

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: P708883

Luminaire Tested: **22APR-34-80L940-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708883
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-34-80L940-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

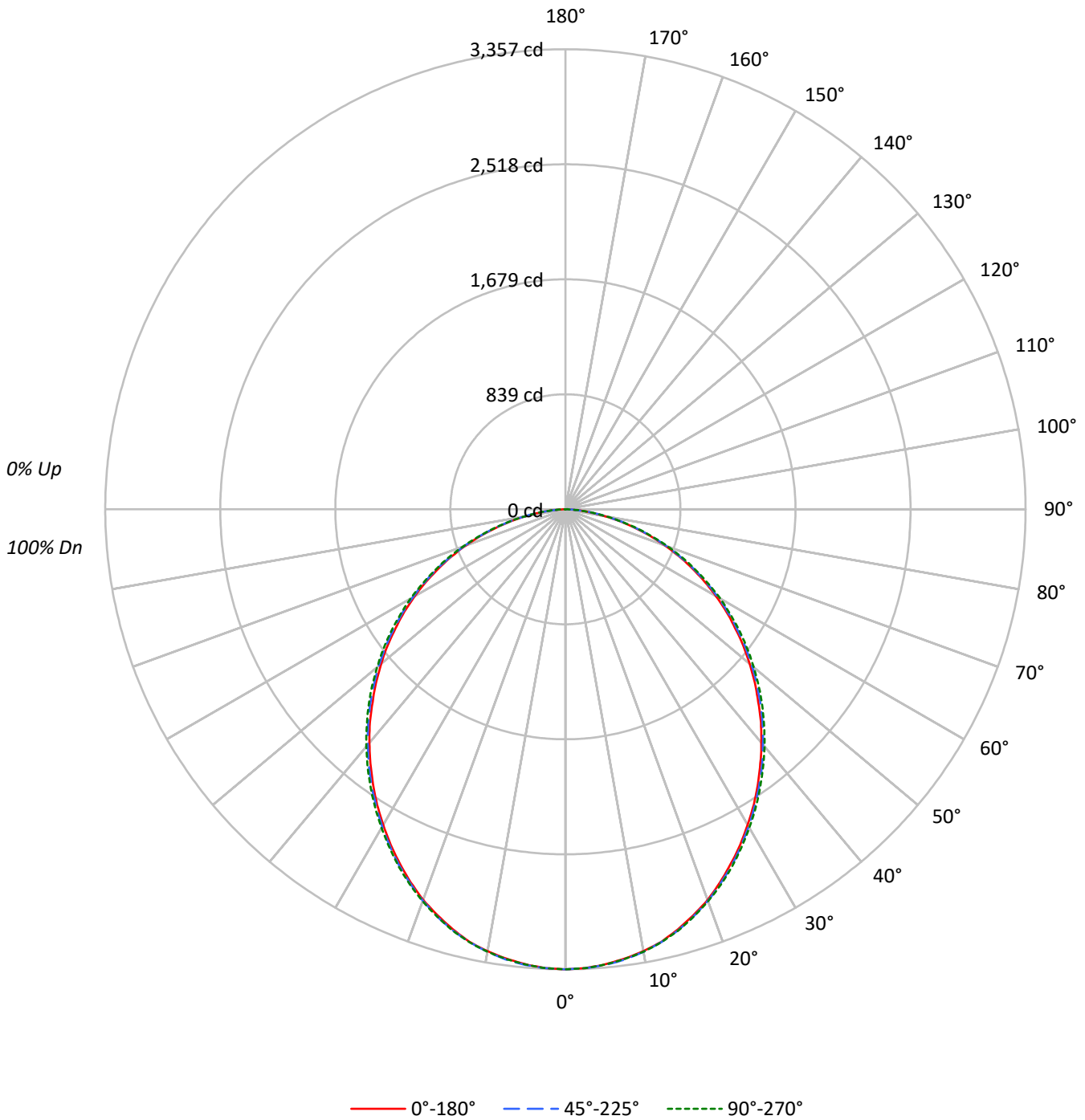
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8731.6 lumens
Efficiency: N/A
Efficacy: 84.5 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): 103.3
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				
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°	9034	9034	9034
5°	9004	9016	9008
10°	8948	8961	8959
15°	8839	8862	8866
20°	8687	8705	8717
25°	8477	8517	8544
30°	8261	8307	8337
35°	8040	8095	8136
40°	7814	7875	7939
45°	7571	7664	7731
50°	7345	7433	7509
55°	7093	7188	7277
60°	6835	6924	7022
65°	6496	6603	6679
70°	6080	6162	6250
75°	5467	5569	5641
80°	4616	4736	4779
85°	3455	3606	3585



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.7	3.6
10°-20°	895.9	10.3
20°-30°	1320.4	15.1
30°-40°	1541.1	17.6
40°-50°	1553.1	17.8
50°-60°	1370.7	15.7
60°-70°	1025.1	11.7
70°-80°	568.1	6.5
80°-90°	140.5	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°	2533.0	29.0
0°-40°	4074.1	46.7
0°-60°	6997.9	80.1
0°-90°	8731.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8731.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3357	3357	3357	3357	3357	
5°	3333	3338	3338	3338	3335	316
15°	3173	3178	3181	3184	3182	894
25°	2855	2861	2868	2874	2878	1315
35°	2447	2453	2464	2474	2477	1531
45°	1989	2002	2014	2028	2031	1537
55°	1512	1521	1532	1546	1551	1353
65°	1020	1025	1037	1045	1049	1011
75°	526	529	536	541	543	558
85°	112	115	117	115	116	137
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3357.2	3357.2	3357.2	3357.2	3357.2
2.5°	3350.9	3354.4	3351.6	3354.4	3351.6
5°	3333.4	3337.6	3337.6	3338.3	3334.8
7.5°	3307.5	3312.4	3314.5	3315.2	3310.3
10°	3274.7	3279.5	3279.5	3282.3	3278.8
12.5°	3232.7	3235.5	3234.8	3239.0	3236.2
15°	3172.6	3178.2	3180.9	3183.7	3182.3
17.5°	3105.4	3112.4	3114.5	3119.4	3115.9
20°	3033.4	3038.3	3039.7	3047.4	3043.9
22.5°	2947.4	2952.3	2957.2	2964.2	2964.9
25°	2855.1	2861.4	2868.4	2874.0	2877.5
27.5°	2760.0	2766.3	2772.6	2779.6	2781.0
30°	2658.6	2666.3	2673.3	2681.7	2683.1
32.5°	2556.5	2559.3	2569.8	2578.9	2583.1
35°	2447.4	2453.0	2464.2	2474.0	2476.8
37.5°	2336.2	2344.6	2356.5	2367.0	2369.8
40°	2224.4	2231.4	2241.8	2255.8	2260.0
42.5°	2111.1	2116.0	2130.0	2141.8	2145.3
45°	1989.4	2002.0	2013.9	2027.9	2031.4
47.5°	1873.3	1883.1	1895.0	1908.3	1913.9
50°	1754.5	1766.3	1775.4	1790.1	1793.6
52.5°	1635.6	1643.3	1655.9	1668.4	1674.0
55°	1511.8	1520.9	1532.1	1546.1	1551.0
57.5°	1392.9	1397.8	1410.4	1422.3	1426.5
60°	1269.9	1274.8	1286.6	1299.2	1304.8
62.5°	1146.8	1151.0	1160.8	1175.5	1175.5
65°	1020.2	1025.1	1037.0	1045.4	1048.9
67.5°	897.2	901.4	909.7	920.2	925.1
70°	772.7	776.2	783.2	793.7	794.4
72.5°	648.2	651.7	660.8	664.3	669.2
75°	525.8	528.6	535.6	541.2	542.6
77.5°	409.1	413.3	418.2	420.3	422.4
80°	297.9	302.1	305.6	307.7	308.4
82.5°	197.2	201.4	203.5	204.9	204.2
85°	111.9	115.4	116.8	115.4	116.1
87.5°	44.1	46.2	47.5	46.9	45.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)