

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: P708933

Luminaire Tested: **24APR-X-116L835-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708933
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-X-116L835-UNV
Description: ArcMed Patient Recessed 2x4 Fixture EXAM Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

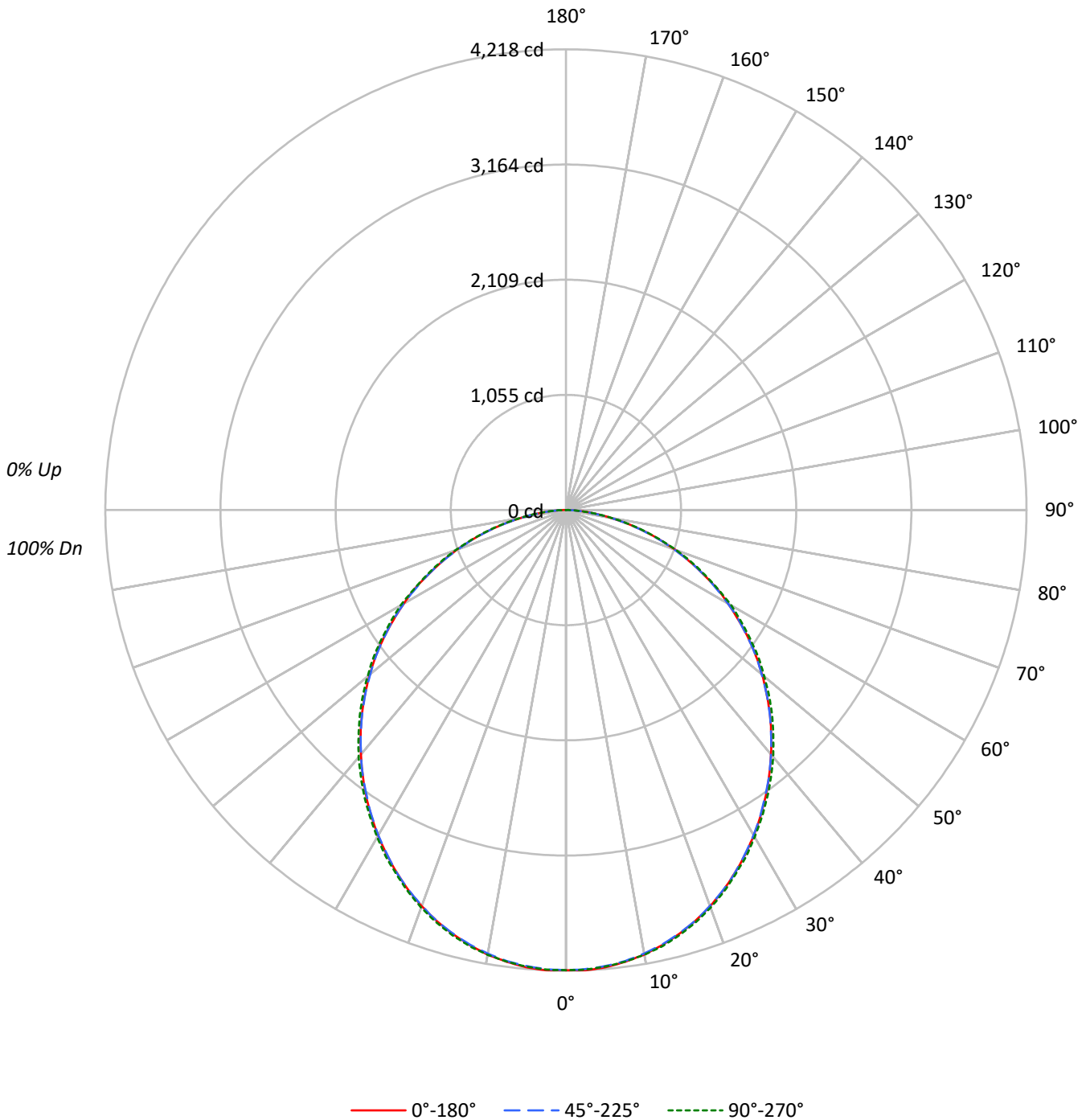
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11434.2 lumens
Efficiency: N/A
Efficacy: 133.1 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 85.9
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	94	98	94	91	94	91	89	90	88	86	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	63	72	67	62	70	65	61	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	53	50
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	42	68	56	48	41	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5669	5669	5669
5°	5675	5660	5666
10°	5647	5634	5649
15°	5593	5589	5611
20°	5527	5523	5547
25°	5439	5441	5459
30°	5344	5340	5370
35°	5243	5231	5278
40°	5132	5129	5187
45°	5026	5022	5083
50°	4909	4900	4965
55°	4776	4769	4835
60°	4619	4616	4704
65°	4409	4416	4468
70°	4180	4146	4232
75°	3820	3790	3863
80°	3305	3264	3332
85°	2600	2573	2644



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.3	3.5
10°-20°	1132.5	9.9
20°-30°	1689.0	14.8
30°-40°	1998.5	17.5
40°-50°	2042.1	17.9
50°-60°	1825.0	16.0
60°-70°	1375.6	12.0
70°-80°	774.3	6.8
80°-90°	198.9	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°	3219.8	28.2
0°-40°	5218.3	45.6
0°-60°	9085.5	79.5
0°-90°	11434.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11434.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4213	4213	4213	4213	4213	
5°	4202	4196	4191	4195	4195	399
15°	4016	4010	4013	4021	4028	1132
25°	3664	3658	3665	3676	3677	1688
35°	3192	3185	3184	3206	3214	1996
45°	2641	2639	2639	2660	2671	2037
55°	2036	2036	2033	2051	2061	1818
65°	1385	1378	1387	1400	1403	1375
75°	735	721	729	726	743	777
85°	168	162	167	169	171	201
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4213.4	4213.4	4213.4	4213.4	4213.4
2.5°	4218.1	4211.7	4207.1	4209.4	4211.1
5°	4201.9	4196.1	4190.9	4194.9	4194.9
7.5°	4171.2	4168.3	4164.3	4167.7	4168.9
10°	4133.0	4126.6	4123.7	4131.8	4134.7
12.5°	4079.2	4071.7	4074.0	4084.4	4089.0
15°	4015.5	4010.3	4012.6	4020.7	4028.3
17.5°	3943.2	3937.4	3942.6	3949.6	3956.5
20°	3859.9	3854.1	3857.0	3866.8	3874.3
22.5°	3767.3	3761.5	3765.0	3773.6	3781.7
25°	3663.7	3658.5	3664.8	3676.4	3677.0
27.5°	3555.5	3549.7	3551.4	3563.6	3574.6
30°	3439.7	3432.2	3437.4	3449.6	3456.5
32.5°	3318.2	3311.3	3315.3	3329.2	3337.3
35°	3192.1	3185.1	3184.5	3205.9	3213.5
37.5°	3058.4	3054.3	3057.8	3075.2	3084.4
40°	2921.8	2916.0	2920.1	2942.1	2953.1
42.5°	2783.5	2780.0	2780.6	2802.6	2811.3
45°	2641.1	2638.8	2639.4	2659.7	2671.2
47.5°	2494.2	2488.9	2491.3	2512.1	2524.2
50°	2345.4	2344.3	2340.8	2361.6	2372.1
52.5°	2192.7	2190.3	2190.3	2208.9	2223.9
55°	2035.8	2035.8	2032.9	2050.9	2061.3
57.5°	1871.5	1872.6	1877.3	1893.5	1903.9
60°	1716.4	1710.6	1715.2	1729.7	1748.2
62.5°	1561.9	1544.5	1549.2	1562.5	1570.0
65°	1384.8	1378.4	1387.1	1400.4	1403.3
67.5°	1222.2	1215.8	1220.5	1229.7	1242.4
70°	1062.5	1045.7	1053.8	1063.6	1075.8
72.5°	894.7	880.2	891.8	899.9	908.5
75°	734.9	721.0	729.1	725.7	743.0
77.5°	574.6	564.8	571.7	578.7	592.0
80°	426.5	415.5	421.3	424.2	430.0
82.5°	290.5	282.4	284.1	295.7	292.2
85°	168.4	161.5	166.7	169.0	171.3
87.5°	66.5	60.2	65.4	67.1	67.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)