

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: P246328

Luminaire Tested: **LD8B40D010 ER8B40830 8LBN0B**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246328
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201749)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B40D010 ER8B40830 8LBN0B
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 3000 CCT WITH SPECULAR BLACK TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: 1887 (1 lamp)
Luminaire Lumens: 2433.0 lumens
Efficiency: 128.9%
Efficacy: 59.5 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

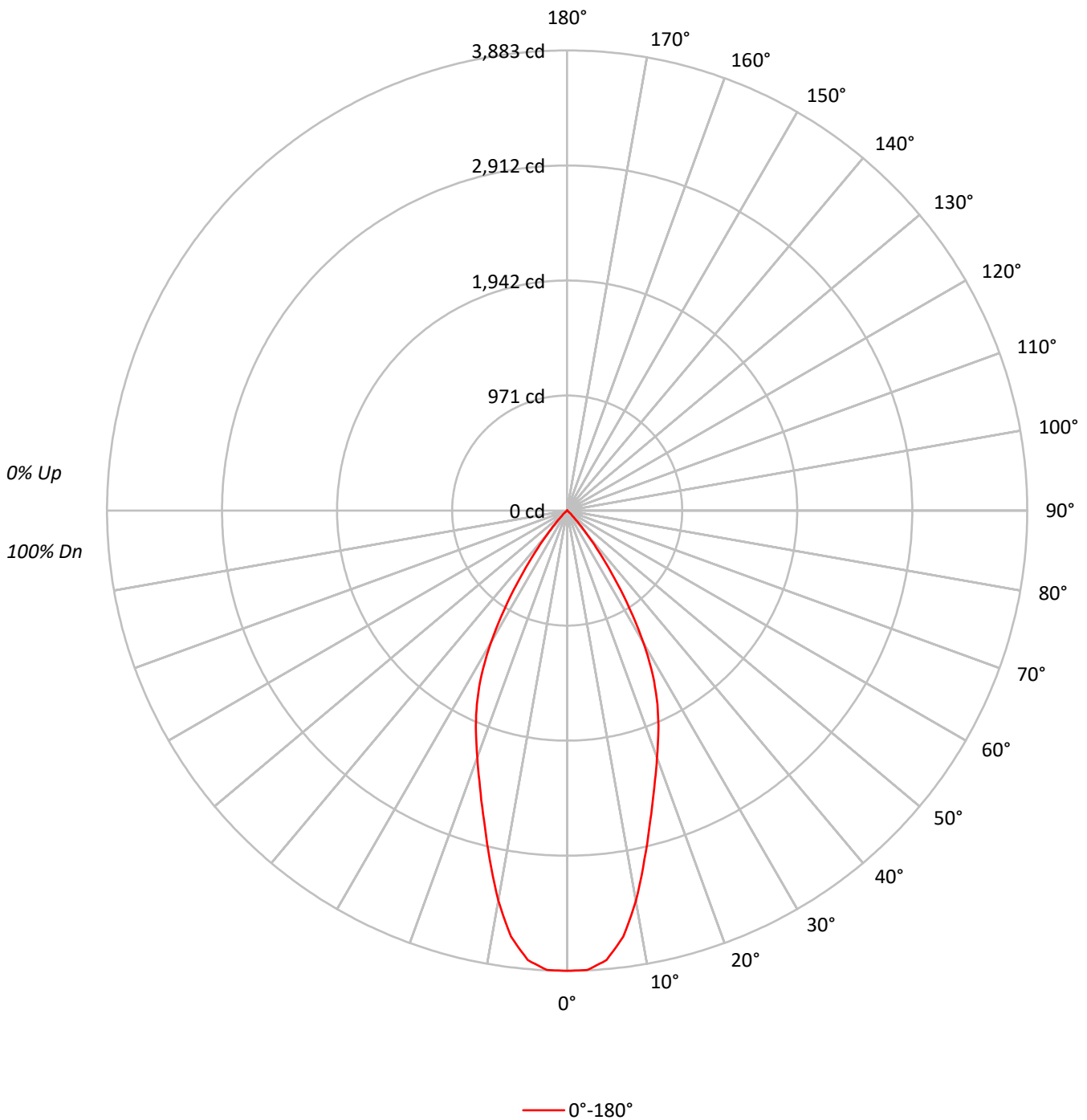
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 153 | 153 | 153 | 153 | 150 | 150 | 150 | 150 | 143 | 143 | 143 | 137 | 137 | 137 | 132 | 132 | 132 | 129 | 129 | 129 |
| 1 | 147 | 144 | 141 | 138 | 144 | 141 | 138 | 136 | 136 | 133 | 132 | 131 | 129 | 128 | 126 | 125 | 124 | 122 | 121 | 120 |
| 2 | 140 | 135 | 130 | 126 | 138 | 132 | 128 | 124 | 128 | 125 | 122 | 124 | 121 | 119 | 121 | 119 | 116 | 114 | 113 | 112 |
| 3 | 134 | 126 | 120 | 116 | 131 | 125 | 119 | 115 | 121 | 117 | 113 | 118 | 114 | 111 | 115 | 112 | 109 | 108 | 107 | 106 |
| 4 | 128 | 119 | 112 | 107 | 126 | 117 | 111 | 107 | 115 | 110 | 105 | 112 | 108 | 104 | 110 | 106 | 103 | 101 | 100 | 99 |
| 5 | 122 | 112 | 105 | 100 | 120 | 111 | 104 | 100 | 109 | 103 | 99 | 107 | 102 | 98 | 105 | 100 | 97 | 95 | 94 | 93 |
| 6 | 117 | 106 | 99 | 94 | 115 | 105 | 98 | 93 | 103 | 97 | 93 | 101 | 96 | 92 | 100 | 95 | 92 | 90 | 89 | 88 |
| 7 | 111 | 100 | 93 | 88 | 110 | 99 | 93 | 88 | 98 | 92 | 87 | 96 | 91 | 87 | 95 | 90 | 86 | 85 | 84 | 83 |
| 8 | 106 | 95 | 88 | 83 | 105 | 94 | 88 | 83 | 93 | 87 | 82 | 92 | 86 | 82 | 91 | 86 | 82 | 80 | 79 | 78 |
| 9 | 102 | 90 | 83 | 78 | 100 | 90 | 83 | 78 | 89 | 82 | 78 | 87 | 82 | 78 | 86 | 81 | 78 | 76 | 75 | 74 |
| 10 | 98 | 86 | 79 | 74 | 96 | 85 | 79 | 74 | 84 | 78 | 74 | 83 | 78 | 74 | 82 | 77 | 74 | 72 | 71 | 70 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 119750 |
| 5° | 117858 |
| 10° | 104701 |
| 15° | 86393 |
| 20° | 72742 |
| 25° | 61356 |
| 30° | 45958 |
| 35° | 25993 |
| 40° | 10265 |
| 45° | 2747 |
| 50° | 552 |
| 55° | 0 |
| 60° | 80 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

CANDELA DISTRIBUTION:

| Zone | Lumens | % Fixture | % Lamp | 0° | Flux | |
|-----------|--------|-----------|--------|------|------|-----|
| 0°-10° | 348.4 | 14.3 | 18.5 | 0° | 3883 | |
| 10°-20° | 759.4 | 31.2 | 40.2 | 5° | 3808 | 348 |
| 20°-30° | 813.5 | 33.4 | 43.1 | 15° | 2706 | 759 |
| 30°-40° | 440.8 | 18.1 | 23.4 | 25° | 1803 | 813 |
| 40°-50° | 68.5 | 2.8 | 3.6 | 35° | 690 | 441 |
| 50°-60° | 2.0 | 0.1 | 0.1 | 45° | 63 | 68 |
| 60°-70° | 0.5 | 0.0 | 0.0 | 55° | 0 | 2 |
| 70°-80° | 0.0 | 0.0 | 0.0 | 65° | 0 | 0 |
| 80°-90° | 0.0 | 0.0 | 0.0 | 75° | 0 | 0 |
| 90°-100° | 0.0 | 0.0 | 0.0 | 85° | 0 | 0 |
| 100°-110° | 0.0 | 0.0 | 0.0 | 90° | 0 | 0 |
| 110°-120° | 0.0 | 0.0 | 0.0 | 95° | 0 | 0 |
| 120°-130° | 0.0 | 0.0 | 0.0 | 105° | 0 | 0 |
| 130°-140° | 0.0 | 0.0 | 0.0 | 115° | 0 | 0 |
| 140°-150° | 0.0 | 0.0 | 0.0 | 125° | 0 | 0 |
| 150°-160° | 0.0 | 0.0 | 0.0 | 135° | 0 | 0 |
| 160°-170° | 0.0 | 0.0 | 0.0 | 145° | 0 | 0 |
| 170°-180° | 0.0 | 0.0 | 0.0 | 155° | 0 | 0 |
| 0°-30° | 1921.2 | 79.0 | 101.8 | 165° | 0 | 0 |
| 0°-40° | 2362.1 | 97.1 | 125.2 | 175° | 0 | 0 |
| 0°-60° | 2432.5 | 100.0 | 128.9 | 180° | 0 | 0 |
| 0°-90° | 2433.0 | 100.0 | 128.9 | | | |
| 90°-120° | 0.0 | 0.0 | 0.0 | | | |
| 90°-150° | 0.0 | 0.0 | 0.0 | | | |
| 90°-180° | 0.0 | 0.0 | 0.0 | | | |
| 0°-180° | 2433.0 | 100.0 | 128.9 | | | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|--------|--------|
| 0° | 3883.4 |
| 2.5° | 3880.9 |
| 5° | 3807.5 |
| 7.5° | 3625.9 |
| 10° | 3343.8 |
| 12.5° | 3015.3 |
| 15° | 2706.2 |
| 17.5° | 2444.7 |
| 20° | 2216.7 |
| 22.5° | 2011.9 |
| 25° | 1803.3 |
| 27.5° | 1567.6 |
| 30° | 1290.7 |
| 32.5° | 984.1 |
| 35° | 690.5 |
| 37.5° | 441.9 |
| 40° | 255.0 |
| 42.5° | 136.5 |
| 45° | 63.0 |
| 47.5° | 33.5 |
| 50° | 11.5 |
| 52.5° | 1.3 |
| 55° | 0.0 |
| 57.5° | 1.3 |
| 60° | 1.3 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 1.3 |
| 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 |
| 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)