

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: METALUX

Report Number: P685538

Luminaire Tested: **8CZL-32-UNV-W-L950-CD-U**

Issue Date: 05/10/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P685538  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 05/10/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8CZL-32-UNV-W-L950-CD-U  
Description: METALUX CRUZE LINEAR 8FT WIDE LENS MODEL @90 CRI and 5000K  
Light Source: (1176) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

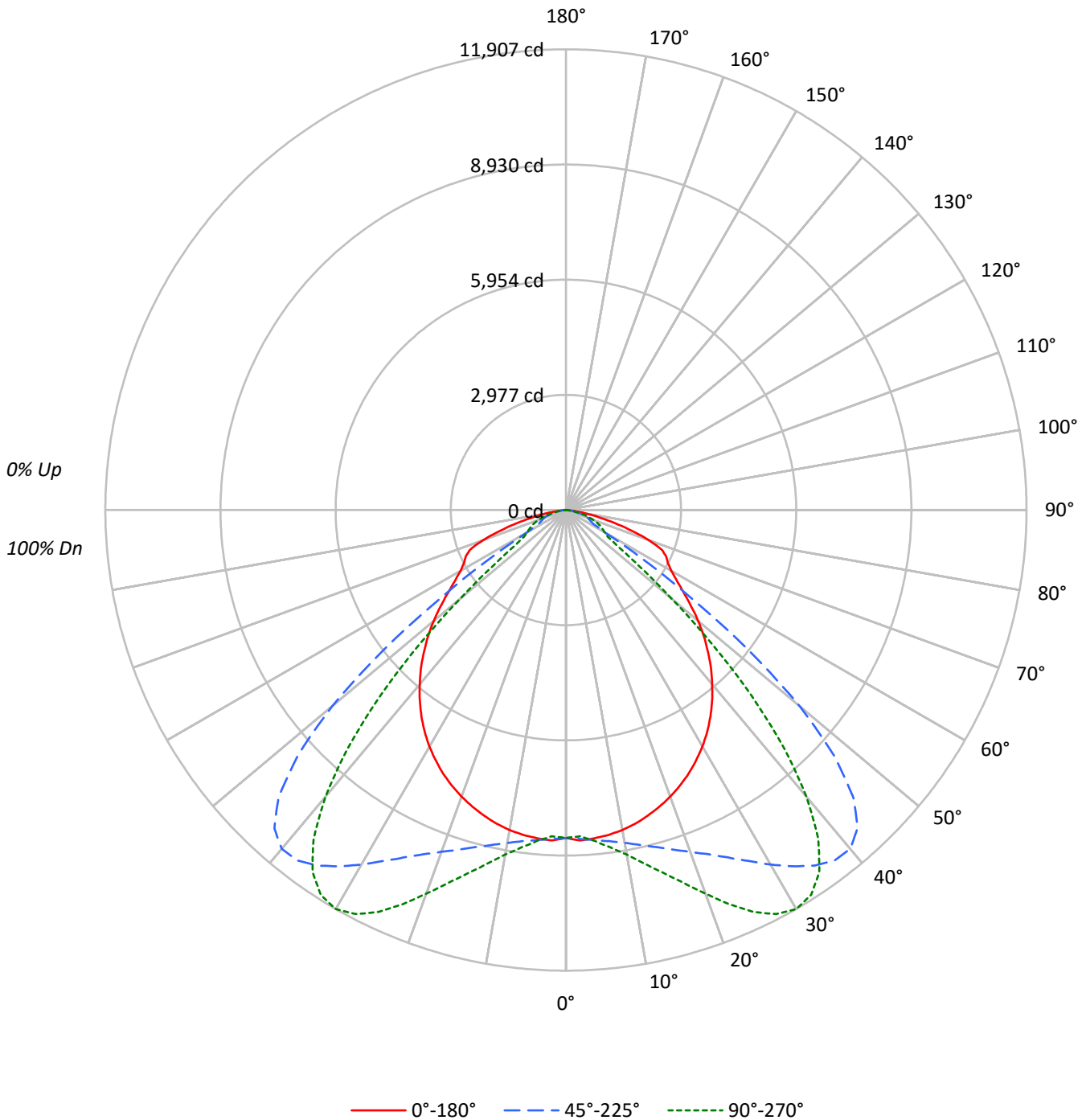
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27103.6 lumens  
Efficiency: N/A  
Efficacy: 131.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.69 / 1.65  
Luminous Opening: Rectangular (W 0.83' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 206  
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

TEST NUMBER: P685538  
CATALOG NUMBER: 8CZL-32-UNV-W-L950-CD-U

### Luminous Intensity Polar Plot





TEST NUMBER: P685538  
 CATALOG NUMBER: 8CZL-32-UNV-W-L950-CD-U

**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  | 0   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 102 | 102 | 102 | 100 |
| 1   | 111 | 106 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  | 89  | 89  | 89  | 87  |
| 2   | 102 | 94  | 88  | 83  | 99  | 93  | 87  | 82  | 89  | 85  | 81  | 86  | 82  | 79  | 83  | 80  | 77  | 77  | 77  | 77  | 75  |
| 3   | 93  | 84  | 77  | 71  | 91  | 82  | 76  | 70  | 79  | 74  | 69  | 77  | 72  | 68  | 74  | 70  | 67  | 67  | 67  | 67  | 65  |
| 4   | 86  | 75  | 67  | 61  | 84  | 73  | 66  | 60  | 71  | 65  | 59  | 69  | 63  | 59  | 67  | 62  | 58  | 58  | 58  | 58  | 56  |
| 5   | 79  | 67  | 59  | 52  | 77  | 66  | 58  | 52  | 64  | 57  | 52  | 62  | 56  | 51  | 60  | 55  | 51  | 51  | 51  | 51  | 49  |
| 6   | 73  | 60  | 52  | 46  | 71  | 59  | 51  | 46  | 58  | 51  | 45  | 56  | 50  | 45  | 55  | 49  | 45  | 45  | 45  | 45  | 43  |
| 7   | 68  | 55  | 46  | 40  | 66  | 54  | 46  | 40  | 52  | 45  | 40  | 51  | 45  | 40  | 50  | 44  | 39  | 39  | 39  | 39  | 38  |
| 8   | 63  | 50  | 42  | 36  | 61  | 49  | 41  | 36  | 48  | 41  | 36  | 47  | 40  | 35  | 45  | 40  | 35  | 35  | 35  | 35  | 33  |
| 9   | 59  | 46  | 38  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 32  | 32  | 32  | 32  | 30  |
| 10  | 55  | 42  | 34  | 29  | 54  | 41  | 34  | 29  | 40  | 34  | 29  | 39  | 33  | 29  | 39  | 33  | 29  | 29  | 29  | 29  | 27  |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 13683 | 13683 | 13683 |
| 5°  | 13802 | 13874 | 13917 |
| 10° | 13768 | 14319 | 14822 |
| 15° | 13668 | 15077 | 16224 |
| 20° | 13548 | 16151 | 18125 |
| 25° | 13386 | 17649 | 20415 |
| 30° | 13157 | 19722 | 22200 |
| 35° | 12836 | 22105 | 22506 |
| 40° | 12390 | 24085 | 20389 |
| 45° | 11855 | 23993 | 15475 |
| 50° | 11213 | 19829 | 8919  |
| 55° | 10451 | 10907 | 4587  |
| 60° | 10143 | 3806  | 3739  |
| 65° | 10931 | 2769  | 3749  |
| 70° | 10794 | 2838  | 3617  |
| 75° | 8162  | 2482  | 2905  |
| 80° | 4932  | 2028  | 2055  |
| 85° | 2456  | 1037  | 437   |



TEST NUMBER: P685538  
 CATALOG NUMBER: 8CZL-32-UNV-W-L950-CD-U

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 820.2   | 3.0       |
| 10°-20°   | 2550.4  | 9.4       |
| 20°-30°   | 4480.2  | 16.5      |
| 30°-40°   | 6224.1  | 23.0      |
| 40°-50°   | 6312.0  | 23.3      |
| 50°-60°   | 4050.6  | 14.9      |
| 60°-70°   | 1894.6  | 7.0       |
| 70°-80°   | 657.0   | 2.4       |
| 80°-90°   | 114.5   | 0.4       |
| 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°    | 7850.8  | 29.0      |
| 0°-40°    | 14074.9 | 51.9      |
| 0°-60°    | 24437.6 | 90.2      |
| 0°-90°    | 27103.6 | 100.0     |
| 90°-120°  | 0.0     | 0.0       |
| 90°-150°  | 0.0     | 0.0       |
| 90°-180°  | 0.0     | 0.0       |
| 0°-180°   | 27103.6 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°   | 67.5° | 90°   | Flux |
|-----|------|-------|-------|-------|-------|------|
| 0°  | 8475 | 8475  | 8475  | 8475  | 8475  |      |
| 5°  | 8516 | 8455  | 8560  | 8587  | 8586  | 809  |
| 15° | 8177 | 8371  | 9020  | 9504  | 9706  | 2307 |
| 25° | 7514 | 8284  | 9907  | 11066 | 11460 | 3458 |
| 35° | 6512 | 8354  | 11215 | 11601 | 11418 | 4067 |
| 45° | 5192 | 8942  | 10508 | 7837  | 6777  | 4002 |
| 55° | 3713 | 9236  | 3875  | 1865  | 1630  | 3351 |
| 65° | 2861 | 2951  | 725   | 908   | 981   | 2784 |
| 75° | 1308 | 452   | 398   | 458   | 466   | 1416 |
| 85° | 133  | 119   | 56    | 32    | 24    | 200  |
| 90° | 0    | 0     | 0     | 0     | 0     |      |



TEST NUMBER: P685538

CATALOG NUMBER: 8CZL-32-UNV-W-L950-CD-U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     | 90°     |
|-------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 8474.6 | 8474.6 | 8474.6 | 8474.6  | 8474.6  | 8474.6  | 8474.6  | 8474.6  | 8474.6  | 8474.6  | 8474.6  |
| 2.5°  | 8548.2 | 8521.7 | 8477.5 | 8459.8  | 8468.7  | 8512.9  | 8527.6  | 8495.2  | 8486.3  | 8462.8  | 8439.2  |
| 5°    | 8515.8 | 8492.2 | 8459.8 | 8453.9  | 8486.3  | 8560.0  | 8592.4  | 8583.6  | 8598.3  | 8601.3  | 8586.5  |
| 7.5°  | 8468.7 | 8448.0 | 8421.5 | 8448.0  | 8515.8  | 8633.7  | 8707.3  | 8730.9  | 8783.9  | 8795.7  | 8792.8  |
| 10°   | 8397.9 | 8380.3 | 8371.4 | 8439.2  | 8557.1  | 8733.9  | 8863.5  | 8928.3  | 9004.9  | 9031.5  | 9040.3  |
| 12.5° | 8303.6 | 8286.0 | 8309.5 | 8427.4  | 8613.0  | 8866.5  | 9058.0  | 9172.9  | 9281.9  | 9337.9  | 9355.6  |
| 15°   | 8176.9 | 8171.0 | 8230.0 | 8418.6  | 8683.8  | 9019.7  | 9284.9  | 9464.6  | 9620.8  | 9682.7  | 9706.2  |
| 17.5° | 8038.4 | 8041.4 | 8147.5 | 8415.6  | 8769.2  | 9199.4  | 9538.3  | 9794.6  | 9986.2  | 10074.6 | 10101.1 |
| 20°   | 7885.2 | 7894.1 | 8053.2 | 8412.7  | 8875.3  | 9399.8  | 9818.2  | 10154.1 | 10392.8 | 10510.7 | 10549.0 |
| 22.5° | 7705.5 | 7723.2 | 7950.0 | 8415.6  | 8987.3  | 9629.6  | 10148.2 | 10549.0 | 10834.8 | 10976.3 | 11023.4 |
| 25°   | 7513.9 | 7540.5 | 7844.0 | 8430.4  | 9128.7  | 9906.6  | 10525.4 | 10993.9 | 11282.7 | 11406.5 | 11459.5 |
| 27.5° | 7292.9 | 7337.1 | 7729.0 | 8451.0  | 9296.7  | 10227.8 | 10911.4 | 11362.3 | 11630.4 | 11724.7 | 11771.8 |
| 30°   | 7057.2 | 7107.3 | 7617.1 | 8492.2  | 9514.7  | 10578.5 | 11268.0 | 11648.1 | 11827.8 | 11880.9 | 11907.4 |
| 32.5° | 6797.9 | 6880.4 | 7505.1 | 8560.0  | 9771.1  | 10917.3 | 11530.2 | 11757.1 | 11801.3 | 11783.6 | 11792.5 |
| 35°   | 6512.1 | 6600.5 | 7399.0 | 8672.0  | 10062.8 | 11214.9 | 11633.4 | 11633.4 | 11503.7 | 11424.1 | 11418.2 |
| 37.5° | 6208.6 | 6320.6 | 7292.9 | 8801.6  | 10401.7 | 11412.4 | 11521.4 | 11229.7 | 10914.4 | 10743.5 | 10716.9 |
| 40°   | 5878.6 | 6028.8 | 7219.3 | 8978.4  | 10708.1 | 11427.1 | 11120.6 | 10519.5 | 9983.2  | 9706.2  | 9673.8  |
| 42.5° | 5551.5 | 5737.1 | 7186.9 | 9208.3  | 10937.9 | 11156.0 | 10366.3 | 9438.1  | 8710.3  | 8383.2  | 8347.8  |
| 45°   | 5192.0 | 5436.6 | 7198.7 | 9523.6  | 10999.8 | 10507.7 | 9243.6  | 8041.4  | 7225.2  | 6812.6  | 6777.3  |
| 47.5° | 4835.4 | 5138.9 | 7228.1 | 9880.1  | 10728.7 | 9408.6  | 7749.7  | 6358.9  | 5548.5  | 5115.4  | 5109.5  |
| 50°   | 4464.2 | 4859.0 | 7298.8 | 10171.8 | 9995.0  | 7894.1  | 5913.9  | 4555.5  | 3907.3  | 3577.2  | 3550.7  |
| 52.5° | 4078.2 | 4614.4 | 7452.1 | 10224.9 | 8689.7  | 5949.3  | 4013.3  | 3040.9  | 2619.6  | 2410.4  | 2369.1  |
| 55°   | 3712.8 | 4408.2 | 7702.5 | 9747.5  | 6812.6  | 3874.8  | 2528.2  | 1918.3  | 1706.1  | 1620.7  | 1629.5  |
| 57.5° | 3397.5 | 4255.0 | 7994.2 | 8501.1  | 4422.9  | 2280.7  | 1464.5  | 1275.9  | 1270.0  | 1278.8  | 1281.8  |
| 60°   | 3141.1 | 4160.7 | 8123.9 | 6376.5  | 2428.0  | 1178.7  | 1022.5  | 1063.7  | 1119.7  | 1152.1  | 1158.0  |
| 62.5° | 2973.2 | 4110.6 | 7729.0 | 3695.1  | 1078.5  | 822.1   | 892.8   | 969.4   | 1034.3  | 1063.7  | 1066.7  |
| 65°   | 2861.2 | 3978.0 | 6323.5 | 1826.9  | 660.0   | 724.9   | 813.3   | 892.8   | 951.8   | 975.3   | 981.2   |
| 67.5° | 2687.3 | 3603.7 | 4334.5 | 757.3   | 580.5   | 654.2   | 739.6   | 816.2   | 866.3   | 884.0   | 886.9   |
| 70°   | 2286.6 | 3017.4 | 2519.4 | 503.9   | 524.5   | 601.1   | 668.9   | 727.8   | 760.2   | 769.1   | 766.1   |
| 72.5° | 1785.7 | 2389.7 | 1273.0 | 456.7   | 486.2   | 527.4   | 565.8   | 598.2   | 615.8   | 624.7   | 624.7   |
| 75°   | 1308.3 | 1747.4 | 598.2  | 403.7   | 362.4   | 397.8   | 436.1   | 456.7   | 462.6   | 465.6   | 465.6   |
| 77.5° | 878.1  | 1205.2 | 356.5  | 312.3   | 279.9   | 309.4   | 324.1   | 315.3   | 309.4   | 315.3   | 315.3   |
| 80°   | 530.4  | 742.6  | 312.3  | 226.9   | 215.1   | 218.1   | 206.3   | 206.3   | 218.1   | 223.9   | 221.0   |
| 82.5° | 285.8  | 421.4  | 274.0  | 165.0   | 144.4   | 132.6   | 129.7   | 123.8   | 117.9   | 114.9   | 114.9   |
| 85°   | 132.6  | 215.1  | 176.8  | 100.2   | 76.6    | 56.0    | 44.2    | 32.4    | 29.5    | 23.6    | 23.6    |
| 87.5° | 53.0   | 82.5   | 53.0   | 32.4    | 17.7    | 11.8    | 8.8     | 5.9     | 2.9     | 2.9     | 2.9     |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)