

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: P247513

Luminaire Tested: **LSR8B120D010 EC8B120940 8LBW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247513
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: LSR8B120D010 EC8B120940 8LBW0GPH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9960.0 lumens
Efficiency: N/A
Efficacy: 84.2 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

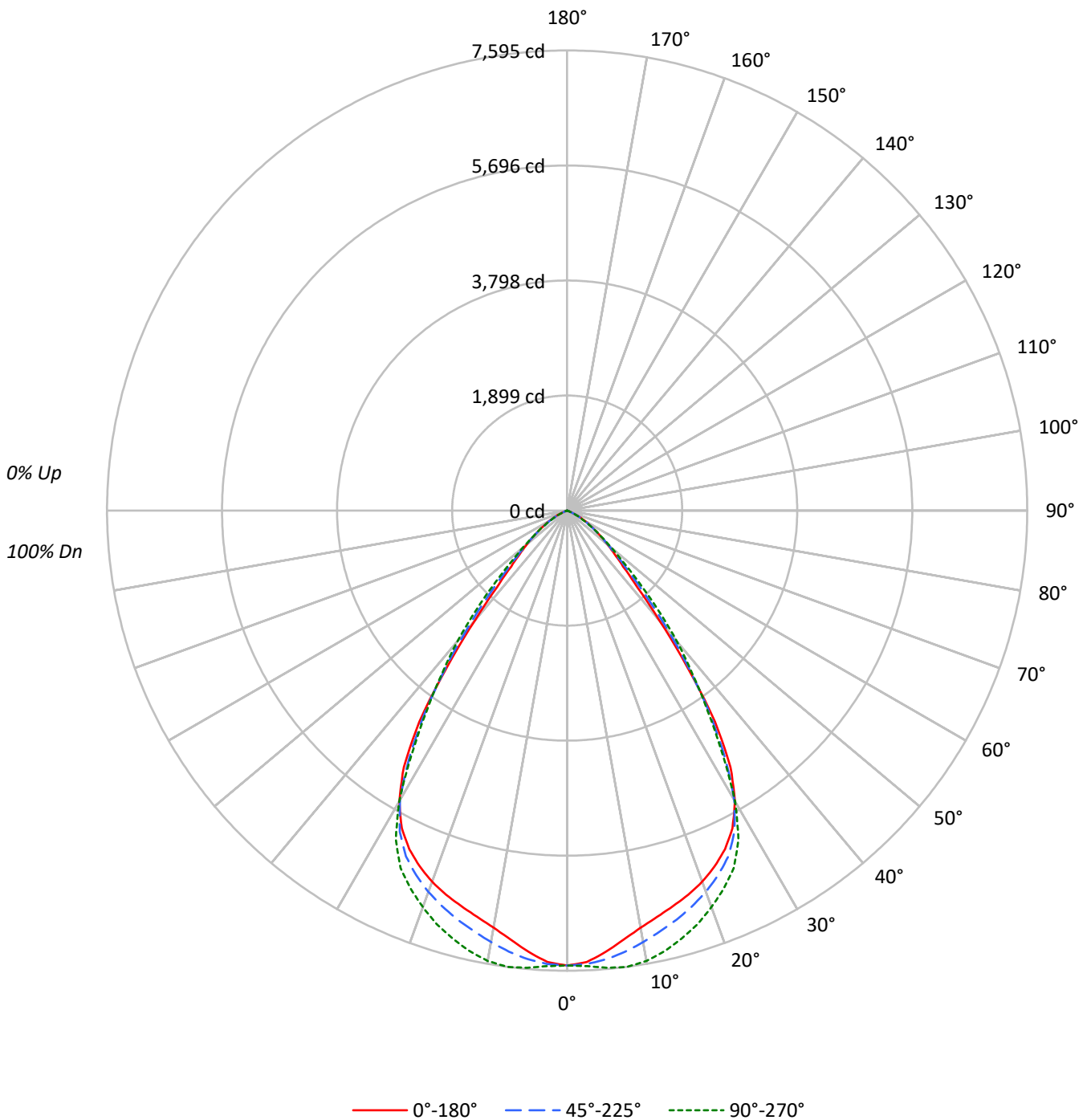
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 231538 | 231538 | 231538 |
| 5° | 226290 | 230107 | 234493 |
| 10° | 218799 | 226439 | 236299 |
| 15° | 215705 | 223076 | 233423 |
| 20° | 213890 | 219745 | 228572 |
| 25° | 209762 | 214226 | 221412 |
| 30° | 197190 | 196442 | 197375 |
| 35° | 160217 | 154834 | 152463 |
| 40° | 95116 | 104833 | 113548 |
| 45° | 56927 | 64079 | 72779 |
| 50° | 41477 | 42547 | 45694 |
| 55° | 30047 | 28988 | 29623 |
| 60° | 20389 | 18853 | 18126 |
| 65° | 10244 | 9478 | 8997 |
| 70° | 2840 | 2488 | 2245 |
| 75° | 1096 | 786 | 786 |
| 80° | 462 | 462 | 231 |
| 85° | 460 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 704.0 | 7.1 |
| 10°-20° | 1977.0 | 19.8 |
| 20°-30° | 2873.5 | 28.9 |
| 30°-40° | 2541.1 | 25.5 |
| 40°-50° | 1208.8 | 12.1 |
| 50°-60° | 503.5 | 5.1 |
| 60°-70° | 140.7 | 1.4 |
| 70°-80° | 10.6 | 0.1 |
| 80°-90° | 0.8 | 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° | 5554.5 | 55.8 |
| 0°-40° | 8095.6 | 81.3 |
| 0°-60° | 9807.9 | 98.5 |
| 0°-90° | 9960.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9960.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 7509 | 7509 | 7509 | 7509 | 7509 | |
| 5° | 7310 | 7347 | 7434 | 7532 | 7576 | 687 |
| 15° | 6757 | 6818 | 6988 | 7200 | 7312 | 1908 |
| 25° | 6165 | 6193 | 6296 | 6435 | 6508 | 2818 |
| 35° | 4256 | 4196 | 4113 | 4050 | 4050 | 2547 |
| 45° | 1305 | 1351 | 1469 | 1606 | 1669 | 1087 |
| 55° | 559 | 552 | 539 | 539 | 551 | 508 |
| 65° | 140 | 138 | 130 | 125 | 123 | 153 |
| 75° | 9 | 8 | 7 | 7 | 7 | 12 |
| 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° | 7508.6 | 7508.6 | 7508.6 | 7508.6 | 7508.6 |
| 2.5° | 7458.7 | 7465.3 | 7490.2 | 7513.8 | 7524.3 |
| 5° | 7310.5 | 7347.2 | 7433.8 | 7532.2 | 7575.5 |
| 7.5° | 7141.2 | 7196.3 | 7342.0 | 7515.1 | 7595.2 |
| 10° | 6987.7 | 7057.2 | 7231.7 | 7445.6 | 7546.6 |
| 12.5° | 6867.0 | 6931.3 | 7109.7 | 7332.8 | 7446.9 |
| 15° | 6756.8 | 6818.5 | 6987.7 | 7200.3 | 7311.8 |
| 17.5° | 6646.6 | 6705.6 | 6851.3 | 7049.4 | 7157.0 |
| 20° | 6518.0 | 6565.2 | 6696.4 | 6870.9 | 6965.4 |
| 22.5° | 6358.0 | 6401.2 | 6511.5 | 6666.3 | 6751.6 |
| 25° | 6165.1 | 6192.6 | 6296.3 | 6435.4 | 6507.5 |
| 27.5° | 5909.2 | 5915.8 | 5978.8 | 6069.3 | 6123.1 |
| 30° | 5538.0 | 5534.0 | 5517.0 | 5513.0 | 5543.2 |
| 32.5° | 5018.4 | 4960.7 | 4861.0 | 4813.7 | 4777.0 |
| 35° | 4256.1 | 4195.8 | 4113.1 | 4050.1 | 4050.1 |
| 37.5° | 3253.8 | 3306.2 | 3339.0 | 3378.4 | 3398.1 |
| 40° | 2362.9 | 2440.3 | 2604.3 | 2774.9 | 2820.8 |
| 42.5° | 1717.4 | 1789.6 | 1966.7 | 2156.9 | 2212.0 |
| 45° | 1305.4 | 1351.4 | 1469.4 | 1605.9 | 1668.9 |
| 47.5° | 1054.8 | 1068.0 | 1127.0 | 1208.4 | 1238.5 |
| 50° | 864.6 | 868.5 | 886.9 | 928.9 | 952.5 |
| 52.5° | 699.3 | 696.7 | 701.9 | 713.7 | 724.2 |
| 55° | 558.9 | 552.4 | 539.2 | 539.2 | 551.0 |
| 57.5° | 431.6 | 422.5 | 408.0 | 401.5 | 397.5 |
| 60° | 330.6 | 321.4 | 305.7 | 295.2 | 293.9 |
| 62.5° | 237.5 | 229.6 | 213.9 | 204.7 | 202.0 |
| 65° | 140.4 | 137.8 | 129.9 | 124.6 | 123.3 |
| 67.5° | 65.6 | 63.0 | 56.4 | 53.8 | 52.5 |
| 70° | 31.5 | 30.2 | 27.6 | 26.2 | 24.9 |
| 72.5° | 15.7 | 15.7 | 13.1 | 13.1 | 13.1 |
| 75° | 9.2 | 7.9 | 6.6 | 6.6 | 6.6 |
| 77.5° | 5.2 | 3.9 | 3.9 | 3.9 | 3.9 |
| 80° | 2.6 | 2.6 | 2.6 | 1.3 | 1.3 |
| 82.5° | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| 85° | 1.3 | 1.3 | 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)