

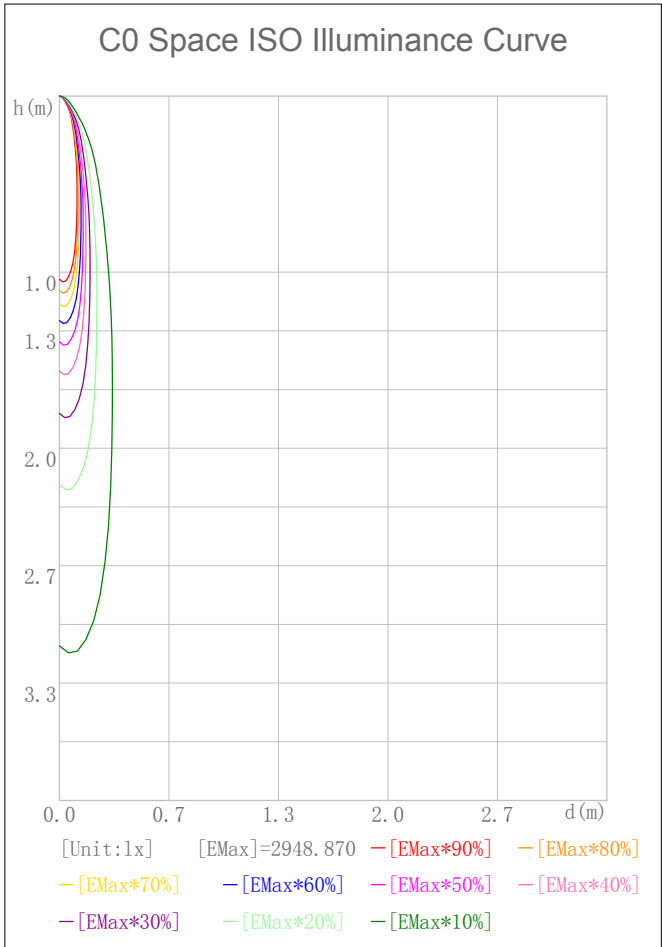
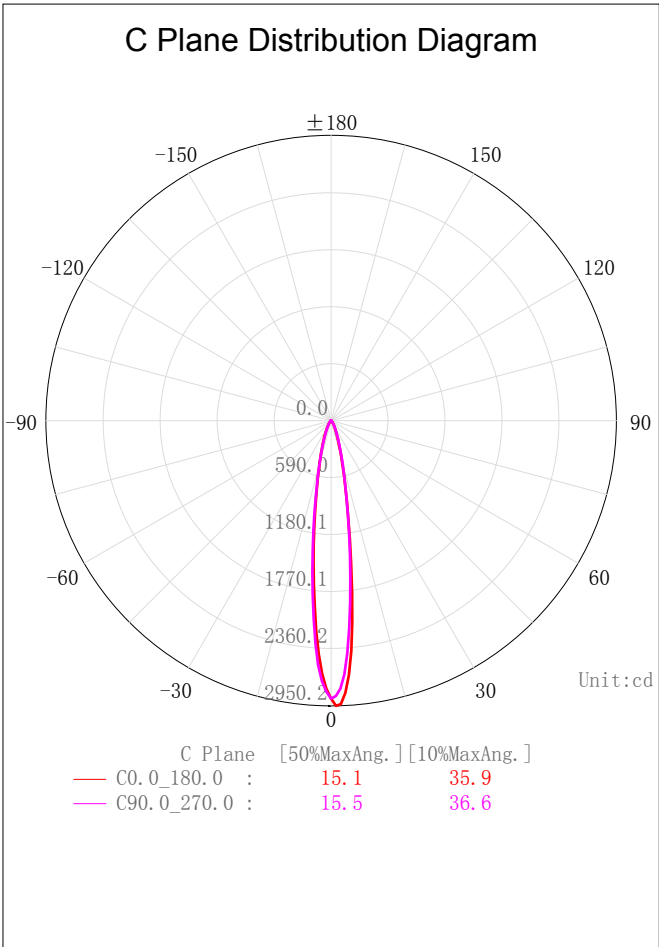
Indoor Luminaire Photometric Data

Description Information

|   |                         |                      |                       |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: SD05-06-XX-01 3000K RA90 15D   |                         | Lum. Catalog:        | Test ID: 01           |
| Lamp Name:                                    |                         | Lamp Catalog: LED    | Test Date: 2021/04/16 |
| 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):0.050m*0.000m*0.000m        |                         | Lum. Area (m2):0.002 | Lum. W (kg): 0.000    |
| Test System: C, γ                             | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25       | Humidity(%): 50.0     |

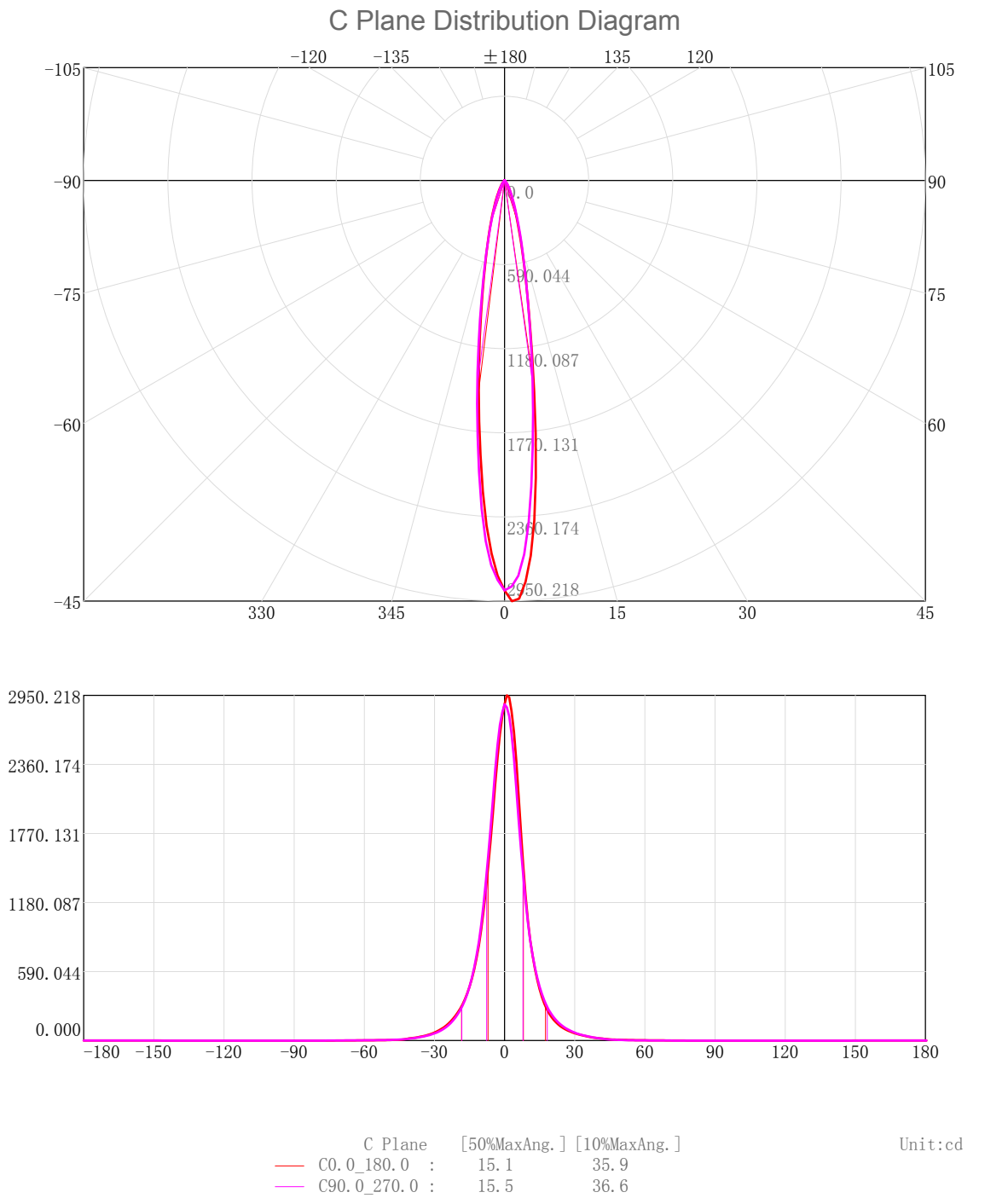
Character Parameter

| Lamp Speciality Parameter                       |                                | Luminaire Speciality Parameter        |  |
|---|--------------------------------|---------------------------------------|--|
| Rated Flux(lm): 391.860                         | Luminary Flux(lm): 391.864     | Field Angle(10%Imax): 35.9(°)         |  |
| Rated Power(W):                                 | Luminary Efficiency: 100.00%   | Down Lumens&Percent: 390.826lm 99.74% |  |
| Rated Voltage(V):                               | Luminary EER(lm/W): 69.406     | Up Lumens&Percent: 1.038lm 0.26%      |  |
| Tested Power(W): 5.646                          | Max. Candela(cd): 2950.218     | S/MH: C0_a180=0.266 C90_270=0.267     |  |
| Lamps' Inside: 1                                | Max Cand@Ang. (°): C=0.0 γ=1.0 | CIE Type: Semi-Direct                 |  |
| Tested Electrics (V, A, pf):240.0, 0.029, 0.787 | Beam Angle(50%Imax): 15.1(°)   | ErP Φ use(90°): 382.156lm             |  |
| Lamp Size (W*L*H):0.050m*0.000m*0.000m          | Left=-7.1°, Right=8.1°         | IRF(%): 1576.131                      |  |



2D Plane Light Intensity Distribution Curve

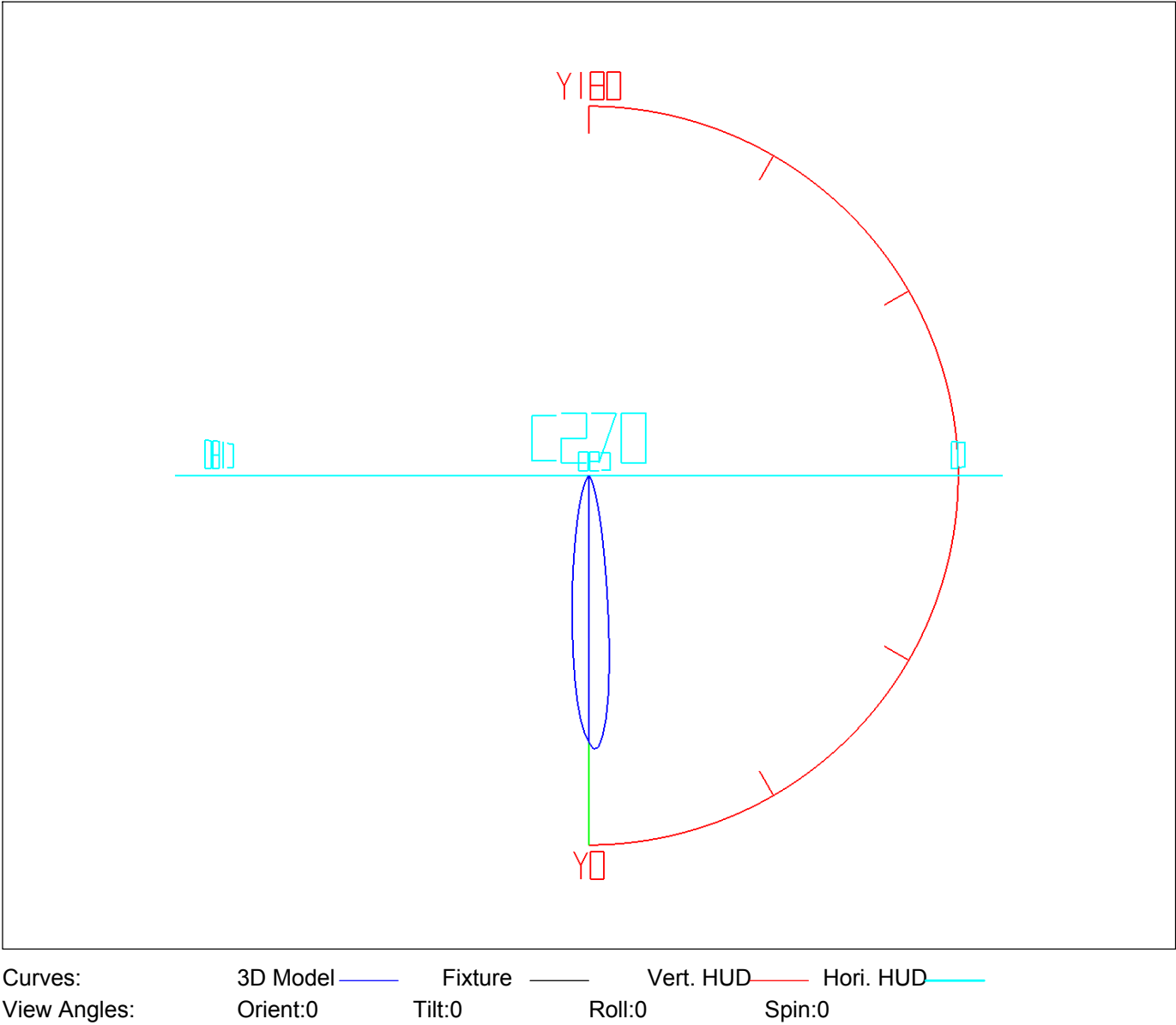
|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                   | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16        |



3D Light Intensity Distribution Modal

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID: 01                  |
| Lamp Name:                                    | Lamp Catelog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16        |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:SD05-06-XX-01 3000K RA90 15D.IES

Zonal Flux Tabulation

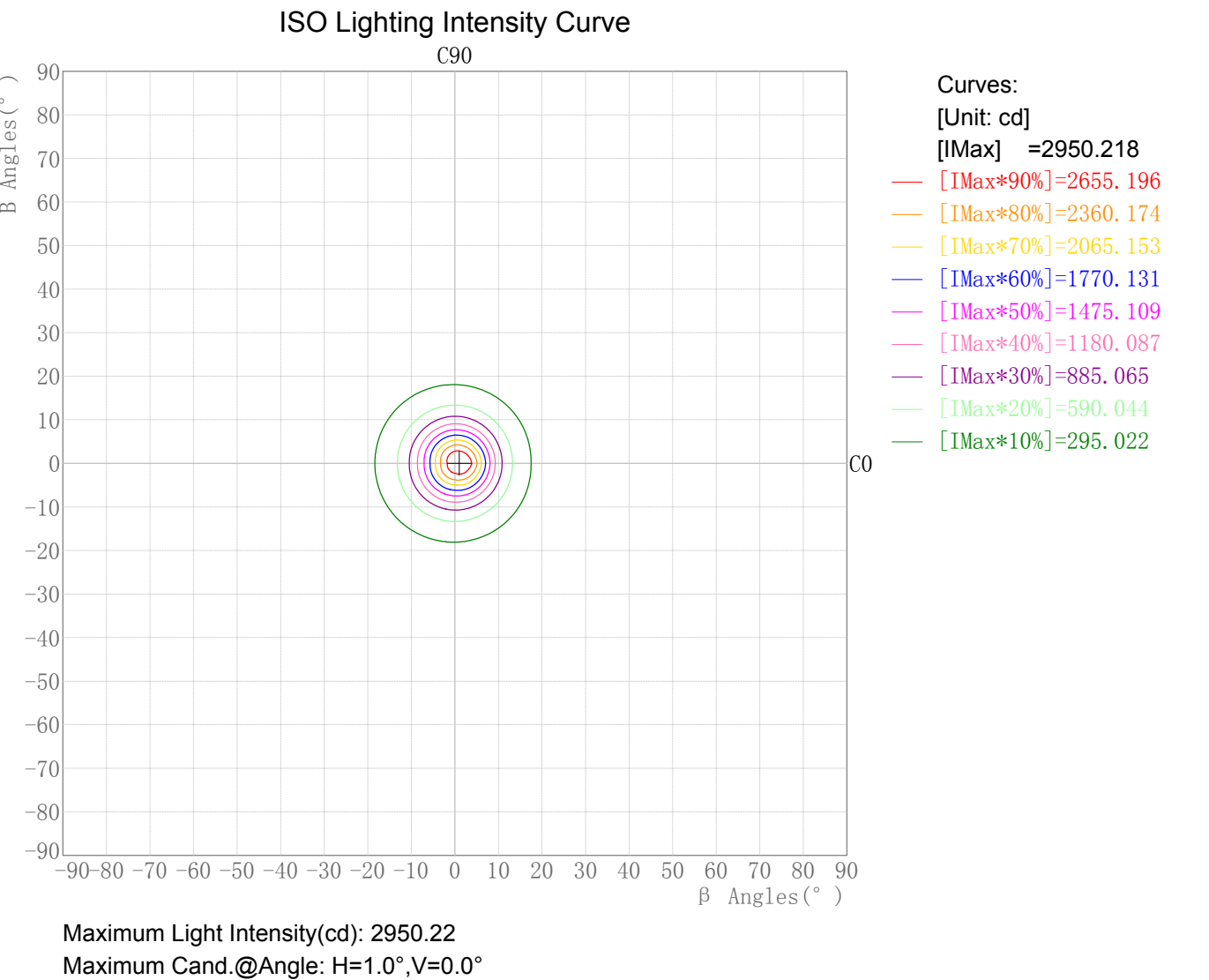
| Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0   | 2.74              | 2.74              | 0.70      | 0.70      | 47.0-48.0 | 0.58              | 384.09            | 0.15      | 98.02     |
| 1.0-2.0   | 8.03              | 10.77             | 2.05      | 2.75      | 48.0-49.0 | 0.54              | 384.63            | 0.14      | 98.16     |
| 2.0-3.0   | 12.81             | 23.58             | 3.27      | 6.02      | 49.0-50.0 | 0.49              | 385.12            | 0.13      | 98.28     |
| 3.0-4.0   | 16.68             | 40.26             | 4.26      | 10.27     | 50.0-51.0 | 0.44              | 385.56            | 0.11      | 98.39     |
| 4.0-5.0   | 19.43             | 59.70             | 4.96      | 15.23     | 51.0-52.0 | 0.40              | 385.96            | 0.10      | 98.49     |
| 5.0-6.0   | 21.04             | 80.74             | 5.37      | 20.60     | 52.0-53.0 | 0.37              | 386.33            | 0.09      | 98.59     |
| 6.0-7.0   | 21.69             | 102.43            | 5.53      | 26.14     | 53.0-54.0 | 0.35              | 386.68            | 0.09      | 98.68     |
| 7.0-8.0   | 21.55             | 123.98            | 5.50      | 31.64     | 54.0-55.0 | 0.33              | 387.01            | 0.08      | 98.76     |
| 8.0-9.0   | 20.79             | 144.77            | 5.31      | 36.94     | 55.0-56.0 | 0.31              | 387.32            | 0.08      | 98.84     |
| 9.0-10.0  | 19.65             | 164.42            | 5.01      | 41.96     | 56.0-57.0 | 0.30              | 387.61            | 0.08      | 98.92     |
| 10.0-11.0 | 18.36             | 182.78            | 4.68      | 46.64     | 57.0-58.0 | 0.28              | 387.89            | 0.07      | 98.99     |
| 11.0-12.0 | 17.06             | 199.84            | 4.35      | 51.00     | 58.0-59.0 | 0.27              | 388.16            | 0.07      | 99.06     |
| 12.0-13.0 | 15.82             | 215.66            | 4.04      | 55.04     | 59.0-60.0 | 0.25              | 388.41            | 0.06      | 99.12     |
| 13.0-14.0 | 14.64             | 230.30            | 3.73      | 58.77     | 60.0-61.0 | 0.24              | 388.65            | 0.06      | 99.18     |
| 14.0-15.0 | 13.50             | 243.79            | 3.44      | 62.21     | 61.0-62.0 | 0.22              | 388.87            | 0.06      | 99.24     |
| 15.0-16.0 | 12.41             | 256.20            | 3.17      | 65.38     | 62.0-63.0 | 0.21              | 389.08            | 0.05      | 99.29     |
| 16.0-17.0 | 11.39             | 267.59            | 2.91      | 68.29     | 63.0-64.0 | 0.20              | 389.28            | 0.05      | 99.34     |
| 17.0-18.0 | 10.45             | 278.04            | 2.67      | 70.95     | 64.0-65.0 | 0.18              | 389.46            | 0.05      | 99.39     |
| 18.0-19.0 | 9.58              | 287.62            | 2.45      | 73.40     | 65.0-66.0 | 0.17              | 389.63            | 0.04      | 99.43     |
| 19.0-20.0 | 8.80              | 296.42            | 2.25      | 75.65     | 66.0-67.0 | 0.16              | 389.79            | 0.04      | 99.47     |
| 20.0-21.0 | 8.08              | 304.50            | 2.06      | 77.71     | 67.0-68.0 | 0.15              | 389.94            | 0.04      | 99.51     |
| 21.0-22.0 | 7.42              | 311.93            | 1.89      | 79.60     | 68.0-69.0 | 0.14              | 390.08            | 0.03      | 99.55     |
| 22.0-23.0 | 6.82              | 318.74            | 1.74      | 81.34     | 69.0-70.0 | 0.12              | 390.20            | 0.03      | 99.58     |
| 23.0-24.0 | 6.26              | 325.00            | 1.60      | 82.94     | 70.0-71.0 | 0.11              | 390.32            | 0.03      | 99.61     |
| 24.0-25.0 | 5.75              | 330.75            | 1.47      | 84.40     | 71.0-72.0 | 0.10              | 390.42            | 0.03      | 99.63     |
| 25.0-26.0 | 5.28              | 336.02            | 1.35      | 85.75     | 72.0-73.0 | 0.09              | 390.50            | 0.02      | 99.65     |
| 26.0-27.0 | 4.84              | 340.87            | 1.24      | 86.99     | 73.0-74.0 | 0.07              | 390.58            | 0.02      | 99.67     |
| 27.0-28.0 | 4.45              | 345.31            | 1.13      | 88.12     | 74.0-75.0 | 0.06              | 390.64            | 0.02      | 99.69     |
| 28.0-29.0 | 4.08              | 349.39            | 1.04      | 89.16     | 75.0-76.0 | 0.05              | 390.69            | 0.01      | 99.70     |
| 29.0-30.0 | 3.75              | 353.14            | 0.96      | 90.12     | 76.0-77.0 | 0.04              | 390.73            | 0.01      | 99.71     |
| 30.0-31.0 | 3.45              | 356.59            | 0.88      | 91.00     | 77.0-78.0 | 0.03              | 390.76            | 0.01      | 99.72     |
| 31.0-32.0 | 3.17              | 359.76            | 0.81      | 91.81     | 78.0-79.0 | 0.02              | 390.78            | 0.01      | 99.72     |
| 32.0-33.0 | 2.90              | 362.66            | 0.74      | 92.55     | 79.0-80.0 | 0.02              | 390.80            | 0.00      | 99.73     |
| 33.0-34.0 | 2.66              | 365.32            | 0.68      | 93.23     | 80.0-81.0 | 0.01              | 390.81            | 0.00      | 99.73     |
| 34.0-35.0 | 2.43              | 367.75            | 0.62      | 93.85     | 81.0-82.0 | 0.01              | 390.82            | 0.00      | 99.74     |
| 35.0-36.0 | 2.22              | 369.97            | 0.57      | 94.41     | 82.0-83.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 36.0-37.0 | 2.02              | 371.99            | 0.52      | 94.93     | 83.0-84.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 37.0-38.0 | 1.82              | 373.82            | 0.47      | 95.40     | 84.0-85.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 38.0-39.0 | 1.65              | 375.47            | 0.42      | 95.82     | 85.0-86.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 39.0-40.0 | 1.51              | 376.98            | 0.39      | 96.20     | 86.0-87.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 40.0-41.0 | 1.38              | 378.36            | 0.35      | 96.56     | 87.0-88.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 41.0-42.0 | 1.21              | 379.57            | 0.31      | 96.86     | 88.0-89.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 42.0-43.0 | 1.02              | 380.59            | 0.26      | 97.12     | 89.0-90.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 43.0-44.0 | 0.86              | 381.45            | 0.22      | 97.34     | 90.0-91.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 44.0-45.0 | 0.75              | 382.20            | 0.19      | 97.53     | 91.0-92.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 45.0-46.0 | 0.68              | 382.88            | 0.17      | 97.71     | 92.0-93.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 46.0-47.0 | 0.63              | 383.51            | 0.16      | 97.87     | 93.0-94.0 | 0.00              | 390.83            | 0.00      | 99.74     |

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              | 390.83            | 0.00      | 99.74     | 141.0-142.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 95.0-96.0   | 0.00              | 390.83            | 0.00      | 99.74     | 142.0-143.0 | 0.00              | 390.83            | 0.00      | 99.74     |
| 96.0-97.0   | 0.00              | 390.83            | 0.00      | 99.74     | 143.0-144.0 | 0.01              | 390.84            | 0.00      | 99.74     |
| 97.0-98.0   | 0.00              | 390.83            | 0.00      | 99.74     | 144.0-145.0 | 0.01              | 390.85            | 0.00      | 99.74     |
| 98.0-99.0   | 0.00              | 390.83            | 0.00      | 99.74     | 145.0-146.0 | 0.02              | 390.87            | 0.01      | 99.75     |
| 99.0-100.0  | 0.00              | 390.83            | 0.00      | 99.74     | 146.0-147.0 | 0.03              | 390.90            | 0.01      | 99.75     |
| 100.0-101.0 | 0.00              | 390.83            | 0.00      | 99.74     | 147.0-148.0 | 0.03              | 390.93            | 0.01      | 99.76     |
| 101.0-102.0 | 0.00              | 390.83            | 0.00      | 99.74     | 148.0-149.0 | 0.03              | 390.96            | 0.01      | 99.77     |
| 102.0-103.0 | 0.00              | 390.83            | 0.00      | 99.74     | 149.0-150.0 | 0.04              | 391.00            | 0.01      | 99.78     |
| 103.0-104.0 | 0.00              | 390.83            | 0.00      | 99.74     | 150.0-151.0 | 0.04              | 391.04            | 0.01      | 99.79     |
| 104.0-105.0 | 0.00              | 390.83            | 0.00      | 99.74     | 151.0-152.0 | 0.04              | 391.08            | 0.01      | 99.80     |
| 105.0-106.0 | 0.00              | 390.83            | 0.00      | 99.74     | 152.0-153.0 | 0.04              | 391.13            | 0.01      | 99.81     |
| 106.0-107.0 | 0.00              | 390.83            | 0.00      | 99.74     | 153.0-154.0 | 0.04              | 391.17            | 0.01      | 99.82     |
| 107.0-108.0 | 0.00              | 390.83            | 0.00      | 99.74     | 154.0-155.0 | 0.04              | 391.21            | 0.01      | 99.84     |
| 108.0-109.0 | 0.00              | 390.83            | 0.00      | 99.74     | 155.0-156.0 | 0.04              | 391.26            | 0.01      | 99.85     |
| 109.0-110.0 | 0.00              | 390.83            | 0.00      | 99.74     | 156.0-157.0 | 0.04              | 391.30            | 0.01      | 99.86     |
| 110.0-111.0 | 0.00              | 390.83            | 0.00      | 99.74     | 157.0-158.0 | 0.04              | 391.35            | 0.01      | 99.87     |
| 111.0-112.0 | 0.00              | 390.83            | 0.00      | 99.74     | 158.0-159.0 | 0.04              | 391.39            | 0.01      | 99.88     |
| 112.0-113.0 | 0.00              | 390.83            | 0.00      | 99.74     | 159.0-160.0 | 0.04              | 391.43            | 0.01      | 99.89     |
| 113.0-114.0 | 0.00              | 390.83            | 0.00      | 99.74     | 160.0-161.0 | 0.04              | 391.47            | 0.01      | 99.90     |
| 114.0-115.0 | 0.00              | 390.83            | 0.00      | 99.74     | 161.0-162.0 | 0.04              | 391.51            | 0.01      | 99.91     |
| 115.0-116.0 | 0.00              | 390.83            | 0.00      | 99.74     | 162.0-163.0 | 0.04              | 391.55            | 0.01      | 99.92     |
| 116.0-117.0 | 0.00              | 390.83            | 0.00      | 99.74     | 163.0-164.0 | 0.04              | 391.59            | 0.01      | 99.93     |
| 117.0-118.0 | 0.00              | 390.83            | 0.00      | 99.74     | 164.0-165.0 | 0.03              | 391.62            | 0.01      | 99.94     |
| 118.0-119.0 | 0.00              | 390.83            | 0.00      | 99.74     | 165.0-166.0 | 0.03              | 391.65            | 0.01      | 99.95     |
| 119.0-120.0 | 0.00              | 390.83            | 0.00      | 99.74     | 166.0-167.0 | 0.03              | 391.68            | 0.01      | 99.95     |
| 120.0-121.0 | 0.00              | 390.83            | 0.00      | 99.74     | 167.0-168.0 | 0.03              | 391.71            | 0.01      | 99.96     |
| 121.0-122.0 | 0.00              | 390.83            | 0.00      | 99.74     | 168.0-169.0 | 0.03              | 391.73            | 0.01      | 99.97     |
| 122.0-123.0 | 0.00              | 390.83            | 0.00      | 99.74     | 169.0-170.0 | 0.02              | 391.76            | 0.01      | 99.97     |
| 123.0-124.0 | 0.00              | 390.83            | 0.00      | 99.74     | 170.0-171.0 | 0.02              | 391.78            | 0.01      | 99.98     |
| 124.0-125.0 | 0.00              | 390.83            | 0.00      | 99.74     | 171.0-172.0 | 0.02              | 391.80            | 0.00      | 99.98     |
| 125.0-126.0 | 0.00              | 390.83            | 0.00      | 99.74     | 172.0-173.0 | 0.02              | 391.81            | 0.00      | 99.99     |
| 126.0-127.0 | 0.00              | 390.83            | 0.00      | 99.74     | 173.0-174.0 | 0.01              | 391.83            | 0.00      | 99.99     |
| 127.0-128.0 | 0.00              | 390.83            | 0.00      | 99.74     | 174.0-175.0 | 0.01              | 391.84            | 0.00      | 99.99     |
| 128.0-129.0 | 0.00              | 390.83            | 0.00      | 99.74     | 175.0-176.0 | 0.01              | 391.85            | 0.00      | 100.00    |
| 129.0-130.0 | 0.00              | 390.83            | 0.00      | 99.74     | 176.0-177.0 | 0.01              | 391.86            | 0.00      | 100.00    |
| 130.0-131.0 | 0.00              | 390.83            | 0.00      | 99.74     | 177.0-178.0 | 0.00              | 391.86            | 0.00      | 100.00    |
| 131.0-132.0 | 0.00              | 390.83            | 0.00      | 99.74     | 178.0-179.0 | 0.00              | 391.86            | 0.00      | 100.00    |
| 132.0-133.0 | 0.00              | 390.83            | 0.00      | 99.74     | 179.0-180.0 | 0.00              | 391.86            | 0.00      | 100.00    |
| 133.0-134.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 134.0-135.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 135.0-136.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 136.0-137.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 137.0-138.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 138.0-139.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 139.0-140.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |
| 140.0-141.0 | 0.00              | 390.83            | 0.00      | 99.74     |             |                   |                   |           |           |

Rectangle ISO Lighting Intensity Diagram

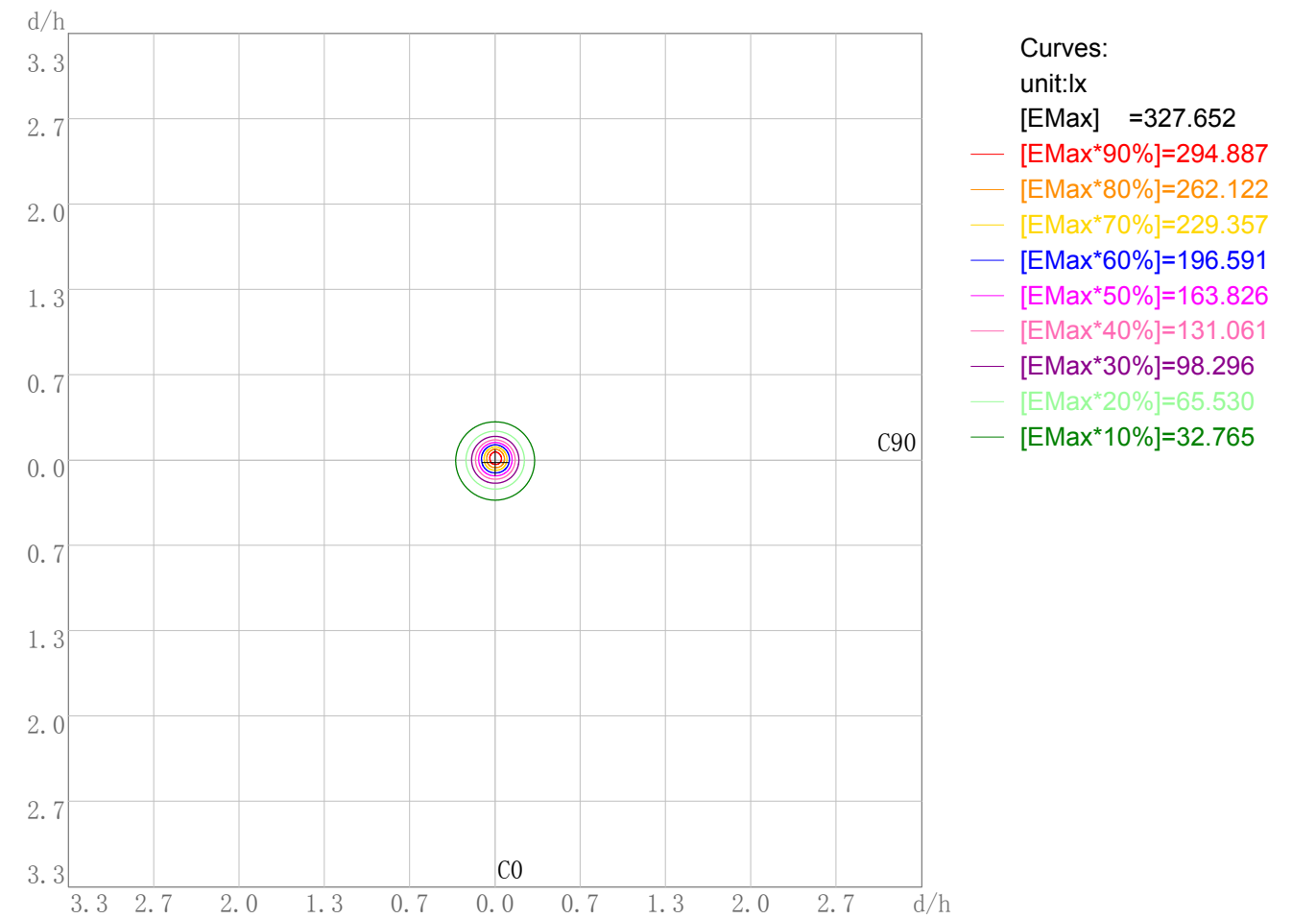
|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                   | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16        |



Plane ISO-Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name:SD05-06-XX-01 3000K 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: 2021/04/16        |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 327.65  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

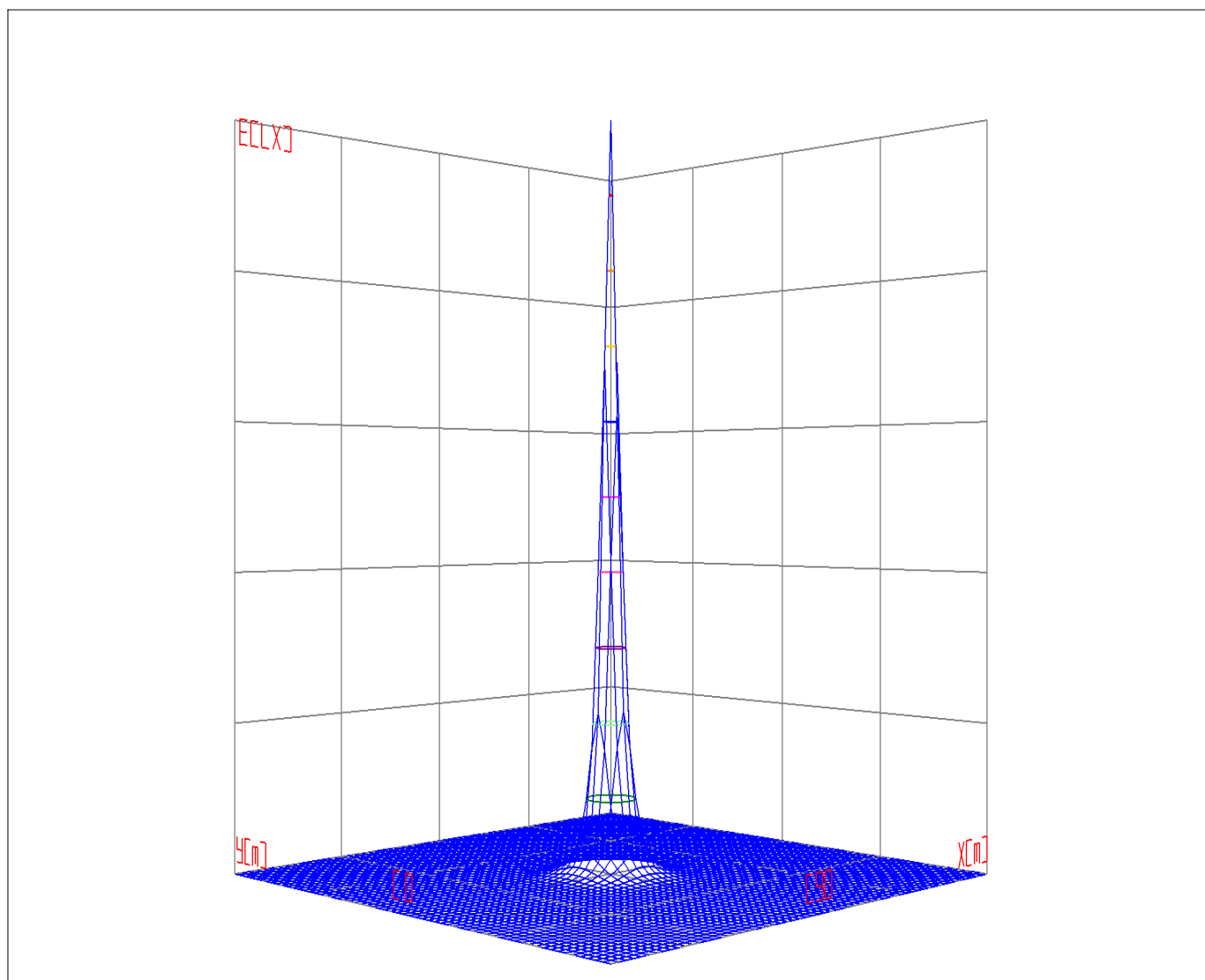
# IES Indoor Report

Photometric Filename:SD05-06-XX-01 3000K RA90 15D.IES

## 3D Plane ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 3000K 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: 2021/04/16        |

## 3D Plane Illuminance Modal



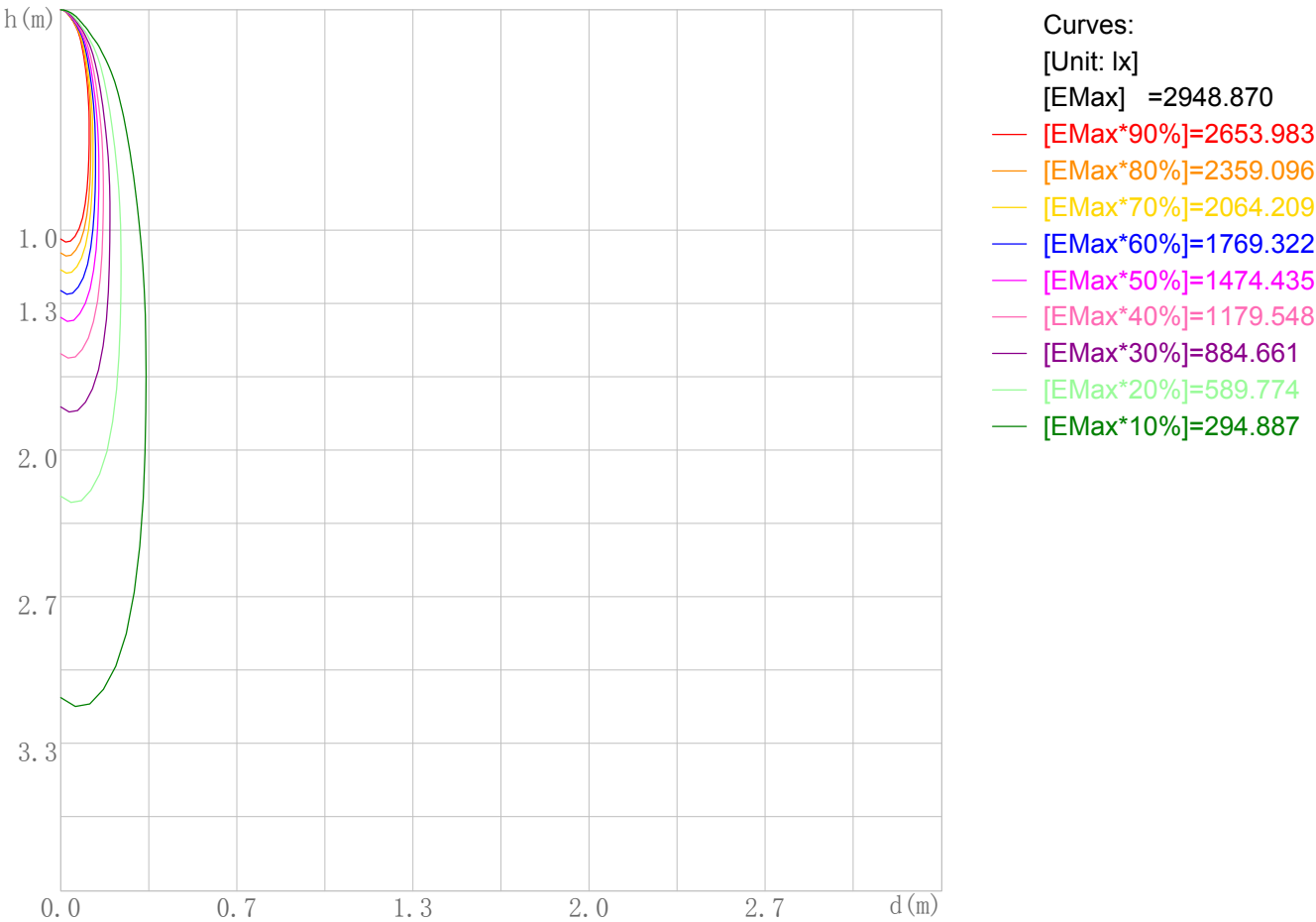
Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —  
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0



Space ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID: 01                  |
| Lamp Name:                                    | Lamp Catelog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16        |

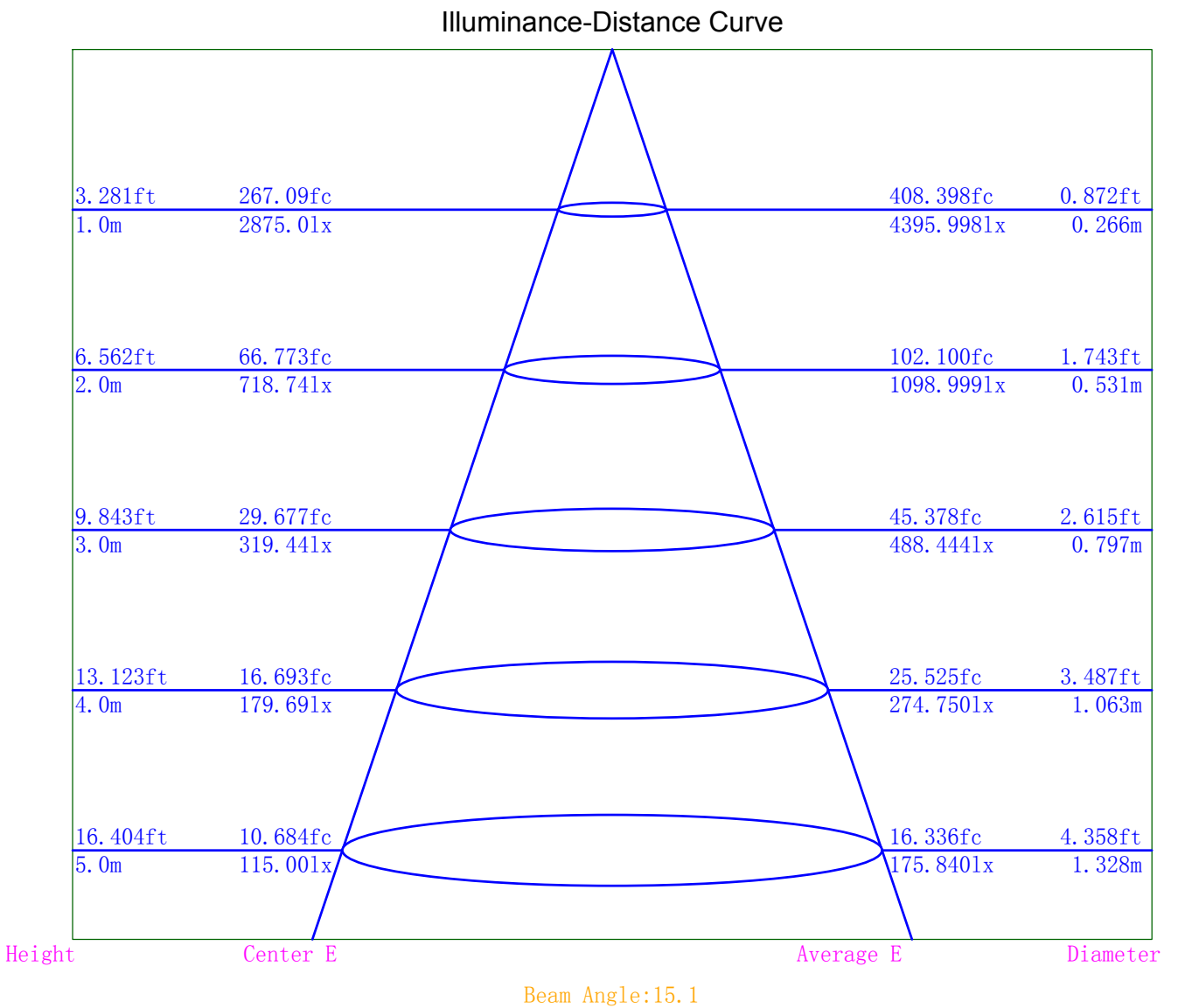
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:2948.87lx,1.0deg  
Plane Maximum Lighting Intensity and @Angle:2950.218cd,0deg

Illuminance-Distance Diagram

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                   | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16        |



Indoor Luminance Limiting Curves

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 3000K 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: 2021/04/16        |

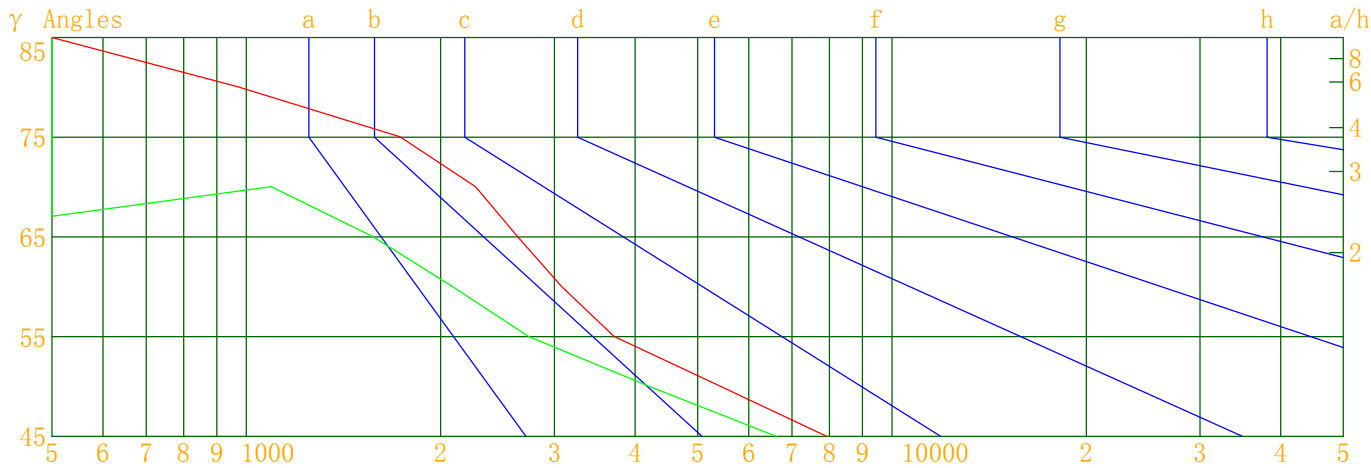
Glare Grade Table

| 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        | 7921 | 5431 | 3713 | 3078 | 2631 | 2265 | 1730 | 971 | 0  |
| C90       | 6620 | 4210 | 2737 | 2086 | 1570 | 1093 | 293  | 0   | 0  |

Luminance Limiting Curve



Luminous Size:

Length(m)=0.000

Width(m)=-0.050

Height(m)=0.000

Area(m^2)=0.001963

Luminous Type:

Without Luminous Side

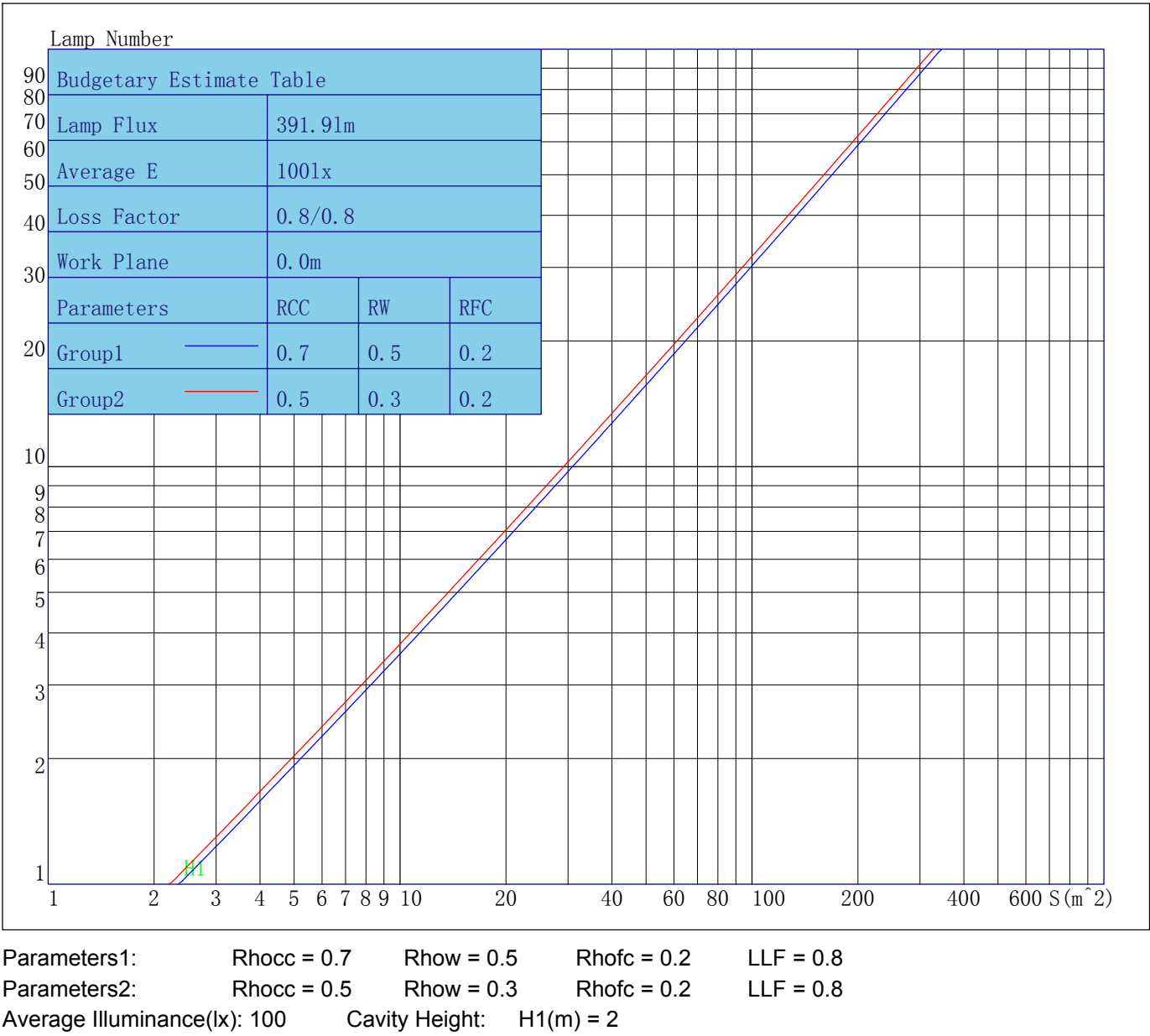
Luminous Curves:

C0-C180 Color: —

C90-C270 Color: —

Indoor Budgetary Estimate Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name:SD05-06-XX-01 3000K 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: 2021/04/16        |



Indoor Coefficient of Utilization Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID: 01                  |
| Lamp Name:                                    | Lamp Catelog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date: 2021/04/16        |

| 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   | 115   | 113 | 111 | 109 | 112 | 111 | 109 | 107 | 107 | 105 | 104 | 103 | 102 | 101 | 99  | 99  | 98  | 96  |
| 2   | 111   | 107 | 104 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 98  | 100 | 98  | 96  | 97  | 95  | 94  | 93  |
| 3   | 107   | 103 | 99  | 96  | 106 | 101 | 98  | 95  | 99  | 96  | 94  | 96  | 94  | 92  | 94  | 92  | 91  | 90  |
| 4   | 104   | 99  | 95  | 91  | 102 | 97  | 94  | 91  | 95  | 92  | 90  | 94  | 91  | 89  | 92  | 90  | 88  | 87  |
| 5   | 101   | 95  | 91  | 88  | 99  | 94  | 90  | 87  | 92  | 89  | 87  | 91  | 88  | 86  | 89  | 87  | 85  | 84  |
| 6   | 98  | 92  | 87  | 84  | 97  | 91  | 87  | 84  | 90  | 86  | 84  | 88  | 85  | 83  | 87  | 85  | 83  | 81  |
| 7   | 95  | 89  | 85  | 82  | 94  | 88  | 84  | 81  | 87  | 84  | 81  | 86  | 83  | 81  | 85  | 82  | 80  | 79  |
| 8   | 93  | 86  | 82  | 79  | 92  | 86  | 82  | 79  | 85  | 81  | 79  | 84  | 81  | 78  | 83  | 80  | 78  | 77  |
| 9   | 90  | 84  | 80  | 77  | 89  | 83  | 79  | 77  | 82  | 79  | 76  | 82  | 79  | 76  | 81  | 78  | 76  | 75  |
| 10  | 88  | 81  | 77  | 75  | 87  | 81  | 77  | 75  | 80  | 77  | 75  | 80  | 77  | 74  | 79  | 76  | 74  | 73  |

Unified Glare Rating Table

|  |                       |                             |
|--|-----------------------|-----------------------------|
| Lum. Name:SD05-06-XX-01 3000K RA90 15D       | Lum. Catelog:         | Test ID:01                  |
| Lamp Name:                                   | Lamp Catelog:LED      | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co.Ltd | Test Machine:GON-2000 | Test Date:2021/04/16        |

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                                      | 12.0            | 12.9 | 12.4 | 13.2 | 13.5 | 11.8          | 12.7 | 12.1 | 13.0 | 13.3 |
|   | 12.1            | 12.9 | 12.5 | 13.3 | 13.6 | 11.7          | 12.5 | 12.1 | 12.8 | 13.2 |
|   | 12.1            | 12.9 | 12.5 | 13.2 | 13.6 | 11.6          | 12.3 | 12.0 | 12.7 | 13.1 |
|   | 12.1            | 12.8 | 12.5 | 13.1 | 13.5 | 11.5          | 12.1 | 11.9 | 12.5 | 12.9 |
|   | 12.0            | 12.7 | 12.5 | 13.1 | 13.5 | 11.4          | 12.0 | 11.8 | 12.4 | 12.9 |
|   | 12.0            | 12.6 | 12.4 | 13.0 | 13.4 | 11.3          | 12.0 | 11.8 | 12.3 | 12.8 |
| X=4H    Y=2H                                      | 11.9            | 12.6 | 12.3 | 13.0 | 13.4 | 11.6          | 12.3 | 12.0 | 12.7 | 13.1 |
|   | 12.1            | 12.7 | 12.5 | 13.1 | 13.5 | 11.5          | 12.1 | 11.9 | 12.5 | 13.0 |
|   | 12.1            | 12.6 | 12.5 | 13.1 | 13.5 | 11.4          | 12.0 | 11.9 | 12.4 | 12.8 |
|   | 12.1            | 12.5 | 12.5 | 13.0 | 13.5 | 11.3          | 11.8 | 11.8 | 12.2 | 12.7 |
|   | 12.0            | 12.4 | 12.5 | 12.9 | 13.4 | 11.2          | 11.7 | 11.7 | 12.1 | 12.6 |
|   | 11.9            | 12.3 | 12.4 | 12.8 | 13.3 | 11.2          | 11.5 | 11.6 | 12.0 | 12.5 |
| X=8H    Y=4H                                      | 12.0            | 12.4 | 12.5 | 12.9 | 13.3 | 11.3          | 11.7 | 11.7 | 12.1 | 12.6 |
|   | 11.9            | 12.3 | 12.5 | 12.8 | 13.3 | 11.1          | 11.5 | 11.6 | 12.0 | 12.5 |
|   | 11.9            | 12.2 | 12.4 | 12.7 | 13.2 | 11.1          | 11.3 | 11.6 | 11.9 | 12.4 |
|   | 11.8            | 12.1 | 12.4 | 12.6 | 13.2 | 11.0          | 11.2 | 11.5 | 11.8 | 12.3 |
| X=12H    Y=4H                                     | 11.9            | 12.3 | 12.4 | 12.8 | 13.3 | 11.2          | 11.6 | 11.7 | 12.0 | 12.5 |
|   | 11.9            | 12.2 | 12.4 | 12.7 | 13.2 | 11.1          | 11.4 | 11.6 | 11.8 | 12.4 |
|   | 11.8            | 12.1 | 12.4 | 12.6 | 13.2 | 11.0          | 11.3 | 11.5 | 11.8 | 12.3 |
| Variations with the objerver position at spacings |                 |      |      |      |      |               |      |      |      |      |
| S=1.0H  | 1.1/-1.4        |      |      |      |      | 1.7/-2.1      |      |      |      |      |
| S=1.5H  | 1.8/-2.4        |      |      |      |      | 3.8/-6.8      |      |      |      |      |
| S=2.0H  | 2.1/-3.1        |      |      |      |      | 3.6/-9.4      |      |      |      |      |
| Reduced UGR Table:                                |                 |      |      |      |      |               |      |      |      |      |
| Nordic Standard Table:                            | BK0             |      |      |      |      | BK0           |      |      |      |      |
| Correction Value                                  | 0.5             |      |      |      |      | 0.2           |      |      |      |      |

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

IES Indoor Report

Photometric Filename:SD05-06-XX-01 3000K RA90 15D.IES

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Candela Tabulation

| V/H    | C0.0    | C90.0   | C180.0  | C270.0  |
|--------|---------|---------|---------|---------|
| γ 0.0  | 2874.98 | 2874.98 | 2874.98 | 2874.98 |
| γ 1.0  | 2950.22 | 2847.22 | 2770.81 | 2801.72 |
| γ 2.0  | 2933.59 | 2772.69 | 2617.82 | 2698.24 |
| γ 3.0  | 2816.99 | 2625.07 | 2422.29 | 2531.99 |
| γ 4.0  | 2637.38 | 2411.33 | 2184.82 | 2306.15 |
| γ 5.0  | 2392.56 | 2154.64 | 1932.88 | 2051.03 |
| γ 6.0  | 2095.53 | 1885.16 | 1699.26 | 1807.15 |
| γ 7.0  | 1788.83 | 1638.89 | 1486.16 | 1576.28 |
| γ 8.0  | 1495.25 | 1410.37 | 1287.90 | 1361.59 |
| γ 9.0  | 1238.00 | 1197.04 | 1107.51 | 1163.84 |
| γ 10.0 | 1027.52 | 1010.12 | 948.81  | 991.09  |
| γ 11.0 | 858.76  | 854.80  | 813.59  | 844.44  |
| γ 12.0 | 722.49  | 727.26  | 700.06  | 722.46  |
| γ 13.0 | 611.34  | 622.79  | 605.56  | 620.30  |
| γ 14.0 | 518.02  | 535.47  | 526.45  | 533.64  |
| γ 15.0 | 438.89  | 461.01  | 459.65  | 459.67  |
| γ 16.0 | 372.40  | 397.99  | 401.82  | 396.61  |
| γ 17.0 | 317.27  | 343.65  | 352.25  | 343.57  |
| γ 18.0 | 271.59  | 297.95  | 309.50  | 298.56  |
| γ 19.0 | 234.22  | 259.57  | 272.36  | 259.79  |
| γ 20.0 | 203.24  | 227.33  | 240.09  | 226.38  |
| γ 21.0 | 177.40  | 199.56  | 211.99  | 197.37  |
| γ 22.0 | 155.69  | 175.77  | 187.19  | 172.22  |
| γ 23.0 | 137.31  | 155.19  | 165.33  | 150.57  |
| γ 24.0 | 121.64  | 137.36  | 145.98  | 131.77  |
| γ 25.0 | 108.26  | 121.89  | 128.65  | 115.47  |
| γ 26.0 | 96.70   | 108.46  | 113.35  | 101.28  |
| γ 27.0 | 86.57   | 96.49   | 100.01  | 88.97   |
| γ 28.0 | 77.75   | 85.95   | 88.29   | 78.34   |
| γ 29.0 | 69.95   | 76.66   | 77.97   | 69.21   |
| γ 30.0 | 63.07   | 68.44   | 68.94   | 61.31   |
| γ 31.0 | 56.97   | 61.22   | 61.01   | 54.47   |
| γ 32.0 | 51.53   | 54.88   | 53.77   | 48.29   |
| γ 33.0 | 46.34   | 49.01   | 47.69   | 42.75   |
| γ 34.0 | 41.40   | 43.86   | 42.36   | 37.93   |
| γ 35.0 | 36.84   | 39.13   | 37.74   | 33.89   |
| γ 36.0 | 33.12   | 35.00   | 33.53   | 29.94   |
| γ 37.0 | 29.39   | 31.03   | 29.43   | 26.25   |
| γ 38.0 | 25.90   | 27.23   | 25.99   | 23.34   |
| γ 39.0 | 23.16   | 24.00   | 23.18   | 21.03   |
| γ 40.0 | 20.90   | 21.38   | 20.74   | 19.01   |
| γ 41.0 | 18.92   | 19.09   | 18.14   | 16.66   |
| γ 42.0 | 16.92   | 16.78   | 13.44   | 13.40   |
| γ 43.0 | 14.34   | 13.28   | 10.16   | 11.41   |
| γ 44.0 | 12.39   | 10.74   | 8.46    | 10.09   |
| γ 45.0 | 11.00   | 9.19    | 7.40    | 9.10    |
| γ 46.0 | 9.90    | 8.06    | 6.69    | 8.34    |

Candela Tabulation - (Cont.)

| V/H    | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|------|-------|--------|--------|
| γ 47.0 | 9.03 | 7.21  | 6.15   | 7.69   |
| γ 48.0 | 8.29 | 6.54  | 5.68   | 7.09   |
| γ 49.0 | 7.60 | 5.96  | 5.10   | 6.34   |
| γ 50.0 | 6.86 | 5.31  | 4.34   | 5.57   |
| γ 51.0 | 5.97 | 4.52  | 3.93   | 5.07   |
| γ 52.0 | 5.36 | 4.03  | 3.63   | 4.70   |
| γ 53.0 | 4.89 | 3.64  | 3.38   | 4.40   |
| γ 54.0 | 4.50 | 3.35  | 3.19   | 4.15   |
| γ 55.0 | 4.18 | 3.08  | 3.02   | 3.93   |
| γ 56.0 | 3.92 | 2.86  | 2.84   | 3.73   |
| γ 57.0 | 3.68 | 2.65  | 2.67   | 3.53   |
| γ 58.0 | 3.44 | 2.44  | 2.50   | 3.34   |
| γ 59.0 | 3.22 | 2.25  | 2.34   | 3.17   |
| γ 60.0 | 3.02 | 2.05  | 2.19   | 2.99   |
| γ 61.0 | 2.84 | 1.87  | 2.05   | 2.83   |
| γ 62.0 | 2.66 | 1.72  | 1.91   | 2.67   |
| γ 63.0 | 2.49 | 1.58  | 1.75   | 2.51   |
| γ 64.0 | 2.33 | 1.44  | 1.61   | 2.35   |
| γ 65.0 | 2.18 | 1.30  | 1.49   | 2.21   |
| γ 66.0 | 2.05 | 1.19  | 1.36   | 2.07   |
| γ 67.0 | 1.91 | 1.06  | 1.23   | 1.92   |
| γ 68.0 | 1.77 | 0.95  | 1.11   | 1.78   |
| γ 69.0 | 1.64 | 0.84  | 0.98   | 1.64   |
| γ 70.0 | 1.52 | 0.73  | 0.86   | 1.50   |
| γ 71.0 | 1.40 | 0.61  | 0.72   | 1.35   |
| γ 72.0 | 1.26 | 0.50  | 0.59   | 1.21   |
| γ 73.0 | 1.12 | 0.38  | 0.47   | 1.08   |
| γ 74.0 | 1.01 | 0.27  | 0.36   | 0.94   |
| γ 75.0 | 0.88 | 0.15  | 0.24   | 0.81   |
| γ 76.0 | 0.76 | 0.06  | 0.16   | 0.69   |
| γ 77.0 | 0.64 | 0.00  | 0.04   | 0.58   |
| γ 78.0 | 0.54 | 0.00  | 0.00   | 0.47   |
| γ 79.0 | 0.43 | 0.00  | 0.00   | 0.36   |
| γ 80.0 | 0.33 | 0.00  | 0.00   | 0.27   |
| γ 81.0 | 0.23 | 0.00  | 0.00   | 0.17   |
| γ 82.0 | 0.14 | 0.00  | 0.00   | 0.09   |
| γ 83.0 | 0.04 | 0.00  | 0.00   | 0.01   |
| γ 84.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 85.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 86.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 87.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 88.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 89.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 90.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 91.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 92.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 93.0 | 0.00 | 0.00  | 0.00   | 0.00   |

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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 | 0.00  | 0.00   | 0.00   |
| γ 138.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 139.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 140.0 | 0.00 | 0.00  | 0.00   | 0.00   |

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Candela Tabulation - (Cont.)

| V/H     | C0.0 | C90.0 | C180.0 | C270.0 |
|---------|------|-------|--------|--------|
| γ 141.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 142.0 | 0.00 | 0.00  | 0.07   | 0.08   |
| γ 143.0 | 0.00 | 0.00  | 0.18   | 0.20   |
| γ 144.0 | 0.10 | 0.00  | 0.30   | 0.30   |
| γ 145.0 | 0.21 | 0.04  | 0.40   | 0.40   |
| γ 146.0 | 0.32 | 0.15  | 0.49   | 0.50   |
| γ 147.0 | 0.43 | 0.25  | 0.59   | 0.57   |
| γ 148.0 | 0.52 | 0.34  | 0.68   | 0.67   |
| γ 149.0 | 0.61 | 0.42  | 0.75   | 0.73   |
| γ 150.0 | 0.70 | 0.50  | 0.82   | 0.79   |
| γ 151.0 | 0.78 | 0.57  | 0.88   | 0.86   |
| γ 152.0 | 0.84 | 0.64  | 0.94   | 0.90   |
| γ 153.0 | 0.91 | 0.69  | 1.00   | 0.95   |
| γ 154.0 | 0.96 | 0.74  | 1.02   | 0.99   |
| γ 155.0 | 1.00 | 0.77  | 1.08   | 1.02   |
| γ 156.0 | 1.04 | 0.81  | 1.12   | 1.04   |
| γ 157.0 | 1.09 | 0.83  | 1.15   | 1.07   |
| γ 158.0 | 1.11 | 0.87  | 1.17   | 1.08   |
| γ 159.0 | 1.14 | 0.89  | 1.21   | 1.09   |
| γ 160.0 | 1.15 | 0.90  | 1.23   | 1.11   |
| γ 161.0 | 1.18 | 0.92  | 1.24   | 1.11   |
| γ 162.0 | 1.19 | 0.94  | 1.26   | 1.13   |
| γ 163.0 | 1.21 | 0.96  | 1.27   | 1.13   |
| γ 164.0 | 1.21 | 0.99  | 1.28   | 1.14   |
| γ 165.0 | 1.23 | 1.00  | 1.28   | 1.14   |
| γ 166.0 | 1.23 | 1.02  | 1.28   | 1.13   |
| γ 167.0 | 1.24 | 1.04  | 1.29   | 1.13   |
| γ 168.0 | 1.24 | 1.05  | 1.29   | 1.14   |
| γ 169.0 | 1.23 | 1.07  | 1.27   | 1.14   |
| γ 170.0 | 1.22 | 1.08  | 1.26   | 1.14   |
| γ 171.0 | 1.22 | 1.06  | 1.24   | 1.13   |
| γ 172.0 | 1.20 | 1.05  | 1.20   | 1.12   |
| γ 173.0 | 1.19 | 1.04  | 1.16   | 1.09   |
| γ 174.0 | 1.16 | 1.02  | 1.13   | 1.06   |
| γ 175.0 | 1.13 | 0.99  | 1.08   | 1.04   |
| γ 176.0 | 1.09 | 0.98  | 1.04   | 1.02   |
| γ 177.0 | 1.07 | 0.95  | 1.02   | 1.00   |
| γ 178.0 | 1.03 | 0.94  | 1.01   | 0.99   |
| γ 179.0 | 1.01 | 0.93  | 1.01   | 0.98   |
| γ 180.0 | 0.99 | 0.99  | 0.99   | 0.99   |