

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: P709020

Luminaire Tested: **24APR-76-181L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709020
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76-181L850-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

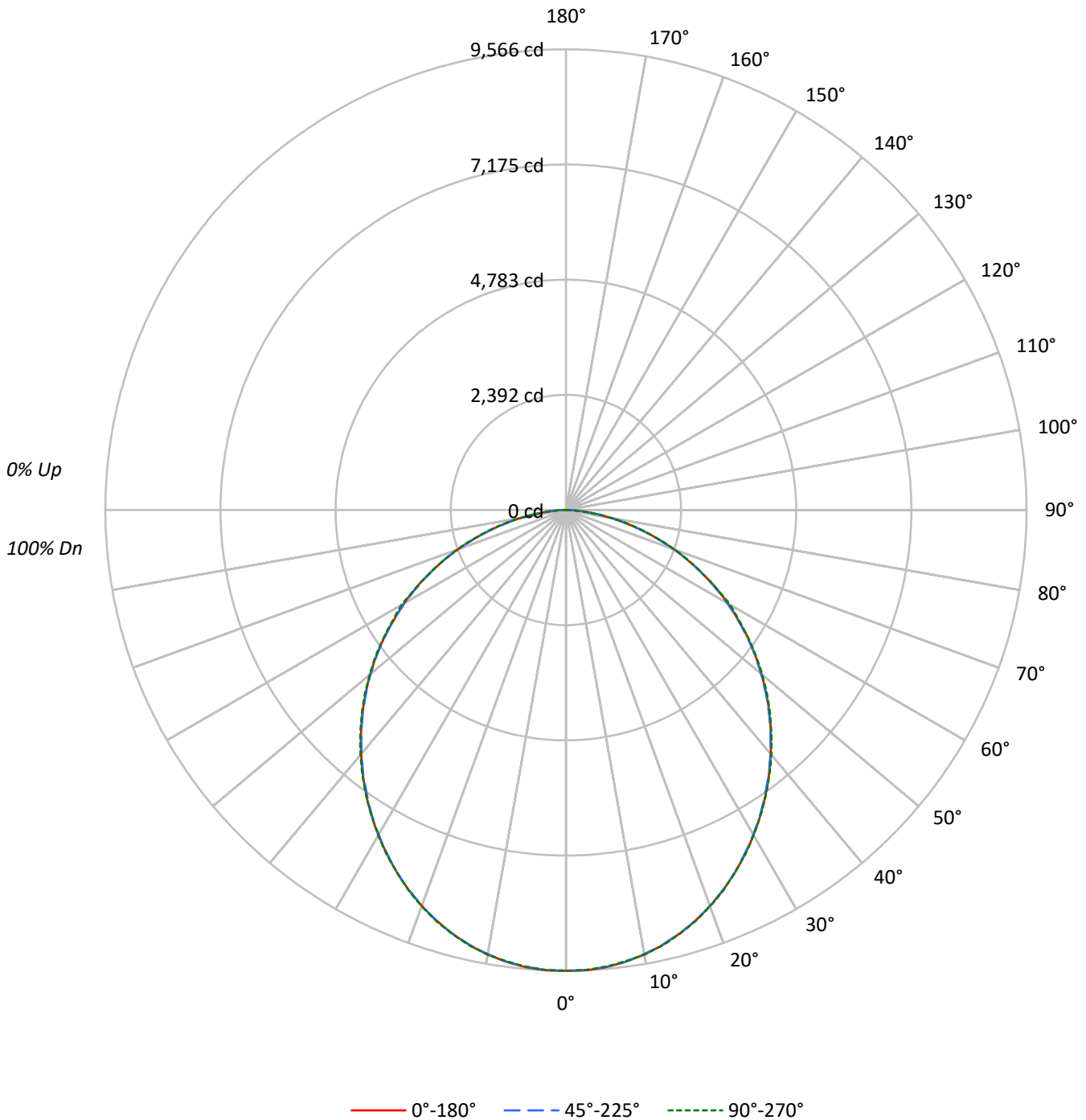
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25816.3 lumens
Efficiency: N/A
Efficacy: 123.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 208.5
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	92	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	73	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	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	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	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12871	12871	12871
5°	12872	12860	12852
10°	12805	12794	12804
15°	12684	12684	12698
20°	12528	12520	12539
25°	12332	12327	12327
30°	12109	12091	12111
35°	11872	11841	11888
40°	11621	11598	11659
45°	11373	11350	11411
50°	11101	11072	11143
55°	10798	10770	10834
60°	10441	10416	10599
65°	9966	9969	9995
70°	9419	9369	9430
75°	8593	8526	8583
80°	7418	7325	7376
85°	5788	5730	5717



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	904.1	3.5
10°-20°	2567.7	9.9
20°-30°	3824.1	14.8
30°-40°	4517.9	17.5
40°-50°	4609.0	17.9
50°-60°	4112.5	15.9
60°-70°	3100.4	12.0
70°-80°	1738.3	6.7
80°-90°	442.3	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°	7295.9	28.3
0°-40°	11813.8	45.8
0°-60°	20535.2	79.5
0°-90°	25816.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25816.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9566	9566	9566	9566	9566	
5°	9531	9526	9521	9523	9516	905
15°	9106	9101	9106	9112	9116	2568
25°	8307	8297	8303	8310	8303	3826
35°	7228	7218	7209	7230	7237	4521
45°	5977	5973	5965	5982	5997	4610
55°	4603	4593	4591	4605	4619	4112
65°	3130	3115	3131	3140	3140	3106
75°	1653	1624	1640	1631	1651	1750
85°	375	361	371	370	370	448
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9566.4	9566.4	9566.4	9566.4	9566.4
2.5°	9566.4	9561.8	9558.1	9557.2	9559.1
5°	9530.6	9526.0	9521.4	9523.2	9515.9
7.5°	9461.7	9462.6	9458.9	9459.8	9451.6
10°	9372.5	9367.9	9364.3	9372.5	9371.6
12.5°	9252.2	9243.9	9247.6	9260.4	9261.4
15°	9106.1	9100.6	9106.1	9112.5	9116.2
17.5°	8939.8	8935.2	8941.6	8942.5	8949.9
20°	8749.6	8744.1	8744.1	8753.3	8757.0
22.5°	8539.2	8530.9	8532.8	8539.2	8543.8
25°	8306.7	8296.6	8303.1	8310.4	8303.1
27.5°	8055.9	8050.4	8044.0	8053.2	8065.1
30°	7794.1	7783.0	7782.1	7788.6	7795.0
32.5°	7517.5	7504.6	7504.6	7512.9	7518.4
35°	7228.1	7218.0	7208.8	7229.9	7237.3
37.5°	6929.5	6917.5	6916.6	6929.5	6941.4
40°	6616.2	6606.1	6603.3	6625.4	6638.2
42.5°	6300.1	6293.7	6287.3	6309.3	6319.4
45°	5976.7	5973.0	5964.8	5982.2	5996.9
47.5°	5644.1	5632.2	5629.4	5649.6	5664.3
50°	5303.2	5298.6	5289.5	5307.8	5323.4
52.5°	4957.8	4952.3	4945.8	4962.4	4978.9
55°	4603.1	4593.0	4591.2	4605.0	4618.7
57.5°	4233.8	4225.5	4238.4	4251.2	4262.2
60°	3880.0	3860.7	3870.8	3885.5	3938.8
62.5°	3524.5	3490.5	3497.8	3538.2	3515.3
65°	3130.3	3114.7	3131.2	3140.4	3139.5
67.5°	2761.0	2742.6	2767.4	2760.0	2771.1
70°	2394.4	2362.2	2381.5	2384.3	2397.1
72.5°	2015.8	1988.3	2004.8	2013.1	2021.3
75°	1652.9	1624.4	1640.0	1630.8	1651.1
77.5°	1291.8	1274.4	1284.5	1290.9	1306.5
80°	957.4	938.1	945.4	946.3	951.9
82.5°	648.7	634.0	635.8	652.3	645.9
85°	374.9	361.1	371.2	370.3	370.3
87.5°	146.1	135.1	145.2	144.2	142.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)