

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: P554768

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-82-84-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: P554768
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-82-84-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .187 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 4000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

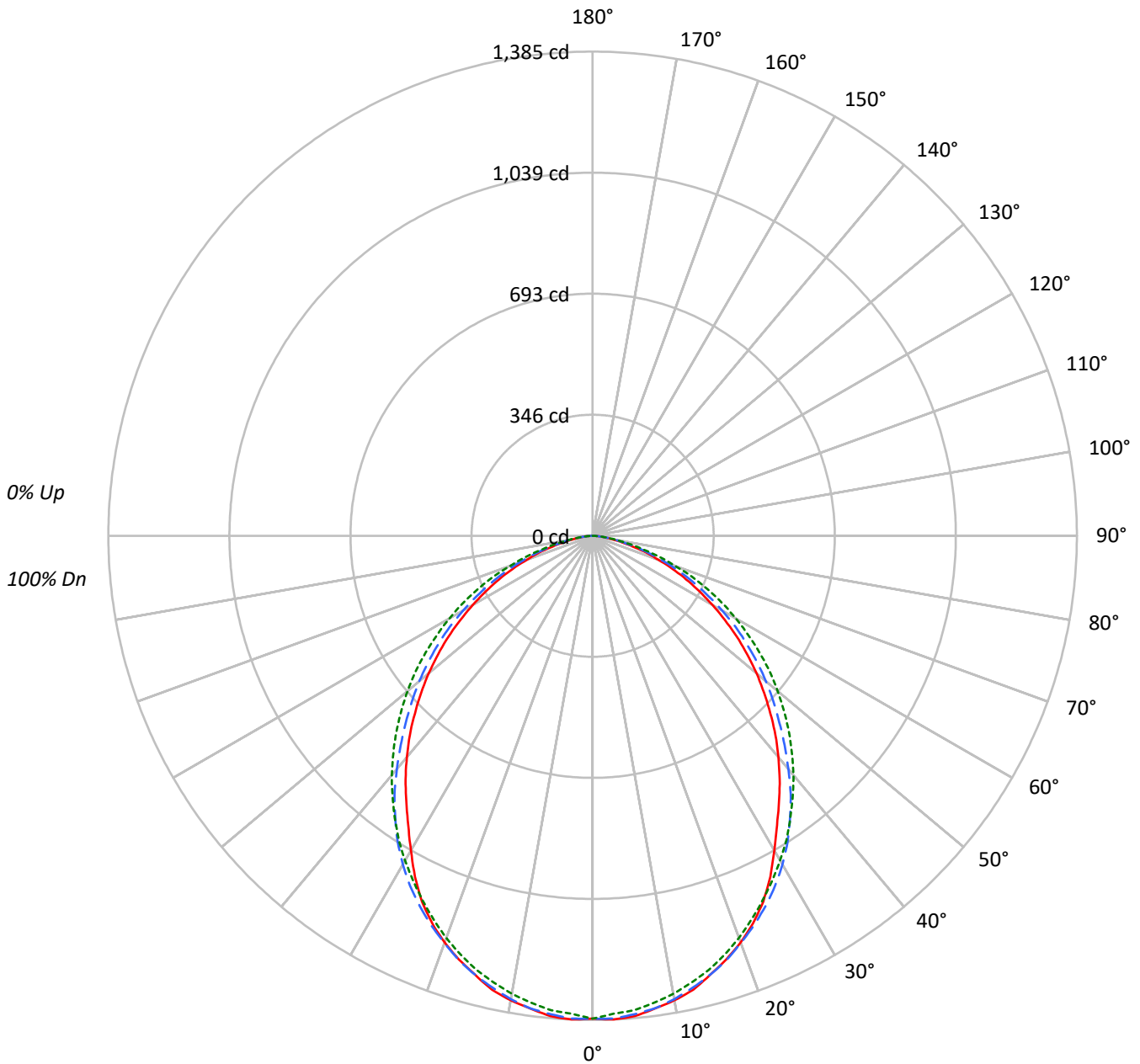
Lumens per Lamp: N/A
Luminaire Lumens: 3194.0 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	7434	7434	7434
5°	7454	7423	7359
10°	7375	7355	7271
15°	7244	7244	7161
20°	7090	7100	7009
25°	6857	6943	6832
30°	6457	6747	6665
35°	6102	6468	6478
40°	5805	6118	6278
45°	5473	5747	6043
50°	5123	5416	5785
55°	4725	5039	5472
60°	4255	4598	5089
65°	3758	4089	4629
70°	3131	3482	3932
75°	2460	2780	3080
80°	1760	1956	2170
85°	1149	1149	1081



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.1	4.1
10°-20°	365.4	11.4
20°-30°	533.9	16.7
30°-40°	606.1	19.0
40°-50°	585.0	18.3
50°-60°	482.6	15.1
60°-70°	321.4	10.1
70°-80°	143.8	4.5
80°-90°	25.7	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°	1029.3	32.2
0°-40°	1635.4	51.2
0°-60°	2703.1	84.6
0°-90°	3194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1381	1381	1381	1381	1381	
5°	1380	1379	1374	1366	1362	131
15°	1300	1303	1300	1294	1285	367
25°	1155	1164	1169	1161	1150	529
35°	929	941	984	990	986	582
45°	719	731	755	790	794	555
55°	504	512	537	567	583	449
65°	295	303	321	344	364	293
75°	118	125	134	140	148	129
85°	19	19	19	18	18	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1381.3	1381.3	1381.3	1381.3	1381.3
2.5°	1385.0	1385.6	1382.4	1373.9	1368.6
5°	1379.7	1379.2	1373.9	1366.5	1362.2
7.5°	1364.3	1365.4	1363.8	1353.2	1347.4
10°	1349.5	1350.0	1345.8	1337.3	1330.4
12.5°	1330.4	1329.8	1324.0	1319.8	1308.6
15°	1300.1	1303.3	1300.1	1294.3	1285.3
17.5°	1270.9	1270.9	1273.1	1263.0	1256.1
20°	1238.0	1239.6	1239.6	1231.7	1223.7
22.5°	1199.8	1204.6	1206.2	1197.7	1188.2
25°	1154.7	1163.7	1169.1	1160.6	1150.5
27.5°	1100.1	1113.9	1129.8	1123.4	1112.3
30°	1039.0	1059.2	1085.7	1080.4	1072.5
32.5°	981.2	1001.4	1038.0	1035.9	1031.6
35°	928.7	941.4	984.4	989.7	986.0
37.5°	878.8	890.5	930.8	943.0	939.8
40°	826.2	839.0	870.8	892.6	893.6
42.5°	774.2	786.4	812.4	843.8	843.8
45°	719.1	731.3	755.1	789.6	793.9
47.5°	664.9	677.7	701.0	735.5	742.4
50°	611.9	623.5	646.9	680.3	690.9
52.5°	556.7	569.4	592.2	623.0	638.4
55°	503.6	512.1	537.0	566.8	583.2
57.5°	448.4	456.4	484.5	510.0	527.0
60°	395.3	405.4	427.2	453.2	472.8
62.5°	344.4	355.0	373.6	396.4	418.7
65°	295.1	303.0	321.1	343.9	363.5
67.5°	247.3	254.2	272.2	288.2	308.8
70°	199.0	208.0	221.3	236.7	249.9
72.5°	160.3	164.0	175.1	186.3	200.1
75°	118.3	124.7	133.7	140.1	148.1
77.5°	84.9	88.6	93.9	99.2	106.7
80°	56.8	58.4	63.1	64.2	70.0
82.5°	34.5	35.6	36.6	37.1	39.3
85°	18.6	18.6	18.6	17.5	17.5
87.5°	10.6	10.6	9.0	7.4	5.3
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)