

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: P709019

Luminaire Tested: **24APR-85-200L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709019
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85-200L850-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

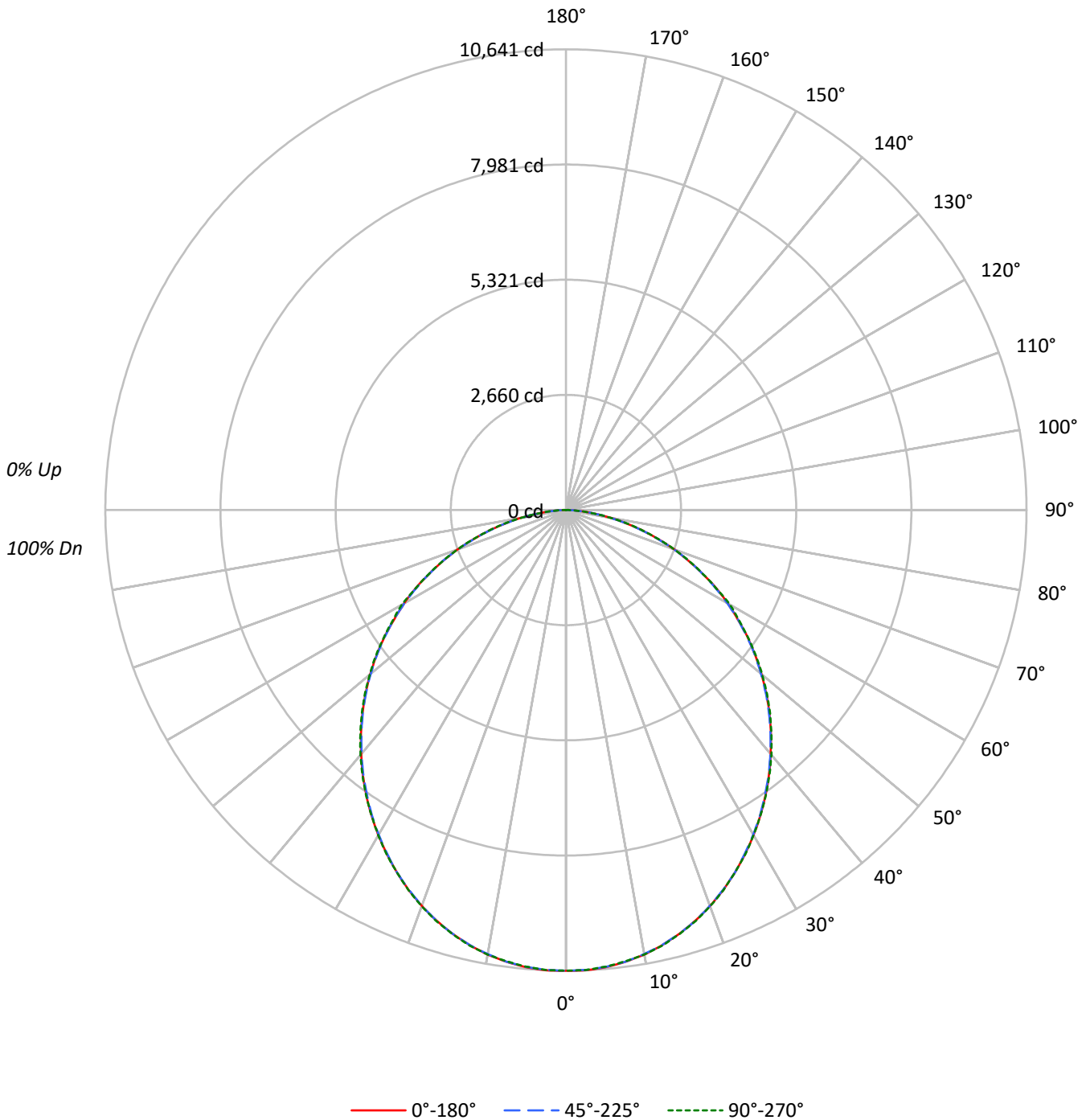
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28717.4 lumens
Efficiency: N/A
Efficacy: 122.0 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): 235.4
Input Voltage (V): 120
Input Current (A_{in}): 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°	14318	14318	14318
5°	14319	14305	14297
10°	14244	14232	14243
15°	14110	14110	14125
20°	13936	13927	13948
25°	13718	13712	13712
30°	13470	13449	13471
35°	13207	13171	13223
40°	12927	12902	12970
45°	12650	12625	12693
50°	12348	12316	12395
55°	12011	11980	12052
60°	11614	11587	11791
65°	11086	11089	11118
70°	10478	10421	10490
75°	9558	9484	9548
80°	8252	8149	8204
85°	6438	6374	6359



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1005.7	3.5
10°-20°	2856.3	9.9
20°-30°	4253.8	14.8
30°-40°	5025.6	17.5
40°-50°	5126.9	17.9
50°-60°	4574.6	15.9
60°-70°	3448.8	12.0
70°-80°	1933.7	6.7
80°-90°	492.0	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°	8115.8	28.3
0°-40°	13141.4	45.8
0°-60°	22842.9	79.5
0°-90°	28717.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28717.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10641	10641	10641	10641	10641	
5°	10602	10596	10591	10593	10585	1006
15°	10129	10123	10129	10136	10141	2856
25°	9240	9229	9236	9244	9236	4256
35°	8040	8029	8019	8042	8051	5029
45°	6648	6644	6635	6654	6671	5128
55°	5120	5109	5107	5122	5138	4574
65°	3482	3465	3483	3493	3492	3455
75°	1839	1807	1824	1814	1837	1946
85°	417	402	413	412	412	499
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10641.4	10641.4	10641.4	10641.4	10641.4
2.5°	10641.4	10636.3	10632.2	10631.2	10633.2
5°	10601.6	10596.4	10591.3	10593.4	10585.2
7.5°	10524.9	10525.9	10521.8	10522.9	10513.7
10°	10425.8	10420.7	10416.6	10425.8	10424.7
12.5°	10291.9	10282.7	10286.8	10301.1	10302.1
15°	10129.4	10123.2	10129.4	10136.5	10140.6
17.5°	9944.4	9939.3	9946.4	9947.4	9955.6
20°	9732.8	9726.7	9726.7	9736.9	9741.0
22.5°	9498.8	9489.6	9491.6	9498.8	9503.9
25°	9240.2	9229.0	9236.1	9244.3	9236.1
27.5°	8961.2	8955.1	8947.9	8958.1	8971.4
30°	8669.9	8657.6	8656.6	8663.8	8670.9
32.5°	8362.3	8348.0	8348.0	8357.2	8363.3
35°	8040.3	8029.1	8018.9	8042.4	8050.6
37.5°	7708.2	7694.9	7693.9	7708.2	7721.5
40°	7359.7	7348.4	7345.4	7369.9	7384.2
42.5°	7008.1	7000.9	6993.8	7018.3	7029.5
45°	6648.3	6644.2	6635.0	6654.5	6670.8
47.5°	6278.4	6265.1	6262.0	6284.5	6300.8
50°	5899.2	5894.1	5883.8	5904.3	5921.7
52.5°	5514.9	5508.8	5501.6	5520.0	5538.4
55°	5120.4	5109.1	5107.1	5122.4	5137.8
57.5°	4709.5	4700.3	4714.6	4728.9	4741.2
60°	4316.0	4294.6	4305.8	4322.2	4381.5
62.5°	3920.5	3882.7	3890.9	3935.8	3910.3
65°	3482.1	3464.7	3483.1	3493.3	3492.3
67.5°	3071.2	3050.8	3078.4	3070.2	3082.5
70°	2663.4	2627.6	2649.1	2652.2	2666.5
72.5°	2242.3	2211.7	2230.1	2239.3	2248.5
75°	1838.6	1807.0	1824.3	1814.1	1836.6
77.5°	1437.0	1417.6	1428.8	1436.0	1453.3
80°	1065.0	1043.5	1051.7	1052.7	1058.8
82.5°	721.6	705.2	707.2	725.6	718.5
85°	417.0	401.7	412.9	411.9	411.9
87.5°	162.5	150.2	161.5	160.5	158.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)