

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: P303655

Luminaire Tested: **PR6FS12D010 PR6M12WW9FSMMS 2000Lm4000K**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P303655
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1903-195-8)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO COMMERCIAL
Catalog Number: PR6FS12D010 PR6M12WW9FSMMS 2000Lm4000K
Description: PR6 WALLWASH ASSEMBLY WITH, MATTE METALLIC SILVER FINISH
Light Source: ARRAY OF HIGH LUMEN LEDs 90CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1549.4 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 1.13 / 1.11
Luminous Opening: Circular (Dia: 0.46' x H: 0')
CIE Type: Direct

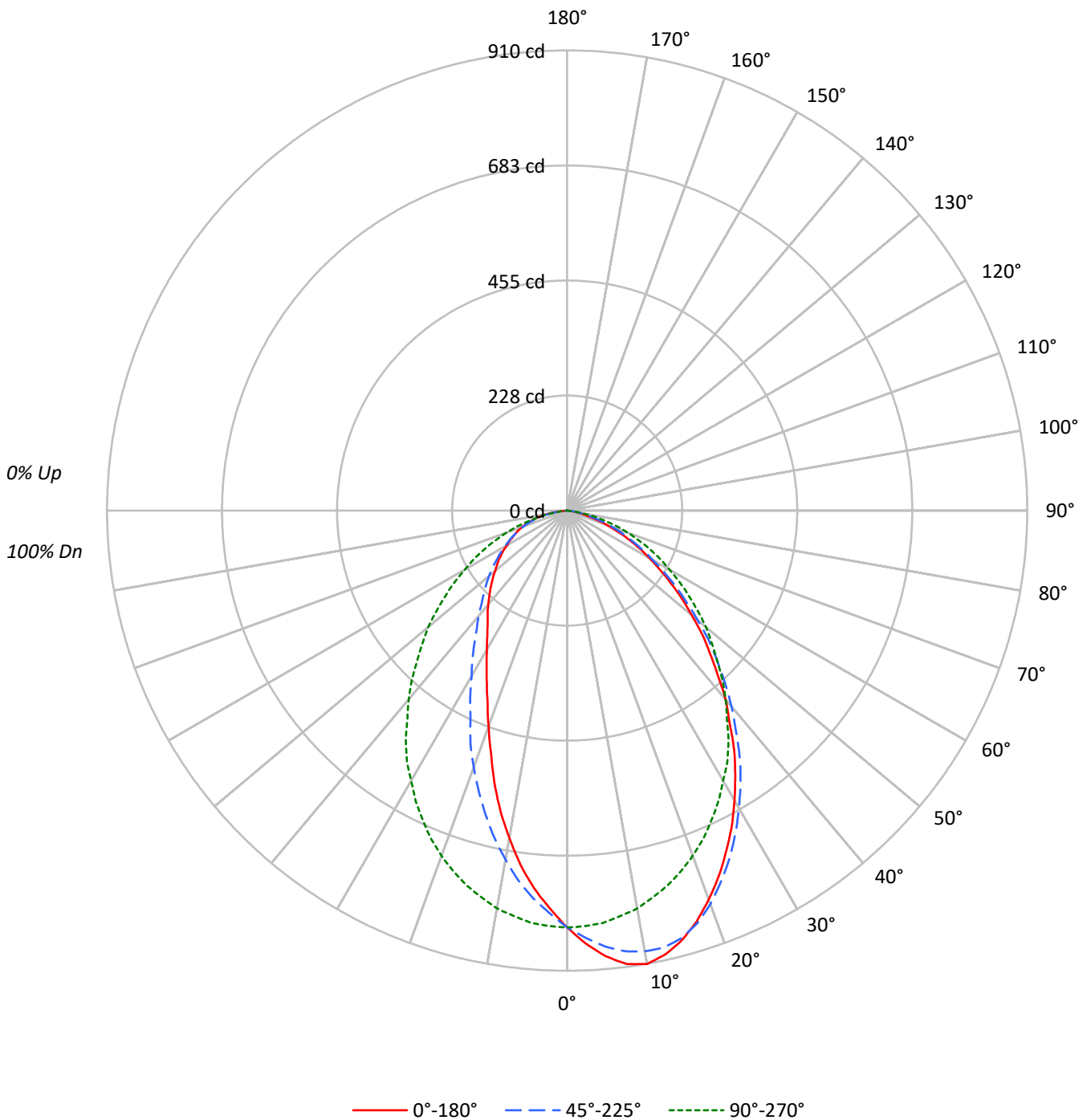
Input Watts (W): 22
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 110 | 106 | 103 | 99 | 108 | 104 | 101 | 98 | 100 | 97 | 95 | 96 | 94 | 92 | 92 | 91 | 89 | 87 | | | | | 87 | | | |
| 2 | 102 | 94 | 88 | 83 | 99 | 92 | 87 | 82 | 89 | 84 | 80 | 86 | 82 | 79 | 83 | 80 | 77 | 75 | | | | | 75 | | | |
| 3 | 94 | 84 | 77 | 71 | 91 | 83 | 76 | 70 | 80 | 74 | 69 | 77 | 72 | 68 | 75 | 70 | 67 | 65 | | | | | 65 | | | |
| 4 | 86 | 76 | 68 | 62 | 84 | 74 | 67 | 61 | 72 | 65 | 60 | 70 | 64 | 60 | 68 | 63 | 59 | 57 | | | | | 57 | | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 58 | 53 | 63 | 57 | 53 | 62 | 56 | 52 | 50 | | | | | 50 | | | |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 59 | 53 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 | | | | | 45 | | | |
| 7 | 69 | 57 | 49 | 43 | 68 | 56 | 48 | 43 | 55 | 48 | 43 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | | | | 40 | | | |
| 8 | 65 | 52 | 44 | 39 | 63 | 52 | 44 | 39 | 50 | 43 | 39 | 49 | 43 | 38 | 48 | 42 | 38 | 36 | | | | | 36 | | | |
| 9 | 61 | 48 | 41 | 35 | 60 | 48 | 40 | 35 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 35 | 33 | | | | | 33 | | | |
| 10 | 57 | 45 | 37 | 33 | 56 | 44 | 37 | 32 | 43 | 37 | 32 | 43 | 36 | 32 | 42 | 36 | 32 | 30 | | | | | 30 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|-------|
| 0° | 53778 | 53778 | 53778 |
| 5° | 57959 | 53597 | 49111 |
| 10° | 60318 | 52925 | 43584 |
| 15° | 59376 | 51839 | 37560 |
| 20° | 56820 | 50432 | 31541 |
| 25° | 53557 | 48626 | 27059 |
| 30° | 49856 | 46466 | 23896 |
| 35° | 45843 | 44290 | 21830 |
| 40° | 41518 | 41518 | 20678 |
| 45° | 36850 | 38659 | 19689 |
| 50° | 32590 | 36366 | 18878 |
| 55° | 28504 | 33406 | 18483 |
| 60° | 24530 | 30402 | 17889 |
| 65° | 20547 | 27802 | 17830 |
| 70° | 16061 | 24283 | 17931 |
| 75° | 10864 | 19258 | 17267 |
| 80° | 6612 | 11760 | 15442 |
| 85° | 1497 | 1497 | 4416 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.2 | 5.0 |
| 10°-20° | 208.9 | 13.5 |
| 20°-30° | 282.2 | 18.2 |
| 30°-40° | 296.6 | 19.1 |
| 40°-50° | 265.4 | 17.1 |
| 50°-60° | 207.0 | 13.4 |
| 60°-70° | 137.7 | 8.9 |
| 70°-80° | 65.9 | 4.3 |
| 80°-90° | 8.5 | 0.6 |
| 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° | 568.3 | 36.7 |
| 0°-40° | 864.9 | 55.8 |
| 0°-60° | 1337.4 | 86.3 |
| 0°-90° | 1549.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1549.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|-----|-----|-----|------|------|------|
| 0° | 824 | 824 | 824 | 824 | 824 | |
| 5° | 885 | 865 | 818 | 770 | 750 | 85 |
| 15° | 879 | 875 | 768 | 623 | 556 | 246 |
| 25° | 744 | 760 | 676 | 452 | 376 | 342 |
| 35° | 576 | 595 | 556 | 319 | 274 | 358 |
| 45° | 399 | 419 | 419 | 233 | 213 | 309 |
| 55° | 251 | 262 | 294 | 170 | 162 | 225 |
| 65° | 133 | 141 | 180 | 118 | 116 | 133 |
| 75° | 43 | 53 | 76 | 65 | 68 | 49 |
| 85° | 2 | 2 | 2 | 4 | 6 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P303655

CATALOG NUMBER: PR6FS12D010 PR6M12WW9FSMMS 2000Lm4000K

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° | 112.5° | 135° | 157.5° | 180° |
|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| 0° | 824.3 | 824.3 | 824.3 | 824.3 | 824.3 | 824.3 | 824.3 | 824.3 | 824.3 |
| 2.5° | 857.6 | 853.7 | 845.8 | 836.1 | 822.4 | 808.6 | 796.9 | 791.0 | 787.1 |
| 5° | 885.0 | 879.1 | 865.4 | 843.9 | 818.4 | 793.0 | 769.5 | 755.8 | 749.9 |
| 7.5° | 904.6 | 896.8 | 879.1 | 847.8 | 808.6 | 771.4 | 738.2 | 712.7 | 706.8 |
| 10° | 910.5 | 904.6 | 885.0 | 849.8 | 798.9 | 747.9 | 701.0 | 669.6 | 657.9 |
| 12.5° | 898.7 | 898.7 | 885.0 | 843.9 | 783.2 | 720.5 | 663.8 | 622.6 | 608.9 |
| 15° | 879.1 | 877.2 | 875.2 | 836.1 | 767.5 | 691.2 | 622.6 | 575.6 | 556.1 |
| 17.5° | 851.7 | 851.7 | 855.6 | 822.4 | 747.9 | 659.8 | 581.5 | 524.7 | 501.2 |
| 20° | 818.4 | 822.4 | 828.2 | 806.7 | 726.4 | 630.5 | 540.4 | 475.8 | 454.3 |
| 22.5° | 783.2 | 785.2 | 794.9 | 785.2 | 702.9 | 595.2 | 499.3 | 428.8 | 411.2 |
| 25° | 744.0 | 749.9 | 759.7 | 757.7 | 675.5 | 561.9 | 452.3 | 391.6 | 375.9 |
| 27.5° | 704.9 | 710.7 | 720.5 | 730.3 | 648.1 | 528.7 | 415.1 | 358.3 | 344.6 |
| 30° | 661.8 | 665.7 | 679.4 | 693.1 | 616.8 | 491.5 | 377.9 | 330.9 | 317.2 |
| 32.5° | 618.7 | 624.6 | 638.3 | 655.9 | 589.4 | 458.2 | 348.5 | 305.4 | 293.7 |
| 35° | 575.6 | 579.6 | 595.2 | 616.8 | 556.1 | 424.9 | 319.2 | 283.9 | 274.1 |
| 37.5° | 526.7 | 532.6 | 548.2 | 573.7 | 518.9 | 391.6 | 293.7 | 264.3 | 258.5 |
| 40° | 487.5 | 489.5 | 505.2 | 532.6 | 487.5 | 360.3 | 272.2 | 248.7 | 242.8 |
| 42.5° | 440.5 | 446.4 | 462.1 | 493.4 | 454.3 | 325.0 | 250.6 | 231.0 | 227.1 |
| 45° | 399.4 | 403.3 | 419.0 | 452.3 | 419.0 | 297.6 | 233.0 | 217.3 | 213.4 |
| 47.5° | 362.2 | 360.3 | 379.8 | 411.2 | 387.7 | 268.2 | 217.3 | 201.7 | 199.7 |
| 50° | 321.1 | 321.1 | 336.8 | 372.0 | 358.3 | 244.7 | 201.7 | 189.9 | 186.0 |
| 52.5° | 285.9 | 283.9 | 297.6 | 336.8 | 325.0 | 221.3 | 186.0 | 176.2 | 174.3 |
| 55° | 250.6 | 252.6 | 262.4 | 299.6 | 293.7 | 199.7 | 170.3 | 164.5 | 162.5 |
| 57.5° | 217.3 | 219.3 | 227.1 | 262.4 | 264.3 | 180.1 | 156.6 | 150.8 | 150.8 |
| 60° | 188.0 | 188.0 | 195.8 | 229.1 | 233.0 | 160.6 | 142.9 | 139.0 | 137.1 |
| 62.5° | 160.6 | 160.6 | 168.4 | 195.8 | 207.5 | 142.9 | 129.2 | 127.3 | 127.3 |
| 65° | 133.1 | 135.1 | 141.0 | 166.4 | 180.1 | 127.3 | 117.5 | 117.5 | 115.5 |
| 67.5° | 107.7 | 109.6 | 117.5 | 141.0 | 152.7 | 111.6 | 103.8 | 105.7 | 105.7 |
| 70° | 84.2 | 88.1 | 95.9 | 111.6 | 127.3 | 94.0 | 92.0 | 94.0 | 94.0 |
| 72.5° | 62.7 | 66.6 | 74.4 | 88.1 | 101.8 | 78.3 | 78.3 | 80.3 | 82.2 |
| 75° | 43.1 | 45.0 | 52.9 | 64.6 | 76.4 | 62.7 | 64.6 | 68.5 | 68.5 |
| 77.5° | 29.4 | 31.3 | 35.2 | 43.1 | 52.9 | 47.0 | 50.9 | 54.8 | 56.8 |
| 80° | 17.6 | 17.6 | 21.5 | 25.5 | 31.3 | 31.3 | 35.2 | 39.2 | 41.1 |
| 82.5° | 7.8 | 7.8 | 9.8 | 11.7 | 13.7 | 15.7 | 19.6 | 19.6 | 21.5 |
| 85° | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 | 3.9 | 3.9 | 3.9 | 5.9 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)