

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: P484999

Luminaire Tested: **ORLG-12-4-INS-89BC-LD4-1LO-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: P484999
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-LD4-1LO-40-120-EDD
Description: 1X4 ORL LED LUMINAIRE WITH 89BC LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

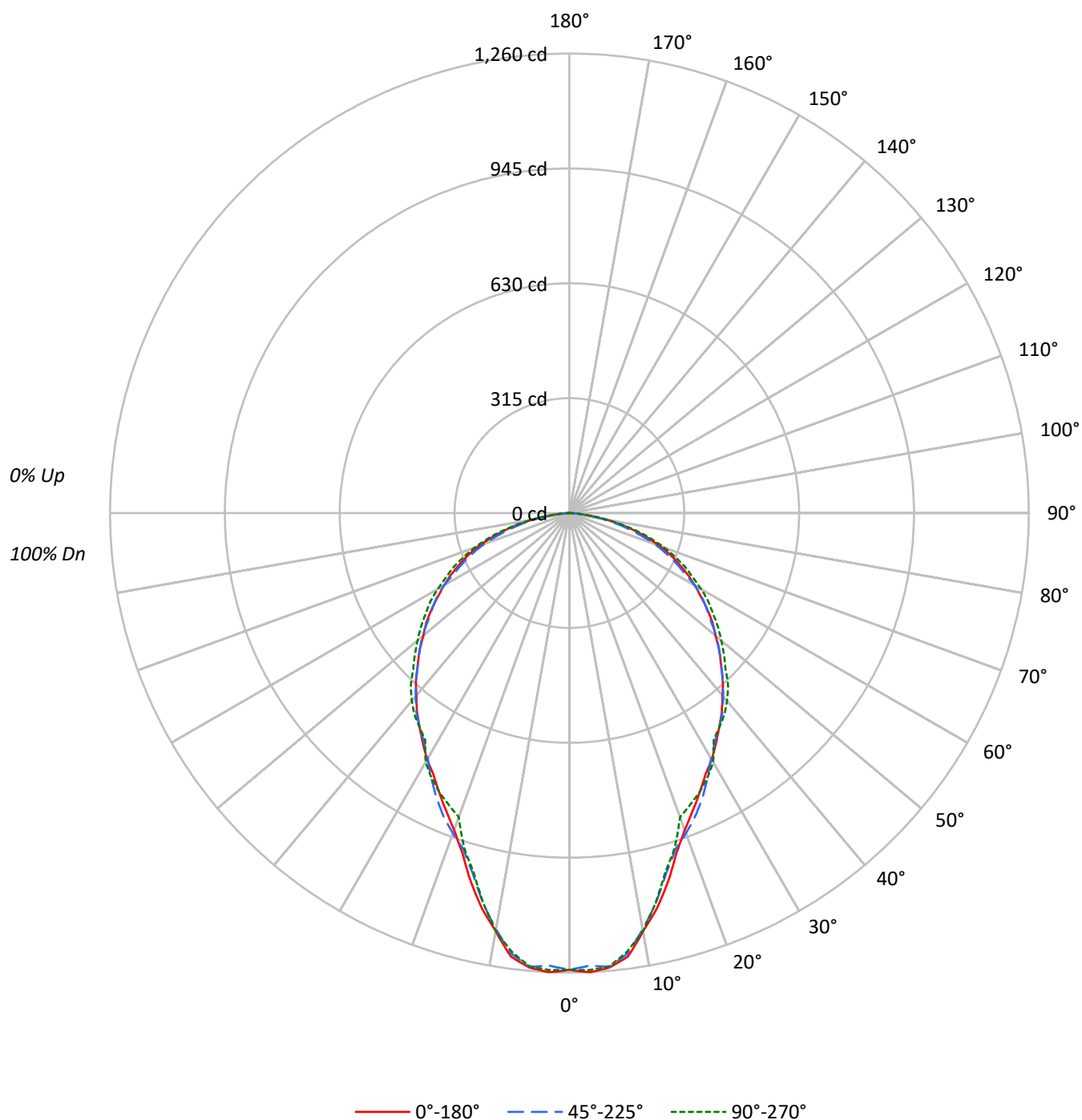
Lumens per Lamp: N/A
Luminaire Lumens: 2678.8 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Spacing Criteria (0/90/45): 0.94 / 0.94 / 1.15
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 23.4
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°	3371	3371	3371
5°	3380	3375	3371
10°	3181	3166	3179
15°	2914	2851	2834
20°	2647	2677	2541
25°	2510	2561	2507
30°	2425	2415	2451
35°	2354	2354	2354
40°	2295	2304	2361
45°	2238	2236	2305
50°	2190	2206	2274
55°	2167	2158	2255
60°	2138	2135	2244
65°	2111	2045	2231
70°	2071	1953	2173
75°	1916	1734	2012
80°	1554	1413	1595
85°	985	886	865



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.3	4.3
10°-20°	290.9	10.9
20°-30°	392.8	14.7
30°-40°	449.8	16.8
40°-50°	460.7	17.2
50°-60°	418.1	15.6
60°-70°	326.3	12.2
70°-80°	185.1	6.9
80°-90°	38.8	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°	800.0	29.9
0°-40°	1249.8	46.7
0°-60°	2128.6	79.5
0°-90°	2678.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1251	1237	1249	1252	1248	117
15°	1046	1049	1023	1028	1017	292
25°	846	857	862	842	844	390
35°	716	718	716	717	716	449
45°	588	593	588	612	606	455
55°	462	461	460	476	481	413
65°	332	324	321	336	350	329
75°	184	171	167	176	194	193
85°	32	29	29	27	28	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.6	1252.6	1252.6	1252.6	1252.6
2.5°	1260.4	1250.6	1242.2	1255.8	1254.5
5°	1251.3	1237.0	1249.3	1251.9	1248.0
7.5°	1227.2	1218.1	1218.7	1213.5	1212.9
10°	1164.0	1169.2	1158.8	1167.9	1163.3
12.5°	1109.9	1113.2	1095.0	1098.9	1093.7
15°	1046.1	1049.4	1023.3	1028.5	1017.4
17.5°	976.4	988.1	966.6	973.1	961.4
20°	924.3	934.1	934.7	924.3	887.2
22.5°	883.3	893.0	900.8	869.6	865.7
25°	845.5	856.6	862.4	841.6	844.2
27.5°	807.7	820.1	820.1	824.6	818.8
30°	780.3	785.6	777.1	794.0	788.8
32.5°	747.8	749.7	742.6	754.9	736.7
35°	716.5	717.8	716.5	717.2	716.5
37.5°	686.5	683.3	689.1	685.2	697.6
40°	653.3	653.3	655.9	662.4	672.2
42.5°	622.7	625.3	622.1	640.3	644.2
45°	588.2	592.7	587.5	611.6	605.8
47.5°	556.9	558.9	557.6	573.9	575.2
50°	523.1	525.7	527.0	541.3	543.2
52.5°	495.0	494.4	489.8	510.7	513.9
55°	461.8	461.2	459.9	476.2	480.7
57.5°	428.0	428.6	431.9	441.0	452.1
60°	397.3	394.1	396.7	407.8	416.9
62.5°	366.1	360.2	354.3	372.6	381.1
65°	331.5	324.4	321.1	336.1	350.4
67.5°	299.6	287.9	286.0	296.4	313.3
70°	263.2	248.8	248.2	256.0	276.2
72.5°	222.8	210.4	207.1	217.6	235.8
75°	184.3	170.7	166.8	176.5	193.5
77.5°	142.7	131.6	129.0	134.2	147.9
80°	100.3	93.8	91.2	93.1	102.9
82.5°	63.2	58.6	57.3	56.7	61.9
85°	31.9	28.7	28.7	26.7	28.0
87.5°	9.8	9.1	8.5	6.5	7.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)