

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: P708947

Luminaire Tested: **24APR-X-138L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708947
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-138L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

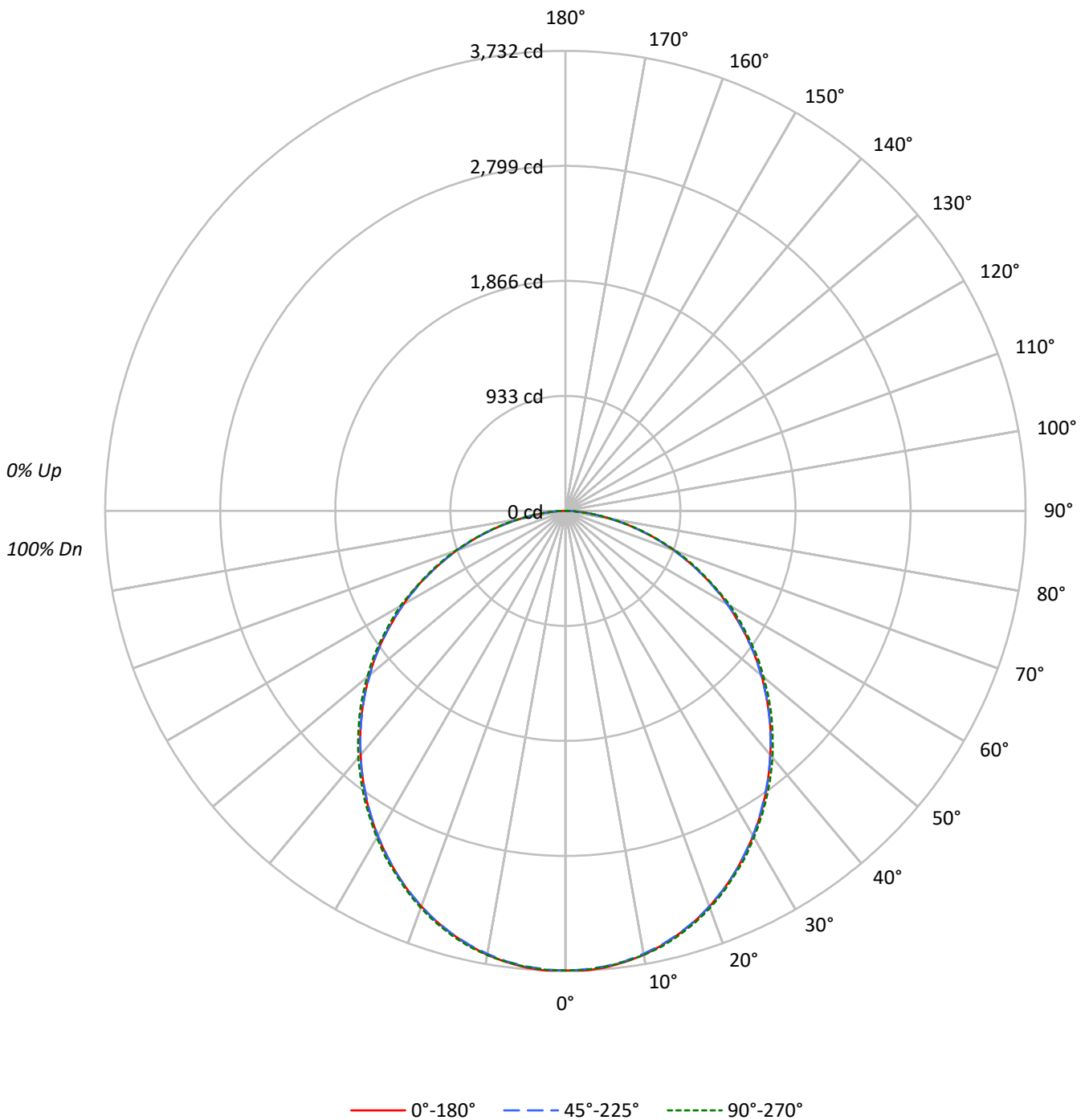
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10117.6 lumens
Efficiency: N/A
Efficacy: 97.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 103.6
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	94	98	94	91	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	72	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	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	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	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5016	5016	5016
5°	5022	5009	5013
10°	4996	4985	4999
15°	4949	4946	4965
20°	4890	4887	4909
25°	4813	4814	4830
30°	4729	4726	4752
35°	4639	4628	4670
40°	4541	4538	4590
45°	4447	4444	4497
50°	4344	4336	4393
55°	4226	4220	4278
60°	4087	4084	4163
65°	3901	3908	3953
70°	3698	3668	3745
75°	3381	3354	3418
80°	2924	2889	2948
85°	2300	2277	2340



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	352.5	3.5
10°-20°	1002.1	9.9
20°-30°	1494.5	14.8
30°-40°	1768.4	17.5
40°-50°	1807.0	17.9
50°-60°	1614.9	16.0
60°-70°	1217.2	12.0
70°-80°	685.1	6.8
80°-90°	176.0	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°	2849.0	28.2
0°-40°	4617.5	45.6
0°-60°	8039.3	79.5
0°-90°	10117.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10117.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3728	3728	3728	3728	3728	
5°	3718	3713	3708	3712	3712	353
15°	3553	3548	3551	3558	3564	1002
25°	3242	3237	3243	3253	3254	1494
35°	2824	2818	2818	2837	2843	1766
45°	2337	2335	2336	2353	2364	1802
55°	1801	1801	1799	1815	1824	1609
65°	1225	1220	1227	1239	1242	1217
75°	650	638	645	642	658	688
85°	149	143	148	150	152	178
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3728.3	3728.3	3728.3	3728.3	3728.3
2.5°	3732.4	3726.7	3722.6	3724.7	3726.2
5°	3718.0	3712.9	3708.3	3711.9	3711.9
7.5°	3690.9	3688.3	3684.7	3687.8	3688.8
10°	3657.1	3651.5	3648.9	3656.1	3658.6
12.5°	3609.5	3602.8	3604.9	3614.1	3618.2
15°	3553.1	3548.5	3550.6	3557.8	3564.4
17.5°	3489.1	3484.0	3488.6	3494.8	3500.9
20°	3415.4	3410.3	3412.8	3421.6	3428.2
22.5°	3333.5	3328.4	3331.4	3339.1	3346.3
25°	3241.8	3237.2	3242.8	3253.1	3253.6
27.5°	3146.1	3140.9	3142.5	3153.2	3163.0
30°	3043.7	3037.0	3041.6	3052.4	3058.5
32.5°	2936.1	2930.0	2933.6	2945.9	2953.0
35°	2824.5	2818.4	2817.8	2836.8	2843.4
37.5°	2706.2	2702.6	2705.7	2721.1	2729.3
40°	2585.4	2580.2	2583.8	2603.3	2613.0
42.5°	2463.0	2459.9	2460.4	2479.9	2487.6
45°	2337.0	2335.0	2335.5	2353.4	2363.6
47.5°	2207.0	2202.3	2204.4	2222.8	2233.6
50°	2075.4	2074.3	2071.3	2089.7	2098.9
52.5°	1940.2	1938.1	1938.1	1954.5	1967.8
55°	1801.4	1801.4	1798.8	1814.7	1823.9
57.5°	1656.0	1657.0	1661.1	1675.4	1684.7
60°	1518.8	1513.6	1517.7	1530.5	1546.9
62.5°	1382.0	1366.7	1370.8	1382.5	1389.2
65°	1225.3	1219.7	1227.4	1239.2	1241.7
67.5°	1081.5	1075.8	1079.9	1088.1	1099.4
70°	940.1	925.3	932.5	941.2	951.9
72.5°	791.6	778.8	789.1	796.2	803.9
75°	650.3	638.0	645.2	642.1	657.5
77.5°	508.5	499.8	505.9	512.1	523.8
80°	377.4	367.7	372.8	375.3	380.5
82.5°	257.1	249.9	251.4	261.7	258.6
85°	149.0	142.9	147.5	149.5	151.6
87.5°	58.9	53.3	57.9	59.4	59.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)