

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: P709049

Luminaire Tested: **4APN-X-X-NL935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709049
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-NL935-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

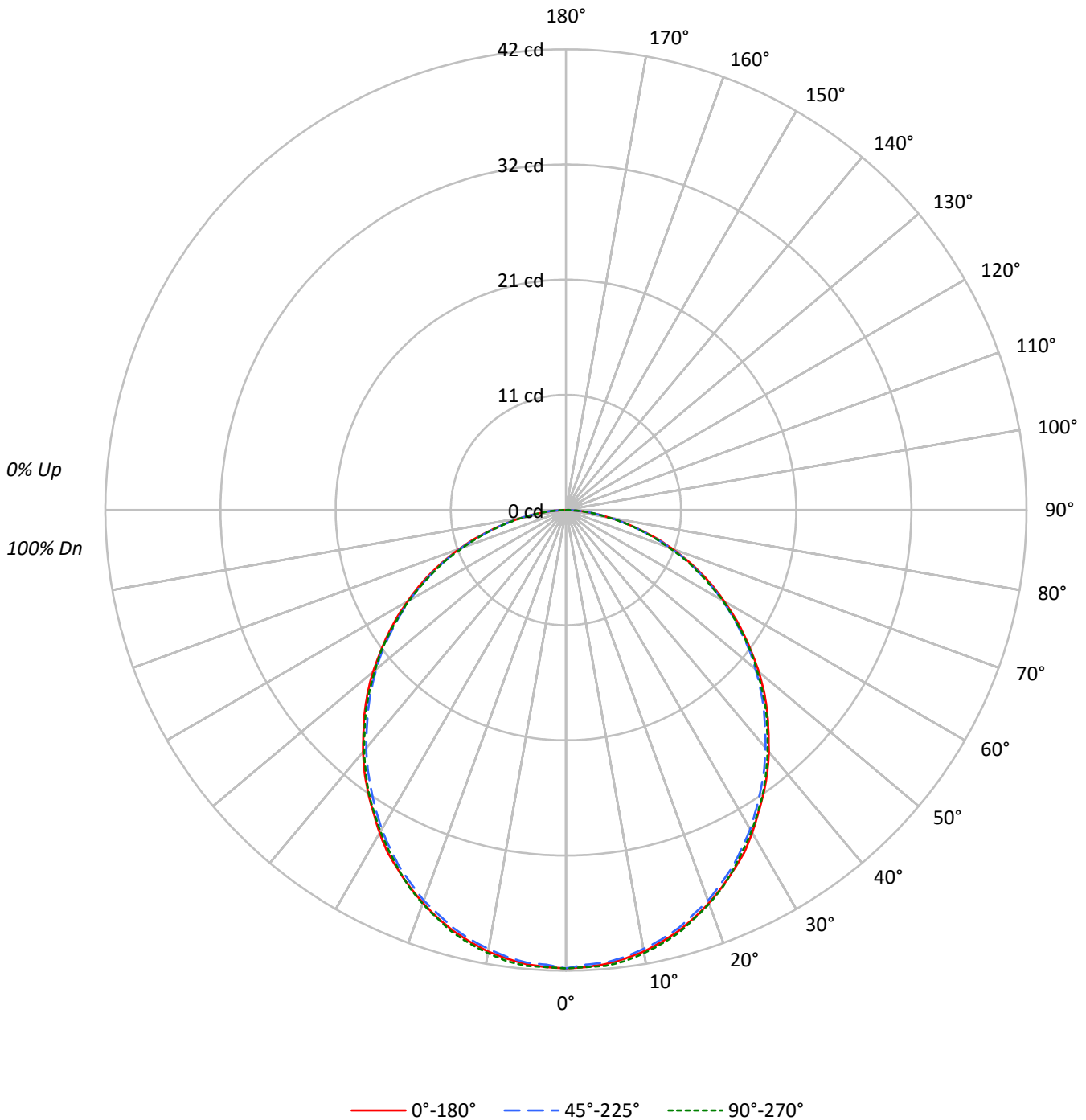
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 111.4 lumens
Efficiency: N/A
Efficacy: 31.8 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	100	100	100	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84	84	84	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70	70	70	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59	59	59	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51	51	51	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44	44	44	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39	39	39	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	34	34	34	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	30	30	30	30
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	27	27	27	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	225	225	225
5°	225	224	225
10°	223	222	224
15°	221	220	222
20°	218	217	219
25°	215	213	215
30°	211	209	210
35°	207	204	206
40°	202	199	201
45°	198	194	196
50°	192	189	190
55°	186	183	185
60°	180	177	178
65°	173	170	169
70°	163	160	157
75°	146	145	143
80°	126	128	123
85°	104	109	104



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	3.5
10°-20°	11.2	10.0
20°-30°	16.6	14.9
30°-40°	19.6	17.5
40°-50°	19.8	17.8
50°-60°	17.6	15.8
60°-70°	13.3	11.9
70°-80°	7.4	6.7
80°-90°	2.0	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°	31.8	28.5
0°-40°	51.3	46.1
0°-60°	88.7	79.6
0°-90°	111.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	111.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	42	42	42	42	42	
5°	42	42	41	41	42	4
15°	40	40	39	40	40	11
25°	36	36	36	36	36	17
35°	31	32	31	31	31	20
45°	26	26	25	26	26	20
55°	20	20	20	20	20	18
65°	14	13	13	13	13	13
75°	7	7	7	7	7	8
85°	2	2	2	2	2	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	41.8	41.8	41.8	41.8	41.8
2.5°	41.7	42.0	41.5	41.8	41.7
5°	41.6	41.9	41.4	41.5	41.7
7.5°	41.3	41.6	41.1	41.2	41.5
10°	40.9	41.2	40.6	40.9	41.0
12.5°	40.3	40.6	40.1	40.3	40.5
15°	39.7	40.0	39.5	39.7	39.9
17.5°	39.0	39.2	38.7	39.0	39.0
20°	38.1	38.3	37.9	38.0	38.2
22.5°	37.2	37.4	36.9	37.0	37.3
25°	36.2	36.4	35.9	35.9	36.1
27.5°	35.2	35.3	34.8	34.8	35.0
30°	34.0	34.1	33.6	33.7	33.8
32.5°	32.7	32.8	32.3	32.4	32.6
35°	31.5	31.5	31.0	31.2	31.4
37.5°	30.2	30.2	29.7	29.8	30.0
40°	28.8	28.8	28.3	28.4	28.6
42.5°	27.3	27.3	26.9	27.0	27.2
45°	26.0	25.9	25.5	25.6	25.8
47.5°	24.5	24.4	24.0	24.1	24.3
50°	23.0	22.9	22.6	22.6	22.7
52.5°	21.4	21.4	21.1	21.1	21.3
55°	19.8	19.9	19.5	19.6	19.7
57.5°	18.3	18.3	18.0	18.1	18.1
60°	16.7	16.8	16.5	16.5	16.5
62.5°	15.2	15.2	14.9	14.9	14.9
65°	13.6	13.5	13.3	13.4	13.2
67.5°	11.9	11.9	11.8	11.8	11.7
70°	10.3	10.3	10.2	10.1	10.0
72.5°	8.7	8.7	8.5	8.6	8.4
75°	7.0	7.0	7.0	7.0	6.9
77.5°	5.6	5.5	5.5	5.5	5.4
80°	4.1	4.1	4.1	4.1	4.0
82.5°	2.8	2.8	2.8	2.9	2.8
85°	1.7	1.7	1.8	1.8	1.7
87.5°	0.7	0.7	0.8	0.8	0.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)