

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: P412611

Luminaire Tested: **24PD-95-PB1-L935**

Issue Date: 9/15/2020



**Test Information**

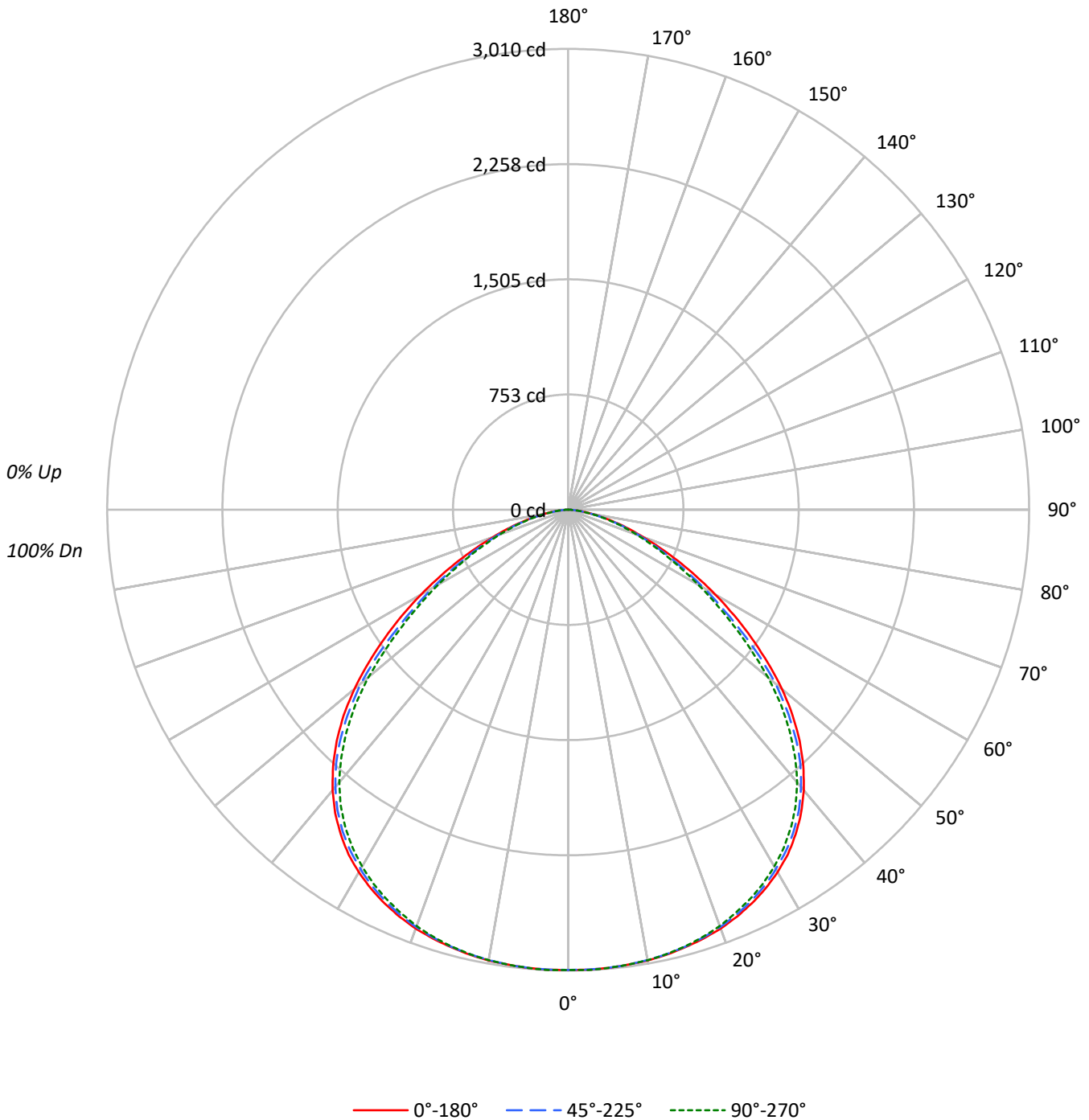
Test Method: LM-79-08  
Report Number: P412611  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2008-911-45)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24PD-95-PB1-L935  
Description: 9500 LUMEN 2X4 PERCEIVE LED TROFFER WITH BEVEL PATTERN OPTICS AND 90 CRI, 3500 CCT LEDS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7998.0 lumens  
Efficiency: N/A  
Efficacy: 109.6 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.32 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 73  
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

TEST NUMBER: P412611  
CATALOG NUMBER: 24PD-95-PB1-L935

### Luminous Intensity Polar Plot





TEST NUMBER: P412611

CATALOG NUMBER: 24PD-95-PB1-L935

**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 | 102 | 102 | 102 | 100 |
| 1   | 110 | 106 | 102 | 98  | 107 | 103 | 100 | 97  | 99  | 96  | 94  | 95  | 93  | 91  | 92  | 90  | 88  | 86  |
| 2   | 101 | 93  | 87  | 82  | 98  | 91  | 86  | 81  | 88  | 83  | 79  | 85  | 81  | 77  | 82  | 78  | 75  | 73  |
| 3   | 92  | 83  | 75  | 69  | 90  | 81  | 74  | 68  | 78  | 72  | 67  | 75  | 70  | 66  | 73  | 69  | 65  | 63  |
| 4   | 85  | 74  | 65  | 59  | 83  | 72  | 65  | 59  | 70  | 63  | 58  | 68  | 62  | 57  | 65  | 60  | 56  | 54  |
| 5   | 78  | 66  | 57  | 51  | 76  | 65  | 57  | 51  | 63  | 56  | 50  | 61  | 55  | 50  | 59  | 54  | 49  | 47  |
| 6   | 72  | 60  | 51  | 45  | 70  | 59  | 51  | 45  | 57  | 50  | 44  | 55  | 49  | 44  | 54  | 48  | 43  | 41  |
| 7   | 67  | 54  | 46  | 40  | 65  | 53  | 45  | 40  | 52  | 45  | 39  | 50  | 44  | 39  | 49  | 43  | 39  | 37  |
| 8   | 63  | 49  | 41  | 35  | 61  | 49  | 41  | 35  | 47  | 40  | 35  | 46  | 40  | 35  | 45  | 39  | 35  | 33  |
| 9   | 58  | 45  | 37  | 32  | 57  | 45  | 37  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 31  | 30  |
| 10  | 55  | 42  | 34  | 29  | 53  | 41  | 34  | 29  | 40  | 33  | 29  | 39  | 33  | 29  | 39  | 33  | 29  | 27  |

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

|     | 0°   | 45°  | 90°  |
|-----|------|------|------|
| 0°  | 4044 | 4044 | 4044 |
| 5°  | 4058 | 4058 | 4058 |
| 10° | 4085 | 4080 | 4082 |
| 15° | 4121 | 4116 | 4113 |
| 20° | 4168 | 4154 | 4143 |
| 25° | 4212 | 4190 | 4167 |
| 30° | 4248 | 4213 | 4181 |
| 35° | 4253 | 4216 | 4164 |
| 40° | 4203 | 4154 | 4084 |
| 45° | 4067 | 3993 | 3890 |
| 50° | 3814 | 3695 | 3560 |
| 55° | 3427 | 3224 | 3091 |
| 60° | 2984 | 2746 | 2641 |
| 65° | 2511 | 2323 | 2222 |
| 70° | 2046 | 1943 | 1865 |
| 75° | 1640 | 1582 | 1516 |
| 80° | 1259 | 1161 | 1130 |
| 85° | 787  | 763  | 763  |



TEST NUMBER: P412611

CATALOG NUMBER: 24PD-95-PB1-L935

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 286.2  | 3.6       |
| 10°-20°   | 835.3  | 10.4      |
| 20°-30°   | 1301.3 | 16.3      |
| 30°-40°   | 1600.8 | 20.0      |
| 40°-50°   | 1607.9 | 20.1      |
| 50°-60°   | 1239.3 | 15.5      |
| 60°-70°   | 735.7  | 9.2       |
| 70°-80°   | 327.6  | 4.1       |
| 80°-90°   | 64.0   | 0.8       |
| 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°    | 2422.7 | 30.3      |
| 0°-40°    | 4023.5 | 50.3      |
| 0°-60°    | 6870.8 | 85.9      |
| 0°-90°    | 7998.0 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 7998.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|-----|------|-------|------|-------|------|------|
| 0°  | 3006 | 3006  | 3006 | 3006  | 3006 |      |
| 5°  | 3004 | 3005  | 3004 | 3001  | 3004 | 286  |
| 15° | 2959 | 2959  | 2955 | 2950  | 2952 | 837  |
| 25° | 2837 | 2836  | 2822 | 2810  | 2807 | 1308 |
| 35° | 2589 | 2585  | 2567 | 2545  | 2535 | 1617 |
| 45° | 2137 | 2132  | 2098 | 2063  | 2044 | 1641 |
| 55° | 1461 | 1433  | 1374 | 1333  | 1318 | 1307 |
| 65° | 789  | 754   | 730  | 702   | 698  | 788  |
| 75° | 316  | 309   | 304  | 294   | 292  | 342  |
| 85° | 51   | 49    | 49   | 47    | 49   | 68   |
| 90° | 0    | 0     | 0    | 0     | 0    |      |



TEST NUMBER: P412611

CATALOG NUMBER: 24PD-95-PB1-L935

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|-------|--------|--------|--------|--------|--------|
| 0°    | 3005.8 | 3005.8 | 3005.8 | 3005.8 | 3005.8 |
| 2.5°  | 3007.3 | 3006.5 | 3006.5 | 3003.4 | 3009.7 |
| 5°    | 3004.2 | 3005.0 | 3004.2 | 3001.0 | 3004.2 |
| 7.5°  | 2997.8 | 2998.6 | 2997.0 | 2993.8 | 2997.0 |
| 10°   | 2989.8 | 2989.8 | 2986.6 | 2985.0 | 2987.4 |
| 12.5° | 2976.3 | 2976.3 | 2973.1 | 2970.7 | 2973.1 |
| 15°   | 2958.7 | 2958.7 | 2954.8 | 2950.0 | 2952.4 |
| 17.5° | 2937.2 | 2937.2 | 2930.9 | 2924.5 | 2926.1 |
| 20°   | 2910.9 | 2910.2 | 2901.4 | 2892.6 | 2893.4 |
| 22.5° | 2877.5 | 2876.7 | 2865.5 | 2855.2 | 2852.0 |
| 25°   | 2836.9 | 2836.1 | 2822.5 | 2809.8 | 2806.6 |
| 27.5° | 2789.9 | 2786.7 | 2771.5 | 2757.2 | 2754.0 |
| 30°   | 2734.1 | 2731.7 | 2711.8 | 2697.4 | 2691.1 |
| 32.5° | 2669.6 | 2663.2 | 2644.9 | 2627.3 | 2618.6 |
| 35°   | 2589.1 | 2585.1 | 2566.8 | 2545.3 | 2534.9 |
| 37.5° | 2498.3 | 2494.3 | 2474.4 | 2450.5 | 2438.5 |
| 40°   | 2393.1 | 2389.9 | 2365.2 | 2340.6 | 2325.4 |
| 42.5° | 2272.0 | 2269.6 | 2243.4 | 2209.1 | 2193.2 |
| 45°   | 2137.4 | 2131.8 | 2098.4 | 2063.3 | 2044.2 |
| 47.5° | 1987.6 | 1978.1 | 1937.4 | 1904.0 | 1883.3 |
| 50°   | 1821.9 | 1809.2 | 1765.4 | 1722.4 | 1700.8 |
| 52.5° | 1642.7 | 1620.4 | 1575.0 | 1525.6 | 1504.9 |
| 55°   | 1461.1 | 1433.2 | 1374.2 | 1332.8 | 1317.7 |
| 57.5° | 1283.4 | 1242.8 | 1187.0 | 1157.5 | 1142.4 |
| 60°   | 1108.9 | 1064.3 | 1020.5 | 991.8  | 981.5  |
| 62.5° | 942.4  | 905.0  | 867.5  | 838.9  | 832.5  |
| 65°   | 788.7  | 754.4  | 729.7  | 701.8  | 697.9  |
| 67.5° | 645.3  | 629.4  | 607.0  | 583.1  | 580.0  |
| 70°   | 520.2  | 513.8  | 493.9  | 479.6  | 474.0  |
| 72.5° | 415.1  | 408.7  | 394.3  | 384.0  | 382.4  |
| 75°   | 315.5  | 309.1  | 304.3  | 294.0  | 291.6  |
| 77.5° | 224.7  | 225.5  | 221.5  | 215.9  | 217.5  |
| 80°   | 162.5  | 153.0  | 149.8  | 146.6  | 145.8  |
| 82.5° | 99.6   | 94.0   | 91.6   | 90.8   | 92.4   |
| 85°   | 51.0   | 48.6   | 49.4   | 47.0   | 49.4   |
| 87.5° | 17.5   | 17.5   | 18.3   | 17.5   | 19.1   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)