

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: PORTFOLIO

Report Number: P247491

Luminaire Tested: **LD8B90D010 ER8B90840 8LBW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247491
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-61)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B90D010 ER8B90840 8LBW0GPH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8494.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.13 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

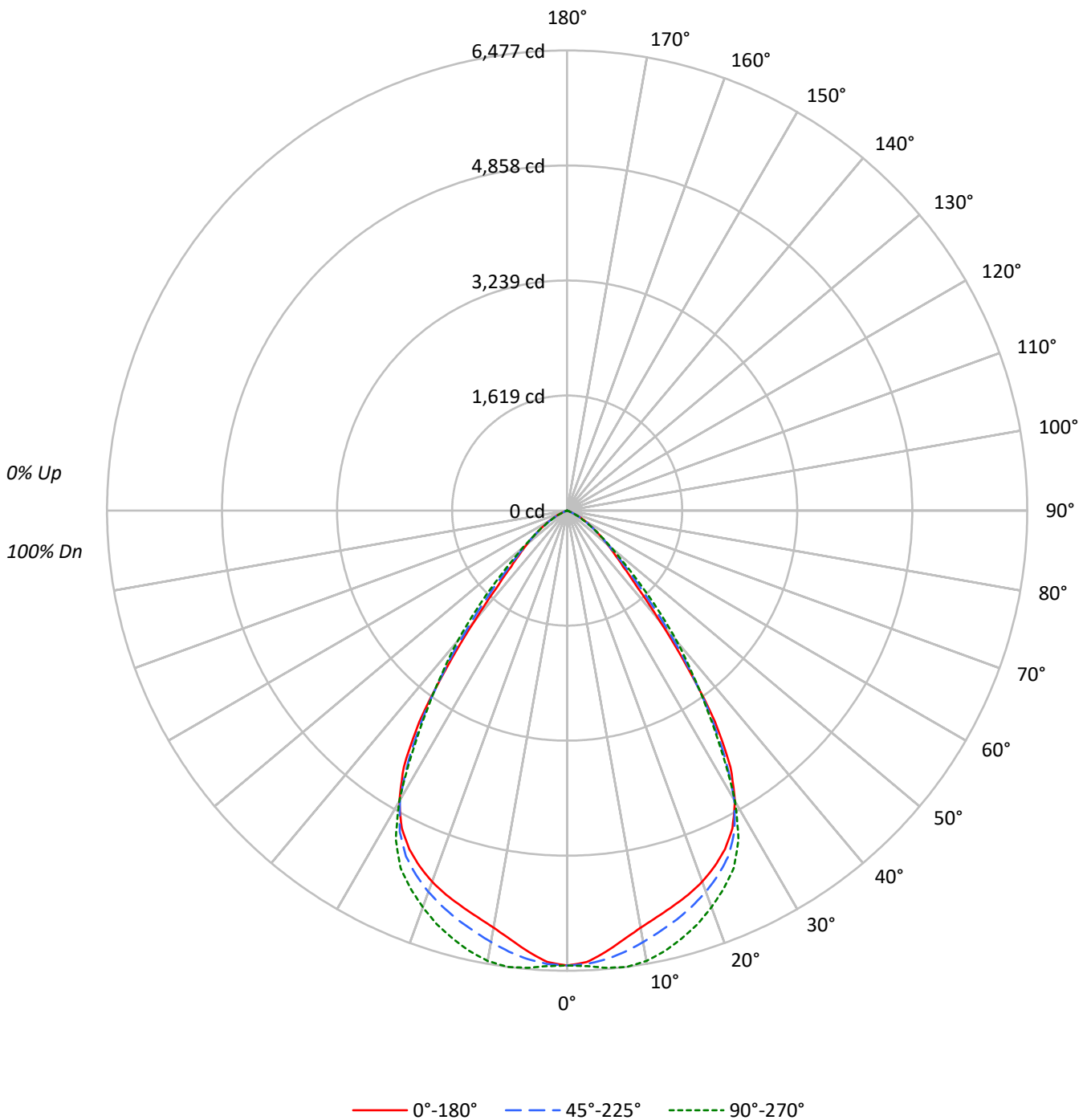
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | | 100 | 98 | 97 | | 96 | 95 | 94 | 92 |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | | 93 | 90 | 87 | | 90 | 88 | 85 | 84 |
| 3 | 100 | 93 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | | 86 | 82 | 79 | | 84 | 81 | 78 | 76 |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 74 | 82 | 77 | 73 | | 80 | 75 | 72 | | 78 | 74 | 71 | 69 |
| 5 | 88 | 79 | 72 | 67 | 86 | 78 | 72 | 67 | 76 | 70 | 66 | | 74 | 69 | 66 | | 72 | 68 | 65 | 63 |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 66 | 61 | 70 | 65 | 61 | | 69 | 64 | 60 | | 68 | 63 | 60 | 58 |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 61 | 56 | 66 | 60 | 56 | | 64 | 59 | 55 | | 63 | 59 | 55 | 53 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 55 | 51 | | 60 | 55 | 51 | | 59 | 54 | 51 | 49 |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 47 | | 56 | 51 | 47 | | 55 | 51 | 47 | 46 |
| 10 | 66 | 55 | 49 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 44 | | 53 | 48 | 44 | | 52 | 47 | 44 | 42 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 197457 | 197457 | 197457 |
| 5° | 192980 | 196237 | 199979 |
| 10° | 186595 | 193111 | 201518 |
| 15° | 183956 | 190242 | 199066 |
| 20° | 182407 | 187402 | 194930 |
| 25° | 178889 | 182692 | 188824 |
| 30° | 168163 | 167526 | 168324 |
| 35° | 136637 | 132045 | 130023 |
| 40° | 81116 | 89404 | 96835 |
| 45° | 48550 | 54651 | 62065 |
| 50° | 35370 | 36287 | 38968 |
| 55° | 25623 | 24725 | 25263 |
| 60° | 17392 | 16078 | 15455 |
| 65° | 8734 | 8085 | 7676 |
| 70° | 2425 | 2119 | 1920 |
| 75° | 929 | 667 | 667 |
| 80° | 391 | 391 | 195 |
| 85° | 389 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 600.4 | 7.1 |
| 10°-20° | 1686.0 | 19.8 |
| 20°-30° | 2450.5 | 28.9 |
| 30°-40° | 2167.1 | 25.5 |
| 40°-50° | 1030.9 | 12.1 |
| 50°-60° | 429.4 | 5.1 |
| 60°-70° | 120.0 | 1.4 |
| 70°-80° | 9.1 | 0.1 |
| 80°-90° | 0.7 | 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° | 4736.9 | 55.8 |
| 0°-40° | 6904.0 | 81.3 |
| 0°-60° | 8364.3 | 98.5 |
| 0°-90° | 8494.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8494.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 6403 | 6403 | 6403 | 6403 | 6403 | |
| 5° | 6234 | 6266 | 6340 | 6424 | 6460 | 586 |
| 15° | 5762 | 5815 | 5959 | 6140 | 6236 | 1628 |
| 25° | 5258 | 5281 | 5370 | 5488 | 5550 | 2403 |
| 35° | 3630 | 3578 | 3508 | 3454 | 3454 | 2172 |
| 45° | 1113 | 1152 | 1253 | 1370 | 1423 | 927 |
| 55° | 477 | 471 | 460 | 460 | 470 | 434 |
| 65° | 120 | 118 | 111 | 106 | 105 | 130 |
| 75° | 8 | 7 | 6 | 6 | 6 | 11 |
| 85° | 1 | 1 | 0 | 0 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 6403.4 | 6403.4 | 6403.4 | 6403.4 | 6403.4 |
| 2.5° | 6360.9 | 6366.5 | 6387.7 | 6407.9 | 6416.8 |
| 5° | 6234.4 | 6265.8 | 6339.6 | 6423.5 | 6460.5 |
| 7.5° | 6090.1 | 6137.1 | 6261.3 | 6409.0 | 6477.2 |
| 10° | 5959.2 | 6018.5 | 6167.3 | 6349.7 | 6435.8 |
| 12.5° | 5856.3 | 5911.1 | 6063.3 | 6253.5 | 6350.8 |
| 15° | 5762.3 | 5814.9 | 5959.2 | 6140.5 | 6235.6 |
| 17.5° | 5668.3 | 5718.6 | 5842.8 | 6011.8 | 6103.5 |
| 20° | 5558.6 | 5598.9 | 5710.8 | 5859.6 | 5940.2 |
| 22.5° | 5422.1 | 5459.1 | 5553.0 | 5685.1 | 5757.8 |
| 25° | 5257.7 | 5281.2 | 5369.5 | 5488.1 | 5549.7 |
| 27.5° | 5039.5 | 5045.1 | 5098.8 | 5176.0 | 5221.9 |
| 30° | 4722.8 | 4719.5 | 4704.9 | 4701.6 | 4727.3 |
| 32.5° | 4279.7 | 4230.5 | 4145.5 | 4105.2 | 4073.9 |
| 35° | 3629.7 | 3578.2 | 3507.7 | 3454.0 | 3454.0 |
| 37.5° | 2774.8 | 2819.6 | 2847.6 | 2881.1 | 2897.9 |
| 40° | 2015.1 | 2081.1 | 2221.0 | 2366.4 | 2405.6 |
| 42.5° | 1464.6 | 1526.2 | 1677.2 | 1839.5 | 1886.4 |
| 45° | 1113.3 | 1152.5 | 1253.2 | 1369.5 | 1423.2 |
| 47.5° | 899.6 | 910.8 | 961.1 | 1030.5 | 1056.2 |
| 50° | 737.3 | 740.7 | 756.4 | 792.2 | 812.3 |
| 52.5° | 596.4 | 594.1 | 598.6 | 608.7 | 617.6 |
| 55° | 476.6 | 471.1 | 459.9 | 459.9 | 469.9 |
| 57.5° | 368.1 | 360.3 | 348.0 | 342.4 | 339.0 |
| 60° | 282.0 | 274.1 | 260.7 | 251.7 | 250.6 |
| 62.5° | 202.5 | 195.8 | 182.4 | 174.5 | 172.3 |
| 65° | 119.7 | 117.5 | 110.8 | 106.3 | 105.2 |
| 67.5° | 55.9 | 53.7 | 48.1 | 45.9 | 44.8 |
| 70° | 26.9 | 25.7 | 23.5 | 22.4 | 21.3 |
| 72.5° | 13.4 | 13.4 | 11.2 | 11.2 | 11.2 |
| 75° | 7.8 | 6.7 | 5.6 | 5.6 | 5.6 |
| 77.5° | 4.5 | 3.4 | 3.4 | 3.4 | 3.4 |
| 80° | 2.2 | 2.2 | 2.2 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)