

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

Report Number: H36031

Luminaire Tested: **H5ICAT 5001MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: H36031  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H5ICAT 5001MB  
Description: HALO 5" DIA RECESSED DOWNLIGHT  
BLACK BAFFLE  
HIGH SOCKET SETTING  
Light Source: 75R30FL 75 WATTS 900 LUMENS  
R30 FLOOD  
Ballast/Driver: -

**Summary**

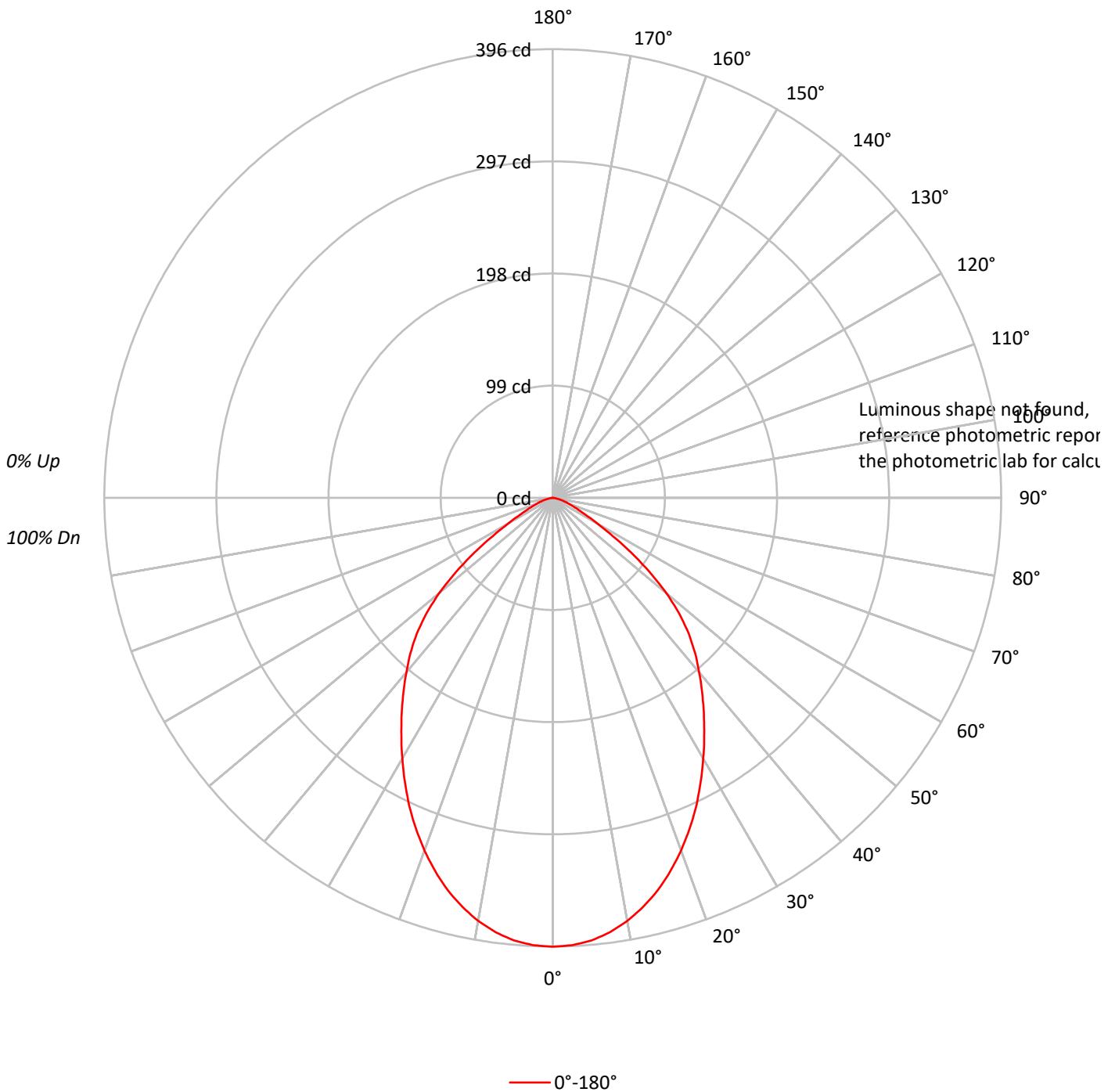
Lumens per Lamp: 900 (1 lamp)  
Luminaire Lumens: 662.1 lumens  
Efficiency: 73.6%  
Efficacy: 8.8 lumens/watt  
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.14  
Luminous Opening: (L: 0' x W: -0.4' x H: 0'  
CIE Type: Direct

Input Watts (W): 75  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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



TEST NUMBER: H36031  
CATALOG NUMBER: H5ICAT 5001MB

### Luminous Intensity Polar Plot





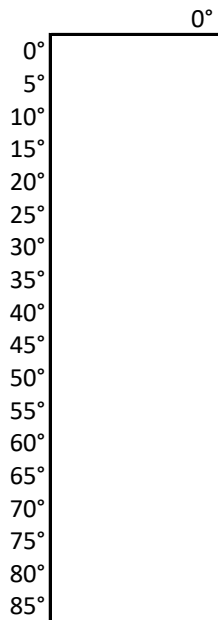
TEST NUMBER: H36031

CATALOG NUMBER: H5ICAT 5001MB

**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   | 88 | 88 | 88 | 88 | 86 | 86 | 86 | 86 | 82 | 82 | 82 |  | 78 | 78 | 78 |  | 75 | 75 | 75 | 74 |
| 1   | 82 | 79 | 77 | 75 | 80 | 78 | 76 | 74 | 75 | 73 | 72 |  | 72 | 71 | 69 |  | 69 | 68 | 67 | 66 |
| 2   | 76 | 72 | 68 | 65 | 75 | 70 | 67 | 64 | 68 | 65 | 62 |  | 66 | 63 | 61 |  | 63 | 61 | 60 | 58 |
| 3   | 71 | 65 | 60 | 56 | 69 | 64 | 59 | 56 | 62 | 58 | 55 |  | 60 | 56 | 54 |  | 58 | 55 | 53 | 52 |
| 4   | 66 | 59 | 53 | 49 | 64 | 58 | 53 | 49 | 56 | 52 | 48 |  | 54 | 51 | 48 |  | 53 | 50 | 47 | 46 |
| 5   | 61 | 53 | 48 | 44 | 60 | 53 | 47 | 43 | 51 | 47 | 43 |  | 50 | 46 | 43 |  | 49 | 45 | 42 | 41 |
| 6   | 57 | 49 | 43 | 39 | 56 | 48 | 43 | 39 | 47 | 42 | 39 |  | 46 | 42 | 38 |  | 45 | 41 | 38 | 37 |
| 7   | 53 | 45 | 39 | 35 | 52 | 44 | 39 | 35 | 43 | 38 | 35 |  | 42 | 38 | 35 |  | 41 | 37 | 34 | 33 |
| 8   | 50 | 41 | 36 | 32 | 49 | 41 | 36 | 32 | 40 | 35 | 32 |  | 39 | 35 | 32 |  | 38 | 34 | 31 | 30 |
| 9   | 47 | 38 | 33 | 29 | 46 | 38 | 33 | 29 | 37 | 32 | 29 |  | 36 | 32 | 29 |  | 36 | 32 | 29 | 28 |
| 10  | 44 | 36 | 30 | 27 | 43 | 35 | 30 | 27 | 34 | 30 | 27 |  | 34 | 30 | 27 |  | 33 | 29 | 26 | 25 |

**AVERAGE LUMINANCE (cd/sqm):**





TEST NUMBER: H36031

CATALOG NUMBER: H5ICAT 5001MB

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 37.0   | 5.6       | 4.1    |
| 10°-20°   | 100.6  | 15.2      | 11.2   |
| 20°-30°   | 137.6  | 20.8      | 15.3   |
| 30°-40°   | 145.5  | 22.0      | 16.2   |
| 40°-50°   | 129.6  | 19.6      | 14.4   |
| 50°-60°   | 76.2   | 11.5      | 8.5    |
| 60°-70°   | 26.3   | 4.0       | 2.9    |
| 70°-80°   | 8.5    | 1.3       | 0.9    |
| 80°-90°   | 0.8    | 0.1       | 0.1    |
| 90°-100°  | 0.0    | 0.0       | 0.0    |
| 100°-110° | 0.0    | 0.0       | 0.0    |
| 110°-120° | 0.0    | 0.0       | 0.0    |
| 120°-130° | 0.0    | 0.0       | 0.0    |
| 130°-140° | 0.0    | 0.0       | 0.0    |
| 140°-150° | 0.0    | 0.0       | 0.0    |
| 150°-160° | 0.0    | 0.0       | 0.0    |
| 160°-170° | 0.0    | 0.0       | 0.0    |
| 170°-180° | 0.0    | 0.0       | 0.0    |
| 0°-30°    | 275.2  | 41.6      | 30.6   |
| 0°-40°    | 420.7  | 63.5      | 46.7   |
| 0°-60°    | 626.5  | 94.6      | 69.6   |
| 0°-90°    | 662.1  | 100.0     | 73.6   |
| 90°-120°  | 0.0    | 0.0       | 0.0    |
| 90°-150°  | 0.0    | 0.0       | 0.0    |
| 90°-180°  | 0.0    | 0.0       | 0.0    |
| 0°-180°   | 662.1  | 100.0     | 73.6   |

**CANDELA DISTRIBUTION:**

|      | 0°  | Flux |
|------|-----|------|
| 0°   | 396 |      |
| 5°   | 392 | 37   |
| 15°  | 358 | 101  |
| 25°  | 300 | 138  |
| 35°  | 232 | 145  |
| 45°  | 170 | 130  |
| 55°  | 84  | 76   |
| 65°  | 25  | 26   |
| 75°  | 8   | 9    |
| 85°  | 0   | 1    |
| 90°  | 0   | 0    |
| 95°  | 0   | 0    |
| 105° | 0   | 0    |
| 115° | 0   | 0    |
| 125° | 0   | 0    |
| 135° | 0   | 0    |
| 145° | 0   | 0    |
| 155° | 0   | 0    |
| 165° | 0   | 0    |
| 175° | 0   | 0    |
| 180° | 0   | 0    |



TEST NUMBER: H36031

CATALOG NUMBER: H5ICAT 5001MB

**CANDELA DISTRIBUTION (FULL):**

| 0°     |       |
|--------|-------|
| 0°     | 396.2 |
| 2.5°   | 395.2 |
| 5°     | 392.2 |
| 7.5°   | 386.7 |
| 10°    | 379.2 |
| 12.5°  | 369.7 |
| 15°    | 358.5 |
| 17.5°  | 345.5 |
| 20°    | 331.2 |
| 22.5°  | 315.9 |
| 25°    | 299.8 |
| 27.5°  | 282.8 |
| 30°    | 265.7 |
| 32.5°  | 248.9 |
| 35°    | 232.5 |
| 37.5°  | 216.6 |
| 40°    | 201.1 |
| 42.5°  | 186.0 |
| 45°    | 169.9 |
| 47.5°  | 151.5 |
| 50°    | 130.8 |
| 52.5°  | 107.7 |
| 55°    | 84.5  |
| 57.5°  | 62.8  |
| 60°    | 45.2  |
| 62.5°  | 32.8  |
| 65°    | 24.9  |
| 67.5°  | 19.1  |
| 70°    | 14.6  |
| 72.5°  | 11.0  |
| 75°    | 7.8   |
| 77.5°  | 5.0   |
| 80°    | 2.8   |
| 82.5°  | 1.1   |
| 85°    | 0.3   |
| 87.5°  | 0.1   |
| 90°    | 0.0   |
| 92.5°  | 0.0   |
| 95°    | 0.0   |
| 97.5°  | 0.0   |
| 100°   | 0.0   |
| 102.5° | 0.0   |
| 105°   | 0.0   |
| 107.5° | 0.0   |
| 110°   | 0.0   |



TEST NUMBER: H36031

CATALOG NUMBER: H5ICAT 5001MB

**CANDELA DISTRIBUTION (continued):**

|        | 0°  |
|--------|-----|
| 112.5° | 0.0 |
| 115°   | 0.0 |
| 117.5° | 0.0 |
| 120°   | 0.0 |
| 122.5° | 0.0 |
| 125°   | 0.0 |
| 127.5° | 0.0 |
| 130°   | 0.0 |
| 132.5° | 0.0 |
| 135°   | 0.0 |
| 137.5° | 0.0 |
| 140°   | 0.0 |
| 142.5° | 0.0 |
| 145°   | 0.0 |
| 147.5° | 0.0 |
| 150°   | 0.0 |
| 152.5° | 0.0 |
| 155°   | 0.0 |
| 157.5° | 0.0 |
| 160°   | 0.0 |
| 162.5° | 0.0 |
| 165°   | 0.0 |
| 167.5° | 0.0 |
| 170°   | 0.0 |
| 172.5° | 0.0 |
| 175°   | 0.0 |
| 177.5° | 0.0 |
| 180°   | 0.0 |

(END OF REPORT)