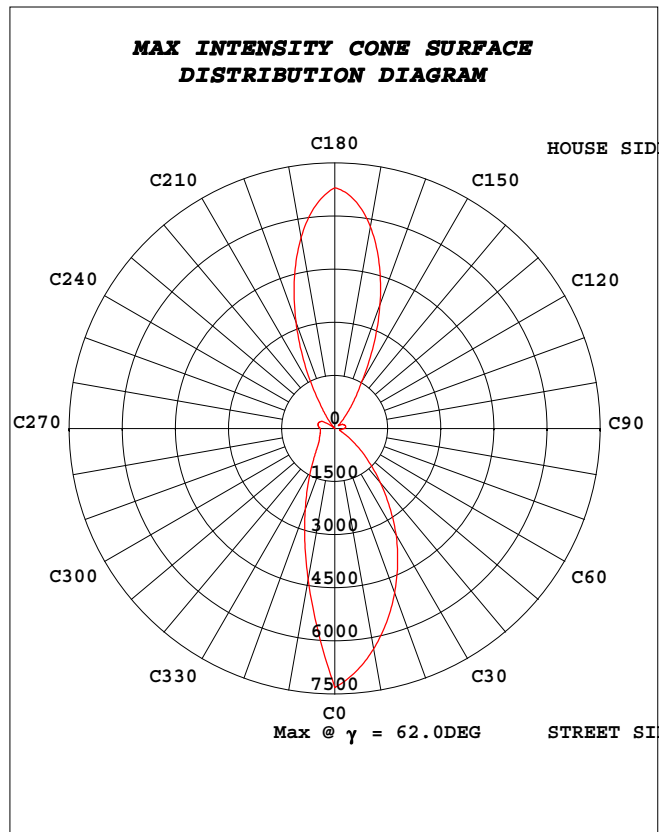
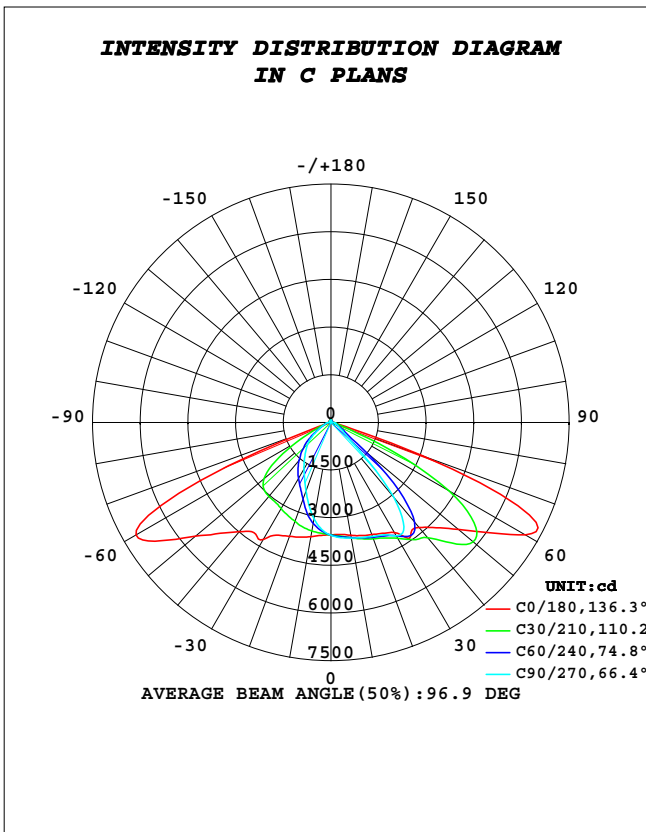


STREETLIGHT PHOTOMETRIC TEST REPORT

| | | |
|---|--------------------|--|
| Test:U:36.00V I:2.220A P:80.00W PF:1.000 Lamp Flux:11798.6x1 lm | | |
| NAME: 144PCS-80W | TYPE:CREE 3030 LED | |
| MFR.: HITECHLED | | |
| | | |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 147.48 lm/W | | | |
|------------------|-------------|-----------------------------------|--------|-----------------------|------|
| MODEL | HT-SWD-1H80 | Imax(cd) | 7316 | η street_up(%) | 1.6 |
| NOMINAL POWER(W) | 80 | LOR(%) | 100.0 | η street_down(%) | 54.5 |
| RATED VOLTAGE(V) | 36 | TOTAL FLUX(lm) | 11799 | η house_up(%) | 1.2 |
| NOMINAL FLUX(lm) | 11798.6 | MAXIMUM @(C, γ) | 0,62.0 | η house_down(%) | 42.7 |
| LAMPS INSIDE | 1 | η up(%) | 2.8 | 76 FLASHAREA(m2) | |
| TEST VOLTAGE(V) | 36 | η down(%) | 97.2 | SLI | |



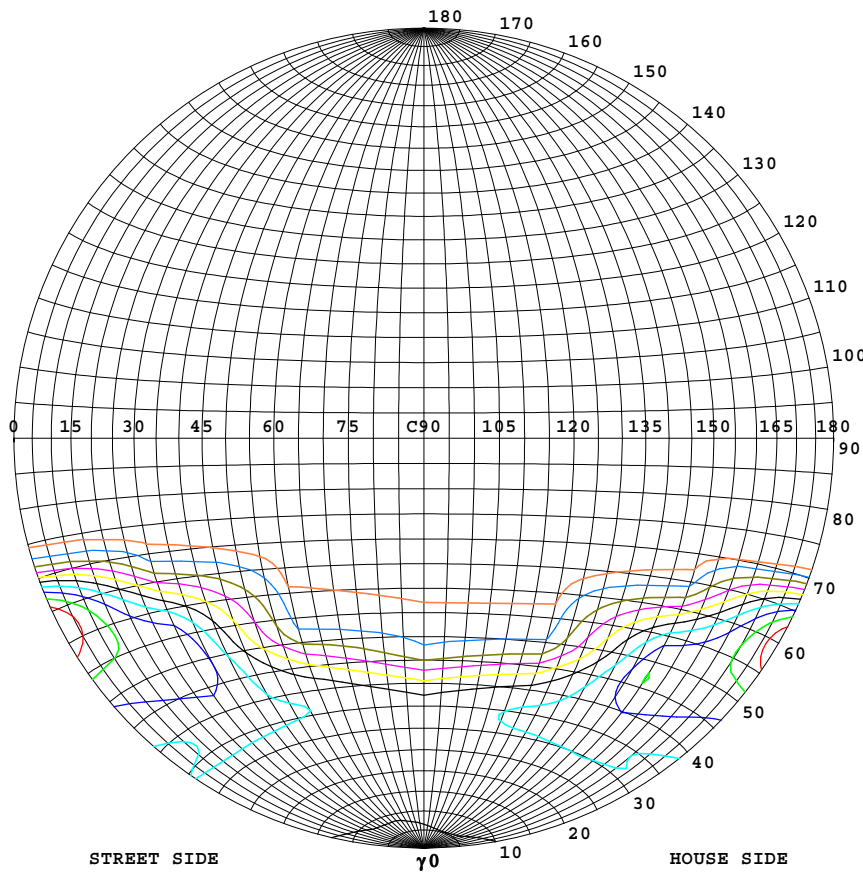
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

Note: SLI: Specific Luminaire Index

STREETLIGHT ISOCANDELA DIAGRAM

| | | |
|---|--------------------|--|
| Test:U:36.00V I:2.220A P:80.00W PF:1.000 Lamp Flux:11798.6x1 lm | | |
| NAME: 144PCS-80W | TYPE:CREE 3030 LED | |
| MFR.: HITECHLED | | |
| | | |



Classification:

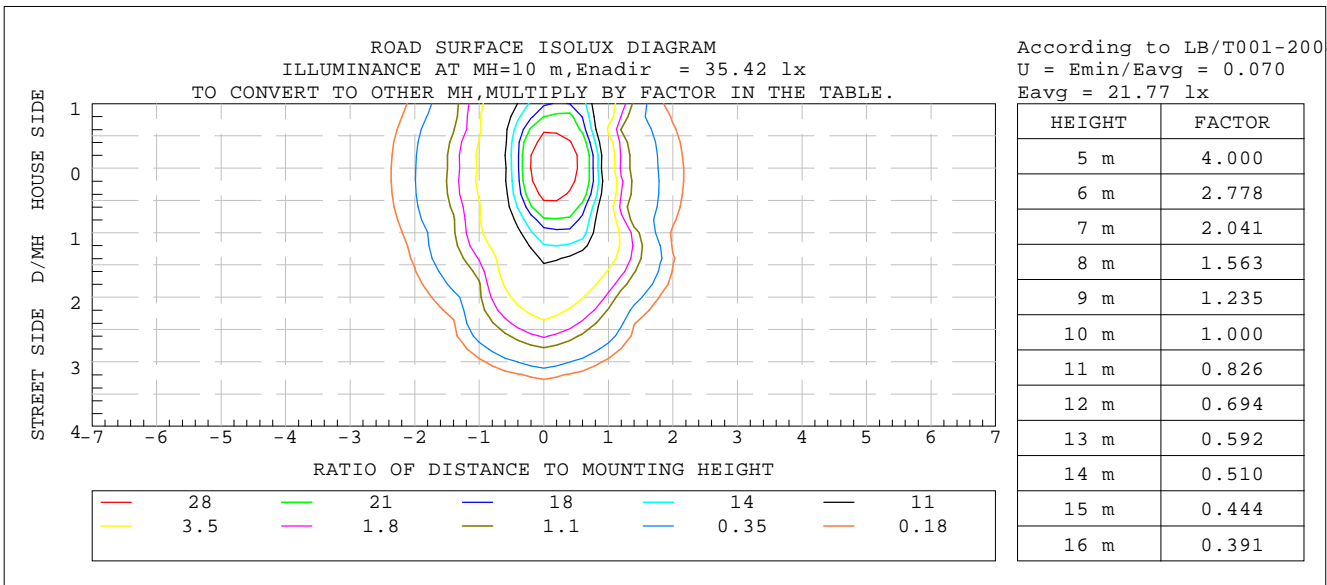
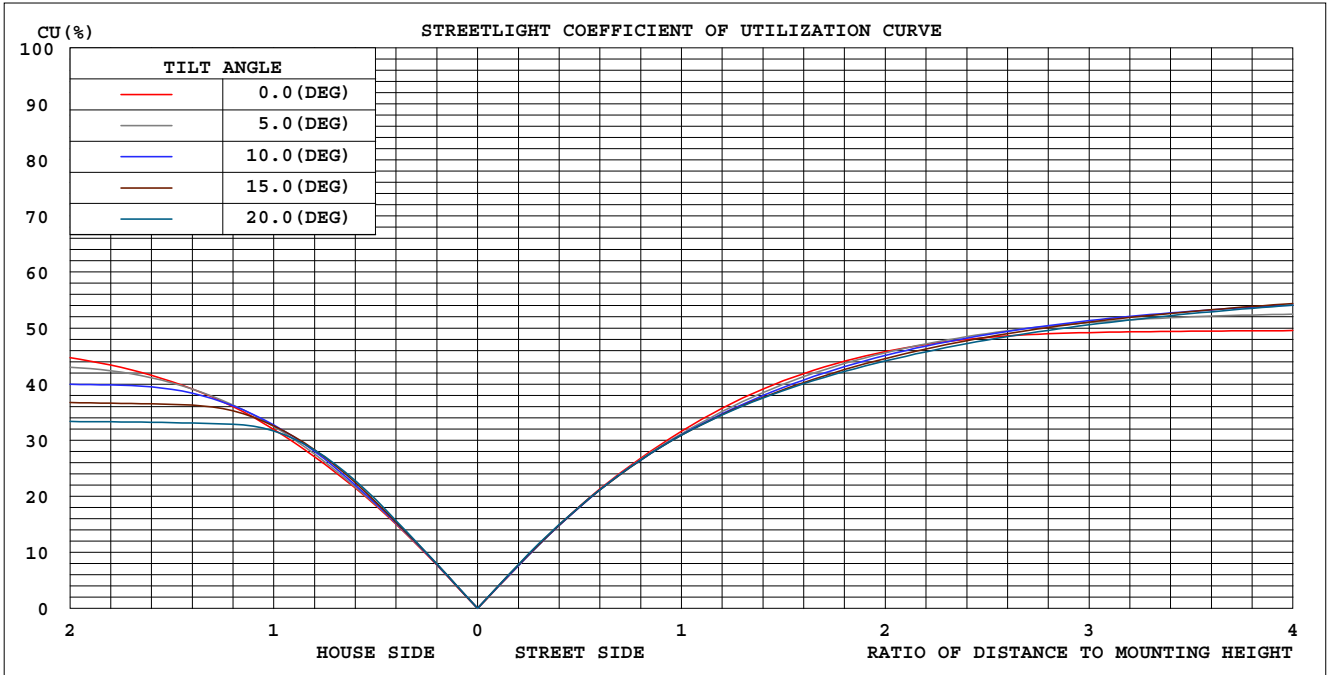
IES:Type III - Short
 CIE:Broad - Intermediate
 IES:Cut-off
 CIE:Full cut-off
 Max.At80:14.08cd/klm
 Max.At90:5.768cd/klm
 Max.80-90:14.08cd/klm
 NRB 5101:Limited[1.7%]

| ISOCANDELA DIAGRAM | |
|--------------------|------|
| UNIT | cd |
| Imax=100% | 7316 |
| 90% | 6585 |
| 80% | 5853 |
| 70% | 5121 |
| 60% | 4390 |
| 50% | 3658 |
| 40% | 2927 |
| 30% | 2195 |
| 20% | 1463 |
| 10% | 732 |
| 5% | 366 |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-06-09

gamma Range: 0 - 180DEG
gamma Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

COEFFICIENT OF UTILIZATION CURVE
AND ISOLUX DIAGRAM



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

ZONAL FLUX DIAGRAM

| | | |
|---|--------------------|--|
| Test:U:36.00V I:2.220A P:80.00W PF:1.000 Lamp Flux:11798.6x1 lm | | |
| NAME: 144PCS-80W | TYPE:CREE 3030 LED | |
| MFR.: HITECHLED | | |
| | | |

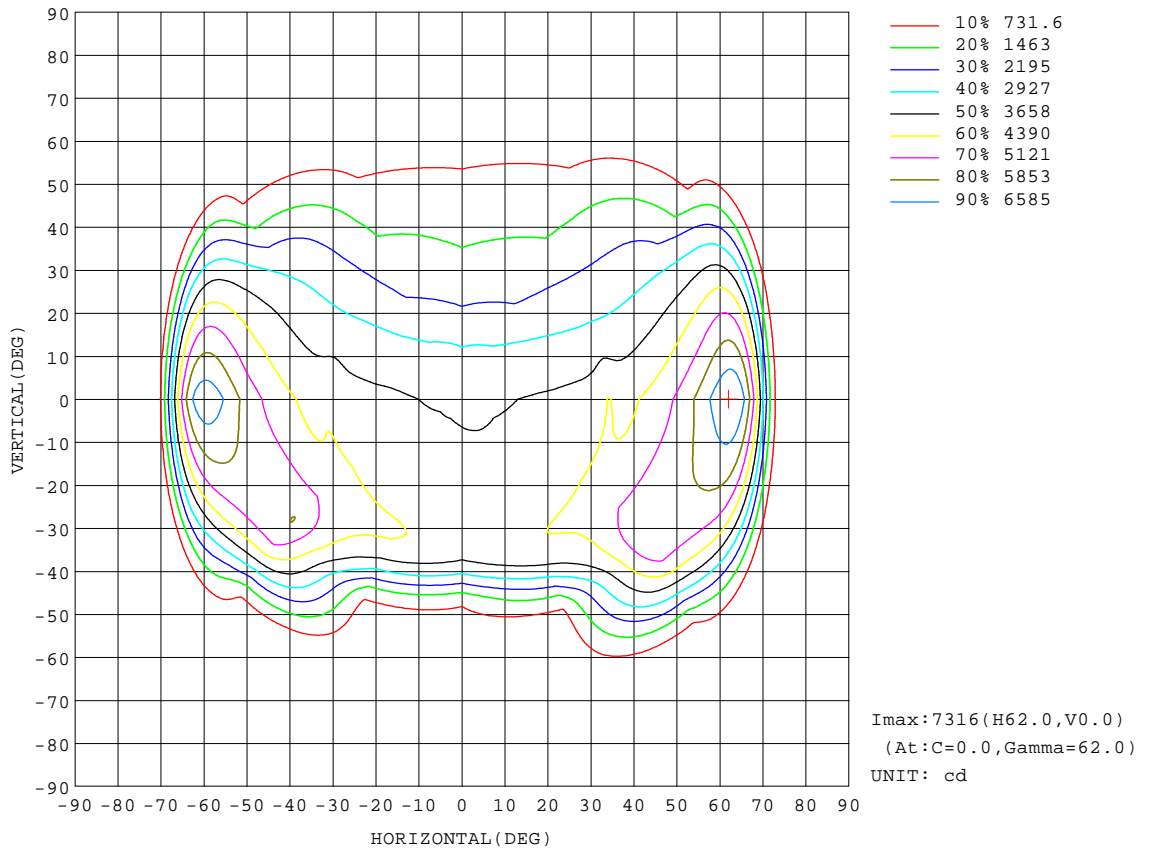
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp | |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|-----------|--|
| 10 | 3607 | 3687 | 3697 | 3748 | 3655 | 3350 | 3079 | 3275 | 0- 10 | 336.8 | 336.8 | 2.85,2.85 | |
| 20 | 3759 | 3872 | 3819 | 3942 | 3815 | 2947 | 2302 | 2852 | 10- 20 | 980.9 | 1318 | 11.2,11.2 | |
| 30 | 4005 | 4167 | 4118 | 4357 | 4244 | 2595 | 1711 | 2446 | 20- 30 | 1571 | 2889 | 24.5,24.5 | |
| 40 | 4315 | 4413 | 3071 | 4513 | 4489 | 2308 | 1255 | 2132 | 30- 40 | 2150 | 5039 | 42.7,42.7 | |
| 50 | 5240 | 3593 | 594.4 | 3251 | 5570 | 1897 | 885.7 | 1834 | 40- 50 | 2374 | 7413 | 62.8,62.8 | |
| 60 | 7068 | 2333 | 296.1 | 1380 | 7087 | 879.4 | 461.2 | 1124 | 50- 60 | 2272 | 9686 | 82.1,82.1 | |
| 70 | 3044 | 354.8 | 189.6 | 209.1 | 781.7 | 270.5 | 220.3 | 355.2 | 60- 70 | 1437 | 11123 | 94.3,94.3 | |
| 80 | 146.5 | 152.6 | 129.5 | 118.1 | 129.3 | 122.3 | 143.2 | 165.6 | 70- 80 | 252.3 | 11375 | 96.4,96.4 | |
| 90 | 55.15 | 39.10 | 18.34 | 22.60 | 59.38 | 34.88 | 33.24 | 57.64 | 80- 90 | 94.81 | 11470 | 97.2,97.2 | |
| 100 | 49.67 | 27.24 | 15.87 | 24.50 | 60.27 | 39.45 | 29.31 | 39.39 | 90-100 | 37.79 | 11508 | 97.5,97.5 | |
| 110 | 61.34 | 34.69 | 20.94 | 30.86 | 70.64 | 48.70 | 35.86 | 48.74 | 100-110 | 40.86 | 11548 | 97.9,97.9 | |
| 120 | 63.78 | 42.40 | 27.25 | 37.31 | 69.97 | 58.18 | 45.15 | 58.72 | 110-120 | 46.05 | 11595 | 98.3,98.3 | |
| 130 | 65.60 | 52.53 | 36.38 | 42.68 | 74.70 | 63.81 | 56.59 | 69.42 | 120-130 | 48.20 | 11643 | 98.7,98.7 | |
| 140 | 69.73 | 61.70 | 46.40 | 49.03 | 79.12 | 67.54 | 66.21 | 76.62 | 130-140 | 47.05 | 11690 | 99.1,99.1 | |
| 150 | 78.35 | 70.46 | 57.44 | 58.47 | 85.45 | 74.27 | 71.06 | 79.88 | 140-150 | 42.56 | 11732 | 99.4,99.4 | |
| 160 | 84.54 | 79.00 | 68.60 | 68.66 | 90.26 | 82.44 | 76.94 | 83.40 | 150-160 | 34.72 | 11767 | 99.7,99.7 | |
| 170 | 89.76 | 85.94 | 78.42 | 78.92 | 93.10 | 87.83 | 83.29 | 87.13 | 160-170 | 23.23 | 11790 | 99.9,99.9 | |
| 180 | 93.96 | 89.78 | 84.15 | 86.21 | 93.93 | 89.92 | 84.19 | 86.36 | 170-180 | 8.288 | 11799 | 100,100 | |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2018-06-09

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
 Humidity:65.0%
 Test Distance:8.000m [K=0.7063]
 Remarks:

ISOCANDELA DIAGRAM

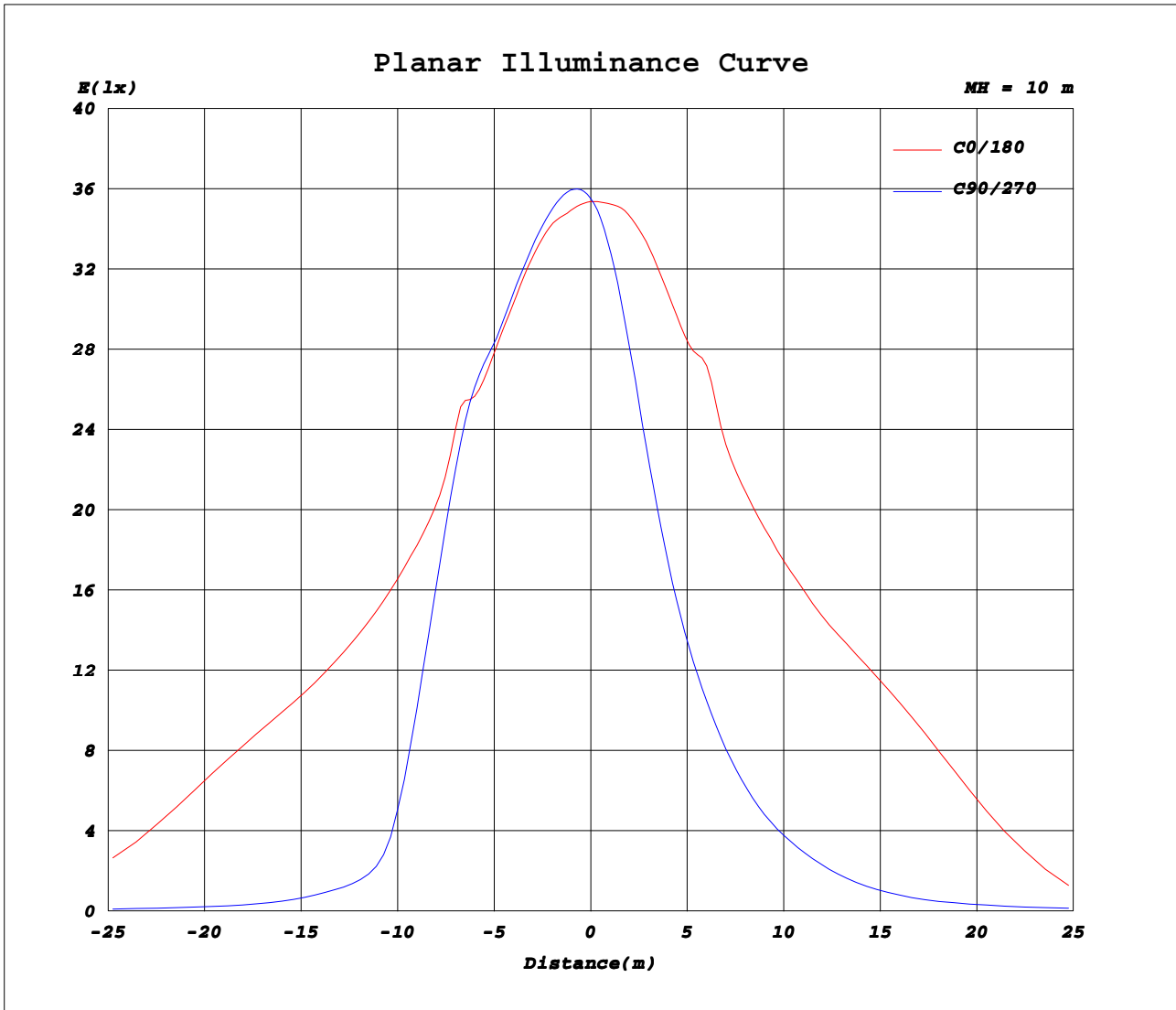
| | | |
|---|--------------------|--|
| Test:U:36.00V I:2.220A P:80.00W PF:1.000 Lamp Flux:11798.6x1 lm | | |
| NAME: 144PCS-80W | TYPE:CREE 3030 LED | |
| MFR.: HITECHLED | | |
| | | |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|---|--------------------|--|
| Test:U:36.00V I:2.220A P:80.00W PF:1.000 Lamp Flux:11798.6x1 lm | | |
| NAME: 144PCS-80W | TYPE:CREE 3030 LED | |
| MFR.: HITECHLED | | |
| | | |

Table--1

UNIT: cd

| C (DEG) γ (DEG) | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0 | 3536 | 3543 | 3545 | 3553 | 3553 | 3538 | 3536 | 3543 | 3545 | 3553 | 3553 | 3538 | | | | | | | |
| 5 | 3544 | 3593 | 3614 | 3640 | 3654 | 3638 | 3569 | 3499 | 3428 | 3378 | 3405 | 3458 | | | | | | | |
| 10 | 3607 | 3692 | 3683 | 3697 | 3743 | 3753 | 3655 | 3469 | 3232 | 3079 | 3175 | 3374 | | | | | | | |
| 15 | 3688 | 3792 | 3761 | 3754 | 3826 | 3854 | 3739 | 3411 | 2942 | 2692 | 2868 | 3293 | | | | | | | |
| 20 | 3759 | 3897 | 3847 | 3819 | 3923 | 3961 | 3815 | 3316 | 2578 | 2302 | 2516 | 3187 | | | | | | | |
| 25 | 3854 | 4015 | 3943 | 3909 | 4052 | 4127 | 3919 | 3231 | 2282 | 1975 | 2205 | 3060 | | | | | | | |
| 30 | 4005 | 4212 | 4122 | 4118 | 4302 | 4412 | 4244 | 3136 | 2053 | 1711 | 1957 | 2934 | | | | | | | |
| 35 | 4377 | 4502 | 4351 | 4010 | 4454 | 4582 | 4233 | 3065 | 1822 | 1473 | 1737 | 2821 | | | | | | | |
| 40 | 4315 | 4731 | 4094 | 3071 | 3871 | 5156 | 4489 | 3042 | 1574 | 1255 | 1526 | 2738 | | | | | | | |
| 45 | 4685 | 5366 | 3034 | 1437 | 2429 | 5803 | 4937 | 2984 | 1315 | 1071 | 1317 | 2672 | | | | | | | |
| 50 | 5240 | 5844 | 1342 | 594 | 808 | 5694 | 5570 | 2750 | 1044 | 886 | 1113 | 2555 | | | | | | | |
| 55 | 6038 | 5504 | 571 | 431 | 449 | 4612 | 6489 | 2150 | 752 | 665 | 870 | 2247 | | | | | | | |
| 60 | 7068 | 4262 | 404 | 296 | 299 | 2461 | 7087 | 1264 | 495 | 461 | 600 | 1648 | | | | | | | |
| 65 | 6893 | 2124 | 264 | 246 | 221 | 573 | 5277 | 602 | 332 | 344 | 390 | 903 | | | | | | | |
| 70 | 3044 | 500 | 210 | 190 | 188 | 230 | 782 | 304 | 237 | 220 | 272 | 438 | | | | | | | |
| 75 | 269 | 231 | 170 | 157 | 154 | 163 | 175 | 176 | 182 | 181 | 212 | 251 | | | | | | | |
| 80 | 146 | 165 | 141 | 130 | 117 | 119 | 129 | 119 | 125 | 143 | 166 | 165 | | | | | | | |
| 85 | 108 | 122 | 97.3 | 78.4 | 57.1 | 48.9 | 83.9 | 67.6 | 61.3 | 85.2 | 95.8 | 122 | | | | | | | |
| 90 | 55.1 | 50.5 | 27.7 | 18.3 | 17.2 | 28.0 | 59.4 | 41.0 | 28.8 | 33.2 | 47.2 | 68.1 | | | | | | | |
| 95 | 46.9 | 33.6 | 20.1 | 17.4 | 16.5 | 28.3 | 56.6 | 42.8 | 29.1 | 38.7 | 32.3 | 43.9 | | | | | | | |
| 100 | 49.7 | 34.0 | 20.5 | 15.9 | 17.6 | 31.4 | 60.3 | 47.4 | 31.5 | 29.3 | 33.3 | 45.5 | | | | | | | |
| 105 | 55.4 | 37.8 | 23.0 | 18.0 | 19.9 | 35.7 | 66.8 | 52.8 | 35.2 | 31.6 | 36.8 | 49.9 | | | | | | | |
| 110 | 61.3 | 43.0 | 26.4 | 20.9 | 22.5 | 39.2 | 70.6 | 57.6 | 39.8 | 35.9 | 41.3 | 56.2 | | | | | | | |
| 115 | 64.1 | 47.5 | 30.0 | 24.0 | 25.5 | 42.2 | 69.4 | 61.4 | 44.5 | 40.4 | 46.5 | 62.1 | | | | | | | |
| 120 | 63.8 | 50.3 | 34.5 | 27.3 | 29.3 | 45.3 | 70.0 | 66.4 | 50.0 | 45.2 | 52.4 | 65.1 | | | | | | | |
| 125 | 63.8 | 55.4 | 39.5 | 31.6 | 33.4 | 47.0 | 72.8 | 67.9 | 55.6 | 50.8 | 58.8 | 69.8 | | | | | | | |
| 130 | 65.6 | 60.2 | 44.8 | 36.4 | 37.5 | 47.8 | 74.7 | 67.3 | 60.3 | 56.6 | 64.8 | 74.0 | | | | | | | |
| 135 | 67.1 | 64.5 | 50.1 | 41.3 | 41.4 | 49.6 | 76.3 | 67.5 | 63.3 | 61.8 | 69.8 | 77.3 | | | | | | | |
| 140 | 69.7 | 68.3 | 55.1 | 46.4 | 45.2 | 52.8 | 79.1 | 70.3 | 64.8 | 66.2 | 73.9 | 79.4 | | | | | | | |
| 145 | 74.0 | 71.8 | 60.2 | 51.7 | 49.5 | 57.3 | 82.5 | 75.0 | 66.1 | 69.2 | 76.8 | 80.3 | | | | | | | |
| 150 | 78.4 | 75.5 | 65.4 | 57.4 | 54.5 | 62.4 | 85.5 | 79.7 | 68.8 | 71.1 | 78.5 | 81.3 | | | | | | | |
| 155 | 82.1 | 79.2 | 70.6 | 63.1 | 60.0 | 67.2 | 88.2 | 83.5 | 73.5 | 73.2 | 79.5 | 83.1 | | | | | | | |
| 160 | 84.5 | 82.5 | 75.5 | 68.6 | 65.9 | 71.4 | 90.3 | 86.5 | 78.4 | 76.9 | 81.5 | 85.3 | | | | | | | |
| 165 | 86.6 | 85.2 | 80.0 | 73.8 | 71.5 | 76.0 | 92.0 | 89.0 | 82.2 | 80.9 | 84.0 | 87.1 | | | | | | | |
| 170 | 89.8 | 88.2 | 83.7 | 78.4 | 76.8 | 81.0 | 93.1 | 90.8 | 84.8 | 83.3 | 85.7 | 88.5 | | | | | | | |
| 175 | 92.7 | 91.2 | 86.2 | 81.9 | 81.4 | 85.2 | 93.9 | 92.2 | 86.6 | 84.5 | 86.0 | 89.2 | | | | | | | |
| 180 | 94.0 | 92.4 | 87.1 | 84.2 | 84.5 | 87.9 | 93.9 | 92.6 | 87.2 | 84.2 | 84.7 | 88.0 | | | | | | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2018-06-09

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.267
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks: