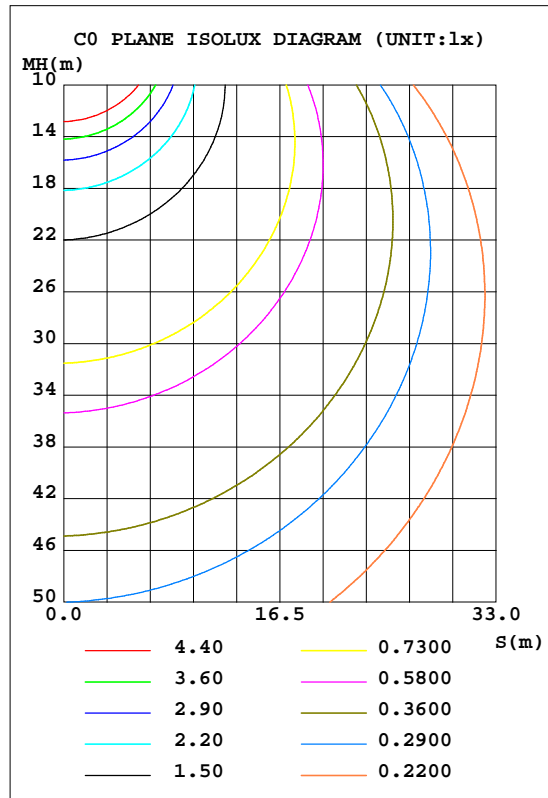
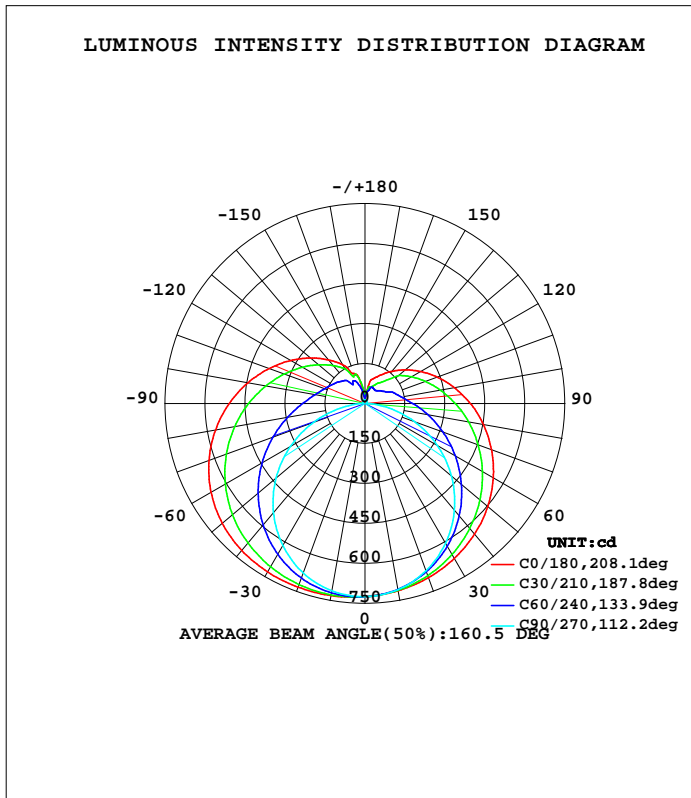


LUMINAIRE PHOTOMETRIC TEST REPORT

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.9lx1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 126.21 lm/W |         |                    |            |
|------------------|---------|-----------------------------------|---------|--------------------|------------|
| MODEL            |         | I <sub>max</sub> (cd)             | 733.6   | S/MH(C0/180)       | 1.53       |
| NOMINAL POWER(W) |         | LOR(%)                            | 100.0   | S/MH(C90/270)      | 1.26       |
| RATED VOLTAGE(V) | 230     | TOTAL FLUX(lm)                    | 4071.9  | h UP, DN(C0-180)   | 12.1, 36.4 |
| NOMINAL FLUX(lm) | 4071.91 | CIE CLASS                         | SEMI-D. | h UP, DN(C180-360) | 13.2, 38.2 |
| LAMPS INSIDE     | 1       | h up(%)                           | 25.3    | CIBSE SHR NOM      | 1.50       |
| TEST VOLTAGE(V)  | 230     | h down(%)                         | 74.7    | CIBSE SHR MAX      | 1.55       |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| g   | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | g       | F zone | F total | %lum,lamp |
|-----|-----------------------|-------|-------|-------|-------|-------|-------|-------|---------|--------|---------|-----------|
| 10  | 713.3                 | 710.2 | 709.7 | 721.8 | 731.9 | 725.2 | 714.0 | 712.7 | 0- 10   | 68.84  | 68.84   | 1.69,1.69 |
| 20  | 695.9                 | 680.2 | 668.7 | 703.1 | 733.6 | 709.9 | 677.1 | 684.9 | 10- 20  | 200.1  | 268.9   | 6.6,6.6   |
| 30  | 670.9                 | 636.1 | 605.0 | 670.2 | 729.8 | 680.9 | 616.2 | 642.1 | 20- 30  | 312.6  | 581.5   | 14.3,14.3 |
| 40  | 639.9                 | 581.0 | 522.3 | 625.4 | 719.6 | 638.8 | 534.8 | 587.2 | 30- 40  | 396.8  | 978.4   | 24,24     |
| 50  | 601.8                 | 517.9 | 423.8 | 570.7 | 699.4 | 586.4 | 435.6 | 523.3 | 40- 50  | 446.5  | 1425    | 35,35     |
| 60  | 556.1                 | 449.8 | 312.9 | 508.4 | 666.6 | 525.6 | 323.2 | 453.6 | 50- 60  | 459.3  | 1884    | 46.3,46.3 |
| 70  | 505.2                 | 381.4 | 196.1 | 442.5 | 622.4 | 459.9 | 202.9 | 383.1 | 60- 70  | 437.9  | 2322    | 57,57     |
| 80  | 451.0                 | 316.8 | 81.69 | 378.2 | 569.0 | 394.8 | 84.44 | 316.6 | 70- 80  | 389.9  | 2712    | 66.6,66.6 |
| 90  | 395.8                 | 259.4 | 6.899 | 320.4 | 509.5 | 335.6 | 6.480 | 258.3 | 80- 90  | 328.4  | 3040    | 74.7,74.7 |
| 100 | 341.5                 | 214.4 | 7.552 | 272.1 | 446.9 | 285.1 | 6.863 | 211.2 | 90-100  | 273.7  | 3314    | 81.4,81.4 |
| 110 | 289.7                 | 179.7 | 8.741 | 232.4 | 384.0 | 242.9 | 8.001 | 172.4 | 100-110 | 225.0  | 3539    | 86.9,86.9 |
| 120 | 241.0                 | 145.8 | 9.946 | 199.3 | 323.1 | 207.7 | 9.253 | 140.3 | 110-120 | 178.3  | 3717    | 91.3,91.3 |
| 130 | 196.9                 | 119.0 | 11.15 | 171.4 | 266.4 | 177.4 | 10.48 | 115.0 | 120-130 | 135.2  | 3853    | 94.6,94.6 |
| 140 | 158.1                 | 86.90 | 12.41 | 146.9 | 214.5 | 149.7 | 11.82 | 83.44 | 130-140 | 96.14  | 3949    | 97,97     |
| 150 | 125.7                 | 74.94 | 13.48 | 123.9 | 168.8 | 121.3 | 13.00 | 70.10 | 140-150 | 63.26  | 4012    | 98.5,98.5 |
| 160 | 101.9                 | 64.52 | 14.35 | 99.08 | 120.6 | 98.43 | 14.01 | 65.31 | 150-160 | 38.48  | 4050    | 99.5,99.5 |
| 170 | 51.70                 | 44.71 | 14.95 | 51.69 | 56.96 | 52.85 | 14.78 | 45.15 | 160-170 | 18.55  | 4069    | 99.9,99.9 |
| 180 | 15.12                 | 15.12 | 15.16 | 15.20 | 15.12 | 15.12 | 15.16 | 15.20 | 170-180 | 2.897  | 4072    | 100,100   |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       | UNIT:lm |        |         |           |

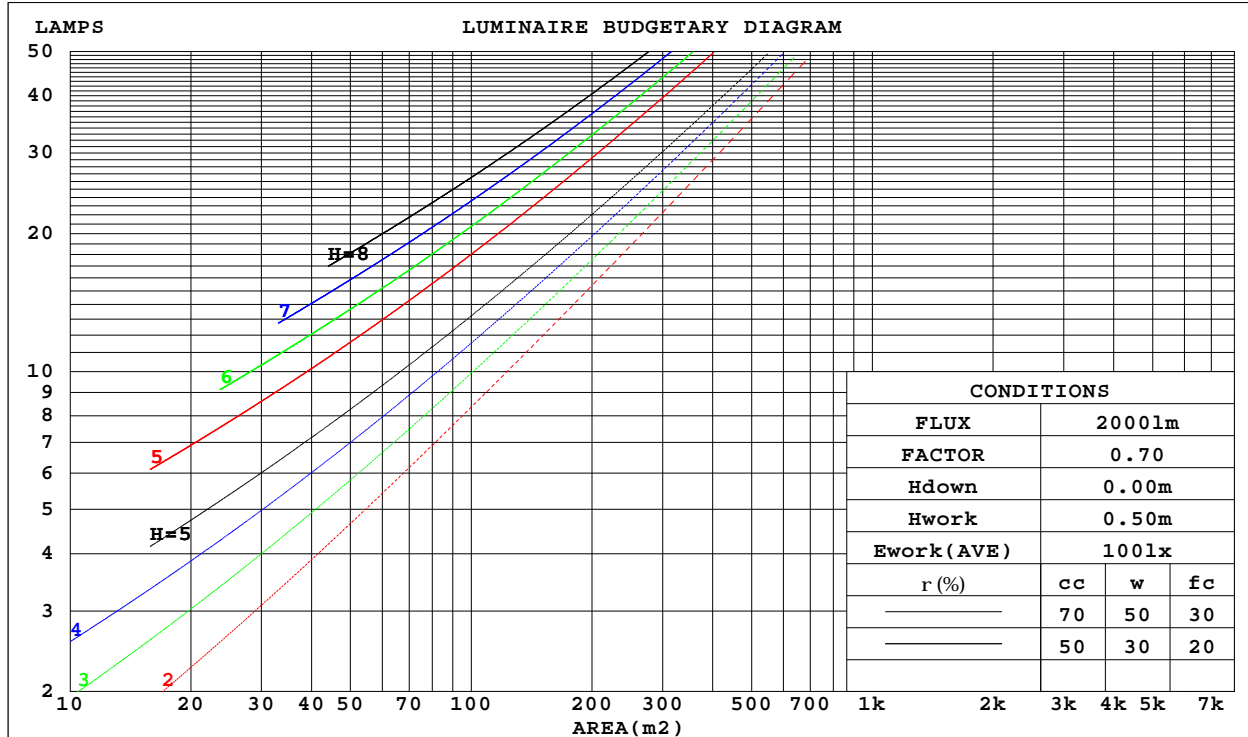
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

|                 |                       |      |      |      |      |      |                                 |     |     |     |     |     |     |     |     |     |
|-----------------|-----------------------|------|------|------|------|------|---------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| r <sub>cc</sub> | 80%                   |      |      | 70%  |      |      | 50%                             |     |     | 30% |     |     | 10% |     |     | 0   |
| r <sub>w</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30% | 10% | 50% | 30% | 10% | 50% | 30% | 10% | 0   |
| r <sub>fc</sub> | 20%                   |      |      | 20%  |      |      | 20%                             |     |     | 20% |     |     | 20% |     |     | 0   |
| RCR             | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |     |     |     |     |     |     |     |     |     |
| 0.0             | 1.13                  | 1.13 | 1.13 | 1.07 | 1.07 | 1.07 | .97                             | .97 | .97 | .88 | .88 | .88 | .79 | .79 | .79 | .75 |
| 1.0             | .93                   | .88  | .83  | .89  | .84  | .79  | .80                             | .76 | .72 | .71 | .68 | .65 | .64 | .61 | .59 | .55 |
| 2.0             | .80                   | .72  | .65  | .75  | .68  | .62  | .68                             | .62 | .57 | .61 | .56 | .52 | .54 | .50 | .47 | .43 |
| 3.0             | .69                   | .60  | .53  | .65  | .57  | .50  | .59                             | .52 | .46 | .52 | .47 | .42 | .47 | .42 | .39 | .35 |
| 4.0             | .60                   | .51  | .44  | .57  | .49  | .42  | .52                             | .44 | .39 | .46 | .40 | .35 | .41 | .36 | .32 | .29 |
| 5.0             | .53                   | .44  | .37  | .51  | .42  | .36  | .46                             | .38 | .33 | .41 | .35 | .30 | .37 | .32 | .28 | .25 |
| 6.0             | .48                   | .38  | .32  | .45  | .37  | .31  | .41                             | .34 | .28 | .37 | .31 | .26 | .33 | .28 | .24 | .21 |
| 7.0             | .43                   | .34  | .28  | .41  | .33  | .27  | .37                             | .30 | .25 | .33 | .27 | .23 | .30 | .25 | .21 | .19 |
| 8.0             | .39                   | .30  | .24  | .37  | .29  | .23  | .34                             | .27 | .22 | .31 | .25 | .20 | .28 | .22 | .19 | .16 |
| 9.0             | .36                   | .27  | .22  | .34  | .26  | .21  | .31                             | .24 | .19 | .28 | .22 | .18 | .25 | .20 | .17 | .15 |
| 10.0            | .33                   | .25  | .19  | .31  | .24  | .19  | .29                             | .22 | .17 | .26 | .20 | .16 | .24 | .19 | .15 | .13 |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

WEC AND CCEC

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

| rcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| rw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0  | .393                  | .224 | .071 | .378 | .216 | .069 | .350                            | .201 | .064 | .324 | .187 | .060 | .301 | .174 | .056 |   |
| 2.0  | .337                  | .185 | .057 | .323 | .178 | .055 | .298                            | .166 | .051 | .275 | .154 | .048 | .253 | .143 | .045 |   |
| 3.0  | .298                  | .158 | .047 | .285 | .153 | .046 | .262                            | .142 | .043 | .241 | .132 | .041 | .221 | .122 | .038 |   |
| 4.0  | .267                  | .139 | .041 | .256 | .134 | .040 | .235                            | .125 | .037 | .216 | .116 | .035 | .197 | .107 | .033 |   |
| 5.0  | .242                  | .123 | .036 | .232 | .119 | .035 | .213                            | .111 | .033 | .195 | .103 | .031 | .178 | .095 | .029 |   |
| 6.0  | .222                  | .111 | .032 | .212 | .107 | .031 | .195                            | .100 | .029 | .178 | .093 | .027 | .163 | .086 | .026 |   |
| 7.0  | .204                  | .101 | .029 | .196 | .098 | .028 | .180                            | .091 | .026 | .164 | .084 | .025 | .150 | .078 | .023 |   |
| 8.0  | .189                  | .092 | .026 | .181 | .089 | .025 | .167                            | .083 | .024 | .153 | .077 | .022 | .139 | .072 | .021 |   |
| 9.0  | .176                  | .085 | .024 | .169 | .082 | .023 | .155                            | .077 | .022 | .142 | .071 | .020 | .130 | .066 | .019 |   |
| 10.0 | .165                  | .079 | .022 | .158 | .076 | .021 | .145                            | .071 | .020 | .133 | .066 | .019 | .122 | .061 | .018 |   |

| rcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| rw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| rfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .383                  | .383 | .383 | .328 | .328 | .328 | .224                                       | .224 | .224 | .129 | .129 | .129 | .041 | .041 | .041 |   |
| 1.0  | .381                  | .350 | .322 | .326 | .300 | .277 | .223                                       | .207 | .192 | .128 | .120 | .112 | .041 | .038 | .036 |   |
| 2.0  | .374                  | .328 | .288 | .320 | .282 | .249 | .220                                       | .195 | .174 | .127 | .113 | .102 | .041 | .037 | .033 |   |
| 3.0  | .367                  | .311 | .267 | .314 | .269 | .232 | .216                                       | .187 | .163 | .125 | .109 | .096 | .040 | .035 | .031 |   |
| 4.0  | .359                  | .299 | .253 | .308 | .259 | .220 | .212                                       | .180 | .155 | .123 | .106 | .092 | .039 | .034 | .030 |   |
| 5.0  | .351                  | .290 | .244 | .302 | .251 | .212 | .208                                       | .175 | .150 | .120 | .103 | .089 | .039 | .034 | .029 |   |
| 6.0  | .344                  | .282 | .237 | .296 | .244 | .206 | .204                                       | .171 | .146 | .118 | .100 | .087 | .038 | .033 | .029 |   |
| 7.0  | .337                  | .275 | .232 | .290 | .239 | .202 | .200                                       | .167 | .143 | .116 | .099 | .085 | .038 | .032 | .028 |   |
| 8.0  | .330                  | .270 | .228 | .284 | .234 | .199 | .197                                       | .164 | .141 | .114 | .097 | .084 | .037 | .032 | .028 |   |
| 9.0  | .324                  | .265 | .225 | .279 | .230 | .197 | .193                                       | .162 | .140 | .113 | .096 | .083 | .037 | .031 | .028 |   |
| 10.0 | .318                  | .261 | .223 | .274 | .227 | .195 | .190                                       | .160 | .138 | .111 | .094 | .082 | .036 | .031 | .027 |   |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

|   |                  |      |      |      |           |                |      |                  |      |      |
|---|------------------|------|------|------|-----------|----------------|------|------------------|------|------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |                  |      |      |      |           |                |      |                  |      |      |
| NAME: LED   |                  |      |      |      | TYPE:T5   |                |      | WEIGHT:          |      |      |
| SPEC.:  |                  |      |      |      | DIM.: 5FT |                |      | SERIAL No.:      |      |      |
| MFR.:   |                  |      |      |      | SUR.:     |                |      | Shielding 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   | 22.7             | 24.0 | 23.3 | 24.6 | 25.3      | 20.5           | 21.8 | 21.1             | 22.4 | 23.1 |
| 3H  | 25.5             | 26.7 | 26.2 | 27.4 | 28.1      | 22.1           | 23.3 | 22.7             | 23.9 | 24.7 |
| 4H  | 27.1             | 28.3 | 27.8 | 28.9 | 29.7      | 22.8           | 23.9 | 23.4             | 24.5 | 25.3 |
| 6H  | 28.9             | 29.9 | 29.5 | 30.6 | 31.4      | 23.3           | 24.3 | 23.9             | 25.0 | 25.8 |
| 8H  | 29.8             | 30.9 | 30.5 | 31.6 | 32.4      | 23.4           | 24.5 | 24.1             | 25.1 | 25.9 |
| 12H   | 31.0             | 32.0 | 31.7 | 32.7 | 33.5      | 23.5           | 24.5 | 24.2             | 25.2 | 26.0 |
| 4H 2H   | 23.3             | 24.4 | 23.9 | 25.1 | 25.8      | 21.7           | 22.8 | 22.3             | 23.4 | 24.2 |
| 3H  | 26.4             | 27.4 | 27.0 | 28.0 | 28.9      | 23.5           | 24.5 | 24.2             | 25.2 | 26.1 |
| 4H  | 28.1             | 29.0 | 28.8 | 29.7 | 30.6      | 24.4           | 25.4 | 25.1             | 26.1 | 26.9 |
| 6H  | 30.1             | 30.9 | 30.8 | 31.6 | 32.5      | 25.2           | 26.0 | 25.9             | 26.7 | 27.6 |
| 8H  | 31.2             | 31.9 | 31.9 | 32.7 | 33.6      | 25.5           | 26.2 | 26.2             | 27.0 | 27.9 |
| 12H   | 32.4             | 33.1 | 33.2 | 33.9 | 34.8      | 25.6           | 26.4 | 26.4             | 27.1 | 28.0 |
| 8H 4H   | 28.5             | 29.2 | 29.2 | 30.0 | 30.9      | 25.6           | 26.4 | 26.3             | 27.1 | 28.0 |
| 6H  | 30.7             | 31.4 | 31.5 | 32.2 | 33.1      | 26.8           | 27.4 | 27.5             | 28.2 | 29.1 |
| 8H  | 32.1             | 32.6 | 32.9 | 33.4 | 34.4      | 27.3           | 27.9 | 28.1             | 28.7 | 29.6 |
| 12H   | 33.6             | 34.1 | 34.4 | 34.9 | 35.9      | 27.7           | 28.2 | 28.5             | 29.0 | 30.0 |
| 12H 4H  | 28.5             | 29.2 | 29.2 | 30.0 | 30.9      | 26.0           | 26.7 | 26.8             | 27.5 | 28.4 |
| 6H  | 30.9             | 31.5 | 31.7 | 32.2 | 33.2      | 27.4           | 28.0 | 28.2             | 28.8 | 29.7 |
| 8H  | 32.3             | 32.8 | 33.1 | 33.6 | 34.6      | 28.1           | 28.6 | 28.9             | 29.4 | 30.4 |
| 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 4072 lm Total Lamp Luminous Flux.(8log(F/F0) = 4.9)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding 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  | 32        | 52  | 40  | 32  | 49            | 38  | 31  | 23     |
| 1.00                             | 61  | 48  | 40        | 59  | 47  | 39  | 55            | 47  | 37  | 28     |
| 1.25                             | 68  | 55  | 46        | 66  | 54  | 45  | 61            | 51  | 43  | 33     |
| 1.50                             | 73  | 61  | 52        | 70  | 59  | 51  | 65            | 55  | 48  | 36     |
| 2.00                             | 81  | 69  | 61        | 77  | 67  | 59  | 71            | 62  | 55  | 42     |
| 2.50                             | 86  | 75  | 67        | 82  | 72  | 64  | 74            | 66  | 60  | 46     |
| 3.00                             | 89  | 80  | 72        | 85  | 76  | 69  | 77            | 70  | 64  | 49     |
| 4.00                             | 94  | 86  | 79        | 90  | 82  | 76  | 81            | 75  | 70  | 54     |
| 5.00                             | 97  | 90  | 84        | 93  | 86  | 80  | 84            | 79  | 74  | 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:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

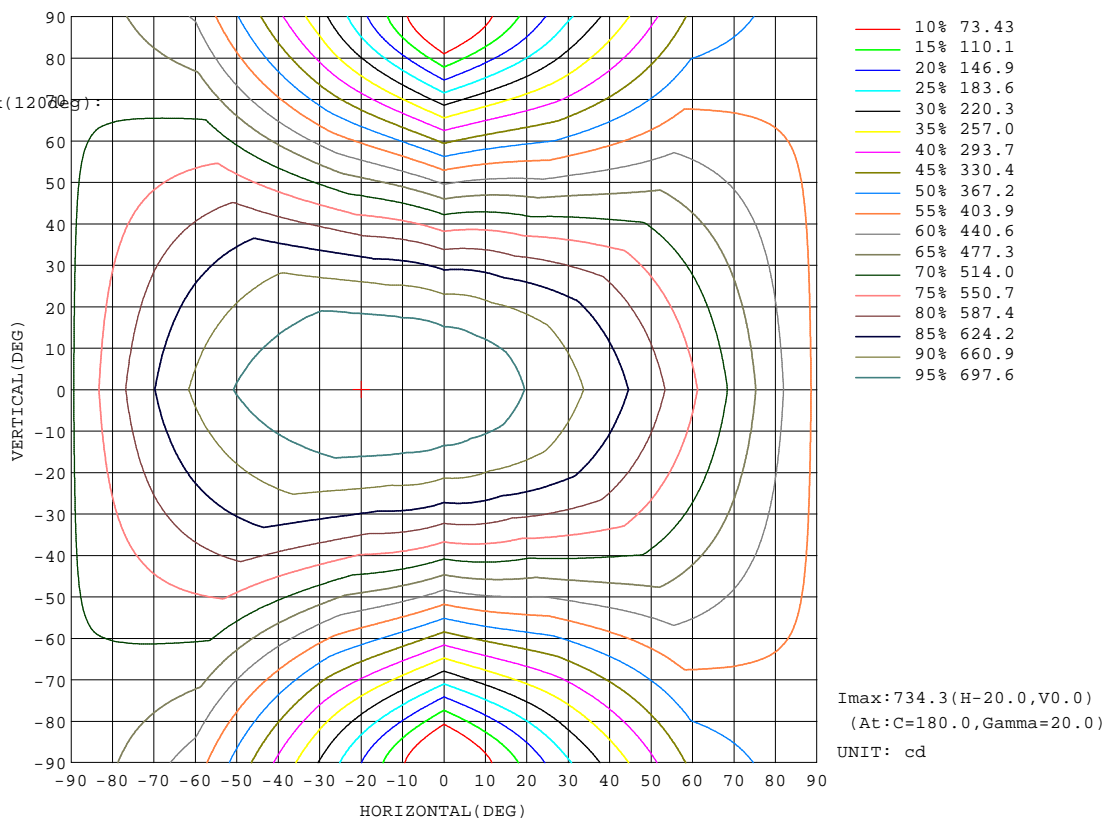
|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.9lx1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

Conical surface Flux(90deg):

1197.7 lm  
%lum = 29.4%  
%lamp = 29.4%

Conical surface Flux(120deg):

1884.1 lm  
%lum = 46.3%  
%lamp = 46.3%



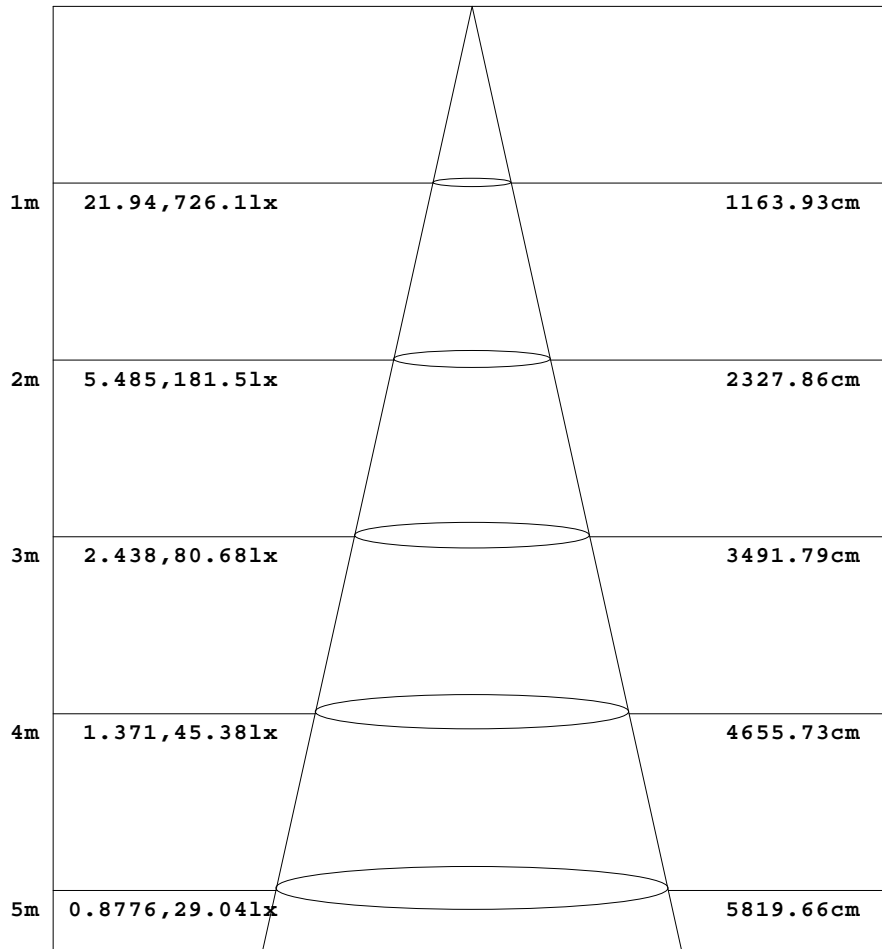
C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2017-10-30

Range: 0 - 180DEG  
Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
Humidity:65.0%  
Test Distance:7.370m [K=1.0000]  
Remarks:

AAI Figure

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.9lx1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

Flux out:2748 lm



Height Eavg, Emax Angle:160.50deg Diameter

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

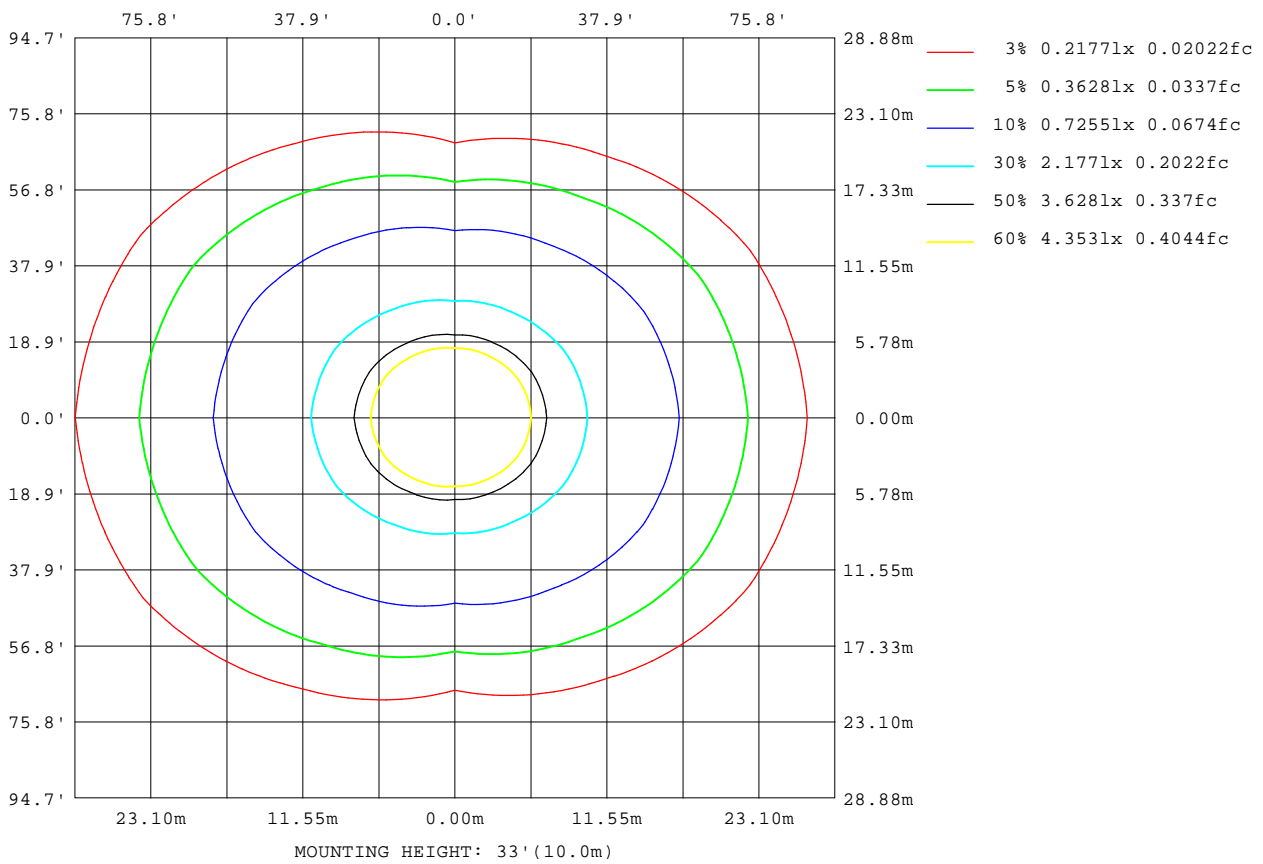
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.9lx1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

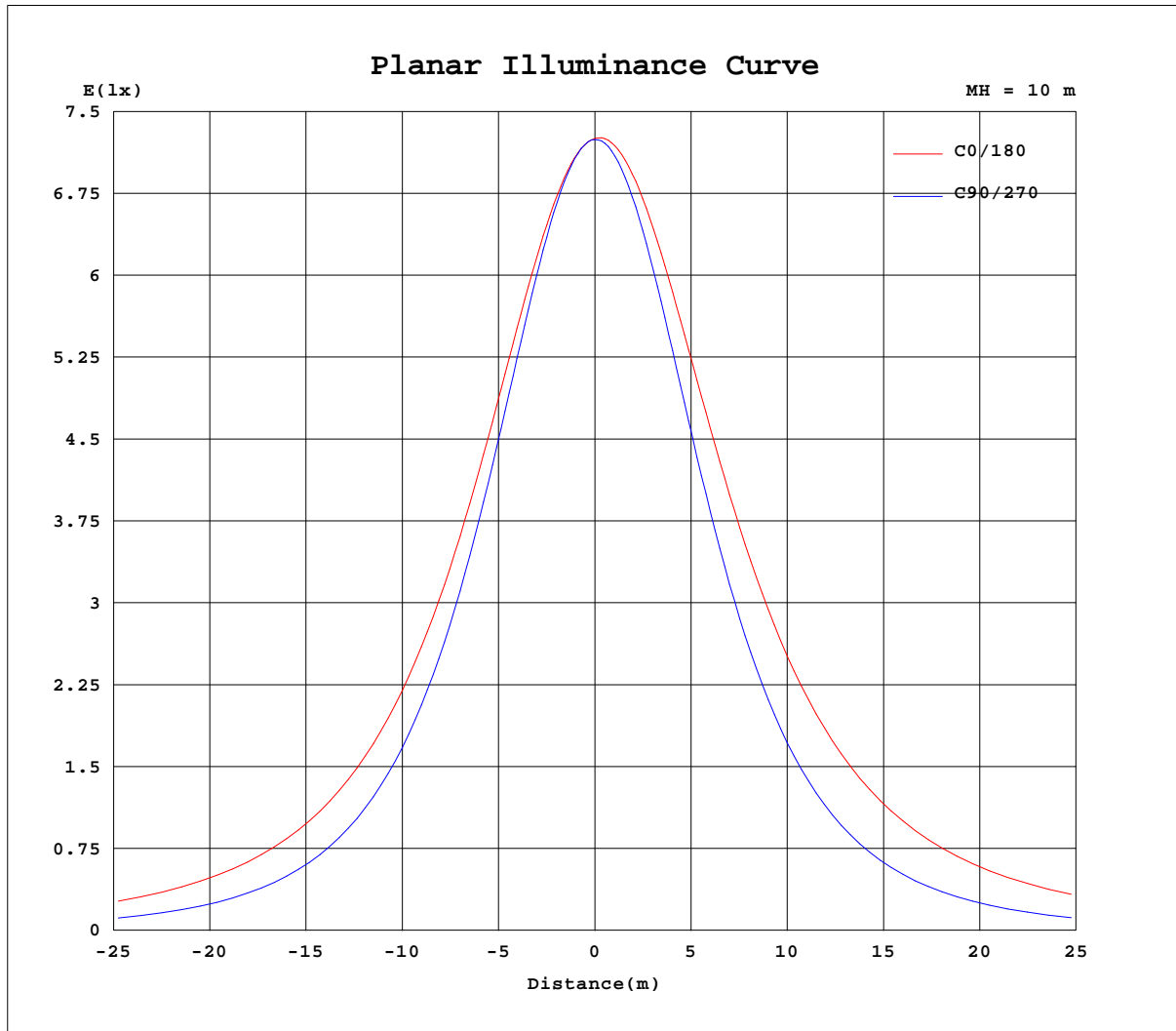
| AvgL           | cd/m2  |
|----------------|--------|
| L_0~180(65)av  | 34818  |
| L_0~180(75)av  | 51929  |
| L_0~180(85)av  | 138153 |
| L_90~270(65)av | 15332  |
| L_90~270(75)av | 13518  |
| L_90~270(85)av | 9638   |
| L_45(65)av     | 26849  |
| L_45(75)av     | 37585  |
| L_45(85)av     | 94518  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 g Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2017-10-30

Page Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity: 65.0%  
 Test Distance: 7.370m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|   |           |                  |
|---|-----------|------------------|
| Test:U:230.3V I:0.1466A P:32.26W PF:0.9552 Lamp Flux:4071.91x1 lm |           |                  |
| NAME: LED   | TYPE:T5   | WEIGHT:          |
| SPEC.:  | DIM.: 5FT | SERIAL No.:      |
| MFR.:   | SUR.:     | Shielding Angle: |

Table--1

UNIT: cd

| C(DEG)<br>g (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|
| 0                 | 725  | 725  | 725  | 725  | 725  | 725  | 725  | 725  | 725  | 725  | 725  | 725  |  |  |  |  |  |  |
| 5                 | 720  | 720  | 719  | 720  | 724  | 727  | 729  | 728  | 726  | 723  | 721  | 720  |  |  |  |  |  |  |
| 10                | 713  | 712  | 708  | 710  | 717  | 727  | 732  | 729  | 721  | 714  | 712  | 714  |  |  |  |  |  |  |
| 15                | 705  | 701  | 692  | 692  | 705  | 723  | 733  | 727  | 712  | 698  | 698  | 704  |  |  |  |  |  |  |
| 20                | 696  | 688  | 672  | 669  | 688  | 718  | 734  | 723  | 697  | 677  | 679  | 691  |  |  |  |  |  |  |
| 25                | 684  | 672  | 647  | 640  | 667  | 710  | 732  | 717  | 677  | 649  | 655  | 676  |  |  |  |  |  |  |
| 30                | 671  | 654  | 618  | 605  | 641  | 699  | 730  | 708  | 654  | 616  | 626  | 658  |  |  |  |  |  |  |
| 35                | 656  | 634  | 586  | 566  | 611  | 687  | 726  | 696  | 626  | 578  | 594  | 638  |  |  |  |  |  |  |
| 40                | 640  | 612  | 550  | 522  | 579  | 672  | 720  | 683  | 594  | 535  | 559  | 616  |  |  |  |  |  |  |
| 45                | 622  | 588  | 512  | 475  | 543  | 655  | 711  | 667  | 560  | 487  | 521  | 592  |  |  |  |  |  |  |
| 50                | 602  | 563  | 473  | 424  | 505  | 636  | 699  | 649  | 524  | 436  | 480  | 567  |  |  |  |  |  |  |
| 55                | 580  | 537  | 432  | 370  | 466  | 614  | 684  | 628  | 485  | 381  | 438  | 540  |  |  |  |  |  |  |
| 60                | 556  | 509  | 391  | 313  | 426  | 591  | 667  | 605  | 446  | 323  | 396  | 511  |  |  |  |  |  |  |
| 65                | 531  | 480  | 350  | 255  | 386  | 565  | 646  | 580  | 406  | 264  | 354  | 482  |  |  |  |  |  |  |
| 70                | 505  | 452  | 311  | 196  | 347  | 538  | 622  | 553  | 367  | 203  | 313  | 453  |  |  |  |  |  |  |
| 75                | 478  | 423  | 274  | 137  | 310  | 510  | 597  | 525  | 329  | 143  | 274  | 424  |  |  |  |  |  |  |
| 80                | 451  | 394  | 239  | 81.7 | 275  | 481  | 569  | 496  | 294  | 84.4 | 238  | 395  |  |  |  |  |  |  |
| 85                | 423  | 367  | 208  | 33.3 | 244  | 452  | 540  | 466  | 262  | 33.9 | 207  | 366  |  |  |  |  |  |  |
| 90                | 396  | 339  | 179  | 6.90 | 218  | 423  | 510  | 437  | 234  | 6.48 | 178  | 339  |  |  |  |  |  |  |
| 95                | 368  | 313  | 157  | 6.95 | 195  | 395  | 478  | 407  | 211  | 6.20 | 154  | 312  |  |  |  |  |  |  |
| 100               | 341  | 288  | 140  | 7.55 | 177  | 367  | 447  | 379  | 192  | 6.86 | 137  | 286  |  |  |  |  |  |  |
| 105               | 315  | 265  | 127  | 8.12 | 163  | 340  | 415  | 351  | 175  | 7.41 | 114  | 260  |  |  |  |  |  |  |
| 110               | 290  | 242  | 117  | 8.74 | 151  | 314  | 384  | 323  | 162  | 8.00 | 109  | 236  |  |  |  |  |  |  |
| 115               | 265  | 222  | 103  | 9.34 | 142  | 289  | 353  | 297  | 152  | 8.63 | 93.8 | 216  |  |  |  |  |  |  |
| 120               | 241  | 202  | 90.0 | 9.95 | 134  | 265  | 323  | 273  | 143  | 9.25 | 82.9 | 198  |  |  |  |  |  |  |
| 125               | 218  | 182  | 81.2 | 10.5 | 127  | 242  | 294  | 249  | 135  | 9.86 | 74.2 | 175  |  |  |  |  |  |  |
| 130               | 197  | 163  | 74.9 | 11.1 | 122  | 221  | 266  | 227  | 128  | 10.5 | 74.2 | 156  |  |  |  |  |  |  |
| 135               | 177  | 131  | 68.9 | 11.8 | 117  | 201  | 240  | 206  | 120  | 11.1 | 69.3 | 130  |  |  |  |  |  |  |
| 140               | 158  | 109  | 64.3 | 12.4 | 112  | 182  | 214  | 186  | 113  | 11.8 | 65.6 | 101  |  |  |  |  |  |  |
| 145               | 141  | 95.6 | 63.6 | 13.0 | 99.0 | 165  | 191  | 168  | 93.7 | 12.4 | 62.8 | 91.4 |  |  |  |  |  |  |
| 150               | 126  | 84.6 | 65.3 | 13.5 | 99.7 | 148  | 169  | 150  | 92.2 | 13.0 | 64.2 | 76.0 |  |  |  |  |  |  |
| 155               | 111  | 73.9 | 67.3 | 13.9 | 94.1 | 119  | 135  | 116  | 95.0 | 13.5 | 66.6 | 69.6 |  |  |  |  |  |  |
| 160               | 102  | 66.3 | 62.8 | 14.4 | 81.6 | 117  | 121  | 115  | 81.8 | 14.0 | 65.5 | 65.1 |  |  |  |  |  |  |
| 165               | 92.6 | 64.4 | 50.0 | 14.7 | 59.5 | 105  | 108  | 104  | 58.8 | 14.4 | 49.5 | 64.5 |  |  |  |  |  |  |
| 170               | 51.7 | 50.0 | 39.4 | 14.9 | 32.6 | 70.8 | 57.0 | 73.6 | 32.1 | 14.8 | 39.8 | 50.5 |  |  |  |  |  |  |
| 175               | 20.6 | 28.4 | 17.1 | 15.1 | 15.9 | 28.6 | 27.0 | 28.2 | 16.1 | 15.0 | 17.9 | 31.2 |  |  |  |  |  |  |
| 180               | 15.1 | 15.1 | 15.1 | 15.2 | 15.2 | 15.2 | 15.1 | 15.1 | 15.1 | 15.2 | 15.2 | 15.2 |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2017-10-30

g Range: 0 - 180DEG  
 Interval: 1.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.293  
 Humidity:65.0%  
 Test Distance:7.370m [K=1.0000]  
 Remarks: