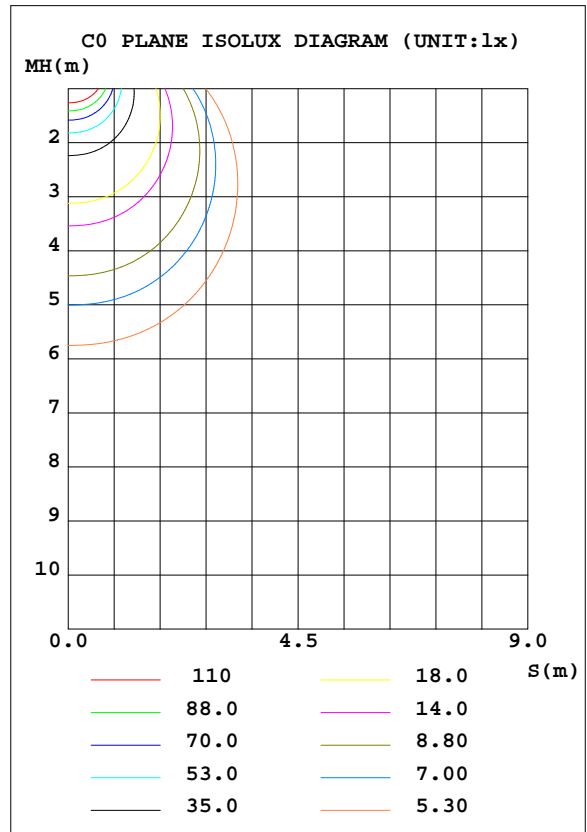
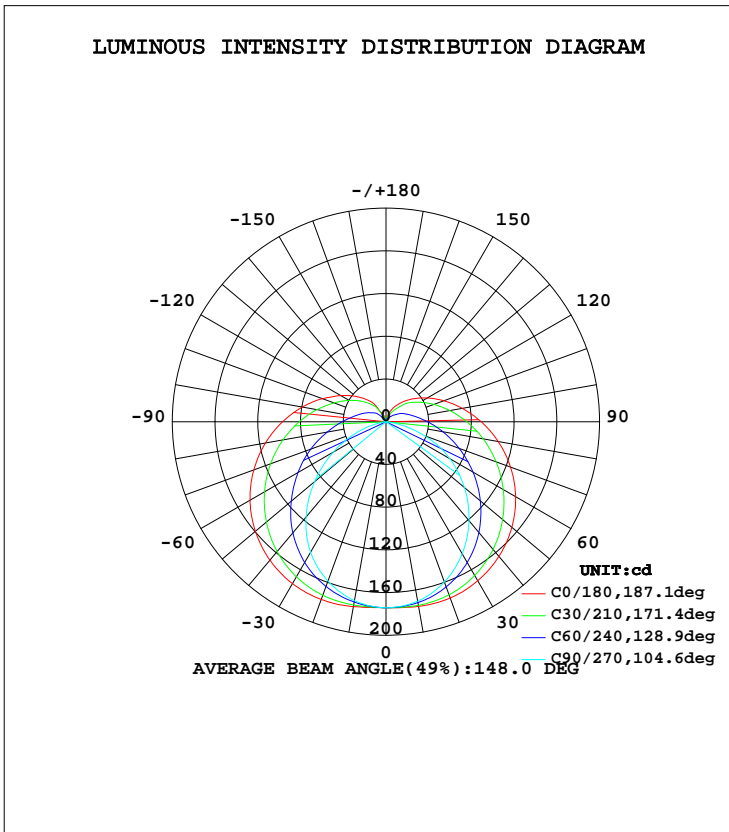


LUMINAIRE PHOTOMETRIC TEST REPORT

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

| DATA OF LAMP     |               | PHOTOMETRIC DATA Eff: 96.95 lm/W |         |                    |           |
|------------------|---------------|----------------------------------|---------|--------------------|-----------|
| MODEL            | 177-061_3000K | Imax(cd)                         | 177.1   | S/MH(C0/180)       | 1.48      |
| NOMINAL POWER(W) | 8             | LOR(%)                           | 100.0   | S/MH(C90/270)      | 1.22      |
| RATED VOLTAGE(V) | 230           | TOTAL FLUX(lm)                   | 866.72  | η UP, DN(C0-180)   | 9.6, 40.4 |
| NOMINAL FLUX(lm) | 866.717       | CIE CLASS                        | SEMI-D. | η UP, DN(C180-360) | 9.7, 40.2 |
| LAMPS INSIDE     | 1             | η up(%)                          | 19.4    | CIBSE SHR NOM      | 1.50      |
| TEST VOLTAGE(V)  | 230.2         | η down(%)                        | 80.6    | CIBSE SHR MAX      | 1.55      |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45   | C90    | C135  | C180  | C225  | C270   | C315  | γ       | Φ zone  | Φ total | Flum, lamp |
|-----|-----------------------|-------|--------|-------|-------|-------|--------|-------|---------|---------|---------|------------|
| 10  | 175.5                 | 173.2 | 170.6  | 173.2 | 175.7 | 172.8 | 170.1  | 173.0 | 0- 10   | 16.57   | 16.57   | 1.91,1.91  |
| 20  | 175.6                 | 168.6 | 159.7  | 169.3 | 177.1 | 168.5 | 158.9  | 168.1 | 10- 20  | 48.43   | 65.00   | 7.5,7.5    |
| 30  | 171.9                 | 159.2 | 142.7  | 160.9 | 175.0 | 160.0 | 141.1  | 158.6 | 20- 30  | 75.81   | 140.8   | 16.2,16.2  |
| 40  | 164.5                 | 145.7 | 121.0  | 148.4 | 169.1 | 147.2 | 116.4  | 145.0 | 30- 40  | 95.62   | 236.4   | 27.3,27.3  |
| 50  | 153.8                 | 128.9 | 95.86  | 132.7 | 159.7 | 131.0 | 87.26  | 128.3 | 40- 50  | 105.9   | 342.4   | 39.5,39.5  |
| 60  | 140.2                 | 110.4 | 68.78  | 114.7 | 147.0 | 113.2 | 56.99  | 109.9 | 50- 60  | 106.4   | 448.8   | 51.8,51.8  |
| 70  | 124.0                 | 91.34 | 38.42  | 95.84 | 131.7 | 94.97 | 28.26  | 91.05 | 60- 70  | 98.35   | 547.1   | 63.1,63.1  |
| 80  | 106.6                 | 73.25 | 9.668  | 77.72 | 114.6 | 76.94 | 4.982  | 73.13 | 70- 80  | 83.80   | 630.9   | 72.8,72.8  |
| 90  | 89.15                 | 57.39 | 0.4959 | 61.82 | 96.84 | 61.14 | 0.5634 | 57.40 | 80- 90  | 67.78   | 698.7   | 80.6,80.6  |
| 100 | 72.57                 | 44.48 | 0.4615 | 48.59 | 79.67 | 48.02 | 0.6105 | 44.55 | 90-100  | 53.84   | 752.5   | 86.8,86.8  |
| 110 | 57.70                 | 34.33 | 0.7315 | 37.73 | 63.25 | 37.40 | 0.8386 | 33.46 | 100-110 | 40.89   | 793.4   | 91.5,91.5  |
| 120 | 44.75                 | 26.14 | 1.067  | 28.99 | 49.10 | 28.55 | 1.108  | 24.50 | 110-120 | 29.77   | 823.2   | 95,95      |
| 130 | 33.71                 | 18.80 | 1.414  | 21.81 | 37.12 | 21.42 | 1.413  | 17.81 | 120-130 | 20.36   | 843.6   | 97.3,97.3  |
| 140 | 24.26                 | 11.65 | 1.719  | 14.58 | 26.49 | 13.25 | 1.707  | 11.44 | 130-140 | 12.66   | 856.2   | 98.8,98.8  |
| 150 | 16.31                 | 7.112 | 2.025  | 8.645 | 11.92 | 6.936 | 1.977  | 6.834 | 140-150 | 6.640   | 862.9   | 99.6,99.6  |
| 160 | 8.985                 | 3.774 | 2.181  | 3.402 | 7.234 | 3.917 | 2.222  | 3.948 | 150-160 | 2.696   | 865.6   | 99.9,99.9  |
| 170 | 2.420                 | 2.371 | 2.366  | 2.470 | 2.544 | 2.392 | 2.462  | 2.597 | 160-170 | 0.9248  | 866.5   | 100,100    |
| 180 | 2.496                 | 2.437 | 2.432  | 2.491 | 2.502 | 2.431 | 2.510  | 2.449 | 170-180 | 0.2339  | 866.7   | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |       |        |       |       |       |        |       |         | UNIT:lm |         |            |

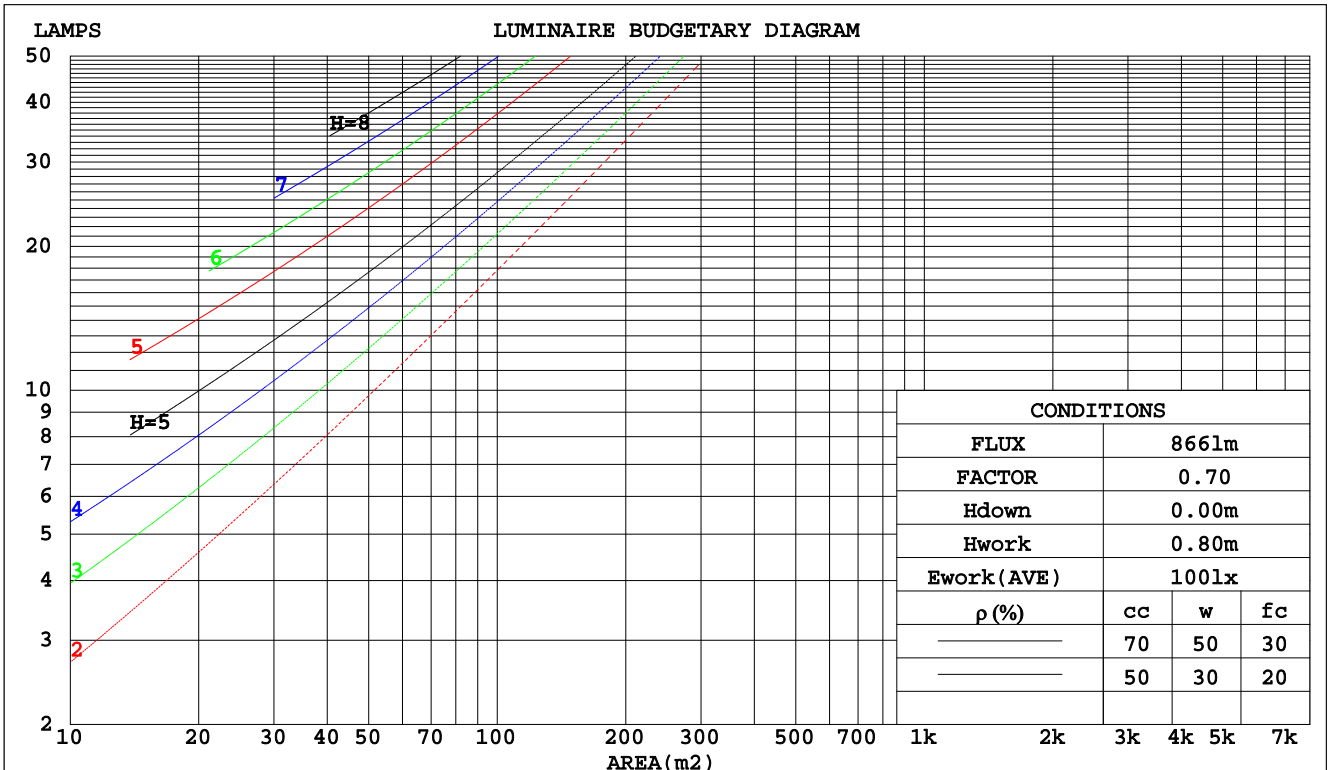
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30% |     |     | 10% |     |     | 0   |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|-----|-----|-----|-----|-----|-----|-----|
|      | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| pw   |                       |      |      |      |      |      |                                 |      |      |     |     |     |     |     |     | 0   |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20% |     |     | 20% |     |     | 0   |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |     |     |     |     |     |     |     |
| 0.0  | 1.14                  | 1.14 | 1.14 | 1.10 | 1.10 | 1.10 | 1.00                            | 1.00 | 1.00 | .92 | .92 | .92 | .84 | .84 | .84 | .81 |
| 1.0  | .95                   | .90  | .85  | .91  | .86  | .81  | .83                             | .79  | .75  | .76 | .72 | .70 | .69 | .66 | .64 | .61 |
| 2.0  | .81                   | .73  | .66  | .77  | .70  | .64  | .71                             | .65  | .60  | .64 | .60 | .55 | .59 | .55 | .51 | .48 |
| 3.0  | .70                   | .61  | .54  | .67  | .59  | .52  | .61                             | .54  | .49  | .56 | .50 | .45 | .51 | .46 | .42 | .39 |
| 4.0  | .62                   | .52  | .45  | .59  | .50  | .43  | .54                             | .47  | .41  | .49 | .43 | .38 | .45 | .40 | .36 | .33 |
| 5.0  | .55                   | .45  | .38  | .52  | .43  | .37  | .48                             | .40  | .35  | .44 | .38 | .33 | .40 | .35 | .30 | .28 |
| 6.0  | .49                   | .39  | .33  | .47  | .38  | .32  | .43                             | .36  | .30  | .39 | .33 | .28 | .36 | .31 | .26 | .24 |
| 7.0  | .44                   | .35  | .29  | .42  | .34  | .28  | .39                             | .32  | .26  | .36 | .29 | .25 | .33 | .27 | .23 | .21 |
| 8.0  | .40                   | .31  | .25  | .38  | .30  | .25  | .35                             | .28  | .23  | .33 | .26 | .22 | .30 | .25 | .21 | .18 |
| 9.0  | .37                   | .28  | .22  | .35  | .27  | .22  | .33                             | .26  | .21  | .30 | .24 | .20 | .28 | .22 | .19 | .16 |
| 10.0 | .34                   | .25  | .20  | .32  | .25  | .20  | .30                             | .23  | .19  | .28 | .22 | .18 | .26 | .21 | .17 | .15 |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:

WEC AND CCEC

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

| 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 |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0  | .390                  | .222 | .070 | .377 | .215 | .068 | .353                            | .202 | .065 | .330 | .190 | .061 | .309 | .179 | .058 |   |
| 2.0  | .337                  | .184 | .057 | .325 | .179 | .055 | .302                            | .168 | .052 | .282 | .158 | .049 | .263 | .149 | .047 |   |
| 3.0  | .298                  | .159 | .048 | .288 | .154 | .046 | .267                            | .145 | .044 | .249 | .136 | .042 | .231 | .128 | .040 |   |
| 4.0  | .268                  | .139 | .041 | .258 | .135 | .040 | .240                            | .127 | .038 | .223 | .120 | .036 | .207 | .113 | .034 |   |
| 5.0  | .243                  | .124 | .036 | .235 | .120 | .035 | .218                            | .113 | .033 | .202 | .107 | .032 | .188 | .100 | .030 |   |
| 6.0  | .223                  | .112 | .032 | .215 | .109 | .031 | .200                            | .102 | .030 | .185 | .096 | .028 | .172 | .091 | .027 |   |
| 7.0  | .205                  | .102 | .029 | .198 | .099 | .028 | .184                            | .093 | .027 | .171 | .088 | .026 | .159 | .083 | .024 |   |
| 8.0  | .190                  | .093 | .026 | .184 | .090 | .026 | .171                            | .085 | .024 | .159 | .081 | .023 | .148 | .076 | .022 |   |
| 9.0  | .177                  | .086 | .024 | .171 | .083 | .023 | .159                            | .079 | .022 | .148 | .074 | .021 | .138 | .070 | .020 |   |
| 10.0 | .166                  | .080 | .022 | .160 | .077 | .022 | .149                            | .073 | .021 | .139 | .069 | .020 | .129 | .065 | .019 |   |

| 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  | .338                  | .338 | .338 | .289 | .289 | .289 | .197                                       | .197 | .197 | .113 | .113 | .113 | .036 | .036 | .036 |   |
| 1.0  | .335                  | .304 | .277 | .286 | .261 | .238 | .196                                       | .180 | .165 | .113 | .104 | .096 | .036 | .033 | .031 |   |
| 2.0  | .328                  | .282 | .243 | .281 | .242 | .210 | .193                                       | .168 | .146 | .111 | .098 | .086 | .036 | .032 | .028 |   |
| 3.0  | .321                  | .265 | .221 | .275 | .229 | .192 | .189                                       | .159 | .134 | .109 | .093 | .079 | .035 | .030 | .026 |   |
| 4.0  | .313                  | .253 | .207 | .268 | .218 | .180 | .185                                       | .152 | .127 | .107 | .089 | .075 | .034 | .029 | .025 |   |
| 5.0  | .305                  | .243 | .197 | .262 | .210 | .172 | .181                                       | .147 | .121 | .105 | .086 | .072 | .034 | .028 | .024 |   |
| 6.0  | .298                  | .235 | .190 | .256 | .204 | .166 | .177                                       | .143 | .117 | .102 | .084 | .070 | .033 | .027 | .023 |   |
| 7.0  | .291                  | .229 | .185 | .250 | .198 | .161 | .173                                       | .139 | .114 | .100 | .082 | .068 | .032 | .027 | .022 |   |
| 8.0  | .284                  | .223 | .181 | .244 | .193 | .158 | .169                                       | .136 | .112 | .098 | .080 | .067 | .032 | .026 | .022 |   |
| 9.0  | .278                  | .218 | .178 | .239 | .189 | .155 | .166                                       | .133 | .110 | .097 | .079 | .066 | .031 | .026 | .022 |   |
| 10.0 | .272                  | .214 | .176 | .234 | .186 | .153 | .163                                       | .131 | .109 | .095 | .077 | .065 | .031 | .025 | .022 |   |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Uncorrected UGR Table

|   |                  |      |      |      |             |                |      |                   |      |      |
|---|------------------|------|------|------|-------------|----------------|------|-------------------|------|------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |                  |      |      |      |             |                |      |                   |      |      |
| NAME: 177-061_3000K   |                  |      |      |      | TYPE:8W     |                |      | WEIGHT:           |      |      |
| DIM.:   |                  |      |      |      | SPEC.:3000K |                |      | SERIAL No.:1      |      |      |
| MFR.: Tronix Lighting   |                  |      |      |      | SUR.:0.0086 |                |      | 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   | 24.0             | 25.3 | 24.5 | 25.9 | 26.5        | 21.2           | 22.6 | 21.8              | 23.1 | 23.7 |
| 3H  | 26.7             | 28.0 | 27.3 | 28.5 | 29.2        | 22.7           | 23.9 | 23.2              | 24.5 | 25.1 |
| 4H  | 28.2             | 29.4 | 28.8 | 30.0 | 30.7        | 23.2           | 24.4 | 23.7              | 24.9 | 25.6 |
| 6H  | 29.9             | 31.0 | 30.5 | 31.6 | 32.3        | 23.4           | 24.6 | 24.0              | 25.1 | 25.8 |
| 8H  | 30.8             | 31.9 | 31.4 | 32.5 | 33.2        | 23.5           | 24.6 | 24.1              | 25.2 | 25.9 |
| 12H   | 31.9             | 32.9 | 32.5 | 33.5 | 34.3        | 23.4           | 24.5 | 24.1              | 25.1 | 25.8 |
| 4H 2H   | 24.5             | 25.7 | 25.1 | 26.3 | 26.9        | 22.5           | 23.7 | 23.1              | 24.3 | 25.0 |
| 3H  | 27.5             | 28.5 | 28.1 | 29.2 | 29.9        | 24.3           | 25.3 | 24.9              | 25.9 | 26.6 |
| 4H  | 29.2             | 30.2 | 29.8 | 30.8 | 31.5        | 25.0           | 26.0 | 25.7              | 26.6 | 27.4 |
| 6H  | 31.1             | 32.0 | 31.8 | 32.6 | 33.4        | 25.5           | 26.4 | 26.2              | 27.1 | 27.8 |
| 8H  | 32.1             | 32.9 | 32.8 | 33.6 | 34.4        | 25.7           | 26.5 | 26.4              | 27.2 | 28.0 |
| 12H   | 33.3             | 34.1 | 34.0 | 34.8 | 35.6        | 25.8           | 26.5 | 26.5              | 27.2 | 28.0 |
| 8H 4H   | 29.5             | 30.3 | 30.2 | 31.0 | 31.8        | 26.3           | 27.1 | 26.9              | 27.8 | 28.5 |
| 6H  | 31.7             | 32.4 | 32.4 | 33.1 | 33.9        | 27.3           | 28.0 | 28.0              | 28.7 | 29.5 |
| 8H  | 33.0             | 33.6 | 33.7 | 34.3 | 35.2        | 27.7           | 28.3 | 28.4              | 29.0 | 29.9 |
| 12H   | 34.5             | 35.0 | 35.2 | 35.7 | 36.6        | 28.0           | 28.5 | 28.7              | 29.3 | 30.1 |
| 12H 4H  | 29.5             | 30.3 | 30.2 | 31.0 | 31.8        | 26.7           | 27.4 | 27.4              | 28.1 | 28.9 |
| 6H  | 31.8             | 32.5 | 32.6 | 33.2 | 34.0        | 27.9           | 28.6 | 28.7              | 29.3 | 30.1 |
| 8H  | 33.2             | 33.8 | 34.0 | 34.5 | 35.4        | 28.6           | 29.1 | 29.3              | 29.9 | 30.7 |
| Variations with the observer position at spacings:                |                  |      |      |      |             |                |      |                   |      |      |
| S = 1.0H  | + 0.1 / - 0.1    |      |      |      |             | + 0.1 / - 0.1  |      |                   |      |      |
| 1.5H  | + 0.2 / - 0.2    |      |      |      |             | + 0.2 / - 0.3  |      |                   |      |      |
| 2.0H  | + 0.2 / - 0.3    |      |      |      |             | + 0.2 / - 0.4  |      |                   |      |      |

CIE Pub.117 Corrected 866.7 lm Total Lamp Luminous Flux. (8log(F/F0) = -0.5)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

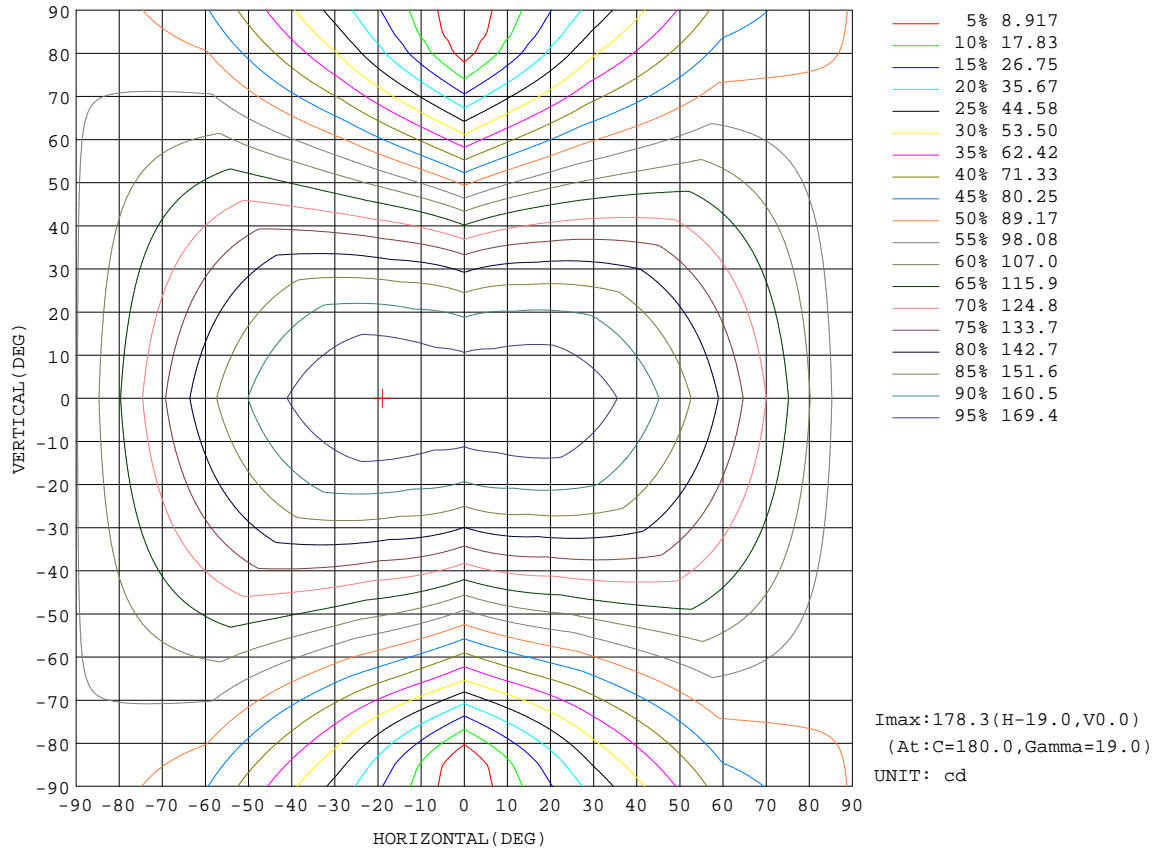
| REFLECTANCE                      |   |     |           |     |     |     |               |     |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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                         | 47  | 34  | 27        | 46  | 34  | 27  | 44            | 33  | 26  | 20     |
| 0.80                             | 56  | 43  | 35        | 54  | 42  | 34  | 52            | 41  | 33  | 26     |
| 1.00                             | 64  | 51  | 42        | 62  | 50  | 42  | 58            | 50  | 40  | 31     |
| 1.25                             | 71  | 58  | 49        | 68  | 56  | 48  | 64            | 54  | 47  | 37     |
| 1.50                             | 76  | 63  | 55        | 73  | 62  | 54  | 68            | 58  | 51  | 41     |
| 2.00                             | 83  | 72  | 63        | 80  | 70  | 62  | 74            | 66  | 59  | 47     |
| 2.50                             | 88  | 77  | 69        | 84  | 75  | 67  | 78            | 70  | 64  | 51     |
| 3.00                             | 91  | 82  | 74        | 88  | 79  | 72  | 81            | 74  | 68  | 54     |
| 4.00                             | 96  | 88  | 81        | 92  | 85  | 79  | 85            | 79  | 74  | 59     |
| 5.00                             | 99  | 92  | 86        | 95  | 89  | 83  | 87            | 82  | 78  | 62     |
| 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:2019-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

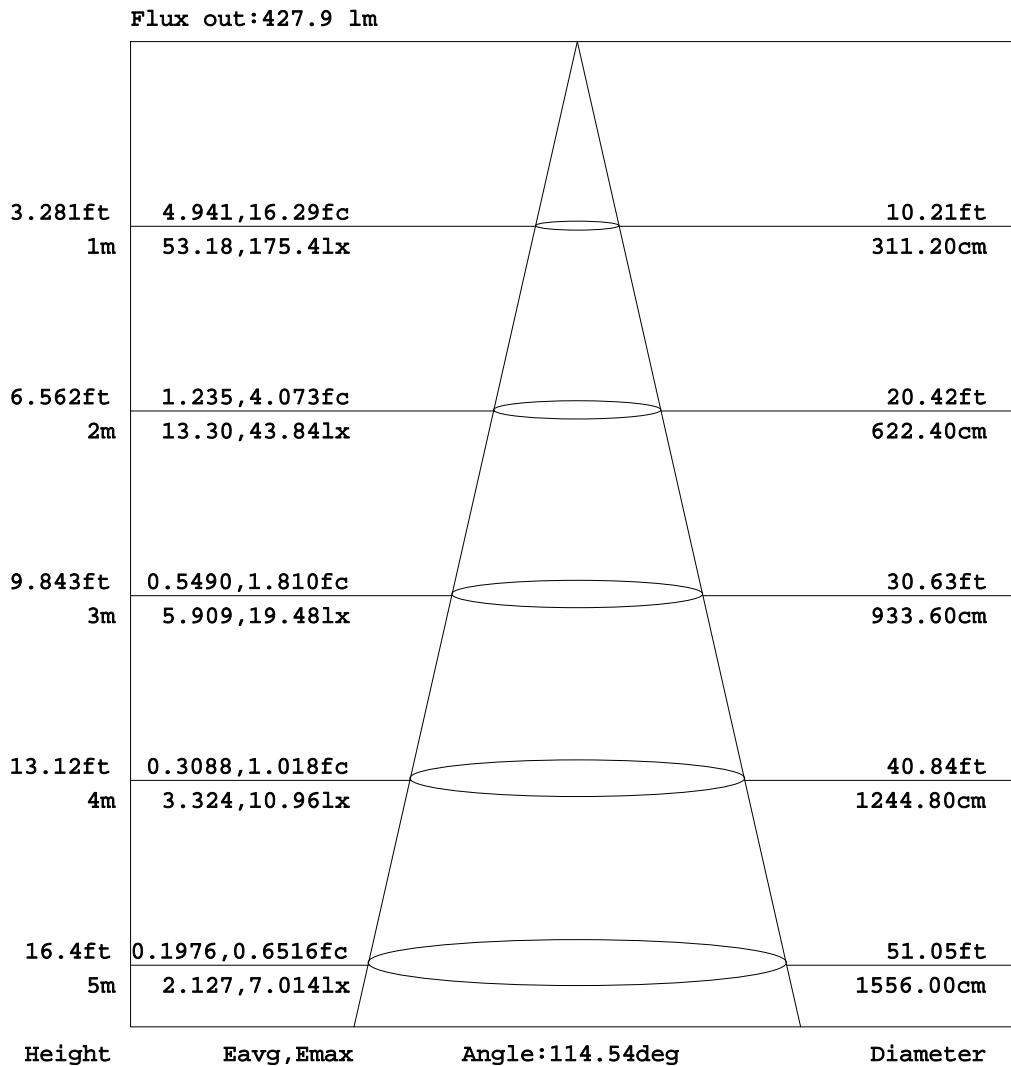


C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

AAI Figure

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |



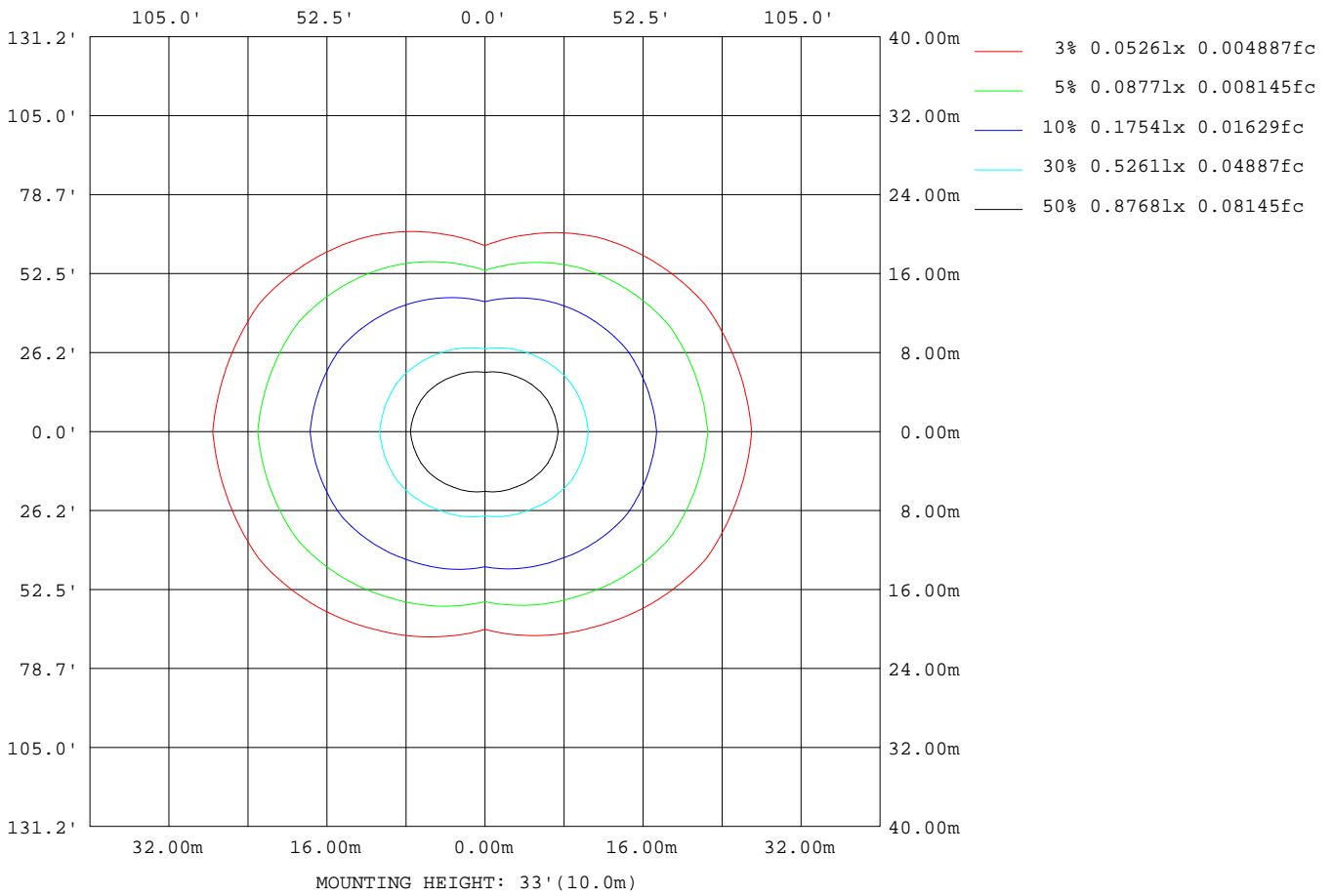
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

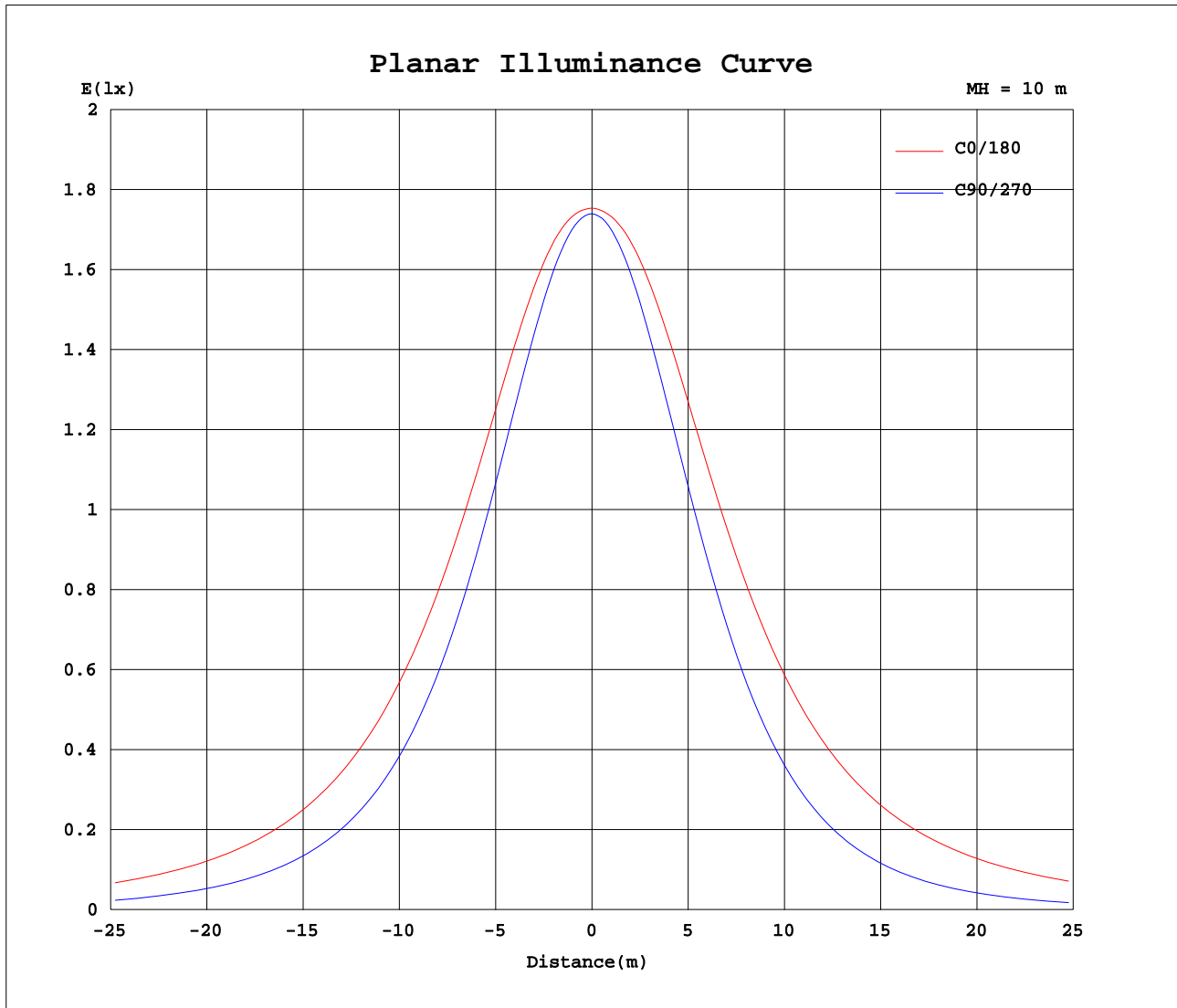
|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: DAMIN  
 Test Date: 2019-12-05

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity: 65.0%  
 Test Distance: 9.443m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|   |             |                   |
|---|-------------|-------------------|
| Test:U:230.2V I:0.0400A P:8.940W PF:0.9680 Lamp Flux:866.717x1 lm |             |                   |
| NAME: 177-061_3000K   | TYPE:8W     | WEIGHT:           |
| DIM.:   | SPEC.:3000K | SERIAL No.:1      |
| MFR.: Tronix Lighting   | SUR.:0.0086 | PROTECTION ANGLE: |

Table--1

UNIT: cd

| C(DEG)\<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0                  | 174  | 174  | 174  | 174  | 174  | 174  | 174  | 174  | 174  | 174  | 174  | 174  |  |  |  |  |  |  |  |
| 5                  | 175  | 174  | 174  | 173  | 174  | 174  | 175  | 174  | 173  | 173  | 174  | 174  |  |  |  |  |  |  |  |
| 10                 | 176  | 175  | 172  | 171  | 172  | 175  | 176  | 174  | 171  | 170  | 172  | 174  |  |  |  |  |  |  |  |
| 15                 | 176  | 174  | 169  | 166  | 169  | 175  | 177  | 174  | 168  | 165  | 169  | 174  |  |  |  |  |  |  |  |
| 20                 | 176  | 172  | 165  | 160  | 165  | 174  | 177  | 173  | 164  | 159  | 164  | 172  |  |  |  |  |  |  |  |
| 25                 | 174  | 170  | 159  | 152  | 160  | 172  | 177  | 171  | 159  | 151  | 158  | 169  |  |  |  |  |  |  |  |
| 30                 | 172  | 166  | 152  | 143  | 153  | 169  | 175  | 168  | 152  | 141  | 152  | 166  |  |  |  |  |  |  |  |
| 35                 | 169  | 162  | 144  | 132  | 146  | 165  | 173  | 164  | 144  | 130  | 144  | 161  |  |  |  |  |  |  |  |
| 40                 | 165  | 156  | 135  | 121  | 137  | 160  | 169  | 159  | 136  | 116  | 135  | 155  |  |  |  |  |  |  |  |
| 45                 | 160  | 150  | 126  | 109  | 128  | 154  | 165  | 153  | 126  | 102  | 125  | 149  |  |  |  |  |  |  |  |
| 50                 | 154  | 142  | 115  | 95.9 | 118  | 147  | 160  | 146  | 116  | 87.3 | 115  | 142  |  |  |  |  |  |  |  |
| 55                 | 147  | 135  | 105  | 82.5 | 108  | 140  | 154  | 139  | 105  | 72.1 | 104  | 134  |  |  |  |  |  |  |  |
| 60                 | 140  | 127  | 94.0 | 68.8 | 97.2 | 132  | 147  | 131  | 95.1 | 57.0 | 93.8 | 126  |  |  |  |  |  |  |  |
| 65                 | 132  | 118  | 83.3 | 54.8 | 86.6 | 124  | 140  | 123  | 85.1 | 42.3 | 83.4 | 118  |  |  |  |  |  |  |  |
| 70                 | 124  | 110  | 72.9 | 38.4 | 76.3 | 115  | 132  | 115  | 75.0 | 28.3 | 73.0 | 109  |  |  |  |  |  |  |  |
| 75                 | 115  | 101  | 63.1 | 22.9 | 66.3 | 107  | 123  | 106  | 65.1 | 15.4 | 63.3 | 100  |  |  |  |  |  |  |  |
| 80                 | 107  | 92.4 | 54.1 | 9.67 | 57.3 | 98.2 | 115  | 97.9 | 55.9 | 4.98 | 54.4 | 91.9 |  |  |  |  |  |  |  |
| 85                 | 97.8 | 83.9 | 46.0 | 0.91 | 49.3 | 89.6 | 106  | 89.4 | 48.0 | 0.90 | 46.4 | 83.5 |  |  |  |  |  |  |  |
| 90                 | 89.2 | 75.8 | 39.0 | 0.50 | 42.3 | 81.4 | 96.8 | 81.2 | 41.1 | 0.56 | 39.4 | 75.4 |  |  |  |  |  |  |  |
| 95                 | 80.7 | 68.0 | 33.1 | 0.45 | 36.4 | 73.5 | 88.1 | 73.3 | 35.2 | 0.53 | 33.5 | 67.7 |  |  |  |  |  |  |  |
| 100                | 72.6 | 60.7 | 28.2 | 0.46 | 31.3 | 65.9 | 79.7 | 65.6 | 30.4 | 0.61 | 28.7 | 60.4 |  |  |  |  |  |  |  |
| 105                | 64.9 | 53.9 | 24.2 | 0.59 | 27.0 | 58.8 | 71.4 | 58.4 | 26.4 | 0.72 | 20.9 | 53.4 |  |  |  |  |  |  |  |
| 110                | 57.7 | 47.7 | 21.0 | 0.73 | 23.4 | 52.1 | 63.3 | 51.8 | 23.0 | 0.84 | 20.8 | 46.2 |  |  |  |  |  |  |  |
| 115                | 51.0 | 41.9 | 18.1 | 0.90 | 20.3 | 45.9 | 55.6 | 45.8 | 20.0 | 0.98 | 18.1 | 39.7 |  |  |  |  |  |  |  |
| 120                | 44.8 | 36.7 | 15.6 | 1.07 | 17.8 | 40.2 | 49.1 | 40.1 | 17.0 | 1.11 | 16.1 | 32.9 |  |  |  |  |  |  |  |
| 125                | 39.0 | 32.0 | 12.3 | 1.25 | 15.5 | 35.0 | 42.9 | 34.9 | 14.8 | 1.26 | 12.8 | 28.4 |  |  |  |  |  |  |  |
| 130                | 33.7 | 27.6 | 10.0 | 1.41 | 13.6 | 30.0 | 37.1 | 30.1 | 12.8 | 1.41 | 10.3 | 25.3 |  |  |  |  |  |  |  |
| 135                | 28.8 | 22.4 | 7.91 | 1.56 | 10.6 | 25.4 | 31.7 | 25.4 | 9.28 | 1.58 | 8.23 | 21.7 |  |  |  |  |  |  |  |
| 140                | 24.3 | 17.1 | 6.16 | 1.72 | 7.81 | 21.3 | 26.5 | 21.2 | 5.25 | 1.71 | 6.26 | 16.6 |  |  |  |  |  |  |  |
| 145                | 20.1 | 13.2 | 5.08 | 1.88 | 5.40 | 17.8 | 21.7 | 17.4 | 5.03 | 1.86 | 5.05 | 12.7 |  |  |  |  |  |  |  |
| 150                | 16.3 | 9.84 | 4.38 | 2.02 | 3.86 | 13.4 | 11.9 | 10.3 | 3.61 | 1.98 | 4.35 | 9.32 |  |  |  |  |  |  |  |
| 155                | 12.3 | 6.84 | 3.29 | 2.10 | 3.22 | 9.07 | 8.65 | 6.68 | 2.81 | 2.09 | 3.69 | 6.40 |  |  |  |  |  |  |  |
| 160                | 8.99 | 5.21 | 2.33 | 2.18 | 2.42 | 4.38 | 7.23 | 5.54 | 2.29 | 2.22 | 3.00 | 4.89 |  |  |  |  |  |  |  |
| 165                | 4.40 | 3.49 | 2.33 | 2.27 | 2.41 | 3.49 | 4.28 | 2.95 | 2.36 | 2.40 | 2.54 | 3.75 |  |  |  |  |  |  |  |
| 170                | 2.42 | 2.36 | 2.38 | 2.37 | 2.44 | 2.50 | 2.54 | 2.36 | 2.42 | 2.46 | 2.42 | 2.77 |  |  |  |  |  |  |  |
| 175                | 2.45 | 2.40 | 2.42 | 2.42 | 2.44 | 2.51 | 2.50 | 2.39 | 2.44 | 2.52 | 2.46 | 2.50 |  |  |  |  |  |  |  |
| 180                | 2.50 | 2.42 | 2.45 | 2.43 | 2.46 | 2.52 | 2.50 | 2.42 | 2.44 | 2.51 | 2.48 | 2.42 |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:DAMIN  
 Test Date:2019-12-05

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.276  
 Humidity:65.0%  
 Test Distance:9.443m [K=1.0000]  
 Remarks: