

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: P709007

Luminaire Tested: **24APR-58-138L830-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709007
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-58-138L830-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

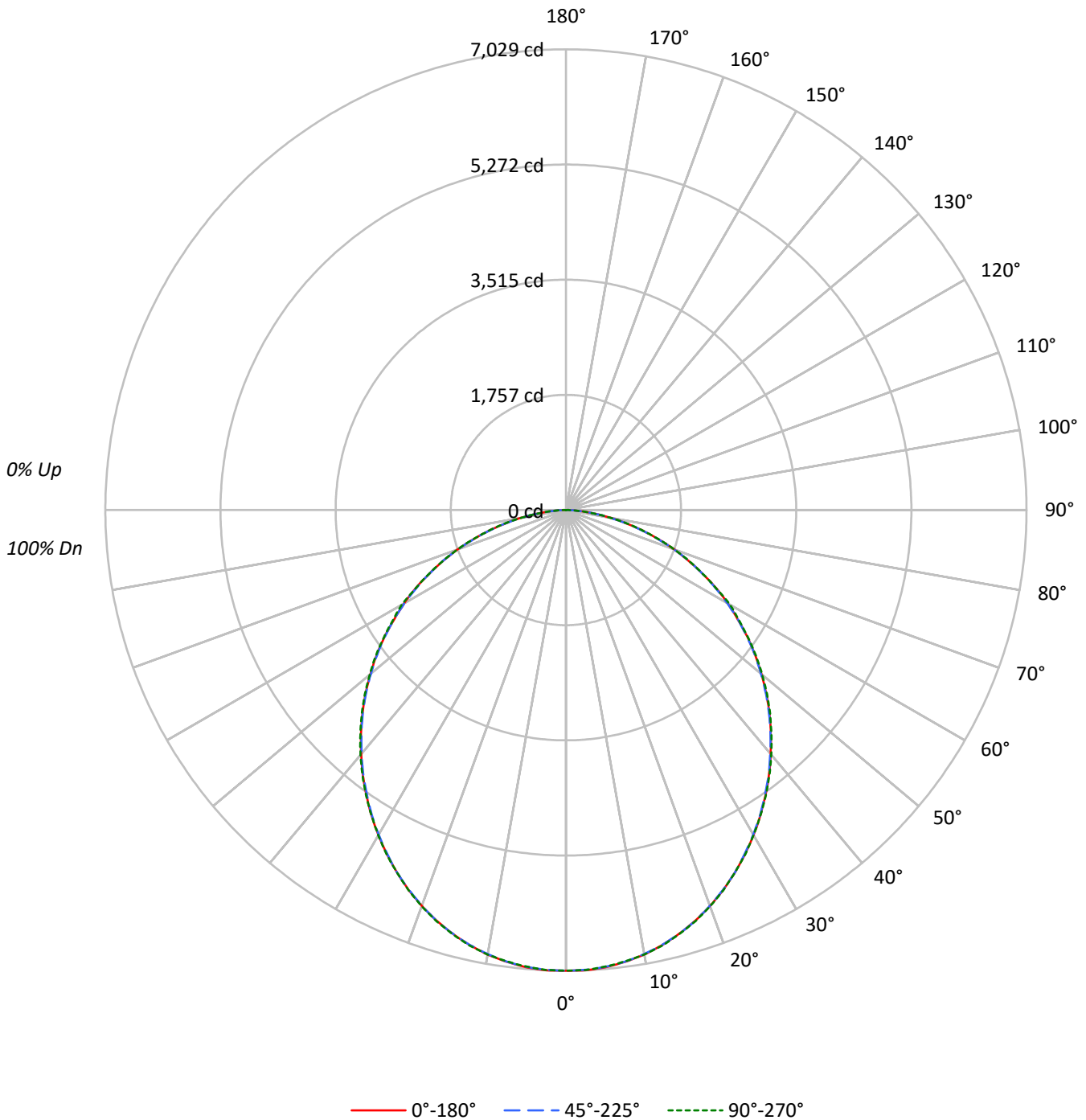
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18968.5 lumens
Efficiency: N/A
Efficacy: 122.1 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): 155.4
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°	9457	9457	9457
5°	9458	9449	9443
10°	9409	9400	9408
15°	9320	9320	9330
20°	9205	9199	9213
25°	9061	9057	9057
30°	8897	8884	8898
35°	8723	8700	8734
40°	8538	8522	8567
45°	8356	8339	8384
50°	8156	8135	8187
55°	7934	7913	7961
60°	7672	7653	7788
65°	7323	7325	7344
70°	6921	6884	6929
75°	6314	6264	6306
80°	5450	5383	5419
85°	4252	4210	4201



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	664.3	3.5
10°-20°	1886.6	9.9
20°-30°	2809.7	14.8
30°-40°	3319.5	17.5
40°-50°	3386.4	17.9
50°-60°	3021.6	15.9
60°-70°	2278.0	12.0
70°-80°	1277.2	6.7
80°-90°	325.0	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°	5360.7	28.3
0°-40°	8680.2	45.8
0°-60°	15088.3	79.5
0°-90°	18968.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18968.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7029	7029	7029	7029	7029	
5°	7003	6999	6996	6997	6992	665
15°	6691	6687	6691	6695	6698	1887
25°	6103	6096	6101	6106	6101	2811
35°	5311	5303	5297	5312	5318	3322
45°	4391	4389	4383	4395	4406	3387
55°	3382	3375	3373	3384	3394	3021
65°	2300	2288	2301	2307	2307	2282
75°	1214	1194	1205	1198	1213	1286
85°	275	265	273	272	272	329
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7028.9	7028.9	7028.9	7028.9	7028.9
2.5°	7028.9	7025.5	7022.8	7022.2	7023.5
5°	7002.6	6999.2	6995.8	6997.2	6991.8
7.5°	6951.9	6952.6	6949.9	6950.6	6944.5
10°	6886.5	6883.1	6880.4	6886.5	6885.8
12.5°	6798.0	6792.0	6794.7	6804.1	6804.8
15°	6690.7	6686.6	6690.7	6695.4	6698.1
17.5°	6568.5	6565.1	6569.9	6570.5	6575.9
20°	6428.8	6424.7	6424.7	6431.5	6434.2
22.5°	6274.2	6268.1	6269.4	6274.2	6277.5
25°	6103.4	6096.0	6100.7	6106.1	6100.7
27.5°	5919.1	5915.0	5910.3	5917.1	5925.8
30°	5726.7	5718.6	5717.9	5722.6	5727.4
32.5°	5523.5	5514.0	5514.0	5520.1	5524.2
35°	5310.8	5303.4	5296.7	5312.2	5317.6
37.5°	5091.4	5082.7	5082.0	5091.4	5100.2
40°	4861.2	4853.8	4851.8	4868.0	4877.4
42.5°	4629.0	4624.3	4619.6	4635.8	4643.2
45°	4391.4	4388.7	4382.6	4395.4	4406.2
47.5°	4147.0	4138.2	4136.2	4151.1	4161.9
50°	3896.5	3893.2	3886.4	3899.9	3911.4
52.5°	3642.7	3638.7	3633.9	3646.1	3658.2
55°	3382.1	3374.7	3373.4	3383.5	3393.6
57.5°	3110.8	3104.7	3114.1	3123.6	3131.7
60°	2850.9	2836.7	2844.1	2854.9	2894.1
62.5°	2589.6	2564.6	2570.0	2599.7	2582.8
65°	2300.0	2288.5	2300.7	2307.4	2306.7
67.5°	2028.6	2015.1	2033.3	2027.9	2036.0
70°	1759.3	1735.6	1749.8	1751.8	1761.3
72.5°	1481.1	1460.9	1473.0	1479.1	1485.2
75°	1214.5	1193.5	1205.0	1198.3	1213.1
77.5°	949.2	936.3	943.8	948.5	960.0
80°	703.4	689.3	694.7	695.3	699.4
82.5°	476.6	465.8	467.2	479.3	474.6
85°	275.4	265.3	272.7	272.1	272.1
87.5°	107.3	99.2	106.7	106.0	104.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)