

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: P835713

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-1HI-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835713
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-LD4-1HI-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

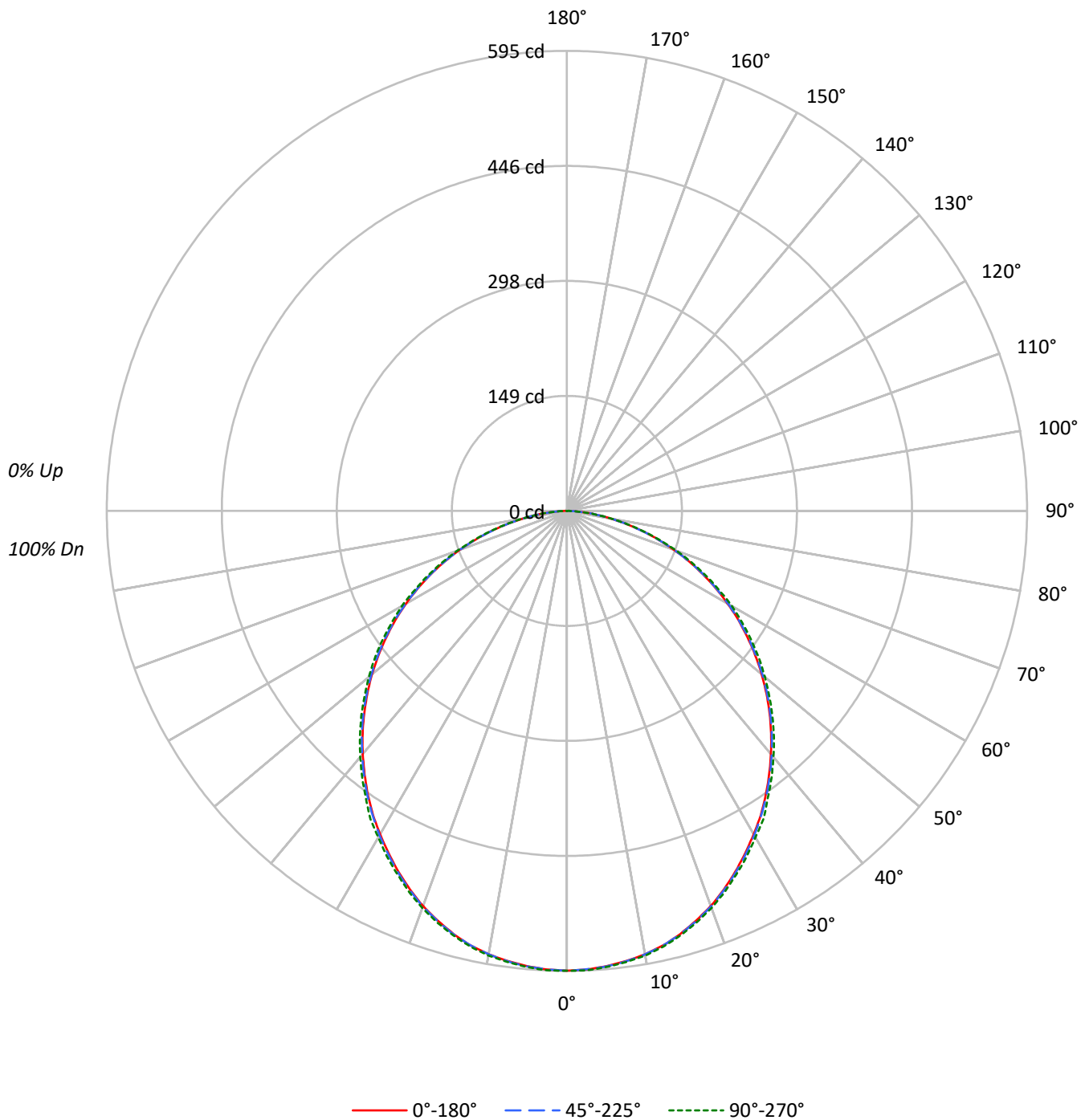
Lumens per Lamp: N/A
Luminaire Lumens: 1607.0 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 22
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

TEST NUMBER: P835713

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-1HI-27-120-EDD-90

Luminous Intensity Polar Plot



Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835713

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-1HI-27-120-EDD-90

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	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1600	1600	1600
5°	1596	1598	1599
10°	1591	1591	1596
15°	1578	1579	1584
20°	1558	1559	1565
25°	1529	1533	1540
30°	1501	1505	1515
35°	1473	1477	1488
40°	1442	1447	1460
45°	1410	1416	1431
50°	1376	1382	1399
55°	1337	1344	1366
60°	1293	1298	1327
65°	1237	1240	1264
70°	1161	1161	1186
75°	1055	1051	1075
80°	907	902	917
85°	704	692	695



TEST NUMBER: P835713

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-1HI-27-120-EDD-90

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.2	3.5
10°-20°	159.9	9.9
20°-30°	238.0	14.8
30°-40°	281.4	17.5
40°-50°	287.3	17.9
50°-60°	256.4	16.0
60°-70°	193.1	12.0
70°-80°	107.7	6.7
80°-90°	27.0	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°	454.0	28.3
0°-40°	735.5	45.8
0°-60°	1279.2	79.6
0°-90°	1607.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1607.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	595	595	595	595	595	
5°	591	592	591	592	592	56
15°	566	567	567	567	568	160
25°	515	516	516	518	519	237
35°	448	448	450	451	453	280
45°	371	370	372	374	376	286
55°	285	285	286	288	291	255
65°	194	193	195	196	198	192
75°	102	101	101	102	103	108
85°	23	22	22	22	22	27
90°	0	0	0	0	0	

Cooper Lighting Solutions Photometric Lab

1121 Highway 74 South

Peachtree City, GA 30269



TEST NUMBER: P835713

CATALOG NUMBER: ORLG-24-2-INS-OPL-LD4-1HI-27-120-EDD-90

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	594.7	594.7	594.7	594.7	594.7
2.5°	593.7	594.7	593.5	593.7	594.8
5°	590.9	592.0	591.4	591.5	592.1
7.5°	587.0	588.4	587.6	587.8	588.4
10°	582.3	583.4	582.4	583.0	584.1
12.5°	575.6	576.1	575.6	575.9	577.1
15°	566.4	567.0	566.8	567.3	568.4
17.5°	555.6	556.3	556.2	557.2	558.0
20°	543.9	544.0	544.5	545.5	546.5
22.5°	530.1	530.4	530.9	532.3	533.3
25°	515.1	515.7	516.3	517.6	518.6
27.5°	499.2	499.8	500.6	502.1	503.7
30°	482.9	482.9	484.5	486.0	487.5
32.5°	466.5	465.9	467.4	469.3	472.8
35°	448.4	447.9	449.6	451.3	453.1
37.5°	429.6	429.2	431.1	432.9	434.7
40°	410.5	410.0	411.9	413.7	415.6
42.5°	390.9	390.7	392.4	394.3	396.2
45°	370.6	370.5	372.2	374.1	376.0
47.5°	349.9	349.7	351.4	353.4	355.1
50°	328.8	328.5	330.2	332.2	334.1
52.5°	307.0	307.0	308.6	310.3	313.1
55°	285.0	284.7	286.4	288.4	291.1
57.5°	262.9	262.4	264.0	266.0	268.4
60°	240.2	239.7	241.2	243.2	246.6
62.5°	217.3	216.6	218.1	219.9	222.0
65°	194.2	193.4	194.8	196.5	198.5
67.5°	170.9	170.0	171.4	172.9	174.7
70°	147.5	146.6	147.6	149.1	150.8
72.5°	124.2	123.4	124.2	124.9	126.9
75°	101.5	100.6	101.1	101.6	103.4
77.5°	79.3	78.4	79.4	79.7	80.8
80°	58.5	57.6	58.2	58.4	59.2
82.5°	39.5	38.8	39.6	39.0	39.8
85°	22.8	22.2	22.4	22.2	22.5
87.5°	9.0	8.5	8.6	8.1	8.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)