

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: P554736

Luminaire Tested: **FUSL-12-2-LD4-2HI-40-UNV-80-84-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: P554736  
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-80-84-EDD-90  
Description: 2FT FUSL SURFACE MOUNT WITH .125 PRISMATIC ACRYLIC 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**

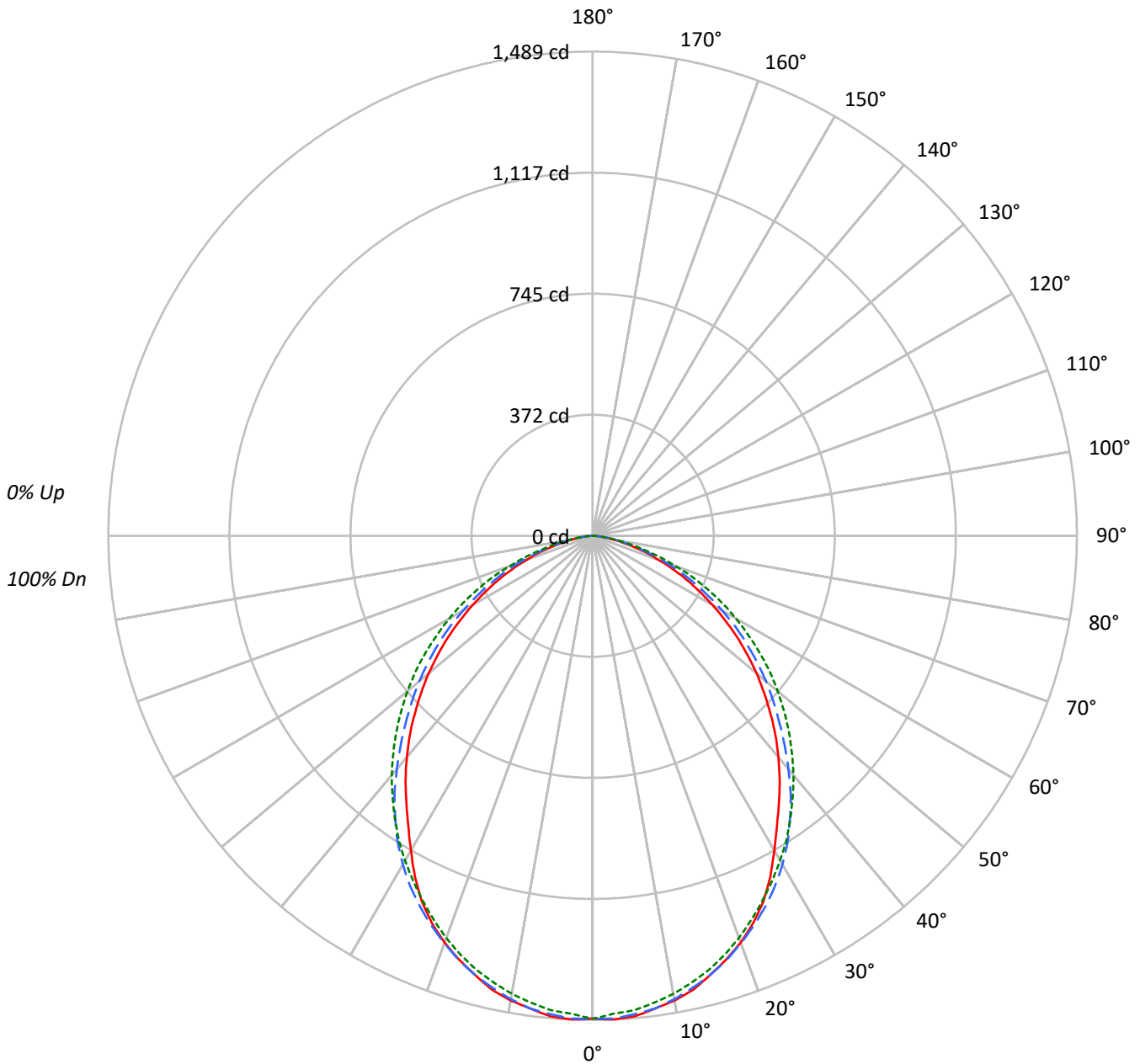
Lumens per Lamp: N/A  
Luminaire Lumens: 3434.0 lumens  
Efficiency: N/A  
Efficacy: 79.5 lumens/watt  
Spacing Criteria (0/90/45): 1.13 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 1' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 43.2  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	7993	7993	7993
5°	8014	7980	7913
10°	7929	7907	7817
15°	7788	7788	7699
20°	7624	7633	7535
25°	7372	7464	7345
30°	6942	7254	7166
35°	6560	6954	6965
40°	6241	6578	6750
45°	5884	6180	6496
50°	5508	5823	6219
55°	5080	5418	5883
60°	4576	4944	5472
65°	4039	4396	4977
70°	3367	3744	4228
75°	2645	2990	3310
80°	1891	2104	2334
85°	1235	1235	1161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.8	4.1
10°-20°	392.8	11.4
20°-30°	574.0	16.7
30°-40°	651.6	19.0
40°-50°	629.0	18.3
50°-60°	518.9	15.1
60°-70°	345.6	10.1
70°-80°	154.6	4.5
80°-90°	27.7	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°	1106.7	32.2
0°-40°	1758.3	51.2
0°-60°	2906.2	84.6
0°-90°	3434.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3434.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1485	1485	1485	1485	1485	
5°	1483	1483	1477	1469	1465	140
15°	1398	1401	1398	1392	1382	394
25°	1242	1251	1257	1248	1237	569
35°	998	1012	1058	1064	1060	626
45°	773	786	812	849	854	596
55°	541	551	577	609	627	483
65°	317	326	345	370	391	315
75°	127	134	144	151	159	139
85°	20	20	20	19	19	27
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1485.1	1485.1	1485.1	1485.1	1485.1
2.5°	1489.1	1489.7	1486.3	1477.1	1471.4
5°	1483.4	1482.8	1477.1	1469.1	1464.6
7.5°	1466.9	1468.0	1466.3	1454.9	1448.6
10°	1450.9	1451.5	1446.9	1437.8	1430.3
12.5°	1430.3	1429.8	1423.5	1418.9	1407.0
15°	1397.8	1401.2	1397.8	1391.5	1381.8
17.5°	1366.4	1366.4	1368.7	1357.9	1350.5
20°	1331.1	1332.8	1332.8	1324.2	1315.7
22.5°	1290.0	1295.1	1296.8	1287.7	1277.4
25°	1241.5	1251.2	1256.9	1247.8	1236.9
27.5°	1182.7	1197.6	1214.7	1207.8	1195.9
30°	1117.1	1138.8	1167.3	1161.6	1153.1
32.5°	1054.9	1076.6	1116.0	1113.7	1109.1
35°	998.4	1012.1	1058.4	1064.1	1060.1
37.5°	944.8	957.4	1000.7	1013.9	1010.4
40°	888.3	902.0	936.3	959.6	960.8
42.5°	832.4	845.5	873.5	907.2	907.2
45°	773.1	786.2	811.9	849.0	853.5
47.5°	714.9	728.6	753.7	790.8	798.2
50°	657.8	670.4	695.5	731.4	742.8
52.5°	598.5	612.2	636.7	669.8	686.4
55°	541.4	550.6	577.4	609.3	627.0
57.5°	482.1	490.7	520.9	548.3	566.5
60°	425.1	435.9	459.3	487.2	508.4
62.5°	370.3	381.7	401.7	426.2	450.2
65°	317.2	325.8	345.2	369.7	390.8
67.5°	265.9	273.3	292.7	309.8	332.1
70°	214.0	223.7	237.9	254.5	268.7
72.5°	172.3	176.3	188.3	200.3	215.1
75°	127.2	134.1	143.8	150.6	159.2
77.5°	91.3	95.3	101.0	106.7	114.7
80°	61.0	62.8	67.9	69.0	75.3
82.5°	37.1	38.2	39.4	39.9	42.2
85°	20.0	20.0	20.0	18.8	18.8
87.5°	11.4	11.4	9.7	8.0	5.7
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)