

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: P835720

Luminaire Tested: **ORLG-24-2-INS-OPL-LD4-4LO-27-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835720
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-90
Description: 2FT x 2FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

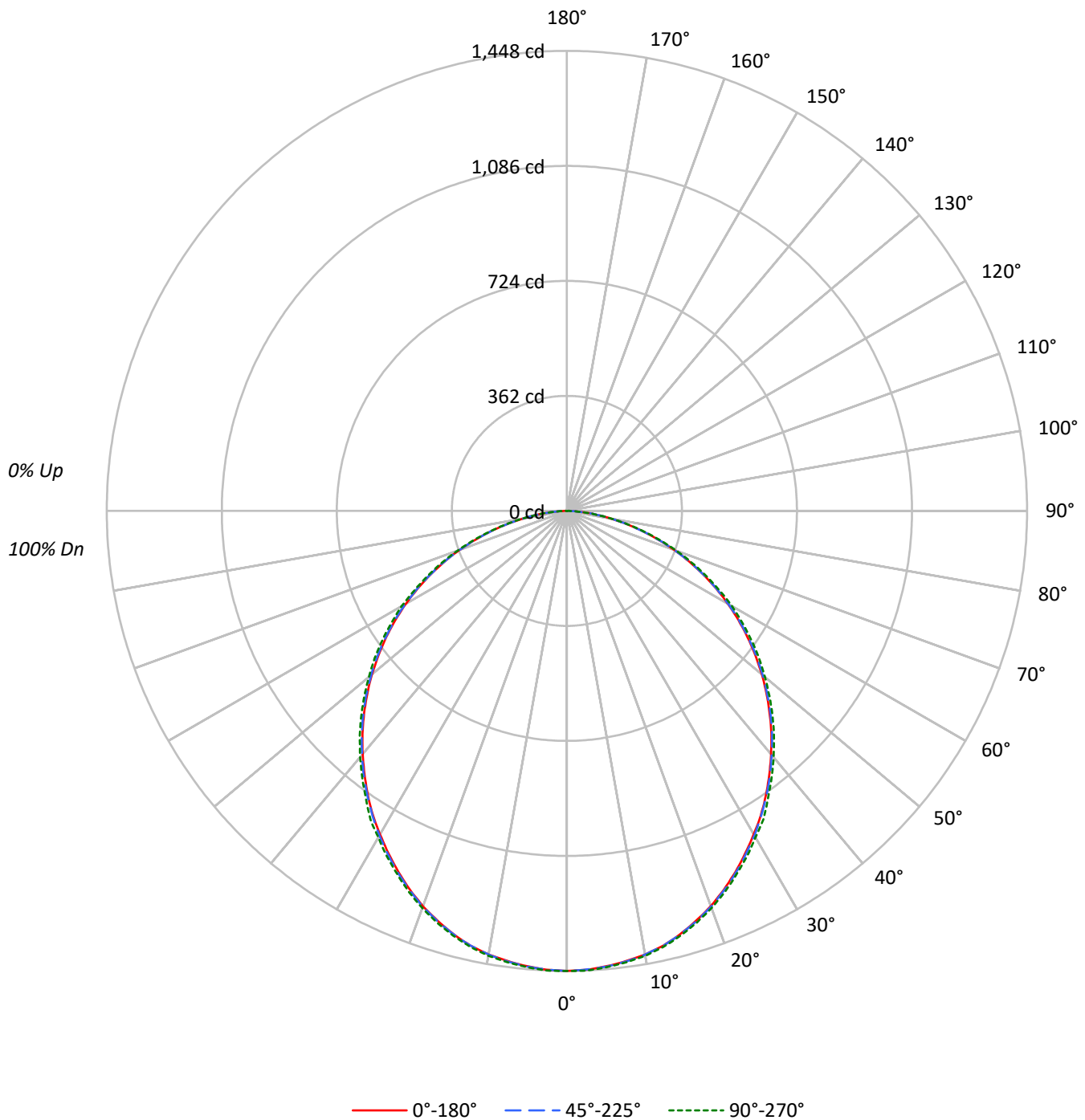
Lumens per Lamp: N/A
Luminaire Lumens: 3912.7 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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	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°	3897	3897	3897
5°	3886	3890	3894
10°	3874	3875	3886
15°	3842	3845	3855
20°	3792	3796	3810
25°	3724	3733	3749
30°	3654	3666	3688
35°	3587	3596	3624
40°	3511	3523	3554
45°	3434	3449	3484
50°	3351	3366	3405
55°	3256	3271	3325
60°	3148	3161	3232
65°	3011	3020	3077
70°	2826	2829	2890
75°	2568	2559	2618
80°	2207	2197	2235
85°	1714	1686	1695



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	136.8	3.5
10°-20°	389.2	9.9
20°-30°	579.4	14.8
30°-40°	685.2	17.5
40°-50°	699.5	17.9
50°-60°	624.3	16.0
60°-70°	470.2	12.0
70°-80°	262.2	6.7
80°-90°	65.7	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°	1105.5	28.3
0°-40°	1790.7	45.8
0°-60°	3114.6	79.6
0°-90°	3912.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3912.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1448	1448	1448	1448	1448	
5°	1439	1441	1440	1440	1442	137
15°	1379	1381	1380	1381	1384	389
25°	1254	1256	1257	1260	1263	578
35°	1092	1091	1095	1099	1103	683
45°	902	902	906	911	916	696
55°	694	693	697	702	709	620
65°	473	471	474	478	483	468
75°	247	245	246	247	252	262
85°	56	54	55	54	55	67
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1448.0	1448.0	1448.0	1448.0	1448.0
2.5°	1445.6	1448.0	1445.0	1445.6	1448.3
5°	1438.7	1441.4	1439.9	1440.2	1441.7
7.5°	1429.1	1432.7	1430.6	1431.2	1432.7
10°	1417.7	1420.4	1418.0	1419.5	1422.2
12.5°	1401.6	1402.8	1401.6	1402.2	1405.2
15°	1379.1	1380.6	1380.0	1381.2	1383.9
17.5°	1352.7	1354.5	1354.2	1356.6	1358.7
20°	1324.2	1324.5	1325.7	1328.1	1330.5
22.5°	1290.6	1291.5	1292.7	1296.0	1298.4
25°	1254.1	1255.6	1257.1	1260.3	1262.7
27.5°	1215.4	1216.9	1219.0	1222.6	1226.5
30°	1175.8	1175.8	1179.7	1183.3	1186.9
32.5°	1135.9	1134.4	1138.0	1142.5	1151.2
35°	1091.9	1090.7	1094.6	1098.8	1103.3
37.5°	1046.0	1045.1	1049.6	1054.1	1058.3
40°	999.5	998.3	1002.8	1007.3	1011.8
42.5°	951.9	951.3	955.5	960.0	964.7
45°	902.4	902.1	906.3	910.8	915.6
47.5°	852.0	851.4	855.6	860.4	864.6
50°	800.5	799.9	804.1	808.9	813.4
52.5°	747.4	747.4	751.3	755.5	762.4
55°	694.0	693.1	697.3	702.1	708.7
57.5°	640.1	638.9	642.8	647.6	653.6
60°	584.9	583.7	587.3	592.1	600.5
62.5°	529.1	527.3	530.9	535.4	540.5
65°	472.8	471.0	474.3	478.5	483.3
67.5°	416.1	414.0	417.3	420.9	425.4
70°	359.2	357.1	359.5	363.1	367.3
72.5°	302.5	300.4	302.5	304.0	309.1
75°	247.0	244.9	246.1	247.3	251.8
77.5°	193.1	191.0	193.4	194.0	196.7
80°	142.4	140.3	141.8	142.1	144.2
82.5°	96.2	94.4	96.5	95.0	96.8
85°	55.5	54.0	54.6	54.0	54.9
87.5°	21.9	20.7	21.0	19.8	19.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)