

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: P708814

Luminaire Tested: **24APR-X-71L830-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708814
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-71L830-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

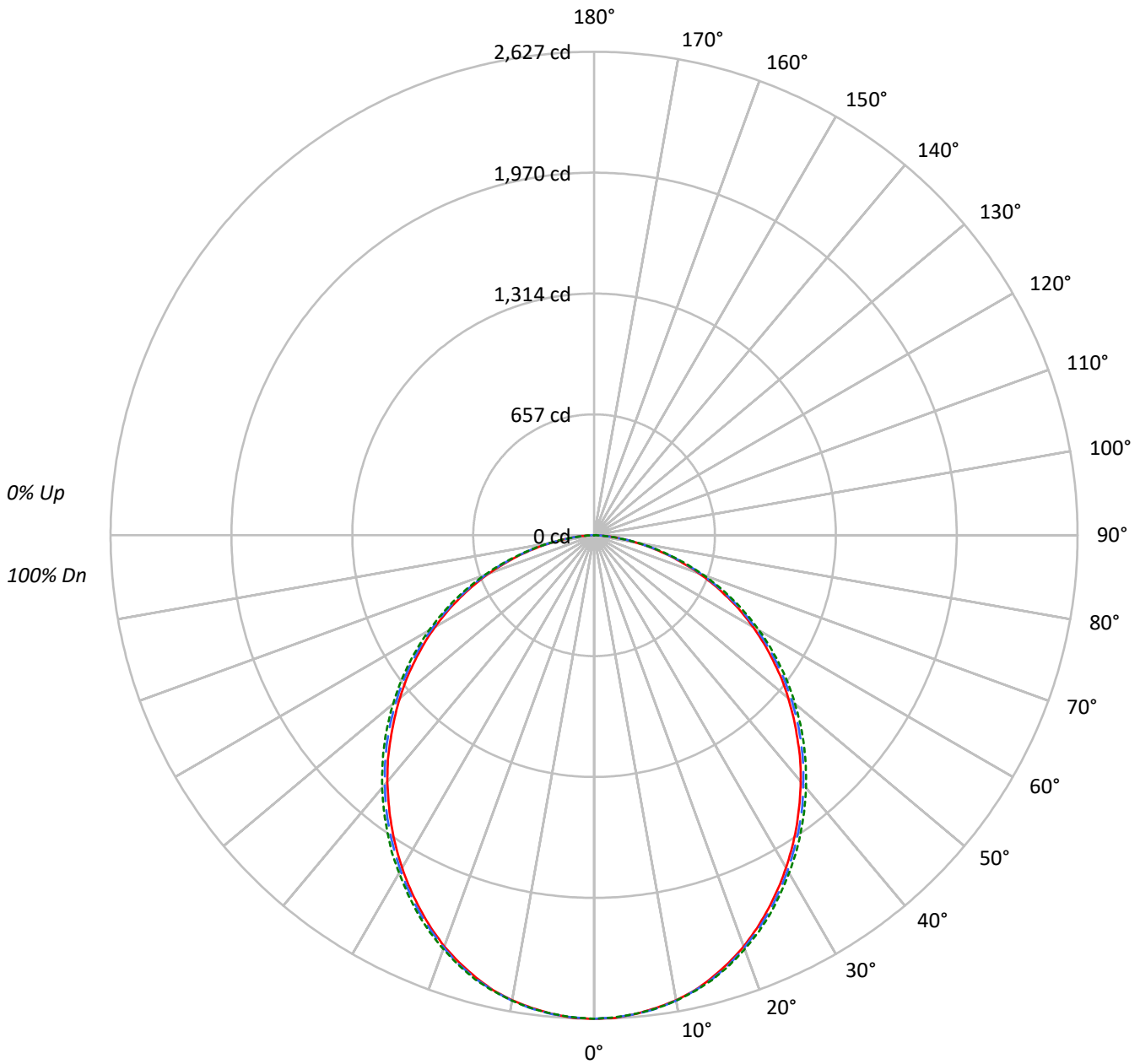
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6885.6 lumens
Efficiency: N/A
Efficacy: 114.8 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



— 0°-180° - - 45°-225° - - - 90°-270°



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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°	7070	7070	7070
5°	7053	7055	7051
10°	7010	7016	7019
15°	6927	6946	6959
20°	6810	6833	6855
25°	6649	6693	6733
30°	6481	6535	6584
35°	6309	6379	6440
40°	6138	6210	6293
45°	5946	6054	6137
50°	5767	5875	5967
55°	5569	5687	5786
60°	5369	5478	5584
65°	5109	5224	5324
70°	4784	4889	4987
75°	4318	4424	4505
80°	3643	3777	3812
85°	2711	2878	2831



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	247.9	3.6
10°-20°	702.4	10.2
20°-30°	1037.6	15.1
30°-40°	1214.1	17.6
40°-50°	1226.2	17.8
50°-60°	1083.8	15.7
60°-70°	811.3	11.8
70°-80°	450.9	6.5
80°-90°	111.5	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°	1987.9	28.9
0°-40°	3202.0	46.5
0°-60°	5512.0	80.1
0°-90°	6885.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6885.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2627	2627	2627	2627	2627	
5°	2611	2612	2612	2612	2610	248
15°	2486	2488	2493	2498	2498	701
25°	2240	2243	2254	2261	2268	1031
35°	1920	1926	1942	1955	1960	1201
45°	1562	1574	1591	1607	1613	1207
55°	1187	1196	1212	1227	1233	1063
65°	802	808	820	831	836	795
75°	415	418	426	433	433	440
85°	88	91	93	92	92	107
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2627.3	2627.3	2627.3	2627.3	2627.3
2.5°	2625.0	2625.0	2622.6	2623.4	2621.8
5°	2610.9	2611.7	2611.7	2612.4	2610.1
7.5°	2590.5	2592.1	2594.4	2595.2	2592.9
10°	2565.4	2567.0	2567.8	2570.9	2568.6
12.5°	2532.5	2533.3	2534.1	2538.8	2536.4
15°	2486.3	2487.9	2493.3	2498.0	2498.0
17.5°	2434.6	2437.7	2444.0	2450.2	2448.7
20°	2378.2	2380.5	2386.0	2394.6	2393.8
22.5°	2311.5	2313.9	2321.7	2331.1	2333.5
25°	2239.5	2242.6	2254.3	2261.4	2267.7
27.5°	2165.0	2168.9	2179.9	2190.9	2194.0
30°	2085.9	2092.1	2103.1	2114.9	2118.8
32.5°	2005.2	2008.3	2023.2	2035.7	2043.6
35°	1920.5	1926.0	1941.7	1955.0	1960.5
37.5°	1833.6	1841.4	1857.9	1872.0	1876.7
40°	1747.4	1753.6	1767.7	1785.8	1791.3
42.5°	1658.0	1663.5	1680.8	1696.4	1701.9
45°	1562.4	1574.2	1590.7	1607.1	1612.6
47.5°	1470.0	1481.0	1497.4	1513.9	1520.1
50°	1377.5	1389.3	1403.4	1420.6	1425.3
52.5°	1285.1	1294.5	1309.4	1324.2	1331.3
55°	1187.1	1196.5	1212.2	1227.1	1233.3
57.5°	1094.7	1100.9	1115.8	1129.9	1135.4
60°	997.5	1003.8	1017.9	1032.8	1037.5
62.5°	901.9	905.8	919.1	933.2	936.4
65°	802.4	807.9	820.4	831.4	836.1
67.5°	705.2	709.9	720.9	732.6	735.0
70°	608.1	611.2	621.4	630.0	633.9
72.5°	510.1	513.2	524.2	528.9	532.8
75°	415.3	417.6	425.5	433.3	433.3
77.5°	322.8	326.8	333.0	336.2	337.7
80°	235.1	239.0	243.7	246.8	246.0
82.5°	155.1	159.1	162.2	163.8	162.2
85°	87.8	90.9	93.2	91.7	91.7
87.5°	34.5	36.0	37.6	36.8	35.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)