

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: P709046

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

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709046
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-NL840-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

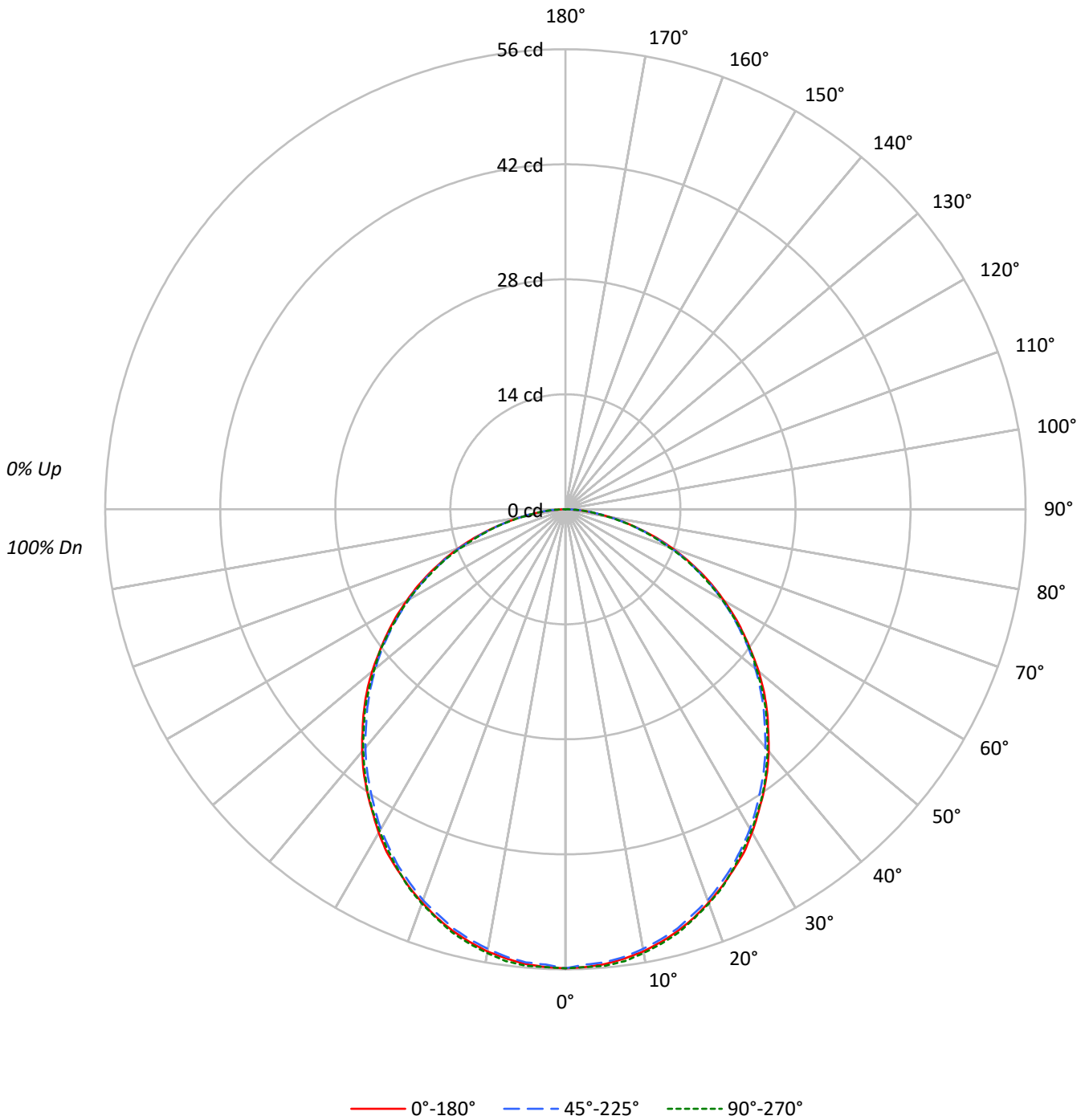
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 149.0 lumens
Efficiency: N/A
Efficacy: 42.6 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 (A_{in}): 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°	301	301	301
5°	300	299	301
10°	299	297	300
15°	296	294	297
20°	292	290	292
25°	287	285	287
30°	282	279	281
35°	276	272	276
40°	270	266	269
45°	264	259	263
50°	257	253	254
55°	249	245	247
60°	240	237	238
65°	231	227	225
70°	217	214	209
75°	196	194	192
80°	168	171	165
85°	139	145	139



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.3	3.5
10°-20°	15.0	10.0
20°-30°	22.2	14.9
30°-40°	26.1	17.5
40°-50°	26.5	17.8
50°-60°	23.5	15.8
60°-70°	17.7	11.9
70°-80°	9.9	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°	42.5	28.5
0°-40°	68.6	46.1
0°-60°	118.7	79.6
0°-90°	149.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	149.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	56	56	56	56	56	
5°	56	56	55	55	56	5
15°	53	53	53	53	53	15
25°	48	49	48	48	48	22
35°	42	42	41	42	42	26
45°	35	35	34	34	34	27
55°	26	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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CATALOG NUMBER: 4APN-X-X-NL840-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	55.9	55.9	55.9	55.9	55.9
2.5°	55.8	56.2	55.5	55.9	55.8
5°	55.6	56.1	55.4	55.5	55.8
7.5°	55.2	55.7	55.0	55.1	55.5
10°	54.7	55.1	54.3	54.7	54.9
12.5°	53.9	54.3	53.6	53.9	54.1
15°	53.1	53.4	52.8	53.0	53.3
17.5°	52.1	52.4	51.7	52.1	52.2
20°	51.0	51.3	50.7	50.9	51.1
22.5°	49.7	50.0	49.3	49.4	49.8
25°	48.4	48.7	48.0	48.0	48.3
27.5°	47.1	47.2	46.5	46.6	46.8
30°	45.4	45.6	44.9	45.0	45.2
32.5°	43.7	43.9	43.2	43.3	43.6
35°	42.1	42.2	41.5	41.7	42.0
37.5°	40.3	40.3	39.7	39.8	40.1
40°	38.5	38.5	37.9	38.0	38.3
42.5°	36.5	36.5	35.9	36.1	36.3
45°	34.7	34.6	34.1	34.2	34.5
47.5°	32.8	32.6	32.1	32.2	32.4
50°	30.7	30.6	30.2	30.2	30.4
52.5°	28.6	28.7	28.2	28.2	28.5
55°	26.5	26.6	26.1	26.2	26.3
57.5°	24.5	24.5	24.1	24.2	24.2
60°	22.3	22.4	22.0	22.1	22.1
62.5°	20.3	20.3	20.0	20.0	19.9
65°	18.1	18.0	17.8	17.9	17.7
67.5°	16.0	15.9	15.8	15.8	15.7
70°	13.8	13.7	13.6	13.5	13.3
72.5°	11.7	11.6	11.4	11.5	11.3
75°	9.4	9.4	9.3	9.4	9.2
77.5°	7.5	7.4	7.4	7.4	7.3
80°	5.4	5.4	5.5	5.5	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)