

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: P224841

Luminaire Tested: **LSR2B20FL408027D010 2LBDL*B**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P224841
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P14834)
Test Lab: INNOVATION CENTER (G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LSR2B20FL408027D010 2LBDL*B
Description: 2000 Lumen, 2inch Portfolio LED Cylinder
FLOOD OPTIC
LENSED SPUN ROUND TRIM WITH BLACK FINISH
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1683.7 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 0.61 / 0.61 / 0.6
Luminous Opening: Rectangular (W 0.17' x L: 0.17' x H: 0')
CIE Type: Direct

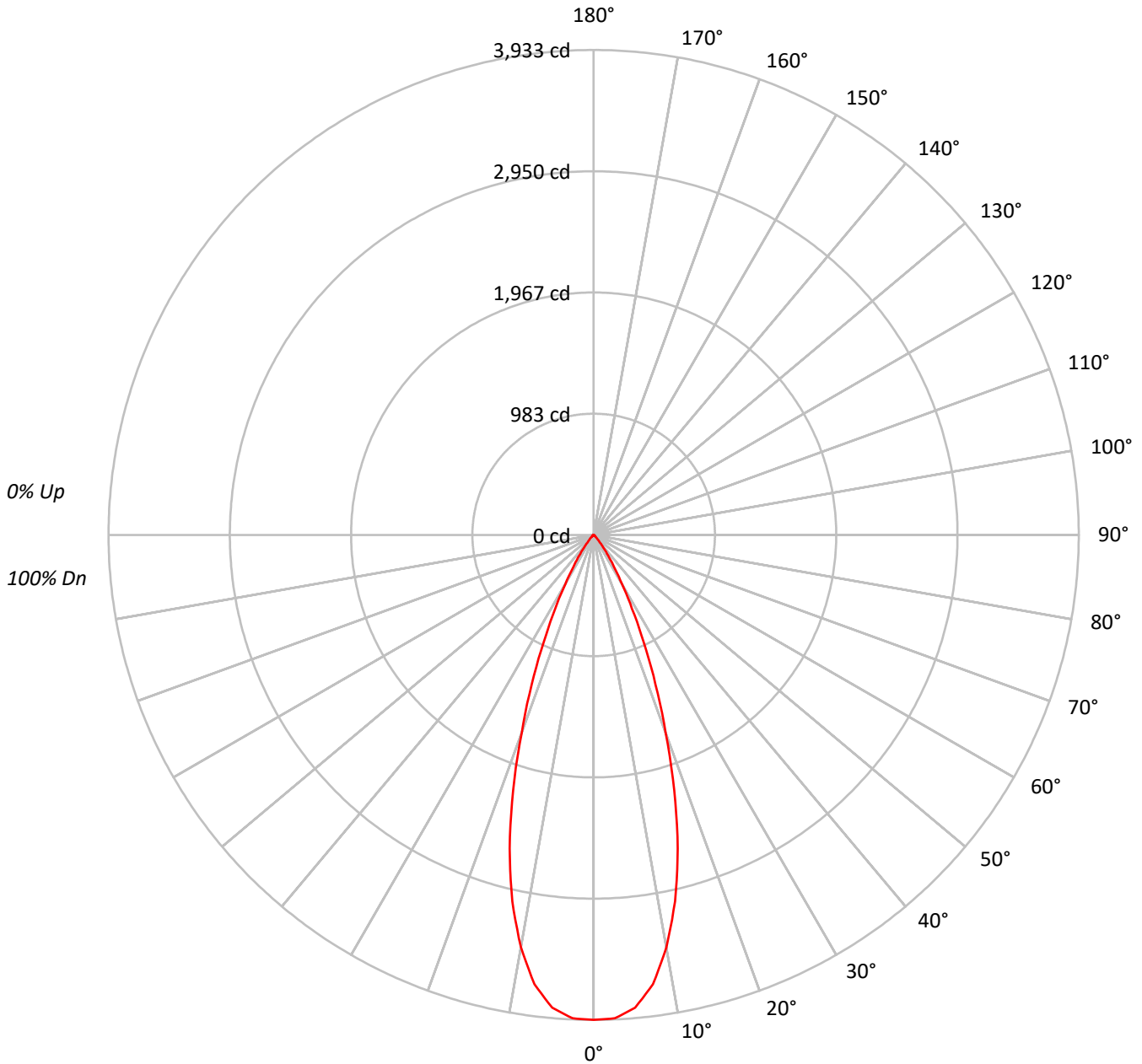
Input Watts (W): 20.9
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P224841

CATALOG NUMBER: LSR2B20FL408027D010 2LBDL*B

Luminous Intensity Polar Plot





TEST NUMBER: P224841

CATALOG NUMBER: LSR2B20FL408027D010 2LBDL*B

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 | 100 | 100 | 100 |
| 1 | 114 | 112 | 110 | 108 | 112 | 110 | 108 | 106 | 106 | 104 | 103 | 102 | 101 | 100 | 99 | 98 | 97 | 95 | 95 | 95 | 95 |
| 2 | 110 | 106 | 103 | 100 | 108 | 104 | 101 | 99 | 101 | 99 | 96 | 98 | 96 | 94 | 96 | 94 | 92 | 91 | 91 | 91 | 91 |
| 3 | 106 | 100 | 96 | 93 | 104 | 99 | 95 | 92 | 97 | 93 | 91 | 94 | 92 | 89 | 92 | 90 | 88 | 87 | 87 | 87 | 87 |
| 4 | 102 | 95 | 91 | 87 | 100 | 94 | 90 | 87 | 92 | 89 | 86 | 90 | 87 | 85 | 89 | 86 | 84 | 83 | 83 | 83 | 83 |
| 5 | 98 | 91 | 86 | 83 | 96 | 90 | 86 | 82 | 88 | 85 | 82 | 87 | 84 | 81 | 85 | 83 | 80 | 79 | 79 | 79 | 79 |
| 6 | 94 | 87 | 82 | 79 | 93 | 86 | 82 | 78 | 85 | 81 | 78 | 84 | 80 | 77 | 82 | 79 | 77 | 76 | 76 | 76 | 76 |
| 7 | 91 | 83 | 78 | 75 | 90 | 83 | 78 | 75 | 81 | 77 | 74 | 80 | 77 | 74 | 79 | 76 | 74 | 72 | 72 | 72 | 72 |
| 8 | 87 | 80 | 75 | 72 | 86 | 79 | 75 | 71 | 78 | 74 | 71 | 77 | 74 | 71 | 76 | 73 | 71 | 69 | 69 | 69 | 69 |
| 9 | 84 | 77 | 72 | 69 | 83 | 76 | 72 | 68 | 75 | 71 | 68 | 74 | 71 | 68 | 74 | 70 | 68 | 67 | 67 | 67 | 67 |
| 10 | 82 | 74 | 69 | 66 | 81 | 73 | 69 | 66 | 73 | 68 | 65 | 72 | 68 | 65 | 71 | 68 | 65 | 64 | 64 | 64 | 64 |

AVERAGE LUMINANCE (cd/sqm):

| | |
|-----|---------|
| | 0° |
| 0° | 1523393 |
| 5° | 1496901 |
| 10° | 1335366 |
| 15° | 1055499 |
| 20° | 703799 |
| 25° | 408327 |
| 30° | 204357 |
| 35° | 96133 |
| 40° | 37569 |
| 45° | 16762 |
| 50° | 7894 |
| 55° | 4457 |
| 60° | 1704 |
| 65° | 0 |
| 70° | 0 |
| 75° | 0 |
| 80° | 0 |
| 85° | 0 |



TEST NUMBER: P224841

CATALOG NUMBER: LSR2B20FL408027D010 2LBDL*B

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 352.9 | 21.0 |
| 10°-20° | 712.5 | 42.3 |
| 20°-30° | 448.2 | 26.6 |
| 30°-40° | 137.0 | 8.1 |
| 40°-50° | 26.9 | 1.6 |
| 50°-60° | 6.0 | 0.4 |
| 60°-70° | 0.3 | 0.0 |
| 70°-80° | 0.0 | 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° | 1513.5 | 89.9 |
| 0°-40° | 1650.5 | 98.0 |
| 0°-60° | 1683.4 | 100.0 |
| 0°-90° | 1683.7 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 1683.7 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | Flux |
|-----|------|------|
| 0° | 3933 | |
| 5° | 3850 | 353 |
| 15° | 2632 | 712 |
| 25° | 955 | 448 |
| 35° | 203 | 137 |
| 45° | 31 | 27 |
| 55° | 7 | 6 |
| 65° | 0 | 0 |
| 75° | 0 | 0 |
| 85° | 0 | 0 |
| 90° | 0 | |



TEST NUMBER: P224841

CATALOG NUMBER: LSR2B20FL408027D010 2LBDL*B

CANDELA DISTRIBUTION (FULL):

| | 0° |
|-------|--------|
| 0° | 3932.9 |
| 2.5° | 3924.2 |
| 5° | 3849.8 |
| 7.5° | 3675.0 |
| 10° | 3395.1 |
| 12.5° | 3045.3 |
| 15° | 2632.1 |
| 17.5° | 2173.1 |
| 20° | 1707.4 |
| 22.5° | 1309.5 |
| 25° | 955.4 |
| 27.5° | 673.3 |
| 30° | 456.9 |
| 32.5° | 308.2 |
| 35° | 203.3 |
| 37.5° | 124.6 |
| 40° | 74.3 |
| 42.5° | 48.1 |
| 45° | 30.6 |
| 47.5° | 19.7 |
| 50° | 13.1 |
| 52.5° | 8.7 |
| 55° | 6.6 |
| 57.5° | 4.4 |
| 60° | 2.2 |
| 62.5° | 0.0 |
| 65° | 0.0 |
| 67.5° | 0.0 |
| 70° | 0.0 |
| 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 |



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180°







(END OF REPORT)