

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: P251271

Luminaire Tested: **LSR8B70D010 EC8B70850 8LBM0GPH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P251271  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201629)  
Test Lab: INNOVATION CENTER-P1  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B70D010 EC8B70850 8LBM0GPH  
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 5000 CCT WITH GRAPHITE TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6714.0 lumens  
Efficiency: N/A  
Efficacy: 88.5 lumens/watt  
Spacing Criteria (0/90/45): 0.82 / 0.82 / 0.87  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

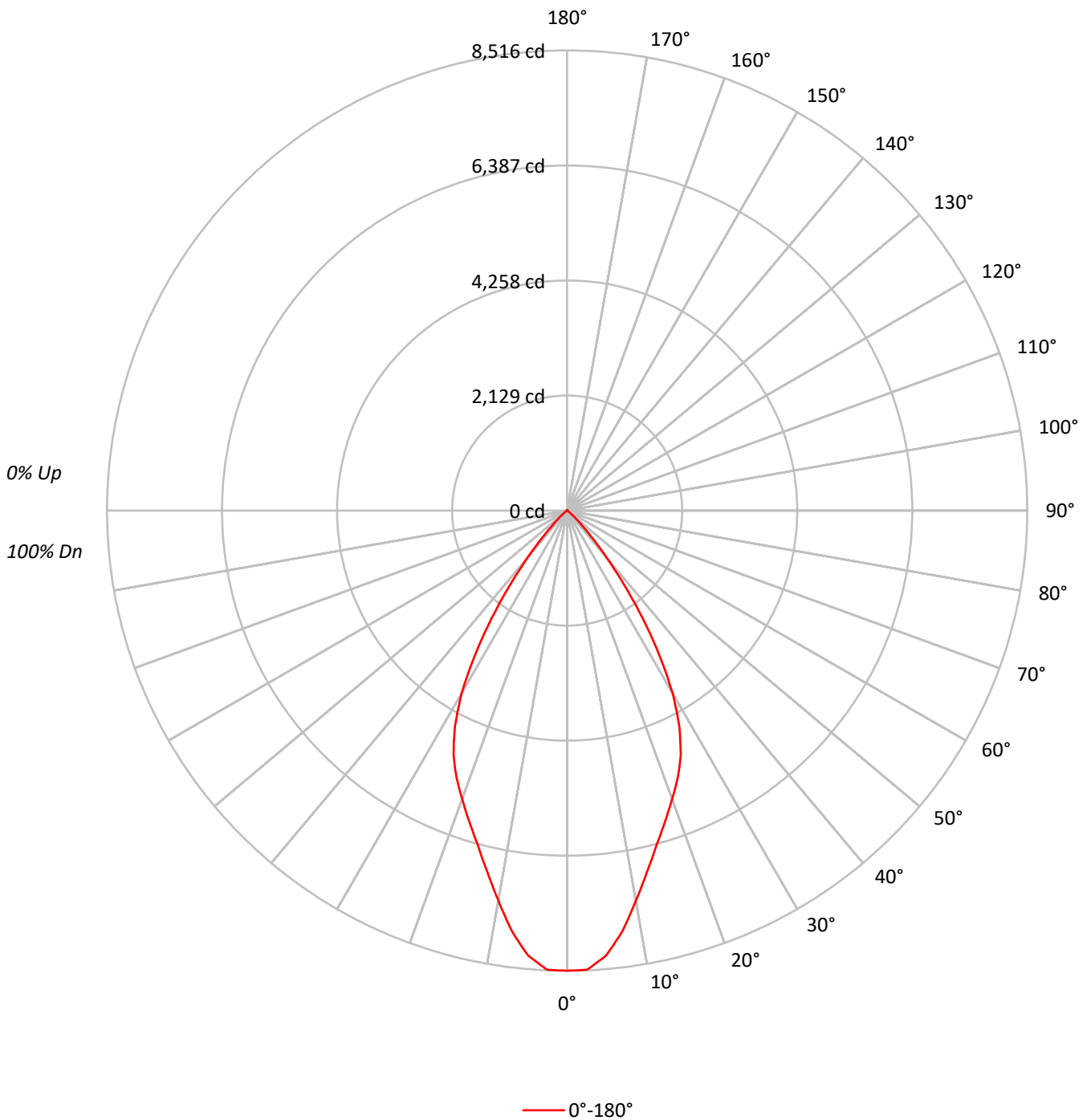
Input Watts (W): 75.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 114 | 111 | 108 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 |  | 101 | 100 | 98  |  | 98  | 96  | 95  | 94  |
| 2   | 108 | 103 | 99  | 96  | 106 | 102 | 98  | 95  | 98  | 95  | 93  |  | 95  | 93  | 91  |  | 93  | 91  | 89  | 87  |
| 3   | 103 | 96  | 92  | 88  | 101 | 95  | 91  | 87  | 92  | 89  | 86  |  | 90  | 87  | 84  |  | 88  | 85  | 83  | 81  |
| 4   | 98  | 90  | 85  | 81  | 96  | 89  | 84  | 80  | 87  | 83  | 79  |  | 85  | 81  | 78  |  | 83  | 80  | 77  | 76  |
| 5   | 93  | 85  | 79  | 75  | 91  | 84  | 78  | 74  | 82  | 77  | 74  |  | 80  | 76  | 73  |  | 79  | 75  | 72  | 71  |
| 6   | 88  | 79  | 73  | 69  | 87  | 79  | 73  | 69  | 77  | 72  | 69  |  | 76  | 71  | 68  |  | 74  | 71  | 68  | 66  |
| 7   | 84  | 75  | 69  | 65  | 82  | 74  | 68  | 64  | 73  | 68  | 64  |  | 72  | 67  | 64  |  | 70  | 66  | 63  | 62  |
| 8   | 80  | 70  | 64  | 60  | 79  | 70  | 64  | 60  | 69  | 64  | 60  |  | 68  | 63  | 60  |  | 67  | 63  | 59  | 58  |
| 9   | 76  | 66  | 61  | 57  | 75  | 66  | 60  | 57  | 65  | 60  | 56  |  | 64  | 59  | 56  |  | 63  | 59  | 56  | 55  |
| 10  | 72  | 63  | 57  | 53  | 71  | 62  | 57  | 53  | 62  | 57  | 53  |  | 61  | 56  | 53  |  | 60  | 56  | 53  | 51  |

**AVERAGE LUMINANCE (cd/sqm):**

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 262617 |
| 5°  | 255953 |
| 10° | 229501 |
| 15° | 204359 |
| 20° | 186466 |
| 25° | 169335 |
| 30° | 138873 |
| 35° | 91445  |
| 40° | 45567  |
| 45° | 16942  |
| 50° | 5157   |
| 55° | 581    |
| 60° | 352    |
| 65° | 0      |
| 70° | 243    |
| 75° | 1001   |
| 80° | 0      |
| 85° | 955    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 758.2  | 11.3      |
| 10°-20°   | 1802.6 | 26.8      |
| 20°-30°   | 2245.4 | 33.4      |
| 30°-40°   | 1515.2 | 22.6      |
| 40°-50°   | 358.1  | 5.3       |
| 50°-60°   | 26.0   | 0.4       |
| 60°-70°   | 4.5    | 0.1       |
| 70°-80°   | 3.3    | 0.0       |
| 80°-90°   | 0.7    | 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°    | 4806.2 | 71.6      |
| 0°-40°    | 6321.4 | 94.2      |
| 0°-60°    | 6705.4 | 99.9      |
| 0°-90°    | 6714.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 6714.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | Flux |
|------|------|------|
| 0°   | 8516 |      |
| 5°   | 8269 | 758  |
| 15°  | 6401 | 1803 |
| 25°  | 4977 | 2245 |
| 35°  | 2429 | 1515 |
| 45°  | 388  | 358  |
| 55°  | 11   | 26   |
| 65°  | 0    | 5    |
| 75°  | 8    | 3    |
| 85°  | 3    | 1    |
| 90°  | 0    | 0    |
| 95°  | 0    | 0    |
| 105° | 0    | 0    |
| 115° | 0    | 0    |
| 125° | 0    | 0    |
| 135° | 0    | 0    |
| 145° | 0    | 0    |
| 155° | 0    | 0    |
| 165° | 0    | 0    |
| 175° | 0    | 0    |
| 180° | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

| 0°     |        |
|--------|--------|
| 0°     | 8516.5 |
| 2.5°   | 8503.0 |
| 5°     | 8268.8 |
| 7.5°   | 7847.2 |
| 10°    | 7329.5 |
| 12.5°  | 6836.5 |
| 15°    | 6401.4 |
| 17.5°  | 6026.4 |
| 20°    | 5682.3 |
| 22.5°  | 5349.0 |
| 25°    | 4976.9 |
| 27.5°  | 4492.3 |
| 30°    | 3900.2 |
| 32.5°  | 3184.0 |
| 35°    | 2429.2 |
| 37.5°  | 1738.2 |
| 40°    | 1132.0 |
| 42.5°  | 677.4  |
| 45°    | 388.5  |
| 47.5°  | 217.7  |
| 50°    | 107.5  |
| 52.5°  | 49.5   |
| 55°    | 10.8   |
| 57.5°  | 2.7    |
| 60°    | 5.7    |
| 62.5°  | 8.4    |
| 65°    | 0.0    |
| 67.5°  | 5.7    |
| 70°    | 2.7    |
| 72.5°  | 2.7    |
| 75°    | 8.4    |
| 77.5°  | 0.0    |
| 80°    | 0.0    |
| 82.5°  | 0.0    |
| 85°    | 2.7    |
| 87.5°  | 0.0    |
| 90°    | 0.0    |
| 92.5°  | 0.0    |
| 95°    | 0.0    |
| 97.5°  | 0.0    |
| 100°   | 0.0    |
| 102.5° | 0.0    |
| 105°   | 0.0    |
| 107.5° | 0.0    |
| 110°   | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  |
|--------|-----|
| 112.5° | 0.0 |
| 115°   | 0.0 |
| 117.5° | 0.0 |
| 120°   | 0.0 |
| 122.5° | 0.0 |
| 125°   | 0.0 |
| 127.5° | 0.0 |
| 130°   | 0.0 |
| 132.5° | 0.0 |
| 135°   | 0.0 |
| 137.5° | 0.0 |
| 140°   | 0.0 |
| 142.5° | 0.0 |
| 145°   | 0.0 |
| 147.5° | 0.0 |
| 150°   | 0.0 |
| 152.5° | 0.0 |
| 155°   | 0.0 |
| 157.5° | 0.0 |
| 160°   | 0.0 |
| 162.5° | 0.0 |
| 165°   | 0.0 |
| 167.5° | 0.0 |
| 170°   | 0.0 |
| 172.5° | 0.0 |
| 175°   | 0.0 |
| 177.5° | 0.0 |
| 180°   | 0.0 |

(END OF REPORT)