

Light efficiency:



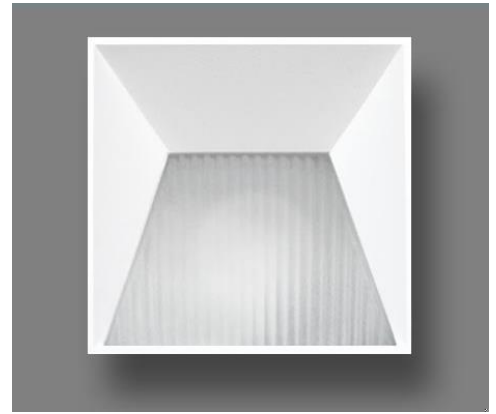
Output: 1025 lm

Light quality:

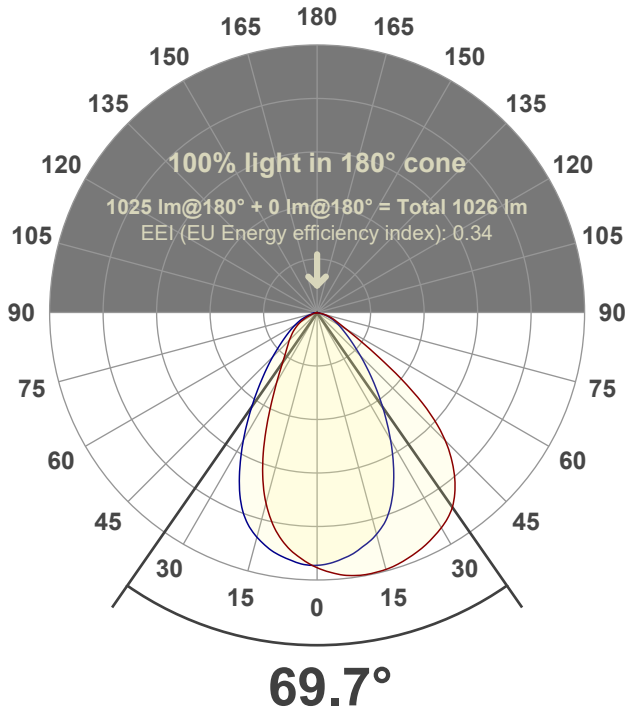


Peak: 699 cd

Power: 20.8 W



Beam angle



Test number:

GR-W-CZ20-30k-SQ-Rev2

Luminaire Model:

Graffiti Wallwash Square CZ20-30k

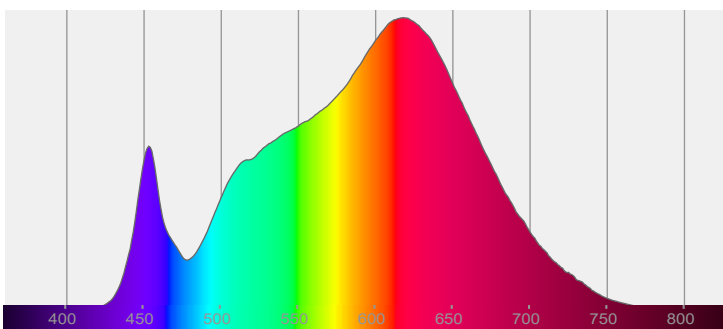
Date and time:

7/7/2022 3:12:01 PM

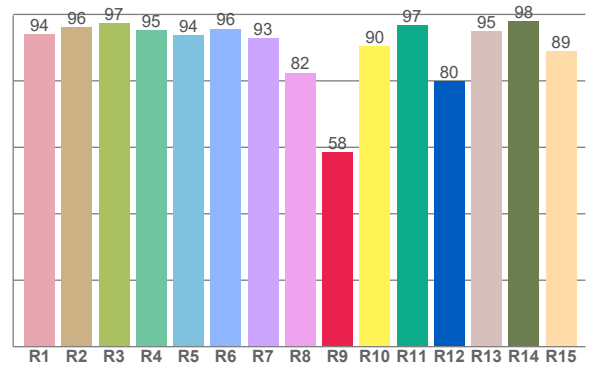
Delivered Lumens

1025

Spectra



CRI: 93.5 (R1-R8)



Color parameters

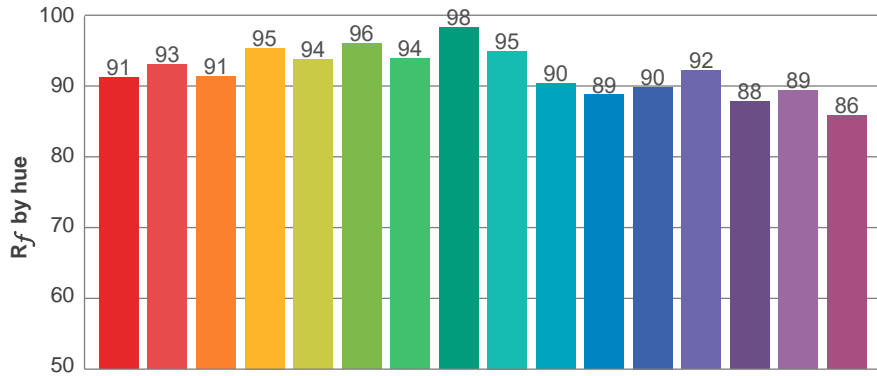
| | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|--|-----------------------|---------------|---------------------|---------------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| | CRI | CRI R9 | TM30 R _f | TM30 R _g | CQS | x | y | u | v | Δuv |
| | 93.5 | 58.5 | 92.1 | 99.5 | 91.7 | 0.434 | 0.405 | 0.248 | 0.348 | 0.0009 |

R_f 92.1
Fidelity index R_f

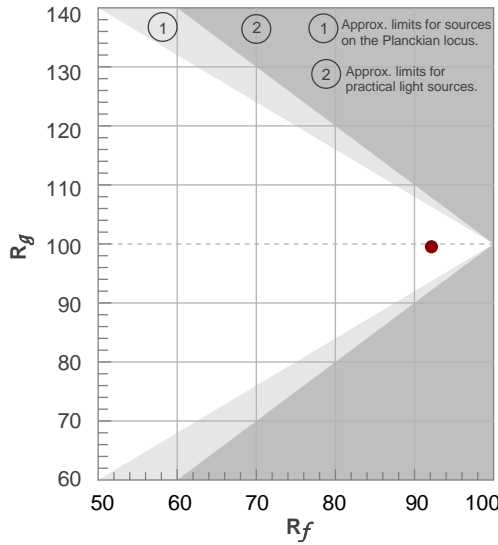
R_g 99.5
Gammut index R_g

TM30: 92.1

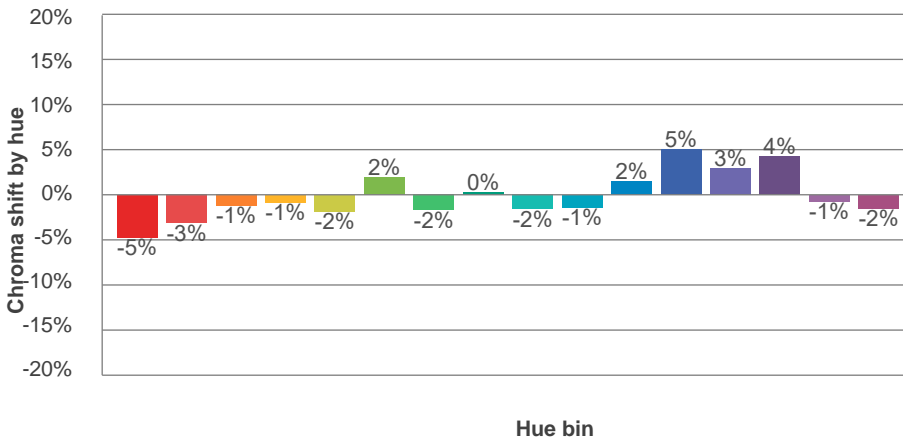
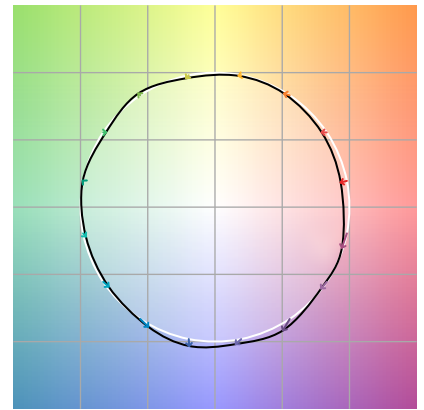
TM-30Color



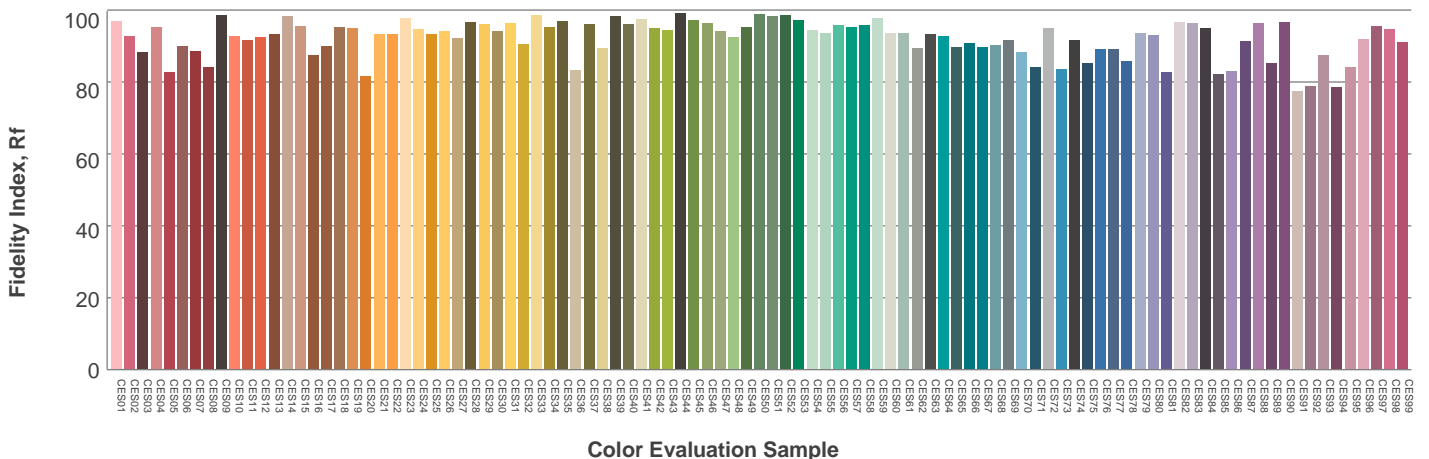
| Hue Bin | R_f | Graphic shifts (%) | |
|---------|-------|--------------------|------|
| | | Chroma | Hue |
| 1 | 91 | -5% | 0% |
| 2 | 93 | -3% | 2% |
| 3 | 91 | -1% | 4% |
| 4 | 95 | -1% | 2% |
| 5 | 94 | -2% | 2% |
| 6 | 96 | 2% | 0% |
| 7 | 94 | -2% | -1% |
| 8 | 98 | 0% | 0% |
| 9 | 95 | -2% | 3% |
| 10 | 90 | -1% | 5% |
| 11 | 89 | 2% | 8% |
| 12 | 90 | 5% | 1% |
| 13 | 92 | 3% | -5% |
| 14 | 88 | 4% | -9% |
| 15 | 89 | -1% | -6% |
| 16 | 86 | -2% | -11% |



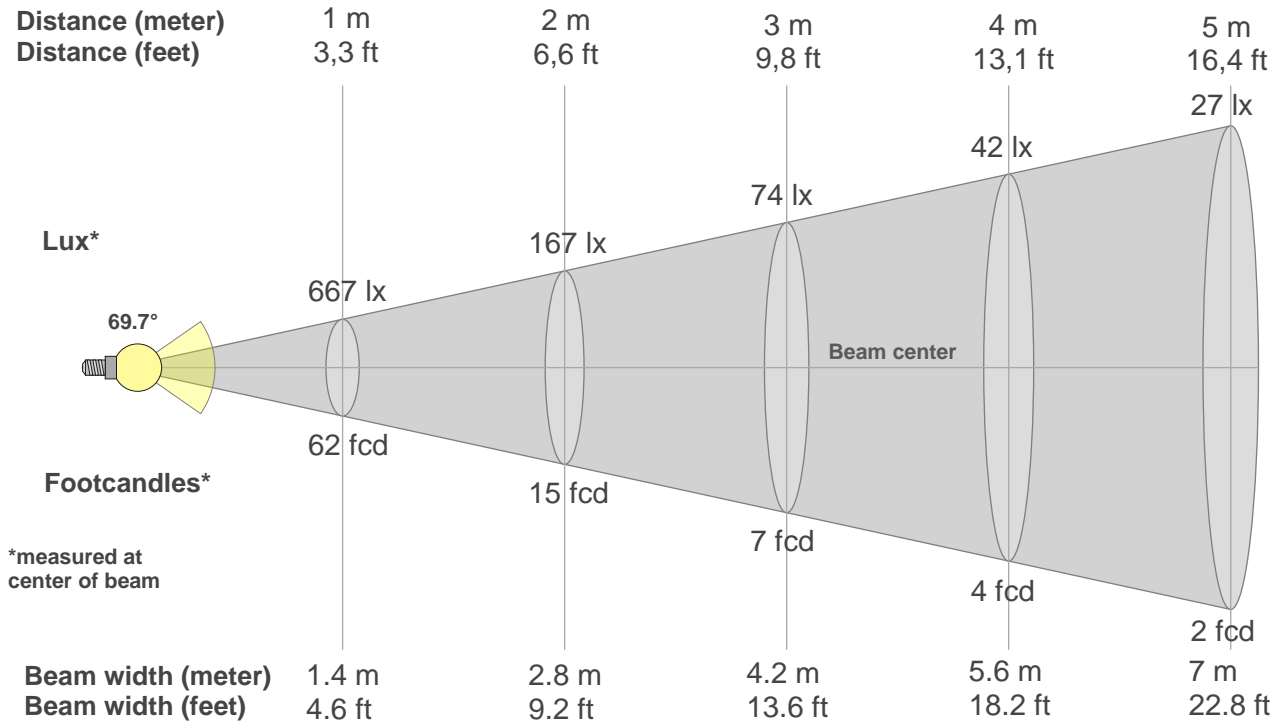
Color vector graphics



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 |
| 667lx | 167lx | 74lx | 42lx | 27lx | 19lx | 14lx | 10lx | 8lx | 7lx | 6lx | 5lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx | 2lx | 2lx |
| 61.9fcd | 15.5fcd | 6.9fcd | 3.9fcd | 2.5fcd | 1.7fcd | 1.3fcd | 1fcd | 0.8fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd |

Intensities in 0° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 667 | 690 | 699 | 698 | 688 | 674 | 653 | 621 | 563 | 478 | 347 | 185 | 97 | 61 | 43 | 27 | 14 | 3 | 0 | 0 |
| 100% | 103% | 105% | 105% | 103% | 101% | 98% | 93% | 84% | 72% | 52% | 28% | 15% | 9% | 6% | 4% | 2% | 0% | 0% | 0% |

Intensities in 90° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 667 | 652 | 632 | 602 | 554 | 477 | 387 | 300 | 224 | 164 | 119 | 89 | 68 | 50 | 35 | 19 | 9 | 4 | 2 | 0 |
| 100% | 98% | 95% | 90% | 83% | 72% | 58% | 45% | 34% | 25% | 18% | 13% | 10% | 8% | 5% | 3% | 1% | 1% | 0% | 0% |

Intensities in 180° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 667 | 638 | 590 | 518 | 418 | 305 | 215 | 158 | 125 | 104 | 86 | 70 | 54 | 37 | 21 | 14 | 9 | 6 | 3 | 0 |
| 100% | 96% | 89% | 78% | 63% | 46% | 32% | 24% | 19% | 16% | 13% | 10% | 8% | 6% | 3% | 2% | 1% | 1% | 1% | 0% |

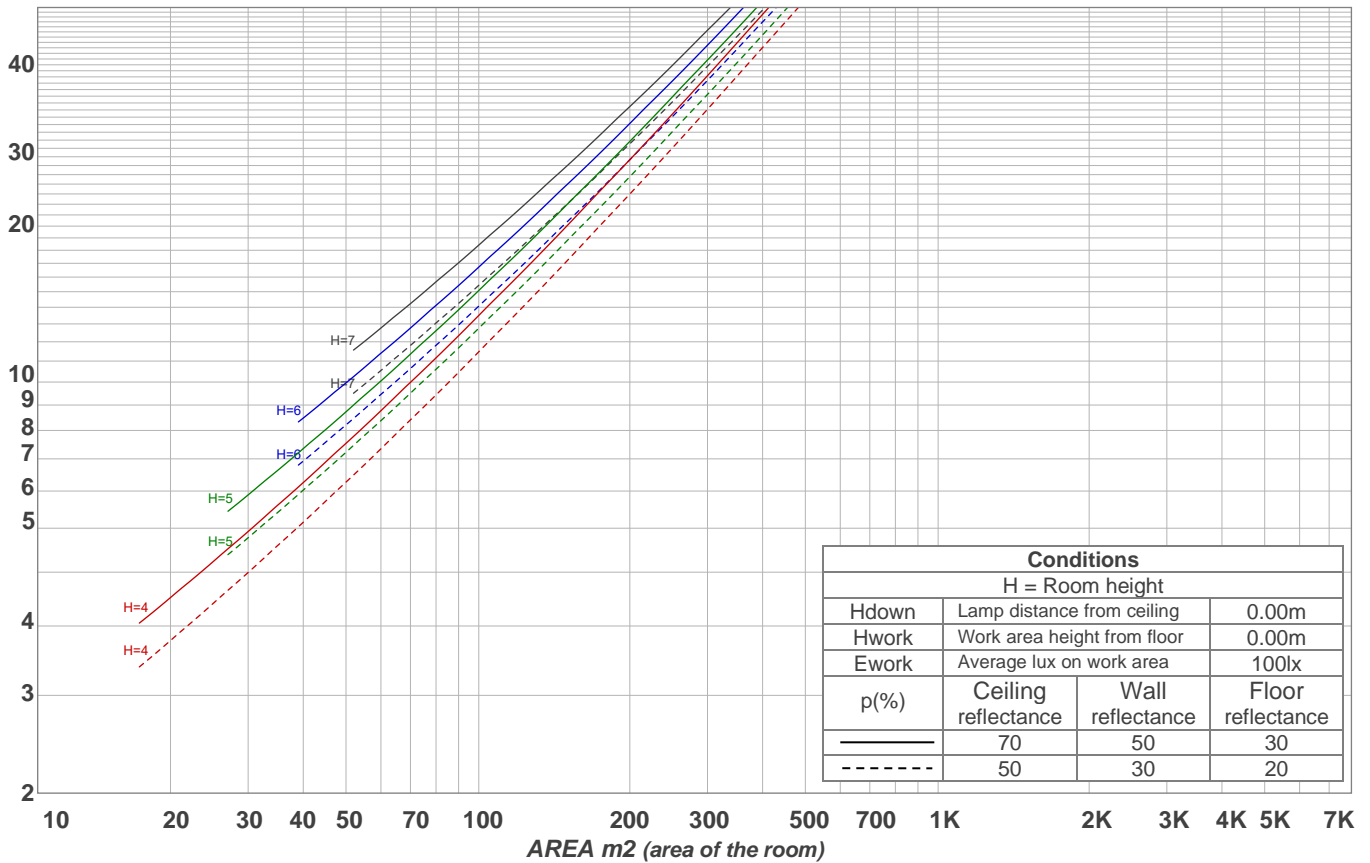
Intensities in 270° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 667 | 657 | 639 | 610 | 563 | 484 | 389 | 299 | 224 | 168 | 124 | 93 | 71 | 52 | 35 | 20 | 8 | 3 | 0 | 0 |
| 100% | 99% | 96% | 92% | 84% | 73% | 58% | 45% | 34% | 25% | 19% | 14% | 11% | 8% | 5% | 3% | 1% | 0% | 0% | 0% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 69.7° | 121.6° | 151.6° | 92.2% | 74.5% |

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 | 50 | 30 | 10 | 0 |
| Floor reflectance | 20 | 20 | 20 | 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 | 100 | 100 | |
| 1 | 111 | 108 | 104 | 102 | 109 | 106 | 103 | 100 | 101 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 | 89 | 89 | |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | 79 | 79 | |
| 3 | 96 | 88 | 81 | 76 | 94 | 86 | 80 | 75 | 84 | 78 | 74 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | 70 | 70 | |
| 4 | 90 | 80 | 73 | 67 | 88 | 79 | 72 | 67 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 68 | 64 | 62 | 62 | 62 | |
| 5 | 84 | 73 | 65 | 60 | 82 | 72 | 65 | 59 | 70 | 64 | 59 | 68 | 63 | 58 | 66 | 62 | 58 | 56 | 56 | 56 | |
| 6 | 78 | 67 | 59 | 54 | 76 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 52 | 51 | 51 | 51 | |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 46 | 46 | 46 | |
| 8 | 69 | 57 | 50 | 44 | 67 | 56 | 49 | 44 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | 42 | 42 | |
| 9 | 65 | 53 | 46 | 41 | 63 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 40 | 49 | 44 | 40 | 39 | 39 | 39 | |
| 10 | 61 | 49 | 42 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 37 | 47 | 41 | 37 | 46 | 41 | 37 | 36 | 36 | 36 | |

Zonal Lumen Summary

| | | | | | | | | |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
| 62.5 lm | 171 lm | 224 lm | 215 lm | 170 lm | 104 lm | 53.3 lm | 22.0 lm | 4.88 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 |