

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: P582436

Luminaire Tested: **HC640D010-HM63040830-61NDC**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582436
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-1)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040830-61NDC
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, SPECULAR TRIM
Light Source: (1) HIGH LUMEN LED 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4614.9 lumens
Efficiency: N/A
Efficacy: 112.6 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.93 / 0.88
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

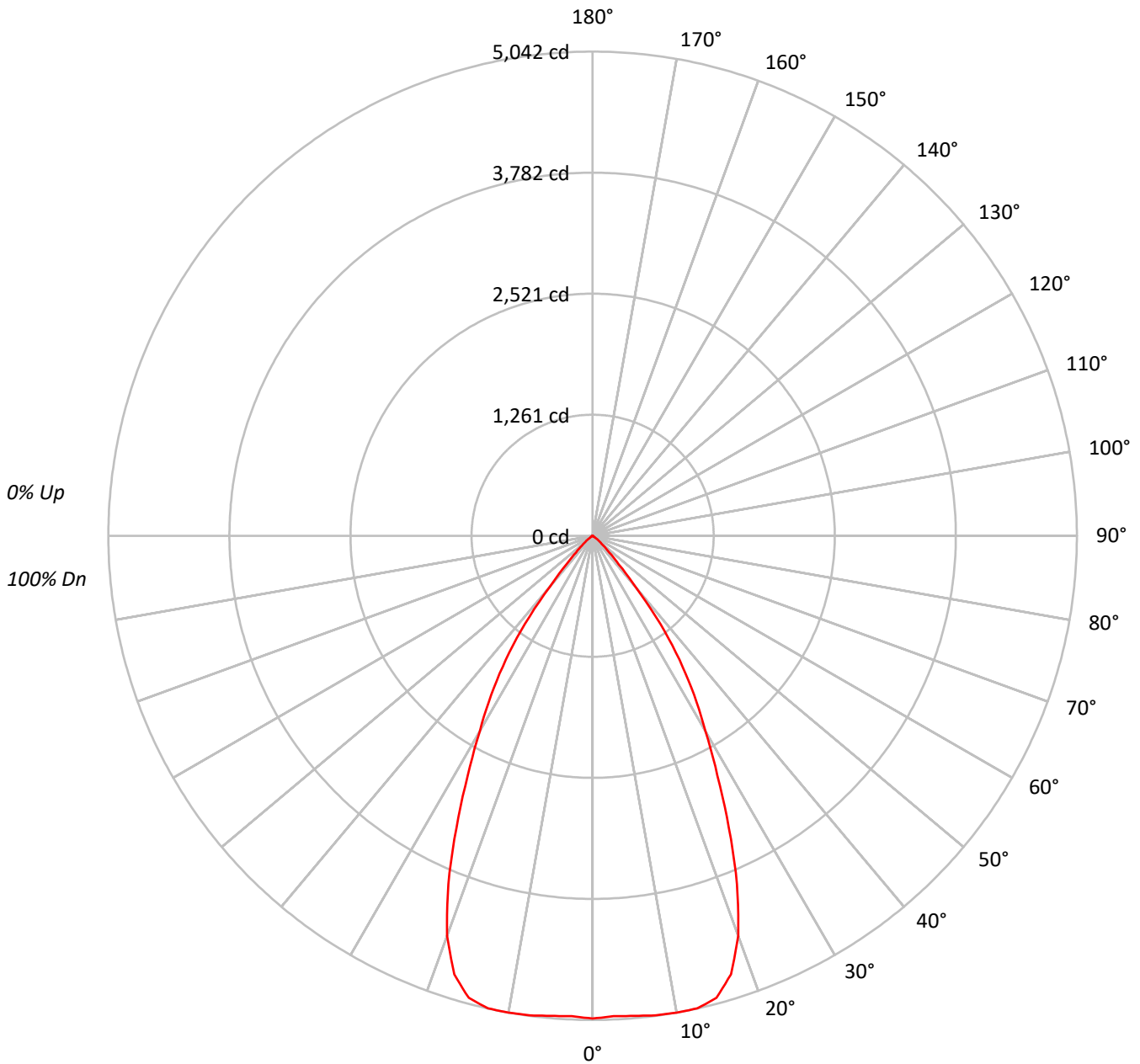
Input Watts (W): 41
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|---|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | |
| 1 | 114 | 111 | 108 | 106 | 111 | 109 | 107 | 105 | 105 | 103 | 101 | 101 | 100 | 98 | 98 | 97 | 96 | 94 | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 102 | 98 | 95 | 98 | 96 | 93 | 96 | 93 | 91 | 93 | 91 | 89 | 87 | | | |
| 3 | 103 | 97 | 92 | 88 | 101 | 95 | 91 | 87 | 93 | 89 | 86 | 90 | 87 | 84 | 88 | 85 | 83 | 82 | | | |
| 4 | 98 | 90 | 85 | 81 | 96 | 89 | 84 | 80 | 87 | 83 | 79 | 85 | 81 | 79 | 83 | 80 | 78 | 76 | | | |
| 5 | 93 | 85 | 79 | 75 | 91 | 84 | 79 | 75 | 82 | 77 | 74 | 80 | 76 | 73 | 79 | 75 | 73 | 71 | | | |
| 6 | 88 | 80 | 74 | 70 | 87 | 79 | 73 | 69 | 77 | 73 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | 67 | | | |
| 7 | 84 | 75 | 69 | 65 | 83 | 74 | 69 | 65 | 73 | 68 | 64 | 72 | 67 | 64 | 71 | 67 | 64 | 62 | | | |
| 8 | 80 | 71 | 65 | 61 | 79 | 70 | 65 | 61 | 69 | 64 | 60 | 68 | 64 | 60 | 67 | 63 | 60 | 59 | | | |
| 9 | 76 | 67 | 61 | 57 | 75 | 66 | 61 | 57 | 65 | 60 | 57 | 65 | 60 | 57 | 64 | 60 | 56 | 55 | | | |
| 10 | 73 | 63 | 58 | 54 | 72 | 63 | 57 | 54 | 62 | 57 | 54 | 61 | 57 | 53 | 61 | 56 | 53 | 52 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 275603 |
| 5° | 276155 |
| 10° | 280695 |
| 15° | 282749 |
| 20° | 258462 |
| 25° | 203092 |
| 30° | 148662 |
| 35° | 105457 |
| 40° | 49879 |
| 45° | 19033 |
| 50° | 8529 |
| 55° | 2322 |
| 60° | 998 |
| 65° | 791 |
| 70° | 481 |
| 75° | 635 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 480.1 | 10.4 |
| 10°-20° | 1377.0 | 29.8 |
| 20°-30° | 1531.6 | 33.2 |
| 30°-40° | 956.8 | 20.7 |
| 40°-50° | 227.4 | 4.9 |
| 50°-60° | 32.5 | 0.7 |
| 60°-70° | 6.7 | 0.1 |
| 70°-80° | 2.8 | 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° | 3388.6 | 73.4 |
| 0°-40° | 4345.5 | 94.2 |
| 0°-60° | 4605.3 | 99.8 |
| 0°-90° | 4614.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4614.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 5027 | |
| 5° | 5018 | 480 |
| 15° | 4982 | 1377 |
| 25° | 3358 | 1532 |
| 35° | 1576 | 957 |
| 45° | 246 | 227 |
| 55° | 24 | 33 |
| 65° | 6 | 7 |
| 75° | 3 | 3 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 5027.4 |
| 2.5° | 5006.1 |
| 5° | 5018.3 |
| 7.5° | 5036.5 |
| 10° | 5042.5 |
| 12.5° | 5039.5 |
| 15° | 4982.0 |
| 17.5° | 4788.0 |
| 20° | 4430.4 |
| 22.5° | 3927.3 |
| 25° | 3357.6 |
| 27.5° | 2812.2 |
| 30° | 2348.5 |
| 32.5° | 1963.7 |
| 35° | 1575.8 |
| 37.5° | 1157.6 |
| 40° | 697.0 |
| 42.5° | 403.1 |
| 45° | 245.5 |
| 47.5° | 157.6 |
| 50° | 100.0 |
| 52.5° | 57.6 |
| 55° | 24.3 |
| 57.5° | 12.1 |
| 60° | 9.1 |
| 62.5° | 9.1 |
| 65° | 6.1 |
| 67.5° | 6.1 |
| 70° | 3.0 |
| 72.5° | 3.0 |
| 75° | 3.0 |
| 77.5° | 3.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)