

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: P835588

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-2LO-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835588
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-LD4-2LO-20-120-EDD
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

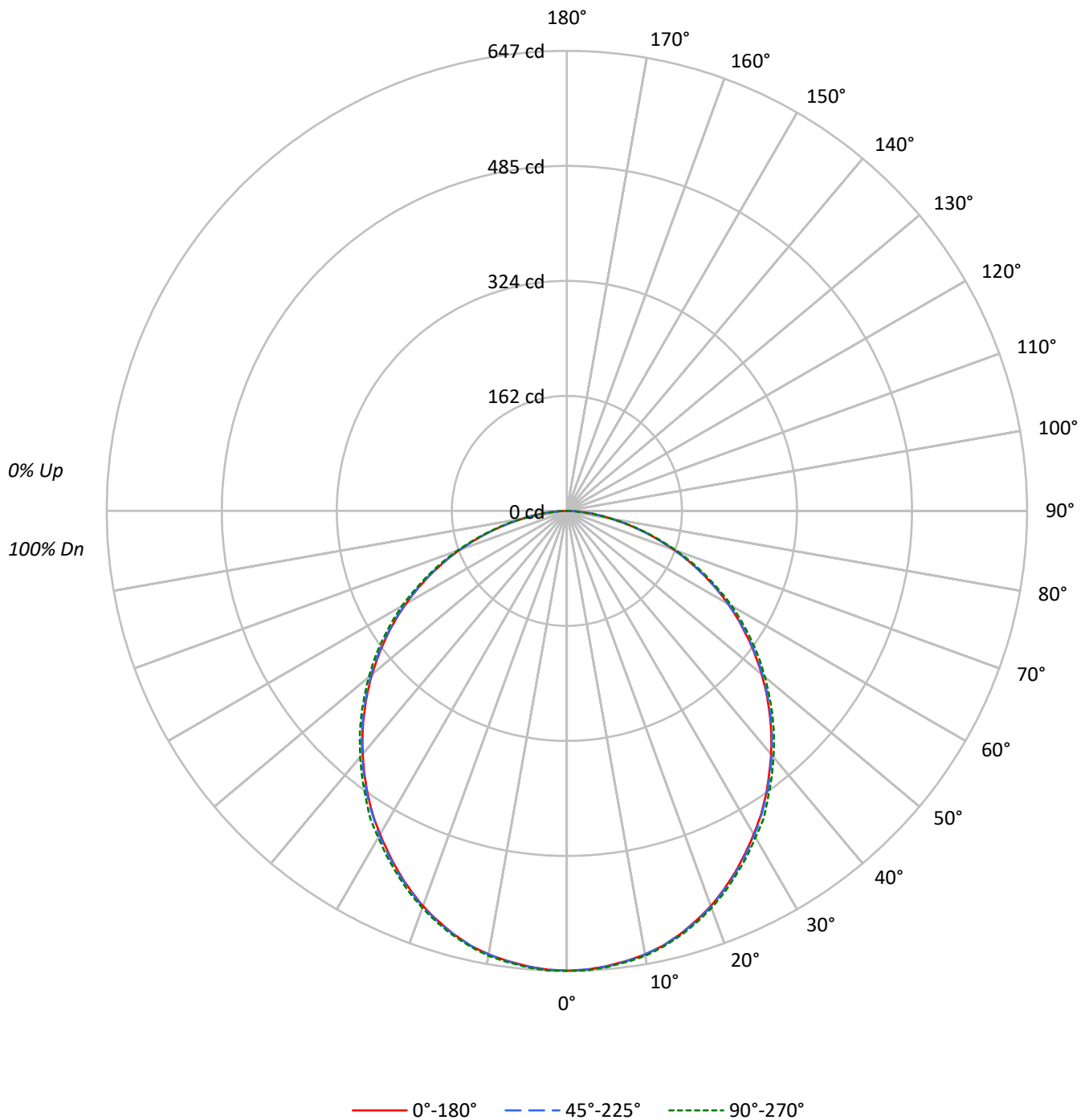
Lumens per Lamp: N/A
Luminaire Lumens: 1747.7 lumens
Efficiency: N/A
Efficacy: 74.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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	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°	1741	1741	1741
5°	1736	1737	1740
10°	1730	1731	1736
15°	1716	1717	1722
20°	1694	1696	1702
25°	1663	1667	1675
30°	1632	1637	1647
35°	1602	1606	1619
40°	1568	1573	1588
45°	1534	1541	1556
50°	1497	1504	1521
55°	1454	1461	1485
60°	1406	1412	1443
65°	1345	1349	1375
70°	1262	1264	1290
75°	1147	1143	1170
80°	986	981	998
85°	766	753	756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	61.1	3.5
10°-20°	173.9	9.9
20°-30°	258.8	14.8
30°-40°	306.1	17.5
40°-50°	312.5	17.9
50°-60°	278.9	16.0
60°-70°	210.0	12.0
70°-80°	117.1	6.7
80°-90°	29.3	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°	493.8	28.3
0°-40°	799.9	45.8
0°-60°	1391.2	79.6
0°-90°	1747.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1747.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	647	647	647	647	647	
5°	643	644	643	643	644	61
15°	616	617	616	617	618	174
25°	560	561	562	563	564	258
35°	488	487	489	491	493	305
45°	403	403	405	407	409	311
55°	310	310	312	314	317	277
65°	211	210	212	214	216	209
75°	110	109	110	110	112	117
85°	25	24	24	24	24	30
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	646.8	646.8	646.8	646.8	646.8
2.5°	645.7	646.8	645.5	645.7	646.9
5°	642.6	643.8	643.2	643.3	644.0
7.5°	638.4	640.0	639.0	639.3	640.0
10°	633.3	634.5	633.4	634.1	635.3
12.5°	626.0	626.6	626.0	626.3	627.6
15°	616.0	616.7	616.4	616.9	618.1
17.5°	604.2	605.0	604.9	606.0	606.9
20°	591.5	591.6	592.2	593.2	594.3
22.5°	576.5	576.9	577.4	578.9	580.0
25°	560.2	560.8	561.5	563.0	564.0
27.5°	542.9	543.5	544.5	546.1	547.8
30°	525.2	525.2	526.9	528.6	530.2
32.5°	507.4	506.7	508.3	510.3	514.2
35°	487.7	487.2	488.9	490.8	492.8
37.5°	467.2	466.8	468.8	470.8	472.7
40°	446.5	445.9	447.9	449.9	452.0
42.5°	425.2	424.9	426.8	428.8	430.9
45°	403.1	402.9	404.8	406.8	409.0
47.5°	380.6	380.3	382.2	384.3	386.2
50°	357.5	357.3	359.2	361.3	363.3
52.5°	333.8	333.8	335.6	337.5	340.5
55°	310.0	309.6	311.5	313.6	316.6
57.5°	285.9	285.4	287.1	289.3	291.9
60°	261.3	260.7	262.3	264.5	268.2
62.5°	236.4	235.6	237.2	239.2	241.4
65°	211.2	210.4	211.8	213.7	215.9
67.5°	185.9	184.9	186.4	188.0	190.0
70°	160.4	159.5	160.6	162.2	164.0
72.5°	135.1	134.2	135.1	135.8	138.1
75°	110.3	109.4	109.9	110.5	112.5
77.5°	86.2	85.3	86.4	86.6	87.8
80°	63.6	62.7	63.3	63.5	64.4
82.5°	43.0	42.2	43.1	42.5	43.3
85°	24.8	24.1	24.4	24.1	24.5
87.5°	9.8	9.2	9.4	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)