

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: P709048

Luminaire Tested: **4APN-X-X-NL930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709048
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-NL930-UNV
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture NIGHT Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

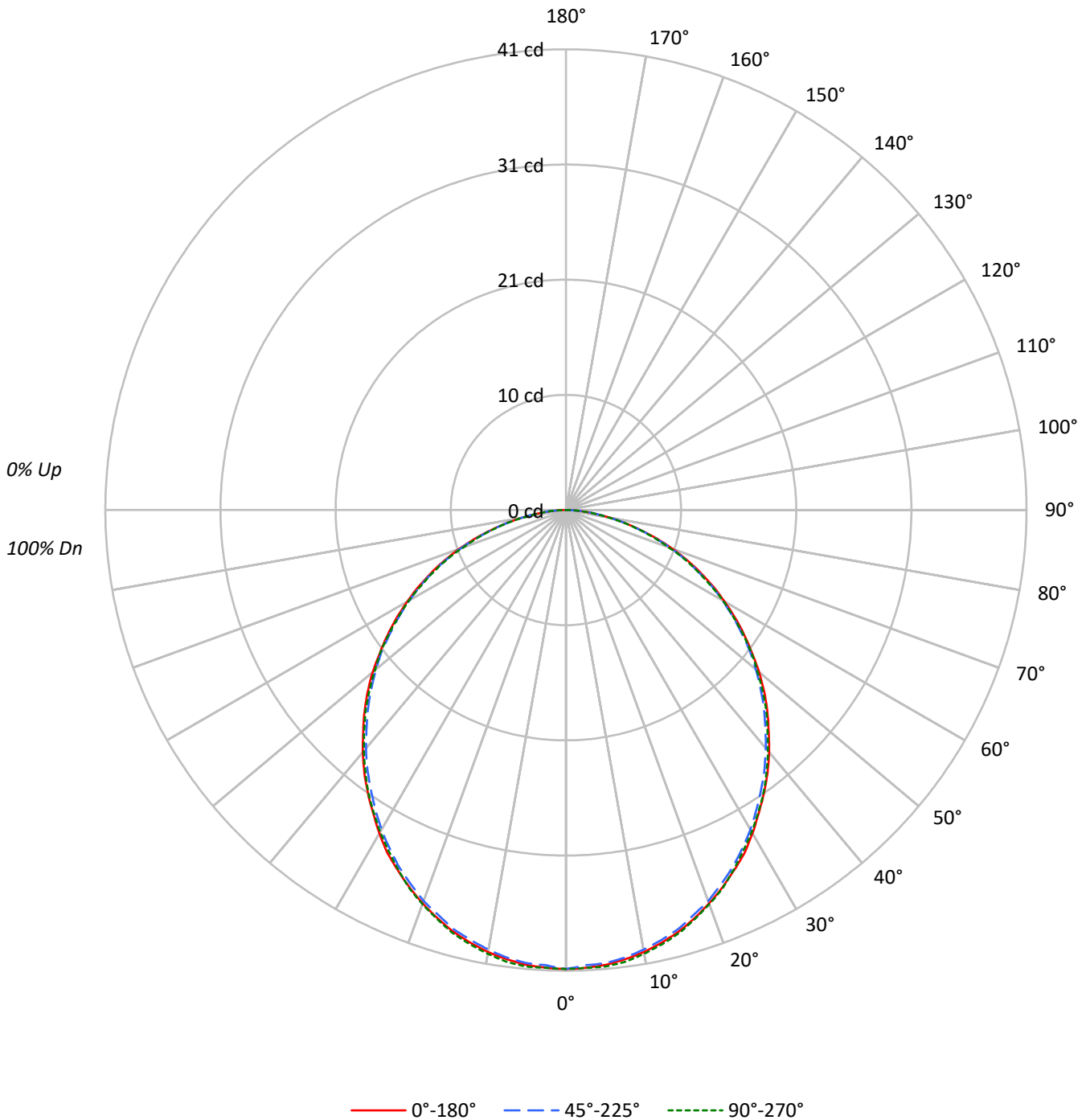
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 108.9 lumens
Efficiency: N/A
Efficacy: 31.1 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

TEST NUMBER: P709048
CATALOG NUMBER: 4APN-X-X-NL930-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P709048
 CATALOG NUMBER: 4APN-X-X-NL930-UNV

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	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°	220	220	220
5°	220	219	220
10°	218	217	219
15°	216	215	217
20°	213	212	214
25°	210	208	210
30°	206	204	206
35°	202	199	202
40°	198	194	197
45°	193	190	192
50°	188	185	186
55°	182	179	180
60°	176	173	174
65°	169	166	165
70°	159	157	153
75°	143	142	140
80°	123	125	121
85°	102	106	102



TEST NUMBER: P709048
 CATALOG NUMBER: 4APN-X-X-NL930-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.9	3.5
10°-20°	10.9	10.0
20°-30°	16.3	14.9
30°-40°	19.1	17.5
40°-50°	19.4	17.8
50°-60°	17.2	15.8
60°-70°	13.0	11.9
70°-80°	7.3	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°	31.1	28.5
0°-40°	50.2	46.1
0°-60°	86.8	79.6
0°-90°	108.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	108.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	41	41	41	41	41	
5°	41	41	40	41	41	4
15°	39	39	39	39	39	11
25°	35	36	35	35	35	16
35°	31	31	30	30	31	19
45°	25	25	25	25	25	20
55°	19	19	19	19	19	17
65°	13	13	13	13	13	13
75°	7	7	7	7	7	7
85°	2	2	2	2	2	2
90°	0	0	0	0	0	



TEST NUMBER: P709048

CATALOG NUMBER: 4APN-X-X-NL930-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	40.9	40.9	40.9	40.9	40.9
2.5°	40.8	41.1	40.6	40.9	40.8
5°	40.6	41.0	40.5	40.6	40.8
7.5°	40.3	40.7	40.2	40.3	40.6
10°	40.0	40.3	39.7	40.0	40.1
12.5°	39.4	39.7	39.2	39.4	39.6
15°	38.8	39.1	38.6	38.8	39.0
17.5°	38.1	38.3	37.8	38.1	38.2
20°	37.3	37.5	37.0	37.2	37.3
22.5°	36.4	36.6	36.1	36.1	36.4
25°	35.4	35.6	35.1	35.1	35.3
27.5°	34.4	34.5	34.0	34.0	34.2
30°	33.2	33.4	32.8	32.9	33.1
32.5°	32.0	32.1	31.6	31.7	31.9
35°	30.8	30.8	30.3	30.5	30.7
37.5°	29.5	29.5	29.0	29.1	29.3
40°	28.1	28.1	27.7	27.8	28.0
42.5°	26.7	26.7	26.3	26.4	26.6
45°	25.4	25.3	24.9	25.0	25.2
47.5°	23.9	23.9	23.5	23.6	23.7
50°	22.5	22.4	22.1	22.1	22.2
52.5°	20.9	21.0	20.7	20.7	20.8
55°	19.4	19.5	19.1	19.2	19.2
57.5°	17.9	17.9	17.6	17.7	17.7
60°	16.3	16.4	16.1	16.2	16.2
62.5°	14.8	14.8	14.6	14.6	14.5
65°	13.2	13.2	13.0	13.1	12.9
67.5°	11.7	11.6	11.5	11.5	11.5
70°	10.1	10.0	10.0	9.9	9.7
72.5°	8.5	8.5	8.3	8.4	8.2
75°	6.9	6.9	6.8	6.9	6.7
77.5°	5.5	5.4	5.4	5.4	5.3
80°	4.0	4.0	4.0	4.0	3.9
82.5°	2.8	2.7	2.8	2.8	2.7
85°	1.7	1.7	1.7	1.7	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)