

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: P709009

Luminaire Tested: **24APR-85-200L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709009
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85-200L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

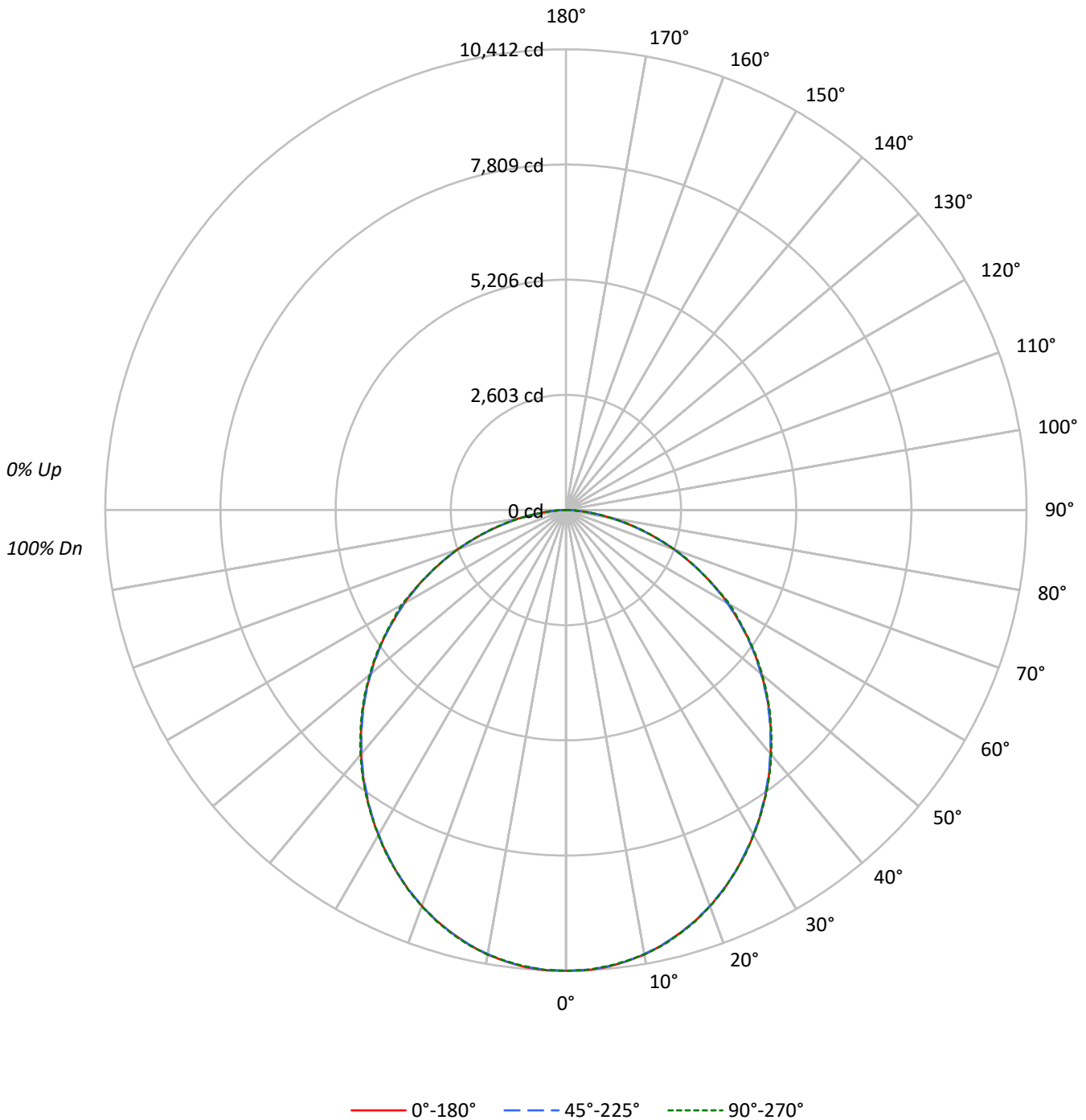
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28096.8 lumens
Efficiency: N/A
Efficacy: 119.4 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

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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	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°	14009	14009	14009
5°	14009	13996	13988
10°	13936	13924	13935
15°	13805	13805	13820
20°	13635	13626	13646
25°	13421	13415	13415
30°	13179	13159	13180
35°	12921	12887	12938
40°	12647	12623	12689
45°	12377	12352	12419
50°	12081	12050	12127
55°	11752	11721	11792
60°	11363	11337	11536
65°	10846	10849	10878
70°	10251	10196	10263
75°	9352	9279	9341
80°	8073	7972	8027
85°	6299	6237	6221



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	984.0	3.5
10°-20°	2794.6	9.9
20°-30°	4161.9	14.8
30°-40°	4917.0	17.5
40°-50°	5016.1	17.9
50°-60°	4475.8	15.9
60°-70°	3374.3	12.0
70°-80°	1891.9	6.7
80°-90°	481.4	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°	7940.4	28.3
0°-40°	12857.4	45.8
0°-60°	22349.2	79.5
0°-90°	28096.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28096.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10412	10412	10412	10412	10412	
5°	10372	10368	10362	10364	10356	984
15°	9910	9904	9910	9918	9922	2794
25°	9040	9030	9036	9044	9036	4164
35°	7867	7856	7846	7869	7877	4921
45°	6505	6501	6492	6511	6527	5017
55°	5010	4999	4997	5012	5027	4475
65°	3407	3390	3408	3418	3417	3380
75°	1799	1768	1785	1775	1797	1904
85°	408	393	404	403	403	488
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10411.5	10411.5	10411.5	10411.5	10411.5
2.5°	10411.5	10406.5	10402.5	10401.5	10403.5
5°	10372.5	10367.5	10362.5	10364.5	10356.5
7.5°	10297.5	10298.5	10294.5	10295.5	10286.5
10°	10200.5	10195.5	10191.5	10200.5	10199.5
12.5°	10069.5	10060.5	10064.5	10078.5	10079.5
15°	9910.5	9904.5	9910.5	9917.5	9921.5
17.5°	9729.5	9724.5	9731.5	9732.5	9740.5
20°	9522.5	9516.5	9516.5	9526.5	9530.5
22.5°	9293.5	9284.5	9286.5	9293.5	9298.5
25°	9040.5	9029.5	9036.5	9044.5	9036.5
27.5°	8767.5	8761.5	8754.5	8764.5	8777.5
30°	8482.6	8470.6	8469.6	8476.6	8483.6
32.5°	8181.6	8167.6	8167.6	8176.6	8182.6
35°	7866.6	7855.6	7845.6	7868.6	7876.6
37.5°	7541.6	7528.6	7527.6	7541.6	7554.6
40°	7200.6	7189.6	7186.6	7210.6	7224.6
42.5°	6856.6	6849.6	6842.6	6866.6	6877.6
45°	6504.7	6500.7	6491.7	6510.7	6526.7
47.5°	6142.7	6129.7	6126.7	6148.7	6164.7
50°	5771.7	5766.7	5756.7	5776.7	5793.7
52.5°	5395.7	5389.7	5382.7	5400.7	5418.7
55°	5009.7	4998.7	4996.7	5011.7	5026.7
57.5°	4607.8	4598.8	4612.8	4626.8	4638.8
60°	4222.8	4201.8	4212.8	4228.8	4286.8
62.5°	3835.8	3798.8	3806.8	3850.8	3825.8
65°	3406.8	3389.8	3407.8	3417.8	3416.8
67.5°	3004.8	2984.8	3011.8	3003.8	3015.8
70°	2605.9	2570.9	2591.9	2594.9	2608.9
72.5°	2193.9	2163.9	2181.9	2190.9	2199.9
75°	1798.9	1767.9	1784.9	1774.9	1796.9
77.5°	1405.9	1386.9	1397.9	1404.9	1421.9
80°	1041.9	1020.9	1028.9	1029.9	1035.9
82.5°	706.0	690.0	692.0	710.0	703.0
85°	408.0	393.0	404.0	403.0	403.0
87.5°	159.0	147.0	158.0	157.0	155.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)