

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: P708967

Luminaire Tested: **24APR-58L830-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708967
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-58L830-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

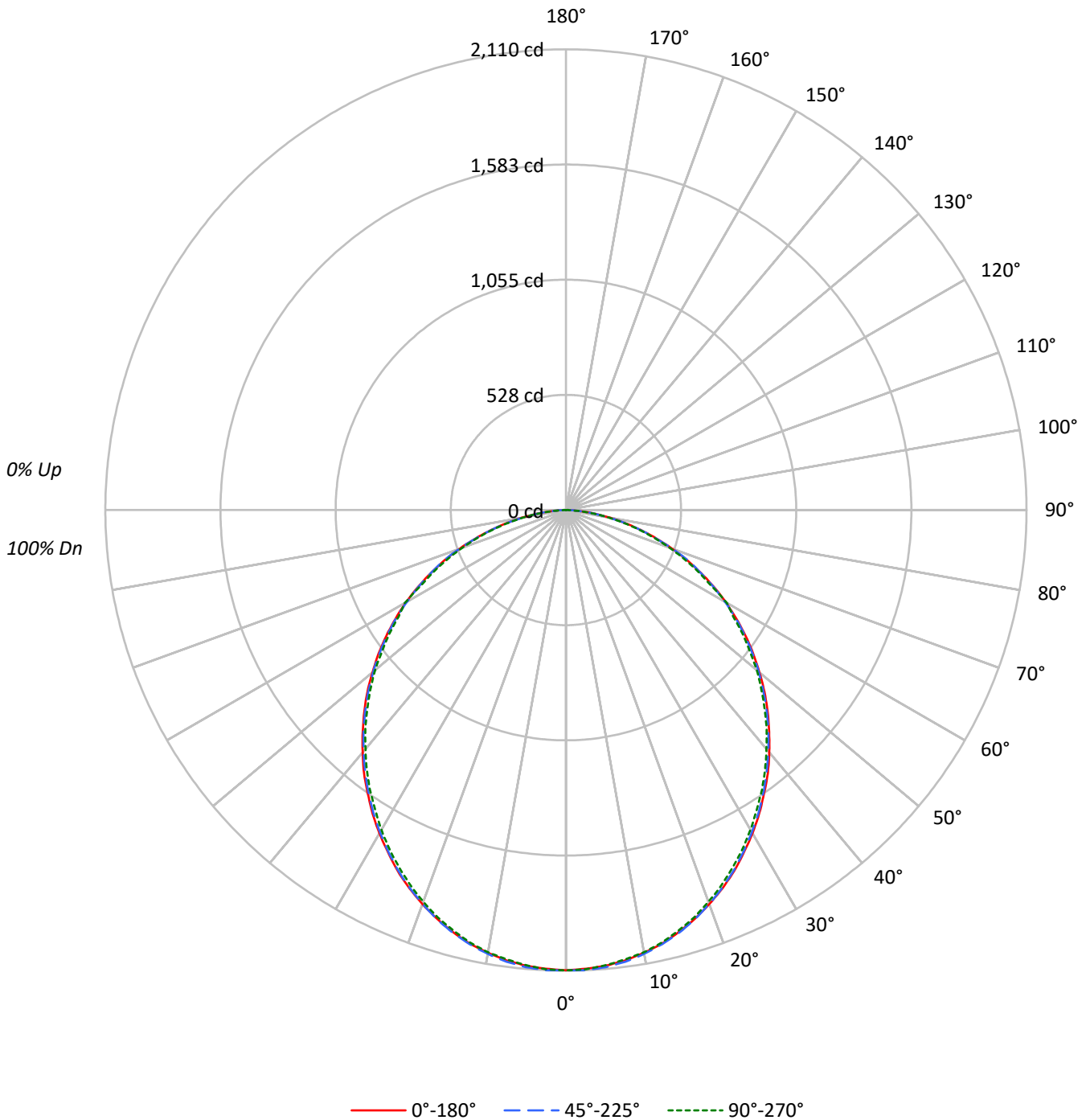
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5615.0 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 51.8
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	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2836	2836	2836
5°	2830	2838	2826
10°	2814	2820	2810
15°	2787	2792	2777
20°	2750	2750	2734
25°	2709	2703	2682
30°	2656	2647	2627
35°	2600	2591	2570
40°	2545	2532	2509
45°	2487	2474	2448
50°	2423	2413	2389
55°	2357	2344	2314
60°	2277	2263	2294
65°	2174	2167	2126
70°	2039	2042	1987
75°	1852	1838	1796
80°	1592	1571	1529
85°	1216	1206	1112



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.1	3.5
10°-20°	564.0	10.0
20°-30°	837.2	14.9
30°-40°	985.5	17.6
40°-50°	1001.5	17.8
50°-60°	890.3	15.9
60°-70°	671.6	12.0
70°-80°	373.0	6.6
80°-90°	92.7	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°	1600.4	28.5
0°-40°	2585.9	46.1
0°-60°	4477.7	79.7
0°-90°	5615.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5615.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2108	2108	2108	2108	2108	
5°	2095	2099	2101	2098	2093	199
15°	2001	2003	2004	2000	1994	564
25°	1825	1823	1821	1812	1806	840
35°	1583	1584	1578	1568	1565	991
45°	1307	1307	1300	1289	1287	1008
55°	1005	997	999	988	986	898
65°	683	679	681	672	668	676
75°	356	352	354	351	345	378
85°	79	77	78	75	72	95
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2108.1	2108.1	2108.1	2108.1	2108.1
2.5°	2102.7	2106.8	2109.5	2106.1	2105.4
5°	2095.3	2098.7	2101.4	2098.0	2092.6
7.5°	2080.5	2084.5	2086.6	2083.2	2075.8
10°	2059.6	2063.7	2064.3	2061.0	2056.9
12.5°	2034.0	2036.7	2036.7	2034.0	2029.3
15°	2001.1	2003.1	2004.4	1999.7	1993.6
17.5°	1963.3	1966.7	1965.4	1958.0	1955.3
20°	1920.9	1923.6	1920.3	1915.5	1909.5
22.5°	1874.5	1875.1	1872.5	1867.1	1861.0
25°	1824.6	1823.3	1820.6	1812.5	1806.5
27.5°	1766.7	1769.4	1762.7	1755.3	1751.3
30°	1709.5	1710.2	1703.5	1694.0	1690.7
32.5°	1648.2	1646.9	1642.2	1632.1	1626.7
35°	1582.9	1583.6	1577.5	1568.1	1564.8
37.5°	1519.6	1515.6	1510.9	1500.1	1498.1
40°	1448.9	1448.3	1441.5	1432.1	1428.7
42.5°	1378.2	1377.6	1372.2	1362.8	1360.1
45°	1306.9	1306.9	1300.1	1289.4	1286.7
47.5°	1234.2	1231.5	1226.8	1217.3	1214.0
50°	1157.4	1155.4	1152.7	1141.9	1141.2
52.5°	1082.0	1080.6	1075.9	1066.5	1061.1
55°	1004.6	997.2	999.2	988.4	986.4
57.5°	925.1	917.7	921.7	912.3	908.3
60°	846.3	838.9	841.0	834.9	852.4
62.5°	765.5	760.8	760.8	775.0	749.4
65°	682.7	678.7	680.7	672.0	667.9
67.5°	601.3	595.2	608.0	591.8	585.1
70°	518.4	514.4	519.1	509.7	505.0
72.5°	436.3	432.9	431.6	428.2	424.2
75°	356.2	351.5	353.5	350.8	345.4
77.5°	278.1	276.7	276.1	272.7	268.6
80°	205.4	204.0	202.7	200.0	197.3
82.5°	137.4	136.0	135.3	134.0	133.3
85°	78.8	76.8	78.1	74.7	72.0
87.5°	29.6	29.0	30.3	27.6	25.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)