

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: P708845

Luminaire Tested: **24APR-X-62L940-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708845  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-X-62L940-UNV  
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

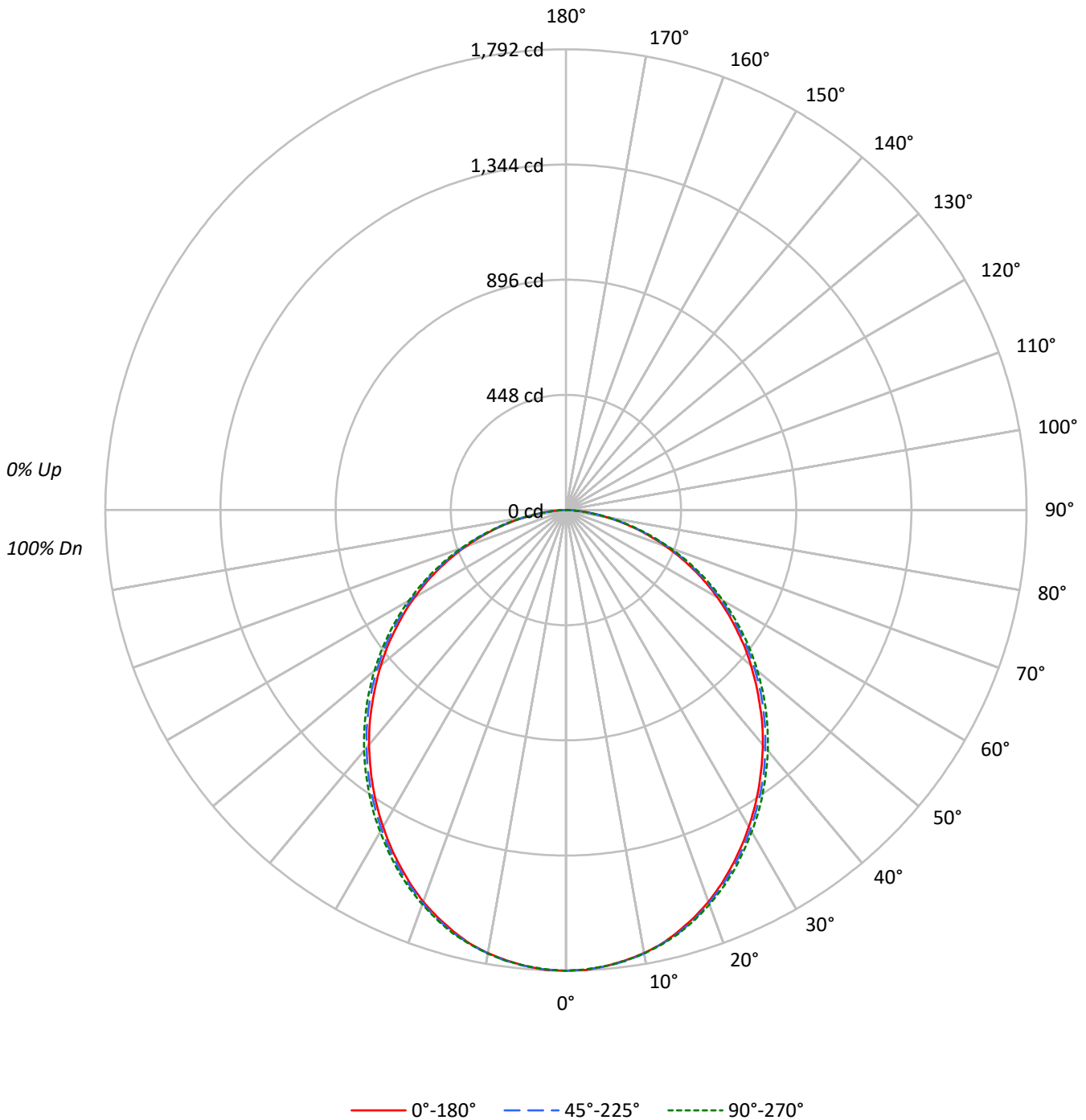
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4696.6 lumens  
Efficiency: N/A  
Efficacy: 91.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 51.3  
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	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	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	66	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	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	40	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°	4823	4823	4823
5°	4811	4812	4809
10°	4782	4786	4787
15°	4725	4738	4747
20°	4645	4661	4676
25°	4535	4566	4593
30°	4421	4457	4491
35°	4303	4351	4393
40°	4187	4236	4292
45°	4056	4129	4186
50°	3934	4007	4070
55°	3799	3879	3947
60°	3662	3737	3808
65°	3485	3563	3631
70°	3263	3334	3402
75°	2946	3017	3073
80°	2484	2576	2600
85°	1849	1964	1930



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	169.1	3.6
10°-20°	479.1	10.2
20°-30°	707.7	15.1
30°-40°	828.1	17.6
40°-50°	836.4	17.8
50°-60°	739.2	15.7
60°-70°	553.4	11.8
70°-80°	307.6	6.5
80°-90°	76.0	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°	1356.0	28.9
0°-40°	2184.1	46.5
0°-60°	3759.7	80.1
0°-90°	4696.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4696.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1792	1792	1792	1792	1792	
5°	1781	1781	1781	1782	1780	169
15°	1696	1697	1701	1704	1704	478
25°	1528	1530	1538	1542	1547	704
35°	1310	1314	1324	1334	1337	819
45°	1066	1074	1085	1096	1100	823
55°	810	816	827	837	841	725
65°	547	551	560	567	570	542
75°	283	285	290	296	296	300
85°	60	62	64	62	62	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1792.1	1792.1	1792.1	1792.1	1792.1
2.5°	1790.5	1790.5	1788.9	1789.4	1788.3
5°	1780.9	1781.4	1781.4	1781.9	1780.3
7.5°	1767.0	1768.0	1769.6	1770.2	1768.6
10°	1749.9	1750.9	1751.5	1753.6	1752.0
12.5°	1727.4	1727.9	1728.5	1731.7	1730.1
15°	1695.9	1696.9	1700.7	1703.9	1703.9
17.5°	1660.6	1662.7	1667.0	1671.3	1670.2
20°	1622.1	1623.7	1627.5	1633.3	1632.8
22.5°	1576.7	1578.3	1583.6	1590.0	1591.7
25°	1527.5	1529.7	1537.7	1542.5	1546.8
27.5°	1476.7	1479.4	1486.9	1494.4	1496.5
30°	1422.8	1427.0	1434.5	1442.5	1445.2
32.5°	1367.7	1369.8	1380.0	1388.6	1393.9
35°	1310.0	1313.7	1324.4	1333.5	1337.2
37.5°	1250.7	1256.0	1267.2	1276.8	1280.1
40°	1191.9	1196.1	1205.8	1218.1	1221.8
42.5°	1130.9	1134.7	1146.4	1157.1	1160.9
45°	1065.7	1073.7	1085.0	1096.2	1099.9
47.5°	1002.7	1010.1	1021.4	1032.6	1036.9
50°	939.6	947.6	957.2	969.0	972.2
52.5°	876.5	882.9	893.1	903.3	908.1
55°	809.7	816.1	826.8	837.0	841.3
57.5°	746.7	750.9	761.1	770.7	774.4
60°	680.4	684.7	694.3	704.4	707.6
62.5°	615.2	617.8	626.9	636.6	638.7
65°	547.3	551.0	559.6	567.1	570.3
67.5°	481.0	484.2	491.7	499.7	501.3
70°	414.7	416.9	423.8	429.7	432.4
72.5°	347.9	350.1	357.6	360.8	363.4
75°	283.3	284.9	290.2	295.6	295.6
77.5°	220.2	222.9	227.1	229.3	230.4
80°	160.3	163.0	166.2	168.4	167.8
82.5°	105.8	108.5	110.6	111.7	110.6
85°	59.9	62.0	63.6	62.5	62.5
87.5°	23.5	24.6	25.7	25.1	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)