

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: P708927

Luminaire Tested: **24APR-X-138L830-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708927
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-138L830-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

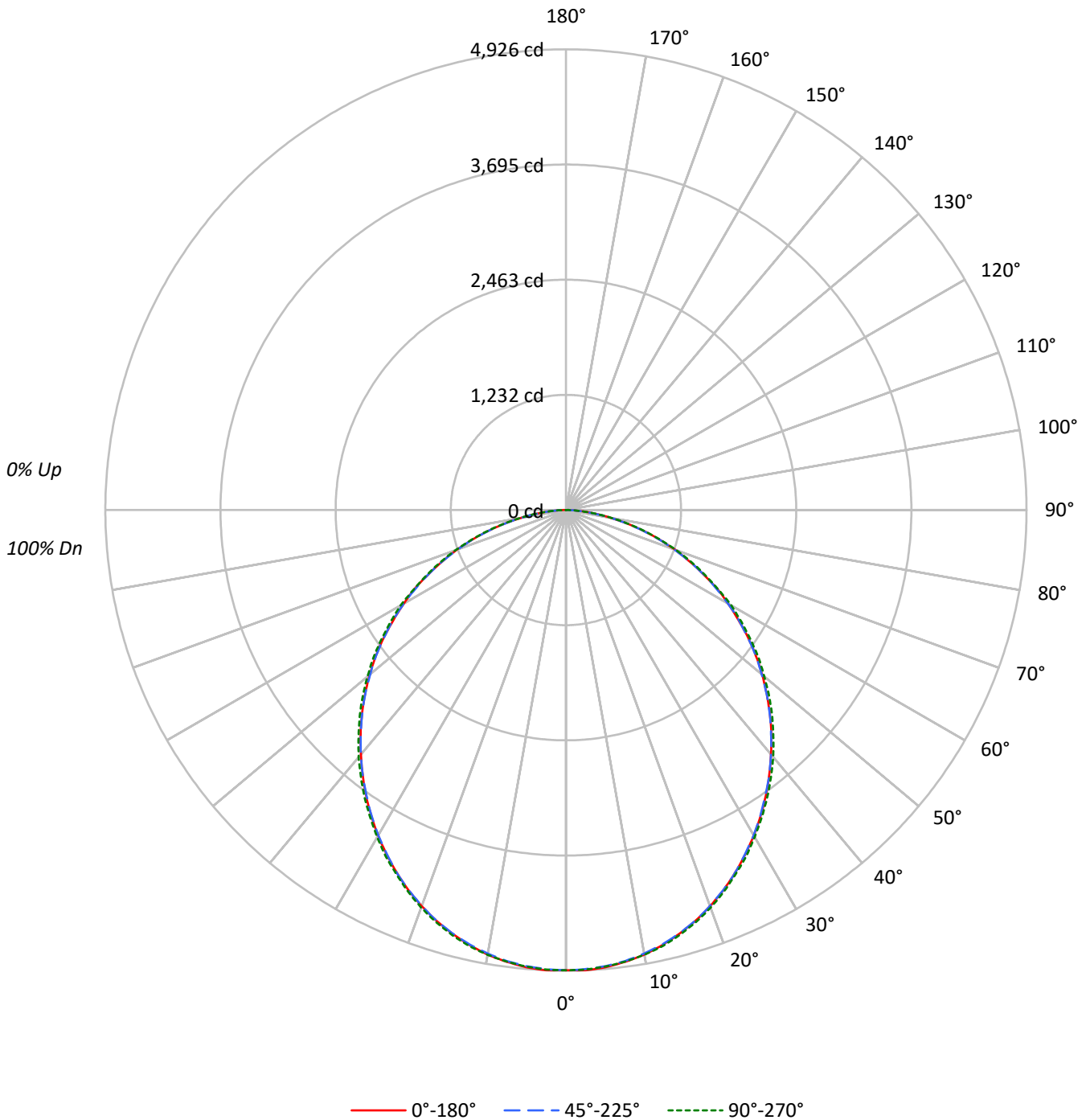
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13354.5 lumens
Efficiency: N/A
Efficacy: 128.9 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				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	100	100	100	100
1	109	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84	84	84	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	70	70	70	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	59	59	59	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	50	50	50	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44	44	44	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	38	38	38	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34	34	34	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30	30	30	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	27	27	27	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	25	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6621	6621	6621
5°	6628	6611	6617
10°	6595	6580	6598
15°	6533	6528	6554
20°	6455	6450	6479
25°	6353	6354	6376
30°	6242	6237	6272
35°	6124	6109	6165
40°	5994	5990	6058
45°	5870	5866	5936
50°	5734	5723	5799
55°	5578	5570	5647
60°	5394	5391	5494
65°	5149	5158	5218
70°	4882	4842	4943
75°	4462	4427	4511
80°	3859	3812	3891
85°	3037	3006	3089



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	465.2	3.5
10°-20°	1322.7	9.9
20°-30°	1972.6	14.8
30°-40°	2334.2	17.5
40°-50°	2385.1	17.9
50°-60°	2131.5	16.0
60°-70°	1606.6	12.0
70°-80°	904.3	6.8
80°-90°	232.3	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°	3760.5	28.2
0°-40°	6094.7	45.6
0°-60°	10611.3	79.5
0°-90°	13354.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13354.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4921	4921	4921	4921	4921	
5°	4908	4901	4895	4899	4899	466
15°	4690	4684	4686	4696	4705	1323
25°	4279	4273	4280	4294	4294	1971
35°	3728	3720	3719	3744	3753	2331
45°	3085	3082	3083	3106	3120	2379
55°	2378	2378	2374	2395	2408	2124
65°	1617	1610	1620	1636	1639	1606
75°	858	842	852	848	868	908
85°	197	189	195	197	200	235
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4921.1	4921.1	4921.1	4921.1	4921.1
2.5°	4926.5	4919.0	4913.6	4916.3	4918.4
5°	4907.5	4900.8	4894.7	4899.4	4899.4
7.5°	4871.7	4868.3	4863.6	4867.7	4869.0
10°	4827.1	4819.7	4816.3	4825.8	4829.1
12.5°	4764.3	4755.5	4758.2	4770.3	4775.7
15°	4689.9	4683.8	4686.5	4696.0	4704.8
17.5°	4605.4	4598.7	4604.7	4612.9	4621.0
20°	4508.1	4501.3	4504.7	4516.2	4525.0
22.5°	4400.0	4393.2	4397.2	4407.4	4416.9
25°	4279.0	4272.9	4280.3	4293.8	4294.5
27.5°	4152.6	4145.8	4147.9	4162.0	4174.9
30°	4017.4	4008.6	4014.7	4028.9	4037.0
32.5°	3875.5	3867.4	3872.1	3888.3	3897.8
35°	3728.1	3720.0	3719.3	3744.4	3753.1
37.5°	3572.0	3567.3	3571.3	3591.6	3602.4
40°	3412.5	3405.7	3410.5	3436.2	3449.0
42.5°	3251.0	3246.9	3247.6	3273.3	3283.4
45°	3084.7	3082.0	3082.7	3106.3	3119.8
47.5°	2913.0	2906.9	2909.6	2934.0	2948.2
50°	2739.3	2738.0	2733.9	2758.3	2770.4
52.5°	2560.9	2558.2	2558.2	2579.8	2597.4
55°	2377.7	2377.7	2374.4	2395.3	2407.5
57.5°	2185.8	2187.1	2192.5	2211.5	2223.6
60°	2004.6	1997.9	2003.3	2020.2	2041.8
62.5°	1824.2	1803.9	1809.3	1824.9	1833.7
65°	1617.4	1609.9	1620.1	1635.6	1639.0
67.5°	1427.5	1420.0	1425.4	1436.2	1451.1
70°	1240.9	1221.3	1230.8	1242.3	1256.5
72.5°	1044.9	1028.0	1041.5	1051.0	1061.1
75°	858.4	842.1	851.6	847.5	867.8
77.5°	671.1	659.7	667.8	675.9	691.4
80°	498.1	485.3	492.0	495.4	502.2
82.5°	339.3	329.8	331.9	345.4	341.3
85°	196.7	188.6	194.7	197.4	200.1
87.5°	77.7	70.3	76.4	78.4	79.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)