

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: P708972

Luminaire Tested: **24APR-58L835-X-UNV**

Issue Date: 09/12/2023



**Test Information**

Test Method: LM-79-08  
Report Number: P708972  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 09/12/2023  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: 24APR-58L835-X-UNV  
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

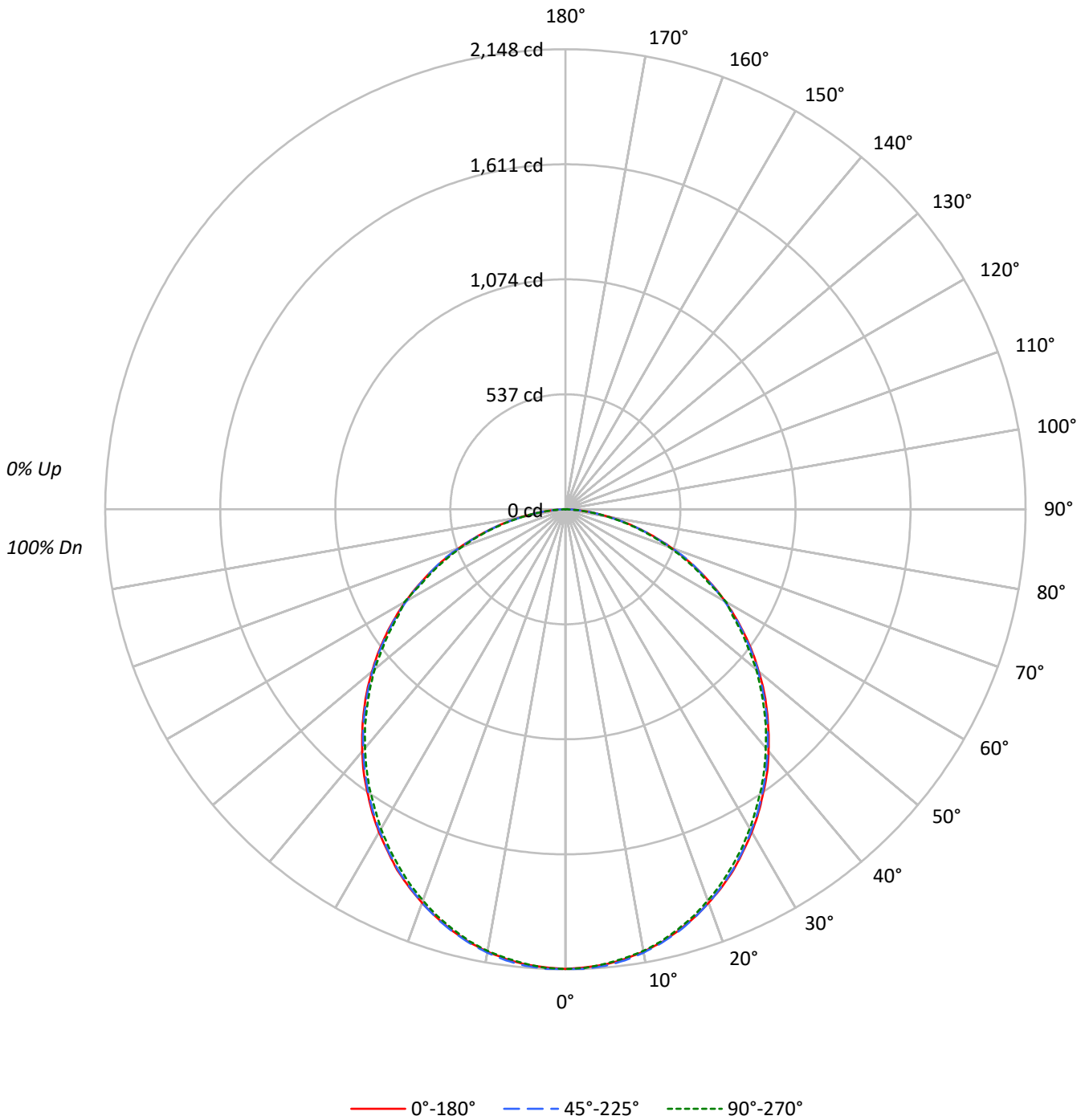
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5716.8 lumens  
Efficiency: N/A  
Efficacy: 110.4 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): 51.8  
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				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	95	98	95	92	94	91	89	90	88	86	86	86	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	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	27	27	27	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2888	2888	2888
5°	2881	2890	2878
10°	2865	2872	2861
15°	2838	2843	2827
20°	2800	2799	2784
25°	2758	2752	2730
30°	2704	2694	2674
35°	2647	2638	2617
40°	2591	2578	2555
45°	2532	2519	2493
50°	2467	2457	2432
55°	2399	2386	2356
60°	2319	2304	2336
65°	2213	2207	2165
70°	2076	2079	2022
75°	1885	1871	1828
80°	1620	1598	1557
85°	1238	1227	1132



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.7	3.5
10°-20°	574.3	10.0
20°-30°	852.4	14.9
30°-40°	1003.4	17.6
40°-50°	1019.7	17.8
50°-60°	906.4	15.9
60°-70°	683.7	12.0
70°-80°	379.8	6.6
80°-90°	94.4	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°	1629.4	28.5
0°-40°	2632.8	46.1
0°-60°	4558.9	79.7
0°-90°	5716.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5716.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2146	2146	2146	2146	2146	
5°	2133	2137	2140	2136	2131	202
15°	2037	2039	2041	2036	2030	574
25°	1858	1856	1854	1845	1839	855
35°	1612	1612	1606	1597	1593	1009
45°	1331	1331	1324	1313	1310	1026
55°	1023	1015	1017	1006	1004	914
65°	695	691	693	684	680	688
75°	363	358	360	357	352	384
85°	80	78	80	76	73	96
90°	0	0	0	0	0	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2146.3	2146.3	2146.3	2146.3	2146.3
2.5°	2140.9	2145.0	2147.7	2144.3	2143.6
5°	2133.3	2136.7	2139.5	2136.1	2130.6
7.5°	2118.2	2122.3	2124.4	2121.0	2113.4
10°	2097.0	2101.1	2101.8	2098.4	2094.2
12.5°	2070.9	2073.7	2073.7	2070.9	2066.1
15°	2037.3	2039.4	2040.8	2036.0	2029.8
17.5°	1999.0	2002.4	2001.0	1993.5	1990.7
20°	1955.8	1958.5	1955.1	1950.3	1944.1
22.5°	1908.5	1909.2	1906.4	1900.9	1894.8
25°	1857.7	1856.4	1853.6	1845.4	1839.2
27.5°	1798.8	1801.5	1794.7	1787.1	1783.0
30°	1740.5	1741.2	1734.3	1724.7	1721.3
32.5°	1678.1	1676.8	1672.0	1661.7	1656.2
35°	1611.6	1612.3	1606.2	1596.6	1593.1
37.5°	1547.2	1543.1	1538.3	1527.3	1525.3
40°	1475.2	1474.5	1467.7	1458.1	1454.7
42.5°	1403.2	1402.6	1397.1	1387.5	1384.7
45°	1330.6	1330.6	1323.7	1312.8	1310.0
47.5°	1256.5	1253.8	1249.0	1239.4	1236.0
50°	1178.4	1176.3	1173.6	1162.6	1161.9
52.5°	1101.6	1100.2	1095.4	1085.9	1080.4
55°	1022.8	1015.2	1017.3	1006.3	1004.3
57.5°	941.9	934.4	938.5	928.9	924.8
60°	861.7	854.1	856.2	850.0	867.9
62.5°	779.4	774.6	774.6	789.0	763.0
65°	695.1	691.0	693.1	684.1	680.0
67.5°	612.2	606.0	619.0	602.6	595.7
70°	527.8	523.7	528.5	518.9	514.1
72.5°	444.2	440.8	439.4	436.0	431.9
75°	362.6	357.8	359.9	357.2	351.7
77.5°	283.1	281.7	281.1	277.6	273.5
80°	209.1	207.7	206.3	203.6	200.9
82.5°	139.8	138.5	137.8	136.4	135.7
85°	80.2	78.1	79.5	76.1	73.3
87.5°	30.2	29.5	30.8	28.1	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)