

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: P249890

Luminaire Tested: **LSR8B90D010 EC8B90840 8LBM0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P249890
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13954)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90840 8LBM0H
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9106.0 lumens
Efficiency: N/A
Efficacy: 105.8 lumens/watt
Spacing Criteria (0/90/45): 0.92 / 0.92 / 0.93
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

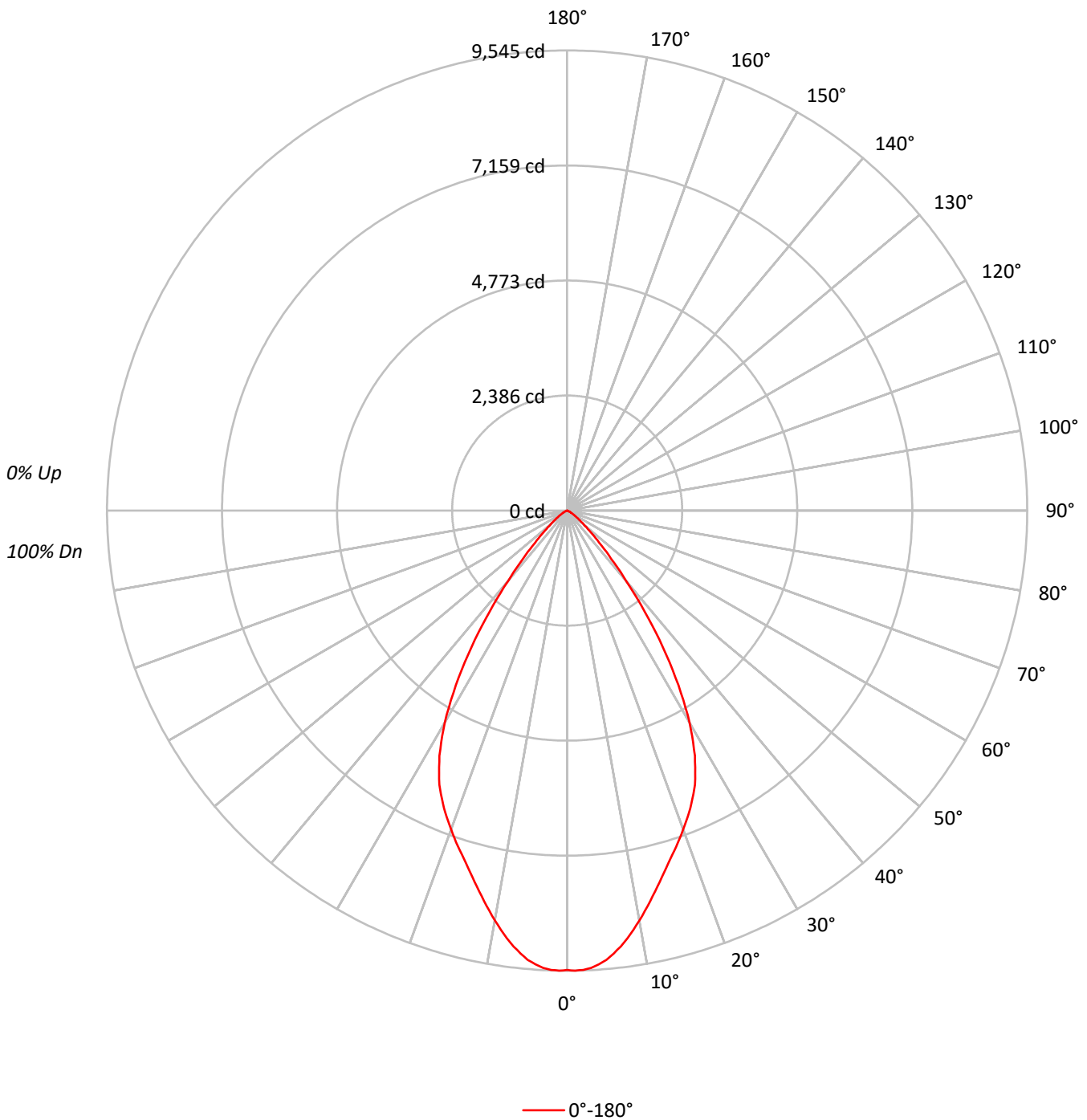
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 101 | | 100 | 99 | 98 | | 97 | 96 | 95 | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 97 | 93 | 97 | 94 | 91 | | 94 | 92 | 89 | | 91 | 89 | 87 | 86 |
| 3 | 101 | 95 | 90 | 85 | 99 | 93 | 89 | 85 | 91 | 87 | 83 | | 88 | 85 | 82 | | 86 | 83 | 81 | 79 |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 82 | 77 | 85 | 80 | 76 | | 83 | 79 | 76 | | 81 | 77 | 75 | 73 |
| 5 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | | 78 | 73 | 70 | | 76 | 72 | 69 | 68 |
| 6 | 86 | 77 | 70 | 66 | 84 | 76 | 70 | 66 | 74 | 69 | 65 | | 73 | 68 | 65 | | 71 | 67 | 64 | 63 |
| 7 | 81 | 72 | 65 | 61 | 80 | 71 | 65 | 61 | 70 | 64 | 60 | | 68 | 64 | 60 | | 67 | 63 | 60 | 58 |
| 8 | 77 | 67 | 61 | 57 | 76 | 67 | 61 | 56 | 65 | 60 | 56 | | 64 | 60 | 56 | | 63 | 59 | 56 | 54 |
| 9 | 73 | 63 | 57 | 53 | 72 | 63 | 57 | 53 | 62 | 56 | 53 | | 61 | 56 | 52 | | 60 | 55 | 52 | 51 |
| 10 | 70 | 60 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 53 | 49 | | 57 | 53 | 49 | | 57 | 52 | 49 | 48 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 293904 |
| 5° | 289576 |
| 10° | 270248 |
| 15° | 248060 |
| 20° | 231033 |
| 25° | 213454 |
| 30° | 181010 |
| 35° | 130215 |
| 40° | 76708 |
| 45° | 40993 |
| 50° | 21391 |
| 55° | 12064 |
| 60° | 6654 |
| 65° | 3940 |
| 70° | 1794 |
| 75° | 1013 |
| 80° | 497 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 868.9 | 9.5 |
| 10°-20° | 2186.2 | 24.0 |
| 20°-30° | 2838.1 | 31.2 |
| 30°-40° | 2142.1 | 23.5 |
| 40°-50° | 783.8 | 8.6 |
| 50°-60° | 219.1 | 2.4 |
| 60°-70° | 57.6 | 0.6 |
| 70°-80° | 9.7 | 0.1 |
| 80°-90° | 0.4 | 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° | 5893.2 | 64.7 |
| 0°-40° | 8035.4 | 88.2 |
| 0°-60° | 9038.3 | 99.3 |
| 0°-90° | 9106.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9106.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 9531 | |
| 5° | 9355 | 869 |
| 15° | 7770 | 2186 |
| 25° | 6274 | 2838 |
| 35° | 3459 | 2142 |
| 45° | 940 | 784 |
| 55° | 224 | 219 |
| 65° | 54 | 58 |
| 75° | 8 | 10 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 9531.1 |
| 1° | 9545.3 |
| 2° | 9533.9 |
| 3° | 9497.0 |
| 4° | 9434.5 |
| 5° | 9355.0 |
| 6° | 9238.5 |
| 7° | 9110.7 |
| 8° | 8963.1 |
| 9° | 8801.2 |
| 10° | 8630.8 |
| 11° | 8460.4 |
| 12° | 8284.3 |
| 13° | 8105.4 |
| 14° | 7935.0 |
| 15° | 7770.3 |
| 16° | 7614.1 |
| 17° | 7463.5 |
| 18° | 7327.2 |
| 19° | 7185.2 |
| 20° | 7040.4 |
| 22.5° | 6679.7 |
| 25° | 6273.6 |
| 27.5° | 5736.8 |
| 30° | 5083.6 |
| 32.5° | 4296.9 |
| 35° | 3459.1 |
| 37.5° | 2641.2 |
| 40° | 1905.6 |
| 42.5° | 1349.0 |
| 45° | 940.0 |
| 47.5° | 661.7 |
| 50° | 445.9 |
| 52.5° | 326.6 |
| 55° | 224.4 |
| 57.5° | 161.9 |
| 60° | 107.9 |
| 62.5° | 79.5 |
| 65° | 54.0 |
| 67.5° | 36.9 |
| 70° | 19.9 |
| 72.5° | 14.2 |
| 75° | 8.5 |
| 77.5° | 2.8 |
| 80° | 2.8 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)