

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: P579990

Luminaire Tested: **HCC4W20D010SL-HM40525830-41WDBB**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579990
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W20D010SL-HM40525830-41WDBB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, BLACK BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

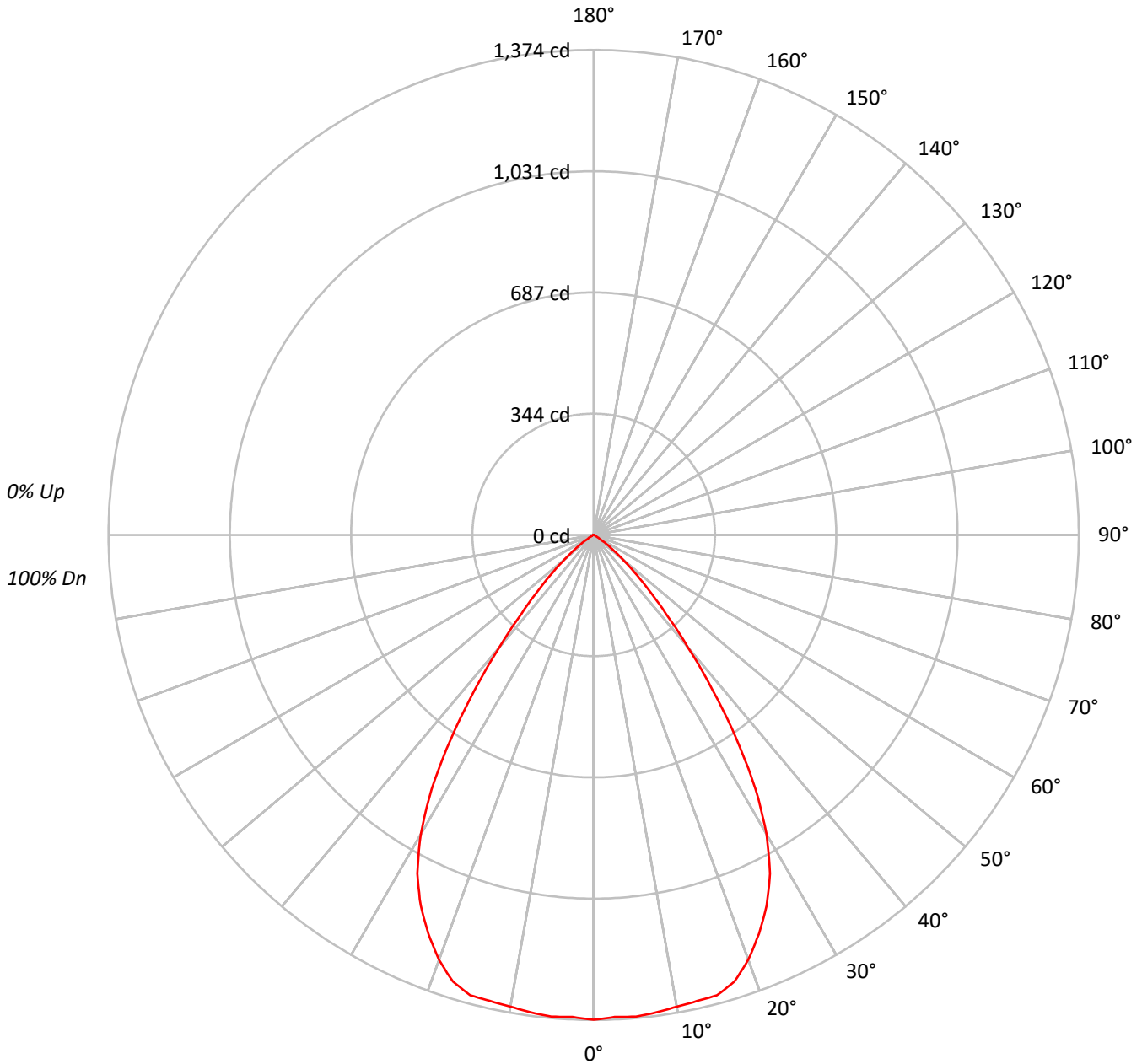
Lumens per Lamp: N/A
Luminaire Lumens: 1698.9 lumens
Efficiency: N/A
Efficacy: 84.9 lumens/watt
Spacing Criteria (0/90/45): 1.1 / 1.1 / 1.03
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

Input Watts (W): 20
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 | | |
| 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 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 94 | | 93 |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | | 85 |
| 3 | 101 | 94 | 89 | 84 | 99 | 93 | 88 | 84 | 90 | 86 | 82 | 87 | 84 | 81 | 85 | 82 | 80 | | 78 |
| 4 | 95 | 87 | 81 | 77 | 93 | 86 | 80 | 76 | 84 | 79 | 75 | 82 | 78 | 74 | 80 | 76 | 73 | | 72 |
| 5 | 90 | 81 | 75 | 70 | 88 | 80 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | | 66 |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 67 | 63 | 70 | 66 | 62 | | 61 |
| 7 | 80 | 70 | 64 | 59 | 79 | 69 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | | 56 |
| 8 | 76 | 65 | 59 | 55 | 74 | 65 | 59 | 54 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | | 52 |
| 9 | 72 | 61 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | | 49 |
| 10 | 68 | 58 | 51 | 47 | 67 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 55 | 50 | 47 | | 45 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 169428 |
| 5° | 169592 |
| 10° | 169925 |
| 15° | 172403 |
| 20° | 168107 |
| 25° | 157723 |
| 30° | 139508 |
| 35° | 106082 |
| 40° | 66838 |
| 45° | 38376 |
| 50° | 20360 |
| 55° | 8451 |
| 60° | 2270 |
| 65° | 1897 |
| 70° | 1406 |
| 75° | 1239 |
| 80° | 923 |
| 85° | 1840 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 130.3 | 7.7 |
| 10°-20° | 378.0 | 22.3 |
| 20°-30° | 527.6 | 31.1 |
| 30°-40° | 434.2 | 25.6 |
| 40°-50° | 178.8 | 10.5 |
| 50°-60° | 40.3 | 2.4 |
| 60°-70° | 6.5 | 0.4 |
| 70°-80° | 2.4 | 0.1 |
| 80°-90° | 0.9 | 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° | 1035.9 | 61.0 |
| 0°-40° | 1470.0 | 86.5 |
| 0°-60° | 1689.2 | 99.4 |
| 0°-90° | 1698.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1698.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1374 | |
| 5° | 1370 | 130 |
| 15° | 1350 | 378 |
| 25° | 1159 | 528 |
| 35° | 704 | 434 |
| 45° | 220 | 179 |
| 55° | 39 | 40 |
| 65° | 6 | 6 |
| 75° | 3 | 2 |
| 85° | 1 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1373.6 |
| 2.5° | 1367.1 |
| 5° | 1369.7 |
| 7.5° | 1364.5 |
| 10° | 1356.7 |
| 12.5° | 1352.7 |
| 15° | 1350.1 |
| 17.5° | 1326.5 |
| 20° | 1280.7 |
| 22.5° | 1223.0 |
| 25° | 1158.9 |
| 27.5° | 1081.6 |
| 30° | 979.5 |
| 32.5° | 853.8 |
| 35° | 704.5 |
| 37.5° | 553.9 |
| 40° | 415.1 |
| 42.5° | 302.5 |
| 45° | 220.0 |
| 47.5° | 157.1 |
| 50° | 106.1 |
| 52.5° | 66.8 |
| 55° | 39.3 |
| 57.5° | 19.6 |
| 60° | 9.2 |
| 62.5° | 7.9 |
| 65° | 6.5 |
| 67.5° | 5.3 |
| 70° | 3.9 |
| 72.5° | 2.6 |
| 75° | 2.6 |
| 77.5° | 1.3 |
| 80° | 1.3 |
| 82.5° | 1.3 |
| 85° | 1.3 |
| 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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(END OF REPORT)