

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: P708957

Luminaire Tested: **24APR-X-138L940-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708957
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-138L940-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

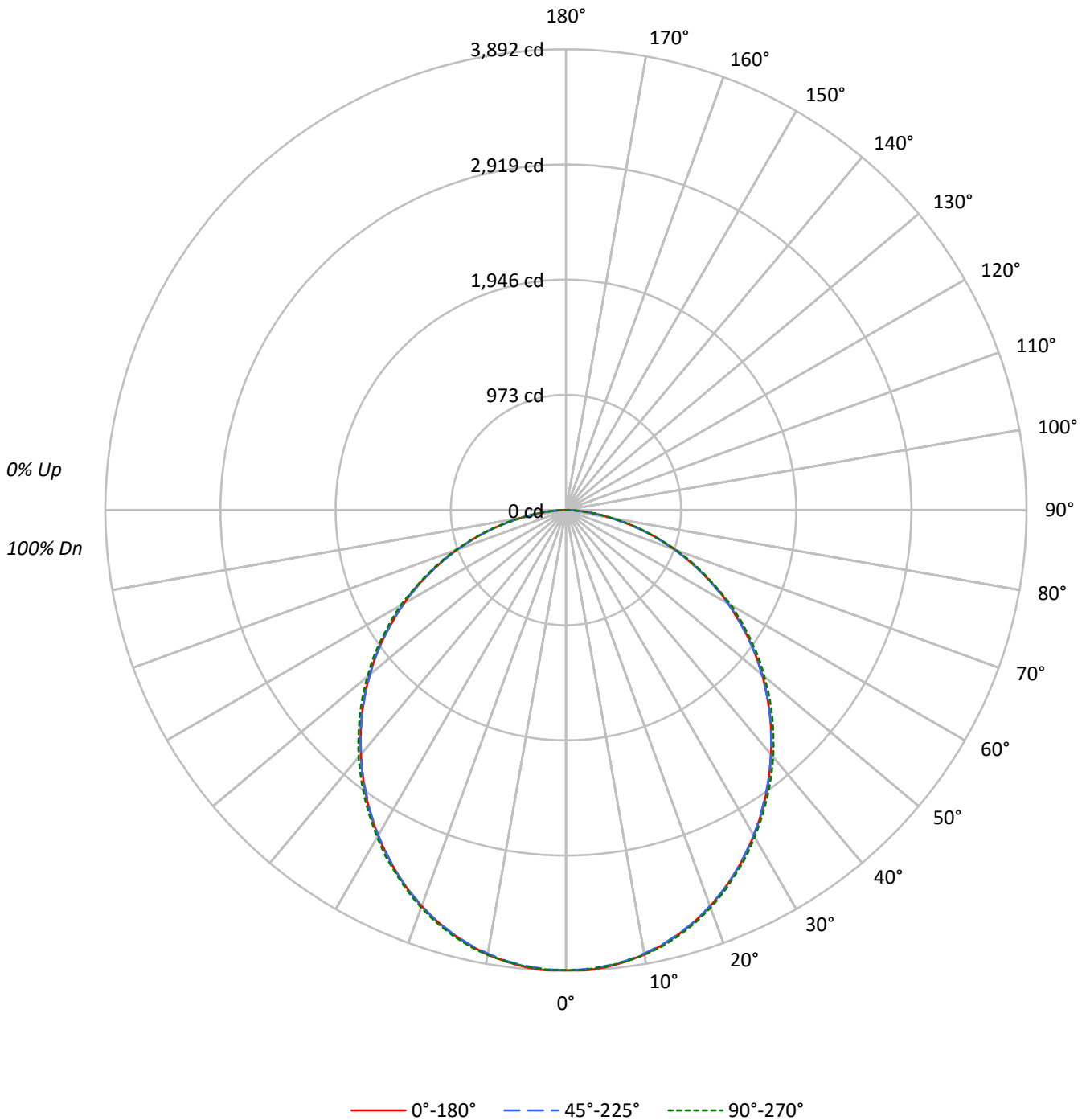
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10550.8 lumens
Efficiency: N/A
Efficacy: 101.8 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°	5231	5231	5231
5°	5237	5223	5228
10°	5210	5199	5213
15°	5161	5158	5178
20°	5100	5096	5119
25°	5019	5020	5037
30°	4931	4928	4955
35°	4838	4827	4870
40°	4735	4732	4786
45°	4637	4634	4690
50°	4530	4521	4582
55°	4407	4400	4462
60°	4262	4259	4341
65°	4068	4075	4123
70°	3857	3825	3905
75°	3526	3498	3564
80°	3049	3012	3074
85°	2399	2374	2441



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.5	3.5
10°-20°	1045.0	9.9
20°-30°	1558.5	14.8
30°-40°	1844.1	17.5
40°-50°	1884.4	17.9
50°-60°	1684.0	16.0
60°-70°	1269.3	12.0
70°-80°	714.5	6.8
80°-90°	183.5	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°	2971.0	28.2
0°-40°	4815.1	45.6
0°-60°	8383.5	79.5
0°-90°	10550.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10550.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3888	3888	3888	3888	3888	
5°	3877	3872	3867	3871	3871	368
15°	3705	3700	3703	3710	3717	1045
25°	3381	3376	3382	3392	3393	1558
35°	2945	2939	2938	2958	2965	1842
45°	2437	2435	2436	2454	2465	1880
55°	1878	1878	1876	1892	1902	1678
65°	1278	1272	1280	1292	1295	1269
75°	678	665	673	670	686	717
85°	155	149	154	156	158	185
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3887.9	3887.9	3887.9	3887.9	3887.9
2.5°	3892.2	3886.3	3882.0	3884.1	3885.8
5°	3877.2	3871.9	3867.1	3870.8	3870.8
7.5°	3848.9	3846.2	3842.5	3845.7	3846.8
10°	3813.7	3807.8	3805.1	3812.6	3815.3
12.5°	3764.0	3757.1	3759.2	3768.8	3773.1
15°	3705.3	3700.5	3702.6	3710.1	3717.0
17.5°	3638.5	3633.2	3638.0	3644.4	3650.8
20°	3561.6	3556.3	3559.0	3568.0	3575.0
22.5°	3476.2	3470.9	3474.1	3482.1	3489.5
25°	3380.6	3375.8	3381.7	3392.4	3392.9
27.5°	3280.8	3275.4	3277.0	3288.2	3298.4
30°	3174.0	3167.0	3171.8	3183.0	3189.4
32.5°	3061.8	3055.4	3059.2	3072.0	3079.4
35°	2945.4	2939.0	2938.5	2958.2	2965.2
37.5°	2822.1	2818.3	2821.5	2837.6	2846.1
40°	2696.1	2690.7	2694.4	2714.7	2724.9
42.5°	2568.4	2565.2	2565.8	2586.1	2594.1
45°	2437.1	2434.9	2435.5	2454.2	2464.8
47.5°	2301.4	2296.6	2298.8	2318.0	2329.2
50°	2164.2	2163.1	2159.9	2179.2	2188.8
52.5°	2023.2	2021.1	2021.1	2038.2	2052.1
55°	1878.5	1878.5	1875.9	1892.4	1902.0
57.5°	1726.9	1727.9	1732.2	1747.2	1756.8
60°	1583.8	1578.4	1582.7	1596.1	1613.1
62.5°	1441.2	1425.2	1429.5	1441.7	1448.7
65°	1277.8	1271.9	1279.9	1292.2	1294.9
67.5°	1127.8	1121.9	1126.2	1134.7	1146.4
70°	980.4	964.9	972.4	981.4	992.7
72.5°	825.5	812.2	822.9	830.3	838.3
75°	678.2	665.3	672.8	669.6	685.6
77.5°	530.2	521.2	527.6	534.0	546.3
80°	393.5	383.4	388.7	391.4	396.7
82.5°	268.1	260.6	262.2	272.9	269.7
85°	155.4	149.0	153.8	155.9	158.1
87.5°	61.4	55.5	60.3	61.9	62.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)