

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: P554822

Luminaire Tested: **FUSL-12-2-LD4-2HI-50-UNV-81-87-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: P554822
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-81-87-EDD-90
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .375 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 90 CRI AND 5000K CCT LEDS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

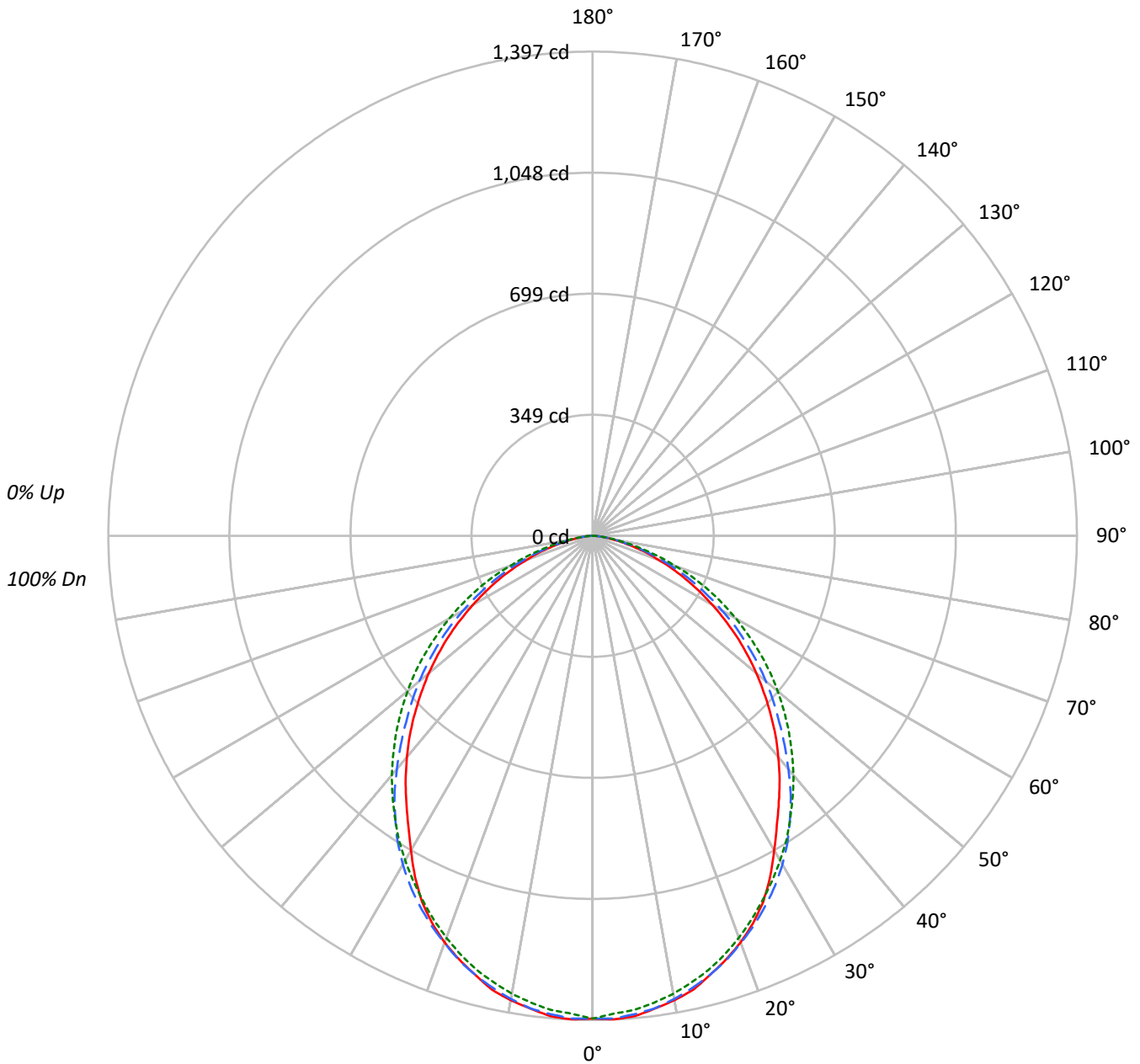
Lumens per Lamp: N/A
Luminaire Lumens: 3221.0 lumens
Efficiency: N/A
Efficacy: 74.6 lumens/watt
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')
CIE Type: Direct

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									
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°	7497	7497	7497
5°	7517	7485	7421
10°	7437	7417	7332
15°	7305	7305	7222
20°	7151	7160	7068
25°	6915	7001	6890
30°	6512	6804	6721
35°	6153	6522	6533
40°	5854	6170	6332
45°	5519	5796	6094
50°	5166	5462	5834
55°	4766	5082	5518
60°	4292	4637	5132
65°	3789	4124	4669
70°	3158	3512	3967
75°	2481	2805	3105
80°	1776	1974	2188
85°	1155	1155	1093



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.2	4.1
10°-20°	368.4	11.4
20°-30°	538.4	16.7
30°-40°	611.2	19.0
40°-50°	590.0	18.3
50°-60°	486.7	15.1
60°-70°	324.1	10.1
70°-80°	145.0	4.5
80°-90°	26.0	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°	1038.0	32.2
0°-40°	1649.2	51.2
0°-60°	2725.9	84.6
0°-90°	3221.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3221.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1393	1393	1393	1393	1393	
5°	1391	1391	1386	1378	1374	132
15°	1311	1314	1311	1305	1296	370
25°	1164	1174	1179	1170	1160	533
35°	936	949	993	998	994	587
45°	725	737	762	796	801	559
55°	508	516	542	572	588	453
65°	298	306	324	347	367	295
75°	119	126	135	141	149	130
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°	1393.0	1393.0	1393.0	1393.0	1393.0
2.5°	1396.7	1397.3	1394.1	1385.5	1380.2
5°	1391.4	1390.9	1385.5	1378.0	1373.7
7.5°	1375.9	1376.9	1375.3	1364.6	1358.7
10°	1360.9	1361.4	1357.1	1348.6	1341.6
12.5°	1341.6	1341.1	1335.2	1330.9	1319.7
15°	1311.1	1314.3	1311.1	1305.2	1296.1
17.5°	1281.7	1281.7	1283.8	1273.7	1266.7
20°	1248.5	1250.1	1250.1	1242.1	1234.1
22.5°	1210.0	1214.8	1216.4	1207.8	1198.2
25°	1164.5	1173.6	1178.9	1170.4	1160.2
27.5°	1109.4	1123.3	1139.3	1132.9	1121.7
30°	1047.8	1068.2	1094.9	1089.6	1081.5
32.5°	989.5	1009.8	1046.8	1044.6	1040.3
35°	936.5	949.4	992.7	998.1	994.3
37.5°	886.2	898.0	938.7	951.0	947.8
40°	833.2	846.1	878.2	900.1	901.2
42.5°	780.8	793.1	819.3	850.9	850.9
45°	725.1	737.4	761.5	796.3	800.6
47.5°	670.5	683.4	706.9	741.7	748.7
50°	617.0	628.8	652.3	686.1	696.8
52.5°	561.4	574.2	597.2	628.3	643.8
55°	507.9	516.4	541.6	571.5	588.1
57.5°	452.2	460.2	488.6	514.3	531.4
60°	398.7	408.9	430.8	457.0	476.8
62.5°	347.3	358.0	376.7	399.8	422.2
65°	297.5	305.6	323.8	346.8	366.6
67.5°	249.4	256.3	274.5	290.6	311.5
70°	200.7	209.8	223.2	238.7	252.1
72.5°	161.6	165.4	176.6	187.8	201.8
75°	119.3	125.8	134.9	141.3	149.3
77.5°	85.6	89.4	94.7	100.1	107.6
80°	57.3	58.9	63.7	64.8	70.6
82.5°	34.8	35.9	36.9	37.5	39.6
85°	18.7	18.7	18.7	17.7	17.7
87.5°	10.7	10.7	9.1	7.5	5.4
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)