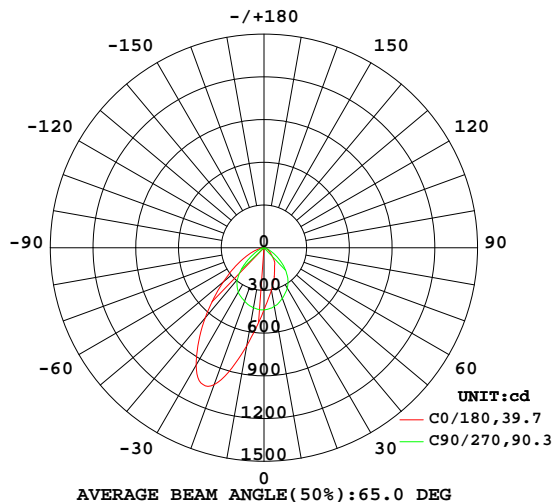


## LUMINAIRE PHOTOMETRIC TEST REPORT

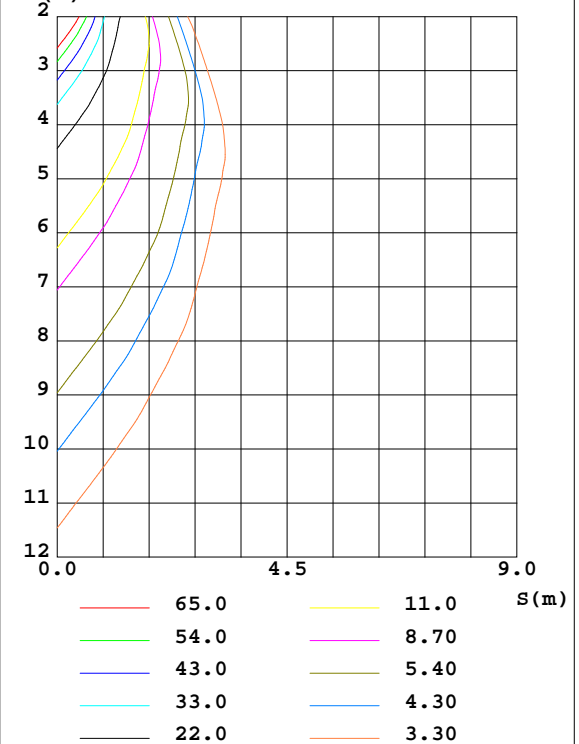
|  |                                  |                  |
|--|----------------------------------|------------------|
| Test:U:120.03V I:0.1257A P:14.879W PF:0.9860 Freq:60.00Hz Lamp Flux:1157.38x1 lm |                                  |                  |
| NAME: R2ARWT-A840-WT   | TYPE: Recessed-mounted Luminaire | HEIGHT:          |
| SPEC.:   | DIM.:                            | SERIAL No.:      |
| MFR.: WAC Lighting   | SUR.:                            | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA |        |                        |          | Eff: 77.79 lm/W |
|------------------|---------|------------------|--------|------------------------|----------|-----------------|
| MODEL            |         | Imax(cd)         | 1054   | S/MH(C0/180)           | 1.38     |                 |
| NOMINAL POWER(W) |         | LOR(%)           | 100.0  | S/MH(C90/270)          | 1.18     |                 |
| RATED VOLTAGE(V) | 120     | TOTAL FLUX(lm)   | 1157.4 | $\eta$ UP,DN(C0-180)   | 0.0,45.0 |                 |
| NOMINAL FLUX(lm) | 1157.38 | CIE CLASS        | DIRECT | $\eta$ UP,DN(C180-360) | 0.0,54.9 |                 |
| LAMPS INSIDE     | 1       | $\eta$ up(%)     | 0.1    | CIBSE SHR NOM          | 0.75     |                 |
| TEST VOLTAGE(V)  | 120     | $\eta$ down(%)   | 99.9   | CIBSE SHR MAX          | 0.95     |                 |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.2DEG  
 Operators:Oliver  
 Test Date:2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:2.464m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

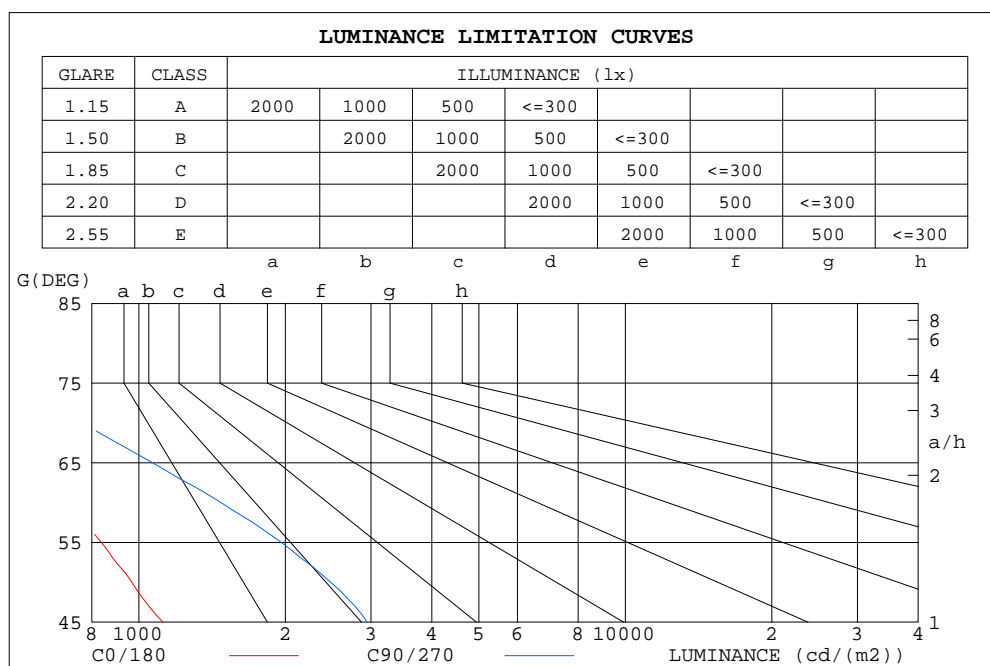
## ZONAL FLUX DIAGRAM:

| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | $\Phi$ lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------------|
| 10       | 302.2                 | 324.4  | 418.4  | 587.2  | 697.7  | 604.5  | 428.0  | 325.9  | 0- 10    | 42.83       | 42.83        | 3.7,3.7          |
| 20       | 212.9                 | 239.6  | 377.7  | 773.1  | 1023   | 821.2  | 399.4  | 240.3  | 10- 20   | 138.9       | 181.7        | 15.7,15.7        |
| 30       | 149.7                 | 170.3  | 326.8  | 853.0  | 953.3  | 889.2  | 361.5  | 172.2  | 20- 30   | 233.7       | 415.5        | 35.9,35.9        |
| 40       | 106.9                 | 118.8  | 254.1  | 699.3  | 642.8  | 704.1  | 291.5  | 116.3  | 30- 40   | 267.3       | 682.7        | 59,59            |
| 50       | 62.66                 | 74.55  | 159.2  | 455.1  | 372.8  | 449.5  | 175.8  | 71.15  | 40- 50   | 225.7       | 908.4        | 78.5,78.5        |
| 60       | 36.54                 | 38.14  | 73.69  | 238.2  | 192.4  | 215.1  | 75.51  | 38.67  | 50- 60   | 145.7       | 1054         | 91.1,91.1        |
| 70       | 18.83                 | 18.18  | 26.18  | 87.32  | 83.83  | 79.95  | 27.54  | 18.42  | 60- 70   | 72.85       | 1127         | 97.4,97.4        |
| 80       | 4.608                 | 5.211  | 5.617  | 13.75  | 21.93  | 14.80  | 5.576  | 5.165  | 70- 80   | 26.49       | 1153         | 99.7,99.7        |
| 90       | 0.2508                | 0.1759 | 0.2208 | 0.2808 | 0.3343 | 0.3113 | 0.2403 | 0.2703 | 80- 90   | 3.020       | 1157         | 99.9,99.9        |
| 100      | 0.0157                | 0.0064 | 0      | 0      | 0      | 0      | 0.0034 | 0.0240 | 90-100   | 0.0928      | 1157         | 99.9,99.9        |
| 110      | 0.0527                | 0.0381 | 0.0017 | 0      | 0      | 0      | 0.0224 | 0.0572 | 100-110  | 0.0147      | 1157         | 99.9,99.9        |
| 120      | 0.1313                | 0.1034 | 0.0333 | 0.0045 | 0.0043 | 0.0145 | 0.0601 | 0.1575 | 110-120  | 0.0381      | 1157         | 99.9,99.9        |
| 130      | 0.2701                | 0.2078 | 0.0953 | 0.0319 | 0.0427 | 0.0621 | 0.1534 | 0.3171 | 120-130  | 0.0933      | 1157         | 99.9,99.9        |
| 140      | 0.3620                | 0.2824 | 0.1640 | 0.0735 | 0.1016 | 0.1322 | 0.2699 | 0.4515 | 130-140  | 0.1491      | 1157         | 100,100          |
| 150      | 0.4288                | 0.3508 | 0.2565 | 0.1474 | 0.1886 | 0.2143 | 0.3597 | 0.5073 | 140-150  | 0.1706      | 1157         | 100,100          |
| 160      | 0.4394                | 0.3873 | 0.3348 | 0.2319 | 0.3026 | 0.3093 | 0.4219 | 0.5014 | 150-160  | 0.1551      | 1157         | 100,100          |
| 170      | 0.4212                | 0.4288 | 0.4052 | 0.3330 | 0.4413 | 0.4324 | 0.4818 | 0.4876 | 160-170  | 0.1105      | 1157         | 100,100          |
| 180      | 0.5387                | 0.5414 | 0.4993 | 0.4290 | 0.5387 | 0.5369 | 0.5210 | 0.4648 | 170-180  | 0.0435      | 1157         | 100,100          |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |                  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25.2DEG  
 Operators:Oliver  
 Test Date:2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 $\gamma$  Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity:65.0%  
 Test Distance:2.464m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES



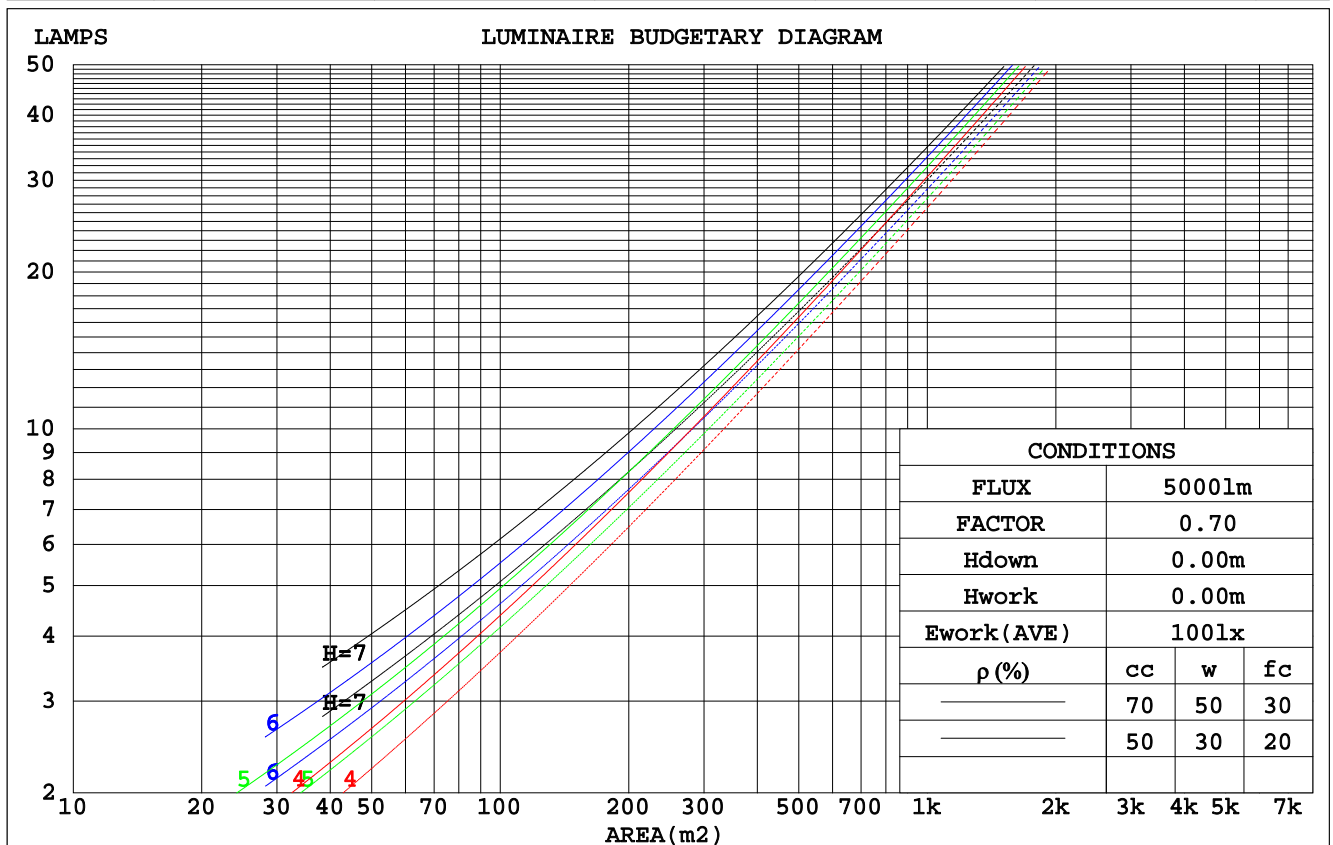
| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G( DEG )          | C0/180 | C90/270 |
| 85                | 153    | 179     |
| 80                | 264    | 324     |
| 75                | 401    | 548     |
| 70                | 547    | 767     |
| 65                | 644    | 1068    |
| 60                | 726    | 1476    |
| 55                | 838    | 1964    |
| 50                | 968    | 2481    |
| 45                | 1121   | 2946    |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.2DEG  
Operators: Oliver  
Test Date: 2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity: 65.0%  
Test Distance: 2.464m [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 | .00 |
| 1.0  | 1.07                  | 1.04 | 1.01 | 1.05 | 1.02 | .99  | 1.01                            | .98  | .96  | .97  | .95  | .93  | .93  | .92  | .90  | .88 |
| 2.0  | .96                   | .90  | .85  | .94  | .89  | .84  | .90                             | .86  | .82  | .87  | .84  | .80  | .84  | .81  | .79  | .77 |
| 3.0  | .86                   | .79  | .73  | .84  | .78  | .72  | .81                             | .76  | .71  | .79  | .74  | .70  | .76  | .72  | .69  | .67 |
| 4.0  | .77                   | .69  | .63  | .76  | .69  | .63  | .73                             | .67  | .62  | .71  | .66  | .61  | .69  | .64  | .61  | .59 |
| 5.0  | .70                   | .62  | .56  | .68  | .61  | .55  | .66                             | .60  | .55  | .65  | .59  | .54  | .63  | .58  | .54  | .52 |
| 6.0  | .63                   | .55  | .49  | .62  | .55  | .49  | .60                             | .54  | .49  | .59  | .53  | .48  | .57  | .52  | .48  | .46 |
| 7.0  | .58                   | .50  | .44  | .57  | .49  | .44  | .55                             | .48  | .43  | .54  | .48  | .43  | .53  | .47  | .43  | .41 |
| 8.0  | .53                   | .45  | .39  | .52  | .45  | .39  | .51                             | .44  | .39  | .50  | .43  | .39  | .48  | .43  | .39  | .37 |
| 9.0  | .49                   | .41  | .36  | .48  | .41  | .36  | .47                             | .40  | .35  | .46  | .40  | .35  | .45  | .39  | .35  | .33 |
| 10.0 | .45                   | .37  | .32  | .44  | .37  | .32  | .43                             | .37  | .32  | .43  | .36  | .32  | .42  | .36  | .32  | .30 |



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [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  | .248                  | .141 | .045 | .241 | .137 | .044 | .228                            | .131 | .042 | .216 | .124 | .040 | .205 | .119 | .038 |   |  |
| 2.0  | .242                  | .132 | .041 | .235 | .130 | .040 | .224                            | .125 | .039 | .214 | .120 | .038 | .204 | .115 | .036 |   |  |
| 3.0  | .230                  | .122 | .037 | .224 | .120 | .036 | .215                            | .116 | .035 | .205 | .113 | .035 | .197 | .109 | .034 |   |  |
| 4.0  | .217                  | .113 | .033 | .212 | .111 | .033 | .203                            | .108 | .032 | .195 | .105 | .032 | .188 | .102 | .031 |   |  |
| 5.0  | .204                  | .104 | .030 | .200 | .103 | .030 | .192                            | .100 | .029 | .185 | .098 | .029 | .178 | .095 | .029 |   |  |
| 6.0  | .192                  | .096 | .028 | .188 | .095 | .027 | .182                            | .093 | .027 | .175 | .091 | .027 | .169 | .089 | .026 |   |  |
| 7.0  | .181                  | .090 | .025 | .178 | .089 | .025 | .172                            | .087 | .025 | .166 | .085 | .025 | .160 | .083 | .024 |   |  |
| 8.0  | .171                  | .084 | .023 | .168 | .083 | .023 | .162                            | .081 | .023 | .157 | .080 | .023 | .152 | .078 | .023 |   |  |
| 9.0  | .162                  | .078 | .022 | .159 | .078 | .022 | .154                            | .076 | .022 | .149 | .075 | .021 | .145 | .074 | .021 |   |  |
| 10.0 | .153                  | .073 | .020 | .151 | .073 | .020 | .146                            | .072 | .020 | .142 | .071 | .020 | .138 | .069 | .020 |   |  |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |  |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|--|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |  |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |  |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0  | .191                  | .191 | .191 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |  |
| 1.0  | .177                  | .157 | .140 | .151 | .135 | .120 | .103                                       | .093 | .083 | .059 | .054 | .048 | .019 | .017 | .016 |   |  |
| 2.0  | .166                  | .133 | .105 | .142 | .114 | .090 | .098                                       | .079 | .063 | .056 | .046 | .037 | .018 | .015 | .012 |   |  |
| 3.0  | .157                  | .115 | .081 | .135 | .099 | .070 | .093                                       | .069 | .049 | .053 | .040 | .029 | .017 | .013 | .009 |   |  |
| 4.0  | .149                  | .101 | .064 | .128 | .087 | .055 | .088                                       | .061 | .039 | .051 | .036 | .023 | .016 | .012 | .008 |   |  |
| 5.0  | .142                  | .090 | .052 | .122 | .078 | .045 | .084                                       | .054 | .032 | .049 | .032 | .019 | .016 | .010 | .006 |   |  |
| 6.0  | .136                  | .082 | .043 | .117 | .071 | .037 | .080                                       | .049 | .026 | .047 | .029 | .016 | .015 | .010 | .005 |   |  |
| 7.0  | .129                  | .075 | .036 | .111 | .065 | .032 | .077                                       | .045 | .022 | .045 | .027 | .013 | .014 | .009 | .004 |   |  |
| 8.0  | .123                  | .069 | .031 | .106 | .060 | .027 | .074                                       | .042 | .019 | .043 | .025 | .011 | .014 | .008 | .004 |   |  |
| 9.0  | .118                  | .064 | .027 | .102 | .055 | .024 | .070                                       | .039 | .017 | .041 | .023 | .010 | .013 | .008 | .003 |   |  |
| 10.0 | .113                  | .060 | .024 | .097 | .052 | .021 | .067                                       | .036 | .015 | .039 | .022 | .009 | .013 | .007 | .003 |   |  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [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                                      | 7.4              | 8.7 | 7.6 | 8.9  | 9.1  | 10.6           | 11.9 | 10.8 | 12.1 | 12.3 |
| 3H   | 8.1              | 9.3 | 8.4 | 9.6  | 9.8  | 11.1           | 12.3 | 11.3 | 12.5 | 12.7 |
| 4H   | 8.3              | 9.5 | 8.6 | 9.7  | 9.9  | 11.2           | 12.3 | 11.5 | 12.6 | 12.8 |
| 6H   | 8.3              | 9.4 | 8.7 | 9.7  | 10.0 | 11.2           | 12.3 | 11.5 | 12.5 | 12.8 |
| 8H   | 8.3              | 9.4 | 8.7 | 9.7  | 9.9  | 11.1           | 12.2 | 11.5 | 12.5 | 12.8 |
| 12H  | 8.3              | 9.3 | 8.6 | 9.6  | 9.9  | 11.1           | 12.1 | 11.4 | 12.4 | 12.7 |
| 4H 2H  | 7.7              | 8.9 | 8.0 | 9.1  | 9.4  | 10.5           | 11.7 | 10.8 | 11.9 | 12.2 |
| 3H   | 8.6              | 9.6 | 8.9 | 9.9  | 10.2 | 11.1           | 12.1 | 11.5 | 12.4 | 12.7 |
| 4H   | 8.9              | 9.8 | 9.2 | 10.1 | 10.4 | 11.3           | 12.2 | 11.7 | 12.5 | 12.9 |
| 6H   | 9.0              | 9.8 | 9.4 | 10.1 | 10.5 | 11.4           | 12.2 | 11.8 | 12.5 | 12.9 |
| 8H   | 9.0              | 9.7 | 9.4 | 10.1 | 10.5 | 11.4           | 12.1 | 11.8 | 12.5 | 12.9 |
| 12H  | 9.0              | 9.6 | 9.4 | 10.0 | 10.4 | 11.3           | 12.0 | 11.8 | 12.4 | 12.8 |
| 8H 4H  | 8.9              | 9.7 | 9.3 | 10.0 | 10.4 | 11.3           | 12.0 | 11.7 | 12.4 | 12.8 |
| 6H   | 9.1              | 9.7 | 9.6 | 10.1 | 10.6 | 11.4           | 12.0 | 11.8 | 12.4 | 12.8 |
| 8H   | 9.2              | 9.7 | 9.6 | 10.1 | 10.6 | 11.4           | 11.9 | 11.9 | 12.4 | 12.8 |
| 12H  | 9.2              | 9.6 | 9.6 | 10.1 | 10.5 | 11.4           | 11.8 | 11.9 | 12.3 | 12.8 |
| 12H 4H   | 8.9              | 9.6 | 9.3 | 10.0 | 10.4 | 11.2           | 11.9 | 11.7 | 12.3 | 12.7 |
| 6H   | 9.1              | 9.6 | 9.6 | 10.1 | 10.5 | 11.4           | 11.9 | 11.8 | 12.3 | 12.8 |
| 8H   | 9.2              | 9.6 | 9.6 | 10.1 | 10.5 | 11.4           | 11.8 | 11.9 | 12.3 | 12.8 |
| Variations with the observer position at spacings: |                  |     |     |      |      |                |      |      |      |      |
| S = 1.0H   | + 0.6 / - 0.8    |     |     |      |      | + 1.3 / - 0.9  |      |      |      |      |
| 1.5H   | + 0.4 / - 0.5    |     |     |      |      | + 2.0 / - 1.6  |      |      |      |      |
| 2.0H   | + 0.9 / - 0.8    |     |     |      |      | + 3.4 / - 2.5  |      |      |      |      |

CIE Pub.117, 1157 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 0.5$ )

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [K=1.0000]  
 Remarks:

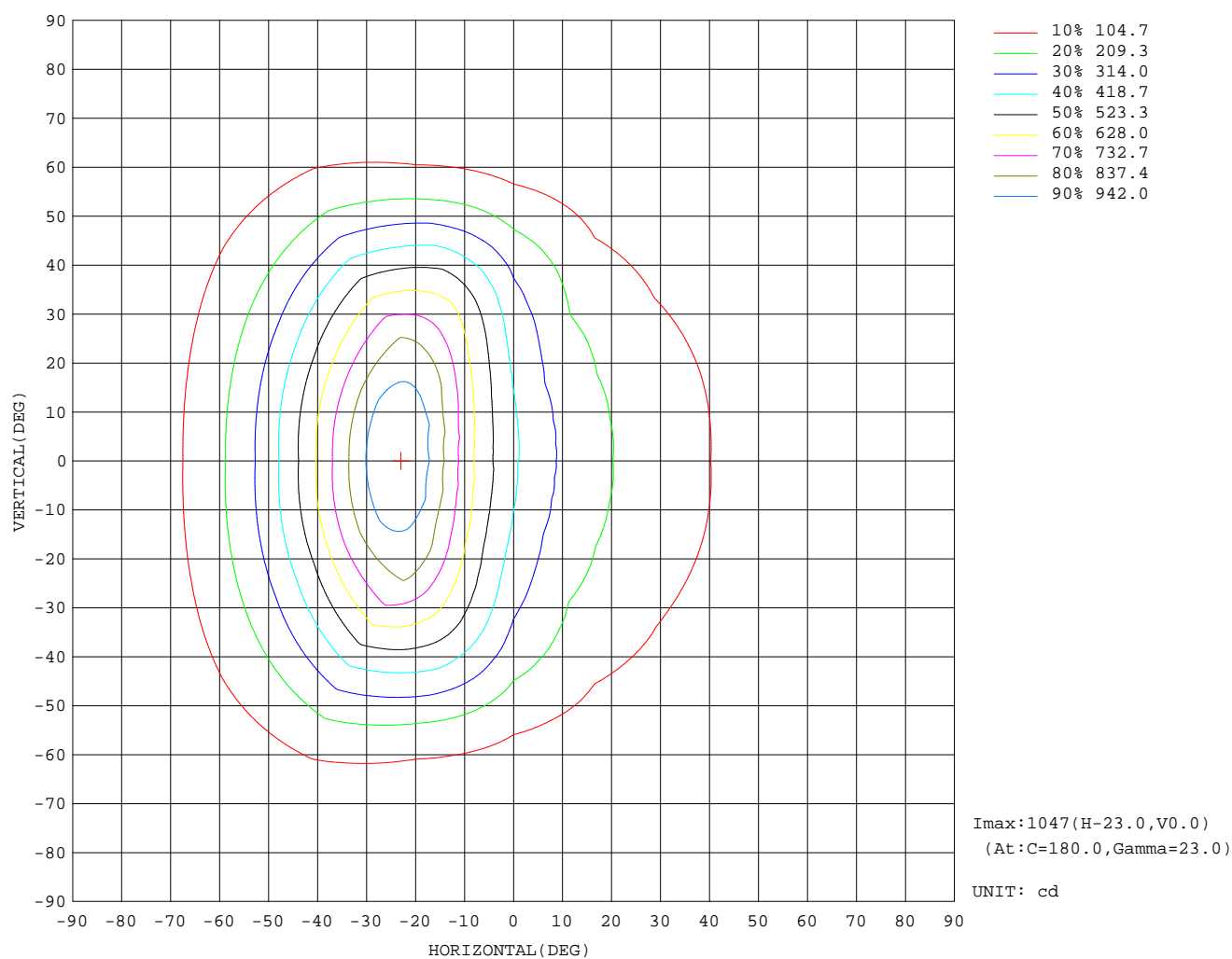
## UTILIZATION FACTORS TABLE

| 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                         | 66  | 55  | 49  | 65        | 55  | 49  | 64  | 55            | 49  | 43     |
| 0.80                             | 76  | 66  | 60  | 75        | 65  | 59  | 73  | 65            | 59  | 53     |
| 1.00                             | 84  | 75  | 69  | 83        | 74  | 68  | 81  | 75            | 68  | 62     |
| 1.25                             | 90  | 82  | 76  | 89        | 81  | 76  | 87  | 80            | 75  | 69     |
| 1.50                             | 95  | 87  | 81  | 93        | 86  | 81  | 91  | 84            | 80  | 73     |
| 2.00                             | 101   | 94  | 89  | 99        | 93  | 88  | 96  | 91            | 86  | 80     |
| 2.50                             | 104   | 97  | 93  | 102       | 96  | 92  | 98  | 94            | 90  | 83     |
| 3.00                             | 106   | 101 | 97  | 104       | 99  | 95  | 101 | 97            | 93  | 86     |
| 4.00                             | 109   | 105 | 101 | 107       | 103 | 100 | 103 | 100           | 97  | 89     |
| 5.00                             | 111   | 107 | 104 | 109       | 106 | 103 | 105 | 102           | 100 | 91     |
| ROOM INDEX                       | UF(total)   |     |     |           |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |   |     |     | Suspended |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [K=1.0000]  
 Remarks:

## ISOCANDELA DIAGRAM

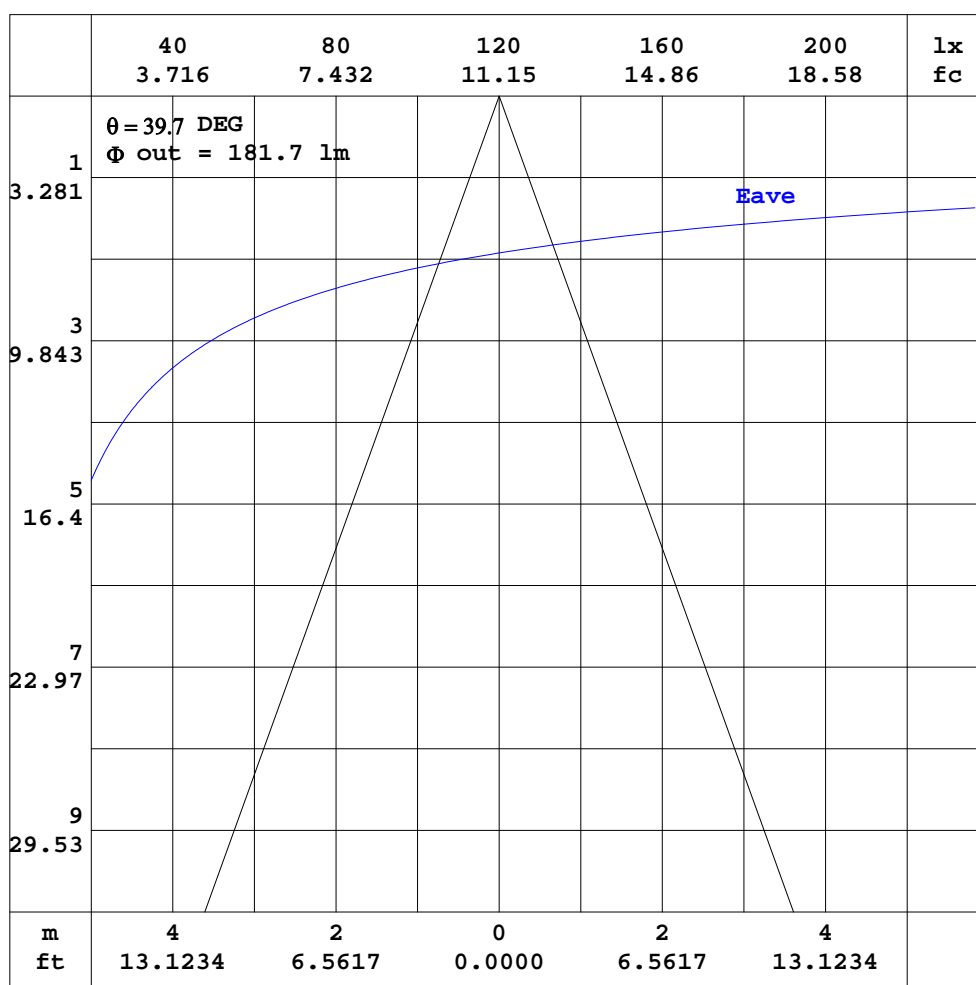


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25.2DEG  
Operators:Oliver  
Test Date:2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity:65.0%  
Test Distance:2.464m [K=1.0000]  
Remarks:



## AAI CURVES

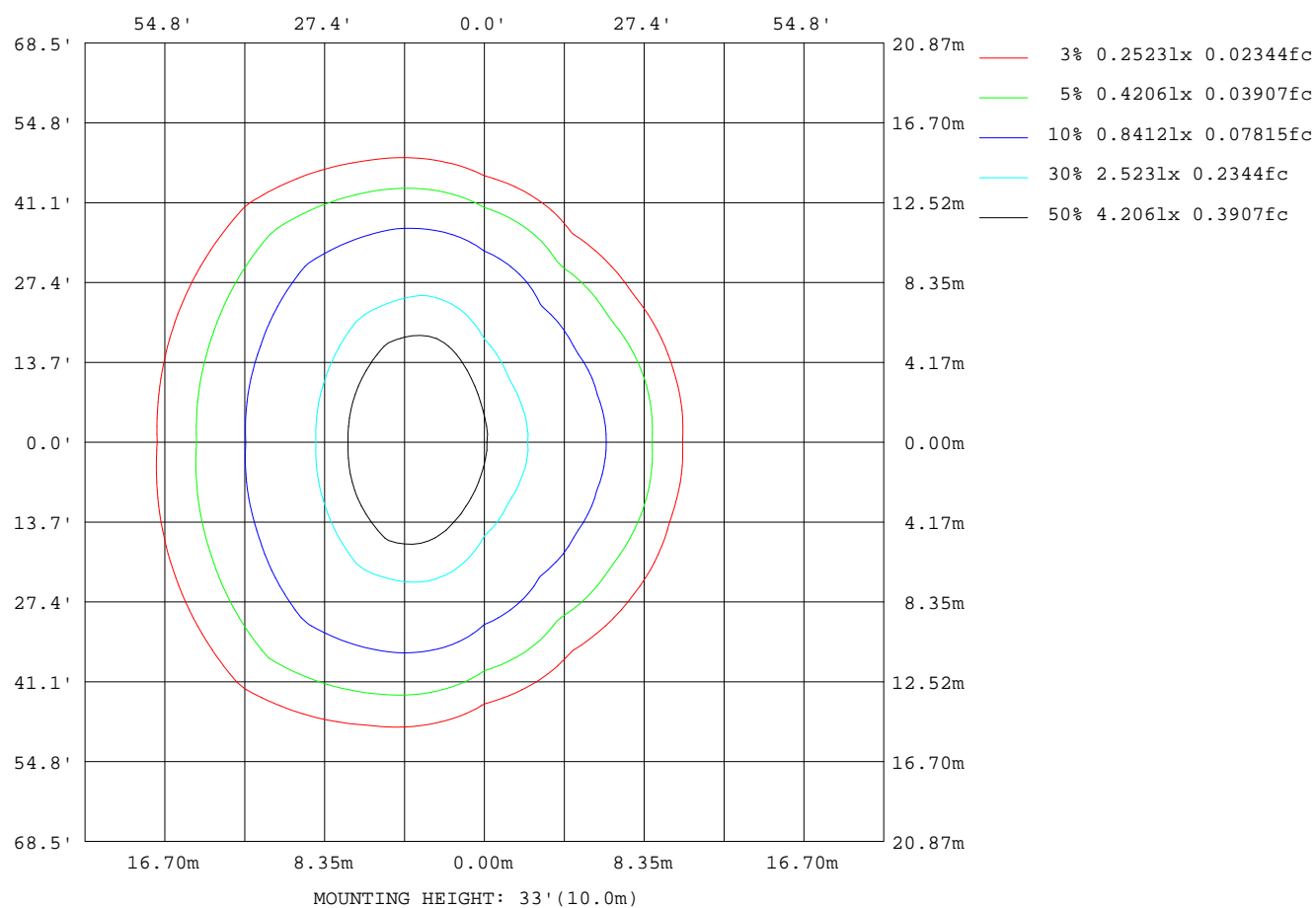


Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [K=1.0000]  
 Remarks:

## ISOLUX DIAGRAM



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.2DEG  
Operators: Oliver  
Test Date: 2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity: 65.0%  
Test Distance: 2.464m [K=1.0000]  
Remarks:

## LED Avg.L Report

|  |                                  |                  |
|--|----------------------------------|------------------|
| Test:U:120.03V I:0.1257A P:14.879W PF:0.9860 Freq:60.00Hz Lamp Flux:1157.38x1 lm |                                  |                  |
| NAME: R2ARWT-A840-WT   | TYPE: Recessed-mounted Luminaire | HEIGHT:          |
| SPEC.:   | DIM.:                            | SERIAL No.:      |
| MFR.: WAC Lighting   | SUR.:                            | Shielding Angle: |

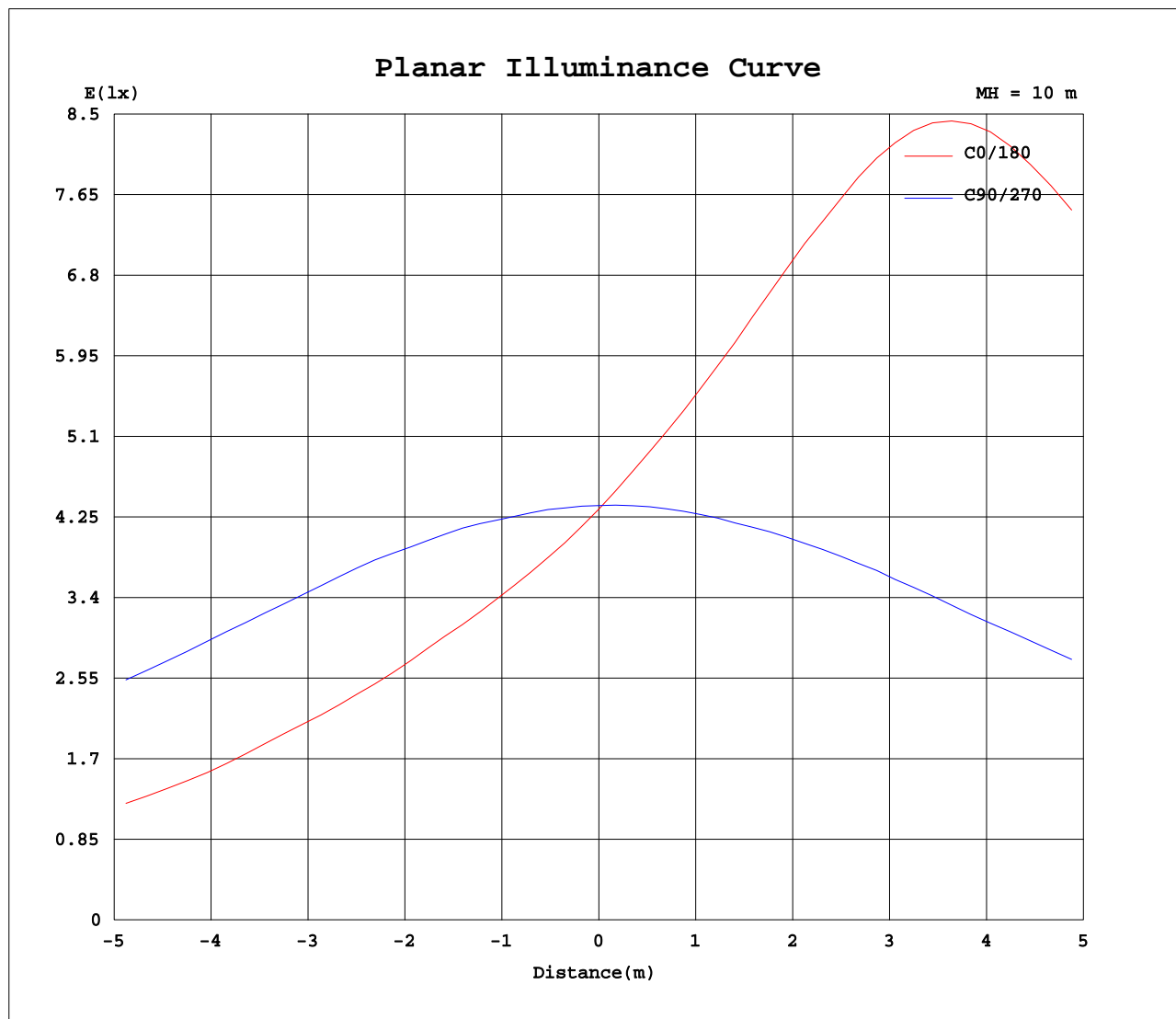
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 1859  |
| L_0~180(75)av  | 1142  |
| L_0~180(85)av  | 290   |
| L_90~270(65)av | 1084  |
| L_90~270(75)av | 559   |
| L_90~270(85)av | 179   |
| L_45(65)av     | 2024  |
| L_45(75)av     | 1061  |
| L_45(85)av     | 169   |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25.2DEG  
Operators: Oliver  
Test Date: 2018-04-03

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
Humidity: 65.0%  
Test Distance: 2.464m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

Table--1

UNIT: cd

| C(DEG)<br>γ (DEG) | 0    | 22.5 | 45   | 67.5 | 90   | 112.5 | 135  | 157.5 | 180  | 202.5 | 225  | 247.5 | 270  | 292.5 | 315  | 337.5 |  |  |  |
|-------------------|------|------|------|------|------|-------|------|-------|------|-------|------|-------|------|-------|------|-------|--|--|--|
| 0                 | 436  | 436  | 436  | 436  | 436  | 436   | 436  | 436   | 436  | 436   | 436  | 436   | 436  | 436   | 436  | 436   |  |  |  |
| 5                 | 359  | 363  | 376  | 399  | 430  | 468   | 505  | 534   | 547  | 539   | 511  | 474   | 435  | 403   | 377  | 362   |  |  |  |
| 10                | 302  | 307  | 324  | 360  | 418  | 498   | 587  | 664   | 698  | 674   | 604  | 512   | 428  | 365   | 326  | 305   |  |  |  |
| 15                | 254  | 262  | 281  | 322  | 401  | 526   | 685  | 815   | 876  | 838   | 714  | 552   | 417  | 327   | 281  | 258   |  |  |  |
| 20                | 213  | 221  | 240  | 285  | 378  | 549   | 773  | 946   | 1023 | 978   | 821  | 592   | 399  | 292   | 240  | 219   |  |  |  |
| 25                | 177  | 183  | 203  | 250  | 353  | 568   | 843  | 994   | 1048 | 1019  | 893  | 627   | 382  | 256   | 204  | 182   |  |  |  |
| 30                | 150  | 154  | 170  | 214  | 327  | 573   | 853  | 930   | 953  | 949   | 889  | 641   | 361  | 220   | 172  | 153   |  |  |  |
| 35                | 133  | 132  | 143  | 182  | 294  | 552   | 799  | 810   | 798  | 815   | 819  | 621   | 331  | 187   | 141  | 130   |  |  |  |
| 40                | 107  | 114  | 119  | 150  | 254  | 494   | 699  | 663   | 643  | 667   | 704  | 551   | 291  | 154   | 116  | 112   |  |  |  |
| 45                | 79.9 | 84.8 | 99.1 | 120  | 208  | 413   | 577  | 519   | 496  | 528   | 578  | 449   | 237  | 121   | 94.3 | 85.2  |  |  |  |
| 50                | 62.7 | 63.9 | 74.5 | 93.4 | 159  | 315   | 455  | 398   | 373  | 401   | 450  | 332   | 176  | 92.8  | 71.1 | 63.6  |  |  |  |
| 55                | 48.4 | 49.7 | 53.1 | 67.9 | 112  | 220   | 341  | 296   | 274  | 292   | 323  | 221   | 120  | 68.5  | 52.9 | 48.1  |  |  |  |
| 60                | 36.5 | 37.3 | 38.1 | 47.3 | 73.7 | 138   | 238  | 213   | 192  | 205   | 215  | 135   | 75.5 | 47.9  | 38.7 | 36.9  |  |  |  |
| 65                | 27.4 | 27.4 | 27.2 | 32.2 | 45.0 | 80.7  | 151  | 144   | 130  | 139   | 136  | 78.7  | 46.6 | 32.8  | 27.8 | 26.7  |  |  |  |
| 70                | 18.8 | 18.4 | 18.2 | 20.9 | 26.2 | 42.7  | 87.3 | 91.8  | 83.8 | 88.8  | 79.9 | 42.7  | 27.5 | 21.6  | 18.4 | 17.7  |  |  |  |
| 75                | 10.4 | 10.4 | 11.0 | 12.3 | 14.2 | 21.6  | 46.4 | 53.0  | 48.7 | 50.0  | 41.4 | 21.1  | 14.8 | 12.8  | 11.2 | 10.3  |  |  |  |
| 80                | 4.61 | 4.84 | 5.21 | 5.53 | 5.62 | 6.74  | 13.8 | 19.3  | 21.9 | 21.5  | 14.8 | 6.58  | 5.58 | 5.58  | 5.17 | 4.86  |  |  |  |
| 85                | 1.35 | 1.45 | 1.63 | 1.67 | 1.56 | 1.37  | 1.33 | 1.50  | 3.70 | 2.29  | 1.27 | 1.36  | 1.57 | 1.70  | 1.64 | 1.58  |  |  |  |
| 90                | 0.25 | 0.21 | 0.18 | 0.24 | 0.22 | 0.23  | 0.28 | 0.26  | 0.33 | 0.35  | 0.31 | 0.30  | 0.24 | 0.26  | 0.27 | 0.28  |  |  |  |
| 95                | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.02 | 0.03  |  |  |  |
| 100               | 0.02 | 0.05 | 0.01 | 0.00 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.01  | 0.02 | 0.03  |  |  |  |
| 105               | 0.03 | 0.03 | 0.02 | 0.01 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.03 | 0.02  | 0.03 | 0.04  |  |  |  |
| 110               | 0.05 | 0.05 | 0.04 | 0.02 | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.02 | 0.03  | 0.06 | 0.06  |  |  |  |
| 115               | 0.08 | 0.08 | 0.06 | 0.04 | 0.02 | 0.00  | 0.00 | 0.00  | 0.00 | 0.00  | 0.00 | 0.01  | 0.03 | 0.07  | 0.10 | 0.10  |  |  |  |
| 120               | 0.13 | 0.12 | 0.10 | 0.07 | 0.03 | 0.01  | 0.00 | 0.00  | 0.00 | 0.01  | 0.01 | 0.03  | 0.06 | 0.11  | 0.16 | 0.17  |  |  |  |
| 125               | 0.19 | 0.18 | 0.15 | 0.11 | 0.06 | 0.03  | 0.02 | 0.01  | 0.02 | 0.02  | 0.03 | 0.06  | 0.10 | 0.17  | 0.23 | 0.26  |  |  |  |
| 130               | 0.27 | 0.25 | 0.21 | 0.15 | 0.10 | 0.06  | 0.03 | 0.02  | 0.04 | 0.05  | 0.06 | 0.09  | 0.15 | 0.24  | 0.32 | 0.36  |  |  |  |
| 135               | 0.32 | 0.30 | 0.25 | 0.19 | 0.13 | 0.08  | 0.05 | 0.04  | 0.07 | 0.08  | 0.10 | 0.14  | 0.21 | 0.31  | 0.40 | 0.46  |  |  |  |
| 140               | 0.36 | 0.33 | 0.28 | 0.22 | 0.16 | 0.11  | 0.07 | 0.06  | 0.10 | 0.11  | 0.13 | 0.18  | 0.27 | 0.37  | 0.45 | 0.53  |  |  |  |
| 145               | 0.40 | 0.37 | 0.32 | 0.26 | 0.21 | 0.16  | 0.11 | 0.09  | 0.14 | 0.14  | 0.17 | 0.23  | 0.32 | 0.41  | 0.49 | 0.56  |  |  |  |
| 150               | 0.43 | 0.39 | 0.35 | 0.31 | 0.26 | 0.20  | 0.15 | 0.12  | 0.19 | 0.19  | 0.21 | 0.28  | 0.36 | 0.44  | 0.51 | 0.56  |  |  |  |
| 155               | 0.44 | 0.40 | 0.37 | 0.34 | 0.29 | 0.24  | 0.19 | 0.15  | 0.24 | 0.24  | 0.26 | 0.32  | 0.39 | 0.46  | 0.51 | 0.54  |  |  |  |
| 160               | 0.44 | 0.40 | 0.39 | 0.37 | 0.33 | 0.29  | 0.23 | 0.19  | 0.30 | 0.29  | 0.31 | 0.36  | 0.42 | 0.48  | 0.50 | 0.52  |  |  |  |
| 165               | 0.43 | 0.41 | 0.41 | 0.40 | 0.37 | 0.33  | 0.28 | 0.24  | 0.36 | 0.36  | 0.36 | 0.41  | 0.45 | 0.49  | 0.50 | 0.49  |  |  |  |
| 170               | 0.42 | 0.41 | 0.43 | 0.43 | 0.41 | 0.37  | 0.33 | 0.30  | 0.44 | 0.44  | 0.43 | 0.46  | 0.48 | 0.50  | 0.49 | 0.46  |  |  |  |
| 175               | 0.51 | 0.51 | 0.51 | 0.49 | 0.46 | 0.42  | 0.39 | 0.36  | 0.51 | 0.51  | 0.50 | 0.51  | 0.51 | 0.50  | 0.48 | 0.45  |  |  |  |
| 180               | 0.54 | 0.54 | 0.54 | 0.53 | 0.50 | 0.47  | 0.43 | 0.40  | 0.54 | 0.54  | 0.54 | 0.54  | 0.52 | 0.50  | 0.46 | 0.43  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25.2DEG  
 Operators: Oliver  
 Test Date: 2018-04-03

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-R5000\_V2 SYSTEM V2.0.366  
 Humidity: 65.0%  
 Test Distance: 2.464m [K=1.0000]  
 Remarks: