

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: P246628

Luminaire Tested: **LSR8B40D010 EC8B40840 8LBN0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P246628
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P201839)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B40D010 EC8B40840 8LBN0MW
Description: PORTFOLIO 8 INCH NARROW DISTRIBUTION 50 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 4000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4026.0 lumens
Efficiency: N/A
Efficacy: 98.4 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.79 / 0.85
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

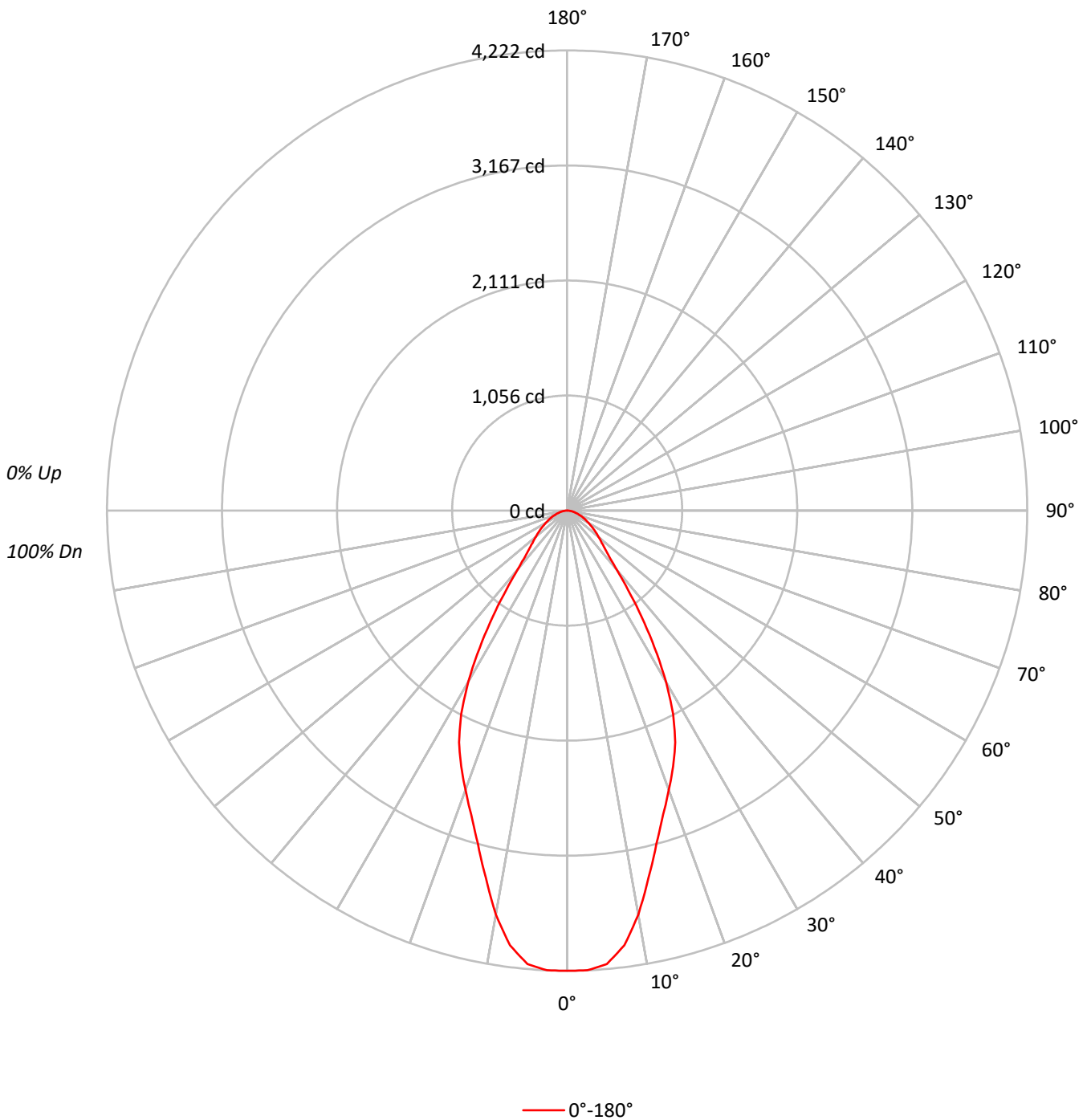
Input Watts (W): 40.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 112 | 109 | 106 | 103 | 109 | 106 | 104 | 101 | 102 | 100 | 98 | | 98 | 97 | 95 | | 95 | 94 | 92 | 90 |
| 2 | 105 | 99 | 94 | 90 | 103 | 97 | 93 | 89 | 94 | 90 | 87 | | 91 | 88 | 85 | | 88 | 86 | 83 | 82 |
| 3 | 99 | 91 | 85 | 80 | 96 | 89 | 84 | 79 | 87 | 82 | 78 | | 84 | 80 | 77 | | 82 | 78 | 76 | 74 |
| 4 | 93 | 84 | 77 | 72 | 91 | 83 | 76 | 72 | 80 | 75 | 71 | | 78 | 74 | 70 | | 76 | 72 | 69 | 67 |
| 5 | 87 | 78 | 71 | 66 | 85 | 77 | 70 | 65 | 75 | 69 | 65 | | 73 | 68 | 64 | | 71 | 67 | 64 | 62 |
| 6 | 82 | 72 | 65 | 60 | 81 | 71 | 65 | 60 | 70 | 64 | 60 | | 68 | 63 | 59 | | 67 | 62 | 59 | 57 |
| 7 | 78 | 67 | 60 | 56 | 76 | 67 | 60 | 55 | 65 | 59 | 55 | | 64 | 59 | 55 | | 63 | 58 | 54 | 53 |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 51 | 61 | 55 | 51 | | 60 | 55 | 51 | | 59 | 54 | 51 | 49 |
| 9 | 70 | 59 | 53 | 48 | 69 | 59 | 52 | 48 | 58 | 52 | 48 | | 57 | 51 | 48 | | 56 | 51 | 47 | 46 |
| 10 | 66 | 56 | 49 | 45 | 65 | 55 | 49 | 45 | 54 | 49 | 45 | | 54 | 48 | 45 | | 53 | 48 | 45 | 43 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 130191 |
| 5° | 129258 |
| 10° | 117790 |
| 15° | 100963 |
| 20° | 89478 |
| 25° | 79844 |
| 30° | 64484 |
| 35° | 44740 |
| 40° | 28387 |
| 45° | 21089 |
| 50° | 17999 |
| 55° | 15779 |
| 60° | 14123 |
| 65° | 12616 |
| 70° | 10873 |
| 75° | 9996 |
| 80° | 9323 |
| 85° | 8208 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 385.2 | 9.6 |
| 10°-20° | 890.9 | 22.1 |
| 20°-30° | 1059.4 | 26.3 |
| 30°-40° | 748.9 | 18.6 |
| 40°-50° | 386.6 | 9.6 |
| 50°-60° | 265.1 | 6.6 |
| 60°-70° | 172.0 | 4.3 |
| 70°-80° | 90.2 | 2.2 |
| 80°-90° | 27.7 | 0.7 |
| 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° | 2335.4 | 58.0 |
| 0°-40° | 3084.4 | 76.6 |
| 0°-60° | 3736.0 | 92.8 |
| 0°-90° | 4026.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4026.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|------|------|
| 0° | 4222 | |
| 5° | 4176 | 385 |
| 15° | 3163 | 891 |
| 25° | 2347 | 1059 |
| 35° | 1188 | 749 |
| 45° | 484 | 387 |
| 55° | 294 | 265 |
| 65° | 173 | 172 |
| 75° | 84 | 90 |
| 85° | 23 | 26 |
| 90° | 0 | 2 |
| 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° | 4222.0 |
| 2.5° | 4222.0 |
| 5° | 4175.8 |
| 7.5° | 4022.3 |
| 10° | 3761.8 |
| 12.5° | 3451.2 |
| 15° | 3162.6 |
| 17.5° | 2925.1 |
| 20° | 2726.7 |
| 22.5° | 2539.1 |
| 25° | 2346.7 |
| 27.5° | 2105.4 |
| 30° | 1811.0 |
| 32.5° | 1494.2 |
| 35° | 1188.5 |
| 37.5° | 915.7 |
| 40° | 705.2 |
| 42.5° | 567.5 |
| 45° | 483.6 |
| 47.5° | 422.6 |
| 50° | 375.2 |
| 52.5° | 333.6 |
| 55° | 293.5 |
| 57.5° | 258.2 |
| 60° | 229.0 |
| 62.5° | 198.4 |
| 65° | 172.9 |
| 67.5° | 149.8 |
| 70° | 120.6 |
| 72.5° | 103.6 |
| 75° | 83.9 |
| 77.5° | 68.1 |
| 80° | 52.5 |
| 82.5° | 39.0 |
| 85° | 23.2 |
| 87.5° | 13.4 |
| 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)