

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: P708836

Luminaire Tested: **24APR-X-52L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708836
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-52L930-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

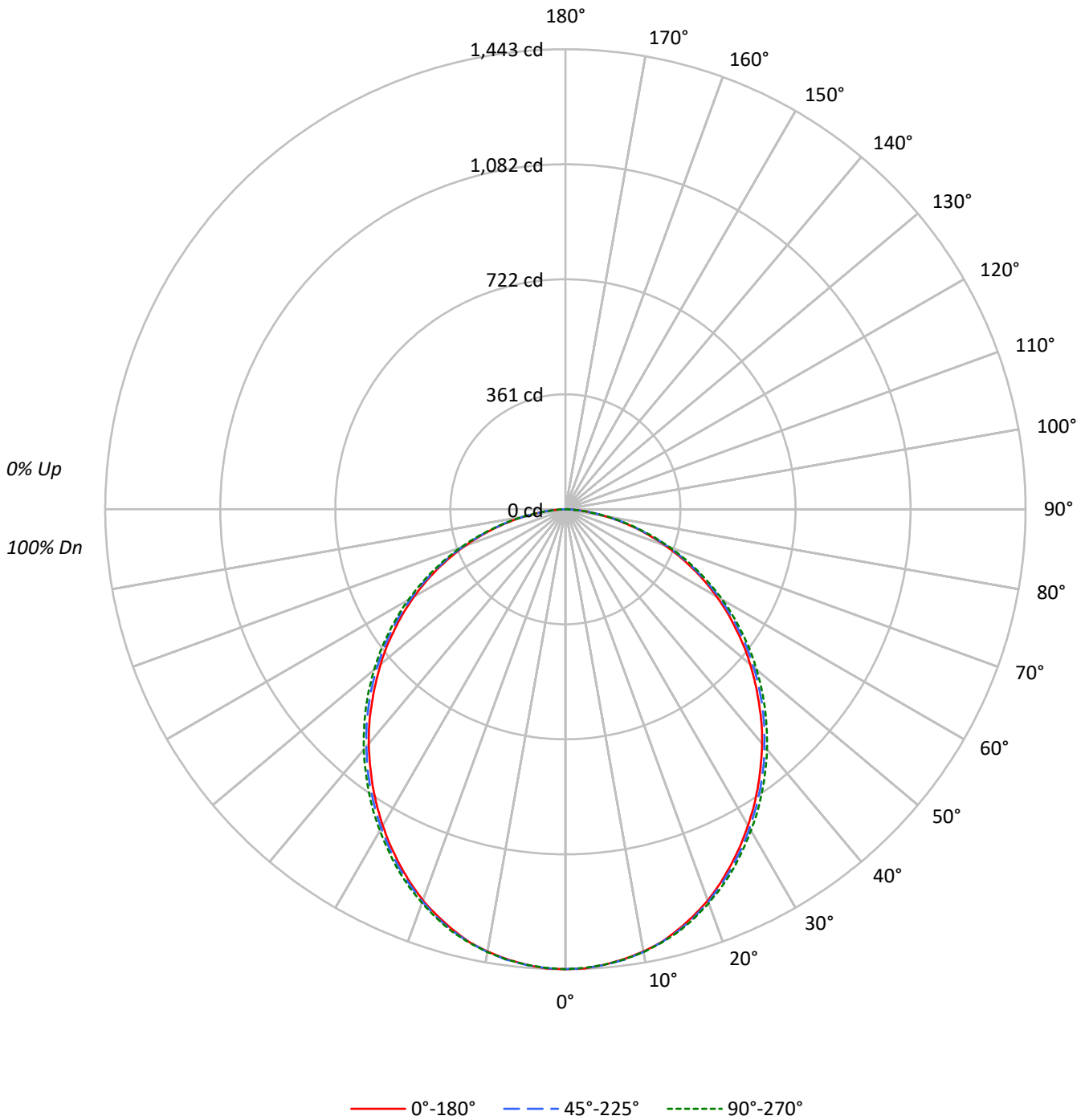
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3780.7 lumens
Efficiency: N/A
Efficacy: 89.0 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

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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°	3882	3882	3882
5°	3873	3874	3871
10°	3849	3853	3854
15°	3803	3814	3821
20°	3739	3752	3764
25°	3651	3675	3697
30°	3559	3588	3615
35°	3464	3502	3536
40°	3370	3410	3455
45°	3265	3324	3369
50°	3167	3226	3276
55°	3058	3123	3177
60°	2948	3008	3066
65°	2805	2869	2923
70°	2627	2685	2739
75°	2371	2429	2473
80°	2001	2073	2094
85°	1488	1581	1553



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.1	3.6
10°-20°	385.7	10.2
20°-30°	569.7	15.1
30°-40°	666.6	17.6
40°-50°	673.3	17.8
50°-60°	595.1	15.7
60°-70°	445.5	11.8
70°-80°	247.6	6.5
80°-90°	61.2	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°	1091.5	28.9
0°-40°	1758.1	46.5
0°-60°	3026.5	80.1
0°-90°	3780.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3780.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1443	1443	1443	1443	1443	
5°	1434	1434	1434	1434	1433	136
15°	1365	1366	1369	1372	1372	385
25°	1230	1231	1238	1242	1245	566
35°	1054	1058	1066	1073	1076	660
45°	858	864	873	882	885	663
55°	652	657	666	674	677	584
65°	441	444	450	456	459	436
75°	228	229	234	238	238	242
85°	48	50	51	50	50	59
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1442.6	1442.6	1442.6	1442.6	1442.6
2.5°	1441.3	1441.3	1440.0	1440.4	1439.6
5°	1433.6	1434.0	1434.0	1434.4	1433.1
7.5°	1422.4	1423.2	1424.5	1425.0	1423.7
10°	1408.6	1409.5	1409.9	1411.6	1410.3
12.5°	1390.5	1391.0	1391.4	1394.0	1392.7
15°	1365.2	1366.0	1369.0	1371.6	1371.6
17.5°	1336.8	1338.5	1341.9	1345.4	1344.5
20°	1305.8	1307.1	1310.1	1314.8	1314.4
22.5°	1269.2	1270.5	1274.8	1280.0	1281.3
25°	1229.6	1231.3	1237.8	1241.7	1245.1
27.5°	1188.8	1190.9	1196.9	1203.0	1204.7
30°	1145.3	1148.7	1154.8	1161.2	1163.4
32.5°	1101.0	1102.7	1110.9	1117.8	1122.1
35°	1054.5	1057.5	1066.1	1073.4	1076.5
37.5°	1006.8	1011.1	1020.1	1027.8	1030.4
40°	959.4	962.9	970.6	980.5	983.5
42.5°	910.4	913.4	922.9	931.5	934.5
45°	857.9	864.4	873.4	882.4	885.4
47.5°	807.1	813.2	822.2	831.2	834.7
50°	756.4	762.8	770.6	780.0	782.6
52.5°	705.6	710.8	718.9	727.1	731.0
55°	651.8	657.0	665.6	673.8	677.2
57.5°	601.0	604.5	612.7	620.4	623.4
60°	547.7	551.1	558.9	567.1	569.6
62.5°	495.2	497.4	504.7	512.4	514.1
65°	440.6	443.6	450.5	456.5	459.1
67.5°	387.2	389.8	395.8	402.3	403.6
70°	333.9	335.6	341.2	345.9	348.1
72.5°	280.1	281.8	287.8	290.4	292.6
75°	228.0	229.3	233.6	237.9	237.9
77.5°	177.3	179.4	182.9	184.6	185.4
80°	129.1	131.2	133.8	135.5	135.1
82.5°	85.2	87.3	89.1	89.9	89.1
85°	48.2	49.9	51.2	50.3	50.3
87.5°	18.9	19.8	20.7	20.2	19.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)