

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: P555777

Luminaire Tested: **FUSL-12-2-LD4-3LO-40-UNV-81-84-EDD**

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: P555777  
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-LD4-3LO-40-UNV-81-84-EDD  
Description: 2FT FUSL SURFACE MOUNT WITH .156 CLEAR PC FIXTURE SIDE AND .125 CLEAR PC ENVIRONMENTAL SIDE LENSES WITH, 80 CRI AND 4000K CCT LEDS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

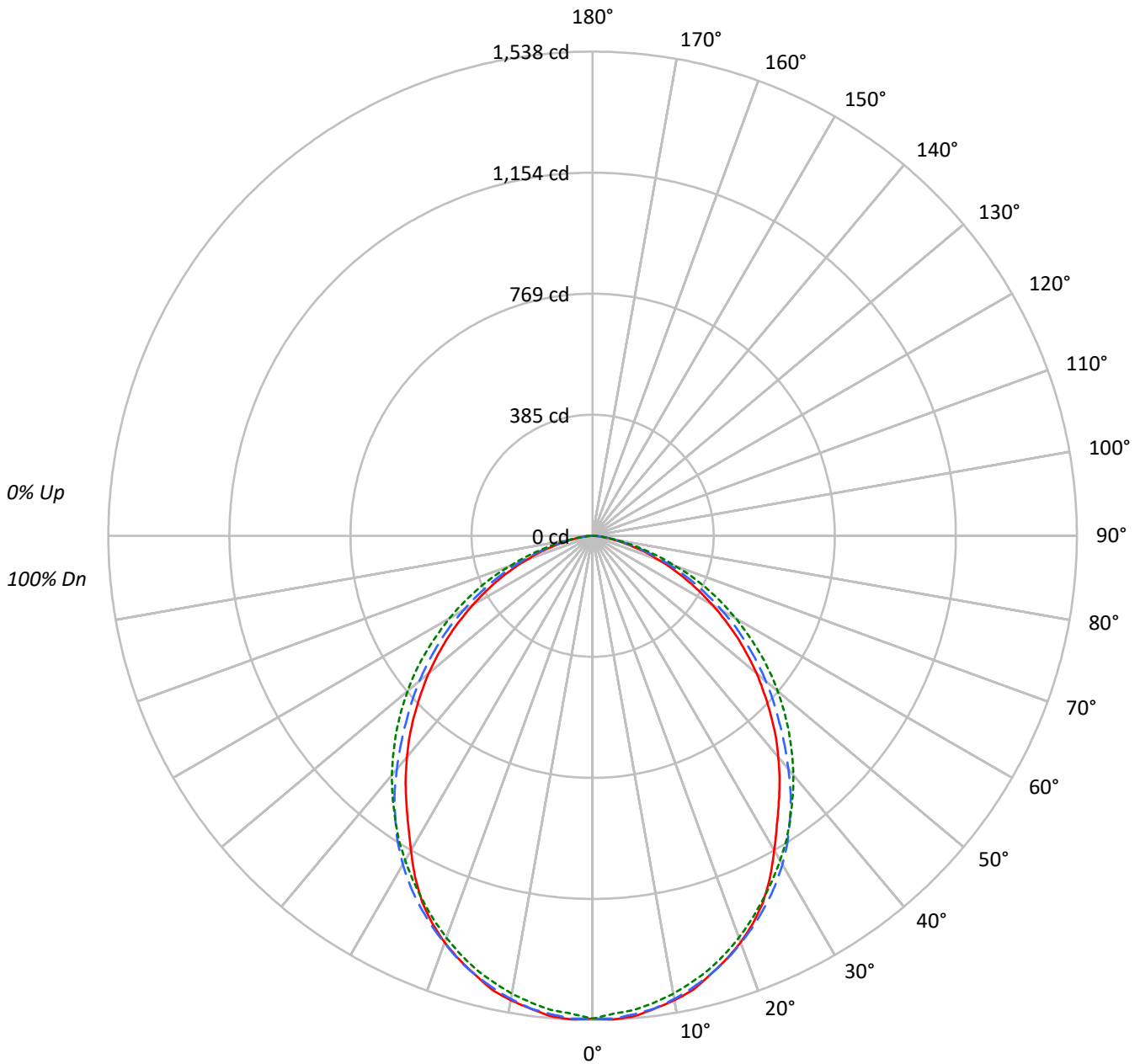
Lumens per Lamp: N/A  
Luminaire Lumens: 3546.0 lumens  
Efficiency: N/A  
Efficacy: 101.0 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 35.1  
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°	8254	8254	8254
5°	8276	8240	8170
10°	8188	8165	8072
15°	8042	8042	7950
20°	7872	7883	7781
25°	7613	7707	7585
30°	7169	7491	7400
35°	6774	7181	7192
40°	6445	6792	6970
45°	6076	6381	6709
50°	5688	6013	6423
55°	5246	5594	6076
60°	4724	5105	5650
65°	4172	4539	5140
70°	3476	3866	4367
75°	2732	3088	3419
80°	1953	2173	2411
85°	1272	1272	1198



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	144.4	4.1
10°-20°	405.6	11.4
20°-30°	592.8	16.7
30°-40°	672.8	19.0
40°-50°	649.5	18.3
50°-60°	535.8	15.1
60°-70°	356.8	10.1
70°-80°	159.7	4.5
80°-90°	28.6	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°	1142.8	32.2
0°-40°	1815.6	51.2
0°-60°	3001.0	84.6
0°-90°	3546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3546.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1534	1534	1534	1534	1534	
5°	1532	1531	1525	1517	1512	145
15°	1443	1447	1443	1437	1427	407
25°	1282	1292	1298	1288	1277	587
35°	1031	1045	1093	1099	1095	646
45°	798	812	838	877	881	616
55°	559	568	596	629	648	499
65°	328	336	356	382	404	325
75°	131	138	148	156	164	144
85°	21	21	21	19	19	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1533.6	1533.6	1533.6	1533.6	1533.6
2.5°	1537.7	1538.3	1534.7	1525.3	1519.4
5°	1531.8	1531.2	1525.3	1517.1	1512.3
7.5°	1514.7	1515.9	1514.1	1502.3	1495.8
10°	1498.2	1498.8	1494.1	1484.7	1477.0
12.5°	1477.0	1476.4	1469.9	1465.2	1452.8
15°	1443.4	1446.9	1443.4	1436.9	1426.9
17.5°	1411.0	1411.0	1413.4	1402.2	1394.5
20°	1374.5	1376.3	1376.3	1367.4	1358.6
22.5°	1332.1	1337.4	1339.1	1329.7	1319.1
25°	1282.0	1292.0	1297.9	1288.5	1277.3
27.5°	1221.3	1236.6	1254.3	1247.2	1234.9
30°	1153.6	1175.9	1205.4	1199.5	1190.7
32.5°	1089.3	1111.7	1152.4	1150.0	1145.3
35°	1031.0	1045.1	1092.9	1098.8	1094.6
37.5°	975.6	988.6	1033.4	1046.9	1043.4
40°	917.3	931.4	966.8	990.9	992.1
42.5°	859.6	873.1	902.0	936.7	936.7
45°	798.3	811.8	838.4	876.7	881.4
47.5°	738.2	752.3	778.3	816.6	824.2
50°	679.3	692.2	718.2	755.3	767.1
52.5°	618.0	632.2	657.5	691.7	708.7
55°	559.1	568.5	596.2	629.2	647.5
57.5°	497.8	506.7	537.9	566.2	585.0
60°	438.9	450.1	474.3	503.1	524.9
62.5°	382.4	394.1	414.8	440.1	464.8
65°	327.6	336.4	356.4	381.8	403.6
67.5°	274.5	282.2	302.2	319.9	342.9
70°	220.9	230.9	245.7	262.8	277.5
72.5°	177.9	182.0	194.4	206.8	222.1
75°	131.4	138.4	148.5	155.5	164.4
77.5°	94.3	98.4	104.3	110.2	118.4
80°	63.0	64.8	70.1	71.3	77.8
82.5°	38.3	39.5	40.7	41.2	43.6
85°	20.6	20.6	20.6	19.4	19.4
87.5°	11.8	11.8	10.0	8.2	5.9
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)