

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: P247571

Luminaire Tested: **LSR8B90D010 EC8B90930 8LBSOGPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247571
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: LSR8B90D010 EC8B90930 8LBS0GPH
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
97 CRI 3000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7774.1 lumens
Efficiency: N/A
Efficacy: 90.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.23
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

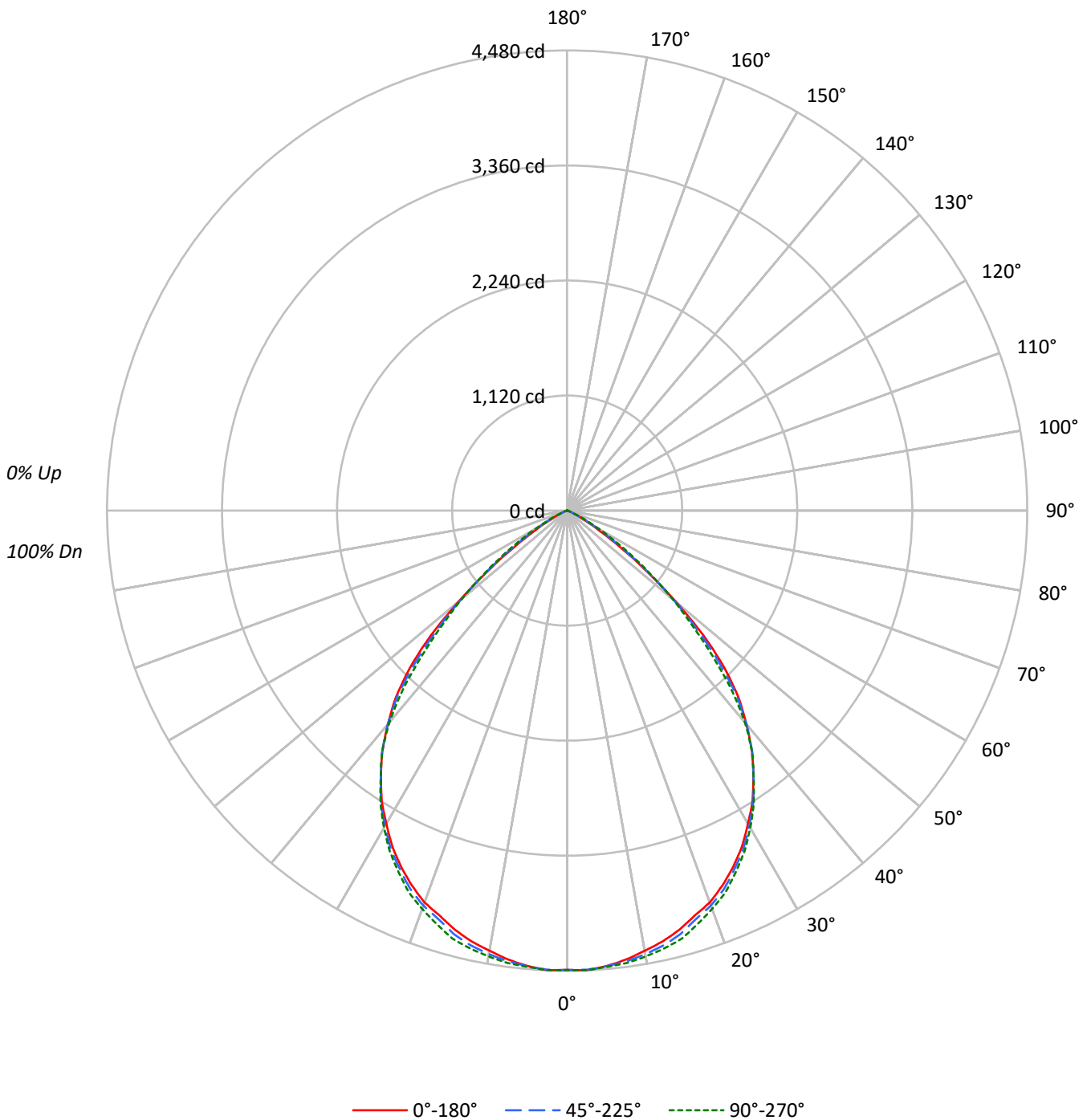
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 112 | 109 | 106 | 103 | 110 | 107 | 104 | 102 | 103 | 100 | 98 | 99 | 97 | 95 | 95 | 94 | 93 | 91 |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | 91 | 88 | 85 | 88 | 85 | 83 | 81 |
| 3 | 98 | 90 | 84 | 79 | 96 | 88 | 83 | 78 | 86 | 81 | 77 | 83 | 79 | 76 | 81 | 77 | 74 | 73 |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 68 | 76 | 71 | 68 | 74 | 70 | 67 | 65 |
| 5 | 85 | 75 | 67 | 62 | 83 | 74 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 61 | 68 | 64 | 60 | 58 |
| 6 | 79 | 68 | 61 | 56 | 78 | 68 | 61 | 56 | 66 | 60 | 55 | 64 | 59 | 55 | 63 | 58 | 54 | 53 |
| 7 | 74 | 63 | 55 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 49 | 48 |
| 8 | 70 | 58 | 51 | 46 | 68 | 57 | 50 | 46 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 43 |
| 9 | 65 | 54 | 47 | 42 | 64 | 53 | 46 | 42 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 |
| 10 | 62 | 50 | 43 | 38 | 60 | 49 | 43 | 38 | 48 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 36 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--|-----|-----|
| 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° | 423.0 | 5.4 |
| 10°-20° | 1201.4 | 15.5 |
| 20°-30° | 1771.8 | 22.8 |
| 30°-40° | 1972.1 | 25.4 |
| 40°-50° | 1587.1 | 20.4 |
| 50°-60° | 674.9 | 8.7 |
| 60°-70° | 126.5 | 1.6 |
| 70°-80° | 15.3 | 0.2 |
| 80°-90° | 1.9 | 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° | 3396.2 | 43.7 |
| 0°-40° | 5368.4 | 69.1 |
| 0°-60° | 7630.4 | 98.2 |
| 0°-90° | 7774.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 7774.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 4472 | 4472 | 4472 | 4472 | 4472 | |
| 5° | 4450 | 4451 | 4452 | 4459 | 4458 | 422 |
| 15° | 4224 | 4247 | 4268 | 4300 | 4314 | 1190 |
| 25° | 3825 | 3839 | 3853 | 3875 | 3884 | 1758 |
| 35° | 3160 | 3161 | 3163 | 3164 | 3164 | 1968 |
| 45° | 2168 | 2150 | 2092 | 2029 | 1999 | 1630 |
| 55° | 670 | 685 | 726 | 754 | 773 | 638 |
| 65° | 84 | 93 | 105 | 112 | 126 | 108 |
| 75° | 8 | 10 | 16 | 15 | 14 | 13 |
| 85° | 0 | 0 | 0 | 0 | 0 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 4472.3 | 4472.3 | 4472.3 | 4472.3 | 4472.3 |
| 2.5° | 4479.7 | 4482.5 | 4473.2 | 4475.0 | 4477.8 |
| 5° | 4449.9 | 4450.9 | 4451.8 | 4459.2 | 4458.3 |
| 7.5° | 4408.1 | 4414.6 | 4425.8 | 4439.7 | 4443.4 |
| 10° | 4351.4 | 4368.1 | 4384.9 | 4401.6 | 4407.2 |
| 12.5° | 4295.6 | 4305.8 | 4335.6 | 4352.3 | 4366.3 |
| 15° | 4223.9 | 4247.2 | 4267.6 | 4300.2 | 4314.2 |
| 17.5° | 4132.8 | 4149.5 | 4169.1 | 4201.6 | 4221.1 |
| 20° | 4059.3 | 4064.0 | 4091.9 | 4120.7 | 4127.2 |
| 22.5° | 3950.5 | 3960.7 | 3989.5 | 4009.0 | 4025.8 |
| 25° | 3824.9 | 3838.9 | 3852.8 | 3875.1 | 3884.4 |
| 27.5° | 3687.2 | 3695.6 | 3715.1 | 3730.9 | 3739.3 |
| 30° | 3520.7 | 3539.3 | 3547.7 | 3555.1 | 3566.3 |
| 32.5° | 3358.9 | 3364.5 | 3371.9 | 3376.6 | 3382.2 |
| 35° | 3159.8 | 3160.8 | 3162.6 | 3163.6 | 3163.6 |
| 37.5° | 2956.1 | 2962.6 | 2960.8 | 2955.2 | 2958.0 |
| 40° | 2715.2 | 2726.4 | 2719.9 | 2703.1 | 2692.0 |
| 42.5° | 2472.4 | 2466.9 | 2444.5 | 2394.2 | 2371.0 |
| 45° | 2168.2 | 2150.5 | 2092.0 | 2028.7 | 1999.0 |
| 47.5° | 1803.6 | 1764.6 | 1715.2 | 1665.9 | 1646.4 |
| 50° | 1382.2 | 1376.7 | 1354.4 | 1334.8 | 1336.7 |
| 52.5° | 990.6 | 1004.6 | 1009.2 | 1027.8 | 1037.1 |
| 55° | 669.7 | 684.6 | 725.5 | 754.3 | 772.9 |
| 57.5° | 407.4 | 436.3 | 480.0 | 527.4 | 551.6 |
| 60° | 257.6 | 274.4 | 314.4 | 345.0 | 356.3 |
| 62.5° | 161.0 | 161.9 | 181.4 | 205.6 | 215.8 |
| 65° | 83.7 | 93.0 | 105.1 | 112.5 | 125.6 |
| 67.5° | 52.1 | 52.1 | 51.1 | 62.3 | 69.7 |
| 70° | 34.4 | 29.8 | 30.7 | 37.2 | 40.0 |
| 72.5° | 12.1 | 20.5 | 18.6 | 18.6 | 13.0 |
| 75° | 8.4 | 10.2 | 15.8 | 14.9 | 13.9 |
| 77.5° | 11.2 | 10.2 | 7.4 | 6.5 | 13.0 |
| 80° | 4.6 | 3.7 | 0.9 | 5.6 | 5.6 |
| 82.5° | 4.6 | 1.9 | 5.6 | 7.4 | 4.6 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.9 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)