

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: P709045

Luminaire Tested: **4APN-X-X-NL835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709045
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-X-NL835-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

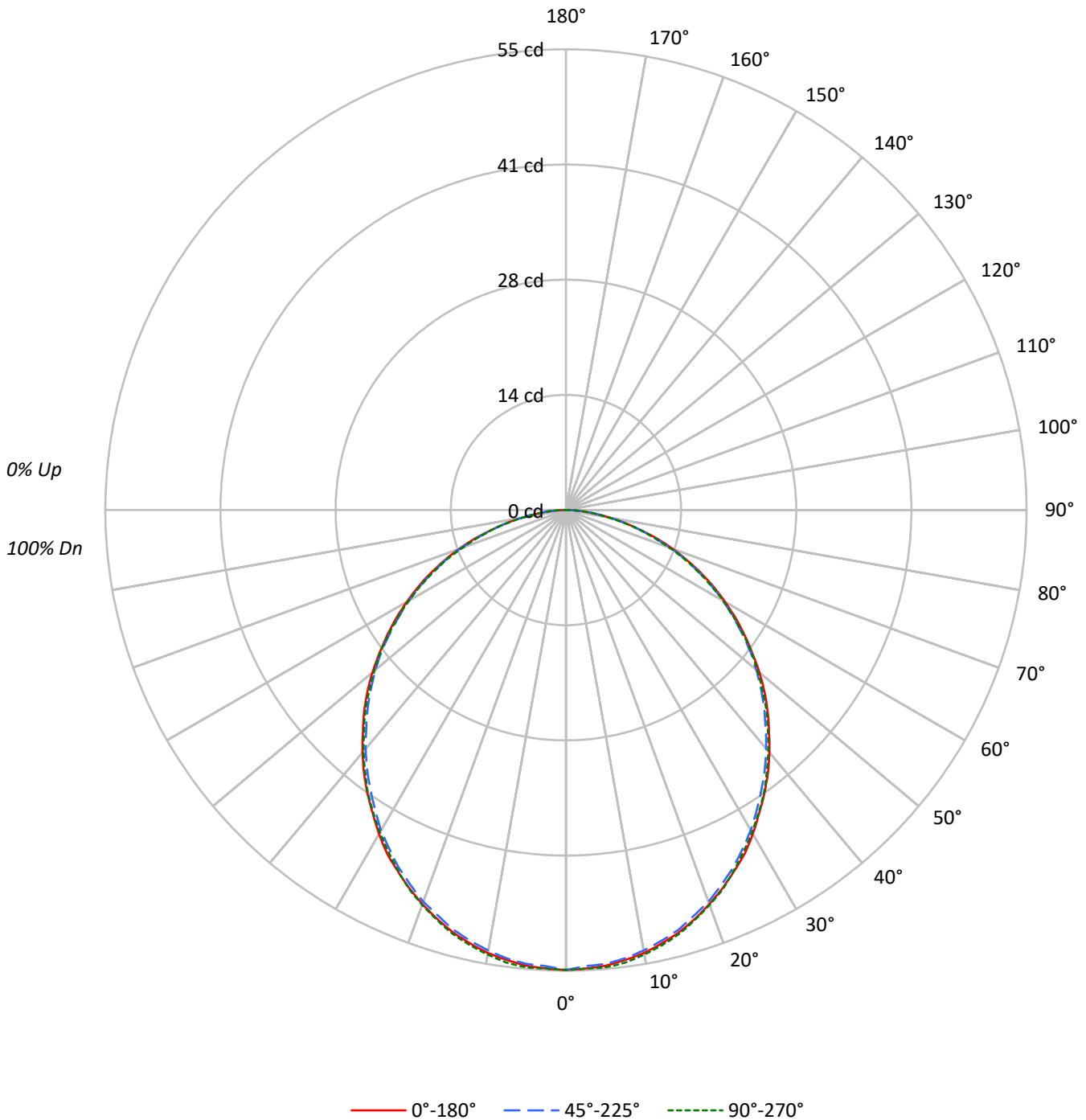
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 146.4 lumens
Efficiency: N/A
Efficacy: 41.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.32
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 3.5
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	95	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	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	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	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	295	295	295
5°	295	294	296
10°	293	292	295
15°	291	289	292
20°	287	285	287
25°	282	280	282
30°	277	274	276
35°	271	268	271
40°	266	261	264
45°	259	255	258
50°	253	248	250
55°	244	241	242
60°	236	233	234
65°	227	223	221
70°	214	210	206
75°	192	190	188
80°	165	168	162
85°	136	143	136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.2	3.5
10°-20°	14.7	10.0
20°-30°	21.8	14.9
30°-40°	25.7	17.5
40°-50°	26.0	17.8
50°-60°	23.1	15.8
60°-70°	17.4	11.9
70°-80°	9.8	6.7
80°-90°	2.6	1.8
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°	41.7	28.5
0°-40°	67.4	46.1
0°-60°	116.6	79.6
0°-90°	146.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	146.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	55	55	55	55	55	
5°	55	55	54	54	55	5
15°	52	52	52	52	52	15
25°	48	48	47	47	47	22
35°	41	41	41	41	41	26
45°	34	34	33	34	34	26
55°	26	26	26	26	26	23
65°	18	18	17	18	17	18
75°	9	9	9	9	9	10
85°	2	2	2	2	2	3
90°	0	0	0	0	0	



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CATALOG NUMBER: 4APN-X-X-NL835-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	54.9	54.9	54.9	54.9	54.9
2.5°	54.8	55.2	54.5	54.9	54.8
5°	54.6	55.1	54.4	54.5	54.8
7.5°	54.2	54.7	54.0	54.1	54.5
10°	53.7	54.1	53.4	53.7	53.9
12.5°	53.0	53.4	52.7	53.0	53.2
15°	52.2	52.5	51.9	52.1	52.4
17.5°	51.2	51.5	50.8	51.2	51.3
20°	50.1	50.4	49.8	50.0	50.2
22.5°	48.9	49.2	48.5	48.6	49.0
25°	47.6	47.9	47.2	47.2	47.5
27.5°	46.3	46.4	45.7	45.8	46.0
30°	44.6	44.8	44.1	44.2	44.4
32.5°	42.9	43.1	42.4	42.5	42.8
35°	41.3	41.4	40.7	40.9	41.2
37.5°	39.6	39.6	39.0	39.1	39.4
40°	37.8	37.8	37.2	37.3	37.6
42.5°	35.9	35.9	35.3	35.5	35.7
45°	34.1	34.0	33.5	33.6	33.9
47.5°	32.2	32.1	31.6	31.7	31.9
50°	30.2	30.1	29.7	29.7	29.9
52.5°	28.1	28.2	27.8	27.8	28.0
55°	26.0	26.1	25.6	25.7	25.8
57.5°	24.0	24.0	23.6	23.7	23.7
60°	21.9	22.0	21.6	21.7	21.7
62.5°	19.9	19.9	19.6	19.6	19.5
65°	17.8	17.7	17.5	17.6	17.4
67.5°	15.7	15.6	15.5	15.5	15.4
70°	13.6	13.5	13.4	13.3	13.1
72.5°	11.5	11.4	11.2	11.3	11.1
75°	9.3	9.3	9.2	9.3	9.1
77.5°	7.3	7.2	7.2	7.2	7.1
80°	5.3	5.3	5.4	5.4	5.2
82.5°	3.7	3.6	3.7	3.8	3.6
85°	2.2	2.2	2.3	2.3	2.2
87.5°	0.9	0.9	1.1	1.1	1.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)