

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: P485813

Luminaire Tested: **ORLG-24-2-INS-89BC-LD4-6HI-35-120-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: P485813
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-24-2-INS-89BC-LD4-6HI-35-120-EDD
Description: 2X2 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

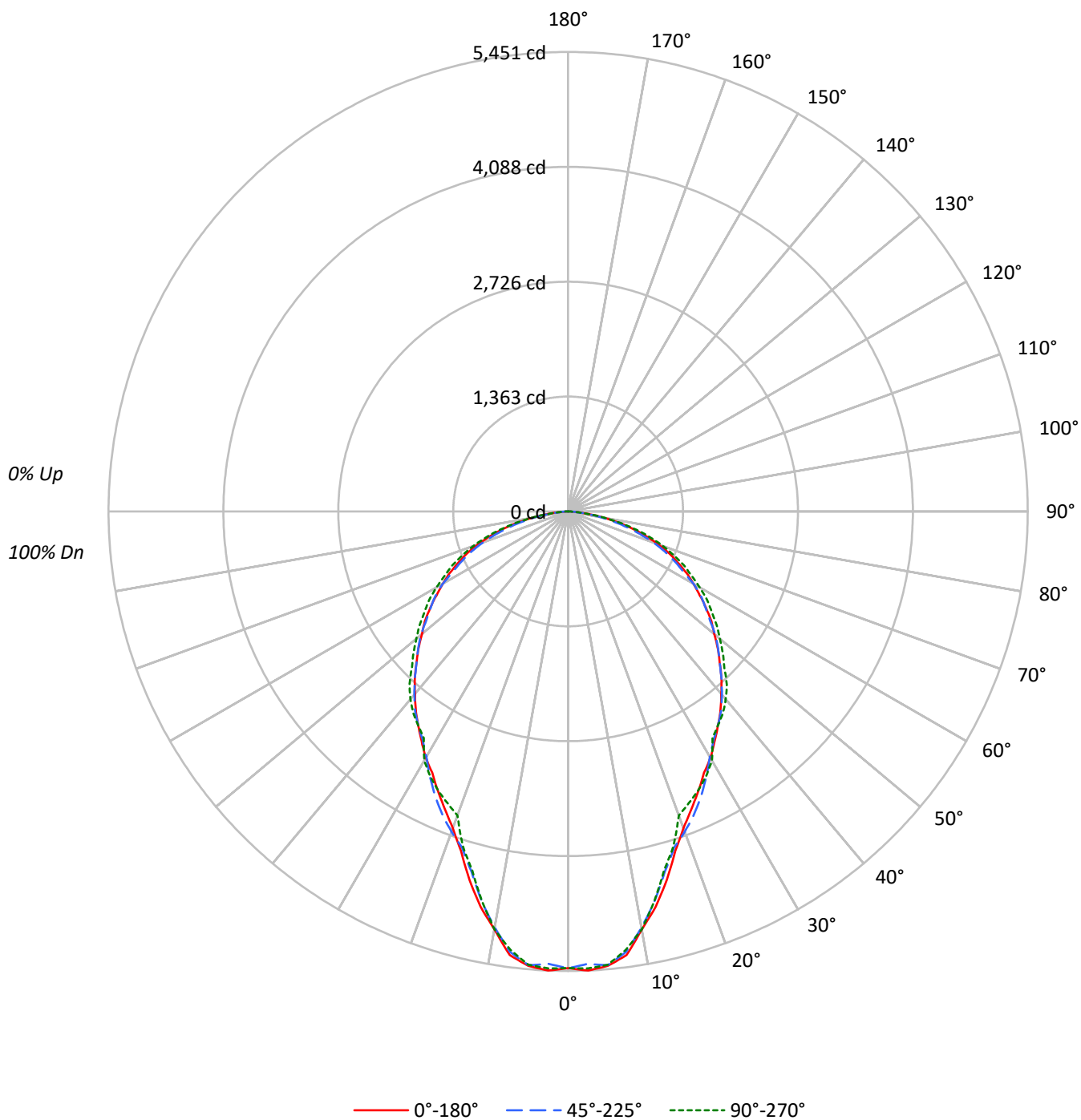
Lumens per Lamp: N/A
Luminaire Lumens: 11584.8 lumens
Efficiency: N/A
Efficacy: 87.8 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 132
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°	14577	14577	14577
5°	14617	14595	14579
10°	13755	13693	13747
15°	12603	12329	12258
20°	11447	11576	10987
25°	10856	11074	10840
30°	10486	10442	10600
35°	10179	10179	10179
40°	9925	9964	10212
45°	9680	9670	9970
50°	9470	9540	9835
55°	9370	9331	9753
60°	9248	9233	9703
65°	9130	8842	9650
70°	8954	8445	9397
75°	8289	7497	8698
80°	6722	6112	6898
85°	4261	3825	3739



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	503.1	4.3
10°-20°	1257.8	10.9
20°-30°	1698.7	14.7
30°-40°	1945.2	16.8
40°-50°	1992.5	17.2
50°-60°	1808.0	15.6
60°-70°	1411.1	12.2
70°-80°	800.3	6.9
80°-90°	168.0	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°	3459.6	29.9
0°-40°	5404.9	46.7
0°-60°	9205.4	79.5
0°-90°	11584.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11584.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5417	5417	5417	5417	5417	
5°	5411	5349	5403	5414	5397	505
15°	4524	4538	4425	4448	4400	1264
25°	3656	3704	3730	3640	3651	1687
35°	3099	3104	3099	3101	3099	1941
45°	2544	2563	2541	2645	2620	1967
55°	1997	1994	1989	2059	2079	1785
65°	1434	1403	1389	1454	1516	1421
75°	797	738	721	763	837	834
85°	138	124	124	116	121	182
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5417.0	5417.0	5417.0	5417.0	5417.0
2.5°	5450.8	5408.5	5371.9	5431.0	5425.4
5°	5411.3	5349.4	5402.9	5414.1	5397.2
7.5°	5307.1	5267.7	5270.5	5247.9	5245.1
10°	5033.9	5056.4	5011.3	5050.8	5031.0
12.5°	4800.0	4814.1	4735.3	4752.2	4729.6
15°	4524.0	4538.1	4425.4	4447.9	4400.0
17.5°	4222.6	4273.3	4180.3	4208.5	4157.8
20°	3997.2	4039.5	4042.3	3997.2	3836.7
22.5°	3819.8	3862.0	3895.8	3760.6	3743.7
25°	3656.4	3704.3	3729.6	3639.5	3650.7
27.5°	3493.0	3546.5	3546.5	3566.2	3540.9
30°	3374.7	3397.2	3360.6	3433.8	3411.3
32.5°	3233.8	3242.3	3211.3	3264.8	3185.9
35°	3098.6	3104.3	3098.6	3101.4	3098.6
37.5°	2969.0	2955.0	2980.3	2963.4	3016.9
40°	2825.4	2825.4	2836.6	2864.8	2907.1
42.5°	2693.0	2704.3	2690.2	2769.0	2785.9
45°	2543.7	2563.4	2540.9	2645.1	2619.7
47.5°	2408.5	2416.9	2411.3	2481.7	2487.3
50°	2262.0	2273.3	2278.9	2340.9	2349.3
52.5°	2140.9	2138.1	2118.3	2208.5	2222.6
55°	1997.2	1994.4	1988.8	2059.2	2078.9
57.5°	1850.7	1853.5	1867.6	1907.1	1954.9
60°	1718.3	1704.2	1715.5	1763.4	1802.8
62.5°	1583.1	1557.8	1532.4	1611.3	1647.9
65°	1433.8	1402.8	1388.7	1453.5	1515.5
67.5°	1295.8	1245.1	1236.6	1281.7	1354.9
70°	1138.0	1076.1	1073.3	1107.1	1194.4
72.5°	963.4	909.9	895.8	940.9	1019.7
75°	797.2	738.0	721.1	763.4	836.6
77.5°	616.9	569.0	557.8	580.3	639.4
80°	433.8	405.6	394.4	402.8	445.1
82.5°	273.2	253.5	247.9	245.1	267.6
85°	138.0	123.9	123.9	115.5	121.1
87.5°	42.3	39.4	36.6	28.2	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)