

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: P709010

Luminaire Tested: **24APR-76-181L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709010
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76-181L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

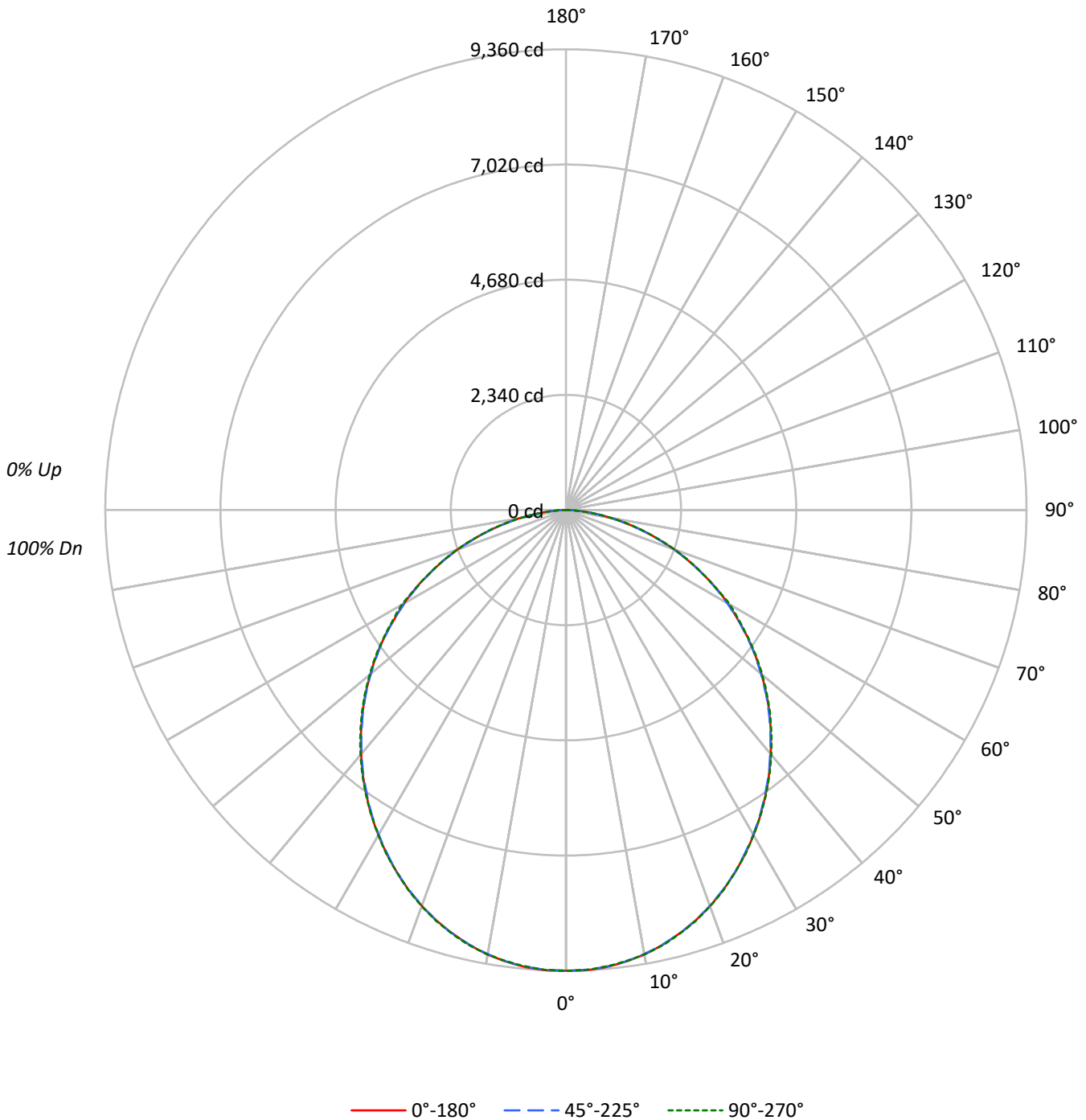
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25258.5 lumens
Efficiency: N/A
Efficacy: 121.1 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): 208.5
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	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°	12593	12593	12593
5°	12594	12582	12575
10°	12528	12517	12527
15°	12410	12410	12424
20°	12257	12250	12268
25°	12066	12060	12060
30°	11847	11829	11849
35°	11616	11585	11631
40°	11370	11347	11408
45°	11127	11105	11164
50°	10861	10833	10902
55°	10564	10537	10600
60°	10215	10191	10370
65°	9751	9754	9779
70°	9216	9166	9226
75°	8407	8342	8398
80°	7258	7167	7216
85°	5663	5607	5593



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	884.6	3.5
10°-20°	2512.2	9.9
20°-30°	3741.4	14.8
30°-40°	4420.3	17.5
40°-50°	4509.4	17.9
50°-60°	4023.6	15.9
60°-70°	3033.4	12.0
70°-80°	1700.8	6.7
80°-90°	432.8	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°	7138.3	28.3
0°-40°	11558.5	45.8
0°-60°	20091.5	79.5
0°-90°	25258.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25258.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9360	9360	9360	9360	9360	
5°	9325	9320	9316	9317	9310	885
15°	8909	8904	8909	8916	8919	2512
25°	8127	8117	8124	8131	8124	3743
35°	7072	7062	7053	7074	7081	4424
45°	5848	5844	5836	5853	5867	4510
55°	4504	4494	4492	4505	4519	4023
65°	3063	3047	3064	3072	3072	3038
75°	1617	1589	1605	1596	1615	1712
85°	367	353	363	362	362	439
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9359.7	9359.7	9359.7	9359.7	9359.7
2.5°	9359.7	9355.2	9351.6	9350.7	9352.5
5°	9324.6	9320.1	9315.6	9317.4	9310.2
7.5°	9257.2	9258.1	9254.5	9255.4	9247.3
10°	9170.0	9165.5	9161.9	9170.0	9169.1
12.5°	9052.2	9044.2	9047.8	9060.3	9061.2
15°	8909.3	8903.9	8909.3	8915.6	8919.2
17.5°	8746.6	8742.1	8748.4	8749.3	8756.5
20°	8560.5	8555.1	8555.1	8564.1	8567.7
22.5°	8354.7	8346.6	8348.4	8354.7	8359.2
25°	8127.2	8117.4	8123.6	8130.8	8123.6
27.5°	7881.8	7876.4	7870.2	7879.1	7890.8
30°	7625.6	7614.9	7614.0	7620.2	7626.5
32.5°	7355.1	7342.5	7342.5	7350.6	7356.0
35°	7071.9	7062.0	7053.0	7073.7	7080.9
37.5°	6779.7	6768.1	6767.2	6779.7	6791.4
40°	6473.2	6463.3	6460.6	6482.2	6494.8
42.5°	6164.0	6157.7	6151.4	6173.0	6182.9
45°	5847.6	5844.0	5835.9	5852.9	5867.3
47.5°	5522.1	5510.5	5507.8	5527.5	5541.9
50°	5188.6	5184.1	5175.2	5193.1	5208.4
52.5°	4850.6	4845.2	4839.0	4855.1	4871.3
55°	4503.6	4493.8	4492.0	4505.4	4518.9
57.5°	4142.3	4134.2	4146.8	4159.4	4170.1
60°	3796.2	3777.3	3787.2	3801.6	3853.7
62.5°	3448.3	3415.0	3422.2	3461.8	3439.3
65°	3062.7	3047.4	3063.6	3072.5	3071.7
67.5°	2701.3	2683.3	2707.6	2700.4	2711.2
70°	2342.6	2311.2	2330.0	2332.7	2345.3
72.5°	1972.3	1945.3	1961.5	1969.6	1977.7
75°	1617.2	1589.3	1604.6	1595.6	1615.4
77.5°	1263.9	1246.8	1256.7	1263.0	1278.3
80°	936.7	917.8	925.0	925.9	931.3
82.5°	634.6	620.3	622.1	638.2	631.9
85°	366.8	353.3	363.2	362.3	362.3
87.5°	142.9	132.1	142.0	141.1	139.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)