

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: P709023

Luminaire Tested: **24APR-49-116L850-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709023
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-49-116L850-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

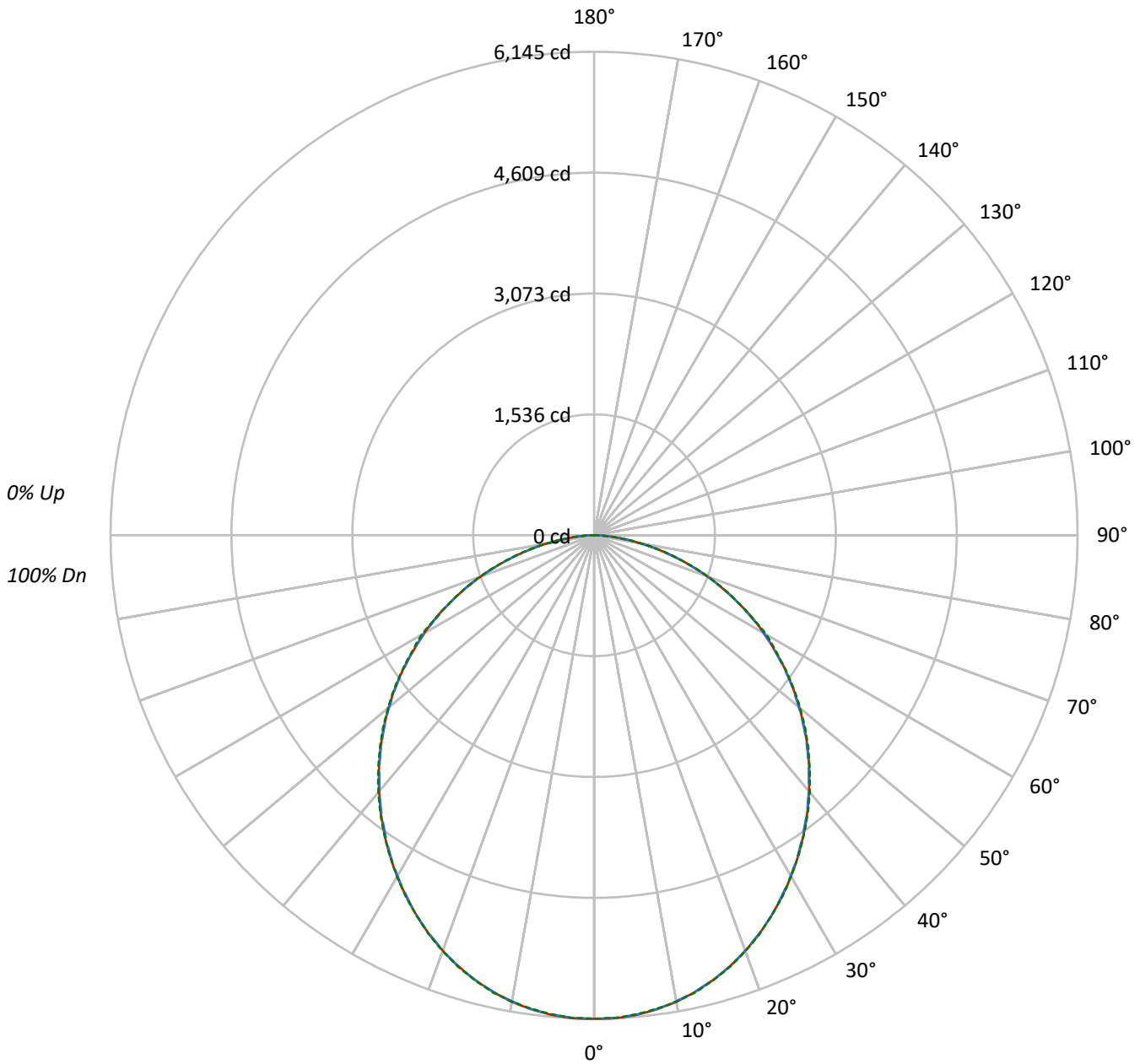
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16584.0 lumens
Efficiency: N/A
Efficacy: 128.9 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 128.7
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: P709023
CATALOG NUMBER: 24APR-49-116L850-UNV

Luminous Intensity Polar Plot



— 0°-180° - - 45°-225° - - - 90°-270°



TEST NUMBER: P709023
 CATALOG NUMBER: 24APR-49-116L850-UNV

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	94	98	94	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	73	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8268	8268	8268
5°	8269	8261	8256
10°	8226	8219	8225
15°	8148	8148	8157
20°	8048	8043	8055
25°	7922	7918	7918
30°	7779	7767	7780
35°	7627	7606	7636
40°	7465	7451	7490
45°	7305	7291	7330
50°	7131	7112	7158
55°	6936	6918	6960
60°	6707	6691	6809
65°	6402	6404	6421
70°	6051	6018	6058
75°	5520	5477	5514
80°	4765	4706	4738
85°	3717	3680	3673



TEST NUMBER: P709023
 CATALOG NUMBER: 24APR-49-116L850-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	580.8	3.5
10°-20°	1649.5	9.9
20°-30°	2456.5	14.8
30°-40°	2902.2	17.5
40°-50°	2960.7	17.9
50°-60°	2641.8	15.9
60°-70°	1991.7	12.0
70°-80°	1116.7	6.7
80°-90°	284.2	1.7
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°	4686.8	28.3
0°-40°	7589.0	45.8
0°-60°	13191.5	79.5
0°-90°	16584.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16584.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6145	6145	6145	6145	6145	
5°	6122	6119	6116	6118	6113	581
15°	5850	5846	5850	5854	5856	1649
25°	5336	5330	5334	5338	5334	2458
35°	4643	4637	4631	4644	4649	2904
45°	3839	3837	3832	3843	3852	2961
55°	2957	2950	2949	2958	2967	2641
65°	2011	2001	2011	2017	2017	1995
75°	1062	1044	1054	1048	1061	1124
85°	241	232	238	238	238	288
90°	0	0	0	0	0	



TEST NUMBER: P709023

CATALOG NUMBER: 24APR-49-116L850-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6145.3	6145.3	6145.3	6145.3	6145.3
2.5°	6145.3	6142.3	6140.0	6139.4	6140.6
5°	6122.3	6119.3	6116.4	6117.5	6112.8
7.5°	6078.0	6078.6	6076.2	6076.8	6071.5
10°	6020.8	6017.8	6015.4	6020.8	6020.2
12.5°	5943.4	5938.1	5940.5	5948.7	5949.3
15°	5849.6	5846.0	5849.6	5853.7	5856.1
17.5°	5742.8	5739.8	5743.9	5744.5	5749.3
20°	5620.6	5617.0	5617.0	5622.9	5625.3
22.5°	5485.4	5480.1	5481.3	5485.4	5488.4
25°	5336.1	5329.6	5333.7	5338.5	5333.7
27.5°	5175.0	5171.4	5167.3	5173.2	5180.9
30°	5006.8	4999.7	4999.1	5003.2	5007.4
32.5°	4829.1	4820.9	4820.9	4826.2	4829.7
35°	4643.2	4636.7	4630.8	4644.4	4649.1
37.5°	4451.4	4443.7	4443.1	4451.4	4459.1
40°	4250.1	4243.6	4241.9	4256.0	4264.3
42.5°	4047.1	4043.0	4038.8	4053.0	4059.5
45°	3839.3	3837.0	3831.7	3842.9	3852.3
47.5°	3625.7	3618.0	3616.2	3629.2	3638.7
50°	3406.7	3403.8	3397.8	3409.7	3419.7
52.5°	3184.8	3181.2	3177.1	3187.7	3198.4
55°	2957.0	2950.5	2949.3	2958.1	2967.0
57.5°	2719.7	2714.4	2722.6	2730.9	2738.0
60°	2492.5	2480.1	2486.6	2496.0	2530.2
62.5°	2264.1	2242.2	2246.9	2272.9	2258.2
65°	2010.9	2000.8	2011.4	2017.3	2016.8
67.5°	1773.6	1761.8	1777.7	1773.0	1780.1
70°	1538.1	1517.4	1529.8	1531.6	1539.9
72.5°	1294.9	1277.2	1287.8	1293.2	1298.5
75°	1061.8	1043.5	1053.5	1047.6	1060.6
77.5°	829.8	818.6	825.1	829.2	839.3
80°	615.0	602.6	607.3	607.9	611.5
82.5°	416.7	407.2	408.4	419.1	414.9
85°	240.8	232.0	238.4	237.9	237.9
87.5°	93.8	86.8	93.3	92.7	91.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)