

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: P708944

Luminaire Tested: **24APR-X-200L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708944
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-200L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

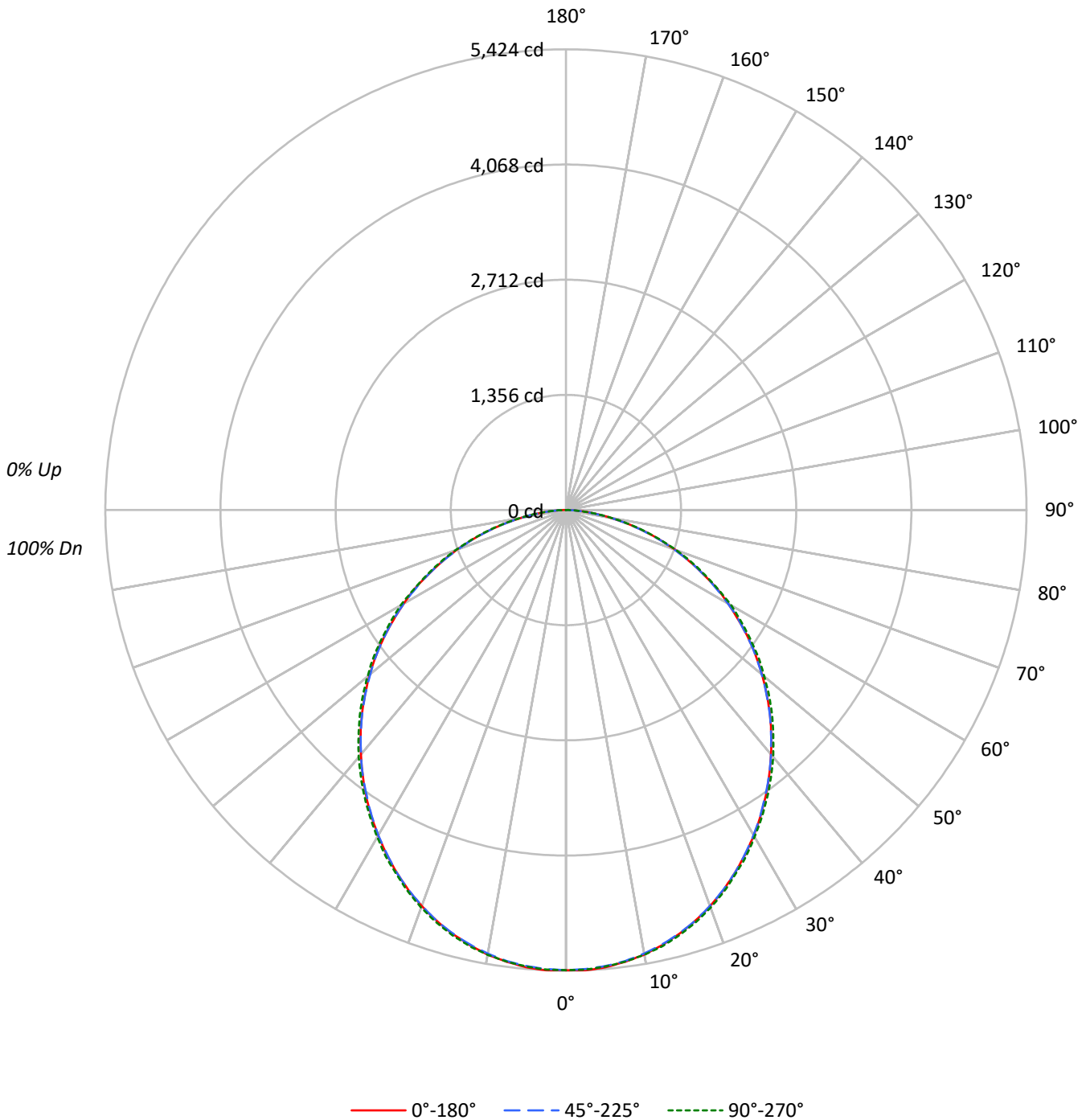
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 14702.3 lumens
Efficiency: N/A
Efficacy: 93.6 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

TEST NUMBER: P708944
CATALOG NUMBER: 24APR-X-200L930-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708944
 CATALOG NUMBER: 24APR-X-200L930-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	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°	7289	7289	7289
5°	7297	7278	7285
10°	7261	7244	7264
15°	7192	7187	7215
20°	7106	7101	7133
25°	6994	6996	7019
30°	6872	6867	6905
35°	6742	6726	6787
40°	6599	6595	6669
45°	6462	6458	6536
50°	6313	6300	6384
55°	6141	6132	6217
60°	5939	5935	6049
65°	5669	5678	5745
70°	5374	5330	5442
75°	4913	4874	4967
80°	4249	4197	4284
85°	3342	3308	3399



TEST NUMBER: P708944
 CATALOG NUMBER: 24APR-X-200L930-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	512.2	3.5
10°-20°	1456.2	9.9
20°-30°	2171.7	14.8
30°-40°	2569.8	17.5
40°-50°	2625.8	17.9
50°-60°	2346.6	16.0
60°-70°	1768.7	12.0
70°-80°	995.6	6.8
80°-90°	255.7	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°	4140.1	28.2
0°-40°	6709.8	45.6
0°-60°	11682.2	79.5
0°-90°	14702.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14702.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5418	5418	5418	5418	5418	
5°	5403	5395	5389	5394	5394	513
15°	5163	5156	5160	5170	5180	1456
25°	4711	4704	4712	4727	4728	2170
35°	4104	4096	4095	4122	4132	2566
45°	3396	3393	3394	3420	3435	2619
55°	2618	2618	2614	2637	2650	2338
65°	1781	1772	1784	1801	1804	1768
75°	945	927	938	933	955	1000
85°	216	208	214	217	220	258
90°	0	0	0	0	0	



TEST NUMBER: P708944

CATALOG NUMBER: 24APR-X-200L930-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5417.7	5417.7	5417.7	5417.7	5417.7
2.5°	5423.7	5415.5	5409.5	5412.5	5414.7
5°	5402.8	5395.4	5388.7	5393.9	5393.9
7.5°	5363.4	5359.7	5354.5	5358.9	5360.4
10°	5314.3	5306.1	5302.4	5312.8	5316.5
12.5°	5245.1	5235.4	5238.4	5251.8	5257.7
15°	5163.2	5156.5	5159.5	5169.9	5179.6
17.5°	5070.2	5062.8	5069.5	5078.4	5087.3
20°	4963.1	4955.6	4959.3	4972.0	4981.7
22.5°	4844.0	4836.6	4841.0	4852.2	4862.6
25°	4710.8	4704.1	4712.3	4727.2	4727.9
27.5°	4571.7	4564.2	4566.5	4582.1	4596.2
30°	4422.9	4413.2	4419.9	4435.5	4444.4
32.5°	4266.6	4257.7	4262.9	4280.7	4291.2
35°	4104.4	4095.5	4094.7	4122.2	4131.9
37.5°	3932.5	3927.3	3931.8	3954.1	3966.0
40°	3756.9	3749.5	3754.7	3782.9	3797.1
42.5°	3579.1	3574.6	3575.3	3603.6	3614.8
45°	3396.0	3393.0	3393.8	3419.8	3434.7
47.5°	3207.0	3200.3	3203.3	3230.1	3245.7
50°	3015.8	3014.3	3009.8	3036.6	3050.0
52.5°	2819.3	2816.4	2816.4	2840.2	2859.5
55°	2617.7	2617.7	2614.0	2637.0	2650.4
57.5°	2406.4	2407.9	2413.8	2434.7	2448.0
60°	2207.0	2199.5	2205.5	2224.1	2247.9
62.5°	2008.3	1986.0	1991.9	2009.0	2018.7
65°	1780.6	1772.4	1783.6	1800.7	1804.4
67.5°	1571.5	1563.3	1569.3	1581.2	1597.6
70°	1366.1	1344.6	1355.0	1367.6	1383.3
72.5°	1150.4	1131.8	1146.6	1157.1	1168.2
75°	945.0	927.1	937.6	933.1	955.4
77.5°	738.9	726.2	735.2	744.1	761.2
80°	548.4	534.3	541.7	545.4	552.9
82.5°	373.5	363.1	365.3	380.2	375.8
85°	216.5	207.6	214.3	217.3	220.2
87.5°	85.6	77.4	84.1	86.3	87.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)