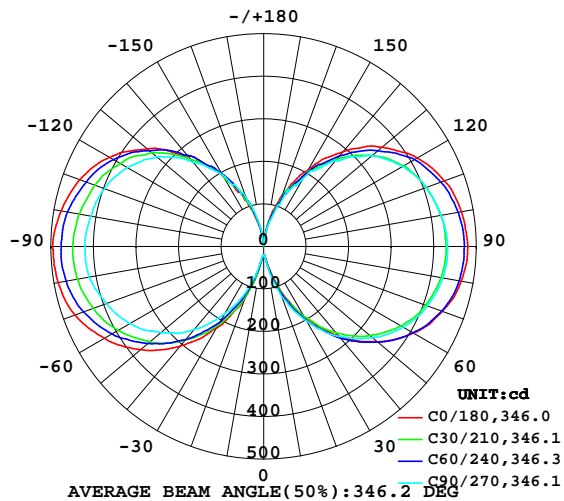


**LUMINAIRE PHOTOMETRIC TEST REPORT**

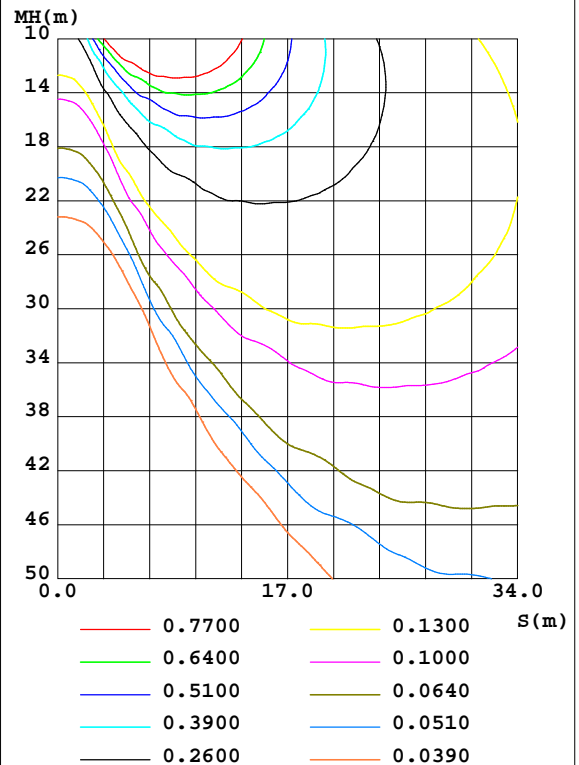
|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |

| DATA OF LAMP     |         | PHOTOMETRIC DATA Eff: 145.66 lm/W |         |                        |           |
|------------------|---------|-----------------------------------|---------|------------------------|-----------|
| MODEL            | OB150c  | Imax(cd)                          | 496.0   | S/MH(C0/180)           | 6.28      |
| NOMINAL POWER(W) | 30      | LOR(%)                            | 100.0   | S/MH(C90/270)          | 5.89      |
| RATED VOLTAGE(V) | 220     | TOTAL FLUX(lm)                    | 4399.0  | $\eta$ UP,DN(C0-180)   | 24.8,25.2 |
| NOMINAL FLUX(lm) | 4398.95 | CIE CLASS                         | DIFFUSE | $\eta$ UP,DN(C180-360) | 25.0,25.0 |
| LAMPS INSIDE     | 1       | $\eta$ up(%)                      | 49.8    | CIBSE SHR NOM          | 1.50      |
| TEST VOLTAGE(V)  | 220     | $\eta$ down(%)                    | 50.2    | CIBSE SHR MAX          | 1.55      |

**LUMINOUS INTENSITY DISTRIBUTION DIAGRAM**



**C0 PLANE ISOLUX DIAGRAM (UNIT:lx)**



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:KAR  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: OB150c-30W-57K

**ZONAL FLUX DIAGRAM**

**ZONAL FLUX DIAGRAM:**

| $\gamma$ | C0                    | C45   | C90   | C135  | C180  | C225  | C270  | C315  | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------------|--------------|------------|
| 10       | 30.45                 | 33.21 | 39.97 | 41.92 | 40.37 | 38.39 | 30.90 | 29.19 | 0- 10    | 2.533       | 2.533        | 0.06,0.06  |
| 20       | 101.6                 | 110.8 | 126.2 | 124.1 | 128.4 | 117.0 | 103.1 | 100.8 | 10- 20   | 21.57       | 24.10        | 0.55,0.55  |
| 30       | 193.6                 | 193.1 | 203.5 | 209.6 | 220.7 | 209.9 | 182.2 | 179.8 | 20- 30   | 73.89       | 97.99        | 2.23,2.23  |
| 40       | 274.9                 | 273.1 | 276.1 | 288.7 | 305.9 | 289.3 | 254.9 | 262.3 | 30- 40   | 151.8       | 249.8        | 5.68,5.68  |
| 50       | 348.7                 | 340.4 | 333.7 | 352.4 | 377.6 | 355.2 | 314.9 | 326.5 | 40- 50   | 243.0       | 492.8        | 11.2,11.2  |
| 60       | 407.4                 | 394.6 | 379.2 | 402.8 | 431.9 | 407.0 | 362.7 | 379.1 | 50- 60   | 333.5       | 826.4        | 18.8,18.8  |
| 70       | 447.1                 | 432.9 | 409.6 | 438.7 | 471.7 | 444.8 | 393.2 | 414.2 | 60- 70   | 412.8       | 1239         | 28.2,28.2  |
| 80       | 471.7                 | 451.3 | 427.5 | 455.1 | 490.3 | 463.5 | 416.5 | 436.4 | 70- 80   | 469.5       | 1709         | 38.8,38.8  |
| 90       | 479.9                 | 458.0 | 432.0 | 459.5 | 495.6 | 469.8 | 420.0 | 446.0 | 80- 90   | 497.9       | 2207         | 50.2,50.2  |
| 100      | 471.9                 | 450.0 | 423.6 | 449.8 | 483.3 | 460.7 | 412.2 | 438.3 | 90-100   | 496.4       | 2703         | 61.4,61.4  |
| 110      | 451.9                 | 428.5 | 405.8 | 428.3 | 460.1 | 437.8 | 398.1 | 422.1 | 100-110  | 466.2       | 3169         | 72,72      |
| 120      | 416.7                 | 394.4 | 376.2 | 389.0 | 419.3 | 401.1 | 370.4 | 389.9 | 110-120  | 411.3       | 3581         | 81.4,81.4  |
| 130      | 363.3                 | 344.4 | 332.4 | 333.5 | 357.8 | 346.4 | 328.4 | 341.5 | 120-130  | 333.1       | 3914         | 89,89      |
| 140      | 290.6                 | 274.0 | 262.1 | 258.5 | 277.6 | 274.5 | 258.5 | 281.0 | 130-140  | 240.6       | 4154         | 94.4,94.4  |
| 150      | 206.6                 | 199.4 | 183.7 | 175.5 | 189.0 | 198.4 | 194.8 | 203.1 | 140-150  | 148.2       | 4302         | 97.8,97.8  |
| 160      | 129.2                 | 123.9 | 104.8 | 95.61 | 104.0 | 114.7 | 118.5 | 130.6 | 150-160  | 72.51       | 4375         | 99.5,99.5  |
| 170      | 49.42                 | 46.36 | 35.89 | 32.31 | 38.44 | 41.88 | 44.20 | 25.47 | 160-170  | 22.47       | 4397         | 100,100    |
| 180      | 5.545                 | 5.549 | 5.591 | 5.582 | 5.545 | 5.545 | 5.587 | 5.596 | 170-180  | 1.617       | 4399         | 100,100    |
| DEG      | LUMINOUS INTENSITY:cd |       |       |       |       |       |       |       |          | UNIT:lm     |              |            |

**Conical surface Flux(90deg): 359.72 lm**

**%lum = 8.2%**

**%lamp = 8.2%**

**Conical surface Flux(120deg): 826.39 lm**

**%lum = 18.8%**

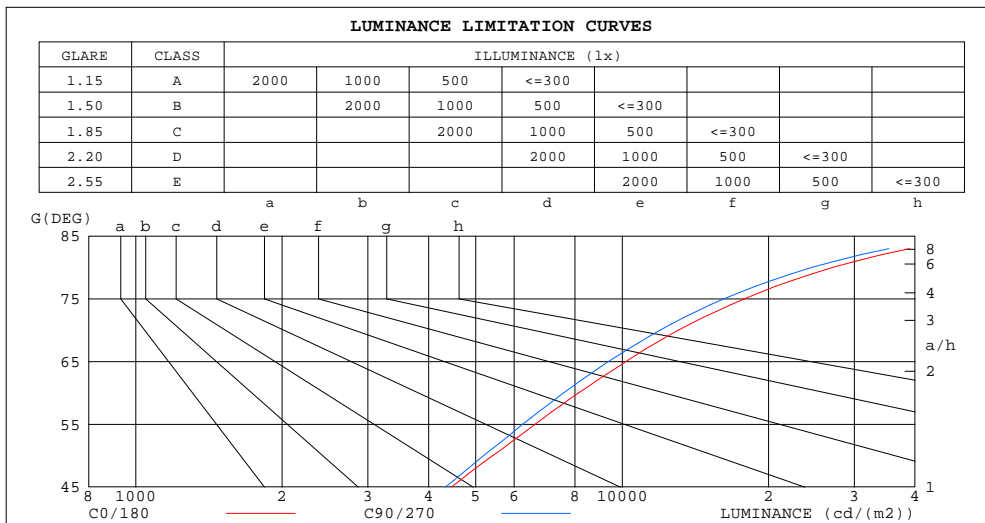
**%lamp = 18.8%**

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

**$\gamma$  Range: 0 - 180DEG**  
 **$\gamma$  Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**LUMINANCE LIMITATION CURVES**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 54846  | 49550   |
| 80                | 27164  | 24620   |
| 75                | 17876  | 16217   |
| 70                | 13071  | 11977   |
| 65                | 10190  | 9380    |
| 60                | 8147   | 7584    |
| 55                | 6625   | 6248    |
| 50                | 5425   | 5192    |
| 45                | 4449   | 4332    |

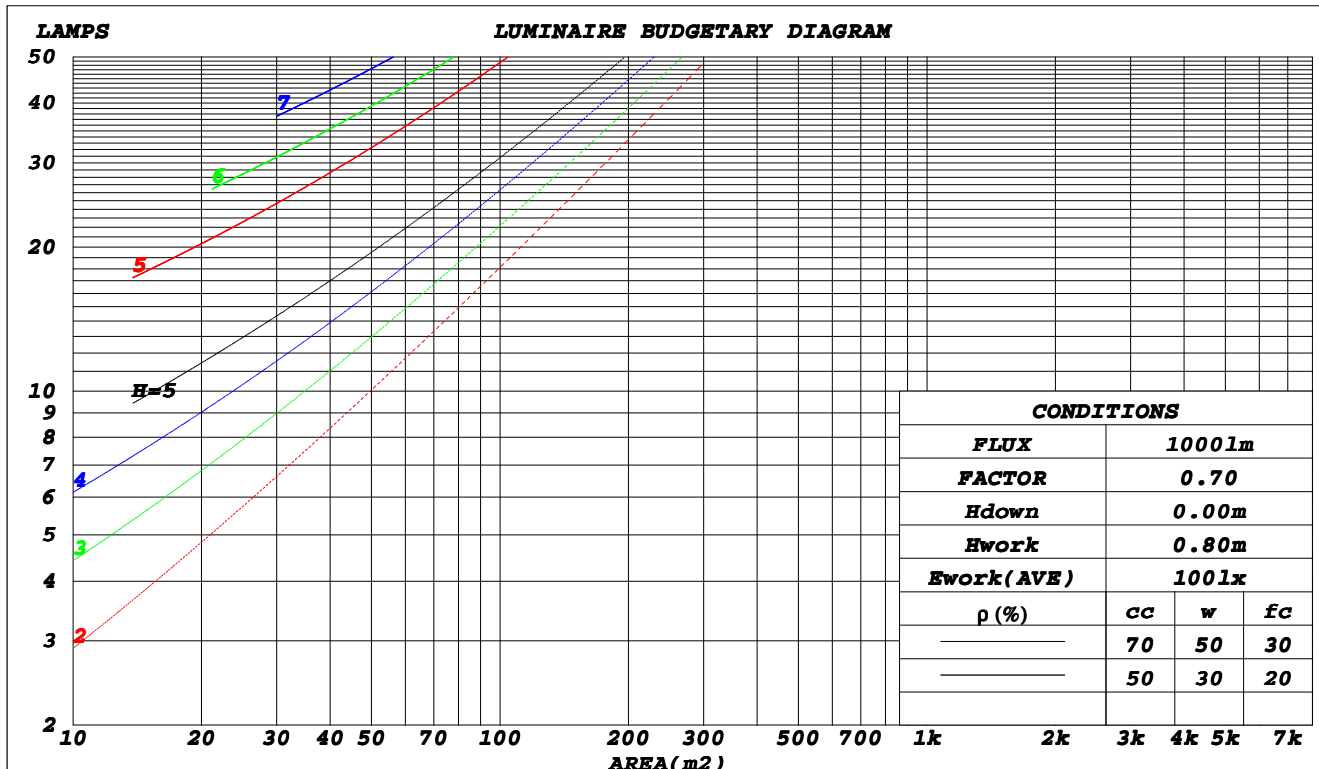
**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | 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         | Coefficients of Utilization(CU) |      |      |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0.0         | 1.07                            | 1.07 | 1.07 | .99 | .99 | .99 | .83 | .83 | .83 | .69 | .69 | .69 | .56 | .56 | .56 | .50 |
| 1.0         | .85                             | .79  | .73  | .78 | .72 | .68 | .64 | .60 | .56 | .52 | .49 | .46 | .40 | .38 | .36 | .30 |
| 2.0         | .71                             | .63  | .55  | .65 | .57 | .51 | .53 | .47 | .42 | .42 | .38 | .34 | .32 | .29 | .26 | .21 |
| 3.0         | .61                             | .51  | .43  | .55 | .47 | .40 | .45 | .38 | .33 | .35 | .30 | .26 | .27 | .23 | .19 | .15 |
| 4.0         | .52                             | .42  | .35  | .48 | .39 | .32 | .39 | .32 | .26 | .30 | .25 | .21 | .23 | .19 | .15 | .11 |
| 5.0         | .46                             | .36  | .29  | .42 | .33 | .26 | .34 | .27 | .22 | .27 | .21 | .17 | .20 | .16 | .12 | .09 |
| 6.0         | .40                             | .31  | .24  | .37 | .28 | .22 | .30 | .23 | .18 | .24 | .18 | .14 | .18 | .13 | .10 | .07 |
| 7.0         | .36                             | .27  | .21  | .33 | .25 | .19 | .27 | .20 | .15 | .21 | .16 | .12 | .16 | .12 | .08 | .05 |
| 8.0         | .32                             | .24  | .18  | .30 | .22 | .16 | .24 | .18 | .13 | .19 | .14 | .10 | .14 | .10 | .07 | .04 |
| 9.0         | .29                             | .21  | .15  | .27 | .19 | .14 | .22 | .16 | .11 | .17 | .12 | .09 | .13 | .09 | .06 | .04 |
| 10.0        | .27                             | .19  | .13  | .24 | .17 | .12 | .20 | .14 | .10 | .16 | .11 | .08 | .12 | .08 | .05 | .03 |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:KAR  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: OB150c-30W-57K

**WEC AND CCEC**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | 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 |      |      |      |      |      | Wall Exitance Coefficients(WEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0         |                       |      |      |      |      |      |                                 |      |      |      |      |      |      |      |      |   |  |
| 1.0         | .440                  | .250 | .079 | .418 | .238 | .076 | .376                            | .215 | .069 | .337 | .194 | .062 | .301 | .175 | .056 |   |  |
| 2.0         | .362                  | .199 | .061 | .342 | .188 | .058 | .303                            | .169 | .052 | .268 | .150 | .047 | .235 | .133 | .042 |   |  |
| 3.0         | .313                  | .167 | .050 | .294 | .158 | .047 | .259                            | .140 | .043 | .227 | .124 | .038 | .196 | .109 | .034 |   |  |
| 4.0         | .277                  | .144 | .042 | .260 | .136 | .040 | .227                            | .121 | .036 | .197 | .106 | .032 | .170 | .092 | .028 |   |  |
| 5.0         | .249                  | .127 | .037 | .233 | .120 | .035 | .203                            | .106 | .031 | .175 | .093 | .028 | .150 | .080 | .024 |   |  |
| 6.0         | .226                  | .113 | .032 | .211 | .107 | .031 | .184                            | .094 | .027 | .158 | .082 | .024 | .134 | .071 | .021 |   |  |
| 7.0         | .207                  | .102 | .029 | .193 | .096 | .027 | .168                            | .085 | .024 | .144 | .074 | .021 | .122 | .063 | .019 |   |  |
| 8.0         | .191                  | .093 | .026 | .178 | .088 | .025 | .155                            | .077 | .022 | .132 | .067 | .019 | .112 | .057 | .017 |   |  |
| 9.0         | .177                  | .085 | .024 | .165 | .080 | .023 | .143                            | .071 | .020 | .123 | .061 | .018 | .103 | .052 | .015 |   |  |
| 10.0        | .165                  | .079 | .022 | .154 | .074 | .021 | .133                            | .065 | .018 | .114 | .057 | .016 | .096 | .048 | .014 |   |  |

| $\rho_{cc}$ | 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 |      |      |      |      |      | Ceiling Cavity Exitance Coefficients(CCEC) |      |      |      |      |      |      |      |      |   |  |
| 0.0         | .570                  | .570 | .570 | .487 | .487 | .487 | .333                                       | .333 | .333 | .191 | .191 | .191 | .061 | .061 | .061 |   |  |
| 1.0         | .572                  | .538 | .507 | .490 | .462 | .436 | .335                                       | .318 | .302 | .193 | .184 | .175 | .062 | .059 | .057 |   |  |
| 2.0         | .567                  | .517 | .475 | .486 | .445 | .411 | .333                                       | .308 | .286 | .192 | .179 | .168 | .062 | .058 | .055 |   |  |
| 3.0         | .560                  | .502 | .456 | .480 | .433 | .395 | .330                                       | .301 | .277 | .190 | .176 | .163 | .061 | .057 | .054 |   |  |
| 4.0         | .553                  | .491 | .443 | .474 | .424 | .385 | .326                                       | .296 | .271 | .189 | .173 | .160 | .061 | .056 | .053 |   |  |
| 5.0         | .545                  | .482 | .435 | .468 | .417 | .378 | .323                                       | .291 | .267 | .187 | .171 | .159 | .060 | .056 | .052 |   |  |
| 6.0         | .538                  | .475 | .429 | .462 | .411 | .374 | .319                                       | .288 | .264 | .185 | .169 | .157 | .060 | .055 | .052 |   |  |
| 7.0         | .531                  | .469 | .425 | .457 | .406 | .370 | .316                                       | .285 | .262 | .183 | .168 | .156 | .059 | .055 | .052 |   |  |
| 8.0         | .524                  | .463 | .422 | .451 | .402 | .368 | .312                                       | .282 | .261 | .182 | .166 | .155 | .059 | .055 | .051 |   |  |
| 9.0         | .518                  | .459 | .419 | .446 | .398 | .366 | .309                                       | .280 | .260 | .180 | .165 | .155 | .058 | .054 | .051 |   |  |
| 10.0        | .512                  | .455 | .417 | .442 | .395 | .364 | .306                                       | .278 | .259 | .179 | .164 | .154 | .058 | .054 | .051 |   |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:KAR  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: OB150c-30W-57K

**UGR(Unified Glare Rating) Table**

|   |                  |      |      |      |           |                |      |                  |      |      |
|---|------------------|------|------|------|-----------|----------------|------|------------------|------|------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |                  |      |      |      |           |                |      |                  |      |      |
| NAME: OB150c-30W-57K  |                  |      |      |      | TYPE:Lamp |                |      | WEIGHT:          |      |      |
| SPEC.:  |                  |      |      |      | DIM.:     |                |      | SERIAL No.:      |      |      |
| MFR.: ICEPIPE   |                  |      |      |      | SUR.:     |                |      | 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   | 16.4             | 17.5 | 17.3 | 18.4 | 19.6      | 16.5           | 17.6 | 17.3             | 18.5 | 19.7 |
| 3H  | 20.2             | 21.2 | 21.1 | 22.1 | 23.3      | 20.1           | 21.1 | 21.0             | 22.0 | 23.2 |
| 4H  | 22.3             | 23.2 | 23.2 | 24.2 | 25.4      | 22.1           | 23.0 | 23.0             | 24.0 | 25.2 |
| 6H  | 24.5             | 25.4 | 25.4 | 26.4 | 27.6      | 24.2           | 25.1 | 25.1             | 26.1 | 27.3 |
| 8H  | 25.8             | 26.6 | 26.7 | 27.6 | 28.8      | 25.4           | 26.3 | 26.3             | 27.2 | 28.5 |
| 12H   | 27.2             | 28.0 | 28.1 | 29.0 | 30.2      | 26.7           | 27.6 | 27.6             | 28.5 | 29.8 |
| 4H 2H   | 17.5             | 18.5 | 18.5 | 19.5 | 20.7      | 17.6           | 18.6 | 18.5             | 19.5 | 20.7 |
| 3H  | 21.3             | 22.1 | 22.2 | 23.1 | 24.3      | 21.3           | 22.2 | 22.3             | 23.2 | 24.4 |
| 4H  | 23.4             | 24.2 | 24.4 | 25.2 | 26.5      | 23.4           | 24.2 | 24.4             | 25.2 | 26.5 |
| 6H  | 25.8             | 26.5 | 26.8 | 27.5 | 28.8      | 25.7           | 26.4 | 26.7             | 27.4 | 28.7 |
| 8H  | 27.2             | 27.8 | 28.2 | 28.8 | 30.1      | 27.0           | 27.6 | 27.9             | 28.6 | 29.9 |
| 12H   | 28.7             | 29.3 | 29.7 | 30.3 | 31.6      | 28.4           | 29.0 | 29.4             | 30.0 | 31.3 |
| 8H 4H   | 24.2             | 24.8 | 25.2 | 25.8 | 27.1      | 24.2           | 24.9 | 25.2             | 25.9 | 27.2 |
| 6H  | 26.8             | 27.3 | 27.8 | 28.4 | 29.7      | 26.8           | 27.3 | 27.8             | 28.4 | 29.7 |
| 8H  | 28.3             | 28.8 | 29.3 | 29.8 | 31.1      | 28.2           | 28.7 | 29.2             | 29.8 | 31.1 |
| 12H   | 30.0             | 30.4 | 31.0 | 31.5 | 32.8      | 29.9           | 30.3 | 30.9             | 31.3 | 32.7 |
| 12H 4H  | 24.4             | 25.0 | 25.4 | 26.0 | 27.4      | 24.4           | 25.0 | 25.4             | 26.0 | 27.3 |
| 6H  | 27.1             | 27.6 | 28.1 | 28.6 | 30.0      | 27.1           | 27.6 | 28.1             | 28.6 | 30.0 |
| 8H  | 28.7             | 29.1 | 29.7 | 30.2 | 31.5      | 28.7           | 29.1 | 29.7             | 30.2 | 31.5 |
| Variations with the observer position at spacings:                |                  |      |      |      |           |                |      |                  |      |      |
| S = 1.0H  | + 0.1 / - 0.1    |      |      |      |           | + 0.1 / - 0.1  |      |                  |      |      |
| 1.5H  | + 0.2 / - 0.3    |      |      |      |           | + 0.2 / - 0.3  |      |                  |      |      |
| 2.0H  | + 0.3 / - 0.4    |      |      |      |           | + 0.3 / - 0.4  |      |                  |      |      |

CIE Pub.117 Corrected 4399 lm Total Lamp Luminous Flux.(8log(F/F0) = 5.1)

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:KAR  
Test Date:17 Feb 2020

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: OB150c-30W-57K

**UTILIZATION FACTORS TABLE**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |

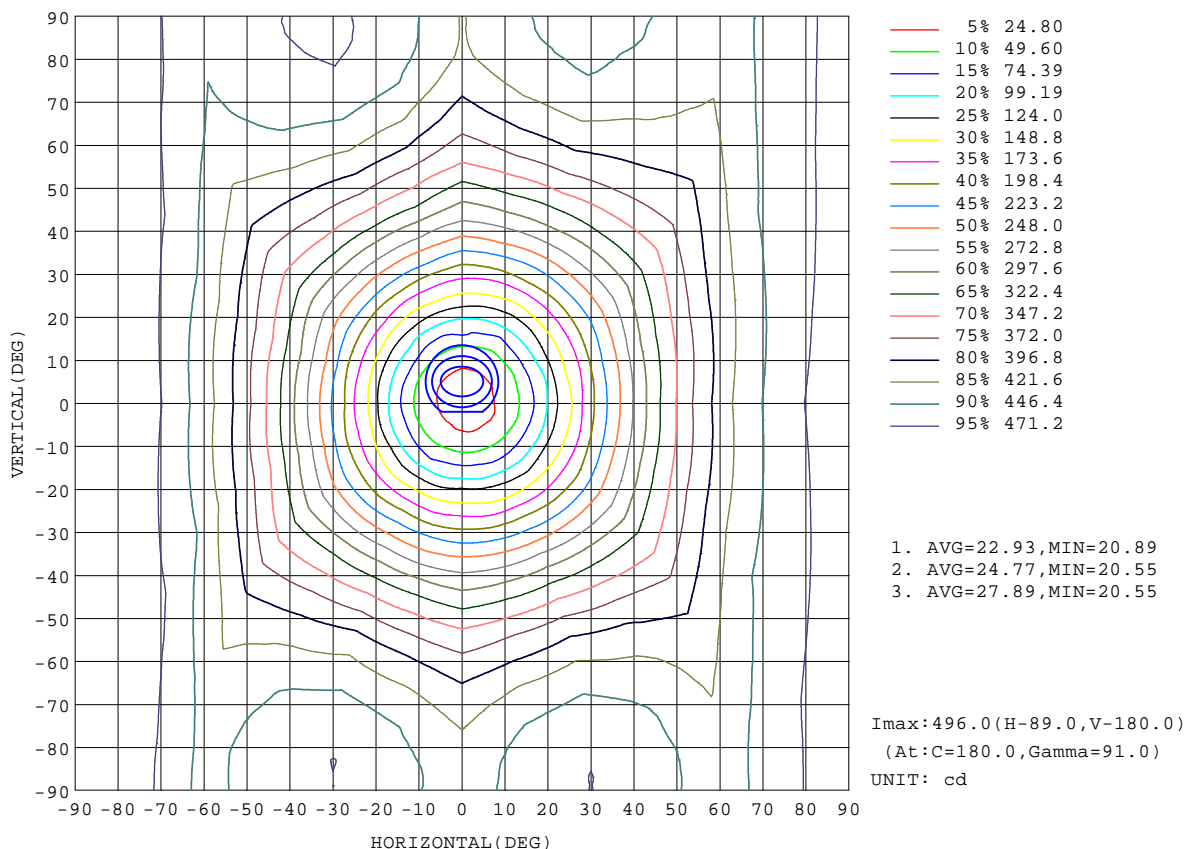
| REFLECTANCE                      |   |     |           |     |     |     |     |              |     |        |
|----------------------------------|---|-----|-----------|-----|-----|-----|-----|--------------|-----|--------|
| Ceiling                          | 0.8   | 0.8 | 0.8       | 0.7 | 0.7 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |              |     |        |
| $k = 0.60$                       | 33  | 20  | 13        | 31  | 19  | 12  | 28  | 17           | 11  | 4      |
| 0.80                             | 42  | 27  | 19        | 39  | 26  | 18  | 34  | 23           | 16  | 6      |
| 1.00                             | 49  | 34  | 24        | 46  | 32  | 23  | 39  | 30           | 21  | 9      |
| 1.25                             | 56  | 41  | 31        | 52  | 38  | 29  | 44  | 33           | 26  | 12     |
| 1.50                             | 61  | 46  | 36        | 57  | 43  | 34  | 48  | 38           | 30  | 14     |
| 2.00                             | 69  | 55  | 45        | 64  | 52  | 42  | 54  | 44           | 37  | 18     |
| 2.50                             | 74  | 62  | 52        | 69  | 57  | 48  | 58  | 49           | 42  | 21     |
| 3.00                             | 79  | 67  | 57        | 72  | 62  | 54  | 61  | 53           | 46  | 24     |
| 4.00                             | 84  | 74  | 66        | 78  | 68  | 61  | 65  | 58           | 52  | 28     |
| 5.00                             | 88  | 79  | 71        | 81  | 73  | 66  | 68  | 62           | 56  | 31     |
| ROOM INDEX                       | UF(total)   |     |           |     |     |     |     |              |     | Direct |
| According to DIN EN 13032-2 2004 |   |     | Suspended |     |     |     |     | SHRNM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:KAR  
Test Date:17 Feb 2020

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351  
Humidity:65.0%  
Test Distance:8.100m [K=1.0000]  
Remarks: OB150c-30W-57K

**ISOCANDELA DIAGRAM**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

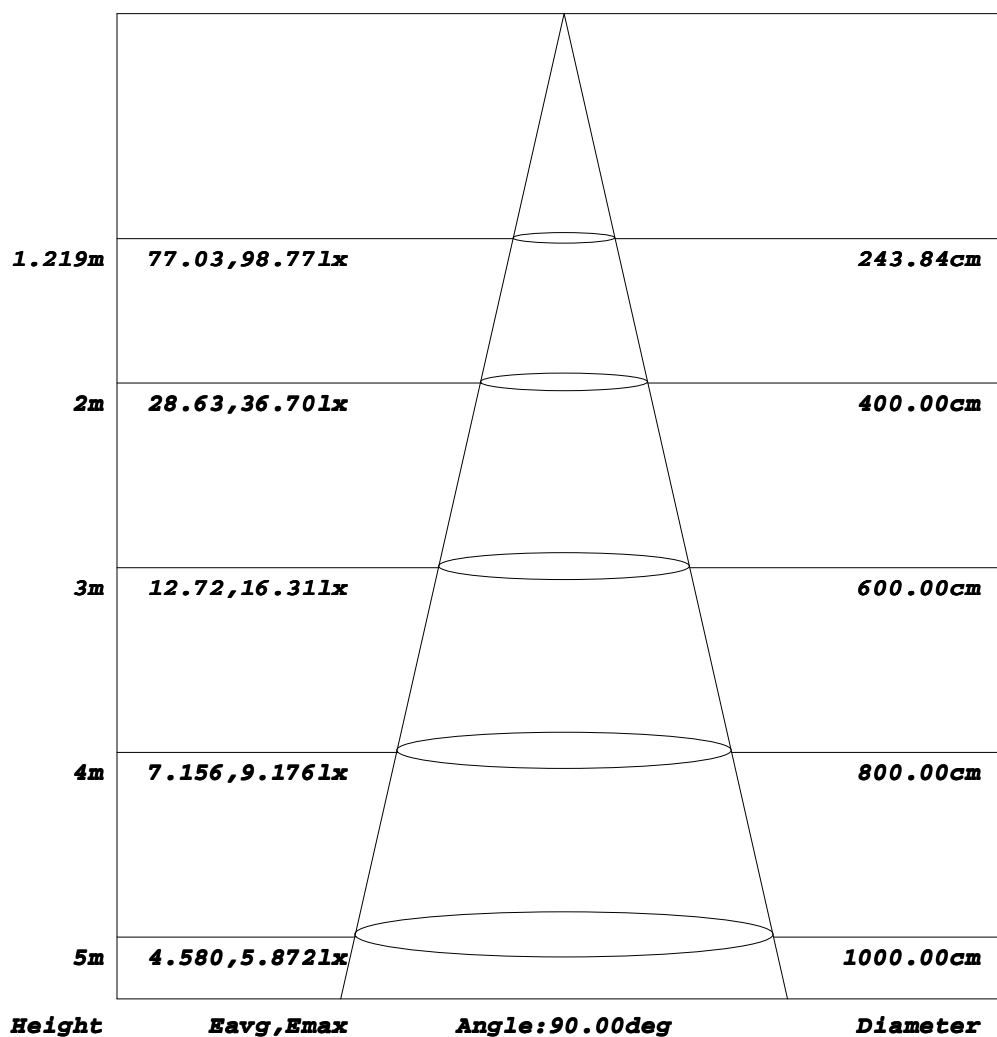
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**



**AAI Figure**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |

**Flux out:359.7 lm**



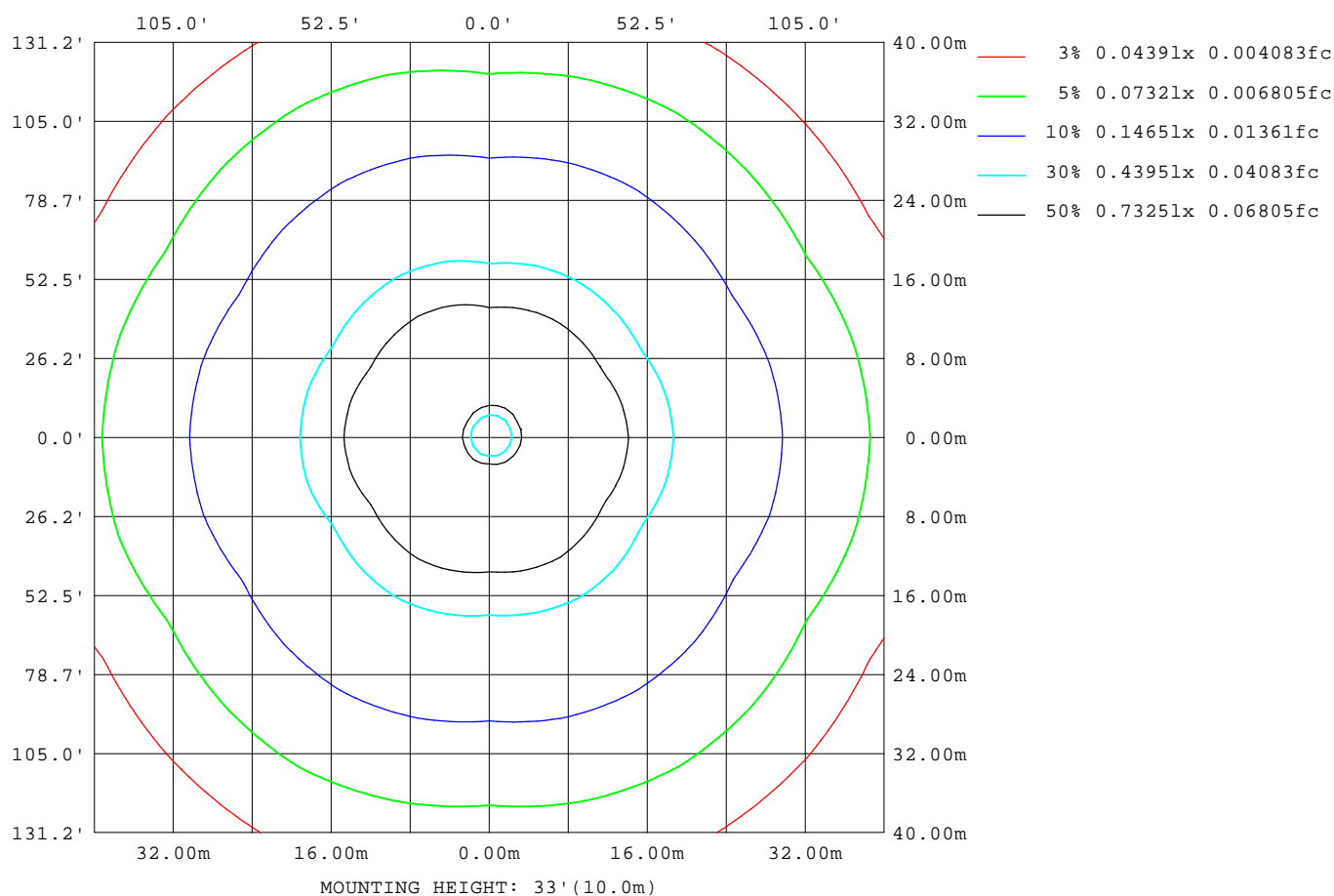
Note: The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**ISOLUX DIAGRAM**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**LED Avg.L Report**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |

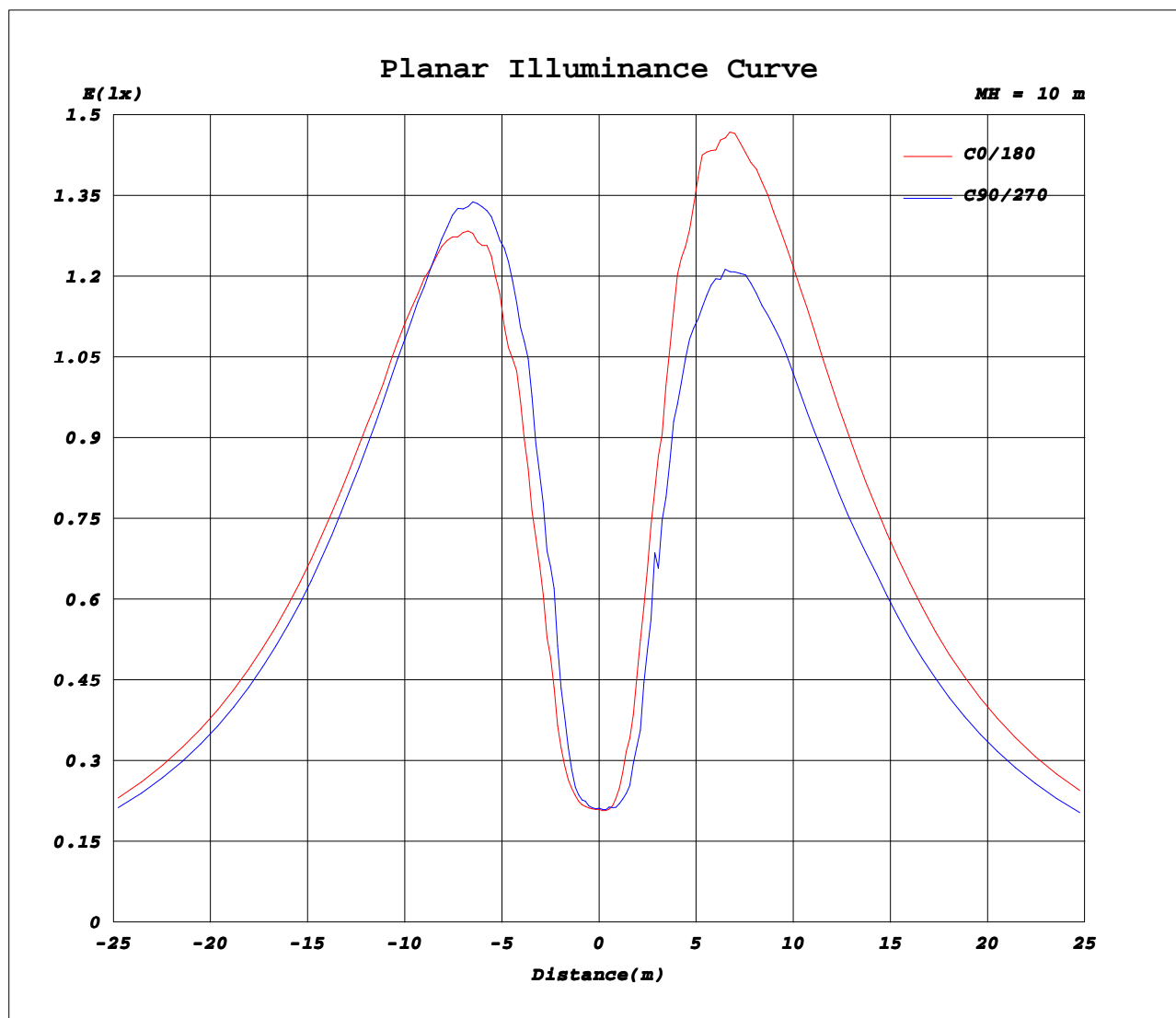
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 10465 |
| L_0~180(75)av  | 18285 |
| L_0~180(85)av  | 55787 |
| L_90~270(65)av | 9190  |
| L_90~270(75)av | 15955 |
| L_90~270(85)av | 48861 |
| L_45(65)av     | 9838  |
| L_45(75)av     | 17182 |
| L_45(85)av     | 52409 |

Standard: GB/T 29293-2012

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

### Planar Illuminance Curve



**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|   |  |  |  |  |  |  |  |  |  |           |  |  |  |  |                  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|--|--|-----------|--|--|--|--|------------------|--|--|--|--|--|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |  |  |  |  |  |  |  |  |  |           |  |  |  |  |                  |  |  |  |  |  |
| NAME: OB150c-30W-57K  |  |  |  |  |  |  |  |  |  | TYPE:Lamp |  |  |  |  | WEIGHT:          |  |  |  |  |  |
| SPEC.:  |  |  |  |  |  |  |  |  |  | DIM.:     |  |  |  |  | SERIAL No.:      |  |  |  |  |  |
| MFR.: ICEPIPE   |  |  |  |  |  |  |  |  |  | SUR.:     |  |  |  |  | Shielding Angle: |  |  |  |  |  |

Table--1

UNIT: cd

| 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                 | 21.0 | 20.9 | 21.0 | 21.0 | 21.1 | 21.1 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.0 | 20.9 | 21.0 | 21.0 | 21.1 | 21.1 | 21.2 |
| 5                 | 22.1 | 22.2 | 23.0 | 23.2 | 22.9 | 22.9 | 23.0 | 23.4 | 24.0 | 24.0 | 24.1 | 23.6 | 23.3 | 22.8 | 21.9 | 22.0 | 21.9 | 22.0 | 21.6 |
| 10                | 30.5 | 31.0 | 32.0 | 33.2 | 34.7 | 36.8 | 40.0 | 39.7 | 40.8 | 41.9 | 43.8 | 41.1 | 40.4 | 40.9 | 39.3 | 38.4 | 35.6 | 32.7 | 30.9 |
| 15                | 58.7 | 63.0 | 68.2 | 68.0 | 70.3 | 76.3 | 76.5 | 79.9 | 75.0 | 80.5 | 84.0 | 78.9 | 81.8 | 82.8 | 84.7 | 78.1 | 67.0 | 65.0 | 62.4 |
| 20                | 102  | 102  | 105  | 111  | 117  | 120  | 126  | 123  | 124  | 124  | 130  | 128  | 128  | 126  | 124  | 117  | 112  | 107  | 103  |
| 25                | 143  | 146  | 149  | 152  | 157  | 157  | 165  | 166  | 167  | 168  | 170  | 173  | 173  | 173  | 170  | 167  | 156  | 153  | 146  |
| 30                | 194  | 191  | 190  | 193  | 201  | 201  | 204  | 208  | 215  | 210  | 209  | 218  | 221  | 221  | 213  | 210  | 204  | 192  | 182  |
| 35                | 233  | 233  | 230  | 233  | 240  | 242  | 241  | 246  | 253  | 250  | 250  | 262  | 267  | 265  | 252  | 251  | 244  | 235  | 220  |
| 40                | 275  | 272  | 264  | 273  | 282  | 279  | 276  | 284  | 291  | 289  | 283  | 300  | 306  | 304  | 288  | 289  | 286  | 275  | 255  |
| 45                | 315  | 310  | 297  | 309  | 317  | 312  | 306  | 319  | 326  | 324  | 315  | 337  | 344  | 341  | 321  | 326  | 322  | 311  | 288  |
| 50                | 349  | 342  | 326  | 340  | 350  | 344  | 334  | 349  | 357  | 352  | 340  | 367  | 378  | 370  | 349  | 355  | 355  | 342  | 315  |
| 55                | 380  | 372  | 351  | 369  | 381  | 373  | 358  | 374  | 387  | 378  | 365  | 395  | 408  | 398  | 373  | 382  | 385  | 369  | 343  |
| 60                | 407  | 397  | 373  | 395  | 405  | 395  | 379  | 399  | 414  | 403  | 386  | 423  | 432  | 423  | 395  | 407  | 412  | 396  | 363  |
| 65                | 431  | 420  | 392  | 414  | 428  | 416  | 396  | 417  | 431  | 422  | 405  | 443  | 454  | 444  | 413  | 427  | 433  | 415  | 380  |
| 70                | 447  | 438  | 405  | 433  | 445  | 434  | 410  | 432  | 448  | 439  | 417  | 459  | 472  | 460  | 426  | 445  | 451  | 432  | 393  |
| 75                | 463  | 450  | 415  | 444  | 459  | 446  | 420  | 445  | 461  | 449  | 427  | 471  | 484  | 471  | 437  | 457  | 463  | 446  | 406  |
| 80                | 472  | 459  | 423  | 451  | 467  | 453  | 428  | 450  | 467  | 455  | 435  | 479  | 490  | 477  | 445  | 464  | 471  | 453  | 416  |
| 85                | 478  | 467  | 427  | 457  | 471  | 457  | 432  | 455  | 472  | 459  | 439  | 482  | 494  | 482  | 448  | 468  | 476  | 459  | 420  |
| 90                | 480  | 468  | 429  | 458  | 472  | 458  | 432  | 455  | 471  | 460  | 438  | 481  | 496  | 483  | 449  | 470  | 476  | 459  | 420  |
| 95                | 476  | 465  | 427  | 455  | 470  | 456  | 430  | 452  | 469  | 456  | 436  | 477  | 492  | 479  | 446  | 467  | 474  | 457  | 418  |
| 100               | 472  | 461  | 423  | 450  | 464  | 450  | 424  | 446  | 461  | 450  | 428  | 470  | 483  | 471  | 440  | 461  | 468  | 450  | 412  |
| 105               | 464  | 454  | 415  | 442  | 455  | 442  | 416  | 434  | 453  | 441  | 420  | 460  | 473  | 460  | 431  | 452  | 457  | 440  | 407  |
| 110               | 452  | 442  | 407  | 428  | 443  | 430  | 406  | 425  | 439  | 428  | 410  | 447  | 460  | 447  | 422  | 438  | 444  | 430  | 398  |
| 115               | 437  | 426  | 394  | 416  | 427  | 416  | 394  | 409  | 420  | 412  | 395  | 428  | 443  | 434  | 409  | 423  | 429  | 414  | 386  |
| 120               | 417  | 409  | 380  | 394  | 410  | 395  | 376  | 387  | 399  | 389  | 376  | 405  | 419  | 409  | 390  | 401  | 408  | 393  | 370  |
| 125               | 390  | 385  | 359  | 372  | 382  | 372  | 356  | 362  | 370  | 366  | 354  | 379  | 390  | 385  | 371  | 379  | 383  | 368  | 351  |
| 130               | 363  | 354  | 333  | 344  | 351  | 339  | 332  | 332  | 340  | 333  | 326  | 345  | 358  | 355  | 343  | 346  | 351  | 341  | 328  |
| 135               | 331  | 325  | 303  | 313  | 316  | 309  | 300  | 300  | 304  | 305  | 290  | 311  | 319  | 322  | 308  | 318  | 320  | 312  | 296  |
| 140               | 291  | 286  | 268  | 274  | 278  | 269  | 262  | 262  | 264  | 258  | 256  | 266  | 278  | 278  | 268  | 274  | 280  | 274  | 258  |
| 145               | 253  | 249  | 233  | 238  | 236  | 235  | 223  | 227  | 222  | 225  | 217  | 230  | 234  | 243  | 230  | 241  | 234  | 231  | 226  |
| 150               | 207  | 206  | 198  | 199  | 196  | 195  | 184  | 185  | 183  | 175  | 166  | 183  | 189  | 186  | 193  | 198  | 199  | 189  | 195  |
| 155               | 168  | 169  | 161  | 155  | 152  | 150  | 148  | 149  | 136  | 139  | 141  | 145  | 141  | 155  | 149  | 153  | 154  | 153  | 161  |
| 160               | 129  | 129  | 117  | 124  | 110  | 113  | 105  | 106  | 103  | 95.6 | 101  | 94.7 | 104  | 108  | 109  | 115  | 118  | 121  | 118  |
| 165               | 90.4 | 81.6 | 79.5 | 77.2 | 75.3 | 69.1 | 67.7 | 63.8 | 57.6 | 61.2 | 64.4 | 64.9 | 62.7 | 69.2 | 70.3 | 71.6 | 73.8 | 77.0 | 81.1 |
| 170               | 49.4 | 45.4 | 46.4 | 46.4 | 41.1 | 38.0 | 35.9 | 36.1 | 34.6 | 32.3 | 34.7 | 35.8 | 38.4 | 37.3 | 40.1 | 41.9 | 43.6 | 43.9 | 44.2 |
| 175               | 5.63 | 5.62 | 5.59 | 5.57 | 5.57 | 5.57 | 5.59 | 5.58 | 5.59 | 5.57 | 5.57 | 5.54 | 5.50 | 5.50 | 5.52 | 5.54 | 5.54 | 5.57 | 5.59 |
| 180               | 5.54 | 5.54 | 5.55 | 5.55 | 5.56 | 5.57 | 5.59 | 5.59 | 5.61 | 5.58 | 5.60 | 5.60 | 5.54 | 5.54 | 5.54 | 5.54 | 5.56 | 5.58 | 5.59 |

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**LUMINOUS DISTRIBUTION INTENSITY DATA**

|   |           |                  |
|---|-----------|------------------|
| Test:U:219.7V I:0.1469A P:30.20W PF:0.9356 Lamp Flux:4398.95x1 lm |           |                  |
| NAME: OB150c-30W-57K  | TYPE:Lamp | WEIGHT:          |
| SPEC.:  | DIM.:     | SERIAL No.:      |
| MFR.: ICEPIPE   | SUR.:     | Shielding Angle: |

Table--2

UNIT: cd

| C(DEG)<br>γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                 | 21.8 | 22.1 | 22.3 | 22.7 | 22.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                | 29.1 | 29.3 | 29.2 | 29.6 | 30.7 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                | 60.1 | 57.2 | 60.3 | 62.3 | 60.8 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                | 99.6 | 98.5 | 101  | 104  | 96.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                | 142  | 137  | 143  | 145  | 148  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                | 181  | 181  | 180  | 184  | 188  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                | 221  | 220  | 224  | 223  | 230  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                | 260  | 261  | 262  | 259  | 271  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                | 295  | 298  | 295  | 293  | 308  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                | 326  | 328  | 326  | 321  | 339  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                | 354  | 359  | 355  | 346  | 368  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                | 379  | 385  | 379  | 370  | 394  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                | 398  | 409  | 399  | 387  | 415  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                | 416  | 427  | 414  | 401  | 433  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                | 430  | 441  | 429  | 412  | 446  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                | 439  | 449  | 436  | 421  | 455  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                | 444  | 456  | 443  | 427  | 460  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                | 446  | 456  | 446  | 428  | 462  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                | 444  | 455  | 444  | 428  | 460  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100               | 438  | 451  | 438  | 423  | 457  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105               | 430  | 443  | 431  | 414  | 448  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110               | 420  | 432  | 422  | 408  | 436  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115               | 406  | 415  | 407  | 396  | 421  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120               | 385  | 397  | 390  | 382  | 403  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125               | 364  | 373  | 368  | 362  | 380  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130               | 336  | 348  | 341  | 339  | 354  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135               | 307  | 315  | 311  | 309  | 324  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140               | 275  | 277  | 281  | 275  | 289  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145               | 232  | 242  | 241  | 242  | 249  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150               | 195  | 204  | 203  | 208  | 209  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155               | 153  | 162  | 163  | 165  | 168  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160               | 124  | 129  | 131  | 135  | 131  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165               | 80.3 | 83.4 | 91.2 | 86.1 | 87.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170               | 41.1 | 35.0 | 25.5 | 32.4 | 43.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175               | 5.62 | 5.62 | 5.62 | 5.63 | 5.62 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180               | 5.60 | 5.59 | 5.60 | 5.61 | 5.61 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature:25.3DEG**  
**Operators:KAR**  
**Test Date:17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System:EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity:65.0%**  
**Test Distance:8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**Photometric Data Table [cd]**

|       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| G/C   | 0.0   | 15.0  | 30.0  | 45.0  | 60.0  | 75.0  | 90.0  | 105.0 | 120.0 | 135.0 |
| 0.0   | 21.00 | 20.91 | 20.98 | 21.01 | 21.09 | 21.15 | 21.20 | 21.18 | 21.21 | 21.22 |
| 3.0   | 21.36 | 21.34 | 21.45 | 21.56 | 21.69 | 21.86 | 21.72 | 21.80 | 21.74 | 21.98 |
| 6.0   | 22.90 | 23.31 | 23.18 | 23.25 | 23.23 | 23.56 | 24.11 | 24.51 | 25.78 | 25.63 |
| 9.0   | 27.53 | 27.04 | 28.24 | 29.11 | 30.45 | 32.08 | 33.78 | 33.99 | 35.54 | 36.50 |
| 12.0  | 39.02 | 40.41 | 44.33 | 47.22 | 50.23 | 51.81 | 54.90 | 55.90 | 55.32 | 57.66 |
| 15.0  | 58.67 | 62.97 | 68.25 | 67.99 | 70.32 | 76.30 | 76.54 | 79.88 | 74.96 | 80.47 |
| 18.0  | 83.14 | 85.82 | 87.63 | 90.08 | 96.11 | 97.91 | 103.4 | 103.5 | 107.0 | 105.7 |
| 21.0  | 110.2 | 111.6 | 117.6 | 119.4 | 123.8 | 129.5 | 132.6 | 134.9 | 133.0 | 131.8 |
| 24.0  | 137.3 | 139.8 | 140.7 | 144.1 | 145.8 | 149.8 | 156.3 | 158.5 | 156.5 | 160.5 |
| 27.0  | 164.9 | 162.6 | 164.4 | 167.0 | 173.9 | 175.1 | 179.0 | 179.9 | 187.7 | 183.1 |
| 30.0  | 193.6 | 190.8 | 190.4 | 193.1 | 201.0 | 201.1 | 203.5 | 207.7 | 214.7 | 209.6 |
| 33.0  | 217.0 | 216.3 | 210.7 | 217.6 | 224.1 | 225.6 | 226.9 | 232.0 | 236.8 | 235.4 |
| 36.0  | 240.5 | 240.3 | 237.2 | 243.3 | 248.7 | 249.6 | 250.4 | 254.4 | 261.3 | 257.1 |
| 39.0  | 267.4 | 265.2 | 257.5 | 265.2 | 273.8 | 272.1 | 270.3 | 276.9 | 284.1 | 282.2 |
| 42.0  | 291.4 | 287.9 | 278.0 | 288.8 | 295.9 | 294.1 | 287.7 | 299.2 | 306.2 | 304.3 |
| 45.0  | 314.6 | 310.2 | 296.9 | 309.5 | 316.9 | 312.2 | 306.3 | 319.3 | 326.0 | 323.9 |
| 48.0  | 334.0 | 331.3 | 316.2 | 329.0 | 336.8 | 331.8 | 323.2 | 336.3 | 345.5 | 340.4 |
| 51.0  | 355.8 | 348.0 | 330.8 | 346.1 | 356.8 | 350.0 | 339.1 | 353.8 | 363.0 | 358.4 |
| 54.0  | 374.6 | 366.1 | 345.9 | 362.6 | 374.8 | 367.3 | 354.0 | 369.2 | 380.8 | 373.7 |
| 57.0  | 390.7 | 382.9 | 360.3 | 381.3 | 391.5 | 382.2 | 366.8 | 384.1 | 398.3 | 387.9 |
| 60.0  | 407.4 | 397.1 | 373.3 | 394.6 | 405.3 | 395.0 | 379.2 | 398.8 | 414.1 | 402.8 |
| 63.0  | 422.1 | 410.9 | 384.4 | 407.2 | 420.3 | 407.6 | 389.8 | 410.6 | 424.2 | 414.9 |
| 66.0  | 433.9 | 423.8 | 395.5 | 418.6 | 431.0 | 420.4 | 399.5 | 420.7 | 434.8 | 426.7 |
| 69.0  | 443.5 | 435.9 | 402.5 | 430.1 | 441.6 | 429.7 | 407.4 | 430.0 | 445.0 | 435.2 |
| 72.0  | 453.0 | 443.4 | 409.3 | 438.0 | 450.8 | 439.1 | 413.5 | 437.7 | 454.0 | 444.3 |
| 75.0  | 462.7 | 450.0 | 414.8 | 444.3 | 458.6 | 445.7 | 419.7 | 444.8 | 461.2 | 448.8 |
| 78.0  | 468.2 | 456.1 | 420.2 | 449.8 | 464.0 | 450.7 | 424.6 | 448.2 | 465.1 | 453.0 |
| 81.0  | 473.0 | 460.5 | 424.4 | 452.3 | 467.9 | 454.1 | 429.0 | 451.3 | 468.1 | 455.8 |
| 84.0  | 476.9 | 465.5 | 427.2 | 456.7 | 469.6 | 456.7 | 431.1 | 454.1 | 471.8 | 458.5 |
| 87.0  | 479.4 | 467.7 | 428.8 | 457.9 | 471.6 | 457.0 | 432.3 | 455.6 | 470.8 | 460.1 |
| 90.0  | 479.9 | 467.5 | 429.0 | 458.0 | 471.6 | 458.5 | 432.0 | 454.7 | 471.0 | 459.5 |
| 93.0  | 478.1 | 466.4 | 427.5 | 457.2 | 470.8 | 457.6 | 431.2 | 453.6 | 470.3 | 457.7 |
| 96.0  | 475.7 | 464.0 | 426.9 | 454.7 | 468.9 | 455.1 | 428.6 | 451.2 | 467.4 | 454.8 |
| 99.0  | 473.0 | 461.6 | 424.1 | 450.6 | 465.9 | 451.7 | 425.0 | 447.7 | 462.2 | 451.3 |
| 102.0 | 469.2 | 458.7 | 419.7 | 446.9 | 460.8 | 447.8 | 420.8 | 441.6 | 458.6 | 446.5 |
| 105.0 | 464.1 | 454.1 | 415.3 | 441.9 | 455.4 | 441.9 | 415.6 | 434.0 | 452.7 | 441.2 |
| 108.0 | 458.9 | 446.3 | 410.8 | 434.2 | 449.3 | 435.5 | 409.4 | 428.5 | 445.0 | 433.5 |
| 111.0 | 448.6 | 438.8 | 404.5 | 426.2 | 440.1 | 427.4 | 404.3 | 422.3 | 436.7 | 426.2 |
| 114.0 | 439.9 | 429.1 | 397.0 | 419.1 | 430.4 | 418.5 | 397.7 | 412.4 | 424.2 | 416.0 |
| 117.0 | 429.3 | 420.1 | 389.0 | 408.8 | 420.6 | 409.6 | 386.7 | 400.1 | 412.6 | 403.1 |
| 120.0 | 416.7 | 409.4 | 379.5 | 394.4 | 409.5 | 395.5 | 376.2 | 386.7 | 398.7 | 389.0 |
| 123.0 | 402.7 | 395.5 | 366.9 | 380.6 | 392.7 | 381.0 | 364.5 | 371.7 | 382.6 | 375.2 |
| 126.0 | 384.6 | 379.9 | 354.4 | 367.7 | 375.6 | 367.0 | 350.8 | 358.3 | 364.4 | 359.2 |
| 129.0 | 368.8 | 362.5 | 338.0 | 350.9 | 355.9 | 346.7 | 337.8 | 339.1 | 345.7 | 339.5 |
| 132.0 | 352.2 | 342.7 | 321.1 | 331.5 | 338.3 | 325.2 | 318.1 | 319.4 | 325.4 | 321.3 |
| 135.0 | 330.7 | 324.9 | 303.1 | 312.9 | 316.4 | 308.7 | 299.7 | 299.6 | 303.6 | 305.0 |
| 138.0 | 307.6 | 303.4 | 281.8 | 290.8 | 293.3 | 287.8 | 273.9 | 278.5 | 279.4 | 276.9 |
| 141.0 | 281.6 | 278.0 | 258.7 | 265.2 | 269.2 | 260.7 | 257.8 | 253.4 | 256.8 | 251.7 |
| 144.0 | 259.6 | 251.9 | 239.0 | 242.8 | 243.6 | 237.6 | 230.4 | 232.9 | 231.0 | 232.7 |
| 147.0 | 235.8 | 238.7 | 218.4 | 226.4 | 226.7 | 220.4 | 211.6 | 208.4 | 206.5 | 201.7 |
| 150.0 | 206.6 | 206.1 | 198.0 | 199.4 | 196.3 | 195.3 | 183.7 | 184.6 | 182.6 | 175.5 |
| 153.0 | 187.4 | 181.1 | 166.5 | 172.4 | 169.8 | 166.6 | 163.3 | 157.5 | 156.8 | 156.2 |
| 156.0 | 160.6 | 163.1 | 148.2 | 154.4 | 143.5 | 142.8 | 139.6 | 134.0 | 132.3 | 131.9 |
| 159.0 | 135.4 | 136.6 | 135.1 | 135.0 | 128.3 | 126.1 | 106.9 | 108.2 | 108.8 | 106.4 |
| 162.0 | 109.9 | 110.6 | 105.0 | 99.26 | 95.06 | 89.73 | 87.00 | 88.46 | 83.03 | 81.64 |
| 165.0 | 90.41 | 81.58 | 79.54 | 77.22 | 75.29 | 69.10 | 67.68 | 63.80 | 57.63 | 61.17 |
| 168.0 | 65.60 | 61.56 | 59.86 | 57.78 | 53.45 | 54.44 | 50.18 | 48.07 | 47.83 | 45.24 |
| 171.0 | 40.55 | 36.83 | 38.52 | 35.32 | 33.71 | 31.08 | 28.98 | 29.42 | 26.35 | 27.58 |
| 174.0 | 6.578 | 6.524 | 6.330 | 6.221 | 6.205 | 6.121 | 6.106 | 6.102 | 6.020 | 6.030 |
| 177.0 | 5.554 | 5.545 | 5.554 | 5.545 | 5.559 | 5.563 | 5.582 | 5.573 | 5.587 | 5.563 |
| 180.0 | 5.545 | 5.536 | 5.549 | 5.549 | 5.563 | 5.568 | 5.591 | 5.591 | 5.605 | 5.582 |
| G/C   | 150.0 | 165.0 | 180.0 | 195.0 | 210.0 | 225.0 | 240.0 | 255.0 | 270.0 | 285.0 |
| 0.0   | 21.23 | 21.17 | 21.00 | 20.91 | 20.98 | 21.01 | 21.09 | 21.15 | 21.20 | 21.18 |
| 3.0   | 22.08 | 21.55 | 21.10 | 20.97 | 20.91 | 20.89 | 21.08 | 21.31 | 21.54 | 21.60 |
| 6.0   | 25.58 | 25.61 | 25.41 | 24.61 | 23.46 | 23.13 | 23.01 | 22.83 | 22.42 | 22.66 |
| 9.0   | 37.45 | 37.45 | 35.48 | 35.54 | 34.55 | 33.28 | 30.72 | 29.15 | 26.40 | 26.71 |
| 12.0  | 57.74 | 56.60 | 56.01 | 56.41 | 53.37 | 53.07 | 47.58 | 43.39 | 38.16 | 39.36 |
| 15.0  | 84.04 | 78.86 | 81.83 | 82.82 | 84.72 | 78.12 | 67.03 | 65.01 | 62.37 | 60.13 |
| 18.0  | 107.7 | 106.5 | 105.5 | 107.3 | 105.2 | 102.9 | 91.31 | 90.11 | 86.89 | 83.61 |
| 21.0  | 135.6 | 140.2 | 139.7 | 137.6 | 133.9 | 130.9 | 124.0 | 115.7 | 114.3 | 108.8 |
| 24.0  | 160.9 | 166.4 | 164.6 | 165.2 | 162.3 | 158.2 | 148.8 | 146.3 | 137.3 | 134.1 |
| 27.0  | 185.6 | 189.9 | 195.7 | 191.6 | 187.4 | 185.6 | 174.5 | 169.1 | 158.4 | 156.5 |
| 30.0  | 209.3 | 217.6 | 220.7 | 221.3 | 213.3 | 209.9 | 204.1 | 191.7 | 182.2 | 181.2 |

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

**Photometric Data Table [cd]**

|       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 33.0  | 232.1 | 244.2 | 247.0 | 248.7 | 236.9 | 234.2 | 228.3 | 220.5 | 205.6 | 207.2 |
| 36.0  | 256.7 | 271.3 | 273.4 | 271.8 | 259.2 | 259.6 | 253.2 | 242.3 | 227.6 | 229.0 |
| 39.0  | 277.4 | 293.5 | 298.1 | 297.9 | 280.8 | 283.0 | 277.7 | 268.7 | 248.9 | 253.3 |
| 42.0  | 295.7 | 314.5 | 321.3 | 318.2 | 302.1 | 304.0 | 298.8 | 289.1 | 269.7 | 274.4 |
| 45.0  | 315.2 | 336.6 | 344.4 | 340.6 | 321.5 | 325.6 | 322.0 | 310.7 | 288.4 | 295.4 |
| 48.0  | 331.0 | 355.8 | 366.0 | 359.7 | 339.7 | 344.6 | 341.2 | 330.9 | 303.9 | 312.4 |
| 51.0  | 345.4 | 374.5 | 383.6 | 376.9 | 352.9 | 360.7 | 361.2 | 347.5 | 319.7 | 331.4 |
| 54.0  | 360.2 | 390.7 | 401.8 | 392.9 | 367.9 | 377.8 | 379.7 | 363.6 | 337.1 | 348.2 |
| 57.0  | 373.3 | 405.4 | 418.7 | 408.0 | 382.1 | 391.7 | 396.3 | 380.4 | 351.2 | 364.4 |
| 60.0  | 386.0 | 422.6 | 431.9 | 423.2 | 395.1 | 407.0 | 412.0 | 395.7 | 362.7 | 379.2 |
| 63.0  | 398.2 | 434.9 | 445.2 | 435.8 | 406.5 | 420.0 | 425.1 | 407.6 | 373.5 | 390.0 |
| 66.0  | 407.4 | 447.8 | 457.6 | 447.9 | 416.4 | 431.1 | 436.6 | 419.8 | 383.5 | 401.3 |
| 69.0  | 415.3 | 456.3 | 469.0 | 457.6 | 424.2 | 441.7 | 446.9 | 428.6 | 390.7 | 413.1 |
| 72.0  | 421.3 | 464.0 | 477.9 | 465.2 | 430.8 | 450.8 | 457.0 | 438.3 | 398.3 | 421.3 |
| 75.0  | 427.1 | 471.3 | 483.8 | 470.9 | 437.2 | 457.2 | 463.4 | 446.1 | 406.2 | 429.6 |
| 78.0  | 432.5 | 477.2 | 487.7 | 474.7 | 442.2 | 461.3 | 469.1 | 450.0 | 412.7 | 435.6 |
| 81.0  | 436.1 | 480.0 | 491.4 | 477.5 | 445.5 | 464.5 | 472.5 | 454.4 | 417.8 | 440.3 |
| 84.0  | 438.2 | 481.4 | 493.3 | 481.4 | 447.8 | 467.0 | 475.7 | 457.7 | 419.5 | 443.0 |
| 87.0  | 438.2 | 481.6 | 494.9 | 483.2 | 448.8 | 469.3 | 476.7 | 458.8 | 420.1 | 444.8 |
| 90.0  | 437.9 | 480.8 | 495.6 | 483.1 | 448.9 | 469.8 | 475.8 | 459.5 | 420.0 | 445.6 |
| 93.0  | 436.8 | 479.3 | 494.4 | 481.3 | 447.9 | 468.0 | 474.9 | 458.7 | 419.9 | 445.7 |
| 96.0  | 434.5 | 475.9 | 490.2 | 478.0 | 444.4 | 465.3 | 473.4 | 456.1 | 417.0 | 443.0 |
| 99.0  | 430.0 | 471.2 | 485.5 | 473.5 | 441.9 | 462.2 | 469.9 | 451.7 | 413.7 | 439.3 |
| 102.0 | 425.0 | 465.7 | 479.7 | 466.8 | 436.9 | 457.9 | 464.0 | 446.5 | 410.6 | 435.0 |
| 105.0 | 419.8 | 459.6 | 473.0 | 459.6 | 430.9 | 451.5 | 457.0 | 440.0 | 407.4 | 430.3 |
| 108.0 | 414.3 | 453.0 | 465.5 | 452.3 | 426.0 | 443.6 | 449.6 | 434.4 | 402.3 | 424.5 |
| 111.0 | 408.3 | 443.0 | 456.7 | 444.5 | 420.0 | 435.4 | 441.4 | 426.3 | 396.1 | 418.0 |
| 114.0 | 399.0 | 431.8 | 446.3 | 437.0 | 412.5 | 427.6 | 432.8 | 417.1 | 389.5 | 408.9 |
| 117.0 | 386.4 | 420.8 | 434.1 | 426.1 | 401.1 | 415.3 | 421.1 | 405.9 | 380.1 | 398.0 |
| 120.0 | 376.2 | 405.1 | 419.3 | 409.5 | 389.6 | 401.1 | 408.3 | 392.7 | 370.4 | 385.0 |
| 123.0 | 363.6 | 388.5 | 403.6 | 394.5 | 380.0 | 387.7 | 393.1 | 378.8 | 357.8 | 372.9 |
| 126.0 | 350.5 | 373.8 | 383.2 | 380.2 | 364.2 | 374.4 | 377.6 | 362.8 | 346.8 | 359.6 |
| 129.0 | 332.4 | 352.1 | 363.0 | 361.3 | 348.1 | 353.5 | 357.5 | 347.7 | 331.8 | 342.8 |
| 132.0 | 310.6 | 332.0 | 345.0 | 343.0 | 329.1 | 334.8 | 338.6 | 326.7 | 315.3 | 324.2 |
| 135.0 | 290.1 | 310.8 | 318.6 | 322.1 | 308.4 | 318.1 | 320.2 | 312.4 | 295.9 | 307.4 |
| 138.0 | 266.4 | 286.3 | 289.1 | 296.2 | 284.5 | 294.0 | 295.5 | 291.7 | 275.9 | 286.2 |
| 141.0 | 247.2 | 257.3 | 273.2 | 269.1 | 260.7 | 265.4 | 274.0 | 264.3 | 252.7 | 264.9 |
| 144.0 | 220.5 | 239.7 | 242.7 | 247.5 | 237.8 | 244.2 | 244.1 | 238.6 | 235.6 | 238.9 |
| 147.0 | 211.7 | 211.1 | 217.9 | 225.8 | 219.9 | 220.1 | 224.7 | 220.1 | 213.0 | 221.6 |
| 150.0 | 166.1 | 183.4 | 189.0 | 185.9 | 192.7 | 198.4 | 198.7 | 189.3 | 194.8 | 195.3 |
| 153.0 | 154.7 | 159.1 | 165.0 | 169.0 | 169.6 | 171.1 | 174.5 | 169.8 | 162.6 | 173.8 |
| 156.0 | 144.7 | 135.2 | 142.5 | 153.1 | 147.7 | 144.5 | 142.9 | 145.6 | 148.4 | 155.5 |
| 159.0 | 104.1 | 106.4 | 115.2 | 114.6 | 117.5 | 125.3 | 130.0 | 126.7 | 135.8 | 128.5 |
| 162.0 | 78.88 | 80.77 | 92.46 | 88.11 | 92.07 | 92.60 | 104.5 | 98.26 | 102.9 | 102.7 |
| 165.0 | 64.36 | 64.86 | 62.74 | 69.20 | 70.31 | 71.63 | 73.79 | 77.00 | 81.14 | 80.30 |
| 168.0 | 45.64 | 47.27 | 46.84 | 46.91 | 49.72 | 53.78 | 54.50 | 56.07 | 58.25 | 53.88 |
| 171.0 | 28.84 | 29.45 | 30.54 | 31.92 | 31.94 | 34.75 | 35.59 | 36.11 | 38.29 | 32.88 |
| 174.0 | 6.027 | 6.051 | 5.860 | 5.888 | 6.048 | 6.081 | 6.142 | 6.173 | 6.240 | 6.072 |
| 177.0 | 5.568 | 5.540 | 5.517 | 5.508 | 5.517 | 5.536 | 5.545 | 5.559 | 5.577 | 5.596 |
| 180.0 | 5.601 | 5.601 | 5.545 | 5.536 | 5.545 | 5.545 | 5.563 | 5.577 | 5.587 | 5.601 |
| G/C   | 300.0 | 315.0 | 330.0 | 345.0 |       |       |       |       |       |       |
| 0.0   | 21.21 | 21.22 | 21.23 | 21.17 |       |       |       |       |       |       |
| 3.0   | 21.67 | 22.01 | 22.08 | 21.64 |       |       |       |       |       |       |
| 6.0   | 22.71 | 22.96 | 23.04 | 23.09 |       |       |       |       |       |       |
| 9.0   | 26.50 | 26.87 | 26.84 | 27.50 |       |       |       |       |       |       |
| 12.0  | 38.58 | 40.31 | 38.56 | 39.00 |       |       |       |       |       |       |
| 15.0  | 57.17 | 60.25 | 62.26 | 60.83 |       |       |       |       |       |       |
| 18.0  | 76.26 | 81.57 | 83.36 | 83.29 |       |       |       |       |       |       |
| 21.0  | 107.8 | 108.5 | 113.5 | 110.0 |       |       |       |       |       |       |
| 24.0  | 128.3 | 131.5 | 136.9 | 139.3 |       |       |       |       |       |       |
| 27.0  | 155.4 | 160.6 | 159.0 | 160.5 |       |       |       |       |       |       |
| 30.0  | 180.8 | 179.8 | 184.1 | 187.9 |       |       |       |       |       |       |
| 33.0  | 206.5 | 208.1 | 207.8 | 217.0 |       |       |       |       |       |       |
| 36.0  | 229.1 | 230.2 | 230.3 | 237.2 |       |       |       |       |       |       |
| 39.0  | 253.1 | 254.2 | 252.5 | 263.3 |       |       |       |       |       |       |
| 42.0  | 277.2 | 275.7 | 273.4 | 286.6 |       |       |       |       |       |       |
| 45.0  | 297.6 | 295.0 | 292.6 | 307.9 |       |       |       |       |       |       |
| 48.0  | 316.4 | 315.4 | 310.3 | 327.6 |       |       |       |       |       |       |
| 51.0  | 335.0 | 331.3 | 326.9 | 345.1 |       |       |       |       |       |       |
| 54.0  | 353.4 | 349.3 | 340.9 | 362.7 |       |       |       |       |       |       |
| 57.0  | 371.1 | 365.2 | 356.7 | 379.4 |       |       |       |       |       |       |
| 60.0  | 385.3 | 379.1 | 369.6 | 393.6 |       |       |       |       |       |       |
| 63.0  | 400.1 | 391.0 | 380.6 | 408.1 |       |       |       |       |       |       |
| 66.0  | 413.2 | 402.4 | 390.0 | 418.0 |       |       |       |       |       |       |

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**



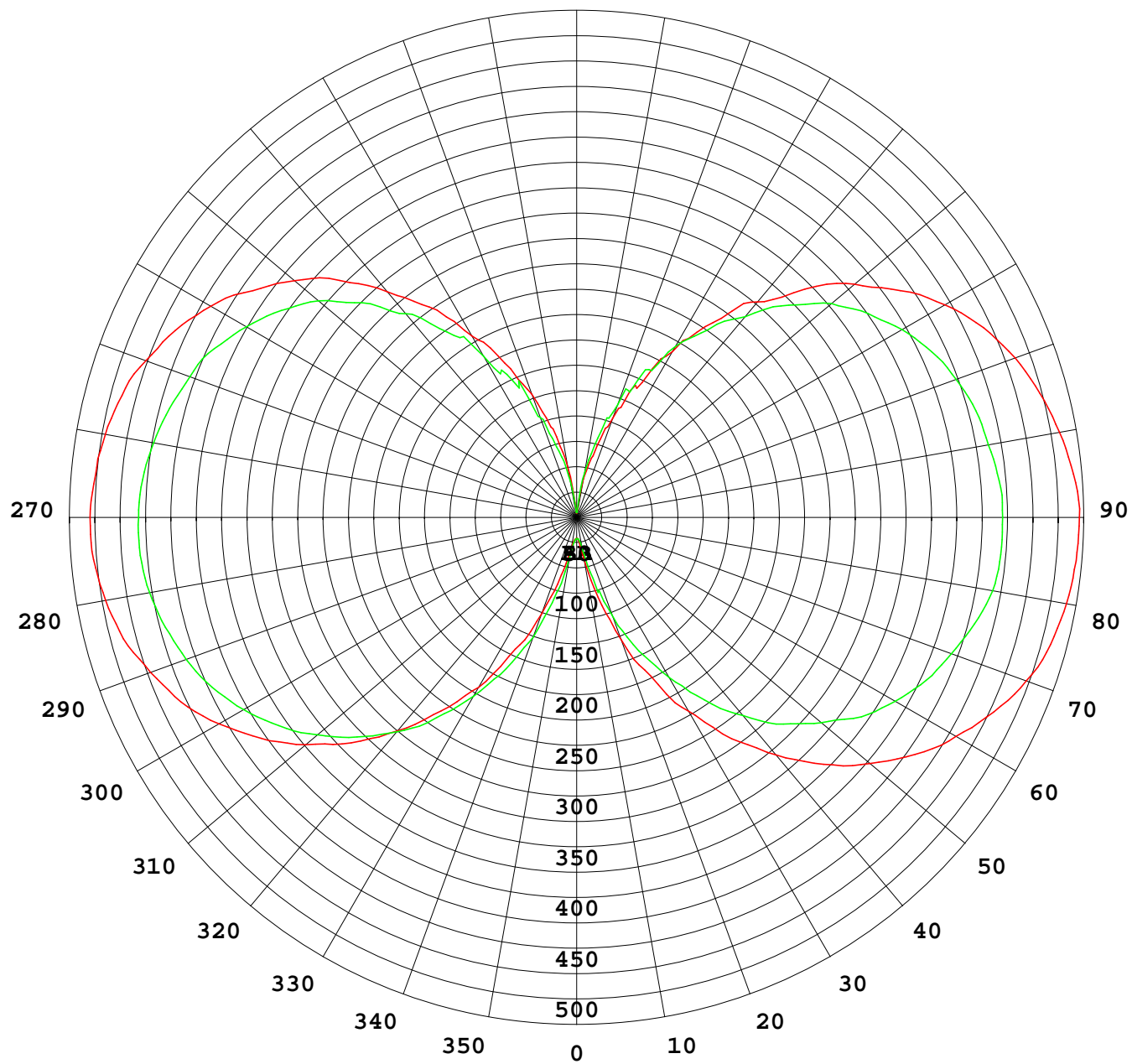
**Photometric Data Table [cd]**

|       |       |       |       |       |
|-------|-------|-------|-------|-------|
| 69.0  | 423.2 | 411.9 | 398.2 | 429.0 |
| 72.0  | 431.3 | 419.9 | 405.2 | 438.3 |
| 75.0  | 441.3 | 428.5 | 411.7 | 446.3 |
| 78.0  | 446.3 | 433.4 | 418.1 | 452.3 |
| 81.0  | 450.4 | 437.7 | 423.2 | 456.7 |
| 84.0  | 454.0 | 441.6 | 426.7 | 459.1 |
| 87.0  | 456.5 | 444.5 | 427.8 | 461.9 |
| 90.0  | 455.6 | 446.0 | 428.4 | 462.0 |
| 93.0  | 455.7 | 446.5 | 428.2 | 461.2 |
| 96.0  | 454.7 | 442.3 | 426.9 | 460.6 |
| 99.0  | 452.7 | 439.1 | 424.3 | 457.8 |
| 102.0 | 448.4 | 436.0 | 420.7 | 453.7 |
| 105.0 | 442.6 | 431.2 | 414.4 | 447.8 |
| 108.0 | 437.2 | 426.0 | 411.1 | 440.8 |
| 111.0 | 429.4 | 419.8 | 405.5 | 432.5 |
| 114.0 | 419.2 | 410.2 | 398.5 | 423.8 |
| 117.0 | 408.0 | 401.4 | 391.4 | 414.2 |
| 120.0 | 396.8 | 389.9 | 381.7 | 403.3 |
| 123.0 | 381.8 | 376.0 | 370.9 | 388.8 |
| 126.0 | 367.8 | 362.9 | 357.9 | 375.7 |
| 129.0 | 354.7 | 347.3 | 344.1 | 359.8 |
| 132.0 | 333.1 | 330.5 | 328.8 | 341.1 |
| 135.0 | 315.0 | 311.4 | 308.9 | 323.7 |
| 138.0 | 295.1 | 295.3 | 291.3 | 301.5 |
| 141.0 | 269.0 | 272.3 | 266.9 | 280.3 |
| 144.0 | 250.7 | 248.0 | 248.6 | 257.0 |
| 147.0 | 223.5 | 227.4 | 225.9 | 231.5 |
| 150.0 | 203.9 | 203.1 | 207.9 | 208.8 |
| 153.0 | 177.3 | 180.7 | 178.9 | 181.1 |
| 156.0 | 155.5 | 158.0 | 161.4 | 161.3 |
| 159.0 | 133.7 | 135.9 | 139.3 | 138.6 |
| 162.0 | 112.3 | 110.5 | 112.5 | 112.9 |
| 165.0 | 83.44 | 91.20 | 86.14 | 87.02 |
| 168.0 | 51.58 | 52.38 | 53.41 | 65.29 |
| 171.0 | 24.43 | 18.79 | 24.77 | 35.21 |
| 174.0 | 6.023 | 5.936 | 6.022 | 6.239 |
| 177.0 | 5.601 | 5.610 | 5.619 | 5.610 |
| 180.0 | 5.587 | 5.596 | 5.605 | 5.605 |

**C Range: 0 - 360DEG**  
**C Interval: 15.0DEG**  
**Test Speed: HIGH**  
**Temperature: 25.3DEG**  
**Operators: KAR**  
**Test Date: 17 Feb 2020**

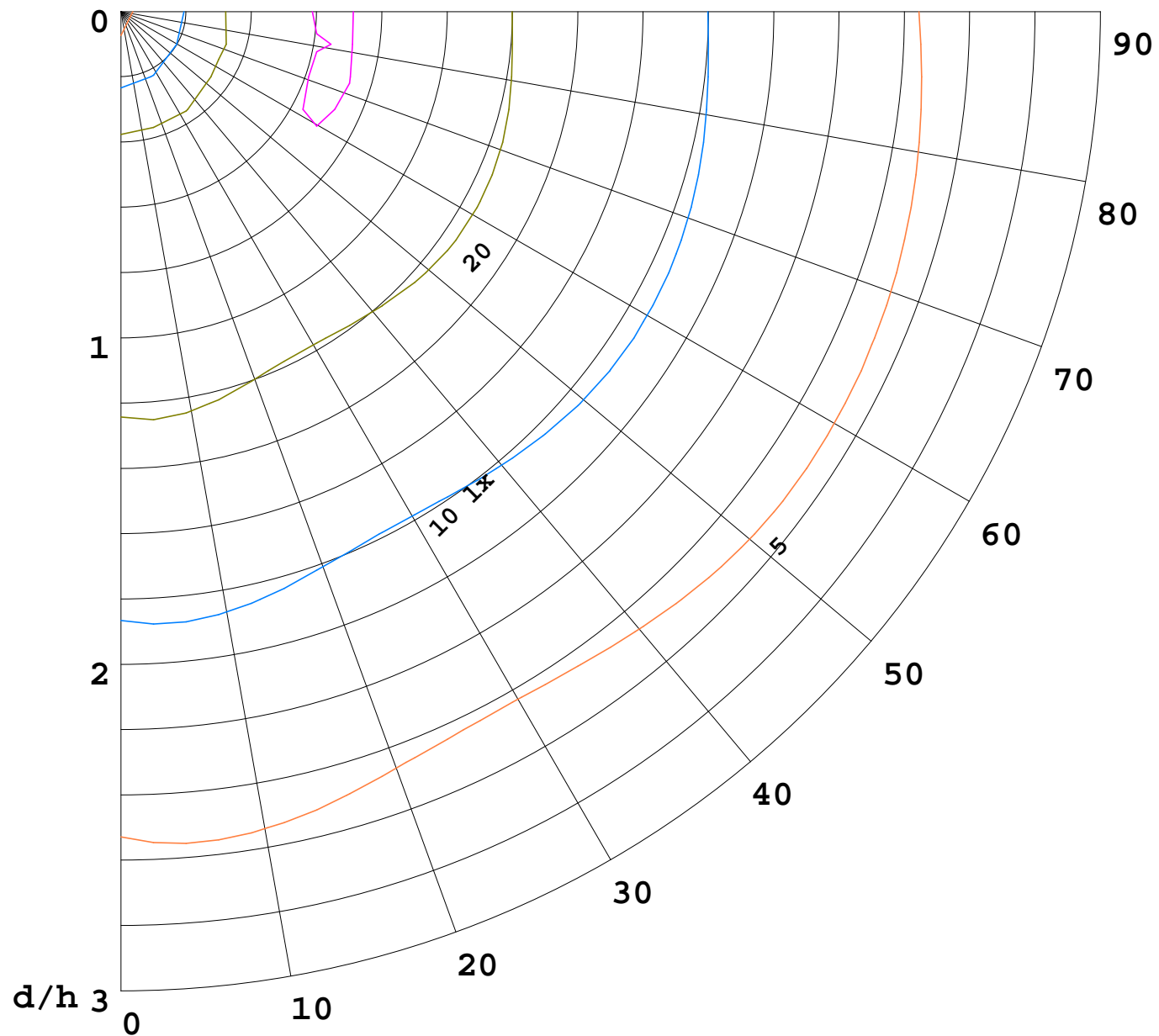
**γ Range: 0 - 180DEG**  
**γ Interval: 1.0DEG**  
**Test System: EVERFINE GO-2000A\_V1 SYSTEM V2.0.351**  
**Humidity: 65.0%**  
**Test Distance: 8.100m [K=1.0000]**  
**Remarks: OB150c-30W-57K**

I(cd)



1000 lm

$K = 1$



**F** = 1000 lm  
**K** = 0.7  
**Hcc** = 0.8 m  
**Hfc** = 0.0 m  
**Eave** = 100 lx

|      | <b>Pcc</b> | <b>Pw</b> | <b>Pfc</b> |
|------|------------|-----------|------------|
| ———— | 70         | 50        | 30         |
| ———— | 50         | 30        | 20         |

