

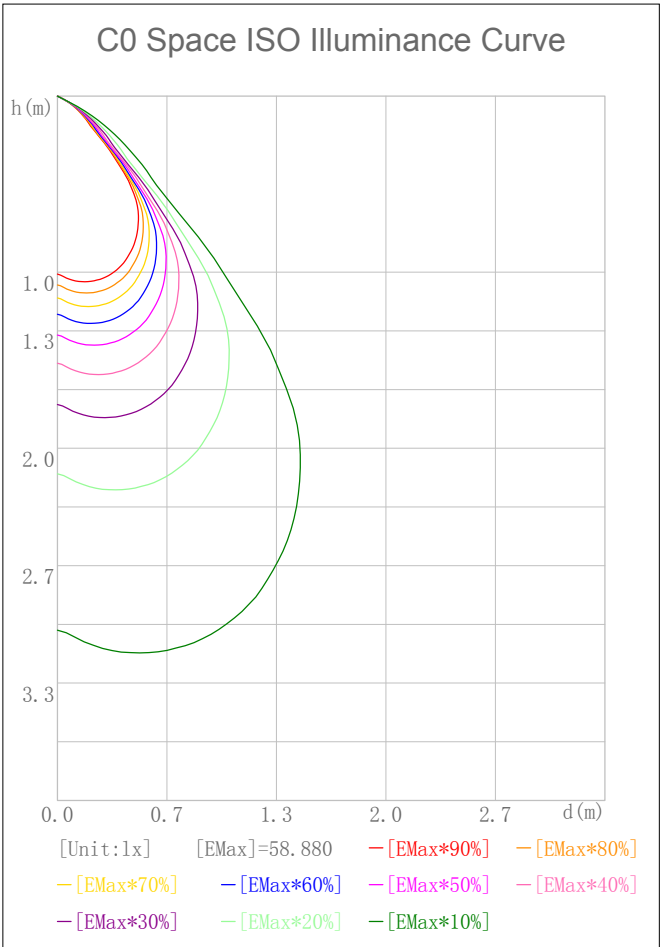
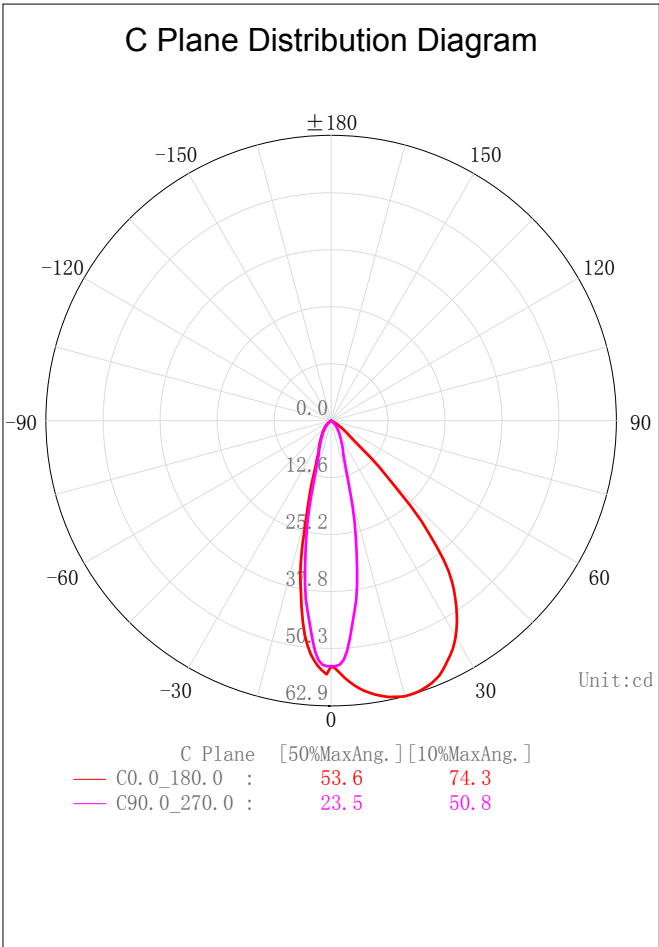
Indoor Luminaire Photometric Data

Description Information

|   |                         |                      |                       |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: ST02-03-PR-02 3000K RA90       |                         | Lum. Catalog:        | Test ID: 01           |
| Lamp Name:                                    |                         | Lamp Catalog: LED    | Test Date: 2020/12/25 |
| 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):0.000m*0.000m*0.000m        |                         | Lum. Area (m2):0.000 | Lum. W (kg): 0.000    |
| Test System: C, γ                             | Test Step: C=30.0 γ=1.0 | Temp. (°C): 25       | Humidity(%): 50.0     |

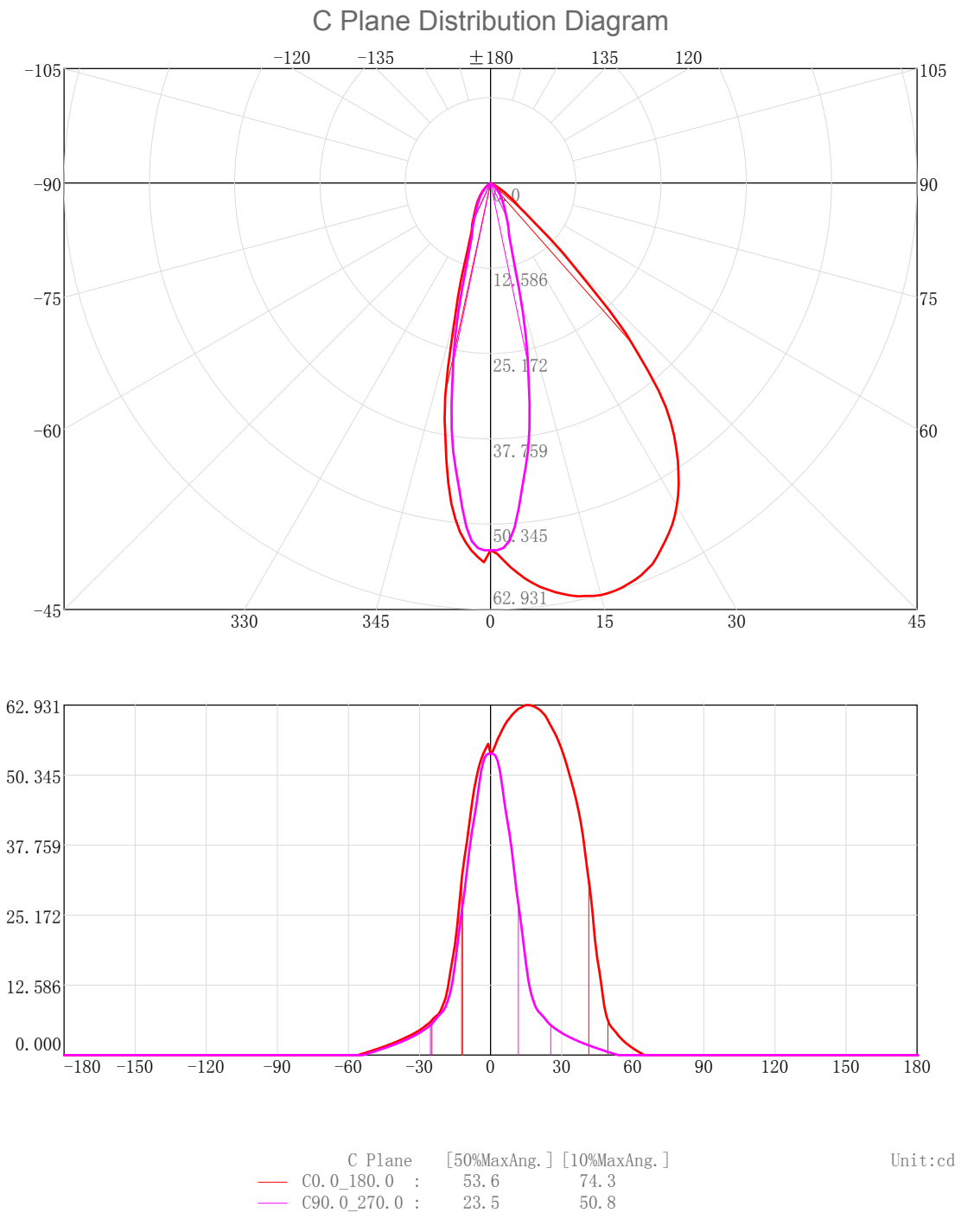
Character Parameter

| Lamp Speciality Parameter                       |                                 | Luminaire Speciality Parameter        |  |
|---|---------------------------------|---------------------------------------|--|
| Rated Flux(lm): 27.810                          | Luminary Flux(lm): 27.814       | Field Angle(10%Imax): 74.3(°)         |  |
| Rated Power(W):                                 | Luminary Efficiency: 100.01%    | Down Lumens&Percent: 27.814lm 100.00% |  |
| Rated Voltage(V):                               | Luminary EER(lm/W): 9.268       | Up Lumens&Percent: 0.000lm 0.00%      |  |
| Tested Power(W): 3.001                          | Max. Candela(cd): 62.931        | S/MH: C0_a180=0.914 C90_270=0.397     |  |
| Lamps' Inside: 1                                | Max Cand@Ang. (°): C=0.0 γ=15.0 | CIE Type: Semi-Direct                 |  |
| Tested Electrics (V, A, pf):240.4, 0.014, 0.856 | Beam Angle(50%Imax): 53.6(°)    | ErP ϕ use(90°): 26.297lm              |  |
| Lamp Size (W*L*H):0.000m*0.000m*0.000m          | Left=-12.2°, Right=41.4°        | IRF(%): 308.870                       |  |



2D Plane Light Intensity Distribution Curve

|  |                       |                            |
|--|-----------------------|----------------------------|
| Lum. Name:ST02-03-PR-02 3000K RA90           | 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:2020/12/25       |



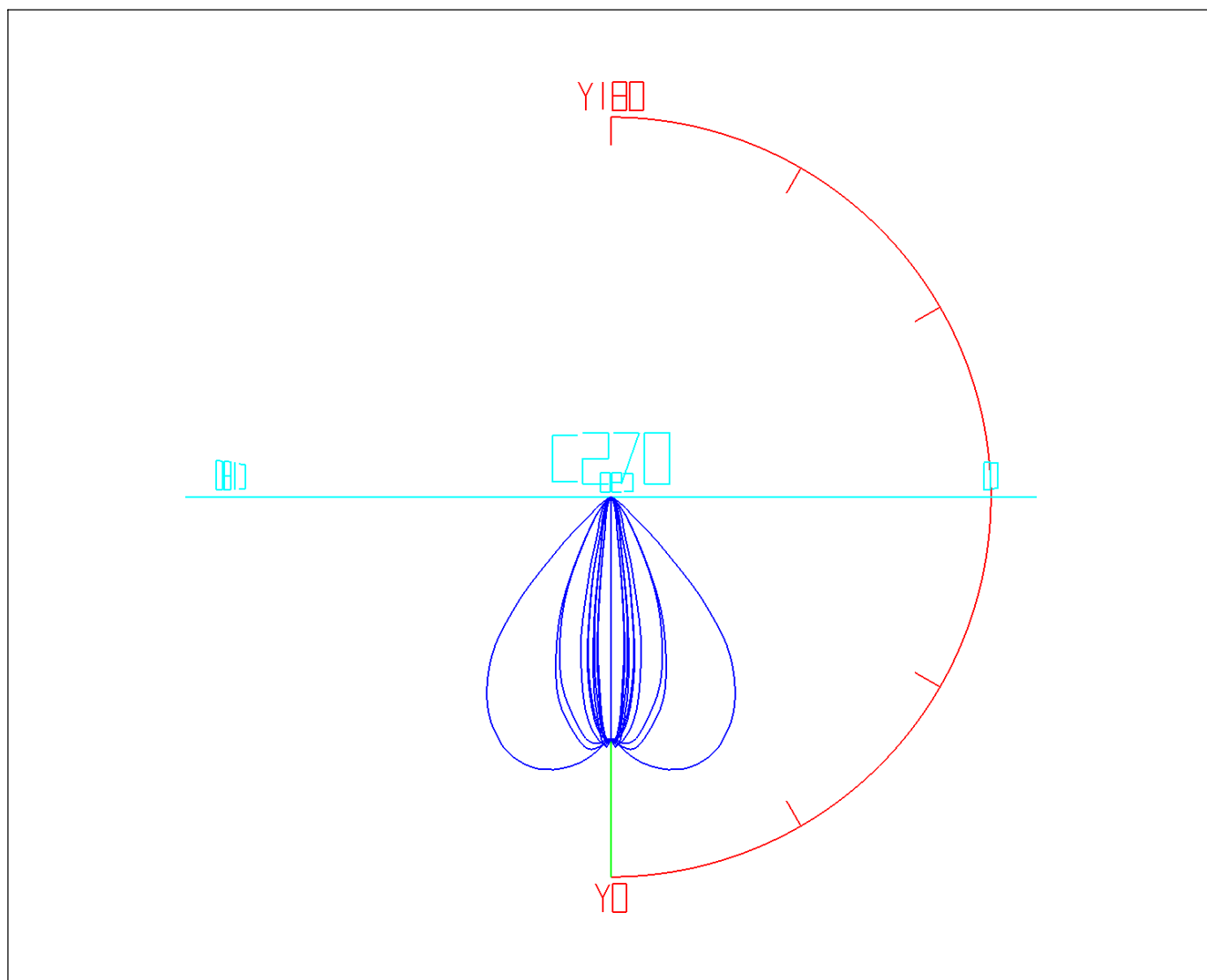
# IES Indoor Report

Photometric Filename:ST02-03-PR-02 3000K RA90 .IES

## 3D Light Intensity Distribution Modal

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

## 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:ST02-03-PR-02 3000K RA90 .IES

Zonal Flux Tabulation

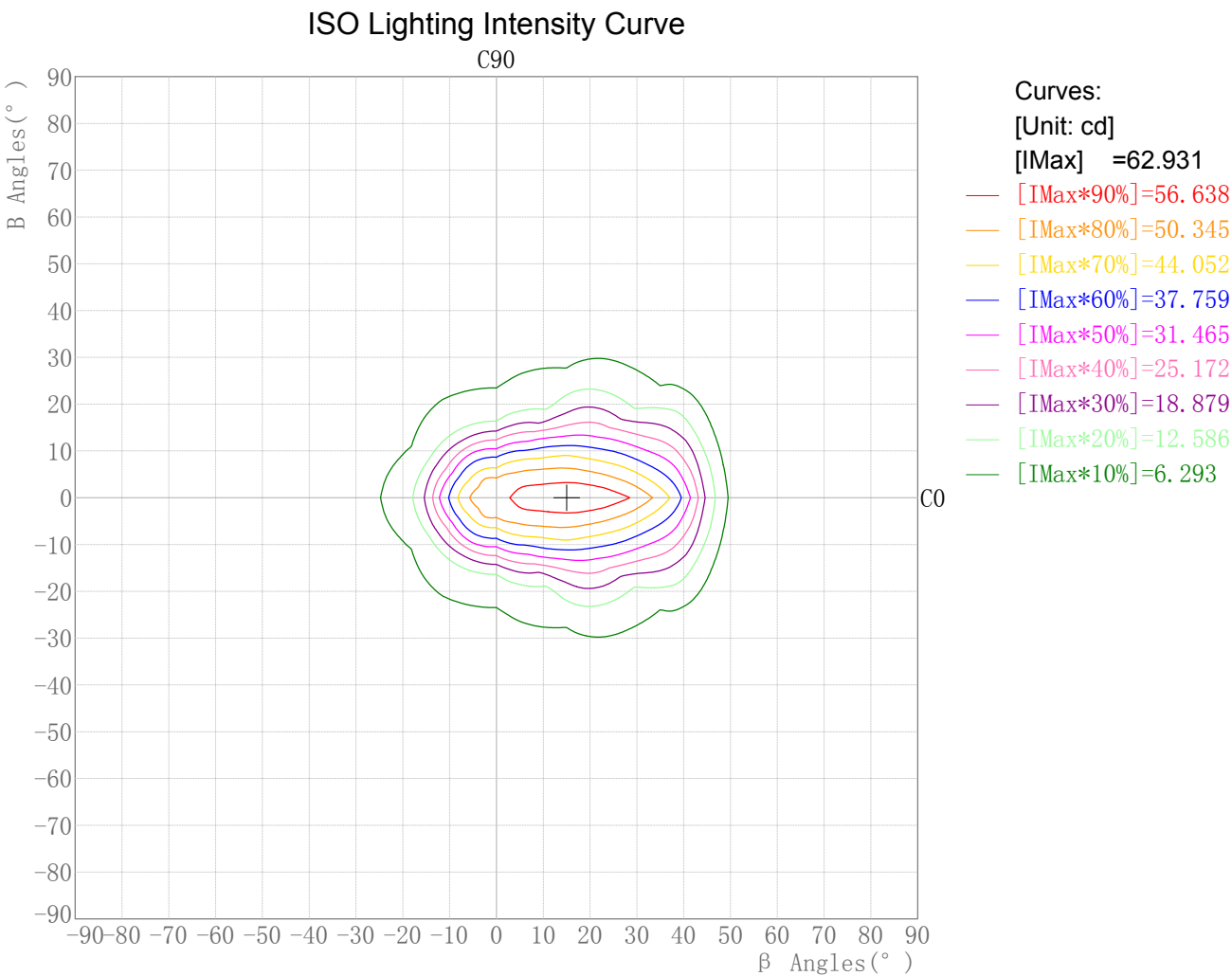
| Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp | Zone(γ)   | Zone Flux<br>(lm) | Sums Flux<br>(lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0   | 0.05              | 0.05              | 0.19      | 0.19      | 47.0-48.0 | 0.18              | 26.94             | 0.66      | 96.88     |
| 1.0-2.0   | 0.16              | 0.21              | 0.56      | 0.75      | 48.0-49.0 | 0.15              | 27.10             | 0.56      | 97.43     |
| 2.0-3.0   | 0.26              | 0.47              | 0.94      | 1.69      | 49.0-50.0 | 0.13              | 27.23             | 0.48      | 97.91     |
| 3.0-4.0   | 0.36              | 0.83              | 1.29      | 2.98      | 50.0-51.0 | 0.11              | 27.34             | 0.41      | 98.32     |
| 4.0-5.0   | 0.45              | 1.28              | 1.62      | 4.60      | 51.0-52.0 | 0.10              | 27.44             | 0.35      | 98.68     |
| 5.0-6.0   | 0.53              | 1.81              | 1.92      | 6.52      | 52.0-53.0 | 0.08              | 27.53             | 0.30      | 98.98     |
| 6.0-7.0   | 0.61              | 2.42              | 2.18      | 8.70      | 53.0-54.0 | 0.07              | 27.60             | 0.25      | 99.23     |
| 7.0-8.0   | 0.67              | 3.09              | 2.41      | 11.11     | 54.0-55.0 | 0.06              | 27.65             | 0.20      | 99.43     |
| 8.0-9.0   | 0.73              | 3.82              | 2.61      | 13.72     | 55.0-56.0 | 0.05              | 27.70             | 0.16      | 99.59     |
| 9.0-10.0  | 0.77              | 4.58              | 2.76      | 16.48     | 56.0-57.0 | 0.03              | 27.73             | 0.13      | 99.72     |
| 10.0-11.0 | 0.80              | 5.38              | 2.86      | 19.34     | 57.0-58.0 | 0.03              | 27.76             | 0.09      | 99.81     |
| 11.0-12.0 | 0.81              | 6.19              | 2.92      | 22.26     | 58.0-59.0 | 0.02              | 27.78             | 0.07      | 99.88     |
| 12.0-13.0 | 0.81              | 7.01              | 2.93      | 25.19     | 59.0-60.0 | 0.01              | 27.79             | 0.04      | 99.93     |
| 13.0-14.0 | 0.81              | 7.82              | 2.92      | 28.11     | 60.0-61.0 | 0.01              | 27.80             | 0.03      | 99.96     |
| 14.0-15.0 | 0.80              | 8.62              | 2.88      | 30.99     | 61.0-62.0 | 0.01              | 27.81             | 0.02      | 99.98     |
| 15.0-16.0 | 0.78              | 9.40              | 2.82      | 33.81     | 62.0-63.0 | 0.00              | 27.81             | 0.02      | 100.00    |
| 16.0-17.0 | 0.76              | 10.17             | 2.75      | 36.56     | 63.0-64.0 | 0.00              | 27.81             | 0.01      | 100.01    |
| 17.0-18.0 | 0.74              | 10.91             | 2.67      | 39.23     | 64.0-65.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 18.0-19.0 | 0.73              | 11.64             | 2.61      | 41.84     | 65.0-66.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 19.0-20.0 | 0.71              | 12.35             | 2.57      | 44.41     | 66.0-67.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 20.0-21.0 | 0.71              | 13.06             | 2.55      | 46.95     | 67.0-68.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 21.0-22.0 | 0.71              | 13.76             | 2.54      | 49.49     | 68.0-69.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 22.0-23.0 | 0.70              | 14.47             | 2.53      | 52.02     | 69.0-70.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 23.0-24.0 | 0.70              | 15.17             | 2.53      | 54.54     | 70.0-71.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 24.0-25.0 | 0.70              | 15.87             | 2.51      | 57.06     | 71.0-72.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 25.0-26.0 | 0.69              | 16.56             | 2.49      | 59.55     | 72.0-73.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 26.0-27.0 | 0.69              | 17.24             | 2.46      | 62.01     | 73.0-74.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 27.0-28.0 | 0.67              | 17.92             | 2.43      | 64.44     | 74.0-75.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 28.0-29.0 | 0.66              | 18.58             | 2.38      | 66.81     | 75.0-76.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 29.0-30.0 | 0.64              | 19.23             | 2.32      | 69.13     | 76.0-77.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 30.0-31.0 | 0.63              | 19.85             | 2.25      | 71.38     | 77.0-78.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 31.0-32.0 | 0.61              | 20.46             | 2.18      | 73.56     | 78.0-79.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 32.0-33.0 | 0.59              | 21.04             | 2.11      | 75.67     | 79.0-80.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 33.0-34.0 | 0.57              | 21.61             | 2.03      | 77.70     | 80.0-81.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 34.0-35.0 | 0.55              | 22.16             | 1.96      | 79.67     | 81.0-82.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 35.0-36.0 | 0.53              | 22.68             | 1.89      | 81.56     | 82.0-83.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 36.0-37.0 | 0.51              | 23.19             | 1.82      | 83.38     | 83.0-84.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 37.0-38.0 | 0.49              | 23.67             | 1.74      | 85.13     | 84.0-85.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 38.0-39.0 | 0.46              | 24.13             | 1.66      | 86.78     | 85.0-86.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 39.0-40.0 | 0.43              | 24.57             | 1.56      | 88.35     | 86.0-87.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 40.0-41.0 | 0.41              | 24.98             | 1.46      | 89.81     | 87.0-88.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 41.0-42.0 | 0.38              | 25.36             | 1.37      | 91.18     | 88.0-89.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 42.0-43.0 | 0.35              | 25.71             | 1.26      | 92.44     | 89.0-90.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 43.0-44.0 | 0.31              | 26.02             | 1.13      | 93.57     | 90.0-91.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 44.0-45.0 | 0.28              | 26.30             | 0.99      | 94.56     | 91.0-92.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 45.0-46.0 | 0.25              | 26.54             | 0.88      | 95.44     | 92.0-93.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 46.0-47.0 | 0.22              | 26.76             | 0.77      | 96.22     | 93.0-94.0 | 0.00              | 27.81             | 0.00      | 100.01    |

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              | 27.81             | 0.00      | 100.01    | 141.0-142.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 95.0-96.0   | 0.00              | 27.81             | 0.00      | 100.01    | 142.0-143.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 96.0-97.0   | 0.00              | 27.81             | 0.00      | 100.01    | 143.0-144.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 97.0-98.0   | 0.00              | 27.81             | 0.00      | 100.01    | 144.0-145.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 98.0-99.0   | 0.00              | 27.81             | 0.00      | 100.01    | 145.0-146.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 99.0-100.0  | 0.00              | 27.81             | 0.00      | 100.01    | 146.0-147.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 100.0-101.0 | 0.00              | 27.81             | 0.00      | 100.01    | 147.0-148.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 101.0-102.0 | 0.00              | 27.81             | 0.00      | 100.01    | 148.0-149.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 102.0-103.0 | 0.00              | 27.81             | 0.00      | 100.01    | 149.0-150.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 103.0-104.0 | 0.00              | 27.81             | 0.00      | 100.01    | 150.0-151.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 104.0-105.0 | 0.00              | 27.81             | 0.00      | 100.01    | 151.0-152.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 105.0-106.0 | 0.00              | 27.81             | 0.00      | 100.01    | 152.0-153.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 106.0-107.0 | 0.00              | 27.81             | 0.00      | 100.01    | 153.0-154.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 107.0-108.0 | 0.00              | 27.81             | 0.00      | 100.01    | 154.0-155.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 108.0-109.0 | 0.00              | 27.81             | 0.00      | 100.01    | 155.0-156.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 109.0-110.0 | 0.00              | 27.81             | 0.00      | 100.01    | 156.0-157.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 110.0-111.0 | 0.00              | 27.81             | 0.00      | 100.01    | 157.0-158.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 111.0-112.0 | 0.00              | 27.81             | 0.00      | 100.01    | 158.0-159.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 112.0-113.0 | 0.00              | 27.81             | 0.00      | 100.01    | 159.0-160.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 113.0-114.0 | 0.00              | 27.81             | 0.00      | 100.01    | 160.0-161.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 114.0-115.0 | 0.00              | 27.81             | 0.00      | 100.01    | 161.0-162.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 115.0-116.0 | 0.00              | 27.81             | 0.00      | 100.01    | 162.0-163.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 116.0-117.0 | 0.00              | 27.81             | 0.00      | 100.01    | 163.0-164.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 117.0-118.0 | 0.00              | 27.81             | 0.00      | 100.01    | 164.0-165.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 118.0-119.0 | 0.00              | 27.81             | 0.00      | 100.01    | 165.0-166.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 119.0-120.0 | 0.00              | 27.81             | 0.00      | 100.01    | 166.0-167.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 120.0-121.0 | 0.00              | 27.81             | 0.00      | 100.01    | 167.0-168.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 121.0-122.0 | 0.00              | 27.81             | 0.00      | 100.01    | 168.0-169.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 122.0-123.0 | 0.00              | 27.81             | 0.00      | 100.01    | 169.0-170.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 123.0-124.0 | 0.00              | 27.81             | 0.00      | 100.01    | 170.0-171.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 124.0-125.0 | 0.00              | 27.81             | 0.00      | 100.01    | 171.0-172.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 125.0-126.0 | 0.00              | 27.81             | 0.00      | 100.01    | 172.0-173.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 126.0-127.0 | 0.00              | 27.81             | 0.00      | 100.01    | 173.0-174.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 127.0-128.0 | 0.00              | 27.81             | 0.00      | 100.01    | 174.0-175.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 128.0-129.0 | 0.00              | 27.81             | 0.00      | 100.01    | 175.0-176.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 129.0-130.0 | 0.00              | 27.81             | 0.00      | 100.01    | 176.0-177.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 130.0-131.0 | 0.00              | 27.81             | 0.00      | 100.01    | 177.0-178.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 131.0-132.0 | 0.00              | 27.81             | 0.00      | 100.01    | 178.0-179.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 132.0-133.0 | 0.00              | 27.81             | 0.00      | 100.01    | 179.0-180.0 | 0.00              | 27.81             | 0.00      | 100.01    |
| 133.0-134.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 134.0-135.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 135.0-136.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 136.0-137.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 137.0-138.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 138.0-139.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 139.0-140.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |
| 140.0-141.0 | 0.00              | 27.81             | 0.00      | 100.01    |             |                   |                   |           |           |

Rectangle ISO Lighting Intensity Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |



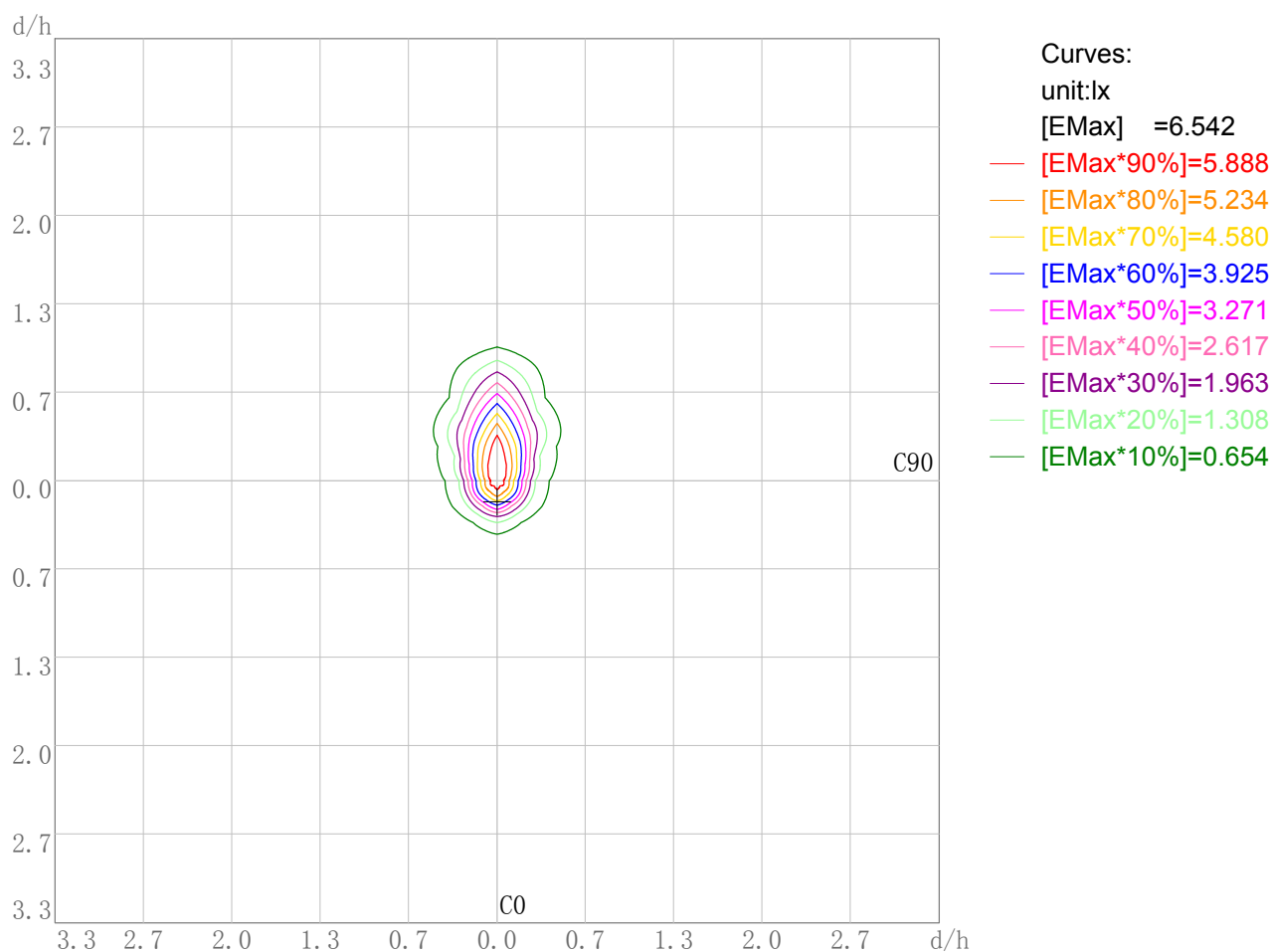
# IES Indoor Report

Photometric Filename:ST02-03-PR-02 3000K RA90 .IES

## Plane ISO-Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

### Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00

Working Plane Maximum Illuminance(lx): 6.54

Working Plane Maximum Illuminance Position(d/h):H0.0 V0.2

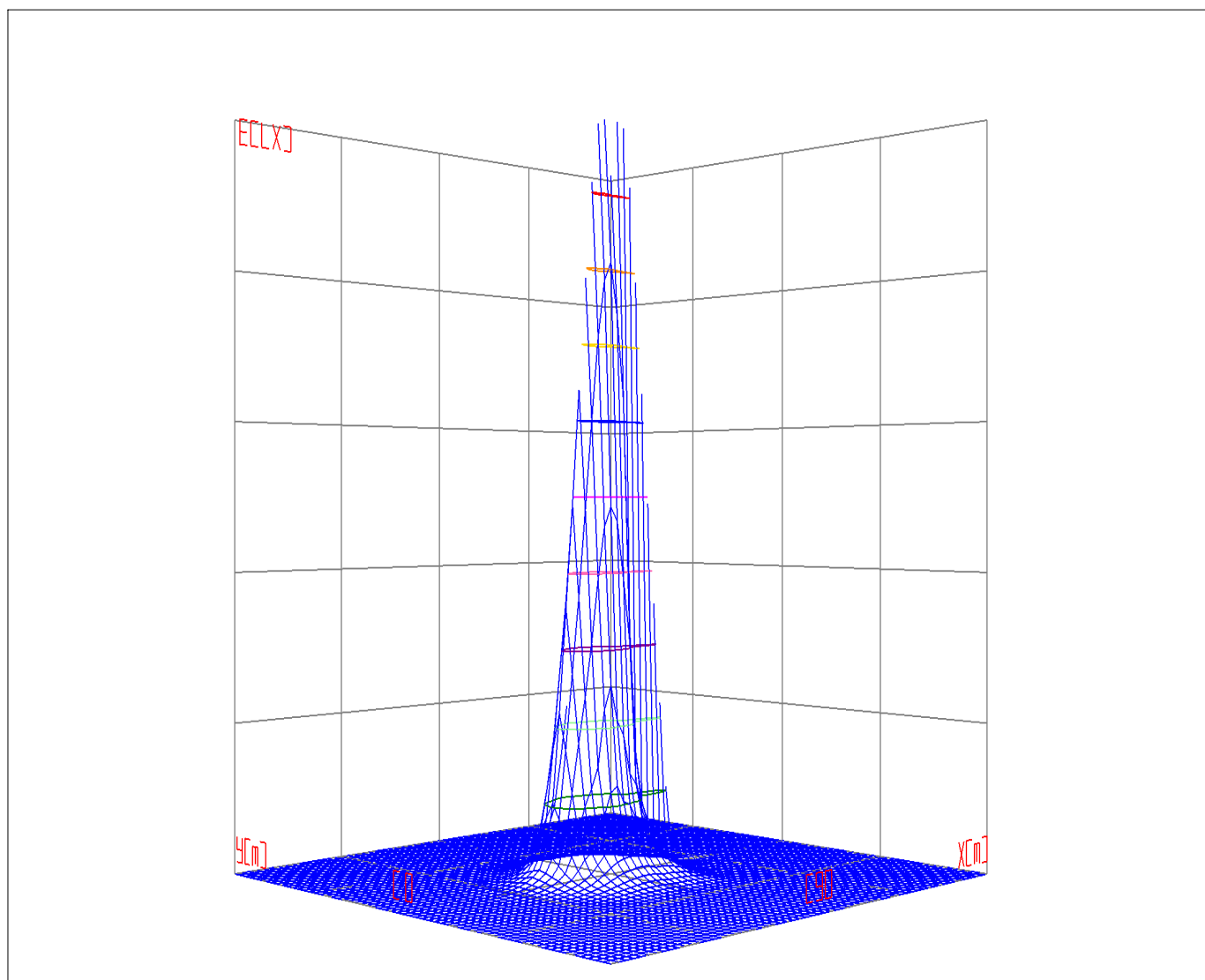
# IES Indoor Report

Photometric Filename:ST02-03-PR-02 3000K RA90 .IES

## 3D Plane ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

## 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



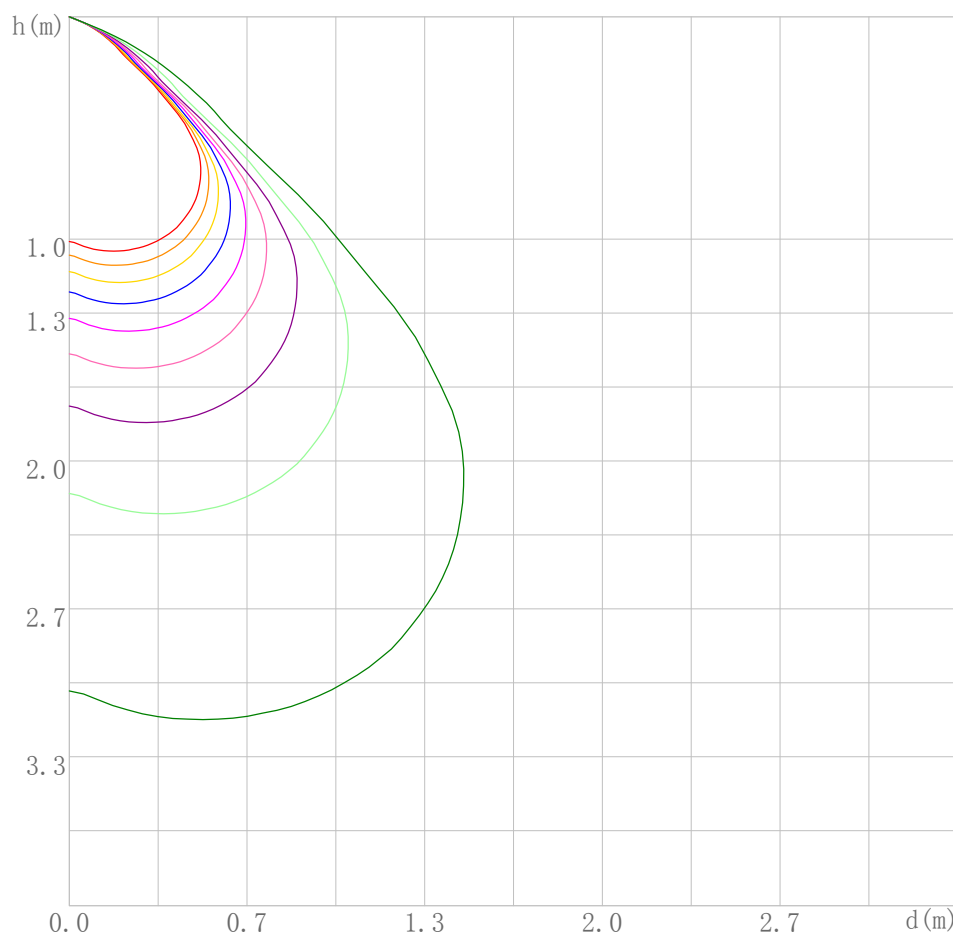
# IES Indoor Report

Photometric Filename:ST02-03-PR-02 3000K RA90 .IES

## Space ISO Illuminance Diagram

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

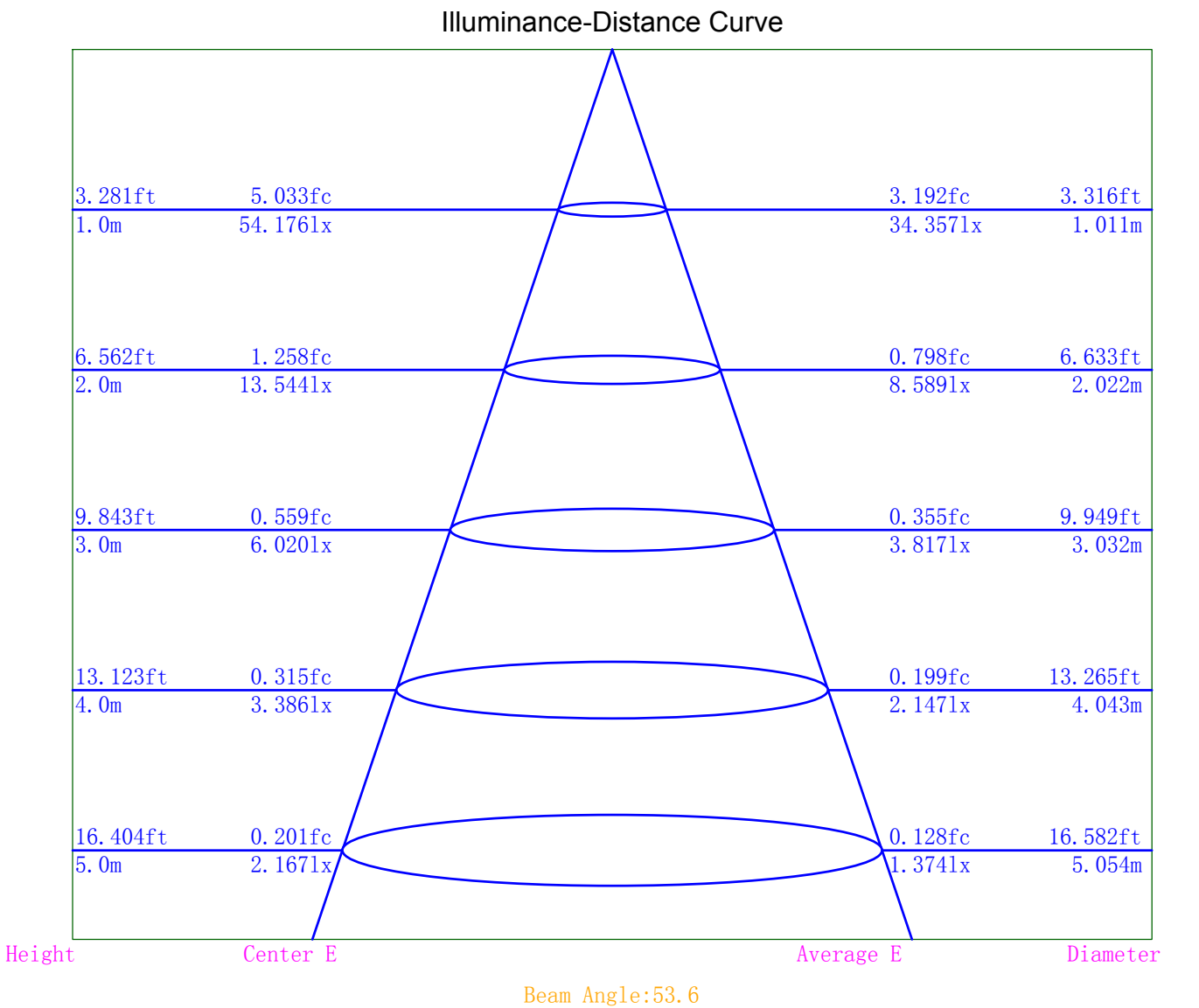
### Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:58.88lx,9.0deg  
Plane Maximum Lighting Intensity and @Angle:62.931cd,0deg

Illuminance-Distance Diagram

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25       |



Indoor Luminance Limiting Curves

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

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        | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |
| C90       | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  | 0  |

Luminance Limiting Curve



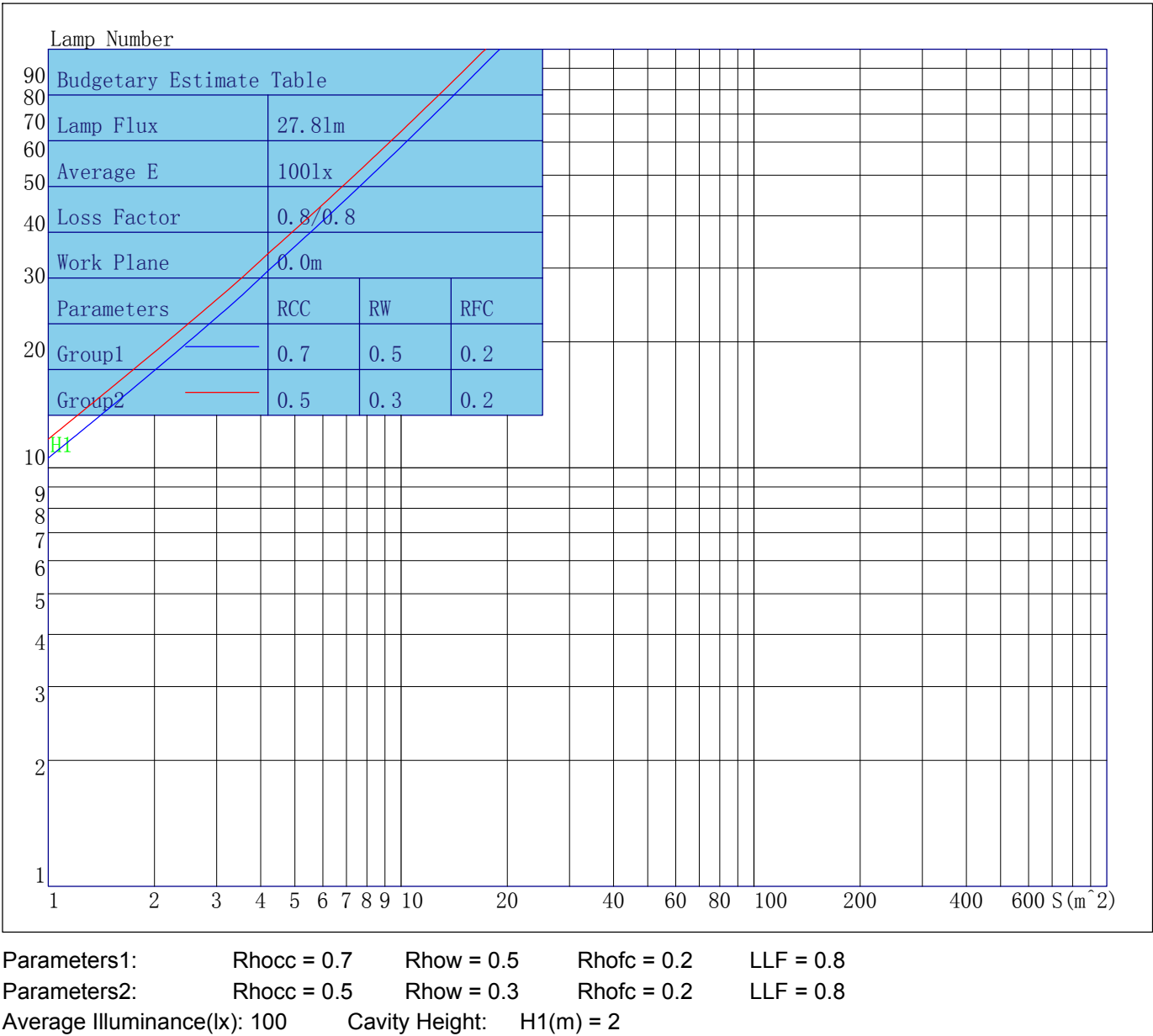
Luminous Size: Length(m)=0.000 Width(m)=0.000 Height(m)=0.000 Area(m^2)=0.000000

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |



Indoor Coefficient of Utilization Table

|   |                       |                             |
|---|-----------------------|-----------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25       |

| 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   | 111 | 109 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98  | 98  | 97  | 96  | 94  |
| 2   | 108   | 103 | 99  | 96  | 106 | 102 | 98  | 95  | 98  | 96  | 93  | 95  | 93  | 91  | 93  | 91  | 89  | 87  |
| 3   | 103   | 97  | 92  | 88  | 101 | 95  | 91  | 87  | 93  | 89  | 86  | 90  | 87  | 84  | 88  | 85  | 83  | 82  |
| 4   | 98  | 90  | 85  | 81  | 96  | 89  | 84  | 80  | 87  | 83  | 79  | 85  | 81  | 79  | 83  | 80  | 78  | 76  |
| 5   | 93  | 85  | 79  | 75  | 91  | 84  | 79  | 75  | 82  | 78  | 74  | 81  | 76  | 73  | 79  | 75  | 73  | 71  |
| 6   | 89  | 80  | 74  | 70  | 87  | 79  | 74  | 70  | 78  | 73  | 69  | 76  | 72  | 69  | 75  | 71  | 68  | 67  |
| 7   | 84  | 75  | 70  | 65  | 83  | 75  | 69  | 65  | 73  | 69  | 65  | 72  | 68  | 65  | 71  | 67  | 64  | 63  |
| 8   | 81  | 71  | 66  | 62  | 79  | 71  | 65  | 61  | 70  | 65  | 61  | 69  | 64  | 61  | 68  | 64  | 61  | 59  |
| 9   | 77  | 68  | 62  | 58  | 76  | 67  | 62  | 58  | 66  | 61  | 58  | 65  | 61  | 58  | 65  | 60  | 57  | 56  |
| 10  | 74  | 64  | 59  | 55  | 73  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 55  | 62  | 57  | 54  | 53  |

Unified Glare Rating Table

|   |                       |                              |
|---|-----------------------|------------------------------|
| Lum. Name: ST02-03-PR-02 3000K RA90           | 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: 2020/12/25        |

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                                      | -13.4           | -12.3 | -13.0 | -12.0 | -11.7 | -13.4         | -12.3 | -13.0 | -12.0 | -11.7 |       |
|   | Y=3H            | -13.6 | -12.7 | -13.2 | -12.3 | -12.0         | -13.6 | -12.7 | -13.2 | -12.3 | -12.0 |
|   | Y=4H            | -13.7 | -12.8 | -13.2 | -12.5 | -12.1         | -13.7 | -12.8 | -13.2 | -12.5 | -12.1 |
|   | Y=6H            | -13.8 | -13.0 | -13.3 | -12.6 | -12.2         | -13.8 | -13.0 | -13.3 | -12.6 | -12.2 |
|   | Y=8H            | -13.8 | -13.1 | -13.4 | -12.7 | -12.3         | -13.8 | -13.1 | -13.4 | -12.7 | -12.3 |
|   | Y=12H           | -13.9 | -13.2 | -13.4 | -12.8 | -12.4         | -13.9 | -13.2 | -13.4 | -12.8 | -12.4 |
| X=4H    Y=2H                                      | -13.7           | -12.8 | -13.2 | -12.5 | -12.1 | -13.7         | -12.8 | -13.2 | -12.5 | -12.1 |       |
|   | Y=3H            | -13.9 | -13.2 | -13.4 | -12.8 | -12.4         | -13.9 | -13.2 | -13.4 | -12.8 | -12.4 |
|   | Y=4H            | -14.0 | -13.4 | -13.5 | -13.0 | -12.5         | -14.0 | -13.4 | -13.5 | -13.0 | -12.5 |
|   | Y=6H            | -14.1 | -13.6 | -13.6 | -13.1 | -12.7         | -14.1 | -13.6 | -13.6 | -13.1 | -12.7 |
|   | Y=8H            | -14.2 | -13.7 | -13.7 | -13.2 | -12.8         | -14.2 | -13.7 | -13.7 | -13.2 | -12.8 |
|   | Y=12H           | -14.2 | -13.8 | -13.7 | -13.3 | -12.8         | -14.2 | -13.8 | -13.7 | -13.3 | -12.8 |
| X=8H    Y=4H                                      | -14.2           | -13.7 | -13.7 | -13.2 | -12.8 | -14.2         | -13.7 | -13.7 | -13.2 | -12.8 |       |
|   | Y=6H            | -14.3 | -13.9 | -13.8 | -13.4 | -12.9         | -14.3 | -13.9 | -13.8 | -13.4 | -12.9 |
|   | Y=8H            | -14.4 | -14.0 | -13.8 | -13.5 | -13.0         | -14.4 | -14.0 | -13.8 | -13.5 | -13.0 |
|   | Y=12H           | -14.4 | -14.1 | -13.9 | -13.6 | -13.0         | -14.4 | -14.1 | -13.9 | -13.6 | -13.0 |
| X=12H    Y=4H                                     | -14.2           | -13.8 | -13.7 | -13.3 | -12.8 | -14.2         | -13.8 | -13.7 | -13.3 | -12.8 |       |
|   | Y=6H            | -14.4 | -14.0 | -13.8 | -13.5 | -13.0         | -14.4 | -14.0 | -13.8 | -13.5 | -13.0 |
|   | Y=8H            | -14.4 | -14.1 | -13.9 | -13.6 | -13.0         | -14.4 | -14.1 | -13.9 | -13.6 | -13.0 |
| Variations with the objerver position at spacings |                 |       |       |       |       |               |       |       |       |       |       |
| S=1.0H  | 0.0/0.0         |       |       |       |       | 0.0/0.0       |       |       |       |       |       |
| S=1.5H  | 0.0/0.0         |       |       |       |       | 0.0/0.0       |       |       |       |       |       |
| S=2.0H  | 0.0/0.0         |       |       |       |       | 0.0/0.0       |       |       |       |       |       |
| Reduced UGR Table:                                |                 |       |       |       |       |               |       |       |       |       |       |
| Nordic Standard Table:                            | BK0             |       |       |       |       | BK0           |       |       |       |       |       |
| Correction Value                                  | 0.0             |       |       |       |       | 0.0           |       |       |       |       |       |

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

IES Indoor Report

Photometric Filename:ST02-03-PR-02 3000K RA90 .IES

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Candela Tabulation

| V/H     | C0. 0  | C30. 0 | C60. 0 | C90. 0 | C120. 0 | C150. 0 | C180. 0 |
|---------|--------|--------|--------|--------|---------|---------|---------|
| γ 0. 0  | 54. 18 | 54. 18 | 54. 18 | 54. 18 | 54. 18  | 54. 18  | 54. 18  |
| γ 1. 0  | 54. 69 | 54. 26 | 54. 36 | 54. 18 | 54. 84  | 54. 30  | 55. 96  |
| γ 2. 0  | 55. 71 | 54. 93 | 54. 86 | 53. 88 | 54. 62  | 53. 63  | 55. 17  |
| γ 3. 0  | 56. 79 | 55. 51 | 54. 74 | 52. 90 | 53. 84  | 52. 67  | 54. 28  |
| γ 4. 0  | 57. 68 | 55. 75 | 54. 00 | 50. 92 | 52. 17  | 51. 23  | 53. 10  |
| γ 5. 0  | 58. 58 | 55. 92 | 52. 49 | 48. 05 | 49. 80  | 49. 24  | 51. 69  |
| γ 6. 0  | 59. 34 | 55. 75 | 50. 41 | 44. 98 | 46. 47  | 46. 74  | 49. 80  |
| γ 7. 0  | 60. 04 | 55. 25 | 48. 24 | 42. 33 | 43. 14  | 44. 03  | 47. 60  |
| γ 8. 0  | 60. 57 | 54. 46 | 46. 36 | 39. 82 | 40. 38  | 41. 17  | 44. 76  |
| γ 9. 0  | 61. 11 | 53. 54 | 44. 50 | 36. 70 | 37. 84  | 38. 08  | 41. 56  |
| γ 10. 0 | 61. 57 | 52. 52 | 42. 29 | 33. 10 | 34. 72  | 34. 64  | 38. 34  |
| γ 11. 0 | 61. 99 | 51. 57 | 39. 62 | 29. 46 | 31. 07  | 30. 59  | 35. 56  |
| γ 12. 0 | 62. 33 | 50. 57 | 36. 61 | 26. 30 | 26. 99  | 26. 49  | 32. 23  |
| γ 13. 0 | 62. 51 | 49. 55 | 33. 73 | 23. 16 | 23. 02  | 23. 09  | 27. 96  |
| γ 14. 0 | 62. 78 | 48. 57 | 31. 16 | 19. 74 | 19. 59  | 20. 34  | 23. 48  |
| γ 15. 0 | 62. 93 | 47. 53 | 28. 59 | 16. 30 | 16. 48  | 17. 47  | 19. 94  |
| γ 16. 0 | 62. 93 | 46. 32 | 25. 73 | 13. 32 | 13. 86  | 14. 16  | 17. 39  |
| γ 17. 0 | 62. 88 | 45. 06 | 22. 60 | 11. 27 | 11. 65  | 11. 13  | 14. 90  |
| γ 18. 0 | 62. 76 | 43. 54 | 19. 49 | 9. 87  | 9. 99   | 9. 25   | 12. 20  |
| γ 19. 0 | 62. 53 | 41. 88 | 16. 78 | 8. 68  | 8. 84   | 8. 05   | 10. 28  |
| γ 20. 0 | 62. 29 | 40. 05 | 14. 77 | 7. 93  | 7. 92   | 7. 08   | 9. 08   |
| γ 21. 0 | 61. 99 | 38. 28 | 13. 26 | 7. 49  | 7. 37   | 6. 33   | 8. 05   |
| γ 22. 0 | 61. 53 | 36. 44 | 11. 94 | 7. 04  | 7. 02   | 5. 99   | 7. 33   |
| γ 23. 0 | 61. 10 | 34. 67 | 10. 86 | 6. 54  | 6. 65   | 5. 73   | 7. 00   |
| γ 24. 0 | 60. 37 | 32. 88 | 10. 18 | 6. 01  | 6. 22   | 5. 44   | 6. 67   |
| γ 25. 0 | 59. 55 | 31. 13 | 9. 67  | 5. 56  | 5. 78   | 5. 01   | 6. 17   |
| γ 26. 0 | 58. 77 | 29. 37 | 9. 14  | 5. 19  | 5. 41   | 4. 65   | 5. 75   |
| γ 27. 0 | 57. 95 | 27. 51 | 8. 55  | 4. 86  | 5. 10   | 4. 35   | 5. 41   |
| γ 28. 0 | 57. 09 | 25. 49 | 7. 90  | 4. 55  | 4. 80   | 4. 06   | 5. 08   |
| γ 29. 0 | 56. 07 | 23. 38 | 7. 35  | 4. 27  | 4. 52   | 3. 80   | 4. 77   |
| γ 30. 0 | 54. 96 | 21. 18 | 6. 84  | 4. 00  | 4. 25   | 3. 56   | 4. 49   |
| γ 31. 0 | 53. 72 | 19. 02 | 6. 37  | 3. 76  | 4. 01   | 3. 33   | 4. 23   |
| γ 32. 0 | 52. 39 | 16. 95 | 5. 98  | 3. 52  | 3. 79   | 3. 12   | 3. 98   |
| γ 33. 0 | 50. 90 | 15. 09 | 5. 58  | 3. 31  | 3. 56   | 2. 91   | 3. 74   |
| γ 34. 0 | 49. 41 | 13. 42 | 5. 23  | 3. 10  | 3. 37   | 2. 73   | 3. 53   |
| γ 35. 0 | 47. 75 | 12. 08 | 4. 90  | 2. 89  | 3. 17   | 2. 52   | 3. 33   |
| γ 36. 0 | 46. 07 | 10. 90 | 4. 59  | 2. 70  | 2. 98   | 2. 34   | 3. 13   |
| γ 37. 0 | 44. 18 | 9. 79  | 4. 31  | 2. 52  | 2. 79   | 2. 15   | 2. 93   |
| γ 38. 0 | 42. 02 | 8. 73  | 4. 04  | 2. 34  | 2. 61   | 2. 00   | 2. 73   |
| γ 39. 0 | 39. 42 | 7. 81  | 3. 77  | 2. 16  | 2. 43   | 1. 83   | 2. 55   |
| γ 40. 0 | 36. 11 | 7. 11  | 3. 52  | 1. 99  | 2. 28   | 1. 67   | 2. 37   |
| γ 41. 0 | 32. 81 | 6. 56  | 3. 30  | 1. 84  | 2. 12   | 1. 52   | 2. 20   |
| γ 42. 0 | 29. 80 | 6. 05  | 3. 07  | 1. 68  | 1. 97   | 1. 37   | 2. 02   |
| γ 43. 0 | 25. 66 | 5. 53  | 2. 86  | 1. 52  | 1. 82   | 1. 23   | 1. 86   |
| γ 44. 0 | 20. 92 | 5. 01  | 2. 63  | 1. 37  | 1. 67   | 1. 09   | 1. 70   |
| γ 45. 0 | 17. 43 | 4. 43  | 2. 43  | 1. 23  | 1. 52   | 0. 95   | 1. 54   |
| γ 46. 0 | 14. 88 | 3. 90  | 2. 23  | 1. 08  | 1. 39   | 0. 82   | 1. 40   |

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**Photometric Filename:ST02-03-PR-02 3000K RA90 .IES**

## Candela Tabulation - (Cont.)

[illegible]

**Photometric Filename:ST02-03-PR-02 3000K RA90 .IES**

## Candela Tabulation - (Cont.)

[illegible]