

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: P835612

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835612
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-LD4-4LO-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

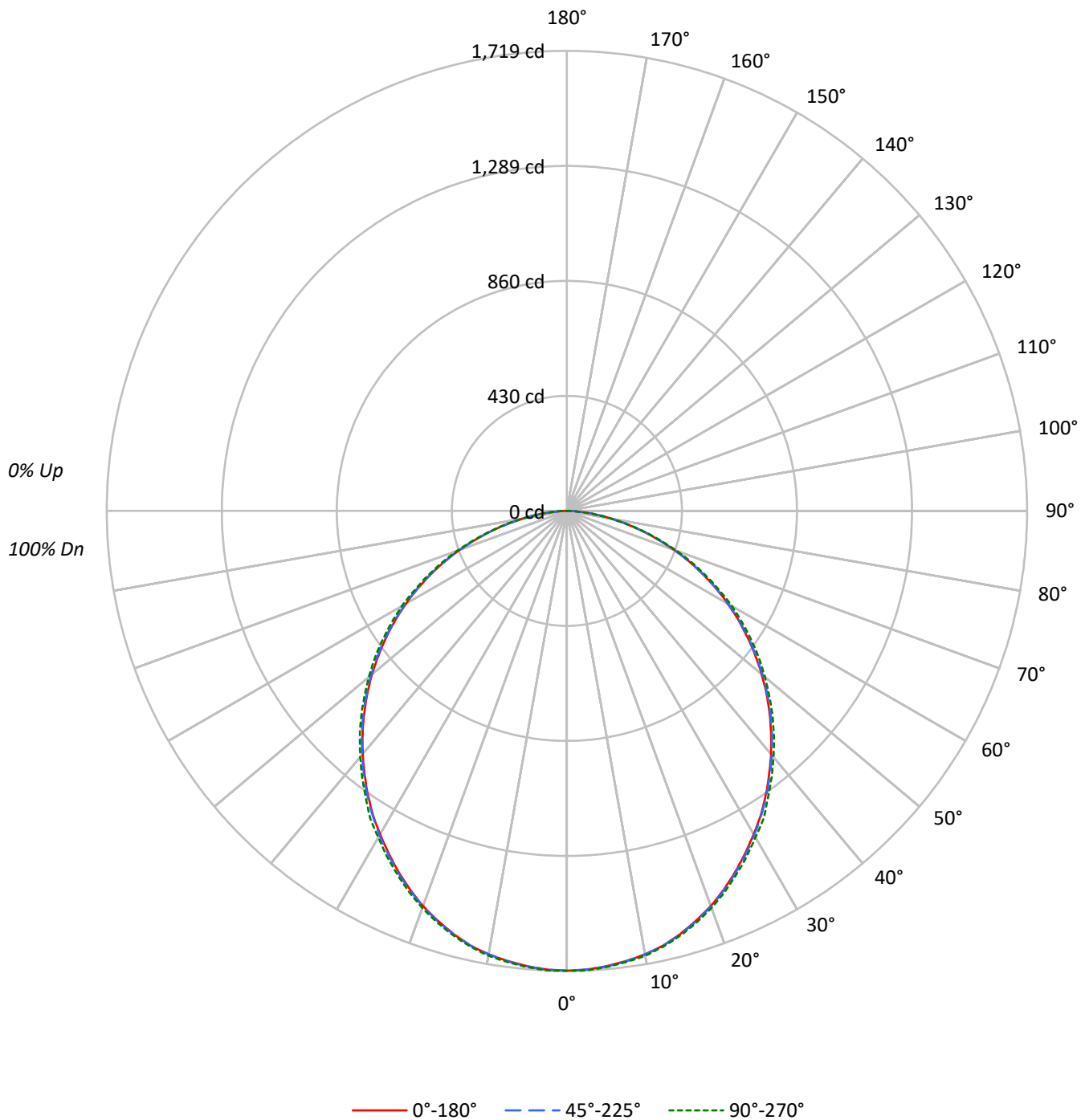
Lumens per Lamp: N/A
Luminaire Lumens: 4643.1 lumens
Efficiency: N/A
Efficacy: 99.2 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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
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°	4624	4624	4624
5°	4612	4616	4621
10°	4597	4598	4612
15°	4559	4562	4575
20°	4500	4505	4521
25°	4418	4429	4449
30°	4336	4350	4377
35°	4256	4267	4301
40°	4167	4180	4218
45°	4075	4093	4135
50°	3977	3994	4041
55°	3864	3882	3946
60°	3736	3751	3835
65°	3572	3584	3652
70°	3353	3356	3429
75°	3047	3037	3107
80°	2619	2608	2651
85°	2032	1998	2010

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	162.4	3.5
10°-20°	461.9	9.9
20°-30°	687.6	14.8
30°-40°	813.2	17.5
40°-50°	830.1	17.9
50°-60°	740.8	16.0
60°-70°	558.0	12.0
70°-80°	311.2	6.7
80°-90°	78.0	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°	1311.9	28.3
0°-40°	2125.0	45.8
0°-60°	3696.0	79.6
0°-90°	4643.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1718	1718	1718	1718	1718	
5°	1707	1710	1709	1709	1711	162
15°	1636	1638	1638	1639	1642	461
25°	1488	1490	1492	1496	1498	686
35°	1296	1294	1299	1304	1309	810
45°	1071	1070	1076	1081	1086	826
55°	824	822	828	833	841	736
65°	561	559	563	568	574	555
75°	293	291	292	294	299	311
85°	66	64	65	64	65	79
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1718.3	1718.3	1718.3	1718.3	1718.3
2.5°	1715.5	1718.3	1714.8	1715.5	1718.7
5°	1707.3	1710.5	1708.7	1709.1	1710.8
7.5°	1695.9	1700.2	1697.7	1698.4	1700.2
10°	1682.4	1685.6	1682.7	1684.5	1687.7
12.5°	1663.2	1664.6	1663.2	1663.9	1667.4
15°	1636.5	1638.3	1637.6	1639.0	1642.2
17.5°	1605.2	1607.3	1607.0	1609.8	1612.3
20°	1571.4	1571.7	1573.2	1576.0	1578.9
22.5°	1531.5	1532.6	1534.0	1537.9	1540.8
25°	1488.1	1489.9	1491.7	1495.6	1498.5
27.5°	1442.3	1444.0	1446.5	1450.8	1455.4
30°	1395.3	1395.3	1399.9	1404.2	1408.5
32.5°	1348.0	1346.2	1350.5	1355.8	1366.1
35°	1295.7	1294.3	1298.9	1303.9	1309.2
37.5°	1241.2	1240.2	1245.5	1250.9	1255.8
40°	1186.1	1184.7	1190.0	1195.4	1200.7
42.5°	1129.5	1128.8	1133.8	1139.1	1144.8
45°	1070.8	1070.5	1075.5	1080.8	1086.5
47.5°	1011.1	1010.4	1015.3	1021.0	1026.0
50°	949.9	949.2	954.1	959.8	965.2
52.5°	886.9	886.9	891.5	896.5	904.7
55°	823.6	822.5	827.5	833.2	841.0
57.5°	759.5	758.1	762.7	768.4	775.6
60°	694.1	692.7	696.9	702.6	712.6
62.5°	627.9	625.8	630.1	635.4	641.4
65°	561.0	558.9	562.8	567.8	573.5
67.5°	493.8	491.3	495.2	499.5	504.8
70°	426.2	423.7	426.6	430.8	435.8
72.5°	359.0	356.5	359.0	360.7	366.8
75°	293.1	290.7	292.1	293.5	298.8
77.5°	229.1	226.6	229.5	230.2	233.4
80°	169.0	166.5	168.3	168.6	171.1
82.5°	114.2	112.1	114.6	112.8	114.9
85°	65.8	64.0	64.7	64.0	65.1
87.5°	26.0	24.5	24.9	23.5	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)