

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: P835243

Luminaire Tested: **ORLG-24-2-INS-ASY2-LD4-1LO-50-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835243
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-ASY2-LD4-1LO-50-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

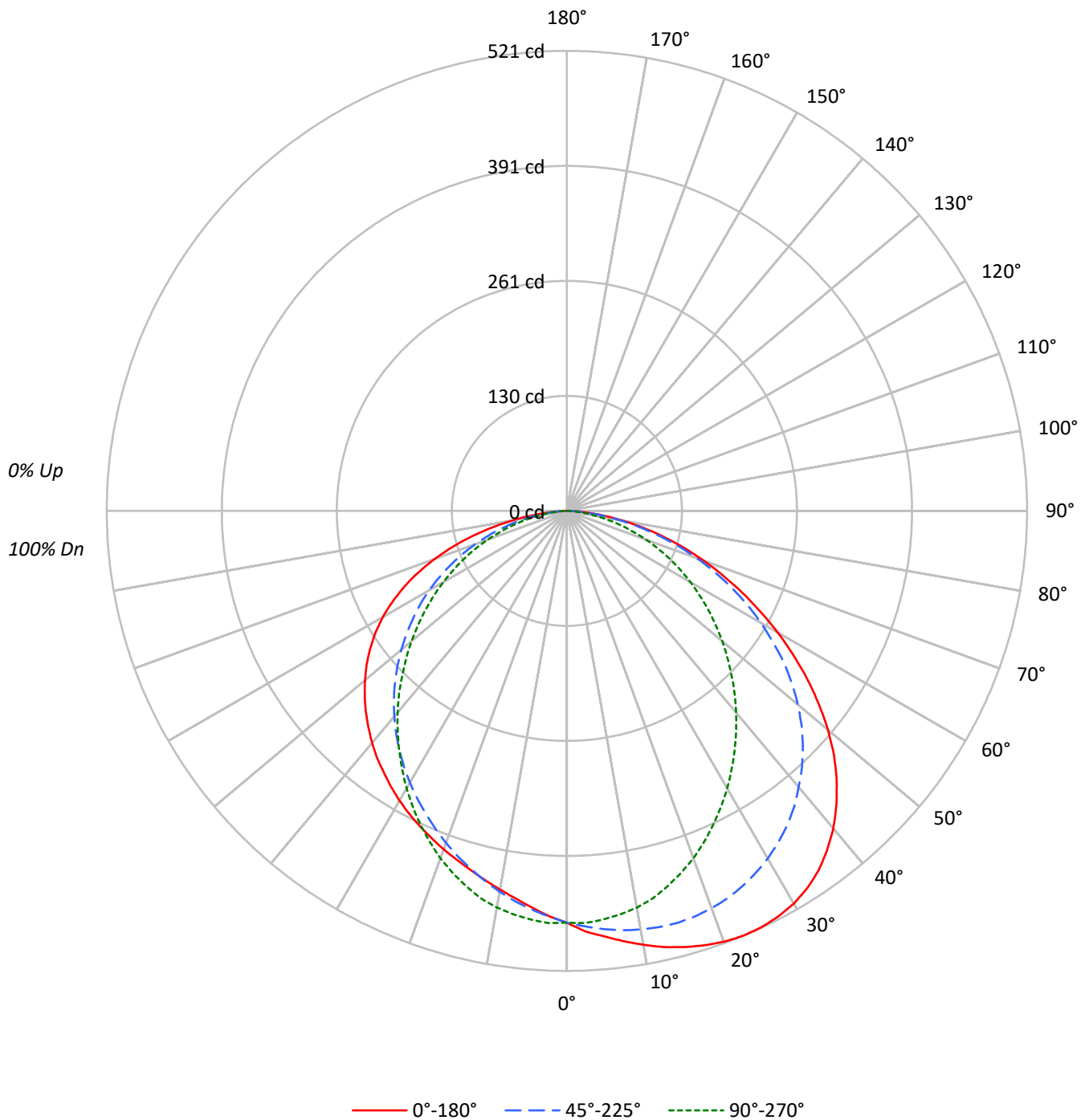
Lumens per Lamp: N/A
Luminaire Lumens: 1371.6 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.17 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 11.7
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
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	109	104	100	96	106	102	98	94	97	94	91		94	91	88		90
2	99	90	84	78	96	89	82	77	85	80	75		82	77	73		79
3	90	79	71	65	87	78	70	64	75	68	63		72	66	62		69
4	82	70	61	55	80	69	61	54	66	59	53		64	58	53		62
5	76	63	54	47	73	61	53	47	59	52	46		57	51	46		55
6	70	56	47	41	68	55	47	41	54	46	40		52	45	40		50
7	65	51	42	36	63	50	42	36	49	41	36		47	40	35		46
8	60	46	38	32	59	46	38	32	44	37	32		43	36	31		42
9	56	43	34	29	55	42	34	29	41	34	29		40	33	28		39
10	53	39	31	26	51	39	31	26	38	31	26		37	30	26		36

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1255	1255	1255
5°	1306	1255	1218
10°	1364	1246	1190
15°	1425	1226	1173
20°	1487	1199	1168
25°	1545	1164	1170
30°	1596	1128	1177
35°	1632	1087	1187
40°	1649	1047	1205
45°	1644	1003	1225
50°	1615	961	1250
55°	1560	917	1276
60°	1484	869	1295
65°	1393	816	1293
70°	1297	753	1255
75°	1177	661	1157
80°	1010	544	976
85°	772	371	670

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.2	3.2
10°-20°	127.7	9.3
20°-30°	195.7	14.3
30°-40°	238.8	17.4
40°-50°	249.7	18.2
50°-60°	226.0	16.5
60°-70°	171.2	12.5
70°-80°	95.4	7.0
80°-90°	23.0	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°	367.6	26.8
0°-40°	606.3	44.2
0°-60°	1082.0	78.9
0°-90°	1371.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1371.6	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	466	466	466	466	466	
5°	484	476	465	453	451	47
15°	511	483	440	420	421	145
25°	520	469	392	378	394	240
35°	497	435	331	331	361	310
45°	432	378	264	275	322	332
55°	332	300	195	213	272	297
65°	219	206	128	146	203	217
75°	113	107	64	76	111	120
85°	25	22	12	16	22	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3
2.5°	476.6	474.3	472.5	473.2	473.6	472.2	471.0	471.2	469.9	472.3	466.8
5°	483.6	481.6	479.4	480.2	479.4	477.3	475.6	475.0	471.8	473.1	467.5
7.5°	491.5	489.2	486.0	487.0	485.2	481.3	479.0	477.7	472.7	472.8	466.6
10°	499.0	497.1	492.8	493.4	490.2	484.9	481.4	479.5	472.5	471.5	465.1
12.5°	506.0	503.4	498.8	499.1	494.5	487.5	482.9	480.2	471.1	468.0	461.7
15°	511.4	508.9	503.4	503.3	497.4	488.2	483.0	479.3	467.7	462.9	456.3
17.5°	516.0	513.7	506.8	506.6	499.5	487.9	481.7	477.1	462.8	456.9	449.6
20°	519.3	516.9	509.3	508.6	500.0	486.4	478.9	473.1	456.4	449.4	441.2
22.5°	520.8	518.5	509.8	508.8	498.8	483.3	474.9	468.1	449.1	439.9	431.4
25°	520.5	518.3	508.5	507.5	496.4	478.7	469.3	461.5	439.8	429.0	420.6
27.5°	517.9	516.2	505.9	504.6	492.2	472.5	462.5	453.8	429.5	417.5	408.4
30°	513.6	512.2	501.3	500.1	486.9	465.7	454.6	444.6	418.4	404.8	395.6
32.5°	506.5	505.3	494.3	493.2	479.7	456.9	445.3	435.0	406.2	391.3	382.1
35°	496.9	496.1	485.4	484.2	470.6	446.9	434.6	423.3	393.6	376.7	367.9
37.5°	484.1	484.1	473.8	472.5	459.1	434.7	422.6	410.5	379.3	361.4	352.7
40°	469.3	470.7	460.2	458.8	445.9	421.5	408.3	395.6	364.0	345.3	336.8
42.5°	451.6	452.8	444.1	442.8	430.7	406.3	394.0	380.3	347.8	328.9	320.1
45°	432.0	433.7	425.8	424.9	413.6	389.7	377.9	364.0	331.0	311.8	303.2
47.5°	410.2	412.4	405.5	405.0	394.5	372.7	360.4	346.2	313.4	293.9	285.9
50°	385.8	388.8	383.2	383.2	373.8	352.1	341.4	327.3	295.1	275.6	267.6
52.5°	359.6	363.4	359.3	359.4	351.7	332.3	321.1	307.3	275.9	256.7	249.4
55°	332.5	336.2	333.6	334.0	328.0	310.2	300.1	286.4	256.3	237.7	230.7
57.5°	304.1	308.2	306.5	307.3	303.1	287.2	276.7	264.7	236.1	217.7	211.8
60°	275.7	279.6	278.6	279.8	277.1	263.4	253.8	241.3	215.9	198.1	192.9
62.5°	246.9	250.5	250.3	251.5	250.1	238.7	230.1	219.5	194.9	178.6	173.8
65°	218.8	221.9	221.7	223.0	222.7	213.5	205.8	196.1	173.9	158.9	154.7
67.5°	191.5	194.1	193.3	194.9	195.3	187.9	181.2	172.5	153.9	139.3	135.8
70°	164.8	166.5	165.6	166.6	167.6	162.1	156.3	148.7	132.6	119.8	116.8
72.5°	138.6	139.8	138.4	139.4	140.2	136.3	131.6	125.0	111.6	100.5	98.0
75°	113.2	115.0	112.0	113.0	113.6	109.7	106.9	101.5	90.0	81.4	79.8
77.5°	88.7	89.7	88.1	87.6	88.1	85.2	83.1	78.9	70.2	63.2	62.2
80°	65.2	65.8	64.2	63.8	64.1	62.1	60.4	57.4	51.3	46.0	45.6
82.5°	43.7	44.0	42.6	42.2	42.4	41.8	39.9	37.7	34.9	30.4	30.3
85°	25.0	25.0	24.0	23.5	23.7	22.7	22.0	20.9	19.8	16.7	16.9
87.5°	9.2	9.2	8.7	8.6	9.6	8.5	8.2	7.6	7.9	6.3	6.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	80°	90°	100°	110°	112.5°	120°	130°	135°	140°	150°	157.5°
0°	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3	466.3
2.5°	468.3	467.3	466.4	463.2	464.5	461.3	461.1	459.9	458.9	457.2	459.4
5°	466.8	464.7	462.1	458.3	459.4	455.6	454.8	453.3	452.1	449.9	451.6
7.5°	464.3	461.0	456.8	452.0	453.5	448.7	447.5	446.0	445.0	442.3	443.9
10°	460.8	456.0	451.1	445.3	446.4	441.2	439.7	438.0	437.1	434.8	436.3
12.5°	455.3	449.5	442.8	436.5	437.7	432.8	430.8	429.1	428.8	426.8	428.7
15°	448.1	440.1	433.3	426.5	428.0	422.2	421.3	419.6	420.1	418.8	421.0
17.5°	439.1	429.8	422.3	415.1	416.5	411.7	411.0	410.2	410.7	410.5	413.0
20°	428.9	418.7	410.1	403.0	403.8	400.0	400.3	400.1	401.2	402.3	405.6
22.5°	417.4	405.8	396.9	389.5	390.8	387.5	388.9	389.3	391.1	393.6	397.9
25°	404.4	392.1	382.7	375.8	376.9	374.8	377.2	378.2	381.0	385.3	389.6
27.5°	390.9	377.8	367.8	361.2	363.3	361.2	364.9	366.9	371.1	375.8	381.2
30°	376.5	362.9	352.6	346.7	348.8	346.8	352.7	355.5	359.7	366.1	372.5
32.5°	361.4	347.1	337.0	332.5	333.9	333.6	340.2	343.3	348.9	356.2	363.0
35°	345.9	331.0	320.8	317.0	318.7	319.1	327.1	330.6	336.7	345.6	352.9
37.5°	329.9	314.7	304.7	301.6	303.1	304.6	313.9	317.5	324.4	334.1	342.1
40°	313.3	298.1	288.3	285.8	287.3	288.9	299.0	303.9	311.5	322.0	330.7
42.5°	296.5	281.3	271.8	270.0	271.5	274.7	285.4	290.0	297.9	309.5	319.2
45°	279.4	263.6	255.3	253.9	255.5	259.2	269.7	275.2	283.6	296.4	306.8
47.5°	262.0	246.6	238.8	237.9	239.5	243.6	255.2	260.2	269.2	282.7	293.9
50°	244.5	229.5	222.0	221.7	223.2	227.6	238.7	244.6	253.9	269.1	280.6
52.5°	226.8	212.4	205.6	205.6	207.0	211.5	222.7	228.8	238.4	254.4	267.1
55°	209.0	195.4	188.9	189.4	191.4	195.3	206.2	212.6	222.3	238.9	252.3
57.5°	191.3	178.4	172.4	173.2	175.1	179.0	189.7	196.9	205.7	222.9	236.7
60°	173.8	161.5	156.3	157.2	158.9	162.8	173.9	180.1	188.9	206.4	220.1
62.5°	156.0	144.9	140.0	141.1	142.6	146.5	157.0	163.0	171.6	188.9	202.7
65°	138.5	128.2	124.0	125.1	126.5	130.0	139.9	145.7	154.0	170.8	184.1
67.5°	121.2	111.8	108.3	109.4	110.5	113.8	122.0	128.3	136.1	152.1	164.6
70°	104.1	95.7	92.6	93.7	94.7	97.7	104.9	110.7	117.8	132.5	144.1
72.5°	87.1	79.0	77.5	78.4	79.2	81.8	88.7	93.3	99.5	112.5	122.5
75°	70.6	63.6	62.6	63.5	64.2	66.2	72.0	75.9	81.1	92.4	100.6
77.5°	54.7	48.8	48.4	49.1	49.8	51.3	55.7	59.9	64.0	72.4	79.6
80°	39.9	35.1	35.1	35.8	35.6	37.3	40.5	43.8	46.8	52.8	58.1
82.5°	26.3	22.5	23.0	23.5	23.8	24.6	26.5	29.0	30.9	34.6	38.0
85°	14.6	12.0	12.5	12.9	12.7	13.6	14.6	16.1	17.0	18.8	20.6
87.5°	5.4	4.5	4.6	4.9	5.1	5.5	5.5	6.4	6.5	6.7	7.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	160°	170°	180°
0°	466.3	466.3	466.3
2.5°	455.2	457.6	459.4
5°	447.3	449.4	451.0
7.5°	439.7	441.5	442.9
10°	432.4	434.5	435.5
12.5°	425.0	427.3	428.2
15°	417.7	420.0	421.0
17.5°	410.1	413.2	414.3
20°	403.1	407.0	407.9
22.5°	396.0	399.9	401.0
25°	388.2	392.9	394.0
27.5°	380.0	385.6	386.7
30°	371.7	377.8	378.9
32.5°	362.8	369.5	370.5
35°	353.6	360.2	361.4
37.5°	343.3	350.5	352.9
40°	332.6	340.4	343.0
42.5°	321.3	329.9	332.6
45°	309.3	318.7	321.8
47.5°	297.2	307.8	310.4
50°	284.0	295.4	298.5
52.5°	270.3	282.6	285.8
55°	256.0	268.5	271.9
57.5°	240.5	253.4	257.0
60°	224.3	237.2	240.6
62.5°	207.7	219.3	222.7
65°	189.2	200.1	203.1
67.5°	169.5	179.5	182.0
70°	148.6	157.3	159.5
72.5°	126.8	132.8	135.8
75°	104.3	109.1	111.3
77.5°	81.6	85.0	86.8
80°	59.5	61.5	63.0
82.5°	38.9	39.7	40.9
85°	21.0	21.0	21.7
87.5°	7.1	6.8	7.1
90°	0.0	0.0	0.0

(END OF REPORT)