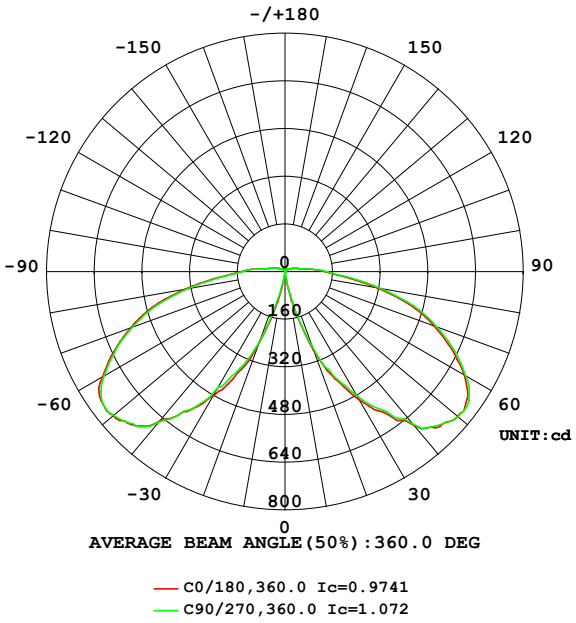
# STREETLIGHT PHOTOMETRIC TEST REPORT

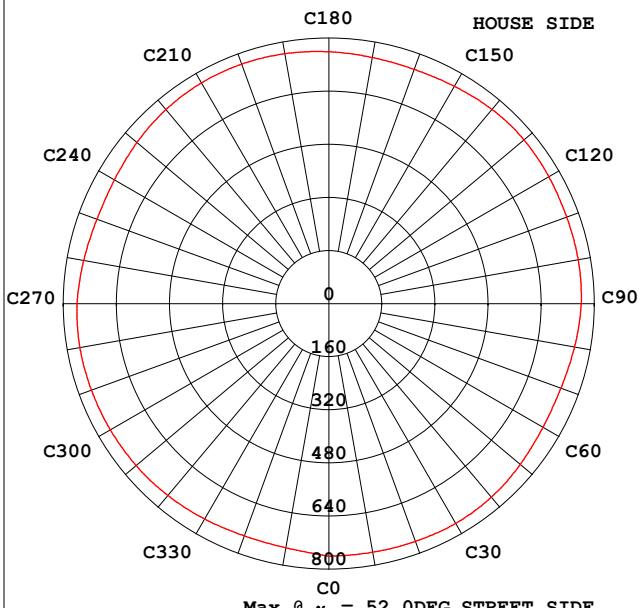
| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA | | Eff: 150.85 lm/W | |
|---|---|---|---|---|---|
| MODEL | | Imax(cd) | 768.5 | η street_up(%) | 3.8 |
| NOMINAL POWER(W) | | LOR(%) | 100.0 | η street_down(%) | 52.1 |
| RATED VOLTAGE(V) | | TOTAL FLUX(lm) | 3367 | η house_up(%) | 3.2 |
| NOMINAL FLUX(lm) | 3367.35 | MAXIMUM @(C,γ ) | 203,52.0 | η house_down(%) | 40.9 |
| LAMPS INSIDE | 1 | η up(%) | 7.0 | 76 FLASHAREA(m2) | |
| TEST VOLTAGE(V) | | η down(%) | 93.0 | SLI | |

INTENSITY DISTRIBUTION DIAGRAM
IN C PLANS




MAX INTENSITY CONE SURFACE
DISTRIBUTION DIAGRAM

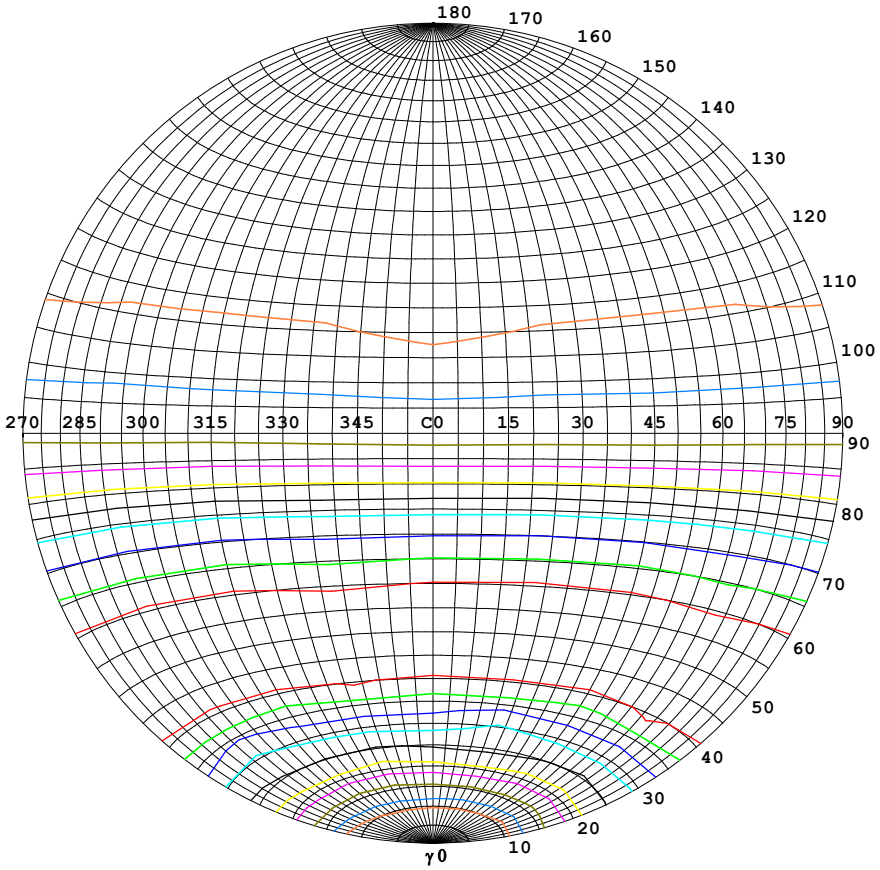



C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

# STREETLIGHT ISOCANDELA DIAGRAM

| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |




Classification:

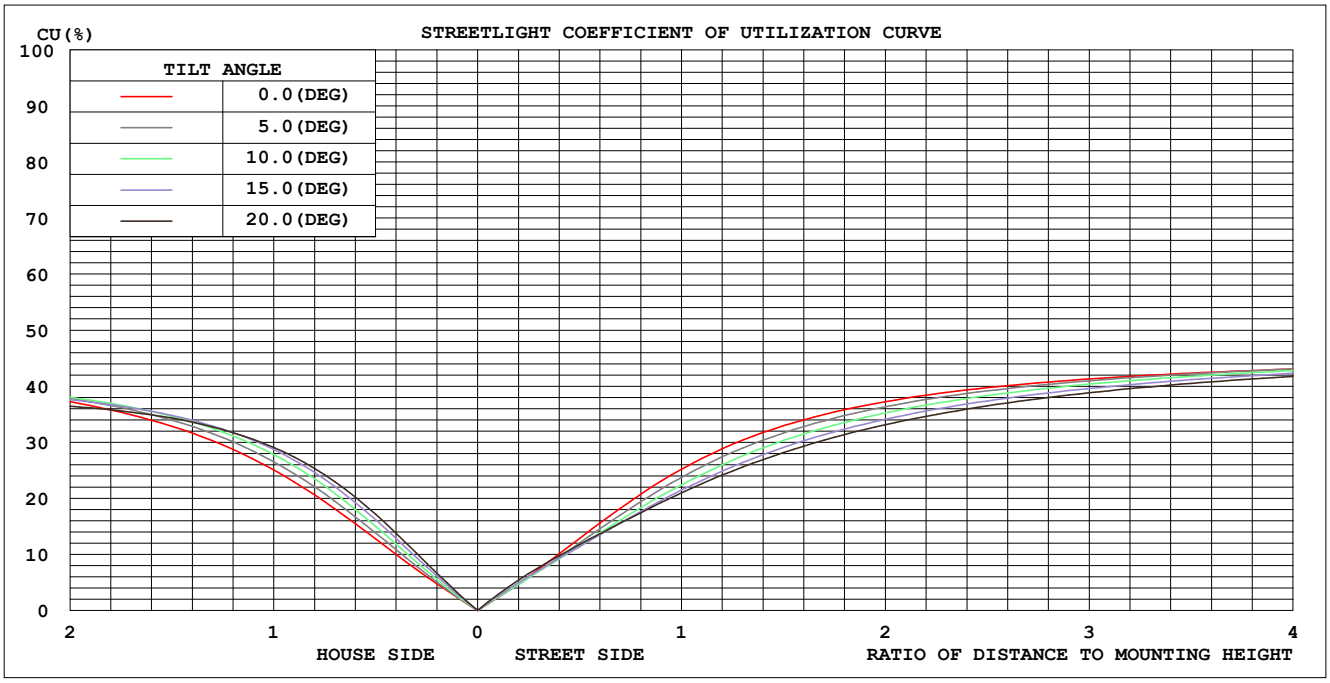
IES:Type V - Short
CIE:Broad - Short
IES:None cut-off
CIE:Non-cut-off
Max.At80:100.6cd/klm
Max.At90:43.38cd/klm
Max.80-90:100.6cd/klm

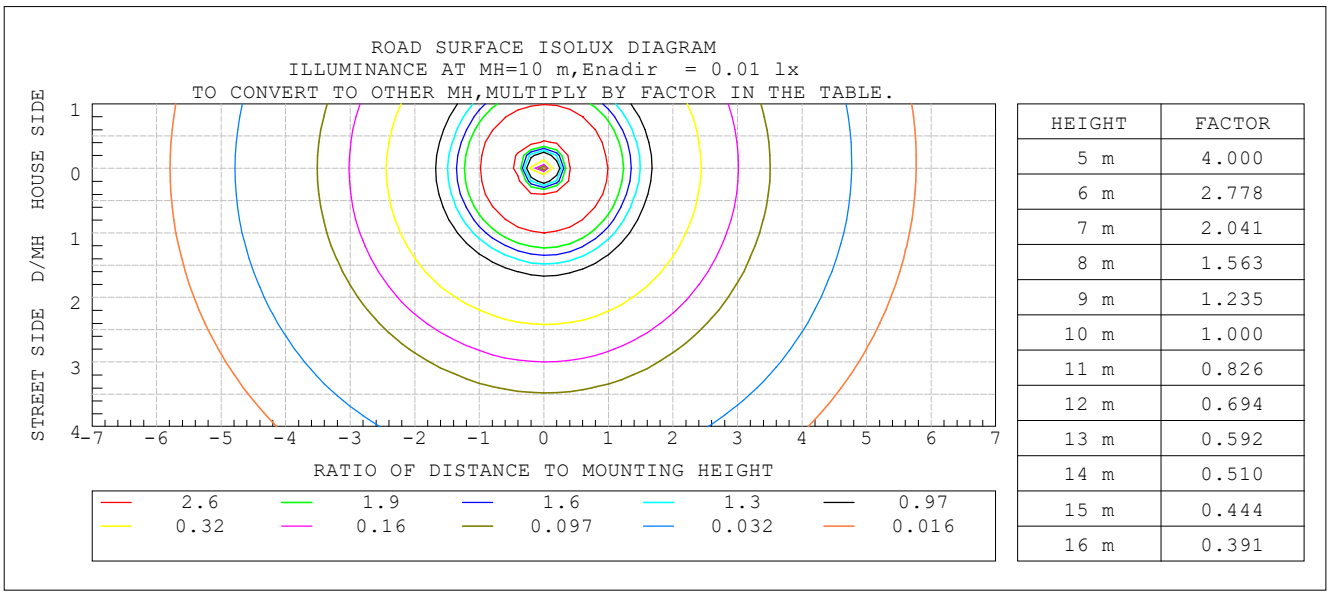
| ISOCANDELA DIAGRAM | |
|---|---|
| UNIT | cd |
| Imax=100% | 769 |
| 90% | 692 |
| 80% | 615 |
| 70% | 538 |
| 60% | 461 |
| 50% | 384 |
| 40% | 307 |
| 30% | 231 |
| 20% | 154 |
| 10% | 77 |
| 5% | 38 |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

# COEFFICIENT OF UTILIZATION CURVE AND ISOLUX DIAGRAM




| HEIGHT | FACTOR |
|---|---|
| 5 m | 4.000 |
| 6 m | 2.778 |
| 7 m | 2.041 |
| 8 m | 1.563 |
| 9 m | 1.235 |
| 10 m | 1.000 |
| 11 m | 0.826 |
| 12 m | 0.694 |
| 13 m | 0.592 |
| 14 m | 0.510 |
| 15 m | 0.444 |
| 16 m | 0.391 |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## ZONAL FLUX DIAGRAM

| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |

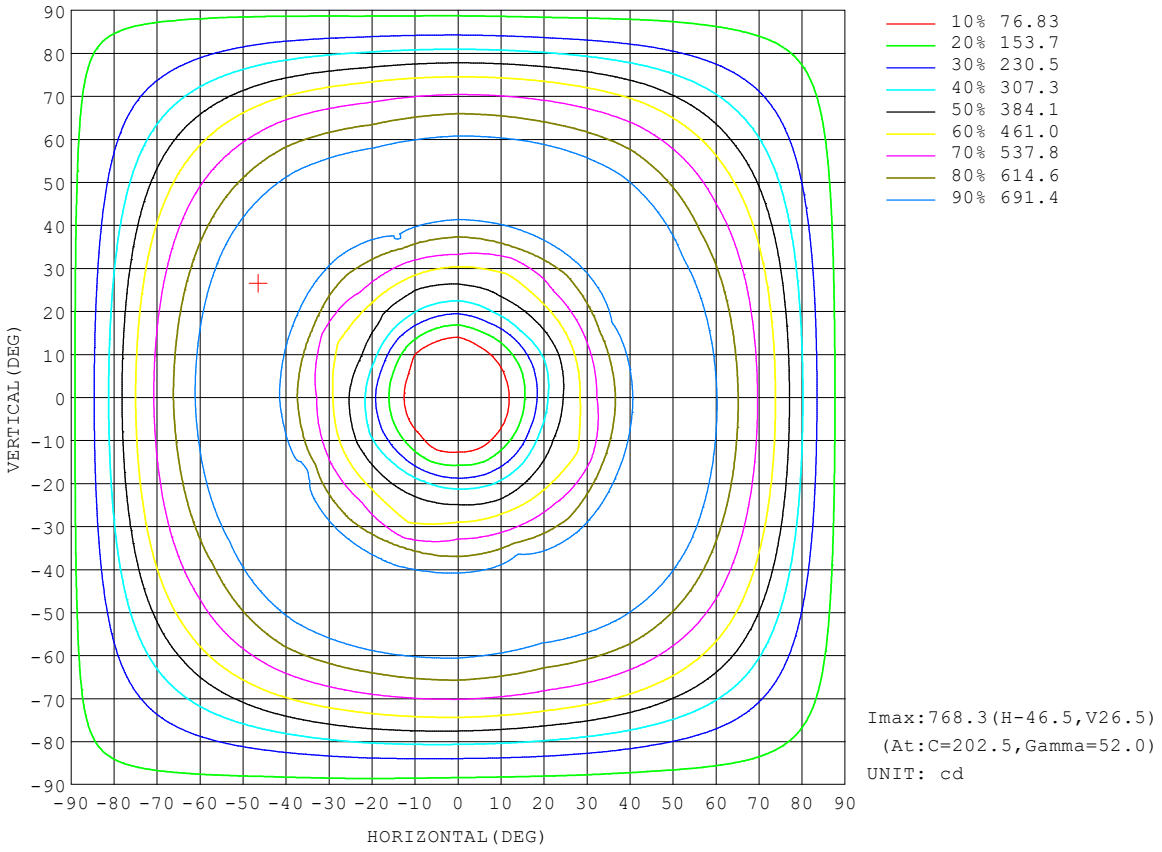
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 45.11 | 38.03 | 16.08 | 32.89 | 28.01 | 20.65 | 22.83 | 41.19 | 0- 10 | 0.8224 | 0.8224 | 0.02,0.02 |
| 20 | 281.6 | 266.7 | 264.1 | 267.5 | 252.8 | 252.8 | 249.9 | 270.3 | 10- 20 | 41.30 | 42.13 | 1.25,1.25 |
| 30 | 494.9 | 482.0 | 478.3 | 489.9 | 481.2 | 484.9 | 445.9 | 483.2 | 20- 30 | 177.6 | 219.7 | 6.53,6.53 |
| 40 | 675.6 | 666.1 | 666.1 | 670.8 | 656.0 | 658.3 | 659.8 | 668.8 | 30- 40 | 362.7 | 582.4 | 17.3,17.3 |
| 50 | 756.2 | 756.4 | 757.7 | 764.6 | 751.8 | 754.2 | 750.9 | 755.2 | 40- 50 | 562.8 | 1145 | 34,34 |
| 60 | 694.7 | 698.1 | 699.9 | 708.0 | 707.8 | 709.4 | 702.7 | 699.6 | 50- 60 | 664.5 | 1810 | 53.7,53.7 |
| 70 | 531.8 | 536.1 | 541.4 | 547.1 | 549.9 | 550.2 | 544.9 | 543.6 | 60- 70 | 616.6 | 2426 | 72.1,72.1 |
| 80 | 312.4 | 316.1 | 324.6 | 332.4 | 338.8 | 336.9 | 330.2 | 322.6 | 70- 80 | 466.8 | 2893 | 85.9,85.9 |
| 90 | 134.3 | 134.9 | 140.3 | 142.9 | 146.1 | 145.1 | 142.9 | 139.7 | 80- 90 | 237.2 | 3130 | 93,93 |
| 100 | 55.60 | 61.83 | 58.25 | 66.90 | 60.54 | 69.22 | 61.75 | 65.28 | 90-100 | 110.2 | 3240 | 96.2,96.2 |
| 110 | 33.77 | 41.04 | 34.98 | 42.09 | 36.04 | 43.50 | 36.50 | 41.61 | 100-110 | 52.91 | 3293 | 97.8,97.8 |
| 120 | 19.59 | 26.20 | 20.25 | 27.40 | 20.96 | 28.44 | 21.36 | 27.10 | 110-120 | 32.17 | 3326 | 98.8,98.8 |
| 130 | 13.27 | 18.38 | 13.70 | 19.28 | 14.02 | 19.96 | 14.33 | 19.14 | 120-130 | 18.61 | 3344 | 99.3,99.3 |
| 140 | 9.430 | 13.13 | 9.619 | 14.04 | 10.07 | 14.78 | 9.935 | 14.07 | 130-140 | 11.34 | 3356 | 99.6,99.6 |
| 150 | 7.418 | 9.304 | 7.552 | 9.815 | 8.147 | 10.40 | 7.754 | 9.740 | 140-150 | 6.618 | 3362 | 99.8,99.8 |
| 160 | 5.469 | 5.919 | 5.324 | 6.562 | 5.957 | 6.992 | 5.949 | 6.265 | 150-160 | 3.369 | 3365 | 99.9,99.9 |
| 170 | 4.185 | 3.941 | 4.342 | 4.200 | 4.990 | 4.707 | 4.934 | 4.150 | 160-170 | 1.507 | 3367 | 100,100 |
| 180 | 2.235 | 2.494 | 2.529 | 2.274 | 2.235 | 2.506 | 2.533 | 2.278 | 170-180 | 0.3552 | 3367 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## ISOCANDELA DIAGRAM

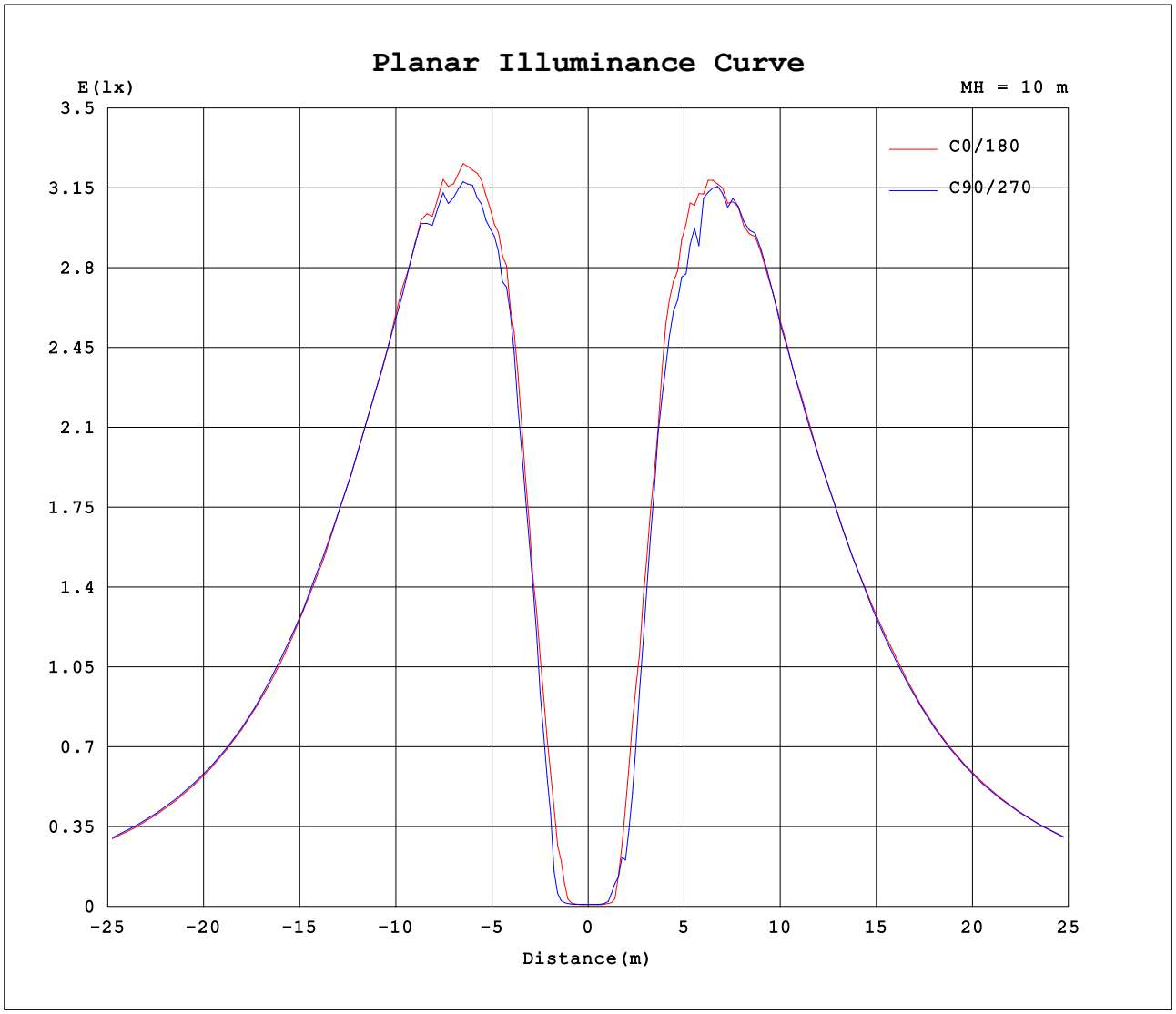
| | | |
|---|---|---|
| **Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz**<br>**Lamp Flux:3367.35x1 lm** | | |
| **NAME: 24W 4K** | **TYPE:** | **WEIGHT:** |
| **SPEC.:** | **DIM.:** | **SERIAL No.:** |
| **MFR.:** | **SUR.: 0.5*0.2** | **Shielding Angle:** |




C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## Planar Illuminance Curve



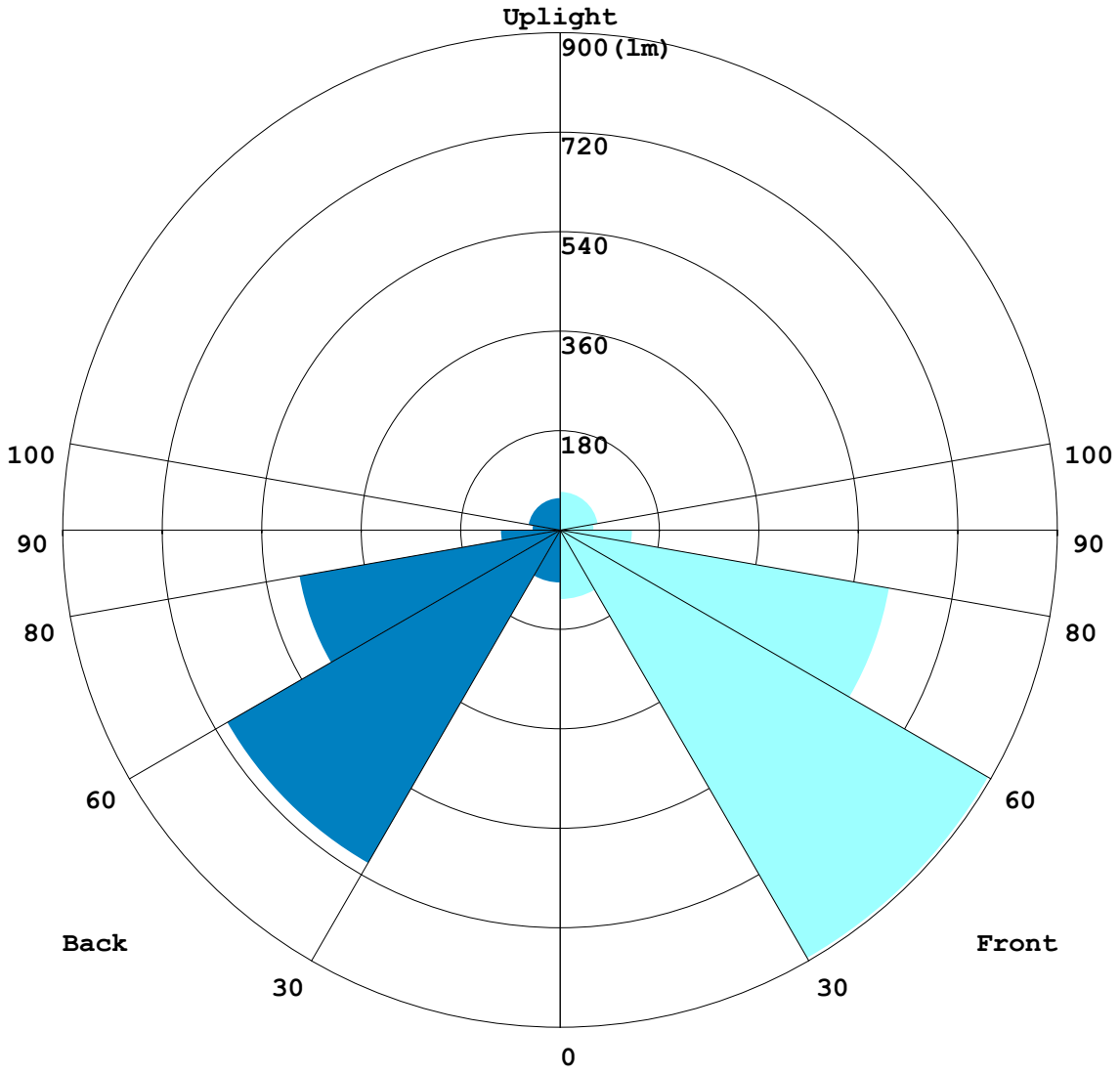

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## LCS REPORT

| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |

### LUMINAIRE CLASSIFICATION SYSTEM(LCS) GRAPH




C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## BUG REPORT

| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |

**IESNA Luminaire Flux Distribution Table:**

| Zone | Lumens | Luminaire % |
|---|---|---|
| FL - Front-Low(0-30) | 124.83 | 3.7 |
| FM - Front-Medium(30-60) | 894.41 | 26.6 |
| FH - Front-High(60-80) | 604.55 | 18.0 |
| FVH - Front-Very High(80-90) | 130.35 | 3.9 |
| Total Forward Light | 1883.4 | 55.9 |

| | | |
|---|---|---|
| BL - Back-Low(0-30) | 94.909 | 2.8 |
| BM - Back-Medium(30-60) | 695.6 | 20.7 |
| BH - Back-High(60-80) | 478.83 | 14.2 |
| BVH - Back-Very High(80-90) | 106.84 | 3.2 |
| Total Back Light | 1484 | 44.1 |

| | | |
|---|---|---|
| UL - Uplight-Low(90-100) | 110.15 | 3.3 |
| UH - Uplight-High(100-180) | 126.88 | 3.8 |
| Total Up Light | 237.04 | 7.0 |

| | |
|---|---|
| BUG(Back,Up,Glare) Rating | B1-U3-G2 |

| Zone | Downward Lumens | Upward Lumens | Total Lumens |
|---|---|---|---|
| House Side | 1376.2 | 107.82 | 1484 |
| Street Side | 1754.1 | 129.21 | 1883.4 |

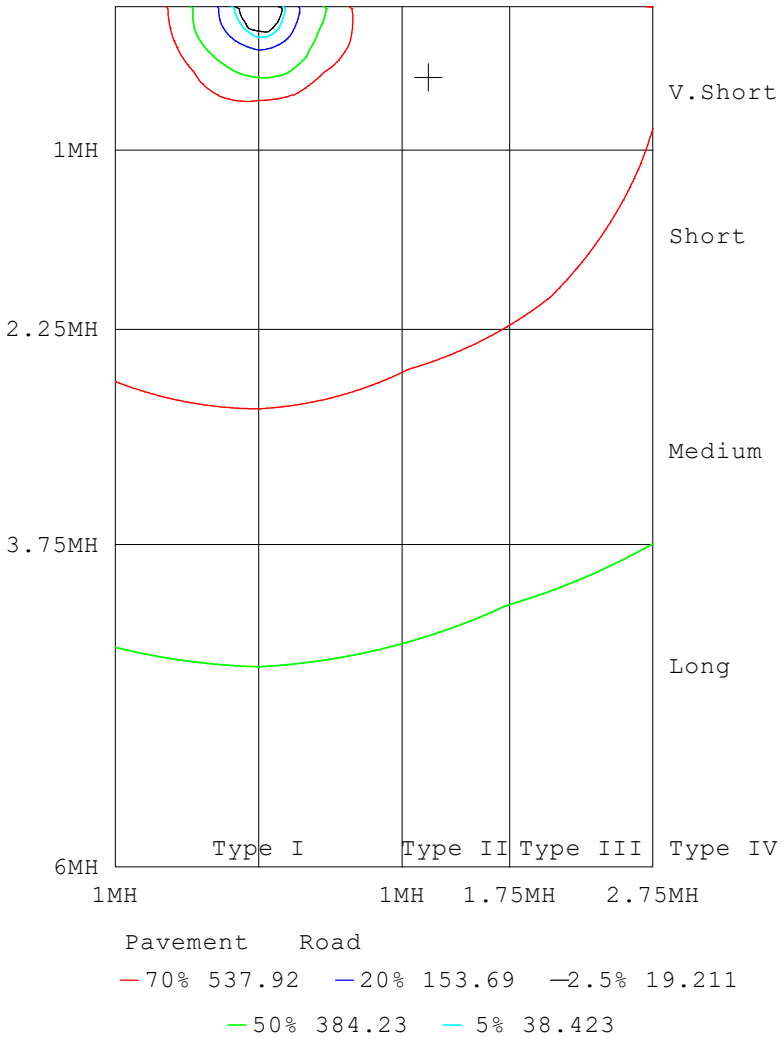
C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## ROAD ISOCANDELA REPORT

| | | |
|---|---|---|
| **Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz**<br>**Lamp Flux:3367.35x1 lm** | | |
| **NAME: 24W 4K** | **TYPE:** | **WEIGHT:** |
| **SPEC.:** | **DIM.:** | **SERIAL No.:** |
| **MFR.:** | **SUR.: 0.5*0.2** | **Shielding Angle:** |

ROAD SURFACE ISOCANDELA DIAGRAM




C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|---|---|
| Test:U:119.91V I:0.1873A P:22.322W PF:0.9938 Freq:59.98Hz<br>Lamp Flux:3367.35x1 lm | | |
| NAME: 24W 4K | TYPE: | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: | SUR.: 0.5*0.2 | Shielding Angle: |

Table--1 UNIT: cd

| γ (DEG) \ C(DEG) | 0 | 22.5 | 45 | 67.5 | 90 | 112.5 | 135 | 157.5 | 180 | 202.5 | 225 | 247.5 | 270 | 292.5 | 315 | 337.5 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0 | 0.97 | 0.99 | 0.97 | 1.03 | 1.07 | 1.06 | 0.98 | 1.01 | 0.97 | 0.99 | 0.97 | 1.03 | 1.07 | 1.06 | 0.98 | 1.01 | | | |
| 5 | 1.77 | 1.44 | 1.27 | 1.15 | 1.17 | 1.27 | 1.30 | 1.30 | 1.20 | 1.13 | 1.10 | 1.31 | 1.55 | 1.43 | 1.73 | 1.91 | | | |
| 10 | 45.1 | 41.2 | 38.0 | 23.9 | 16.1 | 23.0 | 32.9 | 36.1 | 28.0 | 28.8 | 20.7 | 15.6 | 22.8 | 24.0 | 41.2 | 46.3 | | | |
| 15 | 144 | 138 | 134 | 131 | 133 | 121 | 132 | 124 | 122 | 119 | 104 | 107 | 104 | 119 | 131 | 138 | | | |
| 20 | 282 | 286 | 267 | 266 | 264 | 267 | 268 | 256 | 253 | 265 | 253 | 248 | 250 | 278 | 270 | 263 | | | |
| 25 | 397 | 399 | 388 | 370 | 386 | 383 | 382 | 376 | 374 | 401 | 381 | 364 | 357 | 381 | 382 | 374 | | | |
| 30 | 495 | 455 | 482 | 486 | 478 | 444 | 490 | 474 | 481 | 456 | 485 | 464 | 446 | 450 | 483 | 498 | | | |
| 35 | 577 | 552 | 566 | 596 | 566 | 543 | 571 | 605 | 573 | 545 | 566 | 591 | 569 | 550 | 566 | 598 | | | |
| 40 | 676 | 680 | 666 | 703 | 666 | 653 | 671 | 701 | 656 | 657 | 658 | 693 | 660 | 670 | 669 | 698 | | | |
| 45 | 735 | 733 | 732 | 729 | 729 | 727 | 736 | 732 | 727 | 729 | 727 | 723 | 723 | 730 | 726 | 731 | | | |
| 50 | 756 | 764 | 756 | 749 | 758 | 756 | 765 | 752 | 752 | 759 | 754 | 743 | 751 | 759 | 755 | 749 | | | |
| 55 | 747 | 756 | 749 | 730 | 755 | 758 | 759 | 739 | 754 | 760 | 753 | 729 | 752 | 750 | 749 | 727 | | | |
| 60 | 695 | 701 | 698 | 682 | 700 | 707 | 708 | 691 | 708 | 711 | 709 | 692 | 703 | 703 | 700 | 680 | | | |
| 65 | 617 | 621 | 623 | 609 | 627 | 627 | 632 | 613 | 633 | 633 | 634 | 616 | 628 | 625 | 627 | 604 | | | |
| 70 | 532 | 538 | 536 | 532 | 541 | 544 | 547 | 539 | 550 | 552 | 550 | 537 | 545 | 544 | 544 | 527 | | | |
| 75 | 435 | 442 | 440 | 439 | 448 | 452 | 454 | 453 | 461 | 459 | 459 | 446 | 451 | 449 | 449 | 435 | | | |
| 80 | 312 | 317 | 316 | 317 | 325 | 331 | 332 | 331 | 339 | 338 | 337 | 326 | 330 | 326 | 323 | 313 | | | |
| 85 | 197 | 199 | 200 | 205 | 209 | 214 | 216 | 219 | 222 | 218 | 220 | 213 | 213 | 208 | 207 | 202 | | | |
| 90 | 134 | 135 | 135 | 139 | 140 | 143 | 143 | 145 | 146 | 146 | 145 | 144 | 143 | 141 | 140 | 138 | | | |
| 95 | 92.8 | 94.7 | 93.8 | 95.7 | 98.0 | 102 | 102 | 103 | 104 | 105 | 104 | 102 | 101 | 101 | 99.0 | 96.1 | | | |
| 100 | 55.6 | 62.0 | 61.8 | 62.7 | 58.2 | 67.1 | 66.9 | 67.6 | 60.5 | 69.2 | 69.2 | 68.1 | 61.8 | 67.1 | 65.3 | 63.3 | | | |
| 105 | 42.9 | 48.2 | 48.7 | 48.5 | 44.3 | 50.7 | 50.9 | 51.1 | 45.5 | 51.9 | 52.6 | 52.0 | 46.4 | 50.9 | 50.4 | 48.9 | | | |
| 110 | 33.8 | 40.1 | 41.0 | 40.4 | 35.0 | 41.5 | 42.1 | 42.3 | 36.0 | 42.3 | 43.5 | 43.1 | 36.5 | 41.4 | 41.6 | 40.6 | | | |
| 115 | 25.3 | 32.3 | 33.5 | 33.0 | 26.3 | 33.9 | 34.7 | 34.7 | 27.2 | 34.5 | 35.9 | 35.5 | 27.6 | 33.3 | 34.1 | 33.1 | | | |
| 120 | 19.6 | 24.9 | 26.2 | 25.7 | 20.3 | 26.4 | 27.4 | 27.1 | 21.0 | 26.9 | 28.4 | 28.0 | 21.4 | 25.8 | 27.1 | 25.9 | | | |
| 125 | 16.0 | 20.1 | 21.6 | 20.8 | 16.5 | 21.2 | 22.5 | 21.8 | 16.9 | 21.6 | 23.4 | 22.9 | 17.3 | 20.7 | 22.4 | 21.1 | | | |
| 130 | 13.3 | 16.6 | 18.4 | 17.4 | 13.7 | 17.7 | 19.3 | 18.2 | 14.0 | 18.0 | 20.0 | 19.2 | 14.3 | 17.0 | 19.1 | 17.8 | | | |
| 135 | 11.1 | 13.9 | 15.7 | 14.7 | 11.6 | 15.0 | 16.6 | 15.5 | 11.8 | 15.0 | 17.3 | 16.5 | 11.8 | 14.0 | 16.7 | 15.2 | | | |
| 140 | 9.43 | 11.7 | 13.1 | 12.2 | 9.62 | 12.6 | 14.0 | 13.0 | 10.1 | 12.7 | 14.8 | 13.8 | 9.93 | 11.6 | 14.1 | 12.9 | | | |
| 145 | 8.60 | 9.89 | 11.2 | 10.2 | 8.85 | 10.6 | 11.9 | 10.9 | 9.34 | 10.8 | 12.6 | 11.6 | 9.03 | 9.59 | 11.8 | 10.8 | | | |
| 150 | 7.42 | 8.12 | 9.30 | 8.28 | 7.55 | 8.75 | 9.82 | 8.78 | 8.15 | 8.85 | 10.4 | 9.46 | 7.75 | 7.86 | 9.74 | 8.78 | | | |
| 155 | 6.12 | 6.66 | 7.64 | 6.61 | 6.02 | 7.06 | 8.05 | 7.02 | 6.54 | 7.13 | 8.55 | 7.77 | 6.49 | 6.57 | 7.96 | 7.12 | | | |
| 160 | 5.47 | 5.78 | 5.92 | 5.67 | 5.32 | 6.09 | 6.56 | 6.14 | 5.96 | 6.36 | 6.99 | 6.66 | 5.95 | 5.96 | 6.27 | 6.15 | | | |
| 165 | 4.90 | 4.87 | 4.66 | 4.94 | 4.90 | 5.03 | 4.99 | 5.22 | 5.51 | 5.77 | 5.68 | 5.63 | 5.55 | 5.40 | 4.99 | 5.11 | | | |
| 170 | 4.19 | 4.16 | 3.94 | 4.19 | 4.34 | 4.37 | 4.20 | 4.47 | 4.99 | 4.95 | 4.71 | 4.68 | 4.93 | 4.76 | 4.15 | 4.28 | | | |
| 175 | 3.02 | 3.16 | 3.08 | 3.21 | 3.25 | 3.31 | 3.26 | 3.38 | 3.74 | 3.70 | 3.66 | 3.54 | 3.42 | 3.35 | 3.17 | 3.18 | | | |
| 180 | 2.23 | 2.54 | 2.49 | 2.52 | 2.53 | 2.41 | 2.27 | 2.34 | 2.23 | 2.54 | 2.51 | 2.51 | 2.53 | 2.41 | 2.28 | 2.34 | | | |

C Range: 0 - 360DEG
C Interval: 22.5DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:JZ
Test Date:2023-07-10

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.444
Humidity:65.0%
Test Distance:7.030m [K=1.0000]
Remarks: