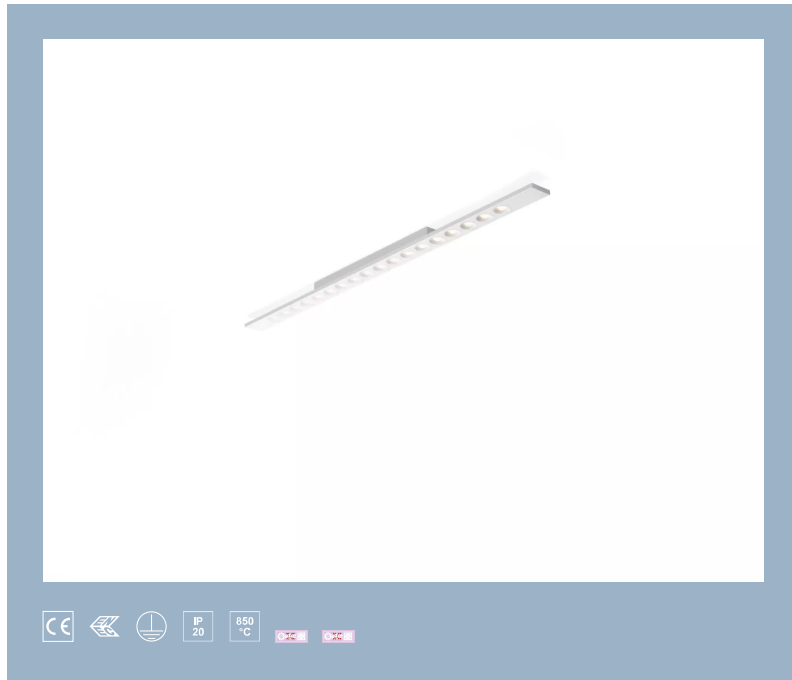


# R710R1/LEDW1820DX1



**luminária de montagem saliente • linear**

**aplicação :** Espaços de trabalho, Salas de aulas, Auditórios

**base:** aço lacada

**fonte de luz :** LED • 3000 K

**óptica :** LED+LENS™ • Polycarbonate (PC) lens and cup • extensiva média

**classificação UGR :** <=16

**fluxo luminoso:** 2250 lm

**fluxo luminoso específico :** 118 lm/W

**LLMF:** 98% @ 50khrs (Tq=25°C)

## Product information

### Medidas

**dimensões :** 1500 mm x 75 mm x 50 mm

**cor:** RAL9003 - branco (texturado)

**tipo :** luminária individual

**IP:** IP20

### Equipamento eléctrico

**driver:** DALI regulável

**potência :** 19 W

**tensão :** 220-240V

**frequência :** 50-60Hz AC

**segurança fotobiológica :** EN 62471: RISK GROUP 1 UNLIMITED

## Luminance

fluxo luminoso : 2250 lm

fluxo luminoso específico : 118 lm/W

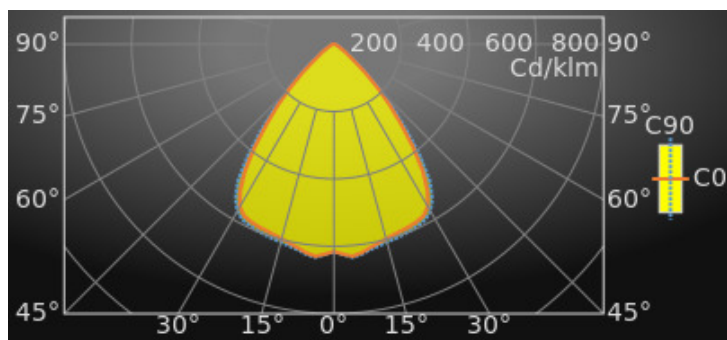
luminância @ 65° = : 1000 cd/m²

classificação UGR =: <=16

área luminosa : 0.09 m²

Average Luminances (Cd/m²) for 2250lm

| Gamma | C0   | C30  | C45  | C60  | C90  |
|-------|------|------|------|------|------|
| 45°   | 6647 | 7043 | 6615 | 7122 | 7129 |
| 50°   | 3269 | 3471 | 3249 | 3570 | 3803 |
| 55°   | 1757 | 1732 | 1660 | 1818 | 1915 |
| 60°   | 1025 | 1071 | 1013 | 1096 | 1096 |
| 65°   | 723  | 758  | 707  | 756  | 785  |
| 70°   | 574  | 593  | 566  | 594  | 619  |
| 75°   | 485  | 502  | 480  | 520  | 522  |
| 80°   | 410  | 442  | 408  | 447  | 481  |
| 85°   | 281  | 350  | 281  | 352  | 397  |



## Classificações

CIE: 818 / 980 / 997 / 1000 / 1000

CIE FLUXCODE : 0.82 / 0.98 / 1.00 / 1.00 / 1.00

BZ: BZ1

CAE: Symmetrical

DIN: A60 (Nach Arbeitsblatt 7)

DIN\_U: Phi u = 1.00

DIN\_SU: Phi su = 0.75

UTE: 1.00 B + 0.00 T

#### Lifetime Data (Tq=25.0°C)

| Time(khrs) | LLMF(%) | Cx(%) |
|------------|---------|-------|
| 10         | 100     | 2     |
| 20         | 99      | 4     |
| 30         | 99      | 6     |
| 40         | 99      | 8     |
| 50         | 98      | 10    |
| 60         | 98      | 12    |

#### Intensidades luminosas em cd

##### Intensity for 2250lm

| Gamma | C0     | C45    | C90    |
|-------|--------|--------|--------|
| 0°    | 1385.2 | 1385.2 | 1385.2 |
| 5°    | 1421.8 | 1420.8 | 1428.1 |
| 10°   | 1381.0 | 1387.5 | 1393.7 |
| 15°   | 1345.9 | 1357.4 | 1369.3 |
| 20°   | 1324.1 | 1333.8 | 1353.4 |
| 25°   | 1307.8 | 1319.6 | 1334.9 |
| 30°   | 1253.6 | 1289.4 | 1289.2 |
| 35°   | 1034.5 | 1086.9 | 1116.9 |
| 40°   | 695.8  | 718.8  | 757.4  |
| 45°   | 414.5  | 412.6  | 444.6  |
| 50°   | 185.3  | 184.2  | 215.6  |
| 55°   | 88.9   | 84.0   | 96.9   |
| 60°   | 45.2   | 44.7   | 48.3   |
| 65°   | 26.9   | 26.4   | 29.2   |
| 70°   | 17.3   | 17.1   | 18.7   |
| 75°   | 11.1   | 11.0   | 11.9   |
| 80°   | 6.3    | 6.2    | 7.4    |
| 85°   | 2.2    | 2.2    | 3.1    |
| 90°   | 0.4    | 0.5    | 0.8    |

#### classificação UGR =

Corrected Glare Ratings for a Total Lamp Flux of 2250lm (S = 0.25H)

|                 | Room Reflection Factors (%)                                    |      |      |      |      |                |      |      |      |      |
|-----------------|----------------------------------------------------------------|------|------|------|------|----------------|------|------|------|------|
| Ceiling         | 70                                                             | 70   | 50   | 50   | 30   | 70             | 70   | 50   | 50   | 30   |
| Walls           | 50                                                             | 30   | 50   | 30   | 30   | 50             | 30   | 50   | 30   | 30   |
| Floor           | 20                                                             | 20   | 20   | 20   | 20   | 20             | 20   | 20   | 20   | 20   |
| Room Dimensions | Viewed Crosswise                                               |      |      |      |      | Viewed Endwise |      |      |      |      |
| X = 2H Y = 2H   | 15.3                                                           | 16.8 | 15.6 | 17.1 | 17.3 | 15.4           | 16.9 | 15.7 | 17.1 | 17.4 |
| Y = 3H          | 15.2                                                           | 16.6 | 15.6 | 16.8 | 17.1 | 15.3           | 16.6 | 15.6 | 16.9 | 17.2 |
| Y = 4H          | 15.2                                                           | 16.4 | 15.5 | 16.7 | 17.0 | 15.2           | 16.5 | 15.6 | 16.8 | 17.1 |
| Y = 6H          | 15.1                                                           | 16.2 | 15.5 | 16.6 | 16.9 | 15.2           | 16.3 | 15.5 | 16.6 | 16.9 |
| Y = 8H          | 15.1                                                           | 16.2 | 15.5 | 16.5 | 16.8 | 15.1           | 16.2 | 15.5 | 16.5 | 16.9 |
| Y = 12H         | 15.1                                                           | 16.1 | 15.4 | 16.4 | 16.8 | 15.1           | 16.1 | 15.5 | 16.5 | 16.8 |
| X = 4H Y = 2H   | 15.1                                                           | 16.4 | 15.5 | 16.7 | 17.0 | 15.2           | 16.4 | 15.5 | 16.7 | 17.0 |
| Y = 3H          | 15.1                                                           | 16.1 | 15.5 | 16.4 | 16.8 | 15.1           | 16.2 | 15.5 | 16.5 | 16.8 |
| Y = 4H          | 15.0                                                           | 16.0 | 15.4 | 16.3 | 16.7 | 15.1           | 16.0 | 15.5 | 16.4 | 16.7 |
| Y = 6H          | 15.0                                                           | 15.8 | 15.4 | 16.2 | 16.6 | 15.1           | 15.9 | 15.5 | 16.2 | 16.6 |
| Y = 8H          | 15.0                                                           | 15.7 | 15.4 | 16.1 | 16.5 | 15.0           | 15.8 | 15.5 | 16.2 | 16.6 |
| Y = 12H         | 15.0                                                           | 15.6 | 15.4 | 16.0 | 16.5 | 15.0           | 15.7 | 15.5 | 16.1 | 16.5 |
| X = 8H Y = 4H   | 15.0                                                           | 15.7 | 15.4 | 16.1 | 16.5 | 15.0           | 15.7 | 15.4 | 16.1 | 16.6 |
| Y = 6H          | 14.9                                                           | 15.6 | 15.4 | 16.0 | 16.5 | 15.0           | 15.6 | 15.5 | 16.0 | 16.5 |
| Y = 8H          | 14.9                                                           | 15.5 | 15.4 | 15.9 | 16.4 | 15.0           | 15.5 | 15.5 | 16.0 | 16.5 |
| Y = 12H         | 14.9                                                           | 15.4 | 15.4 | 15.9 | 16.4 | 14.9           | 15.4 | 15.4 | 15.9 | 16.4 |
| X = 12H Y = 4H  | 14.9                                                           | 15.6 | 15.4 | 16.0 | 16.5 | 15.0           | 15.7 | 15.4 | 16.1 | 16.5 |
| Y = 6H          | 14.9                                                           | 15.5 | 15.4 | 15.9 | 16.4 | 15.0           | 15.5 | 15.4 | 16.0 | 16.4 |
| Y = 8H          | 14.9                                                           | 15.4 | 15.4 | 15.9 | 16.4 | 14.9           | 15.4 | 15.4 | 15.9 | 16.4 |
|                 | UGR Variations with Observer Position for Luminaire Spacings S |      |      |      |      |                |      |      |      |      |
| S = 1.0H        | +2.6                                                           |      | -5.6 |      |      | +2.5           |      | -5.8 |      |      |
| S = 1.5H        | +4.7                                                           |      | -7.7 |      |      | +4.7           |      | -7.6 |      |      |
| S = 2.0H        | +6.6                                                           |      | -8.6 |      |      | +6.7           |      | -8.6 |      |      |

#### Colour properties

Correlated Colour Temperature : 3000

Ra: CRI (Ra) 80

Eficiência

| Utilisation Factors according to IES (%) |                             |     |     |     |     |     |    |    |    |    |
|------------------------------------------|-----------------------------|-----|-----|-----|-----|-----|----|----|----|----|
|                                          | Room Reflection Factors (%) |     |     |     |     |     |    |    |    |    |
| Ceiling                                  | 80                          | 80  | 80  | 50  | 50  | 50  | 30 | 30 | 30 | 0  |
| Walls                                    | 50                          | 30  | 10  | 50  | 30  | 10  | 50 | 30 | 10 | 0  |
| Floor                                    | 20                          | 20  | 20  | 20  | 20  | 20  | 20 | 20 | 20 | 0  |
| RCR = 1                                  | 109                         | 107 | 106 | 103 | 101 | 100 | 99 | 98 | 97 | 91 |
| 2                                        | 100                         | 96  | 93  | 94  | 92  | 90  | 91 | 89 | 87 | 83 |
| 3                                        | 91                          | 86  | 83  | 87  | 83  | 80  | 84 | 81 | 79 | 75 |
| 4                                        | 84                          | 78  | 74  | 80  | 76  | 72  | 78 | 74 | 71 | 68 |
| 5                                        | 77                          | 71  | 66  | 74  | 69  | 65  | 72 | 68 | 64 | 62 |
| 6                                        | 71                          | 64  | 60  | 68  | 63  | 59  | 67 | 62 | 59 | 56 |
| 7                                        | 66                          | 59  | 54  | 63  | 58  | 54  | 62 | 57 | 53 | 51 |
| 8                                        | 61                          | 54  | 50  | 59  | 53  | 49  | 58 | 53 | 49 | 47 |
| 9                                        | 57                          | 50  | 46  | 55  | 49  | 45  | 54 | 49 | 45 | 43 |
| 10                                       | 53                          | 46  | 42  | 51  | 46  | 42  | 50 | 45 | 42 | 40 |

| Utilisation Factors according to LiTG (%) |                             |     |     |     |     |     |     |    |    |    |
|-------------------------------------------|-----------------------------|-----|-----|-----|-----|-----|-----|----|----|----|
|                                           | Room Reflection Factors (%) |     |     |     |     |     |     |    |    |    |
| Ceiling                                   | 80                          | 80  | 80  | 50  | 50  | 50  | 50  | 50 | 30 | 0  |
| Walls                                     | 50                          | 30  | 50  | 30  | 50  | 30  | 50  | 30 | 30 | 0  |
| Floor                                     | 30                          | 30  | 10  | 10  | 30  | 30  | 10  | 10 | 10 | 0  |
| k = 0.60                                  | 65                          | 57  | 62  | 56  | 63  | 56  | 60  | 55 | 55 | 50 |
| 0.80                                      | 77                          | 69  | 72  | 66  | 74  | 68  | 70  | 66 | 65 | 60 |
| 1.00                                      | 84                          | 77  | 78  | 73  | 81  | 75  | 76  | 72 | 71 | 67 |
| 1.25                                      | 94                          | 87  | 86  | 82  | 89  | 84  | 84  | 80 | 80 | 75 |
| 1.50                                      | 99                          | 93  | 90  | 86  | 94  | 89  | 88  | 84 | 84 | 79 |
| 2.00                                      | 106                         | 100 | 94  | 91  | 99  | 95  | 92  | 89 | 88 | 84 |
| 2.50                                      | 111                         | 105 | 98  | 95  | 103 | 99  | 95  | 93 | 92 | 88 |
| 3.00                                      | 115                         | 110 | 100 | 98  | 106 | 103 | 98  | 96 | 95 | 91 |
| 4.00                                      | 118                         | 114 | 102 | 100 | 108 | 105 | 99  | 97 | 96 | 92 |
| 5.00                                      | 120                         | 117 | 103 | 102 | 110 | 108 | 100 | 99 | 98 | 94 |

Esboço

