

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: P708916

Luminaire Tested: **24APR-X-X-UNV-NL830**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708916  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-X-X-UNV-NL830  
Description: ArcMed Patient Recessed 2x4 Fixture NIGHT Light  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

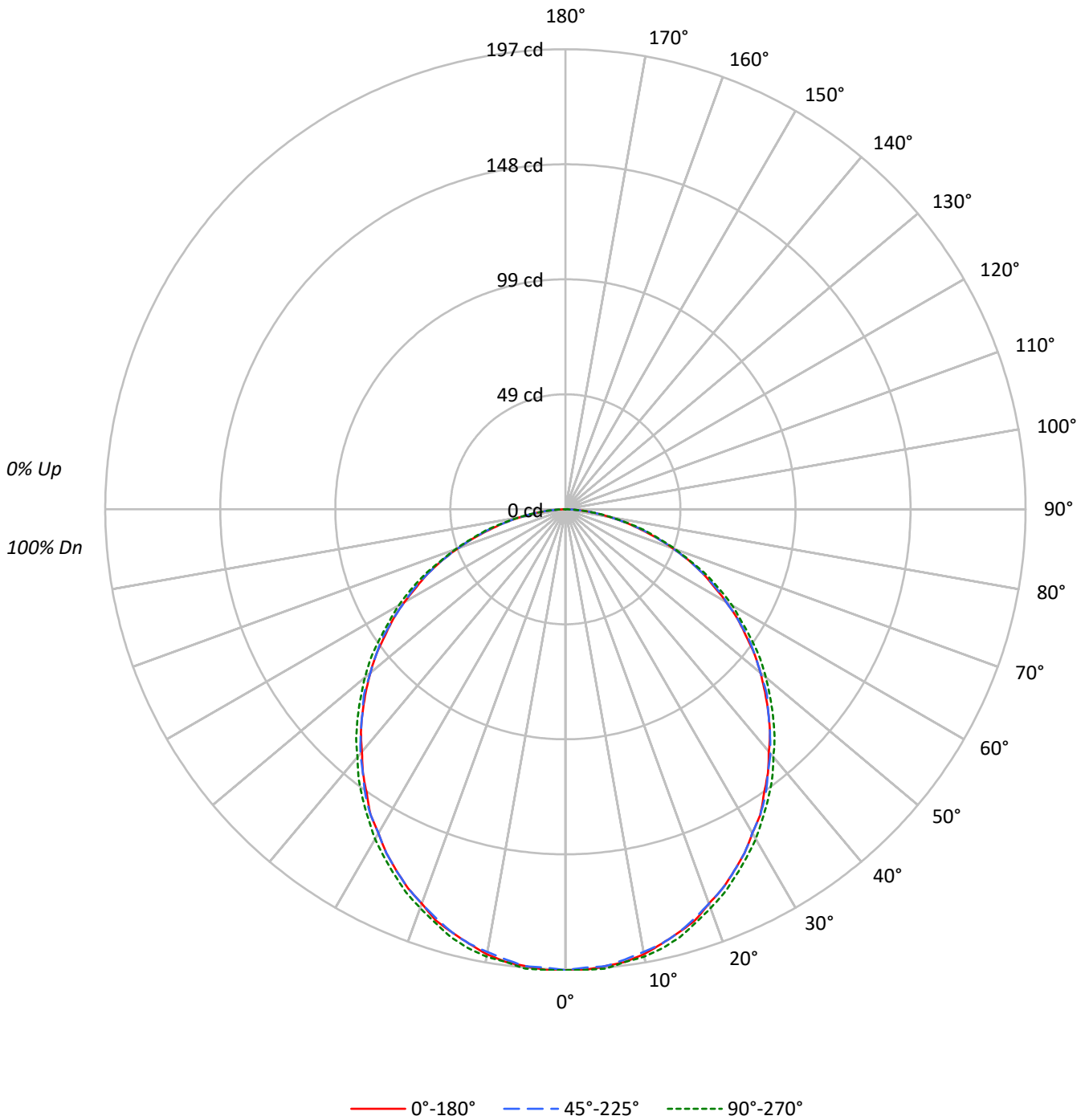
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 535.4 lumens  
Efficiency: N/A  
Efficacy: 89.2 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	46	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	38	31	27	38	31	27	37	31	26	26	26	26	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	266	266	266
5°	265	265	267
10°	264	263	266
15°	261	261	264
20°	257	257	260
25°	254	254	257
30°	249	249	253
35°	244	245	249
40°	238	240	243
45°	234	234	239
50°	228	228	234
55°	221	224	228
60°	214	214	222
65°	206	206	213
70°	193	193	197
75°	174	179	184
80°	152	152	160
85°	122	122	122



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	18.7	3.5
10°-20°	53.0	9.9
20°-30°	79.1	14.8
30°-40°	93.6	17.5
40°-50°	95.6	17.8
50°-60°	85.4	15.9
60°-70°	64.5	12.0
70°-80°	36.3	6.8
80°-90°	9.3	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°	150.7	28.2
0°-40°	244.3	45.6
0°-60°	425.3	79.4
0°-90°	535.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	535.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	197	197	197	197	197	
5°	196	197	196	196	197	19
15°	188	188	188	189	190	53
25°	171	172	171	172	173	79
35°	148	149	149	150	151	93
45°	123	124	123	125	126	95
55°	94	95	95	96	97	85
65°	65	65	65	66	67	64
75°	33	34	34	34	35	36
85°	8	8	8	8	8	9
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	197.4	197.4	197.4	197.4	197.4
2.5°	197.4	197.4	196.4	197.4	197.4
5°	196.4	197.4	196.4	196.4	197.4
7.5°	195.5	195.5	194.5	194.5	195.5
10°	193.5	193.5	192.5	193.5	194.5
12.5°	190.5	190.5	190.5	191.5	192.5
15°	187.6	187.6	187.6	188.6	189.6
17.5°	184.6	184.6	183.7	184.6	185.6
20°	179.7	180.7	179.7	180.7	181.7
22.5°	175.8	176.8	175.8	176.8	177.8
25°	170.9	171.9	170.9	171.9	172.9
27.5°	166.0	167.0	166.0	167.0	168.0
30°	160.1	161.1	160.1	162.1	163.0
32.5°	155.2	155.2	155.2	156.2	157.1
35°	148.3	149.3	149.3	150.3	151.3
37.5°	142.4	142.4	142.4	144.4	145.4
40°	135.5	136.5	136.5	137.5	138.5
42.5°	129.6	129.6	129.6	131.6	132.6
45°	122.8	123.8	122.8	124.7	125.7
47.5°	115.9	116.9	116.9	117.9	118.8
50°	109.0	109.0	109.0	111.0	112.0
52.5°	102.1	102.1	102.1	104.1	105.1
55°	94.3	95.3	95.3	96.3	97.2
57.5°	87.4	87.4	87.4	88.4	89.4
60°	79.6	80.5	79.6	81.5	82.5
62.5°	71.7	72.7	72.7	73.7	74.6
65°	64.8	64.8	64.8	65.8	66.8
67.5°	57.0	57.0	57.0	57.9	57.9
70°	49.1	49.1	49.1	50.1	50.1
72.5°	41.3	41.3	41.3	42.2	42.2
75°	33.4	34.4	34.4	34.4	35.4
77.5°	26.5	26.5	26.5	27.5	27.5
80°	19.6	19.6	19.6	20.6	20.6
82.5°	13.8	12.8	13.8	13.8	13.8
85°	7.9	7.9	7.9	7.9	7.9
87.5°	2.9	2.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)