

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: P179559

Luminaire Tested: **LDA6A45840D010TE LARH30NF 6LA1LI**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P179559
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26641)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA6A45840D010TE LARH30NF 6LA1LI
Description: PORTFOLIO 6" Adjustable Reflector, Angle-cut Trim, Self-flanged, 30°
Narrow Flood
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4959.9 lumens
Efficiency: N/A
Efficacy: 93.6 lumens/watt
Spacing Criteria (0/90/45): 0.56 / 0.56 / 0.55
Luminous Opening: Circular (Dia: 0.5' x H: 0')
CIE Type: Direct

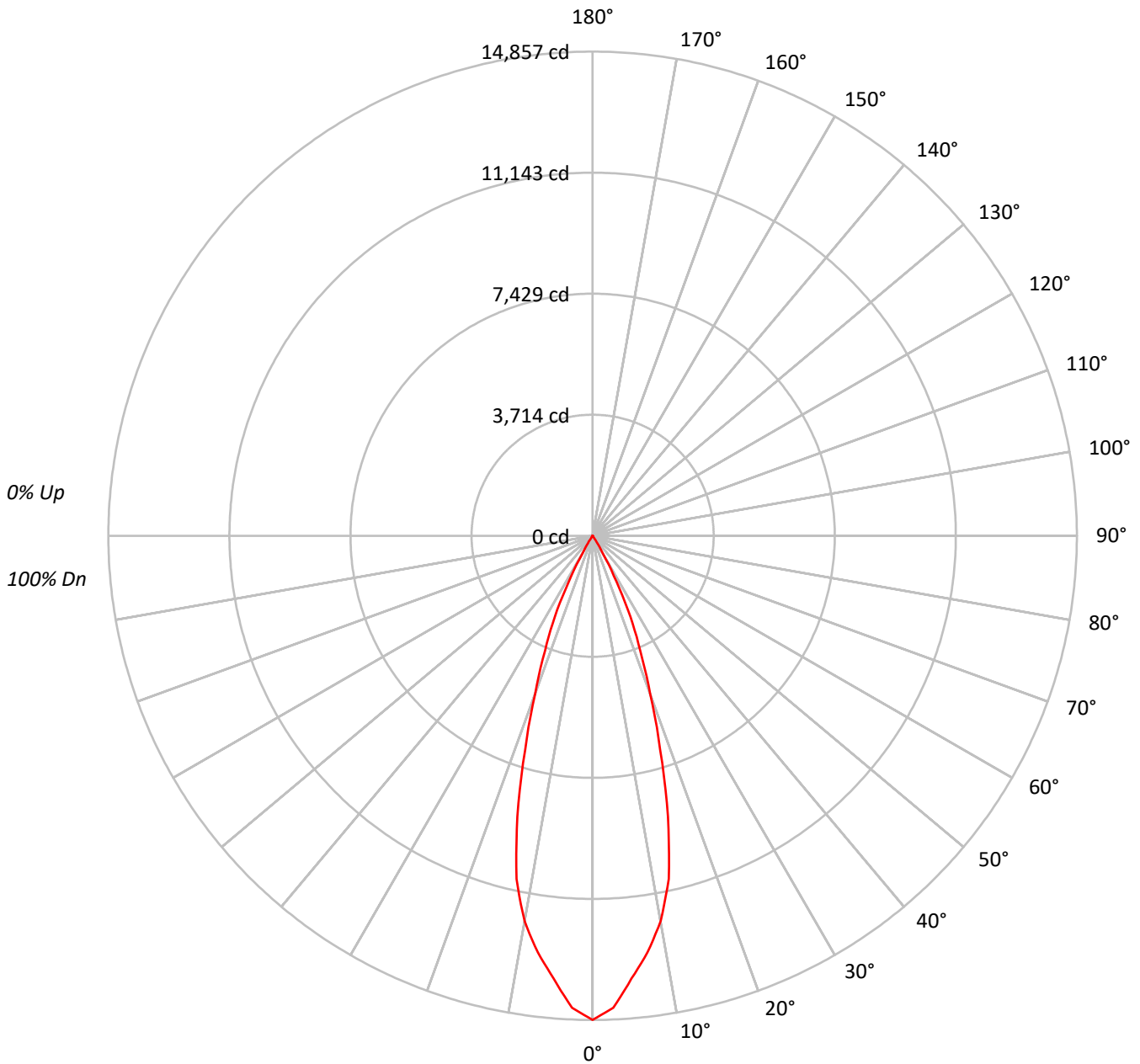
Input Watts (W): 53
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 | | | |
| 1 | 115 | 113 | 111 | 109 | 112 | 110 | 109 | 107 | 107 | 105 | 104 | 103 | 102 | 101 | 99 | 99 | 98 | 96 | | | |
| 2 | 111 | 107 | 104 | 101 | 109 | 105 | 103 | 100 | 102 | 100 | 98 | 99 | 98 | 96 | 97 | 95 | 94 | 93 | | | |
| 3 | 107 | 102 | 98 | 95 | 105 | 101 | 97 | 95 | 98 | 96 | 93 | 96 | 94 | 92 | 94 | 92 | 90 | 89 | | | |
| 4 | 103 | 98 | 94 | 90 | 102 | 97 | 93 | 90 | 95 | 92 | 89 | 93 | 90 | 88 | 91 | 89 | 87 | 86 | | | |
| 5 | 100 | 94 | 90 | 86 | 99 | 93 | 89 | 86 | 91 | 88 | 85 | 90 | 87 | 85 | 88 | 86 | 84 | 83 | | | |
| 6 | 97 | 90 | 86 | 83 | 96 | 90 | 85 | 82 | 88 | 85 | 82 | 87 | 84 | 81 | 86 | 83 | 81 | 80 | | | |
| 7 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 79 | 85 | 81 | 79 | 84 | 81 | 78 | 83 | 80 | 78 | 77 | | | |
| 8 | 91 | 84 | 79 | 76 | 90 | 83 | 79 | 76 | 82 | 79 | 76 | 81 | 78 | 76 | 81 | 78 | 75 | 74 | | | |
| 9 | 88 | 81 | 77 | 74 | 87 | 81 | 76 | 74 | 80 | 76 | 73 | 79 | 76 | 73 | 78 | 75 | 73 | 72 | | | |
| 10 | 85 | 78 | 74 | 71 | 85 | 78 | 74 | 71 | 77 | 73 | 71 | 77 | 73 | 71 | 76 | 73 | 71 | 70 | | | |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 814458 |
| 5° | 750967 |
| 10° | 668436 |
| 15° | 506183 |
| 20° | 301464 |
| 25° | 166159 |
| 30° | 39487 |
| 35° | 2851 |
| 40° | 816 |
| 45° | 240 |
| 50° | 85 |
| 55° | 96 |
| 60° | 110 |
| 65° | 130 |
| 70° | 160 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1255.4 | 25.3 |
| 10°-20° | 2389.3 | 48.2 |
| 20°-30° | 1216.1 | 24.5 |
| 30°-40° | 93.5 | 1.9 |
| 40°-50° | 3.3 | 0.1 |
| 50°-60° | 0.9 | 0.0 |
| 60°-70° | 1.0 | 0.0 |
| 70°-80° | 0.4 | 0.0 |
| 80°-90° | 0.0 | 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° | 4860.8 | 98.0 |
| 0°-40° | 4954.3 | 99.9 |
| 0°-60° | 4958.5 | 100.0 |
| 0°-90° | 4959.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 4959.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 14857 | |
| 5° | 13647 | ### |
| 15° | 8919 | 2389 |
| 25° | 2747 | 1216 |
| 35° | 43 | 93 |
| 45° | 3 | 3 |
| 55° | 1 | 1 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| 0° | |
|-------|---------|
| 0° | 14856.9 |
| 2.5° | 14497.1 |
| 5° | 13646.6 |
| 7.5° | 12894.9 |
| 10° | 12008.0 |
| 12.5° | 10785.3 |
| 15° | 8918.9 |
| 17.5° | 6893.5 |
| 20° | 5167.5 |
| 22.5° | 3809.6 |
| 25° | 2747.0 |
| 27.5° | 1584.6 |
| 30° | 623.8 |
| 32.5° | 256.8 |
| 35° | 42.6 |
| 37.5° | 21.8 |
| 40° | 11.4 |
| 42.5° | 6.2 |
| 45° | 3.1 |
| 47.5° | 2.1 |
| 50° | 1.0 |
| 52.5° | 1.0 |
| 55° | 1.0 |
| 57.5° | 1.0 |
| 60° | 1.0 |
| 62.5° | 1.0 |
| 65° | 1.0 |
| 67.5° | 1.0 |
| 70° | 1.0 |
| 72.5° | 1.0 |
| 75° | 0.0 |
| 77.5° | 0.0 |
| 80° | 0.0 |
| 82.5° | 0.0 |
| 85° | 0.0 |
| 87.5° | 0.0 |
| 90° | 0.0 |



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— 0°-180°







(END OF REPORT)