

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: P247659

Luminaire Tested: **LD8B90D010 ER8B90950 8LBS0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247659
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-87)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B90D010 ER8B90950 8LBS0B
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT
90 CRI 5000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8076.0 lumens
Efficiency: N/A
Efficacy: 93.8 lumens/watt
Spacing Criteria (0/90/45): 1.17 / 1.18 / 1.23
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

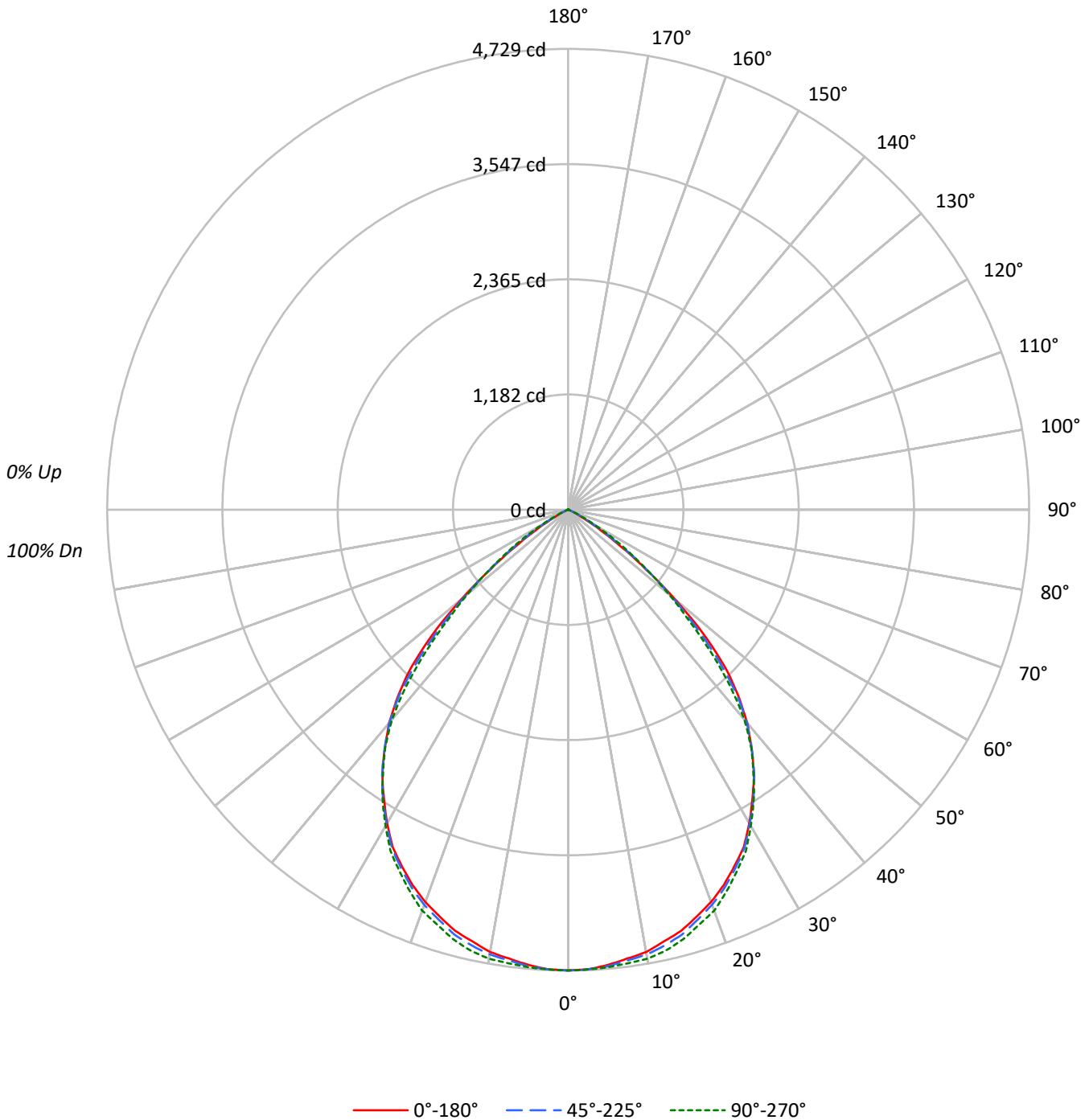
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P247659

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBS0B

Luminous Intensity Polar Plot





TEST NUMBER: P247659

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSOB

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 | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 97 | 96 | 95 | 94 | 93 | 91 |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 86 | 83 | 82 |
| 3 | 98 | 90 | 84 | 79 | 96 | 89 | 83 | 79 | 86 | 81 | 77 | 83 | 79 | 76 | 81 | 78 | 75 | 73 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 75 | 70 | 79 | 73 | 69 | 77 | 72 | 68 | 75 | 71 | 67 | 65 |
| 5 | 85 | 75 | 68 | 63 | 84 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 61 | 59 |
| 6 | 80 | 69 | 62 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 56 | 65 | 59 | 55 | 63 | 59 | 55 | 53 |
| 7 | 75 | 63 | 56 | 51 | 73 | 63 | 56 | 51 | 61 | 55 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 48 |
| 8 | 70 | 58 | 51 | 46 | 69 | 58 | 51 | 46 | 57 | 50 | 46 | 55 | 50 | 46 | 54 | 49 | 45 | 44 |
| 9 | 66 | 54 | 47 | 42 | 64 | 54 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 51 | 45 | 42 | 40 |
| 10 | 62 | 50 | 43 | 39 | 61 | 50 | 43 | 39 | 49 | 43 | 39 | 48 | 42 | 38 | 47 | 42 | 38 | 37 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 145813 | 145813 | 145813 |
| 5° | 145150 | 145534 | 145890 |
| 10° | 144323 | 145103 | 146471 |
| 15° | 142867 | 144096 | 145654 |
| 20° | 140584 | 141608 | 143685 |
| 25° | 137318 | 138060 | 139298 |
| 30° | 132243 | 132574 | 133425 |
| 35° | 125069 | 125265 | 124757 |
| 40° | 114925 | 114800 | 113214 |
| 45° | 98827 | 94793 | 90445 |
| 50° | 68707 | 66265 | 64423 |
| 55° | 35848 | 38972 | 41262 |
| 60° | 14542 | 17163 | 19920 |
| 65° | 4626 | 5684 | 6063 |
| 70° | 658 | 379 | 189 |
| 75° | 0 | 0 | 0 |
| 80° | 1651 | 373 | 550 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P247659

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBS0B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 446.6 | 5.5 |
| 10°-20° | 1270.8 | 15.7 |
| 20°-30° | 1866.9 | 23.1 |
| 30°-40° | 2066.9 | 25.6 |
| 40°-50° | 1647.2 | 20.4 |
| 50°-60° | 674.9 | 8.4 |
| 60°-70° | 99.4 | 1.2 |
| 70°-80° | 1.4 | 0.0 |
| 80°-90° | 2.0 | 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° | 3584.2 | 44.4 |
| 0°-40° | 5651.1 | 70.0 |
| 0°-60° | 7973.2 | 98.7 |
| 0°-90° | 8076.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8076.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 4729 | 4729 | 4729 | 4729 | 4729 | |
| 5° | 4689 | 4698 | 4702 | 4709 | 4713 | 445 |
| 15° | 4475 | 4478 | 4514 | 4556 | 4562 | 1259 |
| 25° | 4036 | 4032 | 4058 | 4082 | 4094 | 1856 |
| 35° | 3322 | 3318 | 3328 | 3323 | 3314 | 2065 |
| 45° | 2266 | 2245 | 2174 | 2093 | 2074 | 1701 |
| 55° | 667 | 690 | 725 | 766 | 768 | 641 |
| 65° | 63 | 66 | 78 | 85 | 83 | 84 |
| 75° | 0 | 0 | 0 | 0 | 0 | 3 |
| 85° | 0 | 0 | 0 | 4 | 0 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247659

CATALOG NUMBER: LD8B90D010 ER8B90950 8LBSOB

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 4728.6 | 4728.6 | 4728.6 | 4728.6 | 4728.6 |
| 2.5° | 4720.3 | 4721.4 | 4721.4 | 4716.2 | 4722.4 |
| 5° | 4689.2 | 4697.5 | 4701.6 | 4708.9 | 4713.1 |
| 7.5° | 4645.6 | 4643.5 | 4665.3 | 4691.3 | 4694.4 |
| 10° | 4609.2 | 4605.1 | 4634.1 | 4668.4 | 4677.8 |
| 12.5° | 4537.5 | 4542.7 | 4580.1 | 4615.4 | 4634.1 |
| 15° | 4475.2 | 4478.3 | 4513.7 | 4556.2 | 4562.5 |
| 17.5° | 4378.6 | 4388.0 | 4411.9 | 4456.5 | 4464.8 |
| 20° | 4284.1 | 4288.3 | 4315.3 | 4351.6 | 4378.6 |
| 22.5° | 4168.9 | 4176.1 | 4196.9 | 4229.1 | 4242.6 |
| 25° | 4035.9 | 4031.8 | 4057.7 | 4081.6 | 4094.1 |
| 27.5° | 3900.9 | 3893.6 | 3913.4 | 3936.2 | 3947.6 |
| 30° | 3714.0 | 3711.9 | 3723.3 | 3737.8 | 3747.2 |
| 32.5° | 3517.7 | 3522.9 | 3534.3 | 3538.4 | 3541.5 |
| 35° | 3322.4 | 3318.3 | 3327.6 | 3323.4 | 3314.1 |
| 37.5° | 3090.8 | 3093.9 | 3093.9 | 3089.8 | 3085.6 |
| 40° | 2855.0 | 2858.2 | 2851.9 | 2829.1 | 2812.5 |
| 42.5° | 2578.8 | 2580.9 | 2548.7 | 2497.8 | 2463.5 |
| 45° | 2266.2 | 2245.4 | 2173.7 | 2092.7 | 2074.0 |
| 47.5° | 1872.6 | 1837.2 | 1762.5 | 1701.2 | 1679.4 |
| 50° | 1432.2 | 1406.2 | 1381.3 | 1349.1 | 1342.9 |
| 52.5° | 1004.3 | 1017.8 | 1027.2 | 1037.5 | 1034.4 |
| 55° | 666.8 | 689.6 | 724.9 | 766.5 | 767.5 |
| 57.5° | 400.9 | 426.9 | 471.5 | 517.2 | 539.0 |
| 60° | 235.8 | 246.1 | 278.3 | 312.6 | 323.0 |
| 62.5° | 127.7 | 130.9 | 145.4 | 179.7 | 174.5 |
| 65° | 63.4 | 66.5 | 77.9 | 85.2 | 83.1 |
| 67.5° | 31.2 | 34.3 | 36.4 | 46.7 | 38.4 |
| 70° | 7.3 | 2.1 | 4.2 | 5.2 | 2.1 |
| 72.5° | 0.0 | 0.0 | 2.1 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 2.1 | 0.0 | 0.0 | 0.0 | 4.2 |
| 80° | 9.3 | 6.2 | 2.1 | 2.1 | 3.1 |
| 82.5° | 3.1 | 1.0 | 3.1 | 1.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 4.2 | 0.0 |
| 87.5° | 5.2 | 1.0 | 1.0 | 3.1 | 5.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)