

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: P708949

Luminaire Tested: **24APR-X-200L935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708949
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-200L935-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

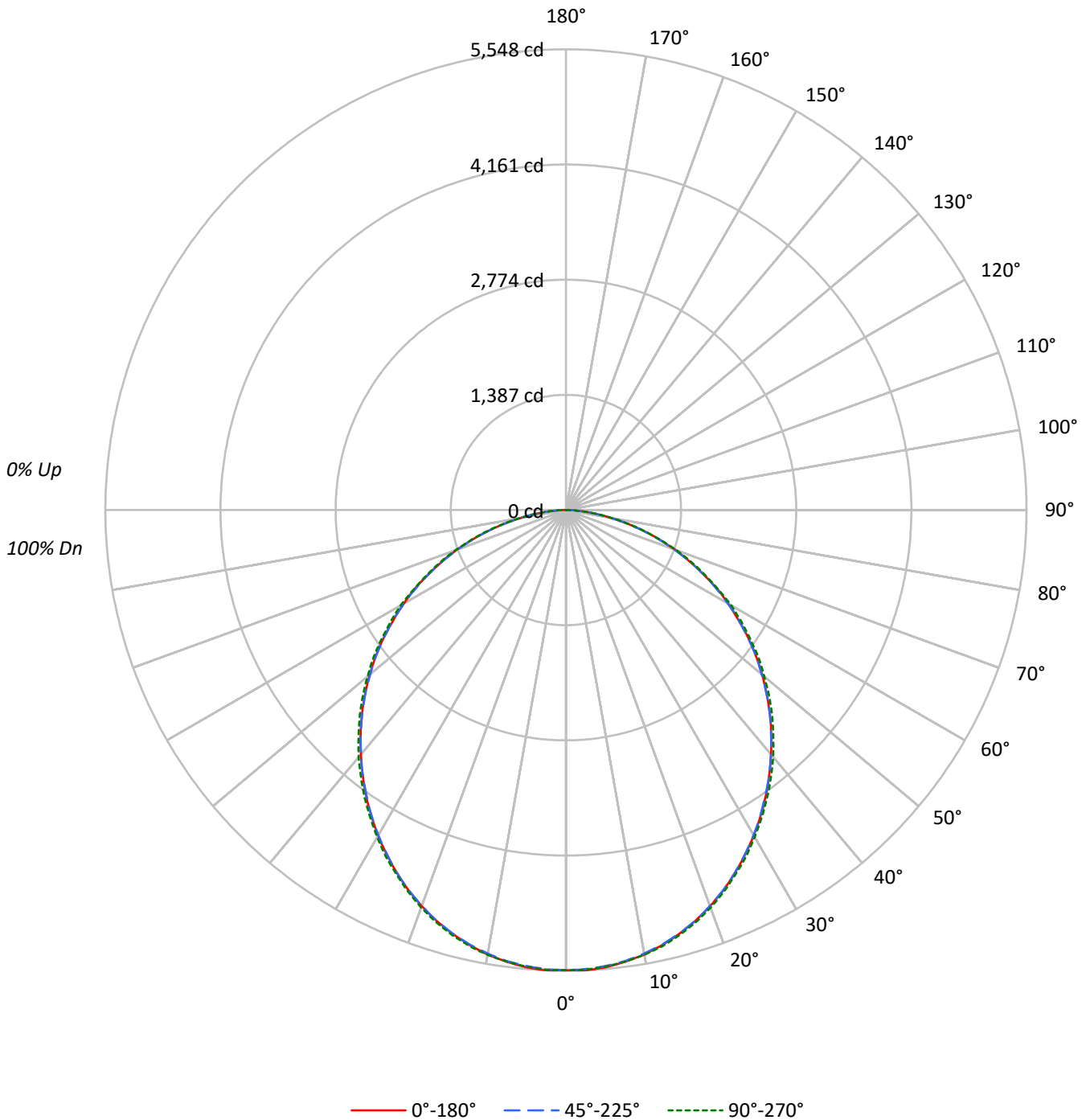
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 15040.1 lumens
Efficiency: N/A
Efficacy: 95.7 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): 157.1
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°	7457	7457	7457
5°	7465	7445	7453
10°	7427	7411	7431
15°	7357	7352	7381
20°	7270	7264	7297
25°	7154	7157	7180
30°	7029	7025	7064
35°	6897	6880	6943
40°	6750	6746	6822
45°	6611	6606	6686
50°	6458	6445	6531
55°	6282	6273	6360
60°	6075	6071	6188
65°	5799	5809	5877
70°	5498	5453	5567
75°	5025	4986	5081
80°	4347	4293	4382
85°	3419	3384	3478



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	523.9	3.5
10°-20°	1489.6	9.9
20°-30°	2221.6	14.8
30°-40°	2628.8	17.5
40°-50°	2686.1	17.9
50°-60°	2400.5	16.0
60°-70°	1809.4	12.0
70°-80°	1018.5	6.8
80°-90°	261.6	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°	4235.2	28.2
0°-40°	6864.0	45.6
0°-60°	11950.7	79.5
0°-90°	15040.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15040.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5542	5542	5542	5542	5542	
5°	5527	5519	5512	5518	5518	525
15°	5282	5275	5278	5289	5299	1489
25°	4819	4812	4821	4836	4837	2220
35°	4199	4190	4189	4217	4227	2625
45°	3474	3471	3472	3498	3514	2679
55°	2678	2678	2674	2698	2711	2392
65°	1822	1813	1825	1842	1846	1809
75°	967	948	959	954	977	1023
85°	222	212	219	222	225	264
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5542.2	5542.2	5542.2	5542.2	5542.2
2.5°	5548.3	5539.9	5533.8	5536.9	5539.1
5°	5527.0	5519.4	5512.5	5517.8	5517.8
7.5°	5486.6	5482.8	5477.5	5482.1	5483.6
10°	5436.4	5428.0	5424.2	5434.9	5438.7
12.5°	5365.6	5355.7	5358.7	5372.4	5378.5
15°	5281.9	5275.0	5278.1	5288.7	5298.6
17.5°	5186.7	5179.1	5186.0	5195.1	5204.2
20°	5077.1	5069.5	5073.3	5086.2	5096.1
22.5°	4955.3	4947.7	4952.3	4963.7	4974.3
25°	4819.1	4812.2	4820.6	4835.8	4836.6
27.5°	4676.7	4669.1	4671.4	4687.4	4701.8
30°	4524.5	4514.6	4521.4	4537.4	4546.6
32.5°	4364.6	4355.5	4360.8	4379.1	4389.8
35°	4198.7	4189.6	4188.8	4217.0	4226.9
37.5°	4022.9	4017.5	4022.1	4044.9	4057.1
40°	3843.2	3835.6	3840.9	3869.9	3884.3
42.5°	3661.3	3656.7	3657.5	3686.4	3697.8
45°	3474.1	3471.0	3471.8	3498.4	3513.6
47.5°	3280.7	3273.9	3276.9	3304.3	3320.3
50°	3085.1	3083.6	3079.0	3106.4	3120.1
52.5°	2884.1	2881.1	2881.1	2905.4	2925.2
55°	2677.9	2677.9	2674.0	2697.6	2711.3
57.5°	2461.7	2463.2	2469.3	2490.6	2504.3
60°	2257.7	2250.1	2256.2	2275.2	2299.5
62.5°	2054.4	2031.6	2037.7	2055.2	2065.1
65°	1821.5	1813.1	1824.6	1842.1	1845.9
67.5°	1607.6	1599.3	1605.3	1617.5	1634.3
70°	1397.5	1375.5	1386.1	1399.1	1415.0
72.5°	1176.8	1157.8	1173.0	1183.6	1195.1
75°	966.7	948.4	959.1	954.5	977.4
77.5°	755.9	742.9	752.1	761.2	778.7
80°	561.0	546.5	554.1	557.9	565.6
82.5°	382.1	371.5	373.7	389.0	384.4
85°	221.5	212.4	219.2	222.3	225.3
87.5°	87.5	79.2	86.0	88.3	89.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)