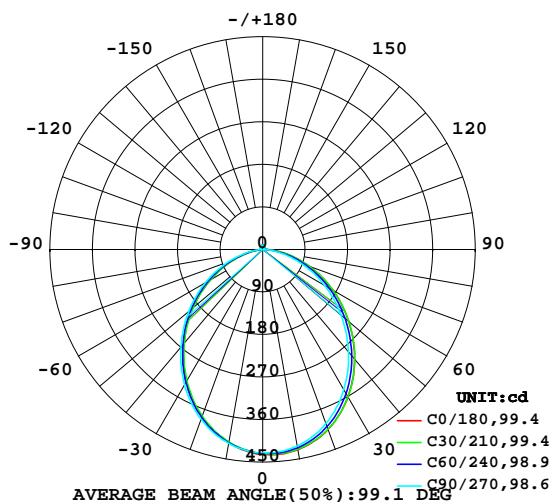
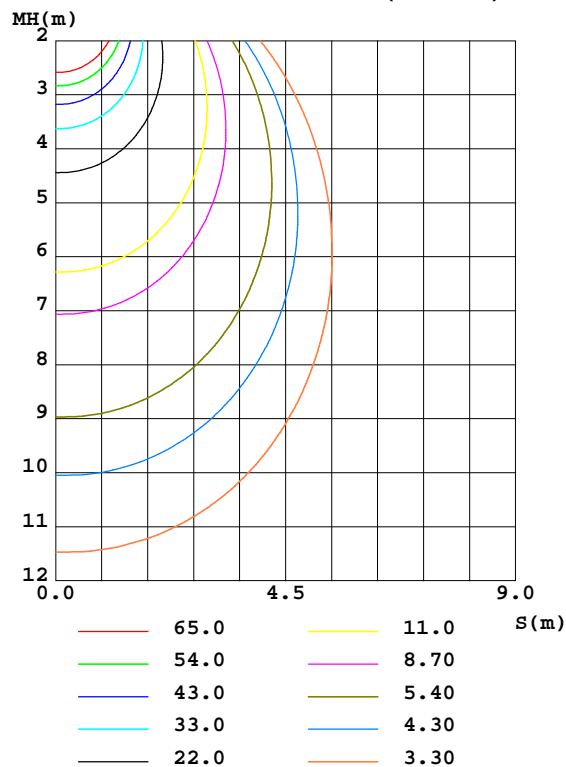


LUMINAIRE PHOTOMETRIC TEST REPORT

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.:LIGHT ENERGY | | |
| | | |

| DATA OF LAMP | | PHOTOMETRIC DATA Eff: 96.81 lm/W | | | |
|------------------|---------|----------------------------------|--------|------------------------|----------|
| MODEL | | Imax(cd) | 435.0 | S/MH(C0/180) | 1.24 |
| NOMINAL POWER(W) | 11 | LOR(%) | 100.0 | S/MH(C90/270) | 1.19 |
| RATED VOLTAGE(V) | 220 | TOTAL FLUX(lm) | 1084.2 | η UP,DN(C0-180) | 1.4,50.3 |
| NOMINAL FLUX(lm) | 1084.23 | CIE CLASS | DIRECT | η UP,DN(C180-360) | 1.5,46.8 |
| LAMPS INSIDE | 1 | η up(%) | 2.9 | CIBSE SHR NOM | 1.25 |
| TEST VOLTAGE(V) | 220 | η down(%) | 97.1 | CIBSE SHR MAX | 1.30 |

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:DAMIN
Test Date:2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

ZONAL FLUX DIAGRAM
ZONAL FLUX DIAGRAM:

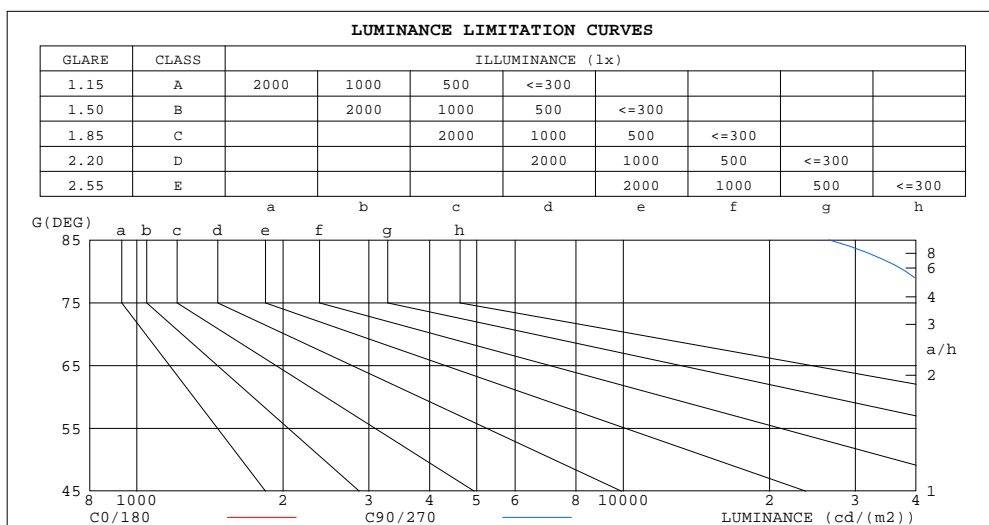
| γ | C0 | C45 | C90 | C135 | C180 | C225 | C270 | C315 | γ | Φ zone | Φ total | %lum,lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|-----------|
| 10 | 430.3 | 427.6 | 422.1 | 415.1 | 415.2 | 414.2 | 416.4 | 421.2 | 0- 10 | 40.62 | 40.62 | 3.75,3.75 |
| 20 | 405.0 | 401.7 | 391.6 | 380.2 | 376.7 | 376.3 | 382.0 | 392.1 | 10- 20 | 114.5 | 155.1 | 14.3,14.3 |
| 30 | 360.6 | 356.7 | 343.0 | 328.1 | 322.5 | 323.0 | 330.6 | 344.7 | 20- 30 | 168.0 | 323.1 | 29.8,29.8 |
| 40 | 302.9 | 298.0 | 282.4 | 266.0 | 259.7 | 260.6 | 269.3 | 285.7 | 30- 40 | 193.3 | 516.4 | 47.6,47.6 |
| 50 | 237.9 | 233.1 | 216.8 | 200.0 | 194.1 | 195.5 | 204.3 | 221.4 | 40- 50 | 189.3 | 705.7 | 65.1,65.1 |
| 60 | 171.4 | 166.4 | 150.8 | 134.7 | 127.2 | 129.4 | 139.2 | 155.6 | 50- 60 | 160.6 | 866.3 | 79.9,79.9 |
| 70 | 105.6 | 101.2 | 87.38 | 73.03 | 65.66 | 68.24 | 77.92 | 92.68 | 60- 70 | 113.6 | 979.8 | 90.4,90.4 |
| 80 | 46.08 | 43.21 | 33.05 | 22.03 | 16.14 | 18.10 | 25.85 | 37.38 | 70- 80 | 59.00 | 1039 | 95.8,95.8 |
| 90 | 3.966 | 3.130 | 2.042 | 2.042 | 2.784 | 2.723 | 2.587 | 2.828 | 80- 90 | 13.89 | 1053 | 97.1,97.1 |
| 100 | 2.455 | 2.492 | 2.621 | 2.818 | 3.503 | 3.414 | 3.231 | 3.064 | 90-100 | 2.865 | 1056 | 97.4,97.4 |
| 110 | 3.342 | 3.376 | 3.528 | 3.758 | 4.382 | 4.268 | 4.049 | 3.849 | 100-110 | 3.564 | 1059 | 97.7,97.7 |
| 120 | 4.351 | 4.374 | 4.530 | 4.770 | 5.339 | 5.211 | 4.965 | 4.751 | 110-120 | 4.258 | 1063 | 98.1,98.1 |
| 130 | 5.407 | 5.418 | 5.556 | 5.799 | 6.236 | 6.103 | 5.863 | 5.656 | 120-130 | 4.719 | 1068 | 98.5,98.5 |
| 140 | 6.425 | 6.441 | 6.552 | 6.772 | 7.052 | 6.895 | 6.665 | 6.485 | 130-140 | 4.800 | 1073 | 99,99 |
| 150 | 7.324 | 7.317 | 7.418 | 7.587 | 7.783 | 7.633 | 7.416 | 7.254 | 140-150 | 4.427 | 1077 | 99.4,99.4 |
| 160 | 8.145 | 8.125 | 8.184 | 8.287 | 8.438 | 8.290 | 8.116 | 7.996 | 150-160 | 3.615 | 1081 | 99.7,99.7 |
| 170 | 8.839 | 8.802 | 8.815 | 8.865 | 8.959 | 8.838 | 8.714 | 8.651 | 160-170 | 2.403 | 1083 | 99.9,99.9 |
| 180 | 9.181 | 9.102 | 9.041 | 9.020 | 9.216 | 9.097 | 9.024 | 9.023 | 170-180 | 0.8508 | 1084 | 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:2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

LUMINANCE LIMITATION CURVES

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |



| LUMINANCE cd/(m2) | | |
|-------------------|--------|---------|
| G(DEG) | C0/180 | C90/270 |
| 85 | 50999 | 26455 |
| 80 | 53072 | 38068 |
| 75 | 57680 | 45331 |
| 70 | 61734 | 51096 |
| 65 | 65339 | 55926 |
| 60 | 68559 | 60312 |
| 55 | 71432 | 64045 |
| 50 | 74028 | 67444 |
| 45 | 76568 | 70656 |

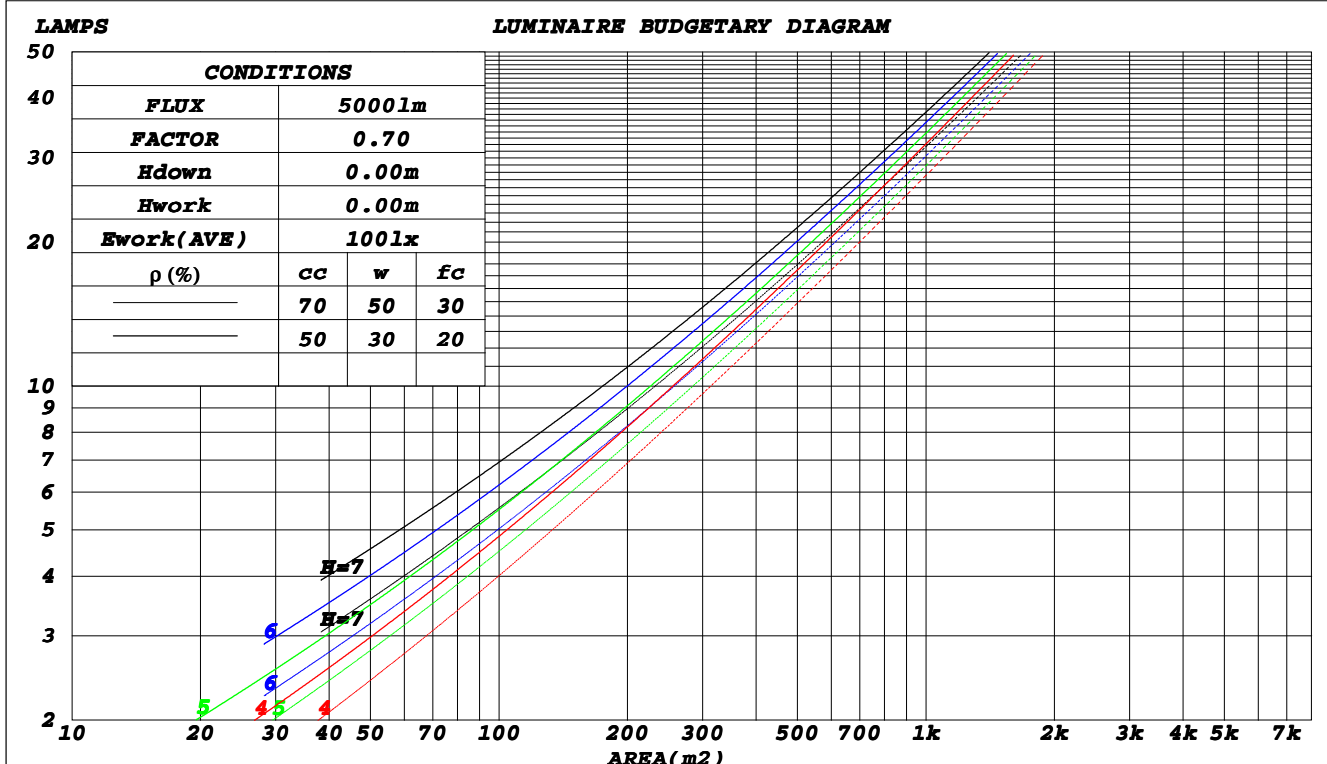
C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-01-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|-----|-----|-----|-----|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 |
| RCR | RCR:Room Cavity Ratio | | | | | | Coefficients of Utilization(CU) | | | | | | | | | |
| 0.0 | 1.18 | 1.18 | 1.18 | 1.15 | 1.15 | 1.15 | 1.09 | 1.09 | 1.09 | 1.04 | 1.04 | 1.04 | .99 | .99 | .99 | .97 |
| 1.0 | 1.04 | 1.00 | .97 | 1.02 | .98 | .95 | .97 | .94 | .91 | .93 | .90 | .88 | .89 | .87 | .85 | .83 |
| 2.0 | .92 | .85 | .80 | .89 | .83 | .78 | .85 | .80 | .76 | .82 | .78 | .74 | .78 | .75 | .72 | .70 |
| 3.0 | .81 | .73 | .67 | .79 | .72 | .66 | .76 | .70 | .65 | .73 | .67 | .63 | .70 | .65 | .62 | .59 |
| 4.0 | .72 | .64 | .57 | .70 | .63 | .57 | .68 | .61 | .55 | .65 | .59 | .54 | .63 | .58 | .53 | .51 |
| 5.0 | .65 | .56 | .49 | .63 | .55 | .49 | .61 | .54 | .48 | .59 | .52 | .47 | .56 | .51 | .47 | .45 |
| 6.0 | .58 | .50 | .43 | .57 | .49 | .43 | .55 | .48 | .43 | .53 | .47 | .42 | .51 | .46 | .41 | .39 |
| 7.0 | .53 | .44 | .39 | .52 | .44 | .38 | .50 | .43 | .38 | .49 | .42 | .37 | .47 | .41 | .37 | .35 |
| 8.0 | .48 | .40 | .34 | .48 | .40 | .34 | .46 | .39 | .34 | .45 | .38 | .34 | .43 | .38 | .33 | .31 |
| 9.0 | .45 | .37 | .31 | .44 | .36 | .31 | .43 | .36 | .31 | .41 | .35 | .30 | .40 | .34 | .30 | .28 |
| 10.0 | .41 | .33 | .28 | .41 | .33 | .28 | .39 | .33 | .28 | .38 | .32 | .28 | .37 | .32 | .27 | .26 |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

WEC AND CCEC

| | | | | | | | | | |
|--|--|--|--|--|----------|--|--|--|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | | | | | | | | |
| NAME: LE-04-IP PROOFY 4000K | | | | | TYPE:LED | | | | |
| MFR.: | | | | | | | | | |
| | | | | | | | | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|--|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Wall Exitance Coefficients(WEC) | | | | | | | | | | |
| 0.0 | | | | | | | | | | | | | | | | | |
| 1.0 | .289 | .164 | .052 | .281 | .160 | .051 | .266 | .153 | .049 | .253 | .146 | .047 | .240 | .139 | .045 | | |
| 2.0 | .275 | .151 | .046 | .268 | .147 | .045 | .255 | .142 | .044 | .243 | .136 | .043 | .231 | .131 | .041 | | |
| 3.0 | .256 | .136 | .041 | .250 | .134 | .040 | .238 | .129 | .039 | .228 | .125 | .038 | .218 | .120 | .037 | | |
| 4.0 | .238 | .124 | .036 | .232 | .122 | .036 | .222 | .118 | .035 | .212 | .114 | .034 | .203 | .110 | .034 | | |
| 5.0 | .221 | .112 | .033 | .216 | .111 | .032 | .207 | .108 | .032 | .198 | .104 | .031 | .190 | .102 | .031 | | |
| 6.0 | .205 | .103 | .029 | .201 | .102 | .029 | .193 | .099 | .029 | .185 | .096 | .028 | .178 | .094 | .028 | | |
| 7.0 | .192 | .095 | .027 | .188 | .094 | .027 | .180 | .091 | .026 | .174 | .089 | .026 | .167 | .087 | .025 | | |
| 8.0 | .180 | .088 | .025 | .176 | .087 | .025 | .169 | .085 | .024 | .163 | .083 | .024 | .157 | .081 | .024 | | |
| 9.0 | .169 | .082 | .023 | .166 | .081 | .023 | .160 | .079 | .022 | .154 | .077 | .022 | .148 | .075 | .022 | | |
| 10.0 | .159 | .076 | .021 | .156 | .075 | .021 | .151 | .074 | .021 | .145 | .072 | .021 | .140 | .071 | .020 | | |

| ρ_{cc} | 80% | | | 70% | | | 50% | | | 30% | | | 10% | | | 0 | |
|-------------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|--|
| ρ_w | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0 | |
| ρ_{fc} | 20% | | | 20% | | | 20% | | | 20% | | | 20% | | | 0 | |
| RCR | RCR:Room Cavity Ratio | | | | | | Ceiling Cavity Exitance Coefficients(CCEC) | | | | | | | | | | |
| 0.0 | .213 | .213 | .213 | .182 | .182 | .182 | .124 | .124 | .124 | .071 | .071 | .071 | .023 | .023 | .023 | | |
| 1.0 | .201 | .179 | .158 | .172 | .153 | .136 | .118 | .105 | .094 | .068 | .061 | .055 | .022 | .020 | .018 | | |
| 2.0 | .192 | .154 | .123 | .165 | .133 | .106 | .113 | .092 | .074 | .065 | .054 | .043 | .021 | .017 | .014 | | |
| 3.0 | .184 | .137 | .099 | .158 | .118 | .086 | .109 | .082 | .060 | .063 | .048 | .035 | .020 | .016 | .012 | | |
| 4.0 | .177 | .123 | .083 | .152 | .107 | .072 | .104 | .074 | .051 | .060 | .044 | .030 | .019 | .014 | .010 | | |
| 5.0 | .169 | .113 | .071 | .145 | .098 | .062 | .100 | .068 | .044 | .058 | .040 | .026 | .019 | .013 | .009 | | |
| 6.0 | .162 | .105 | .063 | .140 | .091 | .055 | .096 | .063 | .039 | .056 | .037 | .023 | .018 | .012 | .008 | | |
| 7.0 | .156 | .098 | .057 | .134 | .085 | .050 | .093 | .059 | .035 | .054 | .035 | .021 | .017 | .011 | .007 | | |
| 8.0 | .149 | .092 | .052 | .129 | .080 | .046 | .089 | .056 | .032 | .052 | .033 | .019 | .017 | .011 | .006 | | |
| 9.0 | .144 | .087 | .049 | .124 | .075 | .043 | .086 | .053 | .030 | .050 | .031 | .018 | .016 | .010 | .006 | | |
| 10.0 | .138 | .083 | .046 | .119 | .072 | .040 | .083 | .051 | .028 | .048 | .030 | .017 | .016 | .010 | .006 | | |

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

UGR(Unified Glare Rating) Table

| | | | | | | | | | | |
|--|------------------|------|------|------|----------|----------------|------|------|------|------|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | | | | | | | | | |
| NAME: LE-04-IP PROOFY 4000K | | | | | TYPE:LED | | | | | |
| MFR.: | | | | | | | | | | |
| | | | | | | | | | | |
| 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 | 27.8 | 29.2 | 28.1 | 29.5 | 29.7 | 27.3 | 28.7 | 27.6 | 29.0 | 29.2 |
| 3H | 29.3 | 30.6 | 29.6 | 30.9 | 31.1 | 28.6 | 29.9 | 28.9 | 30.2 | 30.5 |
| 4H | 29.8 | 31.1 | 30.2 | 31.4 | 31.7 | 29.1 | 30.3 | 29.4 | 30.6 | 30.9 |
| 6H | 30.3 | 31.5 | 30.7 | 31.8 | 32.1 | 29.4 | 30.5 | 29.7 | 30.9 | 31.2 |
| 8H | 30.4 | 31.6 | 30.8 | 31.9 | 32.2 | 29.4 | 30.6 | 29.8 | 30.9 | 31.2 |
| 12H | 30.5 | 31.6 | 30.9 | 32.0 | 32.3 | 29.5 | 30.5 | 29.9 | 30.9 | 31.2 |
| 4H 2H | 28.3 | 29.6 | 28.7 | 29.9 | 30.2 | 27.9 | 29.2 | 28.3 | 29.5 | 29.8 |
| 3H | 30.0 | 31.1 | 30.4 | 31.4 | 31.8 | 29.4 | 30.5 | 29.8 | 30.8 | 31.2 |
| 4H | 30.7 | 31.7 | 31.1 | 32.1 | 32.5 | 30.0 | 31.0 | 30.4 | 31.4 | 31.8 |
| 6H | 31.3 | 32.2 | 31.7 | 32.6 | 33.0 | 30.4 | 31.3 | 30.9 | 31.7 | 32.1 |
| 8H | 31.5 | 32.3 | 32.0 | 32.7 | 33.2 | 30.6 | 31.4 | 31.0 | 31.8 | 32.2 |
| 12H | 31.7 | 32.4 | 32.1 | 32.8 | 33.3 | 30.6 | 31.4 | 31.1 | 31.8 | 32.3 |
| 8H 4H | 30.9 | 31.7 | 31.4 | 32.2 | 32.6 | 30.3 | 31.1 | 30.8 | 31.5 | 32.0 |
| 6H | 31.7 | 32.3 | 32.2 | 32.8 | 33.3 | 30.9 | 31.6 | 31.4 | 32.0 | 32.5 |
| 8H | 32.0 | 32.6 | 32.5 | 33.0 | 33.6 | 31.1 | 31.7 | 31.6 | 32.1 | 32.7 |
| 12H | 32.2 | 32.7 | 32.8 | 33.2 | 33.8 | 31.2 | 31.7 | 31.7 | 32.2 | 32.7 |
| 12H 4H | 30.9 | 31.7 | 31.4 | 32.1 | 32.6 | 30.3 | 31.1 | 30.8 | 31.5 | 32.0 |
| 6H | 31.7 | 32.3 | 32.2 | 32.8 | 33.3 | 31.0 | 31.6 | 31.5 | 32.0 | 32.5 |
| 8H | 32.1 | 32.6 | 32.6 | 33.1 | 33.6 | 31.2 | 31.7 | 31.7 | 32.2 | 32.7 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S = 1.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.3 | | | | |
| 1.5H | + 0.2 / - 0.3 | | | | | + 0.2 / - 0.4 | | | | |
| 2.0H | + 0.2 / - 0.2 | | | | | + 0.2 / - 0.4 | | | | |

CIE Pub.117, 1084 lm Total Lamp Luminous Flux Corrected ($8\log(F/F_0) = 0.3$)

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature:25.3DEG
Operators:DAMIN
Test Date:2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

UTILIZATION FACTORS TABLE

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |

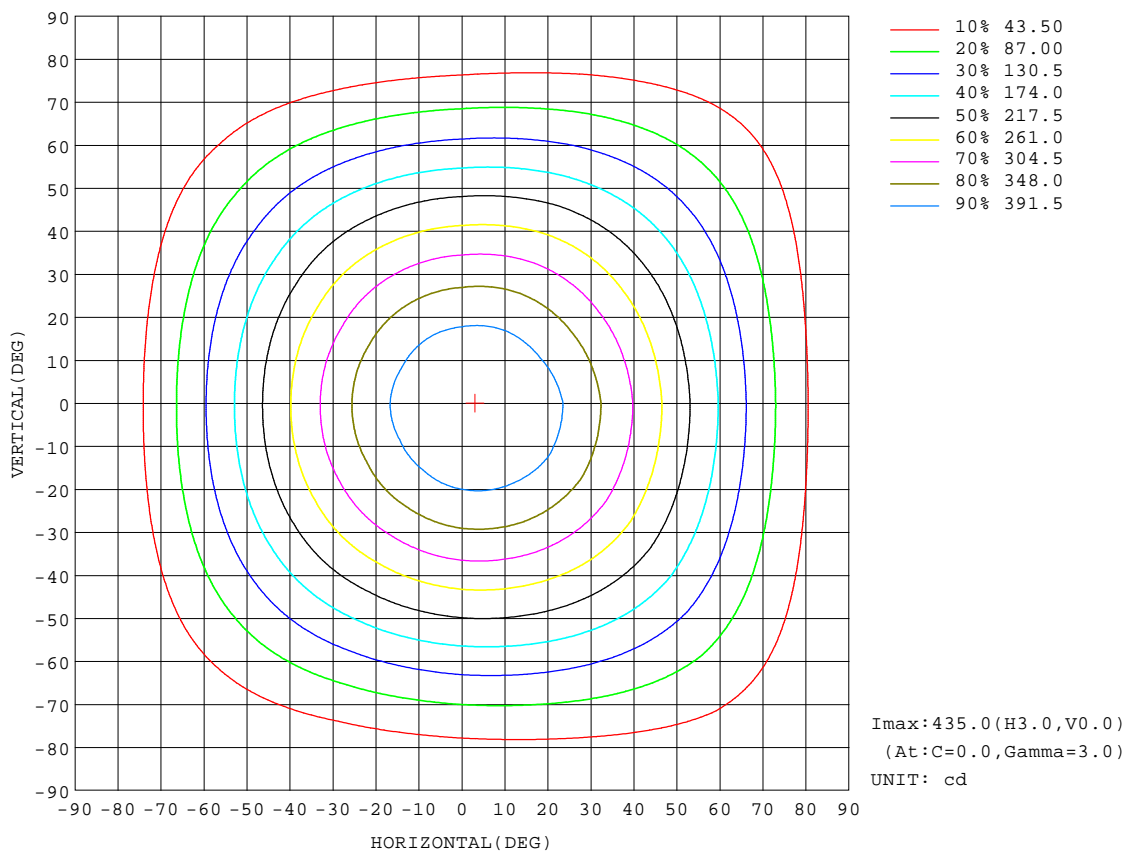
| REFLECTANCE | | | | | | | | | | |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| Ceiling | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0 |
| Walls | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0.7 | 0.5 | 0.3 | 0 |
| Working plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0 |
| ROOM INDEX | UTILIZATION FACTORS(PERCENT) $k(RI) \times RCR = 5$ | | | | | | | | | |
| $k = 0.60$ | 59 | 48 | 41 | 58 | 48 | 41 | 57 | 47 | 41 | 35 |
| 0.80 | 69 | 58 | 51 | 68 | 58 | 51 | 66 | 57 | 50 | 43 |
| 1.00 | 77 | 67 | 60 | 76 | 66 | 59 | 74 | 67 | 59 | 52 |
| 1.25 | 84 | 74 | 68 | 83 | 74 | 67 | 80 | 72 | 66 | 59 |
| 1.50 | 89 | 80 | 73 | 87 | 79 | 73 | 84 | 77 | 71 | 64 |
| 2.00 | 96 | 88 | 81 | 94 | 86 | 81 | 90 | 84 | 79 | 71 |
| 2.50 | 99 | 92 | 86 | 97 | 90 | 85 | 93 | 87 | 83 | 74 |
| 3.00 | 103 | 96 | 91 | 100 | 94 | 90 | 96 | 91 | 87 | 78 |
| 4.00 | 106 | 101 | 97 | 104 | 99 | 95 | 99 | 95 | 92 | 82 |
| 5.00 | 109 | 104 | 100 | 106 | 102 | 98 | 101 | 98 | 95 | 85 |
| 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:DAMIN
Test Date:2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity:65.0%
Test Distance:8.000m [K=0.7063]
Remarks:

ISOCANDELA DIAGRAM

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |

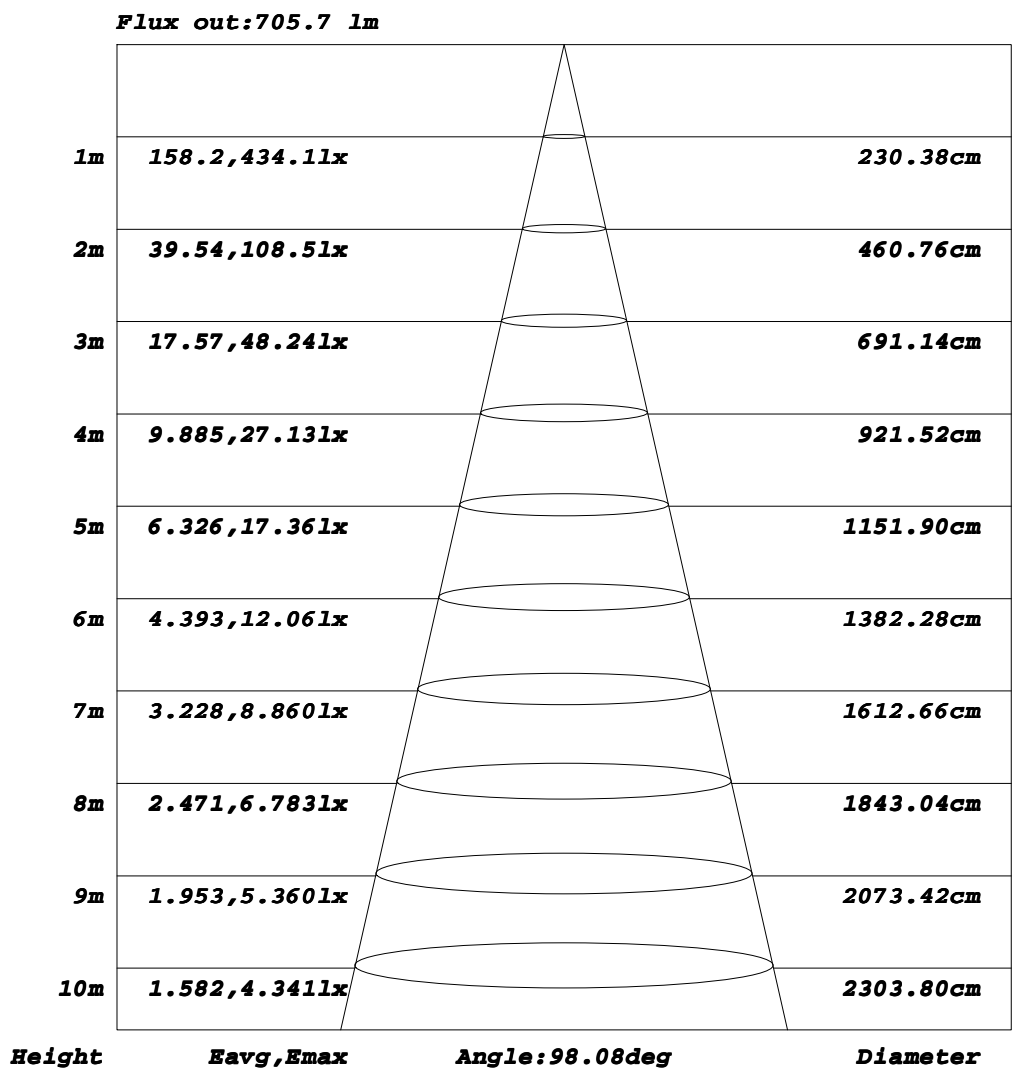


C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-01-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

AAI Figure

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |



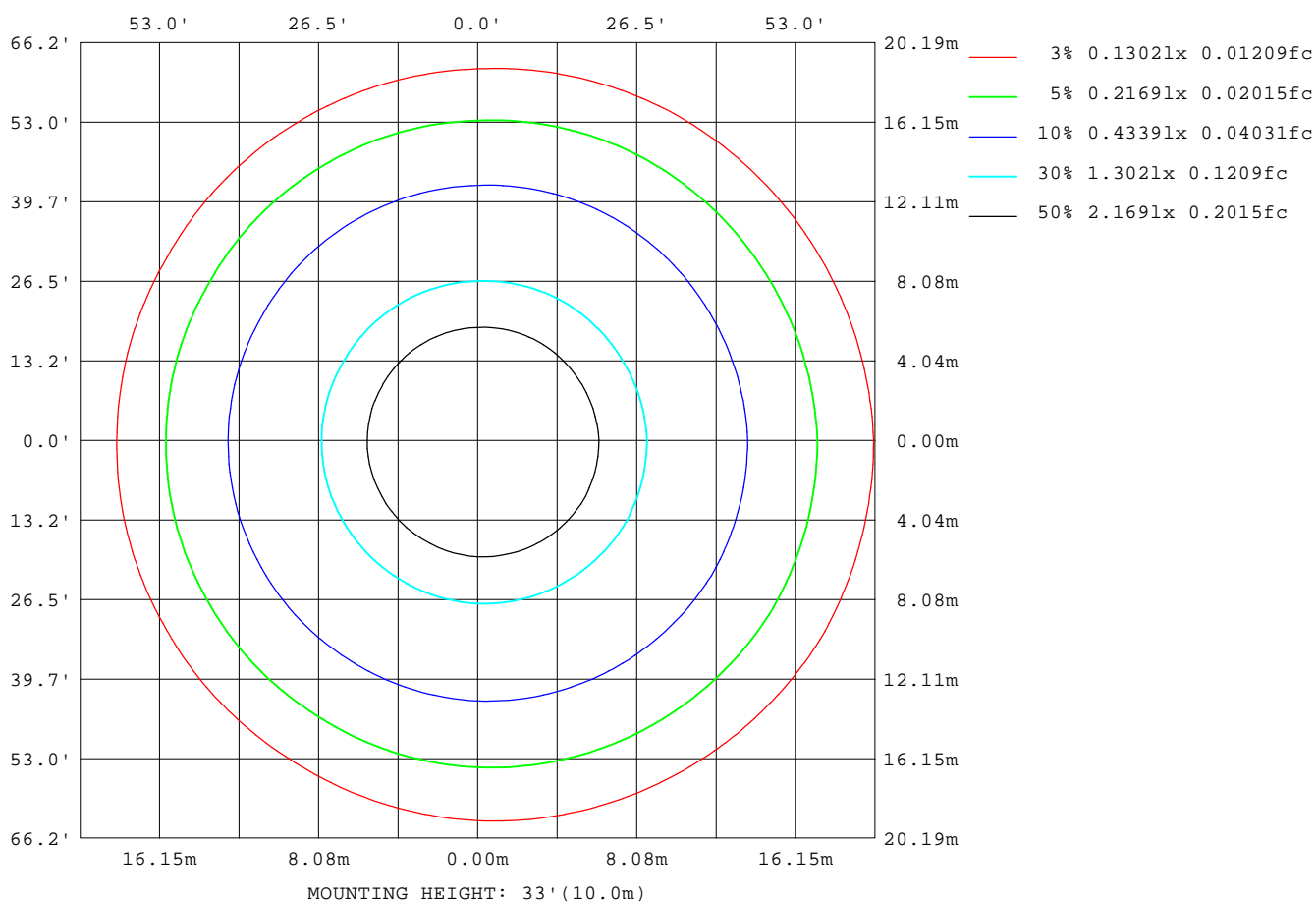
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-01-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

ISOLUX DIAGRAM

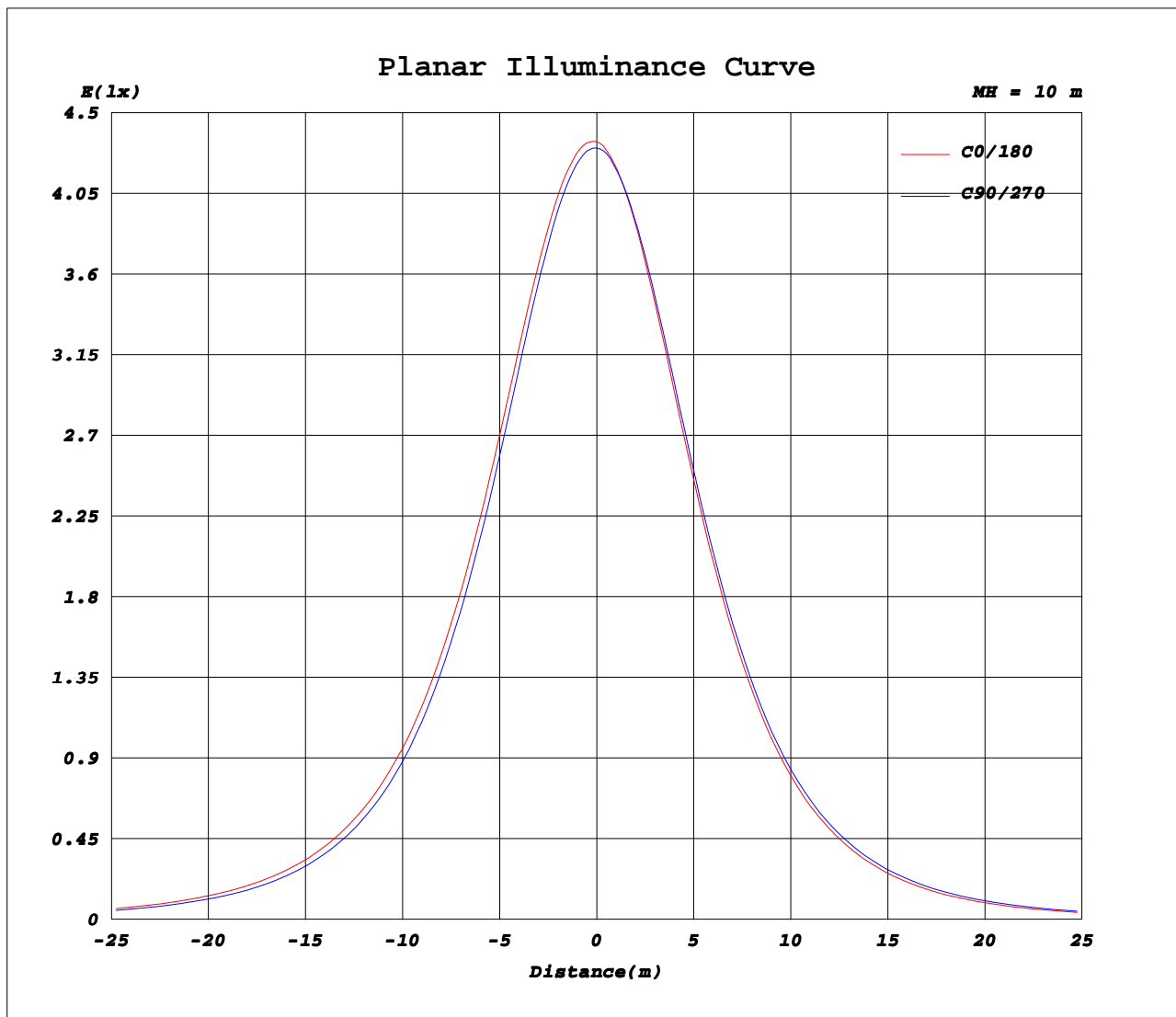
| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |



C Range: 0 - 360DEG
C Interval: 30.0DEG
Test Speed: HIGH
Temperature: 25.3DEG
Operators: DAMIN
Test Date: 2019-01-15

γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
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: 2019-01-15

γ Range: 0 - 180DEG
 γ Interval: 1.0DEG
Test System: EVERFINE GO-2000B_V1 SYSTEM V2.0.406.11
Humidity: 65.0%
Test Distance: 8.000m [K=0.7063]
Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

| | | |
|--|----------|--|
| Test:U:220.40V I:0.0890A P:11.200W PF:0.5690 Freq:50.00Hz Lamp Flux:1084.23x1 lm | | |
| NAME: LE-04-IP PROOFY 4000K | TYPE:LED | |
| MFR.: | | |
| | | |

Table--1

UNIT: cd

| <div> <div>C (DEG)</div> <div>γ (DEG)</div> </div> | 0 | 30 | 60 | 90 | 120 | 150 | 180 | 210 | 240 | 270 | 300 | 330 | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0 | 434 | 432 | 431 | 430 | 430 | 429 | 434 | 432 | 431 | 430 | 430 | 429 | | | | | | | |
| 5 | 435 | 433 | 431 | 429 | 426 | 424 | 427 | 425 | 426 | 426 | 428 | 428 | | | | | | | |
| 10 | 430 | 429 | 426 | 422 | 417 | 413 | 415 | 413 | 415 | 416 | 420 | 422 | | | | | | | |
| 15 | 420 | 419 | 415 | 409 | 402 | 398 | 398 | 397 | 399 | 402 | 407 | 411 | | | | | | | |
| 20 | 405 | 405 | 399 | 392 | 383 | 377 | 377 | 375 | 378 | 382 | 389 | 395 | | | | | | | |
| 25 | 385 | 385 | 378 | 369 | 359 | 352 | 351 | 350 | 353 | 358 | 367 | 374 | | | | | | | |
| 30 | 361 | 361 | 353 | 343 | 332 | 324 | 323 | 321 | 325 | 331 | 341 | 349 | | | | | | | |
| 35 | 333 | 333 | 324 | 314 | 301 | 294 | 292 | 290 | 295 | 301 | 312 | 320 | | | | | | | |
| 40 | 303 | 303 | 293 | 282 | 270 | 262 | 260 | 258 | 263 | 269 | 281 | 290 | | | | | | | |
| 45 | 271 | 271 | 261 | 250 | 237 | 229 | 227 | 225 | 231 | 237 | 249 | 258 | | | | | | | |
| 50 | 238 | 238 | 228 | 217 | 204 | 196 | 194 | 192 | 199 | 204 | 217 | 226 | | | | | | | |
| 55 | 205 | 205 | 194 | 184 | 171 | 164 | 160 | 159 | 165 | 172 | 184 | 193 | | | | | | | |
| 60 | 171 | 171 | 161 | 151 | 138 | 131 | 127 | 126 | 132 | 139 | 151 | 160 | | | | | | | |
| 65 | 138 | 138 | 129 | 118 | 107 | 99.4 | 95.4 | 95.2 | 101 | 108 | 119 | 128 | | | | | | | |
| 70 | 106 | 106 | 96.8 | 87.4 | 76.3 | 69.8 | 65.7 | 65.6 | 70.9 | 77.9 | 88.5 | 96.9 | | | | | | | |
| 75 | 74.6 | 74.9 | 66.8 | 58.7 | 48.5 | 42.9 | 39.2 | 38.5 | 43.9 | 50.1 | 60.0 | 67.2 | | | | | | | |
| 80 | 46.1 | 46.9 | 39.6 | 33.1 | 24.4 | 19.7 | 16.1 | 15.8 | 20.3 | 25.9 | 34.4 | 40.4 | | | | | | | |
| 85 | 22.2 | 22.1 | 17.1 | 11.5 | 5.69 | 2.91 | 2.92 | 2.88 | 3.60 | 6.76 | 13.0 | 17.8 | | | | | | | |
| 90 | 3.97 | 3.90 | 2.36 | 2.04 | 2.00 | 2.08 | 2.78 | 2.76 | 2.68 | 2.59 | 2.68 | 2.97 | | | | | | | |
| 95 | 2.09 | 2.08 | 2.15 | 2.22 | 2.34 | 2.44 | 3.11 | 3.09 | 2.99 | 2.88 | 2.77 | 2.71 | | | | | | | |
| 100 | 2.46 | 2.45 | 2.53 | 2.62 | 2.76 | 2.87 | 3.50 | 3.47 | 3.35 | 3.23 | 3.10 | 3.03 | | | | | | | |
| 105 | 2.88 | 2.88 | 2.95 | 3.05 | 3.20 | 3.33 | 3.93 | 3.90 | 3.76 | 3.63 | 3.48 | 3.40 | | | | | | | |
| 110 | 3.34 | 3.34 | 3.42 | 3.53 | 3.69 | 3.83 | 4.38 | 4.34 | 4.19 | 4.05 | 3.89 | 3.81 | | | | | | | |
| 115 | 3.83 | 3.83 | 3.90 | 4.02 | 4.19 | 4.33 | 4.87 | 4.82 | 4.67 | 4.51 | 4.35 | 4.24 | | | | | | | |
| 120 | 4.35 | 4.33 | 4.41 | 4.53 | 4.70 | 4.84 | 5.34 | 5.29 | 5.13 | 4.97 | 4.80 | 4.70 | | | | | | | |
| 125 | 4.88 | 4.85 | 4.93 | 5.04 | 5.22 | 5.35 | 5.80 | 5.74 | 5.59 | 5.42 | 5.26 | 5.17 | | | | | | | |
| 130 | 5.41 | 5.38 | 5.46 | 5.56 | 5.73 | 5.86 | 6.24 | 6.18 | 6.03 | 5.86 | 5.70 | 5.61 | | | | | | | |
| 135 | 5.92 | 5.90 | 5.98 | 6.09 | 6.23 | 6.37 | 6.64 | 6.58 | 6.43 | 6.28 | 6.12 | 6.03 | | | | | | | |
| 140 | 6.43 | 6.42 | 6.46 | 6.55 | 6.71 | 6.84 | 7.05 | 6.97 | 6.82 | 6.66 | 6.54 | 6.43 | | | | | | | |
| 145 | 6.89 | 6.88 | 6.91 | 6.99 | 7.13 | 7.25 | 7.43 | 7.35 | 7.20 | 7.04 | 6.92 | 6.83 | | | | | | | |
| 150 | 7.32 | 7.30 | 7.33 | 7.42 | 7.54 | 7.64 | 7.78 | 7.70 | 7.57 | 7.42 | 7.29 | 7.22 | | | | | | | |
| 155 | 7.74 | 7.73 | 7.75 | 7.82 | 7.92 | 8.00 | 8.12 | 8.04 | 7.91 | 7.78 | 7.67 | 7.59 | | | | | | | |
| 160 | 8.14 | 8.12 | 8.13 | 8.18 | 8.25 | 8.32 | 8.44 | 8.34 | 8.24 | 8.12 | 8.03 | 7.96 | | | | | | | |
| 165 | 8.51 | 8.49 | 8.47 | 8.52 | 8.57 | 8.63 | 8.72 | 8.63 | 8.54 | 8.43 | 8.37 | 8.31 | | | | | | | |
| 170 | 8.84 | 8.81 | 8.79 | 8.81 | 8.85 | 8.89 | 8.96 | 8.88 | 8.80 | 8.71 | 8.67 | 8.63 | | | | | | | |
| 175 | 9.08 | 9.05 | 9.01 | 9.00 | 9.01 | 9.04 | 9.06 | 8.96 | 8.89 | 8.82 | 8.80 | 8.77 | | | | | | | |
| 180 | 9.18 | 9.15 | 9.06 | 9.04 | 9.02 | 9.02 | 9.22 | 9.12 | 9.08 | 9.02 | 9.03 | 9.02 | | | | | | | |

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