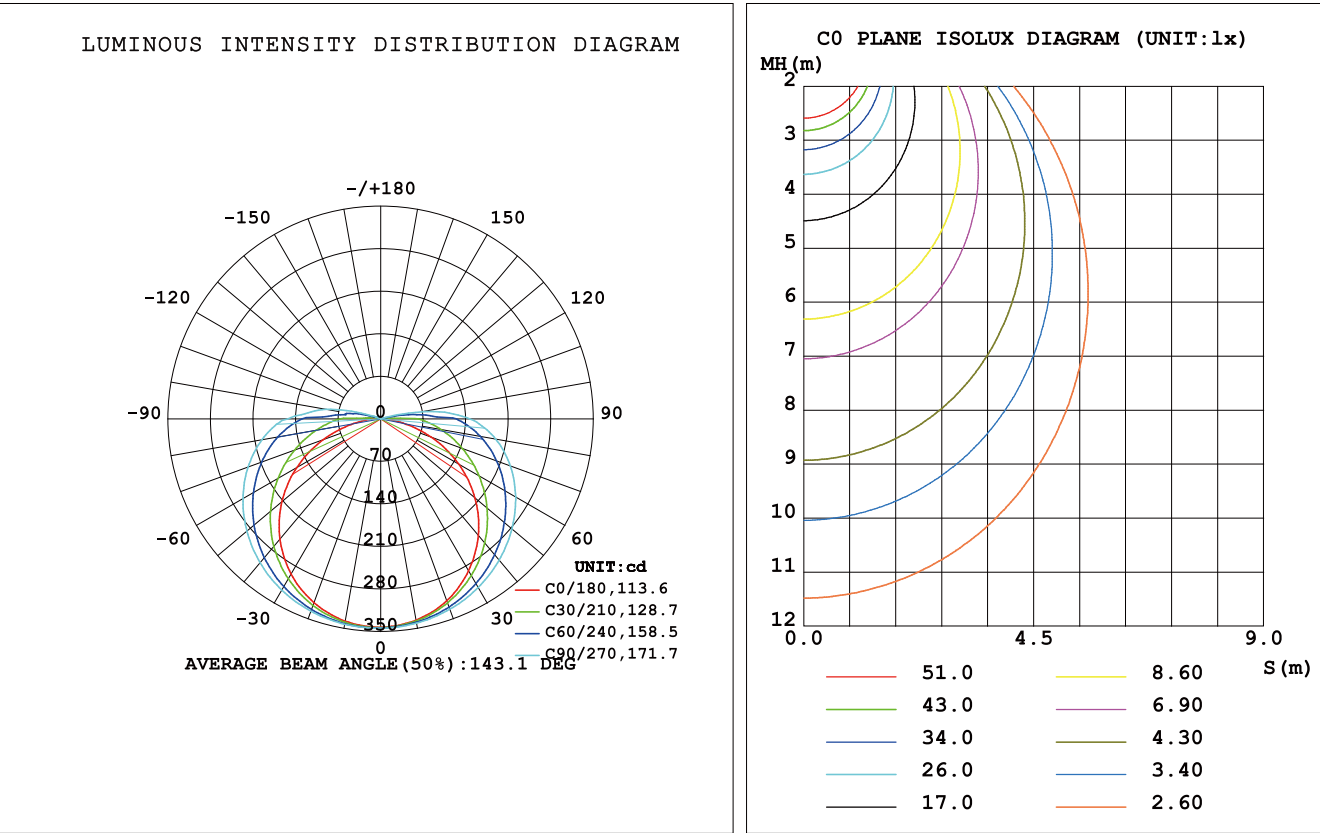


LUMINAIRE PHOTOMETRIC TEST REPORT

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| MFR.: IDEA ILUMINACI6N S.A.                | SUR.:0.008*1 | Shielding Angle: |

| DATA OF LAMP      |         | PHOTOMETRIC DATA      Eff: 115.68 lm/W |        |                     |           |
|-------------------|---------|----------------------------------------|--------|---------------------|-----------|
| MODEL             |         | I <sub>max</sub> (cd)                  | 344.7  | S/MH (C0/180)       | 1.28      |
| NOMINAL POWER (W) | 12.3417 | LOR (%)                                | 100.0  | S/MH (C90/270)      | 1.42      |
| RATED VOLTAGE (V) | 24      | TOTAL FLUX (lm)                        | 1427.7 | η UP, DN (C0-180)   | 2.5, 46.7 |
| NOMINAL FLUX (lm) | 1427.73 | CIE CLASS                              | DIRECT | η UP, DN (C180-360) | 3.3, 47.5 |
| LAMPS INSIDE      | 1       | η up (%)                               | 5.8    | CIBSE SHR NOM       | 1.50      |
| TEST VOLTAGE (V)  | 24      | η down (%)                             | 94.2   | CIBSE SHR MAX       | 1.55      |



C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025-02-14

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.AB09.7310.00)

ZONAL FLUX DIAGRAM

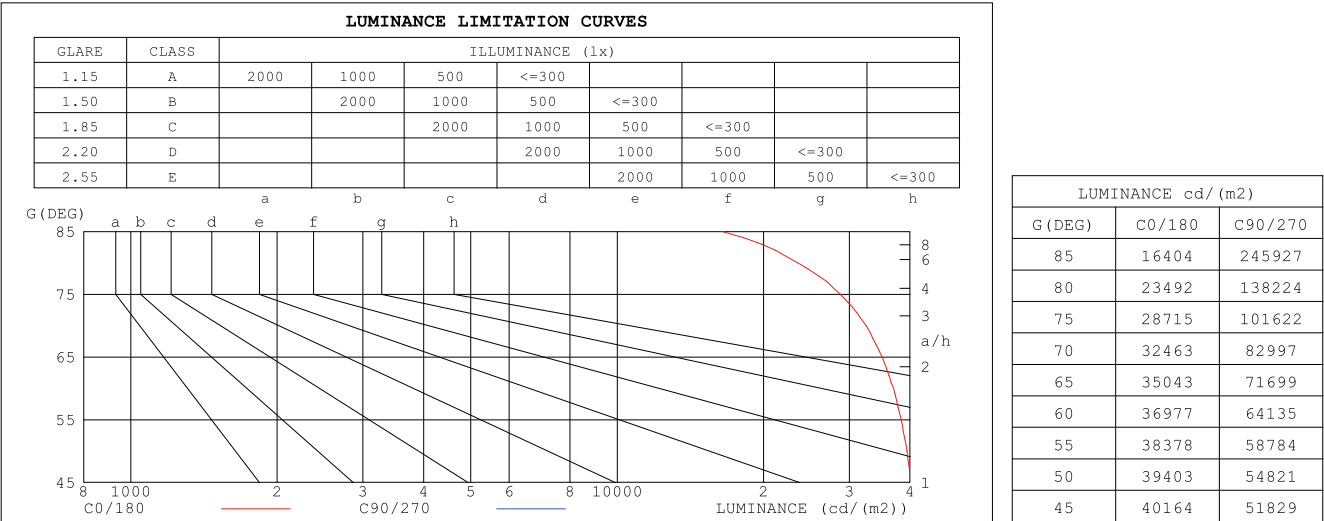
ZONAL FLUX DIAGRAM:

| γ   | C0                    | C45   | C90   | C135  | C180   | C225   | C270  | C315  | γ       | Φ zone  | Φ total | %lum,lamp |
|-----|-----------------------|-------|-------|-------|--------|--------|-------|-------|---------|---------|---------|-----------|
| 10  | 336.2                 | 338.9 | 341.2 | 340.5 | 337.8  | 340.9  | 343.1 | 340.7 | 0- 10   | 32.66   | 32.66   | 2.29,2.29 |
| 20  | 318.5                 | 326.2 | 333.2 | 328.6 | 321.7  | 329.9  | 336.8 | 329.0 | 10- 20  | 94.71   | 127.4   | 8.92,8.92 |
| 30  | 289.0                 | 306.5 | 320.6 | 309.2 | 294.9  | 311.3  | 325.4 | 309.9 | 20- 30  | 147.4   | 274.7   | 19.2,19.2 |
| 40  | 250.0                 | 280.3 | 303.4 | 283.2 | 258.2  | 286.0  | 308.9 | 284.2 | 30- 40  | 185.5   | 460.3   | 32.2,32.2 |
| 50  | 202.6                 | 248.9 | 281.9 | 251.9 | 212.6  | 254.8  | 287.4 | 252.3 | 40- 50  | 205.9   | 666.1   | 46.7,46.7 |
| 60  | 147.9                 | 214.1 | 256.5 | 216.9 | 159.1  | 219.4  | 261.7 | 216.2 | 50- 60  | 207.0   | 873.2   | 61.2,61.2 |
| 70  | 88.82                 | 177.2 | 227.1 | 179.7 | 101.1  | 181.6  | 232.2 | 179.9 | 60- 70  | 190.6   | 1064    | 74.5,74.5 |
| 80  | 32.63                 | 138.2 | 192.0 | 140.8 | 45.20  | 142.4  | 198.4 | 141.8 | 70- 80  | 160.2   | 1224    | 85.7,85.7 |
| 90  | 1.015                 | 98.57 | 146.7 | 99.37 | 7.168  | 100.2  | 153.1 | 100.3 | 80- 90  | 120.9   | 1345    | 94.2,94.2 |
| 100 | 0.6574                | 16.83 | 68.57 | 22.26 | 0.8522 | 29.86  | 91.39 | 34.49 | 90-100  | 61.14   | 1406    | 98.5,98.5 |
| 110 | 0.6620                | 1.149 | 2.221 | 1.109 | 0.7028 | 6.093  | 16.55 | 3.334 | 100-110 | 15.38   | 1421    | 99.6,99.6 |
| 120 | 0.7206                | 1.145 | 1.401 | 1.018 | 0.7774 | 0.9393 | 4.953 | 1.499 | 110-120 | 2.359   | 1424    | 99.7,99.7 |
| 130 | 0.8614                | 1.142 | 1.239 | 1.028 | 0.8988 | 0.9392 | 3.212 | 1.166 | 120-130 | 1.327   | 1425    | 99.8,99.8 |
| 140 | 0.9817                | 1.174 | 1.197 | 1.101 | 1.004  | 0.9877 | 1.991 | 1.162 | 130-140 | 0.9567  | 1426    | 99.9,99.9 |
| 150 | 1.052                 | 1.231 | 1.198 | 1.166 | 1.126  | 1.114  | 1.384 | 1.158 | 140-150 | 0.7323  | 1427    | 99.9,99.9 |
| 160 | 1.125                 | 1.265 | 1.205 | 1.239 | 1.215  | 1.238  | 1.292 | 1.230 | 150-160 | 0.5549  | 1427    | 100,100   |
| 170 | 1.230                 | 1.268 | 1.263 | 1.267 | 1.247  | 1.255  | 1.280 | 1.244 | 160-170 | 0.3503  | 1428    | 100,100   |
| 180 | 1.247                 | 1.271 | 1.271 | 1.271 | 1.255  | 1.263  | 1.263 | 1.247 | 170-180 | 0.1201  | 1428    | 100,100   |
| DEG | LUMINOUS INTENSITY:cd |       |       |       |        |        |       |       |         | UNIT:lm |         |           |

RODDA DOB (21.AB09.7310.00)

LUMINANCE LIMITATION CURVES

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| 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:2025-02-14

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.AB09.7310.00)

## WEC AND CCEC

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| 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 | .364 | .210 | .067 | .350 | .203 | .065 |   |  |
| 2.0         | .350                  | .192 | .059 | .342 | .188 | .058 | .326                             | .181 | .056 | .312 | .175 | .055 | .299 | .169 | .053 |   |  |
| 3.0         | .309                  | .165 | .049 | .302 | .162 | .049 | .289                             | .156 | .048 | .276 | .151 | .046 | .264 | .146 | .045 |   |  |
| 4.0         | .278                  | .144 | .042 | .271 | .142 | .042 | .259                             | .137 | .041 | .248 | .133 | .040 | .237 | .129 | .039 |   |  |
| 5.0         | .252                  | .128 | .037 | .246 | .126 | .037 | .235                             | .122 | .036 | .225 | .119 | .035 | .215 | .115 | .035 |   |  |
| 6.0         | .230                  | .115 | .033 | .225 | .114 | .033 | .215                             | .110 | .032 | .206 | .107 | .031 | .197 | .104 | .031 |   |  |
| 7.0         | .212                  | .105 | .030 | .207 | .103 | .029 | .198                             | .100 | .029 | .190 | .097 | .028 | .182 | .095 | .028 |   |  |
| 8.0         | .196                  | .096 | .027 | .192 | .094 | .027 | .184                             | .092 | .026 | .176 | .089 | .026 | .169 | .087 | .025 |   |  |
| 9.0         | .182                  | .088 | .025 | .179 | .087 | .024 | .171                             | .085 | .024 | .164 | .082 | .024 | .158 | .080 | .023 |   |  |
| 10.0        | .171                  | .082 | .023 | .167 | .081 | .023 | .160                             | .079 | .022 | .154 | .077 | .022 | .148 | .075 | .021 |   |  |

| $\rho_{cc}$ | 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         | .235                  | .235 | .235 | .201 | .201 | .201 | .137                                        | .137 | .137 | .079 | .079 | .079 | .025 | .025 | .025 |   |  |
| 1.0         | .232                  | .200 | .171 | .198 | .172 | .148 | .136                                        | .118 | .102 | .078 | .068 | .059 | .025 | .022 | .019 |   |  |
| 2.0         | .225                  | .177 | .136 | .193 | .152 | .117 | .132                                        | .105 | .082 | .076 | .061 | .048 | .024 | .020 | .016 |   |  |
| 3.0         | .217                  | .160 | .114 | .186 | .138 | .099 | .128                                        | .096 | .069 | .074 | .056 | .041 | .024 | .018 | .013 |   |  |
| 4.0         | .209                  | .147 | .099 | .180 | .127 | .086 | .123                                        | .089 | .061 | .071 | .052 | .036 | .023 | .017 | .012 |   |  |
| 5.0         | .201                  | .137 | .090 | .173 | .118 | .078 | .119                                        | .083 | .055 | .069 | .049 | .033 | .022 | .016 | .011 |   |  |
| 6.0         | .193                  | .129 | .082 | .166 | .112 | .072 | .115                                        | .078 | .051 | .067 | .046 | .030 | .021 | .015 | .010 |   |  |
| 7.0         | .186                  | .122 | .077 | .160 | .106 | .067 | .111                                        | .074 | .048 | .064 | .044 | .028 | .021 | .014 | .009 |   |  |
| 8.0         | .179                  | .116 | .073 | .154 | .101 | .064 | .107                                        | .071 | .045 | .062 | .042 | .027 | .020 | .014 | .009 |   |  |
| 9.0         | .173                  | .111 | .070 | .149 | .097 | .061 | .103                                        | .068 | .043 | .060 | .040 | .026 | .019 | .013 | .009 |   |  |
| 10.0        | .166                  | .107 | .068 | .144 | .093 | .059 | .100                                        | .065 | .042 | .058 | .039 | .025 | .019 | .013 | .008 |   |  |

C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature:25.3DEG  
 Operators:  
 Test Date:2025-02-14

$\gamma$  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.AB09.7310.00)

UGR(Unified Glare Rating) Table

|                                                    |               |      |      |      |      |                  |      |      |                  |      |  |
|----------------------------------------------------|---------------|------|------|------|------|------------------|------|------|------------------|------|--|
| NAME: RODDA DOB 12w 21.AB09.7310.00                |               |      |      |      |      | TYPE:IES         |      |      | WEIGHT:          |      |  |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT         |               |      |      |      |      | DIM.: 1M         |      |      | SERIAL No.:9     |      |  |
| 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                                      | 23.6          | 25.2 | 23.9 | 25.5 | 25.8 | 25.8             | 27.4 | 26.2 | 27.7             | 28.0 |  |
| 3H                                                 | 25.1          | 26.6 | 25.5 | 26.9 | 27.3 | 28.6             | 30.0 | 29.0 | 30.4             | 30.8 |  |
| 4H                                                 | 25.7          | 27.1 | 26.1 | 27.5 | 27.9 | 30.1             | 31.5 | 30.5 | 31.9             | 32.3 |  |
| 6H                                                 | 26.1          | 27.4 | 26.5 | 27.8 | 28.2 | 31.7             | 33.1 | 32.2 | 33.4             | 33.9 |  |
| 8H                                                 | 26.2          | 27.5 | 26.6 | 27.9 | 28.3 | 32.6             | 33.9 | 33.1 | 34.3             | 34.7 |  |
| 12H                                                | 26.3          | 27.5 | 26.7 | 27.9 | 28.4 | 33.6             | 34.9 | 34.1 | 35.3             | 35.7 |  |
| 4H 2H                                              | 24.8          | 26.2 | 25.2 | 26.6 | 27.0 | 26.4             | 27.8 | 26.8 | 28.2             | 28.6 |  |
| 3H                                                 | 26.7          | 27.9 | 27.1 | 28.3 | 28.8 | 29.4             | 30.7 | 29.9 | 31.1             | 31.5 |  |
| 4H                                                 | 27.5          | 28.6 | 27.9 | 29.0 | 29.5 | 31.2             | 32.3 | 31.6 | 32.7             | 33.2 |  |
| 6H                                                 | 28.1          | 29.1 | 28.6 | 29.6 | 30.1 | 33.0             | 34.1 | 33.5 | 34.5             | 35.0 |  |
| 8H                                                 | 28.3          | 29.2 | 28.8 | 29.7 | 30.2 | 34.0             | 35.0 | 34.6 | 35.5             | 36.0 |  |
| 12H                                                | 28.4          | 29.3 | 28.9 | 29.8 | 30.3 | 35.2             | 36.1 | 35.7 | 36.6             | 37.1 |  |
| 8H 4H                                              | 28.6          | 29.6 | 29.1 | 30.1 | 30.6 | 31.5             | 32.5 | 32.0 | 33.0             | 33.5 |  |
| 6H                                                 | 29.6          | 30.5 | 30.2 | 31.0 | 31.5 | 33.7             | 34.5 | 34.2 | 35.0             | 35.6 |  |
| 8H                                                 | 30.1          | 30.8 | 30.6 | 31.3 | 31.9 | 34.9             | 35.7 | 35.5 | 36.2             | 36.8 |  |
| 12H                                                | 30.4          | 31.0 | 31.0 | 31.6 | 32.2 | 36.4             | 37.0 | 36.9 | 37.6             | 38.2 |  |
| 12H 4H                                             | 29.0          | 29.9 | 29.5 | 30.4 | 30.9 | 31.6             | 32.5 | 32.1 | 33.0             | 33.5 |  |
| 6H                                                 | 30.3          | 31.0 | 30.8 | 31.5 | 32.1 | 33.8             | 34.6 | 34.4 | 35.1             | 35.7 |  |
| 8H                                                 | 30.9          | 31.5 | 31.4 | 32.1 | 32.7 | 35.2             | 35.8 | 35.7 | 36.4             | 37.0 |  |
| 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, 1428 lm Total Lamp Luminous Flux Correct ( $8\log(F/F_0) = 1.2$ )  
Area: 0.008 m2

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-14

$\gamma$  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

### UTILIZATION FACTORS TABLE

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| MFR.: IDEA ILUMINACI6N 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) $k(RI) \times RCR = 5$ |     |     |           |     |     |     |                           |     |        |
| $k = 0.60$                       | 50                                                   | 38  | 30  | 50        | 38  | 30  | 48  | 37                        | 30  | 23     |
| 0.80                             | 60                                                   | 47  | 38  | 58        | 46  | 38  | 56  | 45                        | 38  | 30     |
| 1.00                             | 68                                                   | 55  | 46  | 66        | 54  | 46  | 63  | 55                        | 45  | 37     |
| 1.25                             | 74                                                   | 62  | 53  | 73        | 61  | 53  | 70  | 59                        | 52  | 43     |
| 1.50                             | 80                                                   | 67  | 59  | 78        | 66  | 58  | 74  | 64                        | 57  | 48     |
| 2.00                             | 87                                                   | 76  | 68  | 85        | 74  | 67  | 80  | 72                        | 65  | 55     |
| 2.50                             | 91                                                   | 81  | 73  | 89        | 80  | 72  | 84  | 76                        | 70  | 60     |
| 3.00                             | 95                                                   | 86  | 78  | 92        | 84  | 77  | 87  | 80                        | 75  | 64     |
| 4.00                             | 100                                                  | 92  | 85  | 97        | 90  | 84  | 92  | 86                        | 81  | 70     |
| 5.00                             | 103                                                  | 96  | 90  | 100       | 94  | 88  | 94  | 89                        | 85  | 73     |
| ROOM INDEX                       | UF(total)                                            |     |     |           |     |     |     |                           |     | Direct |
| According to DIN EN 13032-2 2004 |                                                      |     |     | Suspended |     |     |     | SHR <sub>NOM</sub> = 1.25 |     |        |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature: 25.3DEG  
Operators:  
Test Date: 2025-02-14

```

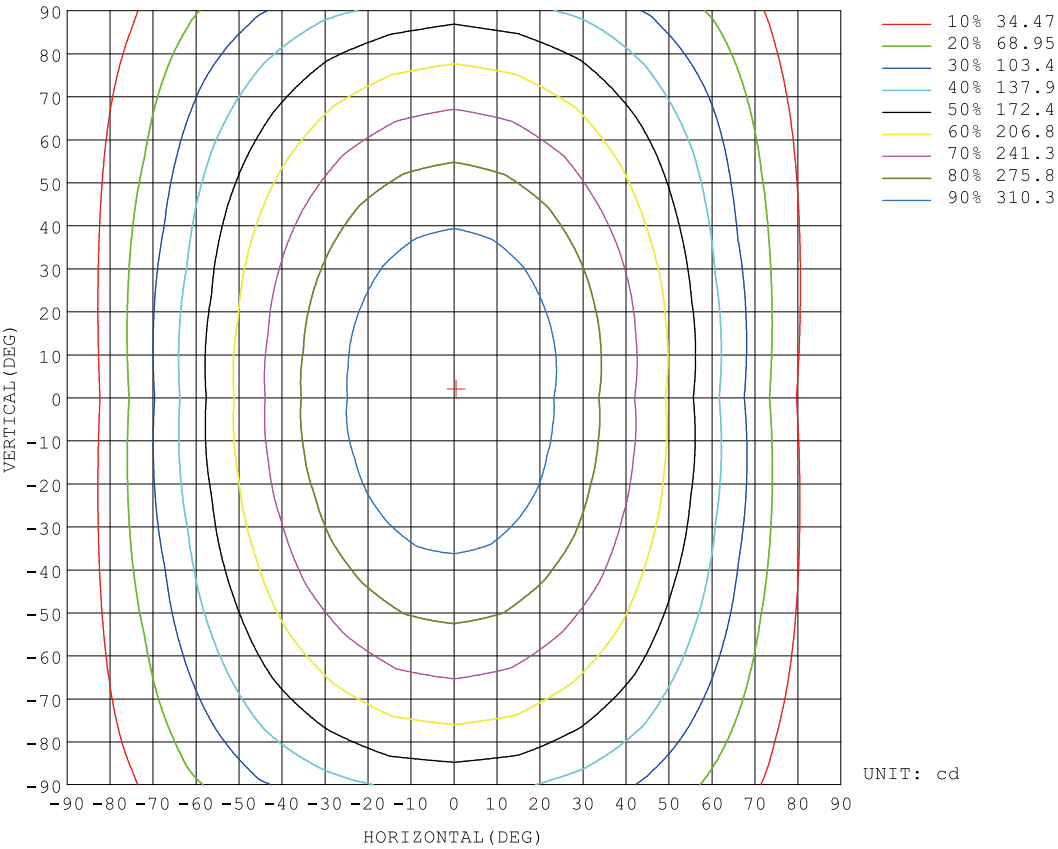
γ Range: 0 - 180DEG
γ Interval: 1.0DEG
Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.407.13
Humidity:65.0%
Test Distance:12.000m [K=1.0000]
Remarks: 1M

```

RODDA DOB (21.AB09.7310.00)

ISOCANDELA DIAGRAM

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | Shielding Angle: |

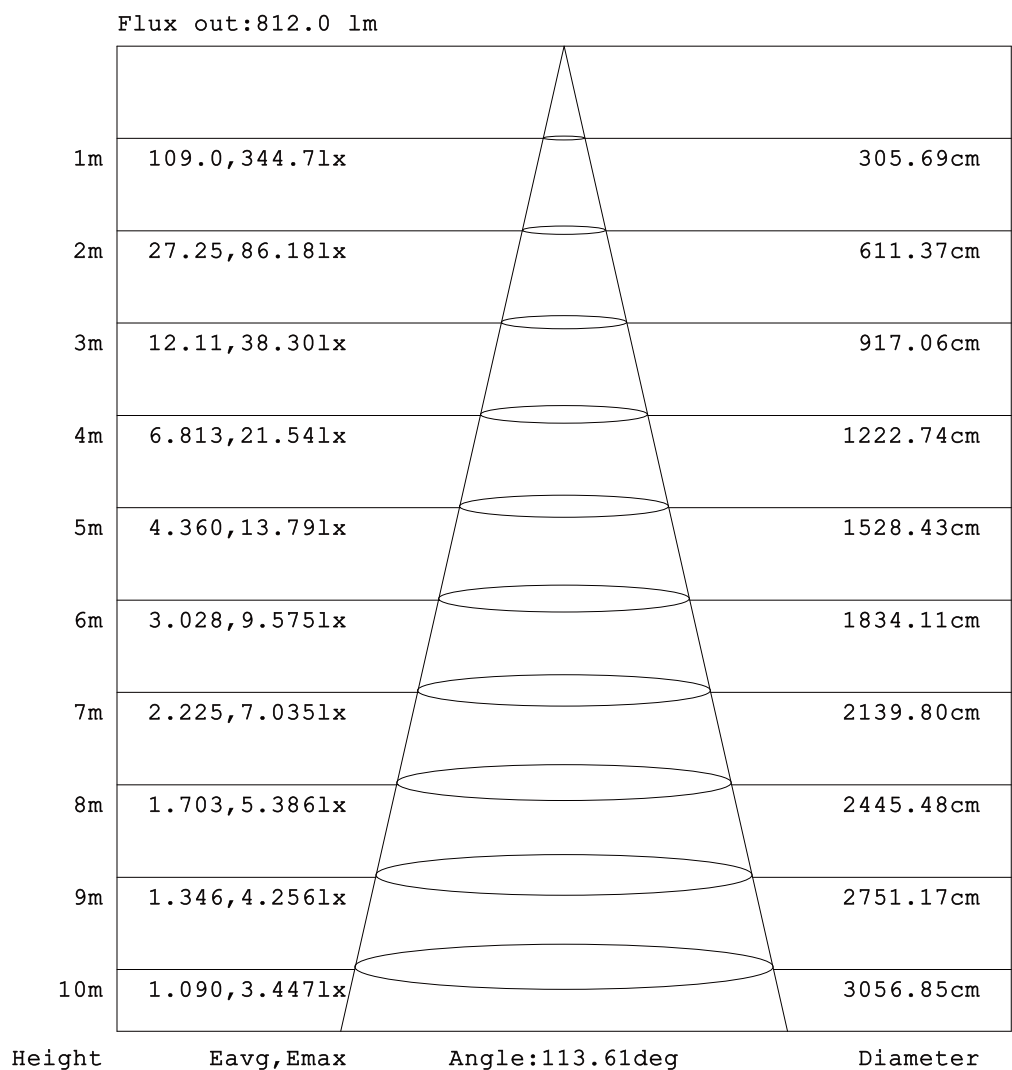


|                      |                                                     |
|----------------------|-----------------------------------------------------|
| C Range: 0 - 360DEG  | γ Range: 0 - 180DEG                                 |
| C Interval: 15.0DEG  | γ Interval: 1.0DEG                                  |
| Test Speed: HIGH     | Test System:EVERFINE GO-2000B_V1 SYSTEM V2.0.407.13 |
| Temperature:25.3DEG  | Humidity:65.0%                                      |
| Operators:           | Test Distance:12.000m [K=1.0000]                    |
| Test Date:2025-02-14 | Remarks: 1M                                         |

RODDA DOB (21.AB09.7310.00)

## AAI Figure

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| MFR.: IDEA ILUMINACIÓN S.A.                | SUR.:0.008*1 | Shielding Angle: |



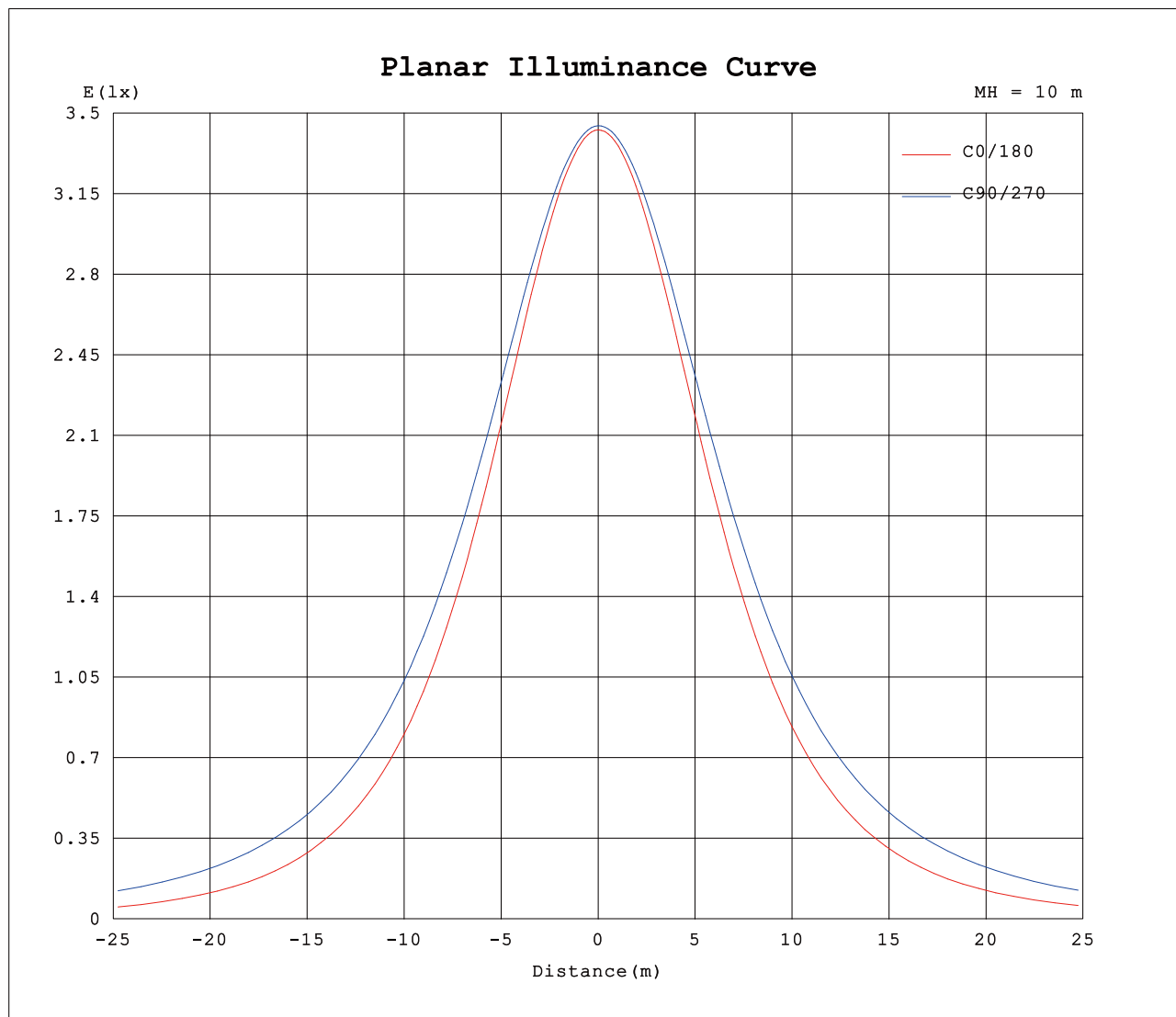
**Note:**The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-14

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.AB09.7310.00)

## Planar Illuminance Curve



C Range: 0 - 360DEG  
 C Interval: 15.0DEG  
 Test Speed: HIGH  
 Temperature: 25.3DEG  
 Operators:  
 Test Date: 2025-02-14

$\gamma$  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.AB09.7310.00)

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| 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                  | 343  | 343  | 344  | 344  | 344  | 345  | 345  | 345  | 344  | 344  | 344  | 344  | 343  | 343  | 344  | 344  | 344  | 345  | 345  |
| 5                  | 341  | 341  | 342  | 342  | 343  | 343  | 343  | 344  | 344  | 343  | 343  | 343  | 342  | 342  | 343  | 343  | 344  | 344  | 344  |
| 10                 | 336  | 337  | 338  | 339  | 340  | 341  | 341  | 341  | 341  | 340  | 340  | 340  | 338  | 339  | 340  | 341  | 342  | 343  | 343  |
| 15                 | 329  | 330  | 331  | 333  | 335  | 337  | 338  | 338  | 337  | 335  | 334  | 333  | 331  | 332  | 334  | 336  | 339  | 340  | 341  |
| 20                 | 318  | 320  | 322  | 326  | 329  | 332  | 333  | 333  | 331  | 329  | 325  | 324  | 322  | 323  | 327  | 330  | 334  | 336  | 337  |
| 25                 | 305  | 307  | 311  | 317  | 322  | 326  | 328  | 327  | 324  | 320  | 315  | 312  | 310  | 312  | 316  | 321  | 327  | 330  | 332  |
| 30                 | 289  | 292  | 298  | 306  | 313  | 319  | 321  | 320  | 315  | 309  | 302  | 298  | 295  | 298  | 304  | 311  | 319  | 324  | 325  |
| 35                 | 271  | 275  | 283  | 294  | 303  | 310  | 313  | 311  | 305  | 297  | 287  | 281  | 278  | 281  | 290  | 299  | 309  | 315  | 318  |
| 40                 | 250  | 256  | 266  | 280  | 292  | 301  | 303  | 301  | 294  | 283  | 271  | 263  | 258  | 263  | 274  | 286  | 298  | 306  | 309  |
| 45                 | 227  | 235  | 248  | 265  | 279  | 290  | 293  | 291  | 281  | 268  | 253  | 242  | 236  | 242  | 256  | 271  | 286  | 295  | 299  |
| 50                 | 203  | 212  | 228  | 249  | 266  | 278  | 282  | 279  | 268  | 252  | 233  | 219  | 213  | 219  | 237  | 255  | 272  | 283  | 287  |
| 55                 | 176  | 188  | 208  | 232  | 251  | 265  | 270  | 266  | 253  | 235  | 213  | 195  | 187  | 195  | 216  | 238  | 257  | 270  | 275  |
| 60                 | 148  | 163  | 187  | 214  | 236  | 252  | 257  | 252  | 238  | 217  | 191  | 169  | 159  | 170  | 195  | 219  | 242  | 256  | 262  |
| 65                 | 118  | 137  | 165  | 196  | 220  | 237  | 242  | 238  | 222  | 199  | 169  | 143  | 130  | 144  | 173  | 201  | 226  | 241  | 247  |
| 70                 | 88.8 | 111  | 143  | 177  | 203  | 222  | 227  | 222  | 205  | 180  | 148  | 117  | 101  | 118  | 151  | 182  | 208  | 225  | 232  |
| 75                 | 59.5 | 85.5 | 122  | 158  | 185  | 205  | 210  | 205  | 187  | 160  | 126  | 91.8 | 71.9 | 92.6 | 129  | 162  | 191  | 209  | 216  |
| 80                 | 32.6 | 62.3 | 101  | 138  | 166  | 186  | 192  | 187  | 168  | 141  | 105  | 68.4 | 45.2 | 68.8 | 107  | 142  | 172  | 191  | 198  |
| 85                 | 11.4 | 42.1 | 80.7 | 118  | 146  | 165  | 171  | 166  | 147  | 120  | 84.8 | 48.0 | 23.3 | 47.8 | 86.7 | 122  | 152  | 171  | 180  |
| 90                 | 1.01 | 25.6 | 62.3 | 98.6 | 125  | 142  | 147  | 142  | 125  | 99.4 | 65.3 | 31.0 | 7.17 | 30.7 | 66.9 | 100  | 130  | 146  | 153  |
| 95                 | 0.71 | 2.06 | 14.6 | 33.3 | 75.0 | 105  | 114  | 105  | 78.3 | 48.3 | 23.4 | 4.03 | 1.36 | 5.07 | 21.9 | 44.6 | 74.7 | 101  | 120  |
| 100                | 0.66 | 0.93 | 2.00 | 16.8 | 38.6 | 59.4 | 68.6 | 62.4 | 41.8 | 22.3 | 4.87 | 1.04 | 0.85 | 3.47 | 12.9 | 29.9 | 51.5 | 73.3 | 91.4 |
| 105                | 0.66 | 0.79 | 1.03 | 1.42 | 6.53 | 16.6 | 21.1 | 19.7 | 11.0 | 2.87 | 1.07 | 0.84 | 0.71 | 0.84 | 3.08 | 12.4 | 25.9 | 38.5 | 50.1 |
| 110                | 0.66 | 0.82 | 1.01 | 1.15 | 1.44 | 1.85 | 2.22 | 1.78 | 1.90 | 1.11 | 0.96 | 0.77 | 0.70 | 1.93 | 4.14 | 6.09 | 9.50 | 11.2 | 16.6 |
| 115                | 0.70 | 0.84 | 0.99 | 1.15 | 1.41 | 1.49 | 1.67 | 1.49 | 1.27 | 1.03 | 0.91 | 0.75 | 0.74 | 0.74 | 2.06 | 1.85 | 2.69 | 5.56 | 7.27 |
| 120                | 0.72 | 0.88 | 1.00 | 1.15 | 1.37 | 1.30 | 1.40 | 1.24 | 1.19 | 1.02 | 0.91 | 0.82 | 0.78 | 0.75 | 0.87 | 0.94 | 4.69 | 5.09 | 4.95 |
| 125                | 0.78 | 0.92 | 1.01 | 1.14 | 1.27 | 1.24 | 1.32 | 1.20 | 1.11 | 1.01 | 0.91 | 0.87 | 0.83 | 0.77 | 0.91 | 0.94 | 1.06 | 4.18 | 4.02 |
| 130                | 0.86 | 0.98 | 1.01 | 1.14 | 1.21 | 1.20 | 1.24 | 1.19 | 1.10 | 1.03 | 0.91 | 0.92 | 0.90 | 0.87 | 0.95 | 0.94 | 1.07 | 1.27 | 3.21 |
| 135                | 0.97 | 1.03 | 1.02 | 1.15 | 1.20 | 1.20 | 1.20 | 1.18 | 1.10 | 1.07 | 0.95 | 0.98 | 0.95 | 0.89 | 1.00 | 0.96 | 1.09 | 2.75 | 2.51 |
| 140                | 0.98 | 1.07 | 1.04 | 1.17 | 1.19 | 1.20 | 1.20 | 1.18 | 1.11 | 1.10 | 0.99 | 1.04 | 1.00 | 0.95 | 1.06 | 0.99 | 1.12 | 1.20 | 1.99 |
| 145                | 1.01 | 1.11 | 1.10 | 1.20 | 1.19 | 1.21 | 1.20 | 1.20 | 1.12 | 1.14 | 1.02 | 1.08 | 1.09 | 1.04 | 1.11 | 1.04 | 1.15 | 1.17 | 1.63 |
| 150                | 1.05 | 1.15 | 1.13 | 1.23 | 1.19 | 1.21 | 1.20 | 1.21 | 1.13 | 1.17 | 1.09 | 1.13 | 1.13 | 1.10 | 1.21 | 1.11 | 1.18 | 1.17 | 1.38 |
| 155                | 1.11 | 1.20 | 1.14 | 1.25 | 1.19 | 1.24 | 1.20 | 1.23 | 1.15 | 1.21 | 1.11 | 1.17 | 1.17 | 1.12 | 1.23 | 1.18 | 1.23 | 1.17 | 1.34 |
| 160                | 1.13 | 1.23 | 1.16 | 1.26 | 1.21 | 1.25 | 1.20 | 1.25 | 1.17 | 1.24 | 1.13 | 1.21 | 1.21 | 1.16 | 1.24 | 1.24 | 1.25 | 1.17 | 1.29 |
| 165                | 1.17 | 1.26 | 1.21 | 1.27 | 1.24 | 1.26 | 1.23 | 1.26 | 1.23 | 1.26 | 1.17 | 1.23 | 1.24 | 1.18 | 1.24 | 1.24 | 1.26 | 1.23 | 1.29 |
| 170                | 1.23 | 1.26 | 1.24 | 1.27 | 1.24 | 1.26 | 1.26 | 1.26 | 1.26 | 1.27 | 1.25 | 1.26 | 1.25 | 1.24 | 1.25 | 1.25 | 1.26 | 1.25 | 1.28 |
| 175                | 1.24 | 1.26 | 1.26 | 1.27 | 1.25 | 1.26 | 1.27 | 1.26 | 1.26 | 1.27 | 1.25 | 1.26 | 1.25 | 1.25 | 1.25 | 1.26 | 1.26 | 1.25 | 1.27 |
| 180                | 1.25 | 1.25 | 1.27 | 1.27 | 1.25 | 1.26 | 1.27 | 1.26 | 1.25 | 1.27 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.26 | 1.26 | 1.25 | 1.26 |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-14

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.AB09.7310.00)

## LUMINOUS DISTRIBUTION INTENSITY DATA

|                                            |              |                  |
|--------------------------------------------|--------------|------------------|
| NAME: RODDA DOB 12w 21.AB09.7310.00        | TYPE:IES     | WEIGHT:          |
| SPEC.:12W 8MM X 5M 24V 24V 2700K IP20, BLT | DIM.: 1M     | SERIAL No.:9     |
| 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                  | 345  | 344  | 344  | 344  | 344  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5                  | 344  | 344  | 344  | 343  | 343  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10                 | 343  | 342  | 341  | 340  | 339  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15                 | 340  | 338  | 336  | 334  | 331  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20                 | 336  | 333  | 329  | 325  | 322  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25                 | 330  | 326  | 320  | 315  | 310  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30                 | 323  | 318  | 310  | 302  | 295  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 35                 | 315  | 308  | 298  | 287  | 278  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40                 | 306  | 297  | 284  | 271  | 259  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 45                 | 295  | 285  | 269  | 253  | 238  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 50                 | 283  | 271  | 252  | 233  | 215  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 55                 | 270  | 256  | 234  | 211  | 190  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 60                 | 256  | 241  | 216  | 188  | 163  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 65                 | 241  | 225  | 198  | 167  | 136  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 70                 | 226  | 208  | 180  | 147  | 109  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 75                 | 209  | 190  | 161  | 126  | 84.4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 80                 | 191  | 172  | 142  | 105  | 64.5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85                 | 172  | 152  | 122  | 84.9 | 44.1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 90                 | 147  | 130  | 100  | 64.9 | 27.2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 95                 | 109  | 89.8 | 61.2 | 35.1 | 7.73 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 100                | 78.1 | 61.9 | 34.5 | 10.9 | 0.99 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 105                | 41.1 | 27.9 | 10.5 | 2.18 | 0.96 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 110                | 13.3 | 8.84 | 3.33 | 1.23 | 0.95 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 115                | 6.09 | 4.01 | 2.04 | 1.13 | 0.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 120                | 4.20 | 2.94 | 1.50 | 1.11 | 0.93 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 125                | 3.38 | 2.14 | 1.24 | 1.11 | 0.93 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 130                | 2.59 | 1.68 | 1.17 | 1.11 | 0.94 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 135                | 2.07 | 1.42 | 1.16 | 1.12 | 0.99 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 140                | 1.74 | 1.29 | 1.16 | 1.14 | 1.01 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 145                | 1.49 | 1.28 | 1.16 | 1.17 | 1.04 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 150                | 1.36 | 1.27 | 1.16 | 1.20 | 1.11 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 155                | 1.33 | 1.27 | 1.21 | 1.25 | 1.12 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 160                | 1.32 | 1.28 | 1.23 | 1.25 | 1.13 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 165                | 1.32 | 1.28 | 1.24 | 1.25 | 1.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 170                | 1.31 | 1.28 | 1.24 | 1.25 | 1.22 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 175                | 1.30 | 1.29 | 1.25 | 1.25 | 1.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 180                | 1.30 | 1.29 | 1.25 | 1.25 | 1.23 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

C Range: 0 - 360DEG  
C Interval: 15.0DEG  
Test Speed: HIGH  
Temperature:25.3DEG  
Operators:  
Test Date:2025-02-14

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