

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: P708848

Luminaire Tested: **24APR-X-80L950-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708848  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-X-80L950-UNV  
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

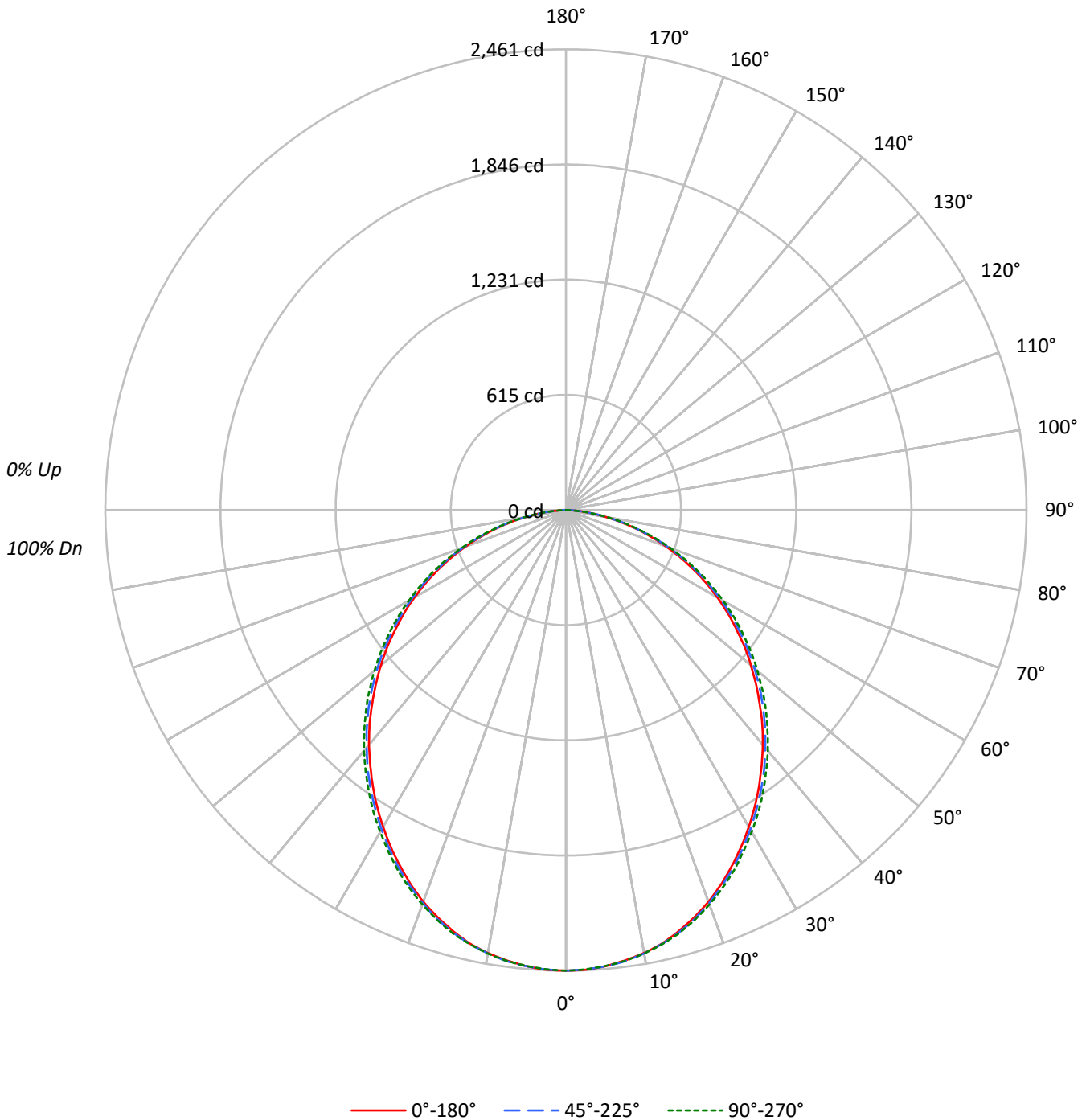
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6450.0 lumens  
Efficiency: N/A  
Efficacy: 93.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 68.8  
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

TEST NUMBER: P708848  
CATALOG NUMBER: 24APR-X-80L950-UNV

### Luminous Intensity Polar Plot





TEST NUMBER: P708848  
 CATALOG NUMBER: 24APR-X-80L950-UNV

**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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84	84	84	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70	70	70	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60	60	60	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51	51	51	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44	44	44	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39	39	39	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34	34	34	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31	31	31	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28	28	28	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25	25	25	25

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

	0°	45°	90°
0°	6623	6623	6623
5°	6606	6608	6604
10°	6566	6572	6574
15°	6488	6507	6519
20°	6379	6400	6422
25°	6229	6270	6307
30°	6071	6121	6167
35°	5910	5975	6033
40°	5750	5817	5894
45°	5570	5670	5749
50°	5402	5503	5589
55°	5217	5327	5420
60°	5029	5132	5230
65°	4786	4893	4987
70°	4482	4580	4672
75°	4044	4144	4220
80°	3412	3538	3572
85°	2538	2695	2652



TEST NUMBER: P708848  
 CATALOG NUMBER: 24APR-X-80L950-UNV

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	232.2	3.6
10°-20°	658.0	10.2
20°-30°	971.9	15.1
30°-40°	1137.2	17.6
40°-50°	1148.6	17.8
50°-60°	1015.2	15.7
60°-70°	760.0	11.8
70°-80°	422.4	6.5
80°-90°	104.4	1.6
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°	1862.2	28.9
0°-40°	2999.4	46.5
0°-60°	5163.2	80.1
0°-90°	6450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6450.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2461	2461	2461	2461	2461	
5°	2446	2446	2446	2447	2445	232
15°	2329	2330	2336	2340	2340	656
25°	2098	2101	2112	2118	2124	966
35°	1799	1804	1819	1831	1836	1125
45°	1464	1475	1490	1505	1511	1130
55°	1112	1121	1136	1149	1155	996
65°	752	757	768	779	783	744
75°	389	391	399	406	406	412
85°	82	85	87	86	86	101
90°	0	0	0	0	0	



TEST NUMBER: P708848

CATALOG NUMBER: 24APR-X-80L950-UNV

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2461.1	2461.1	2461.1	2461.1	2461.1
2.5°	2458.9	2458.9	2456.7	2457.4	2455.9
5°	2445.7	2446.4	2446.4	2447.1	2444.9
7.5°	2426.6	2428.1	2430.3	2431.0	2428.8
10°	2403.1	2404.6	2405.3	2408.2	2406.0
12.5°	2372.3	2373.0	2373.7	2378.1	2375.9
15°	2329.0	2330.4	2335.6	2340.0	2340.0
17.5°	2280.5	2283.5	2289.3	2295.2	2293.7
20°	2227.7	2229.9	2235.0	2243.1	2242.4
22.5°	2165.3	2167.5	2174.8	2183.6	2185.8
25°	2097.8	2100.7	2111.7	2118.3	2124.2
27.5°	2028.0	2031.7	2042.0	2052.2	2055.2
30°	1953.9	1959.8	1970.0	1981.1	1984.7
32.5°	1878.3	1881.2	1895.2	1906.9	1914.3
35°	1799.0	1804.2	1818.8	1831.3	1836.5
37.5°	1717.5	1724.9	1740.3	1753.5	1757.9
40°	1636.8	1642.7	1655.9	1672.8	1677.9
42.5°	1553.1	1558.3	1574.4	1589.1	1594.2
45°	1463.6	1474.6	1490.0	1505.4	1510.6
47.5°	1377.0	1387.3	1402.7	1418.1	1423.9
50°	1290.4	1301.4	1314.6	1330.7	1335.1
52.5°	1203.8	1212.6	1226.5	1240.5	1247.1
55°	1112.0	1120.8	1135.5	1149.4	1155.3
57.5°	1025.4	1031.3	1045.2	1058.4	1063.6
60°	934.4	940.2	953.5	967.4	971.8
62.5°	844.8	848.5	861.0	874.2	877.1
65°	751.6	756.7	768.5	778.8	783.2
67.5°	660.6	665.0	675.3	686.3	688.5
70°	569.6	572.5	582.1	590.1	593.8
72.5°	477.8	480.8	491.0	495.4	499.1
75°	389.0	391.2	398.6	405.9	405.9
77.5°	302.4	306.1	311.9	314.9	316.4
80°	220.2	223.9	228.3	231.2	230.5
82.5°	145.3	149.0	151.9	153.4	151.9
85°	82.2	85.1	87.3	85.9	85.9
87.5°	32.3	33.8	35.2	34.5	33.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)