

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: P708983

Luminaire Tested: **24APR-49L850-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708983
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-49L850-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

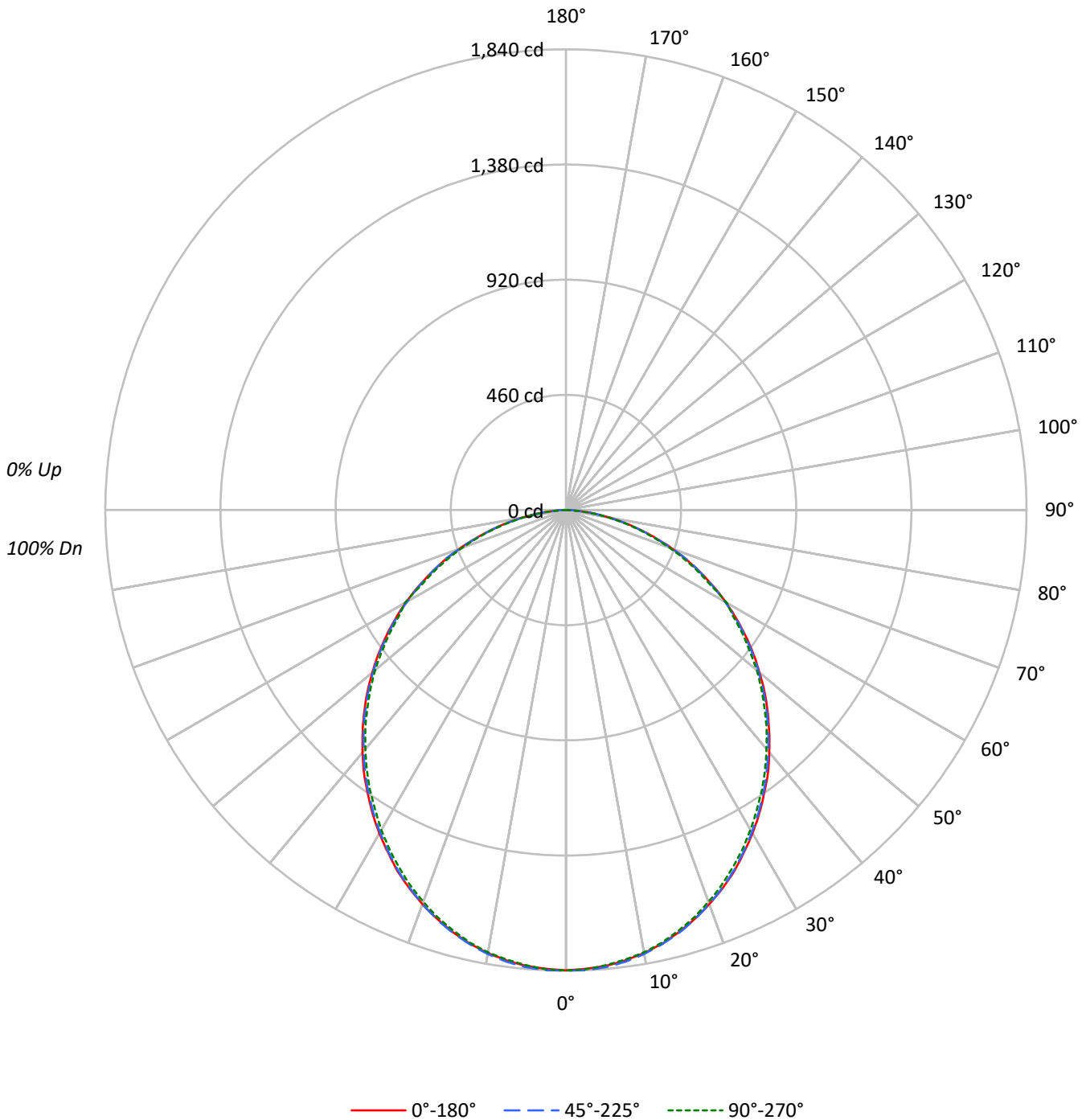
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4897.2 lumens
Efficiency: N/A
Efficacy: 114.4 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): 42.8
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: P708983
CATALOG NUMBER: 24APR-49L850-X-UNV

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°	2474	2474	2474
5°	2468	2475	2465
10°	2454	2460	2451
15°	2431	2435	2422
20°	2399	2398	2385
25°	2363	2357	2339
30°	2316	2308	2291
35°	2268	2260	2242
40°	2220	2208	2189
45°	2169	2158	2135
50°	2113	2104	2084
55°	2055	2044	2018
60°	1986	1974	2000
65°	1896	1890	1855
70°	1779	1781	1733
75°	1615	1603	1566
80°	1388	1370	1333
85°	1061	1051	969



TEST NUMBER: P708983
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.7	3.5
10°-20°	491.9	10.0
20°-30°	730.2	14.9
30°-40°	859.5	17.6
40°-50°	873.5	17.8
50°-60°	776.5	15.9
60°-70°	585.7	12.0
70°-80°	325.3	6.6
80°-90°	80.9	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°	1395.8	28.5
0°-40°	2255.3	46.1
0°-60°	3905.3	79.7
0°-90°	4897.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4897.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1839	1839	1839	1839	1839	
5°	1828	1830	1833	1830	1825	173
15°	1745	1747	1748	1744	1739	492
25°	1591	1590	1588	1581	1576	732
35°	1381	1381	1376	1368	1365	864
45°	1140	1140	1134	1124	1122	879
55°	876	870	871	862	860	783
65°	595	592	594	586	582	589
75°	311	306	308	306	301	329
85°	69	67	68	65	63	83
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1838.6	1838.6	1838.6	1838.6	1838.6
2.5°	1833.9	1837.4	1839.8	1836.8	1836.3
5°	1827.5	1830.4	1832.7	1829.8	1825.1
7.5°	1814.5	1818.1	1819.8	1816.9	1810.4
10°	1796.3	1799.9	1800.4	1797.5	1794.0
12.5°	1774.0	1776.4	1776.4	1774.0	1769.9
15°	1745.2	1747.0	1748.2	1744.1	1738.8
17.5°	1712.4	1715.3	1714.1	1707.7	1705.3
20°	1675.4	1677.7	1674.8	1670.7	1665.4
22.5°	1634.8	1635.4	1633.1	1628.4	1623.1
25°	1591.4	1590.2	1587.9	1580.8	1575.5
27.5°	1540.9	1543.2	1537.4	1530.9	1527.4
30°	1491.0	1491.6	1485.7	1477.5	1474.5
32.5°	1437.5	1436.4	1432.2	1423.4	1418.7
35°	1380.6	1381.2	1375.9	1367.7	1364.7
37.5°	1325.4	1321.9	1317.7	1308.3	1306.6
40°	1263.7	1263.1	1257.3	1249.0	1246.1
42.5°	1202.1	1201.5	1196.8	1188.5	1186.2
45°	1139.8	1139.8	1133.9	1124.5	1122.2
47.5°	1076.4	1074.0	1069.9	1061.7	1058.8
50°	1009.4	1007.7	1005.3	995.9	995.4
52.5°	943.7	942.5	938.4	930.2	925.5
55°	876.1	869.7	871.4	862.1	860.3
57.5°	806.9	800.4	803.9	795.7	792.2
60°	738.1	731.7	733.4	728.2	743.4
62.5°	667.7	663.6	663.6	675.9	653.6
65°	595.4	591.9	593.7	586.1	582.5
67.5°	524.4	519.1	530.3	516.2	510.3
70°	452.2	448.6	452.8	444.5	440.4
72.5°	380.5	377.6	376.4	373.5	370.0
75°	310.6	306.5	308.3	305.9	301.2
77.5°	242.5	241.4	240.8	237.8	234.3
80°	179.1	177.9	176.8	174.4	172.1
82.5°	119.8	118.6	118.0	116.9	116.3
85°	68.7	66.9	68.1	65.2	62.8
87.5°	25.8	25.3	26.4	24.1	22.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)