

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: P708997

Luminaire Tested: **24APR-58L940-X-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708997
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-58L940-X-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient Light
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

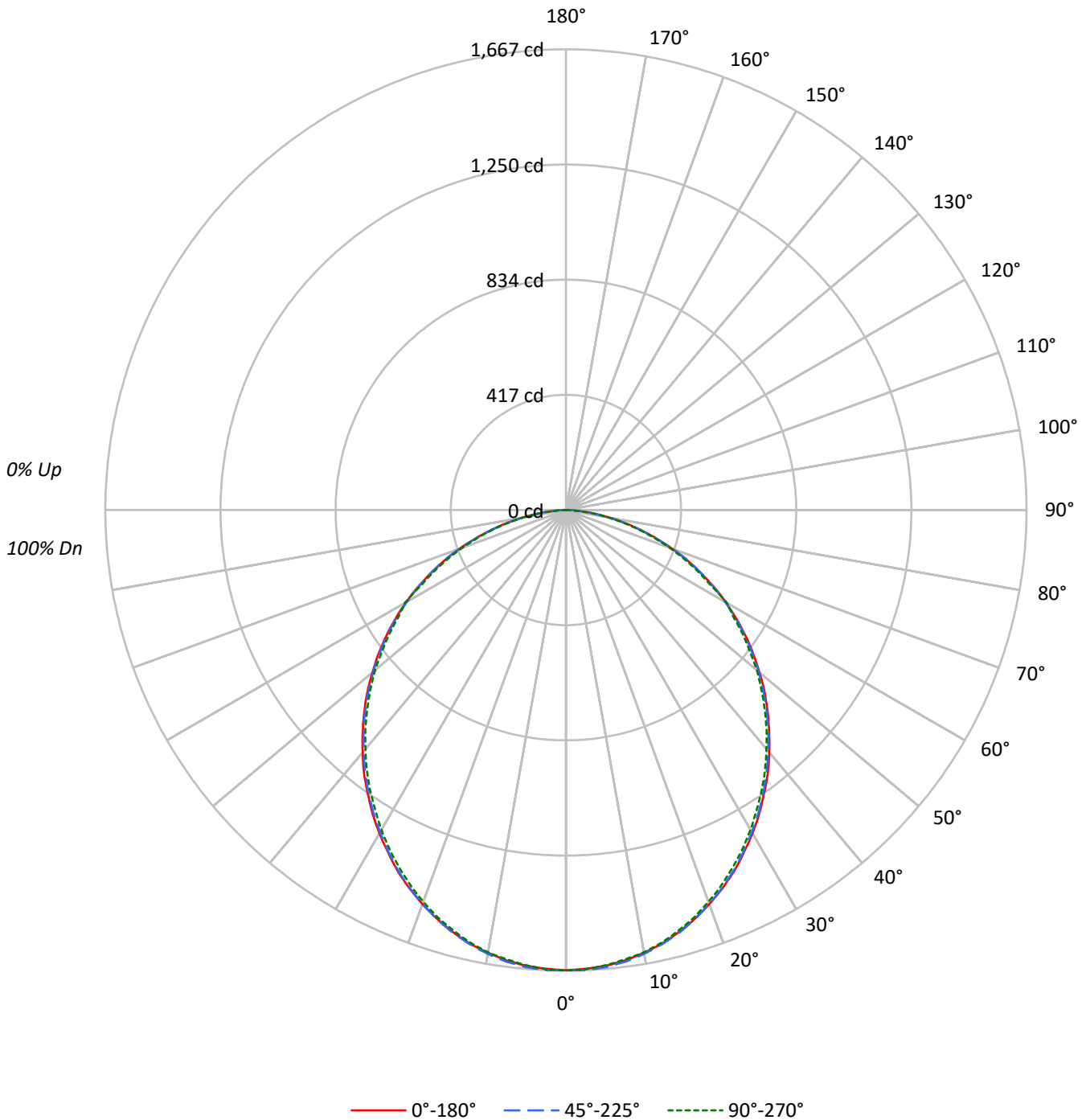
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4436.1 lumens
Efficiency: N/A
Efficacy: 85.6 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): 51.8
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				
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°	2241	2241	2241
5°	2236	2242	2233
10°	2223	2228	2220
15°	2202	2206	2194
20°	2173	2172	2160
25°	2140	2135	2119
30°	2098	2091	2075
35°	2054	2047	2031
40°	2011	2000	1983
45°	1965	1955	1934
50°	1914	1906	1887
55°	1862	1852	1828
60°	1799	1788	1812
65°	1717	1712	1680
70°	1611	1613	1570
75°	1463	1452	1419
80°	1257	1241	1208
85°	960	953	878



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	157.3	3.5
10°-20°	445.6	10.0
20°-30°	661.4	14.9
30°-40°	778.6	17.6
40°-50°	791.2	17.8
50°-60°	703.4	15.9
60°-70°	530.6	12.0
70°-80°	294.7	6.6
80°-90°	73.3	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°	1264.4	28.5
0°-40°	2043.0	46.1
0°-60°	3537.6	79.7
0°-90°	4436.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4436.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1666	1666	1666	1666	1666	
5°	1655	1658	1660	1658	1653	157
15°	1581	1582	1584	1580	1575	446
25°	1442	1440	1438	1432	1427	663
35°	1251	1251	1246	1239	1236	783
45°	1032	1032	1027	1019	1016	796
55°	794	788	789	781	779	709
65°	539	536	538	531	528	534
75°	281	278	279	277	273	298
85°	62	61	62	59	57	75
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1665.5	1665.5	1665.5	1665.5	1665.5
2.5°	1661.3	1664.5	1666.6	1663.9	1663.4
5°	1655.4	1658.1	1660.2	1657.5	1653.3
7.5°	1643.7	1646.9	1648.5	1645.8	1640.0
10°	1627.2	1630.4	1630.9	1628.3	1625.1
12.5°	1607.0	1609.1	1609.1	1607.0	1603.3
15°	1580.9	1582.5	1583.6	1579.9	1575.1
17.5°	1551.1	1553.8	1552.7	1546.9	1544.8
20°	1517.6	1519.8	1517.1	1513.4	1508.6
22.5°	1480.9	1481.5	1479.3	1475.1	1470.3
25°	1441.6	1440.5	1438.4	1432.0	1427.2
27.5°	1395.8	1397.9	1392.6	1386.8	1383.6
30°	1350.6	1351.1	1345.8	1338.4	1335.7
32.5°	1302.2	1301.1	1297.4	1289.4	1285.2
35°	1250.6	1251.1	1246.3	1238.9	1236.2
37.5°	1200.6	1197.4	1193.7	1185.2	1183.6
40°	1144.7	1144.2	1138.9	1131.4	1128.8
42.5°	1088.9	1088.4	1084.1	1076.7	1074.5
45°	1032.5	1032.5	1027.2	1018.7	1016.5
47.5°	975.1	972.9	969.2	961.8	959.1
50°	914.4	912.8	910.7	902.2	901.6
52.5°	854.8	853.8	850.0	842.6	838.3
55°	793.7	787.8	789.4	780.9	779.3
57.5°	730.9	725.0	728.2	720.8	717.6
60°	668.7	662.8	664.4	659.6	673.4
62.5°	604.8	601.1	601.1	612.3	592.1
65°	539.4	536.2	537.8	530.9	527.7
67.5°	475.0	470.2	480.3	467.6	462.3
70°	409.6	406.4	410.1	402.7	399.0
72.5°	344.7	342.0	341.0	338.3	335.1
75°	281.4	277.7	279.3	277.1	272.9
77.5°	219.7	218.6	218.1	215.4	212.2
80°	162.2	161.2	160.1	158.0	155.9
82.5°	108.5	107.5	106.9	105.9	105.3
85°	62.2	60.6	61.7	59.0	56.9
87.5°	23.4	22.9	23.9	21.8	20.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)