

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: P253069

Luminaire Tested: **PRS615D010-S6M12-61SWDH**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P253069  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1805-776-1)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO COMMERCIAL  
Catalog Number: PRS615D010-S6M12-61SWDH  
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, DEEP TRIM HAZE  
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1238.3 lumens  
Efficiency: N/A  
Efficacy: 98.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.33  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
CIE Type: Direct

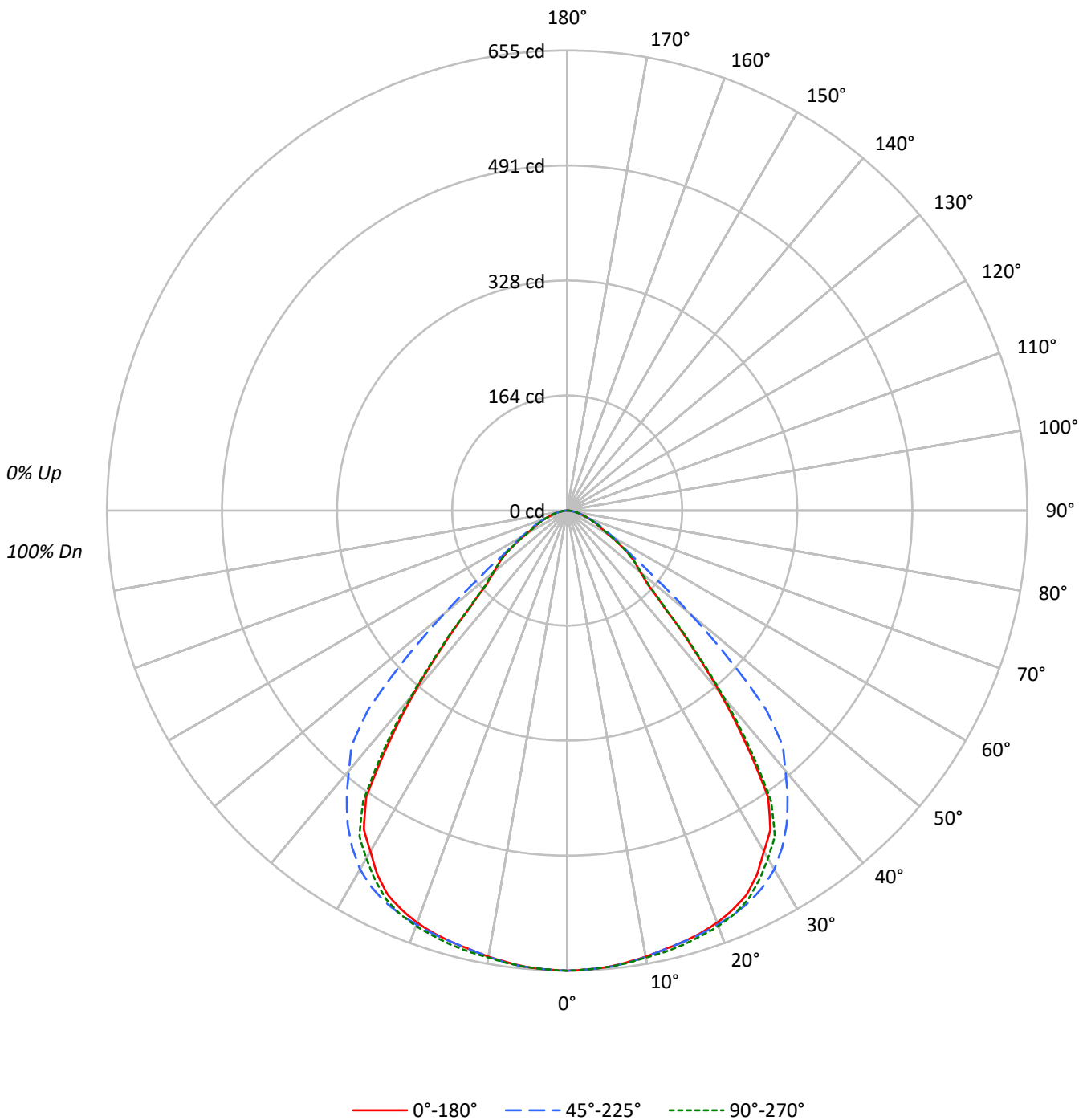
Input Watts (W): 12.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 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 |    |    |    |    | 100 |   |  |   |
| 1   | 112 | 108 | 105 | 102 | 109 | 106 | 103 | 100 | 102 | 99  | 97  | 98  | 96  | 94  | 94  | 93  | 91  | 89  |    |    |    |    | 89  |   |  |   |
| 2   | 104 | 97  | 92  | 88  | 101 | 96  | 91  | 87  | 92  | 88  | 85  | 89  | 86  | 83  | 86  | 84  | 81  | 79  |    |    |    |    | 79  |   |  |   |
| 3   | 97  | 88  | 82  | 76  | 94  | 87  | 81  | 76  | 84  | 79  | 75  | 81  | 77  | 73  | 79  | 75  | 72  | 70  |    |    |    |    | 70  |   |  |   |
| 4   | 90  | 80  | 73  | 67  | 88  | 79  | 72  | 67  | 77  | 71  | 66  | 74  | 69  | 65  | 72  | 68  | 65  | 63  |    |    |    |    | 63  |   |  |   |
| 5   | 84  | 73  | 66  | 60  | 82  | 72  | 65  | 60  | 70  | 64  | 59  | 68  | 63  | 59  | 66  | 62  | 58  | 56  |    |    |    |    | 56  |   |  |   |
| 6   | 78  | 67  | 59  | 54  | 76  | 66  | 59  | 54  | 64  | 58  | 53  | 63  | 57  | 53  | 61  | 56  | 52  | 51  |    |    |    |    | 51  |   |  |   |
| 7   | 73  | 61  | 54  | 49  | 71  | 61  | 53  | 48  | 59  | 53  | 48  | 58  | 52  | 48  | 57  | 51  | 47  | 46  |    |    |    |    | 46  |   |  |   |
| 8   | 68  | 57  | 49  | 44  | 67  | 56  | 49  | 44  | 55  | 48  | 44  | 54  | 48  | 43  | 52  | 47  | 43  | 42  |    |    |    |    | 42  |   |  |   |
| 9   | 64  | 52  | 45  | 40  | 63  | 52  | 45  | 40  | 51  | 44  | 40  | 50  | 44  | 40  | 49  | 43  | 40  | 38  |    |    |    |    | 38  |   |  |   |
| 10  | 60  | 49  | 42  | 37  | 59  | 48  | 41  | 37  | 47  | 41  | 37  | 46  | 41  | 37  | 46  | 40  | 36  | 35  |    |    |    |    | 35  |   |  |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 28206 | 28206 | 28206 |
| 5°  | 28201 | 28201 | 28201 |
| 10° | 28191 | 28191 | 28247 |
| 15° | 28340 | 28340 | 28514 |
| 20° | 28605 | 28724 | 28838 |
| 25° | 28685 | 29174 | 28989 |
| 30° | 27851 | 29318 | 28423 |
| 35° | 26212 | 28635 | 26617 |
| 40° | 19020 | 27164 | 19453 |
| 45° | 11941 | 24356 | 12178 |
| 50° | 9103  | 15285 | 9270  |
| 55° | 7987  | 8565  | 7987  |
| 60° | 5847  | 6510  | 5847  |
| 65° | 4829  | 5226  | 4829  |
| 70° | 4028  | 4192  | 4028  |
| 75° | 3410  | 3410  | 3410  |
| 80° | 2851  | 2851  | 2851  |
| 85° | 2519  | 2519  | 2519  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 62.0   | 5.0       |
| 10°-20°   | 180.2  | 14.6      |
| 20°-30°   | 280.4  | 22.6      |
| 30°-40°   | 320.4  | 25.9      |
| 40°-50°   | 214.4  | 17.3      |
| 50°-60°   | 102.6  | 8.3       |
| 60°-70°   | 50.0   | 4.0       |
| 70°-80°   | 22.5   | 1.8       |
| 80°-90°   | 5.8    | 0.5       |
| 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°    | 522.7  | 42.2      |
| 0°-40°    | 843.1  | 68.1      |
| 0°-60°    | 1160.1 | 93.7      |
| 0°-90°    | 1238.3 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 1238.3 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 655 | 655   | 655 | 655   | 655 |      |
| 5°  | 652 | 652   | 652 | 652   | 652 | 62   |
| 15° | 636 | 636   | 636 | 638   | 640 | 180  |
| 25° | 604 | 608   | 614 | 613   | 610 | 276  |
| 35° | 499 | 527   | 545 | 535   | 506 | 296  |
| 45° | 196 | 252   | 400 | 256   | 200 | 163  |
| 55° | 106 | 114   | 114 | 115   | 106 | 93   |
| 65° | 47  | 49    | 51  | 49    | 47  | 47   |
| 75° | 20  | 20    | 20  | 20    | 20  | 22   |
| 85° | 5   | 5     | 5   | 5     | 5   | 6    |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 655.1 | 655.1 | 655.1 | 655.1 | 655.1 |
| 2.5°  | 653.8 | 653.8 | 653.8 | 653.8 | 653.8 |
| 5°    | 652.5 | 652.5 | 652.5 | 652.5 | 652.5 |
| 7.5°  | 648.7 | 648.7 | 649.9 | 648.7 | 649.9 |
| 10°   | 644.8 | 644.8 | 644.8 | 646.1 | 646.1 |
| 12.5° | 639.7 | 639.7 | 639.7 | 642.3 | 643.5 |
| 15°   | 635.8 | 635.8 | 635.8 | 638.4 | 639.7 |
| 17.5° | 630.7 | 630.7 | 632.0 | 634.6 | 634.6 |
| 20°   | 624.3 | 625.6 | 626.9 | 629.4 | 629.4 |
| 22.5° | 615.3 | 617.9 | 621.7 | 623.0 | 621.7 |
| 25°   | 603.8 | 607.6 | 614.1 | 612.8 | 610.2 |
| 27.5° | 584.6 | 593.5 | 603.8 | 598.7 | 592.3 |
| 30°   | 560.2 | 574.3 | 589.7 | 579.4 | 571.7 |
| 32.5° | 538.4 | 550.0 | 569.2 | 557.6 | 550.0 |
| 35°   | 498.7 | 526.9 | 544.8 | 534.6 | 506.4 |
| 37.5° | 417.9 | 480.7 | 515.3 | 488.4 | 428.2 |
| 40°   | 338.4 | 405.1 | 483.3 | 410.2 | 346.1 |
| 42.5° | 262.8 | 326.9 | 453.8 | 332.0 | 267.9 |
| 45°   | 196.1 | 252.5 | 400.0 | 256.4 | 200.0 |
| 47.5° | 155.1 | 187.2 | 311.5 | 191.0 | 157.7 |
| 50°   | 135.9 | 148.7 | 228.2 | 151.3 | 138.4 |
| 52.5° | 121.8 | 129.5 | 159.0 | 130.8 | 121.8 |
| 55°   | 106.4 | 114.1 | 114.1 | 115.4 | 106.4 |
| 57.5° | 85.9  | 97.4  | 89.7  | 97.4  | 87.2  |
| 60°   | 67.9  | 76.9  | 75.6  | 76.9  | 67.9  |
| 62.5° | 55.1  | 60.3  | 61.5  | 60.3  | 55.1  |
| 65°   | 47.4  | 48.7  | 51.3  | 48.7  | 47.4  |
| 67.5° | 39.7  | 41.0  | 41.0  | 41.0  | 38.5  |
| 70°   | 32.0  | 33.3  | 33.3  | 33.3  | 32.0  |
| 72.5° | 25.6  | 26.9  | 26.9  | 26.9  | 25.6  |
| 75°   | 20.5  | 20.5  | 20.5  | 20.5  | 20.5  |
| 77.5° | 15.4  | 16.7  | 15.4  | 16.7  | 15.4  |
| 80°   | 11.5  | 11.5  | 11.5  | 11.5  | 11.5  |
| 82.5° | 7.7   | 7.7   | 7.7   | 7.7   | 7.7   |
| 85°   | 5.1   | 5.1   | 5.1   | 5.1   | 5.1   |
| 87.5° | 2.6   | 2.6   | 2.6   | 2.6   | 2.6   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)