

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-RL935-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-RL935-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture READING Light w/ Nature Pattern Lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

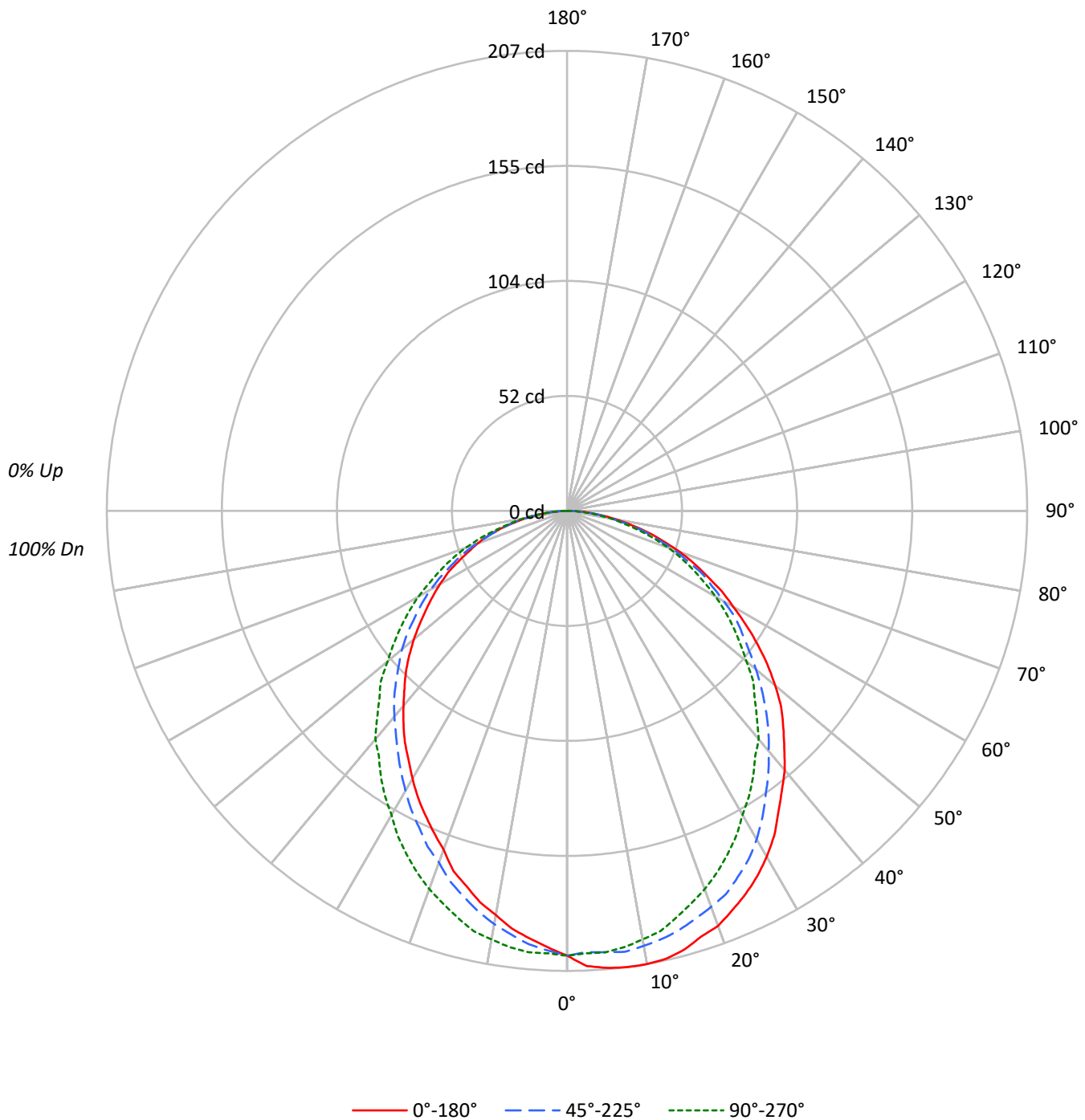
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 521.3 lumens
Efficiency: N/A
Efficacy: 34.5 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.18 / 1.3
Luminous Opening: Rectangular (W 0.5' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 15.1
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
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	98	94	91		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	56	81	70	61	55	67	60	54		65	59	54		63
5	76	63	55	48	74	62	54	48	60	53	47		58	52	47		56
6	71	57	48	42	69	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		47
8	61	48	39	33	59	47	39	33	45	38	33		44	38	33		43
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1077	1077	1077
5°	1115	1077	1043
10°	1132	1070	1009
15°	1138	1056	974
20°	1138	1037	929
25°	1129	1013	896
30°	1117	981	864
35°	1089	959	835
40°	1070	942	804
45°	1047	908	780
50°	1023	882	753
55°	981	857	725
60°	930	832	710
65°	885	796	688
70°	850	762	673
75°	788	686	643
80°	716	632	589
85°	648	519	475



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	18.9	3.6
10°-20°	53.2	10.2
20°-30°	78.2	15.0
30°-40°	91.0	17.4
40°-50°	91.6	17.6
50°-60°	81.3	15.6
60°-70°	61.4	11.8
70°-80°	35.5	6.8
80°-90°	10.3	2.0
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°	150.3	28.8
0°-40°	241.2	46.3
0°-60°	414.1	79.4
0°-90°	521.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	521.3	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	200	200	200	200	200	
5°	206	199	199	196	193	20
15°	204	195	190	180	175	58
25°	190	182	171	157	151	88
35°	166	156	146	133	127	104
45°	138	126	119	109	102	106
55°	105	96	91	84	77	93
65°	70	67	62	57	54	69
75°	38	36	33	30	31	40
85°	10	10	8	8	8	12
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	200.1	200.1	200.1	200.1	200.1	200.1	200.1	200.1	200.1
2.5°	205.0	202.8	198.7	198.0	199.3	201.5	198.0	198.7	196.6
5°	206.4	203.6	199.3	197.3	199.3	199.3	195.8	195.2	193.1
7.5°	207.1	204.3	200.1	196.6	198.0	197.3	192.3	191.7	189.6
10°	207.1	204.3	198.7	195.2	195.8	194.4	188.8	187.4	184.6
12.5°	206.4	202.8	197.3	193.1	193.7	190.9	184.6	182.6	180.4
15°	204.3	200.1	195.2	190.9	189.6	186.7	179.7	177.6	174.8
17.5°	200.8	198.0	192.3	187.4	185.3	181.8	174.8	172.0	169.9
20°	198.7	194.4	189.6	183.9	181.1	176.2	168.4	165.7	162.2
22.5°	194.4	190.9	186.7	178.3	176.2	170.6	163.6	159.3	156.6
25°	190.2	186.1	181.8	174.1	170.6	165.7	157.3	153.7	150.9
27.5°	185.3	181.1	176.9	168.4	164.9	159.3	151.7	147.4	145.3
30°	179.7	175.5	170.6	163.6	157.9	153.1	145.3	141.8	139.0
32.5°	173.4	168.4	163.6	156.6	152.3	146.7	139.0	135.4	132.7
35°	165.7	160.8	155.8	150.2	146.0	140.4	132.7	129.9	127.1
37.5°	158.7	153.7	148.8	143.9	139.0	135.4	126.4	123.5	120.8
40°	152.3	146.0	141.1	136.9	134.1	127.1	120.8	117.3	114.4
42.5°	144.6	139.0	134.1	130.6	126.4	122.2	115.2	111.7	108.2
45°	137.6	131.3	126.4	123.5	119.3	114.4	108.8	105.3	102.5
47.5°	130.6	123.5	118.7	115.8	113.7	107.4	102.5	99.7	96.2
50°	122.2	115.8	110.9	108.8	105.3	100.4	96.9	93.4	89.9
52.5°	113.7	108.8	103.2	101.8	98.3	94.8	90.5	87.8	83.5
55°	104.6	100.4	96.2	94.8	91.3	88.4	83.5	81.4	77.3
57.5°	95.4	92.7	89.9	87.8	84.3	80.8	77.3	75.1	71.6
60°	86.4	84.9	81.4	82.2	77.3	73.7	70.9	68.8	66.0
62.5°	78.6	77.3	73.7	71.6	69.5	66.0	63.9	62.5	60.4
65°	69.5	68.8	67.4	64.5	62.5	59.0	56.9	55.5	54.0
67.5°	61.8	61.0	58.3	56.9	55.5	51.9	50.5	49.1	47.8
70°	54.0	52.6	51.3	50.5	48.4	44.9	43.5	42.1	42.8
72.5°	45.6	44.9	42.8	43.5	40.8	37.9	36.5	37.9	37.2
75°	37.9	37.2	35.8	34.4	33.0	30.9	30.1	31.6	30.9
77.5°	30.1	29.5	28.1	27.4	26.0	23.9	25.3	24.5	23.9
80°	23.1	22.5	21.0	21.0	20.4	18.3	19.0	19.0	19.0
82.5°	16.1	16.1	15.5	14.8	13.4	12.6	13.4	13.4	12.6
85°	10.5	10.5	9.9	9.1	8.4	7.7	8.4	8.4	7.7
87.5°	6.4	5.6	4.9	4.9	4.2	4.2	4.2	4.2	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)