

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: P708877

Luminaire Tested: **22APR-38-89L935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708877
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-38-89L935-UNV
Description: ArcMed Patient Recessed 2x2 Fixture Ambient and Exam Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

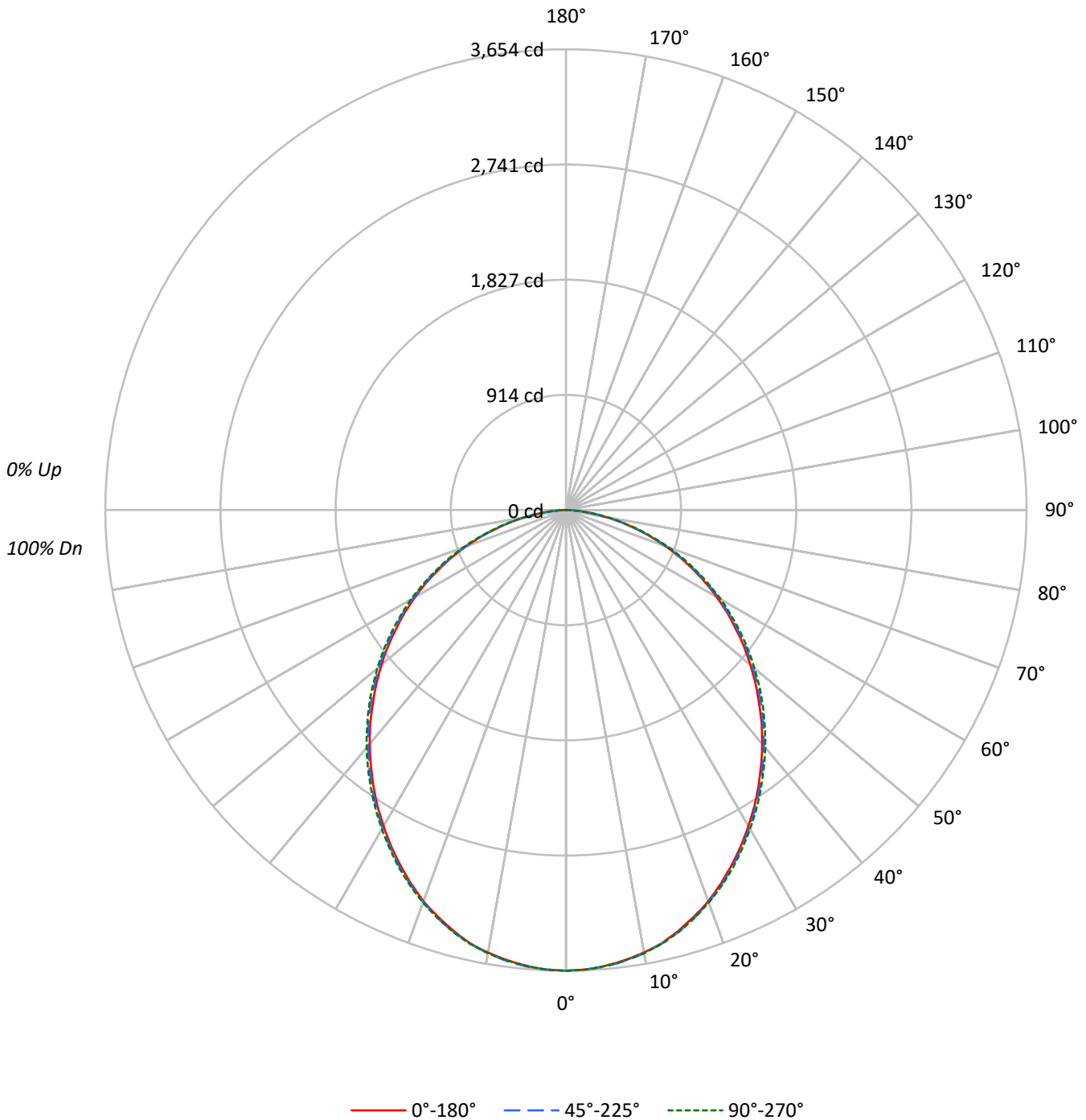
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9505.0 lumens
Efficiency: N/A
Efficacy: 81.4 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.19 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 116.7
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

TEST NUMBER: P708877
CATALOG NUMBER: 22APR-38-89L935-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708877
 CATALOG NUMBER: 22APR-38-89L935-UNV

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	100	100	100	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84	84	84	84
2	99	91	84	79	97	89	83	78	86	81	76	82	78	74	79	76	73	71	71	71	71
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60	60	60	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51	51	51	51
5	76	64	55	48	74	63	54	48	61	53	47	59	52	47	57	51	46	44	44	44	44
6	71	57	49	42	69	57	48	42	55	47	42	53	46	41	51	46	41	39	39	39	39
7	66	52	44	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34	34	34	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31	31	31	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28	28	28	28
10	54	41	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9834	9834	9834
5°	9802	9814	9806
10°	9741	9755	9753
15°	9621	9647	9651
20°	9456	9476	9489
25°	9228	9271	9300
30°	8993	9042	9075
35°	8752	8812	8857
40°	8506	8573	8642
45°	8241	8343	8415
50°	7995	8091	8174
55°	7721	7825	7921
60°	7439	7538	7645
65°	7072	7188	7270
70°	6618	6707	6803
75°	5951	6063	6142
80°	5026	5154	5202
85°	3761	3924	3903



TEST NUMBER: P708877
 CATALOG NUMBER: 22APR-38-89L935-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	344.8	3.6
10°-20°	975.2	10.3
20°-30°	1437.4	15.1
30°-40°	1677.5	17.6
40°-50°	1690.6	17.8
50°-60°	1492.1	15.7
60°-70°	1115.9	11.7
70°-80°	618.4	6.5
80°-90°	152.9	1.6
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°	2757.4	29.0
0°-40°	4434.9	46.7
0°-60°	7617.7	80.1
0°-90°	9505.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9505.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3654	3654	3654	3654	3654	
5°	3629	3633	3633	3634	3630	344
15°	3454	3460	3463	3466	3464	973
25°	3108	3115	3122	3128	3132	1432
35°	2664	2670	2682	2693	2696	1666
45°	2166	2179	2192	2208	2211	1673
55°	1646	1656	1668	1683	1688	1473
65°	1111	1116	1129	1138	1142	1100
75°	572	576	583	589	591	608
85°	122	126	127	126	126	149
90°	0	0	0	0	0	

TEST NUMBER: P708877

CATALOG NUMBER: 22APR-38-89L935-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3654.5	3654.5	3654.5	3654.5	3654.5
2.5°	3647.7	3651.5	3648.4	3651.5	3648.4
5°	3628.6	3633.2	3633.2	3634.0	3630.2
7.5°	3600.5	3605.8	3608.1	3608.8	3603.5
10°	3564.7	3570.0	3570.0	3573.1	3569.3
12.5°	3519.0	3522.1	3521.3	3525.9	3522.8
15°	3453.6	3459.6	3462.7	3465.7	3464.2
17.5°	3380.5	3388.1	3390.4	3395.7	3391.9
20°	3302.1	3307.4	3308.9	3317.3	3313.5
22.5°	3208.4	3213.8	3219.1	3226.7	3227.5
25°	3108.0	3114.8	3122.4	3128.5	3132.3
27.5°	3004.4	3011.3	3018.1	3025.8	3027.3
30°	2894.1	2902.4	2910.1	2919.2	2920.7
32.5°	2782.9	2786.0	2797.4	2807.3	2811.9
35°	2664.2	2670.3	2682.5	2693.1	2696.2
37.5°	2543.2	2552.3	2565.2	2576.7	2579.7
40°	2421.4	2429.0	2440.4	2455.6	2460.2
42.5°	2298.1	2303.4	2318.6	2331.5	2335.4
45°	2165.6	2179.3	2192.2	2207.5	2211.3
47.5°	2039.2	2049.9	2062.8	2077.3	2083.4
50°	1909.8	1922.8	1932.7	1948.7	1952.5
52.5°	1780.4	1788.8	1802.5	1816.2	1822.3
55°	1645.7	1655.6	1667.8	1683.0	1688.3
57.5°	1516.3	1521.6	1535.3	1548.3	1552.8
60°	1382.3	1387.7	1400.6	1414.3	1420.4
62.5°	1248.4	1252.9	1263.6	1279.6	1279.6
65°	1110.6	1115.9	1128.9	1138.0	1141.8
67.5°	976.6	981.2	990.3	1001.7	1007.1
70°	841.1	844.9	852.5	864.0	864.7
72.5°	705.6	709.4	719.3	723.1	728.5
75°	572.4	575.5	583.1	589.2	590.7
77.5°	445.3	449.9	455.2	457.5	459.8
80°	324.3	328.8	332.6	334.9	335.7
82.5°	214.7	219.2	221.5	223.0	222.3
85°	121.8	125.6	127.1	125.6	126.4
87.5°	48.0	50.2	51.8	51.0	49.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)