

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: P250737

Luminaire Tested: **LSR8B90D010 EC8B90850 8LBM0MW**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P250737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P13935)
Test Lab: INNOVATION CENTER-P1
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90850 8LBM0MW
Description: PORTFOLIO 8 INCH MEDIUM DISTRIBUTION 55 DEG CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 5000 CCT WITH MATTE WHITE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9528.0 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 0.86 / 0.86 / 0.93
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

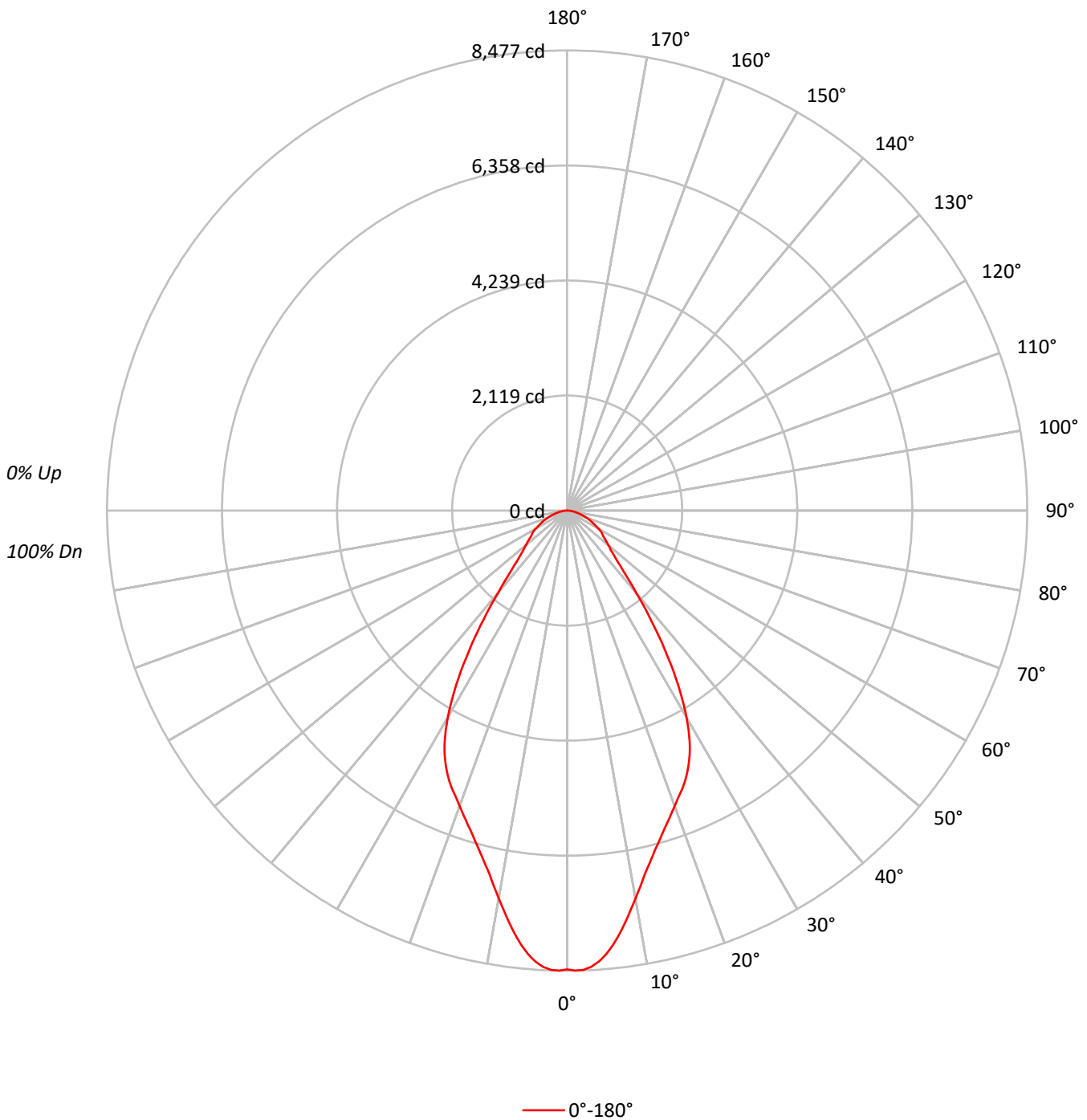
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P250737

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBM0MW

Luminous Intensity Polar Plot





TEST NUMBER: P250737

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBM0MW

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 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 91 | 89 |
| 2 | 104 | 98 | 93 | 88 | 102 | 96 | 91 | 87 | 93 | 89 | 85 | 90 | 86 | 83 | 87 | 84 | 82 | 80 |
| 3 | 97 | 89 | 83 | 78 | 95 | 88 | 82 | 77 | 85 | 80 | 76 | 82 | 78 | 75 | 80 | 76 | 73 | 71 |
| 4 | 91 | 82 | 75 | 69 | 89 | 80 | 74 | 69 | 78 | 72 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 65 |
| 5 | 85 | 75 | 68 | 63 | 83 | 74 | 67 | 62 | 72 | 66 | 62 | 70 | 65 | 61 | 69 | 64 | 60 | 59 |
| 6 | 80 | 69 | 62 | 57 | 78 | 68 | 62 | 57 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 55 | 54 |
| 7 | 75 | 64 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 55 | 51 | 60 | 55 | 51 | 49 |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 51 | 47 | 56 | 51 | 47 | 46 |
| 9 | 67 | 56 | 49 | 44 | 66 | 56 | 49 | 44 | 54 | 48 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 |
| 10 | 64 | 53 | 46 | 41 | 63 | 52 | 46 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 50 | 45 | 41 | 39 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 260622 |
| 5° | 254022 |
| 10° | 227097 |
| 15° | 204078 |
| 20° | 190056 |
| 25° | 179048 |
| 30° | 156556 |
| 35° | 118609 |
| 40° | 79675 |
| 45° | 56142 |
| 50° | 47608 |
| 55° | 43423 |
| 60° | 41142 |
| 65° | 37008 |
| 70° | 33305 |
| 75° | 29881 |
| 80° | 26442 |
| 85° | 25368 |



TEST NUMBER: P250737

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBM0MW

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 751.1 | 7.9 |
| 10°-20° | 1802.8 | 18.9 |
| 20°-30° | 2389.1 | 25.1 |
| 30°-40° | 1959.1 | 20.6 |
| 40°-50° | 1043.4 | 11.0 |
| 50°-60° | 734.4 | 7.7 |
| 60°-70° | 506.4 | 5.3 |
| 70°-80° | 263.7 | 2.8 |
| 80°-90° | 78.0 | 0.8 |
| 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° | 4943.0 | 51.9 |
| 0°-40° | 6902.1 | 72.4 |
| 0°-60° | 8679.9 | 91.1 |
| 0°-90° | 9528.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 9528.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 8452 | |
| 5° | 8206 | 751 |
| 15° | 6393 | 1803 |
| 25° | 5262 | 2389 |
| 35° | 3151 | 1959 |
| 45° | 1287 | 1043 |
| 55° | 808 | 734 |
| 65° | 507 | 506 |
| 75° | 251 | 264 |
| 85° | 72 | 78 |
| 90° | 0 | |



TEST NUMBER: P250737

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBM0MW

CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 8451.8 |
| 1° | 8476.6 |
| 2° | 8465.6 |
| 3° | 8415.9 |
| 4° | 8330.5 |
| 5° | 8206.4 |
| 6° | 8052.1 |
| 7° | 7867.4 |
| 8° | 7668.9 |
| 9° | 7456.7 |
| 10° | 7252.7 |
| 11° | 7057.0 |
| 12° | 6858.5 |
| 13° | 6693.1 |
| 14° | 6536.0 |
| 15° | 6392.6 |
| 16° | 6257.5 |
| 17° | 6133.5 |
| 18° | 6017.7 |
| 19° | 5901.9 |
| 20° | 5791.7 |
| 21° | 5684.1 |
| 22° | 5590.5 |
| 23° | 5493.9 |
| 24° | 5381.0 |
| 25° | 5262.4 |
| 26° | 5127.3 |
| 27° | 4975.7 |
| 28° | 4804.8 |
| 29° | 4614.6 |
| 30° | 4396.8 |
| 31° | 4168.0 |
| 32° | 3928.2 |
| 33° | 3671.8 |
| 34° | 3415.5 |
| 35° | 3150.8 |
| 37.5° | 2525.1 |
| 40° | 1979.3 |
| 42.5° | 1563.0 |
| 45° | 1287.4 |
| 47.5° | 1105.4 |
| 50° | 992.4 |
| 52.5° | 893.2 |
| 55° | 807.7 |
| 57.5° | 755.3 |



TEST NUMBER: P250737

CATALOG NUMBER: LSR8B90D010 EC8B90850 8LBM0MW

CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-------|
| 60° | 667.1 |
| 62.5° | 581.6 |
| 65° | 507.2 |
| 67.5° | 441.1 |
| 70° | 369.4 |
| 72.5° | 308.7 |
| 75° | 250.8 |
| 77.5° | 181.9 |
| 80° | 148.9 |
| 82.5° | 107.5 |
| 85° | 71.7 |
| 87.5° | 33.1 |
| 90° | 0.0 |

(END OF REPORT)