

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: P238146

Luminaire Tested: **PRS630D010-S6M24-61SMDMB-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238146
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-14)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS630D010-S6M24-61SMDMB-3000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM DISTRIBUTION, DEEP TRIM MATTE BLACK
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2184.5 lumens
Efficiency: N/A
Efficacy: 85.7 lumens/watt
Spacing Criteria (0/90/45): 0.93 / 0.95 / 1
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

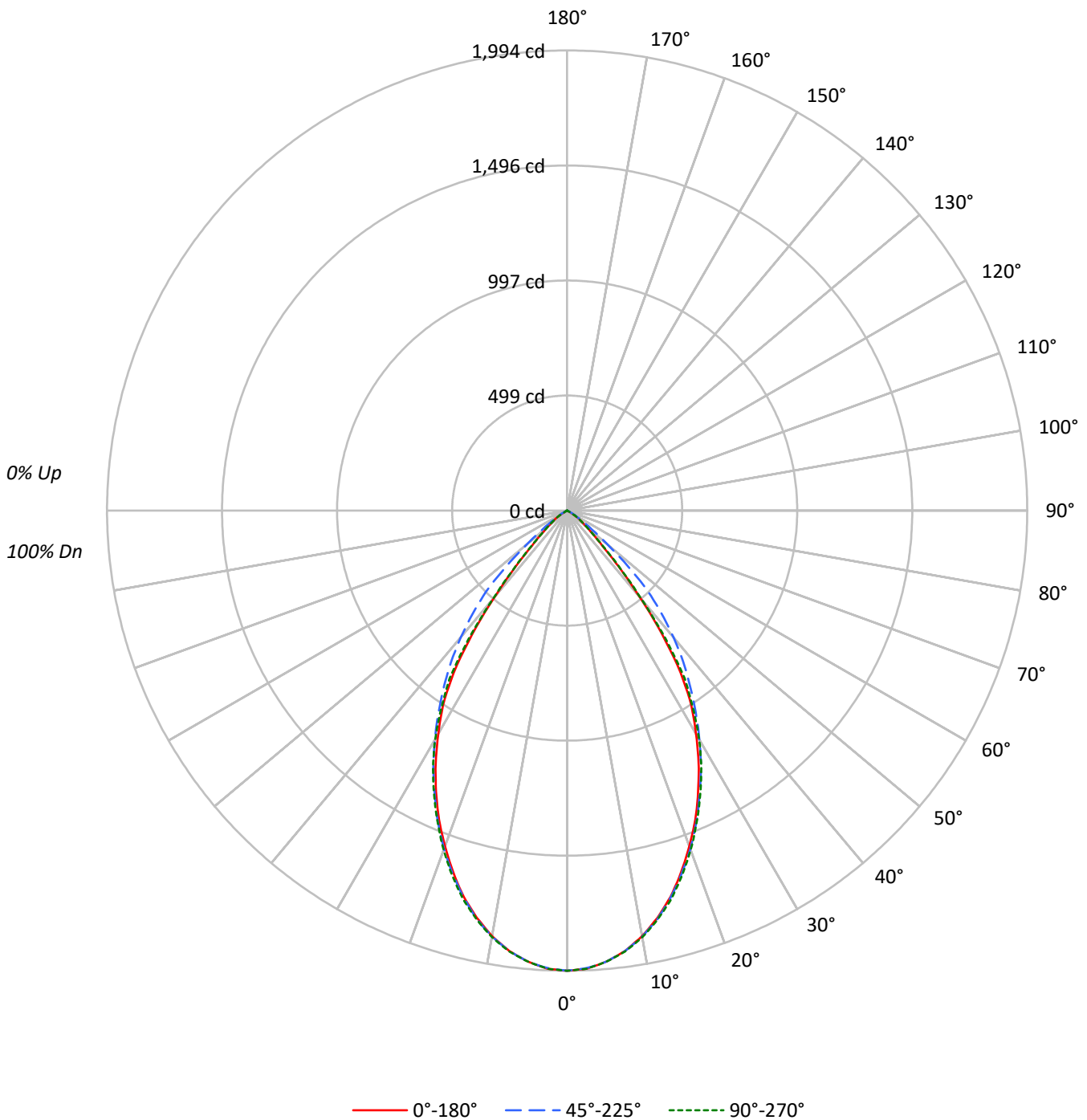
Input Watts (W): 25.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 113 | 110 | 107 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 94 | 93 |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 |
| 3 | 101 | 94 | 88 | 84 | 99 | 92 | 88 | 84 | 90 | 86 | 82 | 87 | 84 | 81 | 85 | 82 | 80 | 78 |
| 4 | 95 | 87 | 81 | 76 | 93 | 86 | 80 | 76 | 83 | 79 | 75 | 81 | 77 | 74 | 80 | 76 | 73 | 72 |
| 5 | 90 | 81 | 74 | 70 | 88 | 80 | 74 | 69 | 78 | 73 | 69 | 76 | 72 | 68 | 74 | 70 | 67 | 66 |
| 6 | 85 | 75 | 68 | 64 | 83 | 74 | 68 | 63 | 73 | 67 | 63 | 71 | 66 | 63 | 70 | 65 | 62 | 61 |
| 7 | 80 | 70 | 63 | 59 | 78 | 69 | 63 | 59 | 68 | 62 | 58 | 67 | 62 | 58 | 65 | 61 | 58 | 56 |
| 8 | 76 | 65 | 59 | 54 | 74 | 65 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 61 | 57 | 53 | 52 |
| 9 | 72 | 61 | 55 | 50 | 70 | 61 | 54 | 50 | 60 | 54 | 50 | 59 | 54 | 50 | 58 | 53 | 50 | 48 |
| 10 | 68 | 57 | 51 | 47 | 67 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 54 | 50 | 46 | 45 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 85857 | 85857 | 85857 |
| 5° | 84785 | 84785 | 84785 |
| 10° | 81844 | 81949 | 82058 |
| 15° | 77221 | 77332 | 77662 |
| 20° | 70923 | 71496 | 71725 |
| 25° | 63825 | 64538 | 64775 |
| 30° | 55518 | 57005 | 56881 |
| 35° | 45071 | 48866 | 46643 |
| 40° | 27597 | 40209 | 28159 |
| 45° | 13207 | 30201 | 13658 |
| 50° | 7348 | 15024 | 7348 |
| 55° | 4301 | 6178 | 4489 |
| 60° | 1076 | 2790 | 1292 |
| 65° | 0 | 764 | 255 |
| 70° | 0 | 0 | 0 |
| 75° | 0 | 0 | 0 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 184.5 | 8.4 |
| 10°-20° | 485.4 | 22.2 |
| 20°-30° | 620.8 | 28.4 |
| 30°-40° | 553.8 | 25.4 |
| 40°-50° | 264.8 | 12.1 |
| 50°-60° | 69.4 | 3.2 |
| 60°-70° | 5.9 | 0.3 |
| 70°-80° | 0.0 | 0.0 |
| 80°-90° | 0.0 | 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° | 1290.7 | 59.1 |
| 0°-40° | 1844.5 | 84.4 |
| 0°-60° | 2178.7 | 99.7 |
| 0°-90° | 2184.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2184.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1994 | 1994 | 1994 | 1994 | 1994 | |
| 5° | 1962 | 1962 | 1962 | 1964 | 1962 | 184 |
| 15° | 1732 | 1732 | 1735 | 1740 | 1742 | 484 |
| 25° | 1344 | 1348 | 1358 | 1364 | 1364 | 614 |
| 35° | 858 | 900 | 930 | 912 | 887 | 517 |
| 45° | 217 | 299 | 496 | 302 | 224 | 189 |
| 55° | 57 | 75 | 82 | 75 | 60 | 52 |
| 65° | 0 | 2 | 8 | 0 | 2 | 2 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P238146

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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1994.1 | 1994.1 | 1994.1 | 1994.1 | 1994.1 |
| 2.5° | 1986.6 | 1986.6 | 1984.1 | 1986.6 | 1986.6 |
| 5° | 1961.7 | 1961.7 | 1961.7 | 1964.2 | 1961.7 |
| 7.5° | 1924.3 | 1924.3 | 1924.3 | 1926.8 | 1926.8 |
| 10° | 1872.0 | 1872.0 | 1874.4 | 1876.9 | 1876.9 |
| 12.5° | 1807.1 | 1807.1 | 1812.1 | 1814.6 | 1814.6 |
| 15° | 1732.4 | 1732.4 | 1734.9 | 1739.8 | 1742.3 |
| 17.5° | 1642.6 | 1645.1 | 1650.1 | 1655.1 | 1657.6 |
| 20° | 1547.9 | 1550.4 | 1560.4 | 1565.4 | 1565.4 |
| 22.5° | 1450.7 | 1453.2 | 1463.2 | 1468.2 | 1465.7 |
| 25° | 1343.5 | 1348.5 | 1358.5 | 1363.5 | 1363.5 |
| 27.5° | 1233.8 | 1241.3 | 1256.3 | 1253.8 | 1258.8 |
| 30° | 1116.7 | 1129.2 | 1146.6 | 1146.6 | 1144.1 |
| 32.5° | 1002.0 | 1017.0 | 1036.9 | 1027.0 | 1014.5 |
| 35° | 857.5 | 899.8 | 929.7 | 912.3 | 887.4 |
| 37.5° | 675.5 | 770.2 | 825.1 | 787.7 | 702.9 |
| 40° | 491.0 | 603.2 | 715.4 | 618.2 | 501.0 |
| 42.5° | 331.5 | 431.2 | 605.7 | 443.7 | 344.0 |
| 45° | 216.9 | 299.1 | 496.0 | 301.6 | 224.3 |
| 47.5° | 149.6 | 199.4 | 358.9 | 201.9 | 152.0 |
| 50° | 109.7 | 139.6 | 224.3 | 139.6 | 109.7 |
| 52.5° | 82.3 | 102.2 | 137.1 | 102.2 | 82.3 |
| 55° | 57.3 | 74.8 | 82.3 | 74.8 | 59.8 |
| 57.5° | 34.9 | 49.9 | 49.9 | 49.9 | 34.9 |
| 60° | 12.5 | 27.4 | 32.4 | 27.4 | 15.0 |
| 62.5° | 0.0 | 7.5 | 17.4 | 7.5 | 0.0 |
| 65° | 0.0 | 2.5 | 7.5 | 0.0 | 2.5 |
| 67.5° | 0.0 | 0.0 | 2.5 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)