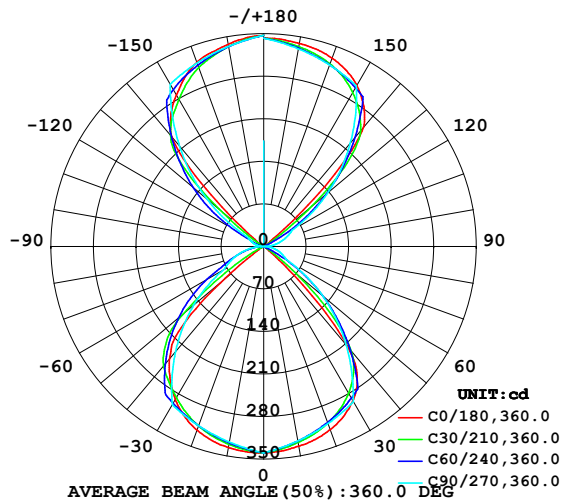


LUMINAIRE PHOTOMETRIC TEST REPORT

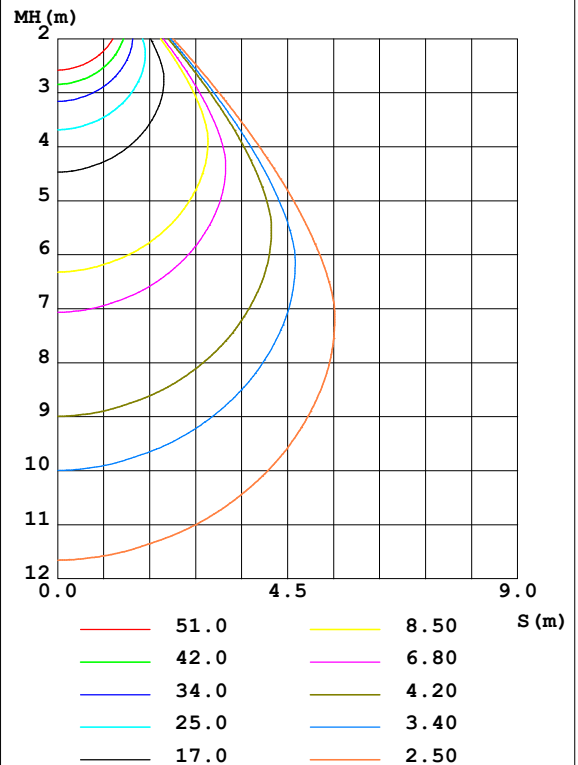
|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

| DATA OF LAMP     |                | PHOTOMETRIC DATA Eff: 82.08 lm/W |         |                        |           |
|------------------|----------------|----------------------------------|---------|------------------------|-----------|
| MODEL            | WL73-16W-3000K | Imax(cd)                         | 347.5   | S/MH(C0/180)           | 1.26      |
| NOMINAL POWER(W) | 16             | LOR(%)                           | 100.0   | S/MH(C90/270)          | 1.27      |
| RATED VOLTAGE(V) | 230            | TOTAL FLUX(lm)                   | 1329.7  | $\eta$ UP,DN(C0-180)   | 25.1,24.6 |
| NOMINAL FLUX(lm) | 1329.69        | CIE CLASS                        | DIFFUSE | $\eta$ UP,DN(C180-360) | 24.4,25.9 |
| LAMPS INSIDE     | 1              | $\eta$ up(%)                     | 49.5    | CIBSE SHR NOM          | 1.25      |
| TEST VOLTAGE(V)  | 230            | $\eta$ down(%)                   | 50.5    | CIBSE SHR MAX          | 1.35      |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
 Humidity:65.0%  
 Test Distance:8.692m [K=1.0000]  
 Remarks:

## ZONAL FLUX DIAGRAM

### ZONAL FLUX DIAGRAM:

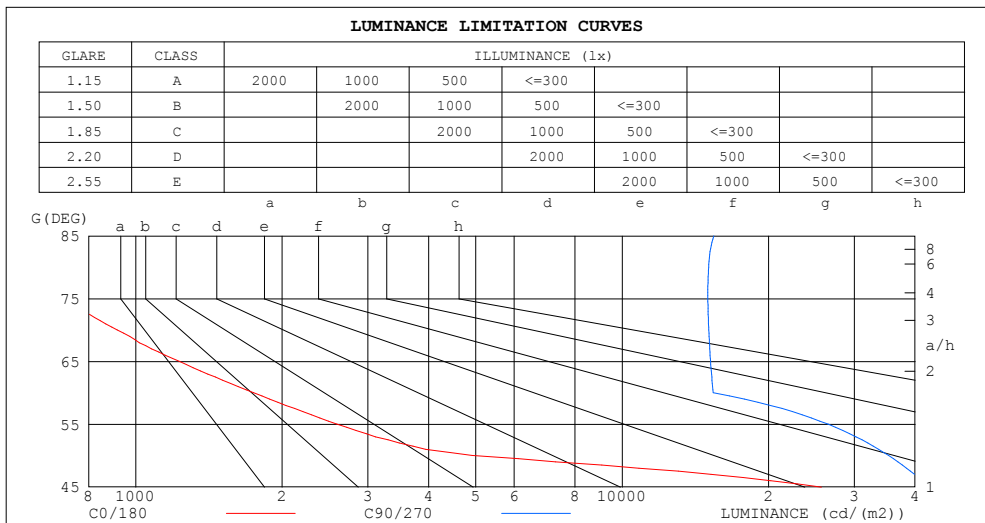
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 333.7                 | 325.9  | 324.9  | 327.7  | 335.9  | 329.1  | 326.8  | 327.0  | 0- 10    | 31.74       | 31.74        | 2.39,2.39  |
| 20       | 320.7                 | 307.9  | 310.0  | 309.4  | 321.5  | 313.9  | 313.9  | 310.4  | 10- 20   | 90.72       | 122.5        | 9.21,9.21  |
| 30       | 293.4                 | 283.0  | 295.2  | 285.3  | 290.9  | 292.4  | 300.9  | 287.0  | 20- 30   | 139.3       | 261.8        | 19.7,19.7  |
| 40       | 214.9                 | 243.9  | 211.2  | 256.0  | 241.0  | 263.2  | 225.7  | 251.1  | 30- 40   | 165.2       | 427.0        | 32.1,32.1  |
| 50       | 17.70                 | 145.9  | 127.1  | 168.7  | 93.38  | 177.1  | 150.5  | 148.8  | 40- 50   | 136.8       | 563.8        | 42.4,42.4  |
| 60       | 4.894                 | 46.59  | 43.08  | 72.62  | 9.640  | 74.05  | 75.31  | 45.99  | 50- 60   | 67.31       | 631.2        | 47.5,47.5  |
| 70       | 1.755                 | 2.706  | 28.86  | 5.594  | 4.214  | 4.815  | 50.37  | 2.956  | 60- 70   | 24.15       | 655.3        | 49.3,49.3  |
| 80       | 0.5339                | 1.605  | 14.64  | 2.558  | 1.552  | 2.373  | 25.42  | 1.692  | 70- 80   | 11.90       | 667.2        | 50.2,50.2  |
| 90       | 0.1007                | 0.6813 | 0.4206 | 0.2549 | 0.1244 | 0.4623 | 0.4740 | 0.6398 | 80- 90   | 4.292       | 671.5        | 50.5,50.5  |
| 100      | 0.8657                | 1.699  | 18.44  | 2.615  | 1.395  | 2.648  | 10.25  | 2.273  | 90-100   | 3.357       | 674.9        | 50.8,50.8  |
| 110      | 2.241                 | 2.897  | 36.46  | 5.372  | 4.679  | 5.127  | 20.02  | 4.207  | 100-110  | 9.117       | 684.0        | 51.4,51.4  |
| 120      | 5.928                 | 58.99  | 54.48  | 59.82  | 9.581  | 60.48  | 29.79  | 51.42  | 110-120  | 18.80       | 702.8        | 52.9,52.9  |
| 130      | 34.68                 | 160.5  | 138.1  | 160.5  | 27.70  | 157.5  | 122.6  | 150.0  | 120-130  | 59.51       | 762.3        | 57.3,57.3  |
| 140      | 256.3                 | 259.8  | 221.7  | 260.8  | 235.2  | 248.4  | 215.4  | 254.3  | 130-140  | 133.4       | 895.7        | 67.4,67.4  |
| 150      | 306.4                 | 297.1  | 305.3  | 287.2  | 287.9  | 285.8  | 308.2  | 295.4  | 140-150  | 167.8       | 1063         | 80,80      |
| 160      | 329.7                 | 318.1  | 317.7  | 308.5  | 322.5  | 314.1  | 321.3  | 319.4  | 150-160  | 141.8       | 1205         | 90.6,90.6  |
| 170      | 339.2                 | 332.2  | 330.2  | 328.2  | 337.7  | 333.5  | 334.3  | 335.5  | 160-170  | 92.18       | 1297         | 97.6,97.6  |
| 180      | 342.7                 | 342.7  | 342.7  | 342.7  | 347.4  | 347.4  | 347.4  | 347.4  | 170-180  | 32.24       | 1330         | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G (DEG)           | C0/180 | C90/270 |
| 85                | 437    | 15428   |
| 80                | 549    | 15054   |
| 75                | 707    | 15005   |
| 70                | 916    | 15067   |
| 65                | 1229   | 15197   |
| 60                | 1748   | 15385   |
| 55                | 2590   | 26493   |
| 50                | 4918   | 35313   |
| 45                | 25685  | 42713   |

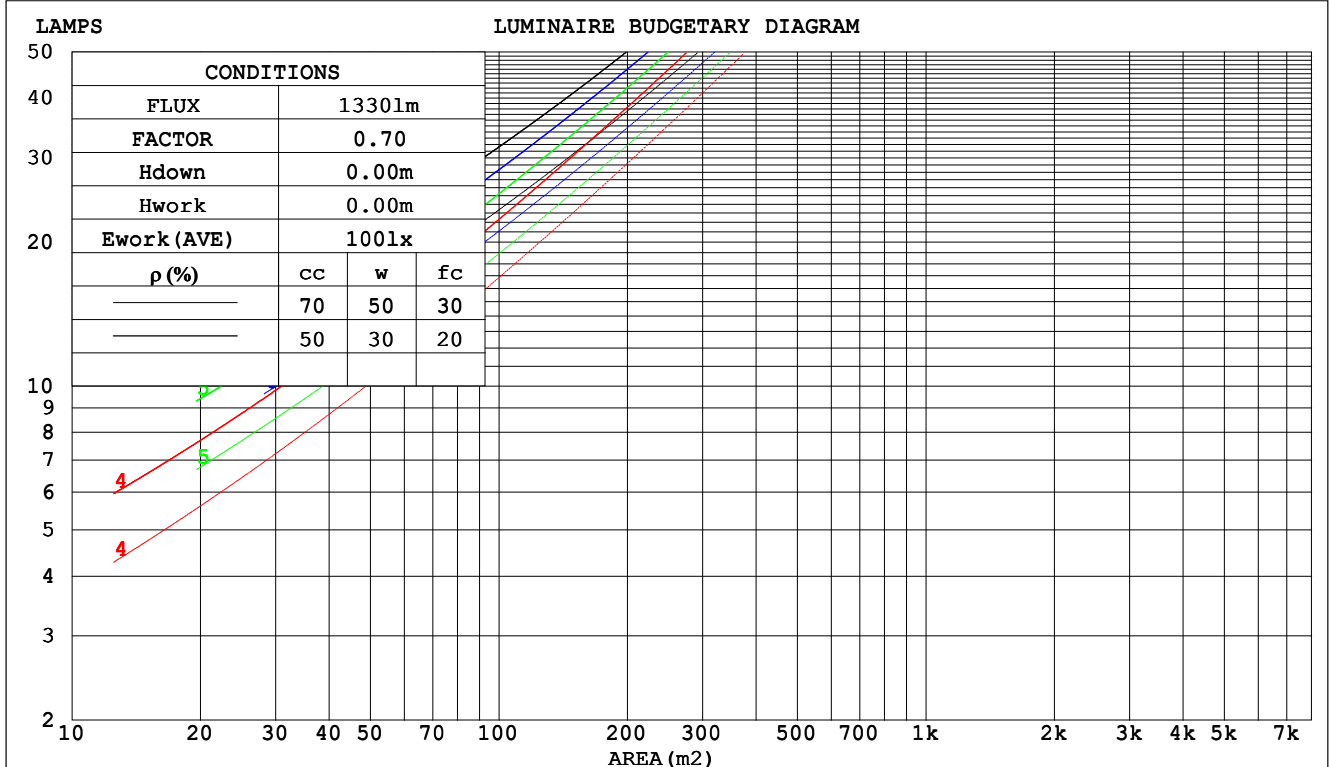
H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

| 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 |      |      | Coefficients of Utilization(CU) |     |     |     |     |     |     |     |     |     |     |     |     |
| 0.0  | 1.07                  | 1.07 | 1.07 | .99                             | .99 | .99 | .84 | .84 | .84 | .70 | .70 | .70 | .57 | .57 | .57 | .51 |
| 1.0  | .95                   | .92  | .89  | .88                             | .85 | .83 | .75 | .73 | .71 | .63 | .62 | .60 | .52 | .51 | .50 | .45 |
| 2.0  | .85                   | .79  | .74  | .79                             | .74 | .70 | .67 | .64 | .61 | .57 | .54 | .52 | .47 | .46 | .44 | .40 |
| 3.0  | .75                   | .69  | .63  | .70                             | .64 | .60 | .60 | .56 | .53 | .51 | .48 | .46 | .43 | .41 | .39 | .35 |
| 4.0  | .67                   | .60  | .55  | .63                             | .57 | .52 | .54 | .50 | .46 | .46 | .43 | .40 | .39 | .37 | .34 | .31 |
| 5.0  | .61                   | .53  | .48  | .57                             | .50 | .45 | .49 | .44 | .40 | .42 | .38 | .35 | .36 | .33 | .31 | .28 |
| 6.0  | .55                   | .47  | .42  | .51                             | .45 | .40 | .45 | .39 | .36 | .38 | .34 | .31 | .33 | .30 | .27 | .25 |
| 7.0  | .50                   | .42  | .37  | .47                             | .40 | .35 | .41 | .35 | .32 | .35 | .31 | .28 | .30 | .27 | .25 | .22 |
| 8.0  | .45                   | .38  | .33  | .43                             | .36 | .31 | .37 | .32 | .28 | .32 | .28 | .25 | .28 | .25 | .22 | .20 |
| 9.0  | .42                   | .34  | .30  | .39                             | .33 | .28 | .34 | .29 | .26 | .30 | .26 | .23 | .26 | .23 | .20 | .18 |
| 10.0 | .38                   | .31  | .27  | .36                             | .30 | .26 | .32 | .27 | .23 | .28 | .24 | .21 | .24 | .21 | .19 | .17 |



H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

### WEC AND CCEC

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

| 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  | .247                  | .141 | .045 | .226 | .129 | .041 | .185                            | .106 | .034 | .147 | .085 | .027 | .112 | .065 | .021 |   |  |
| 2.0  | .233                  | .128 | .039 | .213 | .117 | .036 | .176                            | .098 | .030 | .142 | .080 | .025 | .110 | .062 | .020 |   |  |
| 3.0  | .218                  | .116 | .035 | .200 | .107 | .032 | .166                            | .090 | .027 | .135 | .074 | .023 | .106 | .059 | .018 |   |  |
| 4.0  | .204                  | .106 | .031 | .188 | .098 | .029 | .157                            | .083 | .025 | .128 | .069 | .021 | .101 | .055 | .017 |   |  |
| 5.0  | .192                  | .098 | .028 | .176 | .091 | .026 | .148                            | .077 | .023 | .121 | .064 | .019 | .096 | .051 | .015 |   |  |
| 6.0  | .180                  | .090 | .026 | .166 | .084 | .024 | .139                            | .071 | .021 | .115 | .060 | .018 | .091 | .048 | .014 |   |  |
| 7.0  | .169                  | .084 | .024 | .156 | .078 | .022 | .132                            | .067 | .019 | .109 | .056 | .016 | .087 | .045 | .013 |   |  |
| 8.0  | .159                  | .078 | .022 | .147 | .073 | .021 | .124                            | .062 | .018 | .103 | .052 | .015 | .083 | .042 | .012 |   |  |
| 9.0  | .151                  | .073 | .020 | .139 | .068 | .019 | .118                            | .058 | .017 | .098 | .049 | .014 | .079 | .040 | .012 |   |  |
| 10.0 | .142                  | .068 | .019 | .132 | .064 | .018 | .112                            | .055 | .015 | .093 | .046 | .013 | .075 | .038 | .011 |   |  |

| 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  | .568                  | .568 | .568 | .485 | .485 | .485 | .331                                       | .331 | .331 | .190 | .190 | .190 | .061 | .061 | .061 |   |
| 1.0  | .556                  | .537 | .520 | .476 | .461 | .447 | .326                                       | .317 | .309 | .187 | .183 | .180 | .060 | .059 | .058 |   |
| 2.0  | .547                  | .515 | .488 | .469 | .443 | .422 | .321                                       | .307 | .294 | .185 | .178 | .172 | .059 | .058 | .056 |   |
| 3.0  | .539                  | .499 | .466 | .462 | .430 | .404 | .317                                       | .299 | .284 | .183 | .175 | .167 | .059 | .057 | .055 |   |
| 4.0  | .532                  | .487 | .452 | .457 | .420 | .392 | .314                                       | .293 | .276 | .182 | .172 | .163 | .058 | .056 | .054 |   |
| 5.0  | .526                  | .477 | .441 | .452 | .413 | .384 | .311                                       | .288 | .271 | .180 | .169 | .161 | .058 | .055 | .053 |   |
| 6.0  | .520                  | .469 | .433 | .447 | .406 | .377 | .308                                       | .285 | .267 | .179 | .167 | .159 | .058 | .055 | .052 |   |
| 7.0  | .514                  | .463 | .427 | .442 | .401 | .372 | .306                                       | .281 | .264 | .178 | .166 | .157 | .057 | .054 | .052 |   |
| 8.0  | .509                  | .458 | .423 | .438 | .397 | .369 | .303                                       | .279 | .262 | .176 | .165 | .156 | .057 | .054 | .052 |   |
| 9.0  | .504                  | .453 | .419 | .434 | .394 | .366 | .301                                       | .277 | .260 | .175 | .163 | .155 | .057 | .054 | .051 |   |
| 10.0 | .499                  | .450 | .417 | .430 | .391 | .364 | .299                                       | .275 | .258 | .174 | .162 | .154 | .056 | .053 | .051 |   |

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## UGR(Unified Glare Rating) Table

|                                                                             |  |              |                        |                  |  |
|-----------------------------------------------------------------------------|--|--------------|------------------------|------------------|--|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% |  |              | Lamp Flux:1329.69x1 lm |                  |  |
| NAME: WL73-16W-3000K                                                        |  | TYPE: 16W    |                        | WEIGHT:          |  |
| SPEC.: 3000K                                                                |  | DIM.:        |                        | SERIAL No.:      |  |
| MFR.:                                                                       |  | SUR.: 0.0056 |                        | 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                                                   | 17.5             | 18.4 | 18.4 | 19.2 | 20.3 | 19.7           | 20.6 | 20.5 | 21.4 | 22.4 |
| 3H                                                              | 17.2             | 18.0 | 18.1 | 18.8 | 19.9 | 19.5           | 20.3 | 20.4 | 21.2 | 22.3 |
| 4H                                                              | 17.0             | 17.7 | 17.9 | 18.6 | 19.7 | 19.5           | 20.2 | 20.4 | 21.1 | 22.2 |
| 6H                                                              | 16.9             | 17.5 | 17.8 | 18.4 | 19.6 | 19.5           | 20.2 | 20.4 | 21.1 | 22.2 |
| 8H                                                              | 16.8             | 17.4 | 17.7 | 18.3 | 19.5 | 19.6           | 20.2 | 20.5 | 21.1 | 22.3 |
| 12H                                                             | 16.7             | 17.3 | 17.6 | 18.2 | 19.4 | 19.6           | 20.2 | 20.5 | 21.1 | 22.3 |
| 4H 2H                                                           | 17.4             | 18.1 | 18.3 | 19.0 | 20.1 | 19.3           | 20.1 | 20.2 | 20.9 | 22.1 |
| 3H                                                              | 17.1             | 17.7 | 18.0 | 18.6 | 19.7 | 19.2           | 19.8 | 20.1 | 20.7 | 21.9 |
| 4H                                                              | 16.9             | 17.4 | 17.8 | 18.4 | 19.6 | 19.1           | 19.7 | 20.1 | 20.6 | 21.8 |
| 6H                                                              | 16.7             | 17.2 | 17.7 | 18.1 | 19.4 | 19.2           | 19.6 | 20.1 | 20.6 | 21.8 |
| 8H                                                              | 16.6             | 17.1 | 17.6 | 18.0 | 19.3 | 19.2           | 19.6 | 20.2 | 20.6 | 21.8 |
| 12H                                                             | 16.5             | 16.9 | 17.5 | 17.9 | 19.2 | 19.3           | 19.6 | 20.2 | 20.6 | 21.9 |
| 8H 4H                                                           | 16.6             | 17.1 | 17.6 | 18.0 | 19.3 | 18.9           | 19.3 | 19.8 | 20.3 | 21.5 |
| 6H                                                              | 16.5             | 16.8 | 17.5 | 17.8 | 19.1 | 18.9           | 19.2 | 19.9 | 20.2 | 21.5 |
| 8H                                                              | 16.4             | 16.7 | 17.4 | 17.7 | 19.0 | 18.9           | 19.2 | 20.0 | 20.2 | 21.5 |
| 12H                                                             | 16.3             | 16.5 | 17.3 | 17.6 | 18.9 | 19.0           | 19.3 | 20.0 | 20.3 | 21.6 |
| 12H 4H                                                          | 16.5             | 16.9 | 17.5 | 17.9 | 19.2 | 18.8           | 19.2 | 19.8 | 20.1 | 21.4 |
| 6H                                                              | 16.4             | 16.7 | 17.4 | 17.7 | 19.0 | 18.8           | 19.1 | 19.8 | 20.1 | 21.4 |
| 8H                                                              | 16.3             | 16.5 | 17.3 | 17.6 | 18.9 | 18.8           | 19.1 | 19.9 | 20.1 | 21.4 |
| Variations with the observer position at spacings(CIE Pub.117): |                  |      |      |      |      |                |      |      |      |      |
| S = 1.0H                                                        | + 2.7 / -11.7    |      |      |      |      | + 1.3 / - 3.0  |      |      |      |      |
| 1.5H                                                            | + 2.5 / - 8.5    |      |      |      |      | + 0.9 / - 1.0  |      |      |      |      |
| 2.0H                                                            | + 5.5 / -10.2    |      |      |      |      | + 3.4 / - 9.6  |      |      |      |      |

CIE Pub.117, 1330 lm Total Lamp Luminous Flux Corrected ( $8\log(F/F_0) = 1.0$ )  
Area: 0.0056 m2

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                             |  |              |                        |                  |  |
|-----------------------------------------------------------------------------|--|--------------|------------------------|------------------|--|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% |  |              | Lamp Flux:1329.69x1 lm |                  |  |
| NAME: WL73-16W-3000K                                                        |  | TYPE: 16W    |                        | WEIGHT:          |  |
| SPEC.: 3000K                                                                |  | DIM.:        |                        | SERIAL No.:      |  |
| MFR.:                                                                       |  | SUR.: 0.0056 |                        | Shielding Angle: |  |

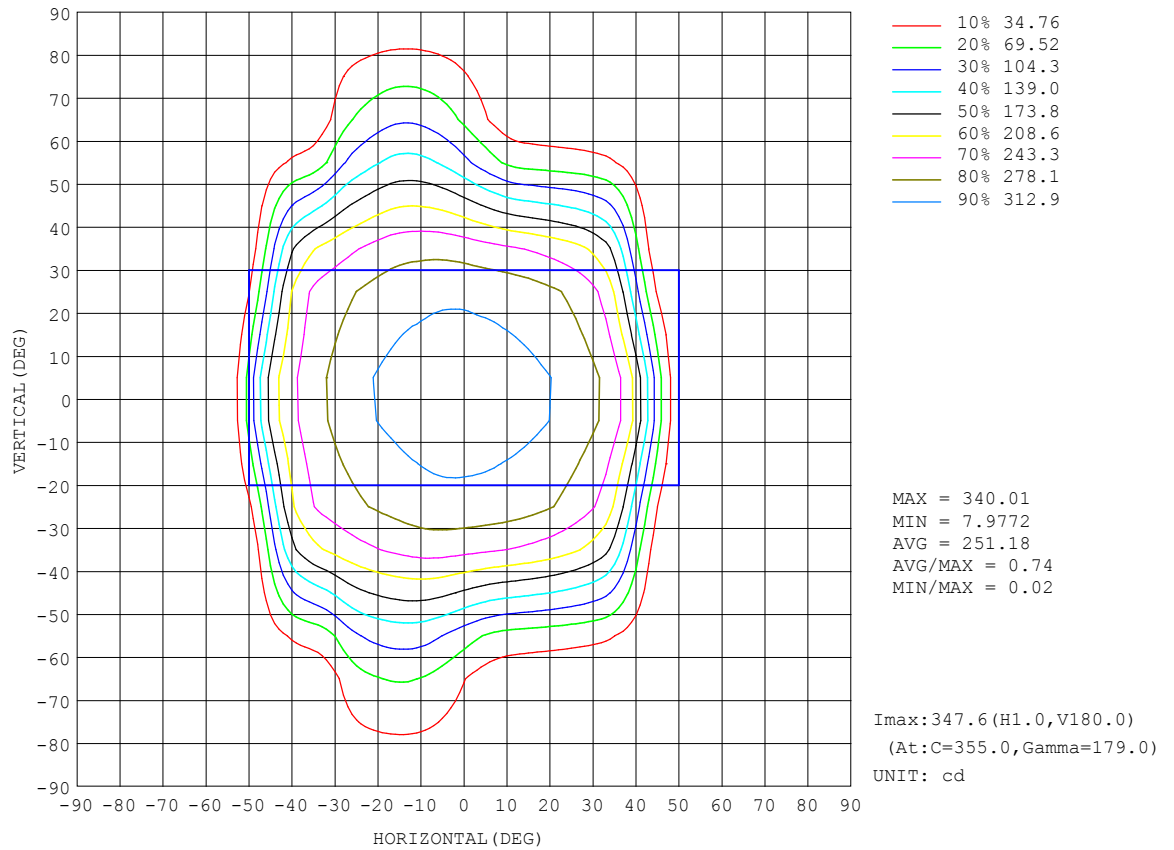
| REFLECTANCE                      |                                                      |     |           |     |     |     |     |               |     |        |
|----------------------------------|------------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 50                                                   | 40  | 35        | 47  | 39  | 33  | 43  | 36            | 31  | 24     |
| 0.80                             | 60                                                   | 49  | 43        | 56  | 47  | 42  | 50  | 43            | 39  | 29     |
| 1.00                             | 67                                                   | 57  | 51        | 63  | 54  | 49  | 56  | 50            | 45  | 33     |
| 1.25                             | 74                                                   | 64  | 58        | 69  | 61  | 55  | 60  | 54            | 50  | 36     |
| 1.50                             | 78                                                   | 69  | 63        | 73  | 65  | 60  | 64  | 58            | 54  | 39     |
| 2.00                             | 84                                                   | 76  | 70        | 79  | 72  | 67  | 68  | 63            | 60  | 42     |
| 2.50                             | 88                                                   | 81  | 75        | 82  | 76  | 71  | 71  | 66            | 63  | 43     |
| 3.00                             | 91                                                   | 85  | 79        | 85  | 79  | 75  | 73  | 69            | 66  | 44     |
| 4.00                             | 95                                                   | 89  | 85        | 88  | 83  | 80  | 75  | 72            | 69  | 46     |
| 5.00                             | 97                                                   | 92  | 88        | 90  | 86  | 83  | 77  | 74            | 72  | 46     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

$H(\beta)$  Range:-90 - 90DEG  
 $H(\beta)$  Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-12-14

$V(B)$  Range:-180 - 180DEG  
 $V(B)$  Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
 Humidity:65.0%  
 Test Distance:8.692m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

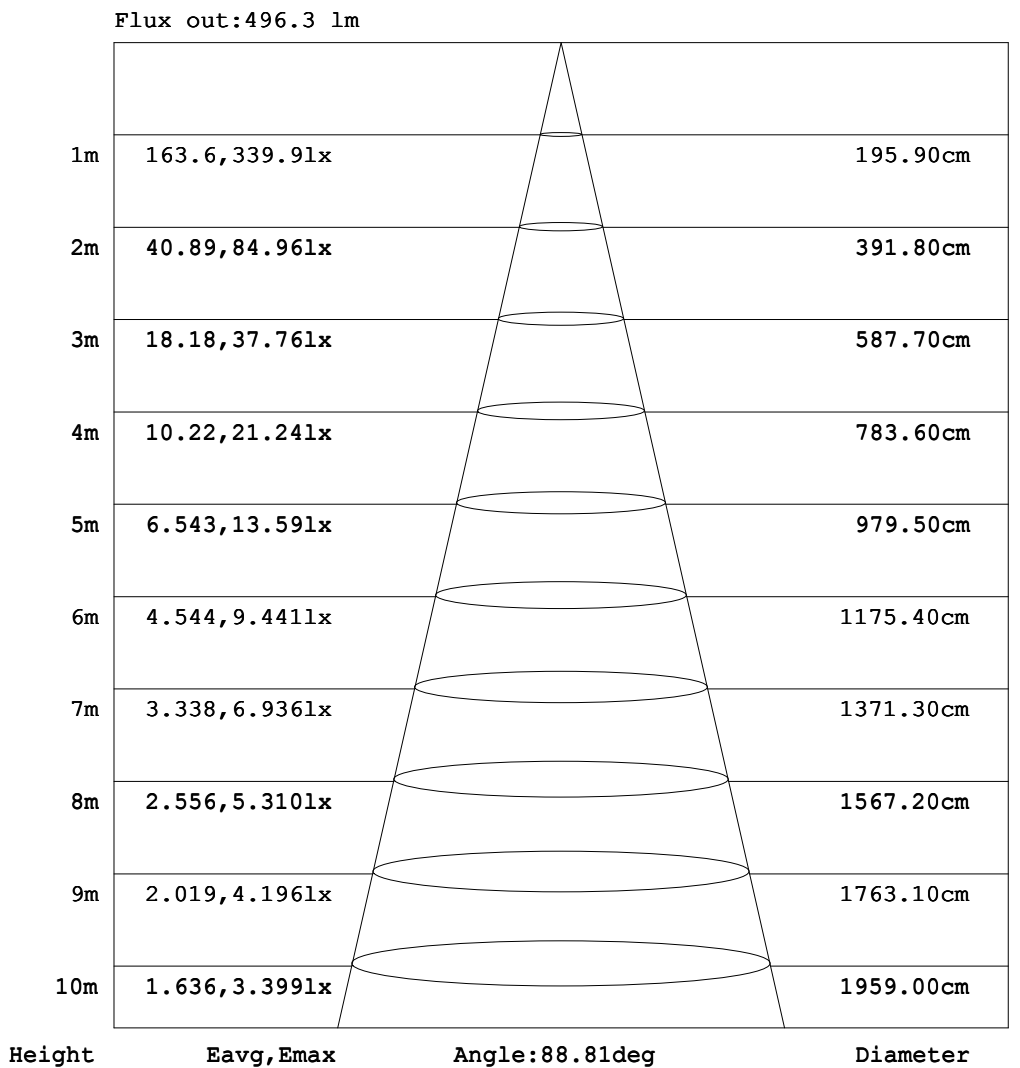


H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
 Humidity:65.0%  
 Test Distance:8.692m [K=1.0000]  
 Remarks:

**AAI Figure**

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |



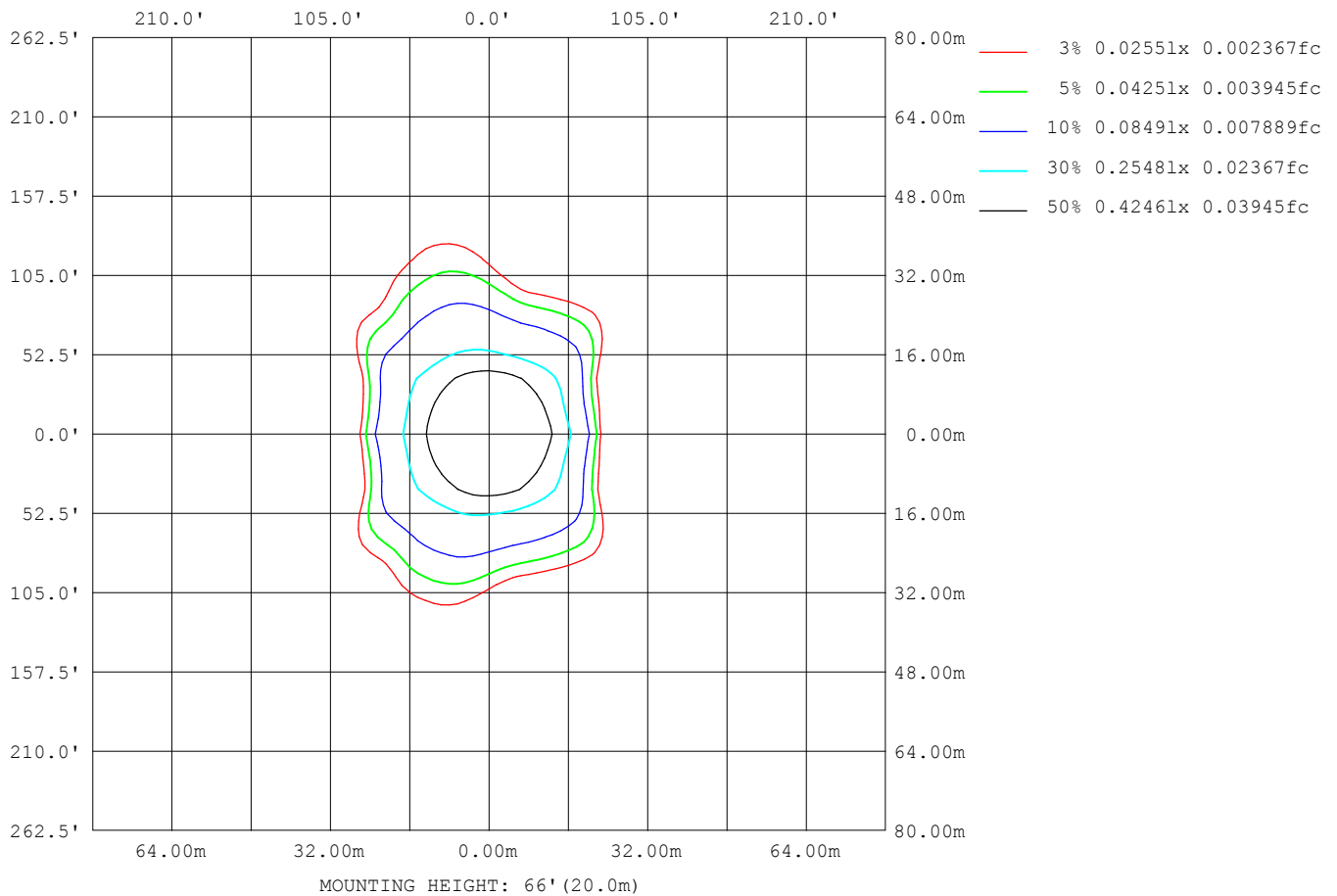
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
 Humidity:65.0%  
 Test Distance:8.692m [K=1.0000]  
 Remarks:

**ISOLUX DIAGRAM**

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |



H( $\beta$ ) Range:-90 - 90DEG  
 H( $\beta$ ) Interval: 1.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
 V(B) Interval: 5.0DEG  
 Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
 Humidity:65.0%  
 Test Distance:8.692m [K=1.0000]  
 Remarks:

### LED Avg.L Report

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

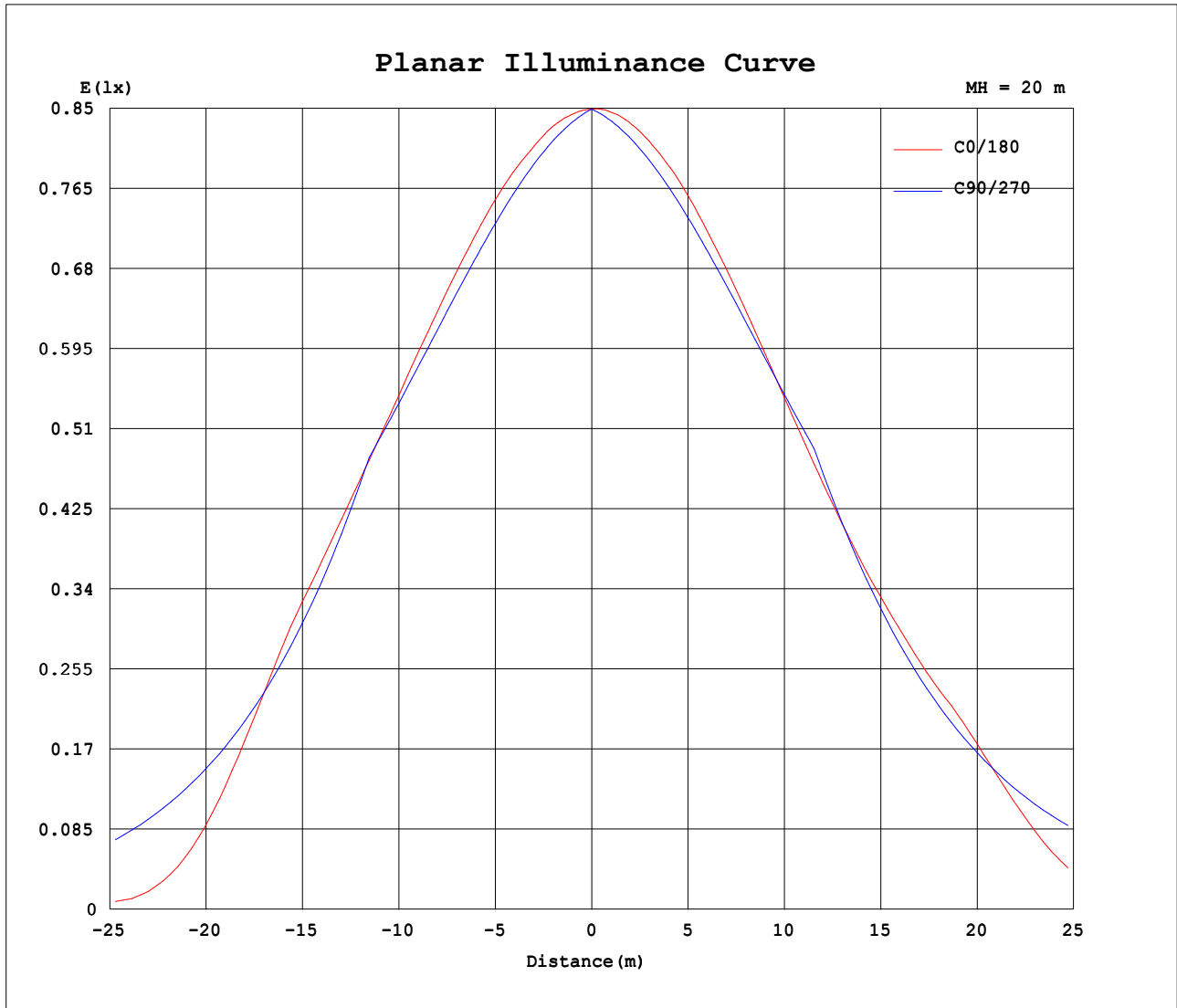
| AvgL             | cd/m2 |
|------------------|-------|
| L_0~180 (65) av  | 1964  |
| L_0~180 (75) av  | 1270  |
| L_0~180 (85) av  | 861   |
| L_90~270 (65) av | 20875 |
| L_90~270 (75) av | 20575 |
| L_90~270 (85) av | 20978 |
| L_45 (65) av     | 9029  |
| L_45 (75) av     | 2038  |
| L_45 (85) av     | 2579  |

Standard: GB/T 29293-2012

H( $\beta$ ) Range:-90 - 90DEG  
H( $\beta$ ) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

### Planar Illuminance Curve



H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

Table--1

UNIT: cd

| C (DEG)<br>γ (DEG) | 0    | 5    | 10   | 15   | 20   | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  |
| 5                  | 338  | 337  | 337  | 336  | 335  | 335  | 335  | 334  | 334  | 333  | 333  | 333  | 333  | 332  | 332  | 332  | 332  | 332  | 332  |
| 10                 | 334  | 332  | 331  | 330  | 329  | 328  | 327  | 327  | 326  | 326  | 326  | 325  | 325  | 325  | 325  | 325  | 325  | 325  | 325  |
| 15                 | 329  | 327  | 325  | 323  | 322  | 321  | 320  | 319  | 318  | 317  | 317  | 317  | 317  | 317  | 317  | 317  | 317  | 317  | 317  |
| 20                 | 321  | 318  | 315  | 313  | 312  | 310  | 309  | 308  | 308  | 308  | 308  | 308  | 308  | 308  | 309  | 309  | 309  | 310  | 310  |
| 25                 | 310  | 306  | 303  | 300  | 298  | 297  | 296  | 296  | 296  | 296  | 297  | 298  | 299  | 300  | 300  | 301  | 302  | 302  | 303  |
| 30                 | 293  | 288  | 284  | 282  | 280  | 279  | 279  | 280  | 281  | 283  | 285  | 287  | 288  | 290  | 292  | 293  | 294  | 295  | 295  |
| 35                 | 269  | 261  | 256  | 254  | 254  | 255  | 257  | 260  | 264  | 267  | 271  | 274  | 268  | 262  | 257  | 253  | 251  | 251  | 253  |
| 40                 | 215  | 202  | 196  | 196  | 201  | 210  | 224  | 234  | 242  | 244  | 236  | 228  | 221  | 215  | 210  | 206  | 205  | 207  | 211  |
| 45                 | 102  | 93.3 | 92.8 | 99.0 | 111  | 130  | 156  | 186  | 199  | 195  | 189  | 181  | 174  | 168  | 163  | 159  | 158  | 162  | 169  |
| 50                 | 17.7 | 17.8 | 20.1 | 25.5 | 31.0 | 43.5 | 69.4 | 105  | 134  | 146  | 142  | 135  | 128  | 121  | 115  | 112  | 111  | 117  | 127  |
| 55                 | 8.32 | 7.83 | 7.79 | 8.18 | 9.05 | 10.0 | 17.1 | 42.8 | 72.7 | 92.7 | 95.9 | 89.1 | 81.4 | 74.2 | 68.3 | 64.3 | 63.8 | 71.1 | 85.1 |
| 60                 | 4.89 | 4.59 | 4.59 | 4.83 | 5.28 | 5.92 | 6.89 | 11.6 | 30.1 | 46.6 | 51.3 | 44.5 | 35.8 | 27.8 | 21.3 | 16.9 | 16.4 | 25.4 | 43.1 |
| 65                 | 2.91 | 2.73 | 2.77 | 2.97 | 3.29 | 3.68 | 4.15 | 4.75 | 8.77 | 14.5 | 11.5 | 4.13 | 4.62 | 5.22 | 6.09 | 7.45 | 10.4 | 19.9 | 36.0 |
| 70                 | 1.75 | 1.66 | 1.71 | 1.89 | 2.12 | 2.36 | 2.54 | 2.58 | 2.46 | 2.71 | 2.99 | 3.31 | 3.70 | 4.18 | 4.86 | 5.88 | 8.13 | 15.6 | 28.9 |
| 75                 | 1.03 | 0.97 | 1.08 | 1.30 | 1.48 | 1.55 | 1.63 | 1.77 | 1.93 | 2.13 | 2.34 | 2.58 | 2.87 | 3.22 | 3.71 | 4.46 | 6.05 | 11.6 | 21.7 |
| 80                 | 0.53 | 0.51 | 0.81 | 1.04 | 1.17 | 1.24 | 1.32 | 1.39 | 1.49 | 1.60 | 1.75 | 1.90 | 2.09 | 2.31 | 2.63 | 3.12 | 4.12 | 7.77 | 14.6 |
| 85                 | 0.21 | 0.53 | 0.93 | 1.09 | 1.12 | 1.10 | 1.05 | 1.06 | 1.09 | 1.13 | 1.20 | 1.27 | 1.34 | 1.45 | 1.59 | 1.82 | 2.29 | 4.08 | 7.53 |
| 90                 | 0.10 | 1.56 | 1.45 | 1.38 | 1.15 | 0.99 | 0.83 | 0.75 | 0.71 | 0.68 | 0.67 | 0.66 | 0.62 | 0.60 | 0.57 | 0.55 | 0.50 | 0.46 | 0.42 |
| 95                 | 0.38 | 1.13 | 1.64 | 1.54 | 1.39 | 1.25 | 1.15 | 1.12 | 1.14 | 1.18 | 1.25 | 1.33 | 1.42 | 1.56 | 1.73 | 2.02 | 2.86 | 5.81 | 9.43 |
| 100                | 0.87 | 0.93 | 1.38 | 1.63 | 1.62 | 1.52 | 1.48 | 1.52 | 1.60 | 1.70 | 1.85 | 2.02 | 2.24 | 2.54 | 2.90 | 3.52 | 5.32 | 11.3 | 18.4 |
| 105                | 1.42 | 1.37 | 1.48 | 1.76 | 1.90 | 1.89 | 1.86 | 1.95 | 2.09 | 2.27 | 2.49 | 2.76 | 3.11 | 3.56 | 4.12 | 5.07 | 7.96 | 16.9 | 27.4 |
| 110                | 2.24 | 2.11 | 2.12 | 2.32 | 2.56 | 2.76 | 2.86 | 2.83 | 2.65 | 2.90 | 3.20 | 3.57 | 4.04 | 4.66 | 5.40 | 6.72 | 10.9 | 22.7 | 36.5 |
| 115                | 3.63 | 3.38 | 3.36 | 3.54 | 3.85 | 4.20 | 4.56 | 5.33 | 13.6 | 19.1 | 13.3 | 4.48 | 5.08 | 5.85 | 6.77 | 8.49 | 14.2 | 28.9 | 45.5 |
| 120                | 5.93 | 5.52 | 5.44 | 5.61 | 5.99 | 6.49 | 7.61 | 20.1 | 44.1 | 59.0 | 57.9 | 48.0 | 38.2 | 29.8 | 22.8 | 18.5 | 21.5 | 36.2 | 54.5 |
| 125                | 9.48 | 8.87 | 8.76 | 9.22 | 11.3 | 11.4 | 30.8 | 65.6 | 96.1 | 110  | 104  | 95.3 | 86.4 | 78.8 | 72.3 | 68.2 | 70.8 | 82.2 | 96.3 |
| 130                | 34.7 | 33.4 | 36.7 | 42.4 | 51.8 | 70.5 | 103  | 140  | 161  | 161  | 152  | 143  | 135  | 128  | 122  | 118  | 120  | 128  | 138  |
| 135                | 155  | 141  | 136  | 140  | 151  | 170  | 194  | 220  | 219  | 210  | 201  | 192  | 185  | 177  | 171  | 167  | 168  | 173  | 180  |
| 140                | 256  | 242  | 232  | 229  | 232  | 240  | 248  | 253  | 259  | 260  | 250  | 242  | 234  | 226  | 220  | 217  | 216  | 218  | 222  |
| 145                | 286  | 280  | 275  | 273  | 272  | 272  | 274  | 276  | 278  | 282  | 286  | 290  | 283  | 275  | 269  | 265  | 263  | 263  | 263  |
| 150                | 306  | 302  | 298  | 296  | 294  | 293  | 293  | 294  | 295  | 297  | 299  | 301  | 302  | 304  | 305  | 306  | 306  | 306  | 305  |
| 155                | 320  | 317  | 314  | 312  | 310  | 309  | 308  | 308  | 308  | 309  | 309  | 310  | 311  | 311  | 312  | 312  | 312  | 312  | 311  |
| 160                | 330  | 327  | 325  | 323  | 322  | 321  | 320  | 319  | 318  | 318  | 318  | 318  | 318  | 318  | 318  | 318  | 318  | 318  | 318  |
| 165                | 336  | 334  | 333  | 331  | 330  | 329  | 328  | 327  | 326  | 326  | 325  | 325  | 325  | 325  | 325  | 325  | 324  | 324  | 324  |
| 170                | 339  | 338  | 337  | 336  | 335  | 335  | 334  | 333  | 333  | 332  | 332  | 332  | 331  | 331  | 331  | 331  | 330  | 330  | 330  |
| 175                | 342  | 341  | 341  | 340  | 340  | 340  | 339  | 339  | 338  | 338  | 338  | 338  | 337  | 337  | 337  | 337  | 337  | 337  | 336  |
| 180                | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  |

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

Table--2

UNIT: cd

| C (DEG)<br>γ (DEG) | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160  | 165  | 170  | 175  | 180  | 185  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  |
| 5                  | 332  | 333  | 333  | 333  | 333  | 333  | 334  | 334  | 334  | 335  | 335  | 336  | 336  | 337  | 337  | 338  | 339  | 339  | 339  |
| 10                 | 325  | 325  | 326  | 326  | 326  | 326  | 327  | 327  | 328  | 328  | 329  | 330  | 330  | 331  | 332  | 333  | 335  | 336  | 335  |
| 15                 | 318  | 318  | 318  | 318  | 319  | 319  | 319  | 319  | 319  | 320  | 321  | 321  | 322  | 324  | 325  | 327  | 328  | 330  | 329  |
| 20                 | 310  | 311  | 311  | 311  | 310  | 310  | 310  | 310  | 309  | 310  | 310  | 310  | 311  | 313  | 314  | 316  | 319  | 322  | 319  |
| 25                 | 303  | 303  | 303  | 303  | 302  | 300  | 299  | 298  | 298  | 298  | 298  | 298  | 299  | 300  | 301  | 303  | 305  | 309  | 306  |
| 30                 | 296  | 296  | 295  | 294  | 292  | 290  | 288  | 287  | 285  | 285  | 284  | 283  | 283  | 284  | 284  | 286  | 288  | 291  | 289  |
| 35                 | 257  | 260  | 264  | 267  | 269  | 272  | 276  | 274  | 273  | 271  | 269  | 268  | 266  | 265  | 264  | 264  | 265  | 268  | 266  |
| 40                 | 217  | 223  | 228  | 232  | 235  | 238  | 242  | 248  | 256  | 257  | 254  | 250  | 244  | 239  | 235  | 234  | 236  | 241  | 237  |
| 45                 | 178  | 187  | 194  | 197  | 200  | 203  | 206  | 210  | 215  | 225  | 235  | 222  | 207  | 190  | 181  | 179  | 185  | 199  | 187  |
| 50                 | 140  | 151  | 159  | 163  | 166  | 167  | 167  | 165  | 169  | 176  | 179  | 164  | 129  | 101  | 87.0 | 81.8 | 83.6 | 93.4 | 84.7 |
| 55                 | 102  | 116  | 125  | 129  | 130  | 129  | 122  | 116  | 120  | 124  | 110  | 75.9 | 37.2 | 24.7 | 22.4 | 18.1 | 16.4 | 16.9 | 16.5 |
| 60                 | 63.5 | 81.2 | 91.4 | 95.1 | 94.5 | 88.5 | 73.0 | 66.2 | 72.6 | 70.6 | 48.9 | 20.4 | 10.1 | 9.08 | 8.82 | 8.73 | 8.97 | 9.64 | 8.99 |
| 65                 | 53.3 | 67.3 | 73.8 | 74.1 | 68.9 | 53.3 | 24.0 | 19.6 | 28.4 | 27.8 | 14.6 | 7.07 | 6.34 | 6.07 | 5.97 | 5.86 | 5.96 | 6.39 | 5.99 |
| 70                 | 43.2 | 54.5 | 59.3 | 58.9 | 53.5 | 37.2 | 13.7 | 7.24 | 5.59 | 4.51 | 4.55 | 4.23 | 4.11 | 4.03 | 4.03 | 3.98 | 3.95 | 4.21 | 3.99 |
| 75                 | 32.8 | 41.2 | 44.6 | 43.9 | 39.1 | 24.4 | 8.04 | 5.10 | 3.92 | 3.20 | 2.78 | 2.54 | 2.49 | 2.56 | 2.57 | 2.60 | 2.52 | 2.66 | 2.57 |
| 80                 | 22.1 | 27.8 | 29.9 | 29.2 | 25.5 | 14.6 | 4.78 | 3.32 | 2.56 | 2.09 | 1.83 | 1.67 | 1.55 | 1.49 | 1.48 | 1.45 | 1.54 | 1.55 | 1.60 |
| 85                 | 11.3 | 14.1 | 15.1 | 14.7 | 12.8 | 6.92 | 2.43 | 1.76 | 1.36 | 1.12 | 0.98 | 0.89 | 0.83 | 0.80 | 0.71 | 0.57 | 0.53 | 0.63 | 0.72 |
| 90                 | 0.40 | 0.38 | 0.38 | 0.37 | 0.37 | 0.37 | 0.35 | 0.31 | 0.25 | 0.21 | 0.18 | 0.17 | 0.15 | 0.15 | 0.14 | 0.14 | 0.14 | 0.12 | 0.39 |
| 95                 | 12.5 | 15.0 | 16.1 | 14.4 | 11.0 | 4.06 | 1.87 | 1.62 | 1.41 | 1.25 | 1.14 | 1.06 | 0.97 | 0.87 | 0.64 | 0.48 | 0.47 | 0.37 | 0.41 |
| 100                | 24.5 | 29.5 | 31.8 | 28.7 | 22.2 | 8.76 | 3.44 | 2.99 | 2.61 | 2.33 | 2.15 | 2.00 | 1.86 | 1.74 | 1.49 | 1.52 | 1.45 | 1.39 | 1.34 |
| 105                | 36.4 | 43.8 | 47.6 | 43.5 | 34.7 | 15.5 | 5.15 | 4.45 | 3.92 | 3.51 | 3.23 | 3.04 | 2.97 | 2.95 | 2.95 | 2.98 | 2.88 | 3.00 | 2.84 |
| 110                | 48.1 | 57.8 | 63.4 | 58.9 | 48.6 | 25.6 | 7.30 | 6.06 | 5.37 | 4.82 | 4.76 | 4.67 | 4.58 | 4.51 | 4.53 | 4.51 | 4.41 | 4.68 | 4.42 |
| 115                | 59.6 | 71.5 | 79.1 | 75.1 | 64.1 | 40.3 | 11.8 | 16.6 | 21.3 | 15.1 | 7.73 | 6.94 | 6.62 | 6.48 | 6.43 | 6.25 | 6.29 | 6.69 | 6.34 |
| 120                | 71.3 | 86.2 | 97.6 | 97.6 | 91.4 | 79.3 | 60.9 | 59.7 | 59.8 | 43.9 | 20.7 | 10.5 | 9.45 | 9.07 | 8.84 | 8.77 | 8.95 | 9.58 | 9.03 |
| 125                | 109  | 121  | 131  | 133  | 130  | 125  | 114  | 108  | 109  | 94.8 | 63.3 | 30.2 | 14.7 | 13.7 | 12.5 | 12.4 | 12.7 | 13.6 | 12.8 |
| 130                | 148  | 156  | 164  | 168  | 167  | 166  | 164  | 160  | 160  | 158  | 136  | 98.9 | 66.2 | 46.2 | 37.2 | 30.9 | 27.5 | 27.7 | 27.6 |
| 135                | 186  | 192  | 198  | 202  | 203  | 205  | 208  | 210  | 214  | 217  | 214  | 187  | 160  | 140  | 128  | 122  | 123  | 135  | 123  |
| 140                | 226  | 229  | 232  | 236  | 238  | 241  | 246  | 252  | 261  | 259  | 250  | 238  | 228  | 218  | 212  | 213  | 220  | 235  | 223  |
| 145                | 265  | 266  | 268  | 270  | 273  | 276  | 280  | 278  | 277  | 274  | 270  | 266  | 262  | 257  | 255  | 255  | 257  | 266  | 262  |
| 150                | 304  | 302  | 300  | 297  | 294  | 292  | 290  | 289  | 287  | 286  | 285  | 284  | 282  | 280  | 279  | 279  | 281  | 288  | 284  |
| 155                | 311  | 309  | 308  | 305  | 303  | 302  | 300  | 299  | 298  | 298  | 297  | 297  | 297  | 297  | 298  | 299  | 300  | 307  | 304  |
| 160                | 317  | 316  | 315  | 314  | 312  | 311  | 310  | 309  | 309  | 308  | 309  | 309  | 310  | 311  | 312  | 313  | 315  | 322  | 320  |
| 165                | 324  | 323  | 323  | 322  | 321  | 320  | 319  | 319  | 318  | 318  | 318  | 319  | 319  | 320  | 321  | 323  | 324  | 331  | 329  |
| 170                | 330  | 330  | 329  | 329  | 329  | 329  | 328  | 328  | 328  | 328  | 328  | 329  | 329  | 329  | 330  | 331  | 332  | 338  | 337  |
| 175                | 336  | 336  | 336  | 336  | 336  | 336  | 336  | 336  | 336  | 337  | 337  | 337  | 337  | 338  | 338  | 339  | 339  | 344  | 344  |
| 180                | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 343  | 347  | 347  |

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

Table--3

UNIT: cd

| C (DEG)<br>γ (DEG) | 190  | 195  | 200  | 205  | 210  | 215  | 220  | 225  | 230  | 235  | 240  | 245  | 250  | 255  | 260  | 265  | 270  | 275  | 280  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  |
| 5                  | 338  | 338  | 337  | 337  | 336  | 336  | 335  | 335  | 335  | 334  | 334  | 334  | 334  | 334  | 334  | 333  | 333  | 333  | 333  |
| 10                 | 334  | 333  | 332  | 331  | 330  | 330  | 329  | 329  | 329  | 328  | 328  | 328  | 328  | 327  | 327  | 327  | 327  | 327  | 326  |
| 15                 | 328  | 326  | 325  | 324  | 324  | 323  | 322  | 322  | 321  | 321  | 321  | 321  | 321  | 321  | 321  | 321  | 320  | 320  | 319  |
| 20                 | 318  | 316  | 315  | 315  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 314  | 313  | 312  |
| 25                 | 304  | 303  | 302  | 302  | 302  | 302  | 303  | 304  | 305  | 306  | 306  | 307  | 307  | 308  | 308  | 308  | 307  | 306  | 306  |
| 30                 | 287  | 286  | 286  | 286  | 287  | 289  | 290  | 292  | 295  | 297  | 298  | 299  | 300  | 301  | 301  | 301  | 301  | 300  | 299  |
| 35                 | 266  | 267  | 268  | 270  | 272  | 274  | 277  | 279  | 283  | 286  | 284  | 280  | 277  | 274  | 271  | 267  | 263  | 260  | 258  |
| 40                 | 236  | 238  | 243  | 249  | 256  | 261  | 264  | 263  | 257  | 254  | 252  | 250  | 247  | 243  | 239  | 233  | 226  | 219  | 214  |
| 45                 | 183  | 186  | 196  | 214  | 228  | 243  | 233  | 224  | 220  | 218  | 218  | 219  | 218  | 214  | 207  | 199  | 188  | 177  | 169  |
| 50                 | 85.0 | 92.9 | 109  | 139  | 173  | 185  | 182  | 177  | 177  | 180  | 183  | 186  | 188  | 184  | 177  | 165  | 151  | 135  | 123  |
| 55                 | 18.2 | 22.9 | 28.0 | 47.0 | 84.5 | 117  | 128  | 125  | 127  | 138  | 146  | 152  | 157  | 155  | 146  | 132  | 113  | 92.5 | 75.7 |
| 60                 | 8.79 | 8.91 | 9.21 | 11.0 | 26.0 | 54.1 | 73.8 | 74.1 | 72.7 | 89.0 | 107  | 117  | 125  | 126  | 116  | 99.0 | 75.3 | 49.6 | 28.2 |
| 65                 | 5.92 | 6.06 | 6.15 | 6.38 | 7.47 | 17.4 | 29.4 | 28.5 | 20.4 | 37.9 | 72.4 | 89.3 | 100  | 103  | 96.9 | 83.1 | 62.8 | 39.9 | 19.3 |
| 70                 | 4.05 | 4.10 | 4.10 | 4.15 | 4.18 | 4.64 | 4.06 | 4.82 | 6.44 | 21.8 | 52.4 | 69.2 | 79.1 | 82.9 | 78.2 | 67.1 | 50.4 | 31.3 | 14.6 |
| 75                 | 2.68 | 2.64 | 2.61 | 2.53 | 2.51 | 2.68 | 2.97 | 3.48 | 4.42 | 12.0 | 35.5 | 50.6 | 58.7 | 62.2 | 59.1 | 50.7 | 37.9 | 23.2 | 10.5 |
| 80                 | 1.55 | 1.57 | 1.56 | 1.64 | 1.75 | 1.87 | 2.05 | 2.37 | 2.94 | 6.41 | 21.7 | 33.2 | 38.9 | 41.6 | 39.7 | 34.1 | 25.4 | 15.5 | 6.88 |
| 85                 | 0.75 | 0.89 | 0.94 | 0.99 | 1.05 | 1.12 | 1.22 | 1.39 | 1.67 | 2.97 | 10.4 | 16.6 | 19.6 | 21.0 | 20.1 | 17.3 | 12.9 | 7.95 | 3.63 |
| 90                 | 0.39 | 0.39 | 0.39 | 0.39 | 0.40 | 0.41 | 0.43 | 0.46 | 0.49 | 0.48 | 0.48 | 0.48 | 0.47 | 0.45 | 0.44 | 0.44 | 0.47 | 0.52 | 0.55 |
| 95                 | 0.44 | 0.64 | 0.88 | 1.09 | 1.21 | 1.31 | 1.42 | 1.54 | 1.67 | 1.88 | 2.75 | 7.39 | 10.5 | 10.7 | 9.92 | 7.74 | 5.36 | 3.48 | 2.69 |
| 100                | 1.42 | 1.34 | 1.60 | 1.88 | 2.08 | 2.26 | 2.45 | 2.65 | 2.90 | 3.35 | 5.53 | 14.9 | 20.7 | 20.8 | 19.3 | 15.0 | 10.2 | 6.47 | 4.84 |
| 105                | 2.94 | 2.82 | 2.90 | 2.94 | 3.05 | 3.28 | 3.54 | 3.85 | 4.22 | 4.92 | 9.35 | 23.5 | 31.2 | 31.0 | 28.6 | 22.1 | 15.1 | 9.53 | 7.02 |
| 110                | 4.49 | 4.53 | 4.52 | 4.61 | 4.71 | 4.77 | 4.74 | 5.13 | 5.70 | 6.74 | 15.1 | 33.5 | 42.0 | 41.0 | 37.6 | 29.0 | 20.0 | 12.7 | 9.25 |
| 115                | 6.32 | 6.50 | 6.55 | 6.71 | 7.01 | 7.55 | 13.7 | 21.0 | 16.3 | 9.22 | 24.2 | 44.9 | 52.8 | 51.0 | 46.3 | 35.7 | 24.9 | 16.0 | 11.5 |
| 120                | 8.86 | 8.94 | 9.23 | 9.57 | 10.3 | 17.7 | 42.5 | 60.5 | 59.1 | 52.9 | 61.0 | 71.0 | 71.8 | 66.0 | 57.1 | 42.8 | 29.8 | 20.3 | 17.5 |
| 125                | 12.5 | 12.7 | 13.8 | 14.1 | 25.4 | 60.2 | 95.8 | 110  | 104  | 101  | 108  | 112  | 111  | 106  | 98.3 | 86.6 | 76.2 | 68.7 | 66.2 |
| 130                | 31.0 | 37.0 | 43.4 | 60.8 | 95.8 | 138  | 161  | 158  | 151  | 149  | 152  | 153  | 151  | 147  | 140  | 131  | 123  | 117  | 115  |
| 135                | 121  | 126  | 139  | 162  | 190  | 217  | 213  | 205  | 197  | 195  | 194  | 193  | 191  | 188  | 182  | 175  | 169  | 165  | 164  |
| 140                | 216  | 216  | 222  | 231  | 238  | 245  | 249  | 248  | 241  | 238  | 236  | 234  | 232  | 229  | 224  | 219  | 215  | 213  | 213  |
| 145                | 259  | 258  | 258  | 260  | 261  | 263  | 265  | 269  | 273  | 279  | 278  | 276  | 273  | 270  | 267  | 264  | 262  | 261  | 261  |
| 150                | 282  | 280  | 279  | 279  | 279  | 281  | 283  | 286  | 289  | 294  | 298  | 302  | 305  | 307  | 308  | 309  | 308  | 308  | 306  |
| 155                | 301  | 299  | 298  | 298  | 298  | 298  | 300  | 302  | 304  | 306  | 308  | 310  | 312  | 314  | 315  | 315  | 315  | 314  | 314  |
| 160                | 318  | 316  | 315  | 314  | 313  | 313  | 313  | 314  | 315  | 316  | 317  | 319  | 320  | 321  | 321  | 321  | 321  | 321  | 321  |
| 165                | 328  | 326  | 325  | 325  | 324  | 324  | 324  | 324  | 325  | 325  | 326  | 326  | 327  | 327  | 328  | 328  | 328  | 328  | 328  |
| 170                | 336  | 335  | 335  | 334  | 334  | 334  | 334  | 333  | 333  | 333  | 334  | 334  | 334  | 334  | 334  | 334  | 334  | 334  | 334  |
| 175                | 343  | 343  | 343  | 342  | 342  | 342  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  | 341  |
| 180                | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  |

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks:

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                                                                                    |              |                  |
|----------------------------------------------------------------------------------------------------|--------------|------------------|
| Test:U:230.09V I:0.0760A P:16.200W PF:0.9267 Freq:49.99Hz UTHDi:0% ITHDi:0% Lamp Flux:1329.69x1 lm |              |                  |
| NAME: WL73-16W-3000K                                                                               | TYPE: 16W    | WEIGHT:          |
| SPEC.: 3000K                                                                                       | DIM.:        | SERIAL No.:      |
| MFR.:                                                                                              | SUR.: 0.0056 | Shielding Angle: |

Table--4

UNIT: cd

| C (DEG)<br>γ (DEG) | 285  | 290  | 295  | 300  | 305  | 310  | 315  | 320  | 325  | 330  | 335  | 340  | 345  | 350  | 355  |  |  |  |  |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|--|--|
| 0                  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  | 340  |  |  |  |  |
| 5                  | 333  | 333  | 333  | 333  | 333  | 334  | 334  | 334  | 335  | 335  | 335  | 336  | 336  | 337  | 337  |  |  |  |  |
| 10                 | 326  | 326  | 326  | 326  | 327  | 327  | 327  | 327  | 328  | 328  | 329  | 330  | 331  | 331  | 333  |  |  |  |  |
| 15                 | 319  | 319  | 319  | 319  | 319  | 319  | 319  | 320  | 320  | 321  | 322  | 323  | 324  | 325  | 327  |  |  |  |  |
| 20                 | 312  | 312  | 311  | 311  | 311  | 310  | 310  | 310  | 311  | 311  | 312  | 313  | 314  | 316  | 318  |  |  |  |  |
| 25                 | 305  | 304  | 304  | 303  | 302  | 301  | 300  | 299  | 298  | 299  | 299  | 300  | 302  | 304  | 306  |  |  |  |  |
| 30                 | 298  | 297  | 295  | 293  | 291  | 289  | 287  | 285  | 284  | 283  | 282  | 283  | 284  | 286  | 289  |  |  |  |  |
| 35                 | 259  | 262  | 267  | 273  | 279  | 276  | 273  | 269  | 265  | 261  | 258  | 256  | 255  | 256  | 261  |  |  |  |  |
| 40                 | 212  | 214  | 219  | 226  | 233  | 242  | 251  | 248  | 238  | 227  | 211  | 200  | 194  | 194  | 201  |  |  |  |  |
| 45                 | 165  | 166  | 171  | 178  | 186  | 194  | 200  | 202  | 187  | 153  | 126  | 107  | 95.9 | 91.0 | 92.5 |  |  |  |  |
| 50                 | 116  | 118  | 124  | 131  | 139  | 146  | 149  | 134  | 101  | 62.7 | 38.4 | 29.5 | 25.2 | 20.0 | 17.7 |  |  |  |  |
| 55                 | 67.6 | 70.5 | 76.3 | 83.9 | 92.0 | 97.9 | 93.6 | 70.0 | 38.2 | 13.9 | 9.48 | 8.90 | 8.12 | 7.78 | 7.83 |  |  |  |  |
| 60                 | 19.2 | 22.7 | 29.1 | 37.3 | 46.0 | 52.6 | 46.0 | 27.5 | 9.67 | 6.69 | 5.87 | 5.27 | 4.85 | 4.61 | 4.61 |  |  |  |  |
| 65                 | 9.09 | 7.06 | 6.00 | 5.21 | 4.63 | 11.9 | 14.1 | 7.81 | 4.69 | 4.17 | 3.73 | 3.34 | 3.02 | 2.80 | 2.75 |  |  |  |  |
| 70                 | 7.08 | 5.61 | 4.77 | 4.15 | 3.69 | 3.30 | 2.96 | 2.64 | 2.69 | 2.62 | 2.43 | 2.19 | 1.95 | 1.75 | 1.67 |  |  |  |  |
| 75                 | 5.35 | 4.27 | 3.64 | 3.18 | 2.84 | 2.55 | 2.28 | 2.05 | 1.85 | 1.72 | 1.65 | 1.58 | 1.40 | 1.14 | 1.00 |  |  |  |  |
| 80                 | 3.71 | 3.00 | 2.59 | 2.29 | 2.07 | 1.87 | 1.69 | 1.53 | 1.43 | 1.35 | 1.30 | 1.28 | 1.23 | 0.96 | 0.56 |  |  |  |  |
| 85                 | 2.13 | 1.79 | 1.59 | 1.45 | 1.34 | 1.24 | 1.15 | 1.08 | 1.05 | 1.05 | 1.08 | 1.14 | 1.16 | 1.14 | 0.73 |  |  |  |  |
| 90                 | 0.57 | 0.59 | 0.61 | 0.62 | 0.63 | 0.63 | 0.64 | 0.66 | 0.70 | 0.77 | 0.88 | 1.04 | 1.13 | 1.15 | 1.18 |  |  |  |  |
| 95                 | 2.48 | 2.33 | 2.13 | 1.92 | 1.72 | 1.56 | 1.44 | 1.34 | 1.28 | 1.24 | 1.23 | 1.24 | 1.17 | 0.98 | 0.62 |  |  |  |  |
| 100                | 4.40 | 4.08 | 3.67 | 3.25 | 2.85 | 2.53 | 2.27 | 2.07 | 1.90 | 1.76 | 1.65 | 1.53 | 1.36 | 1.10 | 0.83 |  |  |  |  |
| 105                | 6.34 | 5.87 | 5.27 | 4.65 | 4.06 | 3.57 | 3.19 | 2.87 | 2.60 | 2.38 | 2.22 | 2.04 | 1.79 | 1.54 | 1.38 |  |  |  |  |
| 110                | 8.32 | 7.73 | 6.96 | 6.17 | 5.38 | 4.72 | 4.21 | 3.79 | 3.87 | 3.69 | 3.34 | 2.95 | 2.62 | 2.34 | 2.19 |  |  |  |  |
| 115                | 10.3 | 9.65 | 8.76 | 7.79 | 6.87 | 14.0 | 17.6 | 12.5 | 6.94 | 5.96 | 5.20 | 4.57 | 4.07 | 3.66 | 3.51 |  |  |  |  |
| 120                | 20.3 | 25.7 | 32.4 | 40.3 | 48.3 | 54.5 | 51.4 | 36.8 | 17.8 | 9.84 | 8.36 | 7.37 | 6.40 | 5.87 | 5.71 |  |  |  |  |
| 125                | 68.8 | 73.9 | 80.2 | 87.6 | 94.5 | 99.7 | 97.9 | 80.8 | 53.2 | 26.3 | 14.3 | 13.6 | 10.5 | 9.46 | 9.19 |  |  |  |  |
| 130                | 117  | 122  | 128  | 135  | 143  | 148  | 150  | 141  | 116  | 83.4 | 60.8 | 50.4 | 43.7 | 37.6 | 33.7 |  |  |  |  |
| 135                | 166  | 171  | 177  | 183  | 191  | 197  | 202  | 203  | 194  | 169  | 151  | 140  | 134  | 134  | 140  |  |  |  |  |
| 140                | 215  | 219  | 225  | 232  | 239  | 247  | 254  | 250  | 242  | 233  | 224  | 218  | 220  | 228  | 241  |  |  |  |  |
| 145                | 263  | 267  | 273  | 280  | 286  | 283  | 280  | 276  | 272  | 268  | 267  | 266  | 268  | 273  | 280  |  |  |  |  |
| 150                | 305  | 304  | 302  | 300  | 299  | 297  | 295  | 294  | 293  | 293  | 293  | 294  | 296  | 300  | 305  |  |  |  |  |
| 155                | 313  | 312  | 311  | 310  | 309  | 309  | 309  | 308  | 309  | 309  | 310  | 312  | 314  | 317  | 321  |  |  |  |  |
| 160                | 320  | 320  | 319  | 319  | 319  | 319  | 319  | 320  | 321  | 322  | 323  | 324  | 326  | 329  | 331  |  |  |  |  |
| 165                | 328  | 327  | 327  | 327  | 327  | 328  | 328  | 329  | 330  | 331  | 332  | 333  | 335  | 337  | 339  |  |  |  |  |
| 170                | 334  | 335  | 335  | 335  | 335  | 335  | 336  | 336  | 337  | 338  | 338  | 339  | 340  | 341  | 343  |  |  |  |  |
| 175                | 341  | 341  | 341  | 342  | 342  | 342  | 342  | 343  | 343  | 343  | 344  | 344  | 345  | 345  | 346  |  |  |  |  |
| 180                | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  | 347  |  |  |  |  |

H(β) Range:-90 - 90DEG  
H(β) Interval: 1.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2020-12-14

V(B) Range:-180 - 180DEG  
V(B) Interval: 5.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.00.426  
Humidity:65.0%  
Test Distance:8.692m [K=1.0000]  
Remarks: