

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: P708864

Luminaire Tested: **22APR-30-71L840-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708864
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-30-71L840-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

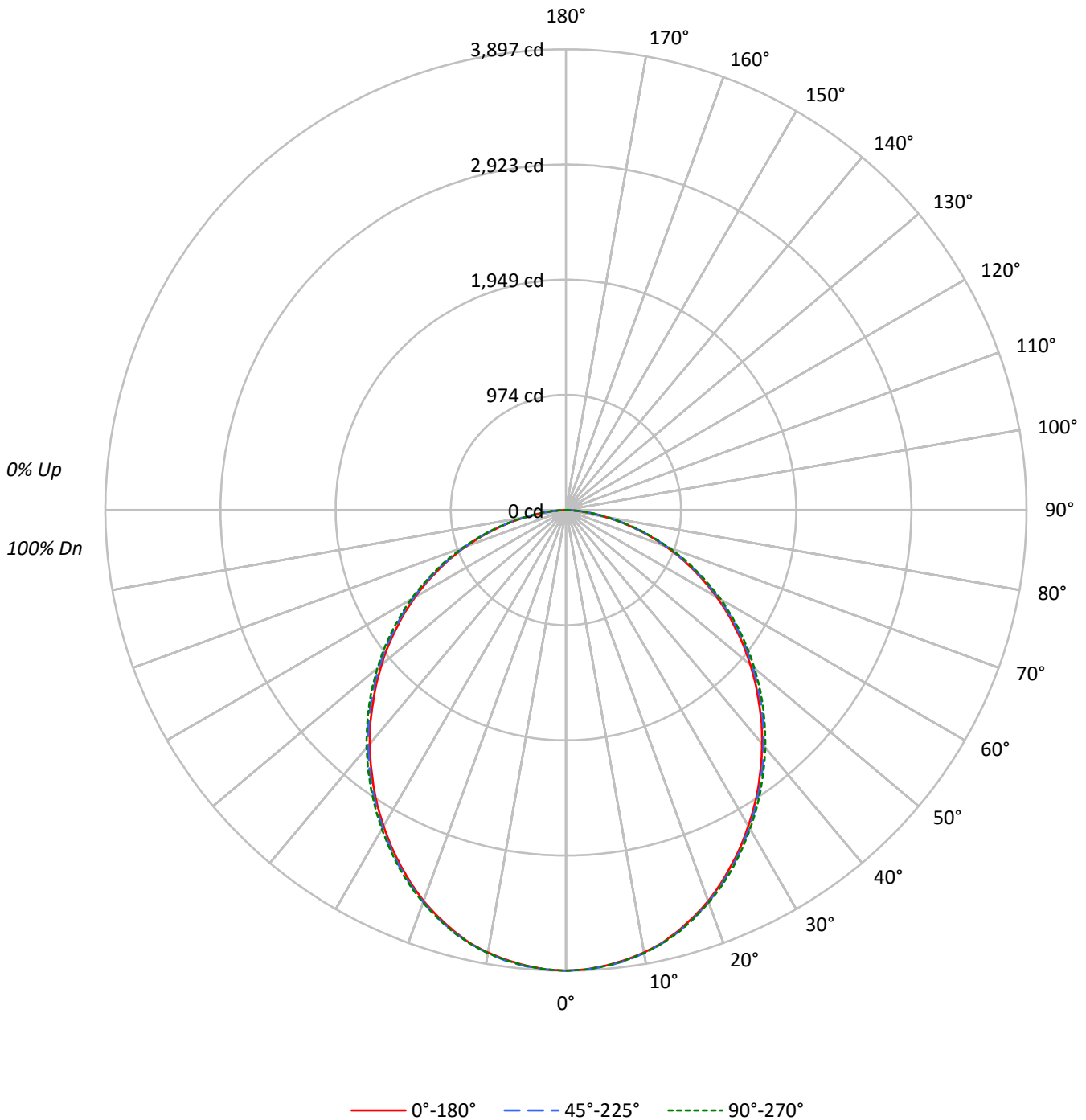
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10135.7 lumens
Efficiency: N/A
Efficacy: 112.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 90.1
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: P708864
CATALOG NUMBER: 22APR-30-71L840-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708864
 CATALOG NUMBER: 22APR-30-71L840-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	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	73	73	73	71
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	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	41	41	41	39
7	66	52	44	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	41	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°	10487	10487	10487
5°	10452	10465	10457
10°	10387	10402	10400
15°	10260	10287	10291
20°	10084	10104	10119
25°	9840	9886	9918
30°	9589	9642	9678
35°	9333	9397	9445
40°	9070	9141	9216
45°	8788	8896	8974
50°	8526	8628	8716
55°	8233	8344	8447
60°	7934	8038	8152
65°	7541	7665	7753
70°	7057	7153	7255
75°	6346	6465	6549
80°	5359	5497	5548
85°	4011	4187	4159



TEST NUMBER: P708864
 CATALOG NUMBER: 22APR-30-71L840-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.6	3.6
10°-20°	1039.9	10.3
20°-30°	1532.8	15.1
30°-40°	1788.9	17.6
40°-50°	1802.8	17.8
50°-60°	1591.1	15.7
60°-70°	1190.0	11.7
70°-80°	659.5	6.5
80°-90°	163.1	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°	2940.3	29.0
0°-40°	4729.2	46.7
0°-60°	8123.2	80.1
0°-90°	10135.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10135.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3897	3897	3897	3897	3897	
5°	3869	3874	3874	3875	3871	367
15°	3683	3689	3692	3696	3694	1038
25°	3314	3322	3330	3336	3340	1527
35°	2841	2848	2860	2872	2875	1777
45°	2309	2324	2338	2354	2358	1784
55°	1755	1766	1778	1795	1800	1571
65°	1184	1190	1204	1214	1218	1173
75°	610	614	622	628	630	648
85°	130	134	136	134	135	159
90°	0	0	0	0	0	



TEST NUMBER: P708864

CATALOG NUMBER: 22APR-30-71L840-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3897.0	3897.0	3897.0	3897.0	3897.0
2.5°	3889.7	3893.8	3890.5	3893.8	3890.5
5°	3869.4	3874.3	3874.3	3875.1	3871.0
7.5°	3839.4	3845.1	3847.5	3848.3	3842.6
10°	3801.2	3806.9	3806.9	3810.2	3806.1
12.5°	3752.5	3755.8	3755.0	3759.8	3756.6
15°	3682.7	3689.2	3692.5	3695.7	3694.1
17.5°	3604.8	3612.9	3615.4	3621.0	3617.0
20°	3521.2	3526.9	3528.5	3537.4	3533.4
22.5°	3421.4	3427.0	3432.7	3440.8	3441.6
25°	3314.2	3321.5	3329.6	3336.1	3340.2
27.5°	3203.8	3211.1	3218.4	3226.5	3228.2
30°	3086.1	3095.0	3103.2	3112.9	3114.5
32.5°	2967.6	2970.9	2983.0	2993.6	2998.5
35°	2841.0	2847.5	2860.5	2871.8	2875.1
37.5°	2711.9	2721.7	2735.5	2747.6	2750.9
40°	2582.0	2590.2	2602.3	2618.6	2623.4
42.5°	2450.5	2456.2	2472.5	2486.3	2490.3
45°	2309.3	2323.9	2337.7	2354.0	2358.0
47.5°	2174.6	2185.9	2199.7	2215.2	2221.6
50°	2036.6	2050.4	2060.9	2078.0	2082.0
52.5°	1898.6	1907.5	1922.1	1936.7	1943.2
55°	1754.9	1765.5	1778.5	1794.7	1800.4
57.5°	1616.9	1622.6	1637.2	1651.0	1655.9
60°	1474.1	1479.7	1493.5	1508.2	1514.6
62.5°	1331.2	1336.1	1347.4	1364.5	1364.5
65°	1184.3	1190.0	1203.8	1213.5	1217.6
67.5°	1041.4	1046.3	1056.0	1068.2	1073.9
70°	896.9	901.0	909.1	921.3	922.1
72.5°	752.5	756.5	767.1	771.1	776.8
75°	610.4	613.7	621.8	628.3	629.9
77.5°	474.8	479.7	485.4	487.8	490.3
80°	345.8	350.7	354.7	357.2	358.0
82.5°	228.9	233.8	236.2	237.8	237.0
85°	129.9	133.9	135.6	133.9	134.7
87.5°	51.1	53.6	55.2	54.4	52.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)