

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: P485025

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-2HI-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: P485025
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-LD4-2HI-50-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

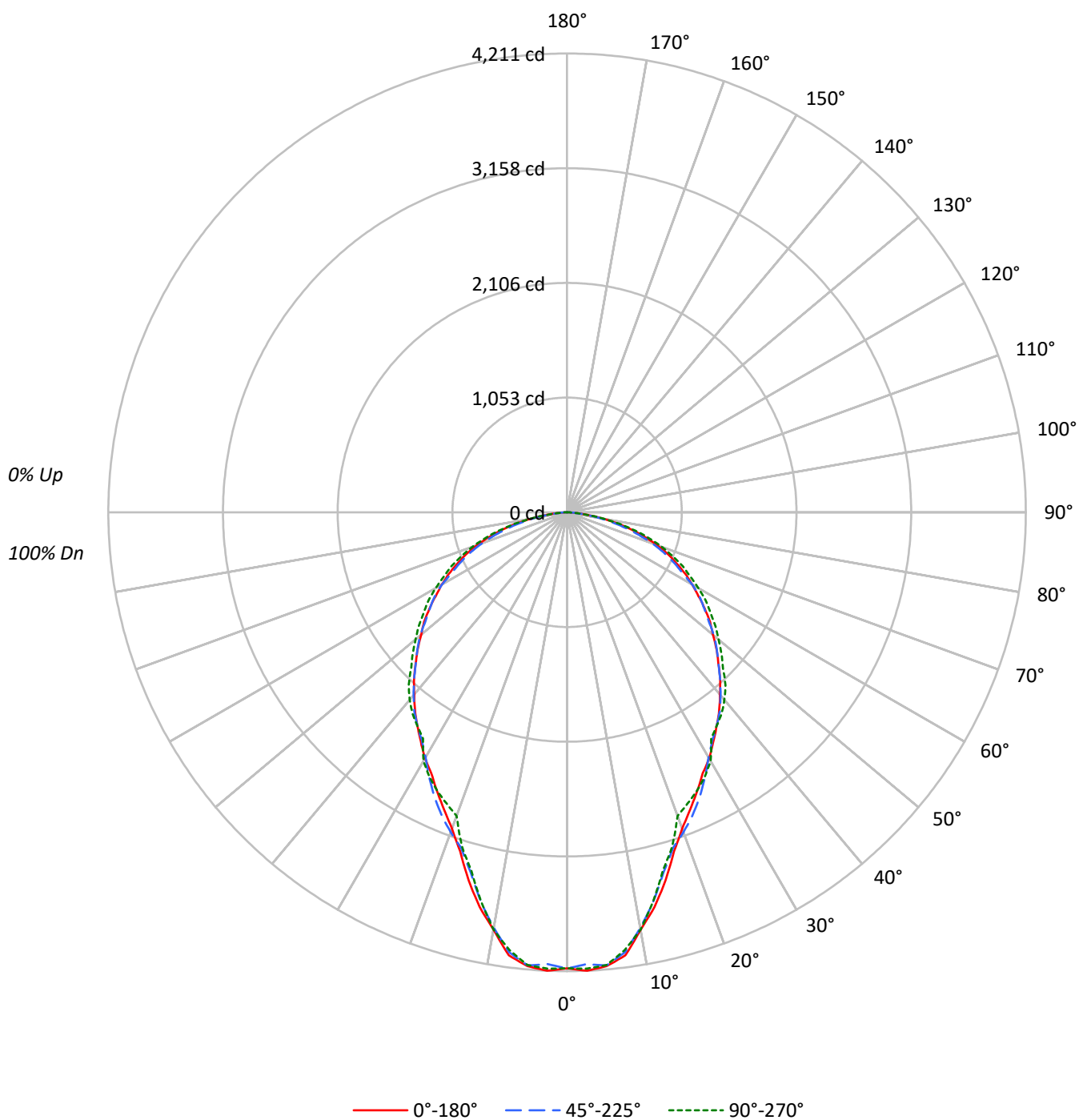
Lumens per Lamp: N/A
Luminaire Lumens: 8949.7 lumens
Efficiency: N/A
Efficacy: 101.7 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 88
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°	11261	11261	11261
5°	11293	11275	11263
10°	10626	10579	10620
15°	9737	9524	9470
20°	8843	8943	8488
25°	8387	8555	8374
30°	8101	8067	8189
35°	7864	7864	7864
40°	7667	7698	7889
45°	7478	7470	7702
50°	7316	7370	7598
55°	7239	7208	7535
60°	7145	7133	7496
65°	7053	6832	7455
70°	6917	6523	7260
75°	6404	5792	6720
80°	5193	4722	5328
85°	3291	2958	2890



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	388.7	4.3
10°-20°	971.7	10.9
20°-30°	1312.3	14.7
30°-40°	1502.8	16.8
40°-50°	1539.3	17.2
50°-60°	1396.7	15.6
60°-70°	1090.1	12.2
70°-80°	618.3	6.9
80°-90°	129.8	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°	2672.7	29.9
0°-40°	4175.5	46.7
0°-60°	7111.5	79.5
0°-90°	8949.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8949.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4185	4185	4185	4185	4185	
5°	4180	4133	4174	4183	4170	390
15°	3495	3506	3419	3436	3399	977
25°	2825	2862	2881	2812	2820	1303
35°	2394	2398	2394	2396	2394	1500
45°	1965	1980	1963	2043	2024	1519
55°	1543	1541	1536	1591	1606	1379
65°	1108	1084	1073	1123	1171	1098
75°	616	570	557	590	646	644
85°	107	96	96	89	94	141
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4184.8	4184.8	4184.8	4184.8	4184.8
2.5°	4210.9	4178.3	4150.0	4195.7	4191.3
5°	4180.5	4132.6	4173.9	4182.6	4169.6
7.5°	4099.9	4069.5	4071.6	4054.2	4052.1
10°	3888.8	3906.3	3871.4	3901.9	3886.7
12.5°	3708.2	3719.1	3658.2	3671.2	3653.8
15°	3495.0	3505.8	3418.8	3436.2	3399.2
17.5°	3262.1	3301.3	3229.5	3251.2	3212.1
20°	3088.0	3120.7	3122.8	3088.0	2964.0
22.5°	2950.9	2983.6	3009.7	2905.2	2892.2
25°	2824.7	2861.7	2881.3	2811.6	2820.3
27.5°	2698.5	2739.8	2739.8	2755.1	2735.5
30°	2607.1	2624.5	2596.2	2652.8	2635.4
32.5°	2498.3	2504.8	2480.9	2522.2	2461.3
35°	2393.8	2398.2	2393.8	2396.0	2393.8
37.5°	2293.7	2282.8	2302.4	2289.3	2330.7
40°	2182.7	2182.7	2191.4	2213.2	2245.8
42.5°	2080.4	2089.1	2078.3	2139.2	2152.2
45°	1965.1	1980.3	1962.9	2043.4	2023.9
47.5°	1860.6	1867.2	1862.8	1917.2	1921.6
50°	1747.5	1756.2	1760.5	1808.4	1814.9
52.5°	1653.9	1651.7	1636.5	1706.1	1717.0
55°	1542.9	1540.7	1536.4	1590.8	1606.0
57.5°	1429.8	1431.9	1442.8	1473.3	1510.3
60°	1327.5	1316.6	1325.3	1362.3	1392.8
62.5°	1223.0	1203.4	1183.8	1244.8	1273.1
65°	1107.7	1083.7	1072.9	1122.9	1170.8
67.5°	1001.0	961.9	955.3	990.2	1046.7
70°	879.2	831.3	829.1	855.2	922.7
72.5°	744.3	702.9	692.0	726.8	787.8
75°	615.9	570.2	557.1	589.7	646.3
77.5°	476.6	439.6	430.9	448.3	494.0
80°	335.1	313.4	304.7	311.2	343.8
82.5°	211.1	195.9	191.5	189.3	206.7
85°	106.6	95.8	95.8	89.2	93.6
87.5°	32.6	30.5	28.3	21.8	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)