

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: P708962

Luminaire Tested: **24APR-X-138L950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708962
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-138L950-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

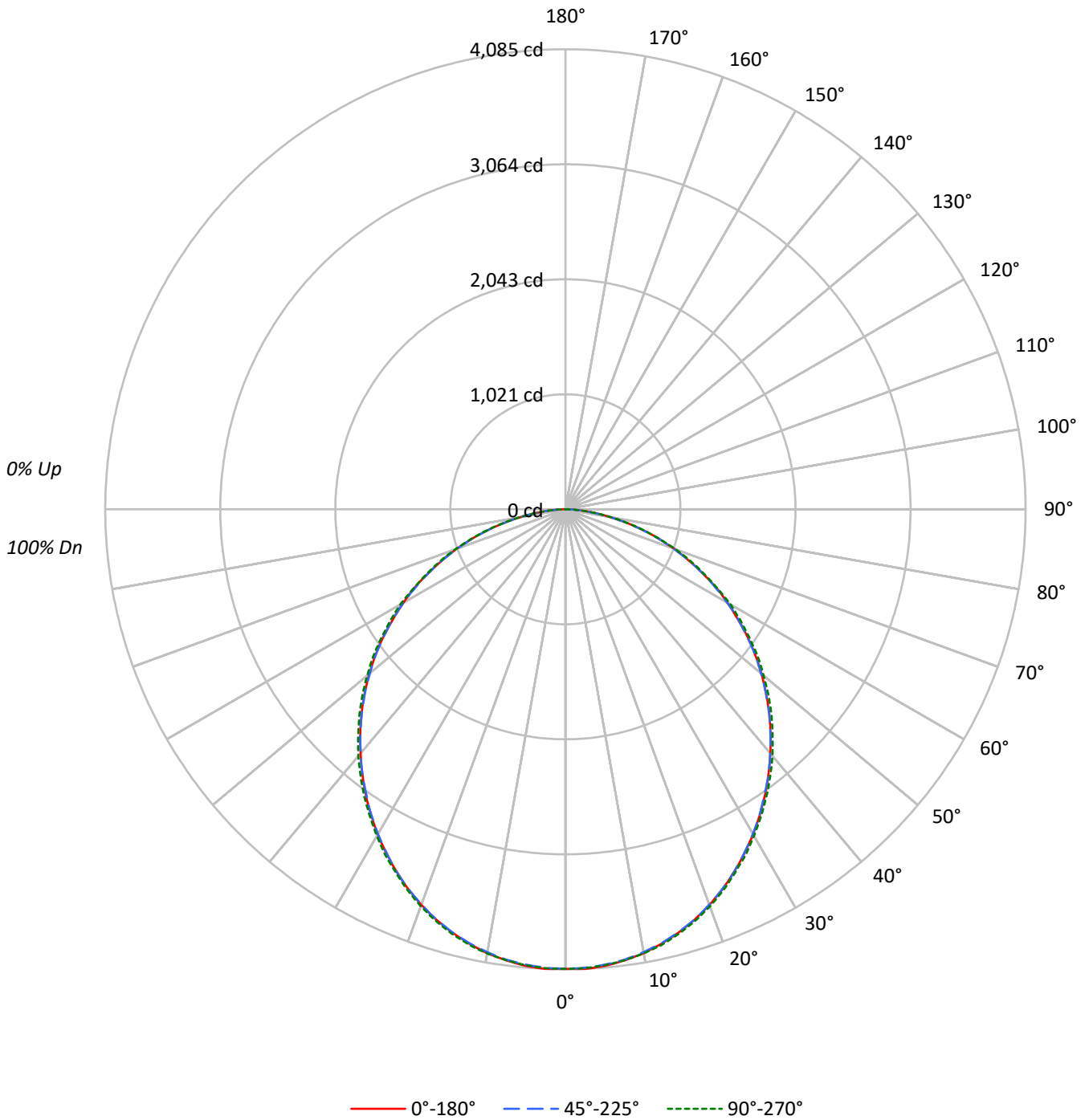
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11073.9 lumens
Efficiency: N/A
Efficacy: 106.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 103.6
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				
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	94	98	94	91	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5490	5490	5490
5°	5496	5482	5487
10°	5469	5457	5471
15°	5417	5413	5434
20°	5353	5348	5373
25°	5268	5269	5287
30°	5176	5172	5201
35°	5078	5066	5112
40°	4970	4967	5023
45°	4867	4864	4923
50°	4755	4745	4809
55°	4625	4619	4683
60°	4473	4470	4556
65°	4270	4277	4327
70°	4048	4015	4099
75°	3700	3671	3741
80°	3201	3161	3226
85°	2518	2492	2561



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.8	3.5
10°-20°	1096.8	9.9
20°-30°	1635.8	14.8
30°-40°	1935.6	17.5
40°-50°	1977.8	17.9
50°-60°	1767.5	16.0
60°-70°	1332.2	12.0
70°-80°	749.9	6.8
80°-90°	192.6	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°	3118.3	28.2
0°-40°	5053.9	45.6
0°-60°	8799.1	79.5
0°-90°	11073.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11073.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4081	4081	4081	4081	4081	
5°	4069	4064	4059	4063	4063	386
15°	3889	3884	3886	3894	3901	1097
25°	3548	3543	3549	3561	3561	1635
35°	3092	3085	3084	3105	3112	1933
45°	2558	2556	2556	2576	2587	1973
55°	1972	1972	1969	1986	1996	1761
65°	1341	1335	1343	1356	1359	1332
75°	712	698	706	703	720	753
85°	163	156	161	164	166	195
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4080.6	4080.6	4080.6	4080.6	4080.6
2.5°	4085.1	4079.0	4074.5	4076.7	4078.4
5°	4069.4	4063.8	4058.8	4062.7	4062.7
7.5°	4039.7	4036.9	4033.0	4036.4	4037.5
10°	4002.7	3996.6	3993.8	4001.6	4004.4
12.5°	3950.6	3943.3	3945.6	3955.7	3960.2
15°	3889.0	3883.9	3886.2	3894.0	3901.3
17.5°	3818.9	3813.3	3818.4	3825.1	3831.8
20°	3738.2	3732.6	3735.4	3744.9	3752.2
22.5°	3648.5	3642.9	3646.3	3654.7	3662.6
25°	3548.2	3543.2	3549.3	3560.6	3561.1
27.5°	3443.4	3437.8	3439.5	3451.3	3461.9
30°	3331.3	3324.0	3329.1	3340.9	3347.6
32.5°	3213.6	3206.9	3210.8	3224.3	3232.1
35°	3091.5	3084.7	3084.2	3104.9	3112.2
37.5°	2962.0	2958.1	2961.4	2978.2	2987.2
40°	2829.7	2824.1	2828.0	2849.3	2860.0
42.5°	2695.8	2692.4	2693.0	2714.3	2722.7
45°	2557.9	2555.7	2556.2	2575.8	2587.0
47.5°	2415.5	2410.5	2412.7	2432.9	2444.7
50°	2271.5	2270.4	2267.0	2287.2	2297.3
52.5°	2123.6	2121.3	2121.3	2139.2	2153.8
55°	1971.7	1971.7	1968.9	1986.2	1996.3
57.5°	1812.5	1813.6	1818.1	1833.8	1843.9
60°	1662.3	1656.7	1661.2	1675.2	1693.1
62.5°	1512.7	1495.8	1500.3	1513.2	1520.5
65°	1341.2	1335.0	1343.4	1356.3	1359.1
67.5°	1183.7	1177.5	1182.0	1191.0	1203.3
70°	1029.0	1012.7	1020.6	1030.1	1041.9
72.5°	866.5	852.4	863.7	871.5	879.9
75°	711.8	698.3	706.2	702.8	719.6
77.5°	556.5	547.0	553.7	560.5	573.3
80°	413.1	402.4	408.0	410.8	416.4
82.5°	281.3	273.5	275.2	286.4	283.0
85°	163.1	156.4	161.4	163.7	165.9
87.5°	64.5	58.3	63.3	65.0	65.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)