

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: P579991

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-10)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4W20D010SL-HM40525830-41WDWB
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" WIDE DISTRIBUTION, WHITE BAFFLE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

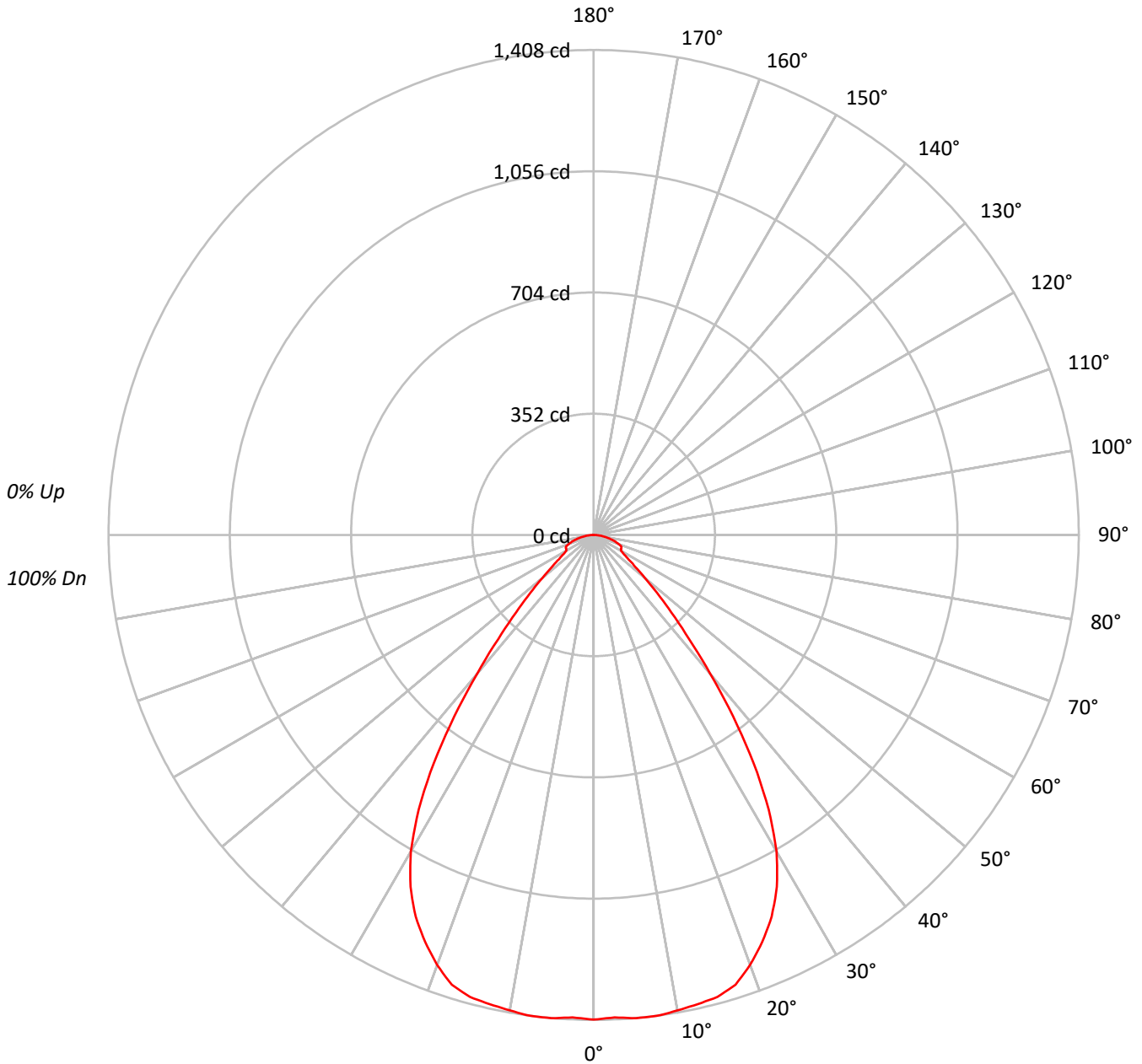
Lumens per Lamp: N/A
Luminaire Lumens: 2114.3 lumens
Efficiency: N/A
Efficacy: 105.7 lumens/watt
Spacing Criteria (0/90/45): 1.14 / 1.14 / 1.07
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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 | 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 | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99 | 97 | 98 | 96 | 94 | 94 | 93 | 92 | 90 | | | | |
| 2 | 104 | 98 | 93 | 89 | 102 | 96 | 92 | 88 | 93 | 89 | 86 | 90 | 87 | 84 | 87 | 84 | 82 | 80 | | | | |
| 3 | 98 | 89 | 83 | 78 | 95 | 88 | 82 | 78 | 85 | 80 | 76 | 83 | 78 | 75 | 80 | 77 | 74 | 72 | | | | |
| 4 | 91 | 82 | 75 | 70 | 89 | 81 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 65 | | | | |
| 5 | 86 | 75 | 68 | 63 | 84 | 74 | 68 | 63 | 72 | 67 | 62 | 71 | 65 | 61 | 69 | 64 | 61 | 59 | | | | |
| 6 | 80 | 70 | 62 | 57 | 79 | 69 | 62 | 57 | 67 | 61 | 57 | 66 | 60 | 56 | 64 | 59 | 56 | 54 | | | | |
| 7 | 76 | 64 | 57 | 52 | 74 | 64 | 57 | 52 | 62 | 56 | 52 | 61 | 56 | 51 | 60 | 55 | 51 | 49 | | | | |
| 8 | 71 | 60 | 53 | 48 | 70 | 59 | 53 | 48 | 58 | 52 | 48 | 57 | 51 | 47 | 56 | 51 | 47 | 46 | | | | |
| 9 | 67 | 56 | 49 | 44 | 66 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 52 | 47 | 44 | 42 | | | | |
| 10 | 64 | 52 | 46 | 41 | 62 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 45 | 41 | 49 | 44 | 41 | 39 | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 173560 |
| 5° | 174396 |
| 10° | 175586 |
| 15° | 177345 |
| 20° | 174394 |
| 25° | 166378 |
| 30° | 151158 |
| 35° | 121922 |
| 40° | 84598 |
| 45° | 55541 |
| 50° | 37227 |
| 55° | 26494 |
| 60° | 22646 |
| 65° | 26005 |
| 70° | 27877 |
| 75° | 26831 |
| 80° | 24222 |
| 85° | 22219 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 134.2 | 6.3 |
| 10°-20° | 390.1 | 18.5 |
| 20°-30° | 557.4 | 26.4 |
| 30°-40° | 497.9 | 23.6 |
| 40°-50° | 255.4 | 12.1 |
| 50°-60° | 116.1 | 5.5 |
| 60°-70° | 86.6 | 4.1 |
| 70°-80° | 58.9 | 2.8 |
| 80°-90° | 17.5 | 0.8 |
| 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° | 1081.8 | 51.2 |
| 0°-40° | 1579.7 | 74.7 |
| 0°-60° | 1951.3 | 92.3 |
| 0°-90° | 2114.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2114.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1407 | |
| 5° | 1408 | 134 |
| 15° | 1389 | 390 |
| 25° | 1222 | 557 |
| 35° | 810 | 498 |
| 45° | 318 | 255 |
| 55° | 123 | 116 |
| 65° | 89 | 87 |
| 75° | 56 | 59 |
| 85° | 16 | 17 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1407.1 |
| 2.5° | 1401.9 |
| 5° | 1408.5 |
| 7.5° | 1408.5 |
| 10° | 1401.9 |
| 12.5° | 1395.3 |
| 15° | 1388.8 |
| 17.5° | 1369.2 |
| 20° | 1328.6 |
| 22.5° | 1278.8 |
| 25° | 1222.5 |
| 27.5° | 1151.7 |
| 30° | 1061.3 |
| 32.5° | 945.9 |
| 35° | 809.7 |
| 37.5° | 664.2 |
| 40° | 525.4 |
| 42.5° | 410.1 |
| 45° | 318.4 |
| 47.5° | 248.9 |
| 50° | 194.0 |
| 52.5° | 152.0 |
| 55° | 123.2 |
| 57.5° | 103.5 |
| 60° | 91.8 |
| 62.5° | 89.1 |
| 65° | 89.1 |
| 67.5° | 86.5 |
| 70° | 77.3 |
| 72.5° | 66.9 |
| 75° | 56.3 |
| 77.5° | 44.5 |
| 80° | 34.1 |
| 82.5° | 24.9 |
| 85° | 15.7 |
| 87.5° | 6.5 |
| 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)