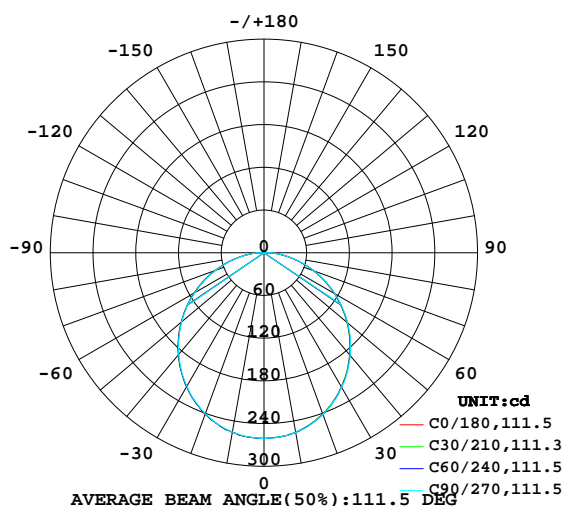


LUMINAIRE PHOTOMETRIC TEST REPORT

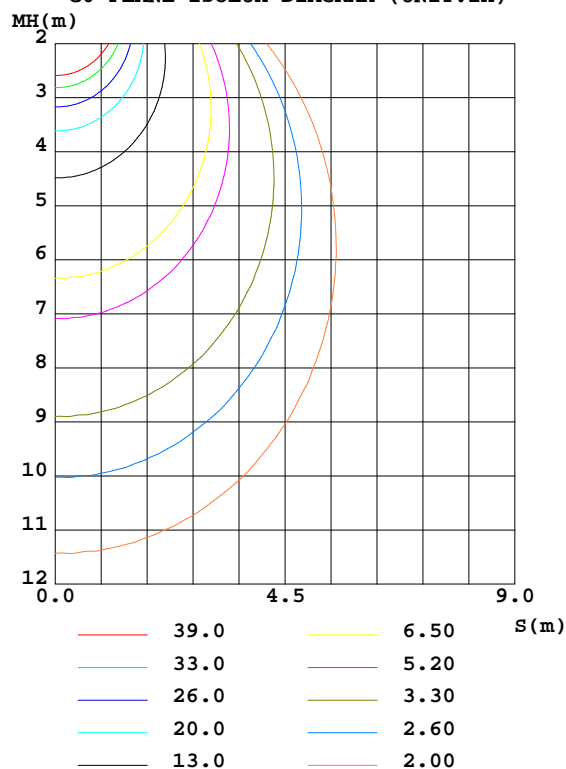
| | | |
|--|-------------------|------------------|
| Test:U:120.09V I:0.1377A P:14.865W PF:0.8987 Freq:59.98Hz Lamp Flux:753.984x1 lm | | |
| NAME: FR-W2004-44L/52L | TYPE:Ceiling Fans | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: WAC Lighting | SUR.: | Shielding Angle: |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 50.72 lm/W | | | |
|------------------|---------|----------------------------------|--------|------------------------|----------|
| MODEL | | Imax(cd) | 261.0 | S/MH(C0/180) | 1.24 |
| NOMINAL POWER(W) | | LOR(%) | 100.0 | S/MH(C90/270) | 1.25 |
| RATED VOLTAGE(V) | 120 | TOTAL FLUX(lm) | 753.98 | η UP,DN(C0-180) | 0.3,49.3 |
| NOMINAL FLUX(lm) | 753.984 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 0.3,50.1 |
| LAMPS INSIDE | 1 | η up(%) | 0.6 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 120 | η down(%) | 99.4 | CIBSE SHR MAX | 1.35 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

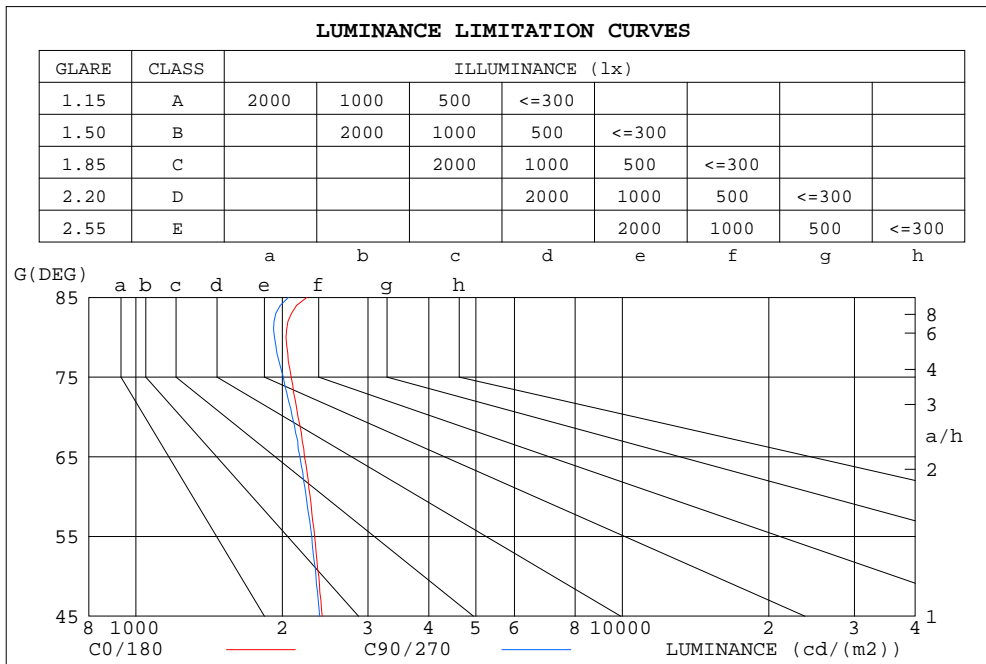
ZONAL FLUX DIAGRAM:

| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | $\%lum, lamp$ |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|---------------|
| 10 | 256.2 | 255.7 | 255.6 | 255.3 | 255.8 | 255.8 | 256.4 | 256.3 | 0- 10 | 24.65 | 24.65 | 3.27,3.27 |
| 20 | 241.6 | 240.7 | 240.8 | 240.4 | 241.1 | 241.1 | 242.1 | 242.1 | 10- 20 | 70.43 | 95.08 | 12.6,12.6 |
| 30 | 217.4 | 217.0 | 216.6 | 216.6 | 217.3 | 217.6 | 218.1 | 218.8 | 20- 30 | 106.1 | 201.2 | 26.7,26.7 |
| 40 | 187.2 | 186.8 | 186.4 | 185.7 | 187.3 | 187.4 | 188.3 | 188.9 | 30- 40 | 127.0 | 328.1 | 43.5,43.5 |
| 50 | 152.2 | 151.2 | 150.9 | 150.3 | 151.9 | 152.5 | 153.3 | 153.6 | 40- 50 | 131.2 | 459.3 | 60.9,60.9 |
| 60 | 113.7 | 112.8 | 112.1 | 111.7 | 113.7 | 114.2 | 115.2 | 115.7 | 50- 60 | 119.0 | 578.3 | 76.7,76.7 |
| 70 | 73.44 | 72.60 | 71.80 | 71.61 | 73.58 | 74.23 | 75.22 | 75.53 | 60- 70 | 92.63 | 670.9 | 89,89 |
| 80 | 35.20 | 34.27 | 33.52 | 33.53 | 35.50 | 35.89 | 36.65 | 37.13 | 70- 80 | 56.92 | 727.8 | 96.5,96.5 |
| 90 | 8.350 | 7.793 | 7.268 | 7.153 | 8.076 | 8.224 | 8.369 | 8.912 | 80- 90 | 21.95 | 749.8 | 99.4,99.4 |
| 100 | 0.1671 | 0.1797 | 0.0594 | 0.0730 | 0.0749 | 0.0608 | 0.0526 | 0.0672 | 90-100 | 2.752 | 752.5 | 99.8,99.8 |
| 110 | 0.1775 | 0.2013 | 0.1977 | 0.1870 | 0.2256 | 0.1798 | 0.1842 | 0.2177 | 100-110 | 0.1371 | 752.7 | 99.8,99.8 |
| 120 | 0.2176 | 0.2497 | 0.2490 | 0.2281 | 0.2880 | 0.2408 | 0.2518 | 0.2761 | 110-120 | 0.2217 | 752.9 | 99.9,99.9 |
| 130 | 0.2500 | 0.2830 | 0.2829 | 0.2629 | 0.3476 | 0.3085 | 0.3112 | 0.3376 | 120-130 | 0.2453 | 753.2 | 99.9,99.9 |
| 140 | 0.2768 | 0.3171 | 0.3064 | 0.2998 | 0.4142 | 0.3833 | 0.3805 | 0.4022 | 130-140 | 0.2493 | 753.4 | 99.9,99.9 |
| 150 | 0.3138 | 0.3666 | 0.3610 | 0.3441 | 0.4529 | 0.4298 | 0.4299 | 0.4272 | 140-150 | 0.2336 | 753.6 | 100,100 |
| 160 | 0.3520 | 0.3941 | 0.3756 | 0.3653 | 0.4725 | 0.4317 | 0.4320 | 0.4487 | 150-160 | 0.1854 | 753.8 | 100,100 |
| 170 | 0.3992 | 0.4360 | 0.4464 | 0.4056 | 0.5008 | 0.4719 | 0.4273 | 0.4501 | 160-170 | 0.1200 | 753.9 | 100,100 |
| 180 | 0.2712 | 0.2343 | 0.1671 | 0.2716 | 0.2900 | 0.2929 | 0.2945 | 0.2958 | 170-180 | 0.0438 | 754.0 | 100,100 |
| DEG | LUMINOUS INTENSITY:cd | | | | | | | | | UNIT:lm | | |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES



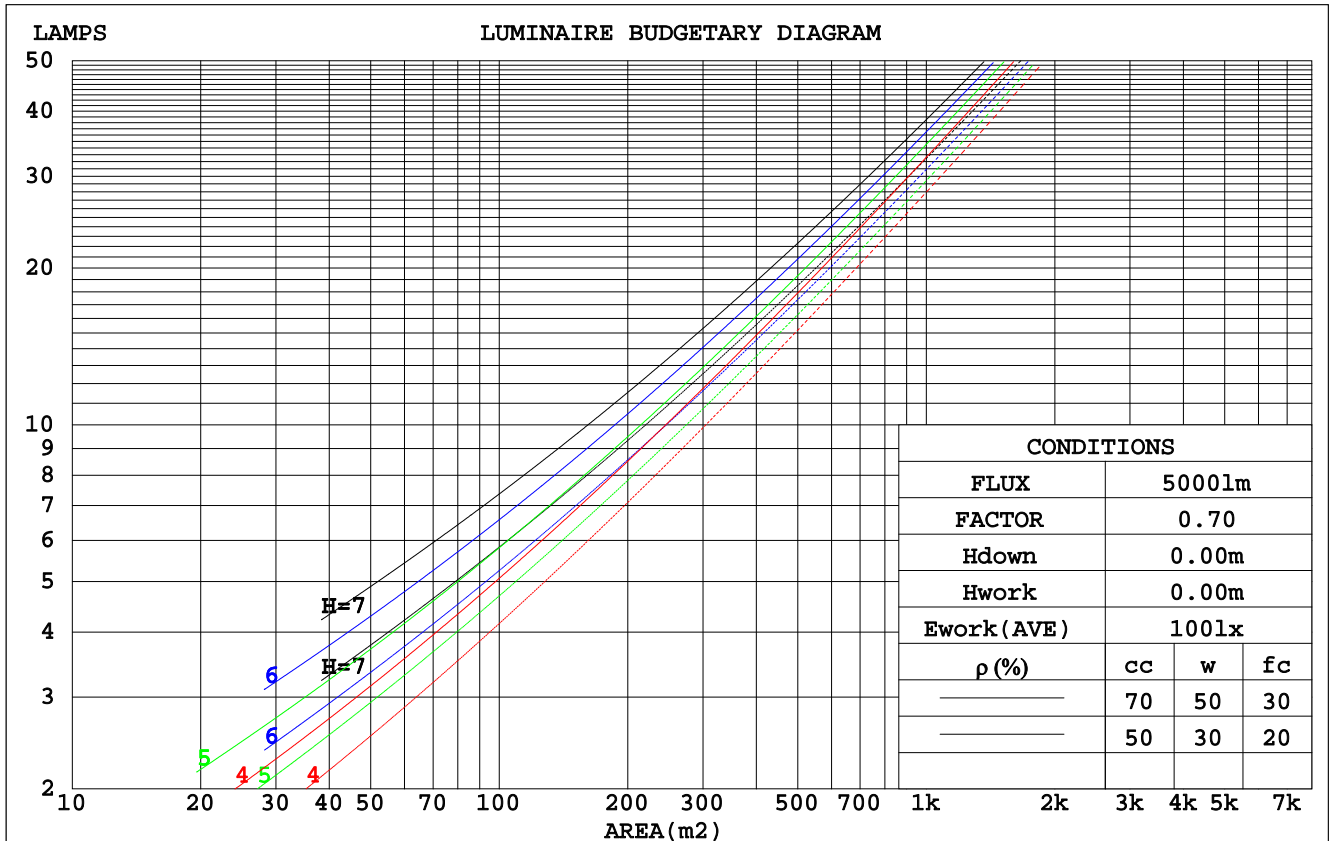
| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G (DEG) | C0/180 | C90/270 |
| 85 | 2246 | 2059 |
| 80 | 2035 | 1928 |
| 75 | 2086 | 2009 |
| 70 | 2155 | 2097 |
| 65 | 2220 | 2174 |
| 60 | 2282 | 2239 |
| 55 | 2331 | 2299 |
| 50 | 2377 | 2345 |
| 45 | 2415 | 2387 |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| pcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| ρw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Coefficients of Utilization(CU) | | | | | | | | | |
| 0.0 | 1.19 | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11 | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .99 |
| 1.0 | 1.03 | .99 | .95 | 1.01 | .97 | .93 | .96 | .93 | .90 | .92 | .90 | .87 | .89 | .86 | .84 | .82 |
| 2.0 | .90 | .82 | .77 | .88 | .81 | .76 | .84 | .78 | .74 | .81 | .76 | .72 | .77 | .74 | .70 | .68 |
| 3.0 | .78 | .70 | .63 | .77 | .69 | .63 | .74 | .67 | .62 | .71 | .65 | .60 | .68 | .63 | .59 | .57 |
| 4.0 | .69 | .60 | .54 | .68 | .60 | .53 | .65 | .58 | .52 | .63 | .57 | .52 | .61 | .55 | .51 | .49 |
| 5.0 | .62 | .53 | .46 | .61 | .52 | .46 | .59 | .51 | .45 | .57 | .50 | .45 | .55 | .49 | .44 | .42 |
| 6.0 | .56 | .47 | .40 | .55 | .46 | .40 | .53 | .45 | .40 | .51 | .44 | .39 | .50 | .44 | .39 | .37 |
| 7.0 | .51 | .42 | .36 | .50 | .41 | .35 | .48 | .41 | .35 | .47 | .40 | .35 | .45 | .39 | .34 | .32 |
| 8.0 | .46 | .38 | .32 | .45 | .37 | .32 | .44 | .37 | .31 | .43 | .36 | .31 | .42 | .35 | .31 | .29 |
| 9.0 | .42 | .34 | .28 | .42 | .34 | .28 | .41 | .33 | .28 | .39 | .33 | .28 | .38 | .32 | .28 | .26 |
| 10.0 | .39 | .31 | .26 | .39 | .31 | .26 | .38 | .30 | .26 | .37 | .30 | .25 | .36 | .30 | .25 | .24 |



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

WEC AND CCEC

| 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 | .323 | .184 | .058 | .316 | .180 | .057 | .302 | .173 | .055 | .290 | .167 | .054 | .278 | .161 | .052 | |
| 2.0 | .299 | .164 | .050 | .293 | .161 | .050 | .281 | .156 | .048 | .269 | .151 | .047 | .259 | .147 | .046 | |
| 3.0 | .275 | .146 | .044 | .269 | .144 | .043 | .258 | .140 | .043 | .248 | .136 | .042 | .239 | .133 | .041 | |
| 4.0 | .252 | .131 | .039 | .247 | .129 | .038 | .238 | .126 | .038 | .229 | .123 | .037 | .221 | .120 | .037 | |
| 5.0 | .233 | .119 | .034 | .228 | .117 | .034 | .220 | .114 | .034 | .212 | .112 | .033 | .205 | .109 | .033 | |
| 6.0 | .215 | .108 | .031 | .211 | .107 | .031 | .204 | .104 | .030 | .197 | .102 | .030 | .190 | .100 | .030 | |
| 7.0 | .200 | .099 | .028 | .197 | .098 | .028 | .190 | .096 | .028 | .184 | .094 | .027 | .178 | .092 | .027 | |
| 8.0 | .187 | .091 | .026 | .184 | .090 | .026 | .177 | .089 | .025 | .172 | .087 | .025 | .167 | .085 | .025 | |
| 9.0 | .175 | .085 | .024 | .172 | .084 | .024 | .167 | .082 | .023 | .161 | .081 | .023 | .157 | .080 | .023 | |
| 10.0 | .164 | .079 | .022 | .162 | .078 | .022 | .157 | .077 | .022 | .152 | .076 | .021 | .148 | .074 | .021 | |

| ρcc | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| ρw | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρfc | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | |
| 0.0 | .195 | .195 | .195 | .166 | .166 | .166 | .114 | .114 | .114 | .065 | .065 | .065 | .021 | .021 | .021 | |
| 1.0 | .185 | .160 | .138 | .159 | .138 | .118 | .109 | .095 | .082 | .062 | .055 | .048 | .020 | .018 | .015 | |
| 2.0 | .178 | .136 | .101 | .152 | .117 | .088 | .104 | .081 | .061 | .060 | .047 | .036 | .019 | .015 | .012 | |
| 3.0 | .170 | .119 | .078 | .145 | .102 | .068 | .100 | .071 | .047 | .058 | .042 | .028 | .019 | .013 | .009 | |
| 4.0 | .162 | .105 | .062 | .139 | .091 | .054 | .096 | .063 | .038 | .055 | .037 | .023 | .018 | .012 | .007 | |
| 5.0 | .154 | .095 | .051 | .133 | .082 | .045 | .091 | .057 | .031 | .053 | .034 | .019 | .017 | .011 | .006 | |
| 6.0 | .147 | .087 | .043 | .127 | .075 | .038 | .087 | .053 | .027 | .051 | .031 | .016 | .016 | .010 | .005 | |
| 7.0 | .140 | .080 | .037 | .121 | .069 | .033 | .083 | .048 | .023 | .048 | .029 | .014 | .016 | .009 | .005 | |
| 8.0 | .134 | .074 | .033 | .115 | .064 | .029 | .080 | .045 | .020 | .046 | .027 | .012 | .015 | .009 | .004 | |
| 9.0 | .128 | .069 | .029 | .110 | .060 | .026 | .076 | .042 | .018 | .044 | .025 | .011 | .014 | .008 | .004 | |
| 10.0 | .122 | .065 | .027 | .105 | .056 | .023 | .073 | .040 | .017 | .043 | .023 | .010 | .014 | .008 | .003 | |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|------|----------------|------|------|------|------|
| 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 | 16.7 | 18.2 | 17.0 | 18.5 | 18.7 | 16.6 | 18.2 | 16.9 | 18.4 | 18.6 |
| 3H | 18.3 | 19.7 | 18.6 | 20.0 | 20.2 | 18.2 | 19.6 | 18.5 | 19.9 | 20.1 |
| 4H | 19.0 | 20.3 | 19.3 | 20.6 | 20.9 | 18.9 | 20.2 | 19.2 | 20.5 | 20.8 |
| 6H | 19.5 | 20.8 | 19.9 | 21.1 | 21.4 | 19.4 | 20.7 | 19.7 | 21.0 | 21.2 |
| 8H | 19.8 | 21.0 | 20.1 | 21.3 | 21.6 | 19.6 | 20.8 | 19.9 | 21.1 | 21.4 |
| 12H | 19.9 | 21.1 | 20.3 | 21.4 | 21.7 | 19.7 | 20.9 | 20.1 | 21.2 | 21.6 |
| 4H 2H | 17.3 | 18.7 | 17.7 | 18.9 | 19.2 | 17.3 | 18.6 | 17.6 | 18.9 | 19.2 |
| 3H | 19.1 | 20.3 | 19.5 | 20.6 | 20.9 | 19.0 | 20.2 | 19.4 | 20.5 | 20.9 |
| 4H | 19.9 | 21.0 | 20.3 | 21.4 | 21.7 | 19.8 | 20.9 | 20.2 | 21.3 | 21.6 |
| 6H | 20.6 | 21.6 | 21.0 | 22.0 | 22.3 | 20.5 | 21.5 | 20.9 | 21.8 | 22.2 |
| 8H | 20.9 | 21.8 | 21.3 | 22.2 | 22.6 | 20.8 | 21.7 | 21.2 | 22.0 | 22.4 |
| 12H | 21.2 | 22.0 | 21.6 | 22.4 | 22.8 | 21.0 | 21.8 | 21.4 | 22.2 | 22.6 |
| 8H 4H | 20.2 | 21.1 | 20.7 | 21.5 | 21.9 | 20.1 | 21.0 | 20.6 | 21.4 | 21.8 |
| 6H | 21.1 | 21.9 | 21.6 | 22.3 | 22.7 | 21.0 | 21.7 | 21.4 | 22.1 | 22.6 |
| 8H | 21.5 | 22.2 | 22.0 | 22.6 | 23.1 | 21.3 | 22.0 | 21.8 | 22.4 | 22.9 |
| 12H | 21.9 | 22.4 | 22.4 | 22.9 | 23.4 | 21.7 | 22.3 | 22.2 | 22.7 | 23.2 |
| 12H 4H | 20.3 | 21.1 | 20.7 | 21.5 | 21.9 | 20.2 | 21.0 | 20.6 | 21.4 | 21.8 |
| 6H | 21.2 | 21.9 | 21.7 | 22.3 | 22.8 | 21.1 | 21.7 | 21.5 | 22.2 | 22.6 |
| 8H | 21.6 | 22.2 | 22.1 | 22.7 | 23.2 | 21.5 | 22.1 | 22.0 | 22.5 | 23.0 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.1 / - 0.2 | | | | | + 0.1 / - 0.2 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.3 | | | | |
| 2.0H | + 0.1 / - 0.3 | | | | | + 0.1 / - 0.3 | | | | |

CIE Pub.117, 754.0 lm Total Lamp Luminous Flux Correct ($8\log(F/F_0) = -1.0$)

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

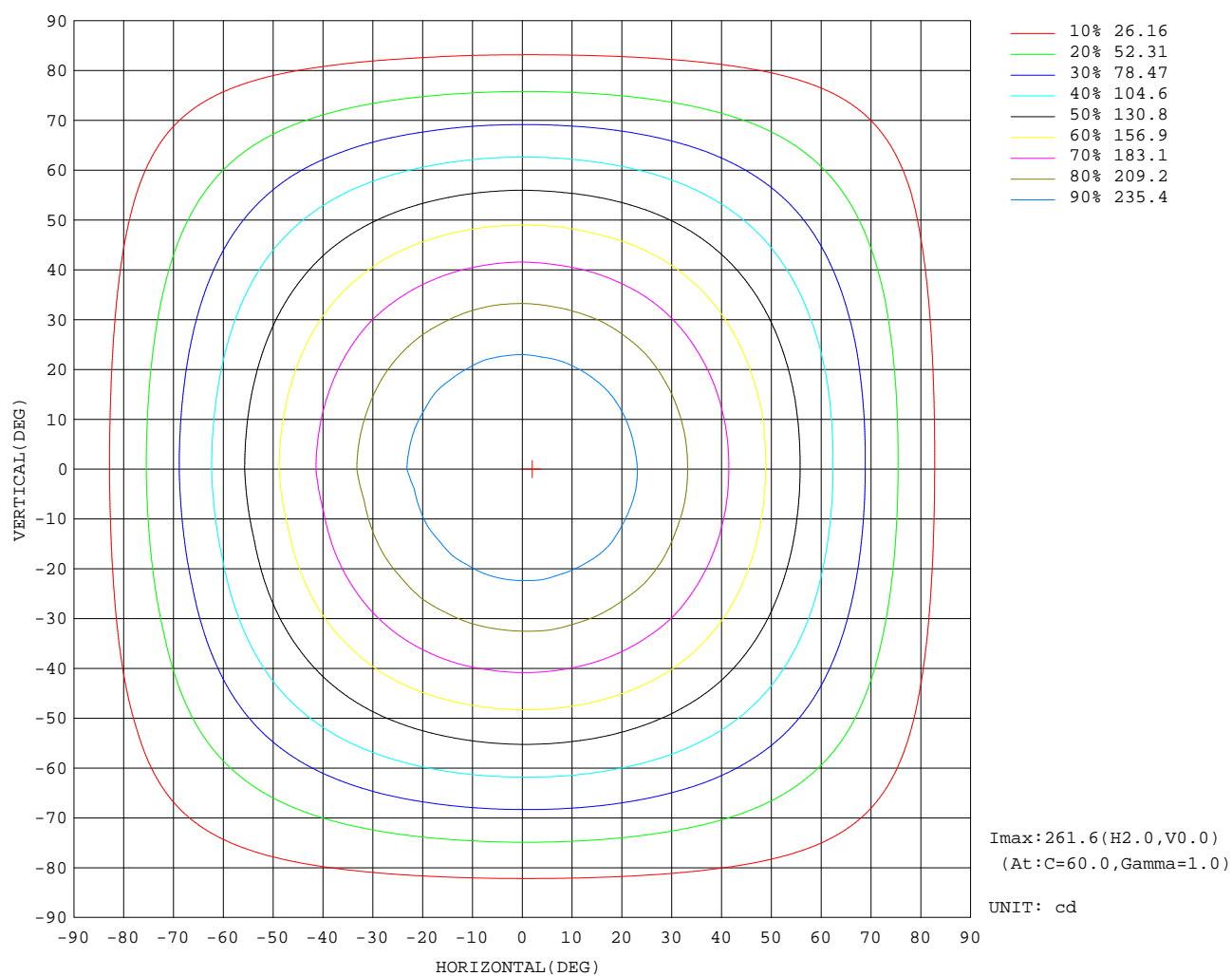
UTILIZATION FACTORS TABLE

| 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) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 57 | 45 | 38 | 56 | 45 | 38 | 55 | 44 | 38 | 31 |
| 0.80 | 67 | 55 | 48 | 66 | 55 | 47 | 64 | 54 | 47 | 40 |
| 1.00 | 75 | 64 | 56 | 74 | 63 | 56 | 72 | 65 | 56 | 48 |
| 1.25 | 82 | 71 | 64 | 81 | 71 | 64 | 78 | 69 | 63 | 55 |
| 1.50 | 87 | 77 | 70 | 85 | 76 | 69 | 82 | 74 | 68 | 61 |
| 2.00 | 94 | 85 | 79 | 92 | 84 | 78 | 89 | 82 | 76 | 68 |
| 2.50 | 98 | 90 | 84 | 96 | 89 | 83 | 92 | 86 | 81 | 72 |
| 3.00 | 101 | 94 | 89 | 99 | 93 | 87 | 95 | 90 | 85 | 76 |
| 4.00 | 105 | 100 | 95 | 103 | 98 | 93 | 99 | 94 | 91 | 81 |
| 5.00 | 108 | 103 | 99 | 105 | 101 | 97 | 101 | 97 | 94 | 84 |
| ROOM INDEX | UF(total) | | | | | | | | | Direct |
| According to DIN EN 13032-2 2004 | | | Suspended | | | | | SHRNOM = 1.25 | | |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

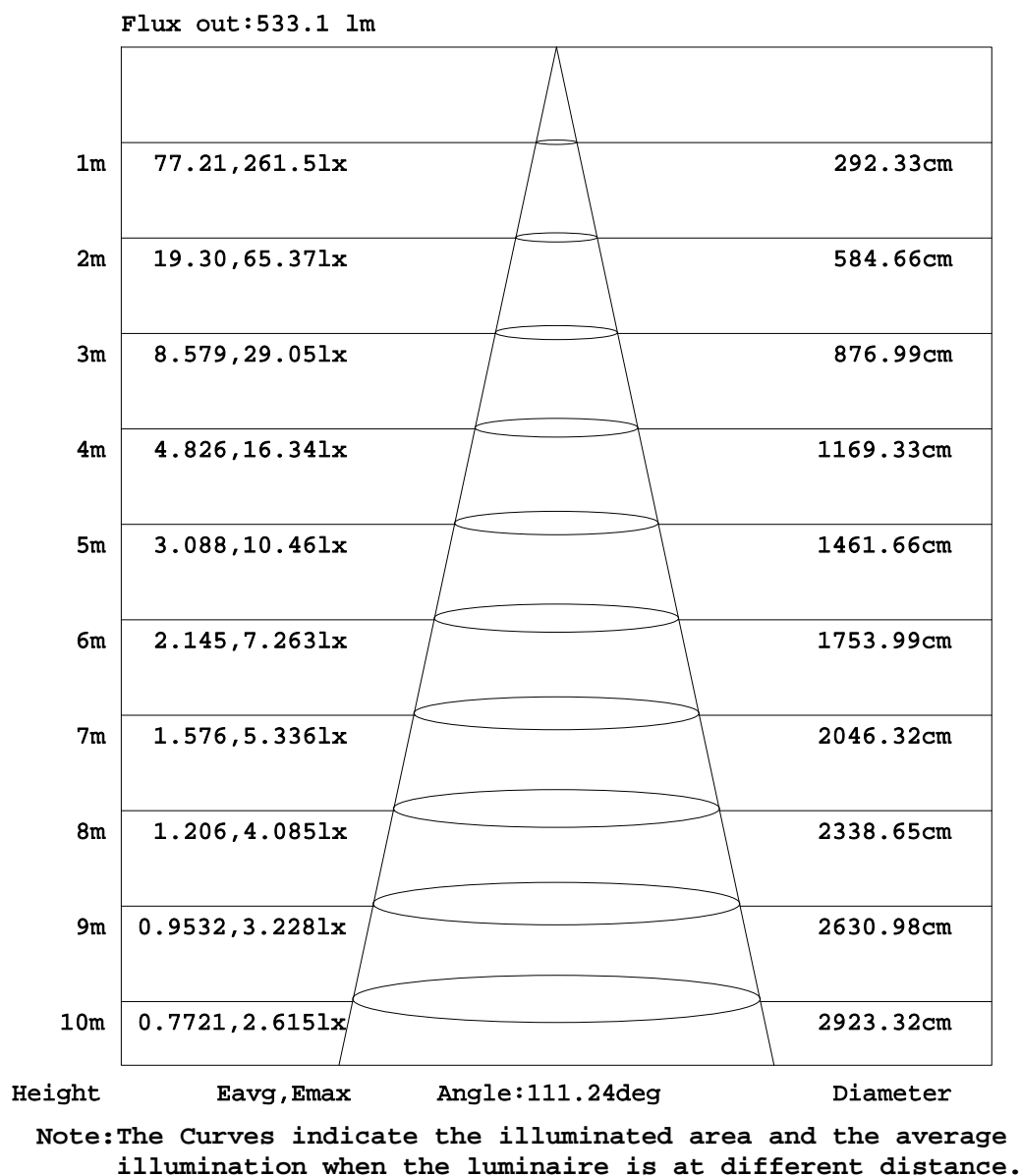
ISOCANDELA DIAGRAM



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Oliver
Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 2.499m [K=1.0000]
Remarks:

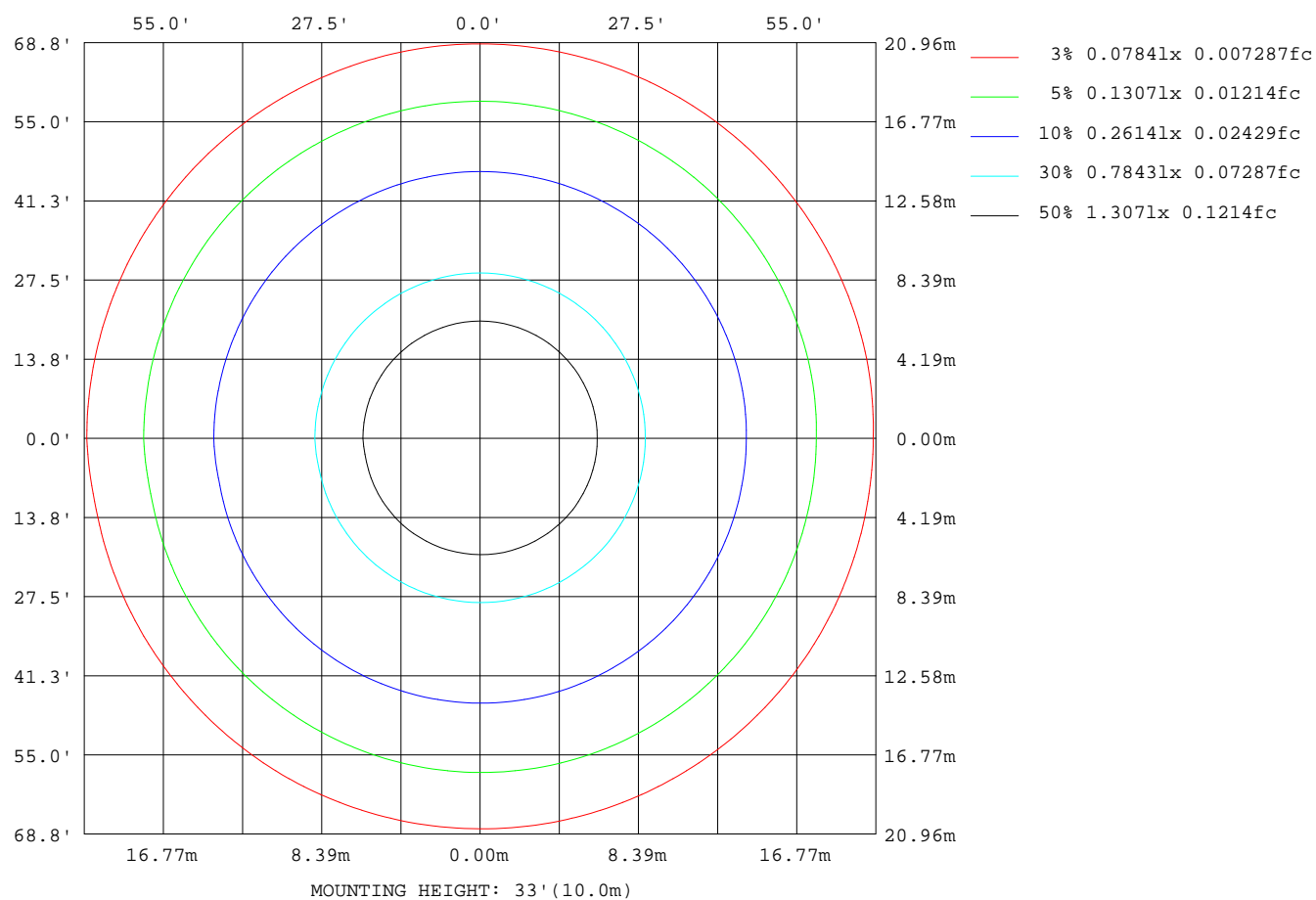
AAI Figure



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM



C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

LED Avg.L Report

| | | |
|--|-------------------|------------------|
| Test:U:120.09V I:0.1377A P:14.865W PF:0.8987 Freq:59.98Hz Lamp Flux:753.984x1 lm | | |
| NAME: FR-W2004-44L/52L | TYPE:Ceiling Fans | WEIGHT: |
| SPEC.: | DIM.: | SERIAL No.: |
| MFR.: WAC Lighting | SUR.: | Shielding Angle: |

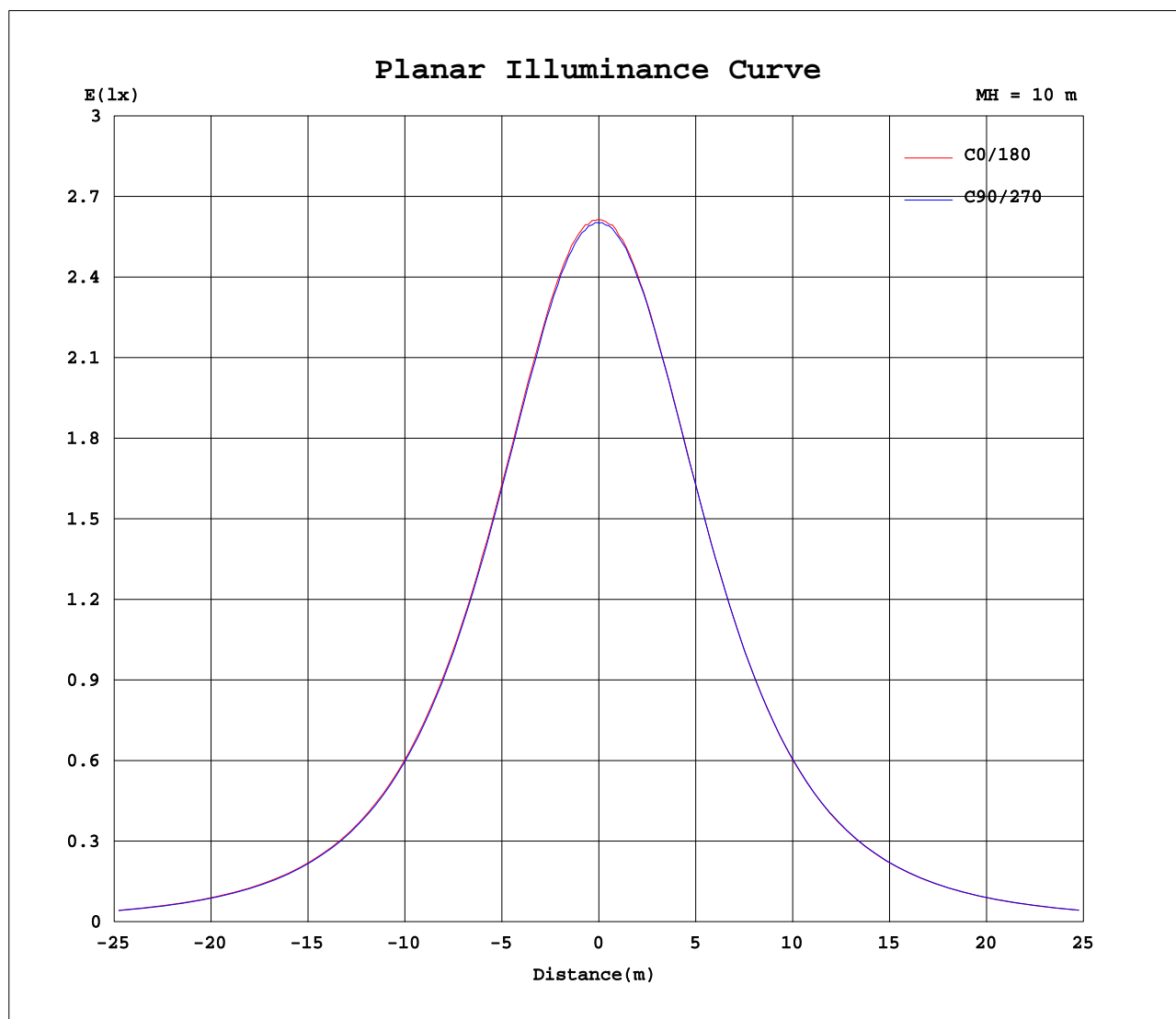
| AvgL | cd/m2 |
|----------------|-------|
| L_0~180(65)av | 2216 |
| L_0~180(75)av | 2081 |
| L_0~180(85)av | 2240 |
| L_90~270(65)av | 2215 |
| L_90~270(75)av | 2077 |
| L_90~270(85)av | 2197 |
| L_45(65)av | 2216 |
| L_45(75)av | 2077 |
| L_45(85)av | 2218 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:Oliver
 Test Date:2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System:EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity:65.0%
 Test Distance:2.499m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
C Interval: 10.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: Oliver
Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
Humidity: 65.0%
Test Distance: 2.499m [K=1.0000]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

| C(DEG) γ (DEG) | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 | 110 | 120 | 130 | 140 | 150 | 160 | 170 | 180 |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 |
| 5 | 260 | 259 | 260 | 259 | 259 | 259 | 260 | 259 | 259 | 260 | 259 | 259 | 259 | 259 | 259 | 259 | 260 | 259 | 260 |
| 10 | 256 | 255 | 256 | 256 | 256 | 256 | 256 | 256 | 255 | 256 | 256 | 255 | 255 | 255 | 255 | 255 | 255 | 256 | 256 |
| 15 | 250 | 250 | 250 | 249 | 249 | 249 | 250 | 250 | 250 | 250 | 249 | 249 | 249 | 249 | 249 | 249 | 250 | 249 | 250 |
| 20 | 242 | 241 | 241 | 241 | 241 | 241 | 241 | 241 | 241 | 241 | 241 | 240 | 240 | 240 | 240 | 240 | 240 | 240 | 241 |
| 25 | 230 | 230 | 230 | 230 | 230 | 230 | 230 | 229 | 230 | 230 | 229 | 229 | 229 | 229 | 229 | 229 | 229 | 229 | 230 |
| 30 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 217 | 216 | 217 | 216 | 216 | 216 | 217 | 216 | 216 | 216 | 216 | 217 |
| 35 | 203 | 203 | 203 | 203 | 203 | 203 | 203 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 202 | 203 |
| 40 | 187 | 187 | 187 | 187 | 187 | 187 | 187 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 186 | 185 | 186 | 186 | 187 |
| 45 | 170 | 170 | 170 | 170 | 170 | 169 | 170 | 169 | 169 | 169 | 169 | 169 | 168 | 169 | 168 | 168 | 169 | 169 | 170 |
| 50 | 152 | 152 | 152 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 151 | 150 | 150 | 150 | 150 | 150 | 151 | 150 | 152 |
| 55 | 133 | 133 | 133 | 133 | 132 | 132 | 133 | 132 | 132 | 132 | 132 | 131 | 131 | 132 | 131 | 131 | 132 | 132 | 133 |
| 60 | 114 | 113 | 113 | 113 | 113 | 113 | 113 | 113 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 112 | 114 |
| 65 | 93.5 | 93.3 | 93.2 | 93.0 | 92.7 | 92.8 | 92.8 | 92.2 | 92.0 | 92.0 | 91.8 | 91.6 | 91.7 | 92.0 | 91.6 | 91.6 | 91.9 | 91.9 | 93.8 |
| 70 | 73.4 | 73.1 | 73.2 | 73.0 | 72.7 | 72.5 | 72.4 | 72.2 | 71.9 | 71.8 | 71.7 | 71.5 | 71.5 | 71.6 | 71.6 | 71.6 | 71.8 | 71.8 | 73.6 |
| 75 | 53.8 | 53.5 | 53.5 | 53.1 | 52.9 | 52.7 | 52.5 | 52.2 | 52.1 | 52.1 | 51.8 | 51.8 | 51.8 | 51.9 | 51.8 | 51.9 | 52.3 | 52.2 | 54.0 |
| 80 | 35.2 | 35.0 | 34.9 | 34.7 | 34.4 | 34.1 | 34.0 | 33.7 | 33.6 | 33.5 | 33.4 | 33.4 | 33.4 | 33.5 | 33.6 | 33.6 | 33.8 | 33.9 | 35.5 |
| 85 | 19.5 | 19.4 | 19.2 | 19.0 | 18.7 | 18.5 | 18.4 | 18.2 | 18.0 | 18.0 | 17.9 | 17.9 | 17.9 | 18.0 | 18.1 | 18.2 | 18.3 | 18.3 | 19.5 |
| 90 | 8.35 | 8.41 | 8.15 | 8.00 | 7.87 | 7.71 | 7.57 | 7.45 | 7.34 | 7.27 | 7.21 | 7.15 | 7.14 | 7.14 | 7.17 | 7.18 | 7.26 | 7.30 | 8.08 |
| 95 | 2.04 | 2.03 | 1.98 | 1.92 | 1.85 | 1.79 | 1.74 | 1.67 | 1.60 | 1.52 | 1.45 | 1.37 | 1.31 | 1.27 | 1.24 | 1.23 | 1.25 | 1.28 | 1.62 |
| 100 | 0.17 | 0.21 | 0.23 | 0.22 | 0.20 | 0.16 | 0.11 | 0.08 | 0.07 | 0.06 | 0.05 | 0.07 | 0.08 | 0.08 | 0.07 | 0.05 | 0.06 | 0.07 | 0.07 |
| 105 | 0.15 | 0.15 | 0.13 | 0.12 | 0.11 | 0.12 | 0.12 | 0.12 | 0.12 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.15 | 0.14 | 0.14 | 0.13 | 0.11 |
| 110 | 0.18 | 0.17 | 0.17 | 0.18 | 0.19 | 0.21 | 0.22 | 0.22 | 0.21 | 0.20 | 0.18 | 0.17 | 0.18 | 0.19 | 0.19 | 0.20 | 0.21 | 0.23 | 0.23 |
| 115 | 0.20 | 0.20 | 0.20 | 0.20 | 0.22 | 0.23 | 0.24 | 0.24 | 0.24 | 0.22 | 0.21 | 0.20 | 0.21 | 0.21 | 0.21 | 0.22 | 0.24 | 0.25 | 0.25 |
| 120 | 0.22 | 0.22 | 0.22 | 0.23 | 0.24 | 0.26 | 0.26 | 0.27 | 0.26 | 0.25 | 0.24 | 0.22 | 0.22 | 0.22 | 0.23 | 0.25 | 0.26 | 0.28 | 0.29 |
| 125 | 0.23 | 0.23 | 0.23 | 0.25 | 0.26 | 0.27 | 0.28 | 0.28 | 0.28 | 0.27 | 0.25 | 0.24 | 0.24 | 0.24 | 0.25 | 0.26 | 0.28 | 0.29 | 0.32 |
| 130 | 0.25 | 0.25 | 0.25 | 0.26 | 0.28 | 0.29 | 0.30 | 0.30 | 0.29 | 0.28 | 0.27 | 0.26 | 0.26 | 0.26 | 0.26 | 0.28 | 0.29 | 0.31 | 0.35 |
| 135 | 0.26 | 0.26 | 0.27 | 0.28 | 0.30 | 0.30 | 0.31 | 0.31 | 0.30 | 0.29 | 0.28 | 0.28 | 0.27 | 0.28 | 0.28 | 0.29 | 0.31 | 0.32 | 0.38 |
| 140 | 0.28 | 0.28 | 0.29 | 0.30 | 0.31 | 0.32 | 0.32 | 0.32 | 0.31 | 0.31 | 0.30 | 0.30 | 0.29 | 0.29 | 0.31 | 0.31 | 0.33 | 0.33 | 0.41 |
| 145 | 0.30 | 0.30 | 0.31 | 0.32 | 0.34 | 0.35 | 0.35 | 0.34 | 0.33 | 0.33 | 0.33 | 0.33 | 0.32 | 0.32 | 0.33 | 0.35 | 0.36 | 0.36 | 0.44 |
| 150 | 0.31 | 0.32 | 0.33 | 0.35 | 0.37 | 0.37 | 0.38 | 0.37 | 0.36 | 0.36 | 0.37 | 0.36 | 0.35 | 0.34 | 0.35 | 0.37 | 0.37 | 0.37 | 0.45 |
| 155 | 0.33 | 0.34 | 0.35 | 0.37 | 0.37 | 0.38 | 0.39 | 0.39 | 0.39 | 0.38 | 0.38 | 0.37 | 0.35 | 0.35 | 0.35 | 0.37 | 0.38 | 0.38 | 0.46 |
| 160 | 0.35 | 0.36 | 0.36 | 0.37 | 0.39 | 0.40 | 0.39 | 0.40 | 0.39 | 0.38 | 0.36 | 0.35 | 0.36 | 0.36 | 0.37 | 0.38 | 0.39 | 0.39 | 0.47 |
| 165 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.41 | 0.41 | 0.39 | 0.38 | 0.40 | 0.40 | 0.40 | 0.39 | 0.38 | 0.38 | 0.39 | 0.40 | 0.40 | 0.47 |
| 170 | 0.40 | 0.41 | 0.43 | 0.46 | 0.44 | 0.43 | 0.45 | 0.46 | 0.46 | 0.45 | 0.42 | 0.38 | 0.39 | 0.40 | 0.41 | 0.40 | 0.40 | 0.42 | 0.50 |
| 175 | 0.44 | 0.45 | 0.45 | 0.44 | 0.42 | 0.49 | 0.65 | 0.55 | 0.44 | 0.43 | 0.46 | 0.47 | 0.46 | 0.46 | 0.43 | 0.39 | 0.38 | 0.41 | 0.72 |
| 180 | 0.27 | 0.22 | 0.31 | 0.32 | 0.29 | 0.18 | 0.17 | 0.17 | 0.16 | 0.17 | 0.26 | 0.31 | 0.23 | 0.22 | 0.32 | 0.31 | 0.27 | 0.24 | 0.29 |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Table--2

UNIT: cd

| C(DEG) γ (DEG) | 190 | 200 | 210 | 220 | 230 | 240 | 250 | 260 | 270 | 280 | 290 | 300 | 310 | 320 | 330 | 340 | 350 | | |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| 0 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | 260 | | |
| 5 | 259 | 259 | 259 | 259 | 260 | 260 | 260 | 259 | 260 | 260 | 259 | 260 | 260 | 260 | 260 | 260 | 260 | | |
| 10 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 256 | 257 | 257 | | |
| 15 | 249 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 251 | 250 | 251 | 251 | | |
| 20 | 241 | 241 | 241 | 241 | 241 | 242 | 241 | 242 | 242 | 242 | 241 | 242 | 242 | 242 | 242 | 242 | 243 | | |
| 25 | 230 | 230 | 230 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 231 | 232 | 232 | | |
| 30 | 217 | 217 | 218 | 218 | 218 | 218 | 218 | 218 | 218 | 218 | 218 | 218 | 219 | 219 | 219 | 219 | 219 | | |
| 35 | 203 | 203 | 203 | 203 | 203 | 204 | 203 | 204 | 204 | 204 | 204 | 204 | 204 | 204 | 204 | 205 | 205 | | |
| 40 | 187 | 187 | 187 | 187 | 187 | 188 | 188 | 188 | 188 | 188 | 188 | 188 | 189 | 189 | 189 | 189 | 189 | | |
| 45 | 170 | 170 | 170 | 170 | 170 | 171 | 171 | 171 | 172 | 172 | 171 | 171 | 172 | 172 | 171 | 172 | 172 | | |
| 50 | 152 | 152 | 152 | 152 | 152 | 153 | 153 | 153 | 153 | 153 | 153 | 153 | 154 | 153 | 154 | 154 | 154 | | |
| 55 | 133 | 133 | 133 | 134 | 134 | 134 | 134 | 134 | 135 | 135 | 135 | 134 | 135 | 135 | 135 | 135 | 135 | | |
| 60 | 114 | 114 | 114 | 114 | 114 | 115 | 115 | 115 | 115 | 115 | 115 | 115 | 116 | 116 | 115 | 116 | 115 | | |
| 65 | 93.9 | 93.9 | 94.1 | 94.2 | 94.4 | 94.8 | 94.8 | 95.2 | 95.3 | 95.2 | 95.4 | 95.6 | 95.7 | 95.7 | 95.6 | 95.7 | 95.4 | | |
| 70 | 73.6 | 73.9 | 74.1 | 74.2 | 74.3 | 74.7 | 74.6 | 74.7 | 75.2 | 75.2 | 75.3 | 75.2 | 75.6 | 75.4 | 75.4 | 75.6 | 75.4 | | |
| 75 | 54.1 | 54.2 | 54.3 | 54.5 | 54.7 | 54.9 | 54.9 | 55.2 | 55.4 | 55.4 | 55.5 | 55.7 | 55.8 | 55.7 | 55.7 | 55.8 | 55.6 | | |
| 80 | 35.6 | 35.7 | 35.7 | 35.8 | 35.9 | 36.3 | 36.3 | 36.4 | 36.7 | 36.8 | 36.9 | 36.9 | 37.1 | 37.1 | 37.1 | 37.1 | 37.0 | | |
| 85 | 19.5 | 19.6 | 19.7 | 19.7 | 19.8 | 20.0 | 20.0 | 20.2 | 20.3 | 20.5 | 20.6 | 20.7 | 20.8 | 20.8 | 20.8 | 20.9 | 20.8 | | |
| 90 | 8.12 | 8.15 | 8.19 | 8.21 | 8.23 | 8.26 | 8.29 | 8.30 | 8.37 | 8.46 | 8.58 | 8.71 | 8.86 | 8.97 | 9.05 | 9.12 | 9.10 | | |
| 95 | 1.68 | 1.71 | 1.73 | 1.73 | 1.71 | 1.67 | 1.63 | 1.61 | 1.61 | 1.63 | 1.70 | 1.81 | 1.95 | 2.08 | 2.20 | 2.30 | 2.36 | | |
| 100 | 0.08 | 0.07 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.07 | 0.07 | 0.06 | 0.06 | 0.08 | 0.16 | | |
| 105 | 0.11 | 0.11 | 0.10 | 0.11 | 0.12 | 0.14 | 0.15 | 0.15 | 0.13 | 0.12 | 0.12 | 0.12 | 0.12 | 0.11 | 0.11 | 0.12 | 0.13 | | |
| 110 | 0.22 | 0.21 | 0.20 | 0.19 | 0.17 | 0.18 | 0.18 | 0.18 | 0.18 | 0.20 | 0.22 | 0.22 | 0.22 | 0.21 | 0.20 | 0.18 | 0.17 | | |
| 115 | 0.25 | 0.24 | 0.23 | 0.21 | 0.20 | 0.20 | 0.21 | 0.21 | 0.22 | 0.23 | 0.24 | 0.25 | 0.26 | 0.24 | 0.23 | 0.21 | 0.20 | | |
| 120 | 0.28 | 0.28 | 0.26 | 0.25 | 0.23 | 0.23 | 0.24 | 0.24 | 0.25 | 0.27 | 0.29 | 0.29 | 0.28 | 0.27 | 0.26 | 0.25 | 0.23 | | |
| 125 | 0.32 | 0.31 | 0.30 | 0.28 | 0.27 | 0.26 | 0.26 | 0.26 | 0.28 | 0.30 | 0.31 | 0.31 | 0.31 | 0.30 | 0.29 | 0.28 | 0.26 | | |
| 130 | 0.35 | 0.34 | 0.33 | 0.31 | 0.30 | 0.30 | 0.30 | 0.30 | 0.31 | 0.33 | 0.34 | 0.34 | 0.34 | 0.34 | 0.33 | 0.31 | 0.29 | | |
| 135 | 0.38 | 0.37 | 0.37 | 0.35 | 0.34 | 0.34 | 0.34 | 0.34 | 0.35 | 0.36 | 0.37 | 0.37 | 0.37 | 0.37 | 0.36 | 0.34 | 0.33 | | |
| 140 | 0.41 | 0.41 | 0.40 | 0.39 | 0.38 | 0.37 | 0.37 | 0.37 | 0.38 | 0.39 | 0.40 | 0.40 | 0.40 | 0.40 | 0.39 | 0.38 | 0.36 | | |
| 145 | 0.44 | 0.44 | 0.43 | 0.42 | 0.41 | 0.40 | 0.39 | 0.40 | 0.42 | 0.42 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 0.41 | 0.39 | | |
| 150 | 0.45 | 0.45 | 0.45 | 0.43 | 0.42 | 0.41 | 0.41 | 0.42 | 0.43 | 0.43 | 0.43 | 0.43 | 0.42 | 0.43 | 0.44 | 0.43 | 0.41 | | |
| 155 | 0.46 | 0.45 | 0.45 | 0.44 | 0.43 | 0.42 | 0.41 | 0.41 | 0.42 | 0.43 | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.44 | 0.42 | | |
| 160 | 0.47 | 0.45 | 0.44 | 0.43 | 0.43 | 0.43 | 0.42 | 0.42 | 0.43 | 0.44 | 0.44 | 0.46 | 0.45 | 0.45 | 0.44 | 0.43 | 0.42 | | |
| 165 | 0.48 | 0.49 | 0.45 | 0.44 | 0.44 | 0.43 | 0.43 | 0.43 | 0.44 | 0.44 | 0.47 | 0.47 | 0.46 | 0.45 | 0.46 | 0.45 | 0.45 | | |
| 170 | 0.50 | 0.55 | 0.52 | 0.49 | 0.46 | 0.44 | 0.43 | 0.43 | 0.43 | 0.43 | 0.44 | 0.43 | 0.44 | 0.46 | 0.48 | 0.44 | 0.45 | | |
| 175 | 0.72 | 0.49 | 0.47 | 0.47 | 0.49 | 0.49 | 0.48 | 0.47 | 0.44 | 0.41 | 0.37 | 0.36 | 0.36 | 0.36 | 0.36 | 0.37 | 0.39 | | |
| 180 | 0.29 | 0.30 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.30 | 0.29 | 0.29 | 0.29 | 0.29 | 0.30 | 0.30 | 0.29 | 0.29 | 0.29 | | |

C Range: 0 - 360DEG
 C Interval: 10.0DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: Oliver
 Test Date: 2019-12-31

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
 Test System: EVERFINE GO-R5000_V2 SYSTEM V2.0.366
 Humidity: 65.0%
 Test Distance: 2.499m [K=1.0000]
 Remarks: