

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: P253050

Luminaire Tested: **PRS620D010-S6M12-61SWDC-3000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P253050
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: PRS620D010-S6M12-61SWDC-3000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" WIDE DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2018.8 lumens
Efficiency: N/A
Efficacy: 100.9 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

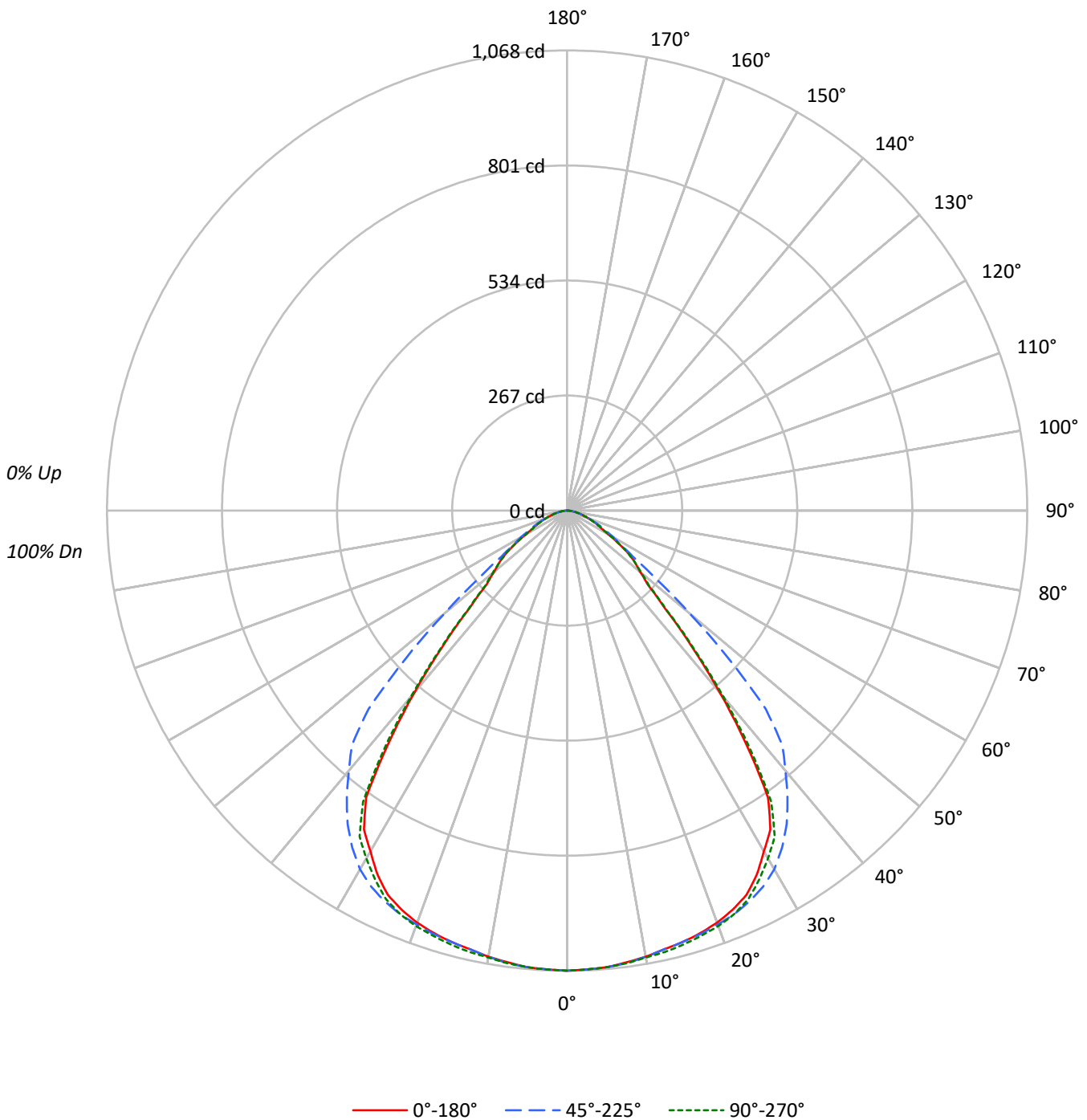
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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° | 45979 | 45979 | 45979 |
| 5° | 45973 | 45973 | 45973 |
| 10° | 45958 | 45958 | 46050 |
| 15° | 46206 | 46206 | 46482 |
| 20° | 46634 | 46827 | 47015 |
| 25° | 46761 | 47559 | 47260 |
| 30° | 45406 | 47792 | 46341 |
| 35° | 42732 | 46685 | 43389 |
| 40° | 31008 | 44284 | 31717 |
| 45° | 19473 | 39700 | 19850 |
| 50° | 14837 | 24918 | 15118 |
| 55° | 13024 | 13962 | 13024 |
| 60° | 9541 | 10618 | 9541 |
| 65° | 7875 | 8517 | 7875 |
| 70° | 6571 | 6836 | 6571 |
| 75° | 5556 | 5556 | 5556 |
| 80° | 4661 | 4661 | 4661 |
| 85° | 4150 | 4150 | 4150 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 101.1 | 5.0 |
| 10°-20° | 293.8 | 14.6 |
| 20°-30° | 457.1 | 22.6 |
| 30°-40° | 522.4 | 25.9 |
| 40°-50° | 349.5 | 17.3 |
| 50°-60° | 167.3 | 8.3 |
| 60°-70° | 81.5 | 4.0 |
| 70°-80° | 36.7 | 1.8 |
| 80°-90° | 9.4 | 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° | 852.1 | 42.2 |
| 0°-40° | 1374.5 | 68.1 |
| 0°-60° | 1891.2 | 93.7 |
| 0°-90° | 2018.8 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2018.8 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 1068 | 1068 | 1068 | 1068 | 1068 | |
| 5° | 1064 | 1064 | 1064 | 1064 | 1064 | 101 |
| 15° | 1037 | 1037 | 1037 | 1041 | 1043 | 293 |
| 25° | 984 | 991 | 1001 | 999 | 995 | 451 |
| 35° | 813 | 859 | 888 | 872 | 826 | 483 |
| 45° | 320 | 412 | 652 | 418 | 326 | 265 |
| 55° | 174 | 186 | 186 | 188 | 174 | 151 |
| 65° | 77 | 79 | 84 | 79 | 77 | 77 |
| 75° | 33 | 33 | 33 | 33 | 33 | 36 |
| 85° | 8 | 8 | 8 | 8 | 8 | 9 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P253050

CATALOG NUMBER: PRS620D010-S6M12-61SWDC-3000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|--------|--------|--------|--------|--------|
| 0° | 1067.9 | 1067.9 | 1067.9 | 1067.9 | 1067.9 |
| 2.5° | 1065.8 | 1065.8 | 1065.8 | 1065.8 | 1065.8 |
| 5° | 1063.7 | 1063.7 | 1063.7 | 1063.7 | 1063.7 |
| 7.5° | 1057.5 | 1057.5 | 1059.6 | 1057.5 | 1059.6 |
| 10° | 1051.2 | 1051.2 | 1051.2 | 1053.3 | 1053.3 |
| 12.5° | 1042.8 | 1042.8 | 1042.8 | 1047.0 | 1049.1 |
| 15° | 1036.6 | 1036.6 | 1036.6 | 1040.8 | 1042.8 |
| 17.5° | 1028.2 | 1028.2 | 1030.3 | 1034.5 | 1034.5 |
| 20° | 1017.8 | 1019.9 | 1022.0 | 1026.1 | 1026.1 |
| 22.5° | 1003.1 | 1007.3 | 1013.6 | 1015.7 | 1013.6 |
| 25° | 984.3 | 990.6 | 1001.1 | 999.0 | 994.8 |
| 27.5° | 953.0 | 967.6 | 984.3 | 976.0 | 965.5 |
| 30° | 913.3 | 936.3 | 961.3 | 944.6 | 932.1 |
| 32.5° | 877.7 | 896.6 | 927.9 | 909.1 | 896.6 |
| 35° | 813.0 | 858.9 | 888.2 | 871.5 | 825.5 |
| 37.5° | 681.3 | 783.7 | 840.1 | 796.2 | 698.0 |
| 40° | 551.7 | 660.4 | 787.9 | 668.8 | 564.3 |
| 42.5° | 428.4 | 532.9 | 739.8 | 541.3 | 436.8 |
| 45° | 319.8 | 411.7 | 652.0 | 418.0 | 326.0 |
| 47.5° | 252.9 | 305.1 | 507.8 | 311.4 | 257.1 |
| 50° | 221.5 | 242.4 | 372.0 | 246.6 | 225.7 |
| 52.5° | 198.5 | 211.1 | 259.1 | 213.2 | 198.5 |
| 55° | 173.5 | 186.0 | 186.0 | 188.1 | 173.5 |
| 57.5° | 140.0 | 158.8 | 146.3 | 158.8 | 142.1 |
| 60° | 110.8 | 125.4 | 123.3 | 125.4 | 110.8 |
| 62.5° | 89.9 | 98.2 | 100.3 | 98.2 | 89.9 |
| 65° | 77.3 | 79.4 | 83.6 | 79.4 | 77.3 |
| 67.5° | 64.8 | 66.9 | 66.9 | 66.9 | 62.7 |
| 70° | 52.2 | 54.3 | 54.3 | 54.3 | 52.2 |
| 72.5° | 41.8 | 43.9 | 43.9 | 43.9 | 41.8 |
| 75° | 33.4 | 33.4 | 33.4 | 33.4 | 33.4 |
| 77.5° | 25.1 | 27.2 | 25.1 | 27.2 | 25.1 |
| 80° | 18.8 | 18.8 | 18.8 | 18.8 | 18.8 |
| 82.5° | 12.5 | 12.5 | 12.5 | 12.5 | 12.5 |
| 85° | 8.4 | 8.4 | 8.4 | 8.4 | 8.4 |
| 87.5° | 4.2 | 4.2 | 4.2 | 4.2 | 4.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)