

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: P708838

Luminaire Tested: **24APR-X-80L935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708838
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-80L935-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

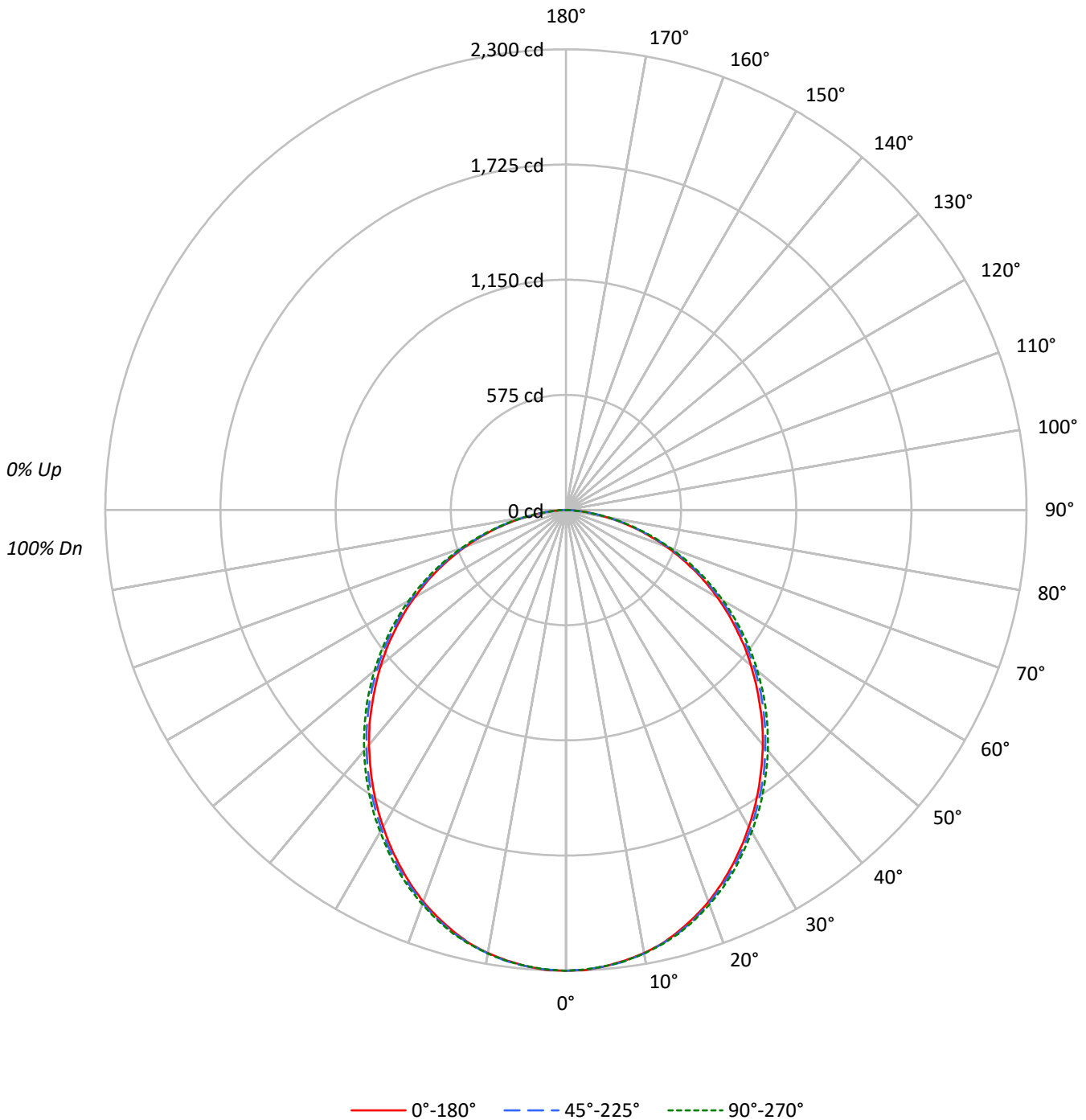
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6028.4 lumens
Efficiency: N/A
Efficacy: 87.6 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): 68.8
Input Voltage (V): 120
Input Current (A_{in}): 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	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°	6190	6190	6190
5°	6175	6176	6173
10°	6137	6143	6145
15°	6064	6081	6093
20°	5962	5982	6002
25°	5822	5860	5895
30°	5675	5721	5764
35°	5524	5585	5639
40°	5374	5437	5509
45°	5206	5300	5373
50°	5049	5144	5224
55°	4876	4979	5066
60°	4700	4796	4888
65°	4473	4574	4661
70°	4189	4280	4367
75°	3780	3873	3945
80°	3189	3307	3338
85°	2371	2519	2479



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	217.1	3.6
10°-20°	615.0	10.2
20°-30°	908.4	15.1
30°-40°	1062.9	17.6
40°-50°	1073.5	17.8
50°-60°	948.9	15.7
60°-70°	710.3	11.8
70°-80°	394.8	6.5
80°-90°	97.6	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°	1740.4	28.9
0°-40°	2803.4	46.5
0°-60°	4825.7	80.1
0°-90°	6028.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6028.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2300	2300	2300	2300	2300	
5°	2286	2286	2286	2287	2285	217
15°	2177	2178	2183	2187	2187	613
25°	1961	1963	1974	1980	1985	903
35°	1681	1686	1700	1712	1716	1052
45°	1368	1378	1393	1407	1412	1056
55°	1039	1048	1061	1074	1080	931
65°	702	707	718	728	732	696
75°	364	366	372	379	379	385
85°	77	80	82	80	80	94
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2300.2	2300.2	2300.2	2300.2	2300.2
2.5°	2298.2	2298.2	2296.1	2296.8	2295.4
5°	2285.8	2286.5	2286.5	2287.2	2285.1
7.5°	2268.0	2269.4	2271.4	2272.1	2270.0
10°	2246.0	2247.4	2248.1	2250.8	2248.8
12.5°	2217.2	2217.9	2218.6	2222.7	2220.7
15°	2176.7	2178.1	2182.9	2187.0	2187.0
17.5°	2131.5	2134.2	2139.7	2145.2	2143.8
20°	2082.1	2084.1	2088.9	2096.5	2095.8
22.5°	2023.8	2025.8	2032.7	2040.9	2043.0
25°	1960.7	1963.4	1973.7	1979.9	1985.3
27.5°	1895.5	1898.9	1908.5	1918.1	1920.9
30°	1826.2	1831.7	1841.3	1851.6	1855.0
32.5°	1755.5	1758.3	1771.3	1782.3	1789.1
35°	1681.4	1686.2	1700.0	1711.6	1716.4
37.5°	1605.3	1612.2	1626.6	1638.9	1643.0
40°	1529.8	1535.3	1547.7	1563.4	1568.2
42.5°	1451.6	1456.4	1471.5	1485.2	1490.0
45°	1367.9	1378.2	1392.6	1407.0	1411.8
47.5°	1287.0	1296.6	1311.0	1325.4	1330.9
50°	1206.0	1216.3	1228.7	1243.8	1247.9
52.5°	1125.1	1133.3	1146.3	1159.4	1165.6
55°	1039.3	1047.6	1061.3	1074.3	1079.8
57.5°	958.4	963.9	976.9	989.2	994.0
60°	873.3	878.8	891.1	904.2	908.3
62.5°	789.6	793.0	804.7	817.1	819.8
65°	702.5	707.3	718.3	727.9	732.0
67.5°	617.4	621.5	631.1	641.4	643.5
70°	532.4	535.1	544.0	551.6	555.0
72.5°	446.6	449.3	458.9	463.1	466.5
75°	363.6	365.6	372.5	379.4	379.4
77.5°	282.6	286.1	291.6	294.3	295.7
80°	205.8	209.2	213.4	216.1	215.4
82.5°	135.8	139.3	142.0	143.4	142.0
85°	76.8	79.6	81.6	80.3	80.3
87.5°	30.2	31.6	32.9	32.2	30.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)