

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: P247204

Luminaire Tested: **LSR8B100D010 EC8B100840 8LBS0H**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P247204  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1801-521-83)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: PORTFOLIO  
Catalog Number: LSR8B100D010 EC8B100840 8LBS0H  
Description: PORTFOLIO 8 INCH WIDE SHALLOW DISTRIBUTION 75 DEGREE CUTOFF RECESSED  
DOWNLIGHT- CYLINDEC  
80 CRI 4000 CCT WITH SEMI-SPECULAR CLEAR TRIM  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11823.0 lumens  
Efficiency: N/A  
Efficacy: 111.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.22 / 1.23  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

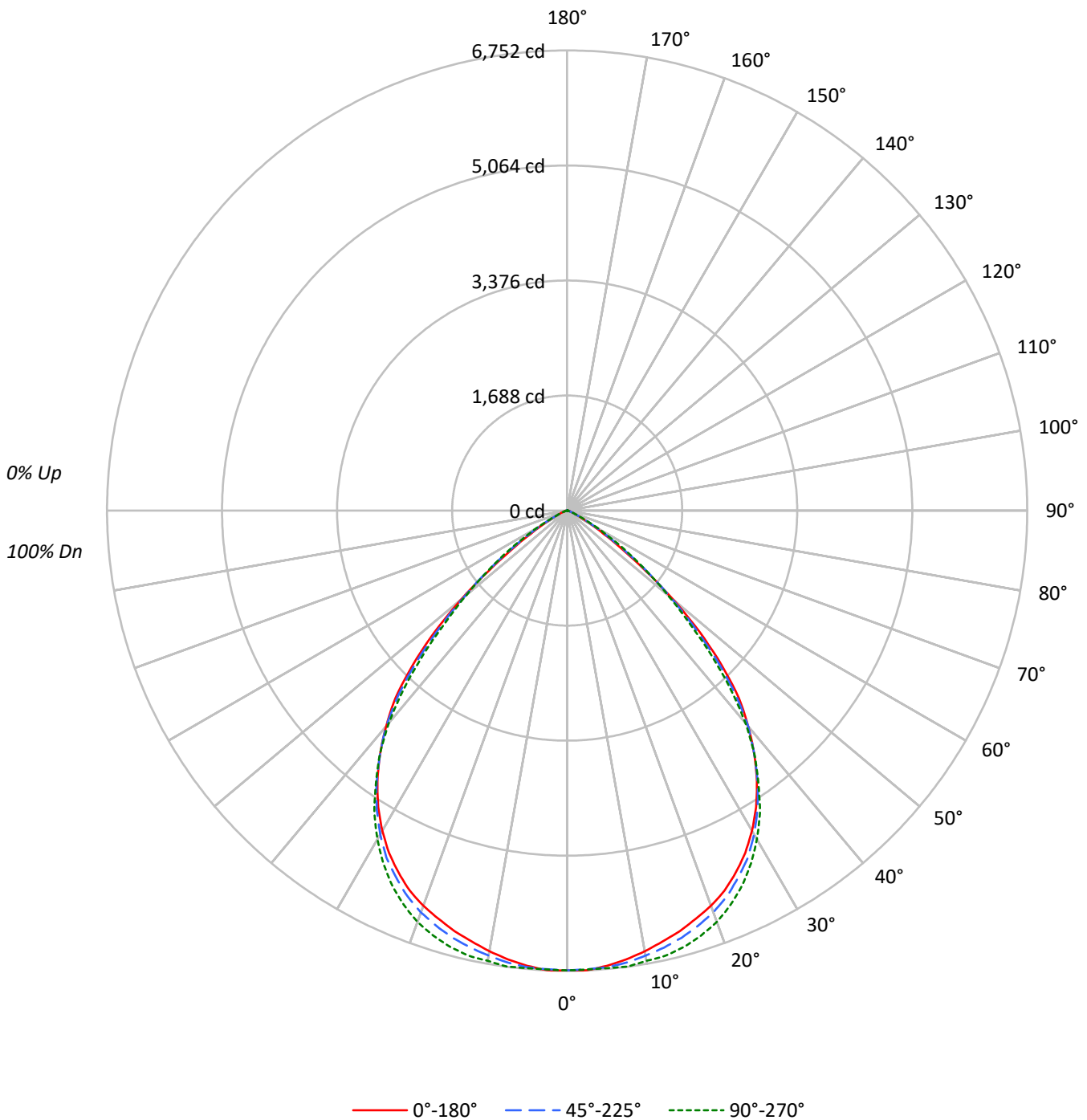
Input Watts (W): 106.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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 | 103 | 110 | 107 | 104 | 102 | 103 | 100 | 98  | 99  | 97  | 95  | 95  | 94  | 93  | 91  |    |    |    |    | 91  |   |  |   |
| 2   | 105 | 99  | 94  | 90  | 103 | 97  | 93  | 89  | 94  | 90  | 87  | 91  | 88  | 85  | 88  | 85  | 83  | 81  |    |    |    |    | 81  |   |  |   |
| 3   | 98  | 90  | 84  | 79  | 96  | 88  | 83  | 78  | 86  | 81  | 77  | 83  | 79  | 76  | 81  | 77  | 74  | 73  |    |    |    |    | 73  |   |  |   |
| 4   | 91  | 82  | 75  | 70  | 89  | 81  | 74  | 69  | 78  | 73  | 68  | 76  | 71  | 68  | 74  | 70  | 67  | 65  |    |    |    |    | 65  |   |  |   |
| 5   | 85  | 75  | 68  | 62  | 83  | 74  | 67  | 62  | 72  | 66  | 61  | 70  | 65  | 61  | 68  | 64  | 60  | 58  |    |    |    |    | 58  |   |  |   |
| 6   | 79  | 69  | 61  | 56  | 78  | 68  | 61  | 56  | 66  | 60  | 55  | 64  | 59  | 55  | 63  | 58  | 54  | 53  |    |    |    |    | 53  |   |  |   |
| 7   | 74  | 63  | 56  | 50  | 73  | 62  | 55  | 50  | 61  | 55  | 50  | 60  | 54  | 50  | 58  | 53  | 49  | 48  |    |    |    |    | 48  |   |  |   |
| 8   | 70  | 58  | 51  | 46  | 68  | 57  | 51  | 46  | 56  | 50  | 45  | 55  | 49  | 45  | 54  | 49  | 45  | 43  |    |    |    |    | 43  |   |  |   |
| 9   | 65  | 54  | 47  | 42  | 64  | 53  | 46  | 42  | 52  | 46  | 42  | 51  | 46  | 41  | 50  | 45  | 41  | 40  |    |    |    |    | 40  |   |  |   |
| 10  | 62  | 50  | 43  | 38  | 60  | 50  | 43  | 38  | 49  | 42  | 38  | 48  | 42  | 38  | 47  | 42  | 38  | 36  |    |    |    |    | 36  |   |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 208056 | 208056 | 208056 |
| 5°  | 207532 | 208132 | 208572 |
| 10° | 205567 | 207627 | 210054 |
| 15° | 203938 | 207152 | 211606 |
| 20° | 202513 | 205860 | 210819 |
| 25° | 199344 | 202110 | 206591 |
| 30° | 193170 | 195285 | 198272 |
| 35° | 182691 | 183519 | 184201 |
| 40° | 166410 | 166253 | 164019 |
| 45° | 139911 | 135690 | 129833 |
| 50° | 97178  | 95010  | 92472  |
| 55° | 51987  | 57471  | 60874  |
| 60° | 25162  | 28585  | 32249  |
| 65° | 11025  | 11113  | 11587  |
| 70° | 5932   | 5473   | 5355   |
| 75° | 5230   | 4766   | 3384   |
| 80° | 231    | 923    | 0      |
| 85° | 460    | 460    | 2300   |



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**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 639.2   | 5.4       |
| 10°-20°   | 1832.9  | 15.5      |
| 20°-30°   | 2734.9  | 23.1      |
| 30°-40°   | 3028.9  | 25.6      |
| 40°-50°   | 2362.1  | 20.0      |
| 50°-60°   | 990.1   | 8.4       |
| 60°-70°   | 198.3   | 1.7       |
| 70°-80°   | 31.5    | 0.3       |
| 80°-90°   | 4.9     | 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°    | 5207.0  | 44.0      |
| 0°-40°    | 8236.0  | 69.7      |
| 0°-60°    | 11588.2 | 98.0      |
| 0°-90°    | 11823.0 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 11823.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 6747 | 6747  | 6747 | 6747  | 6747 |      |
| 5°  | 6704 | 6710  | 6724 | 6742  | 6738 | 636  |
| 15° | 6388 | 6417  | 6489 | 6584  | 6628 | 1802 |
| 25° | 5859 | 5882  | 5940 | 6032  | 6072 | 2692 |
| 35° | 4853 | 4845  | 4875 | 4898  | 4893 | 3016 |
| 45° | 3208 | 3194  | 3112 | 3016  | 2977 | 2427 |
| 55° | 967  | 1004  | 1069 | 1112  | 1132 | 942  |
| 65° | 151  | 151   | 152  | 164   | 159  | 182  |
| 75° | 44   | 40    | 40   | 31    | 28   | 36   |
| 85° | 1    | 3     | 1    | 0     | 6    | 5    |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 6747.1 | 6747.1 | 6747.1 | 6747.1 | 6747.1 |
| 2.5°  | 6752.3 | 6739.4 | 6736.8 | 6744.6 | 6739.4 |
| 5°    | 6704.5 | 6709.7 | 6723.9 | 6742.0 | 6738.1 |
| 7.5°  | 6642.6 | 6651.6 | 6690.3 | 6736.8 | 6748.4 |
| 10°   | 6565.1 | 6584.5 | 6630.9 | 6683.9 | 6708.4 |
| 12.5° | 6474.7 | 6500.5 | 6567.7 | 6643.9 | 6689.0 |
| 15°   | 6388.2 | 6416.6 | 6488.9 | 6584.5 | 6628.4 |
| 17.5° | 6279.8 | 6317.2 | 6388.2 | 6491.5 | 6536.7 |
| 20°   | 6171.3 | 6204.9 | 6273.3 | 6374.0 | 6424.4 |
| 22.5° | 6037.0 | 6061.6 | 6126.1 | 6211.3 | 6263.0 |
| 25°   | 5858.9 | 5882.1 | 5940.2 | 6031.9 | 6071.9 |
| 27.5° | 5660.1 | 5687.2 | 5740.1 | 5803.4 | 5839.5 |
| 30°   | 5425.1 | 5447.0 | 5484.5 | 5541.3 | 5568.4 |
| 32.5° | 5160.4 | 5161.7 | 5199.1 | 5241.7 | 5266.3 |
| 35°   | 4853.1 | 4845.4 | 4875.1 | 4898.3 | 4893.2 |
| 37.5° | 4513.6 | 4514.9 | 4512.3 | 4514.9 | 4520.0 |
| 40°   | 4134.0 | 4115.9 | 4130.1 | 4097.9 | 4074.6 |
| 42.5° | 3731.2 | 3713.1 | 3657.6 | 3586.6 | 3547.9 |
| 45°   | 3208.3 | 3194.1 | 3111.5 | 3015.9 | 2977.2 |
| 47.5° | 2633.8 | 2589.9 | 2522.8 | 2441.4 | 2404.0 |
| 50°   | 2025.7 | 2020.5 | 1980.5 | 1961.1 | 1927.6 |
| 52.5° | 1448.6 | 1448.6 | 1497.6 | 1489.9 | 1488.6 |
| 55°   | 967.0  | 1004.5 | 1069.0 | 1111.6 | 1132.3 |
| 57.5° | 630.0  | 664.9  | 719.1  | 764.3  | 785.0  |
| 60°   | 408.0  | 424.8  | 463.5  | 498.4  | 522.9  |
| 62.5° | 253.0  | 267.3  | 287.9  | 309.9  | 318.9  |
| 65°   | 151.1  | 151.1  | 152.3  | 164.0  | 158.8  |
| 67.5° | 102.0  | 105.9  | 100.7  | 100.7  | 113.6  |
| 70°   | 65.8   | 62.0   | 60.7   | 59.4   | 59.4   |
| 72.5° | 42.6   | 36.1   | 38.7   | 41.3   | 36.1   |
| 75°   | 43.9   | 40.0   | 40.0   | 31.0   | 28.4   |
| 77.5° | 15.5   | 16.8   | 11.6   | 9.0    | 7.7    |
| 80°   | 1.3    | 5.2    | 5.2    | 1.3    | 0.0    |
| 82.5° | 15.5   | 14.2   | 11.6   | 18.1   | 11.6   |
| 85°   | 1.3    | 2.6    | 1.3    | 0.0    | 6.5    |
| 87.5° | 0.0    | 0.0    | 0.0    | 1.3    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)