

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: P835724

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-5STD-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835724
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-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

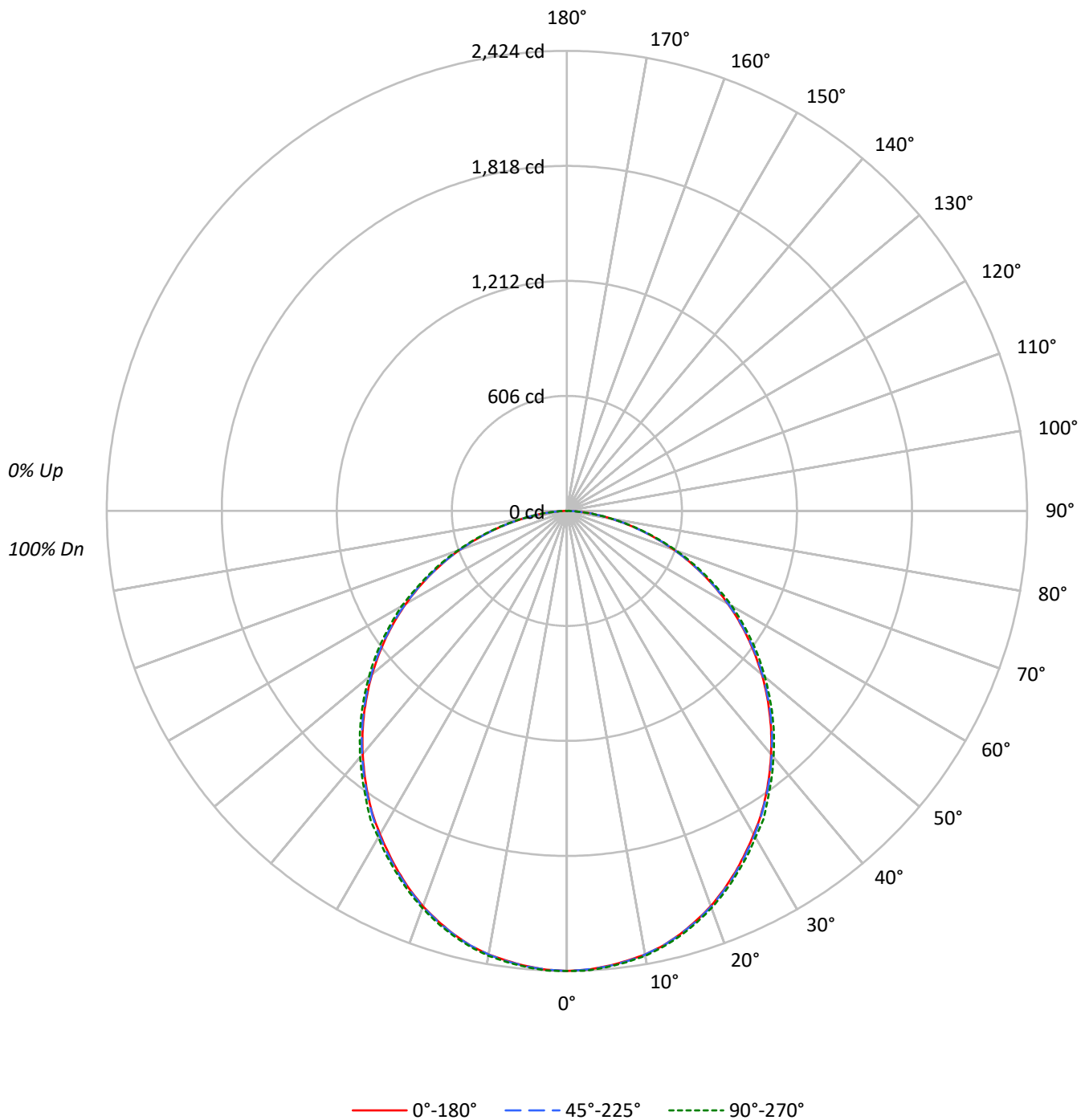
Lumens per Lamp: N/A
Luminaire Lumens: 6549.6 lumens
Efficiency: N/A
Efficacy: 78.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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

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°	6523	6523	6523
5°	6505	6511	6519
10°	6485	6486	6505
15°	6431	6435	6454
20°	6348	6355	6378
25°	6233	6248	6276
30°	6116	6136	6174
35°	6004	6019	6067
40°	5877	5897	5950
45°	5748	5774	5832
50°	5609	5635	5700
55°	5451	5476	5566
60°	5269	5291	5410
65°	5039	5055	5151
70°	4730	4734	4836
75°	4299	4284	4382
80°	3694	3679	3741
85°	2865	2819	2834



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	229.0	3.5
10°-20°	651.5	9.9
20°-30°	969.9	14.8
30°-40°	1147.0	17.5
40°-50°	1171.0	17.9
50°-60°	1045.0	16.0
60°-70°	787.1	12.0
70°-80°	439.0	6.7
80°-90°	110.0	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°	1850.5	28.3
0°-40°	2997.6	45.8
0°-60°	5213.5	79.6
0°-90°	6549.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6549.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2424	2424	2424	2424	2424	
5°	2408	2413	2410	2411	2413	229
15°	2308	2311	2310	2312	2316	651
25°	2099	2102	2104	2110	2114	967
35°	1828	1826	1832	1839	1847	1143
45°	1510	1510	1517	1525	1533	1165
55°	1162	1160	1167	1175	1186	1038
65°	791	788	794	801	809	783
75°	414	410	412	414	422	438
85°	93	90	91	90	92	111
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2423.9	2423.9	2423.9	2423.9	2423.9
2.5°	2419.9	2423.9	2418.8	2419.9	2424.4
5°	2408.3	2412.8	2410.3	2410.8	2413.3
7.5°	2392.3	2398.3	2394.8	2395.8	2398.3
10°	2373.2	2377.7	2373.7	2376.2	2380.7
12.5°	2346.1	2348.1	2346.1	2347.1	2352.1
15°	2308.4	2311.0	2310.0	2312.0	2316.5
17.5°	2264.3	2267.3	2266.8	2270.8	2274.3
20°	2216.6	2217.1	2219.1	2223.1	2227.1
22.5°	2160.4	2161.9	2163.9	2169.4	2173.5
25°	2099.2	2101.7	2104.2	2109.7	2113.7
27.5°	2034.4	2037.0	2040.5	2046.5	2053.0
30°	1968.2	1968.2	1974.7	1980.7	1986.8
32.5°	1901.5	1898.9	1905.0	1912.5	1927.1
35°	1827.7	1825.7	1832.2	1839.2	1846.8
37.5°	1750.9	1749.4	1756.9	1764.5	1771.5
40°	1673.1	1671.1	1678.6	1686.2	1693.7
42.5°	1593.3	1592.3	1599.4	1606.9	1614.9
45°	1510.5	1510.0	1517.1	1524.6	1532.6
47.5°	1426.2	1425.2	1432.2	1440.3	1447.3
50°	1339.9	1338.9	1345.9	1354.0	1361.5
52.5°	1251.1	1251.1	1257.6	1264.6	1276.2
55°	1161.8	1160.2	1167.3	1175.3	1186.3
57.5°	1071.4	1069.4	1075.9	1084.0	1094.0
60°	979.1	977.1	983.1	991.1	1005.2
62.5°	885.7	882.7	888.8	896.3	904.8
65°	791.4	788.4	793.9	800.9	809.0
67.5°	696.5	693.0	698.6	704.6	712.1
70°	601.2	597.7	601.7	607.7	614.7
72.5°	506.4	502.8	506.4	508.9	517.4
75°	413.5	410.0	412.0	414.0	421.5
77.5°	323.2	319.7	323.7	324.7	329.2
80°	238.4	234.9	237.4	237.9	241.4
82.5°	161.1	158.1	161.6	159.1	162.1
85°	92.8	90.3	91.3	90.3	91.8
87.5°	36.6	34.6	35.1	33.1	33.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)