

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: P708902

Luminaire Tested: **22APR-X-X-UNV-NL840**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708902
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-NL840
Description: ArcMed Patient Recessed 2x2 Fixture NIGHT Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

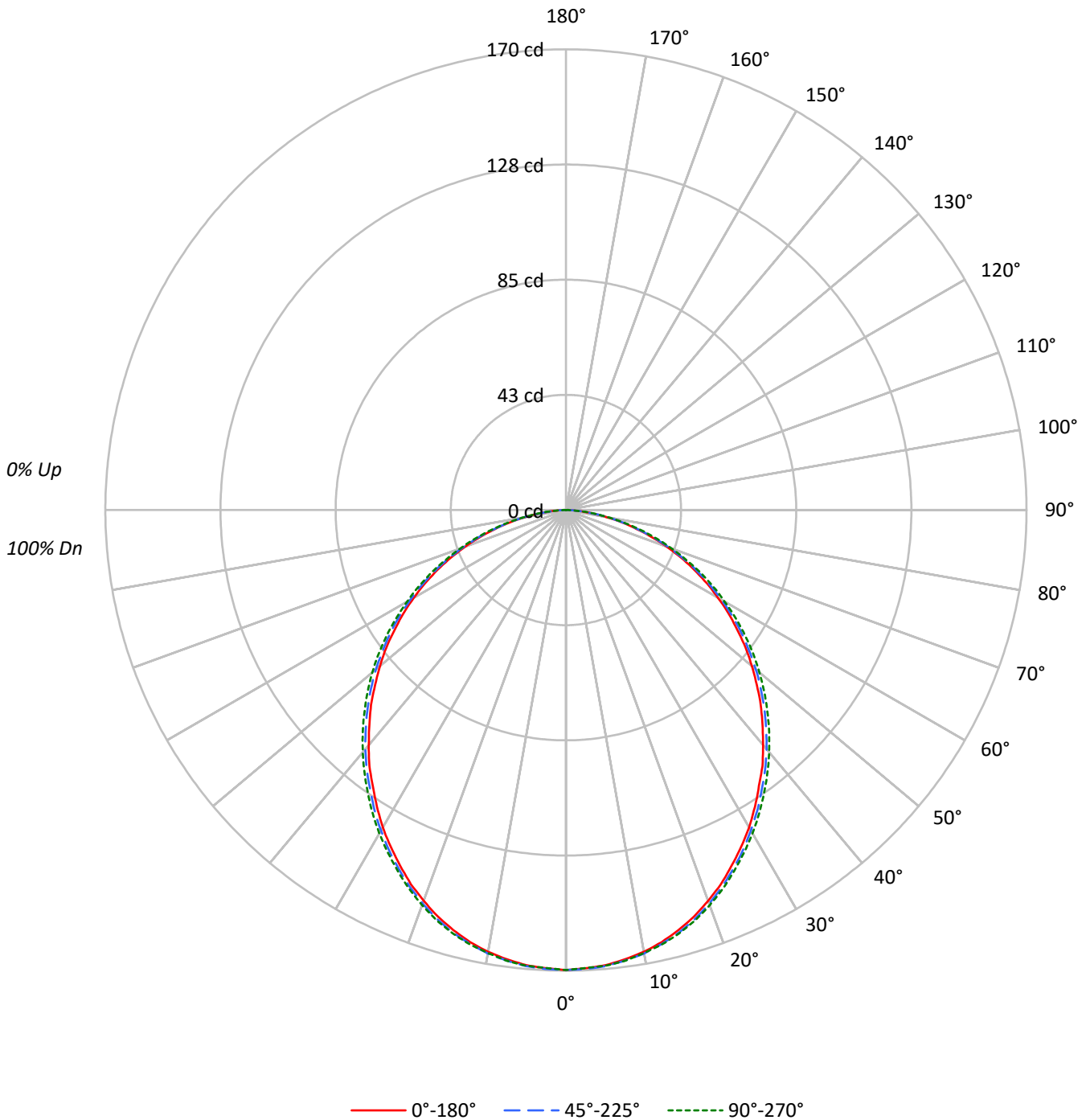
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 448.0 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.21 / 1.32
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 6
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				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	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	73	73	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	59
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	53	53	53	51
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	46	46	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	59	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	29	29	29	29	28
10	54	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	457	457	457
5°	455	456	456
10°	452	454	453
15°	447	450	450
20°	439	443	444
25°	430	434	436
30°	420	424	428
35°	408	414	419
40°	398	405	410
45°	387	394	400
50°	375	383	390
55°	362	371	379
60°	349	357	364
65°	333	341	349
70°	312	319	327
75°	281	288	297
80°	240	249	254
85°	176	179	192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	16.0	3.6
10°-20°	45.4	10.1
20°-30°	67.3	15.0
30°-40°	78.9	17.6
40°-50°	79.9	17.8
50°-60°	70.7	15.8
60°-70°	53.0	11.8
70°-80°	29.5	6.6
80°-90°	7.3	1.6
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°	128.7	28.7
0°-40°	207.6	46.3
0°-60°	358.2	80.0
0°-90°	448.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	448.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	170	170	170	170	170	
5°	169	169	169	169	169	16
15°	160	161	161	162	162	45
25°	145	145	146	147	147	67
35°	124	125	126	127	127	78
45°	102	102	104	105	105	78
55°	77	78	79	80	81	69
65°	52	53	54	55	55	52
75°	27	27	28	29	29	29
85°	6	6	6	6	6	7
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	169.7	169.7	169.7	169.7	169.7
2.5°	169.2	169.6	169.5	169.3	169.1
5°	168.6	168.8	168.9	168.8	168.8
7.5°	167.2	167.6	167.7	167.7	167.8
10°	165.6	166.1	166.2	166.2	166.0
12.5°	163.3	163.8	163.9	164.0	164.1
15°	160.5	161.1	161.4	161.7	161.7
17.5°	157.3	157.8	158.2	158.7	158.7
20°	153.4	154.1	154.6	155.2	155.2
22.5°	149.5	150.0	150.5	151.1	151.3
25°	144.8	145.4	146.1	146.6	146.9
27.5°	140.1	140.6	141.5	142.3	142.4
30°	135.2	135.7	136.5	137.6	137.8
32.5°	129.8	130.3	131.5	132.3	132.8
35°	124.2	124.9	126.0	127.2	127.5
37.5°	119.1	119.5	120.8	122.0	122.2
40°	113.2	114.0	115.2	116.5	116.7
42.5°	107.3	108.1	109.4	110.7	111.0
45°	101.7	102.3	103.6	105.0	105.2
47.5°	95.5	96.3	97.5	99.0	99.3
50°	89.6	90.3	91.5	93.1	93.3
52.5°	83.7	84.1	85.2	86.7	87.2
55°	77.2	77.9	79.1	80.3	80.7
57.5°	71.3	71.7	72.8	74.2	74.3
60°	64.9	65.3	66.3	67.6	67.7
62.5°	58.7	59.0	60.0	61.1	61.4
65°	52.3	52.7	53.6	54.7	54.9
67.5°	45.9	46.1	46.9	48.0	48.0
70°	39.6	39.8	40.5	41.5	41.5
72.5°	33.3	33.5	34.1	35.0	35.2
75°	27.0	27.2	27.7	28.5	28.6
77.5°	21.3	21.1	21.6	22.3	22.4
80°	15.5	15.5	16.1	16.3	16.4
82.5°	10.3	10.3	10.6	11.0	11.0
85°	5.7	5.7	5.8	6.1	6.2
87.5°	2.3	2.2	2.3	2.4	2.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)