

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: P485055

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3HI-30-120-EDD**

Issue Date: 3/1/2021

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.



Test Information

Test Method: LM-79-08
Report Number: P485055
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35357)
Test Lab: INNOVATION CENTER
Issue Date: 3/1/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: ORLG-12-4-INS-89BC-LD4-3HI-30-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

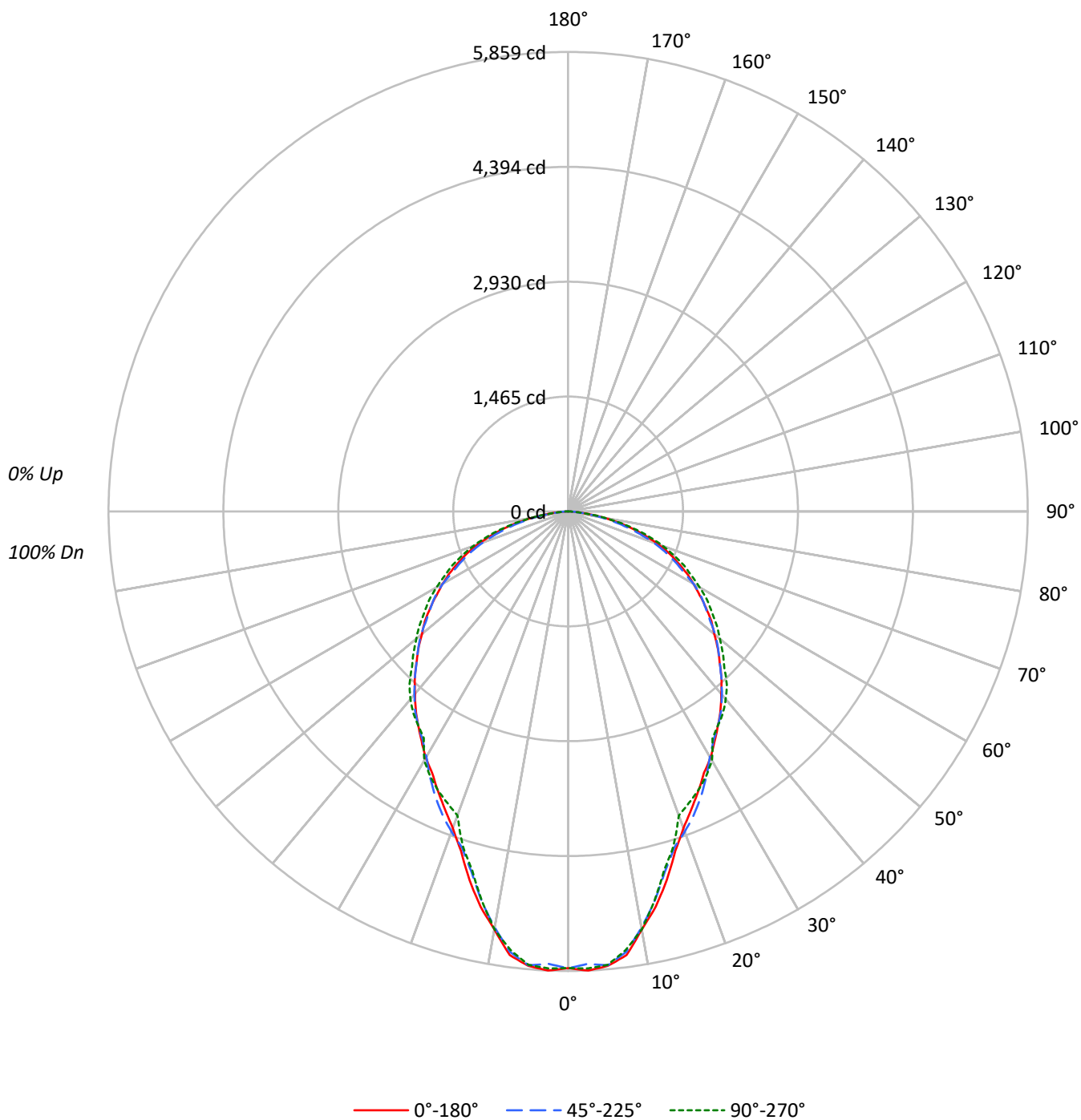
Lumens per Lamp: N/A
Luminaire Lumens: 12452.5 lumens
Efficiency: N/A
Efficacy: 94.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 132
Input Voltage (V): NR
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: 25 FT

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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	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
1	109	104	100	96	106	102	98	95		98	95	92		94	91	89		90	88	86
2	99	91	84	79	97	89	83	78		86	81	76		82	78	74		79	76	73
3	91	80	72	66	88	79	71	65		76	69	64		73	67	63		70	66	62
4	83	71	63	56	81	70	62	56		67	60	55		65	59	54		63	58	53
5	77	64	55	48	75	63	54	48		61	53	48		59	52	47		57	51	47
6	71	58	49	43	69	57	48	42		55	48	42		53	47	42		52	46	41
7	66	53	44	38	64	52	44	38		50	43	37		49	42	37		47	41	37
8	61	48	40	34	60	47	39	34		46	39	34		45	38	33		44	38	33
9	58	44	36	31	56	44	36	31		43	35	30		41	35	30		40	35	30
10	54	41	33	28	53	40	33	28		40	33	28		39	32	28		38	32	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15669	15669	15669
5°	15712	15688	15671
10°	14785	14719	14777
15°	13547	13252	13176
20°	12304	12443	11810
25°	11669	11903	11652
30°	11271	11224	11394
35°	10942	10942	10942
40°	10668	10711	10977
45°	10405	10394	10717
50°	10179	10255	10572
55°	10072	10029	10484
60°	9940	9924	10430
65°	9813	9505	10372
70°	9625	9076	10101
75°	8909	8059	9350
80°	7226	6569	7414
85°	4582	4113	4020



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	540.8	4.3
10°-20°	1352.0	10.9
20°-30°	1825.9	14.7
30°-40°	2090.9	16.8
40°-50°	2141.8	17.2
50°-60°	1943.4	15.6
60°-70°	1516.8	12.2
70°-80°	860.3	6.9
80°-90°	180.6	1.5
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°	3718.8	29.9
0°-40°	5809.7	46.7
0°-60°	9894.9	79.5
0°-90°	12452.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12452.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5823	5823	5823	5823	5823	
5°	5817	5750	5808	5820	5802	543
15°	4863	4878	4757	4781	4730	1359
25°	3930	3982	4009	3912	3924	1814
35°	3331	3337	3331	3334	3331	2086
45°	2734	2755	2731	2843	2816	2114
55°	2147	2144	2138	2213	2235	1918
65°	1541	1508	1493	1562	1629	1527
75°	857	793	775	821	899	896
85°	148	133	133	124	130	196
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5822.7	5822.7	5822.7	5822.7	5822.7
2.5°	5859.0	5813.6	5774.2	5837.8	5831.8
5°	5816.6	5750.0	5807.5	5819.7	5801.5
7.5°	5704.6	5662.2	5665.2	5641.0	5638.0
10°	5410.9	5435.1	5386.7	5429.1	5407.9
12.5°	5159.6	5174.7	5089.9	5108.1	5083.9
15°	4862.8	4878.0	4756.9	4781.1	4729.6
17.5°	4538.8	4593.4	4493.4	4523.7	4469.2
20°	4296.6	4342.0	4345.1	4296.6	4124.0
22.5°	4105.9	4151.3	4187.6	4042.3	4024.1
25°	3930.2	3981.7	4009.0	3912.1	3924.2
27.5°	3754.6	3812.1	3812.1	3833.3	3806.1
30°	3627.4	3651.7	3612.3	3691.0	3666.8
32.5°	3476.0	3485.1	3451.8	3509.4	3424.6
35°	3330.7	3336.8	3330.7	3333.7	3330.7
37.5°	3191.4	3176.3	3203.5	3185.4	3242.9
40°	3037.0	3037.0	3049.1	3079.4	3124.8
42.5°	2894.7	2906.8	2891.7	2976.4	2994.6
45°	2734.2	2755.4	2731.2	2843.2	2816.0
47.5°	2588.9	2598.0	2591.9	2667.6	2673.7
50°	2431.4	2443.5	2449.6	2516.2	2525.3
52.5°	2301.2	2298.2	2277.0	2373.9	2389.0
55°	2146.8	2143.8	2137.7	2213.4	2234.6
57.5°	1989.3	1992.4	2007.5	2049.9	2101.4
60°	1847.0	1831.9	1844.0	1895.5	1937.9
62.5°	1701.7	1674.4	1647.2	1732.0	1771.3
65°	1541.2	1507.9	1492.8	1562.4	1629.0
67.5°	1392.8	1338.3	1329.3	1377.7	1456.4
70°	1223.3	1156.7	1153.6	1190.0	1283.8
72.5°	1035.5	978.0	962.9	1011.3	1096.1
75°	856.9	793.3	775.1	820.6	899.3
77.5°	663.1	611.6	599.5	623.8	687.3
80°	466.3	436.0	423.9	433.0	478.4
82.5°	293.7	272.5	266.5	263.4	287.7
85°	148.4	133.2	133.2	124.1	130.2
87.5°	45.4	42.4	39.4	30.3	33.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)