

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: P834488

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-1STD-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834488
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-OPL-LD4-1STD-40-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

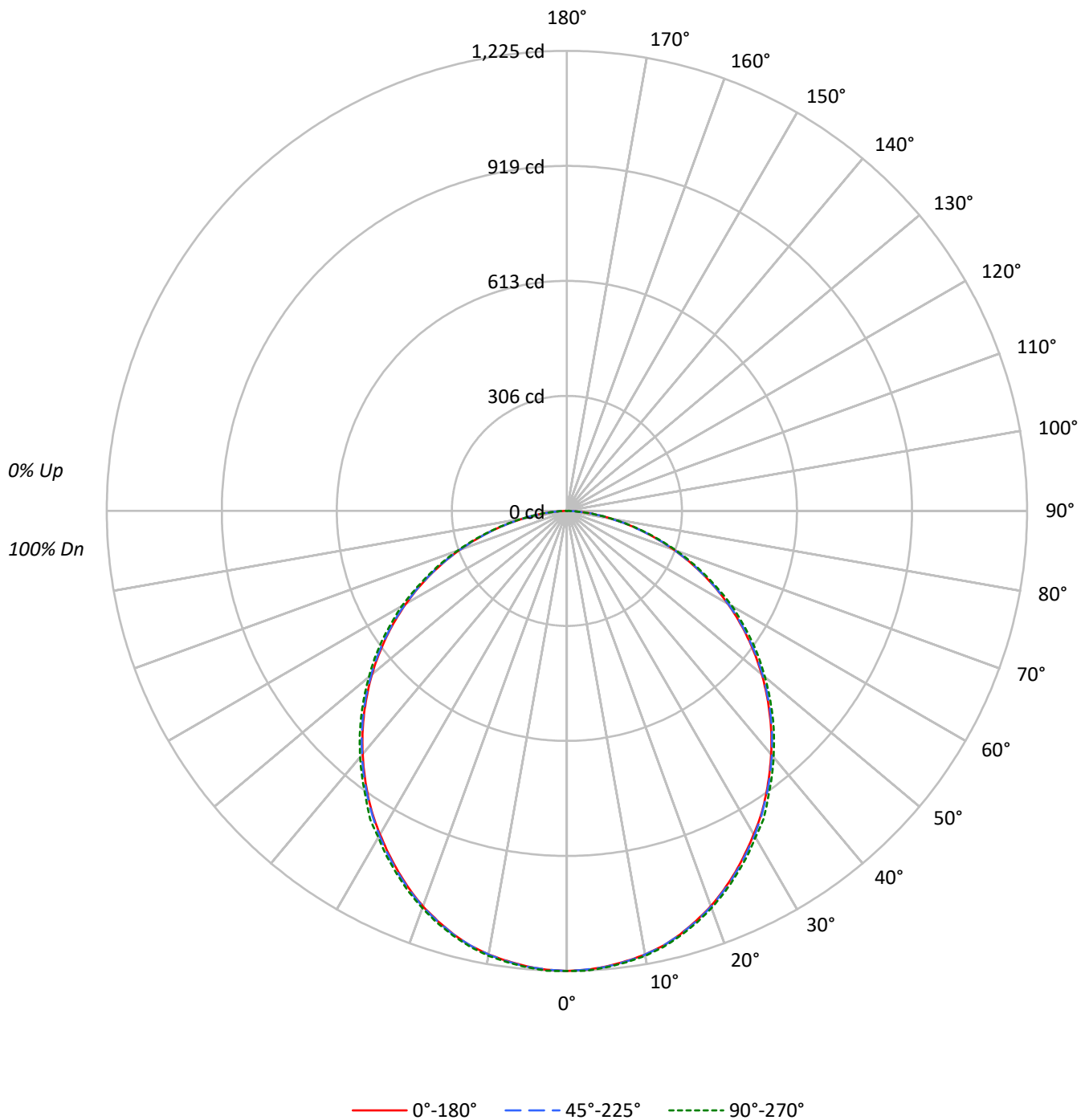
Lumens per Lamp: N/A
Luminaire Lumens: 3310.5 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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

1121 Highway 74 South

Peachtree City, GA 30269



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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	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3297	3297	3297
5°	3288	3291	3295
10°	3278	3278	3288
15°	3251	3253	3262
20°	3208	3212	3224
25°	3150	3158	3172
30°	3091	3101	3120
35°	3035	3042	3066
40°	2971	2981	3007
45°	2906	2918	2948
50°	2835	2848	2881
55°	2755	2768	2813
60°	2664	2674	2735
65°	2547	2555	2604
70°	2391	2393	2445
75°	2173	2165	2216
80°	1867	1860	1891
85°	1448	1426	1433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.8	3.5
10°-20°	329.3	9.9
20°-30°	490.3	14.8
30°-40°	579.8	17.5
40°-50°	591.9	17.9
50°-60°	528.2	16.0
60°-70°	397.8	12.0
70°-80°	221.9	6.7
80°-90°	55.6	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°	935.3	28.3
0°-40°	1515.1	45.8
0°-60°	2635.2	79.6
0°-90°	3310.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3310.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1225	1225	1225	1225	1225	
5°	1217	1220	1218	1219	1220	116
15°	1167	1168	1168	1169	1171	329
25°	1061	1062	1064	1066	1068	489
35°	924	923	926	930	933	578
45°	764	763	767	771	775	589
55°	587	586	590	594	600	525
65°	400	398	401	405	409	396
75°	209	207	208	209	213	222
85°	47	46	46	46	46	56
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1225.1	1225.1	1225.1	1225.1	1225.1
2.5°	1223.1	1225.1	1222.6	1223.1	1225.4
5°	1217.3	1219.6	1218.3	1218.6	1219.8
7.5°	1209.2	1212.2	1210.4	1210.9	1212.2
10°	1199.5	1201.8	1199.8	1201.1	1203.3
12.5°	1185.8	1186.8	1185.8	1186.3	1188.9
15°	1166.8	1168.1	1167.6	1168.6	1170.9
17.5°	1144.5	1146.0	1145.8	1147.8	1149.6
20°	1120.4	1120.6	1121.7	1123.7	1125.7
22.5°	1092.0	1092.7	1093.8	1096.5	1098.6
25°	1061.0	1062.3	1063.6	1066.4	1068.4
27.5°	1028.3	1029.6	1031.4	1034.4	1037.7
30°	994.8	994.8	998.1	1001.2	1004.2
32.5°	961.1	959.8	962.9	966.7	974.0
35°	923.8	922.8	926.1	929.6	933.4
37.5°	885.0	884.2	888.0	891.8	895.4
40°	845.7	844.7	848.5	852.3	856.1
42.5°	805.4	804.8	808.4	812.2	816.3
45°	763.5	763.2	766.8	770.6	774.7
47.5°	720.9	720.4	723.9	728.0	731.5
50°	677.3	676.7	680.3	684.4	688.2
52.5°	632.4	632.4	635.7	639.2	645.0
55°	587.2	586.4	590.0	594.1	599.6
57.5°	541.6	540.5	543.8	547.9	553.0
60°	494.9	493.9	496.9	501.0	508.1
62.5°	447.7	446.2	449.2	453.0	457.3
65°	400.0	398.5	401.3	404.8	408.9
67.5°	352.1	350.3	353.1	356.1	359.9
70°	303.9	302.1	304.1	307.2	310.7
72.5°	255.9	254.2	255.9	257.2	261.5
75°	209.0	207.2	208.2	209.3	213.1
77.5°	163.4	161.6	163.6	164.1	166.4
80°	120.5	118.7	120.0	120.2	122.0
82.5°	81.4	79.9	81.7	80.4	81.9
85°	46.9	45.7	46.2	45.7	46.4
87.5°	18.5	17.5	17.8	16.7	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)