

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: HALO COMMERCIAL

Report Number: P210666

Luminaire Tested: **PR8S40D010 - PR8M34WDMMS - 4000K**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P210666  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29051)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PR8S40D010 - PR8M34WDMMS - 4000K  
Description: HALO 8" ROUND DOWNLIGHT, WIDE LENS, MATTE METALLIC SILVER FINISH  
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3728.2 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 1.37 / 1.37 / 1.39  
Luminous Opening: Circular (Dia: 0.67' x H: 0')  
CIE Type: Direct

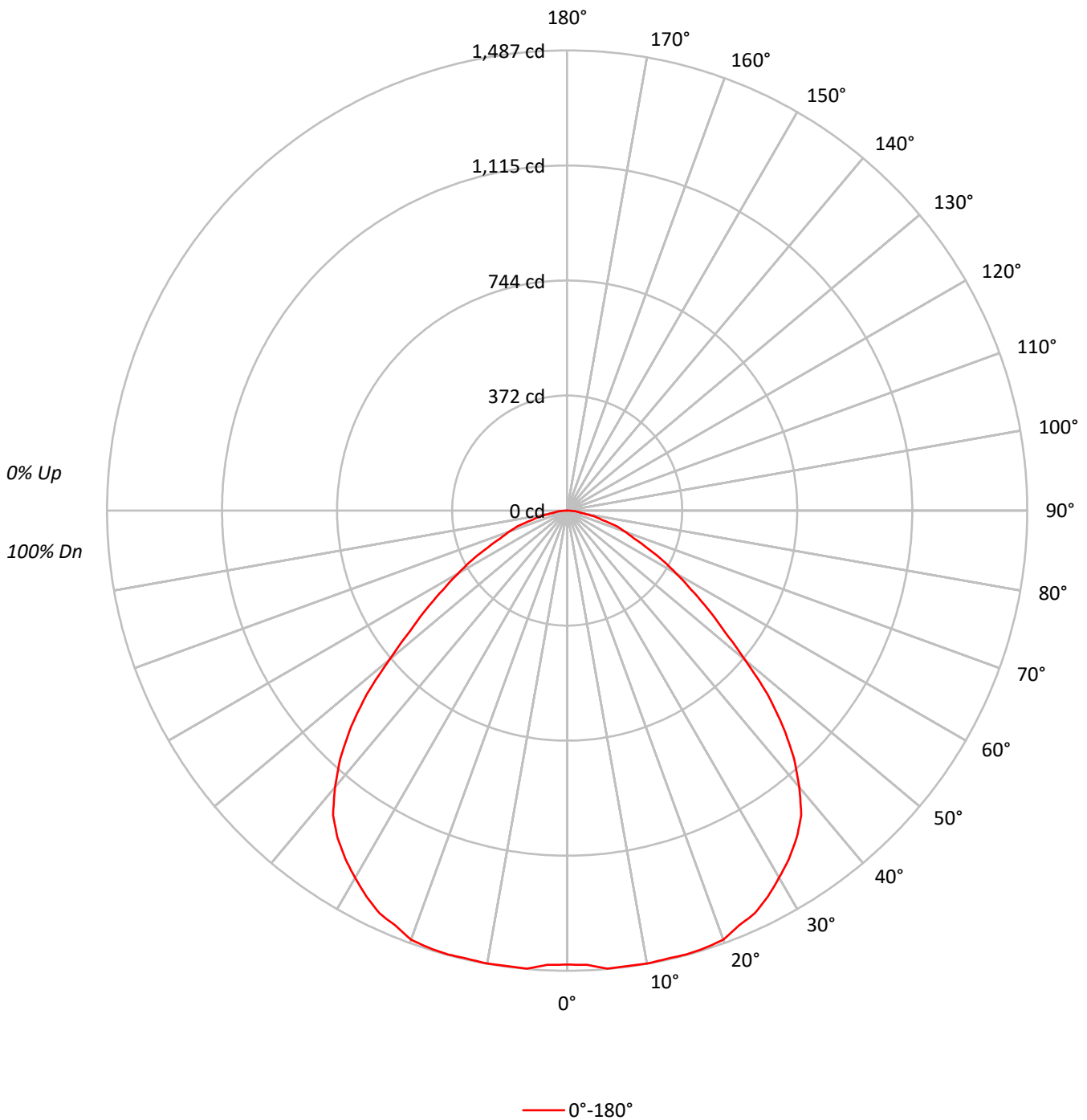
Input Watts (W): 43.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P210666

CATALOG NUMBER: PR8S40D010 - PR8M34WDMMS - 4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P210666

CATALOG NUMBER: PR8S40D010 - PR8M34WDMMS - 4000K

**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   | 110 | 106 | 103 | 99  | 108 | 104 | 101 | 98  | 100 | 97  | 95  |  | 96  | 94  | 92  |  | 92  | 91  | 89  | 87  |
| 2   | 102 | 94  | 88  | 83  | 99  | 92  | 87  | 82  | 89  | 84  | 80  |  | 86  | 82  | 79  |  | 83  | 80  | 77  | 75  |
| 3   | 93  | 84  | 77  | 71  | 91  | 82  | 76  | 70  | 79  | 74  | 69  |  | 77  | 72  | 68  |  | 74  | 70  | 67  | 65  |
| 4   | 86  | 75  | 67  | 61  | 84  | 74  | 66  | 61  | 71  | 65  | 60  |  | 69  | 64  | 59  |  | 67  | 62  | 58  | 56  |
| 5   | 80  | 68  | 59  | 53  | 78  | 67  | 59  | 53  | 64  | 58  | 52  |  | 63  | 57  | 52  |  | 61  | 56  | 51  | 49  |
| 6   | 74  | 61  | 53  | 47  | 72  | 60  | 52  | 47  | 59  | 52  | 46  |  | 57  | 51  | 46  |  | 55  | 50  | 46  | 44  |
| 7   | 68  | 56  | 48  | 42  | 67  | 55  | 47  | 42  | 53  | 46  | 41  |  | 52  | 46  | 41  |  | 51  | 45  | 41  | 39  |
| 8   | 64  | 51  | 43  | 37  | 62  | 50  | 43  | 37  | 49  | 42  | 37  |  | 48  | 42  | 37  |  | 47  | 41  | 37  | 35  |
| 9   | 60  | 47  | 39  | 34  | 58  | 46  | 39  | 34  | 45  | 38  | 34  |  | 44  | 38  | 33  |  | 43  | 37  | 33  | 31  |
| 10  | 56  | 43  | 36  | 31  | 55  | 43  | 36  | 31  | 42  | 35  | 31  |  | 41  | 35  | 30  |  | 40  | 34  | 30  | 29  |

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

|     |       |
|-----|-------|
|     | 0°    |
| 0°  | 45234 |
| 5°  | 45995 |
| 10° | 46548 |
| 15° | 47410 |
| 20° | 48412 |
| 25° | 48852 |
| 30° | 48778 |
| 35° | 48659 |
| 40° | 46964 |
| 45° | 43012 |
| 50° | 35932 |
| 55° | 29875 |
| 60° | 25107 |
| 65° | 20744 |
| 70° | 17843 |
| 75° | 13999 |
| 80° | 9696  |
| 85° | 10190 |



TEST NUMBER: P210666

CATALOG NUMBER: PR8S40D010 - PR8M34WDMMS - 4000K

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 141.5  | 3.8       |
| 10°-20°   | 420.2  | 11.3      |
| 20°-30°   | 660.0  | 17.7      |
| 30°-40°   | 804.5  | 21.6      |
| 40°-50°   | 751.9  | 20.2      |
| 50°-60°   | 501.5  | 13.5      |
| 60°-70°   | 288.5  | 7.7       |
| 70°-80°   | 133.1  | 3.6       |
| 80°-90°   | 27.0   | 0.7       |
| 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°    | 1221.7 | 32.8      |
| 0°-40°    | 2026.2 | 54.3      |
| 0°-60°    | 3279.6 | 88.0      |
| 0°-90°    | 3728.2 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3728.2 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | Flux |
|-----|------|------|
| 0°  | 1467 |      |
| 5°  | 1486 | 142  |
| 15° | 1485 | 420  |
| 25° | 1436 | 660  |
| 35° | 1293 | 804  |
| 45° | 986  | 752  |
| 55° | 556  | 502  |
| 65° | 284  | 289  |
| 75° | 118  | 133  |
| 85° | 29   | 27   |
| 90° | 0    |      |



TEST NUMBER: P210666

CATALOG NUMBER: PR8S40D010 - PR8M34WDMMS - 4000K

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     |
|-------|--------|
| 0°    | 1466.9 |
| 2.5°  | 1469.2 |
| 5°    | 1485.9 |
| 7.5°  | 1484.4 |
| 10°   | 1486.6 |
| 12.5° | 1483.6 |
| 15°   | 1485.1 |
| 17.5° | 1482.1 |
| 20°   | 1475.3 |
| 22.5° | 1451.0 |
| 25°   | 1435.8 |
| 27.5° | 1405.5 |
| 30°   | 1369.9 |
| 32.5° | 1334.3 |
| 35°   | 1292.6 |
| 37.5° | 1242.5 |
| 40°   | 1166.7 |
| 42.5° | 1084.1 |
| 45°   | 986.3  |
| 47.5° | 877.9  |
| 50°   | 749.0  |
| 52.5° | 639.8  |
| 55°   | 555.7  |
| 57.5° | 475.3  |
| 60°   | 407.1  |
| 62.5° | 348.0  |
| 65°   | 284.3  |
| 67.5° | 233.5  |
| 70°   | 197.9  |
| 72.5° | 168.3  |
| 75°   | 117.5  |
| 77.5° | 93.2   |
| 80°   | 54.6   |
| 82.5° | 34.9   |
| 85°   | 28.8   |
| 87.5° | 8.3    |
| 90°   | 0.0    |

(END OF REPORT)