

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: P835279

Luminaire Tested: **ORLG-24-2-INS-ASY2-LD4-1LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835279
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-27-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH asymmetric/symmetric lens v2
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

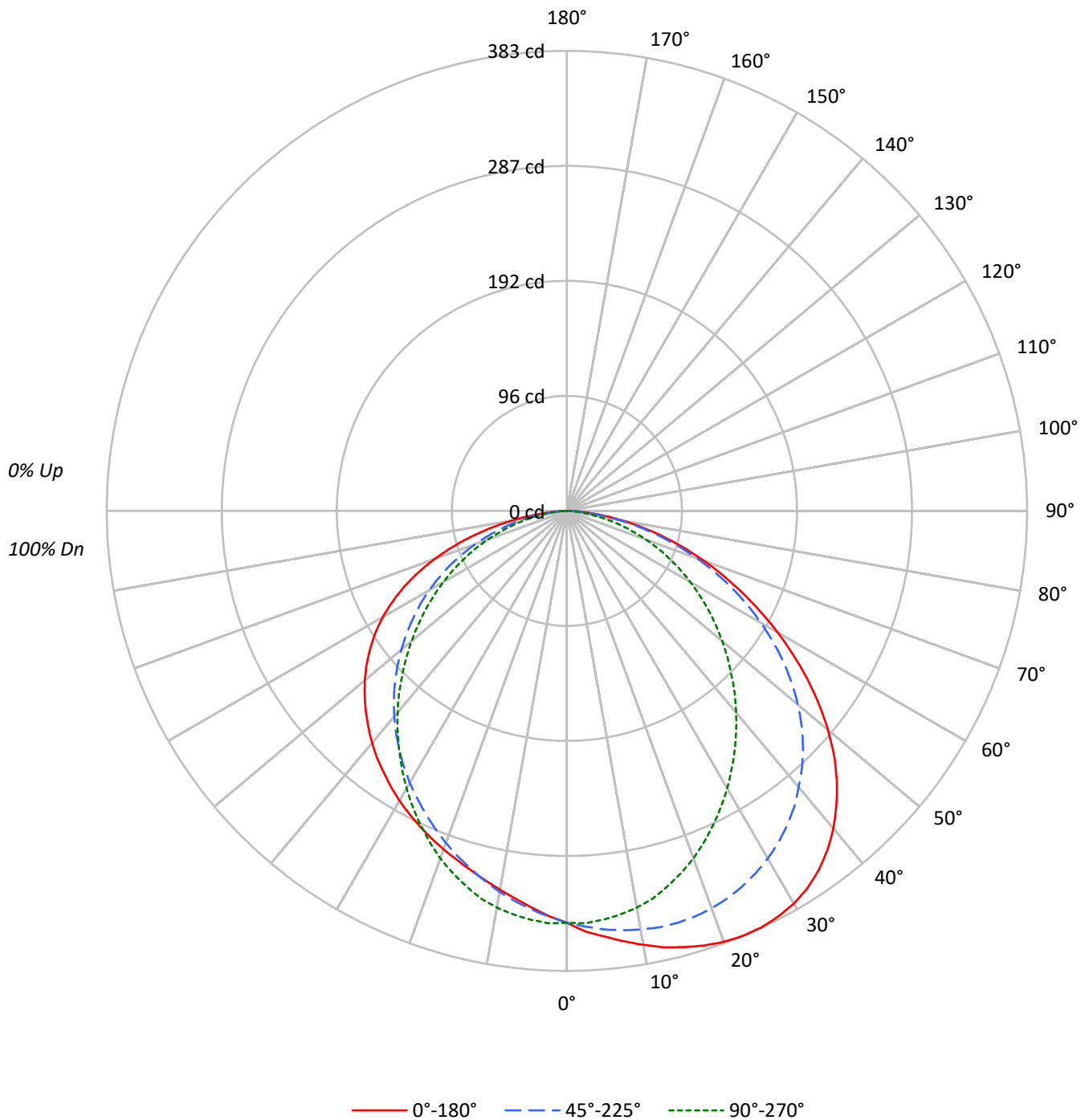
Lumens per Lamp: N/A
Luminaire Lumens: 1008.5 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.17 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P835279

CATALOG NUMBER: ORLG-24-2-INS-ASY2-LD4-1LO-27-120-EDD-90

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°	923	923	923
5°	961	923	896
10°	1003	916	875
15°	1048	902	863
20°	1093	882	859
25°	1136	856	860
30°	1173	829	866
35°	1200	800	873
40°	1212	770	886
45°	1209	738	900
50°	1187	707	919
55°	1147	674	938
60°	1091	639	952
65°	1025	600	951
70°	954	554	923
75°	866	487	850
80°	744	400	717
85°	568	272	494

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	32.5	3.2
10°-20°	93.9	9.3
20°-30°	143.9	14.3
30°-40°	175.6	17.4
40°-50°	183.6	18.2
50°-60°	166.2	16.5
60°-70°	125.8	12.5
70°-80°	70.1	7.0
80°-90°	16.9	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°	270.3	26.8
0°-40°	445.8	44.2
0°-60°	795.6	78.9
0°-90°	1008.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1008.5	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	343	343	343	343	343	
5°	356	350	342	333	332	34
15°	376	355	324	308	310	107
25°	383	345	288	278	290	177
35°	365	320	243	243	266	228
45°	318	278	194	202	237	244
55°	244	221	144	156	200	218
65°	161	151	94	107	149	160
75°	83	79	47	56	82	88
85°	18	16	9	12	16	22
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°	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9
2.5°	350.4	348.8	347.4	347.9	348.2	347.2	346.3	346.4	345.5	347.3	343.2
5°	355.6	354.1	352.5	353.1	352.5	350.9	349.7	349.3	346.9	347.9	343.7
7.5°	361.4	359.7	357.4	358.1	356.8	353.9	352.2	351.2	347.6	347.6	343.1
10°	366.9	365.5	362.3	362.8	360.5	356.6	353.9	352.6	347.4	346.7	342.0
12.5°	372.1	370.1	366.8	367.0	363.6	358.4	355.1	353.1	346.4	344.1	339.5
15°	376.0	374.2	370.1	370.1	365.7	359.0	355.1	352.4	343.9	340.4	335.5
17.5°	379.4	377.7	372.7	372.5	367.3	358.7	354.2	350.8	340.3	336.0	330.6
20°	381.8	380.1	374.5	374.0	367.7	357.6	352.1	347.9	335.6	330.4	324.4
22.5°	382.9	381.2	374.8	374.1	366.8	355.4	349.2	344.2	330.2	323.4	317.2
25°	382.7	381.1	373.9	373.1	365.0	352.0	345.1	339.3	323.4	315.4	309.3
27.5°	380.8	379.6	372.0	371.0	361.9	347.4	340.1	333.7	315.8	307.0	300.3
30°	377.6	376.6	368.6	367.7	358.0	342.4	334.2	326.9	307.6	297.7	290.9
32.5°	372.5	371.6	363.5	362.6	352.7	336.0	327.4	319.8	298.7	287.7	280.9
35°	365.3	364.8	356.9	356.0	346.0	328.6	319.5	311.2	289.4	277.0	270.5
37.5°	356.0	356.0	348.4	347.4	337.6	319.6	310.7	301.9	278.9	265.7	259.4
40°	345.1	346.1	338.4	337.4	327.9	310.0	300.2	290.9	267.6	253.9	247.7
42.5°	332.1	333.0	326.5	325.6	316.7	298.8	289.7	279.6	255.8	241.8	235.4
45°	317.7	318.9	313.1	312.4	304.1	286.6	277.9	267.6	243.4	229.2	222.9
47.5°	301.6	303.2	298.2	297.8	290.1	274.1	265.0	254.6	230.4	216.1	210.2
50°	283.6	285.9	281.8	281.8	274.9	258.9	251.0	240.6	217.0	202.6	196.8
52.5°	264.4	267.2	264.2	264.2	258.6	244.3	236.1	225.9	202.9	188.8	183.4
55°	244.5	247.2	245.3	245.6	241.2	228.1	220.7	210.6	188.5	174.8	169.7
57.5°	223.6	226.6	225.3	225.9	222.9	211.2	203.5	194.6	173.6	160.1	155.7
60°	202.7	205.6	204.9	205.7	203.8	193.6	186.6	177.5	158.7	145.7	141.9
62.5°	181.6	184.2	184.1	185.0	183.9	175.5	169.2	161.4	143.3	131.3	127.8
65°	160.9	163.1	163.0	164.0	163.7	157.0	151.3	144.2	127.8	116.8	113.8
67.5°	140.8	142.7	142.2	143.3	143.6	138.2	133.2	126.9	113.2	102.4	99.8
70°	121.2	122.5	121.8	122.5	123.2	119.2	115.0	109.3	97.5	88.1	85.9
72.5°	101.9	102.8	101.8	102.5	103.1	100.2	96.7	91.9	82.1	73.9	72.1
75°	83.3	84.5	82.4	83.1	83.6	80.6	78.6	74.6	66.2	59.9	58.7
77.5°	65.2	65.9	64.7	64.4	64.7	62.6	61.1	58.0	51.6	46.5	45.7
80°	48.0	48.4	47.2	46.9	47.1	45.6	44.4	42.2	37.7	33.8	33.5
82.5°	32.1	32.4	31.3	31.0	31.2	30.7	29.3	27.7	25.6	22.3	22.3
85°	18.4	18.4	17.6	17.3	17.5	16.7	16.2	15.4	14.5	12.3	12.4
87.5°	6.7	6.7	6.4	6.3	7.0	6.2	6.0	5.6	5.8	4.6	4.9
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°	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9	342.9
2.5°	344.3	343.6	342.9	340.6	341.6	339.2	339.0	338.1	337.5	336.2	337.8
5°	343.2	341.7	339.8	337.0	337.8	335.0	334.4	333.3	332.4	330.8	332.1
7.5°	341.4	339.0	335.9	332.4	333.5	330.0	329.1	327.9	327.2	325.2	326.4
10°	338.8	335.3	331.7	327.4	328.2	324.4	323.3	322.1	321.4	319.7	320.8
12.5°	334.8	330.5	325.6	321.0	321.9	318.3	316.8	315.5	315.3	313.8	315.2
15°	329.5	323.6	318.6	313.6	314.7	310.5	309.8	308.5	308.9	307.9	309.6
17.5°	322.8	316.0	310.6	305.2	306.3	302.8	302.2	301.6	302.0	301.9	303.7
20°	315.3	307.9	301.6	296.3	296.9	294.1	294.4	294.2	295.0	295.8	298.3
22.5°	306.9	298.4	291.8	286.4	287.3	284.9	286.0	286.3	287.5	289.4	292.6
25°	297.4	288.3	281.4	276.3	277.1	275.6	277.4	278.1	280.1	283.3	286.5
27.5°	287.4	277.8	270.5	265.6	267.2	265.6	268.3	269.8	272.9	276.3	280.3
30°	276.8	266.9	259.3	254.9	256.4	255.0	259.4	261.4	264.5	269.2	273.9
32.5°	265.7	255.2	247.8	244.5	245.5	245.3	250.1	252.4	256.5	261.9	266.9
35°	254.3	243.4	235.9	233.1	234.3	234.6	240.5	243.1	247.6	254.1	259.5
37.5°	242.6	231.4	224.1	221.7	222.9	224.0	230.8	233.4	238.5	245.7	251.6
40°	230.4	219.2	212.0	210.1	211.3	212.5	219.9	223.5	229.0	236.7	243.2
42.5°	218.0	206.8	199.9	198.5	199.6	202.0	209.8	213.2	219.0	227.6	234.7
45°	205.4	193.8	187.7	186.7	187.9	190.6	198.3	202.3	208.6	217.9	225.6
47.5°	192.7	181.4	175.6	174.9	176.1	179.1	187.6	191.3	197.9	207.9	216.1
50°	179.8	168.8	163.2	163.0	164.1	167.3	175.5	179.9	186.7	197.8	206.3
52.5°	166.7	156.2	151.2	151.2	152.2	155.5	163.7	168.2	175.3	187.1	196.4
55°	153.7	143.7	138.9	139.2	140.7	143.6	151.6	156.3	163.4	175.7	185.6
57.5°	140.7	131.1	126.8	127.3	128.7	131.6	139.5	144.8	151.2	163.9	174.0
60°	127.8	118.8	115.0	115.6	116.8	119.7	127.8	132.4	138.9	151.8	161.9
62.5°	114.7	106.6	103.0	103.7	104.8	107.7	115.4	119.8	126.2	138.9	149.1
65°	101.8	94.3	91.2	92.0	93.0	95.6	102.9	107.2	113.2	125.6	135.3
67.5°	89.1	82.2	79.7	80.4	81.2	83.7	89.7	94.3	100.0	111.8	121.0
70°	76.5	70.4	68.1	68.9	69.6	71.9	77.1	81.4	86.6	97.4	106.0
72.5°	64.1	58.1	57.0	57.6	58.2	60.2	65.2	68.6	73.1	82.7	90.1
75°	51.9	46.8	46.0	46.7	47.2	48.7	52.9	55.8	59.7	68.0	74.0
77.5°	40.2	35.9	35.6	36.1	36.6	37.7	41.0	44.1	47.1	53.2	58.5
80°	29.3	25.8	25.8	26.3	26.2	27.4	29.8	32.2	34.4	38.8	42.7
82.5°	19.3	16.6	16.9	17.3	17.5	18.1	19.5	21.4	22.7	25.4	28.0
85°	10.7	8.8	9.2	9.5	9.4	10.0	10.7	11.8	12.5	13.8	15.1
87.5°	4.0	3.3	3.4	3.6	3.7	4.0	4.0	4.7	4.8	4.9	5.2
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°	342.9	342.9	342.9
2.5°	334.7	336.5	337.8
5°	328.9	330.4	331.6
7.5°	323.3	324.6	325.7
10°	318.0	319.5	320.2
12.5°	312.5	314.2	314.8
15°	307.1	308.8	309.6
17.5°	301.6	303.8	304.6
20°	296.4	299.2	299.9
22.5°	291.1	294.1	294.9
25°	285.4	288.9	289.7
27.5°	279.4	283.5	284.3
30°	273.3	277.8	278.6
32.5°	266.8	271.7	272.4
35°	260.0	264.8	265.7
37.5°	252.4	257.7	259.5
40°	244.5	250.3	252.2
42.5°	236.3	242.6	244.5
45°	227.4	234.3	236.6
47.5°	218.5	226.3	228.3
50°	208.9	217.2	219.5
52.5°	198.7	207.8	210.1
55°	188.2	197.4	199.9
57.5°	176.9	186.3	189.0
60°	164.9	174.4	176.9
62.5°	152.7	161.3	163.7
65°	139.1	147.1	149.4
67.5°	124.6	132.0	133.8
70°	109.3	115.6	117.3
72.5°	93.2	97.6	99.8
75°	76.7	80.2	81.8
77.5°	60.0	62.5	63.8
80°	43.8	45.2	46.3
82.5°	28.6	29.2	30.1
85°	15.4	15.4	16.0
87.5°	5.2	5.0	5.2
90°	0.0	0.0	0.0

(END OF REPORT)