

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: P708869

Luminaire Tested: **22APR-30-71L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708869
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-30-71L850-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

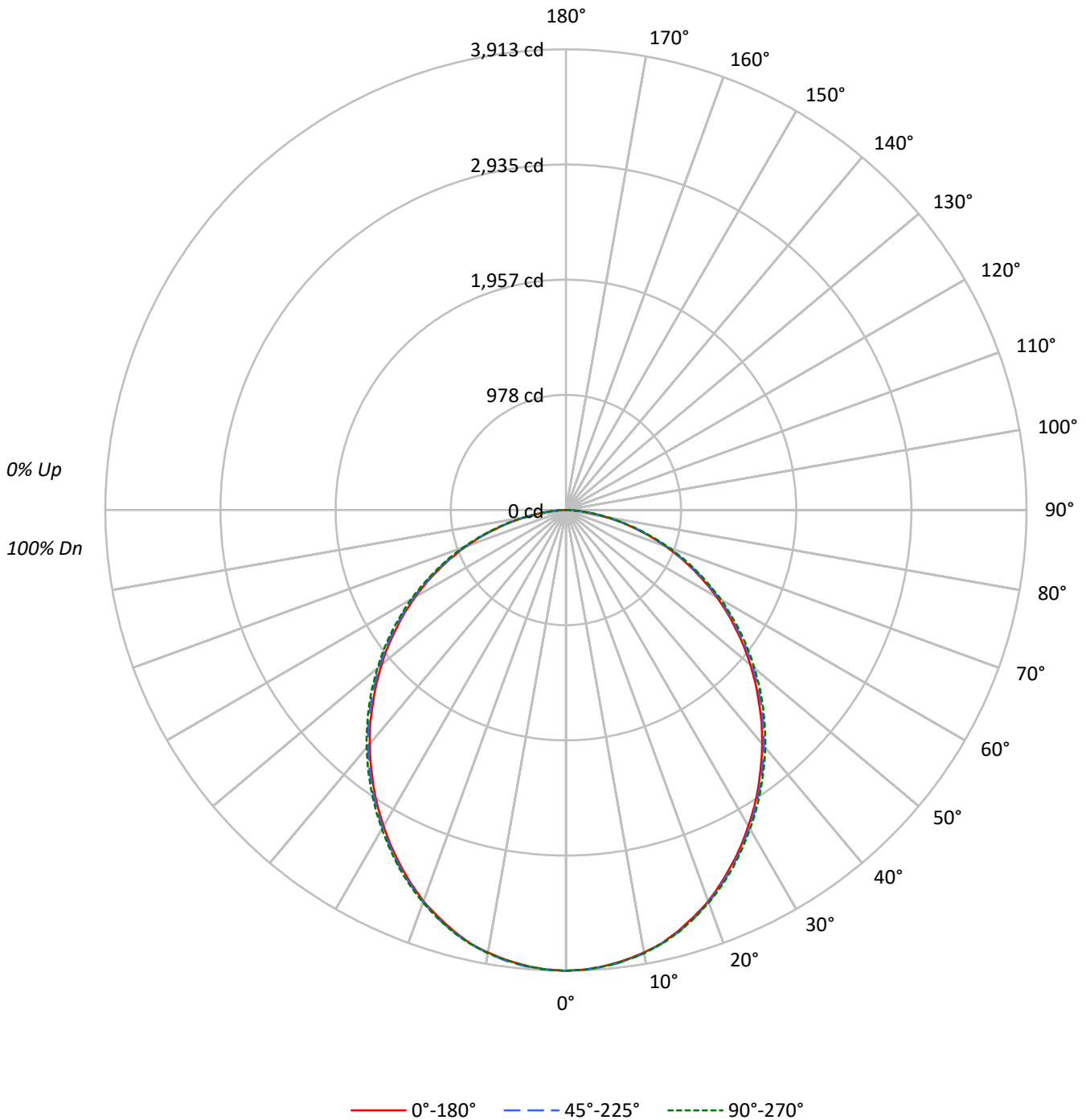
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10178.3 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 90.1
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

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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	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	73	73	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10531	10531	10531
5°	10496	10510	10501
10°	10430	10446	10444
15°	10303	10330	10335
20°	10126	10147	10161
25°	9882	9928	9959
30°	9630	9683	9718
35°	9372	9436	9484
40°	9108	9180	9255
45°	8825	8934	9011
50°	8562	8664	8753
55°	8268	8379	8482
60°	7967	8072	8186
65°	7573	7697	7785
70°	7087	7183	7286
75°	6373	6492	6576
80°	5380	5520	5571
85°	4026	4202	4177



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.2	3.6
10°-20°	1044.3	10.3
20°-30°	1539.2	15.1
30°-40°	1796.4	17.6
40°-50°	1810.4	17.8
50°-60°	1597.8	15.7
60°-70°	1195.0	11.7
70°-80°	662.2	6.5
80°-90°	163.8	1.6
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°	2952.7	29.0
0°-40°	4749.1	46.7
0°-60°	8157.3	80.1
0°-90°	10178.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10178.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3913	3913	3913	3913	3913	
5°	3886	3891	3891	3891	3887	369
15°	3698	3705	3708	3711	3710	1042
25°	3328	3336	3344	3350	3354	1533
35°	2853	2859	2872	2884	2887	1784
45°	2319	2334	2348	2364	2368	1791
55°	1762	1773	1786	1802	1808	1578
65°	1189	1195	1209	1219	1223	1178
75°	613	616	624	631	632	651
85°	130	134	136	134	135	159
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3913.4	3913.4	3913.4	3913.4	3913.4
2.5°	3906.0	3910.1	3906.9	3910.1	3906.9
5°	3885.7	3890.6	3890.6	3891.4	3887.3
7.5°	3855.5	3861.2	3863.7	3864.5	3858.8
10°	3817.2	3822.9	3822.9	3826.2	3822.1
12.5°	3768.3	3771.6	3770.7	3775.6	3772.4
15°	3698.2	3704.7	3708.0	3711.2	3709.6
17.5°	3619.9	3628.1	3630.5	3636.2	3632.2
20°	3536.0	3541.7	3543.3	3552.3	3548.2
22.5°	3435.7	3441.4	3447.1	3455.3	3456.1
25°	3328.1	3335.5	3343.6	3350.1	3354.2
27.5°	3217.3	3224.6	3231.9	3240.1	3241.7
30°	3099.1	3108.0	3116.2	3126.0	3127.6
32.5°	2980.1	2983.3	2995.6	3006.2	3011.0
35°	2852.9	2859.4	2872.5	2883.9	2887.1
37.5°	2723.3	2733.1	2746.9	2759.2	2762.4
40°	2592.9	2601.0	2613.3	2629.6	2634.5
42.5°	2460.8	2466.5	2482.9	2496.7	2500.8
45°	2319.0	2333.7	2347.5	2363.8	2367.9
47.5°	2183.7	2195.1	2209.0	2224.5	2231.0
50°	2045.1	2059.0	2069.6	2086.7	2090.8
52.5°	1906.6	1915.5	1930.2	1944.9	1951.4
55°	1762.3	1772.9	1785.9	1802.2	1807.9
57.5°	1623.7	1629.4	1644.1	1658.0	1662.8
60°	1480.3	1486.0	1499.8	1514.5	1521.0
62.5°	1336.8	1341.7	1353.1	1370.2	1370.2
65°	1189.3	1195.0	1208.8	1218.6	1222.7
67.5°	1045.8	1050.7	1060.5	1072.7	1078.4
70°	900.7	904.8	912.9	925.2	926.0
72.5°	755.6	759.7	770.3	774.4	780.1
75°	613.0	616.2	624.4	630.9	632.5
77.5°	476.8	481.7	487.4	489.9	492.3
80°	347.2	352.1	356.2	358.7	359.5
82.5°	229.9	234.8	237.2	238.8	238.0
85°	130.4	134.5	136.1	134.5	135.3
87.5°	51.4	53.8	55.4	54.6	53.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)