

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: P708856

Luminaire Tested: **22APR-22-52L830-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708856
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-22-52L830-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

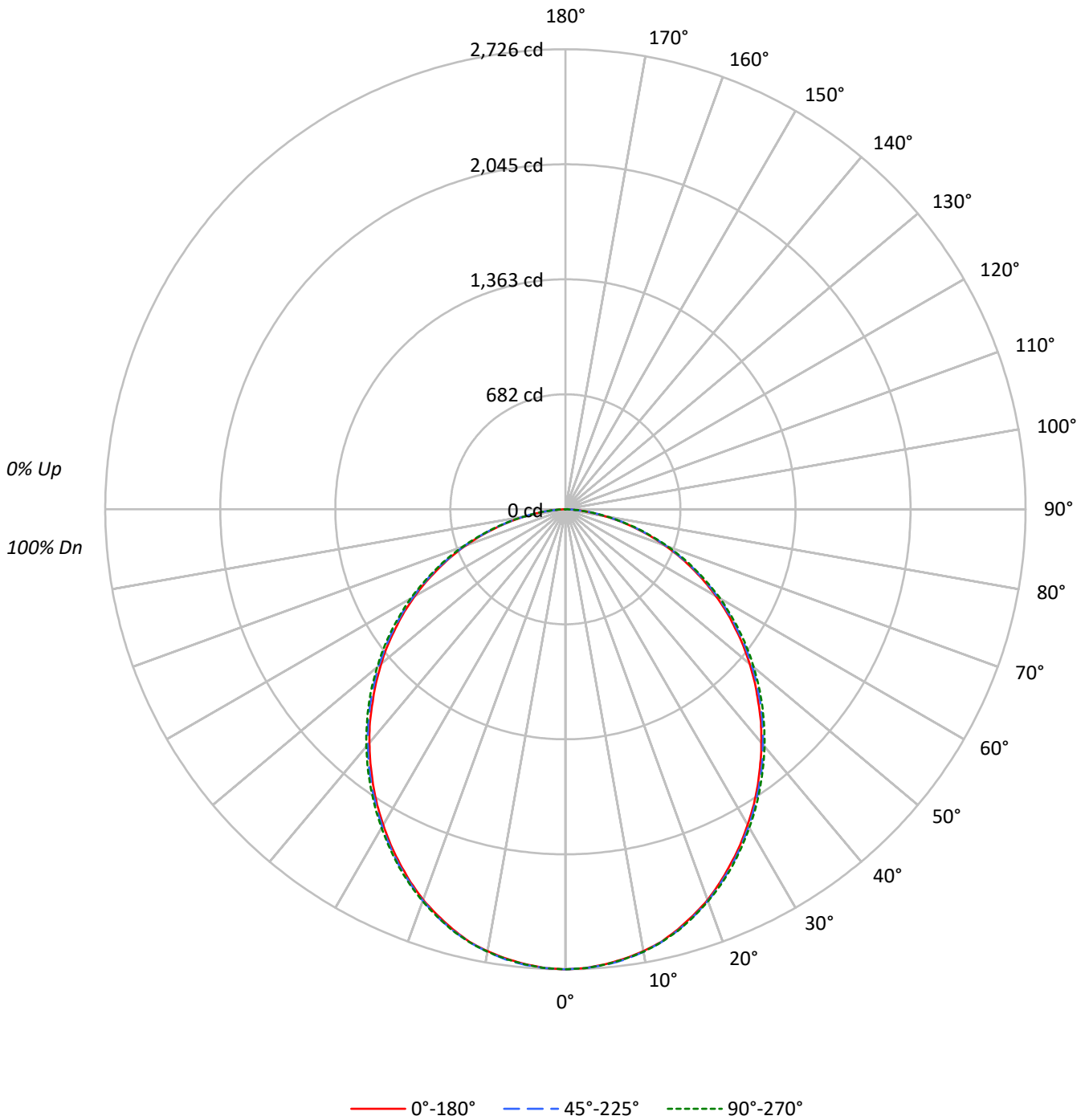
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7090.3 lumens
Efficiency: N/A
Efficacy: 111.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 63.8
Input Voltage (V): 120
Input Current (A_{in}): 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	81	76	82	78	74	79	76	73	73	73	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7336	7336	7336
5°	7312	7321	7315
10°	7266	7277	7275
15°	7177	7196	7199
20°	7054	7068	7078
25°	6884	6916	6938
30°	6708	6745	6770
35°	6529	6573	6607
40°	6345	6395	6447
45°	6148	6223	6277
50°	5964	6036	6098
55°	5759	5837	5909
60°	5550	5623	5703
65°	5275	5362	5423
70°	4936	5004	5075
75°	4440	4523	4581
80°	3749	3845	3880
85°	2807	2927	2912



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	3.6
10°-20°	727.5	10.3
20°-30°	1072.2	15.1
30°-40°	1251.4	17.6
40°-50°	1261.2	17.8
50°-60°	1113.1	15.7
60°-70°	832.4	11.7
70°-80°	461.3	6.5
80°-90°	114.1	1.6
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°	2056.9	29.0
0°-40°	3308.3	46.7
0°-60°	5682.5	80.1
0°-90°	7090.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7090.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2726	2726	2726	2726	2726	
5°	2707	2710	2710	2711	2708	257
15°	2576	2581	2583	2585	2584	726
25°	2318	2324	2329	2334	2337	1068
35°	1987	1992	2001	2009	2011	1243
45°	1616	1626	1635	1647	1650	1248
55°	1228	1235	1244	1256	1259	1099
65°	828	832	842	849	852	821
75°	427	429	435	440	441	453
85°	91	94	95	94	94	111
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2726.1	2726.1	2726.1	2726.1	2726.1
2.5°	2721.0	2723.9	2721.6	2723.9	2721.6
5°	2706.8	2710.2	2710.2	2710.8	2708.0
7.5°	2685.8	2689.8	2691.5	2692.1	2688.1
10°	2659.1	2663.1	2663.1	2665.4	2662.5
12.5°	2625.1	2627.3	2626.8	2630.2	2627.9
15°	2576.2	2580.8	2583.0	2585.3	2584.2
17.5°	2521.7	2527.4	2529.1	2533.1	2530.2
20°	2463.2	2467.2	2468.3	2474.6	2471.7
22.5°	2393.4	2397.4	2401.3	2407.0	2407.6
25°	2318.4	2323.5	2329.2	2333.8	2336.6
27.5°	2241.2	2246.3	2251.4	2257.1	2258.2
30°	2158.9	2165.1	2170.8	2177.6	2178.7
32.5°	2076.0	2078.2	2086.8	2094.1	2097.5
35°	1987.4	1991.9	2001.0	2009.0	2011.2
37.5°	1897.1	1903.9	1913.6	1922.1	1924.4
40°	1806.2	1811.9	1820.4	1831.8	1835.2
42.5°	1714.3	1718.2	1729.6	1739.2	1742.1
45°	1615.5	1625.7	1635.3	1646.7	1649.5
47.5°	1521.2	1529.2	1538.8	1549.6	1554.1
50°	1424.7	1434.3	1441.7	1453.6	1456.5
52.5°	1328.1	1334.4	1344.6	1354.8	1359.4
55°	1227.6	1235.0	1244.1	1255.5	1259.4
57.5°	1131.1	1135.1	1145.3	1155.0	1158.4
60°	1031.2	1035.1	1044.8	1055.0	1059.6
62.5°	931.2	934.6	942.6	954.5	954.5
65°	828.5	832.4	842.1	848.9	851.7
67.5°	728.5	731.9	738.7	747.3	751.2
70°	627.4	630.3	636.0	644.5	645.0
72.5°	526.4	529.2	536.6	539.4	543.4
75°	427.0	429.3	435.0	439.5	440.6
77.5°	332.2	335.6	339.6	341.3	343.0
80°	241.9	245.3	248.1	249.8	250.4
82.5°	160.1	163.5	165.2	166.4	165.8
85°	90.9	93.7	94.8	93.7	94.3
87.5°	35.8	37.5	38.6	38.0	36.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)