

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: P556666

Luminaire Tested: **FUSL-12-4-LD4-1STD-30-UNV-80-94-EDD-90**

Issue Date: 7/16/2021

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: P556666
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2105-257-2)
Test Lab: INNOVATION CENTER
Issue Date: 7/16/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: FAIL-SAFE
Catalog Number: FUSL-12-4-LD4-1STD-30-UNV-80-94-EDD-90
Description: 4FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC FIXTURE SIDE AND .187 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

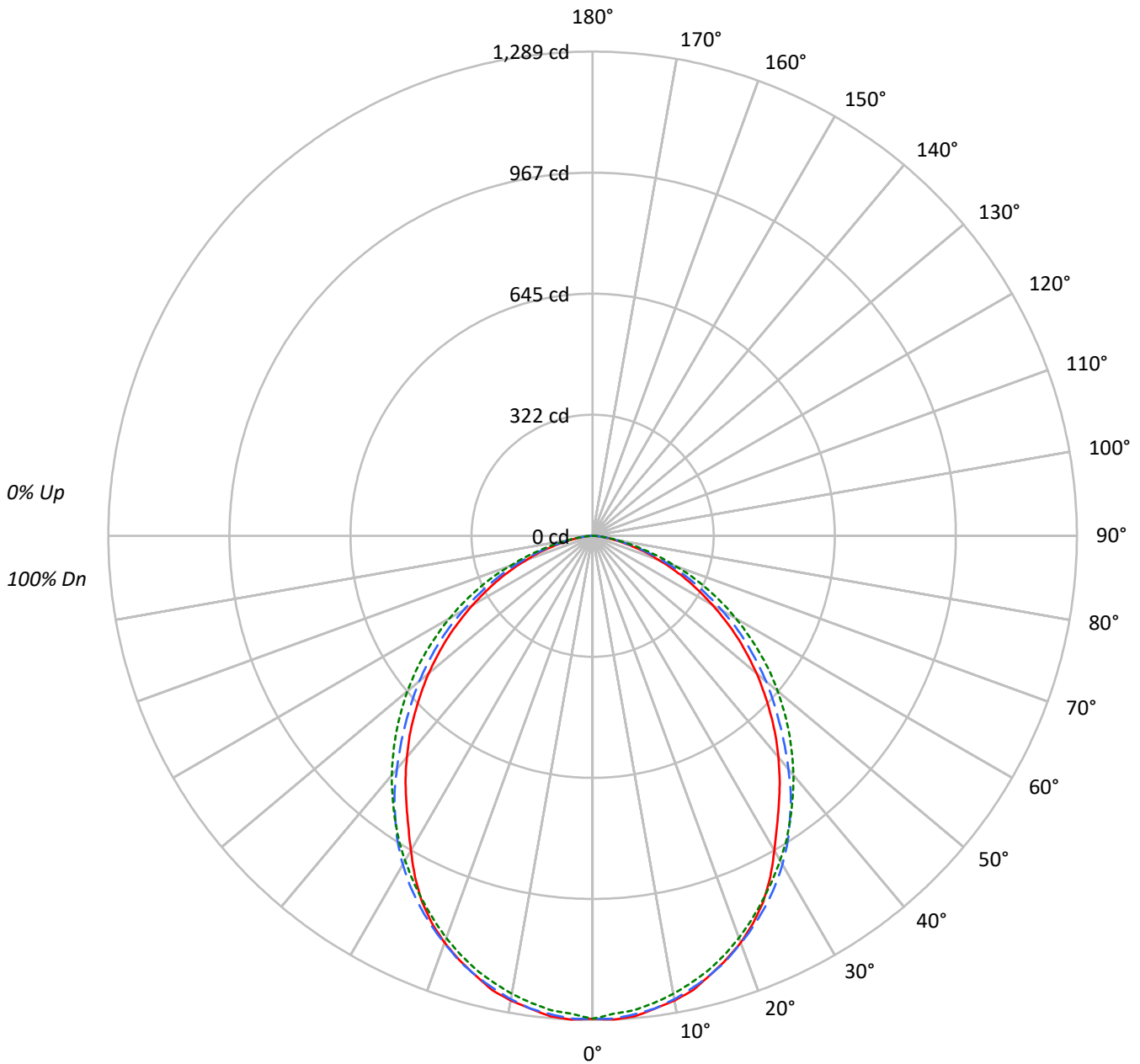
Lumens per Lamp: N/A
Luminaire Lumens: 2973.0 lumens
Efficiency: N/A
Efficacy: 89.3 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
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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CATALOG NUMBER: FUSL-12-4-LD4-1STD-30-UNV-80-94-EDD-90

Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				20	
RC	80				70				50				30				10				0	
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86				86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73				73
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63				63
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54				54
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47				47
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42				42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37				37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34				34
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30				30
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28				28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3460	3460	3460
5°	3469	3454	3425
10°	3432	3423	3384
15°	3372	3372	3333
20°	3300	3304	3262
25°	3191	3231	3180
30°	3005	3140	3102
35°	2840	3010	3015
40°	2702	2847	2922
45°	2547	2675	2812
50°	2384	2521	2692
55°	2199	2345	2547
60°	1981	2140	2369
65°	1748	1903	2155
70°	1457	1621	1830
75°	1146	1294	1433
80°	820	911	1010
85°	534	534	503



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	121.1	4.1
10°-20°	340.1	11.4
20°-30°	497.0	16.7
30°-40°	564.1	19.0
40°-50°	544.6	18.3
50°-60°	449.2	15.1
60°-70°	299.1	10.1
70°-80°	133.9	4.5
80°-90°	24.0	0.8
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°	958.1	32.2
0°-40°	1522.2	51.2
0°-60°	2516.0	84.6
0°-90°	2973.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2973.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1286	1286	1286	1286	1286	
5°	1284	1284	1279	1272	1268	122
15°	1210	1213	1210	1205	1196	341
25°	1075	1083	1088	1080	1071	492
35°	864	876	916	921	918	542
45°	669	681	703	735	739	516
55°	469	477	500	528	543	418
65°	275	282	299	320	338	272
75°	110	116	124	130	138	120
85°	17	17	17	16	16	23
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1285.7	1285.7	1285.7	1285.7	1285.7
2.5°	1289.2	1289.7	1286.7	1278.8	1273.9
5°	1284.3	1283.8	1278.8	1271.9	1268.0
7.5°	1269.9	1270.9	1269.4	1259.6	1254.1
10°	1256.1	1256.6	1252.7	1244.7	1238.3
12.5°	1238.3	1237.8	1232.4	1228.4	1218.1
15°	1210.2	1213.1	1210.2	1204.7	1196.3
17.5°	1183.0	1183.0	1185.0	1175.6	1169.2
20°	1152.4	1153.9	1153.9	1146.5	1139.0
22.5°	1116.8	1121.3	1122.7	1114.8	1105.9
25°	1074.8	1083.2	1088.2	1080.3	1070.9
27.5°	1024.0	1036.8	1051.6	1045.7	1035.3
30°	967.1	985.9	1010.6	1005.7	998.3
32.5°	913.3	932.1	966.2	964.2	960.2
35°	864.4	876.3	916.3	921.2	917.8
37.5°	818.0	828.8	866.4	877.7	874.8
40°	769.1	780.9	810.6	830.8	831.8
42.5°	720.7	732.0	756.2	785.4	785.4
45°	669.3	680.7	702.9	735.0	738.9
47.5°	618.9	630.8	652.5	684.6	691.0
50°	569.5	580.4	602.1	633.2	643.1
52.5°	518.2	530.0	551.2	579.9	594.2
55°	468.8	476.7	499.9	527.5	542.8
57.5°	417.4	424.8	451.0	474.7	490.5
60°	368.0	377.4	397.6	421.8	440.1
62.5°	320.6	330.5	347.7	369.0	389.7
65°	274.6	282.0	298.8	320.1	338.4
67.5°	230.2	236.6	253.4	268.2	287.5
70°	185.2	193.6	206.0	220.3	232.6
72.5°	149.2	152.6	163.0	173.4	186.2
75°	110.2	116.1	124.5	130.4	137.8
77.5°	79.0	82.5	87.4	92.4	99.3
80°	52.9	54.3	58.8	59.8	65.2
82.5°	32.1	33.1	34.1	34.6	36.6
85°	17.3	17.3	17.3	16.3	16.3
87.5°	9.9	9.9	8.4	6.9	4.9
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)