

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: P582509

Luminaire Tested: **HC640D010-HM63040930-61NDH**

Issue Date: 9/16/2021

Test Information

Test Method: LM-41-14
Report Number: P582509
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2105-241-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 9/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: HC640D010-HM63040930-61NDH
Description: HALO COMMERCIAL 6" ROUND, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, HAZE TRIM
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4136.2 lumens
Efficiency: N/A
Efficacy: 100.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 0.89 / 0.89
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

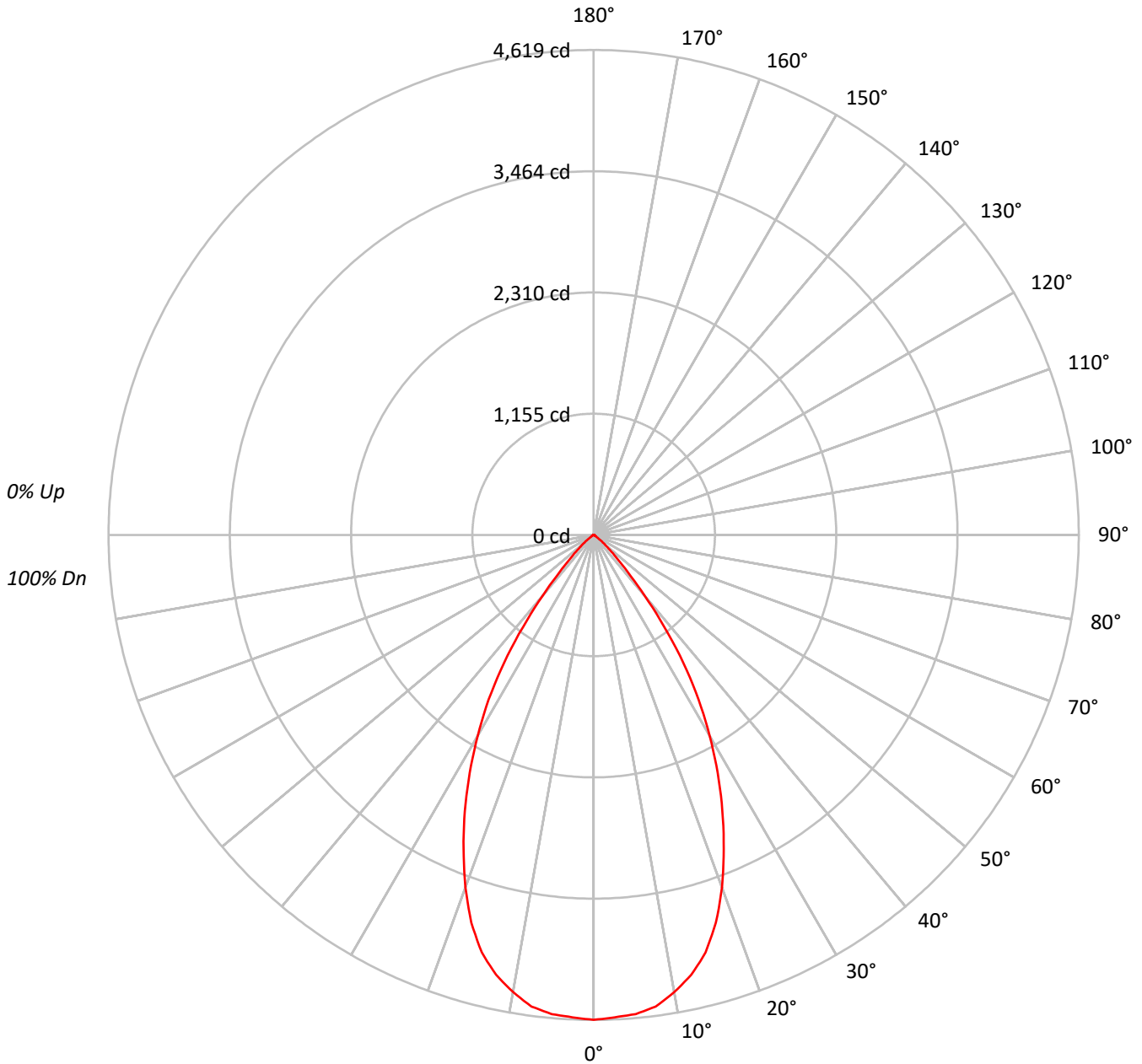
Input Watts (W): 41
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 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 | 113 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 105 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | |
| 2 | 108 | 103 | 99 | 96 | 106 | 101 | 98 | 94 | 98 | 95 | 92 | 95 | 93 | 90 | 92 | 90 | 89 | 87 | | | |
| 3 | 102 | 96 | 91 | 87 | 100 | 95 | 90 | 86 | 92 | 88 | 85 | 90 | 86 | 84 | 87 | 85 | 82 | 81 | | | |
| 4 | 97 | 90 | 84 | 80 | 95 | 88 | 83 | 79 | 86 | 82 | 78 | 84 | 81 | 78 | 82 | 79 | 77 | 75 | | | |
| 5 | 92 | 84 | 78 | 74 | 91 | 83 | 77 | 73 | 81 | 76 | 73 | 79 | 75 | 72 | 78 | 74 | 71 | 70 | | | |
| 6 | 88 | 79 | 73 | 68 | 86 | 78 | 72 | 68 | 76 | 71 | 68 | 75 | 71 | 67 | 74 | 70 | 67 | 65 | | | |
| 7 | 83 | 74 | 68 | 64 | 82 | 73 | 67 | 63 | 72 | 67 | 63 | 71 | 66 | 63 | 70 | 66 | 62 | 61 | | | |
| 8 | 79 | 70 | 64 | 59 | 78 | 69 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 59 | 66 | 62 | 59 | 57 | | | |
| 9 | 75 | 66 | 60 | 56 | 74 | 65 | 59 | 56 | 64 | 59 | 55 | 63 | 59 | 55 | 62 | 58 | 55 | 54 | | | |
| 10 | 72 | 62 | 56 | 52 | 71 | 62 | 56 | 52 | 61 | 56 | 52 | 60 | 55 | 52 | 59 | 55 | 52 | 51 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 253192 |
| 5° | 252118 |
| 10° | 246160 |
| 15° | 233662 |
| 20° | 208274 |
| 25° | 175444 |
| 30° | 139775 |
| 35° | 99729 |
| 40° | 53622 |
| 45° | 22979 |
| 50° | 10447 |
| 55° | 3804 |
| 60° | 1875 |
| 65° | 1466 |
| 70° | 1378 |
| 75° | 614 |
| 80° | 916 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 432.5 | 10.5 |
| 10°-20° | 1141.2 | 27.6 |
| 20°-30° | 1321.8 | 32.0 |
| 30°-40° | 914.0 | 22.1 |
| 40°-50° | 263.9 | 6.4 |
| 50°-60° | 45.4 | 1.1 |
| 60°-70° | 11.6 | 0.3 |
| 70°-80° | 4.5 | 0.1 |
| 80°-90° | 1.2 | 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° | 2895.5 | 70.0 |
| 0°-40° | 3809.5 | 92.1 |
| 0°-60° | 4118.9 | 99.6 |
| 0°-90° | 4136.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4136.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4619 | |
| 5° | 4582 | 432 |
| 15° | 4117 | 1141 |
| 25° | 2900 | 1322 |
| 35° | 1490 | 914 |
| 45° | 296 | 264 |
| 55° | 40 | 45 |
| 65° | 11 | 12 |
| 75° | 3 | 5 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 4618.6 |
| 2.5° | 4598.7 |
| 5° | 4581.5 |
| 7.5° | 4530.4 |
| 10° | 4422.1 |
| 12.5° | 4291.0 |
| 15° | 4117.1 |
| 17.5° | 3872.2 |
| 20° | 3570.1 |
| 22.5° | 3236.7 |
| 25° | 2900.5 |
| 27.5° | 2555.8 |
| 30° | 2208.1 |
| 32.5° | 1860.6 |
| 35° | 1490.2 |
| 37.5° | 1105.5 |
| 40° | 749.3 |
| 42.5° | 473.0 |
| 45° | 296.4 |
| 47.5° | 190.9 |
| 50° | 122.5 |
| 52.5° | 74.1 |
| 55° | 39.8 |
| 57.5° | 22.8 |
| 60° | 17.1 |
| 62.5° | 14.2 |
| 65° | 11.3 |
| 67.5° | 8.6 |
| 70° | 8.6 |
| 72.5° | 5.7 |
| 75° | 2.9 |
| 77.5° | 2.9 |
| 80° | 2.9 |
| 82.5° | 2.9 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



Report Generated By 670245859 / DESKTOP-HRDQ47P





— 0°-180°







(END OF REPORT)