

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: P#

Luminaire Tested: **8SKB1-LD5-8-N-RS-UNV-L840-CD1-RS-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1709-317-8)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 8SKB1-LD5-8-N-RS-UNV-L840-CD1-RS-U  
Description: METALUX SKYBAR 8' WAVESTREAM STRIP  
WITH NARROW LENS AND REFLECTOR  
Light Source: (392) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

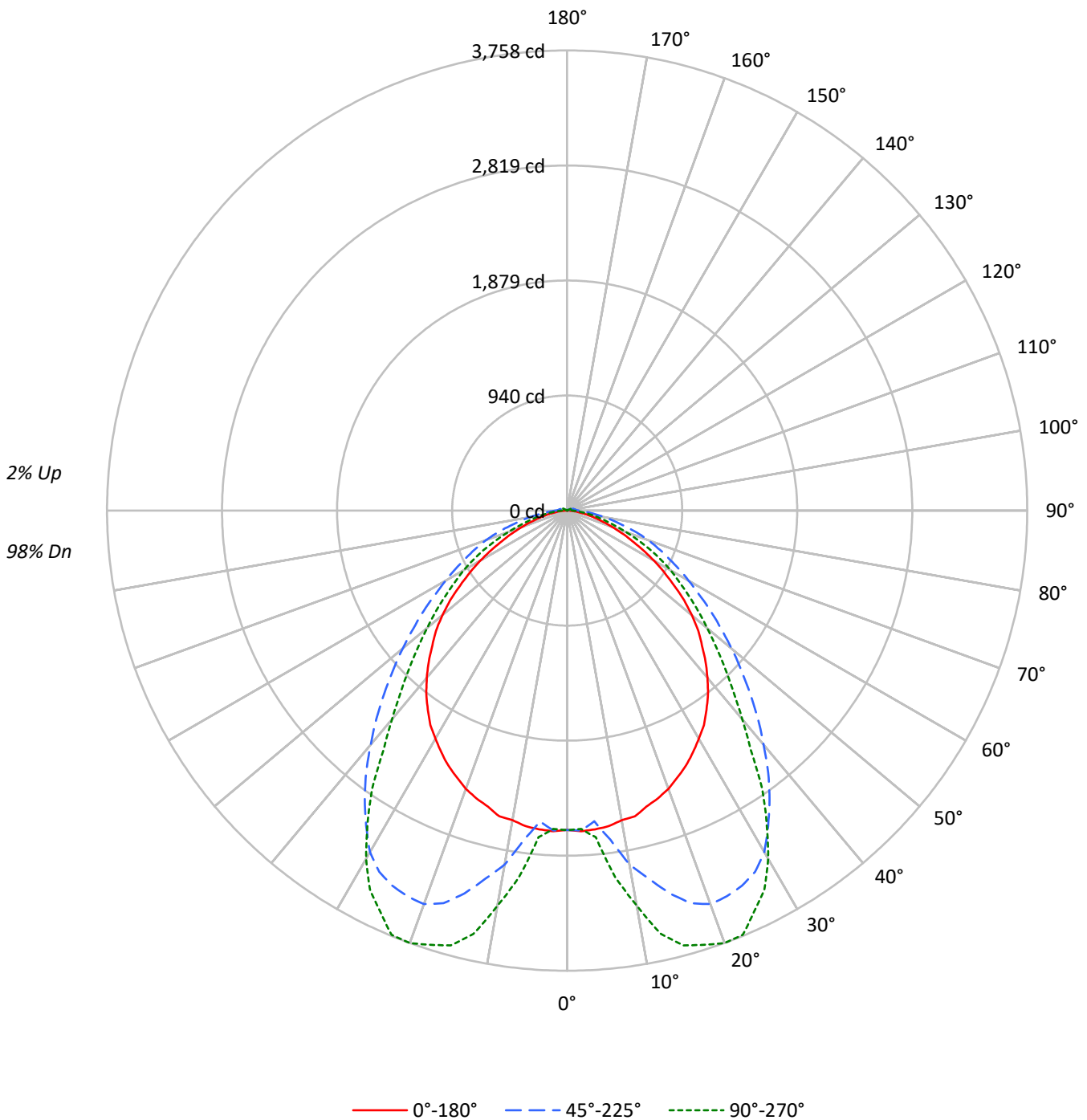
Lumens per Lamp: N/A  
Luminaire Lumens: 8506.0 lumens  
Efficiency: N/A  
Efficacy: 143.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.5 / 1.49  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 8' x H: 0.29')  
CIE Type: Direct

Input Watts (W): 59.5  
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  | 50 | 30 | 10 | 0  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 110 | 110 | 110 | 105 | 105 | 105 | 100 | 100 | 100 | 98 |    |    |    |   |
| 1   | 109 | 104 | 100 | 97  | 106 | 102 | 98  | 95  | 97  | 94  | 92  | 93  | 91  | 88  | 89  | 87  | 85  | 83 |    |    |    |   |
| 2   | 100 | 92  | 85  | 80  | 97  | 90  | 84  | 79  | 86  | 81  | 77  | 82  | 78  | 75  | 79  | 76  | 73  | 71 |    |    |    |   |
| 3   | 91  | 81  | 73  | 67  | 89  | 80  | 72  | 67  | 76  | 70  | 65  | 73  | 68  | 64  | 71  | 66  | 63  | 60 |    |    |    |   |
| 4   | 84  | 72  | 64  | 58  | 82  | 71  | 63  | 57  | 68  | 62  | 56  | 66  | 60  | 55  | 63  | 58  | 54  | 52 |    |    |    |   |
| 5   | 77  | 65  | 56  | 50  | 75  | 64  | 56  | 50  | 62  | 54  | 49  | 59  | 53  | 48  | 57  | 52  | 48  | 46 |    |    |    |   |
| 6   | 72  | 59  | 50  | 44  | 70  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  | 52  | 47  | 42  | 40 |    |    |    |   |
| 7   | 67  | 53  | 45  | 39  | 65  | 53  | 44  | 39  | 51  | 44  | 38  | 49  | 43  | 38  | 48  | 42  | 38  | 36 |    |    |    |   |
| 8   | 62  | 49  | 41  | 35  | 60  | 48  | 40  | 35  | 47  | 40  | 34  | 45  | 39  | 34  | 44  | 38  | 34  | 32 |    |    |    |   |
| 9   | 58  | 45  | 37  | 31  | 56  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 35  | 31  | 41  | 35  | 31  | 29 |    |    |    |   |
| 10  | 54  | 41  | 34  | 29  | 53  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 38  | 32  | 28  | 26 |    |    |    |   |

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

|     | 0°    | 45°   | 90°   |
|-----|-------|-------|-------|
| 0°  | 14040 | 14040 | 14040 |
| 5°  | 14074 | 12809 | 13128 |
| 10° | 13940 | 13947 | 14855 |
| 15° | 13807 | 14682 | 15606 |
| 20° | 13666 | 14955 | 15106 |
| 25° | 13415 | 14372 | 13895 |
| 30° | 13089 | 13422 | 12191 |
| 35° | 12711 | 11865 | 10044 |
| 40° | 12153 | 10234 | 7894  |
| 45° | 11435 | 8683  | 6405  |
| 50° | 10666 | 7296  | 5227  |
| 55° | 9513  | 6062  | 4271  |
| 60° | 8304  | 4984  | 3471  |
| 65° | 6914  | 4084  | 2688  |
| 70° | 5643  | 3306  | 1909  |
| 75° | 4468  | 2414  | 1272  |
| 80° | 3388  | 1637  | 805   |
| 85° | 2319  | 993   | 433   |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 261.0  | 3.1       |
| 10°-20°   | 890.7  | 10.5      |
| 20°-30°   | 1460.6 | 17.2      |
| 30°-40°   | 1651.1 | 19.4      |
| 40°-50°   | 1487.6 | 17.5      |
| 50°-60°   | 1172.1 | 13.8      |
| 60°-70°   | 806.2  | 9.5       |
| 70°-80°   | 449.5  | 5.3       |
| 80°-90°   | 182.4  | 2.1       |
| 90°-100°  | 69.4   | 0.8       |
| 100°-110° | 38.7   | 0.5       |
| 110°-120° | 21.2   | 0.2       |
| 120°-130° | 7.3    | 0.1       |
| 130°-140° | 5.0    | 0.1       |
| 140°-150° | 3.0    | 0.0       |
| 150°-160° | 0.3    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 2612.3 | 30.7      |
| 0°-40°    | 4263.4 | 50.1      |
| 0°-60°    | 6923.1 | 81.4      |
| 0°-90°    | 8361.2 | 98.3      |
| 90°-120°  | 129.3  | 1.5       |
| 90°-150°  | 144.6  | 1.7       |
| 90°-180°  | 145.0  | 1.7       |
| 0°-180°   | 8506.0 | 100.0     |

**CANDELA DISTRIBUTION:**

|      | 0°   | 22.5° | 45°  | 67.5° | 90°  | Flux |
|------|------|-------|------|-------|------|------|
| 0°   | 2609 | 2609  | 2609 | 2609  | 2609 |      |
| 5°   | 2613 | 2624  | 2547 | 2661  | 2678 | 248  |
| 15°  | 2502 | 2693  | 3236 | 3610  | 3676 | 707  |
| 25°  | 2298 | 2778  | 3380 | 3631  | 3613 | 1057 |
| 35°  | 1984 | 2502  | 2882 | 2840  | 2778 | 1239 |
| 45°  | 1557 | 1945  | 2111 | 1950  | 1823 | 1203 |
| 55°  | 1067 | 1345  | 1431 | 1306  | 1214 | 957  |
| 65°  | 585  | 844   | 906  | 831   | 739  | 587  |
| 75°  | 244  | 515   | 485  | 388   | 327  | 264  |
| 85°  | 53   | 257   | 172  | 128   | 101  | 60   |
| 90°  | 2    | 164   | 95   | 62    | 44   | 3    |
| 95°  | 0    | 114   | 71   | 47    | 34   | 0    |
| 105° | 0    | 29    | 52   | 45    | 35   | 0    |
| 115° | 0    | 22    | 9    | 35    | 39   | 0    |
| 125° | 1    | 16    | 8    | 7     | 0    | 1    |
| 135° | 1    | 9     | 8    | 8     | 0    | 1    |
| 145° | 1    | 5     | 6    | 7     | 0    | 1    |
| 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: P#

CATALOG NUMBER: 8SKB1-LD5-8-N-RS-UNV-L840-CD1-RS-U

**CANDELA DISTRIBUTION (FULL):**

|        | 0°     | 22.5°  | 45°    | 67.5°  | 90°    |
|--------|--------|--------|--------|--------|--------|
| 0°     | 2608.7 | 2608.7 | 2608.7 | 2608.7 | 2608.7 |
| 2.5°   | 2621.4 | 2616.8 | 2614.5 | 2636.5 | 2601.8 |
| 5°     | 2613.3 | 2623.8 | 2547.4 | 2660.8 | 2678.1 |
| 7.5°   | 2599.5 | 2569.4 | 2711.7 | 2961.6 | 3021.7 |
| 10°    | 2567.1 | 2534.7 | 2934.9 | 3211.4 | 3277.4 |
| 12.5°  | 2557.8 | 2600.6 | 3078.4 | 3449.7 | 3542.3 |
| 15°    | 2502.3 | 2693.2 | 3235.7 | 3610.5 | 3676.5 |
| 17.5°  | 2464.1 | 2759.1 | 3361.8 | 3671.9 | 3718.1 |
| 20°    | 2417.8 | 2778.8 | 3419.7 | 3706.6 | 3757.5 |
| 22.5°  | 2356.5 | 2798.4 | 3409.3 | 3707.7 | 3749.4 |
| 25°    | 2297.5 | 2777.6 | 3380.3 | 3631.4 | 3612.9 |
| 27.5°  | 2225.8 | 2731.3 | 3324.8 | 3515.7 | 3489.1 |
| 30°    | 2150.6 | 2681.6 | 3220.7 | 3328.3 | 3283.2 |
| 32.5°  | 2077.7 | 2607.6 | 3054.1 | 3086.5 | 3034.4 |
| 35°    | 1984.0 | 2502.3 | 2881.7 | 2840.1 | 2777.6 |
| 37.5°  | 1889.1 | 2378.5 | 2697.8 | 2587.9 | 2462.9 |
| 40°    | 1782.7 | 2238.5 | 2496.5 | 2368.1 | 2223.5 |
| 42.5°  | 1672.8 | 2089.3 | 2305.6 | 2149.4 | 2010.6 |
| 45°    | 1557.1 | 1944.7 | 2111.3 | 1950.5 | 1823.2 |
| 47.5°  | 1453.0 | 1797.8 | 1928.5 | 1763.0 | 1652.0 |
| 50°    | 1329.2 | 1645.0 | 1755.0 | 1595.3 | 1492.3 |
| 52.5°  | 1204.3 | 1498.1 | 1582.6 | 1442.6 | 1348.9 |
| 55°    | 1066.6 | 1345.4 | 1431.0 | 1306.1 | 1213.5 |
| 57.5°  | 940.5  | 1210.1 | 1277.2 | 1178.8 | 1085.1 |
| 60°    | 820.2  | 1074.7 | 1145.3 | 1051.6 | 974.1  |
| 62.5°  | 696.4  | 957.9  | 1025.0 | 942.8  | 856.1  |
| 65°    | 585.4  | 844.5  | 905.8  | 830.6  | 739.2  |
| 67.5°  | 487.0  | 748.5  | 804.0  | 703.4  | 616.6  |
| 70°    | 394.5  | 662.9  | 701.1  | 588.8  | 510.2  |
| 72.5°  | 312.4  | 583.1  | 595.8  | 478.9  | 409.5  |
| 75°    | 244.1  | 514.8  | 484.7  | 387.5  | 327.4  |
| 77.5°  | 181.6  | 454.6  | 391.0  | 307.7  | 256.8  |
| 80°    | 131.9  | 394.5  | 307.7  | 234.8  | 197.8  |
| 82.5°  | 91.4   | 325.1  | 236.0  | 177.0  | 145.8  |
| 85°    | 53.2   | 256.8  | 172.4  | 128.4  | 100.6  |
| 87.5°  | 19.7   | 208.2  | 126.1  | 86.8   | 67.1   |
| 90°    | 2.3    | 164.3  | 94.9   | 62.5   | 44.0   |
| 92.5°  | 1.2    | 138.8  | 78.7   | 52.1   | 35.9   |
| 95°    | 0.0    | 114.5  | 70.6   | 47.4   | 33.5   |
| 97.5°  | 0.0    | 90.2   | 64.8   | 46.3   | 33.5   |
| 100°   | 0.0    | 59.0   | 60.2   | 44.0   | 32.4   |
| 102.5° | 0.0    | 33.5   | 56.7   | 44.0   | 33.5   |
| 105°   | 0.0    | 28.9   | 52.1   | 45.1   | 34.7   |
| 107.5° | 0.0    | 26.6   | 46.3   | 47.4   | 37.0   |
| 110°   | 0.0    | 25.5   | 30.1   | 48.6   | 39.3   |



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**CANDELA DISTRIBUTION (continued):**

|        | 0°  | 22.5° | 45°  | 67.5° | 90°  |
|--------|-----|-------|------|-------|------|
| 112.5° | 0.0 | 23.1  | 11.6 | 49.7  | 41.6 |
| 115°   | 0.0 | 22.0  | 9.3  | 34.7  | 39.3 |
| 117.5° | 0.0 | 20.8  | 9.3  | 24.3  | 25.5 |
| 120°   | 1.2 | 18.5  | 9.3  | 6.9   | 6.9  |
| 122.5° | 1.2 | 17.4  | 8.1  | 6.9   | 0.0  |
| 125°   | 1.2 | 16.2  | 8.1  | 6.9   | 0.0  |
| 127.5° | 1.2 | 13.9  | 8.1  | 8.1   | 0.0  |
| 130°   | 1.2 | 12.7  | 8.1  | 6.9   | 0.0  |
| 132.5° | 1.2 | 11.6  | 8.1  | 8.1   | 0.0  |
| 135°   | 1.2 | 9.3   | 8.1  | 8.1   | 0.0  |
| 137.5° | 1.2 | 8.1   | 6.9  | 8.1   | 0.0  |
| 140°   | 1.2 | 6.9   | 6.9  | 8.1   | 0.0  |
| 142.5° | 1.2 | 5.8   | 6.9  | 8.1   | 0.0  |
| 145°   | 1.2 | 4.6   | 5.8  | 6.9   | 0.0  |
| 147.5° | 1.2 | 3.5   | 5.8  | 6.9   | 0.0  |
| 150°   | 1.2 | 3.5   | 4.6  | 6.9   | 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)