

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: P238275

Luminaire Tested: **PRS620D010-S6M12-61SNDC-4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P238275
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1802-584-22)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PRS620D010-S6M12-61SNDC-4000K
Description: HALO COMMERCIAL 6" SQUARE, NEW CONSTRUCTION FRAME, WITH 6" NARROW DISTRIBUTION, DEEP TRIM SPECULAR
Light Source: ARRAYS OF HIGH LUMEN LEDS 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2374.2 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.79 / 0.8 / 0.81
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

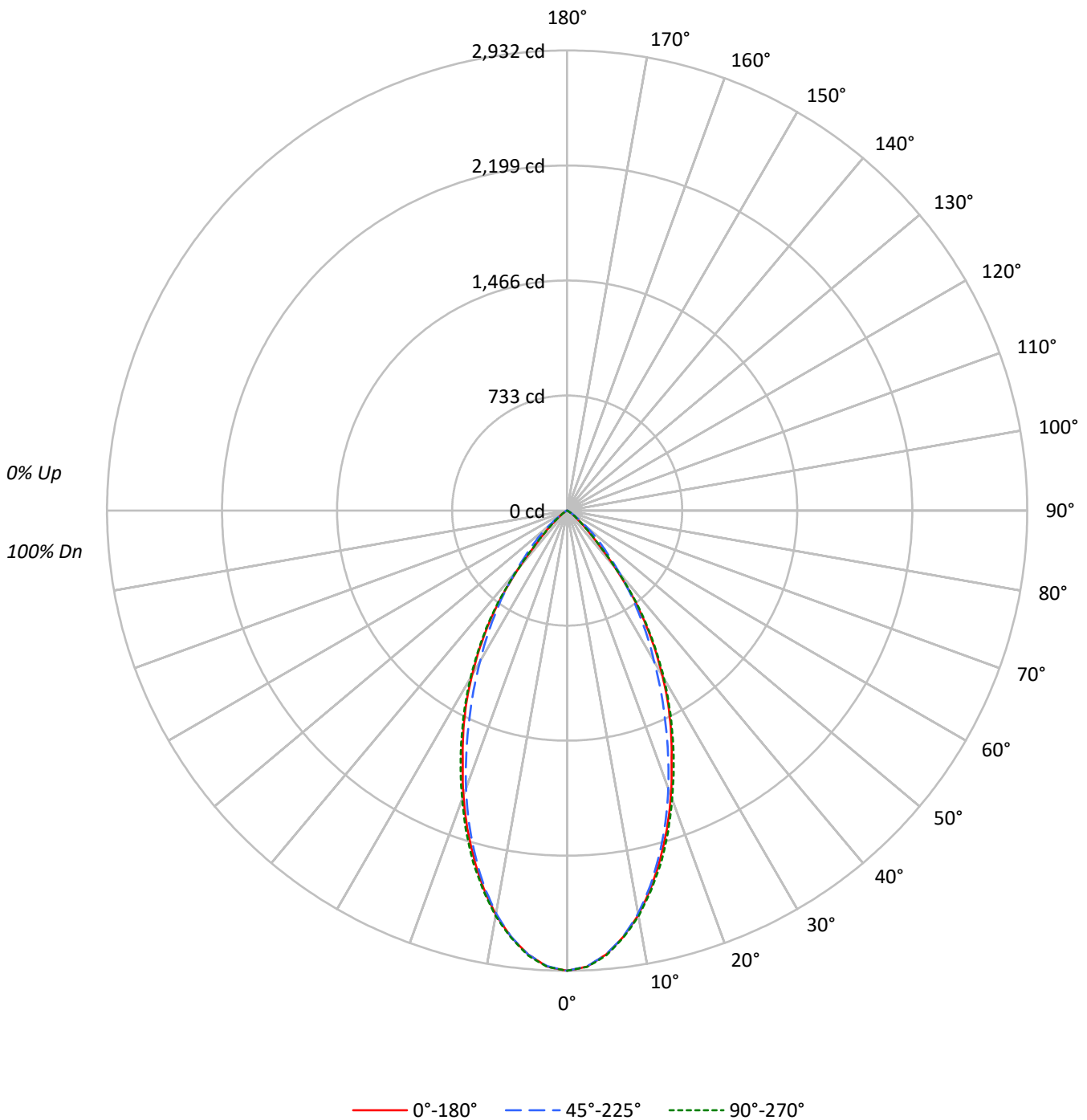
Input Watts (W): 20
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 113 | 111 | 108 | 106 | 111 | 108 | 106 | 104 | 104 | 103 | 101 | 101 | 99 | 98 | 97 | 96 | 95 | 93 | | | | | 93 | | | |
| 2 | 108 | 103 | 99 | 95 | 105 | 101 | 97 | 94 | 98 | 95 | 92 | 95 | 92 | 90 | 92 | 90 | 88 | 87 | | | | | 87 | | | |
| 3 | 102 | 96 | 91 | 86 | 100 | 94 | 90 | 86 | 92 | 88 | 84 | 89 | 86 | 83 | 87 | 84 | 82 | 80 | | | | | 80 | | | |
| 4 | 97 | 89 | 83 | 79 | 95 | 88 | 83 | 79 | 86 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 76 | 74 | | | | | 74 | | | |
| 5 | 92 | 83 | 77 | 73 | 90 | 82 | 77 | 73 | 80 | 76 | 72 | 79 | 75 | 71 | 77 | 74 | 71 | 69 | | | | | 69 | | | |
| 6 | 87 | 78 | 72 | 67 | 86 | 77 | 71 | 67 | 76 | 71 | 67 | 74 | 70 | 66 | 73 | 69 | 66 | 64 | | | | | 64 | | | |
| 7 | 83 | 73 | 67 | 63 | 81 | 72 | 67 | 63 | 71 | 66 | 62 | 70 | 65 | 62 | 69 | 65 | 62 | 60 | | | | | 60 | | | |
| 8 | 79 | 69 | 63 | 59 | 77 | 68 | 62 | 58 | 67 | 62 | 58 | 66 | 61 | 58 | 65 | 61 | 58 | 56 | | | | | 56 | | | |
| 9 | 75 | 65 | 59 | 55 | 74 | 64 | 59 | 55 | 63 | 58 | 55 | 63 | 58 | 54 | 62 | 57 | 54 | 53 | | | | | 53 | | | |
| 10 | 71 | 61 | 55 | 52 | 70 | 61 | 55 | 51 | 60 | 55 | 51 | 59 | 55 | 51 | 59 | 54 | 51 | 50 | | | | | 50 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|--------|--------|--------|
| 0° | 126235 | 126235 | 126235 |
| 5° | 122706 | 122706 | 122987 |
| 10° | 114314 | 113938 | 114695 |
| 15° | 102316 | 101166 | 103279 |
| 20° | 88568 | 86295 | 89558 |
| 25° | 74509 | 70205 | 75536 |
| 30° | 60276 | 55021 | 61350 |
| 35° | 44903 | 41618 | 46038 |
| 40° | 26917 | 29103 | 27040 |
| 45° | 12482 | 18785 | 12610 |
| 50° | 6069 | 10550 | 6069 |
| 55° | 3235 | 4369 | 3235 |
| 60° | 1111 | 1860 | 1111 |
| 65° | 0 | 662 | 0 |
| 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° | 263.9 | 11.1 |
| 10°-20° | 635.8 | 26.8 |
| 20°-30° | 698.8 | 29.4 |
| 30°-40° | 512.8 | 21.6 |
| 40°-50° | 208.5 | 8.8 |
| 50°-60° | 50.1 | 2.1 |
| 60°-70° | 4.3 | 0.2 |
| 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° | 1598.4 | 67.3 |
| 0°-40° | 2111.3 | 88.9 |
| 0°-60° | 2369.9 | 99.8 |
| 0°-90° | 2374.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2374.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|------|-------|------|-------|------|------|
| 0° | 2932 | 2932 | 2932 | 2932 | 2932 | |
| 5° | 2839 | 2841 | 2839 | 2846 | 2846 | 264 |
| 15° | 2295 | 2287 | 2270 | 2291 | 2317 | 639 |
| 25° | 1568 | 1512 | 1478 | 1534 | 1590 | 716 |
| 35° | 854 | 813 | 792 | 828 | 876 | 526 |
| 45° | 205 | 244 | 308 | 248 | 207 | 178 |
| 55° | 43 | 52 | 58 | 52 | 43 | 40 |
| 65° | 0 | 0 | 6 | 0 | 0 | 2 |
| 75° | 0 | 0 | 0 | 0 | 0 | 0 |
| 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° | 2931.9 | 2931.9 | 2931.9 | 2931.9 | 2931.9 |
| 2.5° | 2908.1 | 2908.1 | 2906.0 | 2908.1 | 2910.3 |
| 5° | 2839.1 | 2841.3 | 2839.1 | 2845.6 | 2845.6 |
| 7.5° | 2739.9 | 2735.5 | 2737.7 | 2746.3 | 2744.2 |
| 10° | 2614.7 | 2608.3 | 2606.1 | 2614.7 | 2623.4 |
| 12.5° | 2463.7 | 2452.9 | 2448.6 | 2461.6 | 2474.5 |
| 15° | 2295.4 | 2286.8 | 2269.6 | 2291.1 | 2317.0 |
| 17.5° | 2118.5 | 2101.3 | 2081.9 | 2109.9 | 2140.1 |
| 20° | 1933.0 | 1902.8 | 1883.4 | 1917.9 | 1954.6 |
| 22.5° | 1738.8 | 1706.5 | 1680.6 | 1728.1 | 1773.4 |
| 25° | 1568.4 | 1512.3 | 1477.8 | 1533.9 | 1590.0 |
| 27.5° | 1393.7 | 1333.3 | 1292.3 | 1350.5 | 1410.9 |
| 30° | 1212.4 | 1152.0 | 1106.7 | 1173.6 | 1234.0 |
| 32.5° | 1033.4 | 979.4 | 949.2 | 996.7 | 1048.5 |
| 35° | 854.3 | 813.3 | 791.8 | 828.4 | 875.9 |
| 37.5° | 670.9 | 658.0 | 651.5 | 668.8 | 690.4 |
| 40° | 478.9 | 511.3 | 517.8 | 519.9 | 481.1 |
| 42.5° | 317.1 | 362.4 | 399.1 | 368.9 | 321.4 |
| 45° | 205.0 | 243.8 | 308.5 | 248.1 | 207.1 |
| 47.5° | 131.6 | 161.8 | 230.8 | 164.0 | 133.8 |
| 50° | 90.6 | 107.9 | 157.5 | 107.9 | 90.6 |
| 52.5° | 62.6 | 73.4 | 99.2 | 73.4 | 64.7 |
| 55° | 43.1 | 51.8 | 58.2 | 51.8 | 43.1 |
| 57.5° | 25.9 | 32.4 | 34.5 | 32.4 | 25.9 |
| 60° | 12.9 | 19.4 | 21.6 | 19.4 | 12.9 |
| 62.5° | 0.0 | 6.5 | 12.9 | 6.5 | 0.0 |
| 65° | 0.0 | 0.0 | 6.5 | 0.0 | 0.0 |
| 67.5° | 0.0 | 0.0 | 2.2 | 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)