

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: P708958

Luminaire Tested: **24APR-X-116L940-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708958
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-116L940-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

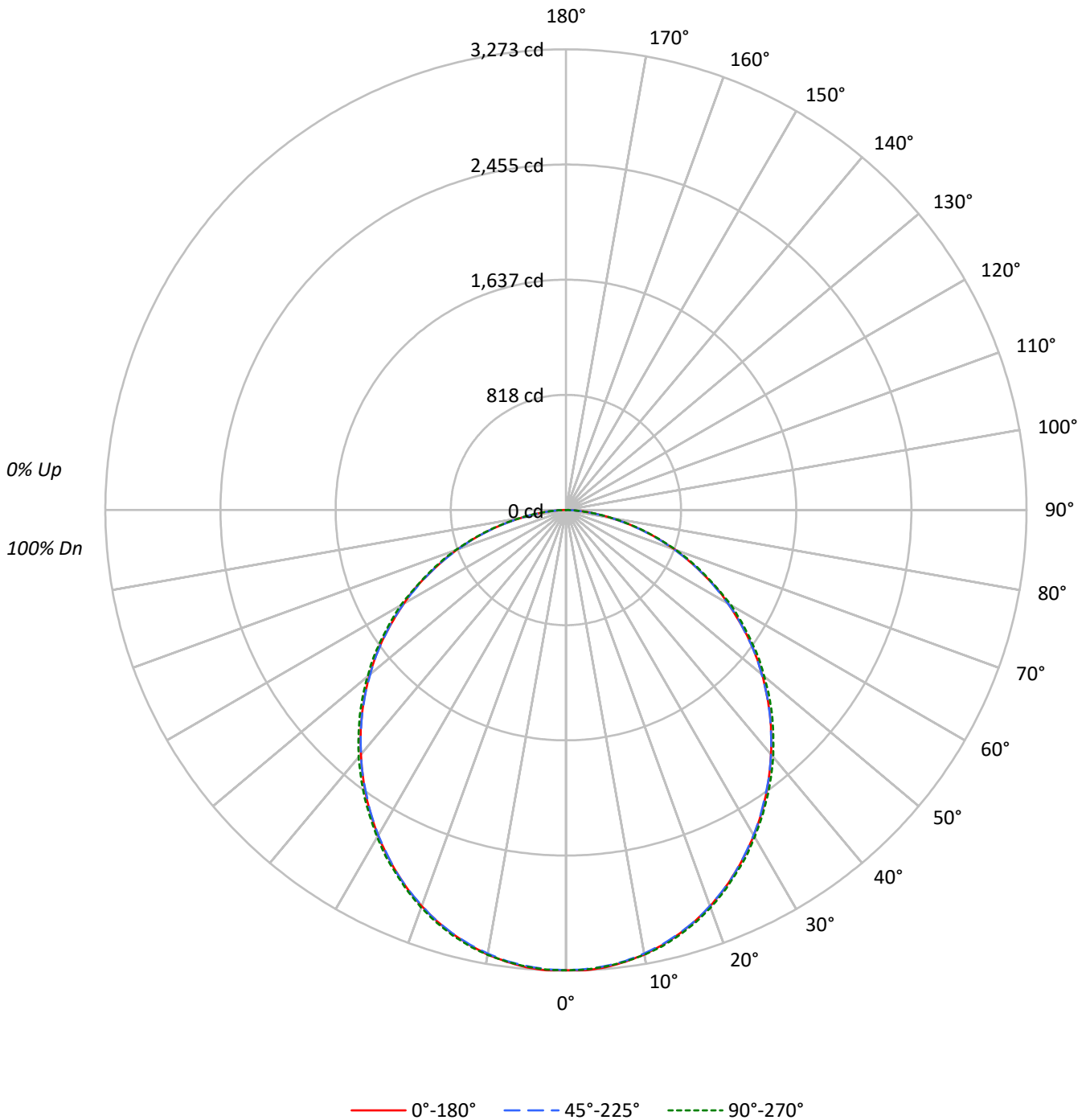
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8872.7 lumens
Efficiency: N/A
Efficacy: 103.3 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): 85.9
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	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°	4399	4399	4399
5°	4404	4392	4397
10°	4382	4372	4384
15°	4340	4337	4354
20°	4289	4285	4305
25°	4221	4222	4236
30°	4147	4144	4167
35°	4069	4059	4096
40°	3982	3980	4025
45°	3900	3897	3944
50°	3810	3802	3853
55°	3706	3700	3752
60°	3584	3582	3651
65°	3421	3427	3467
70°	3244	3217	3284
75°	2965	2941	2997
80°	2565	2533	2585
85°	2018	1996	2052



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	309.1	3.5
10°-20°	878.8	9.9
20°-30°	1310.6	14.8
30°-40°	1550.8	17.5
40°-50°	1584.7	17.9
50°-60°	1416.2	16.0
60°-70°	1067.4	12.0
70°-80°	600.8	6.8
80°-90°	154.3	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°	2498.5	28.2
0°-40°	4049.3	45.6
0°-60°	7050.2	79.5
0°-90°	8872.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8872.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3270	3270	3270	3270	3270	
5°	3261	3256	3252	3255	3255	309
15°	3116	3112	3114	3120	3126	879
25°	2843	2839	2844	2853	2853	1310
35°	2477	2472	2471	2488	2494	1549
45°	2050	2048	2048	2064	2073	1581
55°	1580	1580	1578	1591	1600	1411
65°	1075	1070	1076	1087	1089	1067
75°	570	560	566	563	577	603
85°	131	125	129	131	133	156
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3269.5	3269.5	3269.5	3269.5	3269.5
2.5°	3273.1	3268.2	3264.6	3266.4	3267.7
5°	3260.6	3256.1	3252.0	3255.2	3255.2
7.5°	3236.8	3234.5	3231.4	3234.1	3235.0
10°	3207.1	3202.2	3199.9	3206.2	3208.5
12.5°	3165.4	3159.5	3161.3	3169.4	3173.0
15°	3116.0	3111.9	3113.7	3120.0	3125.8
17.5°	3059.8	3055.3	3059.4	3064.8	3070.2
20°	2995.2	2990.7	2992.9	3000.6	3006.4
22.5°	2923.3	2918.8	2921.5	2928.3	2934.6
25°	2842.9	2838.9	2843.8	2852.8	2853.3
27.5°	2759.0	2754.5	2755.8	2765.3	2773.8
30°	2669.2	2663.3	2667.4	2676.8	2682.2
32.5°	2574.9	2569.5	2572.6	2583.4	2589.7
35°	2477.0	2471.6	2471.1	2487.7	2493.6
37.5°	2373.2	2370.1	2372.8	2386.3	2393.4
40°	2267.3	2262.8	2265.9	2283.0	2291.5
42.5°	2159.9	2157.2	2157.7	2174.8	2181.5
45°	2049.5	2047.7	2048.1	2063.8	2072.8
47.5°	1935.4	1931.4	1933.2	1949.3	1958.8
50°	1820.0	1819.1	1816.4	1832.6	1840.7
52.5°	1701.5	1699.7	1699.7	1714.0	1725.7
55°	1579.8	1579.8	1577.5	1591.4	1599.5
57.5°	1452.2	1453.1	1456.7	1469.3	1477.4
60°	1331.9	1327.4	1331.0	1342.2	1356.6
62.5°	1212.0	1198.5	1202.1	1212.4	1218.3
65°	1074.6	1069.6	1076.4	1086.7	1089.0
67.5°	948.4	943.5	947.0	954.2	964.1
70°	824.5	811.4	817.7	825.4	834.8
72.5°	694.2	683.0	692.0	698.3	705.0
75°	570.3	559.5	565.8	563.1	576.6
77.5°	445.9	438.3	443.7	449.1	459.4
80°	331.0	322.4	326.9	329.2	333.6
82.5°	225.4	219.1	220.5	229.5	226.8
85°	130.7	125.3	129.3	131.1	132.9
87.5°	51.6	46.7	50.7	52.1	52.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)