

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: P247275

Luminaire Tested: **LSR8B90D010 EC8B90950 8LBW0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-59)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90950 8LBW0WMH
Description: PORTFOLIO 8 INCH WIDE DISTRIBUTION 60 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
90 CRI 5000 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8569.0 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.14 / 1.06
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

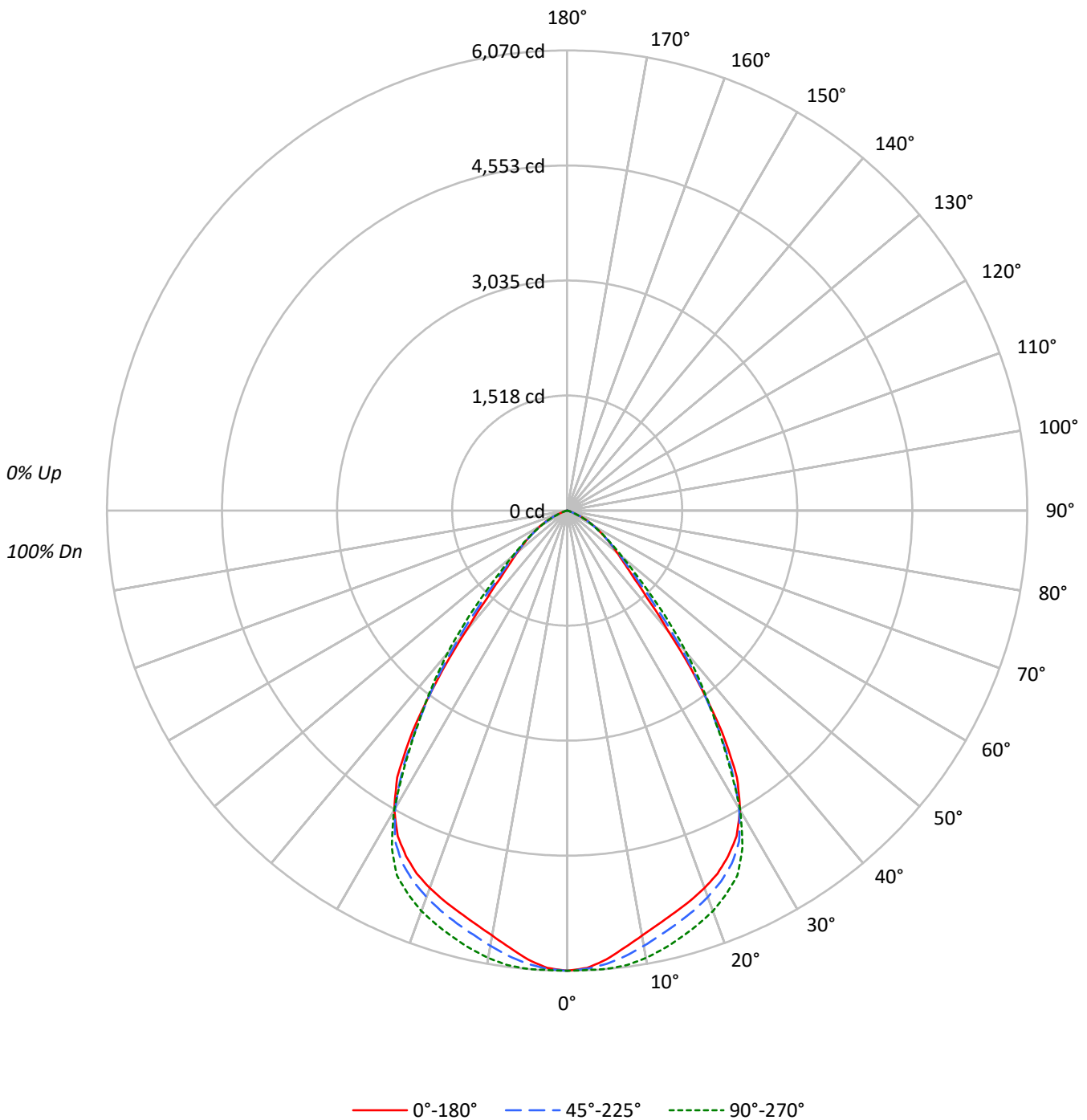
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 98 | 96 | 96 | 94 | 93 | 91 | | | | | 91 | | | |
| 2 | 106 | 100 | 95 | 91 | 103 | 98 | 94 | 90 | 95 | 91 | 88 | 92 | 89 | 86 | 89 | 86 | 84 | 83 | | | | | 83 | | | |
| 3 | 99 | 91 | 85 | 81 | 97 | 90 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 78 | 82 | 79 | 76 | 75 | | | | | 75 | | | |
| 4 | 93 | 84 | 77 | 72 | 91 | 83 | 77 | 72 | 80 | 75 | 71 | 78 | 74 | 70 | 76 | 72 | 69 | 68 | | | | | 68 | | | |
| 5 | 87 | 77 | 70 | 65 | 85 | 76 | 70 | 65 | 74 | 69 | 64 | 72 | 68 | 64 | 71 | 67 | 63 | 61 | | | | | 61 | | | |
| 6 | 82 | 71 | 64 | 59 | 80 | 70 | 64 | 59 | 69 | 63 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | 56 | | | | | 56 | | | |
| 7 | 77 | 66 | 59 | 54 | 75 | 65 | 59 | 54 | 64 | 58 | 54 | 63 | 57 | 53 | 61 | 57 | 53 | 51 | | | | | 51 | | | |
| 8 | 72 | 61 | 54 | 50 | 71 | 61 | 54 | 49 | 59 | 54 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 47 | | | | | 47 | | | |
| 9 | 68 | 57 | 50 | 46 | 67 | 57 | 50 | 46 | 56 | 50 | 45 | 55 | 49 | 45 | 54 | 49 | 45 | 44 | | | | | 44 | | | |
| 10 | 65 | 53 | 47 | 42 | 63 | 53 | 47 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 50 | 45 | 42 | 40 | | | | | 40 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 187180 | 187180 | 187180 |
| 5° | 183973 | 185740 | 187799 |
| 10° | 178228 | 182555 | 187628 |
| 15° | 175212 | 179854 | 185990 |
| 20° | 173833 | 178026 | 184468 |
| 25° | 171083 | 174864 | 180733 |
| 30° | 162324 | 161658 | 162694 |
| 35° | 133803 | 129071 | 128758 |
| 40° | 83833 | 91316 | 98884 |
| 45° | 53133 | 59069 | 66495 |
| 50° | 40911 | 42504 | 45493 |
| 55° | 32386 | 32278 | 33450 |
| 60° | 25236 | 24725 | 24601 |
| 65° | 16979 | 16293 | 15841 |
| 70° | 7772 | 7114 | 6744 |
| 75° | 3717 | 3336 | 3098 |
| 80° | 1847 | 1651 | 1651 |
| 85° | 1097 | 1097 | 743 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 567.7 | 6.6 |
| 10°-20° | 1594.0 | 18.6 |
| 20°-30° | 2347.6 | 27.4 |
| 30°-40° | 2135.2 | 24.9 |
| 40°-50° | 1105.4 | 12.9 |
| 50°-60° | 553.8 | 6.5 |
| 60°-70° | 225.5 | 2.6 |
| 70°-80° | 36.0 | 0.4 |
| 80°-90° | 3.8 | 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° | 4509.3 | 52.6 |
| 0°-40° | 6644.5 | 77.5 |
| 0°-60° | 8303.7 | 96.9 |
| 0°-90° | 8569.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 8569.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 6070 | 6070 | 6070 | 6070 | 6070 | |
| 5° | 5943 | 5959 | 6000 | 6046 | 6067 | 559 |
| 15° | 5488 | 5526 | 5634 | 5764 | 5826 | 1551 |
| 25° | 5028 | 5063 | 5139 | 5257 | 5312 | 2302 |
| 35° | 3554 | 3532 | 3429 | 3400 | 3420 | 2143 |
| 45° | 1218 | 1261 | 1354 | 1459 | 1525 | 1004 |
| 55° | 602 | 600 | 600 | 612 | 622 | 547 |
| 65° | 233 | 232 | 223 | 220 | 217 | 235 |
| 75° | 31 | 30 | 28 | 26 | 26 | 39 |
| 85° | 3 | 3 | 3 | 2 | 2 | 4 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 6070.1 | 6070.1 | 6070.1 | 6070.1 | 6070.1 |
| 2.5° | 6037.9 | 6041.0 | 6049.3 | 6058.7 | 6065.9 |
| 5° | 5943.4 | 5959.0 | 6000.5 | 6046.2 | 6067.0 |
| 7.5° | 5814.6 | 5848.9 | 5924.7 | 6009.9 | 6047.2 |
| 10° | 5692.0 | 5731.5 | 5830.2 | 5944.4 | 5992.2 |
| 12.5° | 5584.0 | 5622.4 | 5729.4 | 5857.2 | 5916.4 |
| 15° | 5488.4 | 5525.8 | 5633.8 | 5763.7 | 5826.0 |
| 17.5° | 5398.1 | 5432.3 | 5535.2 | 5665.0 | 5728.4 |
| 20° | 5297.3 | 5327.4 | 5425.1 | 5550.8 | 5621.4 |
| 22.5° | 5183.1 | 5205.9 | 5297.3 | 5416.8 | 5479.1 |
| 25° | 5028.3 | 5062.6 | 5139.4 | 5256.8 | 5311.9 |
| 27.5° | 4839.3 | 4861.1 | 4914.0 | 4985.7 | 5008.6 |
| 30° | 4558.8 | 4557.8 | 4540.1 | 4540.1 | 4569.2 |
| 32.5° | 4169.3 | 4119.4 | 4035.3 | 3984.4 | 3980.3 |
| 35° | 3554.4 | 3531.5 | 3428.7 | 3399.6 | 3420.4 |
| 37.5° | 2804.5 | 2820.0 | 2846.0 | 2887.6 | 2924.9 |
| 40° | 2082.6 | 2122.0 | 2268.5 | 2399.4 | 2456.5 |
| 42.5° | 1553.9 | 1604.8 | 1754.3 | 1897.7 | 1967.3 |
| 45° | 1218.4 | 1261.0 | 1354.5 | 1459.4 | 1524.8 |
| 47.5° | 1007.5 | 1029.3 | 1079.2 | 1149.8 | 1183.1 |
| 50° | 852.8 | 863.2 | 886.0 | 922.4 | 948.3 |
| 52.5° | 724.0 | 719.8 | 732.3 | 756.2 | 765.5 |
| 55° | 602.4 | 600.4 | 600.4 | 611.8 | 622.2 |
| 57.5° | 499.6 | 496.5 | 490.3 | 495.5 | 498.6 |
| 60° | 409.2 | 406.1 | 400.9 | 399.9 | 398.9 |
| 62.5° | 329.3 | 324.1 | 313.7 | 311.6 | 311.6 |
| 65° | 232.7 | 231.6 | 223.3 | 220.2 | 217.1 |
| 67.5° | 144.4 | 140.2 | 133.0 | 126.7 | 125.7 |
| 70° | 86.2 | 85.2 | 78.9 | 74.8 | 74.8 |
| 72.5° | 51.9 | 49.9 | 46.7 | 44.7 | 43.6 |
| 75° | 31.2 | 30.1 | 28.0 | 26.0 | 26.0 |
| 77.5° | 18.7 | 17.7 | 16.6 | 15.6 | 15.6 |
| 80° | 10.4 | 10.4 | 9.3 | 9.3 | 9.3 |
| 82.5° | 6.2 | 6.2 | 5.2 | 5.2 | 5.2 |
| 85° | 3.1 | 3.1 | 3.1 | 2.1 | 2.1 |
| 87.5° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)