

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: P709022

Luminaire Tested: **24APR-58-138L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709022
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-58-138L850-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

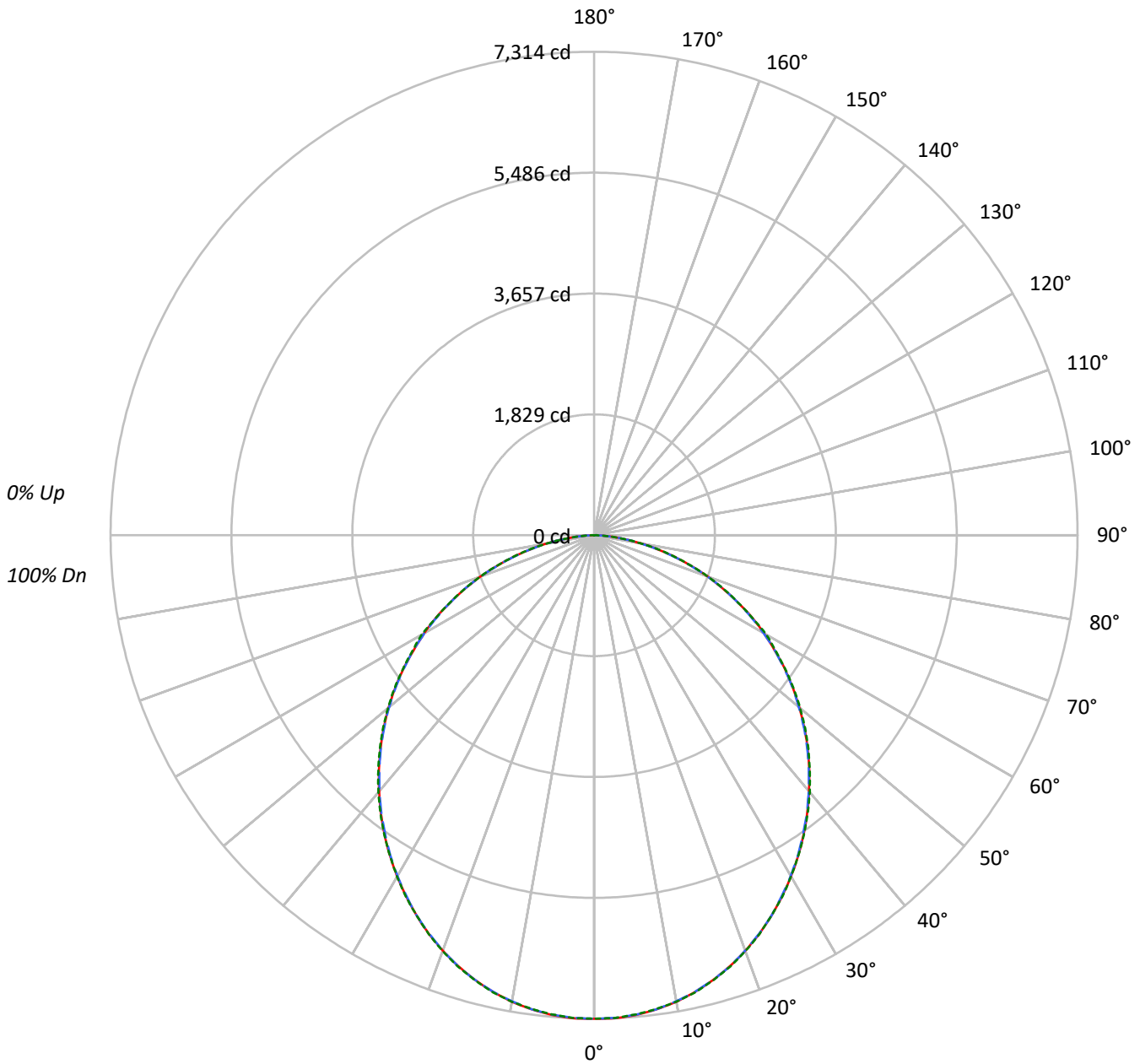
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19739.1 lumens
Efficiency: N/A
Efficacy: 127.0 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): 155.4
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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CATALOG NUMBER: 24APR-58-138L850-UNV

Luminous Intensity Polar Plot



0% Up
100% Dn

— 0°-180° - - 45°-225° - · - · 90°-270°



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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°	9841	9841	9841
5°	9842	9833	9827
10°	9791	9782	9790
15°	9698	9698	9709
20°	9579	9573	9587
25°	9429	9425	9425
30°	9259	9244	9260
35°	9078	9053	9089
40°	8885	8868	8915
45°	8695	8678	8725
50°	8488	8466	8520
55°	8256	8235	8284
60°	7983	7964	8104
65°	7620	7622	7642
70°	7202	7163	7210
75°	6570	6519	6563
80°	5672	5601	5639
85°	4424	4381	4370



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	691.3	3.5
10°-20°	1963.3	9.9
20°-30°	2923.9	14.8
30°-40°	3454.4	17.5
40°-50°	3524.0	17.9
50°-60°	3144.4	15.9
60°-70°	2370.6	12.0
70°-80°	1329.1	6.7
80°-90°	338.2	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°	5578.4	28.3
0°-40°	9032.8	45.8
0°-60°	15701.2	79.5
0°-90°	19739.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19739.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7314	7314	7314	7314	7314	
5°	7287	7284	7280	7281	7276	692
15°	6962	6958	6962	6967	6970	1963
25°	6351	6344	6348	6354	6348	2925
35°	5527	5519	5512	5528	5534	3457
45°	4570	4567	4561	4574	4585	3525
55°	3520	3512	3510	3521	3532	3144
65°	2393	2382	2394	2401	2400	2375
75°	1264	1242	1254	1247	1262	1338
85°	287	276	284	283	283	343
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7314.4	7314.4	7314.4	7314.4	7314.4
2.5°	7314.4	7310.9	7308.1	7307.4	7308.8
5°	7287.0	7283.5	7280.0	7281.4	7275.8
7.5°	7234.3	7235.1	7232.2	7232.9	7226.6
10°	7166.2	7162.7	7159.9	7166.2	7165.5
12.5°	7074.2	7067.9	7070.7	7080.5	7081.2
15°	6962.5	6958.3	6962.5	6967.4	6970.2
17.5°	6835.3	6831.8	6836.7	6837.4	6843.1
20°	6689.9	6685.7	6685.7	6692.7	6695.5
22.5°	6529.0	6522.7	6524.1	6529.0	6532.6
25°	6351.3	6343.6	6348.5	6354.1	6348.5
27.5°	6159.5	6155.3	6150.4	6157.4	6166.5
30°	5959.3	5950.9	5950.2	5955.1	5960.0
32.5°	5747.9	5738.0	5738.0	5744.3	5748.6
35°	5526.6	5518.8	5511.8	5528.0	5533.6
37.5°	5298.3	5289.1	5288.4	5298.3	5307.4
40°	5058.7	5051.0	5048.9	5065.7	5075.6
42.5°	4817.0	4812.1	4807.2	4824.1	4831.8
45°	4569.8	4567.0	4560.6	4574.0	4585.2
47.5°	4315.5	4306.3	4304.2	4319.7	4330.9
50°	4054.8	4051.3	4044.3	4058.3	4070.3
52.5°	3790.7	3786.5	3781.6	3794.2	3806.8
55°	3519.5	3511.8	3510.4	3520.9	3531.5
57.5°	3237.1	3230.8	3240.6	3250.5	3258.9
60°	2966.7	2951.9	2959.6	2970.9	3011.6
62.5°	2694.8	2668.8	2674.4	2705.3	2687.8
65°	2393.4	2381.5	2394.1	2401.1	2400.4
67.5°	2111.0	2097.0	2115.9	2110.3	2118.7
70°	1830.7	1806.1	1820.9	1823.0	1832.8
72.5°	1541.3	1520.2	1532.9	1539.2	1545.5
75°	1263.8	1242.0	1254.0	1246.9	1262.4
77.5°	987.7	974.4	982.1	987.0	999.0
80°	732.0	717.3	722.9	723.6	727.8
82.5°	496.0	484.7	486.1	498.8	493.9
85°	286.6	276.1	283.8	283.1	283.1
87.5°	111.7	103.3	111.0	110.3	108.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)