

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: P709034

Luminaire Tested: **24APR-85-200L940-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709034
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85-200L940-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

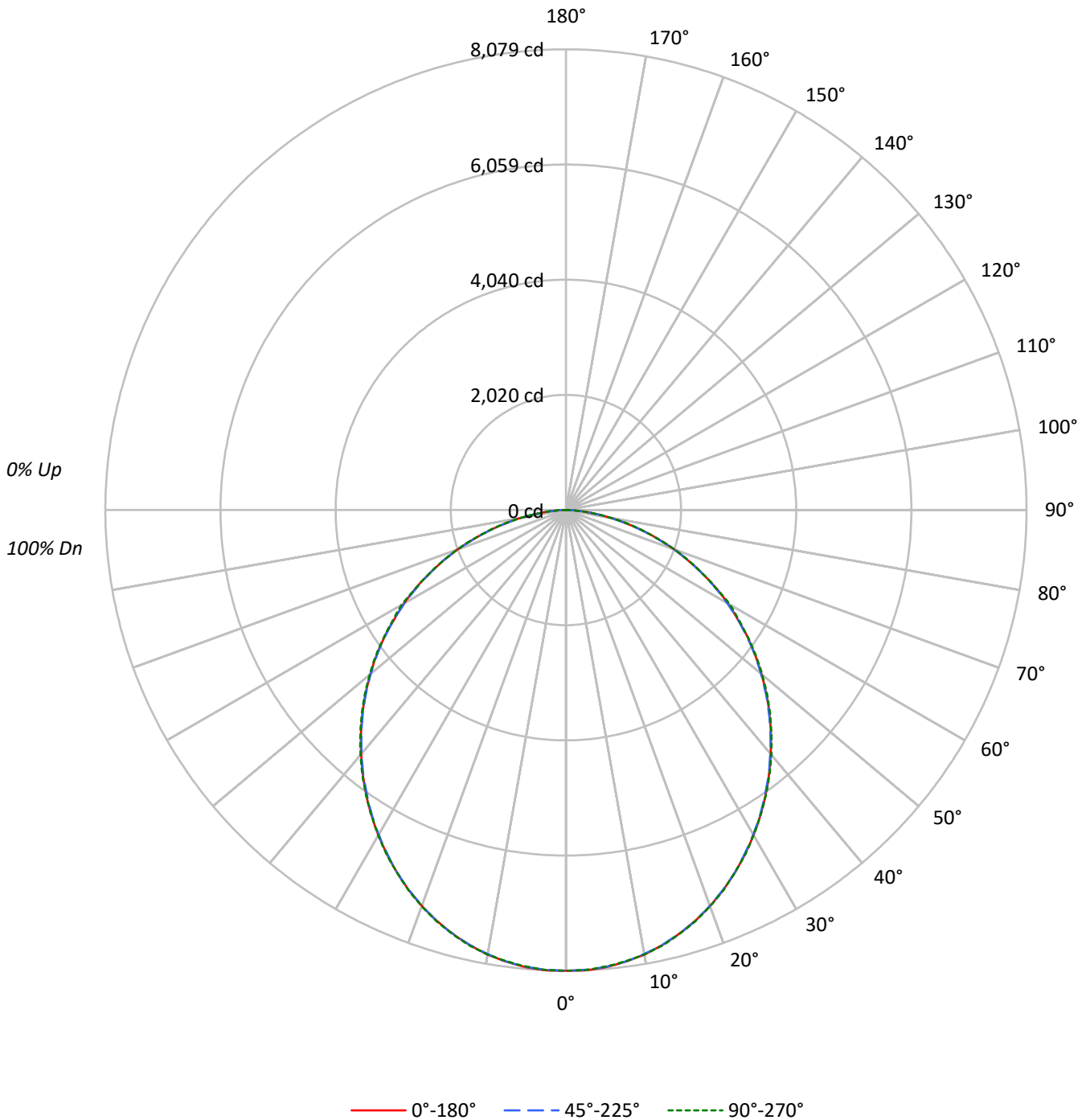
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21802.6 lumens
Efficiency: N/A
Efficacy: 92.6 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): 235.4
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: P709034
CATALOG NUMBER: 24APR-85-200L940-UNV

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	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°	10870	10870	10870
5°	10871	10861	10854
10°	10814	10805	10813
15°	10712	10712	10724
20°	10580	10574	10589
25°	10415	10410	10410
30°	10227	10211	10228
35°	10027	10000	10039
40°	9814	9795	9847
45°	9604	9585	9637
50°	9375	9351	9411
55°	9119	9096	9150
60°	8818	8797	8952
65°	8416	8419	8441
70°	7955	7912	7964
75°	7257	7201	7249
80°	6265	6186	6229
85°	4888	4840	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	763.6	3.5
10°-20°	2168.5	9.9
20°-30°	3229.5	14.8
30°-40°	3815.5	17.5
40°-50°	3892.4	17.9
50°-60°	3473.1	15.9
60°-70°	2618.4	12.0
70°-80°	1468.1	6.7
80°-90°	373.6	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°	6161.6	28.3
0°-40°	9977.1	45.8
0°-60°	17342.6	79.5
0°-90°	21802.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21802.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8079	8079	8079	8079	8079	
5°	8049	8045	8041	8043	8036	764
15°	7690	7686	7690	7696	7699	2168
25°	7015	7007	7012	7018	7012	3231
35°	6104	6096	6088	6106	6112	3818
45°	5048	5044	5037	5052	5065	3893
55°	3888	3879	3877	3889	3901	3472
65°	2644	2630	2644	2652	2651	2623
75°	1396	1372	1385	1377	1394	1478
85°	317	305	314	313	313	379
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8079.1	8079.1	8079.1	8079.1	8079.1
2.5°	8079.1	8075.2	8072.1	8071.3	8072.9
5°	8048.8	8044.9	8041.1	8042.6	8036.4
7.5°	7990.6	7991.4	7988.3	7989.1	7982.1
10°	7915.4	7911.5	7908.4	7915.4	7914.6
12.5°	7813.7	7806.7	7809.8	7820.7	7821.5
15°	7690.3	7685.7	7690.3	7695.8	7698.9
17.5°	7549.9	7546.0	7551.4	7552.2	7558.4
20°	7389.3	7384.6	7384.6	7392.4	7395.5
22.5°	7211.6	7204.6	7206.1	7211.6	7215.5
25°	7015.3	7006.7	7012.2	7018.4	7012.2
27.5°	6803.4	6798.8	6793.3	6801.1	6811.2
30°	6582.3	6573.0	6572.2	6577.6	6583.1
32.5°	6348.7	6337.9	6337.9	6344.9	6349.5
35°	6104.3	6095.8	6088.0	6105.9	6112.1
37.5°	5852.1	5842.0	5841.3	5852.1	5862.2
40°	5587.5	5579.0	5576.7	5595.3	5606.2
42.5°	5320.6	5315.2	5309.8	5328.4	5336.9
45°	5047.5	5044.4	5037.4	5052.1	5064.6
47.5°	4766.6	4756.5	4754.2	4771.3	4783.7
50°	4478.7	4474.8	4467.1	4482.6	4495.8
52.5°	4187.0	4182.3	4176.9	4190.8	4204.8
55°	3887.5	3878.9	3877.4	3889.0	3900.6
57.5°	3575.5	3568.5	3579.4	3590.3	3599.6
60°	3276.8	3260.5	3269.0	3281.4	3326.5
62.5°	2976.5	2947.8	2954.0	2988.1	2968.7
65°	2643.6	2630.4	2644.4	2652.2	2651.4
67.5°	2331.7	2316.2	2337.1	2330.9	2340.2
70°	2022.1	1994.9	2011.2	2013.6	2024.4
72.5°	1702.4	1679.1	1693.1	1700.1	1707.1
75°	1395.9	1371.9	1385.1	1377.3	1394.4
77.5°	1091.0	1076.2	1084.8	1090.2	1103.4
80°	808.5	792.2	798.4	799.2	803.9
82.5°	547.8	535.4	536.9	550.9	545.5
85°	316.6	304.9	313.5	312.7	312.7
87.5°	123.4	114.1	122.6	121.8	120.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)