

Light efficiency:



Output: 900 lm

Light quality:

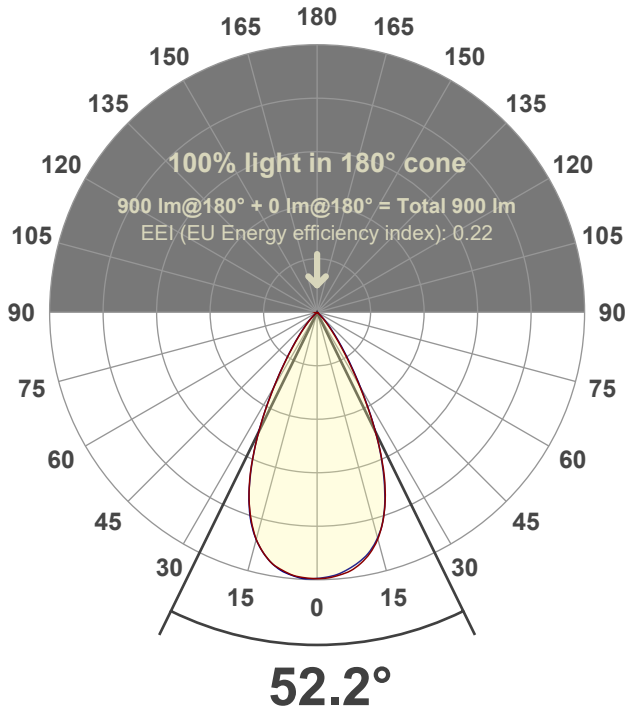


Peak: 1218 cd

Power: 15.0 W



Beam angle



Test number:

**GR-F-A14-2722-WF-RD-91A-Rev2**

Luminaire Model:

**Graffiti Regress Round Fixed Downlight-A14-2722 60° Optic-Solite**

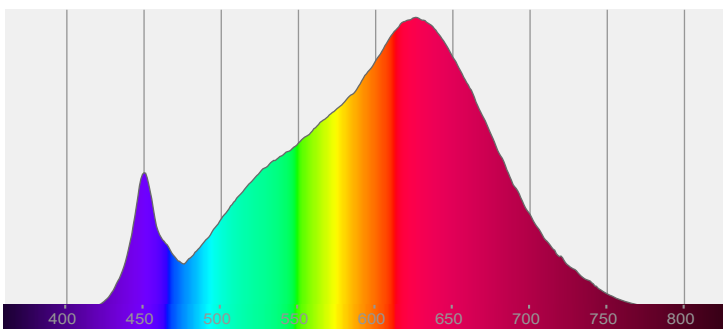
Date and time:

**3/24/2022 6:27:22 PM**

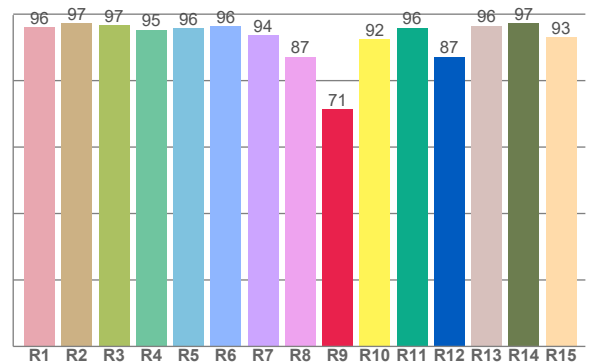
Delivered Lumens

**900**

Spectra



CRI: 94.8 (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 <sub>f</sub> | TM30 R <sub>g</sub> | CQS                 | x                         | y                         | u                | v                | Δuv                             |
| 94.8                  | 71.4          | 92.4                | 102.2               | 91.3                | 0.446                     | 0.401                     | 0.258            | 0.348            | -0.0022                         |

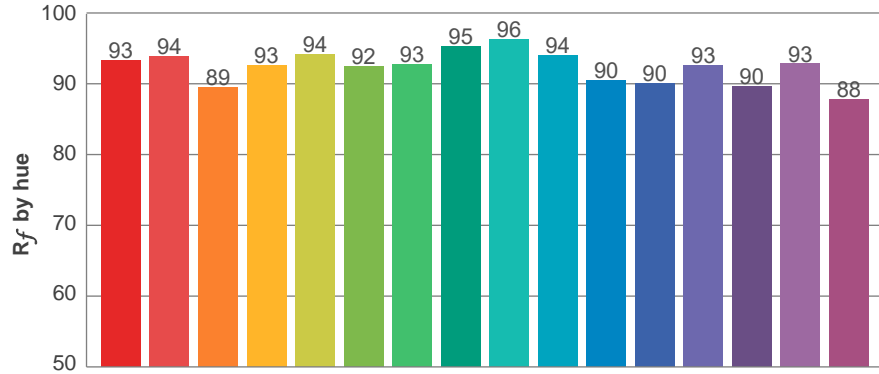
**$R_f$  92.4**  
Fidelity index  $R_f$

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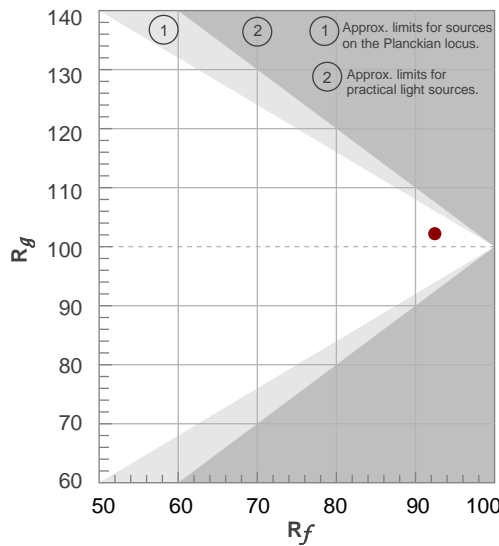
**$R_g$  102.2**  
Gammut index  $R_g$

TM30: 92.4

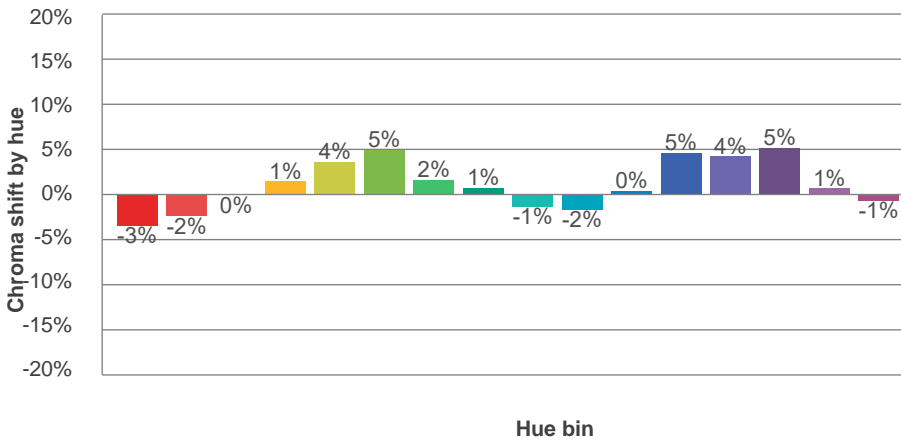
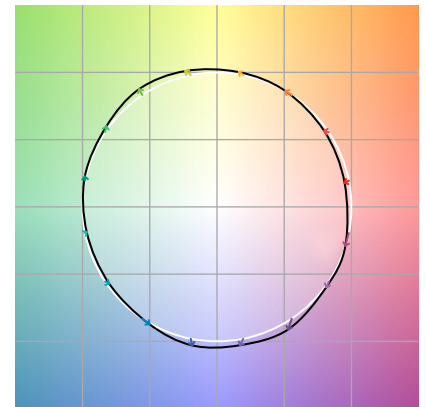
TM-30Color



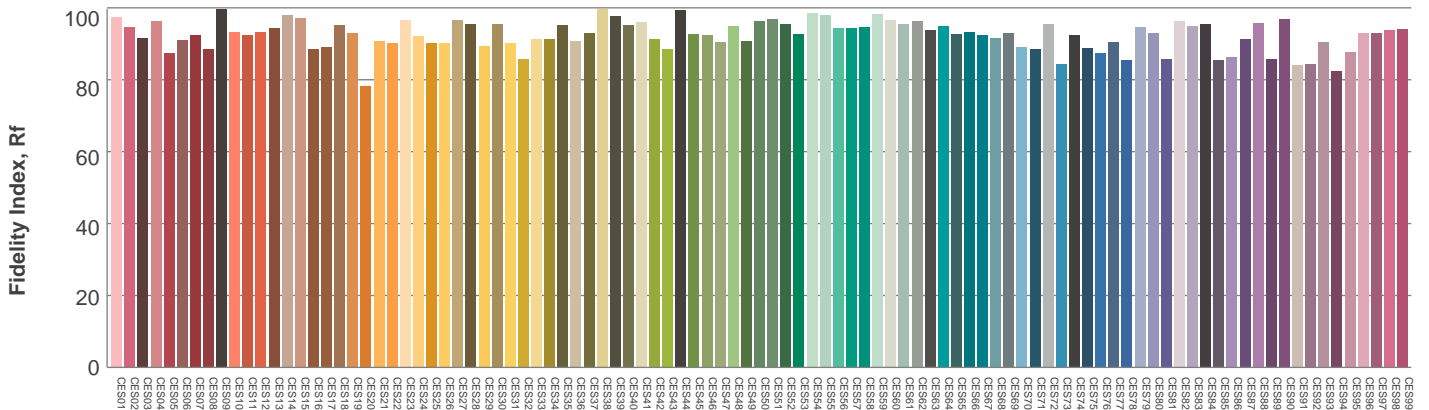
| Hue Bin | $R_f$ | Graphic shifts (%) |      |
|---------|-------|--------------------|------|
|         |       | Chroma             | Hue  |
| 1       | 93    | -3%                | -1%  |
| 2       | 94    | -2%                | 3%   |
| 3       | 89    | 0%                 | 6%   |
| 4       | 93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



Color vector graphics



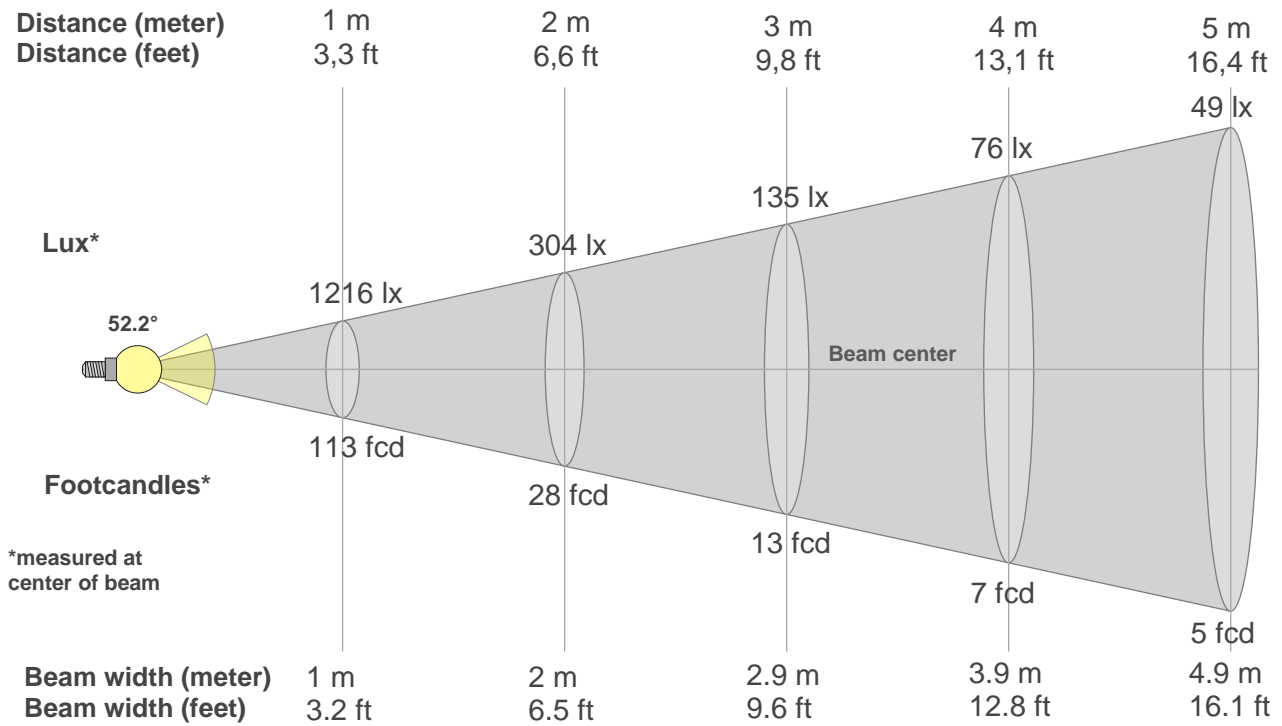
Color distortion



Color Evaluation Sample

[www.graffitilighting.com](http://www.graffitilighting.com) As a result of our continuous improvement, values are subject to change without notice. These are delivered results and can vary +/- 10% from published source data range.

**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 |
| 1216lx | 304lx   | 135lx   | 76lx   | 49lx   | 34lx   | 25lx   | 19lx   | 15lx   | 12lx   | 10lx   | 8lx    | 7lx    | 6lx    | 5lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    |
| 113fcd | 28.3fcd | 12.6fcd | 7.1fcd | 4.5fcd | 3.1fcd | 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° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1216 | 1215 | 1209 | 1199 | 1185 | 1163 | 1133 | 1094 | 1045 | 984 | 912 | 825 | 724 | 614 | 502 | 395 | 304 | 230 | 171 | 125 |
| 100% | 100% | 99%  | 99%  | 97%  | 96%  | 93%  | 90%  | 86%  | 81% | 75% | 68% | 59% | 50% | 41% | 32% | 25% | 19% | 14% | 10% |

**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° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1216 | 1211 | 1203 | 1189 | 1172 | 1151 | 1126 | 1089 | 1042 | 981 | 906 | 817 | 719 | 614 | 508 | 405 | 315 | 244 | 187 | 140 |
| 100% | 100% | 99%  | 98%  | 96%  | 95%  | 93%  | 90%  | 86%  | 81% | 74% | 67% | 59% | 50% | 42% | 33% | 26% | 20% | 15% | 12% |

**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° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1216 | 1215 | 1211 | 1201 | 1186 | 1168 | 1136 | 1096 | 1046 | 983 | 910 | 822 | 721 | 614 | 505 | 402 | 313 | 239 | 180 | 134 |
| 100% | 100% | 100% | 99%  | 98%  | 96%  | 93%  | 90%  | 86%  | 81% | 75% | 68% | 59% | 50% | 42% | 33% | 26% | 20% | 15% | 11% |

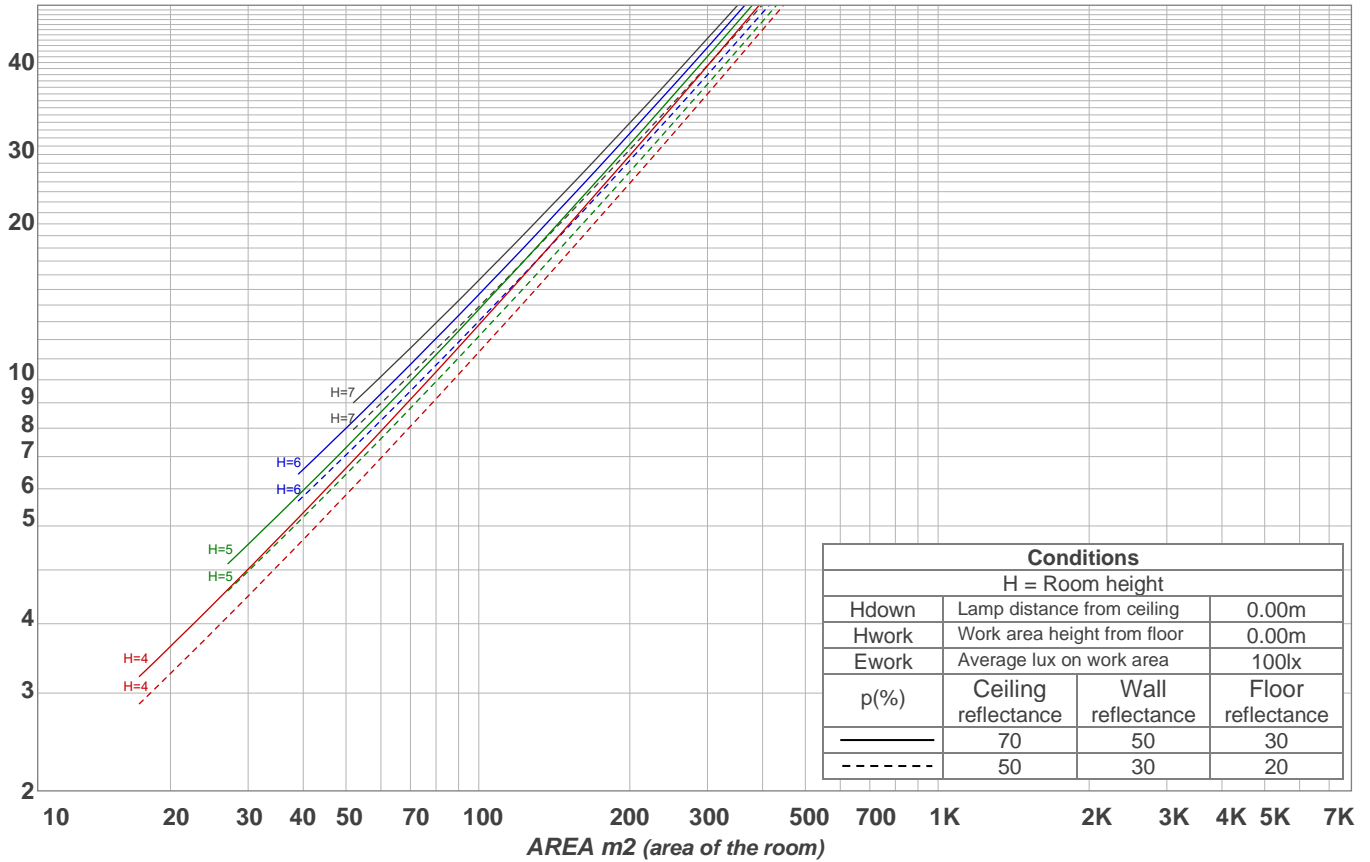
**Intensities in 270° c-plane**

| 0°   | 2°   | 4°   | 6°   | 8°   | 10°  | 12°  | 14°  | 16°  | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1216 | 1218 | 1214 | 1204 | 1191 | 1168 | 1136 | 1097 | 1049 | 989 | 911 | 819 | 719 | 614 | 505 | 403 | 315 | 241 | 183 | 137 |
| 100% | 100% | 100% | 99%  | 98%  | 96%  | 93%  | 90%  | 86%  | 81% | 75% | 67% | 59% | 51% | 42% | 33% | 26% | 20% | 15% | 11% |

| Beam angle 50% | Field angle 10% | Cutoff angle 2,5% | Intensity ratio in 120° cone | Intensity ratio in 90° cone |
|----------------|-----------------|-------------------|------------------------------|-----------------------------|
| 52.2°          | 77.4°           | 94.7°             | 99.1%                        | 96.7%                       |

LAMPS (number of lamps)  
50

### Light planning Luminaire budgetary diagram



| Conditions      |                             |                  |                   |
|-----------------|-----------------------------|------------------|-------------------|
| H = Room height |                             |                  |                   |
| Hdown           | Lamp distance from ceiling  | 0.00m            |                   |
| Hwork           | Work area height from floor | 0.00m            |                   |
| Ework           | Average lux on work area    | 100lx            |                   |
| p(%)            | Ceiling reflectance         | Wall reflectance | Floor reflectance |
| —————           | 70                          | 50               | 30                |
| - - - - -       | 50                          | 30               | 20                |

### 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 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98  | 98  | 97  | 96  | 94  | 94  | 94  |   |
| 2                   | 108  | 104 | 100 | 97  | 106 | 102 | 98  | 95  | 99  | 96  | 93  | 96  | 93  | 91  | 93  | 91  | 90  | 88  | 88  | 88  |   |
| 3                   | 103  | 97  | 92  | 89  | 101 | 96  | 91  | 88  | 93  | 90  | 87  | 91  | 88  | 85  | 89  | 86  | 84  | 82  | 82  | 82  |   |
| 4                   | 98   | 91  | 86  | 82  | 97  | 90  | 85  | 82  | 88  | 84  | 81  | 86  | 83  | 80  | 84  | 81  | 79  | 77  | 77  | 77  |   |
| 5                   | 94   | 86  | 80  | 76  | 92  | 85  | 80  | 76  | 83  | 79  | 75  | 82  | 78  | 75  | 80  | 77  | 74  | 73  | 73  | 73  |   |
| 6                   | 90   | 81  | 75  | 71  | 88  | 80  | 75  | 71  | 79  | 74  | 71  | 78  | 73  | 70  | 76  | 73  | 70  | 68  | 68  | 68  |   |
| 7                   | 85   | 77  | 71  | 67  | 84  | 76  | 71  | 67  | 75  | 70  | 67  | 74  | 69  | 66  | 73  | 69  | 66  | 64  | 64  | 64  |   |
| 8                   | 82   | 73  | 67  | 63  | 81  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 62  | 69  | 65  | 62  | 61  | 61  | 61  |   |
| 9                   | 78   | 69  | 63  | 60  | 77  | 69  | 63  | 60  | 68  | 63  | 59  | 67  | 62  | 59  | 66  | 62  | 59  | 58  | 58  | 58  |   |
| 10                  | 75   | 66  | 60  | 56  | 74  | 65  | 60  | 56  | 64  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 56  | 55  | 55  | 55  |   |

### Zonal Lumen Summary

| 0°-10° | 10°-20° | 20°-30° | 30°-40° | 40°-50° | 50°-60° | 60°-70° | 70°-80° | 80°-90° |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 114 lm | 296 lm  | 300 lm  | 135 lm  | 37.9 lm | 8.99 lm | 4.17 lm | 2.28 lm | 1.93 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  |

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