

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: P835113

Luminaire Tested: **ORLG-24-4-INS-OPL-LD4-5HI-35-120-EDD-90**

Issue Date: 5/16/2024



Test Information

Test Method: LM-79-08
Report Number: P835113
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-LD4-5HI-35-120-EDD-90
Description: 2FT x 4FT ORL LED LUMINAIRE WITH opal acrylic lens
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

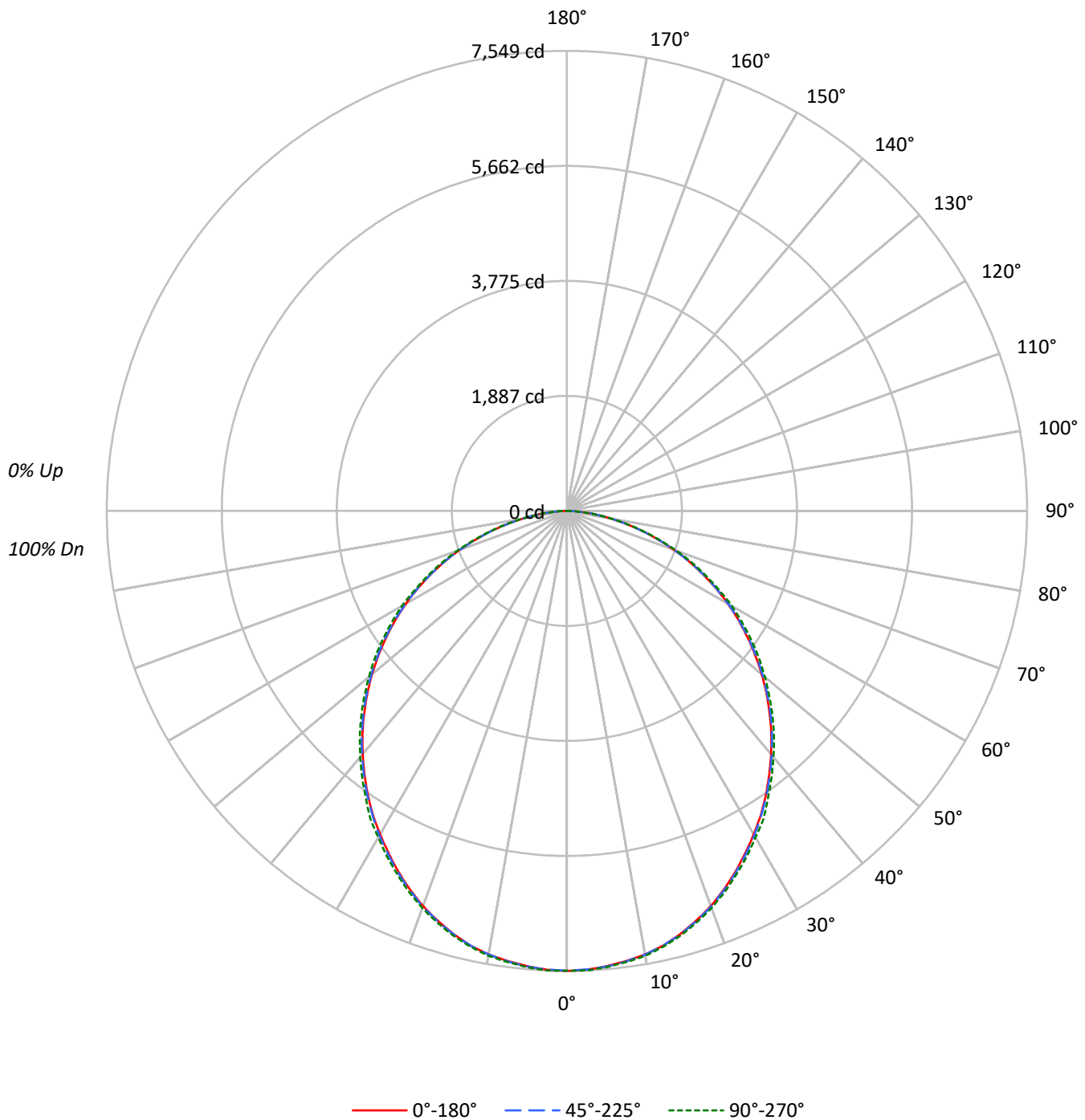
Lumens per Lamp: N/A
Luminaire Lumens: 20392.8 lumens
Efficiency: N/A
Efficacy: 92.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 220
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°	10154	10154	10154
5°	10128	10136	10149
10°	10095	10098	10127
15°	10012	10019	10047
20°	9882	9893	9929
25°	9703	9727	9771
30°	9521	9553	9611
35°	9347	9370	9445
40°	9150	9180	9262
45°	8949	8988	9080
50°	8733	8772	8873
55°	8485	8526	8665
60°	8203	8237	8422
65°	7845	7870	8019
70°	7364	7370	7530
75°	6693	6669	6823
80°	5751	5727	5824
85°	4463	4390	4414

Classified

Scaled Data Report

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	713.2	3.5
10°-20°	2028.6	9.9
20°-30°	3020.0	14.8
30°-40°	3571.4	17.5
40°-50°	3645.9	17.9
50°-60°	3253.8	16.0
60°-70°	2450.7	12.0
70°-80°	1366.7	6.7
80°-90°	342.4	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°	5761.8	28.3
0°-40°	9333.2	45.8
0°-60°	16233.0	79.6
0°-90°	20392.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20392.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7547	7547	7547	7547	7547	
5°	7499	7513	7505	7506	7514	712
15°	7188	7195	7192	7199	7213	2026
25°	6536	6544	6552	6569	6581	3011
35°	5691	5684	5705	5727	5750	3559
45°	4703	4702	4724	4747	4772	3628
55°	3617	3613	3634	3659	3694	3233
65°	2464	2455	2472	2494	2519	2437
75°	1288	1277	1283	1289	1312	1365
85°	289	281	284	281	286	347
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7547.0	7547.0	7547.0	7547.0	7547.0
2.5°	7534.5	7547.0	7531.4	7534.5	7548.6
5°	7498.6	7512.6	7504.8	7506.4	7514.2
7.5°	7448.6	7467.3	7456.4	7459.5	7467.3
10°	7389.2	7403.2	7390.7	7398.6	7412.6
12.5°	7304.8	7311.1	7304.8	7307.9	7323.6
15°	7187.6	7195.4	7192.3	7198.6	7212.6
17.5°	7050.1	7059.5	7057.9	7070.4	7081.4
20°	6901.7	6903.2	6909.5	6922.0	6934.5
22.5°	6726.7	6731.4	6737.6	6754.8	6767.3
25°	6536.0	6543.9	6551.7	6568.9	6581.4
27.5°	6334.5	6342.3	6353.2	6372.0	6392.3
30°	6128.2	6128.2	6148.5	6167.3	6186.0
32.5°	5920.4	5912.6	5931.3	5954.8	6000.1
35°	5690.7	5684.5	5704.8	5726.7	5750.1
37.5°	5451.6	5447.0	5470.4	5493.8	5515.7
40°	5209.5	5203.2	5226.6	5250.1	5273.5
42.5°	4961.0	4957.9	4979.8	5003.2	5028.2
45°	4703.2	4701.6	4723.5	4746.9	4771.9
47.5°	4440.7	4437.6	4459.4	4484.4	4506.3
50°	4171.9	4168.8	4190.7	4215.7	4239.1
52.5°	3895.4	3895.4	3915.7	3937.6	3973.5
55°	3617.2	3612.6	3634.4	3659.4	3693.8
57.5°	3336.0	3329.7	3350.1	3375.1	3406.3
60°	3048.5	3042.2	3061.0	3086.0	3129.7
62.5°	2757.9	2748.5	2767.2	2790.7	2817.2
65°	2464.1	2454.7	2471.9	2493.8	2518.8
67.5°	2168.8	2157.8	2175.0	2193.8	2217.2
70°	1871.9	1861.0	1873.5	1892.2	1914.1
72.5°	1576.6	1565.6	1576.6	1584.4	1611.0
75°	1287.5	1276.6	1282.8	1289.1	1312.5
77.5°	1006.3	995.3	1007.8	1011.0	1025.0
80°	742.2	731.3	739.1	740.6	751.6
82.5°	501.6	492.2	503.1	495.3	504.7
85°	289.1	281.3	284.4	281.3	285.9
87.5°	114.1	107.8	109.4	103.1	103.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)