

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: P708841

Luminaire Tested: **24APR-X-52L935-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708841
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-52L935-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

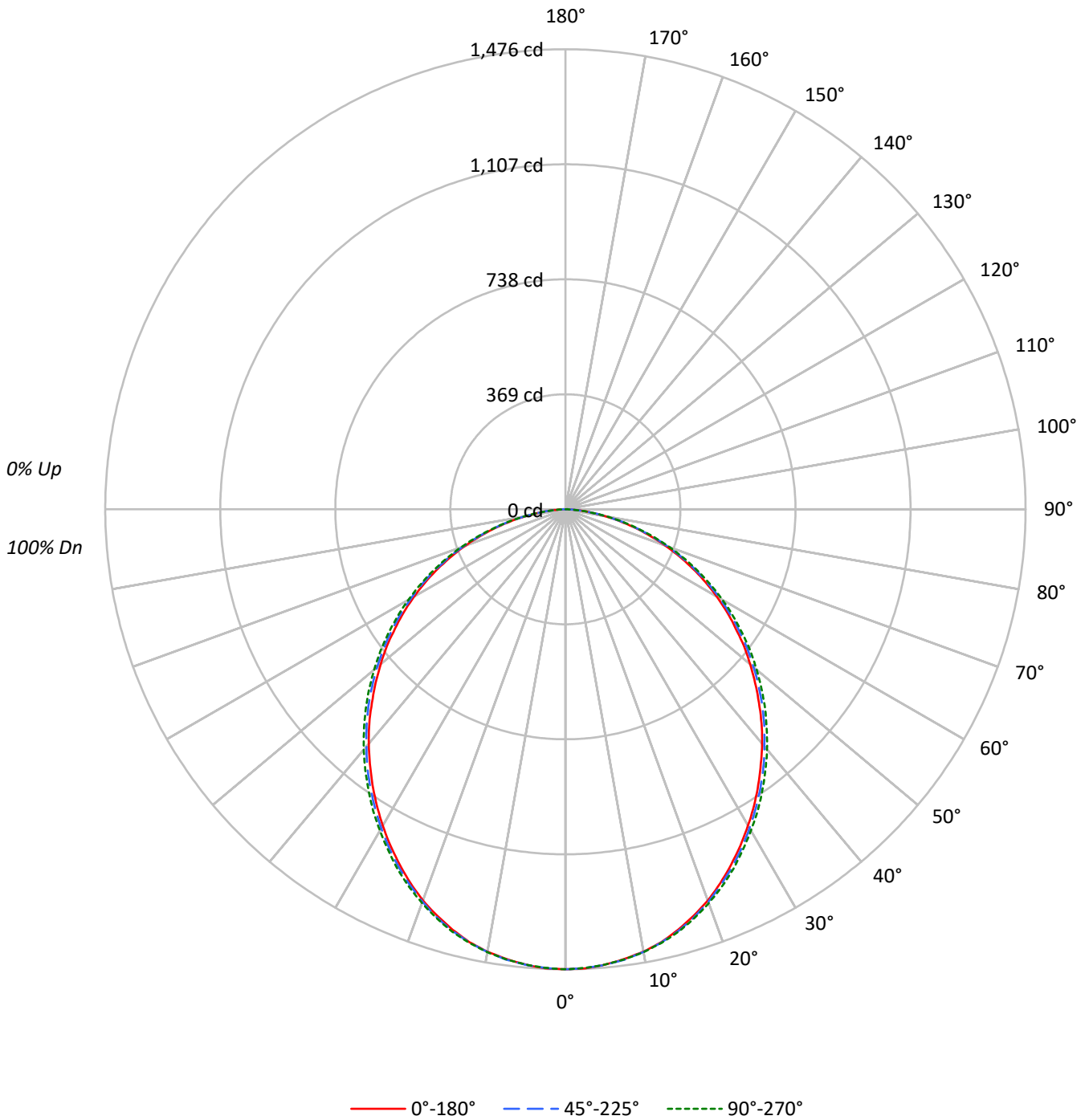
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3867.6 lumens
Efficiency: N/A
Efficacy: 91.0 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): 42.5
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: P708841
CATALOG NUMBER: 24APR-X-52L935-UNV

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	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°	3971	3971	3971
5°	3961	3962	3960
10°	3938	3941	3942
15°	3891	3902	3909
20°	3825	3838	3851
25°	3735	3760	3782
30°	3640	3671	3698
35°	3544	3583	3618
40°	3448	3488	3534
45°	3340	3400	3447
50°	3239	3300	3352
55°	3128	3194	3250
60°	3016	3077	3136
65°	2870	2934	2990
70°	2687	2746	2802
75°	2426	2485	2531
80°	2046	2122	2142
85°	1522	1618	1590



TEST NUMBER: P708841
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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.3	3.6
10°-20°	394.5	10.2
20°-30°	582.8	15.1
30°-40°	681.9	17.6
40°-50°	688.7	17.8
50°-60°	608.8	15.7
60°-70°	455.7	11.8
70°-80°	253.3	6.5
80°-90°	62.6	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°	1116.6	28.9
0°-40°	1798.5	46.5
0°-60°	3096.0	80.1
0°-90°	3867.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3867.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1476	1476	1476	1476	1476	
5°	1466	1467	1467	1467	1466	139
15°	1396	1397	1400	1403	1403	394
25°	1258	1260	1266	1270	1274	579
35°	1079	1082	1091	1098	1101	675
45°	878	884	894	903	906	678
55°	667	672	681	689	693	597
65°	451	454	461	467	470	446
75°	233	235	239	243	243	247
85°	49	51	52	52	52	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1475.7	1475.7	1475.7	1475.7	1475.7
2.5°	1474.4	1474.4	1473.1	1473.5	1472.7
5°	1466.5	1466.9	1466.9	1467.4	1466.1
7.5°	1455.1	1455.9	1457.3	1457.7	1456.4
10°	1441.0	1441.9	1442.3	1444.1	1442.7
12.5°	1422.5	1422.9	1423.4	1426.0	1424.7
15°	1396.5	1397.4	1400.5	1403.1	1403.1
17.5°	1367.5	1369.2	1372.8	1376.3	1375.4
20°	1335.8	1337.1	1340.2	1345.0	1344.6
22.5°	1298.4	1299.7	1304.1	1309.4	1310.7
25°	1257.9	1259.6	1266.2	1270.2	1273.7
27.5°	1216.1	1218.3	1224.4	1230.6	1232.4
30°	1171.6	1175.1	1181.3	1187.9	1190.1
32.5°	1126.3	1128.0	1136.4	1143.4	1147.8
35°	1078.7	1081.8	1090.6	1098.1	1101.2
37.5°	1029.9	1034.3	1043.5	1051.5	1054.1
40°	981.5	985.0	992.9	1003.0	1006.1
42.5°	931.3	934.4	944.1	952.9	956.0
45°	877.6	884.2	893.5	902.7	905.8
47.5°	825.7	831.8	841.1	850.3	853.8
50°	773.7	780.3	788.3	797.9	800.6
52.5°	721.8	727.1	735.5	743.8	747.8
55°	666.8	672.1	680.9	689.2	692.8
57.5°	614.9	618.4	626.7	634.7	637.7
60°	560.3	563.8	571.7	580.1	582.7
62.5°	506.6	508.8	516.3	524.2	526.0
65°	450.7	453.8	460.8	467.0	469.6
67.5°	396.1	398.8	404.9	411.5	412.8
70°	341.5	343.3	349.0	353.9	356.1
72.5°	286.5	288.3	294.4	297.1	299.3
75°	233.3	234.6	239.0	243.4	243.4
77.5°	181.3	183.5	187.1	188.8	189.7
80°	132.0	134.2	136.9	138.6	138.2
82.5°	87.1	89.3	91.1	92.0	91.1
85°	49.3	51.1	52.4	51.5	51.5
87.5°	19.4	20.2	21.1	20.7	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)