

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: P380843

Luminaire Tested: **H36RTAT-3009WHWB**

Issue Date: 3/3/2020



Test Information

Test Method: LM-41-14
Report Number: P380843
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H36RTAT-3009WHWB
Description: 3" ADJ GIMBAL, MW OCULUS, MW TRIM
Light Source: -
Ballast/Driver: -

Summary

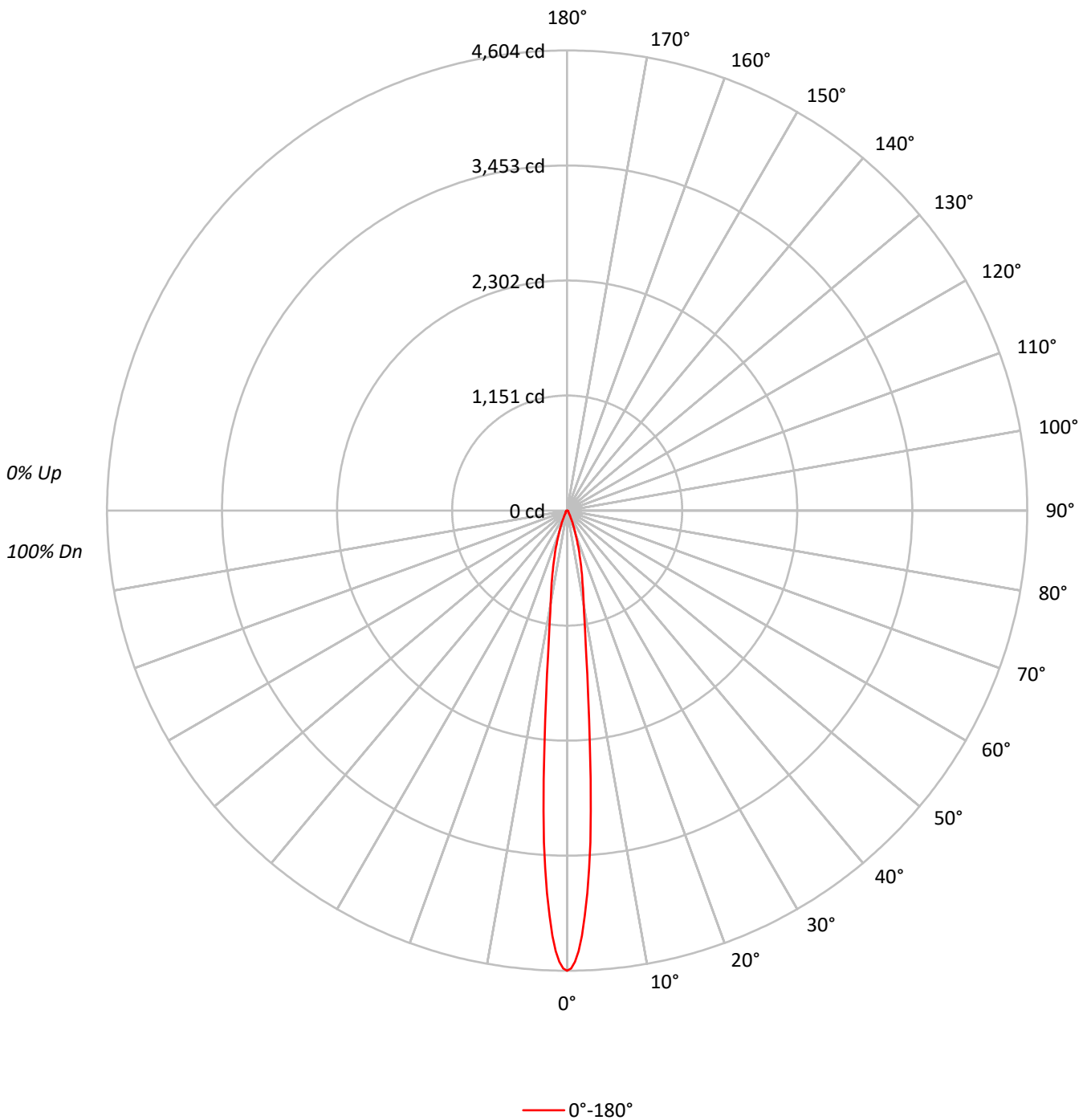
Lumens per Lamp: N/A
Luminaire Lumens: 448.5 lumens
Efficiency: N/A
Efficacy: 53.4 lumens/watt
Spacing Criteria (0/90/45): 0.2 / 0.2 / 0.21
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 8.4
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | | 106 | 106 | 106 | | 102 | 102 | 102 | 100 |
| 1 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | | 102 | 101 | 100 | | 99 | 98 | 97 | 95 |
| 2 | 110 | 106 | 103 | 100 | 108 | 104 | 101 | 99 | 101 | 99 | 97 | | 98 | 96 | 95 | | 96 | 94 | 93 | 91 |
| 3 | 106 | 101 | 97 | 94 | 104 | 100 | 96 | 93 | 97 | 94 | 92 | | 95 | 92 | 90 | | 93 | 91 | 89 | 87 |
| 4 | 103 | 97 | 92 | 89 | 101 | 96 | 92 | 89 | 94 | 90 | 88 | | 92 | 89 | 87 | | 90 | 88 | 86 | 84 |
| 5 | 99 | 93 | 88 | 85 | 98 | 92 | 88 | 85 | 90 | 87 | 84 | | 89 | 86 | 83 | | 87 | 85 | 83 | 82 |
| 6 | 96 | 90 | 85 | 82 | 95 | 89 | 85 | 82 | 88 | 84 | 81 | | 86 | 83 | 81 | | 85 | 82 | 80 | 79 |
| 7 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 79 | 85 | 81 | 79 | | 84 | 81 | 78 | | 83 | 80 | 78 | 77 |
| 8 | 91 | 84 | 80 | 77 | 90 | 84 | 80 | 77 | 83 | 79 | 76 | | 82 | 79 | 76 | | 81 | 78 | 76 | 75 |
| 9 | 89 | 82 | 78 | 75 | 88 | 82 | 77 | 75 | 81 | 77 | 75 | | 80 | 77 | 74 | | 79 | 76 | 74 | 73 |
| 10 | 87 | 80 | 76 | 73 | 86 | 80 | 76 | 73 | 79 | 75 | 73 | | 78 | 75 | 73 | | 78 | 75 | 72 | 71 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2271519 |
| 5° | 1337213 |
| 10° | 475440 |
| 15° | 255903 |
| 20° | 125485 |
| 25° | 57705 |
| 30° | 27916 |
| 35° | 16865 |
| 40° | 14169 |
| 45° | 11862 |
| 50° | 11513 |
| 55° | 12043 |
| 60° | 12828 |
| 65° | 12842 |
| 70° | 12983 |
| 75° | 3813 |
| 80° | 2841 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 193.4 | 43.1 |
| 10°-20° | 141.2 | 31.5 |
| 20°-30° | 53.0 | 11.8 |
| 30°-40° | 19.1 | 4.3 |
| 40°-50° | 13.6 | 3.0 |
| 50°-60° | 12.8 | 2.8 |
| 60°-70° | 10.9 | 2.4 |
| 70°-80° | 4.2 | 0.9 |
| 80°-90° | 0.4 | 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° | 387.6 | 86.4 |
| 0°-40° | 406.7 | 90.7 |
| 0°-60° | 433.1 | 96.5 |
| 0°-90° | 448.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 448.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 4604 | |
| 5° | 2700 | 193 |
| 15° | 501 | 141 |
| 25° | 106 | 53 |
| 35° | 28 | 19 |
| 45° | 17 | 14 |
| 55° | 14 | 13 |
| 65° | 11 | 11 |
| 75° | 2 | 4 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|------|
| 0° | 4604 |
| 0.5° | 4582 |
| 1° | 4515 |
| 1.5° | 4410 |
| 2° | 4257 |
| 2.5° | 4059 |
| 3° | 3833 |
| 3.5° | 3584 |
| 4° | 3326 |
| 4.5° | 3014 |
| 5° | 2700 |
| 5.5° | 2378 |
| 6° | 2105 |
| 6.5° | 1853 |
| 7° | 1649 |
| 7.5° | 1471 |
| 8° | 1313 |
| 8.5° | 1201 |
| 9° | 1108 |
| 9.5° | 1023 |
| 10° | 949 |
| 12.5° | 690 |
| 15° | 501 |
| 17.5° | 350 |
| 20° | 239 |
| 22.5° | 159 |
| 25° | 106 |
| 27.5° | 71 |
| 30° | 49 |
| 32.5° | 36 |
| 35° | 28 |
| 37.5° | 24 |
| 40° | 22 |
| 42.5° | 19 |
| 45° | 17 |
| 47.5° | 16 |
| 50° | 15 |
| 52.5° | 15 |
| 55° | 14 |
| 57.5° | 14 |
| 60° | 13 |
| 62.5° | 12 |
| 65° | 11 |
| 67.5° | 10 |
| 70° | 9 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|----|
| 72.5° | 8 |
| 75° | 2 |
| 77.5° | 1 |
| 80° | 1 |
| 82.5° | 1 |
| 85° | 0 |
| 87.5° | 0 |
| 90° | 0 |

(END OF REPORT)