

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: P708932

Luminaire Tested: **24APR-X-138L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708932
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-138L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

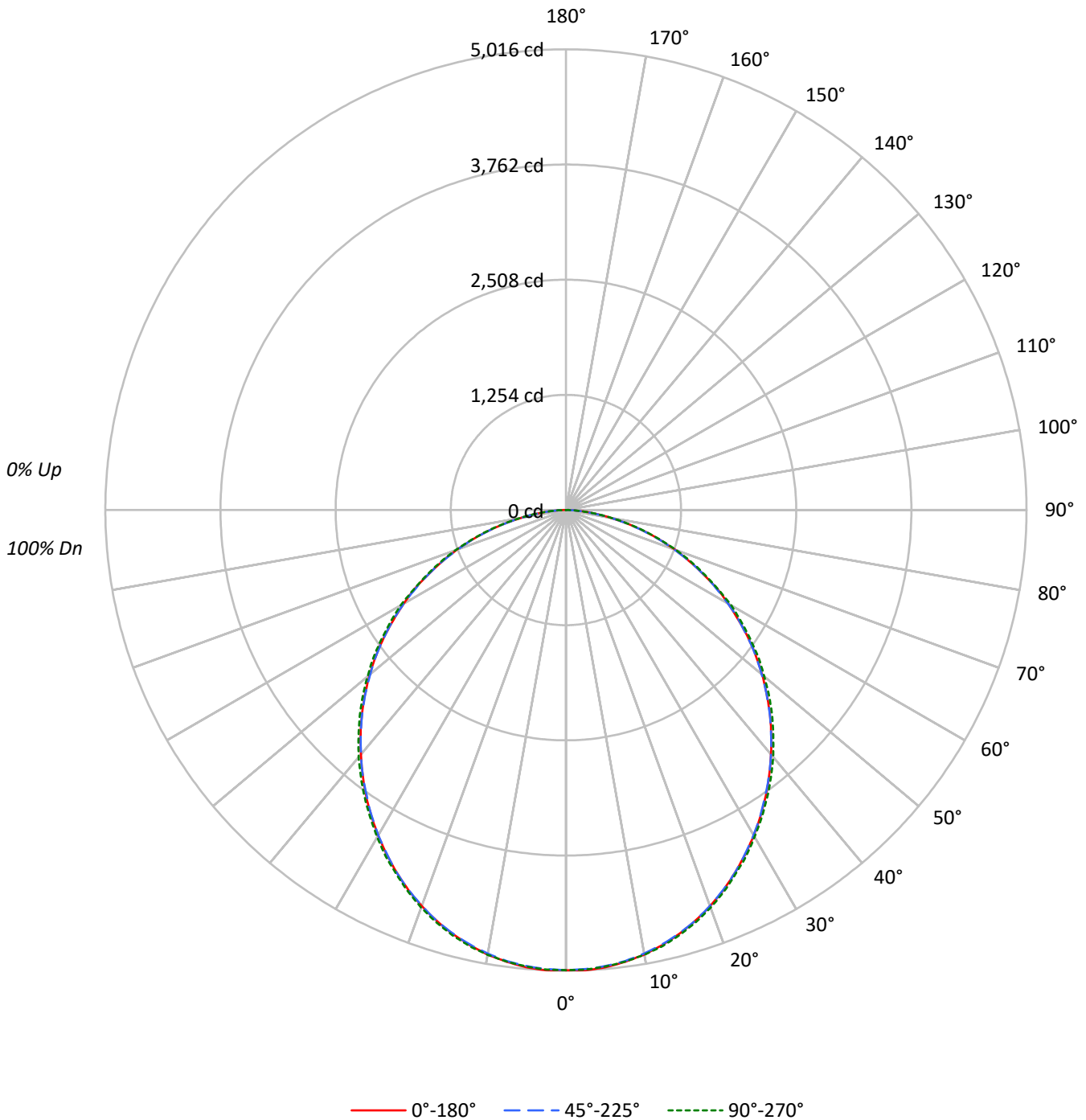
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13596.7 lumens
Efficiency: N/A
Efficacy: 131.2 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	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°	6741	6741	6741
5°	6748	6731	6737
10°	6715	6700	6717
15°	6651	6646	6672
20°	6572	6567	6596
25°	6468	6470	6491
30°	6355	6350	6386
35°	6235	6220	6276
40°	6102	6099	6168
45°	5976	5972	6044
50°	5838	5826	5904
55°	5679	5671	5750
60°	5492	5489	5594
65°	5243	5252	5313
70°	4970	4930	5032
75°	4543	4507	4593
80°	3930	3882	3962
85°	3091	3060	3145



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	473.7	3.5
10°-20°	1346.7	9.9
20°-30°	2008.4	14.8
30°-40°	2376.5	17.5
40°-50°	2428.4	17.9
50°-60°	2170.2	16.0
60°-70°	1635.7	12.0
70°-80°	920.7	6.8
80°-90°	236.5	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°	3828.7	28.2
0°-40°	6205.2	45.6
0°-60°	10803.8	79.5
0°-90°	13596.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13596.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5010	5010	5010	5010	5010	
5°	4996	4990	4984	4988	4988	474
15°	4775	4769	4772	4781	4790	1347
25°	4357	4350	4358	4372	4372	2007
35°	3796	3788	3787	3812	3821	2373
45°	3141	3138	3139	3163	3176	2422
55°	2421	2421	2417	2439	2451	2162
65°	1647	1639	1650	1665	1669	1635
75°	874	857	867	863	884	924
85°	200	192	198	201	204	239
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5010.3	5010.3	5010.3	5010.3	5010.3
2.5°	5015.8	5008.2	5002.7	5005.5	5007.5
5°	4996.5	4989.7	4983.5	4988.3	4988.3
7.5°	4960.1	4956.6	4951.8	4955.9	4957.3
10°	4914.6	4907.1	4903.6	4913.3	4916.7
12.5°	4850.6	4841.7	4844.5	4856.8	4862.3
15°	4775.0	4768.8	4771.5	4781.1	4790.1
17.5°	4688.9	4682.1	4688.2	4696.5	4704.8
20°	4589.8	4583.0	4586.4	4598.1	4607.0
22.5°	4479.7	4472.9	4477.0	4487.3	4496.9
25°	4356.6	4350.4	4357.9	4371.7	4372.4
27.5°	4227.9	4221.0	4223.1	4237.5	4250.6
30°	4090.3	4081.3	4087.5	4102.0	4110.2
32.5°	3945.8	3937.5	3942.3	3958.8	3968.5
35°	3795.7	3787.5	3786.8	3812.3	3821.2
37.5°	3636.8	3632.0	3636.1	3656.7	3667.7
40°	3474.4	3467.5	3472.3	3498.5	3511.5
42.5°	3309.9	3305.8	3306.5	3332.6	3342.9
45°	3140.6	3137.9	3138.6	3162.7	3176.4
47.5°	2965.9	2959.7	2962.4	2987.2	3001.6
50°	2789.0	2787.6	2783.5	2808.3	2820.7
52.5°	2607.3	2604.6	2604.6	2626.6	2644.5
55°	2420.9	2420.9	2417.4	2438.7	2451.1
57.5°	2225.4	2226.8	2232.3	2251.6	2264.0
60°	2041.0	2034.1	2039.6	2056.8	2078.8
62.5°	1857.3	1836.6	1842.1	1858.0	1866.9
65°	1646.7	1639.1	1649.5	1665.3	1668.7
67.5°	1453.3	1445.8	1451.3	1462.3	1477.4
70°	1263.4	1243.5	1253.1	1264.8	1279.2
72.5°	1063.9	1046.7	1060.4	1070.0	1080.4
75°	873.9	857.4	867.0	862.9	883.6
77.5°	683.3	671.6	679.9	688.1	704.0
80°	507.2	494.1	501.0	504.4	511.3
82.5°	345.4	335.8	337.9	351.6	347.5
85°	200.2	192.0	198.2	200.9	203.7
87.5°	79.1	71.6	77.8	79.8	80.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)