

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: P835616

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5STD-27-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835616
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-OPL-LD4-5STD-27-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

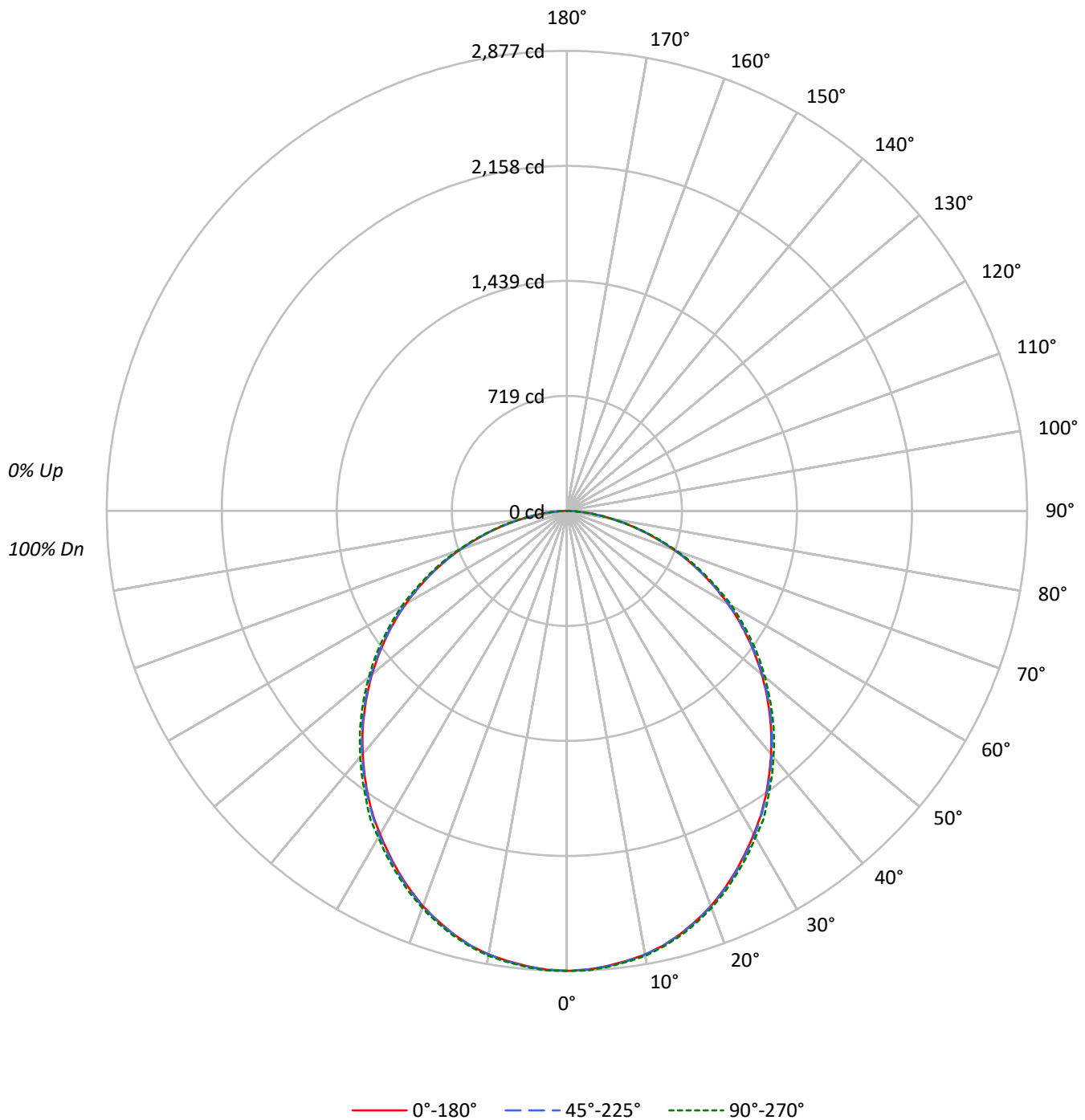
Lumens per Lamp: N/A
Luminaire Lumens: 7772.2 lumens
Efficiency: N/A
Efficacy: 93.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 83.2
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

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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°	7740	7740	7740
5°	7720	7726	7736
10°	7695	7697	7720
15°	7632	7636	7658
20°	7533	7541	7568
25°	7396	7414	7448
30°	7257	7281	7326
35°	7125	7142	7199
40°	6974	6998	7060
45°	6822	6851	6921
50°	6656	6687	6764
55°	6468	6499	6605
60°	6253	6279	6420
65°	5980	5999	6113
70°	5613	5618	5740
75°	5102	5083	5201
80°	4384	4365	4438
85°	3402	3347	3365

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.8	3.5
10°-20°	773.2	9.9
20°-30°	1151.0	14.8
30°-40°	1361.2	17.5
40°-50°	1389.6	17.9
50°-60°	1240.1	16.0
60°-70°	934.0	12.0
70°-80°	520.9	6.7
80°-90°	130.5	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°	2195.9	28.3
0°-40°	3557.1	45.8
0°-60°	6186.7	79.6
0°-90°	7772.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7772.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2876	2876	2876	2876	2876	
5°	2858	2863	2860	2861	2864	271
15°	2739	2742	2741	2744	2749	772
25°	2491	2494	2497	2504	2508	1148
35°	2169	2166	2174	2183	2192	1356
45°	1792	1792	1800	1809	1819	1383
55°	1379	1377	1385	1395	1408	1232
65°	939	936	942	950	960	929
75°	491	486	489	491	500	520
85°	110	107	108	107	109	132
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2876.3	2876.3	2876.3	2876.3	2876.3
2.5°	2871.6	2876.3	2870.4	2871.6	2876.9
5°	2857.9	2863.2	2860.2	2860.8	2863.8
7.5°	2838.8	2846.0	2841.8	2843.0	2846.0
10°	2816.2	2821.5	2816.8	2819.7	2825.1
12.5°	2784.0	2786.4	2784.0	2785.2	2791.2
15°	2739.4	2742.3	2741.1	2743.5	2748.9
17.5°	2687.0	2690.5	2689.9	2694.7	2698.9
20°	2630.4	2631.0	2633.4	2638.1	2642.9
22.5°	2563.7	2565.5	2567.8	2574.4	2579.2
25°	2491.0	2494.0	2497.0	2503.5	2508.3
27.5°	2414.2	2417.2	2421.4	2428.5	2436.2
30°	2335.6	2335.6	2343.3	2350.5	2357.6
32.5°	2256.4	2253.4	2260.6	2269.5	2286.8
35°	2168.9	2166.5	2174.2	2182.6	2191.5
37.5°	2077.7	2076.0	2084.9	2093.8	2102.2
40°	1985.4	1983.1	1992.0	2000.9	2009.9
42.5°	1890.8	1889.6	1897.9	1906.8	1916.4
45°	1792.5	1791.9	1800.2	1809.2	1818.7
47.5°	1692.4	1691.3	1699.6	1709.1	1717.5
50°	1590.0	1588.8	1597.2	1606.7	1615.6
52.5°	1484.6	1484.6	1492.4	1500.7	1514.4
55°	1378.6	1376.8	1385.2	1394.7	1407.8
57.5°	1271.4	1269.0	1276.8	1286.3	1298.2
60°	1161.8	1159.5	1166.6	1176.1	1192.8
62.5°	1051.1	1047.5	1054.7	1063.6	1073.7
65°	939.1	935.5	942.1	950.4	960.0
67.5°	826.6	822.4	829.0	836.1	845.0
70°	713.4	709.3	714.0	721.2	729.5
72.5°	600.9	596.7	600.9	603.8	614.0
75°	490.7	486.5	488.9	491.3	500.2
77.5°	383.5	379.3	384.1	385.3	390.7
80°	282.9	278.7	281.7	282.3	286.4
82.5°	191.2	187.6	191.8	188.8	192.4
85°	110.2	107.2	108.4	107.2	109.0
87.5°	43.5	41.1	41.7	39.3	39.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)