

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: P837185

Luminaire Tested: **L830S23SP927**

Issue Date: 5/17/2024

Test Information

Test Method: LM-79-08
Report Number: P837185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (1529)
Test Lab: INNOVATION CENTER
Issue Date: 5/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: L830S23SP927
Description: Sustainable LED Track Luminaire with Spot Optic and, 2700K, 90CRI LEDs
Light Source: -
Ballast/Driver: -

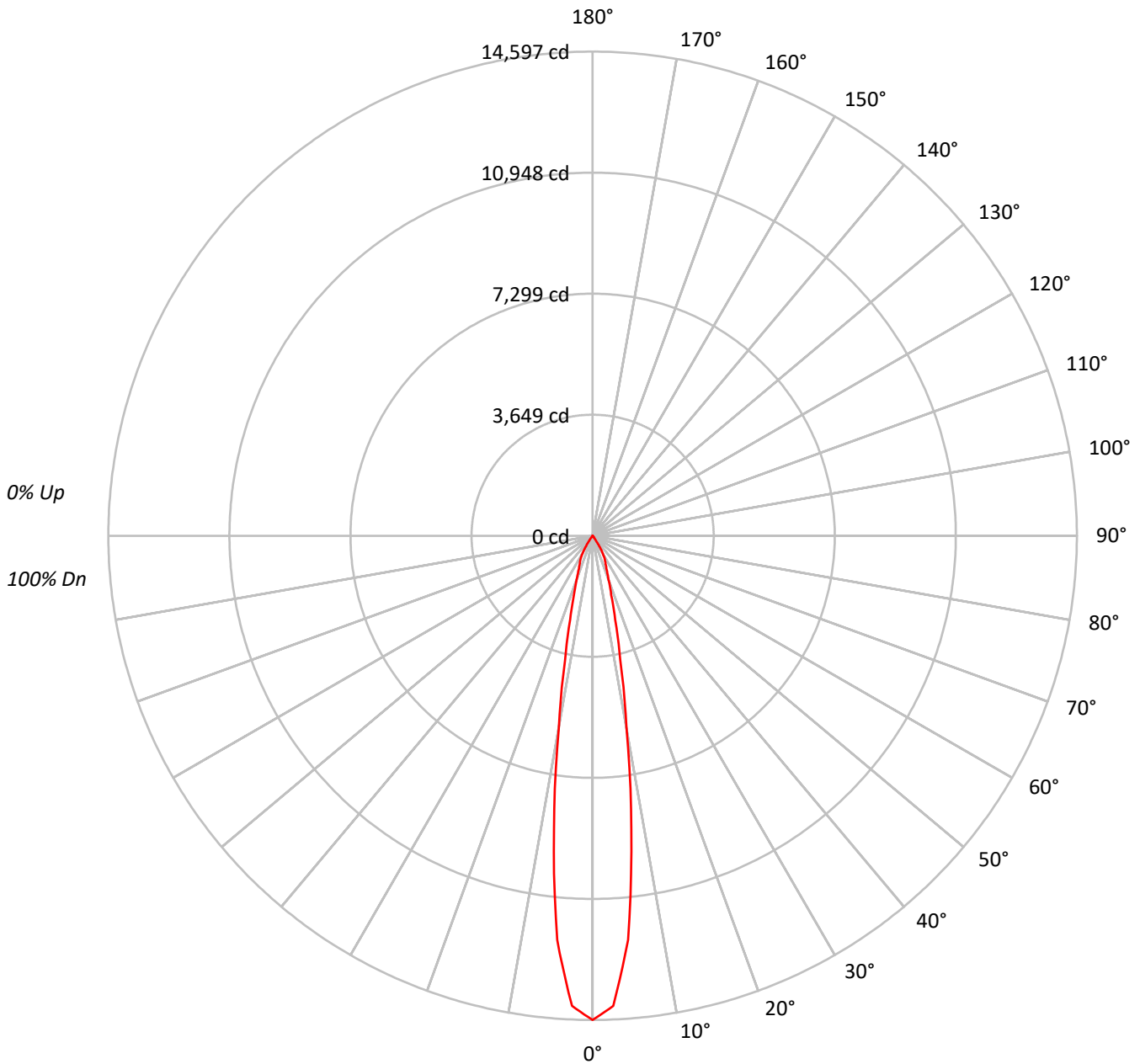
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2313.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 0.3 / 0.3 / 0.31
Luminous Opening: Circular (Dia: 0.29' x H: 0')
CIE Type: Direct

Input Watts (W): 22.8
Input Voltage (V): NR
Input Current (A_{in}): 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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CATALOG NUMBER: L830S23SP927

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|-----|----|--|--|--|--|--|----|--|--|--|--|--|--|--|--|---|
| RF | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | 20 | | | | | | | | | |
| RC | 80 | | | | | | | | | 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 | 0 | | | | | | | | | | | | | | | | |
| RCR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | 100 | | | | | | | | | | | | | | | | |
| 1 | 115 | 113 | 111 | 109 | 113 | 111 | 109 | 108 | 107 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 97 | 96 | 95 | 94 | | | | | | | | | | | | | | | |
| 2 | 111 | 108 | 105 | 102 | 109 | 106 | 103 | 101 | 103 | 101 | 99 | 100 | 98 | 97 | 97 | 96 | 95 | 94 | 94 | 93 | 92 | 90 | | | | | | | | | | | | | | | |
| 3 | 108 | 103 | 100 | 97 | 106 | 102 | 99 | 96 | 99 | 97 | 95 | 97 | 95 | 93 | 95 | 93 | 92 | 90 | 90 | 88 | 86 | 85 | | | | | | | | | | | | | | | |
| 4 | 105 | 99 | 95 | 92 | 103 | 98 | 95 | 92 | 96 | 93 | 91 | 94 | 92 | 90 | 93 | 91 | 89 | 88 | 88 | 86 | 84 | 82 | | | | | | | | | | | | | | | |
| 5 | 101 | 96 | 92 | 89 | 100 | 95 | 91 | 88 | 93 | 90 | 87 | 92 | 89 | 87 | 90 | 88 | 86 | 85 | 85 | 83 | 81 | 80 | | | | | | | | | | | | | | | |
| 6 | 99 | 92 | 88 | 85 | 97 | 92 | 88 | 85 | 90 | 87 | 85 | 89 | 86 | 84 | 88 | 86 | 84 | 82 | 82 | 80 | 78 | 76 | | | | | | | | | | | | | | | |
| 7 | 96 | 90 | 85 | 83 | 95 | 89 | 85 | 82 | 88 | 84 | 82 | 87 | 84 | 82 | 86 | 83 | 81 | 80 | 80 | 78 | 76 | 74 | | | | | | | | | | | | | | | |
| 8 | 93 | 87 | 83 | 80 | 92 | 86 | 82 | 80 | 85 | 82 | 80 | 85 | 81 | 79 | 84 | 81 | 79 | 78 | 78 | 76 | 74 | 72 | | | | | | | | | | | | | | | |
| 9 | 91 | 84 | 80 | 78 | 90 | 84 | 80 | 78 | 83 | 80 | 77 | 82 | 79 | 77 | 82 | 79 | 77 | 76 | 76 | 74 | 72 | 70 | | | | | | | | | | | | | | | |
| 10 | 89 | 82 | 78 | 76 | 88 | 82 | 78 | 75 | 81 | 78 | 75 | 80 | 77 | 75 | 80 | 77 | 75 | 74 | 74 | 72 | 70 | 68 | | | | | | | | | | | | | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 2351702 |
| 5° | 1977992 |
| 10° | 960287 |
| 15° | 436816 |
| 20° | 240089 |
| 25° | 163218 |
| 30° | 111002 |
| 35° | 34791 |
| 40° | 7277 |
| 45° | 1618 |
| 50° | 677 |
| 55° | 393 |
| 60° | 354 |
| 65° | 381 |
| 70° | 377 |
| 75° | 311 |
| 80° | 278 |
| 85° | 370 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 947.4 | 41.0 |
| 10°-20° | 786.0 | 34.0 |
| 20°-30° | 428.9 | 18.5 |
| 30°-40° | 138.8 | 6.0 |
| 40°-50° | 8.7 | 0.4 |
| 50°-60° | 1.4 | 0.1 |
| 60°-70° | 1.0 | 0.0 |
| 70°-80° | 0.5 | 0.0 |
| 80°-90° | 0.2 | 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° | 2162.4 | 93.5 |
| 0°-40° | 2301.2 | 99.5 |
| 0°-60° | 2311.3 | 99.9 |
| 0°-90° | 2313.0 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2313.0 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|------|-------|------|
| 0° | 14597 | |
| 5° | 12231 | 947 |
| 15° | 2619 | 786 |
| 25° | 918 | 429 |
| 35° | 177 | 139 |
| 45° | 7 | 9 |
| 55° | 1 | 1 |
| 65° | 1 | 1 |
| 75° | 0 | 1 |
| 85° | 0 | 0 |
| 90° | 0 | 0 |
| 95° | 0 | 0 |
| 105° | 0 | 0 |
| 115° | 0 | 0 |
| 125° | 0 | 0 |
| 135° | 0 | 0 |
| 145° | 0 | 0 |
| 155° | 0 | 0 |
| 165° | 0 | 0 |
| 175° | 0 | 0 |
| 180° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|--------|---------|
| 0° | 14597.4 |
| 2.5° | 14189.8 |
| 5° | 12231.0 |
| 7.5° | 8933.7 |
| 10° | 5870.1 |
| 12.5° | 3845.1 |
| 15° | 2619.0 |
| 17.5° | 1862.6 |
| 20° | 1400.4 |
| 22.5° | 1091.6 |
| 25° | 918.2 |
| 27.5° | 783.6 |
| 30° | 596.7 |
| 32.5° | 373.4 |
| 35° | 176.9 |
| 37.5° | 63.7 |
| 40° | 34.6 |
| 42.5° | 17.0 |
| 45° | 7.1 |
| 47.5° | 3.9 |
| 50° | 2.7 |
| 52.5° | 1.9 |
| 55° | 1.4 |
| 57.5° | 1.2 |
| 60° | 1.1 |
| 62.5° | 1.0 |
| 65° | 1.0 |
| 67.5° | 0.9 |
| 70° | 0.8 |
| 72.5° | 0.6 |
| 75° | 0.5 |
| 77.5° | 0.4 |
| 80° | 0.3 |
| 82.5° | 0.2 |
| 85° | 0.2 |
| 87.5° | 0.1 |
| 90° | 0.0 |
| 92.5° | 0.0 |
| 95° | 0.0 |
| 97.5° | 0.0 |
| 100° | 0.0 |
| 102.5° | 0.0 |
| 105° | 0.0 |



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CANDELA DISTRIBUTION (continued):

| | 0° |
|--------|-----|
| 112.5° | 0.0 |
| 115° | 0.0 |
| 117.5° | 0.0 |
| 120° | 0.0 |
| 122.5° | 0.0 |
| 125° | 0.0 |
| 127.5° | 0.0 |
| 130° | 0.0 |
| 132.5° | 0.0 |
| 135° | 0.0 |
| 137.5° | 0.0 |
| 140° | 0.0 |
| 142.5° | 0.0 |
| 145° | 0.0 |
| 147.5° | 0.0 |
| 150° | 0.0 |
| 152.5° | 0.0 |
| 155° | 0.0 |
| 157.5° | 0.0 |
| 160° | 0.0 |
| 162.5° | 0.0 |
| 165° | 0.0 |
| 167.5° | 0.0 |
| 170° | 0.0 |
| 172.5° | 0.0 |
| 175° | 0.0 |
| 177.5° | 0.0 |
| 180° | 0.0 |



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180°







| | | |
|--------|--|-----|
| 107.5° | | 0.0 |
| 110° | | 0.0 |



(END OF REPORT)