| γ 163.0 | 2.66 | 2.46  | 2.75   | 2.61   |
| γ 164.0 | 2.68 | 2.49  | 2.77   | 2.63   |
| γ 165.0 | 2.70 | 2.51  | 2.80   | 2.67   |
| γ 166.0 | 2.70 | 2.52  | 2.80   | 2.69   |
| γ 167.0 | 2.72 | 2.53  | 2.80   | 2.71   |
| γ 168.0 | 2.72 | 2.53  | 2.80   | 2.73   |
| γ 169.0 | 2.72 | 2.53  | 2.79   | 2.75   |
| γ 170.0 | 2.71 | 2.52  | 2.78   | 2.75   |
| γ 171.0 | 2.68 | 2.50  | 2.76   | 2.77   |
| γ 172.0 | 2.65 | 2.49  | 2.73   | 2.77   |
| γ 173.0 | 2.63 | 2.47  | 2.70   | 2.76   |
| γ 174.0 | 2.60 | 2.45  | 2.66   | 2.74   |
| γ 175.0 | 2.57 | 2.45  | 2.63   | 2.74   |
| γ 176.0 | 2.55 | 2.46  | 2.60   | 2.72   |
| γ 177.0 | 2.53 | 2.48  | 2.56   | 2.72   |
| γ 178.0 | 2.52 | 2.50  | 2.54   | 2.70   |
| γ 179.0 | 2.51 | 2.55  | 2.53   | 2.68   |
| γ 180.0 | 2.56 | 2.56  | 2.56   | 2.56   |