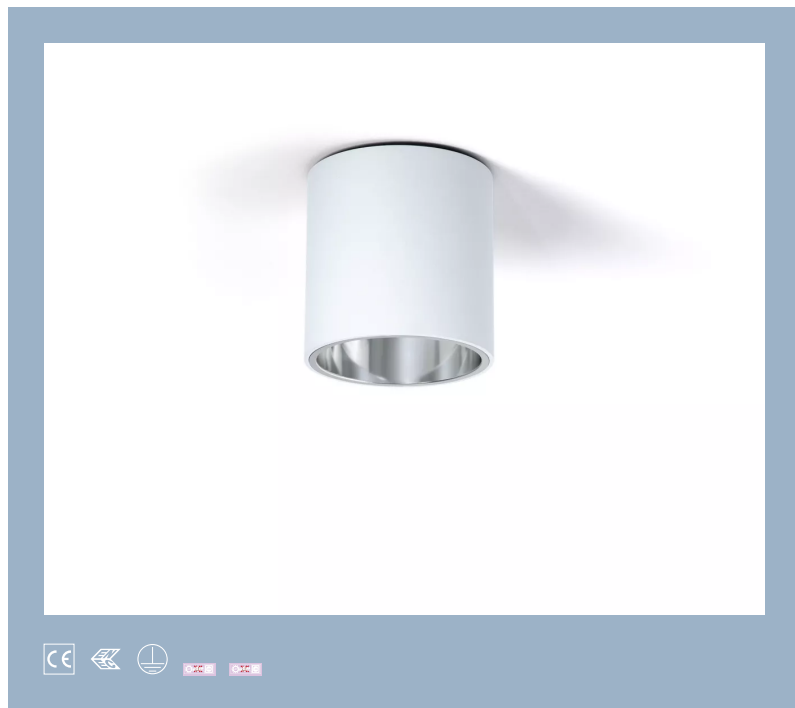


# D21R1/LEDW30SX1



surface-mounted luminaire • round

Application : Others

housing: lacquered aluminium

light source : LED • 3000 K

optics : reflector • aluminium, satin anodised • wide-angle

UGR classification : <=25

luminous flux: 2900 lm

luminous efficacy : 100 lm/W

LLMF: 96% @ 50khrs (Tq=25°C)

## Product information

### Mechanical properties

dimensions : 200 mm x 212 mm

colour: RAL9003 - white (textured)

type : individual luminaire

### Electrical properties

driver: not dimmable

power : 29 W

voltage : 230-240V

frequency : 50Hz AC

photobiological safety : EN 62471: RISK GROUP 1  
UNLIMITED

current : 3 A

Luminance

luminous flux : 2900 lm

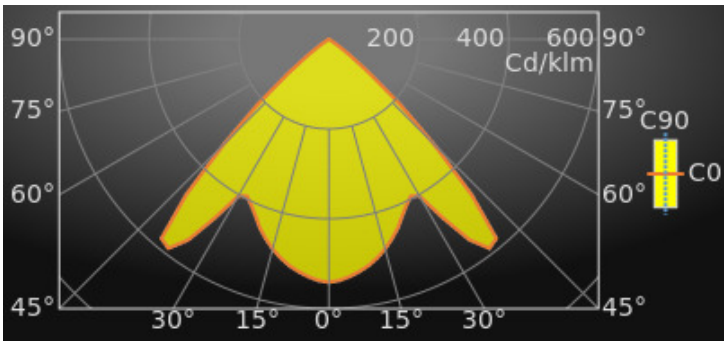
luminous efficacy : 100 lm/W

luminance @ 65° = : 1000 cd/m²

UGR classification =: <=25

luminous area : 0.02 m²

| Gamma | Average Luminances (Cd/m²) for 2900lm |       |       |       |       |
|-------|---------------------------------------|-------|-------|-------|-------|
|       | C0                                    | C30   | C45   | C60   | C90   |
| 45°   | 57398                                 | 57398 | 57398 | 57398 | 57398 |
| 50°   | 22432                                 | 22432 | 22432 | 22432 | 22432 |
| 55°   | 5160                                  | 5160  | 5160  | 5160  | 5160  |
| 60°   | 93                                    | 93    | 93    | 93    | 93    |
| 65°   | 10                                    | 10    | 10    | 10    | 10    |
| 70°   | 0                                     | 0     | 0     | 0     | 0     |
| 75°   | 0                                     | 0     | 0     | 0     | 0     |
| 80°   | 0                                     | 0     | 0     | 0     | 0     |
| 85°   | 0                                     | 0     | 0     | 0     | 0     |



Classifications

CIE: 746 / 1000 / 1000 / 1000 / 1000

CIE FLUXCODE : 0.75 / 1.00 / 1.00 / 1.00 / 1.00

BZ: BZ2/3/BZ1/4/BZ2

CAE: Symmetrical

DIN: A60 (Nach Arbeitsblatt 7)

DIN\_U: Phi u = 1.00

DIN\_SU: Phi su = 0.72

UTE: 1.00 B + 0.00 T



This document has been compiled by ETAP with the greatest possible care. However, the information contained in this publication is not binding and may change due to technical development. ETAP is not liable for any damage whatsoever resulting from the use of this document.  
www.etaplighting.com // Made in Belgium

Lifetime Data (Tq=25.0°C)

| Time(khrs) | LLMF(%) | Cx(%) |
|------------|---------|-------|
| 10         | 99      | 2     |
| 20         | 99      | 4     |
| 30         | 98      | 6     |
| 40         | 98      | 8     |
| 50         | 97      | 10    |
| 60         | 96      | 12    |

## Luminous intensities in cd

Intensity for 2900lm

| Gamma | C0     | C45    | C90    |
|-------|--------|--------|--------|
| 0°    | 1569.4 | 1569.4 | 1569.4 |
| 5°    | 1537.8 | 1537.8 | 1537.8 |
| 10°   | 1482.5 | 1482.5 | 1482.5 |
| 15°   | 1401.0 | 1401.0 | 1401.0 |
| 20°   | 1298.7 | 1298.7 | 1298.7 |
| 25°   | 1184.0 | 1184.0 | 1184.0 |
| 30°   | 1167.4 | 1167.4 | 1167.4 |
| 35°   | 1581.8 | 1581.8 | 1581.8 |
| 40°   | 1679.4 | 1679.4 | 1679.4 |
| 45°   | 954.0  | 954.0  | 954.0  |
| 50°   | 338.9  | 338.9  | 338.9  |
| 55°   | 69.6   | 69.6   | 69.6   |
| 60°   | 1.1    | 1.1    | 1.1    |
| 65°   | 0.1    | 0.1    | 0.1    |
| 70°   | 0.0    | 0.0    | 0.0    |
| 75°   | 0.0    | 0.0    | 0.0    |
| 80°   | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    |

## UGR classification =

Corrected Glare Ratings for a Total Lamp Flux of 2900lm (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   | 23.3                                                           | 24.9 | 23.6  | 25.2 | 25.4 | 23.3           | 24.9 | 23.6  | 25.2 | 25.4 |
| Y = 3H          | 23.2                                                           | 24.6 | 23.5  | 24.8 | 25.1 | 23.2           | 24.6 | 23.5  | 24.8 | 25.1 |
| Y = 4H          | 23.1                                                           | 24.4 | 23.4  | 24.7 | 25.0 | 23.1           | 24.4 | 23.4  | 24.7 | 25.0 |
| Y = 6H          | 23.0                                                           | 24.2 | 23.4  | 24.5 | 24.8 | 23.0           | 24.2 | 23.4  | 24.5 | 24.8 |
| Y = 8H          | 23.0                                                           | 24.1 | 23.3  | 24.4 | 24.8 | 23.0           | 24.1 | 23.3  | 24.4 | 24.8 |
| Y = 12H         | 22.9                                                           | 24.0 | 23.3  | 24.3 | 24.7 | 22.9           | 24.0 | 23.3  | 24.3 | 24.7 |
| X = 4H Y = 2H   | 23.1                                                           | 24.4 | 23.4  | 24.7 | 25.0 | 23.1           | 24.4 | 23.4  | 24.7 | 25.0 |
| Y = 3H          | 22.9                                                           | 24.0 | 23.3  | 24.3 | 24.7 | 22.9           | 24.0 | 23.3  | 24.3 | 24.7 |
| Y = 4H          | 22.9                                                           | 23.8 | 23.3  | 24.2 | 24.5 | 22.9           | 23.8 | 23.3  | 24.2 | 24.5 |
| Y = 6H          | 22.8                                                           | 23.6 | 23.2  | 24.0 | 24.4 | 22.8           | 23.6 | 23.2  | 24.0 | 24.4 |
| Y = 8H          | 22.8                                                           | 23.5 | 23.2  | 23.9 | 24.3 | 22.8           | 23.5 | 23.2  | 23.9 | 24.3 |
| Y = 12H         | 22.7                                                           | 23.4 | 23.2  | 23.8 | 24.3 | 22.7           | 23.4 | 23.2  | 23.8 | 24.3 |
| X = 8H Y = 4H   | 22.8                                                           | 23.5 | 23.2  | 23.9 | 24.3 | 22.8           | 23.5 | 23.2  | 23.9 | 24.3 |
| Y = 6H          | 22.7                                                           | 23.3 | 23.2  | 23.8 | 24.2 | 22.7           | 23.3 | 23.2  | 23.8 | 24.2 |
| Y = 8H          | 22.7                                                           | 23.2 | 23.1  | 23.7 | 24.2 | 22.7           | 23.2 | 23.1  | 23.7 | 24.2 |
| Y = 12H         | 22.6                                                           | 23.1 | 23.1  | 23.6 | 24.1 | 22.6           | 23.1 | 23.1  | 23.6 | 24.1 |
| X = 12H Y = 4H  | 22.7                                                           | 23.4 | 23.2  | 23.8 | 24.3 | 22.7           | 23.4 | 23.2  | 23.8 | 24.3 |
| Y = 6H          | 22.7                                                           | 23.2 | 23.1  | 23.7 | 24.2 | 22.7           | 23.2 | 23.1  | 23.7 | 24.2 |
| Y = 8H          | 22.6                                                           | 23.1 | 23.1  | 23.6 | 24.1 | 22.6           | 23.1 | 23.1  | 23.6 | 24.1 |
|                 | UGR Variations with Observer Position for Luminaire Spacings S |      |       |      |      |                |      |       |      |      |
| S = 1.0H        | +2.9                                                           |      | -13.9 |      |      | +2.9           |      | -13.9 |      |      |
| S = 1.5H        | +5.6                                                           |      | +0.0  |      |      | +5.6           |      | +0.0  |      |      |
| S = 2.0H        | +7.6                                                           |      | +0.0  |      |      | +7.6           |      | +0.0  |      |      |

## Colour properties

Correlated Colour Temperature : 3000

Ra: CRI (Ra) 80

Efficiency

| 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 | 105 | 103 | 101 | 100 | 99 | 98 | 97 | 91 |
| 2                                        | 99                          | 95  | 93  | 94  | 91  | 89  | 91 | 88 | 86 | 82 |
| 3                                        | 90                          | 85  | 81  | 86  | 82  | 79  | 83 | 80 | 77 | 73 |
| 4                                        | 82                          | 76  | 72  | 78  | 73  | 70  | 76 | 72 | 69 | 66 |
| 5                                        | 75                          | 68  | 64  | 71  | 66  | 62  | 70 | 65 | 62 | 59 |
| 6                                        | 68                          | 61  | 57  | 65  | 60  | 56  | 64 | 59 | 55 | 53 |
| 7                                        | 62                          | 56  | 51  | 60  | 54  | 50  | 59 | 54 | 50 | 47 |
| 8                                        | 57                          | 50  | 46  | 55  | 49  | 45  | 54 | 49 | 45 | 43 |
| 9                                        | 53                          | 46  | 41  | 51  | 45  | 41  | 50 | 45 | 41 | 39 |
| 10                                       | 49                          | 42  | 38  | 48  | 42  | 37  | 47 | 41 | 37 | 35 |

| 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                                  | 59                          | 51  | 56  | 50  | 57  | 50  | 55  | 49 | 49 | 43 |
| 0.80                                      | 73                          | 65  | 69  | 63  | 70  | 64  | 67  | 62 | 61 | 56 |
| 1.00                                      | 82                          | 74  | 76  | 70  | 78  | 72  | 74  | 69 | 68 | 63 |
| 1.25                                      | 91                          | 84  | 83  | 78  | 86  | 81  | 81  | 77 | 76 | 72 |
| 1.50                                      | 97                          | 90  | 88  | 84  | 91  | 86  | 86  | 82 | 81 | 77 |
| 2.00                                      | 104                         | 97  | 93  | 89  | 97  | 92  | 90  | 87 | 86 | 82 |
| 2.50                                      | 109                         | 104 | 96  | 93  | 101 | 97  | 94  | 91 | 90 | 86 |
| 3.00                                      | 113                         | 109 | 99  | 97  | 105 | 102 | 97  | 95 | 93 | 90 |
| 4.00                                      | 117                         | 113 | 101 | 99  | 107 | 104 | 98  | 96 | 95 | 91 |
| 5.00                                      | 120                         | 116 | 103 | 101 | 109 | 107 | 100 | 98 | 97 | 93 |

Dimensional drawing

