

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: P184367

Luminaire Tested: **ENW/ENC-12-4-LD1-43-40-CP250-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P184367
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P32844)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ENW/ENC-12-4-LD1-43-40-CP250-UNV-EDC1
Description: FAIL-SAFE 1X4 ENCOUNTER W/ 0.250" THICK CLEAR POLY LENS
Light Source: 4000K LEDS
Ballast/Driver: -

Summary

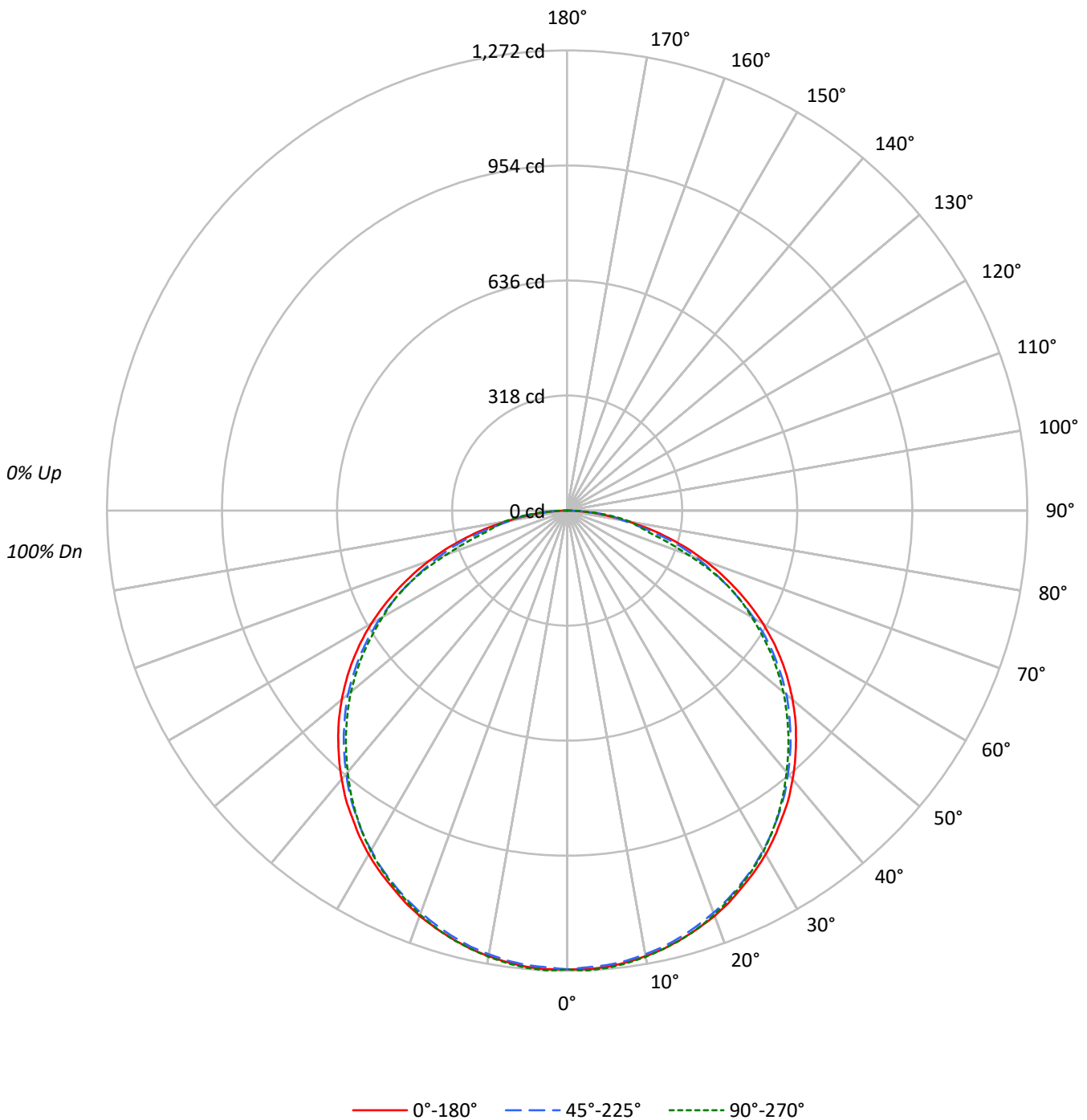
Lumens per Lamp: N/A
Luminaire Lumens: 3795.9 lumens
Efficiency: N/A
Efficacy: 80.8 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 47
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 | 93 | 97 | 94 | 90 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 81 | 76 | 84 | 79 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 |
| 3 | 89 | 79 | 70 | 64 | 87 | 77 | 69 | 63 | 74 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 60 | 57 |
| 4 | 82 | 69 | 60 | 54 | 79 | 68 | 60 | 53 | 66 | 58 | 52 | 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 | 39 | 51 | 44 | 39 | 50 | 43 | 39 | 37 |
| 7 | 64 | 50 | 41 | 35 | 62 | 50 | 41 | 35 | 48 | 40 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 31 | 58 | 45 | 37 | 31 | 44 | 36 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 41 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 25 | 51 | 38 | 31 | 25 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 3412 | 3412 | 3412 |
| 5° | 3413 | 3380 | 3398 |
| 10° | 3403 | 3351 | 3363 |
| 15° | 3391 | 3319 | 3327 |
| 20° | 3384 | 3282 | 3285 |
| 25° | 3367 | 3244 | 3237 |
| 30° | 3362 | 3204 | 3191 |
| 35° | 3344 | 3159 | 3129 |
| 40° | 3336 | 3106 | 3058 |
| 45° | 3323 | 3053 | 2991 |
| 50° | 3306 | 2998 | 2918 |
| 55° | 3278 | 2909 | 2824 |
| 60° | 3226 | 2789 | 2701 |
| 65° | 3127 | 2607 | 2558 |
| 70° | 2984 | 2411 | 2180 |
| 75° | 2746 | 2094 | 1771 |
| 80° | 2277 | 1616 | 1746 |
| 85° | 1631 | 1282 | 1192 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 120.3 | 3.2 |
| 10°-20° | 345.4 | 9.1 |
| 20°-30° | 526.5 | 13.9 |
| 30°-40° | 641.2 | 16.9 |
| 40°-50° | 676.4 | 17.8 |
| 50°-60° | 627.0 | 16.5 |
| 60°-70° | 489.9 | 12.9 |
| 70°-80° | 281.2 | 7.4 |
| 80°-90° | 88.1 | 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° | 992.1 | 26.1 |
| 0°-40° | 1633.3 | 43.0 |
| 0°-60° | 2936.7 | 77.4 |
| 0°-90° | 3795.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3795.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1268 | 1268 | 1268 | 1268 | 1268 | |
| 5° | 1266 | 1266 | 1261 | 1266 | 1269 | 120 |
| 15° | 1226 | 1226 | 1219 | 1223 | 1226 | 346 |
| 25° | 1147 | 1144 | 1138 | 1140 | 1141 | 530 |
| 35° | 1036 | 1032 | 1021 | 1018 | 1019 | 649 |
| 45° | 895 | 889 | 873 | 866 | 864 | 691 |
| 55° | 724 | 715 | 698 | 690 | 688 | 646 |
| 65° | 518 | 509 | 487 | 489 | 488 | 512 |
| 75° | 289 | 277 | 268 | 239 | 234 | 304 |
| 85° | 68 | 72 | 84 | 82 | 83 | 81 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1268.1 | 1268.1 | 1268.1 | 1268.1 | 1268.1 |
| 2.5° | 1269.0 | 1268.1 | 1263.7 | 1269.8 | 1272.4 |
| 5° | 1266.3 | 1265.5 | 1261.1 | 1266.3 | 1269.0 |
| 7.5° | 1259.4 | 1260.2 | 1255.1 | 1259.4 | 1262.0 |
| 10° | 1250.7 | 1249.8 | 1245.4 | 1250.7 | 1252.4 |
| 12.5° | 1240.2 | 1238.5 | 1234.2 | 1237.6 | 1240.2 |
| 15° | 1225.5 | 1225.5 | 1219.4 | 1222.9 | 1226.4 |
| 17.5° | 1209.8 | 1208.1 | 1202.0 | 1207.3 | 1208.9 |
| 20° | 1192.4 | 1189.8 | 1182.9 | 1186.3 | 1188.9 |
| 22.5° | 1171.5 | 1168.1 | 1161.9 | 1164.5 | 1165.4 |
| 25° | 1147.2 | 1144.5 | 1137.6 | 1140.2 | 1141.1 |
| 27.5° | 1123.7 | 1119.3 | 1113.3 | 1113.3 | 1115.0 |
| 30° | 1097.6 | 1091.5 | 1083.7 | 1083.7 | 1086.3 |
| 32.5° | 1068.0 | 1062.0 | 1054.1 | 1052.4 | 1054.1 |
| 35° | 1035.9 | 1031.5 | 1021.1 | 1018.5 | 1019.3 |
| 37.5° | 1005.5 | 998.5 | 988.0 | 982.0 | 982.8 |
| 40° | 969.7 | 963.7 | 949.8 | 943.6 | 943.6 |
| 42.5° | 933.2 | 927.2 | 912.4 | 905.4 | 904.5 |
| 45° | 895.0 | 888.9 | 873.2 | 866.3 | 864.5 |
| 47.5° | 855.9 | 847.9 | 832.3 | 824.5 | 822.7 |
| 50° | 813.2 | 805.4 | 791.5 | 781.0 | 780.2 |
| 52.5° | 769.7 | 761.9 | 745.4 | 735.8 | 734.9 |
| 55° | 723.6 | 714.9 | 698.4 | 689.7 | 688.0 |
| 57.5° | 675.7 | 667.1 | 649.7 | 641.0 | 637.6 |
| 60° | 625.3 | 615.8 | 597.5 | 588.8 | 588.8 |
| 62.5° | 572.3 | 562.7 | 542.7 | 538.3 | 542.7 |
| 65° | 517.5 | 508.8 | 487.0 | 488.8 | 487.9 |
| 67.5° | 462.7 | 453.1 | 432.2 | 434.8 | 425.3 |
| 70° | 405.3 | 394.9 | 380.9 | 367.9 | 353.2 |
| 72.5° | 347.9 | 335.7 | 328.8 | 298.4 | 291.4 |
| 75° | 288.8 | 276.6 | 267.9 | 239.1 | 233.9 |
| 77.5° | 230.5 | 223.5 | 204.4 | 195.7 | 202.7 |
| 80° | 167.8 | 174.8 | 156.6 | 169.6 | 176.6 |
| 82.5° | 117.4 | 117.4 | 127.0 | 134.8 | 134.8 |
| 85° | 67.9 | 72.1 | 83.5 | 81.8 | 82.7 |
| 87.5° | 29.6 | 36.5 | 34.8 | 36.5 | 35.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)