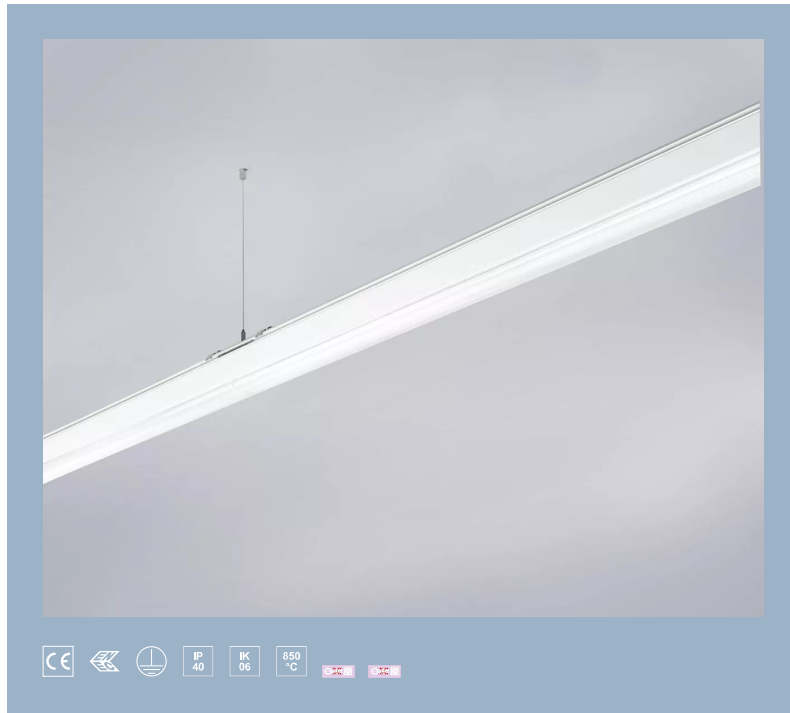


# E4001/LED1W020D



**industriële armatuur • langwerpig**

Toepassing : Productievestigingen

behuizing: gelakt aluminium

lichtbron : led • 3000 K

optiek : DUAL?LENS • Polycarbonaat (PC) •  
diepstralend

UGR classificatie : <=22

lichtstroom: 2350 lm

efficiëntie : 118 lm/W

LLMF: 97% @ 50khrs (Tq=25°C)

## Product information

### Mechanische eigenschappen

afmetingen : 1000 mm x 60 mm x 135 mm

kleur: RAL9016 - verkeerswit (structuurlak)

type : lijnmontage: tussenarmatuur

IP: IP40

IK: IK06

### Elektrische uitrusting

driver: DALI dimbaar

opgenomen vermogen : 20 W

spanning : 220-240V

frequentie : 50-60Hz AC

fotobiologische veiligheid : EN 62471: RISK GROUP 1  
UNLIMITED

## Luminantie

lichtstroom : 2350 lm

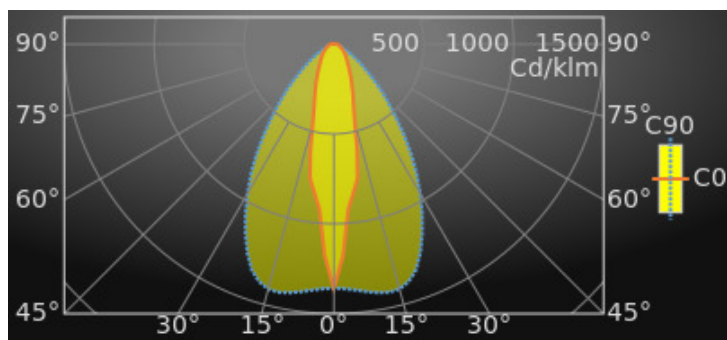
efficiëntie : 118 lm/W

UGR classificatie =: <=22

lichtgevende oppervlakte : 0.06 m²

Average Luminances (Cd/m²) for 2350lm

| Gamma | C0   | C30  | C45  | C60  | C90   |
|-------|------|------|------|------|-------|
| 45°   | 3439 | 3935 | 4935 | 7369 | 21204 |
| 50°   | 2954 | 3303 | 4001 | 5696 | 15378 |
| 55°   | 2562 | 2812 | 3243 | 4361 | 11249 |
| 60°   | 2251 | 2449 | 2616 | 3384 | 8228  |
| 65°   | 1983 | 2151 | 2147 | 2734 | 6314  |
| 70°   | 1784 | 1888 | 1806 | 2293 | 5239  |
| 75°   | 1633 | 1660 | 1559 | 1921 | 5059  |
| 80°   | 1525 | 1464 | 1328 | 1551 | 4792  |
| 85°   | 1441 | 1279 | 1086 | 1227 | 4127  |



## Classifications

CIE: 710 / 894 / 961 / 989 / 1000

CIE FLUXCODE : 0.72 / 0.90 / 0.97 / 0.99 / 1.00

BZ: BZ1/0.8/BZ2

CAE: CAE 1/15°/CAE 2/25°/CAE 4/75°/CAE 3

DIN: A60 (Nach Arbeitsblatt 7 und 8)

DIN\_U: Phi u = 0.99

DIN\_SU: Phi su = 0.72

UTE: 0.99 B + 0.01 T

Lifetime Data (Tq=25.0°C)

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

## Lichtsterkten in cd

Intensity for 2350lm

| Gamma | C0     | C45    | C90    | Gamma | C0   | C45  | C90 |
|-------|--------|--------|--------|-------|------|------|-----|
| 0°    | 3191.8 | 3191.8 | 3191.8 | 90°   | 41.7 | 19.3 | 0.9 |
| 5°    | 2169.7 | 2559.0 | 3226.5 | 95°   | 34.0 | 11.9 | 0.0 |
| 10°   | 1784.0 | 1911.5 | 3299.2 | 100°  | 26.4 | 6.0  | 0.0 |
| 15°   | 1049.3 | 1591.2 | 3316.4 | 105°  | 18.9 | 2.1  | 0.0 |
| 20°   | 734.6  | 1079.3 | 3138.5 | 110°  | 11.9 | 0.5  | 0.0 |
| 25°   | 551.7  | 794.6  | 2732.0 | 115°  | 6.2  | 0.1  | 0.0 |
| 30°   | 411.9  | 611.0  | 2256.9 | 120°  | 2.0  | 0.0  | 0.0 |
| 35°   | 323.1  | 474.4  | 1762.3 | 125°  | 0.4  | 0.0  | 0.0 |
| 40°   | 264.3  | 366.5  | 1280.8 | 130°  | 0.1  | 0.0  | 0.0 |
| 45°   | 218.9  | 283.4  | 899.6  | 135°  | 0.0  | 0.0  | 0.0 |
| 50°   | 181.8  | 219.3  | 593.1  | 140°  | 0.0  | 0.0  | 0.0 |
| 55°   | 151.2  | 168.0  | 387.1  | 145°  | 0.0  | 0.0  | 0.0 |
| 60°   | 126.0  | 126.5  | 246.8  | 150°  | 0.0  | 0.0  | 0.0 |
| 65°   | 104.2  | 95.7   | 160.1  | 155°  | 0.0  | 0.0  | 0.0 |
| 70°   | 86.9   | 73.0   | 107.5  | 160°  | 0.0  | 0.0  | 0.0 |
| 75°   | 72.7   | 56.1   | 78.6   | 165°  | 0.0  | 0.0  | 0.0 |
| 80°   | 61.0   | 41.6   | 49.9   | 170°  | 0.0  | 0.0  | 0.0 |
| 85°   | 50.6   | 28.6   | 21.6   | 175°  | 0.0  | 0.0  | 0.0 |
| 90°   | 41.7   | 19.3   | 0.9    | 180°  | 0.0  | 0.0  | 0.0 |

## UGR classificatie =

Corrected Glare Ratings for a Total Lamp Flux of 2350lm (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   | 13.1                                                           | 14.5 | 13.4 | 14.8 | 15.0 | 18.9           | 20.3 | 19.2 | 20.6 | 20.9 |
| Y = 3H          | 14.2                                                           | 15.5 | 14.5 | 15.8 | 16.1 | 19.4           | 20.7 | 19.8 | 21.0 | 21.3 |
| Y = 4H          | 14.7                                                           | 16.0 | 15.1 | 16.3 | 16.6 | 19.7           | 20.9 | 20.1 | 21.2 | 21.6 |
| Y = 6H          | 15.3                                                           | 16.4 | 15.6 | 16.7 | 17.1 | 19.9           | 21.1 | 20.3 | 21.4 | 21.8 |
| Y = 8H          | 15.5                                                           | 16.6 | 15.9 | 17.0 | 17.3 | 20.0           | 21.1 | 20.4 | 21.5 | 21.8 |
| Y = 12H         | 15.8                                                           | 16.8 | 16.2 | 17.2 | 17.5 | 20.1           | 21.1 | 20.5 | 21.5 | 21.8 |
| X = 4H Y = 2H   | 13.6                                                           | 14.8 | 13.9 | 15.1 | 15.4 | 18.8           | 20.0 | 19.1 | 20.3 | 20.6 |
| Y = 3H          | 14.9                                                           | 16.0 | 15.3 | 16.3 | 16.7 | 19.4           | 20.5 | 19.8 | 20.8 | 21.2 |
| Y = 4H          | 15.6                                                           | 16.5 | 16.0 | 16.9 | 17.3 | 19.8           | 20.7 | 20.2 | 21.1 | 21.5 |
| Y = 6H          | 16.3                                                           | 17.1 | 16.8 | 17.5 | 18.0 | 20.2           | 21.0 | 20.6 | 21.4 | 21.8 |
| Y = 8H          | 16.7                                                           | 17.4 | 17.1 | 17.8 | 18.3 | 20.3           | 21.1 | 20.7 | 21.5 | 21.9 |
| Y = 12H         | 17.0                                                           | 17.7 | 17.5 | 18.1 | 18.6 | 20.4           | 21.1 | 20.8 | 21.5 | 22.0 |
| X = 8H Y = 4H   | 15.8                                                           | 16.6 | 16.3 | 17.0 | 17.4 | 19.8           | 20.5 | 20.2 | 21.0 | 21.4 |
| Y = 6H          | 16.7                                                           | 17.3 | 17.2 | 17.8 | 18.3 | 20.2           | 20.8 | 20.7 | 21.3 | 21.8 |
| Y = 8H          | 17.2                                                           | 17.7 | 17.7 | 18.2 | 18.7 | 20.4           | 21.0 | 20.9 | 21.4 | 21.9 |
| Y = 12H         | 17.6                                                           | 18.1 | 18.2 | 18.6 | 19.2 | 20.5           | 21.0 | 21.0 | 21.5 | 22.1 |
| X = 12H Y = 4H  | 15.8                                                           | 16.5 | 16.3 | 17.0 | 17.4 | 19.8           | 20.5 | 20.2 | 20.9 | 21.3 |
| Y = 6H          | 16.7                                                           | 17.3 | 17.2 | 17.8 | 18.3 | 20.2           | 20.8 | 20.7 | 21.2 | 21.7 |
| Y = 8H          | 17.3                                                           | 17.7 | 17.8 | 18.2 | 18.8 | 20.4           | 20.9 | 20.9 | 21.4 | 21.9 |
|                 | UGR Variations with Observer Position for Luminaire Spacings S |      |      |      |      |                |      |      |      |      |
| S = 1.0H        | +0.3                                                           |      | -0.3 |      |      | +1.0           |      | -0.9 |      |      |
| S = 1.5H        | +0.4                                                           |      | -0.6 |      |      | +2.6           |      | -1.7 |      |      |
| S = 2.0H        | +0.4                                                           |      | -0.9 |      |      | +4.0           |      | -2.4 |      |      |

## Kleureigenschappen

Correlated Colour Temperature : 3000

Ra: CRI (Ra) 80

Rendement

| Utilisation Factors according to IES (%) |                             |     |     |     |    |    |    |    |    |    | Utilisation Factors according to LiTG (%) |                             |     |     |    |     |     |    |    |    |    |
|------------------------------------------|-----------------------------|-----|-----|-----|----|----|----|----|----|----|-------------------------------------------|-----------------------------|-----|-----|----|-----|-----|----|----|----|----|
|                                          | Room Reflection Factors (%) |     |     |     |    |    |    |    |    |    |                                           | Room Reflection Factors (%) |     |     |    |     |     |    |    |    |    |
| Ceiling                                  | 80                          | 80  | 80  | 50  | 50 | 50 | 30 | 30 | 30 | 0  | Ceiling                                   | 80                          | 80  | 80  | 50 | 50  | 50  | 50 | 30 | 0  |    |
| Walls                                    | 50                          | 30  | 10  | 50  | 30 | 10 | 50 | 30 | 10 | 0  | Walls                                     | 50                          | 30  | 50  | 30 | 50  | 30  | 50 | 30 | 30 | 0  |
| Floor                                    | 20                          | 20  | 20  | 20  | 20 | 20 | 20 | 20 | 20 | 0  | Floor                                     | 30                          | 30  | 10  | 10 | 30  | 30  | 10 | 10 | 10 | 0  |
| RCR = 1                                  | 107                         | 105 | 103 | 100 | 98 | 97 | 96 | 95 | 94 | 88 | k = 0.60                                  | 65                          | 58  | 62  | 56 | 63  | 57  | 61 | 56 | 55 | 50 |
| 2                                        | 97                          | 93  | 90  | 91  | 88 | 86 | 88 | 85 | 83 | 78 | 0.80                                      | 75                          | 67  | 70  | 64 | 72  | 65  | 68 | 63 | 63 | 58 |
| 3                                        | 88                          | 83  | 79  | 83  | 79 | 76 | 81 | 77 | 75 | 71 | 1.00                                      | 82                          | 75  | 76  | 71 | 78  | 72  | 74 | 70 | 69 | 64 |
| 4                                        | 81                          | 75  | 71  | 77  | 72 | 69 | 75 | 70 | 67 | 64 | 1.25                                      | 91                          | 83  | 83  | 78 | 86  | 80  | 81 | 77 | 76 | 71 |
| 5                                        | 75                          | 68  | 64  | 71  | 66 | 62 | 69 | 65 | 61 | 58 | 1.50                                      | 96                          | 89  | 87  | 82 | 90  | 85  | 84 | 81 | 79 | 75 |
| 6                                        | 69                          | 63  | 58  | 66  | 61 | 57 | 65 | 60 | 56 | 54 | 2.00                                      | 103                         | 96  | 92  | 88 | 95  | 91  | 89 | 86 | 84 | 80 |
| 7                                        | 64                          | 58  | 53  | 62  | 56 | 52 | 61 | 56 | 52 | 50 | 2.50                                      | 107                         | 102 | 95  | 91 | 99  | 95  | 92 | 89 | 88 | 83 |
| 8                                        | 60                          | 54  | 49  | 58  | 52 | 49 | 57 | 52 | 48 | 46 | 3.00                                      | 111                         | 106 | 97  | 95 | 103 | 99  | 94 | 92 | 91 | 86 |
| 9                                        | 57                          | 50  | 46  | 55  | 49 | 45 | 54 | 49 | 45 | 43 | 4.00                                      | 115                         | 110 | 99  | 97 | 105 | 102 | 96 | 94 | 93 | 88 |
| 10                                       | 53                          | 47  | 43  | 52  | 46 | 42 | 51 | 46 | 42 | 40 | 5.00                                      | 118                         | 114 | 101 | 99 | 107 | 105 | 98 | 96 | 94 | 90 |

Accessoires

|                                                      |
|------------------------------------------------------|
| E7H301 Aansluitstekker, 5- of 7-polig, per stuk      |
| E4H1000 Lijneindstuk, per stuk                       |
| E4H111 Enkelvoudige ophangbeugel voor plafondmontage |
| E4H112 Dubbele ophangbeugel voor plafondmontage      |
| E4H121 Enkelvoudige ophangbeugel voor draadstang     |
| E4H122 Dubbele ophangbeugel voor draadstang          |
| E4H131 Enkelvoudige ophangbeugel voor ketting        |
| E4H141 Enkele ophangbeugel voor staaldraad           |
| E4H142 Dubbele ophangbeugel voor staaldraad          |
| E4H132 Dubbelvoudige ophangbeugel voor ketting       |
| E4H103 Uitlijnbeugel                                 |

