

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: P247541

Luminaire Tested: **LSR8B120D010 EC8B120840 8LBS0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247541
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-86)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B120D010 EC8B120840 8LBS0GPH
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12232.0 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.23
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

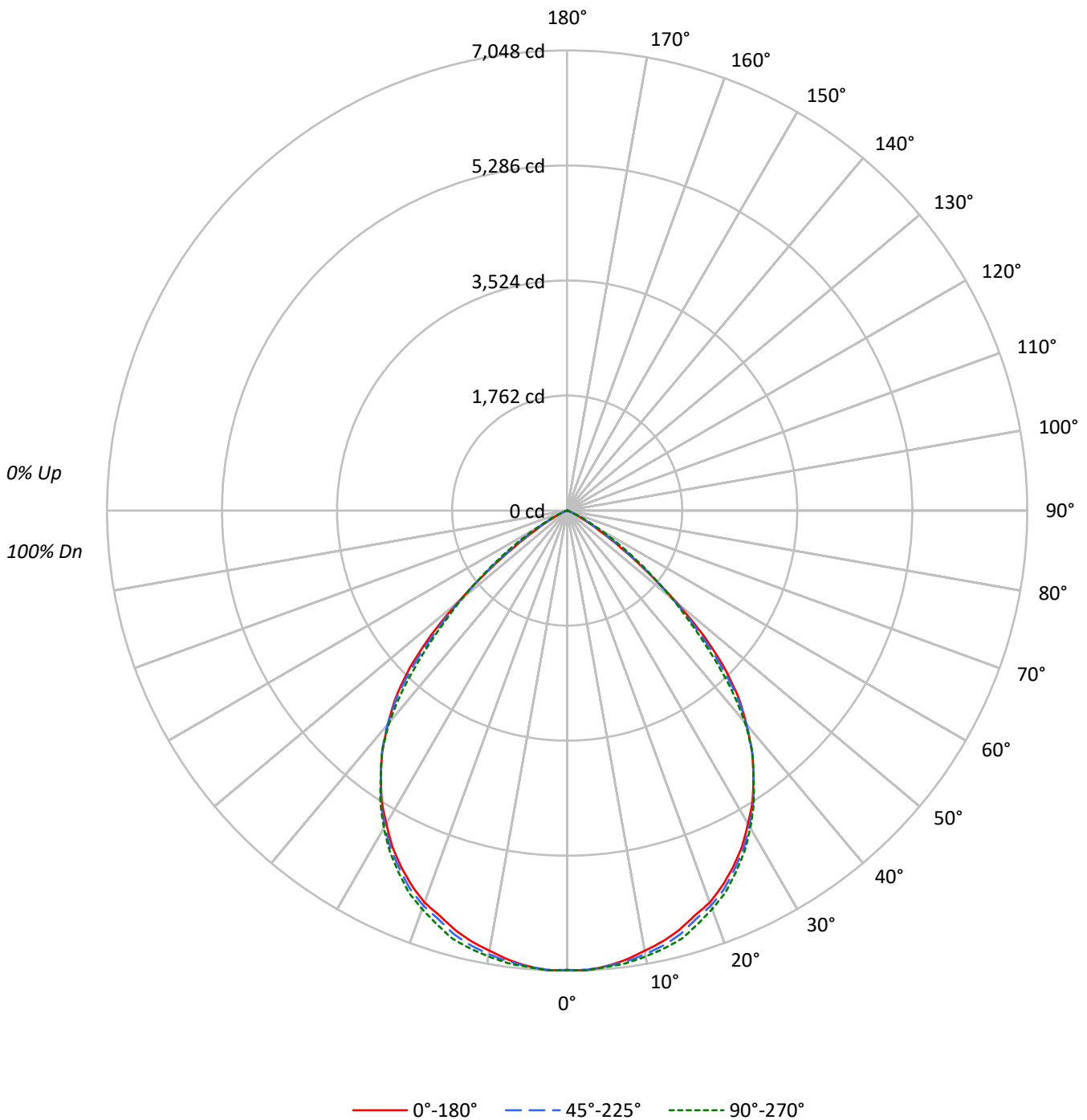
Input Watts (W): 118.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P247541

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBS0GPH

Luminous Intensity Polar Plot





TEST NUMBER: P247541

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBS0GPH

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 | 100 | 98 | 99 | 97 | 95 | 95 | 94 | 93 | 91 | | | | | 91 | | | |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 85 | 83 | 81 | | | | | 81 | | | |
| 3 | 98 | 90 | 84 | 79 | 96 | 88 | 83 | 78 | 86 | 81 | 77 | 83 | 79 | 76 | 81 | 77 | 74 | 73 | | | | | 73 | | | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 | | | | | 65 | | | |
| 5 | 85 | 75 | 67 | 62 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 61 | 68 | 64 | 60 | 58 | | | | | 58 | | | |
| 6 | 79 | 68 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 | | | | | 53 | | | |
| 7 | 74 | 63 | 55 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 | | | | | 48 | | | |
| 8 | 70 | 58 | 51 | 46 | 68 | 57 | 50 | 46 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 43 | | | | | 43 | | | |
| 9 | 65 | 54 | 47 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | | 39 | | | |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | | 36 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 216989 | 216989 | 216989 |
| 5° | 216731 | 216821 | 217140 |
| 10° | 214378 | 216028 | 217130 |
| 15° | 212168 | 214364 | 216701 |
| 20° | 209591 | 211272 | 213096 |
| 25° | 204764 | 206258 | 207949 |
| 30° | 197247 | 198757 | 199800 |
| 35° | 187156 | 187321 | 187378 |
| 40° | 171969 | 172267 | 170496 |
| 45° | 148777 | 143544 | 137159 |
| 50° | 104336 | 102225 | 100892 |
| 55° | 56654 | 61374 | 65385 |
| 60° | 25002 | 30509 | 34568 |
| 65° | 9609 | 12068 | 14418 |
| 70° | 4887 | 4355 | 5671 |
| 75° | 1573 | 2967 | 2621 |
| 80° | 1296 | 266 | 1563 |
| 85° | 0 | 0 | 0 |



TEST NUMBER: P247541

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBS0GPH

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 665.6 | 5.4 |
| 10°-20° | 1890.3 | 15.5 |
| 20°-30° | 2787.8 | 22.8 |
| 30°-40° | 3102.9 | 25.4 |
| 40°-50° | 2497.2 | 20.4 |
| 50°-60° | 1061.9 | 8.7 |
| 60°-70° | 199.1 | 1.6 |
| 70°-80° | 24.2 | 0.2 |
| 80°-90° | 3.0 | 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 |
| <hr/> | | |
| 0°-30° | 5343.7 | 43.7 |
| 0°-40° | 8446.7 | 69.1 |
| 0°-60° | 12005.8 | 98.2 |
| 0°-90° | 12232.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 12232.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 7037 | 7037 | 7037 | 7037 | 7037 | |
| 5° | 7002 | 7003 | 7005 | 7016 | 7015 | 663 |
| 15° | 6646 | 6683 | 6715 | 6766 | 6788 | 1873 |
| 25° | 6018 | 6040 | 6062 | 6097 | 6112 | 2766 |
| 35° | 4972 | 4973 | 4976 | 4978 | 4978 | 3096 |
| 45° | 3412 | 3384 | 3292 | 3192 | 3145 | 2565 |
| 55° | 1054 | 1077 | 1142 | 1187 | 1216 | 1004 |
| 65° | 132 | 146 | 165 | 177 | 198 | 171 |
| 75° | 13 | 16 | 25 | 23 | 22 | 21 |
| 85° | 0 | 0 | 0 | 0 | 0 | 3 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247541

CATALOG NUMBER: LSR8B120D010 EC8B120840 8LBS0GPH

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 7036.8 | 7036.8 | 7036.8 | 7036.8 | 7036.8 |
| 2.5° | 7048.5 | 7052.9 | 7038.3 | 7041.2 | 7045.6 |
| 5° | 7001.7 | 7003.1 | 7004.6 | 7016.3 | 7014.9 |
| 7.5° | 6935.8 | 6946.1 | 6963.6 | 6985.6 | 6991.4 |
| 10° | 6846.5 | 6872.9 | 6899.2 | 6925.6 | 6934.4 |
| 12.5° | 6758.7 | 6774.8 | 6821.7 | 6848.0 | 6870.0 |
| 15° | 6646.0 | 6682.6 | 6714.8 | 6766.0 | 6788.0 |
| 17.5° | 6502.6 | 6529.0 | 6559.7 | 6610.9 | 6641.6 |
| 20° | 6387.0 | 6394.3 | 6438.2 | 6483.6 | 6493.8 |
| 22.5° | 6215.7 | 6231.8 | 6277.2 | 6308.0 | 6334.3 |
| 25° | 6018.2 | 6040.1 | 6062.1 | 6097.2 | 6111.8 |
| 27.5° | 5801.6 | 5814.7 | 5845.5 | 5870.3 | 5883.5 |
| 30° | 5539.6 | 5568.9 | 5582.0 | 5593.7 | 5611.3 |
| 32.5° | 5284.9 | 5293.7 | 5305.4 | 5312.7 | 5321.5 |
| 35° | 4971.7 | 4973.2 | 4976.1 | 4977.6 | 4977.6 |
| 37.5° | 4651.2 | 4661.4 | 4658.5 | 4649.7 | 4654.1 |
| 40° | 4272.1 | 4289.7 | 4279.5 | 4253.1 | 4235.5 |
| 42.5° | 3890.1 | 3881.4 | 3846.2 | 3767.2 | 3730.6 |
| 45° | 3411.6 | 3383.8 | 3291.6 | 3192.0 | 3145.2 |
| 47.5° | 2837.8 | 2776.4 | 2698.8 | 2621.2 | 2590.5 |
| 50° | 2174.9 | 2166.1 | 2130.9 | 2100.2 | 2103.1 |
| 52.5° | 1558.7 | 1580.6 | 1588.0 | 1617.2 | 1631.9 |
| 55° | 1053.8 | 1077.2 | 1141.6 | 1186.9 | 1216.2 |
| 57.5° | 641.0 | 686.4 | 755.2 | 829.8 | 867.9 |
| 60° | 405.4 | 431.8 | 494.7 | 543.0 | 560.5 |
| 62.5° | 253.2 | 254.7 | 285.4 | 323.4 | 339.5 |
| 65° | 131.7 | 146.4 | 165.4 | 177.1 | 197.6 |
| 67.5° | 82.0 | 82.0 | 80.5 | 98.1 | 109.8 |
| 70° | 54.2 | 46.8 | 48.3 | 58.5 | 62.9 |
| 72.5° | 19.0 | 32.2 | 29.3 | 29.3 | 20.5 |
| 75° | 13.2 | 16.1 | 24.9 | 23.4 | 22.0 |
| 77.5° | 17.6 | 16.1 | 11.7 | 10.2 | 20.5 |
| 80° | 7.3 | 5.9 | 1.5 | 8.8 | 8.8 |
| 82.5° | 7.3 | 2.9 | 8.8 | 11.7 | 7.3 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)