

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: P708965

Luminaire Tested: **24APR-76L830-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708965
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76L830-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

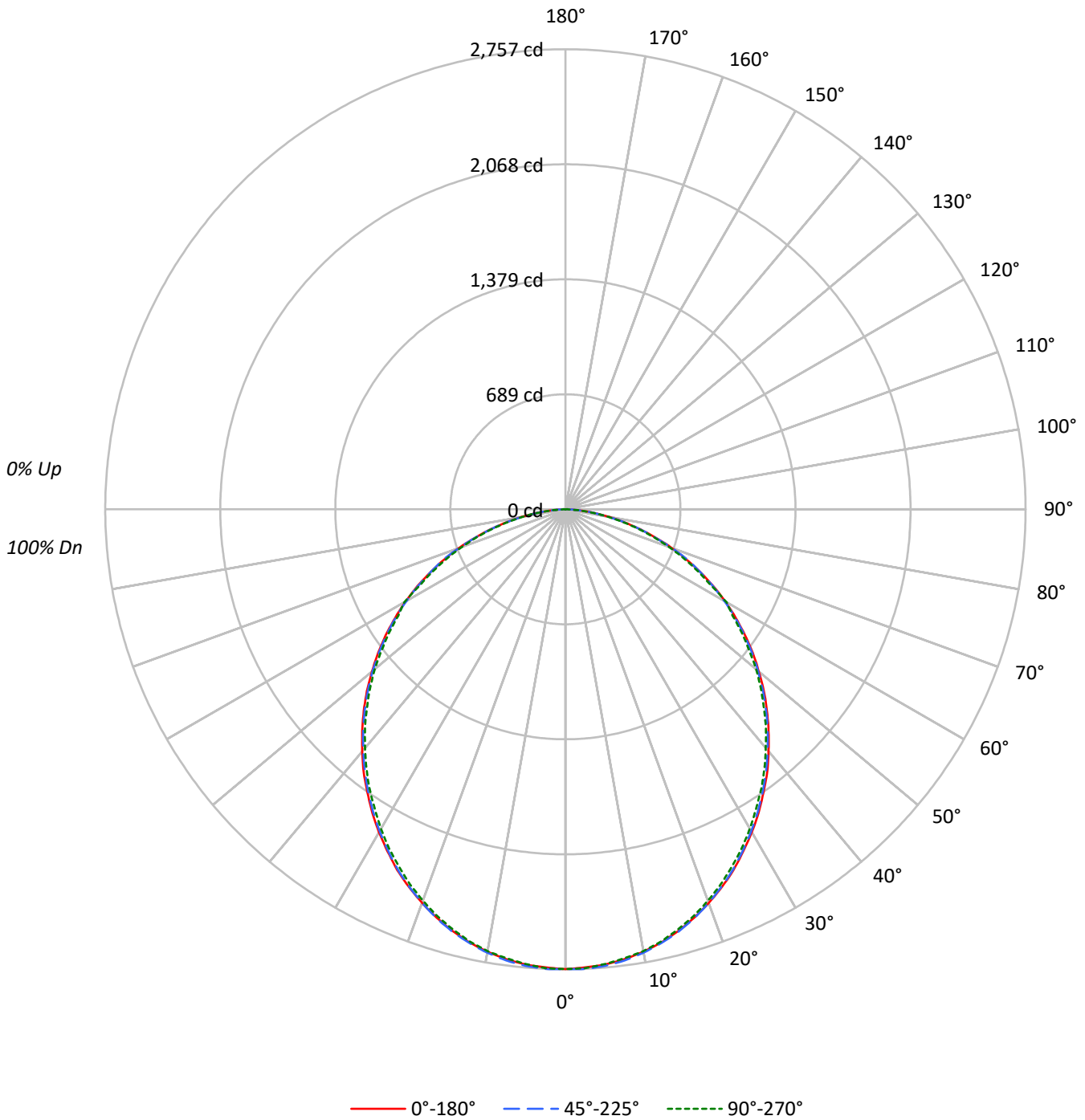
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7339.3 lumens
Efficiency: N/A
Efficacy: 105.8 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): 69.4
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°	3707	3707	3707
5°	3699	3710	3694
10°	3678	3687	3673
15°	3643	3650	3630
20°	3595	3594	3574
25°	3541	3533	3505
30°	3472	3459	3433
35°	3398	3387	3359
40°	3326	3309	3280
45°	3250	3234	3200
50°	3167	3154	3122
55°	3080	3064	3024
60°	2977	2958	2998
65°	2841	2833	2779
70°	2666	2669	2597
75°	2420	2402	2347
80°	2080	2053	1998
85°	1590	1576	1454



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	260.3	3.5
10°-20°	737.3	10.0
20°-30°	1094.3	14.9
30°-40°	1288.1	17.6
40°-50°	1309.1	17.8
50°-60°	1163.7	15.9
60°-70°	877.8	12.0
70°-80°	487.6	6.6
80°-90°	121.2	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°	2091.8	28.5
0°-40°	3380.0	46.1
0°-60°	5852.7	79.7
0°-90°	7339.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7339.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2756	2756	2756	2756	2756	
5°	2739	2743	2747	2742	2735	260
15°	2616	2618	2620	2614	2606	737
25°	2385	2383	2380	2369	2361	1098
35°	2069	2070	2062	2050	2045	1295
45°	1708	1708	1699	1685	1682	1318
55°	1313	1303	1306	1292	1289	1173
65°	892	887	890	878	873	883
75°	466	459	462	458	452	494
85°	103	100	102	98	94	124
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2755.5	2755.5	2755.5	2755.5	2755.5
2.5°	2748.5	2753.7	2757.3	2752.9	2752.0
5°	2738.8	2743.2	2746.7	2742.3	2735.3
7.5°	2719.4	2724.7	2727.3	2722.9	2713.3
10°	2692.1	2697.4	2698.3	2693.9	2688.6
12.5°	2658.7	2662.2	2662.2	2658.7	2652.5
15°	2615.6	2618.2	2620.0	2613.8	2605.9
17.5°	2566.3	2570.7	2568.9	2559.2	2555.7
20°	2510.8	2514.4	2510.0	2503.8	2495.9
22.5°	2450.1	2451.0	2447.5	2440.4	2432.5
25°	2385.0	2383.2	2379.7	2369.2	2361.2
27.5°	2309.3	2312.8	2304.0	2294.3	2289.1
30°	2234.5	2235.4	2226.6	2214.3	2209.9
32.5°	2154.4	2152.7	2146.5	2133.3	2126.3
35°	2069.0	2069.9	2062.0	2049.7	2045.3
37.5°	1986.3	1981.0	1974.9	1960.8	1958.2
40°	1893.9	1893.0	1884.2	1871.9	1867.5
42.5°	1801.5	1800.6	1793.6	1781.3	1777.7
45°	1708.2	1708.2	1699.4	1685.3	1681.8
47.5°	1613.2	1609.6	1603.5	1591.2	1586.8
50°	1512.8	1510.2	1506.7	1492.6	1491.7
52.5°	1414.3	1412.5	1406.4	1394.0	1387.0
55°	1313.1	1303.4	1306.0	1291.9	1289.3
57.5°	1209.2	1199.5	1204.8	1192.5	1187.2
60°	1106.2	1096.6	1099.2	1091.3	1114.2
62.5°	1000.6	994.5	994.5	1013.0	979.5
65°	892.4	887.1	889.8	878.3	873.0
67.5°	785.9	778.0	794.7	773.6	764.8
70°	677.7	672.4	678.5	666.2	660.1
72.5°	570.3	565.9	564.1	559.7	554.4
75°	465.6	459.4	462.0	458.5	451.5
77.5°	363.5	361.7	360.8	356.4	351.1
80°	268.4	266.7	264.9	261.4	257.9
82.5°	179.5	177.8	176.9	175.1	174.3
85°	103.0	100.3	102.1	97.7	94.2
87.5°	38.7	37.8	39.6	36.1	33.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)