

Classified  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P581018

Luminaire Tested: **HCC4W05D010MW-HM40525835-41NDC**

Issue Date: 9/9/2021

**Test Information**

Test Method: LM-41-14  
Report Number: P581018  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-1)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 9/9/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: HCC4W05D010MW-HM40525835-41NDC  
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, SPECULAR TRIM  
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT  
CYLINDER  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

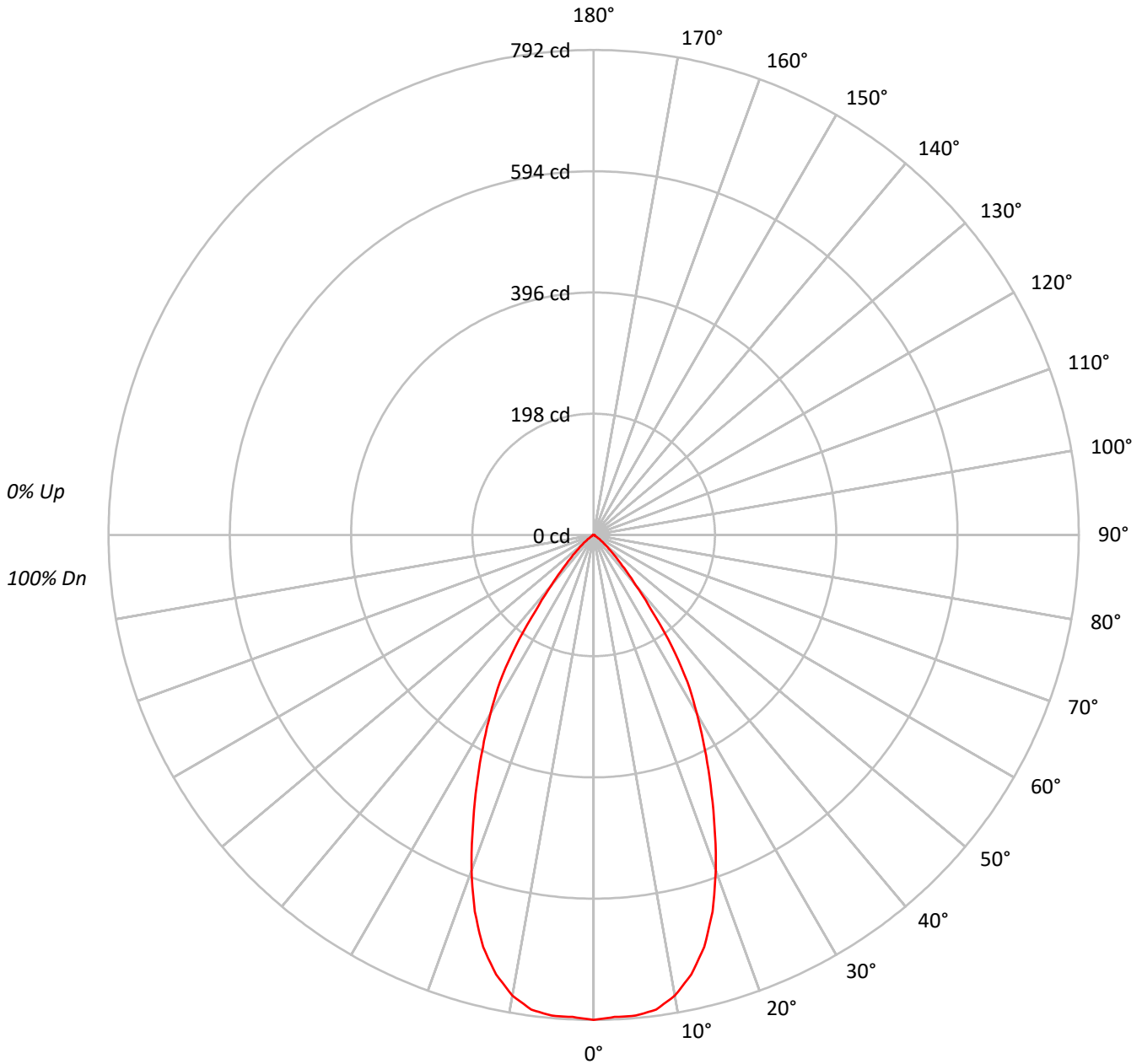
Lumens per Lamp: N/A  
Luminaire Lumens: 663.4 lumens  
Efficiency: N/A  
Efficacy: 110.6 lumens/watt  
Spacing Criteria (0/90/45): 0.84 / 0.84 / 0.85  
Luminous Opening: Circular (Dia: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 6  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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 | 0 |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |   |
| 1   | 114 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99  | 98  | 97  | 96  | 95  | 94  |    |    |   |
| 2   | 108 | 103 | 99  | 96  | 106 | 101 | 98  | 95  | 98  | 95  | 93  | 95  | 93  | 91  | 92  | 91  | 89  | 87  |    |    |   |
| 3   | 103 | 96  | 91  | 87  | 101 | 95  | 90  | 87  | 92  | 88  | 85  | 90  | 87  | 84  | 88  | 85  | 83  | 81  |    |    |   |
| 4   | 97  | 90  | 85  | 80  | 96  | 89  | 84  | 80  | 87  | 82  | 79  | 85  | 81  | 78  | 83  | 80  | 77  | 76  |    |    |   |
| 5   | 93  | 84  | 79  | 74  | 91  | 83  | 78  | 74  | 82  | 77  | 73  | 80  | 76  | 73  | 78  | 75  | 72  | 71  |    |    |   |
| 6   | 88  | 79  | 73  | 69  | 87  | 78  | 73  | 69  | 77  | 72  | 68  | 75  | 71  | 68  | 74  | 70  | 67  | 66  |    |    |   |
| 7   | 84  | 75  | 69  | 64  | 82  | 74  | 68  | 64  | 73  | 68  | 64  | 71  | 67  | 64  | 70  | 66  | 63  | 62  |    |    |   |
| 8   | 80  | 70  | 64  | 60  | 78  | 70  | 64  | 60  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 62  | 59  | 58  |    |    |   |
| 9   | 76  | 66  | 61  | 57  | 75  | 66  | 60  | 56  | 65  | 60  | 56  | 64  | 59  | 56  | 63  | 59  | 56  | 55  |    |    |   |
| 10  | 72  | 63  | 57  | 53  | 71  | 62  | 57  | 53  | 62  | 57  | 53  | 61  | 56  | 53  | 60  | 56  | 53  | 51  |    |    |   |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 97702 |
| 5°  | 97568 |
| 10° | 95677 |
| 15° | 88966 |
| 20° | 76512 |
| 25° | 61461 |
| 30° | 47984 |
| 35° | 33594 |
| 40° | 17229 |
| 45° | 8757  |
| 50° | 4375  |
| 55° | 1634  |
| 60° | 666   |
| 65° | 525   |
| 70° | 325   |
| 75° | 238   |
| 80° | 355   |
| 85° | 0     |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 74.5   | 11.2      |
| 10°-20°   | 192.3  | 29.0      |
| 20°-30°   | 207.2  | 31.2      |
| 30°-40°   | 136.1  | 20.5      |
| 40°-50°   | 42.3   | 6.4       |
| 50°-60°   | 8.3    | 1.3       |
| 60°-70°   | 1.8    | 0.3       |
| 70°-80°   | 0.7    | 0.1       |
| 80°-90°   | 0.2    | 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°    | 474.0  | 71.4      |
| 0°-40°    | 610.1  | 92.0      |
| 0°-60°    | 660.7  | 99.6      |
| 0°-90°    | 663.4  | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 663.4  | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | Flux |
|-----|-----|------|
| 0°  | 792 |      |
| 5°  | 788 | 75   |
| 15° | 697 | 192  |
| 25° | 452 | 207  |
| 35° | 223 | 136  |
| 45° | 50  | 42   |
| 55° | 8   | 8    |
| 65° | 2   | 2    |
| 75° | 0   | 1    |
| 85° | 0   | 0    |
| 90° | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    |
|-------|-------|
| 0°    | 792.1 |
| 2.5°  | 788.0 |
| 5°    | 788.0 |
| 7.5°  | 781.8 |
| 10°   | 763.9 |
| 12.5° | 735.3 |
| 15°   | 696.7 |
| 17.5° | 645.1 |
| 20°   | 582.9 |
| 22.5° | 515.6 |
| 25°   | 451.6 |
| 27.5° | 392.0 |
| 30°   | 336.9 |
| 32.5° | 285.0 |
| 35°   | 223.1 |
| 37.5° | 155.5 |
| 40°   | 107.0 |
| 42.5° | 73.9  |
| 45°   | 50.2  |
| 47.5° | 34.0  |
| 50°   | 22.8  |
| 52.5° | 14.3  |
| 55°   | 7.6   |
| 57.5° | 3.2   |
| 60°   | 2.7   |
| 62.5° | 2.3   |
| 65°   | 1.8   |
| 67.5° | 1.4   |
| 70°   | 0.9   |
| 72.5° | 0.9   |
| 75°   | 0.5   |
| 77.5° | 0.5   |
| 80°   | 0.5   |
| 82.5° | 0.5   |
| 85°   | 0.0   |
| 87.5° | 0.0   |
| 90°   | 0.0   |

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Scaled Data Report



Report Generated By 670245859 / DESKTOP-T8S5UU9

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— 0°-180°

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