

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: P554662

Luminaire Tested: **FUSL-12-2-LD4-2HI-30-UNV-93-87-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: P554662
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-30-UNV-93-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 3000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

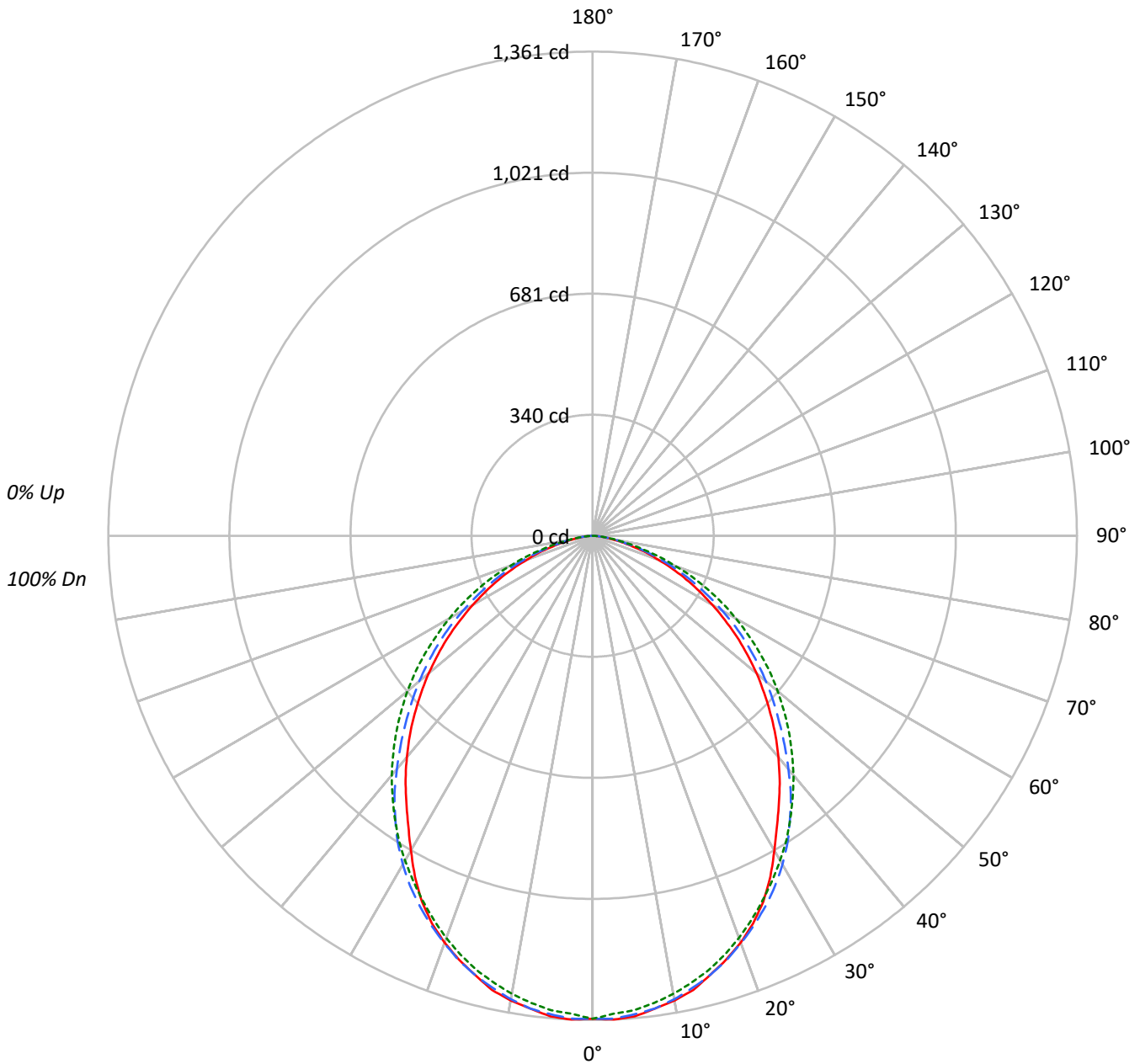
Lumens per Lamp: N/A
Luminaire Lumens: 3139.0 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 43.2
Input Voltage (V): NR
Input Current (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				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°	7306	7306	7306
5°	7326	7294	7233
10°	7248	7228	7145
15°	7119	7119	7038
20°	6968	6978	6888
25°	6739	6823	6714
30°	6346	6631	6550
35°	5997	6356	6366
40°	5705	6013	6171
45°	5379	5648	5938
50°	5035	5323	5685
55°	4644	4952	5378
60°	4182	4519	5002
65°	3693	4018	4549
70°	3078	3423	3865
75°	2418	2732	3026
80°	1729	1925	2132
85°	1130	1130	1062



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.8	4.1
10°-20°	359.1	11.4
20°-30°	524.7	16.7
30°-40°	595.6	19.0
40°-50°	575.0	18.3
50°-60°	474.3	15.1
60°-70°	315.8	10.1
70°-80°	141.3	4.5
80°-90°	25.3	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°	1011.6	32.2
0°-40°	1607.2	51.2
0°-60°	2656.5	84.6
0°-90°	3139.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3139.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1356	1356	1350	1343	1339	128
15°	1278	1281	1278	1272	1263	360
25°	1135	1144	1149	1141	1131	520
35°	913	925	967	973	969	572
45°	707	719	742	776	780	545
55°	495	503	528	557	573	442
65°	290	298	316	338	357	288
75°	116	123	131	138	146	127
85°	18	18	18	17	17	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1357.5	1357.5	1357.5	1357.5	1357.5
2.5°	1361.2	1361.7	1358.6	1350.2	1345.0
5°	1356.0	1355.5	1350.2	1342.9	1338.8
7.5°	1340.8	1341.9	1340.3	1329.9	1324.2
10°	1326.2	1326.8	1322.6	1314.2	1307.5
12.5°	1307.5	1306.9	1301.2	1297.0	1286.1
15°	1277.7	1280.9	1277.7	1272.0	1263.1
17.5°	1249.1	1249.1	1251.1	1241.2	1234.5
20°	1216.7	1218.3	1218.3	1210.5	1202.6
22.5°	1179.2	1183.9	1185.4	1177.1	1167.7
25°	1134.8	1143.7	1148.9	1140.6	1130.7
27.5°	1081.1	1094.7	1110.3	1104.1	1093.1
30°	1021.2	1041.0	1067.0	1061.8	1054.0
32.5°	964.3	984.1	1020.1	1018.0	1013.8
35°	912.7	925.2	967.4	972.6	969.0
37.5°	863.6	875.1	914.8	926.8	923.6
40°	812.0	824.5	855.8	877.2	878.3
42.5°	760.9	772.9	798.5	829.2	829.2
45°	706.7	718.7	742.1	776.0	780.2
47.5°	653.5	666.0	688.9	722.8	729.6
50°	601.3	612.8	635.7	668.6	679.0
52.5°	547.1	559.6	582.0	612.3	627.4
55°	494.9	503.3	527.8	557.0	573.2
57.5°	440.7	448.5	476.2	501.2	517.9
60°	388.5	398.4	419.8	445.4	464.7
62.5°	338.5	348.9	367.2	389.6	411.5
65°	290.0	297.8	315.5	337.9	357.2
67.5°	243.0	249.8	267.5	283.2	303.5
70°	195.6	204.4	217.5	232.6	245.6
72.5°	157.5	161.2	172.1	183.1	196.6
75°	116.3	122.6	131.4	137.7	145.5
77.5°	83.4	87.1	92.3	97.5	104.8
80°	55.8	57.4	62.1	63.1	68.8
82.5°	33.9	34.9	36.0	36.5	38.6
85°	18.3	18.3	18.3	17.2	17.2
87.5°	10.4	10.4	8.9	7.3	5.2
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)