

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: P835137

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-1HI-50-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835137
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-1HI-50-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 5000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

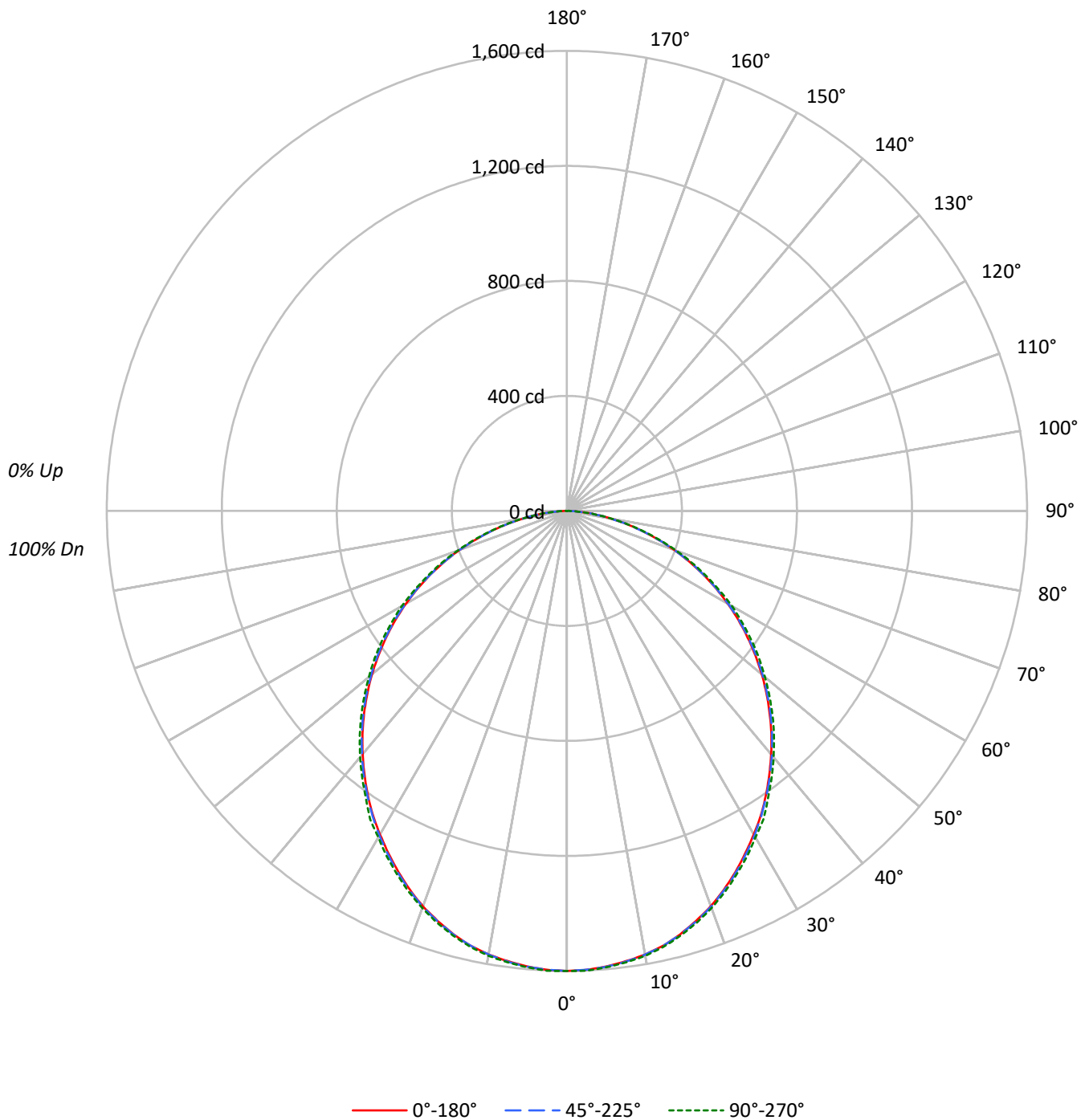
Lumens per Lamp: N/A
Luminaire Lumens: 4323.9 lumens
Efficiency: N/A
Efficacy: 98.3 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 44
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°	2153	2153	2153
5°	2147	2149	2152
10°	2140	2141	2147
15°	2123	2124	2130
20°	2095	2098	2105
25°	2057	2062	2072
30°	2019	2025	2038
35°	1982	1987	2003
40°	1940	1946	1964
45°	1897	1906	1925
50°	1852	1860	1881
55°	1799	1808	1837
60°	1739	1746	1786
65°	1663	1669	1700
70°	1561	1563	1596
75°	1419	1414	1447
80°	1220	1214	1235
85°	946	931	936



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	151.2	3.5
10°-20°	430.1	9.9
20°-30°	640.3	14.8
30°-40°	757.3	17.5
40°-50°	773.0	17.9
50°-60°	689.9	16.0
60°-70°	519.6	12.0
70°-80°	289.8	6.7
80°-90°	72.6	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°	1221.7	28.3
0°-40°	1978.9	45.8
0°-60°	3441.9	79.6
0°-90°	4323.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4323.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1600	1600	1600	1600	1600	
5°	1590	1593	1591	1592	1593	151
15°	1524	1526	1525	1526	1529	430
25°	1386	1388	1389	1393	1396	638
35°	1207	1205	1210	1214	1219	755
45°	997	997	1002	1006	1012	769
55°	767	766	771	776	783	686
65°	522	520	524	529	534	517
75°	273	271	272	273	278	289
85°	61	60	60	60	61	74
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1600.2	1600.2	1600.2	1600.2	1600.2
2.5°	1597.6	1600.2	1596.9	1597.6	1600.5
5°	1589.9	1592.9	1591.3	1591.6	1593.2
7.5°	1579.3	1583.3	1581.0	1581.6	1583.3
10°	1566.7	1569.7	1567.1	1568.7	1571.7
12.5°	1548.8	1550.2	1548.8	1549.5	1552.8
15°	1524.0	1525.7	1525.0	1526.3	1529.3
17.5°	1494.8	1496.8	1496.5	1499.2	1501.5
20°	1463.4	1463.7	1465.0	1467.7	1470.3
22.5°	1426.3	1427.3	1428.6	1432.2	1434.9
25°	1385.8	1387.5	1389.2	1392.8	1395.5
27.5°	1343.1	1344.8	1347.1	1351.1	1355.4
30°	1299.4	1299.4	1303.7	1307.7	1311.6
32.5°	1255.3	1253.7	1257.6	1262.6	1272.2
35°	1206.6	1205.3	1209.6	1214.2	1219.2
37.5°	1155.9	1154.9	1159.9	1164.9	1169.5
40°	1104.6	1103.2	1108.2	1113.2	1118.2
42.5°	1051.9	1051.2	1055.9	1060.8	1066.1
45°	997.2	996.9	1001.5	1006.5	1011.8
47.5°	941.6	940.9	945.5	950.8	955.5
50°	884.6	883.9	888.6	893.9	898.8
52.5°	825.9	825.9	830.2	834.9	842.5
55°	767.0	766.0	770.6	775.9	783.2
57.5°	707.3	706.0	710.3	715.6	722.2
60°	646.4	645.1	649.0	654.3	663.6
62.5°	584.8	582.8	586.7	591.7	597.3
65°	522.5	520.5	524.1	528.8	534.1
67.5°	459.9	457.5	461.2	465.2	470.1
70°	396.9	394.6	397.2	401.2	405.8
72.5°	334.3	332.0	334.3	335.9	341.6
75°	273.0	270.7	272.0	273.3	278.3
77.5°	213.4	211.0	213.7	214.4	217.3
80°	157.4	155.1	156.7	157.0	159.4
82.5°	106.3	104.4	106.7	105.0	107.0
85°	61.3	59.6	60.3	59.6	60.6
87.5°	24.2	22.9	23.2	21.9	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)