

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: P250138

Luminaire Tested: **LSR8B150D010 EC8B150835 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250138
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13942)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B150D010 EC8B150835 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16174.0 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

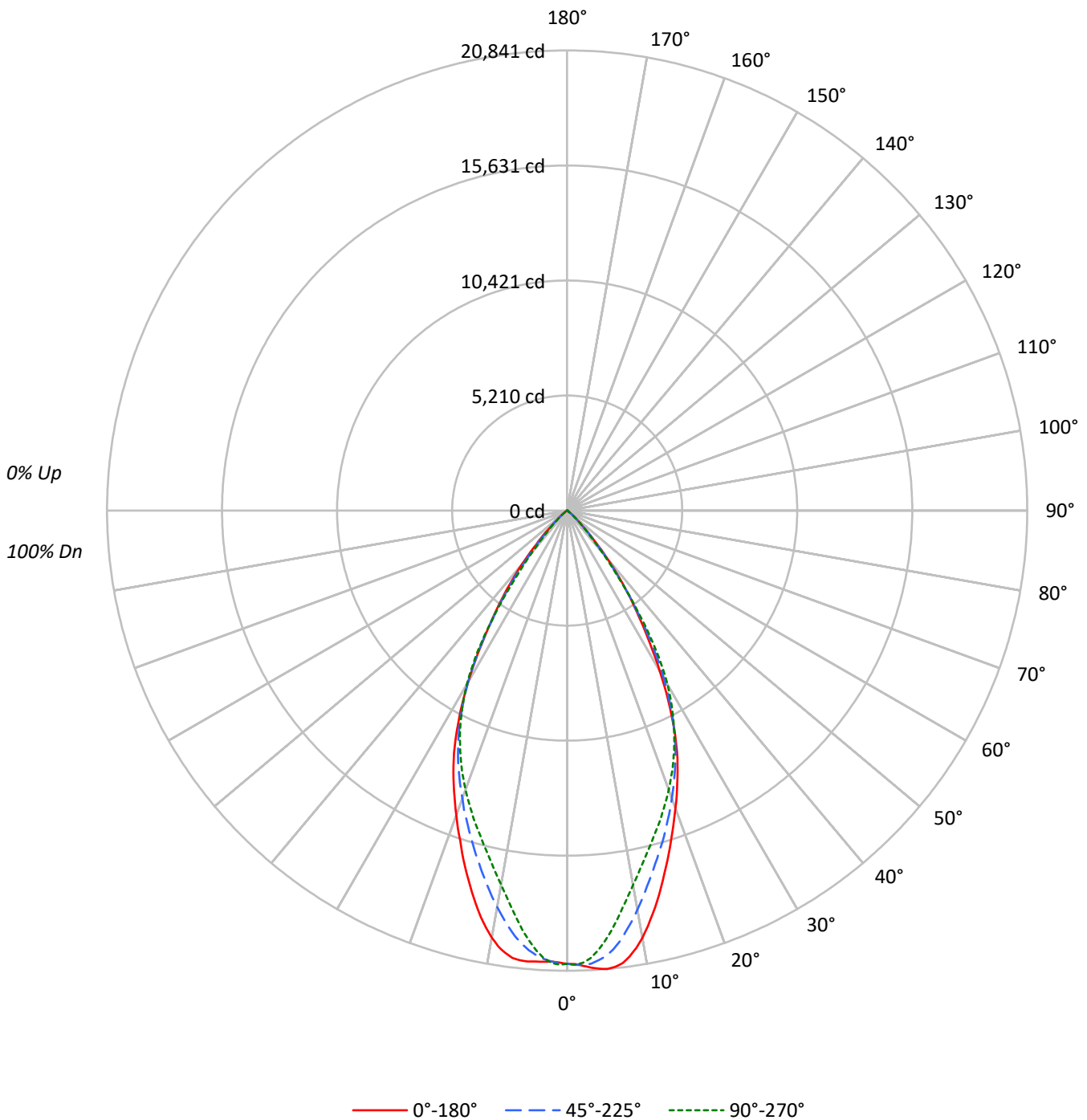
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P250138

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBM0WH

Luminous Intensity Polar Plot





TEST NUMBER: P250138

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBM0WH

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 | 114 | 111 | 108 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98 | 98 | 97 | 96 | 94 |
| 2 | 108 | 103 | 99 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 93 | 95 | 93 | 91 | 93 | 91 | 89 | 87 |
| 3 | 103 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 93 | 89 | 86 | 90 | 87 | 84 | 88 | 85 | 83 | 81 |
| 4 | 98 | 90 | 85 | 81 | 96 | 89 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 78 | 74 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 72 | 71 |
| 6 | 88 | 80 | 74 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | 66 |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 62 |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 64 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 56 | 64 | 59 | 56 | 55 |
| 10 | 73 | 63 | 57 | 54 | 72 | 63 | 57 | 54 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 52 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 632952 | 632952 | 632952 |
| 5° | 645105 | 606023 | 634596 |
| 10° | 615059 | 539115 | 614902 |
| 15° | 543122 | 486246 | 552360 |
| 20° | 470667 | 441353 | 481804 |
| 25° | 397674 | 390879 | 412274 |
| 30° | 298890 | 323590 | 319325 |
| 35° | 200079 | 211538 | 216985 |
| 40° | 112095 | 96223 | 128567 |
| 45° | 45053 | 39610 | 53539 |
| 50° | 15558 | 15083 | 18436 |
| 55° | 4296 | 5102 | 4833 |
| 60° | 2461 | 3077 | 2769 |
| 65° | 2182 | 1817 | 1452 |
| 70° | 0 | 1352 | 902 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 888 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P250138

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBM0WH

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1863.4 | 11.5 |
| 10°-20° | 4506.9 | 27.9 |
| 20°-30° | 5282.3 | 32.7 |
| 30°-40° | 3475.4 | 21.5 |
| 40°-50° | 906.9 | 5.6 |
| 50°-60° | 111.5 | 0.7 |
| 60°-70° | 23.1 | 0.1 |
| 70°-80° | 4.3 | 0.0 |
| 80°-90° | 0.1 | 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° | 11652.5 | 72.0 |
| 0°-40° | 15127.9 | 93.5 |
| 0°-60° | 16146.4 | 99.8 |
| 0°-90° | 16174.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 16174.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 20526 | 20526 | 20526 | 20526 | 20526 | |
| 5° | 20841 | 20247 | 19578 | 19982 | 20501 | ### |
| 15° | 17013 | 16050 | 15231 | 16050 | 17302 | 4742 |
| 25° | 11688 | 11573 | 11488 | 11683 | 12117 | 5269 |
| 35° | 5315 | 5435 | 5619 | 5674 | 5764 | 3328 |
| 45° | 1033 | 973 | 908 | 1053 | 1228 | 926 |
| 55° | 80 | 85 | 95 | 95 | 90 | 106 |
| 65° | 30 | 25 | 25 | 20 | 20 | 21 |
| 75° | 0 | 5 | 0 | 0 | 0 | 3 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P250138

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBM0WH

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 20526.2 | 20526.2 | 20526.2 | 20526.2 | 20526.2 | 20526.2 | 20526.2 | 20526.2 | 20526.2 |
| 1° | 20541.1 | 20571.2 | 20581.1 | 20611.1 | 20566.2 | 20536.3 | 20496.3 | 20466.3 | 20471.3 |
| 2° | 20631.0 | 20646.0 | 20591.1 | 20571.2 | 20491.3 | 20466.3 | 20436.4 | 20431.4 | 20436.4 |
| 3° | 20725.9 | 20695.9 | 20551.2 | 20416.5 | 20296.7 | 20281.7 | 20336.6 | 20416.5 | 20461.3 |
| 4° | 20800.8 | 20720.9 | 20416.5 | 20166.9 | 19977.2 | 19962.3 | 20181.9 | 20386.4 | 20471.3 |
| 5° | 20840.7 | 20695.9 | 20246.7 | 19827.5 | 19578.1 | 19672.8 | 19982.2 | 20346.5 | 20501.2 |
| 6° | 20785.7 | 20571.2 | 19987.3 | 19428.3 | 19143.8 | 19268.6 | 19722.8 | 20251.7 | 20481.3 |
| 7° | 20646.0 | 20371.5 | 19652.9 | 18994.1 | 18644.8 | 18839.4 | 19418.3 | 20092.0 | 20406.5 |
| 8° | 20386.4 | 20057.1 | 19228.7 | 18490.0 | 18145.7 | 18365.3 | 19044.1 | 19862.5 | 20226.8 |
| 9° | 20047.1 | 19682.8 | 18809.5 | 18030.9 | 17661.6 | 17921.1 | 18654.8 | 19558.0 | 19977.2 |
| 10° | 19642.9 | 19253.6 | 18345.3 | 17551.9 | 17217.5 | 17462.0 | 18235.6 | 19203.7 | 19637.9 |
| 11° | 19168.7 | 18794.5 | 17881.2 | 17102.7 | 16783.3 | 17022.9 | 17816.4 | 18779.6 | 19248.6 |
| 12° | 18654.8 | 18310.4 | 17407.2 | 16668.5 | 16369.1 | 16598.7 | 17367.2 | 18340.3 | 18804.5 |
| 13° | 18140.7 | 17796.3 | 16948.0 | 16249.3 | 15974.8 | 16194.4 | 16928.0 | 17861.3 | 18325.3 |
| 14° | 17586.8 | 17272.4 | 16488.9 | 15850.0 | 15600.5 | 15810.1 | 16478.9 | 17377.1 | 17816.4 |
| 15° | 17012.9 | 16763.3 | 16049.7 | 15465.7 | 15231.3 | 15430.8 | 16049.7 | 16878.1 | 17302.3 |
| 16° | 16473.9 | 16244.3 | 15625.4 | 15086.5 | 14891.9 | 15051.5 | 15615.6 | 16379.1 | 16783.3 |
| 17° | 15924.9 | 15715.3 | 15201.2 | 14712.2 | 14537.6 | 14692.3 | 15171.3 | 15875.0 | 16239.3 |
| 18° | 15376.0 | 15201.2 | 14737.2 | 14318.0 | 14163.3 | 14303.0 | 14732.2 | 15366.0 | 15695.3 |
| 19° | 14866.9 | 14707.2 | 14313.0 | 13958.6 | 13818.9 | 13943.6 | 14347.9 | 14876.9 | 15206.2 |
| 20° | 14342.9 | 14213.1 | 13868.8 | 13579.4 | 13449.6 | 13564.3 | 13878.8 | 14392.9 | 14682.3 |
| 21° | 13838.8 | 13724.1 | 13424.6 | 13180.1 | 13075.3 | 13170.2 | 13459.6 | 13923.7 | 14178.2 |
| 22° | 13314.9 | 13250.0 | 12980.5 | 12775.9 | 12706.0 | 12765.9 | 13030.3 | 13429.6 | 13669.2 |
| 23° | 12800.8 | 12740.9 | 12536.3 | 12366.7 | 12306.7 | 12366.7 | 12601.2 | 12960.5 | 13175.2 |
| 24° | 12281.8 | 12217.0 | 12067.3 | 11957.4 | 11907.5 | 11957.4 | 12157.0 | 12461.4 | 12666.1 |
| 25° | 11688.0 | 11678.0 | 11573.2 | 11513.2 | 11488.3 | 11543.2 | 11683.0 | 11947.5 | 12117.1 |
| 26° | 11118.9 | 11089.0 | 11059.1 | 11049.1 | 11054.1 | 11084.0 | 11198.8 | 11398.5 | 11533.3 |
| 27° | 10420.3 | 10465.3 | 10510.1 | 10570.0 | 10590.0 | 10615.0 | 10669.8 | 10814.5 | 10914.4 |
| 28° | 9751.5 | 9836.4 | 9946.2 | 10066.0 | 10120.9 | 10120.9 | 10125.8 | 10205.7 | 10290.5 |
| 29° | 9087.9 | 9177.6 | 9352.4 | 9532.0 | 9606.8 | 9596.8 | 9556.9 | 9591.8 | 9641.8 |
| 30° | 8394.2 | 8508.9 | 8743.5 | 8978.1 | 9087.9 | 9047.9 | 8973.1 | 8938.2 | 8968.1 |
| 31° | 7715.5 | 7830.2 | 8089.7 | 8344.2 | 8488.9 | 8444.1 | 8314.3 | 8289.4 | 8304.3 |
| 32° | 7066.7 | 7181.5 | 7420.9 | 7690.4 | 7855.2 | 7795.3 | 7660.5 | 7620.6 | 7625.6 |
| 33° | 6437.8 | 6527.7 | 6747.2 | 6996.8 | 7131.5 | 7116.5 | 7006.7 | 6956.9 | 6961.8 |
| 34° | 5844.0 | 5918.8 | 6083.5 | 6273.2 | 6402.9 | 6397.9 | 6318.0 | 6323.0 | 6338.0 |
| 35° | 5315.0 | 5354.9 | 5434.7 | 5539.6 | 5619.4 | 5664.2 | 5674.3 | 5714.2 | 5764.1 |
| 37.5° | 4017.5 | 4032.4 | 3937.6 | 3832.7 | 3812.8 | 3942.6 | 4167.2 | 4361.8 | 4436.7 |
| 40° | 2784.7 | 2749.8 | 2630.0 | 2445.4 | 2390.4 | 2535.3 | 2819.7 | 3094.2 | 3193.9 |
| 42.5° | 1731.8 | 1716.8 | 1641.9 | 1502.2 | 1452.3 | 1537.1 | 1751.7 | 1961.3 | 2061.1 |
| 45° | 1033.1 | 1013.0 | 973.1 | 918.3 | 908.3 | 943.2 | 1053.0 | 1172.8 | 1227.7 |
| 47.5° | 593.8 | 588.9 | 563.9 | 544.0 | 539.0 | 563.9 | 613.9 | 683.7 | 698.7 |
| 50° | 324.3 | 319.4 | 314.4 | 314.4 | 314.4 | 329.3 | 354.4 | 374.3 | 384.3 |
| 52.5° | 159.7 | 164.7 | 159.7 | 164.7 | 169.7 | 179.6 | 174.6 | 194.6 | 194.6 |
| 55° | 79.9 | 74.9 | 84.9 | 94.9 | 94.9 | 94.9 | 94.9 | 94.9 | 89.9 |
| 57.5° | 59.8 | 64.8 | 54.9 | 59.8 | 54.9 | 54.9 | 49.9 | 54.9 | 59.8 |



TEST NUMBER: P250138

CATALOG NUMBER: LSR8B150D010 EC8B150835 8LBM0WH

CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|------|-------|------|-------|------|--------|------|--------|------|
| 60° | 39.9 | 34.9 | 39.9 | 44.9 | 49.9 | 44.9 | 34.9 | 39.9 | 44.9 |
| 62.5° | 19.9 | 19.9 | 19.9 | 29.9 | 44.9 | 34.9 | 29.9 | 24.9 | 24.9 |
| 65° | 29.9 | 19.9 | 24.9 | 29.9 | 24.9 | 24.9 | 19.9 | 24.9 | 19.9 |
| 67.5° | 15.0 | 24.9 | 15.0 | 10.0 | 15.0 | 19.9 | 15.0 | 10.0 | 10.0 |
| 70° | 0.0 | 5.0 | 5.0 | 15.0 | 15.0 | 15.0 | 15.0 | 10.0 | 10.0 |
| 72.5° | 5.0 | 5.0 | 5.0 | 10.0 | 5.0 | 10.0 | 5.0 | 5.0 | 10.0 |
| 75° | 0.0 | 0.0 | 5.0 | 5.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 5.0 | 0.0 | 5.0 | 5.0 | 0.0 | 0.0 | 0.0 | 5.0 | 0.0 |
| 80° | 0.0 | 0.0 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)