

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: P708849

Luminaire Tested: **24APR-X-71L950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708849
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-71L950-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

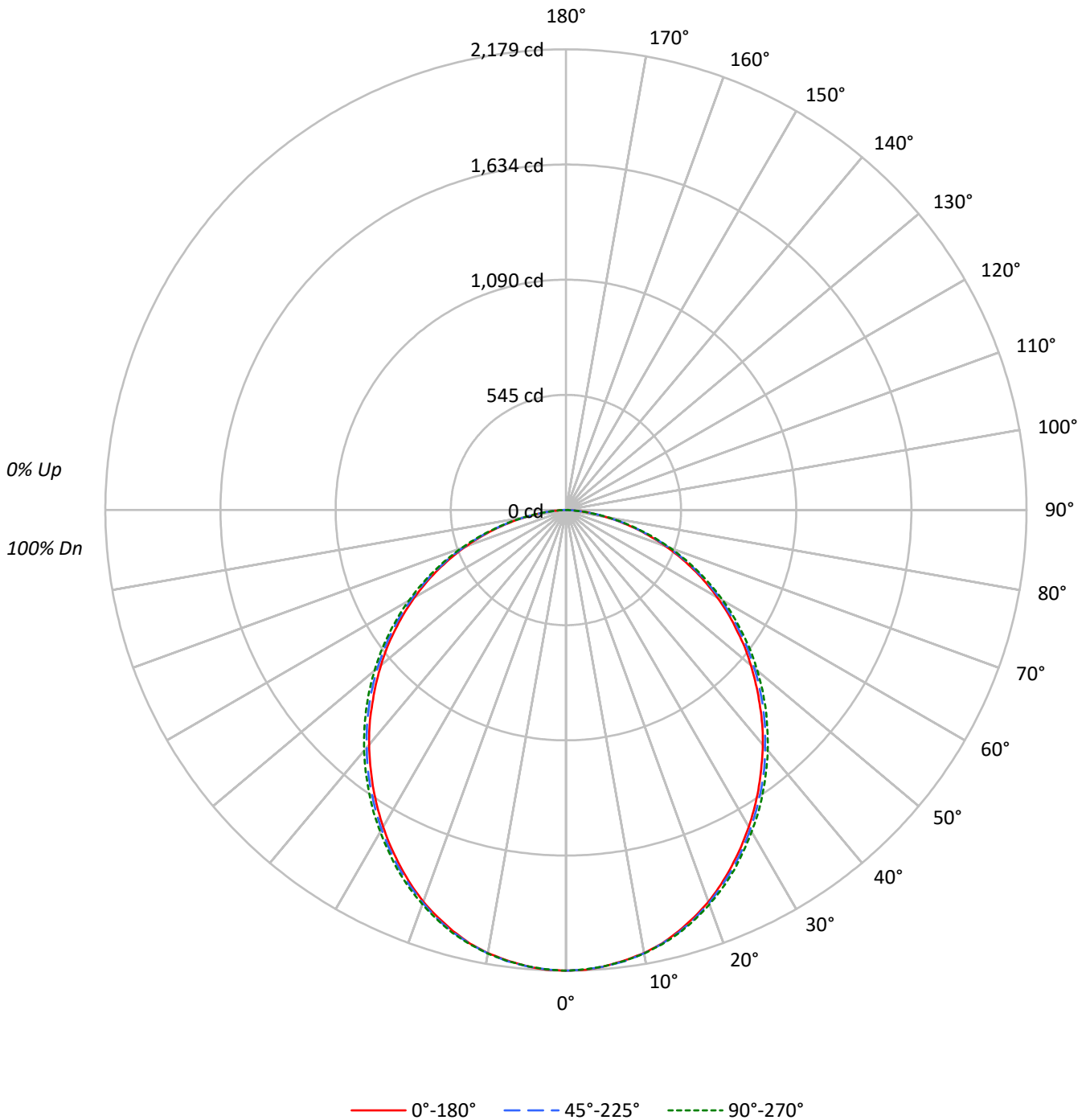
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5709.7 lumens
Efficiency: N/A
Efficacy: 95.2 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): 60
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	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°	5863	5863	5863
5°	5848	5850	5846
10°	5813	5818	5820
15°	5744	5760	5771
20°	5647	5666	5684
25°	5514	5551	5583
30°	5375	5419	5459
35°	5232	5289	5341
40°	5090	5149	5218
45°	4931	5020	5089
50°	4782	4872	4948
55°	4618	4716	4798
60°	4451	4542	4630
65°	4237	4332	4415
70°	3967	4054	4136
75°	3581	3668	3736
80°	3020	3132	3161
85°	2248	2387	2347



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	205.6	3.6
10°-20°	582.5	10.2
20°-30°	860.4	15.1
30°-40°	1006.7	17.6
40°-50°	1016.8	17.8
50°-60°	898.7	15.7
60°-70°	672.7	11.8
70°-80°	373.9	6.5
80°-90°	92.4	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°	1648.4	28.9
0°-40°	2655.2	46.5
0°-60°	4570.7	80.1
0°-90°	5709.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5709.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2179	2179	2179	2179	2179	
5°	2165	2166	2166	2166	2164	205
15°	2062	2063	2068	2071	2071	581
25°	1857	1860	1869	1875	1880	855
35°	1593	1597	1610	1621	1626	996
45°	1296	1305	1319	1333	1337	1001
55°	984	992	1005	1018	1023	882
65°	665	670	680	689	693	659
75°	344	346	353	359	359	365
85°	73	75	77	76	76	89
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2178.6	2178.6	2178.6	2178.6	2178.6
2.5°	2176.7	2176.7	2174.7	2175.4	2174.1
5°	2165.0	2165.6	2165.6	2166.3	2164.3
7.5°	2148.1	2149.4	2151.4	2152.0	2150.1
10°	2127.3	2128.6	2129.3	2131.9	2129.9
12.5°	2100.0	2100.7	2101.3	2105.2	2103.3
15°	2061.7	2063.0	2067.5	2071.4	2071.4
17.5°	2018.8	2021.4	2026.6	2031.8	2030.5
20°	1972.0	1974.0	1978.5	1985.7	1985.0
22.5°	1916.8	1918.7	1925.2	1933.0	1935.0
25°	1857.0	1859.6	1869.4	1875.2	1880.4
27.5°	1795.3	1798.5	1807.6	1816.7	1819.3
30°	1729.7	1734.9	1744.0	1753.7	1756.9
32.5°	1662.7	1665.3	1677.7	1688.1	1694.6
35°	1592.6	1597.1	1610.1	1621.1	1625.7
37.5°	1520.4	1526.9	1540.6	1552.3	1556.2
40°	1449.0	1454.2	1465.9	1480.8	1485.3
42.5°	1374.9	1379.4	1393.7	1406.7	1411.3
45°	1295.6	1305.4	1319.0	1332.7	1337.2
47.5°	1218.9	1228.0	1241.7	1255.3	1260.5
50°	1142.3	1152.0	1163.7	1178.0	1181.9
52.5°	1065.6	1073.4	1085.7	1098.1	1103.9
55°	984.4	992.2	1005.2	1017.5	1022.7
57.5°	907.7	912.9	925.3	937.0	941.5
60°	827.1	832.3	844.0	856.4	860.3
62.5°	747.9	751.1	762.2	773.9	776.5
65°	665.4	669.9	680.3	689.4	693.3
67.5°	584.8	588.7	597.8	607.5	609.5
70°	504.2	506.8	515.3	522.4	525.7
72.5°	423.0	425.6	434.7	438.6	441.8
75°	344.4	346.3	352.8	359.3	359.3
77.5°	267.7	270.9	276.1	278.7	280.0
80°	194.9	198.2	202.1	204.7	204.0
82.5°	128.7	131.9	134.5	135.8	134.5
85°	72.8	75.4	77.3	76.0	76.0
87.5°	28.6	29.9	31.2	30.5	29.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)