

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: P247343

Luminaire Tested: **LSR8B90D010 EC8B90835 8LBS0WMH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P247343
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-84)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: PORTFOLIO
Catalog Number: LSR8B90D010 EC8B90835 8LBS0WMH
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED
DOWNLIGHT- CYLINDEC
80 CRI 3500 CCT WITH WARM HAZE TRIM
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10098.0 lumens
Efficiency: N/A
Efficacy: 117.3 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.2 / 1.23
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

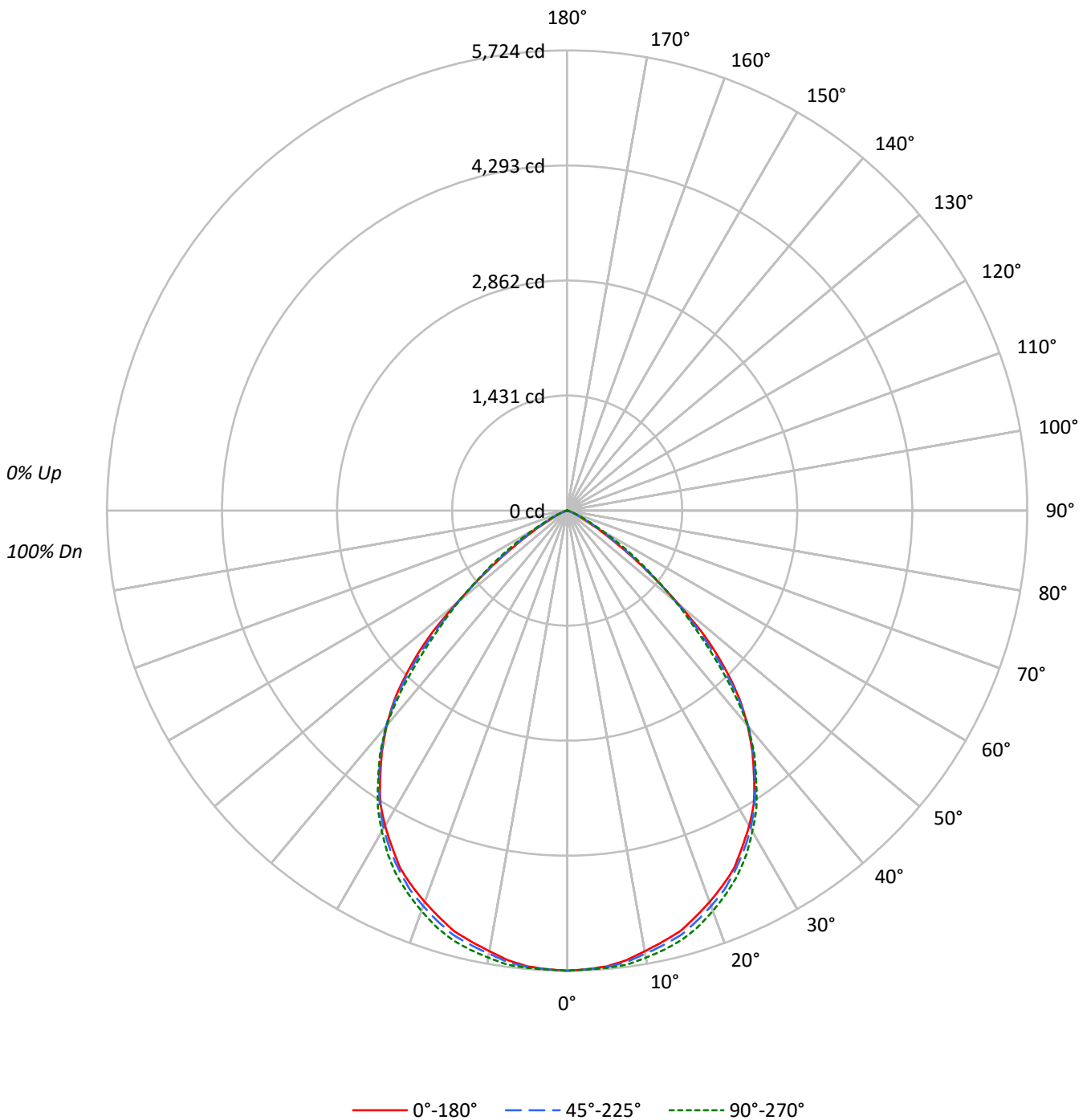
Input Watts (W): 86.1
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P247343

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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 | 103 | 110 | 107 | 104 | 101 | 102 | 100 | 98 | 99 | 97 | 95 | 95 | 94 | 92 | 91 | | | | | 91 | | | |
| 2 | 105 | 99 | 94 | 89 | 102 | 97 | 92 | 88 | 94 | 90 | 86 | 90 | 87 | 85 | 88 | 85 | 83 | 81 | | | | | 81 | | | |
| 3 | 98 | 90 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 79 | 75 | 80 | 77 | 74 | 72 | | | | | 72 | | | |
| 4 | 91 | 81 | 75 | 69 | 89 | 80 | 74 | 69 | 78 | 72 | 68 | 76 | 71 | 67 | 74 | 70 | 66 | 64 | | | | | 64 | | | |
| 5 | 85 | 74 | 67 | 62 | 83 | 73 | 66 | 61 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 63 | 60 | 58 | | | | | 58 | | | |
| 6 | 79 | 68 | 61 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 55 | 64 | 58 | 54 | 62 | 58 | 54 | 52 | | | | | 52 | | | |
| 7 | 74 | 62 | 55 | 50 | 72 | 62 | 55 | 50 | 60 | 54 | 49 | 59 | 53 | 49 | 58 | 53 | 49 | 47 | | | | | 47 | | | |
| 8 | 69 | 58 | 50 | 45 | 68 | 57 | 50 | 45 | 56 | 49 | 45 | 55 | 49 | 45 | 54 | 48 | 44 | 43 | | | | | 43 | | | |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 39 | | | | | 39 | | | |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 46 | 41 | 37 | 36 | | | | | 36 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 176498 | 176498 | 176498 |
| 5° | 176126 | 176404 | 176720 |
| 10° | 174248 | 175272 | 176822 |
| 15° | 173016 | 174526 | 176397 |
| 20° | 170010 | 171785 | 173892 |
| 25° | 167075 | 168151 | 170488 |
| 30° | 161295 | 162577 | 164101 |
| 35° | 152632 | 153562 | 154368 |
| 40° | 140543 | 141223 | 140861 |
| 45° | 121168 | 117976 | 113262 |
| 50° | 86505 | 85204 | 84178 |
| 55° | 49649 | 52616 | 56976 |
| 60° | 23547 | 27574 | 31885 |
| 65° | 11091 | 13396 | 15366 |
| 70° | 5175 | 5788 | 6600 |
| 75° | 2419 | 3491 | 4027 |
| 80° | 2007 | 1794 | 2806 |
| 85° | 814 | 1981 | 1203 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 540.8 | 5.4 |
| 10°-20° | 1538.9 | 15.2 |
| 20°-30° | 2273.5 | 22.5 |
| 30°-40° | 2540.5 | 25.2 |
| 40°-50° | 2051.0 | 20.3 |
| 50°-60° | 912.3 | 9.0 |
| 60°-70° | 205.5 | 2.0 |
| 70°-80° | 31.8 | 0.3 |
| 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° | 4353.2 | 43.1 |
| 0°-40° | 6893.7 | 68.3 |
| 0°-60° | 9857.0 | 97.6 |
| 0°-90° | 10098.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 10098.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 5724 | 5724 | 5724 | 5724 | 5724 | |
| 5° | 5690 | 5689 | 5699 | 5700 | 5709 | 539 |
| 15° | 5420 | 5423 | 5467 | 5508 | 5526 | 1524 |
| 25° | 4910 | 4910 | 4942 | 4983 | 5011 | 2251 |
| 35° | 4055 | 4052 | 4079 | 4084 | 4101 | 2527 |
| 45° | 2778 | 2757 | 2705 | 2610 | 2597 | 2101 |
| 55° | 924 | 937 | 979 | 1029 | 1060 | 869 |
| 65° | 152 | 171 | 184 | 199 | 211 | 177 |
| 75° | 20 | 28 | 29 | 28 | 34 | 26 |
| 85° | 2 | 3 | 6 | 12 | 3 | 2 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 5723.7 | 5723.7 | 5723.7 | 5723.7 | 5723.7 |
| 2.5° | 5709.1 | 5705.7 | 5711.3 | 5707.9 | 5713.6 |
| 5° | 5689.9 | 5688.8 | 5698.9 | 5700.0 | 5709.1 |
| 7.5° | 5640.4 | 5641.5 | 5662.9 | 5678.6 | 5696.7 |
| 10° | 5564.9 | 5569.4 | 5597.6 | 5632.5 | 5647.1 |
| 12.5° | 5492.8 | 5498.4 | 5534.5 | 5582.9 | 5594.2 |
| 15° | 5419.6 | 5423.0 | 5466.9 | 5507.5 | 5525.5 |
| 17.5° | 5300.2 | 5322.7 | 5356.5 | 5402.7 | 5426.4 |
| 20° | 5180.8 | 5196.6 | 5234.9 | 5285.6 | 5299.1 |
| 22.5° | 5050.2 | 5067.1 | 5105.4 | 5147.0 | 5161.7 |
| 25° | 4910.5 | 4910.5 | 4942.1 | 4982.6 | 5010.8 |
| 27.5° | 4715.7 | 4739.3 | 4761.9 | 4797.9 | 4826.1 |
| 30° | 4529.9 | 4538.9 | 4565.9 | 4595.2 | 4608.7 |
| 32.5° | 4323.7 | 4324.9 | 4337.3 | 4369.9 | 4382.3 |
| 35° | 4054.6 | 4052.3 | 4079.3 | 4083.9 | 4100.7 |
| 37.5° | 3785.4 | 3796.7 | 3806.8 | 3822.6 | 3823.7 |
| 40° | 3491.4 | 3497.1 | 3508.3 | 3491.4 | 3499.3 |
| 42.5° | 3171.6 | 3163.7 | 3142.3 | 3091.6 | 3070.2 |
| 45° | 2778.5 | 2757.1 | 2705.3 | 2609.6 | 2597.2 |
| 47.5° | 2344.9 | 2292.0 | 2228.9 | 2157.9 | 2144.4 |
| 50° | 1803.2 | 1807.7 | 1776.1 | 1752.5 | 1754.7 |
| 52.5° | 1314.4 | 1330.1 | 1338.0 | 1360.5 | 1372.9 |
| 55° | 923.5 | 937.1 | 978.7 | 1029.4 | 1059.8 |
| 57.5° | 598.0 | 624.0 | 678.0 | 735.5 | 756.9 |
| 60° | 381.8 | 398.7 | 447.1 | 488.8 | 517.0 |
| 62.5° | 250.0 | 255.7 | 282.7 | 321.0 | 322.1 |
| 65° | 152.0 | 171.2 | 183.6 | 199.3 | 210.6 |
| 67.5° | 99.1 | 99.1 | 110.4 | 125.0 | 128.4 |
| 70° | 57.4 | 58.6 | 64.2 | 69.8 | 73.2 |
| 72.5° | 31.5 | 34.9 | 38.3 | 43.9 | 49.6 |
| 75° | 20.3 | 28.2 | 29.3 | 28.2 | 33.8 |
| 77.5° | 13.5 | 13.5 | 11.3 | 19.1 | 20.3 |
| 80° | 11.3 | 7.9 | 10.1 | 14.6 | 15.8 |
| 82.5° | 0.0 | 1.1 | 1.1 | 2.3 | 0.0 |
| 85° | 2.3 | 3.4 | 5.6 | 12.4 | 3.4 |
| 87.5° | 0.0 | 3.4 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)