

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: P328682

Luminaire Tested: **L815SQ30NF927MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328682  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-24)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L815SQ30NF927MB  
Description: Square Track 26x1, 3000lm, 22°, 2700K, black finish  
Light Source: (26) 2700K CCT, 92 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

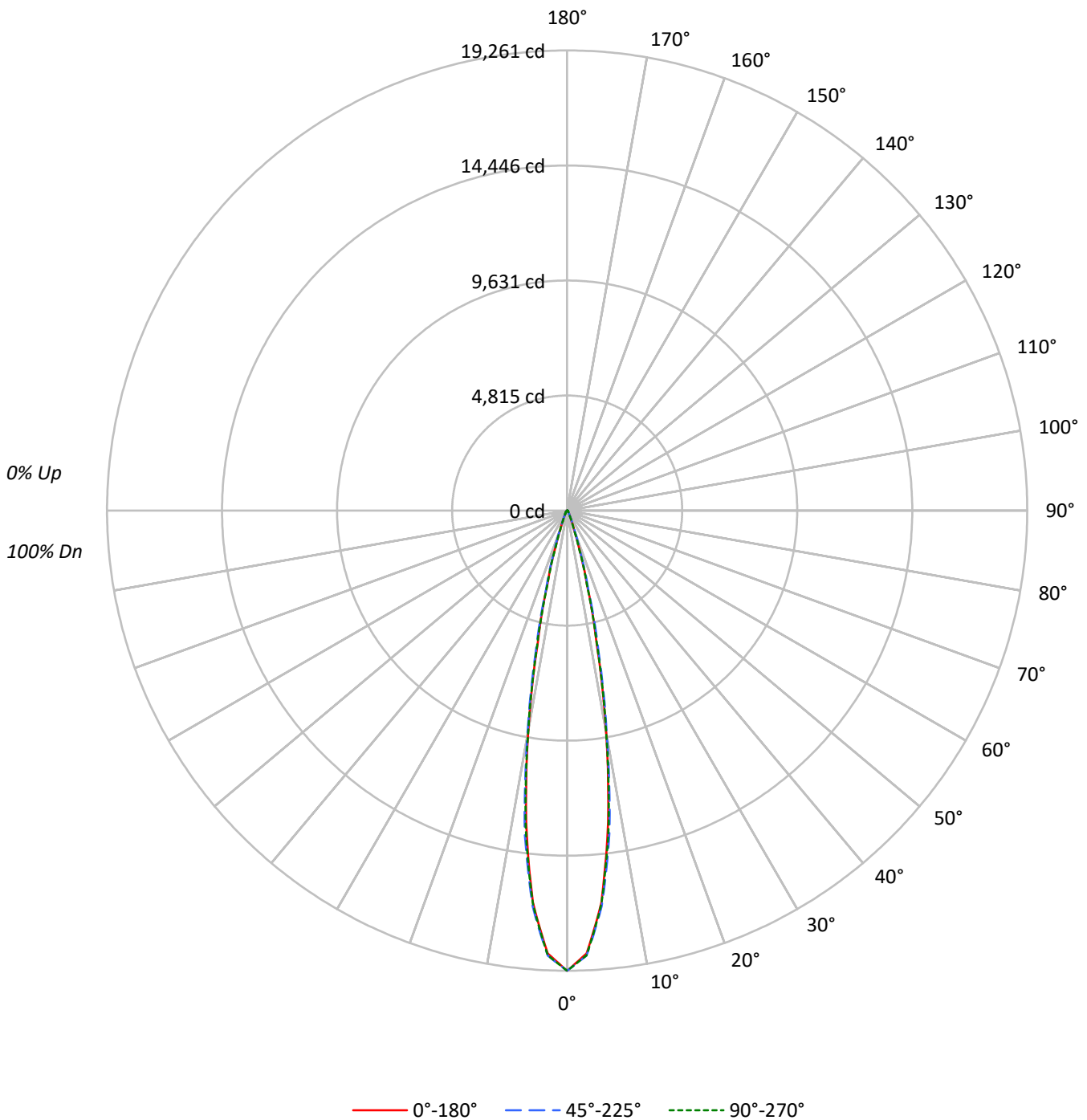
Lumens per Lamp: N/A  
Luminaire Lumens: 2750.0 lumens  
Efficiency: N/A  
Efficacy: 80.9 lumens/watt  
Spacing Criteria (0/90/45): 0.34 / 0.34 / 0.33  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 34  
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 | 100 | 100 | 100 | 100 | 100 |  |   |
| 1   | 115 | 113 | 111 | 110 | 113 | 111 | 109 | 108 | 107 | 106 | 105 | 103 | 102 | 101 | 100 | 99  | 99  | 97  | 97  | 97  | 97  | 97  | 97  | 97  |  |   |
| 2   | 112 | 108 | 105 | 103 | 110 | 106 | 104 | 102 | 103 | 101 | 100 | 101 | 99  | 97  | 98  | 97  | 95  | 94  | 94  | 94  | 94  | 94  | 94  | 94  |  |   |
| 3   | 108 | 104 | 100 | 98  | 107 | 103 | 99  | 97  | 100 | 98  | 95  | 98  | 96  | 94  | 96  | 94  | 93  | 91  | 91  | 91  | 91  | 91  | 91  | 91  |  |   |
| 4   | 105 | 100 | 97  | 94  | 104 | 99  | 96  | 93  | 97  | 94  | 92  | 95  | 93  | 91  | 94  | 92  | 90  | 89  | 89  | 89  | 89  | 89  | 89  | 89  |  |   |
| 5   | 103 | 97  | 93  | 90  | 101 | 96  | 93  | 90  | 95  | 92  | 89  | 93  | 91  | 89  | 92  | 90  | 88  | 87  | 87  | 87  | 87  | 87  | 87  | 87  |  |   |
| 6   | 100 | 94  | 91  | 88  | 99  | 94  | 90  | 87  | 92  | 89  | 87  | 91  | 88  | 86  | 90  | 88  | 86  | 85  | 85  | 85  | 85  | 85  | 85  | 85  |  |   |
| 7   | 98  | 92  | 88  | 85  | 97  | 91  | 88  | 85  | 90  | 87  | 85  | 89  | 86  | 84  | 88  | 86  | 84  | 83  | 83  | 83  | 83  | 83  | 83  | 83  |  |   |
| 8   | 96  | 90  | 86  | 83  | 95  | 89  | 86  | 83  | 88  | 85  | 83  | 88  | 85  | 83  | 87  | 84  | 82  | 81  | 81  | 81  | 81  | 81  | 81  | 81  |  |   |
| 9   | 94  | 88  | 84  | 82  | 93  | 87  | 84  | 81  | 87  | 83  | 81  | 86  | 83  | 81  | 85  | 83  | 81  | 80  | 80  | 80  | 80  | 80  | 80  | 80  |  |   |
| 10  | 92  | 86  | 82  | 80  | 91  | 85  | 82  | 80  | 85  | 82  | 80  | 84  | 81  | 79  | 84  | 81  | 79  | 78  | 78  | 78  | 78  | 78  | 78  | 78  |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°      | 45°     | 90°     |
|-----|---------|---------|---------|
| 0°  | 1865947 | 1865947 | 1865947 |
| 5°  | 1599669 | 1615189 | 1605426 |
| 10° | 922690  | 944420  | 925670  |
| 15° | 324748  | 345088  | 319683  |
| 20° | 87361   | 103062  | 87361   |
| 25° | 33403   | 36108   | 31714   |
| 30° | 19542   | 18972   | 18894   |
| 35° | 13825   | 13742   | 14251   |
| 40° | 9763    | 9308    | 10686   |
| 45° | 8508    | 7905    | 8796    |
| 50° | 7611    | 7716    | 8380    |
| 55° | 7077    | 5979    | 7077    |
| 60° | 6704    | 6433    | 7421    |
| 65° | 6281    | 7289    | 5616    |
| 70° | 3484    | 3682    | 5920    |
| 75° | 3780    | 2957    | 2695    |
| 80° | 781     | 0       | 0       |
| 85° | 0       | 1556    | 7225    |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 1352.3 | 49.2      |
| 10°-20°   | 1031.7 | 37.5      |
| 20°-30°   | 174.9  | 6.4       |
| 30°-40°   | 72.1   | 2.6       |
| 40°-50°   | 48.4   | 1.8       |
| 50°-60°   | 36.9   | 1.3       |
| 60°-70°   | 24.4   | 0.9       |
| 70°-80°   | 7.0    | 0.3       |
| 80°-90°   | 2.3    | 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°    | 2558.9 | 93.1      |
| 0°-40°    | 2631.0 | 95.7      |
| 0°-60°    | 2716.3 | 98.8      |
| 0°-90°    | 2750.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2750.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°    | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|-------|-------|-------|-------|-------|------|
| 0°  | 19261 | 19261 | 19261 | 19261 | 19261 |      |
| 5°  | 16450 | 16527 | 16609 | 16598 | 16509 | 1338 |
| 15° | 3238  | 3326  | 3441  | 3347  | 3188  | 999  |
| 25° | 312   | 318   | 338   | 313   | 297   | 168  |
| 35° | 117   | 116   | 116   | 113   | 120   | 72   |
| 45° | 62    | 56    | 58    | 61    | 64    | 48   |
| 55° | 42    | 42    | 35    | 39    | 42    | 37   |
| 65° | 27    | 29    | 32    | 29    | 24    | 23   |
| 75° | 10    | 9     | 8     | 11    | 7     | 6    |
| 85° | 0     | 1     | 1     | 0     | 6     | 2    |
| 90° | 0     | 0     | 0     | 0     | 0     |      |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 22.5°   | 45°     | 67.5°   | 90°     |
|-------|---------|---------|---------|---------|---------|
| 0°    | 19261.3 | 19261.3 | 19261.3 | 19261.3 | 19261.3 |
| 2.5°  | 18554.6 | 18595.0 | 18639.1 | 18595.0 | 18633.3 |
| 5°    | 16449.8 | 16527.1 | 16609.4 | 16598.5 | 16509.0 |
| 7.5°  | 13131.7 | 13338.9 | 13594.4 | 13341.8 | 13310.7 |
| 10°   | 9379.8  | 9558.1  | 9600.7  | 9506.1  | 9410.1  |
| 12.5° | 5760.0  | 5996.7  | 6079.7  | 6020.5  | 5835.8  |
| 15°   | 3238.0  | 3326.1  | 3440.8  | 3347.0  | 3187.5  |
| 17.5° | 1691.9  | 1772.0  | 1881.0  | 1778.5  | 1604.6  |
| 20°   | 847.4   | 931.1   | 999.7   | 918.1   | 847.4   |
| 22.5° | 473.5   | 501.7   | 560.8   | 480.0   | 443.9   |
| 25°   | 312.5   | 318.3   | 337.8   | 313.3   | 296.7   |
| 27.5° | 228.1   | 227.4   | 229.5   | 218.0   | 217.3   |
| 30°   | 174.7   | 174.7   | 169.6   | 168.2   | 168.9   |
| 32.5° | 135.0   | 137.1   | 136.4   | 138.6   | 140.0   |
| 35°   | 116.9   | 116.2   | 116.2   | 112.6   | 120.5   |
| 37.5° | 86.6    | 89.5    | 90.2    | 85.2    | 94.6    |
| 40°   | 77.2    | 75.1    | 73.6    | 81.6    | 84.5    |
| 42.5° | 65.7    | 70.0    | 70.0    | 72.9    | 74.3    |
| 45°   | 62.1    | 55.6    | 57.7    | 60.6    | 64.2    |
| 47.5° | 57.0    | 54.9    | 52.7    | 59.9    | 58.5    |
| 50°   | 50.5    | 52.0    | 51.2    | 52.7    | 55.6    |
| 52.5° | 48.4    | 49.1    | 44.8    | 46.2    | 52.0    |
| 55°   | 41.9    | 41.9    | 35.4    | 39.0    | 41.9    |
| 57.5° | 32.5    | 35.4    | 28.9    | 39.0    | 34.6    |
| 60°   | 34.6    | 34.6    | 33.2    | 37.5    | 38.3    |
| 62.5° | 26.0    | 31.8    | 31.8    | 34.6    | 32.5    |
| 65°   | 27.4    | 28.9    | 31.8    | 28.9    | 24.5    |
| 67.5° | 15.2    | 10.8    | 11.5    | 14.4    | 17.3    |
| 70°   | 12.3    | 17.3    | 13.0    | 13.0    | 20.9    |
| 72.5° | 3.6     | 7.2     | 6.5     | 3.6     | 2.2     |
| 75°   | 10.1    | 8.7     | 7.9     | 10.8    | 7.2     |
| 77.5° | 3.6     | 7.2     | 5.1     | 0.7     | 8.7     |
| 80°   | 1.4     | 1.4     | 0.0     | 0.0     | 0.0     |
| 82.5° | 5.1     | 2.2     | 2.9     | 0.7     | 8.7     |
| 85°   | 0.0     | 0.7     | 1.4     | 0.0     | 6.5     |
| 87.5° | 1.4     | 2.2     | 7.2     | 3.6     | 1.4     |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)