

Light efficiency:



Output: 583 lm

Light quality:

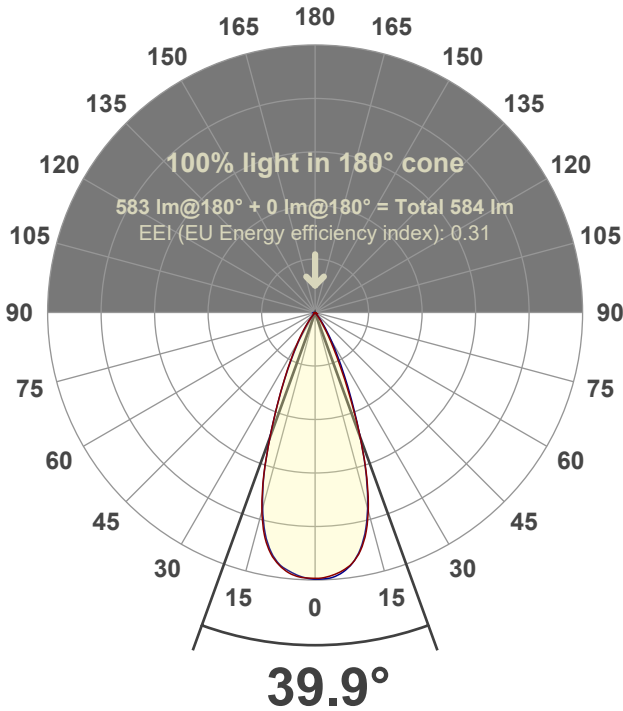


Peak: 1236 cd

Power: 15.0 W



Beam angle



Test number:

GR-F-F-A14-3022-WF-SQ-91A-Rev2

Luminaire Model:

Graffiti Flat Square Fixed Downlight-A14-3022 60° Optic-Solite

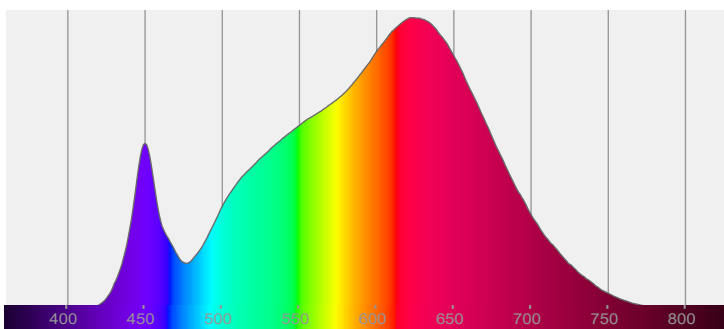
Date and time:

6/30/2022 4:57:20 PM

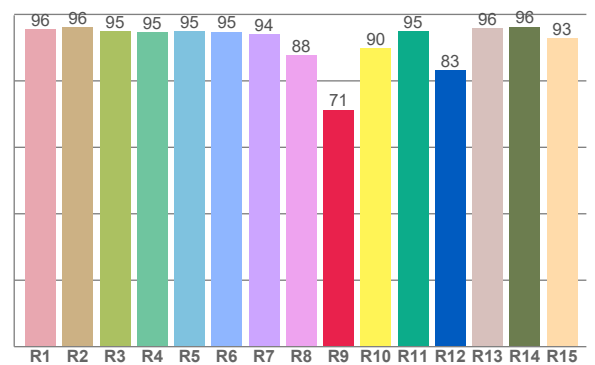
Delivered Lumens

583

Spectra



CRI: 94.1 (R1-R8)



Color parameters

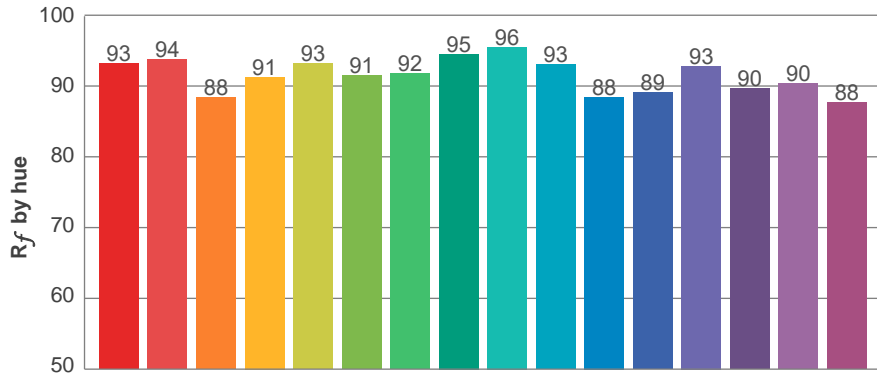
| | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
|--|-----------------------|---------------|---------------------|---------------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| | CRI | CRI R9 | TM30 R _f | TM30 R _g | CQS | x | y | u | v | Δuv |
| | 94.1 | 71.3 | 91.6 | 102.7 | 90.9 | 0.434 | 0.398 | 0.251 | 0.346 | -0.0020 |

R_f 91.6
Fidelity index R_f

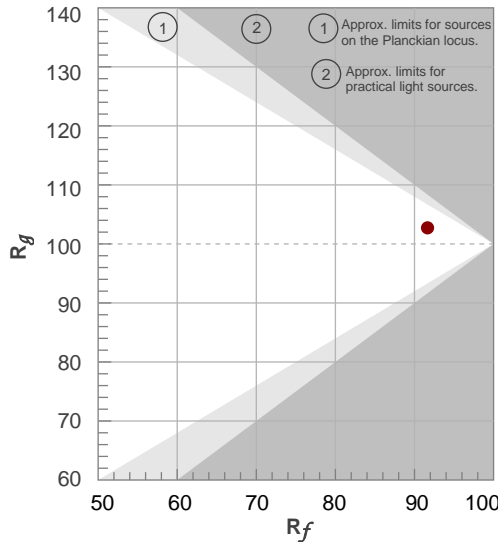
R_g 102.7
Gammut index R_g

TM30: 91.6

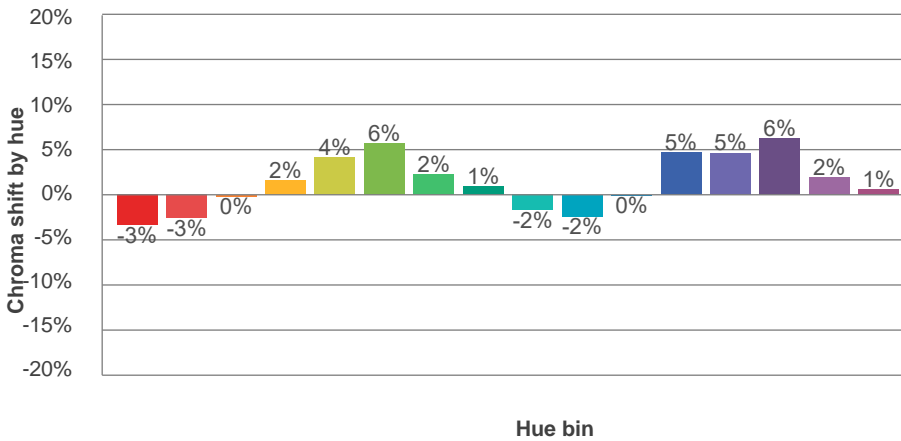
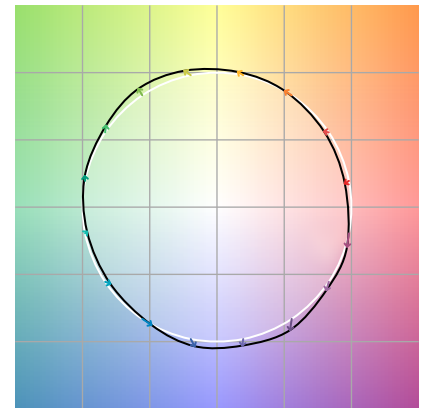
TM-30Color



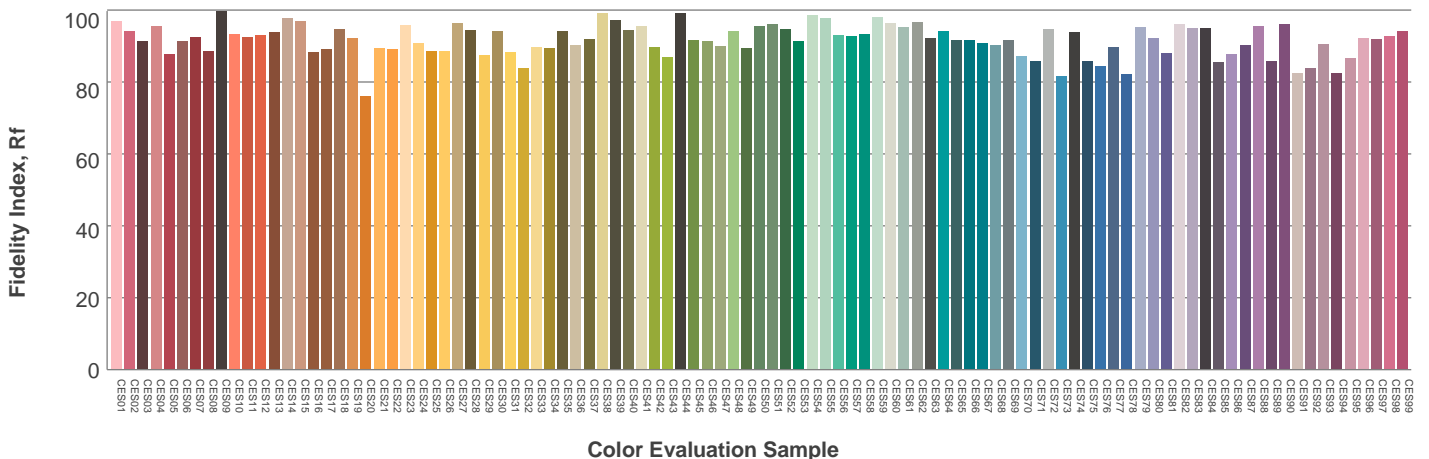
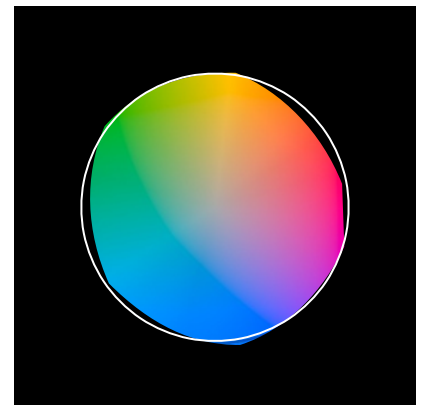
| Hue Bin | R_f | Graphic shifts (%) | |
|---------|-------|--------------------|------|
| | | Chroma | Hue |
| 1 | 93 | -3% | -1% |
| 2 | 94 | -3% | 3% |
| 3 | 88 | 0% | 6% |
| 4 | 91 | 2% | 4% |
| 5 | 93 | 4% | 4% |
| 6 | 91 | 6% | 0% |
| 7 | 92 | 2% | -5% |
| 8 | 95 | 1% | -3% |
| 9 | 96 | -2% | -1%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



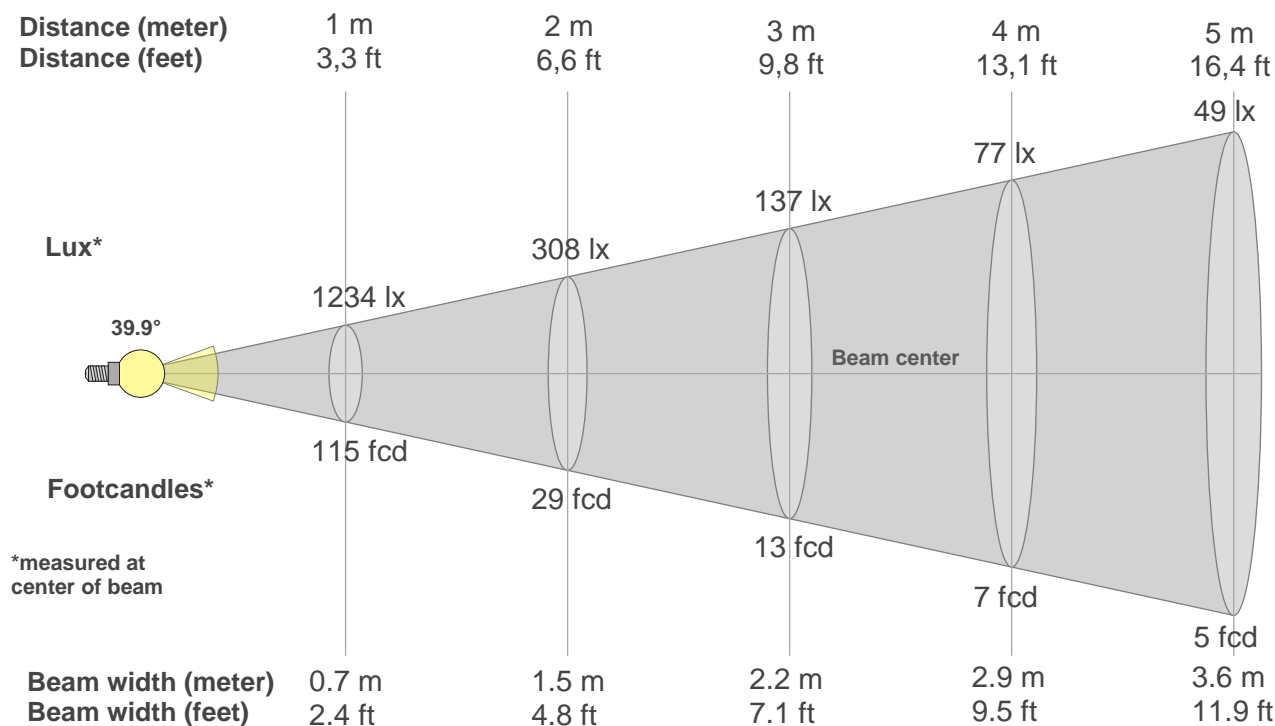
Color vector graphics



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 |
| 1234lx | 308lx | 137lx | 77lx | 49lx | 34lx | 25lx | 19lx | 15lx | 12lx | 10lx | 9lx | 7lx | 6lx | 5lx | 5lx | 4lx | 4lx | 3lx | 3lx |
| 114.6fcd | 28.7fcd | 12.7fcd | 7.2fcd | 4.6fcd | 3.2fcd | 2.3fcd | 1.8fcd | 1.4fcd | 1.1fcd | 0.9fcd | 0.8fcd | 0.7fcd | 0.6fcd | 0.5fcd | 0.4fcd | 0.4fcd | 0.3fcd | 0.3fcd | 0.3fcd |

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° |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1234 | 1229 | 1219 | 1204 | 1181 | 1142 | 1083 | 1001 | 894 | 762 | 612 | 465 | 341 | 244 | 172 | 121 | 84 | 58 | 39 | 26 |
| 100% | 100% | 99% | 98% | 96% | 93% | 88% | 81% | 72% | 62% | 50% | 38% | 28% | 20% | 14% | 10% | 7% | 5% | 3% | 2% |

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° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1234 | 1235 | 1229 | 1212 | 1183 | 1138 | 1075 | 991 | 884 | 756 | 612 | 484 | 375 | 285 | 213 | 157 | 113 | 82 | 57 | 39 |
| 100% | 100% | 100% | 98% | 96% | 92% | 87% | 80% | 72% | 61% | 50% | 39% | 30% | 23% | 17% | 13% | 9% | 7% | 5% | 3% |

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° |
|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1234 | 1231 | 1225 | 1211 | 1185 | 1146 | 1087 | 1003 | 893 | 760 | 612 | 485 | 380 | 295 | 227 | 173 | 129 | 94 | 66 | 45 |
| 100% | 100% | 99% | 98% | 96% | 93% | 88% | 81% | 72% | 62% | 50% | 39% | 31% | 24% | 18% | 14% | 10% | 8% | 5% | 4% |

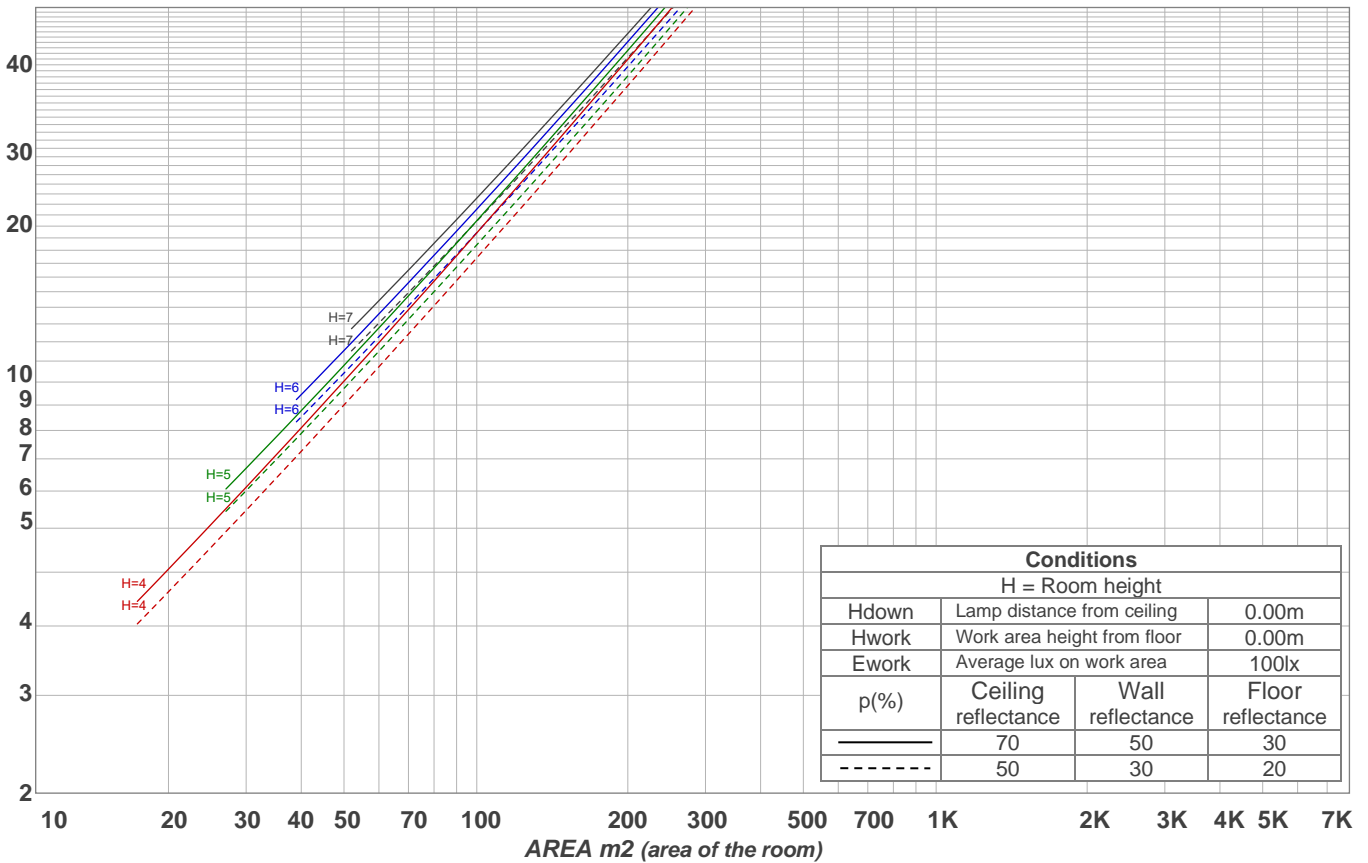
Intensities in 270° c-plane

| 0° | 2° | 4° | 6° | 8° | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1234 | 1231 | 1219 | 1202 | 1181 | 1139 | 1076 | 990 | 882 | 756 | 613 | 482 | 373 | 284 | 213 | 156 | 113 | 81 | 56 | 39 |
| 100% | 100% | 99% | 97% | 96% | 92% | 87% | 80% | 72% | 61% | 50% | 39% | 30% | 23% | 17% | 13% | 9% | 7% | 5% | 3% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 39.9° | 62.6° | 77.6° | 98.2% | 97.3% |

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 | 114 | 111 | 109 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 | 95 | 95 | |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 98 | 95 | 97 | 95 | 93 | 95 | 93 | 91 | 90 | 90 | 90 | |
| 3 | 105 | 99 | 95 | 92 | 103 | 98 | 94 | 91 | 96 | 92 | 90 | 93 | 90 | 88 | 91 | 89 | 87 | 85 | 85 | 85 | |
| 4 | 101 | 94 | 90 | 86 | 99 | 93 | 89 | 86 | 91 | 88 | 85 | 89 | 86 | 84 | 88 | 85 | 83 | 81 | 81 | 81 | |
| 5 | 97 | 90 | 85 | 81 | 95 | 89 | 84 | 81 | 87 | 83 | 80 | 86 | 82 | 80 | 84 | 81 | 79 | 78 | 78 | 78 | |
| 6 | 93 | 86 | 81 | 77 | 92 | 85 | 80 | 77 | 84 | 80 | 76 | 82 | 79 | 76 | 81 | 78 | 75 | 74 | 74 | 74 | |
| 7 | 90 | 82 | 77 | 74 | 89 | 81 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 73 | 78 | 75 | 72 | 71 | 71 | 71 | |
| 8 | 87 | 79 | 74 | 70 | 86 | 78 | 73 | 70 | 77 | 73 | 70 | 76 | 72 | 70 | 75 | 72 | 69 | 68 | 68 | 68 | |
| 9 | 84 | 75 | 71 | 67 | 83 | 75 | 70 | 67 | 74 | 70 | 67 | 73 | 69 | 67 | 73 | 69 | 67 | 65 | 65 | 65 | |
| 10 | 81 | 73 | 68 | 64 | 80 | 72 | 68 | 64 | 71 | 67 | 64 | 71 | 67 | 64 | 70 | 66 | 64 | 63 | 63 | 63 | |

Zonal Lumen Summary

| | | | | | | | | |
|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
| 114 lm | 253 lm | 151 lm | 44.3 lm | 8.21 lm | 2.93 lm | 3.77 lm | 3.67 lm | 3.04 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 |