

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: P708826

Luminaire Tested: **24APR-X-52L840-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708826
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-52L840-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

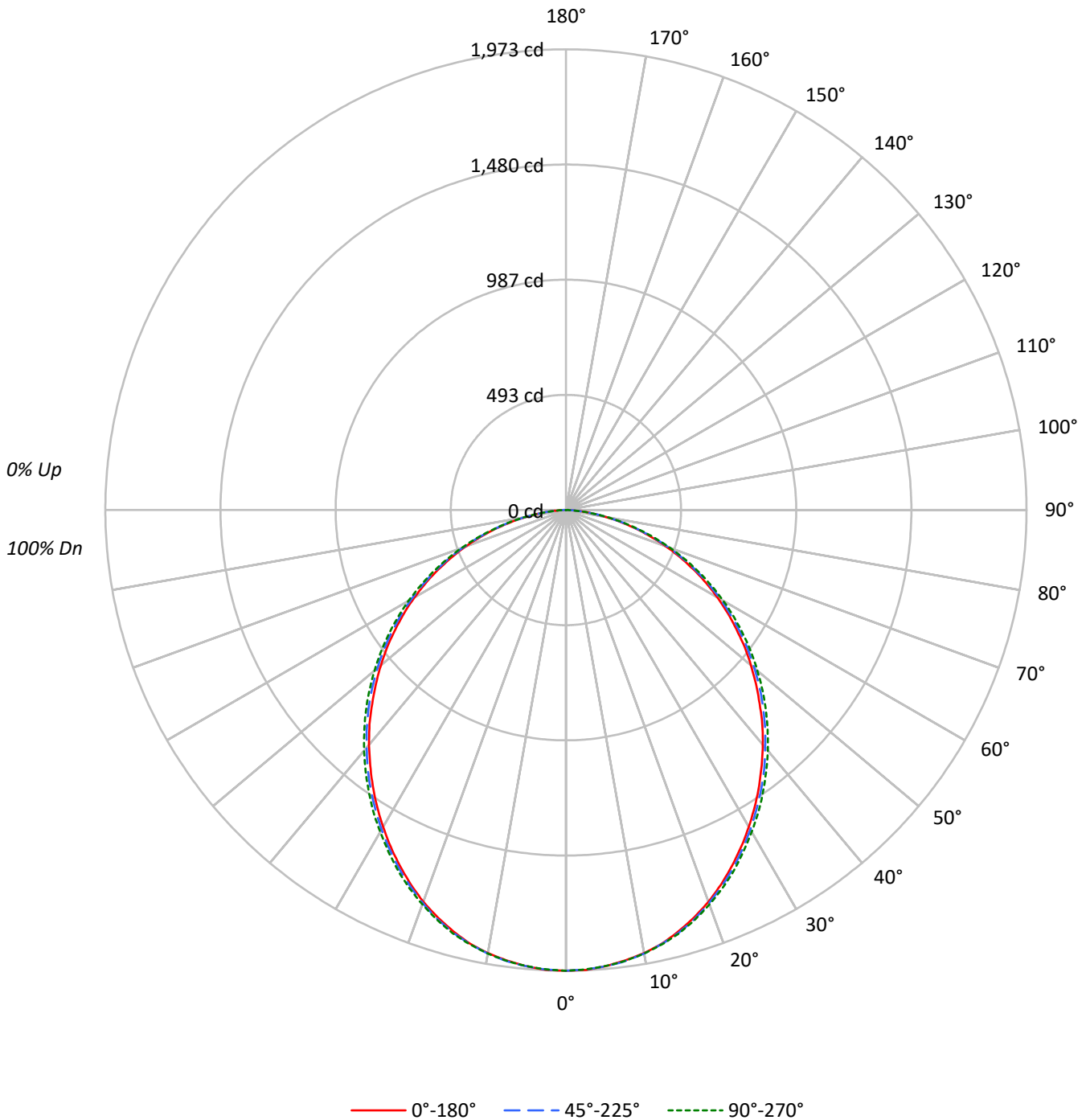
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5171.3 lumens
Efficiency: N/A
Efficacy: 121.7 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

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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°	5310	5310	5310
5°	5297	5298	5295
10°	5265	5270	5271
15°	5202	5217	5227
20°	5115	5131	5148
25°	4994	5027	5057
30°	4868	4908	4945
35°	4738	4791	4837
40°	4610	4664	4726
45°	4466	4546	4609
50°	4331	4412	4482
55°	4183	4271	4346
60°	4032	4114	4194
65°	3837	3923	3998
70°	3593	3672	3746
75°	3243	3322	3383
80°	2735	2836	2864
85°	2035	2161	2127



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	186.2	3.6
10°-20°	527.5	10.2
20°-30°	779.3	15.1
30°-40°	911.8	17.6
40°-50°	920.9	17.8
50°-60°	813.9	15.7
60°-70°	609.3	11.8
70°-80°	338.6	6.5
80°-90°	83.7	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°	1493.0	28.9
0°-40°	2404.8	46.5
0°-60°	4139.6	80.1
0°-90°	5171.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5171.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1973	1973	1973	1973	1973	
5°	1961	1961	1961	1962	1960	186
15°	1867	1868	1873	1876	1876	526
25°	1682	1684	1693	1698	1703	775
35°	1442	1446	1458	1468	1472	902
45°	1173	1182	1195	1207	1211	906
55°	892	899	910	922	926	798
65°	603	607	616	624	628	597
75°	312	314	320	325	325	331
85°	66	68	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°	1973.2	1973.2	1973.2	1973.2	1973.2
2.5°	1971.4	1971.4	1969.7	1970.2	1969.1
5°	1960.8	1961.4	1961.4	1962.0	1960.2
7.5°	1945.5	1946.7	1948.5	1949.1	1947.3
10°	1926.7	1927.9	1928.5	1930.8	1929.0
12.5°	1902.0	1902.6	1903.2	1906.7	1904.9
15°	1867.3	1868.4	1872.6	1876.1	1876.1
17.5°	1828.4	1830.8	1835.5	1840.2	1839.0
20°	1786.0	1787.8	1791.9	1798.4	1797.8
22.5°	1736.0	1737.8	1743.7	1750.7	1752.5
25°	1681.9	1684.2	1693.1	1698.4	1703.1
27.5°	1626.0	1628.9	1637.2	1645.4	1647.8
30°	1566.5	1571.2	1579.5	1588.3	1591.3
32.5°	1505.9	1508.3	1519.5	1528.9	1534.8
35°	1442.4	1446.5	1458.3	1468.3	1472.4
37.5°	1377.1	1382.9	1395.3	1405.9	1409.4
40°	1312.3	1317.0	1327.6	1341.2	1345.3
42.5°	1245.2	1249.3	1262.3	1274.1	1278.2
45°	1173.4	1182.3	1194.6	1207.0	1211.1
47.5°	1104.0	1112.2	1124.6	1136.9	1141.7
50°	1034.6	1043.4	1054.0	1066.9	1070.5
52.5°	965.1	972.2	983.4	994.5	999.8
55°	891.6	898.6	910.4	921.6	926.3
57.5°	822.1	826.8	838.0	848.6	852.7
60°	749.1	753.8	764.4	775.6	779.2
62.5°	677.3	680.3	690.3	700.9	703.2
65°	602.6	606.7	616.1	624.4	627.9
67.5°	529.6	533.2	541.4	550.2	552.0
70°	456.7	459.0	466.7	473.1	476.1
72.5°	383.1	385.5	393.7	397.2	400.2
75°	311.9	313.7	319.5	325.4	325.4
77.5°	242.5	245.4	250.1	252.5	253.6
80°	176.5	179.5	183.0	185.4	184.8
82.5°	116.5	119.5	121.8	123.0	121.8
85°	65.9	68.3	70.0	68.9	68.9
87.5°	25.9	27.1	28.2	27.7	26.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)