

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: P835716

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

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835716
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-LD4-2HI-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

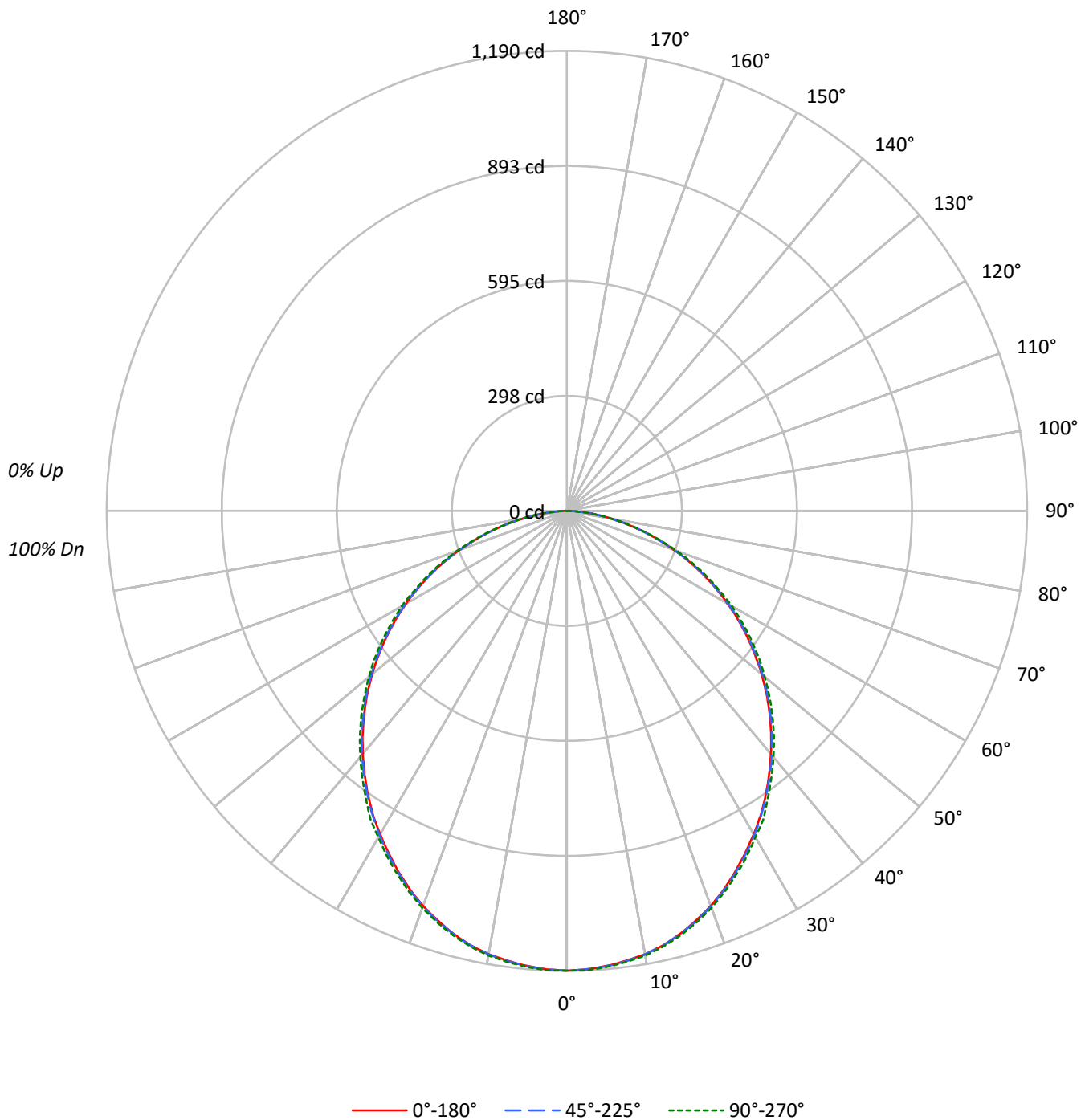
Lumens per Lamp: N/A
Luminaire Lumens: 3213.4 lumens
Efficiency: N/A
Efficacy: 73.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 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

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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°	3200	3200	3200
5°	3192	3195	3199
10°	3182	3182	3192
15°	3155	3157	3166
20°	3114	3118	3129
25°	3058	3065	3079
30°	3001	3011	3029
35°	2946	2953	2977
40°	2884	2893	2919
45°	2820	2833	2861
50°	2752	2765	2797
55°	2674	2687	2731
60°	2585	2596	2654
65°	2472	2480	2527
70°	2321	2323	2373
75°	2110	2101	2150
80°	1813	1805	1835
85°	1408	1383	1392

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.4	3.5
10°-20°	319.7	9.9
20°-30°	475.9	14.8
30°-40°	562.8	17.5
40°-50°	574.5	17.9
50°-60°	512.7	16.0
60°-70°	386.2	12.0
70°-80°	215.4	6.7
80°-90°	54.0	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°	907.9	28.3
0°-40°	1470.7	45.8
0°-60°	2557.9	79.6
0°-90°	3213.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3213.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1189	1189	1189	1189	1189	
5°	1182	1184	1183	1183	1184	112
15°	1133	1134	1133	1134	1136	319
25°	1030	1031	1032	1035	1037	474
35°	897	896	899	902	906	561
45°	741	741	744	748	752	572
55°	570	569	573	577	582	510
65°	388	387	390	393	397	384
75°	203	201	202	203	207	215
85°	46	44	45	44	45	55
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1189.2	1189.2	1189.2	1189.2	1189.2
2.5°	1187.3	1189.2	1186.8	1187.3	1189.5
5°	1181.6	1183.8	1182.6	1182.8	1184.1
7.5°	1173.7	1176.7	1174.9	1175.4	1176.7
10°	1164.4	1166.6	1164.6	1165.8	1168.1
12.5°	1151.1	1152.1	1151.1	1151.6	1154.0
15°	1132.6	1133.8	1133.3	1134.3	1136.5
17.5°	1110.9	1112.4	1112.2	1114.1	1115.9
20°	1087.5	1087.8	1088.8	1090.7	1092.7
22.5°	1060.0	1060.7	1061.7	1064.4	1066.4
25°	1029.9	1031.2	1032.4	1035.1	1037.1
27.5°	998.2	999.4	1001.1	1004.1	1007.3
30°	965.7	965.7	968.9	971.8	974.8
32.5°	932.9	931.7	934.6	938.3	945.5
35°	896.7	895.7	898.9	902.4	906.1
37.5°	859.1	858.3	862.0	865.7	869.1
40°	820.9	819.9	823.6	827.3	831.0
42.5°	781.7	781.2	784.7	788.4	792.3
45°	741.1	740.9	744.3	748.0	751.9
47.5°	699.8	699.3	702.7	706.6	710.1
50°	657.4	656.9	660.4	664.3	668.0
52.5°	613.8	613.8	617.0	620.5	626.1
55°	570.0	569.3	572.7	576.6	582.1
57.5°	525.7	524.7	527.9	531.8	536.8
60°	480.4	479.4	482.3	486.3	493.2
62.5°	434.6	433.1	436.1	439.7	443.9
65°	388.3	386.8	389.5	393.0	396.9
67.5°	341.7	340.0	342.7	345.7	349.4
70°	295.0	293.2	295.2	298.2	301.6
72.5°	248.4	246.7	248.4	249.7	253.9
75°	202.9	201.2	202.1	203.1	206.8
77.5°	158.6	156.8	158.8	159.3	161.5
80°	117.0	115.2	116.5	116.7	118.4
82.5°	79.0	77.6	79.3	78.1	79.5
85°	45.6	44.3	44.8	44.3	45.1
87.5°	18.0	17.0	17.2	16.3	16.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)