

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: P708943

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

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708943
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-116L850-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

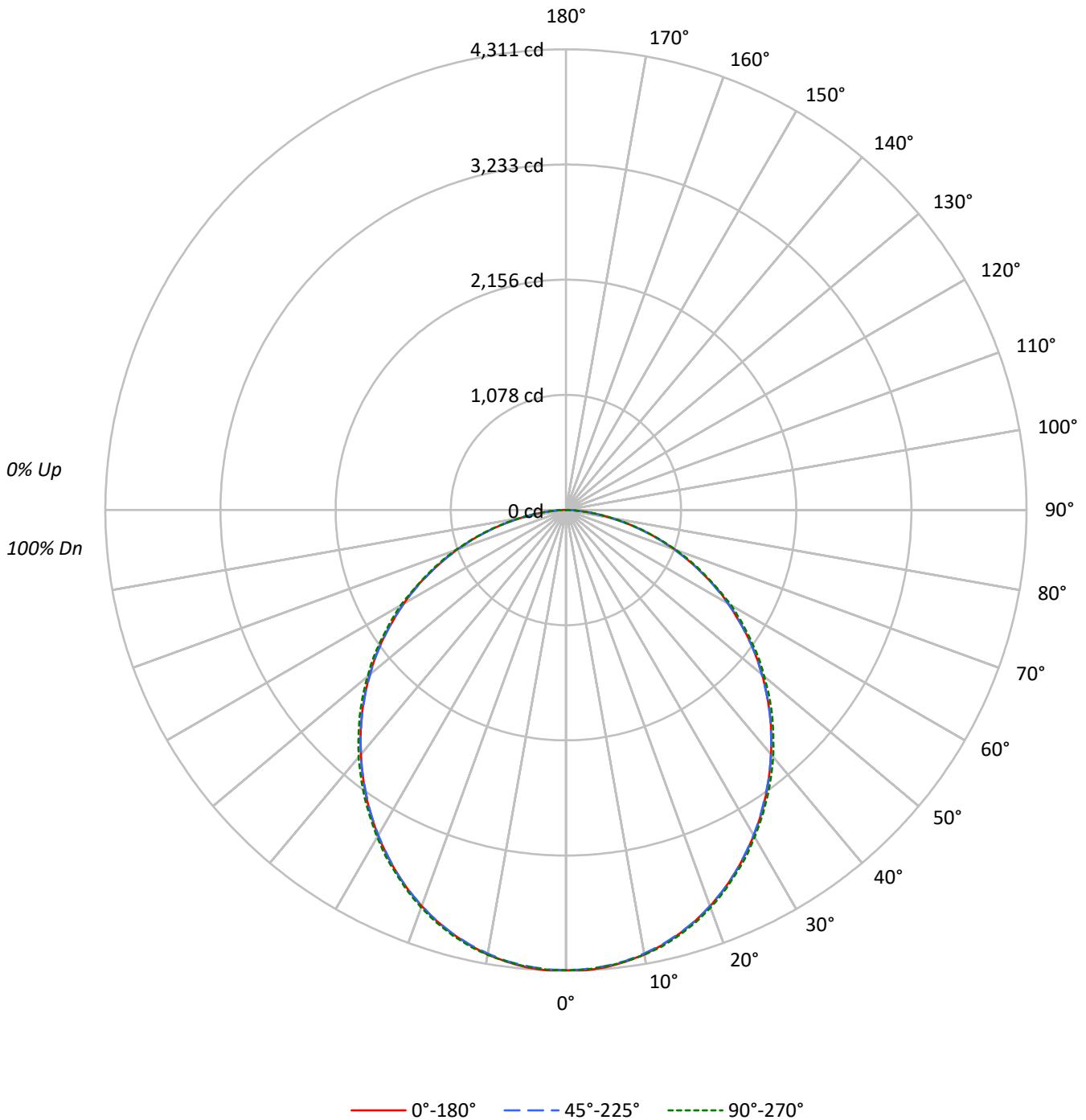
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11686.8 lumens
Efficiency: N/A
Efficacy: 136.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 85.9
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	94	98	94	91	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	72	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	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	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	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5794	5794	5794
5°	5801	5785	5791
10°	5771	5758	5774
15°	5717	5713	5735
20°	5649	5645	5670
25°	5559	5561	5579
30°	5462	5458	5489
35°	5359	5346	5395
40°	5245	5242	5301
45°	5137	5133	5195
50°	5018	5008	5075
55°	4881	4874	4942
60°	4721	4718	4808
65°	4506	4514	4566
70°	4272	4237	4325
75°	3905	3874	3948
80°	3378	3336	3405
85°	2657	2629	2703



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	407.1	3.5
10°-20°	1157.5	9.9
20°-30°	1726.3	14.8
30°-40°	2042.7	17.5
40°-50°	2087.2	17.9
50°-60°	1865.3	16.0
60°-70°	1406.0	12.0
70°-80°	791.4	6.8
80°-90°	203.3	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°	3290.9	28.2
0°-40°	5333.6	45.6
0°-60°	9286.1	79.5
0°-90°	11686.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11686.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4306	4306	4306	4306	4306	
5°	4295	4289	4283	4288	4288	408
15°	4104	4099	4101	4110	4117	1157
25°	3745	3739	3746	3758	3758	1725
35°	3263	3256	3255	3277	3284	2040
45°	2700	2697	2698	2718	2730	2082
55°	2081	2081	2078	2096	2107	1858
65°	1415	1409	1418	1431	1434	1406
75°	751	737	745	742	759	795
85°	172	165	170	173	175	205
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4306.5	4306.5	4306.5	4306.5	4306.5
2.5°	4311.2	4304.7	4300.0	4302.4	4304.1
5°	4294.7	4288.8	4283.4	4287.6	4287.6
7.5°	4263.3	4260.4	4256.2	4259.8	4261.0
10°	4224.3	4217.8	4214.8	4223.1	4226.1
12.5°	4169.3	4161.6	4164.0	4174.6	4179.3
15°	4104.2	4098.9	4101.3	4109.5	4117.2
17.5°	4030.3	4024.4	4029.7	4036.8	4043.9
20°	3945.1	3939.2	3942.2	3952.2	3959.9
22.5°	3850.5	3844.6	3848.1	3857.0	3865.3
25°	3744.6	3739.3	3745.8	3757.6	3758.2
27.5°	3634.0	3628.1	3629.9	3642.3	3653.5
30°	3515.7	3508.0	3513.3	3525.8	3532.9
32.5°	3391.5	3384.4	3388.5	3402.7	3411.0
35°	3262.6	3255.5	3254.9	3276.8	3284.4
37.5°	3125.9	3121.8	3125.3	3143.1	3152.5
40°	2986.3	2980.4	2984.6	3007.0	3018.3
42.5°	2845.0	2841.4	2842.0	2864.5	2873.4
45°	2699.5	2697.1	2697.7	2718.4	2730.2
47.5°	2549.2	2543.9	2546.3	2567.6	2580.0
50°	2397.2	2396.0	2392.5	2413.8	2424.4
52.5°	2241.1	2238.7	2238.7	2257.6	2273.0
55°	2080.8	2080.8	2077.8	2096.2	2106.8
57.5°	1912.8	1914.0	1918.7	1935.3	1945.9
60°	1754.3	1748.4	1753.1	1767.9	1786.8
62.5°	1596.4	1578.6	1583.4	1597.0	1604.7
65°	1415.4	1408.9	1417.8	1431.4	1434.3
67.5°	1249.2	1242.7	1247.4	1256.9	1269.9
70°	1085.9	1068.8	1077.1	1087.1	1099.5
72.5°	914.4	899.6	911.5	919.7	928.6
75°	751.2	737.0	745.3	741.7	759.4
77.5°	587.3	577.3	584.4	591.5	605.1
80°	435.9	424.7	430.6	433.5	439.5
82.5°	296.9	288.6	290.4	302.2	298.7
85°	172.1	165.0	170.3	172.7	175.1
87.5°	68.0	61.5	66.8	68.6	69.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)