

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: P247179

Luminaire Tested: **LSR8B90D010 EC8B90950 8LBW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247179
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-58)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90950 8LBW0H
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8760.0 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.13 / 1.06
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

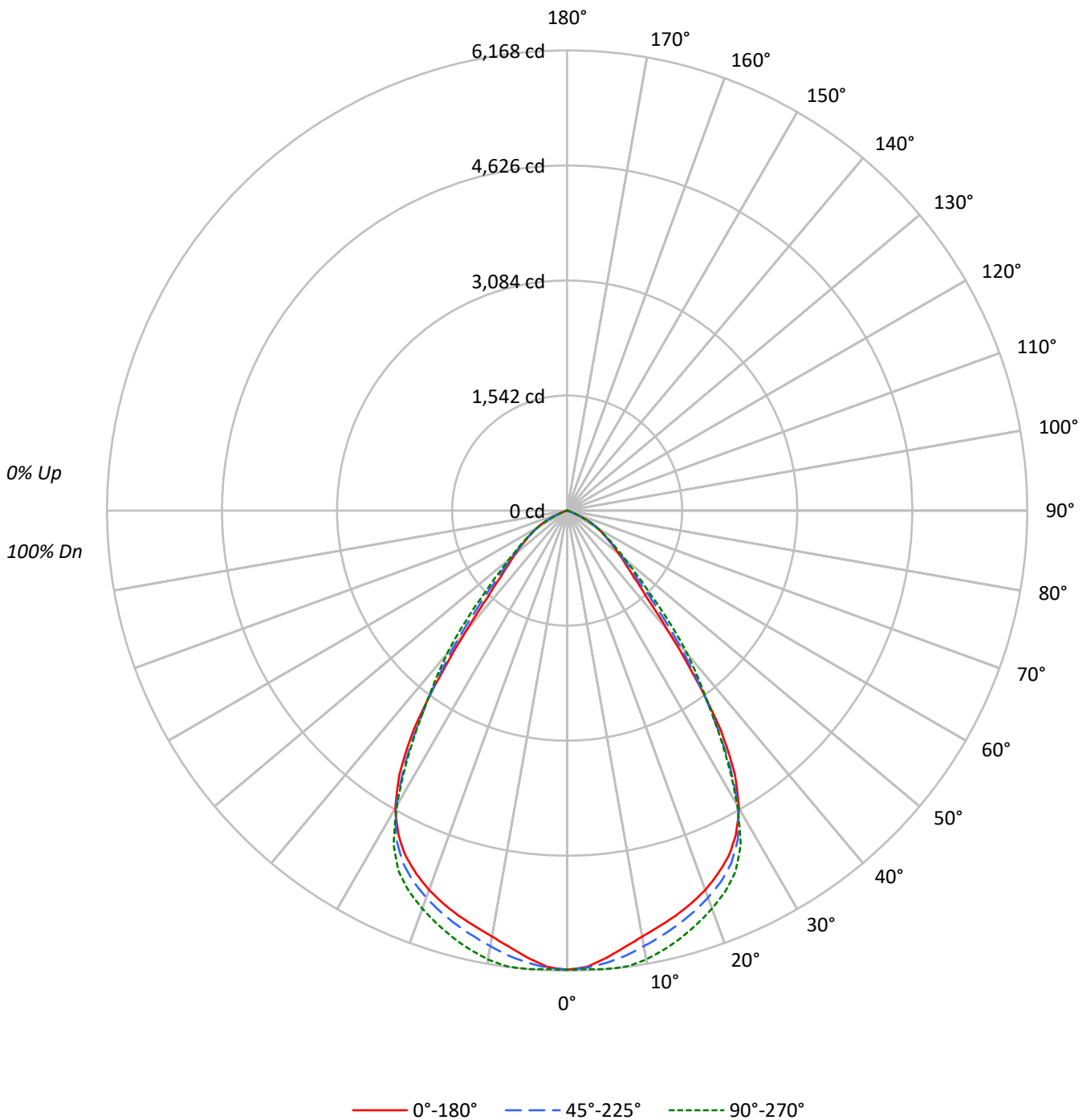
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | | | | | 100 | | | |
| 1 | 112 | 109 | 106 | 104 | 110 | 107 | 104 | 102 | 103 | 101 | 99 | 99 | 97 | 96 | 96 | 94 | 93 | 91 | | | | | 91 | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 86 | 84 | 82 | | | | | 82 | | | |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 82 | 79 | 85 | 81 | 77 | 82 | 79 | 76 | 74 | | | | | 74 | | | |
| 4 | 93 | 84 | 77 | 72 | 91 | 82 | 76 | 72 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 67 | | | | | 67 | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 69 | 65 | 74 | 68 | 64 | 72 | 67 | 63 | 71 | 66 | 63 | 61 | | | | | 61 | | | |
| 6 | 81 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 69 | 63 | 58 | 67 | 62 | 58 | 66 | 61 | 57 | 56 | | | | | 56 | | | |
| 7 | 77 | 66 | 59 | 54 | 75 | 65 | 58 | 54 | 64 | 58 | 53 | 62 | 57 | 53 | 61 | 56 | 53 | 51 | | | | | 51 | | | |
| 8 | 72 | 61 | 54 | 49 | 71 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 47 | | | | | 47 | | | |
| 9 | 68 | 57 | 50 | 45 | 67 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 53 | 48 | 45 | 43 | | | | | 43 | | | |
| 10 | 64 | 53 | 47 | 42 | 63 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 50 | 45 | 42 | 40 | | | | | 40 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 189776 | 189776 | 189776 |
| 5° | 186288 | 188315 | 190919 |
| 10° | 181516 | 185646 | 191273 |
| 15° | 179458 | 183407 | 189109 |
| 20° | 177583 | 181164 | 186345 |
| 25° | 174088 | 177235 | 181689 |
| 30° | 164140 | 163399 | 162399 |
| 35° | 135015 | 130362 | 129620 |
| 40° | 84545 | 93280 | 100848 |
| 45° | 55170 | 61515 | 68170 |
| 50° | 43502 | 45593 | 48582 |
| 55° | 35461 | 36074 | 37192 |
| 60° | 29017 | 28826 | 28696 |
| 65° | 18796 | 18263 | 17278 |
| 70° | 6464 | 5996 | 5527 |
| 75° | 2228 | 2109 | 1978 |
| 80° | 923 | 746 | 746 |
| 85° | 354 | 354 | 354 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 576.5 | 6.6 |
| 10°-20° | 1624.3 | 18.5 |
| 20°-30° | 2375.6 | 27.1 |
| 30°-40° | 2152.5 | 24.6 |
| 40°-50° | 1144.5 | 13.1 |
| 50°-60° | 610.8 | 7.0 |
| 60°-70° | 249.2 | 2.8 |
| 70°-80° | 25.1 | 0.3 |
| 80°-90° | 1.5 | 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° | 4576.3 | 52.2 |
| 0°-40° | 6728.9 | 76.8 |
| 0°-60° | 8484.2 | 96.9 |
| 0°-90° | 8760.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8760.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 6154 | 6154 | 6154 | 6154 | 6154 | |
| 5° | 6018 | 6034 | 6084 | 6139 | 6168 | 567 |
| 15° | 5621 | 5654 | 5745 | 5864 | 5924 | 1586 |
| 25° | 5117 | 5138 | 5209 | 5298 | 5340 | 2338 |
| 35° | 3587 | 3537 | 3463 | 3437 | 3443 | 2155 |
| 45° | 1265 | 1302 | 1411 | 1523 | 1563 | 1035 |
| 55° | 660 | 658 | 671 | 680 | 692 | 598 |
| 65° | 258 | 257 | 250 | 236 | 237 | 257 |
| 75° | 19 | 19 | 18 | 17 | 17 | 27 |
| 85° | 1 | 1 | 1 | 1 | 1 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247179

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 6154.3 | 6154.3 | 6154.3 | 6154.3 | 6154.3 |
| 2.5° | 6121.1 | 6120.0 | 6131.4 | 6144.9 | 6152.2 |
| 5° | 6018.2 | 6033.8 | 6083.7 | 6138.7 | 6167.8 |
| 7.5° | 5901.9 | 5931.0 | 6017.2 | 6111.7 | 6162.6 |
| 10° | 5797.0 | 5834.4 | 5928.9 | 6052.5 | 6108.6 |
| 12.5° | 5706.6 | 5743.0 | 5838.5 | 5965.3 | 6026.5 |
| 15° | 5621.4 | 5653.6 | 5745.1 | 5863.5 | 5923.7 |
| 17.5° | 5522.8 | 5553.9 | 5642.2 | 5754.4 | 5806.3 |
| 20° | 5411.6 | 5437.6 | 5520.7 | 5625.6 | 5678.6 |
| 22.5° | 5273.5 | 5301.5 | 5385.7 | 5482.3 | 5532.1 |
| 25° | 5116.6 | 5138.4 | 5209.1 | 5298.4 | 5340.0 |
| 27.5° | 4898.5 | 4918.2 | 4959.8 | 5007.6 | 5038.7 |
| 30° | 4609.8 | 4604.6 | 4589.0 | 4574.4 | 4560.9 |
| 32.5° | 4183.9 | 4134.0 | 4058.2 | 4010.4 | 4012.5 |
| 35° | 3586.6 | 3536.8 | 3463.0 | 3437.1 | 3443.3 |
| 37.5° | 2802.4 | 2839.8 | 2869.9 | 2919.8 | 2943.7 |
| 40° | 2100.3 | 2164.7 | 2317.3 | 2450.3 | 2505.3 |
| 42.5° | 1578.8 | 1642.2 | 1802.1 | 1942.4 | 2018.2 |
| 45° | 1265.1 | 1302.5 | 1410.6 | 1522.7 | 1563.2 |
| 47.5° | 1059.5 | 1076.1 | 1138.4 | 1210.1 | 1245.4 |
| 50° | 906.8 | 917.2 | 950.4 | 989.9 | 1012.7 |
| 52.5° | 776.9 | 781.1 | 797.7 | 820.6 | 835.1 |
| 55° | 659.6 | 658.5 | 671.0 | 680.3 | 691.8 |
| 57.5° | 557.8 | 556.7 | 556.7 | 559.9 | 567.1 |
| 60° | 470.5 | 467.4 | 467.4 | 463.3 | 465.3 |
| 62.5° | 383.3 | 380.2 | 372.9 | 367.7 | 365.6 |
| 65° | 257.6 | 256.6 | 250.3 | 235.8 | 236.8 |
| 67.5° | 134.0 | 133.0 | 126.7 | 122.6 | 120.5 |
| 70° | 71.7 | 69.6 | 66.5 | 63.4 | 61.3 |
| 72.5° | 36.4 | 35.3 | 34.3 | 32.2 | 32.2 |
| 75° | 18.7 | 18.7 | 17.7 | 16.6 | 16.6 |
| 77.5° | 9.3 | 9.3 | 8.3 | 8.3 | 8.3 |
| 80° | 5.2 | 5.2 | 4.2 | 4.2 | 4.2 |
| 82.5° | 2.1 | 2.1 | 2.1 | 2.1 | 2.1 |
| 85° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)