

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: P708987

Luminaire Tested: **24APR-58L930-X-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708987  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-58L930-X-UNV  
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

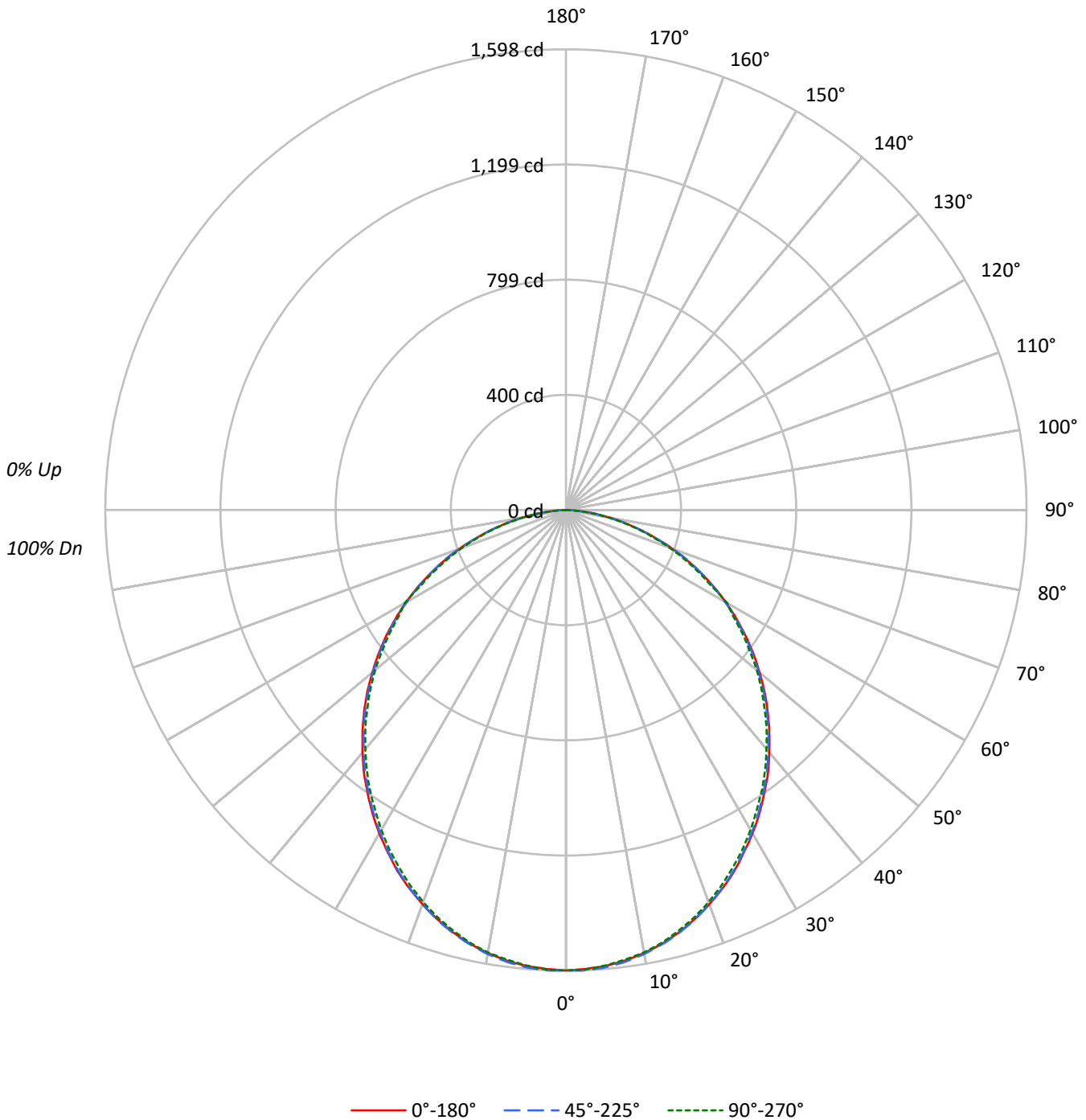
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4254.0 lumens  
Efficiency: N/A  
Efficacy: 82.1 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): 51.8  
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

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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°	2149	2149	2149
5°	2144	2150	2141
10°	2132	2137	2129
15°	2112	2115	2104
20°	2084	2083	2071
25°	2052	2048	2032
30°	2012	2005	1990
35°	1970	1963	1947
40°	1928	1918	1901
45°	1884	1874	1855
50°	1836	1828	1810
55°	1785	1776	1753
60°	1725	1714	1738
65°	1647	1642	1611
70°	1545	1547	1505
75°	1403	1392	1360
80°	1206	1189	1158
85°	922	914	843



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.9	3.5
10°-20°	427.3	10.0
20°-30°	634.3	14.9
30°-40°	746.6	17.6
40°-50°	758.8	17.8
50°-60°	674.5	15.9
60°-70°	508.8	12.0
70°-80°	282.6	6.6
80°-90°	70.3	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°	1212.5	28.5
0°-40°	1959.1	46.1
0°-60°	3392.3	79.7
0°-90°	4254.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4254.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1597	1597	1597	1597	1597	
5°	1587	1590	1592	1590	1585	151
15°	1516	1518	1519	1515	1510	427
25°	1382	1381	1379	1373	1369	636
35°	1199	1200	1195	1188	1186	751
45°	990	990	985	977	975	764
55°	761	756	757	749	747	680
65°	517	514	516	509	506	512
75°	270	266	268	266	262	286
85°	60	58	59	57	55	72
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1597.1	1597.1	1597.1	1597.1	1597.1
2.5°	1593.1	1596.1	1598.2	1595.6	1595.1
5°	1587.4	1590.0	1592.0	1589.5	1585.4
7.5°	1576.2	1579.3	1580.8	1578.3	1572.7
10°	1560.4	1563.5	1564.0	1561.4	1558.4
12.5°	1541.0	1543.1	1543.1	1541.0	1537.5
15°	1516.0	1517.6	1518.6	1515.0	1510.4
17.5°	1487.5	1490.0	1489.0	1483.4	1481.3
20°	1455.3	1457.4	1454.8	1451.2	1446.7
22.5°	1420.1	1420.6	1418.6	1414.5	1409.9
25°	1382.4	1381.4	1379.3	1373.2	1368.6
27.5°	1338.5	1340.6	1335.5	1329.8	1326.8
30°	1295.2	1295.7	1290.6	1283.4	1280.9
32.5°	1248.7	1247.7	1244.1	1236.5	1232.4
35°	1199.3	1199.8	1195.2	1188.0	1185.5
37.5°	1151.3	1148.2	1144.7	1136.5	1135.0
40°	1097.7	1097.2	1092.1	1085.0	1082.4
42.5°	1044.2	1043.7	1039.6	1032.5	1030.4
45°	990.1	990.1	985.0	976.8	974.8
47.5°	935.0	933.0	929.4	922.3	919.7
50°	876.9	875.3	873.3	865.1	864.6
52.5°	819.7	818.7	815.1	808.0	803.9
55°	761.1	755.5	757.0	748.8	747.3
57.5°	700.9	695.3	698.3	691.2	688.1
60°	641.2	635.6	637.1	632.5	645.8
62.5°	580.0	576.4	576.4	587.1	567.7
65°	517.2	514.2	515.7	509.1	506.0
67.5°	455.5	450.9	460.6	448.4	443.3
70°	392.8	389.7	393.3	386.1	382.6
72.5°	330.5	328.0	327.0	324.4	321.4
75°	269.8	266.3	267.8	265.8	261.7
77.5°	210.7	209.7	209.1	206.6	203.5
80°	155.6	154.6	153.5	151.5	149.5
82.5°	104.1	103.0	102.5	101.5	101.0
85°	59.7	58.2	59.2	56.6	54.6
87.5°	22.4	21.9	23.0	20.9	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)