

Light efficiency:



Output: 697 lm

Light quality:

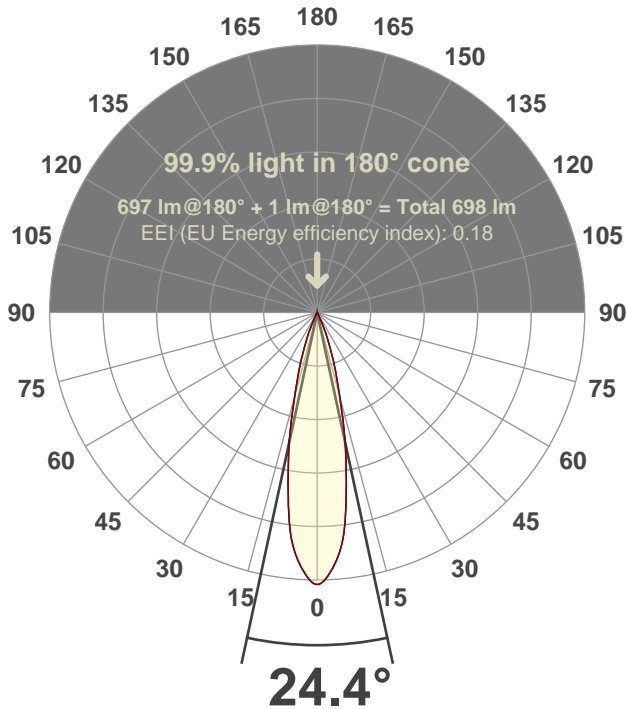


Peak: 3498 cd

Power: 10.2 W



Beam angle



Test number:

SCW3D-R-T7-2765-24°-Rev1

Luminaire Model:

Scope Wonder 3" Round Downlight-T7-2765-24°

Date and time:

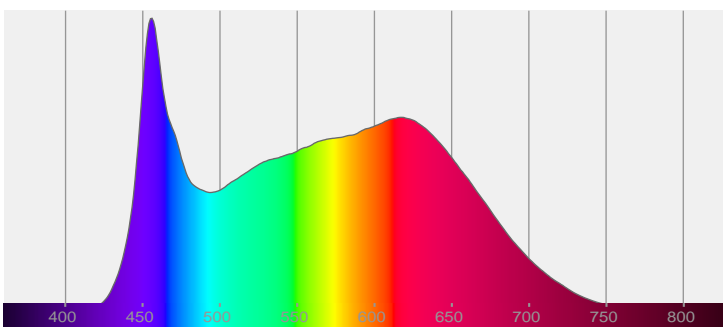
5/27/2021 10:13:47 AM

LUM: 697

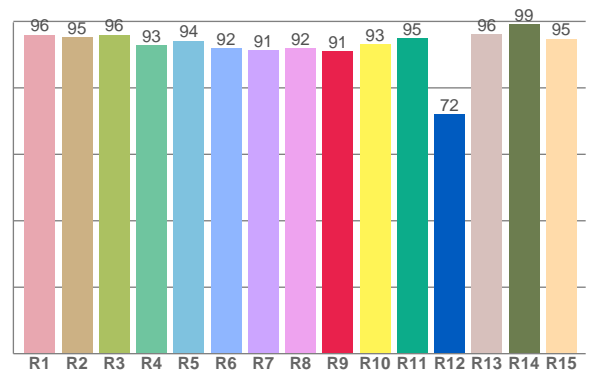
Measured at Mid-Point of Tuneable White CCT Range



Spectra



CRI: 93.7 (R1-R8)



Color parameters

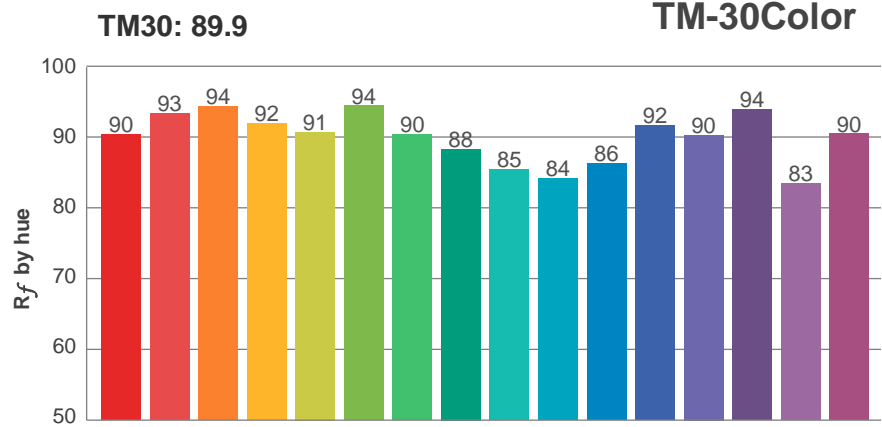
|  | Color rendering index | Red component | Color fidelity      | Color gamut         | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|--|-----------------------|---------------|---------------------|---------------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
|  | CRI                   | CRI R9        | TM30 R <sub>f</sub> | TM30 R <sub>g</sub> | CQS                 | x                         | y                         | u                | v                | Δuv                             |
|  | 93.7                  | 91.1          | 89.9                | 98.5                | 92.0                | 0.357                     | 0.348                     | 0.221            | 0.323            | -0.0069                         |

**$R_f$  89.9**

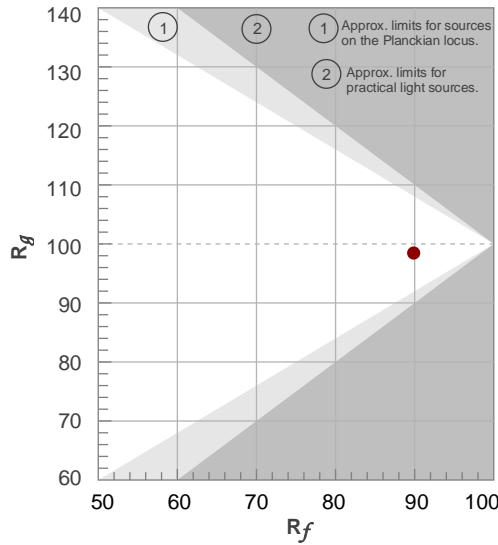
Fidelity index  $R_f$

**$R_g$  98.5**

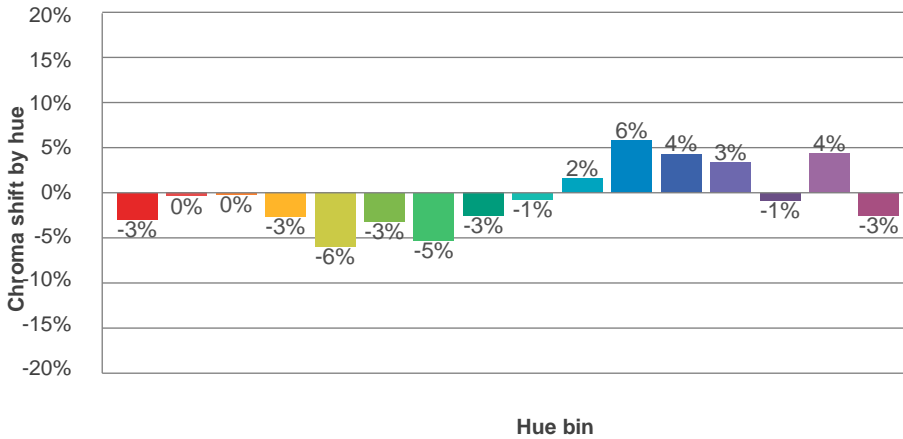
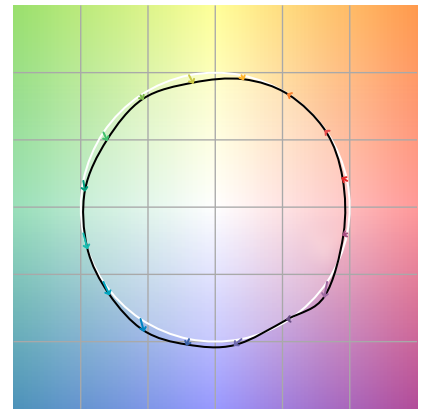
Gammut index  $R_g$



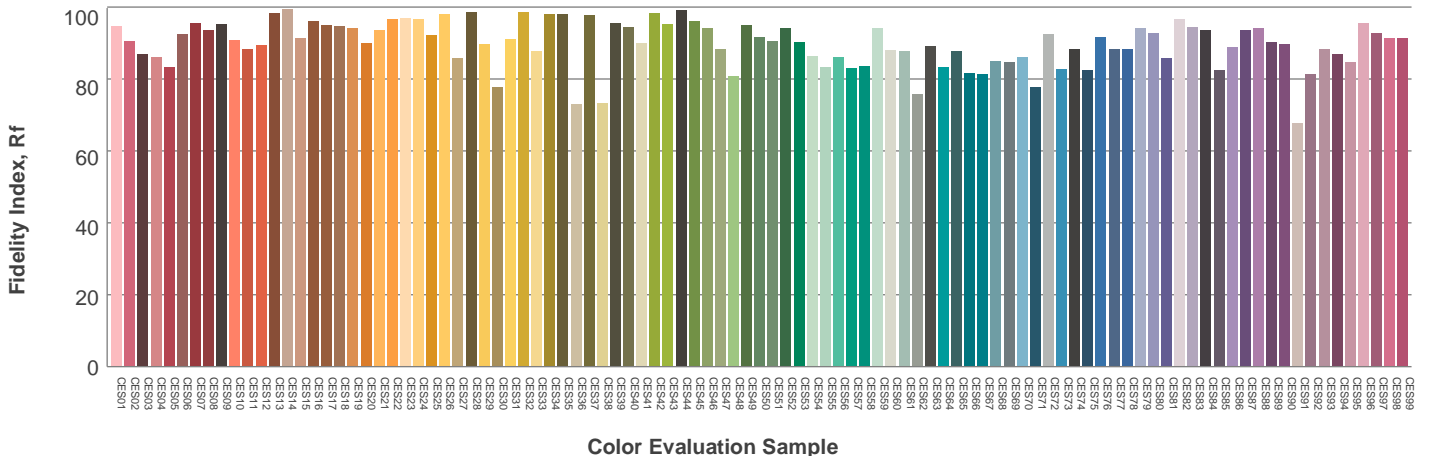
| Hue Bin | $R_f$ | Graphic shifts (%) |      |
|---------|-------|--------------------|------|
|         |       | Chroma             | Hue  |
| 1       | 90    | -3%                | 3%   |
| 2       | 93    | 0%                 | 2%   |
| 3       | 94    | 0%                 | 2%   |
| 4       | 92    | -3%                | -2%  |
| 5       | 91    | -6%                | -2%  |
| 6       | 94    | -3%                | 0%   |
| 7       | 90    | -5%                | 3%   |
| 8       | 88    | -3%                | 7%   |
| 9       | 85    | -1%                | 11%  |
| 10      | 84    | 2%                 | 10%  |
| 11      | 86    | 6%                 | 7%   |
| 12      | 92    | 4%                 | -1%  |
| 13      | 90    | 3%                 | -6%  |
| 14      | 94    | -1%                | -2%  |
| 15      | 83    | 4%                 | -10% |
| 16      | 90    | -3%                | -2%  |



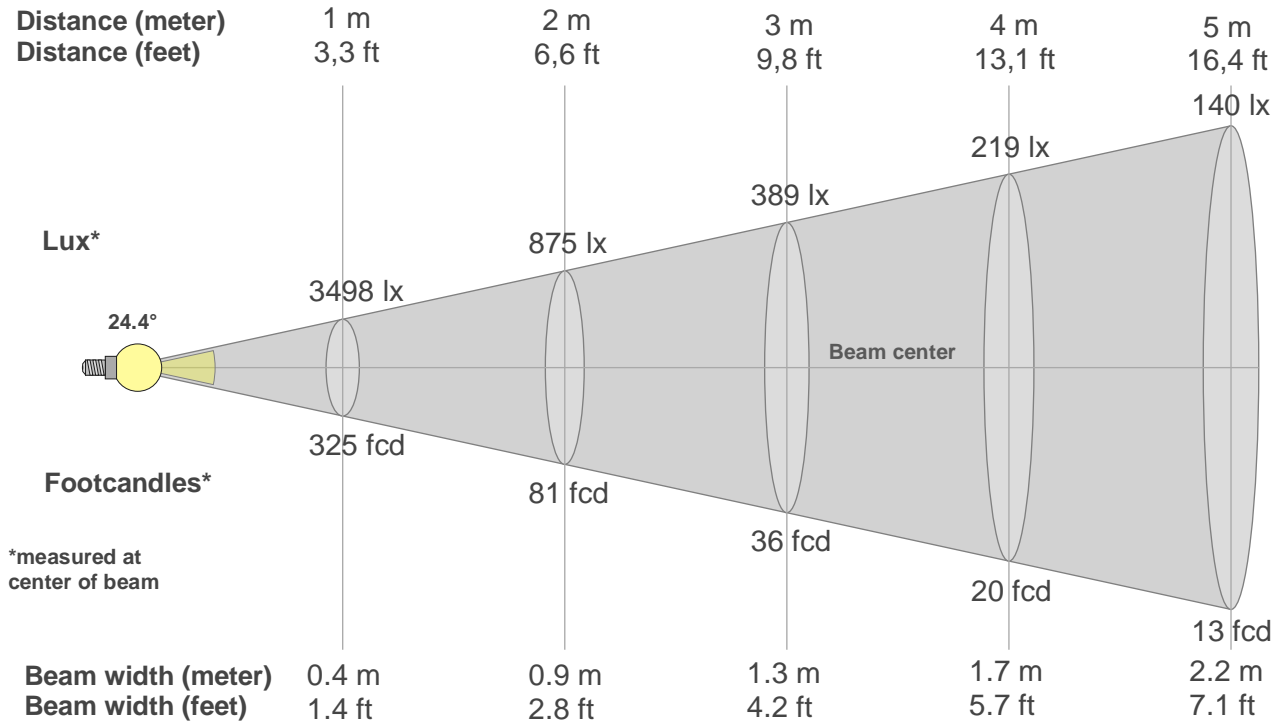
Color vector graphics



Color distortion



### Beam details



#### Beam intensities from 1-20m

| 1m     | 2m      | 3m      | 4m      | 5m     | 6m     | 7m     | 8m     | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
|--------|---------|---------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 3.3ft  | 6.6ft   | 9.8ft   | 13.1ft  | 16.4ft | 19.7ft | 23ft   | 26.2ft | 29.5ft | 32.8ft | 36.1ft | 39.4ft | 42.7ft | 45.9ft | 49.2ft | 52.5ft | 55.8ft | 59.1ft | 62.3ft | 65.6ft |
| 3498lx | 875lx   | 389lx   | 219lx   | 140lx  | 97lx   | 71lx   | 55lx   | 43lx   | 35lx   | 29lx   | 24lx   | 21lx   | 18lx   | 16lx   | 14lx   | 12lx   | 11lx   | 10lx   | 9lx    |
| 325fcd | 81.2fcd | 36.1fcd | 20.3fcd | 13fcd  | 9fcd   | 6.6fcd | 5.1fcd | 4fcd   | 3.2fcd | 2.7fcd | 2.3fcd | 1.9fcd | 1.7fcd | 1.4fcd | 1.3fcd | 1.1fcd | 1fcd   | 0.9fcd | 0.8fcd |

#### Intensities in 0° c-plane

| 0°   | 2°   | 4°   | 6°   | 8°   | 10°  | 12°  | 14°  | 16°  | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3498 | 3477 | 3253 | 3029 | 2666 | 2220 | 1783 | 1404 | 1025 | 758 | 546 | 352 | 235 | 117 | 63  | 34  | 12  | 9   | 6   | 5   |
| 100% | 99%  | 93%  | 87%  | 76%  | 63%  | 51%  | 40%  | 29%  | 22% | 16% | 10% | 7%  | 3%  | 2%  | 1%  | 0%  | 0%  | 0%  | 0%  |

#### Intensities in 90° c-plane

| 0°   | 2°   | 4°   | 6°   | 8°   | 10°  | 12°  | 14°  | 16°  | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3498 | 3477 | 3253 | 3029 | 2666 | 2220 | 1783 | 1404 | 1025 | 758 | 546 | 352 | 235 | 117 | 63  | 34  | 12  | 9   | 6   | 5   |
| 100% | 99%  | 93%  | 87%  | 76%  | 63%  | 51%  | 40%  | 29%  | 22% | 16% | 10% | 7%  | 3%  | 2%  | 1%  | 0%  | 0%  | 0%  | 0%  |

#### Intensities in 180° c-plane

| 0°   | 2°   | 4°   | 6°   | 8°   | 10°  | 12°  | 14°  | 16°  | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3498 | 3477 | 3253 | 3029 | 2666 | 2220 | 1783 | 1404 | 1025 | 758 | 546 | 352 | 235 | 117 | 63  | 34  | 12  | 9   | 6   | 5   |
| 100% | 99%  | 93%  | 87%  | 76%  | 63%  | 51%  | 40%  | 29%  | 22% | 16% | 10% | 7%  | 3%  | 2%  | 1%  | 0%  | 0%  | 0%  | 0%  |

#### Intensities in 270° c-plane

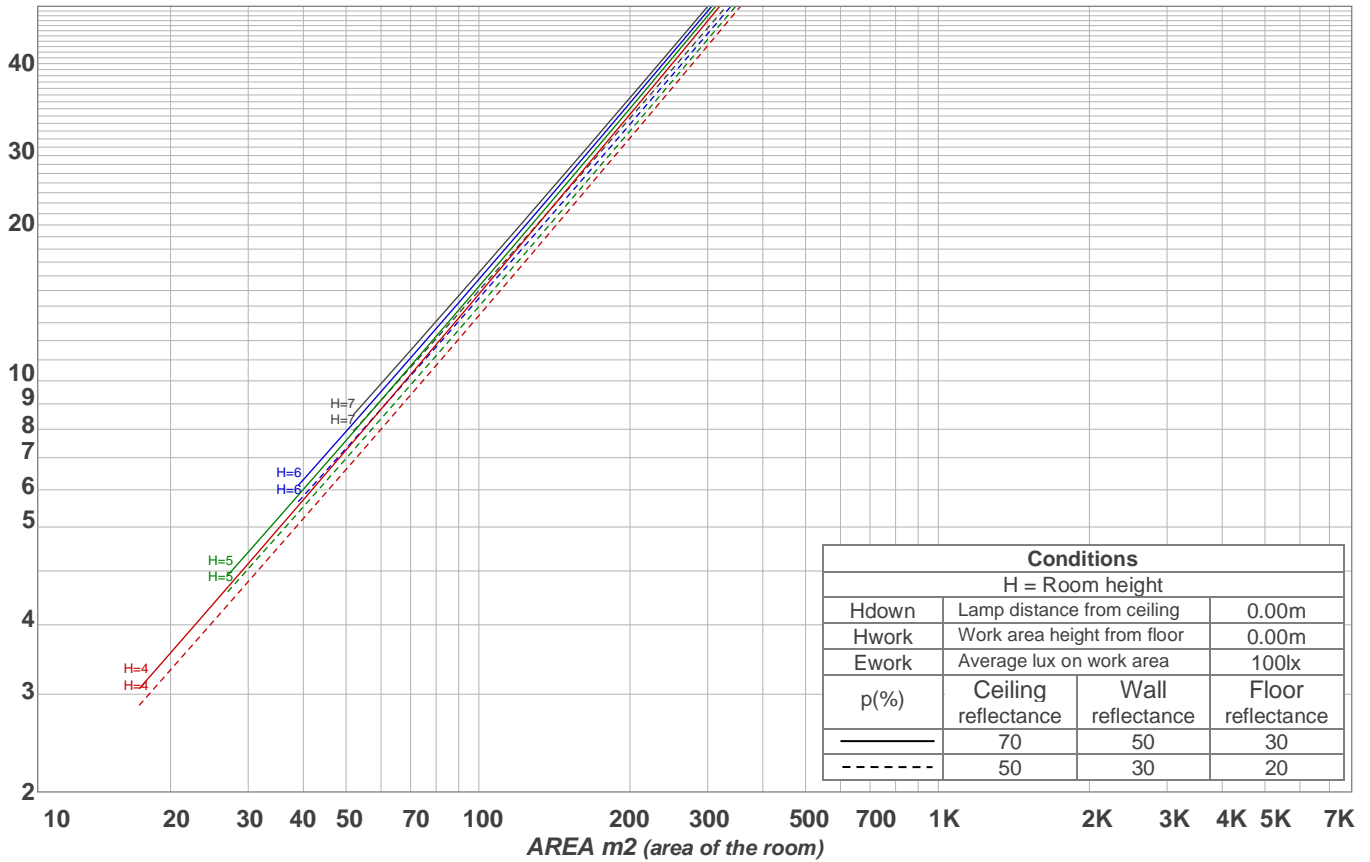
| 0°   | 2°   | 4°   | 6°   | 8°   | 10°  | 12°  | 14°  | 16°  | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 3498 | 3477 | 3253 | 3029 | 2666 | 2220 | 1783 | 1404 | 1025 | 758 | 546 | 352 | 235 | 117 | 63  | 34  | 12  | 9   | 6   | 5   |
| 100% | 99%  | 93%  | 87%  | 76%  | 63%  | 51%  | 40%  | 29%  | 22% | 16% | 10% | 7%  | 3%  | 2%  | 1%  | 0%  | 0%  | 0%  | 0%  |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 24.4°          | 44.1°           | 53°               | 99.6%                        | 99.4%                       |

LAMPS (number of lamps)

50

### Light planning Luminaire budgetary diagram



### Luminaire budgetary diagram AREA m2 (area of the room) Coefficients of Utilization

| Ceiling reflectance | 80  |     |     |     | 70  |     |     |     | 50  |     |     | 30  |     |     | 10  |     |     | 0   |
|---------------------|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Wall reflectance    | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 0   |
| Floor reflectance   | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 20  | 0   |
| RCR                 | (RCR: Room Cavity Ratio)  |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|                     | Room Values are expressed as percentage of Lumens delivered to the task surface |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0                   | 119   | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1                   | 115   | 113 | 111 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 105 | 103 | 102 | 102 | 100 | 99  | 99  | 97  |
| 2                   | 112   | 108 | 105 | 103 | 110 | 107 | 104 | 102 | 104 | 102 | 100 | 101 | 99  | 98  | 98  | 97  | 96  | 94  |
| 3                   | 108   | 104 | 101 | 98  | 107 | 103 | 100 | 97  | 100 | 98  | 96  | 98  | 96  | 94  | 96  | 94  | 93  | 92  |
| 4                   | 105   | 100 | 97  | 94  | 104 | 99  | 96  | 93  | 97  | 95  | 92  | 96  | 93  | 91  | 94  | 92  | 90  | 89  |
| 5                   | 103   | 97  | 93  | 90  | 101 | 96  | 93  | 90  | 95  | 92  | 89  | 93  | 91  | 89  | 92  | 90  | 88  | 87  |
| 6                   | 100   | 94  | 90  | 88  | 99  | 94  | 90  | 87  | 92  | 89  | 87  | 91  | 88  | 86  | 90  | 88  | 86  | 85  |
| 7                   | 98  | 92  | 88  | 85  | 96  | 91  | 87  | 85  | 90  | 87  | 84  | 89  | 86  | 84  | 88  | 85  | 84  | 83  |
| 8                   | 95  | 89  | 85  | 83  | 94  | 89  | 85  | 82  | 88  | 84  | 82  | 87  | 84  | 82  | 86  | 83  | 82  | 81  |
| 9                   | 93  | 87  | 83  | 80  | 92  | 86  | 83  | 80  | 86  | 82  | 80  | 85  | 82  | 80  | 84  | 82  | 80  | 79  |
| 10                  | 91  | 85  | 81  | 78  | 90  | 84  | 81  | 78  | 84  | 80  | 78  | 83  | 80  | 78  | 82  | 80  | 78  | 77  |

### Zonal Lumen Summary

|          |           |           |           |           |           |           |           |           |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10°   | 10°-20°   | 20°-30°   | 30°-40°   | 40°-50°   | 50°-60°   | 60°-70°   | 70°-80°   | 80°-90°   |
| 275 lm   | 329 lm    | 84.2 lm   | 4.82 lm   | 1.67 lm   | 0.852 lm  | 0.770 lm  | 0.681 lm  | 0.629 lm  |
| 90°-100° | 100°-110° | 110°-120° | 120°-130° | 130°-140° | 140°-150° | 150°-160° | 160°-170° | 170°-180° |
| 0.000 lm | 0.000 lm  | 0.000 lm  | 0.000 lm  | 0.000 lm  | 0.000 lm  | 0.000 lm  | 0.000 lm  | 0.000 lm  |

### UGR

| p Ceiling   | 70  | 70   | 50   | 50   | 30   | 70                                      | 70   | 50   | 50   | 30   |      |
|---|---|------|------|------|------|---|------|------|------|------|------|
| p Walls   | 50  | 30   | 50   | 30   | 30   | 50                                      | 30   | 50   | 30   | 30   |      |
| p Floor   | 20  | 20   | 20   | 20   | 20   | 20                                      | 20   | 20   | 20   | 20   |      |
| Room size<br>X    Y   | Viewing direction at right angles to<br>lamp axis |      |      |      |      | Viewing direction parallel to lamp axis |      |      |      |      |      |
| 2H  | 2H  | 11.2 | 11.5 | 11.2 | 11.7 | 11.9                                    | 11.2 | 11.5 | 11.2 | 11.7 | 11.9 |
|   | 3H  | 11.5 | 12.0 | 11.8 | 12.2 | 12.4                                    | 11.5 | 12.0 | 11.8 | 12.2 | 12.4 |
|   | 4H  | 11.9 | 12.5 | 12.3 | 12.7 | 12.9                                    | 11.9 | 12.5 | 12.3 | 12.7 | 12.9 |
|   | 6H  | 12.8 | 13.2 | 13.1 | 13.5 | 13.9                                    | 12.8 | 13.2 | 13.1 | 13.5 | 13.9 |
|   | 8H  | 13.4 | 13.8 | 13.7 | 14.1 | 14.5                                    | 13.4 | 13.8 | 13.7 | 14.1 | 14.5 |
|   | 12H   | 14.1 | 14.5 | 14.5 | 14.9 | 15.3                                    | 14.1 | 14.5 | 14.5 | 14.9 | 15.3 |
| 4H  | 2H  | 11.0 | 11.6 | 11.4 | 11.8 | 12.0                                    | 11.0 | 11.6 | 11.4 | 11.8 | 12.0 |
|   | 3H  | 11.8 | 12.2 | 12.2 | 12.6 | 13.0                                    | 11.8 | 12.2 | 12.2 | 12.6 | 13.0 |
|   | 4H  | 12.4 | 12.8 | 12.8 | 13.2 | 13.7                                    | 12.4 | 12.8 | 12.8 | 13.2 | 13.7 |
|   | 6H  | 13.6 | 14.0 | 14.1 | 14.3 | 14.7                                    | 13.6 | 14.0 | 14.1 | 14.3 | 14.7 |
|   | 8H  | 14.4 | 14.8 | 14.9 | 15.1 | 15.5                                    | 14.4 | 14.8 | 14.9 | 15.1 | 15.5 |
|   | 12H   | 15.3 | 15.6 | 15.8 | 16.0 | 16.5                                    | 15.3 | 15.6 | 15.8 | 16.0 | 16.5 |
| 8H  | 4H  | 12.7 | 13.2 | 13.3 | 13.5 | 13.8                                    | 12.7 | 13.2 | 13.3 | 13.5 | 13.8 |
|   | 6H  | 14.3 | 14.5 | 14.8 | 15.0 | 15.5                                    | 14.3 | 14.5 | 14.8 | 15.0 | 15.5 |
|   | 8H  | 15.3 | 15.5 | 15.8 | 16.0 | 16.7                                    | 15.3 | 15.5 | 15.8 | 16.0 | 16.7 |
|   | 12H   | 16.5 | 16.7 | 17.1 | 17.2 | 17.8                                    | 16.5 | 16.7 | 17.1 | 17.2 | 17.8 |
| 12H   | 4H  | 12.8 | 13.1 | 13.3 | 13.5 | 14.0                                    | 12.8 | 13.1 | 13.3 | 13.5 | 14.0 |
|   | 6H  | 14.6 | 14.7 | 15.1 | 15.3 | 15.9                                    | 14.6 | 14.7 | 15.1 | 15.3 | 15.9 |
|   | 8H  | 15.7 | 15.8 | 16.2 | 16.3 | 16.9                                    | 15.7 | 15.8 | 16.2 | 16.3 | 16.9 |
| Corrected glare indices referring to 697 lm total luminous flux |   |      |      |      |      |   |      |      |      |      |      |