

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: P708834

Luminaire Tested: **24APR-X-71L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708834
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-71L930-UNV
Description: ArcMed Patient Recessed 2x2 Fixture EXAM Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

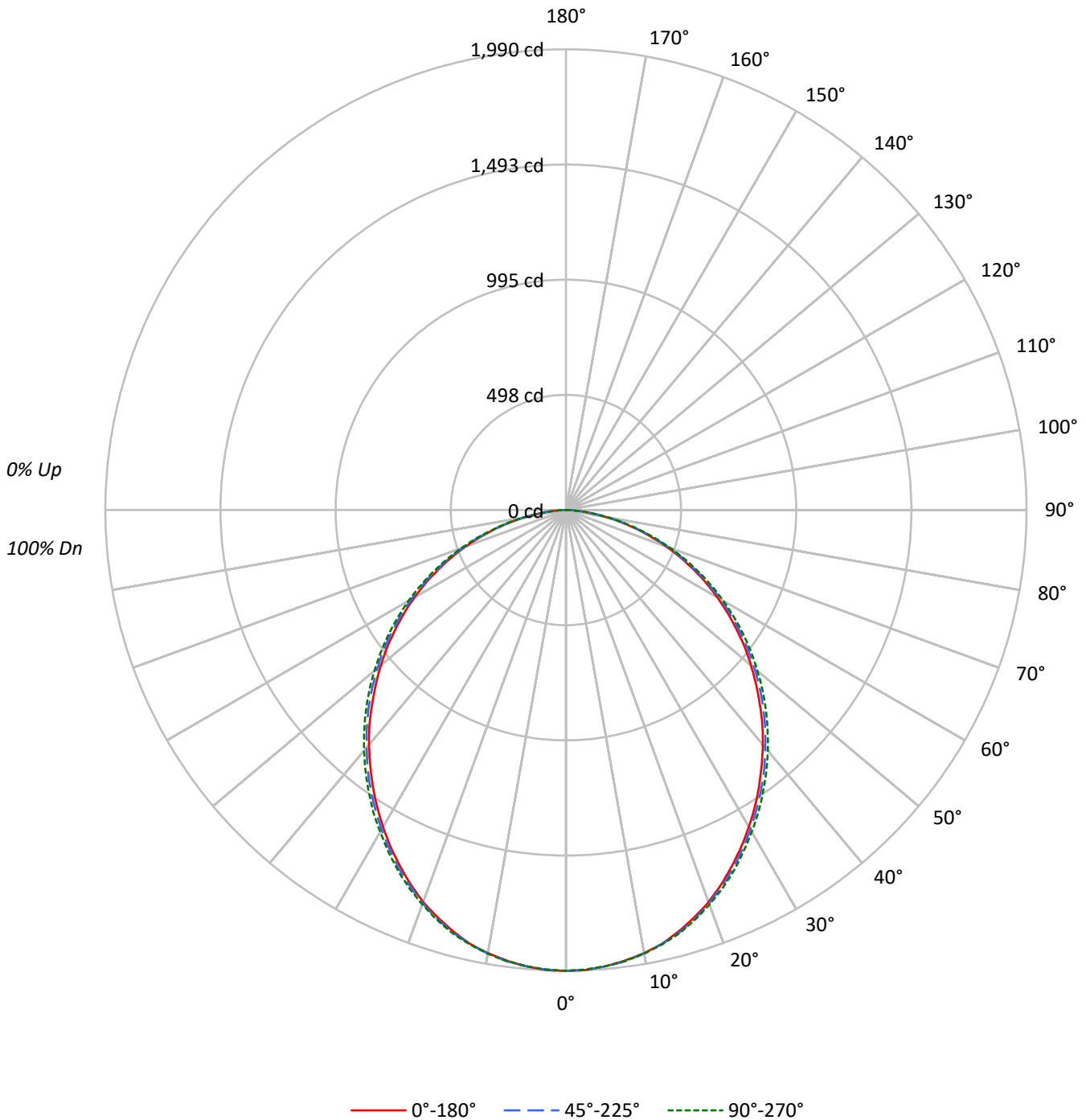
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5216.7 lumens
Efficiency: N/A
Efficacy: 86.9 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): 60
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	100				
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84				
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70				
3	91	80	72	66	88	79	71	65	76	69	64	73	67	63	70	66	62	60				
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51				
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44				
6	71	57	49	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39				
7	66	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34				
8	61	48	39	33	60	47	39	33	46	38	33	44	38	33	43	37	33	31				
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28				
10	54	40	33	27	52	40	32	27	39	32	27	38	32	27	37	31	27	25				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5356	5356	5356
5°	5343	5345	5341
10°	5311	5316	5317
15°	5248	5263	5273
20°	5159	5177	5194
25°	5038	5071	5101
30°	4910	4951	4988
35°	4780	4833	4879
40°	4650	4705	4767
45°	4505	4586	4649
50°	4369	4451	4520
55°	4220	4309	4384
60°	4067	4151	4230
65°	3871	3958	4033
70°	3625	3704	3779
75°	3271	3352	3413
80°	2760	2861	2889
85°	2053	2180	2146



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	187.8	3.6
10°-20°	532.2	10.2
20°-30°	786.1	15.1
30°-40°	919.8	17.6
40°-50°	929.0	17.8
50°-60°	821.1	15.7
60°-70°	614.7	11.8
70°-80°	341.6	6.5
80°-90°	84.5	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°	1506.1	28.9
0°-40°	2425.9	46.5
0°-60°	4176.0	80.0
0°-90°	5216.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5216.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1990	1990	1990	1990	1990	
5°	1978	1979	1979	1979	1977	188
15°	1884	1885	1889	1893	1893	531
25°	1697	1699	1708	1713	1718	781
35°	1455	1459	1471	1481	1485	910
45°	1184	1193	1205	1218	1222	914
55°	899	906	918	930	934	805
65°	608	612	622	630	633	602
75°	315	316	322	328	328	333
85°	66	69	71	70	70	81
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1990.5	1990.5	1990.5	1990.5	1990.5
2.5°	1988.7	1988.7	1986.9	1987.5	1986.4
5°	1978.0	1978.6	1978.6	1979.2	1977.4
7.5°	1962.6	1963.8	1965.6	1966.2	1964.4
10°	1943.6	1944.8	1945.4	1947.8	1946.0
12.5°	1918.7	1919.3	1919.9	1923.4	1921.6
15°	1883.6	1884.8	1889.0	1892.6	1892.6
17.5°	1844.5	1846.8	1851.6	1856.3	1855.2
20°	1801.7	1803.5	1807.7	1814.2	1813.6
22.5°	1751.3	1753.0	1759.0	1766.1	1767.9
25°	1696.7	1699.0	1707.9	1713.3	1718.0
27.5°	1640.3	1643.2	1651.5	1659.8	1662.2
30°	1580.3	1585.0	1593.4	1602.3	1605.2
32.5°	1519.1	1521.5	1532.8	1542.3	1548.2
35°	1455.0	1459.2	1471.1	1481.2	1485.3
37.5°	1389.1	1395.1	1407.5	1418.2	1421.8
40°	1323.8	1328.6	1339.3	1352.9	1357.1
42.5°	1256.2	1260.3	1273.4	1285.3	1289.4
45°	1183.7	1192.6	1205.1	1217.6	1221.7
47.5°	1113.7	1122.0	1134.5	1146.9	1151.7
50°	1043.6	1052.5	1063.2	1076.3	1079.8
52.5°	973.6	980.7	992.0	1003.3	1008.6
55°	899.4	906.5	918.4	929.7	934.4
57.5°	829.3	834.1	845.4	856.0	860.2
60°	755.7	760.5	771.2	782.4	786.0
62.5°	683.3	686.3	696.4	707.0	709.4
65°	607.9	612.1	621.6	629.9	633.4
67.5°	534.3	537.8	546.2	555.1	556.8
70°	460.7	463.0	470.8	477.3	480.3
72.5°	386.5	388.8	397.2	400.7	403.7
75°	314.6	316.4	322.4	328.3	328.3
77.5°	244.6	247.6	252.3	254.7	255.9
80°	178.1	181.1	184.6	187.0	186.4
82.5°	117.5	120.5	122.9	124.1	122.9
85°	66.5	68.9	70.6	69.5	69.5
87.5°	26.1	27.3	28.5	27.9	26.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)