

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: P554772

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-82-86-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: P554772
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-12-2-LD4-2HI-40-UNV-82-86-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .250 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

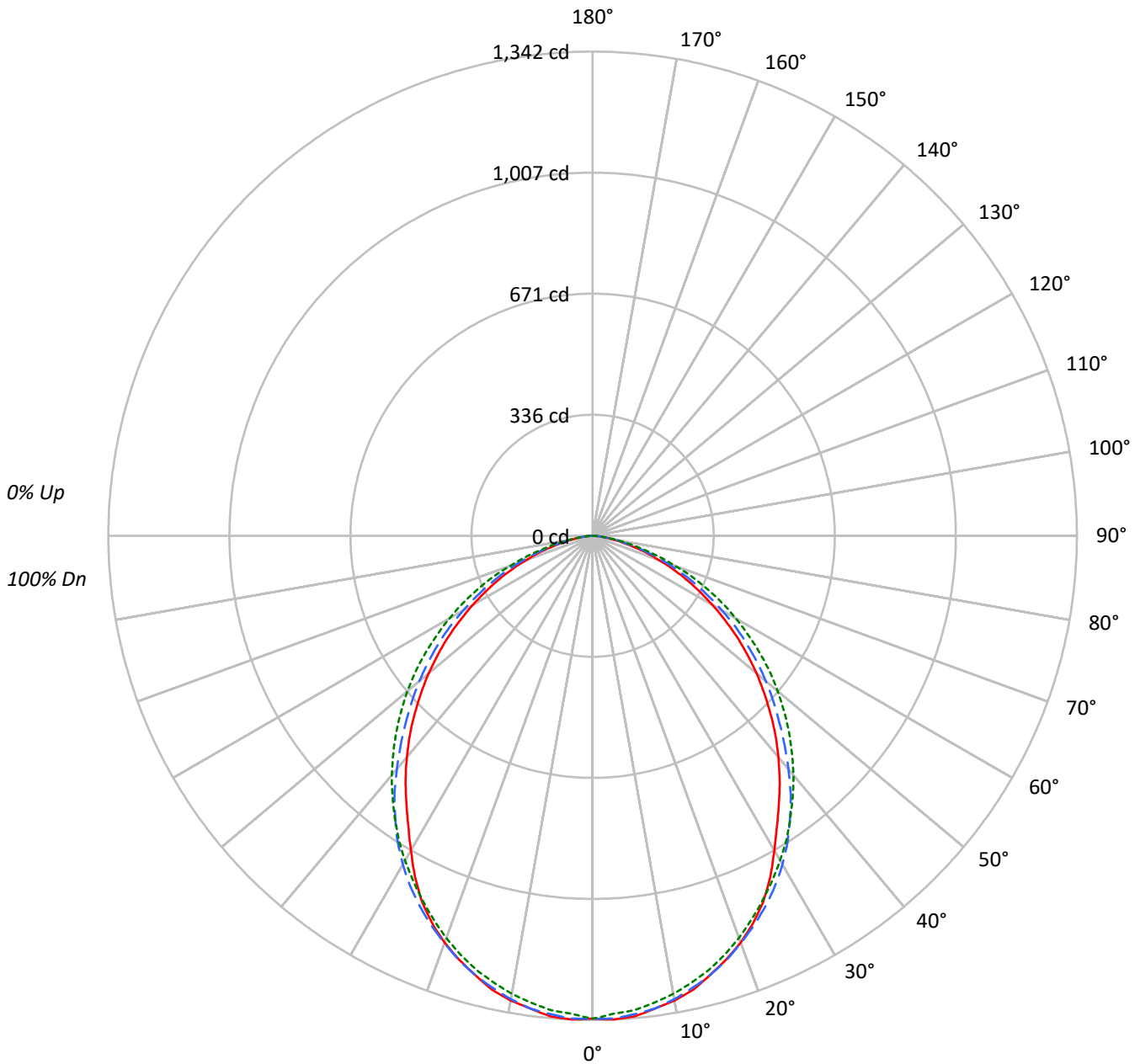
Lumens per Lamp: N/A
Luminaire Lumens: 3095.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
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				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°	7204	7204	7204
5°	7223	7192	7131
10°	7147	7127	7045
15°	7019	7019	6939
20°	6871	6880	6792
25°	6644	6727	6620
30°	6257	6538	6458
35°	5912	6267	6277
40°	5625	5928	6084
45°	5304	5569	5855
50°	4964	5248	5606
55°	4579	4883	5302
60°	4124	4455	4932
65°	3641	3962	4485
70°	3034	3374	3811
75°	2385	2695	2984
80°	1705	1897	2104
85°	1112	1112	1050



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.0	4.1
10°-20°	354.0	11.4
20°-30°	517.4	16.7
30°-40°	587.3	19.0
40°-50°	566.9	18.3
50°-60°	467.7	15.1
60°-70°	311.4	10.1
70°-80°	139.4	4.5
80°-90°	24.9	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°	997.4	32.2
0°-40°	1584.7	51.2
0°-60°	2619.3	84.6
0°-90°	3095.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3095.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1337	1336	1331	1324	1320	127
15°	1260	1263	1260	1254	1245	355
25°	1119	1128	1133	1125	1115	512
35°	900	912	954	959	955	564
45°	697	709	732	765	769	538
55°	488	496	520	549	565	436
65°	286	294	311	333	352	283
75°	115	121	130	136	144	125
85°	18	18	18	17	17	24
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1338.5	1338.5	1338.5	1338.5	1338.5
2.5°	1342.1	1342.6	1339.5	1331.3	1326.2
5°	1337.0	1336.5	1331.3	1324.1	1320.0
7.5°	1322.1	1323.1	1321.5	1311.3	1305.6
10°	1307.7	1308.2	1304.1	1295.8	1289.1
12.5°	1289.1	1288.6	1283.0	1278.9	1268.1
15°	1259.8	1262.9	1259.8	1254.2	1245.4
17.5°	1231.6	1231.6	1233.6	1223.8	1217.2
20°	1199.7	1201.2	1201.2	1193.5	1185.8
22.5°	1162.6	1167.3	1168.8	1160.6	1151.3
25°	1118.9	1127.7	1132.8	1124.6	1114.8
27.5°	1066.0	1079.3	1094.8	1088.6	1077.8
30°	1006.8	1026.4	1052.1	1046.9	1039.2
32.5°	950.8	970.3	1005.8	1003.8	999.6
35°	899.9	912.2	953.9	959.0	955.4
37.5°	851.5	862.9	901.9	913.8	910.7
40°	800.6	813.0	843.8	864.9	865.9
42.5°	750.2	762.1	787.3	817.6	817.6
45°	696.8	708.6	731.7	765.2	769.3
47.5°	644.3	656.7	679.3	712.7	719.4
50°	592.9	604.2	626.8	659.2	669.5
52.5°	539.4	551.8	573.9	603.7	618.6
55°	488.0	496.2	520.4	549.2	565.1
57.5°	434.5	442.2	469.5	494.2	510.6
60°	383.1	392.9	413.9	439.1	458.2
62.5°	333.7	344.0	362.0	384.1	405.7
65°	285.9	293.6	311.1	333.2	352.2
67.5°	239.6	246.3	263.8	279.2	299.3
70°	192.8	201.6	214.4	229.3	242.2
72.5°	155.3	158.9	169.7	180.5	193.9
75°	114.7	120.8	129.6	135.8	143.5
77.5°	82.3	85.9	91.0	96.2	103.4
80°	55.0	56.6	61.2	62.2	67.9
82.5°	33.4	34.5	35.5	36.0	38.1
85°	18.0	18.0	18.0	17.0	17.0
87.5°	10.3	10.3	8.7	7.2	5.1
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)