

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: P708982

Luminaire Tested: **24APR-58L850-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708982
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-58L850-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

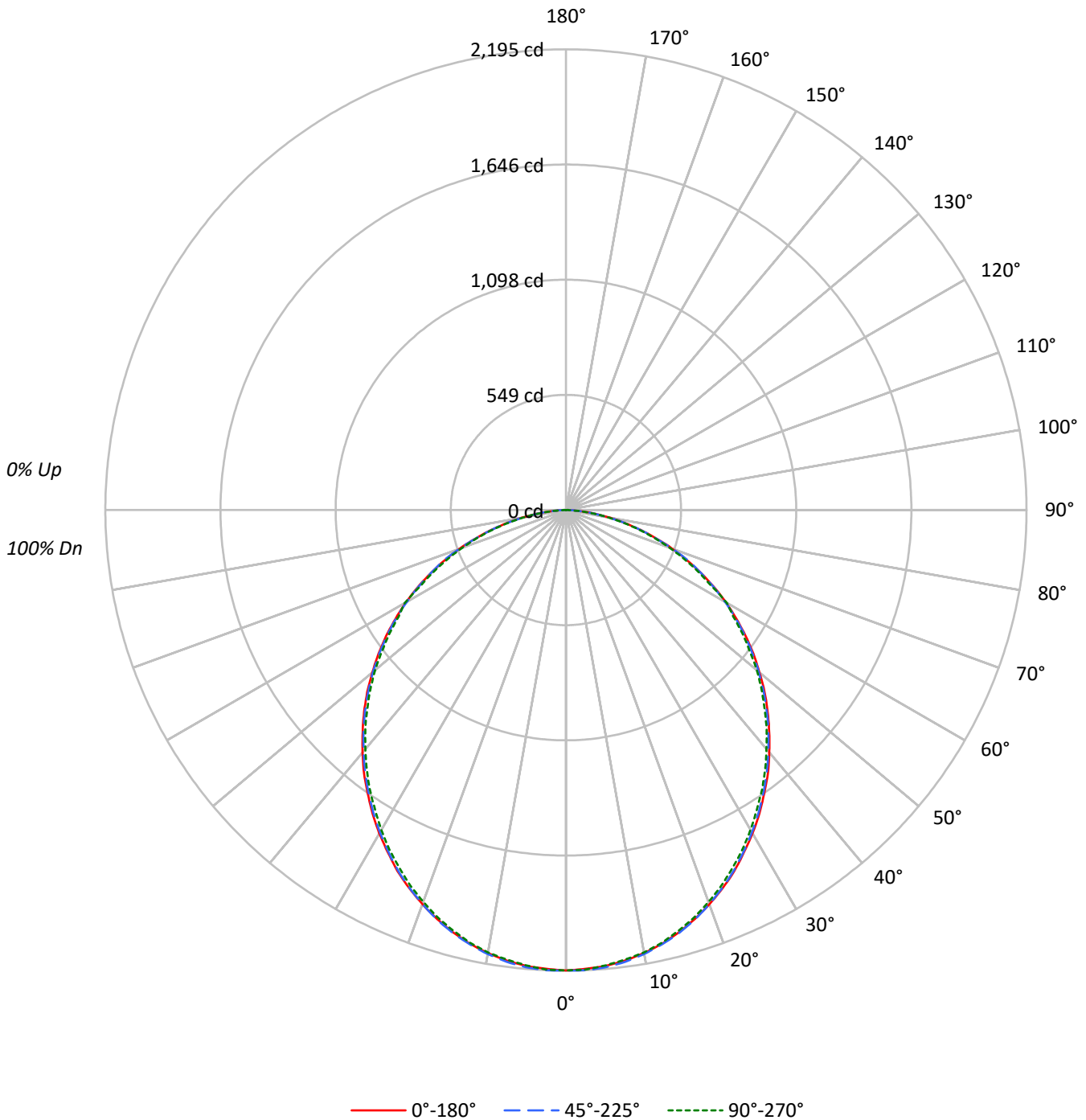
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5843.1 lumens
Efficiency: N/A
Efficacy: 112.8 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

TEST NUMBER: P708982
CATALOG NUMBER: 24APR-58L850-X-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708982
 CATALOG NUMBER: 24APR-58L850-X-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	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°	2952	2952	2952
5°	2945	2953	2941
10°	2928	2935	2924
15°	2901	2905	2890
20°	2862	2861	2845
25°	2819	2813	2791
30°	2764	2754	2733
35°	2706	2696	2675
40°	2648	2635	2611
45°	2588	2575	2548
50°	2521	2511	2486
55°	2452	2439	2408
60°	2370	2355	2387
65°	2262	2255	2213
70°	2122	2125	2067
75°	1927	1912	1868
80°	1656	1634	1591
85°	1266	1255	1158



TEST NUMBER: P708982
 CATALOG NUMBER: 24APR-58L850-X-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.2	3.5
10°-20°	587.0	10.0
20°-30°	871.2	14.9
30°-40°	1025.5	17.6
40°-50°	1042.2	17.8
50°-60°	926.5	15.9
60°-70°	698.9	12.0
70°-80°	388.2	6.6
80°-90°	96.5	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°	1665.4	28.5
0°-40°	2690.9	46.1
0°-60°	4659.6	79.7
0°-90°	5843.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5843.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2194	2194	2194	2194	2194	
5°	2180	2184	2187	2183	2178	207
15°	2082	2084	2086	2081	2075	587
25°	1899	1897	1895	1886	1880	874
35°	1647	1648	1642	1632	1628	1031
45°	1360	1360	1353	1342	1339	1049
55°	1045	1038	1040	1029	1026	934
65°	710	706	708	699	695	703
75°	371	366	368	365	359	393
85°	82	80	81	78	75	99
90°	0	0	0	0	0	



TEST NUMBER: P708982

CATALOG NUMBER: 24APR-58L850-X-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2193.7	2193.7	2193.7	2193.7	2193.7
2.5°	2188.1	2192.3	2195.1	2191.6	2190.9
5°	2180.4	2183.9	2186.7	2183.2	2177.6
7.5°	2165.0	2169.2	2171.3	2167.8	2160.1
10°	2143.3	2147.5	2148.2	2144.7	2140.5
12.5°	2116.7	2119.5	2119.5	2116.7	2111.8
15°	2082.3	2084.4	2085.8	2080.9	2074.6
17.5°	2043.1	2046.6	2045.2	2037.5	2034.7
20°	1999.0	2001.8	1998.3	1993.4	1987.0
22.5°	1950.6	1951.3	1948.5	1942.9	1936.6
25°	1898.8	1897.4	1894.6	1886.2	1879.8
27.5°	1838.5	1841.3	1834.3	1826.6	1822.4
30°	1779.0	1779.7	1772.7	1762.8	1759.3
32.5°	1715.2	1713.8	1708.9	1698.4	1692.8
35°	1647.2	1647.9	1641.6	1631.8	1628.3
37.5°	1581.4	1577.2	1572.3	1561.1	1559.0
40°	1507.8	1507.1	1500.1	1490.3	1486.8
42.5°	1434.2	1433.5	1427.9	1418.1	1415.3
45°	1360.0	1360.0	1353.0	1341.7	1338.9
47.5°	1284.3	1281.5	1276.6	1266.8	1263.3
50°	1204.4	1202.3	1199.5	1188.3	1187.6
52.5°	1125.9	1124.5	1119.6	1109.8	1104.2
55°	1045.4	1037.7	1039.8	1028.6	1026.5
57.5°	962.7	955.0	959.2	949.4	945.2
60°	880.7	873.0	875.1	868.8	887.0
62.5°	796.6	791.7	791.7	806.5	779.8
65°	710.5	706.3	708.4	699.3	695.0
67.5°	625.7	619.4	632.7	615.9	608.9
70°	539.5	535.3	540.2	530.4	525.5
72.5°	454.0	450.5	449.1	445.6	441.4
75°	370.6	365.7	367.8	365.0	359.4
77.5°	289.4	288.0	287.3	283.8	279.6
80°	213.7	212.3	210.9	208.1	205.3
82.5°	142.9	141.5	140.8	139.4	138.7
85°	82.0	79.9	81.3	77.8	75.0
87.5°	30.8	30.1	31.5	28.7	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)