

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: P709039

Luminaire Tested: **24APR-85-200L950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709039
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85-200L950-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

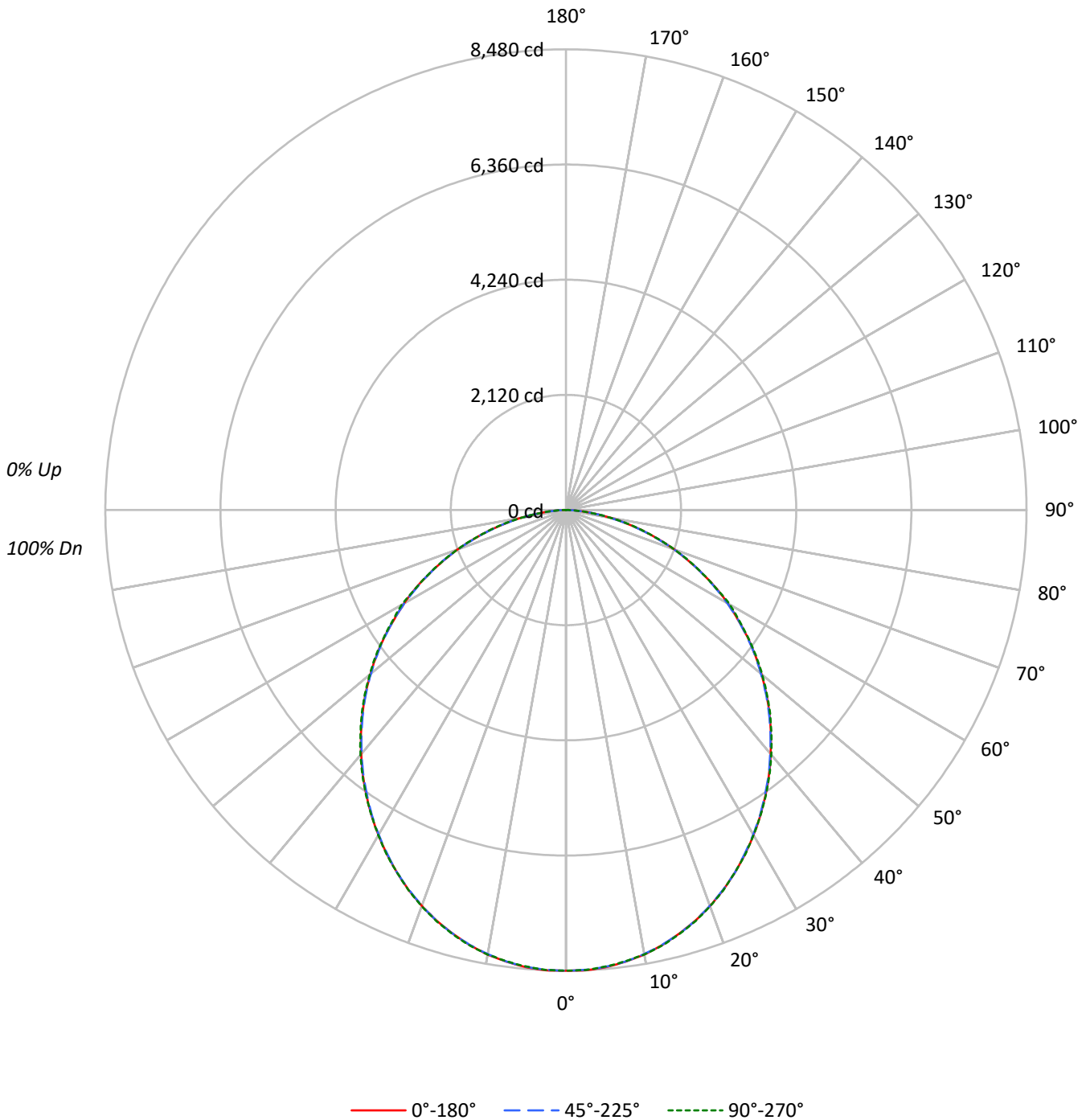
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22883.5 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 235.4
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	94	98	94	92	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	73	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	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	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	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11409	11409	11409
5°	11410	11399	11392
10°	11350	11341	11349
15°	11243	11243	11256
20°	11105	11098	11114
25°	10931	10926	10926
30°	10733	10717	10735
35°	10524	10496	10537
40°	10301	10281	10335
45°	10081	10061	10115
50°	9840	9814	9877
55°	9571	9546	9604
60°	9255	9233	9395
65°	8834	8836	8860
70°	8349	8305	8359
75°	7616	7557	7608
80°	6575	6493	6537
85°	5130	5079	5067



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	801.4	3.5
10°-20°	2276.0	9.9
20°-30°	3389.6	14.8
30°-40°	4004.6	17.5
40°-50°	4085.4	17.9
50°-60°	3645.3	15.9
60°-70°	2748.2	12.0
70°-80°	1540.9	6.7
80°-90°	392.1	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°	6467.1	28.3
0°-40°	10471.7	45.8
0°-60°	18202.4	79.5
0°-90°	22883.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22883.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8480	8480	8480	8480	8480	
5°	8448	8444	8440	8441	8435	802
15°	8072	8067	8072	8077	8081	2276
25°	7363	7354	7360	7366	7360	3391
35°	6407	6398	6390	6409	6415	4008
45°	5298	5294	5287	5303	5316	4086
55°	4080	4071	4070	4082	4094	3645
65°	2775	2761	2776	2784	2783	2753
75°	1465	1440	1454	1446	1464	1551
85°	332	320	329	328	328	397
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8479.6	8479.6	8479.6	8479.6	8479.6
2.5°	8479.6	8475.6	8472.3	8471.5	8473.1
5°	8447.9	8443.8	8439.7	8441.4	8434.8
7.5°	8386.8	8387.6	8384.4	8385.2	8377.8
10°	8307.8	8303.7	8300.5	8307.8	8307.0
12.5°	8201.1	8193.8	8197.0	8208.4	8209.3
15°	8071.6	8066.7	8071.6	8077.3	8080.6
17.5°	7924.2	7920.1	7925.8	7926.7	7933.2
20°	7755.6	7750.7	7750.7	7758.9	7762.1
22.5°	7569.1	7561.8	7563.4	7569.1	7573.2
25°	7363.1	7354.1	7359.8	7366.3	7359.8
27.5°	7140.8	7135.9	7130.2	7138.3	7148.9
30°	6908.6	6898.9	6898.1	6903.8	6909.5
32.5°	6663.5	6652.1	6652.1	6659.4	6664.3
35°	6407.0	6398.0	6389.9	6408.6	6415.1
37.5°	6142.3	6131.7	6130.9	6142.3	6152.9
40°	5864.6	5855.6	5853.2	5872.7	5884.1
42.5°	5584.4	5578.7	5573.0	5592.6	5601.5
45°	5297.7	5294.5	5287.2	5302.6	5315.7
47.5°	5002.9	4992.3	4989.9	5007.8	5020.8
50°	4700.8	4696.7	4688.6	4704.8	4718.7
52.5°	4394.6	4389.7	4384.0	4398.6	4413.3
55°	4080.2	4071.2	4069.6	4081.8	4094.0
57.5°	3752.8	3745.5	3756.9	3768.3	3778.1
60°	3439.3	3422.2	3431.1	3444.1	3491.4
62.5°	3124.1	3093.9	3100.5	3136.3	3115.9
65°	2774.7	2760.9	2775.5	2783.7	2782.8
67.5°	2447.3	2431.0	2453.0	2446.5	2456.3
70°	2122.4	2093.8	2111.0	2113.4	2124.8
72.5°	1786.8	1762.4	1777.0	1784.4	1791.7
75°	1465.1	1439.9	1453.7	1445.6	1463.5
77.5°	1145.1	1129.6	1138.5	1144.2	1158.1
80°	848.6	831.5	838.0	838.8	843.7
82.5°	575.0	561.9	563.6	578.2	572.5
85°	332.3	320.1	329.0	328.2	328.2
87.5°	129.5	119.7	128.7	127.9	126.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)