

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: P708843

Luminaire Tested: **24APR-X-80L940-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708843
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-80L940-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

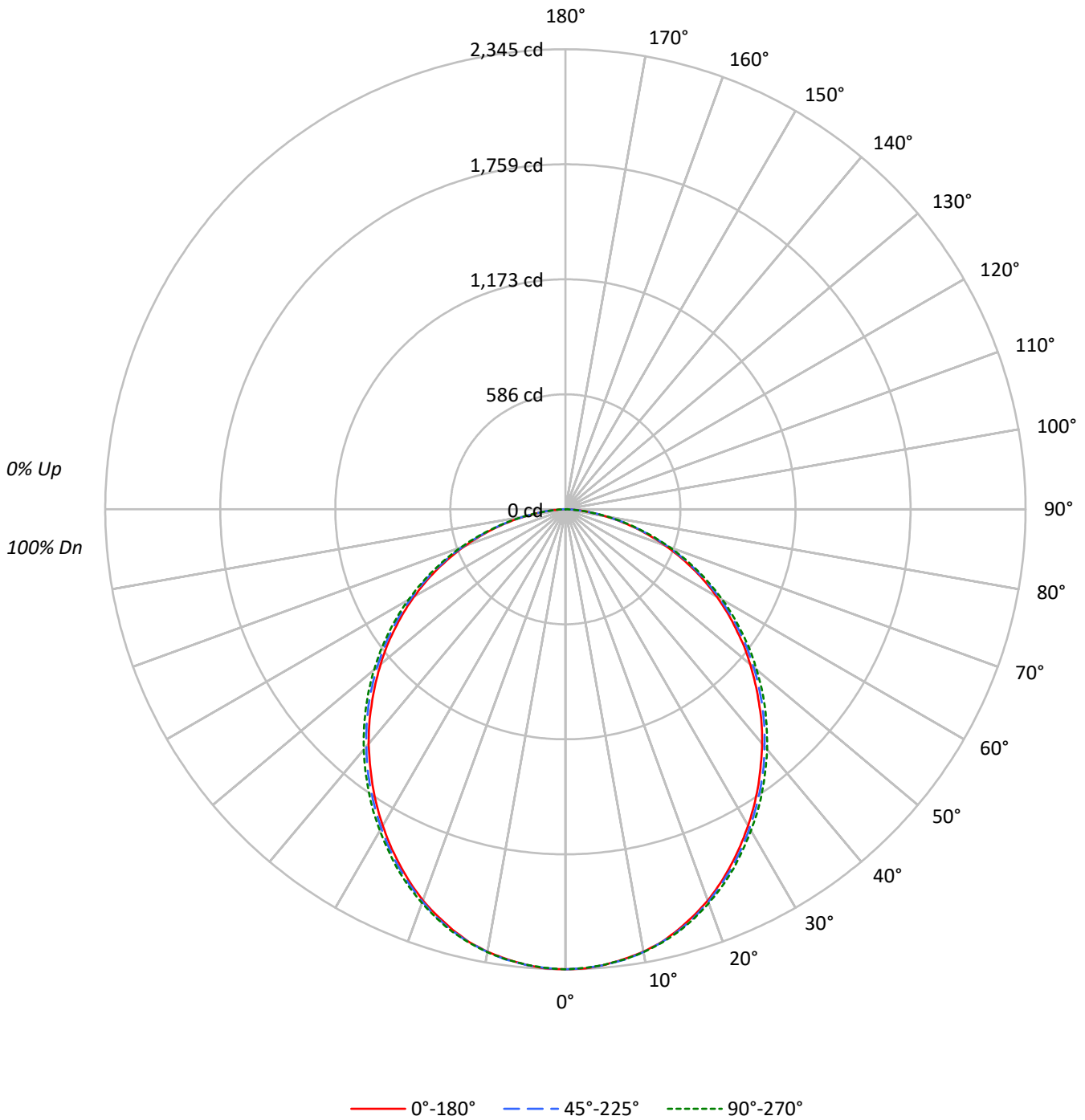
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6145.3 lumens
Efficiency: N/A
Efficacy: 89.3 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 (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: P708843
CATALOG NUMBER: 24APR-X-80L940-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	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°	6310	6310	6310
5°	6294	6296	6292
10°	6256	6262	6264
15°	6182	6199	6211
20°	6078	6098	6118
25°	5934	5974	6009
30°	5785	5832	5876
35°	5631	5693	5748
40°	5478	5542	5616
45°	5307	5402	5477
50°	5147	5243	5326
55°	4971	5076	5164
60°	4791	4889	4983
65°	4560	4662	4751
70°	4270	4364	4452
75°	3853	3948	4021
80°	3251	3371	3403
85°	2418	2569	2526



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	221.3	3.6
10°-20°	626.9	10.2
20°-30°	926.0	15.1
30°-40°	1083.5	17.6
40°-50°	1094.4	17.8
50°-60°	967.2	15.7
60°-70°	724.1	11.8
70°-80°	402.4	6.5
80°-90°	99.5	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°	1774.2	28.9
0°-40°	2857.7	46.5
0°-60°	4919.3	80.1
0°-90°	6145.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6145.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2345	2345	2345	2345	2345	
5°	2330	2331	2331	2332	2329	221
15°	2219	2220	2225	2229	2229	625
25°	1999	2002	2012	2018	2024	921
35°	1714	1719	1733	1745	1750	1072
45°	1394	1405	1420	1434	1439	1077
55°	1060	1068	1082	1095	1101	949
65°	716	721	732	742	746	709
75°	371	373	380	387	387	393
85°	78	81	83	82	82	96
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2344.8	2344.8	2344.8	2344.8	2344.8
2.5°	2342.7	2342.7	2340.6	2341.3	2339.9
5°	2330.1	2330.8	2330.8	2331.5	2329.4
7.5°	2312.0	2313.4	2315.5	2316.2	2314.1
10°	2289.6	2291.0	2291.7	2294.5	2292.4
12.5°	2260.2	2260.9	2261.6	2265.8	2263.7
15°	2218.9	2220.3	2225.2	2229.4	2229.4
17.5°	2172.8	2175.6	2181.2	2186.8	2185.4
20°	2122.4	2124.5	2129.4	2137.1	2136.4
22.5°	2063.0	2065.1	2072.1	2080.5	2082.6
25°	1998.7	2001.5	2011.9	2018.2	2023.8
27.5°	1932.2	1935.7	1945.5	1955.3	1958.1
30°	1861.6	1867.2	1877.0	1887.5	1891.0
32.5°	1789.6	1792.4	1805.6	1816.8	1823.8
35°	1714.0	1718.9	1732.9	1744.8	1749.7
37.5°	1636.4	1643.4	1658.1	1670.7	1674.9
40°	1559.5	1565.1	1577.7	1593.8	1598.7
42.5°	1479.8	1484.7	1500.0	1514.0	1518.9
45°	1394.4	1404.9	1419.6	1434.3	1439.2
47.5°	1311.9	1321.7	1336.4	1351.1	1356.7
50°	1229.4	1239.9	1252.5	1267.9	1272.1
52.5°	1146.9	1155.3	1168.6	1181.9	1188.1
55°	1059.5	1067.9	1081.9	1095.1	1100.7
57.5°	977.0	982.5	995.8	1008.4	1013.3
60°	890.2	895.8	908.4	921.7	925.9
62.5°	804.9	808.4	820.3	832.9	835.7
65°	716.1	721.0	732.2	742.0	746.2
67.5°	629.4	633.6	643.4	653.9	656.0
70°	542.7	545.5	554.6	562.3	565.8
72.5°	455.3	458.1	467.8	472.0	475.5
75°	370.6	372.7	379.7	386.7	386.7
77.5°	288.1	291.6	297.2	300.0	301.4
80°	209.8	213.3	217.5	220.3	219.6
82.5°	138.5	142.0	144.8	146.2	144.8
85°	78.3	81.1	83.2	81.8	81.8
87.5°	30.8	32.2	33.6	32.9	31.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)