

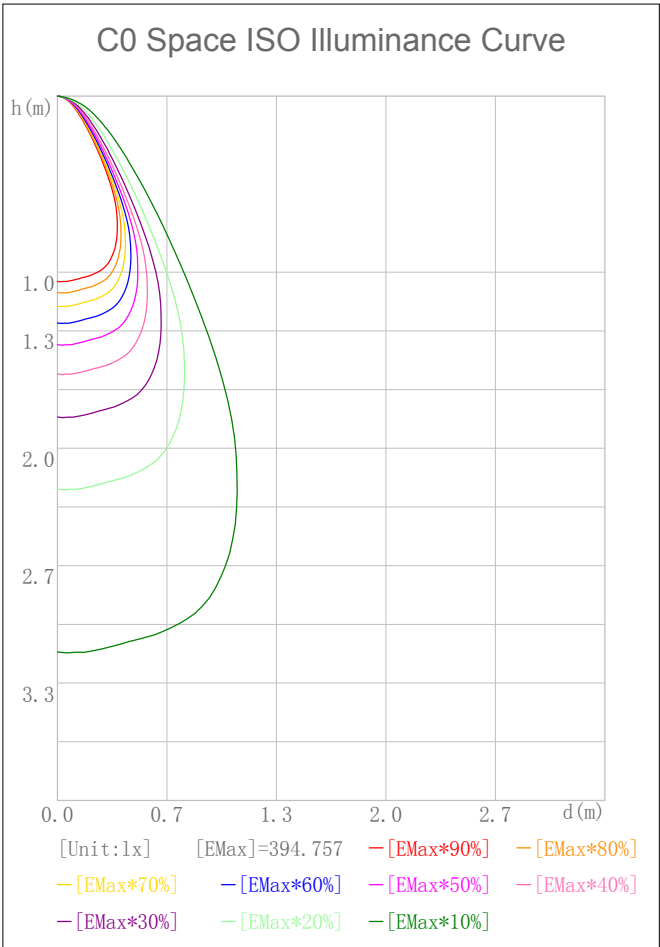
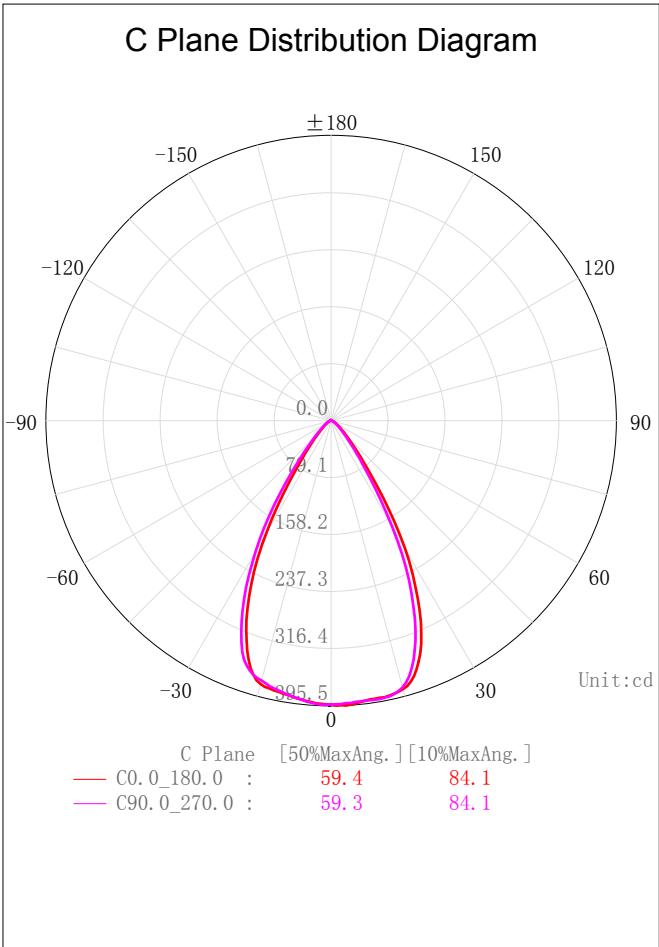
Indoor Luminaire Photometric Data

Description Information

|  |                         |                      |                       |
|--|-------------------------|----------------------|-----------------------|
| Luminary Name:SD09-06-DW-01 RA95 2000K-3000K 60D |                         | Lum. Catalog:        | Test ID: 01           |
| Lamp Name:                                       |                         | Lamp Catalog: LED    | Test Date: 2021/11/08 |
| 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):0.076m*-0.076m*0.000m          |                         | Lum. Area (m2):0.005 | Lum. W(kg): 0.000     |
| Test System: C, γ                                | Test Step: C=90.0 γ=1.0 | Temp. (°C): 25       | Humidity(%): 50.0     |

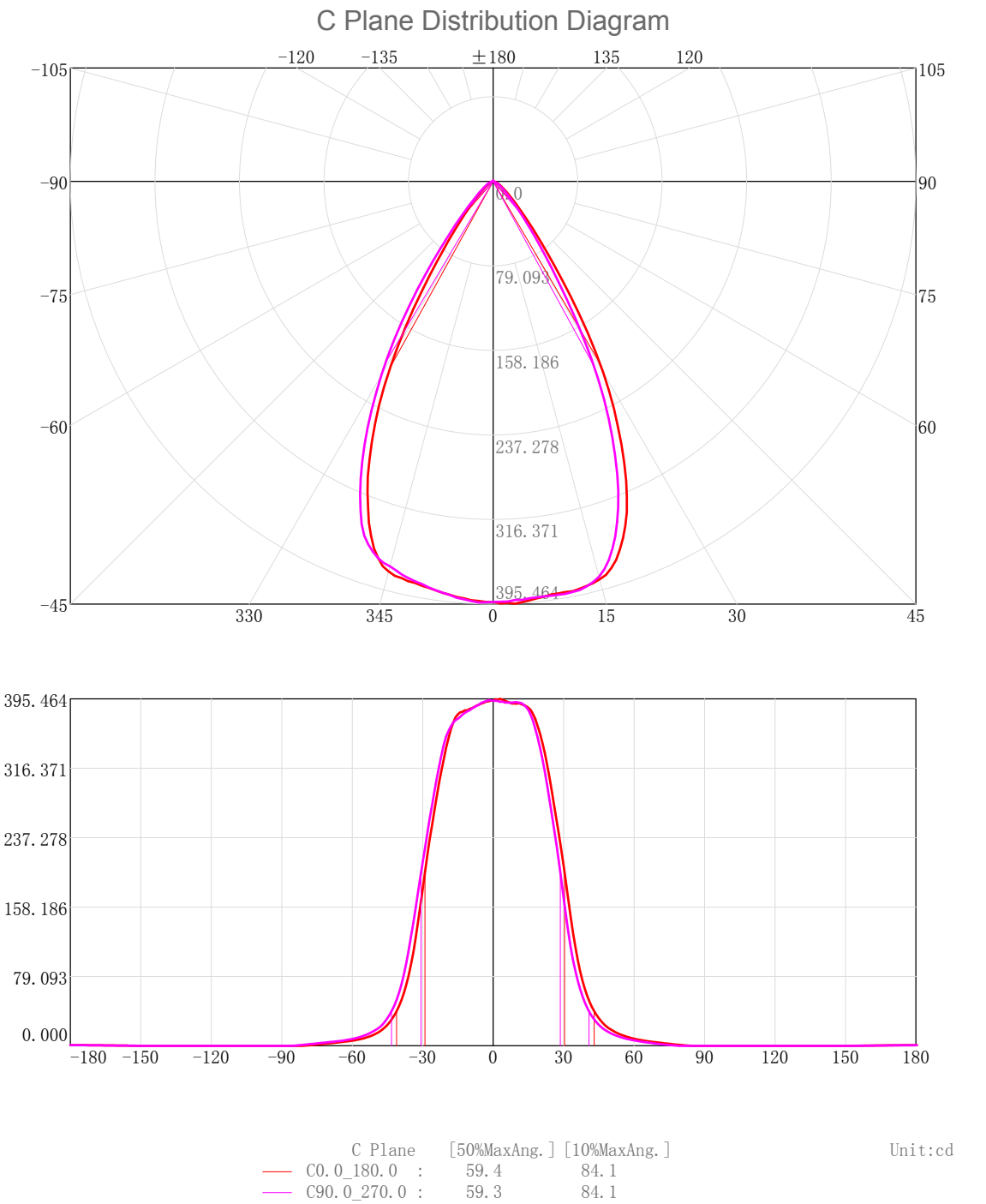
Character Parameter

| Lamp Speciality Parameter                       |                                | Luminaire Speciality Parameter        |  |
|---|--------------------------------|---------------------------------------|--|
| Rated Flux(lm): 374.950                         | Luminary Flux(lm): 374.953     | Field Angle(10%Imax): 84.1(°)         |  |
| Rated Power(W):                                 | Luminary Efficiency: 100.00%   | Down Lumens&Percent: 374.690lm 99.93% |  |
| Rated Voltage(V):                               | Luminary EER(lm/W): 62.954     | Up Lumens&Percent: 0.262lm 0.07%      |  |
| Tested Power(W): 5.956                          | Max. Candela(cd): 395.464      | S/MH: C0_a180=0.961 C90_270=0.957     |  |
| Lamps' Inside: 1                                | Max Cand@Ang. (°): C=0.0 γ=3.0 | CIE Type: Semi-Direct                 |  |
| Tested Electrics (V, A, pf):240.6, 0.029, 0.837 | Beam Angle(50%Imax): 59.4(°)   | ErP Φ use(90°): 343.900lm             |  |
| Lamp Size (W*L*H):0.076m*-0.076m*0.000m         | Left=-29.0°, Right=30.4°       | IRF(%): 223.271                       |  |



2D Plane Light Intensity Distribution Curve

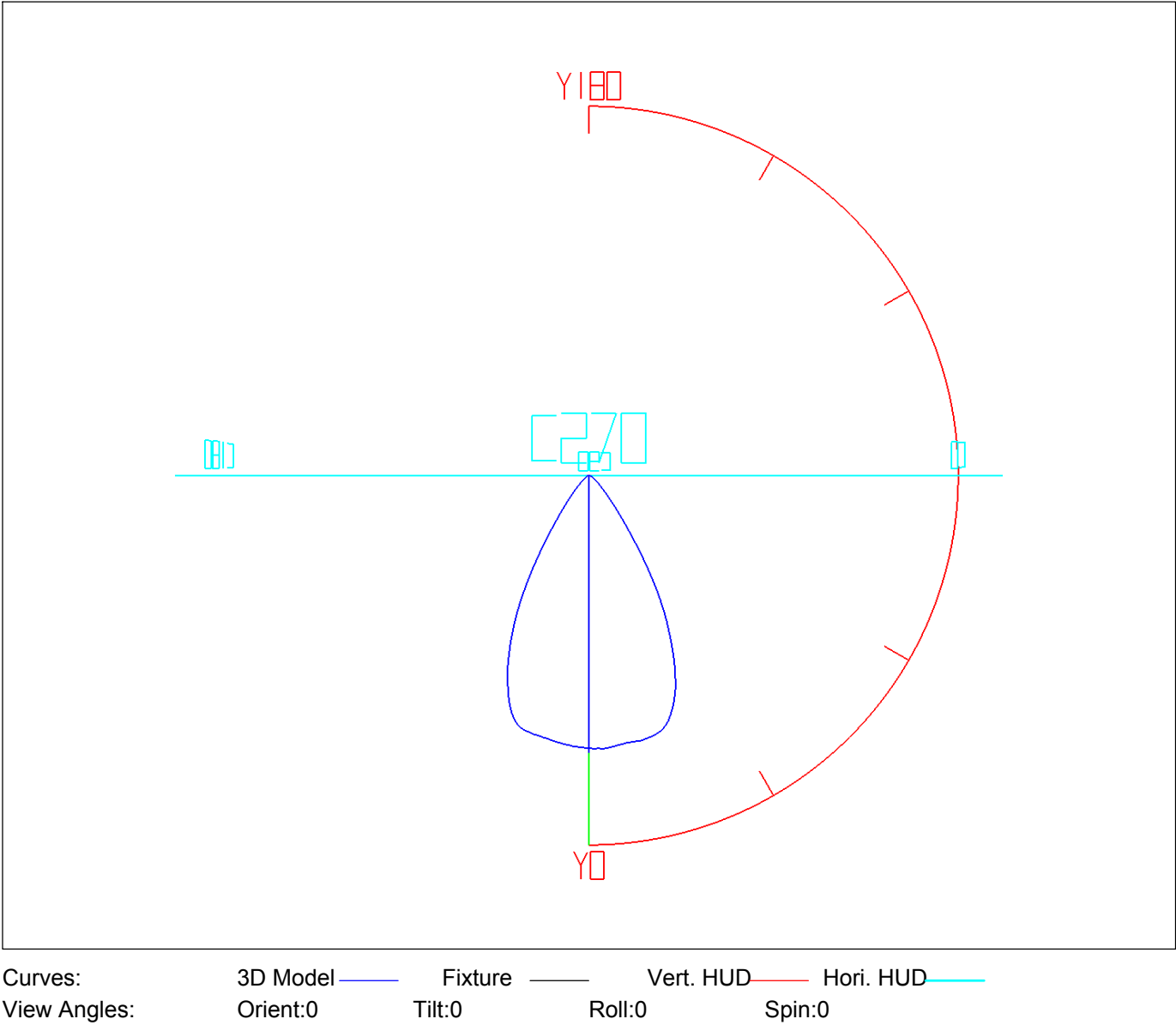
|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | Lum. Catelog:         | Test ID: 01                 |
| Lamp Name:                                      | Lamp Catelog: LED     | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/08       |



3D Light Intensity Distribution Modal

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08       |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:SD09-06-DW-01 RA95 2000K-3000K 60D.IES

Zonal Flux Tabulation

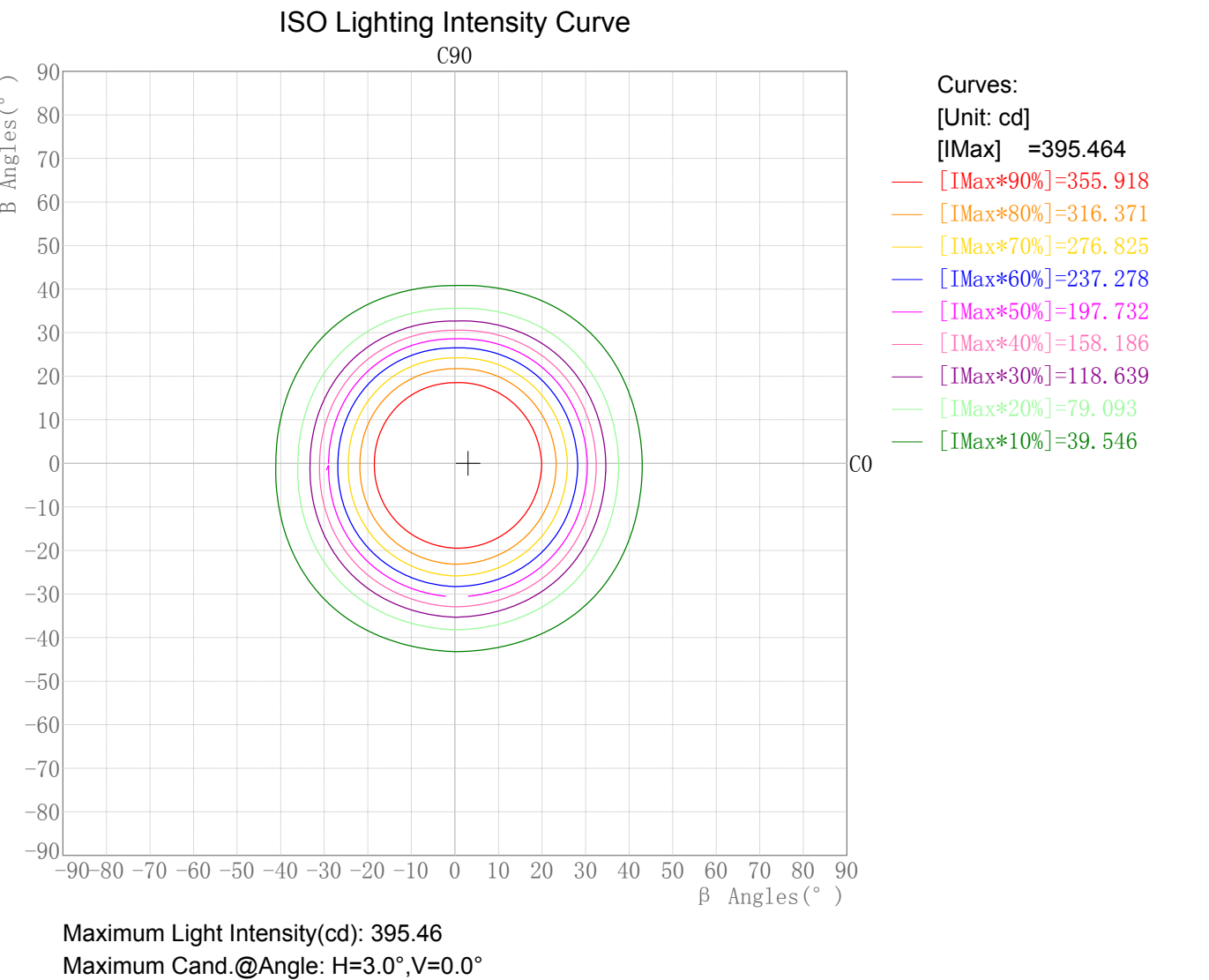
| Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0   | 0.38              | 0.38              | 0.10      | 0.10      | 47.0-48.0 | 1.69              | 355.00            | 0.45      | 94.68     |
| 1.0-2.0   | 1.13              | 1.51              | 0.30      | 0.40      | 48.0-49.0 | 1.55              | 356.55            | 0.41      | 95.09     |
| 2.0-3.0   | 1.88              | 3.39              | 0.50      | 0.90      | 49.0-50.0 | 1.42              | 357.97            | 0.38      | 95.47     |
| 3.0-4.0   | 2.63              | 6.02              | 0.70      | 1.61      | 50.0-51.0 | 1.32              | 359.29            | 0.35      | 95.82     |
| 4.0-5.0   | 3.37              | 9.39              | 0.90      | 2.50      | 51.0-52.0 | 1.22              | 360.51            | 0.32      | 96.15     |
| 5.0-6.0   | 4.11              | 13.50             | 1.10      | 3.60      | 52.0-53.0 | 1.13              | 361.64            | 0.30      | 96.45     |
| 6.0-7.0   | 4.84              | 18.34             | 1.29      | 4.89      | 53.0-54.0 | 1.05              | 362.68            | 0.28      | 96.73     |
| 7.0-8.0   | 5.57              | 23.90             | 1.48      | 6.38      | 54.0-55.0 | 0.97              | 363.65            | 0.26      | 96.99     |
| 8.0-9.0   | 6.29              | 30.19             | 1.68      | 8.05      | 55.0-56.0 | 0.90              | 364.56            | 0.24      | 97.23     |
| 9.0-10.0  | 7.01              | 37.21             | 1.87      | 9.92      | 56.0-57.0 | 0.84              | 365.40            | 0.22      | 97.45     |
| 10.0-11.0 | 7.73              | 44.93             | 2.06      | 11.98     | 57.0-58.0 | 0.79              | 366.18            | 0.21      | 97.66     |
| 11.0-12.0 | 8.44              | 53.37             | 2.25      | 14.23     | 58.0-59.0 | 0.73              | 366.92            | 0.20      | 97.86     |
| 12.0-13.0 | 9.13              | 62.50             | 2.44      | 16.67     | 59.0-60.0 | 0.69              | 367.61            | 0.18      | 98.04     |
| 13.0-14.0 | 9.81              | 72.30             | 2.62      | 19.28     | 60.0-61.0 | 0.65              | 368.25            | 0.17      | 98.21     |
| 14.0-15.0 | 10.46             | 82.76             | 2.79      | 22.07     | 61.0-62.0 | 0.61              | 368.86            | 0.16      | 98.38     |
| 15.0-16.0 | 11.08             | 93.84             | 2.95      | 25.03     | 62.0-63.0 | 0.57              | 369.43            | 0.15      | 98.53     |
| 16.0-17.0 | 11.64             | 105.49            | 3.11      | 28.13     | 63.0-64.0 | 0.53              | 369.96            | 0.14      | 98.67     |
| 17.0-18.0 | 12.13             | 117.62            | 3.24      | 31.37     | 64.0-65.0 | 0.50              | 370.46            | 0.13      | 98.80     |
| 18.0-19.0 | 12.54             | 130.16            | 3.34      | 34.71     | 65.0-66.0 | 0.47              | 370.93            | 0.13      | 98.93     |
| 19.0-20.0 | 12.86             | 143.03            | 3.43      | 38.15     | 66.0-67.0 | 0.44              | 371.37            | 0.12      | 99.04     |
| 20.0-21.0 | 13.09             | 156.12            | 3.49      | 41.64     | 67.0-68.0 | 0.41              | 371.78            | 0.11      | 99.15     |
| 21.0-22.0 | 13.22             | 169.34            | 3.53      | 45.16     | 68.0-69.0 | 0.38              | 372.16            | 0.10      | 99.26     |
| 22.0-23.0 | 13.25             | 182.60            | 3.53      | 48.70     | 69.0-70.0 | 0.35              | 372.51            | 0.09      | 99.35     |
| 23.0-24.0 | 13.18             | 195.78            | 3.51      | 52.21     | 70.0-71.0 | 0.32              | 372.84            | 0.09      | 99.44     |
| 24.0-25.0 | 13.00             | 208.78            | 3.47      | 55.68     | 71.0-72.0 | 0.30              | 373.13            | 0.08      | 99.52     |
| 25.0-26.0 | 12.74             | 221.52            | 3.40      | 59.08     | 72.0-73.0 | 0.27              | 373.40            | 0.07      | 99.59     |
| 26.0-27.0 | 12.39             | 233.91            | 3.30      | 62.38     | 73.0-74.0 | 0.24              | 373.64            | 0.06      | 99.65     |
| 27.0-28.0 | 11.95             | 245.86            | 3.19      | 65.57     | 74.0-75.0 | 0.21              | 373.86            | 0.06      | 99.71     |
| 28.0-29.0 | 11.41             | 257.27            | 3.04      | 68.61     | 75.0-76.0 | 0.19              | 374.04            | 0.05      | 99.76     |
| 29.0-30.0 | 10.78             | 268.05            | 2.87      | 71.49     | 76.0-77.0 | 0.16              | 374.20            | 0.04      | 99.80     |
| 30.0-31.0 | 10.07             | 278.12            | 2.69      | 74.18     | 77.0-78.0 | 0.13              | 374.33            | 0.04      | 99.84     |
| 31.0-32.0 | 9.30              | 287.42            | 2.48      | 76.66     | 78.0-79.0 | 0.11              | 374.44            | 0.03      | 99.86     |
| 32.0-33.0 | 8.49              | 295.91            | 2.26      | 78.92     | 79.0-80.0 | 0.08              | 374.52            | 0.02      | 99.89     |
| 33.0-34.0 | 7.67              | 303.59            | 2.05      | 80.97     | 80.0-81.0 | 0.06              | 374.58            | 0.02      | 99.90     |
| 34.0-35.0 | 6.89              | 310.48            | 1.84      | 82.80     | 81.0-82.0 | 0.04              | 374.63            | 0.01      | 99.91     |
| 35.0-36.0 | 6.16              | 316.63            | 1.64      | 84.45     | 82.0-83.0 | 0.03              | 374.66            | 0.01      | 99.92     |
| 36.0-37.0 | 5.49              | 322.12            | 1.46      | 85.91     | 83.0-84.0 | 0.02              | 374.68            | 0.01      | 99.93     |
| 37.0-38.0 | 4.89              | 327.01            | 1.30      | 87.22     | 84.0-85.0 | 0.01              | 374.69            | 0.00      | 99.93     |
| 38.0-39.0 | 4.36              | 331.37            | 1.16      | 88.38     | 85.0-86.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 39.0-40.0 | 3.89              | 335.26            | 1.04      | 89.41     | 86.0-87.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 40.0-41.0 | 3.47              | 338.73            | 0.93      | 90.34     | 87.0-88.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 41.0-42.0 | 3.11              | 341.85            | 0.83      | 91.17     | 88.0-89.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 42.0-43.0 | 2.79              | 344.64            | 0.74      | 91.92     | 89.0-90.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 43.0-44.0 | 2.51              | 347.15            | 0.67      | 92.58     | 90.0-91.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 44.0-45.0 | 2.26              | 349.41            | 0.60      | 93.19     | 91.0-92.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 45.0-46.0 | 2.05              | 351.46            | 0.55      | 93.73     | 92.0-93.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 46.0-47.0 | 1.86              | 353.31            | 0.49      | 94.23     | 93.0-94.0 | 0.00              | 374.69            | 0.00      | 99.93     |

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              | 374.69            | 0.00      | 99.93     | 141.0-142.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 95.0-96.0   | 0.00              | 374.69            | 0.00      | 99.93     | 142.0-143.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 96.0-97.0   | 0.00              | 374.69            | 0.00      | 99.93     | 143.0-144.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 97.0-98.0   | 0.00              | 374.69            | 0.00      | 99.93     | 144.0-145.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 98.0-99.0   | 0.00              | 374.69            | 0.00      | 99.93     | 145.0-146.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 99.0-100.0  | 0.00              | 374.69            | 0.00      | 99.93     | 146.0-147.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 100.0-101.0 | 0.00              | 374.69            | 0.00      | 99.93     | 147.0-148.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 101.0-102.0 | 0.00              | 374.69            | 0.00      | 99.93     | 148.0-149.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 102.0-103.0 | 0.00              | 374.69            | 0.00      | 99.93     | 149.0-150.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 103.0-104.0 | 0.00              | 374.69            | 0.00      | 99.93     | 150.0-151.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 104.0-105.0 | 0.00              | 374.69            | 0.00      | 99.93     | 151.0-152.0 | 0.00              | 374.69            | 0.00      | 99.93     |
| 105.0-106.0 | 0.00              | 374.69            | 0.00      | 99.93     | 152.0-153.0 | 0.00              | 374.70            | 0.00      | 99.93     |
| 106.0-107.0 | 0.00              | 374.69            | 0.00      | 99.93     | 153.0-154.0 | 0.01              | 374.70            | 0.00      | 99.93     |
| 107.0-108.0 | 0.00              | 374.69            | 0.00      | 99.93     | 154.0-155.0 | 0.01              | 374.71            | 0.00      | 99.94     |
| 108.0-109.0 | 0.00              | 374.69            | 0.00      | 99.93     | 155.0-156.0 | 0.01              | 374.72            | 0.00      | 99.94     |
| 109.0-110.0 | 0.00              | 374.69            | 0.00      | 99.93     | 156.0-157.0 | 0.01              | 374.73            | 0.00      | 99.94     |
| 110.0-111.0 | 0.00              | 374.69            | 0.00      | 99.93     | 157.0-158.0 | 0.01              | 374.74            | 0.00      | 99.94     |
| 111.0-112.0 | 0.00              | 374.69            | 0.00      | 99.93     | 158.0-159.0 | 0.01              | 374.75            | 0.00      | 99.95     |
| 112.0-113.0 | 0.00              | 374.69            | 0.00      | 99.93     | 159.0-160.0 | 0.01              | 374.76            | 0.00      | 99.95     |
| 113.0-114.0 | 0.00              | 374.69            | 0.00      | 99.93     | 160.0-161.0 | 0.01              | 374.77            | 0.00      | 99.95     |
| 114.0-115.0 | 0.00              | 374.69            | 0.00      | 99.93     | 161.0-162.0 | 0.01              | 374.78            | 0.00      | 99.96     |
| 115.0-116.0 | 0.00              | 374.69            | 0.00      | 99.93     | 162.0-163.0 | 0.01              | 374.80            | 0.00      | 99.96     |
| 116.0-117.0 | 0.00              | 374.69            | 0.00      | 99.93     | 163.0-164.0 | 0.01              | 374.81            | 0.00      | 99.96     |
| 117.0-118.0 | 0.00              | 374.69            | 0.00      | 99.93     | 164.0-165.0 | 0.01              | 374.82            | 0.00      | 99.97     |
| 118.0-119.0 | 0.00              | 374.69            | 0.00      | 99.93     | 165.0-166.0 | 0.01              | 374.84            | 0.00      | 99.97     |
| 119.0-120.0 | 0.00              | 374.69            | 0.00      | 99.93     | 166.0-167.0 | 0.01              | 374.85            | 0.00      | 99.97     |
| 120.0-121.0 | 0.00              | 374.69            | 0.00      | 99.93     | 167.0-168.0 | 0.01              | 374.86            | 0.00      | 99.98     |
| 121.0-122.0 | 0.00              | 374.69            | 0.00      | 99.93     | 168.0-169.0 | 0.01              | 374.88            | 0.00      | 99.98     |
| 122.0-123.0 | 0.00              | 374.69            | 0.00      | 99.93     | 169.0-170.0 | 0.01              | 374.89            | 0.00      | 99.98     |
| 123.0-124.0 | 0.00              | 374.69            | 0.00      | 99.93     | 170.0-171.0 | 0.01              | 374.90            | 0.00      | 99.99     |
| 124.0-125.0 | 0.00              | 374.69            | 0.00      | 99.93     | 171.0-172.0 | 0.01              | 374.91            | 0.00      | 99.99     |
| 125.0-126.0 | 0.00              | 374.69            | 0.00      | 99.93     | 172.0-173.0 | 0.01              | 374.92            | 0.00      | 99.99     |
| 126.0-127.0 | 0.00              | 374.69            | 0.00      | 99.93     | 173.0-174.0 | 0.01              | 374.93            | 0.00      | 99.99     |
| 127.0-128.0 | 0.00              | 374.69            | 0.00      | 99.93     | 174.0-175.0 | 0.01              | 374.94            | 0.00      | 100.00    |
| 128.0-129.0 | 0.00              | 374.69            | 0.00      | 99.93     | 175.0-176.0 | 0.01              | 374.94            | 0.00      | 100.00    |
| 129.0-130.0 | 0.00              | 374.69            | 0.00      | 99.93     | 176.0-177.0 | 0.00              | 374.95            | 0.00      | 100.00    |
| 130.0-131.0 | 0.00              | 374.69            | 0.00      | 99.93     | 177.0-178.0 | 0.00              | 374.95            | 0.00      | 100.00    |
| 131.0-132.0 | 0.00              | 374.69            | 0.00      | 99.93     | 178.0-179.0 | 0.00              | 374.95            | 0.00      | 100.00    |
| 132.0-133.0 | 0.00              | 374.69            | 0.00      | 99.93     | 179.0-180.0 | 0.00              | 374.95            | 0.00      | 100.00    |
| 133.0-134.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 134.0-135.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 135.0-136.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 136.0-137.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 137.0-138.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 138.0-139.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 139.0-140.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |
| 140.0-141.0 | 0.00              | 374.69            | 0.00      | 99.93     |             |                   |                   |           |           |

Rectangle ISO Lighting Intensity Diagram

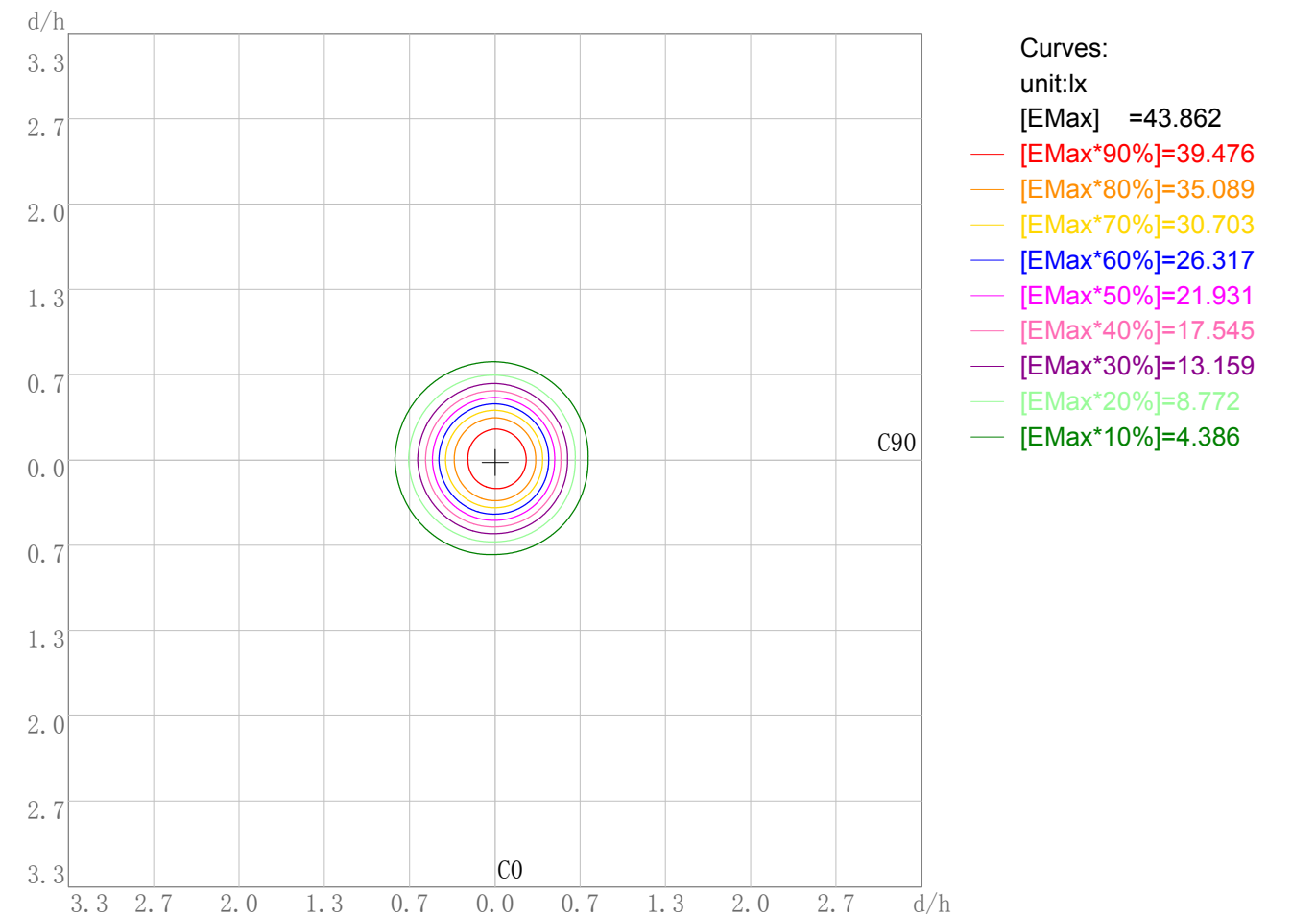
|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | Lum. Catalog:         | Test ID: 01                  |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/08        |



Plane ISO-Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08        |

Plane ISO-Illuminance Curve

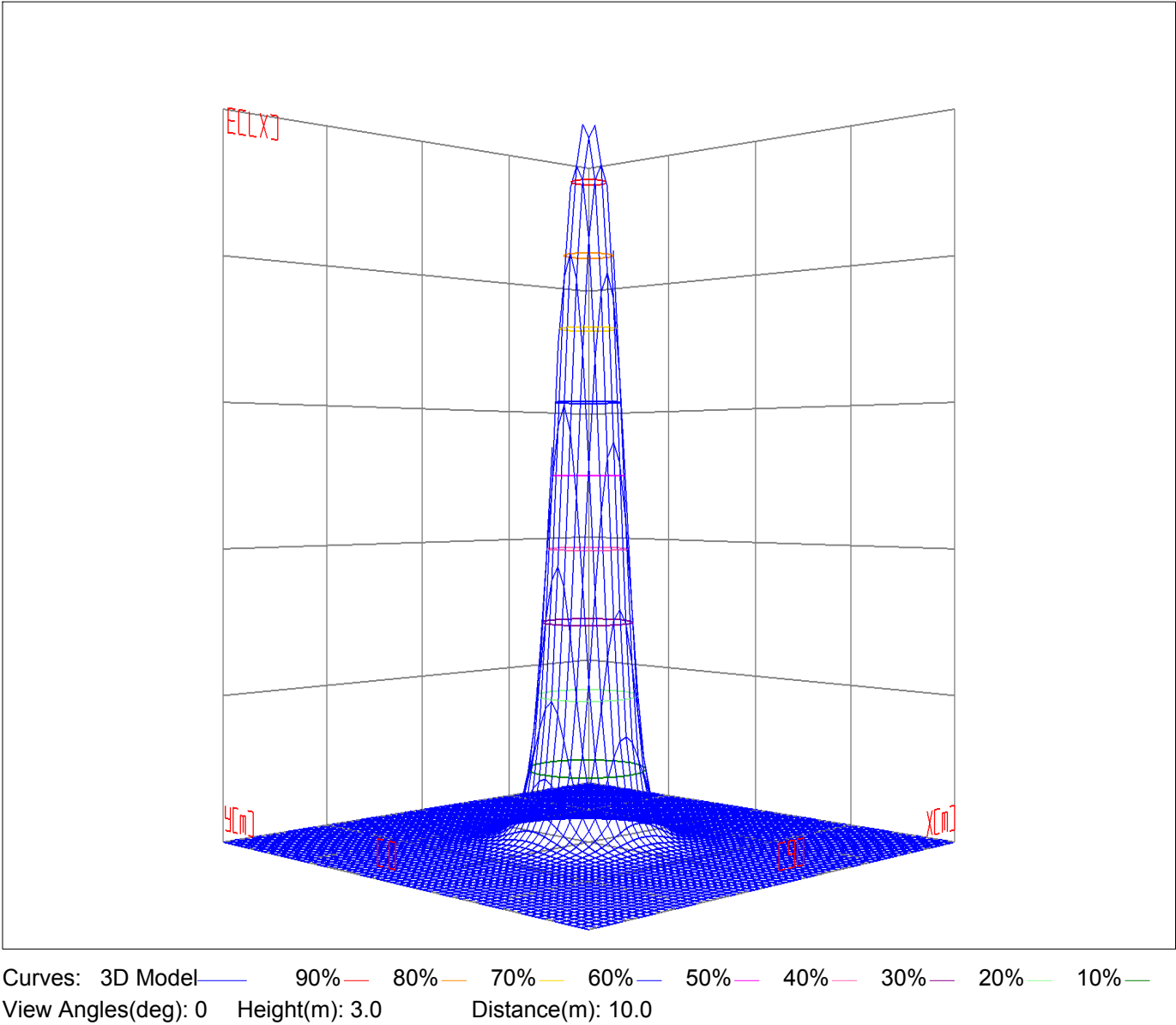


Working Plane Luminaire Mounting Height(m): 3.00  
Working Plane Maximum Illuminance(lx): 43.86  
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

3D Plane ISO Illuminance Diagram

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08       |

3D Plane Illuminance Modal

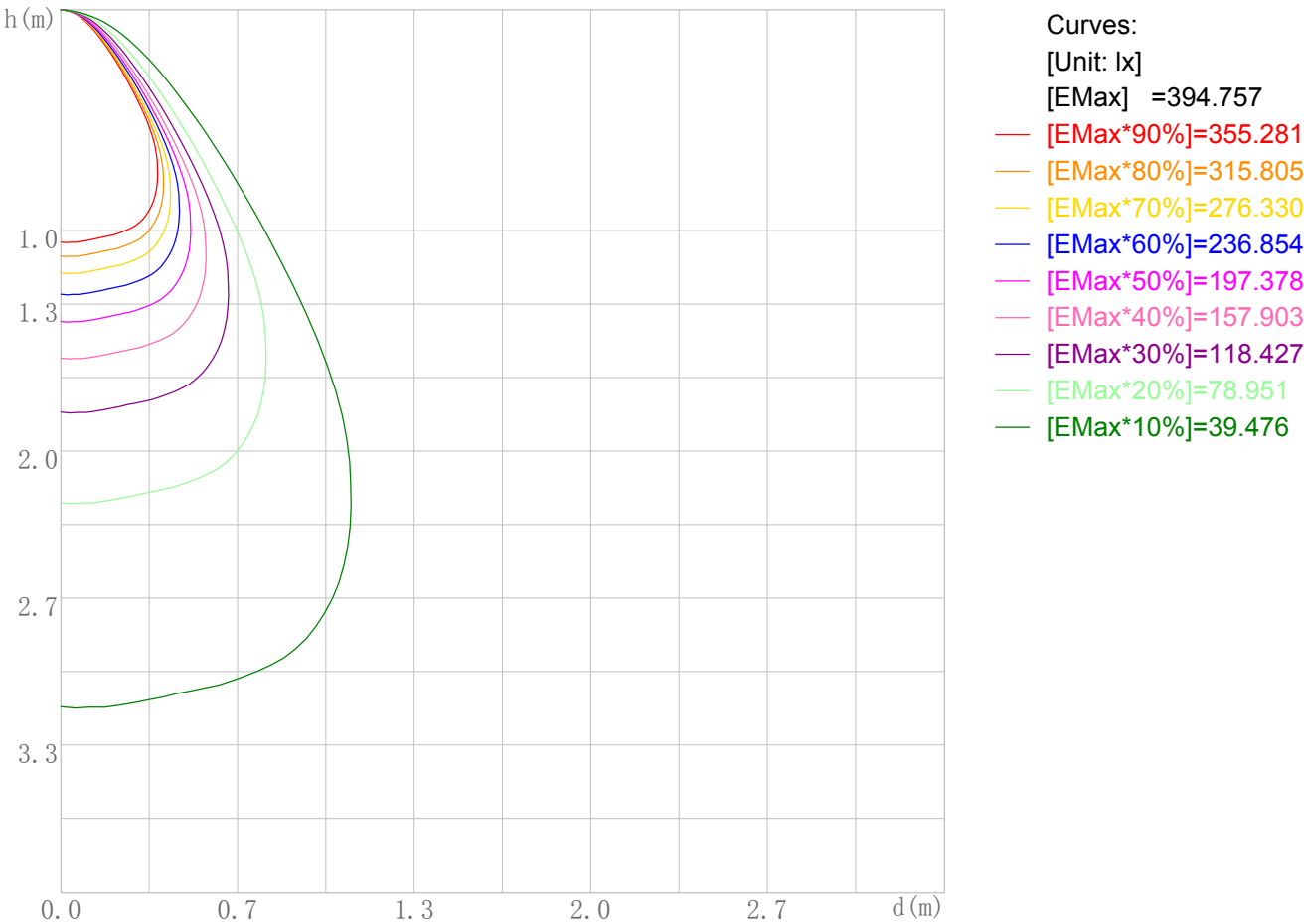




Space ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08        |

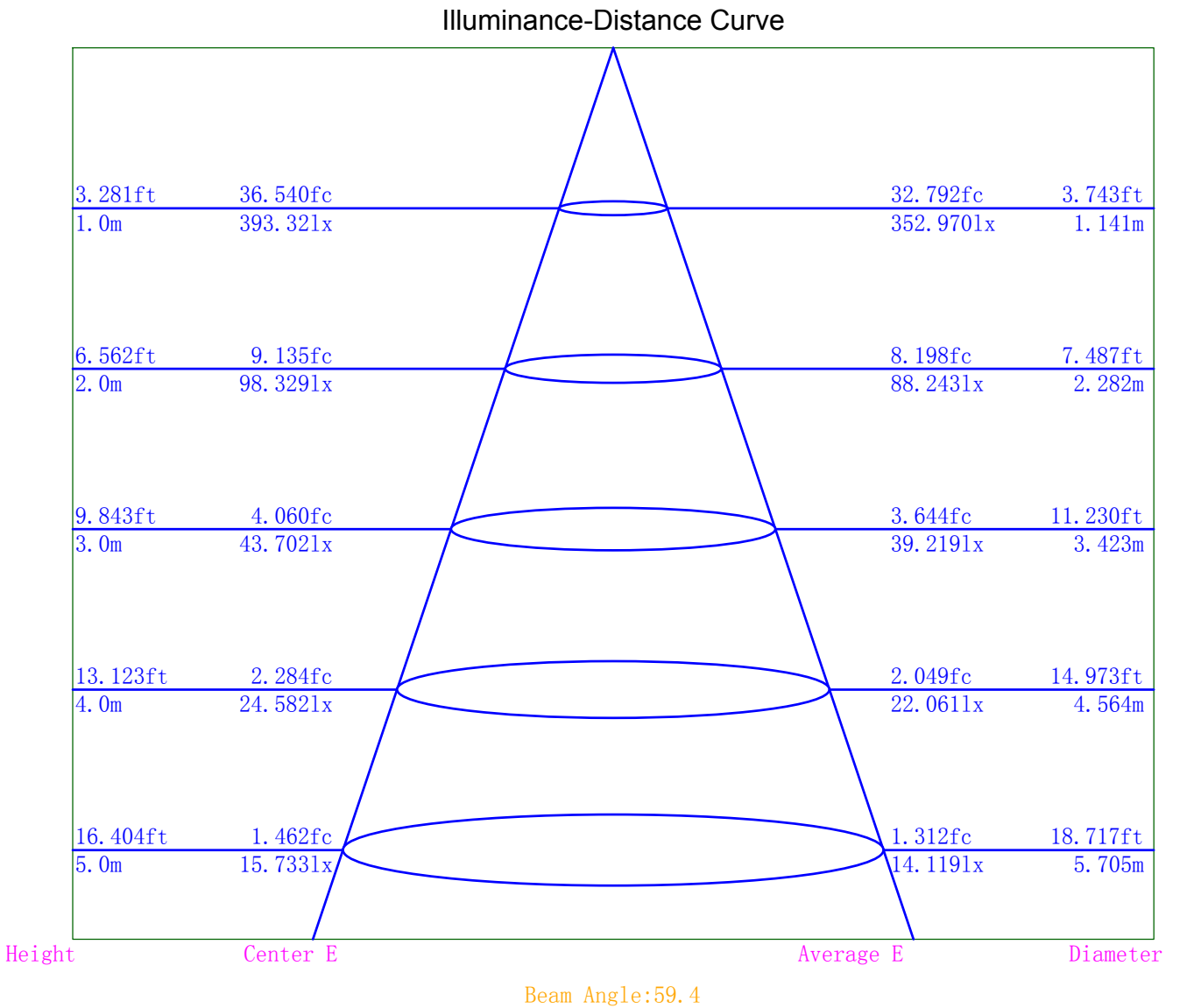
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:394.76lx,1.0deg  
Plane Maximum Lighting Intensity and @Angle:395.464cd,0deg

Illuminance-Distance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08        |



Indoor Luminance Limiting Curves

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08        |

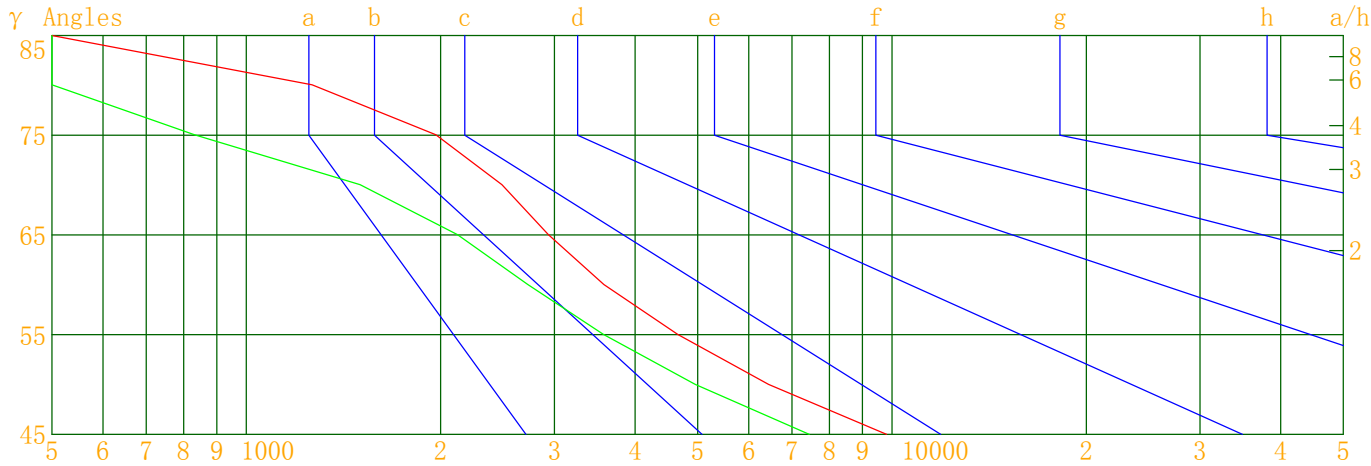
Glare Grade Table

| 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        | 9812 | 6442 | 4661 | 3579 | 2936 | 2488 | 1966 | 1264 | 0  |
| C90       | 7444 | 4958 | 3576 | 2730 | 2123 | 1500 | 831  | 0    | 0  |

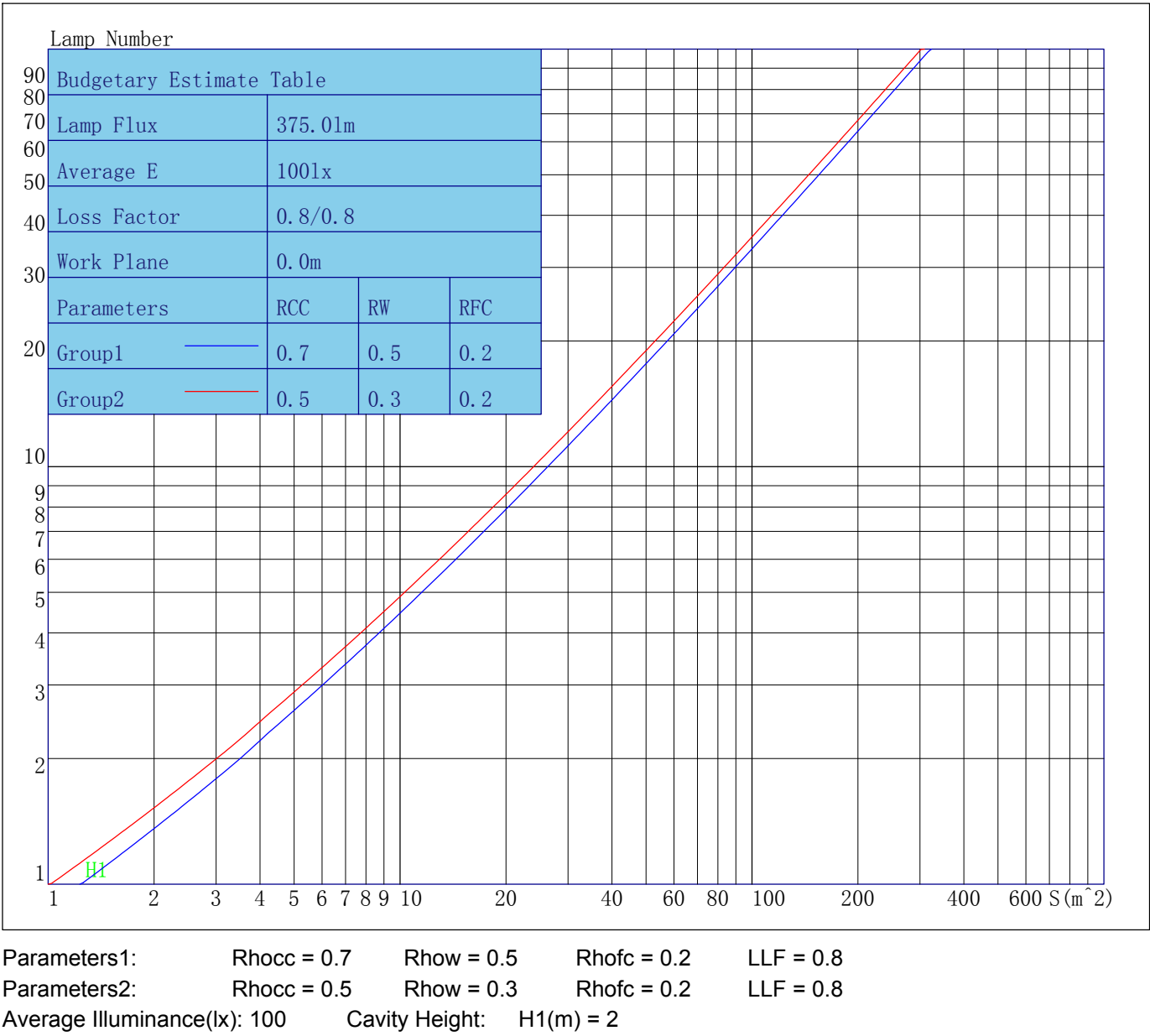
Luminance Limiting Curve



Luminous Size: Length(m)=-0.076 Width(m)=-0.076 Height(m)=0.000 Area(m^2)=0.004536  
Luminous Type: Without Luminous Side  
Luminous Curves: C0-C180 Color: — C90-C270 Color: —

Indoor Budgetary Estimate Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08        |



Indoor Coefficient of Utilization Table

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | 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: 2021/11/08       |

| 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   | 113   | 110 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 95  | 93  |
| 2   | 107   | 102 | 98  | 95  | 105 | 101 | 97  | 94  | 97  | 94  | 92  | 94  | 92  | 90  | 92  | 90  | 88  | 86  |
| 3   | 102   | 95  | 90  | 86  | 100 | 94  | 89  | 85  | 91  | 87  | 84  | 89  | 85  | 83  | 86  | 84  | 81  | 80  |
| 4   | 97  | 89  | 83  | 79  | 95  | 88  | 82  | 78  | 85  | 81  | 77  | 83  | 80  | 76  | 82  | 78  | 76  | 74  |
| 5   | 92  | 83  | 77  | 73  | 90  | 82  | 77  | 72  | 80  | 75  | 72  | 79  | 74  | 71  | 77  | 73  | 70  | 69  |
| 6   | 87  | 78  | 72  | 67  | 85  | 77  | 71  | 67  | 76  | 70  | 67  | 74  | 70  | 66  | 73  | 69  | 66  | 64  |
| 7   | 83  | 73  | 67  | 63  | 81  | 73  | 67  | 63  | 71  | 66  | 62  | 70  | 65  | 62  | 69  | 65  | 62  | 60  |
| 8   | 79  | 69  | 63  | 59  | 77  | 68  | 63  | 59  | 67  | 62  | 58  | 66  | 61  | 58  | 65  | 61  | 58  | 56  |
| 9   | 75  | 65  | 59  | 55  | 74  | 65  | 59  | 55  | 64  | 58  | 55  | 63  | 58  | 55  | 62  | 58  | 54  | 53  |
| 10  | 71  | 62  | 56  | 52  | 70  | 61  | 55  | 52  | 60  | 55  | 52  | 59  | 55  | 51  | 59  | 54  | 51  | 50  |

Unified Glare Rating Table

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: SD09-06-DW-01 RA95 2000K-3000K 60D   | Lum. Catelog:         | Test ID: 01                 |
| Lamp Name:                                      | Lamp Catalog: LED     | Test Lab: Quality Deparment |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/11/08       |

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                                      | 16.5            | 17.6 | 16.9 | 17.9 | 18.2 | 15.1          | 16.1 | 15.4 | 16.4 | 16.8 |
|   | 16.6            | 17.5 | 17.0 | 17.9 | 18.2 | 15.1          | 16.0 | 15.5 | 16.3 | 16.7 |
|   | 16.6            | 17.5 | 17.0 | 17.8 | 18.2 | 15.0          | 15.9 | 15.4 | 16.2 | 16.6 |
|   | 16.6            | 17.4 | 17.0 | 17.7 | 18.1 | 14.9          | 15.7 | 15.3 | 16.1 | 16.5 |
|   | 16.5            | 17.3 | 17.0 | 17.7 | 18.1 | 14.9          | 15.6 | 15.3 | 16.0 | 16.4 |
|   | 16.5            | 17.2 | 16.9 | 17.6 | 18.0 | 14.8          | 15.5 | 15.2 | 15.9 | 16.3 |
| X=4H    Y=2H                                      | 16.4            | 17.3 | 16.8 | 17.6 | 18.0 | 15.0          | 15.8 | 15.4 | 16.2 | 16.6 |
|   | 16.6            | 17.3 | 17.0 | 17.7 | 18.1 | 15.0          | 15.7 | 15.4 | 16.1 | 16.5 |
|   | 16.6            | 17.2 | 17.0 | 17.6 | 18.1 | 15.0          | 15.6 | 15.4 | 16.0 | 16.5 |
|   | 16.6            | 17.1 | 17.0 | 17.6 | 18.0 | 14.9          | 15.4 | 15.3 | 15.9 | 16.3 |
|   | 16.5            | 17.0 | 17.0 | 17.5 | 17.9 | 14.8          | 15.3 | 15.3 | 15.8 | 16.2 |
|   | 16.4            | 16.9 | 16.9 | 17.4 | 17.9 | 14.7          | 15.2 | 15.2 | 15.7 | 16.1 |
| X=8H    Y=4H                                      | 16.5            | 17.0 | 17.0 | 17.4 | 17.9 | 14.8          | 15.4 | 15.3 | 15.8 | 16.3 |
|   | 16.5            | 16.9 | 17.0 | 17.4 | 17.9 | 14.7          | 15.1 | 15.2 | 15.6 | 16.2 |
|   | 16.4            | 16.8 | 16.9 | 17.3 | 17.8 | 14.7          | 15.0 | 15.2 | 15.6 | 16.1 |
|   | 16.4            | 16.7 | 16.9 | 17.2 | 17.8 | 14.6          | 14.9 | 15.1 | 15.4 | 16.0 |
| X=12H    Y=4H                                     | 16.4            | 16.9 | 16.9 | 17.4 | 17.8 | 14.8          | 15.2 | 15.3 | 15.7 | 16.2 |
|   | 16.4            | 16.8 | 16.9 | 17.3 | 17.8 | 14.7          | 15.0 | 15.2 | 15.5 | 16.1 |
|   | 16.4            | 16.7 | 16.9 | 17.2 | 17.8 | 14.6          | 14.9 | 15.1 | 15.4 | 16.0 |
| Variations with the objerver position at spacings |                 |      |      |      |      |               |      |      |      |      |
| S=1.0H  | 1.0/-1.2        |      |      |      |      | 2.3/-4.4      |      |      |      |      |
| S=1.5H  | 1.5/-2.0        |      |      |      |      | 2.7/-4.9      |      |      |      |      |
| S=2.0H  | 2.0/-2.6        |      |      |      |      | 3.0/-5.4      |      |      |      |      |
| Reduced UGR Table:                                |                 |      |      |      |      |               |      |      |      |      |
| Nordic Standard Table:                            | BK0             |      |      |      |      | BK0           |      |      |      |      |
| Correction Value                                  | 0.4             |      |      |      |      | 0.3           |      |      |      |      |

to 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  | 393.32 | 393.32 | 393.32 | 393.32 |
| γ 1.0  | 394.94 | 393.23 | 393.36 | 393.76 |
| γ 2.0  | 394.45 | 393.18 | 392.64 | 393.98 |
| γ 3.0  | 395.46 | 392.06 | 392.31 | 393.03 |
| γ 4.0  | 394.36 | 392.33 | 390.92 | 391.81 |
| γ 5.0  | 393.28 | 391.26 | 390.10 | 390.89 |
| γ 6.0  | 392.11 | 391.21 | 388.76 | 388.86 |
| γ 7.0  | 391.26 | 391.01 | 387.74 | 387.61 |
| γ 8.0  | 390.11 | 391.26 | 386.23 | 386.12 |
| γ 9.0  | 390.10 | 391.48 | 384.91 | 384.56 |
| γ 10.0 | 390.01 | 391.69 | 384.00 | 382.43 |
| γ 11.0 | 390.45 | 391.07 | 382.55 | 381.16 |
| γ 12.0 | 389.43 | 390.64 | 382.27 | 379.55 |
| γ 13.0 | 388.35 | 388.81 | 380.69 | 377.65 |
| γ 14.0 | 387.17 | 386.25 | 380.21 | 375.01 |
| γ 15.0 | 385.23 | 382.83 | 377.73 | 372.75 |
| γ 16.0 | 382.80 | 377.39 | 374.47 | 371.20 |
| γ 17.0 | 378.10 | 370.23 | 368.22 | 368.38 |
| γ 18.0 | 372.28 | 361.13 | 360.90 | 364.22 |
| γ 19.0 | 364.24 | 351.06 | 350.72 | 358.95 |
| γ 20.0 | 355.22 | 339.12 | 339.70 | 352.50 |
| γ 21.0 | 345.02 | 326.53 | 326.54 | 343.14 |
| γ 22.0 | 333.71 | 312.51 | 313.69 | 331.26 |
| γ 23.0 | 320.11 | 297.05 | 299.95 | 318.42 |
| γ 24.0 | 306.00 | 280.23 | 284.28 | 304.77 |
| γ 25.0 | 290.25 | 263.86 | 268.45 | 289.88 |
| γ 26.0 | 273.90 | 246.48 | 251.50 | 274.34 |
| γ 27.0 | 256.78 | 228.16 | 235.07 | 258.95 |
| γ 28.0 | 240.64 | 209.33 | 217.00 | 242.01 |
| γ 29.0 | 223.39 | 189.37 | 197.73 | 225.08 |
| γ 30.0 | 205.55 | 168.80 | 178.19 | 208.90 |
| γ 31.0 | 186.41 | 148.83 | 159.40 | 191.99 |
| γ 32.0 | 166.75 | 129.93 | 140.79 | 174.83 |
| γ 33.0 | 147.78 | 112.92 | 122.78 | 156.99 |
| γ 34.0 | 129.36 | 98.12  | 106.18 | 140.03 |
| γ 35.0 | 112.71 | 85.38  | 91.99  | 123.63 |
| γ 36.0 | 98.06  | 74.33  | 79.52  | 108.03 |
| γ 37.0 | 85.41  | 64.94  | 69.17  | 93.71  |
| γ 38.0 | 74.56  | 56.86  | 60.07  | 81.30  |
| γ 39.0 | 65.35  | 49.78  | 52.44  | 70.39  |
| γ 40.0 | 57.40  | 43.76  | 45.77  | 61.11  |
| γ 41.0 | 50.61  | 38.52  | 40.08  | 53.09  |
| γ 42.0 | 44.66  | 34.03  | 35.17  | 46.40  |
| γ 43.0 | 39.57  | 30.13  | 30.82  | 40.63  |
| γ 44.0 | 35.17  | 26.76  | 27.11  | 35.81  |
| γ 45.0 | 31.47  | 23.88  | 23.90  | 31.56  |
| γ 46.0 | 28.10  | 21.44  | 21.22  | 27.84  |

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Candela Tabulation - (Cont.)

| V/H    | C0.0  | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 25.23 | 19.30 | 18.92  | 24.60  |
| γ 48.0 | 22.68 | 17.50 | 16.93  | 21.92  |
| γ 49.0 | 20.54 | 15.88 | 15.22  | 19.90  |
| γ 50.0 | 18.78 | 14.46 | 13.73  | 18.17  |
| γ 51.0 | 17.15 | 13.20 | 12.40  | 16.60  |
| γ 52.0 | 15.70 | 12.04 | 11.30  | 15.13  |
| γ 53.0 | 14.36 | 11.04 | 10.31  | 13.81  |
| γ 54.0 | 13.20 | 10.12 | 9.47   | 12.60  |
| γ 55.0 | 12.13 | 9.30  | 8.67   | 11.56  |
| γ 56.0 | 11.19 | 8.53  | 7.98   | 10.63  |
| γ 57.0 | 10.28 | 7.88  | 7.37   | 9.81   |
| γ 58.0 | 9.49  | 7.27  | 6.84   | 9.08   |
| γ 59.0 | 8.76  | 6.72  | 6.32   | 8.42   |
| γ 60.0 | 8.12  | 6.19  | 5.89   | 7.83   |
| γ 61.0 | 7.52  | 5.72  | 5.49   | 7.30   |
| γ 62.0 | 7.00  | 5.26  | 5.11   | 6.82   |
| γ 63.0 | 6.51  | 4.84  | 4.78   | 6.39   |
| γ 64.0 | 6.05  | 4.45  | 4.47   | 5.99   |
| γ 65.0 | 5.63  | 4.07  | 4.15   | 5.62   |
| γ 66.0 | 5.24  | 3.71  | 3.86   | 5.30   |
| γ 67.0 | 4.88  | 3.38  | 3.57   | 4.99   |
| γ 68.0 | 4.53  | 3.04  | 3.29   | 4.72   |
| γ 69.0 | 4.19  | 2.69  | 3.03   | 4.46   |
| γ 70.0 | 3.86  | 2.33  | 2.78   | 4.20   |
| γ 71.0 | 3.54  | 2.03  | 2.51   | 3.90   |
| γ 72.0 | 3.22  | 1.73  | 2.21   | 3.63   |
| γ 73.0 | 2.89  | 1.48  | 1.94   | 3.38   |
| γ 74.0 | 2.58  | 1.23  | 1.68   | 3.13   |
| γ 75.0 | 2.31  | 0.98  | 1.45   | 2.81   |
| γ 76.0 | 2.05  | 0.75  | 1.19   | 2.50   |
| γ 77.0 | 1.78  | 0.51  | 0.95   | 2.22   |
| γ 78.0 | 1.48  | 0.30  | 0.70   | 1.98   |
| γ 79.0 | 1.22  | 0.00  | 0.48   | 1.70   |
| γ 80.0 | 1.00  | 0.00  | 0.28   | 1.41   |
| γ 81.0 | 0.75  | 0.00  | 0.04   | 1.14   |
| γ 82.0 | 0.43  | 0.00  | 0.00   | 0.92   |
| γ 83.0 | 0.24  | 0.00  | 0.00   | 0.69   |
| γ 84.0 | 0.09  | 0.00  | 0.00   | 0.38   |
| γ 85.0 | 0.00  | 0.00  | 0.00   | 0.18   |
| 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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# IES Indoor Report

Photometric Filename:SD09-06-DW-01 RA95 2000K-3000K 60D.IES

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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  | 0.00   | 0.00   |
| γ 143.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 144.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 145.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 146.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 147.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 148.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 149.0 | 0.00 | 0.00  | 0.00   | 0.00   |
| γ 150.0 | 0.00 | 0.00  | 0.03   | 0.03   |
| γ 151.0 | 0.00 | 0.00  | 0.07   | 0.07   |
| γ 152.0 | 0.04 | 0.00  | 0.10   | 0.09   |
| γ 153.0 | 0.07 | 0.00  | 0.14   | 0.13   |
| γ 154.0 | 0.12 | 0.02  | 0.18   | 0.17   |
| γ 155.0 | 0.15 | 0.04  | 0.22   | 0.21   |
| γ 156.0 | 0.19 | 0.08  | 0.24   | 0.24   |
| γ 157.0 | 0.22 | 0.13  | 0.28   | 0.27   |
| γ 158.0 | 0.26 | 0.16  | 0.31   | 0.31   |
| γ 159.0 | 0.28 | 0.18  | 0.34   | 0.33   |
| γ 160.0 | 0.31 | 0.22  | 0.38   | 0.36   |
| γ 161.0 | 0.34 | 0.26  | 0.41   | 0.39   |
| γ 162.0 | 0.38 | 0.29  | 0.44   | 0.41   |
| γ 163.0 | 0.41 | 0.32  | 0.46   | 0.44   |
| γ 164.0 | 0.45 | 0.36  | 0.50   | 0.47   |
| γ 165.0 | 0.48 | 0.38  | 0.53   | 0.51   |
| γ 166.0 | 0.51 | 0.43  | 0.55   | 0.53   |
| γ 167.0 | 0.53 | 0.45  | 0.58   | 0.56   |
| γ 168.0 | 0.57 | 0.49  | 0.61   | 0.59   |
| γ 169.0 | 0.59 | 0.52  | 0.62   | 0.61   |
| γ 170.0 | 0.62 | 0.54  | 0.66   | 0.64   |
| γ 171.0 | 0.64 | 0.56  | 0.66   | 0.66   |
| γ 172.0 | 0.67 | 0.58  | 0.69   | 0.67   |
| γ 173.0 | 0.69 | 0.61  | 0.71   | 0.69   |
| γ 174.0 | 0.70 | 0.62  | 0.73   | 0.71   |
| γ 175.0 | 0.72 | 0.64  | 0.73   | 0.73   |
| γ 176.0 | 0.73 | 0.66  | 0.75   | 0.75   |
| γ 177.0 | 0.75 | 0.66  | 0.75   | 0.75   |
| γ 178.0 | 0.76 | 0.68  | 0.76   | 0.76   |
| γ 179.0 | 0.76 | 0.69  | 0.77   | 0.77   |
| γ 180.0 | 0.76 | 0.76  | 0.76   | 0.76   |