

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: P708821

Luminaire Tested: **24APR-X-52L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708821
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-52L835-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

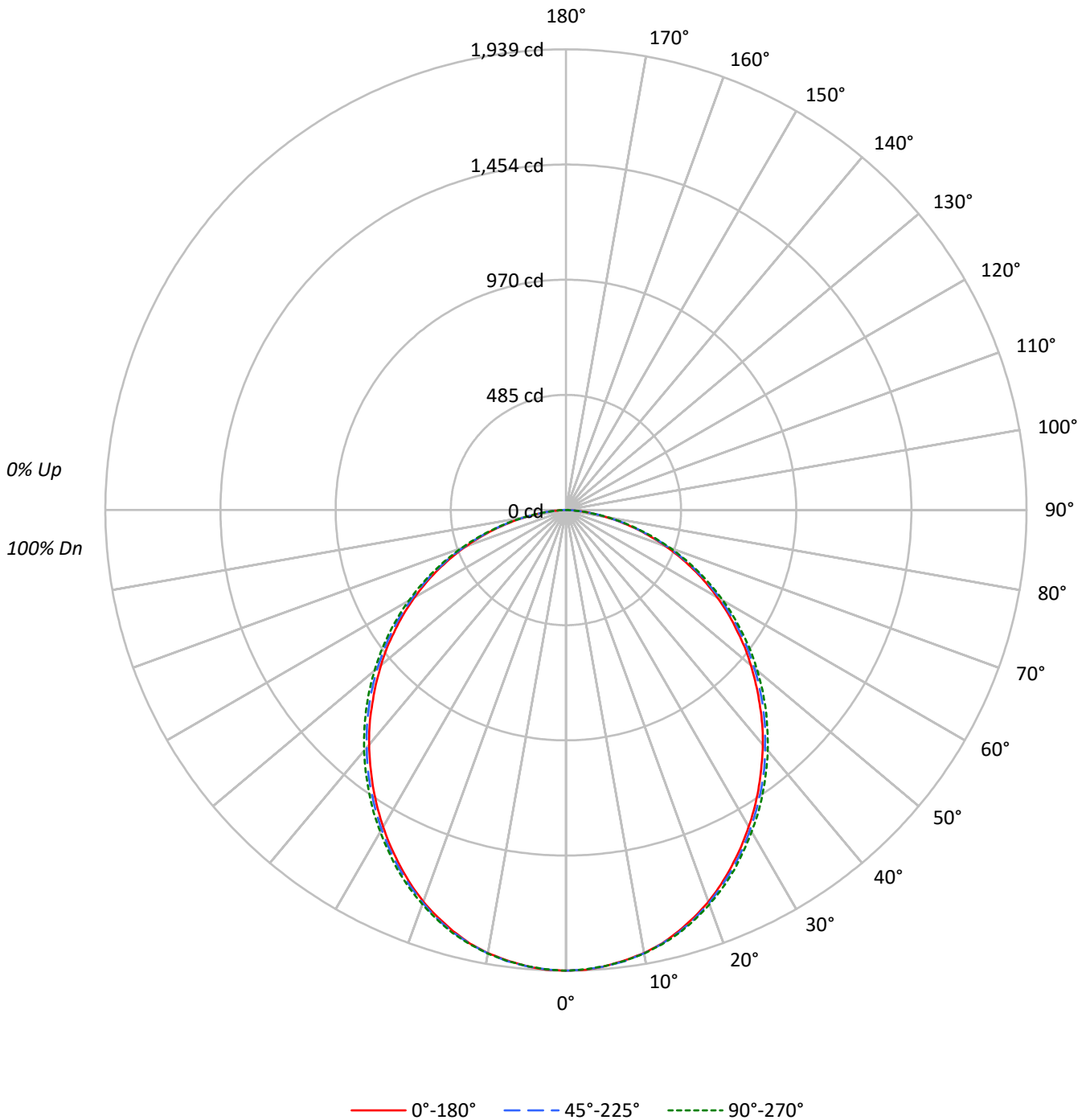
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5080.8 lumens
Efficiency: N/A
Efficacy: 119.5 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				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°	5217	5217	5217
5°	5204	5206	5202
10°	5173	5177	5179
15°	5111	5126	5135
20°	5025	5042	5058
25°	4907	4939	4968
30°	4782	4822	4858
35°	4655	4707	4752
40°	4529	4582	4643
45°	4387	4467	4528
50°	4255	4335	4403
55°	4109	4197	4270
60°	3961	4042	4120
65°	3770	3855	3928
70°	3530	3607	3681
75°	3186	3265	3324
80°	2689	2786	2813
85°	2001	2124	2087



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	182.9	3.6
10°-20°	518.3	10.2
20°-30°	765.6	15.1
30°-40°	895.8	17.6
40°-50°	904.8	17.8
50°-60°	799.7	15.7
60°-70°	598.6	11.8
70°-80°	332.7	6.5
80°-90°	82.3	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°	1466.9	28.9
0°-40°	2362.7	46.5
0°-60°	4067.2	80.1
0°-90°	5080.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5080.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1939	1939	1939	1939	1939	
5°	1926	1927	1927	1928	1926	183
15°	1835	1836	1840	1843	1843	517
25°	1652	1655	1663	1669	1673	761
35°	1417	1421	1433	1443	1447	886
45°	1153	1162	1174	1186	1190	890
55°	876	883	894	905	910	784
65°	592	596	605	614	617	586
75°	306	308	314	320	320	325
85°	65	67	69	68	68	79
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1938.7	1938.7	1938.7	1938.7	1938.7
2.5°	1936.9	1936.9	1935.2	1935.8	1934.6
5°	1926.5	1927.1	1927.1	1927.7	1925.9
7.5°	1911.5	1912.6	1914.4	1914.9	1913.2
10°	1893.0	1894.1	1894.7	1897.0	1895.3
12.5°	1868.7	1869.3	1869.8	1873.3	1871.6
15°	1834.6	1835.7	1839.8	1843.3	1843.3
17.5°	1796.4	1798.7	1803.4	1808.0	1806.8
20°	1754.8	1756.5	1760.6	1766.9	1766.4
22.5°	1705.6	1707.4	1713.2	1720.1	1721.8
25°	1652.5	1654.8	1663.4	1668.6	1673.3
27.5°	1597.5	1600.4	1608.5	1616.6	1618.9
30°	1539.1	1543.8	1551.8	1560.5	1563.4
32.5°	1479.6	1481.9	1492.9	1502.1	1507.9
35°	1417.1	1421.2	1432.7	1442.6	1446.6
37.5°	1353.0	1358.7	1370.9	1381.3	1384.8
40°	1289.4	1294.0	1304.4	1317.7	1321.7
42.5°	1223.4	1227.5	1240.2	1251.8	1255.8
45°	1152.9	1161.6	1173.7	1185.9	1189.9
47.5°	1084.7	1092.8	1104.9	1117.1	1121.7
50°	1016.4	1025.1	1035.5	1048.2	1051.7
52.5°	948.2	955.2	966.1	977.1	982.3
55°	875.9	882.9	894.5	905.4	910.1
57.5°	807.7	812.3	823.3	833.7	837.8
60°	736.0	740.7	751.1	762.0	765.5
62.5°	665.5	668.4	678.2	688.6	690.9
65°	592.1	596.1	605.4	613.5	616.9
67.5°	520.4	523.8	531.9	540.6	542.3
70°	448.7	451.0	458.5	464.9	467.8
72.5°	376.4	378.7	386.8	390.3	393.2
75°	306.4	308.2	314.0	319.7	319.7
77.5°	238.2	241.1	245.7	248.0	249.2
80°	173.5	176.3	179.8	182.1	181.5
82.5°	114.5	117.4	119.7	120.8	119.7
85°	64.8	67.1	68.8	67.6	67.6
87.5°	25.4	26.6	27.8	27.2	26.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)