

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: P708975

Luminaire Tested: **24APR-76L840-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708975
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-76L840-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

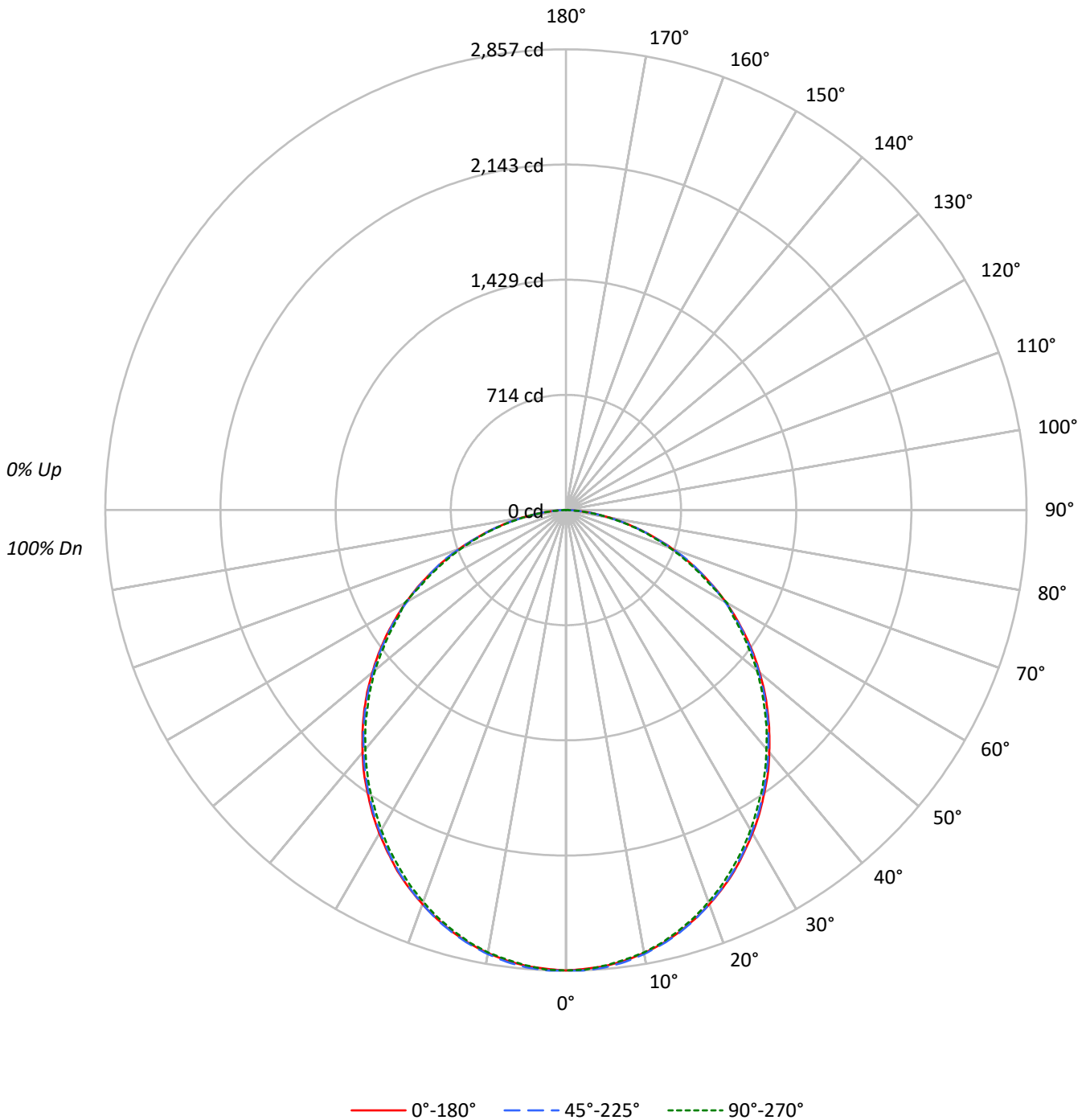
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7605.5 lumens
Efficiency: N/A
Efficacy: 109.6 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): 69.4
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				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°	3842	3842	3842
5°	3833	3844	3828
10°	3812	3820	3806
15°	3775	3782	3762
20°	3726	3724	3703
25°	3669	3661	3633
30°	3597	3585	3558
35°	3522	3510	3481
40°	3447	3430	3399
45°	3368	3351	3316
50°	3282	3268	3236
55°	3192	3175	3134
60°	3085	3065	3107
65°	2944	2935	2880
70°	2762	2766	2691
75°	2508	2489	2432
80°	2156	2127	2070
85°	1647	1633	1507



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	269.7	3.5
10°-20°	764.0	10.0
20°-30°	1134.0	14.9
30°-40°	1334.8	17.6
40°-50°	1356.5	17.8
50°-60°	1205.9	15.9
60°-70°	909.6	12.0
70°-80°	505.3	6.6
80°-90°	125.6	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°	2167.7	28.5
0°-40°	3502.6	46.1
0°-60°	6065.0	79.7
0°-90°	7605.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7605.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2855	2855	2855	2855	2855	
5°	2838	2843	2846	2842	2834	269
15°	2710	2713	2715	2709	2700	764
25°	2472	2470	2466	2455	2447	1137
35°	2144	2145	2137	2124	2120	1342
45°	1770	1770	1761	1746	1743	1365
55°	1361	1351	1353	1339	1336	1216
65°	925	919	922	910	905	915
75°	482	476	479	475	468	512
85°	107	104	106	101	98	128
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2855.4	2855.4	2855.4	2855.4	2855.4
2.5°	2848.1	2853.6	2857.3	2852.7	2851.8
5°	2838.1	2842.7	2846.3	2841.8	2834.5
7.5°	2818.1	2823.5	2826.3	2821.7	2811.7
10°	2789.8	2795.3	2796.2	2791.6	2786.1
12.5°	2755.1	2758.8	2758.8	2755.1	2748.7
15°	2710.4	2713.2	2715.0	2708.6	2700.4
17.5°	2659.4	2663.9	2662.1	2652.1	2648.4
20°	2601.9	2605.6	2601.0	2594.6	2586.4
22.5°	2539.0	2539.9	2536.2	2528.9	2520.7
25°	2471.5	2469.7	2466.0	2455.1	2446.9
27.5°	2393.1	2396.7	2387.6	2377.6	2372.1
30°	2315.5	2316.5	2307.3	2294.6	2290.0
32.5°	2232.6	2230.7	2224.3	2210.7	2203.4
35°	2144.1	2145.0	2136.8	2124.0	2119.5
37.5°	2058.4	2052.9	2046.5	2031.9	2029.2
40°	1962.6	1961.7	1952.6	1939.8	1935.2
42.5°	1866.8	1865.9	1858.6	1845.9	1842.2
45°	1770.2	1770.2	1761.1	1746.5	1742.8
47.5°	1671.7	1668.0	1661.6	1648.9	1644.3
50°	1567.7	1565.0	1561.3	1546.7	1545.8
52.5°	1465.6	1463.7	1457.4	1444.6	1437.3
55°	1360.7	1350.7	1353.4	1338.8	1336.1
57.5°	1253.1	1243.0	1248.5	1235.7	1230.3
60°	1146.4	1136.3	1139.1	1130.9	1154.6
62.5°	1036.9	1030.5	1030.5	1049.7	1015.0
65°	924.8	919.3	922.0	910.2	904.7
67.5°	814.4	806.2	823.5	801.6	792.5
70°	702.2	696.8	703.1	690.4	684.0
72.5°	591.0	586.4	584.6	580.0	574.6
75°	482.4	476.1	478.8	475.1	467.9
77.5°	376.7	374.8	373.9	369.4	363.9
80°	278.2	276.3	274.5	270.9	267.2
82.5°	186.0	184.2	183.3	181.5	180.6
85°	106.7	104.0	105.8	101.2	97.6
87.5°	40.1	39.2	41.0	37.4	34.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)