

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: P835244

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835244
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-LD4-1STD-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

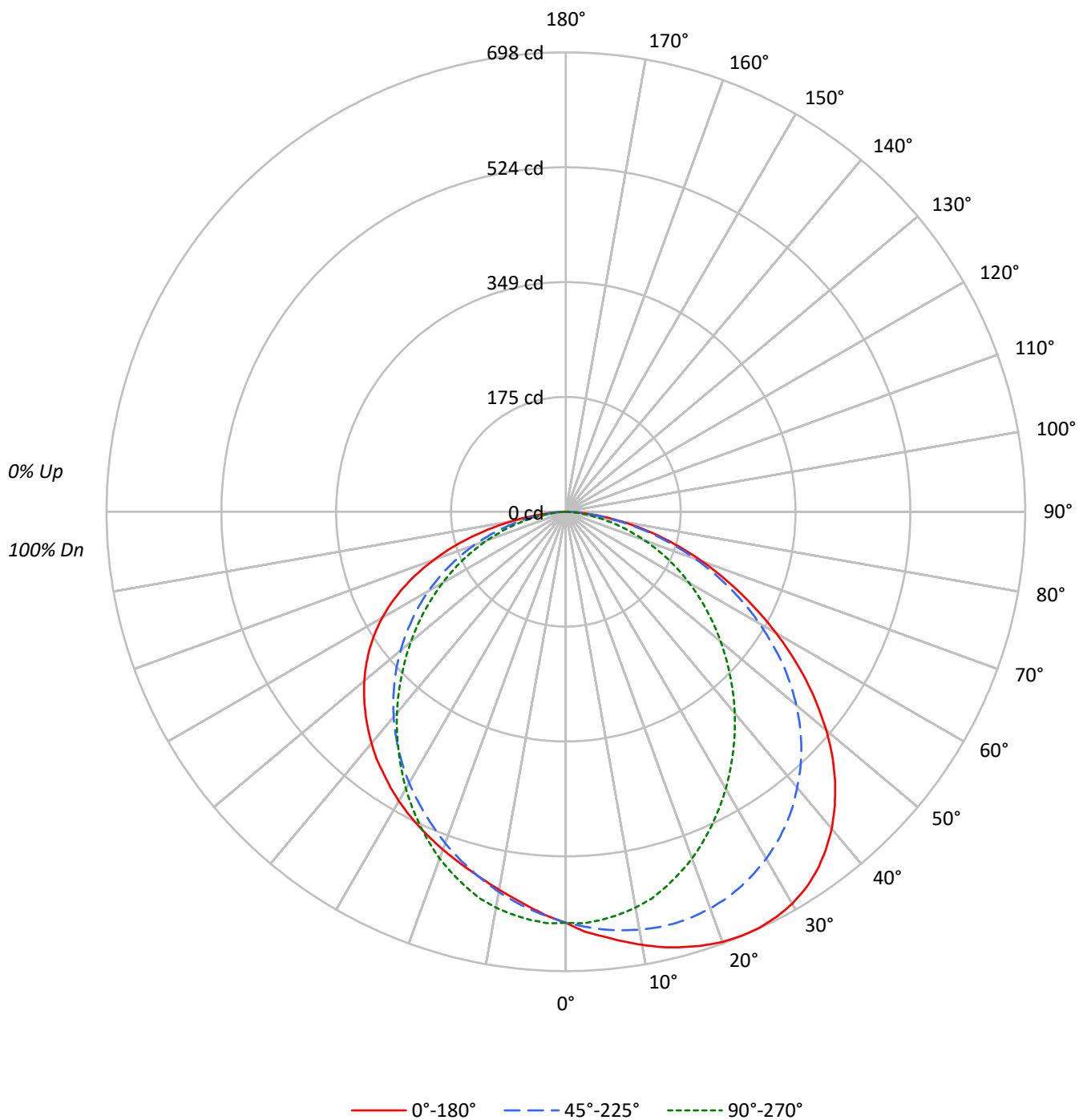
Lumens per Lamp: N/A
Luminaire Lumens: 1836.9 lumens
Efficiency: N/A
Efficacy: 110.7 lumens/watt
Spacing Criteria (0/90/45): 1.41 / 1.17 / 1.4
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 16.6
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	94	97	94	91	94	91	88	90	88	86	84		
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70		
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58		
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50		
5	76	63	54	47	73	61	53	47	59	52	46	57	51	46	55	50	45	43		
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	37		
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33		
8	60	46	38	32	59	46	38	32	44	37	32	43	36	31	42	36	31	29		
9	56	43	34	29	55	42	34	29	41	34	29	40	33	28	39	33	28	26		
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24		

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	1681	1681	1681
5°	1750	1681	1632
10°	1826	1669	1594
15°	1908	1642	1571
20°	1992	1606	1564
25°	2070	1559	1567
30°	2137	1510	1577
35°	2186	1456	1590
40°	2208	1403	1613
45°	2202	1343	1640
50°	2163	1287	1674
55°	2089	1228	1709
60°	1987	1164	1735
65°	1866	1093	1732
70°	1736	1009	1681
75°	1576	886	1550
80°	1354	728	1308
85°	1031	497	898

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.2	3.2
10°-20°	171.0	9.3
20°-30°	262.0	14.3
30°-40°	319.8	17.4
40°-50°	334.4	18.2
50°-60°	302.7	16.5
60°-70°	229.2	12.5
70°-80°	127.7	7.0
80°-90°	30.8	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°	492.3	26.8
0°-40°	812.1	44.2
0°-60°	1449.1	78.9
0°-90°	1836.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1836.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	624	624	624	624	624	
5°	648	637	622	607	604	62
15°	685	647	589	562	564	194
25°	697	629	525	506	528	322
35°	665	582	443	443	484	416
45°	579	506	353	368	431	445
55°	445	402	262	285	364	397
65°	293	276	172	195	272	291
75°	152	143	85	102	149	161
85°	33	30	16	22	29	40
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°	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5
2.5°	638.3	635.3	632.8	633.8	634.3	632.4	630.8	631.0	629.4	632.5	625.2
5°	647.7	645.0	642.1	643.2	642.1	639.2	636.9	636.2	631.9	633.6	626.1
7.5°	658.2	655.2	651.0	652.2	649.9	644.5	641.5	639.8	633.1	633.2	624.9
10°	668.3	665.7	660.0	660.8	656.6	649.5	644.7	642.2	632.8	631.4	622.8
12.5°	677.7	674.2	668.0	668.4	662.3	652.9	646.7	643.2	630.9	626.8	618.3
15°	684.9	681.5	674.2	674.0	666.1	653.8	646.9	642.0	626.4	620.0	611.1
17.5°	691.1	688.0	678.8	678.5	669.0	653.4	645.1	638.9	619.8	611.9	602.1
20°	695.5	692.3	682.1	681.1	669.7	651.4	641.4	633.6	611.2	601.8	590.9
22.5°	697.5	694.4	682.8	681.4	668.0	647.3	636.1	626.9	601.4	589.1	577.8
25°	697.1	694.1	681.0	679.6	664.9	641.1	628.6	618.1	589.0	574.5	563.3
27.5°	693.7	691.4	677.6	675.8	659.2	632.8	619.4	607.8	575.2	559.1	546.9
30°	687.8	686.0	671.4	669.8	652.1	623.7	608.8	595.4	560.3	542.2	529.9
32.5°	678.4	676.8	662.0	660.5	642.5	611.9	596.4	582.6	544.1	524.0	511.7
35°	665.4	664.5	650.1	648.5	630.2	598.5	582.0	566.9	527.2	504.5	492.8
37.5°	648.4	648.4	634.6	632.8	614.9	582.2	565.9	549.8	508.0	484.0	472.4
40°	628.6	630.3	616.3	614.5	597.2	564.6	546.8	529.9	487.4	462.5	451.1
42.5°	604.8	606.5	594.7	593.1	576.8	544.2	527.7	509.3	465.9	440.5	428.7
45°	578.6	580.8	570.3	569.1	553.9	522.0	506.1	487.4	443.3	417.5	406.1
47.5°	549.4	552.3	543.1	542.4	528.4	499.2	482.7	463.7	419.7	393.7	382.9
50°	516.6	520.7	513.2	513.2	500.7	471.6	457.3	438.3	395.2	369.1	358.4
52.5°	481.6	486.8	481.2	481.3	471.1	445.0	430.1	411.5	369.5	343.8	334.0
55°	445.3	450.3	446.8	447.3	439.3	415.5	402.0	383.6	343.3	318.3	309.0
57.5°	407.3	412.8	410.5	411.5	405.9	384.7	370.6	354.5	316.3	291.6	283.6
60°	369.2	374.4	373.2	374.7	371.1	352.7	339.9	323.2	289.1	265.4	258.4
62.5°	330.7	335.5	335.2	336.9	335.0	319.7	308.2	294.0	261.0	239.1	232.7
65°	293.1	297.2	296.9	298.7	298.2	286.0	275.6	262.6	232.9	212.8	207.2
67.5°	256.5	259.9	258.9	261.0	261.5	251.7	242.7	231.1	206.1	186.6	181.8
70°	220.7	223.0	221.8	223.2	224.4	217.0	209.4	199.2	177.6	160.4	156.4
72.5°	185.6	187.3	185.4	186.7	187.8	182.5	176.2	167.3	149.5	134.6	131.3
75°	151.6	154.0	150.0	151.4	152.2	146.9	143.2	136.0	120.5	109.1	106.9
77.5°	118.8	120.1	117.9	117.4	117.9	114.1	111.2	105.6	94.0	84.6	83.3
80°	87.4	88.2	86.0	85.4	85.9	83.1	80.9	76.8	68.7	61.6	61.0
82.5°	58.6	59.0	57.1	56.5	56.8	56.0	53.4	50.5	46.7	40.7	40.5
85°	33.4	33.4	32.1	31.5	31.8	30.4	29.5	28.0	26.5	22.4	22.7
87.5°	12.3	12.3	11.6	11.5	12.8	11.3	10.9	10.2	10.6	8.5	9.0
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°	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5	624.5
2.5°	627.2	625.8	624.6	620.4	622.2	617.8	617.5	615.9	614.7	612.3	615.3
5°	625.2	622.4	618.9	613.8	615.3	610.1	609.1	607.1	605.5	602.5	604.8
7.5°	621.9	617.4	611.8	605.4	607.4	601.0	599.4	597.3	596.0	592.4	594.4
10°	617.1	610.7	604.1	596.4	597.9	590.9	588.9	586.7	585.4	582.3	584.3
12.5°	609.7	602.0	593.1	584.6	586.3	579.7	577.0	574.7	574.2	571.7	574.1
15°	600.2	589.4	580.3	571.2	573.2	565.5	564.3	562.0	562.6	560.9	563.9
17.5°	588.0	575.6	565.6	556.0	557.9	551.5	550.5	549.4	550.1	549.8	553.1
20°	574.4	560.7	549.3	539.7	540.8	535.8	536.2	535.9	537.3	538.8	543.3
22.5°	559.0	543.5	531.5	521.7	523.3	519.0	520.9	521.4	523.7	527.2	532.9
25°	541.6	525.1	512.6	503.3	504.8	501.9	505.2	506.5	510.2	516.0	521.8
27.5°	523.5	506.0	492.6	483.7	486.6	483.7	488.7	491.4	497.0	503.3	510.5
30°	504.2	486.1	472.3	464.4	467.1	464.5	472.4	476.1	481.7	490.3	498.9
32.5°	484.0	464.9	451.4	445.3	447.2	446.8	455.6	459.7	467.2	477.1	486.2
35°	463.3	443.3	429.7	424.5	426.8	427.4	438.0	442.8	451.0	462.9	472.7
37.5°	441.8	421.5	408.1	403.9	405.9	408.0	420.4	425.2	434.5	447.4	458.2
40°	419.6	399.3	386.2	382.7	384.8	387.0	400.5	407.0	417.1	431.2	442.9
42.5°	397.1	376.7	364.0	361.6	363.6	367.9	382.2	388.3	399.0	414.5	427.5
45°	374.1	353.0	341.9	340.0	342.2	347.1	361.2	368.5	379.9	396.9	410.9
47.5°	350.9	330.3	319.8	318.6	320.8	326.2	341.8	348.5	360.5	378.6	393.7
50°	327.5	307.4	297.3	296.9	298.9	304.8	319.7	327.6	340.0	360.4	375.8
52.5°	303.7	284.5	275.3	275.3	277.2	283.2	298.2	306.4	319.3	340.7	357.8
55°	280.0	261.7	252.9	253.6	256.3	261.5	276.1	284.7	297.7	320.0	338.0
57.5°	256.2	238.9	231.0	231.9	234.5	239.7	254.0	263.7	275.5	298.5	316.9
60°	232.7	216.3	209.4	210.5	212.8	218.0	232.9	241.2	252.9	276.4	294.8
62.5°	209.0	194.1	187.5	188.9	191.0	196.1	210.2	218.3	229.9	252.9	271.5
65°	185.5	171.7	166.1	167.5	169.4	174.2	187.4	195.2	206.2	228.8	246.5
67.5°	162.3	149.7	145.1	146.5	148.0	152.5	163.4	171.9	182.2	203.7	220.4
70°	139.4	128.2	124.1	125.4	126.8	130.9	140.5	148.2	157.8	177.4	193.0
72.5°	116.7	105.8	103.7	105.0	106.1	109.6	118.8	124.9	133.2	150.7	164.1
75°	94.6	85.2	83.8	85.0	86.0	88.7	96.4	101.7	108.7	123.8	134.7
77.5°	73.3	65.4	64.8	65.8	66.7	68.7	74.7	80.3	85.7	96.9	106.6
80°	53.4	47.0	47.0	47.9	47.6	50.0	54.2	58.7	62.7	70.7	77.8
82.5°	35.2	30.2	30.8	31.5	31.9	32.9	35.5	38.9	41.4	46.3	50.9
85°	19.5	16.1	16.8	17.3	17.1	18.2	19.5	21.6	22.8	25.1	27.6
87.5°	7.2	6.0	6.1	6.6	6.8	7.4	7.4	8.6	8.7	9.0	9.6
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°	624.5	624.5	624.5
2.5°	609.6	612.9	615.3
5°	599.1	601.8	604.0
7.5°	588.9	591.3	593.2
10°	579.2	581.9	583.3
12.5°	569.2	572.3	573.4
15°	559.4	562.5	563.9
17.5°	549.3	553.4	554.9
20°	539.9	545.0	546.3
22.5°	530.3	535.6	537.1
25°	519.9	526.2	527.7
27.5°	508.9	516.4	517.9
30°	497.8	506.0	507.5
32.5°	485.9	494.8	496.2
35°	473.5	482.4	484.0
37.5°	459.7	469.4	472.7
40°	445.4	455.9	459.3
42.5°	430.4	441.8	445.4
45°	414.3	426.8	430.9
47.5°	398.0	412.2	415.8
50°	380.4	395.6	399.8
52.5°	362.0	378.5	382.7
55°	342.9	359.5	364.2
57.5°	322.1	339.3	344.2
60°	300.4	317.6	322.3
62.5°	278.2	293.7	298.2
65°	253.3	267.9	272.0
67.5°	227.0	240.4	243.8
70°	199.0	210.6	213.6
72.5°	169.8	177.9	181.8
75°	139.6	146.1	149.1
77.5°	109.3	113.8	116.3
80°	79.7	82.3	84.4
82.5°	52.1	53.2	54.7
85°	28.1	28.1	29.1
87.5°	9.6	9.1	9.6
90°	0.0	0.0	0.0

(END OF REPORT)