

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: P584816

Luminaire Tested: **HCC8S50D010BZ-HM82555835-81NDC**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P584816
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8S50D010BZ-HM82555835-81NDC
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

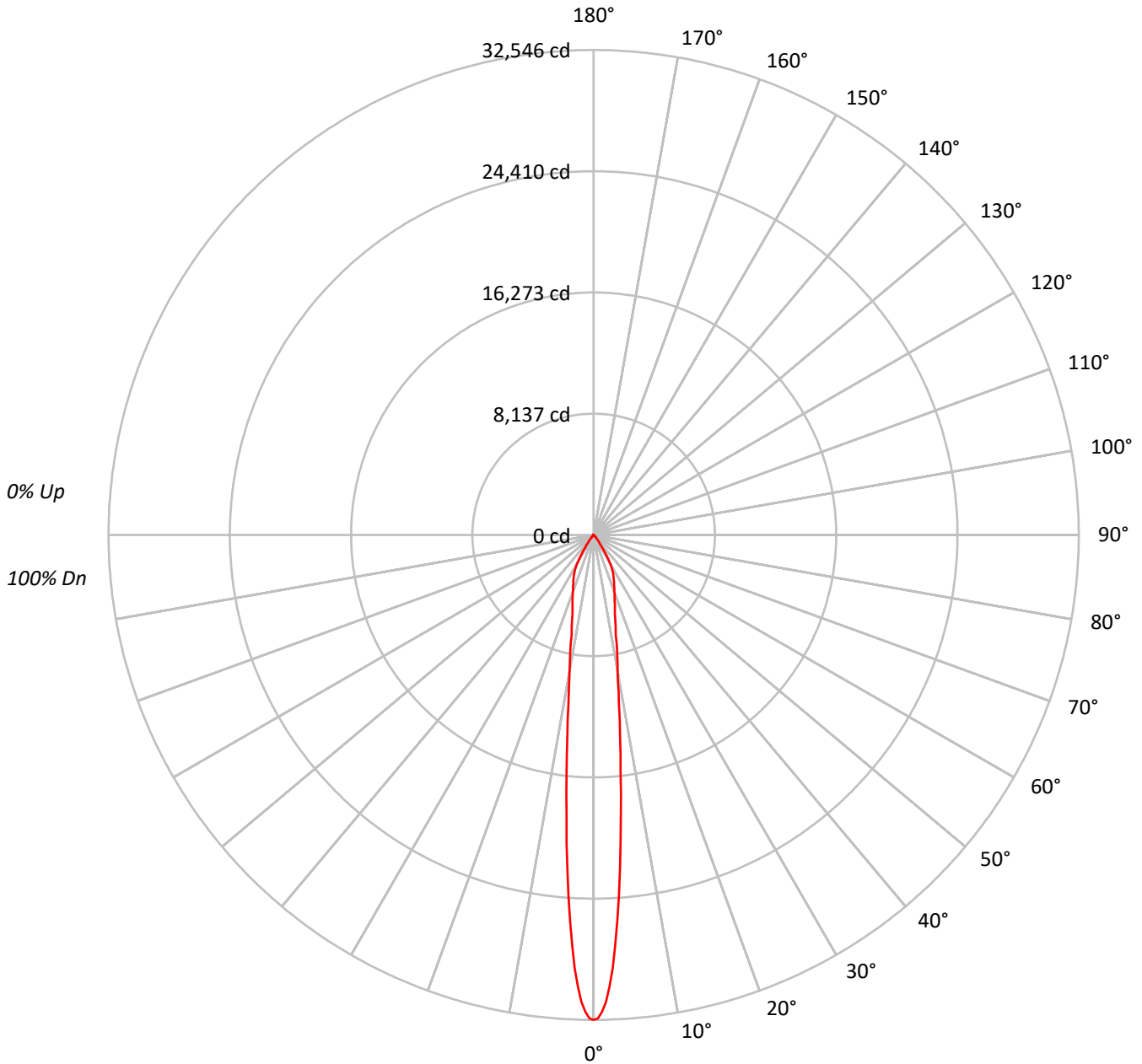
Lumens per Lamp: N/A
Luminaire Lumens: 5332.1 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 0.22 / 0.22 / 0.27
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 48
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 | 115 | 112 | 110 | 108 | 112 | 110 | 108 | 107 | 106 | 105 | 103 | | 102 | 101 | 100 | | 99 | 98 | 97 | 96 |
| 2 | 110 | 106 | 103 | 100 | 108 | 104 | 101 | 99 | 101 | 99 | 97 | | 98 | 96 | 95 | | 96 | 94 | 93 | 91 |
| 3 | 106 | 101 | 97 | 93 | 104 | 99 | 96 | 93 | 97 | 94 | 91 | | 95 | 92 | 90 | | 92 | 90 | 89 | 87 |
| 4 | 102 | 96 | 91 | 88 | 100 | 95 | 91 | 88 | 93 | 89 | 87 | | 91 | 88 | 86 | | 89 | 87 | 85 | 83 |
| 5 | 98 | 92 | 87 | 83 | 97 | 91 | 86 | 83 | 89 | 85 | 82 | | 87 | 84 | 82 | | 86 | 83 | 81 | 80 |
| 6 | 95 | 88 | 83 | 79 | 93 | 87 | 82 | 79 | 86 | 82 | 79 | | 84 | 81 | 78 | | 83 | 80 | 78 | 76 |
| 7 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 78 | 75 | | 81 | 78 | 75 | | 80 | 77 | 75 | 73 |
| 8 | 88 | 81 | 76 | 73 | 87 | 80 | 76 | 73 | 79 | 75 | 72 | | 78 | 75 | 72 | | 77 | 74 | 72 | 71 |
| 9 | 85 | 78 | 73 | 70 | 84 | 77 | 73 | 70 | 76 | 72 | 70 | | 76 | 72 | 69 | | 75 | 72 | 69 | 68 |
| 10 | 83 | 75 | 70 | 67 | 82 | 75 | 70 | 67 | 74 | 70 | 67 | | 73 | 69 | 67 | | 73 | 69 | 67 | 66 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1003602 |
| 5° | 643734 |
| 10° | 290798 |
| 15° | 175461 |
| 20° | 133706 |
| 25° | 107976 |
| 30° | 79125 |
| 35° | 28647 |
| 40° | 10691 |
| 45° | 4854 |
| 50° | 1550 |
| 55° | 382 |
| 60° | 222 |
| 65° | 263 |
| 70° | 0 |
| 75° | 0 |
| 80° | 639 |
| 85° | 1274 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1586.1 | 29.7 |
| 10°-20° | 1611.0 | 30.2 |
| 20°-30° | 1442.1 | 27.0 |
| 30°-40° | 580.9 | 10.9 |
| 40°-50° | 95.3 | 1.8 |
| 50°-60° | 8.6 | 0.2 |
| 60°-70° | 3.1 | 0.1 |
| 70°-80° | 2.4 | 0.0 |
| 80°-90° | 3.4 | 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° | 4639.3 | 87.0 |
| 0°-40° | 5220.2 | 97.9 |
| 0°-60° | 5324.1 | 99.9 |
| 0°-90° | 5333.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 5332.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 32546 | |
| 5° | 20796 | ### |
| 15° | 5496 | 1611 |
| 25° | 3174 | 1442 |
| 35° | 761 | 581 |
| 45° | 111 | 95 |
| 55° | 7 | 9 |
| 65° | 4 | 3 |
| 75° | 0 | 2 |
| 85° | 4 | 3 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 32546.1 |
| 0.5° | 32445.6 |
| 1° | 32025.6 |
| 1.5° | 31350.7 |
| 2° | 30327.6 |
| 2.5° | 29117.8 |
| 3° | 27602.8 |
| 3.5° | 25940.7 |
| 4° | 24296.5 |
| 4.5° | 22454.9 |
| 5° | 20796.4 |
| 5.5° | 18990.6 |
| 6° | 17526.0 |
| 6.5° | 16000.2 |
| 7° | 14801.2 |
| 7.5° | 13534.0 |
| 8° | 12514.4 |
| 8.5° | 11491.3 |
| 9° | 10723.1 |
| 9.5° | 9875.8 |
| 10° | 9287.1 |
| 12.5° | 6849.5 |
| 15° | 5496.2 |
| 17.5° | 4695.6 |
| 20° | 4074.5 |
| 22.5° | 3579.1 |
| 25° | 3173.5 |
| 27.5° | 2767.8 |
| 30° | 2222.2 |
| 32.5° | 1428.8 |
| 35° | 761.0 |
| 37.5° | 420.0 |
| 40° | 265.6 |
| 42.5° | 175.9 |
| 45° | 111.3 |
| 47.5° | 68.2 |
| 50° | 32.3 |
| 52.5° | 10.8 |
| 55° | 7.1 |
| 57.5° | 3.6 |
| 60° | 3.6 |
| 62.5° | 3.6 |
| 65° | 3.6 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 72.5° | 0.0 |
| 75° | 0.0 |
| 77.5° | 3.6 |
| 80° | 3.6 |
| 82.5° | 3.6 |
| 85° | 3.6 |
| 87.5° | 3.6 |
| 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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| | | |
|-------|--|-----|
| 67.5° | | 3.6 |
| 70° | | 0.0 |

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(END OF REPORT)