

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: P250194

Luminaire Tested: **LSR8B150D010 EC8B1509727 8LBM0WH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250194
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 EC8B1509727 8LBM0WH
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
97 CRI 2700 CCT WITH WHEAT TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11261.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 0.84 / 0.8 / 0.85
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

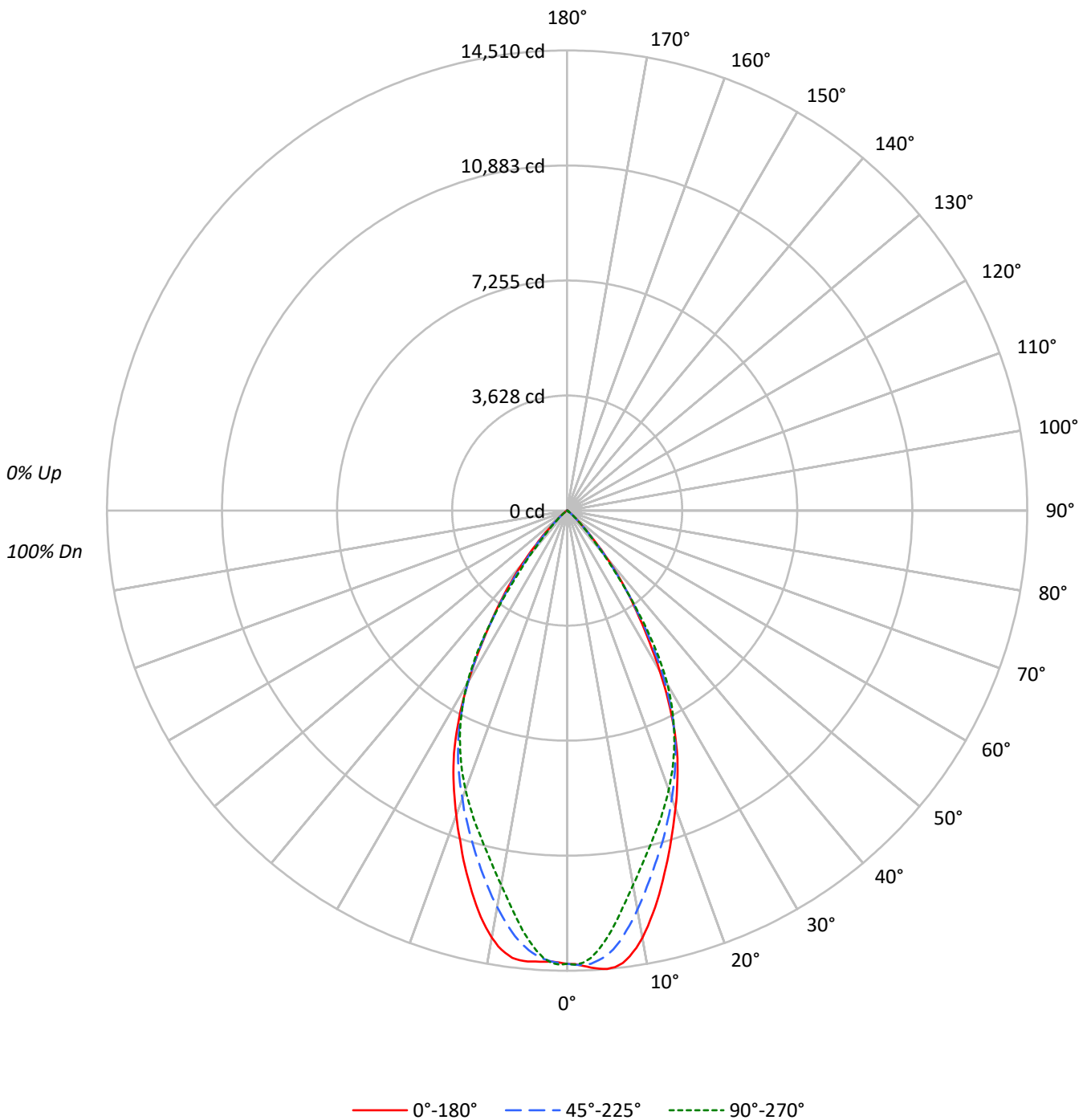
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | 100 | 100 | 100 | 100 | | |
| 1 | 114 | 111 | 108 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98 | 98 | 97 | 96 | 94 | 94 | 94 | 94 | 94 | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 93 | 95 | 93 | 91 | 93 | 91 | 89 | 87 | 87 | 87 | 87 | 87 | | |
| 3 | 103 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 93 | 89 | 86 | 90 | 87 | 84 | 88 | 85 | 83 | 81 | 81 | 81 | 81 | 81 | | |
| 4 | 98 | 90 | 85 | 81 | 96 | 89 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 78 | 83 | 80 | 77 | 76 | 76 | 76 | 76 | 76 | | |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 78 | 74 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 72 | 71 | 71 | 71 | 71 | 71 | | |
| 6 | 88 | 80 | 74 | 69 | 87 | 79 | 73 | 69 | 77 | 72 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | 66 | 66 | 66 | 66 | 66 | | |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 62 | 62 | 62 | 62 | 62 | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 64 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 67 | 63 | 60 | 58 | 58 | 58 | 58 | 58 | | |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 57 | 64 | 60 | 56 | 64 | 59 | 56 | 55 | 55 | 55 | 55 | 55 | | |
| 10 | 73 | 63 | 57 | 54 | 72 | 63 | 57 | 54 | 62 | 57 | 53 | 61 | 56 | 53 | 60 | 56 | 53 | 52 | 52 | 52 | 52 | 52 | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--|-----|------|
| 0° | Luminaire represents a point source (luminous area is zero). | | |
| 5° | No luminance values can be calculated. | | |
| 10° | | | |
| 15° | | | |
| 20° | | | |
| 25° | | | |
| 30° | | | |
| 35° | | | |
| 40° | | | |
| 45° | | | |
| 50° | | | |
| 55° | | | |
| 60° | | | |
| 65° | | | |
| 70° | | | |
| 75° | | | |
| 80° | | | |
| 85° | | | |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 1297.4 | 11.5 |
| 10°-20° | 3137.9 | 27.9 |
| 20°-30° | 3677.7 | 32.7 |
| 30°-40° | 2419.7 | 21.5 |
| 40°-50° | 631.4 | 5.6 |
| 50°-60° | 77.7 | 0.7 |
| 60°-70° | 16.1 | 0.1 |
| 70°-80° | 3.0 | 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° | 8112.9 | 72.0 |
| 0°-40° | 10532.7 | 93.5 |
| 0°-60° | 11241.8 | 99.8 |
| 0°-90° | 11261.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 11261.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0° | 14291 | 14291 | 14291 | 14291 | 14291 | |
| 5° | 14510 | 14097 | 13631 | 13912 | 14274 | ### |
| 15° | 11845 | 11174 | 10605 | 11174 | 12047 | 3302 |
| 25° | 8138 | 8058 | 7999 | 8134 | 8436 | 3669 |
| 35° | 3700 | 3784 | 3912 | 3951 | 4013 | 2317 |
| 45° | 719 | 678 | 632 | 733 | 855 | 645 |
| 55° | 56 | 59 | 66 | 66 | 63 | 74 |
| 65° | 21 | 17 | 17 | 14 | 14 | 15 |
| 75° | 0 | 4 | 0 | 0 | 0 | 2 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P250194

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 14291.2 | 14291.2 | 14291.2 | 14291.2 | 14291.2 | 14291.2 | 14291.2 | 14291.2 | 14291.2 |
| 1° | 14301.6 | 14322.5 | 14329.4 | 14350.3 | 14319.0 | 14298.2 | 14270.4 | 14249.5 | 14253.0 |
| 2° | 14364.2 | 14374.6 | 14336.4 | 14322.5 | 14266.9 | 14249.5 | 14228.6 | 14225.2 | 14228.6 |
| 3° | 14430.2 | 14409.3 | 14308.6 | 14214.8 | 14131.4 | 14120.9 | 14159.2 | 14214.8 | 14246.0 |
| 4° | 14482.3 | 14426.7 | 14214.8 | 14041.0 | 13909.0 | 13898.6 | 14051.5 | 14193.9 | 14253.0 |
| 5° | 14510.1 | 14409.3 | 14096.6 | 13804.7 | 13631.0 | 13697.0 | 13912.5 | 14166.1 | 14273.8 |
| 6° | 14471.9 | 14322.5 | 13915.9 | 13526.8 | 13328.7 | 13415.6 | 13731.8 | 14100.1 | 14259.9 |
| 7° | 14374.6 | 14183.5 | 13683.2 | 13224.5 | 12981.2 | 13116.8 | 13519.8 | 13988.9 | 14207.8 |
| 8° | 14193.9 | 13964.6 | 13387.8 | 12873.5 | 12633.8 | 12786.6 | 13259.3 | 13829.1 | 14082.7 |
| 9° | 13957.6 | 13704.0 | 13095.9 | 12553.9 | 12296.8 | 12477.4 | 12988.2 | 13617.1 | 13909.0 |
| 10° | 13676.2 | 13405.1 | 12772.8 | 12220.3 | 11987.5 | 12157.8 | 12696.3 | 13370.4 | 13672.7 |
| 11° | 13346.1 | 13085.5 | 12449.6 | 11907.6 | 11685.2 | 11852.0 | 12404.5 | 13075.1 | 13401.7 |
| 12° | 12988.2 | 12748.5 | 12119.6 | 11605.3 | 11396.8 | 11556.7 | 12091.8 | 12769.3 | 13092.5 |
| 13° | 12630.3 | 12390.5 | 11799.9 | 11313.4 | 11122.3 | 11275.2 | 11786.0 | 12435.8 | 12758.8 |
| 14° | 12244.6 | 12025.7 | 11480.2 | 11035.4 | 10861.7 | 11007.6 | 11473.3 | 12098.7 | 12404.5 |
| 15° | 11845.1 | 11671.3 | 11174.4 | 10767.9 | 10604.6 | 10743.6 | 11174.4 | 11751.2 | 12046.6 |
| 16° | 11469.8 | 11309.9 | 10879.1 | 10503.8 | 10368.4 | 10479.5 | 10872.2 | 11403.8 | 11685.2 |
| 17° | 11087.5 | 10941.6 | 10583.7 | 10243.2 | 10121.6 | 10229.4 | 10562.9 | 11052.9 | 11306.5 |
| 18° | 10705.4 | 10583.7 | 10260.6 | 9968.8 | 9861.1 | 9958.3 | 10257.2 | 10698.4 | 10927.7 |
| 19° | 10350.9 | 10239.7 | 9965.3 | 9718.6 | 9621.3 | 9708.1 | 9989.6 | 10357.9 | 10587.2 |
| 20° | 9986.1 | 9895.7 | 9656.0 | 9454.5 | 9364.1 | 9444.0 | 9663.0 | 10020.9 | 10222.4 |
| 21° | 9635.2 | 9555.2 | 9346.8 | 9176.5 | 9103.5 | 9169.6 | 9371.1 | 9694.3 | 9871.4 |
| 22° | 9270.4 | 9225.2 | 9037.6 | 8895.1 | 8846.4 | 8888.1 | 9072.3 | 9350.3 | 9517.1 |
| 23° | 8912.4 | 8870.8 | 8728.3 | 8610.2 | 8568.4 | 8610.2 | 8773.5 | 9023.6 | 9173.1 |
| 24° | 8551.1 | 8505.9 | 8401.7 | 8325.2 | 8290.5 | 8325.2 | 8464.2 | 8676.2 | 8818.6 |
| 25° | 8137.6 | 8130.7 | 8057.7 | 8016.0 | 7998.6 | 8036.8 | 8134.2 | 8318.3 | 8436.4 |
| 26° | 7741.5 | 7720.6 | 7699.8 | 7692.8 | 7696.3 | 7717.1 | 7797.1 | 7936.1 | 8029.9 |
| 27° | 7255.1 | 7286.4 | 7317.6 | 7359.3 | 7373.2 | 7390.6 | 7428.8 | 7529.5 | 7599.1 |
| 28° | 6789.4 | 6848.5 | 6924.9 | 7008.3 | 7046.6 | 7046.6 | 7050.0 | 7105.6 | 7164.7 |
| 29° | 6327.3 | 6389.8 | 6511.5 | 6636.6 | 6688.7 | 6681.7 | 6653.9 | 6678.2 | 6713.0 |
| 30° | 5844.4 | 5924.3 | 6087.6 | 6250.9 | 6327.3 | 6299.5 | 6247.4 | 6223.1 | 6243.9 |
| 31° | 5371.8 | 5451.7 | 5632.4 | 5809.6 | 5910.3 | 5879.1 | 5788.8 | 5771.4 | 5781.8 |
| 32° | 4920.1 | 5000.0 | 5166.8 | 5354.4 | 5469.1 | 5427.4 | 5333.6 | 5305.8 | 5309.2 |
| 33° | 4482.3 | 4544.8 | 4697.7 | 4871.5 | 4965.3 | 4954.8 | 4878.4 | 4843.7 | 4847.1 |
| 34° | 4068.8 | 4120.9 | 4235.5 | 4367.7 | 4458.0 | 4454.5 | 4398.9 | 4402.4 | 4412.8 |
| 35° | 3700.5 | 3728.3 | 3783.8 | 3856.9 | 3912.5 | 3943.7 | 3950.6 | 3978.4 | 4013.2 |
| 37.5° | 2797.1 | 2807.5 | 2741.5 | 2668.5 | 2654.6 | 2745.0 | 2901.3 | 3036.9 | 3089.0 |
| 40° | 1938.9 | 1914.5 | 1831.1 | 1702.6 | 1664.3 | 1765.2 | 1963.2 | 2154.3 | 2223.7 |
| 42.5° | 1205.7 | 1195.3 | 1143.2 | 1045.9 | 1011.1 | 1070.2 | 1219.6 | 1365.6 | 1435.0 |
| 45° | 719.3 | 705.3 | 677.5 | 639.3 | 632.4 | 656.7 | 733.1 | 816.5 | 854.8 |
| 47.5° | 413.4 | 410.0 | 392.6 | 378.8 | 375.3 | 392.6 | 427.4 | 476.0 | 486.5 |
| 50° | 225.8 | 222.4 | 218.9 | 218.9 | 218.9 | 229.3 | 246.7 | 260.6 | 267.6 |
| 52.5° | 111.2 | 114.7 | 111.2 | 114.7 | 118.2 | 125.1 | 121.6 | 135.5 | 135.5 |
| 55° | 55.6 | 52.1 | 59.1 | 66.1 | 66.1 | 66.1 | 66.1 | 66.1 | 62.6 |
| 57.5° | 41.7 | 45.1 | 38.3 | 41.7 | 38.3 | 38.3 | 34.8 | 38.3 | 41.7 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|------|-------|------|-------|------|--------|------|--------|------|
| 60° | 27.8 | 24.3 | 27.8 | 31.3 | 34.8 | 31.3 | 24.3 | 27.8 | 31.3 |
| 62.5° | 13.9 | 13.9 | 13.9 | 20.8 | 31.3 | 24.3 | 20.8 | 17.3 | 17.3 |
| 65° | 20.8 | 13.9 | 17.3 | 20.8 | 17.3 | 17.3 | 13.9 | 17.3 | 13.9 |
| 67.5° | 10.5 | 17.3 | 10.5 | 7.0 | 10.5 | 13.9 | 10.5 | 7.0 | 7.0 |
| 70° | 0.0 | 3.5 | 3.5 | 10.5 | 10.5 | 10.5 | 10.5 | 7.0 | 7.0 |
| 72.5° | 3.5 | 3.5 | 3.5 | 7.0 | 3.5 | 7.0 | 3.5 | 3.5 | 7.0 |
| 75° | 0.0 | 0.0 | 3.5 | 3.5 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 |
| 77.5° | 3.5 | 0.0 | 3.5 | 3.5 | 0.0 | 0.0 | 0.0 | 3.5 | 0.0 |
| 80° | 0.0 | 0.0 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.5 |
| 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)