

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: P247636

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBS0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247636
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: LSR8B100D010 EC8B100840 8LBS0B
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10039.0 lumens
Efficiency: N/A
Efficacy: 94.4 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

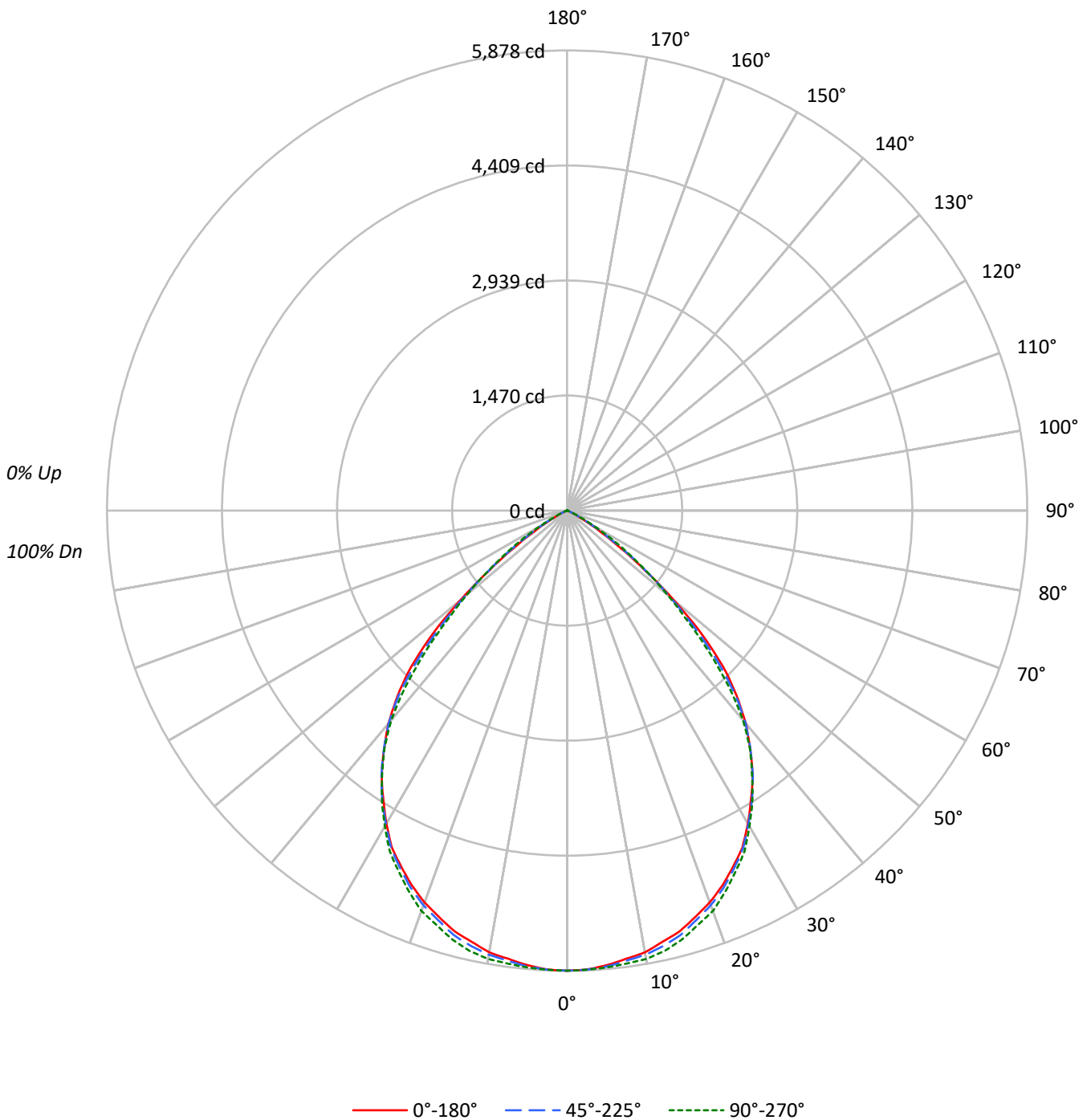
Input Watts (W): 106.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 181256 | 181256 | 181256 |
| 5° | 180431 | 180908 | 181351 |
| 10° | 179402 | 180373 | 182073 |
| 15° | 177594 | 179120 | 181058 |
| 20° | 174758 | 176028 | 178611 |
| 25° | 170696 | 171618 | 173155 |
| 30° | 164385 | 164799 | 165856 |
| 35° | 155471 | 155711 | 155079 |
| 40° | 142861 | 142704 | 140732 |
| 45° | 122847 | 117836 | 112433 |
| 50° | 85406 | 82374 | 80081 |
| 55° | 44558 | 48444 | 51294 |
| 60° | 18076 | 21339 | 24762 |
| 65° | 5750 | 7063 | 7537 |
| 70° | 811 | 469 | 234 |
| 75° | 0 | 0 | 0 |
| 80° | 2060 | 462 | 693 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 555.1 | 5.5 |
| 10°-20° | 1579.7 | 15.7 |
| 20°-30° | 2320.6 | 23.1 |
| 30°-40° | 2569.2 | 25.6 |
| 40°-50° | 2047.5 | 20.4 |
| 50°-60° | 839.0 | 8.4 |
| 60°-70° | 123.5 | 1.2 |
| 70°-80° | 1.8 | 0.0 |
| 80°-90° | 2.5 | 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° | 4455.4 | 44.4 |
| 0°-40° | 7024.7 | 70.0 |
| 0°-60° | 9911.2 | 98.7 |
| 0°-90° | 10039.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 10039.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5878 | 5878 | 5878 | 5878 | 5878 | |
| 5° | 5829 | 5839 | 5844 | 5854 | 5859 | 553 |
| 15° | 5563 | 5567 | 5611 | 5664 | 5672 | 1566 |
| 25° | 5017 | 5012 | 5044 | 5074 | 5089 | 2307 |
| 35° | 4130 | 4125 | 4136 | 4131 | 4120 | 2567 |
| 45° | 2817 | 2791 | 2702 | 2601 | 2578 | 2114 |
| 55° | 829 | 857 | 901 | 953 | 954 | 797 |
| 65° | 79 | 83 | 97 | 106 | 103 | 104 |
| 75° | 0 | 0 | 0 | 0 | 0 | 3 |
| 85° | 0 | 0 | 0 | 5 | 0 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247636

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5878.0 | 5878.0 | 5878.0 | 5878.0 | 5878.0 |
| 2.5° | 5867.7 | 5869.0 | 5869.0 | 5862.5 | 5870.3 |
| 5° | 5829.0 | 5839.3 | 5844.4 | 5853.5 | 5858.7 |
| 7.5° | 5774.7 | 5772.2 | 5799.3 | 5831.5 | 5835.4 |
| 10° | 5729.5 | 5724.4 | 5760.5 | 5803.1 | 5814.8 |
| 12.5° | 5640.5 | 5646.9 | 5693.4 | 5737.3 | 5760.5 |
| 15° | 5563.0 | 5566.9 | 5610.8 | 5663.7 | 5671.5 |
| 17.5° | 5442.9 | 5454.6 | 5484.3 | 5539.8 | 5550.1 |
| 20° | 5325.5 | 5330.6 | 5364.2 | 5409.4 | 5442.9 |
| 22.5° | 5182.2 | 5191.2 | 5217.0 | 5257.0 | 5273.8 |
| 25° | 5016.9 | 5011.7 | 5044.0 | 5073.7 | 5089.2 |
| 27.5° | 4849.1 | 4840.0 | 4864.6 | 4893.0 | 4907.2 |
| 30° | 4616.7 | 4614.1 | 4628.3 | 4646.4 | 4658.0 |
| 32.5° | 4372.7 | 4379.1 | 4393.3 | 4398.5 | 4402.4 |
| 35° | 4130.0 | 4124.8 | 4136.4 | 4131.3 | 4119.6 |
| 37.5° | 3842.1 | 3845.9 | 3845.9 | 3840.8 | 3835.6 |
| 40° | 3549.0 | 3552.9 | 3545.1 | 3516.7 | 3496.1 |
| 42.5° | 3205.6 | 3208.2 | 3168.2 | 3104.9 | 3062.3 |
| 45° | 2817.0 | 2791.2 | 2702.1 | 2601.4 | 2578.2 |
| 47.5° | 2327.7 | 2283.8 | 2190.9 | 2114.7 | 2087.6 |
| 50° | 1780.3 | 1748.0 | 1717.1 | 1677.0 | 1669.3 |
| 52.5° | 1248.4 | 1265.2 | 1276.8 | 1289.7 | 1285.9 |
| 55° | 828.8 | 857.2 | 901.1 | 952.8 | 954.1 |
| 57.5° | 498.3 | 530.6 | 586.1 | 642.9 | 670.0 |
| 60° | 293.1 | 306.0 | 346.0 | 388.6 | 401.5 |
| 62.5° | 158.8 | 162.7 | 180.7 | 223.3 | 216.9 |
| 65° | 78.8 | 82.6 | 96.8 | 105.9 | 103.3 |
| 67.5° | 38.7 | 42.6 | 45.2 | 58.1 | 47.8 |
| 70° | 9.0 | 2.6 | 5.2 | 6.5 | 2.6 |
| 72.5° | 0.0 | 0.0 | 2.6 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 2.6 | 0.0 | 0.0 | 0.0 | 5.2 |
| 80° | 11.6 | 7.7 | 2.6 | 2.6 | 3.9 |
| 82.5° | 3.9 | 1.3 | 3.9 | 1.3 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 5.2 | 0.0 |
| 87.5° | 6.5 | 1.3 | 1.3 | 3.9 | 6.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)