

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: P708828

Luminaire Tested: **24APR-X-80L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708828
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-80L850-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

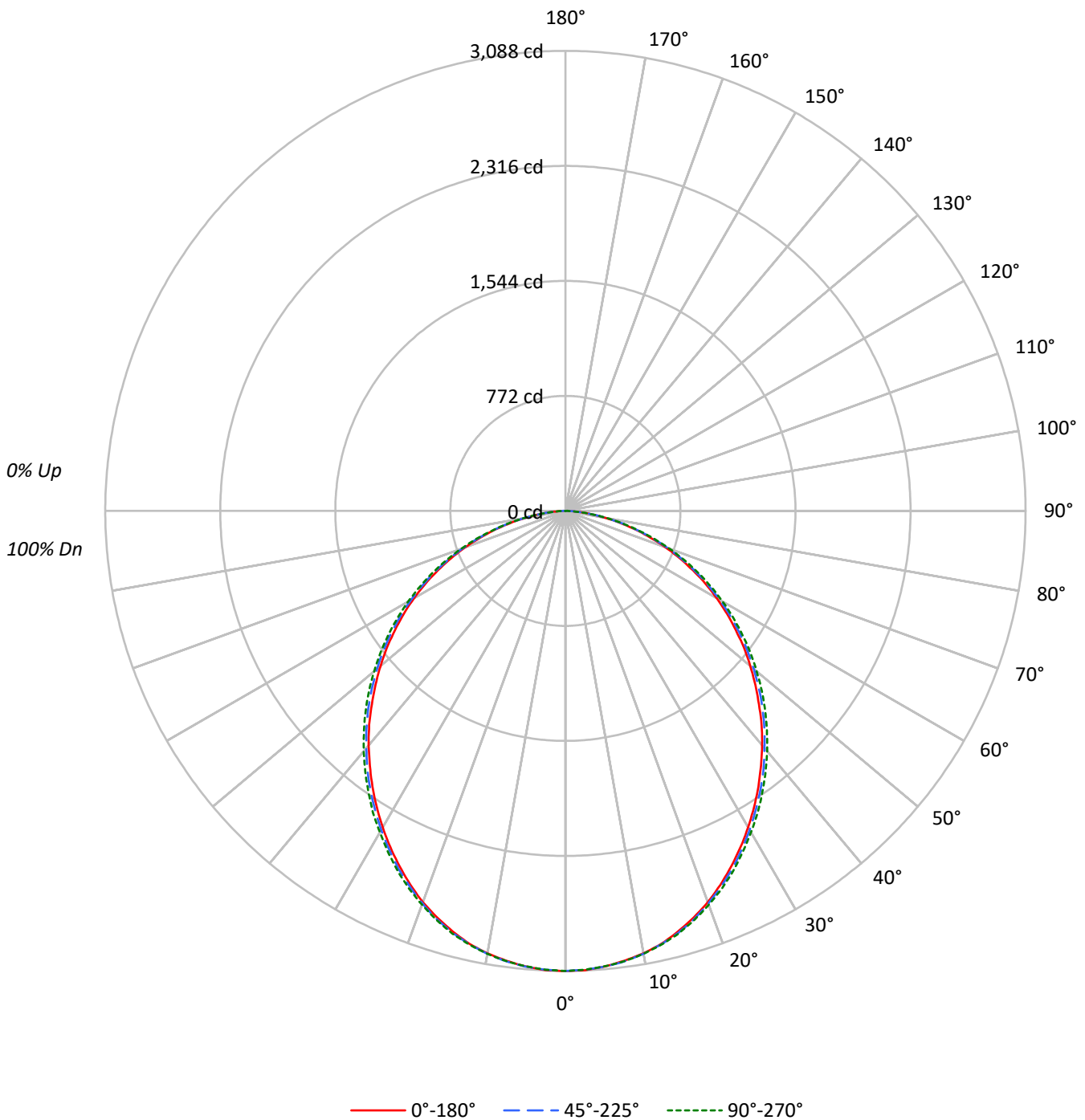
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8094.3 lumens
Efficiency: N/A
Efficacy: 117.6 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 (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	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°	8311	8311	8311
5°	8291	8293	8288
10°	8240	8248	8250
15°	8142	8165	8181
20°	8006	8032	8058
25°	7817	7869	7915
30°	7619	7682	7739
35°	7417	7498	7571
40°	7216	7300	7397
45°	6990	7116	7214
50°	6779	6906	7014
55°	6547	6685	6802
60°	6311	6440	6564
65°	6006	6141	6258
70°	5624	5747	5863
75°	5076	5201	5296
80°	4282	4440	4482
85°	3186	3384	3328



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.4	3.6
10°-20°	825.7	10.2
20°-30°	1219.7	15.1
30°-40°	1427.2	17.6
40°-50°	1441.4	17.8
50°-60°	1274.0	15.7
60°-70°	953.7	11.8
70°-80°	530.1	6.5
80°-90°	131.1	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°	2336.9	28.9
0°-40°	3764.0	46.5
0°-60°	6479.5	80.1
0°-90°	8094.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8094.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3088	3088	3088	3088	3088	
5°	3069	3070	3070	3071	3068	291
15°	2923	2924	2931	2936	2936	824
25°	2633	2636	2650	2658	2666	1213
35°	2258	2264	2282	2298	2305	1412
45°	1837	1850	1870	1889	1896	1419
55°	1396	1406	1425	1442	1450	1250
65°	943	950	964	977	983	934
75°	488	491	500	509	509	517
85°	103	107	110	108	108	126
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3088.5	3088.5	3088.5	3088.5	3088.5
2.5°	3085.7	3085.7	3083.0	3083.9	3082.1
5°	3069.2	3070.1	3070.1	3071.0	3068.2
7.5°	3045.2	3047.1	3049.8	3050.7	3048.0
10°	3015.7	3017.6	3018.5	3022.2	3019.4
12.5°	2977.0	2978.0	2978.9	2984.4	2981.7
15°	2922.7	2924.5	2931.0	2936.5	2936.5
17.5°	2861.9	2865.6	2873.0	2880.3	2878.5
20°	2795.6	2798.4	2804.8	2814.9	2814.0
22.5°	2717.3	2720.1	2729.3	2740.3	2743.1
25°	2632.6	2636.2	2650.1	2658.3	2665.7
27.5°	2545.0	2549.7	2562.5	2575.4	2579.1
30°	2452.0	2459.4	2472.3	2486.1	2490.7
32.5°	2357.1	2360.8	2378.3	2393.1	2402.3
35°	2257.7	2264.1	2282.5	2298.2	2304.6
37.5°	2155.4	2164.6	2184.0	2200.5	2206.1
40°	2054.1	2061.5	2078.0	2099.2	2105.7
42.5°	1949.1	1955.5	1975.8	1994.2	2000.7
45°	1836.7	1850.5	1869.9	1889.2	1895.7
47.5°	1728.0	1740.9	1760.3	1779.6	1787.0
50°	1619.3	1633.1	1649.7	1670.0	1675.5
52.5°	1510.6	1521.7	1539.2	1556.7	1565.0
55°	1395.5	1406.5	1425.0	1442.5	1449.8
57.5°	1286.8	1294.2	1311.7	1328.3	1334.7
60°	1172.6	1180.0	1196.5	1214.0	1219.6
62.5°	1060.2	1064.8	1080.5	1097.0	1100.7
65°	943.2	949.7	964.4	977.3	982.8
67.5°	829.0	834.5	847.4	861.2	864.0
70°	714.8	718.5	730.4	740.6	745.2
72.5°	599.6	603.3	616.2	621.8	626.4
75°	488.2	491.0	500.2	509.4	509.4
77.5°	379.5	384.1	391.5	395.2	397.0
80°	276.3	280.9	286.5	290.2	289.2
82.5°	182.4	187.0	190.7	192.5	190.7
85°	103.2	106.8	109.6	107.8	107.8
87.5°	40.5	42.4	44.2	43.3	41.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)