

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: P708929

Luminaire Tested: **24APR-X-200L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708929
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-200L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

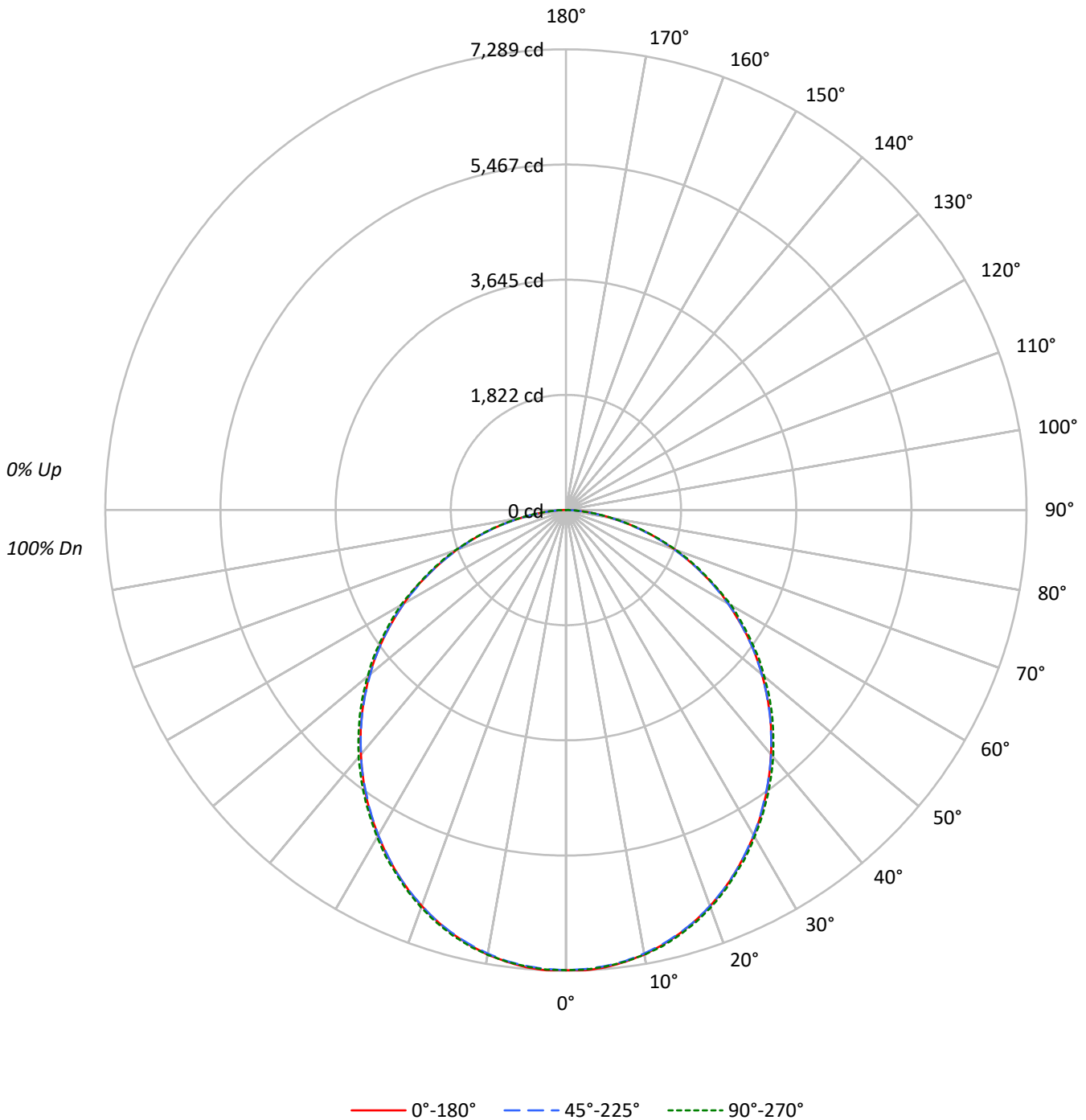
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19757.9 lumens
Efficiency: N/A
Efficacy: 125.8 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°	9796	9796	9796
5°	9807	9781	9790
10°	9757	9735	9761
15°	9665	9658	9696
20°	9550	9543	9586
25°	9398	9401	9433
30°	9234	9228	9279
35°	9060	9038	9121
40°	8868	8863	8963
45°	8684	8678	8783
50°	8483	8467	8580
55°	8252	8240	8355
60°	7981	7976	8129
65°	7618	7631	7720
70°	7222	7163	7313
75°	6602	6550	6674
80°	5711	5641	5757
85°	4492	4446	4570



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	688.3	3.5
10°-20°	1956.9	9.9
20°-30°	2918.5	14.8
30°-40°	3453.4	17.5
40°-50°	3528.7	17.9
50°-60°	3153.5	16.0
60°-70°	2377.0	12.0
70°-80°	1337.9	6.8
80°-90°	343.7	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°	5563.7	28.2
0°-40°	9017.1	45.6
0°-60°	15699.4	79.5
0°-90°	19757.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19757.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7281	7281	7281	7281	7281	
5°	7261	7251	7242	7249	7249	689
15°	6939	6930	6934	6948	6961	1957
25°	6331	6322	6333	6353	6354	2917
35°	5516	5504	5503	5540	5553	3449
45°	4564	4560	4561	4596	4616	3520
55°	3518	3518	3513	3544	3562	3142
65°	2393	2382	2397	2420	2425	2376
75°	1270	1246	1260	1254	1284	1343
85°	291	279	288	292	296	347
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7280.7	7280.7	7280.7	7280.7	7280.7
2.5°	7288.7	7277.7	7269.7	7273.7	7276.7
5°	7260.7	7250.7	7241.7	7248.7	7248.7
7.5°	7207.7	7202.7	7195.7	7201.7	7203.7
10°	7141.7	7130.7	7125.7	7139.7	7144.7
12.5°	7048.7	7035.7	7039.7	7057.7	7065.7
15°	6938.7	6929.7	6933.7	6947.7	6960.7
17.5°	6813.7	6803.7	6812.7	6824.7	6836.7
20°	6669.7	6659.7	6664.7	6681.7	6694.7
22.5°	6509.7	6499.7	6505.7	6520.7	6534.7
25°	6330.7	6321.7	6332.7	6352.7	6353.7
27.5°	6143.7	6133.7	6136.7	6157.7	6176.7
30°	5943.7	5930.7	5939.7	5960.7	5972.7
32.5°	5733.7	5721.7	5728.7	5752.7	5766.7
35°	5515.7	5503.7	5502.7	5539.7	5552.7
37.5°	5284.8	5277.8	5283.8	5313.8	5329.8
40°	5048.8	5038.8	5045.8	5083.8	5102.8
42.5°	4809.8	4803.8	4804.8	4842.8	4857.8
45°	4563.8	4559.8	4560.8	4595.8	4615.8
47.5°	4309.8	4300.8	4304.8	4340.8	4361.8
50°	4052.8	4050.8	4044.8	4080.8	4098.8
52.5°	3788.8	3784.8	3784.8	3816.8	3842.8
55°	3517.8	3517.8	3512.8	3543.8	3561.8
57.5°	3233.8	3235.8	3243.8	3271.8	3289.8
60°	2965.9	2955.9	2963.9	2988.9	3020.9
62.5°	2698.9	2668.9	2676.9	2699.9	2712.9
65°	2392.9	2381.9	2396.9	2419.9	2424.9
67.5°	2111.9	2100.9	2108.9	2124.9	2146.9
70°	1835.9	1806.9	1820.9	1837.9	1858.9
72.5°	1545.9	1520.9	1540.9	1554.9	1569.9
75°	1269.9	1245.9	1259.9	1253.9	1283.9
77.5°	993.0	976.0	988.0	1000.0	1023.0
80°	737.0	718.0	728.0	733.0	743.0
82.5°	502.0	488.0	491.0	511.0	505.0
85°	291.0	279.0	288.0	292.0	296.0
87.5°	115.0	104.0	113.0	116.0	117.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)