

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: P708948

Luminaire Tested: **24APR-X-116L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708948
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-116L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

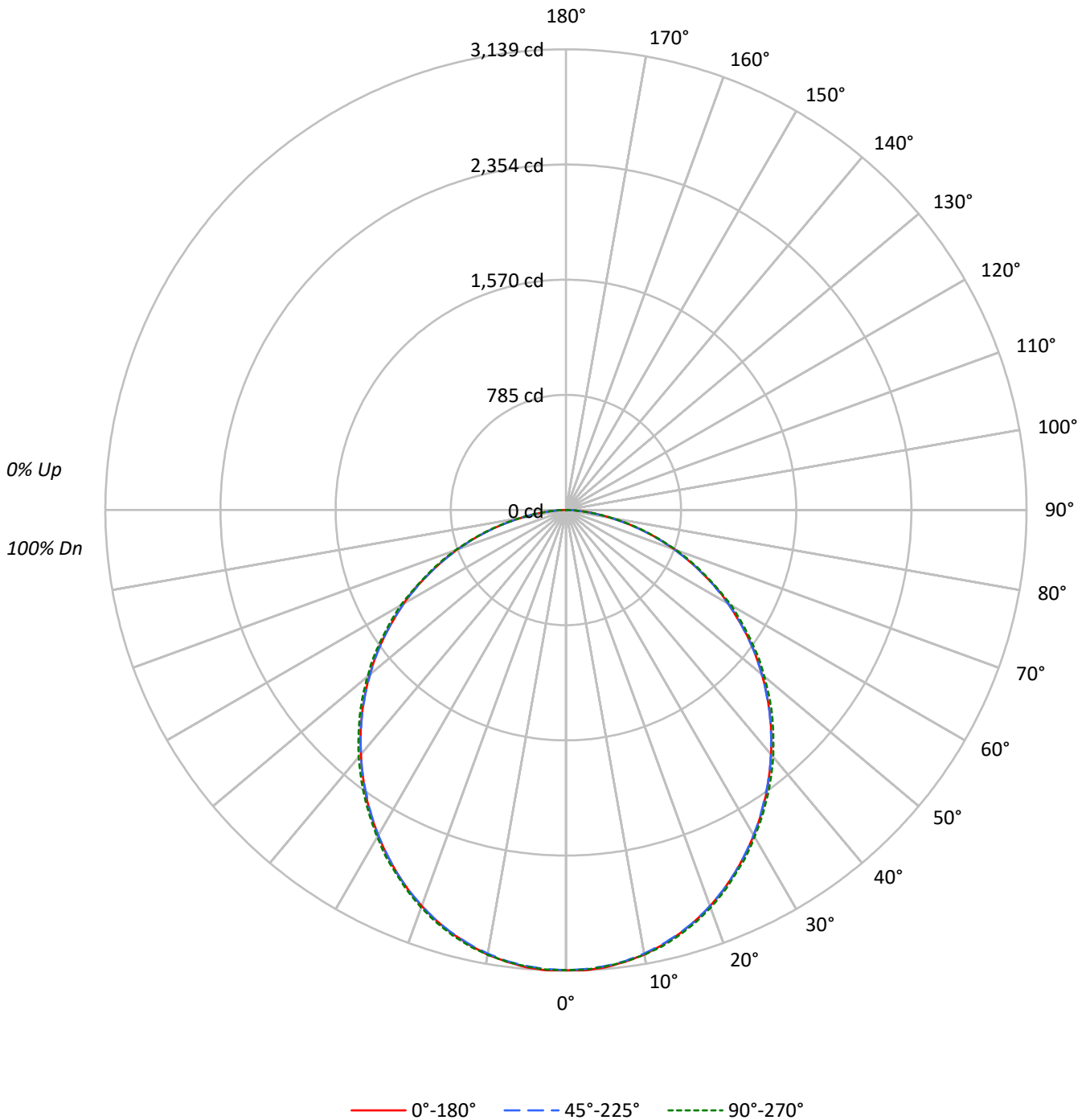
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8508.5 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 85.9
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

TEST NUMBER: P708948
CATALOG NUMBER: 24APR-X-116L930-UNV

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	94	98	94	91	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	72	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	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	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	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4219	4219	4219
5°	4223	4212	4216
10°	4202	4192	4204
15°	4162	4159	4175
20°	4113	4110	4128
25°	4047	4049	4062
30°	3977	3974	3996
35°	3902	3892	3928
40°	3819	3817	3860
45°	3740	3737	3782
50°	3653	3646	3695
55°	3554	3549	3598
60°	3437	3434	3501
65°	3281	3286	3324
70°	3110	3085	3149
75°	2843	2821	2874
80°	2459	2429	2479
85°	1934	1914	1968



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.4	3.5
10°-20°	842.7	9.9
20°-30°	1256.8	14.8
30°-40°	1487.2	17.5
40°-50°	1519.6	17.9
50°-60°	1358.0	16.0
60°-70°	1023.6	12.0
70°-80°	576.2	6.8
80°-90°	148.0	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°	2395.9	28.2
0°-40°	3883.1	45.6
0°-60°	6760.7	79.5
0°-90°	8508.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8508.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3135	3135	3135	3135	3135	
5°	3127	3122	3118	3122	3122	297
15°	2988	2984	2986	2992	2998	843
25°	2726	2722	2727	2736	2736	1256
35°	2375	2370	2370	2386	2391	1485
45°	1965	1964	1964	1979	1988	1516
55°	1515	1515	1513	1526	1534	1353
65°	1030	1026	1032	1042	1044	1023
75°	547	536	543	540	553	578
85°	125	120	124	126	128	150
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3135.3	3135.3	3135.3	3135.3	3135.3
2.5°	3138.8	3134.0	3130.6	3132.3	3133.6
5°	3126.7	3122.4	3118.5	3121.5	3121.5
7.5°	3103.9	3101.7	3098.7	3101.3	3102.2
10°	3075.5	3070.7	3068.6	3074.6	3076.8
12.5°	3035.4	3029.8	3031.5	3039.3	3042.7
15°	2988.0	2984.2	2985.9	2991.9	2997.5
17.5°	2934.2	2929.9	2933.8	2939.0	2944.1
20°	2872.2	2867.9	2870.1	2877.4	2883.0
22.5°	2803.3	2799.0	2801.6	2808.0	2814.1
25°	2726.2	2722.4	2727.1	2735.7	2736.1
27.5°	2645.7	2641.4	2642.7	2651.7	2659.9
30°	2559.6	2554.0	2557.9	2566.9	2572.1
32.5°	2469.2	2464.0	2467.0	2477.3	2483.4
35°	2375.3	2370.1	2369.7	2385.6	2391.2
37.5°	2275.8	2272.8	2275.4	2288.3	2295.2
40°	2174.2	2169.9	2172.9	2189.3	2197.4
42.5°	2071.3	2068.7	2069.1	2085.5	2091.9
45°	1965.3	1963.6	1964.0	1979.1	1987.7
47.5°	1856.0	1852.1	1853.8	1869.3	1878.3
50°	1745.3	1744.4	1741.8	1757.3	1765.1
52.5°	1631.6	1629.9	1629.9	1643.7	1654.9
55°	1514.9	1514.9	1512.8	1526.1	1533.9
57.5°	1392.6	1393.5	1396.9	1409.0	1416.7
60°	1277.2	1272.9	1276.3	1287.1	1300.9
62.5°	1162.2	1149.3	1152.8	1162.7	1168.3
65°	1030.5	1025.7	1032.2	1042.1	1044.2
67.5°	909.5	904.7	908.2	915.1	924.5
70°	790.6	778.1	784.2	791.5	800.5
72.5°	665.7	655.0	663.6	669.6	676.1
75°	546.9	536.5	542.6	540.0	552.9
77.5°	427.6	420.3	425.4	430.6	440.5
80°	317.4	309.2	313.5	315.6	319.9
82.5°	216.2	210.1	211.4	220.0	217.5
85°	125.3	120.1	124.0	125.7	127.5
87.5°	49.5	44.8	48.7	50.0	50.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)