

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: H35155

Luminaire Tested: **H7ICT-312W**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-41-14  
Report Number: H35155  
Test Lab:  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: H7ICT-312W  
Description: HALO 7" RECESSED DOWNLIGHT  
WHITE BAFFLE TRIM  
SOCKET BRACKET AT STOP  
Light Source: 65BR30 65 WATTS 770 LUMENS  
BR30 FLOOD  
Ballast/Driver: -

**Summary**

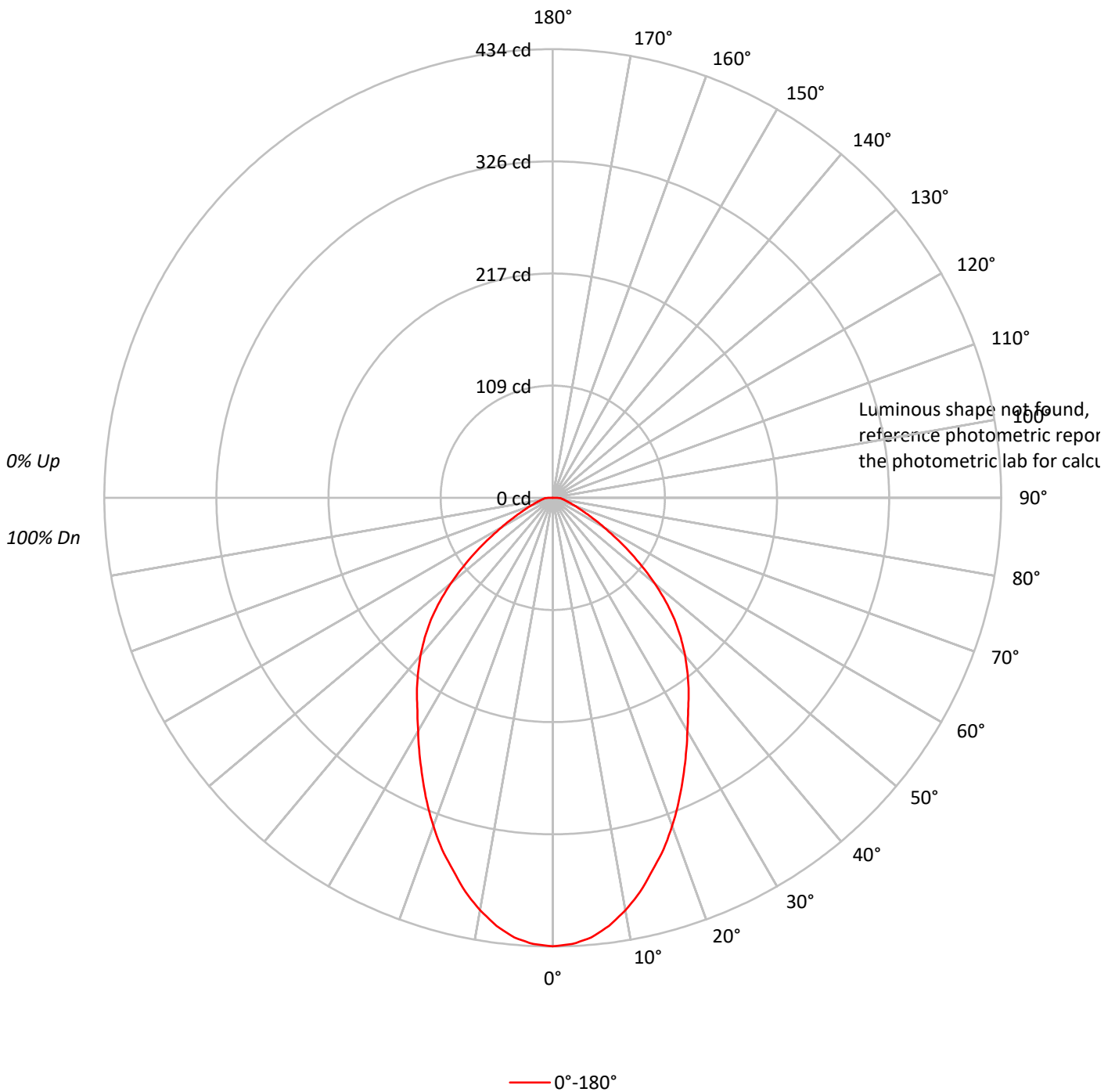
Lumens per Lamp: 770 (1 lamp)  
Luminaire Lumens: 695.9 lumens  
Efficiency: 90.4%  
Efficacy: 10.7 lumens/watt  
Spacing Criteria (0/90/45): 0.95 / 0.95 / 1.08  
Luminous Opening: (L: 0 ' x W: -0.48 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 65  
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



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### Luminous Intensity Polar Plot



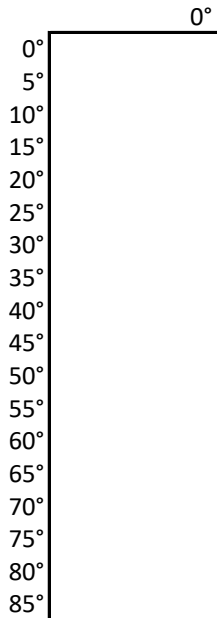


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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |  |    |    |    |  |    |    |    |    |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|----|----|----|--|----|----|----|----|
| 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   | 108 | 108 | 108 | 108 | 105 | 105 | 105 | 105 | 100 | 100 | 100 |  | 96 | 96 | 96 |  | 92 | 92 | 92 | 90 |
| 1   | 100 | 97  | 94  | 91  | 98  | 95  | 92  | 89  | 91  | 89  | 86  |  | 87 | 86 | 84 |  | 84 | 83 | 81 | 80 |
| 2   | 93  | 87  | 82  | 77  | 91  | 85  | 80  | 77  | 82  | 78  | 75  |  | 79 | 76 | 73 |  | 77 | 74 | 72 | 70 |
| 3   | 86  | 78  | 72  | 67  | 84  | 77  | 71  | 66  | 74  | 69  | 65  |  | 72 | 68 | 64 |  | 70 | 66 | 63 | 61 |
| 4   | 80  | 71  | 64  | 59  | 78  | 70  | 63  | 58  | 67  | 62  | 58  |  | 65 | 61 | 57 |  | 64 | 60 | 56 | 54 |
| 5   | 74  | 64  | 57  | 52  | 73  | 63  | 57  | 52  | 62  | 56  | 51  |  | 60 | 55 | 51 |  | 58 | 54 | 50 | 49 |
| 6   | 69  | 59  | 52  | 47  | 68  | 58  | 51  | 46  | 56  | 50  | 46  |  | 55 | 50 | 46 |  | 54 | 49 | 45 | 44 |
| 7   | 65  | 54  | 47  | 42  | 63  | 53  | 47  | 42  | 52  | 46  | 42  |  | 51 | 45 | 41 |  | 50 | 45 | 41 | 39 |
| 8   | 61  | 50  | 43  | 38  | 59  | 49  | 43  | 38  | 48  | 42  | 38  |  | 47 | 42 | 38 |  | 46 | 41 | 37 | 36 |
| 9   | 57  | 46  | 39  | 35  | 56  | 46  | 39  | 35  | 45  | 39  | 35  |  | 44 | 38 | 34 |  | 43 | 38 | 34 | 33 |
| 10  | 54  | 43  | 36  | 32  | 53  | 42  | 36  | 32  | 42  | 36  | 32  |  | 41 | 35 | 32 |  | 40 | 35 | 32 | 30 |

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





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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture | % Lamp |
|-----------|--------|-----------|--------|
| 0°-10°    | 40.0   | 5.8       | 5.2    |
| 10°-20°   | 104.7  | 15.0      | 13.6   |
| 20°-30°   | 137.3  | 19.7      | 17.8   |
| 30°-40°   | 143.3  | 20.6      | 18.6   |
| 40°-50°   | 127.4  | 18.3      | 16.5   |
| 50°-60°   | 81.0   | 11.6      | 10.5   |
| 60°-70°   | 36.7   | 5.3       | 4.8    |
| 70°-80°   | 17.0   | 2.4       | 2.2    |
| 80°-90°   | 8.5    | 1.2       | 1.1    |
| 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°    | 282.0  | 40.5      | 36.6   |
| 0°-40°    | 425.3  | 61.1      | 55.2   |
| 0°-60°    | 633.7  | 91.1      | 82.3   |
| 0°-90°    | 695.9  | 100.0     | 90.4   |
| 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°   | 695.9  | 100.0     | 90.4   |

**CANDELA DISTRIBUTION:**

|      | 0°  | Flux |
|------|-----|------|
| 0°   | 434 |      |
| 5°   | 427 | 40   |
| 15°  | 373 | 105  |
| 25°  | 298 | 137  |
| 35°  | 229 | 143  |
| 45°  | 167 | 127  |
| 55°  | 90  | 81   |
| 65°  | 36  | 37   |
| 75°  | 16  | 17   |
| 85°  | 8   | 7    |
| 90°  | 0   | 1    |
| 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   |      |



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**CANDELA DISTRIBUTION (FULL):**

| 0°     |       |
|--------|-------|
| 0°     | 433.8 |
| 2.5°   | 432.1 |
| 5°     | 427.0 |
| 7.5°   | 417.6 |
| 10°    | 405.0 |
| 12.5°  | 390.5 |
| 15°    | 372.9 |
| 17.5°  | 356.5 |
| 20°    | 337.9 |
| 22.5°  | 318.4 |
| 25°    | 298.4 |
| 27.5°  | 279.2 |
| 30°    | 260.5 |
| 32.5°  | 243.7 |
| 35°    | 229.2 |
| 37.5°  | 214.3 |
| 40°    | 199.1 |
| 42.5°  | 183.3 |
| 45°    | 166.6 |
| 47.5°  | 148.1 |
| 50°    | 128.8 |
| 52.5°  | 109.0 |
| 55°    | 89.7  |
| 57.5°  | 72.3  |
| 60°    | 57.3  |
| 62.5°  | 45.1  |
| 65°    | 35.5  |
| 67.5°  | 28.2  |
| 70°    | 22.8  |
| 72.5°  | 18.7  |
| 75°    | 15.5  |
| 77.5°  | 13.1  |
| 80°    | 11.2  |
| 82.5°  | 9.7   |
| 85°    | 8.5   |
| 87.5°  | 7.3   |
| 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   |



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**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)