

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: P582589

Luminaire Tested: **HC645D010-HM64560830-61WDW**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582589
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-9)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC645D010-HM64560830-61WDW
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, WHITE TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4810.7 lumens
Efficiency: N/A
Efficacy: 109.3 lumens/watt
Spacing Criteria (0/90/45): 1.11 / 1.11 / 1.09
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

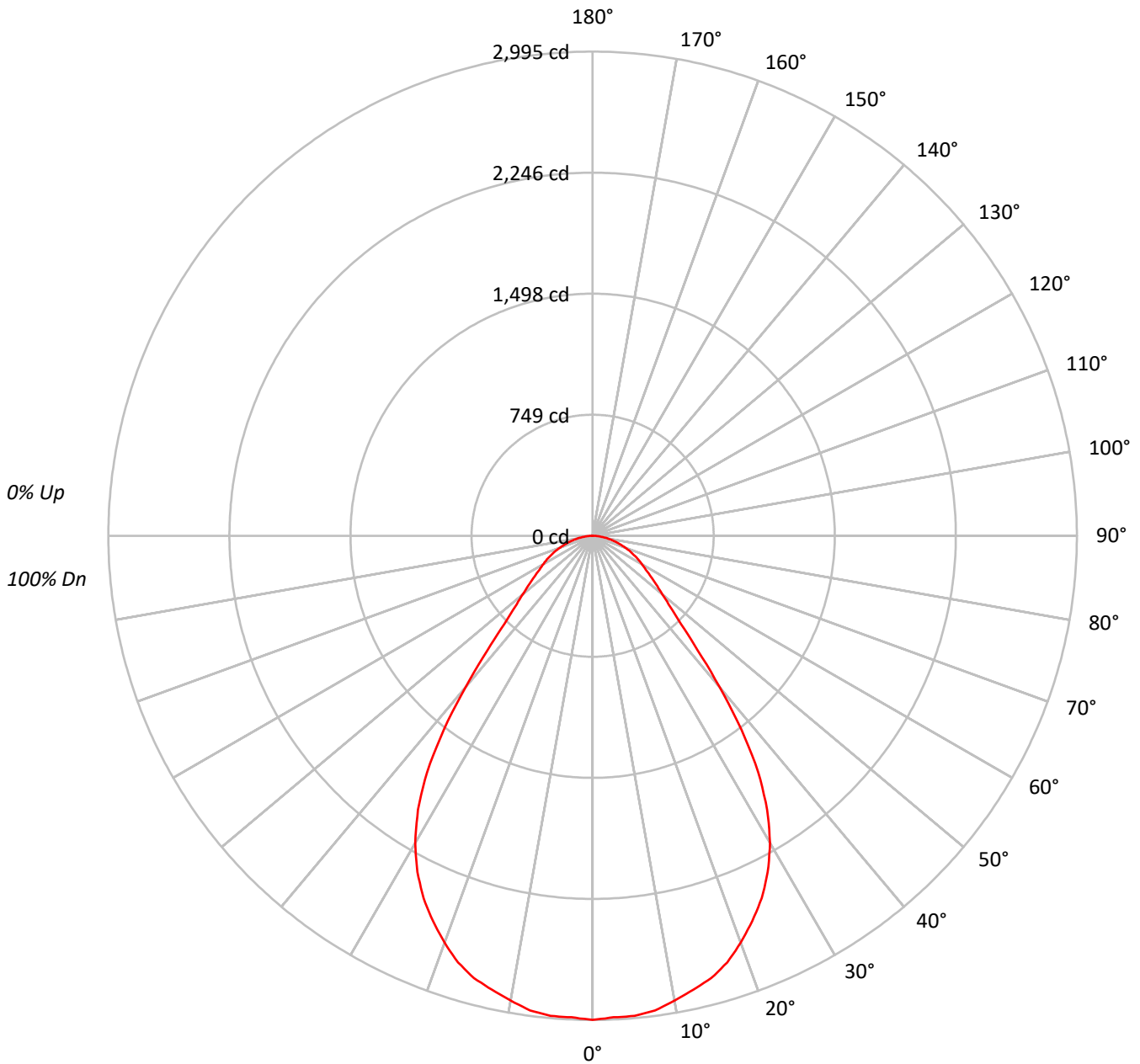
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 107 | 104 | 101 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 94 | 92 | 90 | 89 | | | | | | | | | | | | | | | | | | | |
| 2 | 103 | 97 | 91 | 87 | 101 | 95 | 90 | 86 | 91 | 87 | 84 | 88 | 85 | 82 | 85 | 83 | 80 | 78 | | | | | | | | | | | | | | | | | | | |
| 3 | 96 | 87 | 81 | 76 | 94 | 86 | 80 | 75 | 83 | 78 | 74 | 81 | 76 | 72 | 78 | 74 | 71 | 69 | | | | | | | | | | | | | | | | | | | |
| 4 | 89 | 80 | 72 | 67 | 87 | 78 | 72 | 66 | 76 | 70 | 66 | 74 | 69 | 65 | 72 | 67 | 64 | 62 | | | | | | | | | | | | | | | | | | | |
| 5 | 84 | 73 | 65 | 60 | 82 | 72 | 65 | 59 | 70 | 64 | 59 | 68 | 63 | 58 | 66 | 62 | 58 | 56 | | | | | | | | | | | | | | | | | | | |
| 6 | 78 | 67 | 59 | 54 | 76 | 66 | 59 | 54 | 64 | 58 | 53 | 63 | 57 | 53 | 61 | 56 | 52 | 51 | | | | | | | | | | | | | | | | | | | |
| 7 | 73 | 62 | 54 | 49 | 72 | 61 | 54 | 49 | 60 | 53 | 48 | 58 | 52 | 48 | 57 | 52 | 48 | 46 | | | | | | | | | | | | | | | | | | | |
| 8 | 69 | 57 | 50 | 45 | 68 | 57 | 50 | 45 | 55 | 49 | 44 | 54 | 48 | 44 | 53 | 48 | 44 | 42 | | | | | | | | | | | | | | | | | | | |
| 9 | 65 | 53 | 46 | 41 | 64 | 53 | 46 | 41 | 52 | 45 | 41 | 51 | 45 | 41 | 50 | 44 | 41 | 39 | | | | | | | | | | | | | | | | | | | |
| 10 | 61 | 50 | 43 | 38 | 60 | 49 | 42 | 38 | 48 | 42 | 38 | 47 | 42 | 38 | 47 | 41 | 38 | 36 | | | | | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° |
|-----|--------|
| 0° | 164170 |
| 5° | 164065 |
| 10° | 162483 |
| 15° | 160790 |
| 20° | 156248 |
| 25° | 149652 |
| 30° | 138888 |
| 35° | 119491 |
| 40° | 87235 |
| 45° | 59766 |
| 50° | 48050 |
| 55° | 41872 |
| 60° | 38648 |
| 65° | 36748 |
| 70° | 34333 |
| 75° | 32110 |
| 80° | 29107 |
| 85° | 24845 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 282.6 | 5.9 |
| 10°-20° | 795.7 | 16.5 |
| 20°-30° | 1131.7 | 23.5 |
| 30°-40° | 1089.5 | 22.6 |
| 40°-50° | 626.9 | 13.0 |
| 50°-60° | 397.2 | 8.3 |
| 60°-70° | 281.1 | 5.8 |
| 70°-80° | 160.3 | 3.3 |
| 80°-90° | 45.7 | 0.9 |
| 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° | 2210.0 | 45.9 |
| 0°-40° | 3299.5 | 68.6 |
| 0°-60° | 4323.5 | 89.9 |
| 0°-90° | 4810.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4810.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 2995 | |
| 5° | 2981 | 283 |
| 15° | 2833 | 796 |
| 25° | 2474 | 1132 |
| 35° | 1786 | 1089 |
| 45° | 771 | 627 |
| 55° | 438 | 397 |
| 65° | 283 | 281 |
| 75° | 152 | 160 |
| 85° | 40 | 46 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 2994.7 |
| 2.5° | 2981.4 |
| 5° | 2981.4 |
| 7.5° | 2961.7 |
| 10° | 2918.9 |
| 12.5° | 2876.1 |
| 15° | 2833.1 |
| 17.5° | 2767.3 |
| 20° | 2678.3 |
| 22.5° | 2579.5 |
| 25° | 2474.1 |
| 27.5° | 2345.6 |
| 30° | 2194.1 |
| 32.5° | 2009.6 |
| 35° | 1785.5 |
| 37.5° | 1512.1 |
| 40° | 1219.0 |
| 42.5° | 962.0 |
| 45° | 770.9 |
| 47.5° | 649.0 |
| 50° | 563.4 |
| 52.5° | 494.2 |
| 55° | 438.1 |
| 57.5° | 388.7 |
| 60° | 352.5 |
| 62.5° | 319.5 |
| 65° | 283.3 |
| 67.5° | 250.3 |
| 70° | 214.2 |
| 72.5° | 181.2 |
| 75° | 151.6 |
| 77.5° | 121.9 |
| 80° | 92.2 |
| 82.5° | 65.9 |
| 85° | 39.5 |
| 87.5° | 16.4 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)