

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: P835083

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1HI-30-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835083
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-1HI-30-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

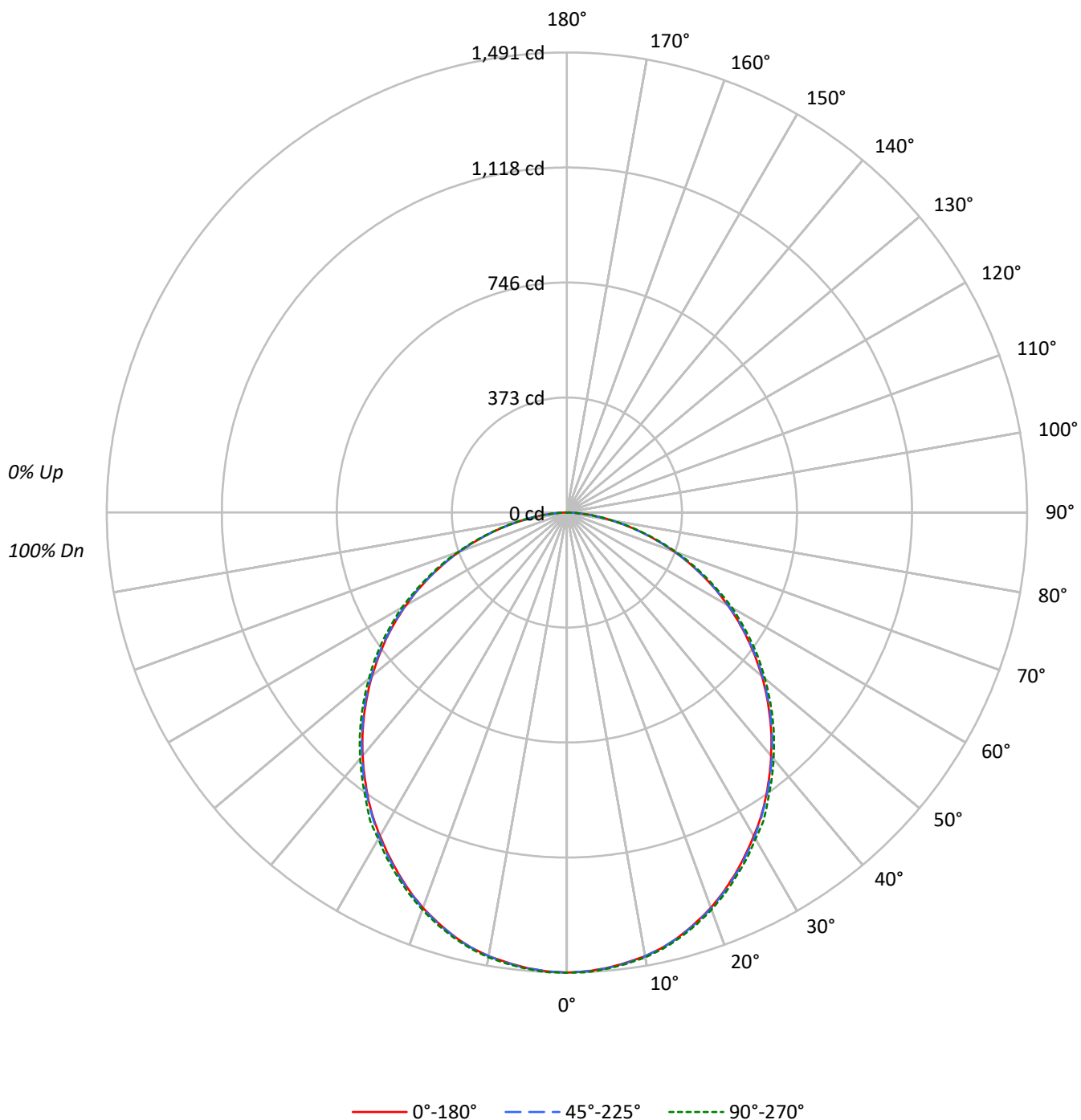
Lumens per Lamp: N/A
Luminaire Lumens: 4029.1 lumens
Efficiency: N/A
Efficacy: 91.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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	100		
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	84		
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	70		
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	59		
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51		
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	44		
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38		
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	34		
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30		
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27		
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2006	2006	2006
5°	2001	2003	2005
10°	1995	1995	2001
15°	1978	1979	1985
20°	1952	1955	1962
25°	1917	1922	1930
30°	1881	1887	1899
35°	1847	1851	1866
40°	1808	1814	1830
45°	1768	1776	1794
50°	1725	1733	1753
55°	1677	1685	1712
60°	1621	1628	1664
65°	1550	1555	1584
70°	1455	1456	1488
75°	1323	1318	1348
80°	1136	1131	1151
85°	881	868	872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	140.9	3.5
10°-20°	400.8	9.9
20°-30°	596.7	14.8
30°-40°	705.6	17.5
40°-50°	720.3	17.9
50°-60°	642.9	16.0
60°-70°	484.2	12.0
70°-80°	270.0	6.7
80°-90°	67.7	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°	1138.4	28.3
0°-40°	1844.0	45.8
0°-60°	3207.2	79.6
0°-90°	4029.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4029.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1491	1491	1491	1491	1491	
5°	1482	1484	1483	1483	1485	141
15°	1420	1422	1421	1422	1425	400
25°	1291	1293	1294	1298	1300	595
35°	1124	1123	1127	1131	1136	703
45°	929	929	933	938	943	717
55°	715	714	718	723	730	639
65°	487	485	488	493	498	482
75°	254	252	254	255	259	270
85°	57	56	56	56	56	69
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1491.1	1491.1	1491.1	1491.1	1491.1
2.5°	1488.6	1491.1	1488.0	1488.6	1491.4
5°	1481.5	1484.3	1482.8	1483.1	1484.6
7.5°	1471.6	1475.4	1473.2	1473.8	1475.4
10°	1459.9	1462.7	1460.2	1461.8	1464.5
12.5°	1443.2	1444.5	1443.2	1443.9	1447.0
15°	1420.1	1421.6	1421.0	1422.3	1425.0
17.5°	1392.9	1394.8	1394.5	1396.9	1399.1
20°	1363.6	1363.9	1365.1	1367.6	1370.1
22.5°	1329.0	1329.9	1331.2	1334.6	1337.0
25°	1291.4	1292.9	1294.4	1297.8	1300.3
27.5°	1251.5	1253.1	1255.2	1258.9	1263.0
30°	1210.8	1210.8	1214.8	1218.5	1222.2
32.5°	1169.7	1168.2	1171.9	1176.5	1185.5
35°	1124.3	1123.1	1127.1	1131.4	1136.1
37.5°	1077.1	1076.2	1080.8	1085.4	1089.8
40°	1029.3	1028.0	1032.7	1037.3	1041.9
42.5°	980.2	979.6	983.9	988.5	993.4
45°	929.2	928.9	933.2	937.9	942.8
47.5°	877.4	876.8	881.1	886.0	890.3
50°	824.3	823.7	828.0	832.9	837.5
52.5°	769.6	769.6	773.6	778.0	785.1
55°	714.7	713.8	718.1	723.0	729.8
57.5°	659.1	657.9	661.9	666.8	673.0
60°	602.3	601.1	604.8	609.7	618.4
62.5°	544.9	543.0	546.7	551.4	556.6
65°	486.8	485.0	488.4	492.7	497.6
67.5°	428.5	426.3	429.7	433.4	438.1
70°	369.8	367.7	370.2	373.9	378.2
72.5°	311.5	309.3	311.5	313.0	318.3
75°	254.4	252.2	253.5	254.7	259.3
77.5°	198.8	196.7	199.1	199.7	202.5
80°	146.6	144.5	146.0	146.3	148.5
82.5°	99.1	97.2	99.4	97.9	99.7
85°	57.1	55.6	56.2	55.6	56.5
87.5°	22.5	21.3	21.6	20.4	20.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)