

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: P556765

Luminaire Tested: **FUSL-12-4-LD4-1STD-35-UNV-82-96-EDD**

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: P556765
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-35-UNV-82-96-EDD
Description: 4FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR TEMPERED GLASS ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 3500K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

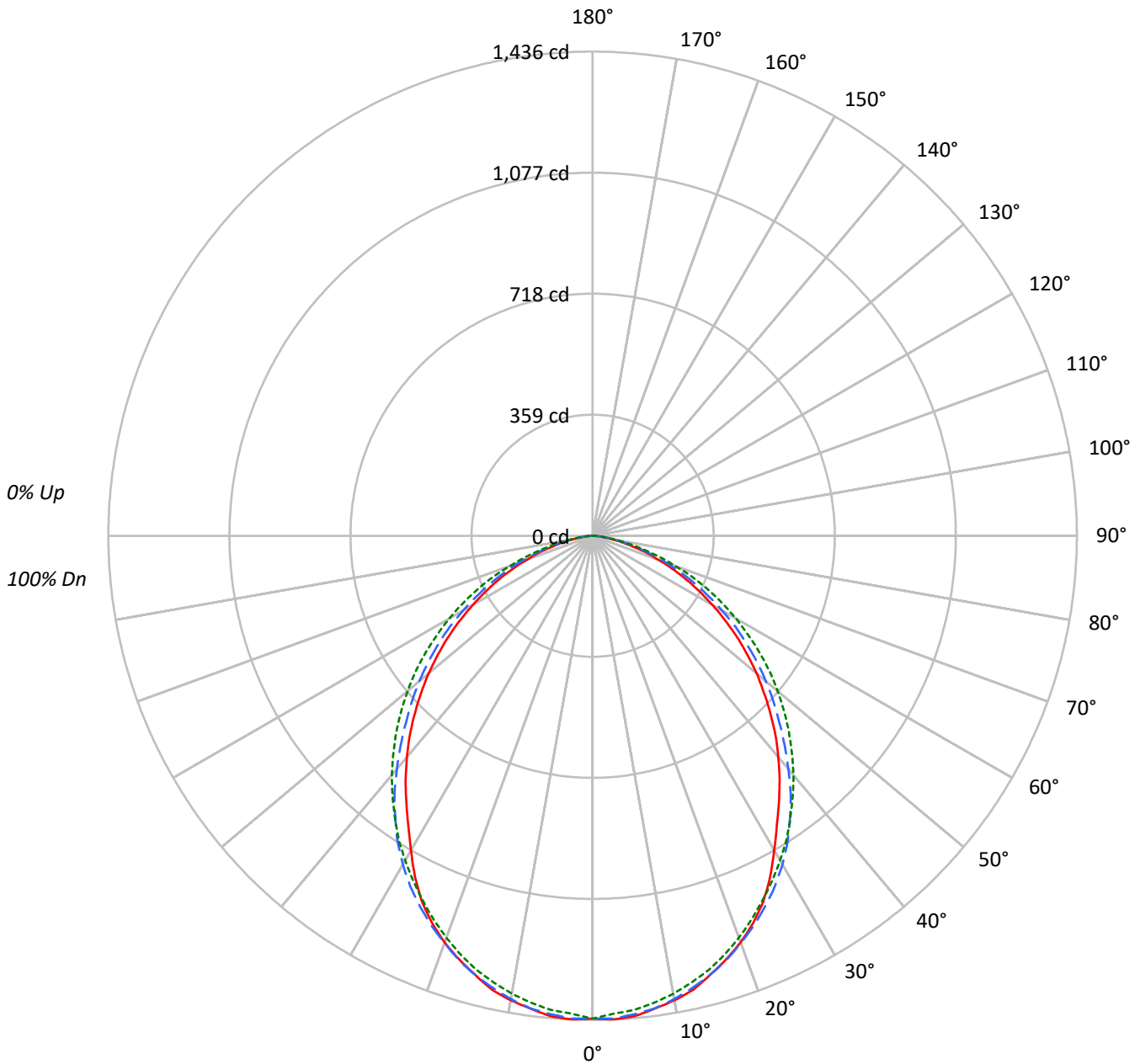
Lumens per Lamp: N/A
Luminaire Lumens: 3311.0 lumens
Efficiency: N/A
Efficacy: 99.4 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 33.3
Input Voltage (V): NR
Input Current (A_{in}): 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									
RC	80									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																			
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86																			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73																			
3	92	83	75	69	90	81	74	68	78	72	67	75	70	66	73	69	65	63																			
4	85	74	65	59	83	72	65	59	70	63	58	68	62	57	65	61	56	54																			
5	78	66	58	51	76	65	57	51	63	56	51	61	55	50	59	54	50	47																			
6	73	60	51	45	71	59	51	45	57	50	45	56	49	44	54	48	44	42																			
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37																			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	36	46	40	35	34																			
9	59	46	38	33	58	45	38	33	44	37	32	43	37	32	42	36	32	30																			
10	55	43	35	30	54	42	35	30	41	34	30	40	34	29	39	33	29	28																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3853	3853	3853
5°	3864	3847	3814
10°	3822	3812	3768
15°	3755	3755	3712
20°	3675	3680	3633
25°	3554	3598	3541
30°	3347	3497	3455
35°	3163	3352	3358
40°	3009	3171	3254
45°	2837	2979	3132
50°	2655	2807	2998
55°	2449	2612	2837
60°	2206	2383	2638
65°	1948	2119	2399
70°	1623	1805	2039
75°	1276	1441	1596
80°	913	1015	1125
85°	596	596	562



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	134.8	4.1
10°-20°	378.7	11.4
20°-30°	553.5	16.7
30°-40°	628.2	19.0
40°-50°	606.5	18.3
50°-60°	500.3	15.1
60°-70°	333.2	10.1
70°-80°	149.1	4.5
80°-90°	26.7	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°	1067.0	32.2
0°-40°	1695.3	51.2
0°-60°	2802.1	84.6
0°-90°	3311.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3311.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1432	1432	1432	1432	1432	
5°	1430	1430	1424	1416	1412	135
15°	1348	1351	1348	1342	1332	380
25°	1197	1206	1212	1203	1193	548
35°	963	976	1020	1026	1022	603
45°	745	758	783	819	823	575
55°	522	531	557	588	605	466
65°	306	314	333	356	377	303
75°	123	129	139	145	154	134
85°	19	19	19	18	18	26
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1431.9	1431.9	1431.9	1431.9	1431.9
2.5°	1435.8	1436.3	1433.0	1424.2	1418.7
5°	1430.3	1429.7	1424.2	1416.5	1412.1
7.5°	1414.3	1415.4	1413.8	1402.8	1396.7
10°	1398.9	1399.5	1395.1	1386.3	1379.1
12.5°	1379.1	1378.6	1372.5	1368.1	1356.6
15°	1347.8	1351.1	1347.8	1341.7	1332.4
17.5°	1317.5	1317.5	1319.7	1309.2	1302.1
20°	1283.4	1285.0	1285.0	1276.8	1268.5
22.5°	1243.8	1248.7	1250.4	1241.6	1231.7
25°	1197.0	1206.4	1211.9	1203.1	1192.6
27.5°	1140.4	1154.7	1171.2	1164.6	1153.0
30°	1077.1	1098.0	1125.5	1120.0	1111.8
32.5°	1017.1	1038.0	1076.0	1073.8	1069.4
35°	962.7	975.9	1020.4	1025.9	1022.1
37.5°	911.0	923.1	964.9	977.5	974.2
40°	856.5	869.7	902.7	925.3	926.4
42.5°	802.6	815.3	842.2	874.7	874.7
45°	745.4	758.0	782.8	818.6	823.0
47.5°	689.3	702.5	726.7	762.4	769.6
50°	634.3	646.4	670.6	705.2	716.2
52.5°	577.1	590.3	613.9	645.8	661.8
55°	522.0	530.9	556.7	587.5	604.6
57.5°	464.8	473.1	502.2	528.7	546.3
60°	409.8	420.3	442.8	469.8	490.1
62.5°	357.0	368.0	387.3	410.9	434.0
65°	305.9	314.1	332.8	356.5	376.8
67.5°	256.3	263.5	282.2	298.7	320.2
70°	206.3	215.6	229.4	245.3	259.1
72.5°	166.1	170.0	181.5	193.1	207.4
75°	122.7	129.3	138.6	145.2	153.5
77.5°	88.0	91.9	97.4	102.9	110.6
80°	58.9	60.5	65.5	66.6	72.6
82.5°	35.8	36.9	38.0	38.5	40.7
85°	19.3	19.3	19.3	18.2	18.2
87.5°	11.0	11.0	9.4	7.7	5.5
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)