

Light efficiency:



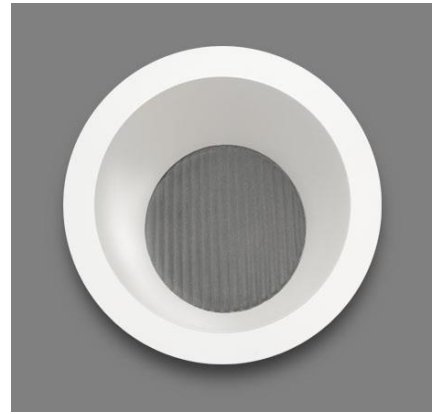
Output: 826 lm

Light quality:

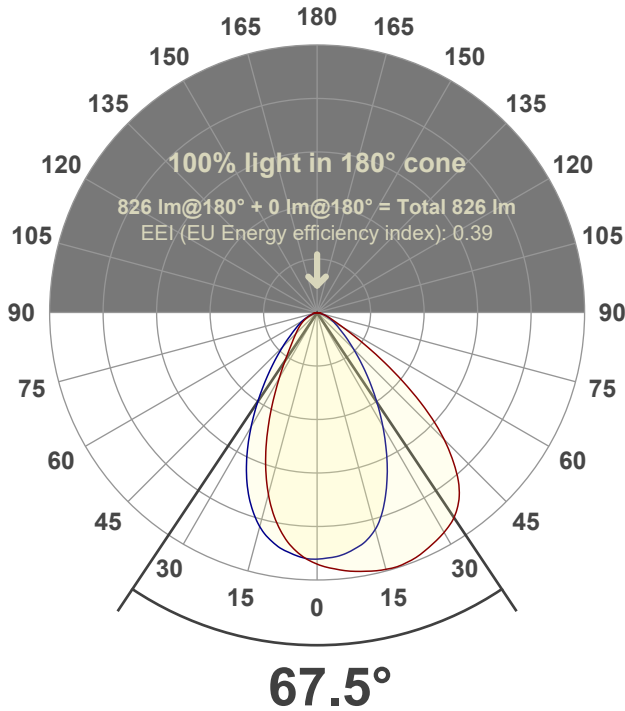


Peak: 617 cd

Power: 21.3 W



Beam angle



Test number:

GR-W-A20-3019-RD-Rev2

Luminaire Model:

Graffiti Wallwash Round A20-3019

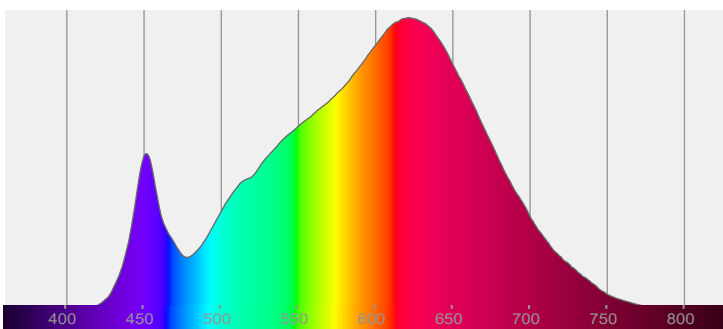
Date and time:

7/7/2022 3:52:06 PM

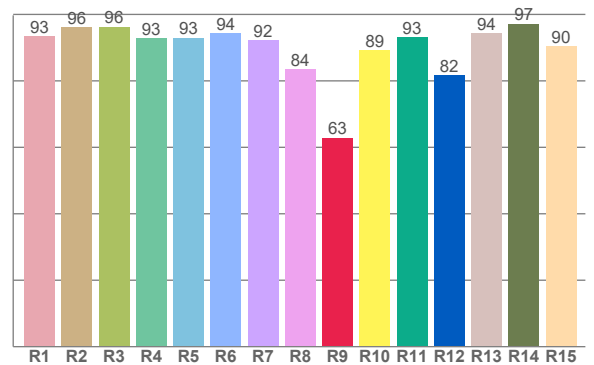
Delivered Lumens

826

Spectra



CRI: 92.7 (R1-R8)



Color parameters

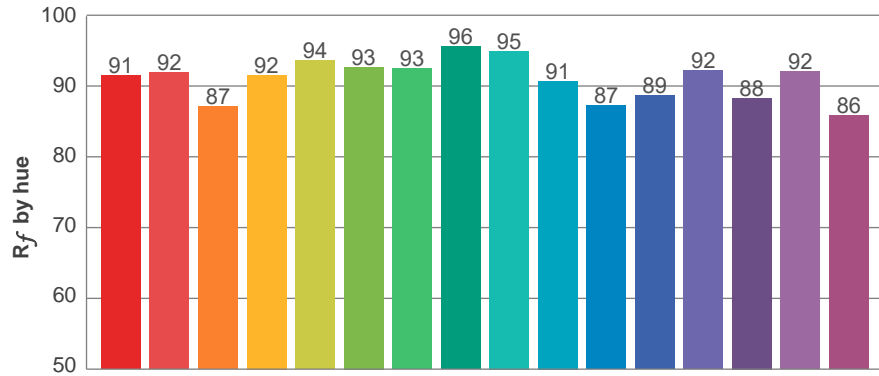
| | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color diviation from black body |
|--|-----------------------|---------------|---------------------|---------------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| | CRI | CRI R9 | TM30 R _f | TM30 R _g | CQS | x | y | u | v | Δuv |
| | 92.7 | 62.8 | 90.9 | 101.3 | 89.7 | 0.437 | 0.398 | 0.253 | 0.346 | -0.0024 |

R_f 90.9
Fidelity index R_f

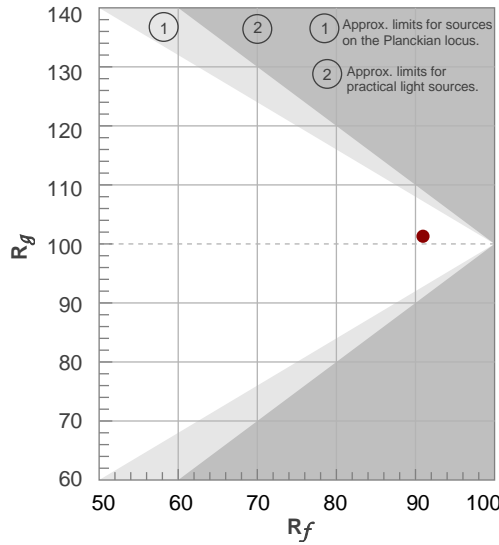
R_g 101.3
Gammut index R_g

TM30: 90.9

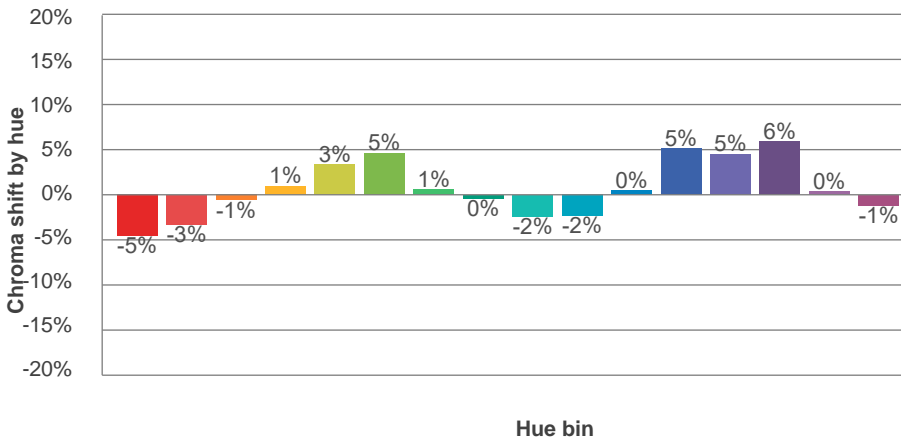
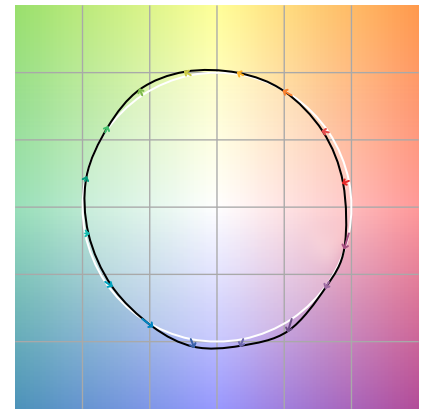
TM-30Color



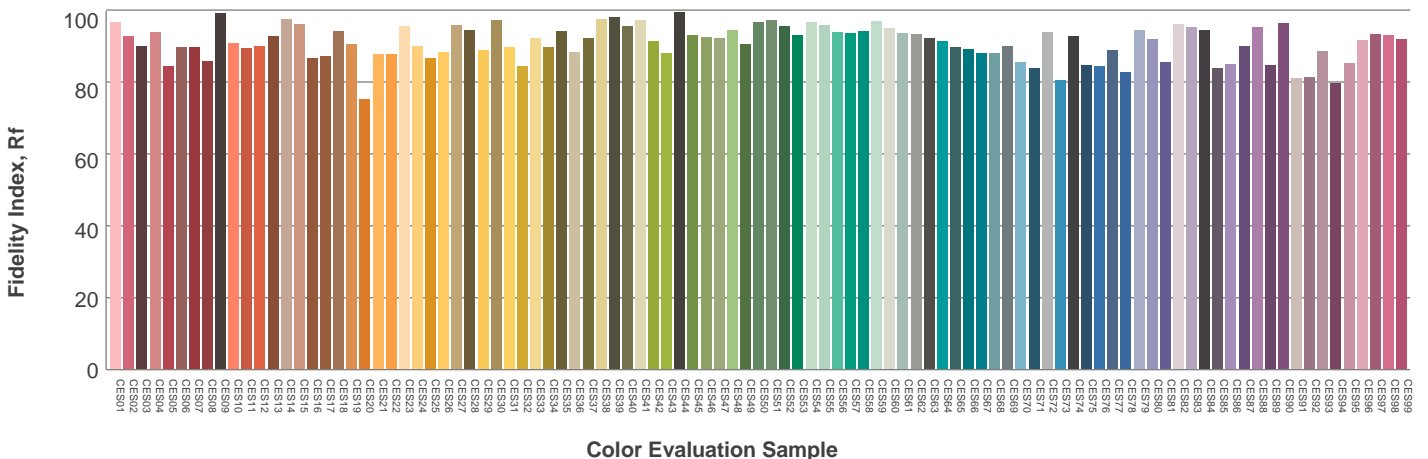
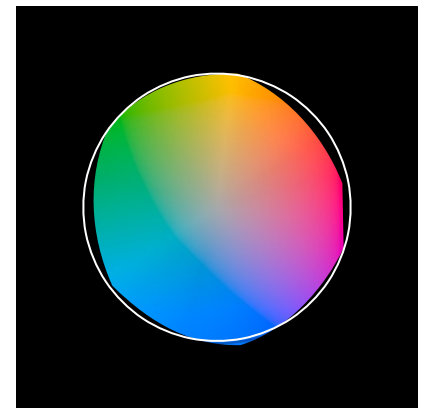
| Hue Bin | R_f | Graphic shifts (%) | |
|---------|-------|--------------------|------|
| | | Chroma | Hue |
| 1 | 91 | -5% | -1% |
| 2 | 92 | -3% | 3% |
| 3 | 87 | -1% | 7% |
| 4 | 92 | 1% | 4% |
| 5 | 94 | 3% | 4% |
| 6 | 93 | 5% | -1% |
| 7 | 93 | 1% | -4% |
| 8 | 96 | 0% | -3% |
| 9 | 95 | -2% | 1% |
| 10 | 91 | -2% | 5% |
| 11 | 87 | 0% | 9% |
| 12 | 89 | 5% | 3% |
| 13 | 92 | 5% | -3% |
| 14 | 88 | 6% | -7% |
| 15 | 92 | 0% | -5% |
| 16 | 86 | -1% | -11% |



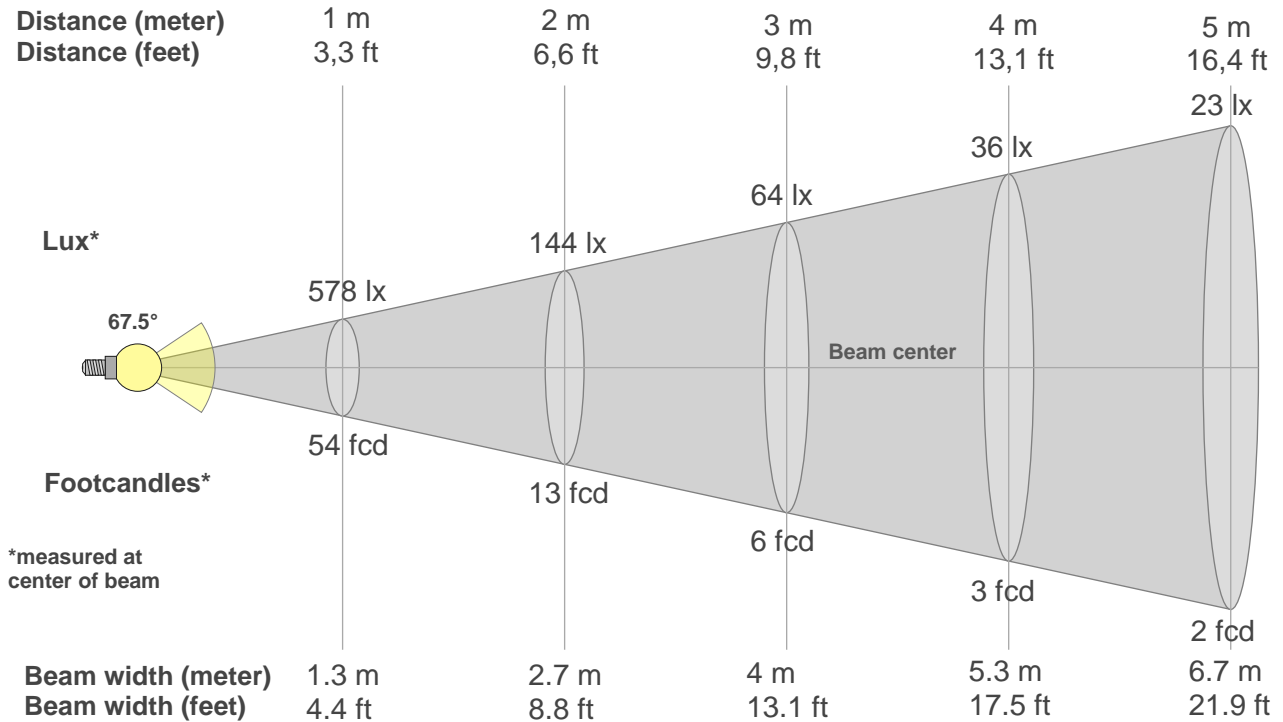
Color vector graphics



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 |
| 578lx | 144lx | 64lx | 36lx | 23lx | 16lx | 12lx | 9lx | 7lx | 6lx | 5lx | 4lx | 3lx | 3lx | 3lx | 2lx | 2lx | 2lx | 2lx | 1lx |
| 53.7fcd | 13.4fcd | 6fcd | 3.4fcd | 2.1fcd | 1.5fcd | 1.1fcd | 0.8fcd | 0.7fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.2fcd | 0.1fcd | 0.1fcd |

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° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 578 | 598 | 608 | 615 | 614 | 604 | 588 | 562 | 510 | 418 | 294 | 164 | 78 | 42 | 27 | 17 | 8 | 1 | 0 | 0 |
| 100% | 103% | 105% | 107% | 106% | 104% | 102% | 97% | 88% | 72% | 51% | 28% | 14% | 7% | 5% | 3% | 1% | 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 578 | 566 | 550 | 519 | 460 | 385 | 306 | 233 | 170 | 121 | 87 | 62 | 47 | 35 | 24 | 14 | 8 | 4 | 2 | 0 |
| 100% | 98% | 95% | 90% | 80% | 67% | 53% | 40% | 29% | 21% | 15% | 11% | 8% | 6% | 4% | 2% | 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° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 578 | 554 | 506 | 436 | 349 | 256 | 177 | 123 | 91 | 71 | 57 | 46 | 35 | 25 | 16 | 12 | 8 | 5 | 3 | 0 |
| 100% | 96% | 88% | 75% | 60% | 44% | 31% | 21% | 16% | 12% | 10% | 8% | 6% | 4% | 3% | 2% | 1% | 1% | 1% | 0% |

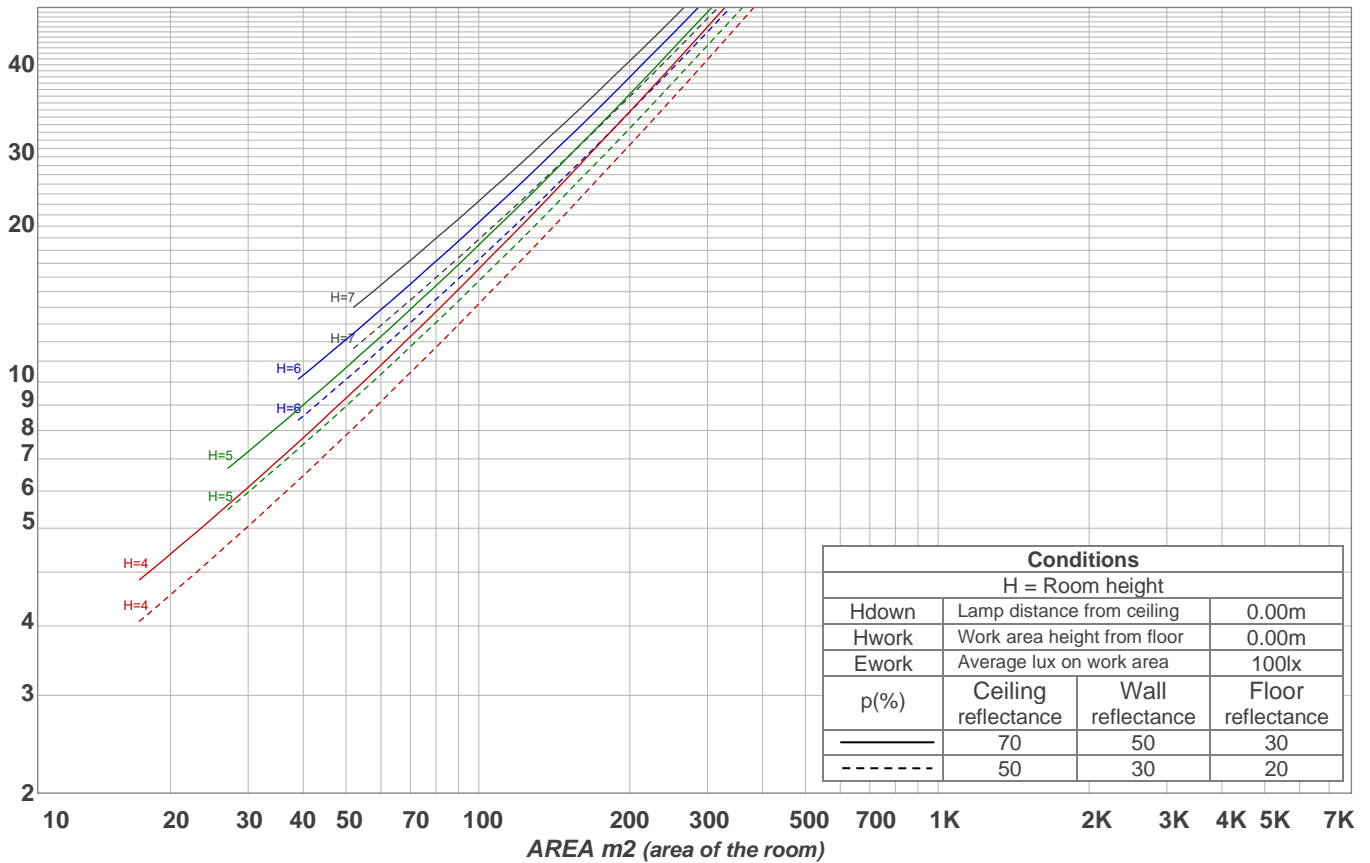
Intensities in 270° c-plane

| 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 578 | 564 | 546 | 513 | 459 | 388 | 307 | 230 | 165 | 116 | 80 | 58 | 42 | 29 | 18 | 8 | 3 | 2 | 0 | 0 |
| 100% | 98% | 95% | 89% | 79% | 67% | 53% | 40% | 29% | 20% | 14% | 10% | 7% | 5% | 3% | 1% | 1% | 0% | 0% | 0% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 67.5° | 110.8° | 146.1° | 94.0% | 78.1% |

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 | 100 |
| 1 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 102 | 100 | 97 | 98 | 96 | 95 | 95 | 93 | 92 | 90 | 90 | 90 | 90 |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 | 80 | 80 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 76 | 73 | 72 | 72 | 72 | 72 |
| 4 | 91 | 81 | 74 | 69 | 89 | 80 | 74 | 69 | 78 | 72 | 68 | 76 | 71 | 67 | 74 | 69 | 66 | 64 | 64 | 64 | 64 |
| 5 | 85 | 74 | 67 | 62 | 83 | 73 | 67 | 61 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 63 | 60 | 58 | 58 | 58 | 58 |
| 6 | 79 | 68 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 | 53 | 53 | 53 |
| 7 | 75 | 63 | 56 | 51 | 73 | 62 | 55 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 50 | 48 | 48 | 48 | 48 |
| 8 | 70 | 59 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 56 | 50 | 46 | 55 | 49 | 46 | 44 | 44 | 44 | 44 |
| 9 | 66 | 55 | 47 | 43 | 65 | 54 | 47 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | 40 | 40 | 40 |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 37 | 37 | 37 | 37 |

Zonal Lumen Summary

| | | | | | | | | |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
| 54.1 lm | 146 lm | 190 lm | 180 lm | 135 lm | 71.7 lm | 32.4 lm | 13.3 lm | 3.51 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 |