

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: P580546

Luminaire Tested: **HCC4W40D010MW-HM43040827-41NDH**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P580546
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W40D010MW-HM43040827-41NDH
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 2700K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

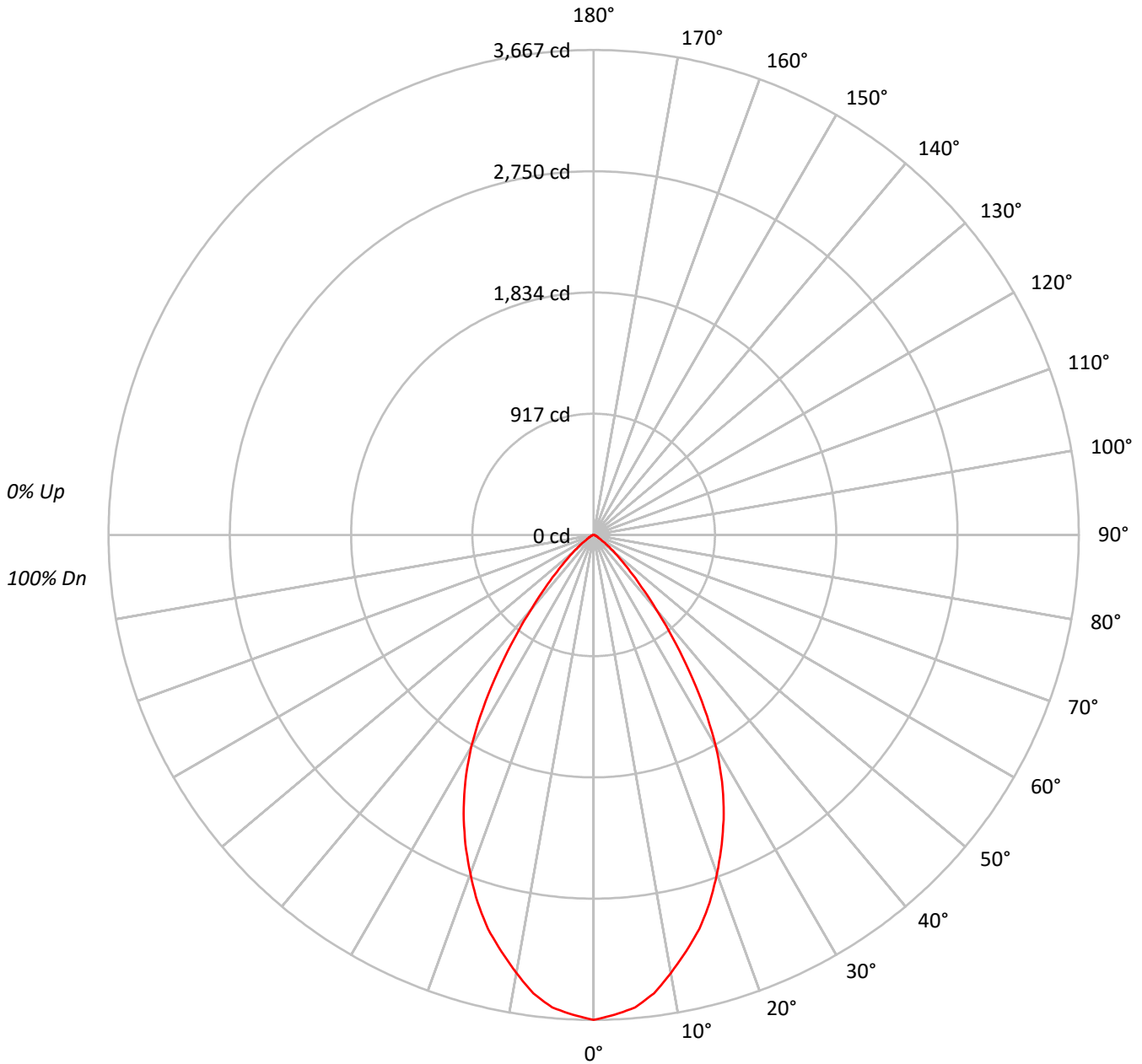
Lumens per Lamp: N/A
Luminaire Lumens: 3487.3 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.91
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 41
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





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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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 104 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 95 | 93 |
| 2 | 107 | 102 | 98 | 94 | 105 | 100 | 96 | 93 | 97 | 94 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 86 |
| 3 | 101 | 95 | 89 | 85 | 99 | 93 | 88 | 84 | 91 | 86 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 79 |
| 4 | 96 | 88 | 82 | 78 | 94 | 87 | 81 | 77 | 85 | 80 | 76 | 83 | 79 | 75 | 81 | 77 | 74 | 73 |
| 5 | 91 | 82 | 76 | 71 | 89 | 81 | 75 | 71 | 79 | 74 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 67 |
| 6 | 86 | 76 | 70 | 66 | 84 | 76 | 70 | 65 | 74 | 69 | 65 | 73 | 68 | 64 | 71 | 67 | 64 | 63 |
| 7 | 81 | 72 | 65 | 61 | 80 | 71 | 65 | 61 | 70 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 58 |
| 8 | 77 | 67 | 61 | 57 | 76 | 67 | 61 | 56 | 65 | 60 | 56 | 64 | 59 | 56 | 63 | 59 | 56 | 54 |
| 9 | 73 | 63 | 57 | 53 | 72 | 63 | 57 | 53 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 51 |
| 10 | 70 | 59 | 53 | 49 | 69 | 59 | 53 | 49 | 58 | 53 | 49 | 57 | 52 | 49 | 57 | 52 | 49 | 48 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 452321 |
| 5° | 444106 |
| 10° | 421236 |
| 15° | 393868 |
| 20° | 357727 |
| 25° | 316548 |
| 30° | 263291 |
| 35° | 189863 |
| 40° | 118492 |
| 45° | 68344 |
| 50° | 38551 |
| 55° | 18365 |
| 60° | 10534 |
| 65° | 8055 |
| 70° | 5410 |
| 75° | 3574 |
| 80° | 3552 |
| 85° | 3538 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 335.3 | 9.6 |
| 10°-20° | 860.4 | 24.7 |
| 20°-30° | 1058.2 | 30.3 |
| 30°-40° | 785.9 | 22.5 |
| 40°-50° | 319.5 | 9.2 |
| 50°-60° | 88.5 | 2.5 |
| 60°-70° | 27.5 | 0.8 |
| 70°-80° | 9.2 | 0.3 |
| 80°-90° | 2.7 | 0.1 |
| 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° | 2253.9 | 64.6 |
| 0°-40° | 3039.8 | 87.2 |
| 0°-60° | 3447.8 | 98.9 |
| 0°-90° | 3487.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3487.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3667 | |
| 5° | 3587 | 335 |
| 15° | 3084 | 860 |
| 25° | 2326 | 1058 |
| 35° | 1261 | 786 |
| 45° | 392 | 320 |
| 55° | 85 | 88 |
| 65° | 28 | 28 |
| 75° | 8 | 9 |
| 85° | 2 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3667.1 |
| 2.5° | 3631.9 |
| 5° | 3586.8 |
| 7.5° | 3496.3 |
| 10° | 3363.2 |
| 12.5° | 3225.0 |
| 15° | 3084.4 |
| 17.5° | 2916.1 |
| 20° | 2725.3 |
| 22.5° | 2531.8 |
| 25° | 2325.9 |
| 27.5° | 2102.3 |
| 30° | 1848.6 |
| 32.5° | 1559.8 |
| 35° | 1260.9 |
| 37.5° | 979.5 |
| 40° | 735.9 |
| 42.5° | 537.5 |
| 45° | 391.8 |
| 47.5° | 281.3 |
| 50° | 200.9 |
| 52.5° | 138.1 |
| 55° | 85.4 |
| 57.5° | 55.3 |
| 60° | 42.7 |
| 62.5° | 35.2 |
| 65° | 27.6 |
| 67.5° | 20.1 |
| 70° | 15.0 |
| 72.5° | 12.6 |
| 75° | 7.5 |
| 77.5° | 5.0 |
| 80° | 5.0 |
| 82.5° | 2.5 |
| 85° | 2.5 |
| 87.5° | 2.5 |
| 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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(END OF REPORT)