

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: P835756

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4LO-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835756
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-2-INS-OPL-LD4-4LO-35-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

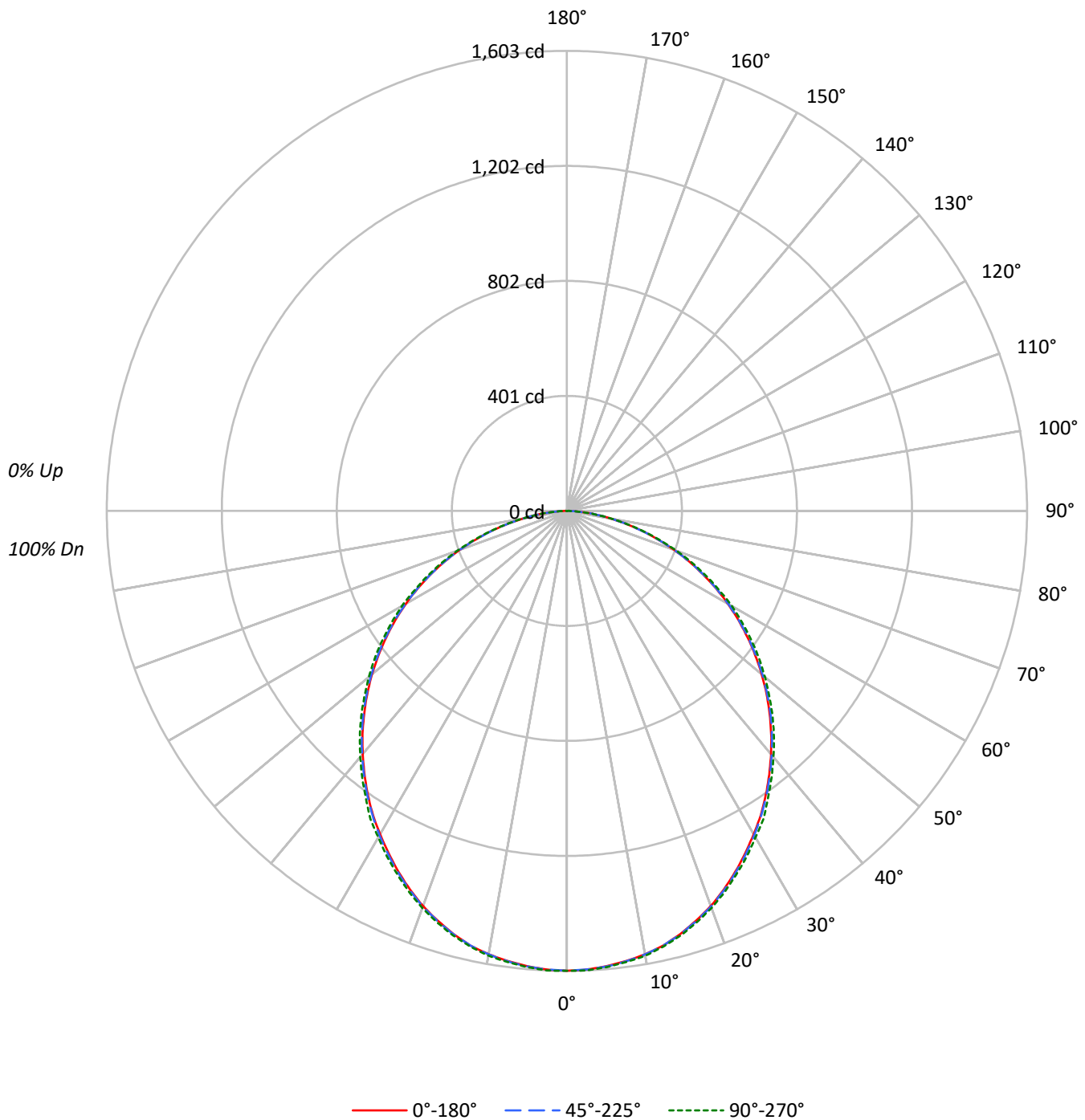
Lumens per Lamp: N/A
Luminaire Lumens: 4330.1 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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: 28.75 FT

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Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	27	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4312	4312	4312
5°	4301	4304	4310
10°	4287	4288	4301
15°	4252	4255	4267
20°	4197	4201	4216
25°	4121	4130	4149
30°	4043	4057	4081
35°	3969	3979	4011
40°	3886	3899	3933
45°	3800	3817	3856
50°	3708	3725	3768
55°	3604	3620	3680
60°	3484	3498	3576
65°	3331	3342	3405
70°	3127	3130	3198
75°	2843	2832	2898
80°	2442	2431	2473
85°	1896	1865	1874

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.4	3.5
10°-20°	430.7	9.9
20°-30°	641.2	14.8
30°-40°	758.3	17.5
40°-50°	774.1	17.9
50°-60°	690.9	16.0
60°-70°	520.4	12.0
70°-80°	290.2	6.7
80°-90°	72.7	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°	1223.4	28.3
0°-40°	1981.8	45.8
0°-60°	3446.8	79.6
0°-90°	4330.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4330.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1602	1602	1602	1602	1602	
5°	1592	1595	1594	1594	1596	151
15°	1526	1528	1527	1528	1532	430
25°	1388	1390	1391	1395	1397	639
35°	1208	1207	1211	1216	1221	756
45°	999	998	1003	1008	1013	770
55°	768	767	772	777	784	687
65°	523	521	525	530	535	517
75°	273	271	272	274	279	290
85°	61	60	60	60	61	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1602.5	1602.5	1602.5	1602.5	1602.5
2.5°	1599.8	1602.5	1599.2	1599.8	1602.8
5°	1592.2	1595.2	1593.5	1593.9	1595.5
7.5°	1581.6	1585.6	1583.2	1583.9	1585.6
10°	1569.0	1572.0	1569.3	1571.0	1573.9
12.5°	1551.1	1552.4	1551.1	1551.7	1555.0
15°	1526.2	1527.8	1527.2	1528.5	1531.5
17.5°	1497.0	1499.0	1498.6	1501.3	1503.6
20°	1465.5	1465.8	1467.1	1469.8	1472.4
22.5°	1428.3	1429.3	1430.6	1434.3	1436.9
25°	1387.8	1389.5	1391.1	1394.8	1397.4
27.5°	1345.0	1346.7	1349.0	1353.0	1357.3
30°	1301.2	1301.2	1305.5	1309.5	1313.5
32.5°	1257.1	1255.4	1259.4	1264.4	1274.0
35°	1208.3	1207.0	1211.3	1216.0	1220.9
37.5°	1157.6	1156.6	1161.5	1166.5	1171.2
40°	1106.1	1104.8	1109.8	1114.8	1119.7
42.5°	1053.4	1052.7	1057.4	1062.3	1067.7
45°	998.6	998.3	1003.0	1007.9	1013.2
47.5°	942.9	942.2	946.9	952.2	956.8
50°	885.8	885.2	889.8	895.1	900.1
52.5°	827.1	827.1	831.4	836.1	843.7
55°	768.1	767.1	771.7	777.0	784.3
57.5°	708.3	707.0	711.3	716.6	723.3
60°	647.3	646.0	649.9	655.3	664.5
62.5°	585.6	583.6	587.6	592.6	598.2
65°	523.2	521.2	524.9	529.5	534.8
67.5°	460.5	458.2	461.8	465.8	470.8
70°	397.5	395.1	397.8	401.8	406.4
72.5°	334.8	332.4	334.8	336.4	342.1
75°	273.4	271.1	272.4	273.7	278.7
77.5°	213.7	211.3	214.0	214.7	217.6
80°	157.6	155.3	156.9	157.3	159.6
82.5°	106.5	104.5	106.8	105.2	107.2
85°	61.4	59.7	60.4	59.7	60.7
87.5°	24.2	22.9	23.2	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)