

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: P208991

Luminaire Tested: **LDSQA6A65840D010TE LARH40FL 6LSQA1H**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P208991
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26677)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDSQA6A65840D010TE LARH40FL 6LSQA1H
Description: PORTFOLIO 6" SQUARE ADJUSTABLE REFLECTOR, ANGLE-CUT TRIM,
SELF-FLANGED, 40° FLOOD
Light Source: (1) HIGH LUMEN LED 80CRI / 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6398.7 lumens
Efficiency: N/A
Efficacy: 81.3 lumens/watt
Spacing Criteria (0/90/45): 0.66 / 0.66 / 0.61
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
CIE Type: Direct

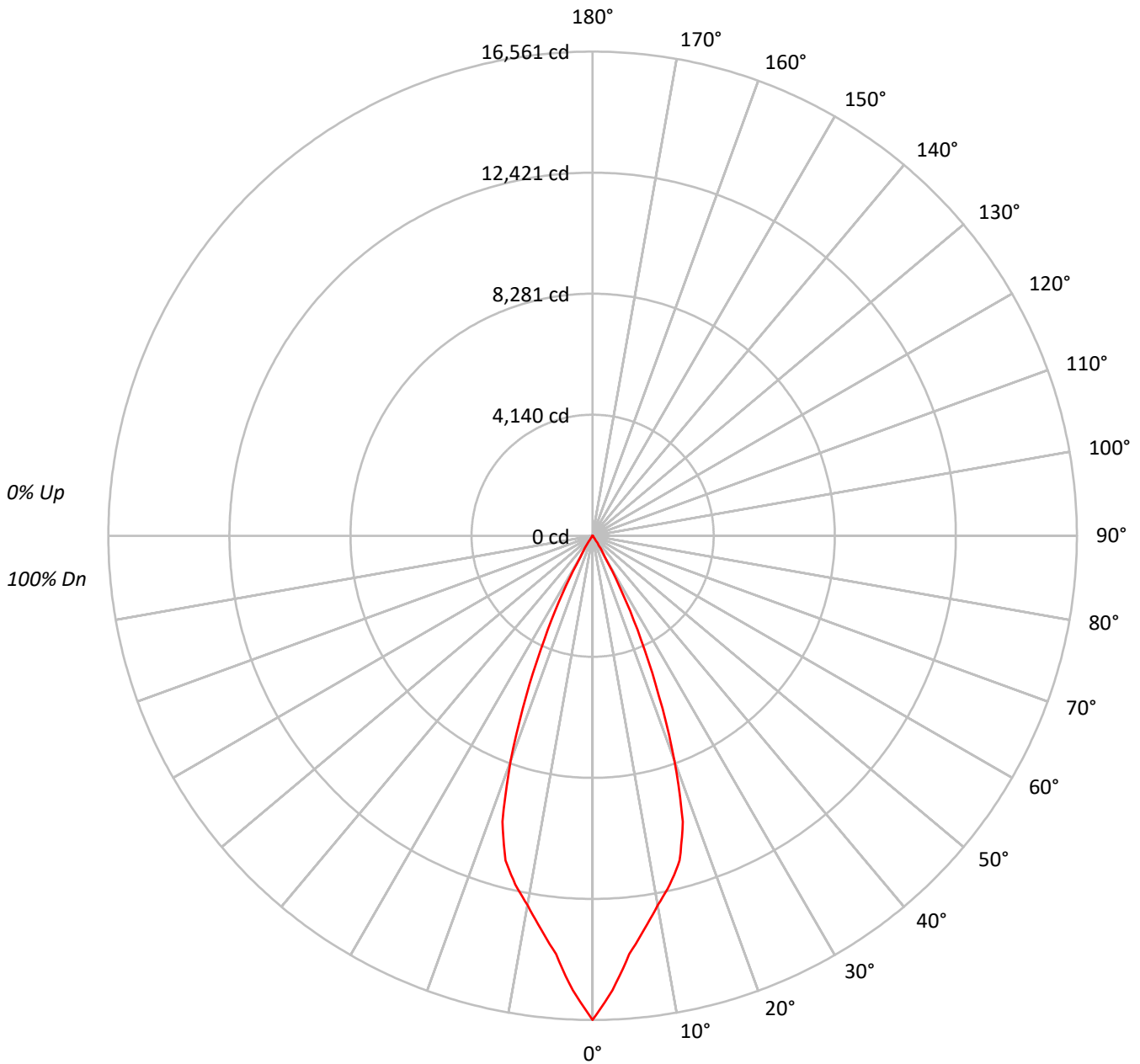
Input Watts (W): 78.67
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

| | | | | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|-----|
| RF | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 20 | | | | 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 | | | | 100 |
| 1 | 115 | 112 | 110 | 109 | 112 | 110 | 108 | 107 | 106 | 105 | 104 | 103 | 101 | 100 | 99 | 98 | 98 | 96 | | | | 96 |
| 2 | 110 | 107 | 103 | 101 | 108 | 105 | 102 | 100 | 102 | 99 | 97 | 99 | 97 | 95 | 96 | 95 | 93 | 92 | | | | 92 |
| 3 | 107 | 101 | 98 | 94 | 105 | 100 | 97 | 94 | 98 | 95 | 92 | 95 | 93 | 91 | 93 | 91 | 89 | 88 | | | | 88 |
| 4 | 103 | 97 | 93 | 89 | 101 | 96 | 92 | 89 | 94 | 90 | 88 | 92 | 89 | 87 | 90 | 88 | 86 | 85 | | | | 85 |
| 5 | 99 | 93 | 88 | 85 | 98 | 92 | 88 | 84 | 90 | 87 | 84 | 89 | 85 | 83 | 87 | 85 | 82 | 81 | | | | 81 |
| 6 | 96 | 89 | 84 | 81 | 94 | 88 | 84 | 81 | 87 | 83 | 80 | 85 | 82 | 80 | 84 | 81 | 79 | 78 | | | | 78 |
| 7 | 92 | 85 | 81 | 77 | 91 | 85 | 80 | 77 | 84 | 80 | 77 | 82 | 79 | 76 | 81 | 78 | 76 | 75 | | | | 75 |
| 8 | 89 | 82 | 77 | 74 | 88 | 82 | 77 | 74 | 81 | 77 | 74 | 80 | 76 | 74 | 79 | 76 | 73 | 72 | | | | 72 |
| 9 | 86 | 79 | 74 | 71 | 85 | 79 | 74 | 71 | 78 | 74 | 71 | 77 | 73 | 71 | 76 | 73 | 71 | 70 | | | | 70 |
| 10 | 84 | 76 | 72 | 69 | 83 | 76 | 71 | 69 | 75 | 71 | 68 | 74 | 71 | 68 | 74 | 70 | 68 | 67 | | | | 67 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|--------|
| | 0° |
| 0° | 713045 |
| 5° | 620771 |
| 10° | 560891 |
| 15° | 512500 |
| 20° | 375284 |
| 25° | 185186 |
| 30° | 41115 |
| 35° | 8326 |
| 40° | 1388 |
| 45° | 408 |
| 50° | 74 |
| 55° | 83 |
| 60° | 95 |
| 65° | 112 |
| 70° | 138 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



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ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1331.4 | 20.8 |
| 10°-20° | 3089.3 | 48.3 |
| 20°-30° | 1812.1 | 28.3 |
| 30°-40° | 156.8 | 2.4 |
| 40°-50° | 6.8 | 0.1 |
| 50°-60° | 1.0 | 0.0 |
| 60°-70° | 1.1 | 0.0 |
| 70°-80° | 0.1 | 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° | 6232.9 | 97.4 |
| 0°-40° | 6389.6 | 99.9 |
| 0°-60° | 6397.5 | 100.0 |
| 0°-90° | 6398.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 6398.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|-------|------|
| 0° | 16561 | |
| 5° | 14363 | ### |
| 15° | 11498 | 3089 |
| 25° | 3898 | 1812 |
| 35° | 158 | 157 |
| 45° | 7 | 7 |
| 55° | 1 | 1 |
| 65° | 1 | 1 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



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CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|---------|
| 0° | 16561.0 |
| 2.5° | 15562.0 |
| 5° | 14363.0 |
| 7.5° | 13565.2 |
| 10° | 12829.2 |
| 12.5° | 12216.8 |
| 15° | 11497.6 |
| 17.5° | 10254.8 |
| 20° | 8190.6 |
| 22.5° | 5923.0 |
| 25° | 3898.1 |
| 27.5° | 2196.8 |
| 30° | 827.0 |
| 32.5° | 427.0 |
| 35° | 158.4 |
| 37.5° | 48.3 |
| 40° | 24.7 |
| 42.5° | 13.5 |
| 45° | 6.7 |
| 47.5° | 3.4 |
| 50° | 1.1 |
| 52.5° | 1.1 |
| 55° | 1.1 |
| 57.5° | 1.1 |
| 60° | 1.1 |
| 62.5° | 1.1 |
| 65° | 1.1 |
| 67.5° | 1.1 |
| 70° | 1.1 |
| 72.5° | 0.0 |
| 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)