

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: P210303

Luminaire Tested: **PR830D010 - PR8M34MDMMS - 3500K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P210303
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P29049)
Test Lab: INNOVATION CENTER-P2
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR830D010 - PR8M34MDMMS - 3500K
Description: HALO 8" ROUND DOWNLIGHT, MEDIUM LENS, MATTE METALLIC SILVER FINISH
Light Source: (1) HIGH LUMEN LED 80CRI / 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3488.3 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Spacing Criteria (0/90/45): 1.04 / 1.04 / 1.13
Luminous Opening: Circular (Dia: 0.67' x H: 0')
CIE Type: Direct

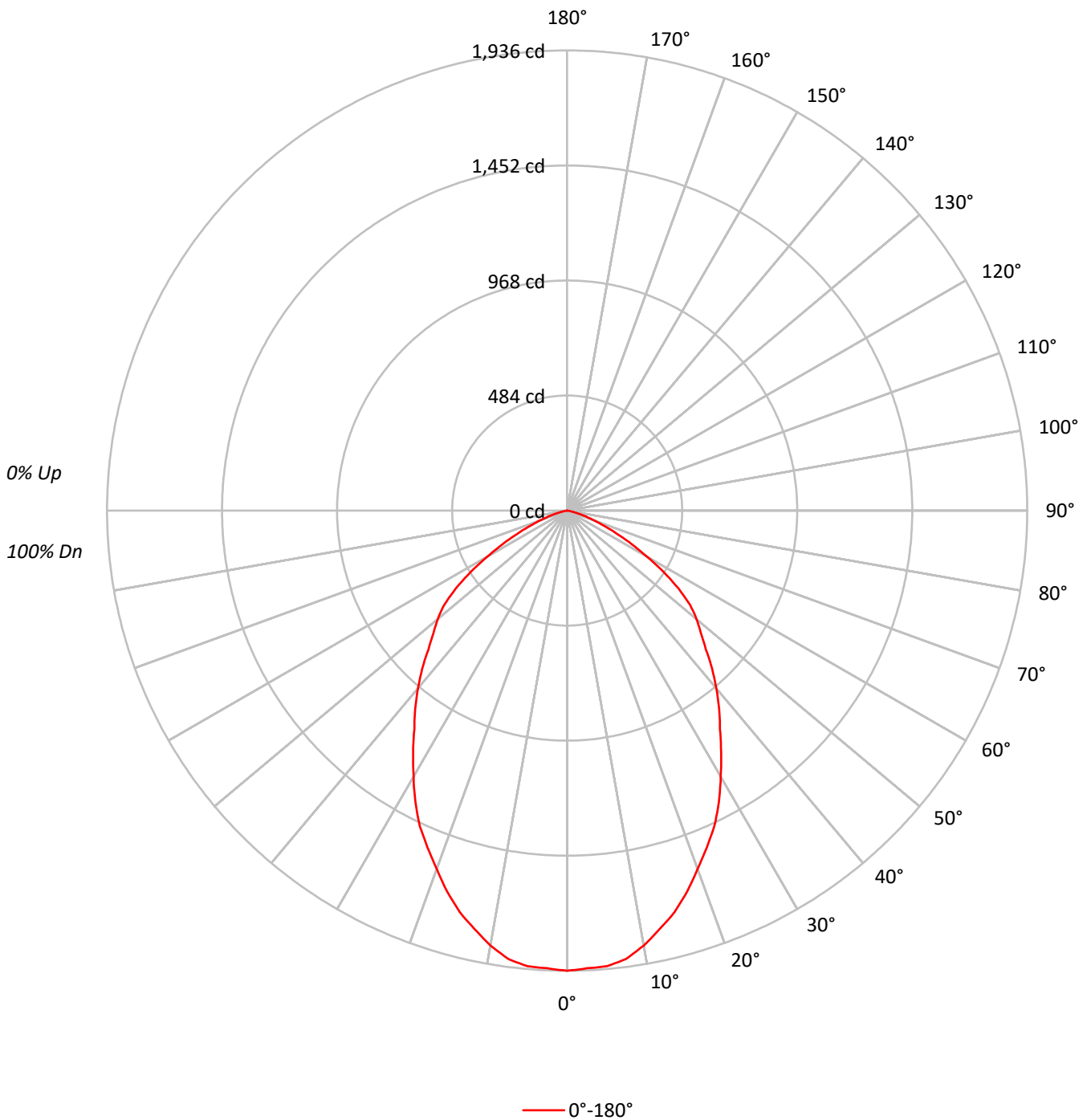
Input Watts (W): 28.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 111 | 107 | 104 | 101 | 109 | 105 | 102 | 99 | 101 | 99 | 96 | | 97 | 95 | 93 | | 94 | 92 | 91 | 89 |
| 2 | 103 | 96 | 91 | 86 | 100 | 94 | 89 | 85 | 91 | 87 | 83 | | 88 | 84 | 81 | | 85 | 82 | 79 | 77 |
| 3 | 95 | 86 | 79 | 74 | 93 | 85 | 78 | 73 | 82 | 76 | 72 | | 79 | 75 | 71 | | 77 | 73 | 70 | 68 |
| 4 | 88 | 78 | 70 | 64 | 86 | 76 | 69 | 64 | 74 | 68 | 63 | | 72 | 66 | 62 | | 70 | 65 | 61 | 59 |
| 5 | 82 | 70 | 62 | 57 | 80 | 69 | 62 | 56 | 67 | 61 | 56 | | 65 | 60 | 55 | | 64 | 59 | 55 | 53 |
| 6 | 76 | 64 | 56 | 50 | 74 | 63 | 56 | 50 | 61 | 55 | 50 | | 60 | 54 | 49 | | 58 | 53 | 49 | 47 |
| 7 | 71 | 59 | 51 | 45 | 69 | 58 | 50 | 45 | 56 | 50 | 45 | | 55 | 49 | 44 | | 54 | 48 | 44 | 42 |
| 8 | 66 | 54 | 46 | 41 | 65 | 53 | 46 | 41 | 52 | 45 | 40 | | 51 | 45 | 40 | | 50 | 44 | 40 | 38 |
| 9 | 62 | 50 | 42 | 37 | 61 | 49 | 42 | 37 | 48 | 42 | 37 | | 47 | 41 | 37 | | 46 | 41 | 37 | 35 |
| 10 | 58 | 46 | 39 | 34 | 57 | 46 | 39 | 34 | 45 | 38 | 34 | | 44 | 38 | 34 | | 43 | 38 | 34 | 32 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|-------|
| | 0° |
| 0° | 59702 |
| 5° | 59568 |
| 10° | 58171 |
| 15° | 55810 |
| 20° | 52642 |
| 25° | 49866 |
| 30° | 46025 |
| 35° | 42203 |
| 40° | 39300 |
| 45° | 35986 |
| 50° | 34104 |
| 55° | 30725 |
| 60° | 23997 |
| 65° | 16906 |
| 70° | 10657 |
| 75° | 5969 |
| 80° | 1669 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 181.6 | 5.2 |
| 10°-20° | 489.8 | 14.0 |
| 20°-30° | 670.7 | 19.2 |
| 30°-40° | 704.6 | 20.2 |
| 40°-50° | 642.6 | 18.4 |
| 50°-60° | 503.0 | 14.4 |
| 60°-70° | 236.2 | 6.8 |
| 70°-80° | 58.3 | 1.7 |
| 80°-90° | 1.5 | 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° | 1342.1 | 38.5 |
| 0°-40° | 2046.7 | 58.7 |
| 0°-60° | 3192.3 | 91.5 |
| 0°-90° | 3488.3 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3488.3 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1936 | |
| 5° | 1924 | 182 |
| 15° | 1748 | 490 |
| 25° | 1466 | 671 |
| 35° | 1121 | 705 |
| 45° | 825 | 643 |
| 55° | 572 | 503 |
| 65° | 232 | 236 |
| 75° | 50 | 58 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1936.1 |
| 2.5° | 1927.5 |
| 5° | 1924.4 |
| 7.5° | 1902.5 |
| 10° | 1857.8 |
| 12.5° | 1803.0 |
| 15° | 1748.2 |
| 17.5° | 1680.1 |
| 20° | 1604.2 |
| 22.5° | 1534.5 |
| 25° | 1465.6 |
| 27.5° | 1383.4 |
| 30° | 1292.6 |
| 32.5° | 1205.7 |
| 35° | 1121.1 |
| 37.5° | 1049.9 |
| 40° | 976.3 |
| 42.5° | 902.7 |
| 45° | 825.2 |
| 47.5° | 762.6 |
| 50° | 710.9 |
| 52.5° | 652.2 |
| 55° | 571.5 |
| 57.5° | 481.5 |
| 60° | 389.1 |
| 62.5° | 306.1 |
| 65° | 231.7 |
| 67.5° | 167.5 |
| 70° | 118.2 |
| 72.5° | 80.6 |
| 75° | 50.1 |
| 77.5° | 27.4 |
| 80° | 9.4 |
| 82.5° | 0.8 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |

(END OF REPORT)