

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: P485071

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-3LO-40-120-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: P485071
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-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

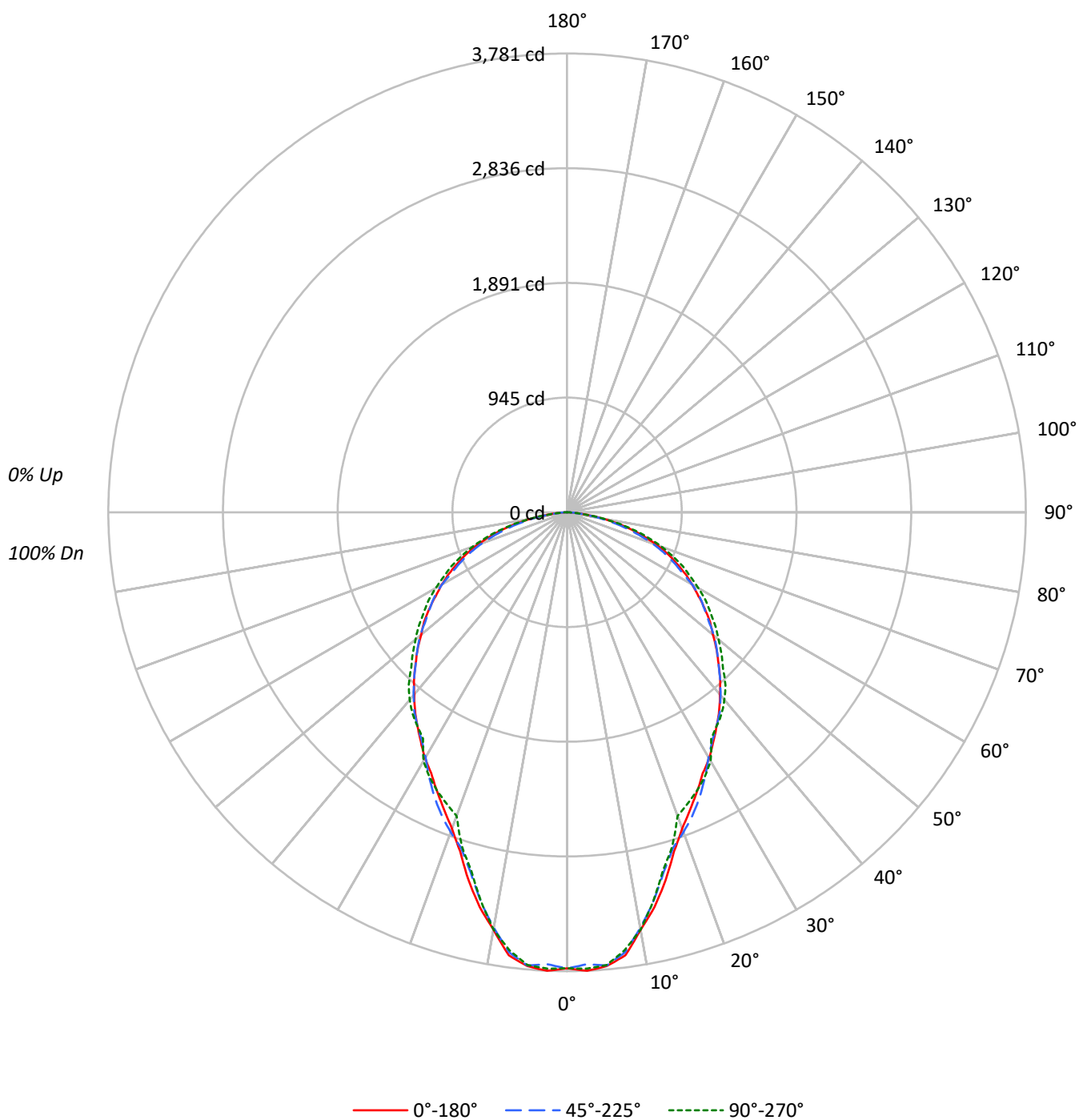
Lumens per Lamp: N/A
Luminaire Lumens: 8036.4 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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°	10112	10112	10112
5°	10140	10124	10114
10°	9542	9499	9536
15°	8743	8552	8503
20°	7941	8030	7622
25°	7531	7682	7519
30°	7274	7244	7353
35°	7061	7061	7061
40°	6885	6913	7084
45°	6715	6708	6916
50°	6569	6618	6823
55°	6500	6473	6766
60°	6415	6405	6731
65°	6333	6134	6694
70°	6212	5858	6519
75°	5750	5202	6035
80°	4663	4240	4784
85°	2958	2655	2594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	349.0	4.3
10°-20°	872.6	10.9
20°-30°	1178.4	14.7
30°-40°	1349.4	16.8
40°-50°	1382.2	17.2
50°-60°	1254.2	15.6
60°-70°	978.9	12.2
70°-80°	555.2	6.9
80°-90°	116.5	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°	2400.0	29.9
0°-40°	3749.4	46.7
0°-60°	6385.8	79.5
0°-90°	8036.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8036.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3758	3758	3758	3758	3758	
5°	3754	3711	3748	3756	3744	351
15°	3138	3148	3070	3086	3052	877
25°	2536	2570	2587	2525	2532	1170
35°	2150	2153	2150	2152	2150	1346
45°	1765	1778	1763	1835	1817	1364
55°	1386	1384	1380	1428	1442	1238
65°	995	973	963	1008	1051	986
75°	553	512	500	530	580	579
85°	96	86	86	80	84	126
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3757.8	3757.8	3757.8	3757.8	3757.8
2.5°	3781.2	3751.9	3726.5	3767.5	3763.6
5°	3753.8	3710.9	3748.0	3755.8	3744.1
7.5°	3681.5	3654.2	3656.1	3640.5	3638.6
10°	3492.0	3507.6	3476.4	3503.7	3490.0
12.5°	3329.8	3339.6	3284.9	3296.6	3281.0
15°	3138.3	3148.1	3069.9	3085.5	3052.3
17.5°	2929.2	2964.4	2899.9	2919.4	2884.3
20°	2772.9	2802.2	2804.1	2772.9	2661.5
22.5°	2649.8	2679.1	2702.5	2608.7	2597.0
25°	2536.4	2569.7	2587.2	2524.7	2532.5
27.5°	2423.1	2460.2	2460.2	2473.9	2456.3
30°	2341.0	2356.7	2331.3	2382.1	2366.4
32.5°	2243.3	2249.2	2227.7	2264.8	2210.1
35°	2149.5	2153.4	2149.5	2151.5	2149.5
37.5°	2059.6	2049.9	2067.4	2055.7	2092.9
40°	1960.0	1960.0	1967.8	1987.3	2016.6
42.5°	1868.1	1875.9	1866.2	1920.9	1932.6
45°	1764.6	1778.2	1762.6	1834.9	1817.3
47.5°	1670.8	1676.6	1672.7	1721.6	1725.5
50°	1569.2	1577.0	1580.9	1623.9	1629.7
52.5°	1485.1	1483.2	1469.5	1532.0	1541.8
55°	1385.5	1383.5	1379.6	1428.5	1442.1
57.5°	1283.9	1285.8	1295.6	1322.9	1356.2
60°	1192.0	1182.2	1190.1	1223.3	1250.6
62.5°	1098.2	1080.6	1063.0	1117.8	1143.2
65°	994.6	973.1	963.4	1008.3	1051.3
67.5°	898.9	863.7	857.9	889.1	939.9
70°	789.5	746.5	744.5	768.0	828.5
72.5°	668.3	631.2	621.4	652.7	707.4
75°	553.0	512.0	500.3	529.6	580.4
77.5°	428.0	394.7	386.9	402.5	443.6
80°	300.9	281.4	273.6	279.4	308.7
82.5°	189.5	175.9	172.0	170.0	185.6
85°	95.8	86.0	86.0	80.1	84.0
87.5°	29.3	27.4	25.4	19.5	21.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)