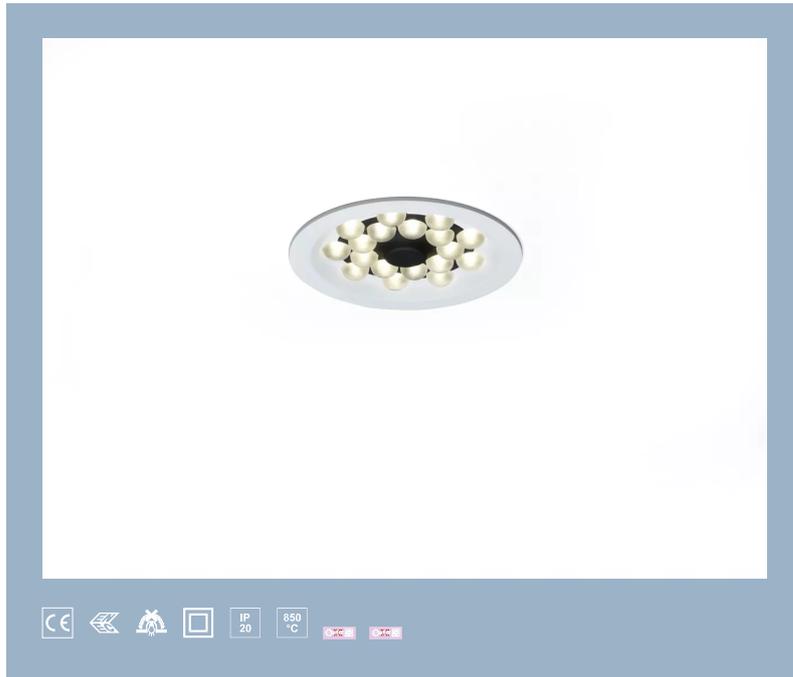


# D42R1/LEDN1820S



## Einbauleuchte • rund

**Anwendung** : Allgemeine Bürobereiche, Allgemeine Bildungsbereiche

**Gehäuse**: lackiertes Aluminium

**Lichtquelle** : LED • 4000 K

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

**UGR-Klassifizierung** : <=22

**Lichtstrom**: 2250 lm

**Spezifischer Lichtstrom** : 132 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 : 2250 lm

Spezifischer Lichtstrom : 132 lm/W

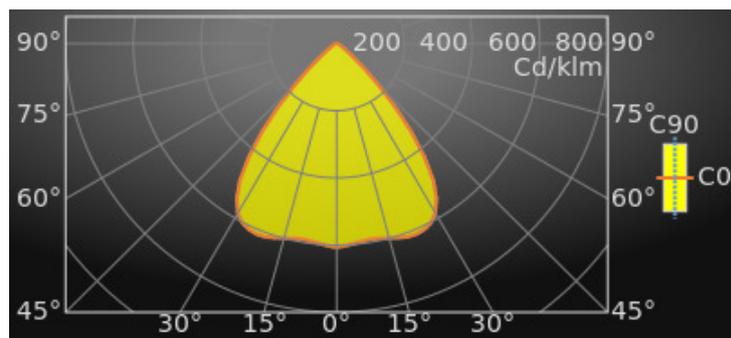
Leuchtdichte @ 65° = : 3000 cd/m<sup>2</sup>

UGR-Klassifizierung =: <=22

leuchtende Fläche : 0.02 m<sup>2</sup>

Average Luminances (Cd/m<sup>2</sup>) for 2250lm

| Gamma | C0    | C30   | C45   | C60   | C90   |
|-------|-------|-------|-------|-------|-------|
| 45°   | 27486 | 27486 | 27486 | 27486 | 27486 |
| 50°   | 11819 | 11819 | 11819 | 11819 | 11819 |
| 55°   | 5932  | 5932  | 5932  | 5932  | 5932  |
| 60°   | 3730  | 3730  | 3730  | 3730  | 3730  |
| 65°   | 2842  | 2842  | 2842  | 2842  | 2842  |
| 70°   | 2411  | 2411  | 2411  | 2411  | 2411  |
| 75°   | 2095  | 2095  | 2095  | 2095  | 2095  |
| 80°   | 1801  | 1801  | 1801  | 1801  | 1801  |
| 85°   | 1418  | 1418  | 1418  | 1418  | 1418  |



## 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    |

UGR-Klassifizierung =

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                                                  |  | 20.4                        | 21.9 | 20.7 | 22.1 | 22.4 | 20.4           | 21.9 | 20.7 | 22.1 | 22.4 |  |
| Y = 3H                                                         |  | 20.3                        | 21.6 | 20.6 | 21.9 | 22.1 | 20.3           | 21.6 | 20.6 | 21.9 | 22.1 |  |
| Y = 4H                                                         |  | 20.2                        | 21.4 | 20.5 | 21.7 | 22.0 | 20.2           | 21.4 | 20.5 | 21.7 | 22.0 |  |
| Y = 6H                                                         |  | 20.1                        | 21.3 | 20.5 | 21.6 | 21.9 | 20.1           | 21.3 | 20.5 | 21.6 | 21.9 |  |
| Y = 8H                                                         |  | 20.1                        | 21.2 | 20.5 | 21.5 | 21.8 | 20.1           | 21.2 | 20.5 | 21.5 | 21.8 |  |
| Y = 12H                                                        |  | 20.1                        | 21.1 | 20.5 | 21.4 | 21.8 | 20.1           | 21.1 | 20.5 | 21.4 | 21.8 |  |
| X = 4H Y = 2H                                                  |  | 20.2                        | 21.4 | 20.5 | 21.7 | 22.0 | 20.2           | 21.4 | 20.5 | 21.7 | 22.0 |  |
| Y = 3H                                                         |  | 20.1                        | 21.1 | 20.5 | 21.5 | 21.8 | 20.1           | 21.1 | 20.5 | 21.5 | 21.8 |  |
| Y = 4H                                                         |  | 20.1                        | 21.0 | 20.5 | 21.3 | 21.7 | 20.1           | 21.0 | 20.5 | 21.3 | 21.7 |  |
| Y = 6H                                                         |  | 20.0                        | 20.8 | 20.5 | 21.2 | 21.6 | 20.0           | 20.8 | 20.5 | 21.2 | 21.6 |  |
| Y = 8H                                                         |  | 20.0                        | 20.7 | 20.4 | 21.1 | 21.6 | 20.0           | 20.7 | 20.4 | 21.1 | 21.6 |  |
| Y = 12H                                                        |  | 20.0                        | 20.6 | 20.4 | 21.1 | 21.5 | 20.0           | 20.6 | 20.4 | 21.1 | 21.5 |  |
| X = 8H Y = 4H                                                  |  | 20.0                        | 20.7 | 20.4 | 21.1 | 21.5 | 20.0           | 20.7 | 20.4 | 21.1 | 21.5 |  |
| Y = 6H                                                         |  | 20.0                        | 20.6 | 20.4 | 21.0 | 21.5 | 20.0           | 20.6 | 20.4 | 21.0 | 21.5 |  |
| Y = 8H                                                         |  | 19.9                        | 20.5 | 20.4 | 20.9 | 21.4 | 19.9           | 20.5 | 20.4 | 20.9 | 21.4 |  |
| Y = 12H                                                        |  | 19.9                        | 20.4 | 20.4 | 20.9 | 21.4 | 19.9           | 20.4 | 20.4 | 20.9 | 21.4 |  |
| X = 12H Y = 4H                                                 |  | 19.9                        | 20.6 | 20.4 | 21.0 | 21.5 | 19.9           | 20.6 | 20.4 | 21.0 | 21.5 |  |
| Y = 6H                                                         |  | 19.9                        | 20.5 | 20.4 | 20.9 | 21.4 | 19.9           | 20.5 | 20.4 | 20.9 | 21.4 |  |
| Y = 8H                                                         |  | 19.9                        | 20.4 | 20.4 | 20.9 | 21.4 | 19.9           | 20.4 | 20.4 | 20.9 | 21.4 |  |
| 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 |  |

Lichtstärken in cd

Intensity for 2250lm

| Gamma | C0     | C45    | C90    |
|-------|--------|--------|--------|
| 0°    | 1364.9 | 1364.9 | 1364.9 |
| 5°    | 1343.6 | 1343.6 | 1343.6 |
| 10°   | 1329.4 | 1329.4 | 1329.4 |
| 15°   | 1347.8 | 1347.8 | 1347.8 |
| 20°   | 1377.3 | 1377.3 | 1377.3 |
| 25°   | 1375.2 | 1375.2 | 1375.2 |
| 30°   | 1310.8 | 1310.8 | 1310.8 |
| 35°   | 1119.0 | 1119.0 | 1119.0 |
| 40°   | 768.2  | 768.2  | 768.2  |
| 45°   | 390.8  | 390.8  | 390.8  |
| 50°   | 152.7  | 152.7  | 152.7  |
| 55°   | 68.4   | 68.4   | 68.4   |
| 60°   | 37.5   | 37.5   | 37.5   |
| 65°   | 24.2   | 24.2   | 24.2   |
| 70°   | 16.6   | 16.6   | 16.6   |
| 75°   | 10.9   | 10.9   | 10.9   |
| 80°   | 6.3    | 6.3    | 6.3    |
| 85°   | 2.5    | 2.5    | 2.5    |
| 90°   | 0.7    | 0.7    | 0.7    |

Colour properties

Correlated Colour Temperature : 4000

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

