

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: P708839

Luminaire Tested: **24APR-X-71L935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708839
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-71L935-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

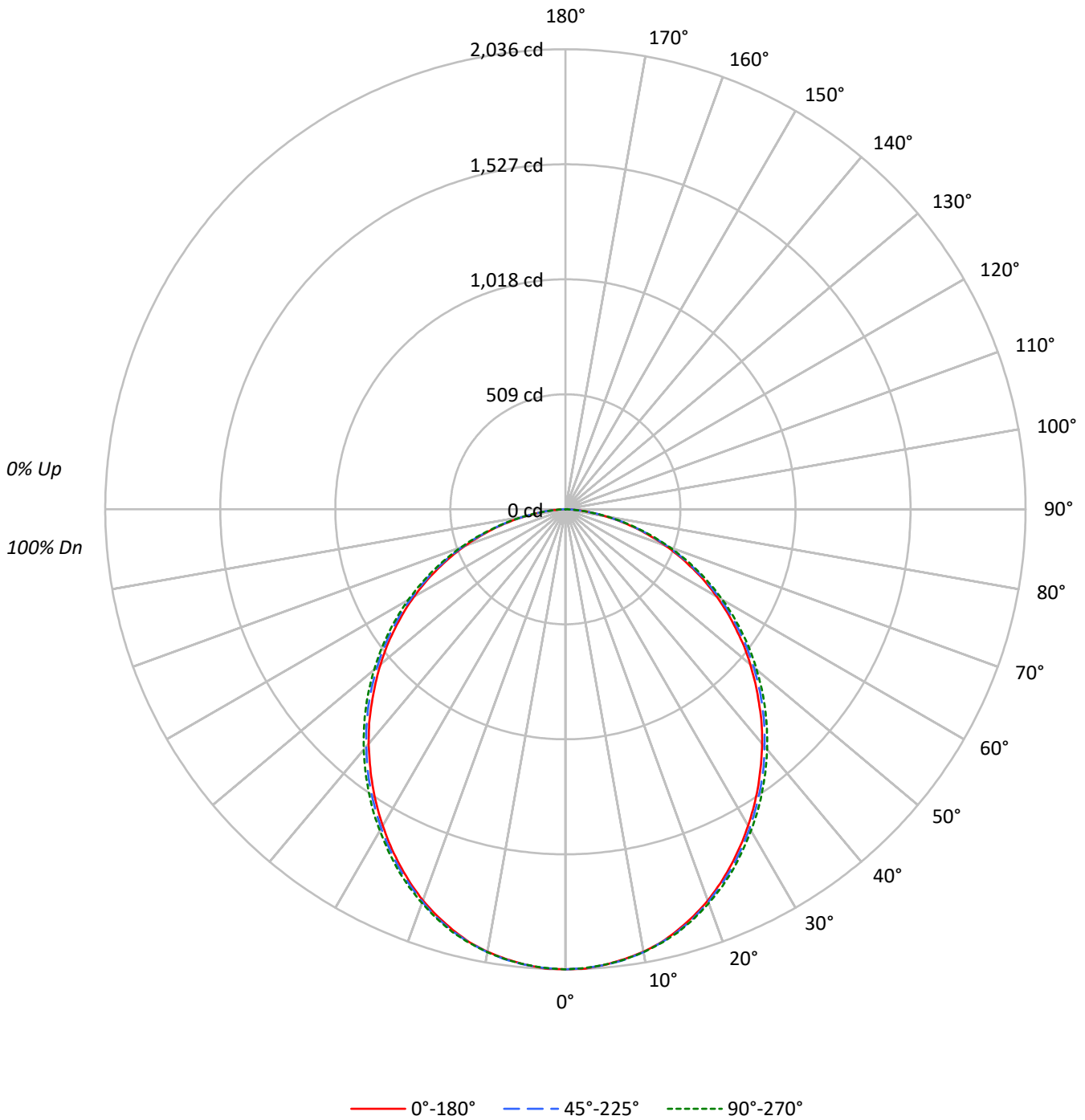
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5336.5 lumens
Efficiency: N/A
Efficacy: 88.9 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 60
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: P708839
CATALOG NUMBER: 24APR-X-71L935-UNV

Luminous Intensity Polar Plot





TEST NUMBER: P708839
 CATALOG NUMBER: 24APR-X-71L935-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	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	73	73	73	73	70
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	62	62	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	53	53	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	46	46	46	44
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	41	41	41	39
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	36	36	36	34
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	33	33	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	30	30	30	28
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5479	5479	5479
5°	5466	5468	5464
10°	5433	5438	5440
15°	5368	5383	5394
20°	5278	5296	5313
25°	5153	5188	5218
30°	5023	5065	5102
35°	4890	4944	4991
40°	4757	4813	4877
45°	4608	4692	4756
50°	4469	4554	4625
55°	4316	4408	4485
60°	4161	4246	4328
65°	3960	4048	4126
70°	3708	3789	3865
75°	3347	3429	3491
80°	2824	2927	2955
85°	2100	2232	2195



TEST NUMBER: P708839
 CATALOG NUMBER: 24APR-X-71L935-UNV

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.1	3.6
10°-20°	544.4	10.2
20°-30°	804.2	15.1
30°-40°	940.9	17.6
40°-50°	950.3	17.8
50°-60°	840.0	15.7
60°-70°	628.8	11.8
70°-80°	349.5	6.5
80°-90°	86.4	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°	1540.7	28.9
0°-40°	2481.6	46.5
0°-60°	4271.9	80.1
0°-90°	5336.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5336.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2024	2024	2024	2025	2023	192
15°	1927	1928	1932	1936	1936	543
25°	1736	1738	1747	1753	1758	799
35°	1488	1493	1505	1515	1519	931
45°	1211	1220	1233	1246	1250	935
55°	920	927	940	951	956	824
65°	622	626	636	644	648	616
75°	322	324	330	336	336	341
85°	68	70	72	71	71	83
90°	0	0	0	0	0	



TEST NUMBER: P708839

CATALOG NUMBER: 24APR-X-71L935-UNV

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2036.2	2036.2	2036.2	2036.2	2036.2
2.5°	2034.4	2034.4	2032.6	2033.2	2032.0
5°	2023.5	2024.1	2024.1	2024.7	2022.9
7.5°	2007.7	2008.9	2010.7	2011.3	2009.5
10°	1988.3	1989.5	1990.1	1992.5	1990.7
12.5°	1962.8	1963.4	1964.0	1967.6	1965.8
15°	1926.9	1928.1	1932.4	1936.0	1936.0
17.5°	1886.9	1889.3	1894.1	1899.0	1897.8
20°	1843.1	1845.0	1849.2	1855.9	1855.3
22.5°	1791.5	1793.3	1799.4	1806.7	1808.5
25°	1735.6	1738.1	1747.2	1752.6	1757.5
27.5°	1677.9	1681.0	1689.5	1698.0	1700.4
30°	1616.6	1621.5	1630.0	1639.1	1642.1
32.5°	1554.1	1556.5	1568.0	1577.7	1583.8
35°	1488.5	1492.7	1504.9	1515.2	1519.4
37.5°	1421.1	1427.1	1439.9	1450.8	1454.5
40°	1354.3	1359.1	1370.0	1384.0	1388.3
42.5°	1285.0	1289.3	1302.6	1314.8	1319.0
45°	1210.9	1220.0	1232.8	1245.6	1249.8
47.5°	1139.3	1147.8	1160.5	1173.3	1178.1
50°	1067.6	1076.7	1087.7	1101.0	1104.7
52.5°	996.0	1003.2	1014.8	1026.3	1031.8
55°	920.0	927.3	939.5	951.0	955.9
57.5°	848.4	853.2	864.8	875.7	880.0
60°	773.1	777.9	788.9	800.4	804.1
62.5°	699.0	702.0	712.4	723.3	725.7
65°	621.9	626.1	635.8	644.3	648.0
67.5°	546.6	550.2	558.7	567.8	569.6
70°	471.3	473.7	481.6	488.3	491.3
72.5°	395.3	397.8	406.3	409.9	413.0
75°	321.9	323.7	329.8	335.8	335.8
77.5°	250.2	253.2	258.1	260.5	261.7
80°	182.2	185.2	188.9	191.3	190.7
82.5°	120.2	123.3	125.7	126.9	125.7
85°	68.0	70.4	72.3	71.1	71.1
87.5°	26.7	27.9	29.1	28.5	27.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)