

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: FAIL-SAFE

Report Number: P184321

Luminaire Tested: **ENW/ENC-12-2-LD1-17-40-CA080-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P184321
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ENW/ENC-12-2-LD1-17-40-CA080-UNV-EDC1
Description: FAIL-SAFE 1X2 ENCOUNTER W/ 0.080" THICK CLEAR ACRYLIC LENS
Light Source: 4000K LEDS
Ballast/Driver: -

Summary

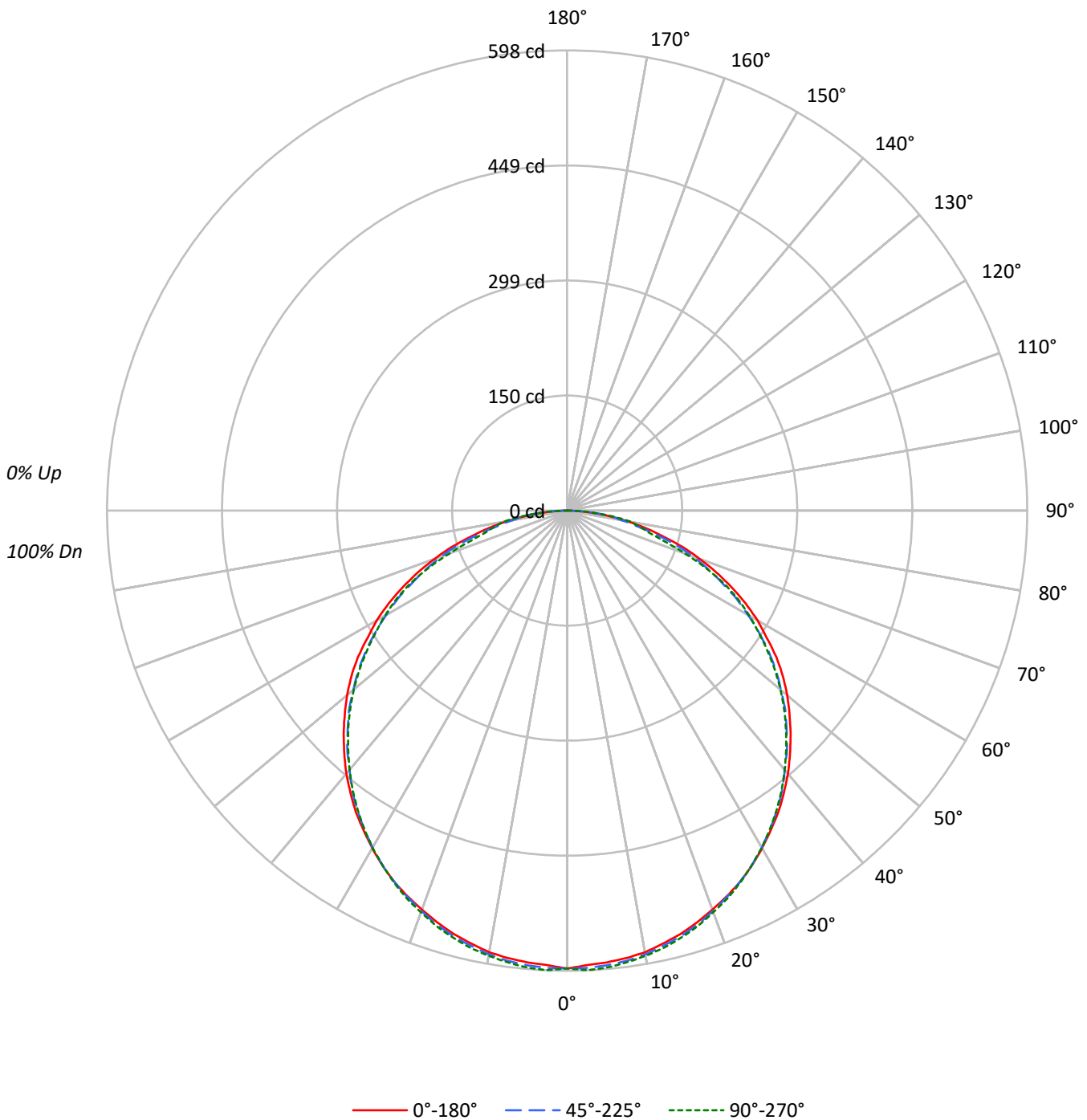
Lumens per Lamp: N/A
Luminaire Lumens: 1752.0 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.38
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
CIE Type: Direct

Input Watts (W): 18.8
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT

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Luminous Intensity Polar Plot





TEST NUMBER: P184321

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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 103 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 |
| 3 | 90 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 80 | 68 | 60 | 53 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 45 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 35 | 63 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 35 | 32 |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 42 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 41 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3202 | 3202 | 3202 |
| 5° | 3157 | 3175 | 3206 |
| 10° | 3130 | 3142 | 3183 |
| 15° | 3091 | 3102 | 3158 |
| 20° | 3049 | 3053 | 3125 |
| 25° | 3018 | 3010 | 3093 |
| 30° | 2977 | 2961 | 3055 |
| 35° | 2938 | 2909 | 3013 |
| 40° | 2894 | 2838 | 2966 |
| 45° | 2842 | 2775 | 2916 |
| 50° | 2792 | 2697 | 2860 |
| 55° | 2724 | 2604 | 2782 |
| 60° | 2622 | 2471 | 2709 |
| 65° | 2474 | 2301 | 2595 |
| 70° | 2263 | 2119 | 2250 |
| 75° | 1950 | 1779 | 1910 |
| 80° | 1543 | 1382 | 2021 |
| 85° | 948 | 1049 | 1442 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 56.4 | 3.2 |
| 10°-20° | 161.4 | 9.2 |
| 20°-30° | 245.2 | 14.0 |
| 30°-40° | 297.6 | 17.0 |
| 40°-50° | 312.4 | 17.8 |
| 50°-60° | 287.7 | 16.4 |
| 60°-70° | 223.5 | 12.8 |
| 70°-80° | 127.7 | 7.3 |
| 80°-90° | 40.1 | 2.3 |
| 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° | 463.0 | 26.4 |
| 0°-40° | 760.6 | 43.4 |
| 0°-60° | 1360.6 | 77.7 |
| 0°-90° | 1752.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1752.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 595 | 595 | 595 | 595 | 595 | |
| 5° | 589 | 591 | 593 | 595 | 596 | 56 |
| 15° | 570 | 571 | 572 | 573 | 574 | 161 |
| 25° | 532 | 531 | 532 | 532 | 533 | 245 |
| 35° | 478 | 478 | 476 | 475 | 475 | 299 |
| 45° | 411 | 409 | 403 | 400 | 402 | 317 |
| 55° | 332 | 328 | 320 | 317 | 318 | 296 |
| 65° | 236 | 231 | 222 | 224 | 226 | 233 |
| 75° | 129 | 126 | 119 | 108 | 109 | 137 |
| 85° | 33 | 34 | 38 | 37 | 37 | 38 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P184321

CATALOG NUMBER: ENW/ENC-12-2-LD1-17-40-CA080-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 595.0 | 595.0 | 595.0 | 595.0 | 595.0 |
| 2.5° | 591.3 | 593.1 | 595.0 | 596.9 | 597.8 |
| 5° | 589.4 | 591.3 | 593.1 | 595.0 | 596.0 |
| 7.5° | 586.6 | 587.5 | 590.3 | 592.2 | 592.2 |
| 10° | 582.8 | 582.8 | 585.6 | 587.5 | 587.5 |
| 12.5° | 576.2 | 577.2 | 579.0 | 580.9 | 581.9 |
| 15° | 569.6 | 570.6 | 572.5 | 573.4 | 574.3 |
| 17.5° | 561.2 | 562.1 | 564.0 | 564.9 | 565.9 |
| 20° | 551.8 | 552.7 | 553.7 | 554.6 | 555.5 |
| 22.5° | 542.4 | 542.4 | 543.3 | 544.3 | 545.2 |
| 25° | 532.0 | 531.1 | 532.0 | 532.0 | 533.0 |
| 27.5° | 519.8 | 519.8 | 519.8 | 518.9 | 519.8 |
| 30° | 506.7 | 506.7 | 505.7 | 504.8 | 505.7 |
| 32.5° | 492.6 | 492.6 | 490.7 | 489.7 | 490.7 |
| 35° | 478.5 | 477.5 | 475.6 | 474.7 | 474.7 |
| 37.5° | 462.5 | 460.6 | 458.7 | 456.8 | 457.8 |
| 40° | 446.5 | 444.6 | 439.9 | 438.0 | 439.9 |
| 42.5° | 428.6 | 426.8 | 423.0 | 420.2 | 421.1 |
| 45° | 410.8 | 408.9 | 403.3 | 400.4 | 402.3 |
| 47.5° | 392.0 | 390.1 | 384.5 | 381.6 | 382.6 |
| 50° | 373.2 | 369.4 | 362.8 | 360.0 | 361.9 |
| 52.5° | 353.4 | 349.7 | 342.2 | 338.4 | 340.3 |
| 55° | 331.8 | 328.1 | 319.6 | 316.8 | 317.7 |
| 57.5° | 307.4 | 305.5 | 296.1 | 293.3 | 295.2 |
| 60° | 285.8 | 281.1 | 271.7 | 270.7 | 273.5 |
| 62.5° | 261.3 | 255.7 | 248.2 | 247.2 | 251.0 |
| 65° | 235.9 | 231.2 | 221.8 | 223.7 | 225.6 |
| 67.5° | 209.6 | 204.9 | 197.4 | 197.4 | 195.5 |
| 70° | 183.3 | 177.7 | 173.9 | 165.4 | 162.6 |
| 72.5° | 157.0 | 152.3 | 147.6 | 133.5 | 131.6 |
| 75° | 128.8 | 126.0 | 119.4 | 108.1 | 109.0 |
| 77.5° | 103.4 | 102.5 | 92.1 | 92.1 | 96.8 |
| 80° | 78.0 | 78.0 | 71.4 | 79.9 | 83.7 |
| 82.5° | 54.5 | 52.6 | 58.3 | 61.1 | 62.0 |
| 85° | 32.9 | 33.8 | 37.6 | 36.7 | 36.7 |
| 87.5° | 14.1 | 15.0 | 16.0 | 16.0 | 16.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)