

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: P834498

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-1HI-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834498
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-LD4-1HI-50-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

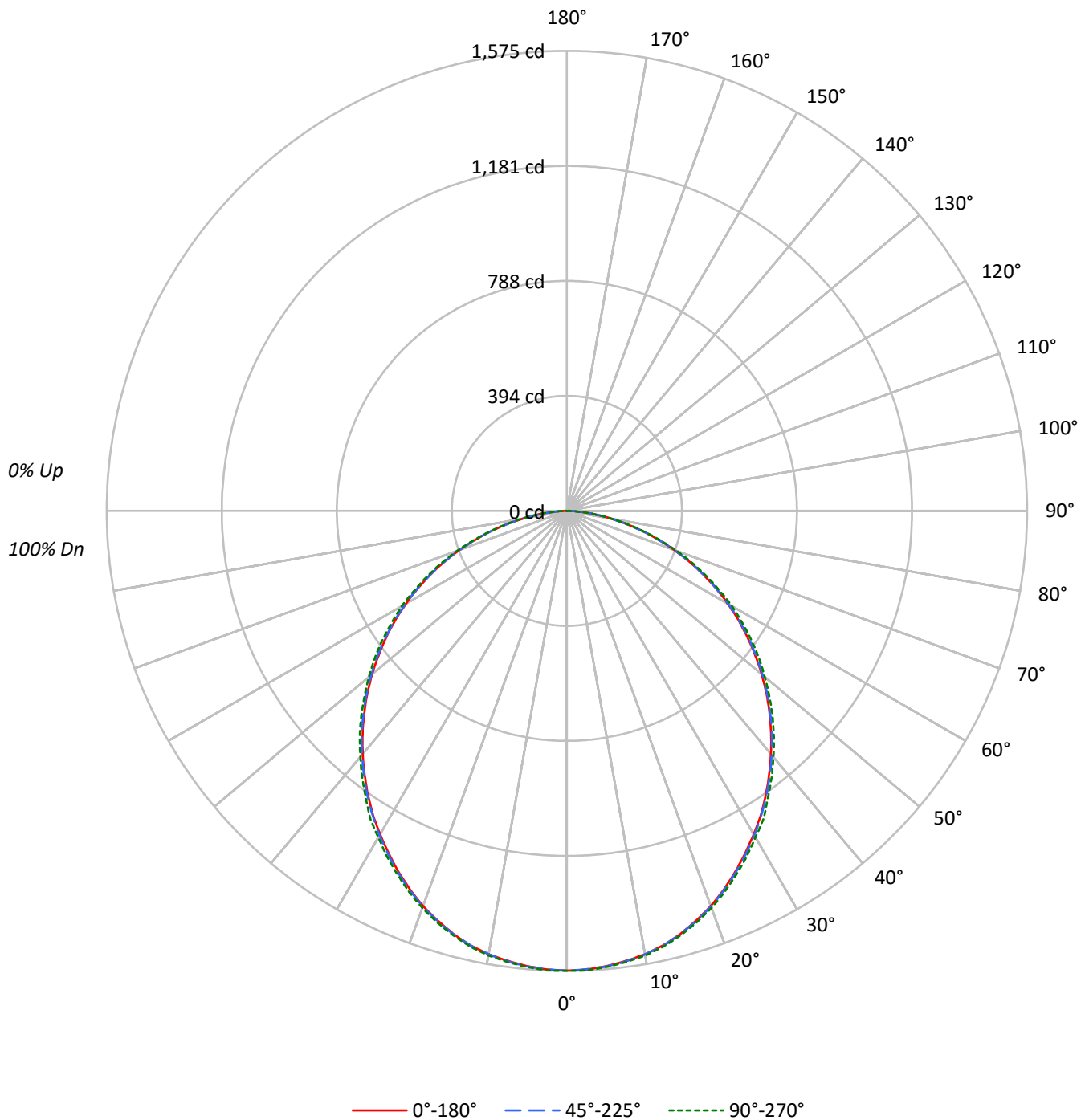
Lumens per Lamp: N/A
Luminaire Lumens: 4253.8 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	4236	4236	4236
5°	4225	4229	4234
10°	4212	4213	4225
15°	4177	4180	4191
20°	4123	4127	4142
25°	4048	4058	4076
30°	3972	3985	4010
35°	3900	3909	3940
40°	3817	3830	3864
45°	3734	3750	3788
50°	3643	3660	3702
55°	3540	3557	3615
60°	3422	3436	3513
65°	3273	3283	3345
70°	3072	3075	3142
75°	2793	2782	2847
80°	2399	2390	2430
85°	1862	1831	1840



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	148.8	3.5
10°-20°	423.2	9.9
20°-30°	630.0	14.8
30°-40°	745.0	17.5
40°-50°	760.5	17.9
50°-60°	678.7	16.0
60°-70°	511.2	12.0
70°-80°	285.1	6.7
80°-90°	71.4	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°	1201.9	28.3
0°-40°	1946.9	45.8
0°-60°	3386.1	79.6
0°-90°	4253.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4253.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1574	1574	1574	1574	1574	
5°	1564	1567	1566	1566	1567	149
15°	1499	1501	1500	1502	1504	423
25°	1363	1365	1367	1370	1373	628
35°	1187	1186	1190	1194	1199	742
45°	981	981	985	990	995	757
55°	754	754	758	763	770	674
65°	514	512	516	520	525	508
75°	269	266	268	269	274	285
85°	60	59	59	59	60	72
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1574.3	1574.3	1574.3	1574.3	1574.3
2.5°	1571.7	1574.3	1571.0	1571.7	1574.6
5°	1564.2	1567.1	1565.5	1565.8	1567.4
7.5°	1553.7	1557.6	1555.4	1556.0	1557.6
10°	1541.3	1544.3	1541.7	1543.3	1546.2
12.5°	1523.7	1525.0	1523.7	1524.4	1527.7
15°	1499.3	1500.9	1500.3	1501.6	1504.5
17.5°	1470.6	1472.6	1472.2	1474.9	1477.1
20°	1439.7	1440.0	1441.3	1443.9	1446.5
22.5°	1403.1	1404.1	1405.4	1409.0	1411.6
25°	1363.4	1365.0	1366.6	1370.2	1372.8
27.5°	1321.3	1323.0	1325.2	1329.2	1333.4
30°	1278.3	1278.3	1282.6	1286.5	1290.4
32.5°	1235.0	1233.3	1237.2	1242.1	1251.6
35°	1187.1	1185.7	1190.0	1194.5	1199.4
37.5°	1137.2	1136.2	1141.1	1146.0	1150.5
40°	1086.7	1085.4	1090.3	1095.1	1100.0
42.5°	1034.8	1034.2	1038.8	1043.6	1048.9
45°	981.1	980.7	985.3	990.2	995.4
47.5°	926.3	925.7	930.2	935.4	940.0
50°	870.2	869.6	874.2	879.4	884.3
52.5°	812.6	812.6	816.8	821.4	828.9
55°	754.5	753.6	758.1	763.3	770.5
57.5°	695.9	694.6	698.8	704.0	710.5
60°	635.9	634.6	638.5	643.7	652.8
62.5°	575.3	573.3	577.2	582.1	587.7
65°	514.0	512.0	515.6	520.2	525.4
67.5°	452.4	450.1	453.7	457.6	462.5
70°	390.5	388.2	390.8	394.7	399.3
72.5°	328.9	326.6	328.9	330.5	336.0
75°	268.6	266.3	267.6	268.9	273.8
77.5°	209.9	207.6	210.2	210.9	213.8
80°	154.8	152.5	154.2	154.5	156.8
82.5°	104.6	102.7	105.0	103.3	105.3
85°	60.3	58.7	59.3	58.7	59.6
87.5°	23.8	22.5	22.8	21.5	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)