

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: CORELITE

Report Number: P233363

Luminaire Tested: **HGL-S-FR-40L835-UNV-8**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P233363  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1708-204-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: HGL-S-FR-40L835-UNV-8  
Description: HUGO 8 FOOT LINEAR LED LUMINAIRE WITH FROSTED LENS  
Light Source: (336) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7957.0 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.23 / 1.33  
Luminous Opening: Rectangular w/ Sides (W: 0.23' x L: 8' x H: 0.01')  
CIE Type: Direct

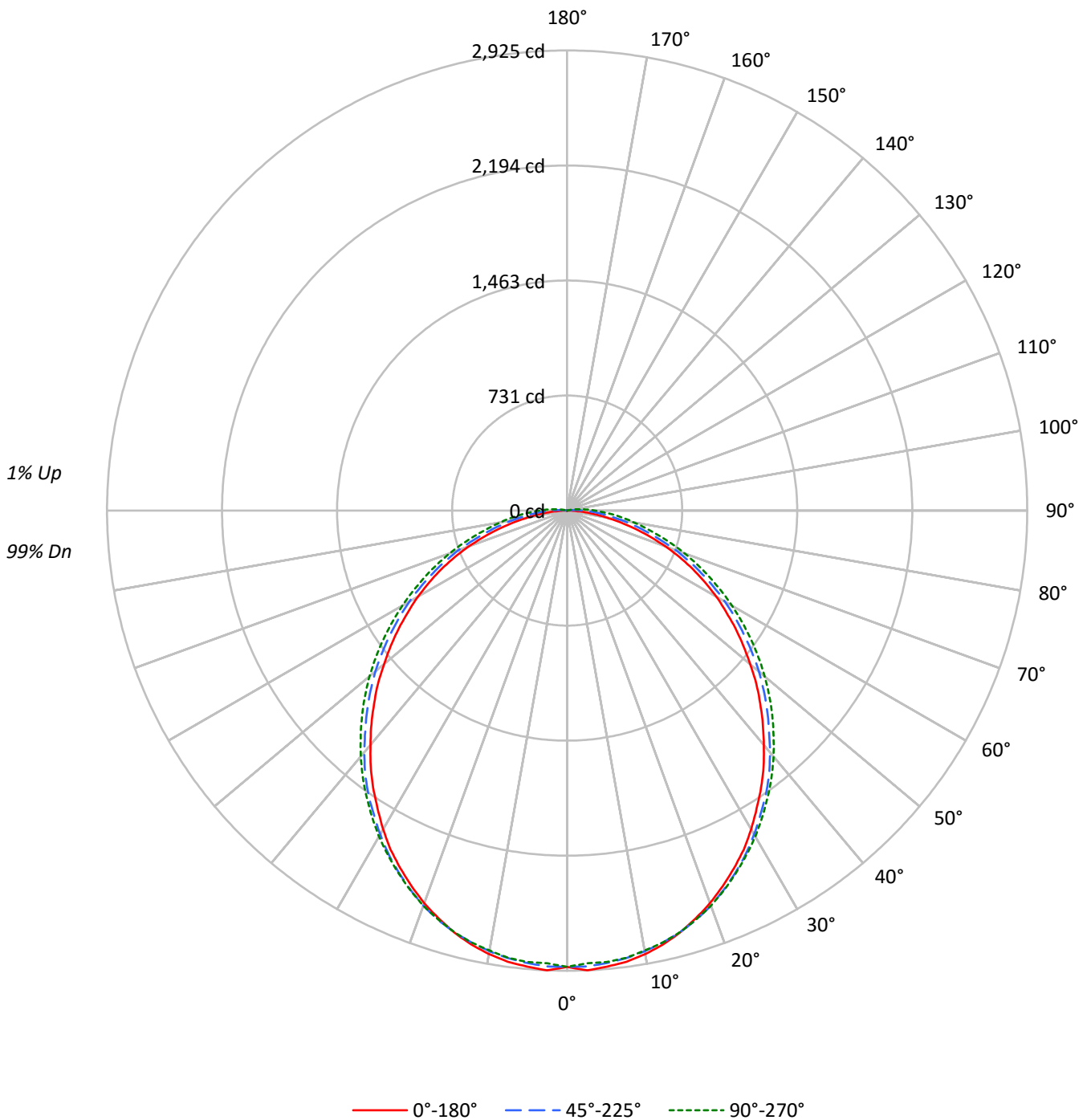
Input Watts (W): 58  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  | 0  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  | 93  | 90  | 87  | 89  | 87  | 85  | 82 |
| 2   | 98  | 90  | 83  | 77  | 96  | 88  | 82  | 76  | 84  | 79  | 74  | 81  | 77  | 73  | 78  | 74  | 71  | 69 |
| 3   | 90  | 79  | 71  | 64  | 87  | 77  | 70  | 64  | 74  | 68  | 62  | 72  | 66  | 61  | 69  | 64  | 60  | 58 |
| 4   | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 53  | 64  | 58  | 53  | 62  | 56  | 52  | 50 |
| 5   | 76  | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 55  | 50  | 45  | 43 |
| 6   | 70  | 57  | 48  | 41  | 68  | 56  | 47  | 41  | 54  | 46  | 41  | 52  | 45  | 40  | 50  | 44  | 40  | 38 |
| 7   | 65  | 51  | 43  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 41  | 36  | 46  | 40  | 35  | 33 |
| 8   | 60  | 47  | 38  | 33  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 32  | 30 |
| 9   | 56  | 43  | 35  | 29  | 55  | 42  | 35  | 29  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 27 |
| 10  | 53  | 40  | 32  | 27  | 52  | 39  | 32  | 27  | 38  | 31  | 26  | 37  | 31  | 26  | 36  | 30  | 26  | 24 |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 17026 | 17026 | 17026 |
| 5°  | 17149 | 16970 | 16907 |
| 10° | 17059 | 16863 | 16798 |
| 15° | 16868 | 16717 | 16664 |
| 20° | 16580 | 16508 | 16437 |
| 25° | 16240 | 16190 | 16134 |
| 30° | 15846 | 15825 | 15819 |
| 35° | 15394 | 15444 | 15460 |
| 40° | 14892 | 14974 | 15090 |
| 45° | 14391 | 14474 | 14671 |
| 50° | 13847 | 14006 | 14234 |
| 55° | 13345 | 13431 | 13728 |
| 60° | 12845 | 12906 | 13210 |
| 65° | 12215 | 12255 | 12676 |
| 70° | 11365 | 11567 | 12159 |
| 75° | 10152 | 10656 | 11580 |
| 80° | 8564  | 10060 | 11638 |
| 85° | 6881  | 10366 | 13057 |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 274.1  | 3.4       |
| 10°-20°   | 779.7  | 9.8       |
| 20°-30°   | 1161.2 | 14.6      |
| 30°-40°   | 1366.7 | 17.2      |
| 40°-50°   | 1380.4 | 17.3      |
| 50°-60°   | 1223.3 | 15.4      |
| 60°-70°   | 930.8  | 11.7      |
| 70°-80°   | 558.8  | 7.0       |
| 80°-90°   | 229.6  | 2.9       |
| 90°-100°  | 50.0   | 0.6       |
| 100°-110° | 2.4    | 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°    | 2215.1 | 27.8      |
| 0°-40°    | 3581.8 | 45.0      |
| 0°-60°    | 6185.4 | 77.7      |
| 0°-90°    | 7904.6 | 99.3      |
| 90°-120°  | 52.4   | 0.7       |
| 90°-150°  | 52.4   | 0.7       |
| 90°-180°  | 52.0   | 0.7       |
| 0°-180°   | 7957.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2900 | 2900  | 2900 | 2900  | 2900 |      |
| 5°   | 2910 | 2877  | 2887 | 2882  | 2880 | 276  |
| 15°  | 2776 | 2748  | 2774 | 2771  | 2774 | 782  |
| 25°  | 2508 | 2488  | 2536 | 2534  | 2541 | 1155 |
| 35°  | 2150 | 2142  | 2203 | 2213  | 2223 | 1344 |
| 45°  | 1735 | 1743  | 1798 | 1824  | 1844 | 1339 |
| 55°  | 1306 | 1324  | 1372 | 1407  | 1425 | 1168 |
| 65°  | 882  | 894   | 942  | 980   | 998  | 871  |
| 75°  | 450  | 470   | 525  | 578   | 594  | 477  |
| 85°  | 104  | 136   | 210  | 270   | 290  | 116  |
| 90°  | 2    | 43    | 104  | 157   | 177  | 7    |
| 95°  | 0    | 2     | 38   | 76    | 91   | 0    |
| 105° | 2    | 0     | 0    | 0     | 2    | 1    |
| 115° | 0    | 0     | 0    | 0     | 0    | 0    |
| 125° | 0    | 0     | 0    | 0     | 0    | 0    |
| 135° | 0    | 0     | 0    | 0     | 0    | 0    |
| 145° | 0    | 0     | 0    | 0     | 0    | 0    |
| 155° | 0    | 0     | 0    | 0     | 0    | 0    |
| 165° | 0    | 0     | 0    | 0     | 0    | 0    |
| 175° | 0    | 0     | 0    | 0     | 0    | 0    |
| 180° | 0    | 0     | 0    | 0     | 0    | 0    |



TEST NUMBER: P233363

CATALOG NUMBER: HGL-S-FR-40L835-UNV-8

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2899.9 | 2899.9 | 2899.9 | 2899.9 | 2899.9 |
| 2.5°   | 2925.2 | 2892.3 | 2899.9 | 2894.8 | 2879.7 |
| 5°     | 2910.0 | 2877.2 | 2887.3 | 2882.2 | 2879.7 |
| 7.5°   | 2892.3 | 2859.5 | 2869.6 | 2864.5 | 2867.1 |
| 10°    | 2862.0 | 2829.2 | 2844.3 | 2839.3 | 2839.3 |
| 12.5°  | 2824.1 | 2796.3 | 2811.5 | 2806.4 | 2811.5 |
| 15°    | 2776.1 | 2748.3 | 2773.6 | 2771.1 | 2773.6 |
| 17.5°  | 2718.0 | 2692.8 | 2728.1 | 2723.1 | 2725.6 |
| 20°    | 2654.9 | 2629.6 | 2672.6 | 2662.4 | 2672.6 |
| 22.5°  | 2584.1 | 2563.9 | 2606.9 | 2599.3 | 2609.4 |
| 25°    | 2508.4 | 2488.2 | 2536.1 | 2533.6 | 2541.2 |
| 27.5°  | 2430.1 | 2412.4 | 2460.4 | 2465.4 | 2467.9 |
| 30°    | 2339.1 | 2326.5 | 2377.0 | 2384.6 | 2392.2 |
| 32.5°  | 2243.1 | 2235.5 | 2288.6 | 2301.2 | 2308.8 |
| 35°    | 2149.7 | 2142.1 | 2202.7 | 2212.8 | 2222.9 |
| 37.5°  | 2051.1 | 2046.1 | 2109.2 | 2119.3 | 2134.5 |
| 40°    | 1945.1 | 1947.6 | 2005.7 | 2023.4 | 2041.0 |
| 42.5°  | 1841.5 | 1846.5 | 1899.6 | 1924.8 | 1942.5 |
| 45°    | 1735.4 | 1743.0 | 1798.5 | 1823.8 | 1844.0 |
| 47.5°  | 1631.8 | 1639.4 | 1695.0 | 1722.8 | 1743.0 |
| 50°    | 1518.2 | 1535.8 | 1591.4 | 1616.7 | 1639.4 |
| 52.5°  | 1412.1 | 1429.7 | 1480.3 | 1513.1 | 1533.3 |
| 55°    | 1306.0 | 1323.6 | 1371.6 | 1407.0 | 1424.7 |
| 57.5°  | 1197.3 | 1222.6 | 1265.5 | 1300.9 | 1318.6 |
| 60°    | 1096.3 | 1111.5 | 1159.5 | 1194.8 | 1210.0 |
| 62.5°  | 987.7  | 1002.8 | 1048.3 | 1091.2 | 1101.4 |
| 65°    | 881.6  | 894.2  | 942.2  | 980.1  | 997.8  |
| 67.5°  | 773.0  | 788.1  | 836.1  | 876.5  | 894.2  |
| 70°    | 664.3  | 679.5  | 732.6  | 778.0  | 793.2  |
| 72.5°  | 553.2  | 570.9  | 623.9  | 677.0  | 694.7  |
| 75°    | 449.6  | 469.8  | 525.4  | 578.5  | 593.6  |
| 77.5°  | 348.6  | 373.9  | 434.5  | 490.1  | 510.3  |
| 80°    | 255.1  | 285.4  | 351.1  | 411.7  | 429.4  |
| 82.5°  | 174.3  | 207.1  | 275.3  | 338.5  | 361.2  |
| 85°    | 103.6  | 136.4  | 209.7  | 270.3  | 290.5  |
| 87.5°  | 45.5   | 80.8   | 151.6  | 209.7  | 227.3  |
| 90°    | 2.5    | 42.9   | 103.6  | 156.6  | 176.8  |
| 92.5°  | 0.0    | 17.7   | 65.7   | 111.1  | 131.4  |
| 95°    | 0.0    | 2.5    | 37.9   | 75.8   | 90.9   |
| 97.5°  | 0.0    | 0.0    | 17.7   | 45.5   | 58.1   |
| 100°   | 0.0    | 0.0    | 2.5    | 22.7   | 32.8   |
| 102.5° | 2.5    | 0.0    | 0.0    | 5.1    | 12.6   |
| 105°   | 2.5    | 0.0    | 0.0    | 0.0    | 2.5    |
| 107.5° | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 110°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



TEST NUMBER: P233363

CATALOG NUMBER: HGL-S-FR-40L835-UNV-8

**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45° | 67.5° | 90° |
|--------|-----|-------|-----|-------|-----|
| 112.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 115°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 117.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 120°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 122.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 125°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 127.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 130°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 132.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 135°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 137.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 140°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 142.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 145°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 147.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 150°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 152.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 155°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 157.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 160°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 162.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 165°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 167.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 170°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 172.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 175°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 177.5° | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |
| 180°   | 0.0 | 0.0   | 0.0 | 0.0   | 0.0 |

(END OF REPORT)