

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: **24CZ-LD5-30SE-RDP-UNV-L835-CD1-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 (P25713)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-30SE-RDP-UNV-L835-CD1-U  
Description:

Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2013.1 lumens  
Efficiency: N/A  
Efficacy: 85.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 4' x H: 0.1')  
CIE Type: Direct

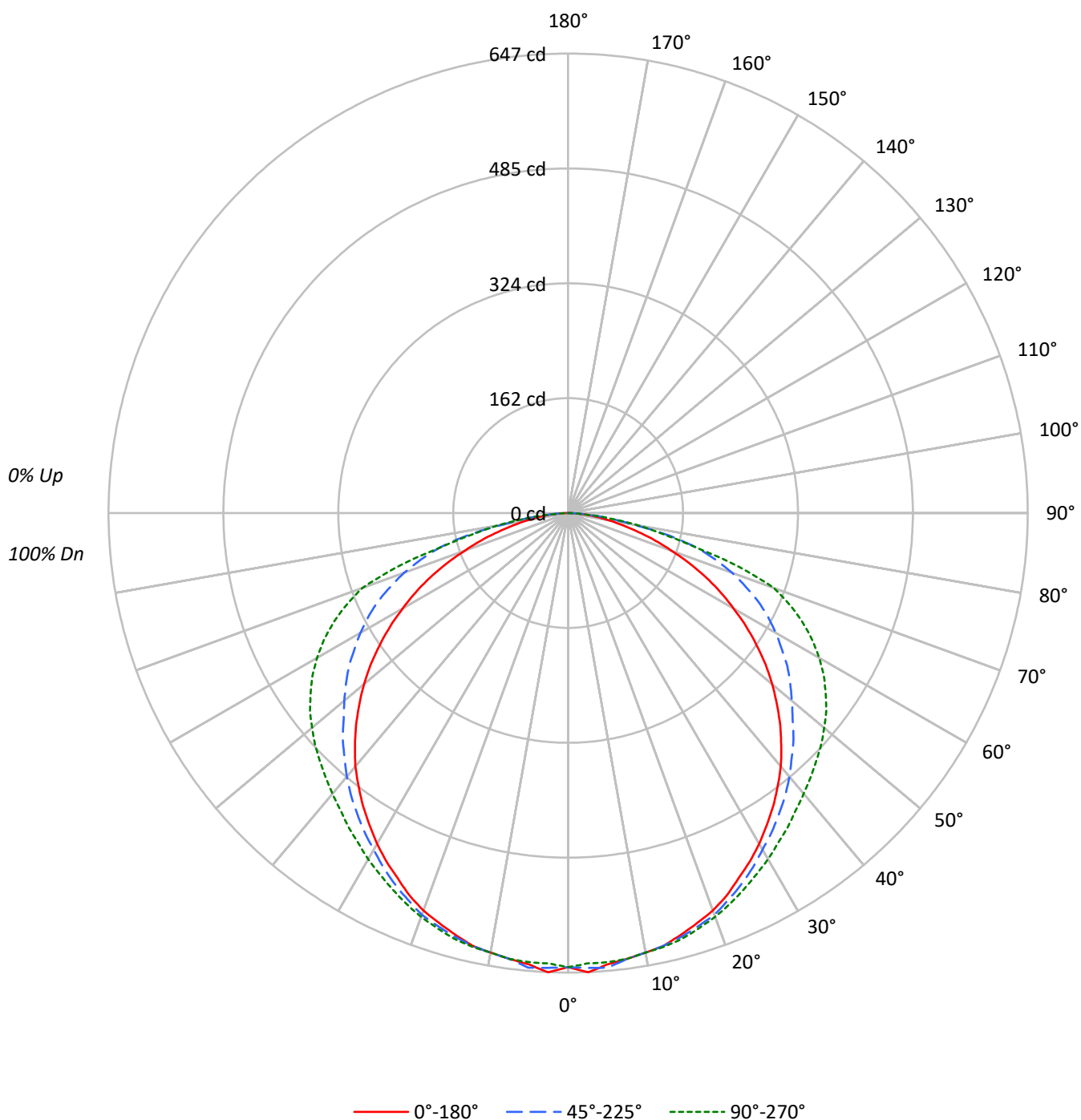
Input Watts (W): 23.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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  |
| RW  | 70  | 50  | 30  | 10  | 70  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  | 50  | 30  | 10  |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 |
| 1   | 108 | 103 | 99  | 95  | 105 | 101 | 97  | 93  | 97  | 93  | 90  | 93  | 90  | 87  | 89  | 87  | 85  |
| 2   | 98  | 89  | 82  | 76  | 95  | 87  | 81  | 75  | 84  | 78  | 73  | 80  | 76  | 71  | 77  | 73  | 70  |
| 3   | 89  | 78  | 69  | 62  | 86  | 76  | 68  | 62  | 73  | 66  | 61  | 70  | 64  | 59  | 68  | 63  | 58  |
| 4   | 81  | 68  | 59  | 52  | 79  | 67  | 58  | 52  | 64  | 57  | 51  | 62  | 56  | 50  | 60  | 54  | 50  |
| 5   | 74  | 61  | 52  | 45  | 72  | 60  | 51  | 44  | 58  | 50  | 44  | 56  | 49  | 43  | 54  | 48  | 43  |
| 6   | 68  | 55  | 45  | 39  | 66  | 54  | 45  | 39  | 52  | 44  | 38  | 50  | 43  | 38  | 48  | 42  | 37  |
| 7   | 63  | 49  | 40  | 34  | 62  | 49  | 40  | 34  | 47  | 39  | 34  | 45  | 39  | 33  | 44  | 38  | 33  |
| 8   | 59  | 45  | 36  | 30  | 57  | 44  | 36  | 30  | 43  | 35  | 30  | 42  | 35  | 30  | 40  | 34  | 29  |
| 9   | 55  | 41  | 33  | 27  | 54  | 41  | 33  | 27  | 39  | 32  | 27  | 38  | 32  | 27  | 37  | 31  | 27  |
| 10  | 51  | 38  | 30  | 24  | 50  | 37  | 30  | 24  | 36  | 29  | 24  | 35  | 29  | 24  | 35  | 28  | 24  |

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

|     | 0°  | 45° | 90°  |
|-----|-----|-----|------|
| 0°  | 860 | 860 | 860  |
| 5°  | 860 | 864 | 854  |
| 10° | 855 | 851 | 851  |
| 15° | 850 | 848 | 853  |
| 20° | 845 | 846 | 851  |
| 25° | 833 | 836 | 848  |
| 30° | 824 | 825 | 850  |
| 35° | 813 | 820 | 856  |
| 40° | 801 | 815 | 870  |
| 45° | 784 | 811 | 895  |
| 50° | 763 | 810 | 930  |
| 55° | 733 | 822 | 969  |
| 60° | 694 | 832 | 1010 |
| 65° | 647 | 845 | 1048 |
| 70° | 570 | 843 | 1065 |
| 75° | 483 | 807 | 808  |
| 80° | 392 | 549 | 604  |
| 85° | 300 | 301 | 276  |



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 60.7   | 3.0       |
| 10°-20°   | 174.3  | 8.7       |
| 20°-30°   | 265.7  | 13.2      |
| 30°-40°   | 325.1  | 16.1      |
| 40°-50°   | 349.8  | 17.4      |
| 50°-60°   | 338.8  | 16.8      |
| 60°-70°   | 287.0  | 14.3      |
| 70°-80°   | 173.5  | 8.6       |
| 80°-90°   | 38.1   | 1.9       |
| 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°    | 500.7  | 24.9      |
| 0°-40°    | 825.8  | 41.0      |
| 0°-60°    | 1514.4 | 75.2      |
| 0°-90°    | 2013.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2013.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°  | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0°  | 639 | 639   | 639 | 639   | 639 |      |
| 5°  | 638 | 638   | 642 | 639   | 635 | 61   |
| 15° | 614 | 616   | 618 | 619   | 621 | 173  |
| 25° | 568 | 571   | 577 | 582   | 585 | 262  |
| 35° | 503 | 506   | 518 | 532   | 539 | 315  |
| 45° | 422 | 430   | 449 | 477   | 494 | 325  |
| 55° | 324 | 338   | 377 | 420   | 442 | 289  |
| 65° | 214 | 238   | 296 | 342   | 364 | 211  |
| 75° | 102 | 138   | 186 | 189   | 184 | 109  |
| 85° | 25  | 30    | 31  | 30    | 28  | 28   |
| 90° | 0   | 0     | 0   | 0     | 0   |      |



TEST NUMBER: P#

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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 22.5° | 45°   | 67.5° | 90°   |
|-------|-------|-------|-------|-------|-------|
| 0°    | 639.4 | 639.4 | 639.4 | 639.4 | 639.4 |
| 2.5°  | 647.2 | 645.7 | 641.0 | 637.8 | 634.7 |
| 5°    | 637.8 | 637.8 | 642.5 | 639.4 | 634.7 |
| 7.5°  | 633.1 | 633.1 | 633.1 | 641.0 | 633.1 |
| 10°   | 628.5 | 630.0 | 628.5 | 634.7 | 628.5 |
| 12.5° | 623.8 | 623.8 | 623.8 | 625.3 | 625.3 |
| 15°   | 614.4 | 615.9 | 617.5 | 619.1 | 620.6 |
| 17.5° | 605.0 | 606.6 | 609.7 | 611.3 | 612.8 |
| 20°   | 595.6 | 597.2 | 601.9 | 601.9 | 605.0 |
| 22.5° | 583.1 | 583.1 | 589.4 | 590.9 | 595.6 |
| 25°   | 567.5 | 570.6 | 576.9 | 581.6 | 584.7 |
| 27.5° | 553.4 | 556.5 | 562.8 | 569.0 | 573.7 |
| 30°   | 537.8 | 540.9 | 547.2 | 556.5 | 562.8 |
| 32.5° | 520.6 | 523.7 | 533.1 | 544.0 | 550.3 |
| 35°   | 503.4 | 506.5 | 517.5 | 531.5 | 539.3 |
| 37.5° | 484.6 | 489.3 | 501.8 | 517.5 | 526.8 |
| 40°   | 465.9 | 470.6 | 484.6 | 501.8 | 515.9 |
| 42.5° | 444.0 | 450.2 | 465.9 | 489.3 | 505.0 |
| 45°   | 422.1 | 429.9 | 448.7 | 476.8 | 494.0 |
| 47.5° | 398.6 | 406.5 | 428.3 | 464.3 | 483.1 |
| 50°   | 375.2 | 384.6 | 411.2 | 450.2 | 470.6 |
| 52.5° | 350.2 | 359.6 | 394.0 | 436.2 | 458.1 |
| 55°   | 323.6 | 337.7 | 376.8 | 420.5 | 442.4 |
| 57.5° | 297.0 | 312.7 | 356.4 | 403.3 | 426.8 |
| 60°   | 268.9 | 287.7 | 337.7 | 384.6 | 408.0 |
| 62.5° | 242.3 | 262.6 | 317.4 | 364.3 | 387.7 |
| 65°   | 214.2 | 237.6 | 295.5 | 342.4 | 364.3 |
| 67.5° | 184.5 | 214.2 | 270.5 | 315.8 | 337.7 |
| 70°   | 154.8 | 189.2 | 245.4 | 287.7 | 308.0 |
| 72.5° | 128.2 | 164.1 | 217.3 | 253.3 | 253.3 |
| 75°   | 101.6 | 137.6 | 186.0 | 189.2 | 184.5 |
| 77.5° | 78.2  | 112.6 | 145.4 | 132.9 | 136.0 |
| 80°   | 57.8  | 86.0  | 92.2  | 96.9  | 100.1 |
| 82.5° | 39.1  | 57.8  | 59.4  | 62.5  | 62.5  |
| 85°   | 25.0  | 29.7  | 31.3  | 29.7  | 28.1  |
| 87.5° | 10.9  | 12.5  | 9.4   | 6.3   | 4.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)