

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: P834953

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-6STD-20-120-EDD**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P834953
Test Lab: INNOVATION CENTER(G2)
Issue Date: 5/16/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-24-4-INS-OPL-LD4-6STD-20-120-EDD
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 2000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

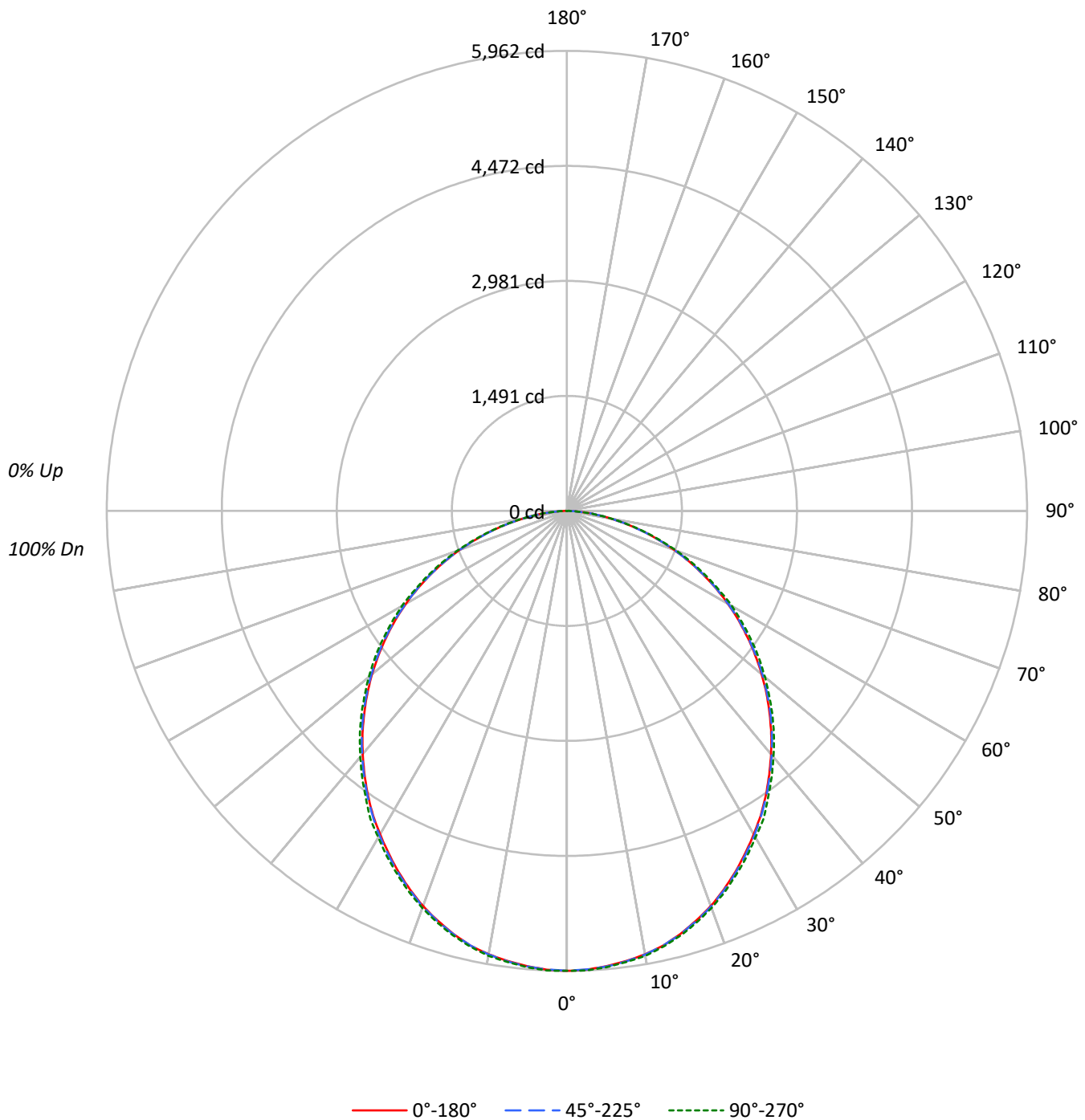
Lumens per Lamp: N/A
Luminaire Lumens: 16105.3 lumens
Efficiency: N/A
Efficacy: 80.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 199.8
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

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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°	8020	8020	8020
5°	7998	8005	8015
10°	7973	7975	7998
15°	7907	7912	7935
20°	7804	7813	7841
25°	7663	7682	7716
30°	7519	7544	7590
35°	7382	7400	7459
40°	7226	7250	7315
45°	7068	7098	7171
50°	6897	6928	7008
55°	6701	6733	6843
60°	6479	6505	6651
65°	6195	6215	6333
70°	5816	5821	5947
75°	5286	5267	5389
80°	4542	4523	4599
85°	3524	3467	3486

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	563.2	3.5
10°-20°	1602.1	9.9
20°-30°	2385.1	14.8
30°-40°	2820.6	17.5
40°-50°	2879.4	17.9
50°-60°	2569.7	16.0
60°-70°	1935.5	12.0
70°-80°	1079.4	6.7
80°-90°	270.4	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°	4550.4	28.3
0°-40°	7370.9	45.8
0°-60°	12820.0	79.6
0°-90°	16105.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16105.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5960	5960	5960	5960	5960	
5°	5922	5933	5927	5928	5934	563
15°	5676	5683	5680	5685	5696	1600
25°	5162	5168	5174	5188	5198	2378
35°	4494	4489	4505	4523	4541	2810
45°	3714	3713	3730	3749	3769	2865
55°	2857	2853	2870	2890	2917	2554
65°	1946	1939	1952	1970	1989	1925
75°	1017	1008	1013	1018	1037	1078
85°	228	222	225	222	226	274
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5960.3	5960.3	5960.3	5960.3	5960.3
2.5°	5950.4	5960.3	5947.9	5950.4	5961.5
5°	5922.0	5933.1	5926.9	5928.2	5934.3
7.5°	5882.5	5897.3	5888.7	5891.1	5897.3
10°	5835.6	5846.7	5836.9	5843.0	5854.1
12.5°	5769.0	5773.9	5769.0	5771.5	5783.8
15°	5676.4	5682.6	5680.1	5685.1	5696.2
17.5°	5567.8	5575.2	5574.0	5583.9	5592.5
20°	5450.6	5451.8	5456.8	5466.7	5476.5
22.5°	5312.4	5316.1	5321.0	5334.6	5344.5
25°	5161.9	5168.0	5174.2	5187.8	5197.6
27.5°	5002.7	5008.8	5017.5	5032.3	5048.3
30°	4839.8	4839.8	4855.8	4870.6	4885.4
32.5°	4675.7	4669.5	4684.3	4702.8	4738.6
35°	4494.3	4489.3	4505.4	4522.6	4541.1
37.5°	4305.5	4301.7	4320.3	4338.8	4356.0
40°	4114.2	4109.2	4127.8	4146.3	4164.8
42.5°	3918.0	3915.5	3932.8	3951.3	3971.0
45°	3714.4	3713.1	3730.4	3748.9	3768.7
47.5°	3507.0	3504.6	3521.9	3541.6	3558.9
50°	3294.8	3292.3	3309.6	3329.4	3347.9
52.5°	3076.4	3076.4	3092.4	3109.7	3138.1
55°	2856.7	2853.0	2870.3	2890.0	2917.2
57.5°	2634.6	2629.7	2645.7	2665.5	2690.1
60°	2407.5	2402.6	2417.4	2437.2	2471.7
62.5°	2178.0	2170.6	2185.4	2203.9	2224.9
65°	1946.0	1938.6	1952.2	1969.5	1989.2
67.5°	1712.8	1704.2	1717.7	1732.5	1751.1
70°	1478.3	1469.7	1479.6	1494.4	1511.7
72.5°	1245.1	1236.5	1245.1	1251.3	1272.3
75°	1016.8	1008.2	1013.1	1018.1	1036.6
77.5°	794.7	786.1	795.9	798.4	809.5
80°	586.2	577.5	583.7	584.9	593.6
82.5°	396.1	388.7	397.4	391.2	398.6
85°	228.3	222.1	224.6	222.1	225.8
87.5°	90.1	85.1	86.4	81.4	81.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)