

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: P709047

Luminaire Tested: **4APN-X-X-NL850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709047
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-NL850-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

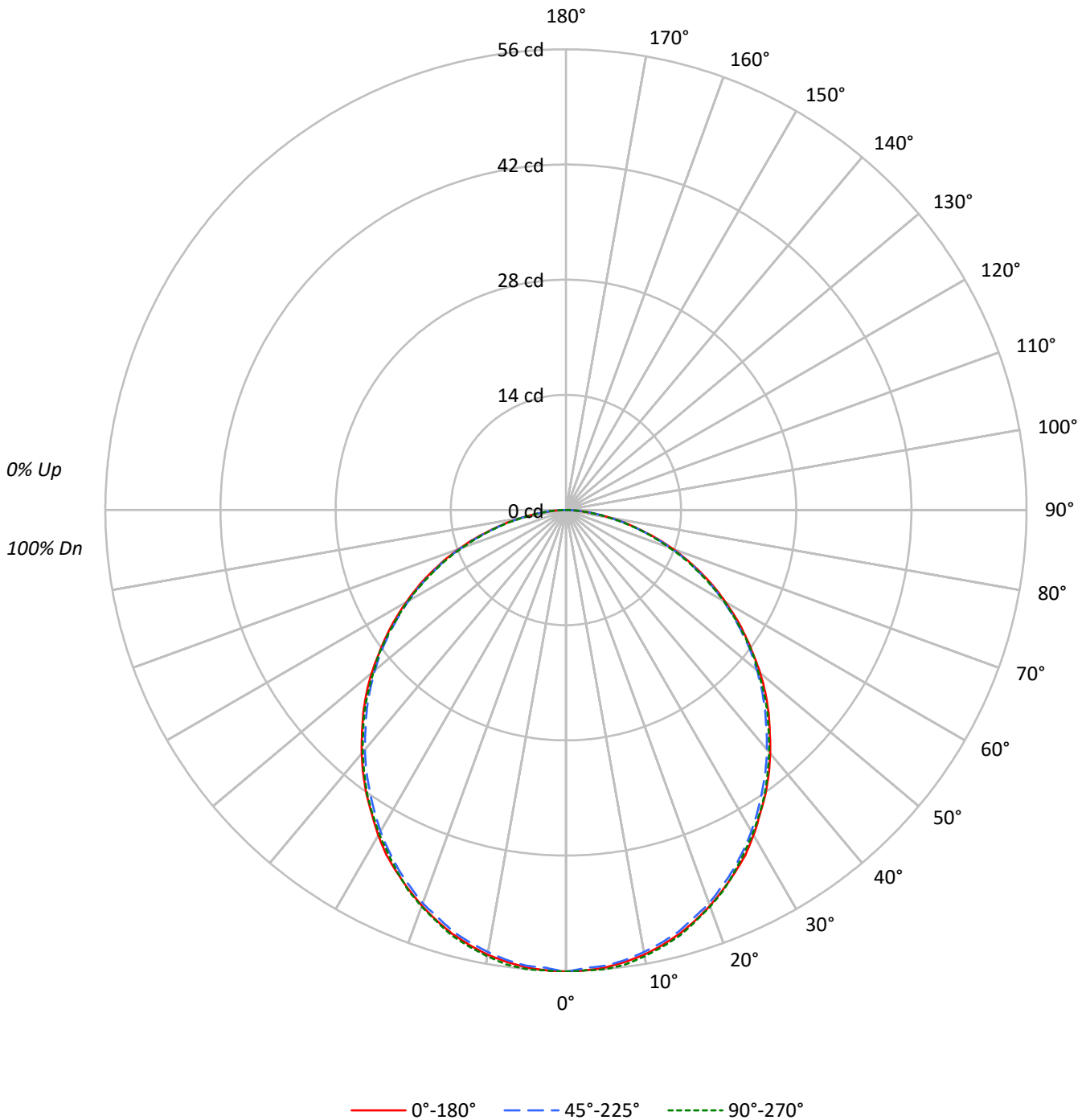
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 149.6 lumens
Efficiency: N/A
Efficacy: 42.8 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°	302	302	302
5°	301	300	303
10°	300	298	301
15°	297	295	298
20°	293	291	294
25°	289	286	288
30°	284	280	282
35°	278	273	277
40°	271	267	270
45°	265	260	264
50°	258	254	256
55°	250	246	248
60°	241	238	239
65°	232	228	226
70°	218	215	210
75°	197	194	192
80°	169	172	166
85°	140	146	140



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.3	3.5
10°-20°	15.0	10.0
20°-30°	22.3	14.9
30°-40°	26.3	17.5
40°-50°	26.6	17.8
50°-60°	23.6	15.8
60°-70°	17.8	11.9
70°-80°	10.0	6.7
80°-90°	2.7	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°	42.7	28.5
0°-40°	68.9	46.1
0°-60°	119.2	79.6
0°-90°	149.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	149.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	56	56	56	56	56	
5°	56	56	56	56	56	5
15°	53	54	53	53	54	15
25°	49	49	48	48	49	22
35°	42	42	42	42	42	26
45°	35	35	34	34	35	27
55°	27	27	26	26	26	24
65°	18	18	18	18	18	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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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	56.1	56.1	56.1	56.1	56.1
2.5°	56.0	56.4	55.7	56.1	56.0
5°	55.8	56.3	55.6	55.7	56.0
7.5°	55.4	55.9	55.2	55.3	55.7
10°	54.9	55.3	54.6	54.9	55.1
12.5°	54.2	54.6	53.9	54.2	54.4
15°	53.3	53.6	53.0	53.2	53.5
17.5°	52.3	52.6	51.9	52.3	52.4
20°	51.2	51.5	50.9	51.1	51.3
22.5°	49.9	50.3	49.5	49.6	50.1
25°	48.6	48.9	48.2	48.2	48.5
27.5°	47.3	47.4	46.7	46.8	47.0
30°	45.6	45.8	45.1	45.2	45.4
32.5°	43.9	44.1	43.4	43.5	43.8
35°	42.2	42.3	41.6	41.8	42.1
37.5°	40.5	40.5	39.9	40.0	40.3
40°	38.6	38.6	38.0	38.1	38.4
42.5°	36.7	36.7	36.1	36.3	36.5
45°	34.8	34.7	34.2	34.3	34.6
47.5°	32.9	32.8	32.3	32.4	32.6
50°	30.8	30.7	30.3	30.3	30.5
52.5°	28.7	28.8	28.4	28.4	28.6
55°	26.6	26.7	26.2	26.3	26.4
57.5°	24.6	24.6	24.2	24.3	24.3
60°	22.4	22.5	22.1	22.2	22.2
62.5°	20.4	20.4	20.0	20.0	19.9
65°	18.2	18.1	17.9	18.0	17.8
67.5°	16.0	15.9	15.8	15.8	15.7
70°	13.9	13.8	13.7	13.6	13.4
72.5°	11.7	11.6	11.4	11.5	11.3
75°	9.5	9.5	9.4	9.5	9.3
77.5°	7.5	7.4	7.4	7.4	7.3
80°	5.5	5.5	5.6	5.6	5.3
82.5°	3.8	3.7	3.8	3.9	3.7
85°	2.3	2.3	2.4	2.4	2.3
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)