

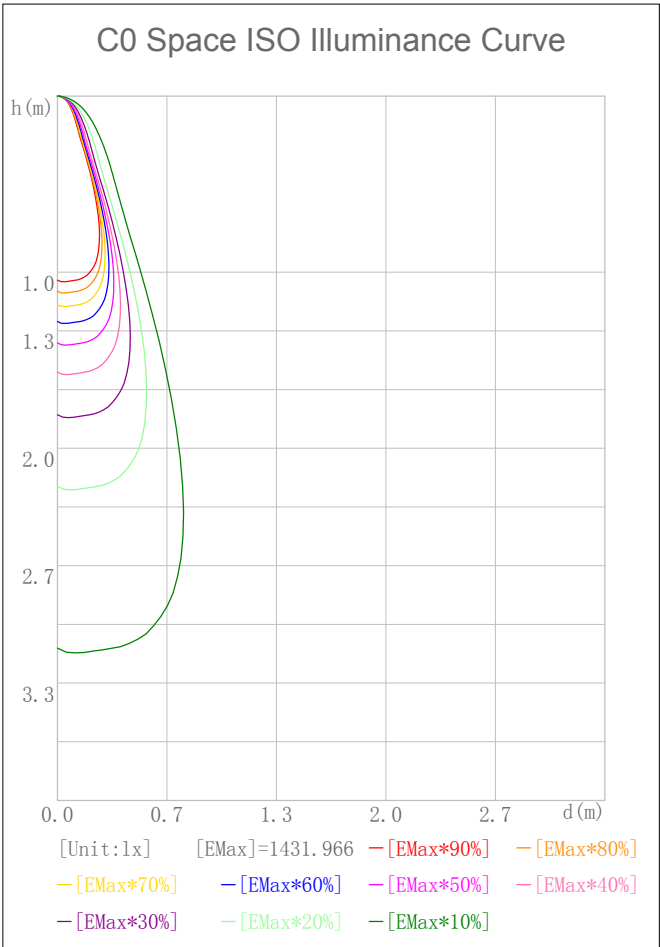
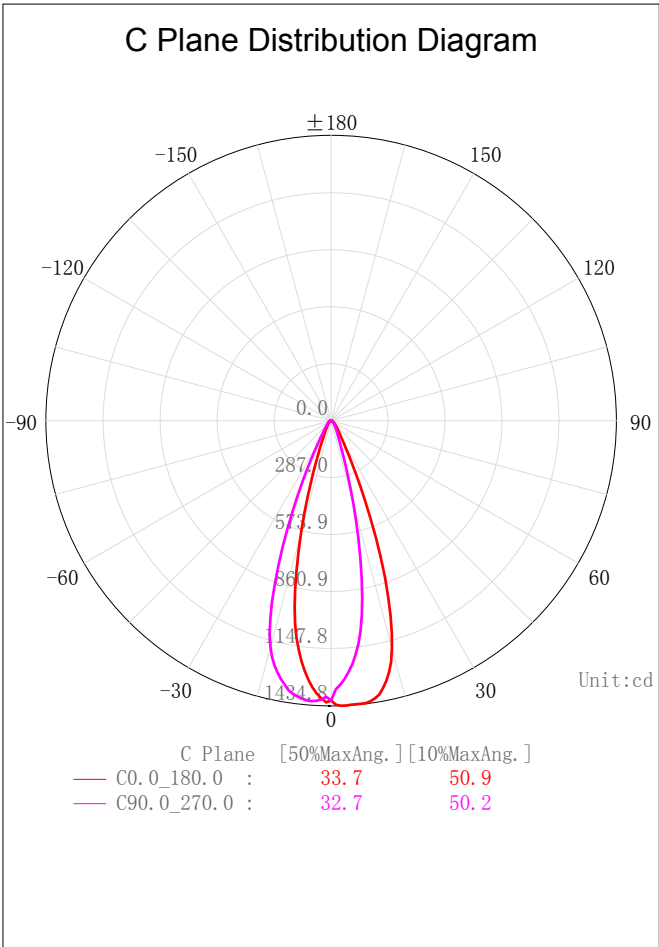
Indoor Luminaire Photometric Data

Description Information

| | | | |
|---|-------------------------|----------------------|-----------------------|
| Luminary Name: TR09-06-XX-01 2700K RA90 36D | | Lum. Catalog: | Test ID: 01 |
| Lamp Name: | | Lamp Catalog: LED | Test Date: 2021/10/25 |
| 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):0.076m*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 |

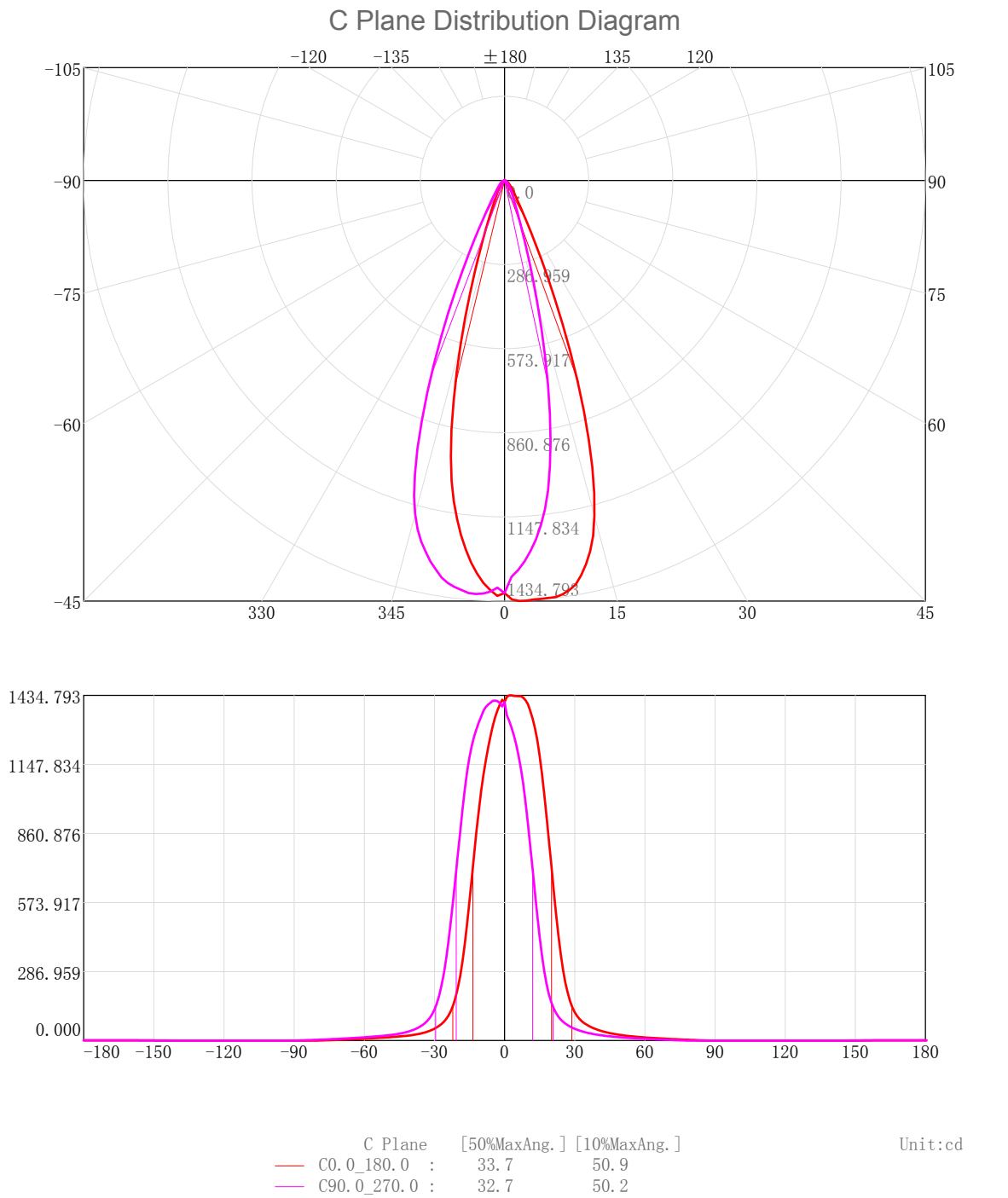
Character Parameter

| Lamp Speciality Parameter | | Luminaire Speciality Parameter | |
|---|--------------------------------|---------------------------------------|--|
| Rated Flux(lm): 525.650 | Luminary Flux(lm): 525.647 | Field Angle(10%Imax): 50.9(°) | |
| Rated Power(W): | Luminary Efficiency: 100.00% | Down Lumens&Percent: 524.739lm 99.83% | |
| Rated Voltage(V): | Luminary EER(lm/W): 84.659 | Up Lumens&Percent: 0.909lm 0.17% | |
| Tested Power(W): 6.209 | Max. Candela(cd): 1434.793 | S/MH: C0_a180=0.577 C90_270=0.556 | |
| Lamps' Inside: 1 | Max Cand@Ang. (°): C=0.0 γ=3.0 | CIE Type: Semi-Direct | |
| Tested Electrics (V, A, pf):241.1, 0.030, 0.844 | Beam Angle(50%Imax): 33.7(°) | ErP ϕ use(90°): 434.642lm | |
| Lamp Size (W*L*H):0.076m*0.076m*0.000m | Left=-13.6°, Right=20.1° | IRF(%): 514.665 | |



2D Plane Light Intensity Distribution Curve

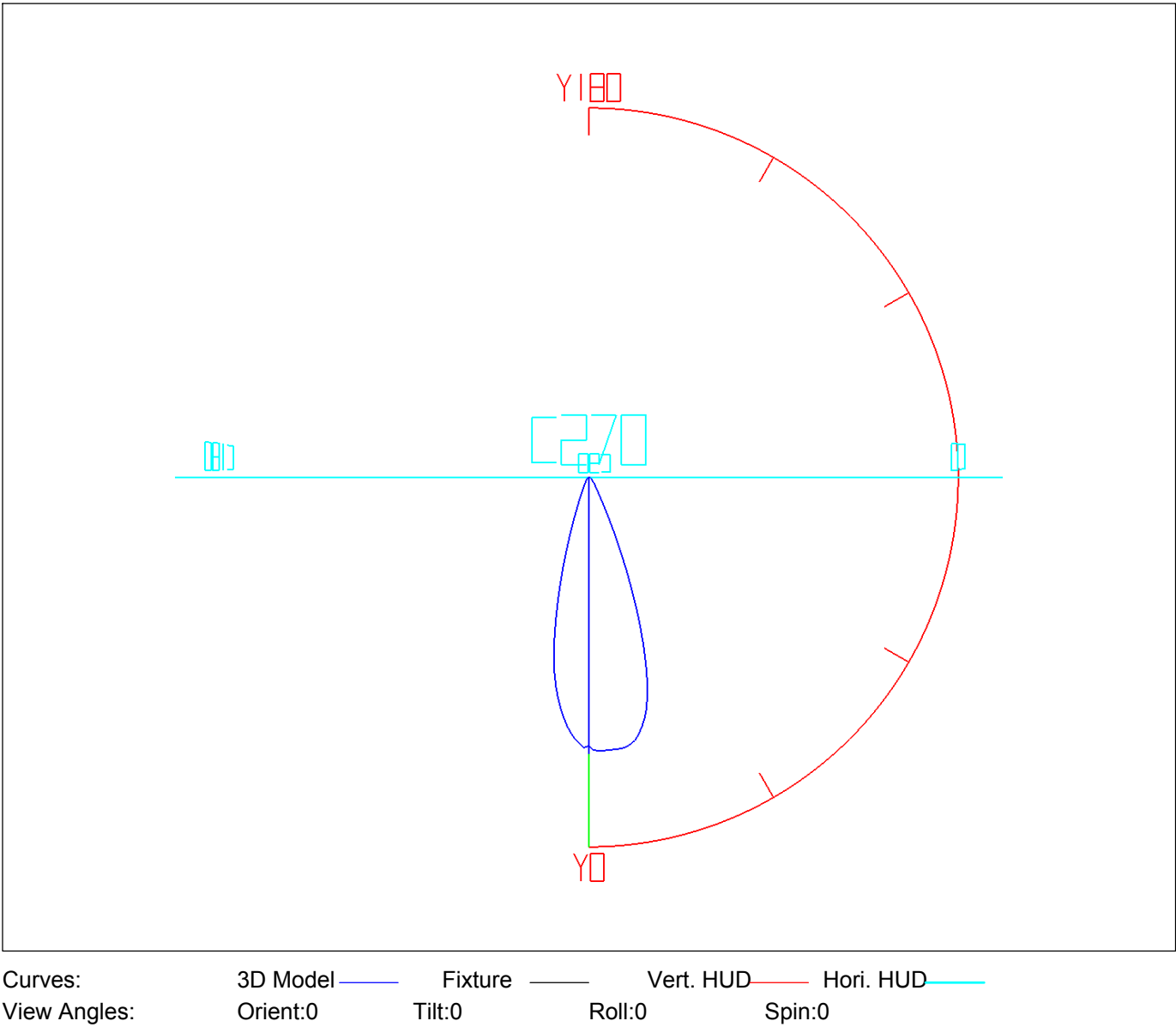
| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | Lum. Catelog: | Test ID:01 |
| Lamp Name: | Lamp Catelog:LED | Test Lab:Quality Department |
| Manufacture:Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date:2021/10/25 |



3D Light Intensity Distribution Modal

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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:2021/10/25 |

3D Light Intensity Distribution Modal



IES Indoor Report

Photometric Filename:TR09-06-XX-01 2700K RA90 36D.IES

Zonal Flux Tabulation

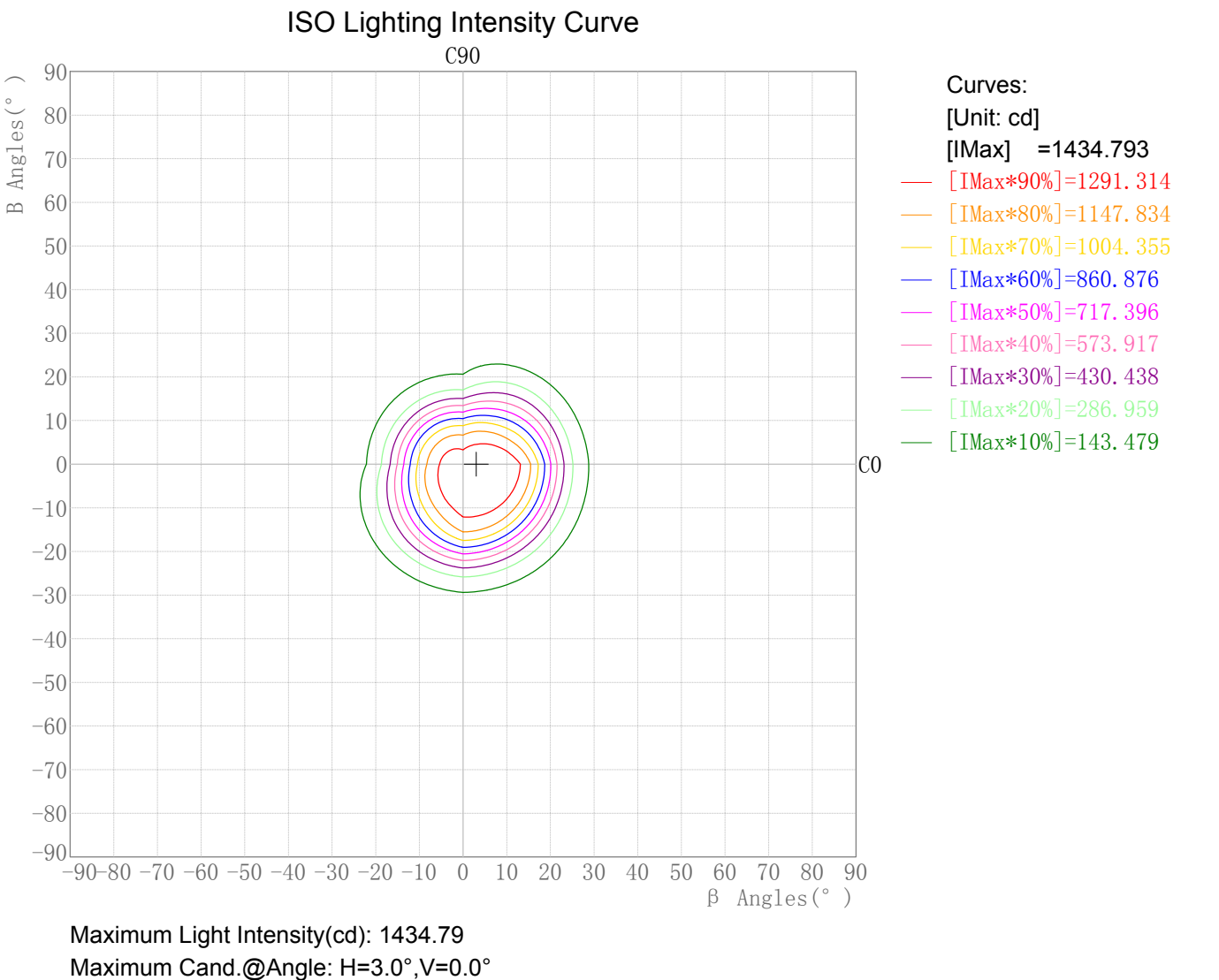
| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-----------|-------------------|-------------------|-----------|-----------|-----------|-------------------|-------------------|-----------|-----------|
| 0.0-1.0 | 1.34 | 1.34 | 0.26 | 0.26 | 47.0-48.0 | 1.67 | 496.70 | 0.32 | 94.49 |
| 1.0-2.0 | 4.00 | 5.34 | 0.76 | 1.02 | 48.0-49.0 | 1.61 | 498.31 | 0.31 | 94.80 |
| 2.0-3.0 | 6.63 | 11.97 | 1.26 | 2.28 | 49.0-50.0 | 1.54 | 499.85 | 0.29 | 95.09 |
| 3.0-4.0 | 9.19 | 21.16 | 1.75 | 4.02 | 50.0-51.0 | 1.49 | 501.34 | 0.28 | 95.38 |
| 4.0-5.0 | 11.66 | 32.81 | 2.22 | 6.24 | 51.0-52.0 | 1.43 | 502.77 | 0.27 | 95.65 |
| 5.0-6.0 | 14.01 | 46.82 | 2.67 | 8.91 | 52.0-53.0 | 1.38 | 504.15 | 0.26 | 95.91 |
| 6.0-7.0 | 16.23 | 63.06 | 3.09 | 12.00 | 53.0-54.0 | 1.33 | 505.47 | 0.25 | 96.16 |
| 7.0-8.0 | 18.28 | 81.34 | 3.48 | 15.47 | 54.0-55.0 | 1.28 | 506.75 | 0.24 | 96.40 |
| 8.0-9.0 | 20.11 | 101.45 | 3.83 | 19.30 | 55.0-56.0 | 1.23 | 507.98 | 0.23 | 96.64 |
| 9.0-10.0 | 21.65 | 123.10 | 4.12 | 23.42 | 56.0-57.0 | 1.18 | 509.16 | 0.22 | 96.86 |
| 10.0-11.0 | 22.86 | 145.95 | 4.35 | 27.77 | 57.0-58.0 | 1.13 | 510.29 | 0.21 | 97.08 |
| 11.0-12.0 | 23.70 | 169.66 | 4.51 | 32.28 | 58.0-59.0 | 1.08 | 511.37 | 0.21 | 97.28 |
| 12.0-13.0 | 24.20 | 193.86 | 4.60 | 36.88 | 59.0-60.0 | 1.03 | 512.40 | 0.20 | 97.48 |
| 13.0-14.0 | 24.37 | 218.23 | 4.64 | 41.52 | 60.0-61.0 | 0.99 | 513.39 | 0.19 | 97.67 |
| 14.0-15.0 | 24.17 | 242.40 | 4.60 | 46.11 | 61.0-62.0 | 0.94 | 514.33 | 0.18 | 97.85 |
| 15.0-16.0 | 23.60 | 266.01 | 4.49 | 50.61 | 62.0-63.0 | 0.90 | 515.23 | 0.17 | 98.02 |
| 16.0-17.0 | 22.69 | 288.70 | 4.32 | 54.92 | 63.0-64.0 | 0.85 | 516.08 | 0.16 | 98.18 |
| 17.0-18.0 | 21.49 | 310.19 | 4.09 | 59.01 | 64.0-65.0 | 0.81 | 516.89 | 0.15 | 98.33 |
| 18.0-19.0 | 20.06 | 330.25 | 3.82 | 62.83 | 65.0-66.0 | 0.76 | 517.66 | 0.15 | 98.48 |
| 19.0-20.0 | 18.45 | 348.70 | 3.51 | 66.34 | 66.0-67.0 | 0.72 | 518.38 | 0.14 | 98.62 |
| 20.0-21.0 | 16.73 | 365.43 | 3.18 | 69.52 | 67.0-68.0 | 0.68 | 519.06 | 0.13 | 98.75 |
| 21.0-22.0 | 14.97 | 380.40 | 2.85 | 72.37 | 68.0-69.0 | 0.64 | 519.69 | 0.12 | 98.87 |
| 22.0-23.0 | 13.25 | 393.66 | 2.52 | 74.89 | 69.0-70.0 | 0.59 | 520.29 | 0.11 | 98.98 |
| 23.0-24.0 | 11.60 | 405.26 | 2.21 | 77.10 | 70.0-71.0 | 0.55 | 520.84 | 0.10 | 99.08 |
| 24.0-25.0 | 10.06 | 415.32 | 1.91 | 79.01 | 71.0-72.0 | 0.51 | 521.35 | 0.10 | 99.18 |
| 25.0-26.0 | 8.68 | 424.00 | 1.65 | 80.66 | 72.0-73.0 | 0.47 | 521.82 | 0.09 | 99.27 |
| 26.0-27.0 | 7.49 | 431.49 | 1.43 | 82.09 | 73.0-74.0 | 0.43 | 522.24 | 0.08 | 99.35 |
| 27.0-28.0 | 6.50 | 437.99 | 1.24 | 83.32 | 74.0-75.0 | 0.39 | 522.63 | 0.07 | 99.43 |
| 28.0-29.0 | 5.68 | 443.67 | 1.08 | 84.40 | 75.0-76.0 | 0.35 | 522.98 | 0.07 | 99.49 |
| 29.0-30.0 | 5.02 | 448.69 | 0.96 | 85.36 | 76.0-77.0 | 0.31 | 523.28 | 0.06 | 99.55 |
| 30.0-31.0 | 4.50 | 453.19 | 0.86 | 86.22 | 77.0-78.0 | 0.26 | 523.55 | 0.05 | 99.60 |
| 31.0-32.0 | 4.08 | 457.28 | 0.78 | 86.99 | 78.0-79.0 | 0.22 | 523.77 | 0.04 | 99.64 |
| 32.0-33.0 | 3.74 | 461.02 | 0.71 | 87.70 | 79.0-80.0 | 0.19 | 523.97 | 0.04 | 99.68 |
| 33.0-34.0 | 3.46 | 464.48 | 0.66 | 88.36 | 80.0-81.0 | 0.17 | 524.13 | 0.03 | 99.71 |
| 34.0-35.0 | 3.22 | 467.70 | 0.61 | 88.97 | 81.0-82.0 | 0.14 | 524.28 | 0.03 | 99.74 |
| 35.0-36.0 | 3.01 | 470.71 | 0.57 | 89.55 | 82.0-83.0 | 0.12 | 524.40 | 0.02 | 99.76 |
| 36.0-37.0 | 2.83 | 473.53 | 0.54 | 90.09 | 83.0-84.0 | 0.10 | 524.50 | 0.02 | 99.78 |
| 37.0-38.0 | 2.67 | 476.20 | 0.51 | 90.59 | 84.0-85.0 | 0.08 | 524.58 | 0.02 | 99.80 |
| 38.0-39.0 | 2.52 | 478.72 | 0.48 | 91.07 | 85.0-86.0 | 0.06 | 524.64 | 0.01 | 99.81 |
| 39.0-40.0 | 2.39 | 481.11 | 0.46 | 91.53 | 86.0-87.0 | 0.04 | 524.69 | 0.01 | 99.82 |
| 40.0-41.0 | 2.27 | 483.39 | 0.43 | 91.96 | 87.0-88.0 | 0.03 | 524.72 | 0.01 | 99.82 |
| 41.0-42.0 | 2.17 | 485.55 | 0.41 | 92.37 | 88.0-89.0 | 0.02 | 524.73 | 0.00 | 99.83 |
| 42.0-43.0 | 2.07 | 487.62 | 0.39 | 92.77 | 89.0-90.0 | 0.01 | 524.74 | 0.00 | 99.83 |
| 43.0-44.0 | 1.97 | 489.59 | 0.38 | 93.14 | 90.0-91.0 | 0.00 | 524.74 | 0.00 | 99.83 |
| 44.0-45.0 | 1.89 | 491.48 | 0.36 | 93.50 | 91.0-92.0 | 0.00 | 524.74 | 0.00 | 99.83 |
| 45.0-46.0 | 1.81 | 493.30 | 0.34 | 93.84 | 92.0-93.0 | 0.00 | 524.74 | 0.00 | 99.83 |
| 46.0-47.0 | 1.74 | 495.03 | 0.33 | 94.18 | 93.0-94.0 | 0.00 | 524.74 | 0.00 | 99.83 |

Zonal Flux Tabulation - (Cont.)

| Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp | Zone(γ) | Zone Flux (lm) | Sums Flux (lm) | Zone%Lamp | Sums%Lamp |
|-------------|-------------------|-------------------|-----------|-----------|-------------|-------------------|-------------------|-----------|-----------|
| 94.0-95.0 | 0.00 | 524.74 | 0.00 | 99.83 | 141.0-142.0 | 0.00 | 524.74 | 0.00 | 99.83 |
| 95.0-96.0 | 0.00 | 524.74 | 0.00 | 99.83 | 142.0-143.0 | 0.00 | 524.74 | 0.00 | 99.83 |
| 96.0-97.0 | 0.00 | 524.74 | 0.00 | 99.83 | 143.0-144.0 | 0.01 | 524.75 | 0.00 | 99.83 |
| 97.0-98.0 | 0.00 | 524.74 | 0.00 | 99.83 | 144.0-145.0 | 0.01 | 524.76 | 0.00 | 99.83 |
| 98.0-99.0 | 0.00 | 524.74 | 0.00 | 99.83 | 145.0-146.0 | 0.01 | 524.77 | 0.00 | 99.83 |
| 99.0-100.0 | 0.00 | 524.74 | 0.00 | 99.83 | 146.0-147.0 | 0.01 | 524.78 | 0.00 | 99.83 |
| 100.0-101.0 | 0.00 | 524.74 | 0.00 | 99.83 | 147.0-148.0 | 0.02 | 524.80 | 0.00 | 99.84 |
| 101.0-102.0 | 0.00 | 524.74 | 0.00 | 99.83 | 148.0-149.0 | 0.02 | 524.81 | 0.00 | 99.84 |
| 102.0-103.0 | 0.00 | 524.74 | 0.00 | 99.83 | 149.0-150.0 | 0.02 | 524.84 | 0.00 | 99.85 |
| 103.0-104.0 | 0.00 | 524.74 | 0.00 | 99.83 | 150.0-151.0 | 0.03 | 524.86 | 0.01 | 99.85 |
| 104.0-105.0 | 0.00 | 524.74 | 0.00 | 99.83 | 151.0-152.0 | 0.03 | 524.90 | 0.01 | 99.86 |
| 105.0-106.0 | 0.00 | 524.74 | 0.00 | 99.83 | 152.0-153.0 | 0.03 | 524.93 | 0.01 | 99.86 |
| 106.0-107.0 | 0.00 | 524.74 | 0.00 | 99.83 | 153.0-154.0 | 0.04 | 524.97 | 0.01 | 99.87 |
| 107.0-108.0 | 0.00 | 524.74 | 0.00 | 99.83 | 154.0-155.0 | 0.04 | 525.01 | 0.01 | 99.88 |
| 108.0-109.0 | 0.00 | 524.74 | 0.00 | 99.83 | 155.0-156.0 | 0.04 | 525.05 | 0.01 | 99.89 |
| 109.0-110.0 | 0.00 | 524.74 | 0.00 | 99.83 | 156.0-157.0 | 0.04 | 525.09 | 0.01 | 99.89 |
| 110.0-111.0 | 0.00 | 524.74 | 0.00 | 99.83 | 157.0-158.0 | 0.04 | 525.13 | 0.01 | 99.90 |
| 111.0-112.0 | 0.00 | 524.74 | 0.00 | 99.83 | 158.0-159.0 | 0.04 | 525.17 | 0.01 | 99.91 |
| 112.0-113.0 | 0.00 | 524.74 | 0.00 | 99.83 | 159.0-160.0 | 0.04 | 525.21 | 0.01 | 99.92 |
| 113.0-114.0 | 0.00 | 524.74 | 0.00 | 99.83 | 160.0-161.0 | 0.04 | 525.25 | 0.01 | 99.92 |
| 114.0-115.0 | 0.00 | 524.74 | 0.00 | 99.83 | 161.0-162.0 | 0.04 | 525.29 | 0.01 | 99.93 |
| 115.0-116.0 | 0.00 | 524.74 | 0.00 | 99.83 | 162.0-163.0 | 0.04 | 525.33 | 0.01 | 99.94 |
| 116.0-117.0 | 0.00 | 524.74 | 0.00 | 99.83 | 163.0-164.0 | 0.04 | 525.37 | 0.01 | 99.95 |
| 117.0-118.0 | 0.00 | 524.74 | 0.00 | 99.83 | 164.0-165.0 | 0.03 | 525.40 | 0.01 | 99.95 |
| 118.0-119.0 | 0.00 | 524.74 | 0.00 | 99.83 | 165.0-166.0 | 0.03 | 525.43 | 0.01 | 99.96 |
| 119.0-120.0 | 0.00 | 524.74 | 0.00 | 99.83 | 166.0-167.0 | 0.03 | 525.46 | 0.01 | 99.96 |
| 120.0-121.0 | 0.00 | 524.74 | 0.00 | 99.83 | 167.0-168.0 | 0.03 | 525.49 | 0.01 | 99.97 |
| 121.0-122.0 | 0.00 | 524.74 | 0.00 | 99.83 | 168.0-169.0 | 0.02 | 525.52 | 0.00 | 99.97 |
| 122.0-123.0 | 0.00 | 524.74 | 0.00 | 99.83 | 169.0-170.0 | 0.02 | 525.54 | 0.00 | 99.98 |
| 123.0-124.0 | 0.00 | 524.74 | 0.00 | 99.83 | 170.0-171.0 | 0.02 | 525.56 | 0.00 | 99.98 |
| 124.0-125.0 | 0.00 | 524.74 | 0.00 | 99.83 | 171.0-172.0 | 0.02 | 525.58 | 0.00 | 99.99 |
| 125.0-126.0 | 0.00 | 524.74 | 0.00 | 99.83 | 172.0-173.0 | 0.02 | 525.59 | 0.00 | 99.99 |
| 126.0-127.0 | 0.00 | 524.74 | 0.00 | 99.83 | 173.0-174.0 | 0.01 | 525.61 | 0.00 | 99.99 |
| 127.0-128.0 | 0.00 | 524.74 | 0.00 | 99.83 | 174.0-175.0 | 0.01 | 525.62 | 0.00 | 99.99 |
| 128.0-129.0 | 0.00 | 524.74 | 0.00 | 99.83 | 175.0-176.0 | 0.01 | 525.63 | 0.00 | 100.00 |
| 129.0-130.0 | 0.00 | 524.74 | 0.00 | 99.83 | 176.0-177.0 | 0.01 | 525.64 | 0.00 | 100.00 |
| 130.0-131.0 | 0.00 | 524.74 | 0.00 | 99.83 | 177.0-178.0 | 0.01 | 525.64 | 0.00 | 100.00 |
| 131.0-132.0 | 0.00 | 524.74 | 0.00 | 99.83 | 178.0-179.0 | 0.00 | 525.65 | 0.00 | 100.00 |
| 132.0-133.0 | 0.00 | 524.74 | 0.00 | 99.83 | 179.0-180.0 | 0.00 | 525.65 | 0.00 | 100.00 |
| 133.0-134.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 134.0-135.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 135.0-136.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 136.0-137.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 137.0-138.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 138.0-139.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 139.0-140.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |
| 140.0-141.0 | 0.00 | 524.74 | 0.00 | 99.83 | | | | | |

Rectangle ISO Lighting Intensity Diagram

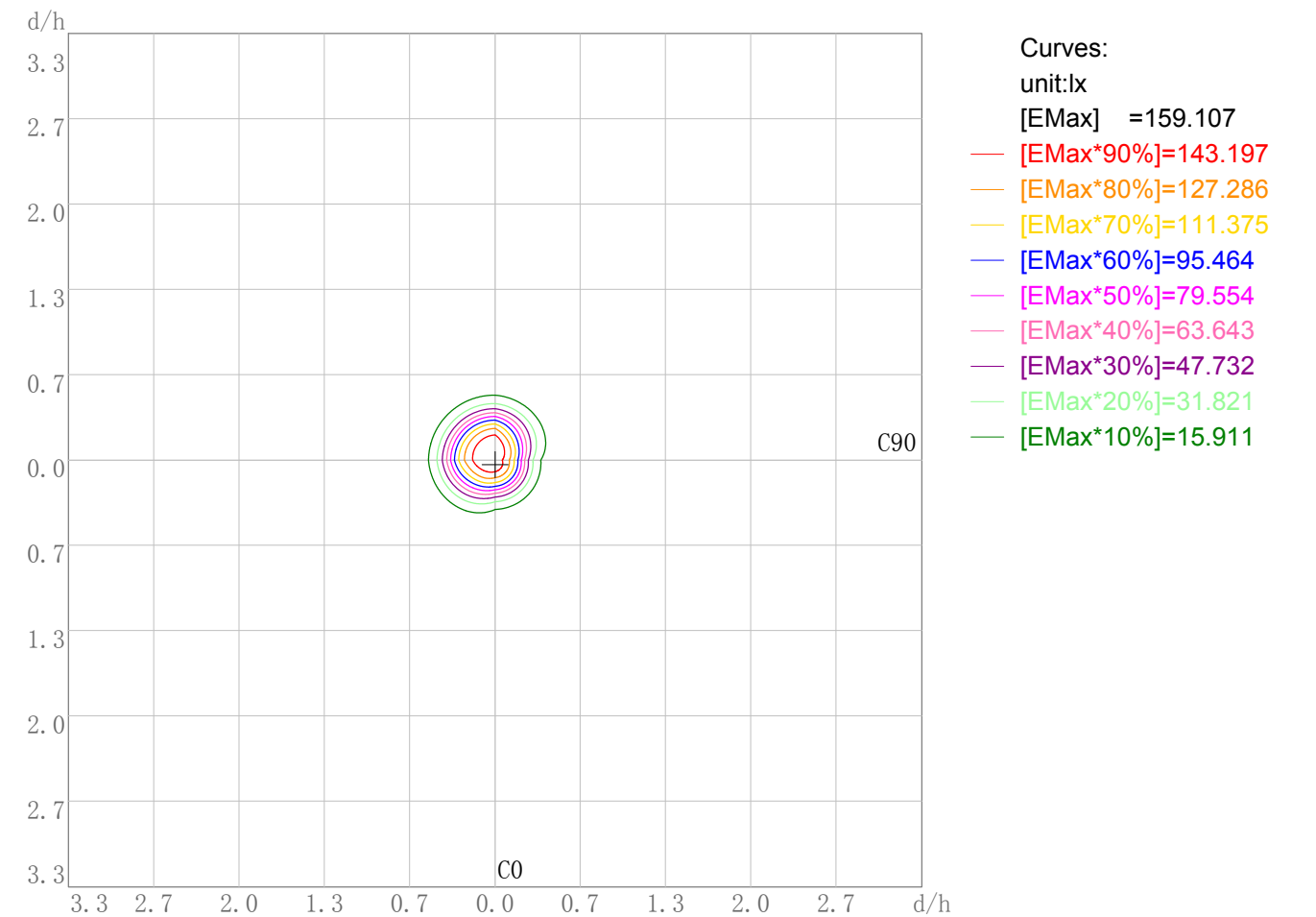
| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | Lum. Catalog: | Test ID:01 |
| Lamp Name: | Lamp Catalog: LED | Test Lab: Quality Department |
| Manufacture: Shenzhen Norming Lighting Co., Ltd | Test Machine:GON-2000 | Test Date: 2021/10/25 |



Plane ISO-Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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: 2021/10/25 |

Plane ISO-Illuminance Curve



Working Plane Luminaire Mounting Height(m): 3.00
Working Plane Maximum Illuminance(lx): 159.11
Working Plane Maximum Illuminance Position(d/h):H0.0 V0.0

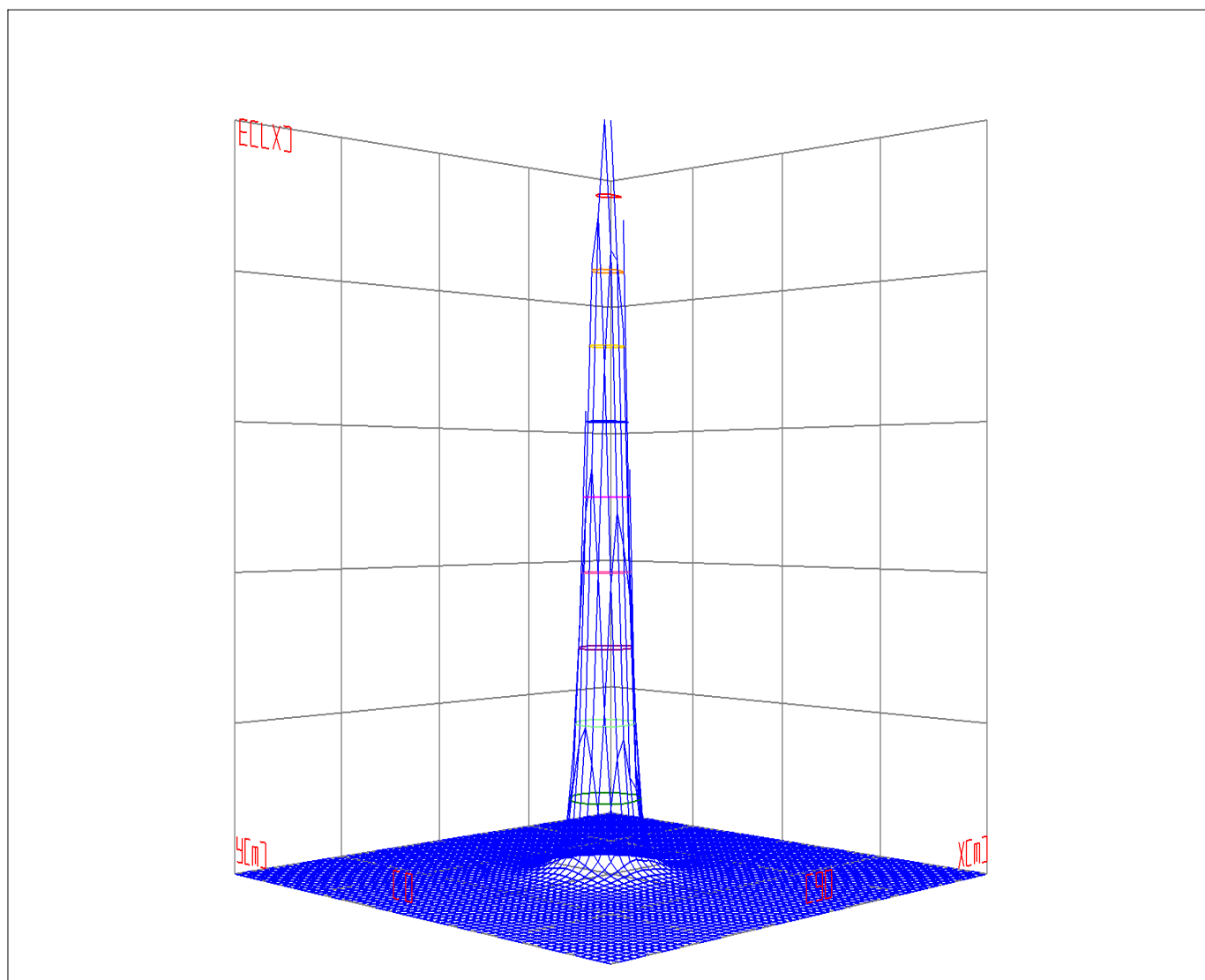
IES Indoor Report

Photometric Filename:TR09-06-XX-01 2700K RA90 36D.IES

3D Plane ISO Illuminance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: TR09-06-XX-01 2700K RA90 36D | 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: 2021/10/25 |

3D Plane Illuminance Modal

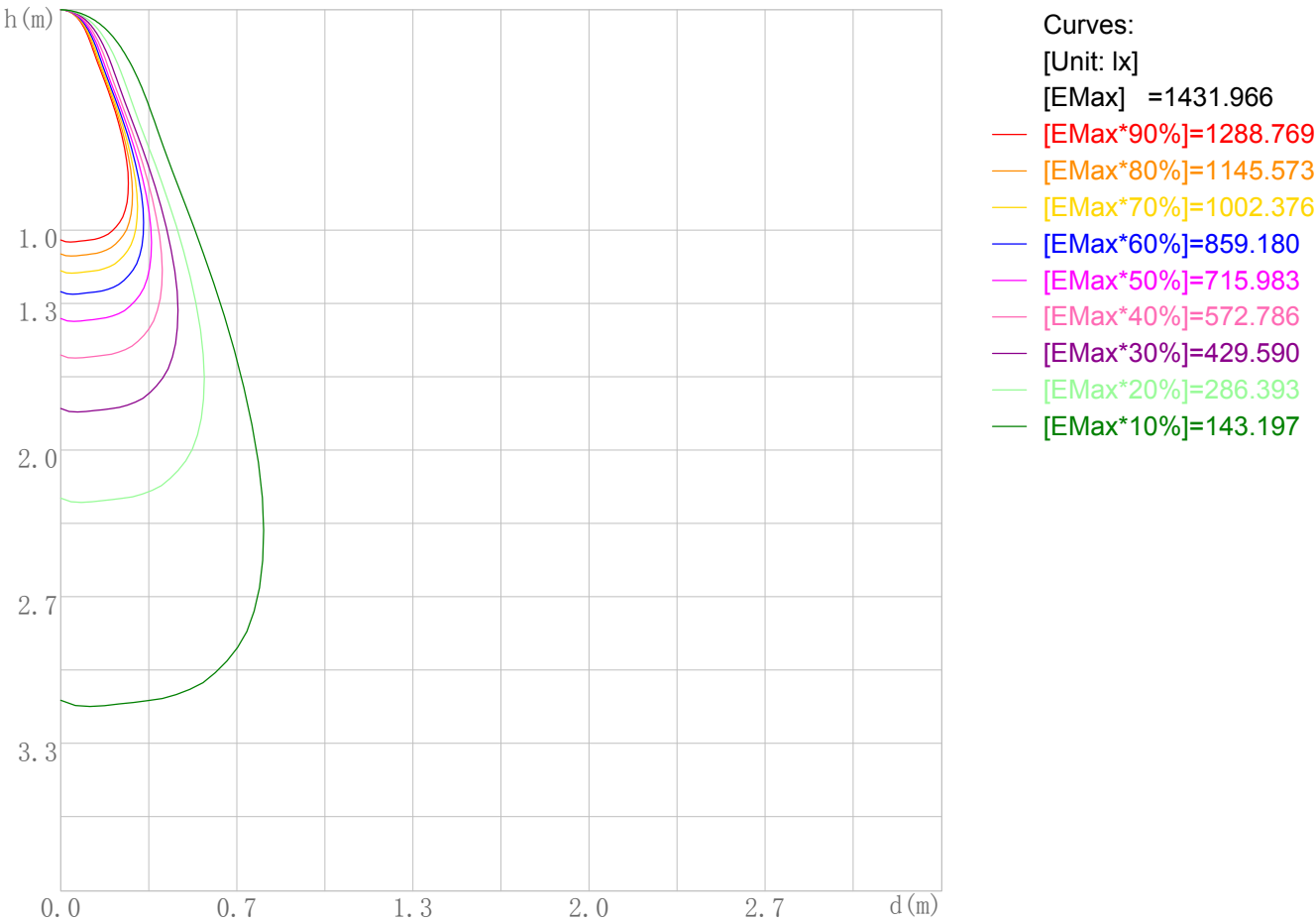


Curves: 3D Model — 90% — 80% — 70% — 60% — 50% — 40% — 30% — 20% — 10% —
View Angles(deg): 0 Height(m): 3.0 Distance(m): 10.0

Space ISO Illuminance Diagram

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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:2021/10/25 |

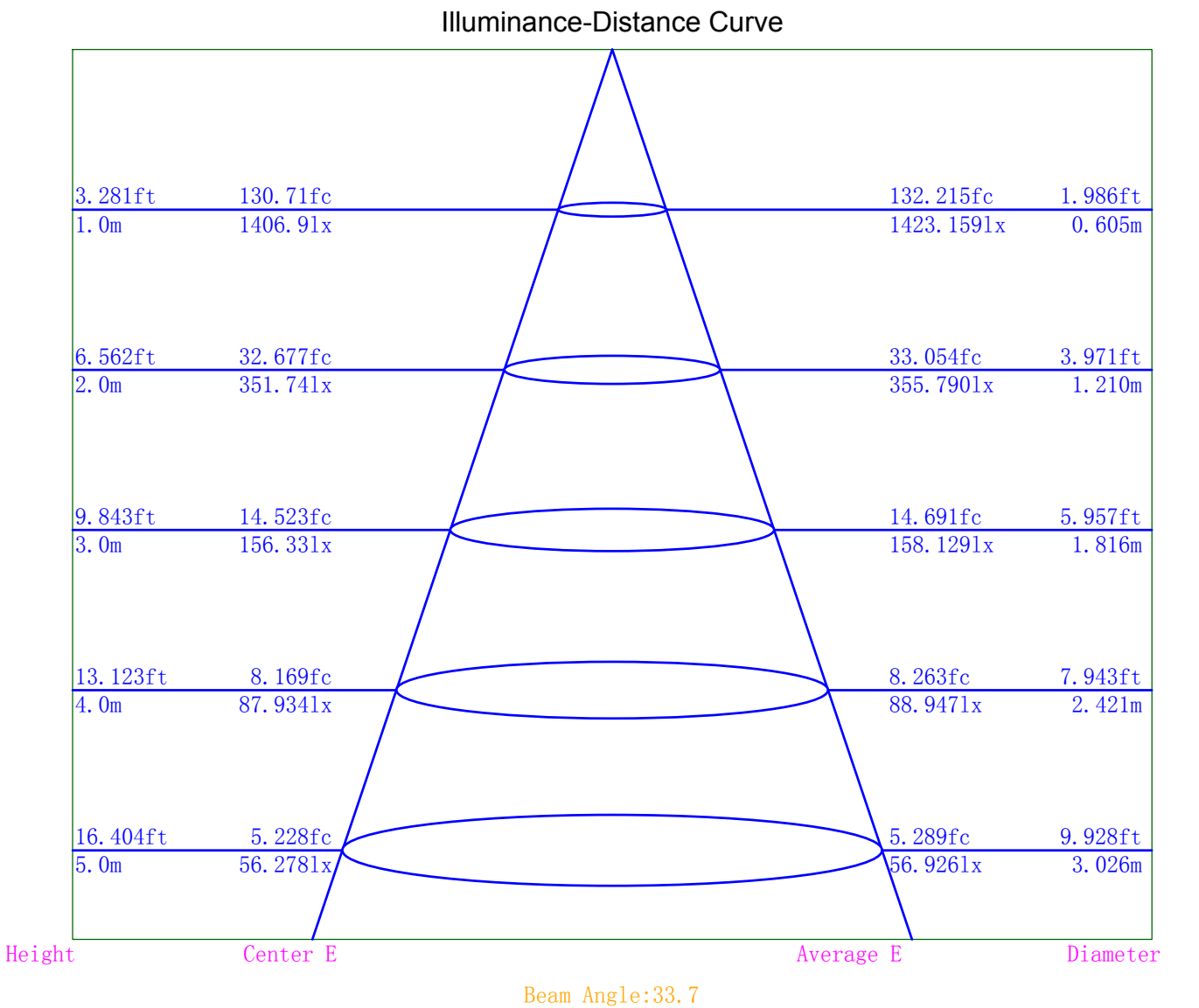
Space ISO Illuminance Curve



Space Plane Maximum Illuminance and @Angle:1431.97lx,2.0deg
Plane Maximum Lighting Intensity and @Angle:1434.793cd,0eg

Illuminance-Distance Diagram

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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: 2021/10/25 |



Indoor Luminance Limiting Curves

| | | |
|---|-----------------------|------------------------------|
| Lum. Name: TR09-06-XX-01 2700K RA90 36D | 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: 2021/10/25 |

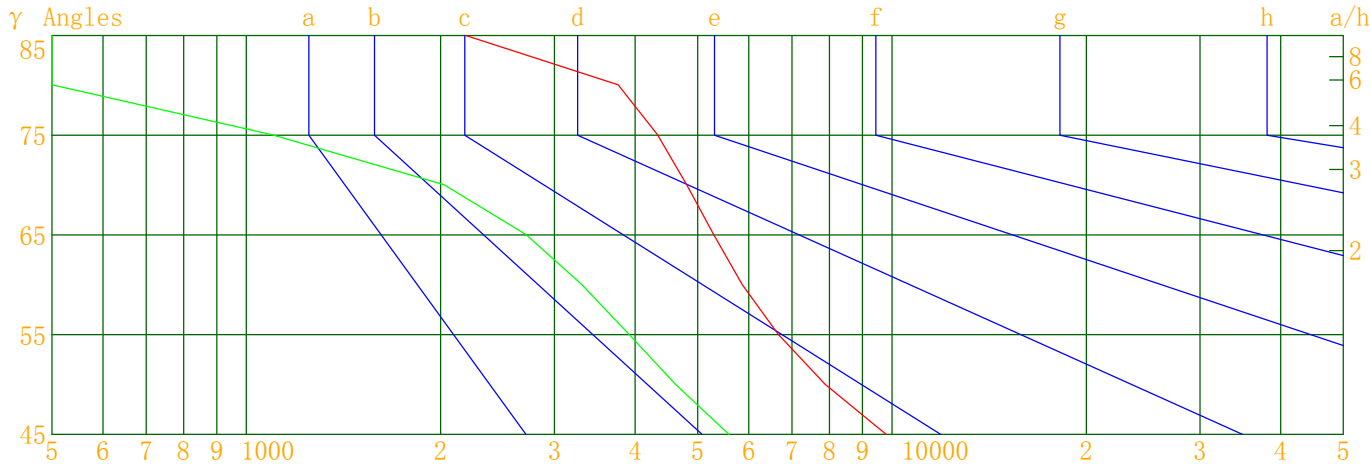
Glare Grade Table

| 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 | 9794 | 7884 | 6668 | 5860 | 5294 | 4808 | 4333 | 3766 | 2188 |
| C90 | 5590 | 4624 | 3916 | 3309 | 2712 | 2023 | 1096 | 0 | 0 |

Luminance Limiting Curve



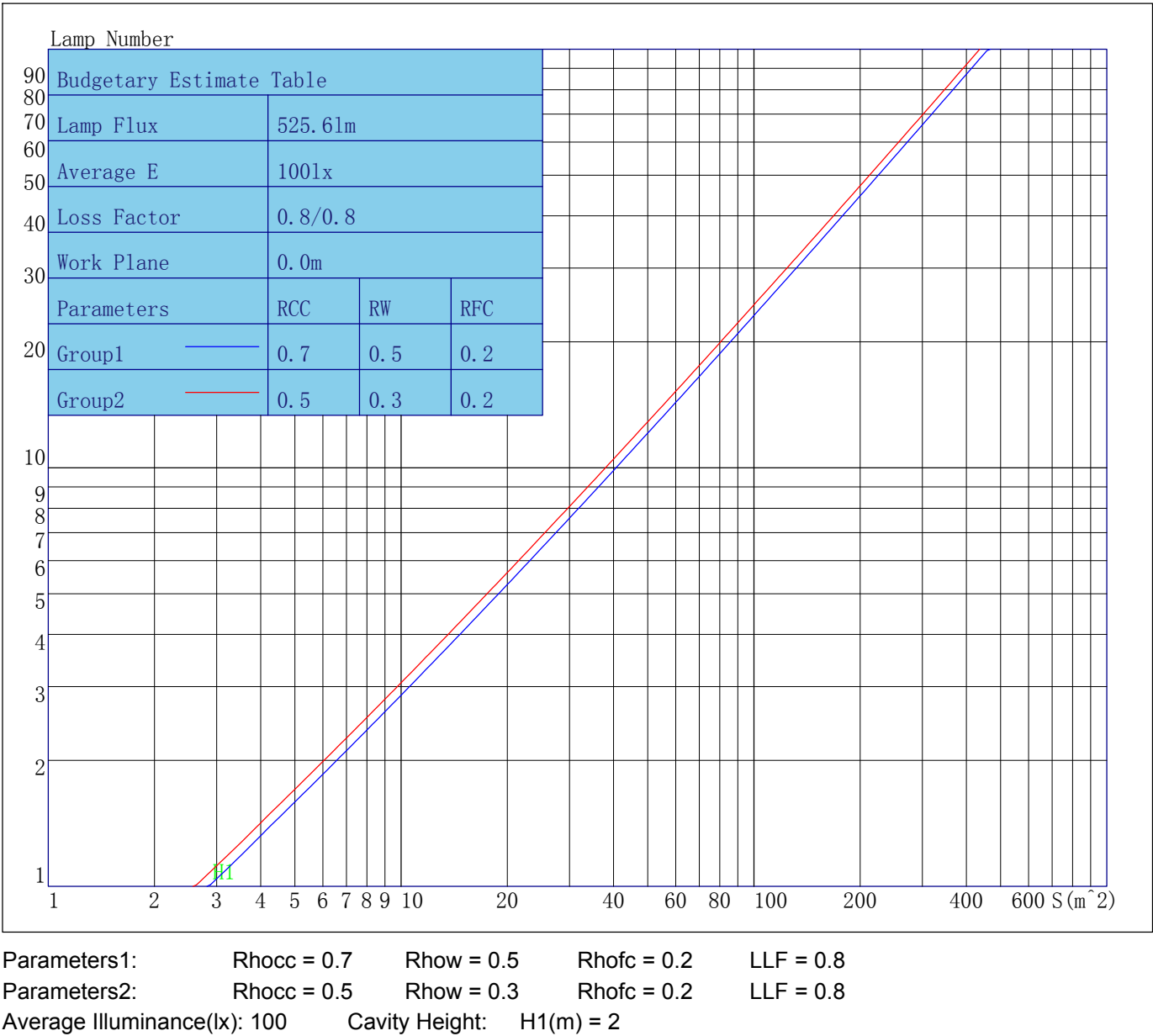
Luminous Size: Length(m)=-0.076 Width(m)=-0.076 Height(m)=0.000 Area(m^2)=0.004536

Luminous Type: Without Luminous Side

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

Indoor Budgetary Estimate Table

| | | |
|---|-----------------------|------------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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: 2021/10/25 |



Indoor Coefficient of Utilization Table

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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:2021/10/25 |

| 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 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 94 |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 93 | 91 | 89 |
| 3 | 105 | 99 | 95 | 91 | 103 | 98 | 94 | 91 | 95 | 92 | 89 | 93 | 90 | 88 | 91 | 88 | 86 | 85 |
| 4 | 101 | 94 | 89 | 86 | 99 | 93 | 89 | 85 | 91 | 87 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 81 |
| 5 | 97 | 90 | 85 | 81 | 95 | 89 | 84 | 81 | 87 | 83 | 80 | 85 | 82 | 79 | 84 | 81 | 78 | 77 |
| 6 | 93 | 86 | 81 | 77 | 92 | 85 | 80 | 77 | 83 | 79 | 76 | 82 | 78 | 76 | 81 | 78 | 75 | 74 |
| 7 | 90 | 82 | 77 | 73 | 89 | 81 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 72 | 78 | 75 | 72 | 71 |
| 8 | 87 | 79 | 74 | 70 | 86 | 78 | 73 | 70 | 77 | 73 | 70 | 76 | 72 | 70 | 75 | 72 | 69 | 68 |
| 9 | 84 | 76 | 71 | 68 | 83 | 75 | 71 | 67 | 74 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 66 |
| 10 | 81 | 73 | 68 | 65 | 80 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 67 | 65 | 70 | 67 | 64 | 63 |

Unified Glare Rating Table

| | | |
|--|-----------------------|-----------------------------|
| Lum. Name:TR09-06-XX-01 2700K RA90 36D | 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:2021/10/25 |

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 | 14.4 | 15.6 | 14.8 | 15.9 | 16.3 | 11.3 | 12.5 | 11.6 | 12.8 | 13.1 |
| | 15.2 | 16.3 | 15.6 | 16.7 | 17.0 | 11.7 | 12.8 | 12.1 | 13.2 | 13.5 |
| | 15.6 | 16.6 | 16.0 | 17.0 | 17.3 | 11.8 | 12.8 | 12.2 | 13.2 | 13.6 |
| | 15.8 | 16.8 | 16.2 | 17.1 | 17.5 | 11.7 | 12.7 | 12.1 | 13.0 | 13.4 |
| | 15.9 | 16.8 | 16.3 | 17.2 | 17.6 | 11.6 | 12.6 | 12.1 | 13.0 | 13.4 |
| | 15.9 | 16.8 | 16.3 | 17.1 | 17.6 | 11.6 | 12.5 | 12.0 | 12.9 | 13.3 |
| X=4H Y=2H | 14.6 | 15.7 | 15.0 | 16.0 | 16.4 | 11.6 | 12.7 | 12.0 | 13.0 | 13.4 |
| | 15.6 | 16.5 | 16.0 | 16.9 | 17.3 | 12.2 | 13.1 | 12.7 | 13.5 | 13.9 |
| | 16.0 | 16.9 | 16.5 | 17.3 | 17.7 | 12.3 | 13.1 | 12.8 | 13.6 | 14.0 |
| | 16.4 | 17.1 | 16.8 | 17.6 | 18.0 | 12.2 | 13.0 | 12.7 | 13.4 | 13.9 |
| | 16.5 | 17.2 | 16.9 | 17.6 | 18.1 | 12.2 | 12.9 | 12.6 | 13.3 | 13.8 |
| | 16.5 | 17.1 | 17.0 | 17.6 | 18.1 | 12.1 | 12.8 | 12.6 | 13.2 | 13.7 |
| X=8H Y=4H | 16.1 | 16.8 | 16.6 | 17.3 | 17.7 | 12.4 | 13.1 | 12.8 | 13.5 | 14.0 |
| | 16.5 | 17.1 | 17.0 | 17.6 | 18.2 | 12.3 | 12.9 | 12.8 | 13.4 | 14.0 |
| | 16.7 | 17.2 | 17.2 | 17.7 | 18.2 | 12.2 | 12.8 | 12.7 | 13.3 | 13.8 |
| | 16.7 | 17.2 | 17.2 | 17.7 | 18.3 | 12.2 | 12.7 | 12.7 | 13.2 | 13.8 |
| X=12H Y=4H | 16.1 | 16.7 | 16.6 | 17.2 | 17.7 | 12.3 | 13.0 | 12.8 | 13.5 | 13.9 |
| | 16.5 | 17.1 | 17.0 | 17.6 | 18.1 | 12.3 | 12.8 | 12.8 | 13.3 | 13.9 |
| | 16.7 | 17.2 | 17.2 | 17.7 | 18.3 | 12.2 | 12.7 | 12.7 | 13.2 | 13.8 |
| Variations with the objerver position at spacings | | | | | | | | | | |
| S=1.0H | 0.5/-0.6 | | | | | 1.8/-2.2 | | | | |
| S=1.5H | 1.0/-1.1 | | | | | 2.4/-4.4 | | | | |
| S=2.0H | 1.3/-1.5 | | | | | 2.8/-4.6 | | | | |
| Reduced UGR Table: | | | | | | | | | | |
| Nordic Standard Table: | BK0 | | | | | BK0 | | | | |
| Correction Value | 1.7 | | | | | 1.0 | | | | |

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

IES Indoor Report

Photometric Filename:TR09-06-XX-01 2700K RA90 36D.IES

Candela Tabulation

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|---------|---------|---------|---------|
| γ 0.0 | 1406.95 | 1406.95 | 1406.95 | 1406.95 |
| γ 1.0 | 1429.12 | 1351.69 | 1416.74 | 1388.89 |
| γ 2.0 | 1434.59 | 1328.94 | 1397.63 | 1402.92 |
| γ 3.0 | 1434.79 | 1301.08 | 1374.26 | 1410.56 |
| γ 4.0 | 1432.33 | 1266.71 | 1344.00 | 1413.39 |
| γ 5.0 | 1432.18 | 1228.71 | 1308.16 | 1412.33 |
| γ 6.0 | 1431.67 | 1182.45 | 1265.37 | 1404.26 |
| γ 7.0 | 1431.50 | 1129.63 | 1218.70 | 1396.81 |
| γ 8.0 | 1425.09 | 1066.03 | 1164.92 | 1386.40 |
| γ 9.0 | 1414.23 | 988.85 | 1107.07 | 1371.21 |
| γ 10.0 | 1398.65 | 903.18 | 1039.58 | 1347.17 |
| γ 11.0 | 1370.47 | 808.92 | 958.48 | 1323.61 |
| γ 12.0 | 1337.26 | 710.95 | 869.95 | 1294.37 |
| γ 13.0 | 1297.62 | 612.42 | 772.52 | 1263.32 |
| γ 14.0 | 1248.97 | 519.27 | 675.22 | 1225.49 |
| γ 15.0 | 1183.81 | 432.28 | 579.32 | 1177.77 |
| γ 16.0 | 1109.14 | 354.40 | 487.83 | 1119.06 |
| γ 17.0 | 1022.81 | 288.09 | 402.89 | 1044.92 |
| γ 18.0 | 929.56 | 234.69 | 329.77 | 960.91 |
| γ 19.0 | 830.91 | 191.94 | 267.71 | 866.80 |
| γ 20.0 | 728.47 | 158.99 | 217.56 | 770.17 |
| γ 21.0 | 624.24 | 133.98 | 177.32 | 673.98 |
| γ 22.0 | 528.04 | 114.92 | 146.46 | 581.26 |
| γ 23.0 | 439.85 | 99.92 | 122.25 | 493.93 |
| γ 24.0 | 362.45 | 88.01 | 103.93 | 412.33 |
| γ 25.0 | 295.83 | 78.63 | 89.42 | 339.36 |
| γ 26.0 | 241.50 | 70.70 | 78.05 | 277.19 |
| γ 27.0 | 198.58 | 64.11 | 68.75 | 226.17 |
| γ 28.0 | 164.15 | 58.53 | 61.15 | 185.16 |
| γ 29.0 | 137.80 | 53.57 | 54.81 | 153.06 |
| γ 30.0 | 117.81 | 49.27 | 49.40 | 128.20 |
| γ 31.0 | 102.80 | 45.41 | 44.83 | 109.36 |
| γ 32.0 | 90.77 | 42.03 | 40.79 | 94.33 |
| γ 33.0 | 81.35 | 38.93 | 37.30 | 82.66 |
| γ 34.0 | 73.42 | 36.16 | 34.19 | 73.19 |
| γ 35.0 | 66.80 | 33.70 | 31.51 | 65.43 |
| γ 36.0 | 61.11 | 31.40 | 29.14 | 58.97 |
| γ 37.0 | 56.20 | 29.33 | 27.11 | 53.55 |
| γ 38.0 | 51.80 | 27.43 | 25.28 | 48.85 |
| γ 39.0 | 48.01 | 25.68 | 23.74 | 44.80 |
| γ 40.0 | 44.46 | 24.14 | 22.30 | 41.24 |
| γ 41.0 | 41.46 | 22.70 | 21.09 | 38.03 |
| γ 42.0 | 38.49 | 21.37 | 19.99 | 35.30 |
| γ 43.0 | 35.94 | 20.12 | 19.04 | 32.84 |
| γ 44.0 | 33.53 | 18.99 | 18.14 | 30.65 |
| γ 45.0 | 31.42 | 17.93 | 17.31 | 28.75 |
| γ 46.0 | 29.41 | 16.90 | 16.53 | 27.09 |

Candela Tabulation - (Cont.)

| V/H | C0.0 | C90.0 | C180.0 | C270.0 |
|--------|-------|-------|--------|--------|
| γ 47.0 | 27.57 | 15.95 | 15.79 | 25.62 |
| γ 48.0 | 25.93 | 15.07 | 15.03 | 24.29 |
| γ 49.0 | 24.40 | 14.24 | 14.31 | 23.09 |
| γ 50.0 | 22.99 | 13.48 | 13.64 | 22.02 |
| γ 51.0 | 21.69 | 12.73 | 12.96 | 21.01 |
| γ 52.0 | 20.47 | 12.06 | 12.32 | 20.10 |
| γ 53.0 | 19.37 | 11.41 | 11.70 | 19.21 |
| γ 54.0 | 18.33 | 10.78 | 11.15 | 18.41 |
| γ 55.0 | 17.35 | 10.19 | 10.55 | 17.61 |
| γ 56.0 | 16.46 | 9.59 | 10.02 | 16.85 |
| γ 57.0 | 15.57 | 9.03 | 9.46 | 16.11 |
| γ 58.0 | 14.79 | 8.51 | 8.95 | 15.33 |
| γ 59.0 | 14.02 | 8.01 | 8.42 | 14.58 |
| γ 60.0 | 13.29 | 7.51 | 7.95 | 13.85 |
| γ 61.0 | 12.59 | 7.01 | 7.47 | 13.17 |
| γ 62.0 | 11.96 | 6.54 | 7.01 | 12.47 |
| γ 63.0 | 11.32 | 6.09 | 6.55 | 11.82 |
| γ 64.0 | 10.73 | 5.64 | 6.12 | 11.20 |
| γ 65.0 | 10.15 | 5.20 | 5.68 | 10.63 |
| γ 66.0 | 9.58 | 4.76 | 5.25 | 10.07 |
| γ 67.0 | 9.03 | 4.34 | 4.84 | 9.53 |
| γ 68.0 | 8.49 | 3.94 | 4.43 | 9.01 |
| γ 69.0 | 7.98 | 3.55 | 4.04 | 8.49 |
| γ 70.0 | 7.46 | 3.14 | 3.64 | 7.99 |
| γ 71.0 | 6.98 | 2.73 | 3.24 | 7.51 |
| γ 72.0 | 6.50 | 2.34 | 2.84 | 7.04 |
| γ 73.0 | 6.03 | 1.97 | 2.46 | 6.58 |
| γ 74.0 | 5.56 | 1.69 | 2.11 | 6.12 |
| γ 75.0 | 5.09 | 1.29 | 1.78 | 5.68 |
| γ 76.0 | 4.64 | 0.90 | 1.47 | 5.25 |
| γ 77.0 | 4.22 | 0.60 | 1.14 | 4.81 |
| γ 78.0 | 3.77 | 0.03 | 0.79 | 4.36 |
| γ 79.0 | 3.37 | 0.00 | 0.48 | 3.92 |
| γ 80.0 | 2.97 | 0.00 | 0.14 | 3.53 |
| γ 81.0 | 2.57 | 0.00 | 0.00 | 3.15 |
| γ 82.0 | 2.12 | 0.00 | 0.00 | 2.78 |
| γ 83.0 | 1.71 | 0.00 | 0.00 | 2.41 |
| γ 84.0 | 1.32 | 0.00 | 0.00 | 2.05 |
| γ 85.0 | 0.87 | 0.00 | 0.00 | 1.68 |
| γ 86.0 | 0.56 | 0.00 | 0.00 | 1.36 |
| γ 87.0 | 0.38 | 0.00 | 0.00 | 0.98 |
| γ 88.0 | 0.17 | 0.00 | 0.00 | 0.63 |
| γ 89.0 | 0.00 | 0.00 | 0.00 | 0.37 |
| 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 |

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 |

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 | 0.10 | 0.00 |
| γ 143.0 | 0.00 | 0.00 | 0.22 | 0.00 |
| γ 144.0 | 0.00 | 0.08 | 0.33 | 0.00 |
| γ 145.0 | 0.00 | 0.17 | 0.43 | 0.00 |
| γ 146.0 | 0.00 | 0.28 | 0.53 | 0.00 |
| γ 147.0 | 0.00 | 0.36 | 0.63 | 0.00 |
| γ 148.0 | 0.00 | 0.44 | 0.73 | 0.00 |
| γ 149.0 | 0.00 | 0.53 | 0.82 | 0.11 |
| γ 150.0 | 0.10 | 0.62 | 0.90 | 0.21 |
| γ 151.0 | 0.20 | 0.70 | 0.99 | 0.32 |
| γ 152.0 | 0.31 | 0.76 | 1.05 | 0.41 |
| γ 153.0 | 0.41 | 0.83 | 1.13 | 0.51 |
| γ 154.0 | 0.50 | 0.87 | 1.18 | 0.61 |
| γ 155.0 | 0.60 | 0.92 | 1.22 | 0.70 |
| γ 156.0 | 0.70 | 0.95 | 1.26 | 0.80 |
| γ 157.0 | 0.77 | 0.98 | 1.29 | 0.88 |
| γ 158.0 | 0.86 | 0.99 | 1.32 | 0.96 |
| γ 159.0 | 0.93 | 0.99 | 1.32 | 1.03 |
| γ 160.0 | 1.00 | 0.99 | 1.32 | 1.09 |
| γ 161.0 | 1.05 | 0.98 | 1.32 | 1.16 |
| γ 162.0 | 1.10 | 0.97 | 1.30 | 1.21 |
| γ 163.0 | 1.14 | 0.95 | 1.28 | 1.25 |
| γ 164.0 | 1.17 | 0.94 | 1.25 | 1.27 |
| γ 165.0 | 1.19 | 0.92 | 1.23 | 1.29 |
| γ 166.0 | 1.20 | 0.92 | 1.21 | 1.30 |
| γ 167.0 | 1.21 | 0.93 | 1.17 | 1.30 |
| γ 168.0 | 1.22 | 0.93 | 1.15 | 1.29 |
| γ 169.0 | 1.21 | 0.94 | 1.13 | 1.26 |
| γ 170.0 | 1.21 | 0.95 | 1.13 | 1.26 |
| γ 171.0 | 1.20 | 0.98 | 1.11 | 1.23 |
| γ 172.0 | 1.19 | 0.99 | 1.12 | 1.22 |
| γ 173.0 | 1.18 | 1.01 | 1.12 | 1.20 |
| γ 174.0 | 1.20 | 1.06 | 1.12 | 1.18 |
| γ 175.0 | 1.20 | 1.09 | 1.13 | 1.18 |
| γ 176.0 | 1.20 | 1.10 | 1.14 | 1.17 |
| γ 177.0 | 1.21 | 1.12 | 1.15 | 1.18 |
| γ 178.0 | 1.21 | 1.13 | 1.16 | 1.20 |
| γ 179.0 | 1.20 | 1.13 | 1.18 | 1.21 |
| γ 180.0 | 1.18 | 1.18 | 1.18 | 1.18 |