

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: P579999

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

Issue Date: 9/9/2021

Test Information

Test Method: LM-41-14
Report Number: P579999
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2106-266-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/9/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC4S20D010MW-HM40525830-41MDW
Description: HALO COMMERCIAL 4" ROUND, NEW CONSTRUCTION FRAME, WITH 4" MEDIUM DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

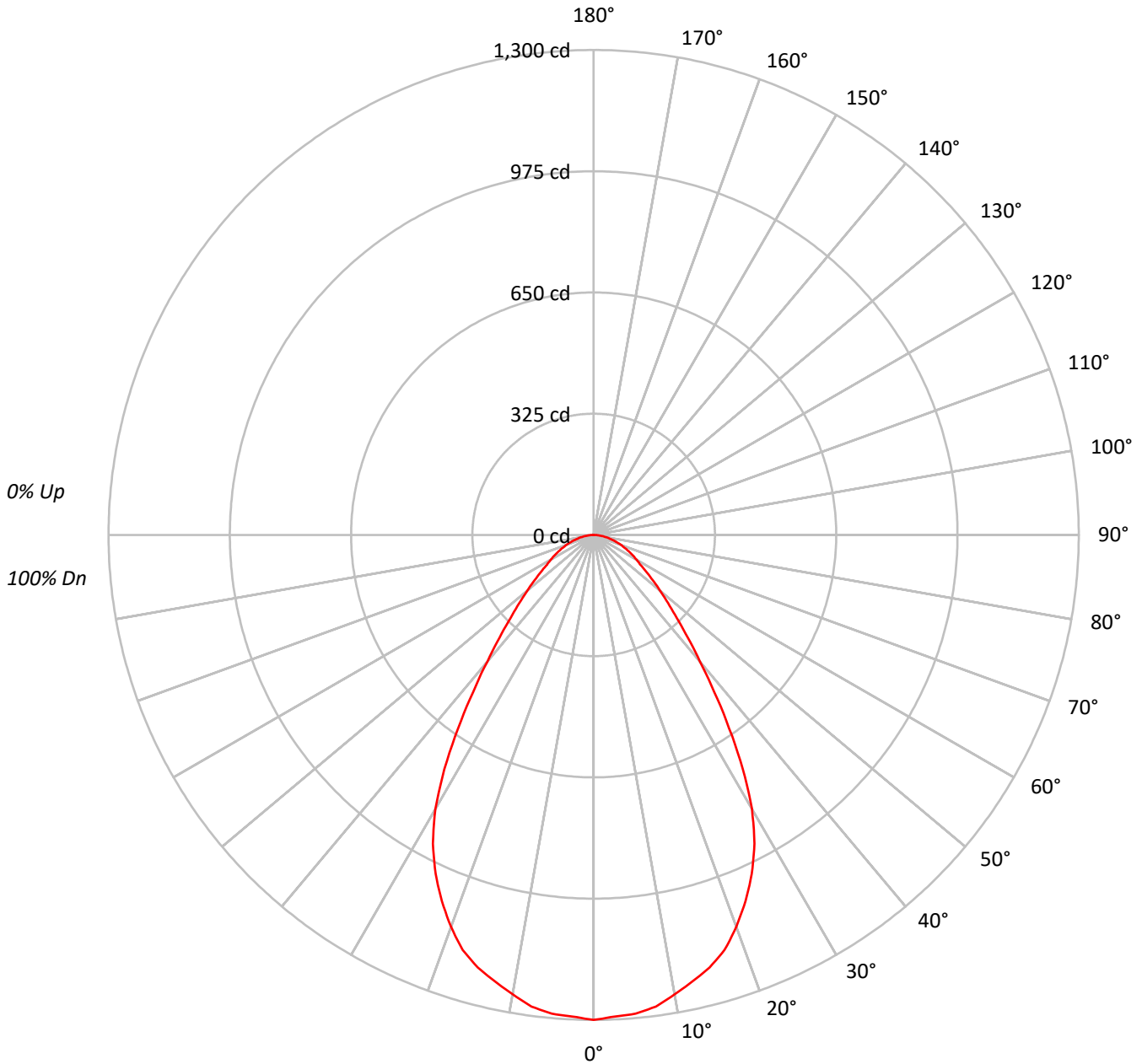
Lumens per Lamp: N/A
Luminaire Lumens: 1891.5 lumens
Efficiency: N/A
Efficacy: 94.6 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.01
Luminous Opening: Circular (Dia: 0.33' x H: 0')
CIE Type: Direct

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 | 111 | 108 | 104 | 101 | 109 | 105 | 102 | 100 | 101 | 99 | 97 | 97 | 95 | 94 | 94 | 92 | 91 | 89 | | | | | | | | | | | | | | | | | | | |
| 2 | 104 | 97 | 92 | 87 | 101 | 95 | 90 | 86 | 92 | 88 | 84 | 89 | 85 | 82 | 86 | 83 | 81 | 79 | | | | | | | | | | | | | | | | | | | |
| 3 | 97 | 88 | 82 | 76 | 94 | 87 | 81 | 76 | 84 | 79 | 75 | 81 | 77 | 73 | 79 | 75 | 72 | 70 | | | | | | | | | | | | | | | | | | | |
| 4 | 90 | 80 | 73 | 68 | 88 | 79 | 73 | 67 | 77 | 71 | 67 | 75 | 70 | 66 | 73 | 68 | 65 | 63 | | | | | | | | | | | | | | | | | | | |
| 5 | 84 | 74 | 66 | 61 | 82 | 73 | 66 | 61 | 71 | 65 | 60 | 69 | 64 | 59 | 67 | 63 | 59 | 57 | | | | | | | | | | | | | | | | | | | |
| 6 | 79 | 68 | 60 | 55 | 77 | 67 | 60 | 55 | 65 | 59 | 54 | 64 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | | | | | | | | | | | | | | | |
| 7 | 74 | 63 | 55 | 50 | 73 | 62 | 55 | 50 | 61 | 54 | 50 | 59 | 54 | 49 | 58 | 53 | 49 | 47 | | | | | | | | | | | | | | | | | | | |
| 8 | 70 | 58 | 51 | 46 | 68 | 58 | 51 | 46 | 56 | 50 | 46 | 55 | 50 | 45 | 54 | 49 | 45 | 44 | | | | | | | | | | | | | | | | | | | |
| 9 | 66 | 54 | 47 | 42 | 65 | 54 | 47 | 42 | 53 | 46 | 42 | 52 | 46 | 42 | 51 | 46 | 42 | 40 | | | | | | | | | | | | | | | | | | | |
| 10 | 62 | 51 | 44 | 39 | 61 | 50 | 44 | 39 | 49 | 43 | 39 | 48 | 43 | 39 | 48 | 42 | 39 | 37 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 160362 |
| 5° | 159513 |
| 10° | 156598 |
| 15° | 153300 |
| 20° | 146751 |
| 25° | 136451 |
| 30° | 120778 |
| 35° | 95315 |
| 40° | 71330 |
| 45° | 54860 |
| 50° | 44500 |
| 55° | 36923 |
| 60° | 32662 |
| 65° | 30237 |
| 70° | 27877 |
| 75° | 25592 |
| 80° | 23298 |
| 85° | 18540 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 121.8 | 6.4 |
| 10°-20° | 336.7 | 17.8 |
| 20°-30° | 457.1 | 24.2 |
| 30°-40° | 396.0 | 20.9 |
| 40°-50° | 248.6 | 13.1 |
| 50°-60° | 156.4 | 8.3 |
| 60°-70° | 102.7 | 5.4 |
| 70°-80° | 56.7 | 3.0 |
| 80°-90° | 15.5 | 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° | 915.6 | 48.4 |
| 0°-40° | 1311.6 | 69.3 |
| 0°-60° | 1716.6 | 90.8 |
| 0°-90° | 1891.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1891.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1300 | |
| 5° | 1288 | 122 |
| 15° | 1200 | 337 |
| 25° | 1003 | 457 |
| 35° | 633 | 396 |
| 45° | 314 | 249 |
| 55° | 172 | 156 |
| 65° | 104 | 103 |
| 75° | 54 | 57 |
| 85° | 13 | 16 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1300.1 |
| 2.5° | 1292.2 |
| 5° | 1288.3 |
| 7.5° | 1275.2 |
| 10° | 1250.3 |
| 12.5° | 1225.5 |
| 15° | 1200.5 |
| 17.5° | 1166.4 |
| 20° | 1118.0 |
| 22.5° | 1062.9 |
| 25° | 1002.6 |
| 27.5° | 933.1 |
| 30° | 848.0 |
| 32.5° | 744.4 |
| 35° | 633.0 |
| 37.5° | 530.8 |
| 40° | 443.0 |
| 42.5° | 373.5 |
| 45° | 314.5 |
| 47.5° | 270.0 |
| 50° | 231.9 |
| 52.5° | 199.2 |
| 55° | 171.7 |
| 57.5° | 148.1 |
| 60° | 132.4 |
| 62.5° | 117.9 |
| 65° | 103.6 |
| 67.5° | 89.1 |
| 70° | 77.3 |
| 72.5° | 64.2 |
| 75° | 53.7 |
| 77.5° | 42.0 |
| 80° | 32.8 |
| 82.5° | 22.3 |
| 85° | 13.1 |
| 87.5° | 5.3 |
| 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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