

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: P247970

Luminaire Tested: **LSR8B150D010 EC8B150940 8LBS0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247970
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-92)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B150D010 EC8B150940 8LBS0H
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15701.0 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.22
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

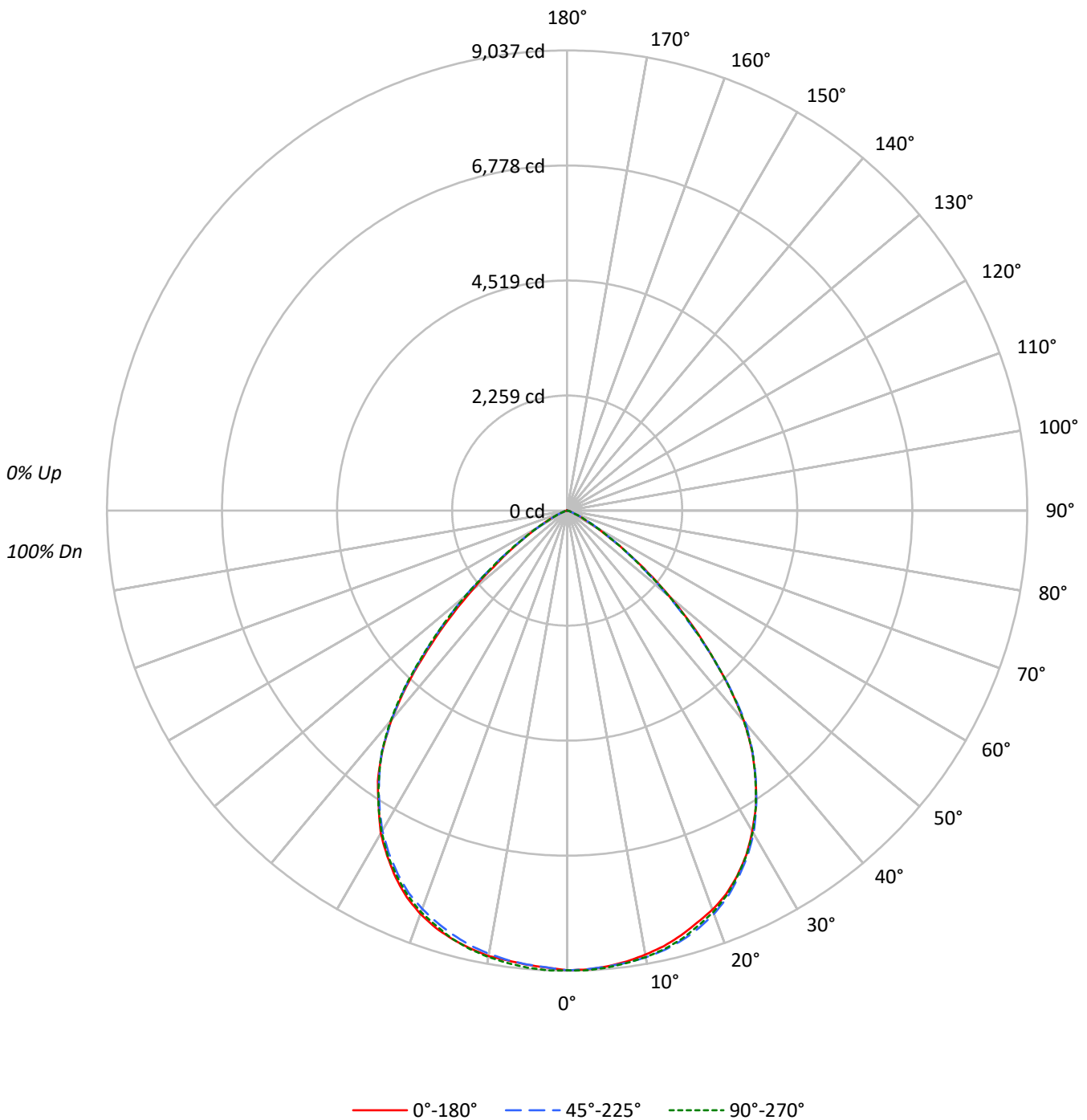
Input Watts (W): 158.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P247970

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBS0H

Luminous Intensity Polar Plot





TEST NUMBER: P247970

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBS0H

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 | 101 | 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 | 68 | 62 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 61 | 68 | 64 | 60 | 58 | | | | | 58 | | | |
| 6 | 79 | 69 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 | | | | | 53 | | | |
| 7 | 74 | 63 | 56 | 50 | 73 | 62 | 55 | 50 | 61 | 55 | 50 | 60 | 54 | 50 | 58 | 53 | 49 | 48 | | | | | 48 | | | |
| 8 | 70 | 58 | 51 | 46 | 68 | 58 | 51 | 46 | 56 | 50 | 46 | 55 | 49 | 45 | 54 | 49 | 45 | 43 | | | | | 43 | | | |
| 9 | 65 | 54 | 47 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 41 | 50 | 45 | 41 | 40 | | | | | 40 | | | |
| 10 | 62 | 50 | 43 | 38 | 60 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 | | | | | 36 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|--------|--------|--------|
| 0° | 278393 | 278393 | 278393 |
| 5° | 278191 | 278850 | 277169 |
| 10° | 277221 | 278755 | 278141 |
| 15° | 275732 | 277950 | 278148 |
| 20° | 273726 | 275334 | 276561 |
| 25° | 269080 | 269382 | 270900 |
| 30° | 258889 | 259459 | 260634 |
| 35° | 243057 | 242621 | 244028 |
| 40° | 217923 | 217347 | 215805 |
| 45° | 174053 | 174014 | 169626 |
| 50° | 125794 | 124600 | 117418 |
| 55° | 77094 | 76519 | 73024 |
| 60° | 39606 | 41142 | 40537 |
| 65° | 19299 | 20080 | 20408 |
| 70° | 8268 | 8511 | 8114 |
| 75° | 6469 | 6469 | 5624 |
| 80° | 3481 | 3161 | 2841 |
| 85° | 2830 | 1875 | 4104 |



TEST NUMBER: P247970

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBS0H

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 854.8 | 5.4 |
| 10°-20° | 2451.8 | 15.6 |
| 20°-30° | 3642.4 | 23.2 |
| 30°-40° | 4014.1 | 25.6 |
| 40°-50° | 3057.4 | 19.5 |
| 50°-60° | 1318.0 | 8.4 |
| 60°-70° | 302.8 | 1.9 |
| 70°-80° | 50.3 | 0.3 |
| 80°-90° | 9.5 | 0.1 |
| 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° | 6949.0 | 44.3 |
| 0°-40° | 10963.1 | 69.8 |
| 0°-60° | 15338.5 | 97.7 |
| 0°-90° | 15701.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 15701.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0° | 9028 | 9028 | 9028 | 9028 | 9028 | |
| 5° | 8987 | 8986 | 9008 | 8948 | 8954 | 854 |
| 15° | 8637 | 8733 | 8707 | 8629 | 8713 | 2436 |
| 25° | 7908 | 7953 | 7917 | 7871 | 7962 | 3629 |
| 35° | 6457 | 6460 | 6445 | 6440 | 6482 | 4009 |
| 45° | 3991 | 3983 | 3990 | 3969 | 3890 | 3079 |
| 55° | 1434 | 1433 | 1423 | 1432 | 1358 | 1337 |
| 65° | 264 | 290 | 275 | 273 | 280 | 296 |
| 75° | 54 | 54 | 54 | 55 | 47 | 50 |
| 85° | 8 | 5 | 5 | 16 | 12 | 8 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247970

CATALOG NUMBER: LSR8B150D010 EC8B150940 8LBS0H

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 9028.1 | 9028.1 | 9028.1 | 9028.1 | 9028.1 | 9028.1 | 9028.1 | 9028.1 | 9028.1 |
| 2.5° | 9018.3 | 9019.2 | 9013.0 | 9026.3 | 9037.0 | 9002.3 | 8981.8 | 9028.1 | 8983.6 |
| 5° | 8987.2 | 8993.4 | 8986.3 | 9003.2 | 9008.5 | 8980.0 | 8948.0 | 8997.8 | 8954.2 |
| 7.5° | 8933.7 | 8946.2 | 8956.9 | 8976.5 | 8962.2 | 8926.6 | 8905.2 | 8964.0 | 8910.6 |
| 10° | 8853.5 | 8884.7 | 8907.9 | 8937.3 | 8902.5 | 8864.2 | 8838.4 | 8918.6 | 8882.9 |
| 12.5° | 8763.6 | 8799.2 | 8838.4 | 8874.0 | 8821.5 | 8765.4 | 8752.0 | 8837.5 | 8805.4 |
| 15° | 8637.1 | 8670.1 | 8733.3 | 8767.1 | 8706.6 | 8642.5 | 8629.1 | 8737.8 | 8712.8 |
| 17.5° | 8488.4 | 8546.3 | 8599.7 | 8626.4 | 8549.8 | 8494.6 | 8487.5 | 8599.7 | 8589.9 |
| 20° | 8341.4 | 8372.6 | 8427.8 | 8463.4 | 8390.4 | 8324.5 | 8321.8 | 8437.6 | 8427.8 |
| 22.5° | 8155.2 | 8182.9 | 8219.4 | 8252.3 | 8183.7 | 8128.5 | 8132.1 | 8227.4 | 8225.6 |
| 25° | 7908.5 | 7927.2 | 7953.1 | 7989.6 | 7917.4 | 7878.2 | 7871.1 | 7972.6 | 7962.0 |
| 27.5° | 7620.8 | 7633.3 | 7662.7 | 7693.9 | 7631.5 | 7596.8 | 7584.3 | 7685.8 | 7650.2 |
| 30° | 7270.8 | 7299.3 | 7319.8 | 7333.1 | 7286.8 | 7265.4 | 7256.5 | 7336.7 | 7319.8 |
| 32.5° | 6899.4 | 6909.2 | 6910.0 | 6943.0 | 6894.0 | 6863.7 | 6863.7 | 6927.9 | 6889.6 |
| 35° | 6456.7 | 6454.9 | 6460.2 | 6495.9 | 6445.1 | 6455.8 | 6439.8 | 6490.5 | 6482.5 |
| 37.5° | 5971.2 | 5979.3 | 5981.0 | 6009.5 | 5981.0 | 5988.2 | 5981.9 | 5990.0 | 5964.1 |
| 40° | 5413.7 | 5448.4 | 5460.0 | 5454.6 | 5399.4 | 5380.7 | 5364.7 | 5394.1 | 5361.1 |
| 42.5° | 4721.6 | 4737.6 | 4739.4 | 4743.0 | 4727.8 | 4725.2 | 4705.6 | 4718.0 | 4666.4 |
| 45° | 3991.2 | 3998.3 | 3983.2 | 3980.5 | 3990.3 | 4005.5 | 3969.0 | 3940.5 | 3889.7 |
| 47.5° | 3324.1 | 3299.1 | 3230.6 | 3255.5 | 3266.2 | 3304.5 | 3265.3 | 3188.7 | 3146.8 |
| 50° | 2622.2 | 2596.4 | 2543.8 | 2555.4 | 2597.3 | 2655.2 | 2609.7 | 2503.8 | 2447.6 |
| 52.5° | 2003.2 | 1973.8 | 1915.0 | 1925.7 | 1938.2 | 1981.8 | 1957.8 | 1885.6 | 1831.3 |
| 55° | 1434.0 | 1413.5 | 1433.1 | 1417.1 | 1423.3 | 1465.2 | 1432.2 | 1372.6 | 1358.3 |
| 57.5° | 969.1 | 980.7 | 996.7 | 999.4 | 986.9 | 974.4 | 970.0 | 946.8 | 959.3 |
| 60° | 642.2 | 651.1 | 677.8 | 685.8 | 667.1 | 640.4 | 645.8 | 645.8 | 657.3 |
| 62.5° | 415.1 | 423.1 | 454.3 | 459.6 | 432.9 | 425.8 | 425.8 | 423.1 | 444.5 |
| 65° | 264.5 | 280.6 | 290.4 | 276.1 | 275.2 | 265.4 | 273.4 | 273.4 | 279.7 |
| 67.5° | 158.5 | 144.3 | 154.1 | 160.3 | 154.1 | 146.1 | 144.3 | 145.2 | 154.1 |
| 70° | 91.7 | 88.2 | 94.4 | 90.9 | 94.4 | 81.9 | 91.7 | 87.3 | 90.0 |
| 72.5° | 58.8 | 57.9 | 57.9 | 61.5 | 57.9 | 56.1 | 59.7 | 51.7 | 57.0 |
| 75° | 54.3 | 54.3 | 54.3 | 47.2 | 54.3 | 52.6 | 55.2 | 41.9 | 47.2 |
| 77.5° | 21.4 | 24.9 | 30.3 | 29.4 | 29.4 | 27.6 | 24.9 | 21.4 | 33.0 |
| 80° | 19.6 | 17.8 | 24.0 | 28.5 | 17.8 | 21.4 | 24.0 | 15.1 | 16.0 |
| 82.5° | 9.8 | 8.9 | 11.6 | 11.6 | 11.6 | 6.2 | 16.0 | 9.8 | 8.0 |
| 85° | 8.0 | 3.6 | 5.3 | 5.3 | 5.3 | 7.1 | 16.0 | 4.5 | 11.6 |
| 87.5° | 1.8 | 2.7 | 4.5 | 4.5 | 5.3 | 8.9 | 16.0 | 3.6 | 13.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)