

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: P485012

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1STD-50-120-EDD-90**

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: P485012
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-LD4-1STD-50-120-EDD-90
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

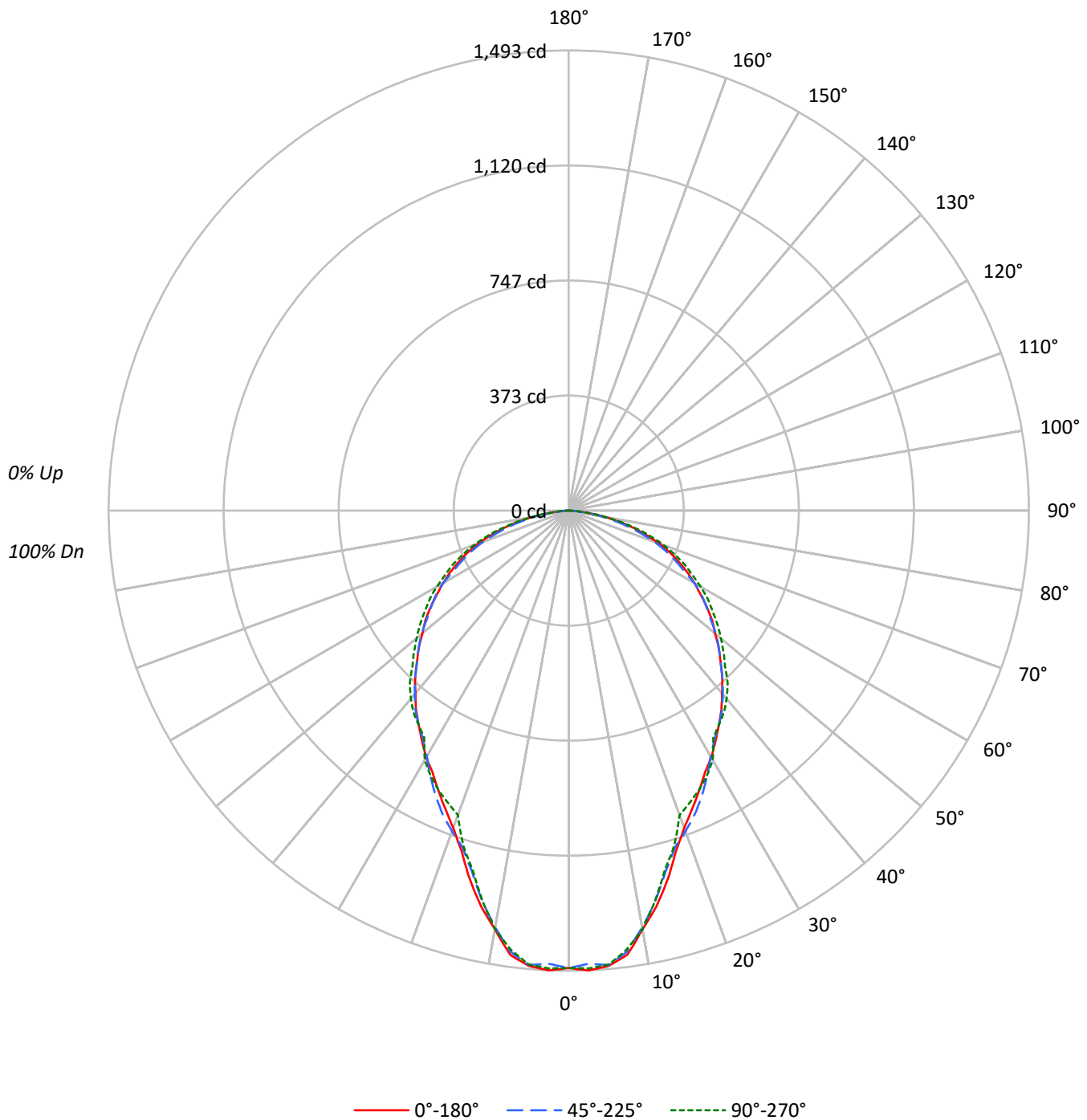
Lumens per Lamp: N/A
Luminaire Lumens: 3174.0 lumens
Efficiency: N/A
Efficacy: 95.3 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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°	3994	3994	3994
5°	4005	3999	3994
10°	3769	3752	3766
15°	3453	3378	3358
20°	3136	3172	3010
25°	2975	3034	2970
30°	2873	2861	2904
35°	2789	2789	2789
40°	2719	2730	2798
45°	2652	2649	2732
50°	2594	2614	2695
55°	2567	2556	2672
60°	2534	2530	2658
65°	2501	2423	2644
70°	2453	2313	2574
75°	2271	2054	2383
80°	1843	1674	1889
85°	1167	1050	1025



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.8	4.3
10°-20°	344.6	10.9
20°-30°	465.4	14.7
30°-40°	533.0	16.8
40°-50°	545.9	17.2
50°-60°	495.4	15.6
60°-70°	386.6	12.2
70°-80°	219.3	6.9
80°-90°	46.0	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°	947.9	29.9
0°-40°	1480.8	46.7
0°-60°	2522.1	79.5
0°-90°	3174.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3174.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1484	1484	1484	1484	1484	
5°	1483	1466	1480	1483	1479	138
15°	1240	1243	1212	1219	1206	346
25°	1002	1015	1022	997	1000	462
35°	849	850	849	850	849	532
45°	697	702	696	725	718	539
55°	547	546	545	564	570	489
65°	393	384	380	398	415	389
75°	218	202	198	209	229	228
85°	38	34	34	32	33	50
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1484.1	1484.1	1484.1	1484.1	1484.1
2.5°	1493.4	1481.8	1471.8	1488.0	1486.5
5°	1482.6	1465.6	1480.3	1483.4	1478.7
7.5°	1454.0	1443.2	1444.0	1437.8	1437.1
10°	1379.2	1385.3	1373.0	1383.8	1378.4
12.5°	1315.1	1319.0	1297.4	1302.0	1295.8
15°	1239.5	1243.3	1212.5	1218.6	1205.5
17.5°	1156.9	1170.8	1145.3	1153.0	1139.1
20°	1095.2	1106.7	1107.5	1095.2	1051.2
22.5°	1046.5	1058.1	1067.4	1030.3	1025.7
25°	1001.8	1014.9	1021.8	997.1	1000.2
27.5°	957.0	971.7	971.7	977.1	970.1
30°	924.6	930.8	920.7	940.8	934.6
32.5°	886.0	888.3	879.8	894.5	872.9
35°	849.0	850.5	849.0	849.7	849.0
37.5°	813.5	809.6	816.5	811.9	826.6
40°	774.1	774.1	777.2	784.9	796.5
42.5°	737.8	740.9	737.1	758.7	763.3
45°	696.9	702.3	696.1	724.7	717.8
47.5°	659.9	662.2	660.6	679.9	681.5
50°	619.7	622.8	624.4	641.4	643.7
52.5°	586.6	585.8	580.4	605.1	608.9
55°	547.2	546.4	544.9	564.2	569.6
57.5°	507.1	507.8	511.7	522.5	535.6
60°	470.8	466.9	470.0	483.1	493.9
62.5°	433.7	426.8	419.8	441.5	451.5
65°	392.8	384.3	380.5	398.2	415.2
67.5°	355.0	341.1	338.8	351.2	371.2
70°	311.8	294.8	294.0	303.3	327.2
72.5°	263.9	249.3	245.4	257.8	279.4
75°	218.4	202.2	197.6	209.2	229.2
77.5°	169.0	155.9	152.8	159.0	175.2
80°	118.9	111.1	108.0	110.4	121.9
82.5°	74.9	69.5	67.9	67.1	73.3
85°	37.8	34.0	34.0	31.6	33.2
87.5°	11.6	10.8	10.0	7.7	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)