

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: P708831

Luminaire Tested: **24APR-X-52L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708831
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-52L850-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

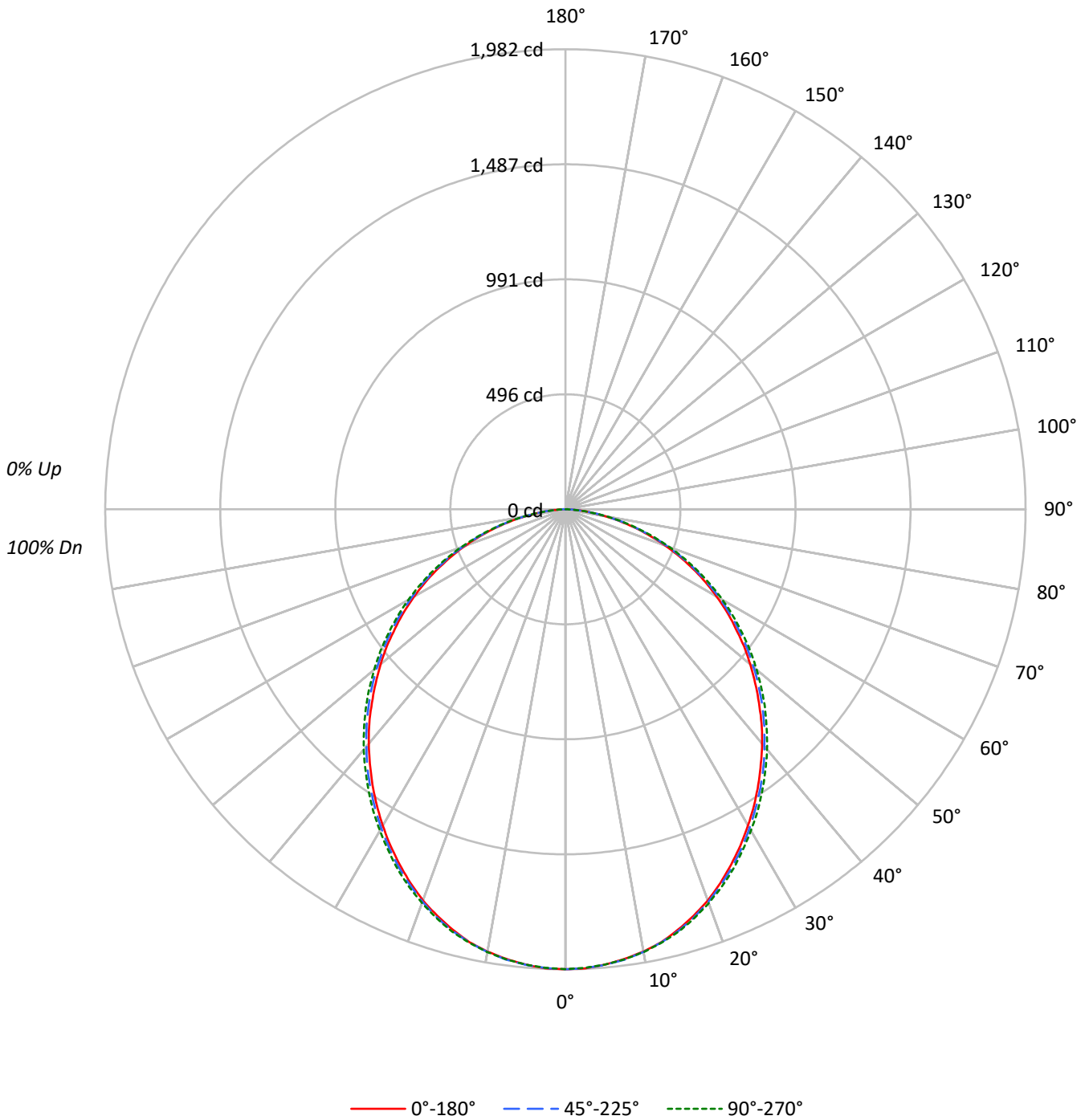
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5193.0 lumens
Efficiency: N/A
Efficacy: 122.2 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): 42.5
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: P708831
CATALOG NUMBER: 24APR-X-52L850-UNV

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°	5332	5332	5332
5°	5319	5321	5317
10°	5287	5292	5293
15°	5224	5239	5249
20°	5136	5153	5170
25°	5015	5048	5078
30°	4888	4928	4965
35°	4758	4811	4857
40°	4629	4683	4745
45°	4485	4565	4628
50°	4349	4431	4500
55°	4200	4289	4364
60°	4049	4132	4211
65°	3853	3940	4015
70°	3608	3687	3762
75°	3256	3336	3398
80°	2748	2848	2876
85°	2044	2171	2133



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.0	3.6
10°-20°	529.7	10.2
20°-30°	782.5	15.1
30°-40°	915.6	17.6
40°-50°	924.8	17.8
50°-60°	817.4	15.7
60°-70°	611.8	11.8
70°-80°	340.1	6.5
80°-90°	84.1	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°	1499.3	28.9
0°-40°	2414.9	46.5
0°-60°	4157.0	80.1
0°-90°	5193.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5193.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1982	1982	1982	1982	1982	
5°	1969	1970	1970	1970	1968	187
15°	1875	1876	1880	1884	1884	528
25°	1689	1691	1700	1706	1710	778
35°	1448	1453	1464	1474	1479	906
45°	1178	1187	1200	1212	1216	910
55°	895	902	914	925	930	802
65°	605	609	619	627	630	599
75°	313	315	321	327	327	332
85°	66	69	70	69	69	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1981.5	1981.5	1981.5	1981.5	1981.5
2.5°	1979.7	1979.7	1977.9	1978.5	1977.3
5°	1969.1	1969.7	1969.7	1970.2	1968.5
7.5°	1953.7	1954.9	1956.7	1957.2	1955.5
10°	1934.8	1936.0	1936.6	1938.9	1937.1
12.5°	1910.0	1910.6	1911.1	1914.7	1912.9
15°	1875.1	1876.3	1880.4	1884.0	1884.0
17.5°	1836.1	1838.5	1843.2	1847.9	1846.7
20°	1793.5	1795.3	1799.5	1806.0	1805.4
22.5°	1743.3	1745.1	1751.0	1758.1	1759.9
25°	1688.9	1691.3	1700.2	1705.5	1710.2
27.5°	1632.8	1635.8	1644.0	1652.3	1654.7
30°	1573.1	1577.8	1586.1	1595.0	1597.9
32.5°	1512.3	1514.6	1525.8	1535.3	1541.2
35°	1448.4	1452.6	1464.4	1474.4	1478.6
37.5°	1382.8	1388.7	1401.2	1411.8	1415.3
40°	1317.8	1322.6	1333.2	1346.8	1350.9
42.5°	1250.5	1254.6	1267.6	1279.4	1283.6
45°	1178.4	1187.2	1199.6	1212.0	1216.2
47.5°	1108.6	1116.9	1129.3	1141.7	1146.5
50°	1038.9	1047.8	1058.4	1071.4	1074.9
52.5°	969.2	976.3	987.5	998.7	1004.0
55°	895.3	902.4	914.2	925.4	930.2
57.5°	825.6	830.3	841.5	852.2	856.3
60°	752.3	757.0	767.7	778.9	782.4
62.5°	680.2	683.1	693.2	703.8	706.2
65°	605.1	609.3	618.7	627.0	630.5
67.5°	531.9	535.4	543.7	552.5	554.3
70°	458.6	460.9	468.6	475.1	478.1
72.5°	384.7	387.1	395.3	398.9	401.8
75°	313.2	315.0	320.9	326.8	326.8
77.5°	243.5	246.4	251.2	253.5	254.7
80°	177.3	180.2	183.8	186.2	185.6
82.5°	117.0	120.0	122.3	123.5	122.3
85°	66.2	68.6	70.3	69.1	69.1
87.5°	26.0	27.2	28.4	27.8	26.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)