

# R3113/LEDN445DX1



pendlad armatur • rektangulär

installation : Arbetsytor, Klassrum

armaturhus: lackad stålplåt

ljuskälla : LED • 4000 K

Optik : Shielded lens • polycarbonate (PC) with aluminium thin film • medelbredstrålande

UGR klassificering : <=16

ljusutbyte: 4400 lm

ljusutbyte : 152 lm/W

LLMF: 98% @ 50khrs (Tq=25°C)

## Product information

### Armatur data

dimensioner : 1340 mm x 260 mm x 35 mm

kulör: RAL9003 - vit (strukurlack)

typ : rampontage: ändarmatur

IP: IP20

### Elektrisk data

drivenhet: DALI reglerbar

effekt : 29 W

spänning : 220-240V

frekvens : 50-60Hz AC

fotobiologisk säkerhet : EN 62471: RISK GROUP 1  
UNLIMITED



Lifetime Data (Tq=25.0°C)

| Time(khrs) | LLMF(%) | Cx(%) |
|------------|---------|-------|
| 10         | 99      | 1     |
| 20         | 99      | 2     |
| 30         | 99      | 3     |
| 40         | 98      | 4     |
| 50         | 98      | 5     |
| 60         | 98      | 6     |

UGR klassificering <=

Corrected Glare Ratings for a Total Lamp Flux of 4400lm (S = 0.25H)

| Ceiling<br>Walls<br>Floor   | Room Reflection Factors (%) |      |       |      |      |                |      |      |      |      |
|---|-----------------------------|------|-------|------|------|----------------|------|------|------|------|
|   | 70                          | 70   | 50    | 50   | 30   | 70             | 70   | 50   | 50   | 30   |
| Room Dimensions   | Viewed Crosswise            |      |       |      |      | Viewed Endwise |      |      |      |      |
| X = 2H Y = 2H   | 15.2                        | 16.3 | 15.9  | 17.0 | 17.7 | 15.6           | 16.7 | 16.3 | 17.5 | 18.1 |
| Y = 3H  | 15.0                        | 15.9 | 15.7  | 16.7 | 17.4 | 15.5           | 16.5 | 16.2 | 17.2 | 17.9 |
| Y = 4H  | 14.8                        | 15.7 | 15.6  | 16.5 | 17.2 | 15.4           | 16.3 | 16.2 | 17.1 | 17.8 |
| Y = 6H  | 14.7                        | 15.5 | 15.5  | 16.3 | 17.0 | 15.3           | 16.1 | 16.1 | 16.9 | 17.6 |
| Y = 8H  | 14.7                        | 15.4 | 15.4  | 16.2 | 17.0 | 15.2           | 16.0 | 16.0 | 16.8 | 17.5 |
| Y = 12H   | 14.6                        | 15.3 | 15.4  | 16.1 | 16.9 | 15.2           | 15.9 | 16.0 | 16.7 | 17.5 |
| X = 4H Y = 2H   | 15.2                        | 16.1 | 16.0  | 16.9 | 17.6 | 15.6           | 16.5 | 16.4 | 17.3 | 18.0 |
| Y = 3H  | 15.0                        | 15.7 | 15.8  | 16.5 | 17.3 | 15.5           | 16.2 | 16.3 | 17.0 | 17.8 |
| Y = 4H  | 14.9                        | 15.5 | 15.7  | 16.3 | 17.1 | 15.4           | 16.0 | 16.2 | 16.8 | 17.6 |
| Y = 6H  | 14.7                        | 15.3 | 15.6  | 16.1 | 16.9 | 15.3           | 15.9 | 16.1 | 16.7 | 17.5 |
| Y = 8H  | 14.7                        | 15.2 | 15.5  | 16.0 | 16.8 | 15.2           | 15.8 | 16.1 | 16.6 | 17.4 |
| Y = 12H   | 14.6                        | 15.1 | 15.5  | 15.9 | 16.7 | 15.2           | 15.6 | 16.0 | 16.5 | 17.3 |
| X = 8H Y = 4H   | 14.7                        | 15.2 | 15.5  | 16.0 | 16.8 | 15.2           | 15.7 | 16.0 | 16.6 | 17.4 |
| Y = 6H  | 14.6                        | 15.0 | 15.4  | 15.9 | 16.7 | 15.1           | 15.5 | 16.0 | 16.4 | 17.2 |
| Y = 8H  | 14.5                        | 14.9 | 15.4  | 15.7 | 16.6 | 15.1           | 15.4 | 15.9 | 16.3 | 17.2 |
| Y = 12H   | 14.4                        | 14.7 | 15.3  | 15.6 | 16.5 | 15.0           | 15.3 | 15.9 | 16.2 | 17.1 |
| X = 12H Y = 4H  | 14.6                        | 15.1 | 15.5  | 15.9 | 16.8 | 15.1           | 15.6 | 16.0 | 16.5 | 17.3 |
| Y = 6H  | 14.5                        | 14.9 | 15.4  | 15.7 | 16.6 | 15.0           | 15.4 | 15.9 | 16.3 | 17.1 |
| Y = 8H  | 14.4                        | 14.7 | 15.3  | 15.6 | 16.5 | 15.0           | 15.3 | 15.9 | 16.2 | 17.1 |
| <b>UGR Variations with Observer Position for Luminaire Spacings S</b> |                             |      |       |      |      |                |      |      |      |      |
| S = 1.0H  | +1.1                        |      | -2.3  |      |      | +0.7           |      | -1.5 |      |      |
| S = 1.5H  | +2.3                        |      | -7.5  |      |      | +2.1           |      | -6.6 |      |      |
| S = 2.0H  | +3.6                        |      | -14.7 |      |      | +3.3           |      | -8.3 |      |      |

Ljusstyrka i cd

Intensity for 4400lm

| Gamma | C0     | C45    | C90    | Gamma | C0    | C45   | C90   |
|-------|--------|--------|--------|-------|-------|-------|-------|
| 0°    | 1655.5 | 1655.5 | 1655.5 | 90°   | 0.2   | 0.3   | 1.4   |
| 5°    | 1646.8 | 1642.5 | 1641.2 | 95°   | 3.5   | 5.0   | 8.6   |
| 10°   | 1617.3 | 1615.4 | 1615.7 | 100°  | 13.4  | 18.7  | 26.6  |
| 15°   | 1569.4 | 1567.0 | 1564.7 | 105°  | 31.6  | 41.6  | 56.1  |
| 20°   | 1488.5 | 1497.7 | 1499.0 | 110°  | 61.8  | 78.6  | 100.2 |
| 25°   | 1383.8 | 1411.6 | 1417.9 | 115°  | 109.5 | 133.0 | 157.0 |
| 30°   | 1236.3 | 1290.5 | 1299.0 | 120°  | 175.4 | 201.0 | 225.7 |
| 35°   | 1069.7 | 1156.7 | 1149.0 | 125°  | 248.8 | 271.7 | 294.3 |
| 40°   | 879.2  | 990.3  | 957.6  | 130°  | 318.6 | 330.5 | 349.1 |
| 45°   | 687.3  | 826.0  | 772.0  | 135°  | 375.2 | 378.0 | 394.4 |
| 50°   | 481.3  | 647.1  | 570.9  | 140°  | 421.6 | 418.0 | 430.0 |
| 55°   | 241.4  | 477.5  | 313.3  | 145°  | 454.6 | 454.3 | 460.2 |
| 60°   | 130.6  | 285.7  | 129.0  | 150°  | 481.3 | 479.2 | 485.3 |
| 65°   | 32.5   | 106.9  | 75.3   | 155°  | 504.8 | 503.5 | 505.8 |
| 70°   | 15.4   | 27.8   | 39.2   | 160°  | 522.2 | 521.8 | 522.1 |
| 75°   | 8.3    | 11.6   | 24.2   | 165°  | 537.7 | 541.9 | 540.9 |
| 80°   | 1.2    | 4.2    | 12.4   | 170°  | 550.4 | 546.8 | 549.7 |
| 85°   | 0.0    | 0.0    | 3.9    | 175°  | 556.0 | 556.9 | 556.5 |
| 90°   | 0.2    | 0.3    | 1.4    | 180°  | 549.8 | 549.8 | 549.8 |

Colour properties

Correlated Colour Temperature : 4000

Ra: 80



## Verkningsgrad

Utilisation Factors according to IES (%)

|         | Room Reflection Factors (%) |       |       |    |    |    |    |    |    |    |    |    |   |
|---------|-----------------------------|-------|-------|----|----|----|----|----|----|----|----|----|---|
|         | Ceiling                     | Walls | Floor | 80 | 80 | 80 | 50 | 50 | 50 | 30 | 30 | 30 | 0 |
| RCR = 1 | 101                         | 99    | 97    | 85 | 83 | 82 | 75 | 74 | 73 | 61 |    |    |   |
| 2       | 91                          | 87    | 84    | 76 | 74 | 72 | 68 | 66 | 65 | 54 |    |    |   |
| 3       | 81                          | 76    | 73    | 69 | 66 | 63 | 62 | 59 | 57 | 48 |    |    |   |
| 4       | 73                          | 67    | 63    | 63 | 58 | 55 | 56 | 53 | 50 | 42 |    |    |   |
| 5       | 66                          | 60    | 55    | 57 | 52 | 49 | 51 | 48 | 45 | 38 |    |    |   |
| 6       | 60                          | 53    | 49    | 52 | 47 | 43 | 47 | 43 | 40 | 34 |    |    |   |
| 7       | 55                          | 48    | 43    | 48 | 42 | 39 | 43 | 39 | 36 | 31 |    |    |   |
| 8       | 50                          | 43    | 39    | 44 | 39 | 35 | 40 | 36 | 32 | 28 |    |    |   |
| 9       | 46                          | 39    | 35    | 40 | 35 | 32 | 37 | 33 | 30 | 25 |    |    |   |
| 10      | 43                          | 36    | 31    | 37 | 32 | 29 | 34 | 30 | 27 | 23 |    |    |   |

Utilisation Factors according to LiTG (%)

|          | Room Reflection Factors (%) |       |       |    |    |    |    |    |    |    |    |   |
|----------|-----------------------------|-------|-------|----|----|----|----|----|----|----|----|---|
|          | Ceiling                     | Walls | Floor | 80 | 80 | 80 | 50 | 50 | 50 | 50 | 30 | 0 |
| k = 0.60 | 51                          | 43    | 49    | 42 | 45 | 39 | 43 | 38 | 36 | 29 |    |   |
| 0.80     | 62                          | 54    | 58    | 52 | 54 | 48 | 52 | 47 | 44 | 36 |    |   |
| 1.00     | 70                          | 62    | 65    | 59 | 61 | 55 | 58 | 53 | 49 | 41 |    |   |
| 1.25     | 79                          | 72    | 73    | 67 | 68 | 63 | 64 | 60 | 56 | 47 |    |   |
| 1.50     | 85                          | 78    | 77    | 72 | 73 | 68 | 68 | 64 | 60 | 50 |    |   |
| 2.00     | 92                          | 86    | 83    | 78 | 78 | 74 | 72 | 69 | 64 | 54 |    |   |
| 2.50     | 98                          | 92    | 86    | 83 | 82 | 78 | 76 | 73 | 67 | 57 |    |   |
| 3.00     | 102                         | 97    | 89    | 86 | 85 | 82 | 78 | 76 | 70 | 59 |    |   |
| 4.00     | 106                         | 102   | 92    | 89 | 88 | 85 | 80 | 78 | 72 | 61 |    |   |
| 5.00     | 109                         | 105   | 94    | 92 | 90 | 88 | 82 | 80 | 73 | 62 |    |   |

## Tillbehör

R3H1201/150-5X1 Upphångningsdetaljer med takkopp (RAL9003-vit) - rampontage - 5-polig - max. 1 m

R3H1101/150-5 Upphångningsdetaljer med 2 x litet takfäste - rampontage - 5-polig - max. 1 m

R3H1120-X1 Kopplingsdon 180 mm

R3H1130-X1 Kopplingsdon 260 mm

## Måttskiss

