

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: P485037

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2LO-50-120-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: P485037
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-LD4-2LO-50-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

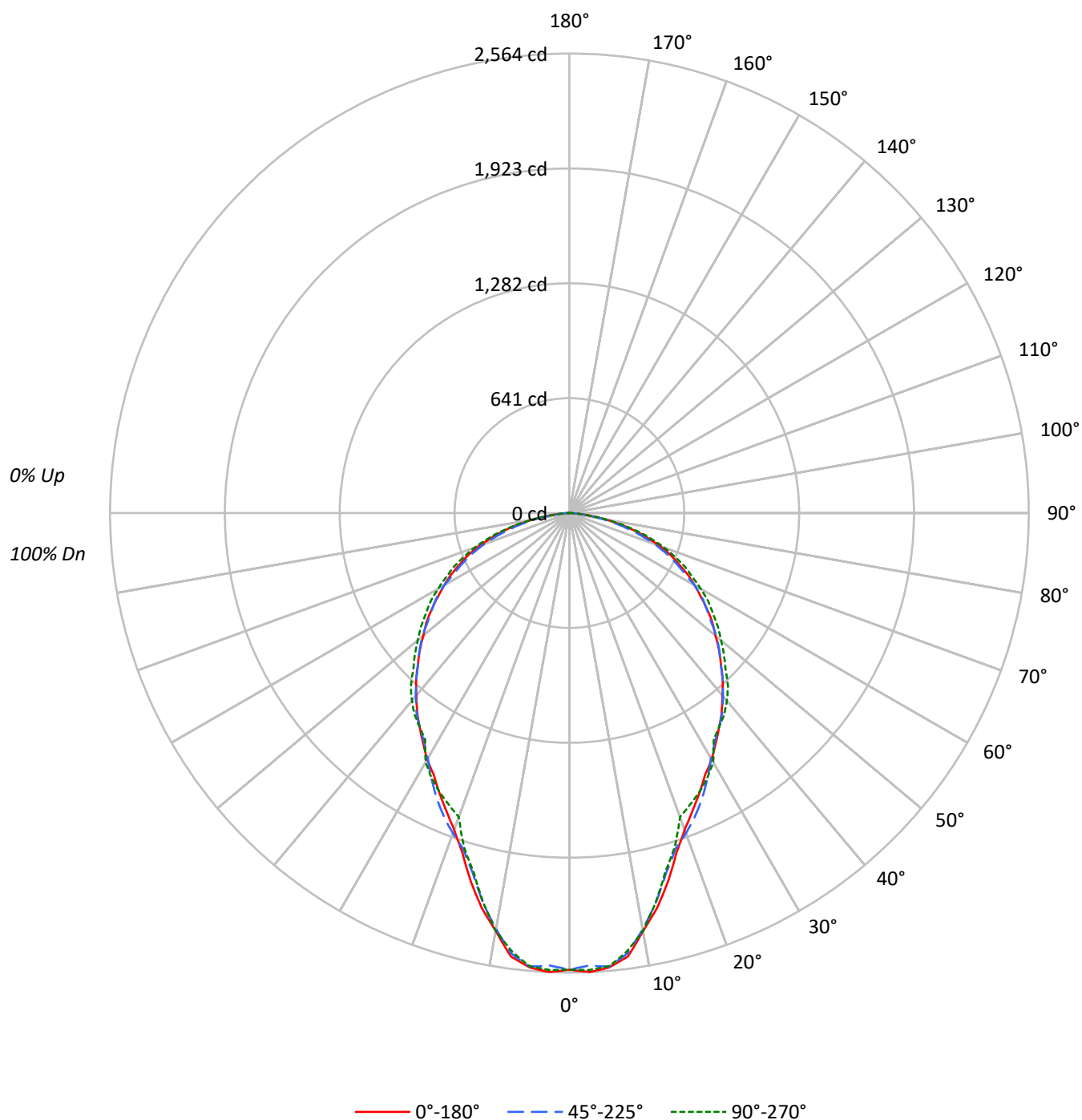
Lumens per Lamp: N/A
Luminaire Lumens: 5448.5 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 46.8
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°	6856	6856	6856
5°	6875	6864	6857
10°	6469	6440	6466
15°	5928	5798	5765
20°	5384	5444	5167
25°	5106	5208	5098
30°	4932	4911	4985
35°	4787	4787	4787
40°	4668	4686	4803
45°	4553	4548	4689
50°	4454	4487	4626
55°	4407	4388	4587
60°	4350	4342	4563
65°	4294	4159	4539
70°	4211	3972	4419
75°	3898	3527	4091
80°	3161	2875	3243
85°	2004	1800	1760



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	236.6	4.3
10°-20°	591.6	10.9
20°-30°	798.9	14.7
30°-40°	914.9	16.8
40°-50°	937.1	17.2
50°-60°	850.3	15.6
60°-70°	663.6	12.2
70°-80°	376.4	6.9
80°-90°	79.0	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°	1627.1	29.9
0°-40°	2542.0	46.7
0°-60°	4329.4	79.5
0°-90°	5448.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5448.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2548	2548	2548	2548	2548	
5°	2545	2516	2541	2546	2538	238
15°	2128	2134	2081	2092	2069	595
25°	1720	1742	1754	1712	1717	794
35°	1457	1460	1457	1459	1457	913
45°	1196	1206	1195	1244	1232	925
55°	939	938	935	968	978	839
65°	674	660	653	684	713	668
75°	375	347	339	359	394	392
85°	65	58	58	54	57	86
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2547.7	2547.7	2547.7	2547.7	2547.7
2.5°	2563.6	2543.7	2526.5	2554.3	2551.6
5°	2545.0	2515.9	2541.0	2546.3	2538.4
7.5°	2496.0	2477.5	2478.8	2468.2	2466.9
10°	2367.5	2378.1	2356.9	2375.4	2366.2
12.5°	2257.5	2264.2	2227.1	2235.0	2224.4
15°	2127.7	2134.3	2081.3	2091.9	2069.4
17.5°	1985.9	2009.8	1966.1	1979.3	1955.5
20°	1880.0	1899.8	1901.2	1880.0	1804.4
22.5°	1796.5	1816.4	1832.3	1768.7	1760.7
25°	1719.6	1742.2	1754.1	1711.7	1717.0
27.5°	1642.8	1668.0	1668.0	1677.3	1665.3
30°	1587.2	1597.8	1580.5	1615.0	1604.4
32.5°	1520.9	1524.9	1510.3	1535.5	1498.4
35°	1457.3	1460.0	1457.3	1458.7	1457.3
37.5°	1396.4	1389.8	1401.7	1393.7	1418.9
40°	1328.8	1328.8	1334.1	1347.4	1367.2
42.5°	1266.6	1271.8	1265.2	1302.3	1310.3
45°	1196.3	1205.6	1195.0	1244.0	1232.1
47.5°	1132.7	1136.7	1134.1	1167.2	1169.8
50°	1063.8	1069.1	1071.8	1100.9	1104.9
52.5°	1006.9	1005.6	996.3	1038.7	1045.3
55°	939.3	938.0	935.3	968.5	977.7
57.5°	870.4	871.7	878.4	896.9	919.4
60°	808.2	801.5	806.8	829.4	847.9
62.5°	744.6	732.6	720.7	757.8	775.0
65°	674.3	659.8	653.1	683.6	712.8
67.5°	609.4	585.6	581.6	602.8	637.2
70°	535.2	506.1	504.8	520.7	561.7
72.5°	453.1	427.9	421.3	442.5	479.6
75°	374.9	347.1	339.2	359.0	393.5
77.5°	290.1	267.6	262.3	272.9	300.7
80°	204.0	190.8	185.5	189.5	209.3
82.5°	128.5	119.2	116.6	115.3	125.9
85°	64.9	58.3	58.3	54.3	57.0
87.5°	19.9	18.5	17.2	13.2	14.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)