

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: P708988

Luminaire Tested: **24APR-49L930-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708988
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-49L930-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

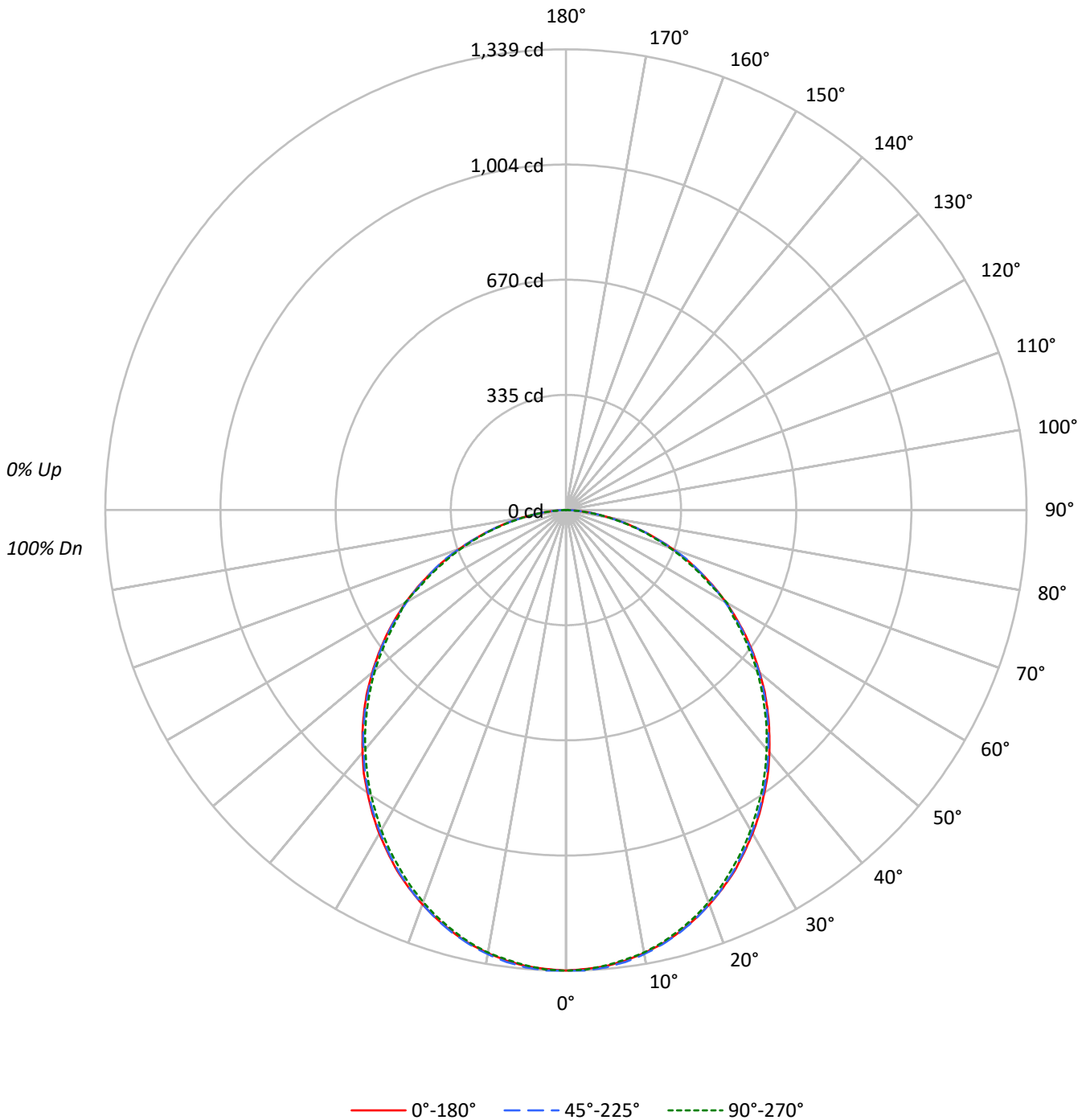
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3565.3 lumens
Efficiency: N/A
Efficacy: 83.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.2 / 1.32
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 42.8
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	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	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	61	61	61	59
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	53	53	53	51
5	76	63	55	48	74	62	54	48	60	53	47	58	52	47	56	51	46	46	46	46	44
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	41	41	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	41	36	47	41	36	36	36	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	37	33	43	37	32	32	32	32	30
9	57	44	35	30	55	43	35	30	42	35	30	41	34	29	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1801	1801	1801
5°	1797	1802	1795
10°	1787	1791	1784
15°	1770	1773	1763
20°	1746	1746	1736
25°	1720	1716	1703
30°	1686	1680	1668
35°	1651	1645	1632
40°	1616	1608	1593
45°	1579	1571	1555
50°	1538	1532	1517
55°	1496	1488	1469
60°	1446	1437	1456
65°	1380	1376	1350
70°	1295	1297	1261
75°	1176	1167	1140
80°	1010	997	971
85°	772	766	706



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.4	3.5
10°-20°	358.2	10.0
20°-30°	531.6	14.9
30°-40°	625.7	17.6
40°-50°	635.9	17.8
50°-60°	565.3	15.9
60°-70°	426.4	12.0
70°-80°	236.8	6.6
80°-90°	58.9	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°	1016.2	28.5
0°-40°	1641.9	46.1
0°-60°	2843.2	79.7
0°-90°	3565.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3565.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1339	1339	1339	1339	1339	
5°	1330	1333	1334	1332	1329	126
15°	1271	1272	1273	1270	1266	358
25°	1159	1158	1156	1151	1147	533
35°	1005	1006	1002	996	994	629
45°	830	830	826	819	817	640
55°	638	633	634	628	626	570
65°	434	431	432	427	424	429
75°	226	223	224	223	219	240
85°	50	49	50	48	46	60
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1338.6	1338.6	1338.6	1338.6	1338.6
2.5°	1335.2	1337.7	1339.4	1337.3	1336.9
5°	1330.5	1332.6	1334.3	1332.2	1328.8
7.5°	1321.1	1323.6	1324.9	1322.8	1318.1
10°	1307.8	1310.4	1310.8	1308.7	1306.1
12.5°	1291.6	1293.3	1293.3	1291.6	1288.6
15°	1270.6	1271.9	1272.7	1269.8	1265.9
17.5°	1246.7	1248.8	1248.0	1243.2	1241.5
20°	1219.7	1221.4	1219.3	1216.3	1212.5
22.5°	1190.2	1190.7	1189.0	1185.5	1181.7
25°	1158.6	1157.7	1156.0	1150.9	1147.1
27.5°	1121.8	1123.5	1119.3	1114.6	1112.0
30°	1085.5	1085.9	1081.6	1075.7	1073.5
32.5°	1046.6	1045.7	1042.7	1036.3	1032.9
35°	1005.1	1005.5	1001.7	995.7	993.6
37.5°	964.9	962.4	959.4	952.5	951.2
40°	920.0	919.6	915.3	909.3	907.2
42.5°	875.1	874.7	871.3	865.3	863.6
45°	829.8	829.8	825.6	818.7	817.0
47.5°	783.7	781.9	779.0	773.0	770.8
50°	734.9	733.6	731.9	725.1	724.7
52.5°	687.0	686.2	683.2	677.2	673.8
55°	637.9	633.2	634.4	627.6	626.3
57.5°	587.4	582.7	585.3	579.3	576.7
60°	537.4	532.7	534.0	530.1	541.2
62.5°	486.1	483.1	483.1	492.1	475.8
65°	433.5	430.9	432.2	426.7	424.1
67.5°	381.8	377.9	386.1	375.8	371.5
70°	329.2	326.6	329.6	323.6	320.6
72.5°	277.0	274.9	274.0	271.9	269.3
75°	226.2	223.2	224.5	222.7	219.3
77.5°	176.6	175.7	175.3	173.1	170.6
80°	130.4	129.5	128.7	127.0	125.3
82.5°	87.2	86.4	85.9	85.1	84.7
85°	50.0	48.7	49.6	47.5	45.7
87.5°	18.8	18.4	19.2	17.5	16.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)