

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: P485067

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3LO-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: P485067
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-LD4-3LO-30-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

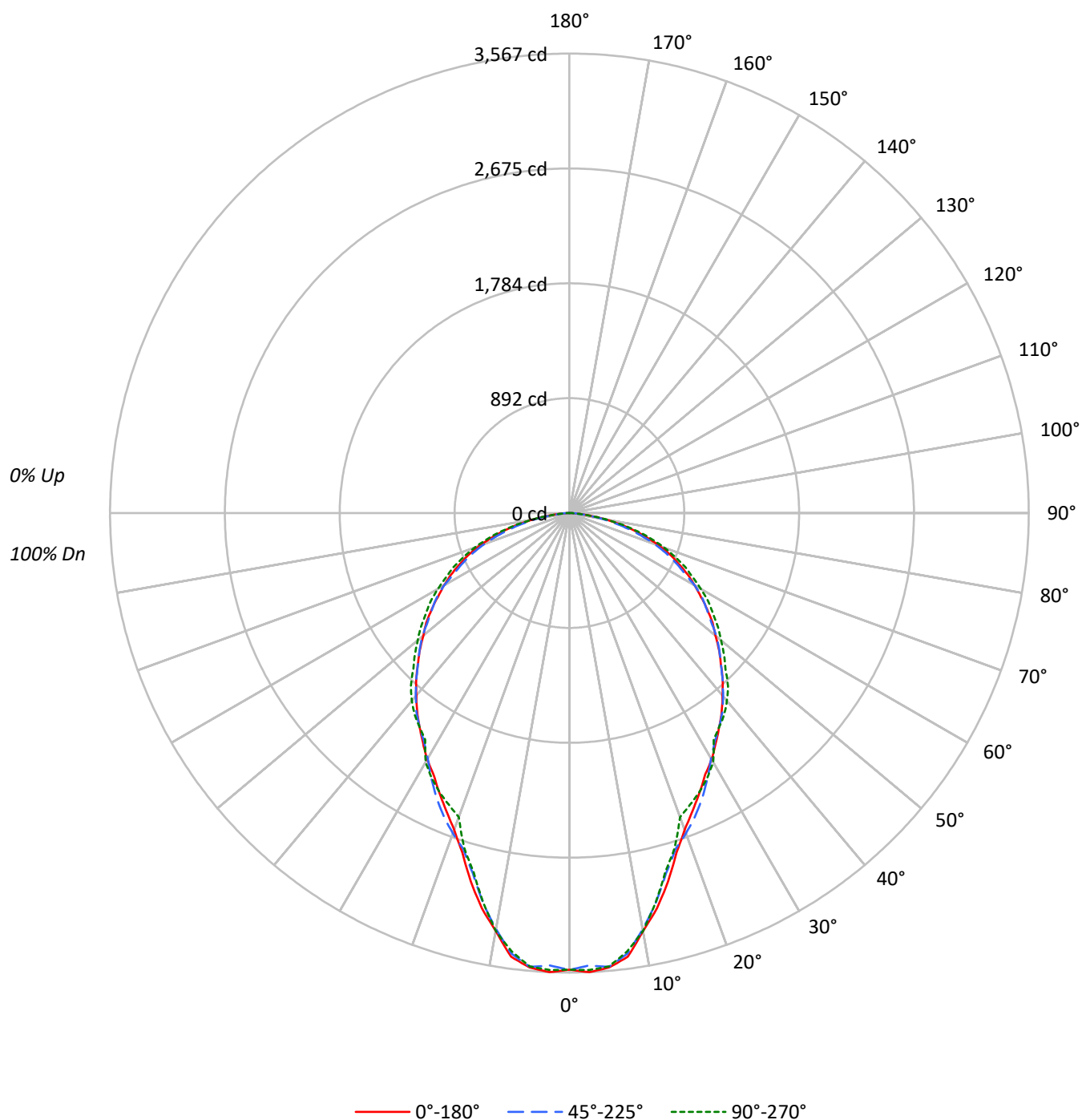
Lumens per Lamp: N/A
Luminaire Lumens: 7581.0 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 70.2
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°	9539	9539	9539
5°	9565	9551	9541
10°	9001	8961	8996
15°	8248	8068	8022
20°	7491	7575	7190
25°	7104	7247	7093
30°	6862	6833	6936
35°	6661	6661	6661
40°	6495	6521	6683
45°	6335	6328	6524
50°	6197	6243	6436
55°	6132	6106	6382
60°	6052	6042	6350
65°	5975	5787	6315
70°	5859	5526	6150
75°	5424	4906	5692
80°	4400	4000	4514
85°	2788	2504	2448



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	329.2	4.3
10°-20°	823.1	10.9
20°-30°	1111.6	14.7
30°-40°	1272.9	16.8
40°-50°	1303.9	17.2
50°-60°	1183.1	15.6
60°-70°	923.4	12.2
70°-80°	523.7	6.9
80°-90°	109.9	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°	2264.0	29.9
0°-40°	3536.9	46.7
0°-60°	6023.9	79.5
0°-90°	7581.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7581.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3545	3545	3545	3545	3545	
5°	3541	3501	3536	3543	3532	331
15°	2960	2970	2896	2911	2879	827
25°	2393	2424	2441	2382	2389	1104
35°	2028	2031	2028	2030	2028	1270
45°	1665	1678	1663	1731	1714	1287
55°	1307	1305	1301	1348	1360	1168
65°	938	918	909	951	992	930
75°	522	483	472	500	548	546
85°	90	81	81	76	79	119
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3544.8	3544.8	3544.8	3544.8	3544.8
2.5°	3566.9	3539.3	3515.3	3554.0	3550.3
5°	3541.1	3500.6	3535.6	3543.0	3531.9
7.5°	3472.9	3447.1	3449.0	3434.2	3432.4
10°	3294.1	3308.9	3279.4	3305.2	3292.3
12.5°	3141.1	3150.3	3098.7	3109.8	3095.0
15°	2960.5	2969.7	2895.9	2910.7	2879.4
17.5°	2763.2	2796.4	2735.6	2754.0	2720.8
20°	2615.8	2643.4	2645.2	2615.8	2510.7
22.5°	2499.6	2527.3	2549.4	2460.9	2449.8
25°	2392.7	2424.0	2440.6	2381.6	2389.0
27.5°	2285.8	2320.8	2320.8	2333.7	2317.1
30°	2208.4	2223.1	2199.1	2247.1	2232.3
32.5°	2116.2	2121.7	2101.4	2136.5	2084.9
35°	2027.7	2031.4	2027.7	2029.6	2027.7
37.5°	1942.9	1933.7	1950.3	1939.2	1974.3
40°	1848.9	1848.9	1856.3	1874.7	1902.4
42.5°	1762.3	1769.6	1760.4	1812.0	1823.1
45°	1664.6	1677.5	1662.7	1730.9	1714.3
47.5°	1576.1	1581.6	1577.9	1624.0	1627.7
50°	1480.2	1487.6	1491.3	1531.8	1537.4
52.5°	1401.0	1399.1	1386.2	1445.2	1454.4
55°	1307.0	1305.1	1301.4	1347.5	1360.4
57.5°	1211.1	1212.9	1222.2	1248.0	1279.3
60°	1124.5	1115.2	1122.6	1154.0	1179.8
62.5°	1036.0	1019.4	1002.8	1054.4	1078.4
65°	938.3	918.0	908.8	951.2	991.7
67.5°	848.0	814.8	809.2	838.7	886.7
70°	744.7	704.2	702.3	724.4	781.6
72.5°	630.4	595.4	586.2	615.7	667.3
75°	521.7	483.0	471.9	499.6	547.5
77.5°	403.7	372.4	365.0	379.7	418.4
80°	283.9	265.4	258.1	263.6	291.3
82.5°	178.8	165.9	162.2	160.4	175.1
85°	90.3	81.1	81.1	75.6	79.3
87.5°	27.7	25.8	24.0	18.4	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)