

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: P14198

Luminaire Tested: **L806SMSP8027 / L807SMSP8027**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P14198
Test Lab: INNOVATION CENTER-P1
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L806SMSP8027 / L807SMSP8027
Description: HALO LED 806/7 SMALL, NF, 2700K
Light Source: [5] 2700K LEDS
Ballast/Driver: [1] ELECTRONIC DRIVER

Summary

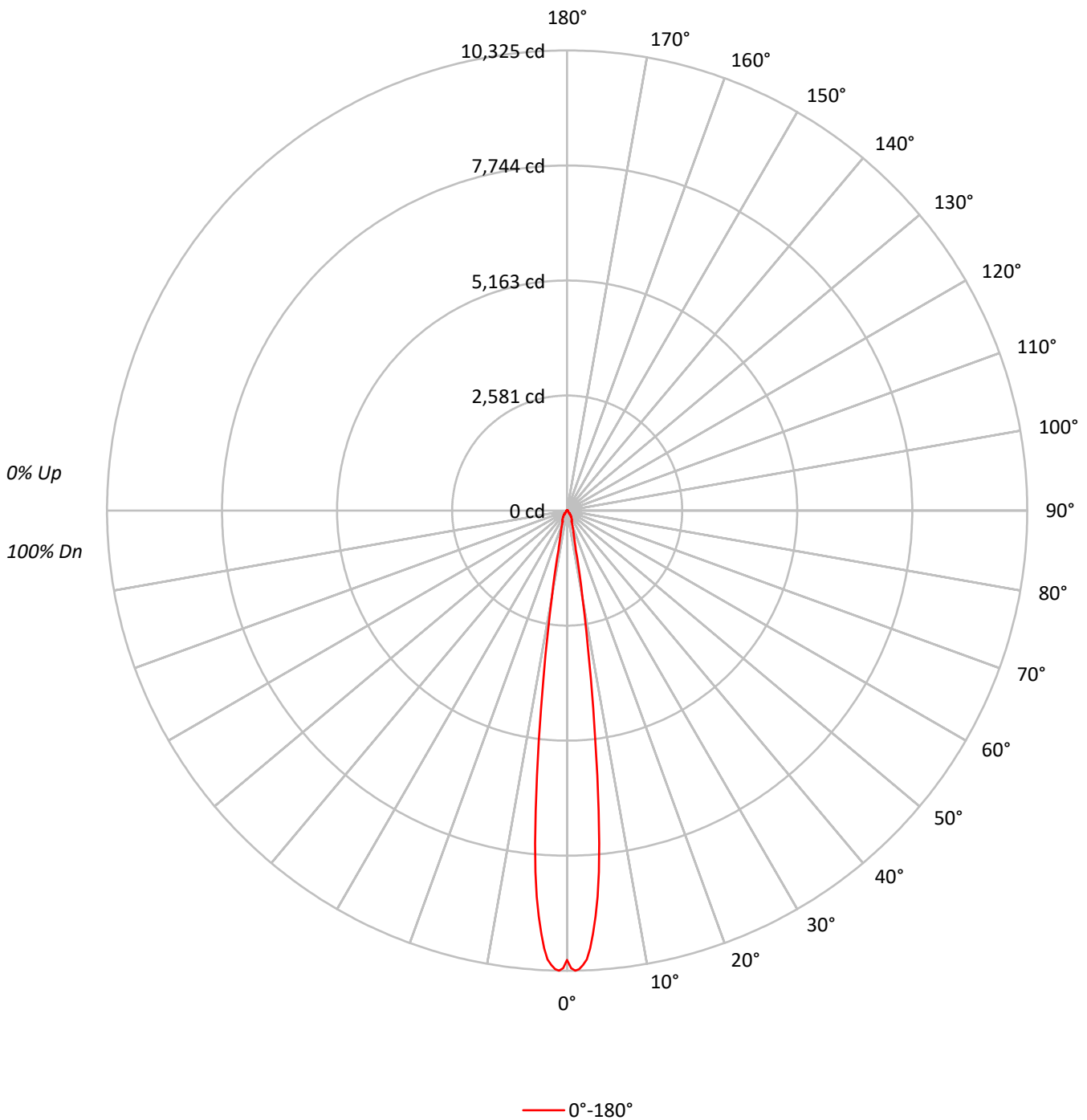
Lumens per Lamp: N/A
Luminaire Lumens: 975.9 lumens
Efficiency: N/A
Efficacy: 79.3 lumens/watt
Spacing Criteria (0/90/45): 0.25 / 0.25 / 0.23
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

Input Watts (W): 12.3
Input Voltage (V): NR
Input Current (Ain): 0.10263
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 | 115 | 113 | 111 | 109 | 113 | 111 | 109 | 107 | 107 | 105 | 104 | | 103 | 102 | 101 | | 100 | 99 | 98 | 97 |
| 2 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 103 | 101 | 99 | | 100 | 98 | 97 | | 97 | 96 | 95 | 93 |
| 3 | 108 | 103 | 99 | 97 | 106 | 102 | 98 | 96 | 99 | 97 | 94 | | 97 | 95 | 93 | | 95 | 93 | 91 | 90 |
| 4 | 104 | 99 | 95 | 92 | 103 | 98 | 94 | 92 | 96 | 93 | 91 | | 94 | 92 | 90 | | 93 | 90 | 89 | 88 |
| 5 | 102 | 96 | 92 | 89 | 100 | 95 | 91 | 88 | 93 | 90 | 88 | | 92 | 89 | 87 | | 90 | 88 | 86 | 85 |
| 6 | 99 | 93 | 89 | 86 | 98 | 92 | 88 | 86 | 91 | 88 | 85 | | 90 | 87 | 85 | | 88 | 86 | 84 | 83 |
| 7 | 96 | 90 | 86 | 83 | 95 | 90 | 86 | 83 | 89 | 85 | 83 | | 88 | 85 | 82 | | 87 | 84 | 82 | 81 |
| 8 | 94 | 88 | 84 | 81 | 93 | 87 | 84 | 81 | 87 | 83 | 81 | | 86 | 83 | 81 | | 85 | 82 | 80 | 79 |
| 9 | 92 | 86 | 82 | 79 | 91 | 85 | 82 | 79 | 85 | 81 | 79 | | 84 | 81 | 79 | | 83 | 81 | 79 | 78 |
| 10 | 90 | 84 | 80 | 78 | 90 | 84 | 80 | 78 | 83 | 80 | 77 | | 82 | 79 | 77 | | 82 | 79 | 77 | 76 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 4975239 |
| 5° | 4031946 |
| 10° | 989958 |
| 15° | 291147 |
| 20° | 174314 |
| 25° | 136640 |
| 30° | 110523 |
| 35° | 45173 |
| 40° | 48305 |
| 45° | 22328 |
| 50° | 5373 |
| 55° | 10322 |
| 60° | 10854 |
| 65° | 12842 |
| 70° | 21638 |
| 75° | 0 |
| 80° | 5683 |
| 85° | 5661 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 537.9 | 55.1 |
| 10°-20° | 192.6 | 19.7 |
| 20°-30° | 113.2 | 11.6 |
| 30°-40° | 75.6 | 7.7 |
| 40°-50° | 28.3 | 2.9 |
| 50°-60° | 14.8 | 1.5 |
| 60°-70° | 8.7 | 0.9 |
| 70°-80° | 3.8 | 0.4 |
| 80°-90° | 1.1 | 0.1 |
| 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° | 843.7 | 86.5 |
| 0°-40° | 919.3 | 94.2 |
| 0°-60° | 962.4 | 98.6 |
| 0°-90° | 975.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 975.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 10084 | |
| 5° | 8141 | 538 |
| 15° | 570 | 193 |
| 25° | 251 | 113 |
| 35° | 75 | 76 |
| 45° | 32 | 28 |
| 55° | 12 | 15 |
| 65° | 11 | 9 |
| 75° | 0 | 4 |
| 85° | 1 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|-------|
| 0° | 10084 |
| 0.5° | 10268 |
| 1° | 10325 |
| 1.5° | 10295 |
| 2° | 10207 |
| 2.5° | 10082 |
| 3° | 9839 |
| 3.5° | 9510 |
| 4° | 9132 |
| 4.5° | 8694 |
| 5° | 8141 |
| 5.5° | 7504 |
| 6° | 6772 |
| 7° | 5203 |
| 7.5° | 4469 |
| 8° | 3820 |
| 9° | 2732 |
| 10° | 1976 |
| 11° | 1455 |
| 12° | 1059 |
| 12.5° | 901 |
| 13° | 840 |
| 14° | 686 |
| 15° | 570 |
| 16° | 513 |
| 17° | 467 |
| 17.5° | 428 |
| 18° | 420 |
| 19° | 372 |
| 20° | 332 |
| 21° | 308 |
| 22° | 253 |
| 23° | 266 |
| 24° | 258 |
| 25° | 251 |
| 26° | 231 |
| 27° | 226 |
| 27.5° | 226 |
| 28° | 210 |
| 29° | 210 |
| 30° | 194 |
| 31° | 180 |
| 32° | 155 |
| 32.5° | 152 |
| 33° | 159 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|-------|-----|
| 34° | 135 |
| 35° | 75 |
| 36° | 80 |
| 37° | 118 |
| 37.5° | 94 |
| 38° | 94 |
| 39° | 104 |
| 40° | 75 |
| 41° | 87 |
| 42° | 59 |
| 42.5° | 44 |
| 43° | 45 |
| 44° | 38 |
| 45° | 32 |
| 46° | 25 |
| 47° | 10 |
| 47.5° | 28 |
| 48° | 21 |
| 49° | 16 |
| 50° | 7 |
| 52.5° | 27 |
| 55° | 12 |
| 57.5° | 18 |
| 60° | 11 |
| 62.5° | 9 |
| 65° | 11 |
| 67.5° | 2 |
| 70° | 15 |
| 72.5° | 1 |
| 75° | 0 |
| 77.5° | 5 |
| 80° | 2 |
| 82.5° | 0 |
| 85° | 1 |
| 87.5° | 2 |
| 90° | 0 |

(END OF REPORT)