

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

Report Number: P14161

Luminaire Tested: **L80228040**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P14161
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L80228040
Description: HALO SPAN LED WALL WASH WITH 0 DEG TILT
Light Source: [49] 4000K LEDS
Ballast/Driver: [1] ELECTRONIC DRIVER

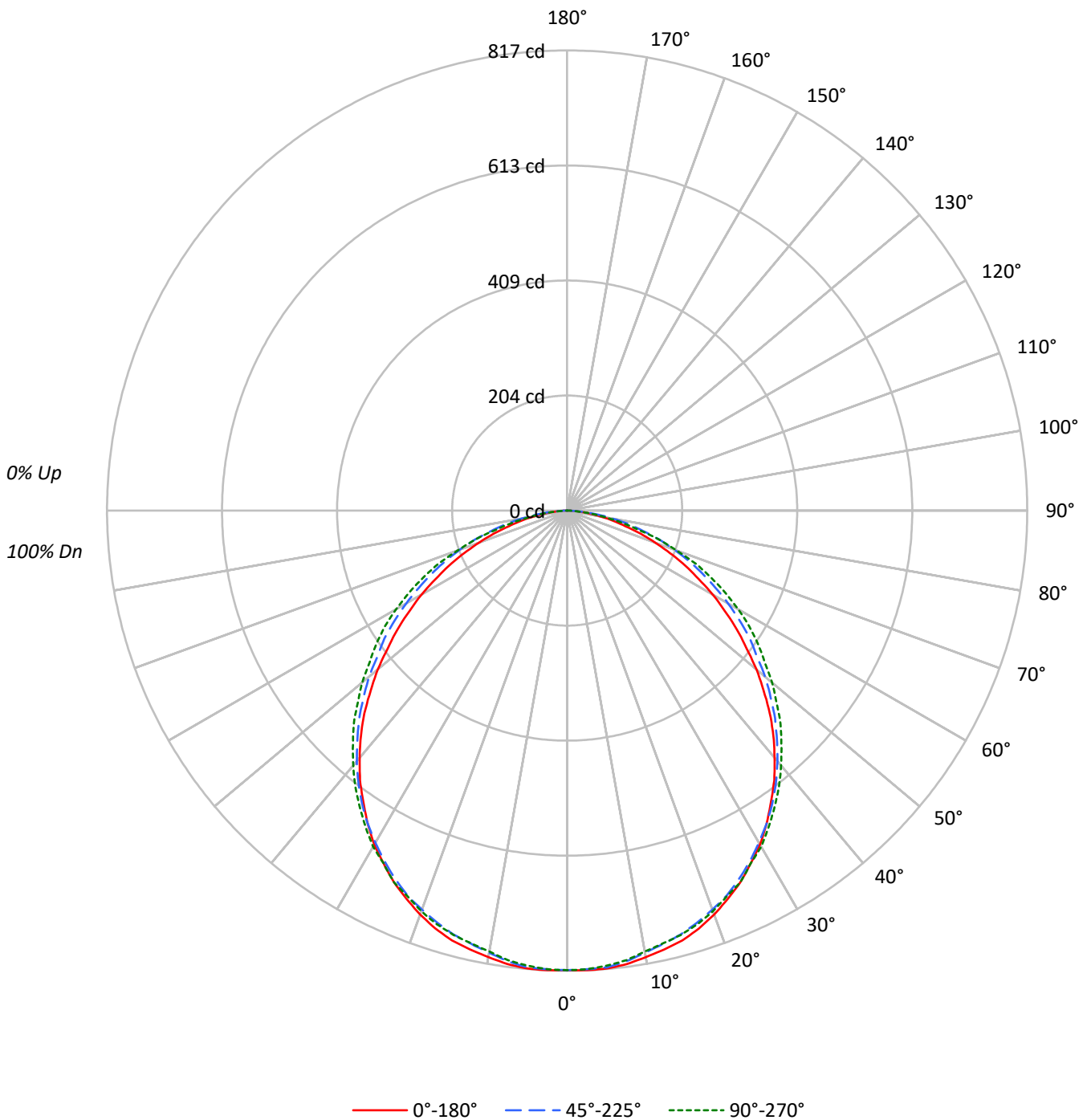
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2212.5 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.25 / 1.35
Luminous Opening: Rectangular (W 0.32' x L: 1.88' x H: 0')
CIE Type: Direct

Input Watts (W): 24.9
Input Voltage (V): NR
Input Current (Ain): 0.20889
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: 3 HR
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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 95 | 98 | 95 | 92 | 94 | 91 | 89 | 90 | 88 | 86 | 84 |
| 2 | 99 | 91 | 85 | 79 | 97 | 89 | 83 | 78 | 86 | 81 | 76 | 83 | 78 | 74 | 79 | 76 | 73 | 71 |
| 3 | 91 | 80 | 72 | 66 | 88 | 79 | 71 | 65 | 76 | 69 | 64 | 73 | 67 | 63 | 70 | 66 | 62 | 60 |
| 4 | 83 | 71 | 63 | 56 | 81 | 70 | 62 | 55 | 67 | 60 | 55 | 65 | 59 | 54 | 63 | 58 | 53 | 51 |
| 5 | 76 | 64 | 55 | 48 | 74 | 63 | 54 | 48 | 60 | 53 | 47 | 58 | 52 | 47 | 57 | 51 | 46 | 44 |
| 6 | 71 | 57 | 49 | 42 | 69 | 56 | 48 | 42 | 55 | 47 | 42 | 53 | 46 | 41 | 51 | 45 | 41 | 39 |
| 7 | 66 | 52 | 43 | 37 | 64 | 51 | 43 | 37 | 50 | 42 | 37 | 48 | 42 | 37 | 47 | 41 | 36 | 34 |
| 8 | 61 | 48 | 39 | 33 | 59 | 47 | 39 | 33 | 46 | 38 | 33 | 44 | 38 | 33 | 43 | 37 | 33 | 31 |
| 9 | 57 | 44 | 35 | 30 | 56 | 43 | 35 | 30 | 42 | 35 | 30 | 41 | 34 | 30 | 40 | 34 | 29 | 28 |
| 10 | 53 | 40 | 32 | 27 | 52 | 40 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 27 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-------|-------|-------|
| 0° | 14507 | 14507 | 14507 |
| 5° | 14562 | 14526 | 14473 |
| 10° | 14532 | 14387 | 14351 |
| 15° | 14540 | 14337 | 14356 |
| 20° | 14435 | 14265 | 14321 |
| 25° | 14280 | 14162 | 14280 |
| 30° | 14062 | 13980 | 14144 |
| 35° | 13694 | 13781 | 13933 |
| 40° | 13298 | 13483 | 13715 |
| 45° | 12797 | 13124 | 13476 |
| 50° | 12142 | 12695 | 13137 |
| 55° | 11406 | 12274 | 12832 |
| 60° | 10631 | 11733 | 12480 |
| 65° | 9759 | 11147 | 11863 |
| 70° | 8628 | 10500 | 10708 |
| 75° | 7350 | 9548 | 8929 |
| 80° | 6143 | 8395 | 7064 |
| 85° | 4895 | 6731 | 5099 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 77.2 | 3.5 |
| 10°-20° | 220.5 | 10.0 |
| 20°-30° | 333.1 | 15.1 |
| 30°-40° | 396.9 | 17.9 |
| 40°-50° | 401.8 | 18.2 |
| 50°-60° | 350.8 | 15.9 |
| 60°-70° | 258.7 | 11.7 |
| 70°-80° | 139.1 | 6.3 |
| 80°-90° | 34.4 | 1.6 |
| 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° | 630.8 | 28.5 |
| 0°-40° | 1027.7 | 46.4 |
| 0°-60° | 1780.3 | 80.5 |
| 0°-90° | 2212.5 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2212.5 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 816 | 816 | 816 | 816 | 816 | |
| 5° | 816 | 816 | 814 | 812 | 811 | 78 |
| 15° | 790 | 785 | 779 | 778 | 780 | 223 |
| 25° | 728 | 721 | 722 | 725 | 728 | 335 |
| 35° | 631 | 628 | 635 | 637 | 642 | 395 |
| 45° | 509 | 511 | 522 | 533 | 536 | 392 |
| 55° | 368 | 377 | 396 | 410 | 414 | 329 |
| 65° | 232 | 244 | 265 | 281 | 282 | 229 |
| 75° | 107 | 121 | 139 | 136 | 130 | 116 |
| 85° | 24 | 32 | 33 | 27 | 25 | 29 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-----|-------|-----|-------|-----|
| 0° | 816 | 816 | 816 | 816 | 816 |
| 2.5° | 817 | 817 | 815 | 815 | 815 |
| 5° | 816 | 816 | 814 | 812 | 811 |
| 7.5° | 812 | 811 | 807 | 804 | 805 |
| 10° | 805 | 803 | 797 | 794 | 795 |
| 12.5° | 798 | 796 | 788 | 786 | 787 |
| 15° | 790 | 785 | 779 | 778 | 780 |
| 17.5° | 778 | 772 | 767 | 768 | 770 |
| 20° | 763 | 756 | 754 | 756 | 757 |
| 22.5° | 746 | 739 | 740 | 739 | 741 |
| 25° | 728 | 721 | 722 | 725 | 728 |
| 27.5° | 706 | 700 | 702 | 704 | 706 |
| 30° | 685 | 678 | 681 | 685 | 689 |
| 32.5° | 659 | 655 | 659 | 663 | 666 |
| 35° | 631 | 628 | 635 | 637 | 642 |
| 37.5° | 604 | 602 | 609 | 615 | 618 |
| 40° | 573 | 573 | 581 | 588 | 591 |
| 42.5° | 542 | 542 | 551 | 560 | 563 |
| 45° | 509 | 511 | 522 | 533 | 536 |
| 47.5° | 473 | 477 | 490 | 501 | 504 |
| 50° | 439 | 444 | 459 | 471 | 475 |
| 52.5° | 401 | 407 | 424 | 438 | 442 |
| 55° | 368 | 377 | 396 | 410 | 414 |
| 57.5° | 332 | 343 | 363 | 377 | 384 |
| 60° | 299 | 310 | 330 | 346 | 351 |
| 62.5° | 263 | 277 | 297 | 313 | 317 |
| 65° | 232 | 244 | 265 | 281 | 282 |
| 67.5° | 198 | 212 | 234 | 246 | 248 |
| 70° | 166 | 180 | 202 | 210 | 206 |
| 72.5° | 137 | 152 | 172 | 175 | 171 |
| 75° | 107 | 121 | 139 | 136 | 130 |
| 77.5° | 84 | 99 | 112 | 105 | 99 |
| 80° | 60 | 76 | 82 | 72 | 69 |
| 82.5° | 41 | 53 | 56 | 48 | 45 |
| 85° | 24 | 32 | 33 | 27 | 25 |
| 87.5° | 11 | 16 | 11 | 7 | 5 |
| 90° | 0 | 0 | 0 | 0 | 0 |

(END OF REPORT)