

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: P708989

Luminaire Tested: **24APR-85L935-X-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708989  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-85L935-X-UNV  
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

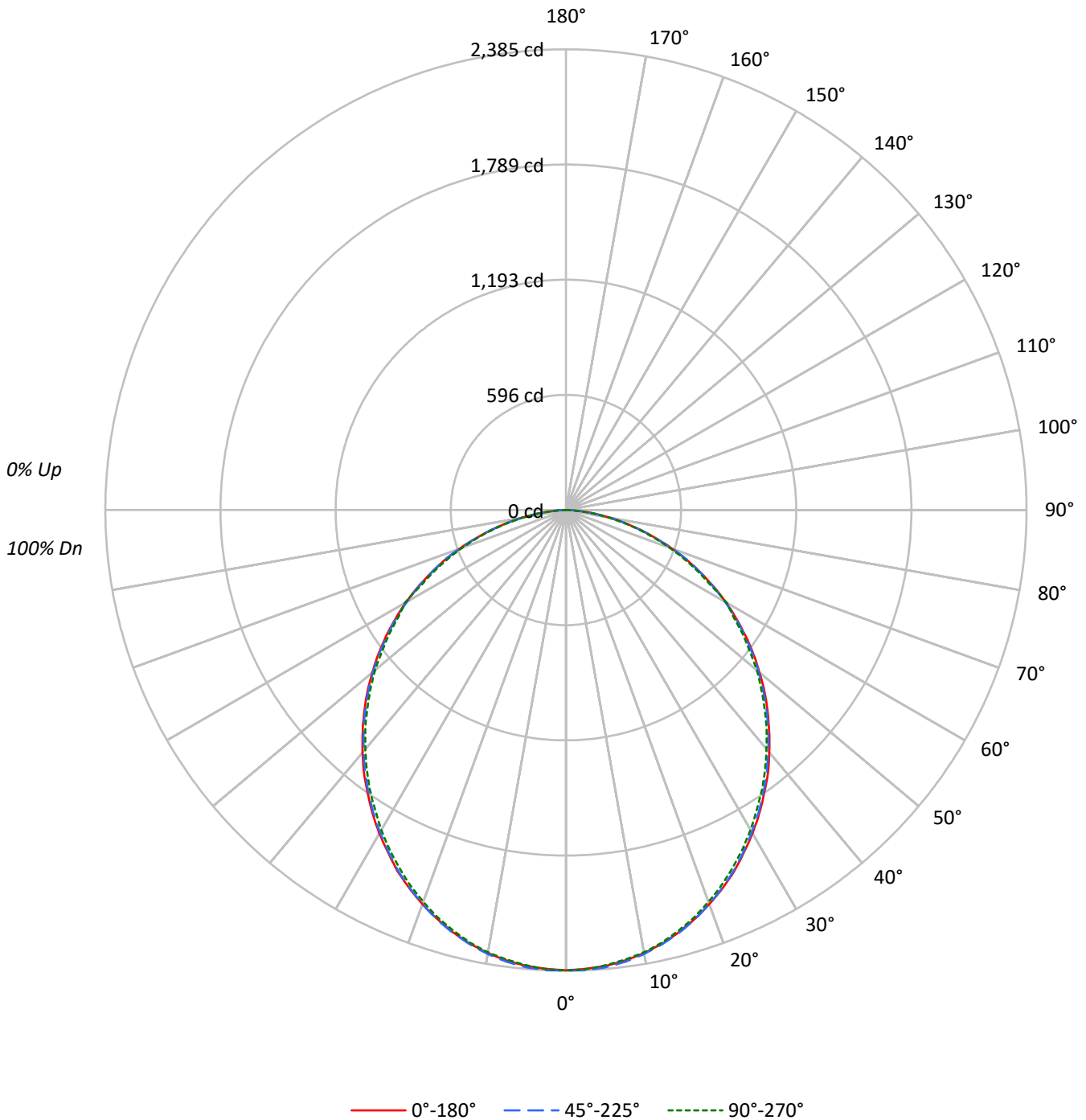
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6347.8 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 78.3  
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





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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	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3207	3207	3207
5°	3199	3209	3195
10°	3181	3189	3177
15°	3151	3156	3139
20°	3109	3108	3091
25°	3062	3056	3032
30°	3003	2992	2969
35°	2939	2929	2906
40°	2877	2862	2837
45°	2811	2797	2768
50°	2739	2728	2701
55°	2664	2650	2616
60°	2575	2558	2593
65°	2457	2450	2404
70°	2306	2309	2246
75°	2093	2077	2030
80°	1799	1775	1728
85°	1376	1363	1257



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	225.1	3.5
10°-20°	637.7	10.0
20°-30°	946.5	14.9
30°-40°	1114.1	17.6
40°-50°	1132.2	17.8
50°-60°	1006.5	15.9
60°-70°	759.2	12.0
70°-80°	421.7	6.6
80°-90°	104.9	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°	1809.2	28.5
0°-40°	2923.3	46.1
0°-60°	5062.0	79.7
0°-90°	6347.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6347.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2383	2383	2383	2383	2383	
5°	2369	2373	2376	2372	2366	225
15°	2262	2264	2266	2261	2254	638
25°	2063	2061	2058	2049	2042	949
35°	1790	1790	1783	1773	1769	1120
45°	1477	1477	1470	1458	1455	1140
55°	1136	1127	1130	1117	1115	1015
65°	772	767	770	760	755	764
75°	403	397	400	397	390	427
85°	89	87	88	84	81	107
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2383.2	2383.2	2383.2	2383.2	2383.2
2.5°	2377.1	2381.7	2384.8	2380.9	2380.2
5°	2368.8	2372.6	2375.6	2371.8	2365.7
7.5°	2352.0	2356.6	2358.9	2355.1	2346.7
10°	2328.4	2333.0	2333.8	2329.9	2325.4
12.5°	2299.5	2302.5	2302.5	2299.5	2294.2
15°	2262.2	2264.5	2266.0	2260.7	2253.8
17.5°	2219.6	2223.4	2221.9	2213.5	2210.4
20°	2171.6	2174.7	2170.9	2165.5	2158.7
22.5°	2119.1	2119.9	2116.8	2110.7	2103.9
25°	2062.8	2061.3	2058.2	2049.1	2042.2
27.5°	1997.3	2000.4	1992.7	1984.4	1979.8
30°	1932.6	1933.4	1925.8	1915.1	1911.3
32.5°	1863.3	1861.8	1856.5	1845.1	1839.0
35°	1789.5	1790.3	1783.4	1772.8	1769.0
37.5°	1718.0	1713.4	1708.1	1695.9	1693.6
40°	1638.0	1637.3	1629.7	1619.0	1615.2
42.5°	1558.1	1557.4	1551.3	1540.6	1537.6
45°	1477.4	1477.4	1469.8	1457.6	1454.6
47.5°	1395.2	1392.2	1386.9	1376.2	1372.4
50°	1308.5	1306.2	1303.1	1290.9	1290.2
52.5°	1223.2	1221.7	1216.4	1205.7	1199.6
55°	1135.7	1127.3	1129.6	1117.4	1115.1
57.5°	1045.9	1037.5	1042.0	1031.4	1026.8
60°	956.8	948.4	950.7	943.9	963.6
62.5°	865.5	860.1	860.1	876.1	847.2
65°	771.8	767.3	769.5	759.6	755.1
67.5°	679.7	672.9	687.3	669.1	661.5
70°	586.1	581.5	586.9	576.2	570.9
72.5°	493.2	489.4	487.9	484.1	479.5
75°	402.7	397.3	399.6	396.6	390.5
77.5°	314.4	312.8	312.1	308.3	303.7
80°	232.2	230.6	229.1	226.1	223.0
82.5°	155.3	153.8	153.0	151.5	150.7
85°	89.1	86.8	88.3	84.5	81.4
87.5°	33.5	32.7	34.3	31.2	28.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)