

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: FAIL-SAFE

Report Number: P708923

Luminaire Tested: **24APR-X-X-UNV-NL950**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708923
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-X-UNV-NL950
Description: ArcMed Patient Recessed 2x4 Fixture NIGHT Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

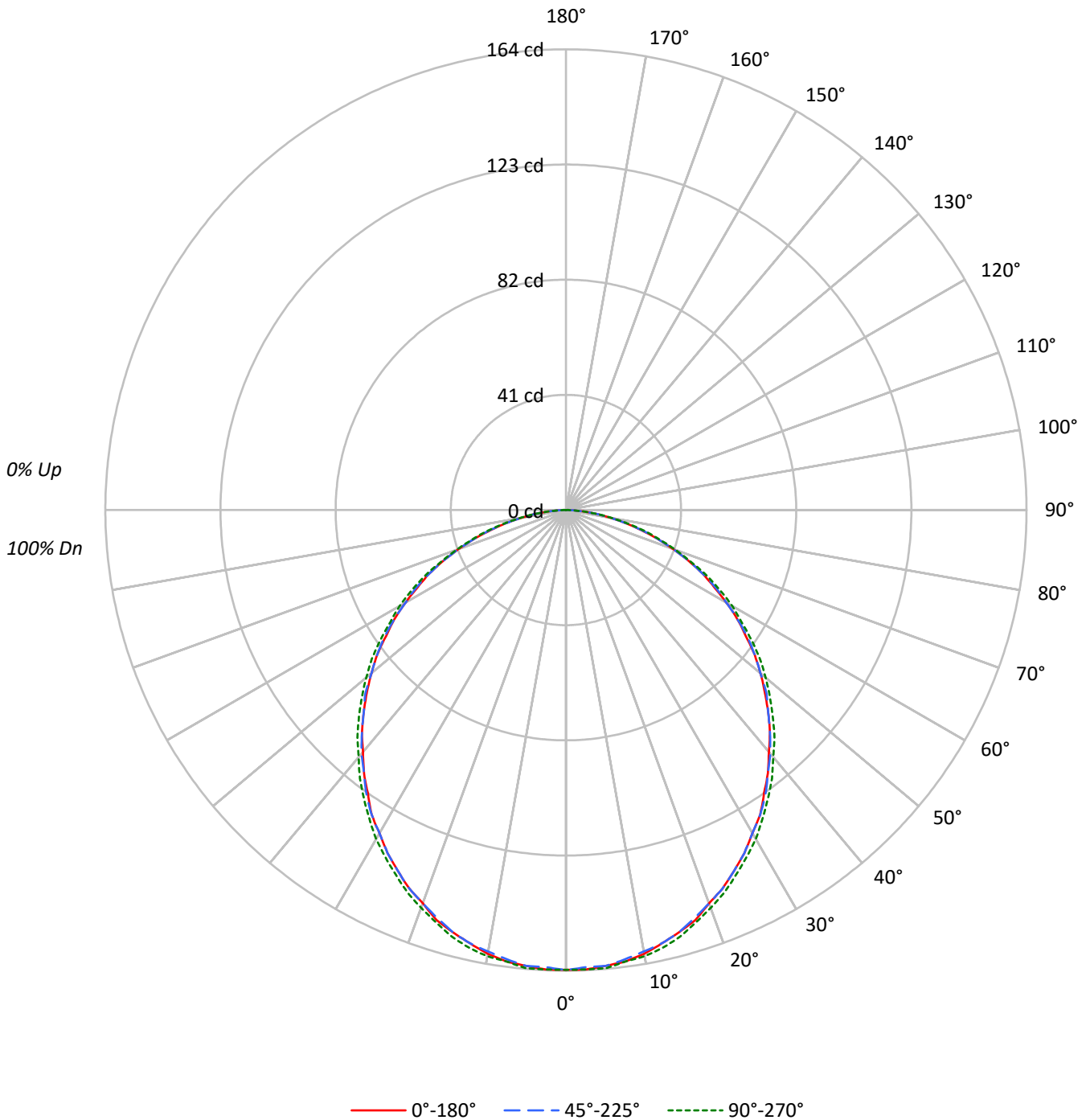
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 443.9 lumens
Efficiency: N/A
Efficacy: 74.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 6
Input Voltage (V): 120
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





TEST NUMBER: P708923
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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 | 102 | 102 | 102 | 100 |
| 1 | 109 | 104 | 100 | 96 | 106 | 102 | 98 | 94 | 98 | 94 | 91 | 94 | 91 | 89 | 90 | 88 | 86 | 86 | 86 | 86 | 84 |
| 2 | 99 | 91 | 84 | 78 | 96 | 89 | 83 | 77 | 85 | 80 | 76 | 82 | 78 | 74 | 79 | 75 | 72 | 72 | 72 | 72 | 70 |
| 3 | 90 | 80 | 72 | 65 | 88 | 78 | 71 | 65 | 75 | 69 | 63 | 72 | 67 | 62 | 70 | 65 | 61 | 61 | 61 | 61 | 59 |
| 4 | 83 | 71 | 62 | 55 | 80 | 69 | 61 | 55 | 67 | 60 | 54 | 65 | 58 | 53 | 62 | 57 | 53 | 53 | 53 | 53 | 50 |
| 5 | 76 | 63 | 54 | 48 | 74 | 62 | 54 | 47 | 60 | 53 | 47 | 58 | 51 | 46 | 56 | 50 | 46 | 46 | 46 | 46 | 44 |
| 6 | 70 | 57 | 48 | 42 | 68 | 56 | 48 | 41 | 54 | 47 | 41 | 53 | 46 | 41 | 51 | 45 | 40 | 40 | 40 | 40 | 38 |
| 7 | 65 | 52 | 43 | 37 | 63 | 51 | 43 | 37 | 49 | 42 | 36 | 48 | 41 | 36 | 47 | 40 | 36 | 36 | 36 | 36 | 34 |
| 8 | 61 | 47 | 39 | 33 | 59 | 47 | 38 | 33 | 45 | 38 | 33 | 44 | 37 | 32 | 43 | 37 | 32 | 32 | 32 | 32 | 30 |
| 9 | 57 | 43 | 35 | 30 | 55 | 43 | 35 | 30 | 42 | 34 | 29 | 41 | 34 | 29 | 39 | 33 | 29 | 29 | 29 | 29 | 27 |
| 10 | 53 | 40 | 32 | 27 | 52 | 39 | 32 | 27 | 39 | 32 | 27 | 38 | 31 | 27 | 37 | 31 | 26 | 26 | 26 | 26 | 25 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 45° | 90° |
|-----|-----|-----|-----|
| 0° | 220 | 220 | 220 |
| 5° | 220 | 220 | 221 |
| 10° | 219 | 218 | 220 |
| 15° | 217 | 217 | 219 |
| 20° | 213 | 213 | 216 |
| 25° | 210 | 210 | 213 |
| 30° | 206 | 206 | 210 |
| 35° | 202 | 203 | 206 |
| 40° | 197 | 199 | 202 |
| 45° | 194 | 194 | 198 |
| 50° | 189 | 189 | 194 |
| 55° | 183 | 185 | 189 |
| 60° | 178 | 178 | 184 |
| 65° | 171 | 171 | 176 |
| 70° | 160 | 160 | 163 |
| 75° | 144 | 148 | 152 |
| 80° | 126 | 126 | 132 |
| 85° | 100 | 100 | 100 |



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 CATALOG NUMBER: 24APR-X-X-UNV-NL950

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 15.5 | 3.5 |
| 10°-20° | 44.0 | 9.9 |
| 20°-30° | 65.6 | 14.8 |
| 30°-40° | 77.6 | 17.5 |
| 40°-50° | 79.2 | 17.8 |
| 50°-60° | 70.8 | 15.9 |
| 60°-70° | 53.5 | 12.1 |
| 70°-80° | 30.1 | 6.8 |
| 80°-90° | 7.7 | 1.7 |
| 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° | 125.0 | 28.2 |
| 0°-40° | 202.6 | 45.6 |
| 0°-60° | 352.6 | 79.4 |
| 0°-90° | 443.9 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 443.9 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 22.5° | 45° | 67.5° | 90° | Flux |
|-----|-----|-------|-----|-------|-----|------|
| 0° | 164 | 164 | 164 | 164 | 164 | |
| 5° | 163 | 164 | 163 | 163 | 164 | 15 |
| 15° | 156 | 156 | 156 | 156 | 157 | 44 |
| 25° | 142 | 142 | 142 | 142 | 143 | 65 |
| 35° | 123 | 124 | 124 | 125 | 125 | 77 |
| 45° | 102 | 103 | 102 | 103 | 104 | 79 |
| 55° | 78 | 79 | 79 | 80 | 81 | 70 |
| 65° | 54 | 54 | 54 | 55 | 55 | 53 |
| 75° | 28 | 28 | 28 | 28 | 29 | 30 |
| 85° | 6 | 6 | 6 | 6 | 6 | 8 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P708923

CATALOG NUMBER: 24APR-X-X-UNV-NL950

CANDELA DISTRIBUTION (FULL):

| | 0° | 22.5° | 45° | 67.5° | 90° |
|-------|-------|-------|-------|-------|-------|
| 0° | 163.7 | 163.7 | 163.7 | 163.7 | 163.7 |
| 2.5° | 163.7 | 163.7 | 162.9 | 163.7 | 163.7 |
| 5° | 162.9 | 163.7 | 162.9 | 162.9 | 163.7 |
| 7.5° | 162.1 | 162.1 | 161.3 | 161.3 | 162.1 |
| 10° | 160.4 | 160.4 | 159.6 | 160.4 | 161.3 |
| 12.5° | 158.0 | 158.0 | 158.0 | 158.8 | 159.6 |
| 15° | 155.6 | 155.6 | 155.6 | 156.4 | 157.2 |
| 17.5° | 153.1 | 153.1 | 152.3 | 153.1 | 153.9 |
| 20° | 149.0 | 149.9 | 149.0 | 149.9 | 150.7 |
| 22.5° | 145.8 | 146.6 | 145.8 | 146.6 | 147.4 |
| 25° | 141.7 | 142.5 | 141.7 | 142.5 | 143.3 |
| 27.5° | 137.6 | 138.5 | 137.6 | 138.5 | 139.3 |
| 30° | 132.8 | 133.6 | 132.8 | 134.4 | 135.2 |
| 32.5° | 128.7 | 128.7 | 128.7 | 129.5 | 130.3 |
| 35° | 123.0 | 123.8 | 123.8 | 124.6 | 125.4 |
| 37.5° | 118.1 | 118.1 | 118.1 | 119.7 | 120.5 |
| 40° | 112.4 | 113.2 | 113.2 | 114.0 | 114.8 |
| 42.5° | 107.5 | 107.5 | 107.5 | 109.1 | 109.9 |
| 45° | 101.8 | 102.6 | 101.8 | 103.4 | 104.2 |
| 47.5° | 96.1 | 96.9 | 96.9 | 97.7 | 98.5 |
| 50° | 90.4 | 90.4 | 90.4 | 92.0 | 92.8 |
| 52.5° | 84.7 | 84.7 | 84.7 | 86.3 | 87.1 |
| 55° | 78.2 | 79.0 | 79.0 | 79.8 | 80.6 |
| 57.5° | 72.5 | 72.5 | 72.5 | 73.3 | 74.1 |
| 60° | 66.0 | 66.8 | 66.0 | 67.6 | 68.4 |
| 62.5° | 59.5 | 60.3 | 60.3 | 61.1 | 61.9 |
| 65° | 53.8 | 53.8 | 53.8 | 54.6 | 55.4 |
| 67.5° | 47.2 | 47.2 | 47.2 | 48.1 | 48.1 |
| 70° | 40.7 | 40.7 | 40.7 | 41.5 | 41.5 |
| 72.5° | 34.2 | 34.2 | 34.2 | 35.0 | 35.0 |
| 75° | 27.7 | 28.5 | 28.5 | 28.5 | 29.3 |
| 77.5° | 22.0 | 22.0 | 22.0 | 22.8 | 22.8 |
| 80° | 16.3 | 16.3 | 16.3 | 17.1 | 17.1 |
| 82.5° | 11.4 | 10.6 | 11.4 | 11.4 | 11.4 |
| 85° | 6.5 | 6.5 | 6.5 | 6.5 | 6.5 |
| 87.5° | 2.4 | 2.4 | 2.4 | 2.4 | 2.4 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)