

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: P328531

Luminaire Tested: **L815SML10NP930MB**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P328531
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-2)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L815SML10NP930MB
Description: Small, 1000lm, 8D, 3000K, black finish
Light Source: (1) 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

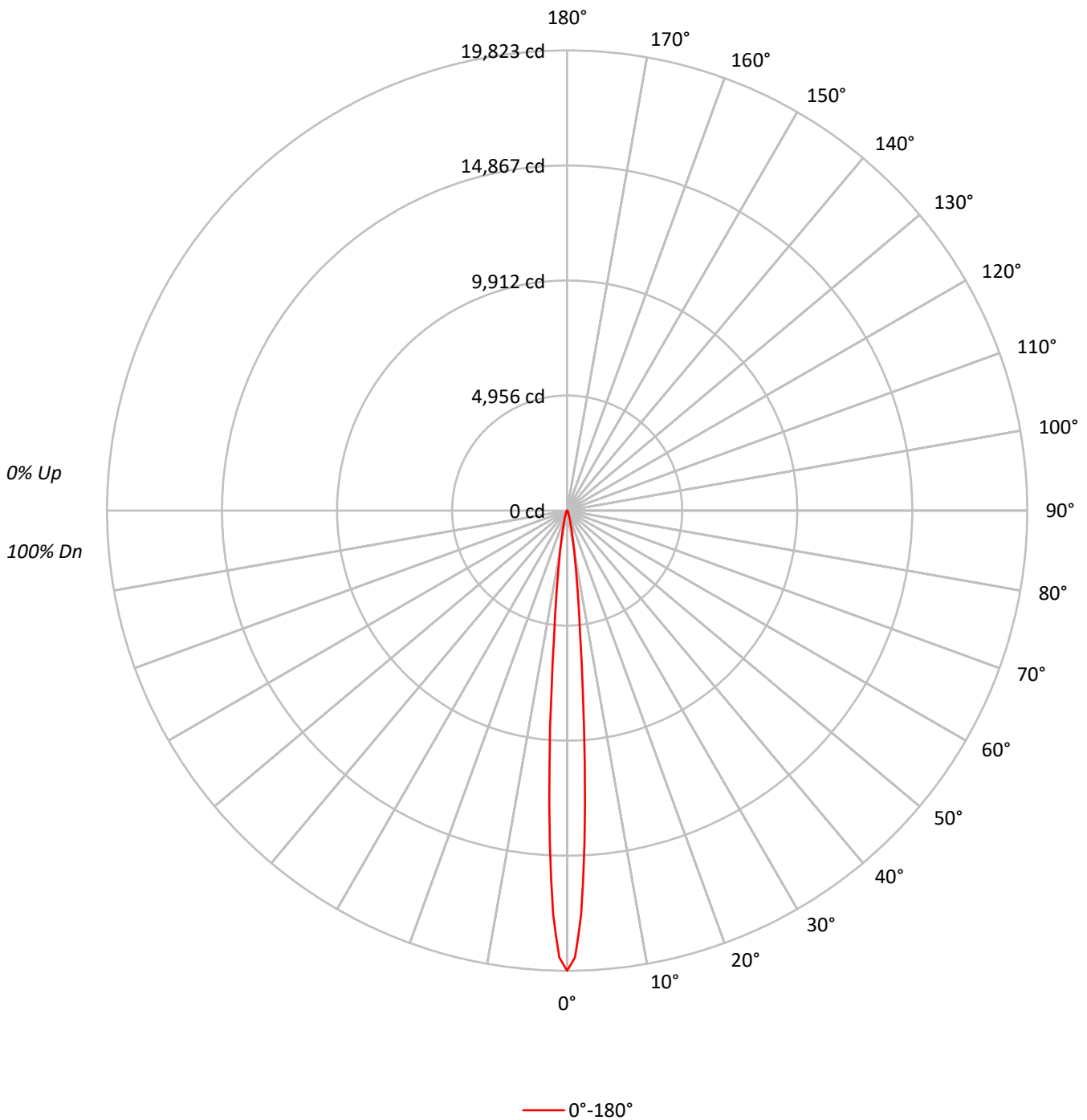
Lumens per Lamp: N/A
Luminaire Lumens: 858.1 lumens
Efficiency: N/A
Efficacy: 77.3 lumens/watt
Spacing Criteria (0/90/45): 0.15 / 0.15 / 0.15
Luminous Opening: Circular (Dia: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 11.1
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 | | | | | | | |
| RW | 70 | 50 | 30 | 10 | 70 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | 50 | 30 | 10 | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 111 | 106 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 100 | 100 | 100 | 100 |
| 1 | 116 | 114 | 112 | 111 | 113 | 112 | 110 | 109 | 108 | 107 | 105 | 105 | 104 | 103 | 102 | 102 | 101 | 100 | 99 | 99 | 98 | 98 | 98 | 98 |
| 2 | 112 | 109 | 107 | 104 | 110 | 108 | 105 | 103 | 105 | 103 | 101 | 101 | 102 | 100 | 99 | 99 | 99 | 98 | 97 | 97 | 96 | 96 | 96 | 96 |
| 3 | 110 | 106 | 102 | 100 | 108 | 104 | 101 | 99 | 102 | 100 | 98 | 98 | 100 | 98 | 96 | 96 | 98 | 96 | 95 | 95 | 94 | 94 | 94 | 94 |
| 4 | 107 | 102 | 99 | 97 | 106 | 101 | 98 | 96 | 99 | 97 | 95 | 95 | 98 | 96 | 94 | 94 | 96 | 94 | 93 | 93 | 92 | 92 | 92 | 92 |
| 5 | 105 | 100 | 96 | 94 | 103 | 99 | 96 | 93 | 97 | 95 | 93 | 93 | 96 | 94 | 92 | 92 | 95 | 93 | 91 | 91 | 90 | 90 | 90 | 90 |
| 6 | 103 | 97 | 94 | 91 | 101 | 97 | 94 | 91 | 96 | 93 | 91 | 91 | 94 | 92 | 90 | 90 | 93 | 91 | 90 | 90 | 89 | 89 | 89 | 89 |
| 7 | 101 | 95 | 92 | 90 | 100 | 95 | 92 | 89 | 94 | 91 | 89 | 89 | 93 | 90 | 89 | 89 | 92 | 90 | 88 | 88 | 87 | 87 | 87 | 87 |
| 8 | 99 | 94 | 90 | 88 | 98 | 93 | 90 | 88 | 92 | 89 | 87 | 87 | 91 | 89 | 87 | 87 | 91 | 89 | 87 | 87 | 86 | 86 | 86 | 86 |
| 9 | 97 | 92 | 89 | 87 | 96 | 92 | 89 | 86 | 91 | 88 | 86 | 86 | 90 | 88 | 86 | 86 | 90 | 87 | 86 | 86 | 85 | 85 | 85 | 85 |
| 10 | 96 | 91 | 87 | 85 | 95 | 90 | 87 | 85 | 90 | 87 | 85 | 85 | 89 | 87 | 85 | 85 | 88 | 86 | 85 | 85 | 84 | 84 | 84 | 84 |

AVERAGE LUMINANCE (cd/sqm):

| 0° | |
|-----|---------|
| 0° | 4346867 |
| 5° | 1698499 |
| 10° | 387345 |
| 15° | 125358 |
| 20° | 52481 |
| 25° | 27848 |
| 30° | 16205 |
| 35° | 11136 |
| 40° | 8530 |
| 45° | 7288 |
| 50° | 6175 |
| 55° | 5314 |
| 60° | 2807 |
| 65° | 1660 |
| 70° | 705 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 565.5 | 65.9 |
| 10°-20° | 176.0 | 20.5 |
| 20°-30° | 56.1 | 6.5 |
| 30°-40° | 26.9 | 3.1 |
| 40°-50° | 18.1 | 2.1 |
| 50°-60° | 11.8 | 1.4 |
| 60°-70° | 3.3 | 0.4 |
| 70°-80° | 0.4 | 0.1 |
| 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° | 797.6 | 92.9 |
| 0°-40° | 824.5 | 96.1 |
| 0°-60° | 854.4 | 99.6 |
| 0°-90° | 858.1 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 858.1 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 19823 | |
| 5° | 7716 | 566 |
| 15° | 552 | 176 |
| 25° | 115 | 56 |
| 35° | 42 | 27 |
| 45° | 24 | 18 |
| 55° | 14 | 12 |
| 65° | 3 | 3 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 19823.3 |
| 1° | 19254.1 |
| 2° | 17397.2 |
| 3° | 14309.2 |
| 4° | 10913.1 |
| 5° | 7716.3 |
| 6° | 5390.5 |
| 7° | 3931.2 |
| 8° | 2911.1 |
| 9° | 2259.8 |
| 10° | 1739.6 |
| 11° | 1360.1 |
| 12° | 1061.7 |
| 13° | 848.5 |
| 14° | 683.3 |
| 15° | 552.2 |
| 17.5° | 342.2 |
| 20° | 224.9 |
| 22.5° | 157.8 |
| 25° | 115.1 |
| 27.5° | 85.3 |
| 30° | 64.0 |
| 32.5° | 50.1 |
| 35° | 41.6 |
| 37.5° | 35.2 |
| 40° | 29.8 |
| 42.5° | 26.6 |
| 45° | 23.5 |
| 47.5° | 20.3 |
| 50° | 18.1 |
| 52.5° | 16.0 |
| 55° | 13.9 |
| 57.5° | 10.7 |
| 60° | 6.4 |
| 62.5° | 4.3 |
| 65° | 3.2 |
| 67.5° | 2.1 |
| 70° | 1.1 |
| 72.5° | 1.1 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |



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CANDELA DISTRIBUTION (continued):

90° | $\frac{0^\circ}{0.0}$

(END OF REPORT)