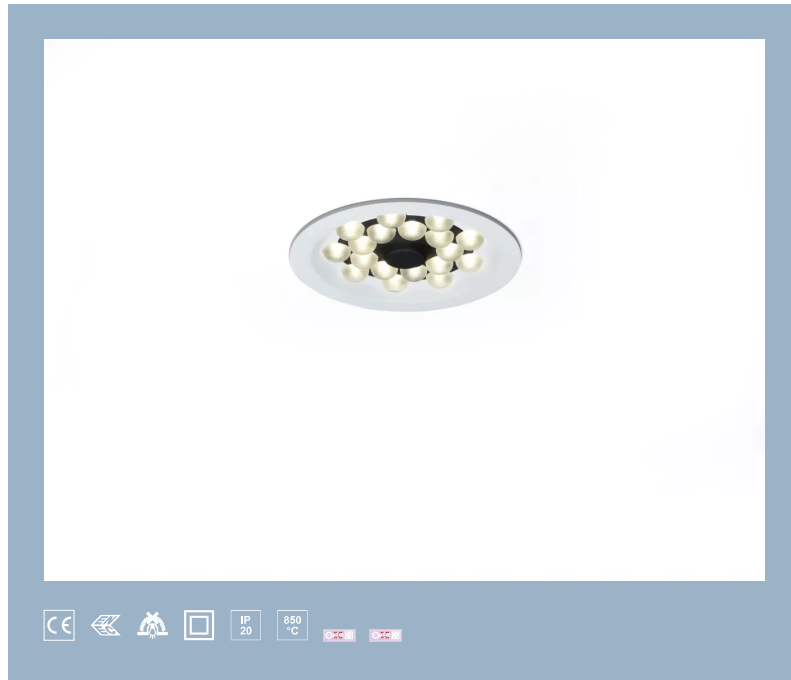


# D42R1/LEDW1820S



## Einbauleuchte • rund

**Anwendung** : Allgemeine Bürobereiche, Allgemeine Bildungsbereiche

**Gehäuse**: lackiertes Aluminium

**Lichtquelle** : LED • 3000 K

**Optik** : LED+LENS™ • Polycarbonat (PC) Linse • breit strahlend

**UGR-Klassifizierung** : ≤22

**Lichtstrom**: 2100 lm

**Spezifischer Lichtstrom** : 124 lm/W

**LLMF**: 98% @ 50khrs (Tq=25°C)

## Product information

### Mechanische Merkmale

**Abmessungen** : 200 mm x 70 mm

**min. Deckenausschnitt** : 180 mm x 70 mm

**Farbe**: RAL9003 - signalweiß

**Einbaurahmen**: aufliegender Einbaurahmen

**Typ** : Einzelleuchte

**IP**: IP20

### Elektrische Ausrüstung

**Betriebsgerät**: nicht dimmbar

**Anschlussleistung** : 17 W

**Spannung** : 220-240V

**Frequenz** : 50-60Hz AC

**Fotobiologische Sicherheit** : EN 62471: RISK GROUP 1 UNLIMITED

**current** : 12 A

## Leuchtdichte

Lichtstrom : 2100 lm

Spezifischer Lichtstrom : 124 lm/W

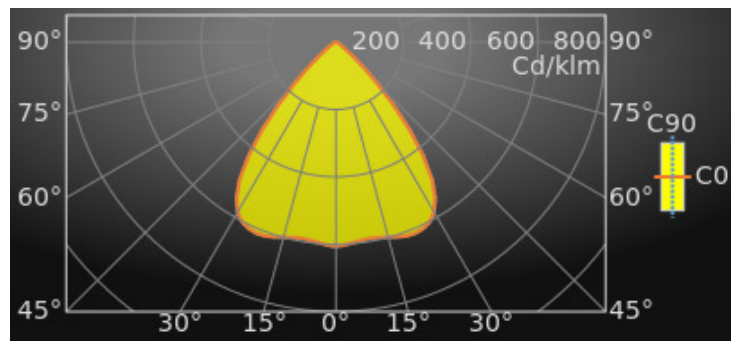
Leuchtdichte @ 65° = : 3000 cd/m²

UGR-Klassifizierung =: <=22

leuchtende Fläche : 0.02 m²

Average Luminances (Cd/m²) for 2100lm

| Gamma | C0    | C30   | C45   | C60   | C90   |
|-------|-------|-------|-------|-------|-------|
| 45°   | 25653 | 25653 | 25653 | 25653 | 25653 |
| 50°   | 11031 | 11031 | 11031 | 11031 | 11031 |
| 55°   | 5537  | 5537  | 5537  | 5537  | 5537  |
| 60°   | 3481  | 3481  | 3481  | 3481  | 3481  |
| 65°   | 2653  | 2653  | 2653  | 2653  | 2653  |
| 70°   | 2250  | 2250  | 2250  | 2250  | 2250  |
| 75°   | 1956  | 1956  | 1956  | 1956  | 1956  |
| 80°   | 1681  | 1681  | 1681  | 1681  | 1681  |
| 85°   | 1324  | 1324  | 1324  | 1324  | 1324  |



## Klassifikationen

CIE: 835 / 982 / 997 / 1000 / 1000

CIE FLUXCODE : 0.84 / 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:  $\Phi_{su} = 0.76$

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    |

### Lichtstärken in cd

#### Intensity for 2100lm

| Gamma | C0     | C45    | C90    |
|-------|--------|--------|--------|
| 0°    | 1273.9 | 1273.9 | 1273.9 |
| 5°    | 1254.1 | 1254.1 | 1254.1 |
| 10°   | 1240.8 | 1240.8 | 1240.8 |
| 15°   | 1257.9 | 1257.9 | 1257.9 |
| 20°   | 1285.5 | 1285.5 | 1285.5 |
| 25°   | 1283.5 | 1283.5 | 1283.5 |
| 30°   | 1223.4 | 1223.4 | 1223.4 |
| 35°   | 1044.4 | 1044.4 | 1044.4 |
| 40°   | 717.0  | 717.0  | 717.0  |
| 45°   | 364.7  | 364.7  | 364.7  |
| 50°   | 142.6  | 142.6  | 142.6  |
| 55°   | 63.9   | 63.9   | 63.9   |
| 60°   | 35.0   | 35.0   | 35.0   |
| 65°   | 22.5   | 22.5   | 22.5   |
| 70°   | 15.5   | 15.5   | 15.5   |
| 75°   | 10.2   | 10.2   | 10.2   |
| 80°   | 5.9    | 5.9    | 5.9    |
| 85°   | 2.3    | 2.3    | 2.3    |
| 90°   | 0.7    | 0.7    | 0.7    |

### UGR-Klassifizierung =

Corrected Glare Ratings for a Total Lamp Flux of 2100lm (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   | 20.1                                                           | 21.6 | 20.4 | 21.9 | 22.1 | 20.1           | 21.6 | 20.4 | 21.9 | 22.1 |  |
| Y = 3H          | 20.0                                                           | 21.4 | 20.3 | 21.6 | 21.9 | 20.0           | 21.4 | 20.3 | 21.6 | 21.9 |  |
| Y = 4H          | 20.0                                                           | 21.2 | 20.3 | 21.5 | 21.8 | 20.0           | 21.2 | 20.3 | 21.5 | 21.8 |  |
| Y = 6H          | 19.9                                                           | 21.0 | 20.3 | 21.3 | 21.7 | 19.9           | 21.0 | 20.3 | 21.3 | 21.7 |  |
| Y = 8H          | 19.9                                                           | 21.0 | 20.3 | 21.3 | 21.6 | 19.9           | 21.0 | 20.3 | 21.3 | 21.6 |  |
| Y = 12H         | 19.9                                                           | 20.9 | 20.2 | 21.2 | 21.5 | 19.9           | 20.9 | 20.2 | 21.2 | 21.5 |  |
| X = 4H Y = 2H   | 19.9                                                           | 21.2 | 20.3 | 21.5 | 21.8 | 19.9           | 21.2 | 20.3 | 21.5 | 21.8 |  |
| Y = 3H          | 19.9                                                           | 20.9 | 20.2 | 21.2 | 21.6 | 19.9           | 20.9 | 20.2 | 21.2 | 21.6 |  |
| Y = 4H          | 19.8                                                           | 20.7 | 20.2 | 21.1 | 21.4 | 19.8           | 20.7 | 20.2 | 21.1 | 21.4 |  |
| Y = 6H          | 19.8                                                           | 20.6 | 20.2 | 21.0 | 21.4 | 19.8           | 20.6 | 20.2 | 21.0 | 21.4 |  |
| Y = 8H          | 19.8                                                           | 20.5 | 20.2 | 20.9 | 21.3 | 19.8           | 20.5 | 20.2 | 20.9 | 21.3 |  |
| Y = 12H         | 19.7                                                           | 20.4 | 20.2 | 20.8 | 21.3 | 19.7           | 20.4 | 20.2 | 20.8 | 21.3 |  |
| X = 8H Y = 4H   | 19.7                                                           | 20.5 | 20.2 | 20.9 | 21.3 | 19.7           | 20.5 | 20.2 | 20.9 | 21.3 |  |
| Y = 6H          | 19.7                                                           | 20.3 | 20.2 | 20.8 | 21.2 | 19.7           | 20.3 | 20.2 | 20.8 | 21.2 |  |
| Y = 8H          | 19.7                                                           | 20.2 | 20.2 | 20.7 | 21.2 | 19.7           | 20.2 | 20.2 | 20.7 | 21.2 |  |
| Y = 12H         | 19.7                                                           | 20.2 | 20.2 | 20.6 | 21.2 | 19.7           | 20.2 | 20.2 | 20.6 | 21.2 |  |
| X = 12H Y = 4H  | 19.7                                                           | 20.4 | 20.2 | 20.8 | 21.2 | 19.7           | 20.4 | 20.2 | 20.8 | 21.2 |  |
| Y = 6H          | 19.7                                                           | 20.2 | 20.2 | 20.7 | 21.2 | 19.7           | 20.2 | 20.2 | 20.7 | 21.2 |  |
| Y = 8H          | 19.7                                                           | 20.1 | 20.2 | 20.6 | 21.1 | 19.7           | 20.1 | 20.2 | 20.6 | 21.1 |  |
|                 | UGR Variations with Observer Position for Luminaire Spacings S |      |      |      |      |                |      |      |      |      |  |
| S = 1.0H        | +2.8                                                           |      |      |      | -6.6 |                | +2.8 |      |      | -6.6 |  |
| S = 1.5H        | +5.1                                                           |      |      |      | -8.2 |                | +5.1 |      |      | -8.2 |  |
| S = 2.0H        | +7.1                                                           |      |      |      | -8.9 |                | +7.1 |      |      | -8.9 |  |

### Colour properties

Correlated Colour Temperature : 3000

Farbwiedergabeindex Ra: CRI (Ra) 80

Leuchten-Betriebwirkungsgrad

| 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 | 92 |
| 2                                        | 100                         | 96  | 94  | 95  | 92  | 90  | 92 | 89 | 88 | 83 |
| 3                                        | 91                          | 87  | 83  | 87  | 83  | 81  | 85 | 81 | 79 | 75 |
| 4                                        | 84                          | 78  | 74  | 80  | 76  | 73  | 78 | 74 | 72 | 68 |
| 5                                        | 77                          | 71  | 67  | 74  | 69  | 66  | 72 | 68 | 65 | 62 |
| 6                                        | 71                          | 65  | 60  | 69  | 63  | 60  | 67 | 62 | 59 | 56 |
| 7                                        | 66                          | 59  | 55  | 64  | 58  | 54  | 62 | 57 | 54 | 52 |
| 8                                        | 61                          | 55  | 50  | 59  | 54  | 50  | 58 | 53 | 49 | 47 |
| 9                                        | 57                          | 50  | 46  | 55  | 50  | 46  | 54 | 49 | 45 | 43 |
| 10                                       | 53                          | 47  | 42  | 52  | 46  | 42  | 51 | 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                          | 58  | 62  | 56  | 63  | 57  | 61  | 56 | 55 | 50 |
| 0.80                                      | 77                          | 70  | 72  | 67  | 74  | 68  | 71  | 66 | 66 | 61 |
| 1.00                                      | 85                          | 77  | 79  | 73  | 81  | 75  | 77  | 72 | 72 | 67 |
| 1.25                                      | 94                          | 88  | 86  | 82  | 90  | 84  | 84  | 81 | 80 | 76 |
| 1.50                                      | 99                          | 93  | 90  | 86  | 94  | 89  | 88  | 85 | 84 | 80 |
| 2.00                                      | 106                         | 100 | 95  | 91  | 99  | 95  | 92  | 90 | 89 | 85 |
| 2.50                                      | 111                         | 106 | 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 | 106 | 99  | 98 | 96 | 93 |
| 5.00                                      | 121                         | 117 | 103 | 102 | 110 | 108 | 100 | 99 | 98 | 94 |

## Vermaßte Skizze

