

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: P328711

Luminaire Tested: **L815SQ40WF930MB**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P328711  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1905-290-26)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: HALO  
Catalog Number: L815SQ40WF930MB  
Description: Square Track 26x1, 4000lm, 60°, 3000K, black finish  
Light Source: (26) 3000K CCT, 92 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

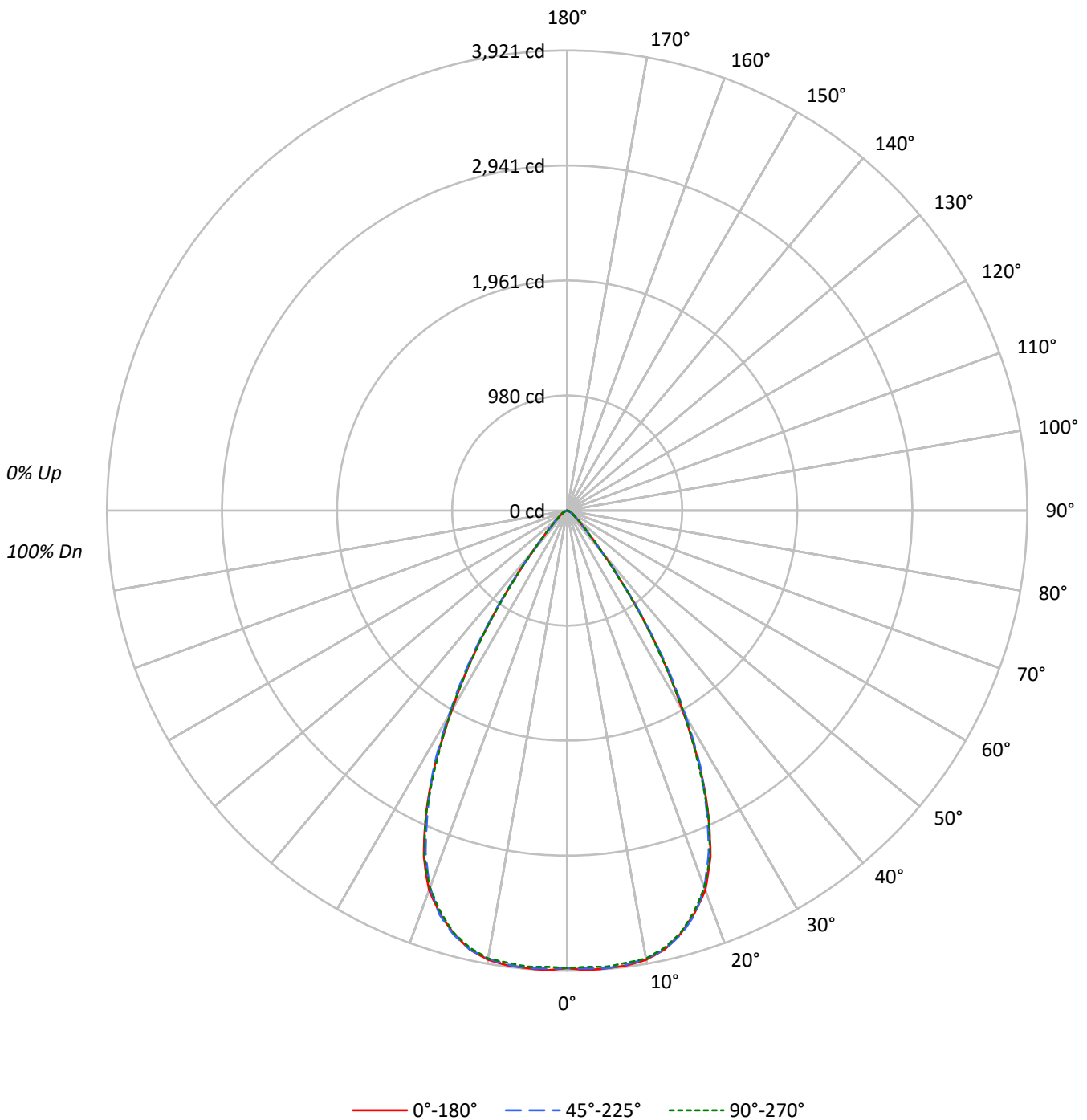
Lumens per Lamp: N/A  
Luminaire Lumens: 3667.0 lumens  
Efficiency: N/A  
Efficacy: 70.5 lumens/watt  
Spacing Criteria (0/90/45): 0.97 / 0.97 / 0.89  
Luminous Opening: Rectangular (W 0.33' x L: 0.33' x H: 0')  
CIE Type: Direct

Input Watts (W): 52  
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 |   |  |   |
| 1   | 113 | 111 | 108 | 106 | 111 | 109 | 106 | 104 | 104 | 103 | 101 | 101 | 99  | 98  | 97  | 96  | 95  | 93  |    |    |    |    | 93  |   |  |   |
| 2   | 108 | 103 | 99  | 96  | 106 | 101 | 98  | 94  | 98  | 95  | 92  | 95  | 93  | 90  | 92  | 90  | 89  | 87  |    |    |    |    | 87  |   |  |   |
| 3   | 102 | 96  | 91  | 87  | 100 | 95  | 90  | 86  | 92  | 88  | 85  | 90  | 86  | 84  | 87  | 85  | 82  | 81  |    |    |    |    | 81  |   |  |   |
| 4   | 97  | 90  | 84  | 80  | 95  | 89  | 83  | 79  | 86  | 82  | 79  | 84  | 81  | 78  | 83  | 79  | 77  | 75  |    |    |    |    | 75  |   |  |   |
| 5   | 92  | 84  | 78  | 74  | 91  | 83  | 78  | 74  | 81  | 77  | 73  | 80  | 75  | 72  | 78  | 74  | 72  | 70  |    |    |    |    | 70  |   |  |   |
| 6   | 88  | 79  | 73  | 69  | 86  | 78  | 72  | 68  | 77  | 72  | 68  | 75  | 71  | 67  | 74  | 70  | 67  | 66  |    |    |    |    | 66  |   |  |   |
| 7   | 83  | 74  | 68  | 64  | 82  | 74  | 68  | 64  | 72  | 67  | 63  | 71  | 66  | 63  | 70  | 66  | 63  | 61  |    |    |    |    | 61  |   |  |   |
| 8   | 79  | 70  | 64  | 60  | 78  | 69  | 64  | 60  | 68  | 63  | 59  | 67  | 63  | 59  | 66  | 62  | 59  | 58  |    |    |    |    | 58  |   |  |   |
| 9   | 76  | 66  | 60  | 56  | 75  | 66  | 60  | 56  | 65  | 59  | 56  | 64  | 59  | 56  | 63  | 59  | 55  | 54  |    |    |    |    | 54  |   |  |   |
| 10  | 72  | 62  | 57  | 53  | 71  | 62  | 57  | 53  | 61  | 56  | 53  | 60  | 56  | 52  | 60  | 55  | 52  | 51  |    |    |    |    | 51  |   |  |   |

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

|     | 0°     | 45°    | 90°    |
|-----|--------|--------|--------|
| 0°  | 377649 | 377649 | 377649 |
| 5°  | 380677 | 380677 | 379394 |
| 10° | 382275 | 381370 | 381272 |
| 15° | 374293 | 375115 | 373781 |
| 20° | 354783 | 352257 | 352360 |
| 25° | 303964 | 300575 | 303632 |
| 30° | 220312 | 225447 | 222024 |
| 35° | 133649 | 135577 | 131485 |
| 40° | 59209  | 58046  | 57275  |
| 45° | 26976  | 25428  | 27524  |
| 50° | 16292  | 15222  | 16292  |
| 55° | 11721  | 10860  | 11721  |
| 60° | 9494   | 8506   | 9281   |
| 65° | 7014   | 7014   | 7014   |
| 70° | 5495   | 4900   | 5495   |
| 75° | 3069   | 3069   | 3069   |
| 80° | 558    | 558    | 558    |
| 85° | 0      | 0      | 0      |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 372.1  | 10.1      |
| 10°-20°   | 1043.1 | 28.4      |
| 20°-30°   | 1271.0 | 34.7      |
| 30°-40°   | 706.1  | 19.3      |
| 40°-50°   | 172.1  | 4.7       |
| 50°-60°   | 63.0   | 1.7       |
| 60°-70°   | 30.5   | 0.8       |
| 70°-80°   | 9.0    | 0.2       |
| 80°-90°   | 0.1    | 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°    | 2686.2 | 73.3      |
| 0°-40°    | 3392.3 | 92.5      |
| 0°-60°    | 3627.4 | 98.9      |
| 0°-90°    | 3667.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 3667.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3898 | 3898  | 3898 | 3898  | 3898 |      |
| 5°  | 3915 | 3908  | 3915 | 3910  | 3901 | 373  |
| 15° | 3732 | 3726  | 3740 | 3742  | 3727 | 1044 |
| 25° | 2844 | 2854  | 2812 | 2840  | 2841 | 1274 |
| 35° | 1130 | 1106  | 1146 | 1100  | 1112 | 708  |
| 45° | 197  | 196   | 186  | 198   | 201  | 175  |
| 55° | 69   | 68    | 64   | 68    | 69   | 64   |
| 65° | 31   | 29    | 31   | 29    | 31   | 32   |
| 75° | 8    | 8     | 8    | 8     | 8    | 9    |
| 85° | 0    | 0     | 0    | 0     | 0    | 0    |
| 90° | 0    | 0     | 0    | 0     | 0    | 0    |



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3898.3 | 3898.3 | 3898.3 | 3898.3 | 3898.3 |
| 2.5°  | 3920.7 | 3896.3 | 3905.4 | 3910.5 | 3891.2 |
| 5°    | 3914.6 | 3907.5 | 3914.6 | 3909.5 | 3901.4 |
| 7.5°  | 3908.5 | 3907.5 | 3901.4 | 3898.3 | 3886.1 |
| 10°   | 3886.1 | 3873.8 | 3876.9 | 3877.9 | 3875.9 |
| 12.5° | 3832.0 | 3823.8 | 3832.0 | 3827.9 | 3816.7 |
| 15°   | 3732.0 | 3725.9 | 3740.2 | 3742.2 | 3726.9 |
| 17.5° | 3601.5 | 3585.2 | 3611.7 | 3608.6 | 3587.2 |
| 20°   | 3441.4 | 3412.8 | 3416.9 | 3429.1 | 3417.9 |
| 22.5° | 3191.5 | 3181.3 | 3152.7 | 3168.0 | 3183.3 |
| 25°   | 2843.7 | 2853.9 | 2812.0 | 2839.6 | 2840.6 |
| 27.5° | 2439.8 | 2433.6 | 2457.1 | 2438.7 | 2412.2 |
| 30°   | 1969.5 | 1962.4 | 2015.4 | 1996.1 | 1984.8 |
| 32.5° | 1545.2 | 1514.6 | 1589.1 | 1527.9 | 1529.9 |
| 35°   | 1130.1 | 1105.6 | 1146.4 | 1100.5 | 1111.8 |
| 37.5° | 736.4  | 719.1  | 751.7  | 727.2  | 733.4  |
| 40°   | 468.2  | 455.9  | 459.0  | 466.1  | 452.9  |
| 42.5° | 292.7  | 290.7  | 279.5  | 293.7  | 293.7  |
| 45°   | 196.9  | 195.8  | 185.6  | 197.9  | 200.9  |
| 47.5° | 142.8  | 140.8  | 133.6  | 142.8  | 142.8  |
| 50°   | 108.1  | 108.1  | 101.0  | 107.1  | 108.1  |
| 52.5° | 84.7   | 84.7   | 79.6   | 84.7   | 84.7   |
| 55°   | 69.4   | 68.3   | 64.3   | 68.3   | 69.4   |
| 57.5° | 57.1   | 56.1   | 53.0   | 56.1   | 58.1   |
| 60°   | 49.0   | 46.9   | 43.9   | 46.9   | 47.9   |
| 62.5° | 38.8   | 37.7   | 36.7   | 37.7   | 38.8   |
| 65°   | 30.6   | 28.6   | 30.6   | 28.6   | 30.6   |
| 67.5° | 24.5   | 23.5   | 24.5   | 23.5   | 24.5   |
| 70°   | 19.4   | 18.4   | 17.3   | 17.3   | 19.4   |
| 72.5° | 13.3   | 12.2   | 12.2   | 12.2   | 13.3   |
| 75°   | 8.2    | 8.2    | 8.2    | 8.2    | 8.2    |
| 77.5° | 4.1    | 4.1    | 4.1    | 4.1    | 4.1    |
| 80°   | 1.0    | 1.0    | 1.0    | 1.0    | 1.0    |
| 82.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)