

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: P708959

Luminaire Tested: **24APR-X-200L950-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708959
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-200L950-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

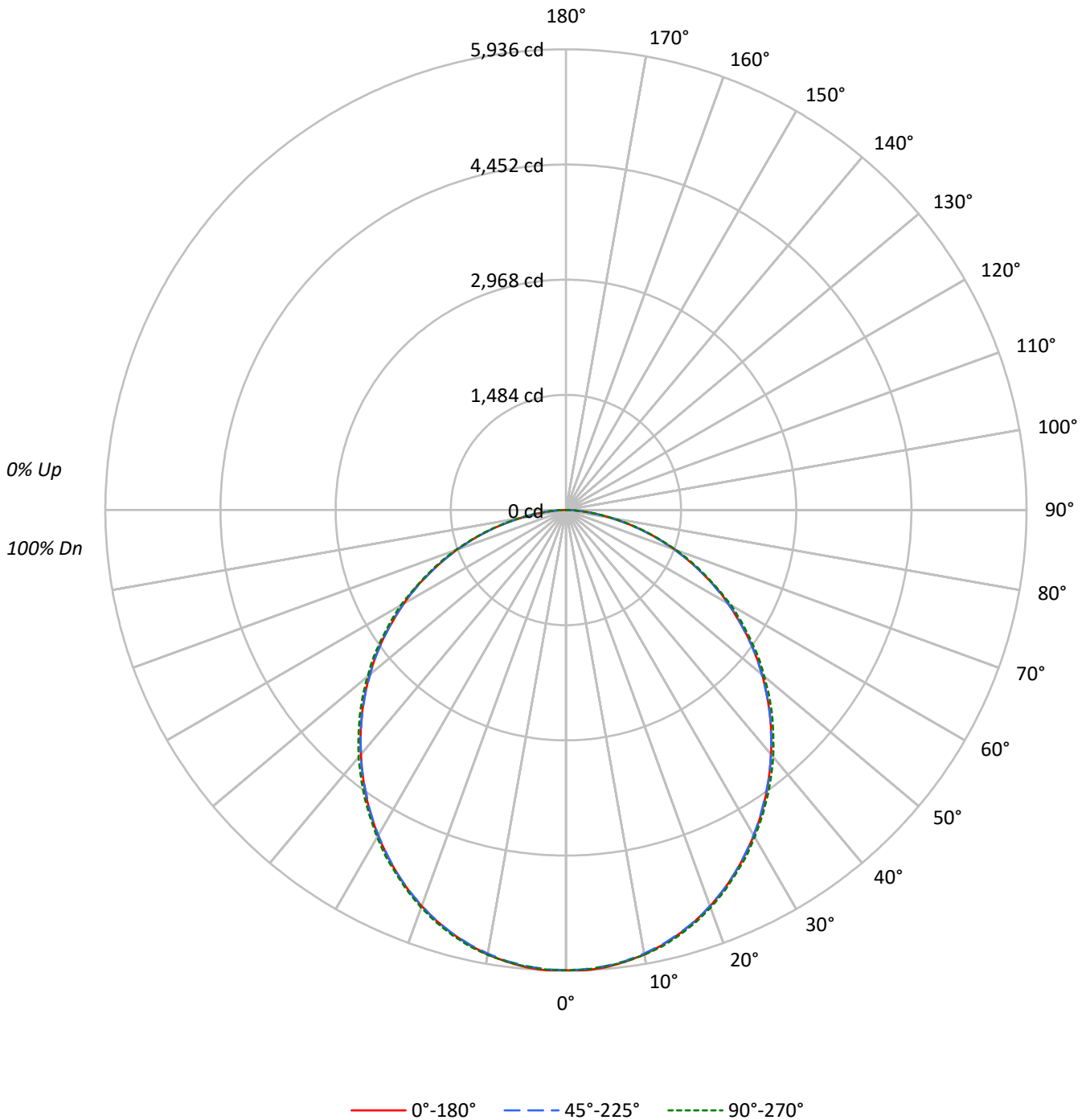
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16091.9 lumens
Efficiency: N/A
Efficacy: 102.4 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): 157.1
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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	7978	7978	7978
5°	7987	7966	7974
10°	7947	7929	7950
15°	7872	7866	7897
20°	7778	7772	7807
25°	7655	7657	7682
30°	7521	7516	7558
35°	7379	7361	7428
40°	7222	7218	7300
45°	7073	7068	7153
50°	6909	6896	6988
55°	6721	6711	6805
60°	6500	6496	6621
65°	6205	6215	6288
70°	5882	5834	5956
75°	5377	5335	5436
80°	4651	4594	4689
85°	3659	3622	3722



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	560.6	3.5
10°-20°	1593.8	9.9
20°-30°	2377.0	14.8
30°-40°	2812.6	17.5
40°-50°	2874.0	17.9
50°-60°	2568.4	16.0
60°-70°	1935.9	12.0
70°-80°	1089.7	6.8
80°-90°	279.9	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°	4531.3	28.2
0°-40°	7344.0	45.6
0°-60°	12786.4	79.5
0°-90°	16091.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16091.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5930	5930	5930	5930	5930	
5°	5914	5905	5898	5904	5904	561
15°	5651	5644	5647	5659	5669	1594
25°	5156	5149	5158	5174	5175	2376
35°	4492	4482	4482	4512	4522	2809
45°	3717	3714	3714	3743	3759	2867
55°	2865	2865	2861	2886	2901	2559
65°	1949	1940	1952	1971	1975	1935
75°	1034	1015	1026	1021	1046	1094
85°	237	227	235	238	241	283
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5929.8	5929.8	5929.8	5929.8	5929.8
2.5°	5936.3	5927.3	5920.8	5924.1	5926.5
5°	5913.5	5905.3	5898.0	5903.7	5903.7
7.5°	5870.3	5866.2	5860.5	5865.4	5867.0
10°	5816.6	5807.6	5803.5	5814.9	5819.0
12.5°	5740.8	5730.2	5733.5	5748.1	5754.7
15°	5651.2	5643.9	5647.2	5658.6	5669.1
17.5°	5549.4	5541.3	5548.6	5558.4	5568.2
20°	5432.1	5424.0	5428.1	5441.9	5452.5
22.5°	5301.8	5293.7	5298.6	5310.8	5322.2
25°	5156.1	5148.7	5157.7	5174.0	5174.8
27.5°	5003.8	4995.6	4998.1	5015.2	5030.6
30°	4840.9	4830.3	4837.6	4854.7	4864.5
32.5°	4669.9	4660.1	4665.8	4685.3	4696.7
35°	4492.3	4482.5	4481.7	4511.9	4522.4
37.5°	4304.2	4298.5	4303.4	4327.8	4340.8
40°	4112.0	4103.8	4109.5	4140.5	4156.0
42.5°	3917.3	3912.4	3913.3	3944.2	3956.4
45°	3717.0	3713.7	3714.5	3743.1	3759.3
47.5°	3510.1	3502.8	3506.1	3535.4	3552.5
50°	3300.8	3299.2	3294.3	3323.6	3338.3
52.5°	3085.8	3082.6	3082.6	3108.6	3129.8
55°	2865.1	2865.1	2861.0	2886.3	2900.9
57.5°	2633.8	2635.4	2642.0	2664.8	2679.4
60°	2415.6	2407.4	2413.9	2434.3	2460.3
62.5°	2198.1	2173.7	2180.2	2198.9	2209.5
65°	1948.9	1939.9	1952.2	1970.9	1975.0
67.5°	1720.0	1711.1	1717.6	1730.6	1748.5
70°	1495.3	1471.6	1483.0	1496.9	1514.0
72.5°	1259.1	1238.7	1255.0	1266.4	1278.6
75°	1034.3	1014.8	1026.2	1021.3	1045.7
77.5°	808.7	794.9	804.6	814.4	833.1
80°	600.2	584.7	592.9	597.0	605.1
82.5°	408.8	397.4	399.9	416.2	411.3
85°	237.0	227.2	234.6	237.8	241.1
87.5°	93.7	84.7	92.0	94.5	95.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)