

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: P

Luminaire Tested: **4APN-X-X-NL840-UNV-NP**

Issue Date: 06/06/2024



Test Information

Test Method: LM-79-08
Report Number: P
Test Lab: INNOVATION CENTER(G2)
Issue Date: 06/06/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 4APN-X-X-NL840-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light w/ Nature Pattern Lens
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

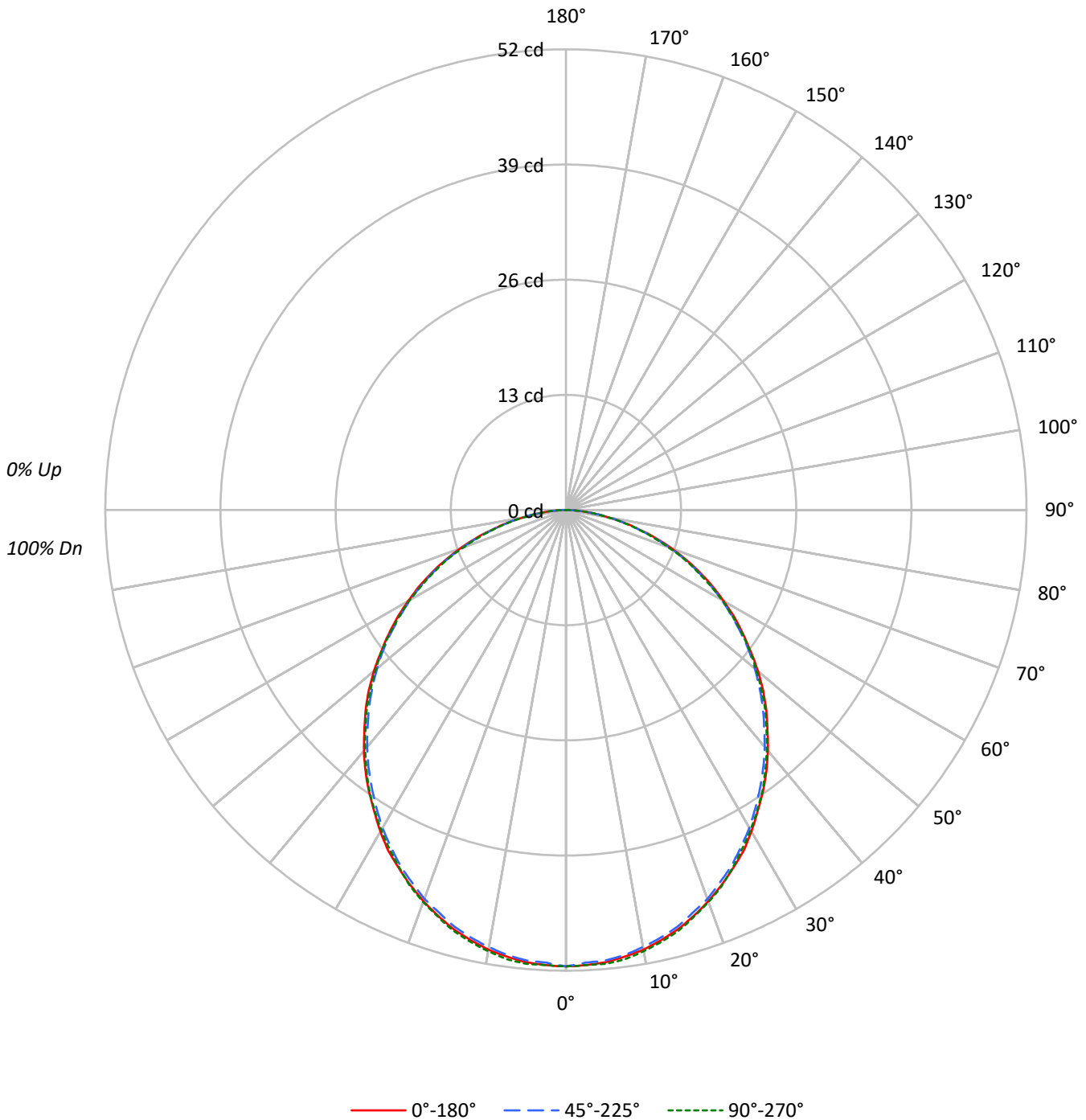
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 137.4 lumens
Efficiency: N/A
Efficacy: 39.3 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				
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°	277	277	277
5°	277	276	278
10°	275	274	276
15°	273	271	274
20°	269	268	270
25°	265	263	264
30°	260	257	259
35°	255	251	254
40°	249	245	248
45°	243	239	242
50°	237	233	235
55°	229	226	228
60°	221	218	219
65°	213	209	208
70°	200	197	193
75°	180	178	177
80°	155	158	152
85°	128	134	128



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.9	3.5
10°-20°	13.8	10.0
20°-30°	20.5	14.9
30°-40°	24.1	17.5
40°-50°	24.4	17.8
50°-60°	21.7	15.8
60°-70°	16.3	11.9
70°-80°	9.2	6.7
80°-90°	2.5	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°	39.2	28.5
0°-40°	63.3	46.1
0°-60°	109.4	79.6
0°-90°	137.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	137.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	52	52	52	52	52	
5°	51	52	51	51	51	5
15°	49	49	49	49	49	14
25°	45	45	44	44	45	21
35°	39	39	38	38	39	24
45°	32	32	31	32	32	25
55°	24	25	24	24	24	22
65°	17	17	16	17	16	17
75°	9	9	9	9	8	9
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°	51.5	51.5	51.5	51.5	51.5
2.5°	51.4	51.8	51.1	51.5	51.4
5°	51.2	51.7	51.0	51.1	51.4
7.5°	50.9	51.3	50.7	50.8	51.1
10°	50.4	50.8	50.1	50.4	50.6
12.5°	49.7	50.1	49.4	49.7	49.9
15°	49.0	49.3	48.7	48.9	49.2
17.5°	48.0	48.3	47.7	48.0	48.1
20°	47.0	47.3	46.7	46.9	47.1
22.5°	45.9	46.1	45.5	45.6	46.0
25°	44.6	44.9	44.3	44.3	44.5
27.5°	43.4	43.5	42.8	42.9	43.1
30°	41.9	42.1	41.4	41.5	41.7
32.5°	40.3	40.5	39.8	39.9	40.2
35°	38.8	38.9	38.2	38.4	38.7
37.5°	37.2	37.2	36.6	36.7	37.0
40°	35.5	35.5	34.9	35.0	35.3
42.5°	33.7	33.7	33.1	33.3	33.5
45°	32.0	31.9	31.4	31.5	31.8
47.5°	30.2	30.1	29.6	29.7	29.9
50°	28.3	28.2	27.8	27.8	28.0
52.5°	26.3	26.4	26.0	26.0	26.2
55°	24.4	24.5	24.1	24.2	24.3
57.5°	22.6	22.6	22.2	22.3	22.3
60°	20.6	20.7	20.3	20.4	20.4
62.5°	18.7	18.7	18.4	18.4	18.3
65°	16.7	16.6	16.4	16.5	16.3
67.5°	14.7	14.6	14.5	14.5	14.4
70°	12.7	12.6	12.6	12.5	12.3
72.5°	10.8	10.7	10.5	10.6	10.4
75°	8.7	8.7	8.6	8.7	8.5
77.5°	6.9	6.8	6.8	6.8	6.7
80°	5.0	5.0	5.1	5.1	4.9
82.5°	3.5	3.4	3.5	3.6	3.4
85°	2.1	2.1	2.2	2.2	2.1
87.5°	0.9	0.9	1.0	1.0	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)