

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: P554856

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-93-88-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: P554856
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-50-UNV-93-88-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR TEMPERED GLASS FIXTURE SIDE AND .500 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

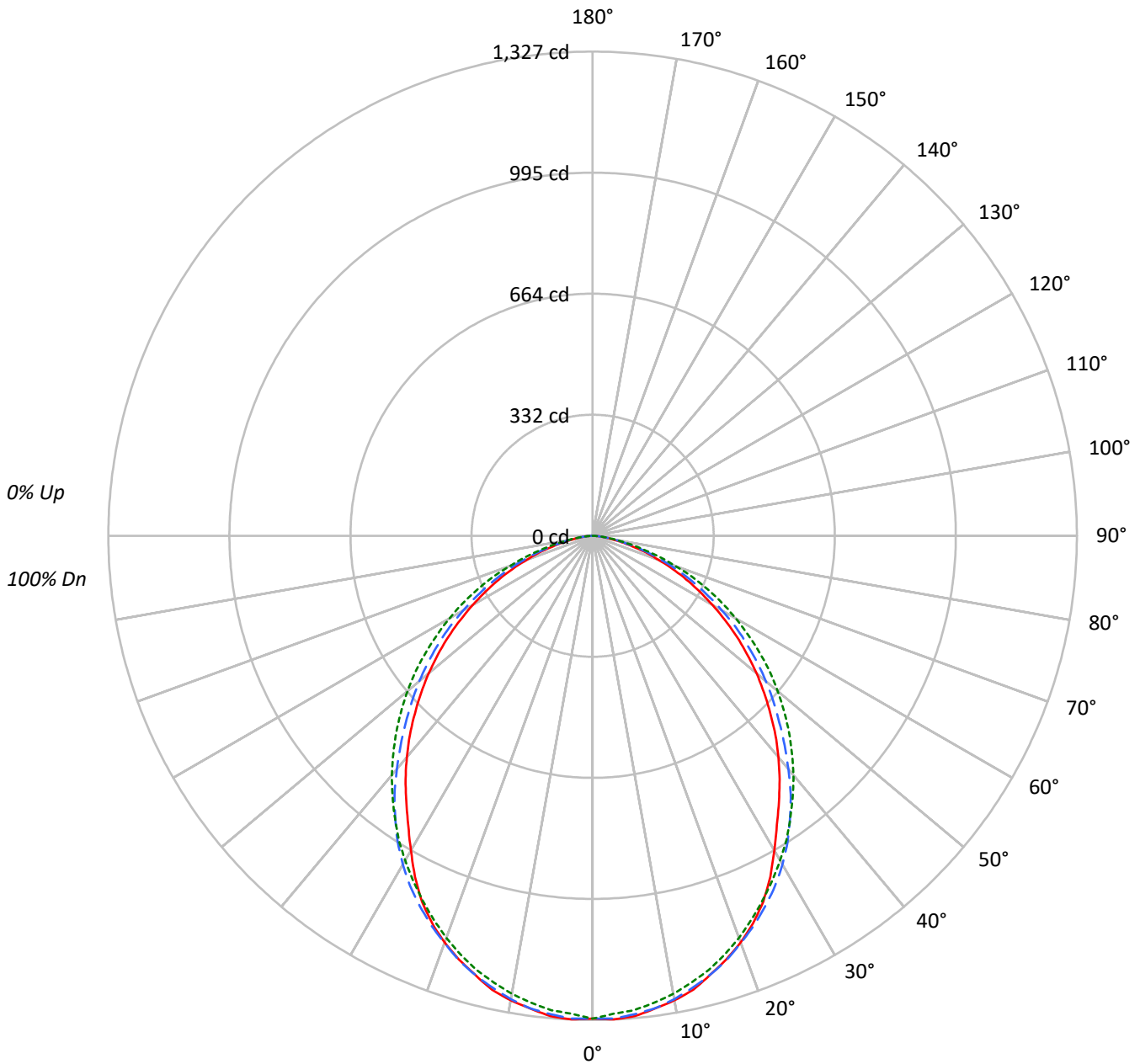
Lumens per Lamp: N/A
Luminaire Lumens: 3060.0 lumens
Efficiency: N/A
Efficacy: 70.8 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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°	7122	7122	7122
5°	7141	7111	7051
10°	7066	7046	6966
15°	6940	6940	6861
20°	6793	6802	6715
25°	6570	6651	6545
30°	6187	6464	6385
35°	5845	6196	6206
40°	5562	5861	6015
45°	5243	5507	5789
50°	4908	5189	5542
55°	4527	4828	5242
60°	4077	4406	4876
65°	3600	3917	4436
70°	3001	3336	3769
75°	2358	2664	2949
80°	1686	1875	2080
85°	1099	1099	1037



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.6	4.1
10°-20°	350.0	11.4
20°-30°	511.5	16.7
30°-40°	580.6	19.0
40°-50°	560.5	18.3
50°-60°	462.4	15.1
60°-70°	307.9	10.1
70°-80°	137.8	4.5
80°-90°	24.7	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°	986.2	32.2
0°-40°	1566.8	51.2
0°-60°	2589.7	84.6
0°-90°	3060.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1323	1323	1323	1323	1323	
5°	1322	1321	1316	1309	1305	125
15°	1246	1249	1246	1240	1231	351
25°	1106	1115	1120	1112	1102	507
35°	890	902	943	948	945	557
45°	689	701	724	756	761	532
55°	482	491	514	543	559	431
65°	283	290	308	329	348	280
75°	113	120	128	134	142	124
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°	1323.4	1323.4	1323.4	1323.4	1323.4
2.5°	1326.9	1327.4	1324.4	1316.3	1311.2
5°	1321.8	1321.3	1316.3	1309.1	1305.1
7.5°	1307.1	1308.1	1306.6	1296.4	1290.8
10°	1292.9	1293.4	1289.3	1281.2	1274.6
12.5°	1274.6	1274.1	1268.5	1264.4	1253.7
15°	1245.6	1248.6	1245.6	1240.0	1231.4
17.5°	1217.6	1217.6	1219.7	1210.0	1203.4
20°	1186.1	1187.6	1187.6	1180.0	1172.4
22.5°	1149.5	1154.1	1155.6	1147.5	1138.3
25°	1106.3	1114.9	1120.0	1111.9	1102.2
27.5°	1053.9	1067.1	1082.4	1076.3	1065.6
30°	995.5	1014.8	1040.2	1035.1	1027.5
32.5°	940.0	959.4	994.4	992.4	988.3
35°	889.7	901.9	943.1	948.2	944.6
37.5°	841.9	853.1	891.7	903.4	900.4
40°	791.6	803.8	834.3	855.1	856.1
42.5°	741.8	753.5	778.4	808.4	808.4
45°	688.9	700.6	723.5	756.5	760.6
47.5°	637.0	649.2	671.6	704.6	711.3
50°	586.2	597.4	619.7	651.8	661.9
52.5°	533.3	545.5	567.4	596.9	611.6
55°	482.5	490.6	514.5	543.0	558.7
57.5°	429.6	437.2	464.2	488.6	504.8
60°	378.8	388.4	409.3	434.2	453.0
62.5°	330.0	340.1	357.9	379.8	401.1
65°	282.7	290.3	307.6	329.4	348.3
67.5°	236.9	243.5	260.8	276.1	295.9
70°	190.7	199.3	212.0	226.7	239.5
72.5°	153.5	157.1	167.8	178.4	191.7
75°	113.4	119.5	128.1	134.2	141.8
77.5°	81.3	84.9	90.0	95.1	102.2
80°	54.4	55.9	60.5	61.5	67.1
82.5°	33.0	34.1	35.1	35.6	37.6
85°	17.8	17.8	17.8	16.8	16.8
87.5°	10.2	10.2	8.6	7.1	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)