

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: HALO COMMERCIAL

Report Number: P210189

Luminaire Tested: **PR815D010 - PR8M12WDMB - 3000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210189  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29051)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR815D010 - PR8M12WDMB - 3000K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE BLACK FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1443.0 lumens  
Efficiency: N/A  
Efficacy: 96.2 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.39  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

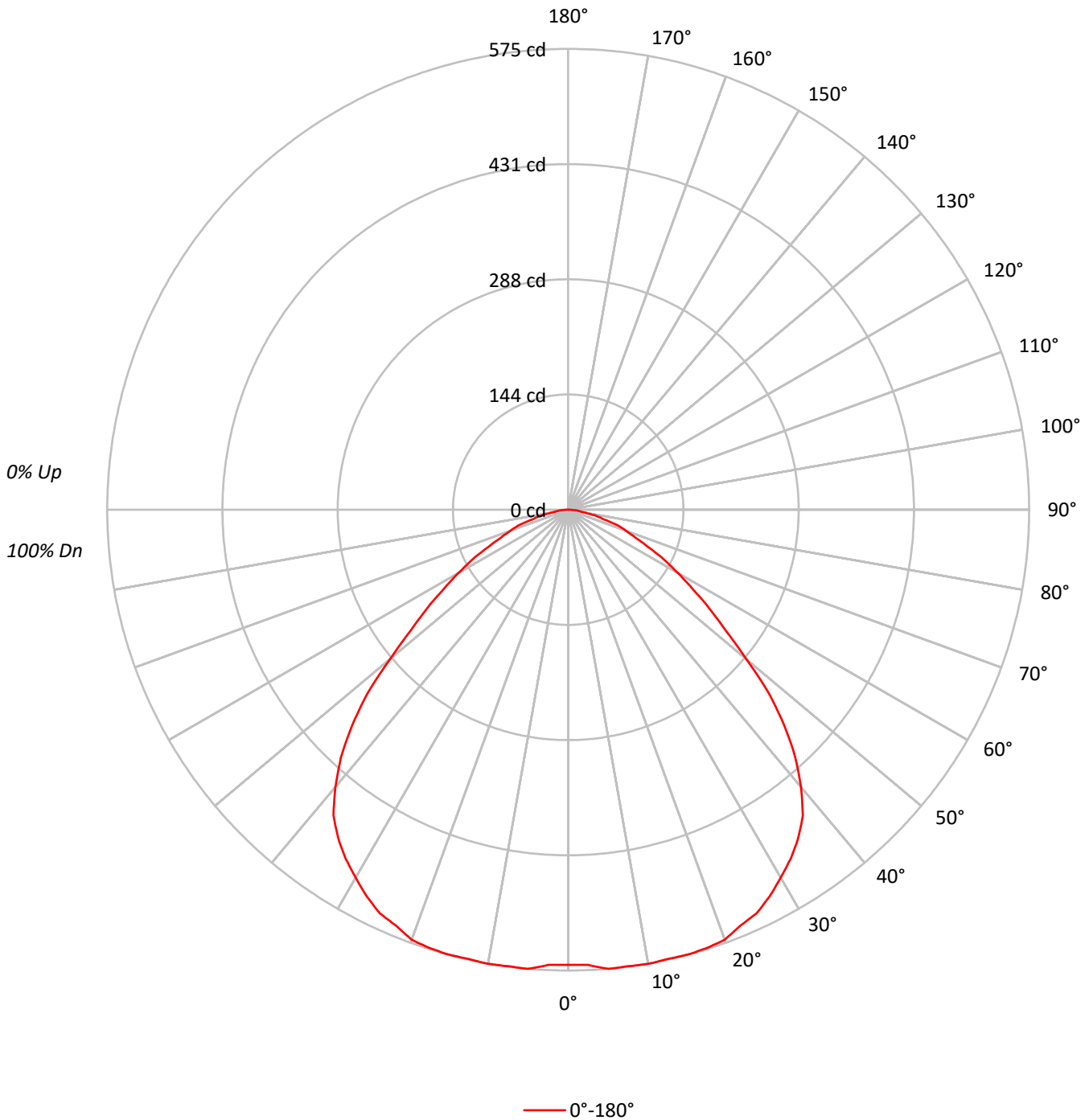
Input Watts (W): 15  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |  |     |     |     |  |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 |  | 106 | 106 | 106 |  | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  |  | 96  | 94  | 92  |  | 92  | 91  | 89  | 87  |
| 2   | 102 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  |  | 86  | 82  | 79  |  | 83  | 80  | 77  | 75  |
| 3   | 93  | 84  | 77  | 71  | 91  | 82  | 76  | 70  | 79  | 74  | 69  |  | 77  | 72  | 68  |  | 74  | 70  | 67  | 65  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  |  | 69  | 64  | 59  |  | 67  | 62  | 58  | 56  |
| 5   | 80  | 68  | 59  | 53  | 78  | 67  | 59  | 53  | 64  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 47  | 59  | 52  | 46  |  | 57  | 51  | 46  |  | 55  | 50  | 46  | 44  |
| 7   | 68  | 56  | 48  | 42  | 67  | 55  | 47  | 42  | 53  | 46  | 41  |  | 52  | 46  | 41  |  | 51  | 45  | 41  | 39  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 43  | 37  | 49  | 42  | 37  |  | 48  | 42  | 37  |  | 47  | 41  | 37  | 35  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 34  | 45  | 38  | 34  |  | 44  | 38  | 33  |  | 43  | 37  | 33  | 31  |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 35  | 31  |  | 41  | 35  | 30  |  | 40  | 34  | 30  | 29  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 17509 |
| 5°  | 17802 |
| 10° | 18017 |
| 15° | 18350 |
| 20° | 18738 |
| 25° | 18907 |
| 30° | 18879 |
| 35° | 18833 |
| 40° | 18179 |
| 45° | 16646 |
| 50° | 13907 |
| 55° | 11564 |
| 60° | 9720  |
| 65° | 8026  |
| 70° | 6906  |
| 75° | 5421  |
| 80° | 3747  |
| 85° | 3927  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 54.8   | 3.8       |
| 10°-20°   | 162.7  | 11.3      |
| 20°-30°   | 255.4  | 17.7      |
| 30°-40°   | 311.4  | 21.6      |
| 40°-50°   | 291.0  | 20.2      |
| 50°-60°   | 194.1  | 13.5      |
| 60°-70°   | 111.7  | 7.7       |
| 70°-80°   | 51.5   | 3.6       |
| 80°-90°   | 10.4   | 0.7       |
| 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°    | 472.9  | 32.8      |
| 0°-40°    | 784.2  | 54.3      |
| 0°-60°    | 1269.4 | 88.0      |
| 0°-90°    | 1443.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1443.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 568 |      |
| 5°  | 575 | 55   |
| 15° | 575 | 163  |
| 25° | 556 | 255  |
| 35° | 500 | 311  |
| 45° | 382 | 291  |
| 55° | 215 | 194  |
| 65° | 110 | 112  |
| 75° | 46  | 51   |
| 85° | 11  | 10   |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 567.8 |
| 2.5°  | 568.6 |
| 5°    | 575.1 |
| 7.5°  | 574.5 |
| 10°   | 575.4 |
| 12.5° | 574.2 |
| 15°   | 574.8 |
| 17.5° | 573.6 |
| 20°   | 571.0 |
| 22.5° | 561.6 |
| 25°   | 555.7 |
| 27.5° | 544.0 |
| 30°   | 530.2 |
| 32.5° | 516.4 |
| 35°   | 500.3 |
| 37.5° | 480.9 |
| 40°   | 451.6 |
| 42.5° | 419.6 |
| 45°   | 381.7 |
| 47.5° | 339.8 |
| 50°   | 289.9 |
| 52.5° | 247.6 |
| 55°   | 215.1 |
| 57.5° | 184.0 |
| 60°   | 157.6 |
| 62.5° | 134.7 |
| 65°   | 110.0 |
| 67.5° | 90.4  |
| 70°   | 76.6  |
| 72.5° | 65.1  |
| 75°   | 45.5  |
| 77.5° | 36.1  |
| 80°   | 21.1  |
| 82.5° | 13.5  |
| 85°   | 11.1  |
| 87.5° | 3.2   |
| 90°   | 0.0   |

(END OF REPORT)