

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: P708979

Luminaire Tested: **24APR-85L850-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708979
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85L850-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

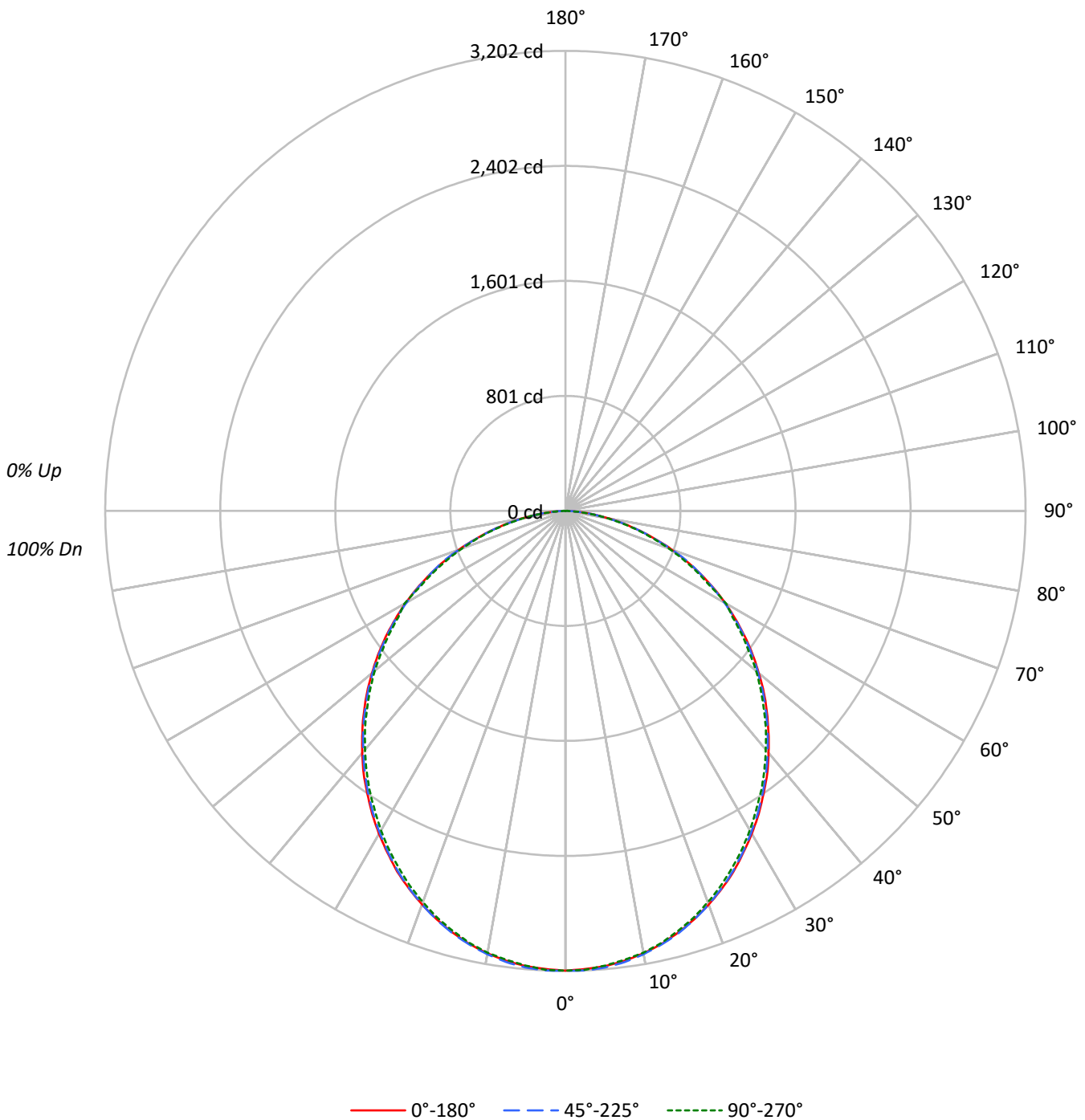
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8523.1 lumens
Efficiency: N/A
Efficacy: 108.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 78.3
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	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	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	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4305	4305	4305
5°	4296	4308	4290
10°	4271	4281	4266
15°	4231	4238	4215
20°	4175	4174	4150
25°	4112	4103	4071
30°	4032	4017	3987
35°	3947	3933	3901
40°	3863	3843	3809
45°	3775	3755	3716
50°	3678	3662	3626
55°	3577	3558	3512
60°	3457	3435	3482
65°	3299	3290	3228
70°	3096	3100	3015
75°	2810	2790	2726
80°	2415	2383	2321
85°	1846	1831	1689



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	302.2	3.5
10°-20°	856.2	10.0
20°-30°	1270.8	14.9
30°-40°	1495.9	17.6
40°-50°	1520.2	17.8
50°-60°	1351.4	15.9
60°-70°	1019.4	12.0
70°-80°	566.2	6.6
80°-90°	140.8	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°	2429.2	28.5
0°-40°	3925.1	46.1
0°-60°	6796.7	79.7
0°-90°	8523.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8523.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3200	3200	3200	3200	3200	
5°	3180	3186	3190	3185	3176	302
15°	3037	3040	3043	3035	3026	856
25°	2770	2768	2764	2751	2742	1275
35°	2403	2404	2395	2380	2375	1504
45°	1984	1984	1974	1957	1953	1530
55°	1525	1514	1517	1500	1497	1362
65°	1036	1030	1033	1020	1014	1026
75°	541	534	537	532	524	573
85°	120	116	119	113	109	144
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3199.9	3199.9	3199.9	3199.9	3199.9
2.5°	3191.8	3197.9	3202.0	3196.9	3195.9
5°	3180.5	3185.6	3189.7	3184.6	3176.4
7.5°	3158.0	3164.2	3167.2	3162.1	3150.9
10°	3126.4	3132.5	3133.5	3128.4	3122.3
12.5°	3087.5	3091.6	3091.6	3087.5	3080.4
15°	3037.4	3040.5	3042.6	3035.4	3026.2
17.5°	2980.2	2985.3	2983.3	2972.0	2967.9
20°	2915.8	2919.9	2914.8	2907.6	2898.4
22.5°	2845.3	2846.3	2842.2	2834.1	2824.9
25°	2769.7	2767.6	2763.5	2751.3	2742.1
27.5°	2681.8	2685.9	2675.6	2664.4	2658.3
30°	2594.9	2595.9	2585.7	2571.4	2566.3
32.5°	2501.9	2499.9	2492.7	2477.4	2469.2
35°	2402.8	2403.8	2394.6	2380.3	2375.2
37.5°	2306.7	2300.6	2293.4	2277.1	2274.0
40°	2199.4	2198.4	2188.1	2173.8	2168.7
42.5°	2092.1	2091.1	2082.9	2068.6	2064.5
45°	1983.7	1983.7	1973.5	1957.2	1953.1
47.5°	1873.4	1869.3	1862.1	1847.8	1842.7
50°	1756.9	1753.8	1749.7	1733.3	1732.3
52.5°	1642.4	1640.3	1633.2	1618.9	1610.7
55°	1524.9	1513.6	1516.7	1500.3	1497.3
57.5°	1404.3	1393.0	1399.1	1384.8	1378.7
60°	1284.7	1273.4	1276.5	1267.3	1293.9
62.5°	1162.0	1154.9	1154.9	1176.3	1137.5
65°	1036.3	1030.2	1033.3	1020.0	1013.8
67.5°	912.7	903.5	922.9	898.4	888.1
70°	787.0	780.8	788.0	773.7	766.5
72.5°	662.3	657.2	655.1	650.0	643.9
75°	540.6	533.5	536.6	532.5	524.3
77.5°	422.1	420.1	419.0	413.9	407.8
80°	311.7	309.7	307.6	303.5	299.5
82.5°	208.5	206.4	205.4	203.4	202.4
85°	119.6	116.5	118.6	113.4	109.4
87.5°	45.0	43.9	46.0	41.9	38.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)