

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: P708888

Luminaire Tested: **22APR-34-80L950-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708888  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 22APR-34-80L950-UNV  
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light  
Light Source: 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

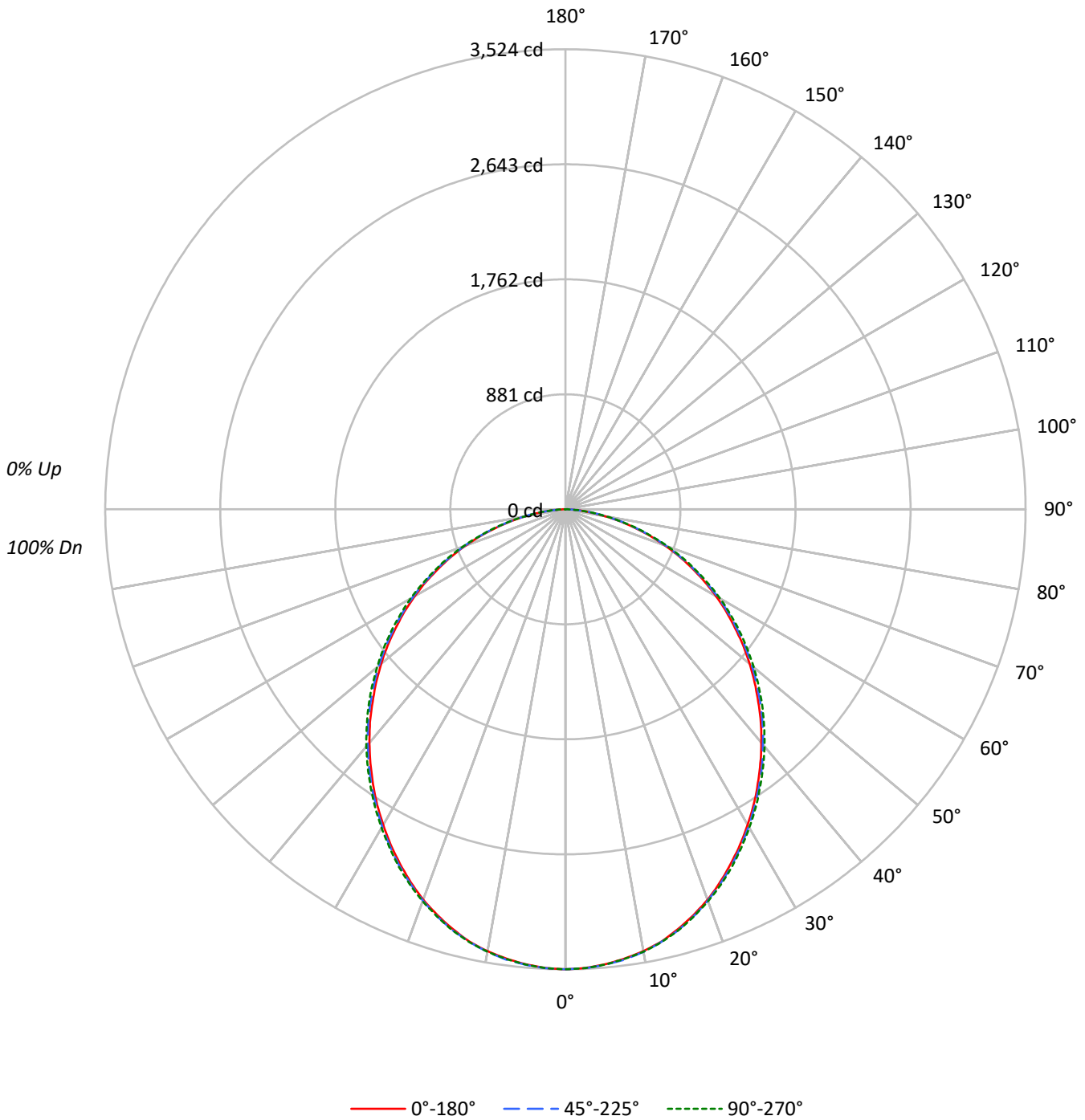
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9164.5 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 103.3  
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	81	76	82	78	74	79	76	73	73	73	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	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	30	30	30	30	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	9482	9482	9482
5°	9451	9463	9455
10°	9392	9406	9404
15°	9277	9301	9305
20°	9117	9136	9149
25°	8897	8939	8967
30°	8671	8718	8750
35°	8439	8497	8540
40°	8201	8266	8333
45°	7946	8044	8114
50°	7709	7801	7881
55°	7445	7544	7637
60°	7173	7268	7371
65°	6818	6930	7010
70°	6381	6467	6559
75°	5738	5845	5921
80°	4846	4970	5016
85°	3625	3785	3761



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	332.4	3.6
10°-20°	940.3	10.3
20°-30°	1385.9	15.1
30°-40°	1617.5	17.6
40°-50°	1630.1	17.8
50°-60°	1438.7	15.7
60°-70°	1075.9	11.7
70°-80°	596.3	6.5
80°-90°	147.5	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°	2658.6	29.0
0°-40°	4276.1	46.7
0°-60°	7344.8	80.1
0°-90°	9164.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9164.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3524	3524	3524	3524	3524	
5°	3499	3503	3503	3504	3500	332
15°	3330	3336	3339	3342	3340	938
25°	2997	3003	3011	3016	3020	1380
35°	2569	2575	2586	2597	2600	1607
45°	2088	2101	2114	2128	2132	1613
55°	1587	1596	1608	1623	1628	1420
65°	1071	1076	1088	1097	1101	1061
75°	552	555	562	568	570	586
85°	117	121	123	121	122	143
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3523.6	3523.6	3523.6	3523.6	3523.6
2.5°	3517.0	3520.7	3517.7	3520.7	3517.7
5°	3498.7	3503.1	3503.1	3503.8	3500.1
7.5°	3471.5	3476.6	3478.8	3479.6	3474.4
10°	3437.0	3442.1	3442.1	3445.1	3441.4
12.5°	3393.0	3395.9	3395.2	3399.6	3396.6
15°	3329.9	3335.7	3338.7	3341.6	3340.1
17.5°	3259.4	3266.7	3268.9	3274.1	3270.4
20°	3183.8	3188.9	3190.4	3198.5	3194.8
22.5°	3093.5	3098.7	3103.8	3111.1	3111.9
25°	2996.6	3003.3	3010.6	3016.5	3020.1
27.5°	2896.8	2903.4	2910.0	2917.4	2918.9
30°	2790.4	2798.5	2805.8	2814.6	2816.1
32.5°	2683.3	2686.2	2697.2	2706.7	2711.1
35°	2568.8	2574.6	2586.4	2596.7	2599.6
37.5°	2452.1	2460.9	2473.4	2484.4	2487.3
40°	2334.6	2342.0	2353.0	2367.7	2372.1
42.5°	2215.7	2220.9	2235.6	2248.0	2251.7
45°	2088.0	2101.3	2113.7	2128.4	2132.1
47.5°	1966.2	1976.5	1989.0	2002.9	2008.8
50°	1841.4	1853.9	1863.5	1878.9	1882.5
52.5°	1716.7	1724.7	1738.0	1751.2	1757.0
55°	1586.8	1596.3	1608.0	1622.7	1627.9
57.5°	1462.0	1467.1	1480.3	1492.8	1497.2
60°	1332.8	1338.0	1350.4	1363.6	1369.5
62.5°	1203.7	1208.1	1218.3	1233.7	1233.7
65°	1070.8	1075.9	1088.4	1097.2	1100.9
67.5°	941.6	946.0	954.8	965.9	971.0
70°	811.0	814.7	822.0	833.0	833.7
72.5°	680.4	684.0	693.6	697.2	702.4
75°	551.9	554.9	562.2	568.1	569.5
77.5°	429.4	433.8	438.9	441.1	443.3
80°	312.7	317.1	320.7	322.9	323.7
82.5°	207.0	211.4	213.6	215.0	214.3
85°	117.4	121.1	122.6	121.1	121.8
87.5°	46.2	48.4	49.9	49.2	47.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)