

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: P835615

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835615
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-LD4-5LO-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

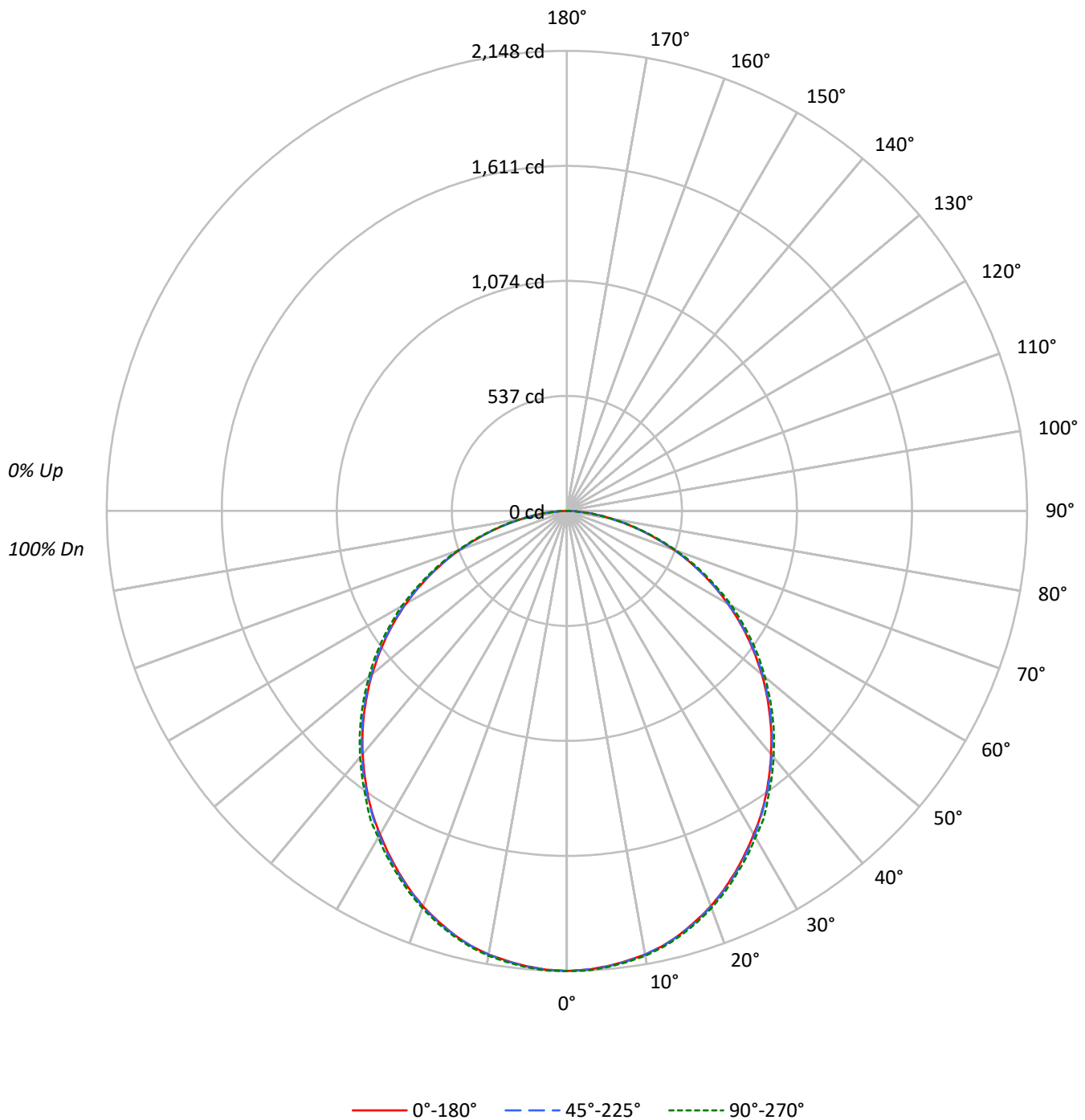
Lumens per Lamp: N/A
Luminaire Lumens: 5804.3 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 58.5
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	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°	5780	5780	5780
5°	5765	5770	5777
10°	5747	5748	5765
15°	5699	5703	5719
20°	5625	5632	5652
25°	5524	5537	5562
30°	5420	5438	5471
35°	5321	5334	5376
40°	5208	5226	5273
45°	5094	5116	5169
50°	4971	4994	5051
55°	4830	4853	4933
60°	4670	4689	4794
65°	4465	4480	4565
70°	4192	4195	4286
75°	3811	3796	3884
80°	3273	3261	3315
85°	2541	2498	2513

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	203.0	3.5
10°-20°	577.4	9.9
20°-30°	859.6	14.8
30°-40°	1016.5	17.5
40°-50°	1037.7	17.9
50°-60°	926.1	16.0
60°-70°	697.5	12.0
70°-80°	389.0	6.7
80°-90°	97.5	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°	1639.9	28.3
0°-40°	2656.5	45.8
0°-60°	4620.3	79.6
0°-90°	5804.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5804.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2148	2148	2148	2148	2148	
5°	2134	2138	2136	2136	2139	203
15°	2046	2048	2047	2049	2053	577
25°	1860	1862	1865	1870	1873	857
35°	1620	1618	1624	1630	1637	1013
45°	1339	1338	1344	1351	1358	1033
55°	1030	1028	1034	1042	1051	920
65°	701	699	704	710	717	694
75°	366	363	365	367	374	388
85°	82	80	81	80	81	99
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2148.1	2148.1	2148.1	2148.1	2148.1
2.5°	2144.5	2148.1	2143.6	2144.5	2148.5
5°	2134.3	2138.3	2136.1	2136.5	2138.7
7.5°	2120.0	2125.4	2122.3	2123.2	2125.4
10°	2103.1	2107.1	2103.6	2105.8	2109.8
12.5°	2079.1	2080.9	2079.1	2080.0	2084.5
15°	2045.8	2048.0	2047.1	2048.9	2052.9
17.5°	2006.6	2009.3	2008.9	2012.4	2015.5
20°	1964.4	1964.8	1966.6	1970.2	1973.7
22.5°	1914.6	1915.9	1917.7	1922.6	1926.1
25°	1860.3	1862.5	1864.8	1869.7	1873.2
27.5°	1803.0	1805.2	1808.3	1813.6	1819.4
30°	1744.2	1744.2	1750.0	1755.4	1760.7
32.5°	1685.1	1682.9	1688.2	1694.9	1707.8
35°	1619.7	1617.9	1623.7	1630.0	1636.6
37.5°	1551.7	1550.3	1557.0	1563.7	1569.9
40°	1482.7	1481.0	1487.6	1494.3	1501.0
42.5°	1412.0	1411.1	1417.4	1424.0	1431.2
45°	1338.6	1338.2	1344.4	1351.1	1358.2
47.5°	1263.9	1263.0	1269.3	1276.4	1282.6
50°	1187.4	1186.6	1192.8	1199.9	1206.6
52.5°	1108.7	1108.7	1114.5	1120.7	1131.0
55°	1029.6	1028.2	1034.5	1041.6	1051.4
57.5°	949.5	947.7	953.5	960.6	969.5
60°	867.7	865.9	871.2	878.3	890.8
62.5°	785.0	782.3	787.6	794.3	801.9
65°	701.3	698.7	703.6	709.8	716.9
67.5°	617.3	614.2	619.1	624.4	631.1
70°	532.8	529.7	533.2	538.6	544.8
72.5°	448.7	445.6	448.7	451.0	458.5
75°	366.5	363.3	365.1	366.9	373.6
77.5°	286.4	283.3	286.9	287.7	291.7
80°	211.2	208.1	210.4	210.8	213.9
82.5°	142.8	140.1	143.2	141.0	143.6
85°	82.3	80.1	80.9	80.1	81.4
87.5°	32.5	30.7	31.1	29.4	29.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)