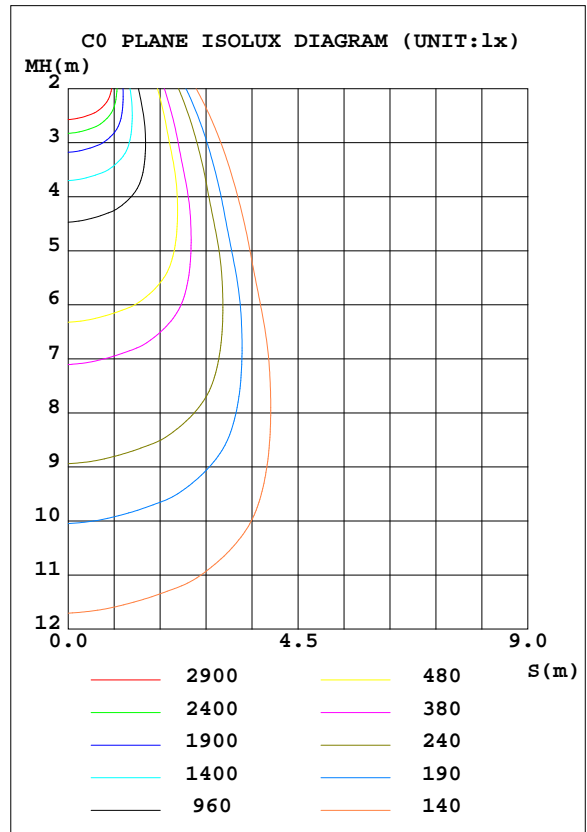
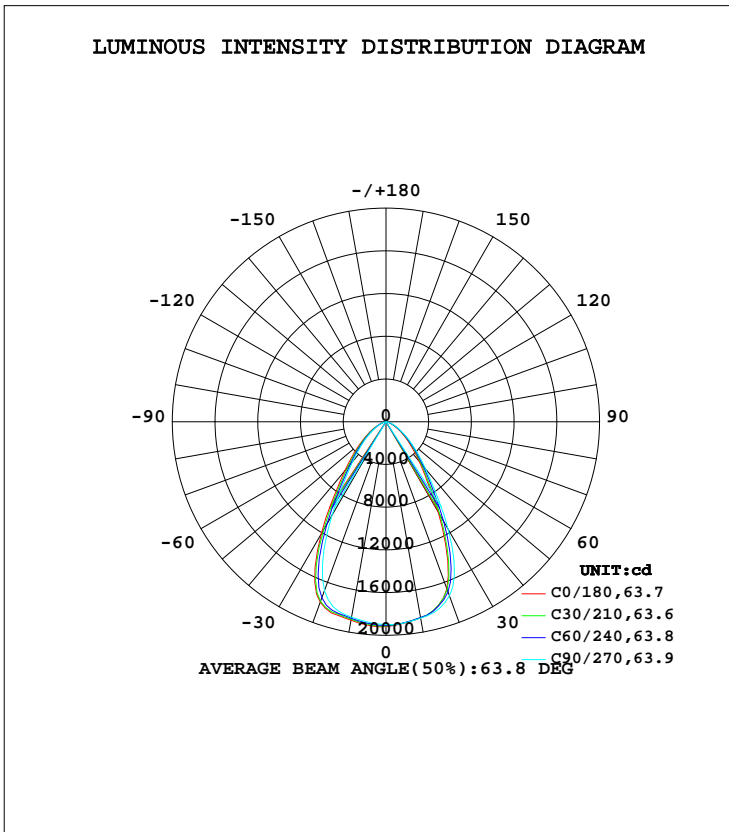


LUMINAIRE PHOTOMETRIC TEST REPORT

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHBL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

| DATA OF LAMP     |          | PHOTOMETRIC DATA Eff: 122.65 lm/W |        |                    |          |
|------------------|----------|-----------------------------------|--------|--------------------|----------|
| MODEL            | AHBL200W | I <sub>max</sub> (cd)             | 19215  | S/MH(C0/180)       | 0.98     |
| NOMINAL POWER(W) | 200      | LOR(%)                            | 100.0  | S/MH(C90/270)      | 0.92     |
| RATED VOLTAGE(V) | 220      | TOTAL FLUX(lm)                    | 24420  | η UP, DN(C0-180)   | 0.2,51.3 |
| NOMINAL FLUX(lm) | 24419.7  | CIE CLASS                         | DIRECT | η UP, DN(C180-360) | 0.2,48.3 |
| LAMPS INSIDE     | 1        | η up(%)                           | 0.4    | CIBSE SHR NOM      | 0.75     |
| TEST VOLTAGE(V)  | 220      | η down(%)                         | 99.6   | CIBSE SHR MAX      | 0.95     |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

| γ   | C0                       | C45    | C90    | C135   | C180   | C225   | C270   | C315   | γ       | Φ zone  | Φ total | %lum, lamp |
|-----|--------------------------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|------------|
| 10  | 1866                     | 1862   | 1867   | 1873   | 1887   | 1873   | 1858   | 1840   | 0- 10   | 1797    | 1797    | 7.36,7.36  |
| 20  | 1667                     | 1685   | 1736   | 1785   | 1800   | 1773   | 1683   | 1598   | 10- 20  | 5111    | 6908    | 28.3,28.3  |
| 30  | 982.5                    | 1051   | 1168   | 1284   | 1212   | 1140   | 1015   | 914.0  | 20- 30  | 6572    | 13480   | 55.2,55.2  |
| 40  | 482.6                    | 527.5  | 579.9  | 623.6  | 599.9  | 542.3  | 483.7  | 460.0  | 30- 40  | 4833    | 18313   | 75,75      |
| 50  | 253.5                    | 279.0  | 305.0  | 326.2  | 310.8  | 279.5  | 249.2  | 236.7  | 40- 50  | 3045    | 21358   | 87.5,87.5  |
| 60  | 118.6                    | 133.3  | 148.7  | 160.1  | 146.6  | 130.1  | 114.5  | 105.6  | 50- 60  | 1780    | 23138   | 94.8,94.8  |
| 70  | 43.63                    | 49.80  | 58.67  | 63.82  | 55.24  | 47.39  | 39.27  | 35.85  | 60- 70  | 852.4   | 23991   | 98.2,98.2  |
| 80  | 9.199                    | 11.17  | 14.13  | 16.22  | 12.19  | 9.822  | 7.381  | 6.111  | 70- 80  | 284.9   | 24276   | 99.4,99.4  |
| 90  | 0.0427                   | 0.0452 | 0.1368 | 0.4272 | 0.0765 | 0.0812 | 0.0836 | 0.0921 | 80- 90  | 41.58   | 24317   | 99.6,99.6  |
| 100 | 0.1082                   | 0.0996 | 0.0867 | 0.0761 | 0.1693 | 0.1851 | 0.2039 | 0.2218 | 90-100  | 1.121   | 24318   | 99.6,99.6  |
| 110 | 0.2892                   | 0.2609 | 0.2265 | 0.2076 | 0.3819 | 0.4210 | 0.4673 | 0.5005 | 100-110 | 2.462   | 24321   | 99.6,99.6  |
| 120 | 0.6476                   | 0.5885 | 0.5185 | 0.4814 | 0.7811 | 0.8553 | 0.9467 | 1.011  | 110-120 | 5.132   | 24326   | 99.6,99.6  |
| 130 | 1.304                    | 1.198  | 1.059  | 0.9833 | 1.503  | 1.641  | 1.829  | 1.969  | 120-130 | 9.354   | 24335   | 99.7,99.7  |
| 140 | 2.486                    | 2.346  | 2.107  | 1.929  | 2.773  | 2.961  | 3.234  | 3.448  | 130-140 | 15.44   | 24351   | 99.7,99.7  |
| 150 | 4.034                    | 3.904  | 3.610  | 3.358  | 4.369  | 4.553  | 4.820  | 5.017  | 140-150 | 21.36   | 24372   | 99.8,99.8  |
| 160 | 5.557                    | 5.452  | 5.183  | 4.910  | 5.835  | 6.000  | 6.231  | 6.382  | 150-160 | 22.73   | 24395   | 99.9,99.9  |
| 170 | 7.016                    | 6.954  | 6.739  | 6.474  | 7.133  | 7.224  | 7.346  | 7.403  | 160-170 | 17.91   | 24413   | 100,100    |
| 180 | 7.695                    | 7.712  | 7.675  | 7.548  | 7.717  | 7.712  | 7.662  | 7.551  | 170-180 | 6.989   | 24420   | 100,100    |
| DEG | LUMINOUS INTENSITY:×10cd |        |        |        |        |        |        |        |         | UNIT:lm |         |            |

Conical surface Flux(90deg): 20312 lm

%lum = 83.2%  
%lamp = 83.2%

Conical surface Flux(120deg): 23138 lm

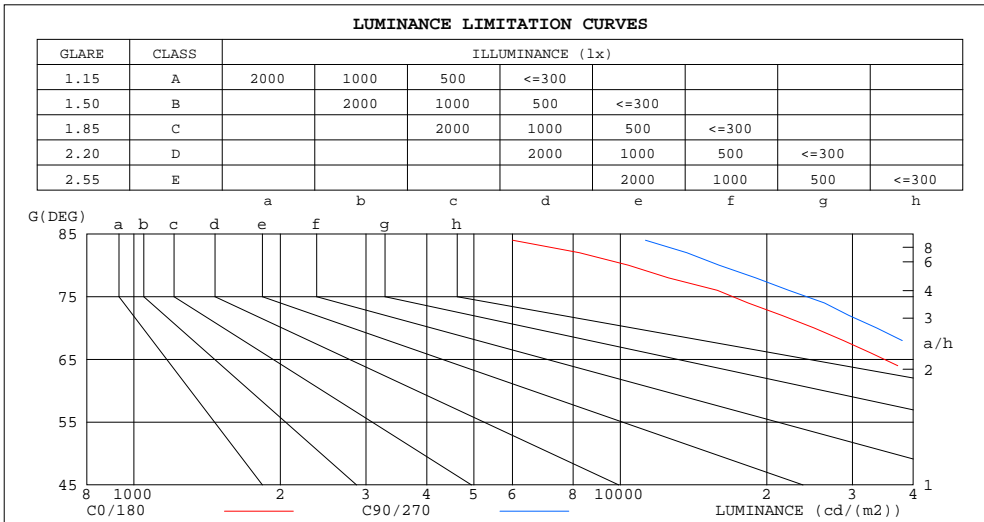
%lum = 94.8%  
%lamp = 94.8%

C Range: 0 - 360DEG  
C Interval: 30.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2019-03-1

γ Range: 0 - 180DEG  
γ Interval: 2.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
Humidity:65.0%  
Test Distance:8.800m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AABL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 7205   | 13514   |
| 80                | 10387  | 15955   |
| 75                | 19503  | 27985   |
| 70                | 25010  | 33633   |
| 65                | 38558  | 49196   |
| 60                | 46490  | 58295   |
| 55                | 65587  | 79055   |
| 50                | 77316  | 93025   |
| 45                | 103997 | 124878  |

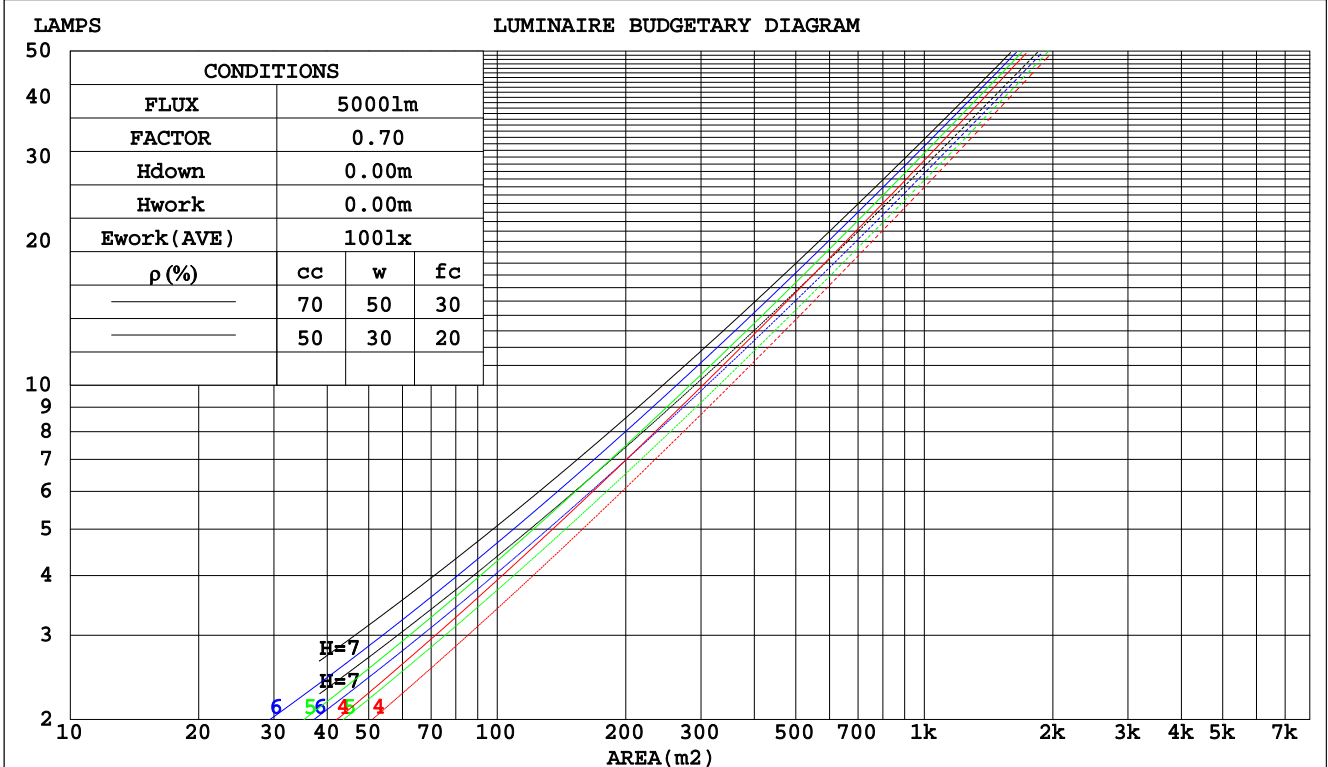
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHB200W  | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

| pcc  | 80%  |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0   |
|------|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|
|      | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| pw   |  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |
| pfc  | 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  | 1.09   | 1.06 | 1.03 | 1.07 | 1.04 | 1.02 | 1.02 | 1.00 | .98  | .99  | .97  | .95  | .95  | .94  | .92  | .91 |
| 2.0  | .99  | .94  | .90  | .98  | .93  | .89  | .94  | .90  | .87  | .91  | .88  | .85  | .88  | .86  | .83  | .82 |
| 3.0  | .91  | .85  | .80  | .89  | .84  | .79  | .87  | .82  | .78  | .84  | .80  | .77  | .82  | .78  | .76  | .74 |
| 4.0  | .83  | .77  | .72  | .82  | .76  | .71  | .80  | .75  | .70  | .78  | .73  | .70  | .76  | .72  | .69  | .67 |
| 5.0  | .77  | .70  | .65  | .76  | .69  | .65  | .74  | .68  | .64  | .72  | .67  | .63  | .70  | .66  | .63  | .61 |
| 6.0  | .71  | .64  | .59  | .70  | .64  | .59  | .69  | .63  | .58  | .67  | .62  | .58  | .66  | .61  | .58  | .56 |
| 7.0  | .66  | .59  | .54  | .65  | .59  | .54  | .64  | .58  | .54  | .63  | .57  | .53  | .61  | .57  | .53  | .51 |
| 8.0  | .62  | .55  | .50  | .61  | .54  | .50  | .60  | .54  | .50  | .59  | .53  | .49  | .58  | .53  | .49  | .48 |
| 9.0  | .58  | .51  | .46  | .57  | .51  | .46  | .56  | .50  | .46  | .55  | .50  | .46  | .54  | .49  | .46  | .44 |
| 10.0 | .54  | .47  | .43  | .54  | .47  | .43  | .53  | .47  | .43  | .52  | .46  | .43  | .51  | .46  | .43  | .41 |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

WEC AND CCEC

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AABL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

| 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  | .213                  | .121 | .038 | .206 | .117 | .037 | .193                            | .111 | .035 | .181 | .104 | .033 | .170 | .098 | .032 |   |
| 2.0  | .206                  | .113 | .035 | .200 | .110 | .034 | .189                            | .105 | .033 | .178 | .100 | .031 | .169 | .095 | .030 |   |
| 3.0  | .196                  | .104 | .031 | .191 | .102 | .031 | .181                            | .098 | .030 | .172 | .094 | .029 | .164 | .091 | .028 |   |
| 4.0  | .185                  | .096 | .028 | .181 | .095 | .028 | .172                            | .091 | .027 | .164 | .088 | .027 | .157 | .085 | .026 |   |
| 5.0  | .175                  | .089 | .026 | .171 | .088 | .026 | .164                            | .085 | .025 | .157 | .083 | .025 | .150 | .080 | .024 |   |
| 6.0  | .166                  | .083 | .024 | .162 | .082 | .024 | .156                            | .080 | .023 | .150 | .078 | .023 | .144 | .076 | .022 |   |
| 7.0  | .157                  | .078 | .022 | .154 | .077 | .022 | .148                            | .075 | .022 | .143 | .073 | .021 | .138 | .071 | .021 |   |
| 8.0  | .149                  | .073 | .021 | .147 | .072 | .020 | .141                            | .071 | .020 | .136 | .069 | .020 | .132 | .068 | .020 |   |
| 9.0  | .142                  | .069 | .019 | .139 | .068 | .019 | .135                            | .067 | .019 | .130 | .065 | .019 | .126 | .064 | .019 |   |
| 10.0 | .135                  | .065 | .018 | .133 | .064 | .018 | .129                            | .063 | .018 | .125 | .062 | .018 | .121 | .061 | .017 |   |

| 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  | .194                  | .194 | .194 | .166 | .166 | .166 | .113                                       | .113 | .113 | .065 | .065 | .065 | .021 | .021 | .021 |   |
| 1.0  | .177                  | .160 | .145 | .151 | .138 | .125 | .103                                       | .095 | .086 | .060 | .055 | .050 | .019 | .018 | .016 |   |
| 2.0  | .164                  | .136 | .112 | .140 | .117 | .097 | .096                                       | .081 | .067 | .056 | .047 | .039 | .018 | .015 | .013 |   |
| 3.0  | .153                  | .117 | .088 | .132 | .101 | .076 | .090                                       | .070 | .054 | .052 | .041 | .032 | .017 | .013 | .010 |   |
| 4.0  | .144                  | .103 | .071 | .124 | .089 | .062 | .085                                       | .062 | .044 | .049 | .036 | .026 | .016 | .012 | .008 |   |
| 5.0  | .136                  | .092 | .059 | .117 | .079 | .051 | .081                                       | .055 | .036 | .047 | .033 | .021 | .015 | .011 | .007 |   |
| 6.0  | .129                  | .083 | .049 | .111 | .072 | .043 | .077                                       | .050 | .030 | .045 | .030 | .018 | .014 | .010 | .006 |   |
| 7.0  | .123                  | .075 | .042 | .106 | .065 | .037 | .073                                       | .046 | .026 | .042 | .027 | .016 | .014 | .009 | .005 |   |
| 8.0  | .117                  | .069 | .037 | .101 | .060 | .032 | .070                                       | .042 | .023 | .041 | .025 | .014 | .013 | .008 | .004 |   |
| 9.0  | .112                  | .064 | .032 | .096 | .056 | .028 | .067                                       | .039 | .020 | .039 | .023 | .012 | .013 | .008 | .004 |   |
| 10.0 | .107                  | .060 | .029 | .092 | .052 | .025 | .064                                       | .037 | .018 | .037 | .022 | .011 | .012 | .007 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHB200W  | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

|  |                  |      |      |      |      |                |      |      |      |      |
|--|------------------|------|------|------|------|----------------|------|------|------|------|
| 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                                      | 14.2             | 15.3 | 14.4 | 15.5 | 15.7 | 14.9           | 16.0 | 15.1 | 16.2 | 16.4 |
| 3H   | 14.4             | 15.5 | 14.7 | 15.7 | 15.9 | 15.2           | 16.3 | 15.5 | 16.5 | 16.7 |
| 4H   | 14.4             | 15.4 | 14.7 | 15.6 | 15.9 | 15.3           | 16.3 | 15.6 | 16.5 | 16.7 |
| 6H   | 14.4             | 15.3 | 14.7 | 15.6 | 15.8 | 15.2           | 16.2 | 15.6 | 16.4 | 16.7 |
| 8H   | 14.3             | 15.2 | 14.7 | 15.5 | 15.8 | 15.2           | 16.1 | 15.5 | 16.4 | 16.7 |
| 12H  | 14.3             | 15.1 | 14.6 | 15.4 | 15.7 | 15.2           | 16.0 | 15.5 | 16.3 | 16.6 |
| 4H 2H  | 14.3             | 15.3 | 14.6 | 15.5 | 15.8 | 15.0           | 15.9 | 15.3 | 16.2 | 16.4 |
| 3H   | 14.6             | 15.5 | 15.0 | 15.8 | 16.1 | 15.4           | 16.2 | 15.7 | 16.5 | 16.8 |
| 4H   | 14.7             | 15.5 | 15.1 | 15.8 | 16.1 | 15.5           | 16.2 | 15.8 | 16.5 | 16.9 |
| 6H   | 14.7             | 15.4 | 15.1 | 15.7 | 16.1 | 15.5           | 16.2 | 15.9 | 16.5 | 16.9 |
| 8H   | 14.6             | 15.3 | 15.1 | 15.6 | 16.0 | 15.5           | 16.1 | 15.9 | 16.5 | 16.8 |
| 12H  | 14.6             | 15.2 | 15.0 | 15.6 | 16.0 | 15.4           | 16.0 | 15.9 | 16.4 | 16.8 |
| 8H 4H  | 14.7             | 15.3 | 15.1 | 15.7 | 16.0 | 15.4           | 16.0 | 15.8 | 16.4 | 16.8 |
| 6H   | 14.7             | 15.2 | 15.1 | 15.6 | 16.0 | 15.4           | 16.0 | 15.9 | 16.4 | 16.8 |
| 8H   | 14.6             | 15.1 | 15.1 | 15.5 | 16.0 | 15.4           | 15.9 | 15.9 | 16.3 | 16.8 |
| 12H  | 14.6             | 15.0 | 15.1 | 15.4 | 15.9 | 15.4           | 15.8 | 15.9 | 16.2 | 16.7 |
| 12H 4H   | 14.6             | 15.2 | 15.0 | 15.6 | 16.0 | 15.4           | 15.9 | 15.8 | 16.3 | 16.7 |
| 6H   | 14.6             | 15.1 | 15.1 | 15.5 | 16.0 | 15.4           | 15.9 | 15.9 | 16.3 | 16.7 |
| 8H   | 14.6             | 15.0 | 15.1 | 15.4 | 15.9 | 15.4           | 15.8 | 15.9 | 16.2 | 16.7 |
| Variations with the observer position at spacings: |                  |      |      |      |      |                |      |      |      |      |
| S = 1.0H   | + 1.0 / - 1.5    |      |      |      |      | + 0.9 / - 1.3  |      |      |      |      |
| 1.5H   | + 0.9 / - 0.9    |      |      |      |      | + 1.2 / - 0.9  |      |      |      |      |
| 2.0H   | + 1.9 / - 1.8    |      |      |      |      | + 2.0 / - 1.9  |      |      |      |      |

CIE Pub.117, 24420 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 11.1)

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AABL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

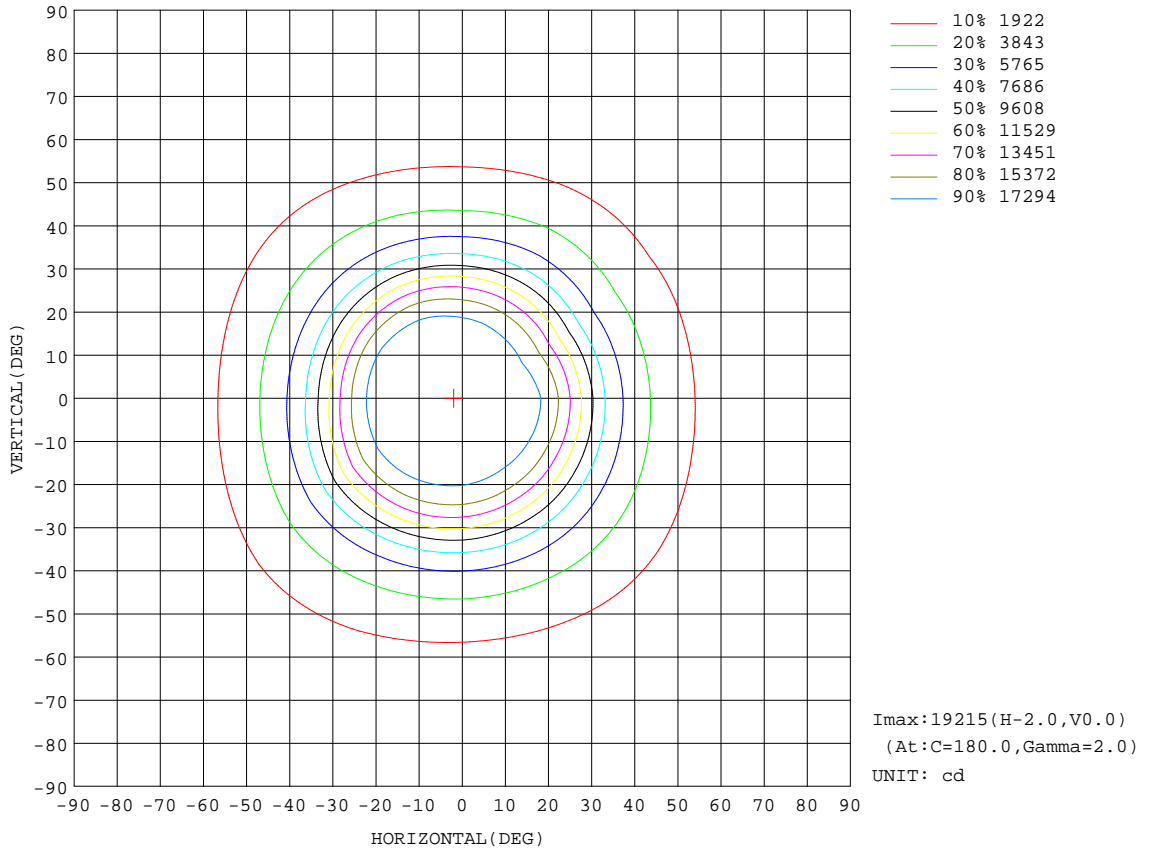
| REFLECTANCE                      |   |     |           |     |     |     |               |     |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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                         | 76  | 67  | 62        | 75  | 67  | 62  | 74            | 67  | 62  | 57     |
| 0.80                             | 85  | 77  | 72        | 84  | 76  | 71  | 82            | 76  | 71  | 66     |
| 1.00                             | 91  | 84  | 79        | 90  | 83  | 78  | 88            | 83  | 78  | 73     |
| 1.25                             | 96  | 89  | 85        | 95  | 89  | 84  | 93            | 88  | 84  | 78     |
| 1.50                             | 100   | 94  | 89        | 99  | 93  | 89  | 96            | 91  | 87  | 82     |
| 2.00                             | 104   | 99  | 95        | 103 | 98  | 94  | 100           | 96  | 92  | 86     |
| 2.50                             | 107   | 102 | 98        | 105 | 100 | 97  | 102           | 98  | 95  | 88     |
| 3.00                             | 109   | 104 | 101       | 107 | 103 | 100 | 103           | 100 | 97  | 90     |
| 4.00                             | 111   | 108 | 105       | 109 | 106 | 103 | 105           | 103 | 101 | 93     |
| 5.00                             | 113   | 110 | 107       | 111 | 108 | 106 | 106           | 104 | 103 | 94     |
| 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:2019-03-1

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

ISOCANDELA DIAGRAM

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AABL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |



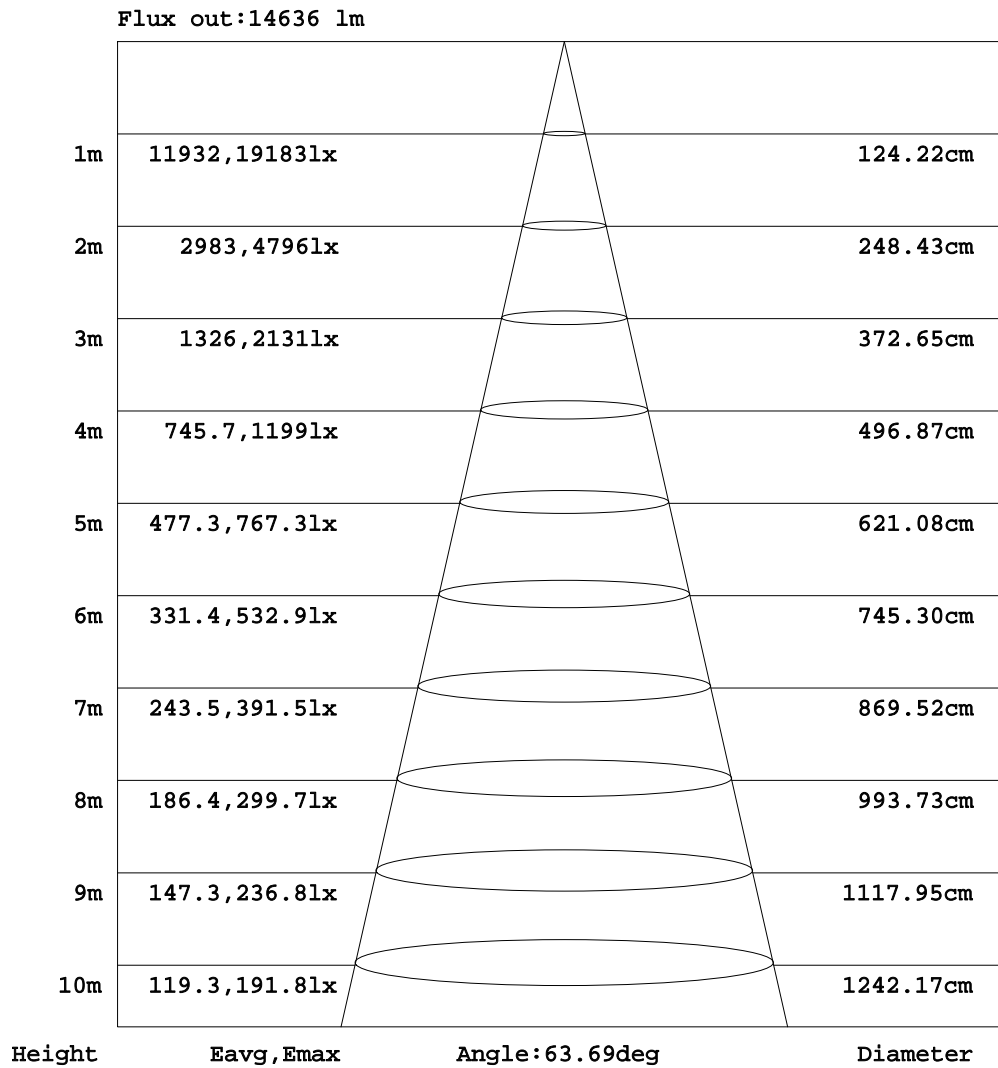
C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:



AAI Figure

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHBL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |



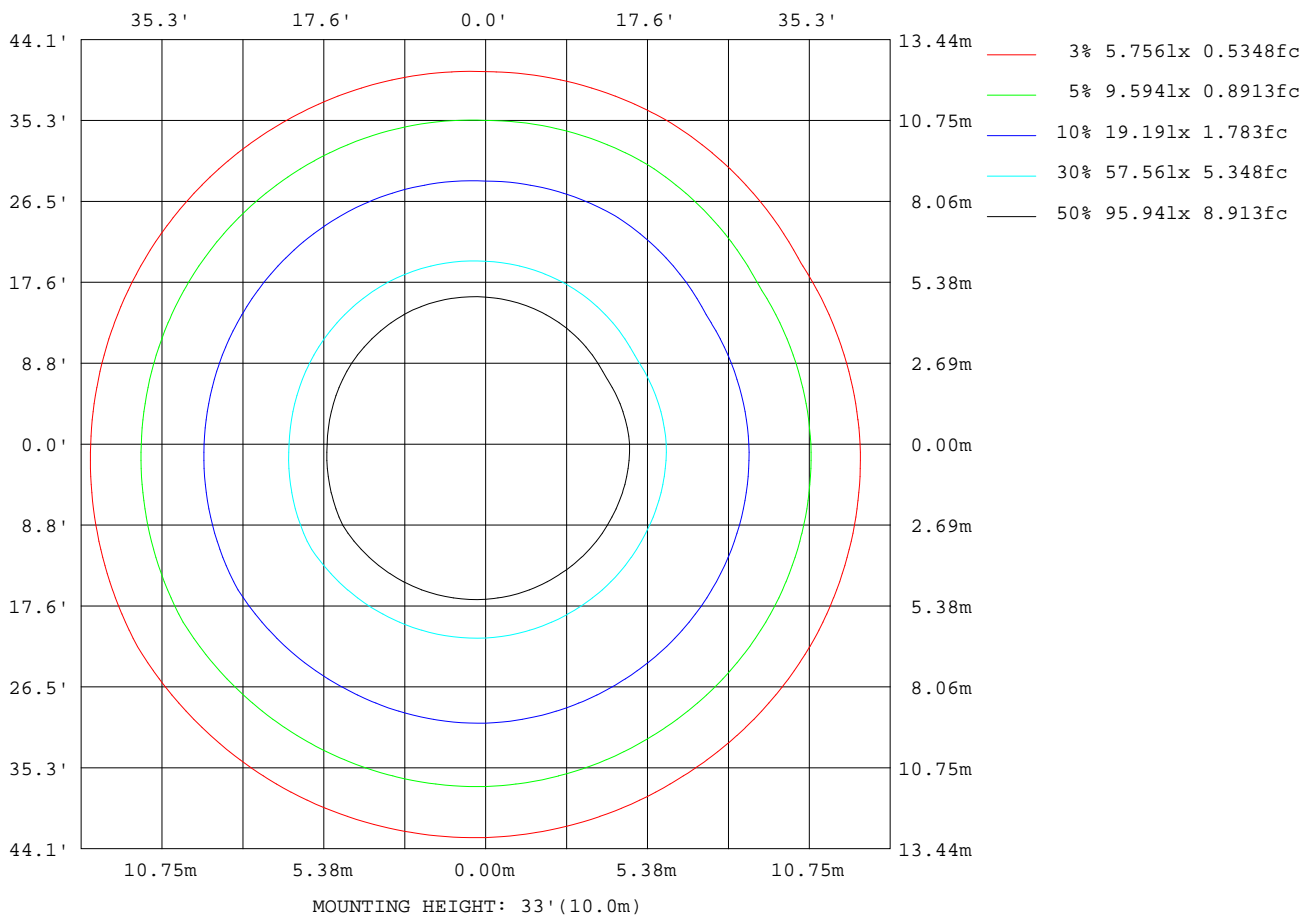
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AABL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

**LED Avg.L Report**

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHBL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

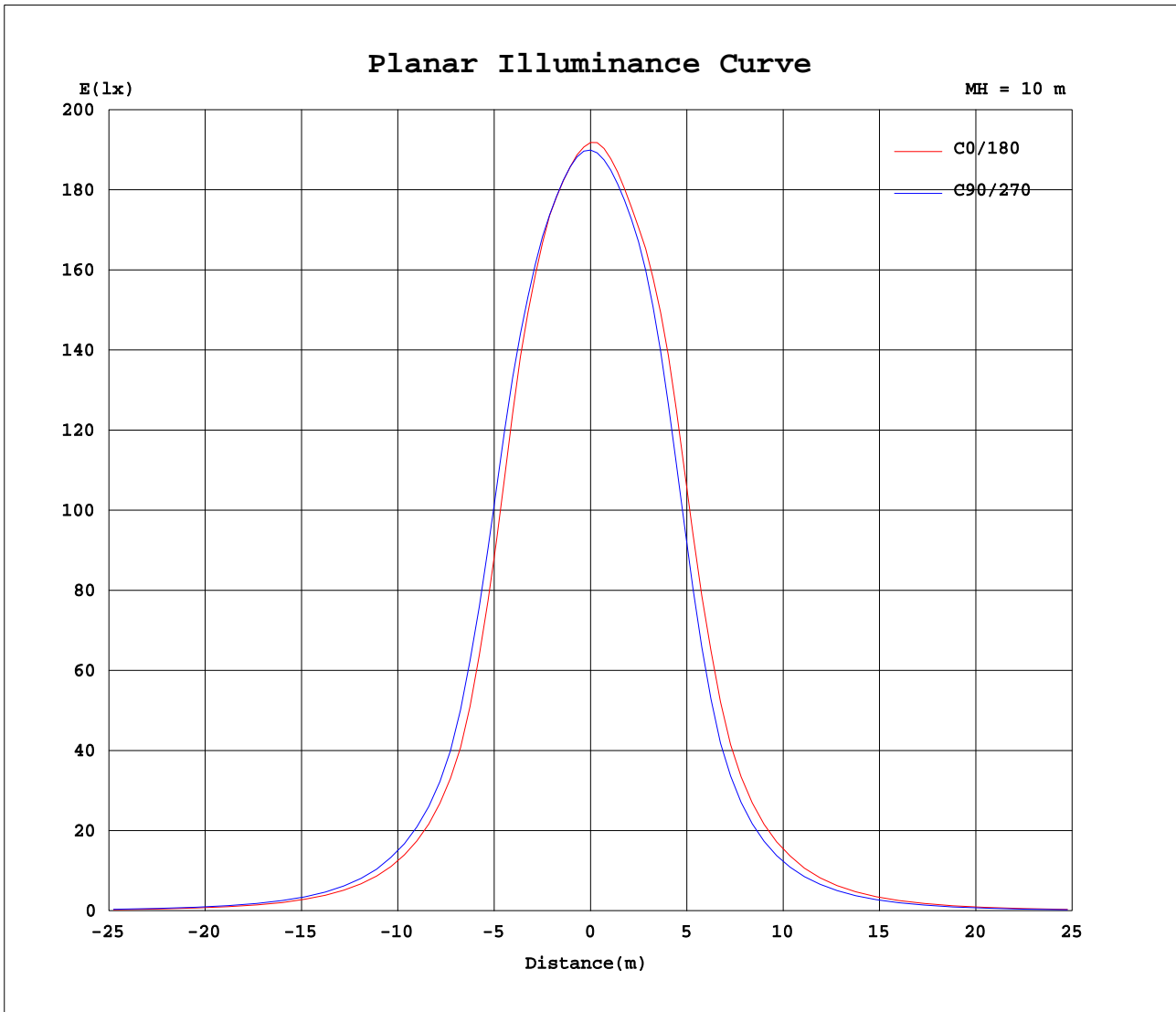
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 39251 |
| L_0~180(75)av  | 19334 |
| L_0~180(85)av  | 6184  |
| L_90~270(65)av | 38800 |
| L_90~270(75)av | 19294 |
| L_90~270(85)av | 6530  |
| L_45(65)av     | 38951 |
| L_45(75)av     | 19200 |
| L_45(85)av     | 6631  |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2019-03-1

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 2.0DEG  
 Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity: 65.0%  
 Test Distance: 8.800m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |                     |                     |
|--|---------------------|---------------------|
| Test:U:218.40V I:0.7030A P:199.10W PF:0.9740 Freq:50.00Hz Lamp Flux:24419.7x1 lm |                     |                     |
| NAME: AHBL200W   | TYPE:LED            | WEIGHT:3.59         |
| SPEC.:60D  | DIM.: 385*385*156   | SERIAL No.:001      |
| MFR.:  | SUR.:0.13*0.13*3.14 | Shielding Angle:120 |

Table--1

UNIT: x10cd

| C( DEG)<br>γ (DEG) | 0    | 30   | 60   | 90   | 120  | 150  | 180  | 210  | 240  | 270  | 300  | 330  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|--|--|--|
| 0                  | 1918 | 1912 | 1906 | 1899 | 1893 | 1888 | 1918 | 1912 | 1906 | 1899 | 1893 | 1888 |  |  |  |  |  |  |  |
| 5                  | 1901 | 1897 | 1896 | 1896 | 1896 | 1895 | 1917 | 1909 | 1900 | 1889 | 1880 | 1870 |  |  |  |  |  |  |  |
| 10                 | 1866 | 1862 | 1862 | 1867 | 1871 | 1874 | 1887 | 1878 | 1869 | 1858 | 1846 | 1835 |  |  |  |  |  |  |  |
| 15                 | 1825 | 1823 | 1827 | 1842 | 1849 | 1852 | 1868 | 1857 | 1848 | 1828 | 1802 | 1778 |  |  |  |  |  |  |  |
| 20                 | 1667 | 1674 | 1697 | 1736 | 1770 | 1799 | 1800 | 1791 | 1755 | 1683 | 1624 | 1572 |  |  |  |  |  |  |  |
| 25                 | 1422 | 1447 | 1501 | 1576 | 1636 | 1685 | 1642 | 1622 | 1564 | 1465 | 1389 | 1314 |  |  |  |  |  |  |  |
| 30                 | 982  | 1018 | 1084 | 1168 | 1245 | 1322 | 1212 | 1172 | 1108 | 1015 | 951  | 878  |  |  |  |  |  |  |  |
| 35                 | 715  | 753  | 807  | 881  | 944  | 1016 | 916  | 865  | 808  | 735  | 706  | 653  |  |  |  |  |  |  |  |
| 40                 | 483  | 512  | 543  | 580  | 604  | 643  | 600  | 560  | 524  | 484  | 478  | 442  |  |  |  |  |  |  |  |
| 45                 | 375  | 403  | 422  | 450  | 466  | 495  | 463  | 432  | 407  | 371  | 368  | 341  |  |  |  |  |  |  |  |
| 50                 | 253  | 273  | 285  | 305  | 319  | 333  | 311  | 290  | 268  | 249  | 246  | 228  |  |  |  |  |  |  |  |
| 55                 | 192  | 207  | 216  | 231  | 245  | 254  | 235  | 218  | 201  | 187  | 181  | 170  |  |  |  |  |  |  |  |
| 60                 | 119  | 131  | 136  | 149  | 157  | 163  | 147  | 136  | 124  | 115  | 110  | 101  |  |  |  |  |  |  |  |
| 65                 | 83.1 | 90.8 | 95.7 | 106  | 112  | 118  | 103  | 94.7 | 86.2 | 78.1 | 74.7 | 68.7 |  |  |  |  |  |  |  |
| 70                 | 43.6 | 48.0 | 51.6 | 58.7 | 61.9 | 65.8 | 55.2 | 50.0 | 44.8 | 39.3 | 37.8 | 33.9 |  |  |  |  |  |  |  |
| 75                 | 25.7 | 28.5 | 31.3 | 36.9 | 38.6 | 41.2 | 33.0 | 29.5 | 26.0 | 22.3 | 20.6 | 19.4 |  |  |  |  |  |  |  |
| 80                 | 9.20 | 10.5 | 11.8 | 14.1 | 15.6 | 16.8 | 12.2 | 10.6 | 9.02 | 7.38 | 6.44 | 5.78 |  |  |  |  |  |  |  |
| 85                 | 3.20 | 3.89 | 4.66 | 6.01 | 6.89 | 7.53 | 4.65 | 3.81 | 3.01 | 2.09 | 1.66 | 1.39 |  |  |  |  |  |  |  |
| 90                 | 0.04 | 0.04 | 0.05 | 0.14 | 0.34 | 0.51 | 0.08 | 0.08 | 0.08 | 0.08 | 0.09 | 0.09 |  |  |  |  |  |  |  |
| 95                 | 0.06 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.10 | 0.10 | 0.12 | 0.12 | 0.13 | 0.13 |  |  |  |  |  |  |  |
| 100                | 0.11 | 0.11 | 0.09 | 0.09 | 0.08 | 0.08 | 0.17 | 0.18 | 0.19 | 0.20 | 0.22 | 0.22 |  |  |  |  |  |  |  |
| 105                | 0.17 | 0.16 | 0.14 | 0.13 | 0.12 | 0.12 | 0.24 | 0.25 | 0.27 | 0.29 | 0.31 | 0.32 |  |  |  |  |  |  |  |
| 110                | 0.29 | 0.28 | 0.25 | 0.23 | 0.21 | 0.20 | 0.38 | 0.40 | 0.44 | 0.47 | 0.49 | 0.51 |  |  |  |  |  |  |  |
| 115                | 0.41 | 0.39 | 0.35 | 0.32 | 0.30 | 0.29 | 0.51 | 0.55 | 0.59 | 0.63 | 0.65 | 0.68 |  |  |  |  |  |  |  |
| 120                | 0.65 | 0.61 | 0.56 | 0.52 | 0.50 | 0.47 | 0.78 | 0.83 | 0.88 | 0.95 | 0.98 | 1.04 |  |  |  |  |  |  |  |
| 125                | 0.86 | 0.82 | 0.75 | 0.69 | 0.67 | 0.63 | 1.01 | 1.08 | 1.15 | 1.23 | 1.29 | 1.36 |  |  |  |  |  |  |  |
| 130                | 1.30 | 1.24 | 1.15 | 1.06 | 1.02 | 0.95 | 1.50 | 1.59 | 1.69 | 1.83 | 1.92 | 2.02 |  |  |  |  |  |  |  |
| 135                | 1.71 | 1.64 | 1.53 | 1.40 | 1.34 | 1.25 | 1.95 | 2.04 | 2.18 | 2.33 | 2.46 | 2.57 |  |  |  |  |  |  |  |
| 140                | 2.49 | 2.42 | 2.28 | 2.11 | 1.99 | 1.87 | 2.77 | 2.88 | 3.04 | 3.23 | 3.38 | 3.51 |  |  |  |  |  |  |  |
| 145                | 3.09 | 3.03 | 2.88 | 2.68 | 2.53 | 2.39 | 3.40 | 3.51 | 3.68 | 3.88 | 4.03 | 4.16 |  |  |  |  |  |  |  |
| 150                | 4.03 | 3.98 | 3.83 | 3.61 | 3.44 | 3.28 | 4.37 | 4.47 | 4.63 | 4.82 | 4.97 | 5.07 |  |  |  |  |  |  |  |
| 155                | 4.64 | 4.60 | 4.45 | 4.24 | 4.06 | 3.90 | 4.97 | 5.07 | 5.23 | 5.40 | 5.54 | 5.62 |  |  |  |  |  |  |  |
| 160                | 5.56 | 5.52 | 5.38 | 5.18 | 5.00 | 4.82 | 5.84 | 5.93 | 6.07 | 6.23 | 6.36 | 6.41 |  |  |  |  |  |  |  |
| 165                | 6.18 | 6.15 | 6.02 | 5.83 | 5.63 | 5.45 | 6.39 | 6.47 | 6.60 | 6.74 | 6.84 | 6.88 |  |  |  |  |  |  |  |
| 170                | 7.02 | 7.01 | 6.90 | 6.74 | 6.56 | 6.39 | 7.13 | 7.18 | 7.27 | 7.35 | 7.40 | 7.40 |  |  |  |  |  |  |  |
| 175                | 7.41 | 7.42 | 7.34 | 7.23 | 7.08 | 6.94 | 7.49 | 7.51 | 7.57 | 7.60 | 7.61 | 7.58 |  |  |  |  |  |  |  |
| 180                | 7.69 | 7.73 | 7.70 | 7.68 | 7.59 | 7.51 | 7.72 | 7.71 | 7.71 | 7.66 | 7.60 | 7.50 |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 30.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2019-03-1

γ Range: 0 - 180DEG  
 γ Interval: 2.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.263  
 Humidity:65.0%  
 Test Distance:8.800m [K=1.0000]  
 Remarks: