

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: P835722

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4HI-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835722
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-LD4-4HI-27-120-EDD-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

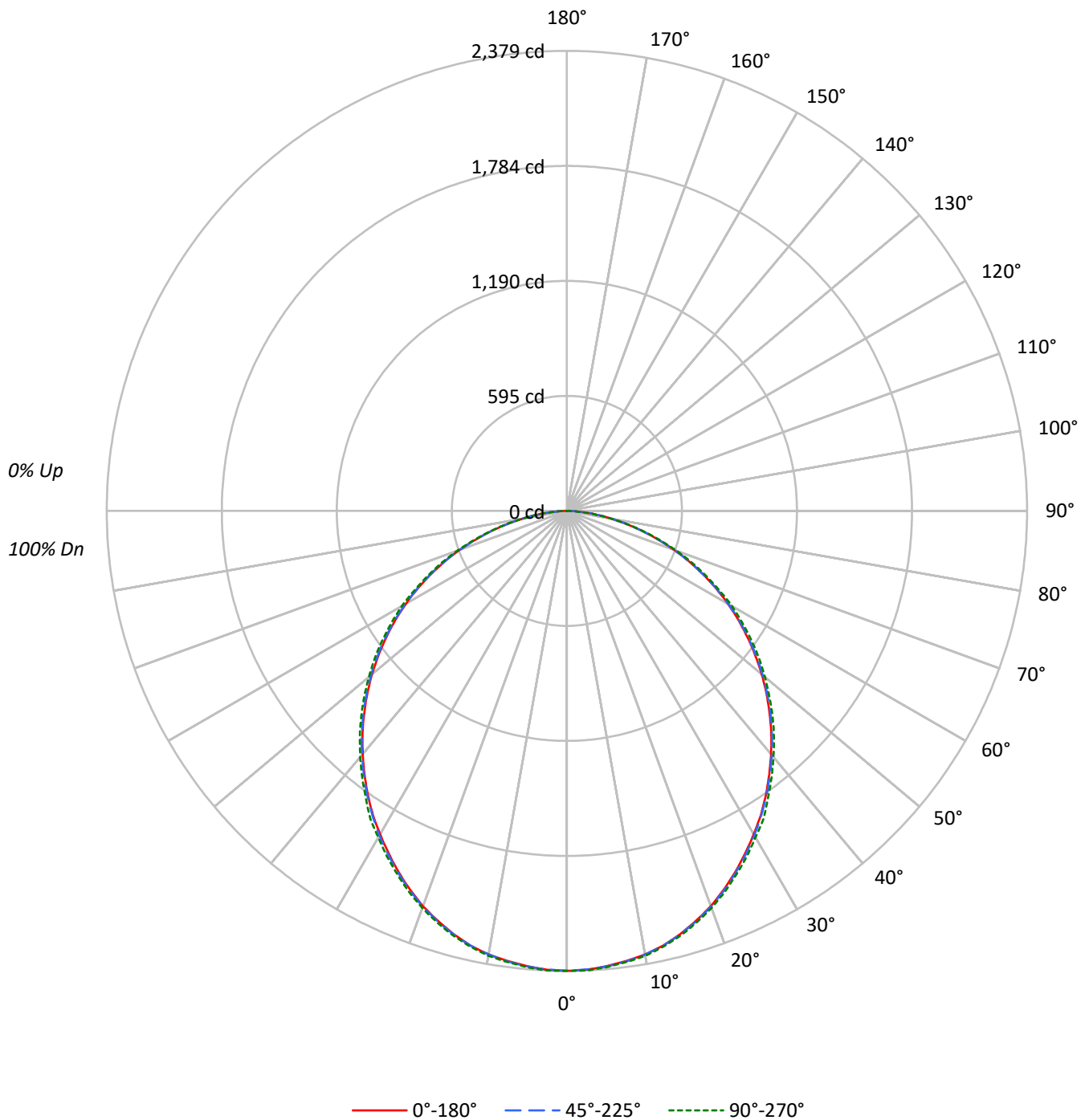
Lumens per Lamp: N/A
Luminaire Lumens: 6426.8 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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

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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	102	102	100
1	109	104	100	96	106	102	98	95	98	94	92	94	91	89	90	88	86	86	86	84
2	99	91	84	78	96	89	83	77	85	80	76	82	78	74	79	76	72	72	72	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	62	70	65	61	61	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	53	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	51	46	46	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	40	40	38
7	65	52	43	37	64	51	43	37	49	42	36	48	41	36	47	41	36	36	36	34
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	32	32	30
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	29	29	27
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	26	26	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6400	6400	6400
5°	6384	6389	6397
10°	6363	6365	6383
15°	6311	6315	6333
20°	6229	6236	6258
25°	6116	6131	6158
30°	6001	6021	6058
35°	5891	5906	5953
40°	5767	5786	5838
45°	5641	5665	5723
50°	5504	5529	5593
55°	5348	5374	5461
60°	5170	5192	5308
65°	4945	4960	5054
70°	4641	4645	4746
75°	4219	4204	4300
80°	3625	3609	3671
85°	2813	2766	2782

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	224.8	3.5
10°-20°	639.3	9.9
20°-30°	951.8	14.8
30°-40°	1125.5	17.5
40°-50°	1149.0	17.9
50°-60°	1025.4	16.0
60°-70°	772.4	12.0
70°-80°	430.7	6.7
80°-90°	107.9	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°	1815.8	28.3
0°-40°	2941.4	45.8
0°-60°	5115.8	79.6
0°-90°	6426.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6426.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2378	2378	2378	2378	2378	
5°	2363	2368	2365	2366	2368	224
15°	2265	2268	2267	2269	2273	638
25°	2060	2062	2065	2070	2074	949
35°	1793	1792	1798	1805	1812	1122
45°	1482	1482	1489	1496	1504	1143
55°	1140	1138	1145	1153	1164	1019
65°	777	774	779	786	794	768
75°	406	402	404	406	414	430
85°	91	89	90	89	90	109
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2378.4	2378.4	2378.4	2378.4	2378.4
2.5°	2374.5	2378.4	2373.5	2374.5	2378.9
5°	2363.2	2367.6	2365.1	2365.6	2368.1
7.5°	2347.4	2353.3	2349.9	2350.9	2353.3
10°	2328.7	2333.1	2329.2	2331.7	2336.1
12.5°	2302.1	2304.1	2302.1	2303.1	2308.0
15°	2265.2	2267.6	2266.7	2268.6	2273.1
17.5°	2221.8	2224.8	2224.3	2228.2	2231.7
20°	2175.1	2175.6	2177.5	2181.5	2185.4
22.5°	2119.9	2121.4	2123.4	2128.8	2132.7
25°	2059.8	2062.3	2064.8	2070.2	2074.1
27.5°	1996.3	1998.8	2002.2	2008.1	2014.5
30°	1931.3	1931.3	1937.7	1943.6	1949.5
32.5°	1865.8	1863.4	1869.3	1876.6	1890.9
35°	1793.4	1791.5	1797.9	1804.8	1812.1
37.5°	1718.1	1716.6	1724.0	1731.4	1738.3
40°	1641.8	1639.8	1647.2	1654.6	1661.9
42.5°	1563.5	1562.5	1569.4	1576.8	1584.6
45°	1482.2	1481.7	1488.6	1496.0	1503.9
47.5°	1399.5	1398.5	1405.4	1413.3	1420.2
50°	1314.8	1313.8	1320.7	1328.6	1336.0
52.5°	1227.6	1227.6	1234.0	1240.9	1252.2
55°	1140.0	1138.5	1145.4	1153.3	1164.1
57.5°	1051.3	1049.4	1055.8	1063.6	1073.5
60°	960.7	958.8	964.7	972.5	986.3
62.5°	869.1	866.2	872.1	879.5	887.9
65°	776.6	773.6	779.0	785.9	793.8
67.5°	683.5	680.0	685.5	691.4	698.8
70°	589.9	586.5	590.4	596.3	603.2
72.5°	496.9	493.4	496.9	499.3	507.7
75°	405.8	402.3	404.3	406.3	413.6
77.5°	317.1	313.7	317.6	318.6	323.0
80°	233.9	230.5	232.9	233.4	236.9
82.5°	158.1	155.1	158.6	156.1	159.1
85°	91.1	88.6	89.6	88.6	90.1
87.5°	35.9	34.0	34.5	32.5	32.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)