

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: P593757

Luminaire Tested: **HCC8S45D010MW-HM82555850-81NDH**

Issue Date: 10/21/2021

Test Information

Test Method: LM-41-14
Report Number: P593757
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2109-368-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/21/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HCC8S45D010MW-HM82555850-81NDH
Description: HALO COMMERCIAL 8" ROUND, NEW CONSTRUCTION FRAME, WITH 8" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 5000K CCT
CYLINDER
Ballast/Driver: ELECTRONIC DRIVER

Summary

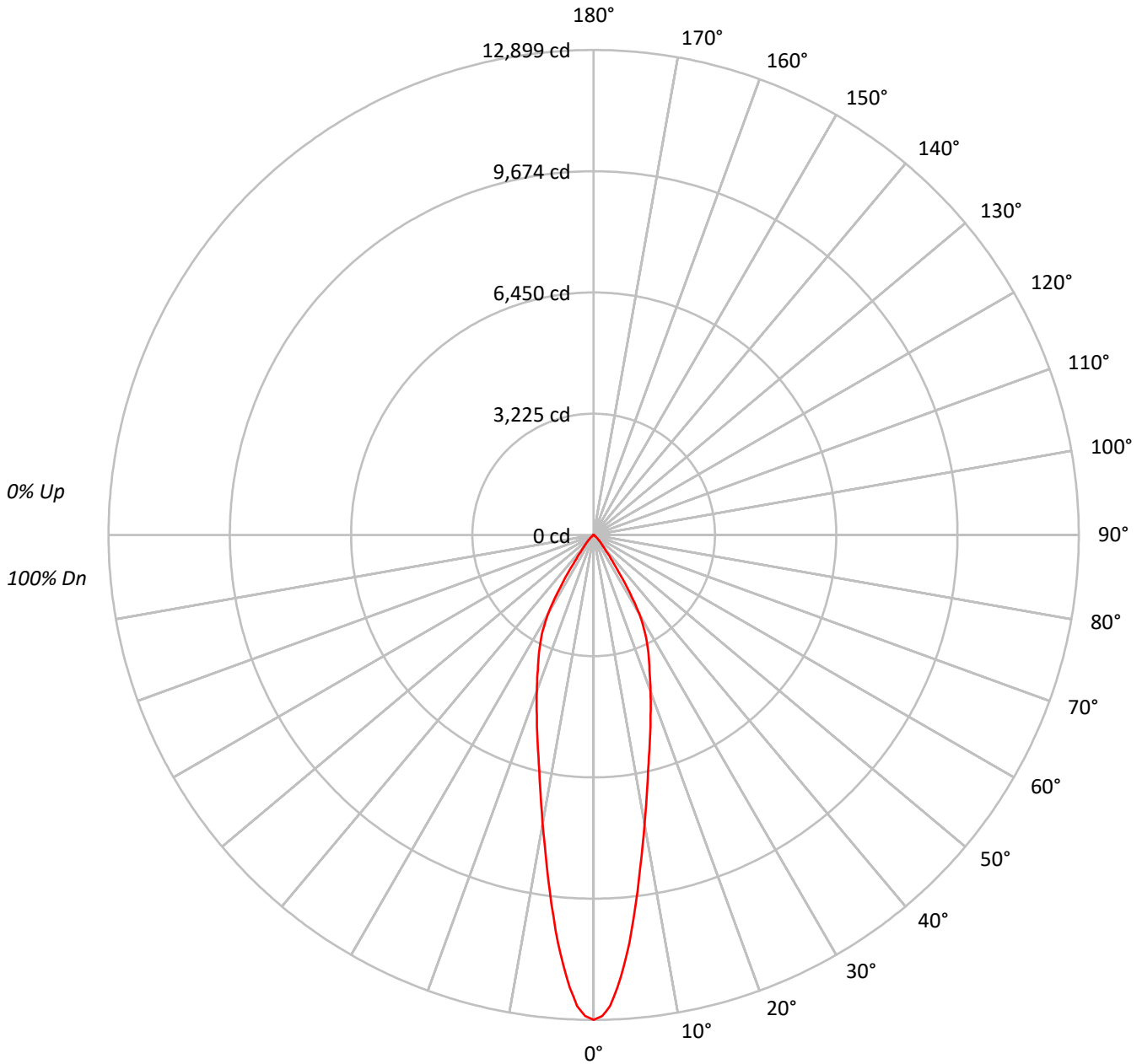
Lumens per Lamp: N/A
Luminaire Lumens: 4999.1 lumens
Efficiency: N/A
Efficacy: 113.6 lumens/watt
Spacing Criteria (0/90/45): 0.42 / 0.42 / 0.57
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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 | | | | | | | | | 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 | 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 | | | | | | | | | | | | | 100 | | | | | | | | | | | | | | | |
| 1 | 114 | 112 | 109 | 107 | 112 | 109 | 107 | 106 | 105 | 104 | 102 | 102 | 100 | 99 | 98 | 97 | 96 | 95 | | | | | | | | | | | | | 95 | | | | | | | | | | | | | | | |
| 2 | 109 | 105 | 101 | 98 | 107 | 103 | 100 | 97 | 100 | 97 | 95 | 97 | 95 | 93 | 94 | 92 | 91 | 89 | | | | | | | | | | | | | 89 | | | | | | | | | | | | | | | |
| 3 | 104 | 99 | 94 | 91 | 102 | 97 | 93 | 90 | 95 | 91 | 88 | 92 | 90 | 87 | 90 | 88 | 86 | 84 | | | | | | | | | | | | | 84 | | | | | | | | | | | | | | | |
| 4 | 100 | 93 | 88 | 84 | 98 | 92 | 87 | 84 | 90 | 86 | 83 | 88 | 85 | 82 | 86 | 83 | 81 | 80 | | | | | | | | | | | | | 80 | | | | | | | | | | | | | | | |
| 5 | 96 | 88 | 83 | 79 | 94 | 87 | 82 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 75 | | | | | | | | | | | | | 75 | | | | | | | | | | | | | | | |
| 6 | 92 | 84 | 78 | 75 | 90 | 83 | 78 | 74 | 81 | 77 | 74 | 80 | 76 | 73 | 79 | 76 | 73 | 72 | | | | | | | | | | | | | 72 | | | | | | | | | | | | | | | |
| 7 | 88 | 80 | 74 | 70 | 87 | 79 | 74 | 70 | 78 | 73 | 70 | 77 | 73 | 70 | 76 | 72 | 69 | 68 | | | | | | | | | | | | | 68 | | | | | | | | | | | | | | | |
| 8 | 84 | 76 | 70 | 67 | 83 | 75 | 70 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 72 | 69 | 66 | 65 | | | | | | | | | | | | | 65 | | | | | | | | | | | | | | | |
| 9 | 81 | 72 | 67 | 64 | 80 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 63 | 69 | 66 | 63 | 62 | | | | | | | | | | | | | 62 | | | | | | | | | | | | | | | |
| 10 | 78 | 69 | 64 | 61 | 77 | 69 | 64 | 61 | 68 | 63 | 60 | 67 | 63 | 60 | 67 | 63 | 60 | 59 | | | | | | | | | | | | | 59 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 397770 |
| 5° | 336991 |
| 10° | 244506 |
| 15° | 183615 |
| 20° | 144876 |
| 25° | 116863 |
| 30° | 86599 |
| 35° | 35081 |
| 40° | 14797 |
| 45° | 7933 |
| 50° | 3564 |
| 55° | 1796 |
| 60° | 1141 |
| 65° | 810 |
| 70° | 667 |
| 75° | 453 |
| 80° | 675 |
| 85° | 1344 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 934.7 | 18.7 |
| 10°-20° | 1615.4 | 32.3 |
| 20°-30° | 1561.9 | 31.2 |
| 30°-40° | 686.0 | 13.7 |
| 40°-50° | 148.3 | 3.0 |
| 50°-60° | 33.3 | 0.7 |
| 60°-70° | 11.4 | 0.2 |
| 70°-80° | 4.5 | 0.1 |
| 80°-90° | 3.6 | 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° | 4112.0 | 82.3 |
| 0°-40° | 4798.0 | 96.0 |
| 0°-60° | 4979.6 | 99.6 |
| 0°-90° | 4999.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4999.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 12899 | |
| 5° | 10887 | 935 |
| 15° | 5752 | 1615 |
| 25° | 3435 | 1562 |
| 35° | 932 | 686 |
| 45° | 182 | 148 |
| 55° | 33 | 33 |
| 65° | 11 | 11 |
| 75° | 4 | 4 |
| 85° | 4 | 4 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 12899.4 |
| 1° | 12802.8 |
| 2° | 12539.3 |
| 3° | 12064.0 |
| 4° | 11495.9 |
| 5° | 10886.8 |
| 6° | 10222.2 |
| 7° | 9553.9 |
| 8° | 8926.3 |
| 9° | 8343.4 |
| 10° | 7808.7 |
| 11° | 7303.7 |
| 12° | 6850.7 |
| 13° | 6438.6 |
| 14° | 6074.6 |
| 15° | 5751.6 |
| 17.5° | 5027.6 |
| 20° | 4414.9 |
| 22.5° | 3876.5 |
| 25° | 3434.7 |
| 27.5° | 2985.4 |
| 30° | 2432.1 |
| 32.5° | 1652.3 |
| 35° | 931.9 |
| 37.5° | 549.6 |
| 40° | 367.6 |
| 42.5° | 259.9 |
| 45° | 181.9 |
| 47.5° | 118.8 |
| 50° | 74.3 |
| 52.5° | 44.6 |
| 55° | 33.4 |
| 57.5° | 26.0 |
| 60° | 18.5 |
| 62.5° | 14.9 |
| 65° | 11.1 |
| 67.5° | 7.4 |
| 70° | 7.4 |
| 72.5° | 3.8 |
| 75° | 3.8 |
| 77.5° | 3.8 |
| 80° | 3.8 |
| 82.5° | 3.8 |

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CANDELA DISTRIBUTION (continued):

0°
90° | 0.0

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— 0°-180°

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| | |
|-------|-----|
| 85° | 3.8 |
| 87.5° | 3.8 |

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(END OF REPORT)