

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P205928

Luminaire Tested: **LD4B30D010 EU4B30508050 4LBSGPH1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P205928
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35319)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LD4B30D010 EU4B30508050 4LBSGPH1
Description: PORTFOLIO 4 INCH SHALLOW RECESSED DOWNLIGHT
SHALLOW DISTRIBUTION WITH GRAPHITE HAZE TRIM
WATTAGE D010TR-27.4W DE010-27.95W D5LT-27.65W DMX-27.73W DL2-29.56W
DL3-29.67W DLE-29.73W
Light Source: HIGH LUMEN LED
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2722.2 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.16 / 1.26
Luminous Opening: Point Source (0' x 0' x 0')
CIE Type: Direct

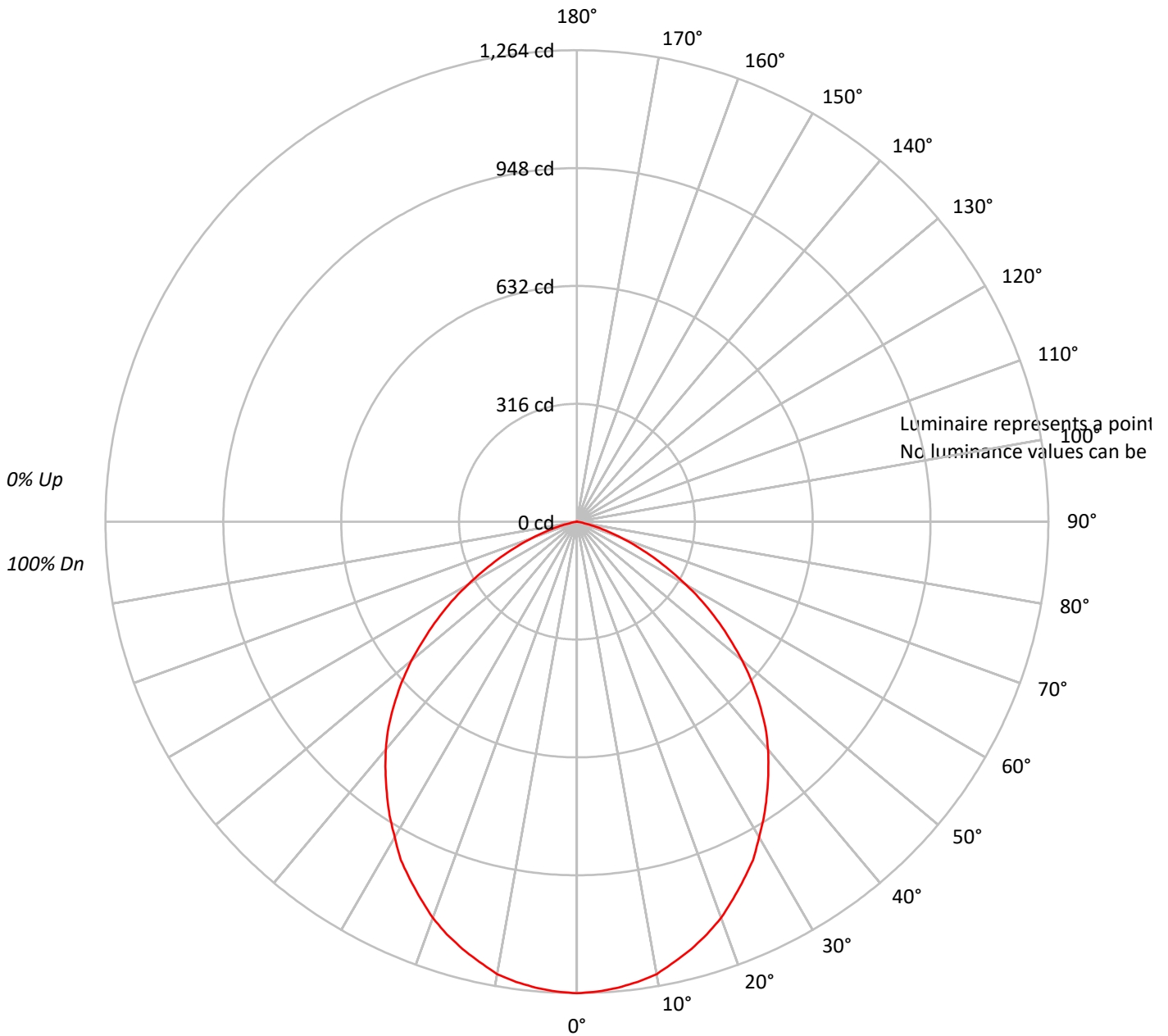
Input Watts (W): 28
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 |
| RCR | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | |
| 1 | 111 | 107 | 103 | 100 | 108 | 105 | 102 | 99 | 101 | 98 | 96 | 97 | 95 | 93 | 93 | 91 | 90 | 88 | | |
| 2 | 102 | 95 | 89 | 84 | 100 | 93 | 88 | 83 | 90 | 85 | 82 | 87 | 83 | 80 | 84 | 81 | 78 | 76 | | |
| 3 | 94 | 85 | 78 | 72 | 92 | 83 | 77 | 71 | 80 | 75 | 70 | 78 | 73 | 69 | 75 | 71 | 68 | 66 | | |
| 4 | 87 | 76 | 68 | 62 | 85 | 75 | 67 | 62 | 72 | 66 | 61 | 70 | 65 | 60 | 68 | 63 | 59 | 57 | | |
| 5 | 80 | 68 | 60 | 54 | 78 | 67 | 60 | 54 | 65 | 59 | 53 | 63 | 58 | 53 | 62 | 56 | 52 | 50 | | |
| 6 | 74 | 62 | 54 | 48 | 73 | 61 | 53 | 48 | 59 | 52 | 47 | 58 | 52 | 47 | 56 | 51 | 47 | 45 | | |
| 7 | 69 | 57 | 48 | 43 | 68 | 56 | 48 | 43 | 54 | 47 | 42 | 53 | 47 | 42 | 52 | 46 | 42 | 40 | | |
| 8 | 65 | 52 | 44 | 38 | 63 | 51 | 44 | 38 | 50 | 43 | 38 | 49 | 42 | 38 | 48 | 42 | 38 | 36 | | |
| 9 | 60 | 48 | 40 | 35 | 59 | 47 | 40 | 35 | 46 | 39 | 35 | 45 | 39 | 34 | 44 | 38 | 34 | 32 | | |
| 10 | 57 | 44 | 37 | 32 | 56 | 44 | 36 | 32 | 43 | 36 | 31 | 42 | 36 | 31 | 41 | 35 | 31 | 30 | | |

AVERAGE LUMINANCE (cd/sqm):





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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 119.0 | 4.4 |
| 10°-20° | 334.2 | 12.3 |
| 20°-30° | 487.4 | 17.9 |
| 30°-40° | 555.8 | 20.4 |
| 40°-50° | 533.1 | 19.6 |
| 50°-60° | 408.3 | 15.0 |
| 60°-70° | 224.0 | 8.2 |
| 70°-80° | 59.6 | 2.2 |
| 80°-90° | 0.9 | 0.0 |
| 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° | 940.5 | 34.6 |
| 0°-40° | 1496.3 | 55.0 |
| 0°-60° | 2437.7 | 89.5 |
| 0°-90° | 2722.2 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 2722.2 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 1264 | |
| 5° | 1254 | 119 |
| 15° | 1186 | 334 |
| 25° | 1058 | 487 |
| 35° | 889 | 556 |
| 45° | 693 | 533 |
| 55° | 457 | 408 |
| 65° | 225 | 224 |
| 75° | 52 | 60 |
| 85° | 0 | 1 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|--------|
| 0° | 1264.3 |
| 2.5° | 1261.1 |
| 5° | 1254.5 |
| 7.5° | 1244.7 |
| 10° | 1231.7 |
| 12.5° | 1208.8 |
| 15° | 1185.9 |
| 17.5° | 1159.8 |
| 20° | 1130.4 |
| 22.5° | 1094.4 |
| 25° | 1058.5 |
| 27.5° | 1022.6 |
| 30° | 976.8 |
| 32.5° | 934.4 |
| 35° | 888.6 |
| 37.5° | 842.9 |
| 40° | 797.1 |
| 42.5° | 748.1 |
| 45° | 692.6 |
| 47.5° | 637.1 |
| 50° | 578.3 |
| 52.5° | 516.2 |
| 55° | 457.4 |
| 57.5° | 398.6 |
| 60° | 336.5 |
| 62.5° | 277.7 |
| 65° | 225.4 |
| 67.5° | 173.1 |
| 70° | 127.4 |
| 72.5° | 84.9 |
| 75° | 52.3 |
| 77.5° | 22.9 |
| 80° | 6.5 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



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— 0°-180°







(END OF REPORT)