

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: P709025

Luminaire Tested: **24APR-76-181L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709025
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76-181L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

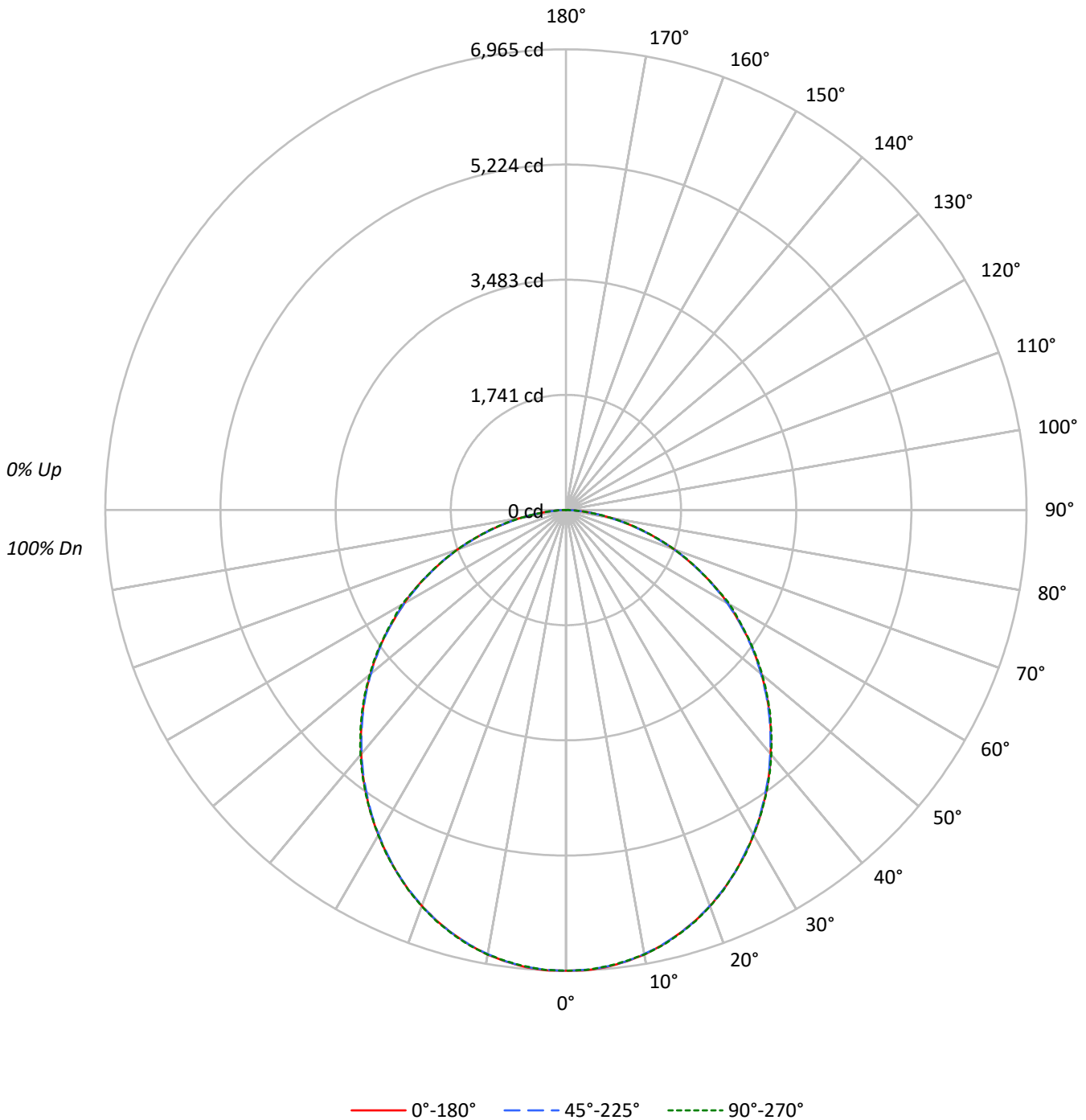
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18795.4 lumens
Efficiency: N/A
Efficacy: 90.1 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): 208.5
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: P709025
CATALOG NUMBER: 24APR-76-181L930-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P709025
 CATALOG NUMBER: 24APR-76-181L930-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°	9371	9371	9371
5°	9372	9363	9357
10°	9323	9315	9322
15°	9235	9235	9245
20°	9121	9115	9129
25°	8978	8974	8974
30°	8816	8802	8817
35°	8644	8621	8655
40°	8460	8444	8489
45°	8280	8263	8308
50°	8082	8061	8113
55°	7861	7841	7888
60°	7601	7583	7717
65°	7256	7258	7277
70°	6858	6821	6866
75°	6256	6207	6249
80°	5401	5333	5370
85°	4213	4171	4162



TEST NUMBER: P709025
 CATALOG NUMBER: 24APR-76-181L930-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	658.2	3.5
10°-20°	1869.4	9.9
20°-30°	2784.1	14.8
30°-40°	3289.2	17.5
40°-50°	3355.5	17.9
50°-60°	2994.1	15.9
60°-70°	2257.2	12.0
70°-80°	1265.6	6.7
80°-90°	322.0	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°	5311.7	28.3
0°-40°	8601.0	45.8
0°-60°	14950.5	79.5
0°-90°	18795.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	18795.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6965	6965	6965	6965	6965	
5°	6939	6935	6932	6933	6928	659
15°	6630	6626	6630	6634	6637	1869
25°	6048	6040	6045	6050	6045	2785
35°	5262	5255	5248	5264	5269	3292
45°	4351	4349	4343	4355	4366	3356
55°	3351	3344	3343	3353	3363	2993
65°	2279	2268	2280	2286	2286	2261
75°	1203	1183	1194	1187	1202	1274
85°	273	263	270	270	270	326
90°	0	0	0	0	0	



TEST NUMBER: P709025

CATALOG NUMBER: 24APR-76-181L930-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6964.7	6964.7	6964.7	6964.7	6964.7
2.5°	6964.7	6961.4	6958.7	6958.1	6959.4
5°	6938.7	6935.3	6932.0	6933.3	6928.0
7.5°	6888.5	6889.2	6886.5	6887.2	6881.1
10°	6823.6	6820.3	6817.6	6823.6	6822.9
12.5°	6736.0	6730.0	6732.6	6742.0	6742.7
15°	6629.6	6625.6	6629.6	6634.3	6637.0
17.5°	6508.5	6505.2	6509.9	6510.6	6515.9
20°	6370.1	6366.1	6366.1	6372.8	6375.4
22.5°	6216.9	6210.9	6212.2	6216.9	6220.2
25°	6047.7	6040.3	6045.0	6050.3	6045.0
27.5°	5865.0	5861.0	5856.4	5863.0	5871.7
30°	5674.4	5666.4	5665.7	5670.4	5675.1
32.5°	5473.1	5463.7	5463.7	5469.7	5473.7
35°	5262.4	5255.0	5248.3	5263.7	5269.0
37.5°	5045.0	5036.3	5035.6	5045.0	5053.7
40°	4816.9	4809.5	4807.5	4823.5	4832.9
42.5°	4586.8	4582.1	4577.4	4593.4	4600.8
45°	4351.3	4348.6	4342.6	4355.3	4366.0
47.5°	4109.1	4100.5	4098.4	4113.2	4123.9
50°	3861.0	3857.6	3850.9	3864.3	3875.7
52.5°	3609.5	3605.5	3600.8	3612.8	3624.9
55°	3351.3	3343.9	3342.6	3352.6	3362.6
57.5°	3082.4	3076.3	3085.7	3095.1	3103.1
60°	2824.8	2810.8	2818.1	2828.8	2867.6
62.5°	2566.0	2541.2	2546.6	2576.0	2559.3
65°	2279.0	2267.6	2279.7	2286.4	2285.7
67.5°	2010.1	1996.7	2014.8	2009.4	2017.4
70°	1743.2	1719.8	1733.8	1735.8	1745.2
72.5°	1467.6	1447.5	1459.6	1465.6	1471.6
75°	1203.4	1182.6	1194.0	1187.3	1202.0
77.5°	940.5	927.8	935.1	939.8	951.2
80°	697.0	683.0	688.3	689.0	693.0
82.5°	472.3	461.6	462.9	474.9	470.2
85°	272.9	262.9	270.2	269.6	269.6
87.5°	106.4	98.3	105.7	105.0	103.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)