

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: P709024

Luminaire Tested: **24APR-85-200L930-UNV**

Issue Date: 09/12/2023



Test Information

Test Method: LM-79-08
Report Number: P709024
Test Lab: INNOVATION CENTER(G2)
Issue Date: 09/12/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: 24APR-85-200L930-UNV
Description: ArcMed Patient Recessed 2x4 Fixture Ambient and Exam Light
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

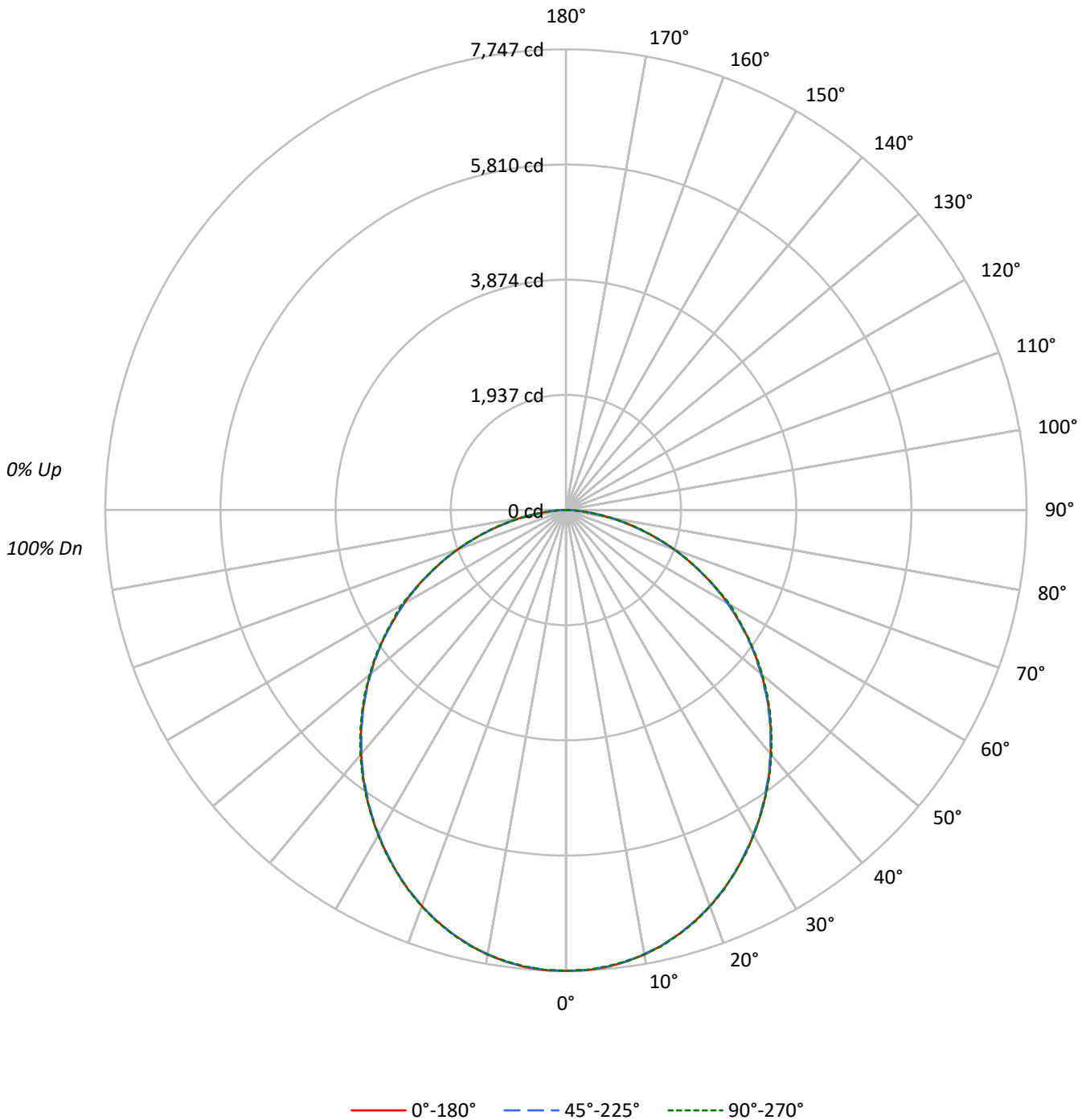
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20907.5 lumens
Efficiency: N/A
Efficacy: 88.8 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 235.4
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	92	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	73	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	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	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	40	34	29	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10424	10424	10424
5°	10425	10415	10409
10°	10370	10361	10369
15°	10272	10272	10284
20°	10146	10139	10154
25°	9987	9983	9983
30°	9807	9792	9808
35°	9615	9589	9627
40°	9411	9393	9442
45°	9210	9192	9241
50°	8990	8967	9024
55°	8745	8722	8774
60°	8456	8436	8584
65°	8071	8073	8095
70°	7628	7587	7637
75°	6959	6905	6951
80°	6007	5933	5973
85°	4687	4641	4630



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	732.2	3.5
10°-20°	2079.5	9.9
20°-30°	3096.9	14.8
30°-40°	3658.8	17.5
40°-50°	3732.6	17.9
50°-60°	3330.5	15.9
60°-70°	2510.9	12.0
70°-80°	1407.8	6.7
80°-90°	358.2	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°	5908.6	28.3
0°-40°	9567.5	45.8
0°-60°	16630.6	79.5
0°-90°	20907.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20907.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7747	7747	7747	7747	7747	
5°	7718	7715	7711	7712	7706	733
15°	7375	7370	7375	7380	7383	2079
25°	6727	6719	6724	6730	6724	3098
35°	5854	5846	5838	5855	5861	3662
45°	4840	4837	4831	4845	4857	3733
55°	3728	3720	3718	3729	3740	3330
65°	2535	2522	2536	2543	2542	2515
75°	1339	1316	1328	1321	1337	1417
85°	304	292	301	300	300	363
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7747.4	7747.4	7747.4	7747.4	7747.4
2.5°	7747.4	7743.7	7740.7	7740.0	7741.4
5°	7718.4	7714.7	7710.9	7712.4	7706.5
7.5°	7662.6	7663.3	7660.3	7661.1	7654.4
10°	7590.4	7586.7	7583.7	7590.4	7589.7
12.5°	7492.9	7486.2	7489.2	7499.6	7500.4
15°	7374.6	7370.1	7374.6	7379.8	7382.8
17.5°	7239.9	7236.2	7241.4	7242.2	7248.1
20°	7085.9	7081.4	7081.4	7088.9	7091.9
22.5°	6915.5	6908.8	6910.3	6915.5	6919.2
25°	6727.3	6719.1	6724.3	6730.2	6724.3
27.5°	6524.1	6519.7	6514.4	6521.9	6531.6
30°	6312.1	6303.1	6302.4	6307.6	6312.8
32.5°	6088.1	6077.7	6077.7	6084.4	6088.8
35°	5853.7	5845.5	5838.1	5855.2	5861.1
37.5°	5611.9	5602.2	5601.5	5611.9	5621.5
40°	5358.1	5350.0	5347.7	5365.6	5376.0
42.5°	5102.2	5097.0	5091.8	5109.6	5117.8
45°	4840.3	4837.3	4830.6	4844.7	4856.6
47.5°	4570.9	4561.2	4559.0	4575.4	4587.3
50°	4294.8	4291.1	4283.7	4298.6	4311.2
52.5°	4015.1	4010.6	4005.4	4018.8	4032.2
55°	3727.9	3719.7	3718.2	3729.3	3740.5
57.5°	3428.7	3422.0	3432.5	3442.9	3451.8
60°	3142.3	3126.6	3134.8	3146.7	3189.9
62.5°	2854.3	2826.8	2832.7	2865.5	2846.9
65°	2535.1	2522.4	2535.8	2543.3	2542.5
67.5°	2236.0	2221.1	2241.2	2235.2	2244.2
70°	1939.1	1913.0	1928.7	1930.9	1941.3
72.5°	1632.5	1610.2	1623.6	1630.3	1637.0
75°	1338.6	1315.5	1328.2	1320.7	1337.1
77.5°	1046.2	1032.0	1040.2	1045.4	1058.1
80°	775.3	759.7	765.7	766.4	770.9
82.5°	525.3	513.4	514.9	528.3	523.1
85°	303.6	292.4	300.6	299.9	299.9
87.5°	118.3	109.4	117.6	116.8	115.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)