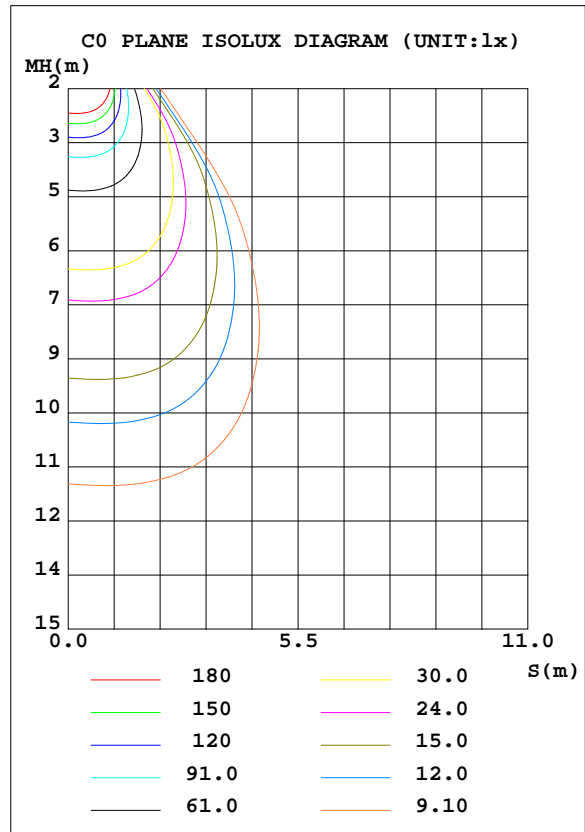
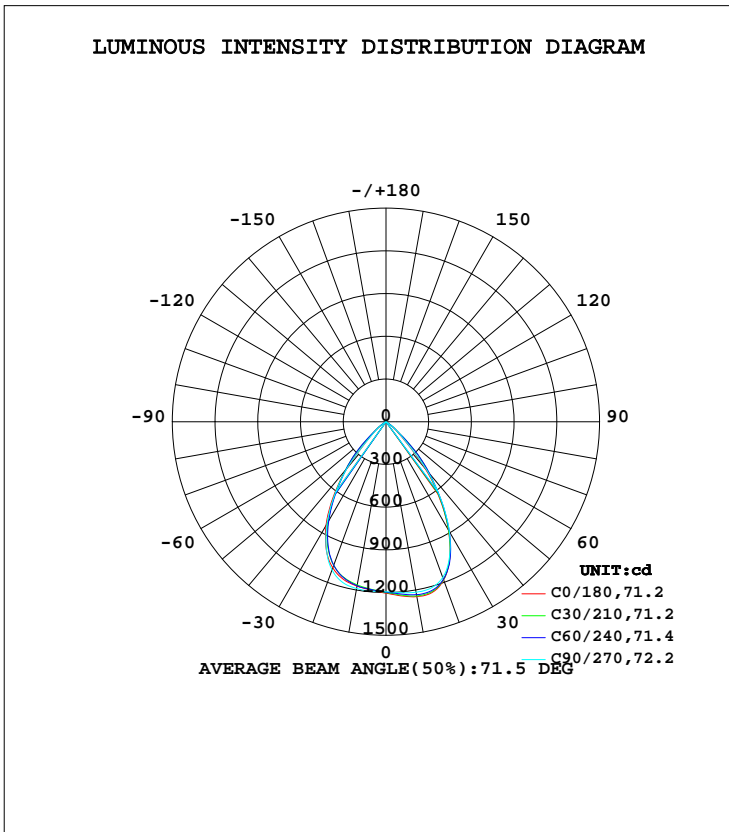


**LUMINAIRE PHOTOMETRIC TEST REPORT**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

| DATA OF LAMP     |               | PHOTOMETRIC DATA Eff: 89.89 lm/W |        |                    |          |
|------------------|---------------|----------------------------------|--------|--------------------|----------|
| MODEL            | CITIZEN-3000K | I <sub>max</sub> (cd)            | 1250   | S/MH(C0/180)       | 1.05     |
| NOMINAL POWER(W) | 18            | LOR(%)                           | 100.0  | S/MH(C90/270)      | 1.05     |
| RATED VOLTAGE(V) | 36.0          | TOTAL FLUX(lm)                   | 1555.0 | η UP, DN(C0-180)   | 0.0,51.0 |
| NOMINAL FLUX(lm) | 1555.04       | CIE CLASS                        | DIRECT | η UP, DN(C180-360) | 0.0,49.0 |
| LAMPS INSIDE     | 1             | η up(%)                          | 0.0    | CIBSE SHR NOM      | 1.00     |
| TEST VOLTAGE(V)  | 34.6          | η down(%)                        | 100.0  | CIBSE SHR MAX      | 1.10     |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [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       | 1247                  | 1239   | 1216   | 1189   | 1172   | 1165   | 1190   | 1228   | 0- 10    | 114.7       | 114.7        | 7.38,7.38  |
| 20       | 1183                  | 1181   | 1164   | 1128   | 1092   | 1068   | 1108   | 1164   | 10- 20   | 334.5       | 449.3        | 28.9,28.9  |
| 30       | 878.5                 | 886.9  | 890.3  | 851.8  | 843.1  | 800.3  | 829.9  | 846.2  | 20- 30   | 464.1       | 913.3        | 58.7,58.7  |
| 40       | 428.6                 | 471.5  | 451.1  | 460.3  | 424.5  | 431.0  | 423.5  | 441.4  | 30- 40   | 403.3       | 1317         | 84.7,84.7  |
| 50       | 86.94                 | 193.9  | 97.14  | 189.0  | 95.83  | 174.9  | 92.23  | 184.0  | 40- 50   | 195.5       | 1512         | 97.2,97.2  |
| 60       | 5.650                 | 14.29  | 6.175  | 14.61  | 6.048  | 13.87  | 6.401  | 13.49  | 50- 60   | 39.45       | 1552         | 99.8,99.8  |
| 70       | 0.8887                | 0.8739 | 0.7727 | 1.070  | 0.9763 | 1.053  | 0.7731 | 0.8295 | 60- 70   | 2.659       | 1554         | 100,100    |
| 80       | 0.2868                | 0.2752 | 0.2540 | 0.3472 | 0.3188 | 0.3590 | 0.2271 | 0.2605 | 70- 80   | 0.6066      | 1555         | 100,100    |
| 90       | 0.0896                | 0.0831 | 0.0831 | 0.0809 | 0.0459 | 0.0437 | 0.0459 | 0.0415 | 80- 90   | 0.1596      | 1555         | 100,100    |
| 100      |                       |        |        |        |        |        |        |        | 90-100   |             |              |            |
| 110      |                       |        |        |        |        |        |        |        | 100-110  |             |              |            |
| 120      |                       |        |        |        |        |        |        |        | 110-120  |             |              |            |
| 130      |                       |        |        |        |        |        |        |        | 120-130  |             |              |            |
| 140      |                       |        |        |        |        |        |        |        | 130-140  |             |              |            |
| 150      |                       |        |        |        |        |        |        |        | 140-150  |             |              |            |
| 160      |                       |        |        |        |        |        |        |        | 150-160  |             |              |            |
| 170      |                       |        |        |        |        |        |        |        | 160-170  |             |              |            |
| 180      |                       |        |        |        |        |        |        |        | 170-180  |             |              |            |
| DEG      | LUMINOUS INTENSITY:cd |        |        |        |        |        |        |        |          | UNIT:lm     |              |            |

Conical surface Flux(90deg): 1443.1 lm

%lum = 92.8%  
%lamp = 92.8%

Conical surface Flux(120deg): 1551.6 lm

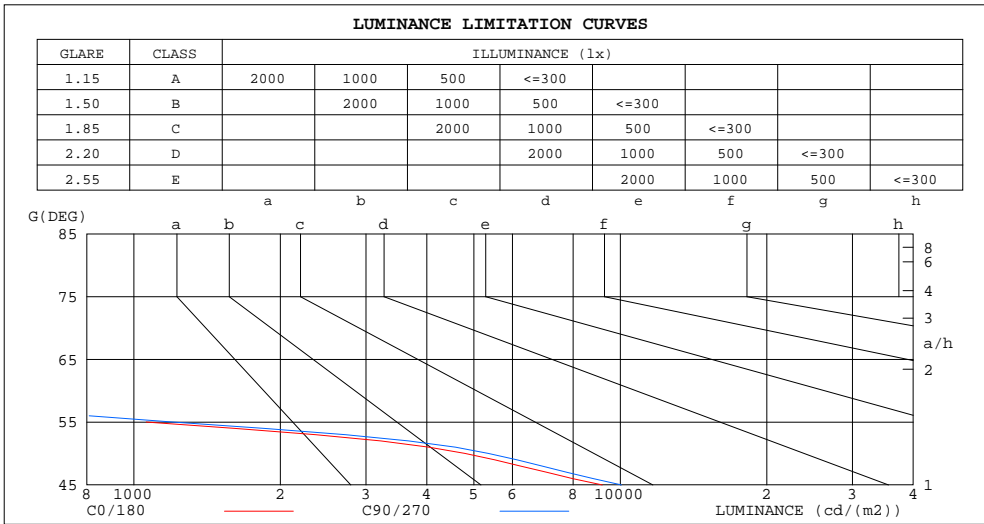
%lum = 99.8%  
%lamp = 99.8%

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Myles  
Test Date:2018-10-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**LUMINANCE LIMITATION CURVES**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 62     | 52      |
| 80                | 59     | 52      |
| 75                | 72     | 62      |
| 70                | 92     | 80      |
| 65                | 126    | 113     |
| 60                | 400    | 438     |
| 55                | 1060   | 1202    |
| 50                | 4792   | 5354    |
| 45                | 9177   | 10056   |

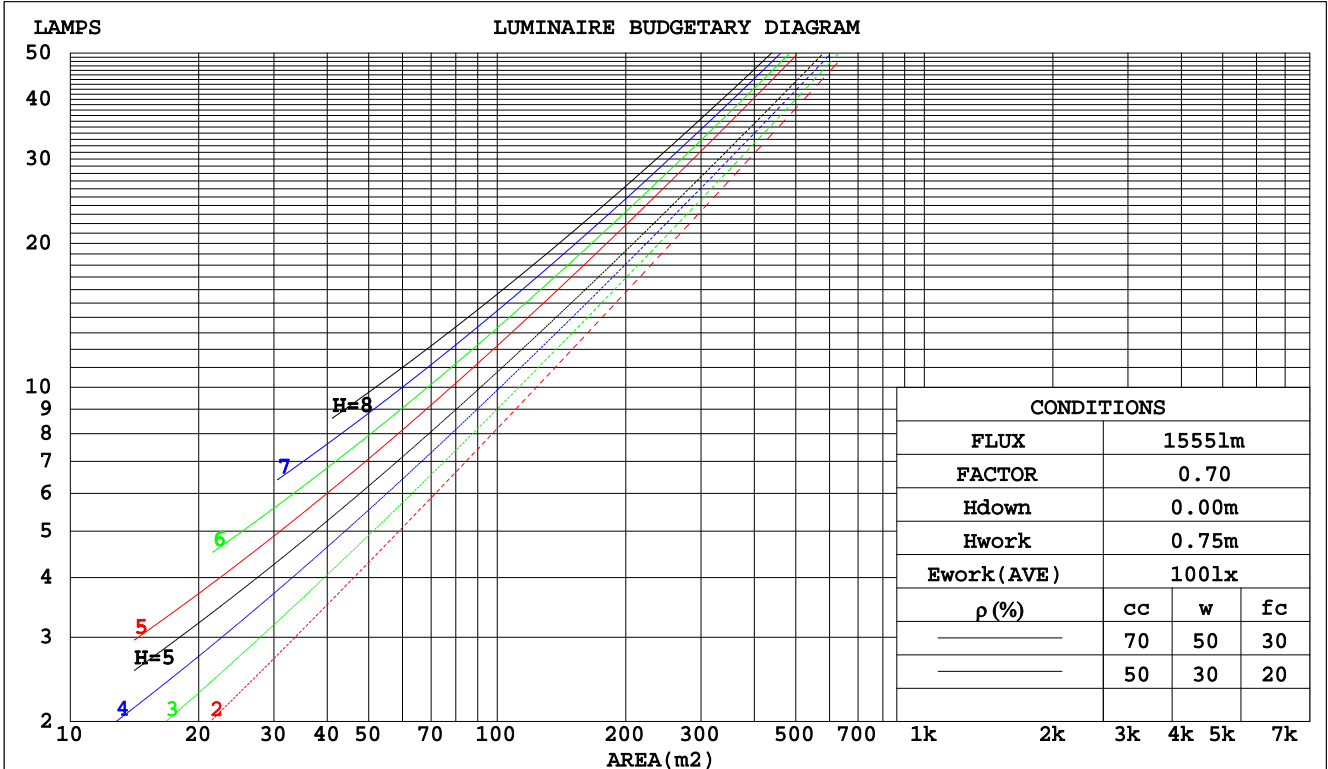
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

| pcc  | 80%                             |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0    |
|------|---------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|      | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0    |
| pw   |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 0    |
| pfc  |                                 |      |      |      |      |      |      |      |      |      |      |      |      |      |      | 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 | 1.00 |
| 1.0  | 1.10                            | 1.07 | 1.05 | 1.08 | 1.06 | 1.03 | 1.04 | 1.02 | 1.00 | 1.00 | .99  | .97  | .97  | .95  | .94  | .93  |
| 2.0  | 1.02                            | .97  | .94  | .90  | .96  | .92  | .97  | .93  | .90  | .94  | .91  | .88  | .91  | .89  | .87  | .85  |
| 3.0  | .94                             | .88  | .84  | .92  | .87  | .83  | .90  | .85  | .82  | .87  | .84  | .81  | .85  | .82  | .79  | .78  |
| 4.0  | .87                             | .81  | .76  | .86  | .80  | .76  | .83  | .78  | .75  | .81  | .77  | .74  | .79  | .76  | .73  | .71  |
| 5.0  | .80                             | .74  | .69  | .79  | .73  | .69  | .77  | .72  | .68  | .76  | .71  | .68  | .74  | .70  | .67  | .65  |
| 6.0  | .75                             | .68  | .63  | .74  | .68  | .63  | .72  | .67  | .63  | .71  | .66  | .62  | .69  | .65  | .62  | .60  |
| 7.0  | .69                             | .63  | .58  | .69  | .62  | .58  | .67  | .62  | .58  | .66  | .61  | .57  | .65  | .60  | .57  | .56  |
| 8.0  | .65                             | .58  | .54  | .64  | .58  | .54  | .63  | .57  | .53  | .62  | .57  | .53  | .61  | .56  | .53  | .51  |
| 9.0  | .61                             | .54  | .50  | .60  | .54  | .50  | .59  | .53  | .49  | .58  | .53  | .49  | .57  | .53  | .49  | .48  |
| 10.0 | .57                             | .50  | .46  | .56  | .50  | .46  | .55  | .50  | .46  | .55  | .49  | .46  | .54  | .49  | .46  | .44  |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Myles  
 Test Date: 2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 56%  
 Test Distance: 5.850m [K=1.0000]  
 Remarks:

WEC AND CCEC

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |
| 0.0  |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |
| 1.0  | .191                  | .109 | .034 | .184 | .105 | .033 | .172                            | .098 | .031 | .160 | .092 | .030 | .149 | .086 | .028 |   |
| 2.0  | .185                  | .102 | .031 | .180 | .099 | .030 | .169                            | .094 | .029 | .159 | .089 | .028 | .150 | .085 | .027 |   |
| 3.0  | .178                  | .095 | .028 | .173 | .093 | .028 | .164                            | .089 | .027 | .155 | .085 | .026 | .147 | .082 | .025 |   |
| 4.0  | .170                  | .088 | .026 | .166 | .087 | .026 | .158                            | .084 | .025 | .150 | .081 | .024 | .143 | .078 | .024 |   |
| 5.0  | .163                  | .083 | .024 | .159 | .082 | .024 | .152                            | .079 | .023 | .145 | .077 | .023 | .139 | .074 | .022 |   |
| 6.0  | .155                  | .078 | .022 | .152 | .077 | .022 | .146                            | .075 | .022 | .140 | .073 | .021 | .135 | .071 | .021 |   |
| 7.0  | .148                  | .073 | .021 | .146 | .073 | .021 | .140                            | .071 | .020 | .135 | .069 | .020 | .130 | .067 | .020 |   |
| 8.0  | .142                  | .069 | .020 | .139 | .069 | .019 | .134                            | .067 | .019 | .130 | .066 | .019 | .125 | .064 | .019 |   |
| 9.0  | .136                  | .066 | .018 | .134 | .065 | .018 | .129                            | .064 | .018 | .125 | .063 | .018 | .121 | .061 | .018 |   |
| 10.0 | .130                  | .062 | .017 | .128 | .062 | .017 | .124                            | .061 | .017 | .120 | .060 | .017 | .117 | .059 | .017 |   |

| ρcc  | 80%                   |      |      | 70%  |      |      | 50%  |      |      | 30%  |      |      | 10%  |      |      | 0 |
|------|-----------------------|------|------|------|------|------|--|------|------|------|------|------|------|------|------|---|
| ρw   | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρfc  | 20%                   |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 20%  |      |      | 0 |
| RCR  | RCR:Room Cavity Ratio |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |
| 0.0  | .190                  | .190 | .190 | .163 | .163 | .163 | .111                                       | .111 | .111 | .064 | .064 | .064 | .020 | .020 | .020 |   |
| 1.0  | .172                  | .157 | .144 | .147 | .135 | .124 | .101                                       | .093 | .086 | .058 | .054 | .050 | .019 | .017 | .016 |   |
| 2.0  | .158                  | .132 | .111 | .135 | .114 | .096 | .093                                       | .079 | .067 | .053 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0  | .147                  | .114 | .087 | .126 | .098 | .076 | .086                                       | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0  | .137                  | .099 | .070 | .118 | .086 | .061 | .081                                       | .060 | .043 | .047 | .035 | .025 | .015 | .011 | .008 |   |
| 5.0  | .129                  | .088 | .057 | .111 | .076 | .050 | .077                                       | .053 | .035 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0  | .123                  | .079 | .048 | .105 | .068 | .041 | .073                                       | .048 | .029 | .042 | .028 | .017 | .014 | .009 | .006 |   |
| 7.0  | .116                  | .072 | .040 | .100 | .062 | .035 | .069                                       | .043 | .025 | .040 | .026 | .015 | .013 | .008 | .005 |   |
| 8.0  | .111                  | .065 | .034 | .095 | .057 | .030 | .066                                       | .040 | .021 | .038 | .024 | .013 | .012 | .008 | .004 |   |
| 9.0  | .106                  | .060 | .030 | .091 | .052 | .026 | .063                                       | .037 | .018 | .037 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0 | .101                  | .056 | .026 | .087 | .049 | .023 | .061                                       | .034 | .016 | .035 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

UGR(Unified Glare Rating) Table

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

|  |                  |      |      |      |      |                |      |      |      |      |
|--|------------------|------|------|------|------|----------------|------|------|------|------|
| 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                                      | 15.9             | 17.0 | 16.1 | 17.1 | 17.3 | 16.1           | 17.2 | 16.3 | 17.3 | 17.5 |
| 3H   | 15.7             | 16.7 | 16.0 | 16.9 | 17.1 | 15.9           | 16.9 | 16.2 | 17.1 | 17.3 |
| 4H   | 15.6             | 16.5 | 15.9 | 16.8 | 17.0 | 15.8           | 16.7 | 16.1 | 17.0 | 17.2 |
| 6H   | 15.5             | 16.4 | 15.8 | 16.6 | 16.9 | 15.7           | 16.6 | 16.0 | 16.8 | 17.1 |
| 8H   | 15.5             | 16.3 | 15.8 | 16.6 | 16.8 | 15.7           | 16.5 | 16.0 | 16.8 | 17.0 |
| 12H  | 15.4             | 16.2 | 15.8 | 16.5 | 16.8 | 15.6           | 16.4 | 16.0 | 16.7 | 17.0 |
| 4H 2H  | 15.7             | 16.6 | 15.9 | 16.8 | 17.0 | 15.8           | 16.8 | 16.1 | 17.0 | 17.2 |
| 3H   | 15.5             | 16.3 | 15.8 | 16.5 | 16.8 | 15.7           | 16.4 | 16.0 | 16.7 | 17.0 |
| 4H   | 15.4             | 16.1 | 15.7 | 16.4 | 16.7 | 15.6           | 16.3 | 15.9 | 16.6 | 16.9 |
| 6H   | 15.3             | 15.9 | 15.7 | 16.2 | 16.6 | 15.5           | 16.1 | 15.9 | 16.4 | 16.8 |
| 8H   | 15.2             | 15.8 | 15.6 | 16.2 | 16.5 | 15.4           | 16.0 | 15.8 | 16.3 | 16.7 |
| 12H  | 15.2             | 15.7 | 15.6 | 16.1 | 16.5 | 15.4           | 15.9 | 15.8 | 16.3 | 16.7 |
| 8H 4H  | 15.2             | 15.8 | 15.6 | 16.2 | 16.5 | 15.4           | 16.0 | 15.8 | 16.3 | 16.7 |
| 6H   | 15.1             | 15.6 | 15.6 | 16.0 | 16.4 | 15.3           | 15.8 | 15.8 | 16.2 | 16.6 |
| 8H   | 15.1             | 15.5 | 15.5 | 15.9 | 16.4 | 15.3           | 15.7 | 15.7 | 16.1 | 16.5 |
| 12H  | 15.0             | 15.4 | 15.5 | 15.8 | 16.3 | 15.2           | 15.6 | 15.7 | 16.0 | 16.5 |
| 12H 4H   | 15.2             | 15.7 | 15.6 | 16.1 | 16.5 | 15.4           | 15.9 | 15.8 | 16.3 | 16.7 |
| 6H   | 15.1             | 15.5 | 15.5 | 15.9 | 16.4 | 15.3           | 15.7 | 15.7 | 16.1 | 16.5 |
| 8H   | 15.0             | 15.4 | 15.5 | 15.8 | 16.3 | 15.2           | 15.6 | 15.7 | 16.0 | 16.5 |
| Variations with the observer position at spacings: |                  |      |      |      |      |                |      |      |      |      |
| S = 1.0H   | + 2.6 / -18.3    |      |      |      |      | + 2.6 / -18.4  |      |      |      |      |
| 1.5H   | + 3.8 / - 7.9    |      |      |      |      | + 3.9 / - 8.0  |      |      |      |      |
| 2.0H   | + 5.6 / -17.0    |      |      |      |      | + 5.7 / -18.3  |      |      |      |      |

CIE Pub.117, 1555 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.5)

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

UTILIZATION FACTORS TABLE

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

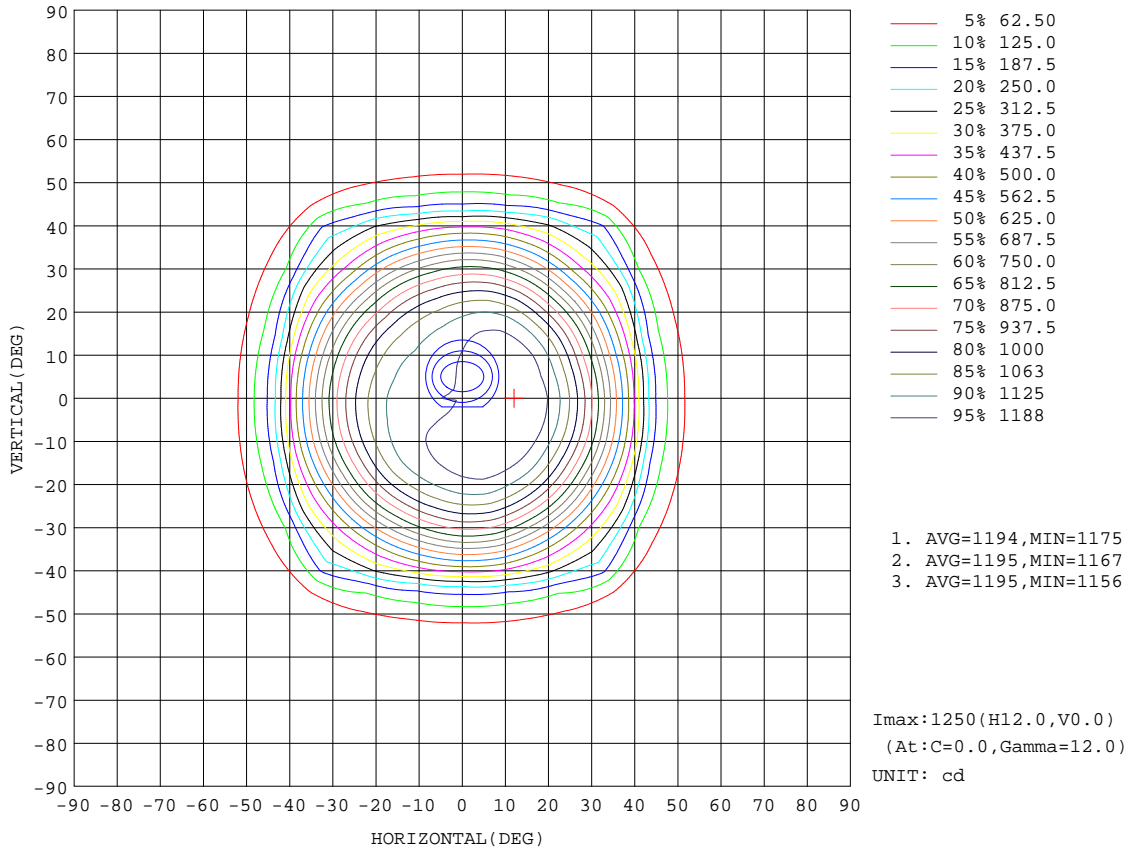
| REFLECTANCE                      |   |     |           |     |     |     |               |     |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|---------------|-----|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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                         | 82  | 74  | 70        | 81  | 74  | 70  | 80            | 74  | 70  | 66     |
| 0.80                             | 90  | 83  | 79        | 89  | 83  | 79  | 88            | 82  | 79  | 74     |
| 1.00                             | 96  | 90  | 85        | 95  | 89  | 85  | 93            | 89  | 85  | 80     |
| 1.25                             | 101   | 95  | 91        | 100 | 94  | 91  | 98            | 93  | 90  | 85     |
| 1.50                             | 104   | 99  | 95        | 103 | 98  | 94  | 100           | 96  | 93  | 88     |
| 2.00                             | 107   | 103 | 99        | 106 | 102 | 98  | 103           | 100 | 97  | 91     |
| 2.50                             | 109   | 105 | 102       | 107 | 104 | 101 | 104           | 101 | 99  | 93     |
| 3.00                             | 111   | 107 | 104       | 109 | 106 | 103 | 106           | 103 | 101 | 94     |
| 4.00                             | 113   | 110 | 107       | 111 | 108 | 106 | 107           | 105 | 103 | 96     |
| 5.00                             | 114   | 112 | 109       | 112 | 110 | 108 | 108           | 106 | 105 | 97     |
| ROOM INDEX                       | UF(total)   |     |           |     |     |     |               |     |     | Direct |
| According to DIN EN 13032-2 2004 |   |     | Suspended |     |     |     | SHRNOM = 1.25 |     |     |        |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

**ISOCANDELA DIAGRAM**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

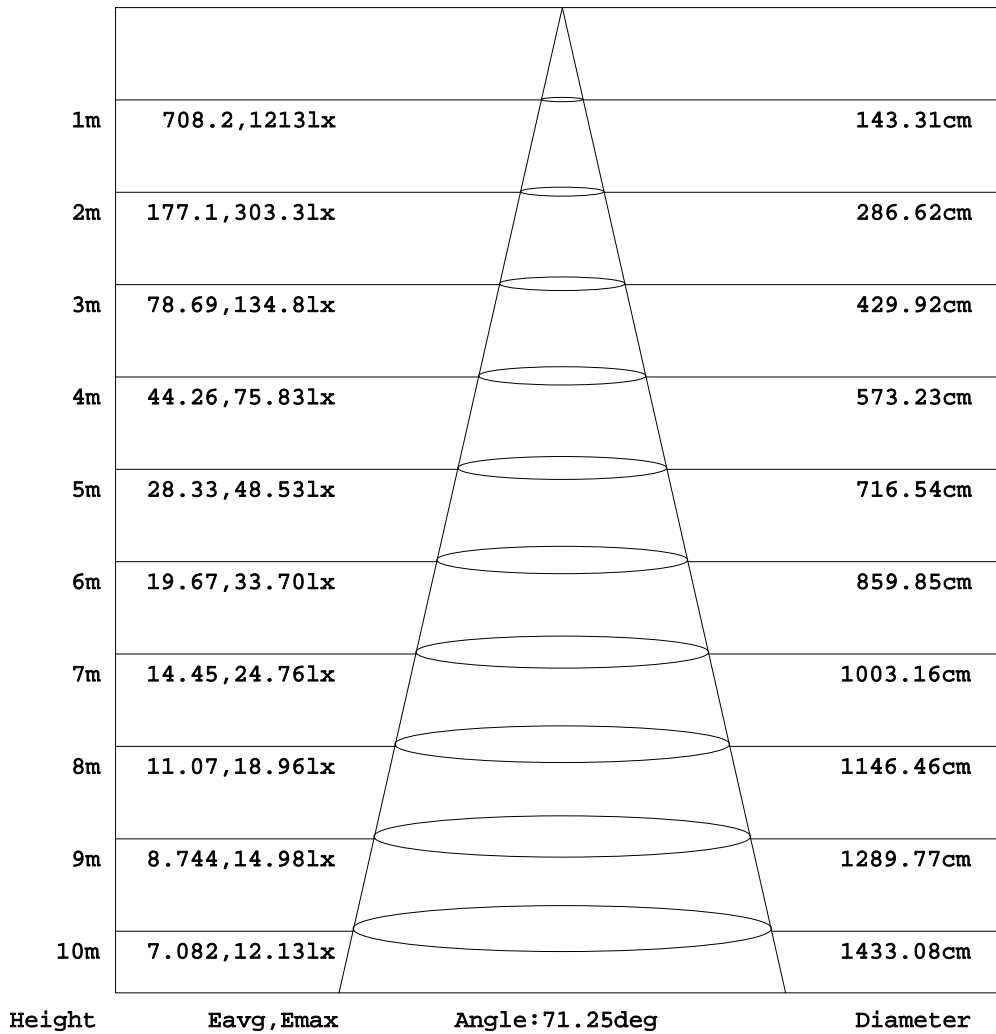
γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:



**AAI Figure**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

Flux out:1174 lm



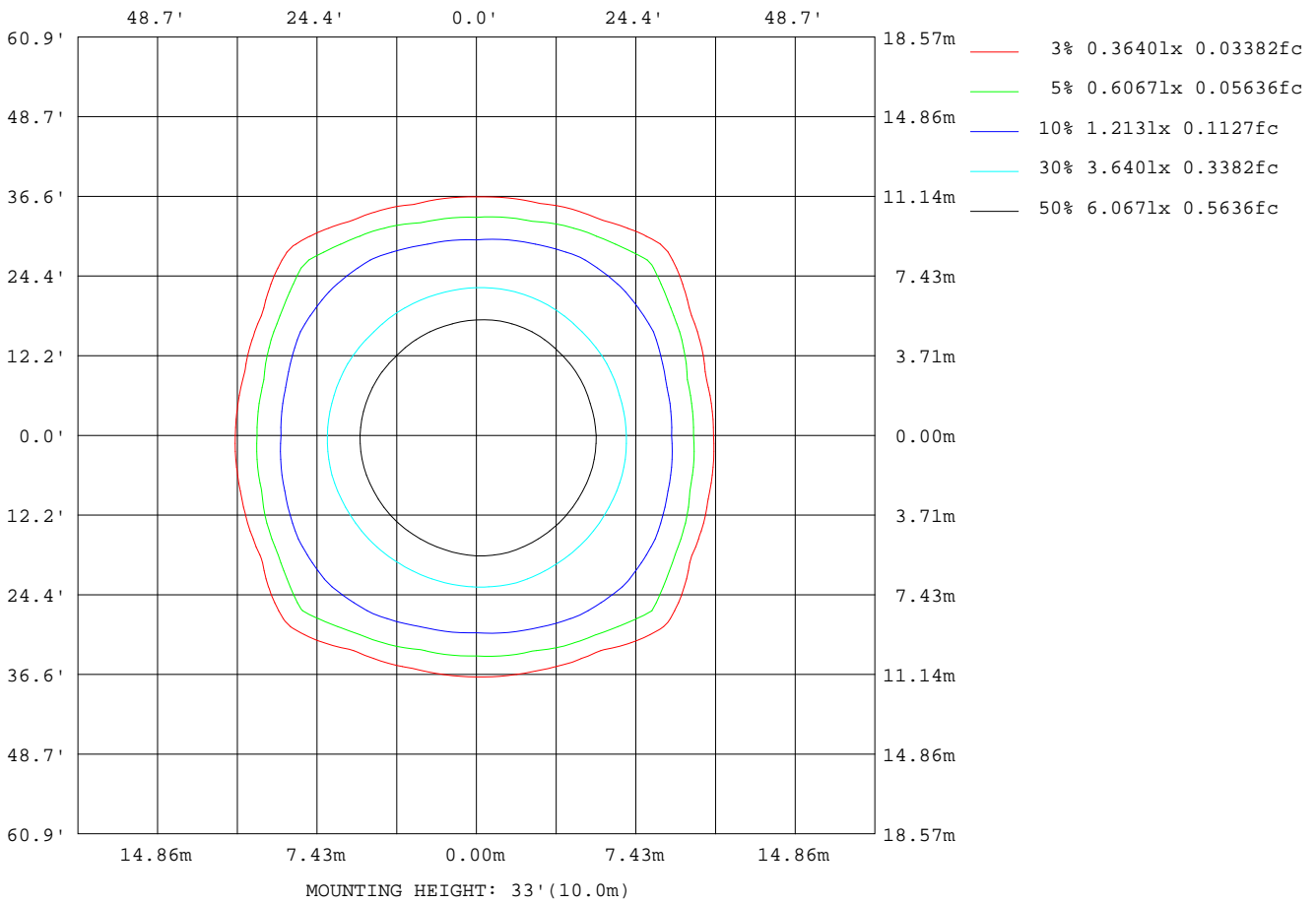
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Myles  
Test Date:2018-10-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

**ISOLUX DIAGRAM**

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:Myles  
 Test Date:2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity:56%  
 Test Distance:5.850m [K=1.0000]  
 Remarks:

LED Avg.L Report

|   |                           |             |
|---|---------------------------|-------------|
| Test:U:34.60V I:0.5000A P:17.30W PF:1.000 Freq:0Hz Lamp Flux:1555.04x1 lm |                           |             |
| NAME: TS150-18W-930   | TYPE:Downlight            | SERIAL No.: |
| SPEC.:3000K   | DIM.: L168mm*W168mm*H80mm |             |
| MFR.: NEKO LIGHTING AG  |                           |             |

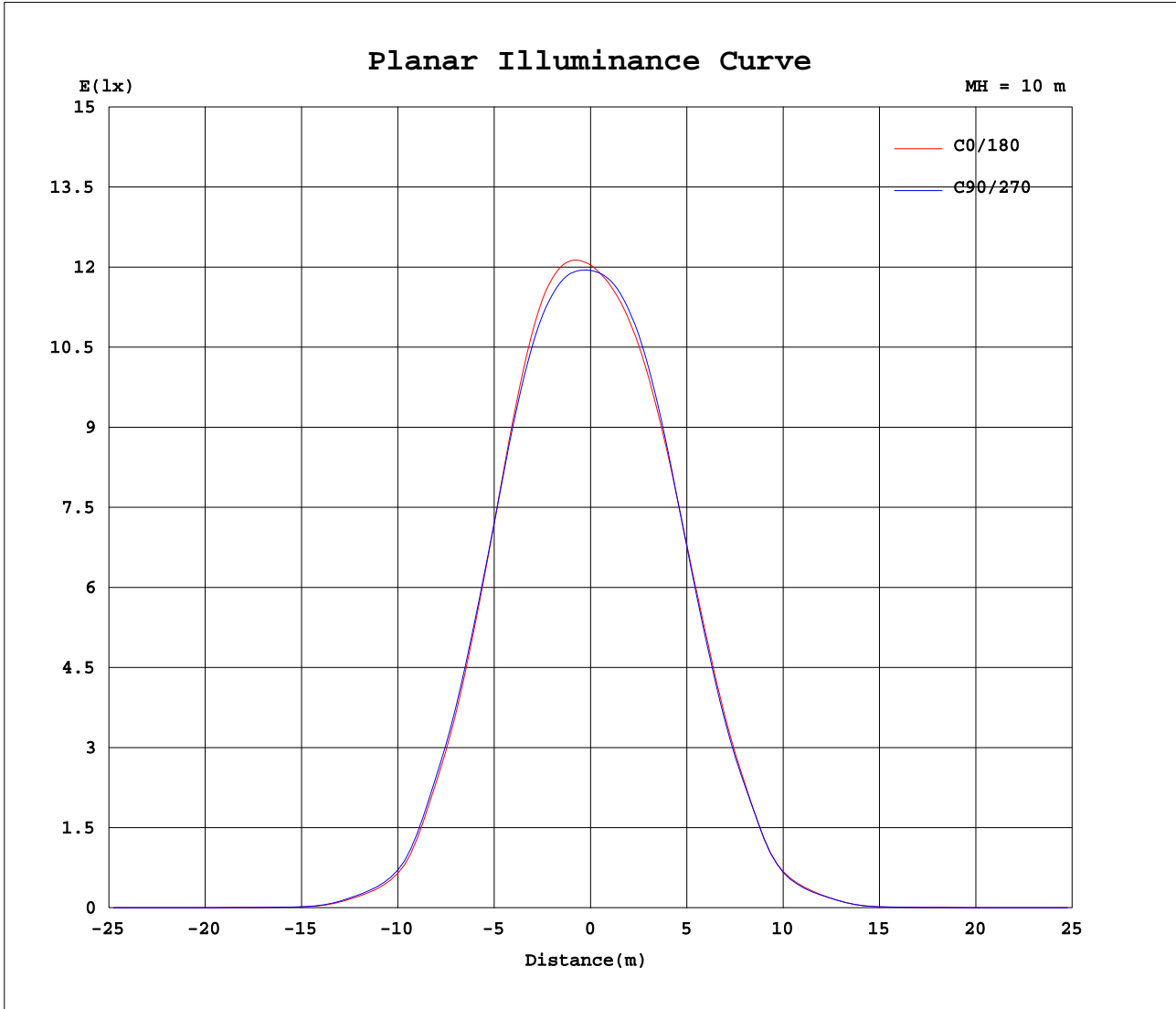
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 131   |
| L_0~180(75)av  | 76    |
| L_0~180(85)av  | 60    |
| L_90~270(65)av | 115   |
| L_90~270(75)av | 61    |
| L_90~270(85)av | 43    |
| L_45(65)av     | 187   |
| L_45(75)av     | 80    |
| L_45(85)av     | 52    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:Myles  
Test Date:2018-10-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
Humidity:56%  
Test Distance:5.850m [K=1.0000]  
Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators: Myles  
 Test Date: 2018-10-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.362  
 Humidity: 56%  
 Test Distance: 5.850m [K=1.0000]  
 Remarks:



