

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: P579996

Luminaire Tested: **HCC4S20D010MW-HM40525830-41MDC**

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579996
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4S20D010MW-HM40525830-41MDC
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

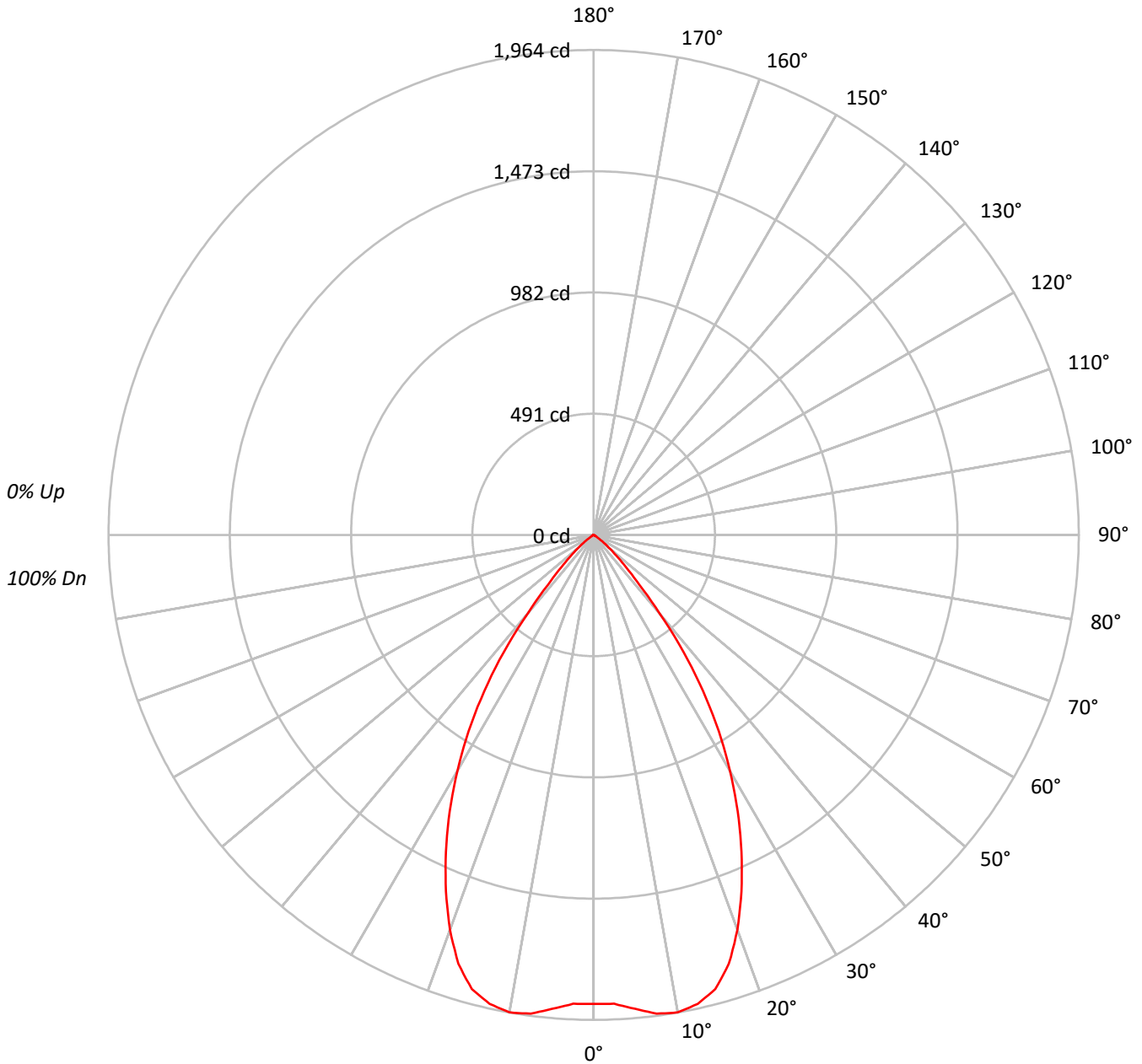
Lumens per Lamp: N/A
Luminaire Lumens: 2022.4 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 1 / 1 / 0.96
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | | | | | | | | | | | | | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 86 | | | | | | | | | | | | | | | | | | | |
| 3 | 102 | 95 | 90 | 86 | 100 | 94 | 89 | 86 | 91 | 87 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | | | | | | | | | | | | | | | | | |
| 4 | 97 | 89 | 83 | 79 | 95 | 88 | 82 | 78 | 86 | 81 | 77 | 84 | 80 | 77 | 82 | 78 | 76 | 74 | | | | | | | | | | | | | | | | | | | |
| 5 | 91 | 83 | 77 | 72 | 90 | 82 | 76 | 72 | 80 | 75 | 72 | 78 | 74 | 71 | 77 | 73 | 70 | 69 | | | | | | | | | | | | | | | | | | | |
| 6 | 87 | 78 | 71 | 67 | 85 | 77 | 71 | 67 | 75 | 70 | 66 | 74 | 69 | 66 | 72 | 68 | 65 | 64 | | | | | | | | | | | | | | | | | | | |
| 7 | 82 | 73 | 66 | 62 | 81 | 72 | 66 | 62 | 71 | 65 | 62 | 69 | 65 | 61 | 68 | 64 | 61 | 60 | | | | | | | | | | | | | | | | | | | |
| 8 | 78 | 68 | 62 | 58 | 77 | 68 | 62 | 58 | 67 | 61 | 57 | 65 | 61 | 57 | 65 | 60 | 57 | 56 | | | | | | | | | | | | | | | | | | | |
| 9 | 74 | 64 | 58 | 54 | 73 | 64 | 58 | 54 | 63 | 57 | 54 | 62 | 57 | 54 | 61 | 57 | 53 | 52 | | | | | | | | | | | | | | | | | | | |
| 10 | 71 | 61 | 55 | 51 | 69 | 60 | 54 | 51 | 59 | 54 | 50 | 58 | 54 | 50 | 58 | 53 | 50 | 49 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 234270 |
| 5° | 238570 |
| 10° | 245925 |
| 15° | 243199 |
| 20° | 223315 |
| 25° | 192659 |
| 30° | 157012 |
| 35° | 116246 |
| 40° | 66693 |
| 45° | 32236 |
| 50° | 15332 |
| 55° | 5355 |
| 60° | 1949 |
| 65° | 1138 |
| 70° | 938 |
| 75° | 620 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 185.3 | 9.2 |
| 10°-20° | 528.0 | 26.1 |
| 20°-30° | 644.8 | 31.9 |
| 30°-40° | 474.0 | 23.4 |
| 40°-50° | 157.1 | 7.8 |
| 50°-60° | 27.7 | 1.4 |
| 60°-70° | 4.2 | 0.2 |
| 70°-80° | 1.4 | 0.1 |
| 80°-90° | 0.0 | 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° | 1358.1 | 67.2 |
| 0°-40° | 1832.1 | 90.6 |
| 0°-60° | 2016.9 | 99.7 |
| 0°-90° | 2022.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2022.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1899 | |
| 5° | 1927 | 185 |
| 15° | 1904 | 528 |
| 25° | 1416 | 645 |
| 35° | 772 | 474 |
| 45° | 185 | 157 |
| 55° | 25 | 28 |
| 65° | 4 | 4 |
| 75° | 1 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 1899.3 |
| 2.5° | 1900.6 |
| 5° | 1926.8 |
| 7.5° | 1955.6 |
| 10° | 1963.5 |
| 12.5° | 1945.2 |
| 15° | 1904.5 |
| 17.5° | 1820.6 |
| 20° | 1701.3 |
| 22.5° | 1562.4 |
| 25° | 1415.6 |
| 27.5° | 1262.3 |
| 30° | 1102.4 |
| 32.5° | 942.4 |
| 35° | 772.0 |
| 37.5° | 599.0 |
| 40° | 414.2 |
| 42.5° | 273.9 |
| 45° | 184.8 |
| 47.5° | 123.2 |
| 50° | 79.9 |
| 52.5° | 47.1 |
| 55° | 24.9 |
| 57.5° | 10.4 |
| 60° | 7.9 |
| 62.5° | 5.3 |
| 65° | 3.9 |
| 67.5° | 2.6 |
| 70° | 2.6 |
| 72.5° | 1.3 |
| 75° | 1.3 |
| 77.5° | 1.3 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 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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