

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: P184351

Luminaire Tested: **ENW/ENC-12-2-LD1-35-40-CP250-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P184351
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-LD1-35-40-CP250-UNV-EDC1
Description: FAIL-SAFE 1X2 ENCOUNTER W/ 0.250" THICK POLY LENS
Light Source: 4000K LEDS
Ballast/Driver: -

Summary

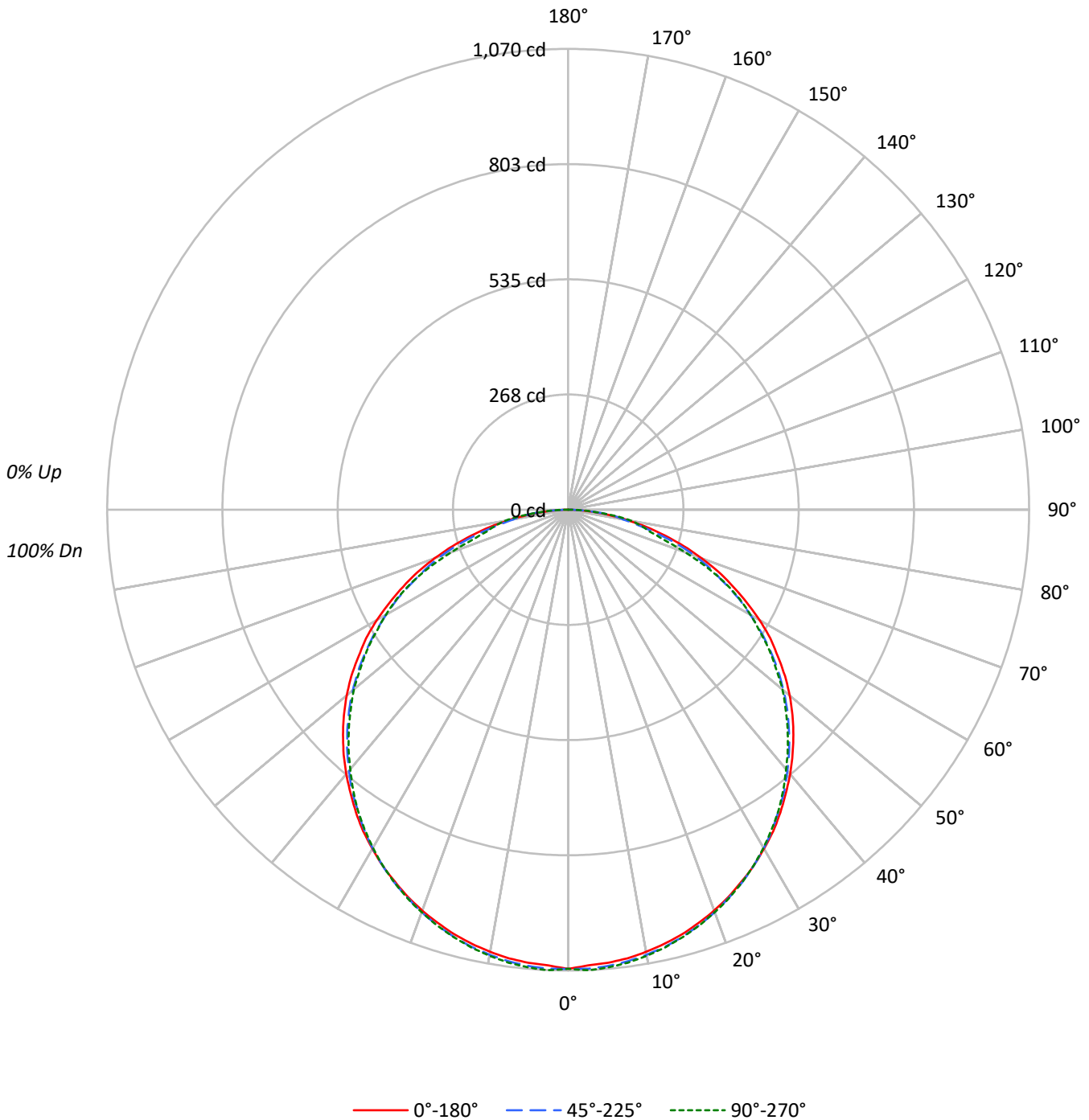
Lumens per Lamp: N/A
Luminaire Lumens: 3144.0 lumens
Efficiency: N/A
Efficacy: 76.7 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.26 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.1')
CIE Type: Direct

Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): 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





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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 | 67 | 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 | 34 | 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° | 5737 | 5737 | 5737 |
| 5° | 5680 | 5692 | 5713 |
| 10° | 5647 | 5629 | 5648 |
| 15° | 5611 | 5561 | 5575 |
| 20° | 5571 | 5485 | 5496 |
| 25° | 5528 | 5404 | 5419 |
| 30° | 5490 | 5317 | 5325 |
| 35° | 5450 | 5210 | 5230 |
| 40° | 5404 | 5105 | 5102 |
| 45° | 5358 | 4988 | 4981 |
| 50° | 5304 | 4852 | 4858 |
| 55° | 5201 | 4675 | 4683 |
| 60° | 5084 | 4438 | 4486 |
| 65° | 4859 | 4131 | 4210 |
| 70° | 4556 | 3818 | 3577 |
| 75° | 4092 | 3179 | 2963 |
| 80° | 3388 | 2504 | 2974 |
| 85° | 2279 | 1853 | 1913 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.0 | 3.2 |
| 10°-20° | 289.3 | 9.2 |
| 20°-30° | 439.8 | 14.0 |
| 30°-40° | 533.9 | 17.0 |
| 40°-50° | 561.2 | 17.9 |
| 50°-60° | 516.5 | 16.4 |
| 60°-70° | 400.9 | 12.8 |
| 70°-80° | 229.4 | 7.3 |
| 80°-90° | 72.0 | 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° | 830.0 | 26.4 |
| 0°-40° | 1364.0 | 43.4 |
| 0°-60° | 2441.7 | 77.7 |
| 0°-90° | 3144.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3144.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1066 | 1066 | 1066 | 1066 | 1066 | |
| 5° | 1056 | 1058 | 1063 | 1067 | 1067 | 100 |
| 15° | 1021 | 1022 | 1026 | 1027 | 1027 | 288 |
| 25° | 953 | 953 | 955 | 954 | 955 | 439 |
| 35° | 858 | 855 | 852 | 850 | 852 | 537 |
| 45° | 739 | 734 | 725 | 721 | 720 | 570 |
| 55° | 594 | 587 | 574 | 570 | 570 | 532 |
| 65° | 422 | 415 | 398 | 402 | 402 | 418 |
| 75° | 234 | 226 | 213 | 197 | 196 | 247 |
| 85° | 58 | 59 | 66 | 68 | 66 | 68 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P184351

CATALOG NUMBER: ENW/ENC-12-2-LD1-35-40-CP250-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1066.0 | 1066.0 | 1066.0 | 1066.0 | 1066.0 |
| 2.5° | 1059.2 | 1061.8 | 1066.8 | 1070.2 | 1070.2 |
| 5° | 1055.9 | 1058.4 | 1063.4 | 1066.8 | 1066.8 |
| 7.5° | 1050.8 | 1053.4 | 1057.6 | 1060.9 | 1060.9 |
| 10° | 1042.4 | 1045.0 | 1049.2 | 1051.7 | 1051.7 |
| 12.5° | 1032.4 | 1034.9 | 1039.1 | 1040.8 | 1040.8 |
| 15° | 1020.6 | 1022.3 | 1026.5 | 1027.3 | 1027.3 |
| 17.5° | 1006.3 | 1007.2 | 1011.4 | 1011.4 | 1012.2 |
| 20° | 990.4 | 991.2 | 994.6 | 994.6 | 994.6 |
| 22.5° | 972.7 | 972.7 | 975.2 | 975.2 | 976.1 |
| 25° | 952.6 | 952.6 | 955.1 | 954.2 | 955.1 |
| 27.5° | 932.4 | 931.6 | 932.4 | 930.7 | 931.6 |
| 30° | 908.9 | 908.9 | 908.0 | 906.4 | 906.4 |
| 32.5° | 885.4 | 882.8 | 881.2 | 879.5 | 879.5 |
| 35° | 858.5 | 855.1 | 851.8 | 850.1 | 851.8 |
| 37.5° | 829.9 | 827.4 | 824.0 | 819.0 | 819.8 |
| 40° | 801.4 | 798.8 | 791.3 | 787.1 | 787.1 |
| 42.5° | 771.1 | 766.9 | 759.4 | 755.2 | 754.3 |
| 45° | 739.2 | 734.2 | 724.9 | 720.7 | 719.9 |
| 47.5° | 706.4 | 701.4 | 689.6 | 685.4 | 684.6 |
| 50° | 671.2 | 665.3 | 652.7 | 648.5 | 649.3 |
| 52.5° | 634.2 | 627.5 | 614.0 | 610.7 | 609.0 |
| 55° | 593.9 | 587.2 | 573.7 | 569.5 | 570.4 |
| 57.5° | 556.1 | 547.7 | 531.7 | 526.7 | 528.4 |
| 60° | 513.2 | 503.2 | 488.0 | 485.5 | 488.9 |
| 62.5° | 467.9 | 459.5 | 446.0 | 443.5 | 448.6 |
| 65° | 422.5 | 415.0 | 398.2 | 401.5 | 401.5 |
| 67.5° | 378.0 | 367.9 | 357.0 | 351.1 | 346.9 |
| 70° | 329.3 | 320.0 | 313.3 | 296.5 | 289.8 |
| 72.5° | 281.4 | 273.0 | 265.4 | 240.2 | 233.5 |
| 75° | 233.5 | 226.0 | 213.4 | 196.6 | 195.7 |
| 77.5° | 185.6 | 182.3 | 166.3 | 166.3 | 173.9 |
| 80° | 140.3 | 139.4 | 129.4 | 143.6 | 150.4 |
| 82.5° | 96.6 | 94.1 | 104.2 | 111.7 | 110.0 |
| 85° | 58.0 | 58.8 | 66.4 | 68.0 | 66.4 |
| 87.5° | 25.2 | 26.0 | 27.7 | 30.2 | 27.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)