

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: P834494

Luminaire Tested: **ORLG-12-4-INS-OPL-LD4-3STD-40-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834494
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-LD4-3STD-40-120-EDD-90
Description: 1FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

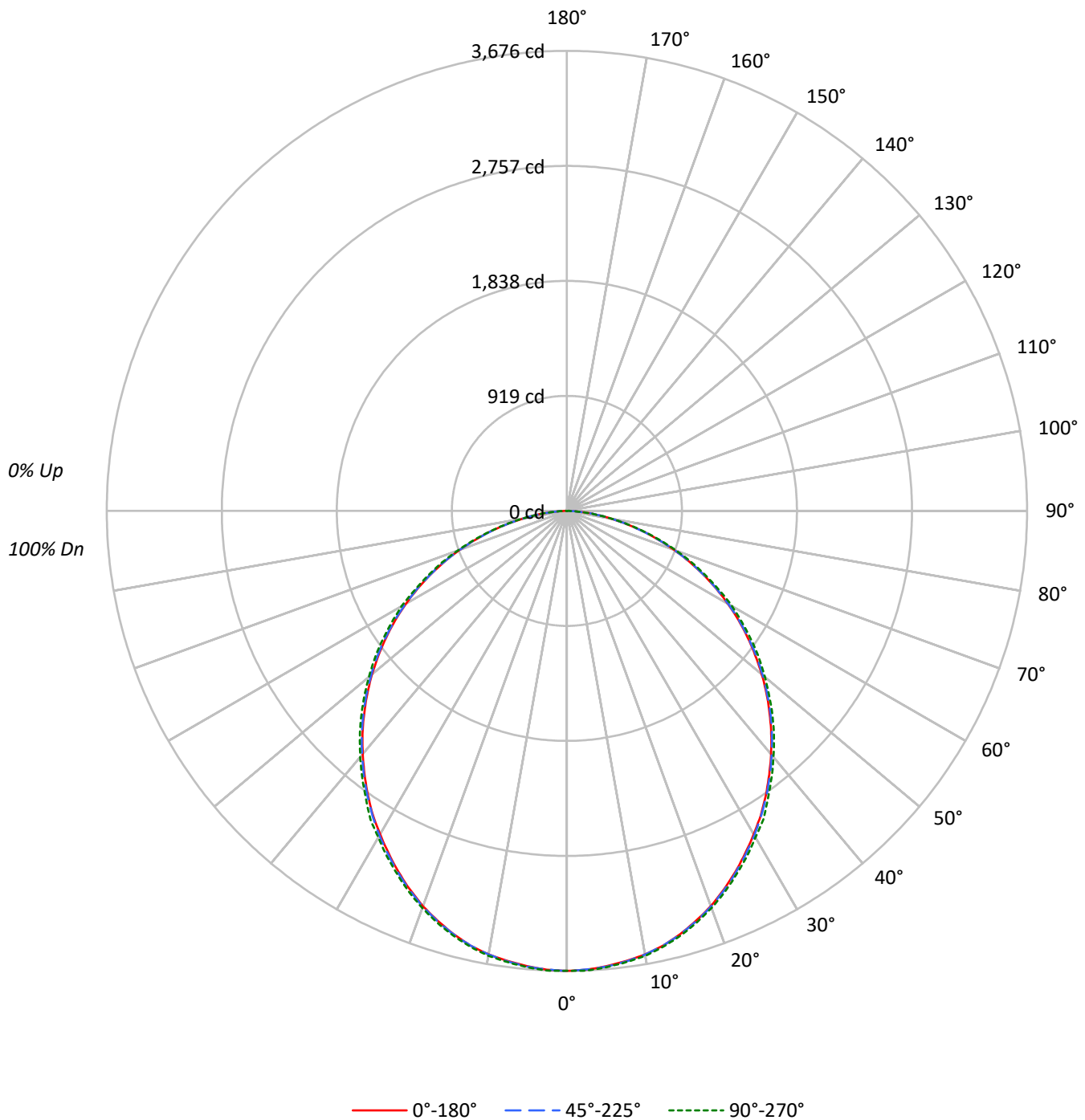
Lumens per Lamp: N/A
Luminaire Lumens: 9931.5 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 99.9
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	95	98	94	92		94	91	89		90
2	99	91	84	78	96	89	83	77	85	80	76		82	78	74		79
3	90	80	72	65	88	78	71	65	75	69	64		73	67	62		70
4	83	71	62	55	80	69	61	55	67	60	54		65	58	53		62
5	76	63	54	48	74	62	54	47	60	53	47		58	52	46		56
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51
7	65	52	43	37	64	51	43	37	49	42	36		48	41	36		47
8	61	47	39	33	59	47	38	33	45	38	33		44	37	32		43
9	57	43	35	30	55	43	35	30	42	34	29		41	34	29		40
10	53	40	32	27	52	40	32	27	39	32	27		38	31	27		37

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9890	9890	9890
5°	9865	9873	9885
10°	9833	9835	9864
15°	9752	9758	9786
20°	9625	9636	9671
25°	9451	9474	9517
30°	9274	9304	9361
35°	9104	9127	9199
40°	8912	8942	9022
45°	8717	8754	8844
50°	8506	8544	8643
55°	8265	8304	8440
60°	7990	8023	8203
65°	7641	7665	7811
70°	7172	7179	7334
75°	6519	6495	6646
80°	5602	5577	5672
85°	4347	4276	4301

Classified

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	347.3	3.5
10°-20°	988.0	9.9
20°-30°	1470.8	14.8
30°-40°	1739.3	17.5
40°-50°	1775.6	17.9
50°-60°	1584.6	16.0
60°-70°	1193.5	12.0
70°-80°	665.6	6.7
80°-90°	166.8	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°	2806.0	28.3
0°-40°	4545.3	45.8
0°-60°	7905.6	79.6
0°-90°	9931.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9931.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3675	3675	3675	3675	3675	
5°	3652	3659	3655	3656	3660	347
15°	3500	3504	3503	3506	3513	987
25°	3183	3187	3191	3199	3205	1466
35°	2771	2768	2778	2789	2800	1733
45°	2290	2290	2300	2312	2324	1767
55°	1762	1759	1770	1782	1799	1575
65°	1200	1196	1204	1214	1227	1187
75°	627	622	625	628	639	665
85°	141	137	138	137	139	169
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3675.4	3675.4	3675.4	3675.4	3675.4
2.5°	3669.4	3675.4	3667.8	3669.4	3676.2
5°	3651.9	3658.7	3654.9	3655.7	3659.5
7.5°	3627.5	3636.6	3631.3	3632.8	3636.6
10°	3598.6	3605.4	3599.4	3603.2	3610.0
12.5°	3557.5	3560.5	3557.5	3559.0	3566.6
15°	3500.4	3504.2	3502.7	3505.8	3512.6
17.5°	3433.5	3438.0	3437.3	3443.4	3448.7
20°	3361.2	3361.9	3365.0	3371.1	3377.1
22.5°	3275.9	3278.2	3281.3	3289.6	3295.7
25°	3183.1	3186.9	3190.7	3199.1	3205.2
27.5°	3084.9	3088.7	3094.1	3103.2	3113.1
30°	2984.5	2984.5	2994.4	3003.5	3012.6
32.5°	2883.3	2879.5	2888.6	2900.0	2922.1
35°	2771.4	2768.4	2778.3	2788.9	2800.3
37.5°	2655.0	2652.7	2664.1	2675.5	2686.2
40°	2537.0	2534.0	2545.4	2556.8	2568.2
42.5°	2416.1	2414.5	2425.2	2436.6	2448.8
45°	2290.5	2289.7	2300.4	2311.8	2324.0
47.5°	2162.7	2161.1	2171.8	2184.0	2194.6
50°	2031.8	2030.2	2040.9	2053.1	2064.5
52.5°	1897.1	1897.1	1907.0	1917.6	1935.1
55°	1761.6	1759.3	1770.0	1782.2	1798.9
57.5°	1624.7	1621.6	1631.5	1643.7	1658.9
60°	1484.6	1481.6	1490.7	1502.9	1524.2
62.5°	1343.1	1338.5	1347.7	1359.1	1372.0
65°	1200.0	1195.5	1203.8	1214.5	1226.7
67.5°	1056.2	1050.9	1059.3	1068.4	1079.8
70°	911.6	906.3	912.4	921.5	932.2
72.5°	767.8	762.5	767.8	771.6	784.6
75°	627.0	621.7	624.7	627.8	639.2
77.5°	490.1	484.7	490.8	492.3	499.2
80°	361.5	356.1	359.9	360.7	366.0
82.5°	244.3	239.7	245.0	241.2	245.8
85°	140.8	137.0	138.5	137.0	139.3
87.5°	55.6	52.5	53.3	50.2	50.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)