

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: P247495

Luminaire Tested: **LD8B90D010 ER8B90850 8LBW0GPH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247495
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-61)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LD8B90D010 ER8B90850 8LBW0GPH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT
80 CRI 5000 CCT WITH GRAPHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8660.0 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 1.12 / 1.13 / 1.05
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

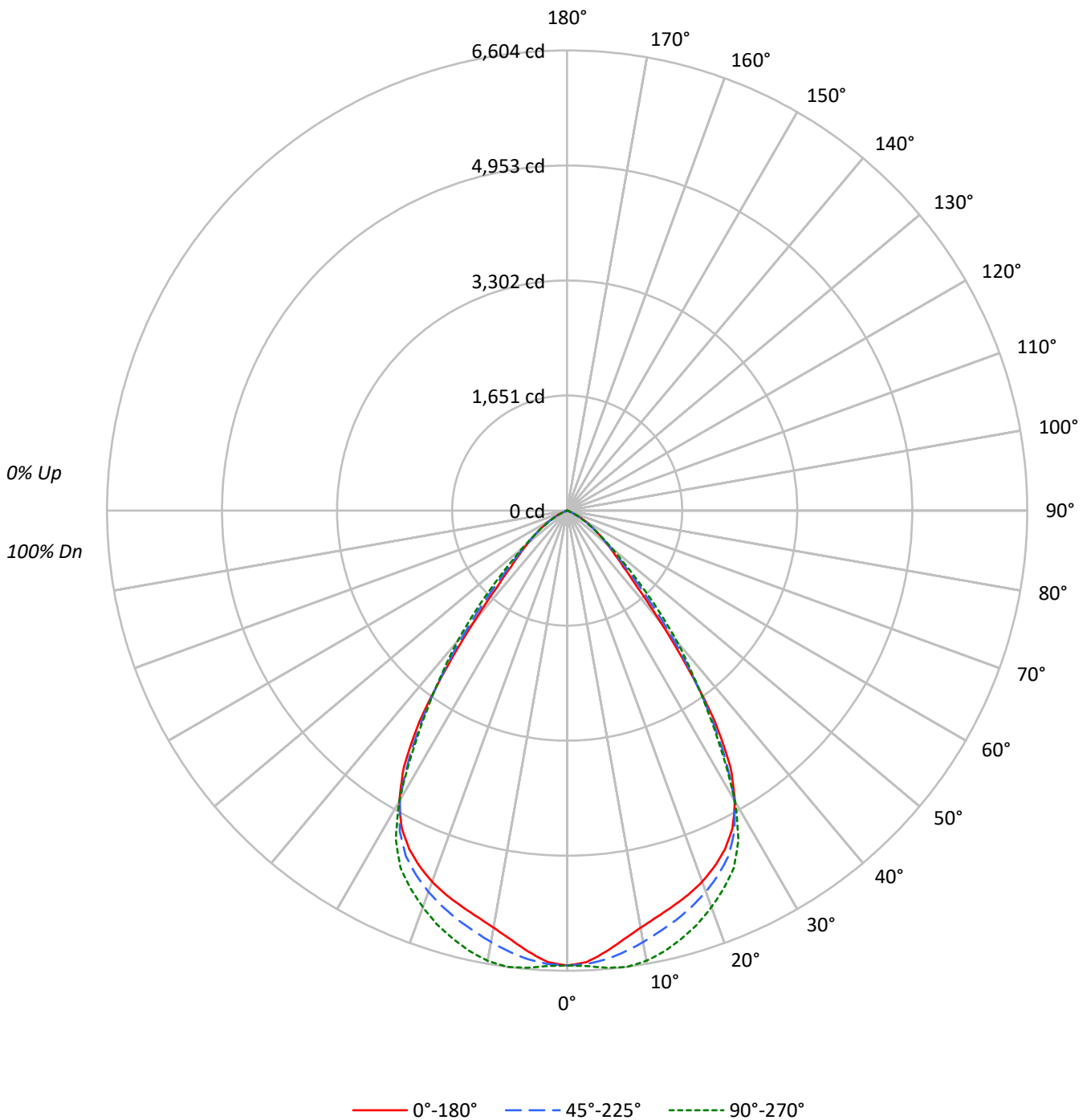
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 100 | 96 | 95 | 94 | 92 | | |
| 1 | 113 | 110 | 107 | 104 | 110 | 107 | 105 | 103 | 103 | 101 | 100 | 100 | 98 | 97 | 96 | 95 | 94 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | |
| 2 | 106 | 101 | 96 | 92 | 104 | 99 | 95 | 91 | 96 | 92 | 89 | 93 | 90 | 87 | 90 | 88 | 85 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | 84 | |
| 3 | 100 | 93 | 87 | 82 | 98 | 91 | 86 | 82 | 88 | 84 | 80 | 86 | 82 | 79 | 84 | 81 | 78 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | 76 | |
| 4 | 94 | 85 | 79 | 74 | 92 | 84 | 78 | 74 | 82 | 77 | 73 | 80 | 75 | 72 | 78 | 74 | 71 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | 69 | |
| 5 | 88 | 79 | 72 | 67 | 86 | 78 | 72 | 67 | 76 | 70 | 66 | 74 | 69 | 66 | 72 | 68 | 65 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | 63 | |
| 6 | 83 | 73 | 66 | 61 | 81 | 72 | 66 | 61 | 70 | 65 | 61 | 69 | 64 | 60 | 68 | 63 | 60 | 58 | 58 | 58 | 58 | 58 | 58 | 58 | 58 | |
| 7 | 78 | 68 | 61 | 56 | 77 | 67 | 61 | 56 | 66 | 60 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | 53 | |
| 8 | 74 | 63 | 56 | 52 | 72 | 62 | 56 | 52 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 51 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | 49 | |
| 9 | 70 | 59 | 52 | 48 | 68 | 58 | 52 | 48 | 57 | 52 | 47 | 56 | 51 | 47 | 55 | 51 | 47 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | 46 | |
| 10 | 66 | 55 | 49 | 44 | 65 | 55 | 48 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | 42 | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 201315 | 201315 | 201315 |
| 5° | 196754 | 200072 | 203885 |
| 10° | 190242 | 196884 | 205457 |
| 15° | 187551 | 193961 | 202954 |
| 20° | 185974 | 191064 | 198739 |
| 25° | 182383 | 186265 | 192512 |
| 30° | 171450 | 170802 | 171614 |
| 35° | 139306 | 134627 | 132564 |
| 40° | 82702 | 91151 | 98727 |
| 45° | 49501 | 55715 | 63277 |
| 50° | 36066 | 36997 | 39731 |
| 55° | 26128 | 25209 | 25757 |
| 60° | 17731 | 16393 | 15757 |
| 65° | 8909 | 8238 | 7822 |
| 70° | 2470 | 2164 | 1956 |
| 75° | 953 | 679 | 679 |
| 80° | 408 | 408 | 195 |
| 85° | 389 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 612.1 | 7.1 |
| 10°-20° | 1719.0 | 19.8 |
| 20°-30° | 2498.4 | 28.9 |
| 30°-40° | 2209.4 | 25.5 |
| 40°-50° | 1051.1 | 12.1 |
| 50°-60° | 437.8 | 5.1 |
| 60°-70° | 122.3 | 1.4 |
| 70°-80° | 9.2 | 0.1 |
| 80°-90° | 0.7 | 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° | 4829.5 | 55.8 |
| 0°-40° | 7038.9 | 81.3 |
| 0°-60° | 8527.8 | 98.5 |
| 0°-90° | 8660.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8660.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 6528 | 6528 | 6528 | 6528 | 6528 | |
| 5° | 6356 | 6388 | 6464 | 6549 | 6587 | 598 |
| 15° | 5875 | 5928 | 6076 | 6260 | 6357 | 1659 |
| 25° | 5360 | 5384 | 5474 | 5595 | 5658 | 2450 |
| 35° | 3701 | 3648 | 3576 | 3522 | 3522 | 2215 |
| 45° | 1135 | 1175 | 1278 | 1396 | 1451 | 945 |
| 55° | 486 | 480 | 469 | 469 | 479 | 442 |
| 65° | 122 | 120 | 113 | 108 | 107 | 133 |
| 75° | 8 | 7 | 6 | 6 | 6 | 11 |
| 85° | 1 | 1 | 0 | 0 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P247495

CATALOG NUMBER: LD8B90D010 ER8B90850 8LBW0GPH

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 6528.5 | 6528.5 | 6528.5 | 6528.5 | 6528.5 |
| 2.5° | 6485.2 | 6490.9 | 6512.6 | 6533.1 | 6542.2 |
| 5° | 6356.3 | 6388.2 | 6463.5 | 6549.1 | 6586.7 |
| 7.5° | 6209.1 | 6257.0 | 6383.7 | 6534.2 | 6603.8 |
| 10° | 6075.7 | 6136.1 | 6287.8 | 6473.8 | 6561.6 |
| 12.5° | 5970.7 | 6026.6 | 6181.8 | 6375.7 | 6474.9 |
| 15° | 5874.9 | 5928.5 | 6075.7 | 6260.5 | 6357.4 |
| 17.5° | 5779.1 | 5830.4 | 5957.0 | 6129.3 | 6222.8 |
| 20° | 5667.3 | 5708.3 | 5822.4 | 5974.1 | 6056.3 |
| 22.5° | 5528.1 | 5565.7 | 5661.6 | 5796.2 | 5870.3 |
| 25° | 5360.4 | 5384.4 | 5474.5 | 5595.4 | 5658.1 |
| 27.5° | 5138.0 | 5143.7 | 5198.4 | 5277.1 | 5323.9 |
| 30° | 4815.1 | 4811.7 | 4796.9 | 4793.5 | 4819.7 |
| 32.5° | 4363.4 | 4313.2 | 4226.5 | 4185.4 | 4153.5 |
| 35° | 3700.6 | 3648.1 | 3576.3 | 3521.5 | 3521.5 |
| 37.5° | 2829.1 | 2874.7 | 2903.2 | 2937.4 | 2954.6 |
| 40° | 2054.5 | 2121.8 | 2264.4 | 2412.7 | 2452.6 |
| 42.5° | 1493.2 | 1556.0 | 1710.0 | 1875.4 | 1923.3 |
| 45° | 1135.1 | 1175.0 | 1277.6 | 1396.3 | 1451.0 |
| 47.5° | 917.2 | 928.6 | 979.9 | 1050.6 | 1076.9 |
| 50° | 751.8 | 755.2 | 771.2 | 807.7 | 828.2 |
| 52.5° | 608.0 | 605.7 | 610.3 | 620.6 | 629.7 |
| 55° | 486.0 | 480.3 | 468.9 | 468.9 | 479.1 |
| 57.5° | 375.3 | 367.3 | 354.8 | 349.1 | 345.6 |
| 60° | 287.5 | 279.5 | 265.8 | 256.7 | 255.5 |
| 62.5° | 206.5 | 199.6 | 185.9 | 178.0 | 175.7 |
| 65° | 122.1 | 119.8 | 112.9 | 108.4 | 107.2 |
| 67.5° | 57.0 | 54.8 | 49.1 | 46.8 | 45.6 |
| 70° | 27.4 | 26.2 | 24.0 | 22.8 | 21.7 |
| 72.5° | 13.7 | 13.7 | 11.4 | 11.4 | 11.4 |
| 75° | 8.0 | 6.8 | 5.7 | 5.7 | 5.7 |
| 77.5° | 4.6 | 3.4 | 3.4 | 3.4 | 3.4 |
| 80° | 2.3 | 2.3 | 2.3 | 1.1 | 1.1 |
| 82.5° | 1.1 | 1.1 | 1.1 | 1.1 | 1.1 |
| 85° | 1.1 | 1.1 | 0.0 | 0.0 | 0.0 |
| 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)