

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMIERE

Report Number: G2-1802-569-21

Luminaire Tested: **203-FL-8LED4036-12-BK-LSL**

Test Date: 04/06/18

Test Information

Test Method: LM-79-08
Report Number: G2-1802-569-21
Test Lab: INNOVATION CENTER(G2)
Test Date: 04/06/18
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMIERE
Catalog Number: 203-FL-8LED4036-12-BK-LSL
Description: CAMBRIA 203 LED LUMINAIRE, 8 WATT, 4000K CCT, 36 DEGREE WIDE OPTIC,
FLUSH HOOD BLACK, LINEAR SPREAD LENS
Light Source: (1) SORAA 4000K 95 CRI LED
SM16-07-36D-940-03
Ballast/Driver: (1) CHROMA POWER SUPPLY IN0004

Summary

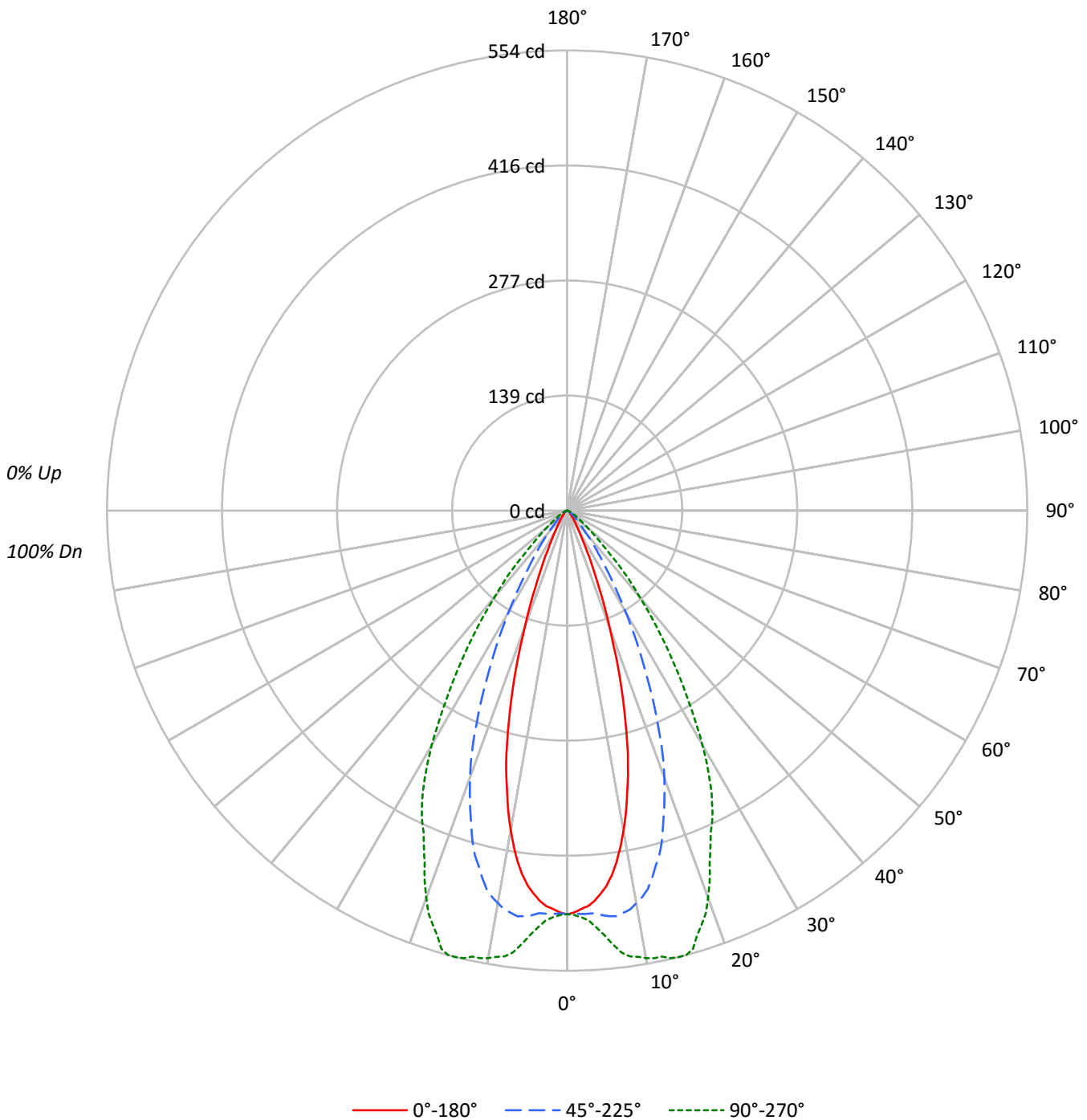
Lumens per Lamp: N/A
Luminaire Lumens: 371.1 lumens
Efficiency: N/A
Efficacy: 48.2 lumens/watt
Spacing Criteria (0/90/45): 0.54 / 1.08 / 0.77
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 7.7
Input Voltage (V): 12.0
Input Current (A_{in}): 0.676
Voltage Rise (V): NR
Power Factor: 0.9909
Total Harmonic Distortion (THDi): 27.3%
Frequency (hertz): 60
Stabilization Time: 0.5 HR
Operation Time: 3 HR
Ambient Temperature (°C): 24.8
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: G2-1802-569-21

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | 20 | | | | | |
| RC | 80 | | | | | 70 | | | | | 50 | | | | | 30 | | | | | 10 | | | | | 0 |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 0 | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | | | 100 | | | |
| 1 | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 94 | | | | | 94 | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 95 | 98 | 95 | 93 | 95 | 93 | 91 | 92 | 90 | 89 | 87 | | | | | 87 | | | |
| 3 | 103 | 96 | 91 | 87 | 101 | 95 | 90 | 87 | 92 | 88 | 85 | 90 | 87 | 84 | 88 | 85 | 83 | 81 | | | | | 81 | | | |
| 4 | 97 | 90 | 85 | 80 | 96 | 89 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | | | | | 76 | | | |
| 5 | 93 | 84 | 79 | 74 | 91 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 76 | 73 | 79 | 75 | 72 | 71 | | | | | 71 | | | |
| 6 | 88 | 79 | 74 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 69 | 76 | 71 | 68 | 74 | 71 | 68 | 66 | | | | | 66 | | | |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 62 | | | | | 62 | | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 65 | 61 | 69 | 64 | 61 | 68 | 64 | 60 | 67 | 63 | 60 | 59 | | | | | 59 | | | |
| 9 | 77 | 67 | 61 | 57 | 75 | 67 | 61 | 57 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 57 | 55 | | | | | 55 | | | |
| 10 | 73 | 64 | 58 | 54 | 72 | 63 | 58 | 54 | 62 | 57 | 54 | 62 | 57 | 54 | 61 | 57 | 54 | 52 | | | | | 52 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 239782 | 239782 | 239782 |
| 5° | 229307 | 242184 | 254071 |
| 10° | 195887 | 240476 | 274042 |
| 15° | 140466 | 219126 | 282974 |
| 20° | 78757 | 179565 | 260422 |
| 25° | 35929 | 128475 | 224831 |
| 30° | 15952 | 79759 | 185724 |
| 35° | 9035 | 43968 | 134314 |
| 40° | 5797 | 23186 | 87592 |
| 45° | 4186 | 12559 | 47447 |
| 50° | 3838 | 8443 | 25330 |
| 55° | 3441 | 6021 | 13763 |
| 60° | 2960 | 3947 | 8881 |
| 65° | 2335 | 3502 | 5837 |
| 70° | 2885 | 2885 | 4328 |
| 75° | 1906 | 1906 | 1906 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 46.3 | 12.5 |
| 10°-20° | 115.4 | 31.1 |
| 20°-30° | 108.8 | 29.3 |
| 30°-40° | 63.8 | 17.2 |
| 40°-50° | 24.1 | 6.5 |
| 50°-60° | 8.1 | 2.2 |
| 60°-70° | 3.3 | 0.9 |
| 70°-80° | 1.2 | 0.3 |
| 80°-90° | 0.0 | 0.0 |
| 90°-100° | 0.0 | 0.0 |
| 100°-110° | 0.0 | 0.0 |
| 110°-120° | 0.0 | 0.0 |
| 120°-130° | 0.0 | 0.0 |
| 130°-140° | 0.0 | 0.0 |
| 140°-150° | 0.0 | 0.0 |
| 150°-160° | 0.0 | 0.0 |
| 160°-170° | 0.0 | 0.0 |
| 170°-180° | 0.0 | 0.0 |
| 0°-30° | 270.5 | 72.9 |
| 0°-40° | 334.3 | 90.1 |
| 0°-60° | 366.5 | 98.8 |
| 0°-90° | 371.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 371.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 486 | 486 | 486 | 486 | 486 | |
| 5° | 463 | 471 | 489 | 507 | 513 | 42 |
| 15° | 275 | 320 | 429 | 522 | 554 | 74 |
| 25° | 66 | 96 | 236 | 373 | 413 | 32 |
| 35° | 15 | 22 | 73 | 187 | 223 | 10 |
| 45° | 6 | 9 | 18 | 52 | 68 | 5 |
| 55° | 4 | 5 | 7 | 13 | 16 | 4 |
| 65° | 2 | 3 | 3 | 4 | 5 | 2 |
| 75° | 1 | 1 | 1 | 1 | 1 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | 0 |



TEST NUMBER: G2-1802-569-21

CATALOG NUMBER: 203-FL-8LED4036-12-BK-LSL

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-----|-------|-----|-------|-----|
| 0° | 486 | 486 | 486 | 486 | 486 |
| 1° | 484 | 484 | 485 | 486 | 487 |
| 2° | 480 | 482 | 486 | 489 | 490 |
| 3° | 477 | 480 | 486 | 491 | 494 |
| 4° | 471 | 477 | 486 | 498 | 503 |
| 5° | 463 | 471 | 489 | 507 | 513 |
| 6° | 454 | 464 | 491 | 514 | 525 |
| 7° | 442 | 454 | 492 | 524 | 536 |
| 8° | 427 | 443 | 489 | 529 | 542 |
| 9° | 410 | 431 | 486 | 530 | 544 |
| 10° | 391 | 416 | 480 | 531 | 547 |
| 11° | 371 | 400 | 474 | 529 | 549 |
| 12° | 348 | 383 | 466 | 528 | 549 |
| 13° | 326 | 363 | 454 | 526 | 553 |
| 14° | 302 | 342 | 441 | 525 | 554 |
| 15° | 275 | 320 | 429 | 522 | 554 |
| 16° | 250 | 297 | 414 | 520 | 549 |
| 17° | 224 | 272 | 395 | 513 | 535 |
| 18° | 199 | 247 | 378 | 498 | 524 |
| 19° | 172 | 221 | 360 | 481 | 513 |
| 20° | 150 | 197 | 342 | 466 | 496 |
| 21° | 129 | 172 | 323 | 451 | 479 |
| 22° | 110 | 150 | 303 | 434 | 458 |
| 23° | 92 | 129 | 279 | 414 | 441 |
| 24° | 78 | 112 | 258 | 394 | 425 |
| 25° | 66 | 96 | 236 | 373 | 413 |
| 26° | 55 | 83 | 215 | 355 | 399 |
| 27° | 46 | 70 | 195 | 339 | 383 |
| 28° | 38 | 60 | 177 | 322 | 365 |
| 29° | 32 | 50 | 158 | 305 | 346 |
| 30° | 28 | 43 | 140 | 285 | 326 |
| 32.5° | 20 | 30 | 102 | 237 | 272 |
| 35° | 15 | 22 | 73 | 187 | 223 |
| 37.5° | 12 | 17 | 52 | 143 | 178 |
| 40° | 9 | 14 | 36 | 103 | 136 |
| 42.5° | 8 | 11 | 25 | 73 | 103 |
| 45° | 6 | 9 | 18 | 52 | 68 |
| 47.5° | 5 | 7 | 14 | 37 | 46 |
| 50° | 5 | 6 | 11 | 24 | 33 |
| 52.5° | 4 | 5 | 9 | 17 | 22 |
| 55° | 4 | 5 | 7 | 13 | 16 |
| 57.5° | 4 | 4 | 5 | 10 | 12 |
| 60° | 3 | 3 | 4 | 7 | 9 |
| 62.5° | 3 | 3 | 4 | 5 | 6 |
| 65° | 2 | 3 | 3 | 4 | 5 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|----|-------|-----|-------|-----|
| 67.5° | 2 | 2 | 2 | 3 | 4 |
| 70° | 2 | 2 | 2 | 2 | 3 |
| 72.5° | 1 | 1 | 1 | 2 | 2 |
| 75° | 1 | 1 | 1 | 1 | 1 |
| 77.5° | 1 | 1 | 1 | 1 | 1 |
| 80° | 0 | 0 | 0 | 0 | 0 |
| 82.5° | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 |
| 87.5° | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)