

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: P709040

Luminaire Tested: **24APR-76-181L950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709040
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76-181L950-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

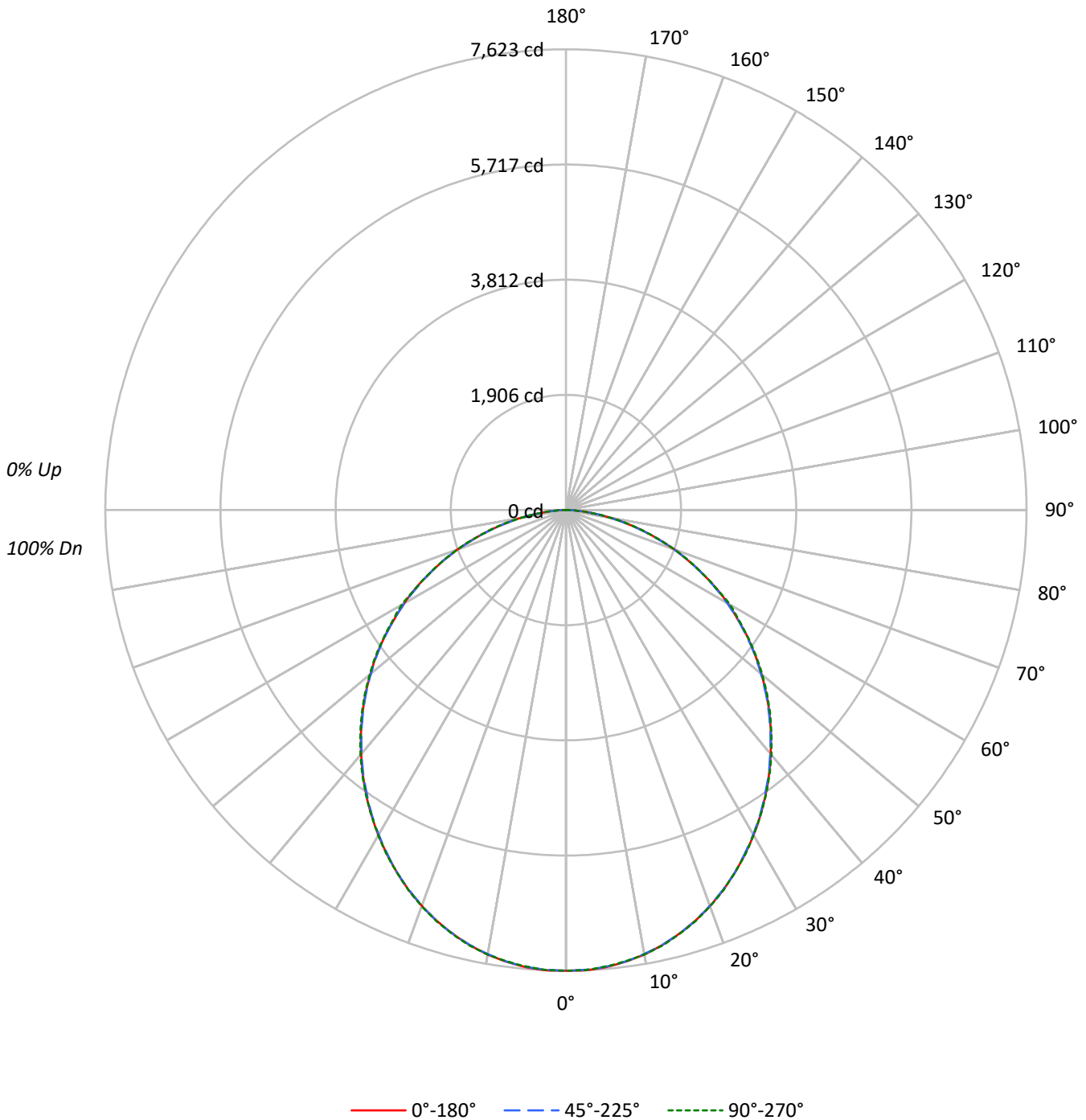
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20571.8 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 208.5
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	94	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10257	10257	10257
5°	10257	10247	10242
10°	10204	10195	10203
15°	10108	10108	10119
20°	9983	9977	9991
25°	9827	9822	9822
30°	9649	9634	9650
35°	9461	9435	9473
40°	9260	9242	9291
45°	9062	9044	9093
50°	8846	8823	8879
55°	8604	8582	8634
60°	8320	8300	8446
65°	7941	7944	7965
70°	7506	7465	7514
75°	6847	6794	6840
80°	5911	5838	5877
85°	4611	4566	4556



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	720.5	3.5
10°-20°	2046.1	9.9
20°-30°	3047.2	14.8
30°-40°	3600.1	17.5
40°-50°	3672.7	17.9
50°-60°	3277.0	15.9
60°-70°	2470.6	12.0
70°-80°	1385.2	6.7
80°-90°	352.5	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°	5813.8	28.3
0°-40°	9413.9	45.8
0°-60°	16363.6	79.5
0°-90°	20571.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20571.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7623	7623	7623	7623	7623	
5°	7594	7591	7587	7589	7583	721
15°	7256	7252	7256	7261	7264	2046
25°	6619	6611	6616	6622	6616	3049
35°	5760	5752	5744	5761	5767	3603
45°	4763	4760	4753	4767	4779	3673
55°	3668	3660	3658	3670	3680	3276
65°	2494	2482	2495	2502	2502	2475
75°	1317	1294	1307	1300	1316	1394
85°	299	288	296	295	295	357
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7623.0	7623.0	7623.0	7623.0	7623.0
2.5°	7623.0	7619.4	7616.4	7615.7	7617.2
5°	7594.5	7590.8	7587.1	7588.6	7582.8
7.5°	7539.6	7540.3	7537.4	7538.1	7531.5
10°	7468.5	7464.9	7461.9	7468.5	7467.8
12.5°	7372.6	7366.0	7369.0	7379.2	7379.9
15°	7256.2	7251.8	7256.2	7261.3	7264.3
17.5°	7123.7	7120.0	7125.2	7125.9	7131.8
20°	6972.1	6967.8	6967.8	6975.1	6978.0
22.5°	6804.5	6797.9	6799.4	6804.5	6808.1
25°	6619.3	6611.2	6616.3	6622.2	6616.3
27.5°	6419.4	6415.0	6409.9	6417.2	6426.7
30°	6210.7	6201.9	6201.2	6206.3	6211.5
32.5°	5990.4	5980.1	5980.1	5986.7	5991.1
35°	5759.7	5751.7	5744.4	5761.2	5767.0
37.5°	5521.8	5512.3	5511.5	5521.8	5531.3
40°	5272.1	5264.1	5261.9	5279.4	5289.7
42.5°	5020.3	5015.1	5010.0	5027.6	5035.6
45°	4762.6	4759.6	4753.0	4766.9	4778.7
47.5°	4497.5	4488.0	4485.8	4501.9	4513.6
50°	4225.9	4222.2	4214.9	4229.6	4242.0
52.5°	3950.6	3946.2	3941.1	3954.3	3967.5
55°	3668.0	3660.0	3658.5	3669.5	3680.5
57.5°	3373.7	3367.1	3377.4	3387.6	3396.4
60°	3091.8	3076.4	3084.5	3096.2	3138.7
62.5°	2808.5	2781.4	2787.2	2819.5	2801.2
65°	2494.4	2481.9	2495.1	2502.4	2501.7
67.5°	2200.1	2185.4	2205.2	2199.3	2208.1
70°	1908.0	1882.3	1897.7	1899.9	1910.1
72.5°	1606.3	1584.3	1597.5	1604.1	1610.7
75°	1317.1	1294.4	1306.9	1299.5	1315.7
77.5°	1029.4	1015.5	1023.5	1028.7	1041.1
80°	762.9	747.5	753.4	754.1	758.5
82.5°	516.9	505.2	506.6	519.8	514.7
85°	298.7	287.7	295.8	295.1	295.1
87.5°	116.4	107.6	115.7	114.9	113.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)