

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: P708899

Luminaire Tested: **22APR-X-X-UNV-RL950**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708899
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-X-X-UNV-RL950
Description: ArcMed Patient Recessed 2x2 Fixture READING Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

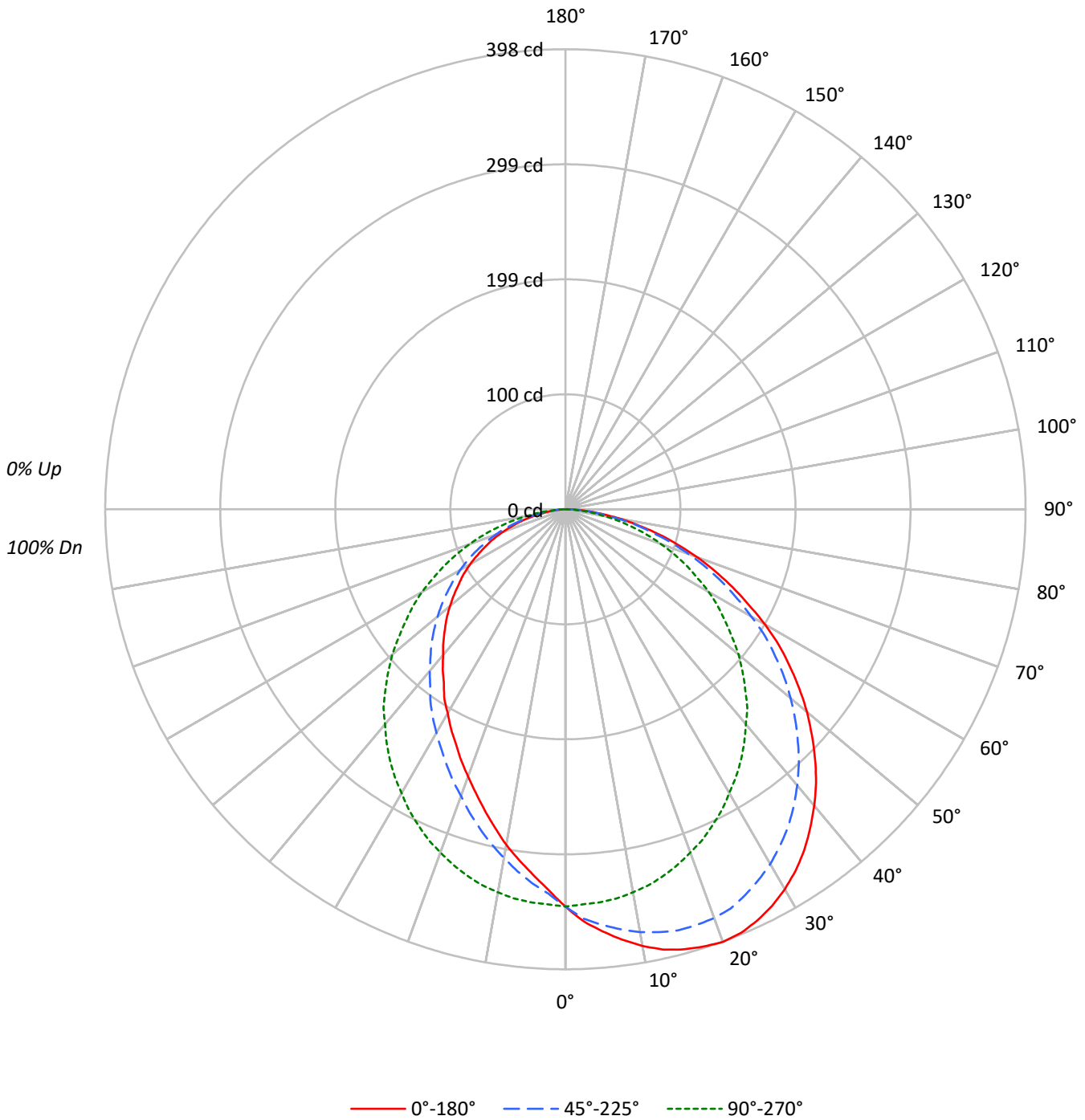
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 958.7 lumens
Efficiency: N/A
Efficacy: 68.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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			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	94	98	94	91	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	75	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	64	75	69	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	53	53	53	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	41	68	56	47	41	54	47	41	52	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	36	36	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	32	32	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	31	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	925	925	925
5°	990	922	858
10°	1048	919	806
15°	1098	914	751
20°	1141	905	704
25°	1166	895	665
30°	1179	881	633
35°	1183	870	602
40°	1176	853	578
45°	1162	837	561
50°	1142	818	545
55°	1112	791	527
60°	1074	771	513
65°	1016	737	488
70°	955	692	455
75°	872	627	407
80°	758	542	329
85°	630	426	225



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.6	3.4
10°-20°	93.4	9.7
20°-30°	140.8	14.7
30°-40°	168.1	17.5
40°-50°	172.5	18.0
50°-60°	154.3	16.1
60°-70°	115.9	12.1
70°-80°	64.8	6.8
80°-90°	16.5	1.7
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°	266.7	27.8
0°-40°	434.8	45.4
0°-60°	761.6	79.4
0°-90°	958.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	958.7	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	344	344	344	344	344	
5°	366	361	341	325	318	35
15°	394	377	328	286	270	112
25°	393	368	301	244	224	181
35°	360	336	265	204	183	225
45°	305	284	220	164	147	235
55°	237	222	169	125	112	212
65°	160	150	116	85	77	158
75°	84	78	60	43	39	89
85°	20	19	14	9	7	24
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°	343.7	343.7	343.7	343.7	343.7	343.7	343.7	343.7	343.7
2.5°	356.7	355.1	354.3	348.6	342.1	339.6	333.1	333.1	329.9
5°	366.5	364.9	360.8	351.9	341.3	333.9	325.0	321.7	317.6
7.5°	375.5	372.2	366.5	353.5	339.6	328.2	316.0	310.3	306.2
10°	383.6	380.4	371.4	355.1	336.4	321.7	306.2	298.9	294.8
12.5°	390.1	386.1	374.7	355.1	333.1	313.6	296.5	286.7	281.8
15°	394.2	390.1	377.1	354.3	328.2	306.2	285.9	275.3	269.6
17.5°	396.7	391.8	377.1	351.9	322.5	297.3	275.3	263.1	257.4
20°	398.3	392.6	376.3	347.8	316.0	288.3	263.9	252.5	246.0
22.5°	396.7	390.1	373.8	343.7	309.5	278.6	254.1	241.1	235.4
25°	392.6	386.9	368.1	337.2	301.4	269.6	243.5	229.7	224.0
27.5°	386.9	381.2	361.6	329.9	293.2	259.8	232.9	219.1	214.2
30°	379.5	373.0	354.3	321.7	283.4	249.2	223.2	209.3	203.6
32.5°	370.6	364.1	345.3	313.6	274.5	239.5	213.4	199.5	194.7
35°	360.0	354.3	335.6	302.2	264.7	229.7	203.6	188.1	183.3
37.5°	347.8	342.1	324.2	292.4	254.1	219.9	192.2	179.2	174.3
40°	334.8	329.0	311.9	280.2	242.7	209.3	182.4	169.4	164.5
42.5°	320.9	315.2	298.9	268.8	232.9	198.7	172.7	160.5	156.4
45°	305.4	300.5	284.3	255.7	219.9	186.5	163.7	151.5	147.4
47.5°	289.1	284.3	269.6	242.7	207.7	175.9	153.9	142.5	139.3
50°	272.8	268.0	254.1	228.1	195.5	164.5	144.2	133.6	130.3
52.5°	254.9	250.9	238.6	214.2	181.6	153.9	134.4	125.4	121.4
55°	237.0	232.9	221.5	199.5	168.6	143.3	124.6	115.7	112.4
57.5°	219.1	215.8	205.2	182.4	156.4	131.9	114.8	106.7	104.3
60°	199.5	196.3	185.7	167.0	143.3	120.5	105.1	97.7	95.3
62.5°	178.4	175.9	167.8	150.7	128.7	109.1	95.3	88.0	85.5
65°	159.6	157.2	149.9	135.2	115.7	97.7	84.7	79.0	76.6
67.5°	140.1	138.5	131.9	118.9	101.8	86.3	74.1	69.2	67.6
70°	121.4	119.7	114.0	102.6	88.0	74.1	64.3	59.5	57.8
72.5°	101.8	101.8	96.1	86.3	74.9	61.9	53.8	50.5	48.1
75°	83.9	82.3	78.2	70.9	60.3	50.5	43.2	39.9	39.1
77.5°	65.2	65.2	61.9	55.4	48.1	39.1	34.2	31.0	30.1
80°	48.9	48.9	45.6	40.7	35.0	28.5	24.4	22.8	21.2
82.5°	33.4	33.4	31.0	26.9	23.6	18.7	16.3	14.7	13.8
85°	20.4	19.5	18.7	16.3	13.8	10.6	9.0	8.1	7.3
87.5°	9.8	9.8	9.0	6.5	5.7	4.1	3.3	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)