

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-RL940-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-RL940-UNV-NP
Description: ArcMed Patient Recessed 4 FT x6 IN Fixture READING Light w/ Nature Pattern Lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

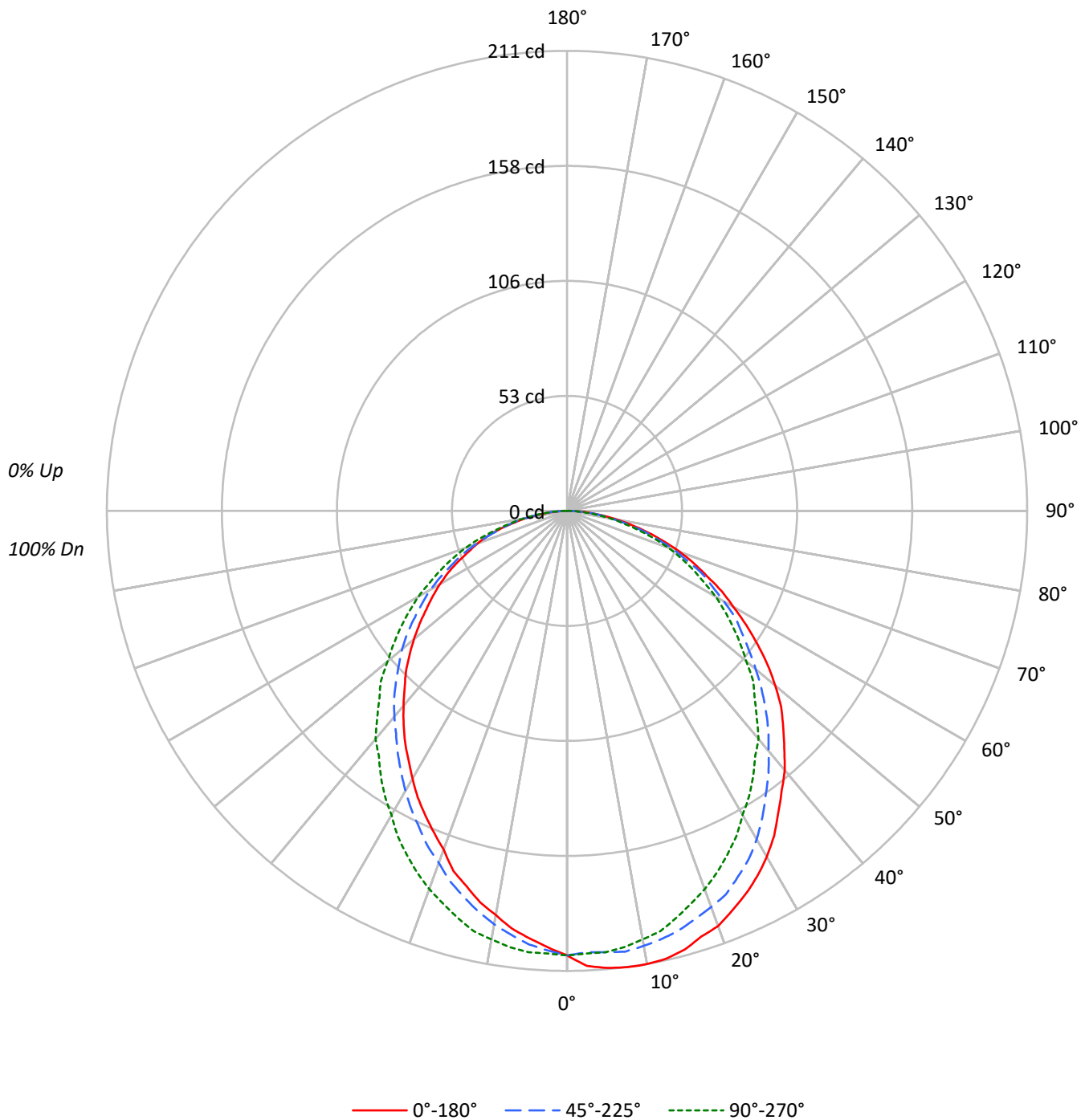
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 531.4 lumens
Efficiency: N/A
Efficacy: 35.2 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°	1097	1097	1097
5°	1137	1098	1063
10°	1154	1091	1029
15°	1161	1077	993
20°	1160	1057	947
25°	1151	1033	914
30°	1139	1001	881
35°	1110	978	851
40°	1091	960	819
45°	1067	926	795
50°	1043	898	767
55°	1000	873	738
60°	948	847	724
65°	902	811	702
70°	867	777	686
75°	803	701	655
80°	731	642	601
85°	661	531	482



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	19.2	3.6
10°-20°	54.2	10.2
20°-30°	79.8	15.0
30°-40°	92.7	17.4
40°-50°	93.3	17.6
50°-60°	82.9	15.6
60°-70°	62.6	11.8
70°-80°	36.2	6.8
80°-90°	10.5	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°	153.2	28.8
0°-40°	245.9	46.3
0°-60°	422.1	79.4
0°-90°	531.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	531.4	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	204	204	204	204	204	
5°	210	203	203	200	197	20
15°	208	199	193	183	178	59
25°	194	185	174	160	154	89
35°	169	159	149	135	130	106
45°	140	129	122	111	104	108
55°	107	98	93	85	79	95
65°	71	69	64	58	55	71
75°	39	36	34	31	32	41
85°	11	10	9	9	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°	203.9	203.9	203.9	203.9	203.9	203.9	203.9	203.9	203.9
2.5°	208.9	206.8	202.6	201.8	203.2	205.4	201.8	202.6	200.4
5°	210.4	207.5	203.2	201.1	203.2	203.2	199.6	199.0	196.8
7.5°	211.1	208.3	203.9	200.4	201.8	201.1	196.1	195.4	193.3
10°	211.1	208.3	202.6	199.0	199.6	198.2	192.5	191.0	188.2
12.5°	210.4	206.8	201.1	196.8	197.5	194.6	188.2	186.1	183.9
15°	208.3	203.9	199.0	194.6	193.3	190.4	183.2	181.1	178.2
17.5°	204.7	201.8	196.1	191.0	188.9	185.3	178.2	175.4	173.2
20°	202.6	198.2	193.3	187.5	184.6	179.6	171.8	168.9	165.3
22.5°	198.2	194.6	190.4	181.7	179.6	173.9	166.7	162.5	159.6
25°	193.9	189.7	185.3	177.5	173.9	168.9	160.3	156.7	153.9
27.5°	188.9	184.6	180.3	171.8	168.2	162.5	154.5	150.3	148.2
30°	183.2	178.9	173.9	166.7	161.0	156.0	148.2	144.6	141.7
32.5°	176.7	171.8	166.7	159.6	155.3	149.5	141.7	138.1	135.3
35°	168.9	163.8	158.9	153.1	148.8	143.1	135.3	132.4	129.5
37.5°	161.7	156.7	151.7	146.7	141.7	138.1	128.8	125.9	123.1
40°	155.3	148.8	143.8	139.6	136.6	129.5	123.1	119.5	116.6
42.5°	147.4	141.7	136.6	133.1	128.8	124.6	117.4	113.8	110.2
45°	140.2	133.8	128.8	125.9	121.6	116.6	110.9	107.3	104.5
47.5°	133.1	125.9	121.0	118.1	115.9	109.5	104.5	101.6	98.0
50°	124.6	118.1	113.0	110.9	107.3	102.3	98.7	95.2	91.6
52.5°	115.9	110.9	105.2	103.7	100.2	96.6	92.3	89.4	85.2
55°	106.6	102.3	98.0	96.6	93.0	90.2	85.2	83.0	78.7
57.5°	97.4	94.5	91.6	89.4	85.8	82.3	78.7	76.5	73.0
60°	88.1	86.6	83.0	83.7	78.7	75.1	72.3	70.2	67.3
62.5°	80.1	78.7	75.1	73.0	70.8	67.3	65.1	63.7	61.5
65°	70.8	70.2	68.7	65.8	63.7	60.1	58.0	56.5	55.1
67.5°	63.0	62.2	59.4	58.0	56.5	52.9	51.5	50.1	48.7
70°	55.1	53.7	52.3	51.5	49.4	45.8	44.3	43.0	43.6
72.5°	46.6	45.8	43.6	44.3	41.5	38.6	37.2	38.6	37.9
75°	38.6	37.9	36.5	35.0	33.7	31.5	30.8	32.2	31.5
77.5°	30.8	30.1	28.6	27.9	26.5	24.3	25.7	25.1	24.3
80°	23.6	22.9	21.5	21.5	20.7	18.6	19.4	19.4	19.4
82.5°	16.5	16.5	15.8	15.0	13.6	12.9	13.6	13.6	12.9
85°	10.7	10.7	10.0	9.3	8.6	7.8	8.6	8.6	7.8
87.5°	6.5	5.7	5.0	5.0	4.3	4.3	4.3	4.3	2.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)