

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: P708945

Luminaire Tested: **24APR-X-181L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708945
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-181L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

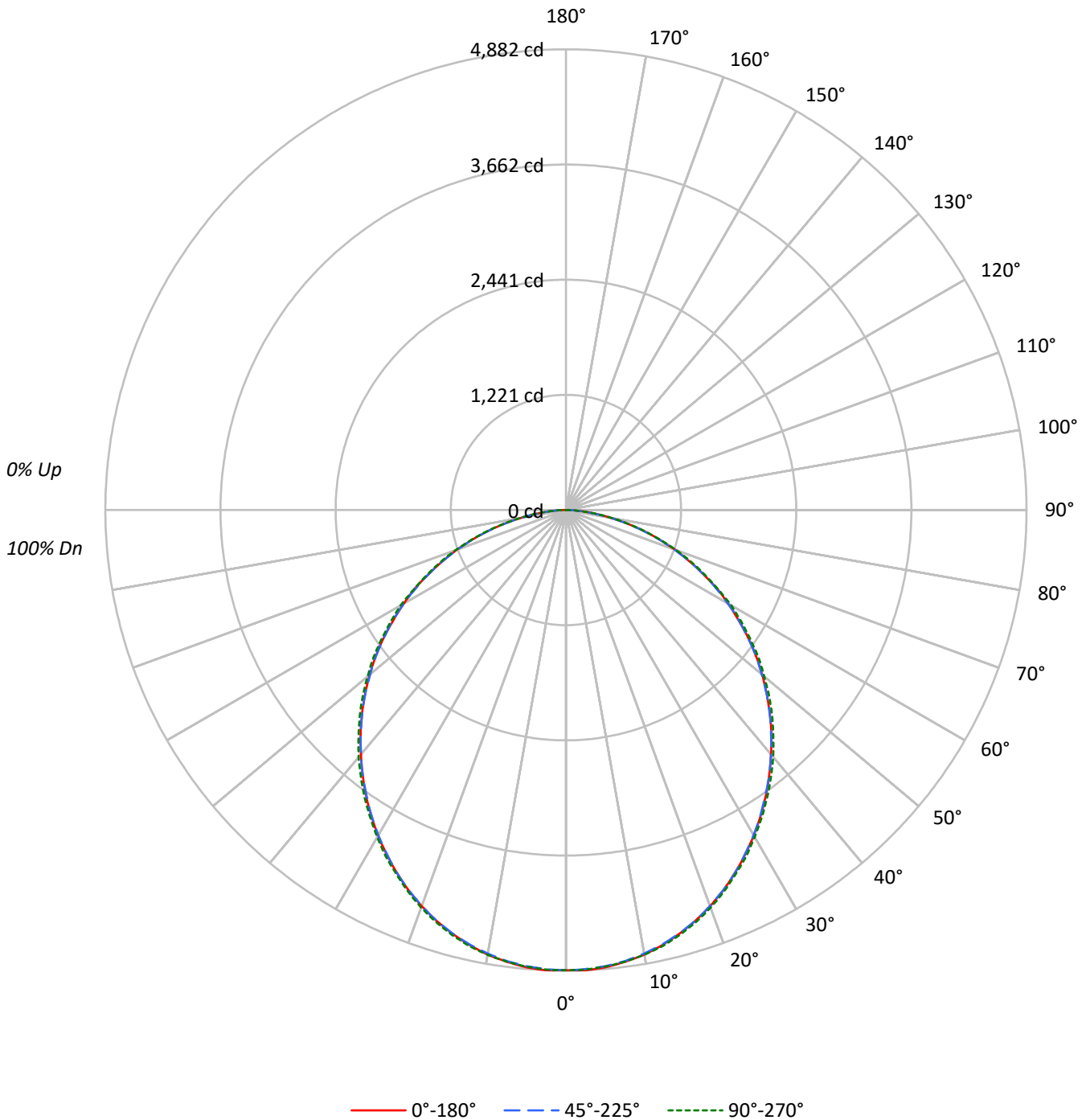
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13235.0 lumens
Efficiency: N/A
Efficacy: 95.1 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): 139.1
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

TEST NUMBER: P708945
CATALOG NUMBER: 24APR-X-181L930-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708945
 CATALOG NUMBER: 24APR-X-181L930-UNV

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°	6562	6562	6562
5°	6569	6552	6558
10°	6536	6521	6539
15°	6474	6470	6495
20°	6397	6392	6421
25°	6296	6298	6319
30°	6186	6182	6216
35°	6069	6055	6109
40°	5940	5936	6004
45°	5817	5813	5883
50°	5683	5671	5747
55°	5528	5520	5597
60°	5346	5343	5445
65°	5103	5112	5171
70°	4838	4799	4899
75°	4422	4388	4471
80°	3825	3778	3856
85°	3009	2978	3061



TEST NUMBER: P708945
 CATALOG NUMBER: 24APR-X-181L930-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.1	3.5
10°-20°	1310.8	9.9
20°-30°	1955.0	14.8
30°-40°	2313.3	17.5
40°-50°	2363.7	17.9
50°-60°	2112.4	16.0
60°-70°	1592.2	12.0
70°-80°	896.2	6.8
80°-90°	230.2	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°	3726.9	28.2
0°-40°	6040.2	45.6
0°-60°	10516.3	79.5
0°-90°	13235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4877	4877	4877	4877	4877	
5°	4864	4857	4851	4856	4856	462
15°	4648	4642	4645	4654	4663	1311
25°	4241	4235	4242	4255	4256	1954
35°	3695	3687	3686	3711	3720	2310
45°	3057	3054	3055	3078	3092	2358
55°	2356	2356	2353	2374	2386	2105
65°	1603	1596	1606	1621	1624	1592
75°	851	835	844	840	860	900
85°	195	187	193	196	198	233
90°	0	0	0	0	0	



TEST NUMBER: P708945

CATALOG NUMBER: 24APR-X-181L930-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4877.0	4877.0	4877.0	4877.0	4877.0
2.5°	4882.4	4875.0	4869.6	4872.3	4874.3
5°	4863.6	4856.9	4850.9	4855.6	4855.6
7.5°	4828.1	4824.8	4820.1	4824.1	4825.4
10°	4783.9	4776.5	4773.2	4782.6	4785.9
12.5°	4721.6	4712.9	4715.6	4727.6	4733.0
15°	4647.9	4641.9	4644.6	4654.0	4662.7
17.5°	4564.2	4557.5	4563.5	4571.6	4579.6
20°	4467.7	4461.0	4464.4	4475.8	4484.5
22.5°	4360.6	4353.9	4357.9	4367.9	4377.3
25°	4240.7	4234.6	4242.0	4255.4	4256.1
27.5°	4115.4	4108.7	4110.7	4124.8	4137.5
30°	3981.4	3972.7	3978.8	3992.8	4000.9
32.5°	3840.8	3832.7	3837.4	3853.5	3862.9
35°	3694.8	3686.7	3686.1	3710.8	3719.5
37.5°	3540.0	3535.3	3539.4	3559.5	3570.2
40°	3382.0	3375.3	3379.9	3405.4	3418.1
42.5°	3221.9	3217.8	3218.5	3244.0	3254.0
45°	3057.1	3054.4	3055.1	3078.5	3091.9
47.5°	2887.0	2880.9	2883.6	2907.7	2921.8
50°	2714.8	2713.5	2709.4	2733.6	2745.6
52.5°	2538.0	2535.3	2535.3	2556.7	2574.1
55°	2356.4	2356.4	2353.1	2373.9	2385.9
57.5°	2166.2	2167.6	2172.9	2191.7	2203.7
60°	1986.7	1980.0	1985.4	2002.1	2023.5
62.5°	1807.9	1787.8	1793.1	1808.5	1817.2
65°	1602.9	1595.5	1605.6	1621.0	1624.3
67.5°	1414.7	1407.3	1412.7	1423.4	1438.1
70°	1229.8	1210.4	1219.8	1231.1	1245.2
72.5°	1035.6	1018.8	1032.2	1041.6	1051.6
75°	850.7	834.6	844.0	840.0	860.1
77.5°	665.1	653.8	661.8	669.8	685.2
80°	493.7	480.9	487.6	491.0	497.7
82.5°	336.3	326.9	328.9	342.3	338.3
85°	194.9	186.9	192.9	195.6	198.3
87.5°	77.0	69.7	75.7	77.7	78.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)