

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: P708994

Luminaire Tested: **24APR-85L940-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708994
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85L940-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

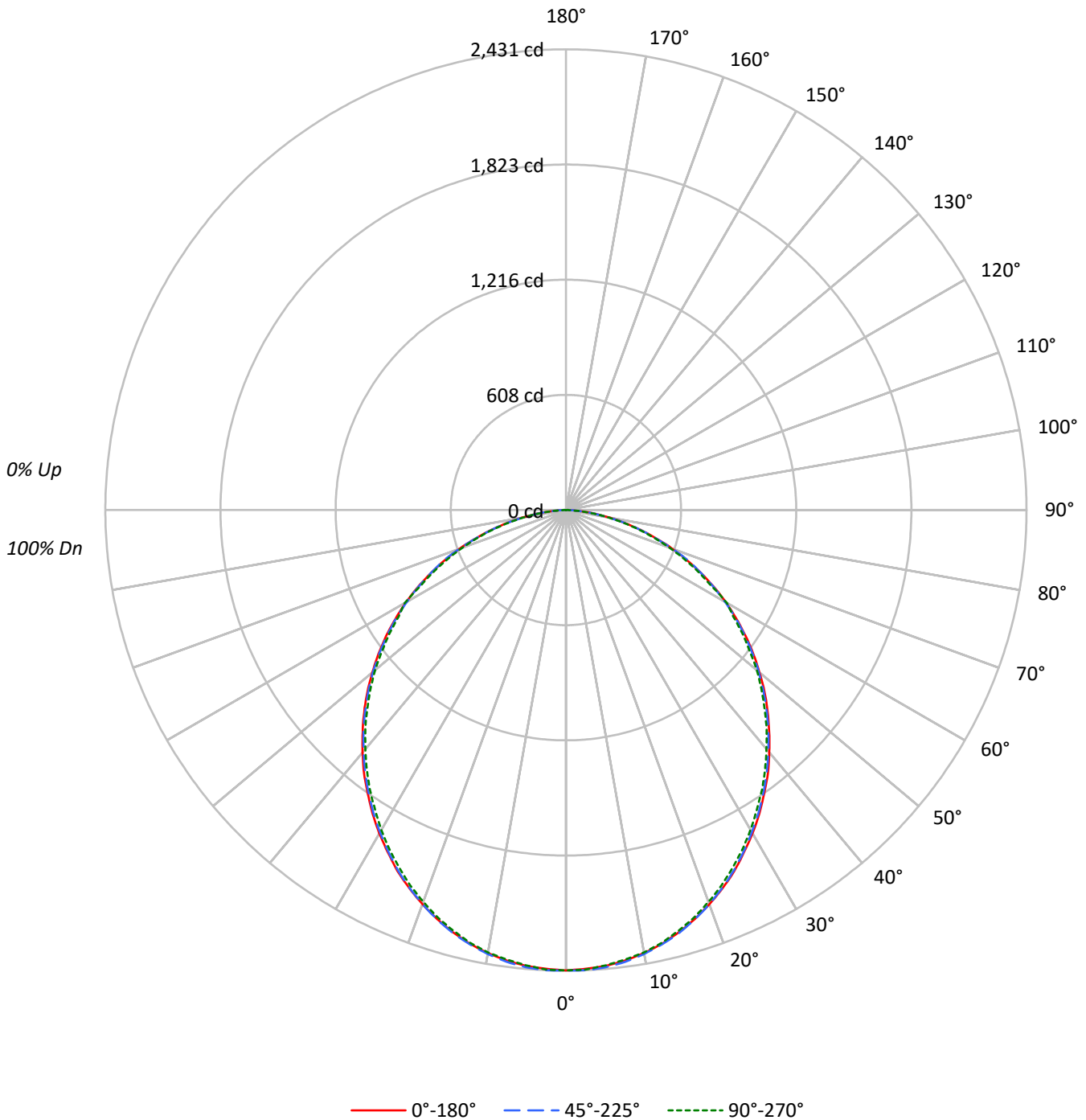
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6470.9 lumens
Efficiency: N/A
Efficacy: 82.6 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°	3269	3269	3269
5°	3261	3271	3257
10°	3243	3250	3239
15°	3212	3218	3200
20°	3170	3169	3151
25°	3122	3115	3091
30°	3061	3050	3027
35°	2996	2986	2962
40°	2933	2918	2892
45°	2866	2851	2821
50°	2792	2781	2753
55°	2716	2701	2666
60°	2625	2608	2643
65°	2505	2498	2450
70°	2351	2353	2289
75°	2134	2118	2070
80°	1834	1810	1761
85°	1402	1389	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.5	3.5
10°-20°	650.0	10.0
20°-30°	964.8	14.9
30°-40°	1135.7	17.6
40°-50°	1154.2	17.8
50°-60°	1026.0	15.9
60°-70°	773.9	12.0
70°-80°	429.9	6.6
80°-90°	106.9	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°	1844.3	28.5
0°-40°	2980.0	46.1
0°-60°	5160.2	79.7
0°-90°	6470.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6470.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2429	2429	2429	2429	2429	
5°	2415	2419	2422	2418	2412	229
15°	2306	2308	2310	2304	2298	650
25°	2103	2101	2098	2089	2082	968
35°	1824	1825	1818	1807	1803	1142
45°	1506	1506	1498	1486	1483	1162
55°	1158	1149	1152	1139	1137	1034
65°	787	782	784	774	770	779
75°	410	405	407	404	398	435
85°	91	88	90	86	83	109
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2429.4	2429.4	2429.4	2429.4	2429.4
2.5°	2423.2	2427.9	2431.0	2427.1	2426.3
5°	2414.7	2418.6	2421.7	2417.8	2411.6
7.5°	2397.6	2402.3	2404.6	2400.7	2392.2
10°	2373.6	2378.2	2379.0	2375.1	2370.5
12.5°	2344.1	2347.2	2347.2	2344.1	2338.7
15°	2306.1	2308.4	2309.9	2304.5	2297.5
17.5°	2262.6	2266.5	2264.9	2256.4	2253.3
20°	2213.7	2216.8	2213.0	2207.5	2200.5
22.5°	2160.2	2161.0	2157.9	2151.7	2144.7
25°	2102.8	2101.2	2098.1	2088.8	2081.8
27.5°	2036.0	2039.1	2031.4	2022.8	2018.2
30°	1970.1	1970.9	1963.1	1952.2	1948.4
32.5°	1899.5	1897.9	1892.5	1880.9	1874.6
35°	1824.2	1825.0	1818.0	1807.1	1803.3
37.5°	1751.3	1746.6	1741.2	1728.8	1726.4
40°	1669.8	1669.0	1661.3	1650.4	1646.5
42.5°	1588.3	1587.6	1581.3	1570.5	1567.4
45°	1506.1	1506.1	1498.3	1485.9	1482.8
47.5°	1422.3	1419.2	1413.7	1402.9	1399.0
50°	1333.8	1331.5	1328.4	1316.0	1315.2
52.5°	1246.9	1245.4	1239.9	1229.1	1222.9
55°	1157.7	1149.2	1151.5	1139.1	1136.7
57.5°	1066.1	1057.6	1062.2	1051.4	1046.7
60°	975.3	966.8	969.1	962.2	982.3
62.5°	882.2	876.8	876.8	893.1	863.6
65°	786.8	782.1	784.5	774.4	769.7
67.5°	692.9	685.9	700.7	682.0	674.3
70°	597.5	592.8	598.2	587.4	581.9
72.5°	502.8	498.9	497.4	493.5	488.8
75°	410.5	405.0	407.4	404.3	398.1
77.5°	320.5	318.9	318.1	314.3	309.6
80°	236.7	235.1	233.6	230.5	227.3
82.5°	158.3	156.7	156.0	154.4	153.6
85°	90.8	88.5	90.0	86.1	83.0
87.5°	34.1	33.4	34.9	31.8	29.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)