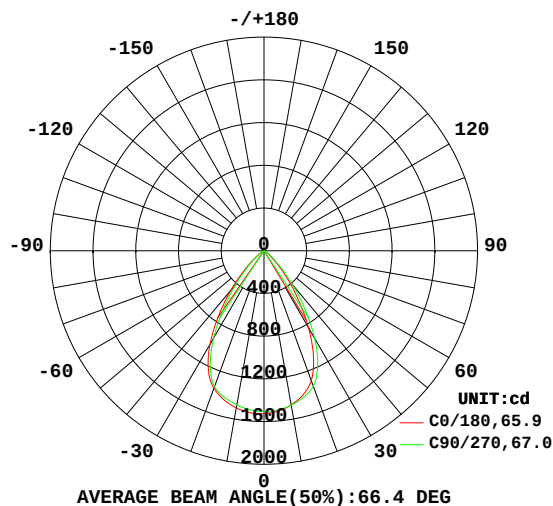


## LUMINAIRE PHOTOMETRIC TEST REPORT

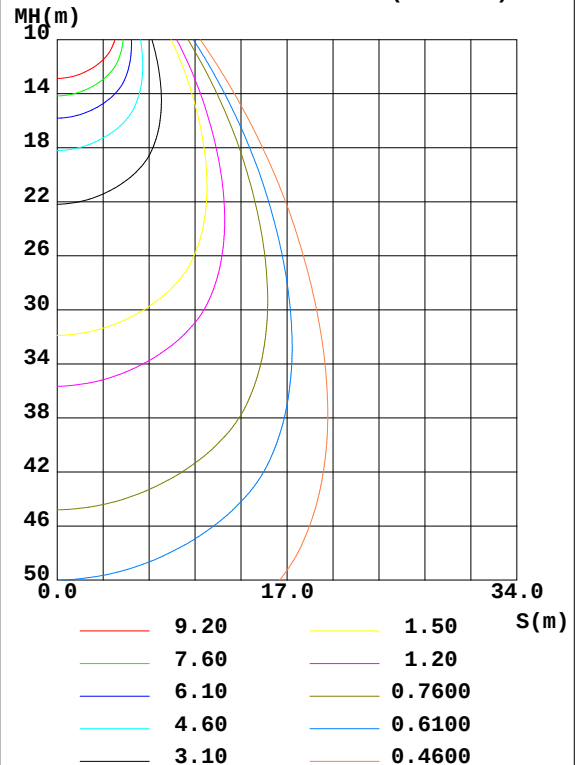
|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |

| DATA OF LAMP     |                  | PHOTOMETRIC DATA Eff: 93.10 lm/W |        |                    |          |
|------------------|------------------|----------------------------------|--------|--------------------|----------|
| MODEL            | TB25171211 3000K | I <sub>max</sub> (cd)            | 1526   | S/MH(C0/180)       | 1.01     |
| NOMINAL POWER(W) | 20               | LOR(%)                           | 100.0  | S/MH(C90/270)      | 0.98     |
| RATED VOLTAGE(V) | 220-240          | TOTAL FLUX(lm)                   | 1721.0 | η UP, DN(C0-180)   | 0.0,49.8 |
| NOMINAL FLUX(lm) | 1720.99          | CIE CLASS                        | DIRECT | η UP, DN(C180-360) | 0.0,50.2 |
| LAMPS INSIDE     | 1                | η up(%)                          | 0.0    | CIBSE SHR NOM      | 1.00     |
| TEST VOLTAGE(V)  | 220              | η down(%)                        | 100.0  | CIBSE SHR MAX      | 1.00     |

LUMINOUS INTENSITY DISTRIBUTION DIAGRAM



C0 PLANE ISOLUX DIAGRAM (UNIT:lx)



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

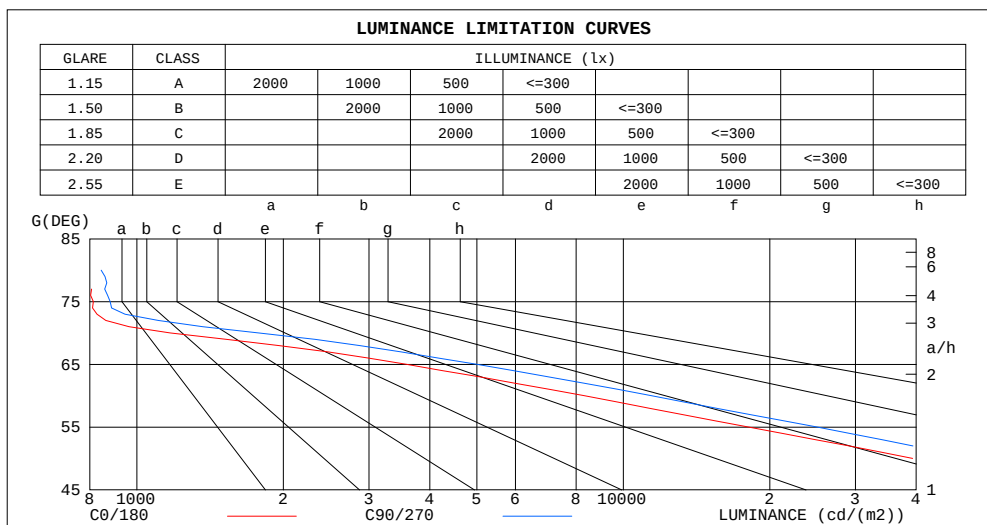
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 1466                  | 1461   | 1469   | 1472   | 1495   | 1480   | 1466   | 1452   | 0- 10    | 142.1       | 142.1        | 8.26, 8.26 |
| 20       | 1296                  | 1302   | 1350   | 1375   | 1370   | 1359   | 1354   | 1332   | 10- 20   | 399.0       | 541.1        | 31.4, 31.4 |
| 30       | 836.7                 | 856.3  | 951.9  | 1030   | 1012   | 983.9  | 946.1  | 886.9  | 20- 30   | 533.4       | 1075         | 62.4, 62.4 |
| 40       | 340.1                 | 357.2  | 421.3  | 485.1  | 483.1  | 449.8  | 408.6  | 362.7  | 30- 40   | 411.7       | 1486         | 86.4, 86.4 |
| 50       | 83.92                 | 89.94  | 112.0  | 132.3  | 132.5  | 117.1  | 105.2  | 91.65  | 40- 50   | 180.1       | 1666         | 96.8, 96.8 |
| 60       | 13.79                 | 15.18  | 18.95  | 23.13  | 22.79  | 19.81  | 17.77  | 15.32  | 50- 60   | 45.63       | 1712         | 99.5, 99.5 |
| 70       | 1.329                 | 1.441  | 2.019  | 2.850  | 2.899  | 2.621  | 1.912  | 1.366  | 60- 70   | 7.847       | 1720         | 99.9, 99.9 |
| 80       | 0.4291                | 0.3867 | 0.4870 | 0.5449 | 0.4124 | 0.4586 | 0.3544 | 0.2733 | 70- 80   | 0.8976      | 1721         | 100, 100   |
| 90       | 0.2316                | 0.1892 | 0.1892 | 0.1892 | 0.0463 | 0.0425 | 0.0386 | 0.0425 | 80- 90   | 0.2249      | 1721         | 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    |              |            |

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-11-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 815    | 855     |
| 80                | 744    | 845     |
| 75                | 814    | 881     |
| 70                | 1171   | 1778    |
| 65                | 3581   | 4999    |
| 60                | 8310   | 11419   |
| 55                | 18084  | 25041   |
| 50                | 39325  | 52497   |
| 45                | 76511  | 97349   |

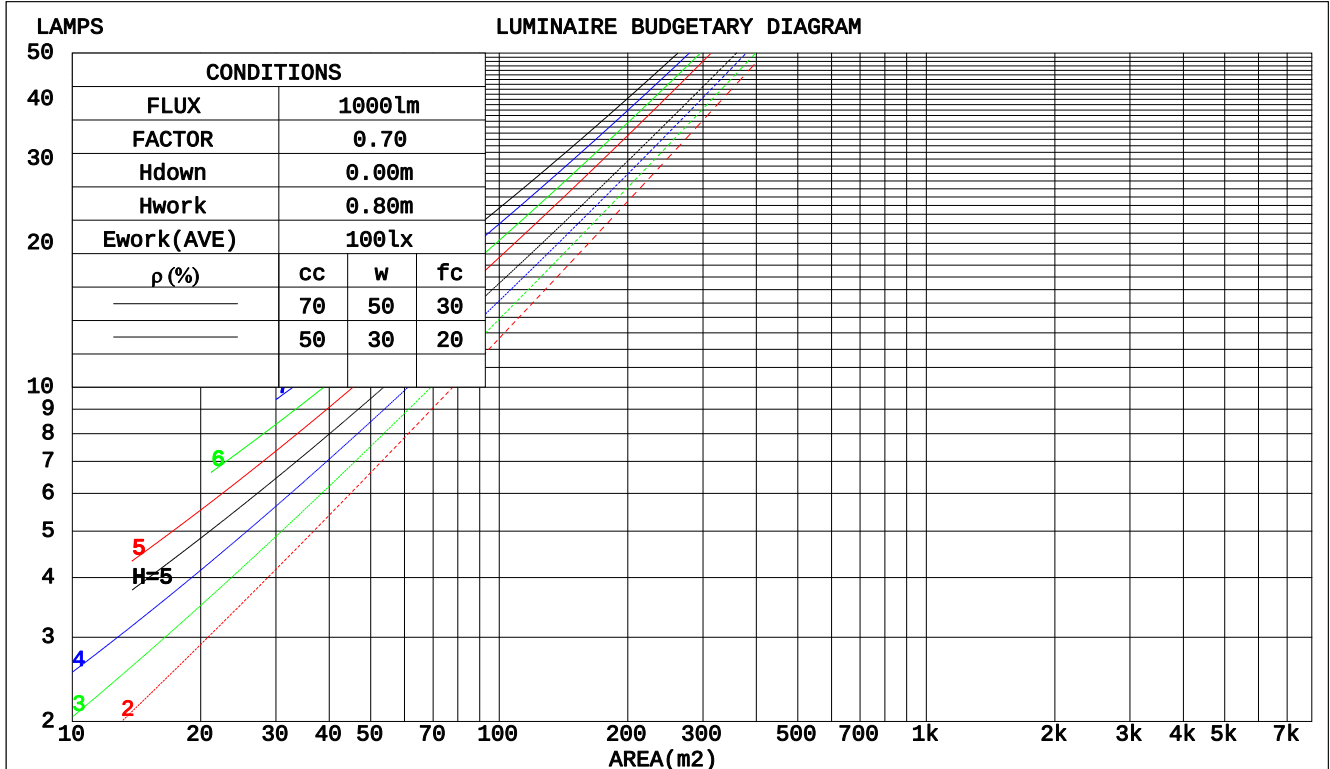
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | 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         | 1.19                            | 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                            | 1.08 | 1.05 | 1.08 | 1.06 | 1.04 | 1.04 | 1.02 | 1.00 | 1.00 | .99  | .97  | .97  | .96  | .95  | .93  |
| 2.0         | 1.02                            | .98  | .94  | 1.00 | .96  | .93  | .97  | .94  | .91  | .94  | .91  | .89  | .91  | .89  | .87  | .85  |
| 3.0         | .94                             | .89  | .85  | .93  | .88  | .84  | .90  | .86  | .83  | .88  | .84  | .81  | .85  | .83  | .80  | .78  |
| 4.0         | .87                             | .81  | .77  | .86  | .81  | .76  | .84  | .79  | .76  | .82  | .78  | .75  | .80  | .77  | .74  | .72  |
| 5.0         | .81                             | .75  | .70  | .80  | .74  | .70  | .78  | .73  | .69  | .77  | .72  | .69  | .75  | .71  | .68  | .67  |
| 6.0         | .76                             | .69  | .65  | .75  | .69  | .64  | .73  | .68  | .64  | .72  | .67  | .63  | .70  | .66  | .63  | .61  |
| 7.0         | .71                             | .64  | .60  | .70  | .64  | .59  | .69  | .63  | .59  | .67  | .62  | .59  | .66  | .62  | .58  | .57  |
| 8.0         | .66                             | .60  | .55  | .65  | .59  | .55  | .64  | .59  | .55  | .63  | .58  | .55  | .62  | .58  | .54  | .53  |
| 9.0         | .62                             | .56  | .51  | .61  | .55  | .51  | .60  | .55  | .51  | .59  | .54  | .51  | .59  | .54  | .51  | .49  |
| 10.0        | .58                             | .52  | .48  | .58  | .52  | .48  | .57  | .51  | .48  | .56  | .51  | .48  | .55  | .51  | .47  | .46  |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2023-11-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.450m [K=1.0000]  
Remarks:

# WEC AND CCEC

|                                                                                  |  |  |            |  |                  |
|----------------------------------------------------------------------------------|--|--|------------|--|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |  |  |            |  |                  |
| NAME: BJ21-BKTC20C023P                                                           |  |  | TYPE:      |  | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    |  |  | DIM.:      |  | SERIAL No.:      |
| MFR.:                                                                            |  |  | SUR.: 65mm |  | 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         | .188                  | .107 | .034 | .181 | .103 | .033 | .169                            | .097 | .031 | .157 | .091 | .029 | .146 | .085 | .027 |   |
| 2.0         | .182                  | .100 | .031 | .176 | .097 | .030 | .166                            | .092 | .029 | .156 | .087 | .027 | .147 | .083 | .026 |   |
| 3.0         | .174                  | .093 | .028 | .170 | .091 | .027 | .160                            | .087 | .026 | .152 | .083 | .026 | .144 | .080 | .025 |   |
| 4.0         | .167                  | .087 | .025 | .163 | .085 | .025 | .155                            | .082 | .024 | .147 | .079 | .024 | .140 | .076 | .023 |   |
| 5.0         | .159                  | .081 | .023 | .155 | .080 | .023 | .148                            | .077 | .023 | .142 | .075 | .022 | .136 | .073 | .022 |   |
| 6.0         | .152                  | .076 | .022 | .149 | .075 | .022 | .143                            | .073 | .021 | .137 | .071 | .021 | .131 | .069 | .021 |   |
| 7.0         | .145                  | .072 | .020 | .142 | .071 | .020 | .137                            | .069 | .020 | .132 | .068 | .020 | .127 | .066 | .019 |   |
| 8.0         | .139                  | .068 | .019 | .136 | .067 | .019 | .131                            | .066 | .019 | .127 | .064 | .019 | .122 | .063 | .018 |   |
| 9.0         | .133                  | .064 | .018 | .131 | .064 | .018 | .126                            | .062 | .018 | .122 | .061 | .018 | .118 | .060 | .017 |   |
| 10.0        | .127                  | .061 | .017 | .125 | .060 | .017 | .121                            | .059 | .017 | .117 | .058 | .017 | .114 | .057 | .016 |   |

| $\rho_{cc}$ | 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         | .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         | .146                  | .114 | .088 | .125 | .098 | .076 | .086                                       | .068 | .053 | .050 | .040 | .031 | .016 | .013 | .010 |   |
| 4.0         | .137                  | .099 | .071 | .117 | .086 | .061 | .081                                       | .060 | .043 | .047 | .035 | .026 | .015 | .011 | .008 |   |
| 5.0         | .128                  | .088 | .058 | .110 | .076 | .050 | .076                                       | .053 | .035 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0         | .121                  | .079 | .048 | .104 | .068 | .042 | .072                                       | .048 | .030 | .042 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0         | .115                  | .071 | .041 | .099 | .062 | .035 | .068                                       | .043 | .025 | .040 | .026 | .015 | .013 | .008 | .005 |   |
| 8.0         | .110                  | .065 | .035 | .094 | .057 | .030 | .065                                       | .040 | .021 | .038 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0         | .105                  | .060 | .030 | .090 | .052 | .026 | .062                                       | .037 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0        | .100                  | .056 | .026 | .086 | .048 | .023 | .060                                       | .034 | .016 | .035 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                       |               |                  |      |      |            |               |                |                  |      |      |  |
|---------------------------------------------------------------------------------------|---------------|------------------|------|------|------------|---------------|----------------|------------------|------|------|--|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz      Lamp Flux:1720.99x1 lm |               |                  |      |      |            |               |                |                  |      |      |  |
| NAME: BJ21-BKTC20C023P                                                                |               |                  |      |      | TYPE:      |               |                | WEIGHT:          |      |      |  |
| SPEC.: black RA90 3000K+5700K                                                         |               |                  |      |      | DIM.:      |               |                | SERIAL No.:      |      |      |  |
| MFR.:                                                                                 |               |                  |      |      | SUR.: 65mm |               |                | 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                                                                         | 21.2          | 22.3             | 21.5 | 22.5 | 22.6       | 22.0          | 23.1           | 22.3             | 23.2 | 23.4 |  |
|                                                                                       | 3H            | 21.1             | 22.0 | 21.3 | 22.2       | 22.4          | 21.9           | 22.8             | 22.1 | 23.0 |  |
|                                                                                       | 4H            | 21.0             | 21.9 | 21.3 | 22.1       | 22.3          | 21.8           | 22.7             | 22.0 | 22.9 |  |
|                                                                                       | 6H            | 20.9             | 21.7 | 21.2 | 22.0       | 22.2          | 21.7           | 22.5             | 22.0 | 22.8 |  |
|                                                                                       | 8H            | 20.8             | 21.6 | 21.2 | 21.9       | 22.2          | 21.6           | 22.4             | 21.9 | 22.7 |  |
|                                                                                       | 12H           | 20.8             | 21.6 | 21.1 | 21.8       | 22.1          | 21.6           | 22.3             | 21.9 | 22.6 |  |
| 4H                                                                                    | 2H            | 21.0             | 21.9 | 21.3 | 22.1       | 22.3          | 21.8           | 22.7             | 22.1 | 22.9 |  |
|                                                                                       | 3H            | 20.8             | 21.6 | 21.2 | 21.9       | 22.1          | 21.6           | 22.4             | 21.9 | 22.6 |  |
|                                                                                       | 4H            | 20.7             | 21.4 | 21.1 | 21.7       | 22.0          | 21.5           | 22.2             | 21.9 | 22.5 |  |
|                                                                                       | 6H            | 20.6             | 21.2 | 21.0 | 21.6       | 21.9          | 21.4           | 22.0             | 21.8 | 22.4 |  |
|                                                                                       | 8H            | 20.6             | 21.2 | 21.0 | 21.5       | 21.9          | 21.4           | 21.9             | 21.8 | 22.3 |  |
|                                                                                       | 12H           | 20.5             | 21.1 | 21.0 | 21.4       | 21.8          | 21.3           | 21.8             | 21.7 | 22.2 |  |
| 8H                                                                                    | 4H            | 20.6             | 21.1 | 21.0 | 21.5       | 21.9          | 21.4           | 21.9             | 21.8 | 22.3 |  |
|                                                                                       | 6H            | 20.5             | 20.9 | 20.9 | 21.3       | 21.8          | 21.3           | 21.7             | 21.7 | 22.1 |  |
|                                                                                       | 8H            | 20.4             | 20.8 | 20.9 | 21.3       | 21.7          | 21.2           | 21.6             | 21.7 | 22.0 |  |
|                                                                                       | 12H           | 20.4             | 20.7 | 20.9 | 21.2       | 21.6          | 21.2           | 21.5             | 21.6 | 22.0 |  |
| 12H                                                                                   | 4H            | 20.5             | 21.1 | 21.0 | 21.4       | 21.8          | 21.3           | 21.8             | 21.7 | 22.2 |  |
|                                                                                       | 6H            | 20.4             | 20.8 | 20.9 | 21.3       | 21.7          | 21.2           | 21.6             | 21.7 | 22.0 |  |
|                                                                                       | 8H            | 20.4             | 20.7 | 20.9 | 21.2       | 21.6          | 21.2           | 21.5             | 21.6 | 22.0 |  |
| Variations with the observer position at spacings(CIE Pub.117):                       |               |                  |      |      |            |               |                |                  |      |      |  |
| S = 1.0H                                                                              | + 2.7 / -10.6 |                  |      |      |            | + 3.1 / - 9.8 |                |                  |      |      |  |
| 1.5H                                                                                  | + 4.2 / - 7.5 |                  |      |      |            | + 4.6 / - 7.8 |                |                  |      |      |  |
| 2.0H                                                                                  | + 6.0 / -10.5 |                  |      |      |            | + 6.4 / -11.0 |                |                  |      |      |  |

CIE Pub.117, 1721 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 1.9)  
Area: 0.00332 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |

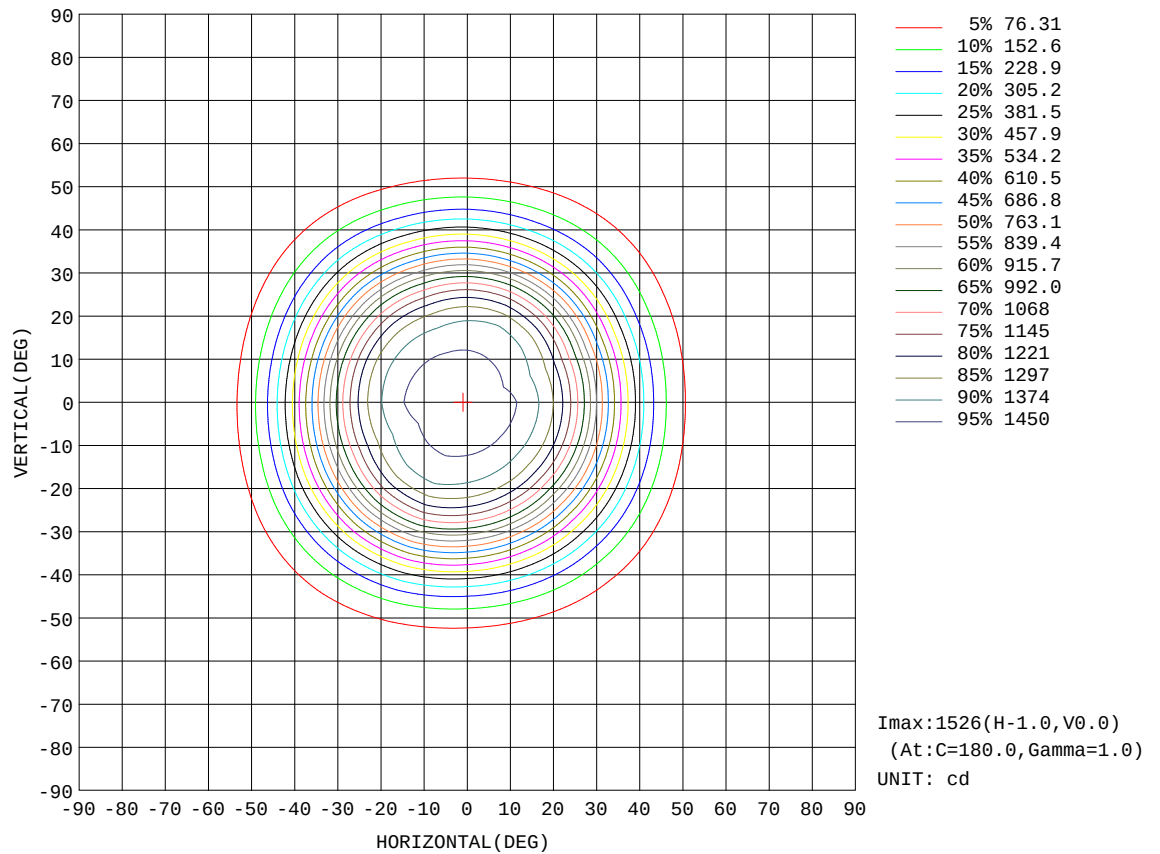
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 83                                                  | 76  | 71        | 82  | 75  | 71  | 81  | 75            | 71  | 67     |
| 0.80                             | 91                                                  | 84  | 80        | 90  | 84  | 80  | 89  | 83            | 80  | 76     |
| 1.00                             | 97                                                  | 90  | 86        | 96  | 90  | 86  | 94  | 90            | 85  | 81     |
| 1.25                             | 101                                                 | 95  | 92        | 100 | 95  | 91  | 98  | 94            | 90  | 86     |
| 1.50                             | 104                                                 | 99  | 95        | 103 | 98  | 95  | 101 | 97            | 94  | 89     |
| 2.00                             | 107                                                 | 103 | 100       | 106 | 102 | 99  | 103 | 100           | 97  | 92     |
| 2.50                             | 109                                                 | 105 | 102       | 108 | 104 | 101 | 104 | 102           | 99  | 93     |
| 3.00                             | 111                                                 | 107 | 104       | 109 | 106 | 103 | 106 | 103           | 101 | 95     |
| 4.00                             | 113                                                 | 110 | 108       | 111 | 108 | 106 | 107 | 105           | 104 | 96     |
| 5.00                             | 114                                                 | 112 | 110       | 112 | 110 | 108 | 108 | 107           | 105 | 97     |
| ROOM INDEX                       | UF(total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                     |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### ISOCANDELA DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |



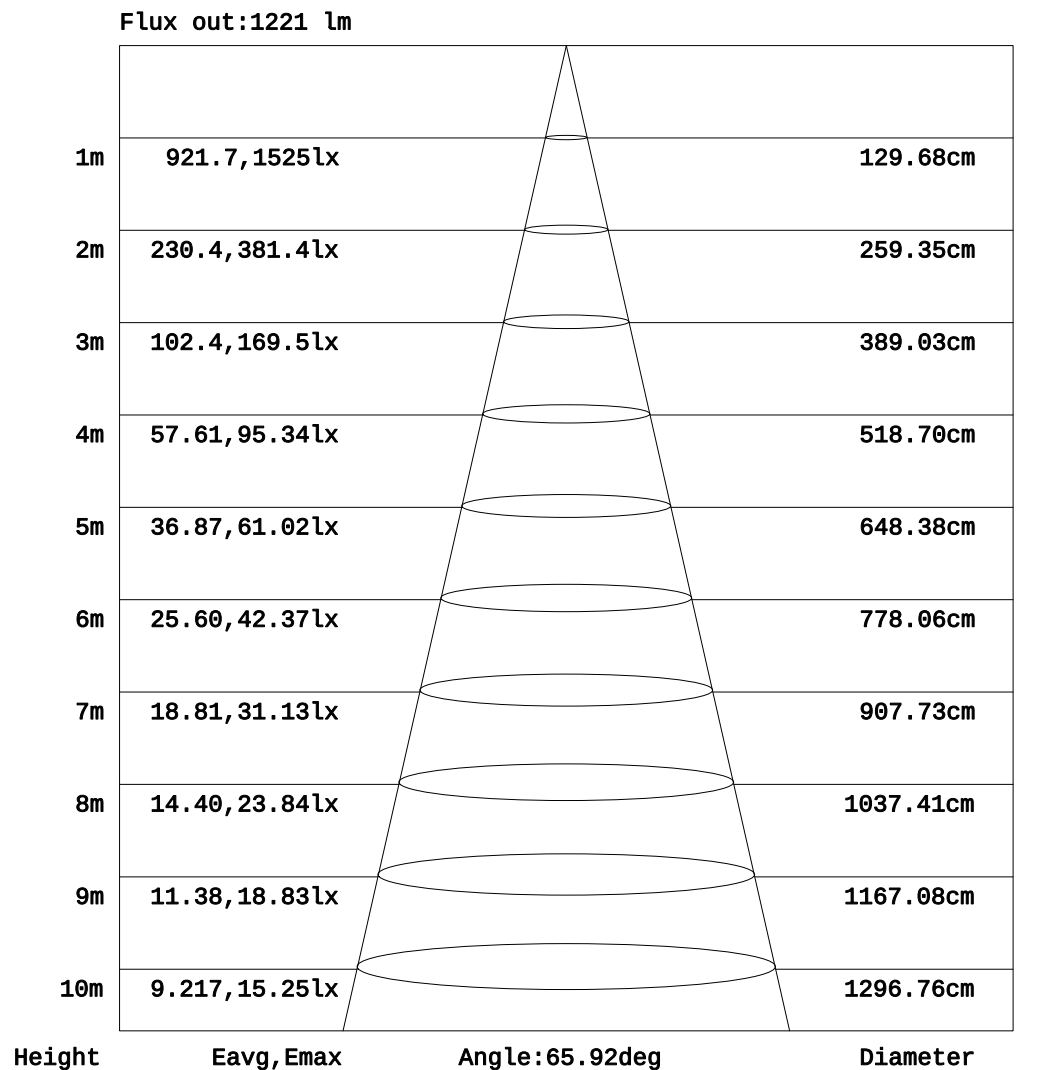
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:



### AAI Figure

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |



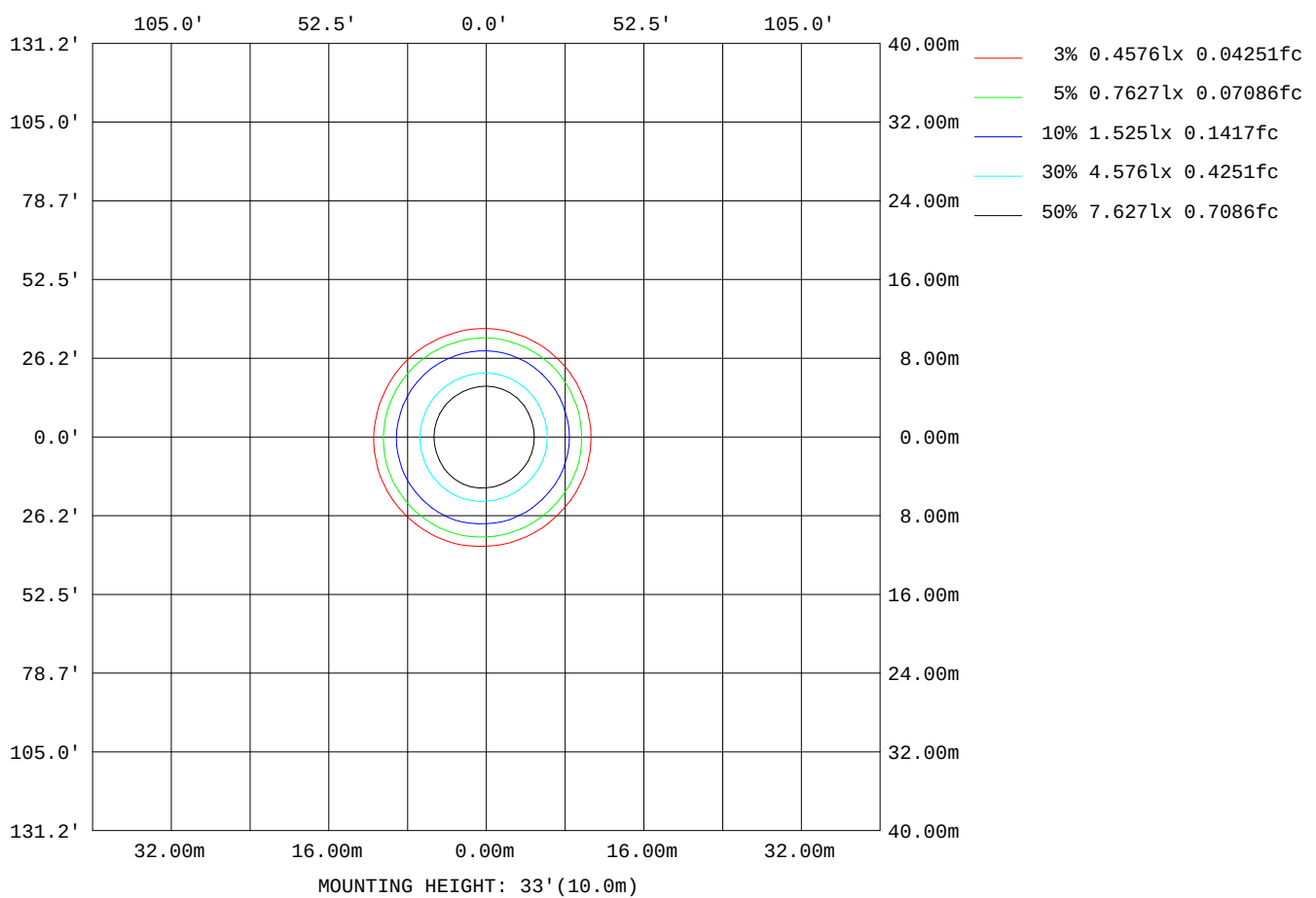
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

# ISOLUX DIAGRAM

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

### LED Avg.L Report

|                                                                                  |            |                  |
|----------------------------------------------------------------------------------|------------|------------------|
| Test:U:220.36V I:0.0914A P:18.486W PF:0.9179 Freq:50.01Hz Lamp Flux:1720.99x1 lm |            |                  |
| NAME: BJ21-BKTC20C023P                                                           | TYPE:      | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:      | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 65mm | Shielding Angle: |

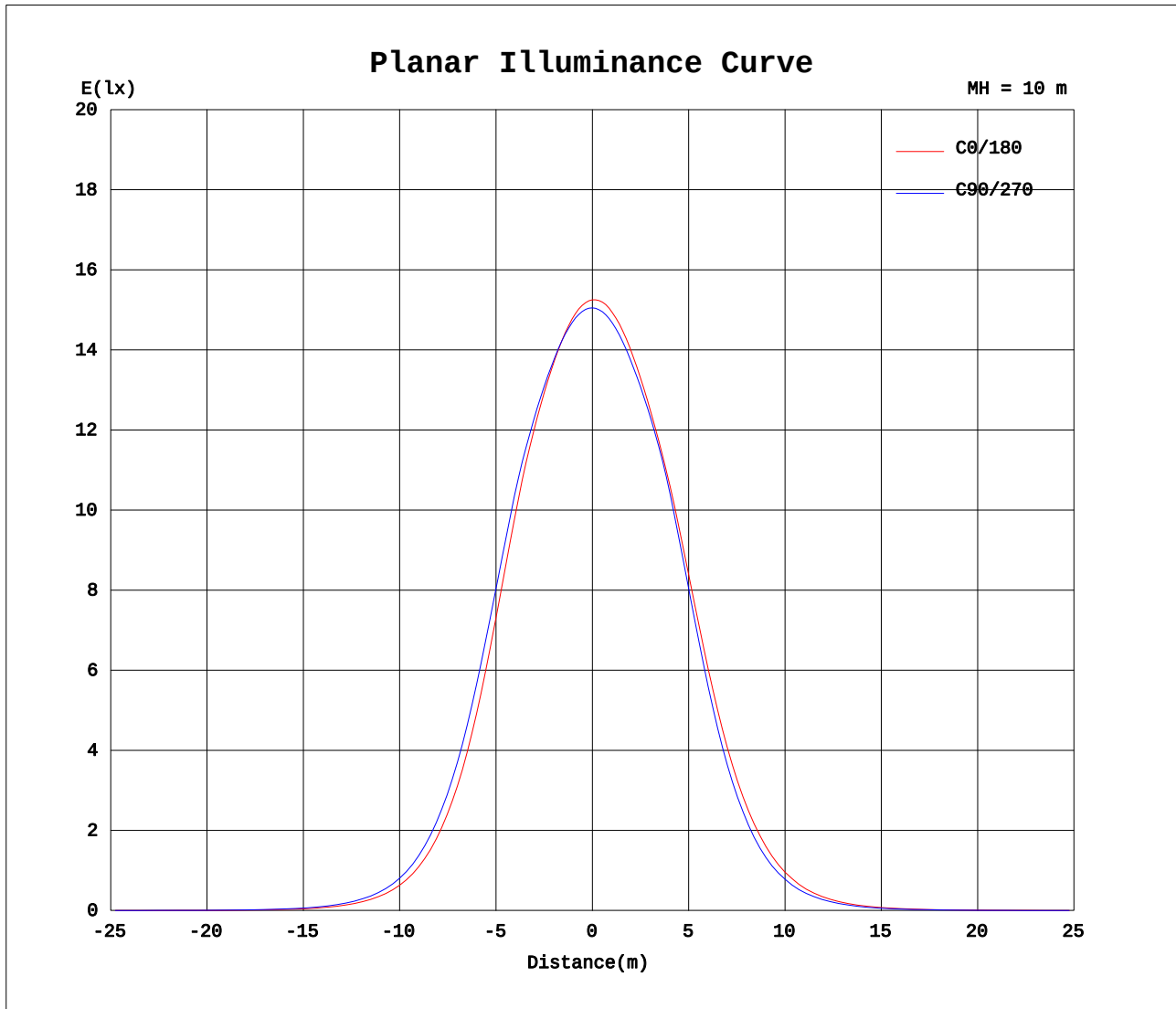
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 4943  |
| L_0~180(75)av  | 826   |
| L_0~180(85)av  | 620   |
| L_90~270(65)av | 4871  |
| L_90~270(75)av | 813   |
| L_90~270(85)av | 607   |
| L_45(65)av     | 4938  |
| L_45(75)av     | 813   |
| L_45(85)av     | 590   |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2023-11-04

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.450m [K=1.0000]  
Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2023-11-04

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.450m [K=1.0000]  
 Remarks:

```

Range: 0 - 90DEG
Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.00.428
Humidity:65.0%
Test Distance:7.450m [K=1.0000]
Remarks:

```