

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: P250429

Luminaire Tested: **LSR8B90D010 EC8B90940 8LBN0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250429
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13948)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90940 8LBN0B
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4958.0 lumens
Efficiency: N/A
Efficacy: 57.6 lumens/watt
Spacing Criteria (0/90/45): 0.69 / 0.69 / 0.77
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

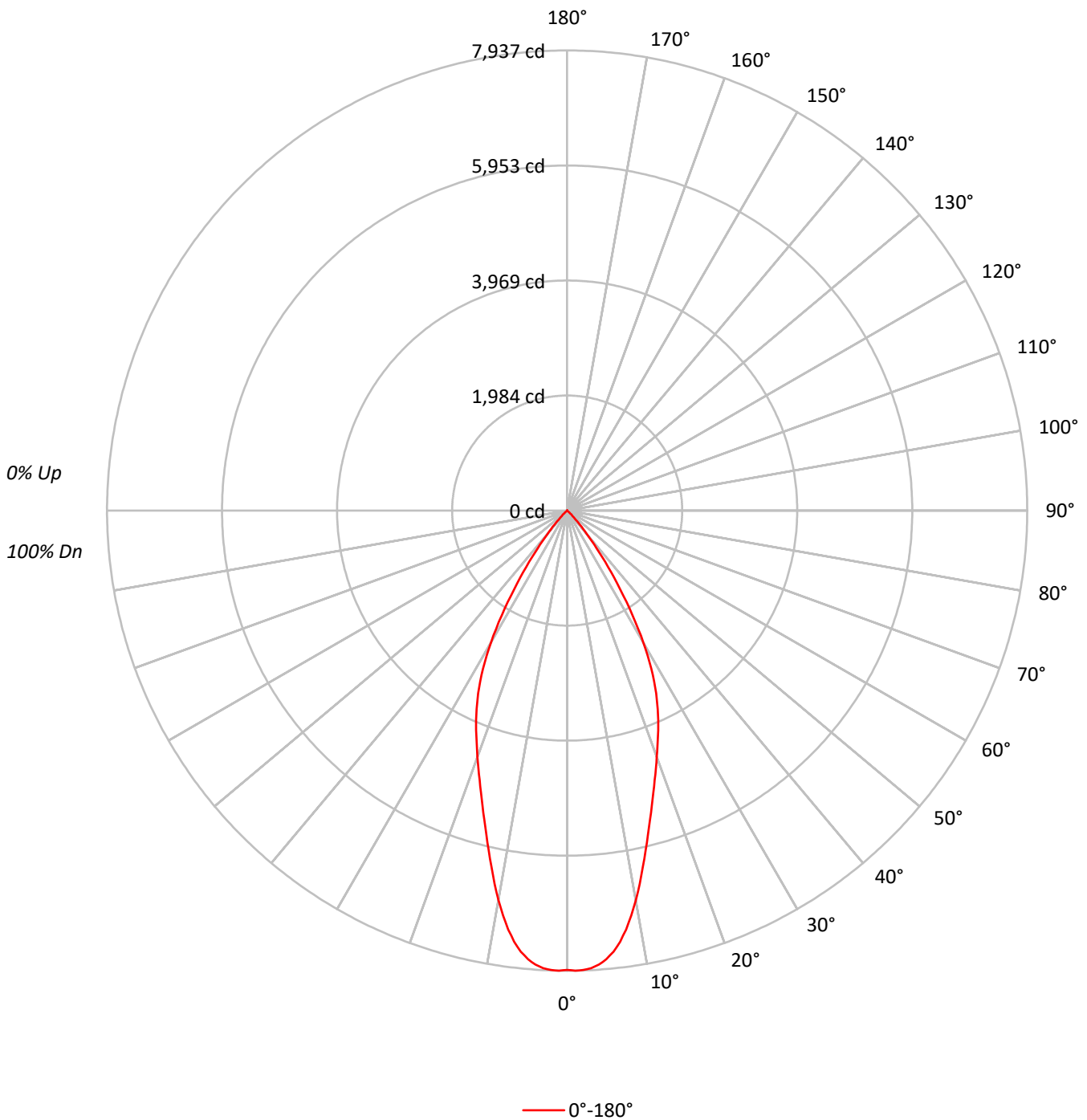
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 114 | 111 | 109 | 107 | 112 | 109 | 107 | 105 | 105 | 104 | 102 | | 101 | 100 | 99 | | 98 | 97 | 96 | 94 |
| 2 | 109 | 104 | 101 | 97 | 107 | 103 | 99 | 96 | 99 | 97 | 94 | | 96 | 94 | 92 | | 94 | 92 | 90 | 89 |
| 3 | 104 | 98 | 93 | 90 | 102 | 97 | 92 | 89 | 94 | 90 | 88 | | 92 | 89 | 86 | | 89 | 87 | 85 | 83 |
| 4 | 99 | 92 | 87 | 83 | 97 | 91 | 86 | 83 | 89 | 85 | 82 | | 87 | 84 | 81 | | 85 | 82 | 80 | 78 |
| 5 | 95 | 87 | 82 | 78 | 93 | 86 | 81 | 77 | 84 | 80 | 77 | | 83 | 79 | 76 | | 81 | 78 | 75 | 74 |
| 6 | 90 | 82 | 77 | 73 | 89 | 81 | 76 | 72 | 80 | 75 | 72 | | 79 | 75 | 71 | | 77 | 74 | 71 | 70 |
| 7 | 86 | 78 | 72 | 68 | 85 | 77 | 72 | 68 | 76 | 71 | 68 | | 75 | 71 | 67 | | 74 | 70 | 67 | 66 |
| 8 | 83 | 74 | 68 | 64 | 81 | 73 | 68 | 64 | 72 | 67 | 64 | | 71 | 67 | 64 | | 70 | 66 | 63 | 62 |
| 9 | 79 | 70 | 65 | 61 | 78 | 70 | 64 | 61 | 69 | 64 | 61 | | 68 | 63 | 60 | | 67 | 63 | 60 | 59 |
| 10 | 76 | 67 | 61 | 58 | 75 | 66 | 61 | 58 | 65 | 61 | 57 | | 65 | 60 | 57 | | 64 | 60 | 57 | 56 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 244298 |
| 5° | 240393 |
| 10° | 213586 |
| 15° | 176189 |
| 20° | 148384 |
| 25° | 125154 |
| 30° | 93710 |
| 35° | 53033 |
| 40° | 20968 |
| 45° | 5630 |
| 50° | 1079 |
| 55° | 0 |
| 60° | 154 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 711.2 | 14.3 |
| 10°-20° | 1545.7 | 31.2 |
| 20°-30° | 1659.5 | 33.5 |
| 30°-40° | 896.9 | 18.1 |
| 40°-50° | 139.9 | 2.8 |
| 50°-60° | 3.8 | 0.1 |
| 60°-70° | 0.9 | 0.0 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 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 |
| 0°-30° | 3916.4 | 79.0 |
| 0°-40° | 4813.3 | 97.1 |
| 0°-60° | 4957.0 | 100.0 |
| 0°-90° | 4958.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4958.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 7922 | |
| 5° | 7766 | 711 |
| 15° | 5519 | 1546 |
| 25° | 3678 | 1659 |
| 35° | 1409 | 897 |
| 45° | 129 | 140 |
| 55° | 0 | 4 |
| 65° | 0 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 7922.4 |
| 1° | 7937.4 |
| 2° | 7930.0 |
| 3° | 7902.8 |
| 4° | 7850.6 |
| 5° | 7766.1 |
| 6° | 7649.8 |
| 7° | 7493.3 |
| 8° | 7297.4 |
| 9° | 7071.9 |
| 10° | 6821.2 |
| 11° | 6558.2 |
| 12° | 6285.3 |
| 13° | 6012.8 |
| 14° | 5759.5 |
| 15° | 5519.0 |
| 16° | 5298.2 |
| 17° | 5084.8 |
| 18° | 4886.4 |
| 19° | 4700.6 |
| 20° | 4521.8 |
| 21° | 4348.2 |
| 22° | 4184.3 |
| 23° | 4020.9 |
| 24° | 3849.7 |
| 25° | 3678.4 |
| 26° | 3504.8 |
| 27° | 3306.4 |
| 28° | 3088.0 |
| 29° | 2865.1 |
| 30° | 2631.8 |
| 31° | 2381.3 |
| 32° | 2130.6 |
| 33° | 1882.6 |
| 34° | 1632.1 |
| 35° | 1408.8 |
| 37.5° | 900.4 |
| 40° | 520.9 |
| 42.5° | 277.9 |
| 45° | 129.1 |
| 47.5° | 69.6 |
| 50° | 22.5 |
| 52.5° | 2.5 |
| 55° | 0.0 |
| 57.5° | 2.5 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 60° | 2.5 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 2.5 |
| 70° | 0.0 |
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)