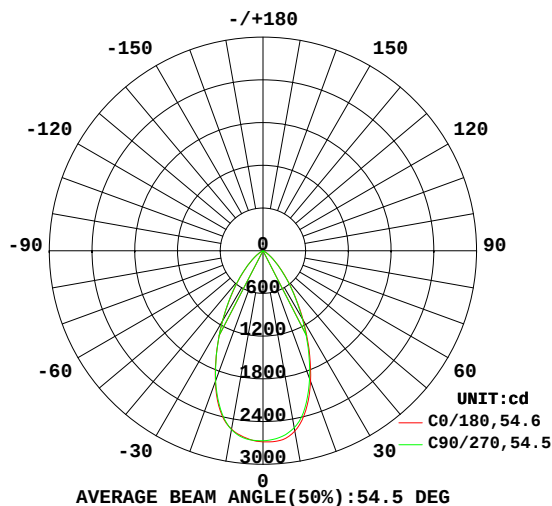


## LUMINAIRE PHOTOMETRIC TEST REPORT

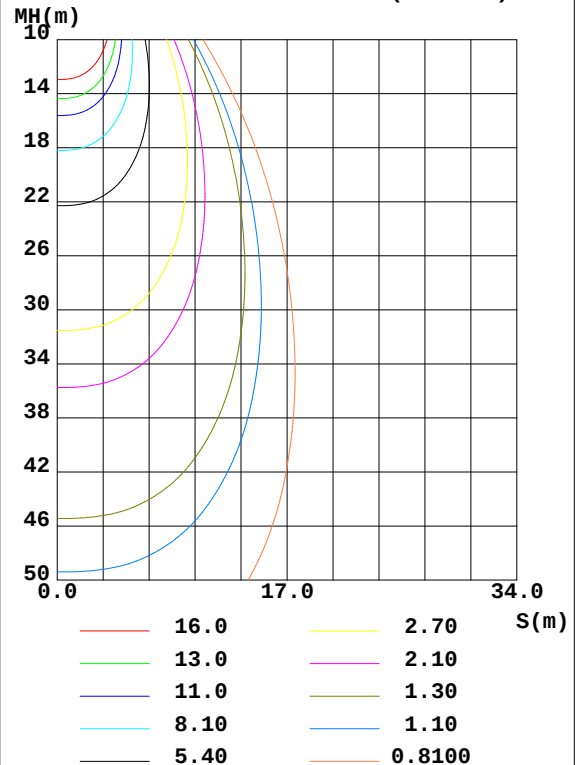
|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |

| DATA OF LAMP     |               | PHOTOMETRIC DATA Eff: 118.89 lm/W |        |                    |           |
|------------------|---------------|-----------------------------------|--------|--------------------|-----------|
| MODEL            | 2835 48 3000K | I <sub>max</sub> (cd)             | 2686   | S/MH(C0/180)       | 0.84      |
| NOMINAL POWER(W) | 20            | LOR(%)                            | 100.0  | S/MH(C90/270)      | 0.84      |
| RATED VOLTAGE(V) | 220-240       | TOTAL FLUX(lm)                    | 2455.8 | η UP, DN(C0-180)   | 0.0, 49.5 |
| NOMINAL FLUX(lm) | 2455.82       | CIE CLASS                         | DIRECT | η UP, DN(C180-360) | 0.0, 50.5 |
| LAMPS INSIDE     | 1             | η up(%)                           | 0.0    | CIBSE SHR NOM      | 0.75      |
| TEST VOLTAGE(V)  | 220           | η down(%)                         | 100.0  | CIBSE SHR MAX      | 0.85      |

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: 2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.880m [K=1.0000]  
Remarks:

## ZONAL FLUX DIAGRAM

## ZONAL FLUX DIAGRAM:

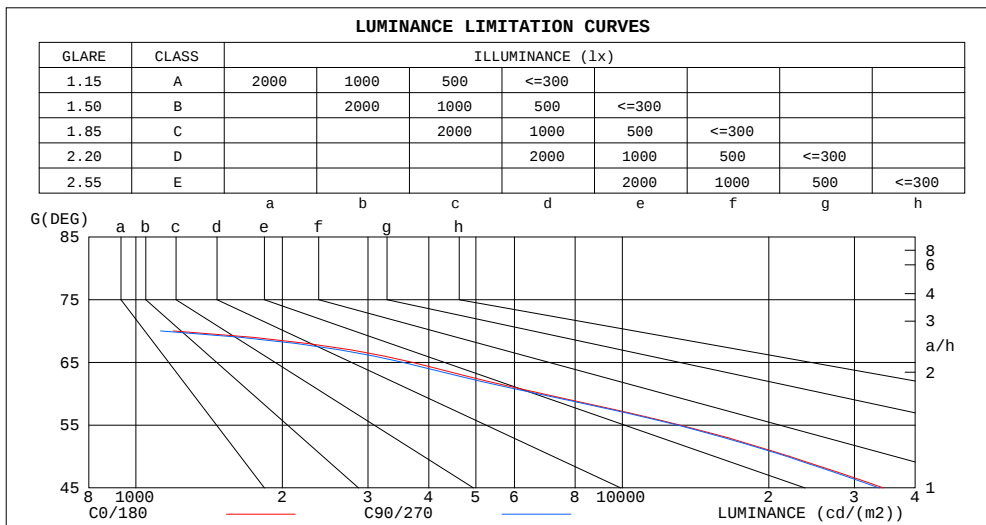
| $\gamma$ | C0                    | C45    | C90    | C135   | C180   | C225   | C270   | C315   | $\gamma$ | $\Phi$ zone | $\Phi$ total | %lum, lamp |
|----------|-----------------------|--------|--------|--------|--------|--------|--------|--------|----------|-------------|--------------|------------|
| 10       | 2573                  | 2542   | 2524   | 2500   | 2546   | 2539   | 2551   | 2575   | 0- 10    | 249.4       | 249.4        | 10.2,10.2  |
| 20       | 1956                  | 1921   | 1913   | 1904   | 1956   | 1953   | 1946   | 1966   | 10- 20   | 637.8       | 887.2        | 36.1,36.1  |
| 30       | 1130                  | 1099   | 1111   | 1108   | 1138   | 1144   | 1137   | 1134   | 20- 30   | 693.9       | 1581         | 64.4,64.4  |
| 40       | 523.0                 | 521.7  | 513.9  | 518.1  | 530.6  | 539.5  | 539.9  | 542.1  | 30- 40   | 497.1       | 2078         | 84.6,84.6  |
| 50       | 188.3                 | 189.3  | 185.8  | 187.4  | 196.6  | 196.2  | 198.6  | 197.7  | 40- 50   | 258.7       | 2337         | 95.2,95.2  |
| 60       | 45.43                 | 48.18  | 44.38  | 44.79  | 48.12  | 46.43  | 47.90  | 48.29  | 50- 60   | 95.84       | 2433         | 99.1,99.1  |
| 70       | 5.418                 | 5.875  | 5.100  | 4.830  | 5.357  | 5.221  | 5.761  | 6.032  | 60- 70   | 22.19       | 2455         | 100,100    |
| 80       | 0.0735                | 0.0691 | 0.0735 | 0.0690 | 0.0551 | 0.0413 | 0.0505 | 0.0505 | 70- 80   | 0.7397      | 2456         | 100,100    |
| 90       | 0.0735                | 0.0735 | 0.0735 | 0.0781 | 0.0735 | 0.0735 | 0.0735 | 0.0735 | 80- 90   | 0.0615      | 2456         | 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:2025-03-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.880m [K=1.0000]  
 Remarks:

## LUMINANCE LIMITATION CURVES

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |



| LUMINANCE cd/(m2) |        |         |
|-------------------|--------|---------|
| G(DEG)            | C0/180 | C90/270 |
| 85                | 48     | 44      |
| 80                | 32     | 32      |
| 75                | 31     | 29      |
| 70                | 1194   | 1124    |
| 65                | 3697   | 3536    |
| 60                | 6847   | 6689    |
| 55                | 13131  | 12984   |
| 50                | 22076  | 21788   |
| 45                | 34416  | 33745   |

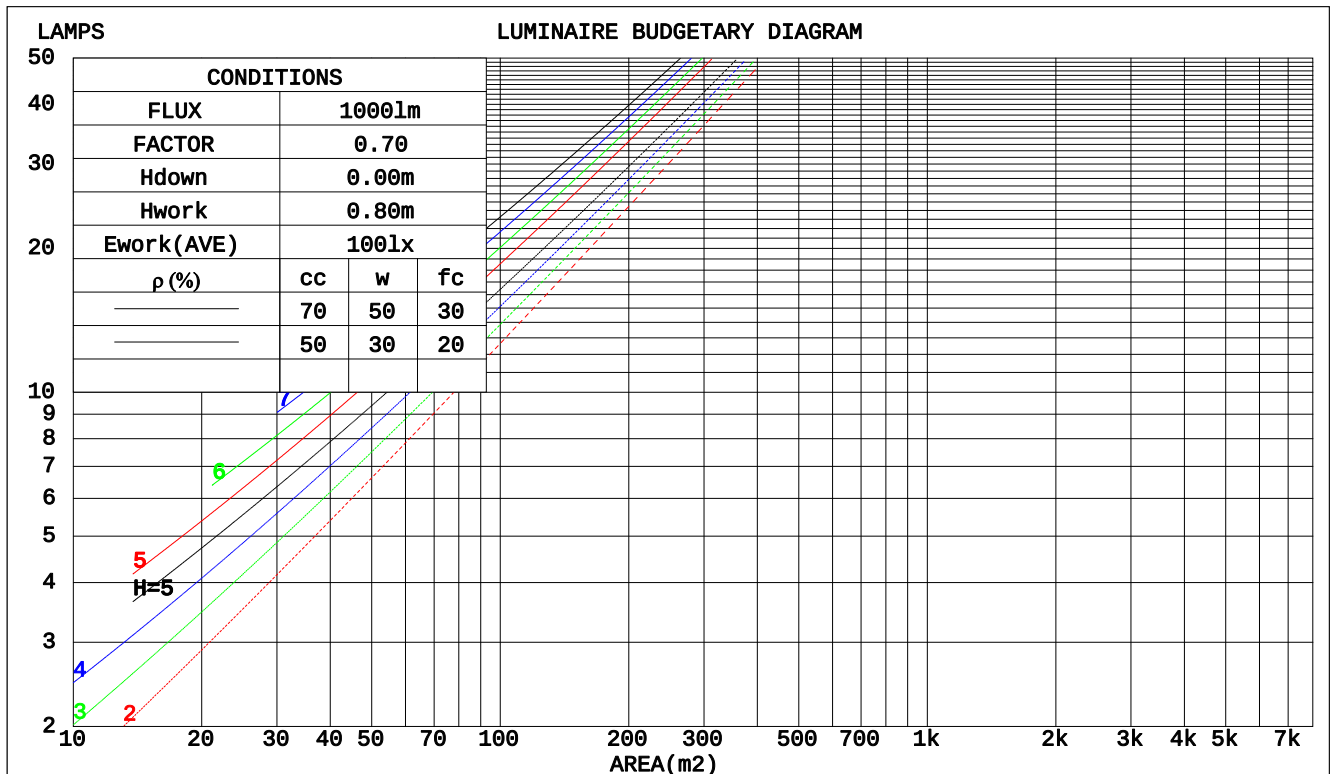
C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.880m [K=1.0000]  
Remarks:

## CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |

| $\rho_{CC}$ | 80%                   |      |      | 70%  |      |      | 50%                             |      |      | 30%  |      |      | 10%  |      |      | 0   |
|-------------|-----------------------|------|------|------|------|------|---------------------------------|------|------|------|------|------|------|------|------|-----|
| $\rho_W$    | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                             | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0   |
| $\rho_{fc}$ | 20%                   |      |      | 20%  |      |      | 20%                             |      |      | 20%  |      |      | 20%  |      |      | 0   |
| RCR         | RCR:Room Cavity Ratio |      |      |      |      |      | Coefficients of Utilization(CU) |      |      |      |      |      |      |      |      |     |
| 0.0         | 1.19                  | 1.19 | 1.19 | 1.16 | 1.16 | 1.16 | 1.11                            | 1.11 | 1.11 | 1.06 | 1.06 | 1.06 | 1.02 | 1.02 | 1.02 | .00 |
| 1.0         | 1.10                  | 1.08 | 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  | .86 |
| 3.0         | .94                   | .89  | .85  | .93  | .88  | .84  | .90                             | .86  | .83  | .88  | .85  | .82  | .86  | .83  | .80  | .79 |
| 4.0         | .88                   | .82  | .77  | .87  | .81  | .77  | .84                             | .80  | .76  | .82  | .78  | .75  | .80  | .77  | .74  | .73 |
| 5.0         | .82                   | .76  | .71  | .81  | .75  | .71  | .79                             | .74  | .70  | .77  | .73  | .69  | .76  | .72  | .69  | .67 |
| 6.0         | .76                   | .70  | .65  | .75  | .70  | .65  | .74                             | .69  | .65  | .73  | .68  | .64  | .71  | .67  | .64  | .62 |
| 7.0         | .71                   | .65  | .61  | .71  | .65  | .61  | .69                             | .64  | .60  | .68  | .63  | .60  | .67  | .63  | .60  | .58 |
| 8.0         | .67                   | .61  | .56  | .66  | .61  | .56  | .65                             | .60  | .56  | .64  | .59  | .56  | .63  | .59  | .56  | .54 |
| 9.0         | .63                   | .57  | .53  | .63  | .57  | .53  | .62                             | .56  | .52  | .61  | .56  | .52  | .60  | .55  | .52  | .51 |
| 10.0        | .60                   | .54  | .49  | .59  | .53  | .49  | .58                             | .53  | .49  | .57  | .53  | .49  | .57  | .52  | .49  | .48 |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature: 25DEG  
Operators:  
Test Date: 2025-03-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity: 65.0%  
Test Distance: 7.880m [K=1.0000]  
Remarks:

# WEC AND CCEC

|                                                                                  |  |  |             |  |                  |
|----------------------------------------------------------------------------------|--|--|-------------|--|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |  |  |             |  |                  |
| NAME: DL2008-BKTC20S03                                                           |  |  | TYPE:       |  | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    |  |  | DIM.:       |  | SERIAL No.:      |
| MFR.:                                                                            |  |  | SUR.: 130mm |  | 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         | .187                  | .106 | .034 | .180 | .103 | .033 | .168                            | .096 | .031 | .156 | .090 | .029 | .145 | .084 | .027 |   |
| 2.0         | .181                  | .099 | .030 | .175 | .096 | .030 | .164                            | .091 | .028 | .155 | .087 | .027 | .145 | .082 | .026 |   |
| 3.0         | .173                  | .092 | .028 | .168 | .090 | .027 | .159                            | .086 | .026 | .150 | .082 | .025 | .143 | .079 | .024 |   |
| 4.0         | .165                  | .086 | .025 | .161 | .084 | .025 | .153                            | .081 | .024 | .145 | .078 | .024 | .138 | .075 | .023 |   |
| 5.0         | .157                  | .080 | .023 | .153 | .079 | .023 | .146                            | .076 | .022 | .140 | .074 | .022 | .134 | .072 | .022 |   |
| 6.0         | .150                  | .075 | .021 | .147 | .074 | .021 | .140                            | .072 | .021 | .135 | .070 | .021 | .129 | .068 | .020 |   |
| 7.0         | .143                  | .071 | .020 | .140 | .070 | .020 | .134                            | .068 | .020 | .129 | .066 | .019 | .125 | .065 | .019 |   |
| 8.0         | .136                  | .067 | .019 | .134 | .066 | .019 | .129                            | .064 | .018 | .124 | .063 | .018 | .120 | .062 | .018 |   |
| 9.0         | .130                  | .063 | .018 | .128 | .062 | .018 | .124                            | .061 | .017 | .119 | .060 | .017 | .116 | .059 | .017 |   |
| 10.0        | .125                  | .060 | .017 | .123 | .059 | .017 | .119                            | .058 | .016 | .115 | .057 | .016 | .111 | .056 | .016 |   |

| ρ <sub>CC</sub> | 80%                   |      |      | 70%  |      |      | 50%                                        |      |      | 30%  |      |      | 10%  |      |      | 0 |
|-----------------|-----------------------|------|------|------|------|------|--------------------------------------------|------|------|------|------|------|------|------|------|---|
| ρ <sub>W</sub>  | 50%                   | 30%  | 10%  | 50%  | 30%  | 10%  | 50%                                        | 30%  | 10%  | 50%  | 30%  | 10%  | 50%  | 30%  | 10%  | 0 |
| ρ <sub>fC</sub> | 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             | .157                  | .132 | .111 | .135 | .114 | .096 | .092                                       | .079 | .067 | .053 | .046 | .039 | .017 | .015 | .013 |   |
| 3.0             | .146                  | .114 | .088 | .125 | .098 | .076 | .086                                       | .068 | .054 | .050 | .040 | .032 | .016 | .013 | .010 |   |
| 4.0             | .136                  | .099 | .071 | .117 | .086 | .062 | .080                                       | .060 | .043 | .046 | .035 | .026 | .015 | .011 | .008 |   |
| 5.0             | .128                  | .088 | .058 | .110 | .076 | .051 | .076                                       | .053 | .036 | .044 | .031 | .021 | .014 | .010 | .007 |   |
| 6.0             | .121                  | .079 | .048 | .104 | .068 | .042 | .072                                       | .048 | .030 | .041 | .028 | .018 | .013 | .009 | .006 |   |
| 7.0             | .114                  | .071 | .041 | .098 | .062 | .036 | .068                                       | .043 | .025 | .039 | .025 | .015 | .013 | .008 | .005 |   |
| 8.0             | .109                  | .065 | .035 | .093 | .056 | .031 | .065                                       | .040 | .022 | .038 | .023 | .013 | .012 | .008 | .004 |   |
| 9.0             | .103                  | .060 | .030 | .089 | .052 | .026 | .062                                       | .037 | .019 | .036 | .022 | .011 | .012 | .007 | .004 |   |
| 10.0            | .099                  | .055 | .027 | .085 | .048 | .023 | .059                                       | .034 | .017 | .034 | .020 | .010 | .011 | .007 | .003 |   |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

### UGR(Unified Glare Rating) Table

|                                                                                  |               |                  |      |      |      |               |                |      |                  |      |      |
|----------------------------------------------------------------------------------|---------------|------------------|------|------|------|---------------|----------------|------|------------------|------|------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |               |                  |      |      |      |               |                |      |                  |      |      |
| NAME: DL2008-BKTC20S03                                                           |               |                  |      |      |      | TYPE:         |                |      | WEIGHT:          |      |      |
| SPEC.: black RA90 3000K+5700K                                                    |               |                  |      |      |      | DIM.:         |                |      | SERIAL No.:      |      |      |
| MFR.:                                                                            |               |                  |      |      |      | SUR.: 130mm   |                |      | Shielding Angle: |      |      |
| ceiling/cavity                                                                   | 0.7           | 0.7              | 0.5  | 0.5  | 0.3  | 0.7           | 0.7            | 0.5  | 0.5              | 0.3  |      |
| walls                                                                            | 0.5           | 0.3              | 0.5  | 0.3  | 0.3  | 0.5           | 0.3            | 0.5  | 0.3              | 0.3  |      |
| working plane                                                                    | 0.2           | 0.2              | 0.2  | 0.2  | 0.2  | 0.2           | 0.2            | 0.2  | 0.2              | 0.2  |      |
| Room dimensions                                                                  |               | Viewed crosswise |      |      |      |               | Viewed endwise |      |                  |      |      |
| x = 2H y = 2H                                                                    | 17.3          | 18.3             | 17.6 | 18.5 | 18.7 | 17.2          | 18.3           | 17.5 | 18.4             | 18.6 |      |
|                                                                                  | 3H            | 17.2             | 18.1 | 17.4 | 18.3 | 18.5          | 17.1           | 18.0 | 17.4             | 18.2 | 18.4 |
|                                                                                  | 4H            | 17.1             | 18.0 | 17.4 | 18.2 | 18.4          | 17.0           | 17.9 | 17.3             | 18.1 | 18.3 |
|                                                                                  | 6H            | 17.0             | 17.8 | 17.3 | 18.1 | 18.3          | 16.9           | 17.7 | 17.2             | 18.0 | 18.2 |
|                                                                                  | 8H            | 16.9             | 17.7 | 17.3 | 18.0 | 18.3          | 16.9           | 17.7 | 17.2             | 17.9 | 18.2 |
|                                                                                  | 12H           | 16.9             | 17.7 | 17.2 | 17.9 | 18.2          | 16.8           | 17.6 | 17.1             | 17.8 | 18.1 |
| 4H                                                                               | 2H            | 17.1             | 18.0 | 17.4 | 18.3 | 18.5          | 17.1           | 17.9 | 17.3             | 18.2 | 18.4 |
|                                                                                  | 3H            | 17.0             | 17.8 | 17.3 | 18.0 | 18.3          | 16.9           | 17.7 | 17.2             | 17.9 | 18.2 |
|                                                                                  | 4H            | 16.9             | 17.6 | 17.3 | 17.9 | 18.2          | 16.8           | 17.5 | 17.2             | 17.8 | 18.1 |
|                                                                                  | 6H            | 16.8             | 17.4 | 17.2 | 17.7 | 18.1          | 16.7           | 17.3 | 17.1             | 17.7 | 18.0 |
|                                                                                  | 8H            | 16.8             | 17.3 | 17.2 | 17.7 | 18.0          | 16.7           | 17.2 | 17.1             | 17.6 | 18.0 |
|                                                                                  | 12H           | 16.7             | 17.2 | 17.1 | 17.6 | 18.0          | 16.6           | 17.1 | 17.0             | 17.5 | 17.9 |
| 8H                                                                               | 4H            | 16.8             | 17.3 | 17.2 | 17.7 | 18.0          | 16.7           | 17.2 | 17.1             | 17.6 | 18.0 |
|                                                                                  | 6H            | 16.7             | 17.1 | 17.1 | 17.5 | 17.9          | 16.6           | 17.0 | 17.0             | 17.4 | 17.8 |
|                                                                                  | 8H            | 16.6             | 17.0 | 17.1 | 17.4 | 17.9          | 16.5           | 16.9 | 17.0             | 17.3 | 17.8 |
|                                                                                  | 12H           | 16.6             | 16.9 | 17.0 | 17.3 | 17.8          | 16.5           | 16.8 | 16.9             | 17.3 | 17.7 |
| 12H                                                                              | 4H            | 16.7             | 17.2 | 17.1 | 17.6 | 18.0          | 16.6           | 17.1 | 17.0             | 17.5 | 17.9 |
|                                                                                  | 6H            | 16.6             | 17.0 | 17.1 | 17.4 | 17.9          | 16.5           | 16.9 | 17.0             | 17.3 | 17.8 |
|                                                                                  | 8H            | 16.6             | 16.9 | 17.0 | 17.3 | 17.8          | 16.5           | 16.8 | 16.9             | 17.3 | 17.7 |
| Variations with the observer position at spacings(CIE Pub.117):                  |               |                  |      |      |      |               |                |      |                  |      |      |
| S = 1.0H                                                                         | + 2.2 / - 5.9 |                  |      |      |      | + 2.2 / - 5.9 |                |      |                  |      |      |
| 1.5H                                                                             | + 3.0 / - 3.9 |                  |      |      |      | + 3.0 / - 3.8 |                |      |                  |      |      |
| 2.0H                                                                             | + 4.6 / - 6.8 |                  |      |      |      | + 4.5 / - 6.8 |                |      |                  |      |      |

CIE Pub.117, 2456 lm Total Lamp Luminous Flux Correct (8log(F/F0) = 3.1)  
Area: 0.01327 m2

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

### UTILIZATION FACTORS TABLE

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |

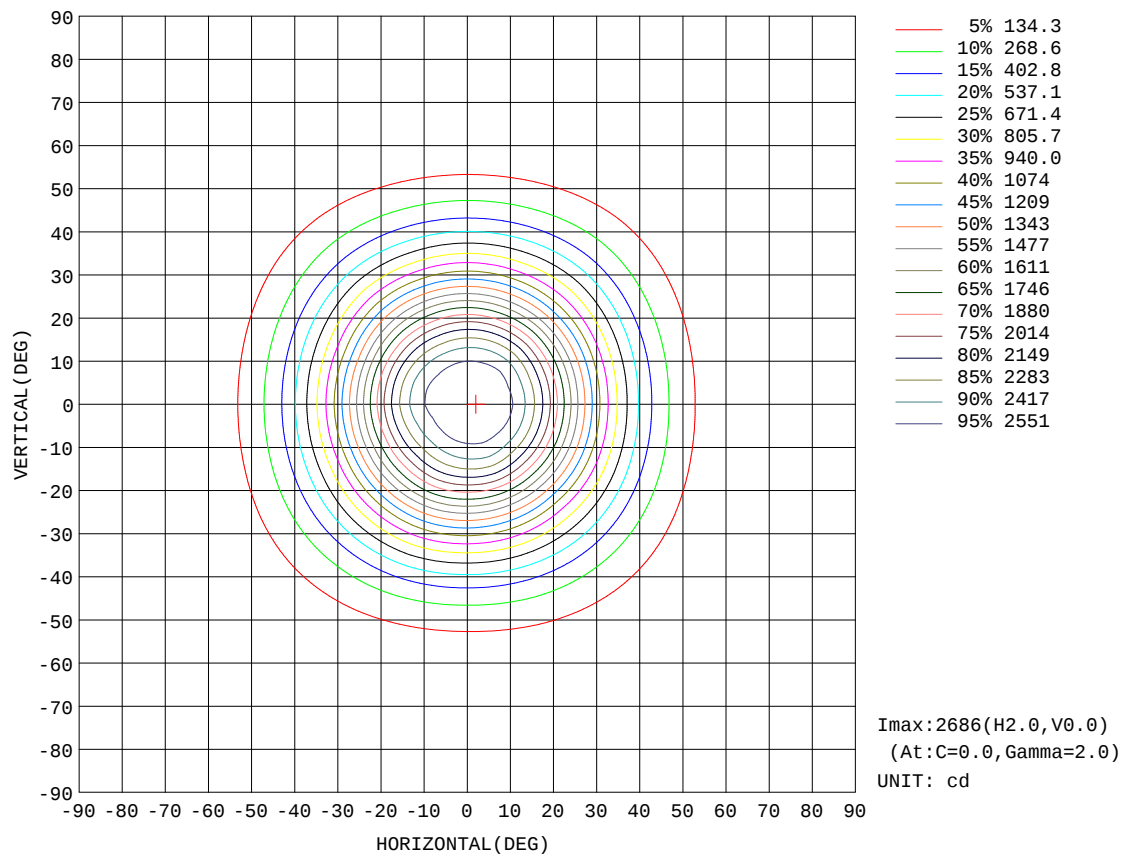
| REFLECTANCE                      |                                                     |     |           |     |     |     |     |               |     |        |
|----------------------------------|-----------------------------------------------------|-----|-----------|-----|-----|-----|-----|---------------|-----|--------|
| 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                         | 82                                                  | 74  | 70        | 81  | 74  | 70  | 80  | 74            | 70  | 66     |
| 0.80                             | 90                                                  | 83  | 79        | 89  | 83  | 79  | 88  | 82            | 78  | 74     |
| 1.00                             | 96                                                  | 89  | 85        | 95  | 89  | 85  | 93  | 89            | 84  | 80     |
| 1.25                             | 100                                                 | 95  | 91        | 99  | 94  | 90  | 97  | 93            | 89  | 85     |
| 1.50                             | 104                                                 | 98  | 94        | 102 | 97  | 94  | 100 | 96            | 93  | 88     |
| 2.00                             | 107                                                 | 102 | 99        | 106 | 101 | 98  | 103 | 99            | 97  | 91     |
| 2.50                             | 109                                                 | 105 | 101       | 107 | 103 | 100 | 104 | 101           | 99  | 92     |
| 3.00                             | 111                                                 | 107 | 104       | 109 | 106 | 103 | 105 | 103           | 101 | 94     |
| 4.00                             | 113                                                 | 110 | 107       | 111 | 108 | 106 | 107 | 105           | 103 | 96     |
| 5.00                             | 114                                                 | 112 | 109       | 112 | 110 | 108 | 108 | 106           | 105 | 97     |
| ROOM INDEX                       | UF(total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                     |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

## ISOCANDELA DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |

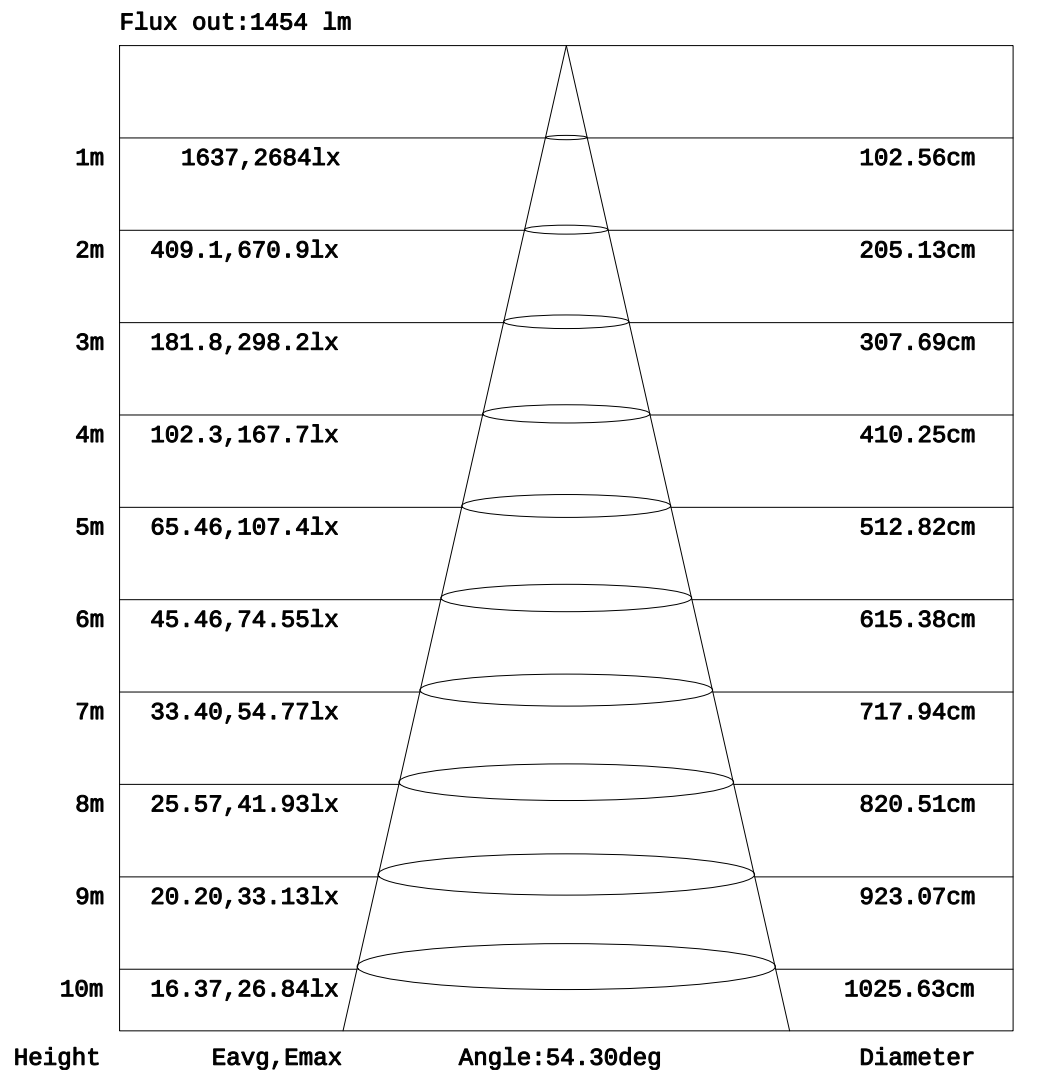


C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

### AAI Figure

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |



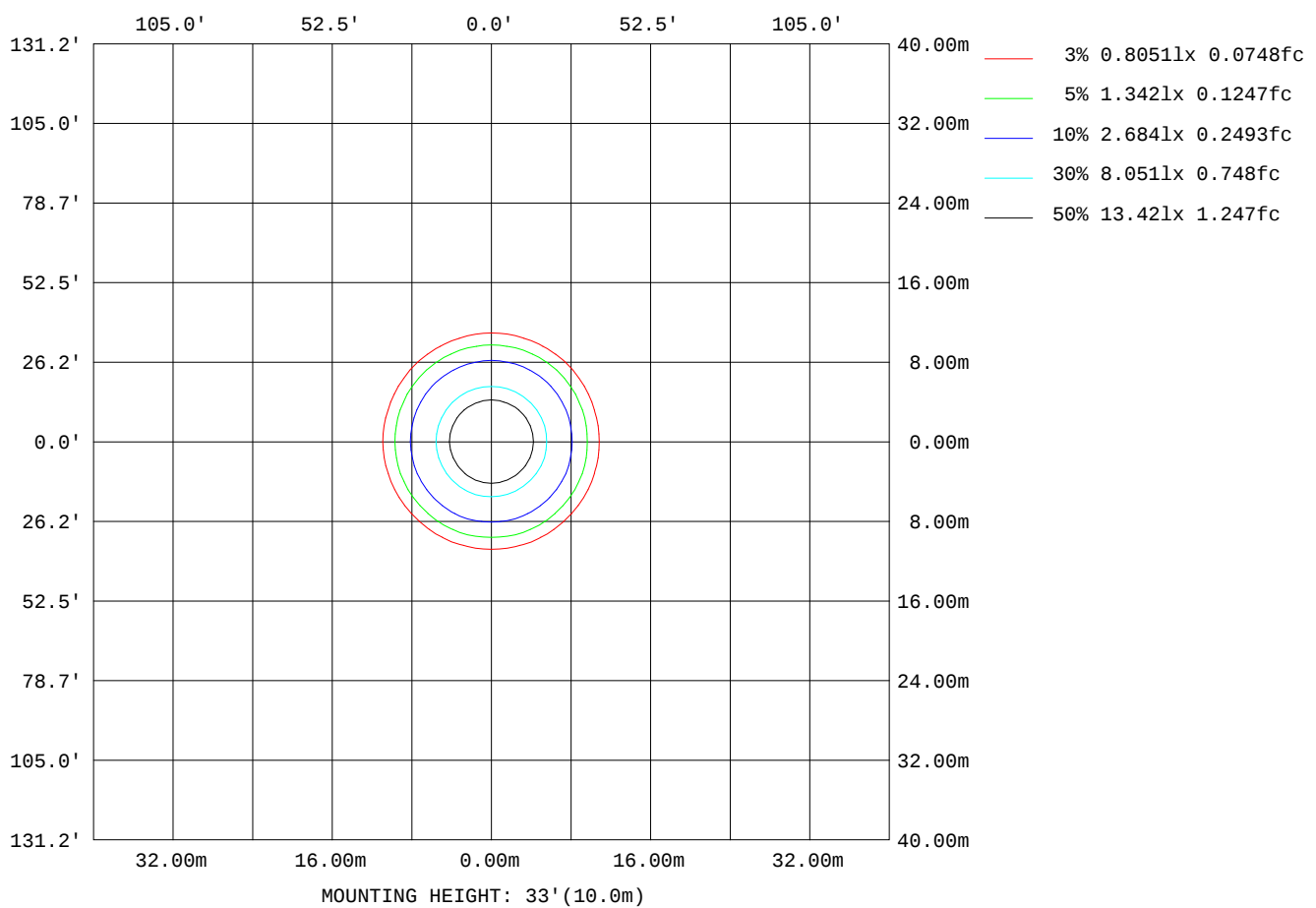
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

# ISOLUX DIAGRAM

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 22.5DEG  
Test Speed: HIGH  
Temperature:25DEG  
Operators:  
Test Date:2025-03-12

γ Range: 0 - 90DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
Humidity:65.0%  
Test Distance:7.880m [K=1.0000]  
Remarks:

## LED Avg.L Report

|                                                                                  |             |                  |
|----------------------------------------------------------------------------------|-------------|------------------|
| Test:U:230.73V I:0.0940A P:20.656W PF:0.9521 Freq:49.99Hz Lamp Flux:2455.82x1 lm |             |                  |
| NAME: DL2008-BKTC20S03                                                           | TYPE:       | WEIGHT:          |
| SPEC.: black RA90 3000K+5700K                                                    | DIM.:       | SERIAL No.:      |
| MFR.:                                                                            | SUR.: 130mm | Shielding Angle: |

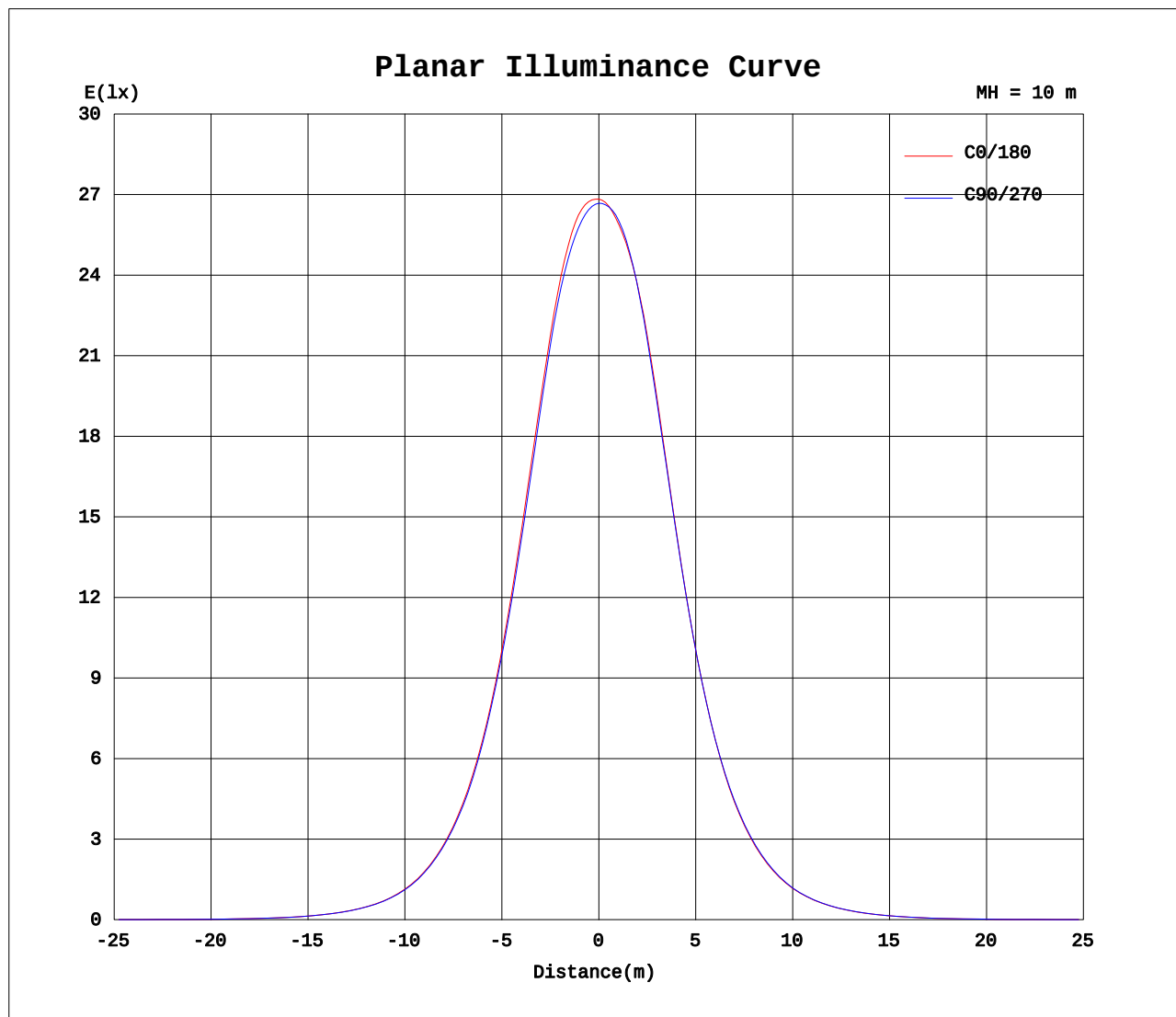
| AvgL           | cd/m2 |
|----------------|-------|
| L_0~180(65)av  | 3788  |
| L_0~180(75)av  | 26    |
| L_0~180(85)av  | 50    |
| L_90~270(65)av | 3696  |
| L_90~270(75)av | 25    |
| L_90~270(85)av | 46    |
| L_45(65)av     | 3803  |
| L_45(75)av     | 25    |
| L_45(85)av     | 45    |

Standard: GB/T 29293-2012

C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature:25DEG  
 Operators:  
 Test Date:2025-03-12

γ Range: 0 - 90DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity:65.0%  
 Test Distance:7.880m [K=1.0000]  
 Remarks:

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 22.5DEG  
 Test Speed: HIGH  
 Temperature: 25DEG  
 Operators:  
 Test Date: 2025-03-12

$\gamma$  Range: 0 - 90DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE G0-2000B\_V1 SYSTEM V2.00.428  
 Humidity: 65.0%  
 Test Distance: 7.880m [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:7.880m [K=1.0000]
Remarks:

```