

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-RL950-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-RL950-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture READING Light w/ Nature Pattern Lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

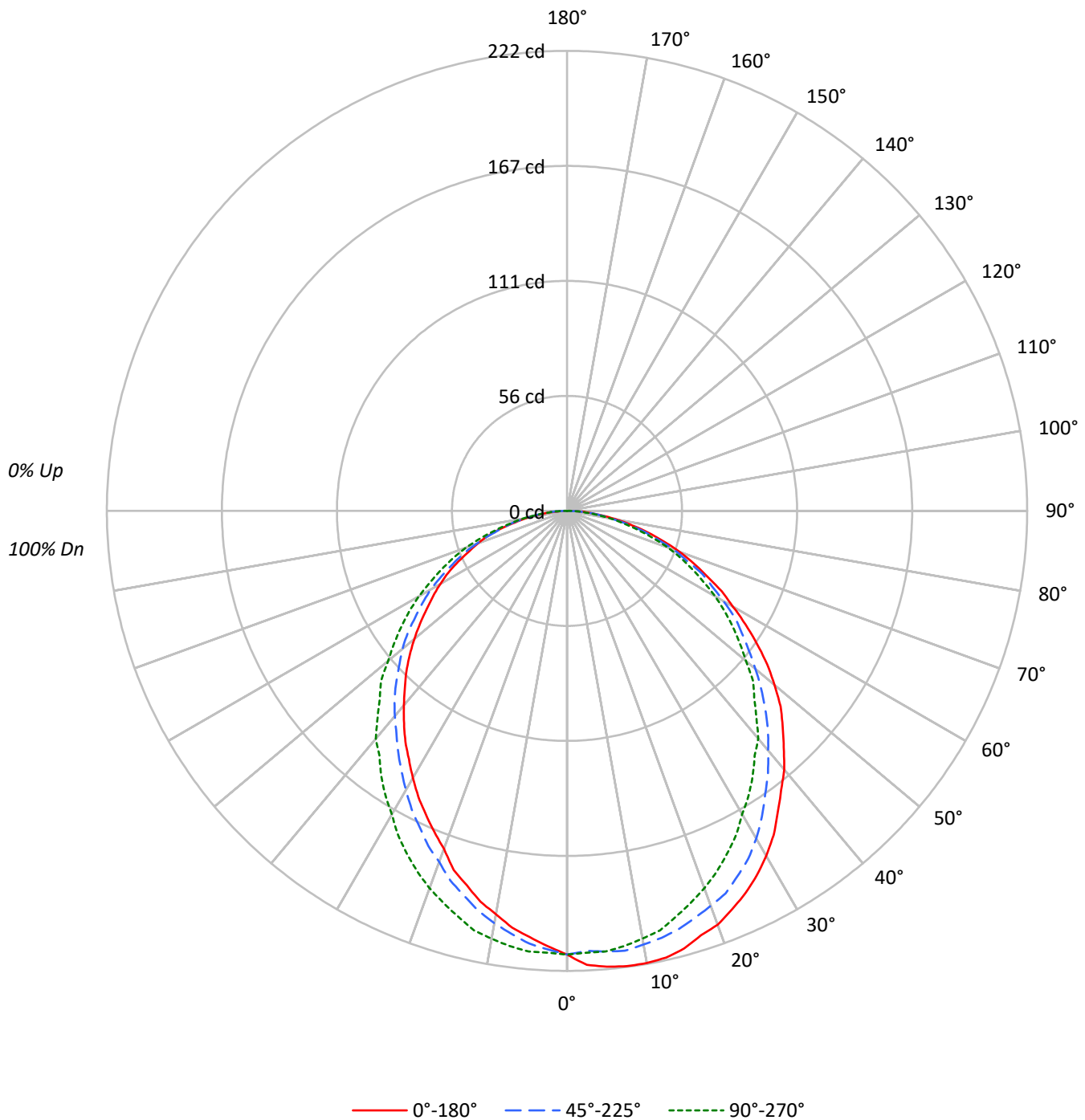
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 557.8 lumens
Efficiency: N/A
Efficacy: 36.9 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

TEST NUMBER: P
CATALOG NUMBER: 4APN-X-X-RL950-UNV-NP

Luminous Intensity Polar Plot



TEST NUMBER: P

CATALOG NUMBER: 4APN-X-X-RL950-UNV-NP

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				0
RW	70	50	30	10	70	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		100
1	109	104	100	96	106	102	98	94	98	94	91		94	91	89		84
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		70
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		59
4	83	71	62	56	81	70	61	55	67	60	54		65	59	54		51
5	76	63	55	48	74	62	54	48	60	53	47		58	52	47		44
6	71	57	48	42	69	56	48	42	54	47	41		53	46	41		39
7	65	52	43	37	64	51	43	37	50	42	37		48	41	36		34
8	61	48	39	33	59	47	39	33	45	38	33		44	38	33		31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		28
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		25

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1152	1152	1152
5°	1193	1153	1116
10°	1211	1145	1080
15°	1218	1130	1042
20°	1217	1110	994
25°	1209	1084	958
30°	1194	1050	924
35°	1165	1026	893
40°	1145	1008	860
45°	1120	972	834
50°	1093	944	805
55°	1050	916	775
60°	995	889	760
65°	946	851	736
70°	910	815	721
75°	844	734	686
80°	769	676	629
85°	692	556	513



TEST NUMBER: P
 CATALOG NUMBER: 4APN-X-X-RL950-UNV-NP

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.2	3.6
10°-20°	56.9	10.2
20°-30°	83.7	15.0
30°-40°	97.3	17.4
40°-50°	98.0	17.6
50°-60°	87.0	15.6
60°-70°	65.7	11.8
70°-80°	38.0	6.8
80°-90°	11.0	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°	160.8	28.8
0°-40°	258.1	46.3
0°-60°	443.0	79.4
0°-90°	557.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	557.8	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	214	214	214	214	214	
5°	221	213	213	210	206	21
15°	219	209	203	192	187	62
25°	204	194	183	168	161	94
35°	177	167	156	142	136	111
45°	147	135	128	116	110	114
55°	112	103	98	89	83	100
65°	74	72	67	61	58	74
75°	41	38	35	32	33	43
85°	11	10	9	9	8	13
90°	0	0	0	0	0	

TEST NUMBER: P

CATALOG NUMBER: 4APN-X-X-RL950-UNV-NP

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1	214.1
2.5°	219.3	217.0	212.5	211.8	213.4	215.6	211.8	212.5	210.3
5°	220.8	217.8	213.4	211.0	213.4	213.4	209.6	208.8	206.5
7.5°	221.6	218.6	214.1	210.3	211.8	211.0	205.8	205.1	202.8
10°	221.6	218.6	212.5	208.8	209.6	208.1	202.0	200.5	197.6
12.5°	220.8	217.0	211.0	206.5	207.3	204.3	197.6	195.3	193.1
15°	218.6	214.1	208.8	204.3	202.8	199.8	192.2	190.0	187.0
17.5°	214.8	211.8	205.8	200.5	198.3	194.5	187.0	184.0	181.7
20°	212.5	208.1	202.8	196.8	193.8	188.5	180.3	177.3	173.5
22.5°	208.1	204.3	199.8	190.8	188.5	182.6	175.0	170.5	167.5
25°	203.6	199.1	194.5	186.2	182.6	177.3	168.3	164.5	161.4
27.5°	198.3	193.8	189.3	180.3	176.5	170.5	162.3	157.8	155.4
30°	192.2	187.8	182.6	175.0	169.0	163.7	155.4	151.8	148.7
32.5°	185.5	180.3	175.0	167.5	163.0	157.0	148.7	144.9	142.0
35°	177.3	172.0	166.7	160.7	156.2	150.2	142.0	138.9	135.9
37.5°	169.7	164.5	159.2	154.0	148.7	144.9	135.2	132.2	129.2
40°	163.0	156.2	150.9	146.5	143.5	135.9	129.2	125.4	122.4
42.5°	154.7	148.7	143.5	139.7	135.2	130.6	123.2	119.4	115.7
45°	147.2	140.4	135.2	132.2	127.7	122.4	116.4	112.7	109.6
47.5°	139.7	132.2	127.0	123.9	121.7	114.9	109.6	106.7	102.9
50°	130.6	123.9	118.7	116.4	112.7	107.4	103.6	99.9	96.2
52.5°	121.7	116.4	110.5	108.9	105.1	101.4	96.9	93.9	89.3
55°	111.9	107.4	102.9	101.4	97.6	94.6	89.3	87.1	82.6
57.5°	102.2	99.1	96.2	93.9	90.2	86.4	82.6	80.4	76.6
60°	92.4	90.9	87.1	87.9	82.6	78.8	75.9	73.6	70.6
62.5°	84.1	82.6	78.8	76.6	74.3	70.6	68.3	66.8	64.6
65°	74.3	73.6	72.1	69.1	66.8	63.1	60.9	59.4	57.8
67.5°	66.1	65.4	62.3	60.9	59.4	55.6	54.1	52.6	51.1
70°	57.8	56.3	54.9	54.1	51.8	48.0	46.6	45.1	45.8
72.5°	48.9	48.0	45.8	46.6	43.5	40.6	39.1	40.6	39.8
75°	40.6	39.8	38.3	36.8	35.3	33.0	32.3	33.8	33.0
77.5°	32.3	31.5	30.1	29.3	27.8	25.5	27.0	26.3	25.5
80°	24.8	24.1	22.5	22.5	21.8	19.5	20.3	20.3	20.3
82.5°	17.2	17.2	16.5	15.8	14.3	13.6	14.3	14.3	13.6
85°	11.2	11.2	10.5	9.8	9.0	8.3	9.0	9.0	8.3
87.5°	6.7	6.0	5.3	5.3	4.5	4.5	4.5	4.5	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)