

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: P238238

Luminaire Tested: **PRS610D010-S6M12-61SMDH**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238238
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-20)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS610D010-S6M12-61SMDH
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" MEDIUM 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: 1044.0 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Spacing Criteria (0/90/45): 0.9 / 0.9 / 0.95
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

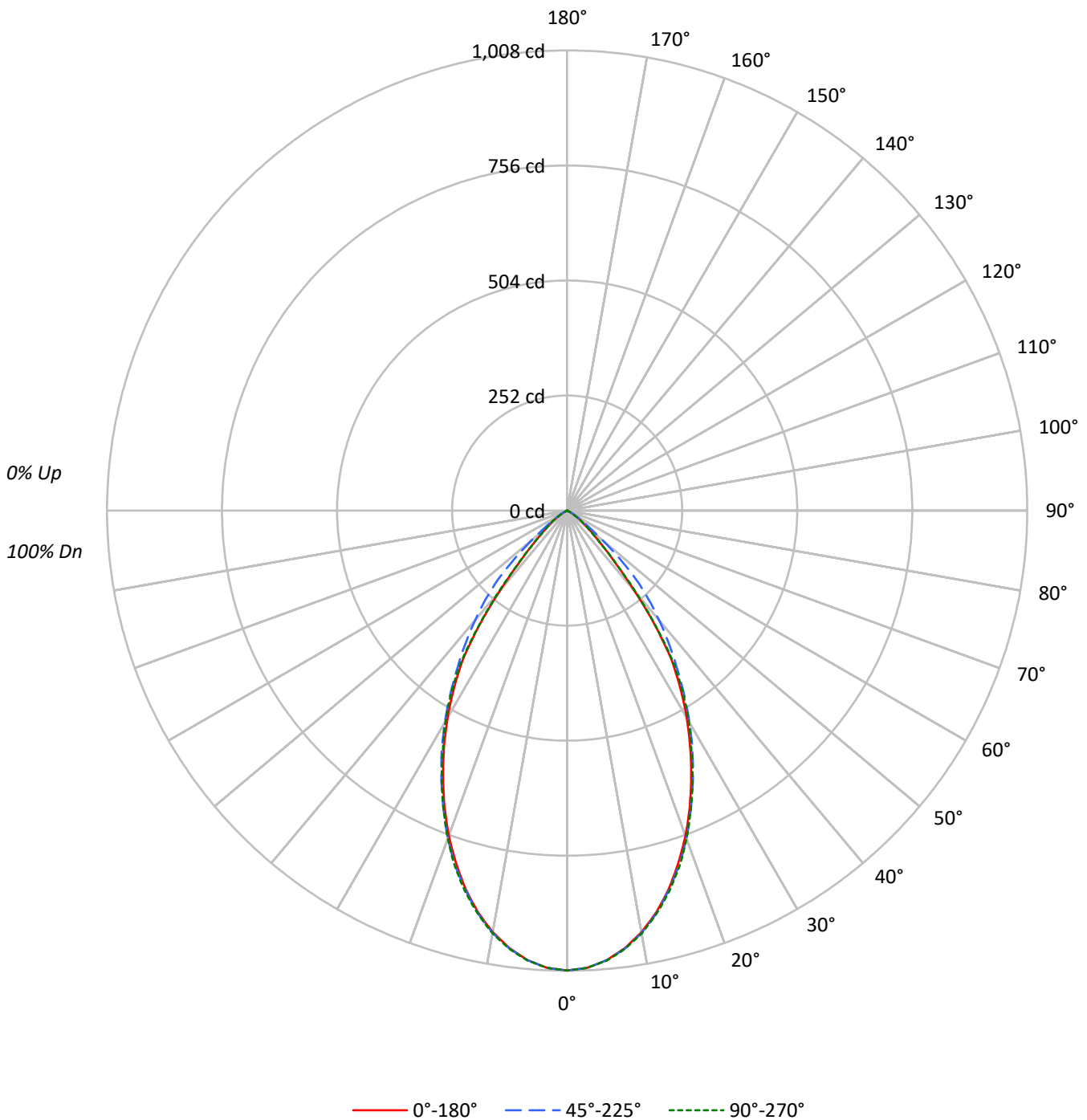
Input Watts (W): 10
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 113 | 110 | 108 | 105 | 111 | 108 | 106 | 103 | 104 | 102 | 100 | 100 | 99 | 97 | 97 | 96 | 94 | 93 | | | | | 93 | | | |
| 2 | 107 | 102 | 97 | 94 | 105 | 100 | 96 | 93 | 97 | 93 | 91 | 94 | 91 | 89 | 91 | 89 | 87 | 85 | | | | | 85 | | | |
| 3 | 101 | 94 | 89 | 84 | 99 | 93 | 88 | 84 | 90 | 86 | 82 | 87 | 84 | 81 | 85 | 82 | 80 | 78 | | | | | 78 | | | |
| 4 | 95 | 87 | 81 | 77 | 93 | 86 | 80 | 76 | 84 | 79 | 75 | 82 | 78 | 74 | 80 | 76 | 73 | 72 | | | | | 72 | | | |
| 5 | 90 | 81 | 75 | 70 | 88 | 80 | 74 | 70 | 78 | 73 | 69 | 76 | 72 | 68 | 75 | 71 | 68 | 66 | | | | | 66 | | | |
| 6 | 85 | 75 | 69 | 64 | 83 | 74 | 68 | 64 | 73 | 67 | 63 | 71 | 67 | 63 | 70 | 66 | 63 | 61 | | | | | 61 | | | |
| 7 | 80 | 70 | 64 | 59 | 79 | 70 | 63 | 59 | 68 | 63 | 59 | 67 | 62 | 58 | 66 | 61 | 58 | 57 | | | | | 57 | | | |
| 8 | 76 | 66 | 59 | 55 | 75 | 65 | 59 | 55 | 64 | 58 | 54 | 63 | 58 | 54 | 62 | 57 | 54 | 52 | | | | | 52 | | | |
| 9 | 72 | 62 | 55 | 51 | 71 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 54 | 50 | 58 | 54 | 50 | 49 | | | | | 49 | | | |
| 10 | 68 | 58 | 52 | 48 | 67 | 57 | 51 | 47 | 57 | 51 | 47 | 56 | 51 | 47 | 55 | 50 | 47 | 46 | | | | | 46 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 43383 | 43383 | 43383 |
| 5° | 42727 | 42727 | 42771 |
| 10° | 40992 | 41079 | 41123 |
| 15° | 38276 | 38361 | 38495 |
| 20° | 34717 | 35038 | 35038 |
| 25° | 30533 | 30960 | 30913 |
| 30° | 26041 | 26638 | 26489 |
| 35° | 20909 | 21960 | 21329 |
| 40° | 12753 | 17587 | 13146 |
| 45° | 6759 | 13085 | 6820 |
| 50° | 3885 | 6765 | 3885 |
| 55° | 2402 | 2928 | 2402 |
| 60° | 861 | 1378 | 861 |
| 65° | 204 | 509 | 204 |
| 70° | 126 | 126 | 126 |
| 75° | 166 | 166 | 166 |
| 80° | 0 | 0 | 0 |
| 85° | 0 | 0 | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 92.8 | 8.9 |
| 10°-20° | 240.4 | 23.0 |
| 20°-30° | 296.8 | 28.4 |
| 30°-40° | 253.4 | 24.3 |
| 40°-50° | 121.3 | 11.6 |
| 50°-60° | 34.1 | 3.3 |
| 60°-70° | 4.5 | 0.4 |
| 70°-80° | 0.7 | 0.1 |
| 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° | 630.0 | 60.3 |
| 0°-40° | 883.5 | 84.6 |
| 0°-60° | 1038.9 | 99.5 |
| 0°-90° | 1044.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1044.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1008 | 1008 | 1008 | 1008 | 1008 | |
| 5° | 989 | 990 | 989 | 990 | 990 | 93 |
| 15° | 859 | 860 | 861 | 864 | 864 | 240 |
| 25° | 643 | 646 | 652 | 652 | 651 | 294 |
| 35° | 398 | 413 | 418 | 418 | 406 | 240 |
| 45° | 111 | 138 | 215 | 139 | 112 | 93 |
| 55° | 32 | 37 | 39 | 36 | 32 | 29 |
| 65° | 2 | 2 | 5 | 2 | 2 | 3 |
| 75° | 1 | 1 | 1 | 1 | 1 | 1 |
| 85° | 0 | 0 | 0 | 0 | 0 | 0 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1007.6 | 1007.6 | 1007.6 | 1007.6 | 1007.6 |
| 2.5° | 1002.6 | 1002.6 | 1002.6 | 1002.6 | 1002.6 |
| 5° | 988.6 | 989.6 | 988.6 | 989.6 | 989.6 |
| 7.5° | 966.6 | 967.6 | 967.6 | 968.6 | 968.6 |
| 10° | 937.6 | 938.6 | 939.6 | 939.6 | 940.6 |
| 12.5° | 901.6 | 901.6 | 903.6 | 904.6 | 904.6 |
| 15° | 858.7 | 859.7 | 860.6 | 863.6 | 863.6 |
| 17.5° | 809.7 | 811.7 | 814.7 | 815.7 | 817.7 |
| 20° | 757.7 | 757.7 | 764.7 | 763.7 | 764.7 |
| 22.5° | 701.7 | 704.7 | 707.7 | 709.7 | 707.7 |
| 25° | 642.7 | 645.7 | 651.7 | 651.7 | 650.7 |
| 27.5° | 583.8 | 586.8 | 594.8 | 591.8 | 589.8 |
| 30° | 523.8 | 526.8 | 535.8 | 530.8 | 532.8 |
| 32.5° | 461.8 | 470.8 | 475.8 | 475.8 | 470.8 |
| 35° | 397.8 | 412.8 | 417.8 | 417.8 | 405.8 |
| 37.5° | 314.9 | 350.9 | 364.9 | 353.9 | 318.9 |
| 40° | 226.9 | 273.9 | 312.9 | 278.9 | 233.9 |
| 42.5° | 158.9 | 198.9 | 264.9 | 201.9 | 160.9 |
| 45° | 111.0 | 137.9 | 214.9 | 138.9 | 112.0 |
| 47.5° | 78.0 | 96.0 | 155.9 | 96.0 | 78.0 |
| 50° | 58.0 | 68.0 | 101.0 | 67.0 | 58.0 |
| 52.5° | 44.0 | 50.0 | 62.0 | 49.0 | 44.0 |
| 55° | 32.0 | 37.0 | 39.0 | 36.0 | 32.0 |
| 57.5° | 20.0 | 25.0 | 25.0 | 25.0 | 19.0 |
| 60° | 10.0 | 14.0 | 16.0 | 14.0 | 10.0 |
| 62.5° | 3.0 | 6.0 | 10.0 | 6.0 | 3.0 |
| 65° | 2.0 | 2.0 | 5.0 | 2.0 | 2.0 |
| 67.5° | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |
| 70° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 72.5° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 75° | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| 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)