

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: P247175

Luminaire Tested: **LSR8B90D010 EC8B90940 8LBW0H**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247175
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 EC8B90940 8LBW0H
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8461.0 lumens
Efficiency: N/A
Efficacy: 98.3 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

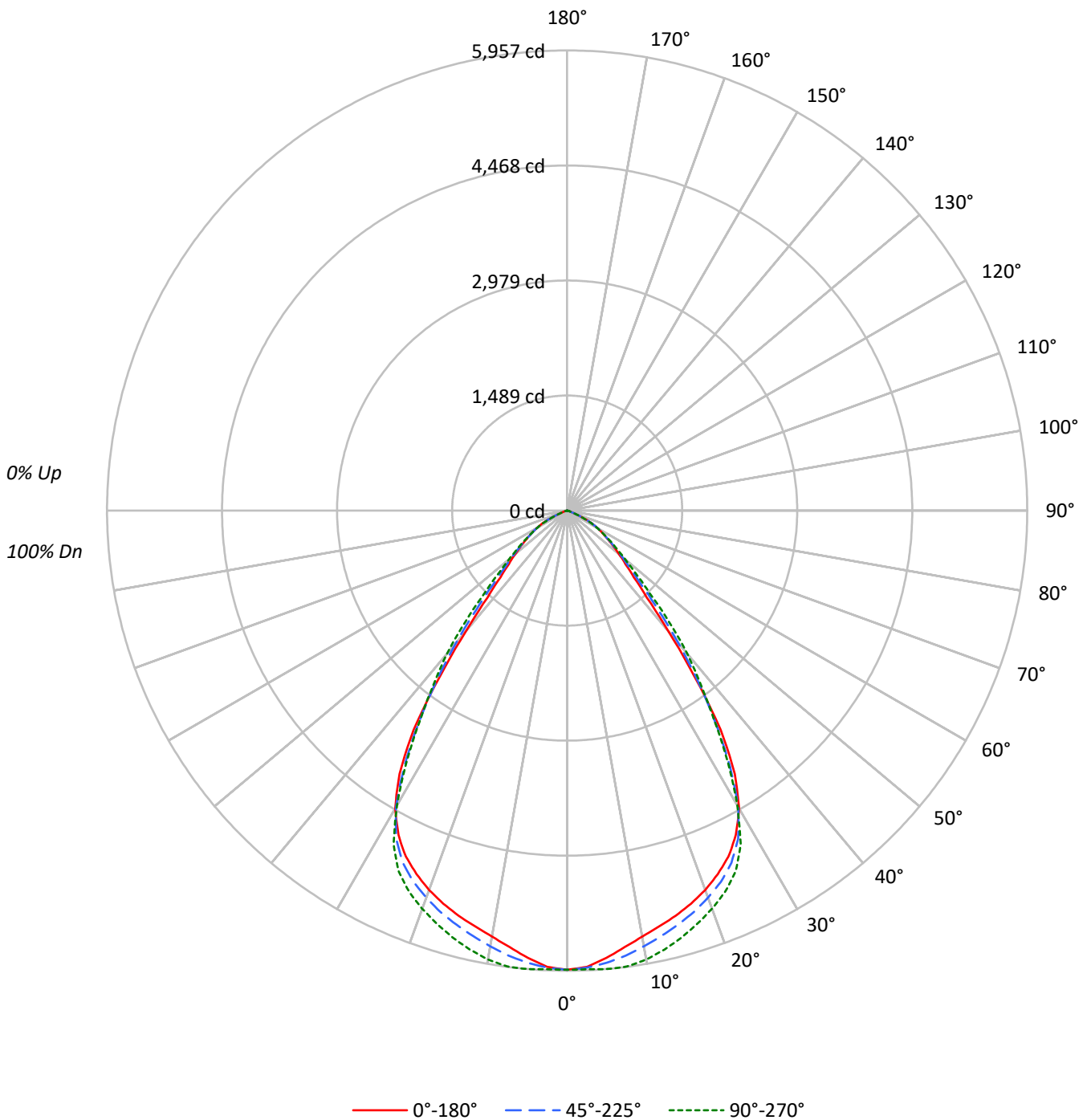
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 183297 | 183297 | 183297 |
| 5° | 179930 | 181886 | 184403 |
| 10° | 175319 | 179308 | 184744 |
| 15° | 173335 | 177147 | 182654 |
| 20° | 171522 | 174981 | 179982 |
| 25° | 168147 | 171185 | 175486 |
| 30° | 158535 | 157820 | 156858 |
| 35° | 130407 | 125912 | 125197 |
| 40° | 81659 | 90096 | 97407 |
| 45° | 53290 | 59413 | 65845 |
| 50° | 42015 | 44039 | 46927 |
| 55° | 34251 | 34843 | 35923 |
| 60° | 28030 | 27845 | 27722 |
| 65° | 18154 | 17643 | 16687 |
| 70° | 6239 | 5788 | 5337 |
| 75° | 2156 | 2037 | 1918 |
| 80° | 888 | 710 | 710 |
| 85° | 354 | 354 | 354 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 556.8 | 6.6 |
| 10°-20° | 1568.9 | 18.5 |
| 20°-30° | 2294.5 | 27.1 |
| 30°-40° | 2079.1 | 24.6 |
| 40°-50° | 1105.5 | 13.1 |
| 50°-60° | 590.0 | 7.0 |
| 60°-70° | 240.6 | 2.8 |
| 70°-80° | 24.3 | 0.3 |
| 80°-90° | 1.4 | 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° | 4420.1 | 52.2 |
| 0°-40° | 6499.2 | 76.8 |
| 0°-60° | 8194.7 | 96.9 |
| 0°-90° | 8461.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8461.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5944 | 5944 | 5944 | 5944 | 5944 | |
| 5° | 5813 | 5828 | 5876 | 5929 | 5957 | 548 |
| 15° | 5430 | 5461 | 5549 | 5663 | 5722 | 1532 |
| 25° | 4942 | 4963 | 5031 | 5118 | 5158 | 2259 |
| 35° | 3464 | 3416 | 3345 | 3320 | 3326 | 2082 |
| 45° | 1222 | 1258 | 1362 | 1471 | 1510 | 1000 |
| 55° | 637 | 636 | 648 | 657 | 668 | 578 |
| 65° | 249 | 248 | 242 | 228 | 229 | 248 |
| 75° | 18 | 18 | 17 | 16 | 16 | 26 |
| 85° | 1 | 1 | 1 | 1 | 1 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5944.2 | 5944.2 | 5944.2 | 5944.2 | 5944.2 |
| 2.5° | 5912.1 | 5911.1 | 5922.2 | 5935.2 | 5942.2 |
| 5° | 5812.8 | 5827.9 | 5876.0 | 5929.2 | 5957.3 |
| 7.5° | 5700.4 | 5728.5 | 5811.8 | 5903.1 | 5952.3 |
| 10° | 5599.1 | 5635.2 | 5726.5 | 5845.9 | 5900.1 |
| 12.5° | 5511.8 | 5547.0 | 5639.2 | 5761.6 | 5820.8 |
| 15° | 5429.6 | 5460.7 | 5549.0 | 5663.3 | 5721.5 |
| 17.5° | 5334.3 | 5364.4 | 5449.6 | 5558.0 | 5608.1 |
| 20° | 5226.9 | 5252.0 | 5332.3 | 5433.6 | 5484.7 |
| 22.5° | 5093.5 | 5120.6 | 5201.8 | 5295.1 | 5343.3 |
| 25° | 4942.0 | 4963.1 | 5031.3 | 5117.6 | 5157.7 |
| 27.5° | 4731.3 | 4750.4 | 4790.5 | 4836.7 | 4866.7 |
| 30° | 4452.4 | 4447.4 | 4432.3 | 4418.3 | 4405.3 |
| 32.5° | 4041.1 | 3992.9 | 3919.7 | 3873.5 | 3875.5 |
| 35° | 3464.2 | 3416.1 | 3344.8 | 3319.7 | 3325.8 |
| 37.5° | 2706.8 | 2742.9 | 2772.0 | 2820.1 | 2843.2 |
| 40° | 2028.6 | 2090.8 | 2238.2 | 2366.7 | 2419.8 |
| 42.5° | 1524.9 | 1586.1 | 1740.6 | 1876.1 | 1949.3 |
| 45° | 1222.0 | 1258.1 | 1362.4 | 1470.8 | 1509.9 |
| 47.5° | 1023.3 | 1039.4 | 1099.6 | 1168.8 | 1202.9 |
| 50° | 875.8 | 885.9 | 918.0 | 956.1 | 978.2 |
| 52.5° | 750.4 | 754.4 | 770.5 | 792.6 | 806.6 |
| 55° | 637.1 | 636.1 | 648.1 | 657.1 | 668.2 |
| 57.5° | 538.7 | 537.7 | 537.7 | 540.7 | 547.8 |
| 60° | 454.5 | 451.5 | 451.5 | 447.4 | 449.5 |
| 62.5° | 370.2 | 367.2 | 360.2 | 355.1 | 353.1 |
| 65° | 248.8 | 247.8 | 241.8 | 227.7 | 228.7 |
| 67.5° | 129.4 | 128.4 | 122.4 | 118.4 | 116.4 |
| 70° | 69.2 | 67.2 | 64.2 | 61.2 | 59.2 |
| 72.5° | 35.1 | 34.1 | 33.1 | 31.1 | 31.1 |
| 75° | 18.1 | 18.1 | 17.1 | 16.1 | 16.1 |
| 77.5° | 9.0 | 9.0 | 8.0 | 8.0 | 8.0 |
| 80° | 5.0 | 5.0 | 4.0 | 4.0 | 4.0 |
| 82.5° | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 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)