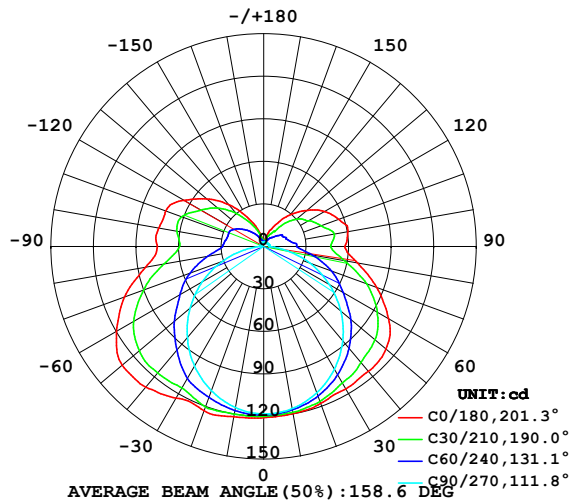


LUMINAIRE PHOTOMETRIC TEST REPORT

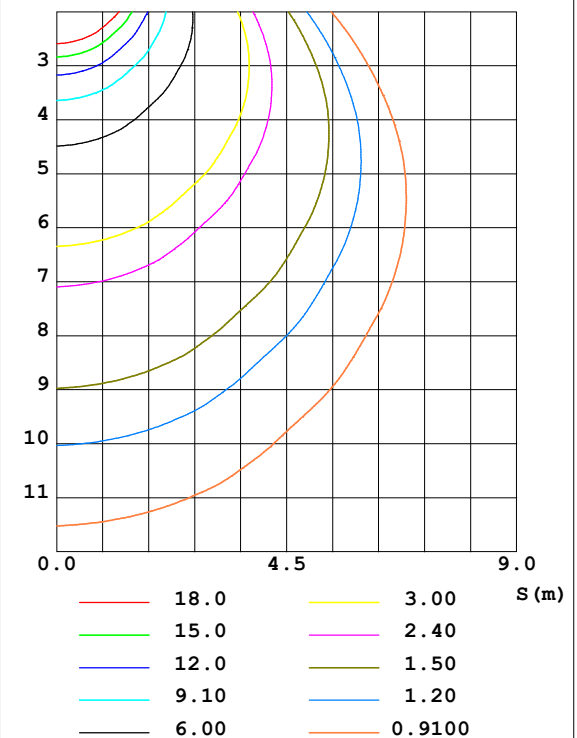
| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 38.43 lm/W | | | |
|-------------------|---------|----------------------------------|---------|---------------------|------------|
| MODEL | 5050 | I _{max} (cd) | 130.5 | S/MH (C0/180) | 1.46 |
| NOMINAL POWER (W) | 18 | LOR (%) | 100.0 | S/MH (C90/270) | 1.26 |
| RATED VOLTAGE (V) | 24 | TOTAL FLUX (lm) | 670.38 | η UP, DN (C0-180) | 12.4, 36.9 |
| NOMINAL FLUX (lm) | 670.383 | CIE CLASS | SEMI-D. | η UP, DN (C180-360) | 13.3, 37.4 |
| LAMPS INSIDE | 1 | η up (%) | 25.7 | CIBSE SHR NOM | 1.50 |
| TEST VOLTAGE (V) | 24.0 | η down (%) | 74.3 | CIBSE SHR MAX | 1.55 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



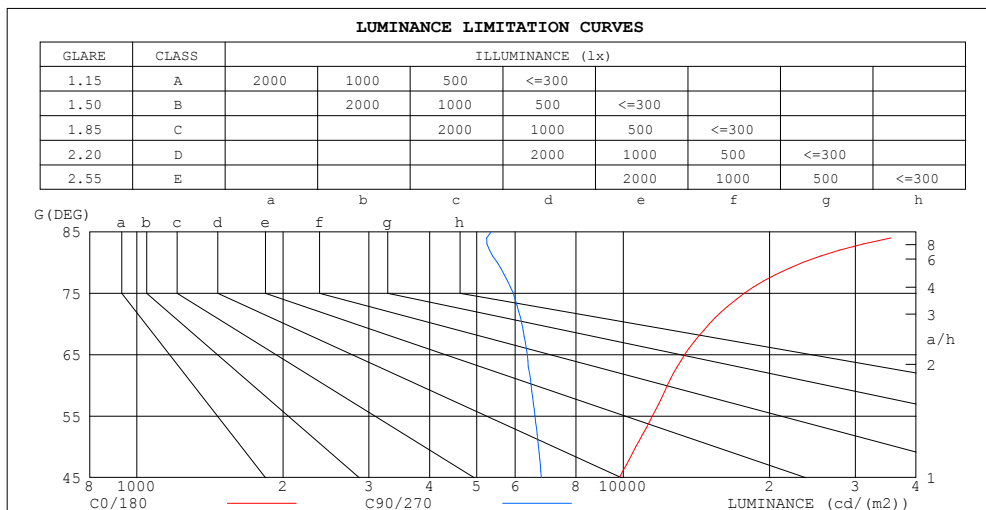
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HXJ
Test Date: 2022-04-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

ZONAL FLUX DIAGRAM
AND LUMINANCE LIMITATION CURVES

ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10 | 119.8 | 117.9 | 116.1 | 117.2 | 122.0 | 118.8 | 115.4 | 115.4 | 0- 10 | 11.28 | 11.28 | 1.68,1.68 |
| 20 | 117.7 | 114.3 | 109.7 | 115.8 | 123.3 | 116.8 | 108.2 | 111.4 | 10- 20 | 32.94 | 44.22 | 6.6,6.6 |
| 30 | 116.0 | 107.8 | 99.87 | 110.9 | 123.5 | 111.5 | 97.51 | 104.4 | 20- 30 | 51.61 | 95.83 | 14.3,14.3 |
| 40 | 115.0 | 100.3 | 86.85 | 105.8 | 129.6 | 105.9 | 83.75 | 96.58 | 30- 40 | 66.49 | 162.3 | 24.2,24.2 |
| 50 | 112.6 | 91.40 | 71.01 | 98.67 | 130.3 | 98.44 | 67.85 | 87.50 | 40- 50 | 76.46 | 238.8 | 35.6,35.6 |
| 60 | 101.8 | 78.59 | 53.33 | 87.40 | 119.8 | 87.10 | 50.05 | 74.91 | 50- 60 | 79.21 | 318.0 | 47.4,47.4 |
| 70 | 84.86 | 64.13 | 34.94 | 73.13 | 104.4 | 72.78 | 31.12 | 60.86 | 60- 70 | 73.66 | 391.6 | 58.4,58.4 |
| 80 | 67.19 | 46.25 | 15.78 | 55.78 | 84.60 | 55.71 | 13.18 | 43.74 | 70- 80 | 60.78 | 452.4 | 67.5,67.5 |
| 90 | 57.40 | 35.36 | 4.076 | 44.41 | 75.11 | 44.23 | 2.383 | 33.16 | 80- 90 | 45.71 | 498.1 | 74.3,74.3 |
| 100 | 60.28 | 35.09 | 4.046 | 44.68 | 75.15 | 44.69 | 2.498 | 33.17 | 90-100 | 41.55 | 539.7 | 80.5,80.5 |
| 110 | 56.34 | 29.96 | 3.814 | 43.86 | 73.51 | 44.00 | 2.568 | 29.84 | 100-110 | 39.36 | 579.1 | 86.4,86.4 |
| 120 | 49.49 | 25.81 | 3.513 | 37.61 | 65.32 | 37.83 | 2.674 | 26.18 | 110-120 | 33.68 | 612.7 | 91.4,91.4 |
| 130 | 39.62 | 20.85 | 3.372 | 30.16 | 52.25 | 30.49 | 2.784 | 19.87 | 120-130 | 25.43 | 638.2 | 95.2,95.2 |
| 140 | 29.37 | 13.60 | 3.196 | 22.02 | 38.62 | 22.08 | 2.970 | 13.21 | 130-140 | 16.79 | 655.0 | 97.7,97.7 |
| 150 | 18.38 | 7.959 | 3.191 | 13.95 | 24.24 | 14.06 | 3.051 | 8.128 | 140-150 | 9.208 | 664.2 | 99.1,99.1 |
| 160 | 10.99 | 5.452 | 3.267 | 8.340 | 13.86 | 8.252 | 3.131 | 5.080 | 150-160 | 4.305 | 668.5 | 99.7,99.7 |
| 170 | 3.987 | 3.689 | 3.362 | 4.668 | 4.410 | 4.610 | 3.246 | 3.579 | 160-170 | 1.561 | 670.0 | 99.9,99.9 |
| 180 | 3.302 | 3.483 | 3.423 | 3.495 | 3.372 | 3.508 | 3.362 | 3.450 | 170-180 | 0.3573 | 670.4 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 41780 | 5363 |
| 80 | 23449 | 5507 |
| 75 | 17772 | 5942 |
| 70 | 15037 | 6191 |
| 65 | 13379 | 6349 |
| 60 | 12334 | 6464 |
| 55 | 11495 | 6585 |
| 50 | 10615 | 6695 |
| 45 | 9825 | 6792 |

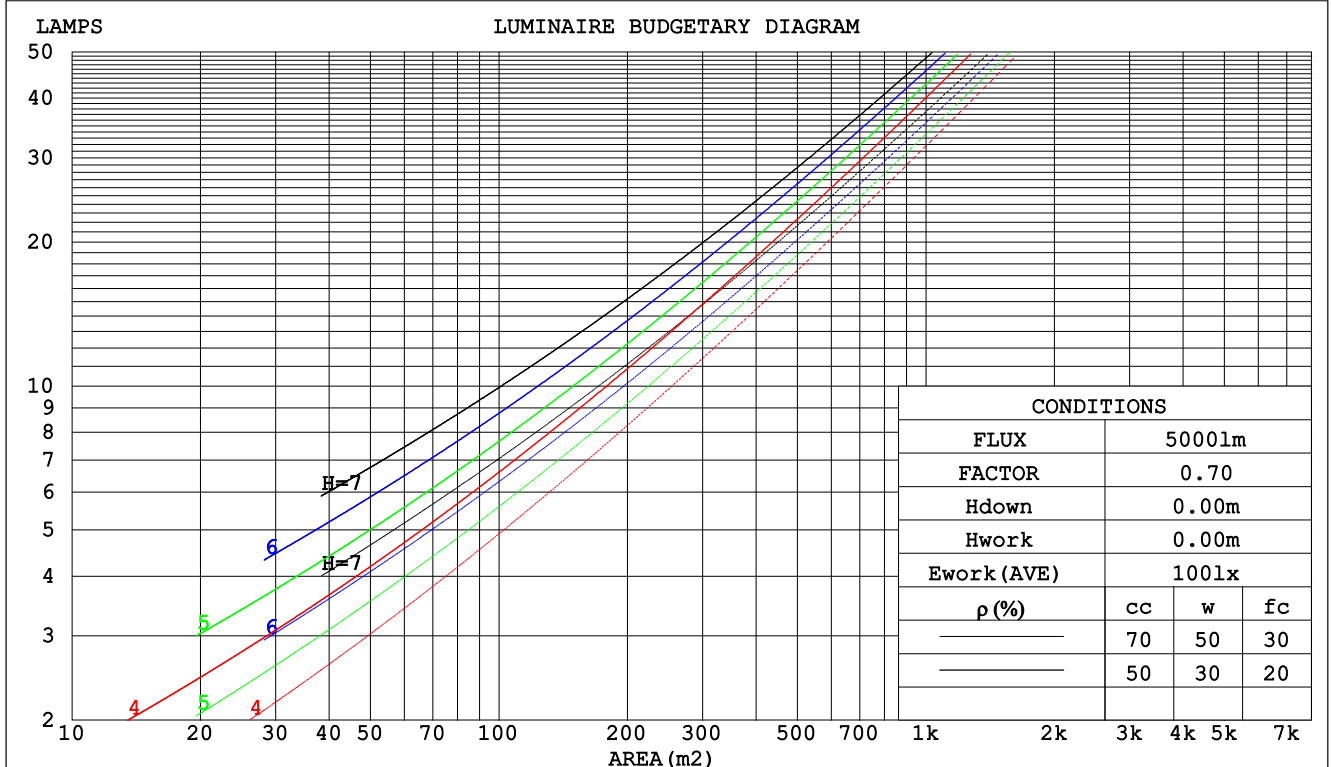
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-----|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | | | | | | | | | | |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

WEC AND CCEC

| | | | | | |
|--|--|--|---------------|--|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | | | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | | | TYPE: 硅胶 | | WEIGHT: |
| DIM.: 16.5mm*16.5mm | | | SPEC.: | | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | | | SUR.:1*0.0165 | | PROTECTION ANGLE: |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .379 | .216 | .068 | .364 | .208 | .066 | .336 | .193 | .062 | .310 | .179 | .057 | .286 | .166 | .053 | | |
| 2.0 | .330 | .181 | .055 | .316 | .174 | .054 | .290 | .161 | .050 | .267 | .150 | .047 | .245 | .139 | .044 | | |
| 3.0 | .293 | .156 | .047 | .281 | .150 | .045 | .258 | .140 | .042 | .236 | .130 | .040 | .216 | .120 | .037 | | |
| 4.0 | .264 | .137 | .040 | .253 | .132 | .039 | .232 | .123 | .037 | .212 | .114 | .034 | .194 | .105 | .032 | | |
| 5.0 | .240 | .123 | .035 | .230 | .118 | .034 | .211 | .110 | .032 | .193 | .102 | .030 | .176 | .094 | .028 | | |
| 6.0 | .220 | .110 | .032 | .211 | .107 | .031 | .193 | .099 | .029 | .177 | .092 | .027 | .161 | .085 | .025 | | |
| 7.0 | .203 | .100 | .028 | .195 | .097 | .028 | .178 | .090 | .026 | .163 | .084 | .024 | .149 | .077 | .023 | | |
| 8.0 | .188 | .092 | .026 | .181 | .089 | .025 | .166 | .083 | .024 | .152 | .077 | .022 | .138 | .071 | .021 | | |
| 9.0 | .176 | .085 | .024 | .168 | .082 | .023 | .154 | .076 | .022 | .141 | .071 | .020 | .129 | .066 | .019 | | |
| 10.0 | .164 | .079 | .022 | .158 | .076 | .021 | .145 | .071 | .020 | .133 | .066 | .019 | .121 | .061 | .017 | | |

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| pw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| pfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .386 | .386 | .386 | .330 | .330 | .330 | .225 | .225 | .225 | .129 | .129 | .129 | .041 | .041 | .041 | |
| 1.0 | .382 | .353 | .326 | .327 | .303 | .281 | .224 | .208 | .194 | .129 | .121 | .113 | .041 | .039 | .037 | |
| 2.0 | .376 | .330 | .292 | .322 | .284 | .253 | .221 | .197 | .176 | .127 | .114 | .103 | .041 | .037 | .034 | |
| 3.0 | .369 | .314 | .271 | .316 | .271 | .235 | .217 | .188 | .165 | .125 | .110 | .097 | .040 | .036 | .032 | |
| 4.0 | .361 | .302 | .257 | .310 | .261 | .223 | .213 | .182 | .157 | .123 | .107 | .093 | .040 | .035 | .031 | |
| 5.0 | .354 | .292 | .247 | .304 | .253 | .215 | .209 | .177 | .152 | .121 | .104 | .090 | .039 | .034 | .030 | |
| 6.0 | .346 | .285 | .240 | .298 | .246 | .209 | .205 | .173 | .148 | .119 | .101 | .088 | .038 | .033 | .029 | |
| 7.0 | .340 | .278 | .235 | .292 | .241 | .205 | .202 | .169 | .145 | .117 | .100 | .086 | .038 | .033 | .029 | |
| 8.0 | .333 | .273 | .231 | .287 | .236 | .202 | .198 | .166 | .143 | .115 | .098 | .085 | .037 | .032 | .028 | |
| 9.0 | .327 | .268 | .228 | .282 | .233 | .199 | .195 | .163 | .141 | .114 | .097 | .084 | .037 | .032 | .028 | |
| 10.0 | .321 | .264 | .226 | .277 | .229 | .197 | .192 | .161 | .140 | .112 | .095 | .084 | .036 | .031 | .028 | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HXJ
 Test Date:2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:9.200m [K=1.0000]
 Remarks:

Uncorrected UGR Table

| | | | | | | | | | | | |
|--|---------------|------------------|------|------|------|---------------|----------------|-----------------------|------|------|------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | | | | | | | | | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | | | | | | TYPE:硅胶 | | WEIGHT: | | | |
| DIM.: 16.5mm*16.5mm | | | | | | SPEC.: | | SERIAL No.:2022042901 | | | |
| MFR.: OLYMPIA | | | | | | SUR.:1*0.0165 | | PROTECTION ANGLE: | | | |
| ceiling/cavity | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | |
| walls | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | |
| working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | |
| Room dimensions | | Viewed crosswise | | | | | Viewed endwise | | | | |
| x = 2H y = 2H | 2H | 20.2 | 21.5 | 20.8 | 22.1 | 22.8 | 17.4 | 18.7 | 18.0 | 19.3 | 20.0 |
| | 3H | 22.8 | 24.0 | 23.4 | 24.6 | 25.4 | 19.1 | 20.3 | 19.7 | 20.9 | 21.7 |
| | 4H | 24.1 | 25.3 | 24.8 | 25.9 | 26.7 | 19.8 | 20.9 | 20.4 | 21.6 | 22.3 |
| | 6H | 25.6 | 26.6 | 26.2 | 27.3 | 28.1 | 20.3 | 21.4 | 21.0 | 22.1 | 22.8 |
| | 8H | 26.4 | 27.4 | 27.0 | 28.1 | 28.9 | 20.5 | 21.5 | 21.2 | 22.2 | 23.0 |
| | 12H | 27.3 | 28.3 | 28.0 | 29.0 | 29.8 | 20.6 | 21.6 | 21.3 | 22.3 | 23.1 |
| 4H | 2H | 20.7 | 21.8 | 21.3 | 22.5 | 23.3 | 18.7 | 19.8 | 19.3 | 20.5 | 21.3 |
| | 3H | 23.5 | 24.5 | 24.2 | 25.2 | 26.0 | 20.5 | 21.5 | 21.2 | 22.2 | 23.0 |
| | 4H | 25.1 | 26.0 | 25.8 | 26.7 | 27.5 | 21.4 | 22.3 | 22.1 | 23.0 | 23.9 |
| | 6H | 26.7 | 27.5 | 27.4 | 28.2 | 29.1 | 22.1 | 22.9 | 22.8 | 23.6 | 24.5 |
| | 8H | 27.6 | 28.4 | 28.4 | 29.1 | 30.0 | 22.4 | 23.1 | 23.1 | 23.9 | 24.8 |
| | 12H | 28.7 | 29.4 | 29.4 | 30.1 | 31.0 | 22.6 | 23.2 | 23.3 | 24.0 | 24.9 |
| 8H | 4H | 25.3 | 26.1 | 26.1 | 26.8 | 27.7 | 22.4 | 23.1 | 23.2 | 23.9 | 24.8 |
| | 6H | 27.3 | 27.9 | 28.0 | 28.7 | 29.6 | 23.4 | 24.0 | 24.2 | 24.8 | 25.8 |
| | 8H | 28.4 | 28.9 | 29.2 | 29.7 | 30.7 | 23.9 | 24.4 | 24.7 | 25.2 | 26.2 |
| | 12H | 29.7 | 30.2 | 30.5 | 31.0 | 32.0 | 24.2 | 24.7 | 25.1 | 25.5 | 26.5 |
| 12H | 4H | 25.3 | 26.0 | 26.1 | 26.8 | 27.7 | 22.7 | 23.4 | 23.5 | 24.2 | 25.1 |
| | 6H | 27.3 | 27.9 | 28.1 | 28.7 | 29.7 | 23.9 | 24.5 | 24.7 | 25.3 | 26.2 |
| | 8H | 28.6 | 29.1 | 29.4 | 29.9 | 30.9 | 24.5 | 25.0 | 25.3 | 25.8 | 26.8 |
| Variations with the observer position at spacings: | | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.1 | | | | | + 0.1 / - 0.1 | | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | | |
| 2.0H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.4 | | | | | |

CIE Pub.117 Corrected 670.4 lm Total Lamp Luminous Flux. (8log(F/F0) = -1.4)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |

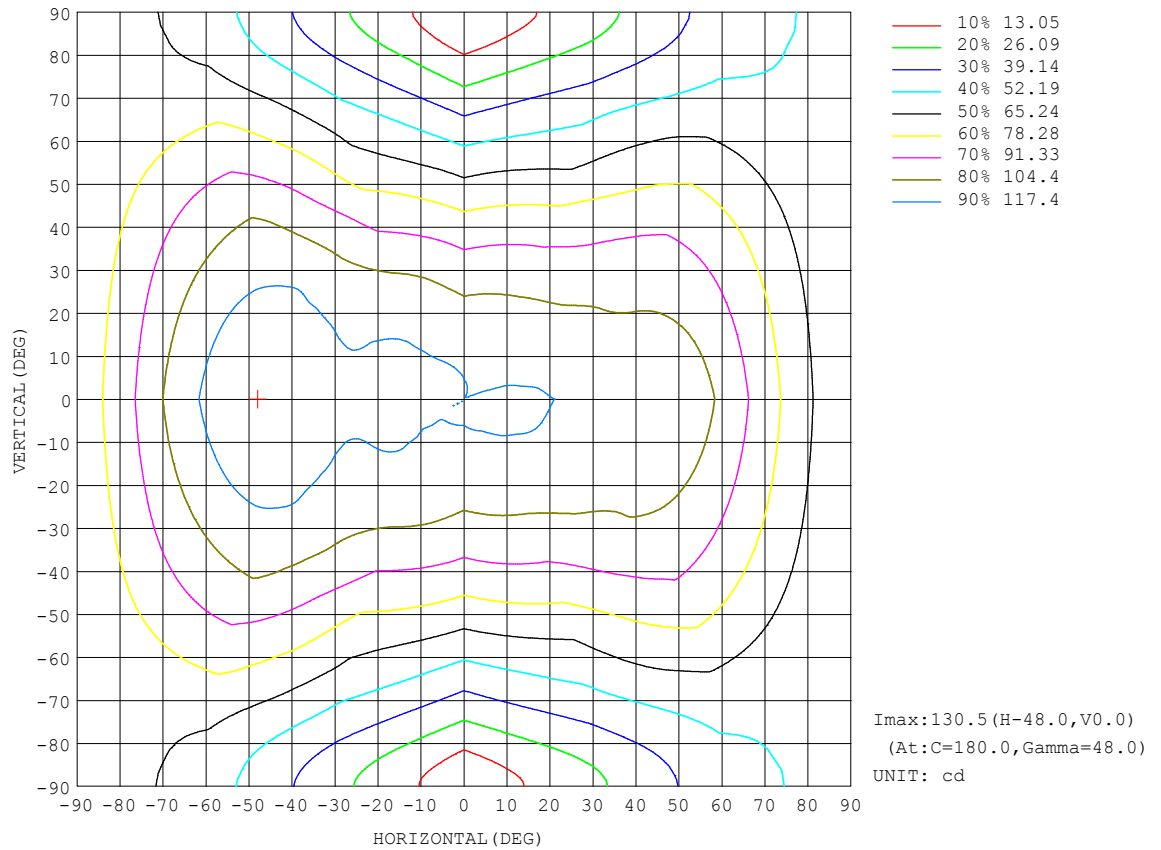
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|--|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 45 | 32 | 25 | 44 | 32 | 25 | 41 | 31 | 24 | 17 |
| 0.80 | 54 | 41 | 33 | 52 | 40 | 32 | 49 | 38 | 31 | 23 |
| 1.00 | 62 | 49 | 40 | 59 | 47 | 39 | 55 | 47 | 38 | 28 |
| 1.25 | 69 | 56 | 47 | 66 | 54 | 46 | 61 | 51 | 44 | 33 |
| 1.50 | 74 | 61 | 53 | 71 | 59 | 51 | 65 | 56 | 49 | 37 |
| 2.00 | 81 | 70 | 62 | 78 | 68 | 60 | 71 | 63 | 56 | 43 |
| 2.50 | 86 | 76 | 67 | 82 | 73 | 65 | 75 | 67 | 61 | 47 |
| 3.00 | 90 | 80 | 73 | 86 | 77 | 70 | 78 | 71 | 65 | 50 |
| 4.00 | 95 | 87 | 80 | 90 | 83 | 77 | 82 | 76 | 71 | 54 |
| 5.00 | 98 | 91 | 85 | 93 | 87 | 81 | 84 | 79 | 75 | 57 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | | SHRNOM = 1.25 | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:HXJ
 Test Date:2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity:65.0%
 Test Distance:9.200m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |

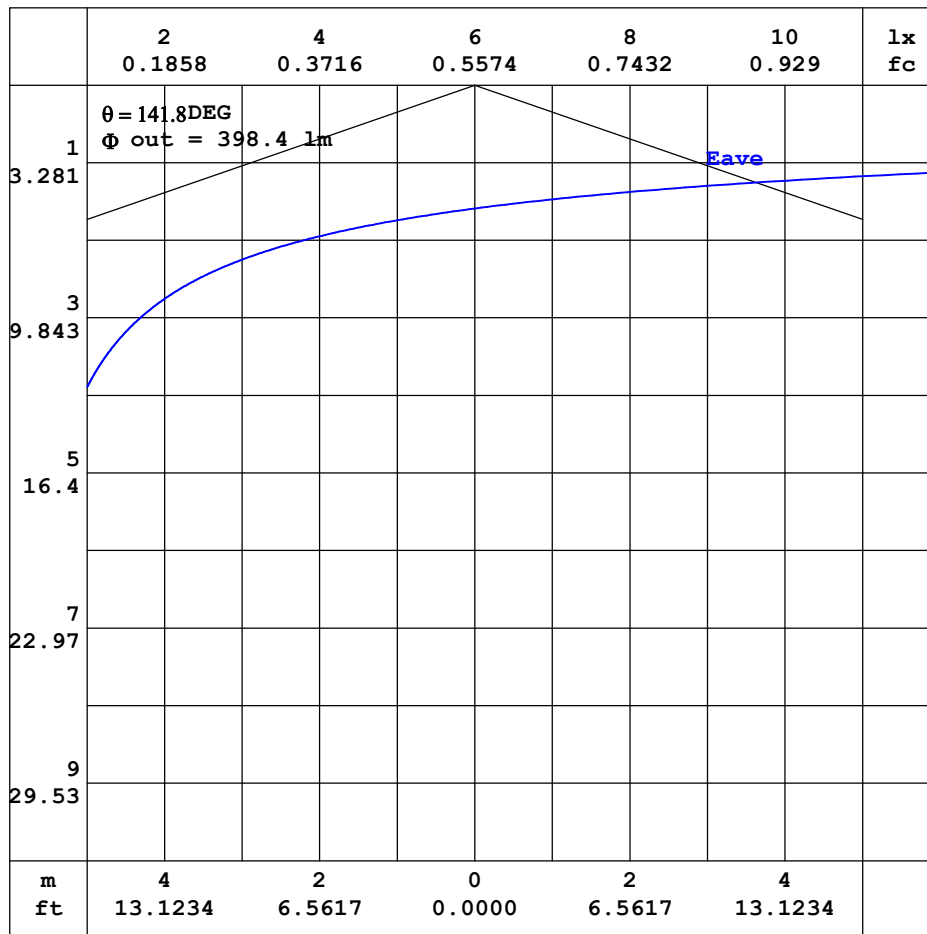


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

AAI CURVES

| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |



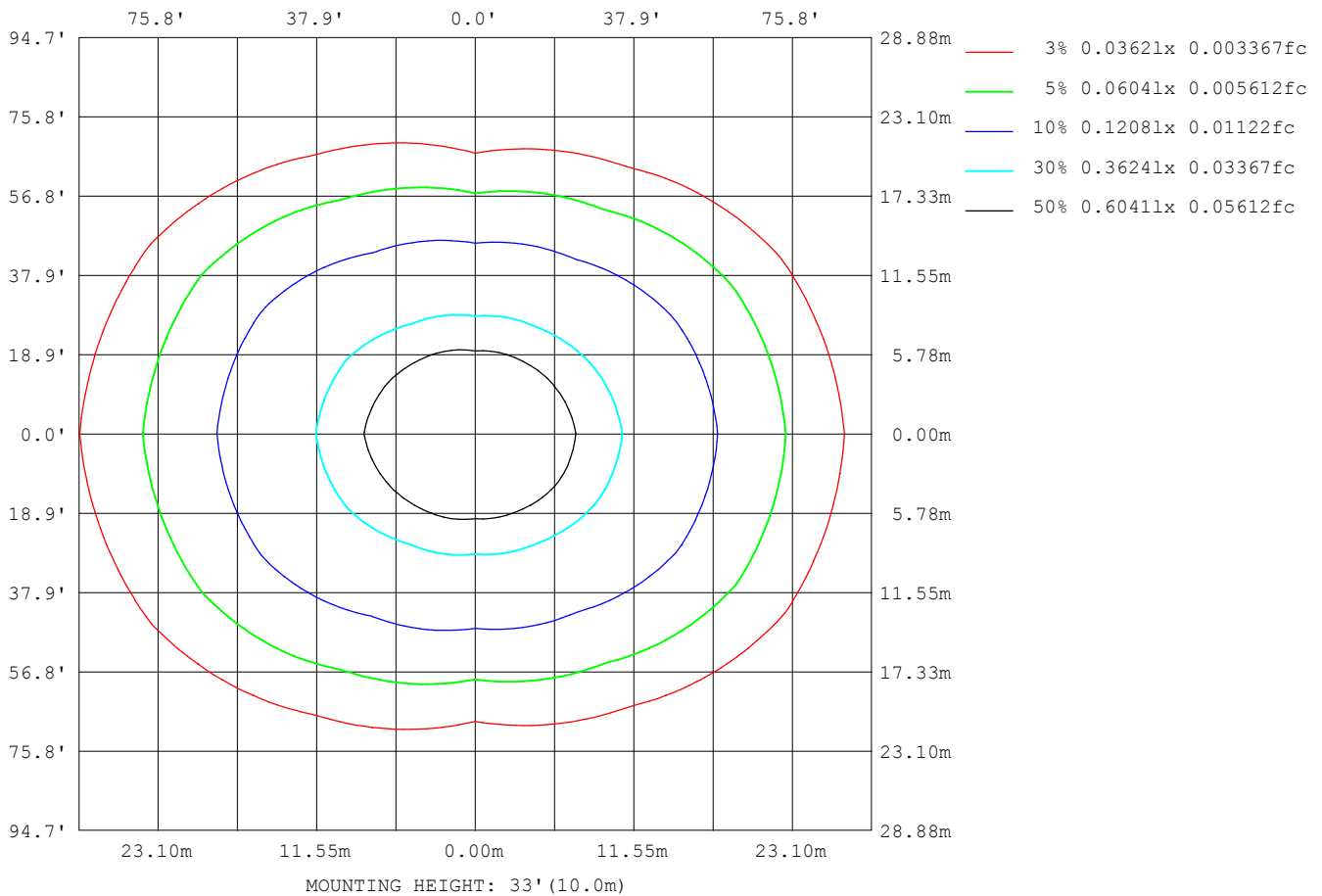
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HXJ
Test Date: 2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

ISOLUX DIAGRAM

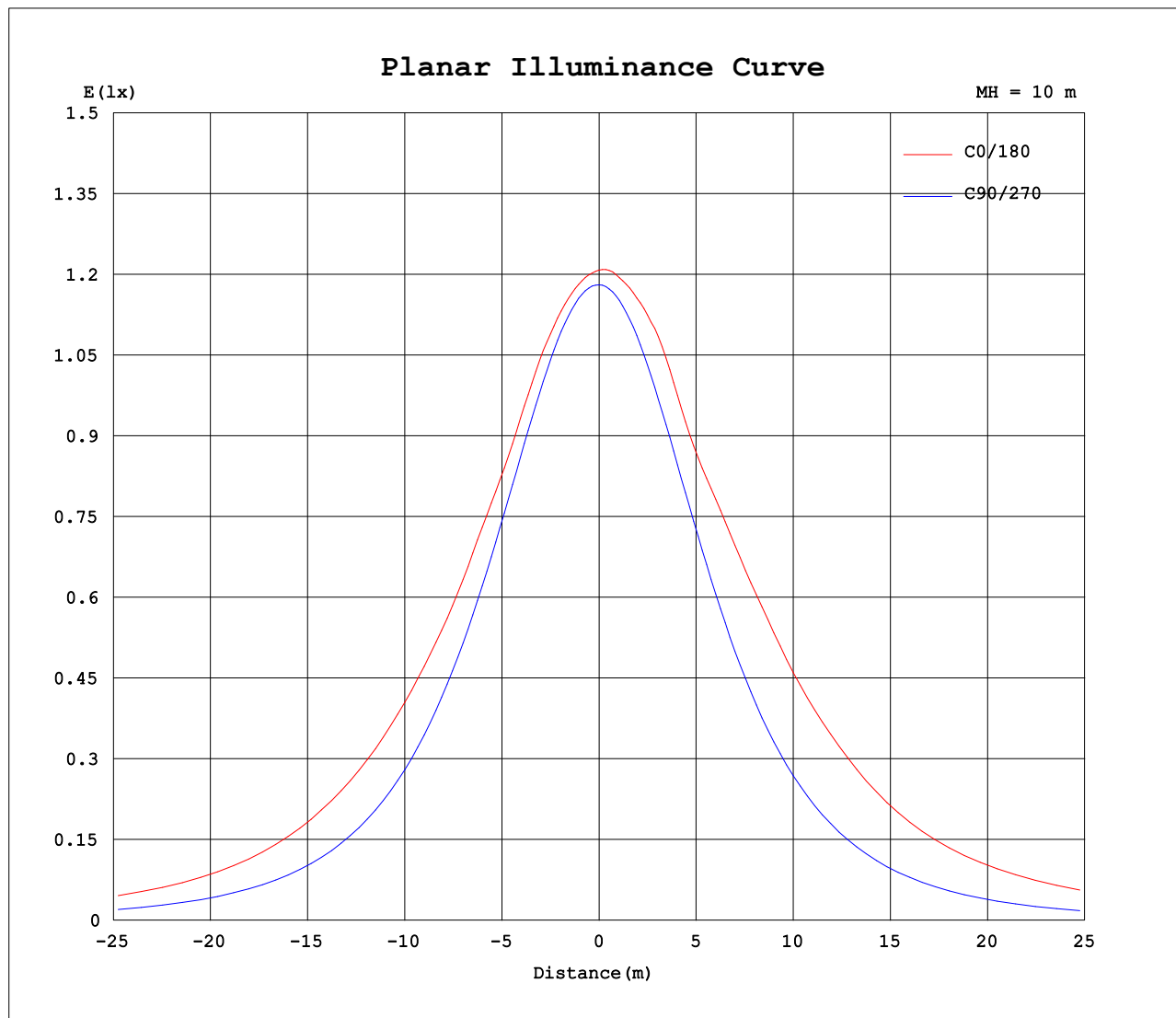
| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: HXJ
Test Date: 2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity: 65.0%
Test Distance: 9.200m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|---------------|-----------------------|
| Test:U:24.00V I:0.7270A P:17.45W PF:1.000 Lamp Flux:670.383x1 lm | | |
| NAME: SF18-24V-5050-70-SPI4-3000 | TYPE: 硅胶 | WEIGHT: |
| DIM.: 16.5mm*16.5mm | SPEC.: | SERIAL No.:2022042901 |
| MFR.: OLYMPIA | SUR.:1*0.0165 | PROTECTION ANGLE: |

Table--1

UNIT: cd

| C (DEG) γ (DEG) | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | | | | | | | |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0 | 121 | 120 | 119 | 118 | 118 | 117 | 121 | 120 | 119 | 118 | 118 | 117 | | | | | | | |
| 5 | 120 | 119 | 118 | 118 | 118 | 117 | 121 | 120 | 119 | 117 | 117 | 116 | | | | | | | |
| 10 | 120 | 119 | 117 | 116 | 117 | 118 | 122 | 120 | 118 | 115 | 115 | 116 | | | | | | | |
| 15 | 119 | 118 | 115 | 113 | 115 | 118 | 123 | 120 | 116 | 112 | 113 | 114 | | | | | | | |
| 20 | 118 | 116 | 112 | 110 | 113 | 119 | 123 | 120 | 113 | 108 | 110 | 113 | | | | | | | |
| 25 | 116 | 114 | 109 | 105 | 111 | 116 | 121 | 118 | 111 | 103 | 106 | 110 | | | | | | | |
| 30 | 116 | 111 | 104 | 99.9 | 108 | 114 | 124 | 115 | 108 | 97.5 | 102 | 107 | | | | | | | |
| 35 | 115 | 110 | 99.4 | 93.7 | 102 | 115 | 127 | 116 | 102 | 91.0 | 96.2 | 106 | | | | | | | |
| 40 | 115 | 107 | 93.7 | 86.8 | 96.3 | 115 | 130 | 116 | 95.4 | 83.8 | 90.5 | 103 | | | | | | | |
| 45 | 115 | 105 | 87.2 | 79.2 | 90.1 | 116 | 130 | 117 | 88.9 | 76.1 | 83.6 | 101 | | | | | | | |
| 50 | 113 | 102 | 80.3 | 71.0 | 83.5 | 114 | 130 | 115 | 82.3 | 67.9 | 76.8 | 98.2 | | | | | | | |
| 55 | 109 | 98.5 | 72.1 | 62.3 | 76.1 | 110 | 127 | 111 | 74.8 | 59.0 | 68.7 | 94.2 | | | | | | | |
| 60 | 102 | 92.5 | 64.7 | 53.3 | 69.5 | 105 | 120 | 106 | 68.3 | 50.1 | 61.3 | 88.6 | | | | | | | |
| 65 | 93.3 | 85.5 | 58.0 | 44.3 | 63.6 | 97.9 | 112 | 98.5 | 62.4 | 40.7 | 54.7 | 81.7 | | | | | | | |
| 70 | 84.9 | 77.3 | 51.0 | 34.9 | 56.5 | 89.7 | 104 | 90.1 | 55.4 | 31.1 | 47.8 | 73.9 | | | | | | | |
| 75 | 75.9 | 67.1 | 42.9 | 25.4 | 48.7 | 80.9 | 94.4 | 81.4 | 47.7 | 21.8 | 39.9 | 64.2 | | | | | | | |
| 80 | 67.2 | 57.9 | 34.6 | 15.8 | 40.7 | 70.8 | 84.6 | 71.4 | 40.0 | 13.2 | 32.1 | 55.4 | | | | | | | |
| 85 | 60.1 | 50.6 | 27.2 | 7.71 | 33.5 | 62.8 | 77.2 | 63.4 | 32.9 | 5.89 | 25.1 | 48.3 | | | | | | | |
| 90 | 57.4 | 47.3 | 23.4 | 4.08 | 29.9 | 58.9 | 75.1 | 59.4 | 29.1 | 2.38 | 21.2 | 45.1 | | | | | | | |
| 95 | 59.2 | 49.0 | 23.3 | 4.07 | 28.9 | 59.7 | 76.4 | 60.0 | 28.3 | 2.49 | 21.2 | 46.8 | | | | | | | |
| 100 | 60.3 | 50.6 | 19.6 | 4.05 | 27.8 | 61.6 | 75.1 | 62.2 | 27.2 | 2.50 | 17.8 | 48.5 | | | | | | | |
| 105 | 60.0 | 47.4 | 18.0 | 3.96 | 27.0 | 62.3 | 73.7 | 63.0 | 26.5 | 2.53 | 16.6 | 46.6 | | | | | | | |
| 110 | 56.3 | 43.0 | 16.9 | 3.81 | 26.9 | 60.8 | 73.5 | 61.5 | 26.5 | 2.57 | 16.6 | 43.1 | | | | | | | |
| 115 | 53.1 | 40.0 | 15.9 | 3.65 | 26.3 | 56.0 | 71.3 | 56.6 | 26.2 | 2.63 | 16.5 | 40.0 | | | | | | | |
| 120 | 49.5 | 36.3 | 15.3 | 3.51 | 24.3 | 50.9 | 65.3 | 51.4 | 24.3 | 2.67 | 15.7 | 36.7 | | | | | | | |
| 125 | 45.1 | 33.7 | 14.0 | 3.45 | 21.8 | 46.5 | 58.6 | 47.0 | 21.9 | 2.70 | 13.3 | 32.2 | | | | | | | |
| 130 | 39.6 | 30.1 | 11.6 | 3.37 | 18.7 | 41.6 | 52.3 | 42.1 | 18.9 | 2.78 | 11.1 | 28.6 | | | | | | | |
| 135 | 34.4 | 25.1 | 9.32 | 3.29 | 15.9 | 36.3 | 45.7 | 36.7 | 16.0 | 2.89 | 9.24 | 24.1 | | | | | | | |
| 140 | 29.4 | 19.1 | 8.09 | 3.20 | 13.4 | 30.7 | 38.6 | 30.7 | 13.4 | 2.97 | 7.76 | 18.7 | | | | | | | |
| 145 | 24.0 | 13.5 | 6.91 | 3.18 | 11.1 | 24.4 | 31.5 | 24.5 | 11.2 | 3.01 | 6.62 | 13.9 | | | | | | | |
| 150 | 18.4 | 10.2 | 5.76 | 3.19 | 8.69 | 19.2 | 24.2 | 19.3 | 8.80 | 3.05 | 5.49 | 10.8 | | | | | | | |
| 155 | 14.0 | 8.63 | 4.84 | 3.23 | 6.91 | 15.0 | 18.6 | 15.0 | 6.93 | 3.09 | 4.59 | 8.22 | | | | | | | |
| 160 | 11.0 | 6.68 | 4.22 | 3.27 | 5.68 | 11.0 | 13.9 | 10.9 | 5.62 | 3.13 | 4.02 | 6.14 | | | | | | | |
| 165 | 6.80 | 4.79 | 3.70 | 3.31 | 4.66 | 7.38 | 8.68 | 7.32 | 4.60 | 3.19 | 3.53 | 4.48 | | | | | | | |
| 170 | 3.99 | 3.82 | 3.55 | 3.36 | 4.16 | 5.18 | 4.41 | 5.16 | 4.06 | 3.25 | 3.41 | 3.75 | | | | | | | |
| 175 | 3.47 | 3.48 | 3.39 | 3.40 | 3.98 | 4.14 | 3.67 | 4.16 | 3.91 | 3.30 | 3.32 | 3.46 | | | | | | | |
| 180 | 3.30 | 3.54 | 3.42 | 3.42 | 3.48 | 3.51 | 3.37 | 3.54 | 3.48 | 3.36 | 3.44 | 3.46 | | | | | | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

Photometric Data Table [cd]

| G/C | 0.0 | 30.0 | 60.0 | 90.0 | 120.0 | 150.0 | 180.0 | 210.0 | 240.0 | 270.0 |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0.0 | 120.8 | 119.8 | 118.9 | 118.1 | 117.5 | 117.1 | 120.8 | 119.8 | 118.9 | 118.1 |
| 3.0 | 120.4 | 119.4 | 118.6 | 118.0 | 117.7 | 117.4 | 121.2 | 120.0 | 118.9 | 117.8 |
| 6.0 | 120.1 | 119.1 | 118.1 | 117.4 | 117.5 | 117.5 | 121.4 | 120.0 | 118.5 | 117.1 |
| 9.0 | 119.9 | 118.8 | 117.3 | 116.5 | 117.0 | 117.6 | 121.9 | 120.0 | 117.8 | 115.9 |
| 12.0 | 119.6 | 118.5 | 116.2 | 115.2 | 116.1 | 117.7 | 122.6 | 120.0 | 116.7 | 114.2 |
| 15.0 | 119.3 | 117.6 | 115.0 | 113.4 | 115.1 | 118.3 | 123.4 | 120.4 | 115.6 | 112.3 |
| 18.0 | 118.6 | 117.0 | 113.6 | 111.3 | 113.9 | 118.8 | 123.9 | 120.7 | 114.2 | 109.8 |
| 21.0 | 117.4 | 115.7 | 111.6 | 108.9 | 112.7 | 118.3 | 122.8 | 120.0 | 112.7 | 107.2 |
| 24.0 | 116.2 | 114.3 | 109.4 | 106.2 | 111.5 | 116.6 | 121.6 | 118.1 | 111.4 | 104.3 |
| 27.0 | 115.7 | 112.7 | 107.1 | 103.1 | 110.1 | 114.8 | 121.6 | 116.3 | 109.7 | 101.0 |
| 30.0 | 116.0 | 111.1 | 104.4 | 99.87 | 107.9 | 114.0 | 123.5 | 115.3 | 107.6 | 97.51 |
| 33.0 | 115.7 | 110.4 | 101.4 | 96.27 | 104.8 | 114.4 | 125.6 | 115.7 | 104.3 | 93.82 |
| 36.0 | 115.0 | 109.4 | 98.40 | 92.39 | 101.2 | 115.1 | 127.2 | 116.2 | 100.6 | 89.58 |
| 39.0 | 114.8 | 107.4 | 94.95 | 88.28 | 97.50 | 115.4 | 128.9 | 116.5 | 96.69 | 85.28 |
| 42.0 | 115.1 | 105.8 | 91.08 | 83.88 | 93.81 | 115.4 | 130.2 | 116.4 | 92.72 | 80.84 |
| 45.0 | 114.6 | 104.8 | 87.18 | 79.24 | 90.07 | 115.7 | 130.3 | 116.7 | 88.87 | 76.06 |
| 48.0 | 113.7 | 103.5 | 83.22 | 74.43 | 86.31 | 114.8 | 130.5 | 115.6 | 85.09 | 71.12 |
| 51.0 | 112.0 | 101.9 | 78.79 | 69.35 | 82.06 | 113.3 | 130.0 | 113.9 | 80.87 | 66.04 |
| 54.0 | 109.8 | 99.46 | 73.70 | 64.11 | 77.62 | 111.3 | 127.7 | 111.9 | 76.33 | 60.91 |
| 57.0 | 106.3 | 96.26 | 69.00 | 58.79 | 73.35 | 108.7 | 124.0 | 109.3 | 72.03 | 55.54 |
| 60.0 | 101.8 | 92.49 | 64.69 | 53.33 | 69.46 | 105.3 | 119.8 | 105.9 | 68.28 | 50.05 |
| 63.0 | 96.74 | 88.51 | 60.71 | 47.83 | 65.99 | 101.0 | 115.3 | 101.6 | 64.76 | 44.49 |
| 66.0 | 91.66 | 83.91 | 56.73 | 42.42 | 62.38 | 96.33 | 111.0 | 96.91 | 61.11 | 38.80 |
| 69.0 | 86.66 | 79.02 | 52.49 | 36.83 | 58.07 | 91.31 | 106.3 | 91.76 | 56.86 | 33.06 |
| 72.0 | 81.29 | 73.31 | 47.83 | 31.11 | 53.46 | 86.30 | 100.7 | 86.86 | 52.34 | 27.32 |
| 75.0 | 75.89 | 67.07 | 42.90 | 25.38 | 48.70 | 80.92 | 94.36 | 81.41 | 47.67 | 21.76 |
| 78.0 | 70.54 | 61.32 | 37.91 | 19.54 | 43.89 | 74.69 | 88.36 | 75.22 | 43.12 | 16.51 |
| 81.0 | 65.57 | 56.25 | 33.00 | 13.92 | 39.13 | 69.01 | 82.94 | 69.56 | 38.55 | 11.46 |
| 84.0 | 61.27 | 51.83 | 28.40 | 9.034 | 34.73 | 64.19 | 78.32 | 64.70 | 34.20 | 6.958 |
| 87.0 | 58.64 | 48.69 | 24.98 | 5.491 | 31.35 | 60.84 | 75.78 | 61.27 | 30.82 | 3.818 |
| 90.0 | 57.40 | 47.33 | 23.39 | 4.076 | 29.88 | 58.95 | 75.11 | 59.37 | 29.09 | 2.383 |
| 93.0 | 58.53 | 48.16 | 23.44 | 4.074 | 29.30 | 59.19 | 76.11 | 59.49 | 28.67 | 2.483 |
| 96.0 | 59.42 | 49.45 | 22.39 | 4.071 | 28.75 | 59.97 | 76.24 | 60.45 | 28.07 | 2.489 |
| 99.0 | 60.02 | 50.66 | 20.12 | 4.056 | 28.00 | 61.16 | 75.44 | 61.77 | 27.41 | 2.496 |
| 102.0 | 60.61 | 50.03 | 18.93 | 4.030 | 27.45 | 62.03 | 74.51 | 62.65 | 26.81 | 2.512 |
| 105.0 | 60.01 | 47.42 | 17.99 | 3.960 | 27.04 | 62.35 | 73.69 | 62.96 | 26.46 | 2.533 |
| 108.0 | 57.45 | 44.51 | 16.97 | 3.885 | 26.94 | 61.84 | 73.50 | 62.46 | 26.42 | 2.563 |
| 111.0 | 55.77 | 42.48 | 17.17 | 3.779 | 26.92 | 60.17 | 73.42 | 60.77 | 26.52 | 2.588 |
| 114.0 | 53.82 | 40.67 | 16.13 | 3.674 | 26.61 | 57.22 | 72.13 | 57.79 | 26.41 | 2.623 |
| 117.0 | 51.78 | 38.85 | 15.42 | 3.583 | 25.66 | 53.56 | 69.11 | 54.37 | 25.54 | 2.643 |
| 120.0 | 49.49 | 36.28 | 15.34 | 3.513 | 24.31 | 50.91 | 65.32 | 51.36 | 24.31 | 2.674 |
| 123.0 | 46.92 | 34.70 | 15.10 | 3.478 | 22.94 | 48.30 | 61.08 | 48.74 | 22.98 | 2.689 |
| 126.0 | 44.06 | 33.04 | 13.26 | 3.432 | 21.17 | 45.55 | 57.39 | 46.06 | 21.24 | 2.704 |
| 129.0 | 40.77 | 31.09 | 12.08 | 3.402 | 19.33 | 42.62 | 53.52 | 43.13 | 19.46 | 2.764 |
| 132.0 | 37.46 | 28.20 | 10.57 | 3.342 | 17.55 | 39.52 | 49.58 | 39.97 | 17.68 | 2.834 |
| 135.0 | 34.40 | 25.10 | 9.317 | 3.287 | 15.91 | 36.34 | 45.70 | 36.67 | 16.04 | 2.895 |
| 138.0 | 31.37 | 21.99 | 8.692 | 3.236 | 14.33 | 32.91 | 41.47 | 33.11 | 14.39 | 2.945 |
| 141.0 | 28.37 | 17.48 | 7.848 | 3.194 | 12.93 | 29.30 | 37.22 | 29.40 | 12.96 | 2.995 |
| 144.0 | 25.11 | 13.07 | 7.134 | 3.186 | 11.59 | 25.58 | 32.94 | 25.75 | 11.67 | 3.010 |
| 147.0 | 21.73 | 12.60 | 6.490 | 3.179 | 10.10 | 22.11 | 28.50 | 22.30 | 10.21 | 3.030 |
| 150.0 | 18.38 | 10.16 | 5.757 | 3.191 | 8.694 | 19.21 | 24.24 | 19.32 | 8.799 | 3.051 |
| 153.0 | 15.78 | 9.389 | 5.088 | 3.217 | 7.488 | 16.56 | 20.69 | 16.65 | 7.525 | 3.066 |
| 156.0 | 13.45 | 8.330 | 4.716 | 3.242 | 6.672 | 14.22 | 17.57 | 14.17 | 6.661 | 3.106 |
| 159.0 | 11.84 | 7.163 | 4.338 | 3.262 | 5.923 | 11.82 | 14.69 | 11.75 | 5.887 | 3.126 |
| 162.0 | 8.707 | 5.826 | 3.997 | 3.292 | 5.245 | 9.341 | 11.81 | 9.271 | 5.189 | 3.161 |
| 165.0 | 6.797 | 4.787 | 3.700 | 3.312 | 4.656 | 7.384 | 8.681 | 7.318 | 4.597 | 3.191 |
| 168.0 | 5.242 | 4.100 | 3.614 | 3.342 | 4.293 | 5.947 | 6.695 | 5.904 | 4.186 | 3.211 |
| 171.0 | 3.836 | 3.718 | 3.513 | 3.377 | 4.117 | 4.797 | 4.184 | 4.787 | 4.010 | 3.247 |
| 174.0 | 3.529 | 3.548 | 3.418 | 3.392 | 4.021 | 4.196 | 3.723 | 4.223 | 3.955 | 3.282 |
| 177.0 | 3.393 | 3.407 | 3.332 | 3.413 | 3.841 | 4.015 | 3.593 | 4.066 | 3.803 | 3.332 |
| 180.0 | 3.302 | 3.543 | 3.423 | 3.423 | 3.483 | 3.508 | 3.372 | 3.538 | 3.478 | 3.362 |
| G/C | 300.0 | 330.0 | | | | | | | | |
| 0.0 | 117.5 | 117.1 | | | | | | | | |
| 3.0 | 117.1 | 116.6 | | | | | | | | |
| 6.0 | 116.4 | 116.2 | | | | | | | | |
| 9.0 | 115.4 | 115.8 | | | | | | | | |
| 12.0 | 114.3 | 115.4 | | | | | | | | |
| 15.0 | 112.9 | 114.3 | | | | | | | | |
| 18.0 | 111.3 | 113.5 | | | | | | | | |
| 21.0 | 109.3 | 112.2 | | | | | | | | |
| 24.0 | 106.8 | 110.7 | | | | | | | | |
| 27.0 | 104.3 | 108.9 | | | | | | | | |
| 30.0 | 101.6 | 107.3 | | | | | | | | |

C Range: 0 - 360DEG
 C Interval: 30.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: HXJ
 Test Date: 2022-04-29

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.269
 Humidity: 65.0%
 Test Distance: 9.200m [K=1.0000]
 Remarks:

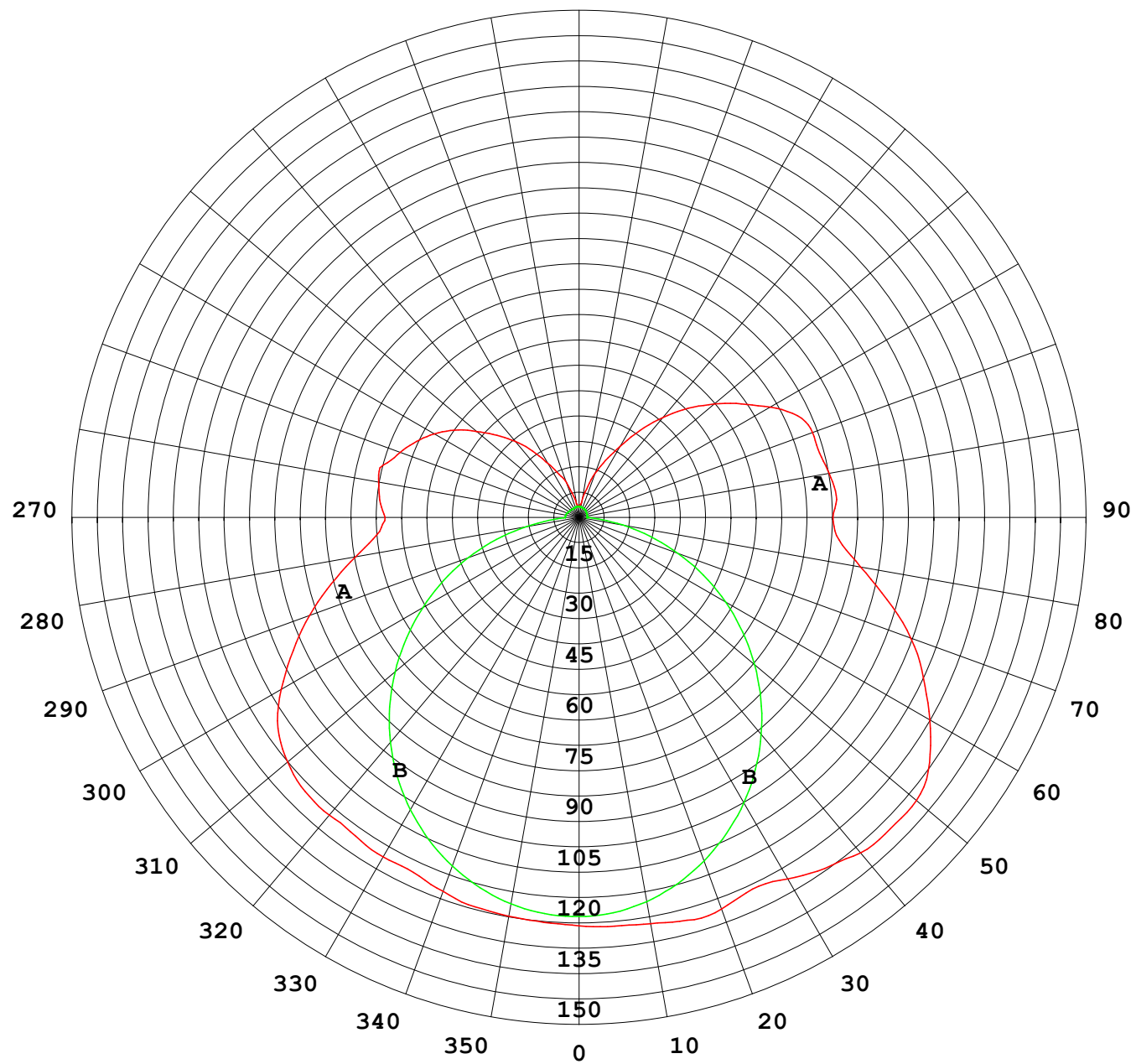
Photometric Data Table [cd]

| | | |
|-------|-------|-------|
| 33.0 | 98.47 | 106.5 |
| 36.0 | 95.14 | 105.4 |
| 39.0 | 91.75 | 103.3 |
| 42.0 | 87.69 | 101.7 |
| 45.0 | 83.62 | 100.6 |
| 48.0 | 79.65 | 99.36 |
| 51.0 | 75.25 | 97.53 |
| 54.0 | 70.28 | 95.17 |
| 57.0 | 65.57 | 92.01 |
| 60.0 | 61.25 | 88.56 |
| 63.0 | 57.25 | 84.78 |
| 66.0 | 53.39 | 80.21 |
| 69.0 | 49.25 | 75.45 |
| 72.0 | 44.73 | 70.27 |
| 75.0 | 39.95 | 64.17 |
| 78.0 | 35.19 | 58.69 |
| 81.0 | 30.62 | 53.73 |
| 84.0 | 26.36 | 49.50 |
| 87.0 | 23.00 | 46.44 |
| 90.0 | 21.25 | 45.08 |
| 93.0 | 21.38 | 45.91 |
| 96.0 | 19.72 | 47.29 |
| 99.0 | 18.25 | 48.49 |
| 102.0 | 17.30 | 48.01 |
| 105.0 | 16.65 | 46.55 |
| 108.0 | 16.30 | 44.96 |
| 111.0 | 16.53 | 42.50 |
| 114.0 | 16.44 | 40.46 |
| 117.0 | 16.60 | 38.58 |
| 120.0 | 15.68 | 36.69 |
| 123.0 | 14.24 | 34.28 |
| 126.0 | 12.71 | 30.91 |
| 129.0 | 11.60 | 29.06 |
| 132.0 | 10.38 | 27.54 |
| 135.0 | 9.244 | 24.08 |
| 138.0 | 8.354 | 20.84 |
| 141.0 | 7.501 | 17.66 |
| 144.0 | 6.843 | 14.84 |
| 147.0 | 6.219 | 12.62 |
| 150.0 | 5.490 | 10.77 |
| 153.0 | 4.823 | 9.102 |
| 156.0 | 4.477 | 7.893 |
| 159.0 | 4.120 | 6.608 |
| 162.0 | 3.778 | 5.366 |
| 165.0 | 3.528 | 4.480 |
| 168.0 | 3.492 | 3.977 |
| 171.0 | 3.387 | 3.664 |
| 174.0 | 3.347 | 3.498 |
| 177.0 | 3.297 | 3.393 |
| 180.0 | 3.438 | 3.463 |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:HXJ
Test Date:2022-04-29

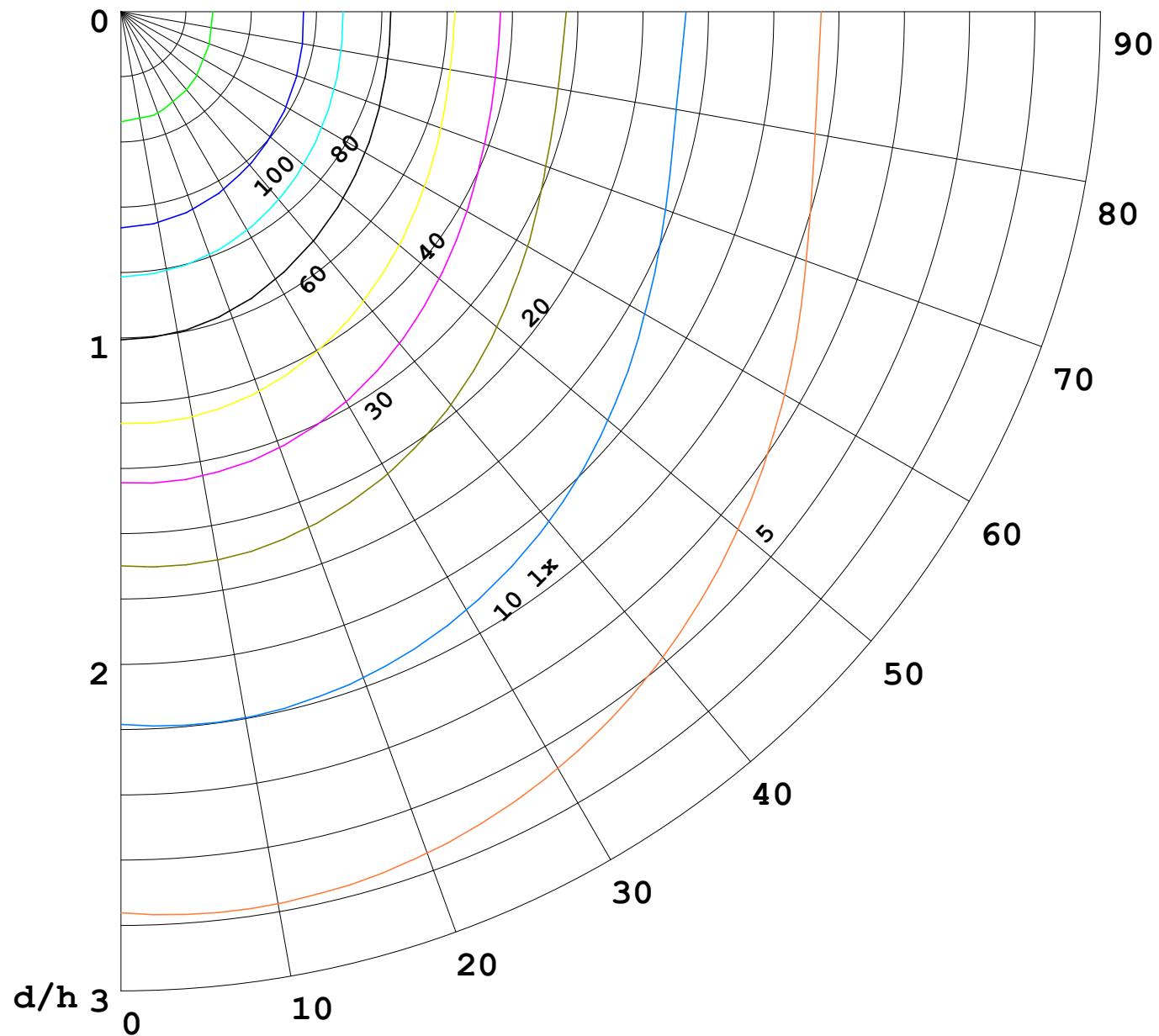
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.269
Humidity:65.0%
Test Distance:9.200m [K=1.0000]
Remarks:

I (cd)



1000 lm

$\kappa = 1$



| | | | |
|-------|-----|----|-----|
| | Pcc | Pw | Pfc |
| _____ | 70 | 50 | 30 |
| _____ | 50 | 30 | 20 |

