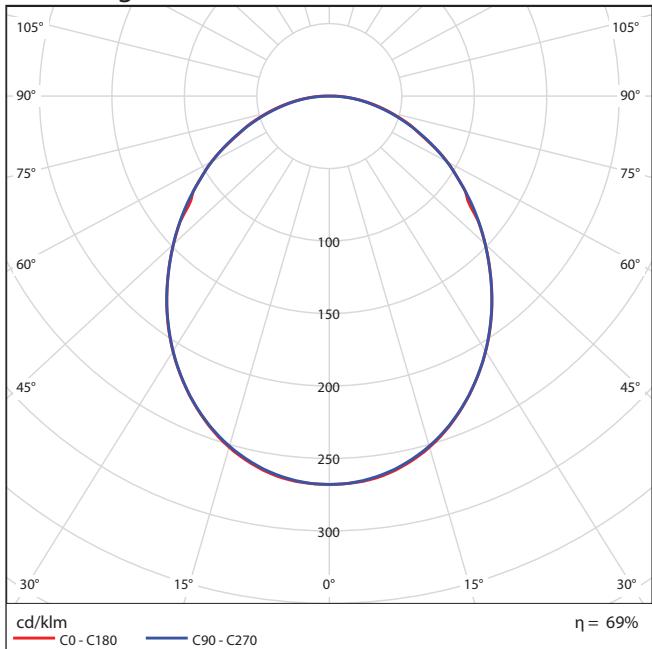
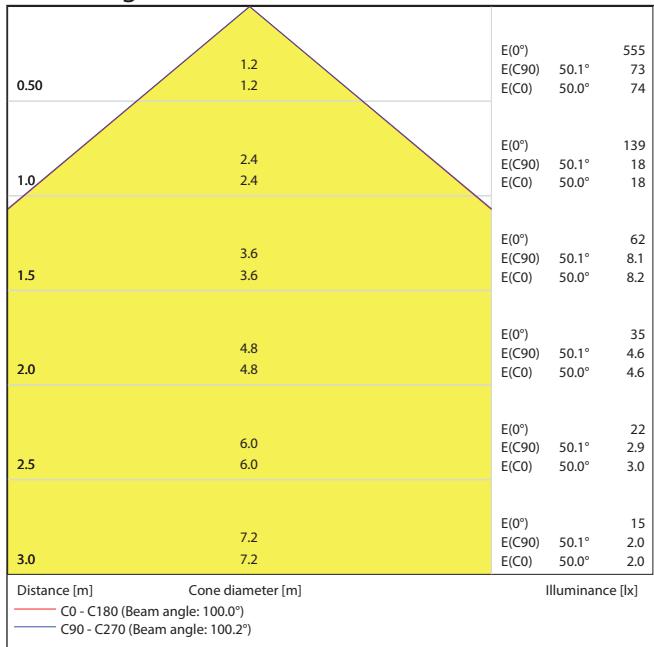


### Polar diagram



### Cone diagram



### UGR diagram

| Glare evaluation according to UGR                                |             |  |             |      |      |   |      |      |      |      |      |
|--|-------------|--|-------------|------|------|---|------|------|------|------|------|
| $\rho$   | Ceiling     | 70   | 70          | 50   | 50   | 30                                      | 70   | 70   | 50   | 50   | 30   |
| $\rho$   | Walls       | 50   | 30          | 50   | 30   | 30                                      | 50   | 30   | 50   | 30   | 30   |
| $\rho$   | Floor       | 20   | 20          | 20   | 20   | 20                                      | 20   | 20   | 20   | 20   | 20   |
| Room size X Y  |             | Viewing direction at right angles to lamp axis |             |      |      | Viewing direction parallel to lamp axis |      |      |      |      |      |
| 2H   | 2H          | 19.7   | 21.0        | 19.9 | 21.2 | 21.4                                    | 20.4 | 21.7 | 20.7 | 21.9 | 22.2 |
|  | 3H          | 20.9   | 22.0        | 21.2 | 22.3 | 22.6                                    | 21.9 | 23.0 | 22.2 | 23.3 | 23.6 |
|  | 4H          | 21.3   | 22.4        | 21.7 | 22.7 | 23.0                                    | 22.5 | 23.6 | 22.8 | 23.8 | 24.1 |
|  | 6H          | 21.7   | 22.7        | 22.0 | 23.0 | 23.3                                    | 22.9 | 23.9 | 23.3 | 24.2 | 24.6 |
|  | 8H          | 21.8   | 22.7        | 22.1 | 23.1 | 23.4                                    | 23.1 | 24.1 | 23.4 | 24.4 | 24.7 |
|  | 12H         | 21.8   | 22.8        | 22.2 | 23.1 | 23.4                                    | 23.2 | 24.1 | 23.6 | 24.5 | 24.8 |
| 4H   | 2H          | 20.3   | 21.4        | 20.6 | 21.7 | 22.0                                    | 20.9 | 22.0 | 21.2 | 22.3 | 22.6 |
|  | 3H          | 21.7   | 22.6        | 22.1 | 23.0 | 23.3                                    | 22.5 | 23.5 | 22.9 | 23.8 | 24.1 |
|  | 4H          | 22.3   | 23.1        | 22.7 | 23.5 | 23.8                                    | 23.3 | 24.1 | 23.6 | 24.4 | 24.8 |
|  | 6H          | 22.7   | 23.4        | 23.1 | 23.8 | 24.2                                    | 23.8 | 24.6 | 24.2 | 24.9 | 25.3 |
|  | 8H          | 22.9   | 23.5        | 23.3 | 23.9 | 24.3                                    | 24.0 | 24.7 | 24.5 | 25.1 | 25.5 |
|  | 12H         | 22.9   | 23.6        | 23.4 | 24.0 | 24.4                                    | 24.2 | 24.8 | 24.7 | 25.2 | 25.7 |
| 8H   | 4H          | 22.6   | 23.2        | 23.0 | 23.6 | 24.0                                    | 23.4 | 24.1 | 23.9 | 24.5 | 24.9 |
|  | 6H          | 23.1   | 23.7        | 23.6 | 24.1 | 24.5                                    | 24.1 | 24.7 | 24.6 | 25.1 | 25.6 |
|  | 8H          | 23.3   | 23.8        | 23.8 | 24.2 | 24.7                                    | 24.4 | 24.9 | 24.9 | 25.3 | 25.8 |
|  | 12H         | 23.5   | 23.9        | 23.9 | 24.3 | 24.8                                    | 24.6 | 25.0 | 25.1 | 25.5 | 26.0 |
| 12H  | 4H          | 22.6   | 23.2        | 23.0 | 23.6 | 24.0                                    | 23.4 | 24.1 | 23.9 | 24.5 | 24.9 |
|  | 6H          | 23.2   | 23.7        | 23.6 | 24.1 | 24.6                                    | 24.2 | 24.6 | 24.6 | 25.1 | 25.6 |
|  | 8H          | 23.4   | 23.8        | 23.9 | 24.3 | 24.8                                    | 24.5 | 24.9 | 25.0 | 25.3 | 25.8 |
| Variation of the observer position for the luminaire distances S |             |  |             |      |      |   |      |      |      |      |      |
| S = 1.0H   | +0.2 / -0.2 |  | +0.1 / -0.1 |      |      |   |      |      |      |      |      |
| S = 1.5H   | +0.3 / -0.5 |  | +0.2 / -0.3 |      |      |   |      |      |      |      |      |
| S = 2.0H   | +0.5 / -1.0 |  | +0.5 / -0.6 |      |      |   |      |      |      |      |      |
| Standard table   | BK05        |  | BK06        |      |      |   |      |      |      |      |      |
| Correction summand   | 4.6         |  | 6.1         |      |      |   |      |      |      |      |      |
| Corrected glare indices referring to 518lm Total luminous flux   |             |  |             |      |      |   |      |      |      |      |      |

The UGR values are calculated in acc. with CIE Publ. 117. Spacing-to-Height-Ratio = 0.25