

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: P708893

Luminaire Tested: **22APR-X-X-UNV-RL835**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P708893
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 22APR-X-X-UNV-RL835
Description: ArcMed Patient Recessed 2x2 Fixture READING Light
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

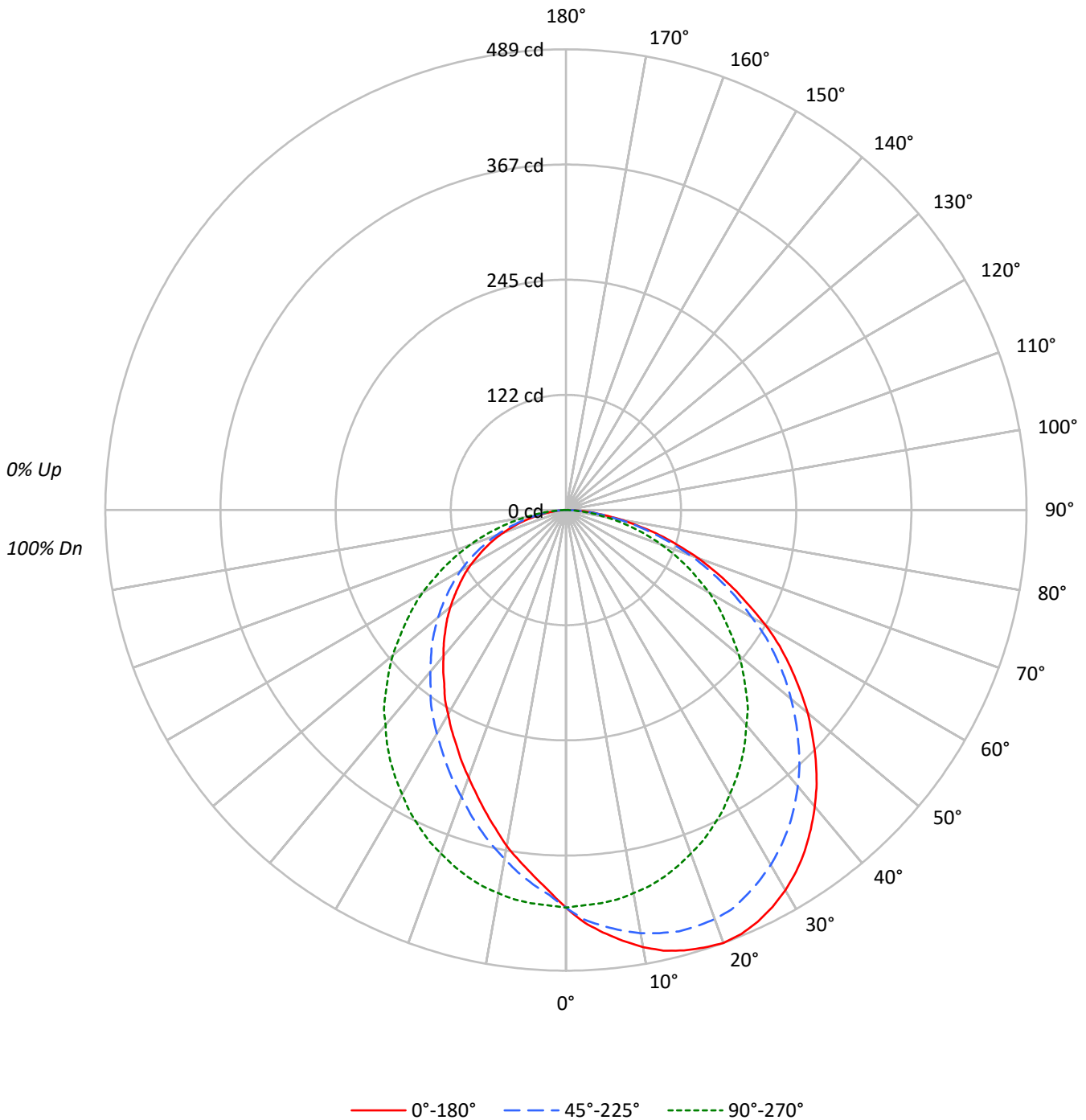
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1177.1 lumens
Efficiency: N/A
Efficacy: 84.1 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.23 / 1.37
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 14
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	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	75	82	78	74	79	75	72	72	72	72	70
3	90	80	72	65	88	78	71	64	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	64	58	53	62	57	53	53	53	53	50
5	76	63	54	47	74	62	54	47	60	52	47	58	51	46	56	50	46	46	46	46	44
6	70	57	48	41	68	56	47	41	54	47	41	52	46	41	51	45	40	40	40	40	38
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	36	36	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	32	32	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	29	29	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	31	26	26	26	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1136	1136	1136
5°	1216	1132	1053
10°	1287	1129	989
15°	1348	1123	922
20°	1400	1111	865
25°	1431	1099	817
30°	1448	1081	777
35°	1452	1068	739
40°	1444	1047	710
45°	1427	1028	689
50°	1402	1005	670
55°	1365	971	647
60°	1319	947	630
65°	1248	904	599
70°	1172	850	559
75°	1071	769	499
80°	930	666	403
85°	772	525	278



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	40.0	3.4
10°-20°	114.6	9.7
20°-30°	172.8	14.7
30°-40°	206.4	17.5
40°-50°	211.8	18.0
50°-60°	189.4	16.1
60°-70°	142.3	12.1
70°-80°	79.5	6.8
80°-90°	20.3	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°	327.5	27.8
0°-40°	533.8	45.4
0°-60°	935.0	79.4
0°-90°	1177.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1177.1	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	422	422	422	422	422	
5°	450	443	419	399	390	44
15°	484	463	403	351	331	137
25°	482	452	370	299	275	222
35°	442	412	325	250	225	276
45°	375	349	270	201	181	289
55°	291	272	207	153	138	260
65°	196	184	142	104	94	194
75°	103	96	74	53	48	109
85°	25	23	17	11	9	29
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	422	422	422	422	422	422	422	422	422
2.5°	438	436	435	428	420	417	409	409	405
5°	450	448	443	432	419	410	399	395	390
7.5°	461	457	450	434	417	403	388	381	376
10°	471	467	456	436	413	395	376	367	362
12.5°	479	474	460	436	409	385	364	352	346
15°	484	479	463	435	403	376	351	338	331
17.5°	487	481	463	432	396	365	338	323	316
20°	489	482	462	427	388	354	324	310	302
22.5°	487	479	459	422	380	342	312	296	289
25°	482	475	452	414	370	331	299	282	275
27.5°	475	468	444	405	360	319	286	269	263
30°	466	458	435	395	348	306	274	257	250
32.5°	455	447	424	385	337	294	262	245	239
35°	442	435	412	371	325	282	250	231	225
37.5°	427	420	398	359	312	270	236	220	214
40°	411	404	383	344	298	257	224	208	202
42.5°	394	387	367	330	286	244	212	197	192
45°	375	369	349	314	270	229	201	186	181
47.5°	355	349	331	298	255	216	189	175	171
50°	335	329	312	280	240	202	177	164	160
52.5°	313	308	293	263	223	189	165	154	149
55°	291	286	272	245	207	176	153	142	138
57.5°	269	265	252	224	192	162	141	131	128
60°	245	241	228	205	176	148	129	120	117
62.5°	219	216	206	185	158	134	117	108	105
65°	196	193	184	166	142	120	104	97	94
67.5°	172	170	162	146	125	106	91	85	83
70°	149	147	140	126	108	91	79	73	71
72.5°	125	125	118	106	92	76	66	62	59
75°	103	101	96	87	74	62	53	49	48
77.5°	80	80	76	68	59	48	42	38	37
80°	60	60	56	50	43	35	30	28	26
82.5°	41	41	38	33	29	23	20	18	17
85°	25	24	23	20	17	13	11	10	9
87.5°	12	12	11	8	7	5	4	3	3
90°	0	0	0	0	0	0	0	0	0

(END OF REPORT)