

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: P708969

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

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708969
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85L835-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

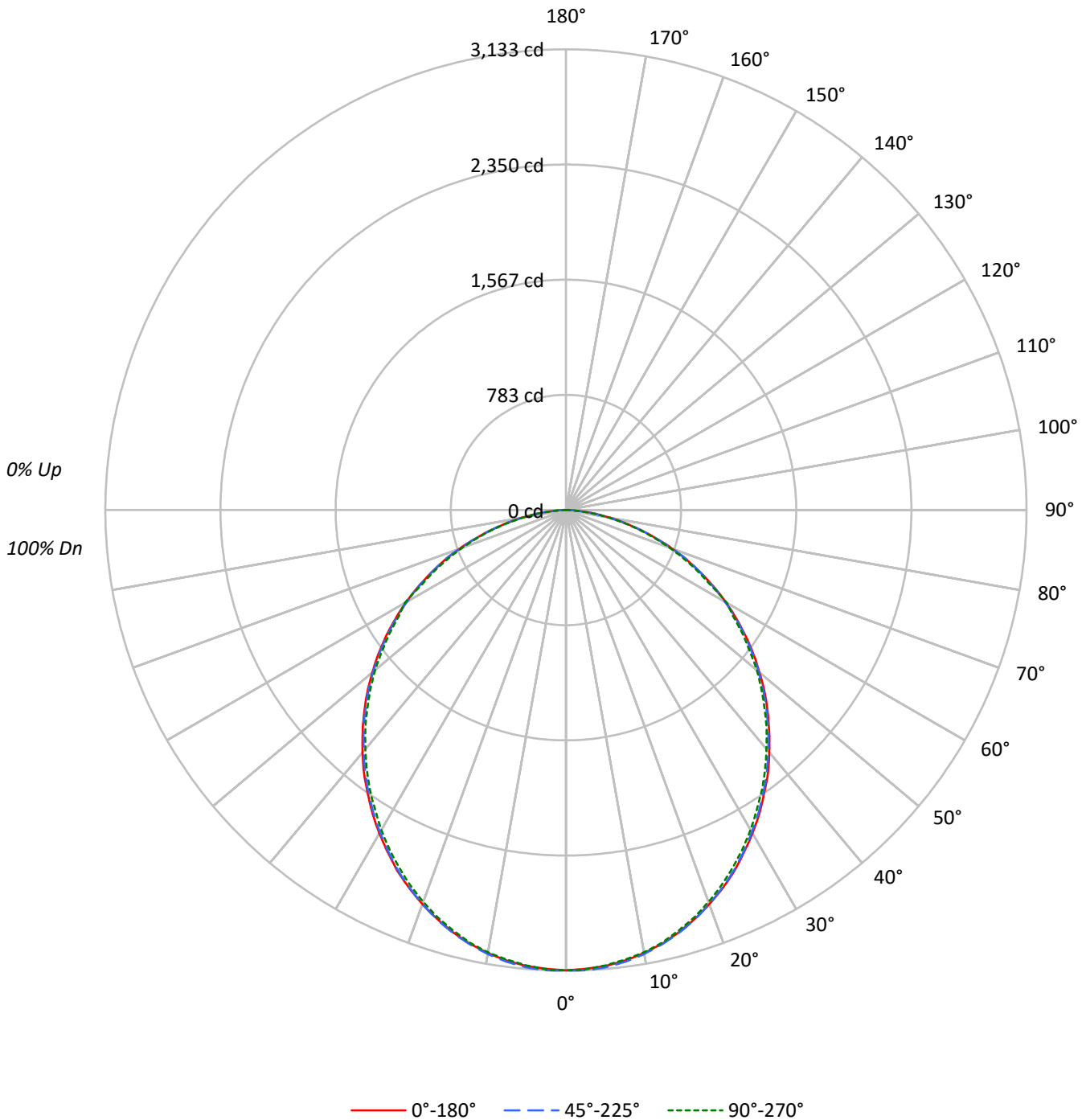
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8339.0 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 78.3
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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	100	
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	86	84	
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	70	
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	59	
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	51	
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	44	
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	39	
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	34	
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	30	
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	29	27	
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	25	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4212	4212	4212
5°	4203	4215	4197
10°	4179	4189	4174
15°	4140	4147	4124
20°	4085	4083	4060
25°	4023	4014	3983
30°	3944	3930	3901
35°	3861	3848	3817
40°	3780	3760	3727
45°	3693	3674	3636
50°	3598	3583	3548
55°	3500	3481	3436
60°	3382	3361	3407
65°	3228	3218	3158
70°	3029	3033	2950
75°	2750	2729	2667
80°	2363	2332	2270
85°	1806	1791	1652



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	295.7	3.5
10°-20°	837.7	10.0
20°-30°	1243.4	14.9
30°-40°	1463.6	17.6
40°-50°	1487.4	17.8
50°-60°	1322.2	15.9
60°-70°	997.3	12.0
70°-80°	554.0	6.6
80°-90°	137.7	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°	2376.7	28.5
0°-40°	3840.3	46.1
0°-60°	6649.9	79.7
0°-90°	8339.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8339.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3131	3131	3131	3131	3131	
5°	3112	3117	3121	3116	3108	295
15°	2972	2975	2977	2970	2961	838
25°	2710	2708	2704	2692	2683	1247
35°	2351	2352	2343	2329	2324	1472
45°	1941	1941	1931	1915	1911	1497
55°	1492	1481	1484	1468	1465	1333
65°	1014	1008	1011	998	992	1004
75°	529	522	525	521	513	561
85°	117	114	116	111	107	141
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3130.8	3130.8	3130.8	3130.8	3130.8
2.5°	3122.8	3128.8	3132.8	3127.8	3126.8
5°	3111.8	3116.8	3120.8	3115.8	3107.8
7.5°	3089.8	3095.8	3098.8	3093.8	3082.8
10°	3058.8	3064.8	3065.8	3060.8	3054.8
12.5°	3020.8	3024.8	3024.8	3020.8	3013.8
15°	2971.8	2974.8	2976.8	2969.8	2960.8
17.5°	2915.8	2920.8	2918.8	2907.8	2903.8
20°	2852.8	2856.8	2851.8	2844.8	2835.8
22.5°	2783.8	2784.8	2780.8	2772.8	2763.8
25°	2709.8	2707.8	2703.8	2691.8	2682.8
27.5°	2623.8	2627.8	2617.8	2606.8	2600.8
30°	2538.8	2539.8	2529.8	2515.8	2510.8
32.5°	2447.8	2445.8	2438.8	2423.8	2415.8
35°	2350.8	2351.8	2342.8	2328.8	2323.8
37.5°	2256.9	2250.9	2243.9	2227.9	2224.9
40°	2151.9	2150.9	2140.9	2126.9	2121.9
42.5°	2046.9	2045.9	2037.9	2023.9	2019.9
45°	1940.9	1940.9	1930.9	1914.9	1910.9
47.5°	1832.9	1828.9	1821.9	1807.9	1802.9
50°	1718.9	1715.9	1711.9	1695.9	1694.9
52.5°	1606.9	1604.9	1597.9	1583.9	1575.9
55°	1491.9	1480.9	1483.9	1467.9	1464.9
57.5°	1373.9	1362.9	1368.9	1354.9	1348.9
60°	1256.9	1245.9	1248.9	1239.9	1265.9
62.5°	1136.9	1129.9	1129.9	1150.9	1112.9
65°	1013.9	1007.9	1010.9	997.9	991.9
67.5°	892.9	883.9	902.9	878.9	868.9
70°	770.0	764.0	771.0	757.0	750.0
72.5°	648.0	643.0	641.0	636.0	630.0
75°	529.0	522.0	525.0	521.0	513.0
77.5°	413.0	411.0	410.0	405.0	399.0
80°	305.0	303.0	301.0	297.0	293.0
82.5°	204.0	202.0	201.0	199.0	198.0
85°	117.0	114.0	116.0	111.0	107.0
87.5°	44.0	43.0	45.0	41.0	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)