

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

Report Number: P328457

Luminaire Tested: **L815MED20FL940MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328457  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-12)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L815MED20FL940MB  
Description: Medium, 2000lm, 45D, 4000K, black finish  
Light Source: (1) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2081.0 lumens  
Efficiency: N/A  
Efficacy: 84.3 lumens/watt  
Spacing Criteria (0/90/45): 0.75 / 0.75 / 0.66  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

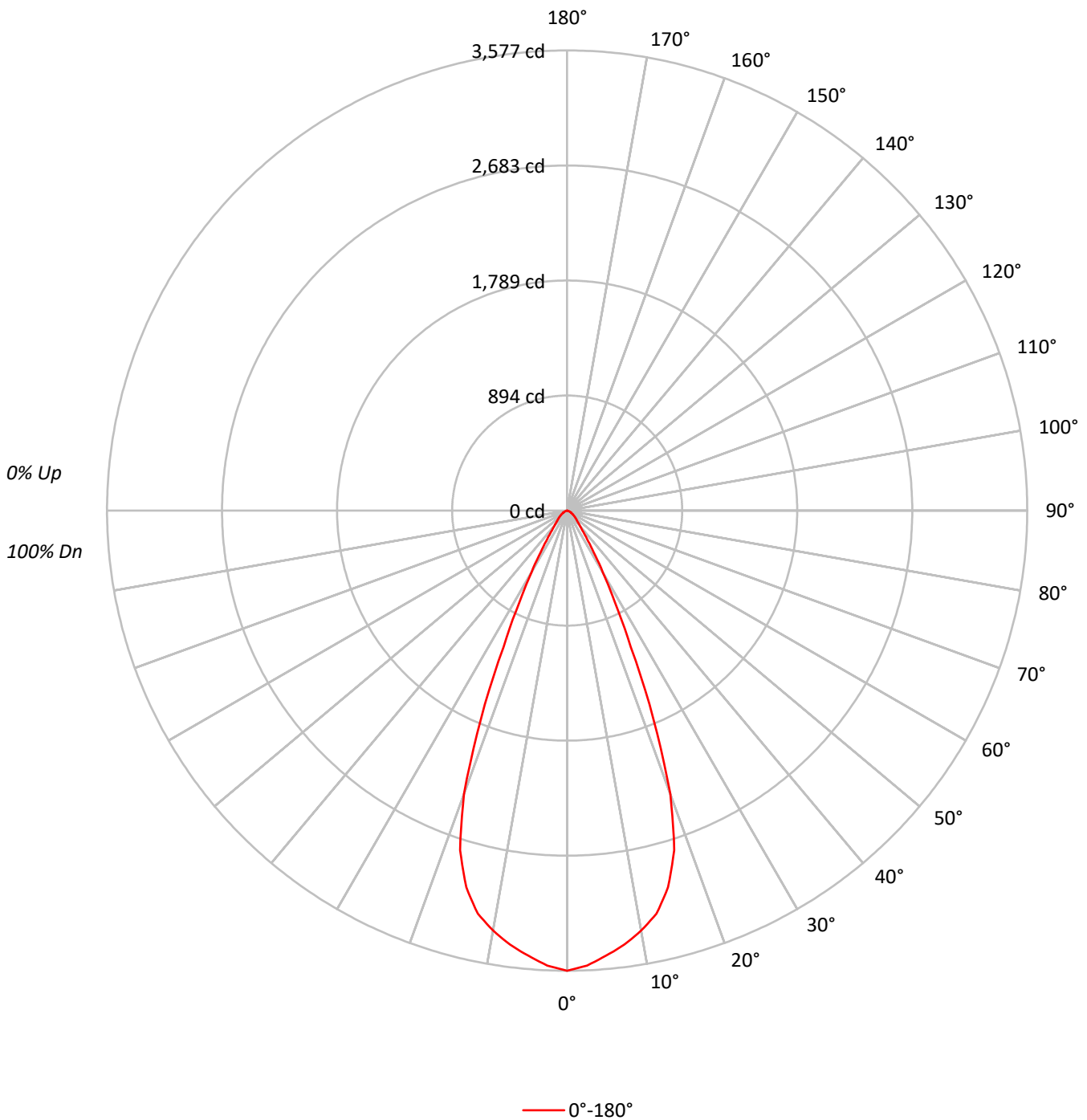
Input Watts (W): 24.7  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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   | 114 | 111 | 109 | 107 | 111 | 109 | 107 | 105 | 105 | 103 | 102 | 101 | 100 | 99  | 98  | 97  | 96  | 94  |
| 2   | 109 | 104 | 100 | 97  | 107 | 102 | 99  | 96  | 99  | 96  | 94  | 96  | 94  | 92  | 94  | 92  | 90  | 89  |
| 3   | 104 | 98  | 93  | 90  | 102 | 97  | 92  | 89  | 94  | 90  | 87  | 92  | 89  | 86  | 89  | 87  | 85  | 83  |
| 4   | 99  | 92  | 87  | 83  | 97  | 91  | 86  | 83  | 89  | 85  | 82  | 87  | 84  | 81  | 85  | 82  | 80  | 79  |
| 5   | 95  | 87  | 82  | 78  | 93  | 86  | 81  | 78  | 85  | 80  | 77  | 83  | 79  | 76  | 82  | 78  | 76  | 74  |
| 6   | 91  | 83  | 77  | 73  | 89  | 82  | 77  | 73  | 81  | 76  | 73  | 79  | 75  | 72  | 78  | 74  | 72  | 70  |
| 7   | 87  | 79  | 73  | 69  | 86  | 78  | 73  | 69  | 77  | 72  | 69  | 76  | 72  | 69  | 75  | 71  | 68  | 67  |
| 8   | 84  | 75  | 70  | 66  | 82  | 74  | 69  | 66  | 73  | 69  | 66  | 72  | 68  | 65  | 72  | 68  | 65  | 64  |
| 9   | 80  | 72  | 66  | 63  | 79  | 71  | 66  | 63  | 70  | 66  | 62  | 69  | 65  | 62  | 69  | 65  | 62  | 61  |
| 10  | 77  | 69  | 63  | 60  | 76  | 68  | 63  | 60  | 67  | 63  | 60  | 67  | 62  | 59  | 66  | 62  | 59  | 58  |

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

|     |        |
|-----|--------|
|     | 0°     |
| 0°  | 441244 |
| 5°  | 430028 |
| 10° | 415161 |
| 15° | 387164 |
| 20° | 307415 |
| 25° | 159301 |
| 30° | 78933  |
| 35° | 39948  |
| 40° | 24813  |
| 45° | 18630  |
| 50° | 15447  |
| 55° | 12236  |
| 60° | 9942   |
| 65° | 7909   |
| 70° | 5987   |
| 75° | 2907   |
| 80° | 639    |
| 85° | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 326.8  | 15.7      |
| 10°-20°   | 825.4  | 39.7      |
| 20°-30°   | 573.7  | 27.6      |
| 30°-40°   | 183.3  | 8.8       |
| 40°-50°   | 85.0   | 4.1       |
| 50°-60°   | 52.1   | 2.5       |
| 60°-70°   | 27.3   | 1.3       |
| 70°-80°   | 7.3    | 0.4       |
| 80°-90°   | 0.1    | 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°    | 1725.9 | 82.9      |
| 0°-40°    | 1909.1 | 91.7      |
| 0°-60°    | 2046.2 | 98.3      |
| 0°-90°    | 2081.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2081.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 3577 |      |
| 5°  | 3473 | 327  |
| 15° | 3032 | 825  |
| 25° | 1170 | 574  |
| 35° | 265  | 183  |
| 45° | 107  | 85   |
| 55° | 57   | 52   |
| 65° | 27   | 27   |
| 75° | 6    | 7    |
| 85° | 0    | 0    |
| 90° | 0    |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 3577.3 |
| 2.5°  | 3539.7 |
| 5°    | 3473.1 |
| 7.5°  | 3403.1 |
| 10°   | 3314.7 |
| 12.5° | 3209.6 |
| 15°   | 3031.9 |
| 17.5° | 2767.5 |
| 20°   | 2342.0 |
| 22.5° | 1752.8 |
| 25°   | 1170.5 |
| 27.5° | 801.1  |
| 30°   | 554.2  |
| 32.5° | 381.7  |
| 35°   | 265.3  |
| 37.5° | 196.1  |
| 40°   | 154.1  |
| 42.5° | 126.9  |
| 45°   | 106.8  |
| 47.5° | 91.9   |
| 50°   | 80.5   |
| 52.5° | 68.3   |
| 55°   | 56.9   |
| 57.5° | 48.2   |
| 60°   | 40.3   |
| 62.5° | 33.3   |
| 65°   | 27.1   |
| 67.5° | 21.9   |
| 70°   | 16.6   |
| 72.5° | 10.5   |
| 75°   | 6.1    |
| 77.5° | 2.6    |
| 80°   | 0.9    |
| 82.5° | 0.0    |
| 85°   | 0.0    |
| 87.5° | 0.0    |
| 90°   | 0.0    |

(END OF REPORT)