

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: P708866

Luminaire Tested: **22APR-22-52L840-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708866
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-22-52L840-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

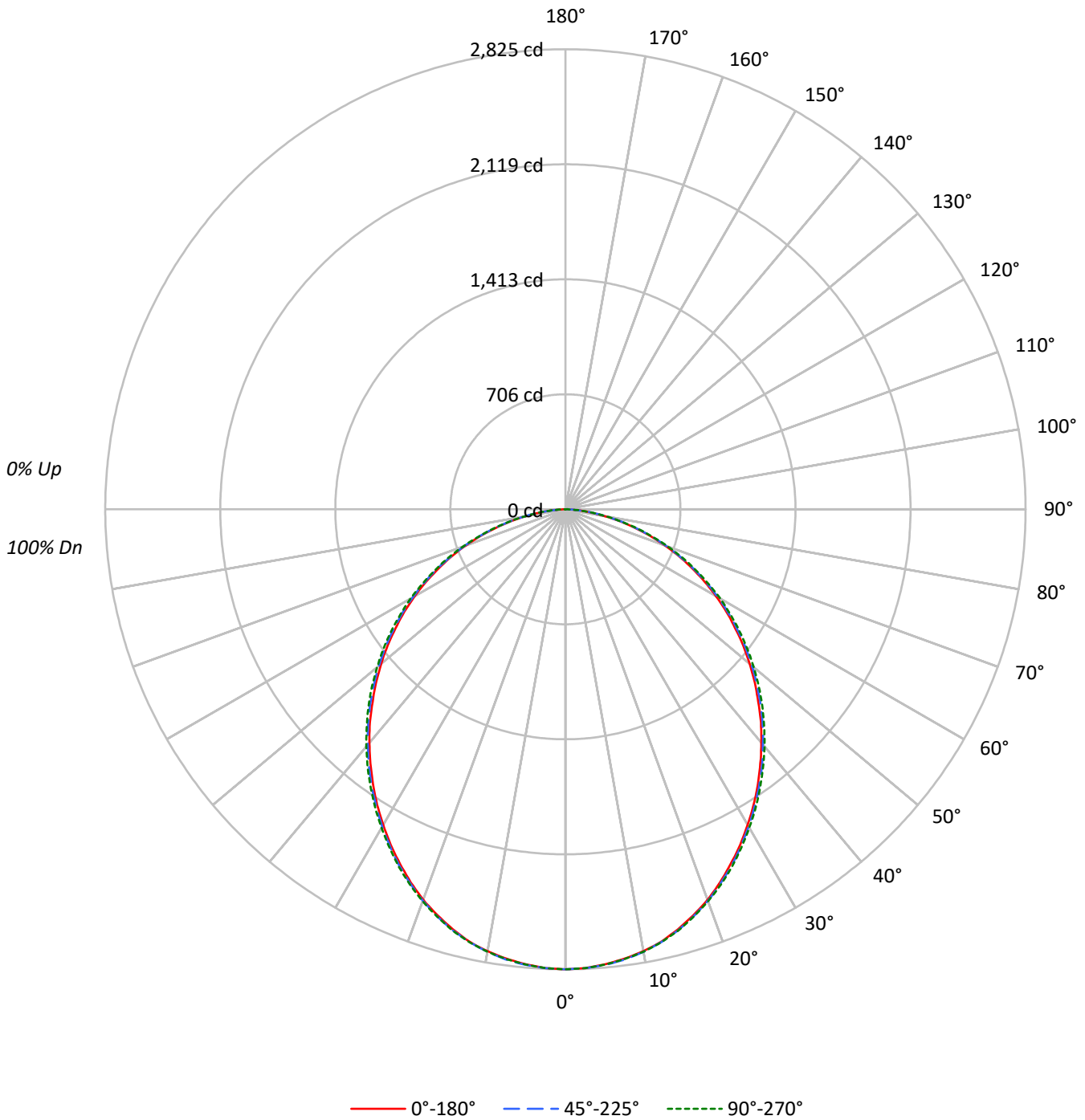
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7347.5 lumens
Efficiency: N/A
Efficacy: 115.2 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): 63.8
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°	7602	7602	7602
5°	7577	7586	7580
10°	7530	7541	7539
15°	7438	7457	7460
20°	7310	7325	7335
25°	7133	7167	7189
30°	6952	6990	7016
35°	6766	6812	6847
40°	6575	6627	6681
45°	6371	6449	6505
50°	6180	6255	6319
55°	5969	6048	6123
60°	5751	5827	5909
65°	5466	5556	5620
70°	5116	5185	5259
75°	4601	4686	4747
80°	3885	3984	4021
85°	2905	3035	3017



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	266.5	3.6
10°-20°	753.9	10.3
20°-30°	1111.1	15.1
30°-40°	1296.8	17.6
40°-50°	1306.9	17.8
50°-60°	1153.4	15.7
60°-70°	862.6	11.7
70°-80°	478.0	6.5
80°-90°	118.2	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°	2131.5	29.0
0°-40°	3428.3	46.7
0°-60°	5888.6	80.1
0°-90°	7347.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7347.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2825	2825	2825	2825	2825	
5°	2805	2808	2808	2809	2806	266
15°	2670	2674	2677	2679	2678	752
25°	2402	2408	2414	2418	2421	1107
35°	2060	2064	2074	2082	2084	1288
45°	1674	1685	1695	1706	1709	1293
55°	1272	1280	1289	1301	1305	1139
65°	858	863	873	880	883	850
75°	442	445	451	455	457	470
85°	94	97	98	97	98	115
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2825.0	2825.0	2825.0	2825.0	2825.0
2.5°	2819.7	2822.6	2820.3	2822.6	2820.3
5°	2805.0	2808.5	2808.5	2809.1	2806.2
7.5°	2783.2	2787.3	2789.1	2789.7	2785.6
10°	2755.6	2759.7	2759.7	2762.0	2759.1
12.5°	2720.3	2722.6	2722.0	2725.6	2723.2
15°	2669.7	2674.4	2676.7	2679.1	2677.9
17.5°	2613.2	2619.1	2620.8	2624.9	2622.0
20°	2552.6	2556.7	2557.9	2564.3	2561.4
22.5°	2480.2	2484.3	2488.4	2494.3	2494.9
25°	2402.5	2407.8	2413.7	2418.4	2421.3
27.5°	2322.5	2327.8	2333.1	2339.0	2340.1
30°	2237.2	2243.6	2249.5	2256.6	2257.8
32.5°	2151.3	2153.6	2162.4	2170.1	2173.6
35°	2059.5	2064.2	2073.6	2081.8	2084.2
37.5°	1965.9	1973.0	1983.0	1991.8	1994.2
40°	1871.8	1877.6	1886.5	1898.2	1901.8
42.5°	1776.4	1780.6	1792.3	1802.3	1805.3
45°	1674.1	1684.6	1694.6	1706.4	1709.4
47.5°	1576.4	1584.6	1594.6	1605.8	1610.5
50°	1476.3	1486.3	1494.0	1506.4	1509.3
52.5°	1376.3	1382.8	1393.4	1404.0	1408.7
55°	1272.2	1279.8	1289.2	1301.0	1305.1
57.5°	1172.1	1176.2	1186.8	1196.8	1200.4
60°	1068.6	1072.7	1082.7	1093.3	1098.0
62.5°	965.0	968.5	976.8	989.1	989.1
65°	858.5	862.6	872.6	879.7	882.6
67.5°	754.9	758.5	765.5	774.4	778.5
70°	650.2	653.1	659.0	667.9	668.4
72.5°	545.5	548.4	556.1	559.0	563.1
75°	442.5	444.8	450.7	455.4	456.6
77.5°	344.2	347.8	351.9	353.6	355.4
80°	250.7	254.2	257.1	258.9	259.5
82.5°	165.9	169.5	171.2	172.4	171.8
85°	94.1	97.1	98.3	97.1	97.7
87.5°	37.1	38.8	40.0	39.4	38.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)