

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: P184320

Luminaire Tested: **ENW/ENC-12-2-LD1-13-40-CA080-UNV-EDC1**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P184320
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-LD1-13-40-CA080-UNV-EDC1
Description: FAIL-SAFE ENCOUNTER W/ 0.080" THICK CLEAR ACRYLIC LENS
Light Source: 4000K LEDS
Ballast/Driver: -

Summary

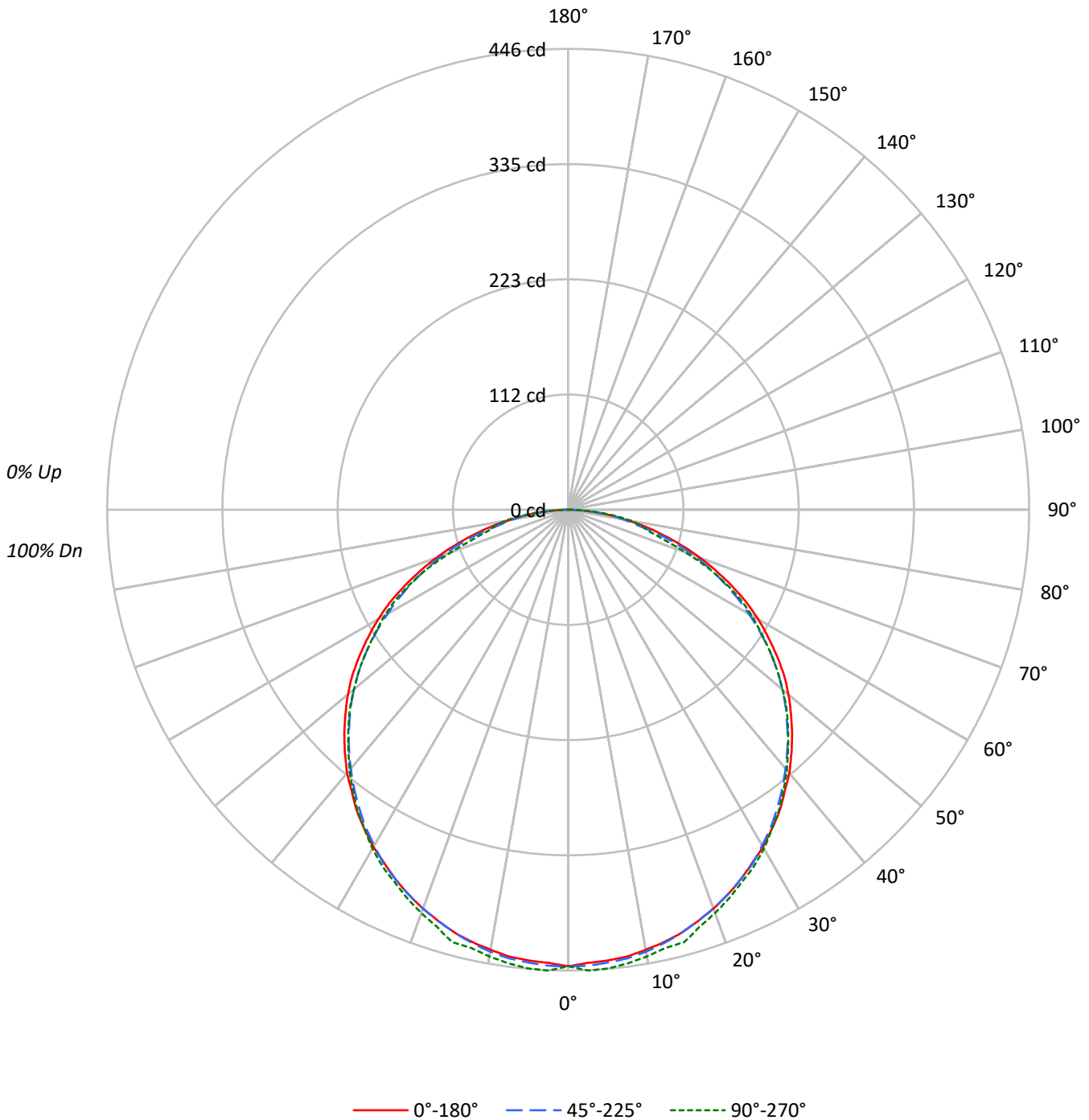
Lumens per Lamp: N/A
Luminaire Lumens: 1304.7 lumens
Efficiency: N/A
Efficacy: 83.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.27 / 1.39
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
CIE Type: Direct

Input Watts (W): 15.7
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

TEST NUMBER: P184320

CATALOG NUMBER: ENW/ENC-12-2-LD1-13-40-CA080-UNV-EDC1

Luminous Intensity Polar Plot





TEST NUMBER: P184320

CATALOG NUMBER: ENW/ENC-12-2-LD1-13-40-CA080-UNV-EDC1

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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|------|------|------|
| 0° | 2378 | 2378 | 2378 |
| 5° | 2346 | 2355 | 2397 |
| 10° | 2322 | 2330 | 2378 |
| 15° | 2300 | 2297 | 2382 |
| 20° | 2270 | 2265 | 2337 |
| 25° | 2240 | 2234 | 2307 |
| 30° | 2214 | 2197 | 2288 |
| 35° | 2188 | 2156 | 2255 |
| 40° | 2157 | 2110 | 2218 |
| 45° | 2120 | 2064 | 2180 |
| 50° | 2081 | 2012 | 2139 |
| 55° | 2022 | 1938 | 2083 |
| 60° | 1949 | 1838 | 2030 |
| 65° | 1833 | 1716 | 1924 |
| 70° | 1671 | 1569 | 1664 |
| 75° | 1452 | 1317 | 1416 |
| 80° | 1133 | 1037 | 1497 |
| 85° | 677 | 762 | 1108 |



TEST NUMBER: P184320

CATALOG NUMBER: ENW/ENC-12-2-LD1-13-40-CA080-UNV-EDC1

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 41.9 | 3.2 |
| 10°-20° | 120.1 | 9.2 |
| 20°-30° | 182.3 | 14.0 |
| 30°-40° | 221.5 | 17.0 |
| 40°-50° | 232.9 | 17.8 |
| 50°-60° | 214.5 | 16.4 |
| 60°-70° | 166.6 | 12.8 |
| 70°-80° | 95.0 | 7.3 |
| 80°-90° | 29.9 | 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° | 344.3 | 26.4 |
| 0°-40° | 565.8 | 43.4 |
| 0°-60° | 1013.2 | 77.7 |
| 0°-90° | 1304.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1304.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 442 | 442 | 442 | 442 | 442 | |
| 5° | 438 | 439 | 440 | 442 | 446 | 42 |
| 15° | 424 | 425 | 424 | 426 | 433 | 120 |
| 25° | 395 | 396 | 395 | 396 | 398 | 182 |
| 35° | 356 | 355 | 352 | 352 | 355 | 223 |
| 45° | 306 | 305 | 300 | 299 | 301 | 236 |
| 55° | 246 | 244 | 238 | 236 | 238 | 220 |
| 65° | 175 | 172 | 165 | 167 | 167 | 173 |
| 75° | 96 | 94 | 88 | 81 | 81 | 102 |
| 85° | 24 | 25 | 27 | 28 | 28 | 28 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P184320

CATALOG NUMBER: ENW/ENC-12-2-LD1-13-40-CA080-UNV-EDC1

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 441.8 | 441.8 | 441.8 | 441.8 | 441.8 |
| 2.5° | 439.0 | 440.9 | 441.8 | 442.7 | 446.5 |
| 5° | 438.0 | 439.0 | 439.9 | 441.8 | 445.6 |
| 7.5° | 436.2 | 437.1 | 438.0 | 440.9 | 442.7 |
| 10° | 432.4 | 433.3 | 434.3 | 435.2 | 439.0 |
| 12.5° | 428.6 | 429.6 | 429.6 | 431.5 | 434.3 |
| 15° | 423.9 | 424.9 | 423.9 | 425.8 | 433.3 |
| 17.5° | 417.4 | 420.2 | 417.4 | 419.2 | 423.0 |
| 20° | 410.8 | 411.7 | 410.8 | 411.7 | 415.5 |
| 22.5° | 403.3 | 403.3 | 403.3 | 402.3 | 407.0 |
| 25° | 394.8 | 395.7 | 394.8 | 395.7 | 397.6 |
| 27.5° | 385.4 | 387.3 | 386.3 | 385.4 | 389.2 |
| 30° | 376.9 | 376.9 | 375.1 | 375.1 | 378.8 |
| 32.5° | 366.6 | 368.5 | 364.7 | 364.7 | 366.6 |
| 35° | 356.3 | 355.3 | 352.5 | 352.5 | 355.3 |
| 37.5° | 344.0 | 343.1 | 340.3 | 339.3 | 342.2 |
| 40° | 332.8 | 330.9 | 327.1 | 327.1 | 329.0 |
| 42.5° | 319.6 | 317.7 | 314.0 | 313.0 | 314.9 |
| 45° | 306.4 | 304.6 | 299.9 | 298.9 | 300.8 |
| 47.5° | 292.3 | 291.4 | 285.8 | 284.8 | 286.7 |
| 50° | 278.2 | 276.4 | 270.7 | 268.8 | 270.7 |
| 52.5° | 263.2 | 260.4 | 254.7 | 252.9 | 254.7 |
| 55° | 246.3 | 244.4 | 237.8 | 235.9 | 237.8 |
| 57.5° | 229.4 | 227.5 | 220.0 | 219.0 | 220.9 |
| 60° | 212.4 | 209.6 | 202.1 | 202.1 | 204.9 |
| 62.5° | 194.6 | 190.8 | 184.2 | 185.2 | 188.0 |
| 65° | 174.8 | 172.0 | 165.4 | 167.3 | 167.3 |
| 67.5° | 155.1 | 153.2 | 147.6 | 146.6 | 145.7 |
| 70° | 135.4 | 133.5 | 128.8 | 124.1 | 120.3 |
| 72.5° | 115.6 | 112.8 | 110.0 | 99.6 | 97.8 |
| 75° | 95.9 | 94.0 | 88.4 | 80.8 | 80.8 |
| 77.5° | 77.1 | 76.1 | 68.6 | 68.6 | 72.4 |
| 80° | 57.3 | 58.3 | 53.6 | 59.2 | 62.0 |
| 82.5° | 40.4 | 39.5 | 43.2 | 46.1 | 46.1 |
| 85° | 23.5 | 25.4 | 27.3 | 28.2 | 28.2 |
| 87.5° | 10.3 | 11.3 | 11.3 | 12.2 | 11.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)