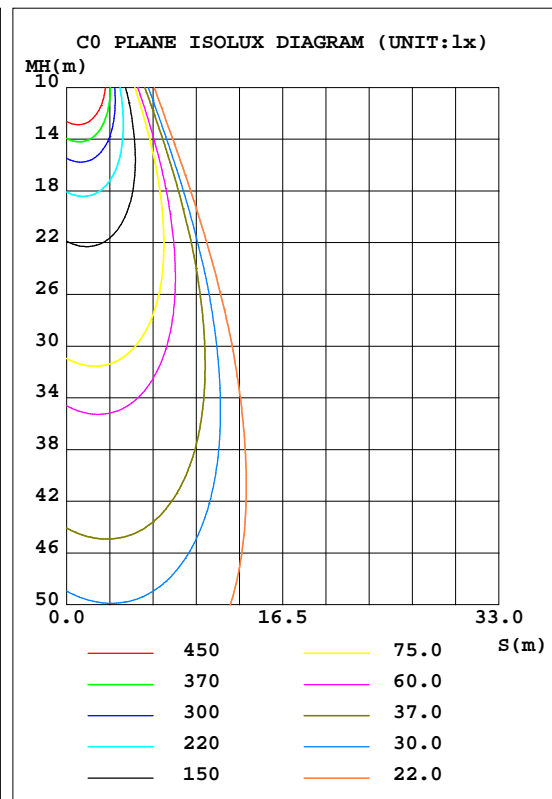
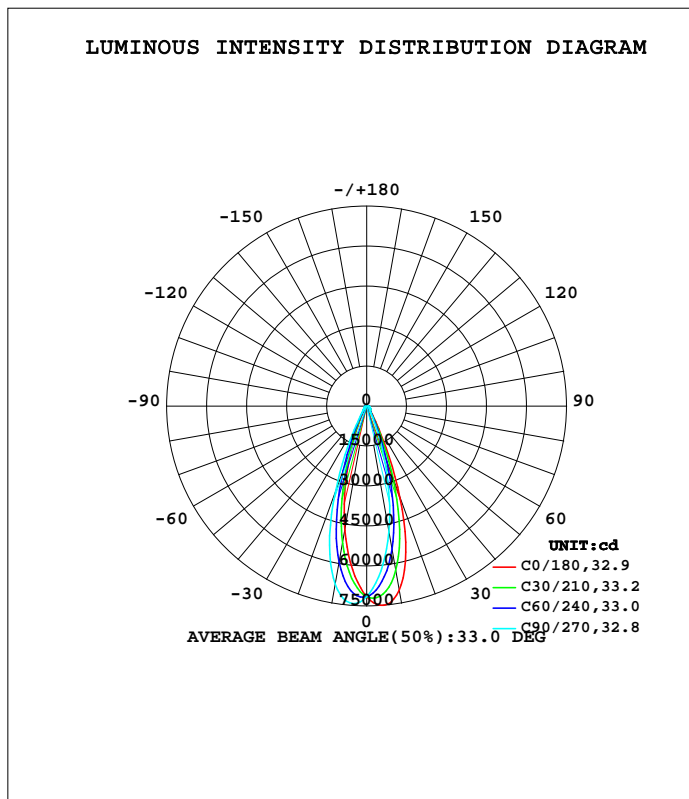


LUMINAIRE PHOTOMETRIC TEST REPORT

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 125.66 lm/W |        |                    |          |
|------------------|---------|-----------------------------------|--------|--------------------|----------|
| MODEL            | LL-240W | I <sub>max</sub> (cd)             | 78180  | S/MH(C0/180)       | 0.45     |
| NOMINAL POWER(W) |         | LOR(%)                            | 100.0  | S/MH(C90/270)      | 0.61     |
| RATED VOLTAGE(V) |         | TOTAL FLUX(lm)                    | 30349  | η UP, DN(C0-180)   | 0.0,44.4 |
| NOMINAL FLUX(lm) | 30349.3 | CIE CLASS                         | DIRECT | η UP, DN(C180-360) | 0.0,55.5 |
| LAMPS INSIDE     | 1       | η up(%)                           | 0.1    | CIBSE SHR NOM      | 0.50     |
| TEST VOLTAGE(V)  |         | η down(%)                         | 99.9   | CIBSE SHR MAX      | 0.55     |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [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       | 7020                               | 5877   | 4814  | 4424   | 4743   | 5553   | 6794   | 7572   | 0- 10    | 6198        | 6198         | 20.4,20.4 |
| 20       | 3684                               | 2580   | 1725  | 1444   | 1649   | 2237   | 3472   | 4387   | 10- 20   | 11752       | 17950        | 59.1,59.1 |
| 30       | 672.3                              | 512.1  | 379.3 | 317.5  | 342.4  | 425.2  | 693.3  | 894.9  | 20- 30   | 6054        | 24004        | 79.1,79.1 |
| 40       | 215.8                              | 200.2  | 194.7 | 176.9  | 180.1  | 188.0  | 225.6  | 238.1  | 30- 40   | 1920        | 25924        | 85.4,85.4 |
| 50       | 139.4                              | 138.1  | 145.1 | 137.3  | 137.5  | 137.3  | 149.0  | 145.1  | 40- 50   | 1270        | 27194        | 89.6,89.6 |
| 60       | 107.1                              | 110.0  | 120.5 | 112.3  | 111.8  | 106.2  | 111.5  | 106.7  | 50- 60   | 1106        | 28300        | 93.2,93.2 |
| 70       | 85.05                              | 87.18  | 91.65 | 90.11  | 87.53  | 82.31  | 81.86  | 81.60  | 60- 70   | 973.5       | 29274        | 96.5,96.5 |
| 80       | 50.59                              | 50.86  | 44.27 | 53.83  | 59.38  | 48.24  | 39.64  | 46.67  | 70- 80   | 719.8       | 29994        | 98.8,98.8 |
| 90       | 7.798                              | 7.803  | 1.765 | 5.893  | 10.96  | 5.030  | 1.465  | 6.993  | 80- 90   | 339.5       | 30333        | 99.9,99.9 |
| 100      | 0.3603                             | 0.4173 | 1.262 | 0.4950 | 0.2688 | 0.3335 | 0.8110 | 0.3501 | 90-100   | 15.95       | 30349        | 100,100   |
| 110      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 100-110  | 0.2683      | 30349        | 100,100   |
| 120      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 110-120  | 0           | 30349        | 100,100   |
| 130      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 120-130  | 0           | 30349        | 100,100   |
| 140      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 130-140  | 0           | 30349        | 100,100   |
| 150      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 140-150  | 0           | 30349        | 100,100   |
| 160      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 150-160  | 0           | 30349        | 100,100   |
| 170      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 160-170  | 0           | 30349        | 100,100   |
| 180      | 0                                  | 0      | 0     | 0      | 0      | 0      | 0      | 0      | 170-180  | 0           | 30349        | 100,100   |
| DEG      | LUMINOUS INTENSITY: $\times 10$ cd |        |       |        |        |        |        |        | UNIT:lm  |             |              |           |

Conical surface Flux(90deg): 26588 lm

%lum = 87.6%  
%lamp = 87.6%

Conical surface Flux(120deg): 28300 lm

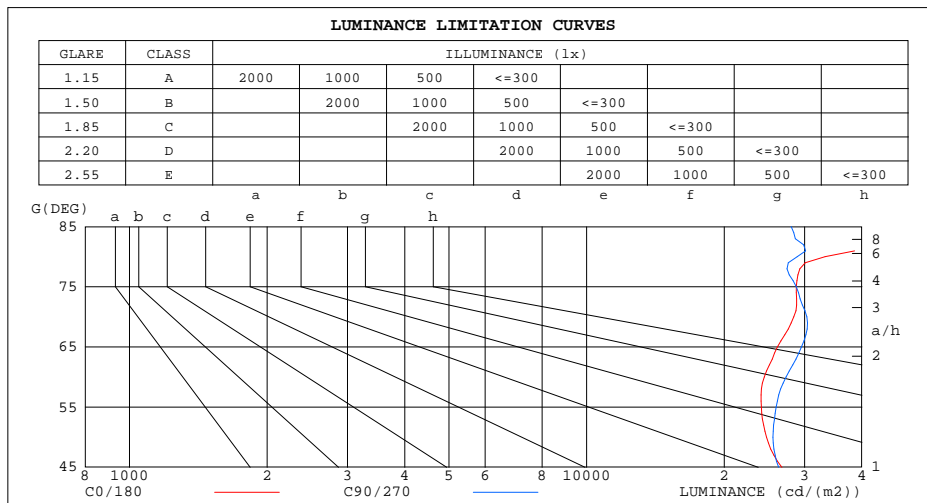
%lum = 93.2%  
%lamp = 93.2%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:22DEG  
Operators:NEIKO  
Test Date:2017-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:55%  
Test Distance:12.218m [K=1.0000]  
Remarks:

LUMINANCE LIMITATION CURVES

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 43089  | 28053   |
| 80                | 33259  | 28882   |
| 75                | 28768  | 28761   |
| 70                | 28389  | 30359   |
| 65                | 26156  | 29530   |
| 60                | 24461  | 27307   |
| 55                | 24109  | 26005   |
| 50                | 24755  | 25579   |
| 45                | 26766  | 26327   |

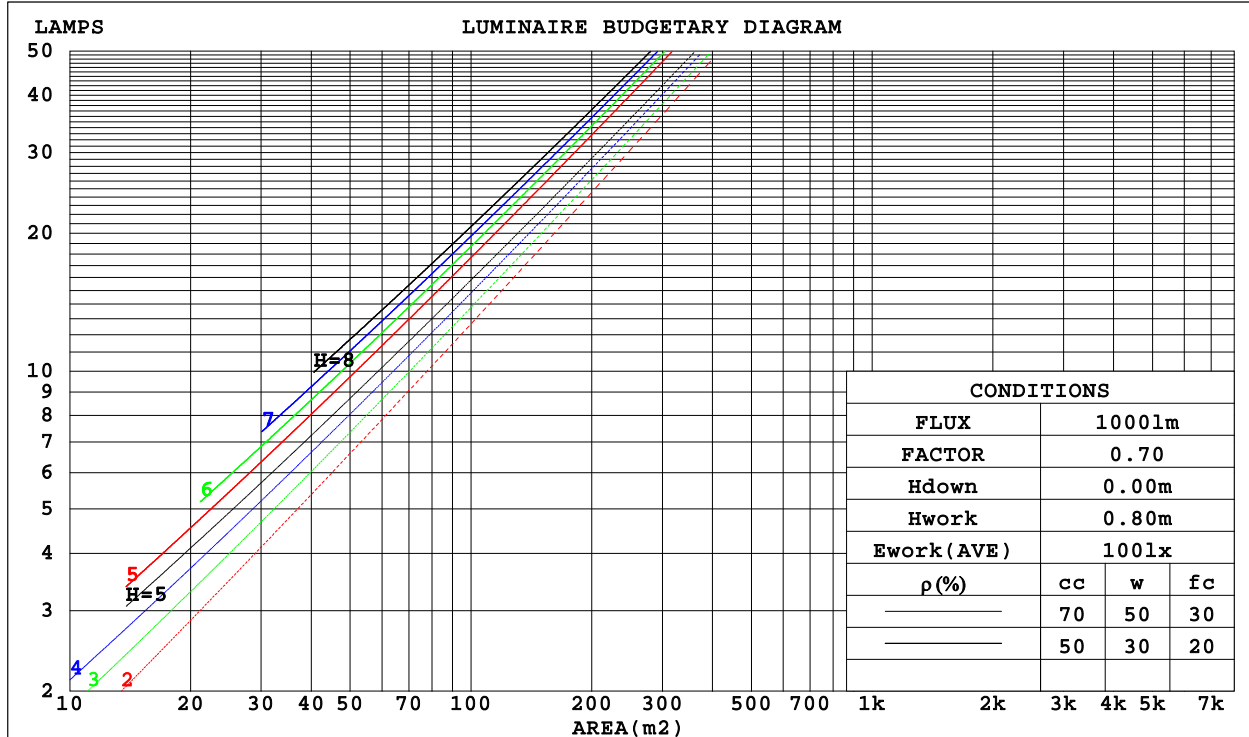
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 22DEG  
 Operators: NEIKO  
 Test Date: 2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity: 55%  
 Test Distance: 12.218m [K=1.0000]  
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

|             |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |     |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_{cc}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
| $\rho_w$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$ | 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         | 1.10                  | 1.07 | 1.05 | 1.08 | 1.05 | 1.03 | 1.04                            | 1.02 | .00  | .00  | .98  | .97  | .96  | .95  | .94  | .92 |
| 2.0         | 1.02                  | .98  | .95  | 1.01 | .97  | .94  | .97                             | .94  | .91  | .94  | .92  | .90  | .92  | .89  | .88  | .86 |
| 3.0         | .96                   | .91  | .87  | .95  | .90  | .86  | .92                             | .88  | .85  | .89  | .86  | .84  | .87  | .85  | .82  | .81 |
| 4.0         | .90                   | .85  | .81  | .89  | .84  | .80  | .87                             | .83  | .79  | .85  | .81  | .79  | .83  | .80  | .78  | .76 |
| 5.0         | .86                   | .80  | .76  | .85  | .80  | .76  | .83                             | .78  | .75  | .81  | .77  | .74  | .80  | .76  | .74  | .72 |
| 6.0         | .81                   | .76  | .72  | .81  | .75  | .72  | .79                             | .75  | .71  | .78  | .74  | .71  | .77  | .73  | .70  | .69 |
| 7.0         | .78                   | .72  | .68  | .77  | .72  | .68  | .76                             | .71  | .68  | .75  | .70  | .67  | .74  | .70  | .67  | .66 |
| 8.0         | .74                   | .69  | .65  | .74  | .69  | .65  | .73                             | .68  | .65  | .72  | .68  | .64  | .71  | .67  | .64  | .63 |
| 9.0         | .71                   | .66  | .62  | .71  | .66  | .62  | .70                             | .65  | .62  | .69  | .65  | .62  | .68  | .64  | .62  | .60 |
| 10.0        | .69                   | .63  | .60  | .68  | .63  | .60  | .67                             | .63  | .60  | .67  | .62  | .59  | .66  | .62  | .59  | .58 |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

WEC AND CCEC

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | 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  | .193                  | .110 | .035 | .187 | .106 | .034 | .174                            | .100 | .032 | .162 | .094 | .030 | .151 | .088 | .028 |   |
| 2.0  | .178                  | .097 | .030 | .172 | .095 | .029 | .161                            | .090 | .028 | .151 | .085 | .027 | .142 | .080 | .025 |   |
| 3.0  | .164                  | .087 | .026 | .159 | .085 | .026 | .150                            | .081 | .025 | .142 | .078 | .024 | .134 | .074 | .023 |   |
| 4.0  | .152                  | .079 | .023 | .148 | .077 | .023 | .140                            | .074 | .022 | .133 | .071 | .022 | .126 | .069 | .021 |   |
| 5.0  | .142                  | .072 | .021 | .138 | .071 | .021 | .132                            | .069 | .020 | .125 | .066 | .020 | .119 | .064 | .019 |   |
| 6.0  | .133                  | .067 | .019 | .130 | .066 | .019 | .124                            | .064 | .019 | .119 | .062 | .018 | .114 | .060 | .018 |   |
| 7.0  | .125                  | .062 | .018 | .123 | .061 | .017 | .118                            | .059 | .017 | .113 | .058 | .017 | .108 | .056 | .017 |   |
| 8.0  | .119                  | .058 | .016 | .116 | .057 | .016 | .112                            | .056 | .016 | .107 | .054 | .016 | .103 | .053 | .015 |   |
| 9.0  | .113                  | .055 | .015 | .111 | .054 | .015 | .106                            | .053 | .015 | .103 | .051 | .015 | .099 | .050 | .015 |   |
| 10.0 | .107                  | .051 | .014 | .105 | .051 | .014 | .102                            | .050 | .014 | .098 | .049 | .014 | .095 | .048 | .014 |   |

| pcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| pw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| pfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .191                  | .191 | .191 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .173                  | .158 | .144 | .148 | .135 | .124 | .101                                       | .093 | .086 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .157                  | .133 | .112 | .135 | .114 | .097 | .092                                       | .079 | .068 | .053 | .046 | .040 | .017 | .015 | .013 |   |
| 3.0  | .144                  | .114 | .090 | .124 | .098 | .078 | .085                                       | .068 | .055 | .049 | .040 | .032 | .016 | .013 | .011 |   |
| 4.0  | .133                  | .099 | .073 | .114 | .086 | .064 | .079                                       | .060 | .045 | .046 | .035 | .026 | .015 | .011 | .009 |   |
| 5.0  | .124                  | .087 | .061 | .106 | .076 | .053 | .073                                       | .053 | .037 | .042 | .031 | .022 | .014 | .010 | .007 |   |
| 6.0  | .115                  | .078 | .051 | .099 | .068 | .045 | .068                                       | .047 | .032 | .040 | .028 | .019 | .013 | .009 | .006 |   |
| 7.0  | .108                  | .070 | .044 | .093 | .061 | .038 | .064                                       | .043 | .027 | .037 | .025 | .016 | .012 | .008 | .005 |   |
| 8.0  | .102                  | .064 | .038 | .088 | .055 | .033 | .061                                       | .039 | .023 | .035 | .023 | .014 | .011 | .008 | .005 |   |
| 9.0  | .096                  | .058 | .033 | .083 | .051 | .029 | .057                                       | .036 | .020 | .033 | .021 | .012 | .011 | .007 | .004 |   |
| 10.0 | .091                  | .054 | .029 | .079 | .047 | .025 | .054                                       | .033 | .018 | .032 | .019 | .011 | .010 | .006 | .004 |   |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

## UGR(Unified Glare Rating) Table

| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |        |                  |      |      |      |                           |                |      |      |      |      |      |
|--|--------|------------------|------|------|------|---------------------------|----------------|------|------|------|------|------|
| NAME:  |        | TYPE:            |      |      |      | WEIGHT:                   |                |      |      |      |      |      |
| SPEC.:   |        | DIM.:            |      |      |      | SERIAL No.:BLD20170317N21 |                |      |      |      |      |      |
| MFR.:  |        | SUR.:0.08*0.22*5 |      |      |      | 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 | 19.4             | 20.2 | 19.6 | 20.4 | 20.6                      | 19.5           | 20.4 | 19.7 | 20.5 | 20.7 |      |
|  | 3H     | 21.4             | 22.2 | 21.6 | 22.4 | 22.6                      | 21.7           | 22.5 | 22.0 | 22.7 | 22.9 |      |
|  | 4H     | 22.4             | 23.2 | 22.7 | 23.4 | 23.6                      | 22.6           | 23.4 | 22.9 | 23.7 | 23.9 |      |
|  | 6H     | 23.3             | 24.0 | 23.6 | 24.3 | 24.5                      | 23.4           | 24.1 | 23.7 | 24.4 | 24.6 |      |
|  | 8H     | 23.9             | 24.6 | 24.2 | 24.8 | 25.1                      | 23.7           | 24.4 | 24.0 | 24.7 | 24.9 |      |
|  | 12H    | 24.3             | 25.0 | 24.6 | 25.3 | 25.5                      | 23.9           | 24.6 | 24.2 | 24.9 | 25.1 |      |
|  | 4H     | 2H               | 20.1 | 20.9 | 20.4 | 21.2                      | 21.4           | 20.2 | 21.0 | 20.5 | 21.3 | 21.5 |
|  |        | 3H               | 22.4 | 23.1 | 22.7 | 23.4                      | 23.7           | 22.7 | 23.4 | 23.0 | 23.6 | 23.9 |
|  |        | 4H               | 23.6 | 24.2 | 23.9 | 24.5                      | 24.8           | 23.8 | 24.4 | 24.1 | 24.7 | 25.0 |
|  |        | 6H               | 24.6 | 25.2 | 25.0 | 25.6                      | 25.9           | 24.7 | 25.3 | 25.1 | 25.6 | 26.0 |
|  |        | 8H               | 25.3 | 25.9 | 25.7 | 26.2                      | 26.6           | 25.1 | 25.7 | 25.5 | 26.0 | 26.4 |
|  |        | 12H              | 25.9 | 26.3 | 26.3 | 26.7                      | 27.1           | 25.4 | 25.9 | 25.8 | 26.3 | 26.6 |
|  | 8H     | 4H               | 24.1 | 24.6 | 24.5 | 25.0                      | 25.3           | 24.3 | 24.8 | 24.6 | 25.1 | 25.5 |
|  |        | 6H               | 25.4 | 25.8 | 25.8 | 26.2                      | 26.7           | 25.4 | 25.9 | 25.9 | 26.3 | 26.7 |
|  |        | 8H               | 26.3 | 26.7 | 26.7 | 27.1                      | 27.5           | 26.0 | 26.4 | 26.5 | 26.8 | 27.3 |
|  |        | 12H              | 27.0 | 27.3 | 27.4 | 27.8                      | 28.2           | 26.4 | 26.8 | 26.9 | 27.2 | 27.7 |
|  | 12H    | 4H               | 24.1 | 24.6 | 24.6 | 25.0                      | 25.4           | 24.3 | 24.8 | 24.7 | 25.2 | 25.6 |
|  |        | 6H               | 25.6 | 26.0 | 26.0 | 26.4                      | 26.8           | 25.6 | 26.0 | 26.0 | 26.4 | 26.9 |
|  |        | 8H               | 26.5 | 26.9 | 27.0 | 27.3                      | 27.8           | 26.3 | 26.6 | 26.7 | 27.1 | 27.5 |
| Variations with the observer position at spacings:               |        |                  |      |      |      |                           |                |      |      |      |      |      |
| S = 1.0H   |        | + 0.1 / - 0.2    |      |      |      | + 0.1 / - 0.1             |                |      |      |      |      |      |
| 1.5H   |        | + 0.2 / - 0.1    |      |      |      | + 0.1 / - 0.2             |                |      |      |      |      |      |
| 2.0H   |        | + 0.2 / - 0.2    |      |      |      | + 0.2 / - 0.3             |                |      |      |      |      |      |

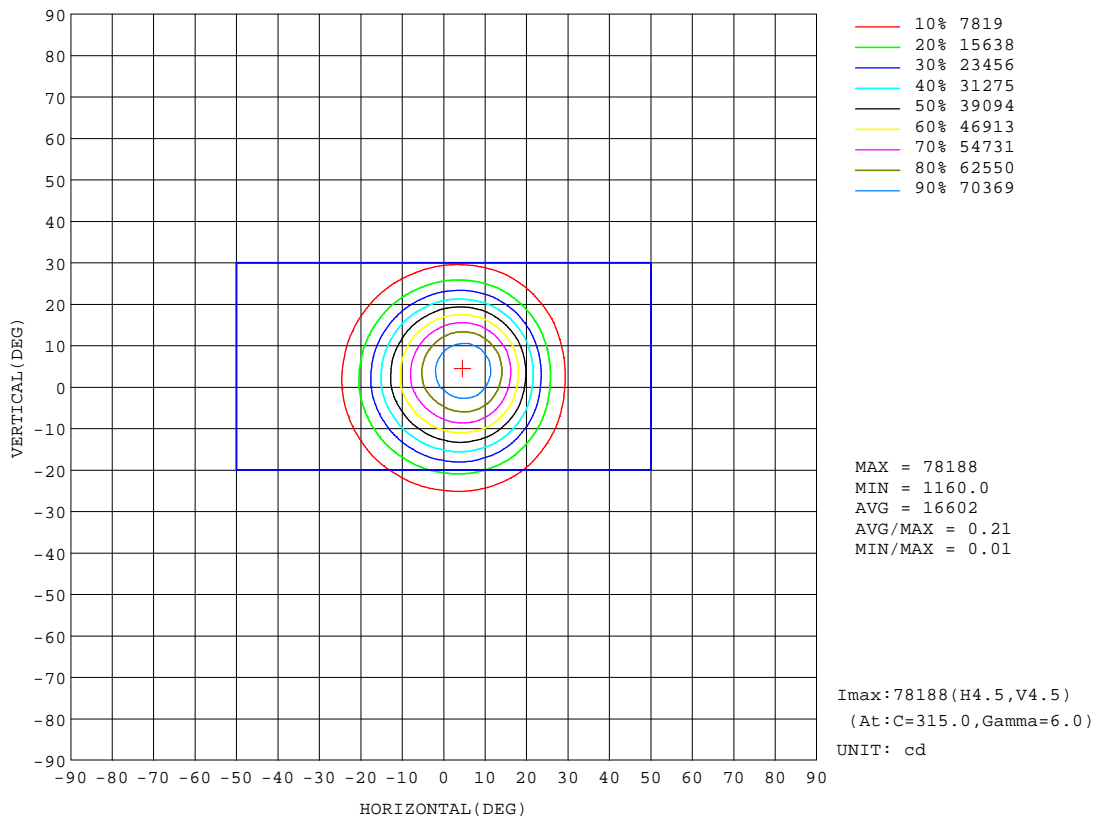
CIE Pub.117 Corrected 30349 lm Total Lamp Luminous Flux.(8log(F/F0) = 11.9)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:22DEG  
Operators:NEIKO  
Test Date:2017-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
Humidity:55%  
Test Distance:12.218m [K=1.0000]  
Remarks:

ISOCANDELA DIAGRAM

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |



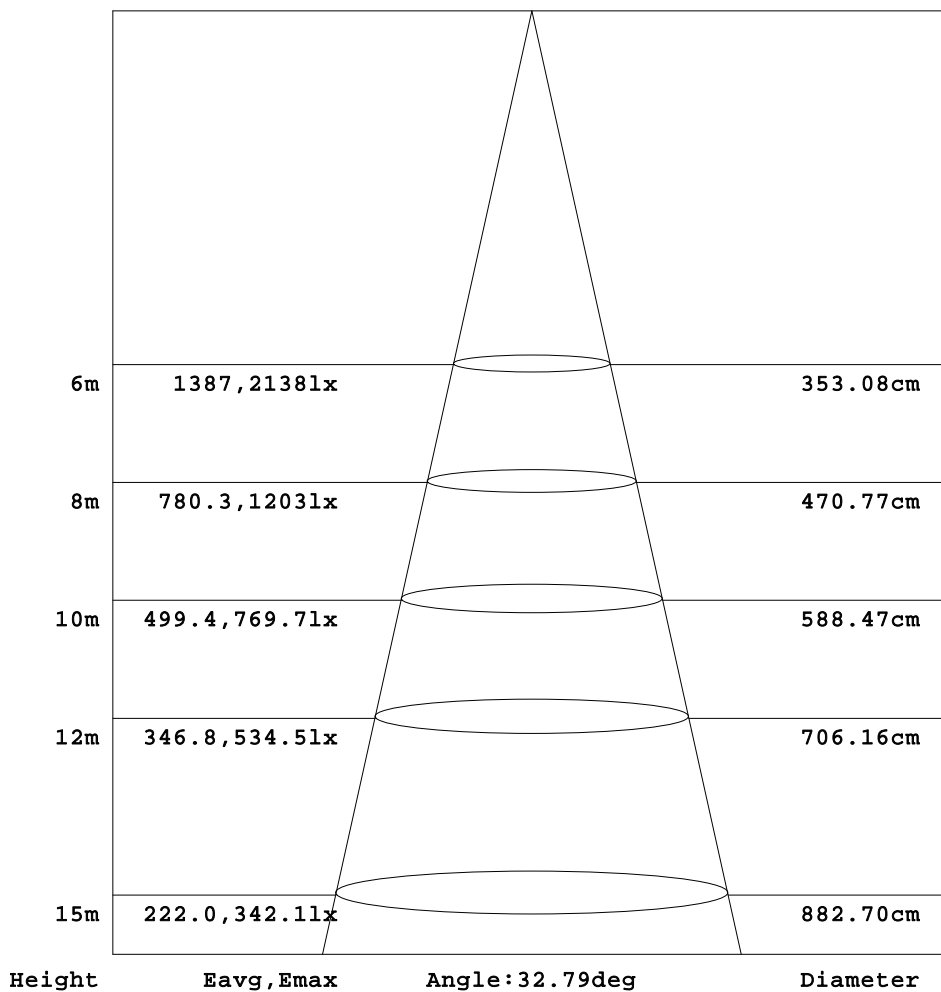
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

AAI Figure

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

Flux out:14665 lm



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

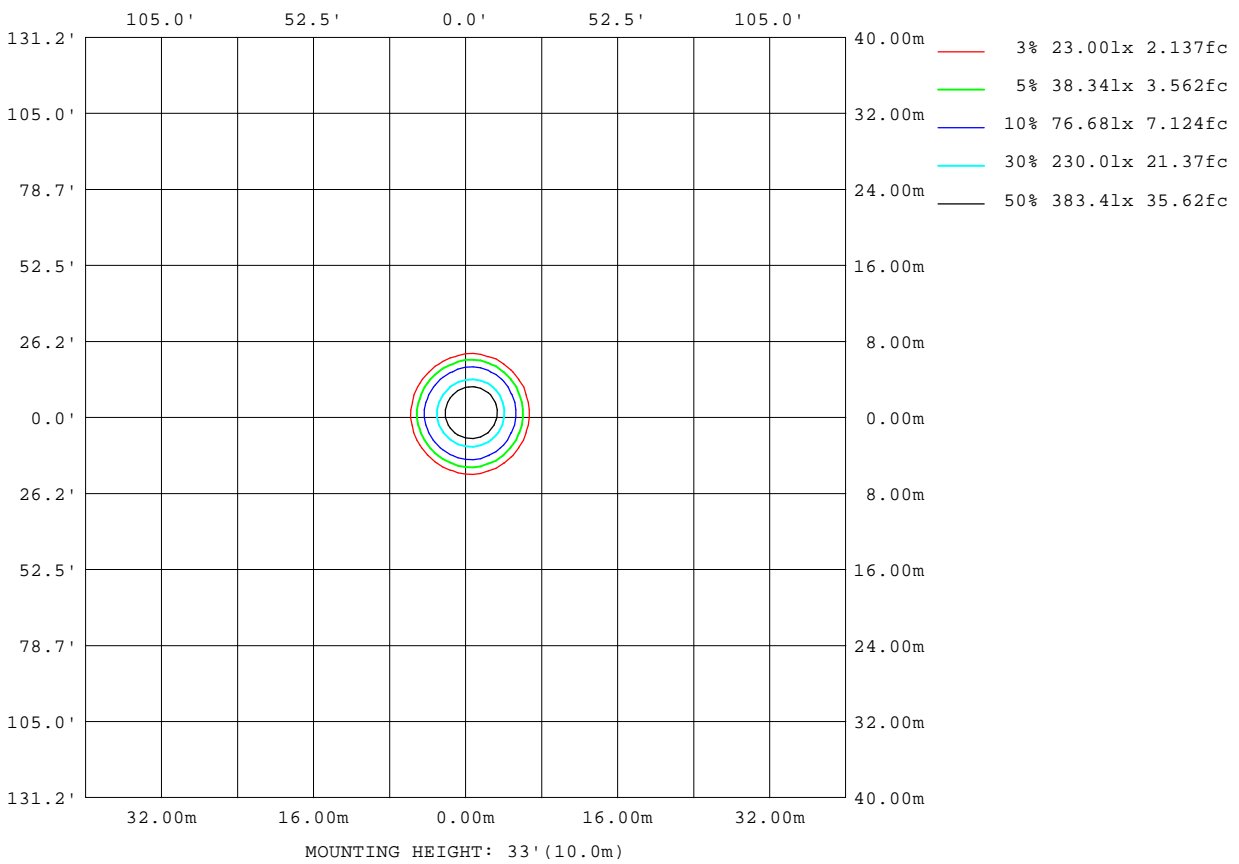
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:



ISOLUX DIAGRAM

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 22DEG  
 Operators: NEIKO  
 Test Date: 2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity: 55%  
 Test Distance: 12.218m [K=1.0000]  
 Remarks:

## LED Avg.L Report

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

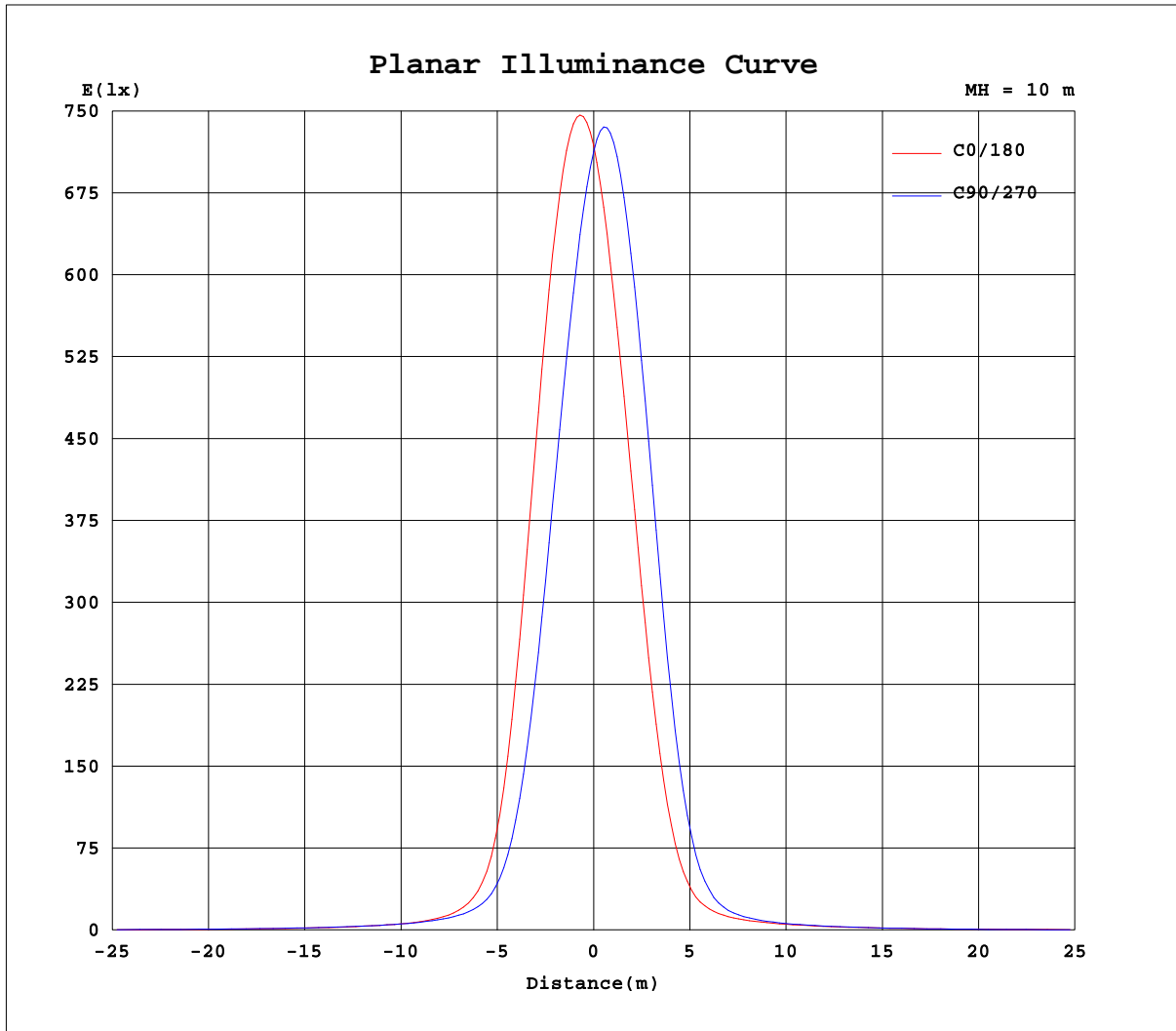
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 26767 |
| L_0~180(75)av  | 28296 |
| L_0~180(85)av  | 41459 |
| L_90~270(65)av | 28065 |
| L_90~270(75)av | 27633 |
| L_90~270(85)av | 27269 |
| L_45(65)av     | 26304 |
| L_45(75)av     | 30762 |
| L_45(85)av     | 43818 |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 22DEG  
 Operators: NEIKO  
 Test Date: 2017-03-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity: 55%  
 Test Distance: 12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

Table--1

UNIT: x10cd

| C(DEG)<br>γ (DEG) | 0    | 15   | 30   | 45   | 60   | 75   | 90   | 105  | 120  | 135  | 150  | 165  | 180  | 195  | 210  | 225  | 240  | 255  | 270  |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 0                 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 | 7152 |
| 5                 | 7496 | 7313 | 7082 | 6849 | 6607 | 6395 | 6202 | 6060 | 5962 | 5929 | 5945 | 6023 | 6150 | 6289 | 6486 | 6699 | 6941 | 7174 | 7407 |
| 10                | 7020 | 6691 | 6283 | 5877 | 5466 | 5134 | 4814 | 4618 | 4454 | 4424 | 4427 | 4561 | 4743 | 4938 | 5233 | 5553 | 5958 | 6365 | 6794 |
| 15                | 5677 | 5266 | 4785 | 4336 | 3863 | 3510 | 3191 | 2992 | 2837 | 2805 | 2814 | 2933 | 3111 | 3296 | 3601 | 3935 | 4403 | 4865 | 5395 |
| 20                | 3684 | 3349 | 2934 | 2580 | 2220 | 1959 | 1725 | 1585 | 1470 | 1444 | 1445 | 1528 | 1649 | 1775 | 1991 | 2237 | 2604 | 2990 | 3472 |
| 25                | 1741 | 1569 | 1357 | 1192 | 1015 | 887  | 772  | 701  | 641  | 634  | 620  | 658  | 715  | 771  | 874  | 996  | 1199 | 1424 | 1722 |
| 30                | 672  | 635  | 560  | 512  | 460  | 418  | 379  | 351  | 328  | 318  | 315  | 325  | 342  | 360  | 388  | 425  | 490  | 573  | 693  |
| 35                | 333  | 318  | 301  | 287  | 273  | 261  | 250  | 236  | 224  | 219  | 216  | 219  | 226  | 231  | 239  | 252  | 270  | 297  | 333  |
| 40                | 216  | 209  | 203  | 200  | 196  | 195  | 195  | 186  | 180  | 177  | 174  | 175  | 180  | 180  | 183  | 188  | 196  | 208  | 226  |
| 45                | 166  | 162  | 160  | 160  | 158  | 160  | 164  | 158  | 154  | 153  | 151  | 151  | 155  | 153  | 154  | 157  | 160  | 166  | 177  |
| 50                | 139  | 137  | 137  | 138  | 138  | 140  | 145  | 140  | 138  | 137  | 135  | 135  | 138  | 135  | 135  | 137  | 139  | 142  | 149  |
| 55                | 121  | 120  | 121  | 123  | 124  | 126  | 132  | 127  | 124  | 124  | 122  | 121  | 124  | 120  | 119  | 121  | 122  | 123  | 128  |
| 60                | 107  | 106  | 107  | 110  | 111  | 115  | 121  | 116  | 113  | 112  | 110  | 110  | 112  | 108  | 106  | 106  | 106  | 108  | 111  |
| 65                | 96.8 | 96.0 | 96.8 | 99.3 | 101  | 105  | 110  | 106  | 103  | 103  | 101  | 100  | 102  | 97.6 | 95.1 | 95.1 | 94.5 | 95.3 | 98.6 |
| 70                | 85.0 | 84.9 | 84.9 | 87.2 | 88.3 | 90.5 | 91.6 | 91.7 | 90.4 | 90.1 | 88.3 | 87.8 | 87.5 | 84.8 | 82.6 | 82.3 | 81.5 | 81.2 | 81.9 |
| 75                | 65.2 | 69.4 | 71.0 | 73.0 | 73.3 | 70.7 | 65.7 | 72.2 | 74.5 | 74.0 | 72.2 | 69.3 | 63.7 | 65.8 | 67.0 | 66.2 | 66.3 | 63.8 | 60.2 |
| 80                | 50.6 | 53.3 | 53.9 | 50.9 | 55.1 | 50.0 | 44.3 | 52.2 | 55.8 | 53.8 | 64.3 | 64.2 | 59.4 | 59.3 | 58.7 | 48.2 | 49.6 | 45.3 | 39.6 |
| 85                | 32.9 | 37.3 | 39.6 | 37.1 | 35.6 | 28.5 | 21.6 | 30.4 | 33.1 | 33.3 | 38.0 | 35.8 | 30.7 | 32.7 | 35.2 | 29.6 | 29.4 | 25.7 | 20.2 |
| 90                | 7.80 | 10.2 | 9.98 | 7.80 | 7.49 | 4.99 | 1.76 | 3.79 | 5.47 | 5.89 | 8.18 | 8.59 | 11.0 | 7.98 | 7.45 | 5.03 | 4.89 | 3.19 | 1.46 |
| 95                | 0.33 | 0.33 | 0.40 | 0.71 | 0.96 | 1.13 | 1.39 | 1.17 | 0.96 | 0.68 | 0.39 | 0.35 | 0.29 | 0.27 | 0.29 | 0.53 | 0.71 | 0.90 | 1.06 |
| 100               | 0.36 | 0.36 | 0.36 | 0.42 | 0.59 | 0.77 | 1.26 | 0.85 | 0.70 | 0.50 | 0.42 | 0.38 | 0.27 | 0.27 | 0.29 | 0.33 | 0.44 | 0.58 | 0.81 |
| 105               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 110               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 115               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 120               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 125               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 130               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 135               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 140               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 145               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 150               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 155               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 160               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 165               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 170               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 175               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 180               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

|  |                  |                           |
|--|------------------|---------------------------|
| Test:U:219.9V I:1.121A P:241.5W PF:0.9799 Lamp Flux:30349.3x1 lm |                  |                           |
| NAME:  | TYPE:            | WEIGHT:                   |
| SPEC.:   | DIM.:            | SERIAL No.:BLD20170317N21 |
| MFR.:  | SUR.:0.08*0.22*5 | Shielding Angle:          |

Table--2

UNIT: x10cd

| C(DEG)<br>γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 7152 | 7152 | 7152 | 7152 | 7152 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 7593 | 7728 | 7784 | 7773 | 7669 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 7154 | 7442 | 7572 | 7552 | 7345 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 5860 | 6241 | 6402 | 6374 | 6099 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 3880 | 4253 | 4387 | 4380 | 4085 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 1979 | 2217 | 2282 | 2215 | 1990 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 795  | 892  | 895  | 853  | 757  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 362  | 389  | 390  | 379  | 356  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 233  | 240  | 238  | 233  | 223  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 177  | 178  | 176  | 173  | 167  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 146  | 146  | 145  | 142  | 139  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 125  | 124  | 124  | 122  | 120  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 108  | 107  | 107  | 105  | 105  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 95.9 | 94.5 | 94.4 | 93.7 | 93.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 81.5 | 81.5 | 81.6 | 81.3 | 82.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 63.1 | 66.6 | 67.1 | 67.3 | 66.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 44.4 | 50.1 | 46.7 | 50.6 | 51.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 25.9 | 32.2 | 34.4 | 36.7 | 35.3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 3.92 | 6.98 | 6.99 | 9.38 | 9.43 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 0.93 | 0.78 | 0.61 | 0.41 | 0.25 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 0.61 | 0.47 | 0.35 | 0.29 | 0.27 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:22DEG  
 Operators:NEIKO  
 Test Date:2017-03-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.350  
 Humidity:55%  
 Test Distance:12.218m [K=1.0000]  
 Remarks: