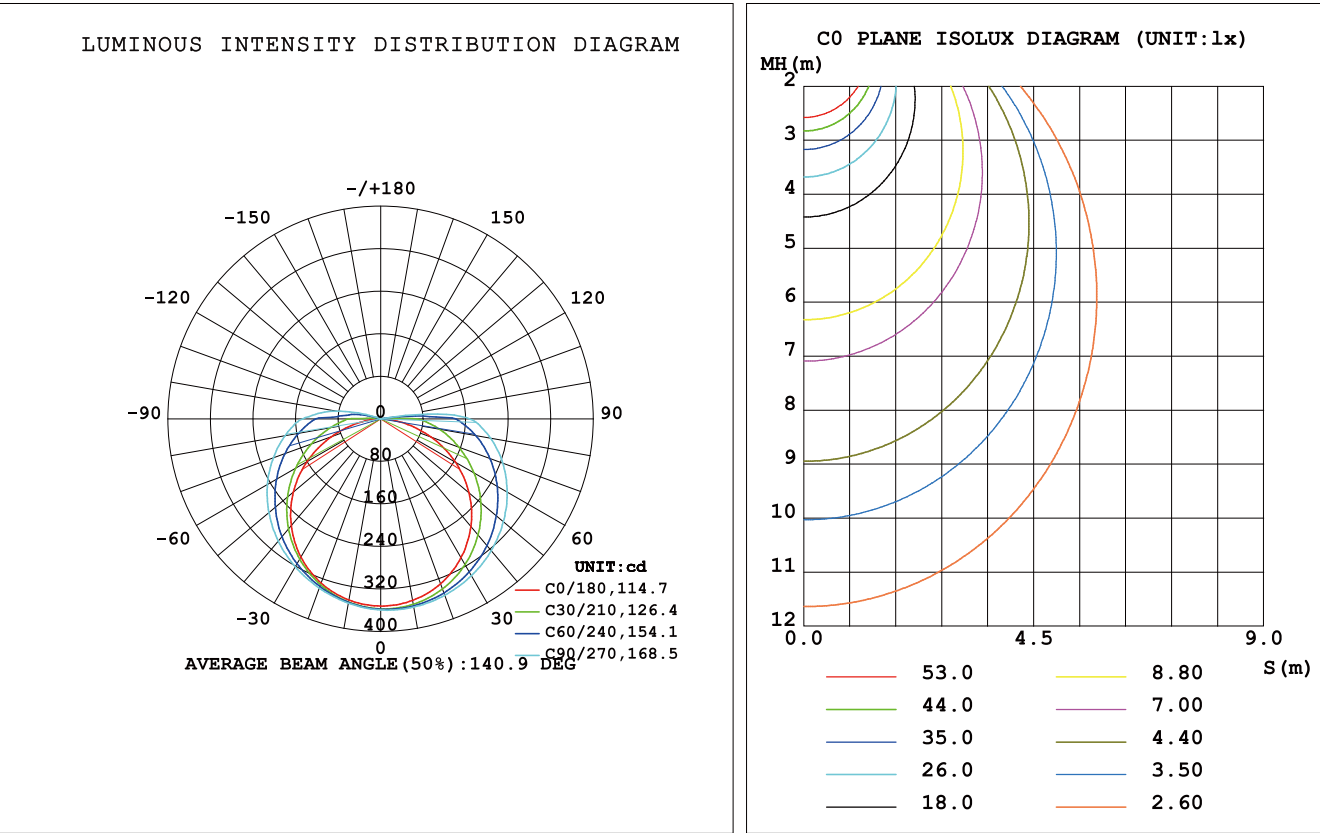


LUMINAIRE PHOTOMETRIC TEST REPORT

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACI6N S.A.                | SUR.:0.008*1 | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA      Eff: 120.05 lm/W |        |                     |           |
|-------------------|---------|----------------------------------------|--------|---------------------|-----------|
| MODEL             |         | I <sub>max</sub> (cd)                  | 360.4  | S/MH (C0/180)       | 1.27      |
| NOMINAL POWER (W) | 12.0393 | LOR (%)                                | 100.0  | S/MH (C90/270)      | 1.34      |
| RATED VOLTAGE (V) | 24      | TOTAL FLUX (lm)                        | 1445.4 | η UP, DN (C0-180)   | 2.0, 49.3 |
| NOMINAL FLUX (lm) | 1445.35 | CIE CLASS                              | DIRECT | η UP, DN (C180-360) | 2.9, 45.8 |
| LAMPS INSIDE      | 1       | η up (%)                               | 4.9    | CIBSE SHR NOM       | 1.50      |
| TEST VOLTAGE (V)  | 24      | η down (%)                             | 95.1   | CIBSE SHR MAX       | 1.55      |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity: 65.0%  
Test Distance: 12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

ZONAL FLUX DIAGRAM

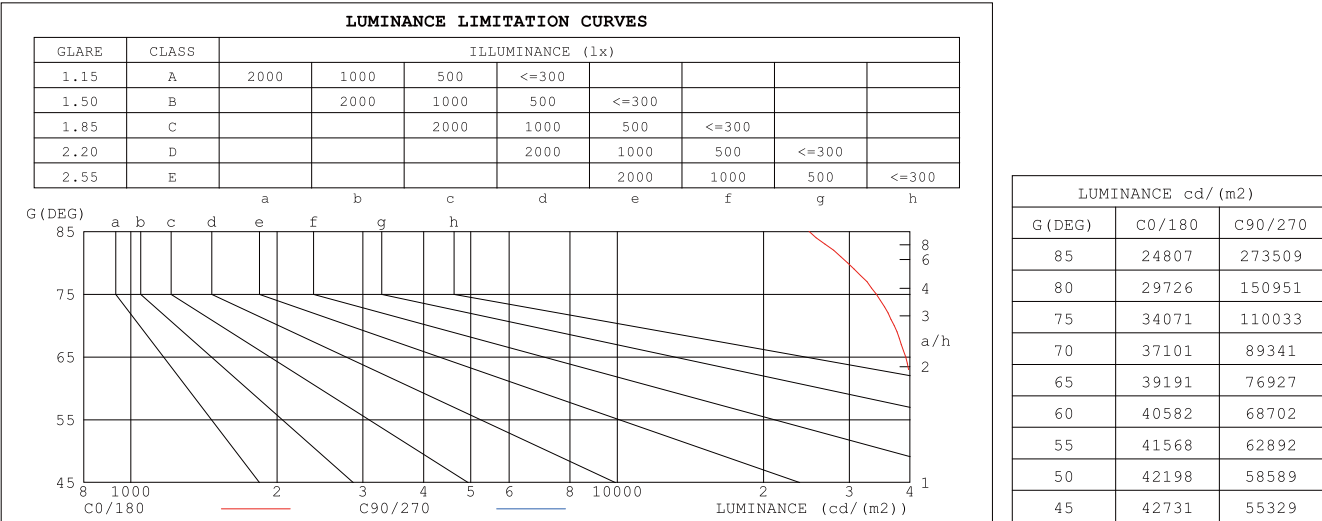
ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45    | C90   | C135   | C180   | C225   | C270  | C315  | γ       | Φ zone  | Φ total | %lum, lamp |
|-----|-----------------------|--------|-------|--------|--------|--------|-------|-------|---------|---------|---------|------------|
| 10  | 346.7                 | 355.8  | 359.5 | 357.7  | 346.0  | 349.9  | 351.8 | 352.4 | 0- 10   | 33.95   | 33.95   | 2.35,2.35  |
| 20  | 329.9                 | 344.8  | 352.9 | 346.3  | 328.6  | 333.0  | 338.6 | 336.2 | 10- 20  | 98.19   | 132.1   | 9.14,9.14  |
| 30  | 301.9                 | 325.4  | 340.9 | 326.6  | 300.2  | 308.8  | 321.5 | 313.0 | 20- 30  | 152.2   | 284.3   | 19.7,19.7  |
| 40  | 264.1                 | 298.9  | 323.6 | 299.9  | 261.8  | 278.9  | 300.0 | 283.7 | 30- 40  | 190.8   | 475.1   | 32.9,32.9  |
| 50  | 217.0                 | 266.7  | 301.3 | 267.5  | 214.7  | 243.8  | 274.5 | 249.1 | 40- 50  | 210.7   | 685.8   | 47.4,47.4  |
| 60  | 162.3                 | 230.4  | 274.8 | 231.2  | 159.6  | 205.7  | 246.1 | 211.4 | 50- 60  | 210.9   | 896.7   | 62,62      |
| 70  | 101.5                 | 191.6  | 244.5 | 192.8  | 99.22  | 167.0  | 215.0 | 172.7 | 60- 70  | 193.3   | 1090    | 75.4,75.4  |
| 80  | 41.29                 | 151.7  | 209.7 | 153.1  | 40.00  | 128.9  | 182.6 | 134.4 | 70- 80  | 161.7   | 1252    | 86.6,86.6  |
| 90  | 1.558                 | 111.4  | 166.8 | 111.4  | 2.097  | 93.62  | 146.6 | 98.69 | 80- 90  | 122.9   | 1375    | 95.1,95.1  |
| 100 | 0.6419                | 3.109  | 16.44 | 1.930  | 0.6636 | 25.07  | 85.63 | 33.88 | 90-100  | 55.96   | 1431    | 99,99      |
| 110 | 0.6459                | 1.040  | 1.199 | 0.9154 | 0.7045 | 1.094  | 13.98 | 1.252 | 100-110 | 10.06   | 1441    | 99.7,99.7  |
| 120 | 0.7207                | 0.9891 | 1.101 | 0.9209 | 0.8016 | 0.9774 | 1.181 | 1.114 | 110-120 | 1.356   | 1442    | 99.8,99.8  |
| 130 | 0.8470                | 1.020  | 1.079 | 0.9717 | 0.9231 | 0.9793 | 1.177 | 1.082 | 120-130 | 0.8909  | 1443    | 99.8,99.8  |
| 140 | 0.9403                | 1.093  | 1.082 | 1.054  | 1.028  | 1.012  | 1.182 | 1.091 | 130-140 | 0.8030  | 1444    | 99.9,99.9  |
| 150 | 1.028                 | 1.150  | 1.101 | 1.148  | 1.117  | 1.106  | 1.224 | 1.129 | 140-150 | 0.6879  | 1444    | 99.9,99.9  |
| 160 | 1.131                 | 1.223  | 1.136 | 1.223  | 1.190  | 1.150  | 1.247 | 1.198 | 150-160 | 0.5382  | 1445    | 100,100    |
| 170 | 1.182                 | 1.259  | 1.239 | 1.265  | 1.256  | 1.240  | 1.252 | 1.237 | 160-170 | 0.3445  | 1445    | 100,100    |
| 180 | 1.271                 | 1.255  | 1.247 | 1.255  | 1.263  | 1.247  | 1.255 | 1.255 | 170-180 | 0.1194  | 1445    | 100,100    |
| DEG | LUMINOUS INTENSITY:cd |        |       |        |        |        |       |       |         | UNIT:lm |         |            |

RODDA DOB (21.AB09.7320.00)

LUMINANCE LIMITATION CURVES

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACI6N S.A.                | SUR.:0.008*1 | Shielding Angle: |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## WEC AND CCEC

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | 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         | .406                  | .231 | .073 | .397 | .226 | .072 | .380                             | .218 | .070 | .365 | .211 | .068 | .351 | .203 | .066 |   |  |
| 2.0         | .350                  | .192 | .059 | .342 | .188 | .058 | .327                             | .182 | .056 | .313 | .176 | .055 | .301 | .170 | .054 |   |  |
| 3.0         | .309                  | .165 | .049 | .302 | .162 | .049 | .289                             | .157 | .048 | .277 | .152 | .047 | .266 | .147 | .045 |   |  |
| 4.0         | .278                  | .144 | .042 | .271 | .142 | .042 | .259                             | .138 | .041 | .248 | .133 | .040 | .238 | .129 | .039 |   |  |
| 5.0         | .252                  | .128 | .037 | .246 | .126 | .037 | .235                             | .123 | .036 | .226 | .119 | .035 | .216 | .116 | .035 |   |  |
| 6.0         | .230                  | .115 | .033 | .225 | .114 | .033 | .216                             | .110 | .032 | .207 | .107 | .032 | .198 | .104 | .031 |   |  |
| 7.0         | .212                  | .105 | .030 | .207 | .103 | .029 | .199                             | .100 | .029 | .191 | .098 | .028 | .183 | .095 | .028 |   |  |
| 8.0         | .196                  | .096 | .027 | .192 | .095 | .027 | .184                             | .092 | .026 | .177 | .090 | .026 | .170 | .087 | .025 |   |  |
| 9.0         | .183                  | .088 | .025 | .179 | .087 | .024 | .172                             | .085 | .024 | .165 | .083 | .024 | .159 | .081 | .023 |   |  |
| 10.0        | .171                  | .082 | .023 | .167 | .081 | .023 | .161                             | .079 | .022 | .155 | .077 | .022 | .149 | .075 | .022 |   |  |

| $\rho_{cc}$ | 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         | .228                  | .228 | .228 | .195 | .195 | .195 | .133                                        | .133 | .133 | .076 | .076 | .076 | .024 | .024 | .024 |   |
| 1.0         | .225                  | .193 | .164 | .192 | .166 | .141 | .131                                        | .114 | .098 | .076 | .066 | .057 | .024 | .021 | .018 |   |
| 2.0         | .218                  | .169 | .129 | .187 | .146 | .111 | .128                                        | .101 | .078 | .074 | .059 | .046 | .024 | .019 | .015 |   |
| 3.0         | .210                  | .153 | .107 | .180 | .132 | .093 | .124                                        | .091 | .065 | .071 | .053 | .038 | .023 | .017 | .013 |   |
| 4.0         | .202                  | .140 | .092 | .173 | .121 | .080 | .119                                        | .084 | .056 | .069 | .049 | .033 | .022 | .016 | .011 |   |
| 5.0         | .194                  | .130 | .082 | .167 | .112 | .072 | .115                                        | .078 | .051 | .067 | .046 | .030 | .021 | .015 | .010 |   |
| 6.0         | .186                  | .122 | .075 | .160 | .105 | .066 | .110                                        | .074 | .046 | .064 | .043 | .028 | .021 | .014 | .009 |   |
| 7.0         | .179                  | .115 | .070 | .154 | .100 | .061 | .106                                        | .070 | .043 | .062 | .041 | .026 | .020 | .013 | .009 |   |
| 8.0         | .172                  | .109 | .066 | .148 | .095 | .058 | .102                                        | .066 | .041 | .060 | .039 | .024 | .019 | .013 | .008 |   |
| 9.0         | .165                  | .104 | .063 | .142 | .090 | .055 | .099                                        | .064 | .039 | .057 | .038 | .023 | .019 | .012 | .008 |   |
| 10.0        | .159                  | .100 | .060 | .137 | .087 | .053 | .095                                        | .061 | .037 | .056 | .036 | .022 | .018 | .012 | .007 |   |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

## RODDA DOB (21.AB09.7320.00)

UGR(Unified Glare Rating) Table

|                                                    |               |      |      |      |      |                  |      |      |                  |      |  |
|----------------------------------------------------|---------------|------|------|------|------|------------------|------|------|------------------|------|--|
| NAME: RODDA DOB 12w 21.AB09.7320.00                |               |      |      |      |      | TYPE:IES         |      |      | WEIGHT:          |      |  |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT         |               |      |      |      |      | DIM.: 1M         |      |      | SERIAL No.:10    |      |  |
| MFR.: IDEA ILUMINACIÓN S.A.                        |               |      |      |      |      | SUR.:0.008*1     |      |      | 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                                      | 24.1          | 25.7 | 24.4 | 26.0 | 26.3 | 26.2             | 27.8 | 26.6 | 28.1             | 28.4 |  |
| 3H                                                 | 25.6          | 27.1 | 26.0 | 27.5 | 27.8 | 29.0             | 30.5 | 29.4 | 30.8             | 31.2 |  |
| 4H                                                 | 26.3          | 27.7 | 26.7 | 28.1 | 28.4 | 30.5             | 32.0 | 30.9 | 32.3             | 32.7 |  |
| 6H                                                 | 26.8          | 28.1 | 27.2 | 28.5 | 28.9 | 32.2             | 33.5 | 32.6 | 33.9             | 34.3 |  |
| 8H                                                 | 26.9          | 28.2 | 27.3 | 28.6 | 29.0 | 33.1             | 34.4 | 33.5 | 34.8             | 35.2 |  |
| 12H                                                | 27.0          | 28.3 | 27.4 | 28.6 | 29.1 | 34.2             | 35.4 | 34.6 | 35.8             | 36.2 |  |
| 4H 2H                                              | 25.3          | 26.7 | 25.7 | 27.1 | 27.5 | 26.9             | 28.3 | 27.2 | 28.6             | 29.0 |  |
| 3H                                                 | 27.2          | 28.5 | 27.6 | 28.8 | 29.3 | 29.9             | 31.1 | 30.3 | 31.5             | 32.0 |  |
| 4H                                                 | 28.0          | 29.2 | 28.5 | 29.6 | 30.1 | 31.6             | 32.8 | 32.1 | 33.2             | 33.6 |  |
| 6H                                                 | 28.7          | 29.7 | 29.2 | 30.2 | 30.7 | 33.5             | 34.6 | 34.0 | 35.0             | 35.5 |  |
| 8H                                                 | 28.9          | 29.9 | 29.4 | 30.4 | 30.9 | 34.6             | 35.5 | 35.1 | 36.0             | 36.5 |  |
| 12H                                                | 29.1          | 30.0 | 29.6 | 30.5 | 31.0 | 35.7             | 36.7 | 36.3 | 37.1             | 37.7 |  |
| 8H 4H                                              | 29.2          | 30.2 | 29.7 | 30.6 | 31.1 | 32.0             | 33.0 | 32.5 | 33.4             | 33.9 |  |
| 6H                                                 | 30.3          | 31.1 | 30.8 | 31.6 | 32.1 | 34.2             | 35.0 | 34.7 | 35.5             | 36.1 |  |
| 8H                                                 | 30.7          | 31.5 | 31.3 | 32.0 | 32.6 | 35.5             | 36.2 | 36.0 | 36.7             | 37.3 |  |
| 12H                                                | 31.1          | 31.7 | 31.6 | 32.3 | 32.8 | 36.9             | 37.6 | 37.5 | 38.1             | 38.7 |  |
| 12H 4H                                             | 29.6          | 30.5 | 30.1 | 31.0 | 31.5 | 32.0             | 32.9 | 32.5 | 33.4             | 33.9 |  |
| 6H                                                 | 30.9          | 31.6 | 31.4 | 32.2 | 32.7 | 34.3             | 35.1 | 34.9 | 35.6             | 36.2 |  |
| 8H                                                 | 31.5          | 32.2 | 32.1 | 32.7 | 33.3 | 35.7             | 36.4 | 36.3 | 36.9             | 37.5 |  |
| 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                                               | + 0.2 / - 0.4 |      |      |      |      | + 0.2 / - 0.4    |      |      |                  |      |  |

CIE Pub.117, 1445 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.3$ )  
Area: 0.008 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## UTILIZATION FACTORS TABLE

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | 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) $k(RI) \times RCR = 5$ |     |           |     |     |     |     |               |     |        |
| $k = 0.60$                       | 51                                                   | 38  | 31        | 50  | 38  | 31  | 49  | 37            | 30  | 24     |
| 0.80                             | 60                                                   | 47  | 39        | 59  | 47  | 39  | 57  | 46            | 38  | 31     |
| 1.00                             | 68                                                   | 55  | 47        | 67  | 54  | 46  | 64  | 56            | 46  | 38     |
| 1.25                             | 75                                                   | 62  | 54        | 73  | 62  | 54  | 70  | 60            | 53  | 44     |
| 1.50                             | 80                                                   | 68  | 59        | 78  | 67  | 59  | 74  | 65            | 58  | 49     |
| 2.00                             | 87                                                   | 76  | 68        | 85  | 75  | 67  | 81  | 72            | 66  | 56     |
| 2.50                             | 92                                                   | 82  | 74        | 89  | 80  | 73  | 85  | 77            | 71  | 61     |
| 3.00                             | 95                                                   | 86  | 79        | 93  | 84  | 78  | 88  | 81            | 75  | 65     |
| 4.00                             | 100                                                  | 92  | 86        | 97  | 90  | 84  | 92  | 86            | 81  | 70     |
| 5.00                             | 103                                                  | 96  | 90        | 100 | 94  | 89  | 95  | 90            | 85  | 74     |
| ROOM INDEX                       | UF (total)                                           |     |           |     |     |     |     |               |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     | Suspended |     |     |     |     | SHRNOM = 1.25 |     |        |

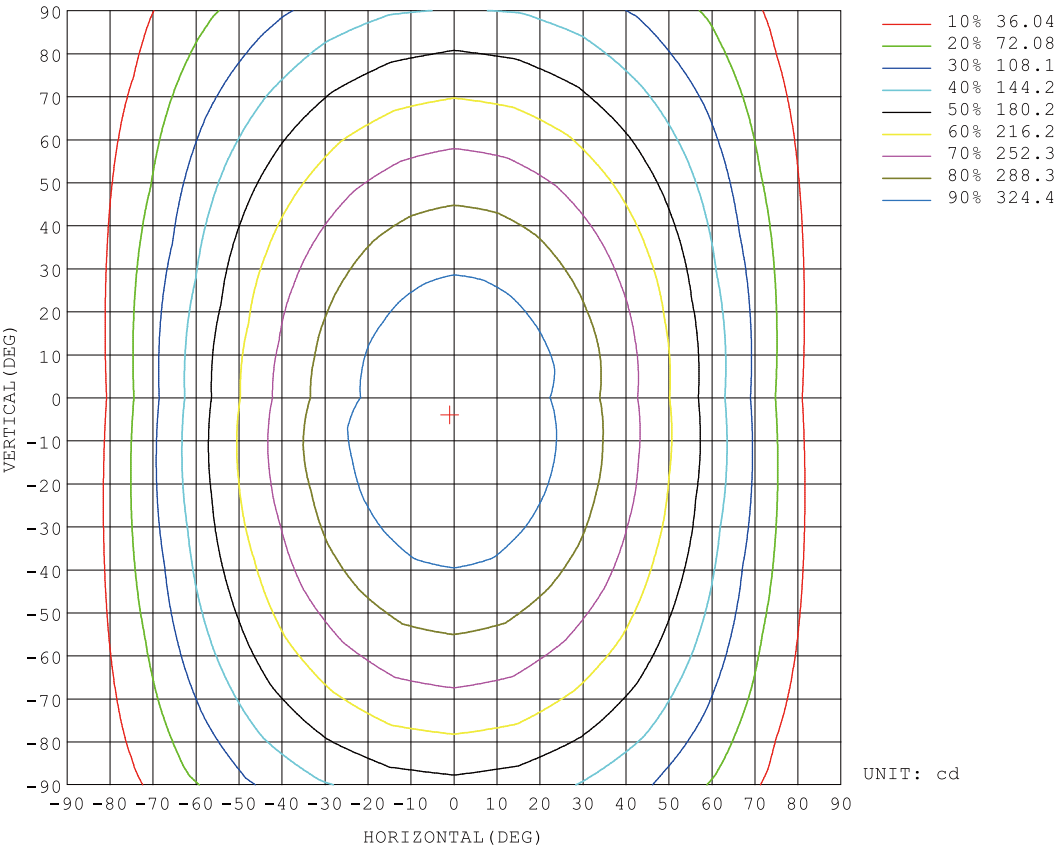
C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025-02-17

γ Range: 0 - 180DEG  
 γ Interval: 1.0DEG  
 Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
 Humidity:65.0%  
 Test Distance:12.000m [K=1.0000]  
 Remarks: 1M

RODDA DOB (21.AB09.7320.00)

ISOCANDELA DIAGRAM

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | Shielding Angle: |



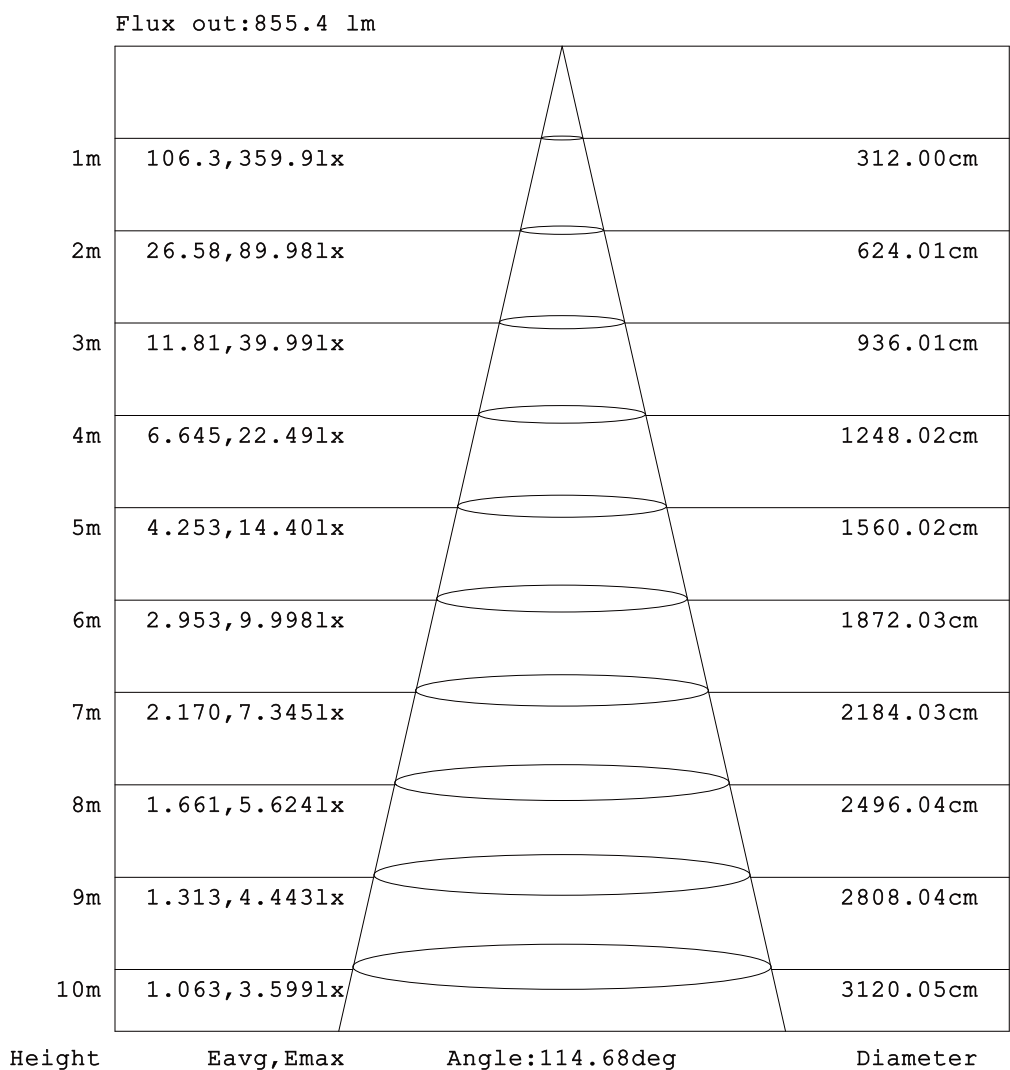
C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## AAI Figure

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | Shielding Angle: |



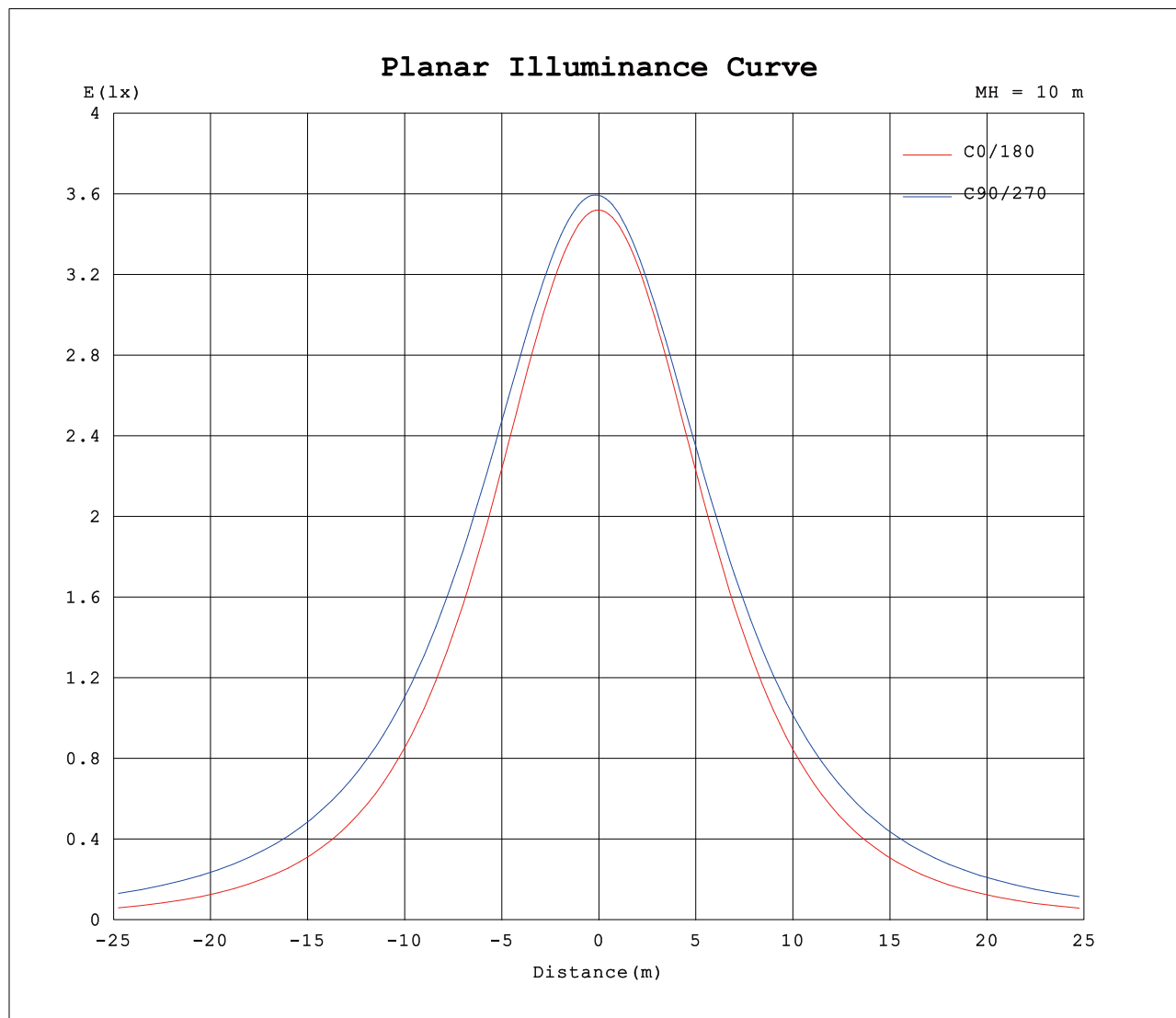
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2025-02-17

$\gamma$  Range: 0 - 180DEG  
 $\gamma$  Interval: 1.0DEG  
 Test System: EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
 Humidity: 65.0%  
 Test Distance: 12.000m [K=1.0000]  
 Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACI6N S.A.                | SUR.:0.008*1 | 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                  | 352  | 355  | 357  | 358  | 358  | 359  | 359  | 360  | 360  | 360  | 360  | 360  | 352  | 355  | 357  | 358  | 358  | 359  | 359  |
| 5                  | 351  | 355  | 357  | 358  | 359  | 360  | 360  | 360  | 360  | 360  | 359  | 359  | 350  | 353  | 355  | 355  | 355  | 356  | 357  |
| 10                 | 347  | 351  | 354  | 356  | 357  | 359  | 359  | 359  | 359  | 358  | 356  | 355  | 346  | 348  | 350  | 350  | 350  | 351  | 352  |
| 15                 | 340  | 345  | 349  | 351  | 354  | 356  | 357  | 357  | 355  | 353  | 350  | 348  | 339  | 341  | 342  | 342  | 344  | 345  | 346  |
| 20                 | 330  | 336  | 340  | 345  | 348  | 352  | 353  | 352  | 350  | 346  | 342  | 339  | 329  | 330  | 332  | 333  | 335  | 337  | 339  |
| 25                 | 317  | 324  | 330  | 336  | 341  | 346  | 348  | 347  | 342  | 337  | 331  | 326  | 316  | 317  | 319  | 322  | 326  | 329  | 330  |
| 30                 | 302  | 309  | 317  | 325  | 333  | 339  | 341  | 339  | 334  | 327  | 318  | 311  | 300  | 301  | 305  | 309  | 315  | 319  | 322  |
| 35                 | 284  | 292  | 302  | 313  | 323  | 330  | 333  | 331  | 323  | 314  | 302  | 294  | 282  | 283  | 288  | 295  | 303  | 308  | 311  |
| 40                 | 264  | 273  | 285  | 299  | 311  | 321  | 324  | 321  | 312  | 300  | 285  | 274  | 262  | 263  | 270  | 279  | 289  | 296  | 300  |
| 45                 | 242  | 251  | 266  | 283  | 298  | 309  | 313  | 310  | 299  | 284  | 266  | 253  | 239  | 241  | 250  | 262  | 274  | 283  | 288  |
| 50                 | 217  | 228  | 246  | 267  | 284  | 297  | 301  | 298  | 285  | 267  | 246  | 229  | 215  | 217  | 229  | 244  | 259  | 269  | 275  |
| 55                 | 191  | 203  | 225  | 249  | 269  | 284  | 289  | 284  | 270  | 250  | 225  | 204  | 188  | 191  | 207  | 225  | 243  | 255  | 261  |
| 60                 | 162  | 177  | 203  | 230  | 253  | 269  | 275  | 270  | 254  | 231  | 203  | 177  | 160  | 164  | 184  | 206  | 226  | 240  | 246  |
| 65                 | 133  | 150  | 180  | 211  | 236  | 254  | 260  | 255  | 237  | 212  | 180  | 150  | 130  | 137  | 162  | 186  | 209  | 224  | 231  |
| 70                 | 102  | 122  | 157  | 192  | 219  | 238  | 244  | 239  | 220  | 193  | 158  | 123  | 99.2 | 110  | 139  | 167  | 192  | 208  | 215  |
| 75                 | 70.5 | 95.2 | 134  | 172  | 201  | 221  | 228  | 222  | 202  | 173  | 135  | 96.2 | 68.7 | 84.1 | 117  | 148  | 174  | 191  | 199  |
| 80                 | 41.3 | 70.0 | 112  | 152  | 182  | 203  | 210  | 204  | 183  | 153  | 113  | 71.3 | 40.0 | 60.2 | 96.3 | 129  | 157  | 175  | 183  |
| 85                 | 17.3 | 45.6 | 90.3 | 131  | 162  | 183  | 191  | 184  | 163  | 133  | 92.1 | 49.0 | 16.7 | 39.6 | 77.0 | 111  | 140  | 158  | 167  |
| 90                 | 1.56 | 25.3 | 68.8 | 111  | 142  | 162  | 167  | 163  | 141  | 111  | 70.0 | 28.8 | 2.10 | 23.2 | 60.1 | 93.6 | 123  | 139  | 147  |
| 95                 | 0.64 | 2.83 | 7.95 | 32.0 | 65.9 | 97.2 | 108  | 101  | 68.8 | 37.2 | 12.4 | 0.89 | 0.67 | 2.18 | 17.7 | 38.0 | 73.2 | 102  | 118  |
| 100                | 0.64 | 0.72 | 1.03 | 3.11 | 7.75 | 14.9 | 16.4 | 14.8 | 6.16 | 1.93 | 1.06 | 0.69 | 0.66 | 0.72 | 5.42 | 25.1 | 50.9 | 70.7 | 85.6 |
| 105                | 0.64 | 0.74 | 0.92 | 1.08 | 1.71 | 2.18 | 2.20 | 1.75 | 1.32 | 1.08 | 0.84 | 0.70 | 0.67 | 0.72 | 1.12 | 7.32 | 20.3 | 32.4 | 44.2 |
| 110                | 0.65 | 0.75 | 0.91 | 1.04 | 1.16 | 1.20 | 1.20 | 1.11 | 1.13 | 0.92 | 0.84 | 0.71 | 0.70 | 0.72 | 0.99 | 1.09 | 5.11 | 10.6 | 14.0 |
| 115                | 0.65 | 0.79 | 0.91 | 1.00 | 1.13 | 1.08 | 1.16 | 1.04 | 1.04 | 0.92 | 0.84 | 0.75 | 0.75 | 0.71 | 0.90 | 0.99 | 1.10 | 1.70 | 2.46 |
| 120                | 0.72 | 0.83 | 0.90 | 0.99 | 1.06 | 1.07 | 1.10 | 1.04 | 1.00 | 0.92 | 0.85 | 0.80 | 0.80 | 0.75 | 0.88 | 0.98 | 1.09 | 1.19 | 1.18 |
| 125                | 0.76 | 0.88 | 0.90 | 1.00 | 1.06 | 1.05 | 1.08 | 1.04 | 1.00 | 0.93 | 0.85 | 0.87 | 0.87 | 0.79 | 0.93 | 0.98 | 1.08 | 1.15 | 1.18 |
| 130                | 0.85 | 0.93 | 0.90 | 1.02 | 1.07 | 1.07 | 1.08 | 1.05 | 1.00 | 0.97 | 0.87 | 0.94 | 0.92 | 0.86 | 0.98 | 0.98 | 1.08 | 1.14 | 1.18 |
| 135                | 0.88 | 0.99 | 0.92 | 1.04 | 1.07 | 1.08 | 1.08 | 1.07 | 1.01 | 1.01 | 0.91 | 0.99 | 0.97 | 0.90 | 1.03 | 0.99 | 1.11 | 1.15 | 1.18 |
| 140                | 0.94 | 1.03 | 0.98 | 1.09 | 1.07 | 1.09 | 1.08 | 1.09 | 1.01 | 1.05 | 0.97 | 1.05 | 1.03 | 0.96 | 1.08 | 1.01 | 1.14 | 1.15 | 1.18 |
| 145                | 0.99 | 1.07 | 1.01 | 1.12 | 1.07 | 1.12 | 1.08 | 1.12 | 1.02 | 1.11 | 1.01 | 1.10 | 1.08 | 1.00 | 1.11 | 1.04 | 1.17 | 1.15 | 1.21 |
| 150                | 1.03 | 1.13 | 1.07 | 1.15 | 1.10 | 1.15 | 1.10 | 1.15 | 1.10 | 1.15 | 1.10 | 1.15 | 1.12 | 1.04 | 1.16 | 1.11 | 1.20 | 1.15 | 1.22 |
| 155                | 1.11 | 1.17 | 1.10 | 1.18 | 1.12 | 1.18 | 1.12 | 1.19 | 1.13 | 1.19 | 1.12 | 1.19 | 1.16 | 1.12 | 1.18 | 1.12 | 1.22 | 1.15 | 1.24 |
| 160                | 1.13 | 1.20 | 1.13 | 1.22 | 1.13 | 1.21 | 1.14 | 1.22 | 1.15 | 1.22 | 1.14 | 1.22 | 1.19 | 1.14 | 1.22 | 1.15 | 1.25 | 1.18 | 1.25 |
| 165                | 1.15 | 1.24 | 1.17 | 1.25 | 1.17 | 1.24 | 1.17 | 1.26 | 1.17 | 1.25 | 1.27 | 1.24 | 1.23 | 1.16 | 1.25 | 1.19 | 1.26 | 1.22 | 1.25 |
| 170                | 1.18 | 1.26 | 1.23 | 1.26 | 1.22 | 1.26 | 1.24 | 1.27 | 1.23 | 1.27 | 1.27 | 1.25 | 1.26 | 1.25 | 1.26 | 1.24 | 1.26 | 1.23 | 1.25 |
| 175                | 1.24 | 1.27 | 1.25 | 1.25 | 1.26 | 1.26 | 1.25 | 1.27 | 1.24 | 1.26 | 1.26 | 1.26 | 1.26 | 1.25 | 1.26 | 1.24 | 1.26 | 1.24 | 1.25 |
| 180                | 1.27 | 1.27 | 1.25 | 1.25 | 1.25 | 1.26 | 1.25 | 1.25 | 1.25 | 1.25 | 1.26 | 1.26 | 1.26 | 1.26 | 1.26 | 1.25 | 1.26 | 1.25 | 1.25 |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M

RODDA DOB (21.AB09.7320.00)

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7320.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 3000K IP20, BLT | DIM.: 1M     | SERIAL No.:10    |
| MFR.: IDEA ILUMINACI6N S.A.                | SUR.:0.008*1 | Shielding Angle: |

Table--2

UNIT: cd

| C (DEG)<br>γ (DEG) | 285  | 300  | 315  | 330  | 345  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------|------|------|------|------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 0                  | 360  | 360  | 360  | 360  | 360  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 357  | 357  | 357  | 358  | 358  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 352  | 352  | 352  | 353  | 353  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 346  | 346  | 345  | 346  | 346  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 338  | 338  | 336  | 336  | 336  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 330  | 328  | 325  | 323  | 322  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 321  | 318  | 313  | 309  | 307  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 310  | 306  | 299  | 293  | 289  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 298  | 293  | 284  | 275  | 269  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 285  | 278  | 267  | 256  | 247  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 272  | 263  | 249  | 235  | 223  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 257  | 247  | 230  | 213  | 198  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 242  | 230  | 211  | 191  | 171  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 226  | 213  | 192  | 168  | 144  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 210  | 196  | 173  | 146  | 117  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 194  | 178  | 153  | 124  | 90.6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 177  | 161  | 134  | 102  | 66.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 160  | 144  | 116  | 82.8 | 44.9 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 142  | 127  | 98.7 | 65.6 | 28.0 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 109  | 84.6 | 53.9 | 30.1 | 6.82 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 77.8 | 59.5 | 33.9 | 11.6 | 0.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 39.2 | 27.8 | 10.5 | 1.04 | 0.80 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 11.7 | 6.31 | 1.25 | 1.03 | 0.79 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 1.88 | 1.29 | 1.13 | 1.01 | 0.81 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 1.25 | 1.25 | 1.11 | 1.00 | 0.83 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 1.21 | 1.21 | 1.10 | 1.01 | 0.85 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 1.19 | 1.17 | 1.08 | 1.05 | 0.90 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 1.19 | 1.17 | 1.09 | 1.08 | 0.97 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 1.19 | 1.19 | 1.09 | 1.11 | 1.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 1.20 | 1.21 | 1.11 | 1.14 | 1.03 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 1.20 | 1.23 | 1.13 | 1.17 | 1.14 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 1.20 | 1.25 | 1.15 | 1.22 | 1.15 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 1.21 | 1.26 | 1.20 | 1.24 | 1.16 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 1.23 | 1.26 | 1.22 | 1.24 | 1.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 1.24 | 1.26 | 1.24 | 1.25 | 1.21 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 1.25 | 1.26 | 1.25 | 1.25 | 1.24 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 1.25 | 1.26 | 1.25 | 1.25 | 1.26 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-17

γ Range: 0 - 180DEG  
γ Interval: 1.0DEG  
Test System:EVERFINE GO-2000B\_V1 SYSTEM V2.0.407.13  
Humidity:65.0%  
Test Distance:12.000m [K=1.0000]  
Remarks: 1M